FCC PART 15E
TEST REPORT
No.25T04Z100757-016

for

TCL Communication Ltd.

GSM/UMTS/LTE/NR Mobile phone

T951P

FCC ID: 2ACCJH188

with

Hardware Version: 05

Software Version: 9ESH

Issued Date: 2025-06-25

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

Test Laboratory:

CTTL-Telecommunication Technology Labs, CAICT

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
25T04Z100757-016	Rev.0	1st edition	2025-06-25

Note: the latest revision of the test report supersedes all previous version.

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1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

1.2. Testing Location

Conducted testing Location:CTTL(Gaolizhang Road)

Address: Cuihu Cloud Center, No.1, Gaolizhang Road, Wenquan, Haidian District, Beijing, China

Radiated testing Location: CTTL(BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology Development Area, Beijing, P. R. China 100176

1.3. Testing Environment

Normal Temperature: 15-35°C

Relative Humidity: 20-75%

1.4. Project date

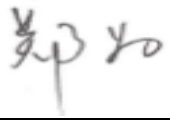
Testing Start Date: 2025-05-13

Testing End Date: 2025-06-25

1.5. Signature

Yao Xingyu

(Prepared this test report)



Zheng Wei

(Reviewed this test report)

Pang Shuai

(Approved this test report)

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2. Client Information

2.1. Applicant Information

Company Name:	TCL Communication Ltd.
Address/Post:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong
City:	Hong Kong
Postal Code:	/
Country:	China
Contact Person:	Ting Wang
Contact Email:	ting.wang.hz@tcl.com
Telephone:	+86 752 2639091
Fax:	0086-755-36612000-81722

2.2. Manufacturer Information

Company Name:	TCL Communication Ltd.
Address/Post:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong
City:	Hong Kong
Postal Code:	/
Country:	China
Contact Person:	Ting Wang
Contact Email:	ting.wang.hz@tcl.com
Telephone:	+86 752 2639091
Fax:	0086-755-36612000-81722

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3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	GSM/UMTS/LTE/NR Mobile phone
Model name	T951P
FCC ID	2ACCJH188
WLAN Frequency Band	ISM Bands: -5150MHz~5250MHz -5250MHz~5350MHz -5470MHz~5725MHz
Type of modulation	OFDM/OFDMA
Antenna	Integral Antenna
Normal Voltage	3.85V
Extreme High Voltage	4.4V
Extreme Low Voltage	3.6V

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
UT36a	356448870204758/ 356448870204766	05	9ESH	2025-06-07
UT24a	356448870204436/ 356448870204543	05	9ESH	2025-05-13
UT28a	356448870204477/ 356448870204584	05	9ESH	2025-05-13

*EUT ID: is used to identify the test sample in the lab internally.

UT36a is used for Conduction test, UT24a and UT28a are used for Radiation test.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Note	Manufacturer
AE1	Battery	TLp050D7	VEKEN
AE2	Charger	QC16US	PUAN
AE2-2	Charger	QC16EU	BaiJunDa
AE3-1	USB cable	CDA0000308C1	JUWEI
AE3-1	USB cable	CDA0000305C1	JUWEI

*AE ID: is used to identify the test sample in the lab internally.

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3.4. General Description

The Equipment under Test (EUT) is a model of GSM/UMTS/LTE/NR Mobile phone with integrated antenna and inbuilt battery.
It consists of normal options: travel charger, USB cable.
Manual and specifications of the EUT were provided to fulfil the test.
Samples undergoing test were selected by the client.

3.5. Interpretation of the Test Environment

For the test methods, the test environment uncertainty figures correspond to an expansion factor k=2.
Measurement Uncertainty

Parameter	Uncertainty
temperature	0.48°C
humidity	2 %
DC voltages	0.003V

4. Reference Documents

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

FCC Part15	FCC CFR 47, Part 15, Subpart C and E: 15.205 Restricted bands of operation; 15.207 Conducted limits; 15.209 Radiated emission limits, general requirements; 15.403 Definitions; 15.407 General technical requirements.	2021
ANSI C63.10	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2013
UNII: KDB 789033 D02	General U-NII Test Procedures New Rules v02r01	2017-12

Note:UNII: KDB 789033 D02 is not in the scope of ISO/IEC 17025 accreditation by A2LA.

5. Laboratory Environment

Conducted RF performance testing is performed in shielding room.

EMC performance testing is performed in Semi-anechoic chamber.

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6. Test Results

6.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15C/E	Sub-clause of IC	Verdict
Maximum Output Power	15.407	/	**P**
Peak Power Spectral Density	15.407	/	**P**
26dB Emission Bandwidth	15.403	/	**P**
Band edge compliance (Radiated)	15.407, 15.205, 15.209	/	**P**
Transmitter spurious emissions (Radiated)	15.407, 15.205, 15.209	/	**P**
AC Powerline Conducted Emission (150kHz- 30MHz)	15.207	/	**P**
99% Occupied bandwidth	/	/	**P**
Transmit Power Control	15.407	/	**NA**

Please refer to **ANNEX A** for detail.

Terms used in Verdict column

P	Pass, The EUT complies with the essential requirements in the standard.
NM	Not measured, The test was not measured by CTTL
NA	Not Applicable, The test was not applicable
F	Fail, The EUT does not comply with the essential requirements in the standard

6.2. Statements

CTTL has evaluated the test cases as listed in section 6.1 of this report for the EUT specified in section 3 according to the standards or reference documents listed in section 4.

This report only deals with the WLAN function among the features described in section 3.

6.3. Test Conditions

For this report, all the test cases are tested under normal temperature and normal voltage, and also under norm humidity, the specific condition is shown as follows:

Temperature	26°C
Voltage	3.85V
Humidity	44%

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7. Test Facilities Utilized

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Vector Signal Analyzer	FSQ40	200089	Rohde & Schwarz	1 year	2025-08-11
2	Vector Signal Analyzer	FSW67	104051	Rohde & Schwarz	1 year	2026-06-09
3	LISN	ENV216	101200	Rohde & Schwarz	1 year	2026-06-05
4	Test Receiver	ESCI	100344	Rohde & Schwarz	1 year	2026-04-01
5	Attenuator	10dB/2W	/	Rosenberger	/	/
6	Shielding Room	S81	/	ETS-Lindgren	/	/

Radiated emission test system

BDA SAC/FAC3

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver	ESR26	101372	R&S	1 year	2026-01-15
2	EMI Antenna	VULB 9163	01177	R&S	1 year	2025-11-19
3	EMI Antenna	3117	00119021	Schwarzbeck	1 year	2025-09-18
4	Test Receiver	FSV40	101047	R&S	1 year	2025-07-18
5	EMI Antenna	LB-180400 -25-C-KF	J211060826	A-INFO	1 year	2025-07-29

Huayuan North Road

Test Item	Test Software and Version	Software Vendor
Conducted emission	EMC32 V8.53.0	R&S

BDA

Test Item	Test Software and Version	Software Vendor
Radiated emission	EMC32 V8.53.0	R&S

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8. Measurement Uncertainty

8.1 Transmitter Output Power

Measurement Uncertainty: 0.387dB,k=1.96

8.2 Peak Power Spectral Density

Measurement Uncertainty: 0.705dB,k=1.96

8.3 26dB Emission Bandwidth

Measurement Uncertainty: 60.80Hz,k=1.96

8.4 Band Edges Compliance

Measurement Uncertainty : 0.62dB,k=1.96

8.5 Spurious Emissions

Conducted (k=1.96)

Frequency Range	Uncertainty(dB)
30MHz ≤ f ≤ 2GHz	1.22
2GHz ≤ f ≤3.6GHz	1.22
3.6GHz ≤ f ≤8GHz	1.22
8GHz ≤ f ≤12.75GHz	1.51
12.75GHz ≤ f ≤26GHz	1.51
26GHz ≤ f ≤40GHz	1.59

Radiated (k=2)

Frequency Range	Uncertainty(dB)
9kHz-30MHz	/
30MHz ≤ f ≤ 1GHz	5.73
1GHz ≤ f ≤18GHz	5.58
18GHz ≤ f ≤40GHz	3.37

8.6 AC Power-line Conducted Emission

Measurement Uncertainty : 3.08dB,k=2

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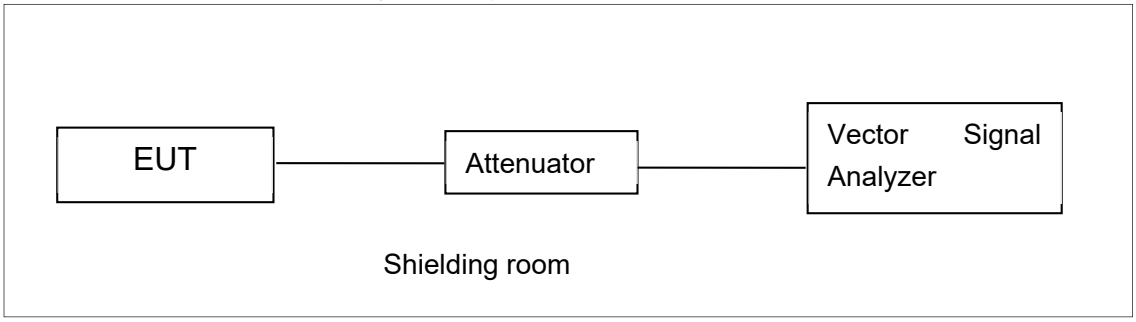
ANNEX A: Detailed Test Results

A.1. Measurement Method

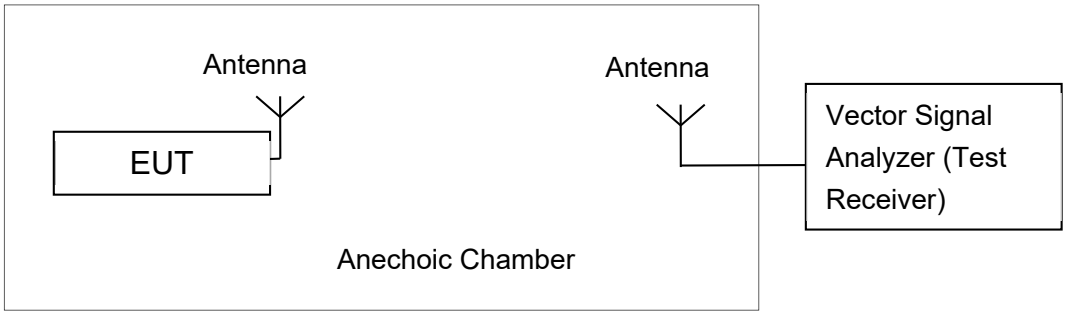
A.1.1. Conducted Measurements

1). Connect the EUT to the test system correctly.
2). Set the EUT to the required work mode.
3). Set the EUT to the required channel.
4). Set the spectrum analyzer to start measurement.
5). Record the values. Vector Signal Analyzer



A.1.2. Radiated Emission Measurements

In the case of radiated emission, the used settings are as follows,
Sweep frequency from 30 MHz to 1GHz, RBW = 100 kHz, VBW = 300 kHz;
Sweep frequency from 1 GHz to 26GHz, RBW = 1MHz, VBW = 3MHz;



The measurement is made according to KDB 789033
The radiated emission test is performed in semi-anechoic chamber. The distance from the EUT to the reference point of measurement antenna is 3m. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result.

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A.2. Maximum output Power

Measurement Limit and Method:

Standard	Frequency (MHz)	Limit (dBm)
FCC CRF Part 15.407(a)	5150MHz~5250MHz	24dBm
	5250MHz~5350MHz	24dBm or 11+10logB
	5470MHz~5725MHz	24dBm or 11+10logB

Limit use the less value, and B is the 26dB bandwidth.
The measurementmethod SA-2 is made according to KDB 789033

A.2.1 Antenna Gain

Antenna gain is -5.80dBi/ -5.60dBi(Ant6/Ant9) and the value is supplied by the applicant or manufacturer.

A.2.2 Maximum output Power-Conducted

EUT ID: UT36a

Measurement Results:

802.11a mode

Mode	Channel	Test Result (dBm)		
		Data Rate (Mbps)		
		6		
		Ant6	Ant9	Sum
802.11a	5180MHz (Ch36)	18.09	18.53	21.33
	5200MHz (Ch40)	18.13	18.68	21.42
	5240MHz(Ch48)	18.26	18.52	21.40
	5260MHz(Ch52)	18.07	18.79	21.46
	5280MHz(Ch56)	18.36	18.66	21.52
	5320MHz(Ch64)	18.06	18.33	21.21
	5500MHz(Ch100)	18.05	18.58	21.33
	5580MHz(Ch116)	18.00	18.62	21.33
	5700MHz(Ch140)	18.03	18.59	21.33
	5720MHz(Ch144)	18.19	18.81	21.52

The data rate 6Mbps is selected as worst condition, and the following cases are performed with this condition.

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802.11n-HT20 mode

Mode	Channel	Test Result (dBm)		
		Data Rate (Mbps)		
		MCS0		
		Ant6	Ant9	Sum
802.11n20	5180MHz (Ch36)	18.09	18.62	21.37
	5200MHz (Ch40)	18.16	18.75	21.48
	5240MHz(Ch48)	18.03	18.83	21.46
	5260MHz(Ch52)	18.11	18.47	21.30
	5280MHz(Ch56)	18.05	18.76	21.43
	5320MHz(Ch64)	18.12	18.32	21.23
	5500MHz(Ch100)	18.07	18.59	21.35
	5580MHz(Ch116)	18.10	18.80	21.47
	5700MHz(Ch140)	18.06	18.24	21.16
	5720MHz(Ch144)	18.00	18.80	21.43

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ac-VHT20 mode

Mode	Channel	Test Result (dBm)		
		Data Rate (Mbps)		
		MCS0		
		Ant6	Ant9	Sum
802.11ac20	5180MHz (Ch36)	18.05	18.78	21.44
	5200MHz (Ch40)	18.01	18.76	21.41
	5240MHz(Ch48)	18.16	18.62	21.41
	5260MHz(Ch52)	18.08	18.75	21.44
	5280MHz(Ch56)	18.07	18.62	21.36
	5320MHz(Ch64)	18.01	18.27	21.15
	5500MHz(Ch100)	18.05	18.68	21.39
	5580MHz(Ch116)	18.06	18.81	21.46
	5700MHz(Ch140)	18.11	18.72	21.44
	5720MHz(Ch144)	18.13	18.69	21.43

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

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802.11ax-HE20 mode

Mode	Channel	Test Result (dBm)		
		Data Rate (Mbps)		
		MCS0		
		Ant6	Ant9	Sum
802.11ax20	5180MHz (Ch36)	16.01	16.79	19.43
	5200MHz (Ch40)	16.02	16.75	19.41
	5240MHz(Ch48)	16.11	16.89	19.53
	5260MHz(Ch52)	16.16	16.68	19.44
	5280MHz(Ch56)	16.33	16.89	19.63
	5320MHz(Ch64)	16.00	16.25	19.14
	5500MHz(Ch100)	16.56	16.85	19.72
	5580MHz(Ch116)	16.14	16.63	19.40
	5700MHz(Ch140)	16.02	16.79	19.43
	5720MHz(Ch144)	16.42	16.87	19.66

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11n-HT40 mode

Mode	Channel	Test Result (dBm)		
		Data Rate		
		MCS0		
		Ant6	Ant9	Sum
802.11n40	5190MHz (Ch38)	16.26	16.68	19.49
	5230MHz(Ch46)	16.31	16.65	19.49
	5270MHz(Ch54)	16.32	16.37	19.36
	5310MHz(Ch62)	16.56	16.37	19.48
	5510MHz(Ch102)	16.43	16.43	19.44
	5550MHz(Ch110)	16.21	16.69	19.47
	5670MHz(Ch134)	16.60	16.52	19.57
	5710MHz(Ch142)	16.75	16.64	19.71

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

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802.11ac-VHT40 mode

Mode	Channel	Test Result (dBm)		
		Data Rate		
		MCS0		
		Ant6	Ant9	Sum
802.11ac40	5190MHz (Ch38)	16.38	16.65	19.53
	5230MHz(Ch46)	16.53	16.76	19.66
	5270MHz(Ch54)	16.62	16.55	19.60
	5310MHz(Ch62)	16.71	16.29	19.52
	5510MHz(Ch102)	16.72	16.63	19.69
	5550MHz(Ch110)	16.68	16.75	19.73
	5670MHz(Ch134)	16.66	16.60	19.64
	5710MHz(Ch142)	16.70	16.83	19.78

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ax-HE40 mode

Mode	Channel	Test Result (dBm)		
		Data Rate		
		MCS0		
		Ant6	Ant9	Sum
802.11ax40	5190MHz (Ch38)	15.91	16.02	18.98
	5230MHz(Ch46)	16.05	16.13	19.10
	5270MHz(Ch54)	16.23	15.82	19.04
	5310MHz(Ch62)	16.13	16.01	19.08
	5510MHz(Ch102)	16.32	15.91	19.13
	5550MHz(Ch110)	16.07	16.06	19.08
	5670MHz(Ch134)	16.01	15.96	19.00
	5710MHz(Ch142)	16.29	16.09	19.20

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

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802.11ac-VHT80 mode

Mode	Channel	Test Result (dBm)		
		Data Rate		
		MCS0		
		Ant6	Ant9	Sum
802.11ac80	5210MHz(Ch42)	14.56	14.37	17.48
	5290MHz(Ch58)	14.60	14.47	17.55
	5530MHz(Ch106)	14.71	14.32	17.53
	5610MHz(Ch122)	14.77	14.62	17.71
	5690MHz(Ch138)	14.85	14.83	17.85

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ax-HE80 mode

Mode	Channel	Test Result (dBm)		
		Data Rate		
		MCS0		
		Ant6	Ant9	Sum
802.11ax80	5210MHz(Ch42)	14.92	14.46	17.71
	5290MHz(Ch58)	14.91	14.67	17.80
	5530MHz(Ch106)	14.79	14.56	17.69
	5610MHz(Ch122)	14.77	14.28	17.54
	5690MHz(Ch138)	15.09	15.13	18.12

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

RU Mode

802.11ax-20 RU MIMO mode

Mode	Channel	Test Result (dBm)		
		Ant6	Ant9	mimo
		MCS0	MCS0	MCS0
RU26-L	5180MHz (Ch36)	9.45	9.17	12.32
	5200MHz (Ch40)	9.75	9.34	12.56
	5240MHz(Ch48)	9.68	9.33	12.52
	5260MHz(Ch52)	9.34	9.52	12.44
	5280MHz(Ch56)	9.54	9.44	12.50
	5320MHz(Ch64)	9.73	9.25	12.51

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RU26-R	5500MHz(Ch100)	9.72	9.77	12.76
	5580MHz(Ch116)	9.09	9.02	12.07
	5700MHz(Ch140)	9.88	9.31	12.61
	5720MHz(Ch144)	9.92	9.89	12.92
Mode	Channel	Test Result (dBm)		
		Ant6	Ant9	mimo
		MCS0	MCS0	MCS0
RU52-L	5180MHz (Ch36)	12.14	11.92	15.04
	5200MHz (Ch40)	12.07	11.82	14.96
	5240MHz(Ch48)	12.09	11.85	14.98
	5260MHz(Ch52)	12.18	11.93	15.07
	5280MHz(Ch56)	12.11	12.02	15.08
	5320MHz(Ch64)	12.24	11.88	15.07
RU52-R	5500MHz(Ch100)	12.23	12.10	15.18
	5580MHz(Ch116)	12.10	12.15	15.14
	5700MHz(Ch140)	12.36	12.17	15.28
	5720MHz(Ch144)	12.29	12.15	15.23
Mode	Channel	Test Result (dBm)		
		Ant6	Ant9	mimo
		MCS0	MCS0	MCS0
RU106-L	5180MHz (Ch36)	13.44	13.14	16.30
	5200MHz (Ch40)	13.56	13.17	16.38
	5240MHz(Ch48)	13.55	13.11	16.35
	5260MHz(Ch52)	13.02	13.31	16.18
	5280MHz(Ch56)	13.47	13.28	16.39
	5320MHz(Ch64)	13.68	13.26	16.49
RU106-R	5500MHz(Ch100)	13.82	13.66	16.75
	5580MHz(Ch116)	13.36	13.43	16.41
	5700MHz(Ch140)	13.77	13.86	16.83
	5720MHz(Ch144)	13.57	13.50	16.55

Conclusion: PASS

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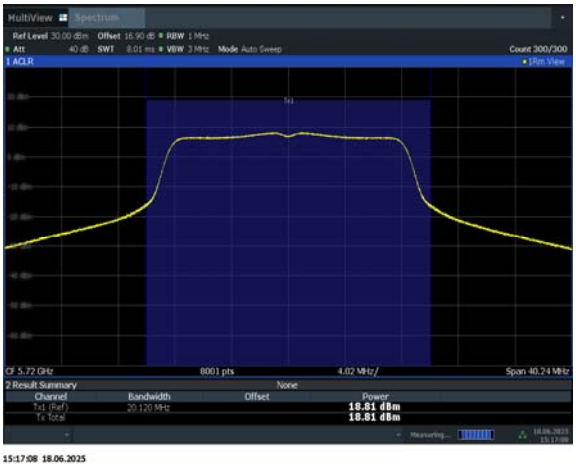

Maximum output Power：11a CH144 Ant9

Duty Cycle

Mode	802.11a	802.11n20	802.11n40	802.11ac20	802.11ac40	802.11ac80
Duty Cycle	100%	100%	100%	100%	100%	100%

802.11ax-20	802.11ax-40	802.11ax-80
100%	100%	100%

Mode	802.11ax-20 RU26	802.11ax-20 RU52	802.11ax-20 RU106
Duty Cycle	88%	88%	78%

Duty Cycle:RU26

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A.3. Peak Power Spectral Density (conducted)

Measurement Limit:

Standard	Frequency (MHz)	Limit (dBm/MHz)
FCC CRF Part 15.407(a)	5150MHz~5250MHz	11
	5250MHz~5350MHz	11
	5470MHz~5725MHz	11

The output power measurement method Section F is made according to KDB 789033

EUT ID: UT36a

Full RU MIMO

Measurement Results:

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant6	5180	6.88	≤11.00	PASS
	Ant9	5180	7.46	≤11.00	PASS
	total	5180	10.19	≤11.00	PASS
	Ant6	5200	6.94	≤11.00	PASS
	Ant9	5200	7.52	≤11.00	PASS
	total	5200	10.25	≤11.00	PASS
	Ant6	5240	7.27	≤11.00	PASS
	Ant9	5240	7.24	≤11.00	PASS
	total	5240	10.27	≤11.00	PASS
	Ant6	5260	6.80	≤11.00	PASS
	Ant9	5260	7.48	≤11.00	PASS
	total	5260	10.16	≤11.00	PASS
	Ant6	5280	7.15	≤11.00	PASS
	Ant9	5280	7.38	≤11.00	PASS
	total	5280	10.28	≤11.00	PASS
	Ant6	5320	7.20	≤11.00	PASS
	Ant9	5320	7.28	≤11.00	PASS
	total	5320	10.25	≤11.00	PASS
	Ant6	5500	6.82	≤11.00	PASS
	Ant9	5500	7.19	≤11.00	PASS
	total	5500	10.02	≤11.00	PASS
	Ant6	5580	6.95	≤11.00	PASS
	Ant9	5580	7.56	≤11.00	PASS
	total	5580	10.28	≤11.00	PASS
	Ant6	5700	7.03	≤11.00	PASS
	Ant9	5700	7.48	≤11.00	PASS
	total	5700	10.27	≤11.00	PASS
	Ant6	5720	7.10	≤11.00	PASS
	Ant9	5720	7.41	≤11.00	PASS

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	total	5720	10.27	≤11.00	PASS
11N20MIMO	Ant6	5180	6.81	≤11.00	PASS
	Ant9	5180	7.33	≤11.00	PASS
	total	5180	10.09	≤11.00	PASS
	Ant6	5200	6.77	≤11.00	PASS
	Ant9	5200	7.19	≤11.00	PASS
	total	5200	10.00	≤11.00	PASS
	Ant6	5240	6.72	≤11.00	PASS
	Ant9	5240	7.26	≤11.00	PASS
	total	5240	10.01	≤11.00	PASS
	Ant6	5260	6.82	≤11.00	PASS
	Ant9	5260	7.32	≤11.00	PASS
	total	5260	10.09	≤11.00	PASS
	Ant6	5280	6.89	≤11.00	PASS
	Ant9	5280	7.26	≤11.00	PASS
	total	5280	10.09	≤11.00	PASS
	Ant6	5320	6.82	≤11.00	PASS
	Ant9	5320	7.27	≤11.00	PASS
	total	5320	10.06	≤11.00	PASS
	Ant6	5500	6.90	≤11.00	PASS
	Ant9	5500	7.26	≤11.00	PASS
	total	5500	10.09	≤11.00	PASS
	Ant6	5580	7.02	≤11.00	PASS
	Ant9	5580	7.14	≤11.00	PASS
	total	5580	10.09	≤11.00	PASS
	Ant6	5700	7.09	≤11.00	PASS
	Ant9	5700	7.24	≤11.00	PASS
	total	5700	10.18	≤11.00	PASS
	Ant6	5720	7.07	≤11.00	PASS
	Ant9	5720	7.16	≤11.00	PASS
	total	5720	10.13	≤11.00	PASS
11AC40MIMO	Ant6	5190	3.12	≤11.00	PASS
	Ant9	5190	3.17	≤11.00	PASS
	total	5190	6.16	≤11.00	PASS
	Ant6	5230	3.12	≤11.00	PASS
	Ant9	5230	3.19	≤11.00	PASS
	total	5230	6.17	≤11.00	PASS
	Ant6	5270	3.29	≤11.00	PASS
	Ant9	5270	3.17	≤11.00	PASS
	total	5270	6.24	≤11.00	PASS
	Ant6	5310	3.36	≤11.00	PASS
	Ant9	5310	3.26	≤11.00	PASS

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	total	5310	6.32	≤11.00	PASS
	Ant6	5510	3.27	≤11.00	PASS
	Ant9	5510	3.35	≤11.00	PASS
	total	5510	6.32	≤11.00	PASS
	Ant6	5550	3.25	≤11.00	PASS
	Ant9	5550	3.22	≤11.00	PASS
	total	5550	6.25	≤11.00	PASS
	Ant6	5670	3.06	≤11.00	PASS
	Ant9	5670	3.44	≤11.00	PASS
	total	5670	6.26	≤11.00	PASS
	Ant6	5710	3.40	≤11.00	PASS
	Ant9	5710	3.27	≤11.00	PASS
	total	5710	6.35	≤11.00	PASS
11AX80MIMO	Ant6	5210	-2.90	≤11.00	PASS
	Ant9	5210	-3.15	≤11.00	PASS
	total	5210	-0.01	≤11.00	PASS
	Ant6	5290	-2.71	≤11.00	PASS
	Ant9	5290	-3.04	≤11.00	PASS
	total	5290	0.14	≤11.00	PASS
	Ant6	5530	-2.85	≤11.00	PASS
	Ant9	5530	-3.11	≤11.00	PASS
	total	5530	0.03	≤11.00	PASS
	Ant6	5610	-3.02	≤11.00	PASS
	Ant9	5610	-3.36	≤11.00	PASS
	total	5610	-0.18	≤11.00	PASS
	Ant6	5690	-2.76	≤11.00	PASS
	Ant9	5690	-2.95	≤11.00	PASS
	total	5690	0.16	≤11.00	PASS

RU MIMO

Measurement Results:

Test Mode	Antenna	Frequency[MHz]	Ru Size	Ru Index	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11AX20MIMO	Ant6	5180	26Tone	RU0	6.78	≤11.00	PASS
			52Tone	RU37	7.03	≤11.00	PASS
			106Tone	RU53	6.51	≤11.00	PASS
	Ant9	5180	26Tone	RU0	6.57	≤11.00	PASS
			52Tone	RU37	6.75	≤11.00	PASS
			106Tone	RU53	6.22	≤11.00	PASS
	total	5180	26Tone	RU0	9.69	≤11.00	PASS
			52Tone	RU37	9.90	≤11.00	PASS

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			106Tone	RU53	9.38	≤11.00	PASS
	Ant6	5200	26Tone	RU0	6.75	≤11.00	PASS
			52Tone	RU37	6.81	≤11.00	PASS
			106Tone	RU53	6.59	≤11.00	PASS
	Ant9	5200	26Tone	RU0	6.47	≤11.00	PASS
			52Tone	RU37	6.65	≤11.00	PASS
			106Tone	RU53	6.13	≤11.00	PASS
	total	5200	26Tone	RU0	9.62	≤11.00	PASS
			52Tone	RU37	9.74	≤11.00	PASS
			106Tone	RU53	9.38	≤11.00	PASS
	Ant6	5240	26Tone	RU0	6.84	≤11.00	PASS
			52Tone	RU37	6.85	≤11.00	PASS
			106Tone	RU53	6.62	≤11.00	PASS
	Ant9	5240	26Tone	RU0	6.79	≤11.00	PASS
			52Tone	RU37	6.70	≤11.00	PASS
			106Tone	RU53	6.06	≤11.00	PASS
	total	5240	26Tone	RU0	9.83	≤11.00	PASS
			52Tone	RU37	9.79	≤11.00	PASS
			106Tone	RU53	9.36	≤11.00	PASS
	Ant6	5260	26Tone	RU0	7.09	≤11.00	PASS
			52Tone	RU37	6.94	≤11.00	PASS
			106Tone	RU53	5.85	≤11.00	PASS
	Ant9	5260	26Tone	RU0	7.04	≤11.00	PASS
			52Tone	RU37	6.82	≤11.00	PASS
			106Tone	RU53	6.23	≤11.00	PASS
	total	5260	26Tone	RU0	10.08	≤11.00	PASS
			52Tone	RU37	9.89	≤11.00	PASS
			106Tone	RU53	9.05	≤11.00	PASS
	Ant6	5280	26Tone	RU0	7.12	≤11.00	PASS
			52Tone	RU37	6.87	≤11.00	PASS
			106Tone	RU53	6.55	≤11.00	PASS
	Ant9	5280	26Tone	RU0	6.87	≤11.00	PASS
			52Tone	RU37	6.97	≤11.00	PASS
			106Tone	RU53	6.31	≤11.00	PASS
	total	5280	26Tone	RU0	10.01	≤11.00	PASS
			52Tone	RU37	9.93	≤11.00	PASS
			106Tone	RU53	9.44	≤11.00	PASS
	Ant6	5320	26Tone	RU0	6.82	≤11.00	PASS
			52Tone	RU37	7.13	≤11.00	PASS
			106Tone	RU53	6.84	≤11.00	PASS
	Ant9	5320	26Tone	RU0	6.62	≤11.00	PASS
			52Tone	RU37	6.78	≤11.00	PASS

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			106Tone	RU53	6.24	≤11.00	PASS
	total	5320	26Tone	RU0	9.73	≤11.00	PASS
			52Tone	RU37	9.97	≤11.00	PASS
			106Tone	RU53	9.56	≤11.00	PASS
	Ant6	5500	26Tone	RU8	7.16	≤11.00	PASS
			52Tone	RU40	7.19	≤11.00	PASS
			106Tone	RU54	6.68	≤11.00	PASS
	Ant9	5500	26Tone	RU8	7.07	≤11.00	PASS
			52Tone	RU40	7.26	≤11.00	PASS
			106Tone	RU54	6.55	≤11.00	PASS
	total	5500	26Tone	RU8	10.13	≤11.00	PASS
			52Tone	RU40	10.24	≤11.00	PASS
			106Tone	RU54	9.63	≤11.00	PASS
	Ant6	5580	26Tone	RU8	6.57	≤11.00	PASS
			52Tone	RU40	7.08	≤11.00	PASS
			106Tone	RU54	6.45	≤11.00	PASS
	Ant9	5580	26Tone	RU8	6.31	≤11.00	PASS
			52Tone	RU40	7.11	≤11.00	PASS
			106Tone	RU54	6.36	≤11.00	PASS
	total	5580	26Tone	RU8	9.45	≤11.00	PASS
			52Tone	RU40	10.11	≤11.00	PASS
			106Tone	RU54	9.42	≤11.00	PASS
	Ant6	5700	26Tone	RU8	7.57	≤11.00	PASS
			52Tone	RU40	7.11	≤11.00	PASS
			106Tone	RU54	6.48	≤11.00	PASS
	Ant9	5700	26Tone	RU8	6.70	≤11.00	PASS
			52Tone	RU40	7.17	≤11.00	PASS
			106Tone	RU54	6.86	≤11.00	PASS
	total	5700	26Tone	RU8	10.17	≤11.00	PASS
			52Tone	RU40	10.15	≤11.00	PASS
			106Tone	RU54	9.68	≤11.00	PASS
	Ant6	5720	26Tone	RU8	6.54	≤11.00	PASS
			52Tone	RU40	6.71	≤11.00	PASS
			106Tone	RU54	6.51	≤11.00	PASS
	Ant9	5720	26Tone	RU8	6.32	≤11.00	PASS
			52Tone	RU40	6.67	≤11.00	PASS
			106Tone	RU54	6.43	≤11.00	PASS
	total	5720	26Tone	RU8	9.44	≤11.00	PASS
			52Tone	RU40	9.70	≤11.00	PASS
			106Tone	RU54	9.48	≤11.00	PASS

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Peak Power Spectral Density:11a CH116 Ant9

Conclusion: PASS

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A.4. 26dB Emission Bandwidth (conducted)

Measurement Limit:

Standard	Limit (kHz)
FCC 47 CFR Part 15.403 (i)	/

The measurement is made according to KDB 789033

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz

EUT ID: UT36a

Measurement Result:

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant6	5180	30.16	5165.60	5195.76	---	---
	Ant9	5180	31.68	5165.36	5197.04	---	---
	Ant6	5200	32.24	5183.48	5215.72	---	---
	Ant9	5200	32.88	5183.40	5216.28	---	---
	Ant6	5240	32.52	5223.92	5256.44	---	---
	Ant9	5240	23.60	5228.28	5251.88	---	---
	Ant6	5260	32.28	5243.56	5275.84	---	---
	Ant9	5260	30.64	5243.92	5274.56	---	---
	Ant6	5280	31.92	5263.88	5295.80	---	---
	Ant9	5280	27.80	5267.28	5295.08	---	---
	Ant6	5320	32.76	5303.16	5335.92	---	---
	Ant9	5320	30.32	5303.60	5333.92	---	---
	Ant6	5500	30.00	5486.04	5516.04	---	---
	Ant9	5500	32.68	5484.32	5517.00	---	---
	Ant6	5580	29.08	5566.28	5595.36	---	---
	Ant9	5580	28.16	5567.24	5595.40	---	---
	Ant6	5700	28.84	5684.16	5713.00	---	---
	Ant9	5700	31.52	5682.12	5713.64	---	---
	Ant6	5720	30.64	5705.28	5735.92	---	---
	Ant9	5720	31.12	5704.88	5736.00	---	---
11N20MIMO	Ant6	5180	32.48	5164.72	5197.20	---	---
	Ant9	5180	29.68	5166.20	5195.88	---	---
	Ant6	5200	31.72	5184.32	5216.04	---	---
	Ant9	5200	35.32	5182.32	5217.64	---	---
	Ant6	5240	28.36	5225.72	5254.08	---	---
	Ant9	5240	22.92	5228.56	5251.48	---	---
	Ant6	5260	27.08	5247.16	5274.24	---	---
	Ant9	5260	30.36	5245.04	5275.40	---	---
	Ant6	5280	27.88	5265.72	5293.60	---	---
	Ant9	5280	27.72	5266.76	5294.48	---	---

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	Ant6	5320	33.40	5301.96	5335.36	---	---
	Ant9	5320	33.80	5302.48	5336.28	---	---
	Ant6	5500	32.88	5484.52	5517.40	---	---
	Ant9	5500	32.96	5484.32	5517.28	---	---
	Ant6	5580	29.00	5565.12	5594.12	---	---
	Ant9	5580	30.48	5565.16	5595.64	---	---
	Ant6	5700	30.04	5682.88	5712.92	---	---
	Ant9	5700	32.08	5682.36	5714.44	---	---
	Ant6	5720	27.32	5707.00	5734.32	---	---
	Ant9	5720	32.92	5703.64	5736.56	---	---
11AC40MIMO	Ant6	5190	55.92	5164.56	5220.48	---	---
	Ant9	5190	59.68	5164.08	5223.76	---	---
	Ant6	5230	42.08	5209.04	5251.12	---	---
	Ant9	5230	40.56	5209.68	5250.24	---	---
	Ant6	5270	43.52	5249.44	5292.96	---	---
	Ant9	5270	40.40	5249.76	5290.16	---	---
	Ant6	5310	56.88	5277.84	5334.72	---	---
	Ant9	5310	51.76	5280.96	5332.72	---	---
	Ant6	5510	56.56	5485.44	5542.00	---	---
	Ant9	5510	47.60	5485.92	5533.52	---	---
	Ant6	5550	50.16	5520.56	5570.72	---	---
	Ant9	5550	40.40	5529.84	5570.24	---	---
	Ant6	5670	50.32	5645.36	5695.68	---	---
	Ant9	5670	53.84	5639.76	5693.60	---	---
	Ant6	5710	41.36	5689.36	5730.72	---	---
	Ant9	5710	40.40	5689.84	5730.24	---	---
11AX80MIMO	Ant6	5210	106.24	5163.60	5269.84	---	---
	Ant9	5210	95.36	5168.88	5264.24	---	---
	Ant6	5290	90.24	5244.72	5334.96	---	---
	Ant9	5290	94.08	5238.48	5332.56	---	---
	Ant6	5530	104.16	5485.68	5589.84	---	---
	Ant9	5530	81.12	5489.36	5570.48	---	---
	Ant6	5610	81.12	5569.36	5650.48	---	---
	Ant9	5610	80.96	5569.52	5650.48	---	---
	Ant6	5690	81.12	5649.36	5730.48	---	---
	Ant9	5690	80.96	5649.52	5730.48	---	---

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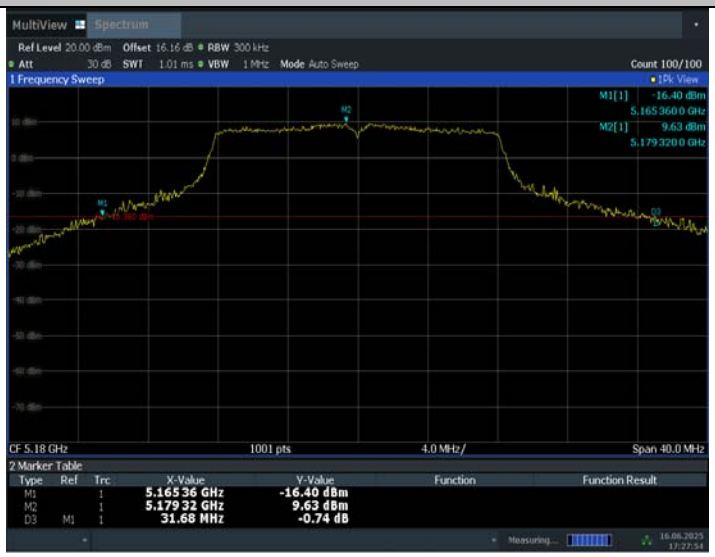
Test graphs as below:

11A_Ant6_5180

17:26:49 16.06.2025

11A_Ant9_5180



17:27:54 16.06.2025

11A_Ant6_5200

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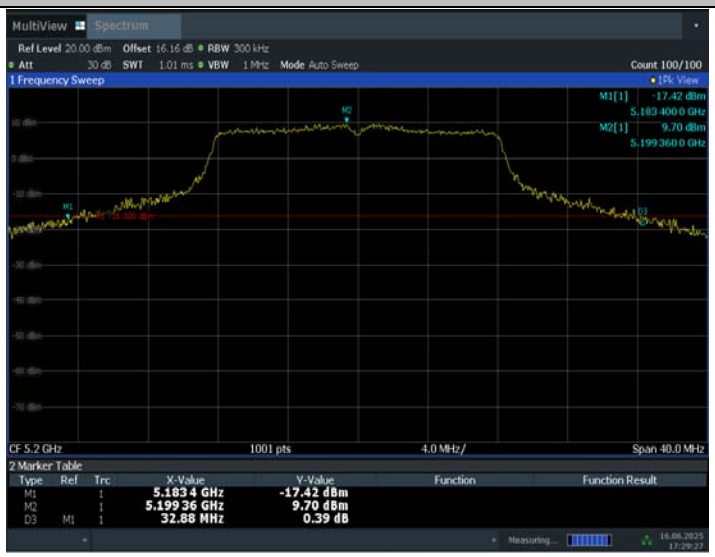
11A_Ant9_5200



11A_Ant6_5240

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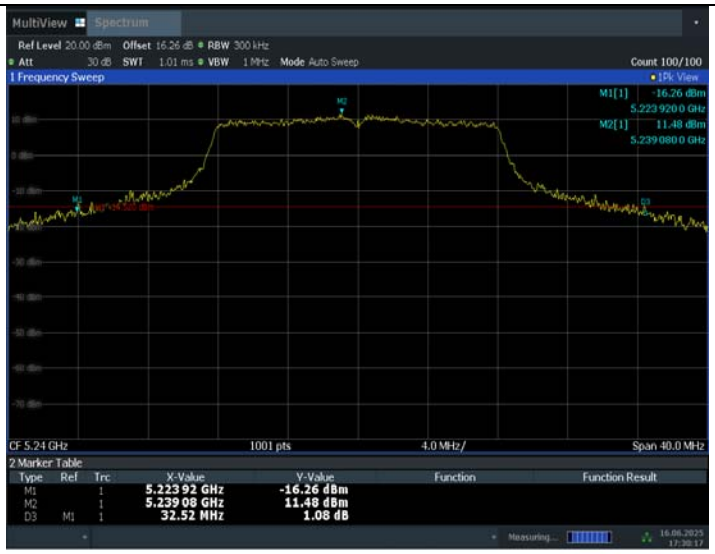
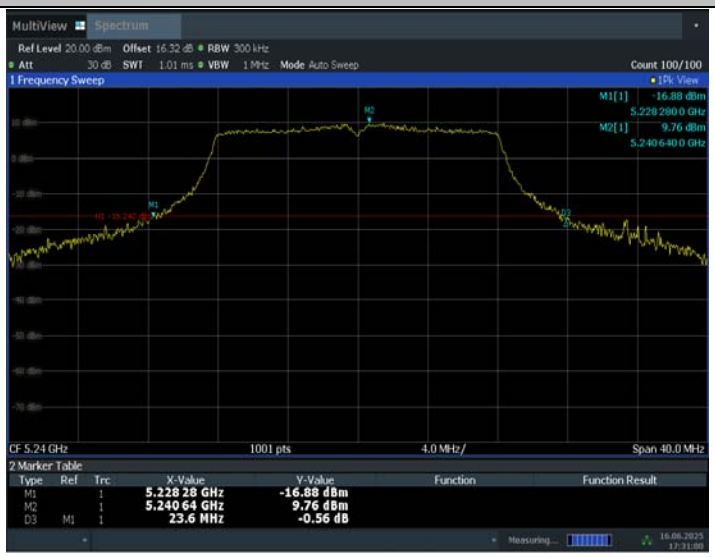


11A_Ant9_5240



11A_Ant6_5260

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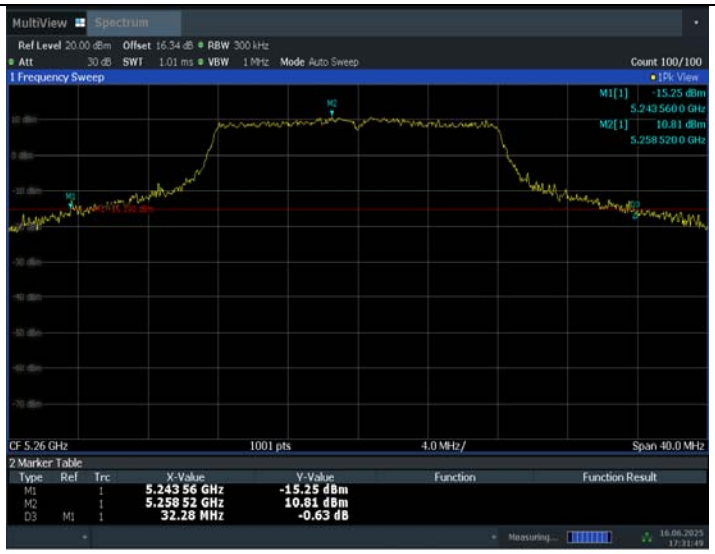

11A_Ant9_5260

11A_Ant6_5280

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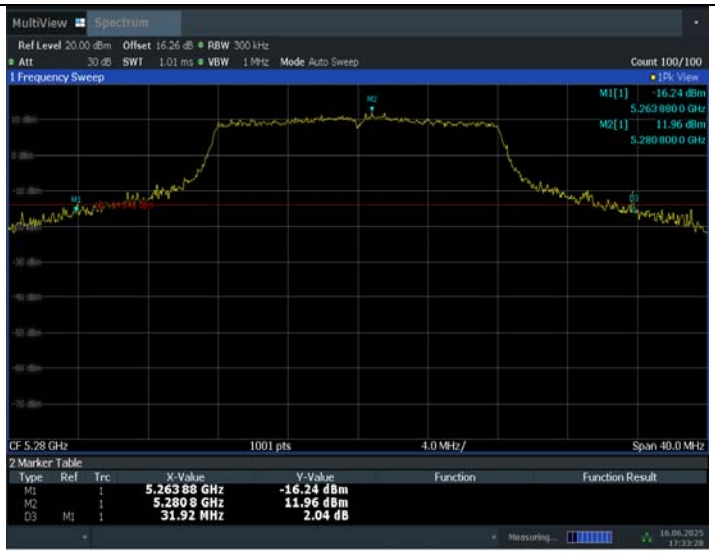

11A_Ant9_5280

11A_Ant6_5320

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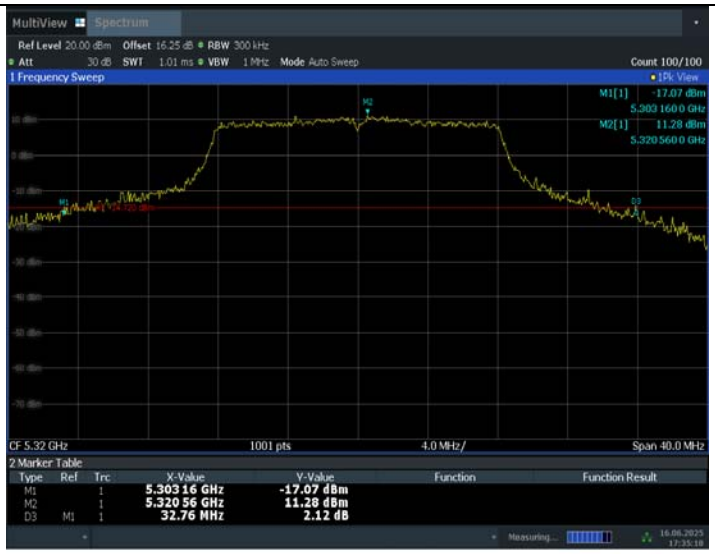

11A_Ant9_5320

11A_Ant6_5500

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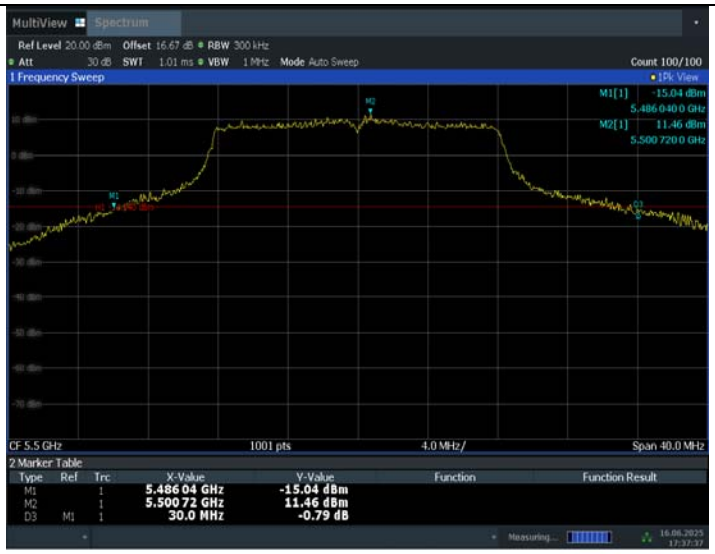

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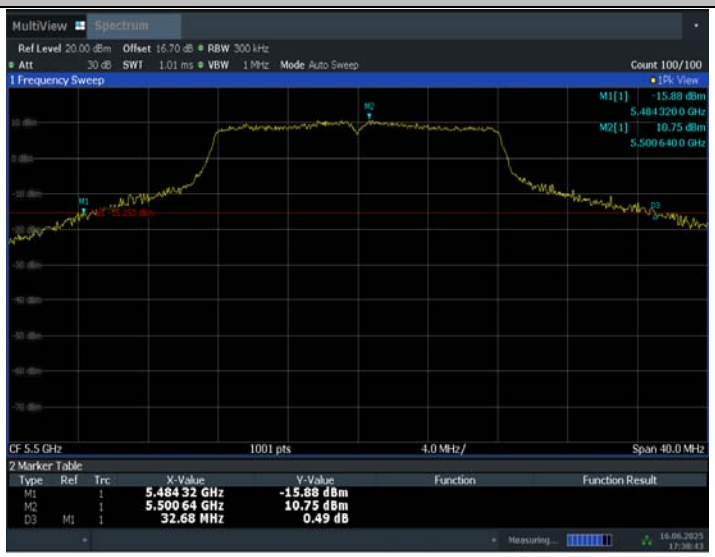
11A_Ant9_5500



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11A_Ant6_5580

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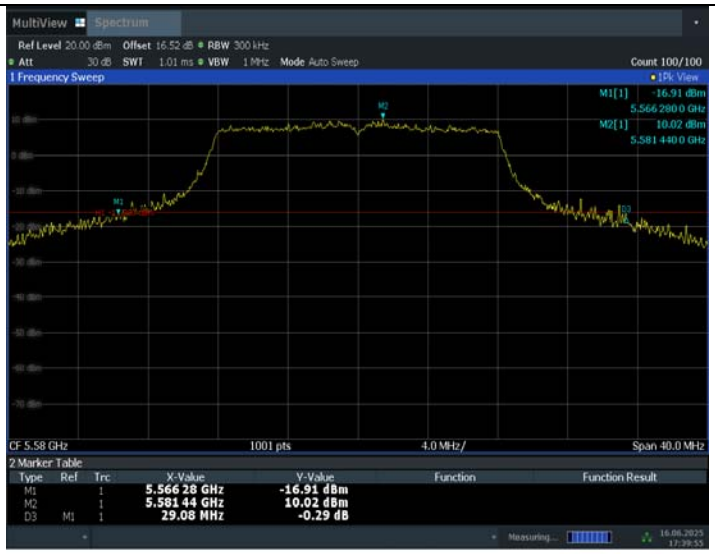

11A_Ant9_5580

11A_Ant6_5700

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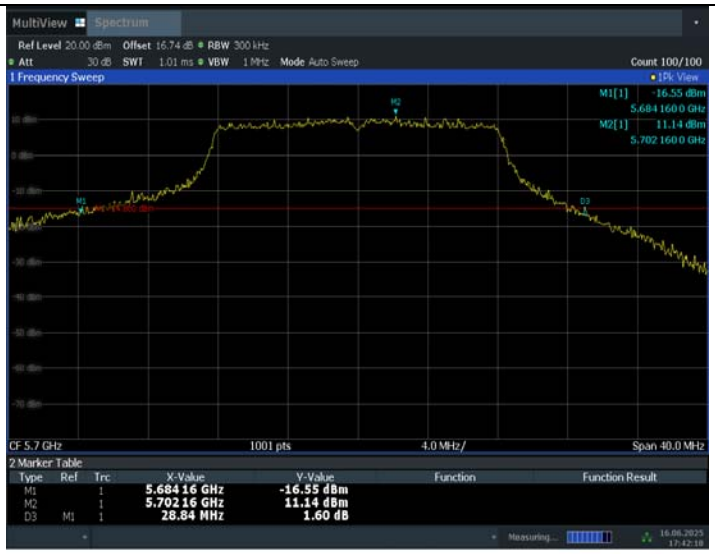

11A_Ant9_5700

11A_Ant6_5720

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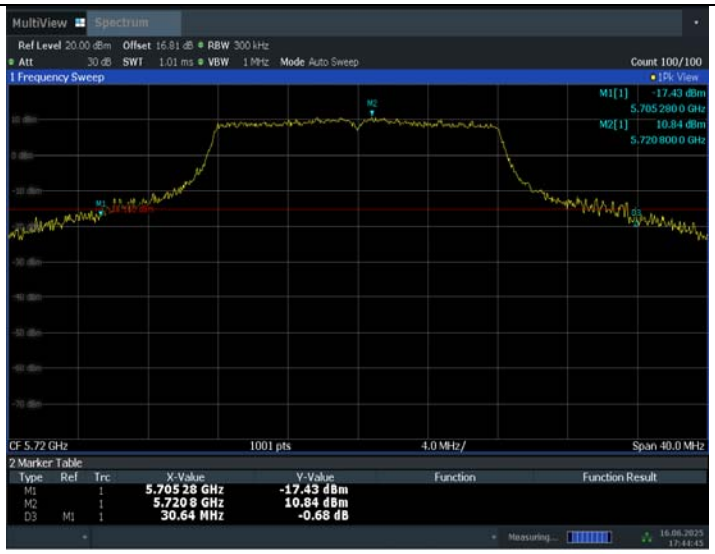

11A_Ant9_5720

11N20MIMO_Ant6_5180

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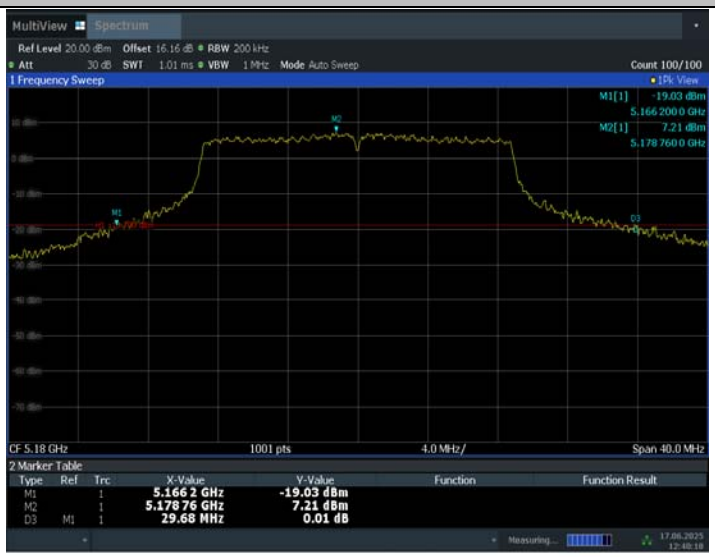
11N20MIMO_Ant9_5180



11N20MIMO_Ant6_5200

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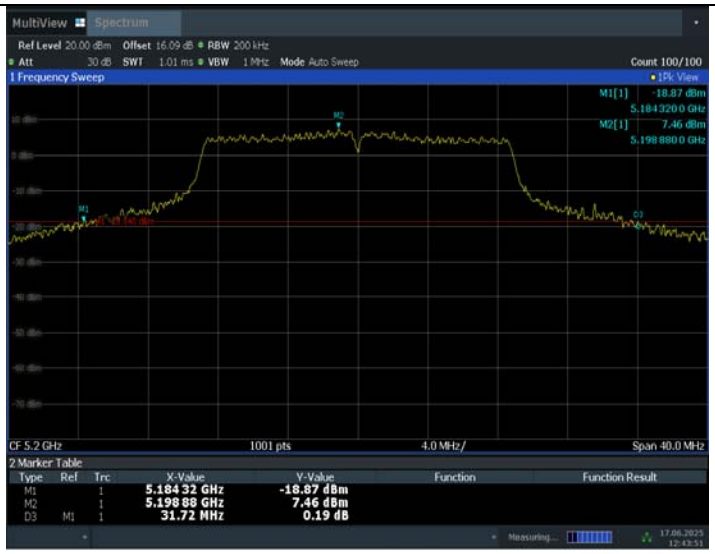

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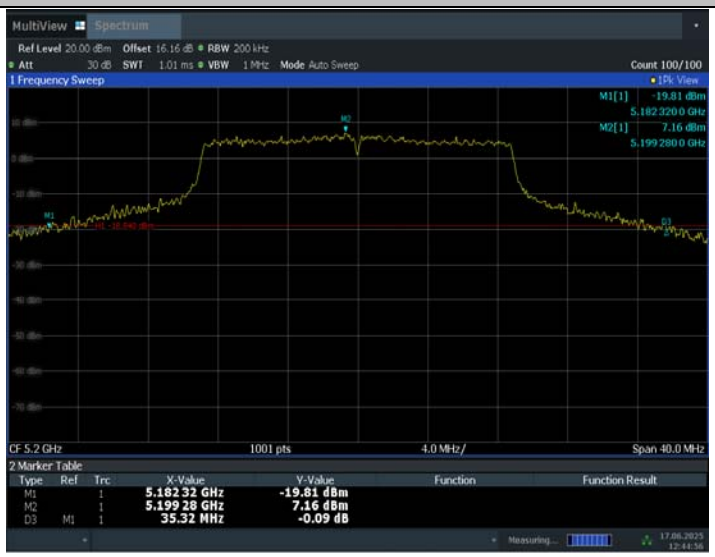

11N20MIMO_Ant6_5240

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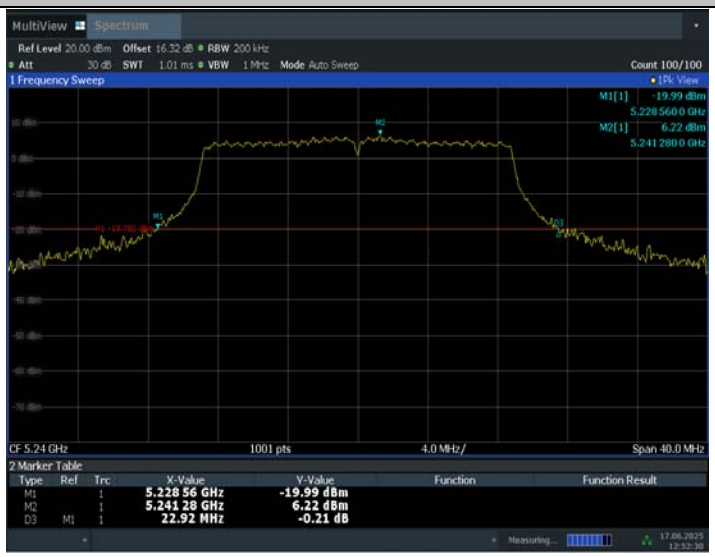
11N20MIMO_Ant9_5240



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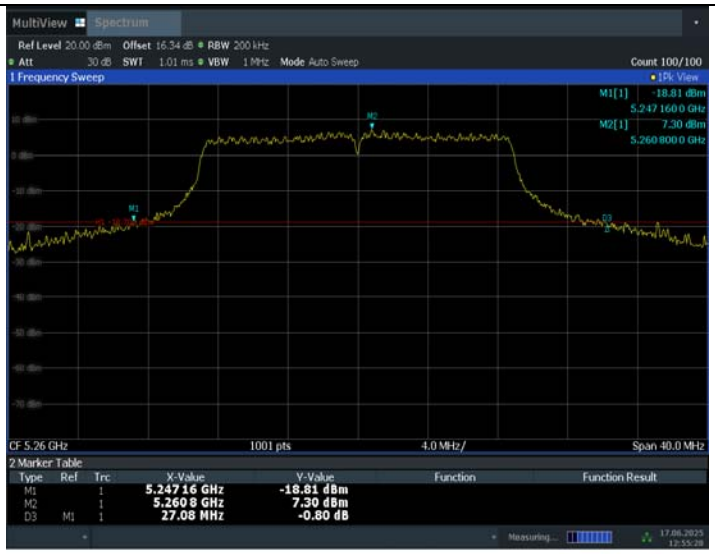

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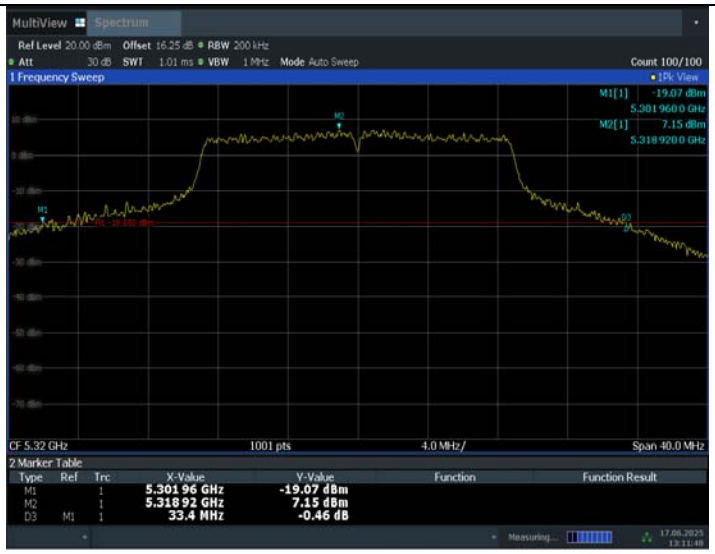

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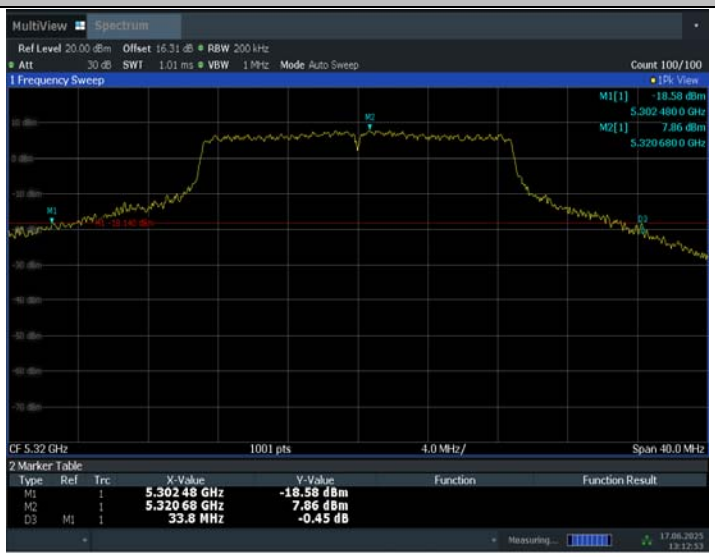

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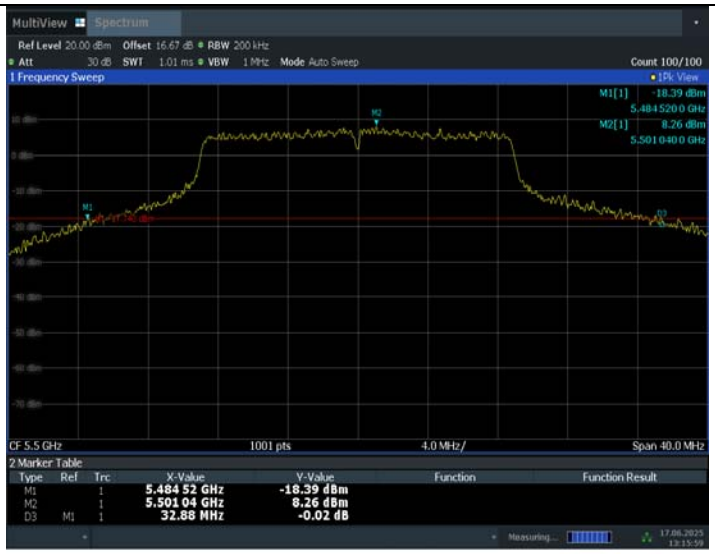

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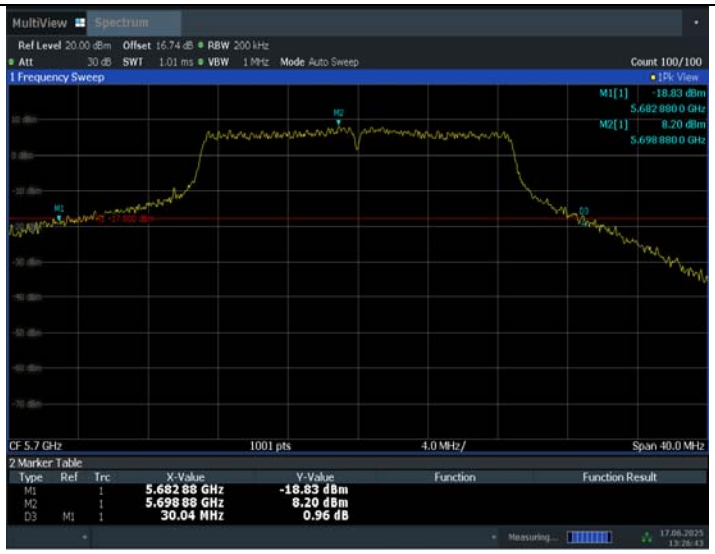

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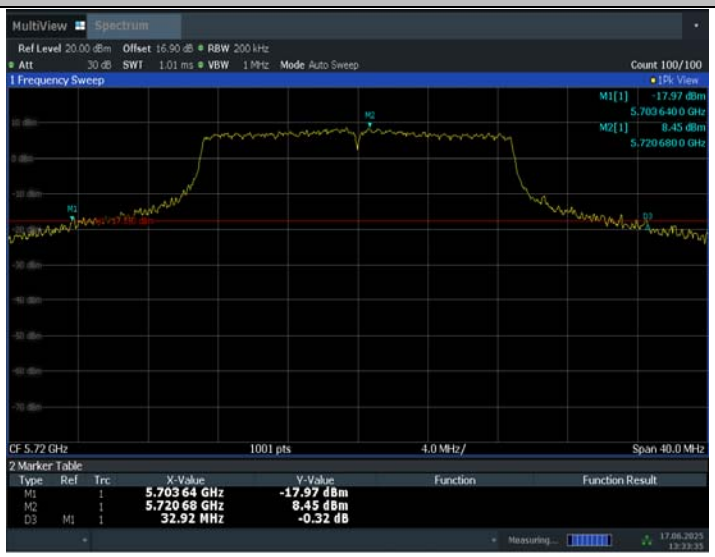

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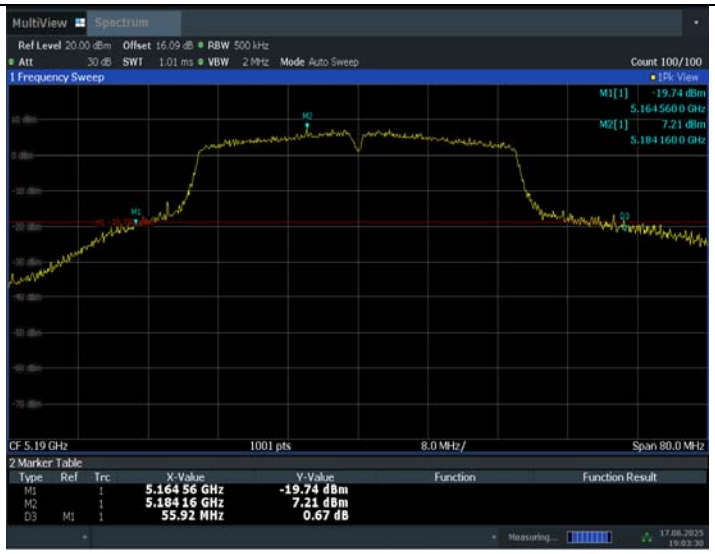

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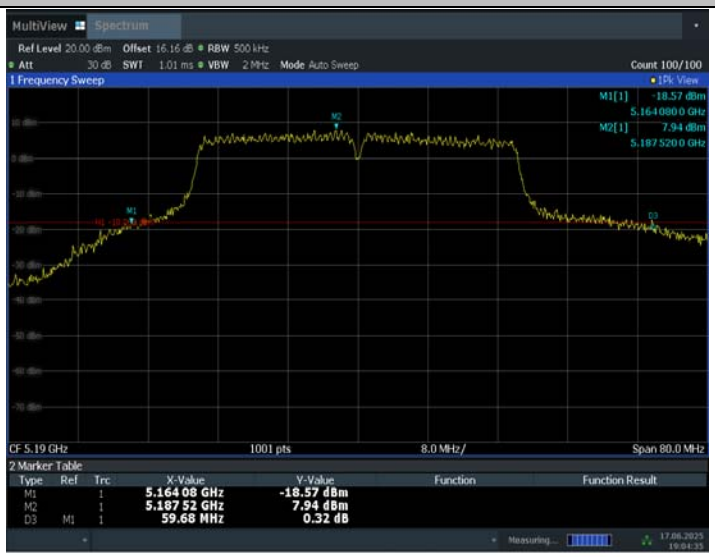

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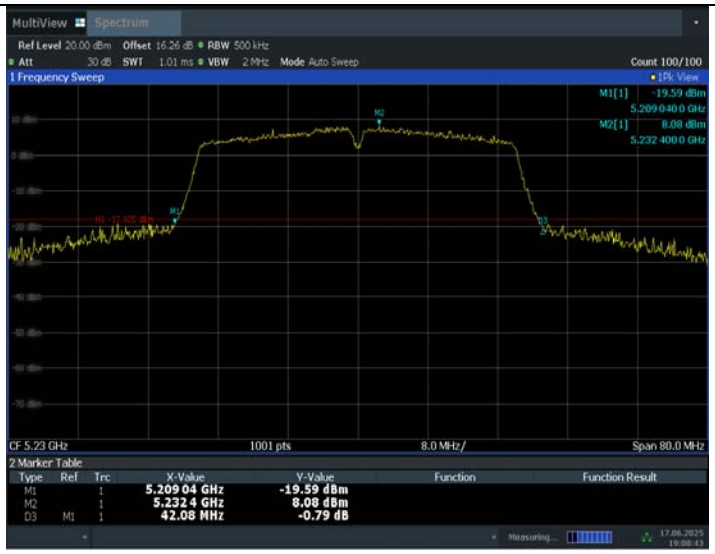

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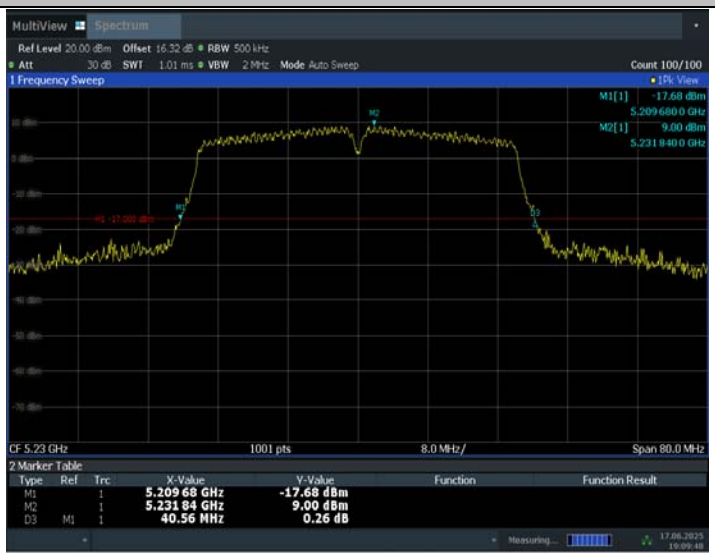

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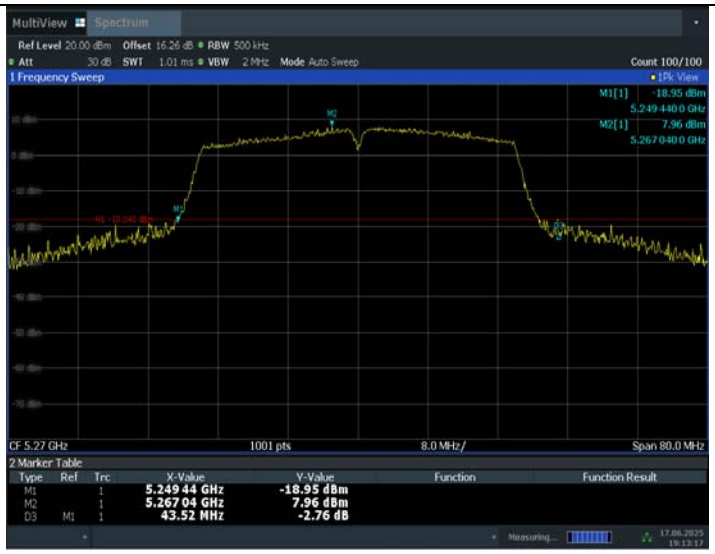

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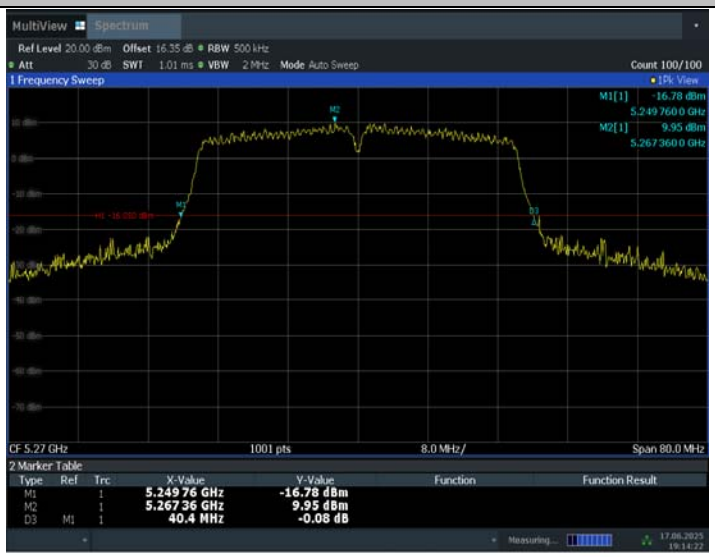

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11AC40MIMO_Ant6_5510

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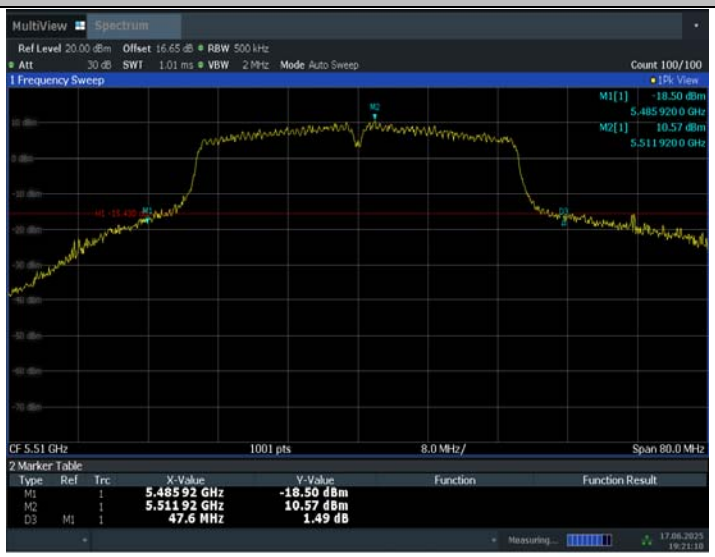

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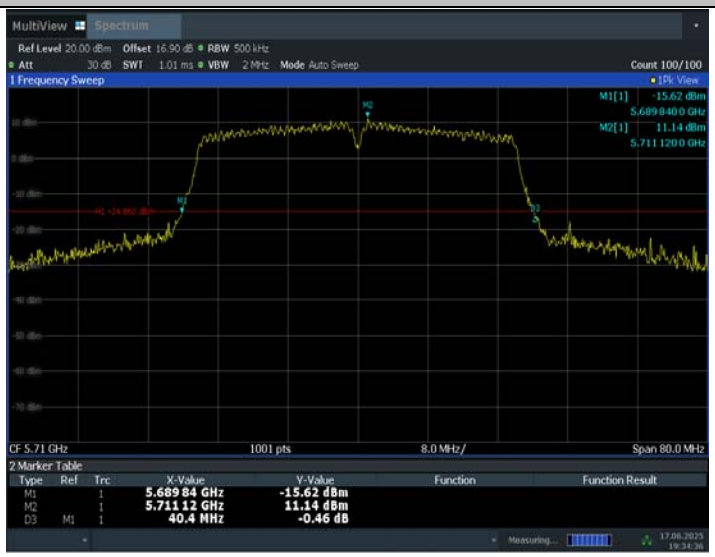

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11AX80MIMO_Ant6_5530

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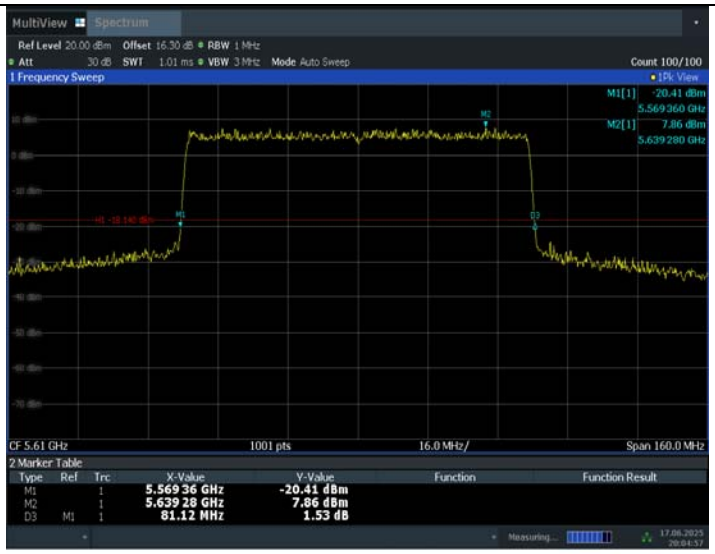

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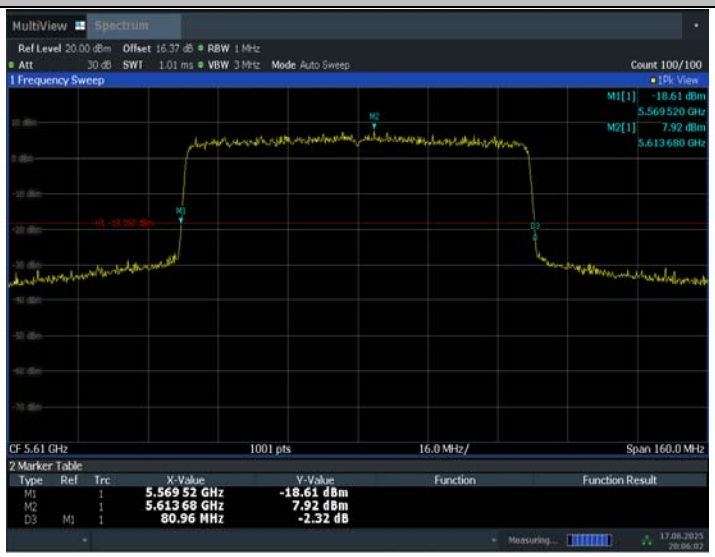

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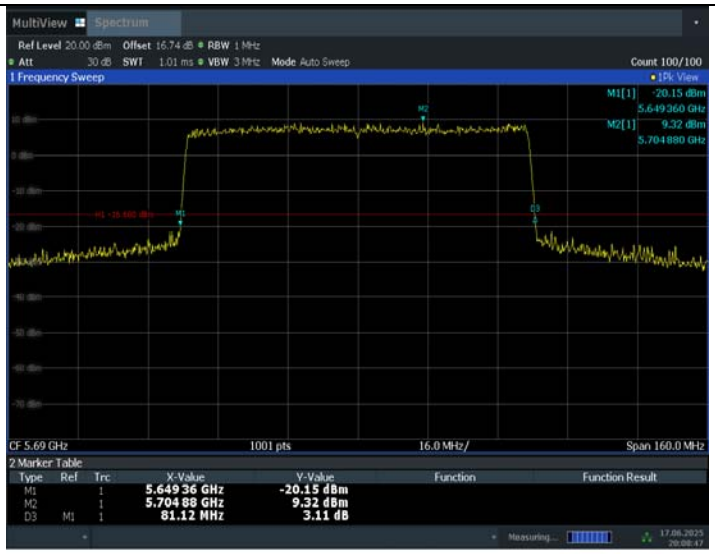

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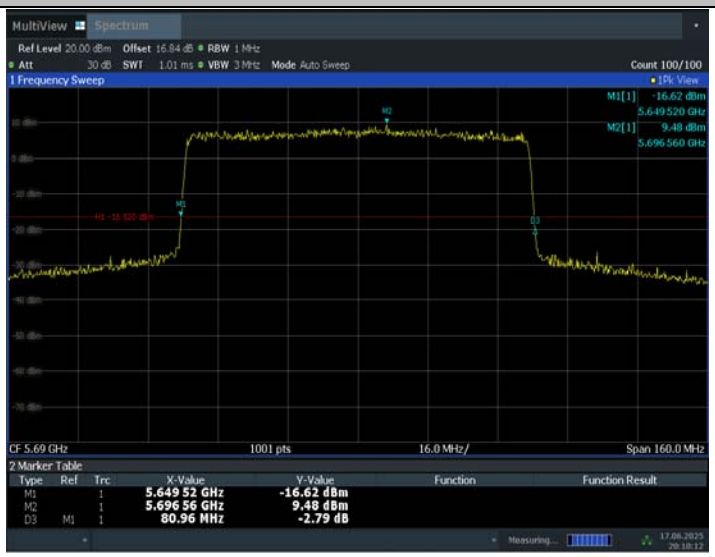

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Conclusion: PASS

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A.5. Band Edges Compliance

A5.1 Band Edges - Radiated

Measurement Limit:

Standard	Limit (dB μ V/m)	
FCC 47 CFR Part 15.209	Peak	74
	Average	54

The measurement is made according to KDB 789033

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)	Measurement distance(m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

The measurement is made according to ANSI C63.10-2013 and KDB 789033

Measurement Result:

Mode	Channel	Test Results	Conclusion
802.11a	5180 MHz	Fig.1	P
	5320 MHz	Fig.2	P
	5500 MHz	Fig.3	P
	5700 MHz	Fig.4	P
802.11n HT20	5180 MHz	Fig.5	P
	5320 MHz	Fig.6	P
	5500 MHz	Fig.7	P
	5700 MHz	Fig.8	P
802.11n HT40	5190 MHz	Fig.9	P
	5310 MHz	Fig.10	P
	5510 MHz	Fig.11	P
	5670 MHz	Fig.12	P
802.11ac HT20	5180 MHz	Fig.13	P
	5320 MHz	Fig.14	P
	5500 MHz	Fig.15	P
	5700 MHz	Fig.16	P
802.11ac HT40	5190 MHz	Fig.17	P
	5310 MHz	Fig.18	P
	5510 MHz	Fig.19	P
	5670 MHz	Fig.20	P
802.11ac	5210MHz	Fig.21	P

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HT80	5290MHz	Fig.22	P
	5530MHz	Fig.23	P
	5610MHz	Fig.24	P
802.11ax HE20	5180 MHz	Fig.25	P
	5320 MHz	Fig.26	P
	5500 MHz	Fig.27	P
	5700 MHz	Fig.28	P
802.11ax HE40	5190 MHz	Fig.29	P
	5310 MHz	Fig.30	P
	5510 MHz	Fig.31	P
	5670 MHz	Fig.32	P
802.11ax HE80	5210MHz	Fig.33	P
	5290MHz	Fig.34	P
	5530MHz	Fig.35	P
	5610MHz	Fig.36	P

Partial RU

Mode	Channel	RU size and index	Test Results	Conclusion
802.11ax HE20	5180 MHz	106RU-index53	Fig.37	P
	5320 MHz	106RU-index54	Fig.38	P
	5500 MHz	106RU-index53	Fig.39	P
	5700 MHz	106RU-index54	Fig.40	P
802.11ax HE40	5190 MHz	242RU-index61	Fig.41	P
	5310 MHz	242RU-index62	Fig.42	P
	5510 MHz	242RU-index61	Fig.43	P
	5670 MHz	242RU-index62	Fig.44	P
802.11ax HE80	5210MHz	242RU-index61	Fig.45	P
	5290MHz	242RU-index62	Fig.46	P
	5530MHz	242RU-index61	Fig.47	P
	5610MHz	242RU-index62	Fig.48	P

Note1: All partial RU and full RU have been tested, in spurious domain there are basically noises with suspicious emission, thus only the full RU results were reported.

Note2: All SISO and MIMO emissions have been checked, only the worst cases were reported.

Conclusion: PASS

Test graphs as below:

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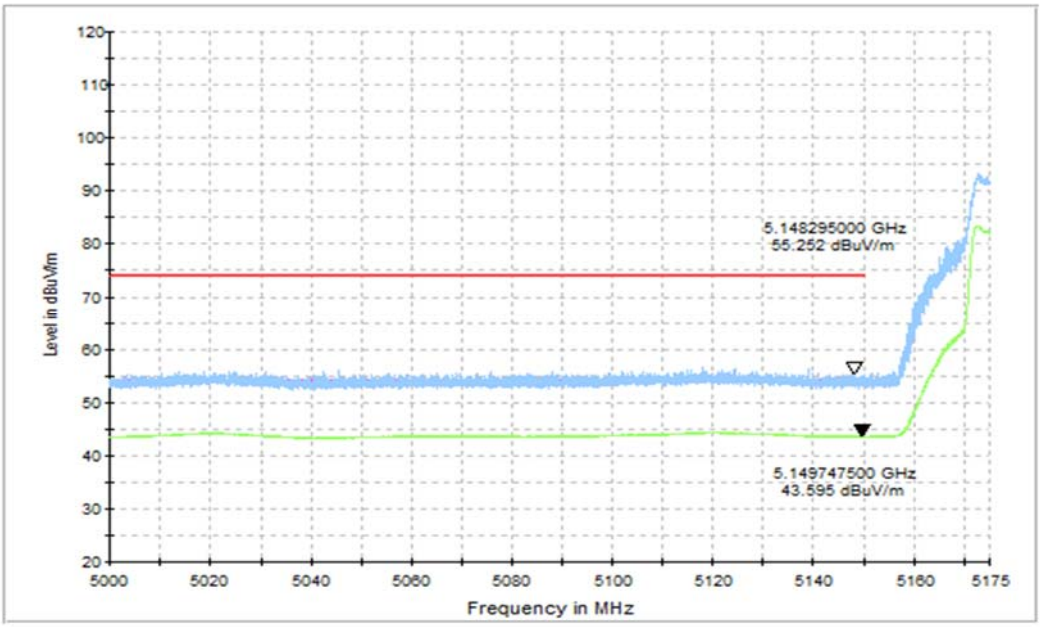

Fig. 1 Band Edges (802.11a Ch36, 5180MHz, FULL RU)

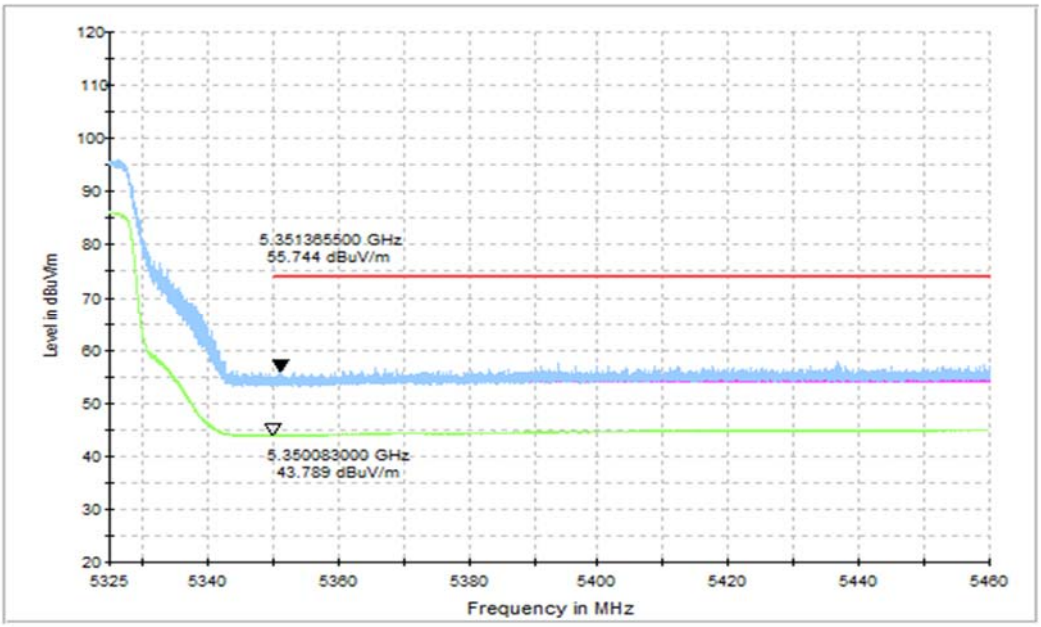

Fig. 2 Band Edges (802.11a Ch64, 5320MHz, FULL RU)

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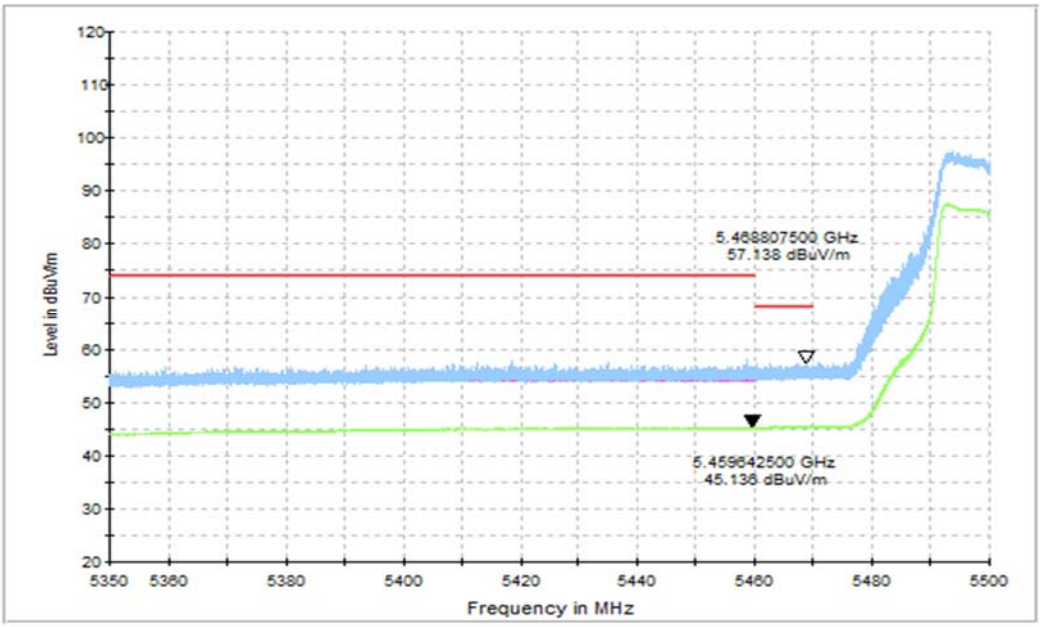

Fig. 3 Band Edges (802.11a Ch100, 5500MHz, FULL RU)

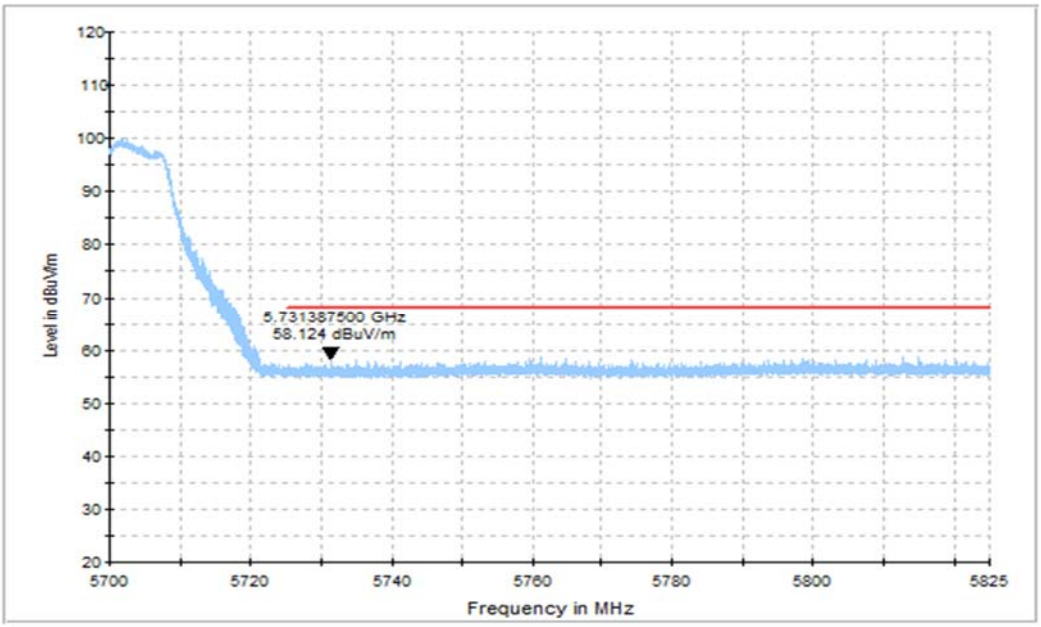

Fig. 4 Band Edges (802.11a Ch140, 5700MHz, FULL RU)

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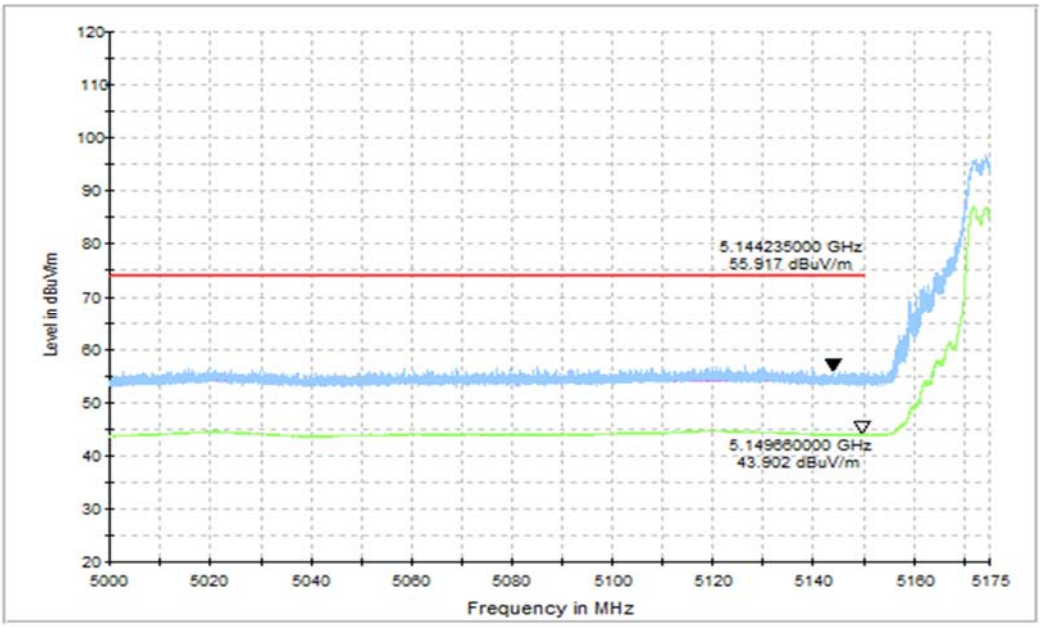

Fig. 5 Band Edges (802.11n-HT20 Ch36, 5180MHz, FULL RU)

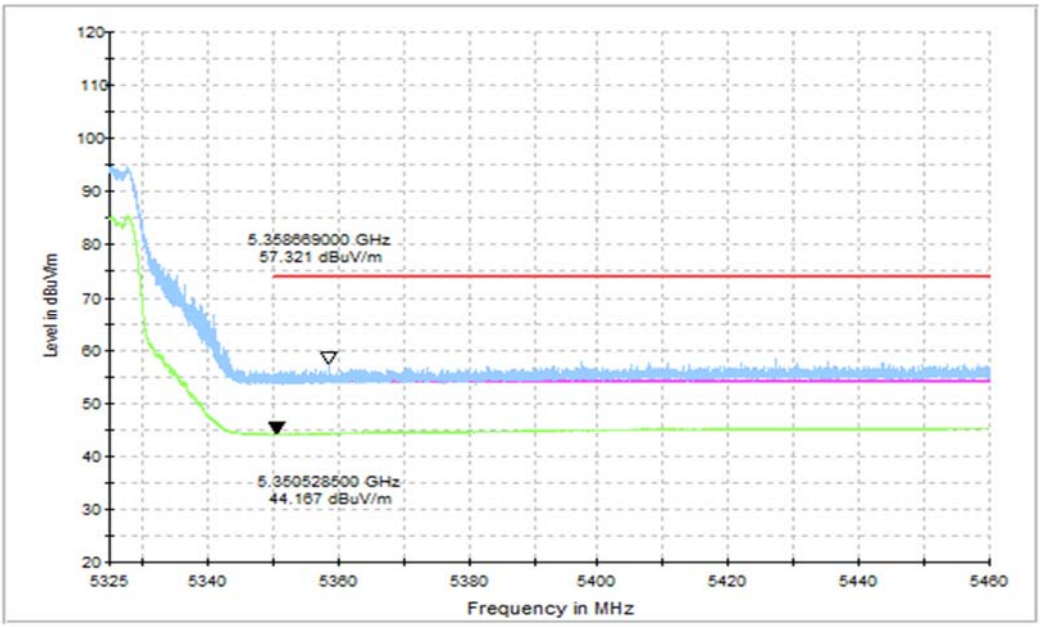

Fig. 6 Band Edges (802.11n-HT20 Ch64, 5320MHz, FULL RU)

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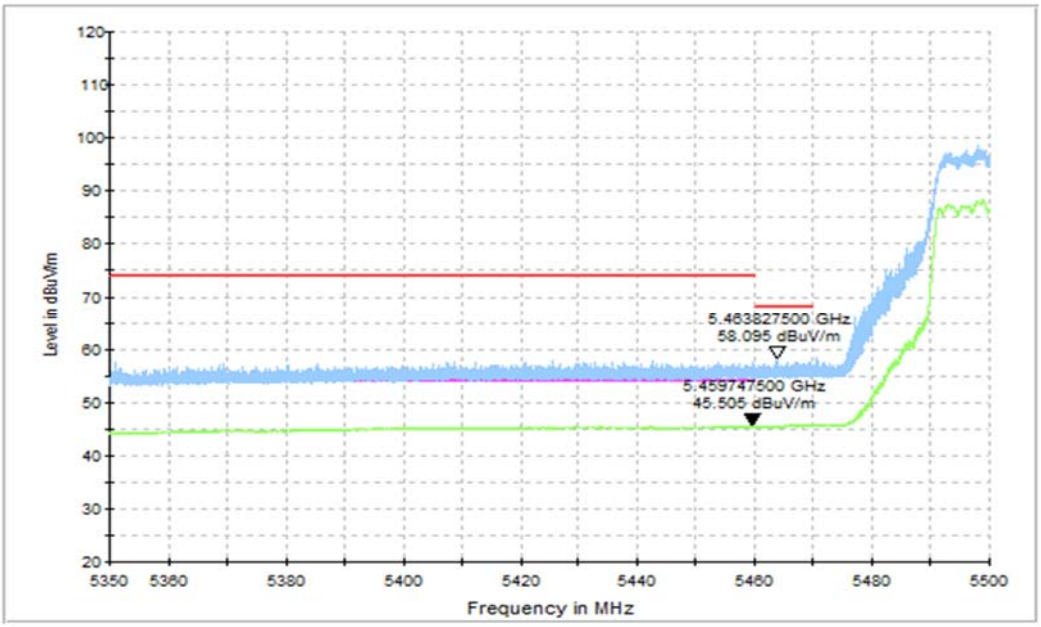

Fig. 7 Band Edges (802.11n-HT20 Ch100, 5500MHz, FULL RU)

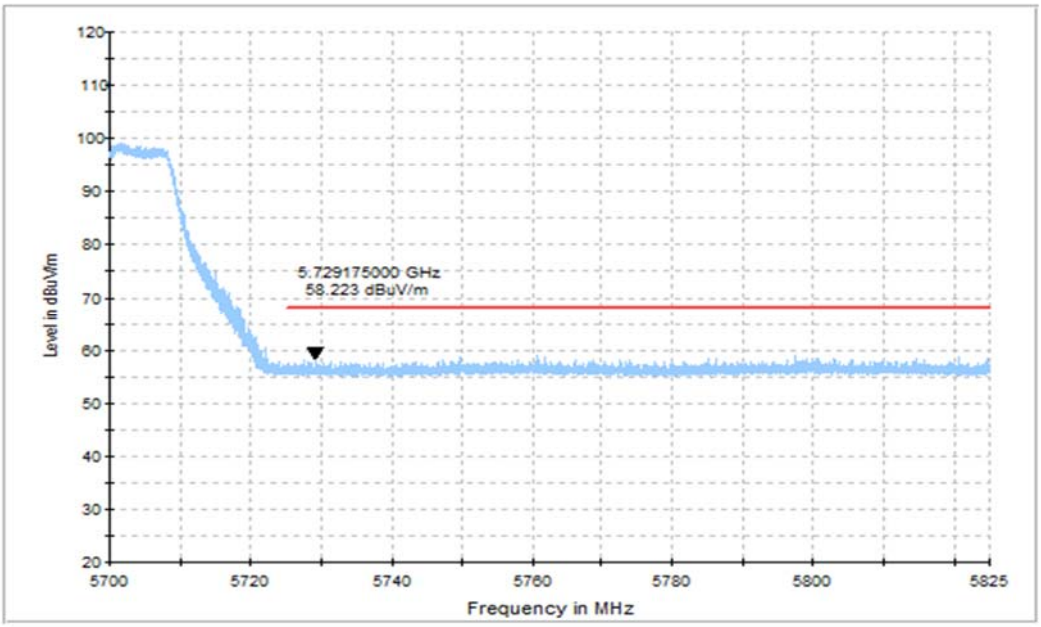

Fig. 8 Band Edges (802.11n-HT20 Ch140, 5700MHz, FULL RU)

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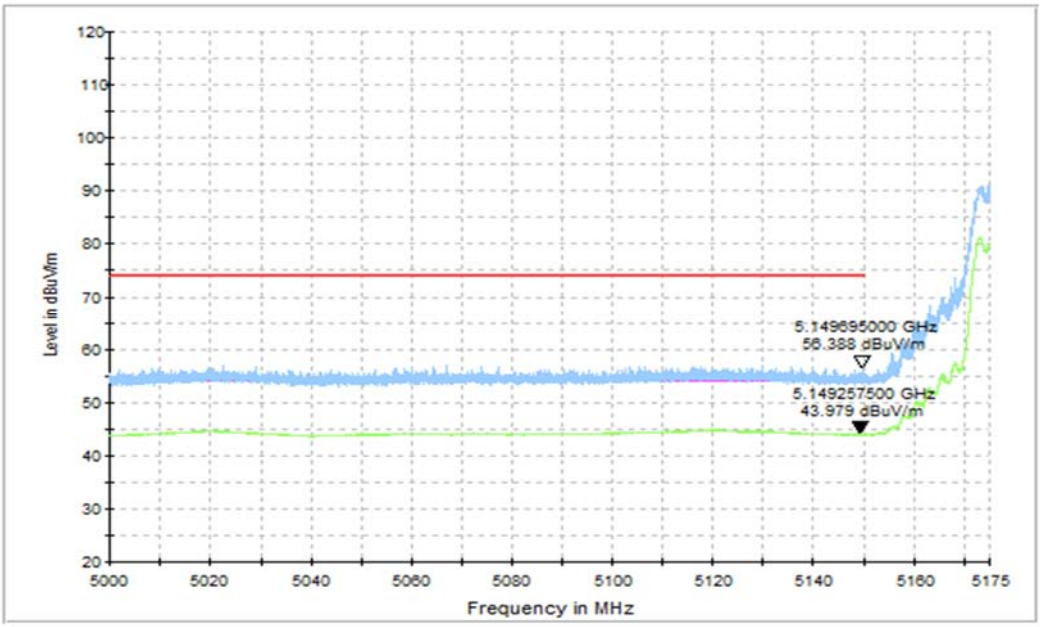

Fig. 9 Band Edges (802.11n-HT40 Ch38, 5190MHz, FULL RU)

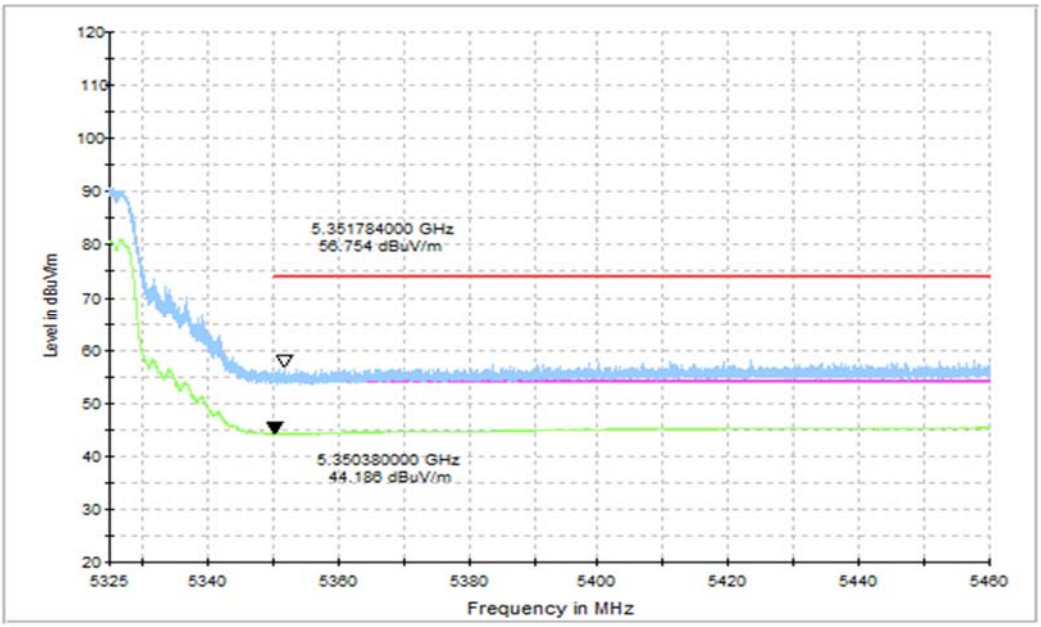

Fig. 10 Band Edges (802.11n-HT40 Ch62, 5310MHz, FULL RU)

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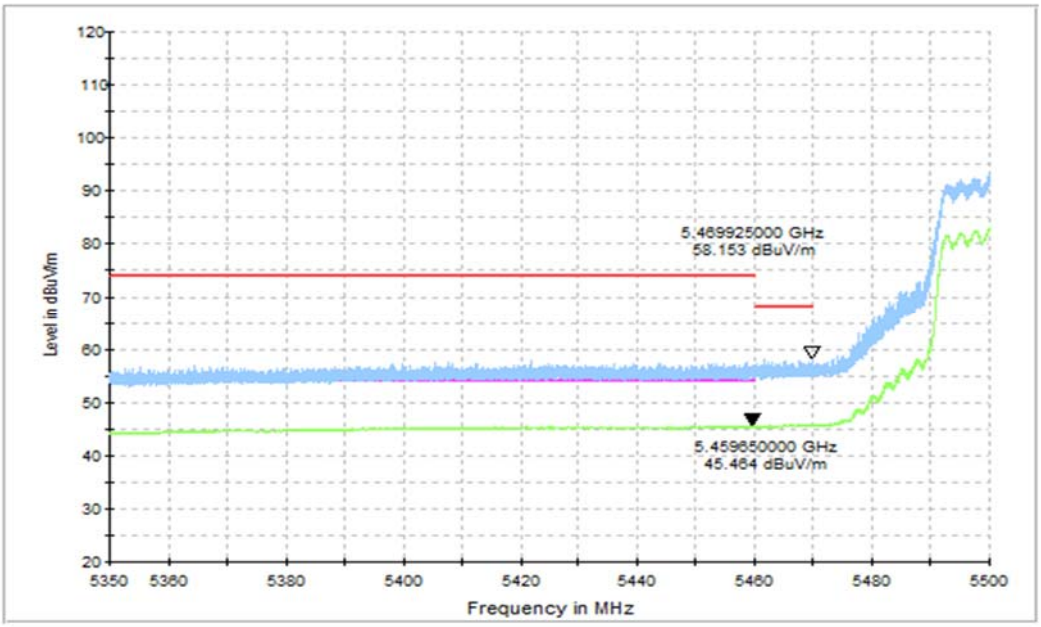

Fig. 11 Band Edges (802.11n-HT40 Ch102, 5510MHz, FULL RU)

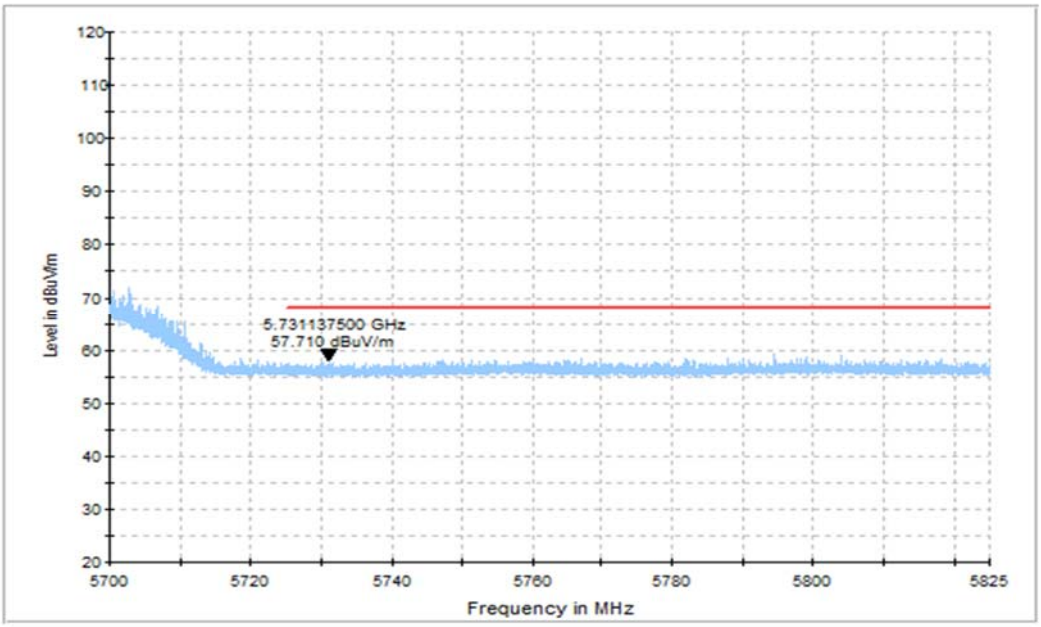

Fig. 12 Band Edges (802.11n-HT40 Ch134, 5670MHz, FULL RU)

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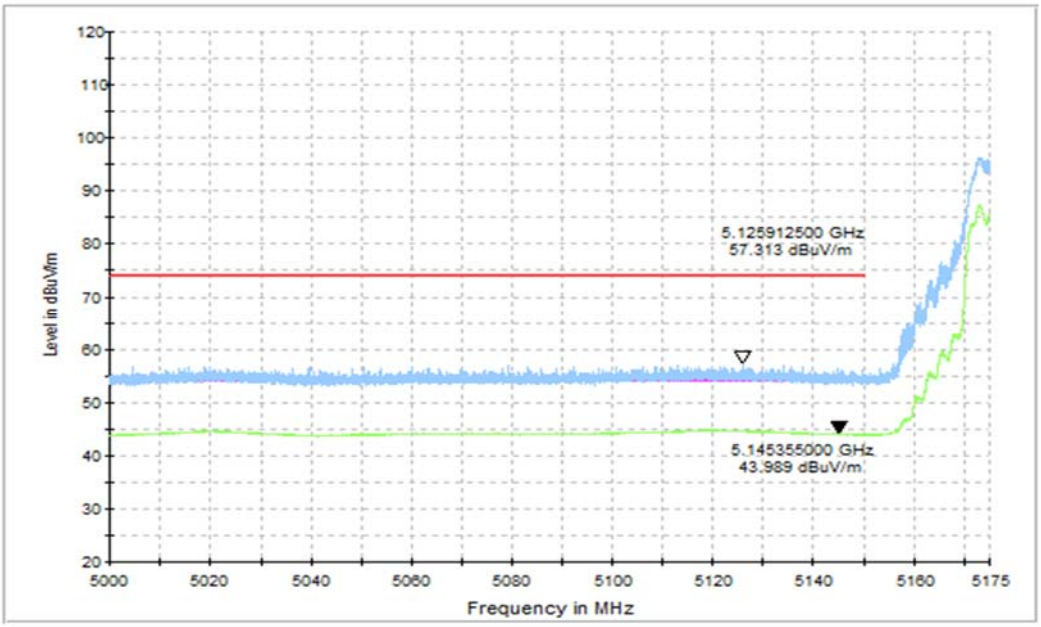

Fig. 13 Band Edges (802.11ac-HT20 Ch36, 5180MHz, FULL RU)

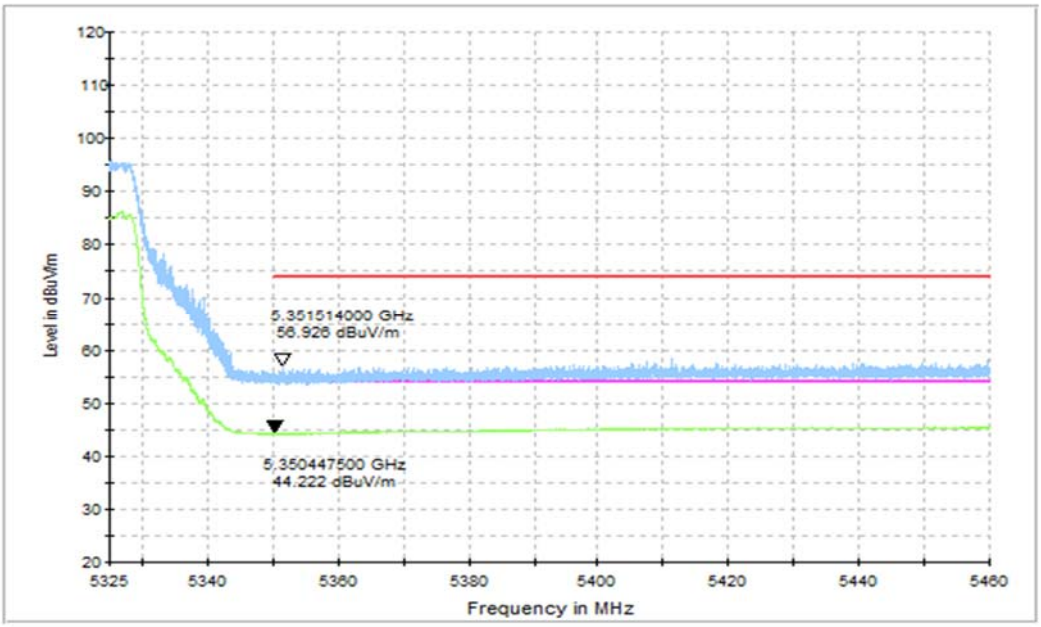

Fig. 14 Band Edges (802.11ac-HT20 Ch64, 5320MHz, FULL RU)

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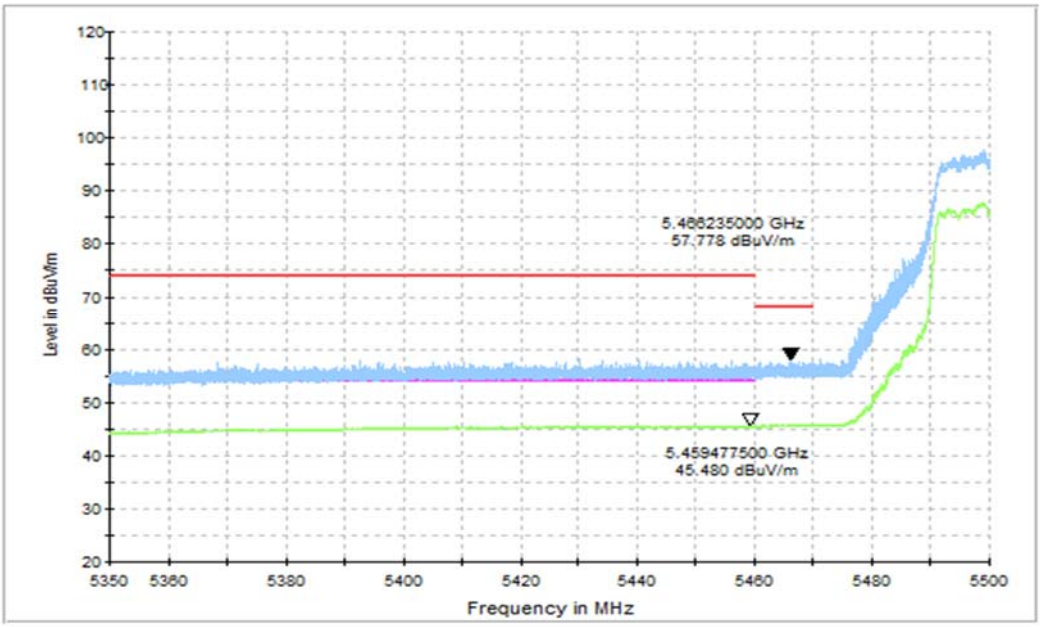

Fig. 15 Band Edges (802.11ac-HT20 Ch100, 5500MHz, FULL RU)

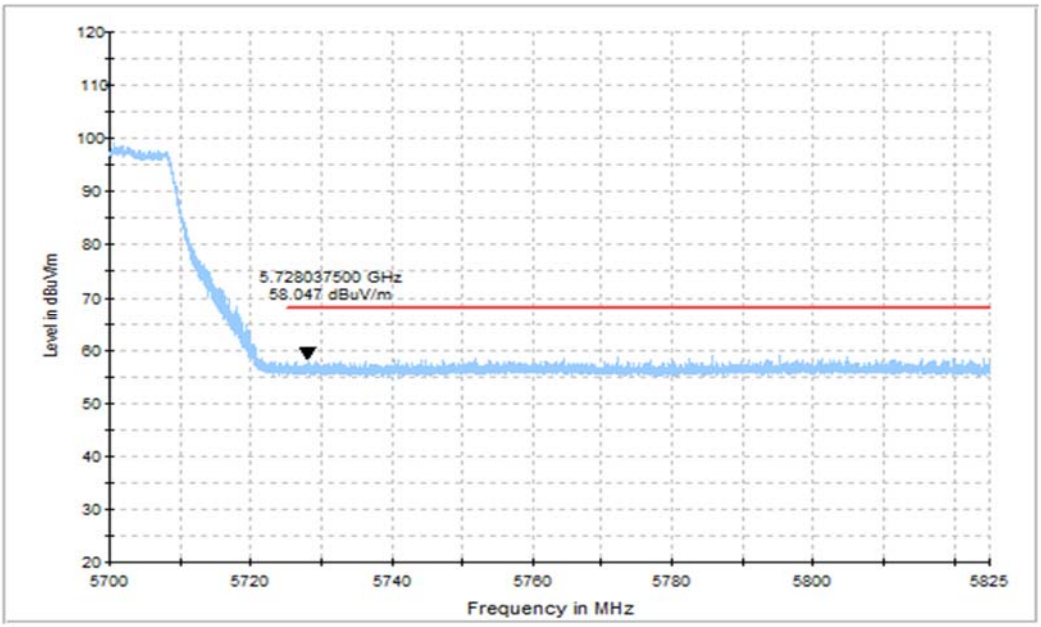

Fig. 16 Band Edges (802.11ac-HT20 Ch140, 5700MHz, FULL RU)

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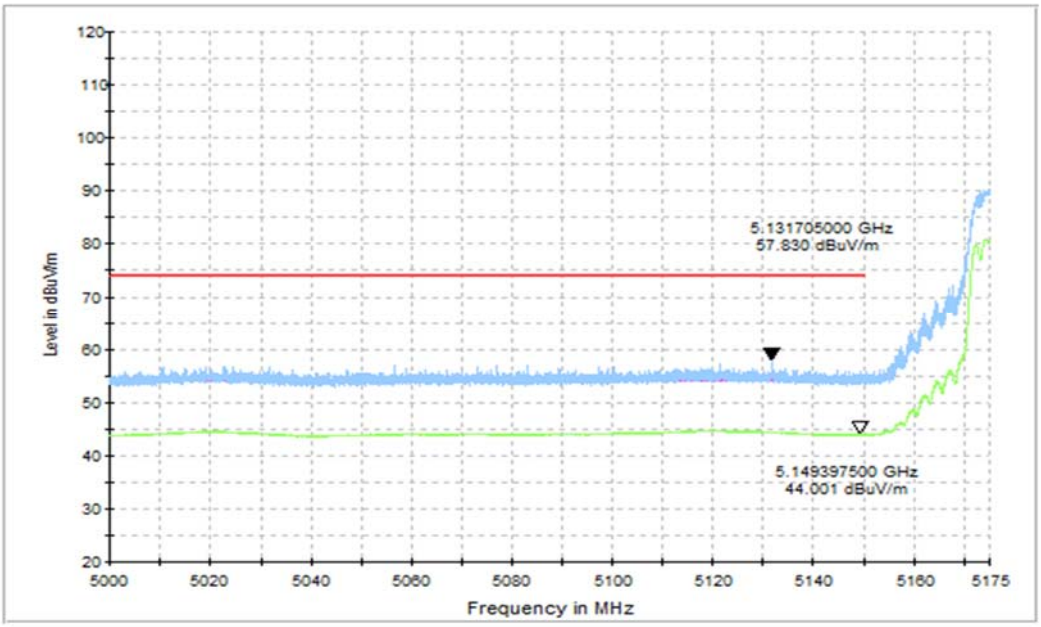

Fig. 17 Band Edges (802.11ac-HT40 Ch38, 5190MHz, FULL RU)

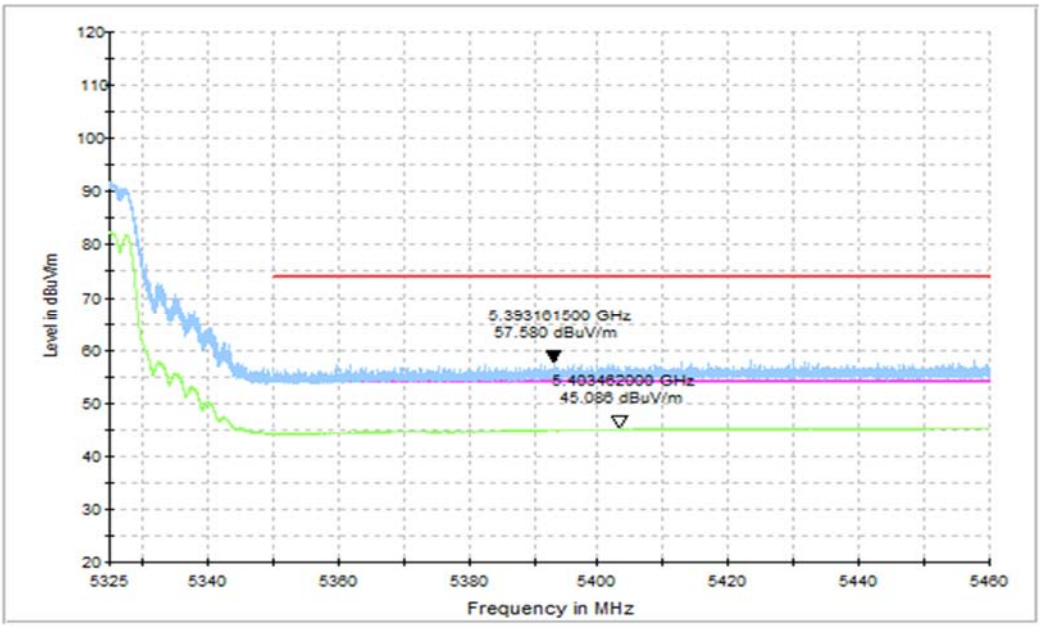

Fig. 18 Band Edges (802.11ac-HT40 Ch62, 5310MHz, FULL RU)

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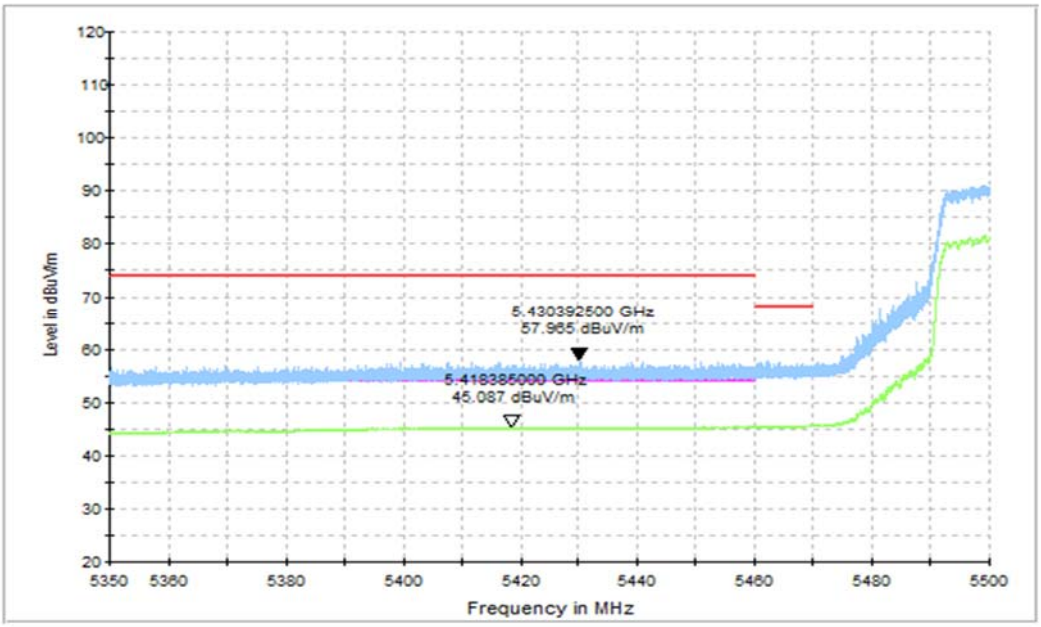

Fig. 19 Band Edges (802.11ac-HT40 Ch102, 5510MHz, FULL RU)

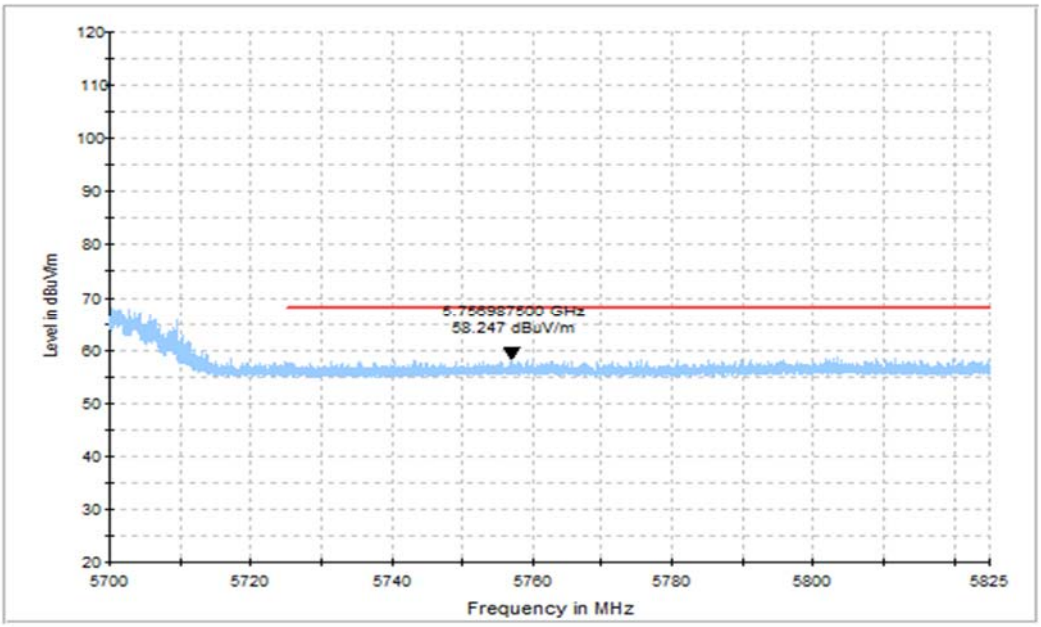

Fig. 20 Band Edges (802.11ac-HT40 Ch134, 5670MHz, FULL RU)

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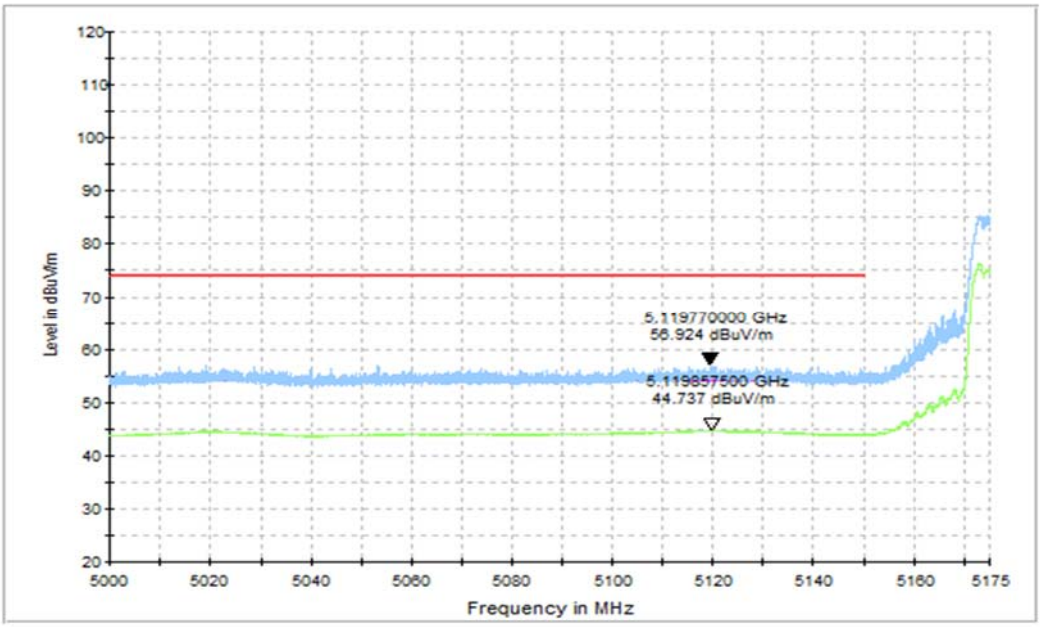

Fig. 21 Band Edges (802.11ac-HT80 Ch42 , 5210MHz, FULL RU)

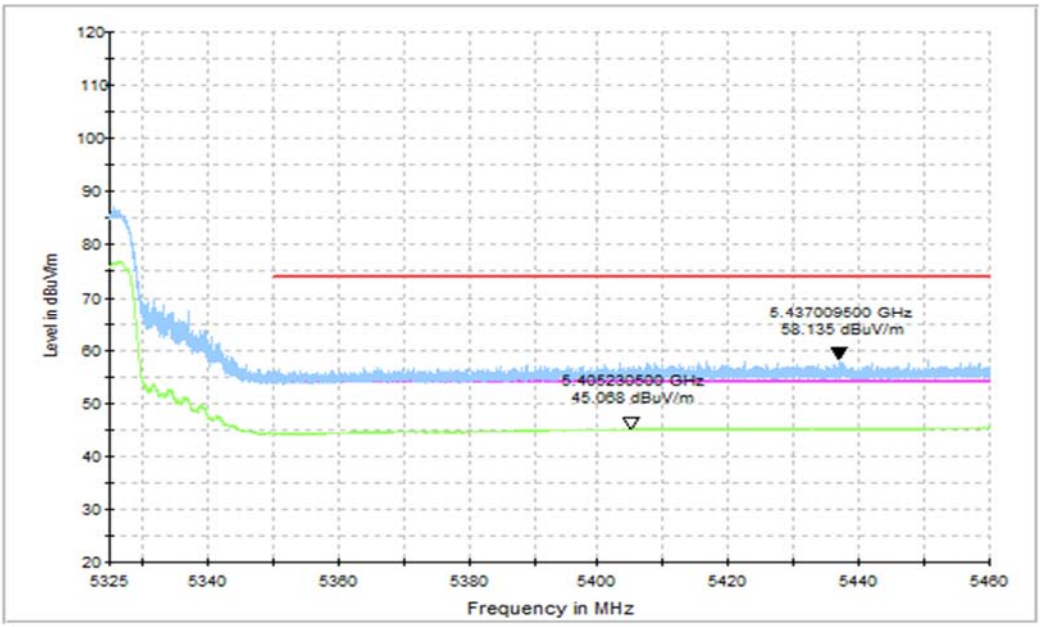

Fig. 22 Band Edges (802.11ac-HT80 Ch58, 5290MHz), FULL RU

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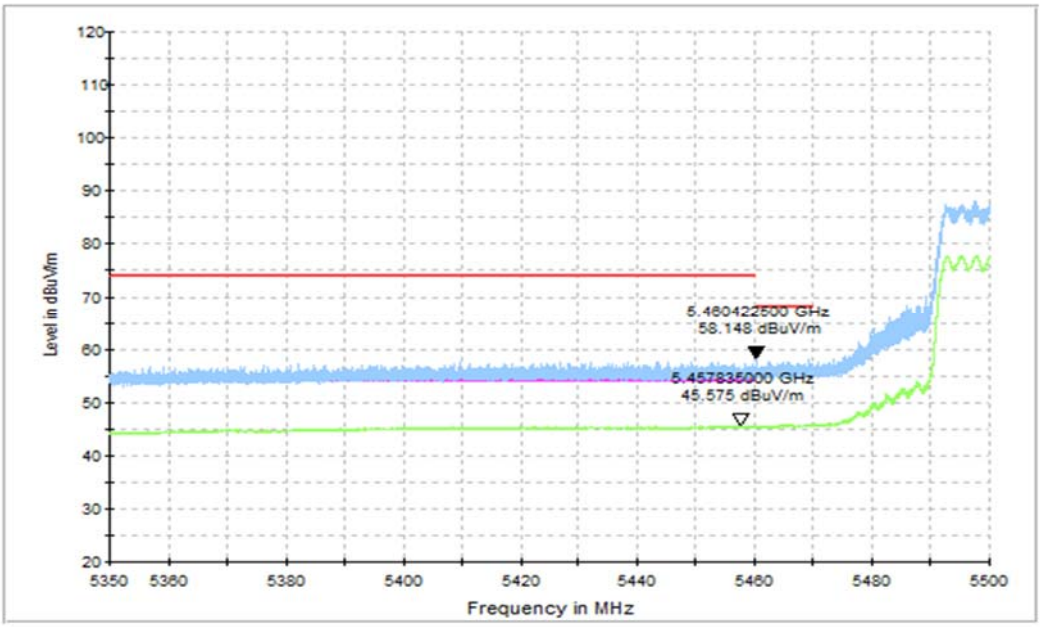

Fig. 23 Band Edges (802.11ac-HT80 Ch106, 5530MHz, FULL RU)

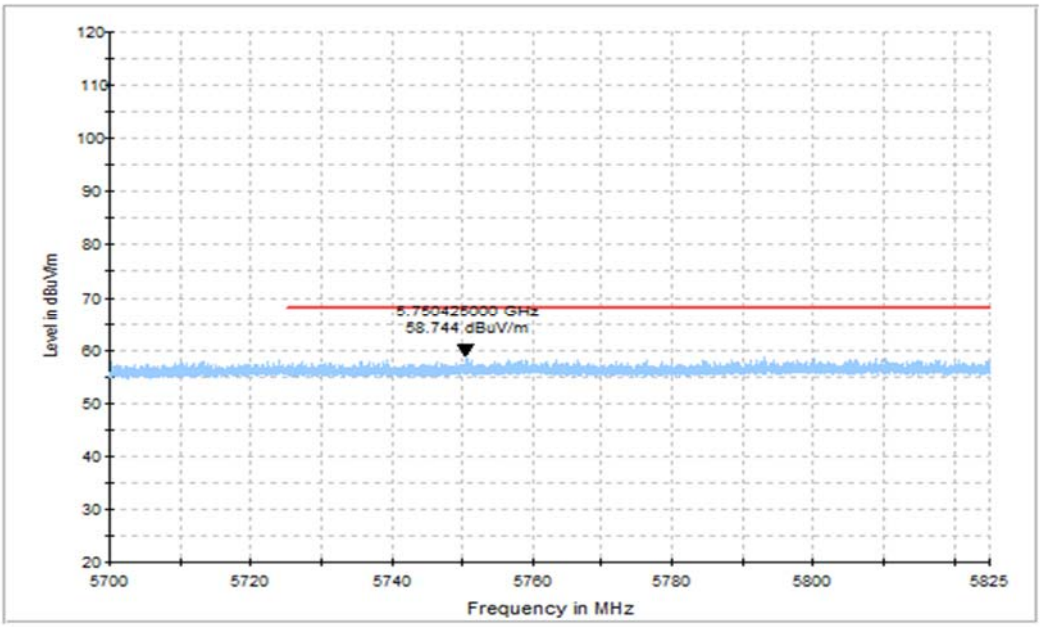

Fig. 24 Band Edges (802.11ac-HT80 Ch122, 5610MHz, FULL RU)

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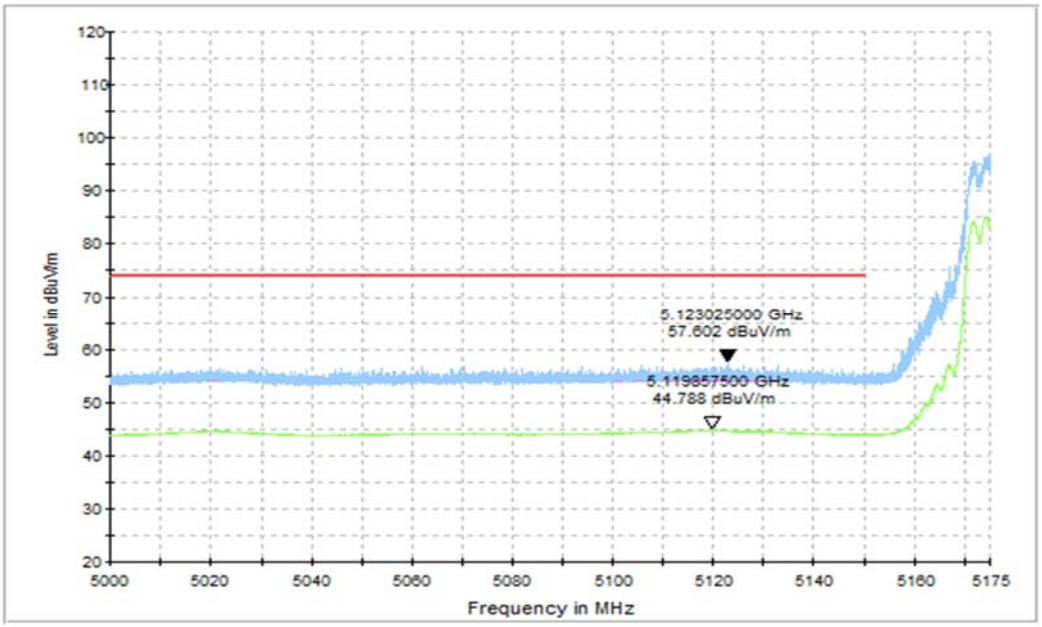

Fig. 25 Band Edges (802.11ax-HT20 Ch36, 5180MHz, FULL RU)

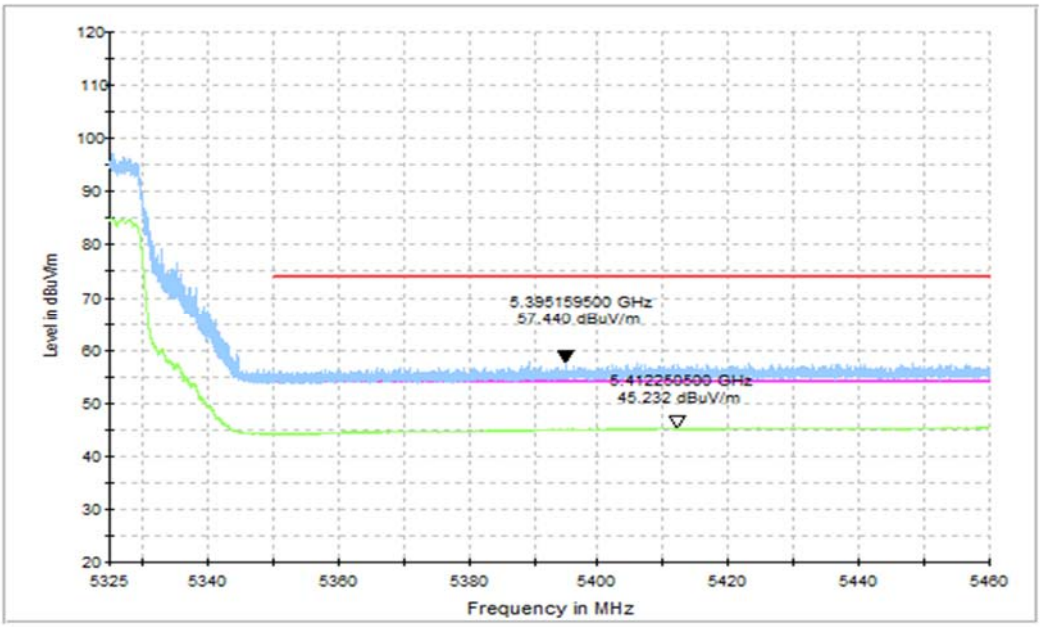

Fig. 26 Band Edges (802.11ax-HT20 Ch64, 5320MHz, FULL RU)

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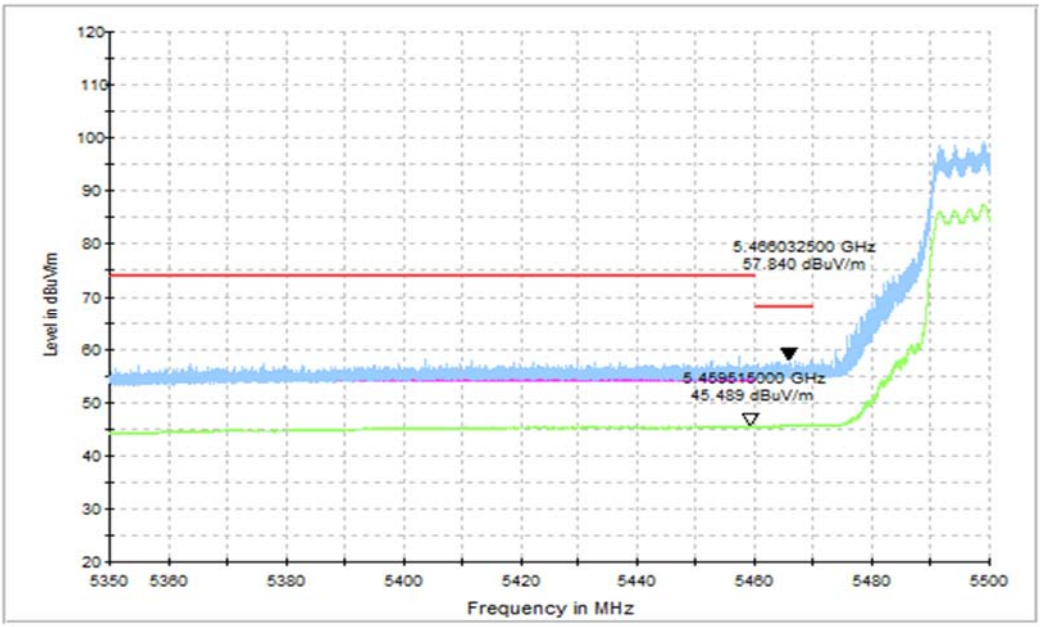

Fig. 27 Band Edges (802.11ax-HT20 Ch100, 5500MHz, FULL RU)

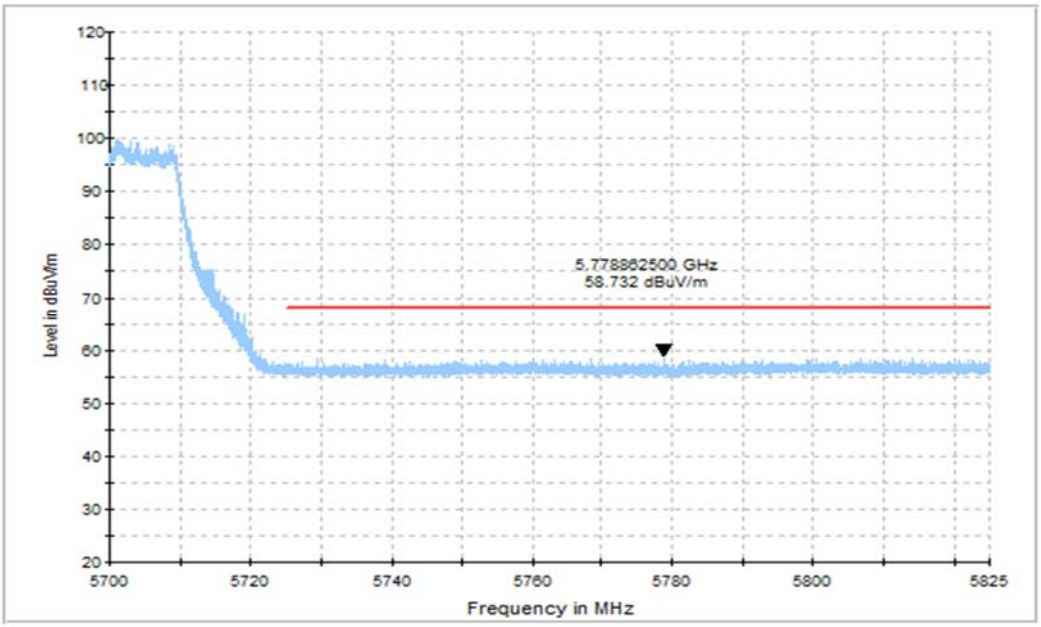

Fig. 28 Band Edges (802.11ax-HT20 Ch140, 5700MHz, FULL RU)

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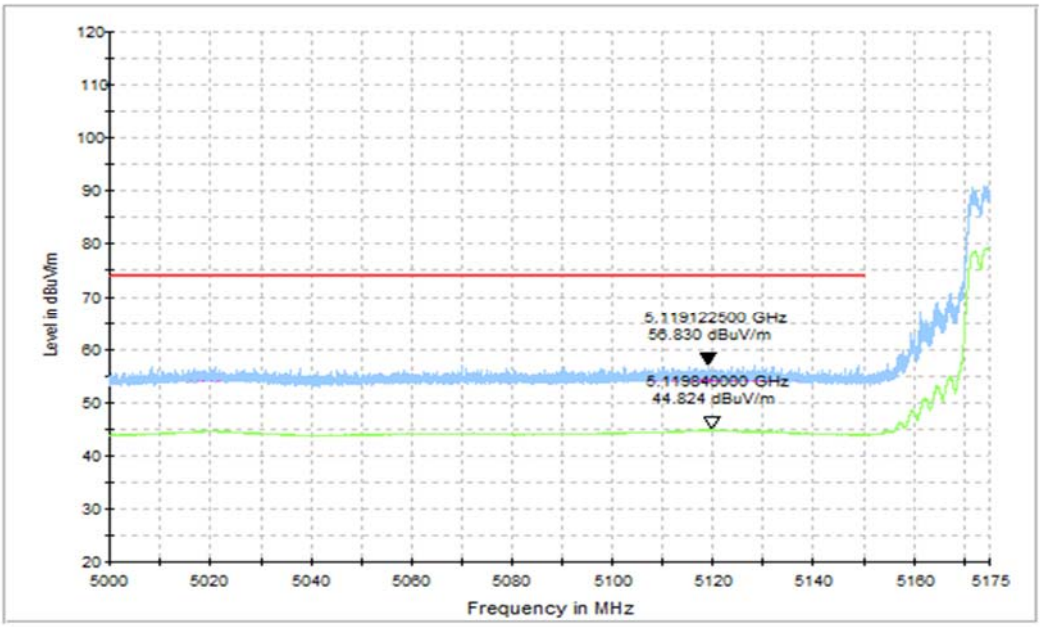

Fig. 29 Band Edges (802.11ax-HT40 Ch38, 5190MHz, FULL RU)

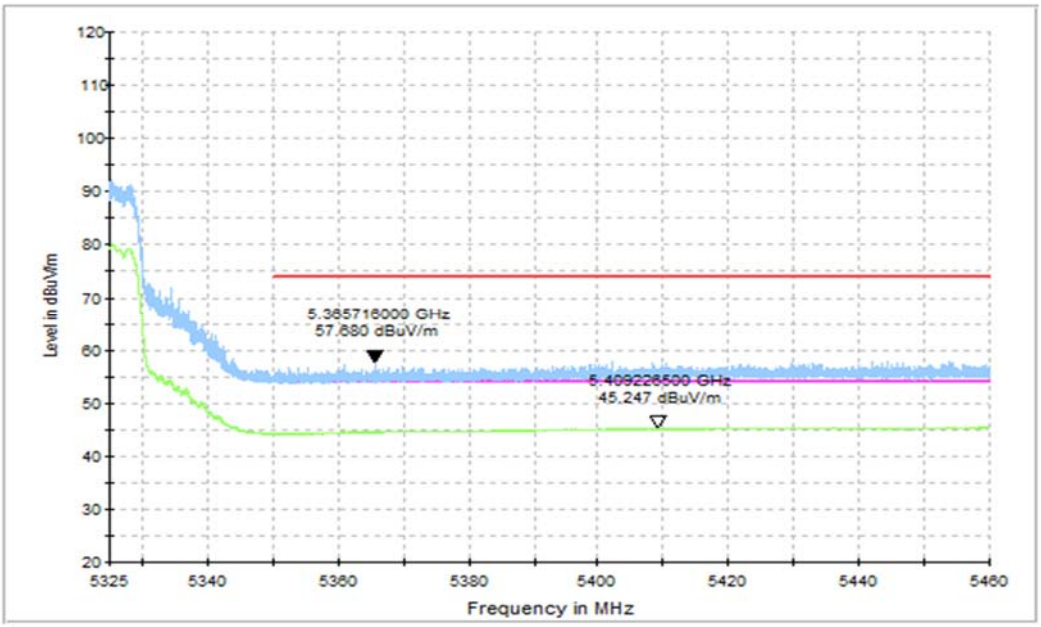

Fig. 30 Band Edges (802.11ax-HT40 Ch62, 5310MHz, FULL RU)

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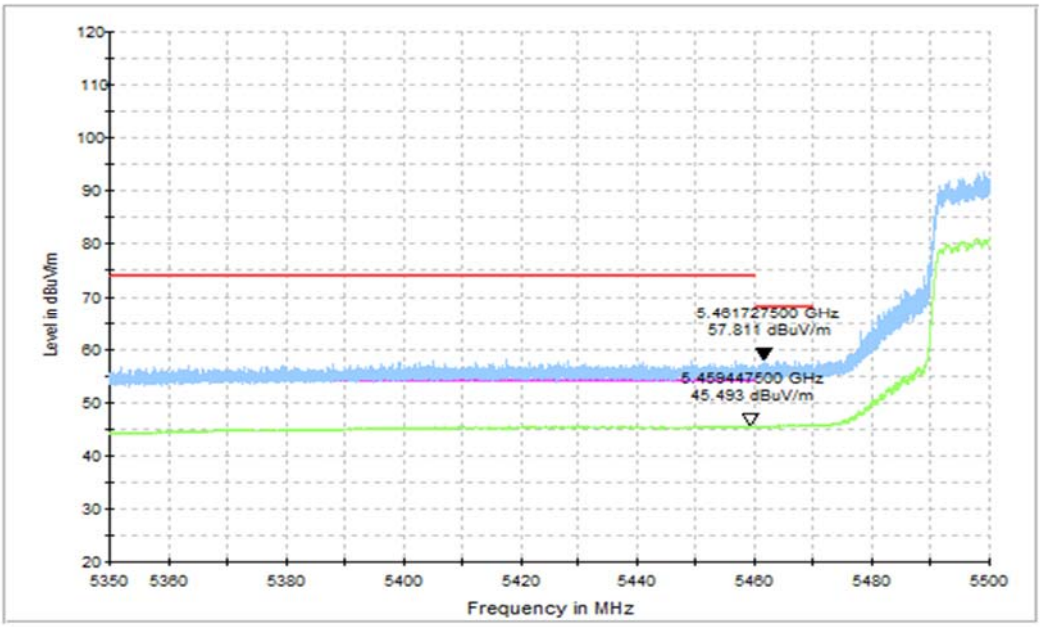

Fig. 31 Band Edges (802.11ax-HT40 Ch102, 5510MHz, FULL RU)

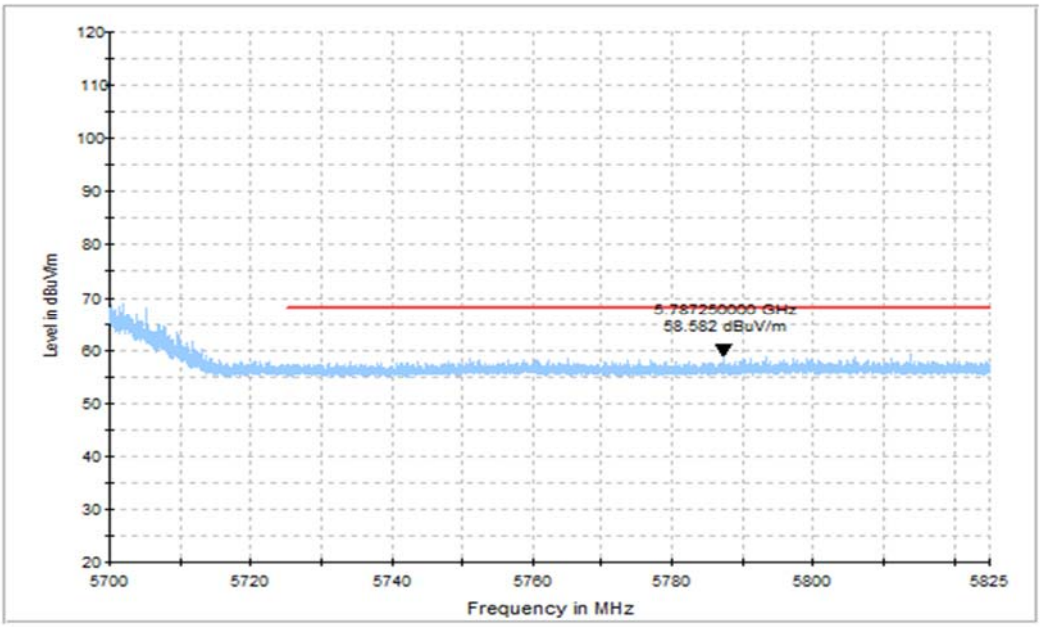

Fig. 32 Band Edges (802.11ax-HT40 Ch134, 5670MHz, FULL RU)

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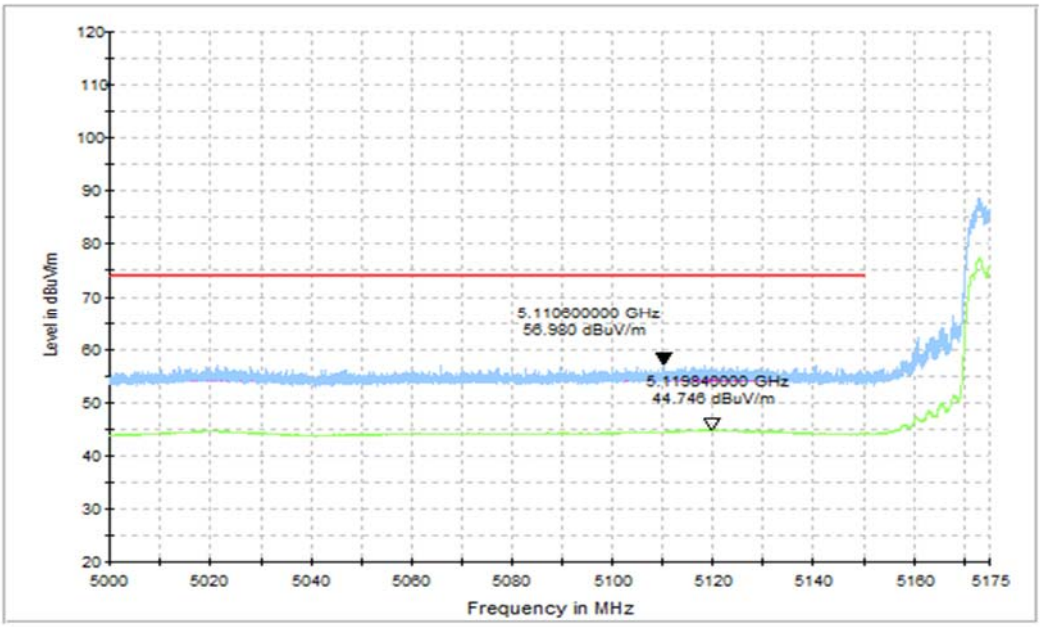

Fig. 33 Band Edges (802.11ax-HT80 Ch42 , 5210MHz, FULL RU)

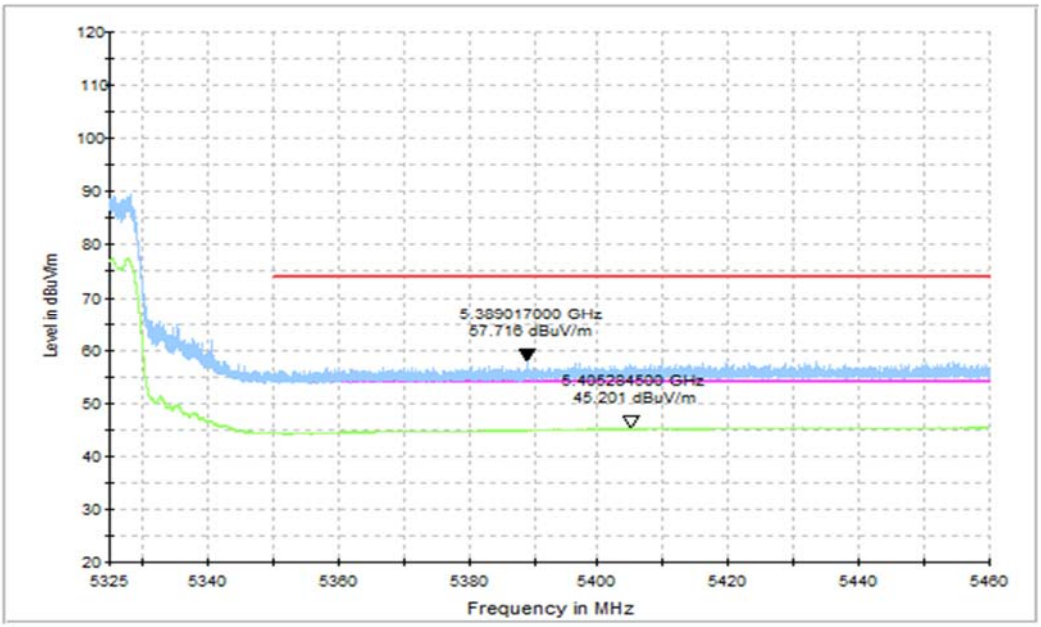

Fig. 34 Band Edges (802.11ax-HT80 Ch58, 5290MHz) , FULL RU

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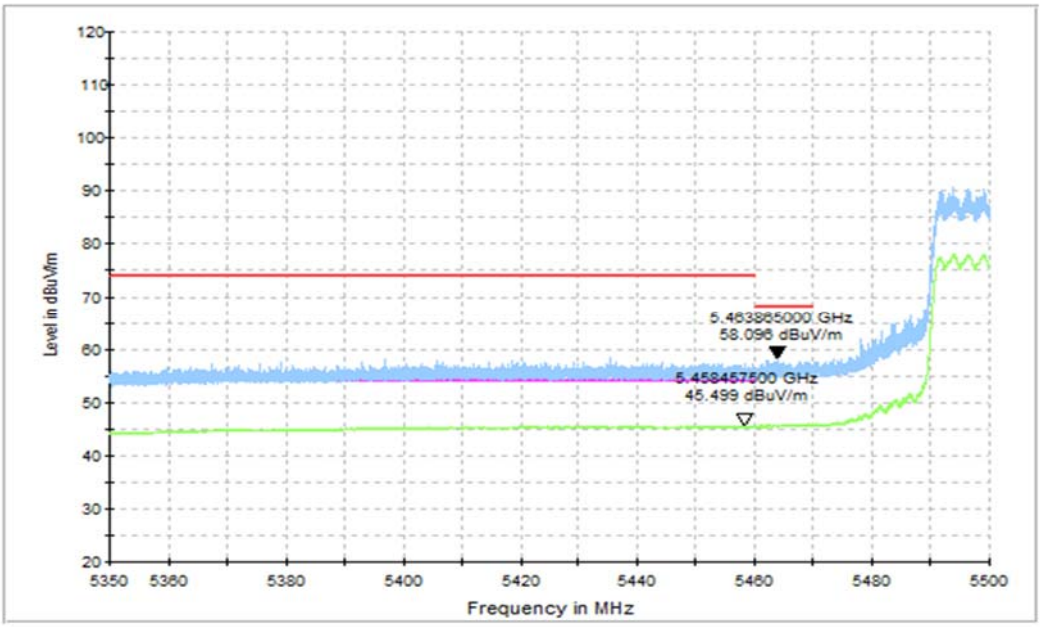

Fig. 35 Band Edges (802.11ax-HT80 Ch106, 5530MHz, FULL RU)

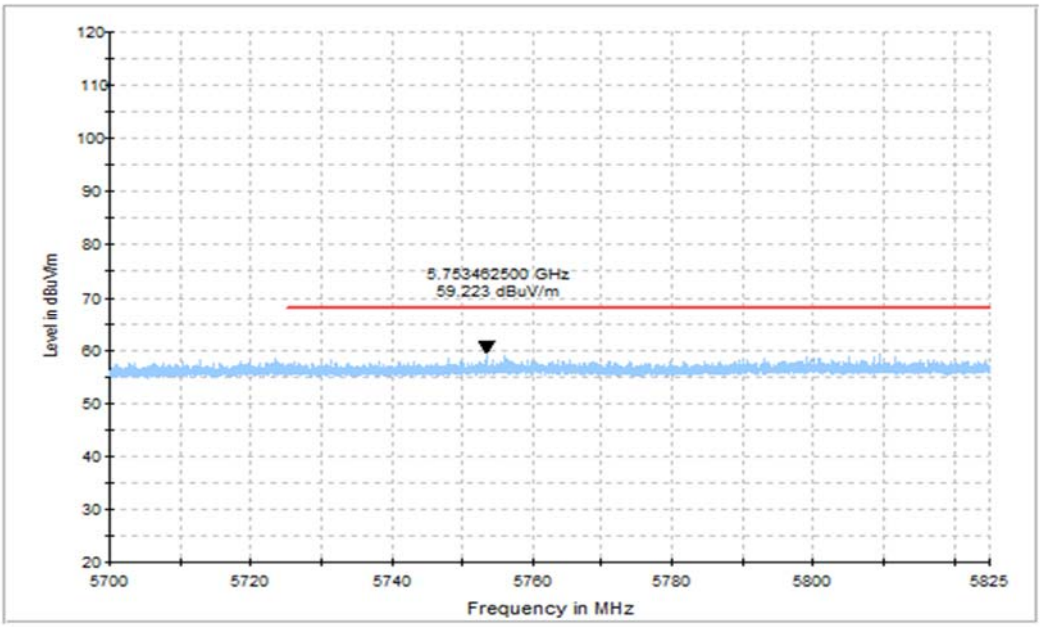

Fig. 36 Band Edges (802.11ax-HT80 Ch122, 5610MHz, FULL RU)

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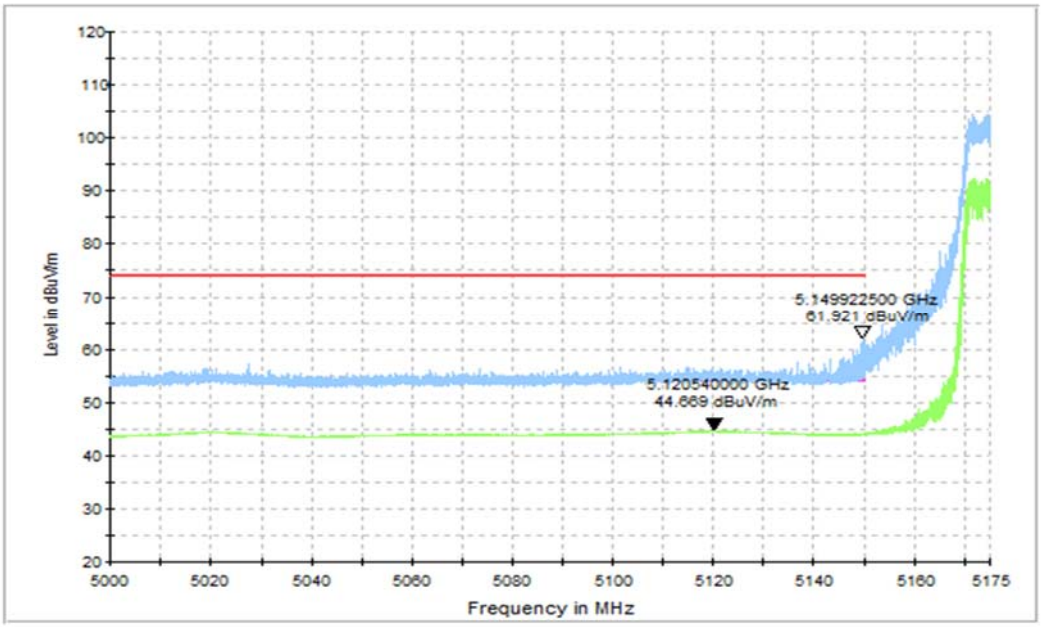

Fig. 37 Band Edges (802.11ax-HT20 Ch36, 5180MHz, PARTIAL RU)

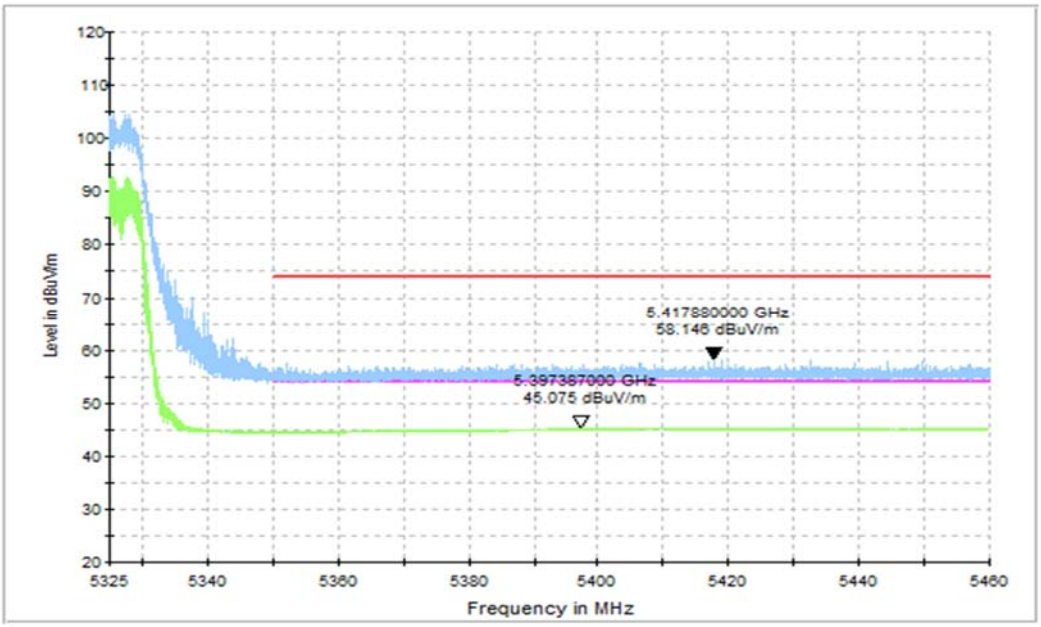

Fig. 38 Band Edges (802.11ax-HT20 Ch64, 5320MHz, PARTIAL RU)

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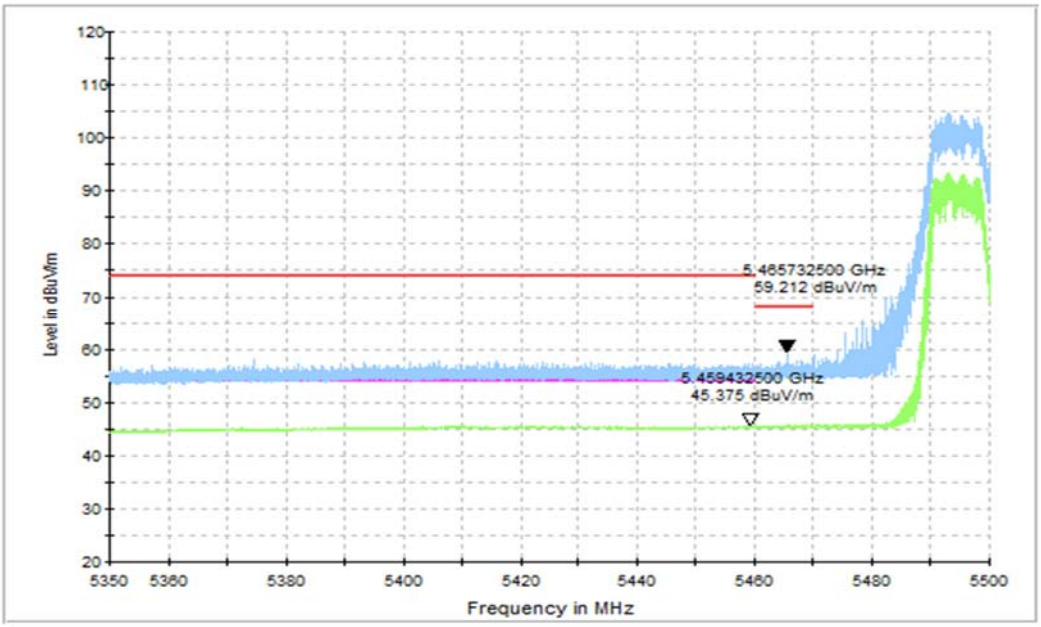

Fig. 39 Band Edges (802.11ax-HT20 Ch100, 5500MHz, PARTIAL RU)

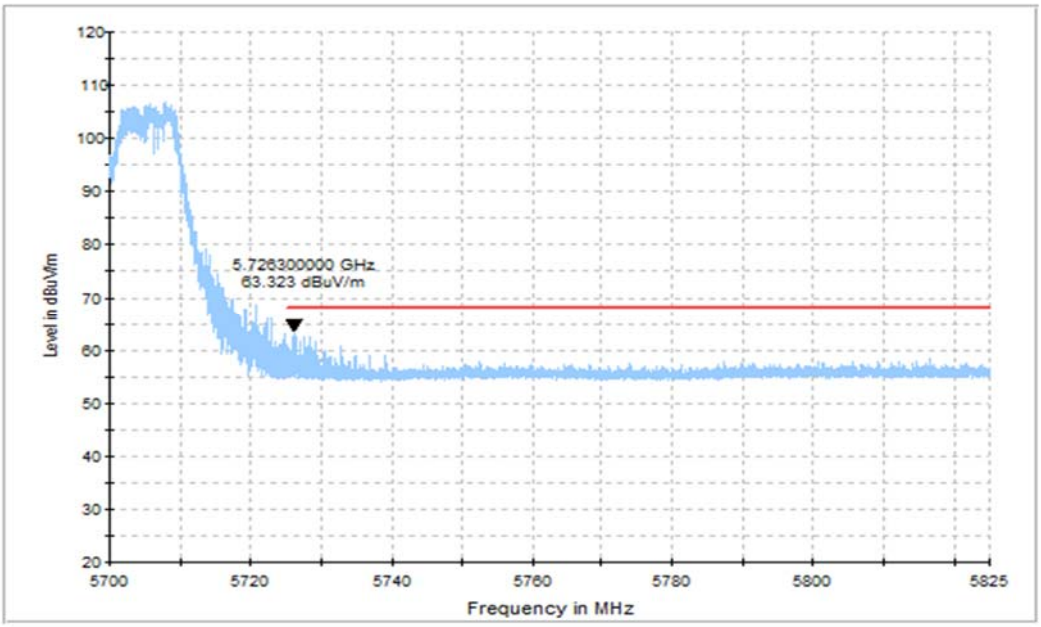

Fig. 40 Band Edges (802.11ax-HT20 Ch140, 5700MHz, PARTIAL RU)

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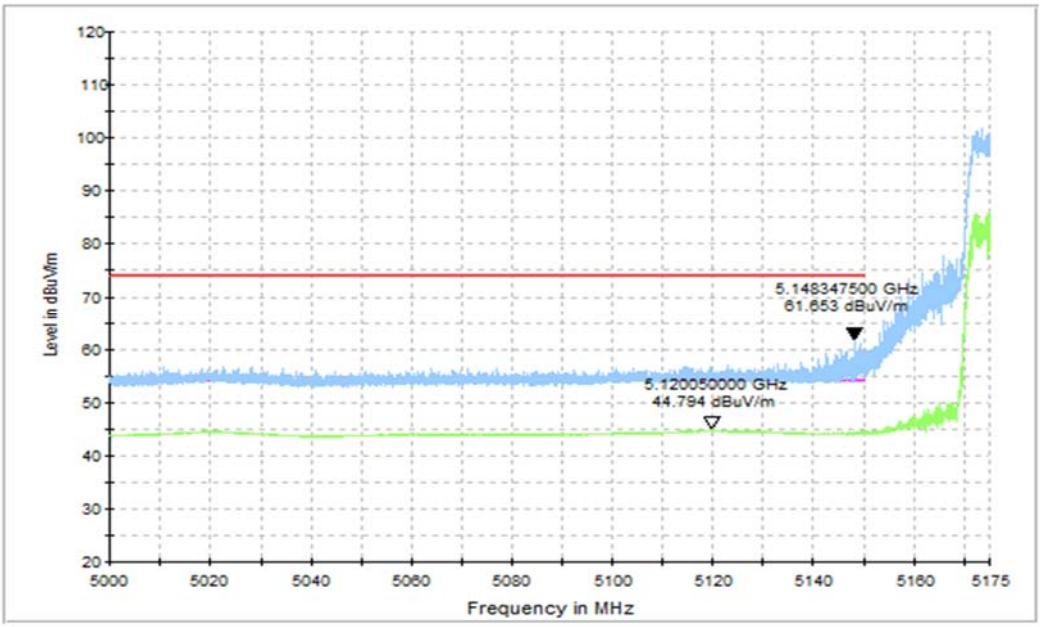

Fig. 41 Band Edges (802.11ax-HT40 Ch38, 5190MHz, PARTIAL RU)

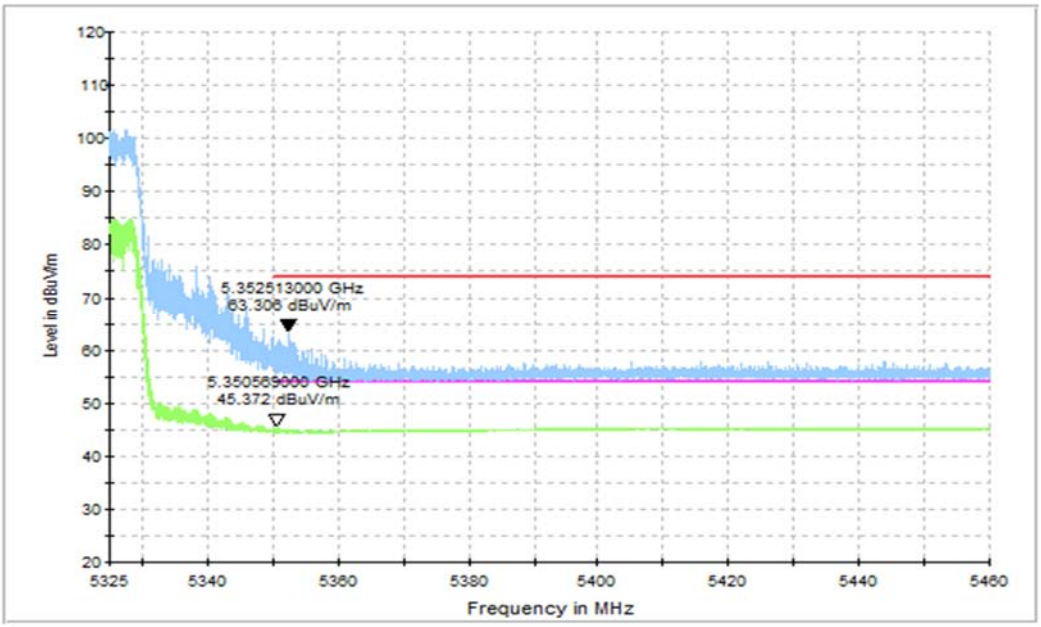

Fig. 42 Band Edges (802.11ax-HT40 Ch62, 5310MHz, PARTIAL RU)

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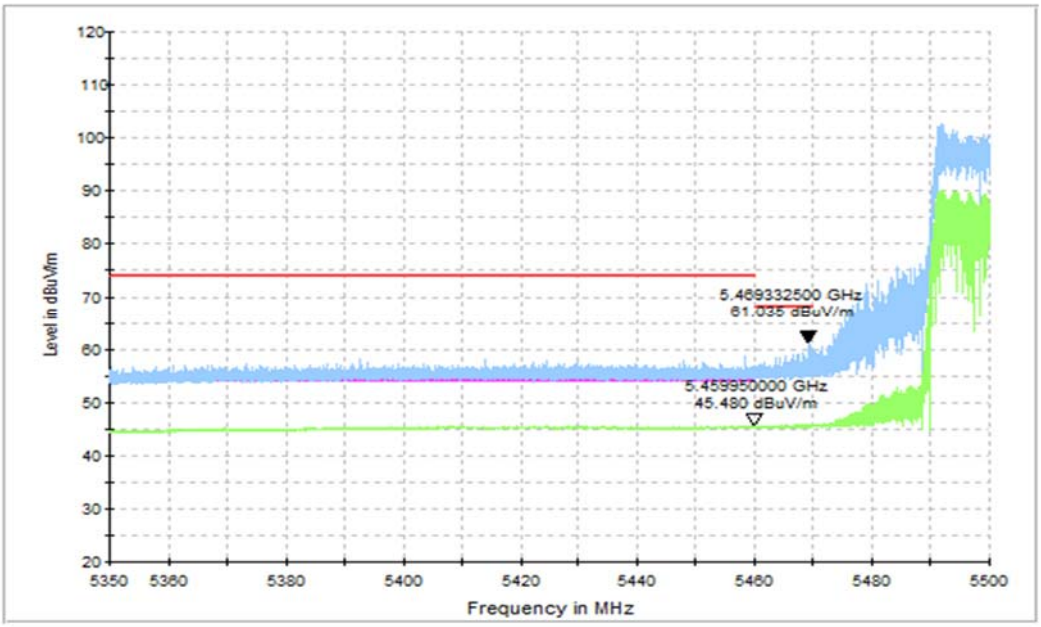

Fig. 43 Band Edges (802.11ax-HT40 Ch102, 5510MHz, PARTIAL RU)

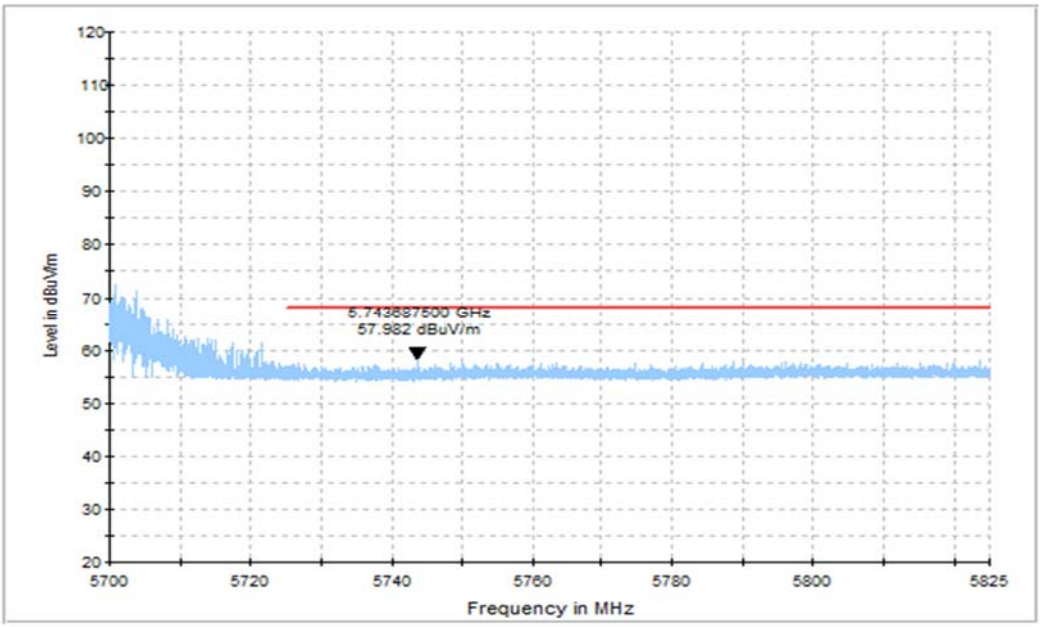

Fig. 44 Band Edges (802.11ax-HT40 Ch134, 5670MHz, PARTIAL RU)

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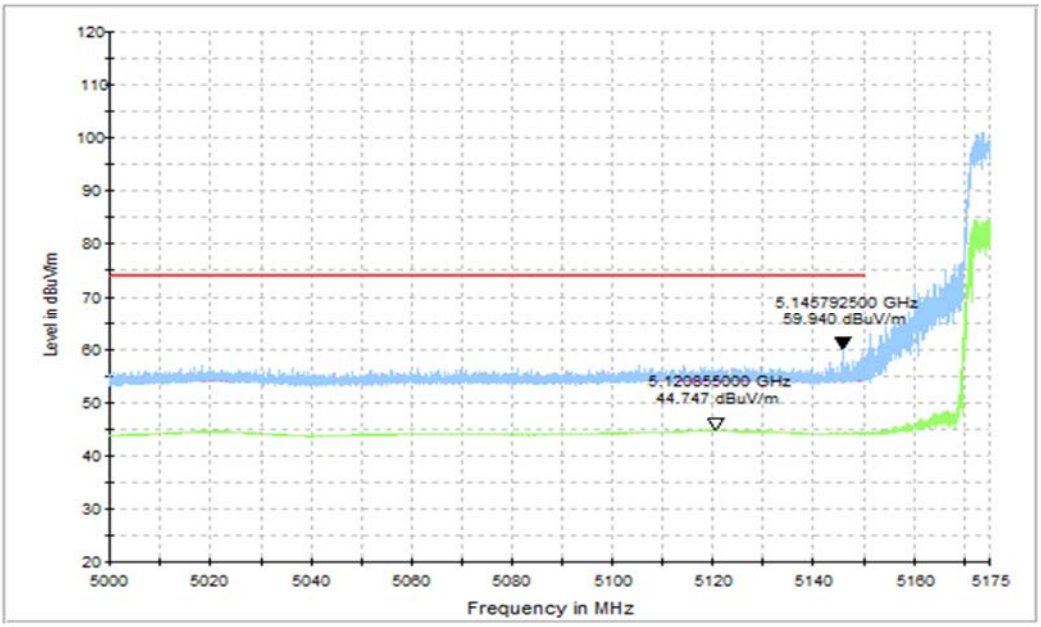

Fig. 45 Band Edges (802.11ax-HT80 Ch42 , 5210MHz, PARTIAL RU)

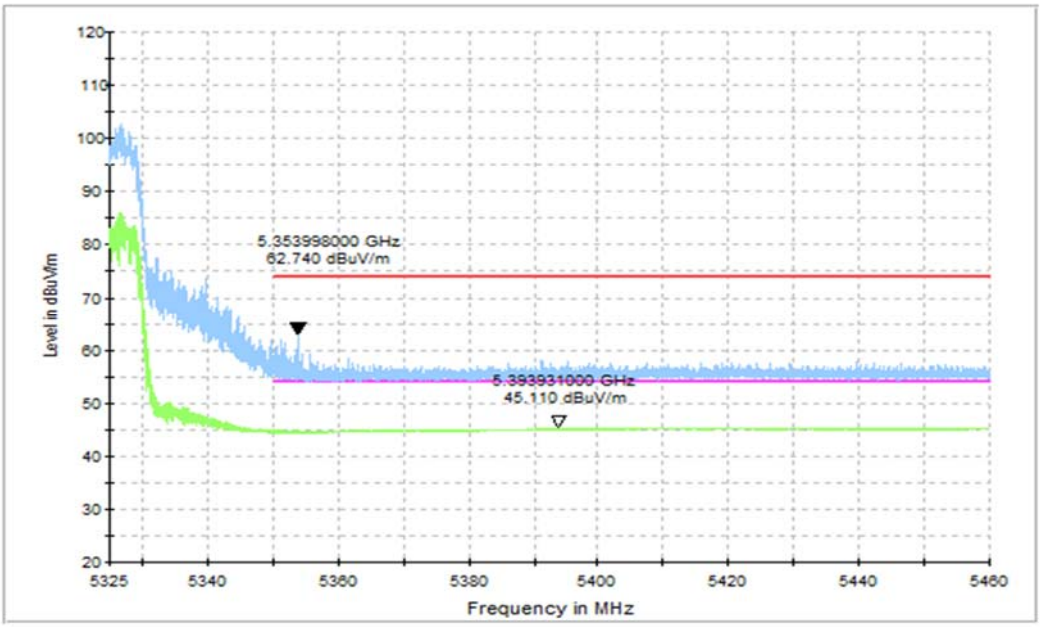

Fig. 46 Band Edges (802.11ax-HT80 Ch58, 5290MHz), PARTIAL RU

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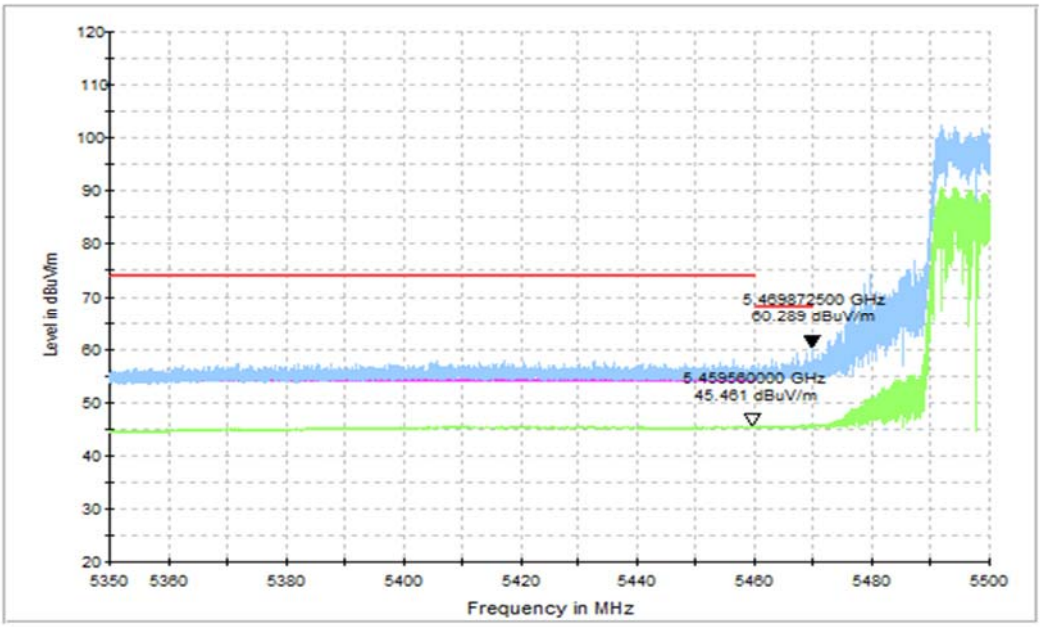

Fig. 47 Band Edges (802.11ax-HT80 Ch106, 5530MHz, PARTIAL RU)

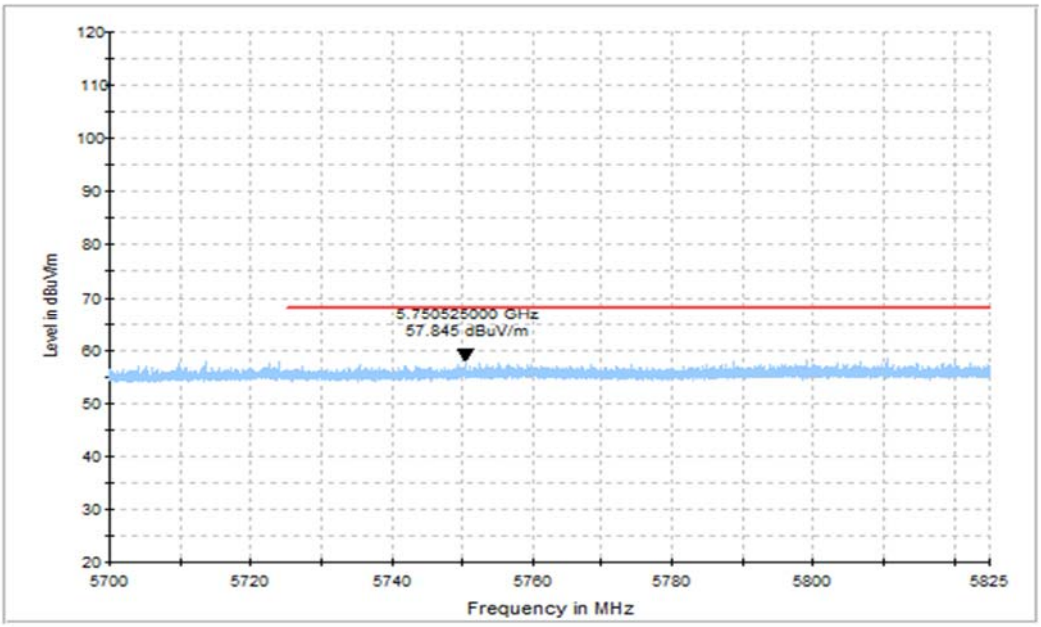

Fig. 48 Band Edges (802.11ax-HT80 Ch122, 5610MHz, PARTIAL RU)

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A.6. Transmitter Spurious Emission

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.407	-27 dBm/MHz

The measurement is made according to KDB 789033
In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength(dBμV/m)	Measurement distance(m)
30-88	40.0	3
88-216	43.5	3
216-960	46.0	3
Above 960	54.0	3

Note: for frequency range below 960MHz, the limit in 15.209 is defined in 10m test distance. The limit used above is calculated from 10m to 3m

Measurement Results:

Conclusion: PASS

Note:
A "reference path loss" is established and the A_{Rpl} is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.
P_{Mea} is the field strength recorded from the instrument.
The measurement results are obtained as described below:
Result=P_{Mea}+$A_{Rpl=}$ P_{Mea}+Cable Loss+Antenna Factor

Note1: All partial RU and full RU have been tested, in spurious domain there are basically noises with suspicious emission, thus only the full RU results were reported.

Note2: All SISO and MIMO emissions have been checked, only the worst cases were reported.

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Average Results:

802.11a, FULL RU

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.600	43.60	-23.16	34.00	32.76	54.00	10.40	V
5149.900	43.64	-23.16	34.00	32.80	54.00	10.36	V
11987.400	35.22	-27.89	38.87	24.23	54.00	18.78	H
15539.850	36.81	-24.38	40.40	20.78	54.00	17.19	H
17881.750	39.04	-20.96	40.52	19.48	54.00	14.96	H
17949.950	39.19	-20.83	40.55	19.47	54.00	14.81	H

Average Results:

802.11a, FULL RU

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5351.150	43.77	-23.06	34.10	32.73	54.00	10.23	V
5352.000	43.75	-23.04	34.11	32.69	54.00	10.25	V
10639.350	43.82	-29.12	37.64	35.30	54.00	10.18	H
15857.200	37.96	-23.43	40.86	20.53	54.00	16.04	V
17886.150	39.13	-20.97	40.51	19.59	54.00	14.87	V
17953.800	39.13	-20.87	40.55	19.45	54.00	14.87	H

Average Results:

802.11a, FULL RU

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5459.250	45.07	-22.49	34.46	33.09	54.00	8.93	V
5459.750	45.10	-22.48	34.46	33.12	54.00	8.90	V
10998.500	38.25	-28.92	37.90	29.28	54.00	15.75	H
15859.400	37.81	-23.38	40.86	20.33	54.00	16.19	V
17849.850	38.68	-21.24	40.55	19.37	54.00	15.32	V
17950.500	38.94	-20.83	40.55	19.22	54.00	15.06	V

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Average Results:

802.11n-HT20, FULL RU

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.800	43.84	-23.16	34.00	33.00	54.00	10.16	V
5149.900	43.86	-23.16	34.00	33.02	54.00	10.14	V
12114.450	37.11	-27.41	38.97	25.56	54.00	16.89	V
15539.850	39.20	-24.38	40.40	23.17	54.00	14.80	H
17878.450	40.97	-21.01	40.52	21.46	54.00	13.03	V
17947.200	40.87	-20.99	40.55	21.32	54.00	13.13	H

Average Results:

802.11n-HT20, FULL RU

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.350	44.02	-23.08	34.10	33.00	54.00	9.98	V
5351.200	44.03	-23.06	34.10	32.99	54.00	9.97	V
10638.800	50.81	-29.11	37.64	42.29	54.00	3.19	H
15960.050	39.94	-23.44	40.84	22.54	54.00	14.06	V
17887.800	40.75	-20.98	40.51	21.22	54.00	13.25	H
17945.550	40.46	-21.10	40.55	21.01	54.00	13.54	V

Average Results:

802.11n-HT20, FULL RU

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5458.500	45.21	-22.50	34.47	33.24	54.00	8.79	V
5459.550	45.26	-22.48	34.46	33.28	54.00	8.74	V
11000.150	46.59	-28.94	37.90	37.64	54.00	7.41	H
15854.450	40.05	-23.49	40.85	22.69	54.00	13.95	H
17886.150	40.90	-20.97	40.51	21.36	54.00	13.10	V
17954.900	40.73	-20.89	40.55	21.06	54.00	13.27	V

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Average Results:

802.11n-HT40, FULL RU

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5140.900	43.99	-23.06	34.00	33.05	54.00	10.01	V
5146.400	43.91	-23.12	34.00	33.03	54.00	10.09	V
12115.000	37.13	-27.38	38.97	25.54	54.00	16.87	H
15570.100	39.09	-24.28	40.40	22.98	54.00	14.91	V
17878.450	40.86	-21.01	40.52	21.35	54.00	13.14	H
17948.850	40.73	-20.89	40.55	21.08	54.00	13.27	H

Average Results:

802.11n-HT40, FULL RU

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5351.400	44.16	-23.06	34.11	33.11	54.00	9.84	V
5353.150	44.19	-23.01	34.11	33.09	54.00	9.81	V
10619.550	47.23	-29.26	37.62	38.87	54.00	6.77	V
15929.800	39.47	-23.86	40.87	22.46	54.00	14.53	V
17890.550	40.79	-20.99	40.51	21.28	54.00	13.21	H
17947.200	40.87	-20.99	40.55	21.32	54.00	13.13	V

Average Results:

802.11n-HT40, FULL RU

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5458.750	45.25	-22.49	34.46	33.28	54.00	8.75	V
5459.450	45.23	-22.48	34.46	33.25	54.00	8.77	V
11012.250	39.04	-29.03	37.89	30.18	54.00	14.96	H
16160.800	40.36	-22.75	40.98	22.13	54.00	13.64	V
17880.650	40.98	-20.95	40.52	21.42	54.00	13.02	H
17951.050	40.97	-20.84	40.55	21.26	54.00	13.03	V

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Average Results:

802.11ac-HT20, FULL RU

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5119.750	44.69	-22.34	34.00	33.03	54.00	9.31	V
5121.950	44.64	-22.39	34.00	33.03	54.00	9.36	V
11953.300	37.02	-27.62	38.81	25.84	54.00	16.98	H
15539.850	39.16	-24.38	40.40	23.14	54.00	14.84	H
17875.150	40.69	-21.13	40.52	21.30	54.00	13.31	V
17951.050	40.77	-20.84	40.55	21.06	54.00	13.23	V

Average Results:

802.11ac-HT20, FULL RU

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5368.500	44.56	-22.57	34.17	32.96	54.00	9.44	V
5370.400	44.64	-22.53	34.18	32.99	54.00	9.36	V
10636.050	50.66	-29.09	37.64	42.11	54.00	3.34	H
15960.050	39.98	-23.44	40.84	22.58	54.00	14.02	V
17883.950	40.96	-20.96	40.52	21.41	54.00	13.04	H
17958.200	40.85	-20.93	40.56	21.23	54.00	13.15	V

Average Results:

802.11ac-HT20, FULL RU

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5458.800	45.24	-22.49	34.46	33.27	54.00	8.76	V
5459.600	45.24	-22.48	34.46	33.26	54.00	8.76	V
10999.600	42.69	-28.94	37.90	33.72	54.00	11.31	V
15853.350	40.15	-23.52	40.85	22.81	54.00	13.85	V
17881.200	40.97	-20.96	40.52	21.41	54.00	13.03	V
17957.650	40.86	-20.92	40.56	21.22	54.00	13.14	H

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Average Results:

802.11ac-HT40, FULL RU

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5120.100	44.59	-22.33	34.00	32.92	54.00	9.41	V
5121.600	44.50	-22.38	34.00	32.87	54.00	9.50	V
11805.900	36.91	-28.18	38.70	26.39	54.00	17.09	H
15570.100	39.11	-24.28	40.40	22.99	54.00	14.89	V
17886.150	40.87	-20.97	40.51	21.33	54.00	13.13	H
17953.800	40.93	-20.87	40.55	21.25	54.00	13.07	H

Average Results:

802.11ac-HT40, FULL RU

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5410.100	44.97	-22.42	34.34	33.05	54.00	9.03	V
5425.150	44.93	-22.51	34.40	33.04	54.00	9.07	V
10620.100	44.69	-29.25	37.62	36.32	54.00	9.31	V
15929.800	39.54	-23.86	40.87	22.53	54.00	14.46	V
17882.300	41.07	-20.96	40.52	21.51	54.00	12.93	H
17954.350	40.98	-20.88	40.55	21.31	54.00	13.02	V

Average Results:

802.11ac-HT40, FULL RU

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5440.400	44.97	-22.55	34.46	33.06	54.00	9.03	V
5460.000	45.12	-22.48	34.46	33.14	54.00	8.88	V
11019.950	40.36	-28.91	37.88	31.39	54.00	13.64	H
16157.500	40.36	-22.84	40.98	22.22	54.00	13.64	V
17876.800	40.90	-21.07	40.52	21.45	54.00	13.10	H
17950.500	40.90	-20.83	40.55	21.18	54.00	13.10	H

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Average Results:

802.11ac-HT80, FULL RU

Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5115.100	44.51	-22.58	34.00	33.08	54.00	9.49	V
5119.900	44.59	-22.33	34.00	32.93	54.00	9.41	V
12110.600	37.07	-27.64	38.98	25.73	54.00	16.93	V
15630.050	38.63	-24.00	40.46	22.17	54.00	15.37	V
17869.100	40.49	-21.32	40.53	21.29	54.00	13.51	V
17948.850	40.52	-20.89	40.55	20.87	54.00	13.48	V

Average Results:

802.11ac-HT80, FULL RU

Channel 58

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5409.600	45.04	-22.43	34.34	33.13	54.00	8.96	V
5435.150	45.04	-22.53	34.44	33.12	54.00	8.96	V
10600.300	41.52	-29.61	37.60	33.53	54.00	12.48	V
15869.850	39.61	-23.12	40.87	21.86	54.00	14.39	V
17883.400	40.62	-20.96	40.52	21.06	54.00	13.38	V
17947.750	40.38	-20.96	40.55	20.80	54.00	13.62	V

Average Results:

802.11ac-HT80, FULL RU

Channel 106

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5430.400	45.11	-22.51	34.42	33.20	54.00	8.89	V
5458.600	45.15	-22.50	34.47	33.18	54.00	8.85	V
11057.900	37.35	-28.84	37.84	28.35	54.00	16.65	H
15863.250	39.73	-23.29	40.86	22.15	54.00	14.27	V
17886.150	40.64	-20.97	40.51	21.09	54.00	13.36	V
17954.350	40.37	-20.88	40.55	20.69	54.00	13.63	V

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Average Results:

802.11ax-HT20, FULL RU

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5116.800	44.6	-22.5	34.0	33.05	54.0	9.4	V
5120.050	44.7	-22.3	34.0	32.98	54.0	9.3	V
12018.750	37.2	-27.7	38.9	25.89	54.0	16.8	V
15539.850	39.0	-24.4	40.4	23.01	54.0	15.0	V
17879.000	40.5	-21.0	40.5	20.95	54.0	13.5	V
17949.950	40.5	-20.8	40.6	20.76	54.0	13.5	V

Average Results:

802.11ax-HT20, FULL RU

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5410.200	45.1	-22.4	34.3	33.16	54.0	8.9	V
5426.750	45.1	-22.5	34.4	33.15	54.0	9.0	V
10640.450	49.5	-29.1	37.6	41.03	54.0	4.5	H
15960.050	39.7	-23.4	40.8	22.26	54.0	14.3	V
17881.750	40.6	-21.0	40.5	21.09	54.0	13.4	V
17947.750	40.5	-21.0	40.5	20.91	54.0	13.5	V

Average Results:

802.11ax-HT20, FULL RU

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5428.600	45.1	-22.5	34.4	33.23	54.0	8.9	V
5459.250	45.3	-22.5	34.5	33.28	54.0	8.7	V
10999.600	44.7	-28.9	37.9	35.69	54.0	9.4	H
15857.200	39.9	-23.4	40.9	22.46	54.0	14.1	V
17875.150	40.7	-21.1	40.5	21.28	54.0	13.3	H
17949.950	40.7	-20.8	40.6	20.94	54.0	13.3	V

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Average Results:

802.11ax-HT40, FULL RU

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5119.800	44.7	-22.3	34.0	33.04	54.0	9.3	V
5123.000	45.6	-22.4	34.0	34.00	54.0	8.4	V
11961.550	37.3	-27.8	38.8	26.25	54.0	16.7	V
15570.100	38.7	-24.3	40.4	22.62	54.0	15.3	H
17869.100	40.8	-21.3	40.5	21.58	54.0	13.2	H
17947.750	40.8	-21.0	40.5	21.26	54.0	13.2	H

Average Results:

802.11ax-HT40, FULL RU

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5408.050	45.0	-22.4	34.3	33.11	54.0	9.0	V
5417.600	45.0	-22.5	34.4	33.15	54.0	9.0	V
10619.550	47.6	-29.3	37.6	39.24	54.0	6.4	H
15929.800	39.1	-23.9	40.9	22.06	54.0	14.9	H
17886.150	40.9	-21.0	40.5	21.35	54.0	13.1	V
17953.800	40.7	-20.9	40.6	21.05	54.0	13.3	V

Average Results:

802.11ax-HT40, FULL RU

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5420.950	45.1	-22.5	34.4	33.22	54.0	8.9	V
5459.700	45.2	-22.5	34.5	33.21	54.0	8.8	V
11027.100	41.4	-28.9	37.9	32.39	54.0	12.6	H
15862.150	40.0	-23.3	40.9	22.40	54.0	14.0	H
17885.050	41.0	-21.0	40.5	21.44	54.0	13.0	V
17948.850	40.9	-20.9	40.5	21.24	54.0	13.1	V

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Average Results:

802.11ax-HT80, FULL RU

Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5116.950	44.6	-22.5	34.0	33.08	54.0	9.4	V
5119.950	44.7	-22.3	34.0	33.03	54.0	9.3	V
12120.500	37.4	-27.1	39.0	25.51	54.0	16.6	V
15870.400	39.6	-23.1	40.9	21.82	54.0	14.4	V
17888.350	41.2	-21.0	40.5	21.68	54.0	12.8	V
17953.800	41.0	-20.9	40.6	21.28	54.0	13.0	V

Average Results:

802.11ax-HT80, FULL RU

Channel 58

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5408.550	45.1	-22.4	34.3	33.19	54.0	8.9	V
5430.100	45.2	-22.5	34.4	33.26	54.0	8.8	V
10600.300	41.2	-29.6	37.6	33.20	54.0	12.8	V
15869.850	39.6	-23.1	40.9	21.84	54.0	14.4	V
17890.000	41.2	-21.0	40.5	21.70	54.0	12.8	V
17954.350	41.0	-20.9	40.6	21.32	54.0	13.0	V

Average Results:

802.11ax-HT80, FULL RU

Channel 106

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5436.750	45.1	-22.5	34.4	33.23	54.0	8.9	V
5454.650	45.2	-22.5	34.5	33.30	54.0	8.8	V
11060.100	36.1	-28.8	37.8	27.12	54.0	17.9	H
15977.650	40.0	-23.4	40.8	22.54	54.0	14.0	V
17861.400	41.2	-21.3	40.5	21.93	54.0	12.8	V
17953.800	41.1	-20.9	40.6	21.43	54.0	12.9	V

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PEAK Results:

802.11a, FULL RU

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5147.682	55.48	-23.14	34.00	44.61	74.00	18.52	H
5148.295	55.25	-23.14	34.00	44.39	74.00	18.75	H
10361.050	59.22	-29.15	37.42	50.95	68.20	8.98	H
15539.850	50.71	-24.38	40.40	34.69	74.00	23.29	V
16692.100	52.62	-22.59	41.39	33.82	68.20	15.58	H
17667.250	53.59	-21.26	40.57	34.28	68.20	14.61	H

PEAK Results:

802.11a, FULL RU

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5351.365	55.74	-23.06	34.11	44.70	74.00	18.26	V
5353.012	55.60	-23.02	34.11	44.51	74.00	18.40	V
10635.500	57.38	-29.09	37.64	48.83	74.00	16.62	H
15960.050	50.28	-23.44	40.84	32.88	74.00	23.72	H
17262.450	53.10	-22.16	40.84	34.42	68.20	15.10	V
17672.750	53.38	-21.25	40.55	34.08	68.20	14.82	V

PEAK Results:

802.11a, FULL RU

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5462.815	57.18	-22.40	34.45	45.13	68.20	11.02	H
5468.807	57.14	-22.23	34.42	44.94	68.20	11.06	H
11000.150	52.12	-28.94	37.90	43.17	74.00	21.88	V
16500.150	49.64	-22.71	41.10	31.25	68.20	18.56	V
17055.100	52.22	-22.44	41.04	33.62	68.20	15.98	H
17540.750	52.78	-20.69	40.76	32.70	68.20	15.42	V

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PEAK Results:

802.11n-HT20, FULL RU

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5144.235	55.92	-23.10	34.00	45.02	74.00	18.08	V
5145.285	55.70	-23.11	34.00	44.81	74.00	18.30	H
10357.750	64.19	-29.12	37.42	55.89	68.20	4.02	H
15539.850	51.24	-24.38	40.40	35.22	74.00	22.76	H
16543.600	54.87	-22.95	41.19	36.62	68.20	13.34	V
17462.100	55.07	-21.72	40.76	36.03	68.20	13.13	H

PEAK Results:

802.11n-HT20, FULL RU

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5355.105	56.43	-22.96	34.12	45.27	74.00	17.57	H
5358.669	57.32	-22.87	34.13	46.06	74.00	16.68	H
10641.000	64.26	-29.12	37.64	55.74	74.00	9.74	H
15960.050	53.02	-23.44	40.84	35.61	74.00	20.98	V
16877.450	54.87	-22.13	41.40	35.60	68.20	13.33	V
17541.300	55.17	-20.73	40.76	35.15	68.20	13.03	H

PEAK Results:

802.11n-HT20, FULL RU

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5463.505	57.78	-22.38	34.45	45.71	68.20	10.42	H
5463.828	58.09	-22.37	34.44	46.02	68.20	10.11	V
10997.400	58.92	-28.91	37.89	49.94	74.00	15.08	H
16500.150	52.40	-22.71	41.10	34.01	68.20	15.80	H
16963.800	54.48	-22.20	41.21	35.47	68.20	13.72	V
17138.150	54.32	-22.14	40.96	35.50	68.20	13.88	H

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PEAK Results:

802.11n-HT40, FULL RU

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5148.190	56.15	-23.14	34.00	45.29	74.00	17.85	V
5149.695	56.39	-23.16	34.00	45.55	74.00	17.61	H
10378.100	62.84	-29.21	37.46	54.60	68.20	5.36	H
15570.100	51.45	-24.28	40.40	35.33	74.00	22.55	H
16443.500	54.50	-23.14	40.99	36.66	68.20	13.70	V
17539.100	54.81	-20.71	40.76	34.76	68.20	13.39	V

PEAK Results:

802.11n-HT40, FULL RU

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5351.784	56.75	-23.05	34.11	45.70	74.00	17.25	H
5351.959	56.41	-23.04	34.11	45.35	74.00	17.59	V
10622.850	62.31	-29.19	37.62	53.88	74.00	11.69	H
15929.800	51.36	-23.86	40.87	34.36	74.00	22.64	V
17543.500	54.96	-20.92	40.76	35.12	68.20	13.24	H
17590.250	54.74	-21.83	40.71	35.86	68.20	13.46	V

PEAK Results:

802.11n-HT40, FULL RU

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5461.810	58.01	-22.43	34.45	45.98	68.20	10.19	V
5469.925	58.15	-22.20	34.42	45.93	68.20	10.05	H
11004.550	52.06	-29.00	37.90	43.16	74.00	21.94	V
16529.850	51.66	-22.53	41.16	33.03	68.20	16.54	V
16579.900	54.44	-22.33	41.26	35.51	68.20	13.76	H
17542.400	54.77	-20.83	40.76	34.84	68.20	13.43	H

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PEAK Results:

802.11ac-HT20, FULL RU

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5125.913	57.31	-22.51	34.00	45.82	74.00	16.69	H
5134.172	56.86	-22.81	34.00	45.66	74.00	17.14	V
10359.400	65.41	-29.13	37.42	57.13	68.20	2.79	H
15539.850	51.22	-24.38	40.40	35.19	74.00	22.78	H
16713.000	54.72	-22.37	41.40	35.69	68.20	13.48	H
16895.600	54.58	-22.41	41.40	35.60	68.20	13.62	V

PEAK Results:

802.11ac-HT20, FULL RU

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5351.514	56.93	-23.06	34.11	45.88	74.00	17.07	H
5355.524	56.51	-22.95	34.12	45.34	74.00	17.49	H
10639.900	66.33	-29.12	37.64	57.82	74.00	7.67	V
15960.050	52.83	-23.44	40.84	35.43	74.00	21.17	H
16280.700	55.71	-22.45	40.90	37.26	68.20	12.49	H
16620.050	54.59	-22.46	41.32	35.73	68.20	13.61	H

PEAK Results:

802.11ac-HT20, FULL RU

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5466.085	57.62	-22.31	34.44	45.50	68.20	10.58	H
5466.235	57.78	-22.30	34.43	45.65	68.20	10.42	V
11000.150	55.77	-28.94	37.90	46.81	74.00	18.23	V
16337.900	54.42	-22.83	40.90	36.36	68.20	13.78	V
16500.150	51.50	-22.71	41.10	33.11	68.20	16.70	V
17541.300	54.43	-20.73	40.76	34.41	68.20	13.77	H

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PEAK Results:

802.11ac-HT40, FULL RU

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5121.608	57.27	-22.38	34.00	45.65	74.00	16.73	H
5131.705	57.83	-22.70	34.00	46.53	74.00	16.17	H
10381.400	59.77	-29.20	37.46	51.51	68.20	8.43	H
15570.100	52.96	-24.28	40.40	36.84	74.00	21.04	H
16660.200	54.77	-22.36	41.36	35.77	68.20	13.43	V
17539.100	54.76	-20.71	40.76	34.71	68.20	13.44	H

PEAK Results:

802.11ac-HT40, FULL RU

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5359.776	57.32	-22.85	34.14	46.03	74.00	16.68	V
5393.162	57.58	-22.51	34.27	45.82	74.00	16.42	H
10620.100	59.18	-29.25	37.62	50.80	74.00	14.82	H
15930.350	52.03	-23.86	40.87	35.02	74.00	21.97	H
16749.300	54.71	-22.85	41.40	36.16	68.20	13.49	V
17311.400	54.92	-22.00	40.79	36.13	68.20	13.28	V

PEAK Results:

802.11ac-HT40, FULL RU

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5399.552	57.46	-22.54	34.30	45.70	74.00	16.54	V
5430.392	57.97	-22.51	34.42	46.05	74.00	16.03	V
11019.400	53.03	-28.92	37.88	44.07	74.00	20.97	V
16529.850	52.71	-22.53	41.16	34.08	68.20	15.49	V
16631.600	54.73	-22.59	41.33	35.99	68.20	13.47	V
17077.650	54.96	-22.33	41.02	36.27	68.20	13.24	H

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PEAK Results:

802.11ac-HT80, FULL RU

Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5022.365	56.48	-22.32	33.94	44.85	74.00	17.52	V
5119.770	56.92	-22.34	34.00	45.26	74.00	17.08	V
10415.500	57.61	-29.43	37.50	49.54	68.20	10.59	V
15630.050	50.32	-24.00	40.46	33.86	74.00	23.68	V
16282.350	54.42	-22.36	40.90	35.88	68.20	13.78	H
17531.400	54.19	-21.48	40.77	34.90	68.20	14.01	H

PEAK Results:

802.11ac-HT80, FULL RU

Channel 58

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5363.812	56.62	-22.72	34.16	45.18	74.00	17.38	V
5437.010	58.13	-22.54	34.45	46.22	74.00	15.87	V
10580.500	59.26	-28.85	37.58	50.53	68.20	8.94	H
15869.850	50.77	-23.12	40.87	33.01	74.00	23.23	V
16757.000	54.02	-22.80	41.40	35.42	68.20	14.18	V
17640.300	54.27	-21.49	40.62	35.13	68.20	13.93	H

PEAK Results:

802.11ac-HT80, FULL RU

Channel 106

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5460.422	58.15	-22.46	34.46	46.15	68.20	10.05	H
5469.100	58.05	-22.22	34.42	45.85	68.20	10.15	V
11002.900	51.44	-28.98	37.90	42.52	74.00	22.56	V
16589.890	51.63	-22.29	41.28	32.64	68.20	16.57	H
16616.750	54.20	-22.43	41.32	35.32	68.20	14.00	V
17540.750	53.78	-20.69	40.76	33.71	68.20	14.42	H

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PEAK Results:

802.11ax-HT20, FULL RU

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5116.935	56.4	-22.5	34.0	44.88	74.0	17.6	V
5123.025	57.6	-22.4	34.0	46.02	74.0	16.4	H
10359.950	65.9	-29.1	37.4	57.65	68.2	2.3	V
15539.850	52.2	-24.4	40.4	36.15	74.0	21.8	V
16845.550	53.8	-22.5	41.4	34.88	68.2	14.4	V
17677.700	54.3	-21.2	40.5	35.00	68.2	13.9	V

PEAK Results:

802.11ax-HT20, FULL RU

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5389.881	56.6	-22.5	34.3	44.86	74.0	17.4	H
5395.160	57.4	-22.5	34.3	45.68	74.0	16.6	H
10640.450	62.3	-29.1	37.6	53.77	74.0	11.7	H
15960.050	51.5	-23.4	40.8	34.13	74.0	22.5	H
17064.450	54.2	-22.2	41.0	35.40	68.2	14.0	V
17540.750	54.8	-20.7	40.8	34.77	68.2	13.4	V

PEAK Results:

802.11ax-HT20, FULL RU

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5466.033	57.8	-22.3	34.4	45.71	68.2	10.4	V
5466.918	57.7	-22.3	34.4	45.56	68.2	10.5	H
11000.150	56.9	-28.9	37.9	47.90	74.0	17.1	H
16379.700	53.9	-22.6	40.9	35.57	68.2	14.3	H
16500.150	51.2	-22.7	41.1	32.82	68.2	17.0	V
17535.250	54.5	-21.1	40.8	34.82	68.2	13.7	V

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PEAK Results:

802.11ax-HT40, FULL RU

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5115.378	56.6	-22.6	34.0	45.11	74.0	17.4	H
5119.123	56.8	-22.4	34.0	45.20	74.0	17.2	H
10384.700	62.3	-29.2	37.5	54.06	68.2	5.9	H
15570.100	50.9	-24.3	40.4	34.80	74.0	23.1	H
16687.150	54.5	-22.6	41.4	35.70	68.2	13.7	V
17542.950	54.4	-20.9	40.8	34.49	68.2	13.8	V

PEAK Results:

802.11ax-HT40, FULL RU

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5360.883	57.3	-22.8	34.1	46.00	74.0	16.7	V
5365.716	57.7	-22.7	34.2	46.18	74.0	16.3	H
10624.500	60.7	-29.2	37.6	52.20	74.0	13.3	H
15929.800	50.8	-23.9	40.9	33.75	74.0	23.2	H
17540.200	54.5	-20.6	40.8	34.36	68.2	13.7	V
17657.350	54.5	-21.3	40.6	35.21	68.2	13.7	H

PEAK Results:

802.11ax-HT40, FULL RU

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5461.728	57.8	-22.4	34.5	45.79	68.2	10.4	H
5466.910	57.8	-22.3	34.4	45.62	68.2	10.4	V
11028.200	54.0	-28.9	37.9	45.03	74.0	20.0	V
16529.850	51.6	-22.5	41.2	32.92	68.2	16.7	H
17069.400	54.6	-22.1	41.0	35.66	68.2	13.6	H
17544.600	54.6	-21.0	40.8	34.86	68.2	13.6	H

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PEAK Results:

802.11ax-HT80, FULL RU

Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5110.600	57.0	-22.8	34.0	45.79	74.0	17.0	V
5118.580	56.9	-22.4	34.0	45.28	74.0	17.1	V
10414.950	58.4	-29.4	37.5	50.31	68.2	9.8	V
15630.050	50.5	-24.0	40.5	34.04	74.0	23.5	V
17060.600	54.6	-22.4	41.0	35.99	68.2	13.6	H
17679.350	54.2	-21.2	40.5	34.87	68.2	14.0	H

PEAK Results:

802.11ax-HT80, FULL RU

Channel 58

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5389.017	57.7	-22.5	34.3	45.98	74.0	16.3	V
5396.523	57.5	-22.5	34.3	45.76	74.0	16.5	V
10580.500	56.4	-28.9	37.6	47.69	68.2	11.8	H
15869.850	51.7	-23.1	40.9	33.95	74.0	22.3	V
16679.450	54.5	-22.5	41.4	35.63	68.2	13.7	V
17673.850	55.1	-21.2	40.6	35.76	68.2	13.1	H

PEAK Results:

802.11ax-HT80, FULL RU

Channel 106

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5462.470	57.8	-22.4	34.4	45.71	68.2	10.4	H
5463.865	58.1	-22.4	34.4	46.02	68.2	10.1	V
11060.100	48.6	-28.8	37.8	39.58	74.0	25.4	V
16589.800	51.7	-22.3	41.3	32.73	68.2	16.5	H
16667.350	54.6	-22.4	41.4	35.67	68.2	13.6	V
17539.100	54.9	-20.7	40.8	34.85	68.2	13.3	H

Conclusion: PASS

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A.7. AC Powerline Conducted Emission (150kHz- 30MHz)

Method of Measurement: See ANSI C63.10-2013-clause 6.2

1 The one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT.

2 If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed.

3 The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation.

4 If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.

5 If the EUT uses a detachable antenna, these measurements shall be made with a suitable dummy load connected to the antenna output terminals; otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. When measuring the ac conducted emissions from a device that operates between 150 kHz and 30 MHz a non-detachable antenna may be replaced with a dummy load for the measurements within the fundamental emission band of the transmitter, but only for those measurements.36 Record the six highest EUT emissions relative to the limit of each of the current-carrying conductors of the power cords of the equipment that comprises the EUT over the frequency range specified by the procuring or regulatory agency. Diagram or photograph the test setup that was used. See Clause 8 for full reporting requirements.

Test Condition:

Voltage（V）	Frequency（Hz）
120	60

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Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger QC16US		
		11a mode	Idle	
0.15 to 0.5	66 to 56	Fig.49	Fig.50	P
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger QC16US		
		11a mode	Idle	
0.15 to 0.5	56 to 46	Fig.49	Fig.50	P
0.5 to 5	46			
5 to 30	50			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger QC16EU		
		11a mode	Idle	
0.15 to 0.5	66 o 56	Fig.51	/	P
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger QC16EU		
		11a mode	Idle	
0.15 to 0.5	56 o 46	Fig.51	/	P
0.5 to 5	46			
5 to 30	50			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Conclusion: PASS

Test graphs as below:

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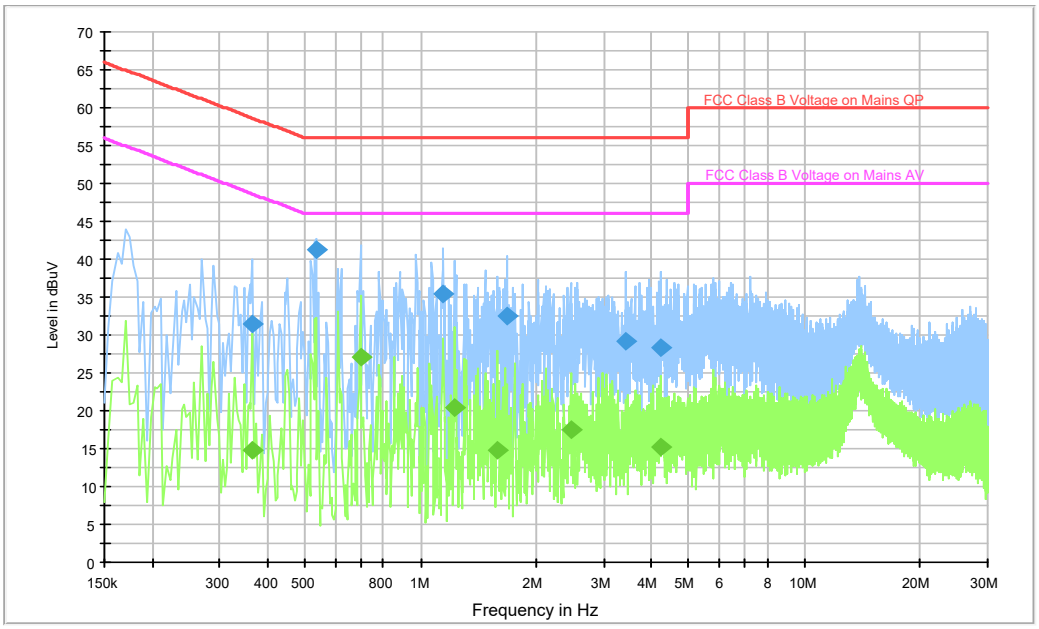

Fig.49 Conducted Emission(802.11a, Ch40, TX, With charger QC16US)

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.366000	31.4	L1	19.9	27.2	58.6
0.534000	41.3	L1	20.0	14.7	56.0
1.146000	35.3	L1	19.9	20.7	56.0
1.682000	32.5	L1	19.8	23.5	56.0
3.438000	29.2	L1	19.8	26.8	56.0
4.234000	28.3	L1	19.8	27.7	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.366000	14.8	L1	19.93	33.8	48.6
0.698000	27.0	L1	19.96	19.0	46.0
1.226000	20.4	L1	19.87	25.6	46.0
1.586000	14.9	L1	19.85	31.1	46.0
2.458000	17.5	L1	19.83	28.5	46.0
4.234000	15.1	L1	19.84	30.9	46.0

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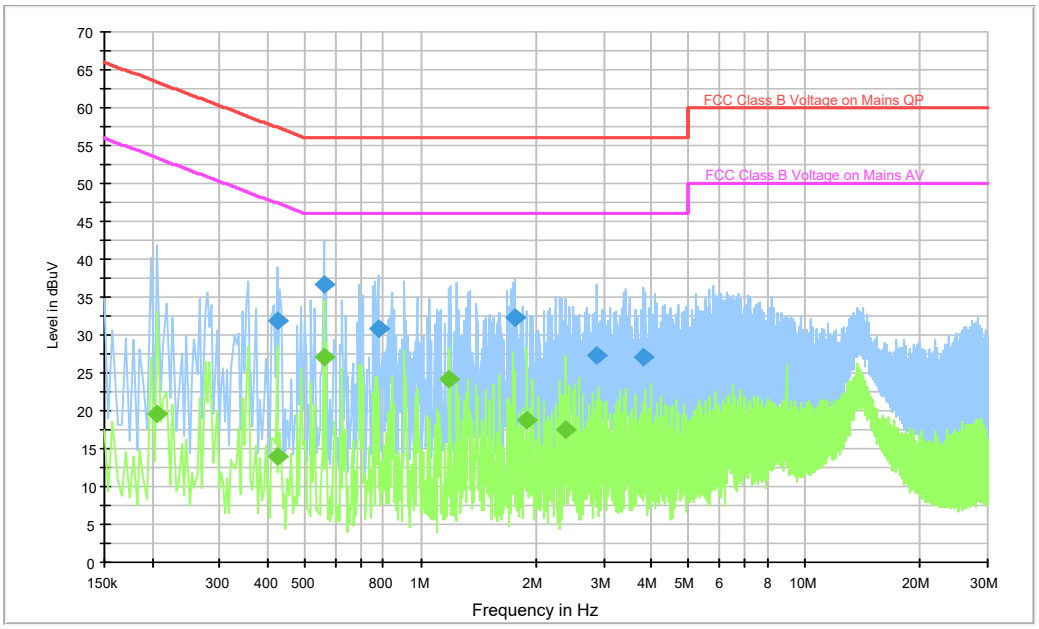

Fig.50 Conducted Emission(802.11a, IDLE, With charger QC16US)

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.422000	31.84	L1	19.97	25.60	57.40
0.558000	36.75	L1	20.00	19.20	56.00
0.774000	30.79	L1	19.94	25.20	56.00
1.758000	32.32	L1	19.84	23.70	56.00
2.866000	27.36	L1	19.83	28.60	56.00
3.786000	27.07	L1	19.83	28.90	56.00

Final Result 2

Frequency (MHz)	Average (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.206000	19.56	L1	19.84	33.80	53.40
0.422000	13.87	L1	19.97	33.50	47.40
0.558000	27.10	L1	20.00	18.90	46.00
1.190000	24.26	L1	19.87	21.70	46.00
1.890000	18.85	L1	19.83	27.20	46.00
2.382000	17.43	L1	19.83	28.60	46.00

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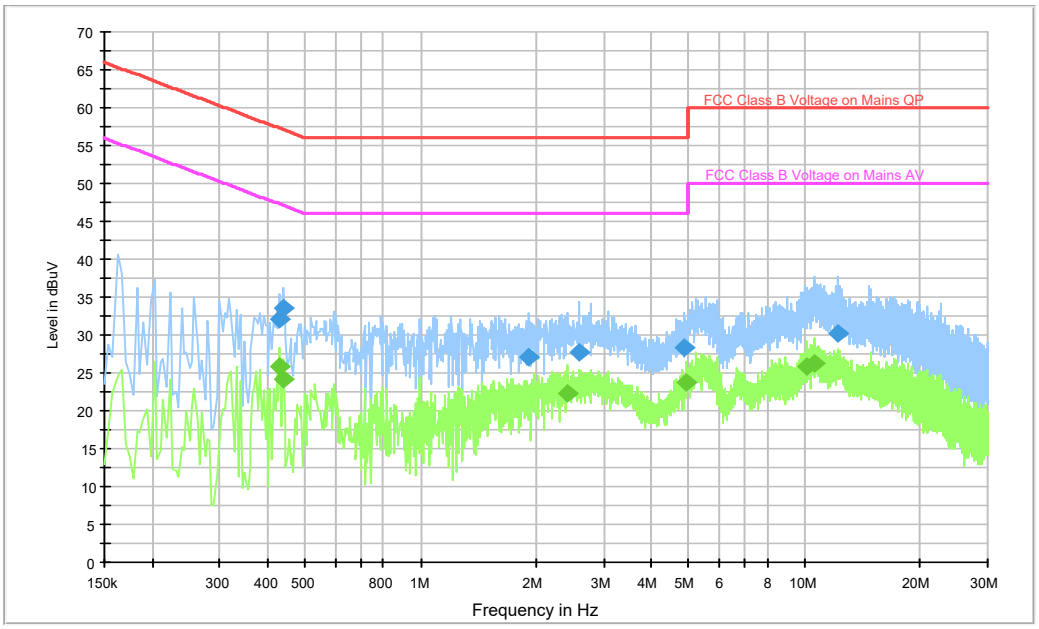

Fig.51 AC Powerline Conducted Emission-802.11a With charger QC16EU

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.430000	32.2	N	19.9	25.1	57.3
0.438000	33.6	N	19.9	23.5	57.1
1.918000	27.0	L1	19.8	29.0	56.0
2.594000	27.7	L1	19.8	28.3	56.0
4.854000	28.4	L1	19.8	27.6	56.0
12.270000	30.3	L1	20.0	29.7	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.430000	25.9	N	19.9	21.4	47.3
0.438000	24.2	N	19.9	22.9	47.1
2.418000	22.3	L1	19.8	23.7	46.0
4.898000	23.7	L1	19.8	22.3	46.0
10.082000	25.8	L1	19.9	24.2	50.0
10.622000	26.2	L1	19.9	23.8	50.0

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A.8. 99% Occupied bandwidth

Method of Measurement: See ANSI C63.10-2013-clause 12.4.2.

a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.

c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.

d) Step a) through step c) might require iteration to adjust within the specified range.

e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.

f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% ofthe total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.

h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz

EUT ID: UT36a

Measurement Result:

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant6	5180	19.075	5170.6793	5189.7539	---	---
	Ant9	5180	18.727	5170.7885	5189.5155	---	---
	Ant6	5200	18.882	5190.4703	5209.3524	---	---
	Ant9	5200	19.062	5190.5287	5209.5903	---	---
	Ant6	5240	18.402	5230.7626	5249.1647	---	---
	Ant9	5240	17.512	5231.2484	5248.7604	---	---
11N20MIMO	Ant6	5180	19.818	5170.3157	5190.1340	---	---
	Ant9	5180	18.530	5170.7491	5189.2787	---	---
	Ant6	5200	19.674	5190.1050	5209.7791	---	---
	Ant9	5200	19.461	5190.2394	5209.6999	---	---
	Ant6	5240	18.937	5230.4755	5249.4123	---	---

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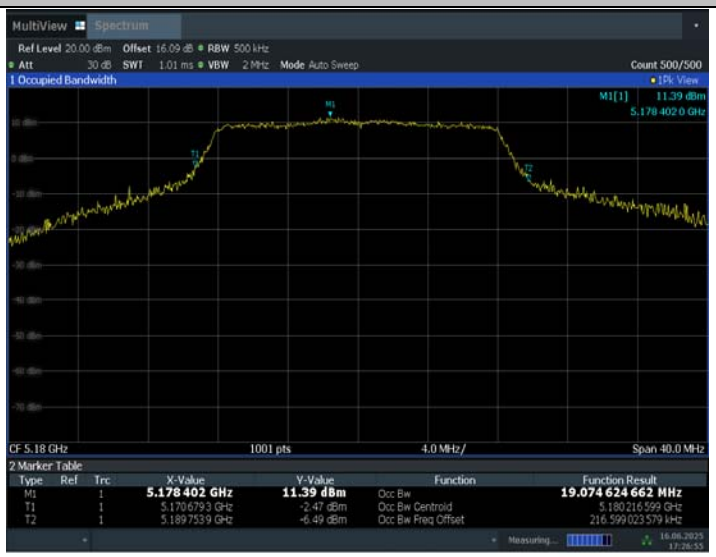
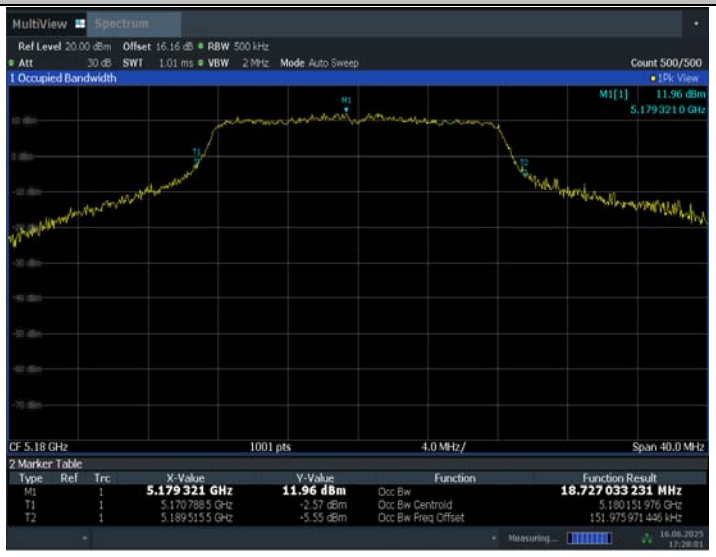
	Ant9	5240	18.166	5230.9100	5249.0755	---	---
11AC40MIMO	Ant6	5190	37.099	5171.5834	5208.6821	---	---
	Ant9	5190	37.592	5171.2966	5208.8890	---	---
	Ant6	5230	36.651	5211.6247	5248.2752	---	---
	Ant9	5230	36.393	5211.7493	5248.1428	---	---
11AX80MIMO	Ant6	5210	78.097	5170.9528	5249.0502	---	---
	Ant9	5210	77.844	5171.0079	5248.8524	---	---

Test graphs as below:

11A_Ant6_5180



11A_Ant9_5180



11A_Ant6_5200

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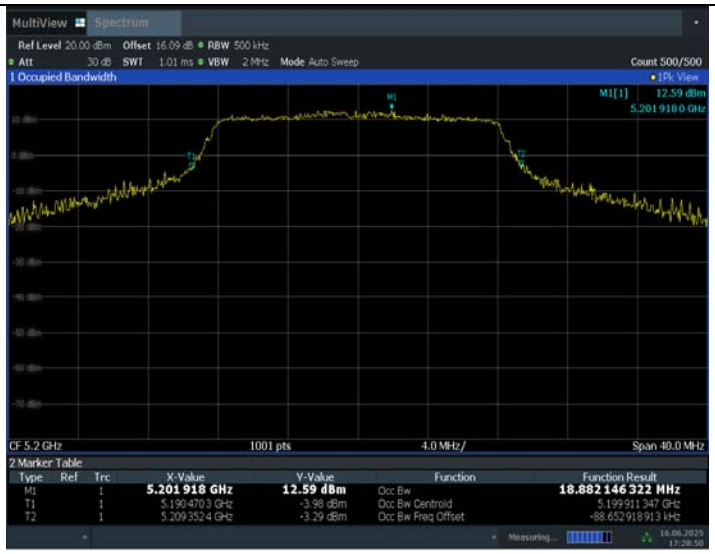

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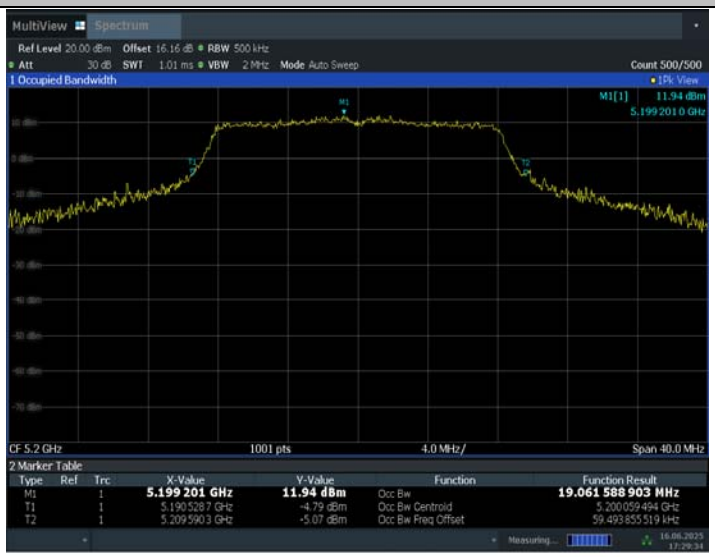

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11A_Ant6_5240

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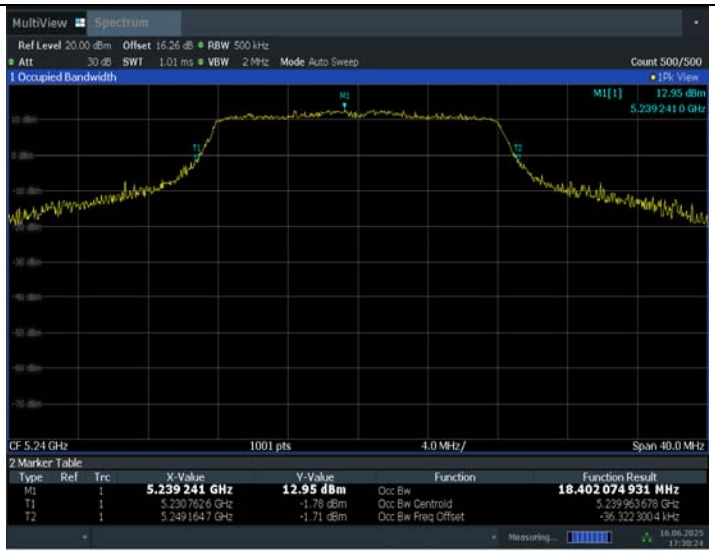

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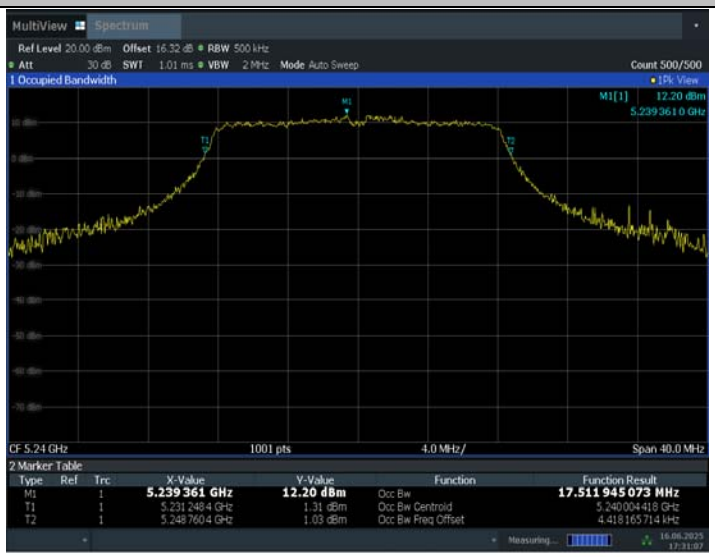

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11N20MIMO_Ant6_5180

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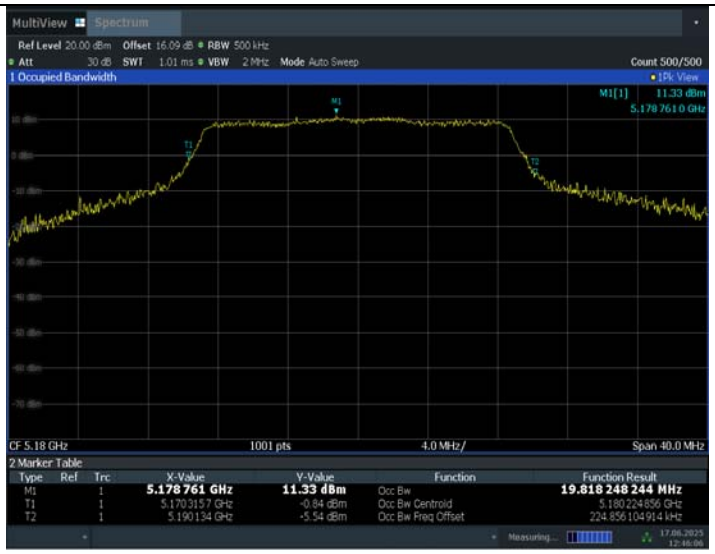

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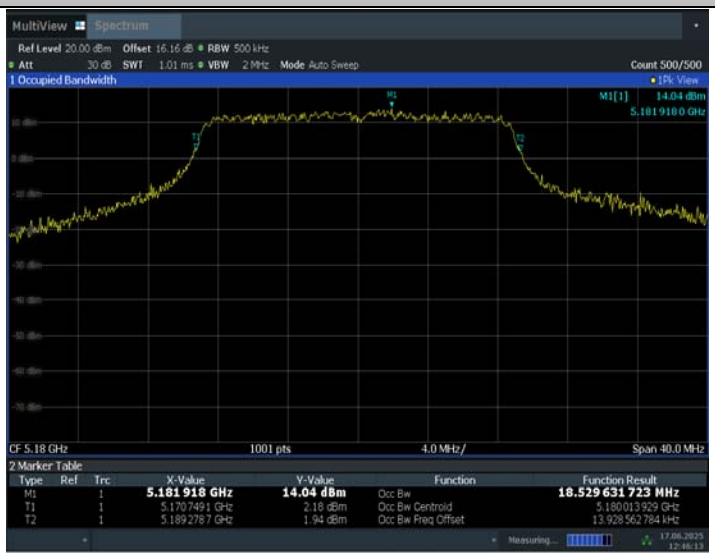

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11N20MIMO_Ant6_5200

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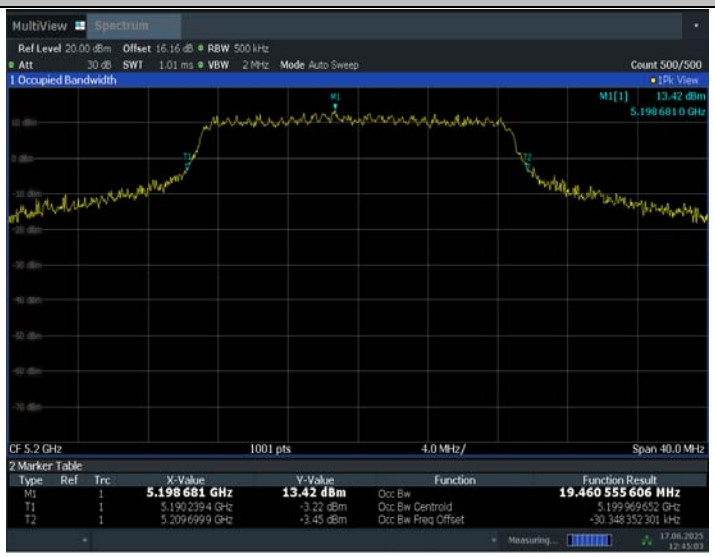

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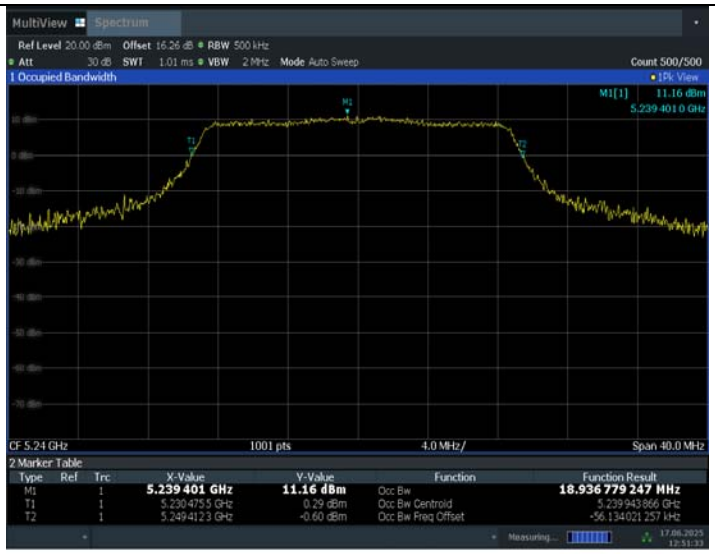

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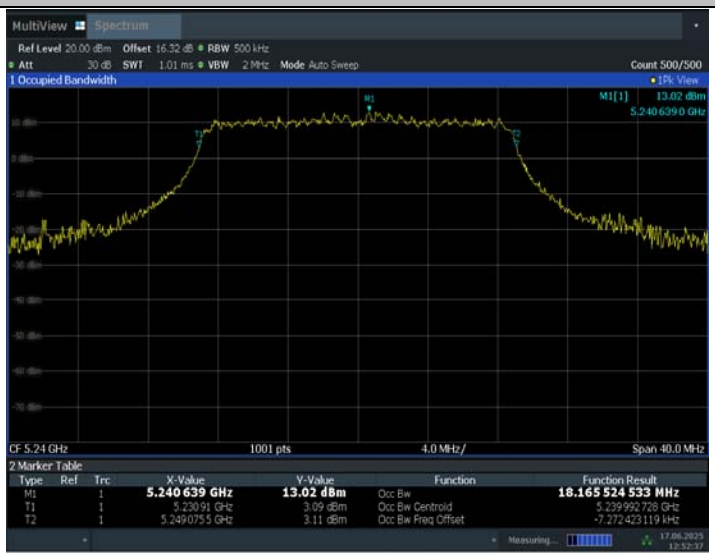

11AC40MIMO_Ant6_5190

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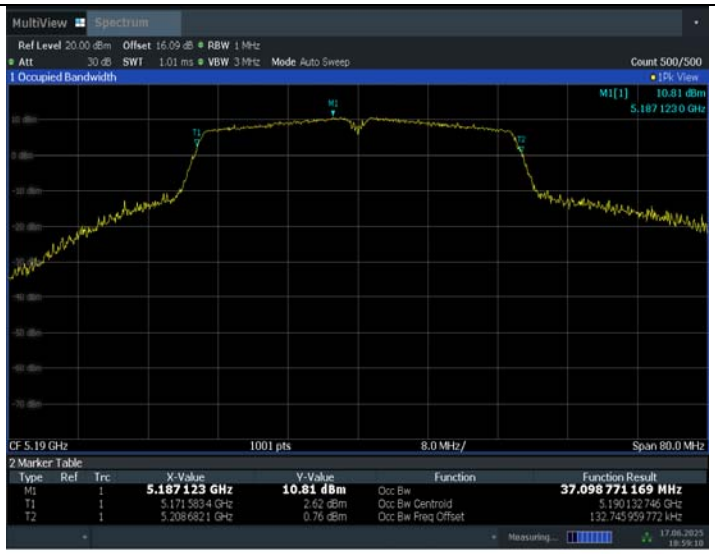

11AC40MIMO_Ant9_5190

11AC40MIMO_Ant6_5230

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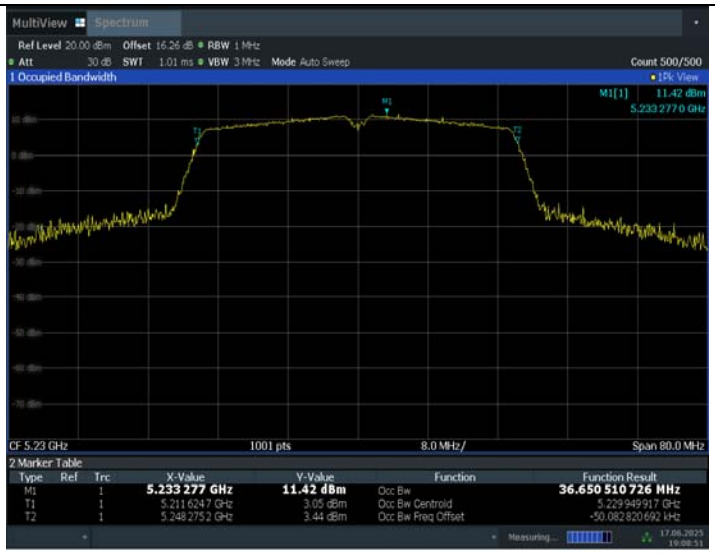

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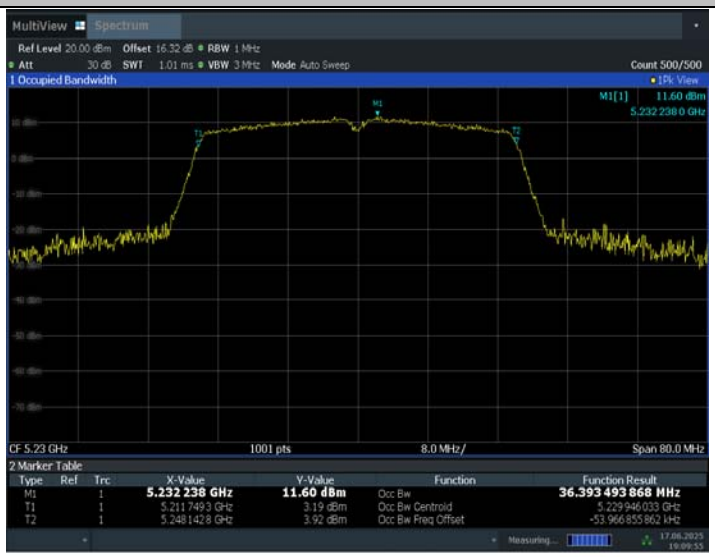

19:09:56 17.06.2025

11AX80MIMO_Ant6_5210

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11AX80MIMO_Ant9_5210

Conclusion: PASS

A.8. Antenna Requirement

The antenna of the device is permanently attached. There are no provisions for connection to an external antenna.

The unit complies with the requirement of FCC Part 15.203.

A.9. Power control

A Transmission Power Control mechanism is not required for systems with an e.i.r.p. of less than 27dBm (500 mW).

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ANNEX B: EUT parameters

Disclaimer: The antenna gain and worse case provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

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ANNEX C: Accreditation Certificate

Accredited Laboratory

A2LA has accredited

TELECOMMUNICATION TECHNOLOGY LABS, CAICT

Beijing, People's Republic of China

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 23rd day of July 2024.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7049.01
Valid to July 31, 2026

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

***** END OF REPORT BODY *****

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