



FCC PART 15E TEST REPORT No.25T04Z100239-031

for

TCL Communication Ltd.

GSM/UMTS/LTE/NR Mobile phone

T513V

FCC ID:2ACCJH187

with

Hardware Version: 04

Software Version: 9ABJ

Issued Date: 2025-04-16

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.

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
25T04Z100239-031	Rev.0	1st edition	2025-04-16

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(huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,
100191, P. R. China

1.3. Testing Environment

Normal Temperature: 15-35°C

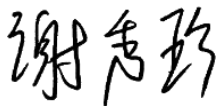
Relative Humidity: 20-75%

1.4. Project date

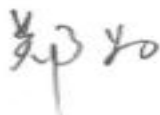
Testing Start Date: 2025-02-14

Testing End Date: 2025-03-27

1.5. Signature



Xie Xiuzhen
(Prepared this test report)



Zheng Wei
(Reviewed this test report)



Pang Shuai
(Approved this test report)

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
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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

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

3.1. About EUT

Description	GSM/UMTS/LTE/NR Mobile phone
Model name	T513V
FCC ID	2ACCJH187
WLAN Frequency Band	ISM Bands: -5150MHz~5250MHz -5250MHz~5350MHz -5470MHz~5725MHz
Type of modulation	OFDM
Antenna	Integral Antenna
Normal Voltage	3.87V
Extreme High Voltage	4.45V
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
UT13a	016644000212016/	04	9CS4	2025-02-17
(Initial model)	016644000212024			
UT53a	016644000213576/	04	9CS4	2025-03-10
(Initial model)	016644000213584			

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

UT13a is used for Conduction test, UT53a is used for Radiation test.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Model	Manufacturer
AE1	Cable	CDA0000218C1	JUWEI
AE2	Charger(Provided by the lab.)	/	/

*AE ID: is used to identify the test sample in the lab internally. The information of manufacturer was provided by the client.

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;	2021
	15.207 Conducted limits;	
	15.209 Radiated emission limits, general requirements;	
ANSI C63.10	15.407 General technical requirements.	2013
	Methods of Measurement of Radio-Noise Emissions from	
	Low-Voltage Electrical and Electronic Equipment in the	
UNII: KDB 789033 D02	Range of 9 kHz to 40 GHz	2017-12
	General U-NII Test Procedures New Rules v02r01	

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.

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	/	BR
Peak Power Spectral Density	15.407	/	BR
26dB Emission Bandwidth	15.403	/	BR
Radiated Unwanted Emission	15.407, 15.205, 15.209	/	BR
AC Powerline Conducted Emission	15.207	/	BR
99% Occupied bandwidth	/	/	BR
Transmit Power Control	15.407	/	BR

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
BR	Re-use test data from basic model report.

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.

The Equipment Under Test (EUT) model T513V (FCC ID: 2ACCJH187) is a variant product of T513SP(FCC ID: 2ACCJH187), according to the declaration of changes provided by the applicant, all results are derived from test report 25T04Z100239-006.

For detail differences between two models please refer the Declaration of Changes document.

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	3.87V
Humidity	44%

7. Test Facilities Utilized

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Vector Signal Analyzer	FSW67	104051	Rohde & Schwarz	1 year	2025-04-30
2	LISN	ENV216	101200	Rohde & Schwarz	1 year	2025-05-16
3	Test Receiver	ESCI	100344	Rohde & Schwarz	1 year	2025-04-01
4	Attenuator	10dB/2W	/	Rosenberger	/	/
5	Shielding Room	S81	/	ETS-Lindgren	/	/

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver	ESW44	103023	R&S	1 year	2025-06-06
2	EMI Antenna	VULB 9163	01222	SCHWARZBECK	1 year	2025-09-11
3	EMI Antenna	3115	00167250	ETS-Lindgren	1 year	2025-04-11

Test Software

Test Item	Test Software and Version	Software Vendor
Radiated Continuous Emission	EMC32 V8.53.0	R&S
	EMC32 V10.60.20	R&S
Conducted Emission	EMC32 V8.53.0	R&S

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)
$30\text{MHz} \leq f \leq 2\text{GHz}$	1.22
$2\text{GHz} \leq f \leq 3.6\text{GHz}$	1.22
$3.6\text{GHz} \leq f \leq 8\text{GHz}$	1.22
$8\text{GHz} \leq f \leq 12.75\text{GHz}$	1.51
$12.75\text{GHz} \leq f \leq 26\text{GHz}$	1.51
$26\text{GHz} \leq f \leq 40\text{GHz}$	1.59

8.6 Radiated Unwanted Emission

Frequency Range	Uncertainty(dB) (k=2)
9kHz-30MHz	4.92
$30\text{MHz} \leq f \leq 1\text{GHz}$	5.73
$1\text{GHz} \leq f \leq 18\text{GHz}$	5.58
$18\text{GHz} \leq f \leq 40\text{GHz}$	3.37

8.7 AC Power-line Conducted Emission

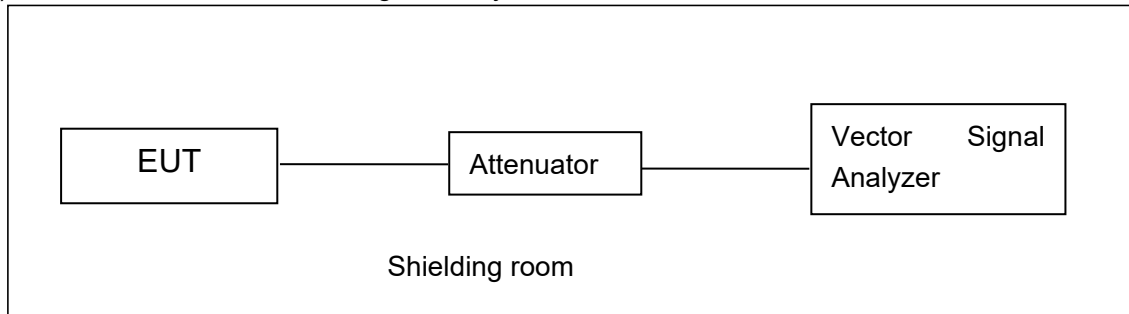
Measurement Uncertainty : 3.08dB,k=2

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

Measurement performed according to Clause 6.4, 6.5, 6.6 in ANSI C63.10-2013 and II.G.4, II.G.5, II.G.6 in KDB 789033.

The radiated emission test is performed in semi-anechoic chamber. The EUT was placed on a non-conductive table with 80cm above the ground plane for measurement below 1GHz and 1.5m above the ground plane for measurement above 1GHz. The measurement antenna was placed at a distance of 3 meters from the EUT. 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 from 0° to 360° and the measurement antenna is moved from 1m to 4m to get the maximization result. The maximization process was repeated with the EUT positioned in each of its three orthogonal orientations

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 measurement method SA-2 is made according to KDB 789033

A.2.1 Antenna Gain

Antenna gain is -4.98dBi and the value is supplied by the applicant or manufacturer.

A.2.2 Maximum output Power-Conducted

EUT ID: UT13a

Measurement Results:

802.11a mode

Mode	Frequency	Test Result (dBm)							
		Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
802.11a	5180MHz	17.48	/	/	/	/	/	/	/
	5200MHz	18.22	/	/	/	/	/	/	/
	5240MHz	17.92	/	/	/	/	/	/	/
	5260MHz	17.90	/	/	/	/	/	/	/
	5280MHz	18.18	/	/	/	/	/	/	/
	5320MHz	18.05	/	/	/	/	/	/	/
	5500MHz	18.42	/	/	/	/	/	/	/
	5580MHz	17.73	/	/	/	/	/	/	/
	5700MHz	18.51	/	/	/	/	/	/	/
	5720MHz	18.25	/	/	/	/	/	/	/

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

802.11n-HT20 mode

Mode	Frequency	Test Result (dBm)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11n (HT20)	5180MHz	17.85	/	/	/	/	/	/	/
	5200MHz	18.11	/	/	/	/	/	/	/
	5240MHz	17.86	/	/	/	/	/	/	/
	5260MHz	17.70	/	/	/	/	/	/	/
	5280MHz	18.14	/	/	/	/	/	/	/
	5320MHz	18.36	/	/	/	/	/	/	/

	5500MHz	18.26	/	/	/	/	/	/	/
	5580MHz	17.64	/	/	/	/	/	/	/
	5700MHz	18.37	/	/	/	/	/	/	/
	5720MHz	18.46	/	/	/	/	/	/	/

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

802.11ac-VHT20 mode

Mode	Frequency	Test Result (dBm)								
		Data Rate								
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
802.11ac (VHT20)	5180MHz	16.95	/	/	/	/	/	/	/	/
	5200MHz	17.18	/	/	/	/	/	/	/	/
	5240MHz	16.92	/	/	/	/	/	/	/	/
	5260MHz	17.23	/	/	/	/	/	/	/	/
	5280MHz	17.65	/	/	/	/	/	/	/	/
	5320MHz	17.39	/	/	/	/	/	/	/	/
	5500MHz	17.83	/	/	/	/	/	/	/	/
	5580MHz	17.18	/	/	/	/	/	/	/	/
	5700MHz	17.81	/	/	/	/	/	/	/	/
	5720MHz	17.56	/	/	/	/	/	/	/	/

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

802.11n-HT40 mode

Mode	Frequency	Test Result (dBm)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11n (HT40)	5190MHz	17.04	/	/	/	/	/	/	/
	5230MHz	17.32	/	/	/	/	/	/	/
	5270MHz	17.39	/	/	/	/	/	/	/
	5310MHz	16.88	/	/	/	/	/	/	/
	5510MHz	17.67	/	/	/	/	/	/	/
	5550MHz	17.43	/	/	/	/	/	/	/
	5670MHz	17.47	/	/	/	/	/	/	/
	5710MHz	17.79	/	/	/	/	/	/	/

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

802.11ac-VHT40 mode

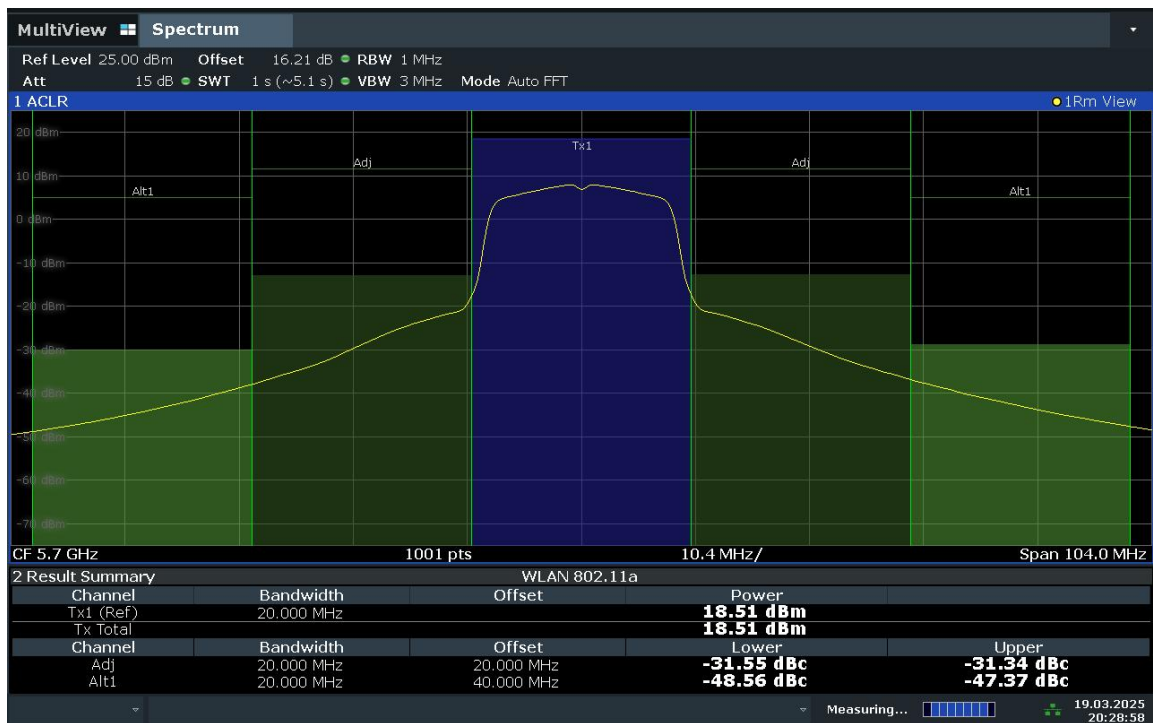
Mode	Frequency	Test Result (dBm)									
		Data Rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
802.11ac (VHT40)	5190MHz	16.13	/	/	/	/	/	/	/	/	/
	5230MHz	16.30	/	/	/	/	/	/	/	/	/
	5270MHz	16.44	/	/	/	/	/	/	/	/	/
	5310MHz	16.35	/	/	/	/	/	/	/	/	/
	5510MHz	16.68	/	/	/	/	/	/	/	/	/
	5550MHz	16.44	/	/	/	/	/	/	/	/	/
	5670MHz	16.52	/	/	/	/	/	/	/	/	/
	5710MHz	16.64	/	/	/	/	/	/	/	/	/

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

802.11ac-VHT80 mode

Mode	Frequency	Test Result (dBm)									
		Data Rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
802.11ac (VHT80)	5210MHz	15.09	/	/	/	/	/	/	/	/	/
	5290MHz	15.24	/	/	/	/	/	/	/	/	/
	5530MHz	15.45	/	/	/	/	/	/	/	/	/
	5610MHz	14.94	/	/	/	/	/	/	/	/	/
	5690MHz	15.55	/	/	/	/	/	/	/	/	/

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



20:28:58 19.03.2025

Maximum output Power: 11a CH140

The duty cycle of all mode

Mode	802.11a	802.11n20	802.11ac20	802.11n40	802.11ac40	802.11ac80
Duty Cycle	98%	97%	97%	95%	95%	89%



18:02:13 19.03.2025

Duty cycle

Conclusion: PASS

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

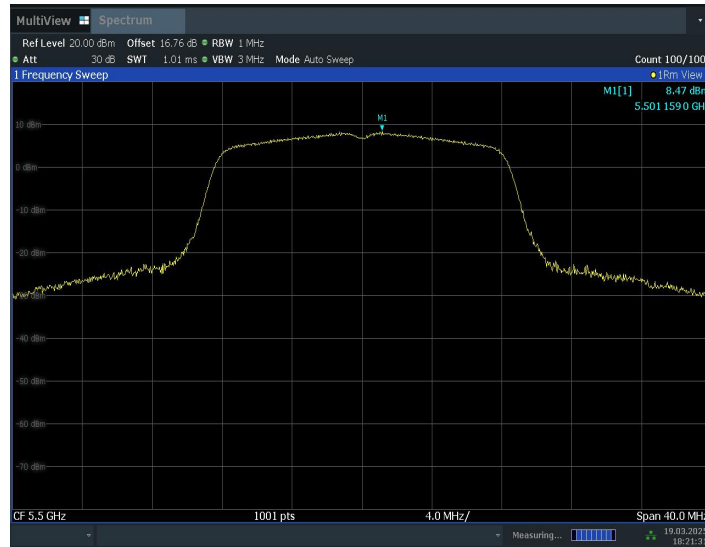
The output power measurement method Section F is made according to KDB 789033

EUT ID: UT13a

Measurement Results:

TestMode	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	5180	7.13	≤11.00	PASS
	5200	8.03	≤11.00	PASS
	5240	7.90	≤11.00	PASS
	5260	7.57	≤11.00	PASS
	5280	7.96	≤11.00	PASS
	5320	7.85	≤11.00	PASS
	5500	8.47	≤11.00	PASS
	5580	7.57	≤11.00	PASS
	5700	8.22	≤11.00	PASS
	5720	7.99	≤11.00	PASS
11N20SISO	5180	7.41	≤11.00	PASS
	5200	7.74	≤11.00	PASS
	5240	7.40	≤11.00	PASS
	5260	7.35	≤11.00	PASS
	5280	7.76	≤11.00	PASS
	5320	8.15	≤11.00	PASS
	5500	7.85	≤11.00	PASS
	5580	7.23	≤11.00	PASS
	5700	8.13	≤11.00	PASS
	5720	7.97	≤11.00	PASS
11N40SISO	5190	3.78	≤11.00	PASS
	5230	4.28	≤11.00	PASS
	5270	4.00	≤11.00	PASS
	5310	3.48	≤11.00	PASS
	5510	4.47	≤11.00	PASS
	5550	4.12	≤11.00	PASS
	5670	4.22	≤11.00	PASS
	5710	4.60	≤11.00	PASS
11AC80SISO	5210	-1.39	≤11.00	PASS
	5290	-0.79	≤11.00	PASS

	5530	-0.45	≤ 11.00	PASS
	5610	-1.36	≤ 11.00	PASS
	5690	-0.72	≤ 11.00	PASS



18:21:32 19.03.2025

Peak Power Spectral Density:11a CH100

Conclusion: PASS

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
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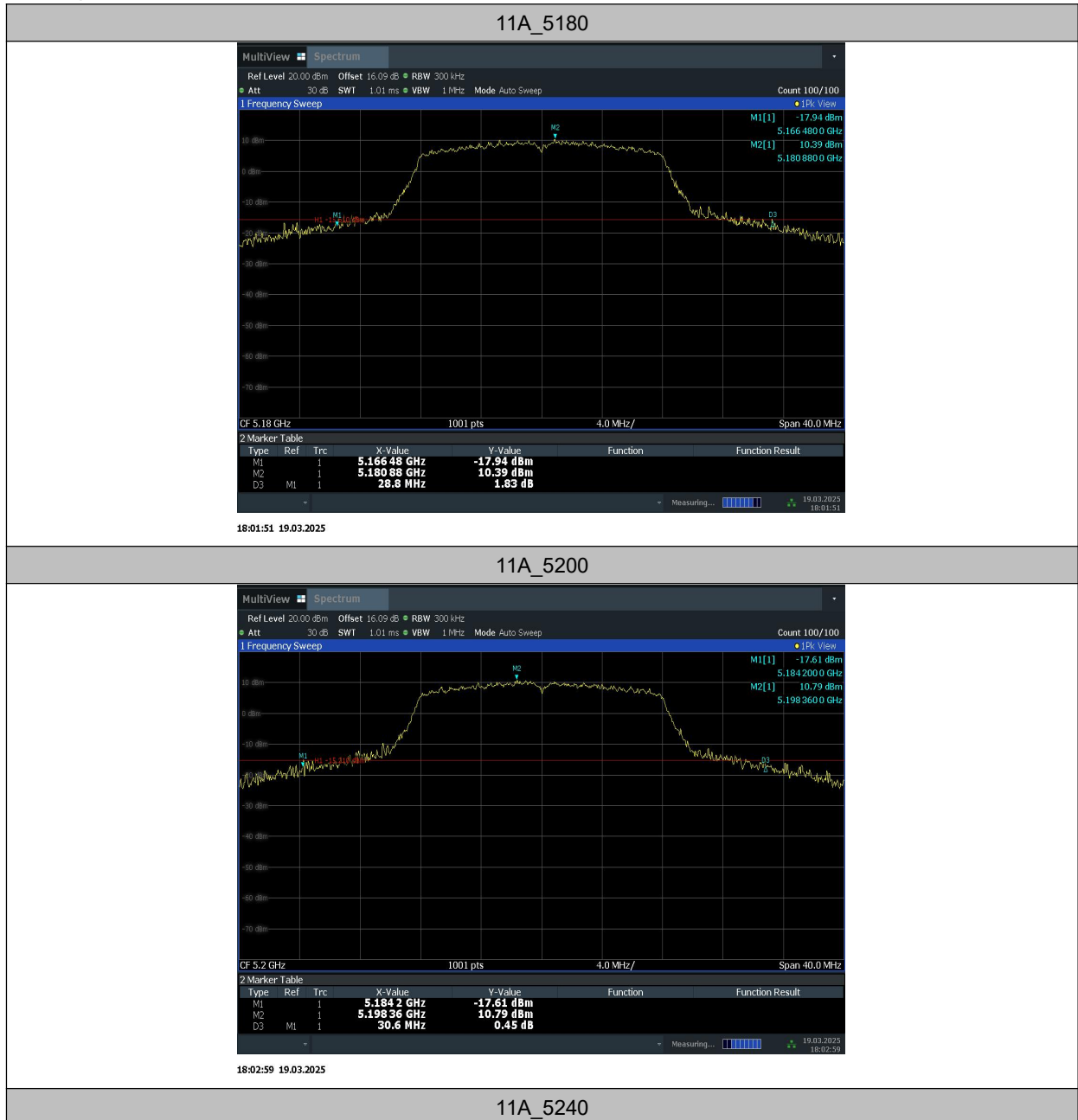
EUT ID: UT13a

Measurement Result:

TestMode	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	5180	28.80	5166.48	5195.28	---	---
	5200	30.60	5184.20	5214.80	---	---
	5240	28.48	5226.80	5255.28	---	---
	5260	27.76	5246.72	5274.48	---	---
	5280	31.56	5264.04	5295.60	---	---
	5320	31.56	5301.96	5333.52	---	---
	5500	29.56	5485.12	5514.68	---	---
	5580	30.44	5563.80	5594.24	---	---
	5700	31.12	5684.04	5715.16	---	---
	5720	30.96	5705.00	5735.96	---	---
11N20SISO	5180	33.88	5164.12	5198.00	---	---
	5200	28.32	5185.68	5214.00	---	---
	5240	30.40	5224.72	5255.12	---	---
	5260	28.60	5246.00	5274.60	---	---
	5280	30.36	5264.72	5295.08	---	---
	5320	28.84	5305.48	5334.32	---	---
	5500	28.84	5485.36	5514.20	---	---
	5580	32.68	5562.84	5595.52	---	---
	5700	31.76	5684.24	5716.00	---	---
	5720	34.04	5702.52	5736.56	---	---
11N40SISO	5190	46.24	5168.24	5214.48	---	---
	5230	53.60	5197.84	5251.44	---	---
	5270	60.56	5237.36	5297.92	---	---
	5310	47.36	5284.16	5331.52	---	---
	5510	61.36	5477.36	5538.72	---	---
	5550	58.32	5517.44	5575.76	---	---
	5670	55.60	5642.80	5698.40	---	---
	5710	58.48	5677.92	5736.40	---	---
11AC80SISO	5210	87.04	5167.28	5254.32	---	---
	5290	83.04	5247.60	5330.64	---	---

	5530	93.92	5476.88	5570.80	---	---
	5610	90.40	5560.24	5650.64	---	---
	5690	84.48	5649.20	5733.68	---	---

Test graphs as below:





18:16:14 19.03.2025

11A_5260



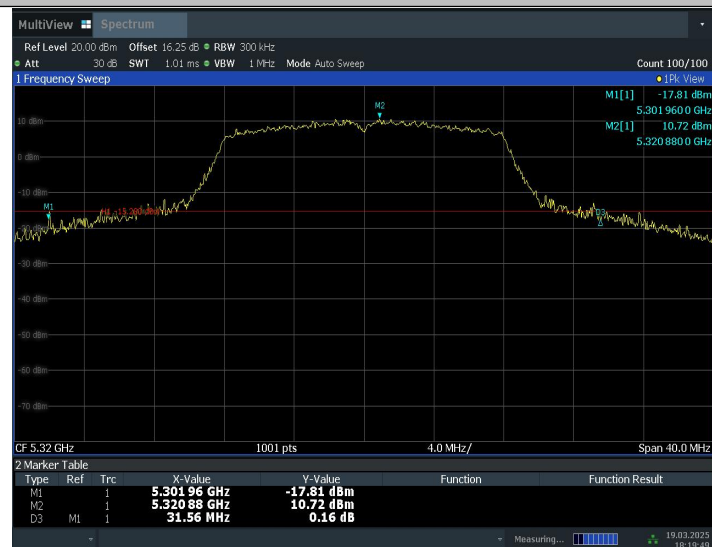
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11A_5280



18:18:30 19.03.2025

11A_5320



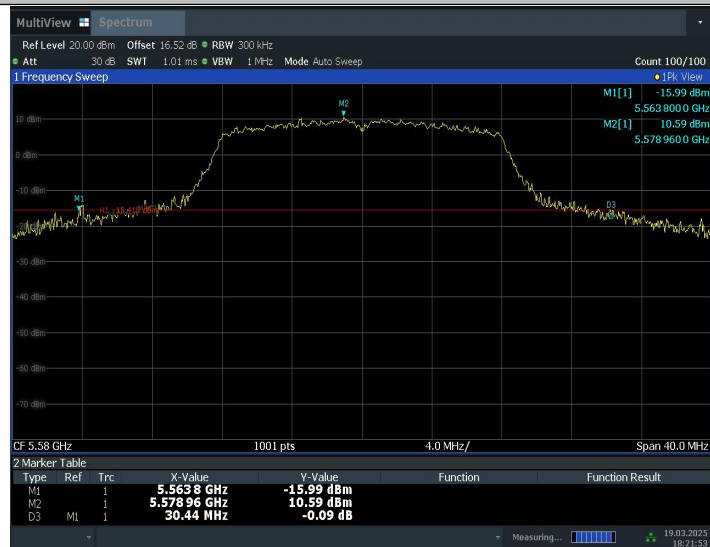
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11A_5500



18:20:50 19.03.2025

11A_5580



18:21:53 19.03.2025

11A_5700



18:49:13 19.03.2025

11A_5720



18:52:18 19.03.2025

11N20SISO_5180



20:14:32 19.03.2025

11N20SISO_5200



20:14:52 19.03.2025

11N20SISO_5240



20:15:15 19.03.2025

11N20SISO_5260



20:15:35 19.03.2025

11N20SISO_5280



20:15:55 19.03.2025

11N20SISO_5320



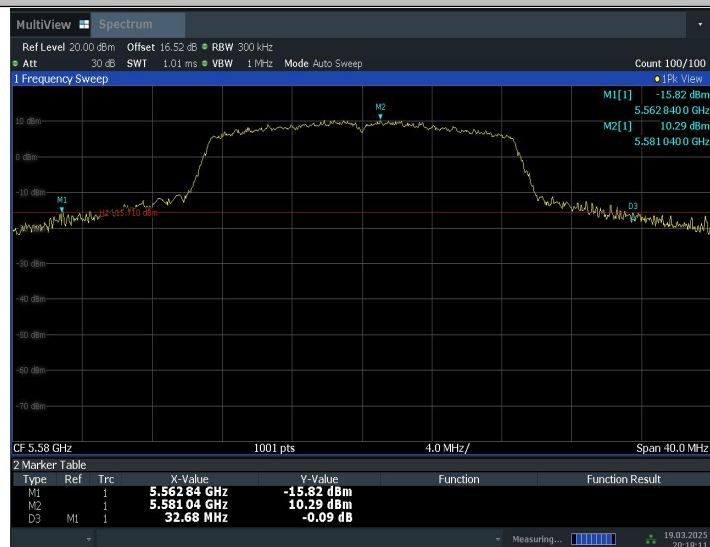
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11N20SISO_5500



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11N20SISO_5580



20:18:11 19.03.2025

11N20SISO_5700



20:18:39 19.03.2025

11N20SISO_5720



20:19:09 19.03.2025

11N40SISO_5190



19:21:44 19.03.2025

11N40SISO_5230



19:22:45 19.03.2025

11N40SISO_5270



19:23:46 19.03.2025

11N40SISO_5310



19:24:50 19.03.2025

11N40SISO_5510



19:25:54 19.03.2025

11N40ISO_5550



19:26:55 19.03.2025

11N40ISO_5670



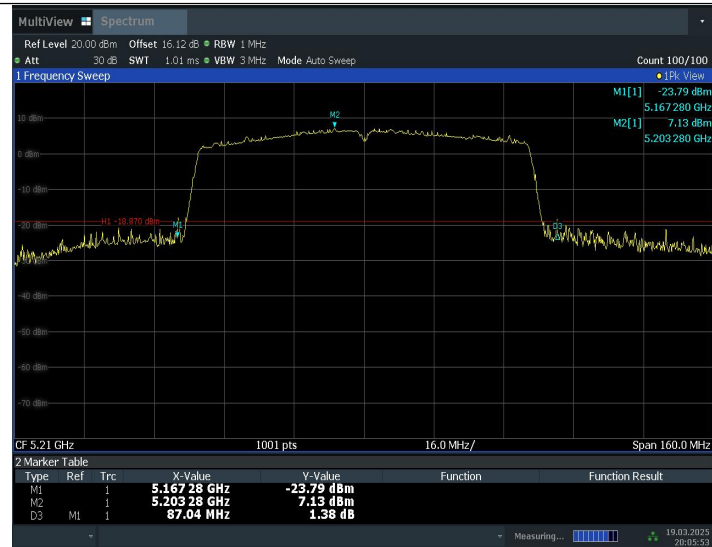
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11N40SISO_5710



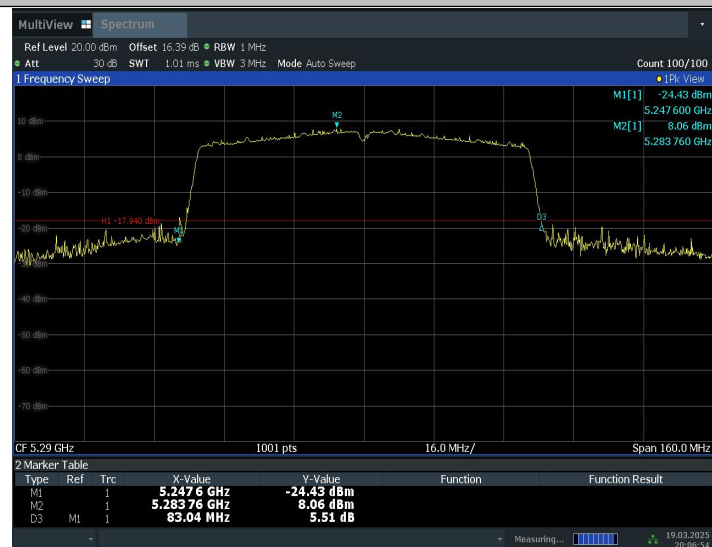
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11AC80SISO_5210



20:05:54 19.03.2025

11AC80SISO_5290



20:06:54 19.03.2025

11AC80SISO_5530



20:07:56 19.03.2025

11AC80SISO_5610



20:09:03 19.03.2025

11AC80SISO_5690



Conclusion: PASS

A.5. Radiated Unwanted Emission

A.5.1 Limits

Unwanted Emissions in the unrestricted bands shall not exceed the limits that shown in 15.407:

Standard	Limit
FCC 47 CFR Part 15.407	(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz. (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz. (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

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))

Frequency (MHz)	Field strength(μ V/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30

Frequency of emission (MHz)	Field strength (μ V/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

Note: When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor (as defined in KDB 789033 II.G.2.d).

A.5.2 Test setup

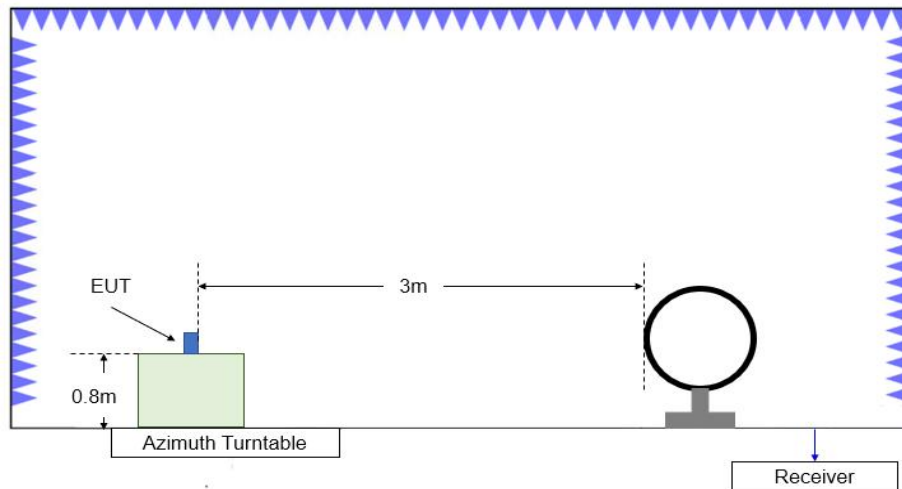


Figure A.5.1. Test Site Diagram (9kHz-30MHz)

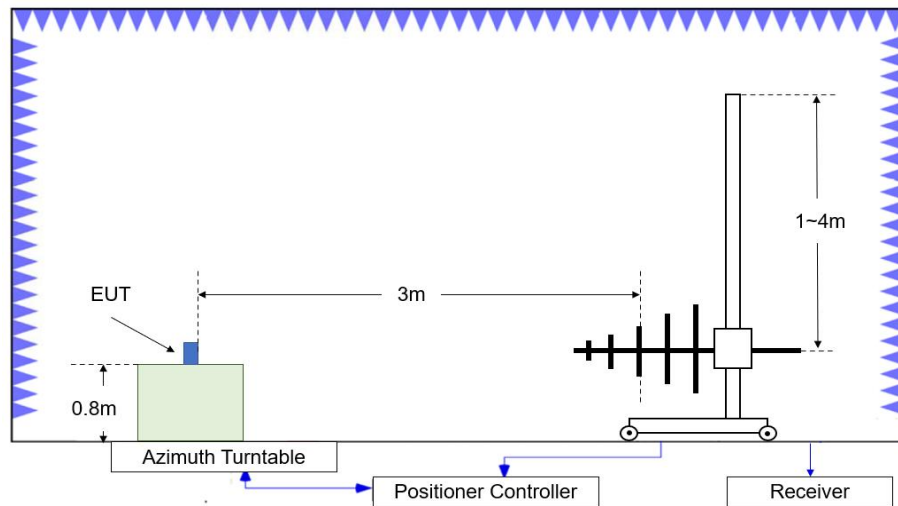


Figure A.5.2. Test Site Diagram (30MHz-1GHz)

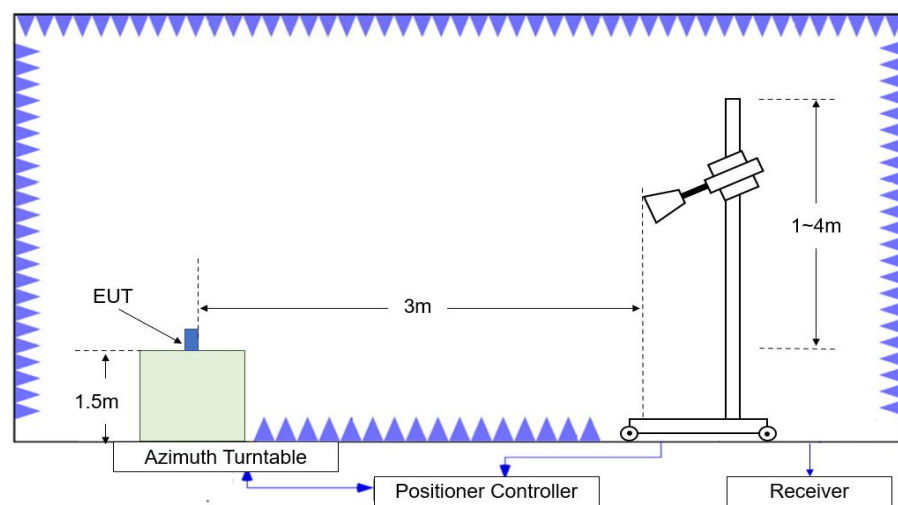


Figure A.5.3. Test Site Diagram (1GHz-40GHz)

A.5.3 Test Procedures

Radiated unwanted emissions from the EUT were measured according to ANSI C63.10 and KDB 789033 D02 v02r01.

Test setting

Frequency of emission (MHz)	RBW/VBW
30-1000	100kHz/300kHz
1000-4000	1MHz/3MHz
4000-18000	1MHz/3MHz
18000-26500	1MHz/3MHz
26500-40000	1MHz/3MHz

A.5.4 Calculation

1. The measurement results reported below is calculated by:

Measurement Results (dB μ V/m) = $P_{\text{measurement}}$ (dB μ V) + Cable Loss (dB) + Antenna Factor (dB/m)

Where: $P_{\text{measurement}}$ is the field strength recorded from the instrument

2. Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:

$$E = \text{EIRP} - 20 \log(D) + 104.77$$

Where:

E is the field strength in dB μ V/m

D is the measurement distance in meters

EIRP is the equivalent isotropically radiated power in dBm

Test note

1. The EUT is operating at its maximum duty cycle and its maximum power control level.
2. Investigation has been done on all modes and modulations/data rates. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.
3. Spurious emissions for all channels were investigated and almost the same below 1GHz. According to FCC 47 CFR §15.31, emission levels are not report much lower than the limit by over 20dB
4. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept.
5. EUT in each of three orthogonal axis emissions had been tested out only the worst case (axis data) recorded in the report.
6. Measurement frequencies were performed from 9 kHz to the 10th harmonic of highest fundamental frequency or 40GHz, whichever is lower.
7. No spurious emissions were detected within 20dB of the limit below 30MHz. OFS and semi-chamber comparison testing had been performed and the result came out very similar. (KDB 414788)

Measurement Results:
Average Results:
802.11a
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)
17919.15	45.11	-25.55	42.3	28.36	54	8.89	H
17945.55	45.07	-25.55	42.3	28.32	54	8.93	V
14476.15	39.06	-28.78	40	27.84	54	14.94	H
13274.95	38.96	-29.75	40.3	28.41	54	15.04	V
5149.28	47.05	-27.27	32.7	41.62	54	6.95	H
5148.8	46.85	-27.27	32.7	41.42	54	7.15	H

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)
17941.7	45.29	-25.55	42.3	28.54	54	8.71	H
17912	45.26	-25.55	42.3	28.51	54	8.74	V
14495.95	39.51	-28.78	40	28.29	54	14.49	H
13266.7	39.22	-29.75	40.2	28.77	54	14.78	V
5350.192	49.96	-27.08	33.5	43.54	54	4.04	H
5350.288	49.56	-27.08	33.5	43.14	54	4.44	H

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)
17929.6	45.49	-25.55	42.3	28.74	54	8.51	H
17907.6	45.48	-25.55	42.3	28.73	54	8.52	H
14477.25	39.39	-28.78	40	28.17	54	14.61	V
14473.95	38.94	-28.78	40	27.72	54	15.06	H
5456.38	41.67	-27.06	33.7	35.03	54	12.33	H
5453.185	41.31	-27.06	33.7	34.67	54	12.69	H

802.11n-HT20

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)
17911.45	45.27	-25.55	42.3	28.52	54	8.73	H
17935.1	45.14	-25.55	42.3	28.39	54	8.86	H
13283.75	38.83	-29.75	40.3	28.28	54	15.17	V
14492.1	38.82	-28.78	40	27.6	54	15.18	H
5149.86	48.87	-27.27	32.7	43.44	54	5.13	H
5148.98	48.49	-27.27	32.7	43.06	54	5.51	H

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)
17925.2	45.24	-25.55	42.3	28.49	54	8.76	V
17921.35	45.02	-25.55	42.3	28.27	54	8.98	H
14498.7	39.04	-28.78	40	27.82	54	14.96	V
14477.8	39.02	-28.78	40	27.8	54	14.98	V
5350.304	49.38	-27.08	33.5	42.96	54	4.62	H
5351.712	49.15	-27.08	33.5	42.73	54	4.85	H

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)
17924.65	45.2	-25.55	42.3	28.45	54	8.8	V
17912	45.04	-25.55	42.3	28.29	54	8.96	H
14488.8	38.95	-28.78	40	27.73	54	15.05	H
14499.8	38.95	-28.78	40	27.73	54	15.05	V
5456.395	41.45	-27.06	33.7	34.81	54	12.55	H
5456.71	41.42	-27.06	33.7	34.78	54	12.58	H

802.11n-HT40
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)
17902.1	45.08	-25.55	42.3	28.33	54	8.92	H
17929.05	45.06	-25.55	42.3	28.31	54	8.94	H
14478.9	39.08	-28.78	40	27.86	54	14.92	H
14494.3	39.05	-28.78	40	27.83	54	14.95	V
5148.78	43.16	-27.27	32.7	37.73	54	10.84	H
5149.16	42.97	-27.27	32.7	37.54	54	11.03	H

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)
17924.1	45.31	-25.55	42.3	28.56	54	8.69	V
17909.25	45.27	-25.55	42.3	28.52	54	8.73	V
14495.95	39.18	-28.78	40	27.96	54	14.82	H
13279.9	38.93	-29.75	40.3	28.38	54	15.07	H
5353.744	41.91	-27.08	33.5	35.49	54	12.09	H
5353.552	41.78	-27.08	33.5	35.36	54	12.22	H

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)
17930.15	45.07	-25.55	42.3	28.32	54	8.93	H
17916.4	45.03	-25.55	42.3	28.28	54	8.97	V
14492.65	39.56	-28.78	40	28.34	54	14.44	H
14471.75	39.08	-28.78	40	27.86	54	14.92	V
5449.45	41.8	-27.06	33.7	35.16	54	12.2	H
5458.465	41.77	-27.06	33.7	35.13	54	12.23	H

802.11ac-HT20

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)
17924.65	45.05	-25.55	42.3	28.3	54	8.95	H
17927.95	44.96	-25.55	42.3	28.21	54	9.04	V
13260.65	39.04	-29.75	40.2	28.59	54	14.96	V
13280.45	38.93	-29.75	40.3	28.38	54	15.07	V
5148.1	41.18	-27.34	32.7	35.82	54	12.82	H
5149.8	41.13	-27.27	32.7	35.7	54	12.87	H

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)
17925.75	45.45	-25.55	42.3	28.7	54	8.55	H
17932.35	45.16	-25.55	42.3	28.41	54	8.84	H
14484.4	39.09	-28.78	40	27.87	54	14.91	H
14496.5	38.98	-28.78	40	27.76	54	15.02	H
5404.16	41.31	-27.18	33.6	34.89	54	12.69	H
5361.52	41.07	-27.08	33.5	34.65	54	12.93	H

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)
17919.7	45.15	-25.55	42.3	28.4	54	8.85	H
17921.35	45.1	-25.55	42.3	28.35	54	8.9	V
13280.45	39.11	-29.75	40.3	28.56	54	14.89	H
14493.2	38.95	-28.78	40	27.73	54	15.05	H
5458.855	41.52	-27.06	33.7	34.88	54	12.48	H
5458.57	41.34	-27.06	33.7	34.7	54	12.66	H

802.11ac-HT40

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)
17914.2	45.24	-25.55	42.3	28.49	54	8.76	V
17913.65	45.05	-25.55	42.3	28.3	54	8.95	H
14498.7	38.95	-28.78	40	27.73	54	15.05	V
13325	38.88	-30.08	40.3	28.66	54	15.12	H
5147.84	41.95	-27.34	32.7	36.59	54	12.05	H
5149.78	41.77	-27.27	32.7	36.34	54	12.23	H

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)
17942.8	45.07	-25.55	42.3	28.32	54	8.93	V
17925.2	45.01	-25.55	42.3	28.26	54	8.99	H
14486.6	38.95	-28.78	40	27.73	54	15.05	V
14498.15	38.9	-28.78	40	27.68	54	15.1	V
5352.816	41.92	-27.08	33.5	35.5	54	12.08	H
5353.024	41.63	-27.08	33.5	35.21	54	12.37	H

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)
17943.9	45.11	-25.55	42.3	28.36	54	8.89	H
17923.55	45.06	-25.55	42.3	28.31	54	8.94	V
14475.6	39	-28.78	40	27.78	54	15	H
14494.3	38.88	-28.78	40	27.66	54	15.12	H
5459.335	42.56	-27.06	33.7	35.92	54	11.44	H
5458.27	42.07	-27.06	33.7	35.43	54	11.93	H

802.11ac-HT80

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)
17915.3	44.94	-25.55	42.3	28.19	54	9.06	H
17911.45	44.89	-25.55	42.3	28.14	54	9.11	H
14485.5	38.89	-28.78	40	27.67	54	15.11	H
13272.75	38.78	-29.75	40.3	28.23	54	15.22	V
5149.68	41.22	-27.27	32.7	35.79	54	12.78	H
5149.58	41.17	-27.27	32.7	35.74	54	12.83	H

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)
17907.6	45.34	-25.55	42.3	28.59	54	8.66	H
17916.95	45.15	-25.55	42.3	28.4	54	8.85	V
14498.15	39.32	-28.78	40	28.1	54	14.68	H
14478.9	39.04	-28.78	40	27.82	54	14.96	H
5350.24	42.15	-27.08	33.5	35.73	54	11.85	H
5350.528	42.06	-27.08	33.5	35.64	54	11.94	V

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)
17908.15	45.35	-25.55	42.3	28.6	54	8.65	H
17908.7	45.19	-25.55	42.3	28.44	54	8.81	V
14483.3	39	-28.78	40	27.78	54	15	V
14491.55	38.83	-28.78	40	27.61	54	15.17	H
5458.225	42.81	-27.06	33.7	36.17	54	11.19	H
5456.995	42.67	-27.06	33.7	36.03	54	11.33	H

PEAK Results:
802.11a
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)
17939.5	56.4	-25.55	42.3	39.65	74	17.6	H
17914.75	56.27	-25.55	42.3	39.52	74	17.73	V
14173.65	51.89	-28.86	40.4	40.35	68.2	16.31	H
13706.15	51.77	-29.88	40.7	40.95	68.2	16.43	V
5147.5	65.09	-27.34	32.7	59.73	74	8.91	H
5149.72	64.74	-27.27	32.7	59.31	74	9.26	H

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)
17923	56.14	-25.55	42.3	39.39	74	17.86	H
17932.9	55.81	-25.55	42.3	39.06	74	18.19	H
13711.1	52.11	-29.88	40.7	41.29	68.2	16.09	V
13562.05	52.06	-29.95	40.5	41.51	68.2	16.14	H
5354.56	68.57	-27.08	33.5	62.15	74	5.43	H
5355.184	67.28	-27.08	33.5	60.86	74	6.72	H

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)
17935.1	55.95	-25.55	42.3	39.2	74	18.05	H
17931.25	55.77	-25.55	42.3	39.02	74	18.23	V
13706.7	51.97	-29.88	40.7	41.15	68.2	16.23	H
14110.4	51.96	-28.86	40.5	40.32	68.2	16.24	V
5448.4	52.71	-27.06	33.7	46.07	74	21.29	H
5467.735	54.38	-27.06	33.7	47.74	68.2	13.82	H

802.11n-HT20

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)
17882.85	56.48	-25.55	42.3	39.73	74	17.52	H
17927.4	56.11	-25.55	42.3	39.36	74	17.89	H
13710	52.15	-29.88	40.7	41.33	68.2	16.05	H
14216	52	-28.86	40.4	40.46	68.2	16.2	V
5149.3	67.38	-27.27	32.7	61.95	74	6.62	H
5149.82	67.12	-27.27	32.7	61.69	74	6.88	H

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)
17920.25	56.39	-25.55	42.3	39.64	74	17.61	V
17923	56.15	-25.55	42.3	39.4	74	17.85	H
14057.6	51.79	-28.98	40.7	40.07	68.2	16.41	H
14075.2	51.74	-28.98	40.5	40.22	68.2	16.46	V
5350.528	67.48	-27.08	33.5	61.06	74	6.52	H
5351.216	67.33	-27.08	33.5	60.91	74	6.67	H

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)
17919.15	57	-25.55	42.3	40.25	74	17	V
17910.9	55.96	-25.55	42.3	39.21	74	18.04	V
13683.05	51.86	-29.88	40.7	41.04	68.2	16.34	H
14088.95	51.84	-28.98	40.5	40.32	68.2	16.36	H
5457.925	53.25	-27.06	33.7	46.61	74	20.75	H
5469.16	61.29	-27.06	33.7	54.65	68.2	6.91	H

802.11n-HT40

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)
17920.8	55.99	-25.55	42.3	39.24	74	18.01	V
17916.4	55.87	-25.55	42.3	39.12	74	18.13	V
14137.9	52.23	-28.86	40.5	40.59	68.2	15.97	H
13725.95	51.67	-29.41	40.7	40.38	68.2	16.53	V
5149.88	64.95	-27.27	32.7	59.52	74	9.05	H
5149.86	64.68	-27.27	32.7	59.25	74	9.32	H

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)
17896.05	56.29	-25.55	42.3	39.54	74	17.71	H
17942.25	56.05	-25.55	42.3	39.3	74	17.95	H
14031.2	51.94	-28.98	40.7	40.22	68.2	16.26	V
14151.1	51.68	-28.86	40.5	40.04	68.2	16.52	H
5351.648	56.23	-27.08	33.5	49.81	74	17.77	H
5353.408	56.21	-27.08	33.5	49.79	74	17.79	H

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)
17883.95	56.42	-25.55	42.3	39.67	74	17.58	V
17946.65	56.17	-25.55	42.3	39.42	74	17.83	V
14025.7	51.68	-28.98	40.7	39.96	68.2	16.52	V
14104.35	51.68	-28.98	40.5	40.16	68.2	16.52	H
5457.085	57.76	-27.06	33.7	51.12	74	16.24	H
5469.955	63.3	-27.06	33.7	56.66	68.2	4.9	H

802.11ac-HT20
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)
17934.55	55.66	-25.55	42.3	38.91	74	18.34	H
17893.3	55.53	-25.55	42.3	38.78	74	18.47	H
13750.7	51.63	-29.41	40.7	40.34	68.2	16.57	V
13734.75	51.5	-29.41	40.7	40.21	68.2	16.7	V
5149.24	56.93	-27.27	32.7	51.5	74	17.07	H
5149.12	55.94	-27.27	32.7	50.51	74	18.06	H

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)
17907.6	56.3	-25.55	42.3	39.55	74	17.7	H
17915.3	56.09	-25.55	42.3	39.34	74	17.91	V
13595.05	51.49	-29.88	40.6	40.77	68.2	16.71	V
13729.25	51.37	-29.41	40.7	40.08	68.2	16.83	H
5350.864	55.82	-27.08	33.5	49.4	74	18.18	H
5356.784	54.02	-27.08	33.5	47.6	74	19.98	H

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)
17907.05	56.36	-25.55	42.3	39.61	74	17.64	V
17872.95	55.95	-25.55	42.3	39.2	74	18.05	H
14176.4	51.75	-28.86	40.4	40.21	68.2	16.45	H
13749.05	51.61	-29.41	40.7	40.32	68.2	16.59	H
5454.76	52.55	-27.06	33.7	45.91	74	21.45	H
5469.73	57.18	-27.06	33.7	50.54	68.2	11.02	H

802.11ac-HT40
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)
17903.2	56.52	-25.55	42.3	39.77	74	17.48	V
17941.7	55.79	-25.55	42.3	39.04	74	18.21	V
14139	52.14	-28.86	40.5	40.5	68.2	16.06	V
13631.35	51.16	-29.88	40.6	40.44	68.2	17.04	V
5149.88	60.52	-27.27	32.7	55.09	74	13.48	H
5145.74	60.07	-27.34	32.7	54.71	74	13.93	H

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)
17949.95	55.93	-25.55	42.3	39.18	74	18.07	V
17918.6	55.89	-25.55	42.3	39.14	74	18.11	H
13761.15	51.96	-29.41	40.7	40.67	68.2	16.24	H
14126.9	51.96	-28.86	40.5	40.32	68.2	16.24	V
5350.96	58.76	-27.08	33.5	52.34	74	15.24	V
5350.048	58.71	-27.08	33.5	52.29	74	15.29	H

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)
17910.35	56.49	-25.55	42.3	39.74	74	17.51	V
17810.8	55.99	-25.55	42.3	39.24	74	18.01	V
14100.5	51.39	-28.98	40.5	39.87	68.2	16.81	V
14106.55	51.36	-28.98	40.5	39.84	68.2	16.84	H
5455.675	57.3	-27.06	33.7	50.66	74	16.7	H
5468.305	63.64	-27.06	33.7	57	68.2	4.56	H

802.11ac-HT80
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)
17969.75	56.73	-25.55	42.3	39.98	74	17.27	V
17820.7	56.01	-25.55	42.3	39.26	74	17.99	H
13713.3	51.89	-29.41	40.7	40.6	68.2	16.31	V
13816.7	51.79	-29.41	40.9	40.3	68.2	16.41	H
5149.48	52.42	-27.27	32.7	46.99	74	21.58	H
5149.82	52.04	-27.27	32.7	46.61	74	21.96	H

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)
17914.75	56.34	-25.55	42.3	39.59	74	17.66	H
17908.7	55.99	-25.55	42.3	39.24	74	18.01	H
13699	51.59	-29.88	40.7	40.77	68.2	16.61	H
14081.25	51.49	-28.98	40.5	39.97	68.2	16.71	V
5350.48	53.3	-27.08	33.5	46.88	74	20.7	H
5350.256	52.87	-27.08	33.5	46.45	74	21.13	H

Conclusion: PASS

Band edge compliance

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 HT80	5210MHz	Fig.21	P
	5290MHz	Fig.22	P
	5530MHz	Fig.23	P
	5610MHz	Fig.24	P

Conclusion: PASS

Test graphs as below:

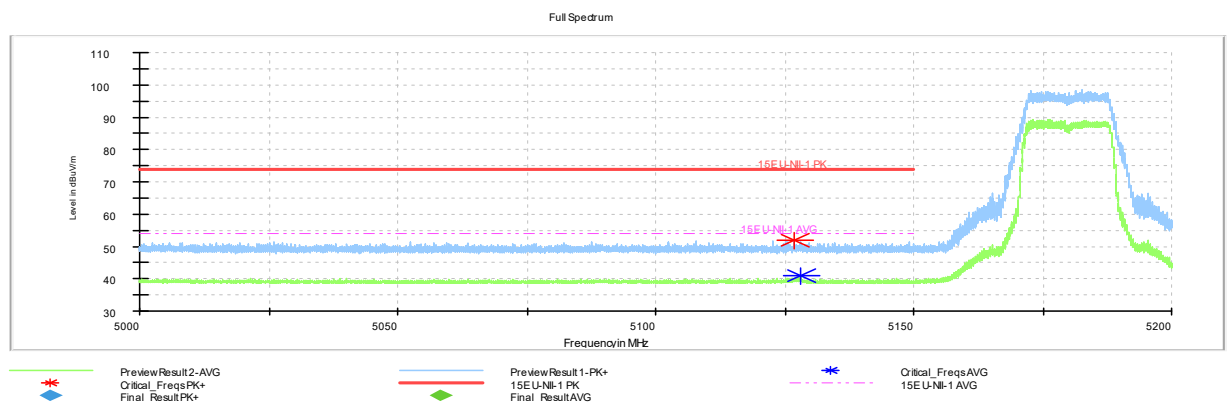


Fig. 1 Band Edges (802.11a Ch36, 5180MHz)

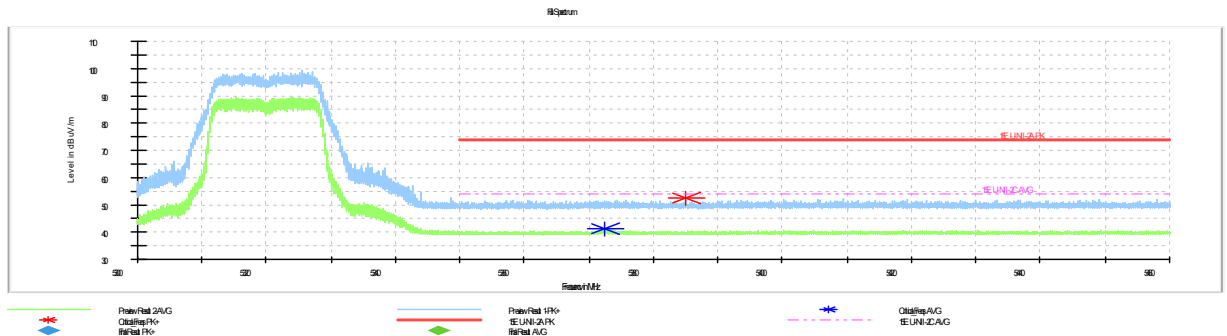


Fig. 2 Band Edges (802.11a Ch64, 5320MHz)

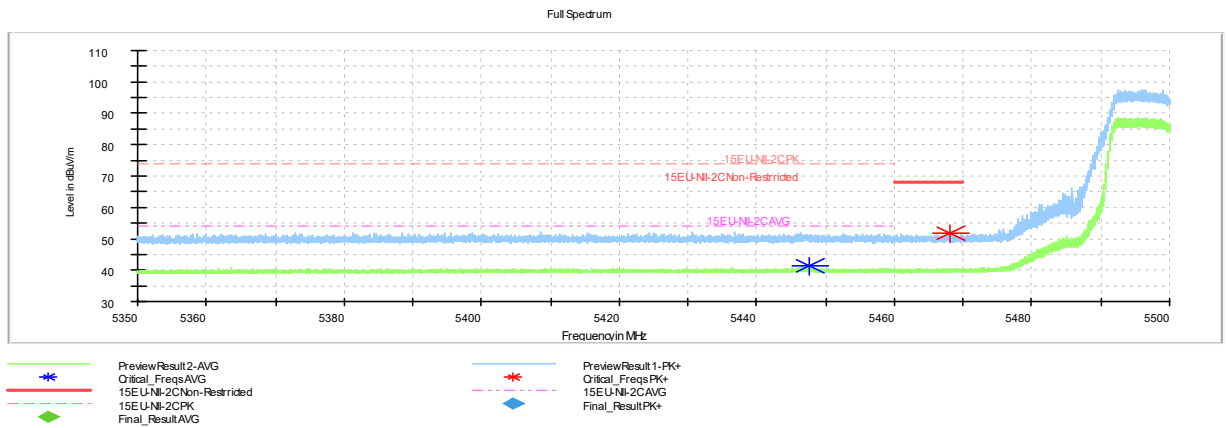


Fig. 3 Band Edges (802.11a Ch100, 5500MHz)

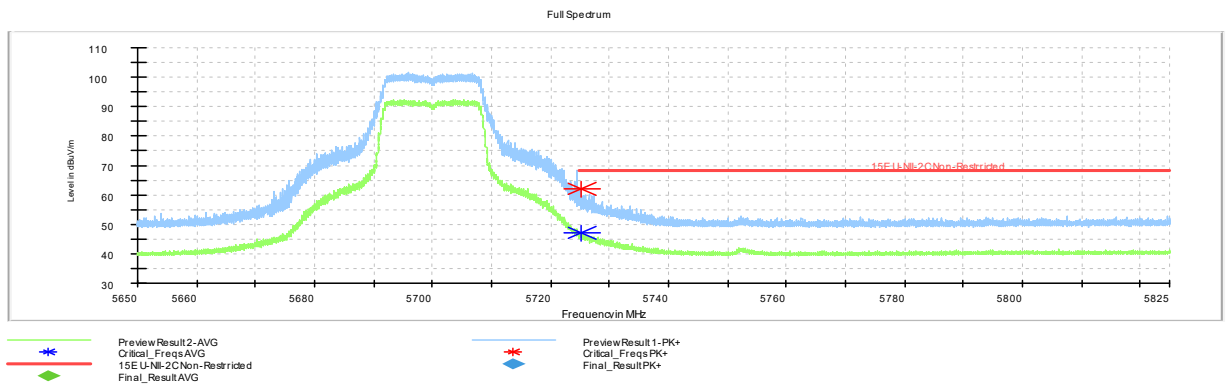


Fig. 4 Band Edges (802.11a Ch140, 5700MHz)

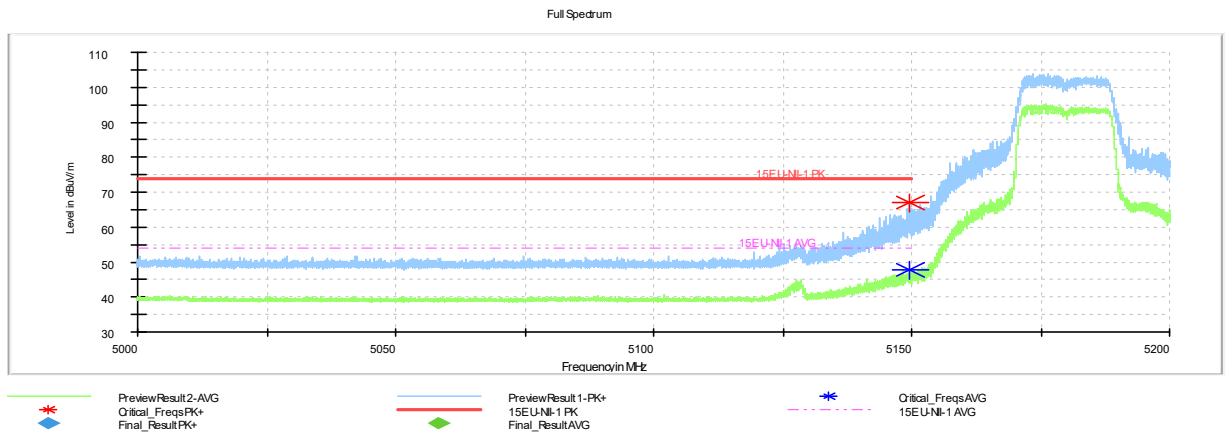


Fig. 5 Band Edges (802.11n-HT20 Ch36, 5180MHz)

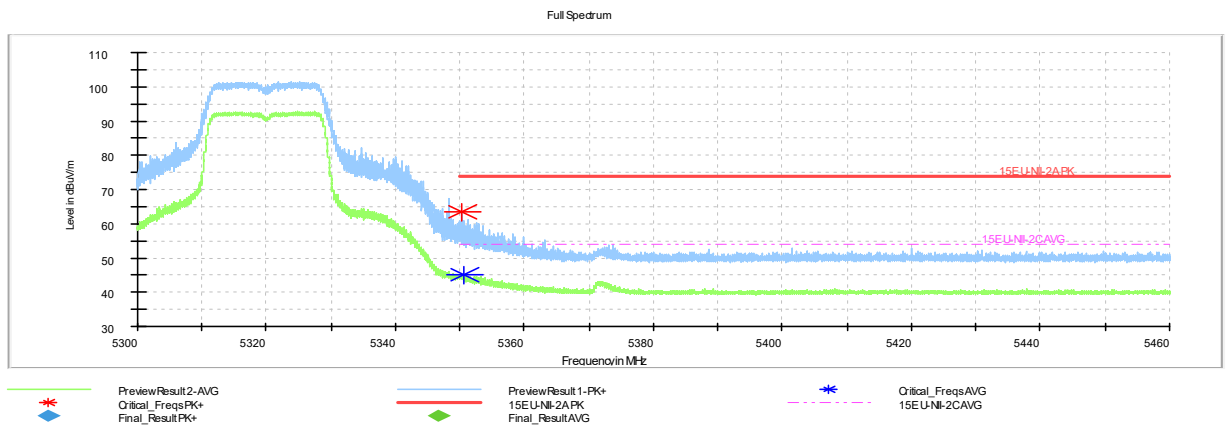


Fig. 6 Band Edges (802.11n-HT20 Ch64, 5320MHz)

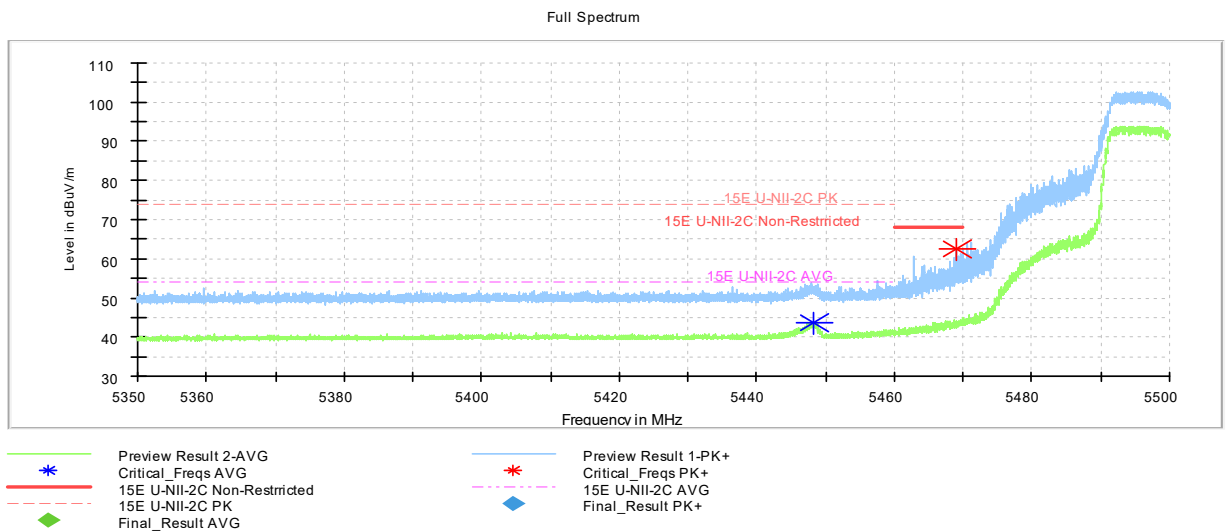


Fig. 7 Band Edges (802.11n-HT20 Ch100, 5500MHz)

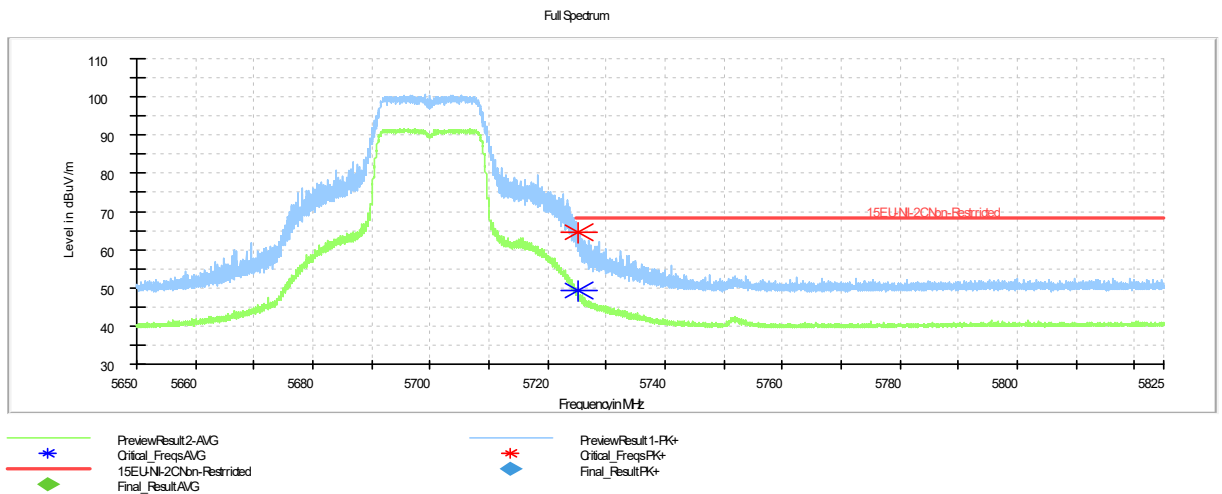


Fig. 8 Band Edges (802.11n-HT20 Ch140, 5700MHz)

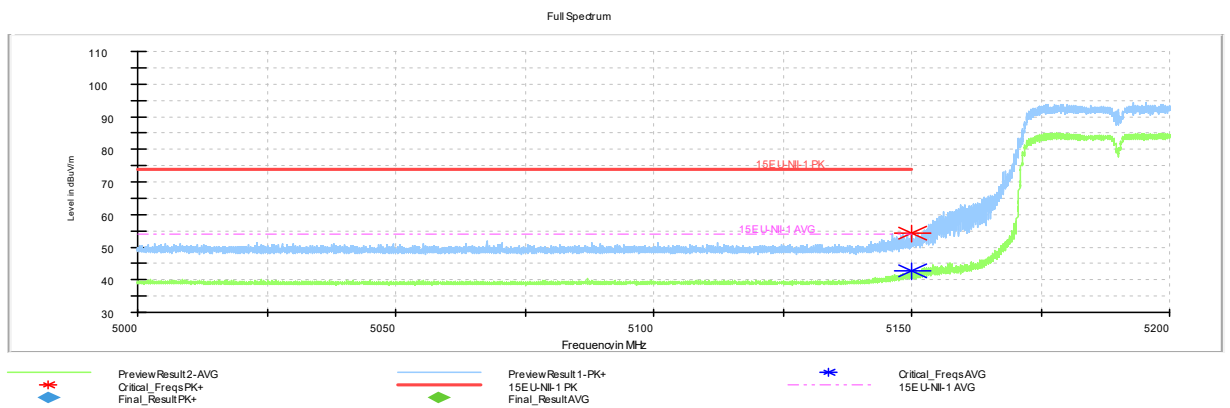


Fig. 9 Band Edges (802.11n-HT40 Ch38, 5190MHz)

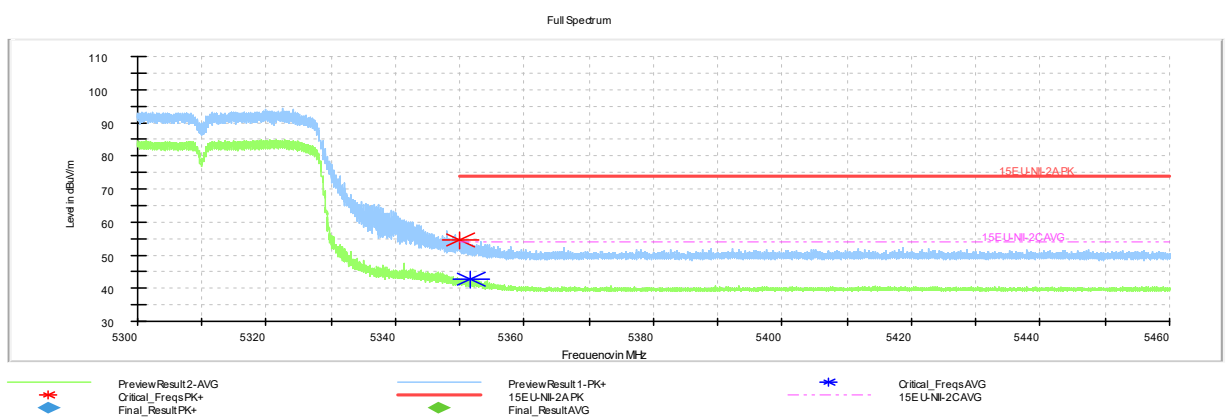


Fig. 10 Band Edges (802.11n-HT40 Ch62, 5310MHz)

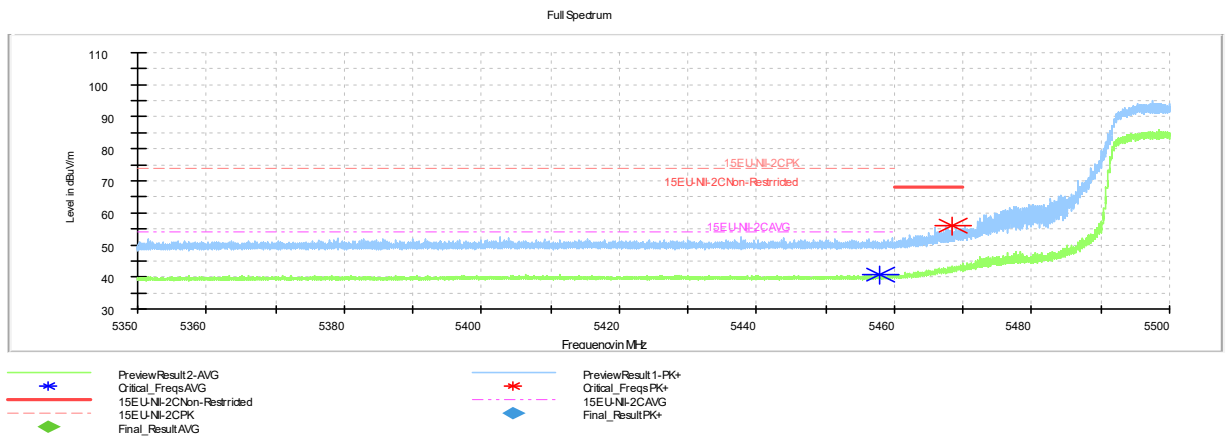


Fig. 11 Band Edges (802.11n-HT40 Ch102, 5510MHz)

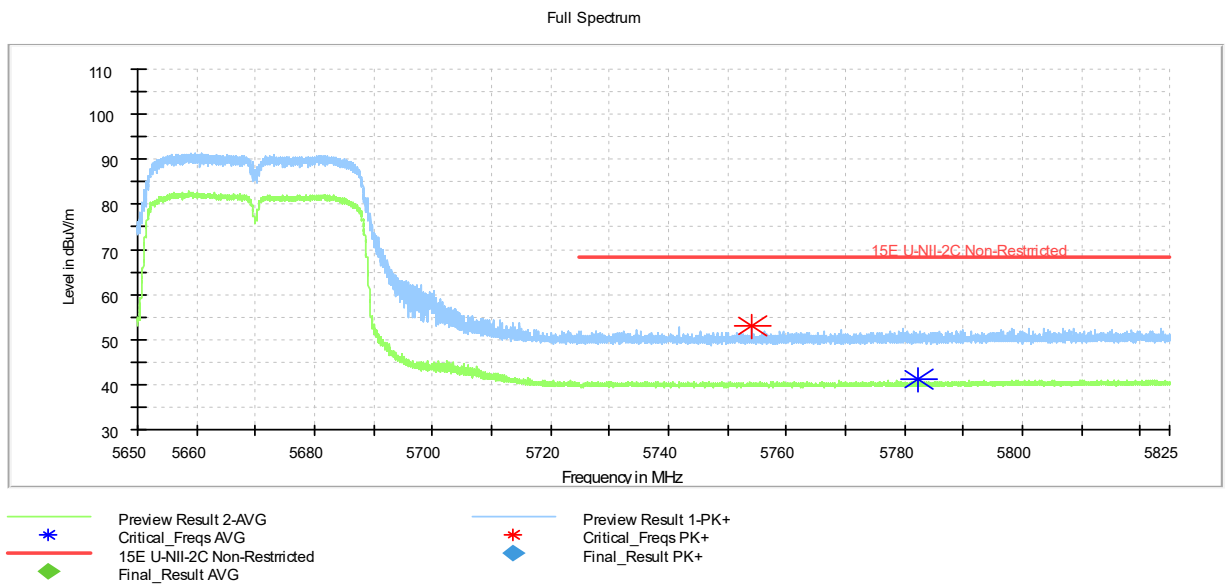


Fig. 12 Band Edges (802.11n-HT40 Ch134, 5670MHz)

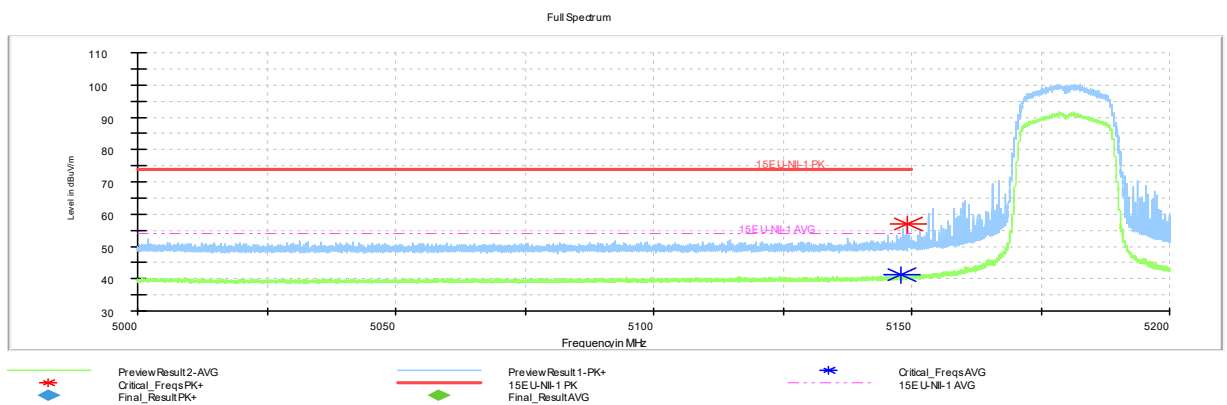


Fig. 13 Band Edges (802.11ac-HT20 Ch36, 5180MHz)

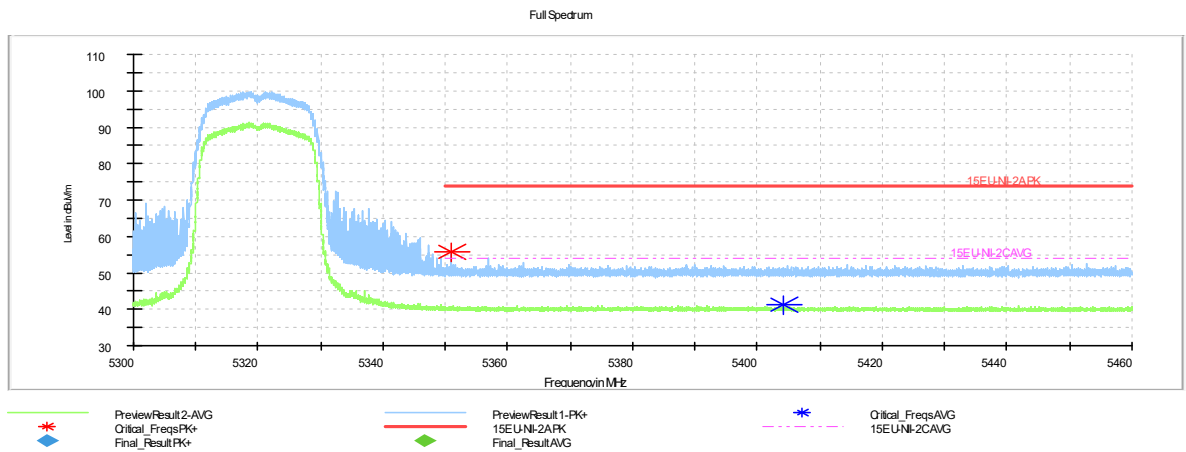


Fig. 14 Band Edges (802.11ac-HT20 Ch64, 5320MHz)

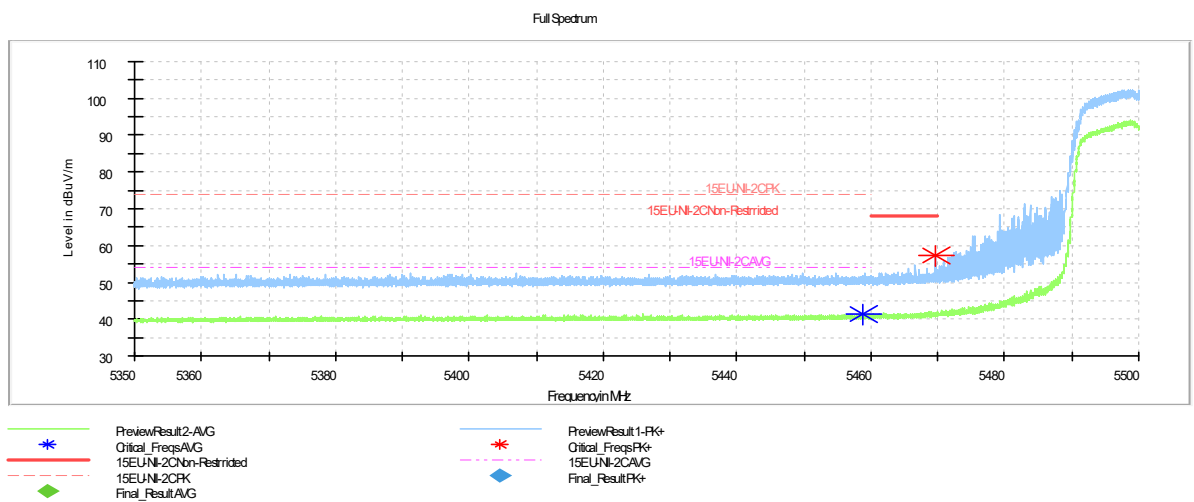


Fig. 15 Band Edges (802.11ac-HT20 Ch100, 5500MHz)

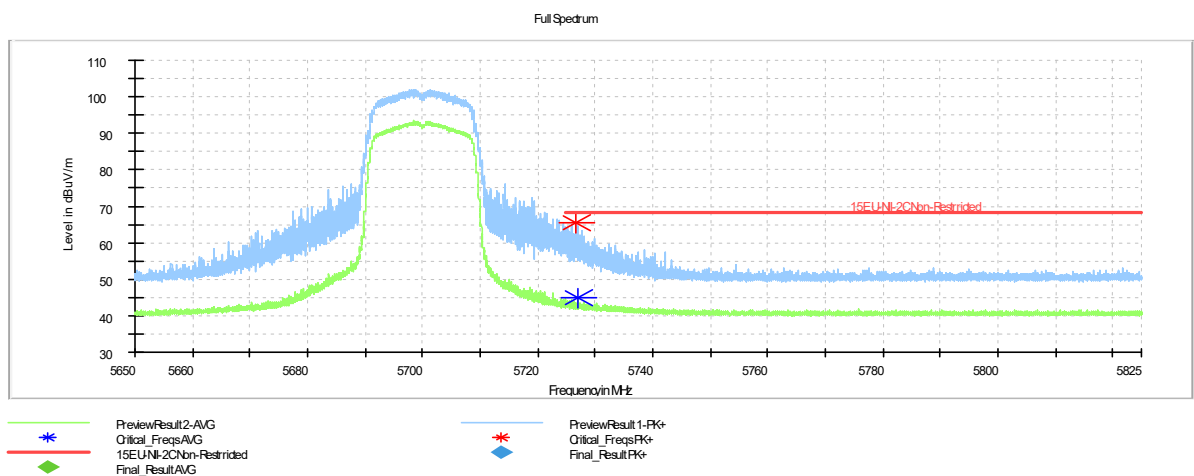


Fig. 16 Band Edges (802.11ac-HT20 Ch140, 5700MHz)