



FCC PART 15 TEST REPORT No.I23Z61433-IOT02

for

TCL Communication Ltd.

Tablet PC

8192A

FCC ID: 2ACCJB205

with

Hardware Version: KY14

Software Version: 35132419

Issued Date: 2023-08-31

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:

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I23Z61433-IOT02	Rev.0	1st edition	2023-08-24
I23Z61433-IOT02	Rev.1	Update A.4 name Occupied 26dB Bandwidth(conducted) to 26dB Emission Bandwidth (conducted),Add the CH144 CH142 CH138 power results.	2023-08-31

CONTENTS

CONTENTS	3
1. TEST LATORATORY	5
1.1. INTRODUCTION & ACCREDITATION	5
1.2. TESTING LOCATION	5
1.3. TESTING ENVIRONMENT.....	5
1.4. PROJECT DATE	5
1.5. SIGNATURE	6
2. CLIENT INFORMATION.....	7
2.1 APPLICANT INFORMATION	7
2.2 MANUFACTURER INFORMATION	7
3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARYEQUIPMENT(AE)	8
3.1. ABOUT EUT	8
3.2. INTERNAL IDENTIFICATION OF EUT USED DURING THE TEST	8
3.3. INTERNAL IDENTIFICATION OF AE USED DURING THE TEST	8
4.1. GENERAL DESCRIPTION.....	9
4.2. INTERPRETATION OF THE TEST ENVIRONMENT.....	9
5. REFERENCE DOCUMENTS	9
5.1. DOCUMENTS SUPPLIED BY APPLICANT	9
5.2. REFERENCE DOCUMENTS FOR TESTING.....	9
6. LABORATORY ENVIRONMENT.....	9
7. SUMMARY OF TEST RESULTS	10
7.1. SUMMARY OF TEST RESULTS.....	10
7.2. STATEMENTS.....	10
7.3. TEST CONDITIONS	10
8. TEST EQUIPMENTS UTILIZED	11
9. MEASUREMENT UNCERTAINTY	12
8.1 TRANSMITTER OUTPUT POWER	12
8.2 PEAK POWER SPECTRAL DENSITY	12
8.3 OCCUPIED CHANNEL BANDWIDTH	12
8.4 BAND EDGES COMPLIANCE	12
8.5 SPURIOUS EMISSIONS	12
8.6 AC POWER-LINE CONDUCTED EMISSION	12
ANNEX A: MEASUREMENT RESULTS.....	13
A.1. MEASUREMENT METHOD	13
A.2. MAXIMUM OUTPUT POWER	14
A.3. PEAK POWER SPECTRAL DENSITY (CONDUCTED).....	17



A.4. OCCUPIED 26DB BANDWIDTH(CONDUCTED)..... 19

A.5. BAND EDGES COMPLIANCE 37

A5.1 BAND EDGES - RADIATED..... 37

A.6. TRANSMITTER SPURIOUS EMISSION 50

A.7. AC POWERLINE CONDUCTED EMISSION (150KHZ- 30MHZ)..... 87

A.8. 99% OCCUPIED BANDWIDTH 90

A.9. POWER CONTROL 96

ANNEX B: EUT PARAMETERS..... 96

ANNEX C: ACCREDITATION CERTIFICATE 97



1. TEST LATORATORY

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 (CN5017), 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(Huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,
P. R. China100191

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

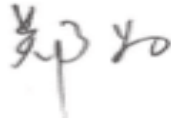
Testing Start Date: 2023-07-25

Testing End Date: 2023-08-31

1.5. Signature

姚兴宇

Yao Xingyu
(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: 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science
Park, Shatin, NT, Hong Kong
City: Hong Kong
Postal Code: /
Country: China
Telephone: +86 755 3661 1621
Fax: /

2.2 Manufacturer Information

Company Name: TCL Communication Ltd.
Address: 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science
Park, Shatin, NT, Hong Kong
City: Hong Kong
Postal Code: /
Country: China
Telephone: +86 755 3661 1621
Fax: /

3. EQUIPMENT UNDER TEST (EUT) AND

ANCILLARY EQUIPMENT(AE)

3.1. About EUT

Description	Tablet PC
Model name	8192A
FCC ID	2ACCJB205
WLAN Frequency Band	ISM Bands: -5150MHz~5250MHz -5250MHz~5350MHz -5470MHz~5725MHz
Type of modulation	OFDM
Antenna	Integral Antenna
Voltage	3.7V

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
UT05a	351324190000496	KY14	35132419
UT12a	351324190000553	KY14	35132419

*EUT ID: is used to identify the test sample in the lab internally.
 UT05a is used for Conduction test, UT12a is used for Radiation test.

3.3. Internal Identification of AE used during the test

4. AE ID*	Description	SN
AE1	Battery	/
AE2	Charger1	/
AE3	Data Cable	
AE1		
Model	2853B7PL - 2P	
Manufacturer	Gaoyuan	
Capacity(mAh)	6000mAh	
AE2		
Model	CG10A0502000UU	
Manufacturer	JUWEI	
Length of cable	/	
AE3		
Model	JWUB1591-J51R	
Manufacturer	JUWEI	
Length of cable	/	

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

4.1. General Description

The Equipment under Test (EUT) is a model of Tablet PC 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.

4.2. 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

5. REFERENCE DOCUMENTS

5.1. Documents supplied by applicant

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

5.2. Reference Documents for testing

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

FCC Part15	Title 47 of the Code of Federal Regulations; Chapter I Part 15 - Radio frequency devices	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 Federal Communications Commission Office of Engineering and Technology Laboratory Division	2013
KDB 558074 D01	GUIDANCE FOR COMPLIANCE MEASUREMENTS ON DIGITAL TRANSMISSION SYSTEM, FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM, AND HYBRID SYSTEM DEVICES OPERATING UNDER SECTION 15.247 OF THE FCC RULES	2019

6. LABORATORY ENVIRONMENT

Conducted RF performance testing is performed in shielding room.

EMC performance testing is performed in Semi-anechoic chamber.

7. SUMMARY OF TEST RESULTS

7.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15E	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)	15.209	/	P
Transmitter spurious emissions (Radiated)	15.407	/	P
AC Powerline Conducted Emission (150kHz- 30MHz)	15.407	/	P
Frequency Stability	15.407	/	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

7.2. Statements

CTTL has evaluated the test cases requested by the client/manufacturer 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 4.1.

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

7.3. 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%

8. TEST EQUIPMENTS 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	2024-07-04
2	LISN	ENV216	101200	Rohde & Schwarz	1 year	2024-07-04
3	Test Receiver	ESCI	100344	Rohde & Schwarz	1 year	2024-02-21
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	103144	R&S	1 year	2023-10-25
2	EMI Antenna	VULB 9163	01222	SCHWARZBECK	1 year	2024-02-28
3	EMI Antenna	3115	6914	ETS-Lindgren	1 year	2024-04-25
4	EMI Antenna	3116	2661	ETS-Lindgren	1 year	2024-01-30

9. 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

Radiated (k=2)

Frequency Range	Uncertainty(dB)
9kHz-30MHz	/
$30\text{MHz} \leq f \leq 1\text{GHz}$	4.72
$1\text{GHz} \leq f \leq 18\text{GHz}$	4.84
$18\text{GHz} \leq f \leq 40\text{GHz}$	5.12

8.6 AC Power-line Conducted Emission

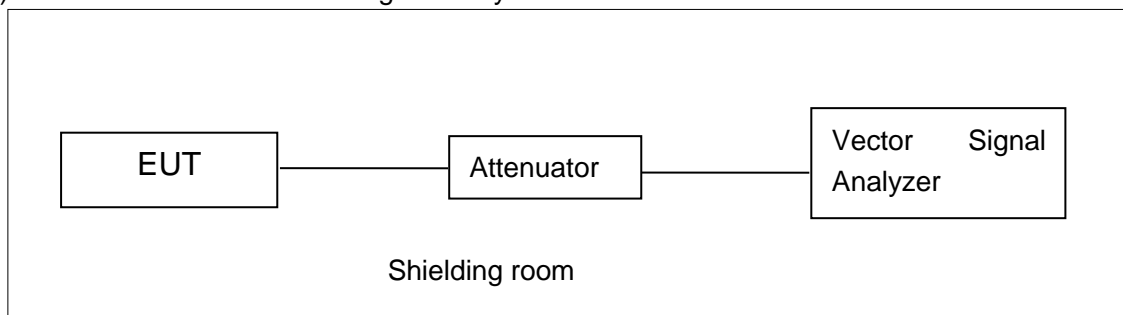
Measurement Uncertainty: 3.08dB, k=2.

ANNEX A: MEASUREMENT 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

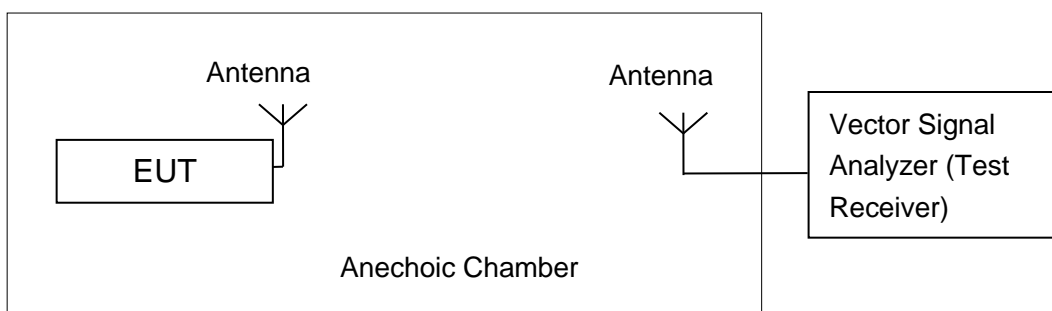


A.1.2. Radiated Emission Measurements

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.

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

Measurement Results:

802.11a mode

Mode	Frequency	Test Result (dBm)							
		Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
802.11a	5180MHz	18.68	/	/	/	/	/	/	/
	5200MHz	18.88	/	/	/	/	/	/	/
	5240MHz	18.81	/	/	/	/	/	/	/
	5260MHz	18.64	/	/	/	/	/	/	/
	5280MHz	18.61	/	/	/	/	/	/	/
	5320MHz	18.24	/	/	/	/	/	/	/
	5500MHz	18.67	/	/	/	/	/	/	/
	5580MHz	18.22	/	/	/	/	/	/	/
	5700MHz	18.84	/	/	/	/	/	/	/
	5720MHz	18.88	/	/	/	/	/	/	/

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	16.27	/	/	/	/	/	/	/
	5200MHz	15.84	/	/	/	/	/	/	/
	5240MHz	15.84	/	/	/	/	/	/	/
	5260MHz	15.98	/	/	/	/	/	/	/
	5280MHz	15.91	/	/	/	/	/	/	/
	5320MHz	15.91	/	/	/	/	/	/	/
	5500MHz	15.87	/	/	/	/	/	/	/
	5580MHz	15.10	/	/	/	/	/	/	/
	5700MHz	15.92	/	/	/	/	/	/	/
	5720MHz	15.91	/	/	/	/	/	/	/

The data rate MSC0 is selected as worst condition, and the following cases are performed with this condition.

802.11ac-HT20 mode

Mode	Frequency	Test Result (dBm)								
		Data Rate								
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
802.11ac (HT20)	5180MHz	14.13	/	/	/	/	/	/	/	/
	5200MHz	13.91	/	/	/	/	/	/	/	/
	5240MHz	13.75	/	/	/	/	/	/	/	/
	5260MHz	13.93	/	/	/	/	/	/	/	/
	5280MHz	13.71	/	/	/	/	/	/	/	/
	5320MHz	13.66	/	/	/	/	/	/	/	/
	5500MHz	13.87	/	/	/	/	/	/	/	/
	5580MHz	13.57	/	/	/	/	/	/	/	/
	5700MHz	13.53	/	/	/	/	/	/	/	/
5720MHz	13.36	/	/	/	/	/	/	/	/	

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	13.99	/	/	/	/	/	/	/
	5230MHz	14.12	/	/	/	/	/	/	/
	5270MHz	14.13	/	/	/	/	/	/	/
	5310MHz	14.24	/	/	/	/	/	/	/
	5510MHz	14.22	/	/	/	/	/	/	/
	5550MHz	13.87	/	/	/	/	/	/	/
	5670MHz	13.65	/	/	/	/	/	/	/
	5710MHz	13.75	/	/	/	/	/	/	/

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

802.11ac-HT40 mode

Mode	Frequency	Test Result (dBm)									
		Data Rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
802.11ac (HT40)	5190MHz	14.13	/	/	/	/	/	/	/	/	/
	5230MHz	14.11	/	/	/	/	/	/	/	/	/
	5270MHz	14.39	/	/	/	/	/	/	/	/	/
	5310MHz	13.89	/	/	/	/	/	/	/	/	/
	5510MHz	13.66	/	/	/	/	/	/	/	/	/
	5550MHz	13.52	/	/	/	/	/	/	/	/	/

	5670MHz	13.30	/	/	/	/	/	/	/	/	/
	5710MHz	13.32	/	/	/	/	/	/	/	/	/

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

802.11ac-HT80 mode

Mode	Frequency	Test Result (dBm)									
		Data Rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
802.11ac (HT80)	5210MHz	13.85	/	/	/	/	/	/	/	/	/
	5290MHz	14.18	/	/	/	/	/	/	/	/	/
	5530MHz	13.69	/	/	/	/	/	/	/	/	/
	5610MHz	14.01	/	/	/	/	/	/	/	/	/
	5690MHz	13.74	/	/	/	/	/	/	/	/	/

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

The duty cycle of all mode are 100%.

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

Measurement Results:

Mode	Frequency	Power Spectral Density (dBm/MHz)	Conclusion
802.11a	5180 MHz	8.08	P
	5200 MHz	8.25	P
	5240 MHz	7.82	P
	5260 MHz	7.85	P
	5280 MHz	7.96	P
	5320 MHz	7.59	P
	5500 MHz	8.09	P
	5580 MHz	8.16	P
	5700 MHz	7.74	P
	5720 MHz	7.69	P
802.11n HT20	5180 MHz	5.63	P
	5200 MHz	5.44	P
	5240 MHz	5.34	P
	5260 MHz	5.55	P
	5280 MHz	5.41	P
	5320 MHz	5.45	P
	5500 MHz	5.40	P
	5580 MHz	5.70	P
	5700 MHz	5.50	P
	5720 MHz	5.54	P
802.11ac VHT40	5190 MHz	0.37	P
	5230 MHz	0.90	P
	5270 MHz	1.08	P
	5310 MHz	0.76	P
	5510 MHz	0.40	P
	5550 MHz	0.24	P
	5670 MHz	0.08	P
	5710 MHz	0.04	P
802.11ac VHT80	5210MHz	-2.67	P
	5290MHz	-2.38	P
	5530MHz	-2.85	P



	5610MHz	-2.36	P
	5690 MHz	-2.69	P

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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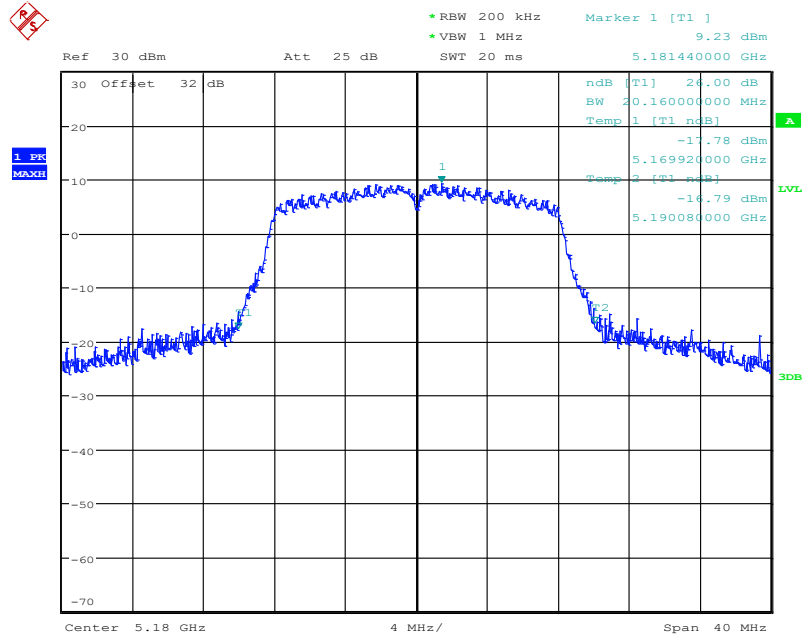
Measurement Result:

Mode	Frequency	Occupied 26dB Bandwidth (MHz)		conclusion
		Fig.	Value	
802.11a	5180 MHz	Fig.1	20.16	P
	5200 MHz	Fig.2	20.64	P
	5240 MHz	Fig.3	20.16	P
	5260 MHz	Fig.4	20.24	P
	5280 MHz	Fig.5	20.20	P
	5320 MHz	Fig.6	20.40	P
	5500 MHz	Fig.7	20.72	P
	5580 MHz	Fig.8	20.48	P
	5700 MHz	Fig.9	20.96	P
	5720 MHz	Fig.10	21.40	P
802.11n HT20	5180 MHz	Fig.11	20.40	P
	5200 MHz	Fig.12	20.36	P
	5240 MHz	Fig.13	20.36	P
	5260 MHz	Fig.14	20.40	P
	5280 MHz	Fig.15	20.28	P
	5320 MHz	Fig.16	20.36	P
	5500 MHz	Fig.17	20.32	P
	5580 MHz	Fig.18	20.48	P
	5700 MHz	Fig.19	20.40	P
	5720 MHz	Fig.20	20.44	P
802.11ac VHT40	5190 MHz	Fig.21	40.96	P
	5230 MHz	Fig.22	41.28	P
	5270 MHz	Fig.23	41.04	P
	5310 MHz	Fig.24	41.04	P
	5510 MHz	Fig.25	41.04	P
	5550 MHz	Fig.26	40.88	P
	5670 MHz	Fig.27	41.12	P
	5710 MHz	Fig.28	41.20	P
802.11ac VHT80	5210MHz	Fig.29	81.92	P
	5290MHz	Fig.30	81.76	P
	5530MHz	Fig.31	81.60	P

	5610MHz	Fig.32	81.60	P
	5690MHz	Fig.33	81.44	P

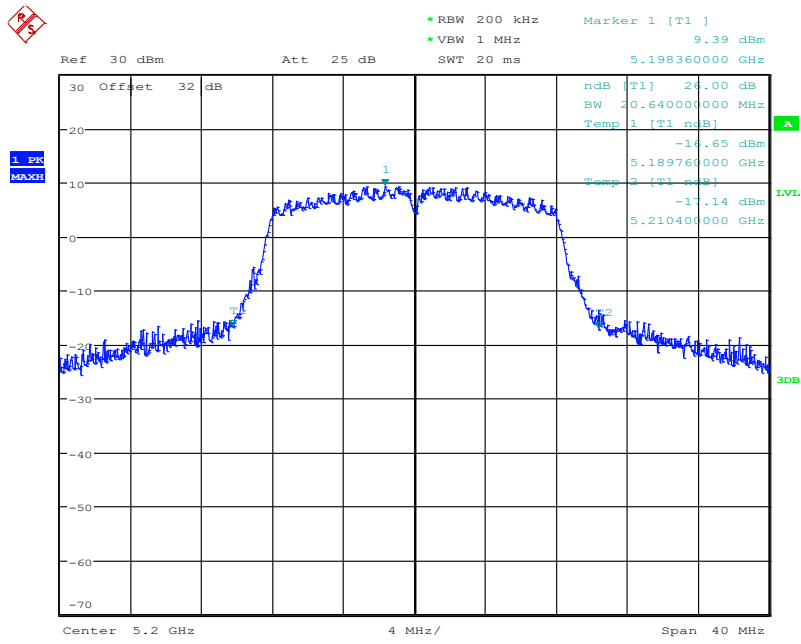
Conclusion: PASS

Test graphs as below:



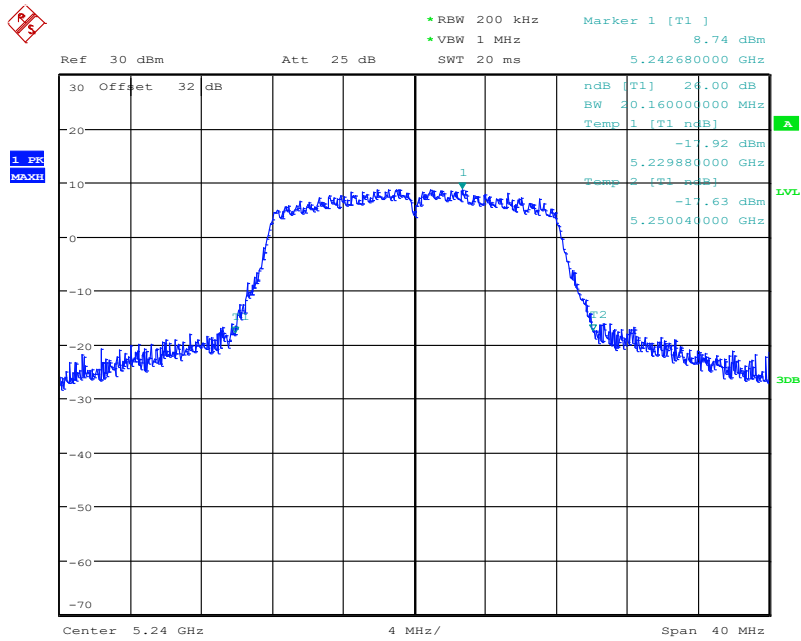
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Fig.1 26dB Emission Bandwidth (802.11a, 5180MHz)



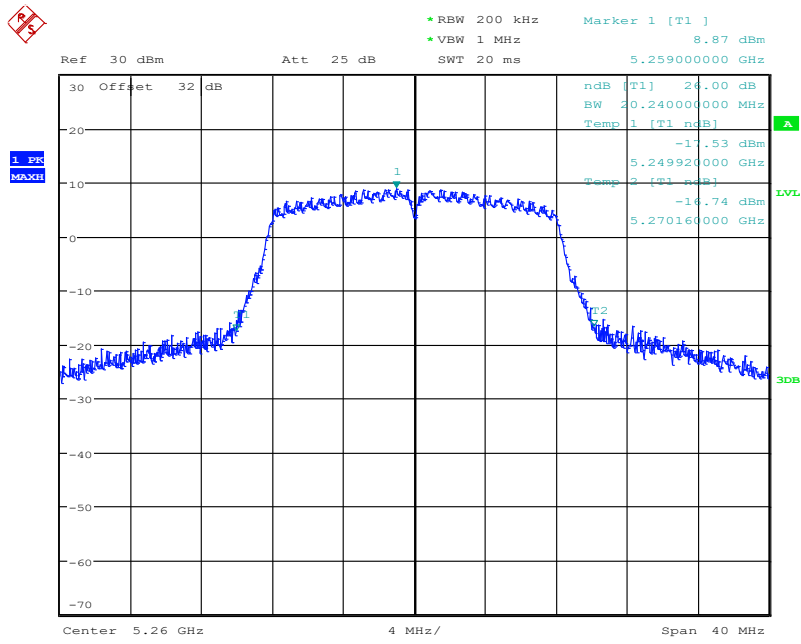
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Fig.2 26dB Emission Bandwidth (802.11a, 5200MHz)



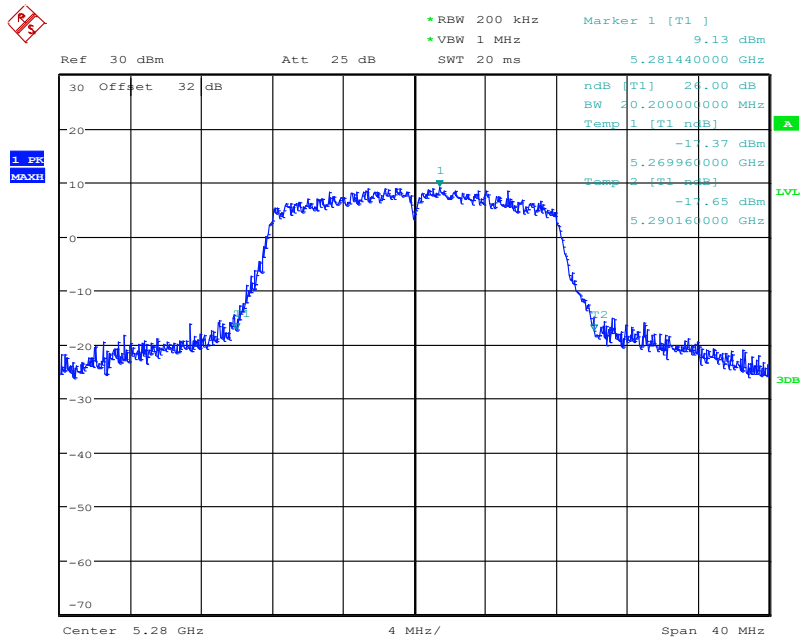
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Fig.3 26dB Emission Bandwidth (802.11a, 5240MHz)



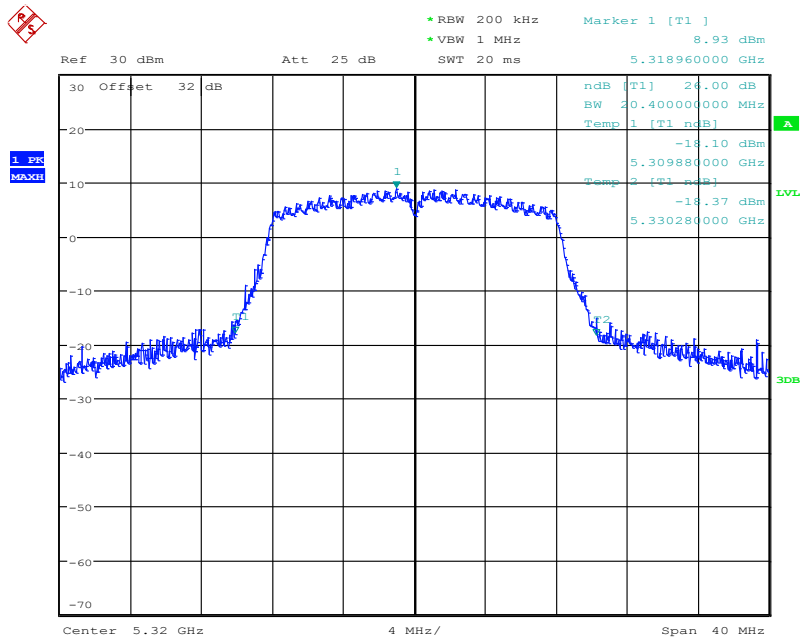
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Fig.4 26dB Emission Bandwidth (802.11a, 5260MHz)



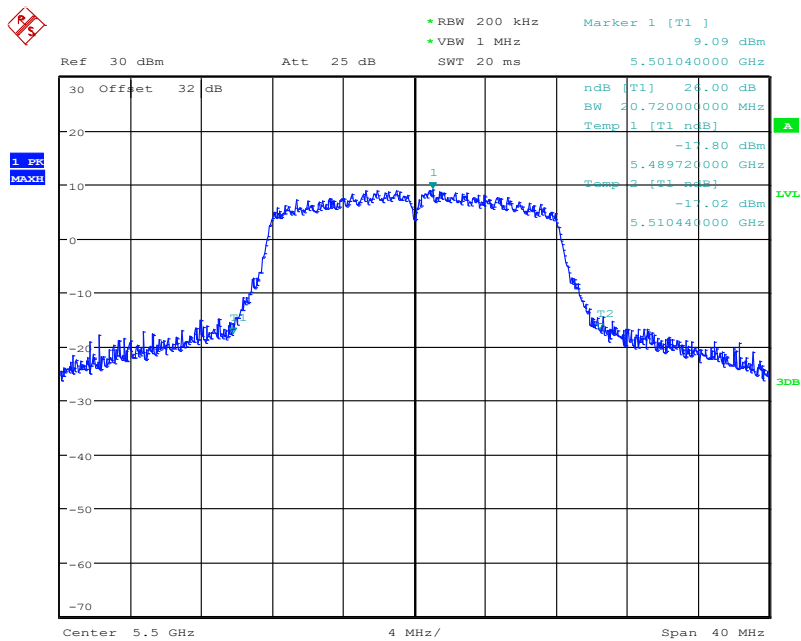
Date: 16.AUG.2023 14:12:42

Fig.5 26dB Emission Bandwidth (802.11a, 5280MHz)



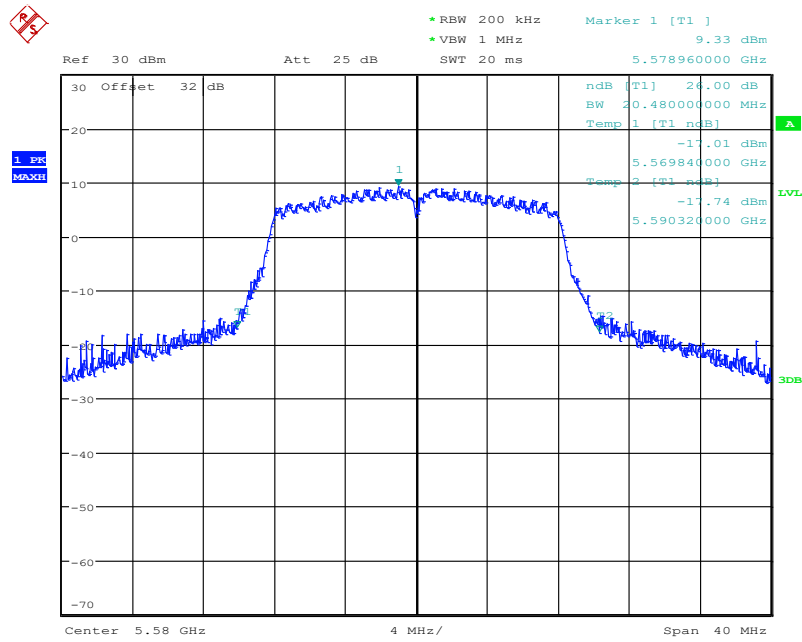
Date: 16.AUG.2023 14:14:38

Fig.6 26dB Emission Bandwidth (802.11a, 5320MHz)



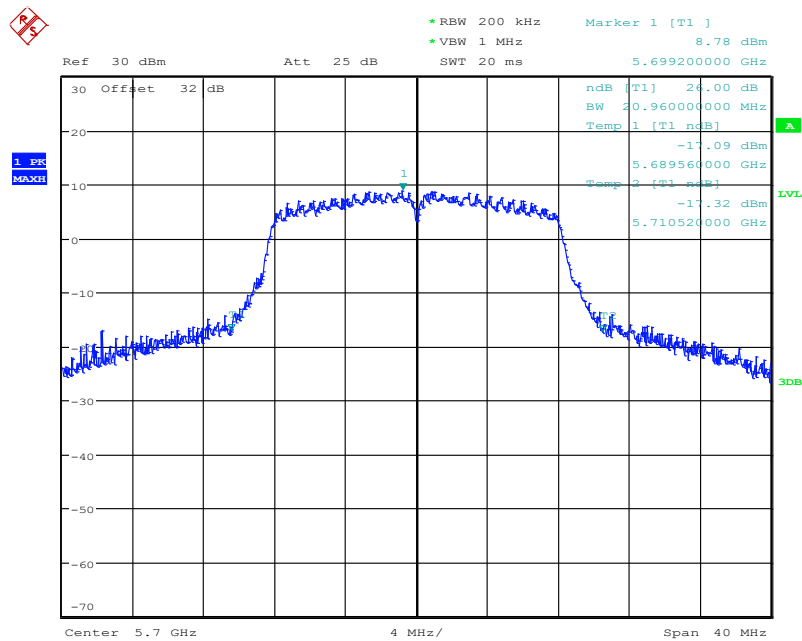
Date: 16.AUG.2023 14:24:00

Fig.7 26dB Emission Bandwidth (802.11a, 5500MHz)



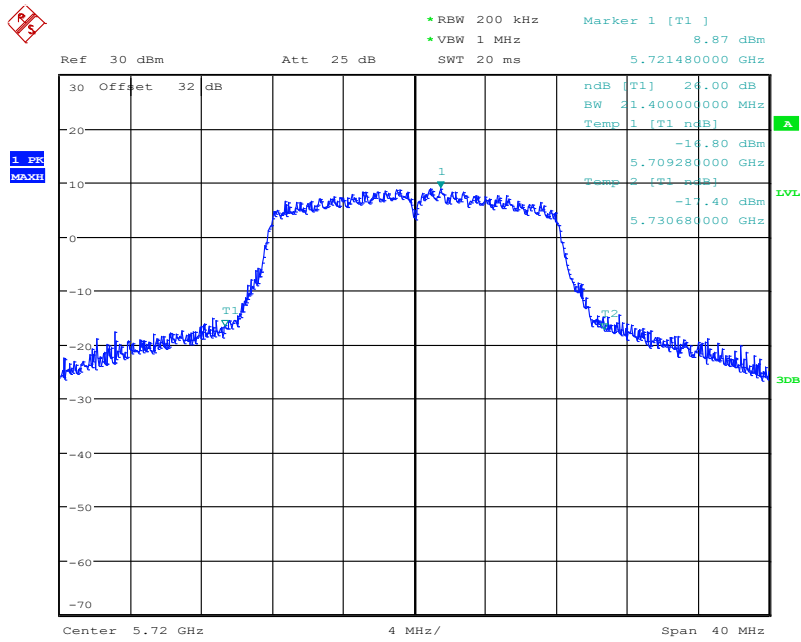
Date: 16.AUG.2023 14:29:25

Fig.8 26dB Emission Bandwidth (802.11a, 5580MHz)



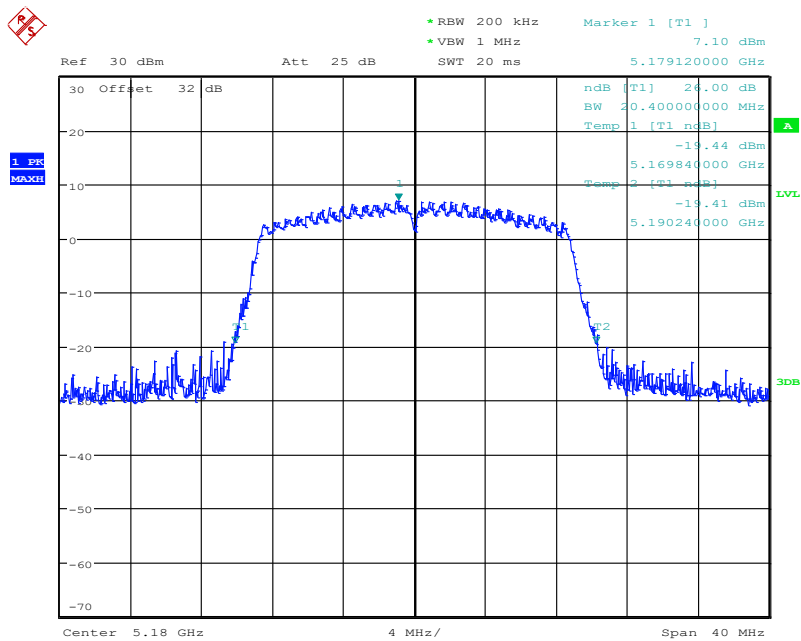
Date: 16.AUG.2023 14:30:31

Fig.9 26dB Emission Bandwidth (802.11a, 5700MHz)



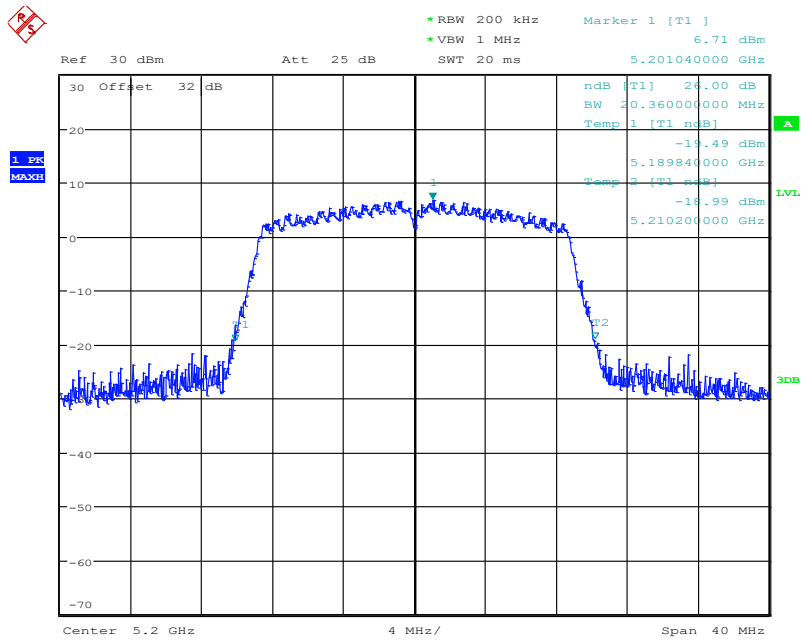
Date: 16.AUG.2023 14:35:35

Fig.10 26dB Emission Bandwidth (802.11a, 5720MHz)



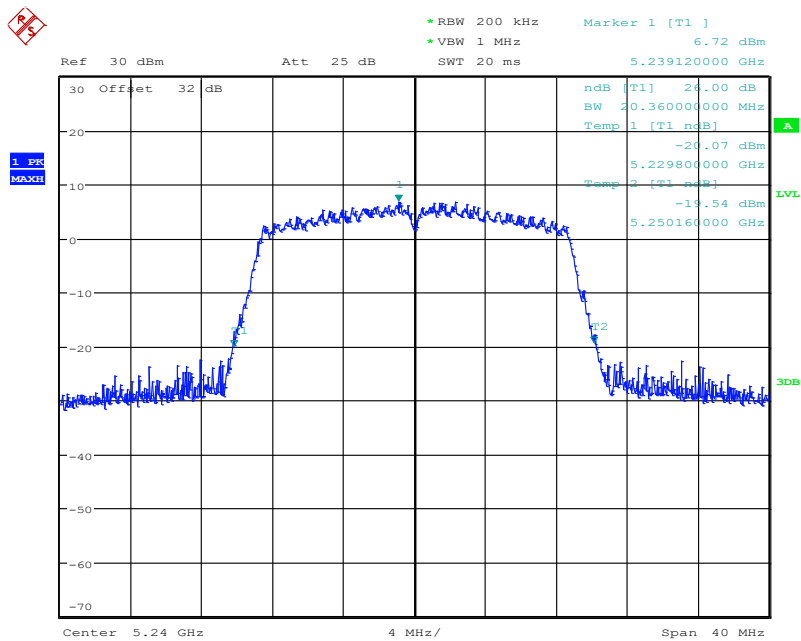
Date: 16.AUG.2023 15:49:46

Fig.11 26dB Emission Bandwidth (802.11n-HT20, 5180MHz)



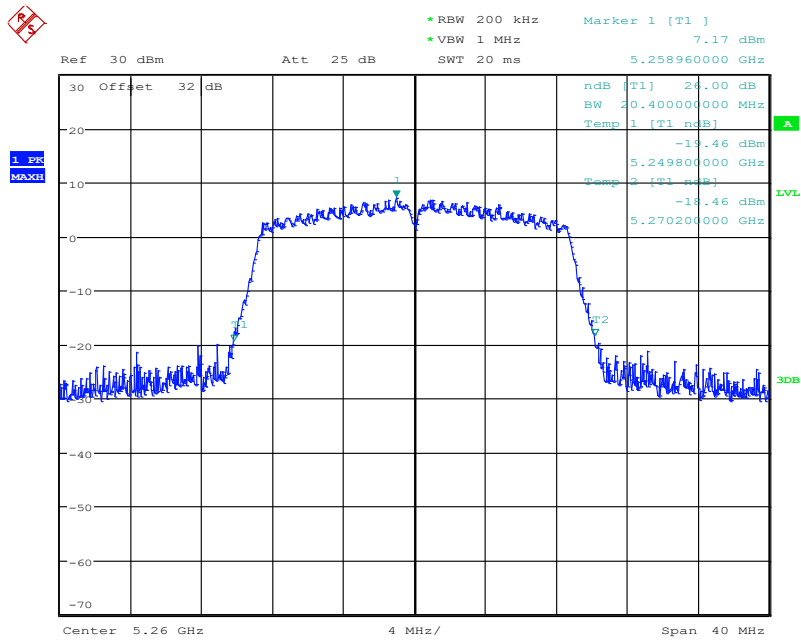
Date: 16.AUG.2023 15:52:36

Fig.12 26dB Emission Bandwidth (802.11n-HT20, 5200MHz)



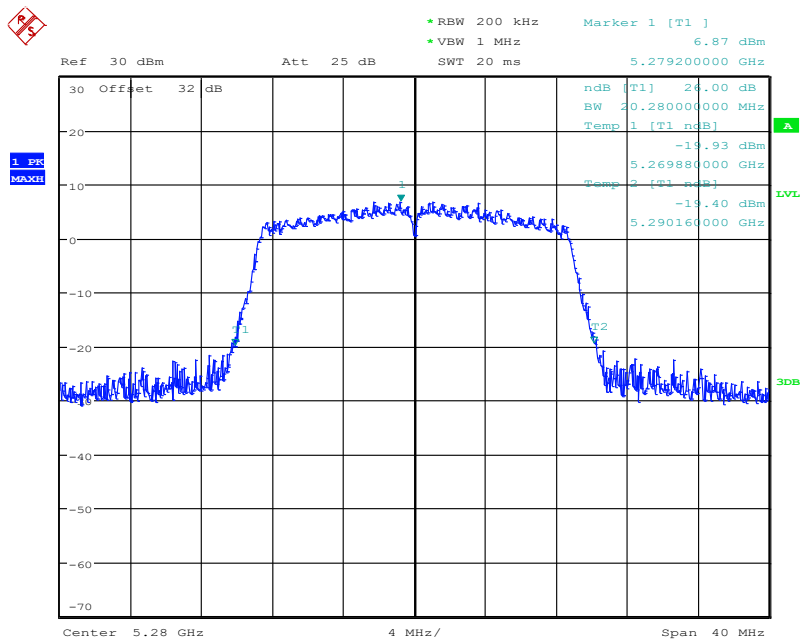
Date: 16.AUG.2023 15:57:43

Fig.13 26dB Emission Bandwidth (802.11n-HT20, 5240MHz)



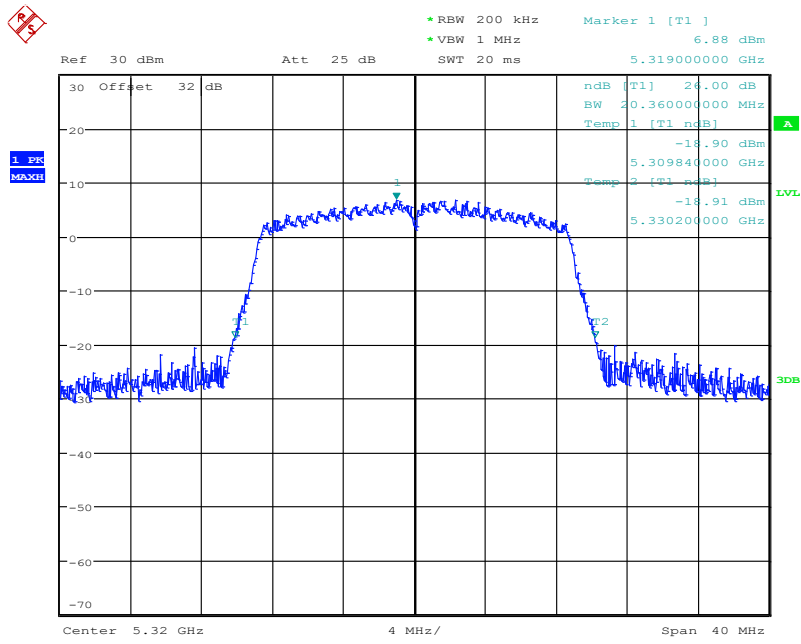
Date: 16.AUG.2023 16:01:19

Fig.14 26dB Emission Bandwidth (802.11n-HT20, 5260MHz)



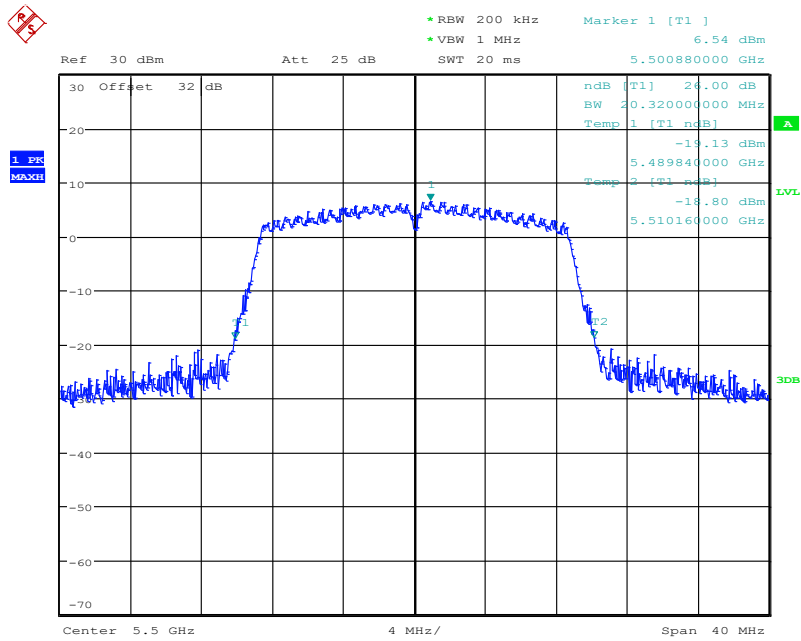
Date: 16.AUG.2023 16:03:17

Fig.15 26dB Emission Bandwidth (802.11n-HT20, 5280MHz)



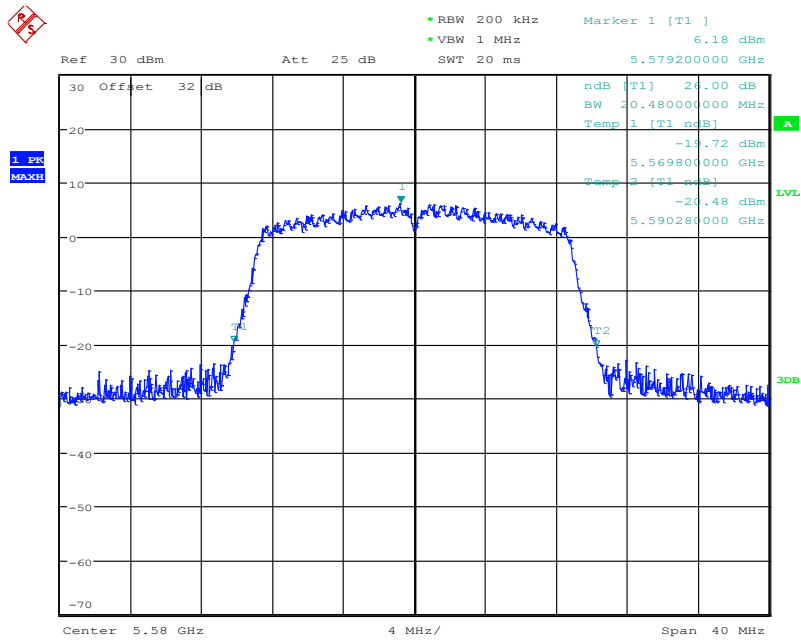
Date: 16.AUG.2023 16:09:00

Fig.16 26dB Emission Bandwidth (802.11n-HT20, 5320MHz)



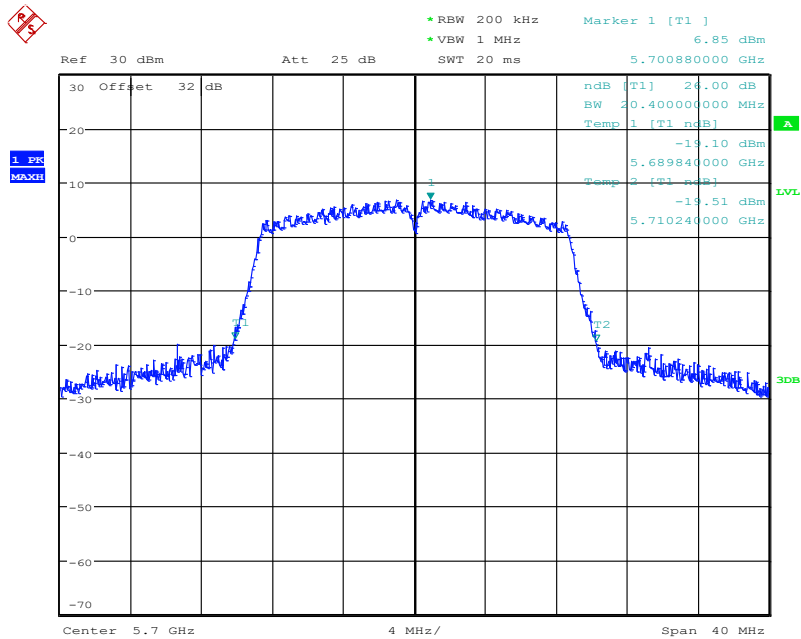
Date: 16.AUG.2023 16:11:07

Fig.17 26dB Emission Bandwidth (802.11n-HT20, 5500MHz)



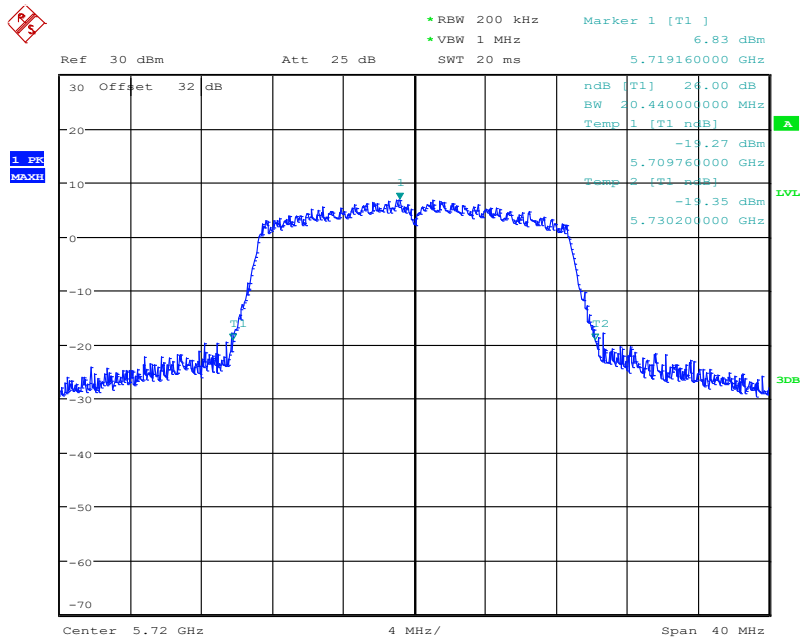
Date: 16.AUG.2023 16:20:14

Fig.18 26dB Emission Bandwidth (802. 11n-HT20, 5580MHz)



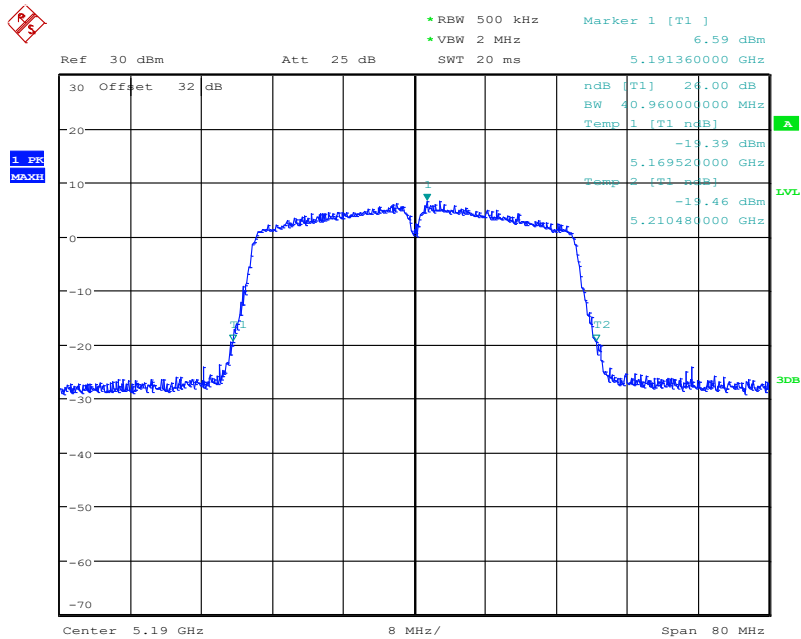
Date: 16.AUG.2023 16:23:44

Fig.19 26dB Emission Bandwidth (802. 11n-HT20, 5700MHz)



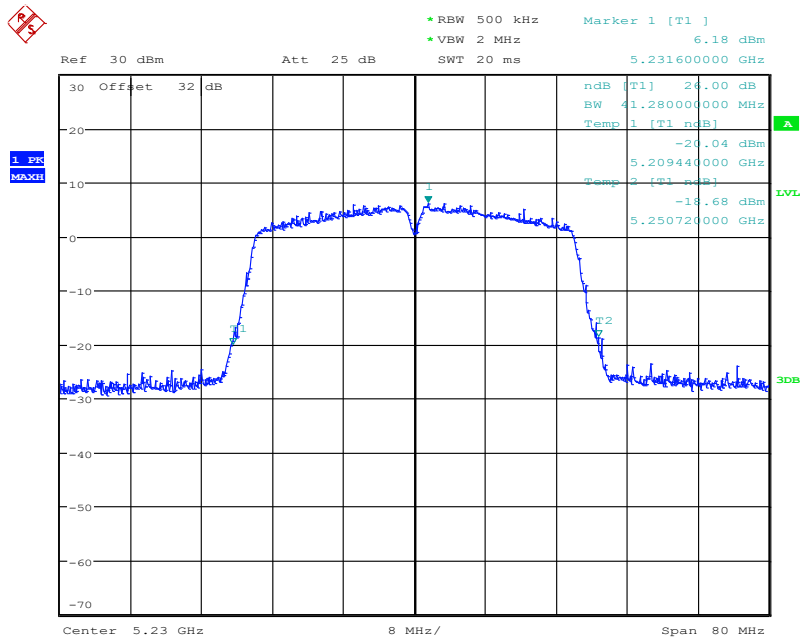
Date: 16.AUG.2023 16:27:45

Fig.20 26dB Emission Bandwidth (802. 11n-HT20, 5720MHz)



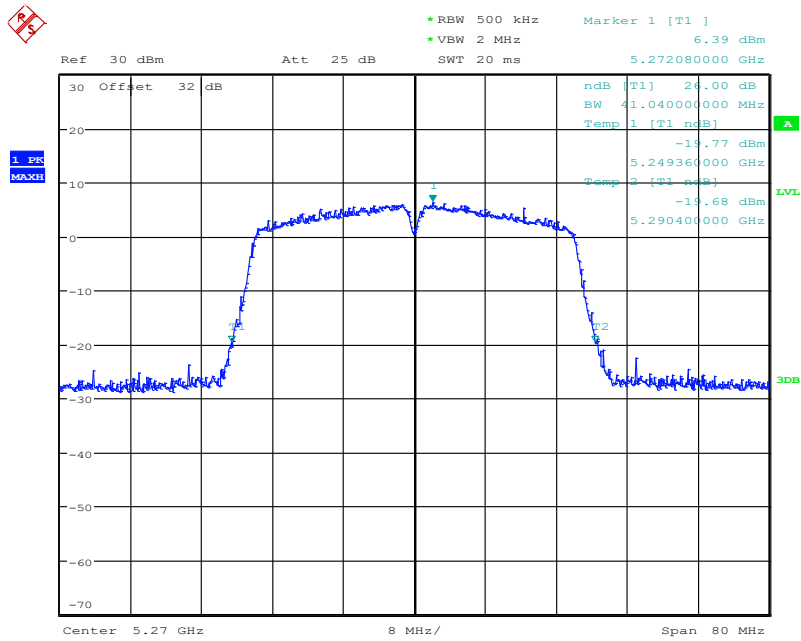
Date: 16.AUG.2023 15:06:37

Fig.21 26dB Emission Bandwidth (802.11ac-HT40, 5190MHz)



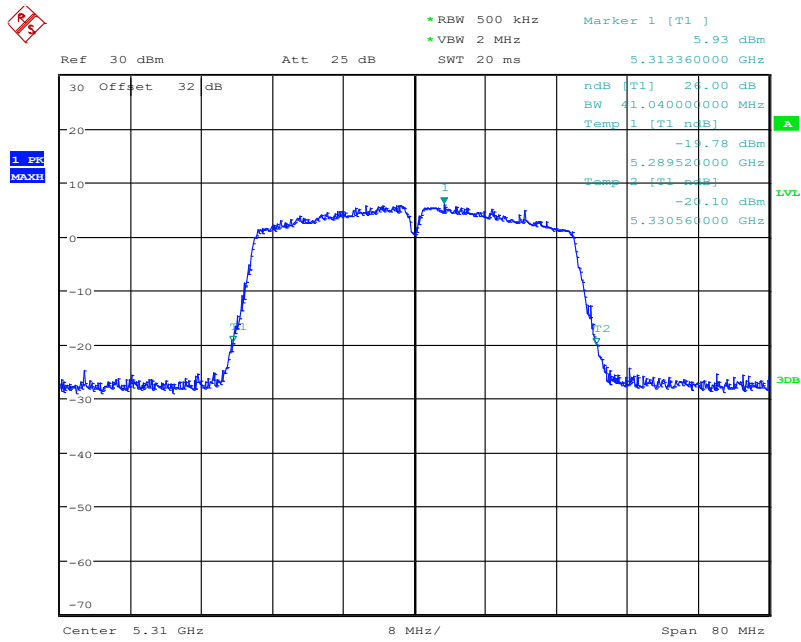
Date: 16.AUG.2023 15:09:41

Fig.22 26dB Emission Bandwidth (802.11ac-HT40, 5230MHz)



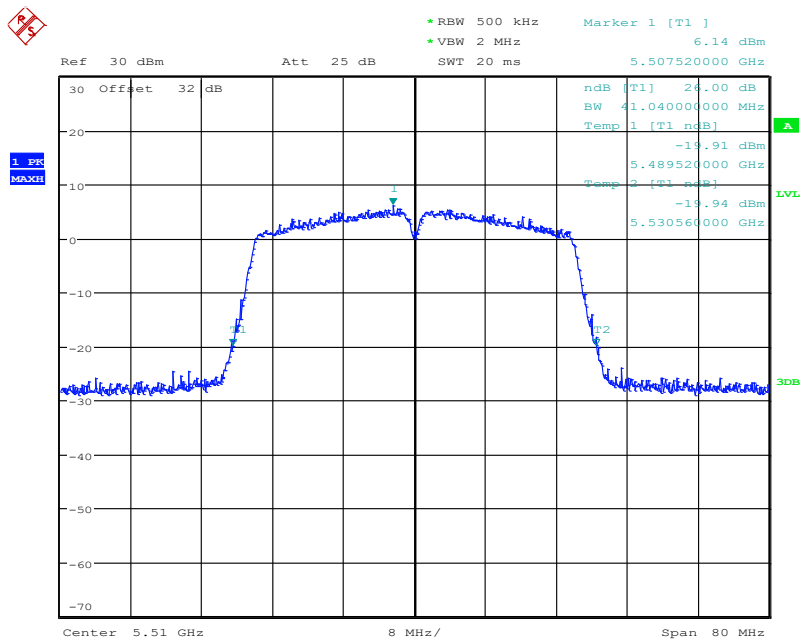
Date: 16.AUG.2023 15:11:17

Fig.23 26dB Emission Bandwidth (802.11ac-HT40, 5270MHz)



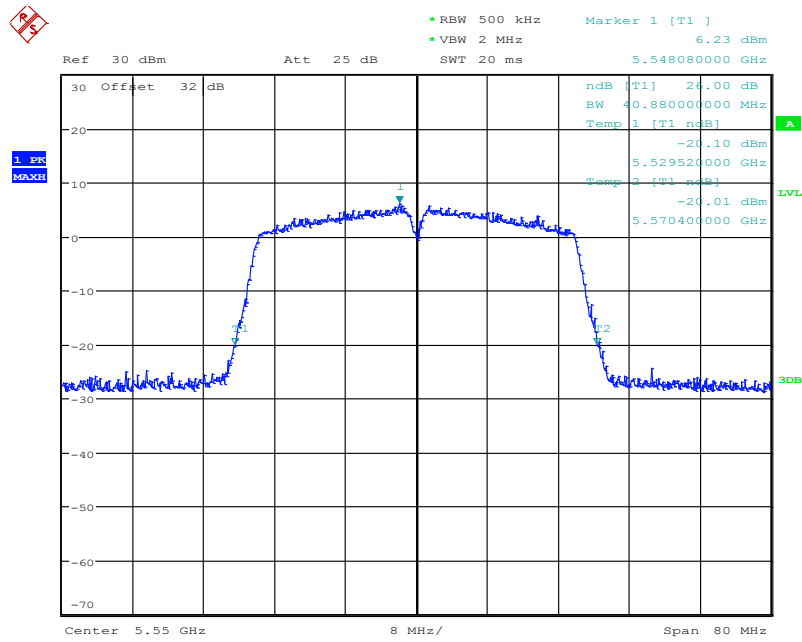
Date: 16.AUG.2023 15:15:11

Fig.24 26dB Emission Bandwidth (802.11ac-HT40, 5310MHz)



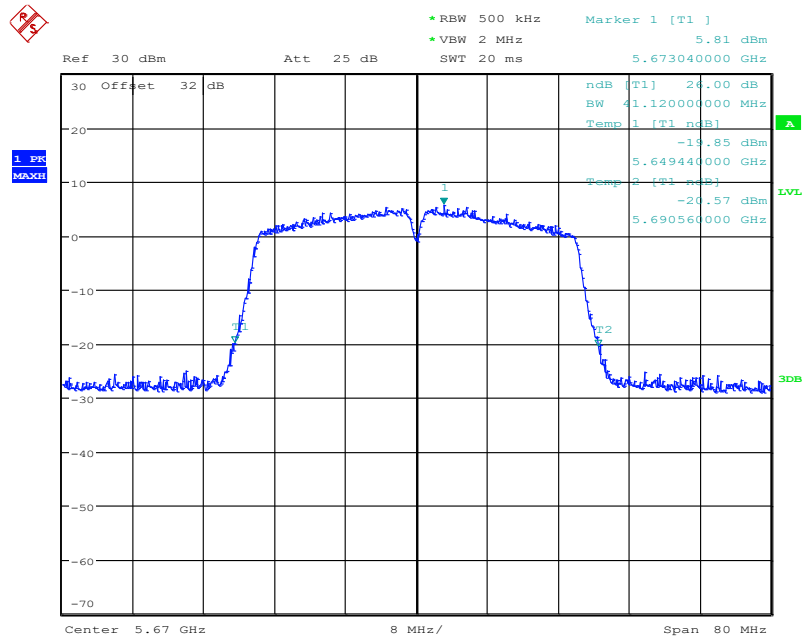
Date: 16.AUG.2023 15:22:06

Fig.25 26dB Emission Bandwidth (802.11ac-HT40, 5510MHz)



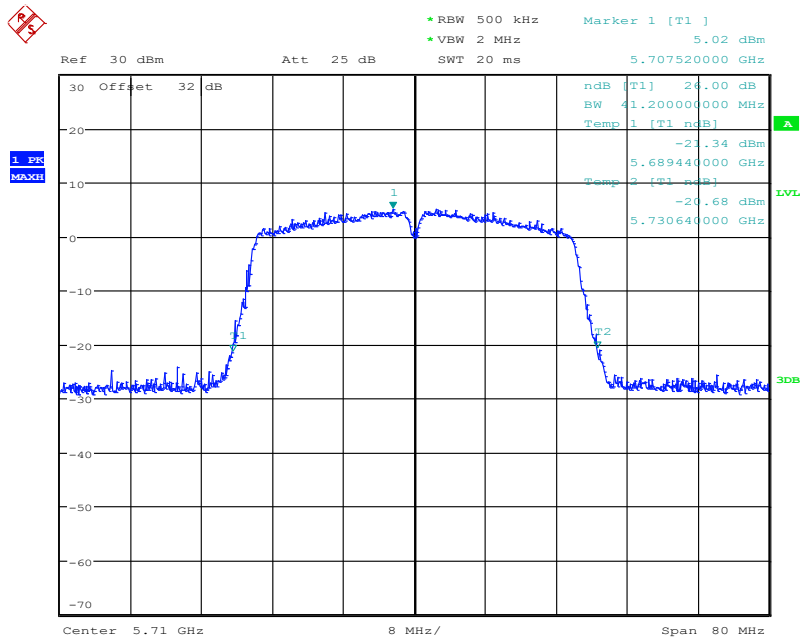
Date: 16.AUG.2023 15:23:16

Fig.26 26dB Emission Bandwidth (802. 11ac-HT40, 5550MHz)



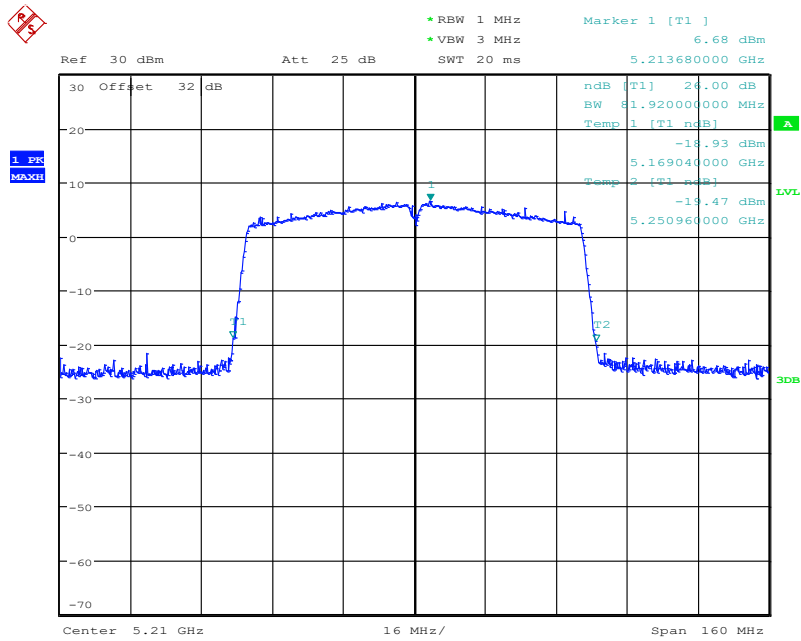
Date: 16.AUG.2023 15:28:12

Fig.27 26dB Emission Bandwidth (802. 11ac-HT40, 5670MHz)



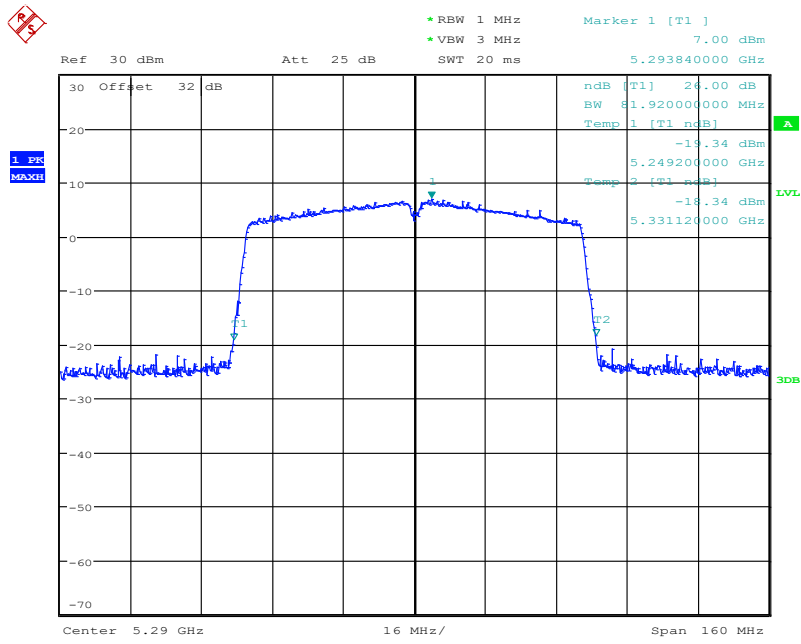
Date: 16.AUG.2023 15:29:15

Fig.28 26dB Emission Bandwidth (802.11ac-HT40, 5710MHz)



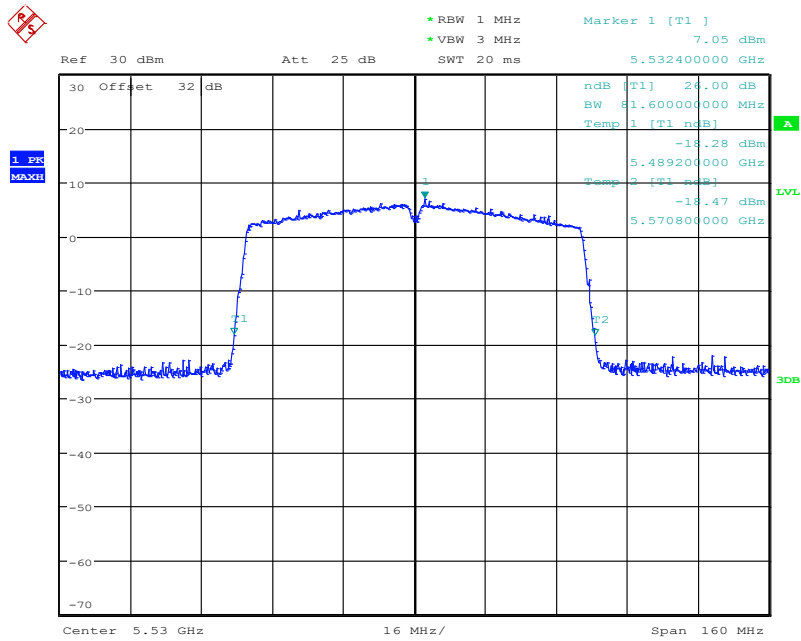
Date: 16.AUG.2023 15:33:33

Fig.29 26dB Emission Bandwidth (802.11ac-HT80, 5210MHz)



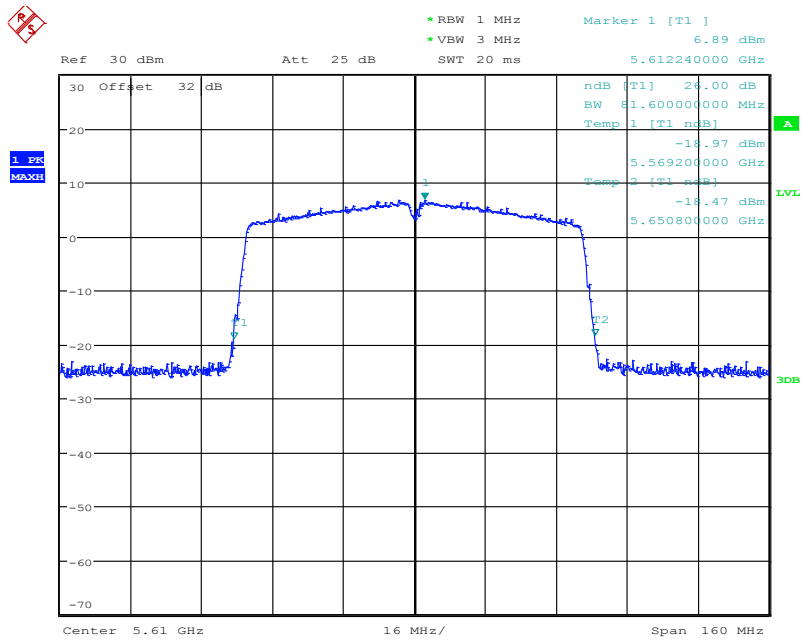
Date: 16.AUG.2023 15:35:02

Fig.30 26dB Emission Bandwidth (802.11ac-HT80, 5290MHz)



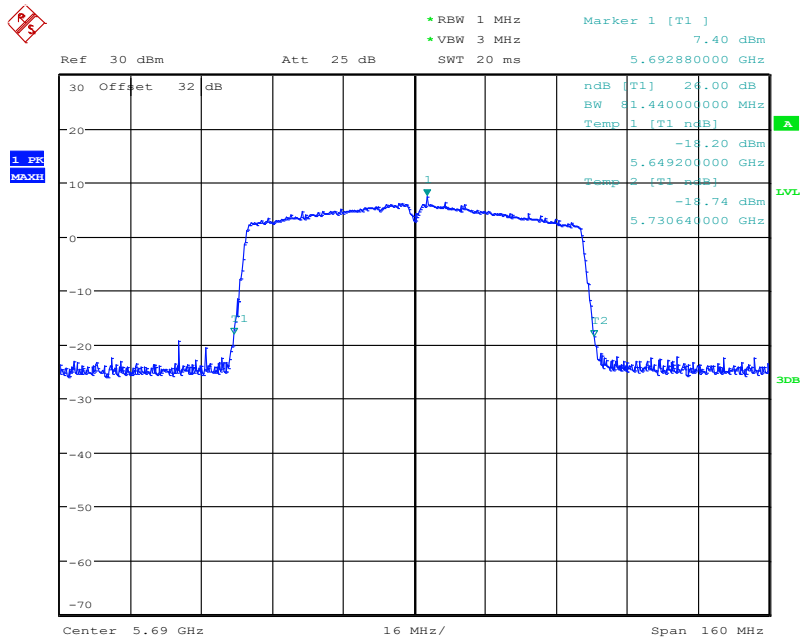
Date: 16.AUG.2023 15:41:58

Fig.31 26dB Emission Bandwidth (802.11ac-HT80, 5530MHz)



Date: 16.AUG.2023 15:42:48

Fig.32 26dB Emission Bandwidth (802.11ac-HT80, 5610MHz)



Date: 16.AUG.2023 15:47:33

Fig.33 26dB Emission Bandwidth (802.11ac-HT80, 5690MHz)

A.5. Band Edges Compliance

A5.1 Band Edges - Radiated

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.407	-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)).

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.34	P
	5320 MHz	Fig.35	P
	5500 MHz	Fig.36	P
	5700 MHz	Fig.37	P
802.11n HT20	5180 MHz	Fig.38	P
	5320 MHz	Fig.39	P
	5500 MHz	Fig.40	P
	5700 MHz	Fig.41	P
802.11n HT40	5190 MHz	Fig.42	P
	5310 MHz	Fig.43	P
	5510 MHz	Fig.44	P
	5670 MHz	Fig.45	P
802.11ac HT20	5180 MHz	Fig.46	P
	5320 MHz	Fig.47	P
	5500 MHz	Fig.48	P
	5700 MHz	Fig.49	P
802.11ac HT40	5190 MHz	Fig.50	P
	5310 MHz	Fig.51	P
	5510 MHz	Fig.52	P
	5670 MHz	Fig.53	P
802.11ac HT80	5210MHz	Fig.54	P
	5290MHz	Fig.55	P
	5530MHz	Fig.56	P
	5610MHz	Fig.57	P

Conclusion: PASS

Test graphs as below:

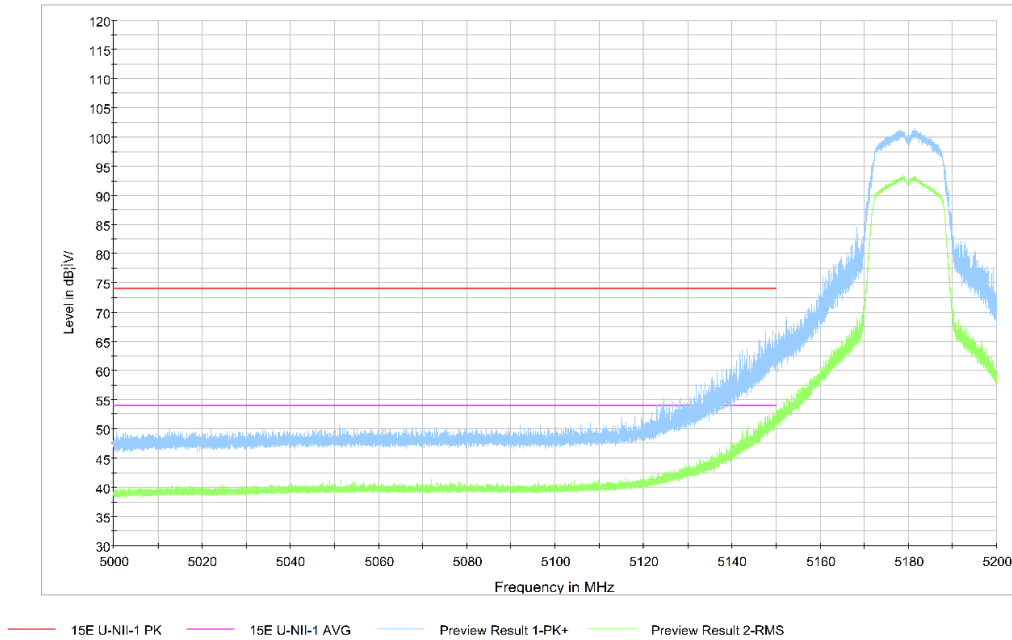


Fig.34 Band Edges (802.11a Ch36, 5180MHz)

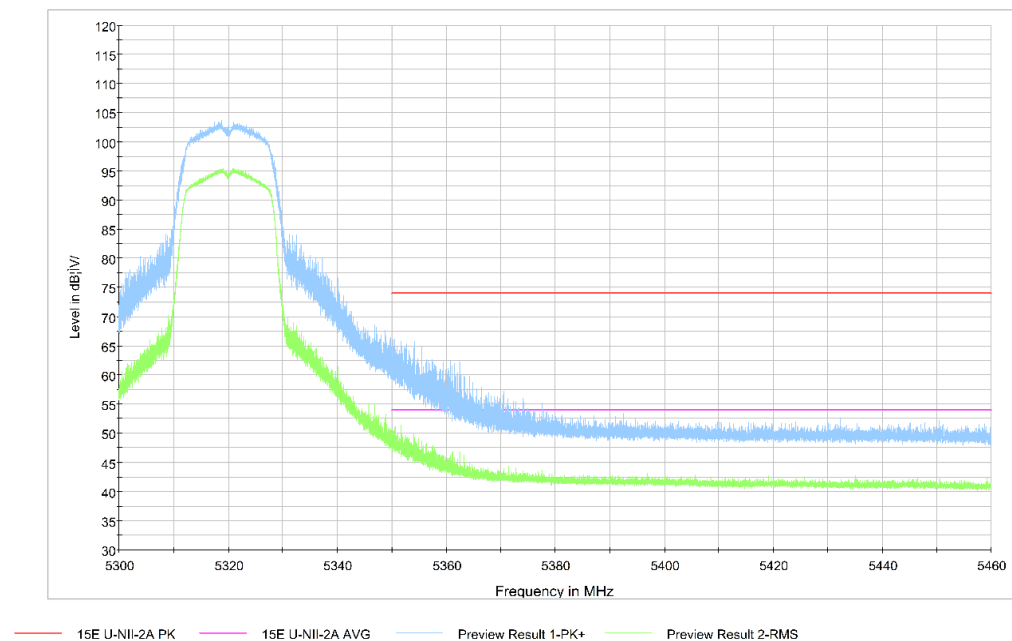


Fig.35 Band Edges (802.11a Ch64, 5320MHz)

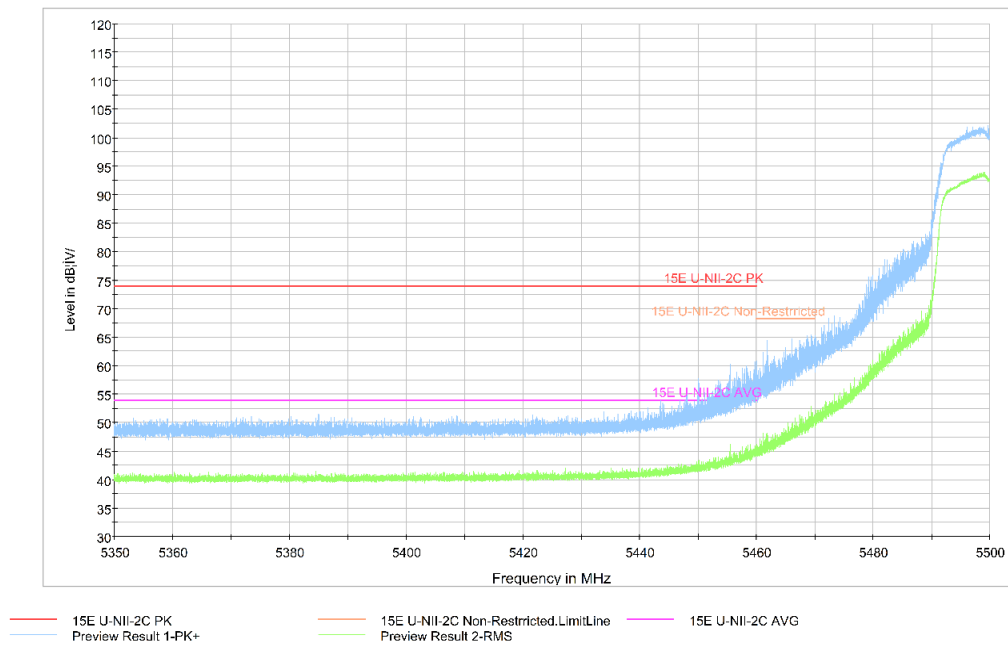


Fig.36 Band Edges (802.11a Ch100, 5500MHz)

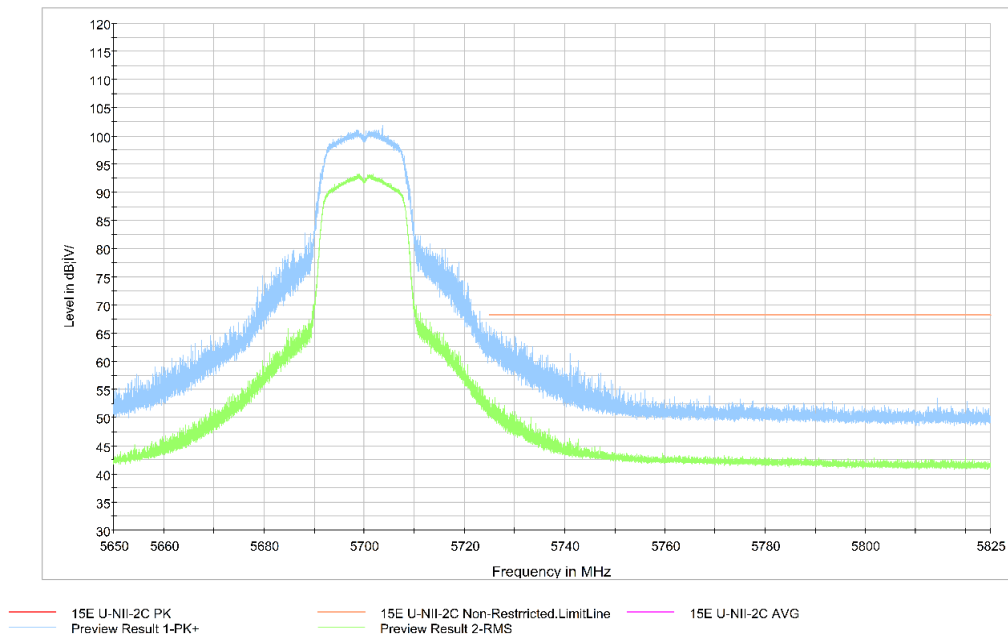


Fig.37 Band Edges (802.11a Ch140, 5700MHz)

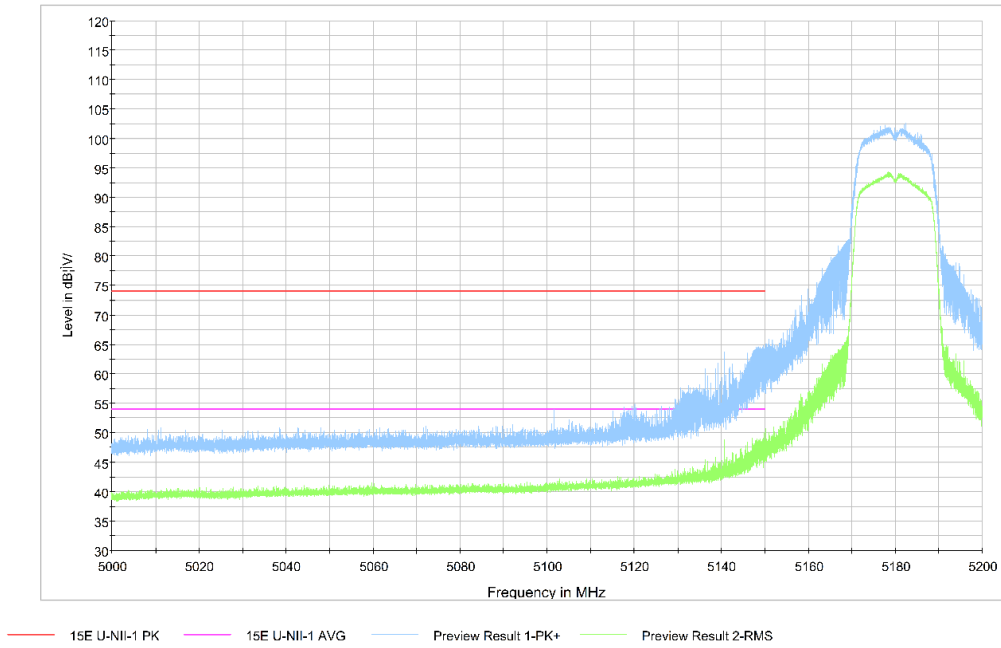


Fig.38 Band Edges (802.11n-HT20 Ch36, 5180MHz)

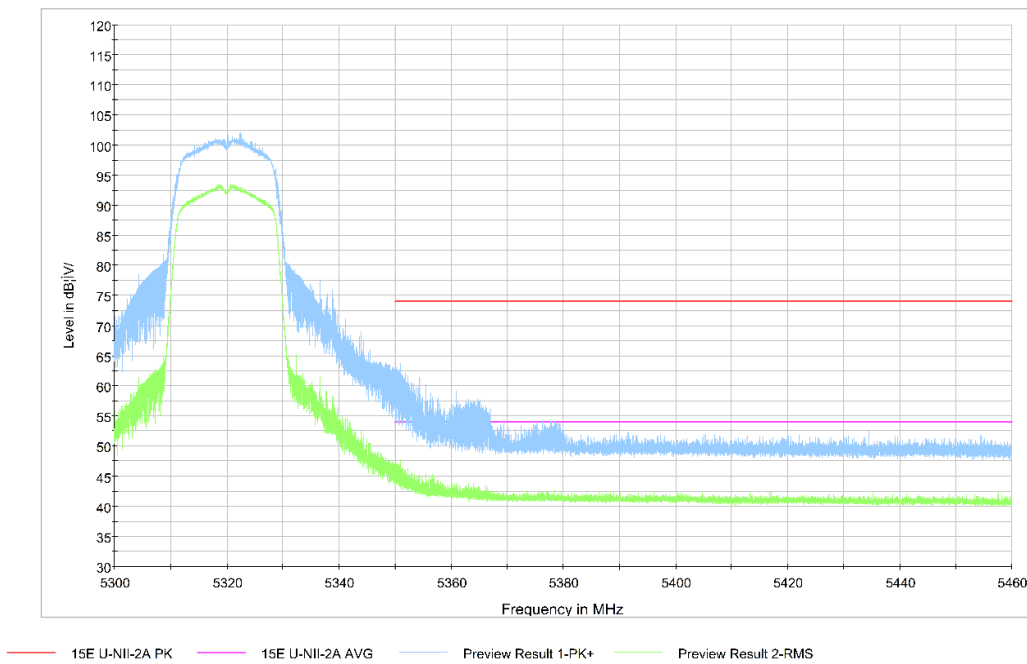


Fig.39 Band Edges (802.11n-HT20 Ch64, 5320MHz)

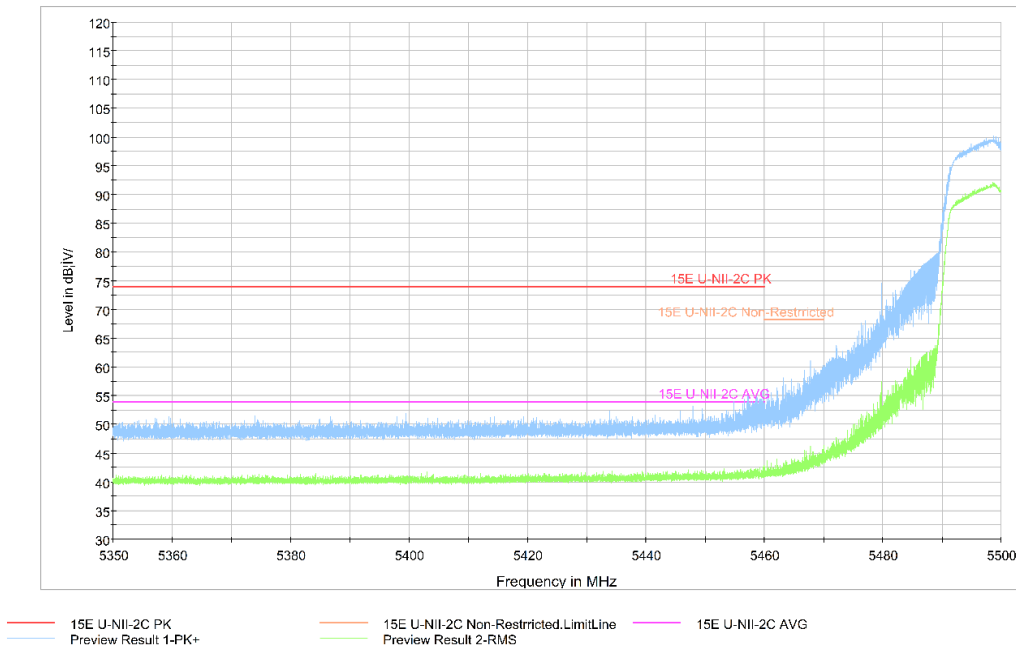


Fig.40 Band Edges (802.11n-HT20 Ch100, 5500MHz)

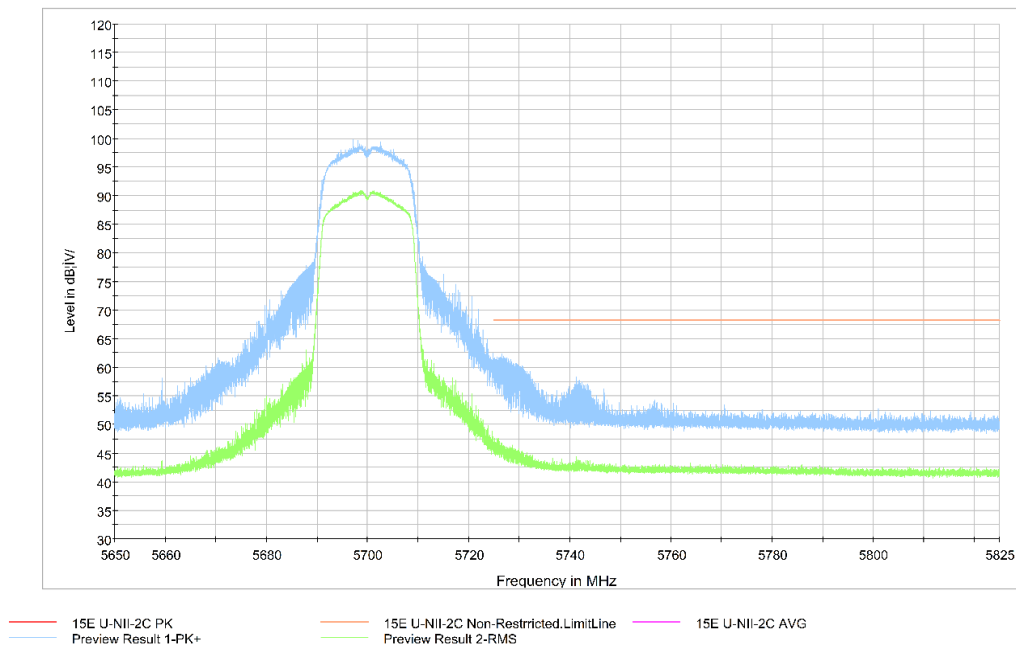


Fig.41 Band Edges (802.11n-HT20 Ch140, 5700MHz)

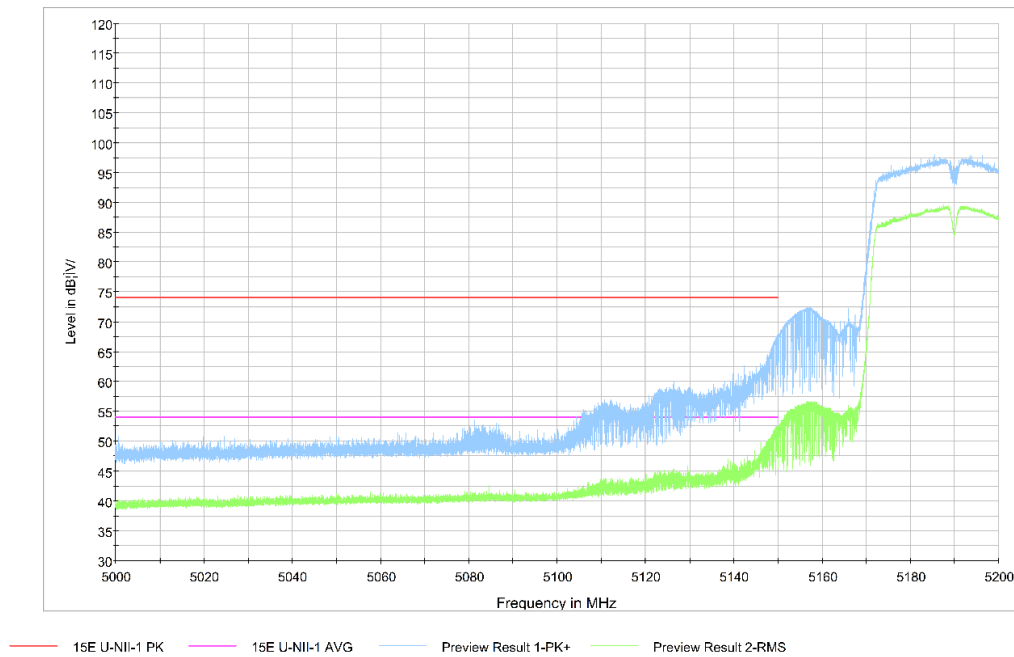


Fig.42 Band Edges (802.11n-HT40 Ch38, 5190MHz)

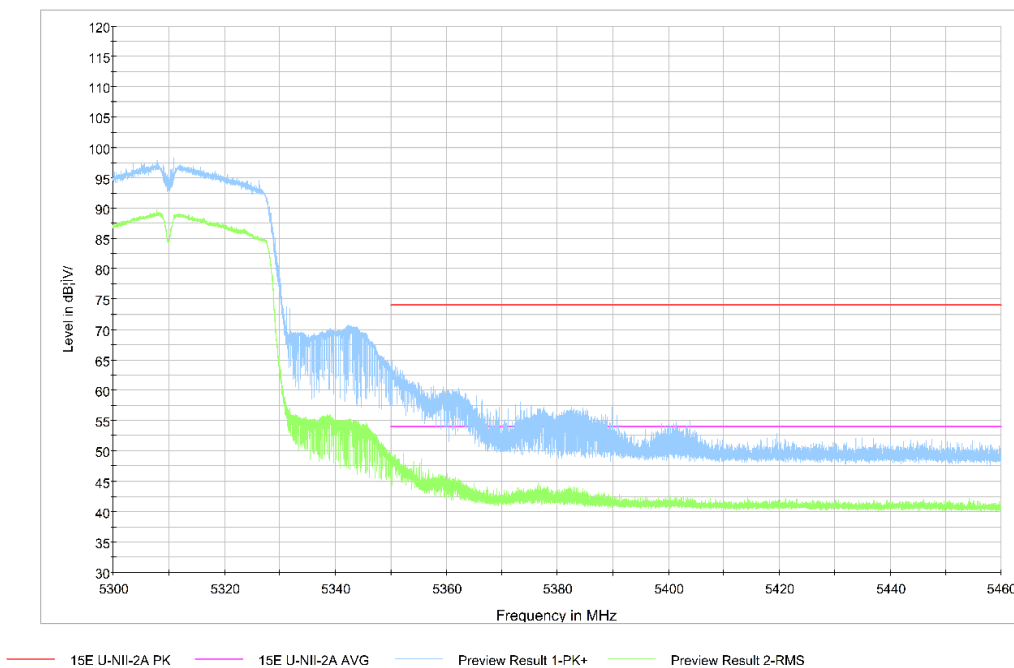


Fig.43 Band Edges (802.11n-HT40 Ch62, 5310MHz)

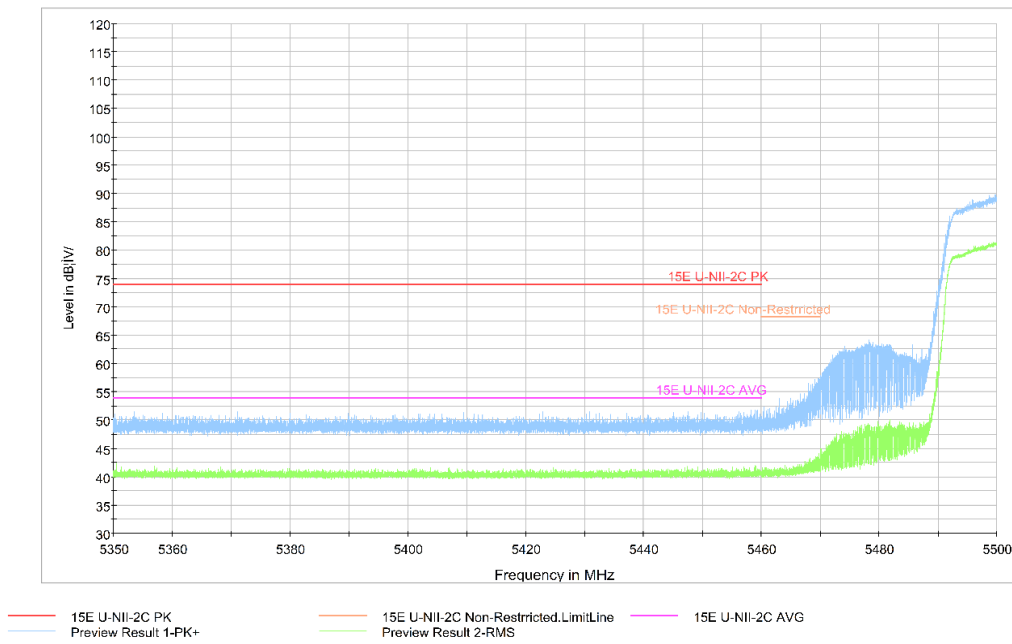


Fig.44 Band Edges (802.11n-HT40 Ch102, 5510MHz)

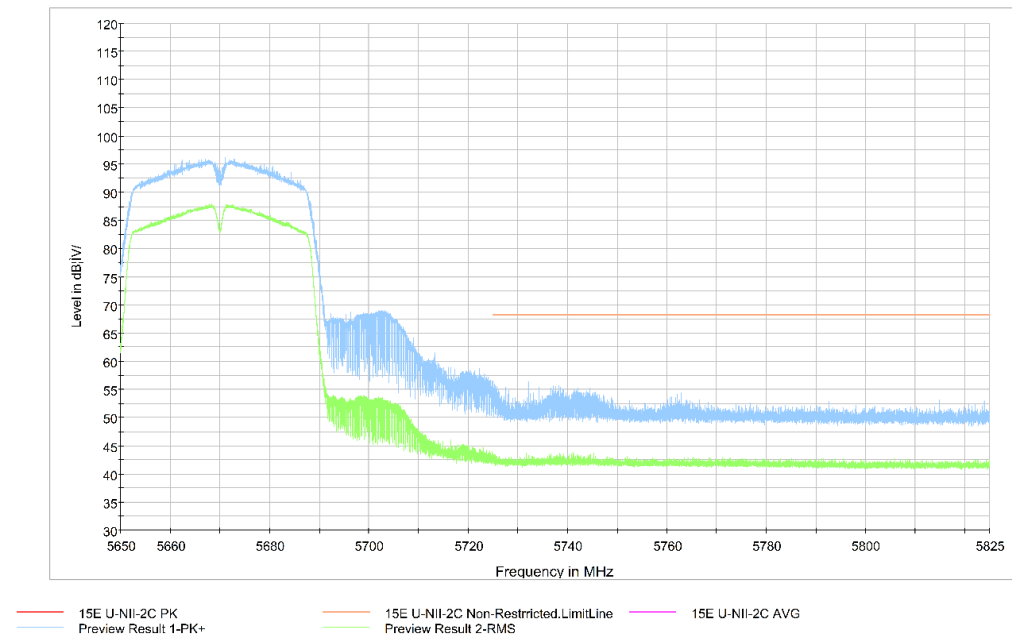


Fig.45 Band Edges (802.11n-HT40 Ch134, 5670MHz)

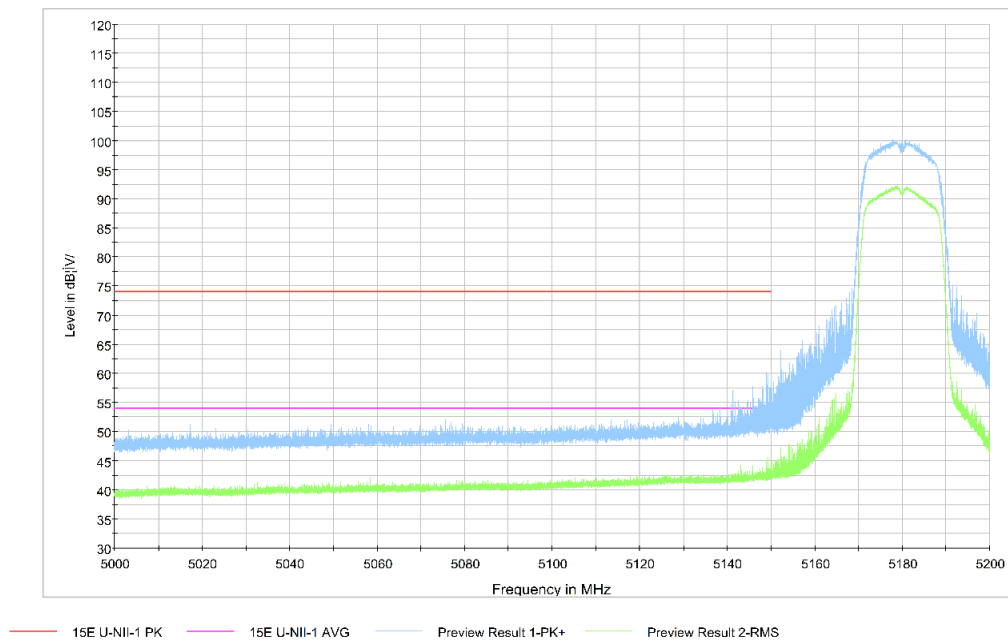


Fig.46 Band Edges (802.11ac-HT20 Ch36, 5180MHz)

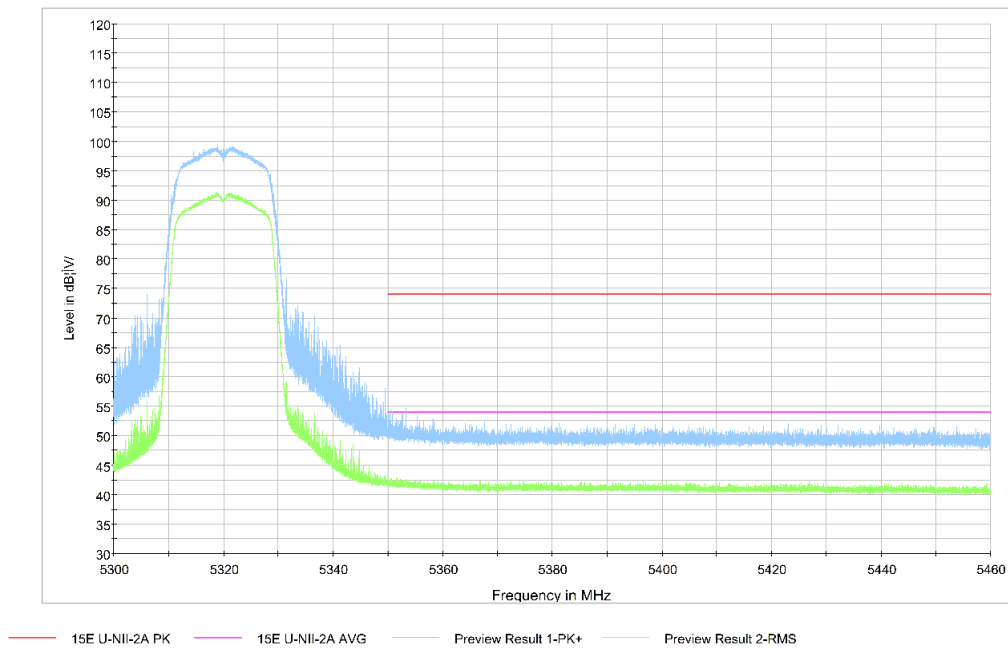


Fig.47 Band Edges (802.11ac-HT20 Ch64, 5320MHz)

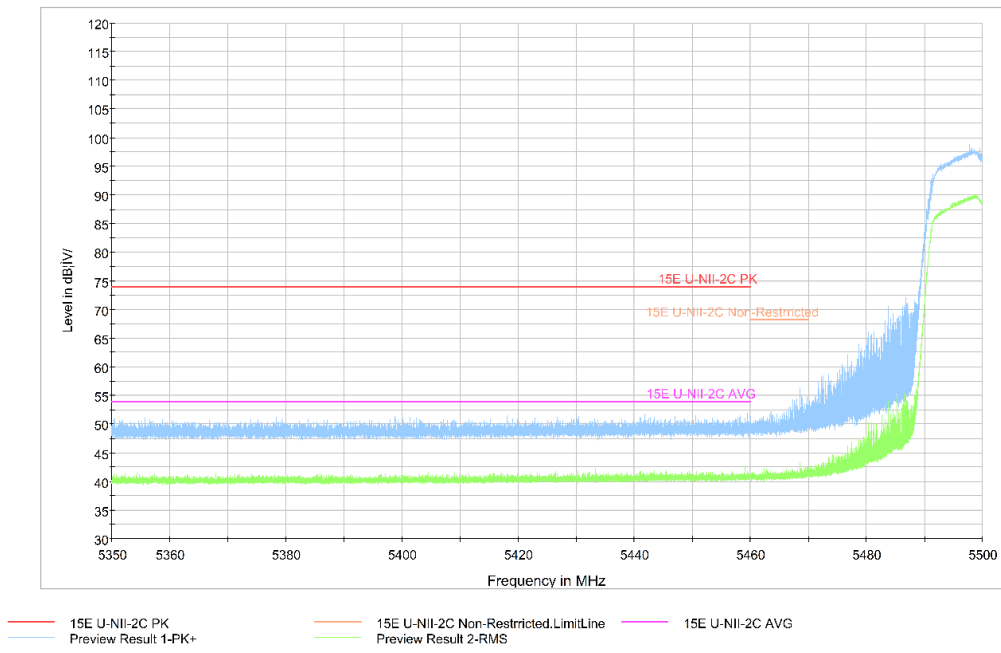


Fig.48 Band Edges (802.11ac-HT20 Ch100, 5500MHz)

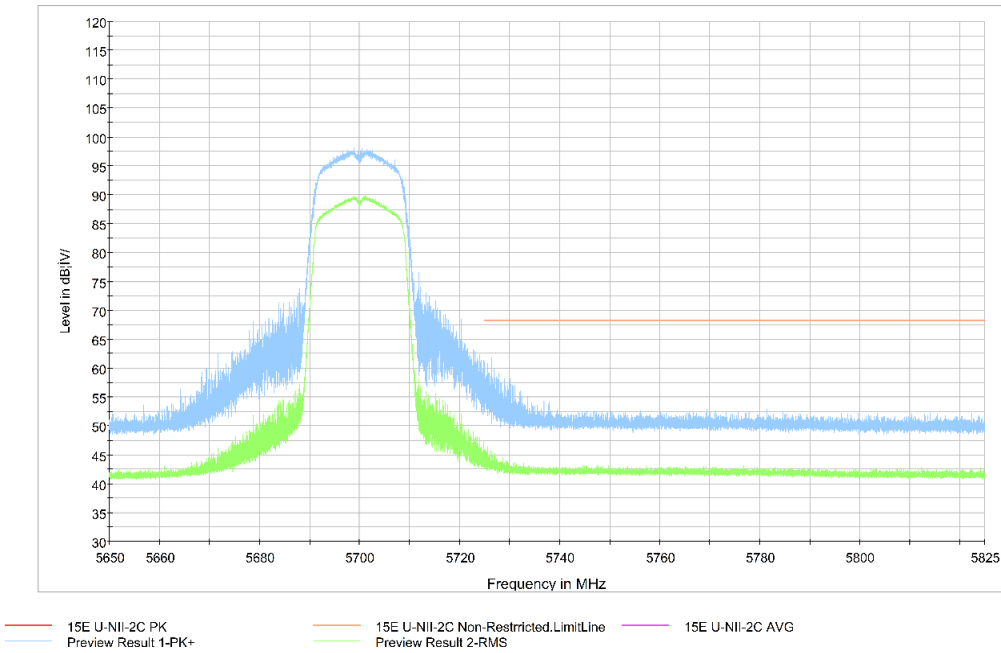


Fig.49 Band Edges (802.11ac-HT20 Ch140, 5700MHz)

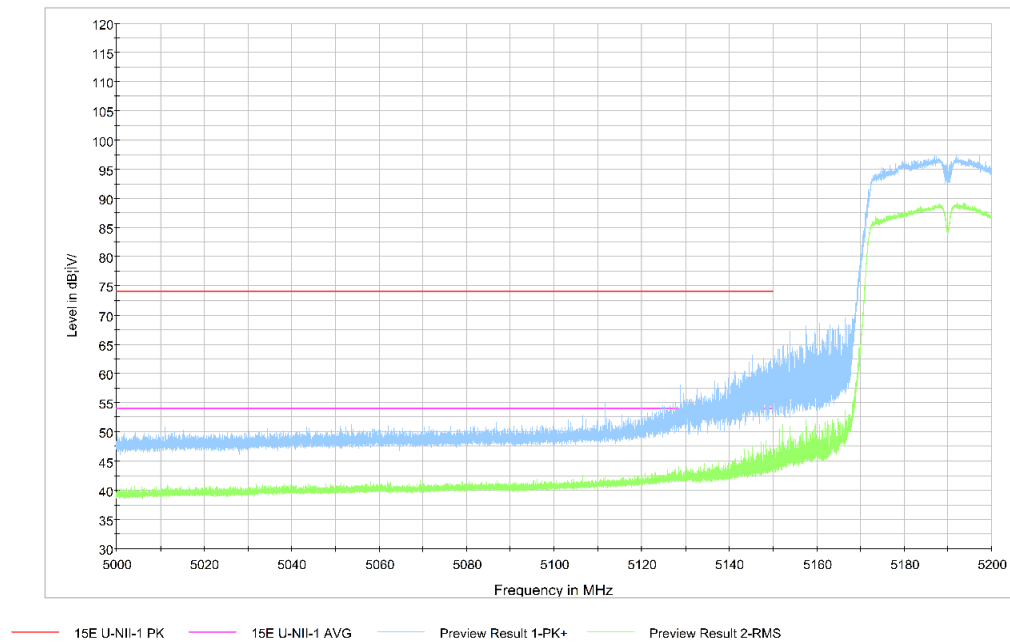


Fig.50 Band Edges (802.11ac-HT40 Ch38, 5190MHz)

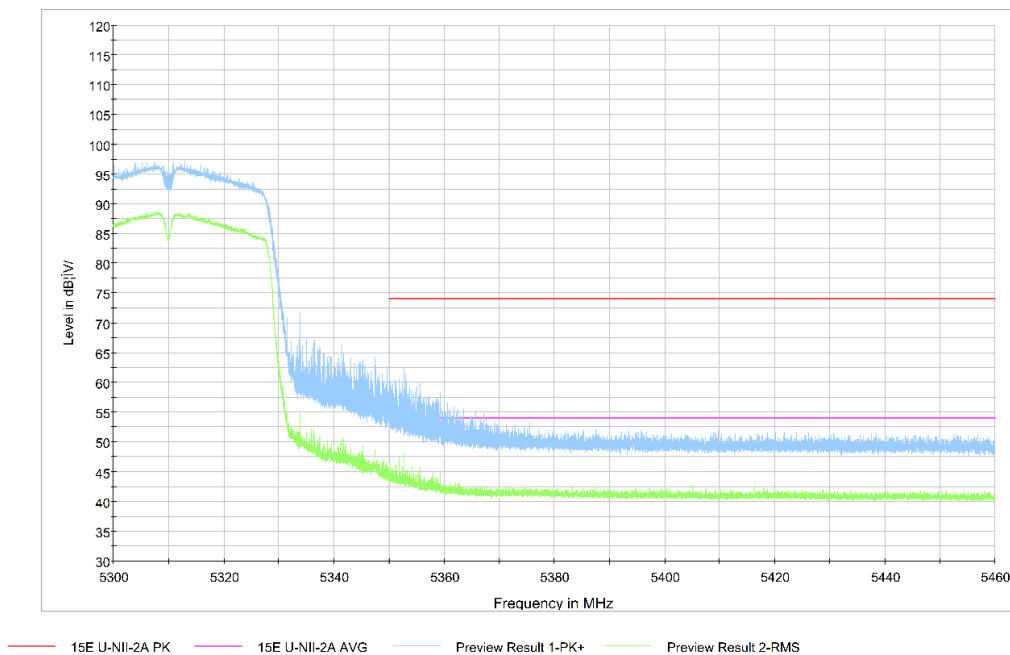


Fig.51 Band Edges (802.11ac-HT40 Ch62, 5310MHz)

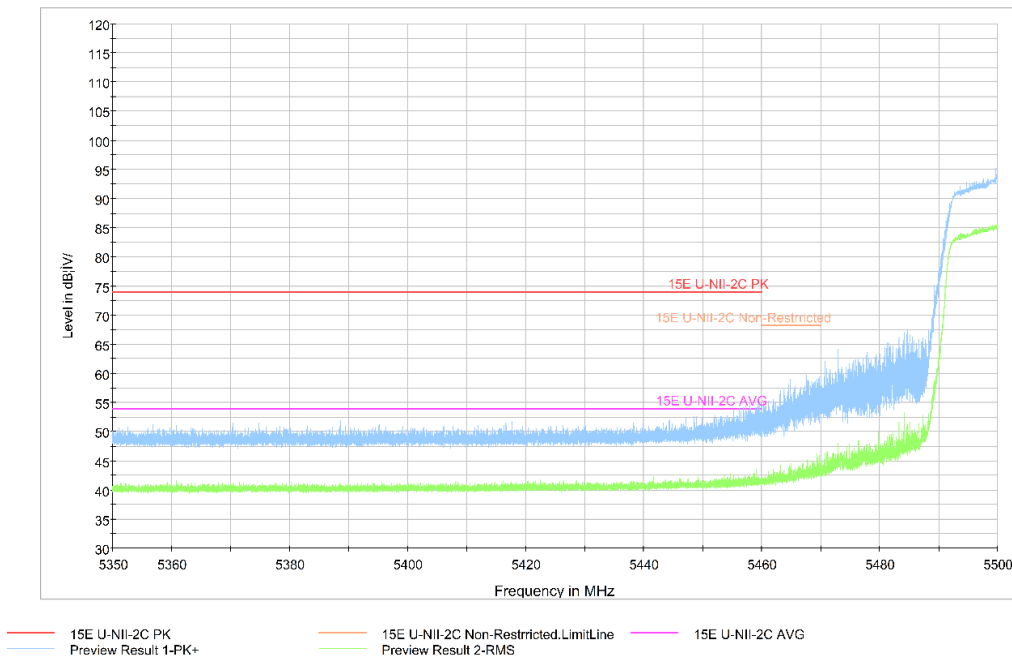


Fig.52 Band Edges (802.11ac-HT40 Ch102, 5510MHz)

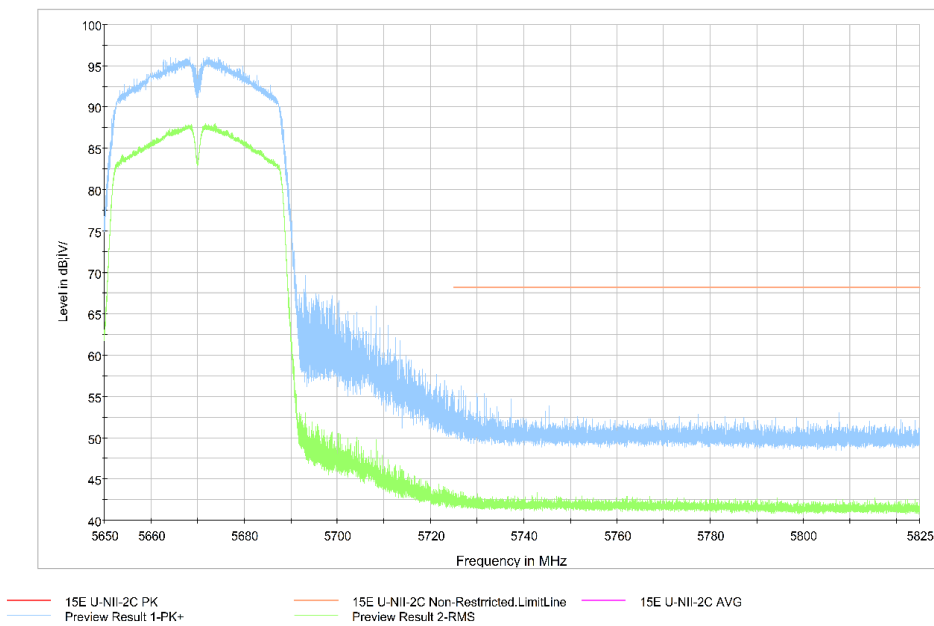


Fig.53 Band Edges (802.11ac-HT40 Ch134, 5670MHz)

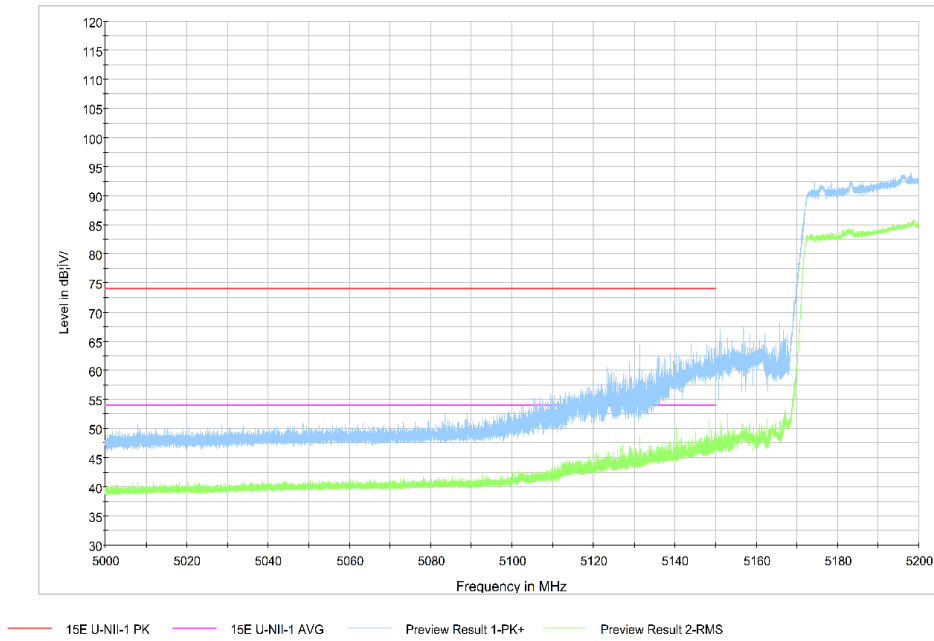


Fig.54 Band Edges (802.11ac-HT80 Ch42 , 5210MHz)

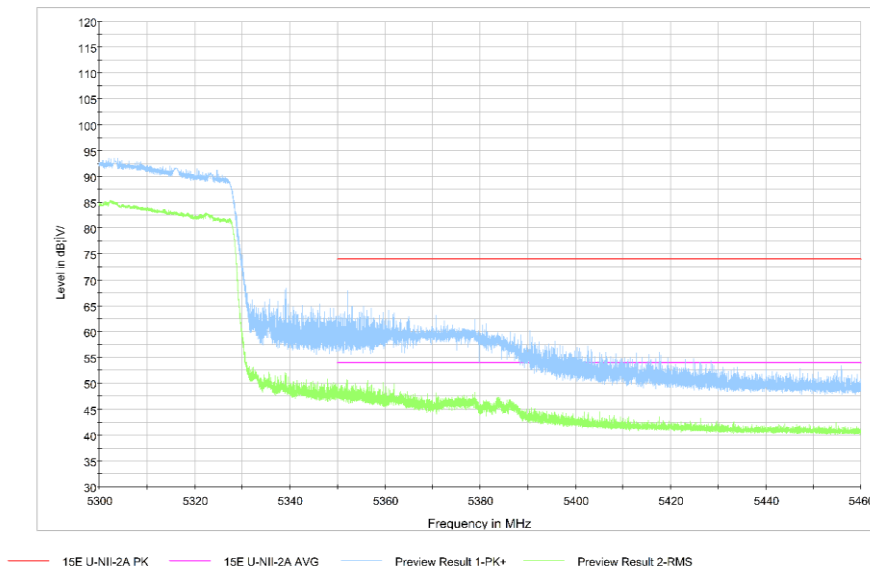


Fig.55 Band Edges (802.11ac-HT80 Ch58, 5290MHz)

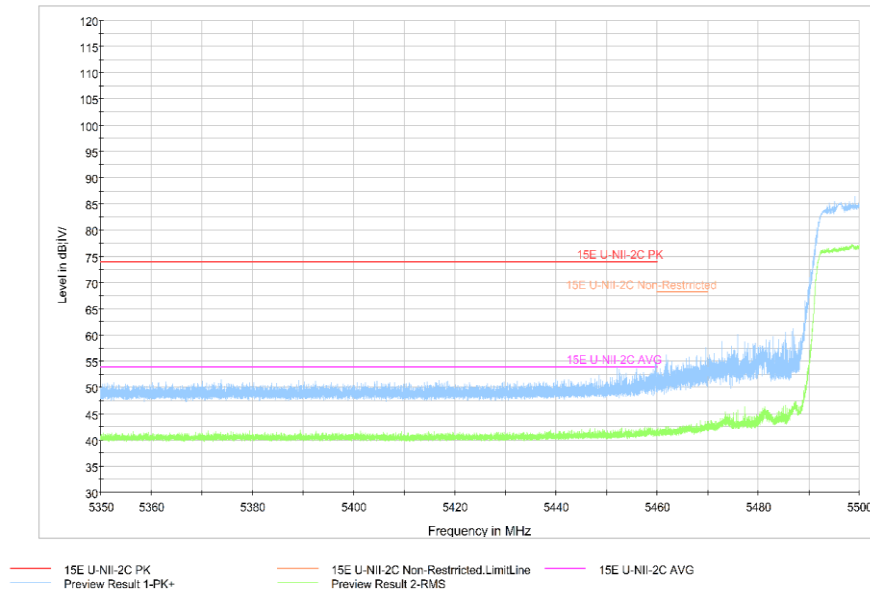


Fig.56 Band Edges (802.11ac-HT80 Ch106, 5530MHz)

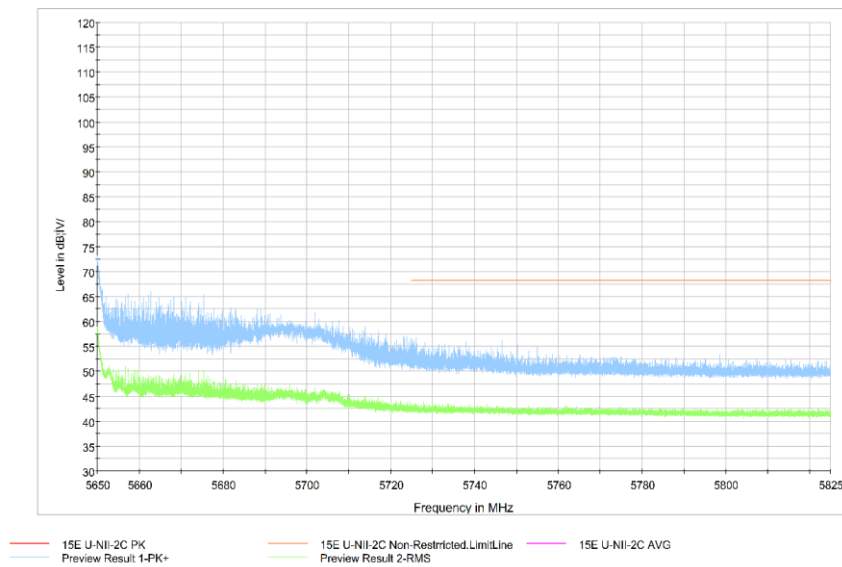


Fig.57 Band Edges (802.11ac-HT80 Ch122, 5610MHz)

A.6. Transmitter Spurious Emission

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.407	-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)).

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 Results:

802.11a mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11a	36(5180MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	40(5200MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	48(5240MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	52(5260MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	56(5280MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	64(5320MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	100(5500MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	120(5600MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	140(5700MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n -HT20	36(5180MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	40(5200MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	48(5240MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	52(5260MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	56(5280MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	64(5320MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	100(5500MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	120(5600MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	140(5700MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n HT40	38(5190MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	46(5230MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	54(5270MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	62(5310MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	102(5510MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	118(5590MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
134(5670MHz)	30 MHz ~1 GHz	---	P	
	1 GHz ~ 3 GHz	---	P	
	3 GHz ~ 7 GHz	---	P	
	7 GHz ~ 18 GHz	---	P	
	18 GHz ~ 26.5 GHz	---	P	
	26.5 GHz ~ 40 GHz	---	P	

802.11ac-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11ac -HT20	36(5180MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	40(5200MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	48(5240MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	52(5260MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	56(5280MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	64(5320MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	100(5500MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	120(5600MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	140(5700MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11ac-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11ac HT40	38(5190MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	46(5230MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	54(5270MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	62(5310MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	102(5510MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	118(5590MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
134(5670MHz)	30 MHz ~1 GHz	---	P	
	1 GHz ~ 3 GHz	---	P	
	3 GHz ~ 7 GHz	---	P	
	7 GHz ~ 18 GHz	---	P	
	18 GHz ~ 26.5 GHz	---	P	
	26.5 GHz ~ 40 GHz	---	P	

802.11ac-HT80 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11ac – HT80	42(5210MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	58(5290MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
	106(5530MHz)	26.5 GHz ~ 40 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
	122(5610MHz)	7 GHz ~ 18 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
			7 GHz ~ 18 GHz	---

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:

$$\text{Result} = P_{Mea} + A_{Rpl} = P_{Mea} + \text{Cable Loss} + \text{Antenna Factor}$$

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)
17975.800	40.60	-29.59	45.95	24.24	54.00	13.40	V
17975.067	40.55	-29.59	45.95	24.19	54.00	13.45	H
12333.167	36.97	-32.39	38.95	30.41	54.00	17.03	H
12332.800	36.94	-32.39	38.95	30.38	54.00	17.06	V
5149.940	53.44	-28.00	34.00	47.44	54.00	0.56	V
5149.270	53.04	-28.00	34.00	47.04	54.00	0.96	V

Channel 40

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)
17974.333	40.80	-29.59	45.95	24.44	54.00	13.20	H
17939.500	40.74	-29.59	45.95	24.38	54.00	13.26	H
12332.800	37.31	-32.39	38.95	30.75	54.00	16.69	V
12326.200	37.12	-32.12	39.00	30.24	54.00	16.88	H
8489.033	33.75	-34.28	37.30	30.73	54.00	20.25	V
8354.100	33.65	-34.93	37.20	31.38	54.00	20.35	H

Channel 48

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)
17983.867	40.74	-29.59	45.95	24.38	54.00	13.26	V
17941.700	40.62	-29.59	45.95	24.26	54.00	13.38	V
12332.800	37.69	-32.39	38.95	31.13	54.00	16.31	H
12332.433	37.06	-32.39	38.95	30.50	54.00	16.94	V
8321.833	34.29	-34.93	37.20	32.02	54.00	19.71	H
8495.633	34.08	-34.28	37.30	31.06	54.00	19.92	H

Channel 52

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)
17971.033	40.65	-29.59	45.95	24.29	54.00	13.35	H
17951.233	40.63	-29.59	45.95	24.27	54.00	13.37	V
12330.600	36.96	-32.39	38.95	30.40	54.00	17.04	H
12329.500	36.82	-32.39	38.95	30.26	54.00	17.18	V
8495.633	34.70	-34.28	37.30	31.68	54.00	19.30	V
8467.400	34.46	-34.28	37.30	31.44	54.00	19.54	V

Channel 56

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)
17971.767	40.96	-29.59	45.95	24.60	54.00	13.04	V
17979.100	40.65	-29.59	45.95	24.29	54.00	13.35	H
12332.800	36.81	-32.39	38.95	30.25	54.00	17.19	V
12289.900	36.61	-32.12	39.00	29.73	54.00	17.39	V
8470.700	33.87	-34.28	37.30	30.85	54.00	20.13	V
8282.967	33.68	-34.84	37.10	31.41	54.00	20.32	V

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)
17934.000	40.71	-29.59	45.95	24.35	54.00	13.29	H
17947.200	40.67	-29.59	45.95	24.31	54.00	13.33	V
12010.133	37.33	-32.66	39.00	30.99	54.00	16.67	V
12332.067	37.13	-32.39	38.95	30.57	54.00	16.87	V
5351.720	51.38	-27.82	34.20	45.00	54.00	2.62	V
5350.760	51.04	-27.82	34.20	44.66	54.00	2.96	V

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)
17942.067	40.96	-29.59	45.95	24.60	54.00	13.04	H
17948.667	40.45	-29.59	45.95	24.09	54.00	13.55	V
12260.933	37.33	-32.37	38.95	30.75	54.00	16.67	H
12328.767	37.10	-32.39	38.95	30.54	54.00	16.90	V
5455.495	46.23	-27.49	34.20	39.52	54.00	7.77	V
5458.945	46.16	-27.49	34.20	39.45	54.00	7.84	H

Channel 120

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)
17867.267	40.99	-29.59	45.95	24.63	54.00	13.01	V
17936.200	40.84	-29.59	45.95	24.48	54.00	13.16	H
12332.800	37.28	-32.39	38.95	30.72	54.00	16.72	V
12332.433	37.16	-32.39	38.95	30.60	54.00	16.84	H
8494.167	34.52	-34.28	37.30	31.50	54.00	19.48	H
8336.500	34.11	-34.93	37.20	31.84	54.00	19.89	H

Channel 140

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)
17970.667	40.45	-29.59	45.95	24.09	54.00	13.55	V
17938.767	40.43	-29.59	45.95	24.07	54.00	13.57	V
12331.700	37.06	-32.39	38.95	30.50	54.00	16.94	V
12332.800	37.06	-32.39	38.95	30.50	54.00	16.94	H
8102.567	34.27	-35.06	36.90	32.43	54.00	19.73	H
8293.600	33.84	-34.84	37.10	31.57	54.00	20.16	V

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)
17976.533	40.50	-29.59	45.95	24.14	54.00	13.50	V
17958.567	40.46	-29.59	45.95	24.10	54.00	13.54	H
12332.800	36.86	-32.39	38.95	30.30	54.00	17.14	H
12331.700	36.80	-32.39	38.95	30.24	54.00	17.20	H
5149.870	49.99	-28.00	34.00	43.99	54.00	4.01	V
5149.590	49.13	-28.00	34.00	43.13	54.00	4.87	V

Channel 40

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)
17979.833	40.63	-29.59	45.95	24.27	54.00	13.37	V
17998.900	40.58	-29.59	45.95	24.22	54.00	13.42	V
12332.800	37.06	-32.39	38.95	30.50	54.00	16.94	V
12264.233	36.99	-32.37	38.95	30.41	54.00	17.01	V
8309.000	33.84	-34.84	37.10	31.57	54.00	20.16	H
8483.900	33.82	-34.28	37.30	30.80	54.00	20.18	V

Channel 48

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)
17937.300	41.16	-29.59	45.95	24.80	54.00	12.84	H
17940.600	40.96	-29.59	45.95	24.60	54.00	13.04	V
12333.167	37.12	-32.39	38.95	30.56	54.00	16.88	H
12014.167	37.09	-32.66	39.00	30.75	54.00	16.91	H
8313.400	34.87	-34.84	37.10	32.60	54.00	19.13	H
8486.467	33.80	-34.28	37.30	30.78	54.00	20.20	H

Channel 52

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)
17864.700	40.72	-29.59	45.95	24.36	54.00	13.28	V
17975.800	40.42	-29.59	45.95	24.06	54.00	13.58	H
12330.600	37.27	-32.39	38.95	30.71	54.00	16.73	H
12332.433	36.93	-32.39	38.95	30.37	54.00	17.07	V
8359.600	34.16	-34.93	37.20	31.89	54.00	19.84	V
8494.900	33.58	-34.28	37.30	30.56	54.00	20.42	V

Channel 56

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)
17960.400	40.63	-29.59	45.95	24.27	54.00	13.37	H
17934.000	40.56	-29.59	45.95	24.20	54.00	13.44	H
12332.800	37.00	-32.39	38.95	30.44	54.00	17.00	H
12330.600	36.98	-32.39	38.95	30.42	54.00	17.02	H
8443.200	33.82	-34.69	37.40	31.11	54.00	20.18	V
8490.500	33.74	-34.28	37.30	30.72	54.00	20.26	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)
17936.567	40.85	-29.59	45.95	24.49	54.00	13.15	V
17977.267	40.72	-29.59	45.95	24.36	54.00	13.28	H
12266.433	36.75	-32.37	38.95	30.17	54.00	17.25	V
12327.667	36.72	-32.39	38.95	30.16	54.00	17.28	H
5350.992	47.71	-27.82	34.20	41.33	54.00	6.29	V
5350.040	47.13	-27.82	34.20	40.75	54.00	6.87	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)
17976.533	40.58	-29.59	45.95	24.22	54.00	13.42	V
17940.600	40.40	-29.59	45.95	24.04	54.00	13.60	V
12331.700	37.51	-32.39	38.95	30.95	54.00	16.49	V
12332.800	37.13	-32.39	38.95	30.57	54.00	16.87	H
5459.943	42.91	-27.49	34.20	36.20	54.00	11.09	V
5459.837	42.58	-27.49	34.20	35.87	54.00	11.42	H

Channel 120

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)
17934.733	40.73	-29.59	45.95	24.37	54.00	13.27	V
17964.800	40.50	-29.59	45.95	24.14	54.00	13.50	H
12216.933	37.58	-32.12	38.90	30.80	54.00	16.42	V
12332.800	37.29	-32.39	38.95	30.73	54.00	16.71	V
8098.167	34.26	-35.06	36.90	32.42	54.00	19.74	V
8493.067	34.23	-34.28	37.30	31.21	54.00	19.77	V

Channel 140

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)
17936.200	41.21	-29.59	45.95	24.85	54.00	12.79	V
17977.633	40.88	-29.59	45.95	24.52	54.00	13.12	H
12332.433	37.25	-32.39	38.95	30.69	54.00	16.75	V
12222.800	36.88	-32.12	38.90	30.10	54.00	17.12	V
8499.667	34.30	-34.28	37.30	31.28	54.00	19.70	V
8485.000	34.10	-34.28	37.30	31.08	54.00	19.90	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)
17938.767	40.55	-29.59	45.95	24.19	54.00	13.45	H
17974.333	40.54	-29.59	45.95	24.18	54.00	13.46	H
12332.067	37.45	-32.39	38.95	30.89	54.00	16.55	H
12330.967	37.12	-32.39	38.95	30.56	54.00	16.88	V
5149.940	52.53	-28.00	34.00	46.53	54.00	1.47	V
5149.980	52.50	-28.00	34.00	46.50	54.00	1.50	H

Channel 46

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)
17867.267	40.71	-29.59	45.95	24.35	54.00	13.29	H
17938.033	40.59	-29.59	45.95	24.23	54.00	13.41	H
12331.333	37.40	-32.39	38.95	30.84	54.00	16.60	H
12331.700	36.93	-32.39	38.95	30.37	54.00	17.07	H
8344.200	33.99	-34.93	37.20	31.72	54.00	20.01	V
8355.933	33.70	-34.93	37.20	31.43	54.00	20.30	H

Channel 54

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)
17968.467	40.73	-29.59	45.95	24.37	54.00	13.27	H
17936.200	40.69	-29.59	45.95	24.33	54.00	13.31	V
12332.067	36.89	-32.39	38.95	30.33	54.00	17.11	H
12261.300	36.83	-32.37	38.95	30.25	54.00	17.17	V
8248.867	33.81	-34.48	37.00	31.29	54.00	20.19	H
8315.600	33.80	-34.84	37.10	31.53	54.00	20.20	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)
17867.267	41.52	-29.59	45.95	25.16	54.00	12.48	V
17898.433	40.56	-29.59	45.95	24.20	54.00	13.44	H
12332.800	37.02	-32.39	38.95	30.46	54.00	16.98	V
12260.933	36.93	-32.37	38.95	30.35	54.00	17.07	V
5352.344	49.60	-27.82	34.20	43.22	54.00	4.40	H
5350.008	49.55	-27.82	34.20	43.17	54.00	4.45	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)
17941.333	40.86	-29.59	45.95	24.50	54.00	13.14	H
17974.700	40.68	-29.59	45.95	24.32	54.00	13.32	H
12291.367	37.36	-32.12	39.00	30.48	54.00	16.64	V
11836.700	37.31	-32.73	39.15	30.89	54.00	16.69	V
5458.908	42.00	-27.49	34.20	35.29	54.00	12.00	H
5447.365	41.81	-27.49	34.20	35.10	54.00	12.19	V

Channel 118

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)
17968.467	40.75	-29.59	45.95	24.39	54.00	13.25	H
17974.333	40.75	-29.59	45.95	24.39	54.00	13.25	V
12331.700	37.20	-32.39	38.95	30.64	54.00	16.80	H
12218.400	36.80	-32.12	38.90	30.02	54.00	17.20	V
8497.100	34.25	-34.28	37.30	31.23	54.00	19.75	V
8483.900	34.07	-34.28	37.30	31.05	54.00	19.93	V

Channel 134

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)
17952.333	40.62	-29.59	45.95	24.26	54.00	13.38	V
17946.100	40.56	-29.59	45.95	24.20	54.00	13.44	V
12330.233	37.89	-32.39	38.95	31.33	54.00	16.11	H
12292.100	36.97	-32.12	39.00	30.09	54.00	17.03	V
8306.800	34.70	-34.84	37.10	32.43	54.00	19.30	H
8338.333	34.32	-34.93	37.20	32.05	54.00	19.68	V

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)
17980.567	40.90	-29.59	45.95	24.54	54.00	13.10	H
17975.067	40.58	-29.59	45.95	24.22	54.00	13.42	V
12331.700	37.78	-32.39	38.95	31.22	54.00	16.22	V
12330.233	37.10	-32.39	38.95	30.54	54.00	16.90	H
5149.230	45.55	-28.00	34.00	39.55	54.00	8.45	H
5149.000	45.12	-28.00	34.00	39.12	54.00	8.88	V

Channel 40

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)
17957.833	40.85	-29.59	45.95	24.49	54.00	13.15	V
17937.300	40.75	-29.59	45.95	24.39	54.00	13.25	V
12332.067	37.07	-32.39	38.95	30.51	54.00	16.93	V
12305.300	37.02	-32.12	39.00	30.14	54.00	16.98	H
8264.633	34.16	-34.48	37.00	31.64	54.00	19.84	H
8495.633	33.78	-34.28	37.30	30.76	54.00	20.22	V

Channel 48

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)
17975.067	40.89	-29.59	45.95	24.53	54.00	13.11	H
17936.200	40.80	-29.59	45.95	24.44	54.00	13.20	H
12221.700	37.01	-32.12	38.90	30.23	54.00	16.99	V
12332.800	37.01	-32.39	38.95	30.45	54.00	16.99	H
8497.100	33.85	-34.28	37.30	30.83	54.00	20.15	H
8411.300	33.71	-34.42	37.30	30.83	54.00	20.29	V

Channel 52

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)
17943.900	40.98	-29.59	45.95	24.62	54.00	13.02	H
17971.767	40.43	-29.59	45.95	24.07	54.00	13.57	H
12331.700	37.44	-32.39	38.95	30.88	54.00	16.56	H
12308.600	36.87	-32.12	39.00	29.99	54.00	17.13	V
8495.633	34.47	-34.28	37.30	31.45	54.00	19.53	V
8471.800	34.12	-34.28	37.30	31.10	54.00	19.88	V

Channel 56

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)
17887.067	40.78	-29.59	45.95	24.42	54.00	13.22	H
17845.267	40.42	-29.59	45.95	24.06	54.00	13.58	V
12299.067	36.61	-32.12	39.00	29.73	54.00	17.39	V
12295.767	36.57	-32.12	39.00	29.69	54.00	17.43	H
8321.833	34.39	-34.93	37.20	32.12	54.00	19.61	H
8359.600	34.01	-34.93	37.20	31.74	54.00	19.99	V

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)
17953.067	40.87	-29.59	45.95	24.51	54.00	13.13	H
17977.267	40.48	-29.59	45.95	24.12	54.00	13.52	H
12333.167	37.05	-32.39	38.95	30.49	54.00	16.95	V
12261.300	37.03	-32.37	38.95	30.45	54.00	16.97	V
5351.608	42.88	-27.82	34.20	36.50	54.00	11.12	V
5350.016	42.72	-27.82	34.20	36.34	54.00	11.28	V

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)
17981.667	40.81	-29.59	45.95	24.45	54.00	13.19	V
17972.500	40.63	-29.59	45.95	24.27	54.00	13.37	H
12330.233	37.27	-32.39	38.95	30.71	54.00	16.73	H
12265.333	37.09	-32.37	38.95	30.51	54.00	16.91	H
5459.118	42.78	-27.49	34.20	36.07	54.00	11.22	H
5433.325	42.08	-27.94	34.30	35.72	54.00	11.92	V

Channel 120

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)
17945.367	41.10	-29.59	45.95	24.74	54.00	12.90	H
17976.533	41.01	-29.59	45.95	24.65	54.00	12.99	V
12309.333	37.40	-32.12	39.00	30.52	54.00	16.60	V
12329.133	37.35	-32.39	38.95	30.79	54.00	16.65	V
8493.067	34.45	-34.28	37.30	31.43	54.00	19.55	V
8479.867	33.98	-34.28	37.30	30.96	54.00	20.02	V

Channel 140

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)
17970.300	40.44	-29.59	45.95	24.08	54.00	13.56	V
17976.900	40.35	-29.59	45.95	23.99	54.00	13.65	V
12330.967	37.34	-32.39	38.95	30.78	54.00	16.66	H
12313.000	37.01	-32.12	39.00	30.13	54.00	16.99	V
8264.633	34.15	-34.48	37.00	31.63	54.00	19.85	V
8474.367	33.85	-34.28	37.30	30.83	54.00	20.15	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)
17935.467	40.65	-29.59	45.95	24.29	54.00	13.35	H
17974.333	40.52	-29.59	45.95	24.16	54.00	13.48	H
12332.800	37.84	-32.39	38.95	31.28	54.00	16.16	H
12329.500	37.23	-32.39	38.95	30.67	54.00	16.77	V
5148.440	48.48	-27.79	34.00	42.27	54.00	5.52	H
5147.280	48.21	-27.79	34.00	42.00	54.00	5.79	H

Channel 46

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)
17979.100	41.56	-29.59	45.95	25.20	54.00	12.44	H
17978.367	40.54	-29.59	45.95	24.18	54.00	13.46	H
12328.400	37.26	-32.39	38.95	30.70	54.00	16.74	V
12221.700	37.12	-32.12	38.90	30.34	54.00	16.88	H
8313.400	34.50	-34.84	37.10	32.23	54.00	19.50	V
8297.267	34.45	-34.84	37.10	32.18	54.00	19.55	V

Channel 54

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)
17940.233	40.80	-29.59	45.95	24.44	54.00	13.20	H
17939.867	40.71	-29.59	45.95	24.35	54.00	13.29	H
12218.767	37.25	-32.12	38.90	30.47	54.00	16.75	H
12330.233	37.14	-32.39	38.95	30.58	54.00	16.86	V
8354.100	34.10	-34.93	37.20	31.83	54.00	19.90	H
8056.000	34.00	-34.89	36.90	31.99	54.00	20.00	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)
17975.067	40.72	-29.59	45.95	24.36	54.00	13.28	V
17932.900	40.63	-29.59	45.95	24.27	54.00	13.37	V
12331.700	37.13	-32.39	38.95	30.57	54.00	16.87	V
12288.433	37.12	-32.12	39.00	30.24	54.00	16.88	V
5352.720	47.93	-27.82	34.20	41.55	54.00	6.07	V
5351.856	47.45	-27.82	34.20	41.07	54.00	6.55	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)
17934.733	40.78	-29.59	45.95	24.42	54.00	13.22	H
17974.333	40.68	-29.59	45.95	24.32	54.00	13.32	V
12330.967	37.93	-32.39	38.95	31.37	54.00	16.07	H
12332.067	37.16	-32.39	38.95	30.60	54.00	16.84	V
5459.012	43.63	-27.49	34.20	36.92	54.00	10.37	V
5458.727	42.87	-27.49	34.20	36.16	54.00	11.13	H

Channel 118

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)
17978.367	41.49	-29.59	45.95	25.13	54.00	12.51	H
17934.000	41.15	-29.59	45.95	24.79	54.00	12.85	V
12266.433	37.10	-32.37	38.95	30.52	54.00	16.90	V
12330.967	37.08	-32.39	38.95	30.52	54.00	16.92	V
8498.200	33.93	-34.28	37.30	30.91	54.00	20.07	H
8204.500	33.91	-34.94	36.90	31.95	54.00	20.09	V

Channel 134

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)
17937.300	40.74	-29.59	45.95	24.38	54.00	13.26	H
17938.033	40.53	-29.59	45.95	24.17	54.00	13.47	V
12332.433	37.23	-32.39	38.95	30.67	54.00	16.77	V
12333.167	37.20	-32.39	38.95	30.64	54.00	16.80	V
8498.200	34.01	-34.28	37.30	30.99	54.00	19.99	H
9494.067	33.76	-34.40	37.70	30.46	54.00	20.24	V

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)
17888.900	40.93	-29.59	45.95	24.57	54.00	13.07	V
17932.167	40.92	-29.59	45.95	24.56	54.00	13.08	H
12330.600	37.37	-32.39	38.95	30.81	54.00	16.63	V
12332.433	37.16	-32.39	38.95	30.60	54.00	16.84	V
5148.420	51.33	-27.79	34.00	45.12	54.00	2.67	V
5140.280	50.20	-27.79	34.00	43.99	54.00	3.80	V

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)
17943.900	40.56	-29.59	45.95	24.20	54.00	13.44	H
17979.467	40.32	-29.59	45.95	23.96	54.00	13.68	H
12332.800	37.65	-32.39	38.95	31.09	54.00	16.35	H
12333.167	36.82	-32.39	38.95	30.26	54.00	17.18	V
5352.040	50.67	-27.82	34.20	44.29	54.00	3.33	V
5356.328	50.62	-27.82	34.20	44.24	54.00	3.38	H

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)
17978.000	41.50	-29.59	45.95	25.14	54.00	12.50	V
17944.633	41.22	-29.59	45.95	24.86	54.00	12.78	V
12331.333	37.75	-32.39	38.95	31.19	54.00	16.25	H
12264.600	37.52	-32.37	38.95	30.94	54.00	16.48	V
5457.648	42.43	-27.49	34.20	35.72	54.00	11.57	V
5458.592	42.43	-27.49	34.20	35.72	54.00	11.57	V

Channel 122

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)
17975.800	41.29	-29.59	45.95	24.93	54.00	12.71	V
17832.067	41.06	-29.59	45.95	24.70	54.00	12.94	V
12264.600	38.42	-32.37	38.95	31.84	54.00	15.58	H
12332.800	37.64	-32.39	38.95	31.08	54.00	16.36	V
8498.200	34.84	-34.28	37.30	31.82	54.00	19.16	V
8307.167	34.54	-34.84	37.10	32.27	54.00	19.46	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)
17939.867	49.38	-29.59	45.95	33.02	74.00	24.62	H
17961.500	49.03	-29.59	45.95	32.67	74.00	24.97	V
12259.467	45.86	-32.37	38.95	39.28	74.00	28.14	V
12216.933	45.45	-32.12	38.90	38.67	74.00	28.55	V
5149.240	66.77	-28.00	34.00	60.77	74.00	7.23	V
5147.740	66.64	-27.79	34.00	60.43	74.00	7.36	V

Channel 40

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)
16844.267	49.13	-29.50	40.00	38.63	68.20	19.07	V
17973.967	49.08	-29.59	45.95	32.72	74.00	24.92	H
12017.100	45.57	-32.66	39.00	39.23	74.00	28.43	V
12082.000	45.41	-32.38	38.90	38.89	74.00	28.59	H
7991.100	43.12	-35.07	36.90	41.29	68.20	25.08	H
10000.433	42.97	-34.07	38.00	39.04	68.20	25.23	V

Channel 48

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)
17983.867	49.02	-29.59	45.95	32.66	74.00	24.98	V
17938.767	48.83	-29.59	45.95	32.47	74.00	25.17	V
12331.333	46.25	-32.39	38.95	39.69	74.00	27.75	H
12333.167	45.94	-32.39	38.95	39.38	74.00	28.06	V
8508.100	43.46	-34.28	37.30	40.44	68.20	24.74	H
10000.433	43.32	-34.07	38.00	39.39	68.20	24.88	H

Channel 52

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)
17940.233	49.63	-29.59	45.95	33.27	74.00	24.37	H
16868.100	48.93	-29.50	40.00	38.43	68.20	19.27	V
12305.300	45.38	-32.12	39.00	38.50	74.00	28.62	H
12011.233	45.31	-32.66	39.00	38.97	74.00	28.69	H
10037.467	43.09	-34.07	38.00	39.16	68.20	25.11	V
8480.967	42.92	-34.28	37.30	39.90	74.00	31.08	H

Channel 56

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)
17971.767	49.01	-29.59	45.95	32.65	74.00	24.99	V
17982.767	48.79	-29.59	45.95	32.43	74.00	25.21	H
12328.767	45.43	-32.39	38.95	38.87	74.00	28.57	H
11761.167	45.25	-32.71	39.20	38.76	74.00	28.75	H
10236.567	43.24	-34.09	38.00	39.33	68.20	24.96	V
10057.267	43.23	-33.75	38.05	38.93	68.20	24.97	V

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)
17985.700	49.68	-29.59	45.95	33.32	74.00	24.32	V
17940.233	49.42	-29.59	45.95	33.06	74.00	24.58	V
12286.600	45.23	-32.12	39.00	38.35	74.00	28.77	H
12330.600	45.06	-32.39	38.95	38.50	74.00	28.94	V
5350.568	66.17	-27.82	34.20	59.79	74.00	7.83	V
5350.256	66.05	-27.82	34.20	59.67	74.00	7.95	V

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)
17943.533	49.11	-29.59	45.95	32.75	74.00	24.89	H
17959.667	48.86	-29.59	45.95	32.50	74.00	25.14	V
12295.033	45.94	-32.12	39.00	39.06	74.00	28.06	V
12266.067	45.91	-32.37	38.95	39.33	74.00	28.09	V
5459.703	60.63	-27.49	34.20	53.92	74.00	13.37	V
5469.392	65.34	-27.49	34.20	58.63	68.20	2.86	H

Channel 120

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)
17477.867	49.75	-29.07	44.55	34.27	68.20	18.45	H
17935.833	49.66	-29.59	45.95	33.30	74.00	24.34	V
12330.600	45.82	-32.39	38.95	39.26	74.00	28.18	H
12328.400	45.45	-32.39	38.95	38.89	74.00	28.55	H
8241.167	43.50	-34.48	37.00	40.98	74.00	30.50	H
9635.600	43.04	-34.18	37.60	39.62	68.20	25.16	V

Channel 140

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)
17332.300	49.54	-28.74	43.40	34.88	68.20	18.66	H
17191.500	49.10	-29.08	42.05	36.13	68.20	19.10	V
12308.967	46.18	-32.12	39.00	39.30	74.00	27.82	H
12266.067	45.39	-32.37	38.95	38.81	74.00	28.61	H
5725.311	65.94	-27.47	34.10	59.31	68.20	2.26	H
5725.854	65.61	-27.47	34.10	58.98	68.20	2.59	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)
17955.633	49.31	-29.59	45.95	32.95	74.00	24.69	H
17967.733	49.03	-29.59	45.95	32.67	74.00	24.97	H
12033.233	45.15	-32.19	38.95	38.39	74.00	28.85	H
12333.167	45.01	-32.39	38.95	38.45	74.00	28.99	V
5149.590	64.80	-28.00	34.00	58.80	74.00	9.20	V
5148.510	64.59	-27.79	34.00	58.38	74.00	9.41	V

Channel 40

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)
16837.667	49.29	-29.50	40.00	38.79	68.20	18.91	H
17375.933	48.98	-28.74	43.40	34.32	68.20	19.22	H
11987.033	45.59	-32.66	39.00	39.25	74.00	28.41	V
12286.233	45.34	-32.12	39.00	38.46	74.00	28.66	H
9537.333	42.85	-33.73	37.60	38.98	68.20	25.35	V
10099.800	42.77	-34.28	38.10	38.95	68.20	25.43	V

Channel 48

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)
17937.300	49.69	-29.59	45.95	33.33	74.00	24.31	H
17940.233	49.48	-29.59	45.95	33.12	74.00	24.52	H
12332.800	45.44	-32.39	38.95	38.88	74.00	28.56	H
12333.167	45.42	-32.39	38.95	38.86	74.00	28.58	V
9980.633	42.81	-34.00	37.95	38.86	68.20	25.39	H
8534.867	42.72	-33.81	37.40	39.13	68.20	25.48	H

Channel 52

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)
17940.233	50.62	-29.59	45.95	34.26	74.00	23.38	H
17959.300	49.04	-29.59	45.95	32.68	74.00	24.96	V
12330.233	45.23	-32.39	38.95	38.67	74.00	28.77	V
12197.133	45.18	-32.12	38.90	38.40	74.00	28.82	H
8261.333	42.82	-34.48	37.00	40.30	74.00	31.18	V
9760.267	42.75	-33.67	38.00	38.42	68.20	25.45	H

Channel 56

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)
17935.100	48.88	-29.59	45.95	32.52	74.00	25.12	H
17972.133	48.78	-29.59	45.95	32.42	74.00	25.22	V
12333.167	46.10	-32.39	38.95	39.54	74.00	27.90	H
12037.267	45.49	-32.19	38.95	38.73	74.00	28.51	V
10247.567	43.15	-33.82	38.00	38.97	68.20	25.05	H
8204.133	43.10	-34.94	36.90	41.14	74.00	30.90	V

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)
17836.833	49.30	-29.59	45.95	32.94	74.00	24.70	V
17943.533	49.09	-29.59	45.95	32.73	74.00	24.91	H
12236.000	45.64	-32.37	38.95	39.06	74.00	28.36	H
12295.400	45.42	-32.12	39.00	38.54	74.00	28.58	H
5350.992	63.73	-27.82	34.20	57.35	74.00	10.27	V
5350.248	62.96	-27.82	34.20	56.58	74.00	11.04	V

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)
17338.167	49.48	-28.74	43.40	34.82	68.20	18.72	H
17977.267	49.29	-29.59	45.95	32.93	74.00	24.71	V
12291.733	45.52	-32.12	39.00	38.64	74.00	28.48	H
12331.333	45.51	-32.39	38.95	38.95	74.00	28.49	V
5459.770	55.94	-27.49	34.20	49.23	74.00	18.06	V
5467.818	61.07	-27.49	34.20	54.36	68.20	7.13	V

Channel 120

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)
17976.900	49.25	-29.59	45.95	32.89	74.00	24.75	H
17955.633	48.94	-29.59	45.95	32.58	74.00	25.06	H
12261.667	46.82	-32.37	38.95	40.24	74.00	27.18	H
12217.300	46.05	-32.12	38.90	39.27	74.00	27.95	H
8069.933	43.01	-35.06	36.90	41.17	74.00	30.99	V
9483.067	42.96	-34.40	37.70	39.66	74.00	31.04	V

Channel 140

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)
17936.200	50.92	-29.59	45.95	34.56	74.00	23.08	V
17845.267	49.71	-29.59	45.95	33.35	74.00	24.29	H
12263.133	45.91	-32.37	38.95	39.33	74.00	28.09	V
12326.200	45.71	-32.12	39.00	38.83	74.00	28.29	V
5726.554	62.44	-27.47	34.10	55.81	68.20	5.76	H
5726.851	61.83	-27.47	34.10	55.20	68.20	6.37	V

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)
17225.600	49.23	-29.08	42.05	36.26	68.20	18.97	V
17278.767	49.10	-29.54	42.90	35.74	68.20	19.10	H
12264.967	46.08	-32.37	38.95	39.50	74.00	27.92	V
12311.167	45.25	-32.12	39.00	38.37	74.00	28.75	V
5150.000	67.79	-28.00	34.00	61.79	74.00	6.21	V
5149.830	67.71	-28.00	34.00	61.71	74.00	6.29	V

Channel 46

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)
17935.833	49.10	-29.59	45.95	32.74	74.00	24.90	V
17871.300	49.00	-29.59	45.95	32.64	74.00	25.00	H
12331.333	45.52	-32.39	38.95	38.96	74.00	28.48	H
11944.867	45.44	-32.42	39.05	38.81	74.00	28.56	V
8403.600	43.05	-34.42	37.30	40.17	74.00	30.95	H
8874.033	42.77	-34.69	37.80	39.66	68.20	25.43	V

Channel 54

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)
17980.567	49.48	-29.59	45.95	33.12	74.00	24.52	V
17865.800	49.04	-29.59	45.95	32.68	74.00	24.96	V
12257.267	45.29	-32.37	38.95	38.71	74.00	28.71	V
12330.600	45.29	-32.39	38.95	38.73	74.00	28.71	H
10251.600	42.98	-33.82	38.00	38.80	68.20	25.22	H
10100.533	42.78	-34.28	38.10	38.96	68.20	25.42	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)
17976.167	49.67	-29.59	45.95	33.31	74.00	24.33	V
17973.600	49.17	-29.59	45.95	32.81	74.00	24.83	H
12330.233	45.89	-32.39	38.95	39.33	74.00	28.11	V
12156.433	45.25	-32.17	38.90	38.52	74.00	28.75	H
5350.264	64.89	-27.82	34.20	58.51	74.00	9.11	V
5350.008	64.24	-27.82	34.20	57.86	74.00	9.76	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)
17836.833	49.55	-29.59	45.95	33.19	74.00	24.45	H
17348.433	49.30	-28.74	43.40	34.64	68.20	18.90	V
12310.067	46.41	-32.12	39.00	39.53	74.00	27.59	H
12330.967	45.84	-32.39	38.95	39.28	74.00	28.16	V
5459.290	51.82	-27.49	34.20	45.11	74.00	22.18	H
5470.000	57.32	-27.49	34.20	50.61	68.20	10.88	V

Channel 118

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)
17967.733	49.32	-29.59	45.95	32.96	74.00	24.68	V
17364.200	49.29	-28.74	43.40	34.63	68.20	18.91	V
12314.100	45.89	-32.12	39.00	39.01	74.00	28.11	V
12330.967	45.79	-32.39	38.95	39.23	74.00	28.21	V
10247.200	42.76	-34.09	38.00	38.85	68.20	25.44	H
9211.000	42.72	-34.16	37.60	39.28	68.20	25.48	H

Channel 134

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)
17344.033	49.66	-28.74	43.40	35.00	68.20	18.54	V
17114.133	49.44	-29.25	41.40	37.29	68.20	18.76	H
12219.500	45.85	-32.12	38.90	39.07	74.00	28.15	H
12193.467	45.57	-32.12	38.90	38.79	74.00	28.43	H
5732.136	56.33	-27.47	34.10	49.70	68.20	11.87	H
5725.023	56.21	-27.47	34.10	49.58	68.20	11.99	V

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)
17020.267	48.72	-29.38	40.85	37.25	68.20	19.48	V
17985.700	48.64	-29.59	45.95	32.28	74.00	25.36	V
12262.033	45.94	-32.37	38.95	39.36	74.00	28.06	V
12261.300	45.60	-32.37	38.95	39.02	74.00	28.40	H
5149.000	60.15	-28.00	34.00	54.15	74.00	13.85	V
5149.230	59.69	-28.00	34.00	53.69	74.00	14.31	H

Channel 40

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)
17978.000	49.30	-29.59	45.95	32.94	74.00	24.70	V
17948.300	49.26	-29.59	45.95	32.90	74.00	24.74	H
12330.967	45.33	-32.39	38.95	38.77	74.00	28.67	V
12221.700	45.16	-32.12	38.90	38.38	74.00	28.84	V
8819.400	43.62	-33.97	37.80	39.79	68.20	24.58	H
8744.233	43.32	-34.52	37.90	39.94	68.20	24.88	H

Channel 48

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)
17971.400	49.42	-29.59	45.95	33.06	74.00	24.58	H
17931.433	49.15	-29.59	45.95	32.79	74.00	24.85	V
12258.733	45.50	-32.37	38.95	38.92	74.00	28.50	V
11974.567	45.31	-32.42	39.05	38.68	74.00	28.69	V
10145.633	43.37	-34.28	38.10	39.55	68.20	24.83	V
10163.600	42.95	-33.67	38.05	38.57	68.20	25.25	H

Channel 52

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)
17981.300	49.09	-29.59	45.95	32.73	74.00	24.91	V
17359.067	48.86	-28.74	43.40	34.20	68.20	19.34	V
12331.333	46.34	-32.39	38.95	39.78	74.00	27.66	H
12332.800	44.96	-32.39	38.95	38.40	74.00	29.04	V
10307.333	43.02	-33.88	38.00	38.90	68.20	25.18	V
8812.433	42.78	-33.97	37.80	38.95	68.20	25.42	H

Channel 56

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)
17833.533	49.62	-29.59	45.95	33.26	74.00	24.38	H
17373.367	49.13	-28.74	43.40	34.47	68.20	19.07	H
12296.133	45.62	-32.12	39.00	38.74	74.00	28.38	V
12330.600	45.56	-32.39	38.95	39.00	74.00	28.44	H
10288.633	43.22	-33.82	38.00	39.04	68.20	24.98	H
9988.700	42.58	-34.00	37.95	38.63	68.20	25.62	V

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)
17869.833	49.51	-29.59	45.95	33.15	74.00	24.49	H
17939.133	49.28	-29.59	45.95	32.92	74.00	24.72	H
12332.800	45.37	-32.39	38.95	38.81	74.00	28.63	V
12328.767	45.24	-32.39	38.95	38.68	74.00	28.76	V
5353.312	54.60	-27.82	34.20	48.22	74.00	19.40	V
5350.616	54.44	-27.82	34.20	48.06	74.00	19.56	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)
17343.300	49.13	-28.74	43.40	34.47	68.20	19.07	V
16028.433	49.07	-29.04	38.20	39.91	74.00	24.93	V
12016.000	45.55	-32.66	39.00	39.21	74.00	28.45	V
12330.600	45.28	-32.39	38.95	38.72	74.00	28.72	V
5459.440	51.98	-27.49	34.20	45.27	74.00	22.02	V
5468.568	56.32	-27.49	34.20	49.61	68.20	11.88	V

Channel 120

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)
17934.367	49.59	-29.59	45.95	33.23	74.00	24.41	H
16831.433	49.08	-29.24	39.85	38.47	68.20	19.12	H
12080.533	45.86	-32.38	38.90	39.34	74.00	28.14	V
12327.300	45.62	-32.39	38.95	39.06	74.00	28.38	H
10119.600	43.03	-34.28	38.10	39.21	68.20	25.17	H
10254.900	43.02	-33.82	38.00	38.84	68.20	25.18	H

Channel 140

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)
17972.867	48.88	-29.59	45.95	32.52	74.00	25.12	H
17953.433	48.75	-29.59	45.95	32.39	74.00	25.25	H
12306.767	45.40	-32.12	39.00	38.52	74.00	28.60	H
12262.033	45.35	-32.37	38.95	38.77	74.00	28.65	V
5726.352	61.76	-27.47	34.10	55.13	68.20	6.44	H
5725.014	61.09	-27.47	34.10	54.46	68.20	7.11	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)
17939.500	49.17	-29.59	45.95	32.81	74.00	24.83	H
17871.300	49.12	-29.59	45.95	32.76	74.00	24.88	V
12333.167	45.54	-32.39	38.95	38.98	74.00	28.46	H
12263.867	45.24	-32.37	38.95	38.66	74.00	28.76	H
5145.180	63.18	-27.79	34.00	56.97	74.00	10.82	V
5147.810	62.63	-27.79	34.00	56.42	74.00	11.37	V

Channel 46

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)
17439.733	49.94	-28.70	44.20	34.44	68.20	18.26	V
17344.033	49.40	-28.74	43.40	34.74	68.20	18.80	V
12007.200	46.05	-32.66	39.00	39.71	74.00	27.95	V
12193.467	45.72	-32.12	38.90	38.94	74.00	28.28	V
10026.100	43.12	-34.07	38.00	39.19	68.20	25.08	V
8853.867	42.90	-33.97	37.80	39.07	68.20	25.30	V

Channel 54

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)
17373.000	49.71	-28.74	43.40	35.05	68.20	18.49	V
17938.400	49.32	-29.59	45.95	32.96	74.00	24.68	H
11826.433	45.45	-32.09	39.20	38.34	74.00	28.55	V
12223.533	45.27	-32.12	38.90	38.49	74.00	28.73	V
10163.600	43.25	-33.67	38.05	38.87	68.20	24.95	H
9516.067	42.57	-33.73	37.60	38.70	68.20	25.63	V

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)
17951.233	49.12	-29.59	45.95	32.76	74.00	24.88	H
17962.233	49.11	-29.59	45.95	32.75	74.00	24.89	V
12196.400	45.66	-32.12	38.90	38.88	74.00	28.34	V
12331.333	45.29	-32.39	38.95	38.73	74.00	28.71	V
5352.720	62.50	-27.82	34.20	56.12	74.00	11.50	V
5352.968	61.33	-27.82	34.20	54.95	74.00	12.67	V

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)
17936.567	49.79	-29.59	45.95	33.43	74.00	24.21	H
17338.167	49.52	-28.74	43.40	34.86	68.20	18.68	V
11762.267	45.88	-32.71	39.20	39.39	74.00	28.12	V
12331.333	45.81	-32.39	38.95	39.25	74.00	28.19	V
5459.575	55.12	-27.49	34.20	48.41	74.00	18.88	H
5467.517	59.67	-27.49	34.20	52.96	68.20	8.53	H

Channel 118

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)
17984.967	49.14	-29.59	45.95	32.78	74.00	24.86	V
17443.400	49.12	-28.70	44.20	33.62	68.20	19.08	H
12333.167	46.39	-32.39	38.95	39.83	74.00	27.61	V
12262.400	46.23	-32.37	38.95	39.65	74.00	27.77	V
10109.333	43.29	-34.28	38.10	39.47	68.20	24.91	V
10128.400	42.85	-34.28	38.10	39.03	68.20	25.35	H

Channel 134

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)
17975.800	49.34	-29.59	45.95	32.98	74.00	24.66	V
17360.167	49.30	-28.74	43.40	34.64	68.20	18.90	H
12265.333	46.59	-32.37	38.95	40.01	74.00	27.41	H
12332.433	45.93	-32.39	38.95	39.37	74.00	28.07	V
5726.493	56.32	-27.47	34.10	49.69	68.20	11.88	H
5726.002	55.68	-27.47	34.10	49.05	68.20	12.52	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)
17973.233	49.15	-29.59	45.95	32.79	74.00	24.85	H
17976.533	48.83	-29.59	45.95	32.47	74.00	25.17	H
11988.500	46.77	-32.66	39.00	40.43	74.00	27.23	H
11988.133	45.95	-32.66	39.00	39.61	74.00	28.05	H
5131.500	64.60	-27.79	34.00	58.39	74.00	9.40	V
5144.060	64.60	-27.79	34.00	58.39	74.00	9.40	V

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)
17944.633	49.04	-29.59	45.95	32.68	74.00	24.96	V
17973.233	48.94	-29.59	45.95	32.58	74.00	25.06	V
12220.600	45.81	-32.12	38.90	39.03	74.00	28.19	V
12332.800	45.74	-32.39	38.95	39.18	74.00	28.26	H
5352.136	67.90	-27.82	34.20	61.52	74.00	6.10	H
5353.112	65.00	-27.82	34.20	58.62	74.00	9.00	H

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)
17980.933	50.03	-29.59	45.95	33.67	74.00	23.97	V
17406.733	50.02	-29.44	43.80	35.66	68.20	18.18	V
12083.833	46.18	-32.38	38.90	39.66	74.00	27.82	V
12329.500	46.02	-32.39	38.95	39.46	74.00	27.98	V
5459.658	54.84	-27.49	34.20	48.13	74.00	19.16	V
5469.655	57.61	-27.49	34.20	50.90	68.20	10.59	H

Channel 122

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)
17022.833	49.59	-29.38	40.85	38.12	68.20	18.61	V
17978.000	49.47	-29.59	45.95	33.11	74.00	24.53	V
12237.100	45.89	-32.37	38.95	39.31	74.00	28.11	H
12264.967	45.73	-32.37	38.95	39.15	74.00	28.27	H
5726.011	56.79	-27.47	34.10	50.16	68.20	11.41	H
5725.171	56.44	-27.47	34.10	49.81	68.20	11.76	H

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

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement uncertainty:

Expanded measurement uncertainty for this test item is $U = 3.10\text{dB}$, $k=2$.

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
		With charger AE5		
		802.11a	Idle	
0.15 to 0.5	66 to 56	Fig.58	Fig.59	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 (dB μ V)	Result (dB μ V)		Conclusion
		With charger AE5		
		802.11a	Idle	
0.15 to 0.5	67 56 to 46	Fig.58	Fig.59	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:

Traffic:

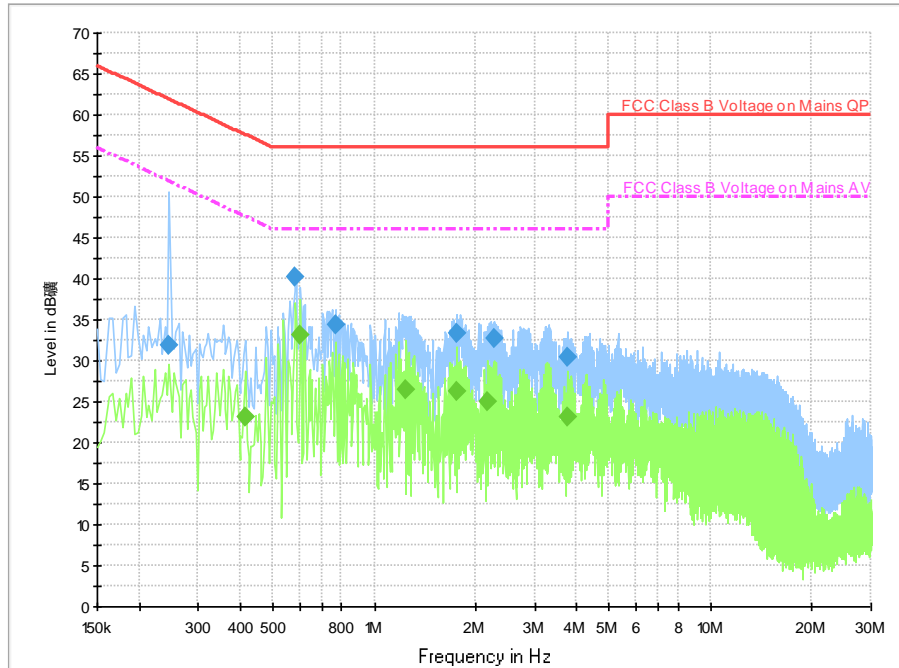


Fig.58 Conducted Emission (802.11a, Ch36, TX)

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.246000	31.8	2000.0	9.000	On	N	19.7	30.1	61.9
0.582000	40.3	2000.0	9.000	On	L1	19.7	15.7	56.0
0.766000	34.3	2000.0	9.000	On	L1	19.7	21.7	56.0
1.762000	33.3	2000.0	9.000	On	L1	19.6	22.7	56.0
2.262000	32.7	2000.0	9.000	On	L1	19.6	23.3	56.0
3.738000	30.3	2000.0	9.000	On	L1	19.6	25.7	56.0

Final Result 2

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.414000	23.2	2000.0	9.000	On	L1	19.7	24.3	47.6
0.602000	33.2	2000.0	9.000	On	L1	19.7	12.8	46.0
1.246000	26.5	2000.0	9.000	On	L1	19.6	19.5	46.0
1.762000	26.2	2000.0	9.000	On	L1	19.6	19.8	46.0
2.174000	24.9	2000.0	9.000	On	L1	19.6	21.1	46.0
3.738000	23.2	2000.0	9.000	On	L1	19.6	22.8	46.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers

Idle:

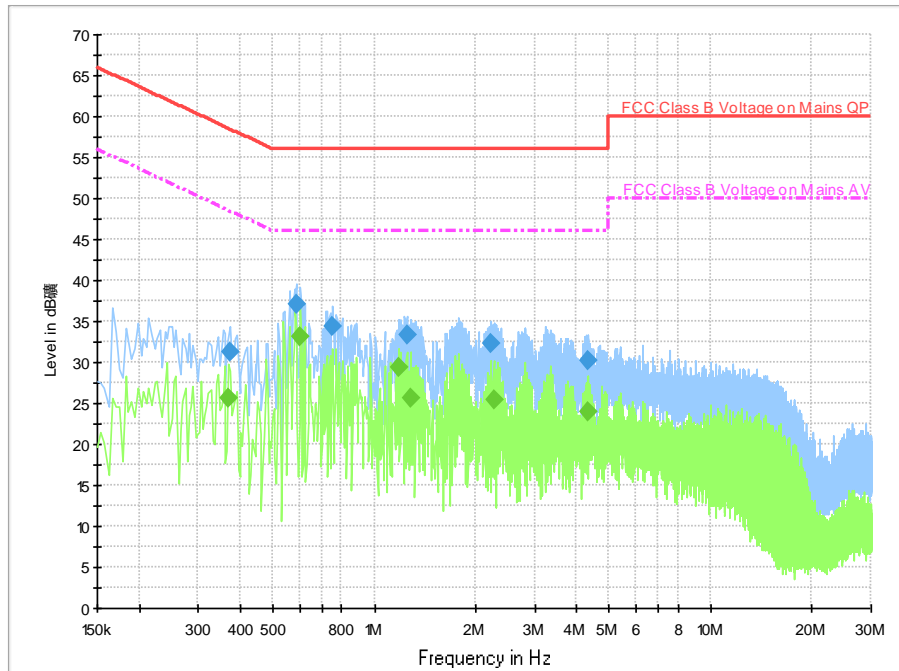


Fig.59 Conducted Emission(802.11a, IDLE)

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.374000	31.3	2000.0	9.000	On	L1	19.7	27.1	58.4
0.586000	37.1	2000.0	9.000	On	L1	19.7	18.9	56.0
0.754000	34.4	2000.0	9.000	On	L1	19.7	21.6	56.0
1.250000	33.4	2000.0	9.000	On	L1	19.6	22.6	56.0
2.218000	32.4	2000.0	9.000	On	L1	19.6	23.6	56.0
4.306000	30.2	2000.0	9.000	On	L1	19.6	25.8	56.0

Final Result 2

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.370000	25.6	2000.0	9.000	On	L1	19.7	22.9	48.5
0.602000	33.2	2000.0	9.000	On	L1	19.7	12.8	46.0
1.182000	29.3	2000.0	9.000	On	L1	19.7	16.7	46.0
1.282000	25.6	2000.0	9.000	On	L1	19.7	20.4	46.0
2.262000	25.5	2000.0	9.000	On	L1	19.6	20.5	46.0
4.338000	24.0	2000.0	9.000	On	L1	19.6	22.0	46.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers

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% of the 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
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Measurement Result:

Mode	Frequency	99% Occupied bandwidth (MHz)		conclusion
		Fig.	Value	
802.11a	5180 MHz	Fig.60	17.23	P
	5200 MHz	Fig.61	17.26	P
	5240 MHz	Fig.62	17.23	P
802.11n HT20	5180 MHz	Fig.63	18.27	P
	5200 MHz	Fig.64	18.33	P
	5240 MHz	Fig.65	18.33	P
802.11ac HT40	5190 MHz	Fig.66	36.28	P
	5230 MHz	Fig.67	36.28	P
802.11ac HT80	5210 MHz	Fig.68	75.64	P

Conclusion: PASS
Test graphs as below:

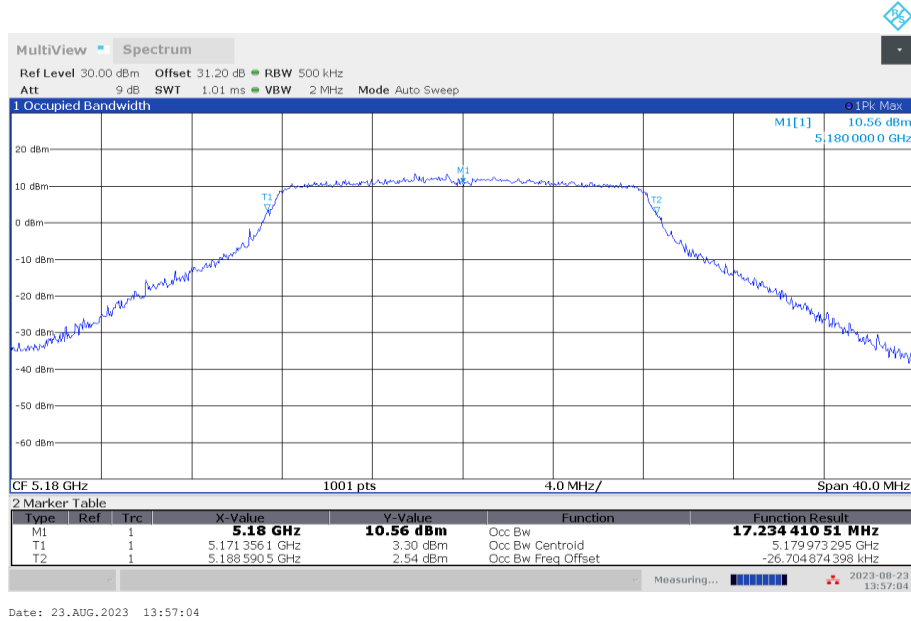


Fig.60 99% Occupied bandwidth (802.11a, 5180MHz)

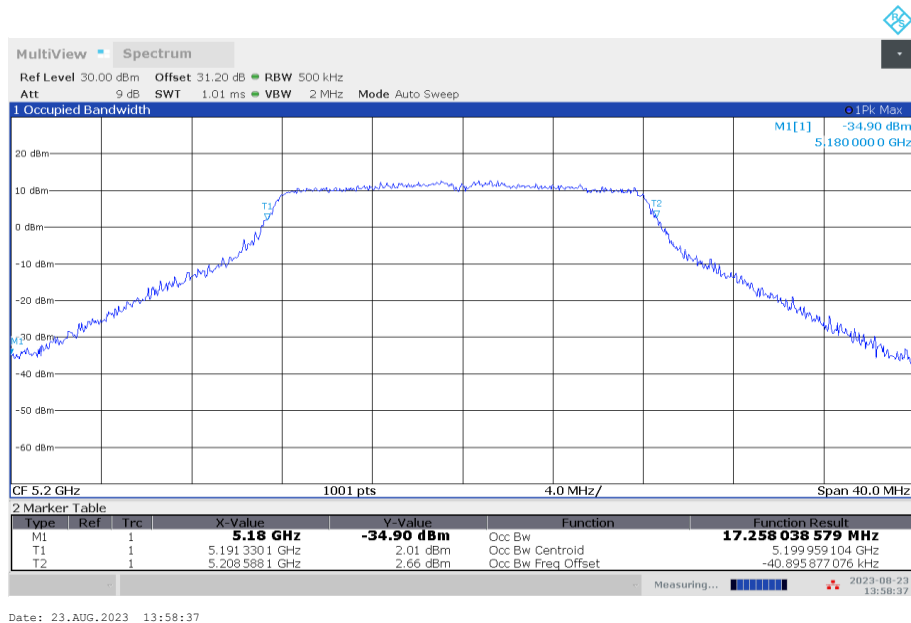


Fig.61 99% Occupied bandwidth (802.11a, 5200MHz)

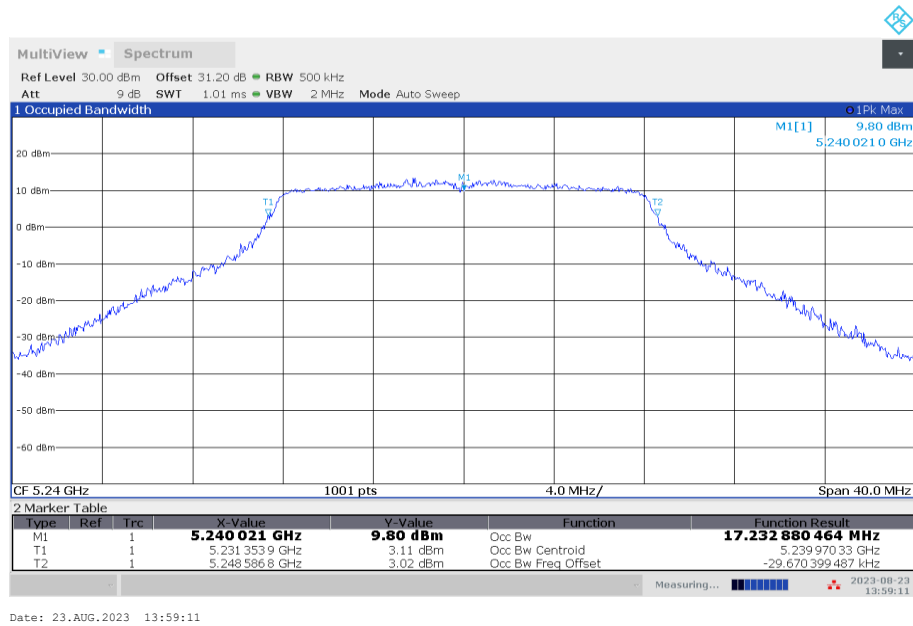
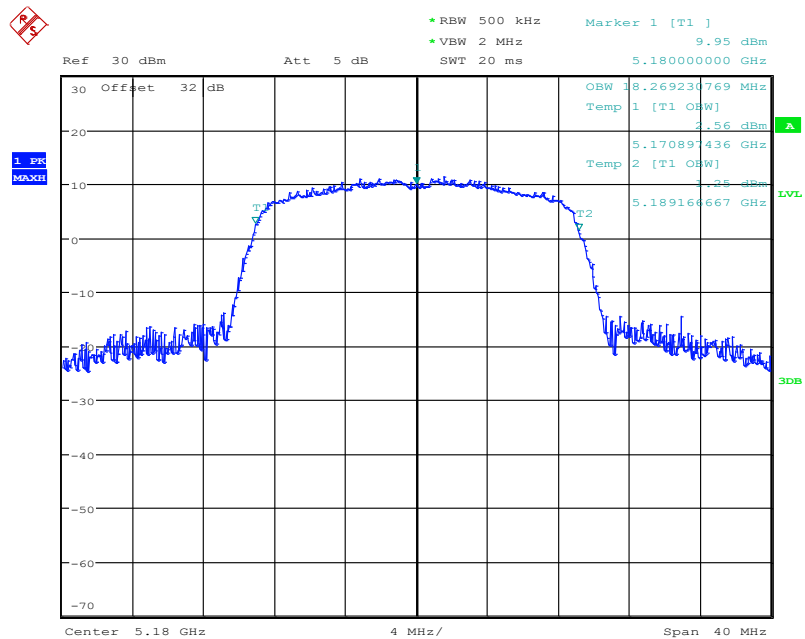
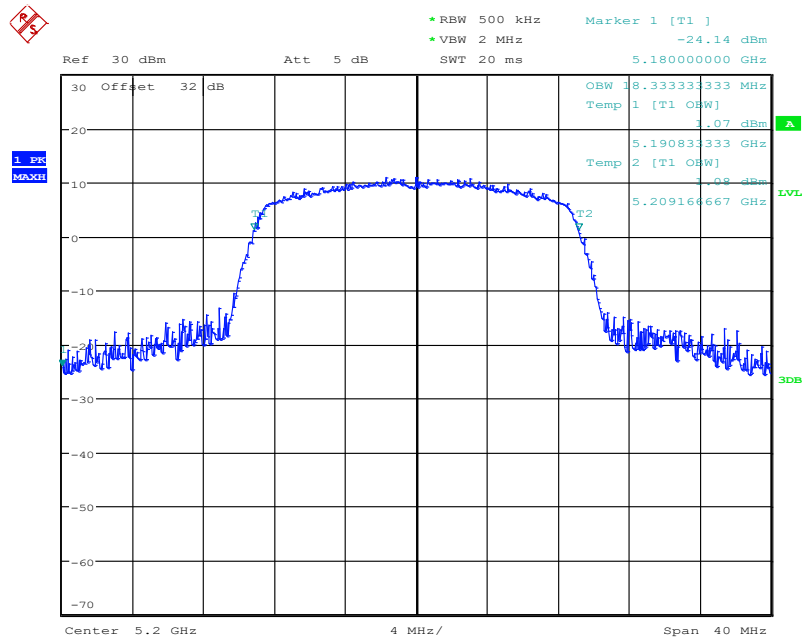


Fig.62 99% Occupied bandwidth (802.11a, 5240MHz)



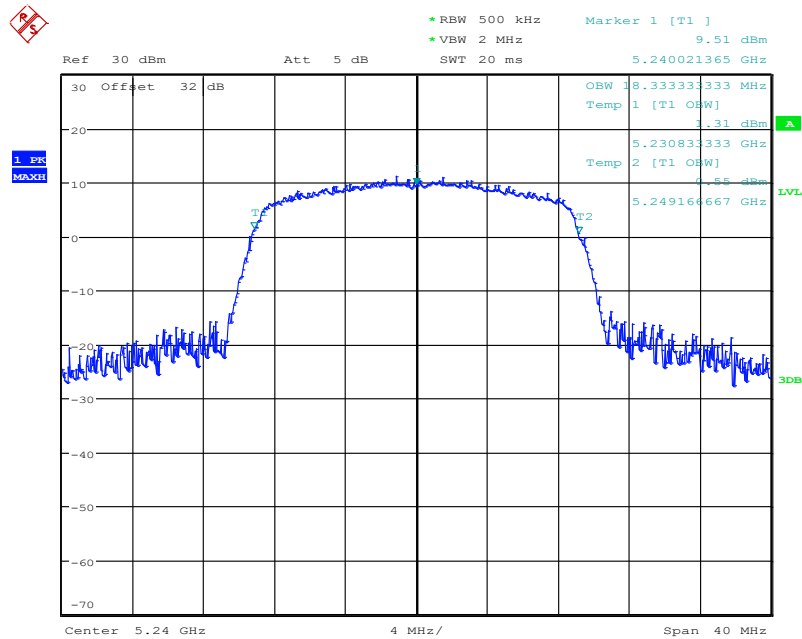
Date: 16.AUG.2023 15:49:31

Fig.63 99% Occupied bandwidth (802.11n-HT20, 5180MHz)



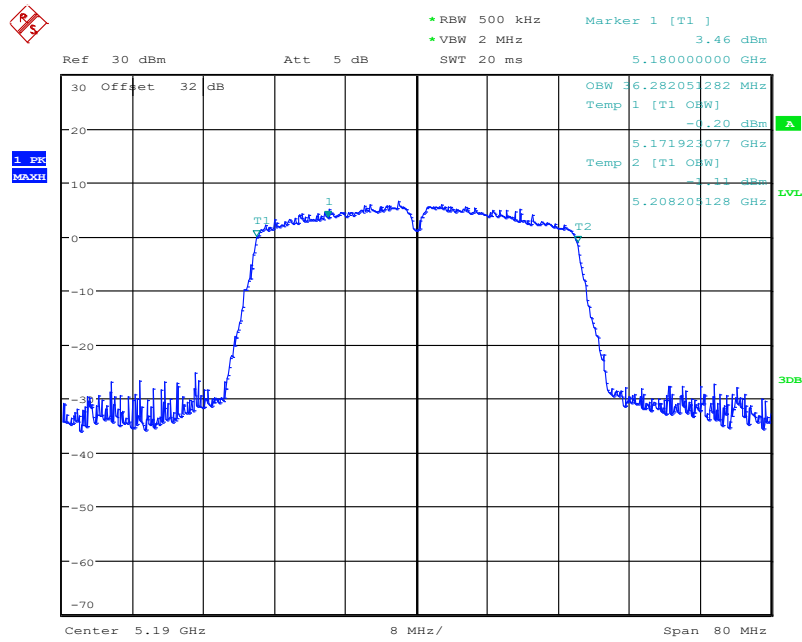
Date: 16.AUG.2023 15:52:57

Fig.64 99% Occupied bandwidth (802.11n-HT20, 5200MHz)



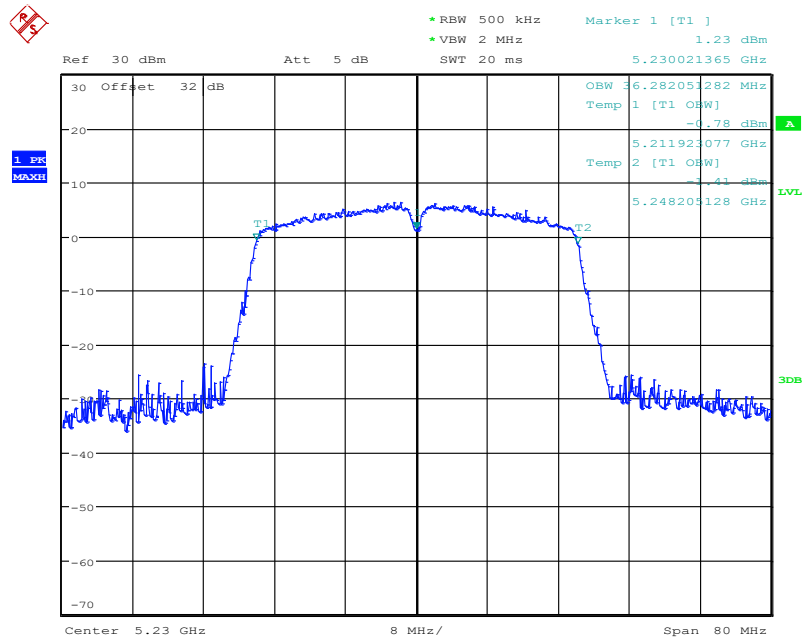
Date: 16.AUG.2023 15:56:45

Fig.65 99% Occupied bandwidth (802.11n-HT20, 5240MHz)



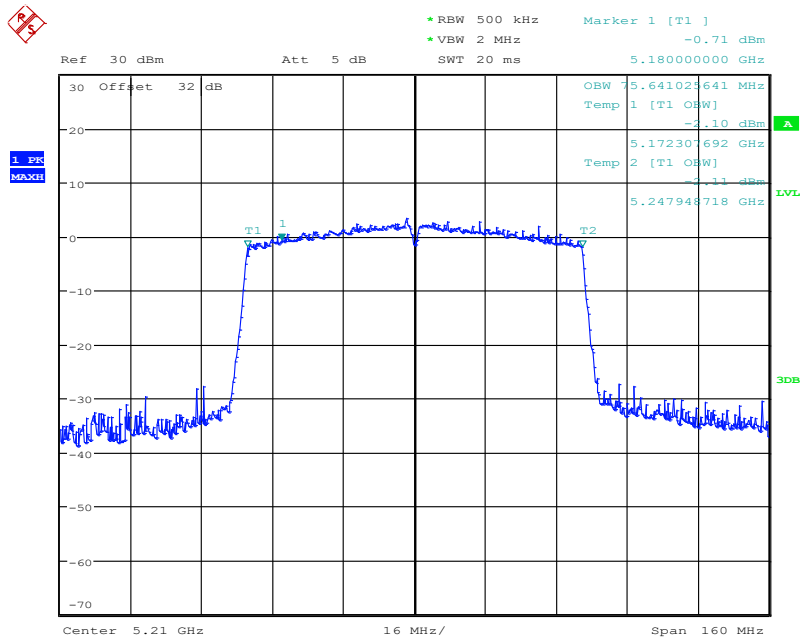
Date: 16.AUG.2023 15:06:19

Fig.66 99% Occupied bandwidth (802.11ac-HT40, 5190MHz)



Date: 16.AUG.2023 15:10:01

Fig.67 99% Occupied bandwidth (802.11ac-HT40, 5230MHz)



Date: 16.AUG.2023 15:33:59

Fig.68 99% Occupied bandwidth (802.11ac-HT80, 5210MHz)

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).

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.

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 26th day of June 2023.



Mr. Trace McInturf, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7049.01
Valid to July 31, 2024

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

*** END OF REPORT BODY ***