FCC PART 15E
TEST REPORT
No.24T04Z100676-026

for

COOSEA GROUP (HK) COMPANY LIMITED

Smart Phone

SN509A/SN509C

FCC ID: 2A28USN509

with

Hardware Version: 1.0

Software Version: SN509A:SN509AA10017 /

SN509C:SN509CC10017

Issued Date: 2024-06-28

Note:

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

Test Laboratory:

CTTL-Telecommunication Technology Labs, CAICT

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

Tel:+86(0)10-62304633-2512, Fax:+86(0)10-62304633-2504

Email: cttl_terminals@caict.ac.cn, website: www.caict.ac.cn

REPORT HISTORY

Report Number	Revision	Description	Issue Date
24T04Z100676-026	Rev.0	1st edition	2024-06-28

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

CONTENTS

1. Test Laboratory

1.1. Introduction & Accreditation

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

1.2. Testing Location

Conducted testing Location: CTTL(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

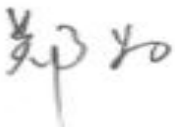
Testing Start Date: 2024-05-09

Testing End Date: 2024-06-27

1.5. Signature

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:	COOSEA GROUP (HK) COMPANY LIMITED
Address:	UNIT 5-6 16/F MULTIFIELD PLAZA 3-7A PRAT AVENUE TSIMSHATSUI KL
Contact:	Zhao jiandong
Postal Code:	/
Email:	zhaojiandong@cooseagroup.com
Telephone:	137-5984-9661
Fax:	/

2.2. Manufacturer Information

Company Name:	COOSEA GROUP (HK) COMPANY LIMITED
Address:	UNIT 5-6 16/F MULTIFIELD PLAZA 3-7A PRAT AVENUE TSIMSHATSUI KL
Contact:	Zhao jiandong
Postal Code:	/
Email:	zhaojiandong@cooseagroup.com
Telephone:	137-5984-9661
Fax:	/

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

3.1. About EUT

Description	Smart Phone
Model name	SN509A/SN509C
FCC ID	2A28USN509
WLAN Frequency Band	ISM Bands: -5150MHz~5250MHz -5250MHz~5350MHz -5470MHz~5725MHz
Type of modulation	OFDM
Antenna	Integral Antenna
Nominal Voltage	3.8V
Extreme High Voltage	4.4V
Extreme Low Voltage	3.6V

Note：The difference between SN509A and SN509C is that the back cover color and logo are different.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
UT25a	352095330005327	1.0	SN509AA10017	2024-04-29
UT61a	352095330010269	1.0	SN509AA10017	2024-06-21
UT42a	352095330006499	1.0	SN509AA10017	2024-05-07
UT57a	352095330007109	1.0	SN509AA10017	2024-06-06

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

UT25a and UT61a is used for Conduction test, UT42a and UT57a is used for Radiation test.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Model	Manufacturer
AE1	Battery1	BL-A67CT	Huizhou Highpower Technology Co., Ltd.
AE2	Charger1	HJ-0503000-US	SHENZHEN HUAJIN ELECTRON CO.,LTD.
AE3	USB Cable1	FKY-24-050	ShenZhen FKY-QY Hardware&Electronics.,Ltd.

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

3.4. General Description

The Equipment under Test (EUT) is a model of Smart Phone with integrated antenna and inbuilt battery.

It consists of normal options: travel charger, USB cable.

Manual and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the client.

3.5. Interpretation of the Test Environment

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

Measurement Uncertainty

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

4. Reference Documents

4.1. Documents supplied by applicant

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

4.2. Reference Documents for testing

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

FCC Part15	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	2013
UNII: KDB 789033 D02	General U-NII Test Procedures New Rules v02r01	2017-12

5. Laboratory Environment

Conducted RF performance testing is performed in shielding room.

EMC performance testing is performed in Semi-anechoic chamber.

6. Test Results

6.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of 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**
Radiated Unwanted Emission	15.407, 15.205, 15.209	/	**P**
AC Powerline Conducted Emission	15.107, 15.207	/	**P**
99% Occupied bandwidth	/	/	**P**
Transmit Power Control	15.407	/	**NA**

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

Terms used in Verdict column

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

Note:

All test results are derived from the DUT with model SN509A.

6.2. Statements

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

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

6.3. Test Conditions

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

Temperature	26°C
Voltage	3.8V
Humidity	44%

7. Test Facilities Utilized

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Vector Signal Analyzer	FSQ40	200089	Rohde & Schwarz	1 year	2024-07-04
2	Vector Signal Analyzer	FSW67	104051	Rohde & Schwarz	1 year	2025-04-01
3	Test Receiver	ESCI 3	100766	R&S	1 year	2025-05-18
4	LISN	ENV216	101459	R&S	1 year	2025-06-16
5	Attenuator	10dB/2W	/	Rosenberger	/	/
6	Shielding Room	S81	/	ETS-Lindgren	/	/

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver	ESW44	103015	R&S	1 year	2025-02-17
2	EMI Antenna	VULB 9163	482	SCHWARZBECK	1 year	2025-06-19
3	EMI Antenna	3117	00139065	ETS-Lindgren	1 year	2024-11-22
4	EMI Antenna	LB-180400-25-C-KF	2110084000006	A-INFO	1 year	2024-07-11

8. Measurement Uncertainty

8.1 Transmitter Output Power

Measurement Uncertainty: 0.387dB,k=1.96

8.2 Peak Power Spectral Density

Measurement Uncertainty: 0.705dB,k=1.96

8.3 26dB Emission Bandwidth

Measurement Uncertainty: 60.80Hz,k=1.96

8.4 Band Edges Compliance

Measurement Uncertainty : 0.62dB,k=1.96

8.5 Spurious Emissions

Conducted (k=1.96)

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

8.6 Radiated Unwanted Emission

Frequency Range	Uncertainty(dB) (k=2)
9kHz-30MHz	3.96
30MHz ≤ f ≤ 1GHz	5.29
1GHz ≤ f ≤18GHz	5.62
18GHz ≤ f ≤40GHz	3.52

8.7 AC Power-line Conducted Emission

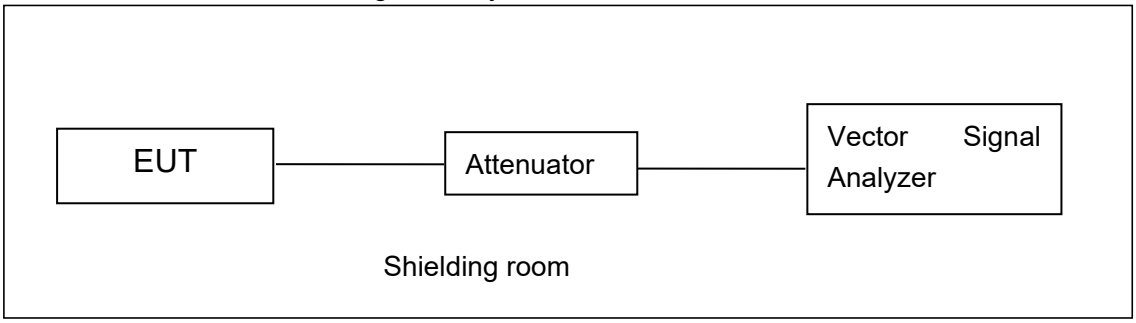
Measurement Uncertainty : 3.10 dB,k=2

ANNEX A: Detailed Test Results

A.1. Measurement Method

A.1.1. Conducted Measurements

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



A.1.2. Radiated Emission Measurements

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

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

A.2. Maximum output Power

Measurement Limit and Method:

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

Limit use the less value, and B is the 26dB bandwidth.

The measurementmethod SA-2 is made according to KDB 789033

A.2.1 Antenna Gain

Antenna gain is 1.8dBi and the value is supplied by the applicant or manufacturer.

A.2.2 Maximum output Power-Conducted

EUT ID: UT25a UT61a

Measurement Results:

802.11a mode

Mode	Frequency	Test Result (dBm)							
		Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
802.11a	5180MHz	17.73	/	/	/	/	/	/	/
	5200MHz	17.65	/	/	/	/	/	/	/
	5240MHz	17.76	/	/	/	/	/	/	/
	5260MHz	17.82	/	/	/	/	/	/	/
	5280MHz	17.69	/	/	/	/	/	/	/
	5320MHz	17.53	/	/	/	/	/	/	/
	5500MHz	13.21	/	/	/	/	/	/	/
	5580MHz	17.93	/	/	/	/	/	/	/
	5700MHz	12.49	/	/	/	/	/	/	/
	5720MHz	17.71	/	/	/	/	/	/	/

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	16.58	/	/	/	/	/	/	/
	5200MHz	16.55	/	/	/	/	/	/	/
	5240MHz	16.64	/	/	/	/	/	/	/
	5260MHz	16.71	/	/	/	/	/	/	/
	5280MHz	16.62	/	/	/	/	/	/	/
	5320MHz	16.45	/	/	/	/	/	/	/
	5500MHz	13.41	/	/	/	/	/	/	/

	5580MHz	16.89	/	/	/	/	/	/	/
	5700MHz	12.33	/	/	/	/	/	/	/
	5720MHz	16.69	/	/	/	/	/	/	/

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

802.11ac-VHT20 mode

Mode	Frequency	Test Result (dBm)								
		Data Rate								
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
802.11ac (VHT20)	5180MHz	15.65	/	/	/	/	/	/	/	/
	5200MHz	15.58	/	/	/	/	/	/	/	/
	5240MHz	15.73	/	/	/	/	/	/	/	/
	5260MHz	15.69	/	/	/	/	/	/	/	/
	5280MHz	15.55	/	/	/	/	/	/	/	/
	5320MHz	15.46	/	/	/	/	/	/	/	/
	5500MHz	13.34	/	/	/	/	/	/	/	/
	5580MHz	15.83	/	/	/	/	/	/	/	/
	5700MHz	12.37	/	/	/	/	/	/	/	/
	5720MHz	15.74	/	/	/	/	/	/	/	/

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	16.67	/	/	/	/	/	/	/
	5230MHz	16.59	/	/	/	/	/	/	/
	5270MHz	16.58	/	/	/	/	/	/	/
	5310MHz	15.31	/	/	/	/	/	/	/
	5510MHz	11.40	/	/	/	/	/	/	/
	5550MHz	16.18	/	/	/	/	/	/	/
	5670MHz	15.78	/	/	/	/	/	/	/
	5710MHz	16.71	/	/	/	/	/	/	/

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

802.11ac-VHT40 mode

Mode	Frequency	Test Result (dBm)									
		Data Rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
802.11ac (VHT40)	5190MHz	14.58	/	/	/	/	/	/	/	/	/
	5230MHz	14.63	/	/	/	/	/	/	/	/	/
	5270MHz	14.65	/	/	/	/	/	/	/	/	/
	5310MHz	14.52	/	/	/	/	/	/	/	/	/
	5510MHz	11.34	/	/	/	/	/	/	/	/	/
	5550MHz	14.12	/	/	/	/	/	/	/	/	/
	5670MHz	14.86	/	/	/	/	/	/	/	/	/
	5710MHz	14.67	/	/	/	/	/	/	/	/	/

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

802.11ac-VHT80 mode

Mode	Frequency	Test Result (dBm)									
		Data Rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
802.11ac (VHT80)	5210MHz	14.31	/	/	/	/	/	/	/	/	/
	5290MHz	14.72	/	/	/	/	/	/	/	/	/
	5530MHz	14.01	/	/	/	/	/	/	/	/	/
	5610MHz	14.73	/	/	/	/	/	/	/	/	/
	5690MHz	14.39	/	/	/	/	/	/	/	/	/

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%

10:36:41 15.05.2024

Maximum output Power：11a CH116

Conclusion: PASS

A.3. Peak Power Spectral Density (conducted)

Measurement Limit:

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

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

EUT ID: UT25a UT61a

Measurement Results:

TestMode	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	5180	7.34	≤11.00	PASS
	5200	7.64	≤11.00	PASS
	5240	7.87	≤11.00	PASS
	5260	7.53	≤11.00	PASS
	5280	7.79	≤11.00	PASS
	5320	7.22	≤11.00	PASS
	5500	3.21	≤11.00	PASS
	5580	7.51	≤11.00	PASS
	5700	2.35	≤11.00	PASS
	5720	7.65	≤11.00	PASS
11N20SISO	5180	5.94	≤11.00	PASS
	5200	6.15	≤11.00	PASS
	5240	6.47	≤11.00	PASS
	5260	6.10	≤11.00	PASS
	5280	5.68	≤11.00	PASS
	5320	5.71	≤11.00	PASS
	5500	2.88	≤11.00	PASS
	5580	6.08	≤11.00	PASS
	5700	1.81	≤11.00	PASS
	5720	6.49	≤11.00	PASS
11N40SISO	5190	3.11	≤11.00	PASS
	5230	3.15	≤11.00	PASS
	5270	3.16	≤11.00	PASS
	5310	2.01	≤11.00	PASS
	5510	-1.94	≤11.00	PASS
	5550	2.97	≤11.00	PASS
	5670	2.65	≤11.00	PASS
	5710	3.79	≤11.00	PASS
11AC80SISO	5210	-2.19	≤11.00	PASS
	5290	-2.56	≤11.00	PASS
	5530	-2.43	≤11.00	PASS

	5610	-2.40	≤11.00	PASS
	5690	-1.52	≤11.00	PASS

Peak Power Spectral Density:11a CH48

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

EUT ID: UT25a UT61a

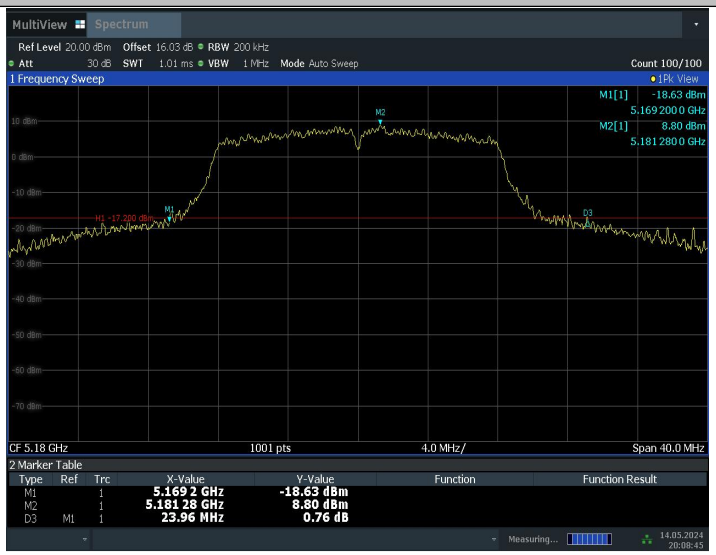
Measurement Result:

TestMode	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	5180	23.96	5169.20	5193.16	---	---
	5200	22.68	5188.64	5211.32	---	---
	5240	24.56	5227.44	5252.00	---	---
	5260	23.92	5248.00	5271.92	---	---
	5280	23.84	5268.76	5292.60	---	---
	5320	25.12	5307.44	5332.56	---	---
	5500	20.04	5489.92	5509.96	---	---
	5580	29.20	5563.84	5593.04	---	---
	5700	19.96	5689.96	5709.92	---	---
	5720	28.24	5705.20	5733.44	---	---
11N20SISO	5180	23.36	5167.76	5191.12	---	---
	5200	22.36	5189.24	5211.60	---	---
	5240	24.48	5227.04	5251.52	---	---
	5260	24.16	5247.40	5271.56	---	---
	5280	23.24	5269.04	5292.28	---	---
	5320	24.28	5308.32	5332.60	---	---
	5500	20.28	5489.84	5510.12	---	---
	5580	25.28	5567.88	5593.16	---	---
	5700	20.20	5689.88	5710.08	---	---
	5720	26.68	5706.80	5733.48	---	---
11N40SISO	5190	45.28	5168.24	5213.52	---	---
	5230	45.84	5204.80	5250.64	---	---
	5270	48.08	5244.64	5292.72	---	---
	5310	41.12	5289.44	5330.56	---	---
	5510	40.96	5489.52	5530.48	---	---
	5550	53.68	5521.44	5575.12	---	---
	5670	49.20	5642.00	5691.20	---	---
	5710	50.80	5684.80	5735.60	---	---
11AC80SISO	5210	80.96	5169.52	5250.48	---	---
	5290	81.60	5249.20	5330.80	---	---

	5530	81.60	5489.04	5570.64	---	---
	5610	83.52	5567.28	5650.80	---	---
	5690	81.28	5649.36	5730.64	---	---

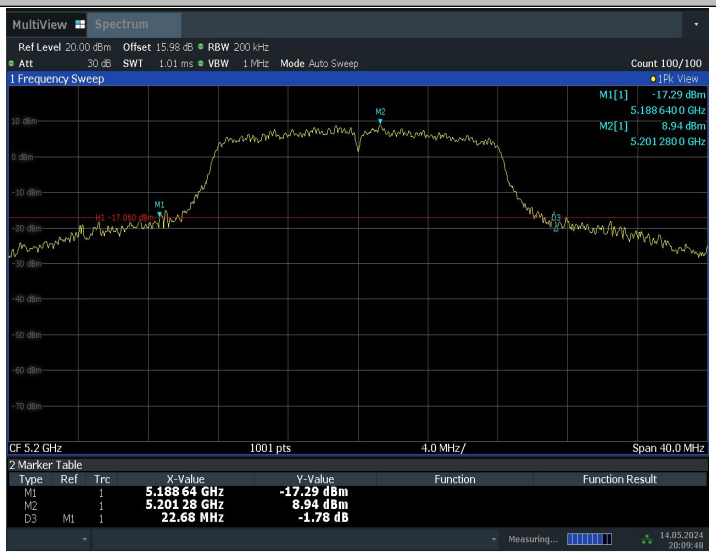
Test graphs as below:

11A_5180



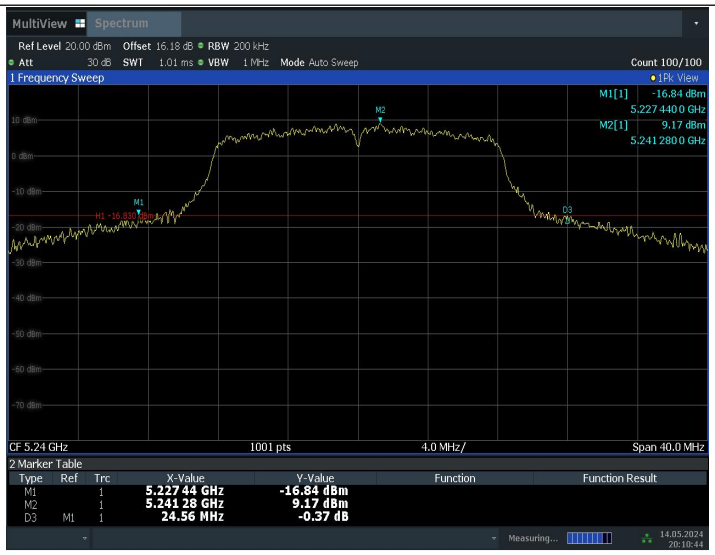
20:08:46 14.05.2024

11A_5200



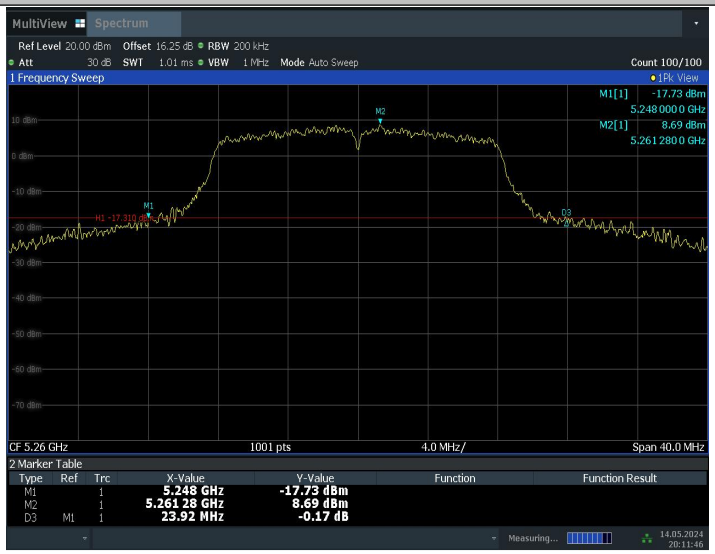
20:09:48 14.05.2024

11A_5240



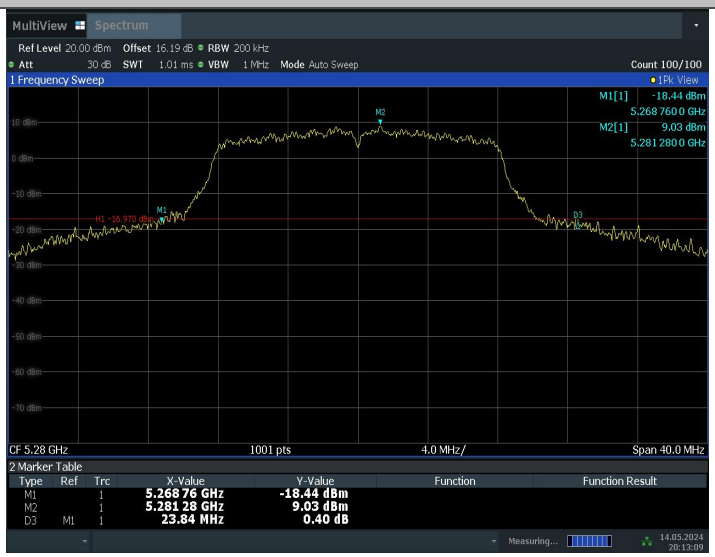
20:10:45 14.05.2024

11A_5260



20:11:46 14.05.2024

11A_5280

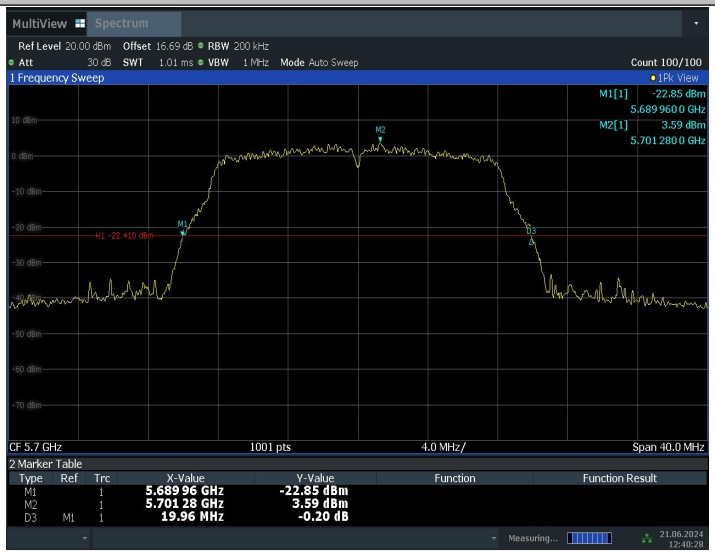


20:13:10 14.05.2024

11A_5320
 20:14:12 14.05.2024
11A_5500
 12:38:44 21.06.2024
11A_5580

20:16:15 14.05.2024

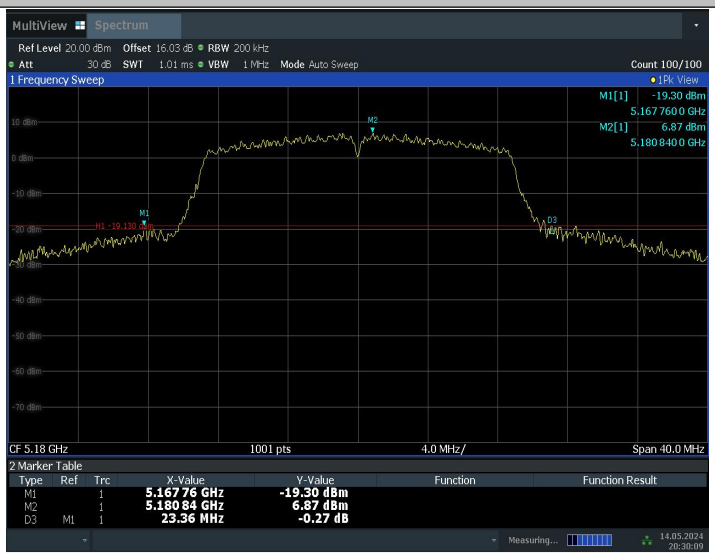
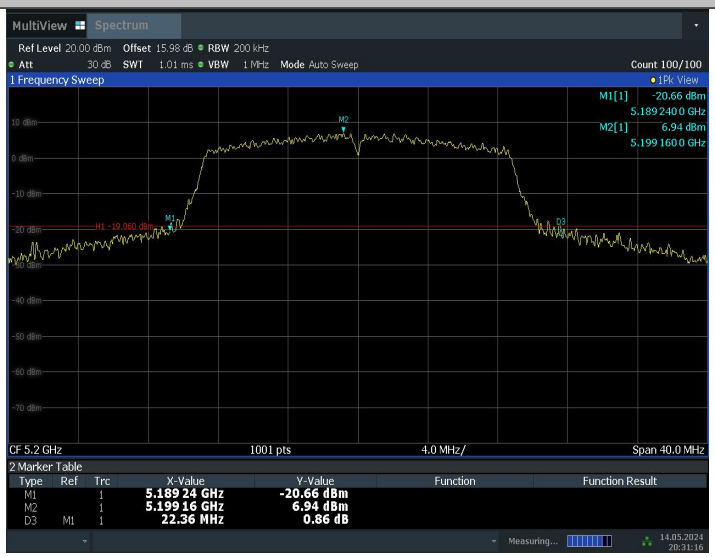
11A_5700



12:40:28 21.06.2024

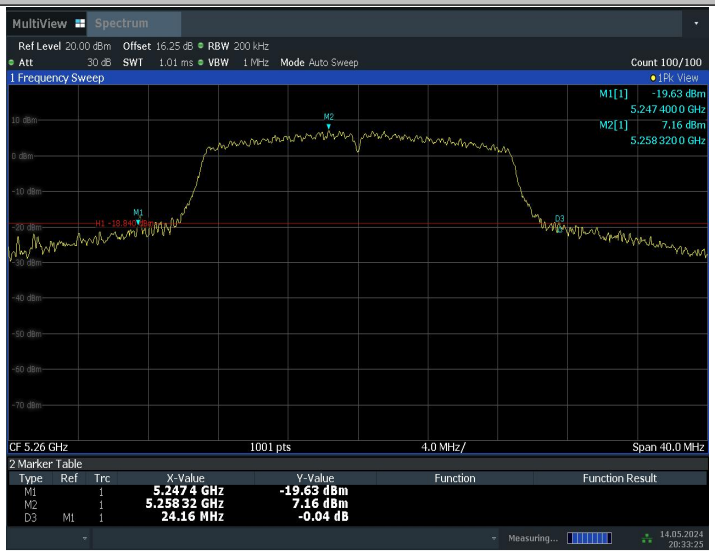
11A_5720

20:21:54 14.05.2024

11N20SISO_5180
 20:30:09 14.05.2024
11N20SISO_5200
 20:31:17 14.05.2024
11N20SISO_5240

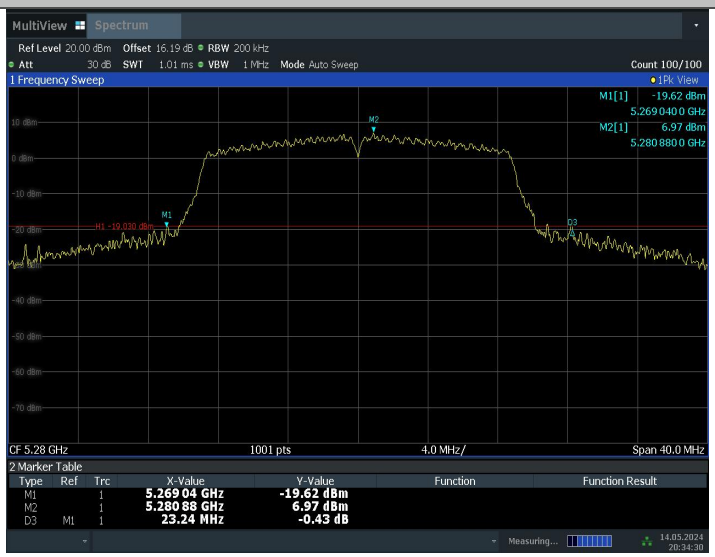
20:32:21 14.05.2024

11N20SISO_5260

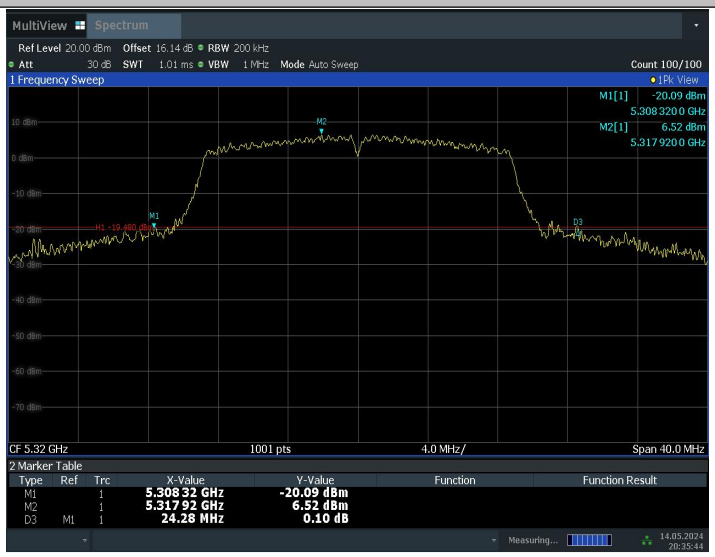


20:33:26 14.05.2024

11N20SISO_5280



20:34:31 14.05.2024

11N20SISO_5320
 20:35:44 14.05.2024
11N20SISO_5500
 12:42:21 21.06.2024
11N20SISO_5580

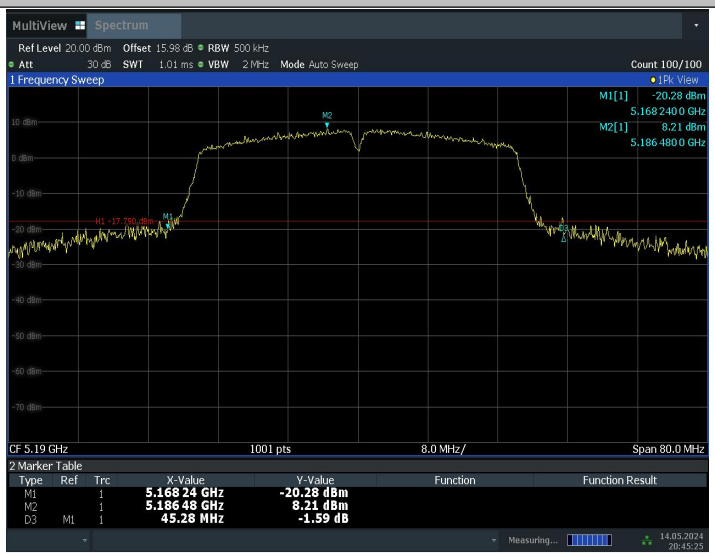
20:37:56 14.05.2024

11N20SISO_5700

12:43:24 21.06.2024

11N20SISO_5720

20:40:07 14.05.2024

11N40SISO_5190


20:45:26 14.05.2024

11N40SISO_5230


20:46:32 14.05.2024

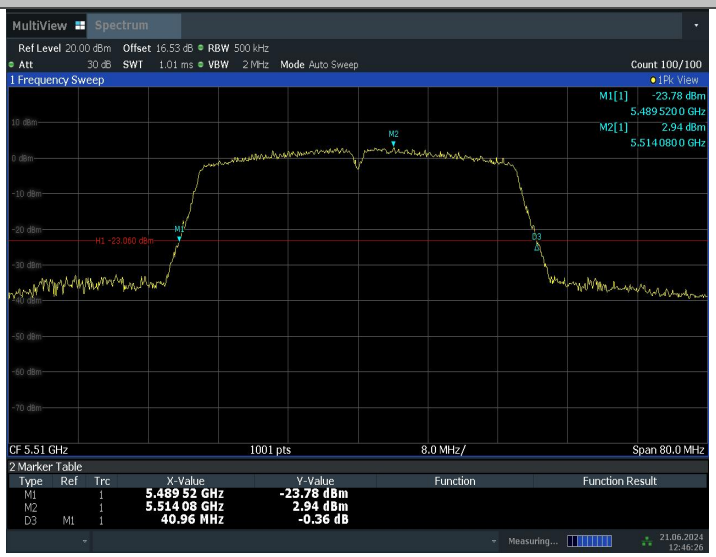
11N40SISO_5270

20:47:37 14.05.2024

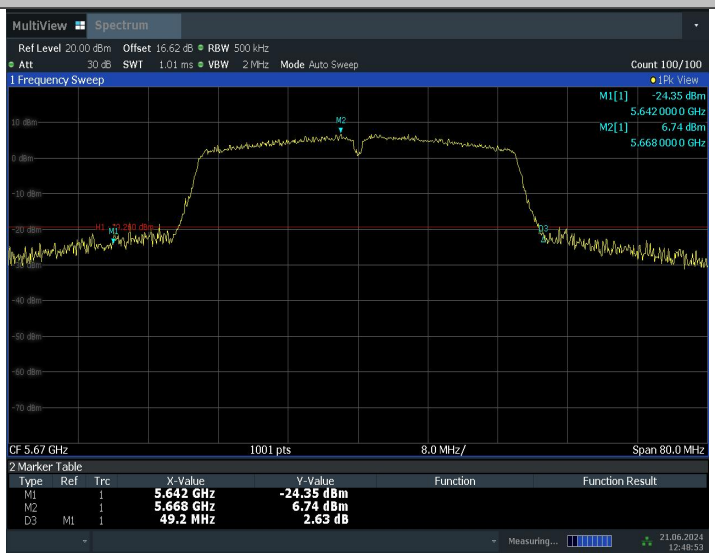
11N40SISO_5310

12:45:18 21.06.2024

11N40SISO_5510

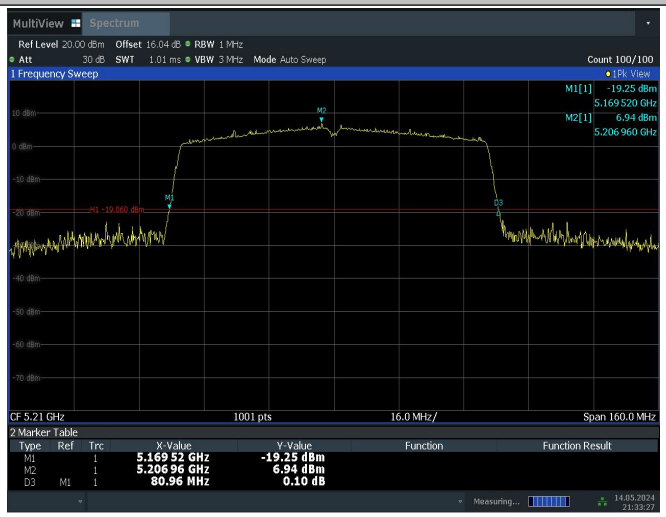


12:46:26 21.06.2024

11N40SISO_5550
 21:01:45 14.05.2024
11N40SISO_5670
 12:48:53 21.06.2024
11N40SISO_5710

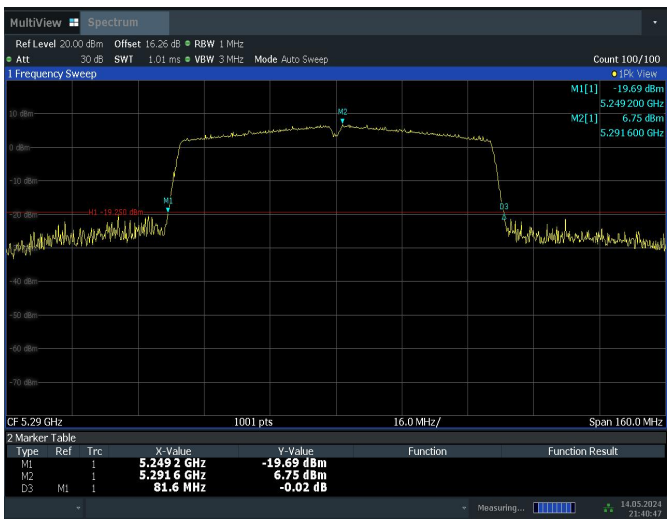
21:01:03 14.05.2024

11AC80SISO_5210



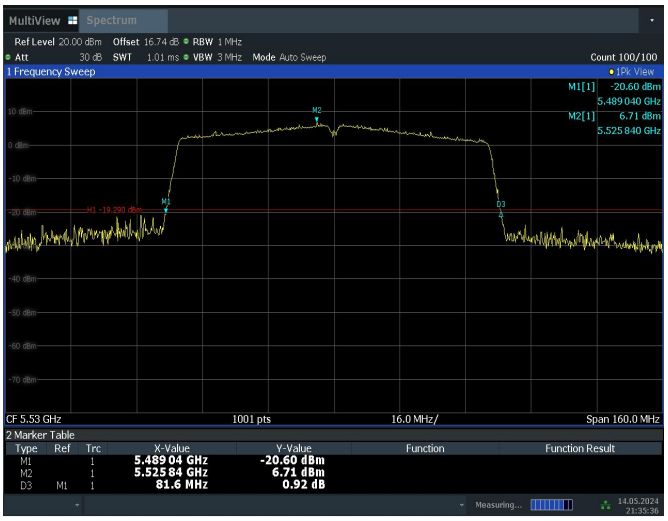
21:33:27 14.05.2024

11AC80SISO_5290



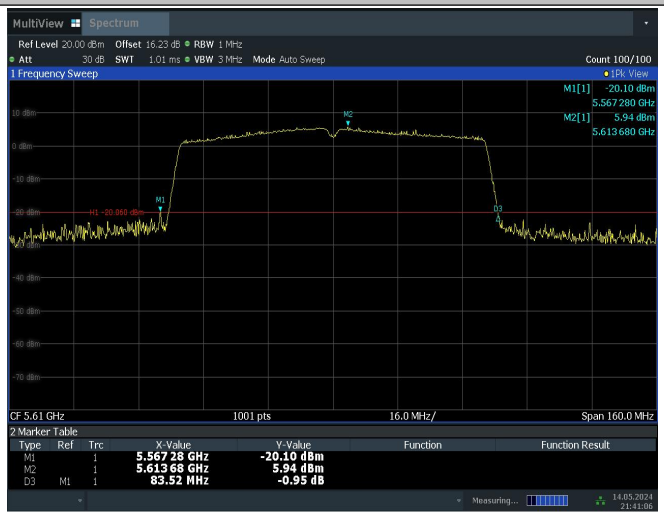
21:40:47 14.05.2024

11AC80SISO_5530



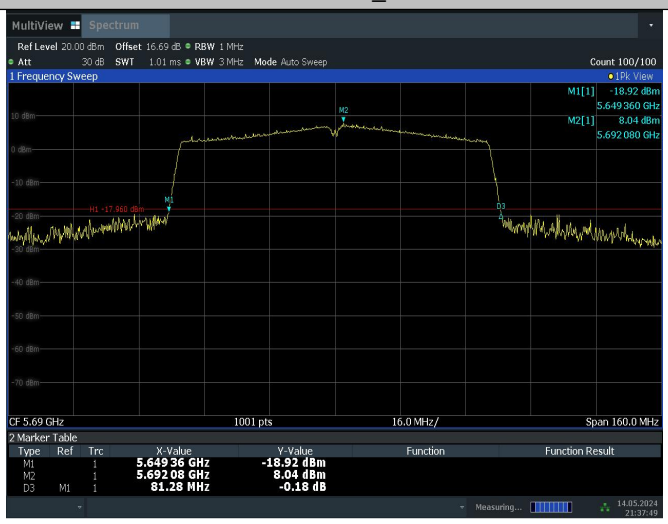
21:35:36 14.05.2024

11AC80SISO_5610



21:41:07 14.05.2024

11AC80SISO_5690



21:37:49 14.05.2024

Conclusion: PASS

A.5. Radiated Unwanted Emission

A.5.1 Limits

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

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

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

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

Frequency of emission (MHz)	Field strength (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

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

A.5.2 Test setup

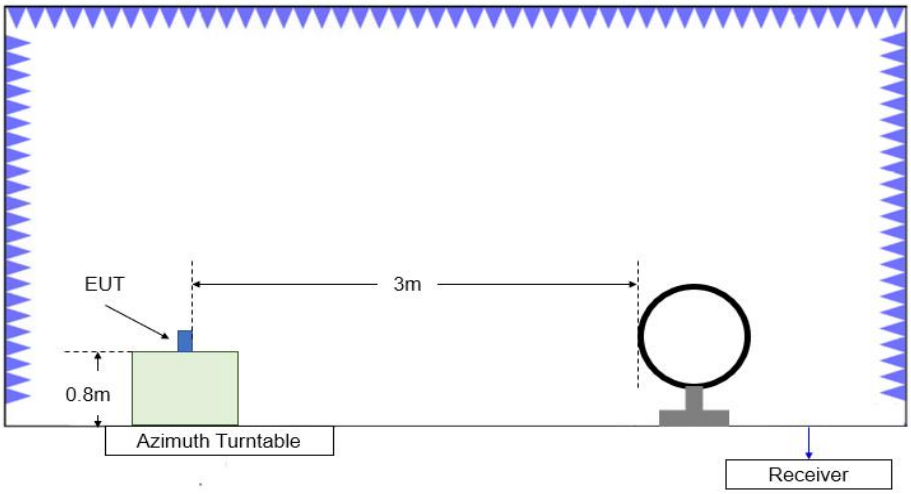


Figure A.5.1. Test Site Diagram (9kHz-30MHz)

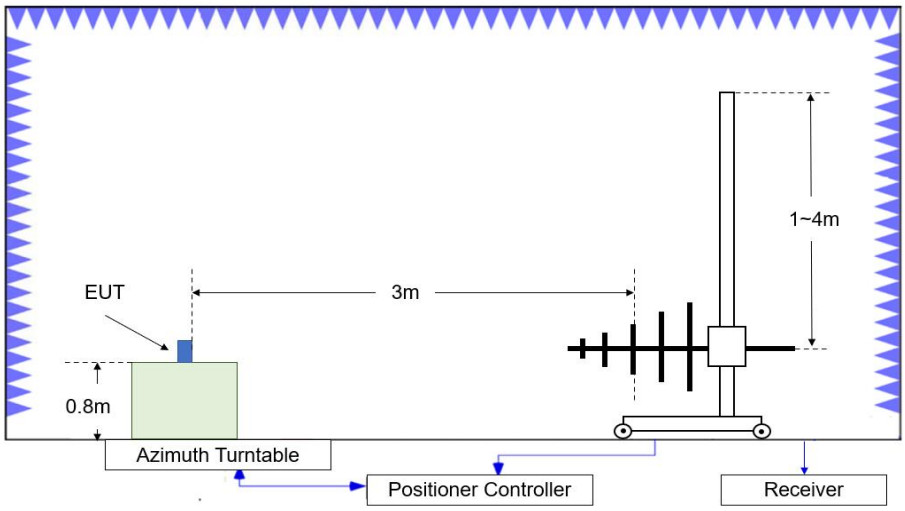


Figure A.5.2. Test Site Diagram (30MHz-1GHz)

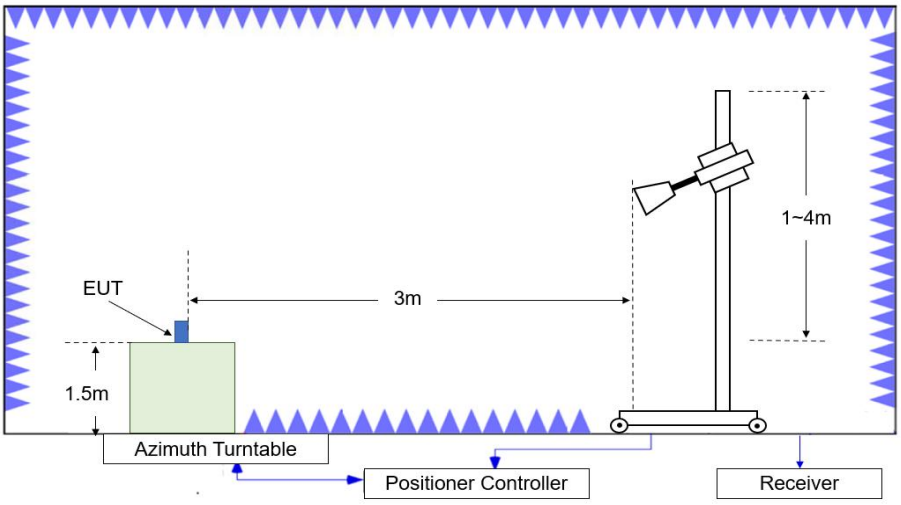


Figure A.5.3. Test Site Diagram (1GHz-40GHz)

A.5.3 Test Procedures

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

Test setting

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

A.5.4 Calculation

1. The measurement results reported below is calculated by:

Measurement Results (dBμV/m) = $P_{measurement}$ (dBμV) + Cable Loss(dB) + Antenna Factor (dB/m)

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

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

E=EIRP- 20log (*D)* +104.77

Where:

E is the field strength in dBμV/m

D is the measurement distance in meters

EIRP is the equivalent isotropically radiated power in dBm

Test note

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

Measurement Results:

Average Results:

802.11a

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5148.750	46.33	-22.53	34.39	34.47	54.00	7.67	V
5149.250	46.52	-22.51	34.40	34.63	54.00	7.48	V
10360.000	40.30	-29.74	37.50	32.54	54.00	13.70	V
15540.000	37.56	-24.68	40.14	22.10	54.00	16.44	H
17940.500	40.12	-23.02	41.20	21.94	54.00	13.88	V
17996.500	40.39	-22.86	41.20	22.05	54.00	13.61	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)
5149.000	45.13	-22.52	34.39	33.26	54.00	8.87	V
5150.000	45.17	-22.49	34.40	33.25	54.00	8.83	V
10401.000	38.01	-29.71	37.50	30.22	54.00	15.99	V
15560.000	37.57	-24.62	40.16	22.04	54.00	16.43	H
17895.000	39.86	-23.12	41.20	21.78	54.00	14.14	V
17985.500	40.19	-23.10	41.20	22.09	54.00	13.81	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)
5142.375	44.69	-22.76	34.35	33.09	54.00	9.31	V
5149.750	44.89	-22.49	34.40	32.98	54.00	9.11	V
10479.500	37.09	-29.82	37.58	29.33	54.00	16.91	V
15720.500	37.47	-24.39	40.34	21.52	54.00	16.53	V
17764.000	39.84	-23.09	41.20	21.72	54.00	14.16	V
17990.000	40.22	-23.06	41.20	22.07	54.00	13.78	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)
5350.500	45.31	-22.89	35.00	33.21	54.00	8.69	V
5352.875	45.11	-22.92	34.99	33.04	54.00	8.89	V
11903.500	36.21	-28.72	38.70	26.22	54.00	17.79	H
15780.000	37.68	-24.47	40.46	21.69	54.00	16.32	V
17937.500	39.87	-23.07	41.20	21.75	54.00	14.13	H
17994.500	40.05	-22.92	41.20	21.77	54.00	13.95	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)
5350.125	45.73	-22.89	35.00	33.62	54.00	8.27	V
5351.250	45.51	-22.90	35.00	33.42	54.00	8.49	V
11906.500	36.19	-28.71	38.71	26.19	54.00	17.81	V
15840.000	38.20	-24.48	40.58	22.09	54.00	15.80	H
17764.500	39.82	-23.09	41.20	21.71	54.00	14.18	V
17969.000	39.96	-23.10	41.20	21.86	54.00	14.04	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)
5350.250	48.34	-22.89	35.00	36.23	54.00	5.66	V
5350.625	48.16	-22.90	35.00	36.06	54.00	5.84	V
10638.500	36.28	-29.39	37.70	27.97	54.00	17.72	H
15878.000	38.91	-23.73	40.66	21.98	54.00	15.09	H
17759.500	39.84	-23.10	41.20	21.74	54.00	14.16	H
17995.500	40.14	-22.89	41.20	21.83	54.00	13.86	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)
5410.125	44.61	-22.61	34.60	32.62	54.00	9.39	V
5412.625	44.59	-22.61	34.60	32.60	54.00	9.41	V
10999.500	39.53	-30.50	37.80	32.22	54.00	14.47	H
15883.500	39.45	-23.76	40.67	22.54	54.00	14.55	V
17949.500	40.33	-23.14	41.20	22.27	54.00	13.67	H
17991.500	40.92	-23.01	41.20	22.73	54.00	13.08	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)
5567.750	45.57	-22.44	34.64	33.38	54.00	8.43	V
5626.250	45.74	-22.37	34.70	33.42	54.00	8.26	V
11202.000	38.32	-30.33	37.90	30.75	54.00	15.68	H
15882.500	39.44	-23.74	40.67	22.51	54.00	14.56	V
17953.500	40.38	-23.16	41.20	22.34	54.00	13.62	H
17997.500	40.91	-22.83	41.20	22.54	54.00	13.09	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)
5732.000	44.55	-22.37	34.77	32.15	54.00	9.45	V
5735.000	44.53	-22.50	34.78	32.25	54.00	9.47	V
11397.500	39.27	-29.67	38.10	30.84	54.00	14.73	V
15853.500	39.00	-24.17	40.61	22.57	54.00	15.00	V
17895.500	39.86	-23.11	41.20	21.77	54.00	14.14	V
17998.000	40.93	-22.82	41.20	22.55	54.00	13.07	V

Channel 144

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)
5609.875	44.88	-21.98	34.70	32.16	54.00	9.12	V
5658.375	45.09	-22.14	34.70	32.53	54.00	8.91	V
11440.500	40.43	-29.53	38.18	31.78	54.00	13.57	H
15873.500	39.58	-23.85	40.65	22.78	54.00	14.42	V
17988.500	40.87	-23.07	41.20	22.74	54.00	13.13	H
17998.000	41.00	-22.82	41.20	22.62	54.00	13.00	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)
5148.375	45.51	-22.54	34.39	33.66	54.00	8.49	V
5150.000	45.61	-22.49	34.40	33.69	54.00	8.39	V
10361.500	36.57	-29.73	37.50	28.79	54.00	17.43	H
15579.000	37.93	-24.44	40.18	22.20	54.00	16.07	H
17800.000	39.89	-23.03	41.20	21.72	54.00	14.11	V
17989.500	40.14	-23.06	41.20	22.00	54.00	13.86	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)
5145.375	45.18	-22.65	34.37	33.46	54.00	8.82	V
5149.250	45.19	-22.51	34.40	33.31	54.00	8.81	V
10402.000	36.72	-29.65	37.50	28.87	54.00	17.28	H
15581.500	37.85	-24.44	40.18	22.10	54.00	16.15	V
17772.500	39.80	-23.11	41.20	21.71	54.00	14.20	H
17984.500	40.03	-23.11	41.20	21.94	54.00	13.97	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)
5144.625	44.75	-22.68	34.37	33.06	54.00	9.25	V
5147.750	44.81	-22.57	34.39	32.99	54.00	9.19	V
10479.000	35.85	-29.82	37.58	28.09	54.00	18.15	V
15706.500	37.80	-24.55	40.31	22.03	54.00	16.20	V
17612.000	39.43	-22.94	41.02	21.35	54.00	14.57	V
17993.500	40.15	-22.95	41.20	21.91	54.00	13.85	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)
5350.750	45.35	-22.90	35.00	33.25	54.00	8.65	V
5352.750	45.16	-22.92	34.99	33.08	54.00	8.84	V
11911.000	36.13	-28.71	38.71	26.13	54.00	17.87	V
15780.000	37.87	-24.47	40.46	21.89	54.00	16.13	V
17967.000	40.23	-23.12	41.20	22.15	54.00	13.77	V
17994.500	40.60	-22.92	41.20	22.32	54.00	13.40	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)
5350.500	45.44	-22.89	35.00	33.33	54.00	8.56	V
5366.500	45.42	-22.93	34.97	33.38	54.00	8.58	V
11907.000	36.25	-28.71	38.71	26.26	54.00	17.75	H
15840.000	38.27	-24.48	40.58	22.16	54.00	15.73	H
17935.500	40.12	-23.12	41.20	22.04	54.00	13.88	V
17994.500	40.29	-22.92	41.20	22.01	54.00	13.71	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)
5350.000	47.04	-22.89	35.00	34.93	54.00	6.96	V
5351.500	46.70	-22.90	35.00	34.61	54.00	7.30	V
10637.000	38.63	-29.42	37.70	30.35	54.00	15.37	V
15960.000	38.96	-23.92	40.82	22.05	54.00	15.04	V
17982.500	40.63	-23.13	41.20	22.56	54.00	13.37	V
17996.500	40.71	-22.86	41.20	22.38	54.00	13.29	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)
5408.750	44.50	-22.60	34.60	32.50	54.00	9.50	V
5411.250	44.56	-22.61	34.60	32.56	54.00	9.44	V
10998.000	39.35	-30.50	37.80	32.04	54.00	14.65	H
15877.000	39.41	-23.75	40.65	22.51	54.00	14.59	H
17949.000	40.32	-23.13	41.20	22.25	54.00	13.68	V
17997.000	40.91	-22.85	41.20	22.56	54.00	13.09	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)
5555.750	44.89	-22.48	34.61	32.76	54.00	9.11	V
5639.500	45.04	-22.46	34.70	32.80	54.00	8.96	V
11198.000	38.95	-30.33	37.90	31.39	54.00	15.05	H
15880.000	39.47	-23.67	40.66	22.49	54.00	14.53	H
17986.000	40.77	-23.09	41.20	22.67	54.00	13.23	H
17997.500	40.83	-22.83	41.20	22.46	54.00	13.17	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)
5726.500	44.70	-22.28	34.76	32.23	54.00	9.30	V
5731.625	44.52	-22.45	34.79	32.17	54.00	9.48	V
11398.000	38.60	-29.67	38.10	30.17	54.00	15.40	V
15877.000	39.51	-23.75	40.65	22.61	54.00	14.49	V
17987.000	40.74	-23.09	41.20	22.62	54.00	13.26	V
17997.000	40.83	-22.85	41.20	22.48	54.00	13.17	H

Channel 144

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)
5609.750	45.02	-21.98	34.70	32.31	54.00	8.98	V
5659.625	45.08	-22.11	34.70	32.49	54.00	8.92	V
11410.000	39.31	-29.79	38.12	30.98	54.00	14.69	H
15878.000	39.47	-23.73	40.66	22.54	54.00	14.53	V
17956.500	40.48	-23.17	41.20	22.45	54.00	13.52	V
17986.500	40.82	-23.09	41.20	22.71	54.00	13.18	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)
5149.000	49.60	-22.52	34.39	37.73	54.00	4.40	V
5149.875	49.92	-22.49	34.40	38.01	54.00	4.08	V
10378.500	35.80	-29.79	37.50	28.10	54.00	18.20	H
15570.000	37.62	-24.58	40.17	22.04	54.00	16.38	H
1718.100	38.93	0.00	29.57	9.36	54.00	15.07	V
17956.500	39.88	-23.17	41.20	21.85	54.00	14.12	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)
5145.750	44.89	-22.64	34.37	33.15	54.00	9.11	V
5149.000	45.01	-22.52	34.39	33.14	54.00	8.99	V
10459.000	35.74	-29.56	37.56	27.74	54.00	18.26	V
15690.000	37.63	-24.29	40.29	21.64	54.00	16.37	V
17909.500	39.76	-23.08	41.20	21.65	54.00	14.24	V
17991.500	39.89	-23.01	41.20	21.70	54.00	14.11	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)
5350.000	45.90	-22.89	35.00	33.79	54.00	8.10	V
5351.375	45.78	-22.90	35.00	33.68	54.00	8.22	V
11905.500	36.40	-28.71	38.71	26.41	54.00	17.60	V
15930.000	39.09	-24.16	40.76	22.49	54.00	14.91	H
17967.000	40.46	-23.12	41.20	22.37	54.00	13.54	V
17993.000	40.79	-22.97	41.20	22.56	54.00	13.21	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)
5350.000	49.13	-22.89	35.00	37.02	54.00	4.87	V
5350.375	49.08	-22.89	35.00	36.97	54.00	4.92	V
10619.000	37.54	-29.30	37.70	29.15	54.00	16.46	H
15930.000	39.01	-24.16	40.76	22.42	54.00	14.99	V
17982.500	40.58	-23.13	41.20	22.51	54.00	13.42	H
17997.500	40.83	-22.83	41.20	22.46	54.00	13.17	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)
5409.375	44.51	-22.60	34.60	32.52	54.00	9.49	V
5410.750	44.54	-22.61	34.60	32.55	54.00	9.46	V
11020.000	37.12	-30.40	37.82	29.70	54.00	16.88	V
15877.500	39.45	-23.74	40.66	22.54	54.00	14.55	V
17985.000	40.73	-23.10	41.20	22.63	54.00	13.27	V
17995.000	40.85	-22.91	41.20	22.56	54.00	13.15	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)
5410.375	44.88	-22.39	34.84	32.43	54.00	9.12	V
5452.500	44.57	-22.60	34.60	32.57	54.00	9.43	V
11178.000	36.65	-30.39	37.90	29.14	54.00	17.35	H
15886.000	39.43	-23.83	40.67	22.58	54.00	14.57	H
17950.500	40.50	-23.15	41.20	22.45	54.00	13.50	H
17990.500	40.80	-23.04	41.20	22.65	54.00	13.20	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)
5739.250	44.60	-22.92	34.96	32.56	54.00	9.40	V
5745.125	44.44	-22.39	34.84	31.99	54.00	9.56	V
11340.000	37.84	-29.85	38.04	29.64	54.00	16.16	H
15873.000	39.69	-23.86	40.65	22.91	54.00	14.31	H
17969.000	40.65	-23.10	41.20	22.54	54.00	13.35	V
17981.500	40.92	-23.14	41.20	22.86	54.00	13.08	V

Channel 142

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5368.750	44.48	-22.91	34.96	32.43	54.00	9.52	V
5409.250	44.61	-22.40	34.84	32.17	54.00	9.39	V
11420.000	37.65	-29.46	38.14	28.97	54.00	16.35	H
15877.500	39.77	-23.74	40.66	22.86	54.00	14.23	H
17945.500	40.54	-23.08	41.20	22.42	54.00	13.46	H
17989.500	41.01	-23.06	41.20	22.88	54.00	12.99	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)
5142.375	45.03	-22.76	34.35	33.43	54.00	8.97	V
5148.250	45.36	-22.55	34.39	33.52	54.00	8.64	V
10360.500	35.99	-29.73	37.50	28.23	54.00	18.01	V
15539.000	37.57	-24.67	40.14	22.10	54.00	16.43	V
17809.500	39.78	-23.03	41.20	21.60	54.00	14.22	V
17996.500	40.27	-22.86	41.20	21.93	54.00	13.73	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)
5146.750	45.01	-22.60	34.38	33.23	54.00	8.99	V
5149.500	45.13	-22.50	34.40	33.24	54.00	8.87	V
10401.500	36.80	-29.68	37.50	28.98	54.00	17.20	H
15600.500	37.44	-24.72	40.20	21.96	54.00	16.56	V
17763.500	39.82	-23.09	41.20	21.71	54.00	14.18	V
17997.500	40.22	-22.83	41.20	21.86	54.00	13.78	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)
5143.250	44.76	-22.73	34.36	33.13	54.00	9.24	V
5149.000	44.80	-22.52	34.39	32.93	54.00	9.20	V
10480.500	36.32	-29.82	37.58	28.56	54.00	17.68	H
15708.000	37.74	-24.54	40.32	21.97	54.00	16.26	V
17909.500	39.86	-23.08	41.20	21.74	54.00	14.14	V
17987.500	40.08	-23.08	41.20	21.96	54.00	13.92	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)
5350.000	45.26	-22.89	35.00	33.15	54.00	8.74	V
5351.000	45.25	-22.90	35.00	33.15	54.00	8.75	V
11907.000	36.35	-28.71	38.71	26.35	54.00	17.65	H
15780.000	38.05	-24.47	40.46	22.06	54.00	15.95	H
17977.500	40.51	-23.14	41.20	22.44	54.00	13.49	H
17998.000	40.83	-22.82	41.20	22.44	54.00	13.17	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)
5363.000	45.36	-22.97	34.97	33.36	54.00	8.64	V
5367.375	45.53	-22.93	34.97	33.49	54.00	8.47	V
11907.500	36.35	-28.71	38.71	26.35	54.00	17.65	V
15840.000	38.53	-24.48	40.58	22.42	54.00	15.47	H
17952.000	40.42	-23.15	41.20	22.37	54.00	13.58	V
17993.000	40.63	-22.97	41.20	22.40	54.00	13.37	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)
5349.750	46.42	-22.89	35.00	34.32	54.00	7.58	V
5350.500	46.39	-22.89	35.00	34.28	54.00	7.61	V
10639.500	38.63	-29.37	37.70	30.30	54.00	15.37	V
15960.000	39.17	-23.92	40.82	22.27	54.00	14.83	V
17979.000	40.61	-23.14	41.20	22.56	54.00	13.39	V
17997.000	40.95	-22.85	41.20	22.60	54.00	13.05	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)
5407.750	44.49	-22.61	34.60	32.50	54.00	9.51	V
5410.625	44.60	-22.61	34.60	32.60	54.00	9.40	V
10999.000	38.43	-30.50	37.80	31.13	54.00	15.57	V
15877.500	39.42	-23.74	40.66	22.50	54.00	14.58	V
17978.500	40.49	-23.14	41.20	22.44	54.00	13.51	V
17989.500	40.74	-23.06	41.20	22.61	54.00	13.26	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)
5563.375	45.38	-22.43	34.63	33.18	54.00	8.62	V
5629.375	45.41	-22.49	34.70	33.20	54.00	8.59	V
11200.500	38.26	-30.35	37.90	30.71	54.00	15.74	H
15879.500	39.41	-23.69	40.66	22.44	54.00	14.59	V
17989.000	40.79	-23.07	41.20	22.65	54.00	13.21	V
17998.000	40.90	-22.82	41.20	22.52	54.00	13.10	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)
5727.250	44.79	-22.13	34.76	32.17	54.00	9.21	V
5732.500	44.57	-22.33	34.77	32.13	54.00	9.43	V
11398.000	37.94	-29.67	38.10	29.52	54.00	16.06	V
15862.500	39.31	-24.01	40.63	22.70	54.00	14.69	H
17965.500	40.57	-23.13	41.20	22.50	54.00	13.43	V
17989.500	40.81	-23.06	41.20	22.67	54.00	13.19	H

Channel 144

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)
5610.625	44.95	-21.98	34.70	32.23	54.00	9.05	V
5658.875	45.02	-22.13	34.70	32.45	54.00	8.98	V
11440.500	38.05	-29.53	38.18	29.41	54.00	15.95	H
15878.500	39.45	-23.71	40.66	22.51	54.00	14.55	V
17985.500	40.74	-23.10	41.20	22.64	54.00	13.26	H
17995.500	40.89	-22.89	41.20	22.58	54.00	13.11	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)
5147.250	46.89	-22.58	34.38	35.09	54.00	7.11	V
5149.750	47.41	-22.49	34.40	35.51	54.00	6.59	V
10380.000	34.54	-29.81	37.50	26.85	54.00	19.46	H
15570.000	37.62	-24.58	40.17	22.04	54.00	16.38	H
17896.000	39.83	-23.10	41.20	21.73	54.00	14.17	H
17997.500	40.09	-22.83	41.20	21.72	54.00	13.91	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)
5145.625	44.99	-22.64	34.37	33.26	54.00	9.01	V
5148.500	45.03	-22.54	34.39	33.18	54.00	8.97	V
10460.000	35.13	-29.57	37.56	27.14	54.00	18.87	V
15670.500	37.82	-24.35	40.27	21.91	54.00	16.18	H
17774.000	39.80	-23.13	41.20	21.73	54.00	14.20	H
17993.500	40.02	-22.95	41.20	21.77	54.00	13.98	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)
5350.000	45.31	-22.89	35.00	33.20	54.00	8.69	V
5351.875	45.08	-22.91	35.00	32.99	54.00	8.92	V
11911.500	36.29	-28.72	38.71	26.30	54.00	17.71	H
15810.000	38.26	-24.35	40.52	22.09	54.00	15.74	H
17959.000	40.40	-23.18	41.20	22.38	54.00	13.60	H
17996.500	40.91	-22.86	41.20	22.58	54.00	13.09	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)
5350.075	47.15	-22.89	35.00	35.04	54.00	6.85	V
5352.125	46.75	-22.91	35.00	34.66	54.00	7.25	V
10621.500	36.80	-29.33	37.70	28.43	54.00	17.20	V
15930.000	38.76	-24.16	40.76	22.16	54.00	15.24	V
17954.500	40.42	-23.16	41.20	22.38	54.00	13.58	H
17994.000	40.67	-22.94	41.20	22.41	54.00	13.33	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)
5458.125	45.27	-22.61	34.60	33.27	54.00	8.73	V
5459.625	45.18	-22.61	34.60	33.19	54.00	8.82	V
11020.000	36.20	-30.40	37.82	28.79	54.00	17.80	V
15879.000	39.84	-23.70	40.66	22.88	54.00	14.16	V
17897.500	40.34	-23.08	41.20	22.22	54.00	13.66	H
17994.000	41.01	-22.94	41.20	22.75	54.00	12.99	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)
5366.625	44.52	-22.93	34.97	32.48	54.00	9.48	V
5409.000	44.75	-22.40	34.85	32.31	54.00	9.25	V
11180.000	35.62	-30.37	37.90	28.10	54.00	18.38	H
15880.500	39.66	-23.69	40.66	22.68	54.00	14.34	H
17950.500	40.62	-23.15	41.20	22.57	54.00	13.38	H
17988.500	40.91	-23.07	41.20	22.78	54.00	13.09	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)
5703.375	45.61	-22.54	34.88	33.26	54.00	8.39	V
5713.375	45.26	-22.39	34.84	32.81	54.00	8.74	V
11340.000	36.59	-29.85	38.04	28.40	54.00	17.41	V
15876.000	39.66	-23.78	40.65	22.79	54.00	14.34	V
17943.500	40.57	-23.06	41.20	22.43	54.00	13.43	H
17989.000	40.88	-23.07	41.20	22.74	54.00	13.12	V

Channel 142

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)
5386.000	44.44	-22.81	34.93	32.33	54.00	9.56	V
5409.625	44.61	-22.39	34.84	32.16	54.00	9.39	V
11420.000	36.32	-29.46	38.14	27.65	54.00	17.68	H
15883.000	39.78	-23.75	40.67	22.87	54.00	14.22	V
17976.500	40.85	-23.13	41.20	22.78	54.00	13.15	H
17998.000	41.10	-22.82	41.20	22.72	54.00	12.90	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)
5146.125	47.99	-22.62	34.38	36.24	54.00	6.01	V
5150.000	48.58	-22.49	34.40	36.67	54.00	5.42	V
11849.000	35.88	-28.89	38.65	26.12	54.00	18.12	H
15630.000	37.20	-24.88	40.23	21.86	54.00	16.80	V
17987.500	40.50	-23.08	41.20	22.38	54.00	13.50	H
17997.500	40.66	-22.83	41.20	22.30	54.00	13.34	H

Channel 58

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.125	48.94	-22.89	35.00	36.83	54.00	5.07	V
5351.000	48.59	-22.90	35.00	36.50	54.00	5.41	V
11854.500	35.93	-28.83	38.65	26.10	54.00	18.07	H
15870.000	39.26	-23.94	40.64	22.56	54.00	14.74	V
17958.500	40.14	-23.18	41.20	22.12	54.00	13.86	V
17994.500	40.70	-22.92	41.20	22.42	54.00	13.31	V

Channel 106

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5406.250	44.46	-22.46	34.86	32.06	54.00	9.54	V
5409.875	44.48	-22.39	34.84	32.02	54.00	9.52	V
11060.000	35.53	-30.31	37.86	27.98	54.00	18.47	V
15876.000	39.67	-23.78	40.65	22.80	54.00	14.33	V
17978.500	40.81	-23.14	41.20	22.75	54.00	13.19	H
17998.500	41.03	-22.80	41.20	22.64	54.00	12.97	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)
5407.125	44.64	-22.44	34.86	32.22	54.00	9.36	V
5413.250	44.63	-22.46	34.82	32.27	54.00	9.37	V
11220.000	34.99	-30.00	37.92	27.07	54.00	19.01	V
15862.500	39.65	-24.01	40.63	23.03	54.00	14.35	H
17944.000	40.53	-23.06	41.20	22.40	54.00	13.47	H
17996.000	40.94	-22.88	41.20	22.62	54.00	13.06	H

Channel 138

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)
5367.750	44.45	-22.92	34.96	32.41	54.00	9.55	V
5409.750	44.63	-22.39	34.84	32.18	54.00	9.37	V
11380.000	35.81	-29.74	38.08	27.47	54.00	18.19	V
15881.000	39.78	-23.70	40.66	22.81	54.00	14.23	H
17986.000	40.95	-23.09	41.20	22.84	54.00	13.05	H
17998.000	41.08	-22.82	41.20	22.70	54.00	12.92	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)
5148.875	66.71	-22.53	34.39	54.85	74.00	7.29	V
5149.500	66.04	-22.50	34.40	54.14	74.00	7.96	H
10359.550	53.00	-29.73	37.50	45.23	68.30	15.30	H
15532.000	52.15	-24.62	40.13	36.64	74.00	21.85	V
16784.500	53.63	-23.59	41.50	35.72	68.30	14.67	V
17522.500	53.92	-23.49	41.00	36.41	68.30	14.38	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)
5157.000	60.74	-22.60	34.40	48.95	68.30	7.56	H
5250.000	61.66	-22.64	34.50	49.80	68.30	6.64	V
10400.500	55.01	-29.74	37.50	47.25	68.30	13.29	V
15557.300	51.10	-24.65	40.16	35.59	74.00	22.90	H
16844.000	53.32	-23.25	41.46	35.11	68.30	14.98	V
17232.000	53.79	-23.24	40.97	36.06	68.30	14.51	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)
5191.500	59.65	-22.83	34.40	48.08	68.30	8.65	V
5290.000	60.33	-23.02	34.74	48.62	68.30	7.97	V
10476.500	53.91	-29.81	37.58	46.14	68.30	14.39	H
15723.000	51.02	-24.42	40.35	35.09	74.00	22.98	H
16800.500	53.51	-23.39	41.50	35.40	68.30	14.79	H
17059.500	53.56	-23.11	41.28	35.39	68.30	14.74	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)
5210.000	59.41	-22.56	34.42	47.56	68.30	8.89	H
5310.500	59.69	-22.58	34.84	47.43	68.30	8.61	H
10523.500	54.47	-29.35	37.62	46.19	68.30	13.83	H
15780.000	49.46	-24.47	40.46	33.47	74.00	24.54	V
16790.500	52.90	-23.49	41.50	34.89	68.30	15.40	H
17337.000	52.93	-23.27	40.90	35.31	68.30	15.37	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)
5229.500	60.80	-22.76	34.46	49.10	68.30	7.50	V
5344.500	60.84	-22.96	34.98	48.82	68.30	7.46	V
10562.500	54.15	-29.17	37.66	45.65	68.30	14.15	H
15843.500	52.58	-24.40	40.59	36.38	74.00	21.42	H
17249.500	53.02	-23.34	40.95	35.41	68.30	15.28	H
17652.000	52.97	-23.29	41.10	35.16	68.30	15.33	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)
5351.550	71.11	-22.91	35.00	59.02	74.00	2.89	V
5352.000	70.46	-22.91	35.00	58.37	74.00	3.54	H
10636.500	52.65	-29.43	37.70	44.37	74.00	21.35	V
15840.000	50.77	-24.48	40.58	34.67	74.00	23.23	V
17263.000	52.91	-23.25	40.94	35.21	68.30	15.39	V
17509.000	52.83	-23.39	41.00	35.21	68.30	15.47	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)
5465.375	60.80	-22.63	34.60	48.83	68.30	7.50	H
5467.375	63.00	-22.64	34.60	51.04	68.30	5.30	V
11002.500	53.39	-30.44	37.80	46.02	74.00	20.61	V
16500.000	50.89	-23.86	41.30	33.46	68.30	17.41	V
17099.000	51.05	-23.28	41.20	33.13	68.30	17.25	V
17435.500	52.31	-23.16	40.94	34.54	68.30	15.99	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)
5566.500	63.77	-22.43	34.63	51.57	68.30	4.53	V
5632.000	65.49	-22.50	34.70	53.29	68.30	2.81	V
11203.500	51.99	-30.31	37.90	44.39	74.00	22.01	V
16800.000	51.28	-23.39	41.50	33.17	68.30	17.02	H
17313.000	53.29	-23.37	40.90	35.76	68.30	15.01	V
17635.000	53.47	-23.29	41.07	35.69	68.30	14.83	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)
5725.000	66.25	-22.04	34.75	53.53	68.30	2.05	V
5725.375	65.88	-22.07	34.75	53.19	68.30	2.42	V
11396.000	50.87	-29.65	38.10	42.42	74.00	23.13	H
17100.000	52.76	-23.27	41.20	34.83	68.30	15.54	V
17321.000	53.08	-23.37	40.90	35.55	68.30	15.22	H
17636.300	53.53	-23.32	41.07	35.77	68.30	14.77	H

Channel 144

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)
5612.500	58.69	-22.02	34.70	46.01	68.30	9.61	H
5649.000	58.02	-22.36	34.70	45.68	68.30	10.28	V
11436.000	52.85	-29.48	38.17	44.15	74.00	21.15	V
17160.000	50.79	-22.99	41.08	32.69	68.30	17.51	H
17451.000	53.42	-23.24	40.95	35.71	68.30	14.88	H
17666.000	52.65	-23.30	41.13	34.82	68.30	15.65	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)
5148.750	69.15	-22.53	34.39	57.29	74.00	4.85	H
5149.625	67.96	-22.50	34.40	56.06	74.00	6.04	H
10360.500	50.26	-29.73	37.50	42.50	68.30	18.04	V
15582.000	51.66	-24.44	40.18	35.92	74.00	22.34	H
16737.000	53.40	-23.61	41.50	35.51	68.30	14.90	H
17453.500	53.47	-23.22	40.95	35.74	68.30	14.83	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)
5157.000	59.98	-22.60	34.40	48.18	68.30	8.32	H
5245.000	61.41	-22.75	34.49	49.67	68.30	6.89	V
10400.500	52.60	-29.74	37.50	44.84	68.30	15.70	H
15576.000	51.50	-24.49	40.18	35.81	74.00	22.50	H
16749.500	53.06	-23.49	41.50	35.05	68.30	15.24	V
17197.000	53.78	-23.15	41.01	35.92	68.30	14.52	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)
5189.000	57.95	-22.85	34.40	46.40	68.30	10.35	V
5293.500	58.46	-22.93	34.76	46.63	68.30	9.84	V
10476.000	52.53	-29.80	37.58	44.76	68.30	15.77	H
15753.000	51.39	-24.54	40.41	35.52	74.00	22.61	H
16773.500	53.41	-23.62	41.50	35.53	68.30	14.89	H
17150.500	53.26	-23.17	41.10	35.34	68.30	15.04	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)
5215.500	60.00	-22.55	34.43	48.12	68.30	8.30	H
5309.000	60.95	-22.60	34.84	48.72	68.30	7.35	H
10519.500	51.82	-29.11	37.62	43.31	68.30	16.48	H
15780.000	49.76	-24.47	40.46	33.77	74.00	24.24	V
17245.000	53.23	-23.29	40.95	35.56	68.30	15.07	H
17442.000	53.28	-23.14	40.94	35.48	68.30	15.02	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)
5233.000	60.99	-22.80	34.47	49.32	68.30	7.31	H
5333.000	59.99	-22.96	34.93	48.02	68.30	8.31	H
10560.500	52.73	-29.10	37.66	44.16	68.30	15.57	V
15840.000	50.30	-24.48	40.58	34.20	74.00	23.70	V
16694.000	53.59	-23.64	41.50	35.73	68.30	14.70	H
17299.500	53.29	-23.32	40.90	35.70	68.30	15.01	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)
5350.762	68.31	-22.90	35.00	56.21	74.00	5.69	H
5350.087	69.13	-22.89	35.00	57.02	74.00	4.87	H
10642.500	50.67	-29.35	37.70	42.32	74.00	23.33	V
15960.000	50.77	-23.92	40.82	33.87	74.00	23.23	H
16784.500	53.65	-23.59	41.50	35.74	68.30	14.65	H
17601.500	53.16	-23.03	41.00	35.18	68.30	15.14	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)
5467.125	62.58	-22.68	34.60	50.65	68.30	5.72	H
5468.875	63.88	-22.68	34.60	51.96	68.30	4.42	V
10999.500	50.00	-30.50	37.80	42.69	74.00	24.00	V
16500.000	50.39	-23.86	41.30	32.95	68.30	17.91	H
17140.500	51.72	-23.21	41.12	33.80	68.30	16.58	V
17474.500	53.04	-23.22	40.97	35.28	68.30	15.26	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)
5558.500	60.72	-22.44	34.62	48.54	68.30	7.58	V
5638.500	60.71	-22.47	34.70	48.48	68.30	7.59	H
11197.000	49.77	-30.32	37.90	42.19	74.00	24.23	H
16800.000	51.28	-23.39	41.50	33.17	68.30	17.02	H
17344.000	53.32	-23.30	40.90	35.72	68.30	14.98	H
17631.000	53.57	-23.22	41.06	35.73	68.30	14.73	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)
5725.375	63.57	-21.97	34.75	50.79	68.30	4.73	V
5725.625	63.00	-21.99	34.75	50.25	68.30	5.30	H
11400.000	50.67	-29.70	38.10	42.27	74.00	23.33	H
17100.000	51.38	-23.27	41.20	33.45	68.30	16.92	H
17318.000	53.27	-23.37	40.90	35.74	68.30	15.03	H
17462.000	52.75	-23.18	40.96	34.97	68.30	15.55	H

Channel 144

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)
5640.000	59.02	-22.46	34.70	46.78	68.30	9.28	V
5646.000	58.21	-22.39	34.70	45.91	68.30	10.09	H
11442.500	50.17	-29.51	38.19	41.49	74.00	23.83	V
17160.000	50.41	-22.99	41.08	32.31	68.30	17.89	H
17406.500	53.09	-23.29	40.91	35.48	68.30	15.21	H
17649.500	52.98	-23.31	41.10	35.19	68.30	15.32	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)
5145.250	71.40	-22.66	34.37	59.69	74.00	2.60	V
5149.750	72.73	-22.49	34.40	60.83	74.00	1.27	V
10379.500	51.25	-29.81	37.50	43.56	68.30	17.05	H
15570.000	49.52	-24.58	40.17	33.93	74.00	24.48	H
16814.500	52.73	-23.51	41.49	34.76	68.30	15.57	H
17339.500	53.46	-23.24	40.90	35.80	68.30	14.84	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)
5161.500	60.06	-22.65	34.40	48.31	68.30	8.24	V
5306.500	61.48	-22.64	34.83	49.30	68.30	6.82	V
10460.500	49.79	-29.58	37.56	41.81	68.30	18.51	V
15689.000	51.61	-24.28	40.29	35.60	74.00	22.39	H
16895.000	53.68	-22.95	41.40	35.23	68.30	14.62	H
17187.500	53.59	-23.31	41.02	35.88	68.30	14.71	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)
5211.500	62.14	-22.56	34.42	50.28	68.30	6.16	V
5341.000	64.17	-23.01	34.96	52.22	68.30	4.13	V
10540.500	49.55	-29.55	37.64	41.45	68.30	18.75	V
15810.000	50.45	-24.35	40.52	34.28	74.00	23.55	V
16982.000	53.68	-23.20	41.40	35.49	68.30	14.62	V
17222.000	53.24	-23.29	40.98	35.56	68.30	15.06	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)
5352.113	71.34	-22.91	35.00	59.25	74.00	2.66	V
5354.812	71.01	-22.94	34.99	58.96	74.00	2.99	H
10621.500	50.05	-29.33	37.70	41.69	74.00	23.95	V
15930.000	51.11	-24.16	40.76	34.51	74.00	22.89	H
17076.500	53.45	-23.43	41.25	35.63	68.30	14.85	V
17525.500	53.67	-23.45	41.00	36.12	68.30	14.63	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)
5463.250	60.09	-22.63	34.60	48.12	68.30	8.21	H
5469.125	61.41	-22.66	34.60	49.47	68.30	6.89	V
11014.000	49.68	-30.33	37.81	42.19	74.00	24.32	V
16530.000	50.70	-23.82	41.36	33.16	68.30	17.60	H
17158.000	53.40	-23.03	41.08	35.35	68.30	14.90	V
17337.000	53.37	-23.27	40.90	35.74	68.30	14.93	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)
5512.500	59.41	-22.00	34.60	46.80	68.30	8.89	V
5670.000	59.58	-22.29	34.70	47.18	68.30	8.72	H
11174.000	49.11	-30.43	37.90	41.64	74.00	24.89	H
16770.000	51.75	-23.60	41.50	33.85	68.30	16.55	V
17327.500	53.32	-23.36	40.90	35.78	68.30	14.98	V
17654.000	52.98	-23.27	41.11	35.15	68.30	15.32	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)
5725.625	66.77	-21.97	34.75	53.99	68.30	1.53	H
5726.125	65.77	-22.45	34.78	53.44	68.30	2.53	H
11340.000	48.00	-29.85	38.04	39.81	74.00	26.00	H
16840.500	53.92	-23.29	41.46	35.75	68.30	14.38	H
17010.000	51.05	-23.10	41.38	32.77	68.30	17.24	H
17206.500	53.23	-23.10	40.99	35.34	68.30	15.07	V

Channel 142

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)
5647.500	60.25	-22.38	34.70	47.93	68.30	8.05	V
5791.000	60.29	-22.34	34.88	47.75	68.30	8.01	V
11420.000	48.24	-29.46	38.14	39.57	74.00	25.76	H
17130.000	52.29	-23.35	41.14	34.50	68.30	16.01	H
17320.500	53.50	-23.37	40.90	35.97	68.30	14.80	V
17442.000	53.66	-23.14	40.94	35.86	68.30	14.64	H

802.11ac-HT20

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5148.125	61.09	-22.55	34.39	49.26	74.00	12.91	V
5148.375	61.41	-22.54	34.39	49.56	74.00	12.59	V
10362.000	50.18	-29.72	37.50	42.40	68.30	18.12	V
15530.000	50.94	-24.60	40.13	35.41	74.00	23.06	H
17267.000	53.95	-23.17	40.93	36.19	68.30	14.34	V
17680.000	54.10	-23.43	41.16	36.38	68.30	14.20	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)
5165.000	59.83	-22.63	34.40	48.05	68.30	8.47	H
5237.500	60.85	-22.83	34.48	49.20	68.30	7.45	V
10395.500	50.08	-29.88	37.50	42.46	68.30	18.22	V
15590.500	51.11	-24.48	40.19	35.40	74.00	22.89	V
16835.500	53.26	-23.35	41.46	35.15	68.30	15.04	H
17652.000	53.74	-23.29	41.10	35.93	68.30	14.56	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)
5210.000	60.95	-22.56	34.42	49.09	68.30	7.35	H
5273.500	60.29	-22.84	34.64	48.48	68.30	8.01	V
10477.500	51.60	-29.81	37.58	43.84	68.30	16.70	V
15717.500	50.46	-24.42	40.34	34.55	74.00	23.54	V
16752.500	53.40	-23.46	41.50	35.36	68.30	14.90	V
17226.500	53.22	-23.26	40.97	35.51	68.30	15.08	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)
5218.000	60.22	-22.55	34.44	48.33	68.30	8.08	H
5314.000	61.97	-22.60	34.86	49.71	68.30	6.33	V
10521.500	51.08	-29.21	37.62	42.67	68.30	17.22	V
15780.000	49.78	-24.47	40.46	33.79	74.00	24.22	H
16846.500	54.09	-23.22	41.45	35.86	68.30	14.20	H
17138.000	51.55	-23.24	41.12	33.66	68.30	16.75	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)
5236.500	59.86	-22.82	34.47	48.21	68.30	8.44	V
5324.000	61.82	-22.75	34.90	49.67	68.30	6.48	H
10558.500	51.89	-29.07	37.66	43.30	68.30	16.41	V
15840.000	51.07	-24.48	40.58	34.97	74.00	22.93	V
16682.000	53.78	-23.67	41.50	35.96	68.30	14.52	H
17129.000	52.97	-23.35	41.14	35.18	68.30	15.33	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)
5352.000	67.63	-22.91	35.00	55.55	74.00	6.37	H
5353.575	65.62	-22.93	34.99	53.55	74.00	8.38	V
10633.000	49.51	-29.49	37.70	41.30	74.00	24.49	V
15960.000	50.99	-23.92	40.82	34.08	74.00	23.01	H
16859.500	53.31	-23.05	41.44	34.92	68.30	14.99	H
17319.500	53.68	-23.37	40.90	36.15	68.30	14.62	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)
5467.250	61.63	-22.66	34.60	49.69	68.30	6.67	V
5467.875	60.58	-22.66	34.60	48.65	68.30	7.72	H
11000.000	49.95	-30.49	37.80	42.64	74.00	24.05	V
16800.000	52.88	-23.39	41.50	34.76	68.30	15.42	H
17247.500	53.71	-23.32	40.95	36.08	68.30	14.59	H
17536.000	53.30	-23.40	41.00	35.69	68.30	15.00	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)
5563.000	58.72	-22.43	34.63	46.52	68.30	9.58	H
5631.000	58.58	-22.50	34.70	46.38	68.30	9.72	H
11198.000	50.91	-30.33	37.90	43.34	74.00	23.09	H
16800.000	51.44	-23.39	41.50	33.32	68.30	16.86	H
17283.500	53.73	-23.40	40.92	36.21	68.30	14.57	H
17569.000	53.39	-23.28	41.00	35.68	68.30	14.91	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)
5725.250	66.21	-22.08	34.75	53.53	68.30	2.09	H
5725.500	66.84	-22.15	34.76	54.23	68.30	1.46	V
11401.000	49.93	-29.71	38.10	41.54	74.00	24.07	H
17100.000	52.19	-23.27	41.20	34.26	68.30	16.11	H
17437.500	53.17	-23.14	40.94	35.38	68.30	15.12	V
17619.000	53.06	-23.05	41.04	35.07	68.30	15.24	V

Channel 144

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)
5657.000	58.17	-22.18	34.70	45.65	68.30	10.13	V
5668.000	58.76	-22.25	34.70	46.32	68.30	9.54	V
11436.000	49.61	-29.48	38.17	40.91	74.00	24.39	H
17160.000	50.98	-22.99	41.08	32.88	68.30	17.32	H
17266.500	53.84	-23.18	40.93	36.08	68.30	14.46	H
17683.500	53.96	-23.42	41.17	36.22	68.30	14.34	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)
5147.125	67.59	-22.59	34.38	55.79	74.00	6.41	H
5149.625	65.64	-22.50	34.40	53.75	74.00	8.36	H
10378.000	48.56	-29.78	37.50	40.85	68.30	19.74	H
15540.500	51.38	-24.68	40.14	35.92	74.00	22.62	V
16862.500	53.06	-23.11	41.44	34.73	68.30	15.24	V
17279.000	53.01	-23.37	40.92	35.46	68.30	15.29	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)
5181.000	60.50	-22.74	34.40	48.84	68.30	7.80	V
5284.000	61.18	-22.98	34.70	49.45	68.30	7.12	H
10457.000	48.15	-29.54	37.56	40.13	68.30	20.15	V
15697.000	50.94	-24.50	40.30	35.14	74.00	23.06	H
16734.500	53.93	-23.61	41.50	36.04	68.30	14.37	V
17608.000	53.28	-22.94	41.02	35.21	68.30	15.02	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)
5220.000	60.74	-22.55	34.44	48.84	68.30	7.56	H
5331.500	63.46	-22.95	34.93	51.48	68.30	4.84	V
10540.000	47.29	-29.58	37.64	39.23	68.30	21.01	H
15810.000	50.64	-24.35	40.52	34.47	74.00	23.36	H
16647.500	52.34	-23.62	41.50	34.46	68.30	15.96	H
16904.500	54.33	-23.06	41.40	35.99	68.30	13.97	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)
5350.087	68.82	-22.89	35.00	56.71	74.00	5.18	H
5351.325	68.27	-22.90	35.00	56.18	74.00	5.73	H
10611.850	48.82	-29.38	37.70	40.51	74.00	25.18	V
15930.000	51.01	-24.16	40.76	34.41	74.00	22.99	H
16665.500	52.26	-23.48	41.50	34.23	68.30	16.04	H
17190.500	53.08	-23.29	41.02	35.35	68.30	15.22	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)
5409.875	44.48	-22.66	34.60	32.54	68.30	23.82	V
5416.875	44.41	-22.66	34.60	32.47	68.30	23.89	V
11020.000	46.41	-30.40	37.82	39.00	74.00	27.59	H
16530.000	50.97	-23.82	41.36	33.43	68.30	17.33	V
16888.500	54.07	-22.99	41.41	35.65	68.30	14.23	H
17264.500	54.36	-23.22	40.94	36.64	68.30	13.94	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)
5543.500	59.63	-22.58	34.60	47.61	68.30	8.67	H
5629.000	60.03	-22.47	34.70	47.80	68.30	8.27	V
11180.000	46.60	-30.37	37.90	39.07	74.00	27.40	V
16607.000	55.33	-23.70	41.50	37.52	68.30	12.97	V
16770.000	51.66	-23.60	41.50	33.75	68.30	16.64	V
17218.000	54.52	-23.27	40.98	36.81	68.30	13.77	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)
5727.875	61.57	-22.13	34.76	48.95	68.30	6.73	H
5729.875	62.16	-22.26	34.76	49.66	68.30	6.14	V
11340.000	47.25	-29.85	38.04	39.05	74.00	26.75	V
17010.000	51.79	-23.10	41.38	33.51	68.30	16.51	H
17427.500	53.94	-23.27	40.93	36.28	68.30	14.36	H
17581.000	54.19	-23.30	41.00	36.49	68.30	14.11	H

Channel 142

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)
5660.500	58.59	-22.11	34.70	46.00	68.30	9.71	V
5771.000	60.53	-22.40	34.84	48.09	68.30	7.77	H
11420.000	47.86	-29.46	38.14	39.18	74.00	26.14	H
17130.000	50.59	-23.35	41.14	32.79	68.30	17.71	V
17279.500	53.25	-23.38	40.92	35.71	68.30	15.05	V
17612.000	53.97	-22.94	41.02	35.89	68.30	14.33	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)
5146.875	69.4	-22.6	34.4	57.61	74.0	4.6	H
5148.750	68.9	-22.5	34.4	57.06	74.0	5.1	V
10420.000	46.6	-29.2	37.5	38.20	68.3	21.8	H
15630.000	49.9	-24.9	40.2	34.56	74.0	24.1	V
16559.000	53.1	-23.6	41.4	35.31	68.3	15.2	H
17202.500	53.8	-23.1	41.0	35.92	68.3	14.5	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)
5350.200	69.8	-22.9	35.0	57.66	74.0	4.2	V
5360.663	70.3	-23.0	35.0	58.36	74.0	3.7	H
10580.000	45.3	-29.6	37.7	37.30	68.3	23.0	V
15870.000	52.8	-23.9	40.6	36.12	74.0	21.2	V
16445.000	53.4	-23.7	41.2	35.98	68.3	14.9	V
17387.500	53.3	-23.4	40.9	35.81	68.3	15.0	V

Channel 106

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5463.500	58.3	-22.6	34.6	46.35	68.3	10.0	H
5466.625	58.2	-22.7	34.6	46.28	68.3	10.1	V
11060.000	46.9	-30.3	37.9	39.35	74.0	27.1	H
16590.000	51.7	-23.8	41.5	34.02	68.3	16.6	V
16851.500	54.1	-23.2	41.4	35.81	68.3	14.2	V
17004.500	54.1	-23.0	41.4	35.65	68.3	14.2	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)
5725.875	59.8	-22.0	34.8	47.02	68.3	8.5	V
5732.375	58.9	-22.3	34.8	46.44	68.3	9.4	H
11220.000	46.8	-30.0	37.9	38.86	74.0	27.2	H
16830.000	51.6	-23.4	41.5	33.54	68.3	16.7	V
16997.500	53.2	-22.9	41.4	34.71	68.3	15.1	H
17180.000	53.5	-23.3	41.0	35.73	68.3	14.8	V

Channel 138

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)
5635.000	59.5	-22.5	34.7	47.24	68.3	8.8	V
5763.000	59.8	-22.4	34.8	47.31	68.3	8.5	V
11380.000	47.0	-29.7	38.1	38.62	74.0	27.0	V
17070.000	51.6	-23.3	41.3	33.64	68.3	16.7	V
17286.000	53.1	-23.4	40.9	35.57	68.3	15.2	V
17512.500	53.9	-23.4	41.0	36.34	68.3	14.4	H

Conclusion: PASS

Band edge compliance

Mode	Channel	Test Results	Conclusion
802.11a	5180 MHz	Fig.1	P
	5320 MHz	Fig.2	P
	5500 MHz	Fig.3	P
	5700 MHz	Fig.4	P
802.11n HT20	5180 MHz	Fig.5	P
	5320 MHz	Fig.6	P
	5500 MHz	Fig.7	P
	5700 MHz	Fig.8	P
802.11n HT40	5190 MHz	Fig.9	P
	5310 MHz	Fig.10	P
	5510 MHz	Fig.11	P
	5670 MHz	Fig.12	P
802.11ac HT20	5180 MHz	Fig.13	P
	5320 MHz	Fig.14	P
	5500 MHz	Fig.15	P
	5700 MHz	Fig.16	P
802.11ac HT40	5190 MHz	Fig.17	P
	5310 MHz	Fig.18	P
	5510 MHz	Fig.19	P
	5670 MHz	Fig.20	P
802.11ac HT80	5210MHz	Fig.21	P
	5290MHz	Fig.22	P
	5530MHz	Fig.23	P
	5610MHz	Fig.24	P

Conclusion: PASS

Test graphs as below:

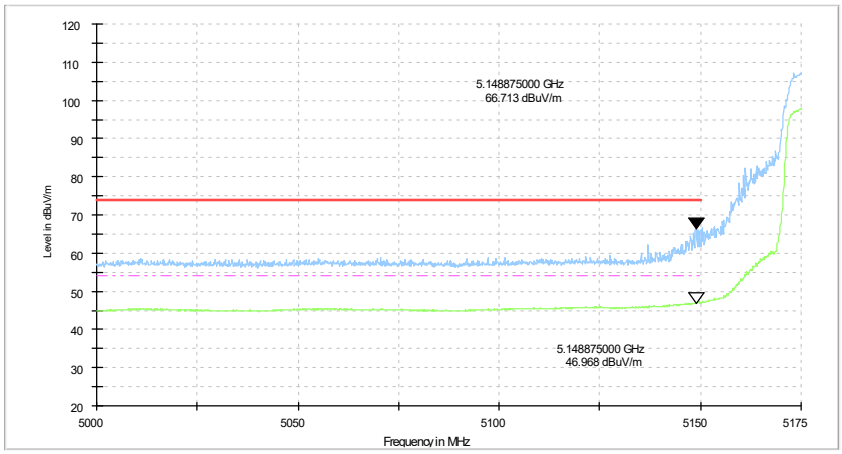


Fig. 1 Band Edges (802.11a Ch36, 5180MHz)

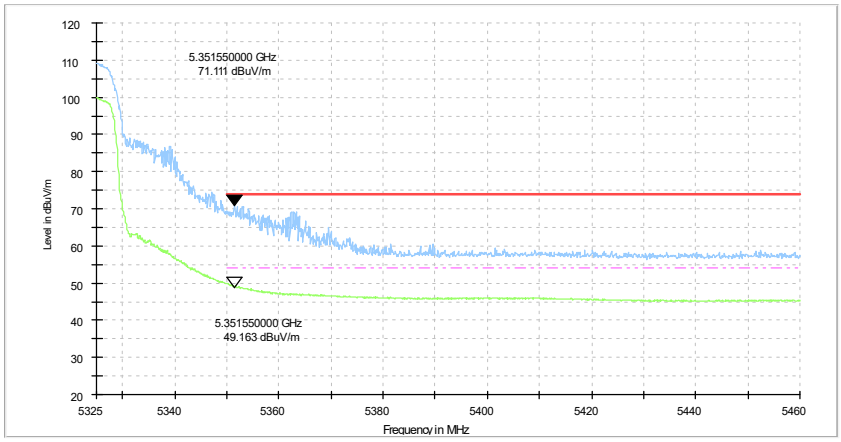


Fig. 2 Band Edges (802.11a Ch64, 5320MHz)

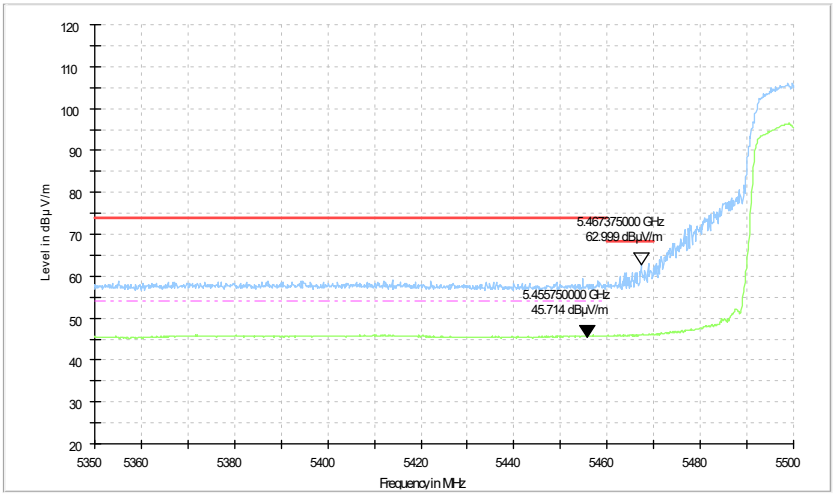


Fig. 3 Band Edges (802.11a Ch100, 5500MHz)

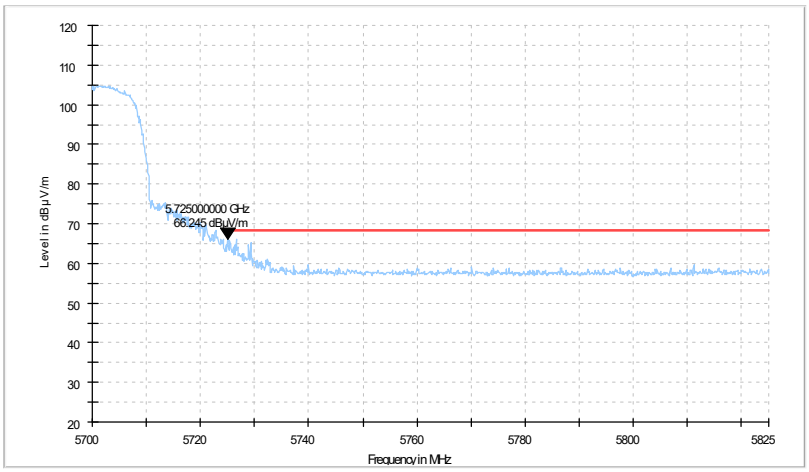


Fig. 4 Band Edges (802.11a Ch140, 5700MHz)

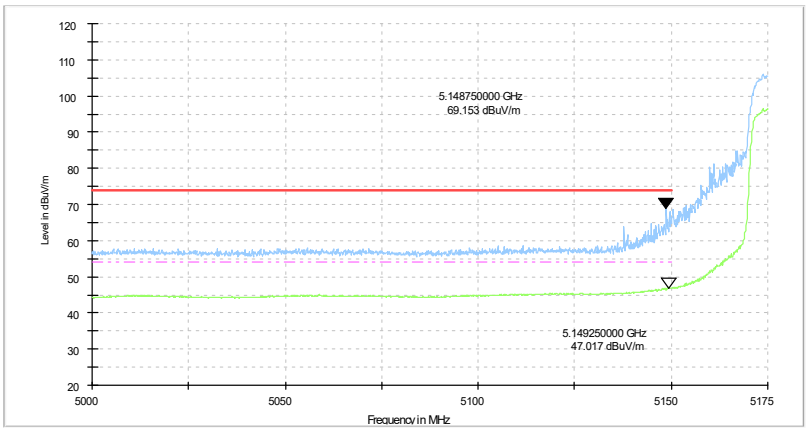


Fig. 5 Band Edges (802.11n-HT20 Ch36, 5180MHz)

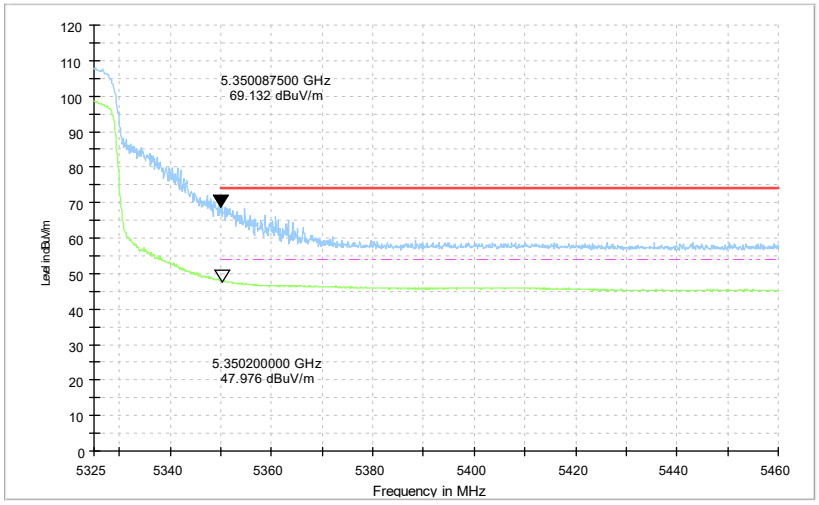


Fig. 6 Band Edges (802.11n-HT20 Ch64, 5320MHz)

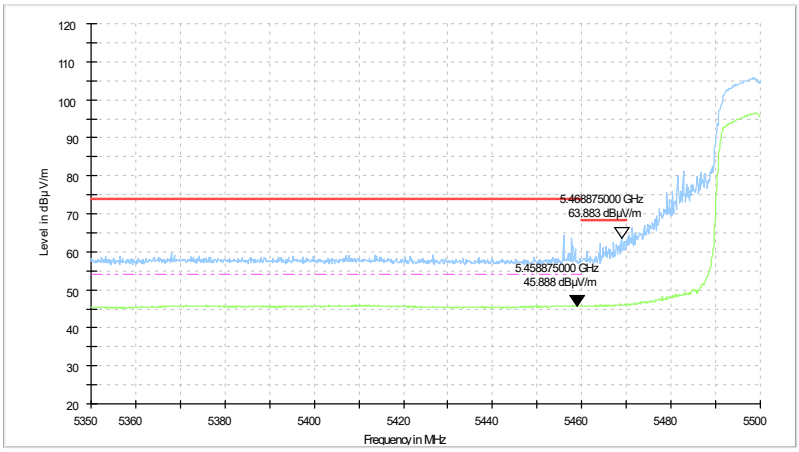


Fig. 7 Band Edges (802.11n-HT20 Ch100, 5500MHz)

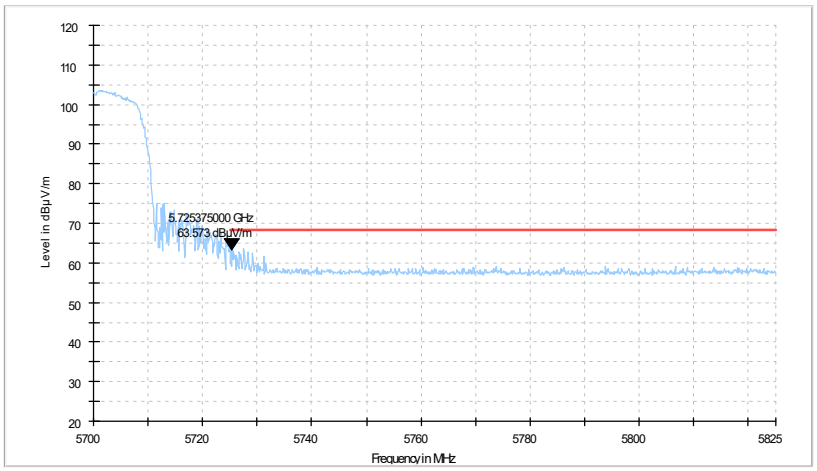


Fig. 8 Band Edges (802.11n-HT20 Ch140, 5700MHz)

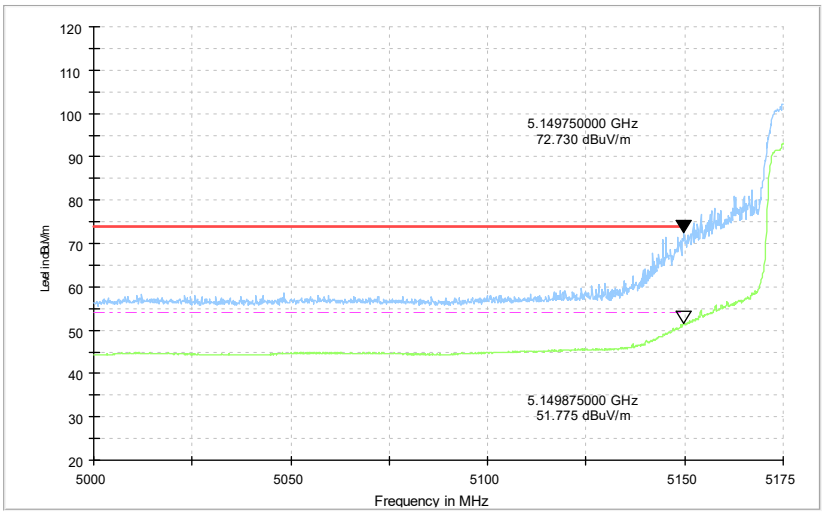


Fig. 9 Band Edges (802.11n-HT40 Ch38, 5190MHz)

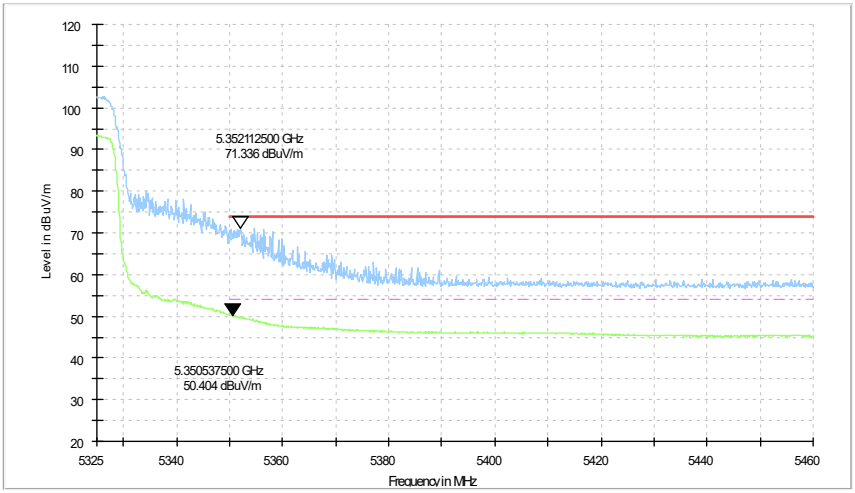


Fig. 10 Band Edges (802.11n-HT40 Ch62, 5310MHz)

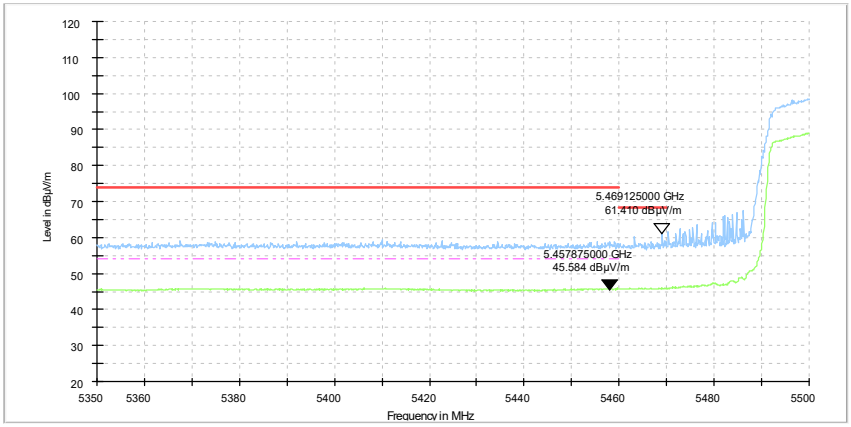


Fig. 11 Band Edges (802.11n-HT40 Ch102, 5510MHz)

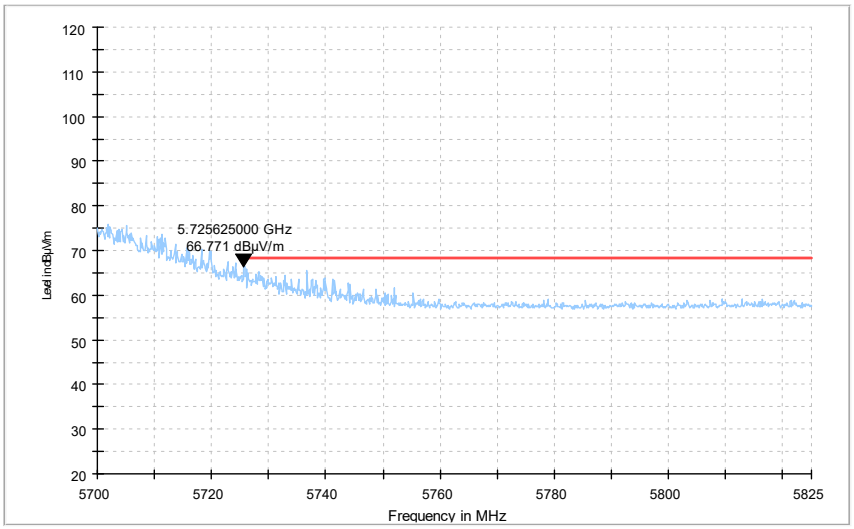


Fig. 12 Band Edges (802.11n-HT40 Ch134, 5670MHz)

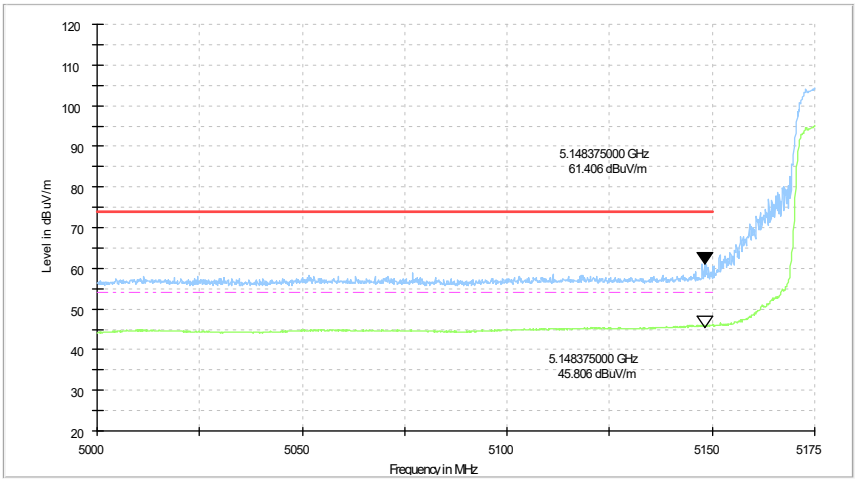


Fig. 13 Band Edges (802.11ac-HT20 Ch36, 5180MHz)

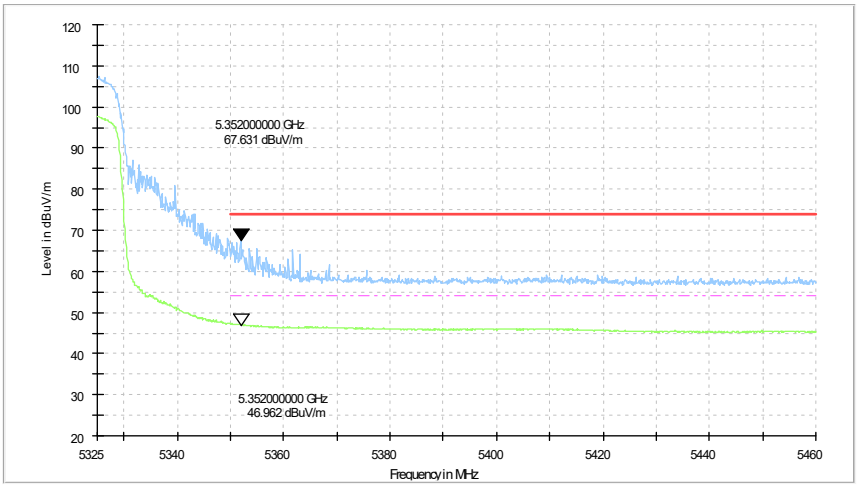


Fig. 14 Band Edges (802.11ac-HT20 Ch64, 5320MHz)

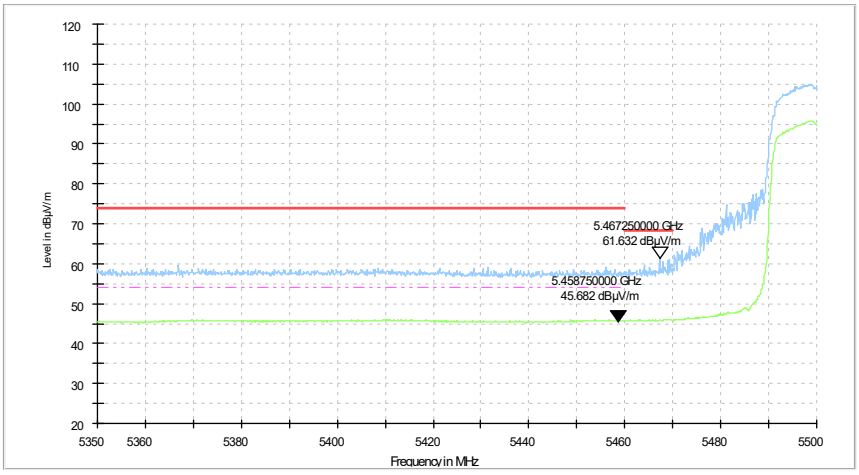


Fig. 15 Band Edges (802.11ac-HT20 Ch100, 5500MHz)

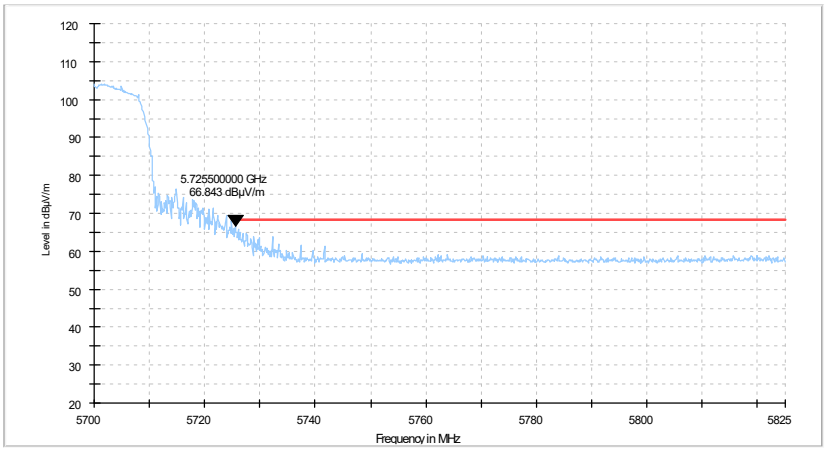


Fig. 16 Band Edges (802.11ac-HT20 Ch140, 5700MHz)

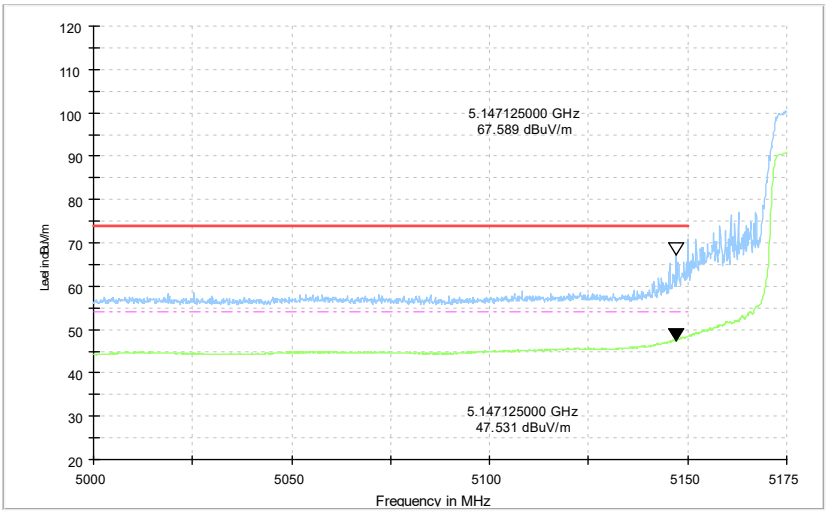


Fig. 17 Band Edges (802.11ac-HT40 Ch38, 5190MHz)

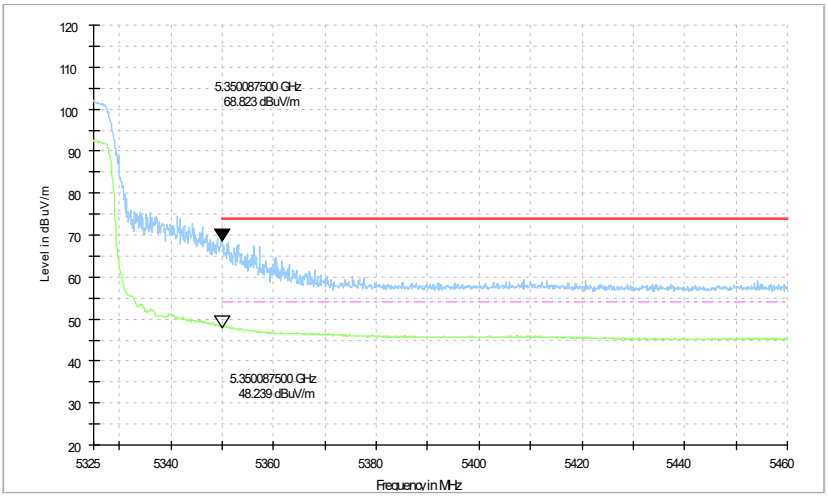


Fig. 18 Band Edges (802.11ac-HT40 Ch62, 5310MHz)

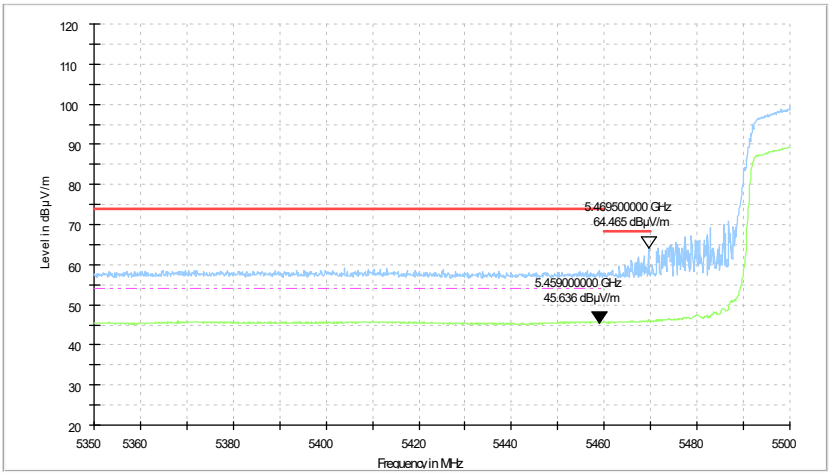


Fig. 19 Band Edges (802.11ac-HT40 Ch102, 5510MHz)

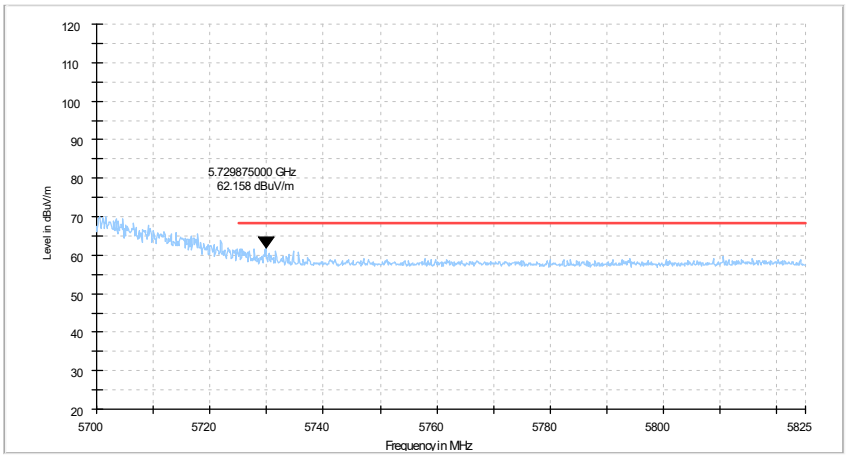


Fig. 20 Band Edges (802.11ac-HT40 Ch134, 5670MHz)

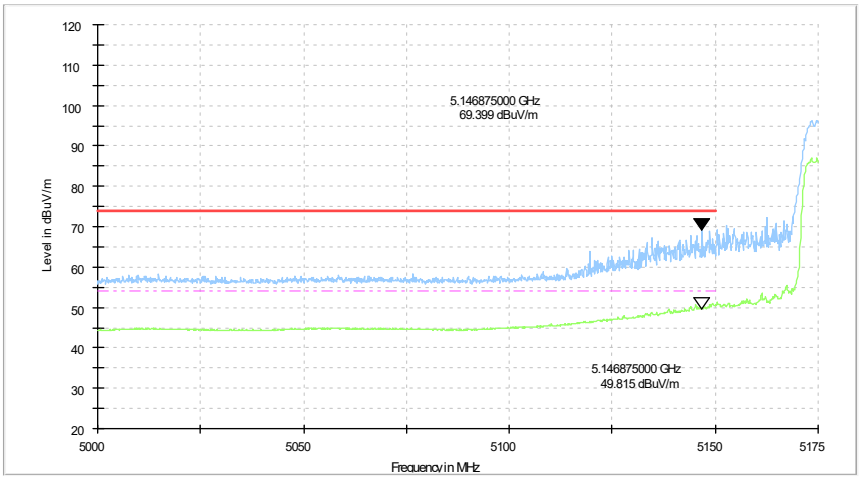


Fig. 21 Band Edges (802.11ac-HT80 Ch42 , 5210MHz)

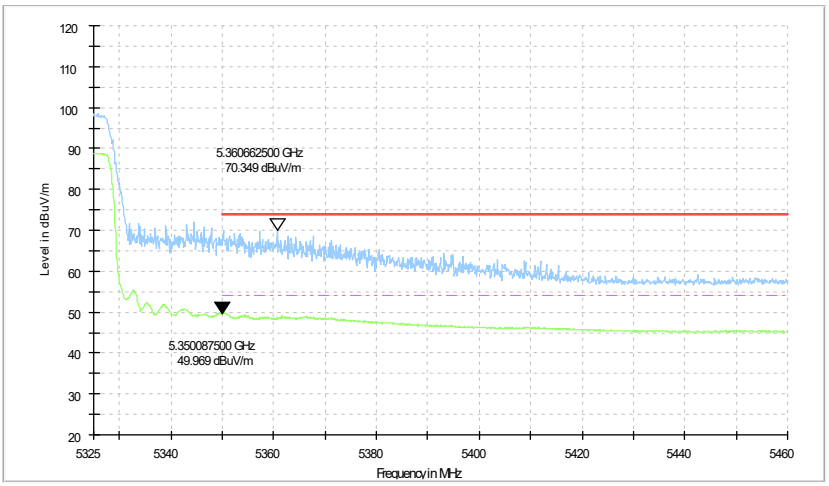


Fig. 22 Band Edges (802.11ac-HT80 Ch58, 5290MHz)

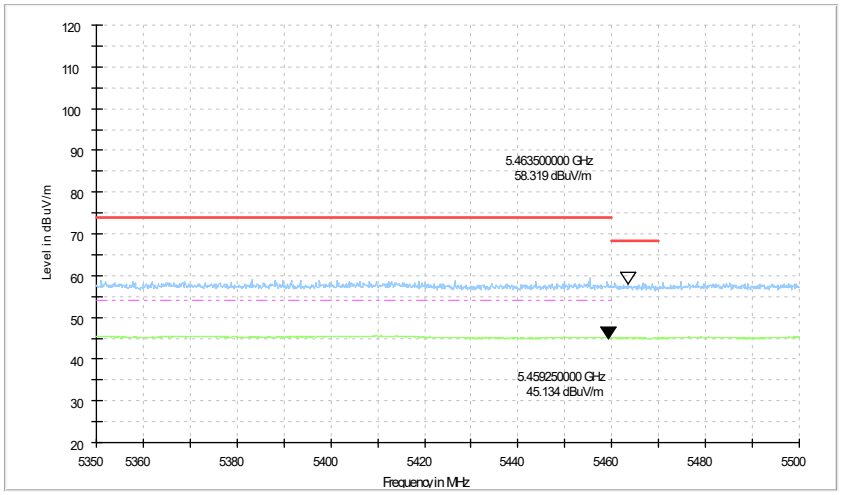


Fig. 23 Band Edges (802.11ac-HT80 Ch106, 5530MHz)

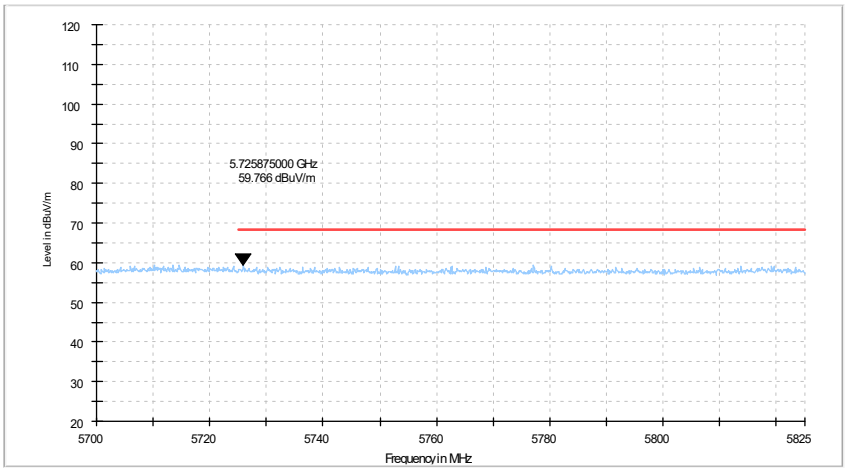


Fig. 24 Band Edges (802.11ac-HT80 Ch122, 5610MHz)

A.6. AC Powerline Conducted Emission (150kHz- 30MHz)

A.6.1 Summary

All AC line conducted spurious emissions are measured with a receiver connected to a grounded LISN while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates and modes were investigated for conducted spurious emissions. Only the conducted emissions of the configuration that produced the worst case emissions are reported in this section

A.6.2 Method of Measurement

See Clause 6.2 of ANSI C63.10 specifically.

See Clause 4 and Clause 5 of ANSI C63.10 generally.

The conducted emissions from the AC port of the EUT are measured in a shielding room. The EUT is connected to a Line Impedance Stabilization Network (LISN). An overview sweep with peak detection was performed. The measurements were performed with a quasi-peak detector and if required, an average detector.

The conducted emission measurements were made with the following detector of the test receiver: Quasi-Peak / Average Detector.

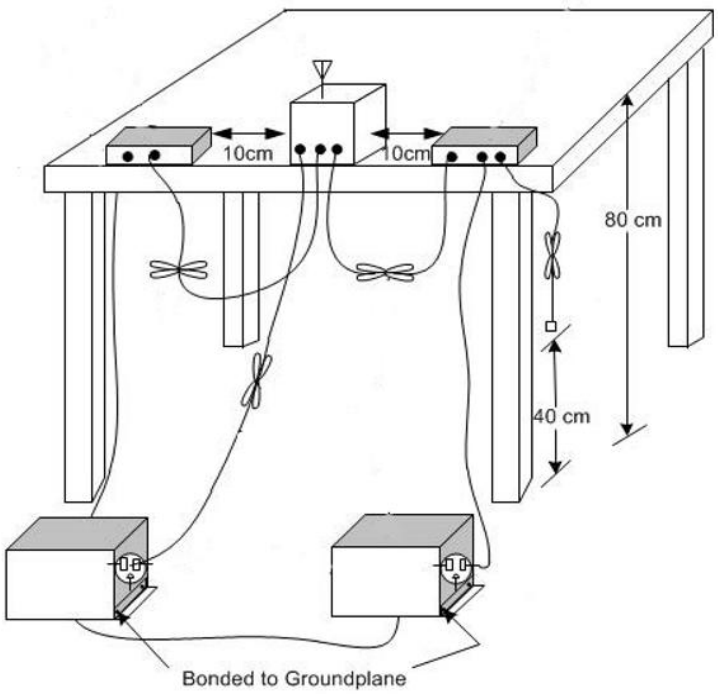
The measurement bandwidth is:

Frequency of Emission (MHz)	RBW/IF bandwidth
0.15-30	9kHz

A.6.3 Test Condition

Voltage（V）	Frequency（Hz）
120	60

A.6.4 Test setup



Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	66 to 56	Fig.25	Fig.26	P
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	56 to 46	Fig.25	Fig.26	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:

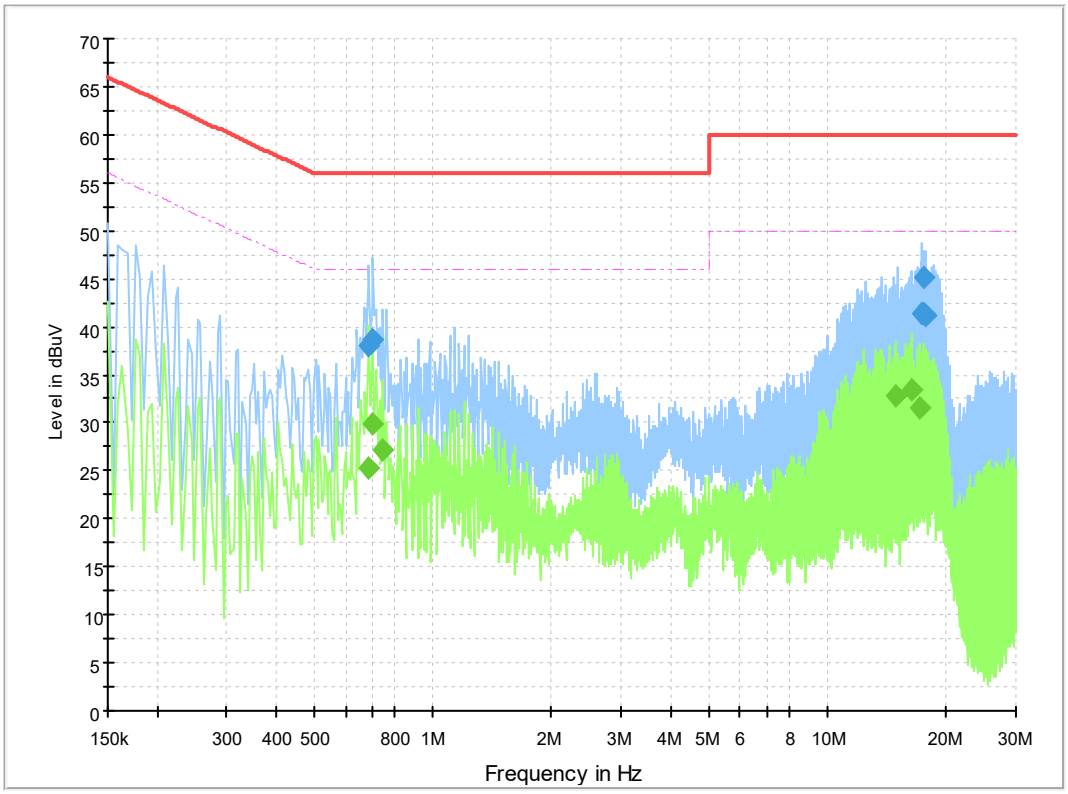


Fig.25 Conducted Emission(802.11a, Ch40, TX)

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.690000	38.0	2000.0	9.000	On	N	20.1	18.0	56.0	
0.703500	38.6	2000.0	9.000	On	N	20.1	17.4	56.0	
17.308500	41.4	2000.0	9.000	On	L1	20.1	18.6	60.0	
17.461500	41.4	2000.0	9.000	On	L1	20.1	18.6	60.0	
17.605500	45.2	2000.0	9.000	On	N	20.2	14.8	60.0	
17.772000	41.2	2000.0	9.000	On	L1	20.1	18.8	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.690000	25.2	2000.0	9.000	On	N	20.1	20.8	46.0	
0.703500	29.8	2000.0	9.000	On	N	20.1	16.2	46.0	
0.748500	27.1	2000.0	9.000	On	L1	20.0	18.9	46.0	
14.860500	32.8	2000.0	9.000	On	L1	20.0	17.2	50.0	
16.350000	33.3	2000.0	9.000	On	L1	20.0	16.7	50.0	
17.110500	31.6	2000.0	9.000	On	L1	20.1	18.4	50.0	

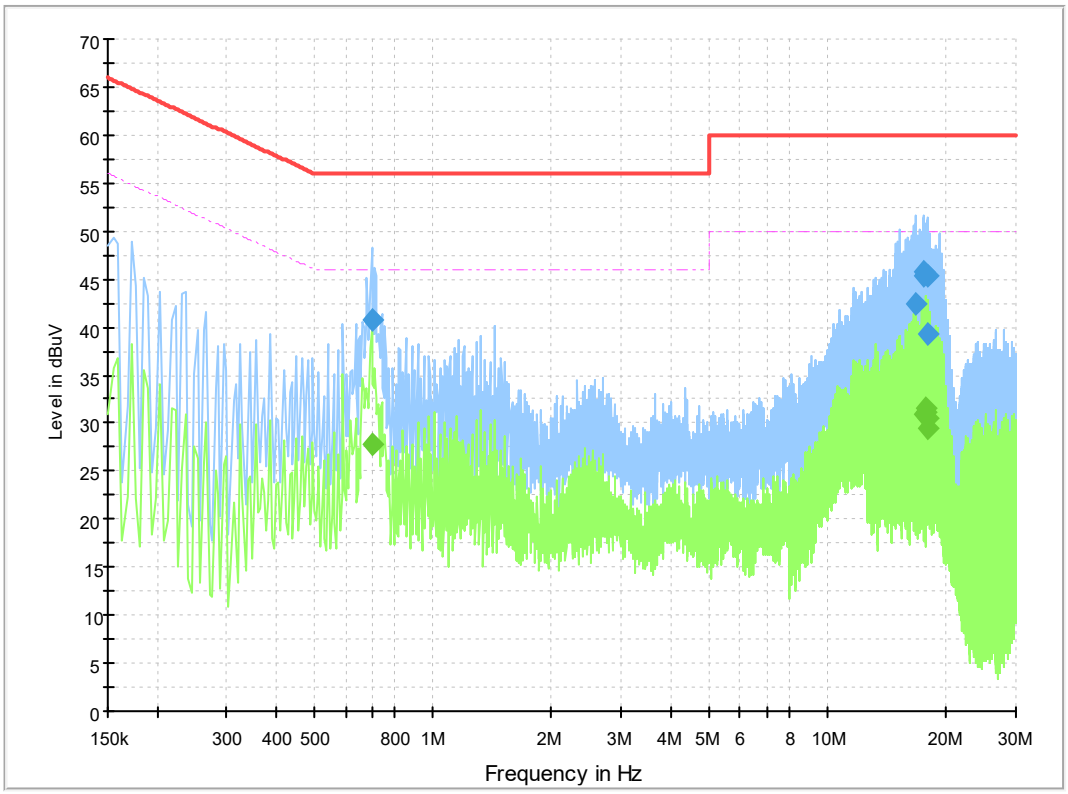


Fig.26 Conducted Emission(802.11a, IDLE)

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.699000	40.8	2000.0	9.000	On	N	20.1	15.2	56.0	
16.710000	42.4	2000.0	9.000	On	L1	20.0	17.6	60.0	
17.430000	45.4	2000.0	9.000	On	N	20.2	14.6	60.0	
17.605500	45.7	2000.0	9.000	On	N	20.2	14.3	60.0	
17.880000	45.3	2000.0	9.000	On	N	20.2	14.7	60.0	
18.033000	39.2	2000.0	9.000	On	L1	20.1	20.8	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.699000	27.8	2000.0	9.000	On	L1	20.0	18.2	46.0	
17.551500	31.0	2000.0	9.000	On	N	20.2	19.0	50.0	
17.695500	31.7	2000.0	9.000	On	L1	20.1	18.3	50.0	
17.772000	31.2	2000.0	9.000	On	L1	20.1	18.8	50.0	
17.925000	30.5	2000.0	9.000	On	N	20.2	19.5	50.0	
18.033000	29.5	2000.0	9.000	On	L1	20.1	20.5	50.0	

A.7. 99% Occupied bandwidth

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

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

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

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

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

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

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

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

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

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz

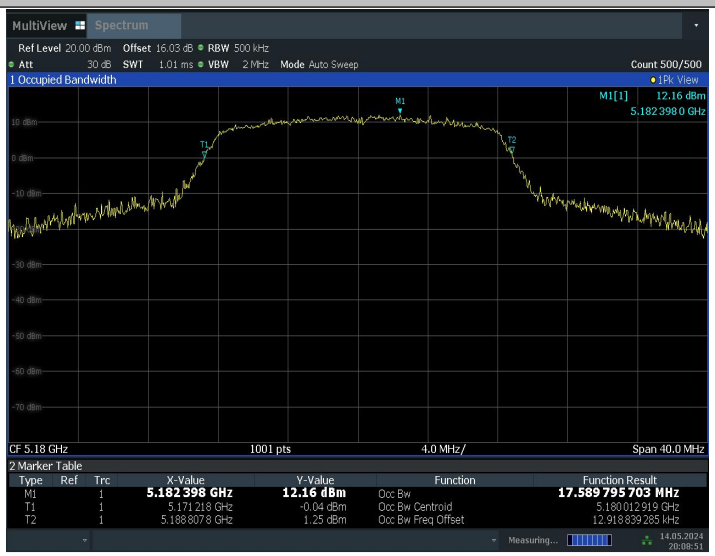
EUT ID: UT25a

Measurement Result:

TestMode	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	5180	17.59	5171.2180	5188.8078	---	---
	5200	17.535	5191.2127	5208.7481	---	---
	5240	17.553	5231.2299	5248.7834	---	---
11N20SISO	5180	18.239	5170.8930	5189.1323	---	---
	5200	18.17	5190.8897	5209.0600	---	---
	5240	18.17	5230.9122	5249.0821	---	---
11N40SISO	5190	36.599	5171.7094	5208.3085	---	---
	5230	36.655	5211.6826	5248.3377	---	---
11AC80SISO	5210	75.255	5172.3655	5247.6209	---	---

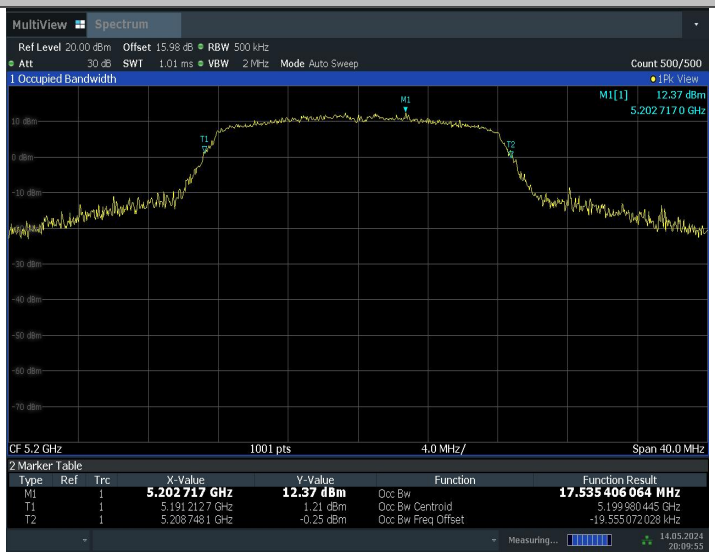
Test graphs as below:

11A_5180



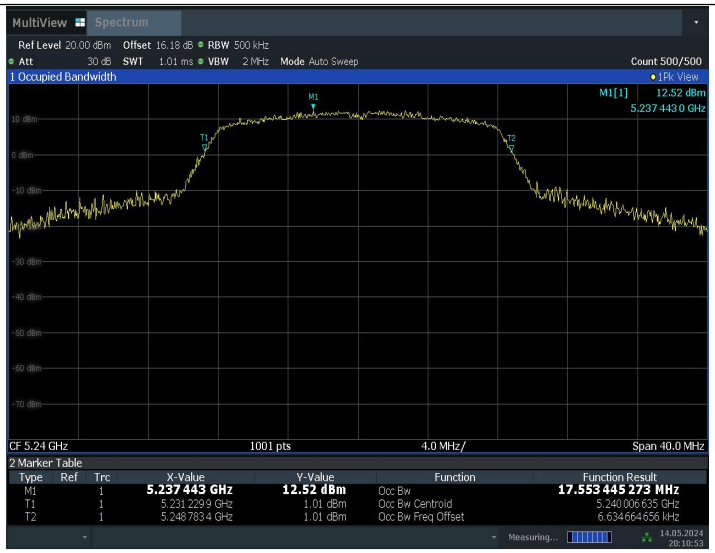
20:08:51 14.05.2024

11A_5200



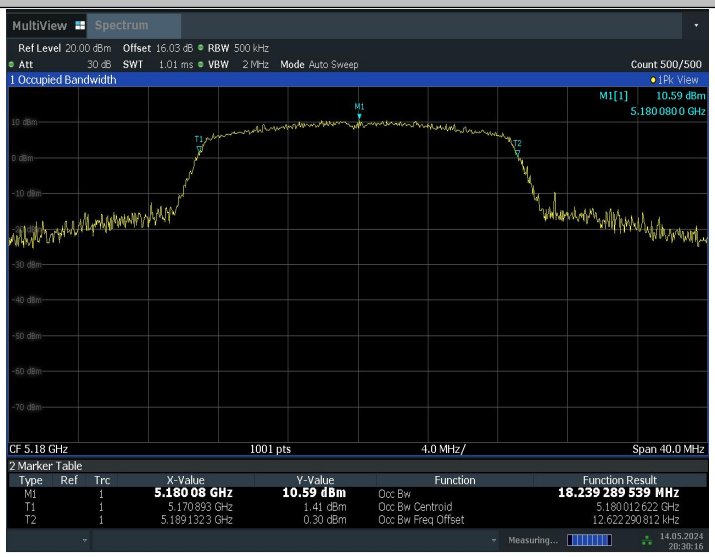
20:09:55 14.05.2024

11A_5240



20:10:53 14.05.2024

11N20SISO_5180



20:30:16 14.05.2024

11N20SISO_5200