



FCC PART 15 TEST REPORT No. I22Z60667-EMC05

for

Honor Device Co., Ltd.

Smart Phone

Model Name: VNE-N41

with

FCC ID: 2AYGCVNE-N41

Hardware Version: HN2VNEM

Software Version: 4.2.0.55(C900E55R1P1)

Issued Date: 2022-06-15

Note:

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The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

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REPORT HISTORY

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1. TEST LATORATORY

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0, and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (ISED#: 24849). The detail accreditation scope can be found on NVLAP website.

1.2. Testing Location

Location2: CTTL (Huayuan North Road)

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

1.3. TestingEnvironment

Normal Temperature: 15-35°C

Relative Humidity: 20-75%

1.4. Project date

Testing Start Date: 2022-04-27

Testing End Date: 2022-05-25

1.5. Signature



An Hui

(Prepared this test report)



Zhang Ying

(Reviewed this test report)



Zhang Xia

(Approved this test report)



2. CLIENT INFORMATION

2.1 Applicant Information

Company Name: Honor Device Co., Ltd.
Suite 3401,Unit A,Building 6,Shum Yip Sky Park,No.8089,Hongli
Address /Post: West Road,Xiangmihu Street,Futian District,Shenzhen,Guangdong
518040,People's Republic of China
Contact: /
Email: /
Telephone: /

2.2 Manufacturer Information

Company Name: Honor Device Co., Ltd.
Suite 3401,Unit A,Building 6,Shum Yip Sky Park,No.8089,Hongli
Address /Post: West Road,Xiangmihu Street,Futian District,Shenzhen,Guangdong
518040,People's Republic of China
Contact: /
Email: /
Telephone: /



3. PRODUCT INFORMATION

3.1. About EUT

Description	Smart Phone
Model name	VNE-N41
FCC ID	2AYGCVNE-N41

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of T CTTL-Telecommunication Technology Labs, CAICT

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
UT22a	864258060052700/864258060067179	HN2VNEM	4.2.0.55(C900E55R1P1)
UT25a	864258060053740/864258060068219	HN2VNEM	4.2.0.55(C900E55R1P1)
UT27a	864258060054268/864258060068730	HN2VNEM	4.2.0.55(C900E55R1P1)
UT29a	864258060052007/864258060066478	HN2VNEM	4.2.0.55(C900E55R1P1)

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

3.3. Internal Identification of AE used during the test

AE ID*	Description	Note
AE1-1	Adapter	HN-100225U00 (Salcomp)
AE1-2	Adapter	HN-100225E00 (Salcomp)
AE1-3	Adapter	HW-100225U00 (Huntkey)
AE1-4	Adapter	HW-100225E00 (Huntkey)
AE1-5	Adapter	HW-100225B00 (Huntkey)
AE2-1	USB Cable	CUDU01B-HC451 -EH (FF)
AE2-2	USB Cable	AU2-CRO013 HF (LJ)
AE2-3	USB Cable	L125UC007-CS-H (LX)
AE2-4	USB Cable	2120-00001-0 (MG)
AE2-5	USB Cable	RY0002 (NB)
AE3-1	Headset	1293-3283-3.5mm-339
AE3-2	Headset	EPAB542-2WH05-DH
AE3-3	Headset	MEND1532B528A11
AE4-1	Battery	HB496590EFW (SCUD)
AE4-2	Battery	HB496590EFW-F (SCUD)
AE4-3	Battery	HB496590EFW (NVT)
AE4-4	Battery	HB496590EFW-F (NVT)

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

3.4. General Description

Equipment Under Test (EUT) is a model of Smart Phone with integrated antenna.

It has MP3, MP4, Camera, USB memory, Bluetooth 5.1, Wi-Fi (802.11b/g/n/ac) , GNSS functions.

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

Samples undergoing test were selected by the client.

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

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.

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

Note: The test methods have no deviation with standards.

5. SUMMARY OF TEST RESULTS

5.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15	Verdict
Radiated Spurious Emission	15.407, 15.205, 15.209	P
AC Power line Conducted Emission	15.407, 15.207	P

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

Terms used in Verdict column

P	Pass, The EUT complies with the essential requirements in the standard.
NP	Not Perform, The test was not performed by CTTL
BR	Re-use test data from basic model report.
NA	Not Applicable, The test was not applicable
F	Fail, The EUT does not comply with the essential requirements in the standard

5.2. Statements

The test cases as listed in section 5.1 of this report for the EUT specified in section 3 was performed by CTTL and according to the standards or reference documents listed in section 4.2 The EUT met all requirements of the standards or reference documents, and only the WLAN function was tested in this report.

5.3. Test Conditions

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

Temperature	Normal Temperature	26°C
Voltage	Normal Voltage	4.0V
Humidity	Normal Humidity	20-75%

6. TEST EQUIPMENTS UTILIZED

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Loop Antenna	HFH2-Z2	829324/007	R&S	1 year	2022-12-22
2	EMI Antenna	3115	00167250	ETS-Lindgren	1 year	2022-07-01
3	EMI Antenna	VULB9163	9163-302	Schwarzbeck	1 year	2022-12-28
4	Test Receiver	ESW44	103023	R&S	1 year	2022-10-28
5	EMI Antenna	3116	2663	ETS-Lindgren	1 year	2022-08-11

AC Powerline Conducted Emission

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	LISN	ENV216	101200	Rohde & Schwarz	1 year	2022-05-30
2	Test Receiver	ESCI 7	100344	Rohde & Schwarz	1 year	2023-02-21



7. Measurement Uncertainty

Radiated Spurious Emission

Frequency Range	Uncertainty(dB) (k=2)
9kHz-30MHz	4.92
$30\text{MHz} \leq f \leq 1\text{GHz}$	5.15
$1\text{GHz} \leq f \leq 18\text{GHz}$	5.54
$18\text{GHz} \leq f \leq 40\text{GHz}$	5.26

AC Power-line Conducted Emission

Measurement Uncertainty (k=2)	3.08dB
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ANNEX A: EUT parameters

Disclaimer: The antenna gain and setting power 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 B: Antenna Requirements

According to FCC 47 CFR § 15.203, §15.407:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.”

- (1) The antennas of the EUT are permanently attached.
- (2) The EUT complies with the requirement of §15.203, §15.407.

ANNEX C: Detailed Test Results

C.1. Radiated Spurious Emission

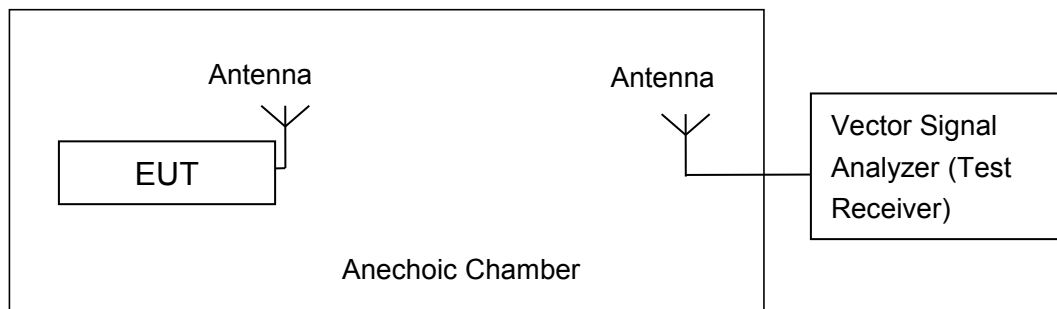
Specification Reference

FCC 47 CFR Part 15, Clause 15.407 (b) Clause 15.205 Clause 15.209

Method of Measurement

Testing was performed in according with ANSI C63.10-2013 and 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.



Measurement Limit

Standard	Limit
FCC 47 CFR Part 15.407 RSS-247, 6.2	(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)).

Limit in restricted band:

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



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

Test settings

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

Sample Calculation

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

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

Where:

E is the field strength in dBμV/m

D is the measurement distance in meters

EIRP is the equivalent isotropically radiated power in dbm

2. The measurement results are obtained as described below:

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

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.

Test Notes

1. The EUT is operating at its maximum duty cycle and its maximum power control level.
2. Investigation has been done on all channel, modes and modulations/data rates. Only the radiated emissions of the configurations that produced the worst case emissions are reported in this section.

C.1.1 Radiated Spurious Emission- above 1GHz

EUT set-up No.	Combination of EUT and AE
Set.1-1	EUT1 + AE1-1 + AE2-1

Results Set.1-1

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)
17941.700	42.06	-25.50	46.66	20.90	54.00	11.94	V
17969.800	42.05	-25.50	46.66	20.89	54.00	11.95	H
13329.400	38.24	-29.49	39.71	28.02	54.00	15.76	V
14487.100	38.16	-28.59	42.46	24.29	54.00	15.84	H
5150.000	44.21	-27.61	33.67	38.15	54.00	9.79	H
5148.500	44.05	-27.61	33.67	37.99	54.00	9.95	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)
17997.200	42.04	-25.50	46.66	20.88	54.00	11.96	V
17997.800	41.95	-25.50	46.66	20.79	54.00	12.05	V
14482.800	38.20	-28.59	42.46	24.33	54.00	15.80	V
14498.100	37.97	-28.59	42.46	24.10	54.00	16.03	V
11891.700	36.53	-31.85	39.05	29.33	54.00	17.47	V
11857.600	36.44	-31.85	39.05	29.24	54.00	17.56	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)
17957.700	42.07	-25.50	46.66	20.91	54.00	11.93	H
17967.000	42.03	-25.50	46.66	20.87	54.00	11.97	H
13327.800	38.00	-29.49	39.71	27.78	54.00	16.00	V
13337.100	38.00	-29.49	39.71	27.78	54.00	16.00	V
11052.400	36.19	-32.49	38.72	29.95	54.00	17.81	H
11050.800	36.07	-32.49	38.72	29.83	54.00	17.93	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)
10639.900	42.38	-32.76	38.38	36.76	54.00	11.62	V
10640.500	42.20	-32.76	38.38	36.58	54.00	11.80	V
17935.100	41.85	-25.50	46.66	20.69	54.00	12.15	V
17946.700	41.69	-25.50	46.66	20.53	54.00	12.31	H
14499.200	38.21	-28.59	42.46	24.34	54.00	15.79	H
13341.500	38.16	-29.49	39.71	27.94	54.00	15.84	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)
17939.000	42.04	-25.50	46.66	20.88	54.00	11.96	H
17979.100	41.89	-25.50	46.66	20.73	54.00	12.11	V
14498.100	37.94	-28.59	42.46	24.07	54.00	16.06	V
13347.000	37.88	-29.49	39.71	27.66	54.00	16.12	H
11043.000	36.22	-32.49	38.72	29.98	54.00	17.78	H
11051.900	36.15	-32.49	38.72	29.91	54.00	17.85	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)
10639.900	42.34	-32.76	38.38	36.72	54.00	11.66	V
10642.600	42.20	-32.76	38.38	36.58	54.00	11.80	V
17978.500	41.93	-25.50	46.66	20.77	54.00	12.07	H
17991.800	41.83	-25.50	46.66	20.67	54.00	12.17	V
5350.000	48.70	-27.43	34.01	42.12	54.00	5.30	H
5350.800	48.50	-27.43	34.01	41.92	54.00	5.50	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)
17780.500	42.06	-25.50	46.66	20.90	54.00	11.94	V
17748.700	41.72	-25.50	46.66	20.56	54.00	12.28	V
13350.900	38.09	-29.49	39.71	27.87	54.00	15.91	H
13328.900	38.02	-29.49	39.71	27.80	54.00	15.98	V
5454.100	45.01	-27.18	34.17	38.02	54.00	8.99	H
5444.900	44.90	-27.18	34.17	37.91	54.00	9.10	H

Channel 116

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
11160.200	43.14	-32.60	38.75	37.00	54.00	10.86	V
11159.100	43.02	-32.60	38.75	36.88	54.00	10.98	V
17949.400	41.82	-25.50	46.66	20.66	54.00	12.18	H
17972.000	41.73	-25.50	46.66	20.57	54.00	12.27	V
13341.500	37.86	-29.49	39.71	27.64	54.00	16.14	H
13351.400	37.84	-29.49	39.71	27.62	54.00	16.16	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)
17983.000	41.84	-25.50	46.66	20.68	54.00	12.16	V
17992.300	41.77	-25.50	46.66	20.61	54.00	12.23	V
13340.400	38.08	-29.49	39.71	27.86	54.00	15.92	H
13333.200	37.97	-29.49	39.71	27.75	54.00	16.03	V
11051.300	36.25	-32.49	38.72	30.01	54.00	17.75	V
11462.100	36.25	-32.26	38.84	29.68	54.00	17.75	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)
17945.000	42.50	-25.50	46.66	21.34	54.00	11.50	H
17979.700	42.06	-25.50	46.66	20.90	54.00	11.94	H
11438.000	39.74	-32.42	38.79	33.37	54.00	14.26	V
11441.800	39.69	-32.42	38.79	33.32	54.00	14.31	V
13342.000	38.08	-29.49	39.71	27.86	54.00	15.92	H
14487.100	37.97	-28.59	42.46	24.10	54.00	16.03	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)
17947.200	41.93	-25.50	46.66	20.77	54.00	12.07	H
17998.900	41.91	-25.50	46.66	20.75	54.00	12.09	V
13348.600	37.87	-29.49	39.71	27.65	54.00	16.13	H
14494.300	37.75	-28.59	42.46	23.88	54.00	16.25	V
5147.400	44.44	-27.61	33.67	38.38	54.00	9.56	H
5148.700	44.44	-27.61	33.67	38.38	54.00	9.56	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)
17865.800	41.95	-25.50	46.66	20.79	54.00	12.05	H
17714.000	41.86	-25.74	45.95	21.65	54.00	12.14	H
14487.700	37.95	-28.59	42.46	24.08	54.00	16.05	V
13360.200	37.88	-29.49	39.71	27.66	54.00	16.12	H
11966.500	36.31	-31.48	39.09	28.70	54.00	17.69	V
11052.400	36.30	-32.49	38.72	30.06	54.00	17.70	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)
17991.200	41.88	-25.50	46.66	20.72	54.00	12.12	V
17995.000	41.82	-25.50	46.66	20.66	54.00	12.18	H
14483.300	38.08	-28.59	42.46	24.21	54.00	15.92	V
13361.900	37.95	-29.49	39.71	27.73	54.00	16.05	H
11045.800	36.08	-32.49	38.72	29.84	54.00	17.92	V
11922.000	36.08	-31.48	39.09	28.47	54.00	17.92	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)
17987.300	41.71	-25.50	46.66	20.55	54.00	12.29	H
17845.500	41.64	-25.50	46.66	20.48	54.00	12.36	V
13351.400	37.89	-29.49	39.71	27.67	54.00	16.11	V
13349.200	37.62	-29.49	39.71	27.40	54.00	16.38	H
11523.800	36.37	-32.26	38.84	29.80	54.00	17.63	V
11943.400	36.11	-31.48	39.09	28.50	54.00	17.89	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)
17978.000	41.86	-25.50	46.66	20.70	54.00	12.14	V
17995.000	41.74	-25.50	46.66	20.58	54.00	12.26	V
14493.200	37.87	-28.59	42.46	24.00	54.00	16.13	H
13338.800	37.78	-29.49	39.71	27.56	54.00	16.22	H
11913.700	36.34	-31.48	39.09	28.73	54.00	17.66	V
11046.400	36.28	-32.49	38.72	30.04	54.00	17.72	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)
10638.800	42.25	-32.76	38.38	36.63	54.00	11.75	V
10643.200	41.84	-32.76	38.38	36.22	54.00	12.16	V
17942.800	41.73	-25.50	46.66	20.57	54.00	12.27	V
17779.500	41.69	-25.50	46.66	20.53	54.00	12.31	V
5350.200	48.63	-27.43	34.01	42.05	54.00	5.37	H
5350.600	48.47	-27.43	34.01	41.89	54.00	5.53	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)
17985.200	42.45	-25.50	46.66	21.29	54.00	11.55	V
17994.000	41.88	-25.50	46.66	20.72	54.00	12.12	H
13347.500	38.23	-29.49	39.71	28.01	54.00	15.77	H
10995.200	38.20	-32.82	38.70	32.32	54.00	15.80	V
5447.400	44.77	-27.18	34.17	37.78	54.00	9.23	H
5456.100	44.77	-27.18	34.17	37.78	54.00	9.23	H

Channel 116

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
11162.400	42.56	-32.60	38.75	36.42	54.00	11.44	V
11156.400	42.22	-32.60	38.75	36.08	54.00	11.78	V
17944.500	41.87	-25.50	46.66	20.71	54.00	12.13	H
17957.700	41.73	-25.50	46.66	20.57	54.00	12.27	V
13328.300	37.95	-29.49	39.71	27.73	54.00	16.05	V
14495.400	37.86	-28.59	42.46	23.99	54.00	16.14	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)
17749.200	41.84	-25.50	46.66	20.68	54.00	12.16	V
17998.900	41.78	-25.50	46.66	20.62	54.00	12.22	V
13338.800	38.07	-29.49	39.71	27.85	54.00	15.93	H
13342.000	38.07	-29.49	39.71	27.85	54.00	15.93	V
11044.100	36.30	-32.49	38.72	30.06	54.00	17.70	V
11527.600	36.25	-32.26	38.84	29.68	54.00	17.75	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)
17998.300	41.88	-25.50	46.66	20.72	54.00	12.12	H
17992.300	41.85	-25.50	46.66	20.69	54.00	12.15	V
11439.000	39.27	-32.42	38.79	32.90	54.00	14.73	V
11442.400	39.14	-32.42	38.79	32.77	54.00	14.86	V
13355.800	37.84	-29.49	39.71	27.62	54.00	16.16	V
13349.800	37.81	-29.49	39.71	27.59	54.00	16.19	H



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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)
17962.600	41.75	-25.50	46.66	20.59	54.00	12.25	V
17748.100	41.72	-25.50	46.66	20.56	54.00	12.28	V
13344.800	37.88	-29.49	39.71	27.66	54.00	16.12	V
14477.800	37.85	-28.59	42.46	23.98	54.00	16.15	V
5149.700	49.62	-27.61	33.67	43.56	54.00	4.38	H
5149.600	49.46	-27.61	33.67	43.40	54.00	4.54	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)
17746.500	41.96	-25.50	46.66	20.80	54.00	12.04	V
17995.000	41.93	-25.50	46.66	20.77	54.00	12.07	H
14492.600	38.00	-28.59	42.46	24.13	54.00	16.00	V
14488.800	37.91	-28.59	42.46	24.04	54.00	16.09	V
11926.900	36.29	-31.48	39.09	28.68	54.00	17.71	H
11917.500	36.27	-31.48	39.09	28.66	54.00	17.73	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)
17774.000	41.78	-25.50	46.66	20.62	54.00	12.22	V
17972.000	41.69	-25.50	46.66	20.53	54.00	12.31	H
14497.000	38.09	-28.59	42.46	24.22	54.00	15.91	V
14491.500	37.95	-28.59	42.46	24.08	54.00	16.05	V
11946.700	36.40	-31.48	39.09	28.79	54.00	17.60	V
11535.900	36.35	-32.26	38.84	29.78	54.00	17.65	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)
17994.500	41.81	-25.50	46.66	20.65	54.00	12.19	H
17742.600	41.77	-25.50	46.66	20.61	54.00	12.23	V
10619.500	39.03	-32.76	38.38	33.41	54.00	14.97	V
10629.500	38.97	-32.76	38.38	33.35	54.00	15.03	V
5350.100	49.46	-27.43	34.01	42.88	54.00	4.54	H
5350.100	49.15	-27.43	34.01	42.57	54.00	4.85	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)
17998.900	41.89	-25.50	46.66	20.73	54.00	12.11	H
17809.700	41.83	-25.50	46.66	20.67	54.00	12.17	V
14498.700	38.01	-28.59	42.46	24.14	54.00	15.99	V
13335.500	37.99	-29.49	39.71	27.77	54.00	16.01	H
5459.200	46.91	-27.18	34.17	39.92	54.00	7.09	H
5458.700	46.74	-27.18	34.17	39.75	54.00	7.26	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)
17962.000	42.36	-25.50	46.66	21.20	54.00	11.64	V
17965.300	42.02	-25.50	46.66	20.86	54.00	11.98	H
11178.900	39.75	-32.60	38.75	33.61	54.00	14.25	V
11172.300	39.43	-32.60	38.75	33.29	54.00	14.57	V
13339.300	38.11	-29.49	39.71	27.89	54.00	15.89	V
13356.400	38.09	-29.49	39.71	27.87	54.00	15.91	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)
17962.600	41.93	-25.50	46.66	20.77	54.00	12.07	V
17963.200	41.80	-25.50	46.66	20.64	54.00	12.20	V
13345.400	38.05	-29.49	39.71	27.83	54.00	15.95	H
13341.500	37.77	-29.49	39.71	27.55	54.00	16.23	H
7559.900	36.47	-35.04	36.87	34.64	54.00	17.53	H
11052.400	36.33	-32.49	38.72	30.09	54.00	17.67	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)
17747.000	42.26	-25.50	46.66	21.10	54.00	11.74	V
17934.500	41.97	-25.50	46.66	20.81	54.00	12.03	V
13341.000	38.04	-29.49	39.71	27.82	54.00	15.96	V
14491.500	38.00	-28.59	42.46	24.13	54.00	16.00	V
11427.500	36.66	-32.42	38.79	30.29	54.00	17.34	V
11419.800	36.65	-32.42	38.79	30.28	54.00	17.35	V



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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)
17948.300	42.03	-25.50	46.66	20.87	54.00	11.97	H
17998.900	41.99	-25.50	46.66	20.83	54.00	12.01	H
14491.000	38.40	-28.59	42.46	24.53	54.00	15.60	V
13333.200	38.12	-29.49	39.71	27.90	54.00	15.88	V
5150.000	44.98	-27.61	33.67	38.92	54.00	9.02	H
5149.500	44.79	-27.61	33.67	38.73	54.00	9.21	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)
17950.000	42.02	-25.50	46.66	20.86	54.00	11.98	V
17963.700	41.92	-25.50	46.66	20.76	54.00	12.08	V
14499.200	38.12	-28.59	42.46	24.25	54.00	15.88	V
13332.100	37.93	-29.49	39.71	27.71	54.00	16.07	H
11929.100	36.44	-31.48	39.09	28.83	54.00	17.56	V
11048.500	36.23	-32.49	38.72	29.99	54.00	17.77	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)
17923.500	42.13	-25.50	46.66	20.97	54.00	11.87	V
17976.300	41.83	-25.50	46.66	20.67	54.00	12.17	V
13356.400	37.94	-29.49	39.71	27.72	54.00	16.06	H
13346.500	37.83	-29.49	39.71	27.61	54.00	16.17	H
11930.800	36.29	-31.48	39.09	28.68	54.00	17.71	V
11053.000	36.24	-32.49	38.72	30.00	54.00	17.76	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)
17704.100	41.86	-25.74	45.95	21.65	54.00	12.14	V
17960.400	41.75	-25.50	46.66	20.59	54.00	12.25	H
13338.800	37.82	-29.49	39.71	27.60	54.00	16.18	H
14487.100	37.80	-28.59	42.46	23.93	54.00	16.20	V
11934.600	36.23	-31.48	39.09	28.62	54.00	17.77	V
11945.600	36.21	-31.48	39.09	28.60	54.00	17.79	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)
17994.500	41.72	-25.50	46.66	20.56	54.00	12.28	H
17744.200	41.69	-25.50	46.66	20.53	54.00	12.31	V
13339.300	38.07	-29.49	39.71	27.85	54.00	15.93	V
14494.900	37.92	-28.59	42.46	24.05	54.00	16.08	H
11936.800	36.45	-31.48	39.09	28.84	54.00	17.55	V
11931.300	36.13	-31.48	39.09	28.52	54.00	17.87	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)
10639.900	42.15	-32.76	38.38	36.53	54.00	11.85	V
17741.500	41.87	-25.50	46.66	20.71	54.00	12.13	V
17726.100	41.67	-25.74	45.95	21.46	54.00	12.33	H
10643.800	41.58	-32.76	38.38	35.96	54.00	12.42	V
5350.100	48.52	-27.43	34.01	41.94	54.00	5.48	H
5350.300	48.36	-27.43	34.01	41.78	54.00	5.64	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)
17980.200	41.86	-25.50	46.66	20.70	54.00	12.14	H
17975.200	41.77	-25.50	46.66	20.61	54.00	12.23	V
13330.500	38.22	-29.49	39.71	28.00	54.00	15.78	H
13350.900	38.11	-29.49	39.71	27.89	54.00	15.89	H
5450.600	45.05	-27.18	34.17	38.06	54.00	8.95	H
5451.400	44.76	-27.18	34.17	37.77	54.00	9.24	H

Channel 116

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
11159.600	42.70	-32.60	38.75	36.56	54.00	11.30	V
11161.300	42.33	-32.60	38.75	36.19	54.00	11.67	V
17947.200	41.94	-25.50	46.66	20.78	54.00	12.06	H
17948.300	41.73	-25.50	46.66	20.57	54.00	12.27	H
14476.700	38.21	-28.59	42.46	24.34	54.00	15.79	H
14496.000	38.10	-28.59	42.46	24.23	54.00	15.90	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)
17989.500	41.80	-25.50	46.66	20.64	54.00	12.20	H
17767.900	41.79	-25.50	46.66	20.63	54.00	12.21	H
13361.300	38.05	-29.49	39.71	27.83	54.00	15.95	H
13328.900	37.94	-29.49	39.71	27.72	54.00	16.06	H
11051.300	36.34	-32.49	38.72	30.10	54.00	17.66	V
11054.600	36.28	-32.49	38.72	30.04	54.00	17.72	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)
17948.300	41.97	-25.50	46.66	20.81	54.00	12.03	V
17969.200	41.89	-25.50	46.66	20.73	54.00	12.11	V
11439.600	39.44	-32.42	38.79	33.07	54.00	14.56	V
11441.800	39.21	-32.42	38.79	32.84	54.00	14.79	V
14491.500	37.98	-28.59	42.46	24.11	54.00	16.02	H
13326.600	37.86	-29.49	39.71	27.64	54.00	16.14	H



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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)
17770.100	41.78	-25.50	46.66	20.62	54.00	12.22	V
17995.000	41.77	-25.50	46.66	20.61	54.00	12.23	V
14497.000	37.74	-28.59	42.46	23.87	54.00	16.26	H
14489.400	37.69	-28.59	42.46	23.82	54.00	16.31	H
5149.800	49.36	-27.61	33.67	43.30	54.00	4.64	H
5149.900	49.34	-27.61	33.67	43.28	54.00	4.66	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)
17997.800	41.76	-25.50	46.66	20.60	54.00	12.24	V
17941.200	41.68	-25.50	46.66	20.52	54.00	12.32	H
14496.000	38.03	-28.59	42.46	24.16	54.00	15.97	H
14499.800	38.01	-28.59	42.46	24.14	54.00	15.99	H
11915.900	36.31	-31.48	39.09	28.70	54.00	17.69	V
11860.400	36.25	-31.85	39.05	29.05	54.00	17.75	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)
17796.500	41.80	-25.50	46.66	20.64	54.00	12.20	V
17749.800	41.72	-25.50	46.66	20.56	54.00	12.28	V
13341.500	37.79	-29.49	39.71	27.57	54.00	16.21	H
14489.900	37.78	-28.59	42.46	23.91	54.00	16.22	H
11987.400	36.20	-31.48	39.09	28.59	54.00	17.80	H
11953.900	36.07	-31.48	39.09	28.46	54.00	17.93	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)
17934.500	41.77	-25.50	46.66	20.61	54.00	12.23	V
17964.800	41.62	-25.50	46.66	20.46	54.00	12.38	V
10619.500	40.35	-32.76	38.38	34.73	54.00	13.65	V
10620.100	39.32	-32.76	38.38	33.70	54.00	14.68	V
5350.600	49.19	-27.43	34.01	42.61	54.00	4.81	H
5350.200	48.94	-27.43	34.01	42.36	54.00	5.06	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)
17780.000	41.92	-25.50	46.66	20.76	54.00	12.08	V
17760.800	41.84	-25.50	46.66	20.68	54.00	12.16	V
14489.900	38.04	-28.59	42.46	24.17	54.00	15.96	V
13350.900	38.02	-29.49	39.71	27.80	54.00	15.98	H
5459.400	47.21	-27.18	34.17	40.22	54.00	6.79	H
5459.700	47.18	-27.18	34.17	40.19	54.00	6.82	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)
17993.400	42.18	-25.50	46.66	21.02	54.00	11.82	V
17953.800	42.00	-25.50	46.66	20.84	54.00	12.00	H
11175.000	39.12	-32.60	38.75	32.98	54.00	14.88	V
11171.200	38.80	-32.60	38.75	32.66	54.00	15.20	V
13348.600	38.02	-29.49	39.71	27.80	54.00	15.98	V
13339.300	38.00	-29.49	39.71	27.78	54.00	16.00	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)
17986.800	41.93	-25.50	46.66	20.77	54.00	12.07	H
17997.800	41.71	-25.50	46.66	20.55	54.00	12.29	H
13339.300	37.98	-29.49	39.71	27.76	54.00	16.02	H
13354.700	37.92	-29.49	39.71	27.70	54.00	16.08	V
11048.500	36.51	-32.49	38.72	30.27	54.00	17.49	V
11046.400	36.29	-32.49	38.72	30.05	54.00	17.71	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)
17991.800	42.08	-25.50	46.66	20.92	54.00	11.92	V
17993.400	42.05	-25.50	46.66	20.89	54.00	11.95	H
13350.300	38.13	-29.49	39.71	27.91	54.00	15.87	H
13346.500	38.06	-29.49	39.71	27.84	54.00	15.94	V
11430.800	36.60	-32.42	38.79	30.23	54.00	17.40	V
11432.500	36.49	-32.42	38.79	30.12	54.00	17.51	V



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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)
17995.000	41.94	-25.50	46.66	20.78	54.00	12.06	H
17778.900	41.83	-25.50	46.66	20.67	54.00	12.17	V
14483.900	38.03	-28.59	42.46	24.16	54.00	15.97	V
13344.800	38.02	-29.49	39.71	27.80	54.00	15.98	V
5149.700	46.09	-27.61	33.67	40.03	54.00	7.91	H
5148.300	45.97	-27.61	33.67	39.91	54.00	8.03	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)
17957.100	41.91	-25.50	46.66	20.75	54.00	12.09	H
17771.200	41.68	-25.50	46.66	20.52	54.00	12.32	V
14497.600	37.92	-28.59	42.46	24.05	54.00	16.08	V
14493.200	37.81	-28.59	42.46	23.94	54.00	16.19	V
5350.500	48.95	-27.43	34.01	42.37	54.00	5.05	H
5350.800	48.70	-27.43	34.01	42.12	54.00	5.30	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)
17946.100	42.03	-25.50	46.66	20.87	54.00	11.97	V
17774.500	42.02	-25.50	46.66	20.86	54.00	11.98	V
13335.500	38.27	-29.49	39.71	28.05	54.00	15.73	V
13337.600	38.12	-29.49	39.71	27.90	54.00	15.88	V
5457.900	45.61	-27.18	34.17	38.62	54.00	8.39	H
5459.800	45.57	-27.18	34.17	38.58	54.00	8.43	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)
17989.500	42.02	-25.50	46.66	20.86	54.00	11.98	V
17947.800	41.95	-25.50	46.66	20.79	54.00	12.05	H
13348.600	38.01	-29.49	39.71	27.79	54.00	15.99	H
14478.400	37.91	-28.59	42.46	24.04	54.00	16.09	H
7479.600	36.70	-34.48	36.82	34.35	54.00	17.30	H
11933.500	36.30	-31.48	39.09	28.69	54.00	17.70	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)
17967.000	41.77	-25.50	46.66	20.61	54.00	12.23	H
17994.500	41.75	-25.50	46.66	20.59	54.00	12.25	V
14499.800	37.97	-28.59	42.46	24.10	54.00	16.03	V
13353.000	37.94	-29.49	39.71	27.72	54.00	16.06	V
11379.600	37.23	-32.42	38.79	30.86	54.00	16.77	V
11367.000	36.87	-32.42	38.79	30.50	54.00	17.13	V



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)
17705.800	53.02	-25.74	45.95	32.81	74.00	20.98	V
17401.600	52.65	-26.85	45.25	34.25	68.30	15.65	H
13546.600	51.22	-29.56	39.99	40.79	68.30	17.08	V
13578.500	50.89	-29.50	40.43	39.96	68.30	17.41	H
5148.800	64.93	-27.61	33.67	58.87	74.00	9.07	H
5147.600	64.83	-27.61	33.67	58.77	74.00	9.17	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)
17936.200	52.78	-25.50	46.66	31.62	74.00	21.22	V
17709.600	52.55	-25.74	45.95	32.34	74.00	21.45	V
13626.400	50.18	-29.50	40.43	39.25	68.30	18.12	V
13700.600	49.97	-29.10	40.86	38.20	68.30	18.33	V
10401.200	48.70	-33.22	38.19	43.73	68.30	19.60	V
10400.100	47.67	-33.22	38.19	42.70	68.30	20.63	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)
17687.600	53.41	-25.74	45.95	33.20	68.30	14.89	H
17727.200	52.75	-25.74	45.95	32.54	74.00	21.25	H
13640.100	50.61	-29.50	40.43	39.68	68.30	17.69	H
13553.200	50.04	-29.56	39.99	39.61	68.30	18.26	H
10481.000	49.57	-32.99	38.27	44.28	68.30	18.73	V
10477.100	48.86	-32.99	38.27	43.57	68.30	19.44	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)
10641.500	52.75	-32.76	38.38	47.13	74.00	21.25	V
17380.700	52.19	-25.95	44.35	33.78	68.30	16.11	V
17711.800	52.16	-25.74	45.95	31.95	74.00	21.84	V
10641.000	50.97	-32.76	38.38	45.35	74.00	23.03	V
13621.500	50.29	-29.50	40.43	39.36	68.30	18.01	V
13548.900	50.09	-29.56	39.99	39.66	68.30	18.21	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)
17821.200	52.46	-25.50	46.66	31.30	74.00	21.54	H
17783.800	52.43	-25.50	46.66	31.27	74.00	21.57	V
10561.800	51.10	-32.99	38.27	45.81	68.30	17.20	V
13557.600	50.48	-29.56	39.99	40.05	68.30	17.82	H
13595.600	50.40	-29.50	40.43	39.47	68.30	17.90	H
10554.600	50.28	-32.99	38.27	44.99	68.30	18.02	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)
17752.500	52.38	-25.50	46.66	31.22	74.00	21.62	V
17749.200	52.09	-25.50	46.66	30.93	74.00	21.91	H
10636.000	51.61	-32.76	38.38	45.99	74.00	22.39	V
10642.600	51.20	-32.76	38.38	45.58	74.00	22.80	V
5350.700	68.81	-27.43	34.01	62.23	74.00	5.19	H
5350.300	68.77	-27.43	34.01	62.19	74.00	5.23	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)
17944.500	52.60	-25.50	46.66	31.44	74.00	21.40	H
17983.500	52.33	-25.50	46.66	31.17	74.00	21.67	V
13561.000	50.36	-29.50	40.43	39.43	68.30	17.94	V
13591.800	49.66	-29.50	40.43	38.73	68.30	18.64	H
5459.700	62.47	-27.18	34.17	55.48	74.00	11.53	H
5469.500	63.67	-27.18	34.17	56.68	68.30	4.63	H

Channel 116

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17673.800	52.99	-25.74	45.95	32.78	68.30	15.31	H
17740.400	52.74	-25.50	46.66	31.58	74.00	21.26	H
11157.500	52.44	-32.60	38.75	46.30	74.00	21.56	V
11153.000	51.95	-32.60	38.75	45.81	74.00	22.05	V
13643.500	50.14	-29.50	40.43	39.21	68.30	18.16	V
13697.900	49.88	-29.10	40.86	38.11	68.30	18.42	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)
17956.000	52.28	-25.50	46.66	31.12	74.00	21.72	V
17937.800	52.25	-25.50	46.66	31.09	74.00	21.75	H
13550.500	50.72	-29.56	39.99	40.29	68.30	17.58	V
13733.100	50.33	-29.10	40.86	38.56	68.30	17.97	H
5725.100	62.82	-27.07	34.31	55.58	68.30	5.48	H
5726.500	62.13	-27.07	34.31	54.89	68.30	6.17	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)
17989.000	53.15	-25.50	46.66	31.99	74.00	20.85	V
17793.200	52.68	-25.50	46.66	31.52	74.00	21.32	H
13672.600	51.10	-29.50	40.43	40.17	68.30	17.20	V
13556.500	50.24	-29.56	39.99	39.81	68.30	18.06	H
11439.600	49.60	-32.42	38.79	43.23	74.00	24.40	V
11443.500	48.74	-32.42	38.79	42.37	74.00	25.26	V



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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)
17744.800	52.58	-25.50	46.66	31.42	74.00	21.42	V
17261.300	52.31	-25.95	44.35	33.90	68.30	15.99	V
13756.800	50.41	-29.10	40.86	38.64	68.30	17.89	V
13639.600	50.13	-29.50	40.43	39.20	68.30	18.17	H
5149.400	64.72	-27.61	33.67	58.66	74.00	9.28	H
5148.600	64.69	-27.61	33.67	58.63	74.00	9.31	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)
17996.700	52.75	-25.50	46.66	31.59	74.00	21.25	V
17385.700	52.13	-25.95	44.35	33.72	68.30	16.17	H
13630.800	49.96	-29.50	40.43	39.03	68.30	18.34	V
13625.300	49.84	-29.50	40.43	38.91	68.30	18.46	V
10403.400	47.31	-33.22	38.19	42.34	68.30	20.99	V
11995.100	46.96	-31.48	39.09	39.35	74.00	27.04	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)
17381.800	53.02	-25.95	44.35	34.61	68.30	15.28	V
17844.300	52.17	-25.50	46.66	31.01	74.00	21.83	H
13656.600	50.58	-29.50	40.43	39.65	68.30	17.72	V
13618.700	50.17	-29.50	40.43	39.24	68.30	18.13	V
10479.900	49.93	-32.99	38.27	44.64	68.30	18.37	V
10478.800	49.74	-32.99	38.27	44.45	68.30	18.56	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)
17385.700	53.63	-25.95	44.35	35.22	68.30	14.67	H
17742.600	52.96	-25.50	46.66	31.80	74.00	21.04	V
13589.000	50.52	-29.50	40.43	39.59	68.30	17.78	H
13578.000	50.33	-29.50	40.43	39.40	68.30	17.97	V
10515.600	49.83	-32.99	38.27	44.54	68.30	18.47	V
10519.500	49.79	-32.99	38.27	44.50	68.30	18.51	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)
17802.000	52.46	-25.50	46.66	31.30	74.00	21.54	H
10555.800	52.45	-32.99	38.27	47.16	68.30	15.85	V
17951.000	52.29	-25.50	46.66	31.13	74.00	21.71	V
10559.000	51.48	-32.99	38.27	46.19	68.30	16.82	V
13750.100	50.49	-29.10	40.86	38.72	68.30	17.81	V
13651.100	50.25	-29.50	40.43	39.32	68.30	18.05	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)
17948.300	52.67	-25.50	46.66	31.51	74.00	21.33	V
17866.300	52.21	-25.50	46.66	31.05	74.00	21.79	H
10633.900	51.83	-32.76	38.38	46.21	74.00	22.17	V
10637.700	51.78	-32.76	38.38	46.16	74.00	22.22	V
5350.800	69.58	-27.43	34.01	63.00	74.00	4.42	H
5350.100	69.30	-27.43	34.01	62.72	74.00	4.70	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)
17364.800	53.02	-25.95	44.35	34.61	68.30	15.28	V
17595.800	52.59	-25.74	45.95	32.38	68.30	15.71	H
13761.700	50.14	-29.10	40.86	38.37	68.30	18.16	V
13617.000	50.06	-29.50	40.43	39.13	68.30	18.24	H
5458.400	62.34	-27.18	34.17	55.35	74.00	11.66	H
5469.800	63.67	-27.18	34.17	56.68	68.30	4.63	H

Channel 116

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17693.100	52.62	-25.74	45.95	32.41	68.30	15.68	V
11153.600	52.47	-32.60	38.75	46.33	74.00	21.53	V
11156.400	52.35	-32.60	38.75	46.21	74.00	21.65	V
17819.600	52.08	-25.50	46.66	30.92	74.00	21.92	V
13673.700	50.24	-29.50	40.43	39.31	68.30	18.06	H
13749.600	50.00	-29.10	40.86	38.23	68.30	18.30	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)
17338.300	52.55	-25.95	44.35	34.14	68.30	15.75	V
17930.700	52.35	-25.50	46.66	31.19	74.00	21.65	H
13633.000	50.61	-29.50	40.43	39.68	68.30	17.69	V
13598.400	50.31	-29.50	40.43	39.38	68.30	17.99	H
5725.500	62.09	-27.07	34.31	54.85	68.30	6.21	H
5726.900	62.01	-27.07	34.31	54.77	68.30	6.29	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)
17994.000	52.16	-25.50	46.66	31.00	74.00	21.84	V
17406.000	52.05	-26.85	45.25	33.65	68.30	16.25	V
13618.700	50.87	-29.50	40.43	39.94	68.30	17.43	V
11438.500	50.75	-32.42	38.79	44.38	74.00	23.25	V
13749.000	50.17	-29.10	40.86	38.40	68.30	18.13	V
11434.100	49.55	-32.42	38.79	43.18	74.00	24.45	V



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Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17920.800	52.99	-25.50	46.66	31.83	74.00	21.01	V
17450.500	52.12	-26.85	45.25	33.72	68.30	16.18	H
13681.400	50.04	-29.50	40.43	39.11	68.30	18.26	H
13669.300	49.71	-29.50	40.43	38.78	68.30	18.59	V
5149.000	63.43	-27.61	33.67	57.37	74.00	10.57	H
5148.400	63.41	-27.61	33.67	57.35	74.00	10.59	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)
17690.300	52.44	-25.74	45.95	32.23	68.30	15.86	H
17992.300	52.38	-25.50	46.66	31.22	74.00	21.62	V
13611.000	50.47	-29.50	40.43	39.54	68.30	17.83	H
13610.500	50.38	-29.50	40.43	39.45	68.30	17.92	H
10534.300	47.97	-32.99	38.27	42.68	68.30	20.33	V
10524.400	47.18	-32.99	38.27	41.89	68.30	21.12	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)
17340.500	52.57	-25.95	44.35	34.16	68.30	15.73	H
17298.200	52.51	-25.95	44.35	34.10	68.30	15.79	H
13750.100	50.37	-29.10	40.86	38.60	68.30	17.93	H
13657.200	49.90	-29.50	40.43	38.97	68.30	18.40	V
10539.800	48.31	-32.99	38.27	43.02	68.30	19.99	V
10556.300	47.70	-32.99	38.27	42.41	68.30	20.60	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)
17852.000	53.03	-25.50	46.66	31.87	74.00	20.97	V
17672.200	52.32	-25.74	45.95	32.11	68.30	15.98	V
13762.200	50.42	-29.10	40.86	38.65	68.30	17.88	V
13508.100	50.32	-29.56	39.99	39.89	68.30	17.98	V
5353.000	63.20	-27.43	34.01	56.62	74.00	10.80	H
5355.600	63.00	-27.43	34.01	56.42	74.00	11.00	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)
17303.200	52.44	-25.95	44.35	34.03	68.30	15.86	V
17941.200	52.44	-25.50	46.66	31.28	74.00	21.56	V
13652.800	50.90	-29.50	40.43	39.97	68.30	17.40	V
13621.500	50.69	-29.50	40.43	39.76	68.30	17.61	H
5458.700	61.86	-27.18	34.17	54.87	74.00	12.14	H
5468.900	63.63	-27.18	34.17	56.64	68.30	4.67	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)
17703.500	52.76	-25.74	45.95	32.55	74.00	21.24	H
17945.000	52.27	-25.50	46.66	31.11	74.00	21.73	H
13648.400	50.61	-29.50	40.43	39.68	68.30	17.69	V
13725.400	50.25	-29.10	40.86	38.48	68.30	18.05	V
11170.600	48.54	-32.60	38.75	42.40	74.00	25.46	V
11180.000	48.52	-32.60	38.75	42.38	74.00	25.48	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)
17907.600	52.52	-25.50	46.66	31.36	74.00	21.48	V
17789.300	52.50	-25.50	46.66	31.34	74.00	21.50	H
13637.400	51.60	-29.50	40.43	40.67	68.30	16.70	H
13617.600	50.04	-29.50	40.43	39.11	68.30	18.26	V
5727.400	61.02	-27.07	34.31	53.78	68.30	7.28	H
5725.300	60.90	-27.07	34.31	53.66	68.30	7.40	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)
17848.200	52.42	-25.50	46.66	31.26	74.00	21.58	H
17631.500	52.41	-25.74	45.95	32.20	68.30	15.89	V
13655.000	50.56	-29.50	40.43	39.63	68.30	17.74	V
13732.500	50.45	-29.10	40.86	38.68	68.30	17.85	V
9175.200	46.64	-33.85	38.08	42.41	74.00	27.36	V
11888.400	46.51	-31.85	39.05	39.31	74.00	27.49	H

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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)
17787.700	52.64	-25.50	46.66	31.48	74.00	21.36	V
17400.500	52.29	-26.85	45.25	33.89	68.30	16.01	V
13593.400	50.81	-29.50	40.43	39.88	68.30	17.49	V
13579.100	50.17	-29.50	40.43	39.24	68.30	18.13	H
5148.200	65.72	-27.61	33.67	59.66	74.00	8.28	H
5147.400	65.51	-27.61	33.67	59.45	74.00	8.49	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)
17708.500	52.31	-25.74	45.95	32.10	74.00	21.69	H
17706.800	52.26	-25.74	45.95	32.05	74.00	21.74	H
13530.100	50.63	-29.56	39.99	40.20	68.30	17.67	V
13624.200	50.15	-29.50	40.43	39.22	68.30	18.15	V
10975.400	47.05	-32.82	38.70	41.17	74.00	26.95	H
11039.800	47.05	-32.49	38.72	40.81	74.00	26.95	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)
17791.000	52.16	-25.50	46.66	31.00	74.00	21.84	V
17799.800	52.07	-25.50	46.66	30.91	74.00	21.93	V
13734.800	50.28	-29.10	40.86	38.51	68.30	18.02	H
13650.600	50.22	-29.50	40.43	39.29	68.30	18.08	V
11994.500	47.34	-31.48	39.09	39.73	74.00	26.66	H
11527.000	46.82	-32.26	38.84	40.25	74.00	27.18	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)
17422.500	52.53	-26.85	45.25	34.13	68.30	15.77	V
17993.400	52.40	-25.50	46.66	31.24	74.00	21.60	H
13752.900	50.74	-29.10	40.86	38.97	68.30	17.56	H
13606.000	50.50	-29.50	40.43	39.57	68.30	17.80	H
10517.800	49.76	-32.99	38.27	44.47	68.30	18.54	V
10513.400	48.72	-32.99	38.27	43.43	68.30	19.58	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)
17982.400	52.33	-25.50	46.66	31.17	74.00	21.67	H
17772.300	52.28	-25.50	46.66	31.12	74.00	21.72	H
13639.600	50.96	-29.50	40.43	40.03	68.30	17.34	V
10564.000	50.31	-32.99	38.27	45.02	68.30	17.99	V
10559.000	50.16	-32.99	38.27	44.87	68.30	18.14	V
13547.200	49.91	-29.56	39.99	39.48	68.30	18.39	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)
10644.300	52.70	-32.76	38.38	47.08	74.00	21.30	V
17935.700	52.35	-25.50	46.66	31.19	74.00	21.65	V
17998.900	52.21	-25.50	46.66	31.05	74.00	21.79	V
10640.500	51.59	-32.76	38.38	45.97	74.00	22.41	V
5350.100	69.68	-27.43	34.01	63.10	74.00	4.32	H
5350.000	69.50	-27.43	34.01	62.92	74.00	4.50	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)
17865.800	52.65	-25.50	46.66	31.49	74.00	21.35	H
17404.300	52.48	-26.85	45.25	34.08	68.30	15.82	V
13625.300	50.91	-29.50	40.43	39.98	68.30	17.39	H
13577.500	49.91	-29.50	40.43	38.98	68.30	18.39	V
5457.100	62.75	-27.18	34.17	55.76	74.00	11.25	H
5468.300	64.13	-27.18	34.17	57.14	68.30	4.17	H

Channel 116

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
11158.000	53.25	-32.60	38.75	47.11	74.00	20.75	V
17318.500	52.88	-25.95	44.35	34.47	68.30	15.42	V
11153.600	52.86	-32.60	38.75	46.72	74.00	21.14	V
17962.600	52.39	-25.50	46.66	31.23	74.00	21.61	V
13677.000	50.53	-29.50	40.43	39.60	68.30	17.77	V
13656.100	49.97	-29.50	40.43	39.04	68.30	18.33	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)
17998.900	52.80	-25.50	46.66	31.64	74.00	21.20	V
17797.600	52.51	-25.50	46.66	31.35	74.00	21.49	H
13691.900	49.54	-29.50	40.43	38.61	68.30	18.76	V
13645.600	49.51	-29.50	40.43	38.58	68.30	18.79	V
5725.600	62.99	-27.07	34.31	55.75	68.30	5.31	H
5728.900	61.96	-27.07	34.31	54.72	68.30	6.34	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)
17980.800	53.05	-25.50	46.66	31.89	74.00	20.95	H
17997.200	52.44	-25.50	46.66	31.28	74.00	21.56	V
13765.500	50.26	-29.10	40.86	38.49	68.30	18.04	V
13592.300	50.14	-29.50	40.43	39.21	68.30	18.16	V
11441.800	49.43	-32.42	38.79	43.06	74.00	24.57	V
11434.100	49.36	-32.42	38.79	42.99	74.00	24.64	V

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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)
17718.400	52.31	-25.74	45.95	32.10	74.00	21.69	V
17708.500	52.21	-25.74	45.95	32.00	74.00	21.79	V
13626.400	50.16	-29.50	40.43	39.23	68.30	18.14	H
13589.500	50.01	-29.50	40.43	39.08	68.30	18.29	H
5149.800	62.16	-27.61	33.67	56.10	74.00	11.84	H
5136.800	62.08	-27.61	33.67	56.02	74.00	11.92	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)
17303.200	52.41	-25.95	44.35	34.00	68.30	15.89	V
17807.000	52.21	-25.50	46.66	31.05	74.00	21.79	V
13612.100	50.43	-29.50	40.43	39.50	68.30	17.87	V
13645.600	49.98	-29.50	40.43	39.05	68.30	18.32	V
10533.200	47.62	-32.99	38.27	42.33	68.30	20.68	V
10521.100	46.87	-32.99	38.27	41.58	68.30	21.43	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)
17976.900	52.34	-25.50	46.66	31.18	74.00	21.66	V
17627.100	52.28	-25.74	45.95	32.07	68.30	16.02	H
13624.200	50.47	-29.50	40.43	39.54	68.30	17.83	V
13659.400	50.06	-29.50	40.43	39.13	68.30	18.24	V
10540.400	47.62	-32.99	38.27	42.33	68.30	20.68	V
10556.300	47.33	-32.99	38.27	42.04	68.30	20.97	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)
17535.800	52.74	-26.85	45.25	34.34	68.30	15.56	V
17921.900	52.39	-25.50	46.66	31.23	74.00	21.61	H
13555.500	50.51	-29.56	39.99	40.08	68.30	17.79	H
13539.500	49.62	-29.56	39.99	39.19	68.30	18.68	V
5352.300	64.28	-27.43	34.01	57.70	74.00	9.72	H
5352.100	63.86	-27.43	34.01	57.28	74.00	10.14	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)
17992.800	52.52	-25.50	46.66	31.36	74.00	21.48	H
17998.900	52.51	-25.50	46.66	31.35	74.00	21.49	V
13509.200	50.42	-29.56	39.99	39.99	68.30	17.88	V
13559.900	49.96	-29.50	40.43	39.03	68.30	18.34	V
5457.300	62.62	-27.18	34.17	55.63	74.00	11.38	H
5469.200	64.26	-27.18	34.17	57.27	68.30	4.04	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)
17844.900	52.47	-25.50	46.66	31.31	74.00	21.53	H
17925.800	52.22	-25.50	46.66	31.06	74.00	21.78	H
13520.200	50.53	-29.56	39.99	40.10	68.30	17.77	H
13629.700	50.45	-29.50	40.43	39.52	68.30	17.85	H
11167.900	48.54	-32.60	38.75	42.40	74.00	25.46	V
11175.600	48.00	-32.60	38.75	41.86	74.00	26.00	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)
17835.500	52.21	-25.50	46.66	31.05	74.00	21.79	V
17749.200	52.12	-25.50	46.66	30.96	74.00	21.88	H
13668.200	50.63	-29.50	40.43	39.70	68.30	17.67	H
13555.500	50.40	-29.56	39.99	39.97	68.30	17.90	V
5725.900	61.75	-27.07	34.31	54.51	68.30	6.55	H
5726.400	61.03	-27.07	34.31	53.79	68.30	7.27	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)
17701.300	52.95	-25.74	45.95	32.74	74.00	21.05	V
17705.200	52.58	-25.74	45.95	32.37	74.00	21.42	H
13657.200	51.08	-29.50	40.43	40.15	68.30	17.22	V
13641.200	50.77	-29.50	40.43	39.84	68.30	17.53	H
11870.800	47.14	-31.85	39.05	39.94	74.00	26.86	V
11925.800	46.94	-31.48	39.09	39.33	74.00	27.06	V

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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)
17414.200	52.44	-26.85	45.25	34.04	68.30	15.86	V
17864.200	51.98	-25.50	46.66	30.82	74.00	22.02	V
13538.400	50.45	-29.56	39.99	40.02	68.30	17.85	V
13563.100	50.43	-29.50	40.43	39.50	68.30	17.87	V
5145.200	57.71	-27.61	33.67	51.65	74.00	16.29	H
5148.000	56.30	-27.61	33.67	50.24	74.00	17.70	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)
17648.000	52.64	-25.74	45.95	32.43	68.30	15.66	H
17726.100	52.51	-25.74	45.95	32.30	74.00	21.49	H
13566.500	50.57	-29.50	40.43	39.64	68.30	17.73	H
13642.400	49.90	-29.50	40.43	38.97	68.30	18.40	V
5352.200	59.91	-27.43	34.01	53.33	74.00	14.09	H
5361.200	59.83	-27.43	34.01	53.25	74.00	14.17	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)
17934.500	52.89	-25.50	46.66	31.73	74.00	21.11	V
17701.900	52.46	-25.74	45.95	32.25	74.00	21.54	H
13597.800	50.06	-29.50	40.43	39.13	68.30	18.24	H
13647.300	49.94	-29.50	40.43	39.01	68.30	18.36	V
5456.200	58.04	-27.18	34.17	51.05	74.00	15.96	H
5465.300	60.02	-27.18	34.17	53.03	68.30	8.28	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)
17446.700	52.66	-26.85	45.25	34.26	68.30	15.64	V
17473.700	52.17	-26.85	45.25	33.77	68.30	16.13	V
13644.000	51.26	-29.50	40.43	40.33	68.30	17.04	H
13734.800	50.06	-29.10	40.86	38.29	68.30	18.24	V
5731.600	55.41	-27.07	34.31	48.17	68.30	12.89	H
5731.800	55.29	-27.07	34.31	48.05	68.30	13.01	H

Channel 138

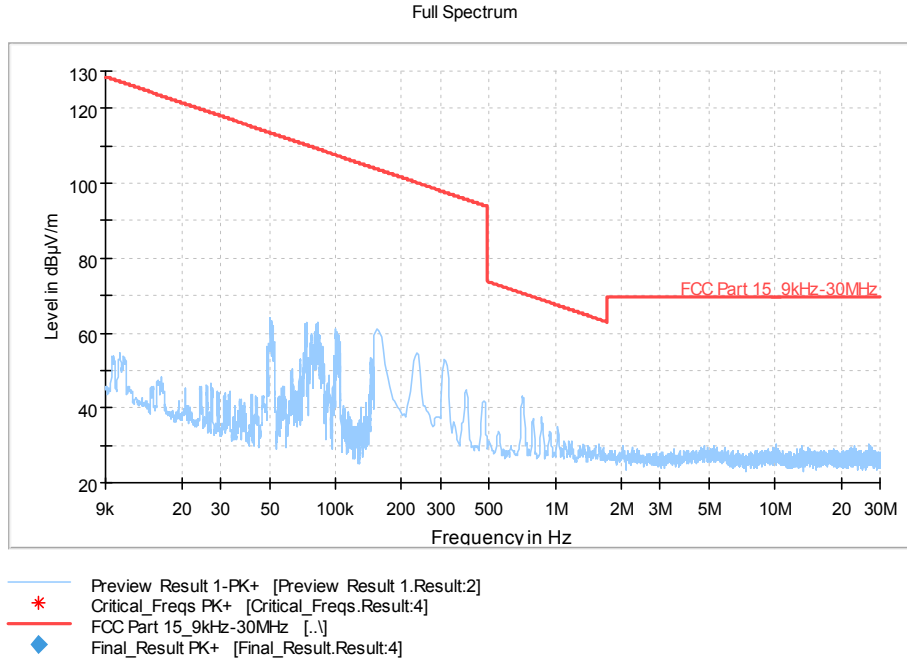
Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17976.300	52.33	-25.50	46.66	31.17	74.00	21.67	H
17685.400	52.28	-25.74	45.95	32.07	68.30	16.02	V
13707.800	49.99	-29.10	40.86	38.22	68.30	18.31	V
13583.500	49.93	-29.50	40.43	39.00	68.30	18.37	H
11050.800	47.24	-32.49	38.72	41.00	74.00	26.76	H
11332.400	47.14	-32.36	38.77	40.74	74.00	26.86	V

The EUT is no radiated spurious emission above 18GHz, all the signals are background noise.

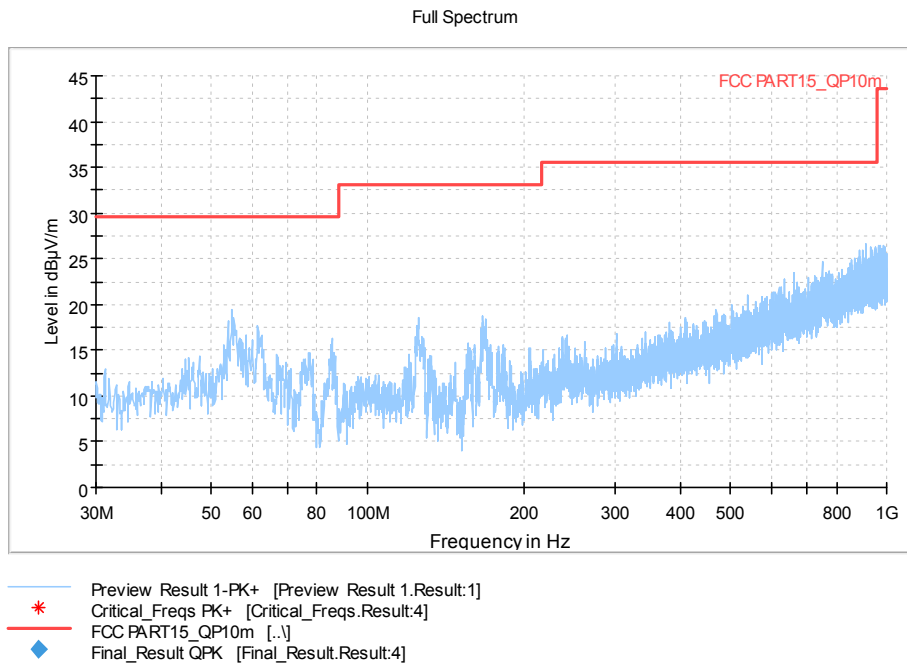
Conclusion: PASS

C.1.2 Radiated Spurious Emission- Below 1GHz

WOSRT CASE BELOW 30MHz (Set.1-1, 802.11a CH36)



WOSRT CASE for 30MHz-1GHz (Set.1-1, 802.11a CH36)



C.1.3 Band Edges Compliance– Radiated
Measurement Result:

EUT set-up No.	Combination of EUT and AE
Set.1-1	EUT1 + AE1-1 + AE2-1

Results for Set.1-1

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:

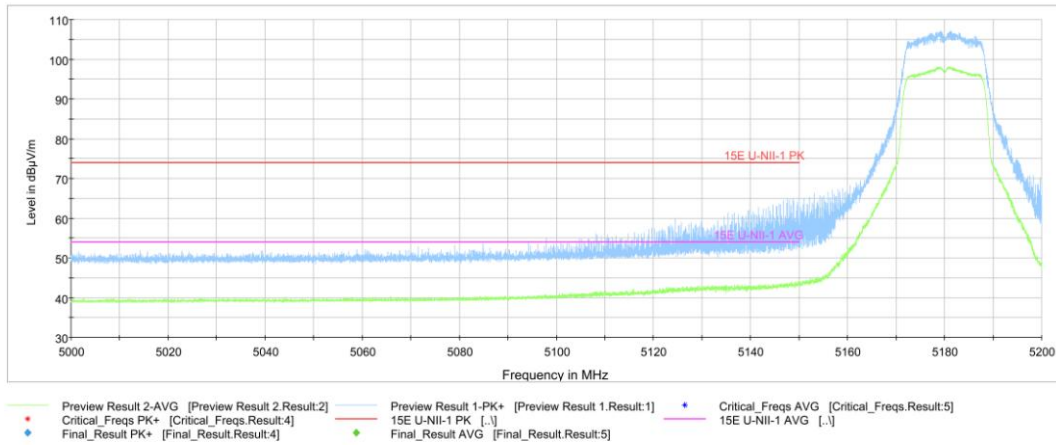


Fig.1 Band Edges (802.11a Ch36, 5180MHz)

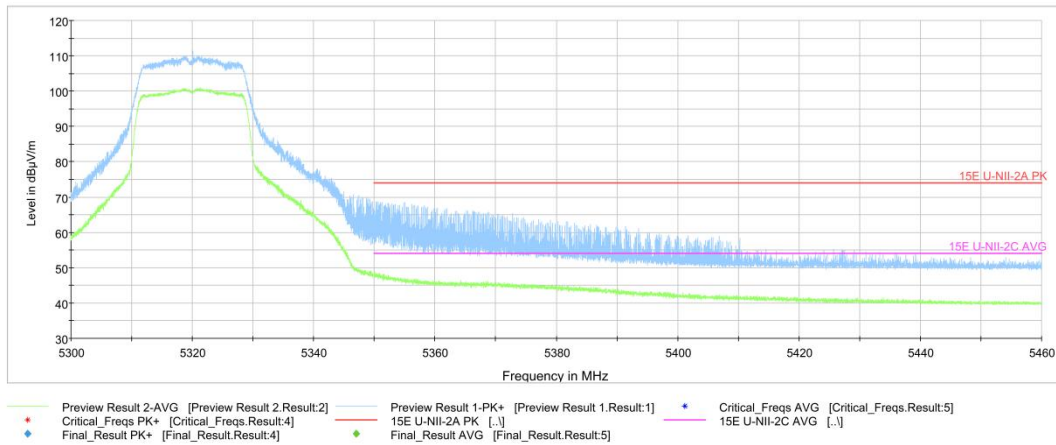


Fig.2 Band Edges (802.11a Ch64, 5320MHz)

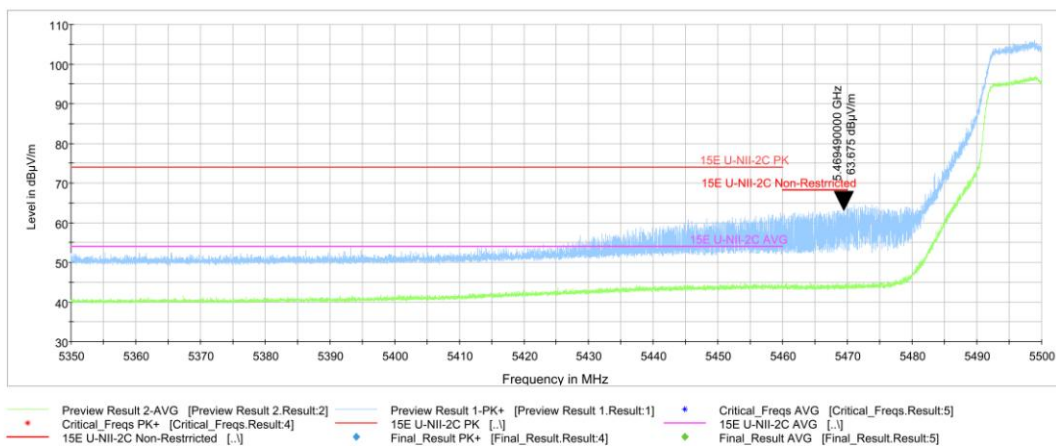


Fig.3 Band Edges (802.11a Ch100, 5500MHz)

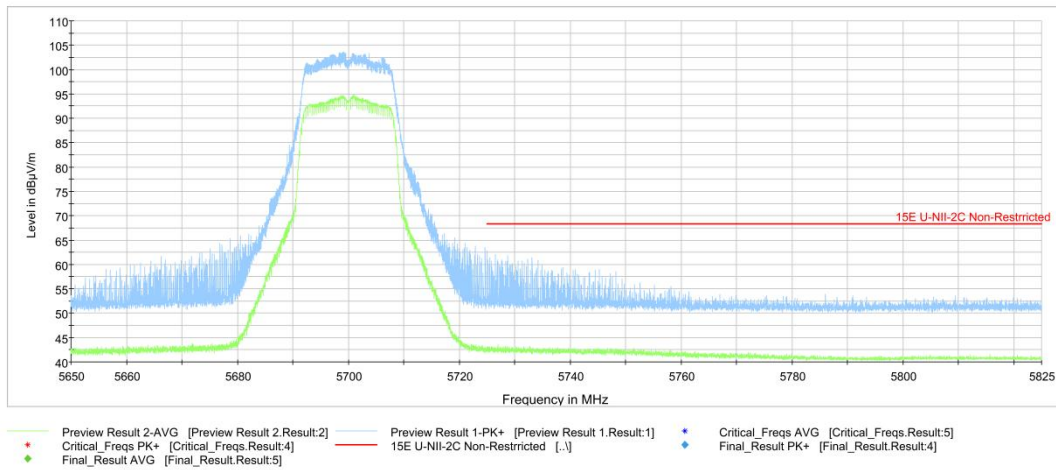


Fig.4 Band Edges (802.11a Ch140, 5700MHz)

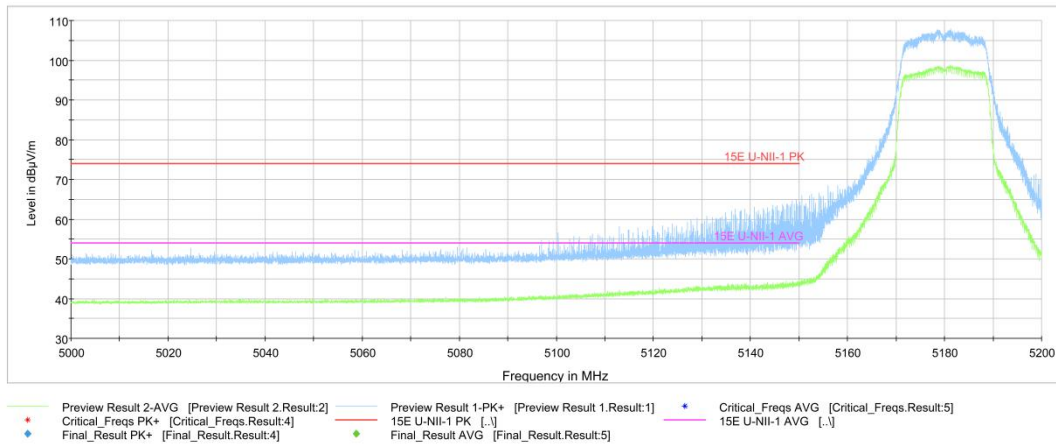


Fig.5 Band Edges (802.11n-HT20 Ch36, 5180MHz)

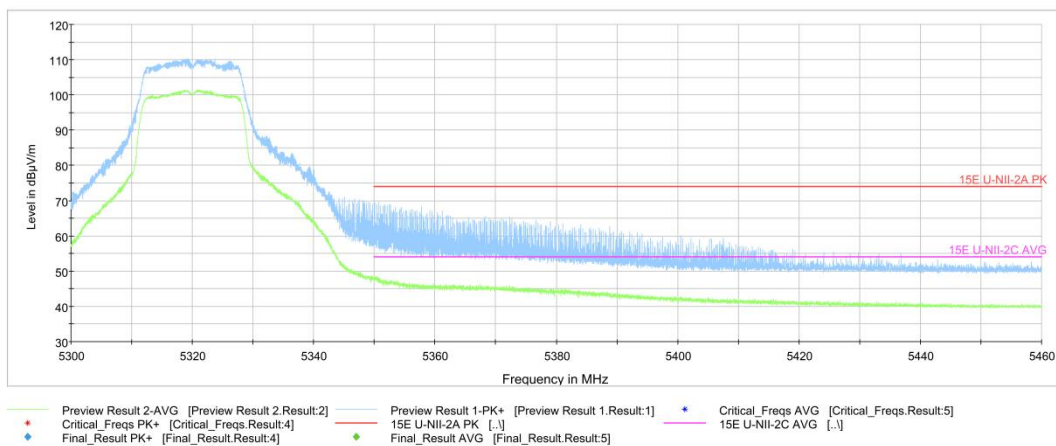


Fig.6 Band Edges (802.11n-HT20 Ch64, 5320MHz)

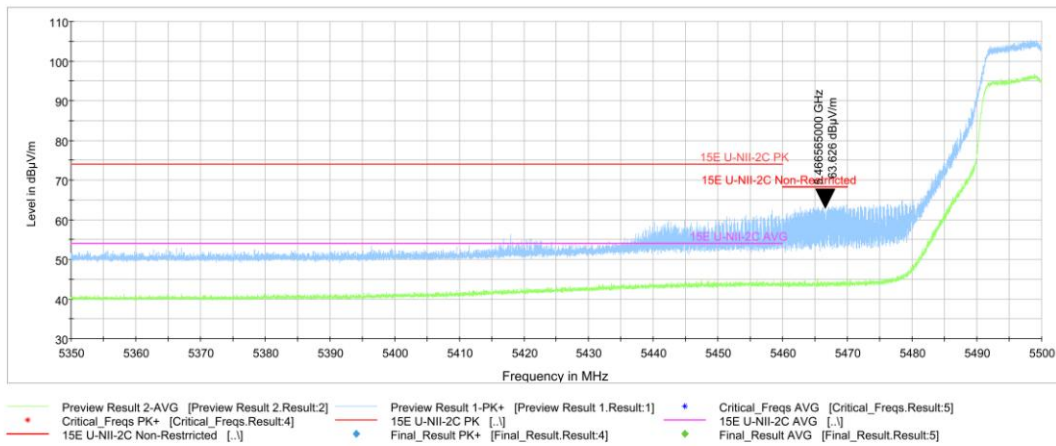


Fig.7 Band Edges (802.11n-HT20 Ch100, 5500MHz)

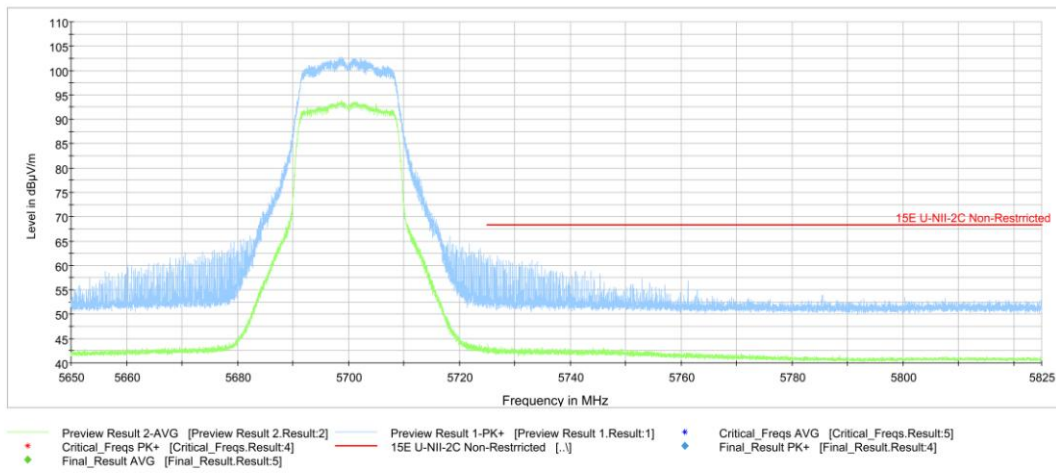


Fig.8 Band Edges (802.11n-HT20 Ch140, 5700MHz)

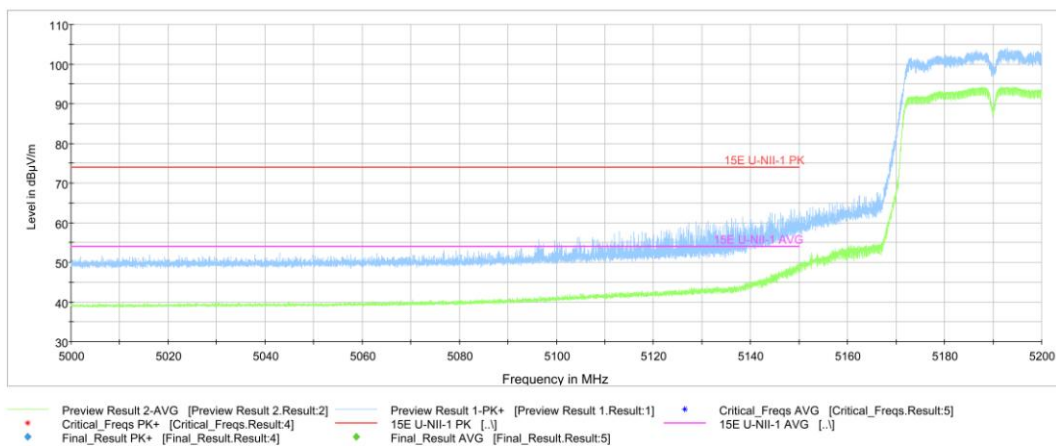


Fig.9 Band Edges (802.11n-HT40 Ch38, 5190MHz)

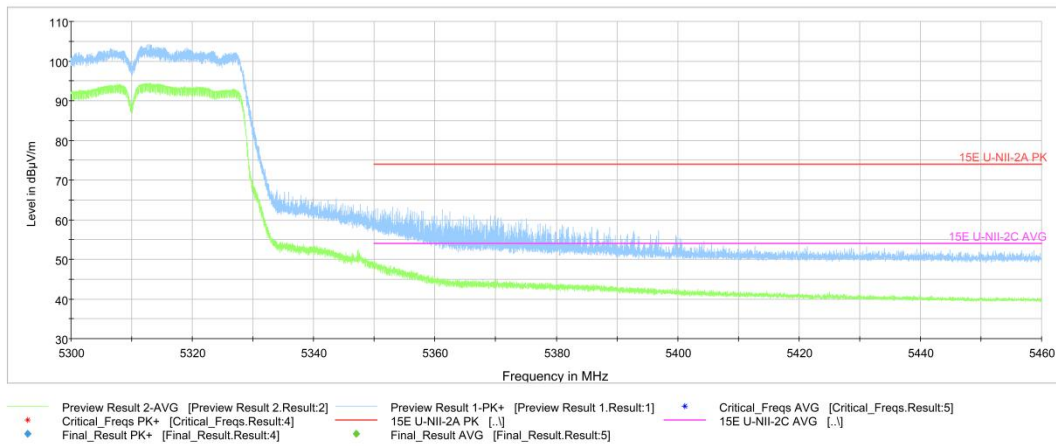


Fig.10 Band Edges (802.11n-HT40 Ch62, 5310MHz)

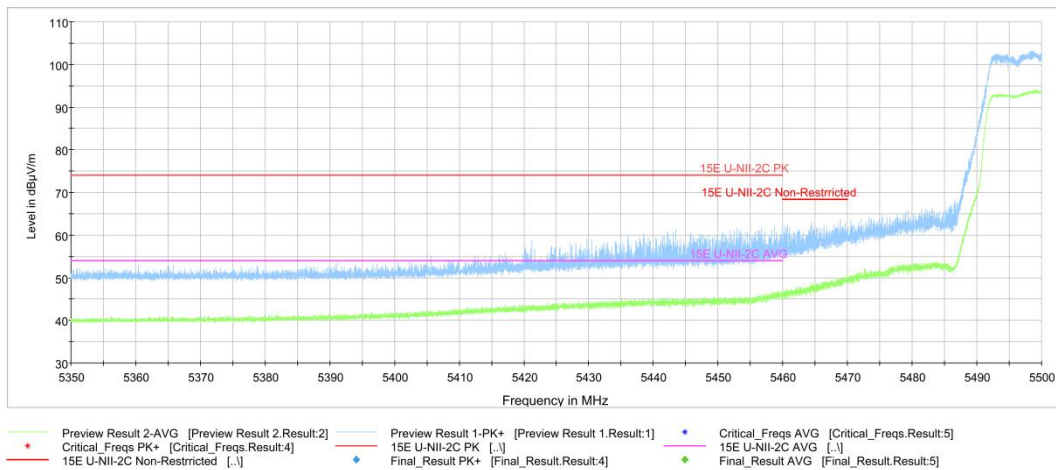


Fig.11 Band Edges (802.11n-HT40 Ch102, 5510MHz)

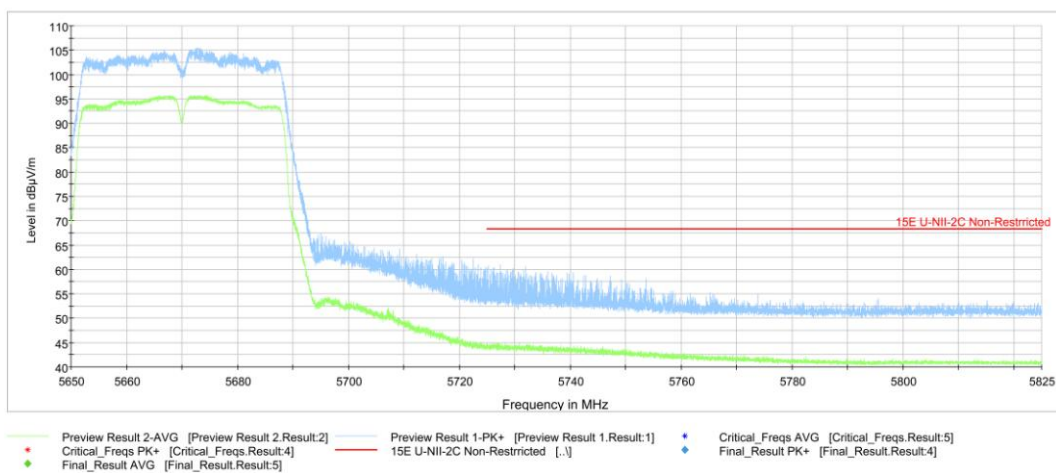


Fig.12 Band Edges (802.11n-HT40 Ch134, 5670MHz)

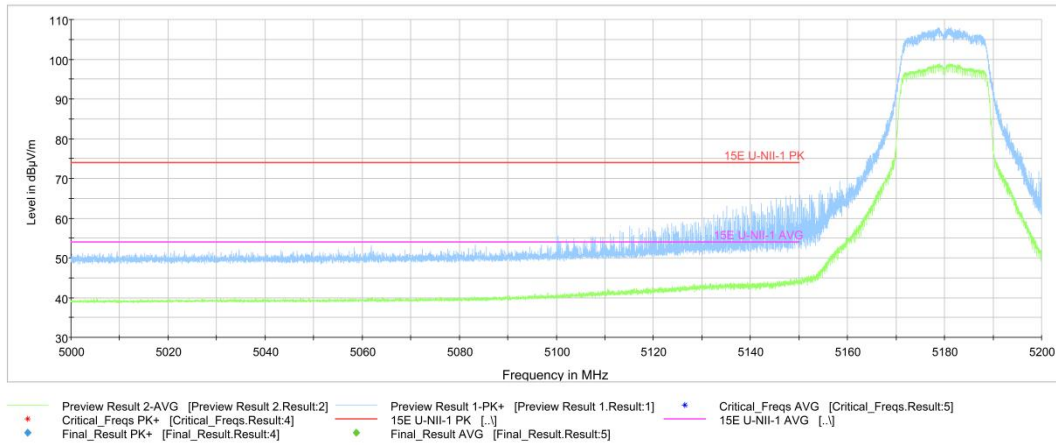


Fig.13 Band Edges (802.11ac-HT20 Ch36, 5180MHz)

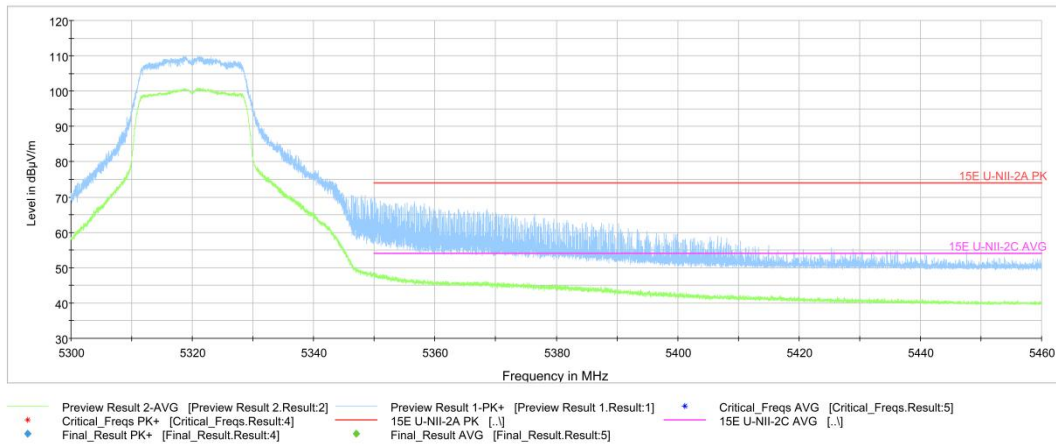


Fig.14 Band Edges (802.11ac-HT20 Ch64, 5320MHz)

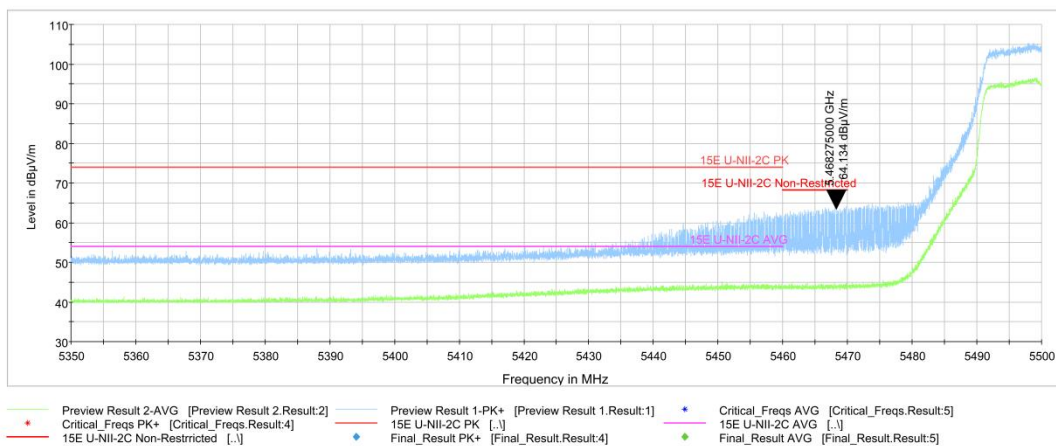


Fig.15 Band Edges (802.11ac-HT20 Ch100, 5500MHz)

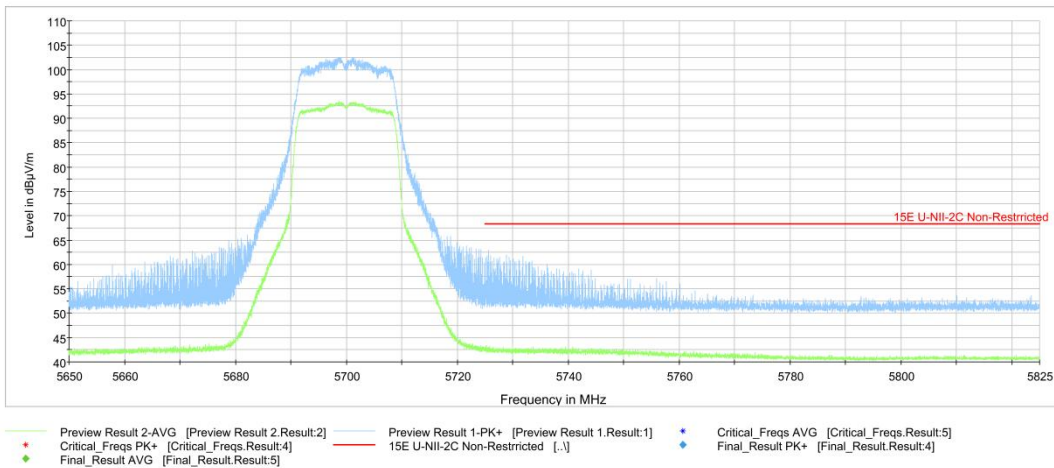


Fig.16 Band Edges (802.11ac-HT20 Ch140, 5700MHz)

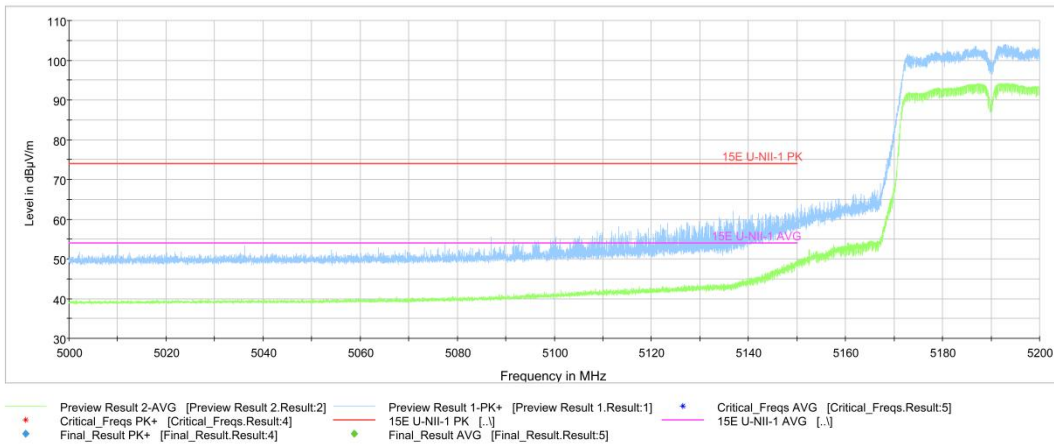


Fig.17 Band Edges (802.11ac-HT40 Ch38, 5190MHz)

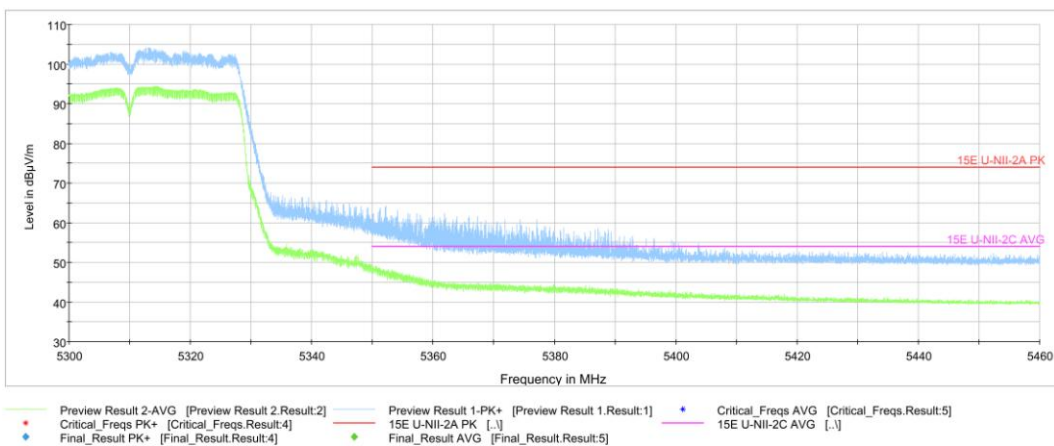


Fig.18 Band Edges (802.11ac-HT40 Ch62, 5310MHz)

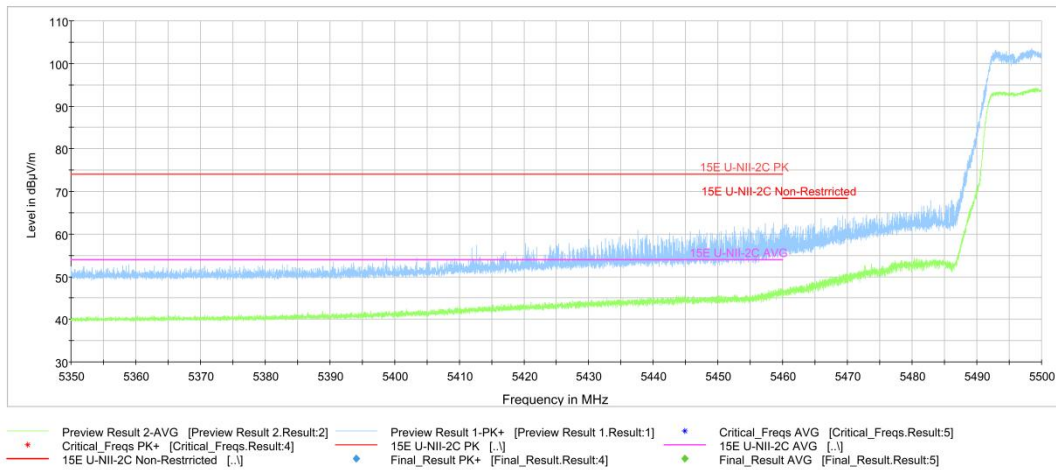


Fig.19 Band Edges (802.11ac-HT40 Ch102, 5510MHz)

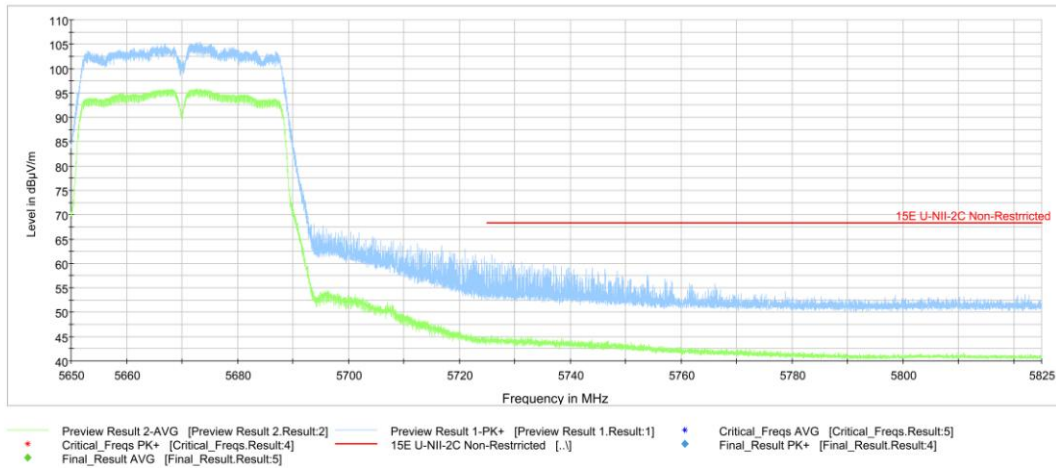


Fig.20 Band Edges (802.11ac-HT40 Ch134, 5670MHz)

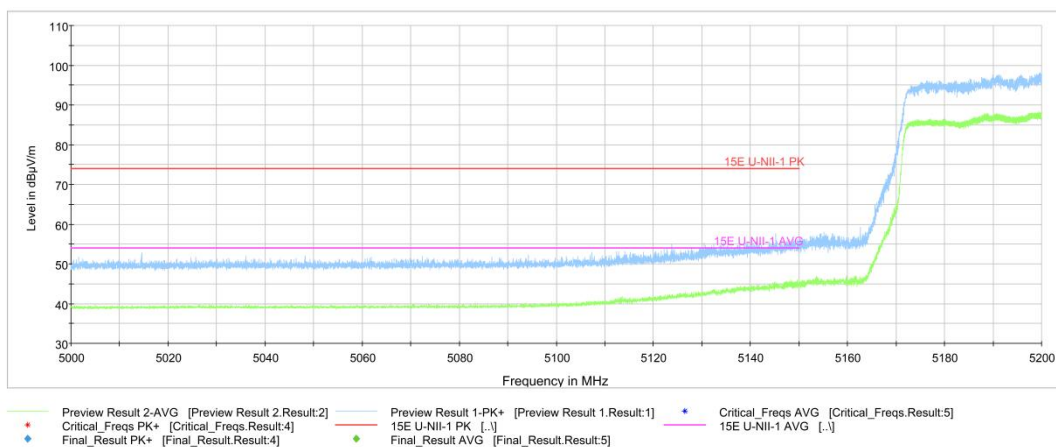


Fig.21 Band Edges (802.11ac-HT80 Ch42, 5210MHz)

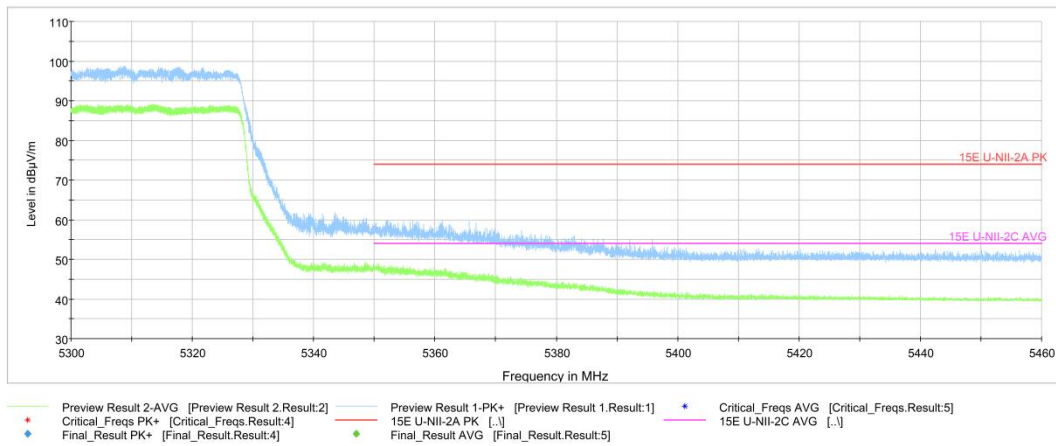


Fig.22 Band Edges (802.11ac-HT80 Ch58, 5290MHz)

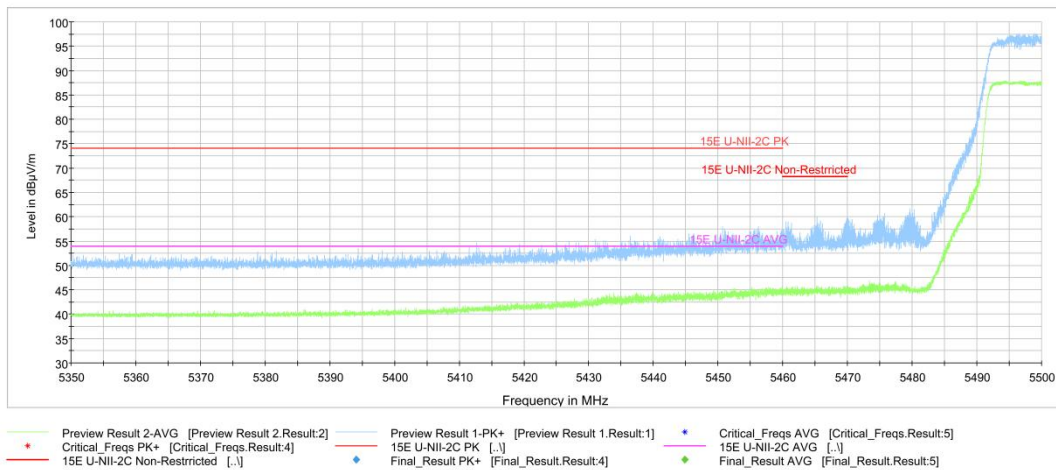


Fig.23 Band Edges (802.11ac-HT80 Ch106, 5530MHz)

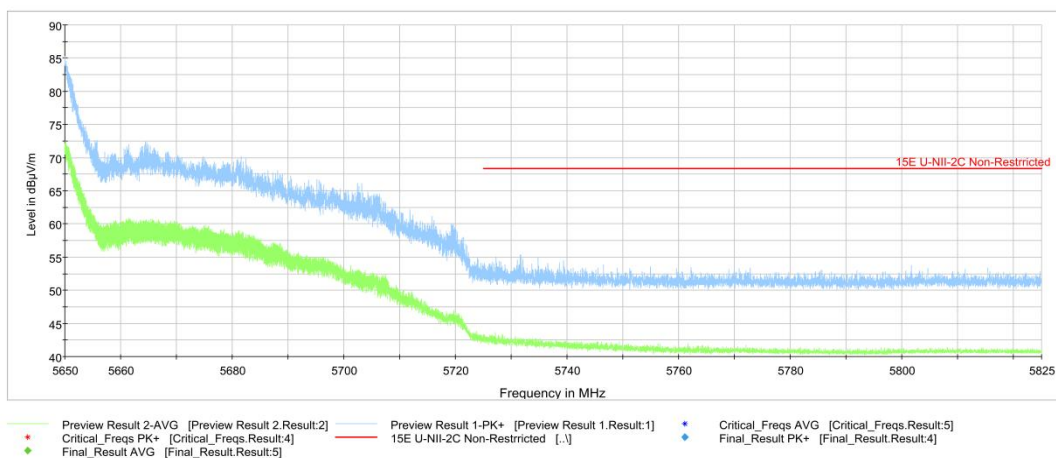


Fig.24 Band Edges (802.11ac-HT80 Ch122, 5610MHz)

C.2. AC Power-line Conducted Emission

Reference

FCC 47 CFR Part 15, Clause 15.407 Clause 15.207

Method of Measurement:

See ANSI C63.10-2013 specifically.

See ANSI C63.10-2013 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.

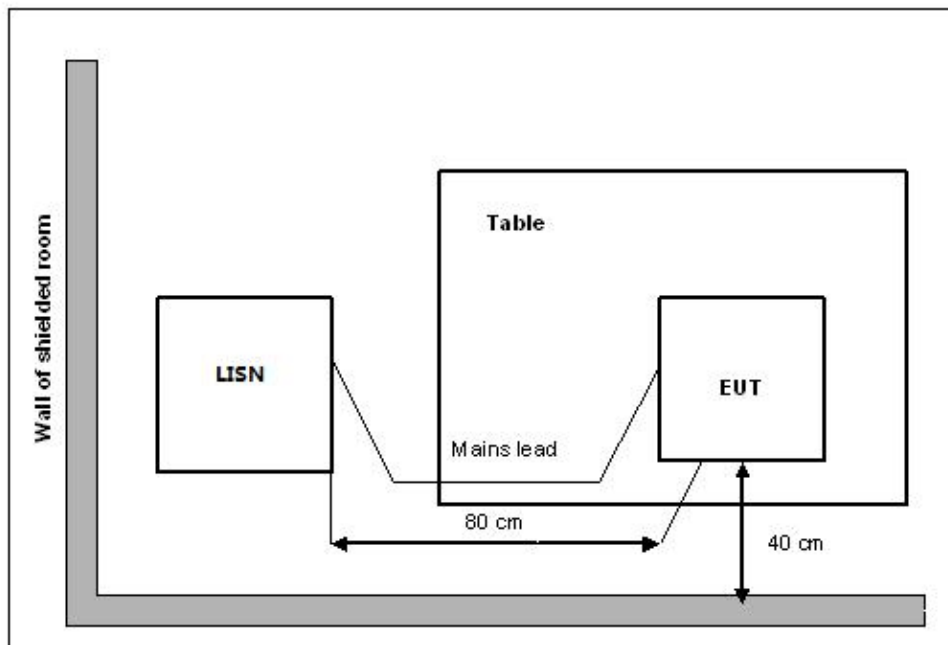
The measurement bandwidth is:

Frequency of Emission (MHz)	RBW/IF bandwidth	Sweep Time(s)
0.15-30	9kHz	1

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement Setup



EUT Operating Mode and Test Conditions

The measurement of EUT is carried out under the transmit state.

The EUT is powered by an travel adapter.

Measurement Result and limit:

EUT set-up No. **Combination of EUT and AE**
 Set.1-2 EUT1 + AE1-1 + AE2-1 + AE3-3

This configuration is the worst result of Set.1-1-Set.1-4 and Set.3-1-Set.3-4 in 15B.

Set.1-2

802.11a/802.11n-HT20/802.11n-HT40/802.11ac-HT20 mode/802.11ac-HT40/802.11ac-HT80:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
		With charger		
		802.11a	Idle	
0.15 to 0.5	66 to 56	Fig.C.2.1	Fig.C.2.2	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		
		802.11a	Idle	
0.15 to 0.5	56 to 46	Fig.C.2.1	Fig.C.2.2	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.

Note: all modes have been tested and the worst results shown here.

Conclusion: Pass

Test graphs as below:

Set.1-2, 802.11a
Traffic:

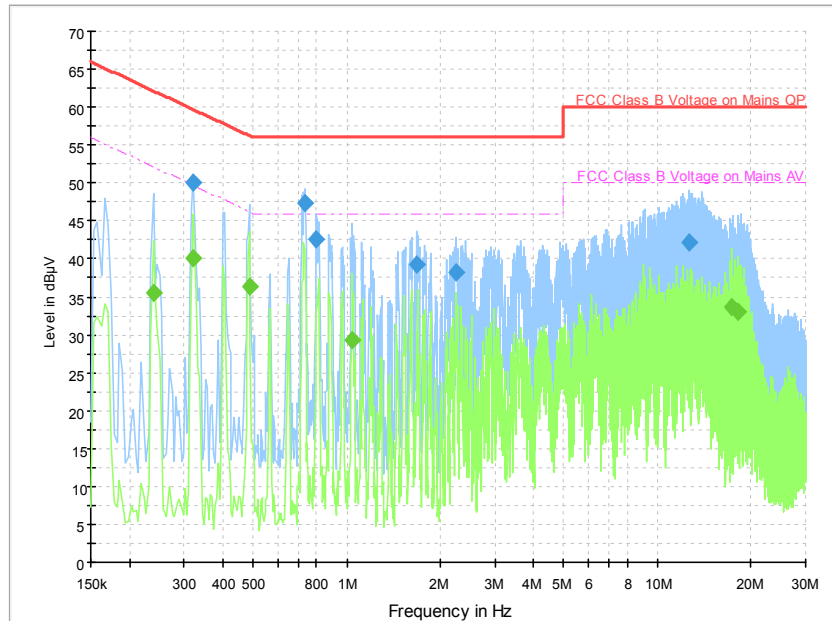


Fig.C.2.1 AC Powerline Conducted Emission-802.11a

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)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.322000	50.0	5000.0	9.000	On	N	19.8	9.7
0.734000	47.3	5000.0	9.000	On	N	19.8	8.7
0.798000	42.6	5000.0	9.000	On	N	19.8	13.4
1.678000	39.2	5000.0	9.000	On	N	19.8	16.8
2.242000	38.2	5000.0	9.000	On	L1	19.5	17.8
12.606000	42.1	5000.0	9.000	On	N	19.7	17.9

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.238000	35.4	5000.0	9.000	On	N	19.8	16.7
0.322000	40.0	5000.0	9.000	On	N	19.8	9.7
0.486000	36.4	5000.0	9.000	On	N	20.0	9.8
1.042000	29.2	5000.0	9.000	On	L1	19.6	16.8
17.286000	33.6	5000.0	9.000	On	L1	19.9	16.4
18.254000	33.1	5000.0	9.000	On	L1	19.9	16.9

Idle:

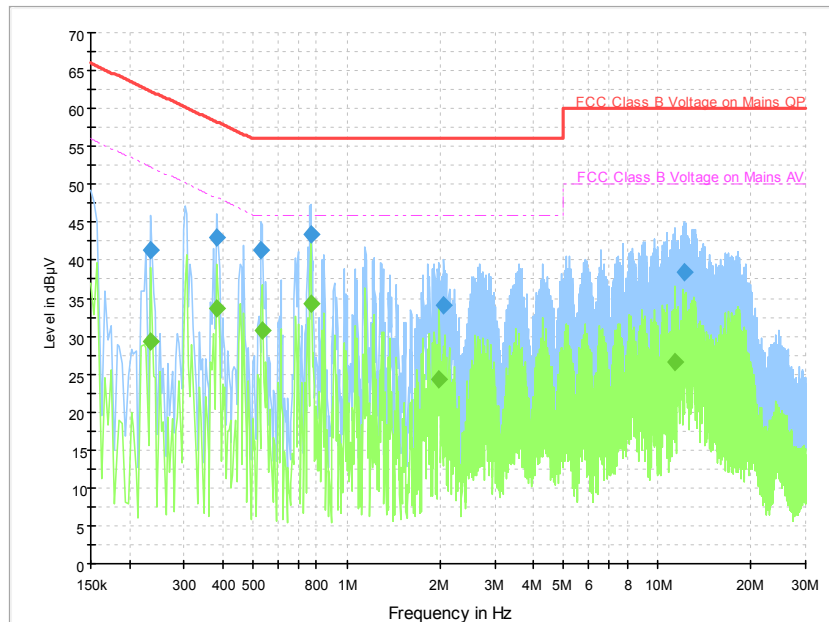


Fig.C.2.2 AC Powerline Conducted Emission-Idle

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)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.234000	41.2	5000.0	9.000	On	N	19.8	21.1
0.382000	43.1	5000.0	9.000	On	N	19.9	15.1
0.530000	41.3	5000.0	9.000	On	N	20.0	14.7
0.766000	43.5	5000.0	9.000	On	L1	19.7	12.5
2.058000	34.0	5000.0	9.000	On	N	19.7	22.0
12.210000	38.4	5000.0	9.000	On	L1	19.6	21.6

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.234000	29.3	5000.0	9.000	On	N	19.8	23.0
0.382000	33.6	5000.0	9.000	On	N	19.9	14.6
0.534000	30.8	5000.0	9.000	On	L1	19.9	15.2
0.766000	34.2	5000.0	9.000	On	L1	19.7	11.8
1.986000	24.3	5000.0	9.000	On	L1	19.4	21.7
11.438000	26.6	5000.0	9.000	On	L1	19.6	23.4

*** END OF REPORT BODY ***