VARIANT FCC TEST REPORT

(Part 15, Subpart E)

Applicant:	Xiaomi Communications Co., Ltd.
Address:	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

Manufacturer or Supplier:	Xiaomi Communications Co., Ltd.
Address:	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Product:	Mobile Phone
Brand Name:	POCO
Model Name:	2410FPCC5G
FCC ID:	2AFZZPCC5G
Date of tests:	May. 11, 2024 ~ Jul. 11, 2024 Oct. 16, 2024 ~ Nov.15, 2024

The tests have been carried out according to the requirements of the following standard:

☒ **FCC Part 15, Subpart E, Section 15.407**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Simon Wang	Approved by Luke Lu
Engineer / Mobile Department	Manager / Mobile Department
Simon Wang	Luke Lu
Date: Nov.15, 2024	Date: Nov.15, 2024

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P24050016RF03	Original release	Jul. 11, 2024
W7L-P24100005RF03	Based on the original product add 2nd materials, 5th and 6th screens. This report only verify conducted power and RSE worst case, the verify results of power are similar or lower, So this report only replaces the RSE worse case(Band 2 802.11ac80 CH58).	Nov.15, 2024

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E		
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**
15.407(b)(9)	AC Power Conducted Emission	Compliance
15.407(b) (1/2/3/4/5)	Radiated Emission & Band Edge Measurement	Compliance
15.407(a/1/2/3)	Maximum conducted output Power	Compliance
15.407(a/1/2/3)	Peak Power Spectral Density	Compliance
15.407(a)(2)(12)	26 dB Bandwidth	Compliance
15.407(e)	6 dB Bandwidth	Compliance
15.203	Antenna Requirement	Compliance

NOTE:

1. Except the data of RSE and Band Edge Measurement, other data please refer to Appendix.
2. For 802.11n HT20/ ac VHT20 and 802.11n HT40 / ac VHT40 mode, the whole testing is assessed only 802.11n HT20/ HT40 by referring to their higher conducted power.

1.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	UNCERTAINTY
AC Power Conducted emissions	±2.70dB
Radiated emissions (9KHz~30MHz)	±2.68dB
Radiated emissions (30MHz~1GHz)	±4.98dB
Radiated emissions (1GHz ~6GHz)	±4.70dB
Radiated emissions (6GHz ~18GHz)	±4.60dB
Radiated emissions (18GHz ~40GHz)	±4.12dB
Conducted emissions	±4.01dB
Occupied Channel Bandwidth	±43.58KHz
Conducted Output power	±2.06dB
Power Spectral Density	±0.85 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Mobile Phone
BRAND NAME	POCO
MODEL NAME	2410FPCC5G
NOMINAL VOLTAGE	5/3.6~11Vdc(adapter or host equipment) 3.84Vdc (Li-ion, battery)
MODULATION	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 150.0Mbps 802.11ac: up to 433.3Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5700MHz, 5745 ~ 5825MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n/ac/ax (20MHz) 2 for 802.11n/ac(40MHz) 1 for 802. 802.11ac (80MHz)/ 5260 ~ 5320MHz: 4 for 802.11a, 802.11n/ac/ax (20MHz) 2 for 802.11n/ac (40MHz) 1 for 802.11ac (80MHz) 5500 ~ 5700MHz: 11 for 802.11a, 802.11n/ac (20MHz)/ 5 for 802.11n/ac (40MHz) 2 for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n/ac (20MHz) 2 for 802.11n/ac (40MHz) 1 for 802.11ac (80MHz)
MAX. OUTPUT POWER	22.59 mW for 5180 ~ 5240MHz 21.68 mW for 5260 ~ 5320MHz 22.34 mW for 5500 ~ 5700MHz 23.44 mW for 5745 ~ 5825MHz
ANTENNA TYPE	PIFA Antenna
ANTENNA GAIN	-0.9dBi for 5180 ~ 5240MHz -0.5dBi for 5260 ~ 5320MHz 0.2dBi for 5500 ~ 5700MHz -1dBi for 5745 ~ 5825MHz
HW VERSION	135100C3N
SW VERSION	Xiaomi HyperOS 1.0

IMEI	864624070035805
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	USB cable1: non-shielded cable, with w/o ferrite core, 1.0 meter USB cable2: non-shielded cable, with w/o ferrite core, 1.0 meter USB cable3: non-shielded cable, with w/o ferrite core, 1.0 meter USB cable4: non-shielded cable, with w/o ferrite core, 1.0 meter USB cable5: non-shielded cable, with w/o ferrite core, 1.0 meter USB cable6: non-shielded cable, with w/o ferrite core, 1.0 meter USB cable7: non-shielded cable, with w/o ferrite core, 1.0 meter USB cable8: non-shielded cable, with w/o ferrite core, 1.0 meter

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

MODULATION MODE	TX FUNCTION
802.11a	1TX /1RX
802.11n/802.11ac (20MHz)	1TX /1RX
802.11n/802.11ac (40MHz)	1TX /1RX
802.11ac (80MHz)	1TX /1RX

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in the test report.
4. Antenna gain and EUT conducted cable loss are provided by the customer, and the laboratory will record the results based on these items that involve these two parameters.

2.2 DESCRIPTION OF TEST MODES

FOR 5180 ~ 5240MHz

4 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz)

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n, 802.11ac (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210 MHz		

FOR 5260 ~ 5320MHz

4 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

2 channels are provided for 802.11n, 802.11ac (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
58	5290 MHz		

FOR 5500 ~ 5700MHz

11 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	124	5620MHz
104	5520 MHz	128	5640MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz		

5 channels are provided for 802.11n, 802.11ac (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	126	5630MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz		

2 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530 MHz	122	5610 MHz

FOR 5745 ~ 5825MHz

5 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745 MHz	161	5805 MHz
153	5765 MHz	165	5825 MHz
157	5785 MHz		

2 channels are provided for 802.11n, 802.11ac (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
142	5710 MHz	159	5795 MHz
151	5755 MHz		

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY
155	5775 MHz

2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	-	**Powered by Adapter with wifi(5G) link**
B	-	-	-	√	Powered by Battery with wifi(5G) link
C	-	-	-	-	Powered by USB with wifi(5G) link

Where **RE≥1G:** Radiated Emission above 1GHz **RE<1G:** Radiated Emission below 1GHz
PLC: Power Line Conducted Emission **APCM:** Antenna Port Conducted Measurement

NOTE:
The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane.**
NOTE: "-"means no effect

RADIATED EMISSION TEST (BELOW 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
☒ The following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11ac (80MHz)	5260-5320	58	58	OFDM	MCS0

RADIATED EMISSION TEST (ABOVE 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ The following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
A	802.11n/ac (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11n/ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11n/ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11n/ac/ (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	6.0
A	802.11n/ac (20MHz)		100 to 140	100, 116, 140	OFDM	MCS0
A	802.11n/ac (40MHz)		102 to 134	102, 110, 134	OFDM	MCS0
A	802.11ac (80MHz)		106 to 122	106, 122	OFDM	MCS0
A	802.11a	5745-5825	149 to 165	149, 157,165	OFDM	6.0
A	802.11n/ac (20MHz)		149 to 165	149, 157,165	OFDM	MCS0
A	802.11n/ac (40MHz)		151 to 159	151, 159	OFDM	MCS0
A	802.11ac (80MHz)		155	155	OFDM	MCS0

POWER LINE CONDUCTED EMISSION TEST:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ The following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11ac (80MHz)	5260-5320	58	58	OFDM	MCS0

BANDEDGE MEASUREMENT:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ The following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
A	802.11n/ac (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11n/ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11n/ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11n/ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	6.0
A	802.11n/ac (20MHz)		100 to 140	100, 116, 140	OFDM	MCS0
A	802.11n/ac (40MHz)		102 to 134	102, 110, 134	OFDM	MCS0
A	802.11ac (80MHz)		106 to 122	106, 122	OFDM	MCS0
A	802.11a	5745-5825	149 to 165	149, 157,165	OFDM	6.0
A	802.11n/ac (20MHz)		149 to 165	149, 157,165	OFDM	MCS0
A	802.11n/ac (40MHz)		151 to 159	151, 159	OFDM	MCS0
A	802.11ac (80MHz)		155	155	OFDM	MCS0

ANTENNA PORT CONDUCTED MEASUREMENT:

☒ This item includes all test values of each mode, but only includes spectrum plot of worst value of each mode.
☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
☒ The following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
A	802.11n/ac (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11n/ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11n/ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11n/ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	6.0
A	802.11n/ac (20MHz)		100 to 140	100, 116, 140	OFDM	MCS0
A	802.11n/ac (40MHz)		102 to 134	102, 110, 134	OFDM	MCS0
A	802.11ac (80MHz)		106 to 122	106, 122	OFDM	MCS0
A	802.11a	5745-5825	149 to 165	149, 157,165	OFDM	6.0
A	802.11n/ac (20MHz)		149 to 165	149, 157,165	OFDM, OFDMA	MCS0
A	802.11n/ac (40MHz)		151 to 159	151, 159	OFDM	MCS0
A	802.11ac (80MHz)		155	155	OFDM	MCS0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	23deg. C, 70%RH	DC 5/3.6~11V By Adapter	Jace Hu
RE≥1G	23deg. C, 70%RH	DC 5/3.6~11V By Adapter	Jace Hu
PLC	25deg. C, 52%RH	DC 5/3.6~11V By Adapter	James Fu
APCM	25deg. C, 60%RH	DC 3.84V By DC Supply	James Fu

2.3 DUTY CYCLE OF TEST SIGNAL

Please Refer to Appendix Of this test report.

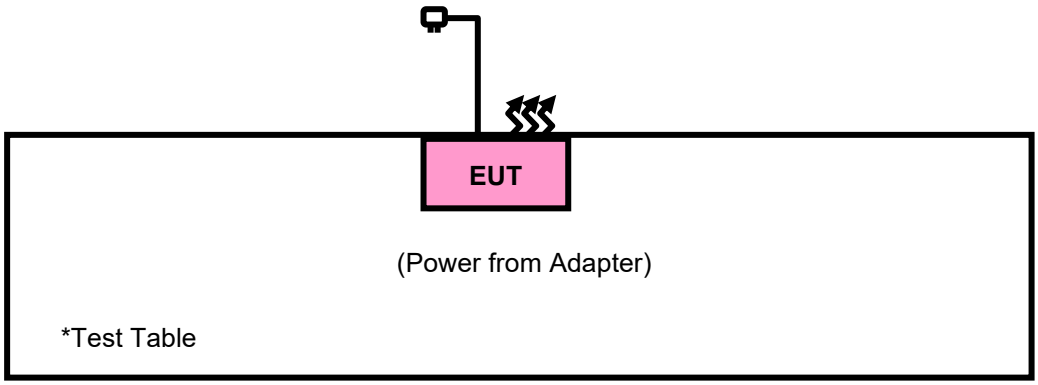
2.4 DESCRIPTION OF SUPPORT UNITS

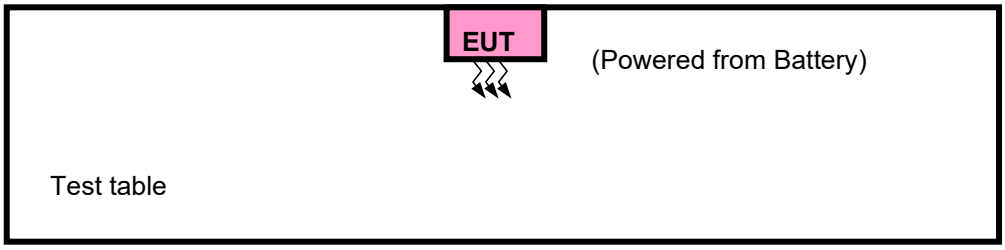
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

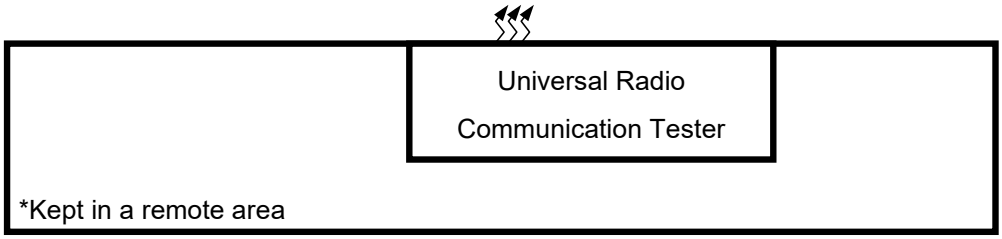
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Desktop	Lenovo	M73 SFF	PC04GRQV	N/A
2	Desktop	Lenovo	M73 SFF	PC06CS27	N/A
3	Laptop	Lenovo	ThinkpadL440	R90FTFKN	N/A
4	DC source	Kikusui/JP	PMX18-5A	0000001	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	AC Line: Unshielded, Detachable 1.5m
2	AC Line: Unshielded, Detachable 1.5m
3	AC Line: Unshielded, Detachable 1.5m
4	DC Line: Unshielded, Detachable 1.0m

2.4.1 CONFIGURATION OF SYSTEM UNDER TEST







2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart E (15.407)
KDB 789033 D02 General U-NII Test Procedures New Rules v02r01
ANSI C63.10-2020

All test items have been performed and recorded as per the above standards.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (Certification). The test report has been issued separately.

3 TEST TYPES AND RESULTS

3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

3.1.2 LIMITS OF UNWANTED EMISSION

<table>
<tr><td rowspan="2">RESTRICTED BANDS</td><td>APPLICABLE TO</td><td colspan="2">LIMIT</td></tr>
<tr><td rowspan="2">789033 D02 General UNII Test Procedures New Rules v02r01</td><td colspan="2">FIELD STRENGTH AT 3m (dBµV/m)</td></tr>
<tr><td>PK : 74</td><td>AV : 54</td></tr>
<tr><td rowspan="5">OUT OF THE RESTRICTED BANDS</td><td>APPLICABLE TO</td><td>EIRP LIMIT (dBm/MHz)</td><td>EQUIVALENT FIELD STRENGTH AT 3m (dBµV/m)</td></tr>
<tr><td>15.407(b)(1)</td><td rowspan="3">PK : -27</td><td rowspan="3">PK : 68.2</td></tr>
<tr><td>15.407(b)(2)</td></tr>
<tr><td>15.407(b)(3)</td></tr>
<tr><td>15.407(b)(4)</td><td colspan="2">See note 2 (FCC 16-24)</td></tr>
</table>

NOTE: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts).

2. All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

3.1.3 TEST INSTRUMENTS

#1

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	Nov. 14,23	Nov. 13,26
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Feb. 18,24	Feb. 17,25
Horn Antenna	ETS-LINDGREN	3117	00168692	Feb. 18,24	Feb. 17,25
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Sep.04, 23	Sep.03, 24
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	JS1120-3	3.2.06	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	N/A	May. 06,24	May. 05,25
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 28,24	Mar. 27,25
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May. 06,24	May. 05,25
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.10,24	May.09,25
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 17,24	Feb. 16,25
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 12,23	Aug. 11,24
Power Meter	Anritsu	ML2495A	1506002	Feb. 14,24	Feb. 13,25
Power Sensor	Anritsu	MA2411B	1339352	Feb. 14,24	Feb. 13,25
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.03,23	Sep.02,24

#2

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	Nov. 14,23	Nov. 13,26
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Feb. 18,24	Feb. 17,25
Horn Antenna	ETS-LINDGREN	3117	00168692	Feb. 18,24	Feb. 17,25

Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Sep.03, 24	Sep.02, 25
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	JS1120-3	3.2.06	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	N/A	May. 06,24	May. 05,25
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 28,24	Mar. 27,25
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May. 06,24	May. 05,25
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.10,24	May.09,25
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 17,24	Feb. 16,25
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 11,24	Aug. 10,25
Power Meter	Anritsu	ML2495A	1506002	Feb. 14,24	Feb. 13,25
Power Sensor	Anritsu	MA2411B	1339352	Feb. 14,24	Feb. 13,25
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.02,24	Sep.01,25

NOTE: 1. The calibration interval of the above test instruments is 12 months or 36 months, and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA, and NIM/CHINA.

2. The test was performed in the 3m Chamber.

3. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

3.1.4 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3-meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height varies from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

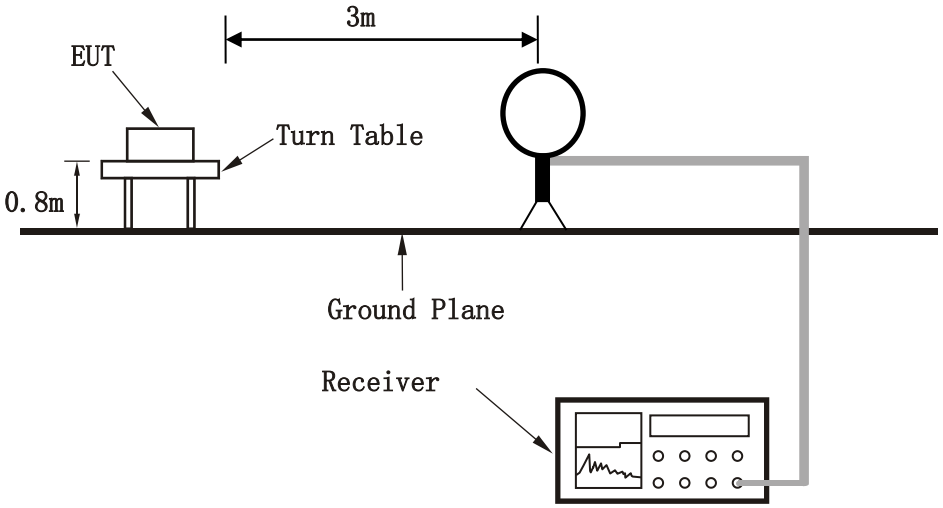
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (10 log(1/duty cycle)).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated, and the worst-case emissions are reported.

3.1.5 DEVIATION FROM TEST STANDARD

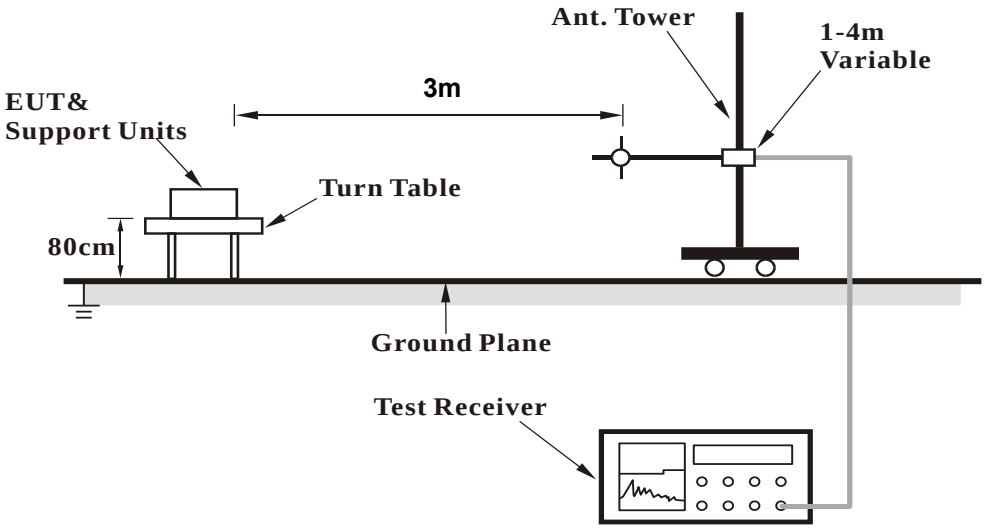
No deviation.

3.1.6 TEST SETUP

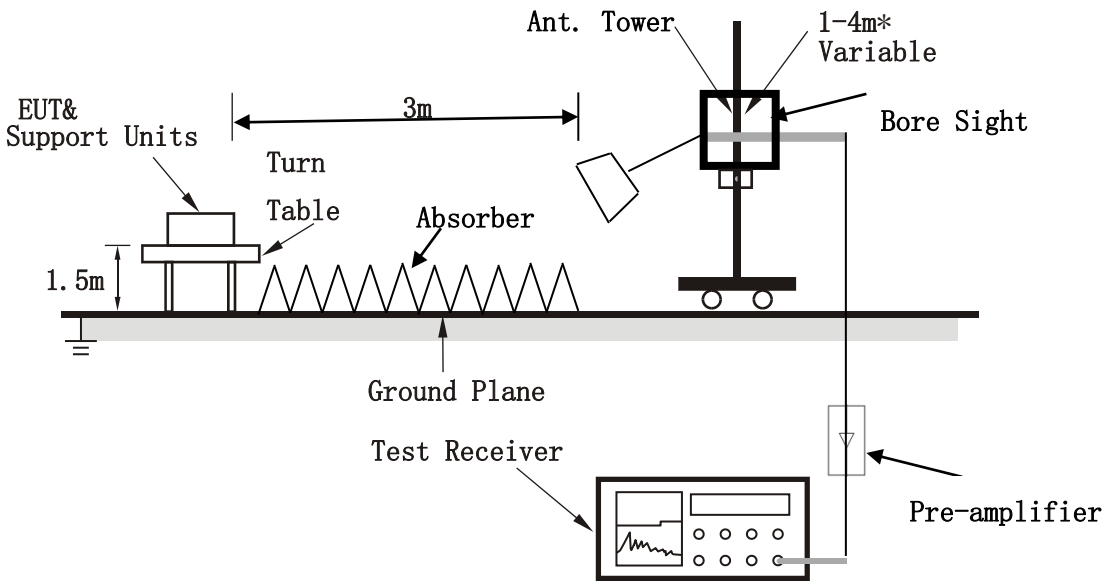
<Frequency Range 9KHz~30MHz >



< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



Note: Above 1G is a directional antenna

Depending on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.1.7 EUT OPERATING CONDITION

a. Set the EUT under full load condition and placed it on a testing table.

b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.

c. The necessary accessories enable the EUT in full functions.

3.1.8 TEST RESULTS

NOTE ： The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

30 MHz – 1GHz data:

Band 2

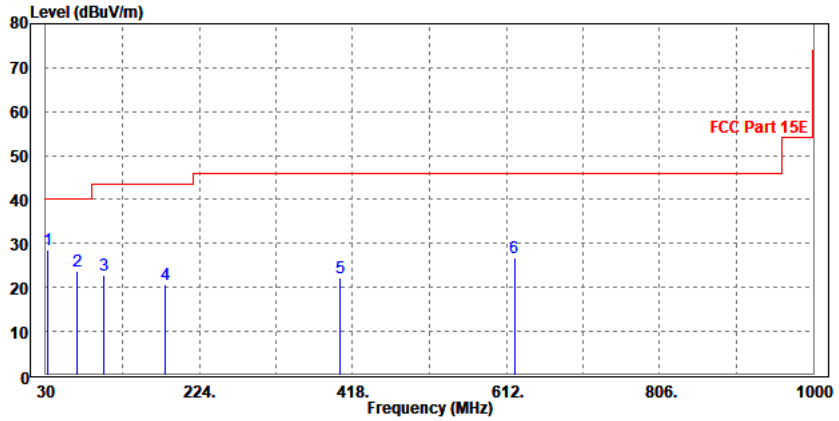
802.11ac (80MHz):

CHANNEL	TX Channel 58	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
32.91	27.29	40.8	40	-12.71	23.74	0.17	37.42	100	360	Peak
85.22	19.56	43.83	40	-20.44	12.4	0.47	37.14	100	360	Peak
148.19	21.44	42.42	43.5	-22.06	14.96	0.79	36.73	100	360	Peak
179.52	23.65	43.43	43.5	-19.85	16	0.85	36.63	100	360	Peak
271.52	20.64	36.9	46	-25.36	19.11	1.22	36.59	100	360	Peak
482.45	24.06	35.28	46	-21.94	23.95	1.88	37.05	100	360	Peak

REMARKS:

1. Emission level (dBuV/m) = Read level (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

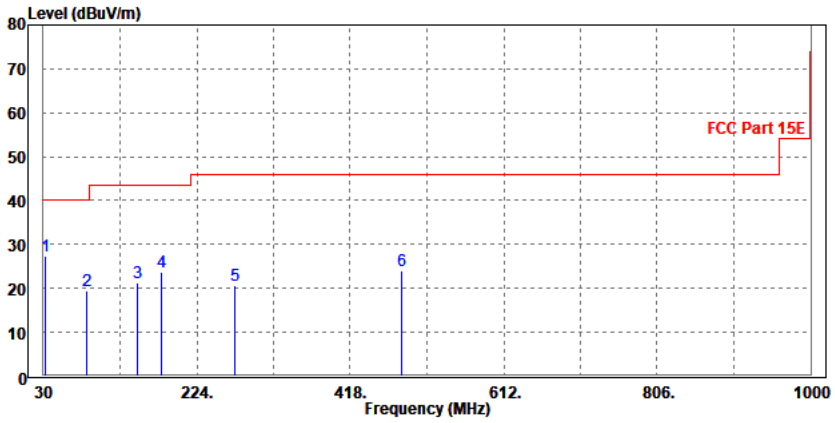


CHANNEL	Channel 58	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
32.91	28.68	42.19	40	-11.32	23.74	0.17	37.42	100	0	Peak
69.27	23.68	47.33	40	-16.32	13.3	0.37	37.32	100	0	Peak
103.78	22.67	44.11	43.5	-20.83	14.88	0.56	36.88	100	0	Peak
180.23	20.59	40.39	43.5	-22.91	15.98	0.85	36.63	100	0	Peak
402.3	22.16	33.92	46	-23.84	23.34	1.57	36.67	100	0	Peak
622.19	26.7	34.19	46	-19.3	27.49	2.26	37.24	100	0	Peak

REMARKS:

1. Emission level (dBuV/m) = Read level (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.



ABOVE 1GHz WORST-CASE DATA:

Note: For higher frequency, the emission is too low to be detected.

Band 1

802.11a

CHANNEL	TX Channel 36	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.46	53.68	74.00	-21.54	34.20	11.17	46.59	100	350	Peak
5150	46.34	47.56	54.00	-7.66	34.20	11.17	46.59	100	350	Average
5180	100.49	101.62	/	/	34.26	11.20	46.59	100	350	Peak
5180	92.36	93.49	/	/	34.26	11.20	46.59	100	350	Average
5350	52.22	53.07	74.00	-21.78	34.30	11.39	46.54	100	350	Peak
5350	45.90	46.75	54.00	-8.10	34.30	11.39	46.54	100	350	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	51.82	53.24	74.00	-22.18	34.00	11.17	46.59	100	265	Peak
5150	45.46	46.88	54.00	-8.54	34.00	11.17	46.59	100	265	Average
5180	92.06	93.51	/	/	33.94	11.20	46.59	100	265	Peak
5180	85.66	87.11	/	/	33.94	11.20	46.59	100	265	Average
5350	51.91	52.26	74.00	-22.09	34.80	11.39	46.54	100	265	Peak
5350	46.35	46.70	54.00	-7.65	34.80	11.39	46.54	100	265	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5180MHz: Fundamental frequency.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	49.33	50.55	74.00	-24.67	34.20	11.17	46.59	100	350	Peak
5150	46.33	47.55	54.00	-7.67	34.20	11.17	46.59	100	350	Average
5200	100.19	101.25	/	/	34.30	11.22	46.58	100	350	Peak
5200	93.30	94.36	/	/	34.30	11.22	46.58	100	350	Average
5350	52.27	53.12	74.00	-21.73	34.30	11.39	46.54	100	350	Peak
5350	45.90	46.75	54.00	-8.10	34.30	11.39	46.54	100	350	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	50.26	51.68	74.00	-23.74	34.00	11.17	46.59	100	260	Peak
5150	45.61	47.03	54.00	-8.39	34.00	11.17	46.59	100	260	Average
5200	93.15	94.61	/	/	33.90	11.22	46.58	100	260	Peak
5200	87.58	89.04	/	/	33.90	11.22	46.58	100	260	Average
5350	54.20	54.55	74.00	-19.80	34.80	11.39	46.54	100	260	Peak
5350	46.32	46.67	54.00	-7.68	34.80	11.39	46.54	100	260	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5200MHz: Fundamental frequency.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.16	54.38	74.00	-20.84	34.20	11.17	46.59	100	350	Peak
5150	46.20	47.42	54.00	-7.80	34.20	11.17	46.59	100	350	Average
5240	100.74	101.58	/	/	34.46	11.27	46.57	100	350	Peak
5240	95.43	96.27	/	/	34.46	11.27	46.57	100	350	Average
5350	52.66	53.51	74.00	-21.34	34.30	11.39	46.54	100	350	Peak
5350	45.91	46.76	54.00	-8.09	34.30	11.39	46.54	100	350	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	48.76	50.18	74.00	-25.24	34.00	11.17	46.59	100	255	Peak
5150	45.47	46.89	54.00	-8.53	34.00	11.17	46.59	100	255	Average
5240	94.67	95.99	/	/	33.98	11.27	46.57	100	255	Peak
5240	87.84	89.16	/	/	33.98	11.27	46.57	100	255	Average
5350	50.72	51.07	74.00	-23.28	34.80	11.39	46.54	100	255	Peak
5350	46.06	46.41	54.00	-7.94	34.80	11.39	46.54	100	255	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.

802.11n (20MHz)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	50.10	51.32	74.00	-23.90	34.20	11.17	46.59	100	350	Peak
5150	46.38	47.60	54.00	-7.62	34.20	11.17	46.59	100	350	Average
5180	101.09	102.22	/	/	34.26	11.20	46.59	100	350	Peak
5180	92.57	93.70	/	/	34.26	11.20	46.59	100	350	Average
5350	52.51	53.36	74.00	-21.49	34.30	11.39	46.54	100	350	Peak
5350	45.96	46.81	54.00	-8.04	34.30	11.39	46.54	100	350	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	50.66	52.08	74.00	-23.34	34.00	11.17	46.59	100	255	Peak
5150	45.46	46.88	54.00	-8.54	34.00	11.17	46.59	100	255	Average
5180	92.68	94.13	/	/	33.94	11.20	46.59	100	255	Peak
5180	86.15	87.60	/	/	33.94	11.20	46.59	100	255	Average
5350	51.58	51.93	74.00	-22.42	34.80	11.39	46.54	100	255	Peak
5350	46.27	46.62	54.00	-7.73	34.80	11.39	46.54	100	255	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5180MHz: Fundamental frequency.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.08	53.30	74.00	-21.92	34.20	11.17	46.59	100	350	Peak
5150	46.27	47.49	54.00	-7.73	34.20	11.17	46.59	100	350	Average
5200	101.56	102.62	/	/	34.30	11.22	46.58	100	350	Peak
5200	94.47	95.53	/	/	34.30	11.22	46.58	100	350	Average
5350	51.87	52.72	74.00	-22.13	34.30	11.39	46.54	100	350	Peak
5350	45.74	46.59	54.00	-8.26	34.30	11.39	46.54	100	350	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.17	54.59	74.00	-20.83	34.00	11.17	46.59	100	255	Peak
5150	45.60	47.02	54.00	-8.40	34.00	11.17	46.59	100	255	Average
5200	92.19	93.65	/	/	33.90	11.22	46.58	100	255	Peak
5200	86.41	87.87	/	/	33.90	11.22	46.58	100	255	Average
5350	51.50	51.85	74.00	-22.50	34.80	11.39	46.54	100	255	Peak
5350	46.27	46.62	54.00	-7.73	34.80	11.39	46.54	100	255	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5200MHz: Fundamental frequency.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	49.87	51.09	74.00	-24.13	34.20	11.17	46.59	100	350	Peak
5150	45.81	47.03	54.00	-8.19	34.20	11.17	46.59	100	350	Average
5240	100.93	101.77	/	/	34.46	11.27	46.57	100	350	Peak
5240	94.55	95.39	/	/	34.46	11.27	46.57	100	350	Average
5350	52.68	53.53	74.00	-21.32	34.30	11.39	46.54	100	350	Peak
5350	45.93	46.78	54.00	-8.07	34.30	11.39	46.54	100	350	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	51.58	53.00	74.00	-22.42	34.00	11.17	46.59	100	255	Peak
5150	45.66	47.08	54.00	-8.34	34.00	11.17	46.59	100	255	Average
5240	92.86	94.18	/	/	33.98	11.27	46.57	100	255	Peak
5240	85.90	87.22	/	/	33.98	11.27	46.57	100	255	Average
5350	52.15	52.50	74.00	-21.85	34.80	11.39	46.54	100	255	Peak
5350	46.26	46.61	54.00	-7.74	34.80	11.39	46.54	100	255	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.

802.11n (40MHz)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	51.33	52.55	74.00	-22.67	34.20	11.17	46.59	100	350	Peak
5150	47.37	48.59	54.00	-6.63	34.20	11.17	46.59	100	350	Average
5190	97.92	99.01	/	/	34.28	11.21	46.58	100	350	Peak
5190	92.27	93.36	/	/	34.28	11.21	46.58	100	350	Average
5350	52.81	53.66	74.00	-21.19	34.30	11.39	46.54	100	350	Peak
5350	46.32	47.17	54.00	-7.68	34.30	11.39	46.54	100	350	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.37	53.79	74.00	-21.63	34.00	11.17	46.59	100	255	Peak
5150	46.04	47.46	54.00	-7.96	34.00	11.17	46.59	100	255	Average
5190	90.37	91.82	/	/	33.92	11.21	46.58	100	255	Peak
5190	82.34	83.79	/	/	33.92	11.21	46.58	100	255	Average
5350	52.02	52.37	74.00	-21.98	34.80	11.39	46.54	100	255	Peak
5350	46.81	47.16	54.00	-7.19	34.80	11.39	46.54	100	255	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5190MHz: Fundamental frequency.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.20	53.42	74.00	-21.80	34.20	11.17	46.59	100	350	Peak
5150	46.51	47.73	54.00	-7.49	34.20	11.17	46.59	100	350	Average
5230	98.62	99.51	/	/	34.42	11.26	46.57	100	350	Peak
5230	92.15	93.04	/	/	34.42	11.26	46.57	100	350	Average
5350	49.93	50.78	74.00	-24.07	34.30	11.39	46.54	100	350	Peak
5350	46.54	47.39	54.00	-7.46	34.30	11.39	46.54	100	350	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	51.21	52.63	74.00	-22.79	34.00	11.17	46.59	100	255	Peak
5150	45.77	47.19	54.00	-8.23	34.00	11.17	46.59	100	255	Average
5230	90.59	91.94	/	/	33.96	11.26	46.57	100	255	Peak
5230	84.18	85.53	/	/	33.96	11.26	46.57	100	255	Average
5350	53.54	53.89	74.00	-20.46	34.80	11.39	46.54	100	255	Peak
5350	46.46	46.81	54.00	-7.54	34.80	11.39	46.54	100	255	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5230MHz: Fundamental frequency.

802.11ac (80MHz)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.37	57.59	74.00	-17.63	34.20	11.17	46.59	100	350	Peak
5150	50.17	51.39	54.00	-3.83	34.20	11.17	46.59	100	350	Average
5210	94.74	95.74	/	/	34.34	11.24	46.58	100	350	Peak
5210	89.44	90.44	/	/	34.34	11.24	46.58	100	350	Average
5350	53.28	54.13	74.00	-20.72	34.30	11.39	46.54	100	350	Peak
5350	46.40	47.25	54.00	-7.60	34.30	11.39	46.54	100	350	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	51.42	52.84	74.00	-22.58	34.00	11.17	46.59	100	255	Peak
5150	46.81	48.23	54.00	-7.19	34.00	11.17	46.59	100	255	Average
5210	85.86	87.28	/	/	33.92	11.24	46.58	100	255	Peak
5210	80.72	82.14	/	/	33.92	11.24	46.58	100	255	Average
5350	53.32	53.67	74.00	-20.68	34.80	11.39	46.54	100	255	Peak
5350	47.87	48.22	54.00	-6.13	34.80	11.39	46.54	100	255	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5210MHz: Fundamental frequency.

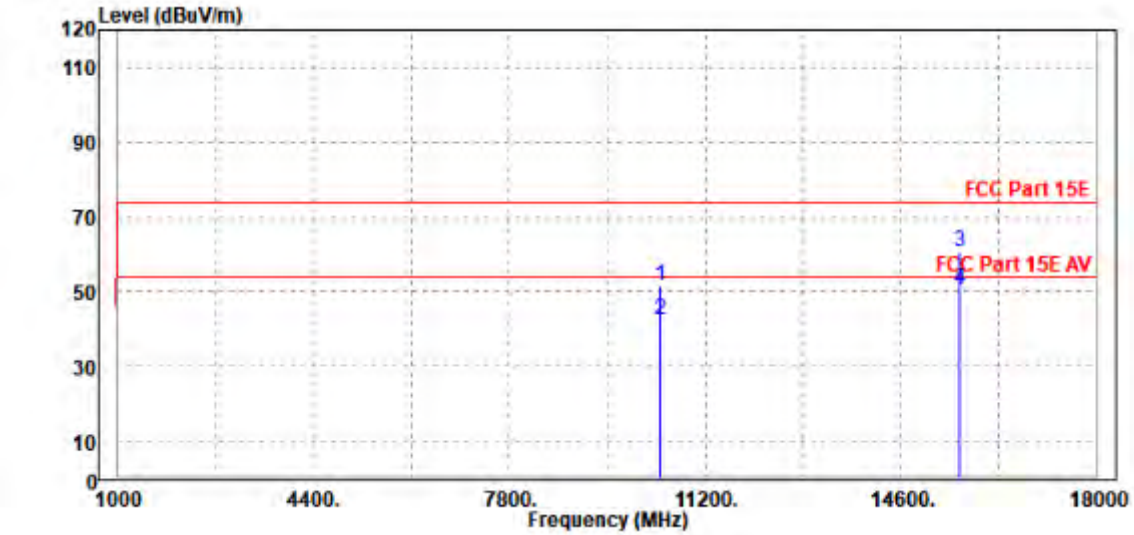
802.11ac (80MHz)

Worst case harmonic:

CHANNEL	TX Channel 42	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

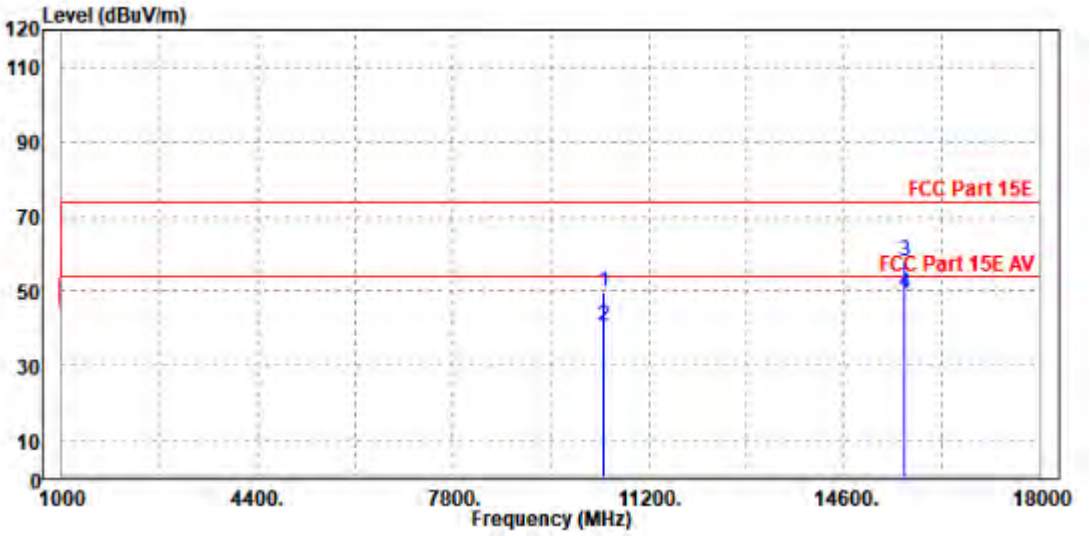
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	10418.000	51.78	44.45	74.00	-22.22	7.33	Peak	Horizontal
2	10418.000	42.45	35.12	54.00	-11.55	7.33	Average	Horizontal
3	PK15630.000	60.90	40.99	74.00	-13.10	19.91	Peak	Horizontal
4	PP15630.000	50.79	30.88	54.00	-3.21	19.91	Average	Horizontal



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	10420.000	49.84	42.87	74.00	-24.16	6.97	Peak	Vertical
2	10420.000	40.64	33.67	54.00	-13.36	6.97	Average	Vertical
3	PK15637.000	57.89	38.33	74.00	-16.11	19.56	Peak	Vertical
4	PP15637.000	49.12	29.56	54.00	-4.88	19.56	Average	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5210MHz: Fundamental frequency.
3. For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet.

Band 2

802.11a

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.01	55.23	74.00	-19.99	34.20	11.17	46.59	100	355	Peak
5150	45.22	46.44	54.00	-8.78	34.20	11.17	46.59	100	355	Average
5260	103.72	104.54	/	/	34.46	11.29	46.57	100	355	Peak
5260	94.58	95.40	/	/	34.46	11.29	46.57	100	355	Average
5350	53.89	54.74	74.00	-20.11	34.30	11.39	46.54	100	355	Peak
5350	45.46	46.31	54.00	-8.54	34.30	11.39	46.54	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	50.97	52.39	74.00	-23.03	34.00	11.17	46.59	100	245	Peak
5150	44.84	46.26	54.00	-9.16	34.00	11.17	46.59	100	245	Average
5260	97.66	98.82	/	/	34.12	11.29	46.57	100	245	Peak
5260	89.38	90.54	/	/	34.12	11.29	46.57	100	245	Average
5350	54.26	54.61	74.00	-19.74	34.80	11.39	46.54	100	245	Peak
5350	45.96	46.31	54.00	-8.04	34.80	11.39	46.54	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5260MHz: Fundamental frequency.

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.96	54.18	74.00	-21.04	34.20	11.17	46.59	100	355	Peak
5150	45.06	46.28	54.00	-8.94	34.20	11.17	46.59	100	355	Average
5300	103.44	104.36	/	/	34.30	11.34	46.56	100	355	Peak
5300	94.95	95.87	/	/	34.30	11.34	46.56	100	355	Average
5350	52.76	53.61	74.00	-21.24	34.30	11.39	46.54	100	355	Peak
5350	45.33	46.18	54.00	-8.67	34.30	11.39	46.54	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.74	55.16	74.00	-20.26	34.00	11.17	46.59	100	245	Peak
5150	44.77	46.19	54.00	-9.23	34.00	11.17	46.59	100	245	Average
5300	97.70	98.32	/	/	34.60	11.34	46.56	100	245	Peak
5300	89.66	90.28	/	/	34.60	11.34	46.56	100	245	Average
5350	52.29	52.64	74.00	-21.71	34.80	11.39	46.54	100	245	Peak
5350	45.86	46.21	54.00	-8.14	34.80	11.39	46.54	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5300MHz: Fundamental frequency.

CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.19	53.41	74.00	-21.81	34.20	11.17	46.59	100	355	Peak
5150	44.97	46.19	54.00	-9.03	34.20	11.17	46.59	100	355	Average
5320	103.45	104.34	/	/	34.30	11.36	46.55	100	355	Peak
5320	95.52	96.41	/	/	34.30	11.36	46.55	100	355	Average
5350	52.64	53.49	74.00	-21.36	34.30	11.39	46.54	100	355	Peak
5350	46.18	47.03	54.00	-7.82	34.30	11.39	46.54	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.01	53.43	74.00	-21.99	34.00	11.17	46.59	100	245	Peak
5150	44.70	46.12	54.00	-9.30	34.00	11.17	46.59	100	245	Average
5320	96.66	97.17	/	/	34.68	11.36	46.55	100	245	Peak
5320	89.66	90.17	/	/	34.68	11.36	46.55	100	245	Average
5350	52.78	53.13	74.00	-21.22	34.80	11.39	46.54	100	245	Peak
5350	45.93	46.28	54.00	-8.07	34.80	11.39	46.54	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5320MHz: Fundamental frequency.

802.11n (20MHz)

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.90	54.12	74.00	-21.10	34.20	11.17	46.59	100	355	Peak
5150	45.13	46.35	54.00	-8.87	34.20	11.17	46.59	100	355	Average
5260	101.92	102.74	/	/	34.46	11.29	46.57	100	355	Peak
5260	94.42	95.24	/	/	34.46	11.29	46.57	100	355	Average
5350	53.74	54.59	74.00	-20.26	34.30	11.39	46.54	100	355	Peak
5350	45.41	46.26	54.00	-8.59	34.30	11.39	46.54	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.61	55.03	74.00	-20.39	34.00	11.17	46.59	100	245	Peak
5150	45.19	46.61	54.00	-8.81	34.00	11.17	46.59	100	245	Average
5260	96.95	98.11	/	/	34.12	11.29	46.57	100	245	Peak
5260	89.52	90.68	/	/	34.12	11.29	46.57	100	245	Average
5350	52.38	52.73	74.00	-21.62	34.80	11.39	46.54	100	245	Peak
5350	46.08	46.43	54.00	-7.92	34.80	11.39	46.54	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5260MHz: Fundamental frequency.

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	51.37	52.59	74.00	-22.63	34.20	11.17	46.59	100	355	Peak
5150	45.50	46.72	54.00	-8.50	34.20	11.17	46.59	100	355	Average
5300	102.20	103.12	/	/	34.30	11.34	46.56	100	355	Peak
5300	94.56	95.48	/	/	34.30	11.34	46.56	100	355	Average
5350	52.76	53.61	74.00	-21.24	34.30	11.39	46.54	100	355	Peak
5350	45.49	46.34	54.00	-8.51	34.30	11.39	46.54	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.42	53.84	74.00	-21.58	34.00	11.17	46.59	100	245	Peak
5150	45.09	46.51	54.00	-8.91	34.00	11.17	46.59	100	245	Average
5300	97.21	97.83	/	/	34.60	11.34	46.56	100	245	Peak
5300	89.56	90.18	/	/	34.60	11.34	46.56	100	245	Average
5350	53.59	53.94	74.00	-20.41	34.80	11.39	46.54	100	245	Peak
5350	45.94	46.29	54.00	-8.06	34.80	11.39	46.54	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5300MHz: Fundamental frequency.

CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.39	53.61	74.00	-21.61	34.20	11.17	46.59	100	355	Peak
5150	45.05	46.27	54.00	-8.95	34.20	11.17	46.59	100	355	Average
5320	101.84	102.73	/	/	34.30	11.36	46.55	100	355	Peak
5320	94.74	95.63	/	/	34.30	11.36	46.55	100	355	Average
5350	53.02	53.87	74.00	-20.98	34.30	11.39	46.54	100	355	Peak
5350	45.58	46.43	54.00	-8.42	34.30	11.39	46.54	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.84	54.26	74.00	-21.16	34.00	11.17	46.59	100	245	Peak
5150	44.95	46.37	54.00	-9.05	34.00	11.17	46.59	100	245	Average
5320	97.21	97.72	/	/	34.68	11.36	46.55	100	245	Peak
5320	89.84	90.35	/	/	34.68	11.36	46.55	100	245	Average
5350	53.49	53.84	74.00	-20.51	34.80	11.39	46.54	100	245	Peak
5350	46.07	46.42	54.00	-7.93	34.80	11.39	46.54	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5320MHz: Fundamental frequency.

802.11n (40MHz)

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	51.11	52.33	74.00	-22.89	34.20	11.17	46.59	100	355	Peak
5150	45.15	46.37	54.00	-8.85	34.20	11.17	46.59	100	355	Average
5270	98.08	98.92	/	/	34.42	11.30	46.56	100	355	Peak
5270	92.33	93.17	/	/	34.42	11.30	46.56	100	355	Average
5350	51.96	52.81	74.00	-22.04	34.30	11.39	46.54	100	355	Peak
5350	46.84	47.69	54.00	-7.16	34.30	11.39	46.54	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	50.72	52.14	74.00	-23.28	34.00	11.17	46.59	100	245	Peak
5150	44.54	45.96	54.00	-9.46	34.00	11.17	46.59	100	245	Average
5270	92.81	93.83	/	/	34.24	11.30	46.56	100	245	Peak
5270	86.89	87.91	/	/	34.24	11.30	46.56	100	245	Average
5350	52.78	53.13	74.00	-21.22	34.80	11.39	46.54	100	245	Peak
5350	46.06	46.41	54.00	-7.94	34.80	11.39	46.54	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5270MHz: Fundamental frequency.

CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.62	53.84	74.00	-21.38	34.20	11.17	46.59	100	355	Peak
5150	45.04	46.26	54.00	-8.96	34.20	11.17	46.59	100	355	Average
5310	96.77	97.67	/	/	34.30	11.35	46.55	100	355	Peak
5310	90.93	91.83	/	/	34.30	11.35	46.55	100	355	Average
5350	53.61	54.46	74.00	-20.39	34.30	11.39	46.54	100	355	Peak
5350	46.72	47.57	54.00	-7.28	34.30	11.39	46.54	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.15	53.57	74.00	-21.85	34.00	11.17	46.59	100	245	Peak
5150	44.76	46.18	54.00	-9.24	34.00	11.17	46.59	100	245	Average
5310	93.04	93.60	/	/	34.64	11.35	46.55	100	245	Peak
5310	87.07	87.63	/	/	34.64	11.35	46.55	100	245	Average
5350	54.23	54.58	74.00	-19.77	34.80	11.39	46.54	100	245	Peak
5350	47.29	47.64	54.00	-6.71	34.80	11.39	46.54	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5310MHz: Fundamental frequency.

802.11ac (80MHz)

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	49.67	50.89	74	-24.33	34.2	11.17	46.59	100	335	Peak
5150	46.55	47.77	54	-7.45	34.2	11.17	46.59	100	335	Average
5290	94.17	95.07	/	/	34.34	11.32	46.56	100	335	Peak
5290	88.43	89.33	/	/	34.34	11.32	46.56	100	335	Average
5350	55.12	55.97	74	-18.88	34.3	11.39	46.54	100	335	Peak
5350	50.9	51.75	54	-3.1	34.3	11.39	46.54	100	335	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	48.44	49.86	74	-25.56	34	11.17	46.59	100	265	Peak
5150	46.3	47.72	54	-7.7	34	11.17	46.59	100	265	Average
5290	86.87	87.63	74	12.87	34.48	11.32	46.56	100	265	Peak
5290	82.69	83.45	54	28.69	34.48	11.32	46.56	100	265	Average
5350	52.05	52.4	74	-21.95	34.8	11.39	46.54	100	265	Peak
5350	47.49	47.84	54	-6.51	34.8	11.39	46.54	100	265	Average

REMARKS:

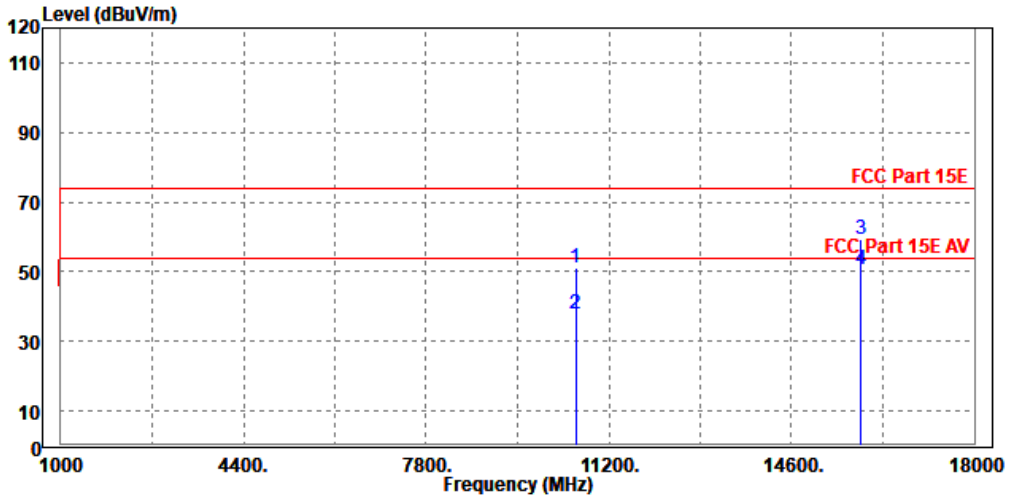
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5290MHz: Fundamental frequency.

802.11ac (80MHz)
Worst case harmonic:

CHANNEL	TX Channel 58	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

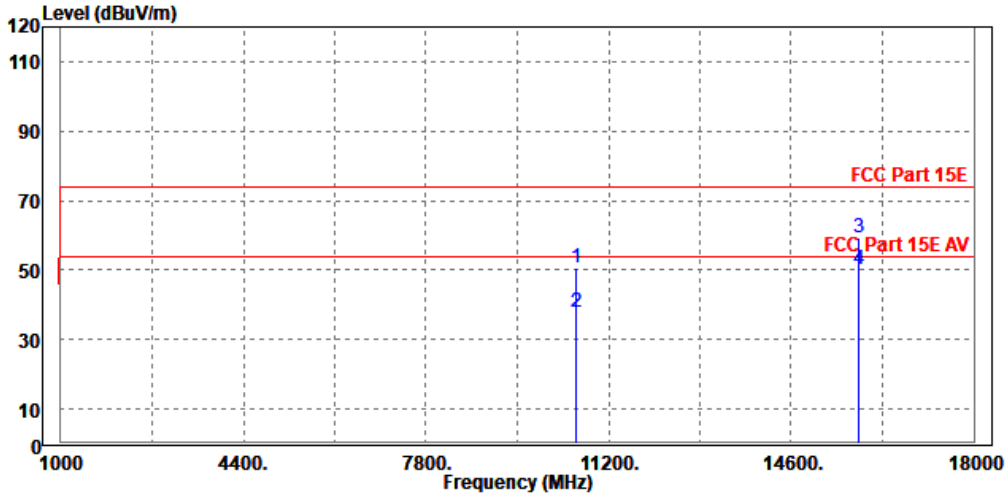
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	10580.000	50.97	43.72	74.00	-23.03	7.25	Peak	Horizontal
2	10580.000	38.09	30.84	54.00	-15.91	7.25	Average	Horizontal
3	PK15875.000	59.24	39.98	74.00	-14.76	19.26	Peak	Horizontal
4	PP15875.000	50.50	31.24	54.00	-3.50	19.26	Average	Horizontal



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	10588.000	50.82	43.59	74.00	-23.18	7.23	Peak	Vertical
2	10588.000	38.01	30.78	54.00	-15.99	7.23	Average	Vertical
3	PK15870.000	59.23	39.94	74.00	-14.77	19.29	Peak	Vertical
4	PP15870.000	50.34	31.05	54.00	-3.66	19.29	Average	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5290MHz: Fundamental frequency.
3. For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet.

Band 3

802.11a

CHANNEL	TX Channel 100	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.19	52.6	74	-21.81	34.58	11.52	46.51	100	355	Peak
5460	46.3	46.71	54	-7.7	34.58	11.52	46.51	100	355	Average
5470	53.93	54.35	68.2	-14.27	34.56	11.53	46.51	100	355	Peak
5500	102	102.45	/	/	34.5	11.56	46.51	100	355	Peak
5500	94.11	94.56	/	/	34.5	11.56	46.51	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.52	53.23	74	-21.48	34.28	11.52	46.51	100	245	Peak
5460	45.79	46.5	54	-8.21	34.28	11.52	46.51	100	245	Average
5470	53.23	53.95	68.2	-14.97	34.26	11.53	46.51	100	245	Peak
5500	95.82	96.57	/	/	34.2	11.56	46.51	100	245	Peak
5500	88.21	88.96	/	/	34.2	11.56	46.51	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor

   Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.19	53.6	74	-20.81	34.58	11.52	46.51	100	355	Peak
5460	45.94	46.35	54	-8.06	34.58	11.52	46.51	100	355	Average
5470	53.73	54.15	68.2	-14.47	34.56	11.53	46.51	100	355	Peak
5580	102.15	102.75	/	/	34.3	11.59	46.49	100	355	Peak
5580	87.87	88.47	/	/	34.3	11.59	46.49	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.06	52.77	74	-21.94	34.28	11.52	46.51	100	245	Peak
5460	45.57	46.28	54	-8.43	34.28	11.52	46.51	100	245	Average
5470	53.18	53.9	68.2	-15.02	34.26	11.53	46.51	100	245	Peak
5580	95.91	95.87	/	/	34.94	11.59	46.49	100	245	Peak
5580	88.12	88.08	/	/	34.94	11.59	46.49	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5580MHz: Fundamental frequency.
3. #: Out of restricted band.

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	101.97	102.19	/	/	34.6	11.64	46.46	100	355	Peak
5700	93.65	93.87	/	/	34.6	11.64	46.46	100	355	Average
5725	53.04	53.29	68.2	-15.16	34.55	11.65	46.45	100	355	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	94.66	95.18	/	/	34.3	11.64	46.46	100	245	Peak
5700	87.44	87.96	/	/	34.3	11.64	46.46	100	245	Average
5725	53.14	53.59	68.2	-15.06	34.35	11.65	46.45	100	245	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5700MHz: Fundamental frequency.
3. #: Out of restricted band.

802.11n (20MHz)

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.21	53.62	74	-20.79	34.58	11.52	46.51	100	355	Peak
5460	45.86	46.27	54	-8.14	34.58	11.52	46.51	100	355	Average
5470	52.73	53.15	68.2	-15.47	34.56	11.53	46.51	100	355	Peak
5500	101.68	102.13	/	/	34.5	11.56	46.51	100	355	Peak
5500	87.24	87.69	/	/	34.5	11.56	46.51	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.15	52.86	74	-21.85	34.28	11.52	46.51	100	245	Peak
5460	45.42	46.13	54	-8.58	34.28	11.52	46.51	100	245	Average
5470	52.87	53.59	68.2	-15.33	34.26	11.53	46.51	100	245	Peak
5500	94.79	95.54	/	/	34.2	11.56	46.51	100	245	Peak
5500	87.5	88.25	/	/	34.2	11.56	46.51	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.06	52.47	74	-21.94	34.58	11.52	46.51	100	355	Peak
5460	46.17	46.58	54	-7.83	34.58	11.52	46.51	100	355	Average
5470	53.18	53.6	68.2	-15.02	34.56	11.53	46.51	100	355	Peak
5580	101.33	101.93	/	/	34.3	11.59	46.49	100	355	Peak
5580	87.05	87.65	/	/	34.3	11.59	46.49	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.9	53.61	74	-21.1	34.28	11.52	46.51	100	245	Peak
5460	45.55	46.26	54	-8.45	34.28	11.52	46.51	100	245	Average
5470	52.13	52.85	68.2	-16.07	34.26	11.53	46.51	100	245	Peak
5580	95.84	95.8	/	/	34.94	11.59	46.49	100	245	Peak
5580	87.54	87.5	/	/	34.94	11.59	46.49	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5580MHz: Fundamental frequency.
3. #: Out of restricted band.

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	101.35	101.57	/	/	34.6	11.64	46.46	100	355	Peak
5700	93.54	93.76	/	/	34.6	11.64	46.46	100	355	Average
5725	53.42	53.67	68.2	-14.78	34.55	11.65	46.45	100	355	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	94.15	94.67	/	/	34.3	11.64	46.46	100	245	Peak
5700	86.43	86.95	/	/	34.3	11.64	46.46	100	245	Average
5725	53.17	53.62	68.2	-15.03	34.35	11.65	46.45	100	245	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5700MHz: Fundamental frequency.
3. #: Out of restricted band.

802.11n (40MHz)

CHANNEL	TX Channel 102	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
5460	52.89	53.3	74	-21.11	34.58	11.52	46.51	100	355	Peak
5460	45.97	46.38	54	-8.03	34.58	11.52	46.51	100	355	Average
5470	51.9	52.32	68.2	-16.3	34.56	11.53	46.51	100	355	Peak
5510	96.87	97.35	/	/	34.46	11.56	46.5	100	355	Peak
5510	91.15	91.63	/	/	34.46	11.56	46.5	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
5460	52.14	52.85	74	-21.86	34.28	11.52	46.51	100	245	Peak
5460	45.45	46.16	54	-8.55	34.28	11.52	46.51	100	245	Average
5470	52.98	53.7	68.2	-15.22	34.26	11.53	46.51	100	245	Peak
5510	92.79	93.43	/	/	34.3	11.56	46.5	100	245	Peak
5510	85.2	85.84	/	/	34.3	11.56	46.5	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5510MHz: Fundamental frequency.
3. #: Out of restricted band.

CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.39	52.8	74	-21.61	34.58	11.52	46.51	100	355	Peak
5460	45.73	46.14	54	-8.27	34.58	11.52	46.51	100	355	Average
5470	52.43	52.85	68.2	-15.77	34.56	11.53	46.51	100	355	Peak
5550	100.84	101.45	/	/	34.3	11.58	46.49	100	355	Peak
5550	93.96	94.57	/	/	34.3	11.58	46.49	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	51.95	52.66	74	-22.05	34.28	11.52	46.51	100	245	Peak
5460	45.65	46.36	54	-8.35	34.28	11.52	46.51	100	245	Average
5470	52.55	53.27	68.2	-15.65	34.26	11.53	46.51	100	245	Peak
5550	92.97	93.18	/	/	34.7	11.58	46.49	100	245	Peak
5550	85.88	86.09	/	/	34.7	11.58	46.49	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.

CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670	100.57	100.81	/	/	34.6	11.62	46.46	100	355	Peak
5670	92.59	92.83	/	/	34.6	11.62	46.46	100	355	Average
5725	54.4	54.65	68.2	-13.8	34.55	11.65	46.45	100	355	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670	92.16	92.58	/	/	34.42	11.62	46.46	100	355	Peak
5670	85.34	85.76	/	/	34.42	11.62	46.46	100	355	Average
5725	52.04	52.49	68.2	-16.16	34.35	11.65	46.45	100	355	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5670MHz: Fundamental frequency.
3. #: Out of restricted band.

802.11ac (80MHz)

CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.29	52.7	74	-21.71	34.58	11.52	46.51	100	355	Peak
5460	45.87	46.28	54	-8.13	34.58	11.52	46.51	100	355	Average
5470	53.19	53.61	68.2	-15.01	34.56	11.53	46.51	100	355	Peak
5530	93.19	93.74	/	/	34.38	11.57	46.5	100	355	Peak
5530	87.86	88.41	/	/	34.38	11.57	46.5	100	355	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.07	52.78	74	-21.93	34.28	11.52	46.51	100	245	Peak
5460	45.65	46.36	54	-8.35	34.28	11.52	46.51	100	245	Average
5470	52.88	53.6	68.2	-15.32	34.26	11.53	46.51	100	245	Peak
5530	88.83	89.26	/	/	34.5	11.57	46.5	100	245	Peak
5530	83.81	84.24	/	/	34.5	11.57	46.5	100	245	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5530MHz: Fundamental frequency.
3. #: Out of restricted band.

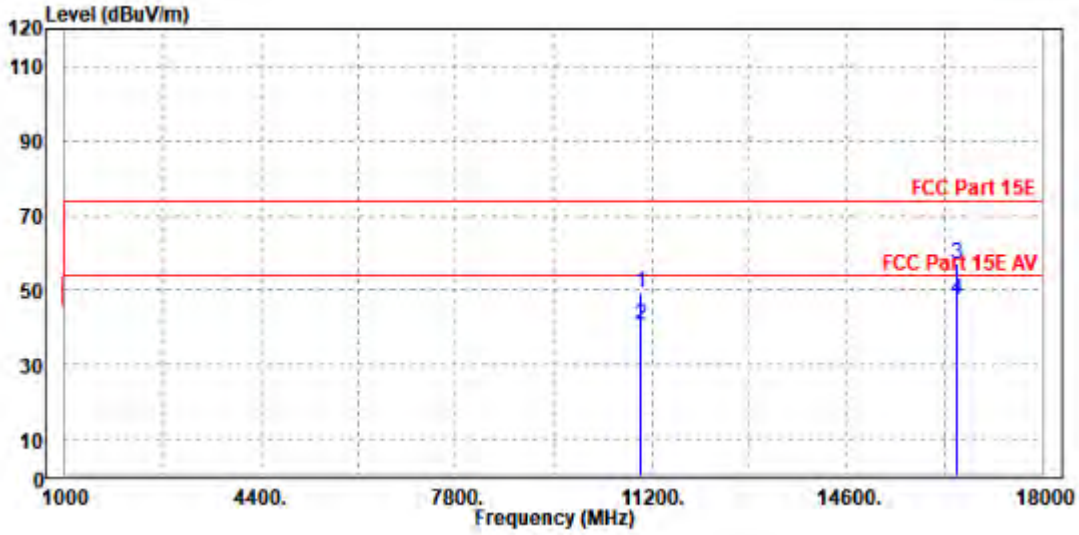
802.11a

Worst case harmonic:

CHANNEL	TX Channel 100	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

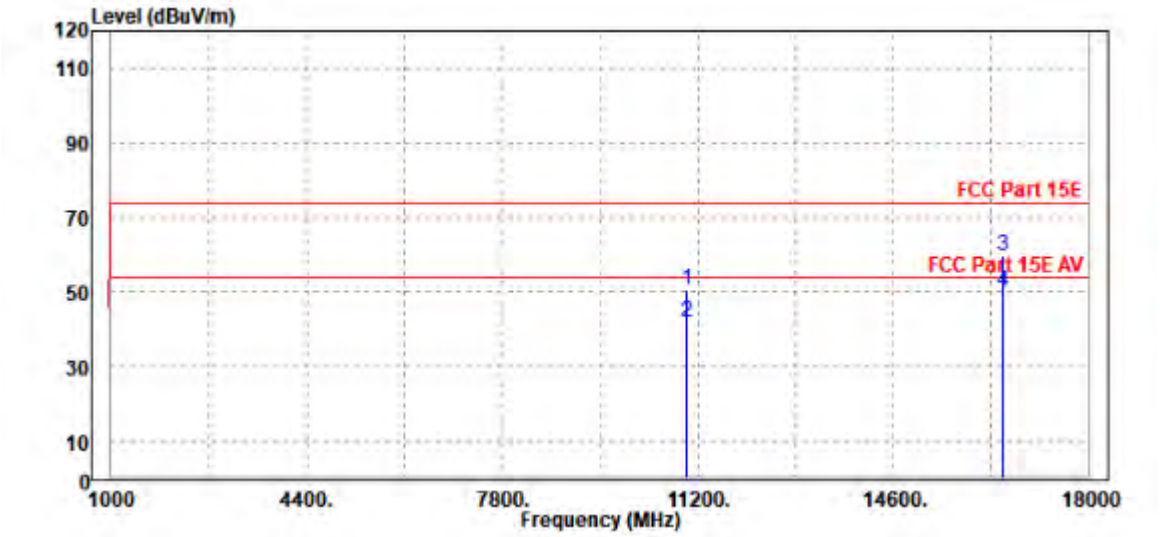
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	10996.000	49.28	42.41	74.00	-24.72	6.87	Peak	Horizontal
2	10996.000	40.75	33.88	54.00	-13.25	6.87	Average	Horizontal
3	PK16500.000	56.82	38.86	74.00	-17.18	17.96	Peak	Horizontal
4	PP16500.000	47.52	29.56	54.00	-6.48	17.96	Average	Horizontal



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	11000.000	50.70	43.43	74.00	-23.30	7.27	Peak	Vertical
2	11000.000	41.93	34.66	54.00	-12.07	7.27	Average	Vertical
3	PK16504.000	59.64	41.88	74.00	-14.36	17.76	Peak	Vertical
4	PP16504.000	50.32	32.56	54.00	-3.68	17.76	Average	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet.

Band 4:

802.11a

CHANNEL	TX Channel 149	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
5745	99.24	99.52	/	/	34.51	11.65	46.44	100	305	Peak
5745	92.37	92.65	/	/	34.51	11.65	46.44	100	305	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
5745	94.78	95.18	/	/	34.39	11.65	46.44	100	190	Peak
5745	88.14	88.54	/	/	34.39	11.65	46.44	100	190	Average

REMARKS:

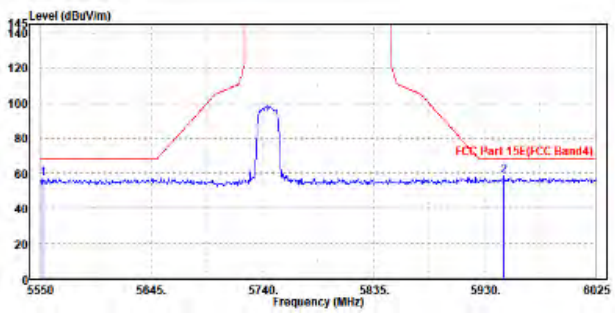
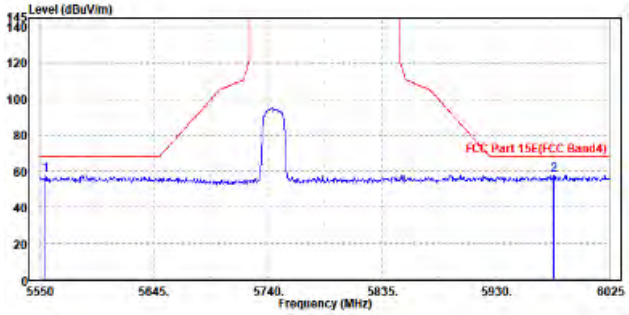
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

OOBE DATA

802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5551.9	57.05	57.66	68.2	-11.15	34.3	11.58	46.49	100	360	Peak
5946.15	58.55	58.12	68.2	-9.65	35.09	11.73	46.39	100	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5554.75	57.92	58.09	68.2	-10.28	34.74	11.58	46.49	100	0	Peak
5978.45	57.86	57.55	68.2	-10.34	34.96	11.74	46.39	100	0	Peak

CH 149

Horizontal	Vertical
	

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	99.48	99.6	/	/	34.64	11.67	46.43	100	305	Peak
5785	93.02	93.14	/	/	34.64	11.67	46.43	100	305	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	94.41	94.42	/	/	34.75	11.67	46.43	100	190	Peak
5785	87.61	87.62	/	/	34.75	11.67	46.43	100	190	Average

REMARKS:

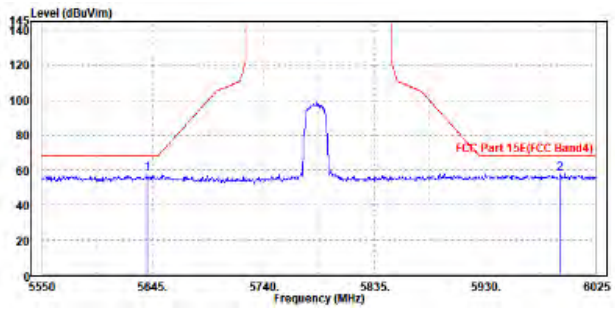
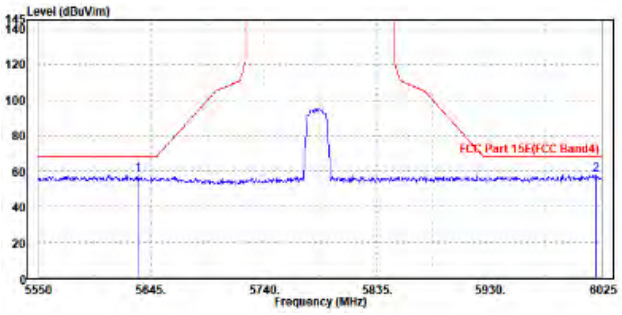
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5785MHz: Fundamental frequency.

OOBE DATA

802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5640.25	57.92	58.24	68.2	-10.28	34.54	11.61	46.47	100	0	Peak
5994.125	58.15	57.68	68.2	-10.05	35.1	11.75	46.38	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5633.6	57.65	57.81	68.2	-10.55	34.7	11.61	46.47	100	360	Peak
6019.3	58.08	57.53	68.2	-10.12	35.15	11.78	46.38	100	360	Peak

CH 157

Horizontal	Vertical
	

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	98.98	98.92	/	/	34.8	11.68	46.42	100	305	Peak
5825	92.93	92.87	/	/	34.8	11.68	46.42	100	305	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	95.92	95.56	/	/	35.1	11.68	46.42	100	190	Peak
5825	87.96	87.6	/	/	35.1	11.68	46.42	100	190	Average

REMARKS:

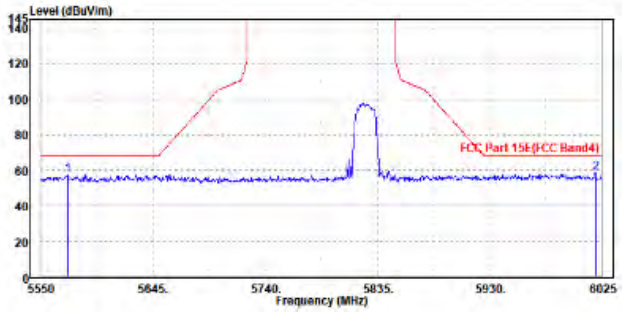
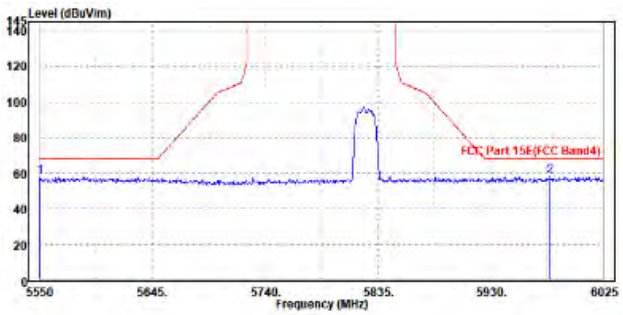
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5825MHz: Fundamental frequency.

OOBE DATA

802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5572.8	57.4	58	68.2	-10.8	34.3	11.59	46.49	100	0	Peak
6019.3	58.27	57.73	68.2	-9.93	35.14	11.78	46.38	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5550.475	58.12	58.33	68.2	-10.08	34.7	11.58	46.49	100	360	Peak
5980.35	58.35	58.03	68.2	-9.85	34.96	11.74	46.38	100	360	Peak

CH 165

Horizontal	Vertical
	

802.11n (20MHz)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	99.58	99.86	/	/	34.51	11.65	46.44	100	305	Peak
5745	82.96	83.24	/	/	34.51	11.65	46.44	100	305	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	96.57	96.97	/	/	34.39	11.65	46.44	100	190	Peak
5745	86.47	86.87	/	/	34.39	11.65	46.44	100	190	Average

REMARKS:

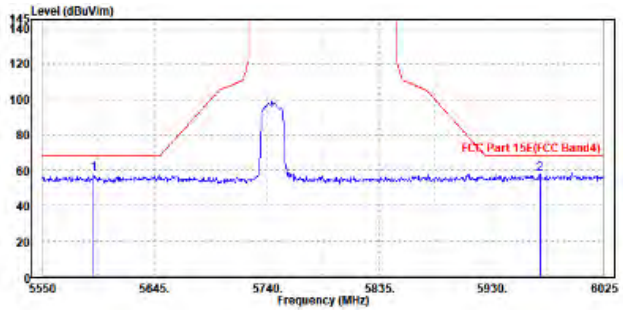
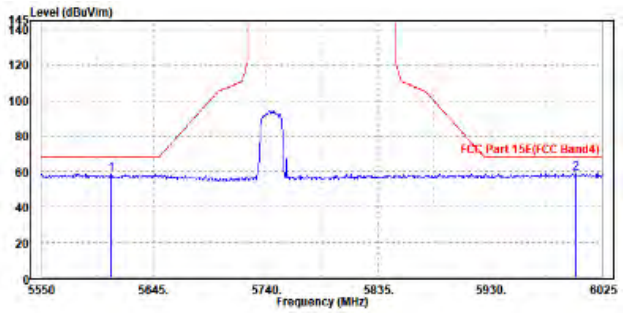
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

OOBE DATA

802.11n (20MHZ)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5593.7	57.62	58.2	68.2	-10.58	34.3	11.6	46.48	100	360	Peak
5971.325	57.9	57.45	68.2	-10.3	35.1	11.74	46.39	100	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5609.375	58.65	58.54	68.2	-9.55	34.99	11.6	46.48	100	0	Peak
6002.2	59.14	58.75	68.2	-9.06	35.02	11.75	46.38	100	0	Peak

CH 149

Horizontal	Vertical
	

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	100.18	100.3	/	/	34.64	11.67	46.43	100	305	Peak
5785	93.02	93.14	/	/	34.64	11.67	46.43	100	305	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	95.84	95.85	/	/	34.75	11.67	46.43	100	190	Peak
5785	87.93	87.94	/	/	34.75	11.67	46.43	100	190	Average

REMARKS:

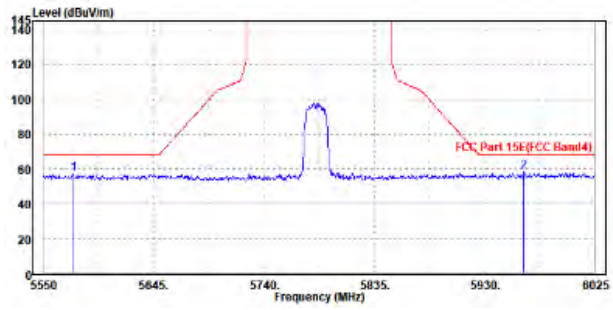
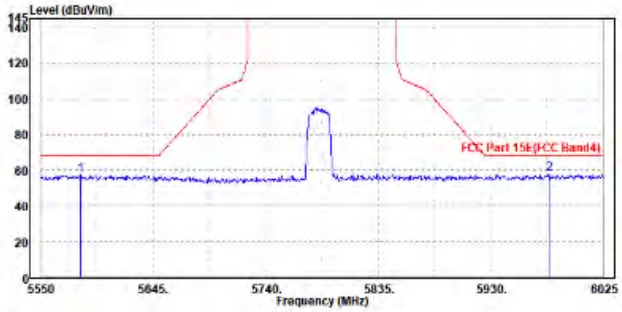
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5785MHz: Fundamental frequency.

OOBE DATA

802.11n (20MHZ)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5575.65	57.12	57.72	68.2	-11.08	34.3	11.59	46.49	100	360	Peak
5963.725	58.7	58.25	68.2	-9.5	35.1	11.74	46.39	100	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5583.725	57.37	57.29	68.2	-10.83	34.97	11.59	46.48	100	0	Peak
5978.925	57.9	57.59	68.2	-10.3	34.96	11.74	46.39	100	0	Peak

CH 157

Horizontal	Vertical
	

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	98.77	98.71	/	/	34.8	11.68	46.42	100	305	Peak
5825	91.9	91.84	/	/	34.8	11.68	46.42	100	305	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	96.9	96.54	/	/	35.1	11.68	46.42	100	190	Peak
5825	88.85	88.49	/	/	35.1	11.68	46.42	100	190	Average

REMARKS:

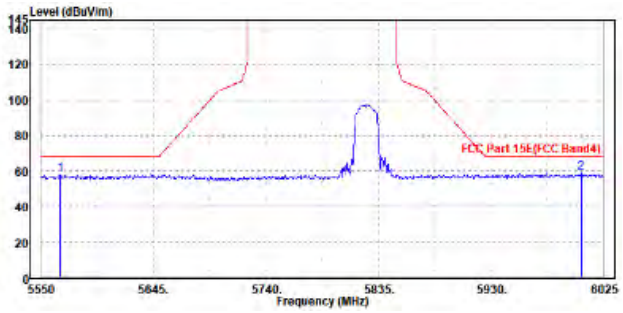
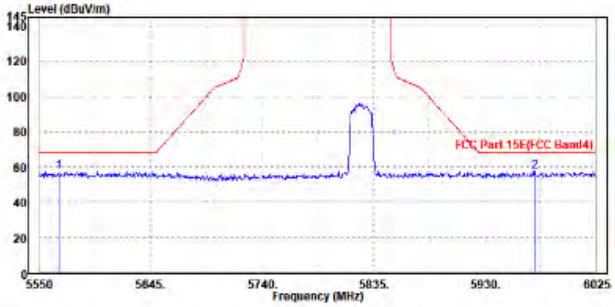
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5825MHz: Fundamental frequency.

OOBE DATA

802.11n (20MHz)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5566.15	57.78	58.38	68.2	-10.42	34.3	11.59	46.49	100	0	Peak
6006	58.92	58.43	68.2	-9.28	35.11	11.76	46.38	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5566.625	57.6	57.67	68.2	-10.6	34.83	11.59	46.49	100	360	Peak
5972.75	57.37	57.07	68.2	-10.83	34.95	11.74	46.39	100	360	Peak

CH 165

Horizontal	Vertical
	

802.11n (40MHz)

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5755	95.38	95.64	/	/	34.52	11.66	46.44	100	305	Peak
5755	89.25	89.51	/	/	34.52	11.66	46.44	100	305	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5755	92.32	92.65	/	/	34.45	11.66	46.44	100	190	Peak
5755	85.16	85.49	/	/	34.45	11.66	46.44	100	190	Average

REMARKS:

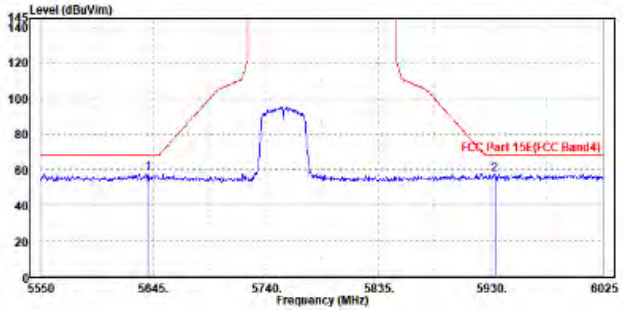
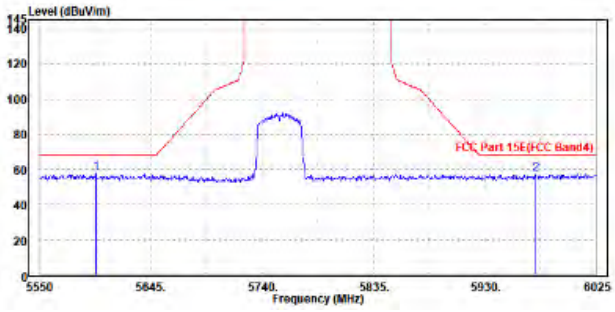
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5755MHz: Fundamental frequency.

OOBE DATA

802.11n (40MHZ)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5640.25	57.64	57.96	68.2	-10.56	34.54	11.61	46.47	100	360	Peak
5933.325	57.3	56.91	68.2	-10.9	35.07	11.72	46.4	100	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5597.975	57.79	57.59	68.2	-10.41	35.08	11.6	46.48	100	0	Peak
5973.225	57.08	56.78	68.2	-11.12	34.95	11.74	46.39	100	0	Peak

CH 151

Horizontal	Vertical
	

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5795	95.48	95.56	/	/	34.68	11.67	46.43	100	305	Peak
5795	88.11	88.19	/	/	34.68	11.67	46.43	100	305	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5795	92.34	92.25	/	/	34.85	11.67	46.43	100	190	Peak
5795	86.22	86.13	/	/	34.85	11.67	46.43	100	190	Average

REMARKS:

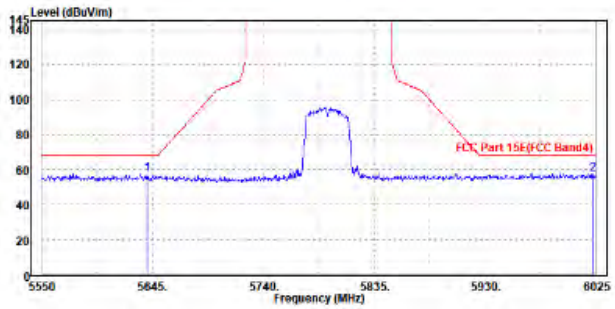
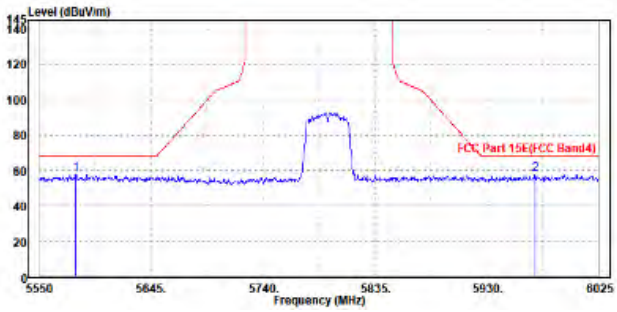
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5795MHz: Fundamental frequency.

OOBE DATA

802.11n (40MHZ)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5640.25	57.64	57.96	68.2	-10.56	34.54	11.61	46.47	100	360	Peak
5933.325	57.3	56.91	68.2	-10.9	35.07	11.72	46.4	100	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5580.875	57.71	57.65	68.2	-10.49	34.95	11.59	46.48	100	360	Peak
5970.85	57.77	57.48	68.2	-10.43	34.94	11.74	46.39	100	360	Peak

CH 159

Horizontal	Vertical
	

802.11ac (80MHz)

CHANNEL	TX Channel 155	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
5775	92.96	93.14	/	/	34.6	11.66	46.44	100	305	Peak
5775	86.37	86.55	/	/	34.6	11.66	46.44	100	305	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
5775	91.32	91.45	/	/	34.65	11.66	46.44	100	190	Peak
5775	84.14	84.27	/	/	34.65	11.66	46.44	100	190	Average

REMARKS:

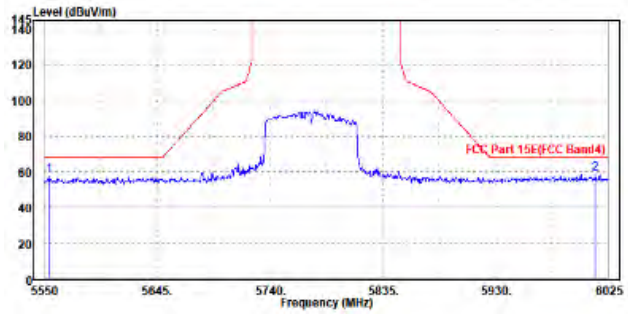
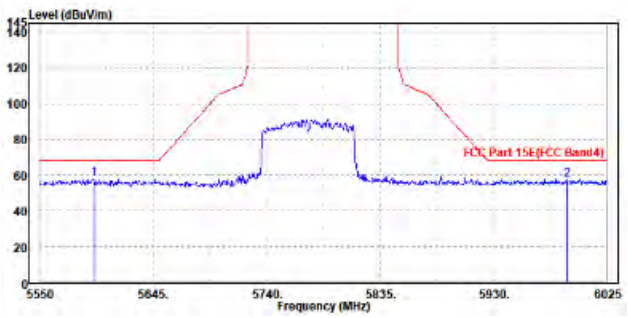
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5775MHz: Fundamental frequency.

OOBE DATA

802.11ac (80MHZ)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5553.8	57.77	58.38	68.2	-10.43	34.3	11.58	46.49	100	360	Peak
6014.075	58.85	58.33	68.2	-9.35	35.13	11.77	46.38	100	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5594.65	58.01	57.83	68.2	-10.19	35.06	11.6	46.48	100	0	Peak
5991.275	57.42	57.07	68.2	-10.78	34.98	11.75	46.38	100	0	Peak

CH 155

Horizontal	Vertical
	

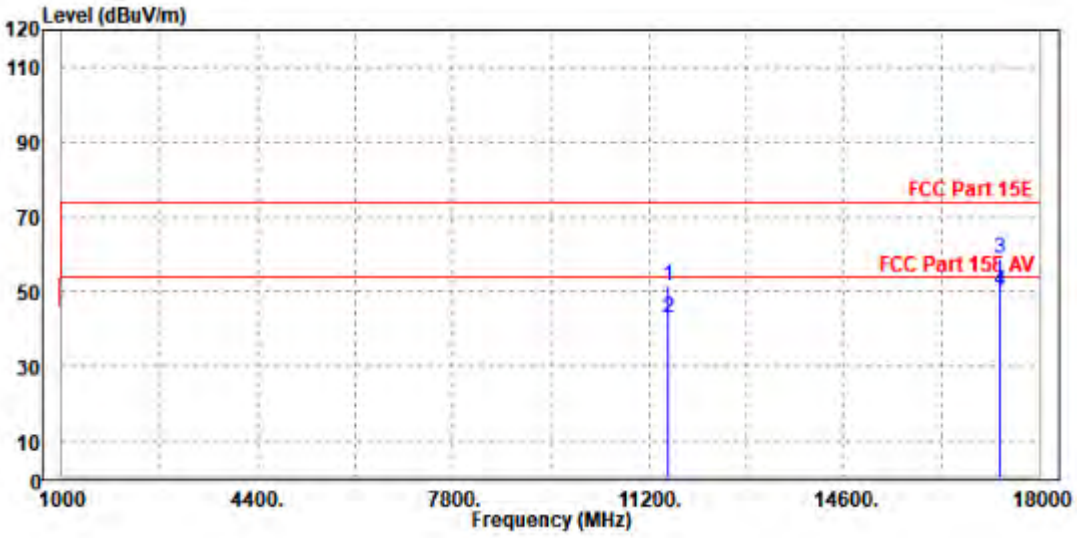
802.11ac (80MHZ)

Worst case harmonic:

CHANNEL	TX Channel 155	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

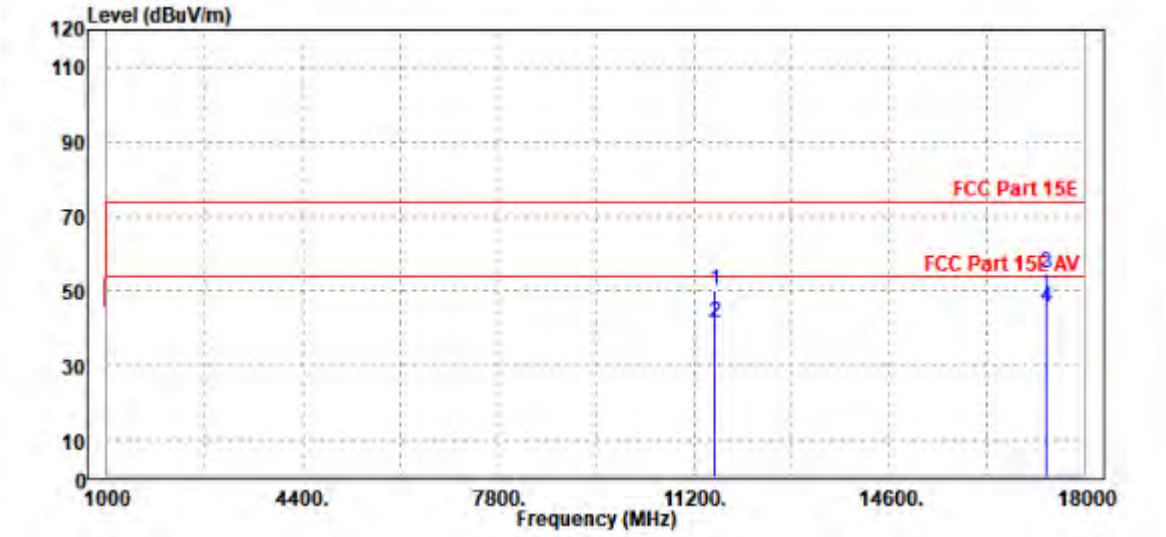
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	11550.000	51.62	43.62	74.00	-22.38	8.00	Peak	Horizontal
2	11550.000	42.79	34.79	54.00	-11.21	8.00	Average	Horizontal
3	PK17320.000	59.07	42.23	74.00	-14.93	16.84	Peak	Horizontal
4	PP17320.000	50.40	33.56	54.00	-3.60	16.84	Average	Horizontal



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	11557.000	50.31	42.77	74.00	-23.69	7.54	Peak	Vertical
2	11557.000	41.40	33.86	54.00	-12.60	7.54	Average	Vertical
3	PK17325.000	54.79	38.85	74.00	-19.21	15.94	Peak	Vertical
4	PP17325.000	45.85	29.91	54.00	-8.15	15.94	Average	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5775MHz: Fundamental frequency.
3. For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet.

3.2 CONDUCTED EMISSION MEASUREMENT

3.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

NOTE: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

3.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR3	101900	Feb. 14,24	Feb. 13,25
EMC32 test software	Rohde&Schwarz	EMC32	NA	NA	NA
LISN network	Rohde&Schwarz	ENV216	101922	Mar. 10,24	Mar. 09,25

NOTE:

1. The test was performed in CE shielded room.
2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

3.2.3 TEST PROCEDURES

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

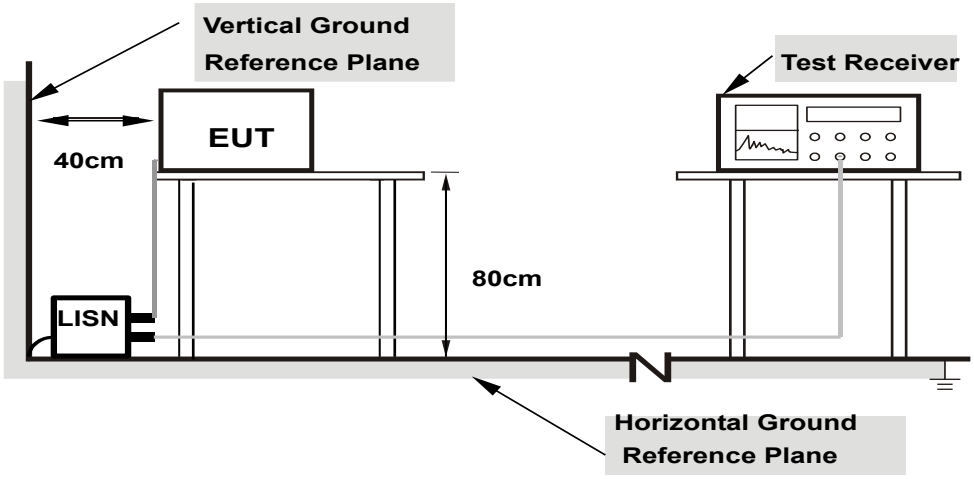
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

3.2.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.2.6 EUT OPERATING CONDITIONS

Same as 3.1.7.

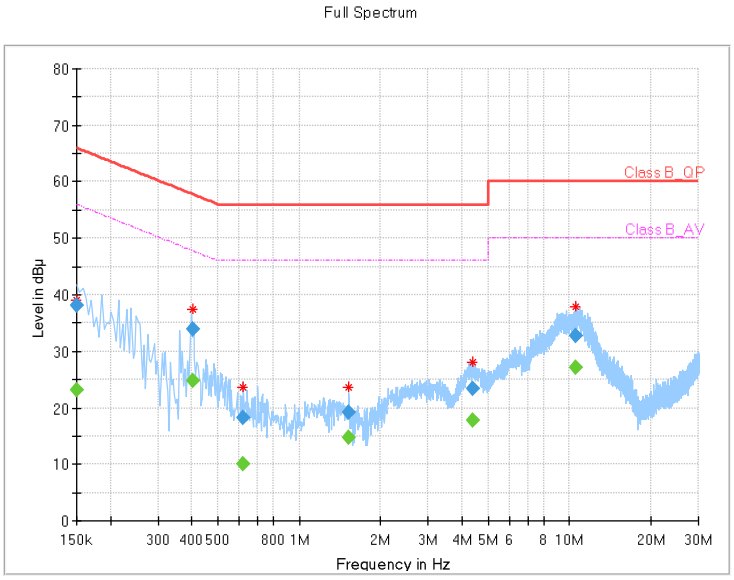
3.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA:

Frequency Range	150KHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	26deg. C, 51%RH
Tested By	Carl Xie		

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	---	23.11	56.00	32.89	L1	ON	9.8
0.150000	38.02	---	66.00	27.98	L1	ON	9.8
0.404000	---	24.71	47.77	23.06	L1	ON	9.8
0.404000	33.80	---	57.77	23.97	L1	ON	9.8
0.616000	---	10.15	46.00	35.85	L1	ON	9.8
0.616000	18.19	---	56.00	37.81	L1	ON	9.8
1.528000	---	14.64	46.00	31.36	L1	ON	9.8
1.528000	19.07	---	56.00	36.93	L1	ON	9.8
4.400000	---	17.76	46.00	28.24	L1	ON	9.8
4.400000	23.46	---	56.00	32.54	L1	ON	9.8
10.588000	---	27.17	50.00	22.83	L1	ON	10.5
10.588000	32.82	---	60.00	27.18	L1	ON	10.5

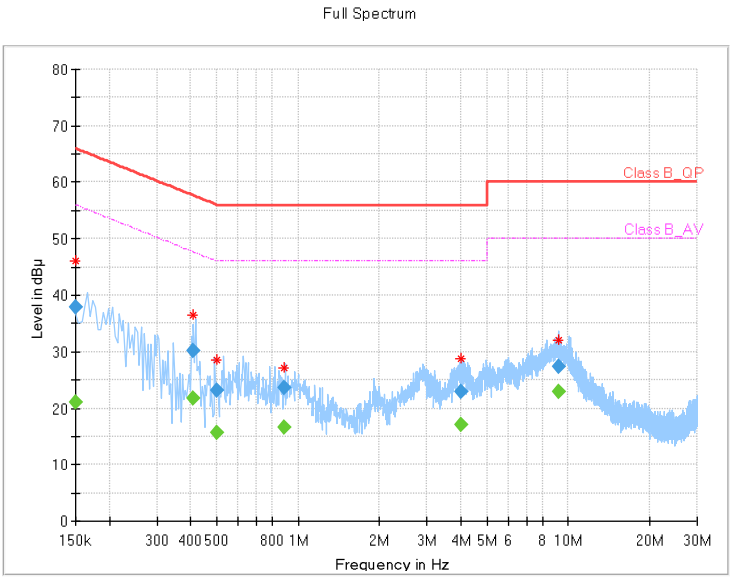
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Limit value - Emission level
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



Frequency Range	150KHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120Vac, 60Hz	Environmental Conditions	26deg. C, 51%RH
Tested By	Carl Xie		

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	---	21.05	56.00	34.95	N	ON	9.7
0.150000	37.92	---	66.00	28.08	N	ON	9.7
0.408000	---	21.66	47.69	26.03	N	ON	9.6
0.408000	30.19	---	57.69	27.50	N	ON	9.6
0.500000	---	15.62	46.00	30.38	N	ON	9.7
0.500000	23.25	---	56.00	32.75	N	ON	9.7
0.888000	---	16.71	46.00	29.29	N	ON	9.7
0.888000	23.64	---	56.00	32.36	N	ON	9.7
4.012000	---	16.99	46.00	29.01	N	ON	9.7
4.012000	22.89	---	56.00	33.11	N	ON	9.7
9.166000	---	22.82	50.00	27.18	N	ON	10.3
9.166000	27.26	---	60.00	32.74	N	ON	10.3

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Limit value - Emission level
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



3.3 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

3.3.1 LIMITS OF MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

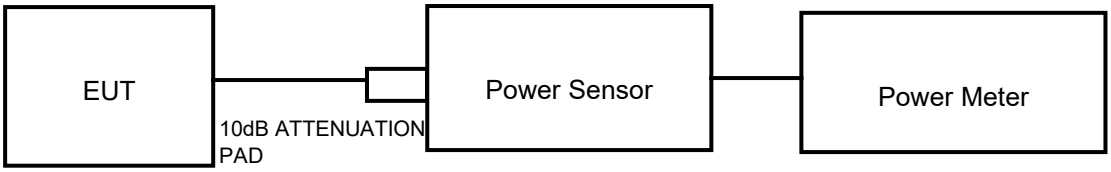
Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
	B	Indoor Access Point	1 Watt (30 dBm)
	√	Client devices	250mW (24 dBm)
U-NII-2A	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√		1 Watt (30 dBm)

NOTE: Where B is the 26dB emission bandwidth in MHz.

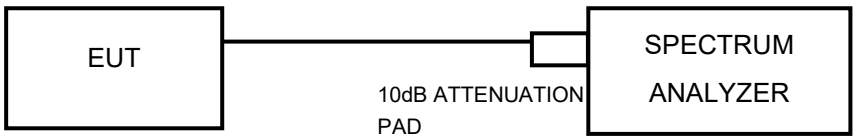
3.3.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT

802.11a, 802.11n/ac (20MHz), 802.11 n/ac (40MHz),802.11ac (80MHz) TEST CONFIGURATION



FOR 26dB BANDWIDTH



3.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Meter	ANRITSU	ML2495A	1506002	Feb. 14,24	Feb. 13,25
EXA Signal Analyzer	KEYSIGHT	N9010A-526	MY54510523	Feb. 14,24	Feb. 13,25
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.10,24	May.09,25
Power Sensor	ANRITSU	MA2411B	1339352	Feb. 14,24	Feb. 13,25

NOTE:

1. The calibration interval of the above test instruments is 12 months, and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in the RF Oven room.

3.3.4 TEST PROCEDURE

FOR POWER MEASUREMENT

For 802.11a, 802.11 n/ac (20MHz), 802.11 n/ac (40MHz) , 802.11 ac (80MHz)

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

FOR 99 PERCENT OCCUPIED BANDWIDTH

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 · RBW
5. 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.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

FOR 26dB BANDWIDTH

1) Set RBW = approximately 1% of the emission bandwidth.
2) Set the VBW > RBW.
3) Detector = Peak.
4) Trace mode = max hold.
5) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

FOR 6dB BANDWIDTH

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3.3.5 DEVIATION FROM TEST STANDARD

No deviation.

3.3.6 EUT OPERATING CONDITIONS

The software provided by the client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

3.3.7 TEST RESULTS

Please Refer to Appendix Of this test report.

3.4 MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

3.4.1 LIMITS OF MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Client devices	11dBm/ MHz
U-NII-2A	√		11dBm/ MHz
U-NII-2C	√		11dBm/ MHz
U-NII-3	√		30dBm/ 500kHz

3.4.2 TEST SETUP

3.4.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information about the above instrument.

3.4.4 TEST PROCEDURES

Using method SA-2(Band1/2/3)

1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
3) Set Channel power measure = 1MHz
4) Sweep time = auto, trigger set to “free run”.
5) Trace average at least 100 traces in power averaging mode.
6) Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission).
7) Record the max value

Using method SA-2 (Band4)

1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 300 KHz, Set VBW ≥ 1 MHz, Detector = RMS
3) Set Channel power measure = 1MHz
4) Sweep time = auto, trigger set to “free run”.
5) Trace average at least 100 traces in power averaging mode.
6) Add 10 log(500kHz/RBW) to the test result. 10 log(500kHz/300KHZ) = 2.22dBm
7) Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission).
8) Record the max value

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

Same as 3.1.7.

3.4.7 TEST RESULTS

Please Refer to Appendix Of this test report.

3.5 AUTOMATICALLY DISCONTINUE TRANSMISSION

3.5.1 LIMIT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information, or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

3.5.2 TEST INSTRUMENTS

Refer to section 3.3.3 to get information about the above instrument.

3.5.3 TEST RESULT

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving。 The EUT can detect the controlling of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

3.6 ANTENNA REQUIREMENTS

3.6.1 STANDARD APPLICABLE

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmits power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.6.2 ANTENNA CONNECTED CONSTRUCTION

An embedded-in antenna design is used.

3.6.3 ANTENNA GAIN

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit and PSD limit.

4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

6 APPENDIX

RLAN

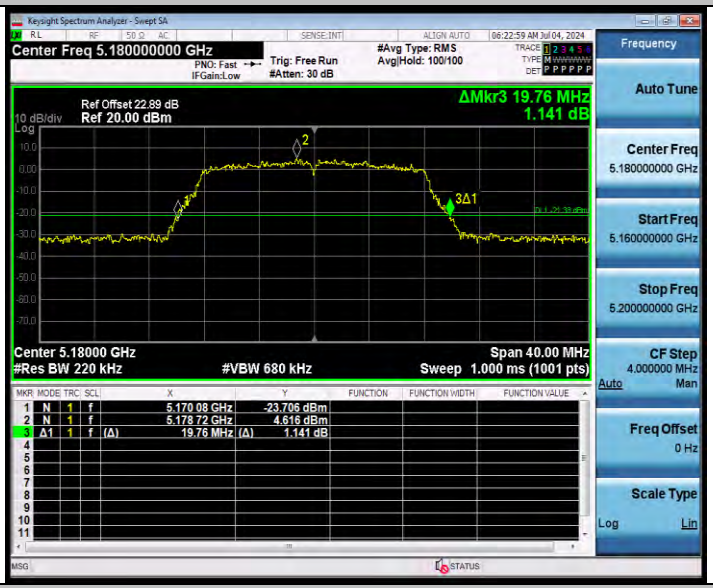
EMISSION BANDWIDTH

TEST RESULT

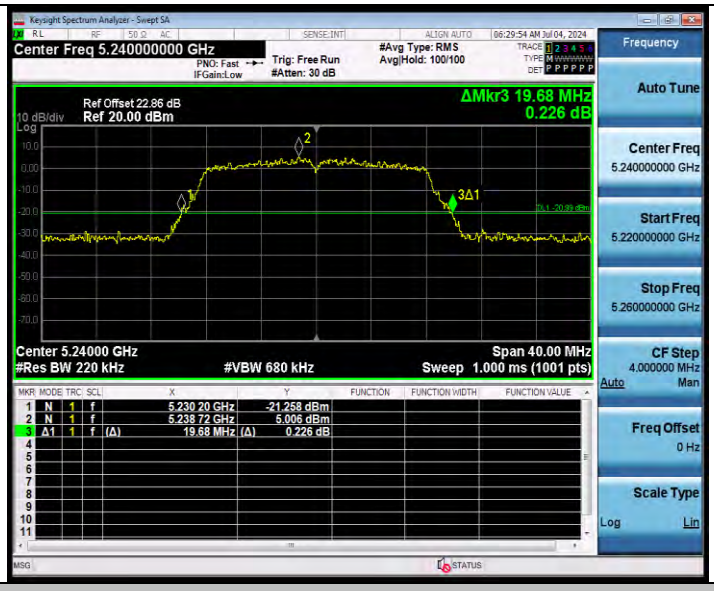
TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	19.760	5170.080	5189.840	---	---
		5200	20.040	5189.920	5209.960	---	---
		5240	19.680	5230.200	5249.880	---	---
		5260	19.560	5250.320	5269.880	---	---
		5280	20.000	5270.000	5290.000	---	---
		5300	19.840	5290.160	5310.000	---	---
		5320	20.080	5310.080	5330.160	---	---
		5500	19.760	5490.120	5509.880	---	---
		5580	20.040	5569.920	5589.960	---	---
		5700	20.120	5689.960	5710.080	---	---
		5745	19.720	5735.120	5754.840	---	---
		5785	19.800	5775.120	5794.920	---	---
		5825	19.960	5815.000	5834.960	---	---
11N20SISO	Ant1	5180	20.160	5169.880	5190.040	---	---
		5200	20.120	5189.960	5210.080	---	---
		5240	20.320	5229.920	5250.240	---	---
		5260	19.960	5250.000	5269.960	---	---
		5300	20.400	5289.800	5310.200	---	---
		5320	20.120	5309.920	5330.040	---	---
		5500	20.320	5489.880	5510.200	---	---
		5580	20.240	5569.880	5590.120	---	---
		5700	20.200	5689.880	5710.080	---	---
		5745	20.000	5734.880	5754.880	---	---
		5785	20.120	5774.840	5794.960	---	---
		5825	20.040	5814.840	5834.880	---	---
11N40SISO	Ant1	5190	40.800	5169.440	5210.240	---	---
		5230	40.480	5209.920	5250.400	---	---

		5270	40.880	5249.760	5290.640	---	---
		5310	40.800	5289.760	5330.560	---	---
		5510	40.400	5489.600	5530.000	---	---
		5550	40.080	5529.680	5569.760	---	---
		5670	40.400	5649.680	5690.080	---	---
		5755	40.320	5734.840	5775.160	---	---
		5795	40.880	5774.440	5815.320	---	---
11AC80SISO	Ant1	5210	80.800	5169.680	5250.480	---	---
		5290	81.120	5249.520	5330.640	---	---
		5530	81.440	5489.360	5570.800	---	---
		5610	80.800	5569.520	5650.320	---	---
		5775	80.960	5734.200	5815.160	---	---

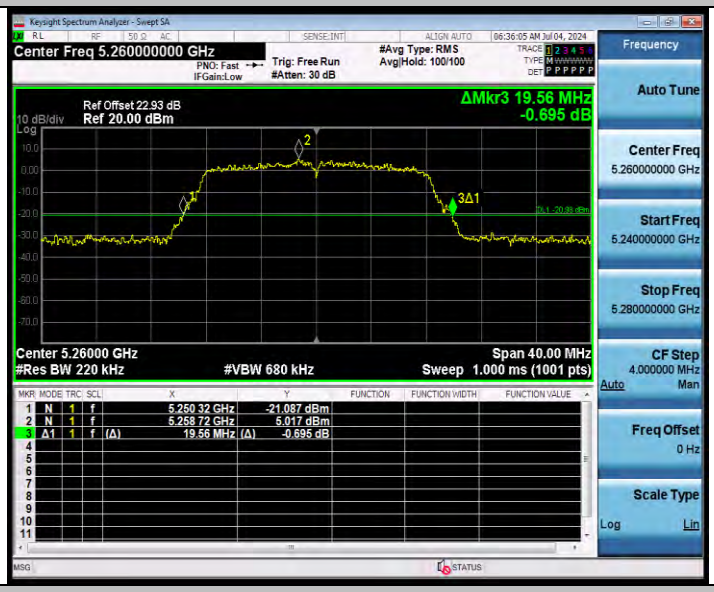
TEST GRAPHS

11A_Ant1_5180

11A_Ant1_5200

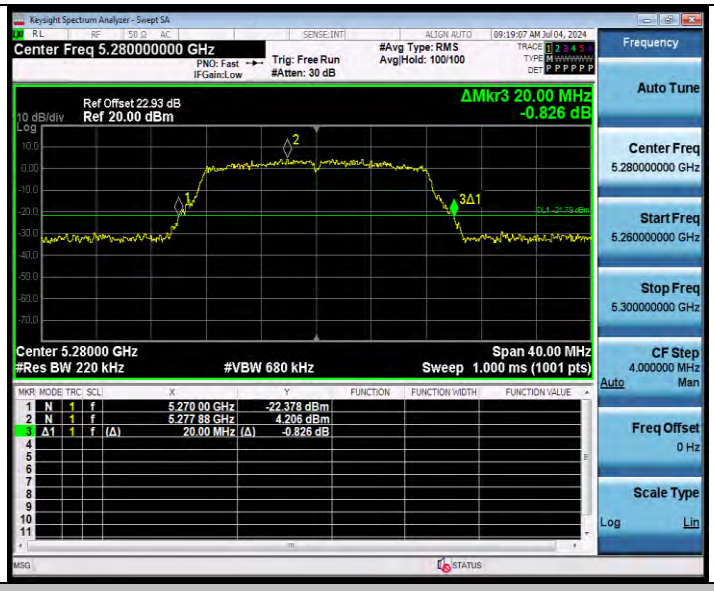
11A_Ant1_5240



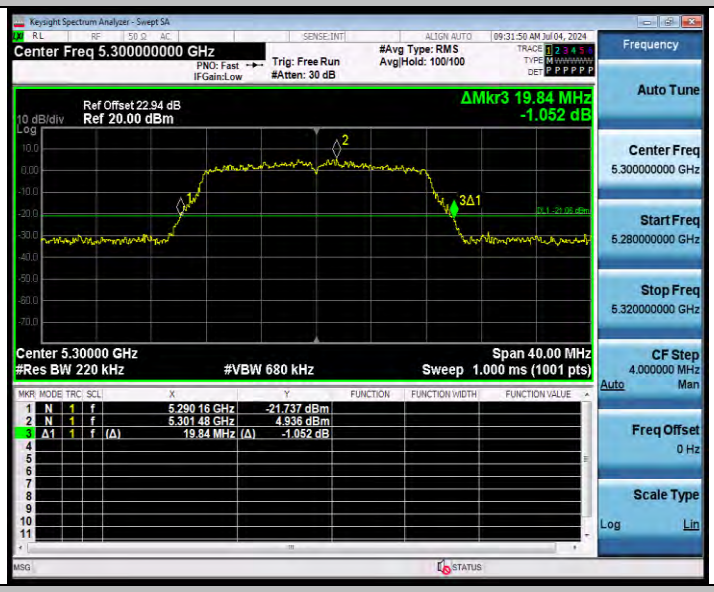
11A_Ant1_5260



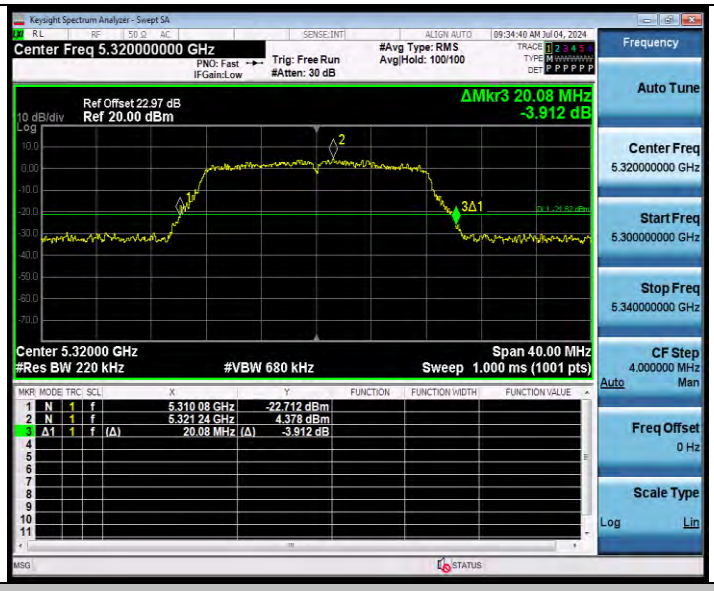
11A_Ant1_5280



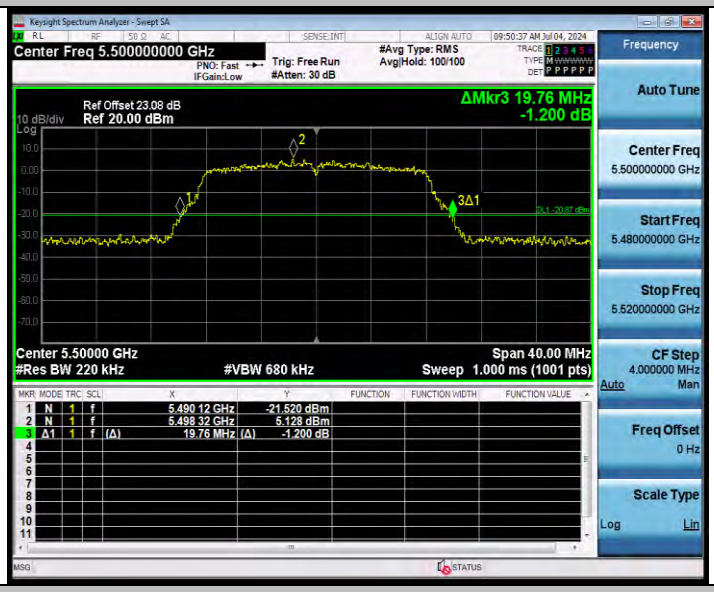
11A_Ant1_5300



11A_Ant1_5320



11A_Ant1_5500



11A_Ant1_5580