VARIANT FCC TEST REPORT

(Part 15, Subpart E)

Applicant:	HMD Global Oy
Address:	Bertel Jungin aukio 9,02600 Espoo,Finland

Manufacturer or Supplier:	HMD Global Oy
Address:	Bertel Jungin aukio 9,02600 Espoo,Finland
Product:	Tablet PC
Brand Name:	NOKIA
Model Name:	TA-1472
FCC ID:	2AJOTTA-1472
Date of tests:	May. 15, 2022 ~ Oct. 20, 2022

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: Oct. 20, 2022	Date: Oct. 20, 2022

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P22050003RF03	Original release	Jun. 07, 2022
W7L-P22090012RF03	Based on the original product changing BT/WIFI/GPS antenna type and changing its antenna gain, So in this report verified the power, re-tested CE and RSE, other data is copied from the original report W7L-P22050003RF03.	Oct. 20, 2022

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)(6)	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
15.403(i)	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 of 802.11a & 802.11n/ac (20/40) & 802.11ac 80 please refer to the appendix A/B.

2. Only the worse data were report

3. The power table had not update, because the verified power is the same as original report.

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 (30MHz~1GMHz)	±4.98dB
Radiated emissions (1GMHz ~6GMHz)	±4.70dB
Radiated emissions (6GMHz ~18GMHz)	±4.60dB
Radiated emissions (18GMHz ~40GMHz)	±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	Tablet PC
BRAND NAME	NOKIA
MODEL NAME	TA-1472
NOMINAL VOLTAGE	3.8Vdc (Li-ion, battery) 5Vdc (adapter)
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 ~ 5720MHz, 5745 ~ 5825MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n/ac (20MHz) 2 for 802.11n/ac (40MHz) 1 for 802. 802.11ac(80MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n/ac (20MHz) 2 for 802.11n/ac (40MHz) 1 for 802.11ac (80MHz) 5500 ~ 5720MHz: 12 for 802.11a, 802.11n/ac (20MHz)/ 6 for 802.11n/ac (40MHz) 3 for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n/ac (20MHz) 3 for 802.11n/ac (40MHz) 2 for 802.11ac (80MHz)
AVERAGE POWER	37.33mW for 5180 ~ 5240MHz 43.85mW for 5260 ~ 5320MHz 61.94mW for 5500 ~ 5720MHz 58.34mW for 5745 ~ 5825MHz
ANTENNA TYPE	MONOPOLE Antenna
ANTENNA GAIN	-0.53 dBi for 5180 ~ 5240MHz -0.53 dBi for 5260 ~ 5320MHz -0.53 dBi for 5500 ~ 5720MHz -0.53 dBi for 5745 ~ 5825MHz
HW VERSION	V0.2
SW VERSION	00WW_0_190

I/O PORTS	Refer to user's manual
CABLE SUPPLIED	USB cable: non-shielded cable, with w/o ferrite core, 1 meter Earphone: non-shielded cable, with w/o ferrite core, 1.5 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 test report.

List of Accessory:

ACCESSORIES	BRAND	MANUFACTURER	MODEL	SPECIFICATION
Battery	NOKIA	HUNAN GAOYUAN BATTERY CO.,LTD	WWT50	Capacity：3.8 Vdc, 5100mAh
AC Adapter	NOKIA	ShenZhenBaiJunDaElectronic CO., LTD.	AD-010U	I/P: 110-240Vac, 0.35A, O/P: 5.0Vdc, 2.0A
Earphone	NOKIA	HUIZHOU JUWEI ELECTRONICS CO.,LTD	JWEP1237-W27H	Signal Line, 1.5meter
USB Cable	Saibao	Saibao(Jiangxi) Communication Industrial Co.,Ltd	SWT-A116A	Signal Line, 1.0meter
LCD Panel 1	HUAXIAN	China display Optoelectronics Technology (Huizhou) Company Limited	8019-3	LCD, 8",800 * 1280, Add-on,α-Si, Non-airgap, A3
LCD Panel 2	COE	CHONG QIAN COE DISPLAY TECHNOLOGY CO., LTD.	T080ET011-HD1-QT	LCD, 8",800 * 1280,
Front Camera 1	C&T	SHENZHEN C&T TECHNOLOGY CO.,LTD	BC12715 V0	2M
Rear Camera 1	C&T	SHENZHEN C&T TECHNOLOGY CO.,LTD	BB18716 V0	8M

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 ~ 5720MHz

12 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	144	5720 MHz

6 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	142	5710 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530 MHz	138	5690 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
151	5755 MHz	159	5795 MHz

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

CHANNEL	FREQUENCY	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).
☒ 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 (20MHz)	5745-5825	144 to 165	157	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).

☒ 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, 48	OFDM	6.0
A	802.11an/ac (20MHz)		36 to 48	36, 48	OFDM	MCS0
A	802.11an/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	802.11an/ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11an/ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11an/ac (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11an/ac (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac (80MHz)		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11an/ac (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11an/ac (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138,155	138, 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).

☒ 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)	5180-5240	42	42	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).

☒ 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, 48	OFDM	6.0
A	802.11an/ac (20MHz)		36 to 48	36, 48	OFDM	MCS0
A	802.11an/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	802.11an/ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11an/ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11an/ac (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11an/ac (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac(80MHz))		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11an/ac (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11an/ac (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138,155	138, 155	OFDM	MCS0

ANTENNA PORT CONDUCTED MEASUREMENT:

☒ This item includes all test value 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).
☒ 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, 48	OFDM	6.0
A	802.11an/ac (20MHz)		36 to 48	36, 48	OFDM	MCS0
A	802.11an/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	802.11an/ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11an/ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11an/ac (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11an/ac (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac (80MHz)		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11an/ac (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11an/ac (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138,155	138, 155	OFDM	MCS0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	23deg. C, 70%RH	DC 5V By Adapter	Star Le
RE≥1G	23deg. C, 70%RH	DC 5V By Adapter	Star Le
PLC	25deg. C, 52%RH	DC 5V By Adapter	James Fu
APCM	25deg. C, 60%RH	DC 3.8V By Battery	James Fu

2.3 DUTY CYCLE OF TEST SIGNAL

Please Refer to Appendix A/B. Of this test report.

WORST-CASE DATA:

Measured Duty Cycle		
Mode		Duty Cycle [%]
		ANT1
5GHZ	11a	95.14
	11n20	94.26
	11n40	89.23
	11ac20	94.31
	11ac40	89.23
	11ac80	80.56

Note:
Duty cycle of test signal is < 98%, duty factor shall be considered.

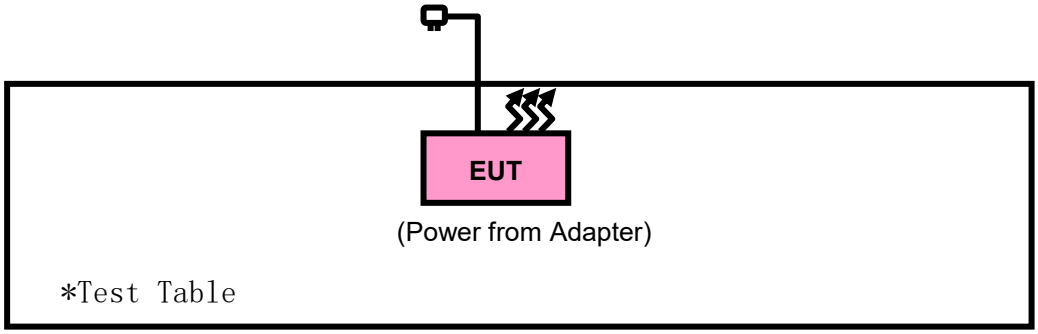
2.4 DESCRIPTION OF SUPPORT UNITS

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	Thnikpad L440	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 C63.10-2013

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

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	May. 19,20	May. 18,23
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Mar. 06,22	Mar. 05,23
Horn Antenna	ETS-LINDGREN	3117	00168692	Mar. 06,22	Mar. 05,23
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Aug. 25, 21	Aug. 24, 22
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Aug. 24, 22	Aug. 23, 23
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	1505	Jun. 03,21	Jun. 02,22
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	Jun. 02,22	Jun. 01,23
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Feb. 18,22	Feb. 17,23
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May.12,22	May.11,23
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.12,22	May.11,23
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 21,22	Feb.20,23
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 25,21	Aug. 24,22
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 24,22	Aug. 23,23
Power Meter	Anritsu	ML2495A	1506002	Feb. 22,22	Feb. 21,23
Power Sensor	Anritsu	MA2411B	1339352	May. 06,22	May. 05,23
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.05,21	Sep. 04,22
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep. 04,22	Sep. 03,23

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 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 is varied 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:

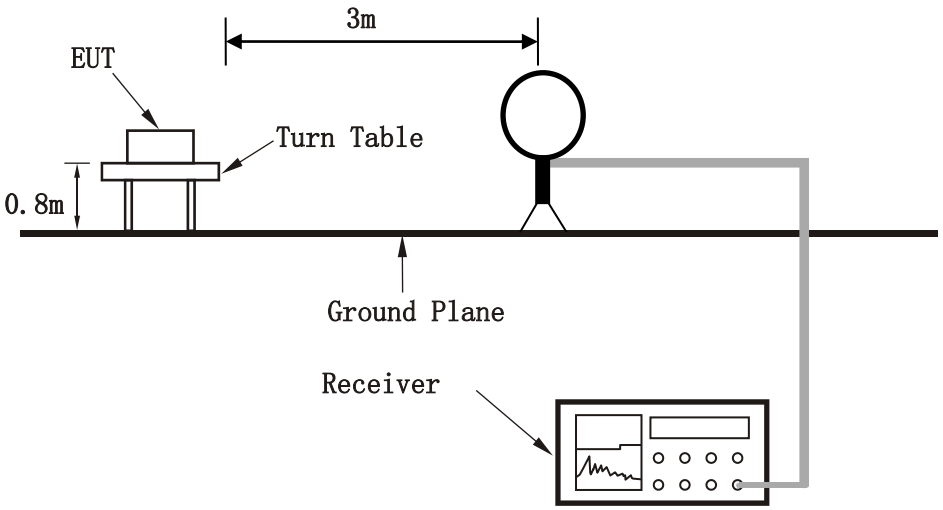
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency 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

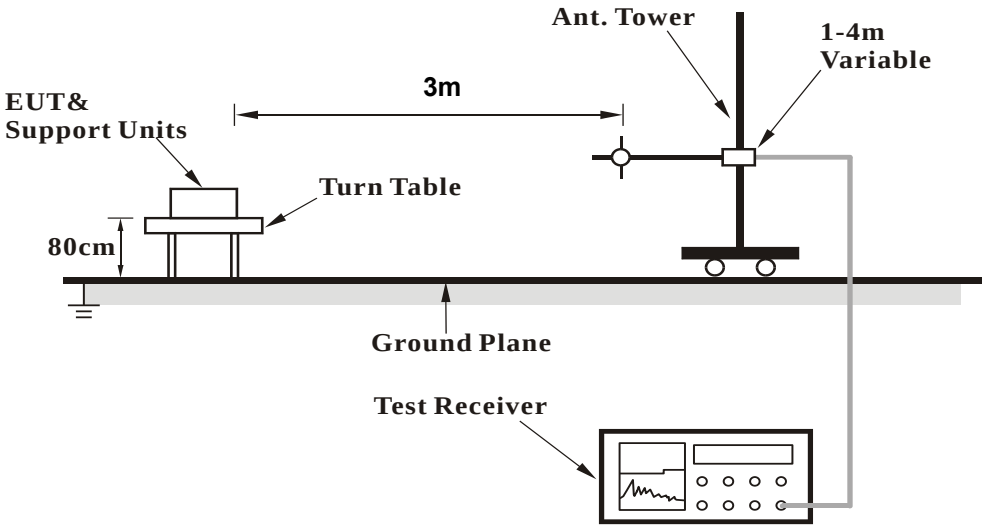
No deviation.

3.1.6 TEST SETUP

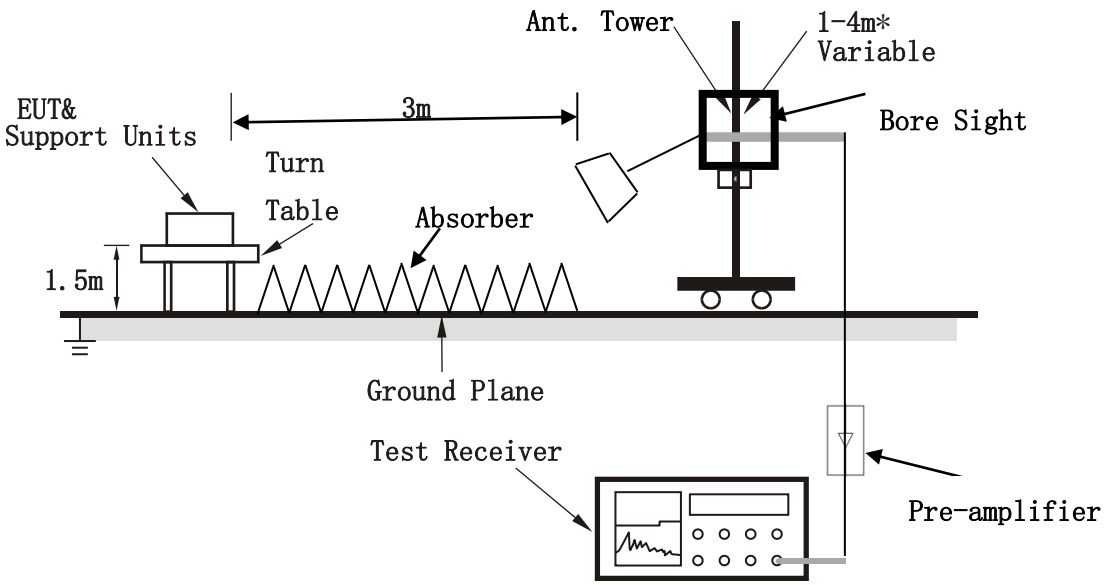
<Frequency Range 9KHz~30MHz >



< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



Note: Above 1G is a directional antenna

Depends 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 them 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 9KHz~30MHz amplitude of spurious emissions are more than 20 dB below the limit is not record in the report.

30 MHz – 1GHz data:

Band 4

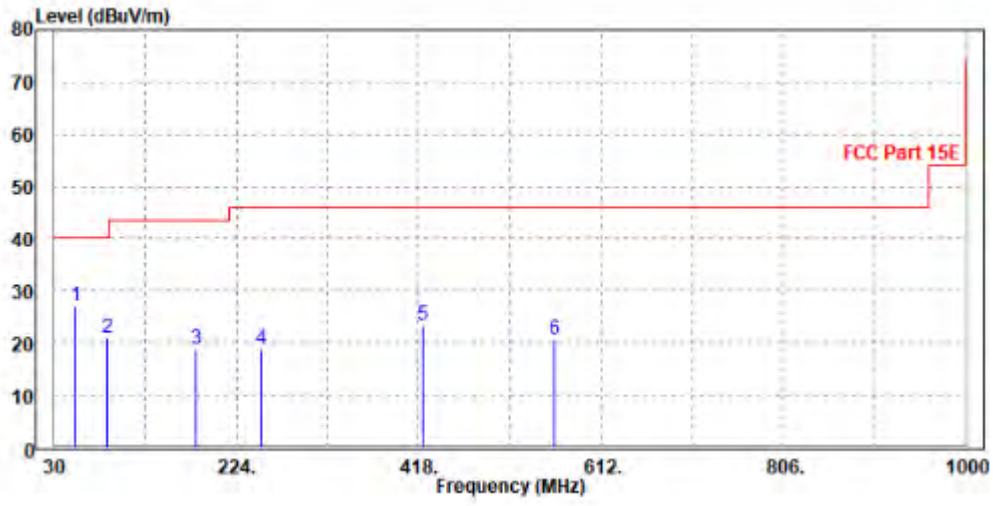
802.11ac (20MHz)

CHANNEL	TX Channel 157	**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
52.31	27.01	53.62	40	-12.99	9.97	0.41	36.99	105	330	QP
86.26	20.99	48.98	40	-19.01	8.45	0.5	36.94	170	152	QP
181.32	18.78	43.07	43.5	-24.72	11.39	0.71	36.39	176	106	QP
250.19	18.8	40.74	46	-27.2	13.5	0.83	36.27	107	104	QP
422.85	23.45	42.18	46	-22.55	16.63	1.11	36.47	146	164	QP
562.53	20.76	37.11	46	-25.24	19.1	1.31	36.76	181	252	QP

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.

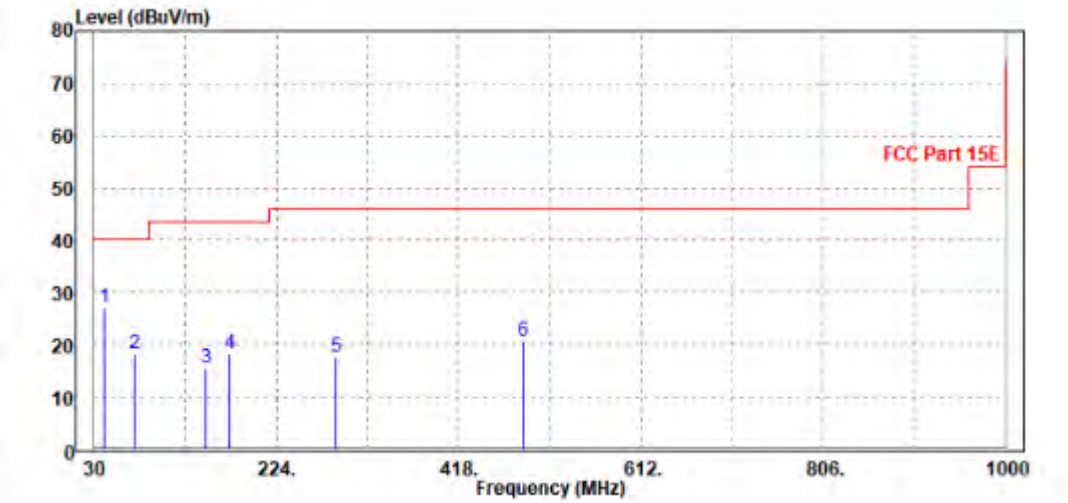


CHANNEL	Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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
40.67	27.11	51.84	40	-12.89	12.11	0.37	37.21	159	58	QP
73.65	18.32	46.89	40	-21.68	7.92	0.48	36.97	169	93	QP
149.31	15.46	40.97	43.5	-28.04	10.39	0.66	36.56	167	84	QP
174.53	18.3	42.91	43.5	-25.2	11.12	0.7	36.43	195	154	QP
287.05	17.56	39.29	46	-28.44	13.64	0.89	36.26	115	352	QP
486.87	20.55	38.51	46	-25.45	17.43	1.2	36.59	165	193	QP

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	53.53	55.84	74	-20.47	34.52	9.52	46.35	126	16	Peak
5150	48.33	50.64	54	-5.67	34.52	9.52	46.35	126	16	Average
5180	100.58	102.81	/	/	34.54	9.58	46.35	116	72	Peak
5180	92.09	94.32	/	/	34.54	9.58	46.35	116	72	Average
5350	54.27	55.95	74	-19.73	34.68	9.94	46.3	127	346	Peak
5350	47.67	49.35	54	-6.33	34.68	9.94	46.3	127	346	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	54.45	56.68	74	-19.55	34.6	9.52	46.35	111	349	Peak
5150	48.64	50.87	54	-5.36	34.6	9.52	46.35	111	349	Average
5180	100.16	102.33	/	/	34.6	9.58	46.35	116	355	Peak
5180	91.91	94.08	/	/	34.6	9.58	46.35	116	355	Average
5350	53.99	55.75	74	-20.01	34.6	9.94	46.3	105	359	Peak
5350	47	48.76	54	-7	34.6	9.94	46.3	105	359	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)
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	54.37	56.68	74	-19.63	34.52	9.52	46.35	121	204	Peak
5150	48.14	50.45	54	-5.86	34.52	9.52	46.35	121	204	Average
5200	98.72	100.88	/	/	34.56	9.62	46.34	123	135	Peak
5200	91.13	93.29	/	/	34.56	9.62	46.34	123	135	Average
5350	53.37	55.05	74	-20.63	34.68	9.94	46.3	119	261	Peak
5350	47.9	49.58	54	-6.1	34.68	9.94	46.3	119	261	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	54	56.23	74	-20	34.6	9.52	46.35	149	158	Peak
5150	47.43	49.66	54	-6.57	34.6	9.52	46.35	149	158	Average
5200	98.59	100.71	/	/	34.6	9.62	46.34	144	249	Peak
5200	91.96	94.08	/	/	34.6	9.62	46.34	144	249	Average
5350	53.39	55.15	74	-20.61	34.6	9.94	46.3	153	82	Peak
5350	46.71	48.47	54	-7.29	34.6	9.94	46.3	153	82	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)
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	55.97	58.28	74	-18.03	34.52	9.52	46.35	173	63	Peak
5150	47.35	49.66	54	-6.65	34.52	9.52	46.35	173	63	Average
5240	98.63	100.66	/	/	34.59	9.71	46.33	171	134	Peak
5240	91.31	93.34	/	/	34.59	9.71	46.33	171	134	Average
5350	53.92	55.6	74	-20.08	34.68	9.94	46.3	181	325	Peak
5350	47.03	48.71	54	-6.97	34.68	9.94	46.3	181	325	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	53.07	55.3	74	-20.93	34.6	9.52	46.35	132	18	Peak
5150	48.26	50.49	54	-5.74	34.6	9.52	46.35	132	18	Average
5240	99.47	101.49	/	/	34.6	9.71	46.33	138	348	Peak
5240	91.82	93.84	/	/	34.6	9.71	46.33	138	348	Average
5350	53.57	55.33	74	-20.43	34.6	9.94	46.3	139	107	Peak
5350	47.53	49.29	54	-6.47	34.6	9.94	46.3	139	107	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	54.84	57.15	74	-19.16	34.52	9.52	46.35	111	346	Peak
5150	49.45	51.76	54	-4.55	34.52	9.52	46.35	111	346	Average
5180	99.54	101.77	/	/	34.54	9.58	46.35	114	302	Peak
5180	91.95	94.18	/	/	34.54	9.58	46.35	114	302	Average
5350	53.67	55.35	74	-20.33	34.68	9.94	46.3	101	214	Peak
5350	47.31	48.99	54	-6.69	34.68	9.94	46.3	101	214	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	56.24	58.47	74	-17.76	34.6	9.52	46.35	130	330	Peak
5150	49.77	52	54	-4.23	34.6	9.52	46.35	130	330	Average
5180	100.04	102.21	/	/	34.6	9.58	46.35	145	208	Peak
5180	92.22	94.39	/	/	34.6	9.58	46.35	145	208	Average
5350	54.65	56.41	74	-19.35	34.6	9.94	46.3	146	166	Peak
5350	46.83	48.59	54	-7.17	34.6	9.94	46.3	146	166	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)
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	56.46	58.77	74	-17.54	34.52	9.52	46.35	137	53	Peak
5150	48.48	50.79	54	-5.52	34.52	9.52	46.35	137	53	Average
5200	99.9	102.06	/	/	34.56	9.62	46.34	142	193	Peak
5200	90.99	93.15	/	/	34.56	9.62	46.34	142	193	Average
5350	54.75	56.43	74	-19.25	34.68	9.94	46.3	126	166	Peak
5350	47.1	48.78	54	-6.9	34.68	9.94	46.3	126	166	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	54.49	56.72	74	-19.51	34.6	9.52	46.35	114	101	Peak
5150	49.06	51.29	54	-4.94	34.6	9.52	46.35	114	101	Average
5200	100.63	102.75	/	/	34.6	9.62	46.34	113	96	Peak
5200	92.55	94.67	/	/	34.6	9.62	46.34	113	96	Average
5350	53.54	55.3	74	-20.46	34.6	9.94	46.3	95	163	Peak
5350	46.78	48.54	54	-7.22	34.6	9.94	46.3	95	163	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)
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	54.54	56.85	74	-19.46	34.52	9.52	46.35	189	33	Peak
5150	48.1	50.41	54	-5.9	34.52	9.52	46.35	189	33	Average
5240	98.98	101.01	/	/	34.59	9.71	46.33	184	51	Peak
5240	90.25	92.28	/	/	34.59	9.71	46.33	184	51	Average
5350	54.19	55.87	74	-19.81	34.68	9.94	46.3	183	84	Peak
5350	47.55	49.23	54	-6.45	34.68	9.94	46.3	183	84	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	53.75	55.98	74	-20.25	34.6	9.52	46.35	172	58	Peak
5150	48.58	50.81	54	-5.42	34.6	9.52	46.35	172	58	Average
5240	99.16	101.18	/	/	34.6	9.71	46.33	168	342	Peak
5240	91.55	93.57	/	/	34.6	9.71	46.33	168	342	Average
5350	54.84	56.6	74	-19.16	34.6	9.94	46.3	176	192	Peak
5350	47.17	48.93	54	-6.83	34.6	9.94	46.3	176	192	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	56.48	58.79	74	-17.52	34.52	9.52	46.35	122	322	Peak
5150	50.64	52.95	54	-3.36	34.52	9.52	46.35	122	322	Average
5190	94.63	96.82	/	/	34.55	9.6	46.34	141	297	Peak
5190	87.3	89.49	/	/	34.55	9.6	46.34	141	297	Average
5350	54.88	56.56	74	-19.12	34.68	9.94	46.3	127	178	Peak
5350	46.77	48.45	54	-7.23	34.68	9.94	46.3	127	178	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	58.2	60.43	74	-15.8	34.6	9.52	46.35	150	331	Peak
5150	50.91	53.14	54	-3.09	34.6	9.52	46.35	150	331	Average
5190	95.95	98.09	/	/	34.6	9.6	46.34	142	130	Peak
5190	88.46	90.6	/	/	34.6	9.6	46.34	142	130	Average
5350	53.18	54.94	74	-20.82	34.6	9.94	46.3	142	24	Peak
5350	46.71	48.47	54	-7.29	34.6	9.94	46.3	142	24	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)
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	53.87	56.18	74	-20.13	34.52	9.52	46.35	150	356	Peak
5150	49.46	51.77	54	-4.54	34.52	9.52	46.35	150	356	Average
5230	94.26	96.32	/	/	34.58	9.69	46.33	156	141	Peak
5230	87.94	90	/	/	34.58	9.69	46.33	156	141	Average
5350	53.93	55.61	74	-20.07	34.68	9.94	46.3	149	295	Peak
5350	48.42	50.1	54	-5.58	34.68	9.94	46.3	149	295	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	56.09	58.32	74	-17.91	34.6	9.52	46.35	130	24	Peak
5150	49.54	51.77	54	-4.46	34.6	9.52	46.35	130	24	Average
5230	95.3	97.34	/	/	34.6	9.69	46.33	144	193	Peak
5230	89.57	91.61	/	/	34.6	9.69	46.33	144	193	Average
5350	52.94	54.7	74	-21.06	34.6	9.94	46.3	137	260	Peak
5350	48.07	49.83	54	-5.93	34.6	9.94	46.3	137	260	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 (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	56.67	58.98	74	-17.33	34.52	9.52	46.35	177	300	Peak
5150	50.39	52.7	54	-3.61	34.52	9.52	46.35	177	300	Average
5180	100.24	102.47	/	/	34.54	9.58	46.35	167	119	Peak
5180	93.92	96.15	/	/	34.54	9.58	46.35	167	119	Average
5350	54.02	55.7	74	-19.98	34.68	9.94	46.3	165	55	Peak
5350	49.14	50.82	54	-4.86	34.68	9.94	46.3	165	55	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	55.58	57.81	74	-18.42	34.6	9.52	46.35	134	40	Peak
5150	50.2	52.43	54	-3.8	34.6	9.52	46.35	134	40	Average
5180	100.65	102.82	/	/	34.6	9.58	46.35	136	222	Peak
5180	94.77	96.94	/	/	34.6	9.58	46.35	136	222	Average
5350	53.29	55.05	74	-20.71	34.6	9.94	46.3	140	319	Peak
5350	48.93	50.69	54	-5.07	34.6	9.94	46.3	140	319	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)
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	54.48	56.79	74	-19.52	34.52	9.52	46.35	174	16	Peak
5150	49.71	52.02	54	-4.29	34.52	9.52	46.35	174	16	Average
5200	99.78	101.94	/	/	34.56	9.62	46.34	168	191	Peak
5200	93.25	95.41	/	/	34.56	9.62	46.34	168	191	Average
5350	55.18	56.86	74	-18.82	34.68	9.94	46.3	169	21	Peak
5350	49.21	50.89	54	-4.79	34.68	9.94	46.3	169	21	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	54.12	56.35	74	-19.88	34.6	9.52	46.35	141	325	Peak
5150	50.51	52.74	54	-3.49	34.6	9.52	46.35	141	325	Average
5200	100.57	102.69	/	/	34.6	9.62	46.34	135	219	Peak
5200	94.23	96.35	/	/	34.6	9.62	46.34	135	219	Average
5350	53.97	55.73	74	-20.03	34.6	9.94	46.3	145	333	Peak
5350	48.92	50.68	54	-5.08	34.6	9.94	46.3	145	333	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)
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	56.13	58.44	74	-17.87	34.52	9.52	46.35	189	25	Peak
5150	50.1	52.41	54	-3.9	34.52	9.52	46.35	189	25	Average
5240	98.35	100.38	/	/	34.59	9.71	46.33	189	176	Peak
5240	92.52	94.55	/	/	34.59	9.71	46.33	189	176	Average
5350	54.29	55.97	74	-19.71	34.68	9.94	46.3	199	167	Peak
5350	48.66	50.34	54	-5.34	34.68	9.94	46.3	199	167	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	54.81	57.04	74	-19.19	34.6	9.52	46.35	193	13	Peak
5150	49.64	51.87	54	-4.36	34.6	9.52	46.35	193	13	Average
5240	99.1	101.12	/	/	34.6	9.71	46.33	180	301	Peak
5240	93.31	95.33	/	/	34.6	9.71	46.33	180	301	Average
5350	54	55.76	74	-20	34.6	9.94	46.3	194	13	Peak
5350	49.6	51.36	54	-4.4	34.6	9.94	46.3	194	13	Average

REMARKS:

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

802.11ac (40MHz)

CHANNEL	TX Channel 38	**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	57.71	60.02	74	-16.29	34.52	9.52	46.35	166	115	Peak
5150	50.52	52.83	54	-3.48	34.52	9.52	46.35	166	115	Average
5190	93.94	96.13	/	/	34.55	9.6	46.34	151	242	Peak
5190	87.24	89.43	/	/	34.55	9.6	46.34	151	242	Average
5350	52.44	54.12	74	-21.56	34.68	9.94	46.3	181	15	Peak
5350	46.9	48.58	54	-7.1	34.68	9.94	46.3	181	15	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	58.46	60.69	74	-15.54	34.6	9.52	46.35	131	112	Peak
5150	50.87	53.1	54	-3.13	34.6	9.52	46.35	131	112	Average
5190	95.59	97.73	/	/	34.6	9.6	46.34	125	324	Peak
5190	87.95	90.09	/	/	34.6	9.6	46.34	125	324	Average
5350	54.57	56.33	74	-19.43	34.6	9.94	46.3	124	68	Peak
5350	47.41	49.17	54	-6.59	34.6	9.94	46.3	124	68	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)
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	54.62	56.93	74	-19.38	34.52	9.52	46.35	177	312	Peak
5150	47.97	50.28	54	-6.03	34.52	9.52	46.35	177	312	Average
5230	93.83	95.89	/	/	34.58	9.69	46.33	188	124	Peak
5230	87.16	89.22	/	/	34.58	9.69	46.33	188	124	Average
5350	53.52	55.2	74	-20.48	34.68	9.94	46.3	162	85	Peak
5350	47.06	48.74	54	-6.94	34.68	9.94	46.3	162	85	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	54.46	56.69	74	-19.54	34.6	9.52	46.35	139	359	Peak
5150	47.82	50.05	54	-6.18	34.6	9.52	46.35	139	359	Average
5230	95.55	97.59	/	/	34.6	9.69	46.33	141	31	Peak
5230	88.53	90.57	/	/	34.6	9.69	46.33	141	31	Average
5350	52.85	54.61	74	-21.15	34.6	9.94	46.3	142	327	Peak
5350	46.43	48.19	54	-7.57	34.6	9.94	46.3	142	327	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	56.66	58.97	74	-17.34	34.52	9.52	46.35	134	5	Peak
5150	49.58	51.89	54	-4.42	34.52	9.52	46.35	134	5	Average
5210	88.76	90.89	/	/	34.57	9.64	46.34	125	341	Peak
5210	83.66	85.79	/	/	34.57	9.64	46.34	125	341	Average
5350	52.72	54.4	74	-21.28	34.68	9.94	46.3	132	321	Peak
5350	46.74	48.42	54	-7.26	34.68	9.94	46.3	132	321	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	57.42	59.65	74	-16.58	34.6	9.52	46.35	141	96	Peak
5150	50.2	52.43	54	-3.8	34.6	9.52	46.35	141	96	Average
5210	90.2	92.3	/	/	34.6	9.64	46.34	137	30	Peak
5210	83.95	86.05	/	/	34.6	9.64	46.34	137	30	Average
5350	53.44	55.2	74	-20.56	34.6	9.94	46.3	153	322	Peak
5350	46.65	48.41	54	-7.35	34.6	9.94	46.3	153	322	Average

REMARKS:

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

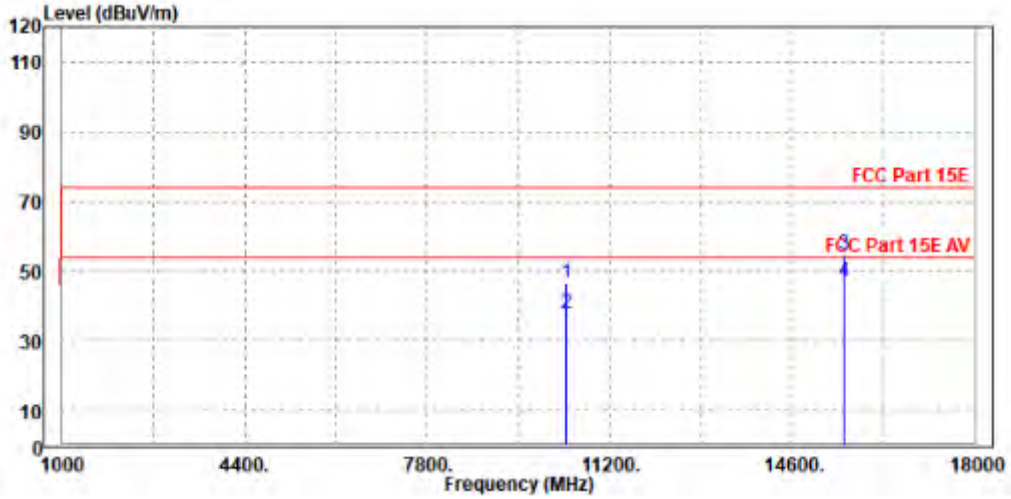
Worst case harmonic:

802.11n (40MHz)

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

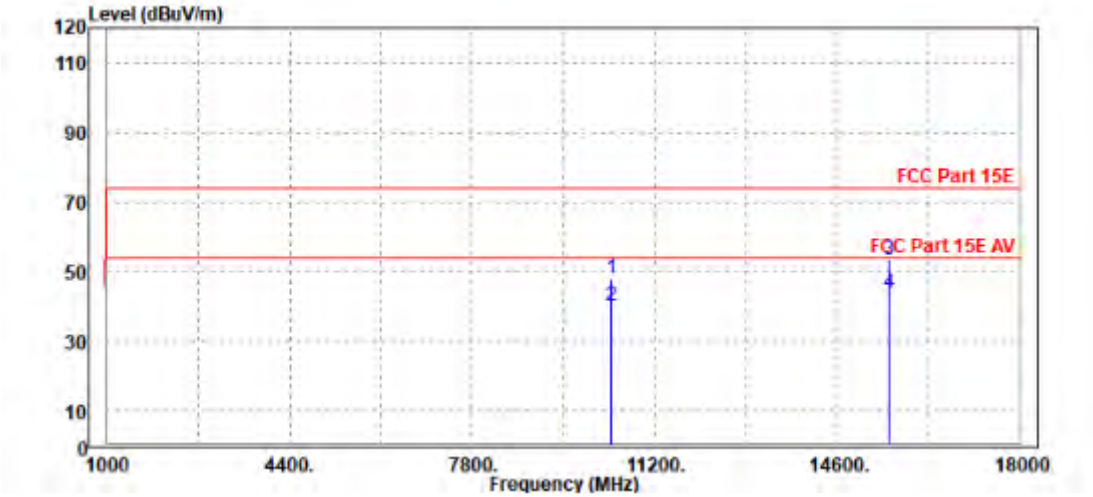
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	10384.000	46.59	42.62	74.00	-27.41	3.97	Peak	Horizontal
2	10384.000	37.80	33.83	54.00	-16.20	3.97	Average	Horizontal
3	PK15570.000	54.62	40.35	74.00	-19.38	14.27	Peak	Horizontal
4	PP15570.000	46.86	32.59	54.00	-7.14	14.27	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	10384.000	48.03	42.91	74.00	-25.97	5.12	Peak	Vertical
2	10384.000	39.95	34.83	54.00	-14.05	5.12	Average	Vertical
3	PK15570.000	53.18	39.90	74.00	-20.82	13.28	Peak	Vertical
4	PP15570.000	43.83	30.55	54.00	-10.17	13.28	Average	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 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	54.17	56.48	74	-19.83	34.52	9.52	46.35	110	77	Peak
5150	48.57	50.88	54	-5.43	34.52	9.52	46.35	110	77	Average
5260	97.97	99.93	/	/	34.61	9.75	46.32	101	315	Peak
5260	91.13	93.09	/	/	34.61	9.75	46.32	101	315	Average
5350	54.95	56.63	74	-19.05	34.68	9.94	46.3	93	273	Peak
5350	47.92	49.6	54	-6.08	34.68	9.94	46.3	93	273	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	54.04	56.27	74	-19.96	34.6	9.52	46.35	133	291	Peak
5150	48.35	50.58	54	-5.65	34.6	9.52	46.35	133	291	Average
5260	99.16	101.13	/	/	34.6	9.75	46.32	123	297	Peak
5260	91.82	93.79	/	/	34.6	9.75	46.32	123	297	Average
5350	54.6	56.36	74	-19.4	34.6	9.94	46.3	133	69	Peak
5350	47.58	49.34	54	-6.42	34.6	9.94	46.3	133	69	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)
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	55.03	57.34	74	-18.97	34.52	9.52	46.35	176	321	Peak
5150	48.46	50.77	54	-5.54	34.52	9.52	46.35	176	321	Average
5300	97.85	99.69	/	/	34.64	9.83	46.31	169	126	Peak
5300	90.26	92.1	/	/	34.64	9.83	46.31	169	126	Average
5350	55.24	56.92	74	-18.76	34.68	9.94	46.3	183	272	Peak
5350	47	48.68	54	-7	34.68	9.94	46.3	183	272	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	55.29	57.52	74	-18.71	34.6	9.52	46.35	178	276	Peak
5150	48.86	51.09	54	-5.14	34.6	9.52	46.35	178	276	Average
5300	98.45	100.33	/	/	34.6	9.83	46.31	182	269	Peak
5300	91.07	92.95	/	/	34.6	9.83	46.31	182	269	Average
5350	54.38	56.14	74	-19.62	34.6	9.94	46.3	196	233	Peak
5350	47.19	48.95	54	-6.81	34.6	9.94	46.3	196	233	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)
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	54.59	56.9	74	-19.41	34.52	9.52	46.35	183	245	Peak
5150	48.16	50.47	54	-5.84	34.52	9.52	46.35	183	245	Average
5320	96.52	98.28	/	/	34.66	9.88	46.3	171	331	Peak
5320	89.24	91	/	/	34.66	9.88	46.3	171	331	Average
5350	54.65	56.33	74	-19.35	34.68	9.94	46.3	173	61	Peak
5350	48.02	49.7	54	-5.98	34.68	9.94	46.3	173	61	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	54.67	56.9	74	-19.33	34.6	9.52	46.35	197	187	Peak
5150	48.39	50.62	54	-5.61	34.6	9.52	46.35	197	187	Average
5320	97.28	99.1	/	/	34.6	9.88	46.3	194	202	Peak
5320	90.08	91.9	/	/	34.6	9.88	46.3	194	202	Average
5350	53.11	54.87	74	-20.89	34.6	9.94	46.3	193	149	Peak
5350	47.72	49.48	54	-6.28	34.6	9.94	46.3	193	149	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	54.1	56.41	74	-19.9	34.52	9.52	46.35	150	263	Peak
5150	48.62	50.93	54	-5.38	34.52	9.52	46.35	150	263	Average
5260	98.17	100.13	/	/	34.61	9.75	46.32	157	134	Peak
5260	90.48	92.44	/	/	34.61	9.75	46.32	157	134	Average
5350	54.16	55.84	74	-19.84	34.68	9.94	46.3	155	75	Peak
5350	47.29	48.97	54	-6.71	34.68	9.94	46.3	155	75	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	55.18	57.41	74	-18.82	34.6	9.52	46.35	188	244	Peak
5150	48.72	50.95	54	-5.28	34.6	9.52	46.35	188	244	Average
5260	99.1	101.07	/	/	34.6	9.75	46.32	183	108	Peak
5260	91.05	93.02	/	/	34.6	9.75	46.32	183	108	Average
5350	52.92	54.68	74	-21.08	34.6	9.94	46.3	183	300	Peak
5350	47.38	49.14	54	-6.62	34.6	9.94	46.3	183	300	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)
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	53.62	55.93	74	-20.38	34.52	9.52	46.35	171	119	Peak
5150	48.6	50.91	54	-5.4	34.52	9.52	46.35	171	119	Average
5300	97.97	99.81	/	/	34.64	9.83	46.31	159	292	Peak
5300	89.71	91.55	/	/	34.64	9.83	46.31	159	292	Average
5350	52.99	54.67	74	-21.01	34.68	9.94	46.3	168	296	Peak
5350	47.56	49.24	54	-6.44	34.68	9.94	46.3	168	296	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	53.73	55.96	74	-20.27	34.6	9.52	46.35	105	318	Peak
5150	48.17	50.4	54	-5.83	34.6	9.52	46.35	105	318	Average
5300	97.63	99.51	/	/	34.6	9.83	46.31	93	160	Peak
5300	90.24	92.12	/	/	34.6	9.83	46.31	93	160	Average
5350	55.32	57.08	74	-18.68	34.6	9.94	46.3	112	238	Peak
5350	47.61	49.37	54	-6.39	34.6	9.94	46.3	112	238	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)
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	53.52	55.83	74	-20.48	34.52	9.52	46.35	172	256	Peak
5150	48.01	50.32	54	-5.99	34.52	9.52	46.35	172	256	Average
5320	97.06	98.82	/	/	34.66	9.88	46.3	167	27	Peak
5320	88.64	90.4	/	/	34.66	9.88	46.3	167	27	Average
5350	53.79	55.47	74	-20.21	34.68	9.94	46.3	174	6	Peak
5350	47.97	49.65	54	-6.03	34.68	9.94	46.3	174	6	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	55.04	57.27	74	-18.96	34.6	9.52	46.35	118	355	Peak
5150	48.49	50.72	54	-5.51	34.6	9.52	46.35	118	355	Average
5320	96.49	98.31	/	/	34.6	9.88	46.3	111	119	Peak
5320	89.4	91.22	/	/	34.6	9.88	46.3	111	119	Average
5350	53.17	54.93	74	-20.83	34.6	9.94	46.3	109	112	Peak
5350	47.35	49.11	54	-6.65	34.6	9.94	46.3	109	112	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	53.99	56.3	74	-20.01	34.52	9.52	46.35	189	283	Peak
5150	48.67	50.98	54	-5.33	34.52	9.52	46.35	189	283	Average
5270	94.28	96.21	/	/	34.62	9.77	46.32	201	320	Peak
5270	87.44	89.37	/	/	34.62	9.77	46.32	201	320	Average
5350	55.63	57.31	74	-18.37	34.68	9.94	46.3	206	346	Peak
5350	47.63	49.31	54	-6.37	34.68	9.94	46.3	206	346	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	54.18	56.41	74	-19.82	34.6	9.52	46.35	164	189	Peak
5150	49.39	51.62	54	-4.61	34.6	9.52	46.35	164	189	Average
5270	94.74	96.69	/	/	34.6	9.77	46.32	160	114	Peak
5270	88.22	90.17	/	/	34.6	9.77	46.32	160	114	Average
5350	54.33	56.09	74	-19.67	34.6	9.94	46.3	160	219	Peak
5350	46.97	48.73	54	-7.03	34.6	9.94	46.3	160	219	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)
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	52.99	55.3	74	-21.01	34.52	9.52	46.35	123	241	Peak
5150	48.87	51.18	54	-5.13	34.52	9.52	46.35	123	241	Average
5310	93.22	95.03	/	/	34.65	9.85	46.31	129	220	Peak
5310	86.35	88.16	/	/	34.65	9.85	46.31	129	220	Average
5350	54.48	56.16	74	-19.52	34.68	9.94	46.3	111	292	Peak
5350	49.65	51.33	54	-4.35	34.68	9.94	46.3	111	292	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	54.56	56.79	74	-19.44	34.6	9.52	46.35	138	319	Peak
5150	49.16	51.39	54	-4.84	34.6	9.52	46.35	138	319	Average
5310	93.67	95.53	/	/	34.6	9.85	46.31	140	289	Peak
5310	86.95	88.81	/	/	34.6	9.85	46.31	140	289	Average
5350	54.16	55.92	74	-19.84	34.6	9.94	46.3	137	31	Peak
5350	49.95	51.71	54	-4.05	34.6	9.94	46.3	137	31	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 (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	54.22	56.53	74	-19.78	34.52	9.52	46.35	189	313	Peak
5150	47.96	50.27	54	-6.04	34.52	9.52	46.35	189	313	Average
5260	98.72	100.68	/	/	34.61	9.75	46.32	202	248	Peak
5260	90.78	92.74	/	/	34.61	9.75	46.32	202	248	Average
5350	53.14	54.82	74	-20.86	34.68	9.94	46.3	179	114	Peak
5350	47.02	48.7	54	-6.98	34.68	9.94	46.3	179	114	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	54.44	56.67	74	-19.56	34.6	9.52	46.35	165	128	Peak
5150	48.43	50.66	54	-5.57	34.6	9.52	46.35	165	128	Average
5260	99.61	101.58	/	/	34.6	9.75	46.32	171	18	Peak
5260	91.21	93.18	/	/	34.6	9.75	46.32	171	18	Average
5350	54.7	56.46	74	-19.3	34.6	9.94	46.3	152	172	Peak
5350	47.71	49.47	54	-6.29	34.6	9.94	46.3	152	172	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)
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	53.29	55.6	74	-20.71	34.52	9.52	46.35	128	4	Peak
5150	48.35	50.66	54	-5.65	34.52	9.52	46.35	128	4	Average
5300	97.84	99.68	/	/	34.64	9.83	46.31	127	310	Peak
5300	89.58	91.42	/	/	34.64	9.83	46.31	127	310	Average
5350	53.32	55	74	-20.68	34.68	9.94	46.3	137	141	Peak
5350	47	48.68	54	-7	34.68	9.94	46.3	137	141	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	54.21	56.44	74	-19.79	34.6	9.52	46.35	138	186	Peak
5150	48.42	50.65	54	-5.58	34.6	9.52	46.35	138	186	Average
5300	98.74	100.62	/	/	34.6	9.83	46.31	149	336	Peak
5300	90.65	92.53	/	/	34.6	9.83	46.31	149	336	Average
5350	52.31	54.07	74	-21.69	34.6	9.94	46.3	135	101	Peak
5350	47.66	49.42	54	-6.34	34.6	9.94	46.3	135	101	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)
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	52.82	55.13	74	-21.18	34.52	9.52	46.35	108	353	Peak
5150	48.18	50.49	54	-5.82	34.52	9.52	46.35	108	353	Average
5320	96.83	98.59	/	/	34.66	9.88	46.3	115	244	Peak
5320	88.88	90.64	/	/	34.66	9.88	46.3	115	244	Average
5350	55.66	57.34	74	-18.34	34.68	9.94	46.3	121	342	Peak
5350	47.41	49.09	54	-6.59	34.68	9.94	46.3	121	342	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	55.27	57.5	74	-18.73	34.6	9.52	46.35	195	44	Peak
5150	47.96	50.19	54	-6.04	34.6	9.52	46.35	195	44	Average
5320	97.43	99.25	/	/	34.6	9.88	46.3	189	110	Peak
5320	89.43	91.25	/	/	34.6	9.88	46.3	189	110	Average
5350	53.99	55.75	74	-20.01	34.6	9.94	46.3	210	340	Peak
5350	47.24	49	54	-6.76	34.6	9.94	46.3	210	340	Average

REMARKS:

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

802.11ac (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	55.43	57.74	74	-18.57	34.52	9.52	46.35	156	170	Peak
5150	48.29	50.6	54	-5.71	34.52	9.52	46.35	156	170	Average
5270	94.56	96.49	/	/	34.62	9.77	46.32	151	166	Peak
5270	87.39	89.32	/	/	34.62	9.77	46.32	151	166	Average
5350	52.51	54.19	74	-21.49	34.68	9.94	46.3	155	241	Peak
5350	47.79	49.47	54	-6.21	34.68	9.94	46.3	155	241	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	54.25	56.48	74	-19.75	34.6	9.52	46.35	101	186	Peak
5150	48.7	50.93	54	-5.3	34.6	9.52	46.35	101	186	Average
5270	95.06	97.01	/	/	34.6	9.77	46.32	91	192	Peak
5270	88.13	90.08	/	/	34.6	9.77	46.32	91	192	Average
5350	52.59	54.35	74	-21.41	34.6	9.94	46.3	104	144	Peak
5350	48.53	50.29	54	-5.47	34.6	9.94	46.3	104	144	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)
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	54.57	56.88	74	-19.43	34.52	9.52	46.35	155	269	Peak
5150	49.07	51.38	54	-4.93	34.52	9.52	46.35	155	269	Average
5310	92.94	94.75	/	/	34.65	9.85	46.31	156	359	Peak
5310	85.7	87.51	/	/	34.65	9.85	46.31	156	359	Average
5350	54.82	56.5	74	-19.18	34.68	9.94	46.3	146	93	Peak
5350	49.23	50.91	54	-4.77	34.68	9.94	46.3	146	93	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	52.77	55	74	-21.23	34.6	9.52	46.35	181	207	Peak
5150	48.74	50.97	54	-5.26	34.6	9.52	46.35	181	207	Average
5310	93.27	95.13	/	/	34.6	9.85	46.31	175	322	Peak
5310	86.57	88.43	/	/	34.6	9.85	46.31	175	322	Average
5350	55.38	57.14	74	-18.62	34.6	9.94	46.3	183	42	Peak
5350	49.32	51.08	54	-4.68	34.6	9.94	46.3	183	42	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	52.95	55.26	74	-21.05	34.52	9.52	46.35	171	37	Peak
5150	49.17	51.48	54	-4.83	34.52	9.52	46.35	171	37	Average
5290	89.57	91.44	/	/	34.63	9.81	46.31	178	278	Peak
5290	83.26	85.13	/	/	34.63	9.81	46.31	178	278	Average
5350	54	55.68	74	-20	34.68	9.94	46.3	166	296	Peak
5350	49.88	51.56	54	-4.12	34.68	9.94	46.3	166	296	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	53.2	55.43	74	-20.8	34.6	9.52	46.35	134	15	Peak
5150	48.96	51.19	54	-5.04	34.6	9.52	46.35	134	15	Average
5290	90.07	91.97	/	/	34.6	9.81	46.31	136	152	Peak
5290	84.3	86.2	/	/	34.6	9.81	46.31	136	152	Average
5350	56.11	57.87	74	-17.89	34.6	9.94	46.3	140	201	Peak
5350	50.18	51.94	54	-3.82	34.6	9.94	46.3	140	201	Average

REMARKS:

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

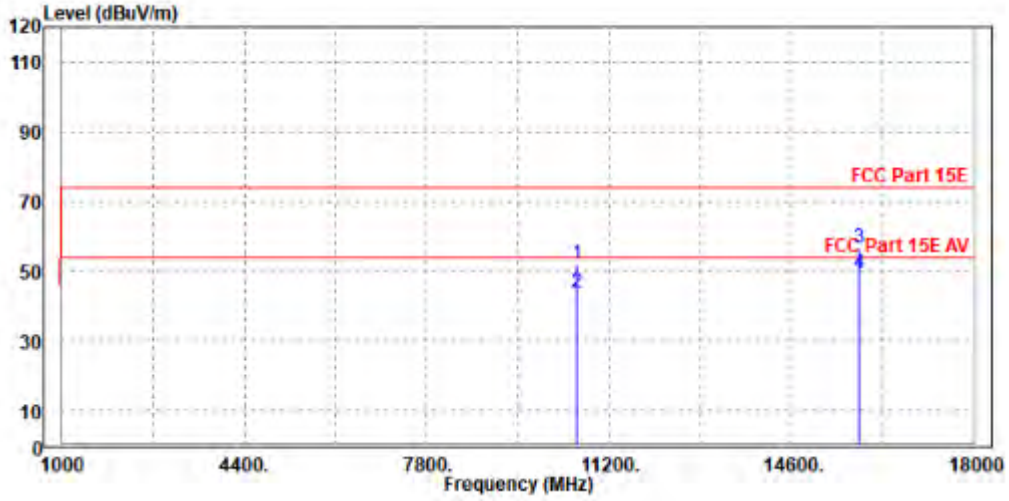
Worst case harmonic:

802.11ac (80MHz)

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

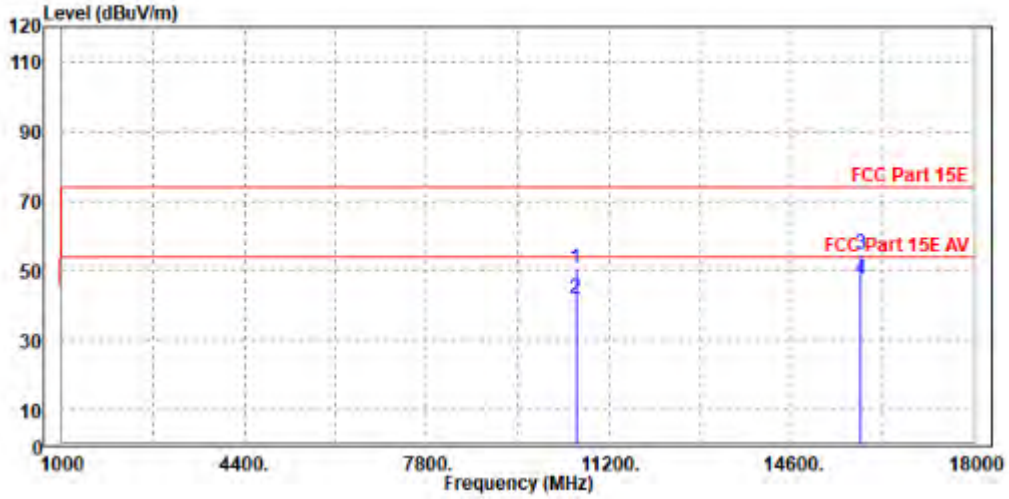
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	10588.000	52.10	42.07	74.00	-21.90	10.03	Peak	Horizontal
2	10588.000	43.84	33.81	54.00	-10.16	10.03	Average	Horizontal
3	PK15870.000	56.35	39.76	74.00	-17.65	16.59	Peak	Horizontal
4	PP15870.000	49.47	32.88	54.00	-4.53	16.59	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	10580.000	50.55	41.56	74.00	-23.45	8.99	Peak	Vertical
2	10580.000	41.84	32.85	54.00	-12.16	8.99	Average	Vertical
3	PK15875.000	54.96	39.49	74.00	-19.04	15.47	Peak	Vertical
4	PP15875.000	47.32	31.85	54.00	-6.68	15.47	Average	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 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)
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	52.74	54.06	74	-21.26	34.77	10.17	46.26	198	344	Peak
5460	46.25	47.57	54	-7.75	34.77	10.17	46.26	198	344	Average
5470	54.19	55.48	68.2	-14.01	34.78	10.19	46.26	185	341	Peak
5500	92.53	93.72	/	/	34.8	10.26	46.25	191	59	Peak
5500	85.85	87.04	/	/	34.8	10.26	46.25	191	59	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	54.88	56.37	74	-19.12	34.6	10.17	46.26	182	265	Peak
5460	47.4	48.89	54	-6.6	34.6	10.17	46.26	182	265	Average
5470	55.16	56.63	68.2	-13.04	34.6	10.19	46.26	191	236	Peak
5500	94.11	95.5	/	/	34.6	10.26	46.25	182	316	Peak
5500	87.04	88.43	/	/	34.6	10.26	46.25	182	316	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	52.31	53.63	74	-21.69	34.77	10.17	46.26	172	270	Peak
5460	47.33	48.65	54	-6.67	34.77	10.17	46.26	172	270	Average
5470	53.16	54.45	68.2	-15.04	34.78	10.19	46.26	179	234	Peak
5580	91.66	92.4	/	/	34.9	10.59	46.23	167	137	Peak
5580	84.37	85.11	/	/	34.9	10.59	46.23	167	137	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	54.06	55.55	74	-19.94	34.6	10.17	46.26	158	95	Peak
5460	46.42	47.91	54	-7.58	34.6	10.17	46.26	158	95	Average
5470	54.09	55.56	68.2	-14.11	34.6	10.19	46.26	162	139	Peak
5580	91.77	92.71	/	/	34.7	10.59	46.23	159	97	Peak
5580	84.28	85.22	/	/	34.7	10.59	46.23	159	97	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	90.8	90.86	/	/	35.04	11.09	46.19	174	316	Peak
5700	83.22	83.28	/	/	35.04	11.09	46.19	174	316	Average
5725	55.39	55.31	68.2	-12.81	35.07	11.2	46.19	186	230	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	91	91.26	/	/	34.84	11.09	46.19	178	40	Peak
5700	83.66	83.92	/	/	34.84	11.09	46.19	178	40	Average
5725	57.2	57.32	68.2	-11	34.87	11.2	46.19	164	305	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.

CHANNEL	TX Channel 144	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
5470	54.16	55.45	68.2	-14.04	34.78	10.19	46.26	100	148	Peak
5720	93.81	93.76	/	/	35.06	11.18	46.19	104	355	Peak
5720	85.31	85.26	/	/	35.06	11.18	46.19	104	355	Average
5850	56.01	55.22	68.2	-12.19	35.22	11.72	46.15	97	54	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
5470	52.68	54.15	68.2	-15.52	34.6	10.19	46.26	105	321	Peak
5720	91.26	91.41	/	/	34.86	11.18	46.19	90	314	Peak
5720	84.64	84.79	/	/	34.86	11.18	46.19	90	314	Average
5850	58.35	57.76	68.2	-9.85	35.02	11.72	46.15	102	136	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5720MHz: Fundamental frequency.
3. #: Out of restricted band.

802.11n (20MHz)

CHANNEL	TX Channel 100	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	53.59	54.91	74	-20.41	34.77	10.17	46.26	173	233	Peak
5460	46.69	48.01	54	-7.31	34.77	10.17	46.26	173	233	Average
5470	55.27	56.56	68.2	-12.93	34.78	10.19	46.26	180	143	Peak
5500	92.17	93.36	/	/	34.8	10.26	46.25	186	351	Peak
5500	85.66	86.85	/	/	34.8	10.26	46.25	186	351	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	51.77	53.26	74	-22.23	34.6	10.17	46.26	185	19	Peak
5460	46.89	48.38	54	-7.11	34.6	10.17	46.26	185	19	Average
5470	53	54.47	68.2	-15.2	34.6	10.19	46.26	192	310	Peak
5500	94.08	95.47	/	/	34.6	10.26	46.25	186	321	Peak
5500	86.69	88.08	/	/	34.6	10.26	46.25	186	321	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	51.69	53.01	74	-22.31	34.77	10.17	46.26	154	65	Peak
5460	47.03	48.35	54	-6.97	34.77	10.17	46.26	154	65	Average
5470	53.04	54.33	68.2	-15.16	34.78	10.19	46.26	149	267	Peak
5580	90.39	91.13	/	/	34.9	10.59	46.23	143	60	Peak
5580	83.01	83.75	/	/	34.9	10.59	46.23	143	60	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	54.31	55.8	74	-19.69	34.6	10.17	46.26	120	128	Peak
5460	47.31	48.8	54	-6.69	34.6	10.17	46.26	120	128	Average
5470	53.53	55	68.2	-14.67	34.6	10.19	46.26	121	266	Peak
5580	91.17	92.11	/	/	34.7	10.59	46.23	109	184	Peak
5580	83.92	84.86	/	/	34.7	10.59	46.23	109	184	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	91.48	91.54	/	/	35.04	11.09	46.19	155	321	Peak
5700	84.61	84.67	/	/	35.04	11.09	46.19	155	321	Average
5725	58.72	58.64	68.2	-9.48	35.07	11.2	46.19	170	40	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	90.7	90.96	/	/	34.84	11.09	46.19	94	65	Peak
5700	84.5	84.76	/	/	34.84	11.09	46.19	94	65	Average
5725	56.23	56.35	68.2	-11.97	34.87	11.2	46.19	93	40	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.

CHANNEL	TX Channel 144	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
5470	52.42	53.71	68.2	-15.78	34.78	10.19	46.26	160	7	Peak
5720	90.47	90.42	/	/	35.06	11.18	46.19	162	264	Peak
5720	84.25	84.2	/	/	35.06	11.18	46.19	162	264	Average
5850	56.44	55.65	68.2	-11.76	35.22	11.72	46.15	166	283	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
5470	54.38	55.85	68.2	-13.82	34.6	10.19	46.26	109	121	Peak
5720	88.99	89.14	/	/	34.86	11.18	46.19	119	320	Peak
5720	83.5	83.65	/	/	34.86	11.18	46.19	119	320	Average
5850	58.01	57.42	68.2	-10.19	35.02	11.72	46.15	105	233	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5720MHz: 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	54.52	55.84	74	-19.48	34.77	10.17	46.26	114	93	Peak
5460	47.03	48.35	54	-6.97	34.77	10.17	46.26	114	93	Average
5470	54.96	56.25	68.2	-13.24	34.78	10.19	46.26	119	2	Peak
5510	88.5	89.64	/	/	34.81	10.3	46.25	112	93	Peak
5510	83.17	84.31	/	/	34.81	10.3	46.25	112	93	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	53.32	54.81	74	-20.68	34.6	10.17	46.26	102	177	Peak
5460	47.43	48.92	54	-6.57	34.6	10.17	46.26	102	177	Average
5470	53.17	54.64	68.2	-15.03	34.6	10.19	46.26	93	85	Peak
5510	89.62	90.96	/	/	34.61	10.3	46.25	112	113	Peak
5510	82.92	84.26	/	/	34.61	10.3	46.25	112	113	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	54.37	55.69	74	-19.63	34.77	10.17	46.26	108	229	Peak
5460	48	49.32	54	-6	34.77	10.17	46.26	108	229	Average
5470	54.76	56.05	68.2	-13.44	34.78	10.19	46.26	113	45	Peak
5550	88.02	88.93	/	/	34.86	10.47	46.24	107	76	Peak
5550	81.09	82	/	/	34.86	10.47	46.24	107	76	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	53.67	55.16	74	-20.33	34.6	10.17	46.26	167	195	Peak
5460	47.02	48.51	54	-6.98	34.6	10.17	46.26	167	195	Average
5470	53.48	54.95	68.2	-14.72	34.6	10.19	46.26	168	352	Peak
5510	87.47	88.81	/	/	34.61	10.3	46.25	171	180	Peak
5510	81.19	82.53	/	/	34.61	10.3	46.25	171	180	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	88.19	88.42	/	/	35	10.97	46.2	124	229	Peak
5670	81.92	82.15	/	/	35	10.97	46.2	124	229	Average
5725	56.92	56.84	74	-17.08	35.07	11.2	46.19	135	50	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	86.81	87.24	/	/	34.8	10.97	46.2	148	179	Peak
5670	81.98	82.41	/	/	34.8	10.97	46.2	148	179	Average
5725	57.23	57.35	68.2	-10.97	34.87	11.2	46.19	156	39	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.

CHANNEL	TX Channel 142	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
5470	55.25	56.54	68.2	-12.95	34.78	10.19	46.26	128	98	Peak
5710	89.94	89.94	/	/	35.05	11.14	46.19	131	139	Peak
5710	83.64	83.64	/	/	35.05	11.14	46.19	131	139	Average
5850	58.7	57.91	68.2	-9.5	35.22	11.72	46.15	129	219	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
5470	54.02	55.49	68.2	-14.18	34.6	10.19	46.26	113	58	Peak
5710	89.86	90.06	/	/	34.85	11.14	46.19	105	8	Peak
5710	83.89	84.09	/	/	34.85	11.14	46.19	105	8	Average
5850	57.41	56.82	68.2	-10.79	35.02	11.72	46.15	111	4	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5710MHz: Fundamental frequency.
3. #: Out of restricted band.

802.11ac (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	53.15	54.47	74	-20.85	34.77	10.17	46.26	177	80	Peak
5460	47.28	48.6	54	-6.72	34.77	10.17	46.26	177	80	Average
5470	54.6	55.89	68.2	-13.6	34.78	10.19	46.26	185	196	Peak
5500	93.72	94.91	/	/	34.8	10.26	46.25	172	82	Peak
5500	85.51	86.7	/	/	34.8	10.26	46.25	172	82	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	53.37	54.86	74	-20.63	34.6	10.17	46.26	191	233	Peak
5460	46.62	48.11	54	-7.38	34.6	10.17	46.26	191	233	Average
5470	54.62	56.09	68.2	-13.58	34.6	10.19	46.26	172	336	Peak
5500	93.88	95.27	/	/	34.6	10.26	46.25	188	75	Peak
5500	87	88.39	/	/	34.6	10.26	46.25	188	75	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	53.91	55.23	74	-20.09	34.77	10.17	46.26	150	218	Peak
5460	47.01	48.33	54	-6.99	34.77	10.17	46.26	150	218	Average
5470	55.03	56.32	68.2	-13.17	34.78	10.19	46.26	144	328	Peak
5580	91.72	92.46	/	/	34.9	10.59	46.23	145	70	Peak
5580	83.83	84.57	/	/	34.9	10.59	46.23	145	70	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	52.86	54.35	74	-21.14	34.6	10.17	46.26	162	265	Peak
5460	47.05	48.54	54	-6.95	34.6	10.17	46.26	162	265	Average
5470	55.91	57.38	68.2	-12.29	34.6	10.19	46.26	171	327	Peak
5580	91.48	92.42	/	/	34.7	10.59	46.23	158	358	Peak
5580	84.05	84.99	/	/	34.7	10.59	46.23	158	358	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	90.3	90.36	/	/	35.04	11.09	46.19	186	258	Peak
5700	83.59	83.65	/	/	35.04	11.09	46.19	186	258	Average
5725	57.43	57.35	68.2	-10.77	35.07	11.2	46.19	181	338	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	90.94	91.2	/	/	34.84	11.09	46.19	151	252	Peak
5700	83.56	83.82	/	/	34.84	11.09	46.19	151	252	Average
5725	57.67	57.79	68.2	-10.53	34.87	11.2	46.19	146	19	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.

CHANNEL	TX Channel 144	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
5470	54.56	55.85	68.2	-13.64	34.78	10.19	46.26	200	45	Peak
5720	89.7	89.65	/	/	35.06	11.18	46.19	203	182	Peak
5720	83.11	83.06	/	/	35.06	11.18	46.19	203	182	Average
5850	57.98	57.19	68.2	-10.22	35.22	11.72	46.15	205	128	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
5470	54.17	55.64	68.2	-14.03	34.6	10.19	46.26	189	279	Peak
5720	89.2	89.35	/	/	34.86	11.18	46.19	202	217	Peak
5720	83.42	83.57	/	/	34.86	11.18	46.19	202	217	Average
5850	57.52	56.93	68.2	-10.68	35.02	11.72	46.15	198	97	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5720MHz: Fundamental frequency.
3. #: Out of restricted band.

802.11ac (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	52.97	54.29	74	-21.03	34.77	10.17	46.26	198	139	Peak
5460	46.99	48.31	54	-7.01	34.77	10.17	46.26	198	139	Average
5470	54.81	56.1	68.2	-13.39	34.78	10.19	46.26	196	177	Peak
5510	87.8	88.94	/	/	34.81	10.3	46.25	204	185	Peak
5510	82.77	83.91	/	/	34.81	10.3	46.25	204	185	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	52.68	54.17	74	-21.32	34.6	10.17	46.26	136	256	Peak
5460	46.77	48.26	54	-7.23	34.6	10.17	46.26	136	256	Average
5470	57.06	58.53	68.2	-11.14	34.6	10.19	46.26	137	145	Peak
5510	88.62	89.96	/	/	34.61	10.3	46.25	138	357	Peak
5510	83.51	84.85	/	/	34.61	10.3	46.25	138	357	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	52.74	54.06	74	-21.26	34.77	10.17	46.26	104	247	Peak
5460	47.72	49.04	54	-6.28	34.77	10.17	46.26	104	247	Average
5470	54.53	55.82	68.2	-13.67	34.78	10.19	46.26	113	56	Peak
5550	87.08	87.99	/	/	34.86	10.47	46.24	99	340	Peak
5550	81.02	81.93	/	/	34.86	10.47	46.24	99	340	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	52.16	53.65	74	-21.84	34.6	10.17	46.26	150	294	Peak
5460	47.21	48.7	54	-6.79	34.6	10.17	46.26	150	294	Average
5470	54.18	55.65	68.2	-14.02	34.6	10.19	46.26	147	134	Peak
5550	88.35	89.46	/	/	34.66	10.47	46.24	149	30	Peak
5550	81.71	82.82	/	/	34.66	10.47	46.24	149	30	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	86.4	86.63	/	/	35	10.97	46.2	155	127	Peak
5670	80.33	80.56	/	/	35	10.97	46.2	155	127	Average
5725	56.72	56.64	68.2	-11.48	35.07	11.2	46.19	176	174	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	86.85	87.28	/	/	34.8	10.97	46.2	183	337	Peak
5670	81.81	82.24	/	/	34.8	10.97	46.2	183	337	Average
5725	56.67	56.79	68.2	-11.53	34.87	11.2	46.19	168	308	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.

CHANNEL	TX Channel 142	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
5470	53.55	54.84	68.2	-14.65	34.78	10.19	46.26	160	157	Peak
5710	89.65	89.65	/	/	35.05	11.14	46.19	162	198	Peak
5710	83.39	83.39	/	/	35.05	11.14	46.19	162	198	Average
5850	56.62	55.83	68.2	-11.58	35.22	11.72	46.15	159	77	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
5470	54.69	56.16	68.2	-13.51	34.6	10.19	46.26	173	262	Peak
5710	88.43	88.63	/	/	34.85	11.14	46.19	181	86	Peak
5710	82.96	83.16	/	/	34.85	11.14	46.19	181	86	Average
5850	57.83	57.24	68.2	-10.37	35.02	11.72	46.15	163	178	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5710MHz: 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	52.41	53.73	74	-21.59	34.77	10.17	46.26	102	338	Peak
5460	47.55	48.87	54	-6.45	34.77	10.17	46.26	102	338	Average
5470	53.73	55.02	68.2	-14.47	34.78	10.19	46.26	99	60	Peak
5530	83.75	84.77	/	/	34.84	10.38	46.24	99	10	Peak
5530	79.73	80.75	/	/	34.84	10.38	46.24	99	10	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	53.37	54.86	74	-20.63	34.6	10.17	46.26	183	326	Peak
5460	46.67	48.16	54	-7.33	34.6	10.17	46.26	183	326	Average
5470	55.44	56.91	68.2	-12.76	34.6	10.19	46.26	173	13	Peak
5530	86.61	87.83	/	/	34.64	10.38	46.24	186	7	Peak
5530	80.1	81.32	/	/	34.64	10.38	46.24	186	7	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.

CHANNEL	TX Channel 122	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	53.7	55.02	74	-20.3	34.77	10.17	46.26	137	262	Peak
5460	47.85	49.17	54	-6.15	34.77	10.17	46.26	137	262	Average
5470	54.45	55.74	68.2	-13.75	34.78	10.19	46.26	133	151	Peak
5610	82.59	83.16	/	/	34.93	10.72	46.22	139	224	Peak
5610	77.66	78.23	/	/	34.93	10.72	46.22	139	224	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	53.85	55.34	74	-20.15	34.6	10.17	46.26	167	310	Peak
5460	47.54	49.03	54	-6.46	34.6	10.17	46.26	167	310	Average
5470	56.37	57.84	68.2	-11.83	34.6	10.19	46.26	156	60	Peak
5610	85.99	86.76	/	/	34.73	10.72	46.22	159	175	Peak
5610	79.72	80.49	/	/	34.73	10.72	46.22	159	175	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5610MHz: Fundamental frequency.
3. #: Out of restricted band.

CHANNEL	TX Channel 138	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
5470	53.58	54.87	68.2	-14.62	34.78	10.19	46.26	129	22	Peak
5690	87.76	87.88	/	/	35.03	11.05	46.2	126	296	Peak
5690	82.46	82.58	/	/	35.03	11.05	46.2	126	296	Average
5850	57.28	56.49	68.2	-10.92	35.22	11.72	46.15	143	17	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
5470	54.16	55.63	68.2	-14.04	34.6	10.19	46.26	184	254	Peak
5690	87.33	87.65	/	/	34.83	11.05	46.2	178	272	Peak
5690	82.19	82.51	/	/	34.83	11.05	46.2	178	272	Average
5850	57.7	57.11	68.2	-10.5	35.02	11.72	46.15	185	254	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5690MHz: Fundamental frequency.
3. #: Out of restricted band.

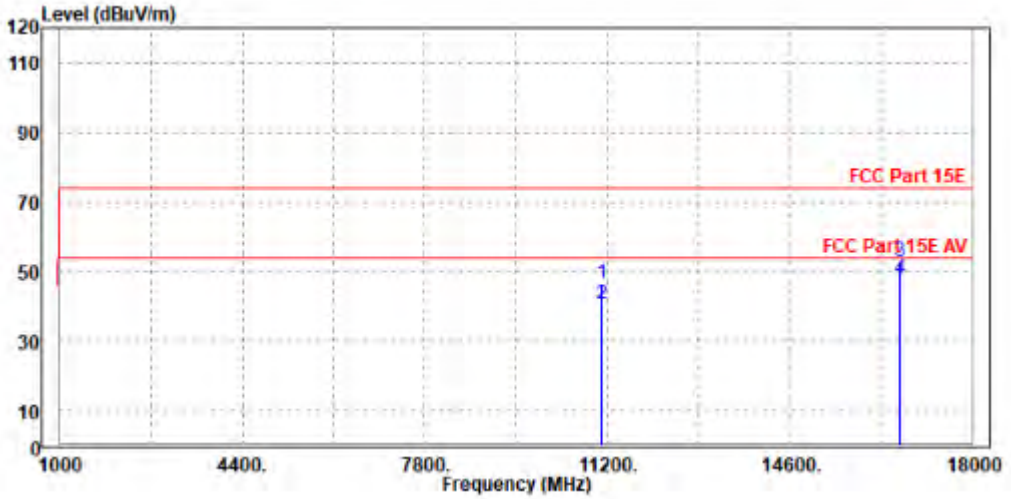
Worst case harmonic:

802.11n (40MHz)

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

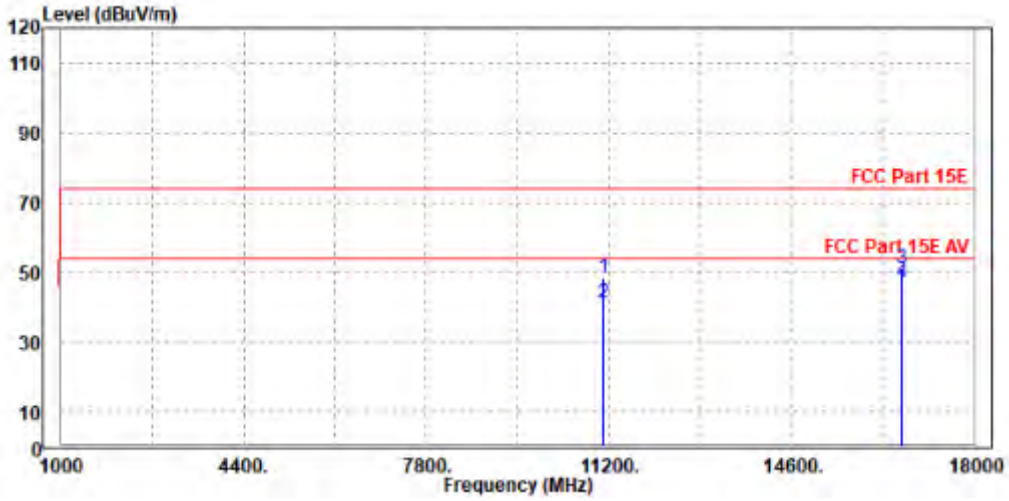
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	11098.000	46.53	40.56	74.00	-27.47	5.97	Peak	Horizontal
2	11098.000	40.65	34.68	54.00	-13.35	5.97	Average	Horizontal
3	PK16650.000	52.71	36.85	74.00	-21.29	15.86	Peak	Horizontal
4	PP16650.000	47.89	32.03	54.00	-6.11	15.86	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	11100.000	48.46	42.05	74.00	-25.54	6.41	Peak	Vertical
2	11100.000	41.10	34.69	54.00	-12.90	6.41	Average	Vertical
3	PK16657.000	51.20	37.19	74.00	-22.80	14.01	Peak	Vertical
4	PP16657.000	46.90	32.89	54.00	-7.10	14.01	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	91.1	90.91	/	/	35.09	11.28	46.18	100	170	Peak
5745	83.95	83.76	/	/	35.09	11.28	46.18	100	170	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	90.36	90.37	/	/	34.89	11.28	46.18	120	190	Peak
5745	83.51	83.52	/	/	34.89	11.28	46.18	120	190	Average

REMARKS:

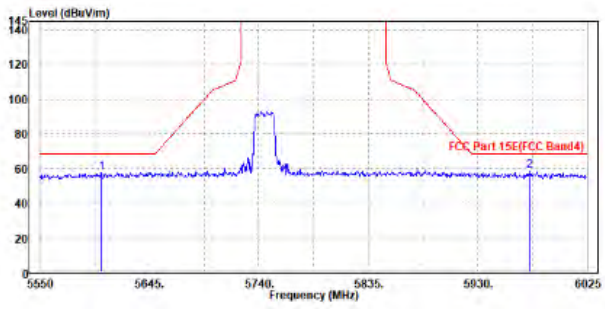
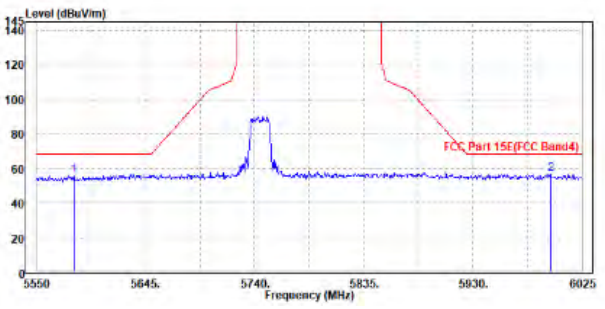
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

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
5603.2	57.61	55.57	68.2	-10.59	37.7	9.84	45.5	110	360	Peak
5974.65	58.17	55.64	68.2	-10.03	38.07	9.96	45.5	110	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
5582.3	55.74	55.8	68.2	-12.46	35.61	9.83	45.5	130	0	Peak
5997.925	56.51	55.35	68.2	-11.69	36.69	9.97	45.5	130	0	Peak

CH 149

Horiontal	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	90.52	90.1	/	/	35.14	11.45	46.17	125	182	Peak
5785	83.87	83.45	/	/	35.14	11.45	46.17	125	182	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	89.36	89.14	/	/	34.94	11.45	46.17	118	107	Peak
5785	82.9	82.68	/	/	34.94	11.45	46.17	118	107	Average

REMARKS:

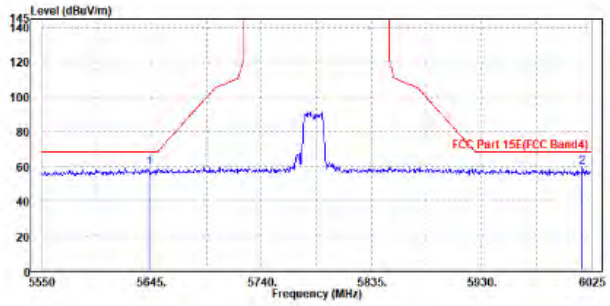
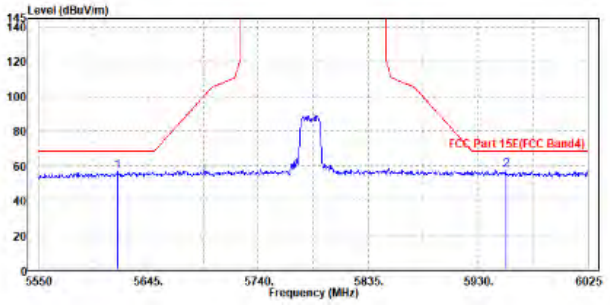
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5785MHz: Fundamental frequency.

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
5643.1	59.06	56.97	68.2	-9.14	37.74	9.85	45.5	127	336	Peak
6017.4	59.5	56.91	68.2	-8.7	38.1	9.98	45.49	127	336	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
5618.4	56.73	56.68	68.2	-11.47	35.71	9.84	45.5	128	93	Peak
5954.225	57.27	56.24	68.2	-10.93	36.58	9.95	45.5	128	93	Peak

CH 157

Horiontal	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	89.98	89.33	/	/	35.19	11.62	46.16	186	229	Peak
5825	82.76	82.11	/	/	35.19	11.62	46.16	186	229	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	88.67	88.22	/	/	34.99	11.62	46.16	170	225	Peak
5825	82.73	82.28	/	/	34.99	11.62	46.16	170	225	Average

REMARKS:

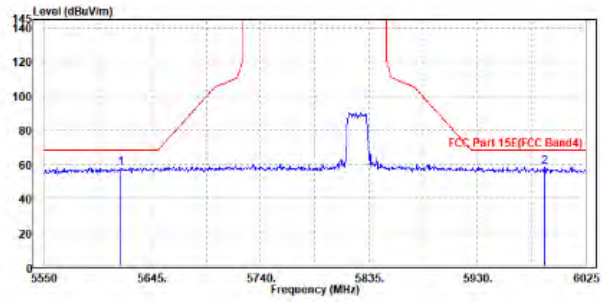
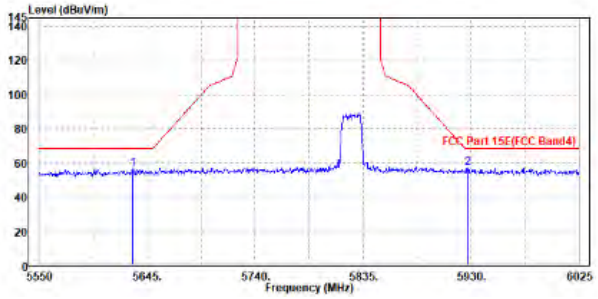
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5825MHz: Fundamental frequency.

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
5617.45	57.78	55.72	68.2	-10.42	37.72	9.84	45.5	165	346	Peak
5989.375	58.43	55.87	68.2	-9.77	38.09	9.97	45.5	165	346	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
5632.175	56.37	56.29	68.2	-11.83	35.74	9.84	45.5	186	0	Peak
5927.15	56.91	55.95	68.2	-11.29	36.51	9.95	45.5	186	0	Peak

CH 165

Horiontal	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	91.65	91.46	/	/	35.09	11.28	46.18	115	96	Peak
5745	84.19	84	/	/	35.09	11.28	46.18	115	96	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	91.83	91.84	/	/	34.89	11.28	46.18	117	195	Peak
5745	83.64	83.65	/	/	34.89	11.28	46.18	117	195	Average

REMARKS:

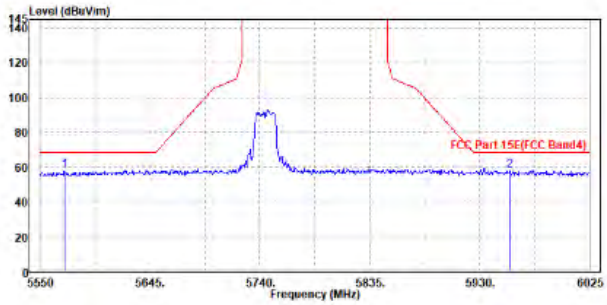
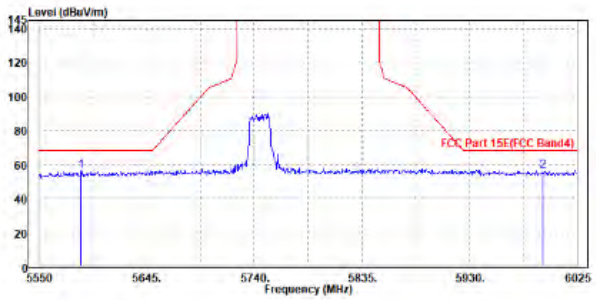
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

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
5570.9	58.02	56.03	68.2	-10.18	37.67	9.82	45.5	151	89	Peak
5956.125	57.86	55.34	68.2	-10.34	38.06	9.96	45.5	151	89	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
5587.05	56.11	56.15	68.2	-12.09	35.63	9.83	45.5	157	273	Peak
5995.075	56.51	55.35	68.2	-11.69	36.69	9.97	45.5	157	273	Peak

CH 149

Horiontal	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	91.62	91.2	/	/	35.14	11.45	46.17	104	286	Peak
5785	83.84	83.42	/	/	35.14	11.45	46.17	104	286	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	90.78	90.56	/	/	34.94	11.45	46.17	157	132	Peak
5785	83.56	83.34	/	/	34.94	11.45	46.17	157	132	Average

REMARKS:

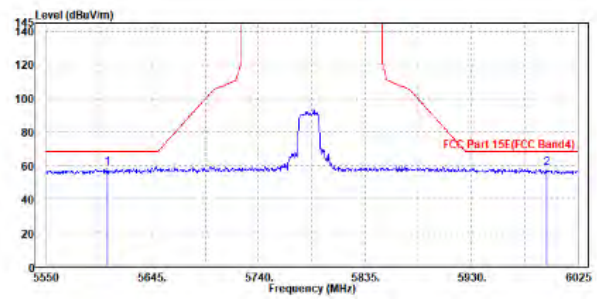
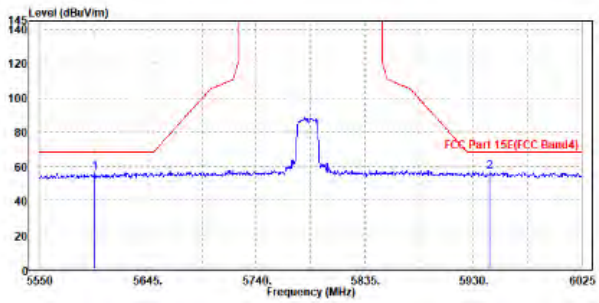
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5785MHz: Fundamental frequency.

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
5605.1	58.26	56.21	68.2	-9.94	37.71	9.84	45.5	181	137	Peak
5996.975	58.62	56.05	68.2	-9.58	38.1	9.97	45.5	181	137	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
5598.45	56.26	56.27	68.2	-11.94	35.66	9.83	45.5	181	98	Peak
5944.725	56.92	55.91	68.2	-11.28	36.56	9.95	45.5	181	98	Peak

CH 157

Horiontal	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	92.27	91.62	/	/	35.19	11.62	46.16	134	175	Peak
5825	84.64	83.99	/	/	35.19	11.62	46.16	134	175	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	90.24	89.79	/	/	34.99	11.62	46.16	136	19	Peak
5825	82.67	82.22	/	/	34.99	11.62	46.16	136	19	Average

REMARKS:

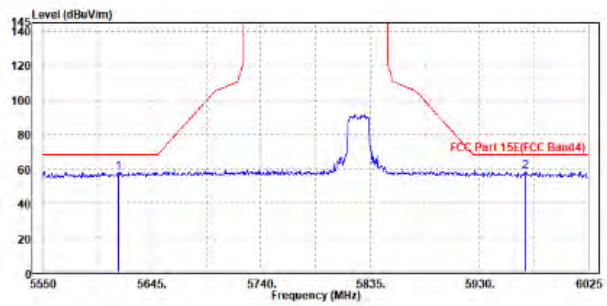
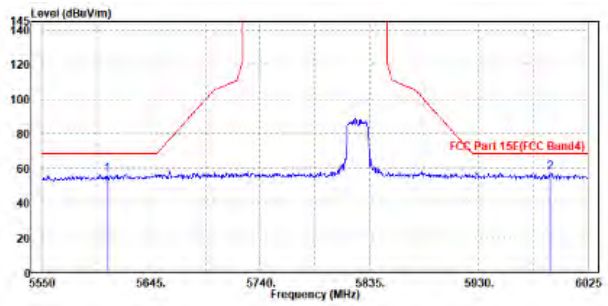
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5825MHz: Fundamental frequency.

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
5616.025	57.78	55.72	68.2	-10.42	37.72	9.84	45.5	187	248	Peak
5969.9	58.56	56.03	68.2	-9.64	38.07	9.96	45.5	187	248	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
5607	56.4	56.38	68.2	-11.8	35.68	9.84	45.5	116	169	Peak
5992.225	57.25	56.1	68.2	-10.95	36.68	9.97	45.5	116	169	Peak

CH 165

Horiontal	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	86.91	86.66	/	/	35.11	11.32	46.18	108	9	Peak
5755	81.11	80.86	/	/	35.11	11.32	46.18	108	9	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	87.95	87.9	/	/	34.91	11.32	46.18	182	266	Peak
5755	80.73	80.68	/	/	34.91	11.32	46.18	182	266	Average

REMARKS:

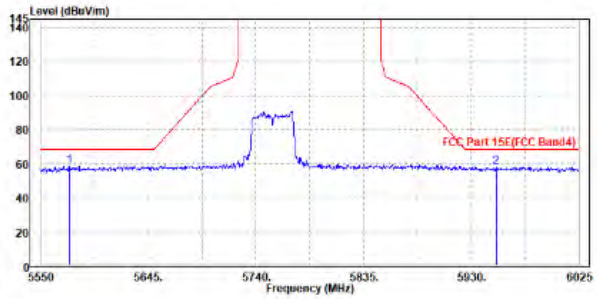
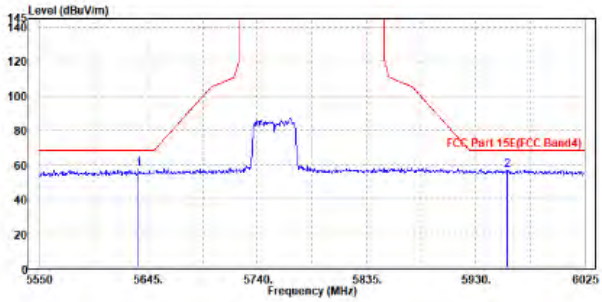
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5755MHz: Fundamental frequency.

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
5575.175	58.65	56.64	68.2	-9.55	37.68	9.83	45.5	195	50	Peak
5952.325	58.1	55.6	68.2	-10.1	38.05	9.95	45.5	195	50	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
5636.45	57.11	57.01	68.2	-11.09	35.75	9.85	45.5	193	169	Peak
5958.025	56.86	55.81	68.2	-11.34	36.59	9.96	45.5	193	169	Peak

CH 151

Horiontal	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	87.6	87.13	/	/	35.15	11.49	46.17	139	234	Peak
5795	81.43	80.96	/	/	35.15	11.49	46.17	139	234	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	87	86.73	/	/	34.95	11.49	46.17	128	204	Peak
5795	80.74	80.47	/	/	34.95	11.49	46.17	128	204	Average

REMARKS:

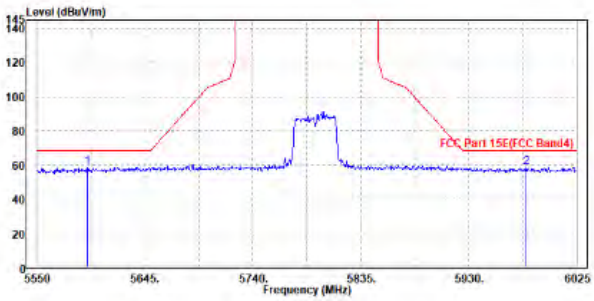
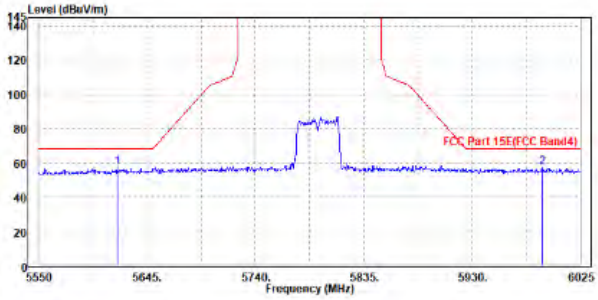
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5795MHz: Fundamental frequency.

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
5594.175	58.71	56.69	68.2	-9.49	37.69	9.83	45.5	121	89	Peak
5980.825	58.53	55.99	68.2	-9.67	38.08	9.96	45.5	121	89	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
5618.875	57.07	57.02	68.2	-11.13	35.71	9.84	45.5	118	142	Peak
5991.275	57.1	55.95	68.2	-11.1	36.68	9.97	45.5	118	142	Peak

CH 159

Horiontal	Vertical
	

802.11ac (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	91.53	91.34	/	/	35.09	11.28	46.18	178	126	Peak
5745	84.25	84.06	/	/	35.09	11.28	46.18	178	126	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	92.17	92.18	/	/	34.89	11.28	46.18	171	145	Peak
5745	83.87	83.88	/	/	34.89	11.28	46.18	171	145	Average

REMARKS:

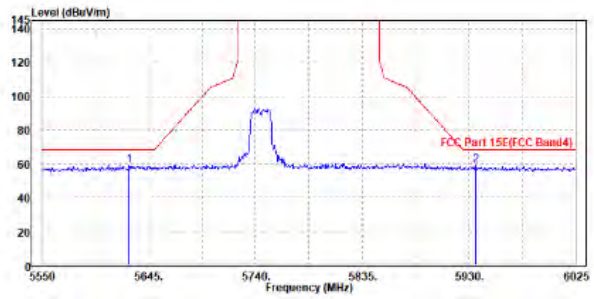
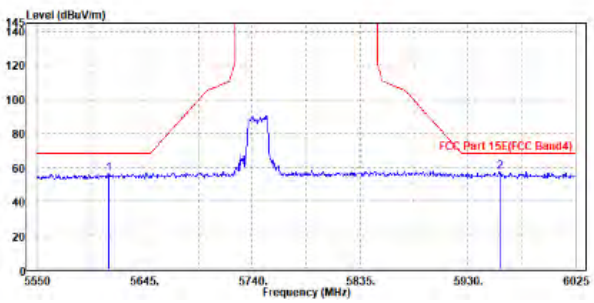
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

OOBE DATA

802.11ac (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
5627.425	59.1	57.03	68.2	-9.1	37.73	9.84	45.5	131	215	Peak
5936.175	58.76	56.27	68.2	-9.44	38.04	9.95	45.5	131	215	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
5613.175	56.35	56.32	68.2	-11.85	35.69	9.84	45.5	136	245	Peak
5958.5	57.36	56.31	68.2	-10.84	36.59	9.96	45.5	136	245	Peak

CH 149

Horiontal	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	91.36	90.94	/	/	35.14	11.45	46.17	189	332	Peak
5785	84.33	83.91	/	/	35.14	11.45	46.17	189	332	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	91.56	91.34	/	/	34.94	11.45	46.17	184	73	Peak
5785	84.07	83.85	/	/	34.94	11.45	46.17	184	73	Average

REMARKS:

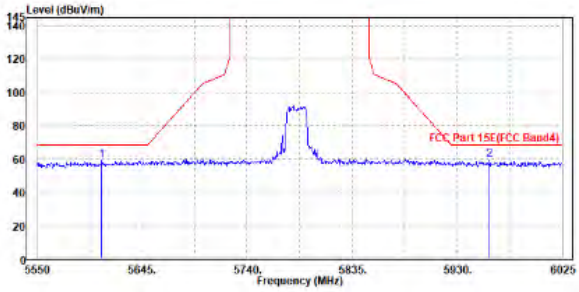
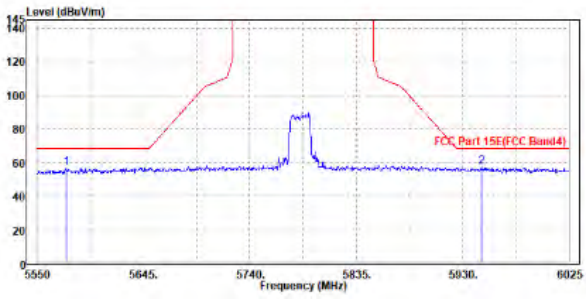
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5785MHz: Fundamental frequency.

OOBE DATA

802.11ac (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
5608.425	58.98	56.93	68.2	-9.22	37.71	9.84	45.5	174	147	Peak
5959.45	59.64	57.12	68.2	-8.56	38.06	9.96	45.5	174	147	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
5575.65	56.64	56.71	68.2	-11.56	35.6	9.83	45.5	179	121	Peak
5946.625	57.14	56.13	68.2	-11.06	36.56	9.95	45.5	179	121	Peak

CH 157

Horiontal	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	91.64	90.99	/	/	35.19	11.62	46.16	109	244	Peak
5825	84.4	83.75	/	/	35.19	11.62	46.16	109	244	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	90.94	90.49	/	/	34.99	11.62	46.16	121	141	Peak
5825	82.98	82.53	/	/	34.99	11.62	46.16	121	141	Average

REMARKS:

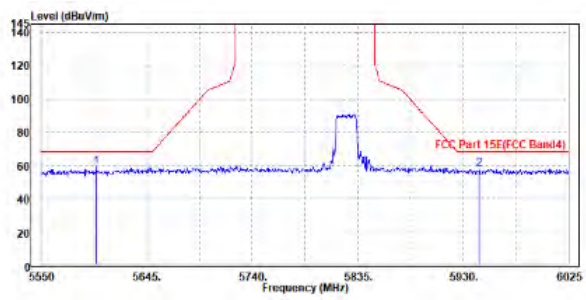
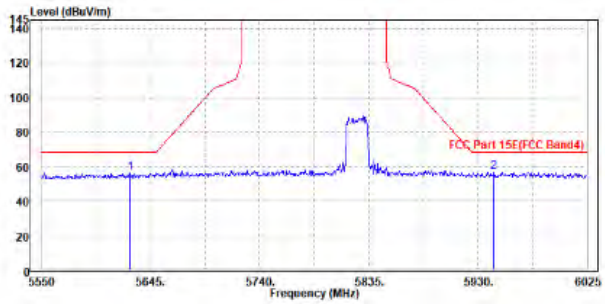
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5825MHz: Fundamental frequency.

OOBE DATA

802.11ac (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
5599.4	58.96	56.93	68.2	-9.24	37.7	9.83	45.5	110	91	Peak
5944.725	57.72	55.23	68.2	-10.48	38.04	9.95	45.5	110	91	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
5627.425	56.06	55.99	68.2	-12.14	35.73	9.84	45.5	115	137	Peak
5943.775	57.04	56.04	68.2	-11.16	36.55	9.95	45.5	115	137	Peak

CH 165

Horiontal	Vertical
	

802.11ac (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	86.31	86.06	/	/	35.11	11.32	46.18	103	70	Peak
5755	81.13	80.88	/	/	35.11	11.32	46.18	103	70	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	86.35	86.3	/	/	34.91	11.32	46.18	158	173	Peak
5755	80.93	80.88	/	/	34.91	11.32	46.18	158	173	Average

REMARKS:

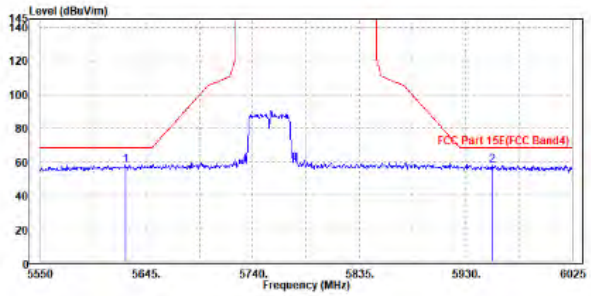
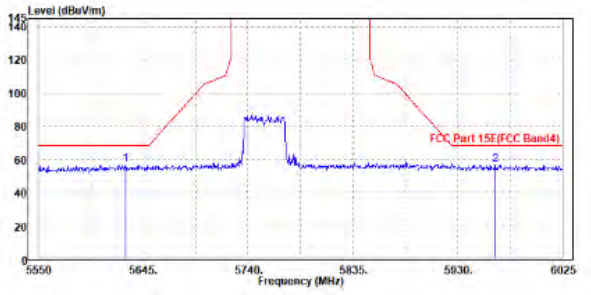
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5755MHz: Fundamental frequency.

OOBE DATA

802.11ac (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
5626.475	58.12	56.05	68.2	-10.08	37.73	9.84	45.5	143	345	Peak
5953.75	58.11	55.61	68.2	-10.09	38.05	9.95	45.5	143	345	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
5628.85	56.8	56.72	68.2	-11.4	35.74	9.84	45.5	150	336	Peak
5964.2	57.01	55.94	68.2	-11.19	36.61	9.96	45.5	150	336	Peak

CH 151

Horiontal	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	88	87.53	/	/	35.15	11.49	46.17	134	266	Peak
5795	81.82	81.35	/	/	35.15	11.49	46.17	134	266	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	87.07	86.8	/	/	34.95	11.49	46.17	132	216	Peak
5795	80.28	80.01	/	/	34.95	11.49	46.17	132	216	Average

REMARKS:

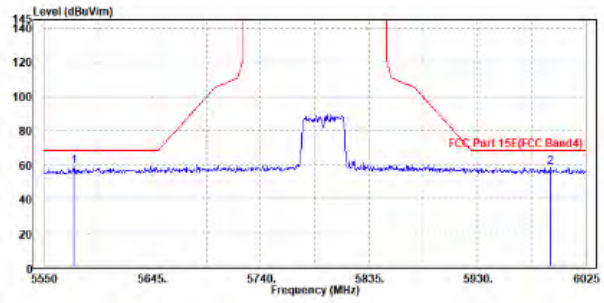
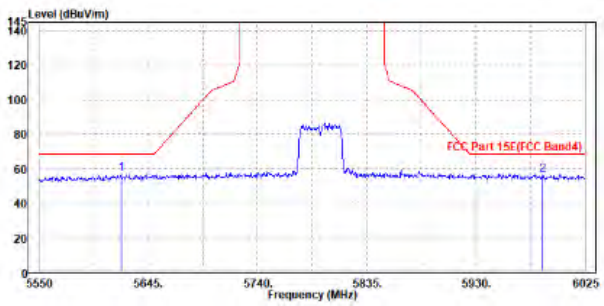
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5795MHz: Fundamental frequency.

OOBE DATA

802.11ac (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
5576.125	59.11	57.1	68.2	-9.09	37.68	9.83	45.5	155	125	Peak
5993.65	58.36	55.8	68.2	-9.84	38.09	9.97	45.5	155	125	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
5621.25	56.8	56.74	68.2	-11.4	35.72	9.84	45.5	151	36	Peak
5988.425	56.5	55.36	68.2	-11.7	36.67	9.97	45.5	151	36	Peak

CH 159

Horiontal	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	84.59	84.22	/	/	35.13	11.41	46.17	108	68	Peak
5775	79.38	79.01	/	/	35.13	11.41	46.17	108	68	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	83.08	82.91	/	/	34.93	11.41	46.17	121	244	Peak
5775	77.99	77.82	/	/	34.93	11.41	46.17	121	244	Average

REMARKS:

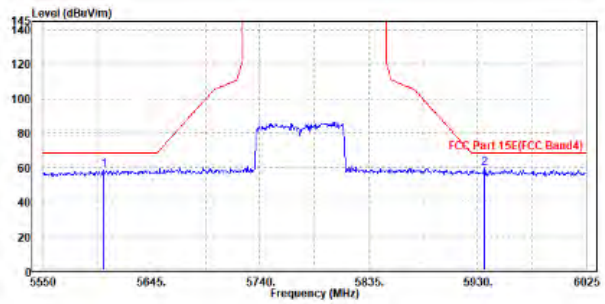
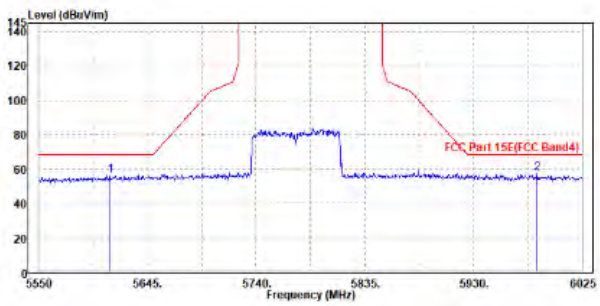
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5775MHz: Fundamental frequency.

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
5603.675	58.35	56.31	68.2	-9.85	37.7	9.84	45.5	178	301	Peak
5936.175	59.36	56.87	68.2	-8.84	38.04	9.95	45.5	178	301	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
5612.225	56.33	56.3	68.2	-11.87	35.69	9.84	45.5	139	339	Peak
5985.575	57.31	56.18	68.2	-10.89	36.66	9.97	45.5	139	339	Peak

CH 155

Horiontal	Vertical
	

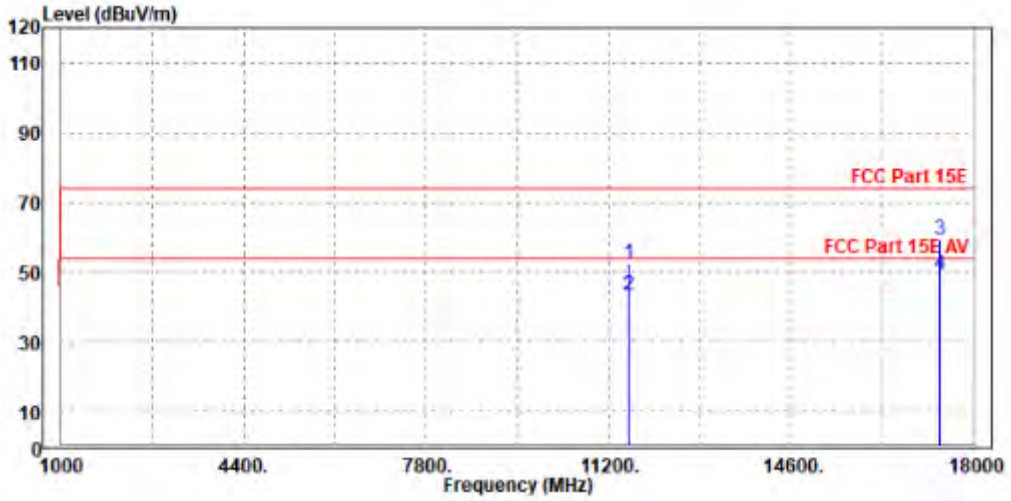
Worst case harmonic:

802.11ac (20MHZ)

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

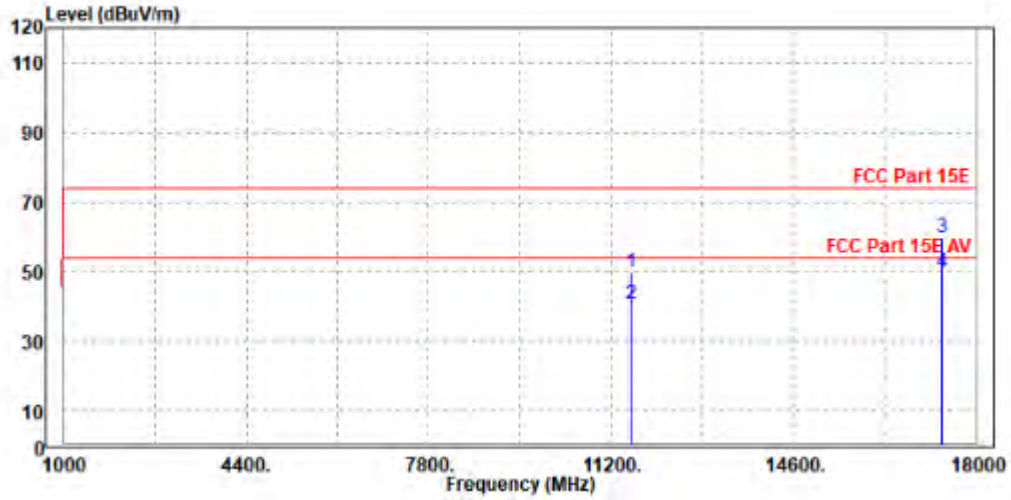
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	11570.000	52.27	40.18	74.00	-21.73	12.09	Peak	Horizontal
2	11570.000	43.35	31.26	54.00	-10.65	12.09	Average	Horizontal
3	PK17354.000	59.43	39.01	74.00	-14.57	20.42	Peak	Horizontal
4	PP17354.000	49.36	28.94	54.00	-4.64	20.42	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	11574.000	49.94	39.78	74.00	-24.06	10.16	Peak	Vertical
2	11574.000	40.71	30.55	54.00	-13.29	10.16	Average	Vertical
3	PK17355.000	59.61	39.51	74.00	-14.39	20.10	Peak	Vertical
4	PP17355.000	49.75	29.65	54.00	-4.25	20.10	Average	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 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. 15,22	Feb. 14,23
EMC32 test software	Rohde&Schwarz	EMC32	NA	NA	NA
LISN network	Rohde&Schwarz	ENV216	101922	Mar. 04,22	Mar. 03,23

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.

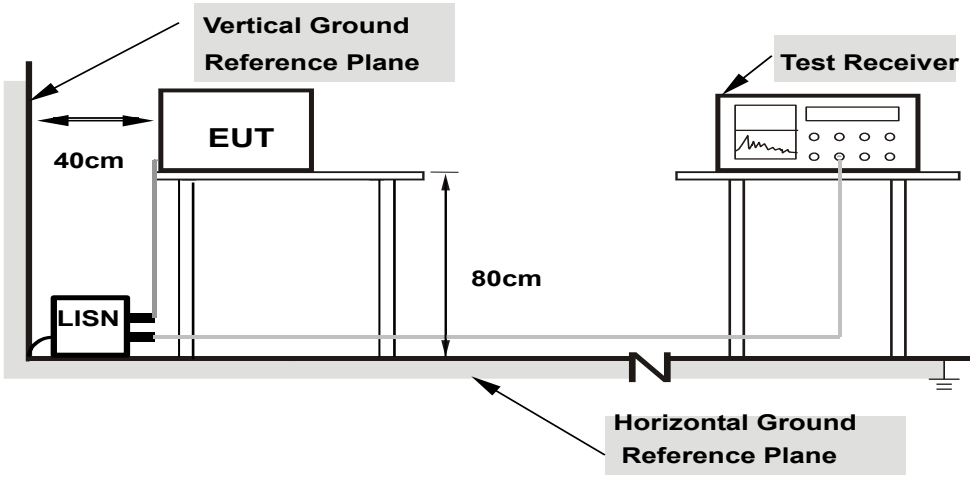
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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.

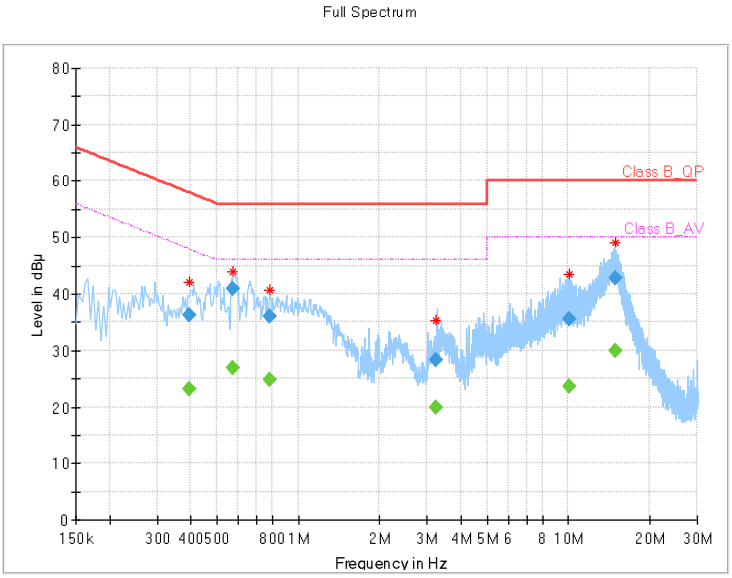
3.2.7 TEST RESULTS

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**	24deg. C, 55%RH
Tested By	Carl Xie		

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.396000	---	23.12	47.94	24.82	L1	ON	9.7
0.396000	36.35	---	57.94	21.59	L1	ON	9.7
0.572000	---	26.90	46.00	19.10	L1	ON	9.7
0.572000	40.83	---	56.00	15.17	L1	ON	9.7
0.780000	---	24.72	46.00	21.28	L1	ON	9.7
0.780000	35.96	---	56.00	20.04	L1	ON	9.7
3.244000	---	19.89	46.00	26.11	L1	ON	9.7
3.244000	28.40	---	56.00	27.60	L1	ON	9.7
10.120000	---	23.73	50.00	26.27	L1	ON	9.8
10.120000	35.63	---	60.00	24.37	L1	ON	9.8
14.888000	---	30.02	50.00	19.98	L1	ON	9.8
14.888000	42.77	---	60.00	17.23	L1	ON	9.8

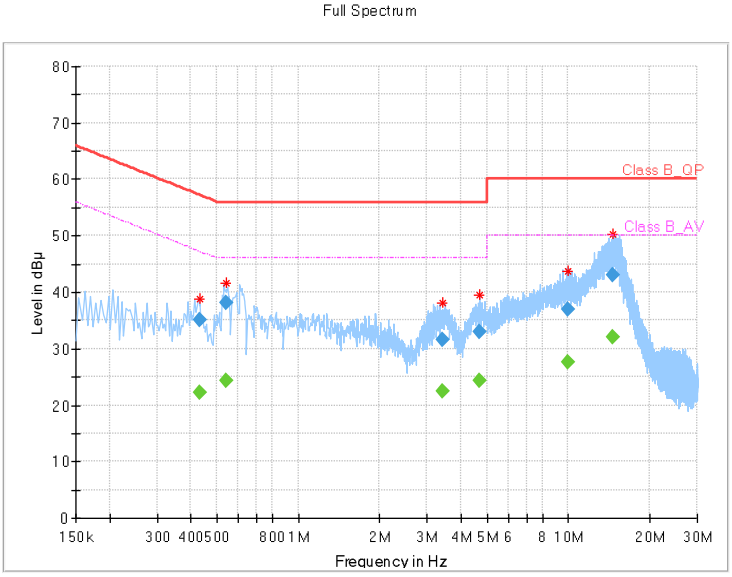
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Limit 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	24deg. C, 55%RH
Tested By	Carl Xie		

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.432000	---	22.27	47.21	24.94	N	ON	9.7
0.432000	35.08	---	57.21	22.13	N	ON	9.7
0.540000	---	24.32	46.00	21.68	N	ON	9.7
0.540000	38.23	---	56.00	17.77	N	ON	9.7
3.440000	---	22.48	46.00	23.52	N	ON	9.8
3.440000	31.57	---	56.00	24.43	N	ON	9.8
4.672000	---	24.25	46.00	21.75	N	ON	9.8
4.672000	32.88	---	56.00	23.12	N	ON	9.8
9.920000	---	27.57	50.00	22.43	N	ON	9.8
9.920000	36.92	---	60.00	23.08	N	ON	9.8
14.544000	---	31.98	50.00	18.02	N	ON	9.8
14.544000	43.14	---	60.00	16.86	N	ON	9.8

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

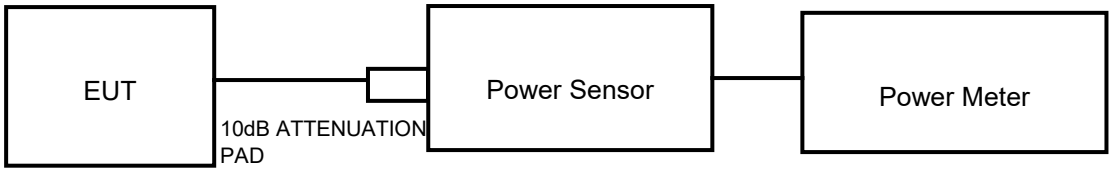
Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
	B	Indoor Access Point	1 Watt (30 dBm)
	√	Client devices	250mW (24 dBm)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

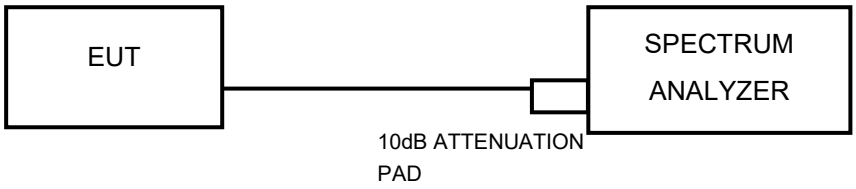
3.3.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT

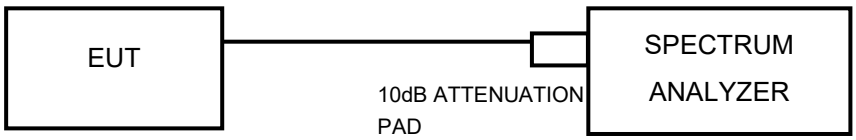
802.11a, 802.11n/ac (20MHz), 802.11 n/ac (40MHz) TEST CONFIGURATION



11ac 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. 22,22	Feb. 21,23
EXA Signal Analyzer	KEYSIGHT	N9010A-526	MY54510322	Feb. 18,22	Feb. 17,23
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.15,22	May.14,23
Power Sensor	ANRITSU	MA2411B	1339352	May. 06,22	May. 05,23

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 RF Oven room.

3.3.4 TEST PROCEDURE

FOR POWER MEASUREMENT

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

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 802.11ac (80MHz)

1. Measure the duty cycle, x, of the transmitter output signal as described in II.B.
2. Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
3. Set RBW = 1 MHz.
4. Set VBW ≥ 3 MHz.
5. Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
6. Sweep time = auto.
7. Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
8. Do not use sweep triggering. Allow the sweep to “free run.”
9. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
10. Add 10 log (1/x), where x is the duty cycle, to the measured power 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). For example, add 10 log (1/0.25) = 6 dB if the duty cycle is 25%.

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 client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

3.3.7 TEST RESULTS

Please Refer to Appendix A/B. 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 of above instrument.

3.4.4 TEST PROCEDURES

Using method SA-2

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

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 A/B. 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 signalling 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 of 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

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 A

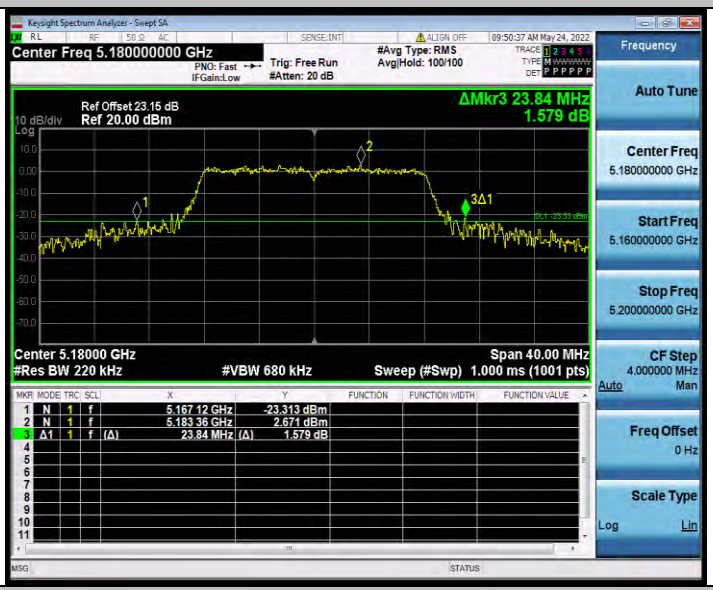
EMISSION BANDWIDTH

TEST RESULT

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	23.840	5167.120	5190.960	---	---
		5200	22.600	5188.920	5211.520	---	---
		5240	21.360	5229.040	5250.400	---	---
		5260	27.440	5245.600	5273.040	---	---
		5300	26.440	5287.160	5313.600	---	---
		5320	24.760	5308.360	5333.120	---	---
		5500	24.600	5486.320	5510.920	---	---
		5580	25.000	5567.160	5592.160	---	---
		5700	24.760	5687.480	5712.240	---	---
		5745	25.320	5730.240	5755.560	---	---
		5785	25.280	5773.200	5798.480	---	---
		5825	24.200	5813.280	5837.480	---	---
11N20SISO	Ant1	5180	26.280	5166.520	5192.800	---	---
		5200	30.120	5184.800	5214.920	---	---
		5240	28.960	5226.560	5255.520	---	---
		5260	24.520	5247.760	5272.280	---	---
		5300	23.720	5288.480	5312.200	---	---
		5320	25.360	5308.320	5333.680	---	---
		5500	27.840	5487.920	5515.760	---	---
		5580	26.080	5568.240	5594.320	---	---
		5700	31.320	5684.040	5715.360	---	---
		5745	28.000	5732.360	5760.360	---	---
		5785	27.360	5771.000	5798.360	---	---
		5825	29.200	5810.880	5840.080	---	---
11N40SISO	Ant1	5190	43.600	5170.240	5213.840	---	---
		5230	46.720	5208.400	5255.120	---	---
		5270	40.240	5250.400	5290.640	---	---
		5310	44.240	5286.400	5330.640	---	---
		5510	42.480	5488.160	5530.640	---	---
		5550	40.560	5529.200	5569.760	---	---
		5670	40.080	5650.240	5690.320	---	---

		5755	42.160	5732.760	5774.920	---	---
		5795	43.200	5773.960	5817.160	---	---
11AC20SISO	Ant1	5180	29.160	5164.200	5193.360	---	---
		5200	27.200	5187.040	5214.240	---	---
		5240	30.320	5226.880	5257.200	---	---
		5260	29.800	5243.520	5273.320	---	---
		5300	26.680	5287.000	5313.680	---	---
		5320	25.720	5307.200	5332.920	---	---
		5500	28.400	5486.320	5514.720	---	---
		5580	32.360	5563.160	5595.520	---	---
		5700	29.240	5684.480	5713.720	---	---
		5745	29.960	5728.560	5758.520	---	---
		5785	28.080	5771.160	5799.240	---	---
		5825	26.920	5811.800	5838.720	---	---
11AC40SISO	Ant1	5190	45.520	5167.200	5212.720	---	---
		5230	47.840	5208.080	5255.920	---	---
		5270	46.480	5245.920	5292.400	---	---
		5310	46.400	5287.440	5333.840	---	---
		5510	41.760	5487.920	5529.680	---	---
		5550	45.120	5524.480	5569.600	---	---
		5670	42.480	5649.760	5692.240	---	---
		5755	49.120	5730.760	5779.880	---	---
		5795	46.080	5773.400	5819.480	---	---
11AC80SISO	Ant1	5210	83.520	5169.840	5253.360	---	---
		5290	83.520	5250.640	5334.160	---	---
		5530	84.960	5488.080	5573.040	---	---
		5610	82.400	5568.560	5650.960	---	---
		5775	83.040	5734.520	5817.560	---	---

TEST GRAPHS

11A_Ant1_5180

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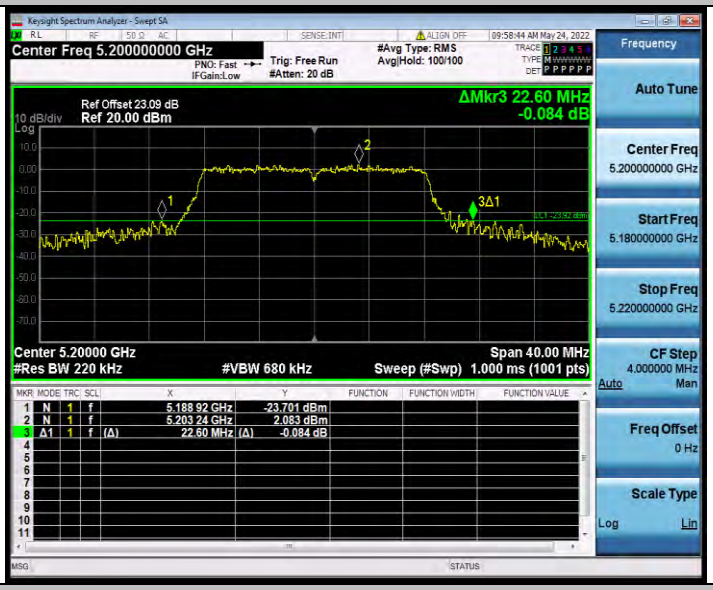
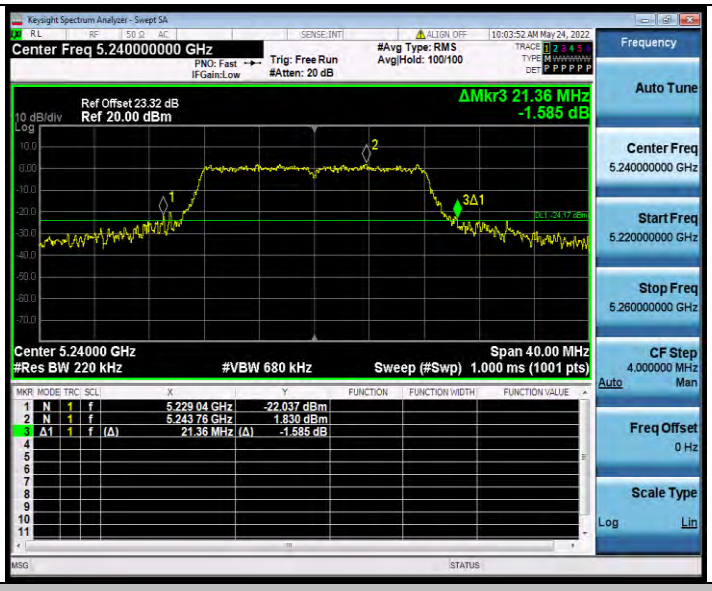
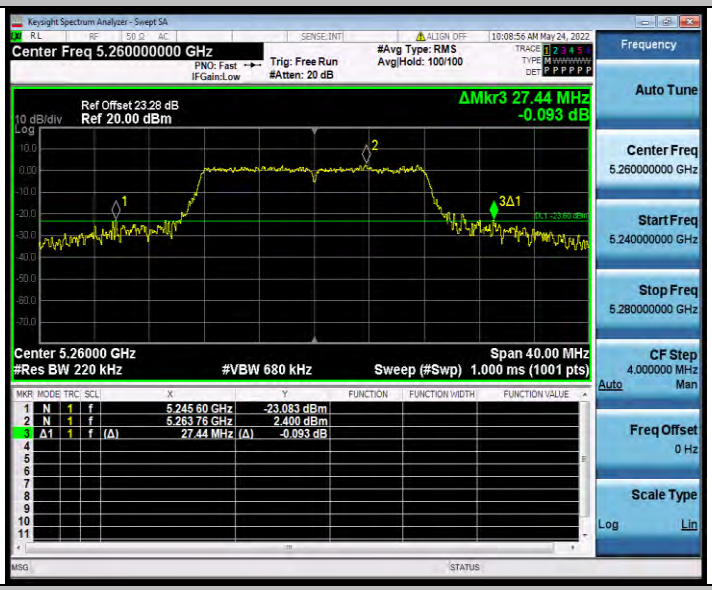
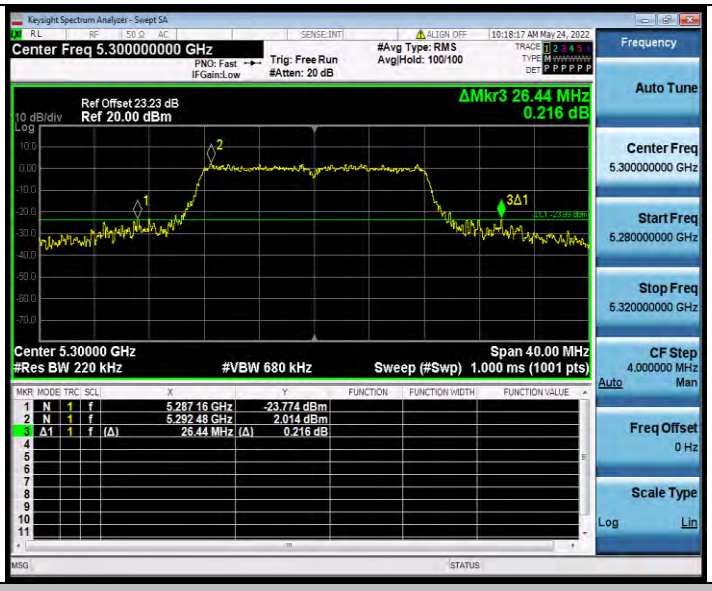

11A_Ant1_5240



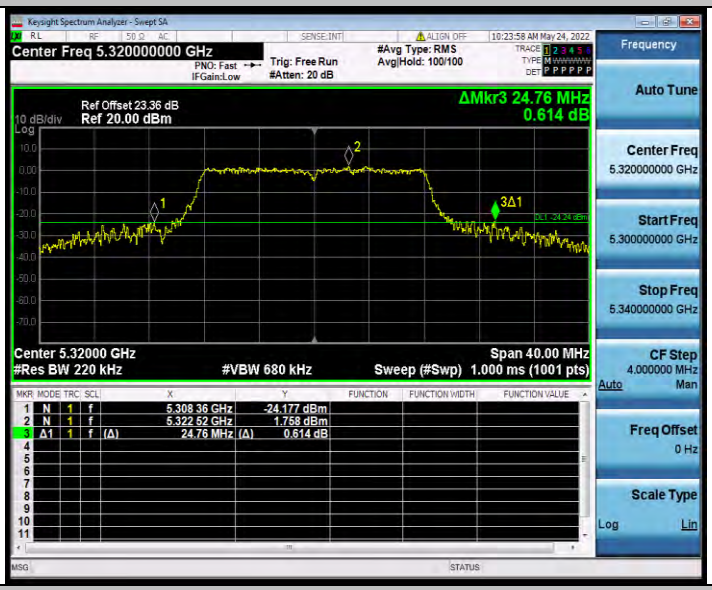
11A_Ant1_5260



11A_Ant1_5300



11A_Ant1_5320



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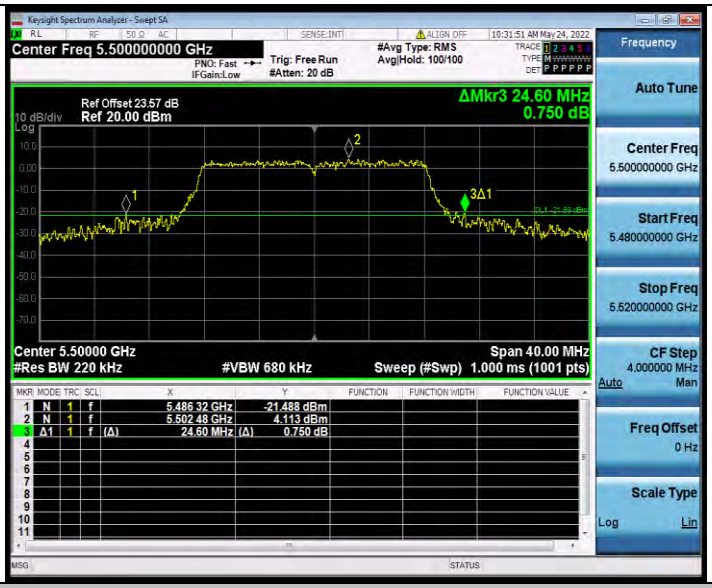

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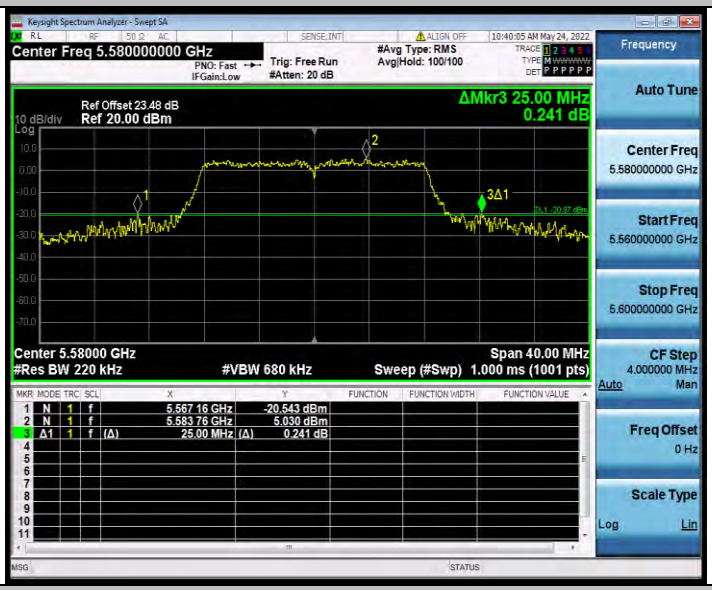

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