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5 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB 157

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P21080006RF14	Original release	Sep. 01, 2021

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

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	Mobile Computer
BRAND NAME	Honeywell
MODEL NAME	CT45P-L1N-2
NOMINAL VOLTAGE	3.85Vdc (Lithium-ion cell, battery)
MODULATION	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to MCS7 802.11ac: up to 390.0Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5720MHz, 5745 ~ 5825MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n, 802.11ac (20MHz) 2 for 802.11n, 802.11ac (40MHz) 1 for 802.11ac (80MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n, 802.11ac (20MHz) 2 for 802.11n, 802.11ac (40MHz) 1 for 802.11ac (80MHz) 5500 ~ 5720MHz: 12 for 802.11a, 802.11n, 802.11ac(20MHz) 6 for 802.11n, 802.11ac (40MHz) 3 for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n, 802.11ac (20MHz) 3 for 802.11n, 802.11ac (40MHz) 2 for 802.11ac (80MHz)
AVERAGE POWER	40.46mW for 5180 ~ 5240MHz 40.18mW for 5260 ~ 5320MHz 46.77mW for 5500 ~ 5720MHz 56.75mW for 5745 ~ 5825MHz
ANTENNA TYPE	PIFA Antenna
ANTENNA GAIN	0.72 dBi for 5180 ~ 5240MHz 0.62 dBi for 5260 ~ 5320MHz 0.52 dBi for 5500 ~ 5720MHz 0.78 dBi for 5745 ~ 5825MHz
HW VERSION	V1.0
SW VERSION	OS.11.002-HON.11.002
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	USB cable: unshielded without ferrite, 1.25 meter Earphone cable: unshielded without ferrite, 1.27 meter

NOTE:

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

2. This product includes the following Three SKU which hardware is exactly same, the difference is described as following, Sample 1 was full test, sample 2 verify the worst case,check worst case Radiated emission:

SAMPLE	EUT CONFIGURATION INFORMATION
1	SKU ID:CT45-L1N-37D120G ,Assembled Scanner Imager: 7-S0703
2	SKU ID:CT45-L1N-38D120G ,Assembled Scanner Imager: 8 - N6803/S0803
3	SKU ID: CT45-L1N-37D220G , Assembled with Scanner: 7-S0703 for China Only with Android non-GMS

3. 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

4. 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	MODEL	SPECIFICATION
Battery	Honeywell	CT50-BTSC	Capacity：3.85vdc 4020mAh
AC Adapter	HONOR	ADS-12B-06 05010E	I/P:100-240Vac, 0.3A O/P: 5Vdc, 2A
USB Cable	Honeywell	CT40-SN	Shielded, 1.25meter
Earphone	VIVO	N/A	Shielded, 1.27meter
LCD Panel	CASIL	CTM10801920T01	5.0" FHD(1928*1080)

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
144	5720MHz	157	5785 MHz
149	5745 MHz	165	5825 MHz
153	5765 MHz		

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
138	5690MHz	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	802.11n (20MHz)	5180-5240	36 to 48	48	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, 40, 48	OFDM	6.0
A	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11n (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11n (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	802.11n (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11n (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	802.11n (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11ac (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	802.11n (40MHz)	5180-5240	36 to 48	48	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	36 to 48	6.0
A	802.11n (20MHz)		36 to 48	36, 48	36 to 48	MCS0
A	802.11n (40MHz)		38 to 46	38, 46	38 to 46	MCS0
A	802.11ac (20MHz)		36 to 48	36, 48	36 to 48	MCS0
A	802.11ac (40MHz)		38 to 46	38, 46	38 to 46	MCS0
A	802.11ac (80MHz)		42	42	42	MCS0
A	802.11a	5260-5320	52 to 64	52, 64	52 to 64	6.0
A	802.11n (20MHz)		52 to 64	52, 64	52 to 64	MCS0
A	802.11n (40MHz)		54 to 62	54, 62	54 to 62	MCS0
A	802.11ac (20MHz)		52 to 64	52, 64	52 to 64	MCS0
A	802.11ac (40MHz)		54 to 62	54, 62	54 to 62	MCS0
A	802.11ac (80MHz)		58	58	58	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	100 to 144	6.0
A	802.11n (20MHz)		100 to 144	100, 116, 140, 144	100 to 144	MCS0
A	802.11n (40MHz)		102 to 142	102, 110, 134, 142	102 to 142	MCS0
A	802.11ac (20MHz)		100 to 144	100, 116, 140, 144	100 to 144	MCS0
A	802.11ac (40MHz)		102 to 142	102, 110, 134, 142	102 to 142	MCS0
A	802.11ac (80MHz)		106 to 138	106, 138	106 to 138	MCS0
EUT CONFIGURE MODE	**MODE**	**FREQ. BAND (MHz)**	**AVAILABLE CHANNEL**	**TESTED CHANNEL**	**MODULATION**	**DATA RATE (Mbps)**
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11n (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11n (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0

A	802.11ac (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, 40, 48	OFDM	6.0
A	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11n (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11n (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11ac (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	802.11n (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11n (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11ac (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	802.11n (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11n (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11ac (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 3.85V By Battery	Star Le
RE≥1G	23deg. C, 70%RH	DC 3.85V By Battery	Star Le
PLC	25deg. C, 52%RH	DC 3.85V By Battery	Jimmy Liu
APCM	25deg. C, 60%RH	DC 3.85V By Battery	Kevin Zhang

2.3 DUTY CYCLE OF TEST SIGNAL

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

802.11a: Duty cycle =2.060/2.119=0.972 , Duty factor = 10 * log(1/ 0.972) = 0.123

802.11n (20MHz): Duty cycle =1.921/1.962=0.979,. Duty factor = 10 * log(1/ 0.979)= 0.092

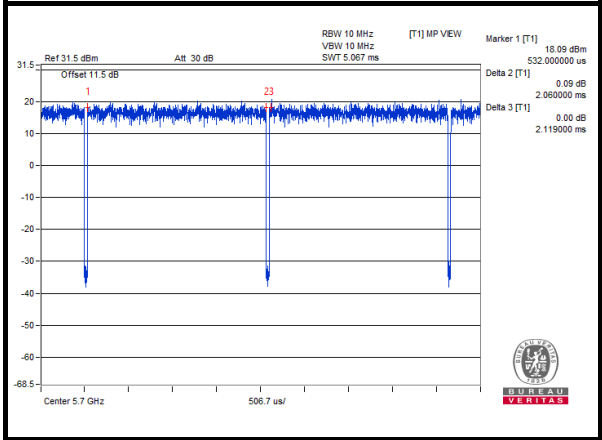
802.11n (40MHz): Duty cycle =0.945/0.991=0.954 Duty factor = 10 * log(1/ 0.954)=0.205

802.11ac (20MHz): Duty cycle =1.930/1.970 =0.980=98% , Duty factor shall be not considered

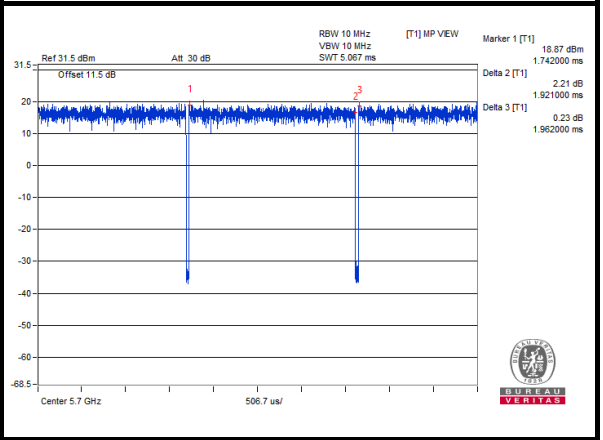
802.11ac (40MHz): Duty cycle =0.949/0.993=0.956 , Duty factor = 10 * log(1/ 0.956)=0.195

802.11ac (80MHz): Duty cycle = 0.459/0.502=0.914， Duty factor = 10 * log(1/ 0.914)=.0.391

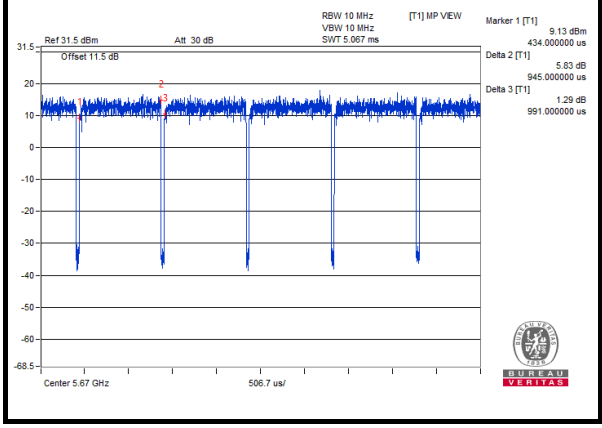
802.11a



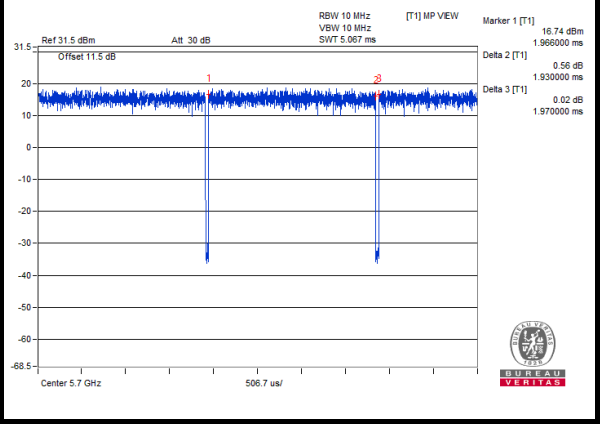
802.11n (20MHz)

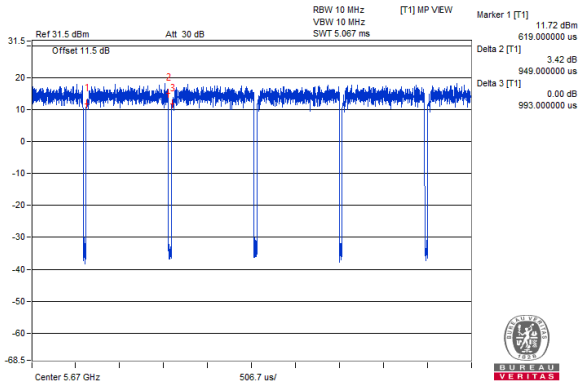
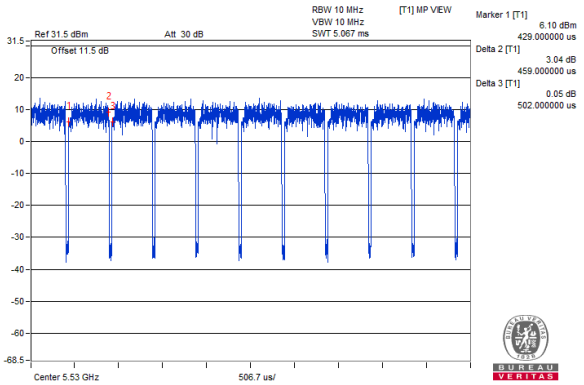


802.11n (40MHz)



802.11ac (20MHz)



802.11 ac (40MHz)	802.11ac (80MHz)
	

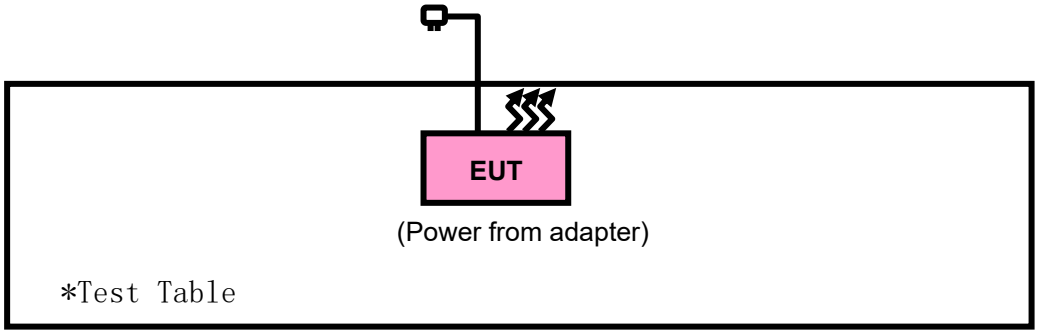
2.4 DESCRIPTION OF SUPPORT UNITS

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

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

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. 05,21	Mar. 04,22
Horn Antenna	ETS-LINDGREN	3117	00168728	Apr. 02,21	Apr. 01,22
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Aug. 26, 20	Aug. 25, 21
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Aug. 25, 21	Aug. 24, 22
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	Jun. 03,21	Jun. 02,22
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Apr. 22,21	Apr. 21,22
Signal Pre-Amplifier	EMSI	EMC 9135	980249	Jun. 02,21	Jun. 01,22
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	Jun. 03,21	Jun. 02,22
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Apr. 22,21	Apr. 21,22

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:

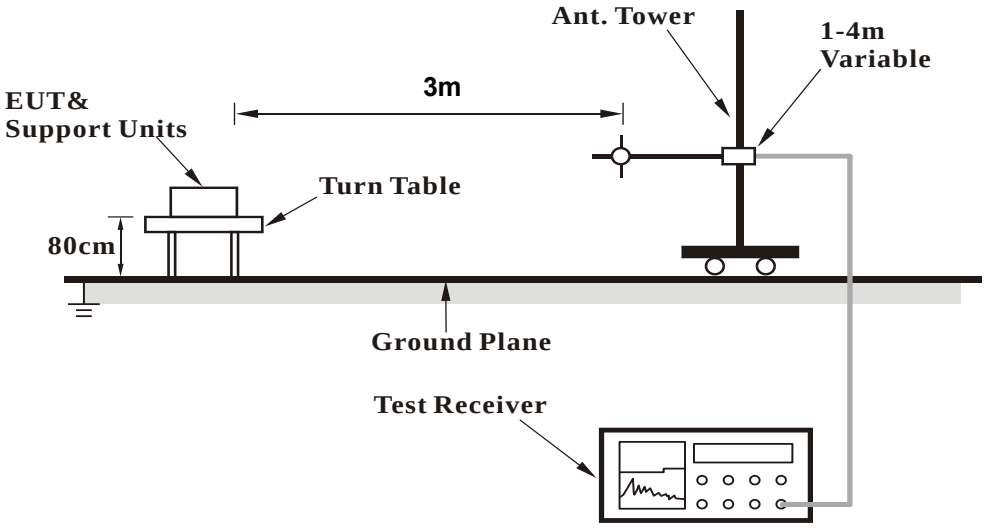
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency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

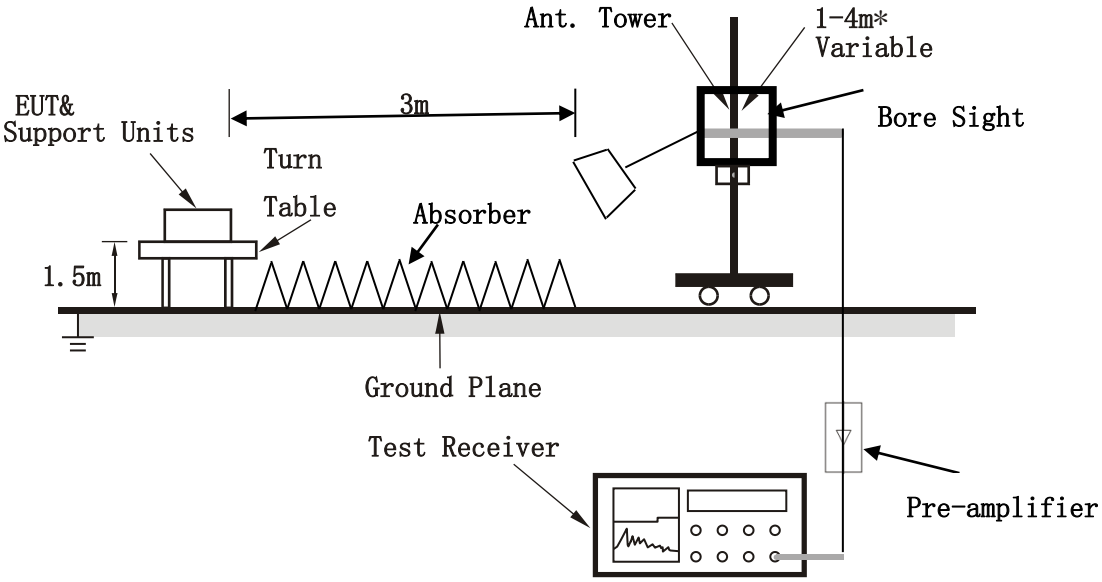
No deviation.

3.1.6 TEST SETUP

< Frequency Range 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

BELOW 1GHz WORST-CASE DATA:

30 MHz – 1GHz data:

Band 2

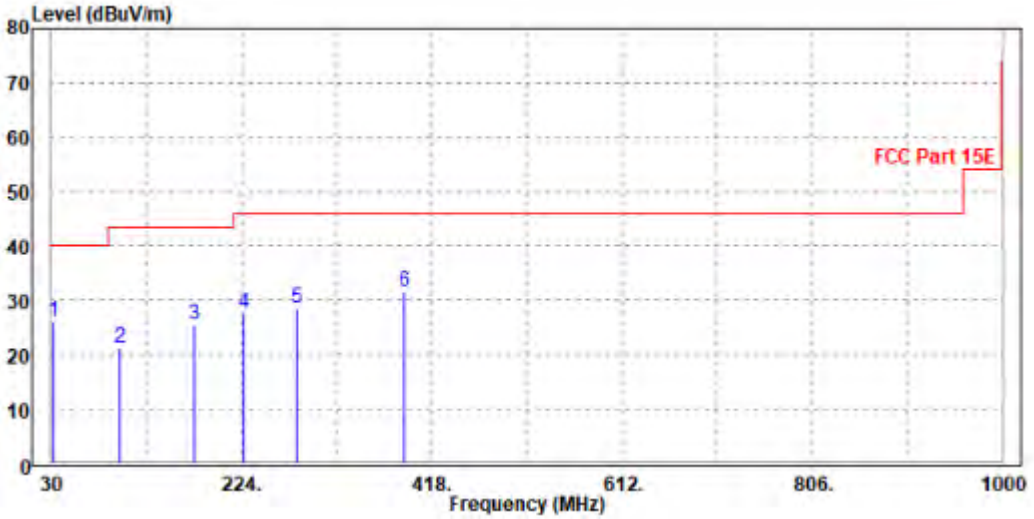
802.11n (20MHz)

CHANNEL	TX Channel 52	**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
31.94	26.05	42.74	40	-13.95	19.93	0.8	37.42	100	0	QP
100.81	21.19	47.99	43.5	-22.31	9.04	1.32	37.16	100	0	QP
176.47	25.64	50.57	43.5	-17.86	10.04	1.69	36.66	100	0	QP
225.94	27.53	50.39	46	-18.47	11.82	1.92	36.6	100	0	QP
281.23	28.58	49.58	46	-17.42	13.56	2.15	36.71	100	0	QP
389.87	31.49	49.25	46	-14.51	16.48	2.58	36.82	100	0	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.

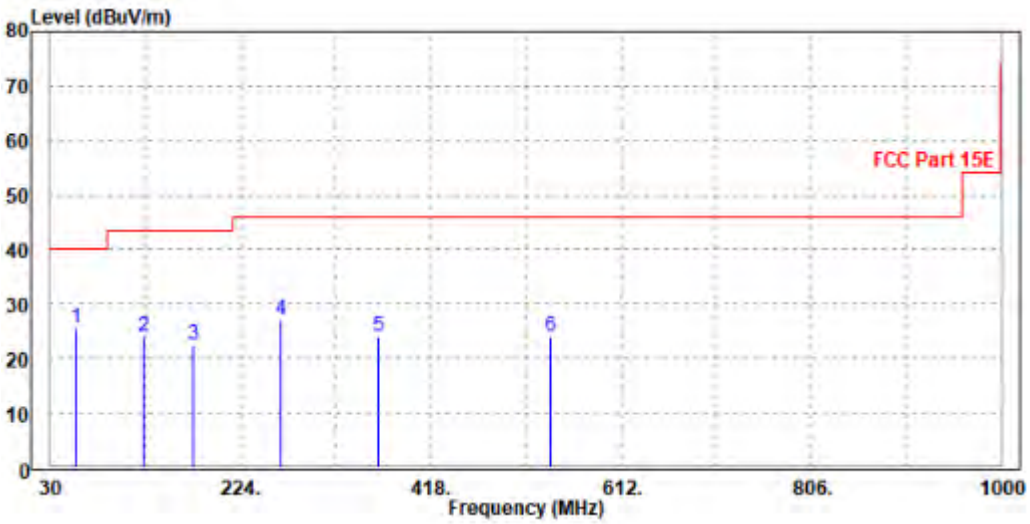


CHANNEL	Channel 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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
56.19	25.54	54.13	40	-14.46	7.7	1.04	37.33	200	0	QP
125.06	24.08	52.25	43.5	-19.42	7.4	1.47	37.04	200	0	QP
176.47	22.6	47.53	43.5	-20.9	10.04	1.69	36.66	200	0	QP
264.74	26.99	48.05	46	-19.01	13.53	2.09	36.68	200	0	QP
365.62	24.17	42.79	46	-21.83	15.7	2.48	36.8	200	0	QP
540.22	24.08	38.69	46	-21.92	19.48	3.06	37.15	200	0	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	56.78	59.09	74	-17.22	34.52	9.52	46.35	140	280	Peak
5150	50.49	52.8	54	-3.51	34.52	9.52	46.35	140	280	Average
5180	103.26	105.49	–	–	34.54	9.58	46.35	140	280	Peak
5180	94.45	96.68	–	–	34.54	9.58	46.35	140	280	Average
5350	53.49	55.17	74	-20.51	34.68	9.94	46.3	140	280	Peak
5350	47.47	49.15	54	-6.53	34.68	9.94	46.3	140	280	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	56.06	58.29	74	-17.94	34.6	9.52	46.35	100	160	Peak
5150	49.76	51.99	54	-4.24	34.6	9.52	46.35	100	160	Average
5180	96.01	98.18	–	–	34.6	9.58	46.35	100	160	Peak
5180	88.86	91.03	–	–	34.6	9.58	46.35	100	160	Average
5350	53.51	55.27	74	-20.49	34.6	9.94	46.3	100	160	Peak
5350	48.01	49.77	54	-5.99	34.6	9.94	46.3	100	160	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.29	58.6	74	-17.71	34.52	9.52	46.35	140	280	Peak
5150	50.15	52.46	54	-3.85	34.52	9.52	46.35	140	280	Average
5200	107.35	109.51	–	–	34.56	9.62	46.34	140	280	Peak
5200	99.24	101.4	–	–	34.56	9.62	46.34	140	280	Average
5350	56.55	58.23	74	-17.45	34.68	9.94	46.3	140	280	Peak
5350	48.68	50.36	54	-5.32	34.68	9.94	46.3	140	280	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	56.2	58.43	74	-17.8	34.6	9.52	46.35	100	160	Peak
5150	49.54	51.77	54	-4.46	34.6	9.52	46.35	100	160	Average
5200	102.9	105.02	–	–	34.6	9.62	46.34	100	160	Peak
5200	93.46	95.58	–	–	34.6	9.62	46.34	100	160	Average
5350	56.67	58.43	74	-17.33	34.6	9.94	46.3	100	160	Peak
5350	48.63	50.39	54	-5.37	34.6	9.94	46.3	100	160	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.25	59.56	74	-16.75	34.52	9.52	46.35	160	280	Peak
5150	49.9	52.21	54	-4.1	34.52	9.52	46.35	160	280	Average
5240	109	111.03	–	–	34.59	9.71	46.33	160	280	Peak
5240	101.24	103.27	–	–	34.59	9.71	46.33	160	280	Average
5350	56.32	58	74	-17.68	34.68	9.94	46.3	160	280	Peak
5350	48.27	49.95	54	-5.73	34.68	9.94	46.3	160	280	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	55.6	57.83	74	-18.4	34.6	9.52	46.35	100	160	Peak
5150	49.29	51.52	54	-4.71	34.6	9.52	46.35	100	160	Average
5240	102.8	104.82	–	–	34.6	9.71	46.33	100	160	Peak
5240	93.85	95.87	–	–	34.6	9.71	46.33	100	160	Average
5350	56.13	57.89	74	-17.87	34.6	9.94	46.3	100	160	Peak
5350	48.46	50.22	54	-5.54	34.6	9.94	46.3	100	160	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) 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	57.84	60.15	74	-16.16	34.52	9.52	46.35	140	280	Peak
5150	50.25	52.56	54	-3.75	34.52	9.52	46.35	140	280	Average
5180	101.07	103.3	–	–	34.54	9.58	46.35	140	280	Peak
5180	91.62	93.85	–	–	34.54	9.58	46.35	140	280	Average
5350	53.21	54.89	74	-20.79	34.68	9.94	46.3	140	280	Peak
5350	47.37	49.05	54	-6.63	34.68	9.94	46.3	140	280	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	54.88	57.11	74	-19.12	34.6	9.52	46.35	105	160	Peak
5150	49.91	52.14	54	-4.09	34.6	9.52	46.35	105	160	Average
5180	95.47	97.64	–	–	34.6	9.58	46.35	105	160	Peak
5180	88.23	90.4	–	–	34.6	9.58	46.35	105	160	Average
5350	56.49	58.25	74	-17.51	34.6	9.94	46.3	105	160	Peak
5350	46.81	48.57	54	-7.19	34.6	9.94	46.3	105	160	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.16	57.47	74	-18.84	34.52	9.52	46.35	160	280	Peak
5150	49.13	51.44	54	-4.87	34.52	9.52	46.35	160	280	Average
5200	106.03	108.19	–	–	34.56	9.62	46.34	160	280	Peak
5200	98.72	100.88	–	–	34.56	9.62	46.34	160	280	Average
5350	53.43	55.11	74	-20.57	34.68	9.94	46.3	160	280	Peak
5350	47.66	49.34	54	-6.34	34.68	9.94	46.3	160	280	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	100	160	Peak
5150	48.53	50.76	54	-5.47	34.6	9.52	46.35	100	160	Average
5200	101.78	103.9	–	–	34.6	9.62	46.34	100	160	Peak
5200	92.98	95.1	–	–	34.6	9.62	46.34	100	160	Average
5350	53.61	55.37	74	-20.39	34.6	9.94	46.3	100	160	Peak
5350	46.85	48.61	54	-7.15	34.6	9.94	46.3	100	160	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.28	57.59	74	-18.72	34.52	9.52	46.35	160	280	Peak
5150	48.8	51.11	54	-5.2	34.52	9.52	46.35	160	280	Average
5240	108.81	110.84	–	–	34.59	9.71	46.33	160	280	Peak
5240	101.2	103.23	–	–	34.59	9.71	46.33	160	280	Average
5350	54.61	56.29	74	-19.39	34.68	9.94	46.3	160	280	Peak
5350	47.51	49.19	54	-6.49	34.68	9.94	46.3	160	280	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	54.77	57	74	-19.23	34.6	9.52	46.35	100	160	Peak
5150	49.19	51.42	54	-4.81	34.6	9.52	46.35	100	160	Average
5240	102.54	104.56	–	–	34.6	9.71	46.33	100	160	Peak
5240	95.2	97.22	–	–	34.6	9.71	46.33	100	160	Average
5350	55.92	57.68	74	-18.08	34.6	9.94	46.3	100	160	Peak
5350	47.71	49.47	54	-6.29	34.6	9.94	46.3	100	160	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	57.17	59.48	74	-16.83	34.52	9.52	46.35	115	275	Peak
5150	50.99	53.3	54	-3.01	34.52	9.52	46.35	115	275	Average
5190	92.39	94.58	–	–	34.55	9.6	46.34	115	275	Peak
5190	85.98	88.17	–	–	34.55	9.6	46.34	115	275	Average
5350	54.96	56.64	74	-19.04	34.68	9.94	46.3	115	275	Peak
5350	48.53	50.21	54	-5.47	34.68	9.94	46.3	115	275	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	56.51	58.74	74	-17.49	34.6	9.52	46.35	100	170	Peak
5150	48.05	50.28	54	-5.95	34.6	9.52	46.35	100	170	Average
5190	91.89	94.03	–	–	34.6	9.6	46.34	100	170	Peak
5190	85.69	87.83	–	–	34.6	9.6	46.34	100	170	Average
5350	53.26	55.02	74	-20.74	34.6	9.94	46.3	100	170	Peak
5350	46.48	48.24	54	-7.52	34.6	9.94	46.3	100	170	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.7	58.01	74	-18.3	34.52	9.52	46.35	140	280	Peak
5150	50.8	53.11	54	-3.2	34.52	9.52	46.35	140	280	Average
5230	104.5	106.56	–	–	34.58	9.69	46.33	140	280	Peak
5230	97.67	99.73	–	–	34.58	9.69	46.33	140	280	Average
5350	53.85	55.53	74	-20.15	34.68	9.94	46.3	140	280	Peak
5350	48.36	50.04	54	-5.64	34.68	9.94	46.3	140	280	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	56.37	58.6	74	-17.63	34.6	9.52	46.35	100	160	Peak
5150	50.18	52.41	54	-3.82	34.6	9.52	46.35	100	160	Average
5230	98.81	100.85	–	–	34.6	9.69	46.33	100	160	Peak
5230	91.3	93.34	–	–	34.6	9.69	46.33	100	160	Average
5350	52.41	54.17	74	-21.59	34.6	9.94	46.3	100	160	Peak
5350	47.47	49.23	54	-6.53	34.6	9.94	46.3	100	160	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) 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	56.04	58.35	74	-17.96	34.52	9.52	46.35	160	280	Peak
5150	50.95	53.26	54	-3.05	34.52	9.52	46.35	160	280	Average
5180	102.24	104.47	–	–	34.54	9.58	46.35	160	280	Peak
5180	93.76	95.99	–	–	34.54	9.58	46.35	160	280	Average
5350	55.44	57.12	74	-18.56	34.68	9.94	46.3	160	280	Peak
5350	48.08	49.76	54	-5.92	34.68	9.94	46.3	160	280	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	54.97	57.2	74	-19.03	34.6	9.52	46.35	110	160	Peak
5150	49.2	51.43	54	-4.8	34.6	9.52	46.35	110	160	Average
5180	96.31	98.48	–	–	34.6	9.58	46.35	110	160	Peak
5180	87.01	89.18	–	–	34.6	9.58	46.35	110	160	Average
5350	53.37	55.13	74	-20.63	34.6	9.94	46.3	110	160	Peak
5350	48.38	50.14	54	-5.62	34.6	9.94	46.3	110	160	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.55	56.86	74	-19.45	34.52	9.52	46.35	160	280	Peak
5150	49.52	51.83	54	-4.48	34.52	9.52	46.35	160	280	Average
5200	105.72	107.88	–	–	34.56	9.62	46.34	160	280	Peak
5200	98.55	100.71	–	–	34.56	9.62	46.34	160	280	Average
5350	54.09	55.77	74	-19.91	34.68	9.94	46.3	160	280	Peak
5350	47.96	49.64	54	-6.04	34.68	9.94	46.3	160	280	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	55.17	57.4	74	-18.83	34.6	9.52	46.35	105	160	Peak
5150	48.78	51.01	54	-5.22	34.6	9.52	46.35	105	160	Average
5200	101.51	103.63	–	–	34.6	9.62	46.34	105	160	Peak
5200	94.34	96.46	–	–	34.6	9.62	46.34	105	160	Average
5350	54.29	56.05	74	-19.71	34.6	9.94	46.3	105	160	Peak
5350	47.63	49.39	54	-6.37	34.6	9.94	46.3	105	160	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	54.36	56.67	74	-19.64	34.52	9.52	46.35	160	280	Peak
5150	48.82	51.13	54	-5.18	34.52	9.52	46.35	160	280	Average
5240	107.9	109.93	–	–	34.59	9.71	46.33	160	280	Peak
5240	100.56	102.59	–	–	34.59	9.71	46.33	160	280	Average
5350	53.81	55.49	74	-20.19	34.68	9.94	46.3	160	280	Peak
5350	47.25	48.93	54	-6.75	34.68	9.94	46.3	160	280	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	53.81	56.04	74	-20.19	34.6	9.52	46.35	105	160	Peak
5150	48.7	50.93	54	-5.3	34.6	9.52	46.35	105	160	Average
5240	103.1	105.12	–	–	34.6	9.71	46.33	105	160	Peak
5240	96.15	98.17	–	–	34.6	9.71	46.33	105	160	Average
5350	53.59	55.35	74	-20.41	34.6	9.94	46.3	105	160	Peak
5350	47.2	48.96	54	-6.8	34.6	9.94	46.3	105	160	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)
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	160	280	Peak
5150	50.7	53.01	54	-3.3	34.52	9.52	46.35	160	280	Average
5190	93.9	96.09	–	–	34.55	9.6	46.34	160	280	Peak
5190	86.01	88.2	–	–	34.55	9.6	46.34	160	280	Average
5350	53.46	55.14	74	-20.54	34.68	9.94	46.3	160	280	Peak
5350	46.7	48.38	54	-7.3	34.68	9.94	46.3	160	280	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	160	Peak
5150	49.82	52.05	54	-4.18	34.6	9.52	46.35	105	160	Average
5190	87.89	90.03	–	–	34.6	9.6	46.34	105	160	Peak
5190	82.29	84.43	–	–	34.6	9.6	46.34	105	160	Average
5350	54	55.76	74	-20	34.6	9.94	46.3	105	160	Peak
5350	47.9	49.66	54	-6.1	34.6	9.94	46.3	105	160	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.83	59.14	74	-17.17	34.52	9.52	46.35	160	280	Peak
5150	50.49	52.8	54	-3.51	34.52	9.52	46.35	160	280	Average
5230	104.36	106.42	–	–	34.58	9.69	46.33	160	280	Peak
5230	98.49	100.55	–	–	34.58	9.69	46.33	160	280	Average
5350	53.4	55.08	74	-20.6	34.68	9.94	46.3	160	280	Peak
5350	48.76	50.44	54	-5.24	34.68	9.94	46.3	160	280	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	54.85	57.08	74	-19.15	34.6	9.52	46.35	105	160	Peak
5150	49	51.23	54	-5	34.6	9.52	46.35	105	160	Average
5230	98.83	100.87	–	–	34.6	9.69	46.33	105	160	Peak
5230	92.74	94.78	–	–	34.6	9.69	46.33	105	160	Average
5350	54.05	55.81	74	-19.95	34.6	9.94	46.3	105	160	Peak
5350	47.75	49.51	54	-6.25	34.6	9.94	46.3	105	160	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	55.23	57.54	74	-18.77	34.52	9.52	46.35	160	280	Peak
5150	50.98	53.29	54	-3.02	34.52	9.52	46.35	160	280	Average
5210	89.86	91.99	–	–	34.57	9.64	46.34	160	280	Peak
5210	83	85.13	–	–	34.57	9.64	46.34	160	280	Peak
5350	52.36	54.04	74	-21.64	34.68	9.94	46.3	160	280	Peak
5350	47.68	49.36	54	-6.32	34.68	9.94	46.3	160	280	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	53.14	55.37	74	-20.86	34.6	9.52	46.35	105	160	Peak
5150	49.64	51.87	54	-4.36	34.6	9.52	46.35	105	160	Average
5210	83.5	85.6	–	–	34.6	9.64	46.34	105	160	Peak
5210	77.65	79.75	–	–	34.6	9.64	46.34	105	160	Average
5350	50.4	52.16	74	-23.6	34.6	9.94	46.3	105	160	Peak
5350	46.45	48.21	54	-7.55	34.6	9.94	46.3	105	160	Average

REMARKS:

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

Band 2

802.11a

CHANNEL	TX Channel 52	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	54.34	56.65	74	-19.66	34.52	9.52	46.35	155	275	Peak
5150	48.81	51.12	54	-5.19	34.52	9.52	46.35	155	275	Average
5260	107.29	109.25	–	–	34.61	9.75	46.32	155	275	Peak
5260	98.33	100.29	–	–	34.61	9.75	46.32	155	275	Average
5350	52.35	54.03	74	-21.65	34.68	9.94	46.3	155	275	Peak
5350	48.02	49.7	54	-5.98	34.68	9.94	46.3	155	275	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	53.53	55.76	74	-20.47	34.6	9.52	46.35	100	160	Peak
5150	48.39	50.62	54	-5.61	34.6	9.52	46.35	100	160	Average
5260	100.73	102.7	–	–	34.6	9.75	46.32	100	160	Peak
5260	91.21	93.18	–	–	34.6	9.75	46.32	100	160	Average
5350	52.73	54.49	74	-21.27	34.6	9.94	46.3	100	160	Peak
5350	47.61	49.37	54	-6.39	34.6	9.94	46.3	100	160	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.42	57.73	74	-18.58	34.52	9.52	46.35	160	275	Peak
5150	49.44	51.75	54	-4.56	34.52	9.52	46.35	160	275	Average
5300	106.56	108.4	–	–	34.64	9.83	46.31	160	275	Peak
5300	98.9	100.74	–	–	34.64	9.83	46.31	160	275	Average
5350	54.2	55.88	74	-19.8	34.68	9.94	46.3	160	275	Peak
5350	48.22	49.9	54	-5.78	34.68	9.94	46.3	160	275	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	54.35	56.58	74	-19.65	34.6	9.52	46.35	100	160	Peak
5150	49.27	51.5	54	-4.73	34.6	9.52	46.35	100	160	Average
5300	99.19	101.07	–	–	34.6	9.83	46.31	100	160	Peak
5300	92.79	94.67	–	–	34.6	9.83	46.31	100	160	Average
5350	53.82	55.58	74	-20.18	34.6	9.94	46.3	100	160	Peak
5350	46.61	48.37	54	-7.39	34.6	9.94	46.3	100	160	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54	56.31	74	-20	34.52	9.52	46.35	140	275	Peak
5150	48.11	50.42	54	-5.89	34.52	9.52	46.35	140	275	Average
5320	104.1	105.86	–	–	34.66	9.88	46.3	140	275	Peak
5320	96.34	98.1	–	–	34.66	9.88	46.3	140	275	Average
5350	55.57	57.25	74	-18.43	34.68	9.94	46.3	140	275	Peak
5350	48.18	49.86	54	-5.82	34.68	9.94	46.3	140	275	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	54.42	56.65	74	-19.58	34.6	9.52	46.35	100	160	Peak
5150	48.37	50.6	54	-5.63	34.6	9.52	46.35	100	160	Average
5320	96.88	98.7	–	–	34.6	9.88	46.3	100	160	Peak
5320	89.08	90.9	–	–	34.6	9.88	46.3	100	160	Average
5350	53.57	55.33	74	-20.43	34.6	9.94	46.3	100	160	Peak
5350	47.25	49.01	54	-6.75	34.6	9.94	46.3	100	160	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) 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	53.74	56.05	74	-20.26	34.52	9.52	46.35	175	275	Peak
5150	48.61	50.92	54	-5.39	34.52	9.52	46.35	175	275	Average
5260	109	110.96	–	–	34.61	9.75	46.32	175	275	Peak
5260	102.1	104.06	–	–	34.61	9.75	46.32	175	275	Average
5350	53.75	55.43	74	-20.25	34.68	9.94	46.3	175	275	Peak
5350	47.01	48.69	54	-6.99	34.68	9.94	46.3	175	275	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	54.02	56.25	74	-19.98	34.6	9.52	46.35	100	170	Peak
5150	48.78	51.01	54	-5.22	34.6	9.52	46.35	100	170	Average
5260	102.47	104.44	–	–	34.6	9.75	46.32	100	170	Peak
5260	95.55	97.52	–	–	34.6	9.75	46.32	100	170	Average
5350	54.66	56.42	74	-19.34	34.6	9.94	46.3	100	170	Peak
5350	48.14	49.9	54	-5.86	34.6	9.94	46.3	100	170	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.33	55.64	74	-20.67	34.52	9.52	46.35	175	275	Peak
5150	48.21	50.52	54	-5.79	34.52	9.52	46.35	175	275	Average
5300	108.38	110.22	–	–	34.64	9.83	46.31	175	275	Peak
5300	101.22	103.06	–	–	34.64	9.83	46.31	175	275	Average
5350	54.95	56.63	74	-19.05	34.68	9.94	46.3	175	275	Peak
5350	47.94	49.62	54	-6.06	34.68	9.94	46.3	175	275	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	150	65	Peak
5150	48.2	50.43	54	-5.8	34.6	9.52	46.35	150	65	Average
5300	103.29	105.17	–	–	34.6	9.83	46.31	150	65	Peak
5300	96.73	98.61	–	–	34.6	9.83	46.31	150	65	Average
5350	54.31	56.07	74	-19.69	34.6	9.94	46.3	150	65	Peak
5350	47.21	48.97	54	-6.79	34.6	9.94	46.3	150	65	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54	56.31	74	-20	34.52	9.52	46.35	170	275	Peak
5150	48.25	50.56	54	-5.75	34.52	9.52	46.35	170	275	Average
5320	105.62	107.38	–	–	34.66	9.88	46.3	170	275	Peak
5320	98.2	99.96	–	–	34.66	9.88	46.3	170	275	Average
5350	56.91	58.59	74	-17.09	34.68	9.94	46.3	170	275	Peak
5350	48.64	50.32	54	-5.36	34.68	9.94	46.3	170	275	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	53.67	55.9	74	-20.33	34.6	9.52	46.35	155	65	Peak
5150	48.06	50.29	54	-5.94	34.6	9.52	46.35	155	65	Average
5320	100.55	102.37	–	–	34.6	9.88	46.3	155	65	Peak
5320	53.84	55.66	–	–	34.6	9.88	46.3	155	65	Average
5350	55.64	57.4	74	-18.36	34.6	9.94	46.3	155	65	Peak
5350	47.49	49.25	54	-6.51	34.6	9.94	46.3	155	65	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	55.49	57.8	74	-18.51	34.52	9.52	46.35	160	275	Peak
5150	48.34	50.65	54	-5.66	34.52	9.52	46.35	160	275	Average
5270	102.73	104.66	–	–	34.62	9.77	46.32	160	275	Peak
5270	97.07	99	–	–	34.62	9.77	46.32	160	275	Average
5350	57.28	58.96	74	-16.72	34.68	9.94	46.3	160	275	Peak
5350	47.58	49.26	54	-6.42	34.68	9.94	46.3	160	275	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	55.26	57.49	74	-18.74	34.6	9.52	46.35	160	65	Peak
5150	48. 00	50.23	54	-6.00	34.6	9.52	46.35	160	65	Average
5270	98.36	100.31	–	–	34.6	9.77	46.32	160	65	Peak
5270	92.43	94.38	–	–	34.6	9.77	46.32	160	65	Average
5350	53.31	55.07	74	-20.69	34.6	9.94	46.3	160	65	Peak
5350	47.87	49.63	54	-6.13	34.6	9.94	46.3	160	65	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.03	55.34	74	-20.97	34.52	9.52	46.35	170	275	Peak
5150	48.56	50.87	54	-5.44	34.52	9.52	46.35	170	275	Average
5310	97.52	99.33	-	-	34.65	9.85	46.31	170	275	Peak
5310	91.55	93.36	-	-	34.65	9.85	46.31	170	275	Average
5350	56.44	58.12	74	-17.56	34.68	9.94	46.3	170	275	Peak
5350	48.35	50.03	54	-5.65	34.68	9.94	46.3	170	275	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	53.23	55.46	74	-20.77	34.6	9.52	46.35	160	65	Peak
5150	48.86	51.09	54	-5.14	34.6	9.52	46.35	160	65	Average
5310	92.47	94.33	-	-	34.6	9.85	46.31	160	65	Peak
5310	86.24	88.1	-	-	34.6	9.85	46.31	160	65	Average
5350	53.84	55.6	74	-20.16	34.6	9.94	46.3	160	65	Peak
5350	47.48	49.24	54	-6.52	34.6	9.94	46.3	160	65	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) 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	54.41	56.72	74	-19.59	34.52	9.52	46.35	170	275	Peak
5150	48.05	50.36	54	-5.95	34.52	9.52	46.35	170	275	Average
5260	107.88	109.84	-	-	34.61	9.75	46.32	170	275	Peak
5260	100.74	102.7	-	-	34.61	9.75	46.32	170	275	Average
5350	54.41	56.09	74	-19.59	34.68	9.94	46.3	170	275	Peak
5350	47.37	49.05	54	-6.63	34.68	9.94	46.3	170	275	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	54.97	57.2	74	-19.03	34.6	9.52	46.35	155	65	Peak
5150	48.39	50.62	54	-5.61	34.6	9.52	46.35	155	65	Average
5260	104.1	106.07	-	-	34.6	9.75	46.32	155	65	Peak
5260	97.01	98.98	-	-	34.6	9.75	46.32	155	65	Average
5350	53.87	55.63	74	-20.13	34.6	9.94	46.3	155	65	Peak
5350	47.23	48.99	54	-6.77	34.6	9.94	46.3	155	65	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.21	56.52	74	-19.79	34.52	9.52	46.35	175	275	Peak
5150	47.44	49.75	54	-6.56	34.52	9.52	46.35	175	275	Average
5300	107.52	109.36	-	-	34.64	9.83	46.31	175	275	Peak
5300	101.29	103.13	-	-	34.64	9.83	46.31	175	275	Average
5350	54.61	56.29	74	-19.39	34.68	9.94	46.3	175	275	Peak
5350	48	49.68	54	-6	34.68	9.94	46.3	175	275	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	160	65	Peak
5150	47.87	50.1	54	-6.13	34.6	9.52	46.35	160	65	Average
5300	102.68	104.56	-	-	34.6	9.83	46.31	160	65	Peak
5300	95.84	97.72	-	-	34.6	9.83	46.31	160	65	Average
5350	53.31	55.07	74	-20.69	34.6	9.94	46.3	160	65	Peak
5350	47.66	49.42	54	-6.34	34.6	9.94	46.3	160	65	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.9	57.21	74	-19.1	34.52	9.52	46.35	175	275	Peak
5150	48.36	50.67	54	-5.64	34.52	9.52	46.35	175	275	Average
5320	105.36	107.12	-	-	34.66	9.88	46.3	175	275	Peak
5320	98.4	100.16	-	-	34.66	9.88	46.3	175	275	Average
5350	57.75	59.43	74	-16.25	34.68	9.94	46.3	175	275	Peak
5350	49.57	51.25	54	-4.43	34.68	9.94	46.3	175	275	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	53.82	56.05	74	-20.18	34.6	9.52	46.35	170	65	Peak
5150	47.97	50.2	54	-6.03	34.6	9.52	46.35	170	65	Average
5320	100.36	102.18	-	-	34.6	9.88	46.3	170	65	Peak
5320	92.81	94.63	-	-	34.6	9.88	46.3	170	65	Average
5350	54.13	55.89	74	-19.87	34.6	9.94	46.3	170	65	Peak
5350	47.88	49.64	54	-6.12	34.6	9.94	46.3	170	65	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	53.69	56	74	-20.31	34.52	9.52	46.35	175	275	Peak
5150	48.84	51.15	54	-5.16	34.52	9.52	46.35	175	275	Average
5270	102.77	104.7	-	-	34.62	9.77	46.32	175	275	Peak
5270	97.5	99.43	-	-	34.62	9.77	46.32	175	275	Average
5350	55.22	56.9	74	-18.78	34.68	9.94	46.3	175	275	Peak
5350	48.54	50.22	54	-5.46	34.68	9.94	46.3	175	275	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	53.4	55.63	74	-20.6	34.6	9.52	46.35	175	65	Peak
5150	48.76	50.99	54	-5.24	34.6	9.52	46.35	175	65	Average
5270	98.16	100.11	-	-	34.6	9.77	46.32	175	65	Peak
5270	92.6	94.55	-	-	34.6	9.77	46.32	175	65	Average
5350	53.85	55.61	74	-20.15	34.6	9.94	46.3	175	65	Peak
5350	48.29	50.05	54	-5.71	34.6	9.94	46.3	175	65	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.94	55.25	74	-21.06	34.52	9.52	46.35	140	275	Peak
5150	47.79	50.1	54	-6.21	34.52	9.52	46.35	140	275	Average
5310	98.71	100.52	-	-	34.65	9.85	46.31	140	275	Peak
5310	93.45	95.26	-	-	34.65	9.85	46.31	140	275	Average
5350	56.78	58.46	74	-17.22	34.68	9.94	46.3	140	275	Peak
5350	50.94	52.62	54	-3.06	34.68	9.94	46.3	140	275	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	52.98	55.21	74	-21.02	34.6	9.52	46.35	170	65	Peak
5150	47.97	50.2	54	-6.03	34.6	9.52	46.35	170	65	Average
5310	93.5	95.36	-	-	34.6	9.85	46.31	170	65	Peak
5310	88	89.86	-	-	34.6	9.85	46.31	170	65	Average
5350	54.76	56.52	74	-19.24	34.6	9.94	46.3	170	65	Peak
5350	48.9	50.66	54	-5.1	34.6	9.94	46.3	170	65	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	53.93	56.24	74	-20.07	34.52	9.52	46.35	175	275	Peak
5150	48.83	51.14	54	-5.17	34.52	9.52	46.35	175	275	Average
5290	95.25	97.12	-	-	34.63	9.81	46.31	175	275	Peak
5290	90.4	92.27	-	-	34.63	9.81	46.31	175	275	Average
5350	57.92	59.6	74	-16.08	34.68	9.94	46.3	175	275	Peak
5350	50.6	52.28	54	-3.4	34.68	9.94	46.3	175	275	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	53.76	55.99	74	-20.24	34.6	9.52	46.35	175	65	Peak
5150	48.75	50.98	54	-5.25	34.6	9.52	46.35	175	65	Average
5290	90.19	92.09	-	-	34.6	9.81	46.31	175	65	Peak
5290	85.34	87.24	-	-	34.6	9.81	46.31	175	65	Average
5350	53.69	55.45	74	-20.31	34.6	9.94	46.3	175	65	Peak
5350	48.83	50.59	54	-5.17	34.6	9.94	46.3	175	65	Average

REMARKS:

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

Band 3

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	55.42	56.74	74	-18.58	34.77	10.17	46.26	135	280	Peak
5460	48.41	49.73	54	-5.59	34.77	10.17	46.26	135	280	Average
5470	55.65	56.94	68.2	-12.55	34.78	10.19	46.26	135	280	Peak
5500	102.69	103.88	-	-	34.8	10.26	46.25	135	280	Peak
5500	96.29	97.48	-	-	34.8	10.26	46.25	135	280	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	53.83	55.32	74	-20.17	34.6	10.17	46.26	105	155	Peak
5460	47.99	49.48	54	-6.01	34.6	10.17	46.26	105	155	Average
5470	54.59	56.06	68.2	-13.61	34.6	10.19	46.26	105	155	Peak
5500	95.82	97.21	-	-	34.6	10.26	46.25	105	155	Peak
5500	87.95	89.34	-	-	34.6	10.26	46.25	105	155	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	55.92	57.24	74	-18.08	34.77	10.17	46.26	135	280	Peak
5460	47.97	49.29	54	-6.03	34.77	10.17	46.26	135	280	Average
5470	53.04	54.33	68.2	-15.16	34.78	10.19	46.26	135	280	Peak
5580	102.15	102.89	-	-	34.9	10.59	46.23	135	280	Peak
5580	95.25	95.99	-	-	34.9	10.59	46.23	135	280	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	54.55	56.04	74	-19.45	34.6	10.17	46.26	100	155	Peak
5460	47.34	48.83	54	-6.66	34.6	10.17	46.26	100	155	Average
5470	54.27	55.74	68.2	-13.93	34.6	10.19	46.26	100	155	Peak
5580	95.56	96.5	-	-	34.7	10.59	46.23	100	155	Peak
5580	88.4	89.34	-	-	34.7	10.59	46.23	100	155	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	103.1	103.16	-	-	35.04	11.09	46.19	135	280	Peak
5700	95.76	95.82	-	-	35.04	11.09	46.19	135	280	Average
5725	59.48	59.4	68.2	-8.72	35.07	11.2	46.19	135	280	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	97.64	97.9	-	-	34.84	11.09	46.19	100	155	Peak
5700	91.27	91.53	-	-	34.84	11.09	46.19	100	155	Average
5725	56.25	56.37	68.2	-11.95	34.87	11.2	46.19	100	155	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	53.25	54.54	74	-20.75	34.78	10.19	46.26	135	280	Peak
5720	105.45	105.4	-	-	35.06	11.18	46.19	135	280	Peak
5720	98.89	98.84	-	-	35.06	11.18	46.19	135	280	Average
5850	57.69	56.9	68.2	-10.51	35.22	11.72	46.15	135	280	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	52.91	54.38	74	-21.09	34.6	10.19	46.26	100	155	Peak
5720	101.12	101.27	-	-	34.86	11.18	46.19	100	155	Peak
5720	94.05	94.2	-	-	34.86	11.18	46.19	100	155	Average
5850	57.11	56.52	68.2	-11.09	35.02	11.72	46.15	100	155	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) 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	53.83	55.15	74	-20.17	34.77	10.17	46.26	100	280	Peak
5460	48.34	49.66	54	-5.66	34.77	10.17	46.26	100	280	Average
5470	57.05	58.34	68.2	-11.15	34.78	10.19	46.26	100	280	Peak
5500	101.77	102.96	-	-	34.8	10.26	46.25	100	280	Peak
5500	94.68	95.87	-	-	34.8	10.26	46.25	100	280	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	54.17	55.66	74	-19.83	34.6	10.17	46.26	100	155	Peak
5460	47.66	49.15	54	-6.34	34.6	10.17	46.26	100	155	Average
5470	53.95	55.42	74	-20.05	34.6	10.19	46.26	100	155	Peak
5500	94.78	96.17	-	-	34.6	10.26	46.25	100	155	Peak
5500	87.68	89.07	-	-	34.6	10.26	46.25	100	155	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	54.52	55.84	74	-19.48	34.77	10.17	46.26	130	280	Peak
5460	47.5	48.82	54	-6.5	34.77	10.17	46.26	130	280	Average
5470	55.25	56.54	68.2	-12.95	34.78	10.19	46.26	130	280	Peak
5580	99.74	100.48	-	-	34.9	10.59	46.23	130	280	Peak
5580	92.39	93.13	-	-	34.9	10.59	46.23	130	280	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	54.45	55.94	74	-19.55	34.6	10.17	46.26	100	165	Peak
5460	47.45	48.94	54	-6.55	34.6	10.17	46.26	100	165	Average
5470	57.13	58.6	74	-16.87	34.6	10.19	46.26	100	165	Peak
5580	96.3	97.24	-	-	34.7	10.59	46.23	100	165	Peak
5580	87.6	88.54	-	-	34.7	10.59	46.23	100	165	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	101.45	101.51	-	-	35.04	11.09	46.19	115	280	Peak
5700	95.53	95.59	-	-	35.04	11.09	46.19	115	280	Average
5725	58.03	57.95	68.2	-10.17	35.07	11.2	46.19	115	280	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	97.04	97.3	-	-	34.84	11.09	46.19	110	160	Peak
5700	90.56	90.82	-	-	34.84	11.09	46.19	110	160	Average
5725	57.22	57.34	74	-16.78	34.87	11.2	46.19	110	160	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	53.89	55.18	74	-20.11	34.78	10.19	46.26	115	280	Peak
5720	103.42	103.37	-	-	35.06	11.18	46.19	115	280	Peak
5720	97.43	97.38	-	-	35.06	11.18	46.19	115	280	Average
5850	57.41	56.62	68.2	-10.79	35.22	11.72	46.15	115	280	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	53.58	55.05	74	-20.42	34.6	10.19	46.26	115	160	Peak
5720	98.9	99.05	-	-	34.86	11.18	46.19	115	160	Peak
5720	91.82	91.97	-	-	34.86	11.18	46.19	115	160	Average
5850	57.09	56.5	68.2	-11.11	35.02	11.72	46.15	115	160	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)
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	53.95	55.27	74	-20.05	34.77	10.17	46.26	100	270	Peak
5460	47.35	48.67	54	-6.65	34.77	10.17	46.26	100	270	Average
5470	55.53	56.82	68.2	-12.67	34.78	10.19	46.26	100	270	Peak
5510	95.95	97.09	-	-	34.81	10.3	46.25	100	270	Peak
5510	91.58	92.72	-	-	34.81	10.3	46.25	100	270	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	53.84	55.33	74	-20.16	34.6	10.17	46.26	175	230	Peak
5460	48.08	49.57	54	-5.92	34.6	10.17	46.26	175	230	Average
5470	56.88	58.35	68.2	-11.32	34.6	10.19	46.26	175	230	Peak
5510	90.18	91.52	-	-	34.61	10.3	46.25	175	230	Peak
5510	85.07	86.41	-	-	34.61	10.3	46.25	175	230	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	51.9	53.22	74	-22.1	34.77	10.17	46.26	100	270	Peak
5460	47.18	48.5	54	-6.82	34.77	10.17	46.26	100	270	Average
5470	54.9	56.19	68.2	-13.3	34.78	10.19	46.26	100	270	Peak
5550	95.57	96.48	-	-	34.86	10.47	46.24	100	270	Peak
5550	90.58	91.49	-	-	34.86	10.47	46.24	100	270	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	54.9	56.39	74	-19.1	34.6	10.17	46.26	170	225	Peak
5460	47.82	49.31	54	-6.18	34.6	10.17	46.26	170	225	Average
5470	55.4	56.87	68.2	-12.8	34.6	10.19	46.26	170	225	Peak
5550	91.24	92.35	-	-	34.66	10.47	46.24	170	225	Peak
5550	85.54	86.65	-	-	34.66	10.47	46.24	170	225	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	94.84	95.07	-	-	35	10.97	46.2	150	280	Peak
5670	91.59	91.82	-	-	35	10.97	46.2	150	280	Average
5725	56.49	56.41	68.2	-11.71	35.07	11.2	46.19	150	280	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	90.56	90.99	-	-	34.8	10.97	46.2	200	225	Peak
5670	86.12	86.55	-	-	34.8	10.97	46.2	200	225	Average
5725	57.65	57.77	68.2	-10.55	34.87	11.2	46.19	200	225	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	52.95	54.24	74	-21.05	34.78	10.19	46.26	150	280	Peak
5710	98.1	98.1	-	-	35.05	11.14	46.19	150	280	Peak
5710	94.12	94.12	-	-	35.05	11.14	46.19	150	280	Average
5850	57.86	57.07	68.2	-10.34	35.22	11.72	46.15	150	280	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	53.41	54.88	74	-20.59	34.6	10.19	46.26	110	160	Peak
5710	94.21	94.41	-	-	34.85	11.14	46.19	110	160	Peak
5710	89.34	89.54	-	-	34.85	11.14	46.19	110	160	Average
5850	57.47	56.88	68.2	-10.73	35.02	11.72	46.15	110	160	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	53.37	54.69	74	-20.63	34.77	10.17	46.26	100	280	Peak
5460	46.97	48.29	54	-7.03	34.77	10.17	46.26	100	280	Average
5470	55.59	56.88	68.2	-12.61	34.78	10.19	46.26	100	280	Peak
5500	100.98	102.17	-	-	34.8	10.26	46.25	100	280	Peak
5500	94.45	95.64	-	-	34.8	10.26	46.25	100	280	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	54.24	55.73	74	-19.76	34.6	10.17	46.26	110	160	Peak
5460	47.28	48.77	54	-6.72	34.6	10.17	46.26	110	160	Average
5470	53.32	54.79	68.2	-14.88	34.6	10.19	46.26	110	160	Peak
5500	92.94	94.33	-	-	34.6	10.26	46.25	110	160	Peak
5500	86.94	88.33	-	-	34.6	10.26	46.25	110	160	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	53.33	54.65	74	-20.67	34.77	10.17	46.26	200	280	Peak
5460	48.95	50.27	54	-5.05	34.77	10.17	46.26	200	280	Average
5470	53.66	54.95	68.2	-14.54	34.78	10.19	46.26	200	280	Peak
5580	99.94	100.68	-	-	34.9	10.59	46.23	200	280	Peak
5580	92.76	93.5	-	-	34.9	10.59	46.23	200	280	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	53.2	54.69	74	-20.8	34.6	10.17	46.26	110	155	Peak
5460	48.09	49.58	54	-5.91	34.6	10.17	46.26	110	155	Average
5470	53.95	55.42	68.2	-14.25	34.6	10.19	46.26	110	155	Peak
5580	94.44	95.38	-	-	34.7	10.59	46.23	110	155	Peak
5580	87.53	88.47	-	-	34.7	10.59	46.23	110	155	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	101.36	101.42	-	-	35.04	11.09	46.19	195	275	Peak
5700	95.37	95.43	-	-	35.04	11.09	46.19	195	275	Average
5725	56.77	56.69	68.2	-11.43	35.07	11.2	46.19	195	275	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	95.29	95.55	-	-	34.84	11.09	46.19	110	155	Peak
5700	88.93	89.19	-	-	34.84	11.09	46.19	110	155	Average
5725	57.82	57.94	68.2	-10.38	34.87	11.2	46.19	110	155	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	54.23	55.52	74	-19.77	34.78	10.19	46.26	195	275	Peak
5720	103.99	103.94	-	-	35.06	11.18	46.19	195	275	Peak
5720	97.53	97.48	-	-	35.06	11.18	46.19	195	275	Average
5850	58.79	58	68.2	-9.41	35.22	11.72	46.15	195	275	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	55.45	56.92	74	-18.55	34.6	10.19	46.26	100	150	Peak
5720	99.43	99.58	-	-	34.86	11.18	46.19	100	150	Peak
5720	92.26	92.41	-	-	34.86	11.18	46.19	100	150	Average
5850	57.37	56.78	68.2	-10.83	35.02	11.72	46.15	100	150	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	53.52	54.84	74	-20.48	34.77	10.17	46.26	100	275	Peak
5460	48.52	49.84	54	-5.48	34.77	10.17	46.26	100	275	Average
5470	55.59	56.88	68.2	-12.61	34.78	10.19	46.26	100	275	Peak
5510	94.49	95.63	-	-	34.81	10.3	46.25	100	275	Peak
5510	90.57	91.71	-	-	34.81	10.3	46.25	100	275	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	53.68	55.17	74	-20.32	34.6	10.17	46.26	115	70	Peak
5460	48.92	50.41	54	-5.08	34.6	10.17	46.26	115	70	Average
5470	54.63	56.1	68.2	-13.57	34.6	10.19	46.26	115	70	Peak
5510	90.75	92.09	-	-	34.61	10.3	46.25	115	70	Peak
5510	84.75	86.09	-	-	34.61	10.3	46.25	115	70	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	53.1	54.42	74	-20.9	34.77	10.17	46.26	200	275	Peak
5460	47.87	49.19	54	-6.13	34.77	10.17	46.26	200	275	Average
5470	53.79	55.08	68.2	-14.41	34.78	10.19	46.26	200	275	Peak
5550	95.08	95.99	-	-	34.86	10.47	46.24	200	275	Peak
5550	89.4	90.31	-	-	34.86	10.47	46.24	200	275	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	54.98	56.47	74	-19.02	34.6	10.17	46.26	145	70	Peak
5460	47.57	49.06	54	-6.43	34.6	10.17	46.26	145	70	Average
5470	53.59	55.06	68.2	-14.61	34.6	10.19	46.26	145	70	Peak
5550	90.62	91.73	-	-	34.66	10.47	46.24	145	70	Peak
5550	87.28	88.39	-	-	34.66	10.47	46.24	145	70	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	97.75	97.98	-	-	35	10.97	46.2	150	275	Peak
5670	93.67	93.9	-	-	35	10.97	46.2	150	275	Average
5725	57.06	56.98	68.2	-11.14	35.07	11.2	46.19	150	275	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	95.46	95.89	-	-	34.8	10.97	46.2	145	70	Peak
5670	91.61	92.04	-	-	34.8	10.97	46.2	145	70	Average
5725	55.62	55.74	68.2	-12.58	34.87	11.2	46.19	145	70	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	54.38	55.67	74	-19.62	34.78	10.19	46.26	150	275	Peak
5710	97.49	97.49	-	-	35.05	11.14	46.19	150	275	Peak
5710	92.8	92.8	-	-	35.05	11.14	46.19	150	275	Average
5850	56.53	55.74	68.2	-11.67	35.22	11.72	46.15	150	275	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	53.54	55.01	74	-20.46	34.6	10.19	46.26	100	160	Peak
5710	93.16	93.36	-	-	34.85	11.14	46.19	100	160	Peak
5710	87.78	87.98	-	-	34.85	11.14	46.19	100	160	Average
5850	57.5	56.91	68.2	-10.7	35.02	11.72	46.15	100	160	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) 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	55.74	57.06	74	-18.26	34.77	10.17	46.26	200	280	Peak
5460	50.5	51.82	54	-3.5	34.77	10.17	46.26	200	280	Average
5470	57.02	58.31	68.2	-11.18	34.78	10.19	46.26	200	280	Peak
5530	88.65	89.67	-	-	34.84	10.38	46.24	200	280	Peak
5530	85.73	86.75	-	-	34.84	10.38	46.24	200	280	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	53.06	54.55	74	-20.94	34.6	10.17	46.26	150	80	Peak
5460	47.28	48.77	54	-6.72	34.6	10.17	46.26	150	80	Average
5470	54.9	56.37	68.2	-13.3	34.6	10.19	46.26	150	80	Peak
5530	84.42	85.64	-	-	34.64	10.38	46.24	150	80	Peak
5530	79.72	80.94	-	-	34.64	10.38	46.24	150	80	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**
5610	93.38	93.95	-	-	34.93	10.72	46.22	165	280	Peak
5610	90.36	90.93	-	-	34.93	10.72	46.22	165	280	Average
5725	55.09	55.01	68.2	-13.11	35.07	11.2	46.19	165	280	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**
5610	87.62	88.39	-	-	34.73	10.72	46.22	120	155	Peak
5610	84.78	85.55	-	-	34.73	10.72	46.22	120	155	Average
5725	54.98	55.1	68.2	-13.22	34.87	11.2	46.19	120	155	Peak

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	52.19	53.48	74	-21.81	34.78	10.19	46.26	190	280	Peak
5690	93.11	93.23	-	-	35.03	11.05	46.2	190	280	Peak
5690	89.23	89.35	-	-	35.03	11.05	46.2	190	280	Average
5850	55.94	55.15	68.2	-12.26	35.22	11.72	46.15	190	280	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	51.24	52.71	74	-22.76	34.6	10.19	46.26	120	160	Peak
5690	88.39	88.71	-	-	34.83	11.05	46.2	120	160	Peak
5690	84.95	85.27	-	-	34.83	11.05	46.2	120	160	Average
5850	54.16	53.57	68.2	-14.04	35.02	11.72	46.15	120	160	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.

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	108.14	107.95	-	-	35.09	11.28	46.18	150	275	Peak
5745	100.96	100.77	-	-	35.09	11.28	46.18	150	275	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	103.73	103.74	-	-	34.89	11.28	46.18	100	150	Peak
5745	97	97.01	-	-	34.89	11.28	46.18	100	150	Average

REMARKS:

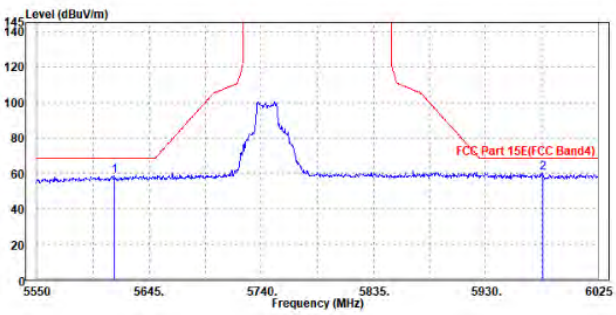
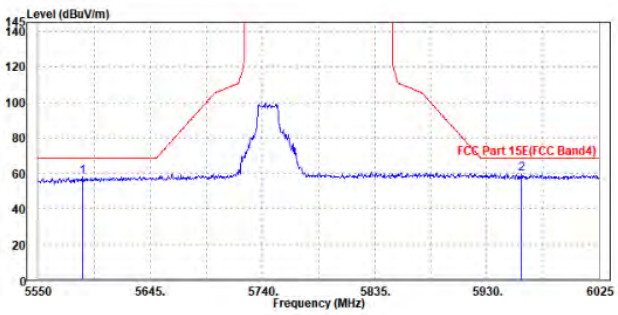
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

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
5616.025	58.64	59.18	68.2	-9.56	34.94	10.74	46.22	200	0	Peak
5977.975	60.09	58.58	68.2	-8.11	35.37	12.26	46.12	200	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5587.525	57.83	58.73	68.2	-10.37	34.71	10.62	46.23	100	0	Peak
5959.45	59.37	58.16	68.2	-8.83	35.15	12.18	46.12	100	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	108.57	108.15	-	-	35.14	11.45	46.17	100	253	Peak
5785	102.01	101.59	-	-	35.14	11.45	46.17	100	253	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	104.83	104.61	-	-	34.94	11.45	46.17	100	150	Peak
5785	98.17	97.95	-	-	34.94	11.45	46.17	100	150	Average

REMARKS:

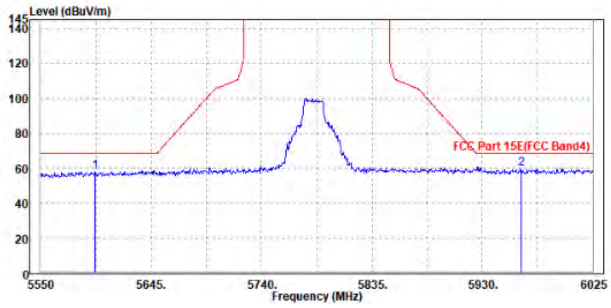
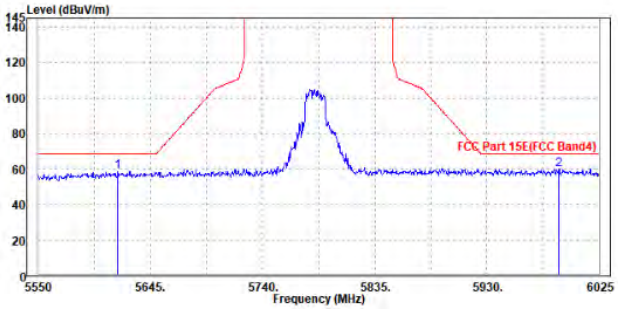
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5785MHz: Fundamental frequency.

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
5596.55	58	58.64	68.2	-10.2	34.92	10.66	46.22	100	0	Peak
5963.25	59.38	57.94	68.2	-8.82	35.36	12.2	46.12	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5617.45	58.38	59.11	68.2	-9.82	34.74	10.75	46.22	200	0	Peak
5990.8	59.66	58.27	68.2	-8.54	35.19	12.31	46.11	200	0	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	107.3	106.65	-	-	35.19	11.62	46.16	155	275	Peak
5825	100.78	100.13	-	-	35.19	11.62	46.16	155	275	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	105.26	104.81	-	-	34.99	11.62	46.16	100	145	Peak
5825	96.77	96.32	-	-	34.99	11.62	46.16	100	145	Average

REMARKS:

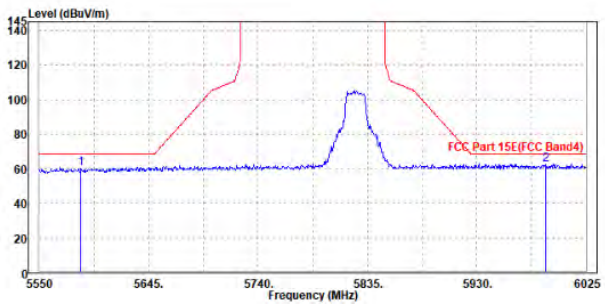
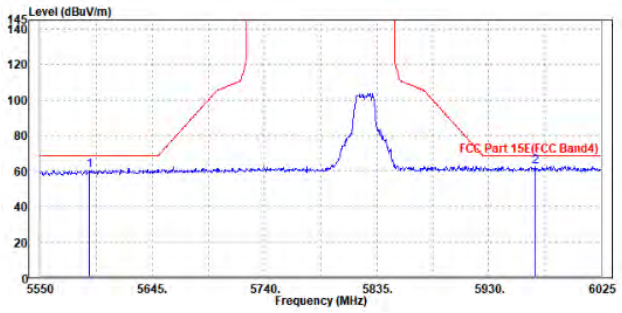
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5825MHz: Fundamental frequency.

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
5586.1	60.3	61.01	68.2	-7.9	34.9	10.62	46.23	100	0	Peak
5989.85	62.28	60.69	68.2	-5.92	35.39	12.31	46.11	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5591.8	60.1	60.97	68.2	-8.1	34.71	10.64	46.22	200	0	Peak
5968.95	62.51	61.25	68.2	-5.69	35.16	12.22	46.12	200	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	106.9	106.71	-	-	35.09	11.28	46.18	155	255	Peak
5745	99.65	99.46	-	-	35.09	11.28	46.18	155	255	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	103.97	103.98	-	-	34.89	11.28	46.18	105	50	Peak
5745	97.42	97.43	-	-	34.89	11.28	46.18	105	50	Average

REMARKS:

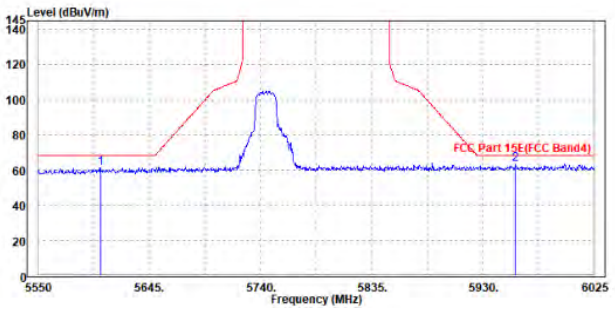
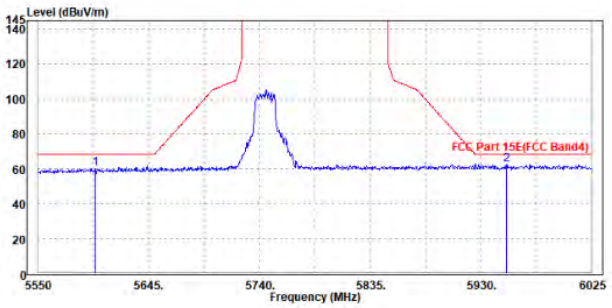
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

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
5603.2	61.26	61.87	68.2	-6.94	34.92	10.69	46.22	200	0	Peak
5958.025	63.39	61.99	68.2	-4.81	35.35	12.17	46.12	200	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5598.925	60.1	60.93	68.2	-8.1	34.72	10.67	46.22	100	0	Peak
5951.85	62.19	61.02	68.2	-6.01	35.14	12.15	46.12	100	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	106.38	105.96	-	-	35.14	11.45	46.17	155	255	Peak
5785	99.77	99.35	-	-	35.14	11.45	46.17	155	255	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	103.79	103.57	-	-	34.94	11.45	46.17	100	50	Peak
5785	98.19	97.97	-	-	34.94	11.45	46.17	100	50	Average

REMARKS:

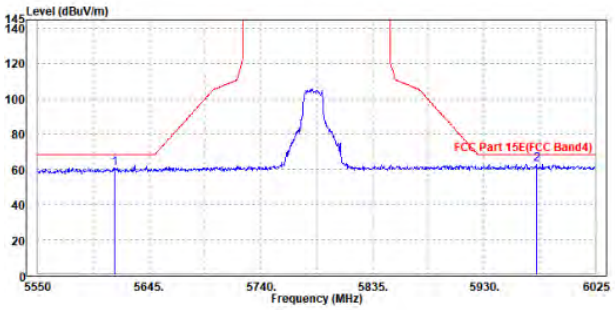
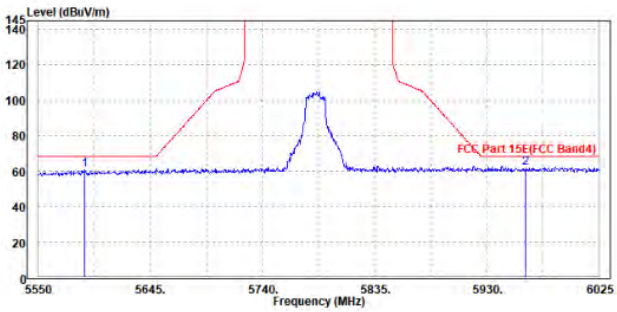
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5785MHz: Fundamental frequency.

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
5615.55	60.83	61.37	68.2	-7.37	34.94	10.74	46.22	100	0	Peak
5974.65	62.98	61.49	68.2	-5.22	35.37	12.24	46.12	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5589.425	60.47	61.35	68.2	-7.73	34.71	10.63	46.22	200	0	Peak
5962.775	61.79	60.56	68.2	-6.41	35.16	12.19	46.12	200	0	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	106.16	105.51	-	-	35.19	11.62	46.16	100	255	Peak
5825	99.62	98.97	-	-	35.19	11.62	46.16	100	255	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	103.82	103.37	-	-	34.99	11.62	46.16	100	50	Peak
5825	97.42	96.97	-	-	34.99	11.62	46.16	100	50	Average

REMARKS:

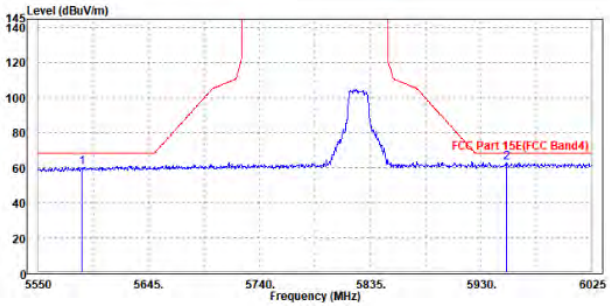
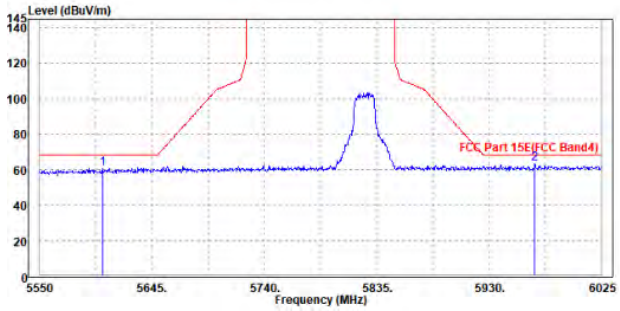
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5825MHz: Fundamental frequency.

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
5587.525	60.25	60.95	68.2	-7.95	34.91	10.62	46.23	200	0	Peak
5951.85	62.88	61.51	68.2	-5.32	35.34	12.15	46.12	200	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5603.2	60.81	61.62	68.2	-7.39	34.72	10.69	46.22	100	0	Peak
5968.475	63.28	62.02	68.2	-4.92	35.16	12.22	46.12	100	0	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	101.52	101.27	-	-	35.11	11.32	46.18	120	255	Peak
5755	97.3	97.05	-	-	35.11	11.32	46.18	120	255	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	98.82	98.77	-	-	34.91	11.32	46.18	100	50	Peak
5755	94.83	94.78	-	-	34.91	11.32	46.18	100	50	Average

REMARKS:

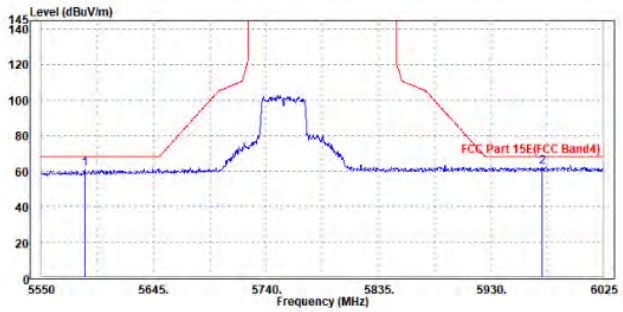
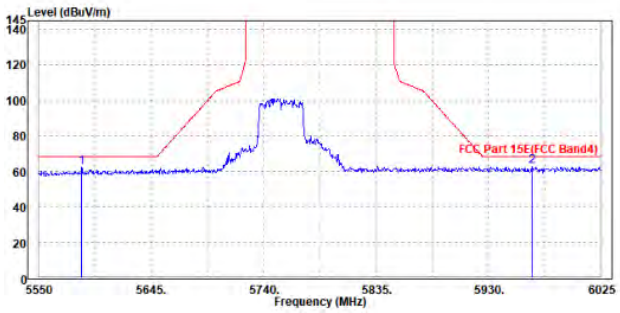
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5755MHz: Fundamental frequency.

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
5587.05	61.07	61.78	68.2	-7.13	34.9	10.62	46.23	100	0	Peak
5973.7	62.34	60.85	68.2	-5.86	35.37	12.24	46.12	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5586.1	62.31	63.22	68.2	-5.89	34.7	10.62	46.23	200	0	Peak
5966.575	62.67	61.42	68.2	-5.53	35.16	12.21	46.12	200	0	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	102.16	101.69	-	-	35.15	11.49	46.17	165	255	Peak
5795	96.95	96.48	-	-	35.15	11.49	46.17	165	255	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	102.54	102.27	-	-	34.95	11.49	46.17	100	50	Peak
5795	94.78	94.51	-	-	34.95	11.49	46.17	100	50	Average

REMARKS:

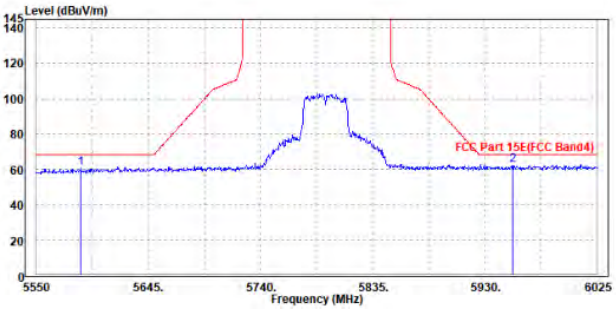
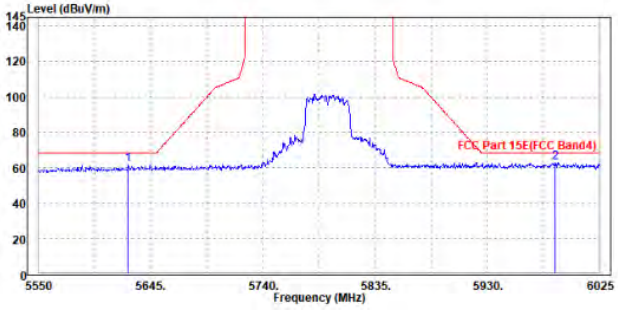
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5795MHz: Fundamental frequency.

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
5588	60.47	61.17	68.2	-7.73	34.91	10.62	46.23	200	0	Peak
5953.75	62.43	61.05	68.2	-5.77	35.34	12.16	46.12	200	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5626	61.99	62.67	68.2	-6.21	34.75	10.78	46.21	100	0	Peak
5987.475	63.05	61.68	68.2	-5.15	35.18	12.3	46.11	100	0	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	104.85	104.66	-	-	35.09	11.28	46.18	100	255	Peak
5745	98.26	98.07	-	-	35.09	11.28	46.18	100	255	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	102.91	102.92	-	-	34.89	11.28	46.18	100	50	Peak
5745	96.79	96.8	-	-	34.89	11.28	46.18	100	50	Average

REMARKS:

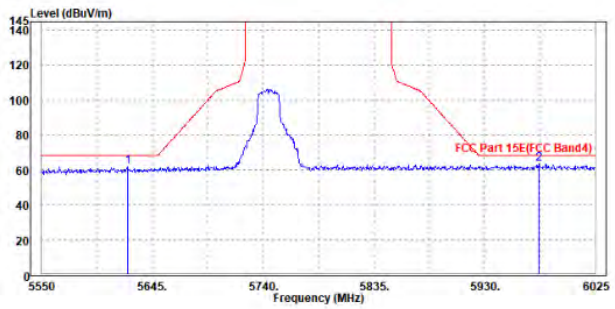
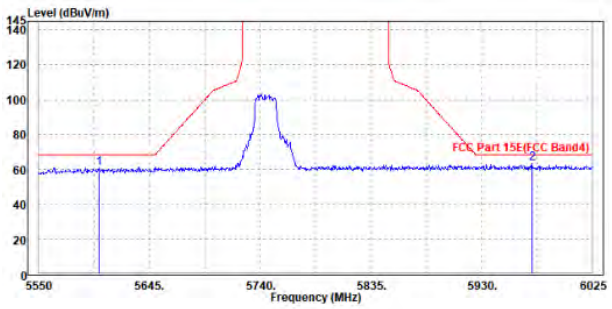
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

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
5623.625	61.54	62.04	68.2	-6.66	34.95	10.77	46.22	100	0	Peak
5976.55	63.34	61.84	68.2	-4.86	35.37	12.25	46.12	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5601.3	60.79	61.61	68.2	-7.41	34.72	10.68	46.22	200	0	Peak
5973.225	63.14	61.85	68.2	-5.06	35.17	12.24	46.12	200	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	106.26	105.84	-	-	35.14	11.45	46.17	195	255	Peak
5785	99.91	99.49	-	-	35.14	11.45	46.17	195	255	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	105.29	105.07	-	-	34.94	11.45	46.17	100	50	Peak
5785	98.63	98.41	-	-	34.94	11.45	46.17	100	50	Average

REMARKS:

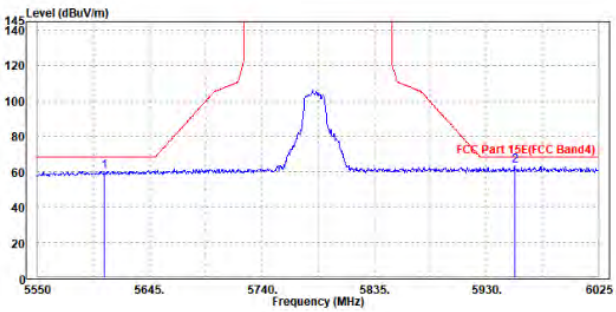
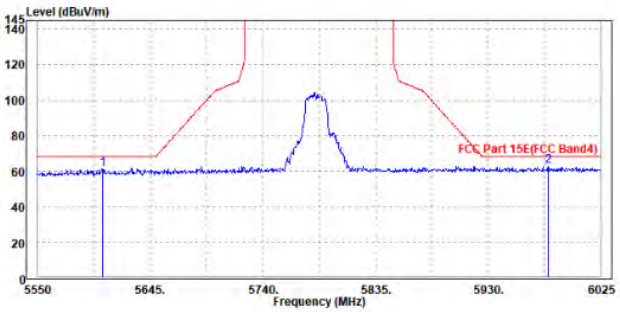
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5785MHz: Fundamental frequency.

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
5606.525	60.26	60.85	68.2	-7.94	34.93	10.7	46.22	200	0	Peak
5954.225	63.31	61.92	68.2	-4.89	35.35	12.16	46.12	200	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5604.625	61.39	62.19	68.2	-6.81	34.73	10.69	46.22	100	0	Peak
5980.825	62.69	61.36	68.2	-5.51	35.18	12.27	46.12	100	0	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	105.54	104.89	-	-	35.19	11.62	46.16	165	255	Peak
5825	99.24	98.59	-	-	35.19	11.62	46.16	165	255	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	104.41	103.96	-	-	34.99	11.62	46.16	100	50	Peak
5825	98.03	97.58	-	-	34.99	11.62	46.16	100	50	Average

REMARKS:

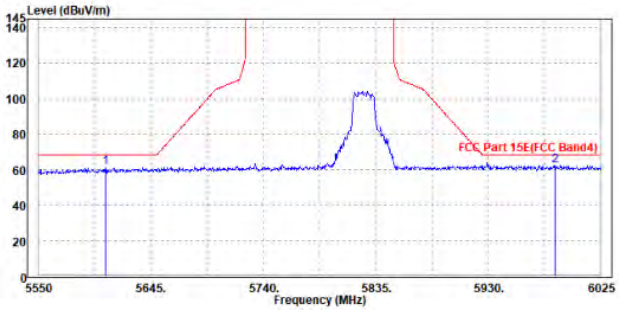
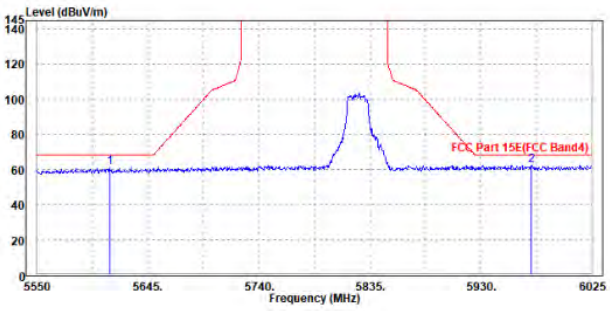
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5825MHz: Fundamental frequency.

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
5606.525	61.09	61.68	68.2	-7.11	34.93	10.7	46.22	100	0	Peak
5986.525	62.55	60.99	68.2	-5.65	35.38	12.29	46.11	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5612.225	61.05	61.81	68.2	-7.15	34.73	10.73	46.22	200	0	Peak
5973.7	62.4	61.11	68.2	-5.8	35.17	12.24	46.12	200	0	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	100.46	100.21	-	-	35.11	11.32	46.18	180	255	Peak
5755	96.54	96.29	-	-	35.11	11.32	46.18	180	255	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	98.93	98.88	-	-	34.91	11.32	46.18	100	50	Peak
5755	93.58	93.53	-	-	34.91	11.32	46.18	100	50	Average

REMARKS:

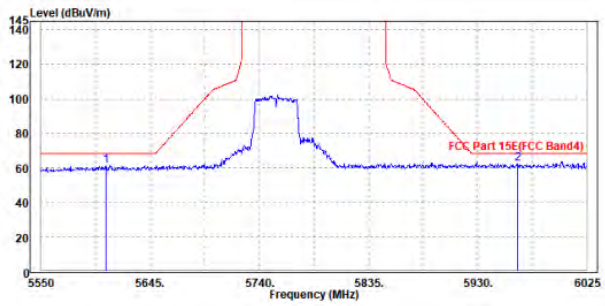
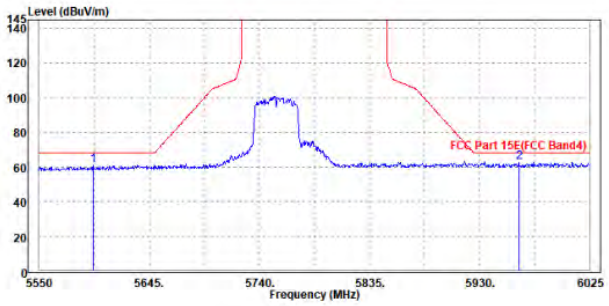
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5755MHz: Fundamental frequency.

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
5606.525	61.03	61.62	68.2	-7.17	34.93	10.7	46.22	200	0	Peak
5965.15	62.26	60.82	68.2	-5.94	35.36	12.2	46.12	200	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5596.55	61.18	62.02	68.2	-7.02	34.72	10.66	46.22	100	0	Peak
5964.2	62.74	61.5	68.2	-5.46	35.16	12.2	46.12	100	0	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	101.96	101.49	-	-	35.15	11.49	46.17	180	255	Peak
5795	96.95	96.48	-	-	35.15	11.49	46.17	180	255	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	99.87	99.6	-	-	34.95	11.49	46.17	100	50	Peak
5795	95.07	94.8	-	-	34.95	11.49	46.17	100	50	Average

REMARKS:

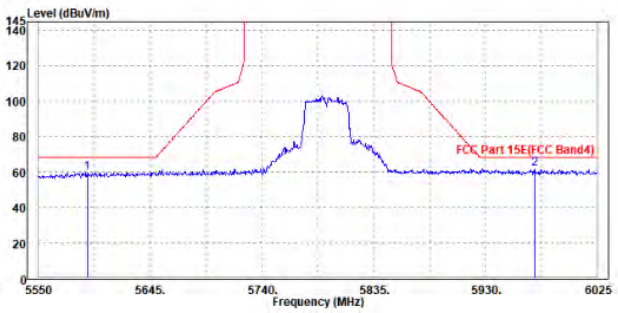
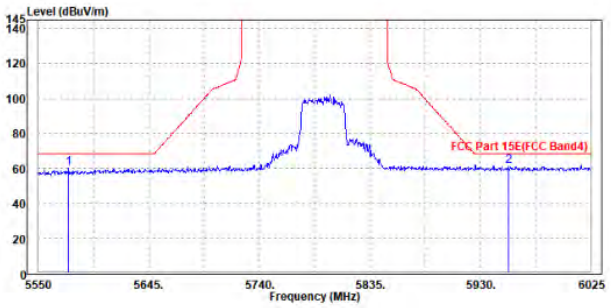
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5795MHz: Fundamental frequency.

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
5591.325	59.76	60.43	68.2	-8.44	34.91	10.64	46.22	100	0	Peak
5971.8	61.61	60.13	68.2	-6.59	35.37	12.23	46.12	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5576.125	59.89	60.86	68.2	-8.31	34.69	10.57	46.23	200	0	Peak
5954.7	60.95	59.76	68.2	-7.25	35.15	12.16	46.12	200	0	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	96.81	96.44	-	-	35.13	11.41	46.17	100	255	Peak
5775	93.5	93.13	-	-	35.13	11.41	46.17	100	255	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	95.35	95.18	-	-	34.93	11.41	46.17	100	50	Peak
5775	91.09	90.92	-	-	34.93	11.41	46.17	100	50	Average

REMARKS:

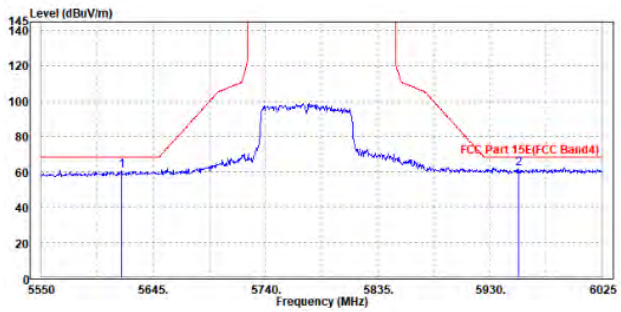
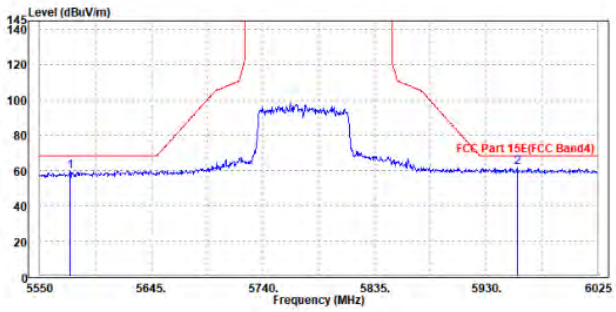
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5775MHz: Fundamental frequency.

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
5617.925	60.68	61.21	68.2	-7.52	34.94	10.75	46.22	200	0	Peak
5954.225	61.66	60.27	68.2	-6.54	35.35	12.16	46.12	200	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5575.65	59.44	60.41	68.2	-8.76	34.69	10.57	46.23	100	0	Peak
5956.6	61.5	60.3	68.2	-6.7	35.15	12.17	46.12	100	0	Peak

CH 155

Horiontal	Vertical
	

3.2 OUT OF BAND EMISSION MEASUREMENT

3.2.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

	APPLICABLE TO	EIRP LIMIT (dBm/MHz)
OUT OF THE RESTRICTED BANDS	15.407(b)(1)	-27
	15.407(b)(2)	
	15.407(b)(3)	
	15.407(b)(4)	See note

NOTE:

(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) 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.

3.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	Jun. 03,21	Jun. 02,22
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	Jun. 03,21	Jun. 02,22

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

3.2.3 TEST PROCEDURES

a. Cheak the calibration of the measurement instrument using either an internal calibrator or a known signal from an external generator.

b. The resolution bandwidth is set to 1MHzThe Video bandwidth is set to ≥1MHz, report the peak value out of oprating band.

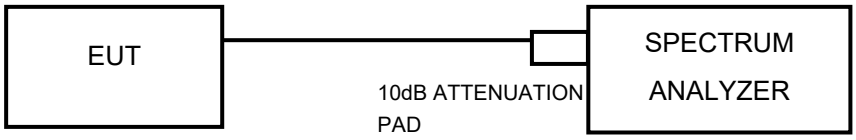
c. Repeat above procedures until all frequencies measured wre complete.

NOTE: All modes of operation were investigated and the worst-case emissions are reported,antenna gain was added into the test result.

3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

3.2.5 TEST SETUP



3.2.6 EUT OPERATING CONDITION

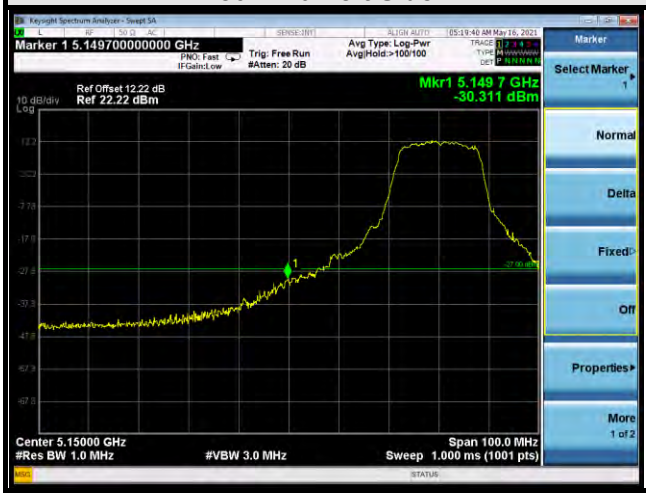
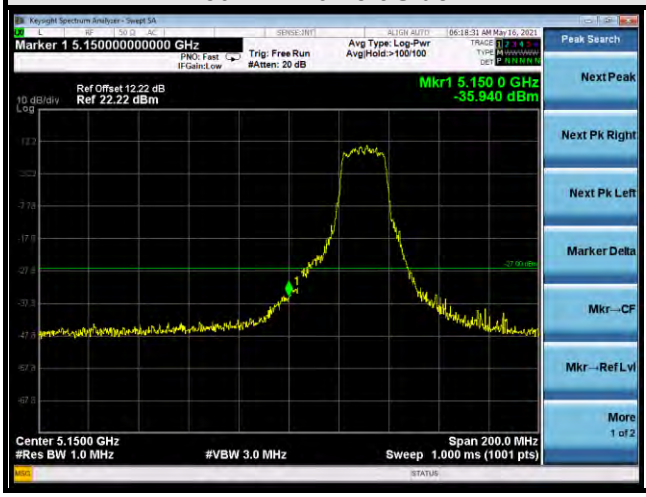
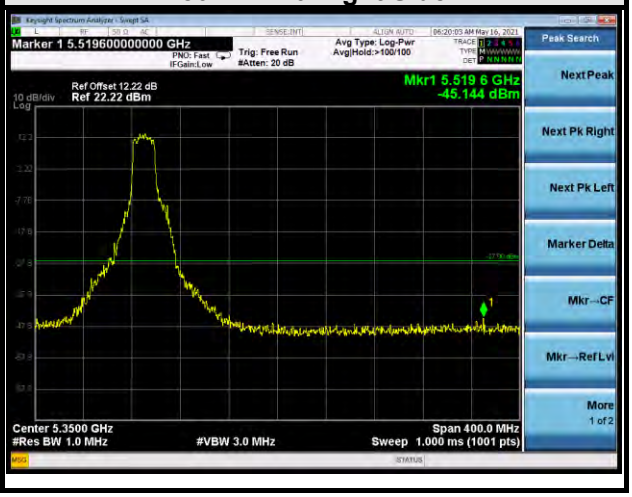
a. Set the EUT under full load condition and placed them on a testing table.

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.

3.2.7 TEST RESULTS

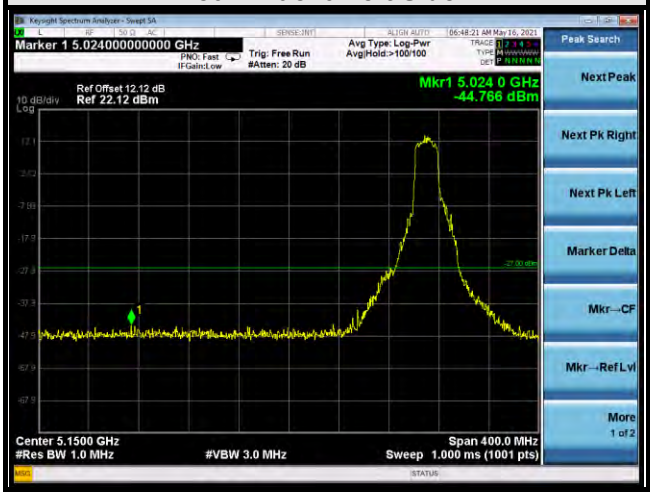
For U-NII-1:

SPECTRUM PLOT OF BANDEDGE	
802.11a Left Side	**802.11a Right Side**
	
802.11n20 Left Side	**802.11n20 Right Side**
	

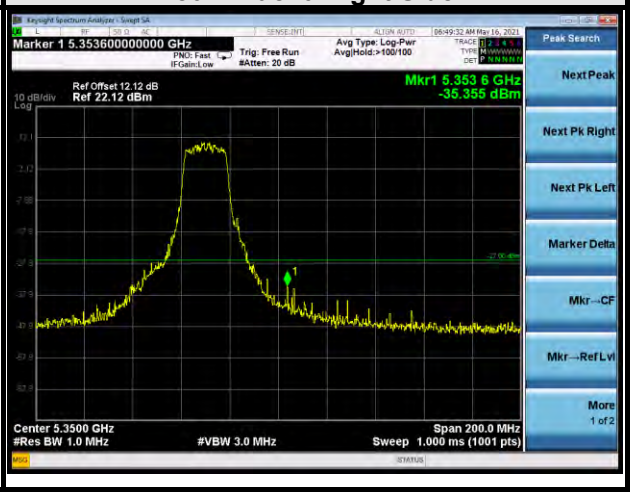
802.11n40 Left Side

802.11n40 Right Side

802.11ac20 Left Side

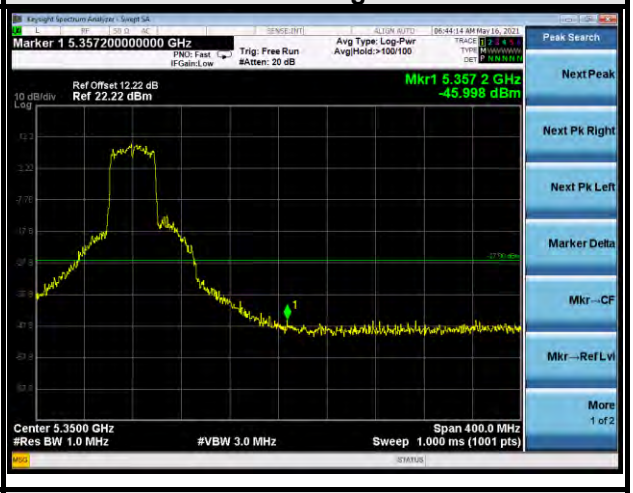


802.11ac20 Right Side



802.11ac40 Left Side

802.11ac40 Right Side



802.11ac80 Left Side

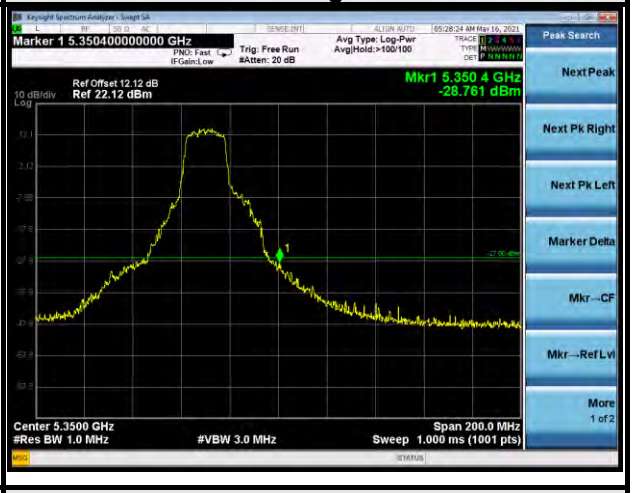
802.11ac80 Right Side

For U-NII-2A:

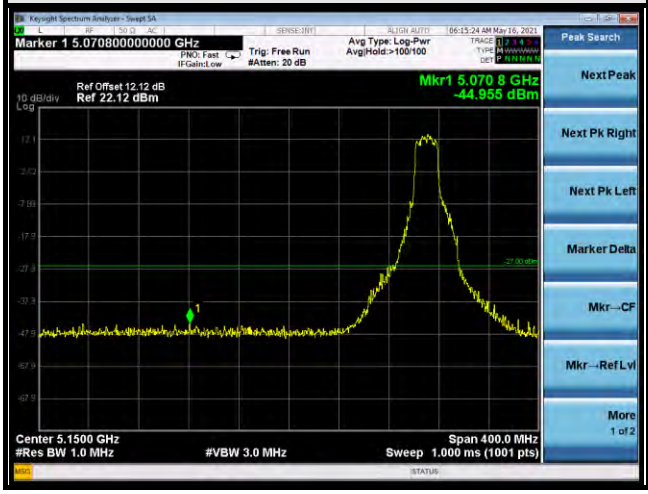
SPECTRUM PLOT OF BANDEDGE

802.11a Left Side

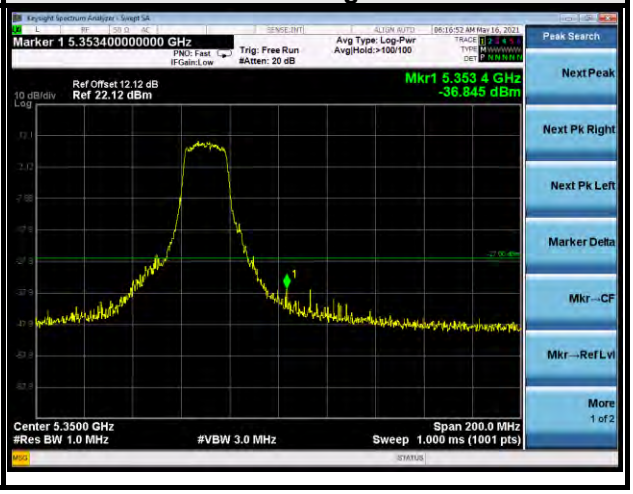
802.11a Right Side



802.11n20 Left Side

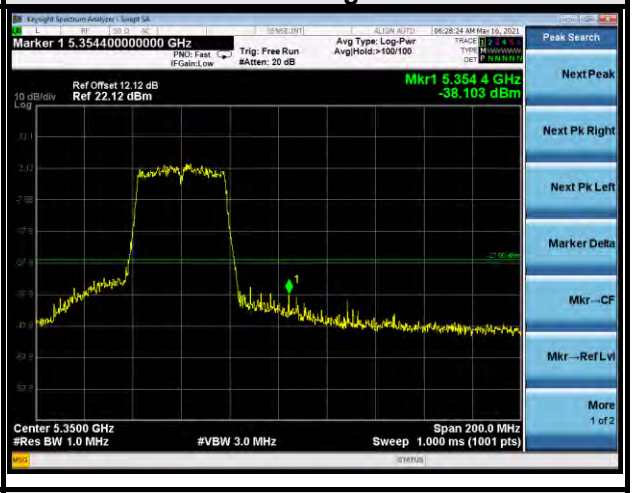


802.11n20 Right Side

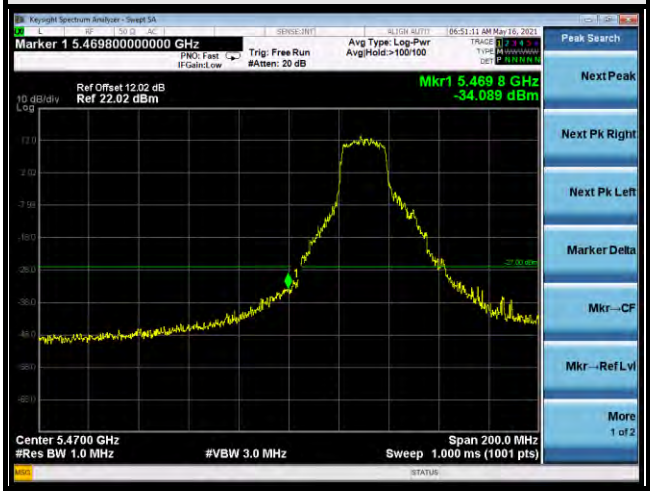


802.11n40 Left Side

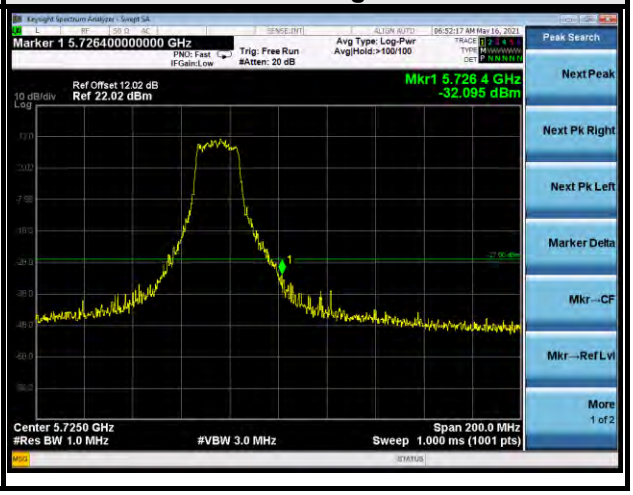
802.11n40 Right Side



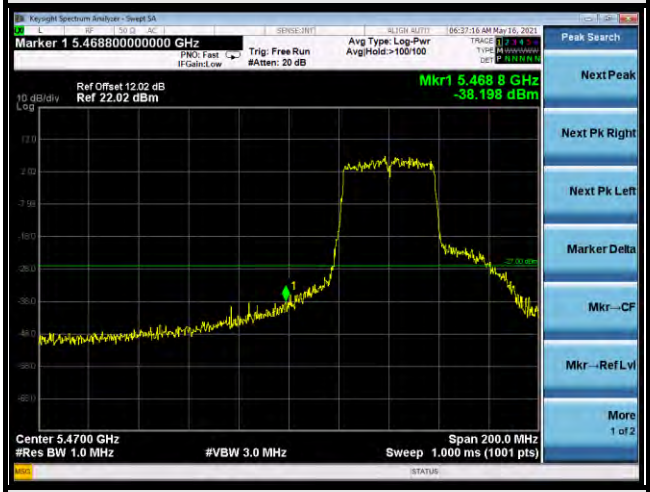
802.11ac20 Left Side



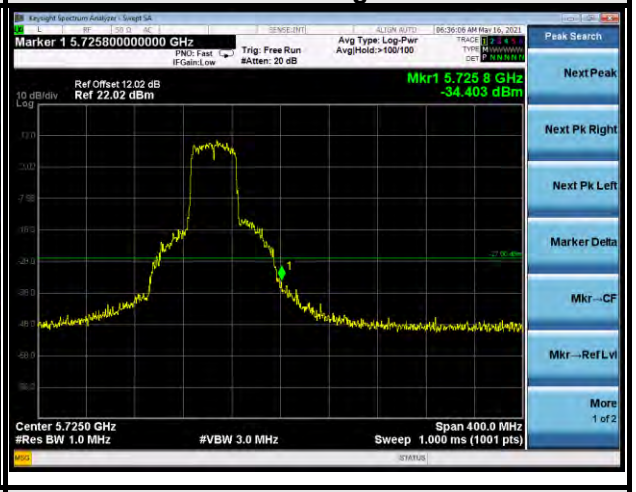
802.11ac20 Right Side



802.11ac40 Left Side



802.11ac40 Right Side



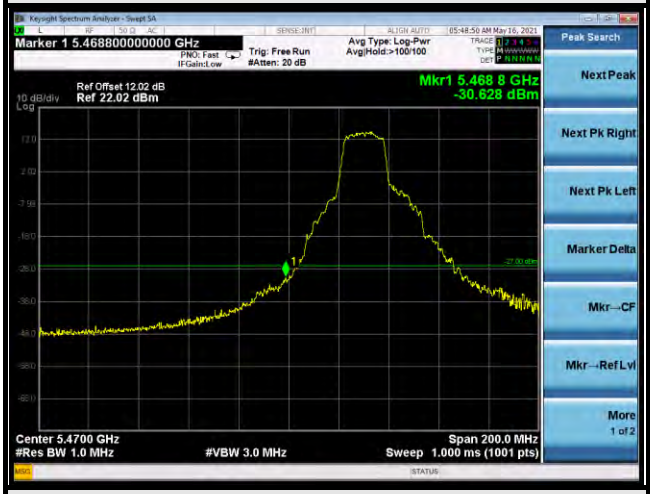
802.11ac80 Left Side

802.11ac80 Right Side

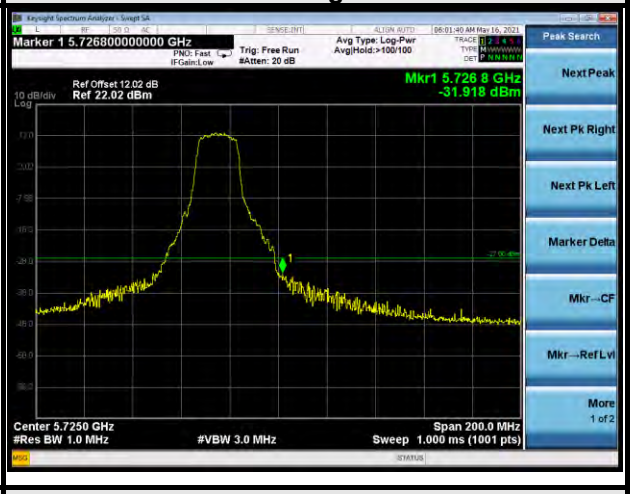
For U-NII-2C:

SPECTRUM PLOT OF BANDEDGE

802.11a Left Side

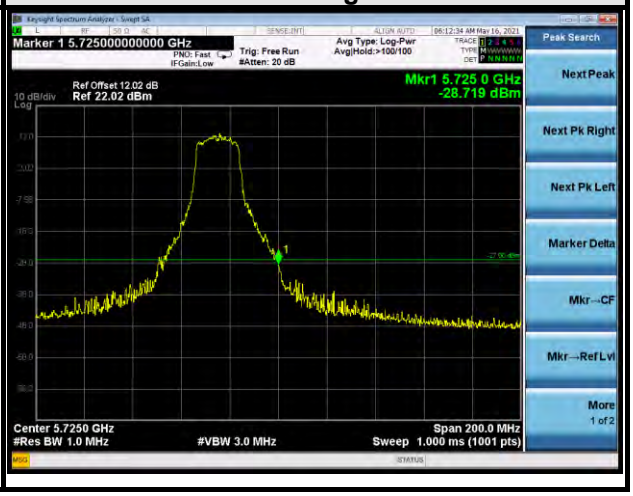


802.11a Right Side



802.11n20 Left Side

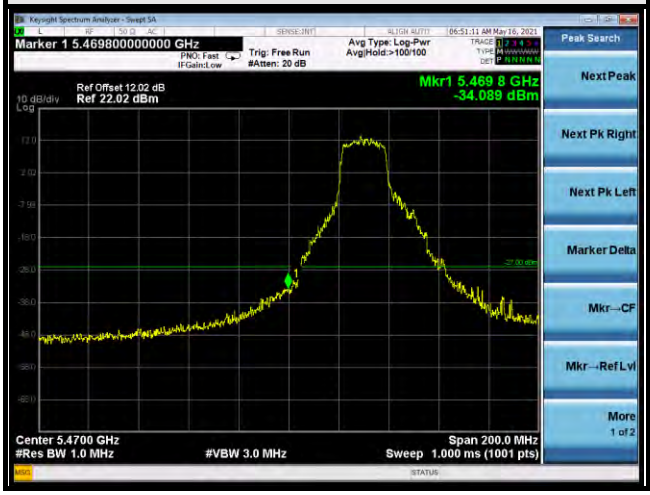
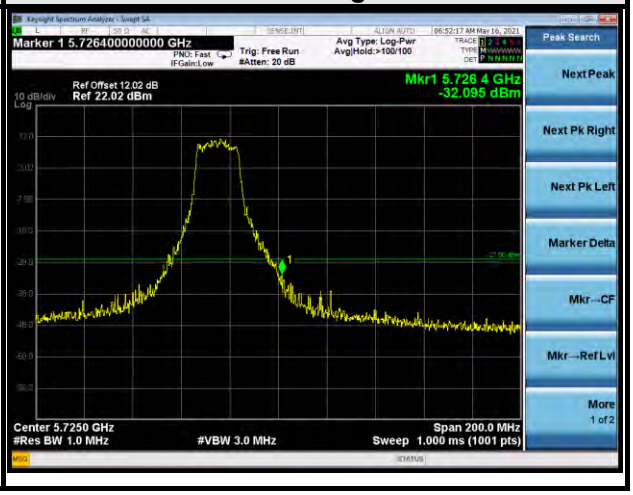
802.11n20 Right Side



802.11n40 Left Side

802.11n40 Right Side

802.11ac20 Left Side



802.11ac20 Right Side