

FCC TEST REPORT

(Part 15, Subpart E)

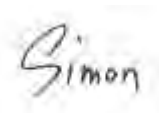
Applicant:	Honeywell International Inc Honeywell Safety and Productivity Solutions
Address:	9680 Old Bailes Road, Fort Mill, SC 29707 United States

Manufacturer or Supplier:	Honeywell International Inc Honeywell Safety and Productivity Solutions
Address:	9680 Old Bailes Road, Fort Mill, SC 29707 United States
Product:	Mobile Computer
Brand Name:	Honeywell
Model Name:	CT45P-X0N
FCC ID:	HD5-CT45PX0NG
Date of tests:	Oct. 12, 2021 ~ Dec. 09, 2021

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

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

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

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
 Date: Dec. 10, 2021	 Date: Dec. 10, 2021

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P21100002RF09	Original release	Dec. 10, 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

NOTE:

1. Except the data of RSE and Band Edge Measurement, other data of 802.11a & 802.11n/ac/ax (20/40) & 802.11ac/ax 80 please refer to the appendix B.

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	$\pm 2.70\text{dB}$
Radiated emissions (30MHz~1GMHz)	$\pm 4.98\text{dB}$
Radiated emissions (1GMHz ~6GMHz)	$\pm 4.70\text{dB}$
Radiated emissions (6GMHz ~18GMHz)	$\pm 4.60\text{dB}$
Radiated emissions (18GMHz ~40GMHz)	$\pm 4.12\text{dB}$
Conducted emissions	$\pm 4.01\text{dB}$
Occupied Channel Bandwidth	$\pm 43.58\text{KHz}$
Conducted Output power	$\pm 2.06\text{dB}$
Power Spectral Density	$\pm 0.85\text{ dB}$

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-X0N
NOMINAL VOLTAGE	3.85Vdc (Lithium-ion cell, battery)
MODULATION	OFDM, OFDMA
TRANSFER RATE	802.11a: up to 54Mbps 802.11n: up to 300Mbps 802.11ac: up to 1083.3Mbps 802.11ax: up to 1201.0Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5720MHz, 5745 ~ 5825MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n/ac 2 for 802.11n/ac/ ax (40MHz) 1 for 802. 802.11ac/ ax (80MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n/ac/ ax (20MHz) 2 for 802.11n/ac/ ax (40MHz) 1 for 802.11ac/ ax (80MHz) 5500 ~ 5720MHz: 12 for 802.11a, 802.11n/ac/ ax (20MHz)/ 6 for 802.11n/ac/ ax (40MHz) 3 for 802.11ac/ ax (80MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n/ac/ ax (20MHz) 3 for 802.11n/ac/ ax (40MHz) 2 for 802.11ac/ ax (80MHz)
AVERAGE POWER	18.03dB for 5180 ~ 5240MHz 17.60dB for 5260 ~ 5320MHz 16.86dB for 5500 ~ 5720MHz 16.46dB for 5745 ~ 5825MHz
ANTENNA TYPE	PIFA Antenna
ANTENNA GAIN	ANT 0: PIFA Antenna with 1.5 dBi for 5180 ~ 5240MHz PIFA Antenna with 1.7 dBi for 5260 ~ 5320MHz PIFA Antenna with 1.6 dBi for 5500 ~ 5720MHz PIFA Antenna with 1.5 dBi for 5745 ~ 5825MHz ANT 1: PIFA Antenna with 2.3 dBi for 5180 ~ 5240MHz PIFA Antenna with 2.2 dBi for 5260 ~ 5320MHz



	PIFA Antenna with 1.7 dBi for 5500 ~ 5720MHz PIFA Antenna with 1.2 dBi for 5745 ~ 5825MHz
HW VERSION	V1.0
SW VERSION	OS.11.001
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 two 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:CT45P-X0N-37D100G ,Assembled with Scanner Imager: S0703
2	SKU ID:CT45P-X0N-38D100G ,Assembled with Scanner Imager: N6803/S0803

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

MODULATION MODE	TX FUNCTION
802.11a	2TX/2RX
802.11n/802.11ac/802.11ax (20MHz)	2TX/2RX
802.11n/802.11ac/802.11ax (40MHz)	2TX/2RX
802.11n/802.11ac/802.11ax (80MHz)	2TX/2RX

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	Honeywell	PTE-300N 3.5L	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) / 802.11ax (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) / 802.11ax (40MHz) :

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210 MHz		

FOR 5260 ~ 5320MHz

4 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz) / 802.11ax (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) / 802.11ax (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
58	5290 MHz		

**FOR 5500 ~ 5720MHz**

12 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz) / 802.11ax (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) / 802.11ax (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)/ 802.11ax (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) / 802.11ax (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) / 802.11ax (40MHz):

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

2 channel is provided for 802.11ac (80MHz) 802.11ax (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 $\geq$ 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 $\geq$ 1G: Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

NOTE:

The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.

NOTE: “-” means no effect.

RADIATED EMISSION TEST (BELOW 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11ac (40MHz)	5180-5240	38 to 46	38	OFDM	MCS0

RADIATED EMISSION TEST (ABOVE 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 48	OFDM	6.0
A	802.11ac/ax/an (20MHz)		36 to 48	36, 48	OFDM	MCS0
A	802.11ac/ax/an (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac/ax(80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11ac/ax/an (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11ac/ax/an (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac/ax(80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11ac/ax/an (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11ac/ax/an (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac/ax(80MHz))		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11ac/ax/an (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11ac/ax/an (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac/ax(80MHz))		138,155	138, 155	OFDM	MCS0

POWER LINE CONDUCTED EMISSION TEST:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11ac (40MHz)	5180-5240	38 to 46	38	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	MODULATIO N	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 48	OFDM	6.0
A	802.11ac/ax/an (20MHz)		36 to 48	36, 48	OFDM	MCS0
A	802.11ac/ax/an (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac/ax(80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11ac/ax/an (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11ac/ax/an (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac/ax(80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11ac/ax/an (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11ac/ax/an (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac/ax(80MHz))		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11ac/ax/an (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11ac/ax/an (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac/ax(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	MODULATIO N	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 48	OFDM	6.0
A	802.11ac/ax/an (20MHz)		36 to 48	36, 48	OFDM	MCS0
A	802.11ac/ax/an (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac/ax(80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11ac/ax/an (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11ac/ax/an (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac/ax(80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11ac/ax/an (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11ac/ax/an (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac/ax(80MHz))		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11ac/ax/an (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11ac/ax/an (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac/ax(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	Lily Zhao
APCM	25deg. C, 60%RH	DC 3.85V By Battery	James Fu

2.3 DUTY CYCLE OF TEST SIGNAL

Please Refer to Appendix B. Of this test report.

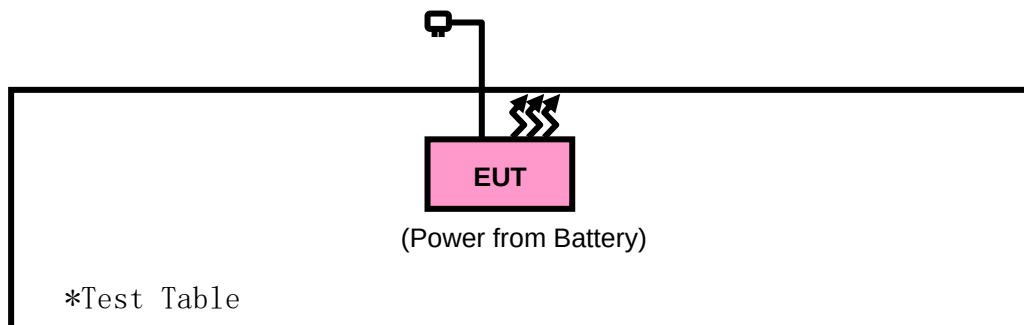
2.4 DESCRIPTION OF SUPPORT UNITS

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

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Desktop	Lenovo	M73 SFF	PC04GRQV	N/A
2	Desktop	Lenovo	M73 SFF	PC06CS27	N/A
3	Laptop	Lenovo	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

RESTRICTED BANDS	APPLICABLE TO	LIMIT	
	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:

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

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. 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:

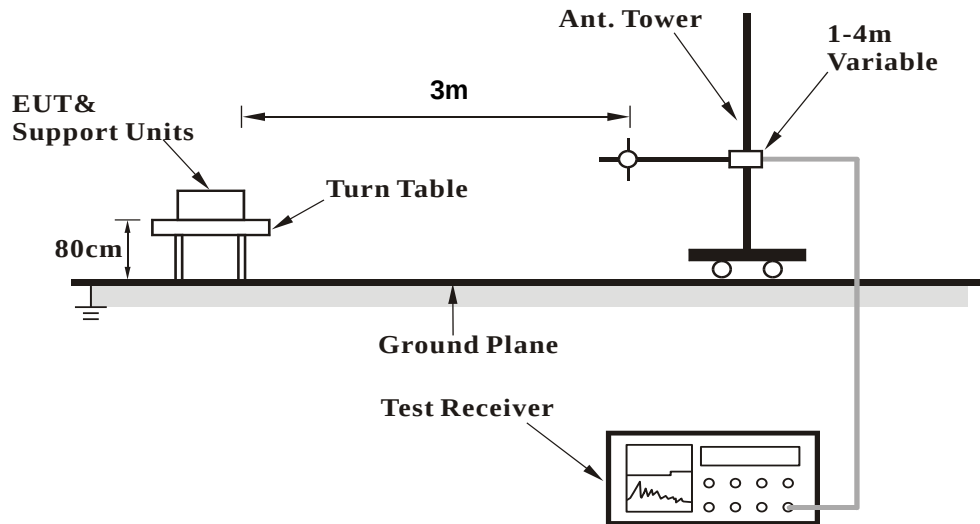
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency 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 ($10 \log(1/\text{duty cycle})$).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle $\geq 98\%$) 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

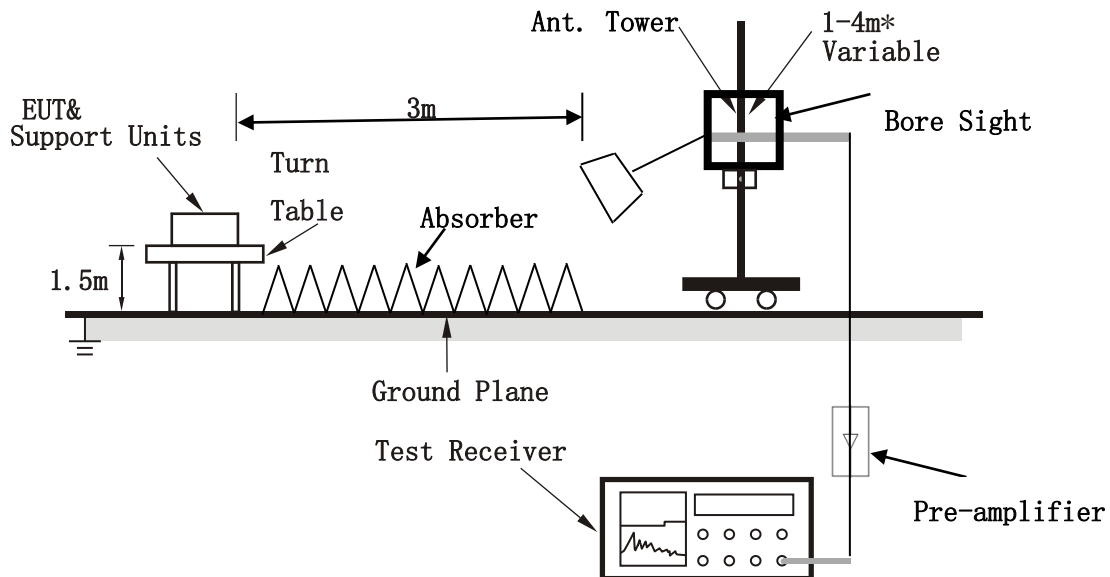
No deviation.

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).



Test Report No.: W7L-P21100002RF09

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 1

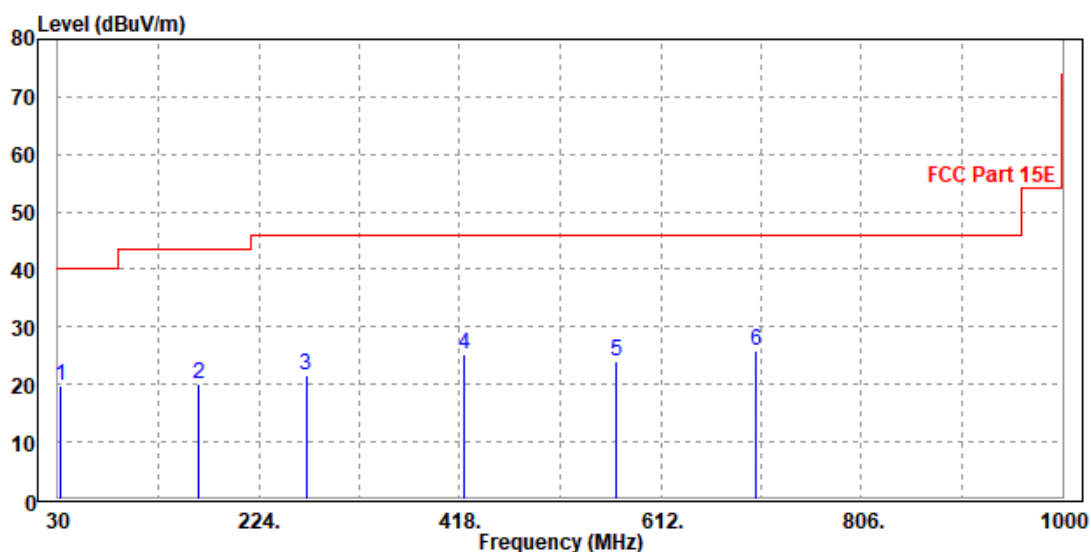
802.11n (40MHz)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
32.91	19.7	37.01	40	-20.3	19.43	0.73	37.47	300	0	QP
165.8	20.13	44.5	43.5	-23.37	10.7	1.63	36.7	300	0	QP
269.59	21.53	42.62	46	-24.47	13.51	2.09	36.69	300	0	QP
422.85	25.12	42.04	46	-20.88	17.31	2.64	36.87	300	0	QP
568.35	24.07	38.12	46	-21.93	20.07	3.13	37.25	300	0	QP
703.18	25.76	37.02	46	-20.24	22.72	3.56	37.54	300	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.

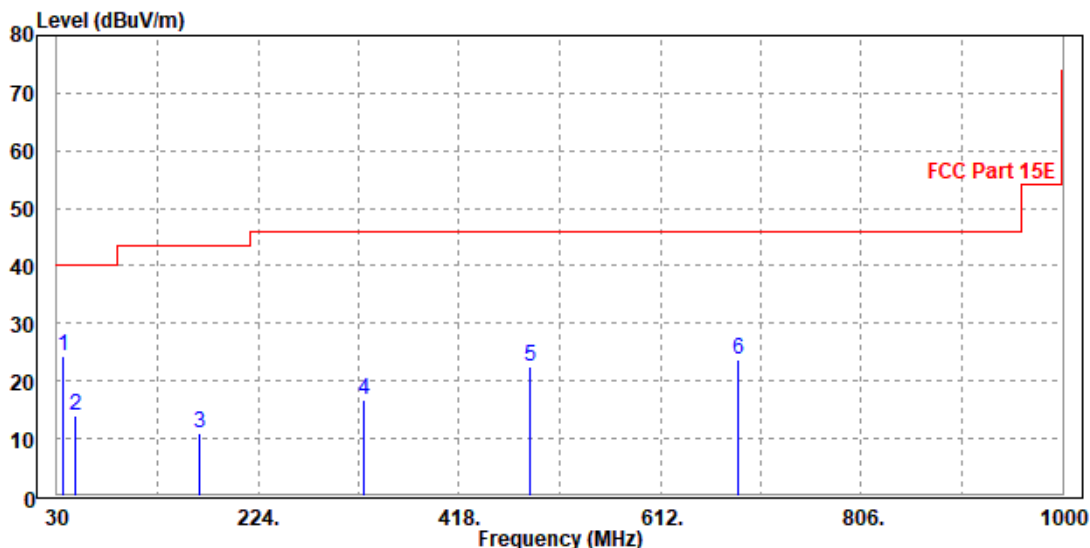


CHANNEL	Channel 38	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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
35.82	24.32	44.09	40	-15.68	17.05	0.77	37.59	200	360	QP
48.43	13.97	40.93	40	-26.03	9.5	0.89	37.35	200	360	QP
166.77	10.9	34.87	43.5	-32.6	11.09	1.64	36.7	200	360	QP
325.85	16.66	35.57	46	-29.34	15.57	2.29	36.77	200	360	QP
486.87	22.55	37.8	46	-23.45	18.85	2.88	36.98	200	360	QP
687.66	23.74	35.61	46	-22.26	22.13	3.51	37.51	200	360	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.



**Band 1****ABOVE 1GHz WORST-CASE DATA Ant 1:**

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

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.12	59.43	74	-16.88	34.52	9.52	46.35	200	100	Peak
5150	49.69	52	54	-4.31	34.52	9.52	46.35	200	100	Average
5180	98.58	100.81	-	-	34.54	9.58	46.35	200	100	Peak
5180	91.1	93.33	-	-	34.54	9.58	46.35	200	100	Average
5350	54.67	56.35	74	-19.33	34.68	9.94	46.3	200	100	Peak
5350	47.42	49.1	54	-6.58	34.68	9.94	46.3	200	100	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.74	59.97	74	-16.26	34.6	9.52	46.35	100	240	Peak
5150	49.88	52.11	54	-4.12	34.6	9.52	46.35	100	240	Average
5180	98.58	100.75	-	-	34.6	9.58	46.35	100	240	Peak
5180	89.76	91.93	-	-	34.6	9.58	46.35	100	240	Average
5350	53.43	55.19	74	-20.57	34.6	9.94	46.3	100	240	Peak
5350	48.02	49.78	54	-5.98	34.6	9.94	46.3	100	240	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.16	58.47	74	-17.84	34.52	9.52	46.35	200	100	Peak
5150	48.66	50.97	54	-5.34	34.52	9.52	46.35	200	100	Average
5200	99.56	101.72	-	-	34.56	9.62	46.34	200	100	Peak
5200	91.42	93.58	-	-	34.56	9.62	46.34	200	100	Average
5350	54.42	56.1	74	-19.58	34.68	9.94	46.3	200	100	Peak
5350	47.56	49.24	54	-6.44	34.68	9.94	46.3	200	100	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	240	Peak
5150	48.84	51.07	54	-5.16	34.6	9.52	46.35	100	240	Average
5200	97.6	99.72	-	-	34.6	9.62	46.34	100	240	Peak
5200	90.4	92.52	-	-	34.6	9.62	46.34	100	240	Average
5350	55.07	56.83	74	-18.93	34.6	9.94	46.3	100	240	Peak
5350	47.16	48.92	54	-6.84	34.6	9.94	46.3	100	240	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 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	54.06	56.37	74	-19.94	34.52	9.52	46.35	200	100	Peak
5150	48.6	50.91	54	-5.4	34.52	9.52	46.35	200	100	Average
5240	99.67	101.7	-	-	34.59	9.71	46.33	200	100	Peak
5240	91.76	93.79	-	-	34.59	9.71	46.33	200	100	Average
5350	54.25	55.93	74	-19.75	34.68	9.94	46.3	200	100	Peak
5350	47.77	49.45	54	-6.23	34.68	9.94	46.3	200	100	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	54.06	56.29	74	-19.94	34.6	9.52	46.35	100	240	Peak
5150	48.38	50.61	54	-5.62	34.6	9.52	46.35	100	240	Average
5240	97.31	99.33	-	-	34.6	9.71	46.33	100	240	Peak
5240	91.31	93.33	-	-	34.6	9.71	46.33	100	240	Average
5350	54.78	56.54	74	-19.22	34.6	9.94	46.3	100	240	Peak
5350	47.85	49.61	54	-6.15	34.6	9.94	46.3	100	240	Average

REMARKS:

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



**BUREAU
VERITAS**

Test Report No.: W7L-P21100002RF09

802.11n (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.45	58.76	74	-17.55	34.52	9.52	46.35	200	100	Peak
5150	50.63	52.94	54	-3.37	34.52	9.52	46.35	200	100	Average
5180	97.16	99.39	-	-	34.54	9.58	46.35	200	100	Peak
5180	91.62	93.85	-	-	34.54	9.58	46.35	200	100	Average
5350	55.69	57.37	74	-18.31	34.68	9.94	46.3	200	100	Peak
5350	47.8	49.48	54	-6.2	34.68	9.94	46.3	200	100	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	58.5	60.73	74	-15.5	34.6	9.52	46.35	100	240	Peak
5150	50.81	53.04	54	-3.19	34.6	9.52	46.35	100	240	Average
5180	98.26	100.43	-	-	34.6	9.58	46.35	100	240	Peak
5180	91.2	93.37	-	-	34.6	9.58	46.35	100	240	Average
5350	56.34	58.1	74	-17.66	34.6	9.94	46.3	100	240	Peak
5350	47.26	49.02	54	-6.74	34.6	9.94	46.3	100	240	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.04	56.35	74	-19.96	34.52	9.52	46.35	200	100	Peak
5150	48.75	51.06	54	-5.25	34.52	9.52	46.35	200	100	Average
5200	100.62	102.78	-	-	34.56	9.62	46.34	200	100	Peak
5200	91.56	93.72	-	-	34.56	9.62	46.34	200	100	Average
5350	54.33	56.01	74	-19.67	34.68	9.94	46.3	200	100	Peak
5350	48.2	49.88	54	-5.8	34.68	9.94	46.3	200	100	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	55.13	57.36	74	-18.87	34.6	9.52	46.35	100	240	Peak
5150	48.44	50.67	54	-5.56	34.6	9.52	46.35	100	240	Average
5200	97.98	100.1	-	-	34.6	9.62	46.34	100	240	Peak
5200	91.78	93.9	-	-	34.6	9.62	46.34	100	240	Average
5350	53.46	55.22	74	-20.54	34.6	9.94	46.3	100	240	Peak
5350	47.25	49.01	54	-6.75	34.6	9.94	46.3	100	240	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	54.92	57.23	74	-19.08	34.52	9.52	46.35	200	100	Peak
5150	48.23	50.54	54	-5.77	34.52	9.52	46.35	200	100	Average
5240	98.3	100.33	–	–	34.59	9.71	46.33	200	100	Peak
5240	92.65	94.68	–	–	34.59	9.71	46.33	200	100	Average
5350	54.91	56.59	74	-19.09	34.68	9.94	46.3	200	100	Peak
5350	47.48	49.16	54	-6.52	34.68	9.94	46.3	200	100	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	55.24	57.47	74	-18.76	34.6	9.52	46.35	100	240	Peak
5150	49.22	51.45	54	-4.78	34.6	9.52	46.35	100	240	Average
5240	98.39	100.41	–	–	34.6	9.71	46.33	100	240	Peak
5240	91.33	93.35	–	–	34.6	9.71	46.33	100	240	Average
5350	54.73	56.49	74	-19.27	34.6	9.94	46.3	100	240	Peak
5350	47.76	49.52	54	-6.24	34.6	9.94	46.3	100	240	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 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	55.44	57.75	74	-18.56	34.52	9.52	46.35	200	100	Peak
5150	50.7	53.01	54	-3.3	34.52	9.52	46.35	200	100	Average
5190	90.65	92.84	-	-	34.55	9.6	46.34	200	100	Peak
5190	83.92	86.11	-	-	34.55	9.6	46.34	200	100	Average
5350	54.54	56.22	74	-19.46	34.68	9.94	46.3	200	100	Peak
5350	47.18	48.86	54	-6.82	34.68	9.94	46.3	200	100	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	54.58	56.81	74	-19.42	34.6	9.52	46.35	100	240	Peak
5150	49.84	52.07	54	-4.16	34.6	9.52	46.35	100	240	Average
5190	91.05	93.19	-	-	34.6	9.6	46.34	100	240	Peak
5190	82.62	84.76	-	-	34.6	9.6	46.34	100	240	Average
5350	56.82	58.58	74	-17.18	34.6	9.94	46.3	100	240	Peak
5350	47.01	48.77	54	-6.99	34.6	9.94	46.3	100	240	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.96	57.27	74	-19.04	34.52	9.52	46.35	200	100	Peak
5150	49.55	51.86	54	-4.45	34.52	9.52	46.35	200	100	Average
5230	92.36	94.42	–	–	34.58	9.69	46.33	200	100	Peak
5230	86.78	88.84	–	–	34.58	9.69	46.33	200	100	Average
5350	55.69	57.37	74	-18.31	34.68	9.94	46.3	200	100	Peak
5350	47.71	49.39	54	-6.29	34.68	9.94	46.3	200	100	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	55.45	57.68	74	-18.55	34.6	9.52	46.35	100	240	Peak
5150	48.55	50.78	54	-5.45	34.6	9.52	46.35	100	240	Average
5230	92.92	94.96	–	–	34.6	9.69	46.33	100	240	Peak
5230	87.62	89.66	–	–	34.6	9.69	46.33	100	240	Average
5350	53.28	55.04	74	-20.72	34.6	9.94	46.3	100	240	Peak
5350	47.23	48.99	54	-6.77	34.6	9.94	46.3	100	240	Average

REMARKS:

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



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Test Report No.: W7L-P21100002RF09

802.11ac (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.7	60.01	74	-16.3	34.52	9.52	46.35	175	60	Peak
5150	50.01	52.32	54	-3.99	34.52	9.52	46.35	175	60	Average
5180	99.49	101.72	-	-	34.54	9.58	46.35	175	60	Peak
5180	92.46	94.69	-	-	34.54	9.58	46.35	175	60	Average
5350	56.35	58.03	74	-17.65	34.68	9.94	46.3	175	60	Peak
5350	47.6	49.28	54	-6.4	34.68	9.94	46.3	175	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.15	57.38	74	-18.85	34.6	9.52	46.35	100	330	Peak
5150	49.55	51.78	54	-4.45	34.6	9.52	46.35	100	330	Average
5180	94.87	97.04	-	-	34.6	9.58	46.35	100	330	Peak
5180	88.57	90.74	-	-	34.6	9.58	46.35	100	330	Average
5350	56.3	58.06	74	-17.7	34.6	9.94	46.3	100	330	Peak
5350	47.72	49.48	54	-6.28	34.6	9.94	46.3	100	330	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.63	56.94	74	-19.37	34.52	9.52	46.35	190	60	Peak
5150	49.51	51.82	54	-4.49	34.52	9.52	46.35	190	60	Average
5200	99.55	101.71	-	-	34.56	9.62	46.34	190	60	Peak
5200	91.17	93.33	-	-	34.56	9.62	46.34	190	60	Average
5350	53.68	55.36	74	-20.32	34.68	9.94	46.3	190	60	Peak
5350	47.4	49.08	54	-6.6	34.68	9.94	46.3	190	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.35	57.58	74	-18.65	34.6	9.52	46.35	100	330	Peak
5150	49.19	51.42	54	-4.81	34.6	9.52	46.35	100	330	Average
5200	94.07	96.19	-	-	34.6	9.62	46.34	100	330	Peak
5200	86.32	88.44	-	-	34.6	9.62	46.34	100	330	Average
5350	55.08	56.84	74	-18.92	34.6	9.94	46.3	100	330	Peak
5350	47.57	49.33	54	-6.43	34.6	9.94	46.3	100	330	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	54.58	56.89	74	-19.42	34.52	9.52	46.35	190	60	Peak
5150	48.45	50.76	54	-5.55	34.52	9.52	46.35	190	60	Average
5240	101.02	103.05	-	-	34.59	9.71	46.33	190	60	Peak
5240	93.07	95.1	-	-	34.59	9.71	46.33	190	60	Average
5350	53.62	55.3	74	-20.38	34.68	9.94	46.3	190	60	Peak
5350	47.65	49.33	54	-6.35	34.68	9.94	46.3	190	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.61	56.84	74	-19.39	34.6	9.52	46.35	100	245	Peak
5150	48.46	50.69	54	-5.54	34.6	9.52	46.35	100	245	Average
5240	97.52	99.54	-	-	34.6	9.71	46.33	100	245	Peak
5240	90.49	92.51	-	-	34.6	9.71	46.33	100	245	Average
5350	54.08	55.84	74	-19.92	34.6	9.94	46.3	100	245	Peak
5350	47.35	49.11	54	-6.65	34.6	9.94	46.3	100	245	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 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	56.5	58.81	74	-17.5	34.52	9.52	46.35	100	60	Peak
5150	50.94	53.25	54	-3.06	34.52	9.52	46.35	100	60	Average
5190	93.45	95.64	-	-	34.55	9.6	46.34	100	60	Peak
5190	86.24	88.43	-	-	34.55	9.6	46.34	100	60	Average
5350	52.98	54.66	74	-21.02	34.68	9.94	46.3	100	60	Peak
5350	47.52	49.2	54	-6.48	34.68	9.94	46.3	100	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.44	58.67	74	-17.56	34.6	9.52	46.35	100	330	Peak
5150	50.17	52.4	54	-3.83	34.6	9.52	46.35	100	330	Average
5190	89.87	92.01	-	-	34.6	9.6	46.34	100	330	Peak
5190	81.7	83.84	-	-	34.6	9.6	46.34	100	330	Average
5350	54.19	55.95	74	-19.81	34.6	9.94	46.3	100	330	Peak
5350	47.45	49.21	54	-6.55	34.6	9.94	46.3	100	330	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.65	57.96	74	-18.35	34.52	9.52	46.35	100	60	Peak
5150	48.02	50.33	54	-5.98	34.52	9.52	46.35	100	60	Average
5230	92.51	94.57	–	–	34.58	9.69	46.33	100	60	Peak
5230	87	89.06	–	–	34.58	9.69	46.33	100	60	Average
5350	53.5	55.18	74	-20.5	34.68	9.94	46.3	100	60	Peak
5350	46.98	48.66	54	-7.02	34.68	9.94	46.3	100	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.95	57.18	74	-19.05	34.6	9.52	46.35	100	245	Peak
5150	48.7	50.93	54	-5.3	34.6	9.52	46.35	100	245	Average
5230	91.7	93.74	–	–	34.6	9.69	46.33	100	245	Peak
5230	85.99	88.03	–	–	34.6	9.69	46.33	100	245	Average
5350	52.43	54.19	74	-21.57	34.6	9.94	46.3	100	245	Peak
5350	47.2	48.96	54	-6.8	34.6	9.94	46.3	100	245	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 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	55.02	57.33	74	-18.98	34.52	9.52	46.35	100	60	Peak
5150	50.07	52.38	54	-3.93	34.52	9.52	46.35	100	60	Average
5210	87.77	89.9	-	-	34.57	9.64	46.34	100	60	Peak
5210	83.47	85.6	-	-	34.57	9.64	46.34	100	60	Average
5350	54.04	55.72	74	-19.96	34.68	9.94	46.3	100	60	Peak
5350	47.58	49.26	54	-6.42	34.68	9.94	46.3	100	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.42	55.65	74	-20.58	34.6	9.52	46.35	100	245	Peak
5150	48.8	51.03	54	-5.2	34.6	9.52	46.35	100	245	Average
5210	85.27	87.37	-	-	34.6	9.64	46.34	100	245	Peak
5210	80.45	82.55	-	-	34.6	9.64	46.34	100	245	Average
5350	52.43	54.19	74	-21.57	34.6	9.94	46.3	100	245	Peak
5350	47.5	49.26	54	-6.5	34.6	9.94	46.3	100	245	Average

REMARKS:

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



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Test Report No.: W7L-P21100002RF09

802.11ax (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.82	55.13	74	-21.18	34.52	9.52	46.35	100	60	Peak
5150	47.87	50.18	54	-6.13	34.52	9.52	46.35	100	60	Average
5180	101.47	103.7	-	-	34.54	9.58	46.35	100	60	Peak
5180	90.45	92.68	-	-	34.54	9.58	46.35	100	60	Average
5350	53	54.68	74	-21	34.68	9.94	46.3	100	60	Peak
5350	47.78	49.46	54	-6.22	34.68	9.94	46.3	100	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.5	57.73	74	-18.5	34.6	9.52	46.35	125	240	Peak
5150	48.38	50.61	54	-5.62	34.6	9.52	46.35	125	240	Average
5180	97.25	99.42	-	-	34.6	9.58	46.35	125	240	Peak
5180	86.79	88.96	-	-	34.6	9.58	46.35	125	240	Average
5350	53.43	55.19	74	-20.57	34.6	9.94	46.3	125	240	Peak
5350	46.75	48.51	54	-7.25	34.6	9.94	46.3	125	240	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.88	56.19	74	-20.12	34.52	9.52	46.35	100	60	Peak
5150	48.26	50.57	54	-5.74	34.52	9.52	46.35	100	60	Average
5200	99.4	101.56	-	-	34.56	9.62	46.34	100	60	Peak
5200	91.55	93.71	-	-	34.56	9.62	46.34	100	60	Average
5350	56.04	57.72	74	-17.96	34.68	9.94	46.3	100	60	Peak
5350	46.95	48.63	54	-7.05	34.68	9.94	46.3	100	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.6	57.83	74	-18.4	34.6	9.52	46.35	125	240	Peak
5150	49.24	51.47	54	-4.76	34.6	9.52	46.35	125	240	Average
5200	96.34	98.46	-	-	34.6	9.62	46.34	125	240	Peak
5200	88.66	90.78	-	-	34.6	9.62	46.34	125	240	Average
5350	54.5	56.26	74	-19.5	34.6	9.94	46.3	125	240	Peak
5350	47.78	49.54	54	-6.22	34.6	9.94	46.3	125	240	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.53	57.84	74	-18.47	34.52	9.52	46.35	100	60	Peak
5150	47.89	50.2	54	-6.11	34.52	9.52	46.35	100	60	Average
5240	99.05	101.08	-	-	34.59	9.71	46.33	100	60	Peak
5240	91.1	93.13	-	-	34.59	9.71	46.33	100	60	Average
5350	52.47	54.15	74	-21.53	34.68	9.94	46.3	100	60	Peak
5350	47.08	48.76	54	-6.92	34.68	9.94	46.3	100	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.63	56.86	74	-19.37	34.6	9.52	46.35	125	240	Peak
5150	48.24	50.47	54	-5.76	34.6	9.52	46.35	125	240	Average
5240	94.27	96.29	-	-	34.6	9.71	46.33	125	240	Peak
5240	86.91	88.93	-	-	34.6	9.71	46.33	125	240	Average
5350	52.94	54.7	74	-21.06	34.6	9.94	46.3	125	240	Peak
5350	46.59	48.35	54	-7.41	34.6	9.94	46.3	125	240	Average

REMARKS:

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



802.11ax (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	55.42	57.73	74	-18.58	34.52	9.52	46.35	100	60	Peak
5150	49.89	52.2	54	-4.11	34.52	9.52	46.35	100	60	Average
5190	92.75	94.94	-	-	34.55	9.6	46.34	100	60	Peak
5190	84.64	86.83	-	-	34.55	9.6	46.34	100	60	Average
5350	53.27	54.95	74	-20.73	34.68	9.94	46.3	100	60	Peak
5350	46.88	48.56	54	-7.12	34.68	9.94	46.3	100	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.48	59.71	74	-16.52	34.6	9.52	46.35	140	240	Peak
5150	49.05	51.28	54	-4.95	34.6	9.52	46.35	140	240	Average
5190	90.16	92.3	-	-	34.6	9.6	46.34	140	240	Peak
5190	81.43	83.57	-	-	34.6	9.6	46.34	140	240	Average
5350	53.21	54.97	74	-20.79	34.6	9.94	46.3	140	240	Peak
5350	46.85	48.61	54	-7.15	34.6	9.94	46.3	140	240	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.96	56.27	74	-20.04	34.52	9.52	46.35	100	60	Peak
5150	48.38	50.69	54	-5.62	34.52	9.52	46.35	100	60	Average
5230	88.31	90.37	-	-	34.58	9.69	46.33	100	60	Peak
5230	80.99	83.05	-	-	34.58	9.69	46.33	100	60	Average
5350	55.17	56.85	74	-18.83	34.68	9.94	46.3	100	60	Peak
5350	47.87	49.55	54	-6.13	34.68	9.94	46.3	100	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.42	57.65	74	-18.58	34.6	9.52	46.35	100	240	Peak
5150	48.78	51.01	54	-5.22	34.6	9.52	46.35	100	240	Average
5230	87.08	89.12	-	-	34.6	9.69	46.33	100	240	Peak
5230	80.3	82.34	-	-	34.6	9.69	46.33	100	240	Average
5350	52.79	54.55	74	-21.21	34.6	9.94	46.3	100	240	Peak
5350	47.8	49.56	54	-6.2	34.6	9.94	46.3	100	240	Average

REMARKS:

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



802.11ax (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	57.17	59.48	74	-16.83	34.52	9.52	46.35	105	90	Peak
5150	50.86	53.17	54	-3.14	34.52	9.52	46.35	105	90	Average
5210	91.46	93.59	-	-	34.57	9.64	46.34	105	90	Peak
5210	84.17	86.3	-	-	34.57	9.64	46.34	105	90	Average
5350	53.34	55.02	74	-20.66	34.68	9.94	46.3	105	90	Peak
5350	49.01	50.69	54	-4.99	34.68	9.94	46.3	105	90	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	56.86	59.09	74	-17.14	34.6	9.52	46.35	100	265	Peak
5150	50.58	52.81	54	-3.42	34.6	9.52	46.35	100	265	Average
5210	86.8	88.9	-	-	34.6	9.64	46.34	100	265	Peak
5210	79.58	81.68	-	-	34.6	9.64	46.34	100	265	Average
5350	54.45	56.21	74	-19.55	34.6	9.94	46.3	100	265	Peak
5350	49.41	51.17	54	-4.59	34.6	9.94	46.3	100	265	Average

REMARKS:

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

ABOVE 1GHz WORST-CASE DATA Ant 0+1:

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

802.11ac (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	58.36	60.67	74	-15.64	34.52	9.52	46.35	200	290	Peak
5150	49.53	51.84	54	-4.47	34.52	9.52	46.35	200	290	Average
5180	101.67	103.9	-	-	34.54	9.58	46.35	200	290	Peak
5180	94.8	97.03	-	-	34.54	9.58	46.35	200	290	Average
5350	53.74	55.42	74	-20.26	34.68	9.94	46.3	200	290	Peak
5350	47.88	49.56	54	-6.12	34.68	9.94	46.3	200	290	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	56.32	58.55	74	-17.68	34.6	9.52	46.35	100	60	Peak
5150	50.35	52.58	54	-3.65	34.6	9.52	46.35	100	60	Average
5180	104.4	106.57	-	-	34.6	9.58	46.35	100	60	Peak
5180	97.39	99.56	-	-	34.6	9.58	46.35	100	60	Average
5350	53.48	55.24	74	-20.52	34.6	9.94	46.3	100	60	Peak
5350	48.24	50	54	-5.76	34.6	9.94	46.3	100	60	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.09	58.4	74	-17.91	34.52	9.52	46.35	200	290	Peak
5150	49.52	51.83	54	-4.48	34.52	9.52	46.35	200	290	Average
5200	102.91	105.07	–	–	34.56	9.62	46.34	200	290	Peak
5200	94	96.16	–	–	34.56	9.62	46.34	200	290	Average
5350	55.21	56.89	74	-18.79	34.68	9.94	46.3	200	290	Peak
5350	48.02	49.7	54	-5.98	34.68	9.94	46.3	200	290	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	55.31	57.54	74	-18.69	34.6	9.52	46.35	100	60	Peak
5150	49.18	51.41	54	-4.82	34.6	9.52	46.35	100	60	Average
5200	105.92	108.04	–	–	34.6	9.62	46.34	100	60	Peak
5200	97.64	99.76	–	–	34.6	9.62	46.34	100	60	Average
5350	52.38	54.14	74	-21.62	34.6	9.94	46.3	100	60	Peak
5350	47.78	49.54	54	-6.22	34.6	9.94	46.3	100	60	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 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	52.61	54.92	74	-21.39	34.52	9.52	46.35	200	290	Peak
5150	48.99	51.3	54	-5.01	34.52	9.52	46.35	200	290	Average
5240	101.93	103.96	–	–	34.59	9.71	46.33	200	290	Peak
5240	96.05	98.08	–	–	34.59	9.71	46.33	200	290	Average
5350	53.49	55.17	74	-20.51	34.68	9.94	46.3	200	290	Peak
5350	47.99	49.67	54	-6.01	34.68	9.94	46.3	200	290	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	60	Peak
5150	48.56	50.79	54	-5.44	34.6	9.52	46.35	100	60	Average
5240	105.05	107.07	–	–	34.6	9.71	46.33	100	60	Peak
5240	98.69	100.71	–	–	34.6	9.71	46.33	100	60	Average
5350	53.66	55.42	74	-20.34	34.6	9.94	46.3	100	60	Peak
5350	47.75	49.51	54	-6.25	34.6	9.94	46.3	100	60	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 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	54.7	57.01	74	-19.3	34.52	9.52	46.35	110	85	Peak
5150	50.41	52.72	54	-3.59	34.52	9.52	46.35	110	85	Average
5190	93.25	95.44	-	-	34.55	9.6	46.34	110	85	Peak
5190	86.18	88.37	-	-	34.55	9.6	46.34	110	85	Average
5350	53.73	55.41	74	-20.27	34.68	9.94	46.3	110	85	Peak
5350	48.47	50.15	54	-5.53	34.68	9.94	46.3	110	85	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.26	56.49	74	-19.74	34.6	9.52	46.35	100	60	Peak
5150	50.52	52.75	54	-3.48	34.6	9.52	46.35	100	60	Average
5190	94.95	97.09	-	-	34.6	9.6	46.34	100	60	Peak
5190	88.35	90.49	-	-	34.6	9.6	46.34	100	60	Average
5350	54.47	56.23	74	-19.53	34.6	9.94	46.3	100	60	Peak
5350	48.76	50.52	54	-5.24	34.6	9.94	46.3	100	60	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.75	57.06	74	-19.25	34.52	9.52	46.35	110	85	Peak
5150	49.64	51.95	54	-4.36	34.52	9.52	46.35	110	85	Average
5230	99.93	101.99	-	-	34.58	9.69	46.33	110	85	Peak
5230	93.68	95.74	-	-	34.58	9.69	46.33	110	85	Average
5350	55.35	57.03	74	-18.65	34.68	9.94	46.3	110	85	Peak
5350	48.82	50.5	54	-5.18	34.68	9.94	46.3	110	85	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.79	57.02	74	-19.21	34.6	9.52	46.35	100	60	Peak
5150	49.83	52.06	54	-4.17	34.6	9.52	46.35	100	60	Average
5230	100.15	102.19	-	-	34.6	9.69	46.33	100	60	Peak
5230	93.71	95.75	-	-	34.6	9.69	46.33	100	60	Average
5350	54.39	56.15	74	-19.61	34.6	9.94	46.3	100	60	Peak
5350	48.5	50.26	54	-5.5	34.6	9.94	46.3	100	60	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 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	55.86	58.17	74	-18.14	34.52	9.52	46.35	100	300	Peak
5150	50.54	52.85	54	-3.46	34.52	9.52	46.35	100	300	Average
5210	87.88	90.01	-	-	34.57	9.64	46.34	100	300	Peak
5210	81.63	83.76	-	-	34.57	9.64	46.34	100	300	Average
5350	55	56.68	74	-19	34.68	9.94	46.3	100	300	Peak
5350	49.44	51.12	54	-4.56	34.68	9.94	46.3	100	300	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	54.86	57.09	74	-19.14	34.6	9.52	46.35	100	60	Peak
5150	50.57	52.8	54	-3.43	34.6	9.52	46.35	100	60	Average
5210	91.97	94.07	-	-	34.6	9.64	46.34	100	60	Peak
5210	84.23	86.33	-	-	34.6	9.64	46.34	100	60	Average
5350	54.08	55.84	74	-19.92	34.6	9.94	46.3	100	60	Peak
5350	49.23	50.99	54	-4.77	34.6	9.94	46.3	100	60	Average

REMARKS:

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



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Test Report No.: W7L-P21100002RF09

802.11ax (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.28	57.59	74	-18.72	34.52	9.52	46.35	200	290	Peak
5150	49.68	51.99	54	-4.32	34.52	9.52	46.35	200	290	Average
5180	102.93	105.16	-	-	34.54	9.58	46.35	200	290	Peak
5180	94.63	96.86	-	-	34.54	9.58	46.35	200	290	Average
5350	54.02	55.7	74	-19.98	34.68	9.94	46.3	200	290	Peak
5350	47.75	49.43	54	-6.25	34.68	9.94	46.3	200	290	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	56.66	58.89	74	-17.34	34.6	9.52	46.35	100	60	Peak
5150	49.64	51.87	54	-4.36	34.6	9.52	46.35	100	60	Average
5180	105.53	107.7	-	-	34.6	9.58	46.35	100	60	Peak
5180	97.19	99.36	-	-	34.6	9.58	46.35	100	60	Average
5350	54.07	55.83	74	-19.93	34.6	9.94	46.3	100	60	Peak
5350	48.62	50.38	54	-5.38	34.6	9.94	46.3	100	60	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.16	58.47	74	-17.84	34.52	9.52	46.35	200	290	Peak
5150	48.58	50.89	54	-5.42	34.52	9.52	46.35	200	290	Average
5200	102.61	104.77	-	-	34.56	9.62	46.34	200	290	Peak
5200	94.83	96.99	-	-	34.56	9.62	46.34	200	290	Average
5350	55.21	56.89	74	-18.79	34.68	9.94	46.3	200	290	Peak
5350	47.65	49.33	54	-6.35	34.68	9.94	46.3	200	290	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	54.94	57.17	74	-19.06	34.6	9.52	46.35	100	60	Peak
5150	49.06	51.29	54	-4.94	34.6	9.52	46.35	100	60	Average
5200	106.51	108.63	-	-	34.6	9.62	46.34	100	60	Peak
5200	98.1	100.22	-	-	34.6	9.62	46.34	100	60	Average
5350	53.77	55.53	74	-20.23	34.6	9.94	46.3	100	60	Peak
5350	47.69	49.45	54	-6.31	34.6	9.94	46.3	100	60	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	54.56	56.87	74	-19.44	34.52	9.52	46.35	200	290	Peak
5150	48.68	50.99	54	-5.32	34.52	9.52	46.35	200	290	Average
5240	102.67	104.7	-	-	34.59	9.71	46.33	200	290	Peak
5240	95.33	97.36	-	-	34.59	9.71	46.33	200	290	Average
5350	54.78	56.46	74	-19.22	34.68	9.94	46.3	200	290	Peak
5350	47.95	49.63	54	-6.05	34.68	9.94	46.3	200	290	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	56.1	58.33	74	-17.9	34.6	9.52	46.35	100	60	Peak
5150	48.68	50.91	54	-5.32	34.6	9.52	46.35	100	60	Average
5240	106.56	108.58	-	-	34.6	9.71	46.33	100	60	Peak
5240	98.6	100.62	-	-	34.6	9.71	46.33	100	60	Average
5350	55.08	56.84	74	-18.92	34.6	9.94	46.3	100	60	Peak
5350	48.21	49.97	54	-5.79	34.6	9.94	46.3	100	60	Average

REMARKS:

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



802.11ax (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	55.26	57.57	74	-18.74	34.52	9.52	46.35	200	290	Peak
5150	49.47	51.78	54	-4.53	34.52	9.52	46.35	200	290	Average
5190	94.15	96.34	-	-	34.55	9.6	46.34	200	290	Peak
5190	88.28	90.47	-	-	34.55	9.6	46.34	200	290	Average
5350	54.22	55.9	74	-19.78	34.68	9.94	46.3	200	290	Peak
5350	48.09	49.77	54	-5.91	34.68	9.94	46.3	200	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.41	59.64	74	-16.59	34.6	9.52	46.35	100	60	Peak
5150	50.69	52.92	54	-3.31	34.6	9.52	46.35	100	60	Average
5190	97.43	99.57	-	-	34.6	9.6	46.34	100	60	Peak
5190	89.71	91.85	-	-	34.6	9.6	46.34	100	60	Average
5350	54.43	56.19	74	-19.57	34.6	9.94	46.3	100	60	Peak
5350	48.23	49.99	54	-5.77	34.6	9.94	46.3	100	60	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.38	55.69	74	-20.62	34.52	9.52	46.35	200	290	Peak
5150	49.19	51.5	54	-4.81	34.52	9.52	46.35	200	290	Average
5230	100.46	102.52	-	-	34.58	9.69	46.33	200	290	Peak
5230	91.52	93.58	-	-	34.58	9.69	46.33	200	290	Average
5350	53.49	55.17	74	-20.51	34.68	9.94	46.3	200	290	Peak
5350	48.84	50.52	54	-5.16	34.68	9.94	46.3	200	290	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	54.53	56.76	74	-19.47	34.6	9.52	46.35	100	60	Peak
5150	49	51.23	54	-5	34.6	9.52	46.35	100	60	Average
5230	101.83	103.87	-	-	34.6	9.69	46.33	100	60	Peak
5230	94.85	96.89	-	-	34.6	9.69	46.33	100	60	Average
5350	53.59	55.35	74	-20.41	34.6	9.94	46.3	100	60	Peak
5350	48.21	49.97	54	-5.79	34.6	9.94	46.3	100	60	Average

REMARKS:

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



802.11ax (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	55.22	57.53	74	-18.78	34.52	9.52	46.35	200	290	Peak
5150	49.55	51.86	54	-4.45	34.52	9.52	46.35	200	290	Average
5210	91.1	93.23	-	-	34.57	9.64	46.34	200	290	Peak
5210	82.76	84.89	-	-	34.57	9.64	46.34	200	290	Average
5350	54.78	56.46	74	-19.22	34.68	9.94	46.3	200	290	Peak
5350	47.91	49.59	54	-6.09	34.68	9.94	46.3	200	290	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	54.71	56.94	74	-19.29	34.6	9.52	46.35	100	60	Peak
5150	50.21	52.44	54	-3.79	34.6	9.52	46.35	100	60	Average
5210	92.4	94.5	-	-	34.6	9.64	46.34	100	60	Peak
5210	85.35	87.45	-	-	34.6	9.64	46.34	100	60	Average
5350	53.92	55.68	74	-20.08	34.6	9.94	46.3	100	60	Peak
5350	47.85	49.61	54	-6.15	34.6	9.94	46.3	100	60	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

ABOVE 1GHz WORST-CASE DATA Ant 1:

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.44	58.75	74	-17.56	34.52	9.52	46.35	103	90	Peak
5150	49	51.31	54	-5	34.52	9.52	46.35	103	90	Average
5260	105.57	107.53	-	-	34.61	9.75	46.32	103	90	Peak
5260	99.31	101.27	-	-	34.61	9.75	46.32	103	90	Average
5350	55.42	57.1	74	-18.58	34.68	9.94	46.3	103	90	Peak
5350	49.06	50.74	54	-4.94	34.68	9.94	46.3	103	90	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.51	59.74	74	-16.49	34.6	9.52	46.35	100	265	Peak
5150	49.5	51.73	54	-4.5	34.6	9.52	46.35	100	265	Average
5260	99.1	101.07	-	-	34.6	9.75	46.32	100	265	Peak
5260	92.62	94.59	-	-	34.6	9.75	46.32	100	265	Average
5350	53.66	55.42	74	-20.34	34.6	9.94	46.3	100	265	Peak
5350	48.54	50.3	54	-5.46	34.6	9.94	46.3	100	265	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.17	57.48	74	-18.83	34.52	9.52	46.35	100	90	Peak
5150	49.46	51.77	54	-4.54	34.52	9.52	46.35	100	90	Average
5300	105.29	107.13	-	-	34.64	9.83	46.31	100	90	Peak
5300	98.75	100.59	-	-	34.64	9.83	46.31	100	90	Average
5350	55.53	57.21	74	-18.47	34.68	9.94	46.3	100	90	Peak
5350	49.91	51.59	54	-4.09	34.68	9.94	46.3	100	90	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	55.37	57.6	74	-18.63	34.6	9.52	46.35	100	245	Peak
5150	50.12	52.35	54	-3.88	34.6	9.52	46.35	100	245	Average
5300	100.54	102.42	-	-	34.6	9.83	46.31	100	245	Peak
5300	93.88	95.76	-	-	34.6	9.83	46.31	100	245	Average
5350	55.59	57.35	74	-18.41	34.6	9.94	46.3	100	245	Peak
5350	48.97	50.73	54	-5.03	34.6	9.94	46.3	100	245	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.15	57.46	74	-18.85	34.52	9.52	46.35	100	90	Peak
5150	49.23	51.54	54	-4.77	34.52	9.52	46.35	100	90	Average
5320	102.7	104.46	-	-	34.66	9.88	46.3	100	90	Peak
5320	97.03	98.79	-	-	34.66	9.88	46.3	100	90	Average
5350	55.15	56.83	74	-18.85	34.68	9.94	46.3	100	90	Peak
5350	50.17	51.85	54	-3.83	34.68	9.94	46.3	100	90	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	56.14	58.37	74	-17.86	34.6	9.52	46.35	100	245	Peak
5150	48.84	51.07	54	-5.16	34.6	9.52	46.35	100	245	Average
5320	97.33	99.15	-	-	34.6	9.88	46.3	100	245	Peak
5320	91.29	93.11	-	-	34.6	9.88	46.3	100	245	Average
5350	56.57	58.33	74	-17.43	34.6	9.94	46.3	100	245	Peak
5350	48.86	50.62	54	-5.14	34.6	9.94	46.3	100	245	Average

REMARKS:

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



802.11n (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.18	59.49	74	-16.82	34.52	9.52	46.35	103	90	Peak
5150	49.55	51.86	54	-4.45	34.52	9.52	46.35	103	90	Average
5260	105.54	107.5	-	-	34.61	9.75	46.32	103	90	Peak
5260	98.9	100.86	-	-	34.61	9.75	46.32	103	90	Average
5350	56.19	57.87	74	-17.81	34.68	9.94	46.3	103	90	Peak
5350	49.11	50.79	54	-4.89	34.68	9.94	46.3	103	90	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	245	Peak
5150	49.03	51.26	54	-4.97	34.6	9.52	46.35	100	245	Average
5260	98.95	100.92	-	-	34.6	9.75	46.32	100	245	Peak
5260	92.59	94.56	-	-	34.6	9.75	46.32	100	245	Average
5350	54.78	56.54	74	-19.22	34.6	9.94	46.3	100	245	Peak
5350	49.03	50.79	54	-4.97	34.6	9.94	46.3	100	245	Average

REMARKS:

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

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
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	55.77	58.08	74	-18.23	34.52	9.52	46.35	100	90	Peak
5150	49.34	51.65	54	-4.66	34.52	9.52	46.35	100	90	Average
5300	105.5	107.34	-	-	34.64	9.83	46.31	100	90	Peak
5300	98.55	100.39	-	-	34.64	9.83	46.31	100	90	Average
5350	54.99	56.67	74	-19.01	34.68	9.94	46.3	100	90	Peak
5350	50.01	51.69	54	-3.99	34.68	9.94	46.3	100	90	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	55.57	57.8	74	-18.43	34.6	9.52	46.35	100	245	Peak
5150	49.12	51.35	54	-4.88	34.6	9.52	46.35	100	245	Average
5300	99.66	101.54	-	-	34.6	9.83	46.31	100	245	Peak
5300	93.23	95.11	-	-	34.6	9.83	46.31	100	245	Average
5350	54.68	56.44	74	-19.32	34.6	9.94	46.3	100	245	Peak
5350	50.03	51.79	54	-3.97	34.6	9.94	46.3	100	245	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.86	58.17	74	-18.14	34.52	9.52	46.35	100	90	Peak
5150	49.31	51.62	54	-4.69	34.52	9.52	46.35	100	90	Average
5320	104.76	106.52	-	-	34.66	9.88	46.3	100	90	Peak
5320	98.48	100.24	-	-	34.66	9.88	46.3	100	90	Average
5350	57.45	59.13	74	-16.55	34.68	9.94	46.3	100	90	Peak
5350	50.77	52.45	54	-3.23	34.68	9.94	46.3	100	90	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.26	59.49	74	-16.74	34.6	9.52	46.35	100	245	Peak
5150	49.52	51.75	54	-4.48	34.6	9.52	46.35	100	245	Average
5320	98.85	100.67	-	-	34.6	9.88	46.3	100	245	Peak
5320	92.41	94.23	-	-	34.6	9.88	46.3	100	245	Average
5350	56.38	58.14	74	-17.62	34.6	9.94	46.3	100	245	Peak
5350	49.42	51.18	54	-4.58	34.6	9.94	46.3	100	245	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 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	56.74	59.05	74	-17.26	34.52	9.52	46.35	103	90	Peak
5150	49.9	52.21	54	-4.1	34.52	9.52	46.35	103	90	Average
5270	98.9	100.83	-	-	34.62	9.77	46.32	103	90	Peak
5270	93.94	95.87	-	-	34.62	9.77	46.32	103	90	Average
5350	53.68	55.36	74	-20.32	34.68	9.94	46.3	103	90	Peak
5350	49.31	50.99	54	-4.69	34.68	9.94	46.3	103	90	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	55.41	57.64	74	-18.59	34.6	9.52	46.35	100	240	Peak
5150	50.3	52.53	54	-3.7	34.6	9.52	46.35	100	240	Average
5270	93.53	95.48	-	-	34.6	9.77	46.32	100	240	Peak
5270	88.38	90.33	-	-	34.6	9.77	46.32	100	240	Average
5350	55.38	57.14	74	-18.62	34.6	9.94	46.3	100	240	Peak
5350	49.05	50.81	54	-4.95	34.6	9.94	46.3	100	240	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.09	57.4	74	-18.91	34.52	9.52	46.35	100	90	Peak
5150	49.37	51.68	54	-4.63	34.52	9.52	46.35	100	90	Average
5310	94.22	96.03	-	-	34.65	9.85	46.31	100	90	Peak
5310	88.55	90.36	-	-	34.65	9.85	46.31	100	90	Average
5350	55.73	57.41	74	-18.27	34.68	9.94	46.3	100	90	Peak
5350	50.87	52.55	54	-3.13	34.68	9.94	46.3	100	90	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	54.11	56.34	74	-19.89	34.6	9.52	46.35	100	240	Peak
5150	49.19	51.42	54	-4.81	34.6	9.52	46.35	100	240	Average
5310	88.25	90.11	-	-	34.6	9.85	46.31	100	240	Peak
5310	82.15	84.01	-	-	34.6	9.85	46.31	100	240	Average
5350	55.03	56.79	74	-18.97	34.6	9.94	46.3	100	240	Peak
5350	49.62	51.38	54	-4.38	34.6	9.94	46.3	100	240	Average

REMARKS:

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



802.11ac (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.02	57.33	74	-18.98	34.52	9.52	46.35	103	90	Peak
5150	49.09	51.4	54	-4.91	34.52	9.52	46.35	103	90	Average
5260	103.91	105.87	-	-	34.61	9.75	46.32	103	90	Peak
5260	96.97	98.93	-	-	34.61	9.75	46.32	103	90	Average
5350	55.49	57.17	74	-18.51	34.68	9.94	46.3	103	90	Peak
5350	48.35	50.03	54	-5.65	34.68	9.94	46.3	103	90	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	55.84	58.07	74	-18.16	34.6	9.52	46.35	110	260	Peak
5150	49.42	51.65	54	-4.58	34.6	9.52	46.35	110	260	Average
5260	96.93	98.9	-	-	34.6	9.75	46.32	110	260	Peak
5260	90.24	92.21	-	-	34.6	9.75	46.32	110	260	Average
5350	55.6	57.36	74	-18.4	34.6	9.94	46.3	110	260	Peak
5350	48.27	50.03	54	-5.73	34.6	9.94	46.3	110	260	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.85	58.16	74	-18.15	34.52	9.52	46.35	103	90	Peak
5150	48.84	51.15	54	-5.16	34.52	9.52	46.35	103	90	Average
5300	102.63	104.47	-	-	34.64	9.83	46.31	103	90	Peak
5300	95.73	97.57	-	-	34.64	9.83	46.31	103	90	Average
5350	54.35	56.03	74	-19.65	34.68	9.94	46.3	103	90	Peak
5350	48.86	50.54	54	-5.14	34.68	9.94	46.3	103	90	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	55.3	57.53	74	-18.7	34.6	9.52	46.35	100	260	Peak
5150	49.5	51.73	54	-4.5	34.6	9.52	46.35	100	260	Average
5300	97.46	99.34	-	-	34.6	9.83	46.31	100	260	Peak
5300	90.77	92.65	-	-	34.6	9.83	46.31	100	260	Average
5350	54.4	56.16	74	-19.6	34.6	9.94	46.3	100	260	Peak
5350	48.37	50.13	54	-5.63	34.6	9.94	46.3	100	260	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.86	57.17	74	-19.14	34.52	9.52	46.35	100	90	Peak
5150	48.95	51.26	54	-5.05	34.52	9.52	46.35	100	90	Average
5320	103.51	105.27	-	-	34.66	9.88	46.3	100	90	Peak
5320	97.5	99.26	-	-	34.66	9.88	46.3	100	90	Average
5350	57.87	59.55	74	-16.13	34.68	9.94	46.3	100	90	Peak
5350	50.54	52.22	54	-3.46	34.68	9.94	46.3	100	90	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	54.69	56.92	74	-19.31	34.6	9.52	46.35	100	260	Peak
5150	48.52	50.75	54	-5.48	34.6	9.52	46.35	100	260	Average
5320	96.26	98.08	-	-	34.6	9.88	46.3	100	260	Peak
5320	89.58	91.4	-	-	34.6	9.88	46.3	100	260	Average
5350	53.28	55.04	74	-20.72	34.6	9.94	46.3	100	260	Peak
5350	48.47	50.23	54	-5.53	34.6	9.94	46.3	100	260	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 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	56.01	58.32	74	-17.99	34.52	9.52	46.35	103	90	Peak
5150	48.69	51	54	-5.31	34.52	9.52	46.35	103	90	Average
5270	97.47	99.4	-	-	34.62	9.77	46.32	103	90	Peak
5270	90.98	92.91	-	-	34.62	9.77	46.32	103	90	Average
5350	53.5	55.18	74	-20.5	34.68	9.94	46.3	103	90	Peak
5350	48.25	49.93	54	-5.75	34.68	9.94	46.3	103	90	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	54.07	56.3	74	-19.93	34.6	9.52	46.35	105	235	Peak
5150	48.85	51.08	54	-5.15	34.6	9.52	46.35	105	235	Average
5270	91.73	93.68	-	-	34.6	9.77	46.32	105	235	Peak
5270	84.23	86.18	-	-	34.6	9.77	46.32	105	235	Average
5350	55.22	56.98	74	-18.78	34.6	9.94	46.3	105	235	Peak
5350	48.21	49.97	54	-5.79	34.6	9.94	46.3	105	235	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.13	57.44	74	-18.87	34.52	9.52	46.35	103	90	Peak
5150	49.09	51.4	54	-4.91	34.52	9.52	46.35	103	90	Average
5310	91.73	93.54	–	–	34.65	9.85	46.31	103	90	Peak
5310	86.04	87.85	–	–	34.65	9.85	46.31	103	90	Average
5350	55.6	57.28	74	-18.4	34.68	9.94	46.3	103	90	Peak
5350	50.78	52.46	54	-3.22	34.68	9.94	46.3	103	90	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	55.43	57.66	74	-18.57	34.6	9.52	46.35	103	240	Peak
5150	48.79	51.02	54	-5.21	34.6	9.52	46.35	103	240	Average
5310	87.3	89.16	–	–	34.6	9.85	46.31	103	240	Peak
5310	80.65	82.51	–	–	34.6	9.85	46.31	103	240	Average
5350	56.3	58.06	74	-17.7	34.6	9.94	46.3	103	240	Peak
5350	48.46	50.22	54	-5.54	34.6	9.94	46.3	103	240	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 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	55.54	57.85	74	-18.46	34.52	9.52	46.35	103	90	Peak
5150	48.49	50.8	54	-5.51	34.52	9.52	46.35	103	90	Average
5290	91.84	93.71	-	-	34.63	9.81	46.31	103	90	Peak
5290	85.54	87.41	-	-	34.63	9.81	46.31	103	90	Average
5350	56.41	58.09	74	-17.59	34.68	9.94	46.3	103	90	Peak
5350	50.44	52.12	54	-3.56	34.68	9.94	46.3	103	90	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	56.63	58.86	74	-17.37	34.6	9.52	46.35	103	260	Peak
5150	48.8	51.03	54	-5.2	34.6	9.52	46.35	103	260	Average
5290	86.34	88.24	-	-	34.6	9.81	46.31	103	260	Peak
5290	80.53	82.43	-	-	34.6	9.81	46.31	103	260	Average
5350	54.35	56.11	74	-19.65	34.6	9.94	46.3	103	260	Peak
5350	49.44	51.2	54	-4.56	34.6	9.94	46.3	103	260	Average

REMARKS:

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



802.11ax (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.09	58.4	74	-17.91	34.52	9.52	46.35	103	90	Peak
5150	48.38	50.69	54	-5.62	34.52	9.52	46.35	103	90	Average
5260	104.15	106.11	-	-	34.61	9.75	46.32	103	90	Peak
5260	95.57	97.53	-	-	34.61	9.75	46.32	103	90	Average
5350	56.75	58.43	74	-17.25	34.68	9.94	46.3	103	90	Peak
5350	47.89	49.57	54	-6.11	34.68	9.94	46.3	103	90	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	55.07	57.3	74	-18.93	34.6	9.52	46.35	103	260	Peak
5150	48.95	51.18	54	-5.05	34.6	9.52	46.35	103	260	Average
5260	99.75	101.72	-	-	34.6	9.75	46.32	103	260	Peak
5260	90.45	92.42	-	-	34.6	9.75	46.32	103	260	Average
5350	54.27	56.03	74	-19.73	34.6	9.94	46.3	103	260	Peak
5350	48.05	49.81	54	-5.95	34.6	9.94	46.3	103	260	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.76	58.07	74	-18.24	34.52	9.52	46.35	103	90	Peak
5150	48.68	50.99	54	-5.32	34.52	9.52	46.35	103	90	Average
5300	102.43	104.27	-	-	34.64	9.83	46.31	103	90	Peak
5300	94.96	96.8	-	-	34.64	9.83	46.31	103	90	Average
5350	54.87	56.55	74	-19.13	34.68	9.94	46.3	103	90	Peak
5350	48.68	50.36	54	-5.32	34.68	9.94	46.3	103	90	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	55.74	57.97	74	-18.26	34.6	9.52	46.35	103	260	Peak
5150	48.25	50.48	54	-5.75	34.6	9.52	46.35	103	260	Average
5300	99.15	101.03	-	-	34.6	9.83	46.31	103	260	Peak
5300	91.08	92.96	-	-	34.6	9.83	46.31	103	260	Average
5350	53.53	55.29	74	-20.47	34.6	9.94	46.3	103	260	Peak
5350	49.88	51.64	54	-4.12	34.6	9.94	46.3	103	260	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.73	59.04	74	-17.27	34.52	9.52	46.35	103	90	Peak
5150	48.14	50.45	54	-5.86	34.52	9.52	46.35	103	90	Average
5320	102.92	104.68	-	-	34.66	9.88	46.3	103	90	Peak
5320	94.13	95.89	-	-	34.66	9.88	46.3	103	90	Average
5350	57	58.68	74	-17	34.68	9.94	46.3	103	90	Peak
5350	49.13	50.81	54	-4.87	34.68	9.94	46.3	103	90	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	53.91	56.14	74	-20.09	34.6	9.52	46.35	103	260	Peak
5150	48.83	51.06	54	-5.17	34.6	9.52	46.35	103	260	Average
5320	99.38	101.2	-	-	34.6	9.88	46.3	103	260	Peak
5320	91.17	92.99	-	-	34.6	9.88	46.3	103	260	Average
5350	53.98	55.74	74	-20.02	34.6	9.94	46.3	103	260	Peak
5350	49.07	50.83	54	-4.93	34.6	9.94	46.3	103	260	Average

REMARKS:

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



802.11ax (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	54.55	56.86	74	-19.45	34.52	9.52	46.35	103	90	Peak
5150	48.58	50.89	54	-5.42	34.52	9.52	46.35	103	90	Average
5270	97.66	99.59	-	-	34.62	9.77	46.32	103	90	Peak
5270	90.11	92.04	-	-	34.62	9.77	46.32	103	90	Average
5350	53.76	55.44	74	-20.24	34.68	9.94	46.3	103	90	Peak
5350	47.9	49.58	54	-6.1	34.68	9.94	46.3	103	90	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	55.37	57.6	74	-18.63	34.6	9.52	46.35	103	260	Peak
5150	48.74	50.97	54	-5.26	34.6	9.52	46.35	103	260	Average
5270	94.56	96.51	-	-	34.6	9.77	46.32	103	260	Peak
5270	85.1	87.05	-	-	34.6	9.77	46.32	103	260	Average
5350	53.48	55.24	74	-20.52	34.6	9.94	46.3	103	260	Peak
5350	48.11	49.87	54	-5.89	34.6	9.94	46.3	103	260	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.35	57.66	74	-18.65	34.52	9.52	46.35	103	90	Peak
5150	47.27	49.58	54	-6.73	34.52	9.52	46.35	103	90	Average
5310	94.71	96.52	-	-	34.65	9.85	46.31	103	90	Peak
5310	86.97	88.78	-	-	34.65	9.85	46.31	103	90	Average
5350	55.88	57.56	74	-18.12	34.68	9.94	46.3	103	90	Peak
5350	50.2	51.88	54	-3.8	34.68	9.94	46.3	103	90	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	54.75	56.98	74	-19.25	34.6	9.52	46.35	103	260	Peak
5150	47.59	49.82	54	-6.41	34.6	9.52	46.35	103	260	Average
5310	91.94	93.8	-	-	34.6	9.85	46.31	103	260	Peak
5310	83.64	85.5	-	-	34.6	9.85	46.31	103	260	Average
5350	56.59	58.35	74	-17.41	34.6	9.94	46.3	103	260	Peak
5350	49.67	51.43	54	-4.33	34.6	9.94	46.3	103	260	Average

REMARKS:

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



802.11ax (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	54.14	56.45	74	-19.86	34.52	9.52	46.35	103	90	Peak
5150	48.73	51.04	54	-5.27	34.52	9.52	46.35	103	90	Average
5290	93.63	95.5	-	-	34.63	9.81	46.31	103	90	Peak
5290	85.45	87.32	-	-	34.63	9.81	46.31	103	90	Average
5350	57.42	59.1	74	-16.58	34.68	9.94	46.3	103	90	Peak
5350	50.53	52.21	54	-3.47	34.68	9.94	46.3	103	90	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	55.21	57.44	74	-18.79	34.6	9.52	46.35	103	260	Peak
5150	48.61	50.84	54	-5.39	34.6	9.52	46.35	103	260	Average
5290	88.18	90.08	-	-	34.6	9.81	46.31	103	260	Peak
5290	80.06	81.96	-	-	34.6	9.81	46.31	103	260	Average
5350	56.5	58.26	74	-17.5	34.6	9.94	46.3	103	260	Peak
5350	49.34	51.1	54	-4.66	34.6	9.94	46.3	103	260	Average

REMARKS:

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



ABOVE 1GHz WORST-CASE DATA Ant 0+1:

802.11ac (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.96	58.27	74	-18.04	34.52	9.52	46.35	100	290	Peak
5150	50.33	52.64	54	-3.67	34.52	9.52	46.35	100	290	Average
5260	104.18	106.14	-	-	34.61	9.75	46.32	100	290	Peak
5260	97.24	99.2	-	-	34.61	9.75	46.32	100	290	Average
5350	54.89	56.57	74	-19.11	34.68	9.94	46.3	100	290	Peak
5350	49.09	50.77	54	-4.91	34.68	9.94	46.3	100	290	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	55.25	57.48	74	-18.75	34.6	9.52	46.35	100	165	Peak
5150	49.77	52	54	-4.23	34.6	9.52	46.35	100	165	Average
5260	105.01	106.98	-	-	34.6	9.75	46.32	100	165	Peak
5260	96.92	98.89	-	-	34.6	9.75	46.32	100	165	Average
5350	54.74	56.5	74	-19.26	34.6	9.94	46.3	100	165	Peak
5350	48.41	50.17	54	-5.59	34.6	9.94	46.3	100	165	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.22	56.53	74	-19.78	34.52	9.52	46.35	100	290	Peak
5150	49.79	52.1	54	-4.21	34.52	9.52	46.35	100	290	Average
5300	103.26	105.1	-	-	34.64	9.83	46.31	100	290	Peak
5300	96.03	97.87	-	-	34.64	9.83	46.31	100	290	Average
5350	54.5	56.18	74	-19.5	34.68	9.94	46.3	100	290	Peak
5350	48.99	50.67	54	-5.01	34.68	9.94	46.3	100	290	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	54.74	56.97	74	-19.26	34.6	9.52	46.35	100	165	Peak
5150	50.13	52.36	54	-3.87	34.6	9.52	46.35	100	165	Average
5300	104.89	106.77	-	-	34.6	9.83	46.31	100	165	Peak
5300	97.47	99.35	-	-	34.6	9.83	46.31	100	165	Average
5350	55.03	56.79	74	-18.97	34.6	9.94	46.3	100	165	Peak
5350	49.79	51.55	54	-4.21	34.6	9.94	46.3	100	165	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.69	57	74	-19.31	34.52	9.52	46.35	100	290	Peak
5150	49.47	51.78	54	-4.53	34.52	9.52	46.35	100	290	Average
5320	103.37	105.13	–	–	34.66	9.88	46.3	100	290	Peak
5320	96.62	98.38	–	–	34.66	9.88	46.3	100	290	Average
5350	55.59	57.27	74	-18.41	34.68	9.94	46.3	100	290	Peak
5350	50.08	51.76	54	-3.92	34.68	9.94	46.3	100	290	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	55.06	57.29	74	-18.94	34.6	9.52	46.35	100	165	Peak
5150	50.46	52.69	54	-3.54	34.6	9.52	46.35	100	165	Average
5320	104.53	106.35	–	–	34.6	9.88	46.3	100	165	Peak
5320	97.44	99.26	–	–	34.6	9.88	46.3	100	165	Average
5350	55.64	57.4	74	-18.36	34.6	9.94	46.3	100	165	Peak
5350	49.76	51.52	54	-4.24	34.6	9.94	46.3	100	165	Average

REMARKS:

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



802.11ac (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.05	57.36	74	-18.95	34.52	9.52	46.35	100	290	Peak
5150	49.82	52.13	54	-4.18	34.52	9.52	46.35	100	290	Average
5270	98.94	100.87	-	-	34.62	9.77	46.32	100	290	Peak
5270	92.82	94.75	-	-	34.62	9.77	46.32	100	290	Average
5350	53.81	55.49	74	-20.19	34.68	9.94	46.3	100	290	Peak
5350	49.26	50.94	54	-4.74	34.68	9.94	46.3	100	290	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	54.37	56.6	74	-19.63	34.6	9.52	46.35	100	165	Peak
5150	49.8	52.03	54	-4.2	34.6	9.52	46.35	100	165	Average
5270	99.71	101.66	-	-	34.6	9.77	46.32	100	165	Peak
5270	93.36	95.31	-	-	34.6	9.77	46.32	100	165	Average
5350	54.58	56.34	74	-19.42	34.6	9.94	46.3	100	165	Peak
5350	48.81	50.57	54	-5.19	34.6	9.94	46.3	100	165	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.76	58.07	74	-18.24	34.52	9.52	46.35	100	290	Peak
5150	49.43	51.74	54	-4.57	34.52	9.52	46.35	100	290	Average
5310	94.26	96.07	-	-	34.65	9.85	46.31	100	290	Peak
5310	88.51	90.32	-	-	34.65	9.85	46.31	100	290	Average
5350	55.17	56.85	74	-18.83	34.68	9.94	46.3	100	290	Peak
5350	50.55	52.23	54	-3.45	34.68	9.94	46.3	100	290	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	55.75	57.98	74	-18.25	34.6	9.52	46.35	100	165	Peak
5150	49.94	52.17	54	-4.06	34.6	9.52	46.35	100	165	Average
5310	95.98	97.84	-	-	34.6	9.85	46.31	100	165	Peak
5310	90.11	91.97	-	-	34.6	9.85	46.31	100	165	Average
5350	57.25	59.01	74	-16.75	34.6	9.94	46.3	100	165	Peak
5350	50.82	52.58	54	-3.18	34.6	9.94	46.3	100	165	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 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	55.32	57.63	74	-18.68	34.52	9.52	46.35	100	290	Peak
5150	49.31	51.62	54	-4.69	34.52	9.52	46.35	100	290	Average
5290	91.63	93.5	-	-	34.63	9.81	46.31	100	290	Peak
5290	86.52	88.39	-	-	34.63	9.81	46.31	100	290	Average
5350	55.53	57.21	74	-18.47	34.68	9.94	46.3	100	290	Peak
5350	50.28	51.96	54	-3.72	34.68	9.94	46.3	100	290	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	55.74	57.97	74	-18.26	34.6	9.52	46.35	100	165	Peak
5150	49.95	52.18	54	-4.05	34.6	9.52	46.35	100	165	Average
5290	92.59	94.49	-	-	34.6	9.81	46.31	100	165	Peak
5290	87.66	89.56	-	-	34.6	9.81	46.31	100	165	Average
5350	57	58.76	74	-17	34.6	9.94	46.3	100	165	Peak
5350	50.86	52.62	54	-3.14	34.6	9.94	46.3	100	165	Average

REMARKS:

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



**BUREAU
VERITAS**

Test Report No.: W7L-P21100002RF09

802.11ax (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.61	56.92	74	-19.39	34.52	9.52	46.35	110	290	Peak
5150	49.55	51.86	54	-4.45	34.52	9.52	46.35	110	290	Average
5260	103.85	105.81	-	-	34.61	9.75	46.32	110	290	Peak
5260	96.73	98.69	-	-	34.61	9.75	46.32	110	290	Average
5350	57.1	58.78	74	-16.9	34.68	9.94	46.3	110	290	Peak
5350	48.65	50.33	54	-5.35	34.68	9.94	46.3	110	290	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	54.1	56.33	74	-19.9	34.6	9.52	46.35	100	63	Peak
5150	50.02	52.25	54	-3.98	34.6	9.52	46.35	100	63	Average
5260	105.84	107.81	-	-	34.6	9.75	46.32	100	63	Peak
5260	97.78	99.75	-	-	34.6	9.75	46.32	100	63	Average
5350	54.45	56.21	74	-19.55	34.6	9.94	46.3	100	63	Peak
5350	49.17	50.93	54	-4.83	34.6	9.94	46.3	100	63	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.54	56.85	74	-19.46	34.52	9.52	46.35	100	290	Peak
5150	49.92	52.23	54	-4.08	34.52	9.52	46.35	100	290	Average
5300	104.47	106.31	-	-	34.64	9.83	46.31	100	290	Peak
5300	96.82	98.66	-	-	34.64	9.83	46.31	100	290	Average
5350	54.66	56.34	74	-19.34	34.68	9.94	46.3	100	290	Peak
5350	49.43	51.11	54	-4.57	34.68	9.94	46.3	100	290	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	54.69	56.92	74	-19.31	34.6	9.52	46.35	100	165	Peak
5150	49.75	51.98	54	-4.25	34.6	9.52	46.35	100	165	Average
5300	106.12	108	-	-	34.6	9.83	46.31	100	165	Peak
5300	97.37	99.25	-	-	34.6	9.83	46.31	100	165	Average
5350	55.89	57.65	74	-18.11	34.6	9.94	46.3	100	165	Peak
5350	48.53	50.29	54	-5.47	34.6	9.94	46.3	100	165	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.22	57.53	74	-18.78	34.52	9.52	46.35	100	290	Peak
5150	49.79	52.1	54	-4.21	34.52	9.52	46.35	100	290	Average
5320	104.08	105.84	-	-	34.66	9.88	46.3	100	290	Peak
5320	96.14	97.9	-	-	34.66	9.88	46.3	100	290	Average
5350	56.16	57.84	74	-17.84	34.68	9.94	46.3	100	290	Peak
5350	49.92	51.6	54	-4.08	34.68	9.94	46.3	100	290	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	56.63	58.86	74	-17.37	34.6	9.52	46.35	100	165	Peak
5150	49.72	51.95	54	-4.28	34.6	9.52	46.35	100	165	Average
5320	105.58	107.4	-	-	34.6	9.88	46.3	100	165	Peak
5320	96.84	98.66	-	-	34.6	9.88	46.3	100	165	Average
5350	56.16	57.92	74	-17.84	34.6	9.94	46.3	100	165	Peak
5350	49.83	51.59	54	-4.17	34.6	9.94	46.3	100	165	Average

REMARKS:

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



802.11ax (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	54.56	56.87	74	-19.44	34.52	9.52	46.35	100	290	Peak
5150	49.72	52.03	54	-4.28	34.52	9.52	46.35	100	290	Average
5270	99.35	101.28	-	-	34.62	9.77	46.32	100	290	Peak
5270	92.45	94.38	-	-	34.62	9.77	46.32	100	290	Average
5350	54.48	56.16	74	-19.52	34.68	9.94	46.3	100	290	Peak
5350	48.84	50.52	54	-5.16	34.68	9.94	46.3	100	290	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	54.43	56.66	74	-19.57	34.6	9.52	46.35	100	165	Peak
5150	49.83	52.06	54	-4.17	34.6	9.52	46.35	100	165	Average
5270	100.74	102.69	-	-	34.6	9.77	46.32	100	165	Peak
5270	92.82	94.77	-	-	34.6	9.77	46.32	100	165	Average
5350	56.11	57.87	74	-17.89	34.6	9.94	46.3	100	165	Peak
5350	49.16	50.92	54	-4.84	34.6	9.94	46.3	100	165	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.79	57.1	74	-19.21	34.52	9.52	46.35	100	290	Peak
5150	49.69	52	54	-4.31	34.52	9.52	46.35	100	290	Average
5310	95.03	96.84	-	-	34.65	9.85	46.31	100	290	Peak
5310	88.35	90.16	-	-	34.65	9.85	46.31	100	290	Average
5350	56.05	57.73	74	-17.95	34.68	9.94	46.3	100	290	Peak
5350	49.6	51.28	54	-4.4	34.68	9.94	46.3	100	290	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	56.38	58.61	74	-17.62	34.6	9.52	46.35	100	165	Peak
5150	50.16	52.39	54	-3.84	34.6	9.52	46.35	100	165	Average
5310	96.25	98.11	-	-	34.6	9.85	46.31	100	165	Peak
5310	89.34	91.2	-	-	34.6	9.85	46.31	100	165	Average
5350	55.25	57.01	74	-18.75	34.6	9.94	46.3	100	165	Peak
5350	50.69	52.45	54	-3.31	34.6	9.94	46.3	100	165	Average

REMARKS:

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



802.11ax (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	55.7	58.01	74	-18.3	34.52	9.52	46.35	100	290	Peak
5150	49.53	51.84	54	-4.47	34.52	9.52	46.35	100	290	Average
5290	92.66	94.53	-	-	34.63	9.81	46.31	100	290	Peak
5290	86.3	88.17	-	-	34.63	9.81	46.31	100	290	Average
5350	54.46	56.14	74	-19.54	34.68	9.94	46.3	100	290	Peak
5350	49.98	51.66	54	-4.02	34.68	9.94	46.3	100	290	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	55.21	57.44	74	-18.79	34.6	9.52	46.35	100	165	Peak
5150	49.94	52.17	54	-4.06	34.6	9.52	46.35	100	165	Average
5290	95.22	97.12	-	-	34.6	9.81	46.31	100	165	Peak
5290	86.71	88.61	-	-	34.6	9.81	46.31	100	165	Average
5350	56.44	58.2	74	-17.56	34.6	9.94	46.3	100	165	Peak
5350	50.52	52.28	54	-3.48	34.6	9.94	46.3	100	165	Average

REMARKS:

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

Band 3

ABOVE 1GHz WORST-CASE DATA Ant 1:

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	56.89	58.21	74	-17.11	34.77	10.17	46.26	103	90	Peak
5460	49.5	50.82	54	-4.5	34.77	10.17	46.26	103	90	Average
5470	57.53	58.82	68.3	-10.77	34.78	10.19	46.26	103	90	Peak
#5500	104.59	105.78	-	-	34.8	10.26	46.25	103	90	Peak
#5500	98.62	99.81	-	-	34.8	10.26	46.25	103	90	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	54.72	56.21	74	-19.28	34.6	10.17	46.26	100	258	Peak
5460	50	51.49	54	-4	34.6	10.17	46.26	100	258	Average
5470	57.02	58.49	68.3	-11.28	34.6	10.19	46.26	100	258	Peak
#5500	98.91	100.3	-	-	34.6	10.26	46.25	100	258	Peak
#5500	93.21	94.6	-	-	34.6	10.26	46.25	100	258	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.