

FCC TEST REPORT

(Part 15, Subpart E)

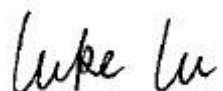
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Manufacturer or Supplier:	PAX Computer Technology (Shenzhen) Co., Ltd.
Address:	4/F, No.3 Building, Software Park, Second Central Science-Tech Road, High-Tech industrial Park, Shenzhen, Guangdong, P.R.C.
Product:	Pay Tablet
Brand Name:	PAX
Model Name:	M8
FCC ID:	V5PM8
Date of tests:	Sep. 19, 2021 ~ Oct. 12, 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: Oct. 13, 2021	 Date: Oct. 13, 2021

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Test Report No.: W7L-P21090022RF03

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P21090022RF03	Original release	Oct. 13, 2021



1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

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

1.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	UNCERTAINTY
AC Power Conducted emissions	$\pm 2.70\text{dB}$
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	Pay Tablet
BRAND NAME	PAX
MODEL NAME	M8
NOMINAL VOLTAGE	5Vdc /9Vdc /12Vdc (adapter) 3.85Vdc (Rechargeable Li-ion, battery)
MODULATION	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to MCS7 802.11ac: up to 390.0Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5720MHz, 5745 ~ 5825MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n, 802.11ac (20MHz) 2 for 802.11n, 802.11ac (40MHz) 1 for 802.11ac (80MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n, 802.11ac (20MHz) 2 for 802.11n, 802.11ac (40MHz) 1 for 802.11ac (80MHz) 5500 ~ 5720MHz: 12 for 802.11a, 802.11n, 802.11ac(20MHz) 6 for 802.11n, 802.11ac (40MHz) 3 for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n, 802.11ac (20MHz) 3 for 802.11n, 802.11ac (40MHz) 2 for 802.11ac (80MHz)
AVERAGE POWER	26.24mW for 5180 ~ 5240MHz 25.12mW for 5260 ~ 5320MHz 26.85mW for 5500 ~ 5720MHz 26.36mW for 5745 ~ 5825MHz
ANTENNA TYPE	PIFA Antenna
ANTENNA GAIN	0.7 dBi for 5180 ~ 5240MHz 0.7 dBi for 5260 ~ 5320MHz 0.7 dBi for 5500 ~ 5720MHz 0.7 dBi for 5745 ~ 5825MHz
HW VERSION	M8-XXX-XXX-XXXX
SW VERSION	V0.0.0.1
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	USB cable: unshielded without ferrite, 1 meter



NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

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

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

List of Accessory:

ACCESSORIES	BRAND	MODEL	SPECIFICATION
Battery	IES	ICS021NA	Capacity: 3.85vdc 6300mAh
AC Adapter	/	GLH-PD18W-U	I/P:100-240Vac, 0.5A O/P: 5Vdc, 3A/9Vdc, 2A/12Vdc, 1.5A
USB Cable	/	HJ-20010506CC444	Shielded, 1meter

2.2 DESCRIPTION OF TEST MODES

FOR 5180 ~ 5240MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210 MHz		

FOR 5260 ~ 5320MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
58	5290 MHz		

**FOR 5500 ~ 5720MHz**

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	124	5620MHz
104	5520 MHz	128	5640MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz	144	5720 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	126	5630MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz	142	5710 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530 MHz	138	5690 MHz
122	5610 MHz		

FOR 5745 ~ 5825MHz

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

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

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
138	5690MHz	155	5775 MHz



2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE $\geq$ 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	802.11n (20MHz)	5180-5240	36 to 48	48	OFDM	MCS0

**RADIATED EMISSION TEST (ABOVE 1GHz):**

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

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

POWER LINE CONDUCTED EMISSION TEST:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11n (40MHz)	5180-5240	36 to 48	48	OFDM	MCS0

**BANDEDGE MEASUREMENT:**

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

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



A	802.11ac (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138,155	138, 155	OFDM	MCS0

ANTENNA PORT CONDUCTED MEASUREMENT:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
A	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11n (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
A	802.11ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11n (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0



A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11n (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11n (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11ac (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac (80MHz)		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11n (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11n (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11ac (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138,155	138, 155	OFDM	MCS0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	23deg. C, 70%RH	DC 3.85V	Star Le
RE≥1G	23deg. C, 70%RH	DC 3.85V	Star Le
PLC	25deg. C, 52%RH	DC 3.85V	Jimmy Liu
APCM	25deg. C, 60%RH	DC 3.85V	Kevin Zhang

2.3 DUTY CYCLE OF TEST SIGNAL

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

802.11a: Duty cycle = 1.41/1.44 = 0.979, Duty factor = $10 * \log(1 / 0.979) = 0.09$.

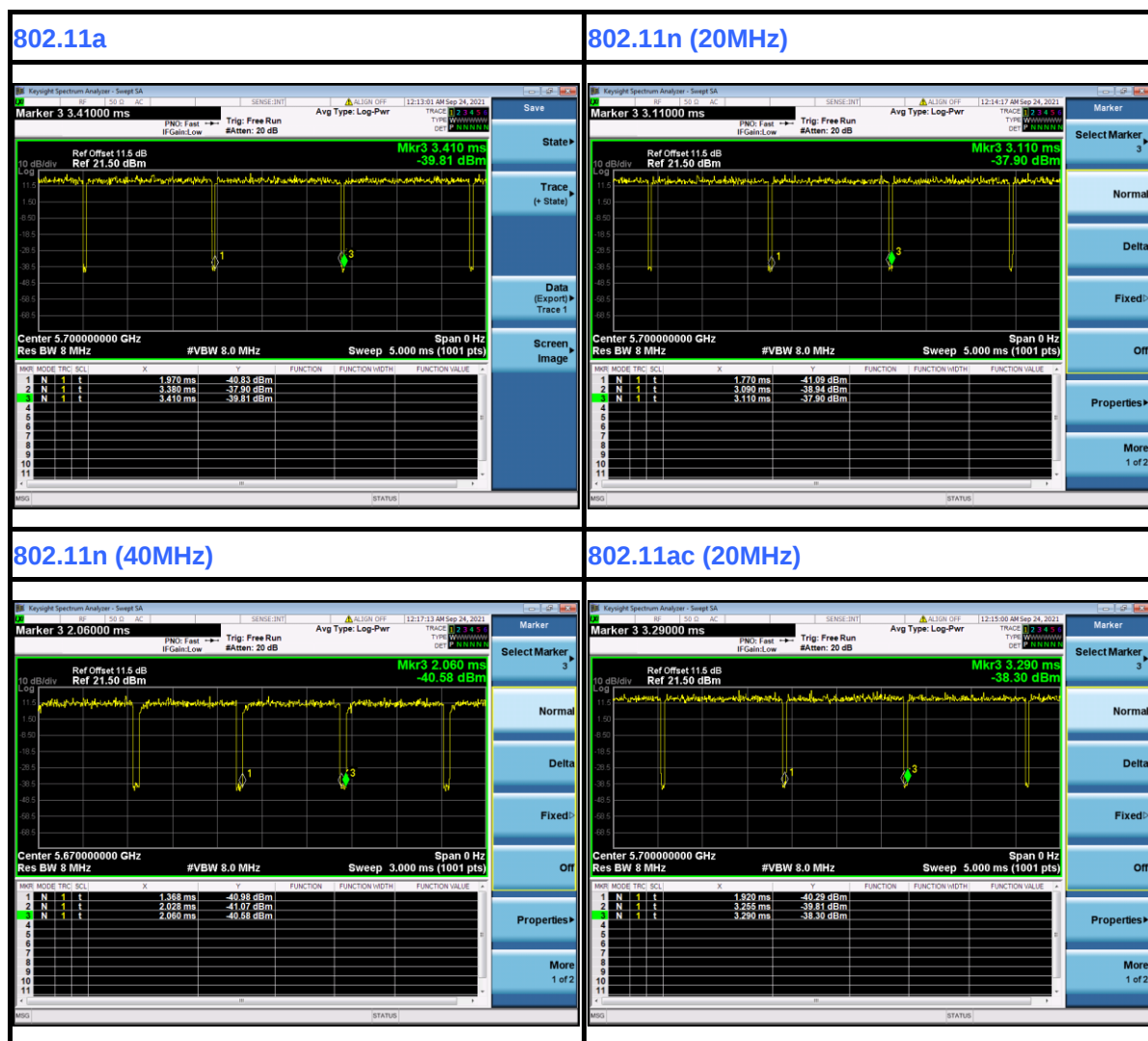
802.11n (20MHz): Duty cycle = 1.32/1.34=0.985, duty factor shall not be considered.

802.11n (40MHz): Duty cycle =0.66/0.692 = 0.954, Duty factor = $10 * \log(1 / 0.954) = 0.20$

802.11ac (20MHz): Duty cycle = 1.335/1.37=0.974, Duty factor = $10 * \log(1 / 0.974) = 0.11$.

802.11ac (40MHz): Duty cycle =0.663/0.698=0.95, Duty factor = $10 * \log(1 / 0.95) = 0.22$.

802.11ac (80MHz): Duty cycle =0.332/0.366=0.907, Duty factor = $10 * \log(1 / 0.907) = 0.42$

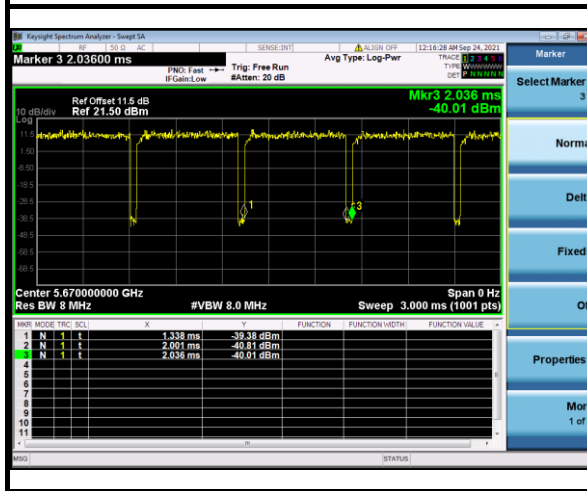




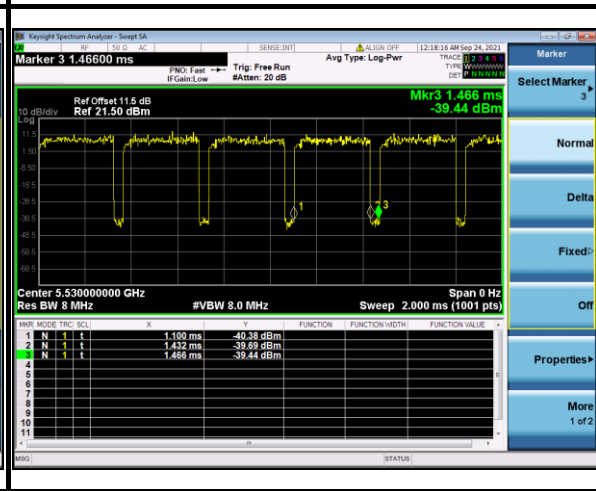
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802.11 ac (40MHz)



802.11ac (80MHz)





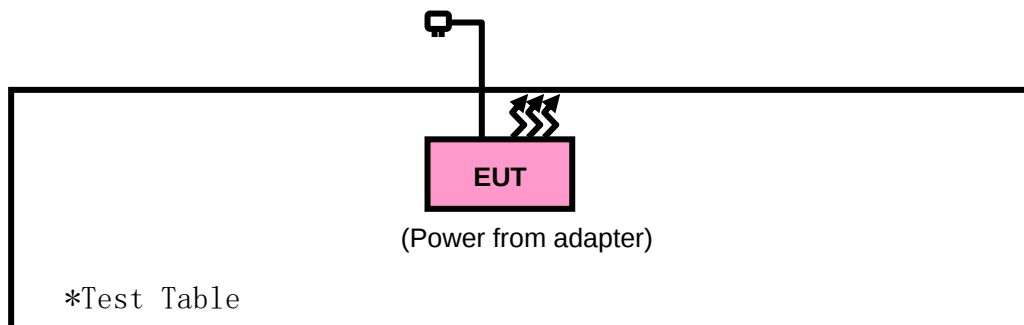
2.4 DESCRIPTION OF SUPPORT UNITS

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

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Desktop	Lenovo	M73 SFF	PC04GRQV	N/A
2	Desktop	Lenovo	M73 SFF	PC06CS27	N/A
3	Laptop	Lenovo	Thnikpad L440	R90FTFKN	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	AC Line: Unshielded, Detachable 1m

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. 26, 21	Aug. 25, 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:

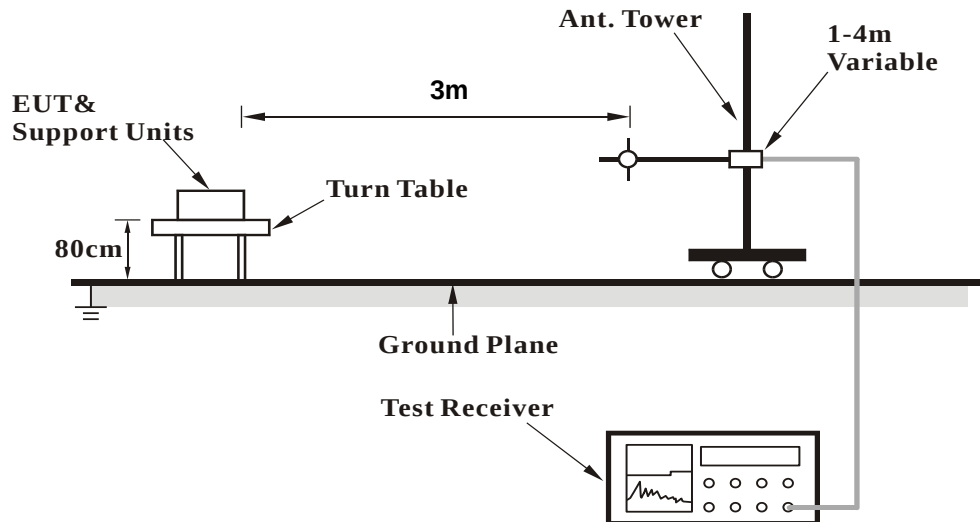
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency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

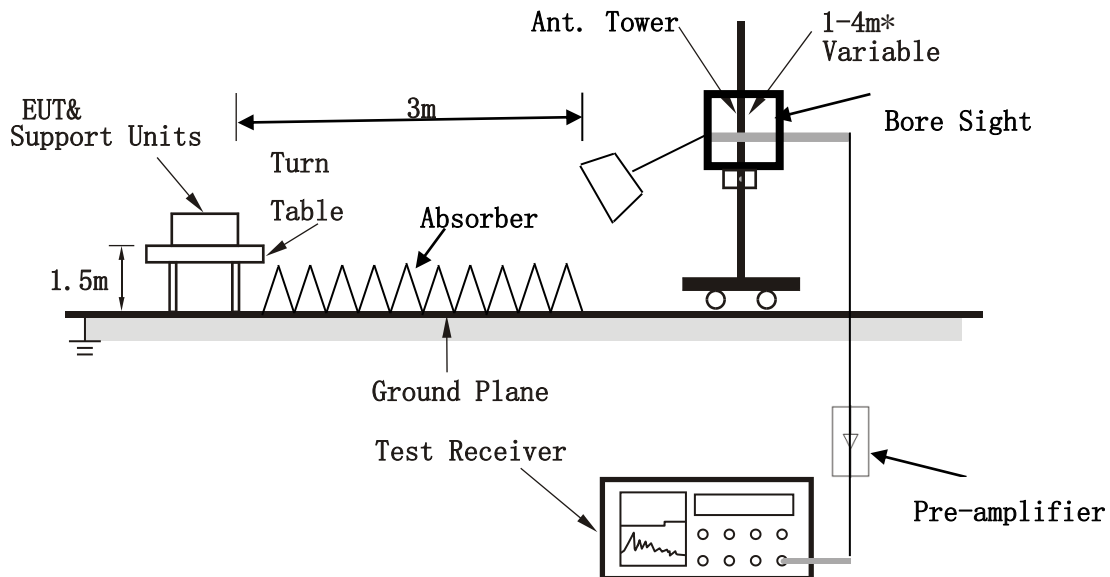
No deviation.

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-P21090022RF03

3.1.7 EUT OPERATING CONDITION

- a. Set the EUT under full load condition and placed them on a testing table.
- b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.
- c. The necessary accessories enable the EUT in full functions.



3.1.8 TEST RESULTS

BELOW 1GHz WORST-CASE DATA:

30 MHz – 1GHz data:

Band 2

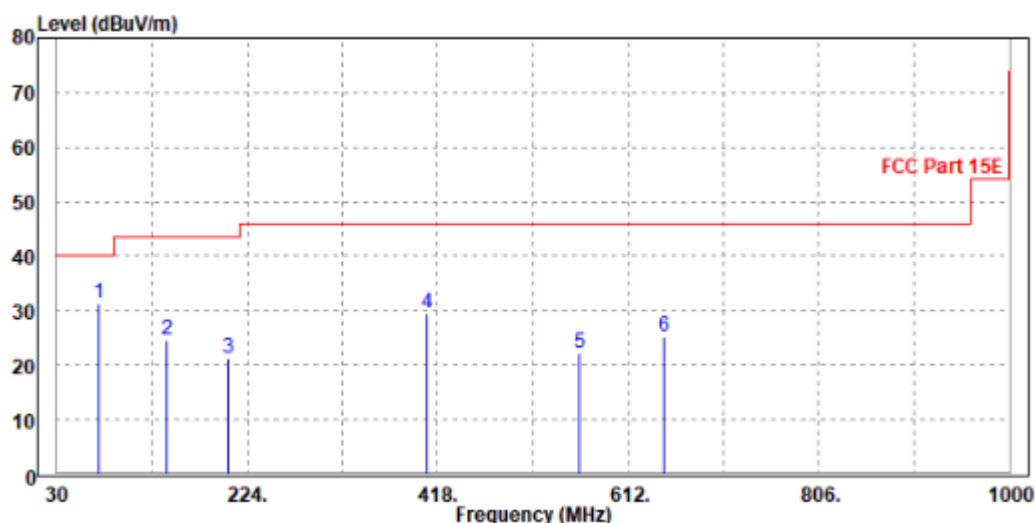
802.11n (40MHz)

CHANNEL	TX Channel 48	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
72.68	31.48	59.96	40	-8.52	7.75	1.1	37.33	300	360	Peak
142.52	24.57	51.39	43.5	-18.93	8.55	1.52	36.89	300	360	Peak
204.6	21.31	44.85	43.5	-22.19	11.2	1.82	36.56	300	360	Peak
406.36	29.6	46.85	46	-16.4	17.01	2.58	36.84	300	360	Peak
562.53	22.07	36.24	46	-23.93	19.95	3.11	37.23	300	360	Peak
648.86	25.21	37.6	46	-20.79	21.68	3.38	37.45	300	360	Peak

REMARKS:

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

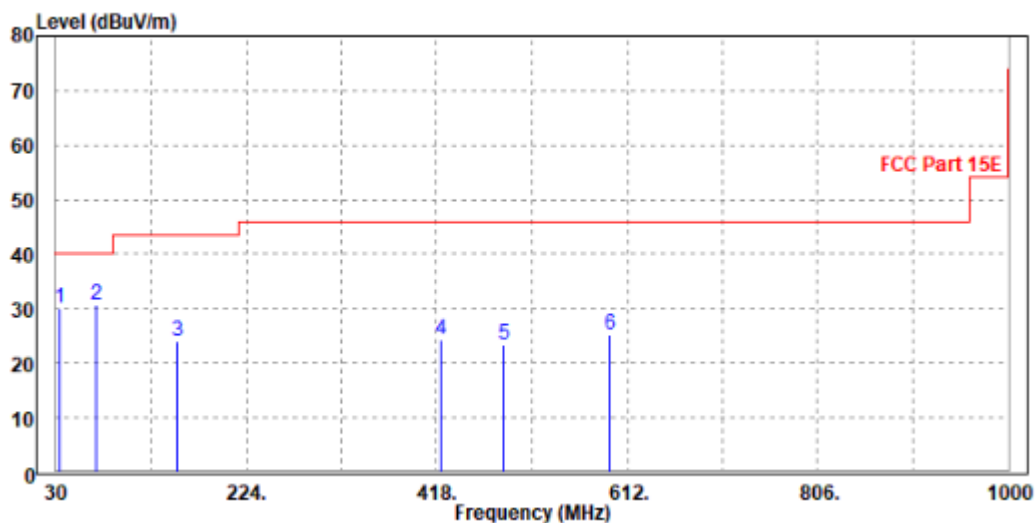


CHANNEL	Channel 48	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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
34.85	30.21	48.98	40	-9.79	18.07	0.75	37.59	200	360	Peak
71.71	30.73	59	40	-9.27	7.97	1.09	37.33	200	360	Peak
154.16	24	48.58	43.5	-19.5	10.62	1.58	36.78	200	360	Peak
422.85	24.27	40.87	46	-21.73	17.63	2.64	36.87	200	360	Peak
486.87	23.35	38.6	46	-22.65	18.85	2.88	36.98	200	360	Peak
594.54	25.33	38.68	46	-20.67	20.8	3.2	37.35	200	360	Peak

REMARKS:

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





ABOVE 1GHz WORST-CASE DATA:

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

Band 1

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
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	55.21	57.52	74	-18.79	34.52	9.52	46.35	180	60	Peak
5150	49.49	51.8	54	-4.51	34.52	9.52	46.35	180	60	Average
5180	95.21	97.44	-	-	34.54	9.58	46.35	180	60	Peak
5180	87.91	90.14	-	-	34.54	9.58	46.35	180	60	Average
5350	55.27	56.95	74	-18.73	34.68	9.94	46.3	180	60	Peak
5350	48.54	50.22	54	-5.46	34.68	9.94	46.3	180	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	54.73	56.96	74	-19.27	34.6	9.52	46.35	100	193	Peak
5150	49.31	51.54	54	-4.69	34.6	9.52	46.35	100	193	Average
5180	94.21	96.38	-	-	34.6	9.58	46.35	100	193	Peak
5180	86.75	88.92	-	-	34.6	9.58	46.35	100	193	Average
5350	55.5	57.26	74	-18.5	34.6	9.94	46.3	100	193	Peak
5350	48.8	50.56	54	-5.2	34.6	9.94	46.3	100	193	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	55.44	57.75	74	-18.56	34.52	9.52	46.35	180	60	Peak
5150	49.71	52.02	54	-4.29	34.52	9.52	46.35	180	60	Average
5200	95.08	97.24	-	-	34.56	9.62	46.34	180	60	Peak
5200	88.04	90.2	-	-	34.56	9.62	46.34	180	60	Average
5350	53.85	55.53	74	-20.15	34.68	9.94	46.3	180	60	Peak
5350	49.02	50.7	54	-4.98	34.68	9.94	46.3	180	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	54.59	56.82	74	-19.41	34.6	9.52	46.35	100	193	Peak
5150	49.94	52.17	54	-4.06	34.6	9.52	46.35	100	193	Average
5200	93.71	95.83	-	-	34.6	9.62	46.34	100	193	Peak
5200	86.74	88.86	-	-	34.6	9.62	46.34	100	193	Average
5350	56.14	57.9	74	-17.86	34.6	9.94	46.3	100	193	Peak
5350	49.13	50.89	54	-4.87	34.6	9.94	46.3	100	193	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	55.34	57.65	74	-18.66	34.52	9.52	46.35	180	60	Peak
5150	49.72	52.03	54	-4.28	34.52	9.52	46.35	180	60	Average
5240	95.93	97.96	-	-	34.59	9.71	46.33	180	60	Peak
5240	89.04	91.07	-	-	34.59	9.71	46.33	180	60	Average
5350	55.88	57.56	74	-18.12	34.68	9.94	46.3	180	60	Peak
5350	49.06	50.74	54	-4.94	34.68	9.94	46.3	180	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	56.93	59.16	74	-17.07	34.6	9.52	46.35	100	193	Peak
5150	49.91	52.14	54	-4.09	34.6	9.52	46.35	100	193	Average
5240	94.18	96.2	-	-	34.6	9.71	46.33	100	193	Peak
5240	87.51	89.53	-	-	34.6	9.71	46.33	100	193	Average
5350	54.26	56.02	74	-19.74	34.6	9.94	46.3	100	193	Peak
5350	48.28	50.04	54	-5.72	34.6	9.94	46.3	100	193	Average

REMARKS:

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



802.11n (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.78	57.09	74	-19.22	34.52	9.52	46.35	200	65	Peak
5150	50.17	52.48	54	-3.83	34.52	9.52	46.35	200	65	Average
5180	95.58	97.81	-	-	34.54	9.58	46.35	200	65	Peak
5180	87.99	90.22	-	-	34.54	9.58	46.35	200	65	Average
5350	53.9	55.58	74	-20.1	34.68	9.94	46.3	200	65	Peak
5350	48.69	50.37	54	-5.31	34.68	9.94	46.3	200	65	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	56.52	58.75	74	-17.48	34.6	9.52	46.35	100	200	Peak
5150	49.66	51.89	54	-4.34	34.6	9.52	46.35	100	200	Average
5180	92.96	95.13	-	-	34.6	9.58	46.35	100	200	Peak
5180	85.79	87.96	-	-	34.6	9.58	46.35	100	200	Average
5350	55.25	57.01	74	-18.75	34.6	9.94	46.3	100	200	Peak
5350	49.21	50.97	54	-4.79	34.6	9.94	46.3	100	200	Average

REMARKS:

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



**BUREAU
VERITAS**

Test Report No.: W7L-P21090022RF03

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	55.7	58.01	74	-18.3	34.52	9.52	46.35	200	60	Peak
5150	49.97	52.28	54	-4.03	34.52	9.52	46.35	200	60	Average
5200	95.21	97.37	-	-	34.56	9.62	46.34	200	60	Peak
5200	87.92	90.08	-	-	34.56	9.62	46.34	200	60	Average
5350	55.78	57.46	74	-18.22	34.68	9.94	46.3	200	60	Peak
5350	48.65	50.33	54	-5.35	34.68	9.94	46.3	200	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	56.76	58.99	74	-17.24	34.6	9.52	46.35	100	200	Peak
5150	50.23	52.46	54	-3.77	34.6	9.52	46.35	100	200	Average
5200	95.23	97.35	-	-	34.6	9.62	46.34	100	200	Peak
5200	87.43	89.55	-	-	34.6	9.62	46.34	100	200	Average
5350	54.32	56.08	74	-19.68	34.6	9.94	46.3	100	200	Peak
5350	48.39	50.15	54	-5.61	34.6	9.94	46.3	100	200	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	54.38	56.69	74	-19.62	34.52	9.52	46.35	200	60	Peak
5150	49.6	51.91	54	-4.4	34.52	9.52	46.35	200	60	Average
5240	95.81	97.84	-	-	34.59	9.71	46.33	200	60	Peak
5240	88	90.03	-	-	34.59	9.71	46.33	200	60	Average
5350	54.73	56.41	74	-19.27	34.68	9.94	46.3	200	60	Peak
5350	48.69	50.37	54	-5.31	34.68	9.94	46.3	200	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	54.97	57.2	74	-19.03	34.6	9.52	46.35	100	200	Peak
5150	50.47	52.7	54	-3.53	34.6	9.52	46.35	100	200	Average
5240	93.62	95.64	-	-	34.6	9.71	46.33	100	200	Peak
5240	86.98	89	-	-	34.6	9.71	46.33	100	200	Average
5350	54.52	56.28	74	-19.48	34.6	9.94	46.3	100	200	Peak
5350	48.75	50.51	54	-5.25	34.6	9.94	46.3	100	200	Average

REMARKS:

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



802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.09	57.4	74	-18.91	34.52	9.52	46.35	200	65	Peak
5150	50.12	52.43	54	-3.88	34.52	9.52	46.35	200	65	Average
5190	90.69	92.88	-	-	34.55	9.6	46.34	200	65	Peak
5190	84.25	86.44	-	-	34.55	9.6	46.34	200	65	Average
5350	55.68	57.36	74	-18.32	34.68	9.94	46.3	200	65	Peak
5350	48.51	50.19	54	-5.49	34.68	9.94	46.3	200	65	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	54.8	57.03	74	-19.2	34.6	9.52	46.35	100	200	Peak
5150	50.24	52.47	54	-3.76	34.6	9.52	46.35	100	200	Average
5190	90.14	92.28	-	-	34.6	9.6	46.34	100	200	Peak
5190	83.07	85.21	-	-	34.6	9.6	46.34	100	200	Average
5350	56.94	58.7	74	-17.06	34.6	9.94	46.3	100	200	Peak
5350	48.47	50.23	54	-5.53	34.6	9.94	46.3	100	200	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	54.86	57.17	74	-19.14	34.52	9.52	46.35	200	65	Peak
5150	50.36	52.67	54	-3.64	34.52	9.52	46.35	200	65	Average
5230	91.31	93.37	-	-	34.58	9.69	46.33	200	65	Peak
5230	84.93	86.99	-	-	34.58	9.69	46.33	200	65	Average
5350	56.72	58.4	74	-17.28	34.68	9.94	46.3	200	65	Peak
5350	48.71	50.39	54	-5.29	34.68	9.94	46.3	200	65	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	55.87	58.1	74	-18.13	34.6	9.52	46.35	100	200	Peak
5150	50.42	52.65	54	-3.58	34.6	9.52	46.35	100	200	Average
5230	89.31	91.35	-	-	34.6	9.69	46.33	100	200	Peak
5230	82.87	84.91	-	-	34.6	9.69	46.33	100	200	Average
5350	54.75	56.51	74	-19.25	34.6	9.94	46.3	100	200	Peak
5350	49.77	51.53	54	-4.23	34.6	9.94	46.3	100	200	Average

REMARKS:

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



802.11ac (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.5	58.81	74	-17.5	34.52	9.52	46.35	200	65	Peak
5150	49.63	51.94	54	-4.37	34.52	9.52	46.35	200	65	Average
5180	94.96	97.19	-	-	34.54	9.58	46.35	200	65	Peak
5180	87.35	89.58	-	-	34.54	9.58	46.35	200	65	Average
5350	54.43	56.11	74	-19.57	34.68	9.94	46.3	200	65	Peak
5350	49.54	51.22	54	-4.46	34.68	9.94	46.3	200	65	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	200	Peak
5150	49.59	51.82	54	-4.41	34.6	9.52	46.35	100	200	Average
5180	93.11	95.28	-	-	34.6	9.58	46.35	100	200	Peak
5180	84.98	87.15	-	-	34.6	9.58	46.35	100	200	Average
5350	55.45	57.21	74	-18.55	34.6	9.94	46.3	100	200	Peak
5350	48.35	50.11	54	-5.65	34.6	9.94	46.3	100	200	Average

REMARKS:

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



**BUREAU
VERITAS**

Test Report No.: W7L-P21090022RF03

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	54.34	56.65	74	-19.66	34.52	9.52	46.35	200	65	Peak
5150	49.94	52.25	54	-4.06	34.52	9.52	46.35	200	65	Average
5200	95.4	97.56	-	-	34.56	9.62	46.34	200	65	Peak
5200	88.08	90.24	-	-	34.56	9.62	46.34	200	65	Average
5350	56.22	57.9	74	-17.78	34.68	9.94	46.3	200	65	Peak
5350	48.56	50.24	54	-5.44	34.68	9.94	46.3	200	65	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	56.65	58.88	74	-17.35	34.6	9.52	46.35	100	200	Peak
5150	49.73	51.96	54	-4.27	34.6	9.52	46.35	100	200	Average
5200	93.69	95.81	-	-	34.6	9.62	46.34	100	200	Peak
5200	86.1	88.22	-	-	34.6	9.62	46.34	100	200	Average
5350	56.86	58.62	74	-17.14	34.6	9.94	46.3	100	200	Peak
5350	48.95	50.71	54	-5.05	34.6	9.94	46.3	100	200	Average

REMARKS:

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



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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.44	58.75	74	-17.56	34.52	9.52	46.35	200	65	Peak
5150	49.45	51.76	54	-4.55	34.52	9.52	46.35	200	65	Average
5240	95.62	97.65	-	-	34.59	9.71	46.33	200	65	Peak
5240	88.23	90.26	-	-	34.59	9.71	46.33	200	65	Average
5350	55.57	57.25	74	-18.43	34.68	9.94	46.3	200	65	Peak
5350	48.34	50.02	54	-5.66	34.68	9.94	46.3	200	65	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.67	56.9	74	-19.33	34.6	9.52	46.35	100	200	Peak
5150	49.66	51.89	54	-4.34	34.6	9.52	46.35	100	200	Average
5240	92.92	94.94	-	-	34.6	9.71	46.33	100	200	Peak
5240	86.53	88.55	-	-	34.6	9.71	46.33	100	200	Average
5350	54.68	56.44	74	-19.32	34.6	9.94	46.3	100	200	Peak
5350	48.98	50.74	54	-5.02	34.6	9.94	46.3	100	200	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	54.95	57.26	74	-19.05	34.52	9.52	46.35	200	65	Peak
5150	49.8	52.11	54	-4.2	34.52	9.52	46.35	200	65	Average
5190	91.18	93.37	-	-	34.55	9.6	46.34	200	65	Peak
5190	83.72	85.91	-	-	34.55	9.6	46.34	200	65	Average
5350	54.93	56.61	74	-19.07	34.68	9.94	46.3	200	65	Peak
5350	48.47	50.15	54	-5.53	34.68	9.94	46.3	200	65	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.18	57.41	74	-18.82	34.6	9.52	46.35	100	200	Peak
5150	49.8	52.03	54	-4.2	34.6	9.52	46.35	100	200	Average
5190	90.1	92.24	-	-	34.6	9.6	46.34	100	200	Peak
5190	82.2	84.34	-	-	34.6	9.6	46.34	100	200	Average
5350	54.58	56.34	74	-19.42	34.6	9.94	46.3	100	200	Peak
5350	49.17	50.93	54	-4.83	34.6	9.94	46.3	100	200	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	56.35	58.66	74	-17.65	34.52	9.52	46.35	200	65	Peak
5150	50.44	52.75	54	-3.56	34.52	9.52	46.35	200	65	Average
5230	89.71	91.77	-	-	34.58	9.69	46.33	200	65	Peak
5230	82.13	84.19	-	-	34.58	9.69	46.33	200	65	Average
5350	56.07	57.75	74	-17.93	34.68	9.94	46.3	200	65	Peak
5350	48.96	50.64	54	-5.04	34.68	9.94	46.3	200	65	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	54.6	56.83	74	-19.4	34.6	9.52	46.35	100	200	Peak
5150	50.22	52.45	54	-3.78	34.6	9.52	46.35	100	200	Average
5230	89.08	91.12	-	-	34.6	9.69	46.33	100	200	Peak
5230	81.88	83.92	-	-	34.6	9.69	46.33	100	200	Average
5350	54.88	56.64	74	-19.12	34.6	9.94	46.3	100	200	Peak
5350	48.55	50.31	54	-5.45	34.6	9.94	46.3	100	200	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	55.31	57.62	74	-18.69	34.52	9.52	46.35	200	65	Peak
5150	50.25	52.56	54	-3.75	34.52	9.52	46.35	200	65	Average
5210	86.72	88.85	-	-	34.57	9.64	46.34	200	65	Peak
5210	79.19	81.32	-	-	34.57	9.64	46.34	200	65	Average
5350	53.83	55.51	74	-20.17	34.68	9.94	46.3	200	65	Peak
5350	49.02	50.7	54	-4.98	34.68	9.94	46.3	200	65	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	57.05	59.28	74	-16.95	34.6	9.52	46.35	100	200	Peak
5150	50.18	52.41	54	-3.82	34.6	9.52	46.35	100	200	Average
5210	84.87	86.97	-	-	34.6	9.64	46.34	100	200	Peak
5210	77.61	79.71	-	-	34.6	9.64	46.34	100	200	Average
5350	54.56	56.32	74	-19.44	34.6	9.94	46.3	100	200	Peak
5350	49.2	50.96	54	-4.8	34.6	9.94	46.3	100	200	Average

REMARKS:

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

Band 2
802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.84	57.15	74	-19.16	34.52	9.52	46.35	180	60	Peak
5150	49.02	51.33	54	-4.98	34.52	9.52	46.35	180	60	Average
5260	93.88	95.84	-	-	34.61	9.75	46.32	180	60	Peak
5260	85.96	87.92	-	-	34.61	9.75	46.32	180	60	Average
5350	54.19	55.87	74	-19.81	34.68	9.94	46.3	180	60	Peak
5350	48.54	50.22	54	-5.46	34.68	9.94	46.3	180	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	100	190	Peak
5150	48.69	50.92	54	-5.31	34.6	9.52	46.35	100	190	Average
5260	92.08	94.05	-	-	34.6	9.75	46.32	100	190	Peak
5260	84.11	86.08	-	-	34.6	9.75	46.32	100	190	Average
5350	54.27	56.03	74	-19.73	34.6	9.94	46.3	100	190	Peak
5350	47.78	49.54	54	-6.22	34.6	9.94	46.3	100	190	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	52.77	55.08	74	-21.23	34.52	9.52	46.35	180	60	Peak
5150	48.57	50.88	54	-5.43	34.52	9.52	46.35	180	60	Average
5300	93.97	95.81	-	-	34.64	9.83	46.31	180	60	Peak
5300	87.78	89.62	-	-	34.64	9.83	46.31	180	60	Average
5350	53.71	55.39	74	-20.29	34.68	9.94	46.3	180	60	Peak
5350	47.57	49.25	54	-6.43	34.68	9.94	46.3	180	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	54.6	56.83	74	-19.4	34.6	9.52	46.35	100	192	Peak
5150	48.03	50.26	54	-5.97	34.6	9.52	46.35	100	192	Average
5300	91.52	93.4	-	-	34.6	9.83	46.31	100	192	Peak
5300	83.32	85.2	-	-	34.6	9.83	46.31	100	192	Average
5350	54.23	55.99	74	-19.77	34.6	9.94	46.3	100	192	Peak
5350	48.14	49.9	54	-5.86	34.6	9.94	46.3	100	192	Average

REMARKS:

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



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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.04	55.35	74	-20.96	34.52	9.52	46.35	123	205	Peak
5150	47.98	50.29	54	-6.02	34.52	9.52	46.35	123	205	Average
5320	93.21	94.97	-	-	34.66	9.88	46.3	123	205	Peak
5320	84.58	86.34	-	-	34.66	9.88	46.3	123	205	Average
5350	55.25	56.93	74	-18.75	34.68	9.94	46.3	123	205	Peak
5350	48.49	50.17	54	-5.51	34.68	9.94	46.3	123	205	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	55.97	58.2	74	-18.03	34.6	9.52	46.35	100	192	Peak
5150	48.65	50.88	54	-5.35	34.6	9.52	46.35	100	192	Average
5320	90.71	92.53	-	-	34.6	9.88	46.3	100	192	Peak
5320	82.27	84.09	-	-	34.6	9.88	46.3	100	192	Average
5350	56.08	57.84	74	-17.92	34.6	9.94	46.3	100	192	Peak
5350	48.47	50.23	54	-5.53	34.6	9.94	46.3	100	192	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	55.71	58.02	74	-18.29	34.52	9.52	46.35	190	60	Peak
5150	48.63	50.94	54	-5.37	34.52	9.52	46.35	190	60	Average
5260	96.05	98.01	-	-	34.61	9.75	46.32	190	60	Peak
5260	88.5	90.46	-	-	34.61	9.75	46.32	190	60	Average
5350	55.78	57.46	74	-18.22	34.68	9.94	46.3	190	60	Peak
5350	48.72	50.4	54	-5.28	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	55.48	57.71	74	-18.52	34.6	9.52	46.35	100	190	Peak
5150	48.76	50.99	54	-5.24	34.6	9.52	46.35	100	190	Average
5260	92.27	94.24	-	-	34.6	9.75	46.32	100	190	Peak
5260	84.2	86.17	-	-	34.6	9.75	46.32	100	190	Average
5350	53.1	54.86	74	-20.9	34.6	9.94	46.3	100	190	Peak
5350	48.63	50.39	54	-5.37	34.6	9.94	46.3	100	190	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	53.35	55.66	74	-20.65	34.52	9.52	46.35	190	60	Peak
5150	48.26	50.57	54	-5.74	34.52	9.52	46.35	190	60	Average
5300	94.6	96.44	-	-	34.64	9.83	46.31	190	60	Peak
5300	87.91	89.75	-	-	34.64	9.83	46.31	190	60	Average
5350	55.88	57.56	74	-18.12	34.68	9.94	46.3	190	60	Peak
5350	48.48	50.16	54	-5.52	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	57.23	59.46	74	-16.77	34.6	9.52	46.35	100	190	Peak
5150	47.75	49.98	54	-6.25	34.6	9.52	46.35	100	190	Average
5300	92.2	94.08	-	-	34.6	9.83	46.31	100	190	Peak
5300	84.38	86.26	-	-	34.6	9.83	46.31	100	190	Average
5350	53.98	55.74	74	-20.02	34.6	9.94	46.3	100	190	Peak
5350	47.3	49.06	54	-6.7	34.6	9.94	46.3	100	190	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	55.03	57.34	74	-18.97	34.52	9.52	46.35	190	60	Peak
5150	48.48	50.79	54	-5.52	34.52	9.52	46.35	190	60	Average
5320	95.33	97.09	-	-	34.66	9.88	46.3	190	60	Peak
5320	88.56	90.32	-	-	34.66	9.88	46.3	190	60	Average
5350	53.8	55.48	74	-20.2	34.68	9.94	46.3	190	60	Peak
5350	47.63	49.31	54	-6.37	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	55.58	57.81	74	-18.42	34.6	9.52	46.35	100	140	Peak
5150	48.51	50.74	54	-5.49	34.6	9.52	46.35	100	140	Average
5320	93.42	95.24	-	-	34.6	9.88	46.3	100	140	Peak
5320	86.57	88.39	-	-	34.6	9.88	46.3	100	140	Average
5350	56.22	57.98	74	-17.78	34.6	9.94	46.3	100	140	Peak
5350	47.83	49.59	54	-6.17	34.6	9.94	46.3	100	140	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	54.46	56.77	74	-19.54	34.52	9.52	46.35	200	65	Peak
5150	48.14	50.45	54	-5.86	34.52	9.52	46.35	200	65	Average
5270	90.43	92.36	-	-	34.62	9.77	46.32	200	65	Peak
5270	83.23	85.16	-	-	34.62	9.77	46.32	200	65	Average
5350	53.76	55.44	74	-20.24	34.68	9.94	46.3	200	65	Peak
5350	46.89	48.57	54	-7.11	34.68	9.94	46.3	200	65	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.12	56.35	74	-19.88	34.6	9.52	46.35	100	190	Peak
5150	48.4	50.63	54	-5.6	34.6	9.52	46.35	100	190	Average
5270	87.32	89.27	-	-	34.6	9.77	46.32	100	190	Peak
5270	81.24	83.19	-	-	34.6	9.77	46.32	100	190	Average
5350	54.06	55.82	74	-19.94	34.6	9.94	46.3	100	190	Peak
5350	47.82	49.58	54	-6.18	34.6	9.94	46.3	100	190	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	55.72	58.03	74	-18.28	34.52	9.52	46.35	200	62	Peak
5150	49.28	51.59	54	-4.72	34.52	9.52	46.35	200	62	Average
5310	92.03	93.84	-	-	34.65	9.85	46.31	200	62	Peak
5310	86.56	88.37	-	-	34.65	9.85	46.31	200	62	Average
5350	54.69	56.37	74	-19.31	34.68	9.94	46.3	200	62	Peak
5350	49.68	51.36	54	-4.32	34.68	9.94	46.3	200	62	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	55.03	57.26	74	-18.97	34.6	9.52	46.35	143	75	Peak
5150	49.97	52.2	54	-4.03	34.6	9.52	46.35	143	75	Average
5310	89.36	91.22			34.6	9.85	46.31	143	75	Peak
5310	84.48	86.34			34.6	9.85	46.31	143	75	Average
5350	53.82	55.58	74	-20.18	34.6	9.94	46.3	143	75	Peak
5350	48.62	50.38	54	-5.38	34.6	9.94	46.3	143	75	Average

REMARKS:

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



802.11ac (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.24	57.55	74	-18.76	34.52	9.52	46.35	200	62	Peak
5150	49.52	51.83	54	-4.48	34.52	9.52	46.35	200	62	Average
5260	95.72	97.68	-	-	34.61	9.75	46.32	200	62	Peak
5260	88.36	90.32	-	-	34.61	9.75	46.32	200	62	Average
5350	54.38	56.06	74	-19.62	34.68	9.94	46.3	200	62	Peak
5350	48.37	50.05	54	-5.63	34.68	9.94	46.3	200	62	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	55.61	57.84	74	-18.39	34.6	9.52	46.35	100	200	Peak
5150	48.94	51.17	54	-5.06	34.6	9.52	46.35	100	200	Average
5260	93.76	95.73	-	-	34.6	9.75	46.32	100	200	Peak
5260	87.48	89.45	-	-	34.6	9.75	46.32	100	200	Average
5350	54.28	56.04	74	-19.72	34.6	9.94	46.3	100	200	Peak
5350	48.68	50.44	54	-5.32	34.6	9.94	46.3	100	200	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	54.93	57.24	74	-19.07	34.52	9.52	46.35	170	62	Peak
5150	49.77	52.08	54	-4.23	34.52	9.52	46.35	170	62	Average
5300	95.89	97.73	-	-	34.64	9.83	46.31	170	62	Peak
5300	89.17	91.01	-	-	34.64	9.83	46.31	170	62	Average
5350	55.24	56.92	74	-18.76	34.68	9.94	46.3	170	62	Peak
5350	49.01	50.69	54	-4.99	34.68	9.94	46.3	170	62	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	56.71	58.94	74	-17.29	34.6	9.52	46.35	108	135	Peak
5150	49.05	51.28	54	-4.95	34.6	9.52	46.35	108	135	Average
5300	92.94	94.82	-	-	34.6	9.83	46.31	108	135	Peak
5300	86.86	88.74	-	-	34.6	9.83	46.31	108	135	Average
5350	53.67	55.43	74	-20.33	34.6	9.94	46.3	108	135	Peak
5350	48.71	50.47	54	-5.29	34.6	9.94	46.3	108	135	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	54.99	57.3	74	-19.01	34.52	9.52	46.35	170	62	Peak
5150	49.01	51.32	54	-4.99	34.52	9.52	46.35	170	62	Average
5320	95.98	97.74	-	-	34.66	9.88	46.3	170	62	Peak
5320	88.52	90.28	-	-	34.66	9.88	46.3	170	62	Average
5350	55.19	56.87	74	-18.81	34.68	9.94	46.3	170	62	Peak
5350	48.83	50.51	54	-5.17	34.68	9.94	46.3	170	62	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.85	57.08	74	-19.15	34.6	9.52	46.35	100	135	Peak
5150	49.56	51.79	54	-4.44	34.6	9.52	46.35	100	135	Average
5320	93.53	95.35	-	-	34.6	9.88	46.3	100	135	Peak
5320	87.36	89.18	-	-	34.6	9.88	46.3	100	135	Average
5350	55.41	57.17	74	-18.59	34.6	9.94	46.3	100	135	Peak
5350	49.1	50.86	54	-4.9	34.6	9.94	46.3	100	135	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	55.62	57.93	74	-18.38	34.52	9.52	46.35	200	62	Peak
5150	49.35	51.66	54	-4.65	34.52	9.52	46.35	200	62	Average
5270	91.28	93.21	-	-	34.62	9.77	46.32	200	62	Peak
5270	86.28	88.21	-	-	34.62	9.77	46.32	200	62	Average
5350	55.2	56.88	74	-18.8	34.68	9.94	46.3	200	62	Peak
5350	48.61	50.29	54	-5.39	34.68	9.94	46.3	200	62	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	54.4	56.63	74	-19.6	34.6	9.52	46.35	115	140	Peak
5150	49.43	51.66	54	-4.57	34.6	9.52	46.35	115	140	Average
5270	89.18	91.13	-	-	34.6	9.77	46.32	115	140	Peak
5270	83.73	85.68	-	-	34.6	9.77	46.32	115	140	Average
5350	54.4	56.16	74	-19.6	34.6	9.94	46.3	115	140	Peak
5350	49.13	50.89	54	-4.87	34.6	9.94	46.3	115	140	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	55.99	58.3	74	-18.01	34.52	9.52	46.35	200	62	Peak
5150	50.5	52.81	54	-3.5	34.52	9.52	46.35	200	62	Average
5310	91.67	93.48	-	-	34.65	9.85	46.31	200	62	Peak
5310	86.23	88.04	-	-	34.65	9.85	46.31	200	62	Average
5350	54.77	56.45	74	-19.23	34.68	9.94	46.3	200	62	Peak
5350	49.63	51.31	54	-4.37	34.68	9.94	46.3	200	62	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	54.98	57.21	74	-19.02	34.6	9.52	46.35	100	140	Peak
5150	49.96	52.19	54	-4.04	34.6	9.52	46.35	100	140	Average
5310	88.32	90.18	-	-	34.6	9.85	46.31	100	140	Peak
5310	83.06	84.92	-	-	34.6	9.85	46.31	100	140	Average
5350	54.76	56.52	74	-19.24	34.6	9.94	46.3	100	140	Peak
5350	48.85	50.61	54	-5.15	34.6	9.94	46.3	100	140	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	54.31	56.62	74	-19.69	34.52	9.52	46.35	200	62	Peak
5150	49.89	52.2	54	-4.11	34.52	9.52	46.35	200	62	Average
5290	86.09	87.96	-	-	34.63	9.81	46.31	200	62	Peak
5290	80.87	82.74	-	-	34.63	9.81	46.31	200	62	Average
5350	53.75	55.43	74	-20.25	34.68	9.94	46.3	200	62	Peak
5350	49.66	51.34	54	-4.34	34.68	9.94	46.3	200	62	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	54.73	56.96	74	-19.27	34.6	9.52	46.35	100	140	Peak
5150	50.11	52.34	54	-3.89	34.6	9.52	46.35	100	140	Average
5290	85.14	87.04	-	-	34.6	9.81	46.31	100	140	Peak
5290	79.69	81.59	-	-	34.6	9.81	46.31	100	140	Average
5350	54.2	55.96	74	-19.8	34.6	9.94	46.3	100	140	Peak
5350	49.08	50.84	54	-4.92	34.6	9.94	46.3	100	140	Average

REMARKS:

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



Band 3

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.48	55.8	74	-19.52	34.77	10.17	46.26	200	60	Peak
5460	48.74	50.06	54	-5.26	34.77	10.17	46.26	200	60	Average
5470	56.68	57.97	68.3	-11.62	34.78	10.19	46.26	200	60	Peak
5500	95.68	96.87	-	-	34.8	10.26	46.25	200	60	Peak
5500	88.49	89.68	-	-	34.8	10.26	46.25	200	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.55	56.04	74	-19.45	34.6	10.17	46.26	115	140	Peak
5460	48.99	50.48	54	-5.01	34.6	10.17	46.26	115	140	Average
5470	54.95	56.42	68.3	-13.35	34.6	10.19	46.26	115	140	Peak
5500	94.03	95.42	-	-	34.6	10.26	46.25	115	140	Peak
5500	87.91	89.3	-	-	34.6	10.26	46.25	115	140	Average

REMARKS:

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



CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
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	55.02	56.34	74	-18.98	34.77	10.17	46.26	200	60	Peak
5460	49.08	50.4	54	-4.92	34.77	10.17	46.26	200	60	Average
5470	54.32	55.61	68.3	-13.98	34.78	10.19	46.26	200	60	Peak
5580	96.84	97.58	-	-	34.9	10.59	46.23	200	60	Peak
5580	90.54	91.28	-	-	34.9	10.59	46.23	200	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.31	55.8	74	-19.69	34.6	10.17	46.26	115	140	Peak
5460	48.53	50.02	54	-5.47	34.6	10.17	46.26	115	140	Average
5470	54.99	56.46	68.3	-13.31	34.6	10.19	46.26	115	140	Peak
5580	96.99	97.93	-	-	34.7	10.59	46.23	115	140	Peak
5580	90.59	91.53	-	-	34.7	10.59	46.23	115	140	Average

REMARKS:

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



CHANNEL	TX Channel 140	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
5700	95.47	95.53	–	–	35.04	11.09	46.19	100	50	Peak
5700	89.21	89.27	–	–	35.04	11.09	46.19	100	50	Average
5725	60.58	60.5	68.3	-7.72	35.07	11.2	46.19	100	50	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	98.18	98.44	–	–	34.84	11.09	46.19	120	245	Peak
5700	92.29	92.55	–	–	34.84	11.09	46.19	120	245	Average
5725	58.67	58.79	68.3	-9.63	34.87	11.2	46.19	120	245	Peak

REMARKS:

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



CHANNEL	TX Channel 144	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
5470	56.83	58.12	74	-17.17	34.78	10.19	46.26	105	48	Peak
5720	96.92	96.87	-	-	35.06	11.18	46.19	105	48	Peak
5720	90.83	90.78	-	-	35.06	11.18	46.19	105	48	Average
5850	58.01	57.22	68.3	-10.29	35.22	11.72	46.15	105	48	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	56.38	57.85	74	-17.62	34.6	10.19	46.26	120	245	Peak
5720	98.49	98.64	-	-	34.86	11.18	46.19	120	245	Peak
5720	92.06	92.21	-	-	34.86	11.18	46.19	120	245	Average
5850	57.43	56.84	68.3	-10.87	35.02	11.72	46.15	120	245	Peak

REMARKS:

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

802.11n (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.9	55.22	74	-20.1	34.77	10.17	46.26	120	60	Peak
5460	48.99	50.31	54	-5.01	34.77	10.17	46.26	120	60	Average
5470	55.71	57	68.3	-12.59	34.78	10.19	46.26	120	60	Peak
5500	95.4	96.59	-	-	34.8	10.26	46.25	120	60	Peak
5500	88.92	90.11	-	-	34.8	10.26	46.25	120	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	55.58	57.07	74	-18.42	34.6	10.17	46.26	103	140	Peak
5460	48.98	50.47	54	-5.02	34.6	10.17	46.26	103	140	Average
5470	54.59	56.06	68.3	-13.71	34.6	10.19	46.26	103	140	Peak
5500	94.74	96.13	-	-	34.6	10.26	46.25	103	140	Peak
5500	88.76	90.15	-	-	34.6	10.26	46.25	103	140	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.



**BUREAU
VERITAS**

Test Report No.: W7L-P21090022RF03

CHANNEL	TX Channel 116	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	54.74	56.06	74	-19.26	34.77	10.17	46.26	200	60	Peak
5460	48.54	49.86	54	-5.46	34.77	10.17	46.26	200	60	Average
5470	55.64	56.93	68.3	-12.66	34.78	10.19	46.26	200	60	Peak
5580	96.39	97.13	–	–	34.9	10.59	46.23	200	60	Peak
5580	89.86	90.6	–	–	34.9	10.59	46.23	200	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.66	55.15	74	-20.34	34.6	10.17	46.26	103	140	Peak
5460	48.78	50.27	54	-5.22	34.6	10.17	46.26	103	140	Average
5470	54.87	56.34	68.3	-13.43	34.6	10.19	46.26	103	140	Peak
5580	95.78	96.72	–	–	34.7	10.59	46.23	103	140	Peak
5580	88.09	89.03	–	–	34.7	10.59	46.23	103	140	Average

REMARKS:

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



**BUREAU
VERITAS**

Test Report No.: W7L-P21090022RF03

CHANNEL	TX Channel 140	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
5700	96.6	96.66	–	–	35.04	11.09	46.19	100	45	Peak
5700	89.86	89.92	–	–	35.04	11.09	46.19	100	45	Average
5725	58.43	58.35	68.3	-9.87	35.07	11.2	46.19	100	45	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	98.6	98.86	–	–	34.84	11.09	46.19	155	240	Peak
5700	92.29	92.55	–	–	34.84	11.09	46.19	155	240	Average
5725	59.51	59.63	68.3	-8.79	34.87	11.2	46.19	155	240	Peak

REMARKS:

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



CHANNEL	TX Channel 144	DETECTOR FUNCTION	Peak (PK)
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
5470	54.19	55.48	74	-19.81	34.78	10.19	46.26	100	35	Peak
5720	95.14	95.09	-	-	35.06	11.18	46.19	100	35	Peak
5720	87.92	87.87	-	-	35.06	11.18	46.19	100	35	Average
5850	60.13	59.34	68.3	-8.17	35.22	11.72	46.15	100	35	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	56.34	57.81	74	-17.66	34.6	10.19	46.26	155	240	Peak
5720	98.98	99.13	-	-	34.86	11.18	46.19	155	240	Peak
5720	93.07	93.22	-	-	34.86	11.18	46.19	155	240	Average
5850	58.21	57.62	68.3	-10.09	35.02	11.72	46.15	155	240	Peak

REMARKS:

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



802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.66	54.98	74	-20.34	34.77	10.17	46.26	100	60	Peak
5460	49.03	50.35	54	-4.97	34.77	10.17	46.26	100	60	Average
5470	58.03	59.32	68.3	-10.27	34.78	10.19	46.26	100	60	Peak
5510	90.06	91.2	-	-	34.81	10.3	46.25	100	60	Peak
5510	85.52	86.66	-	-	34.81	10.3	46.25	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
5460	53.6	55.09	74	-20.4	34.6	10.17	46.26	102	140	Peak
5460	48.8	50.29	54	-5.2	34.6	10.17	46.26	102	140	Average
5470	55.06	56.53	68.3	-13.24	34.6	10.19	46.26	102	140	Peak
5510	90.03	91.37	-	-	34.61	10.3	46.25	102	140	Peak
5510	85.2	86.54	-	-	34.61	10.3	46.25	102	140	Average

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.7	55.02	74	-20.3	34.77	10.17	46.26	100	60	Peak
5460	49.46	50.78	54	-4.54	34.77	10.17	46.26	100	60	Average
5470	54.23	55.52	68.3	-14.07	34.78	10.19	46.26	100	60	Peak
5550	91.41	92.32	-	-	34.86	10.47	46.24	100	60	Peak
5550	86.73	87.64	-	-	34.86	10.47	46.24	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
5460	54.97	56.46	74	-19.03	34.6	10.17	46.26	102	140	Peak
5460	48.99	50.48	54	-5.01	34.6	10.17	46.26	102	140	Average
5470	53.77	55.24	68.3	-14.53	34.6	10.19	46.26	102	140	Peak
5550	90.35	91.46	-	-	34.66	10.47	46.24	102	140	Peak
5550	85.67	86.78	-	-	34.66	10.47	46.24	102	140	Average

REMARKS:

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



CHANNEL	TX Channel 134	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
5670	90.97	91.2	–	–	35	10.97	46.2	100	60	Peak
5670	86.82	87.05	–	–	35	10.97	46.2	100	60	Average
5725	56.49	56.41	68.3	-11.81	35.07	11.2	46.19	100	60	Peak
ANTENNA POLARITY & test distance: Vertical at 3 m										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670	89.97	90.4	–	–	34.8	10.97	46.2	100	140	Peak
5670	85.81	86.24	–	–	34.8	10.97	46.2	100	140	Average
5725	58.14	58.26	68.3	-10.16	34.87	11.2	46.19	100	140	Peak

REMARKS:

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



CHANNEL	TX Channel 142	DETECTOR FUNCTION	Peak (PK)
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
5470	55.19	56.48	74	-18.81	34.78	10.19	46.26	100	50	Peak
5710	89.88	89.88	-	-	35.05	11.14	46.19	100	50	Peak
5710	85.34	85.34	-	-	35.05	11.14	46.19	100	50	Average
5850	59.49	58.7	68.3	-8.81	35.22	11.72	46.15	100	50	Peak
ANTENNA POLARITY & test distance: Vertical at 3 m										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	54.23	55.7	74	-19.77	34.6	10.19	46.26	155	240	Peak
5710	93.62	93.82	-	-	34.85	11.14	46.19	155	240	Peak
5710	90.04	90.24	-	-	34.85	11.14	46.19	155	240	Average
5850	56.51	55.92	68.3	-11.79	35.02	11.72	46.15	155	240	Peak

REMARKS:

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



802.11ac (20MHz)

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
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	56.63	57.95	74	-17.37	34.77	10.17	46.26	152	60	Peak
5460	48.81	50.13	54	-5.19	34.77	10.17	46.26	152	60	Average
5470	56	57.29	68.3	-12.3	34.78	10.19	46.26	152	60	Peak
5500	95.15	96.34	–	–	34.8	10.26	46.25	152	60	Peak
5500	89.61	90.8	–	–	34.8	10.26	46.25	152	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	55.79	57.28	74	-18.21	34.6	10.17	46.26	103	140	Peak
5460	48.96	50.45	54	-5.04	34.6	10.17	46.26	103	140	Average
5470	55.02	56.49	68.3	-13.28	34.6	10.19	46.26	103	140	Peak
5500	95.66	97.05	–	–	34.6	10.26	46.25	103	140	Peak
5500	88.78	90.17	–	–	34.6	10.26	46.25	103	140	Average

REMARKS:

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



CHANNEL	TX Channel 116	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	55.39	56.71	74	-18.61	34.77	10.17	46.26	200	60	Peak
5460	48.64	49.96	54	-5.36	34.77	10.17	46.26	200	60	Average
5470	55.12	56.41	68.3	-13.18	34.78	10.19	46.26	200	60	Peak
5580	95.59	96.33	-	-	34.9	10.59	46.23	200	60	Peak
5580	90.03	90.77	-	-	34.9	10.59	46.23	200	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.56	56.05	74	-19.44	34.6	10.17	46.26	100	140	Peak
5460	48.73	50.22	54	-5.27	34.6	10.17	46.26	100	140	Average
5470	54.45	55.92	68.3	-13.85	34.6	10.19	46.26	100	140	Peak
5580	95.9	96.84	-	-	34.7	10.59	46.23	100	140	Peak
5580	89.16	90.1	-	-	34.7	10.59	46.23	100	140	Average

REMARKS:

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



CHANNEL	TX Channel 140	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
5700	96.63	96.69	–	–	35.04	11.09	46.19	100	45	Peak
5700	89.97	90.03	–	–	35.04	11.09	46.19	100	45	Average
5725	59.11	59.03	68.3	-9.19	35.07	11.2	46.19	100	45	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	98.42	98.68	–	–	34.84	11.09	46.19	200	240	Peak
5700	91.9	92.16	–	–	34.84	11.09	46.19	200	240	Average
5725	58.38	58.5	68.3	-9.92	34.87	11.2	46.19	200	240	Peak

REMARKS:

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



CHANNEL	TX Channel 144	DETECTOR FUNCTION	Peak (PK)
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
5470	55.16	56.45	74	-18.84	34.78	10.19	46.26	218	45	Peak
5720	95.34	95.29	-	-	35.06	11.18	46.19	218	45	Peak
5720	89.25	89.2	-	-	35.06	11.18	46.19	218	45	Average
5850	57.69	56.9	68.3	-10.61	35.22	11.72	46.15	218	45	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	56.04	57.51	74	-17.96	34.6	10.19	46.26	200	240	Peak
5720	98.41	98.56	-	-	34.86	11.18	46.19	200	240	Peak
5720	92.63	92.78	-	-	34.86	11.18	46.19	200	240	Average
5850	60.12	59.53	68.3	-8.18	35.02	11.72	46.15	200	240	Peak

REMARKS:

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



802.11ac (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	55.23	56.55	74	-18.77	34.77	10.17	46.26	120	60	Peak
5460	49.7	51.02	54	-4.3	34.77	10.17	46.26	120	60	Average
5470	55.13	56.42	68.3	-13.17	34.78	10.19	46.26	120	60	Peak
5510	90.84	91.98	-	-	34.81	10.3	46.25	120	60	Peak
5510	85.97	87.11	-	-	34.81	10.3	46.25	120	60	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	56.08	57.57	74	-17.92	34.6	10.17	46.26	110	140	Peak
5460	49.12	50.61	54	-4.88	34.6	10.17	46.26	110	140	Average
5470	55.59	57.06	68.3	-12.71	34.6	10.19	46.26	110	140	Peak
5510	89.56	90.9	-	-	34.61	10.3	46.25	110	140	Peak
5510	84.62	85.96	-	-	34.61	10.3	46.25	110	140	Average

REMARKS:

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



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Test Report No.: W7L-P21090022RF03

CHANNEL	TX Channel 110	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	54.61	55.93	74	-19.39	34.77	10.17	46.26	100	60	Peak
5460	48.99	50.31	54	-5.01	34.77	10.17	46.26	100	60	Average
5470	53.84	55.13	68.3	-14.46	34.78	10.19	46.26	100	60	Peak
5550	91.72	92.63	–	–	34.86	10.47	46.24	100	60	Peak
5550	87.03	87.94	–	–	34.86	10.47	46.24	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
5460	55.61	57.1	74	-18.39	34.6	10.17	46.26	110	140	Peak
5460	48.92	50.41	54	-5.08	34.6	10.17	46.26	110	140	Average
5470	55.43	56.9	68.3	-12.87	34.6	10.19	46.26	110	140	Peak
5550	89.76	90.87	–	–	34.66	10.47	46.24	110	140	Peak
5550	84.52	85.63	–	–	34.66	10.47	46.24	110	140	Average

REMARKS:

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



CHANNEL	TX Channel 134	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
5670	91.18	91.41	–	–	35	10.97	46.2	100	60	Peak
5670	86.53	86.76	–	–	35	10.97	46.2	100	60	Average
5725	58.23	58.15	68.3	-10.07	35.07	11.2	46.19	100	60	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670	94.37	94.8	–	–	34.8	10.97	46.2	200	140	Peak
5670	90.08	90.51	–	–	34.8	10.97	46.2	200	140	Average
5725	55.63	55.75	68.3	-12.67	34.87	11.2	46.19	200	140	Peak

REMARKS:

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



CHANNEL	TX Channel 142	DETECTOR FUNCTION	Peak (PK)
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
5470	53.49	54.78	74	-20.51	34.78	10.19	46.26	100	55	Peak
5710	91.59	91.59	-	-	35.05	11.14	46.19	100	55	Peak
5710	87.27	87.27	-	-	35.05	11.14	46.19	100	55	Average
5850	58.02	57.23	68.3	-10.28	35.22	11.72	46.15	100	55	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	54.06	55.53	74	-19.94	34.6	10.19	46.26	142	240	Peak
5710	94.62	94.82	-	-	34.85	11.14	46.19	142	240	Peak
5710	90.37	90.57	-	-	34.85	11.14	46.19	142	240	Average
5850	57.04	56.45	68.3	-11.26	35.02	11.72	46.15	142	240	Peak

REMARKS:

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



802.11ac (80MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.94	55.26	74	-20.06	34.77	10.17	46.26	100	55	Peak
5460	49.28	50.6	54	-4.72	34.77	10.17	46.26	100	55	Average
5470	54.61	55.9	68.3	-13.69	34.78	10.19	46.26	100	55	Peak
5530	86.77	87.79	-	-	34.84	10.38	46.24	100	55	Peak
5530	82.14	83.16	-	-	34.84	10.38	46.24	100	55	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.48	55.97	74	-19.52	34.6	10.17	46.26	110	140	Peak
5460	48.63	50.12	54	-5.37	34.6	10.17	46.26	110	140	Average
5470	54.29	55.76	68.3	-14.01	34.6	10.19	46.26	110	140	Peak
5530	84.78	86	-	-	34.64	10.38	46.24	110	140	Peak
5530	80.26	81.48	-	-	34.64	10.38	46.24	110	140	Average

REMARKS:

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



CHANNEL	TX Channel 122	DETECTOR FUNCTION	Peak (PK)
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
5610	87.35	87.92	–	–	34.93	10.72	46.22	100	60	Peak
5610	83.76	84.33	–	–	34.93	10.72	46.22	100	60	Average
5725	55.95	55.87	68.3	-12.35	35.07	11.2	46.19	100	60	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5610	84.62	85.39	–	–	34.73	10.72	46.22	110	140	Peak
5610	80.72	81.49	–	–	34.73	10.72	46.22	110	140	Average
5725	53.5	53.62	68.3	-14.8	34.87	11.2	46.19	110	140	Peak

REMARKS:

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



CHANNEL	TX Channel 138	DETECTOR FUNCTION	Peak (PK)
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
5470	55.2	56.49	74	-18.8	34.78	10.19	46.26	100	60	Peak
5690	86.69	86.81	-	-	35.03	11.05	46.2	100	60	Peak
5690	82.28	82.4	-	-	35.03	11.05	46.2	100	60	Average
5850	57.19	56.4	68.3	-11.11	35.22	11.72	46.15	100	60	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	54.55	56.02	74	-19.45	34.6	10.19	46.26	100	140	Peak
5690	85.43	85.75	-	-	34.83	11.05	46.2	100	140	Peak
5690	80.88	81.2	-	-	34.83	11.05	46.2	100	140	Average
5850	59.38	58.79	68.3	-8.92	35.02	11.72	46.15	100	140	Peak

REMARKS:

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



Band 4:

802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
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
5745	97.09	96.9	–	–	35.09	11.28	46.18	105	45	Peak
5745	90.51	90.32	–	–	35.09	11.28	46.18	105	45	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	99.84	99.85	–	–	34.89	11.28	46.18	170	55	Peak
5745	93.75	93.76	–	–	34.89	11.28	46.18	170	55	Average

REMARKS:

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

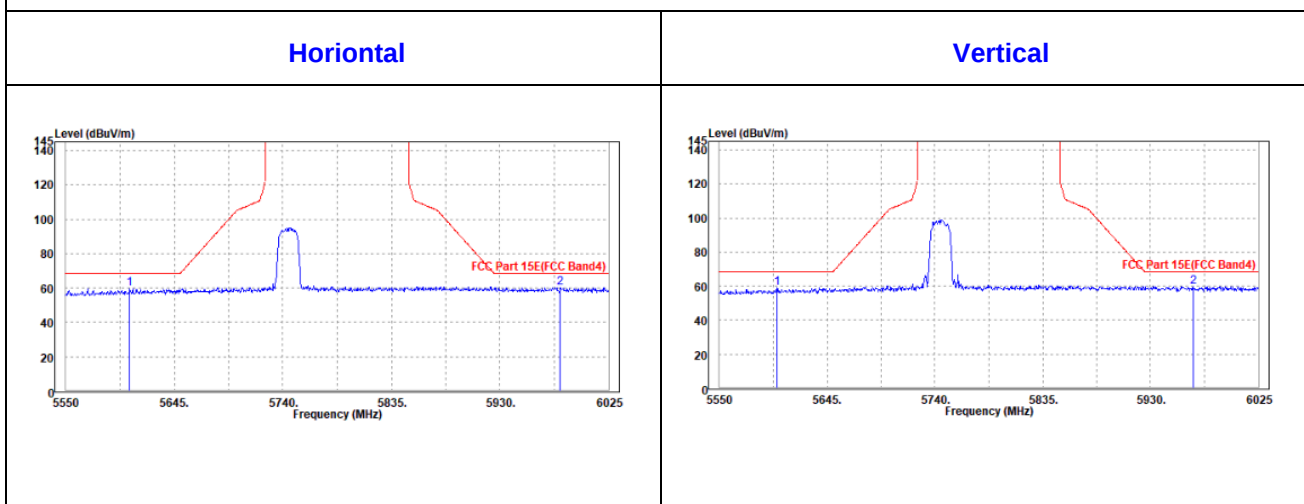


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ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5606.05	59.47	60.06	68.2	-8.73	34.93	10.7	46.22	300	0	Peak
5982.725	60.3	58.75	68.2	-7.9	35.38	12.28	46.11	300	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5600.825	58.8	59.62	68.2	-9.4	34.72	10.68	46.22	300	0	Peak
5967.525	59.65	58.4	68.2	-8.55	35.16	12.21	46.12	300	0	Peak

CH 149





CHANNEL	TX Channel 157	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
5785	96.9	96.48	–	–	35.14	11.45	46.17	100	203	Peak
5785	90.42	90	–	–	35.14	11.45	46.17	100	203	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	99.11	98.89	–	–	34.94	11.45	46.17	200	55	Peak
5785	93.11	92.89	–	–	34.94	11.45	46.17	200	55	Average

REMARKS:

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

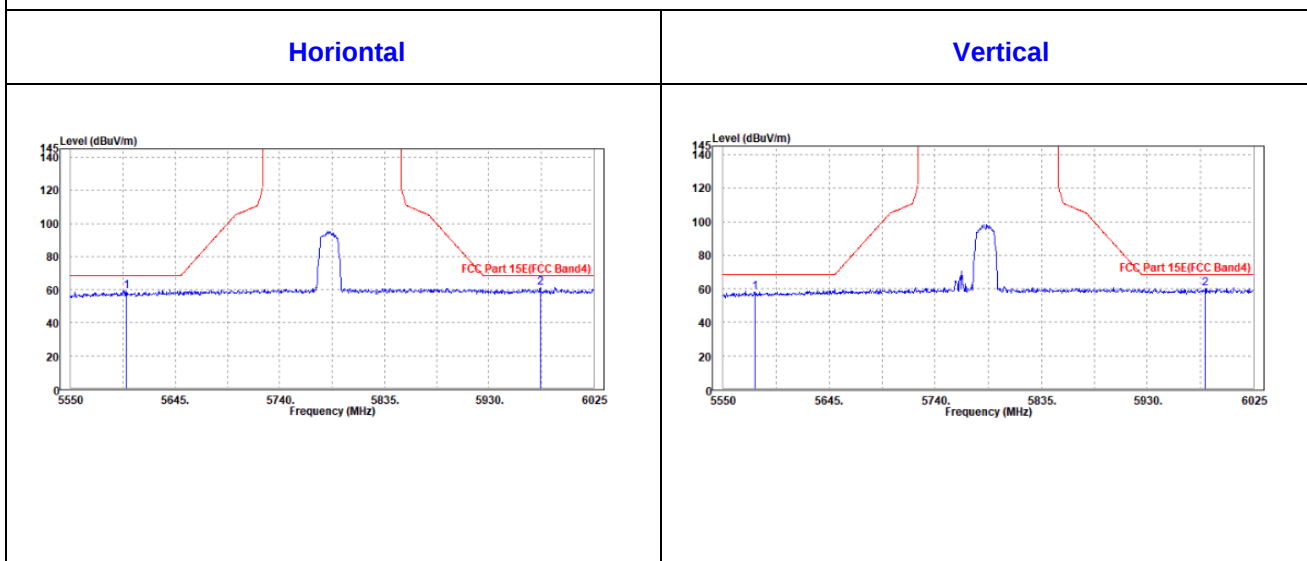


OOBE DATA

802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5600.825	59.01	59.63	68.2	-9.19	34.92	10.68	46.22	300	0	Peak
5976.55	61.32	59.82	68.2	-6.88	35.37	12.25	46.12	300	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5578.5	58.14	59.1	68.2	-10.06	34.69	10.58	46.23	200	0	Peak
5981.775	60.35	59.02	68.2	-7.85	35.18	12.27	46.12	200	0	Peak

CH 157





CHANNEL	TX Channel 165	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
5825	96.42	95.77	–	–	35.19	11.62	46.16	100	205	Peak
5825	90.09	89.44	–	–	35.19	11.62	46.16	100	205	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	98.96	98.51	–	–	34.99	11.62	46.16	200	55	Peak
5825	92.66	92.21	–	–	34.99	11.62	46.16	200	55	Average

REMARKS:

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

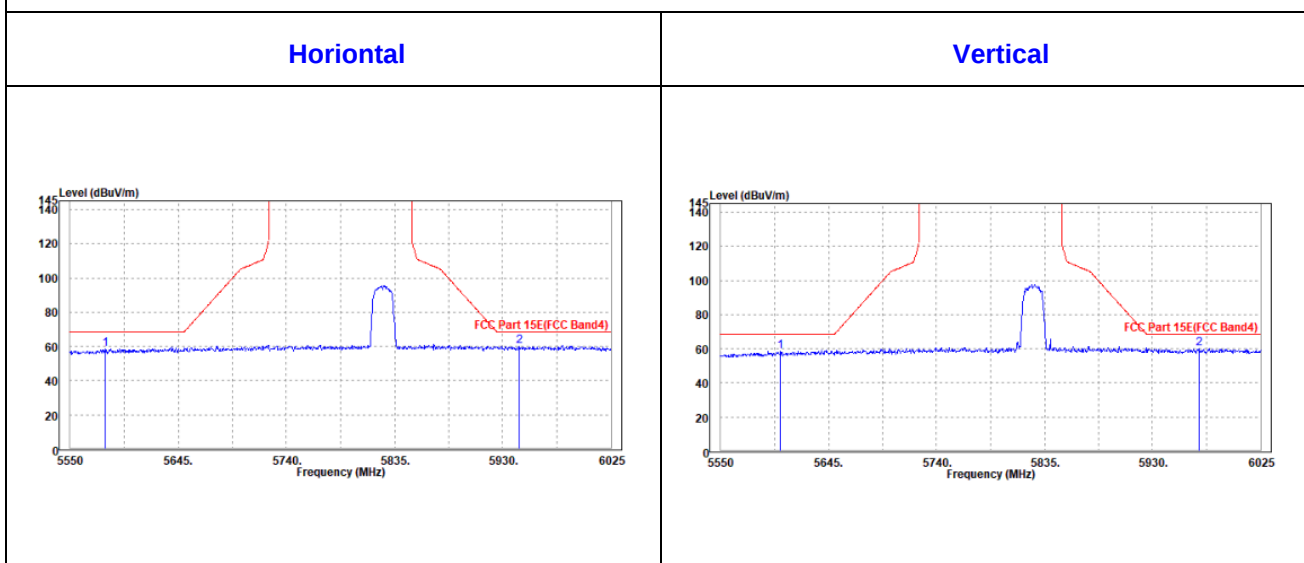


Oobe Data

802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5581.35	58.56	59.29	68.2	-9.64	34.9	10.6	46.23	200	360	Peak
5944.725	60.3	58.98	68.2	-7.9	35.33	12.12	46.13	200	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5602.725	58.44	59.25	68.2	-9.76	34.72	10.69	46.22	300	360	Peak
5970.85	60.1	58.82	68.2	-8.1	35.17	12.23	46.12	300	360	Peak

CH 165





802.11n (20MHz)

CHANNEL	TX Channel 149	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
5745	96.34	96.15	–	–	35.09	11.28	46.18	118	45	Peak
5745	89.57	89.38	–	–	35.09	11.28	46.18	118	45	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	98.63	98.64	–	–	34.89	11.28	46.18	200	55	Peak
5745	92.85	92.86	–	–	34.89	11.28	46.18	200	55	Average

REMARKS:

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



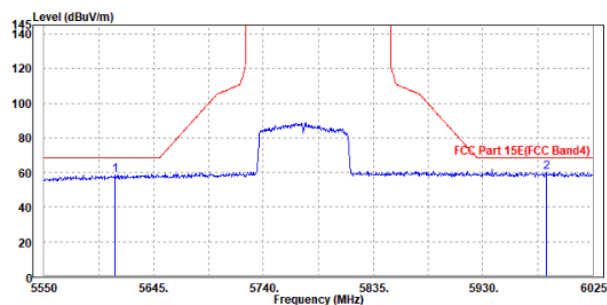
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802.11n (20MHz)

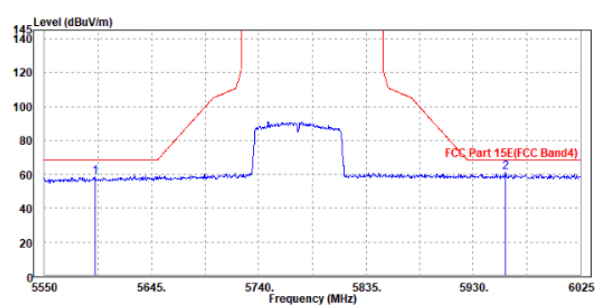
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5606.525	58.45	59.04	68.2	-9.75	34.93	10.7	46.22	300	360	Peak
5965.625	60.62	59.17	68.2	-7.58	35.36	12.21	46.12	300	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5606.05	58.63	59.42	68.2	-9.57	34.73	10.7	46.22	200	360	Peak
5979.875	60.3	58.97	68.2	-7.9	35.18	12.27	46.12	200	360	Peak

CH 149

Horizontal



Vertical





CHANNEL	TX Channel 157	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
5785	96.57	96.35	–	–	34.94	11.45	46.17	200	205	Peak
5785	90.2	89.98	–	–	34.94	11.45	46.17	200	205	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	98.95	98.73	–	–	34.94	11.45	46.17	200	55	Peak
5785	92.42	92.2	–	–	34.94	11.45	46.17	200	55	Average

REMARKS:

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

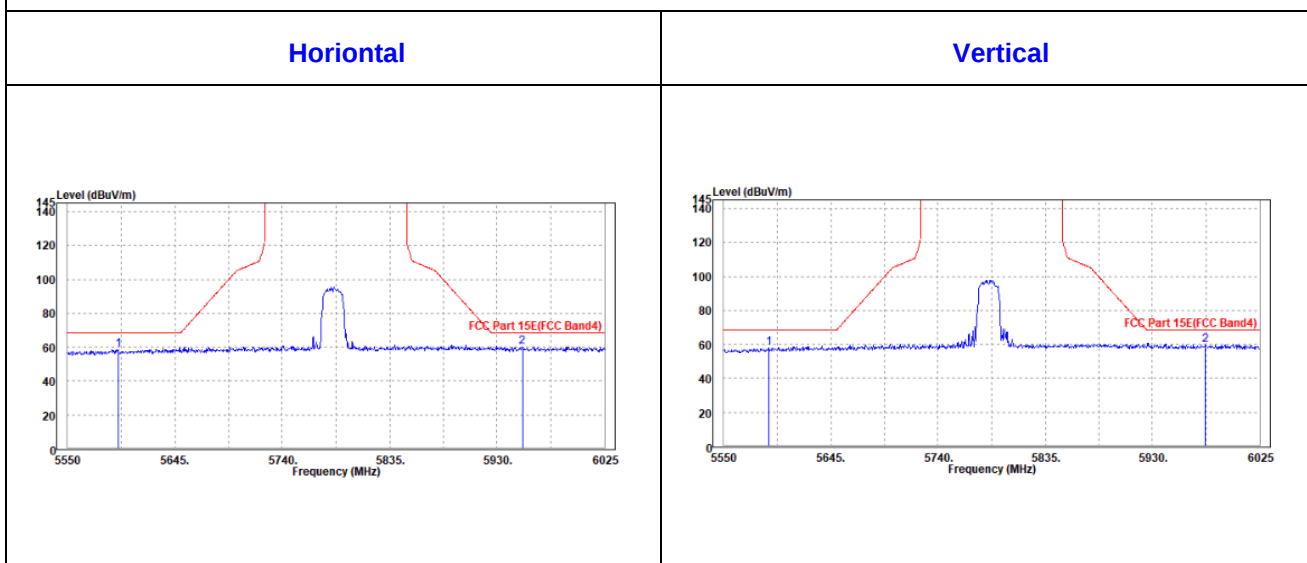


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802.11n (20MHZ)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5594.65	58.49	59.15	68.2	-9.71	34.91	10.65	46.22	200	0	Peak
5952.325	60.34	58.97	68.2	-7.86	35.34	12.15	46.12	200	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5590.375	58.11	58.99	68.2	-10.09	34.71	10.63	46.22	300	0	Peak
5977.025	59.67	58.37	68.2	-8.53	35.17	12.25	46.12	300	0	Peak

CH 157





CHANNEL	TX Channel 165	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
5825	96.32	95.67	–	–	35.19	11.62	46.16	100	205	Peak
5825	89.85	89.2	–	–	35.19	11.62	46.16	100	205	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	98.55	98.1	–	–	34.99	11.62	46.16	200	55	Peak
5825	92.12	91.67	–	–	34.99	11.62	46.16	200	55	Average

REMARKS:

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