



FCC Test Report

Report No.: FVC-ESH-P20112378B-14

FCC ID: T2C-CTP18

Product: Collaboration Touch Panel

Model: CTP18

Received Date: Dec.30, 2020

Test Date: Jan.02 to Jan.18, 2021

Issued Date: Jan.20, 2021

Applicant: YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.

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Manufacturer: YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.

Address: 309, 3rd Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, P.R. China

Issued By: BUREAU VERITAS ADT (Shanghai) Corporation

Lab Address: No. 829, Xinzhuan Road, Shanghai, P.R.China (201612)



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Release Control Record

Issue No.	Description	Date Issued
FVC-ESH-P20112378B-14	Original release	Jan.20, 2021



1 Certificate of Conformity

Product: Collaboration Touch Panel

Brand: Yealink

Model: CTP18

Applicant: YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.

Test Date: Jan.02 to Jan.18, 2021

Standards: 47 CFR Part 15, Subpart E 15.407

The above equipment has been tested by **BUREAU VERITAS ADT (Shanghai) Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by :

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, Date:

Jan.20, 2021

Approved by :

Daniel Sun
EMC Lab Manager

, Date:

Jan.20, 2021





2 Summary of Test Results

The EUT has been tested according to the following specifications:

47 CFR FCC Part 15, Subpart E (SECTION 15.407)			
FCC Clause	Test Item	Result	Remarks
15.203	Antenna Requirement	PASS	No antenna connector is used.
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit.
15.407(a)	26dB Emission bandwidth	PASS	Meet the requirement of limit.
15.407(e)	Minimum 6 dB bandwidth (5.725-5.85 GHz band)	PASS	Meet the requirement of limit.
15.407(a)	Maximum Conducted output power	PASS	Meet the requirement of limit.
15.407(a)	Peak Power spectrum density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.205 / 15.209 / 15.407(b)	Emissions in restricted frequency bands	PASS	Meet the requirement of limit.
15.209 / 15.247(d)	Radiated Emissions Measurement	PASS	Meet the requirement of limit.



2.1 Test Instruments

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Hybrid Antenna(25MHz-1.5GHz)	Schwarzbeck	VULB9168	E1A1012	Jul.29, 20	Jul.28, 22
Horn Antenna(1GHz -18GHz)	Schwarzbeck	BBHA9120D	E1A1017	Aug.25, 20	Aug.24, 22
Double Ridge Horn Antenna(18G-40G)	COM-POWER	AH-840	E1A1040	Jul.15, 20	Jul.14, 22
Pre-Amplifier(100kHz-1.3GHz)	Agilent	8447D	E1A2001	Apr.20, 20	Apr.19, 21
Pre-Amplifier(0.5GHz-18GHz)	EMCI	EMC184045SE	E1A2009	Jul.06, 20	Jul.05, 21
Pre-Amplifier(18GHz-40GHz)	EMCI	EMC051845SE	E1A2008	Jul.06, 20	Jul.05, 21
EMI test receiver	R&S	ESR7	E1R1005	Apr.20, 20	Apr.19, 21
Spectrum Analyzer	Keysight	N9030B	E1S1003	Jul.23, 20	Jul.22, 21
Spectrum Analyzer	Keysight	N9020A	E1S1004	Mar.03, 20	Mar.02, 21
EMI test receiver	R&S	ESCS30	E1R1001	May.12, 20	May.11, 21
LISN	R&S	ENV216	E1L1011	May.12, 20	May.11, 21
Humidity&Temp Tester	Baolima	WS508	E1H1011	Apr. 03, 20	Apr. 02, 21
RF Control Unit	Toscend	JS0806-2	E1C5003	N/A	N/A
Test Software	ADT	ADT_COND_V7 .3.1	N/A	N/A	N/A
Test Software	Toscend	JS32-RE	N/A	N/A	N/A
Test Software	Toscend	JS1120	N/A	N/A	N/A
Test Software	Toscend	JS1120-3	N/A	N/A	N/A



2.2 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT:

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

Measurement	Frequency	Expanded Uncertainty ($k=2$) (\pm)
Conducted Emissions at mains ports	150kHz ~ 30MHz	1.83 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	5.36 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	3.47 dB
	6GHz ~ 18GHz	3.75 dB
	18GHz ~ 40GHz	3.30 dB

2.3 Modification Record

There were no modifications required for compliance.



3 General Information

3.1 General Description of EUT

Product	Collaboration Touch Panel
Brand	Yealink
Test Model	CTP18
Power Rating	48Vdc, 0.2A or PoE 48Vdc, 0.27A
Modulation Type	OFDM
Modulation Technology	802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Operating Frequency	5150 ~ 5250MHz, 5250 ~ 5350MHz, 5470 ~ 5725MHz, 5745 ~ 5850MHz
Number of Channel	See clause 3.2
Output Power	15.02dBm
Antenna Type	PCB Antenna
Antenna Connector	--
Antenna Gain	3dBi

Note: For more details, please refer to the User's manual of the EUT.

Special comments: All tests were performed with DAHUA POE Switch which model is DH-PFS3006-4ET-60.

Modulation Mode	TX /RX Function
802.11a	1TX / 1RX
802.11n/ac (20MHz)	1TX / 1RX
802.11n/ac (40MHz)	1TX / 1RX
802.11ac (80MHz)	1TX / 1RX



3.2 Description of Test Modes

FOR 5150 ~ 5250MHz

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

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

2 channels are provided for 802.11n (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 5250 ~ 5350MHz

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

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

2 channels are provided for 802.11n (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 5470 ~ 5725MHz

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

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

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530 MHz	122	5610 MHz

FOR 5725 ~ 5850MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755 MHz	159	5795 MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
155	5775 MHz		



3.2.1 Test Mode Applicability:

EUT Configure Mode	Applicable to				Description
	RE ≥ 1G	RE < 1G	PLC	APCM	
-	√	√	√	√	-

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

Radiated Emission Test (Above 1 GHz):

- 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).
- 802.11n mode EIRP power is greater than 802.11ac, so test 11a mode and 11an mode.
- 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)
-	802.11a	5150-5250	36 to 48	36, 40, 48	OFDM	6.0
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	MCS0
-	802.11ac (80MHz)		42	42	OFDM	MCS0
-	802.11a	5250-5350	52 to 64	52, 60, 64	OFDM	6.0
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	MCS0
-	802.11ac (80MHz)		58	58	OFDM	MCS0
-	802.11a	5470-5725	100 to 144	100, 116, 140	OFDM	6.0
-	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	MCS0
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	MCS0
-	802.11ac (80MHz)		106	106	OFDM	MCS0
-	802.11a	5725-5850	149 to 161	149, 157, 161	OFDM	6.0
-	802.11n (20MHz)		149 to 161	149, 157, 161	OFDM	MCS0
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	MCS0
-	802.11ac (80MHz)		155	155	OFDM	MCS0



Radiated Emission Test (Below 1 GHz):

- 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	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	36 to 48	36	OFDM	DBPSK	6.0

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	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	36 to 48	36	OFDM	DBPSK	6.0



Antenna Port Conducted 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)
-	802.11a	5150-5250	36 to 48	36, 40, 48	OFDM	6.0
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	MCS0
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	MCS0
-	802.11ac (80MHz)		42	42	OFDM	MCS0
-	802.11a	5250-5350	52 to 64	52, 60, 64	OFDM	6.0
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	MCS0
-	802.11ac (80MHz)		58	58	OFDM	MCS0
-	802.11a	5470-5725	100 to 144	100, 116, 140	OFDM	6.0
-	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	MCS0
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	MCS0
-	802.11ac (80MHz)		106	106	OFDM	MCS0
-	802.11a	5725-5850	149 to 161	149, 157, 161	OFDM	6.0
-	802.11n (20MHz)		149 to 161	149, 157, 161	OFDM	MCS0
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	MCS0
-	802.11ac (80MHz)		155	155	OFDM	MCS0

3.2.2 Test Condition:

Applicable to	Normal Environmental Conditions	Normal Input Power
RE ≥ 1G	25deg. C, 60%RH	120Vac, 60Hz
RE < 1G	25deg. C, 60%RH	120Vac, 60Hz
PLC	25deg. C, 60%RH	120Vac, 60Hz
APCM	25deg. C, 60%RH	120Vac, 60Hz



3.3 Duty Cycle of Test Signal

The test results refer to module FCC ID: T2C-YL1023



3.4 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units.

NO.	PRODUCT	BRAND/ Manufacturer	MODEL NO.
1	PC	ThinkPad	L470
2	Network Cable	--	--
3	POE Switch	DAHUA	DH-PFS3006-4ET-60

3.5 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 standard:

FCC Part 15, Subpart E (15.407)

789033 D02 General U-NII Test Procedures New Rules v01r03

KDB 662911 D01 v02r01

ANSI C63.10:2013

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



4 Test Procedure and Results

4.1 AC Power Conducted Emission

4.1.1 Limits

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

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

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

4.1.2 Test Procedures

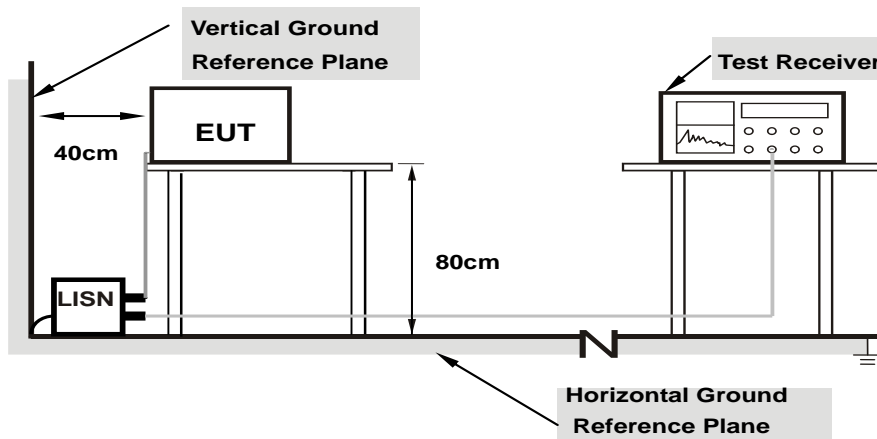
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

4.1.3 Deviation from Test Standard

No deviation.

4.1.4 Test Setup



Note: 1.Support units were connected to second LISN.

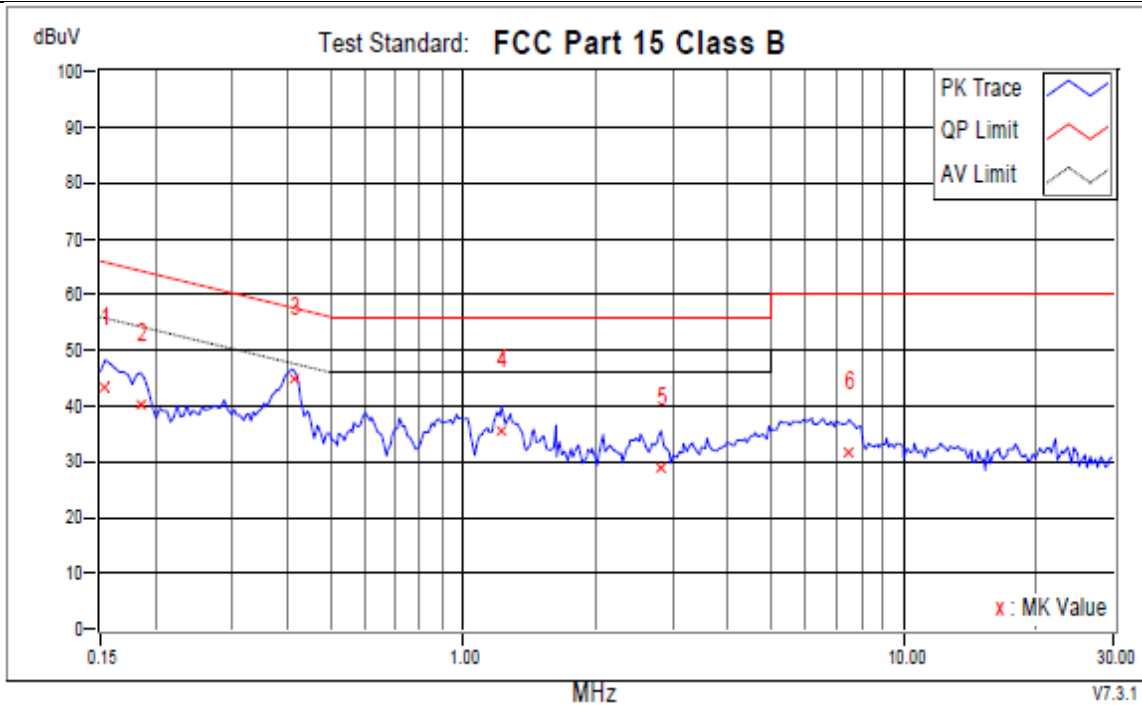
For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.5 EUT Operating Conditions

Same as 4.1.6.

4.1.6 Test Results

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Power supply	AC 120V, 60Hz		

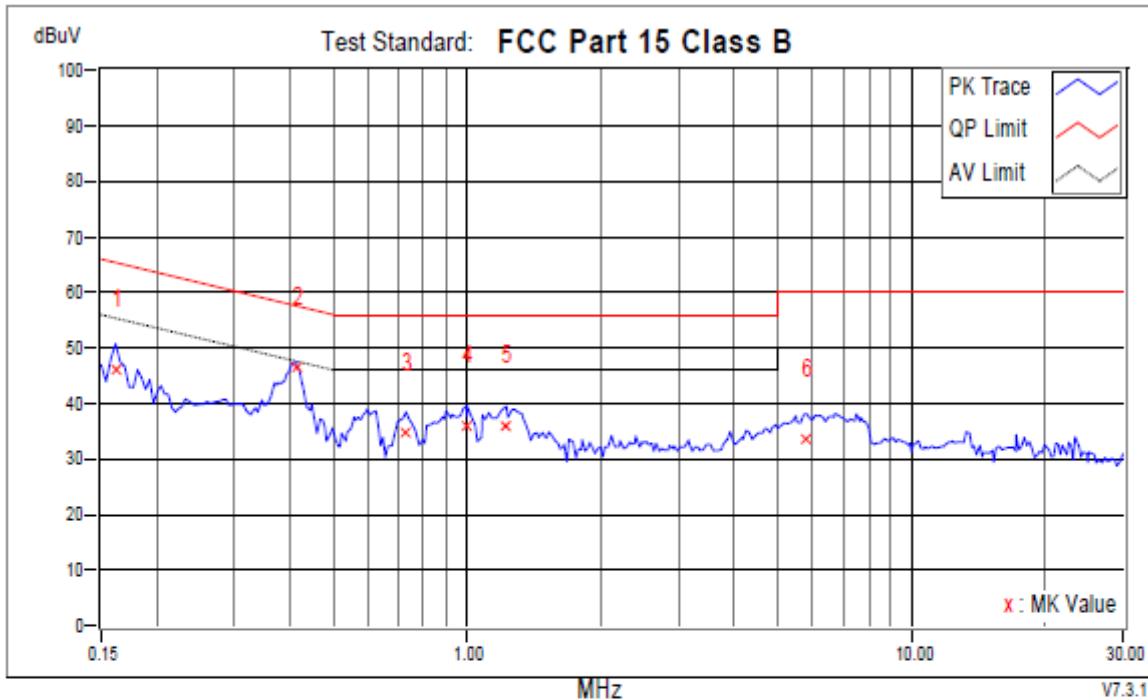


No.	Frequency MHz	Corr. Factor dB	Reading dBuV		Emission dBuV		Limit dBuV		Margins dB		Notes
			QP	AV	QP	AV	QP	AV	QP	AV	
1	0.15391	9.87	33.35	17.95	43.22	27.82	65.79	55.79	-22.56	-27.96	
2	0.18519	9.88	30.33	21.18	40.21	31.06	64.25	54.25	-24.04	-23.19	
+3	0.41197	9.75	35.06	25.97	44.81	35.72	57.61	47.61	-12.80	-11.89	
4	1.22287	9.65	25.85	19.31	35.50	28.96	56.00	46.00	-20.50	-17.04	
5	2.81424	9.87	19.07	11.68	28.94	21.55	56.00	46.00	-27.06	-24.45	
6	7.52188	10.25	21.25	14.25	31.50	24.50	60.00	50.00	-28.50	-25.50	

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Power supply	AC 120V, 60Hz		

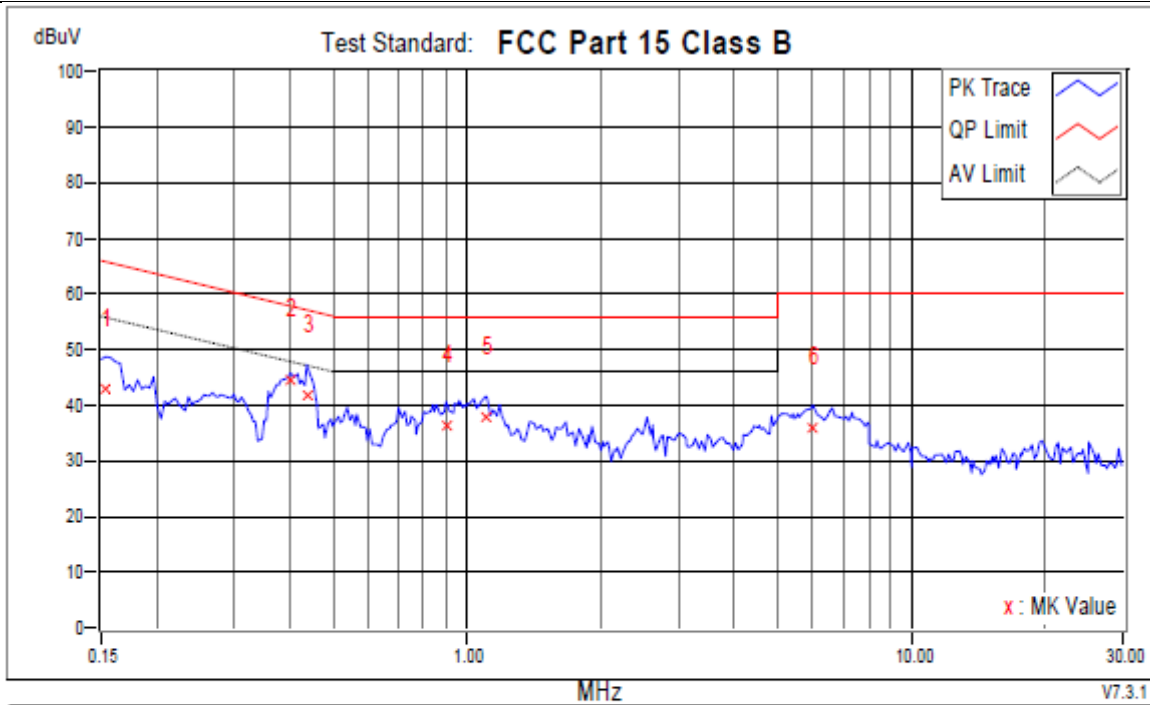


No.	Frequency	Corr. Factor	Reading dBuV		Emission dBuV		Limit dBuV		Margins dB		Notes
	MHz		QP	AV	QP	AV	QP	AV	QP	AV	
1	0.16173	9.87	36.05	26.24	45.92	36.11	65.37	55.37	-19.46	-19.27	
+2	0.41197	9.89	36.61	26.32	46.50	36.21	57.61	47.61	-11.11	-11.40	
3	0.72868	9.85	24.88	18.01	34.73	27.86	56.00	46.00	-21.27	-18.14	
4	0.99456	9.91	26.05	19.41	35.96	29.32	56.00	46.00	-20.04	-16.68	
5	1.22678	9.92	26.12	19.97	36.04	29.89	56.00	46.00	-19.96	-16.11	
6	5.79757	9.92	23.84	17.79	33.76	27.71	60.00	50.00	-26.24	-22.29	

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Power supply	AC 240V, 50Hz		

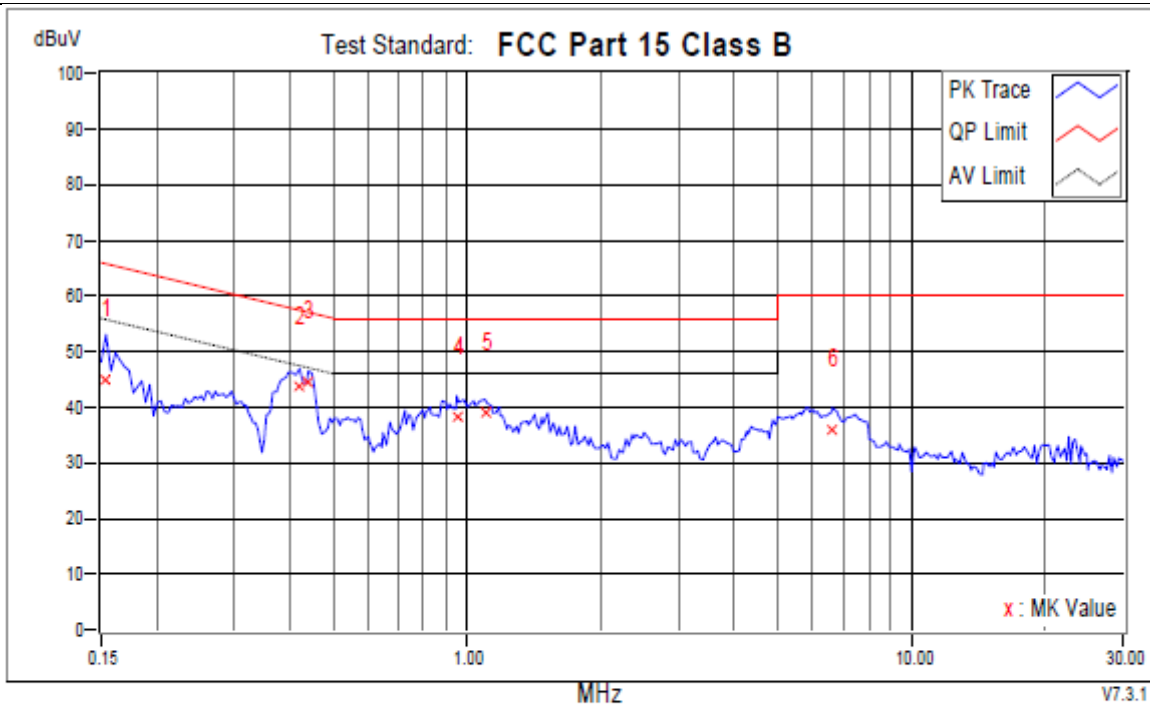


No.	Frequency MHz	Corr. Factor dB	Reading dBuV		Emission dBuV		Limit dBuV		Margins dB		Notes
			QP	AV	QP	AV	QP	AV	QP	AV	
1	0.15391	9.87	33.24	26.55	43.11	36.42	65.79	55.79	-22.67	-19.36	
+2	0.40024	9.75	34.59	28.56	44.34	38.31	57.85	47.85	-13.51	-9.54	
3	0.43543	9.75	32.08	25.33	41.83	35.08	57.15	47.15	-15.32	-12.07	
4	0.89681	9.61	26.58	21.35	36.19	30.96	56.00	46.00	-19.81	-15.04	
5	1.10166	9.63	28.27	23.05	37.90	32.68	56.00	46.00	-18.10	-13.32	
6	6.00480	10.14	25.74	20.87	35.88	31.01	60.00	50.00	-24.12	-18.99	

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Power supply	AC 240V, 50Hz		



No.	Frequency MHz	Corr. Factor dB	Reading dBuV		Emission dBuV		Limit dBuV		Margins dB		Notes
			QP	AV	QP	AV	QP	AV	QP	AV	
1	0.15391	9.88	35.15	27.49	45.03	37.37	65.79	55.79	-20.76	-18.42	
2	0.41979	9.89	33.84	27.21	43.73	37.10	57.45	47.45	-13.72	-10.35	
+3	0.43934	9.89	34.48	27.43	44.37	37.32	57.07	47.07	-12.71	-9.76	
4	0.94764	9.91	28.30	23.38	38.21	33.29	56.00	46.00	-17.79	-12.71	
5	1.09775	9.91	29.08	23.90	38.99	33.81	56.00	46.00	-17.01	-12.19	
6	6.63431	10.12	25.68	21.10	35.80	31.22	60.00	50.00	-24.20	-18.78	

REMARKS:

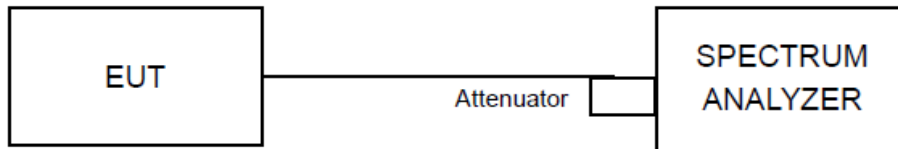
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

4.2 26dB Emission Bandwidth

4.2.1 Limit

No limit requirement.

4.2.2 Test Setup



4.2.3 Test Procedures

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

4.2.4 Deviation of Test Standard

No deviation.



4.2.5 Test Results

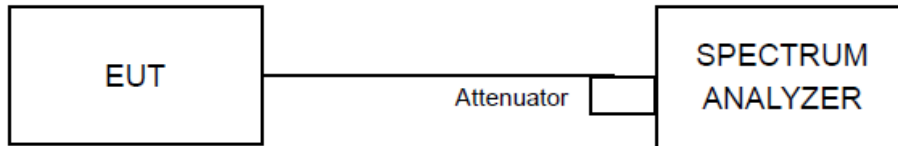
The test results refer to module FCC ID: T2C-YL1023

4.3 Minimum 6dB Bandwidth (5.725-5.85 GHz band)

4.3.1 Limit

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

4.3.2 Test Setup



4.3.3 Test Procedures

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

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 kHz, VBW ≥ 3 · RBW, peak detector with maximum hold) is implemented by the instrumentation function.

4.3.4 Deviation of Test Standard

No deviation.



4.3.5 Test Results

The test results refer to module FCC ID: T2C-YL1023

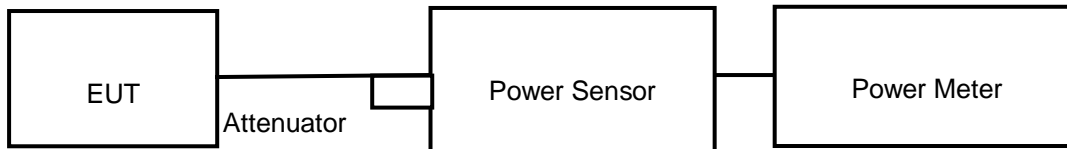
4.4 Conducted Output Power

4.4.1 Limit

Frequency band (MHz)	EUT Category	Limit
5150-5250	Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p \leq 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
	Fixed point-to-point Access Point	1 Watt (30 dBm)
	Indoor Access Point	1 Watt (30 dBm)
	√ Client devices	250mW (24 dBm)
5250-5350	√	250mW (24 dBm) or 11 dBm+10 log B*
5470-5725	√	250mW (24 dBm) or 11 dBm+10 log B*
5725-5850	√	1 Watt (30 dBm)

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

4.4.2 Test Setup



4.4.3 Test Procedures

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

4.4.4 Deviation of Test Standard

No deviation.



4.4.5 Test Results

Test Mode	Antenna	Channel [MHz]	Conducted Output Power [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	10.20	<=24	PASS
		5200	10.22	<=24	PASS
		5240	9.99	<=24	PASS
		5260	12.35	<=24	PASS
		5300	13.03	<=24	PASS
		5320	12.62	<=24	PASS
		5500	15.00	<=24	PASS
		5580	15.02	<=24	PASS
		5700	13.18	<=24	PASS
		5745	13.38	<=30	PASS
		5785	11.96	<=30	PASS
		5825	11.09	<=30	PASS
11N20SISO	Ant1	5180	9.75	<=24	PASS
		5200	10.71	<=24	PASS
		5240	10.69	<=24	PASS
		5260	12.00	<=24	PASS
		5300	12.79	<=24	PASS
		5320	12.28	<=24	PASS
		5500	13.77	<=24	PASS
		5580	14.91	<=24	PASS
		5700	10.74	<=24	PASS
		5745	12.96	<=30	PASS
		5785	11.76	<=30	PASS
		5825	10.91	<=30	PASS
11N40SISO	Ant1	5190	9.15	<=24	PASS
		5230	9.94	<=24	PASS
		5270	11.59	<=24	PASS
		5310	9.37	<=24	PASS
		5510	9.70	<=24	PASS
		5590	14.06	<=24	PASS
		5670	12.91	<=24	PASS
		5755	12.07	<=30	PASS
		5795	10.51	<=30	PASS
11AC20SISO	Ant1	5180	9.73	<=24	PASS
		5200	9.94	<=24	PASS
		5240	9.87	<=24	PASS



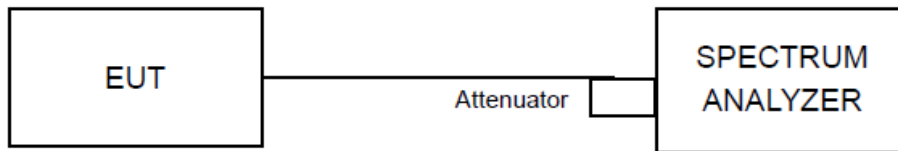
		5260	11.97	<=24	PASS
		5300	11.66	<=24	PASS
		5320	11.37	<=24	PASS
		5500	12.97	<=24	PASS
		5580	13.81	<=24	PASS
		5700	10.03	<=24	PASS
		5745	11.91	<=30	PASS
		5785	10.34	<=30	PASS
		5825	9.76	<=30	PASS
11AC40SISO	Ant1	5190	9.01	<=24	PASS
		5230	9.89	<=24	PASS
		5270	10.23	<=24	PASS
		5310	9.10	<=24	PASS
		5510	8.63	<=24	PASS
		5590	13.15	<=24	PASS
		5670	12.11	<=24	PASS
		5755	11.14	<=30	PASS
		5795	9.53	<=30	PASS
11AC80SISO	Ant1	5210	9.65	<=24	PASS
		5290	8.76	<=24	PASS
		5530	9.32	<=24	PASS
		5610	12.72	<=24	PASS
		5775	12.07	<=30	PASS

4.5 Peak Power spectrum density

4.5.1 Limit

Frequency band (MHz)	EUT Category	Limit
5150-5250	Outdoor Access Point	17dBm/ MHz
	Fixed point-to-point Access Point	
	Indoor Access Point	
	√ Client devices	11dBm/ MHz
5250-5350	√	11dBm/ MHz
5470-5725	√	11dBm/ MHz
5725-5850	√	30dBm/ 500kHz

4.5.2 Test Setup



4.5.3 Test Procedures

Using method SA-2

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

4.5.4 Deviation of Test Standard

No deviation.



4.5.5 Test Results

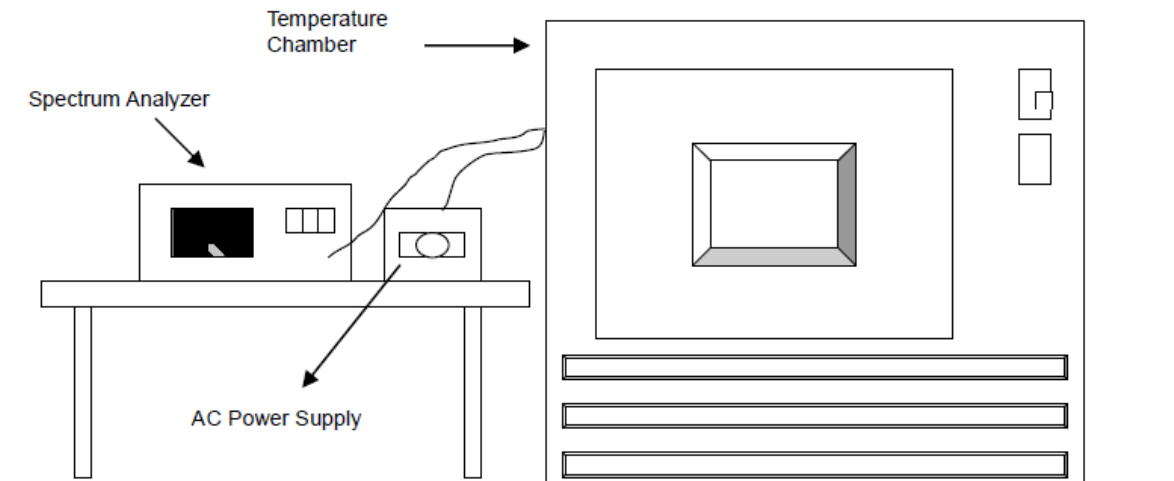
The test results refer to module FCC ID: T2C-YL1023

4.6 Frequency Stability

4.6.1 Test Limit

The frequency of the carrier signal shall be maintained within band of operation.

4.6.2 Test Setup



4.6.3 Test Procedures

- The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- Allow sufficient time for the temperature the chamber to stabilize, turn the EUT on and measure the operating frequency.
- Repeat step b and c with the temperature chamber set to the lowest temperature.
- The test chamber was allowed to stabilize at 20 degree C for a minimum of 30min. The supply voltage was the adjusted on the EUT from 85% to 115% and the frequency record.

4.6.4 Deviation of Test Standard

No deviation.



4.6.5 Test Results

The test results refer to module FCC ID: T2C-YL1023



4.7 Emissions in restricted frequency bands

4.7.1 Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
1 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(2)
13.36 - 13.41	--	--	--



All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

APPLICABLE TO	LIMIT	
789033 D02 General U-NII Test Procedures New Rules v01r03	FIELD STRENGTH AT 3m (dBµV/m)	
	PK : 74	AV : 54
APPLICABLE TO	EIRP LIMIT (dBm/MHz)	EQUIVALENT FIELD STRENGTH AT 3m (dBµV/m)
15.407(b)(1)	PK : -27	PK : 68.3
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	Note	Note

Note: 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.



4.7.2 Test Procedure Reference

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

4.7.3 Test Procedures

Peak Field Strength Measurements

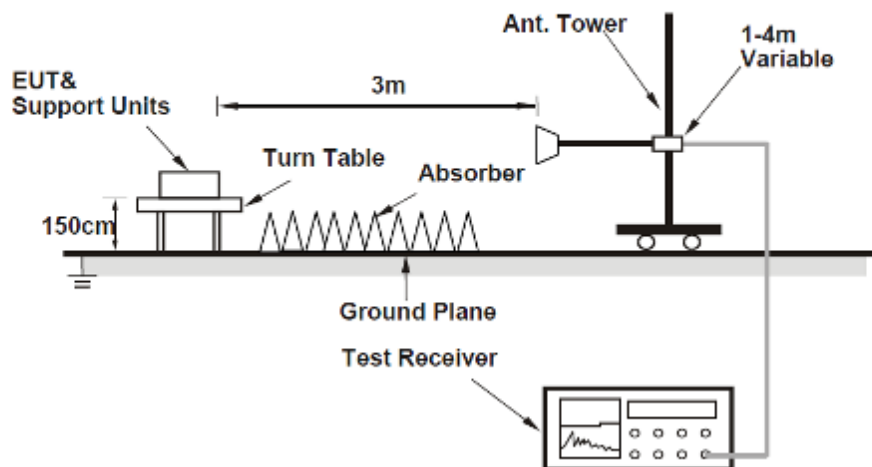
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

8. 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
9. 2. RBW = 1MHz
10. 3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
11. If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
12. 4. Detector = Peak
13. 5. Sweep time = auto
14. 6. Trace mode = max hold
15. 7. Trace was allowed to stabilize

4.7.4 Test Setup

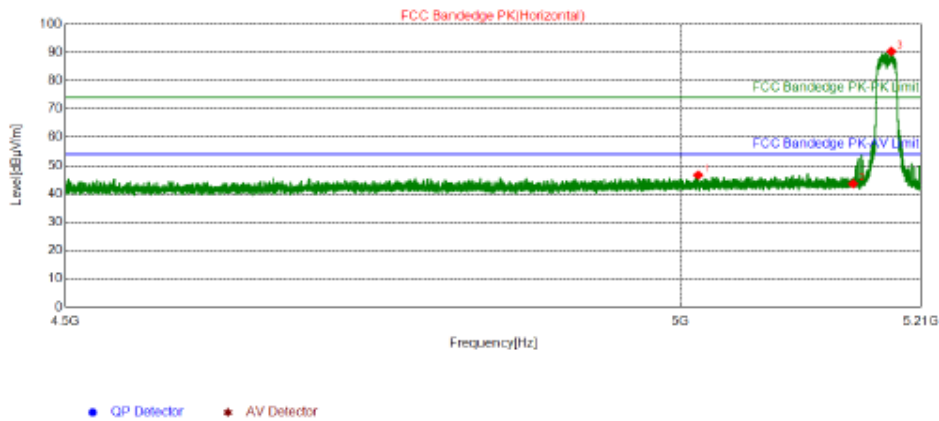
For Radiated emission above 1GHz



4.7.5 Test Results



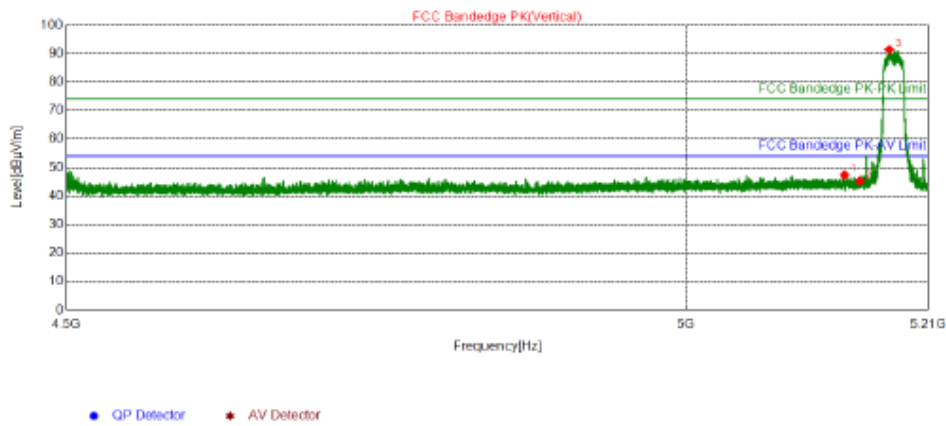
802.11n(20MHz)-5180MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBuV/m]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5015.1760	47.49	46.65	74.00	27.35	380	18	Horizontal	PK
2	5150.0050	44.10	43.58	74.00	30.42	380	147	Horizontal	PK
3	5183.6590	90.82	90.35	74.00	-16.35	380	167	Horizontal	PK

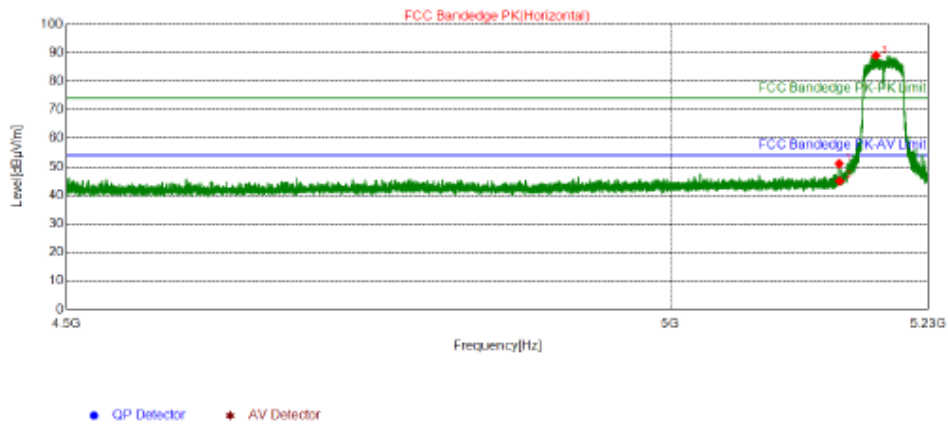
802.11n(20MHz)-5180MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBuV/m]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5136.5505	47.95	47.41	74.00	26.59	380	260	Vertical	PK
2	5150.0050	45.75	45.23	74.00	28.77	380	253	Vertical	PK
3	5175.8135	91.90	91.42	74.00	-17.42	380	287	Vertical	PK

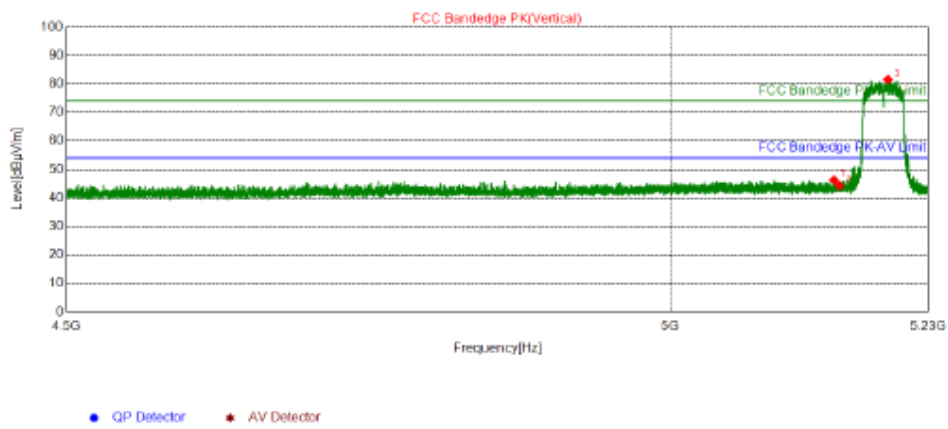
802.11n(40MHz)-5190MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5149.5540	51.64	51.12	74.00	22.88	380	200	Horizontal	PK
2	5150.0285	45.55	45.03	74.00	28.97	380	233	Horizontal	PK
3	5182.6230	89.48	89.01	74.00	-15.01	380	240	Horizontal	PK

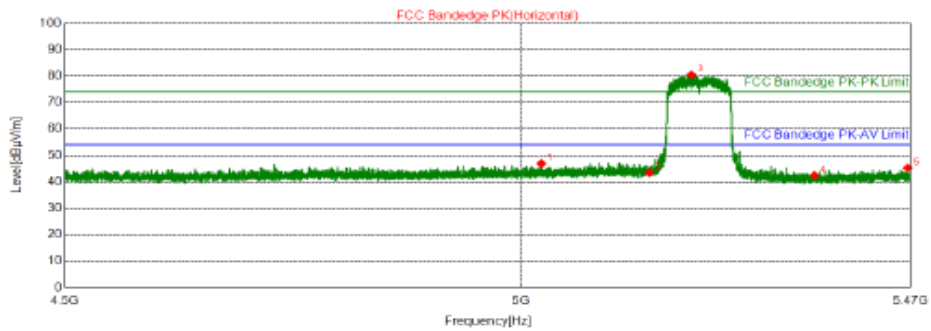
802.11n(40MHz)-5190MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5144.9550	46.77	46.24	74.00	27.76	380	298	Vertical	PK
2	5150.0285	44.86	44.34	74.00	29.66	380	271	Vertical	PK
3	5193.5000	82.02	81.57	74.00	-7.57	380	292	Vertical	PK

802.11ac(80MHz)-5210MHz/ Horizontal

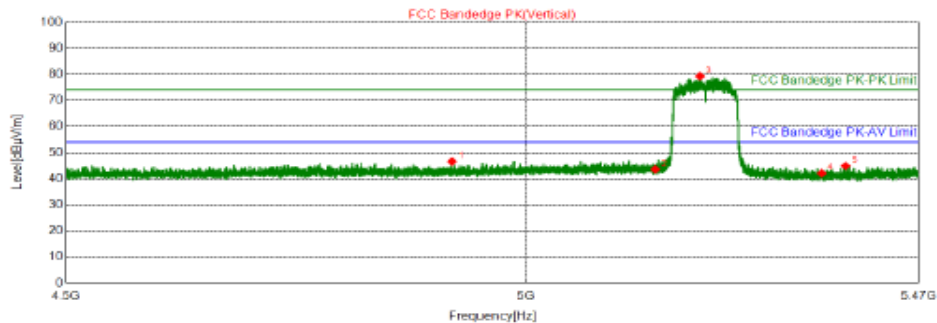


● GP Detector ★ AV Detector

Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5023.1695	47.76	46.90	74.00	27.10	380	262	Horizontal	PK
2	5150.0455	44.07	43.55	74.00	30.45	380	59	Horizontal	PK
3	5200.3400	80.95	80.51	74.00	-6.51	380	242	Horizontal	PK
4	5350.0110	42.91	42.40	74.00	31.60	380	174	Horizontal	PK
5	5466.3625	45.55	45.30	74.00	28.70	380	351	Horizontal	PK

802.11ac(80MHz)-5210MHz/ Vertical

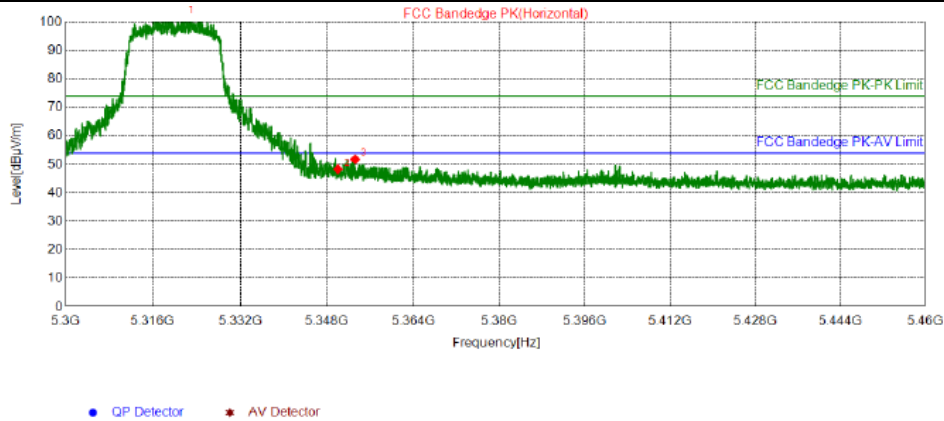


● GP Detector ★ AV Detector

Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	4915.7420	47.37	46.60	74.00	27.40	380	104	Vertical	PK
2	5150.0455	44.13	43.61	74.00	30.39	380	233	Vertical	PK
3	5202.8620	79.73	79.29	74.00	-5.29	380	49	Vertical	PK
4	5350.0110	42.59	42.08	74.00	31.92	380	321	Vertical	PK
5	5379.5475	45.25	44.88	74.00	29.12	380	110	Vertical	PK

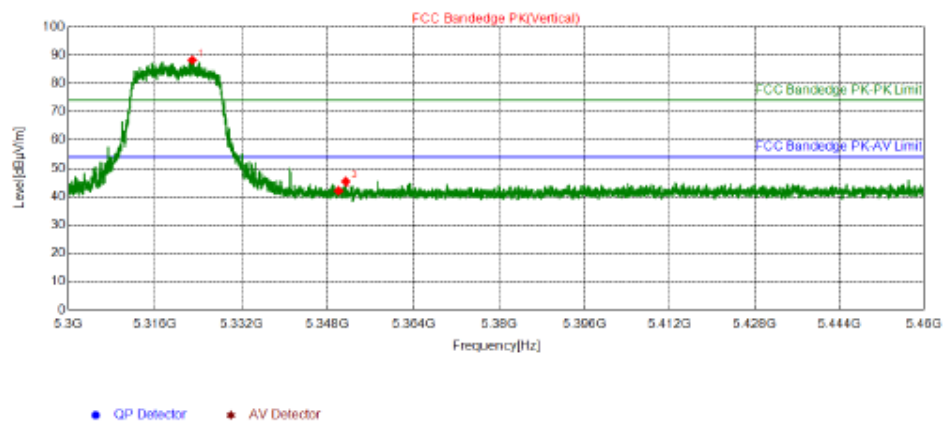
802.11a-5320MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5321.4880	102.43	101.84	74.00	-27.84	380	150	Horizontal	PK
2	5350.0000	48.81	48.30	74.00	25.70	380	150	Horizontal	PK
3	5353.1760	52.23	51.74	74.00	22.26	380	157	Horizontal	PK

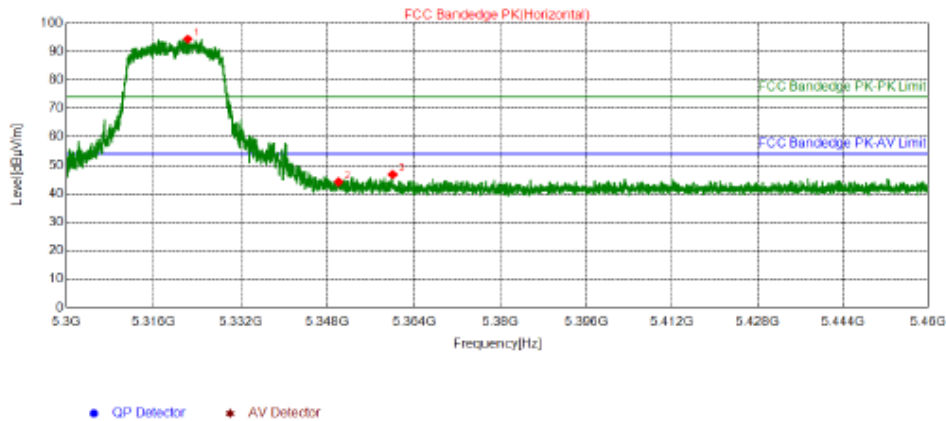
802.11a-5320MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5322.8880	88.83	88.24	74.00	-14.24	380	256	Vertical	PK
2	5350.0000	42.57	42.06	74.00	31.94	380	182	Vertical	PK
3	5351.3360	45.89	45.39	74.00	28.61	380	53	Vertical	PK

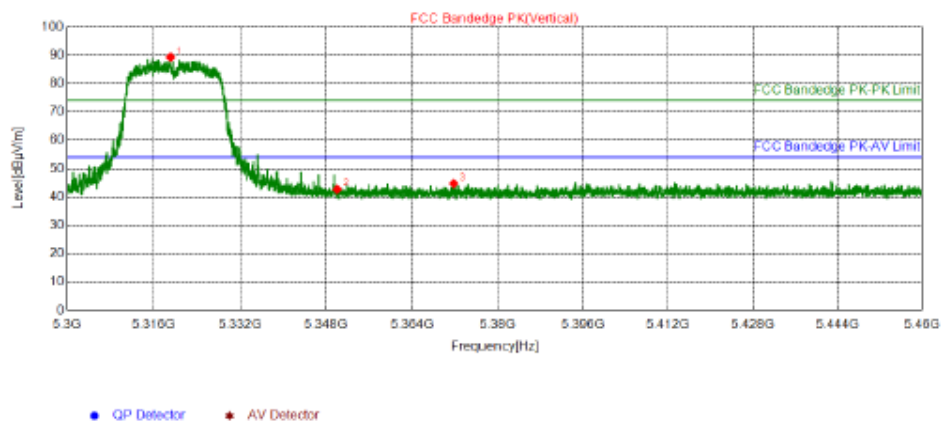
802.11n(20MHz)-5320MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5322.2320	94.95	94.36	74.00	-20.36	380	155	Horizontal	PK
2	5350.0000	44.71	44.20	74.00	29.80	380	162	Horizontal	PK
3	5360.0000	47.23	46.77	74.00	27.23	380	169	Horizontal	PK

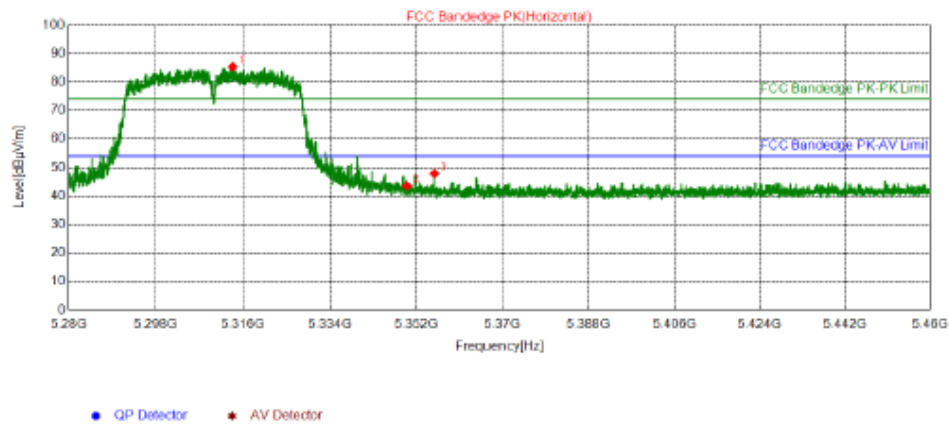
802.11n(20MHz)-5320MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5319.0880	89.88	89.30	74.00	-15.30	380	84	Vertical	PK
2	5350.0000	43.19	42.68	74.00	31.32	380	16	Vertical	PK
3	5371.7360	45.14	44.74	74.00	29.26	380	90	Vertical	PK

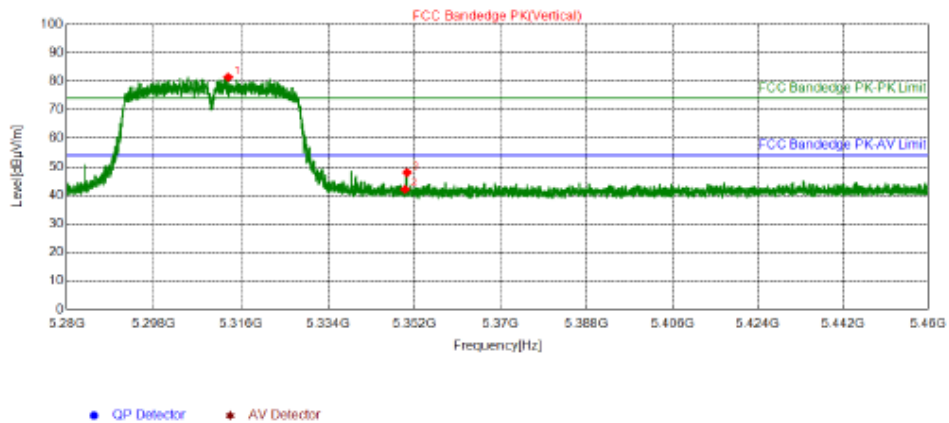
802.11n(40MHz)-5310MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBuV/m]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5313.8580	85.91	85.34	74.00	-11.34	380	162	Horizontal	PK
2	5350.0020	44.05	43.54	74.00	30.46	380	189	Horizontal	PK
3	5355.7170	48.35	47.87	74.00	26.13	380	175	Horizontal	PK

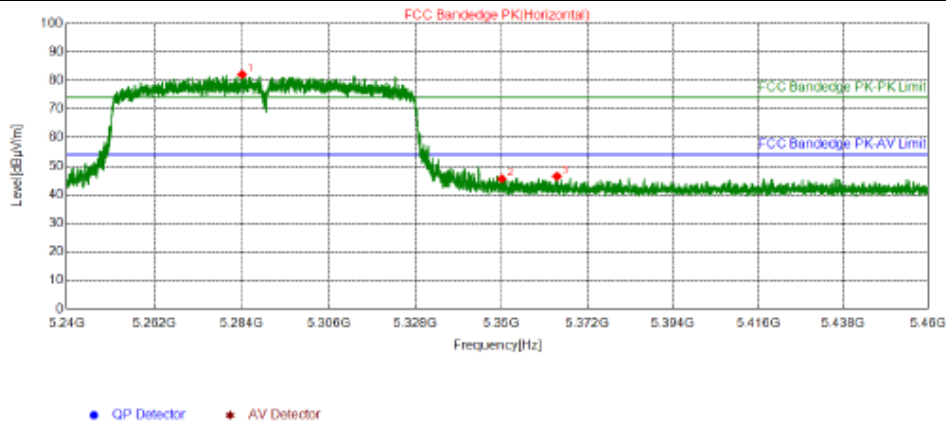
802.11n(40MHz)-5310MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBuV/m]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5313.3000	82.01	81.44	74.00	-7.44	380	83	Vertical	PK
2	5350.0020	42.61	42.10	74.00	31.90	380	76	Vertical	PK
3	5350.4070	48.52	48.01	74.00	25.99	380	253	Vertical	PK

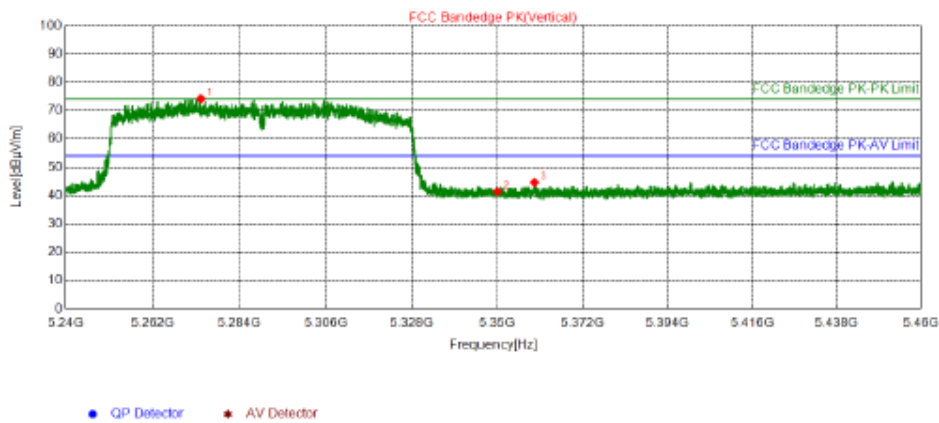
802.11ac(80MHz)-5290MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5284.0880	82.63	82.12	74.00	-8.12	380	152	Horizontal	PK
2	5350.0000	46.11	45.60	74.00	28.40	380	152	Horizontal	PK
3	5364.1130	46.87	46.43	74.00	27.57	380	152	Horizontal	PK

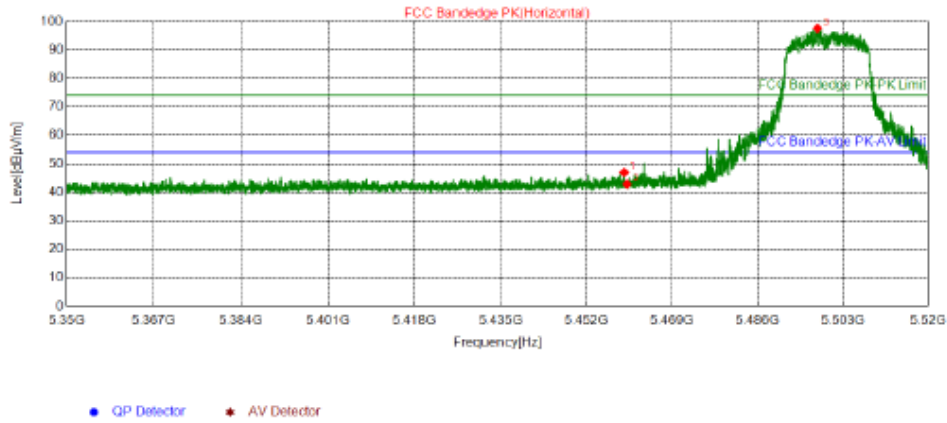
802.11ac(80MHz)-5290MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5274.1880	74.69	74.20	74.00	-0.20	380	290	Vertical	PK
2	5350.0000	41.93	41.42	74.00	32.58	380	93	Vertical	PK
3	5359.5370	45.12	44.66	74.00	29.34	380	93	Vertical	PK

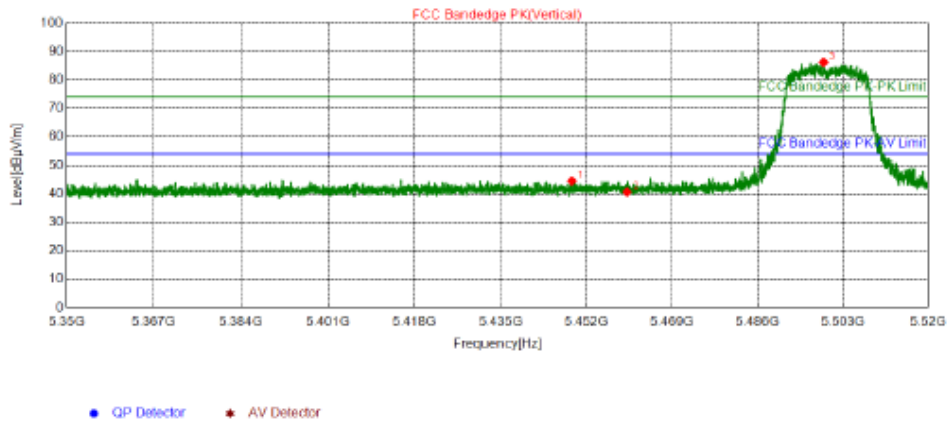
802.11a-5500MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBuV/m]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5459.4290	47.22	46.99	74.00	27.01	380	49	Horizontal	PK
2	5460.0070	43.10	42.87	74.00	31.13	380	151	Horizontal	PK
3	5497.8915	97.96	97.59	74.00	-23.59	380	158	Horizontal	PK

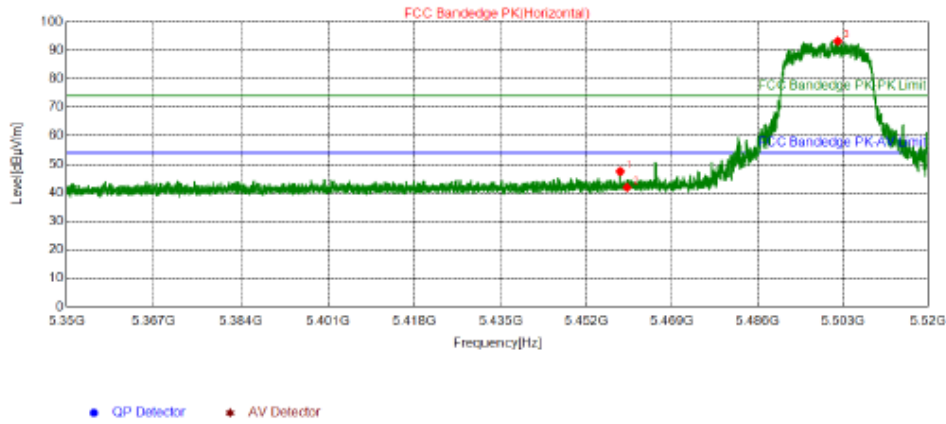
802.11a-5500MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBuV/m]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5449.0590	44.72	44.53	74.00	29.47	380	310	Vertical	PK
2	5460.0070	40.88	40.65	74.00	33.35	380	235	Vertical	PK
3	5499.1155	86.58	86.21	74.00	-12.21	380	93	Vertical	PK

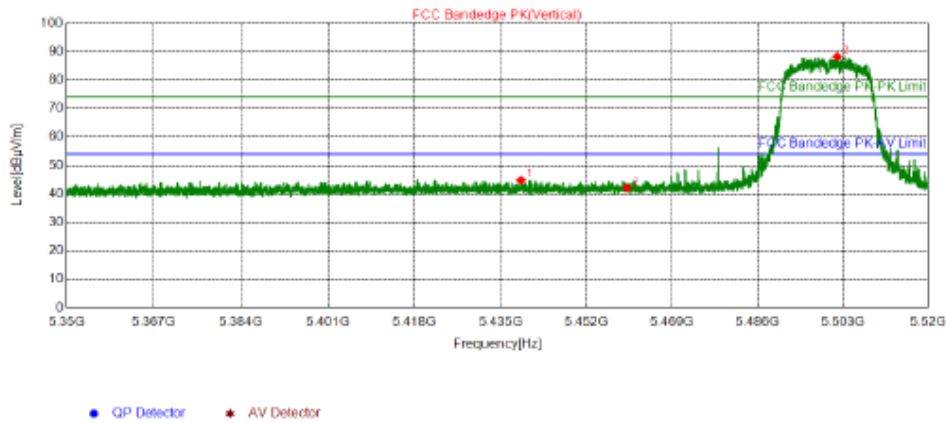
802.11n(20MHz)-5500MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5458.6555	47.74	47.51	74.00	26.49	380	167	Horizontal	PK
2	5460.0070	42.13	41.90	74.00	32.10	380	25	Horizontal	PK
3	5501.9290	93.59	93.21	74.00	-19.21	380	167	Horizontal	PK

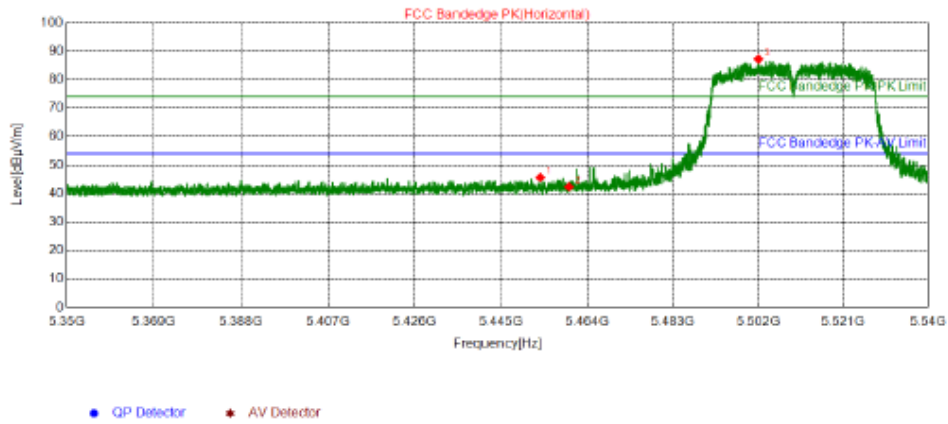
802.11n(20MHz)-5500MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5439.0205	45.00	44.84	74.00	29.16	380	49	Vertical	PK
2	5460.0070	42.28	42.05	74.00	31.95	380	213	Vertical	PK
3	5501.8100	88.61	88.23	74.00	-14.23	380	83	Vertical	PK

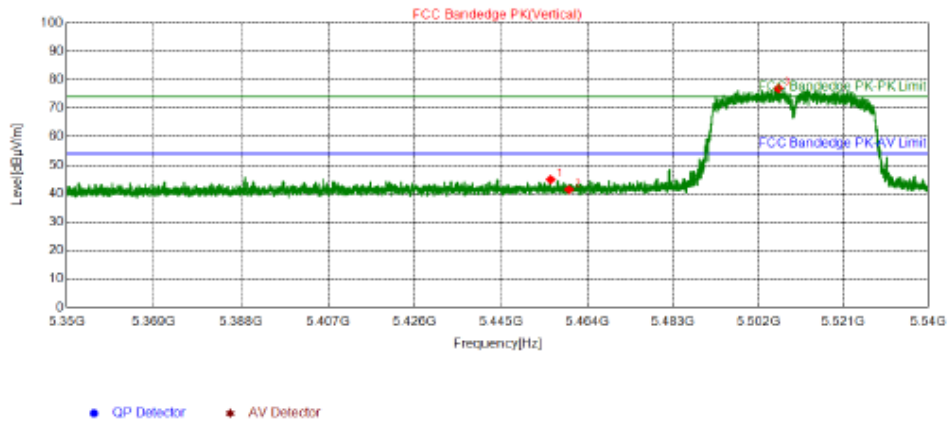
802.11n (40MHz)-5510MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5453.6830	45.86	45.65	74.00	28.35	380	199	Horizontal	PK
2	5460.0005	42.58	42.35	74.00	31.65	380	342	Horizontal	PK
3	5502.0950	87.64	87.26	74.00	-13.26	380	165	Horizontal	PK

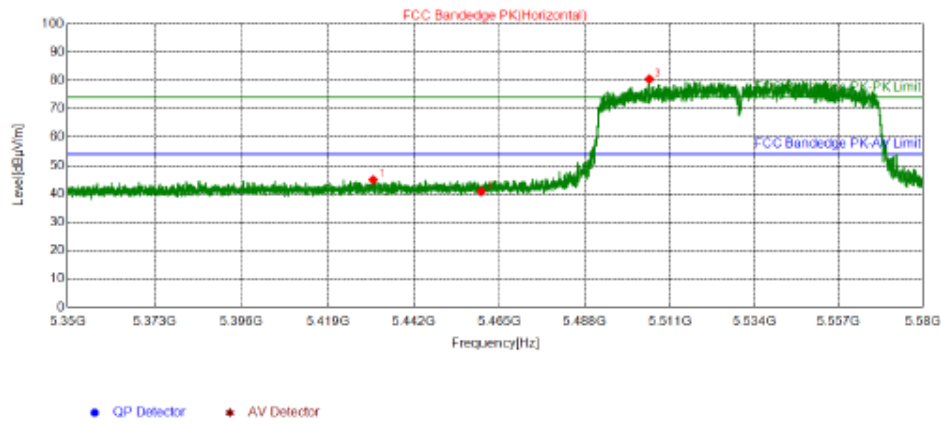
802.11n (40MHz)-5510MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5455.9155	45.16	44.94	74.00	29.06	380	87	Vertical	PK
2	5460.0005	41.66	41.43	74.00	32.57	380	231	Vertical	PK
3	5506.5220	77.34	76.94	74.00	-2.94	380	285	Vertical	PK

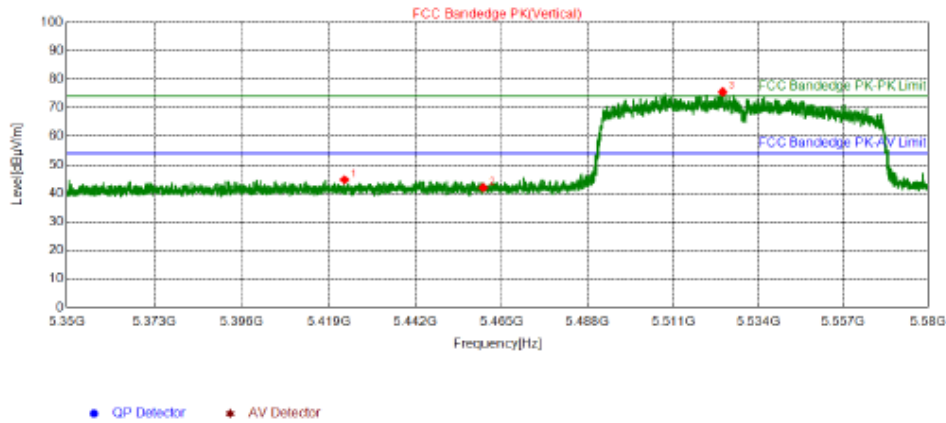
802.11ac (80MHz)-5530MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5431.0980	45.08	44.95	74.00	29.05	380	312	Horizontal	PK
2	5460.0090	41.08	40.85	74.00	33.15	380	107	Horizontal	PK
3	5505.3880	80.86	80.47	74.00	-6.47	380	169	Horizontal	PK

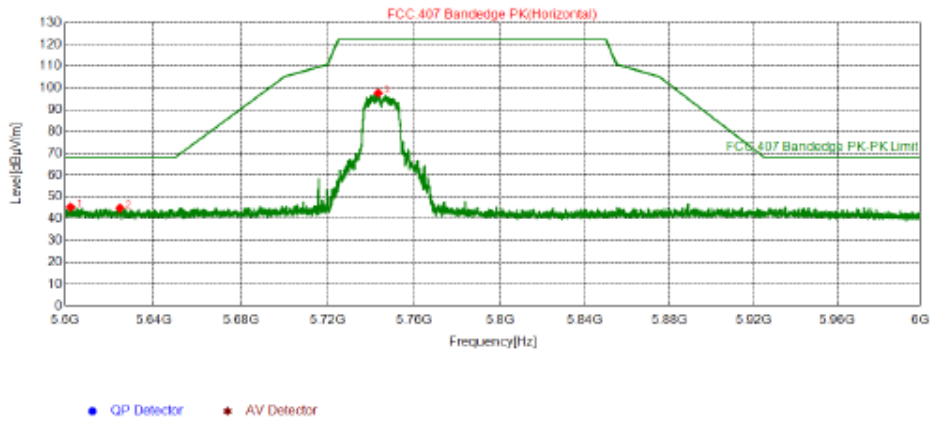
802.11ac (80MHz)-5530MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5423.1285	44.93	44.77	74.00	29.23	380	205	Vertical	PK
2	5460.0090	42.24	42.01	74.00	31.99	380	205	Vertical	PK
3	5524.3055	75.97	75.51	74.00	-1.51	380	35	Vertical	PK

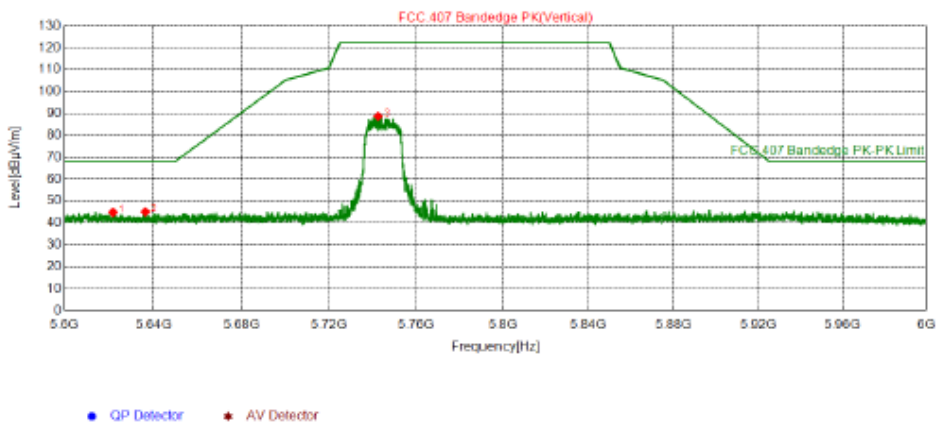
802.11a_5745MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBuV/m]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5602.4200	45.94	45.30	68.20	22.90	380	128	Horizontal	PK
2	5624.7800	45.56	44.88	68.20	23.32	380	203	Horizontal	PK
3	5743.2800	97.85	97.64	122.20	24.56	380	155	Horizontal	PK

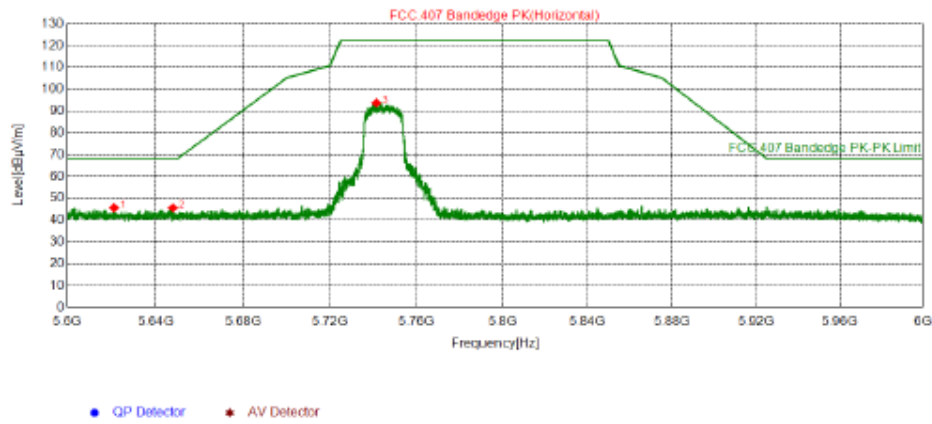
802.11a_5745MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBuV/m]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5621.7800	45.52	44.84	68.20	23.36	380	246	Vertical	PK
2	5636.3400	45.76	45.10	68.20	23.10	380	205	Vertical	PK
3	5742.4400	88.89	88.68	122.20	33.52	380	89	Vertical	PK

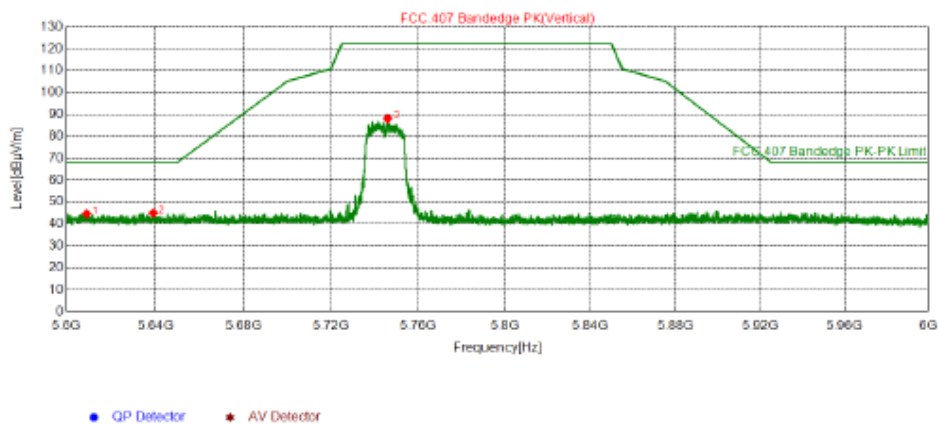
802.11n(20MHz)-5745MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBuV/m]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5621.1000	46.30	45.63	68.20	22.57	380	168	Horizontal	PK
2	5647.8800	46.18	45.59	68.20	22.61	380	175	Horizontal	PK
3	5741.3600	93.88	93.68	122.20	28.52	380	168	Horizontal	PK

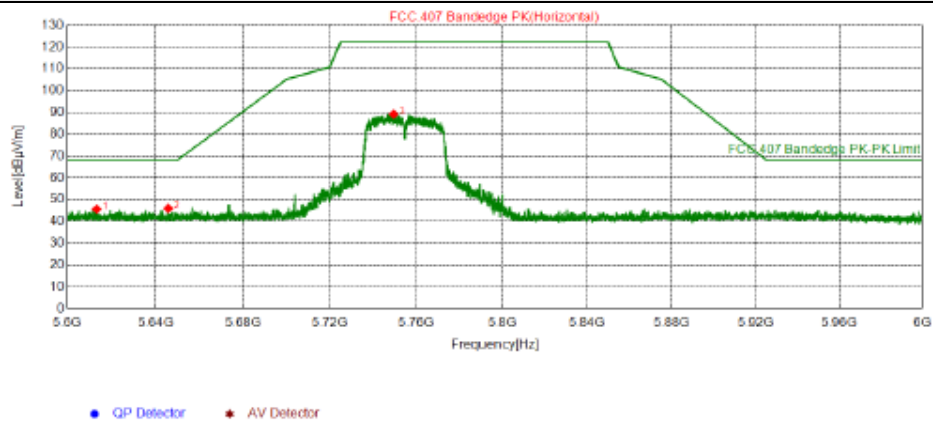
802.11n(20MHz)-5745MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBuV/m]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5609.0000	45.23	44.58	68.20	23.62	380	49	Vertical	PK
2	5639.0000	45.62	44.98	68.20	23.22	380	260	Vertical	PK
3	5745.9600	88.41	88.18	122.20	34.02	380	90	Vertical	PK

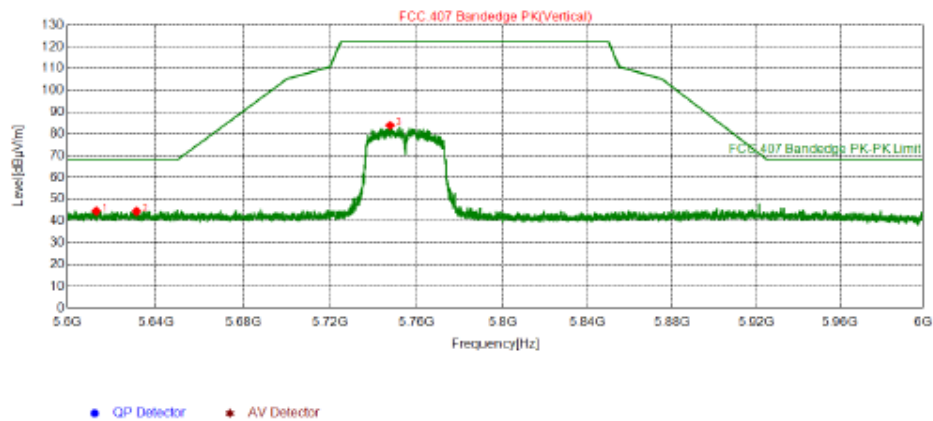
802.11n(40MHz)-5755MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5613.3000	46.27	45.61	68.20	22.59	380	59	Horizontal	PK
2	5645.7400	46.55	45.95	68.20	22.25	380	283	Horizontal	PK
3	5749.4400	89.40	89.15	122.20	33.05	380	154	Horizontal	PK

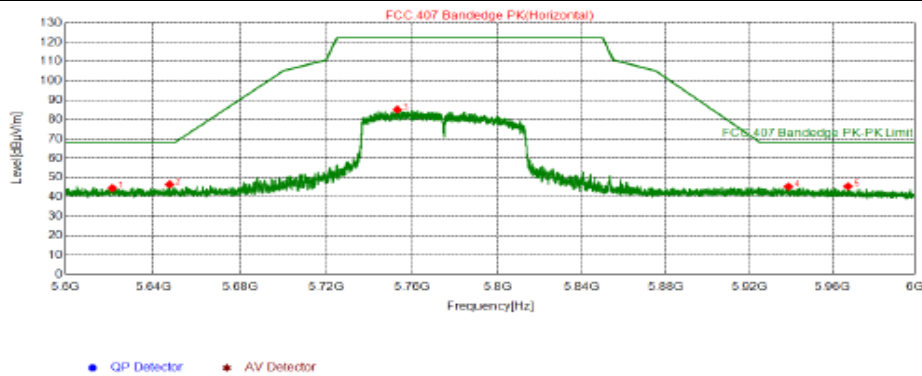
802.11n (40MHz)-5755MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5613.0800	45.17	44.51	68.20	23.69	380	342	Vertical	PK
2	5631.2400	45.08	44.39	68.20	23.81	380	294	Vertical	PK
3	5747.6400	84.10	83.86	122.20	38.34	380	91	Vertical	PK

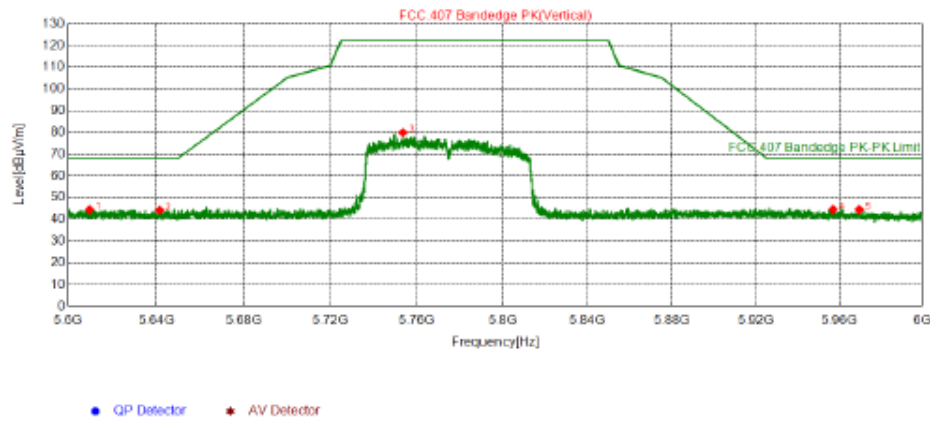
802.11ac(80MHz)-5775MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5621.2800	45.19	44.52	68.20	23.68	380	148	Horizontal	PK
2	5647.5600	47.02	46.43	68.20	21.77	380	168	Horizontal	PK
3	5753.0400	85.39	85.11	122.20	37.09	380	208	Horizontal	PK
4	5938.7800	45.66	45.34	68.20	22.86	380	208	Horizontal	PK
5	5967.6400	46.26	45.47	68.20	22.73	380	134	Horizontal	PK

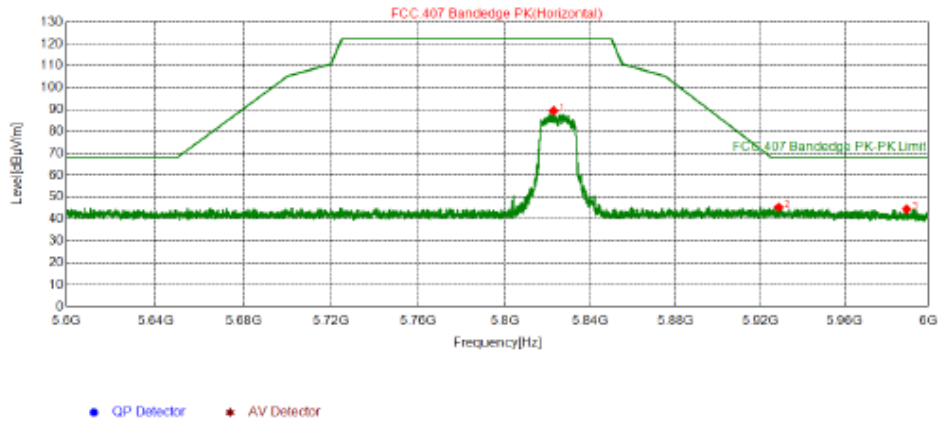
802.11ac(80MHz)-5775MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5609.6800	45.06	44.41	68.20	23.79	380	281	Vertical	PK
2	5641.5400	44.80	44.17	68.20	24.03	380	274	Vertical	PK
3	5753.5400	80.21	79.93	122.20	42.27	380	91	Vertical	PK
4	5956.9800	45.12	44.50	68.20	23.70	380	98	Vertical	PK
5	5969.5600	45.27	44.45	68.20	23.75	380	98	Vertical	PK

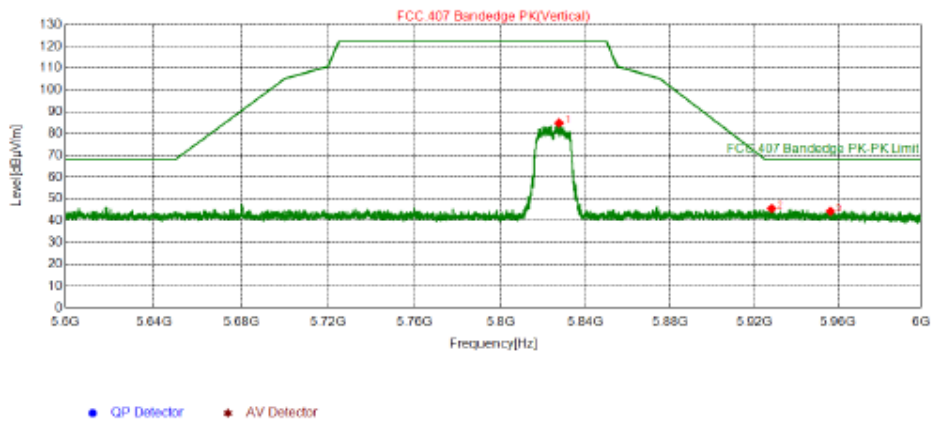
802.11a_5825MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5827.4400	90.14	89.40	122.20	32.80	380	172	Horizontal	PK
2	5928.2600	45.51	45.33	68.20	22.87	380	274	Horizontal	PK
3	5989.3600	45.63	44.48	68.20	23.72	380	274	Horizontal	PK

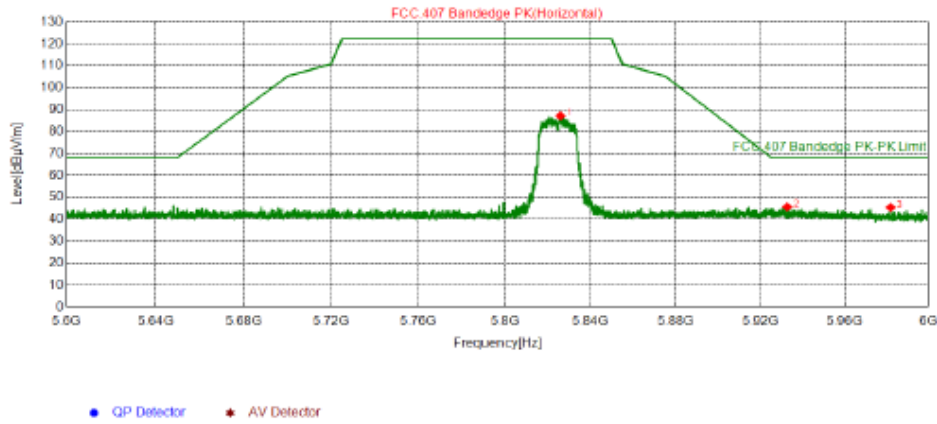
802.11a_5825MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5827.4400	85.59	84.81	122.20	37.39	380	249	Vertical	PK
2	5928.2600	45.76	45.58	68.20	22.62	380	202	Vertical	PK
3	5956.3600	44.91	44.31	68.20	23.89	380	5	Vertical	PK

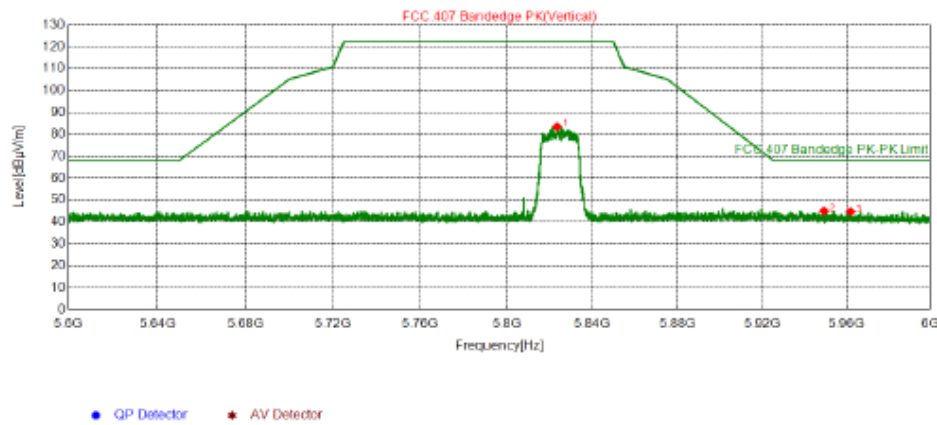
802.11n(20MHz)-5825MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBuV/m]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5825.9600	87.91	87.14	122.20	35.06	380	193	Horizontal	PK
2	5932.7200	45.83	45.61	68.20	22.59	380	91	Horizontal	PK
3	5981.9600	46.37	45.35	68.20	22.85	380	280	Horizontal	PK

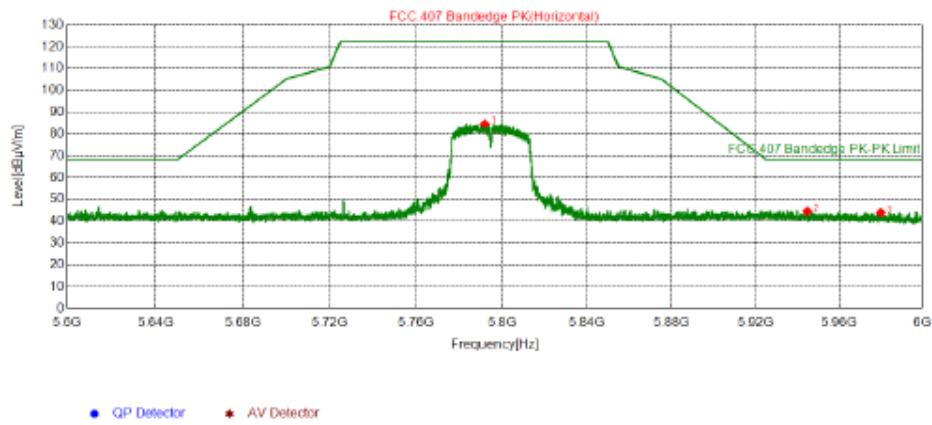
802.11n(20MHz)-5825MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBuV/m]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5823.4600	84.23	83.48	122.20	38.72	380	290	Vertical	PK
2	5949.2600	45.47	44.98	68.20	23.22	380	324	Vertical	PK
3	5961.9400	45.37	44.67	68.20	23.53	380	120	Vertical	PK

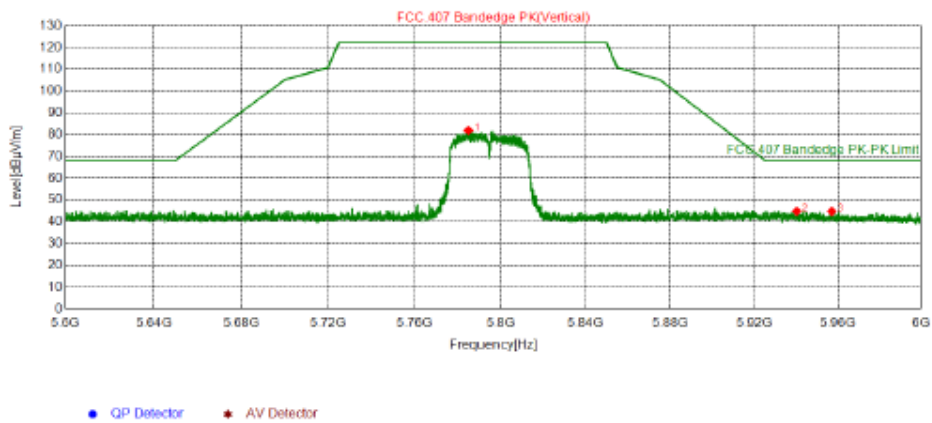
802.11n(40MHz)-5795MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5791.8800	85.13	84.59	122.20	37.61	380	158	Horizontal	PK
2	5944.7200	44.92	44.51	68.20	23.69	380	77	Horizontal	PK
3	5980.0200	44.88	43.89	68.20	24.31	380	342	Horizontal	PK

802.11n (40MHz)-5795MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	5785.0200	82.39	81.90	122.20	40.30	380	290	Vertical	PK
2	5940.1600	45.18	44.84	68.20	23.36	380	188	Vertical	PK
3	5957.0400	45.39	44.77	68.20	23.43	380	236	Vertical	PK



4.8 Radiated Emission Measurement

4.8.1 Limits

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 1000 MHz, 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 20 dB under any condition of modulation.

APPLICABLE TO	LIMIT	
789033 D02 General U-NII Test Procedures New Rules v01r03	FIELD STRENGTH AT 3m (dBµV/m)	
	PK : 74	AV : 54
APPLICABLE TO	EIRP LIMIT (dBm/MHz)	EQUIVALENT FIELD STRENGTH AT 3m (dBµV/m)
15.407(b)(1)	PK : -27	PK : 68.3
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	Note	Note

Note: 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.



4.8.2 Test Procedures

For Radiated emission below 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degree 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. Both X and Y axes of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotate table was turned from 0 degree to 360 degree to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission above 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1 GHz) / 1.5 meters (for above 1 GHz) 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 height of antenna 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detected function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.



Note:

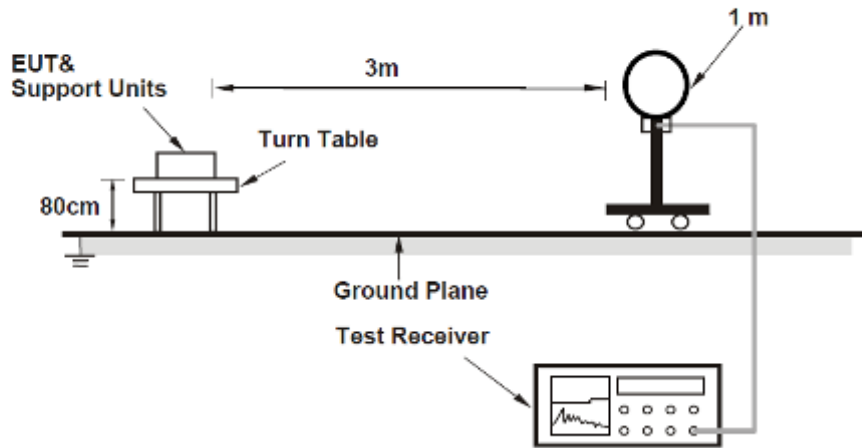
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz & 360 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1/T for RMS Average (Duty cycle < 98 %) for Peak detection at frequency above 1 GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz (Duty cycle \geq 98 %) for Average detection (AV) at frequency above 1 GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

4.8.3 Deviation from Test Standard

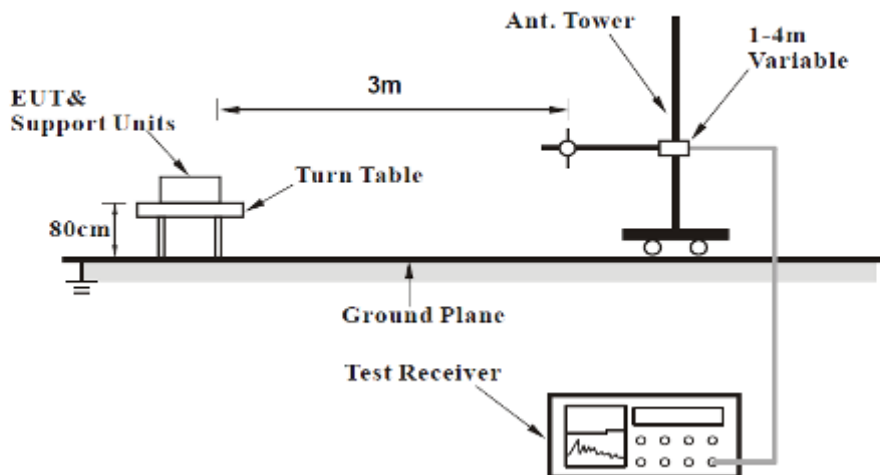
No deviation.

4.8.4 Test Setup

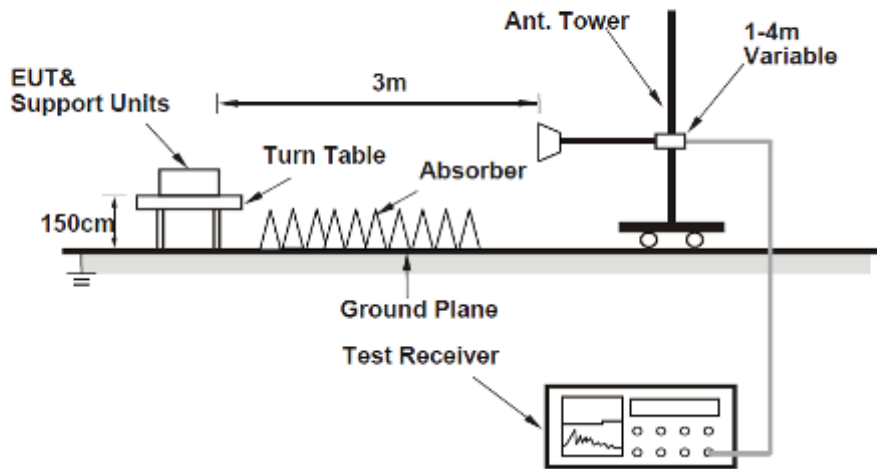
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



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

4.8.5 EUT Operating Conditions

- Placed the EUT on a testing table.
- Use the software to control the EUT under transmission condition continuously at specific channel frequency.

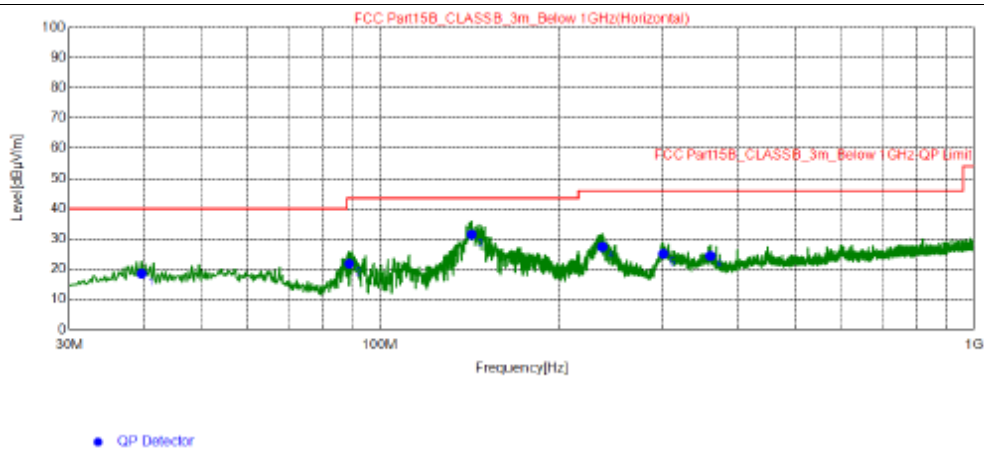
4.8.6 Test Results

Radiated Emissions Range 9kHz~30MHz

The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

Radiated Emissions Range 30MHz~1GHz

Mode	802.11a-5180MHz	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz	Antenna Polarity	Horizontal
Power supply	AC 120V, 60Hz		

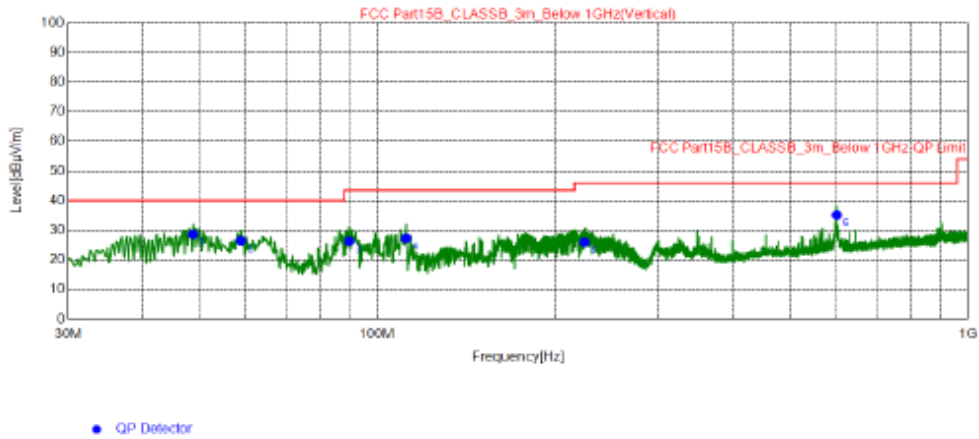


Final Data List									
NO.	Freq. [MHz]	QP Reading [dBµV/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	39.70	29.01	-10.47	18.54	40.00	21.46	200	329	Horizontal
2	88.78	37.52	-15.70	21.82	43.50	21.68	200	208	Horizontal
3	142.7	41.75	-10.25	31.50	43.50	12.00	200	6	Horizontal
4	236.9	38.59	-11.16	27.43	46.00	18.57	200	6	Horizontal
5	300.0	33.76	-8.62	25.14	46.00	20.86	200	172	Horizontal
6	360.3	31.62	-7.20	24.42	46.00	21.58	200	185	Horizontal

REMARKS:

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

Mode	802.11a-5180MHz	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz	Antenna Polarity	Vertical
Power supply	AC 120V, 60Hz		



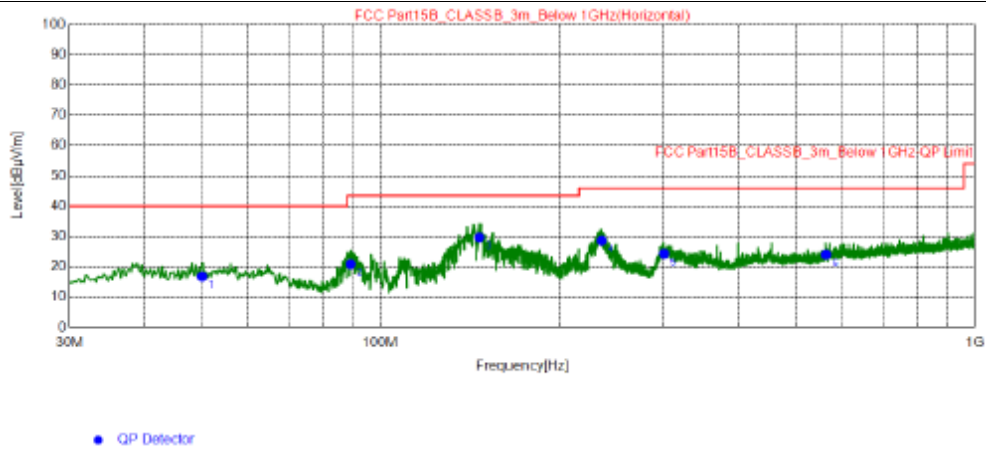
Final Data List

NO.	Freq. [MHz]	QP Reading [dB µV/m]	Factor [dB]	QP Value [dB µV/m]	QP Limit [dB µV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	48.81	38.45	-9.79	28.66	40.00	11.34	100	335	Vertical
2	58.90	36.71	-10.21	26.50	40.00	13.50	100	156	Vertical
3	89.75	42.19	-15.86	26.33	43.50	17.17	100	268	Vertical
4	112.0	40.79	-13.48	27.31	43.50	16.19	100	326	Vertical
5	224.5	37.55	-11.59	25.96	46.00	20.04	100	313	Vertical
6	599.9	37.6	-2.43	35.17	46.00	10.83	100	286	Vertical

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBUV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value =Limit value – Emission Level

Channel	802.11a-5180MHz	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz	Antenna Polarity	Horizontal
Power supply	AC 240V, 50Hz		



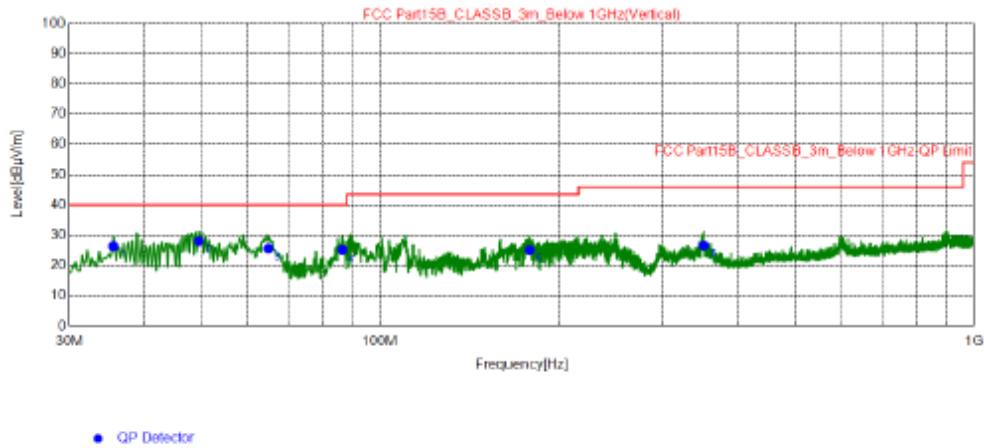
Final Data List

NO.	Freq. [MHz]	QP Reading [dB µV/m]	Factor [dB]	QP Value [dB µV/m]	QP Limit [dB µV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	50.17	26.53	-9.71	16.82	40.00	23.18	200	331	Horizontal
2	89.17	36.67	-15.77	20.90	43.50	22.60	200	231	Horizontal
3	146.7	39.82	-10.13	29.69	43.50	13.81	200	167	Horizontal
4	235.8	39.86	-11.20	28.66	46.00	17.34	200	1	Horizontal
5	300.2	32.95	-8.61	24.34	46.00	21.66	200	345	Horizontal
6	562.5	27.44	-3.37	24.07	46.00	21.93	200	149	Horizontal

REMARKS:

1. Emission Level(dBuV/m) = Spectrum reading (dBUV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	802.11a-5180MHz	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz	Antenna Polarity	Vertical
Power supply	AC 240V, 50Hz		



Final Data List

NO.	Freq. [MHz]	QP Reading [dB µV/m]	Factor [dB]	QP Value [dB µV/m]	QP Limit [dB µV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	35.62	37.32	-10.97	26.35	40.00	13.65	100	242	Vertical
2	49.59	37.88	-9.73	28.15	40.00	11.85	100	74	Vertical
3	64.92	36.74	-11.15	25.59	40.00	14.41	100	228	Vertical
4	86.45	40.52	-15.34	25.18	40.00	14.82	100	242	Vertical
5	178.7	35.94	-10.83	25.11	43.50	18.39	100	295	Vertical
6	351.0	33.99	-7.39	26.60	46.00	19.40	100	151	Vertical

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



Radiated Emission Range 1GHz~10th Harmonic

802.11a

Channel	TX Channel 36	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15540.1000	35.19	74.00	38.81	1.94	H	PK
2	15540.1000	30.12	54.00	23.88	1.94	H	AV
3	15540.1000	35.91	74.00	38.09	1.94	V	PK
4	15540.1000	30.76	54.00	23.24	1.94	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 40	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15601.3000	35.15	74.00	38.85	1.78	H	PK
2	15601.3000	30.67	54.00	23.33	1.78	H	AV
3	15601.3000	34.26	74.00	39.74	1.78	V	PK
4	15601.3000	28.61	54.00	25.39	1.78	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



Channel	TX Channel 48	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15720.3000	33.65	74.00	40.35	1.42	H	PK
2	15720.3000	29.42	54.00	24.58	1.42	H	AV
3	15720.3000	33.82	74.00	40.18	1.42	V	PK
4	15720.3000	28.43	54.00	25.57	1.42	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value =Limit value – Emission Level

Channel	TX Channel 52	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15781.5000	33.48	74.00	40.52	1.23	H	PK
2	15781.5000	28.20	54.00	25.80	1.23	H	AV
3	15781.5000	33.76	74.00	40.24	1.23	V	PK
4	15781.5000	28.70	54.00	25.30	1.23	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value =Limit value – Emission Level



Channel	TX Channel 60	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15900.5000	34.32	74.00	39.68	0.95	H	PK
2	15900.5000	28.29	54.00	25.71	0.95	H	AV
3	15900.5000	32.52	74.00	41.48	0.95	V	PK
4	15900.5000	27.44	54.00	26.56	0.95	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 64	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15960.0000	32.35	74.00	41.65	0.81	H	PK
2	15960.0000	28.44	54.00	25.56	0.81	H	AV
3	15960.0000	34.06	74.00	39.94	0.81	V	PK
4	15960.0000	28.24	54.00	25.76	0.81	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value =Limit value – Emission Level



Channel	TX Channel 100	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	16500.6000	34.12	74.00	39.88	2.87	H	PK
2	16500.6000	27.91	54.00	26.09	2.87	H	AV
3	16500.6000	34.10	74.00	39.90	2.87	V	PK
4	16500.6000	29.34	54.00	24.66	2.87	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 116	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	16740.3000	34.56	74.00	39.44	3.91	H	PK
2	16740.3000	29.07	54.00	24.93	3.91	H	AV
3	16740.3000	35.09	74.00	38.91	3.91	V	PK
4	16740.3000	29.58	54.00	24.42	3.91	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



Channel	TX Channel 140	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	17100.7000	36.90	74.00	37.10	5.96	H	PK
2	17100.7000	31.19	54.00	22.81	5.96	H	AV
3	17100.7000	38.57	74.00	35.43	5.96	V	PK
4	17100.7000	33.66	54.00	20.34	5.96	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 149	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	17235.0000	39.92	74.00	34.08	7.22	H	PK
2	17235.0000	33.26	54.00	20.74	7.22	H	AV
3	17235.0000	39.47	74.00	34.53	7.22	V	PK
4	17235.0000	34.90	54.00	19.10	7.22	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value =Limit value – Emission Level



Channel	TX Channel 157	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	17355.7000	41.87	74.00	32.13	8.37	H	PK
2	17355.7000	34.45	54.00	19.55	8.37	H	AV
3	17355.7000	40.01	74.00	33.99	8.37	V	PK
4	17355.7000	34.40	54.00	19.60	8.37	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 165	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	17476.4000	41.04	74.00	32.96	9.43	H	PK
2	17476.4000	35.90	54.00	18.10	9.43	H	AV
3	17476.4000	42.43	74.00	31.57	9.43	V	PK
4	17476.4000	36.06	54.00	17.94	9.43	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



802.11n (20MHz)

Channel	TX Channel 36	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15540.1000	34.60	74.00	39.40	1.94	H	PK
2	15540.1000	29.93	54.00	24.07	1.94	H	AV
3	15540.1000	35.54	74.00	38.46	1.94	V	PK
4	15540.1000	28.47	54.00	25.53	1.94	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 40	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15601.3000	34.92	74.00	39.08	1.78	H	PK
2	15601.3000	30.88	54.00	23.12	1.78	H	AV
3	15601.3000	34.99	74.00	39.01	1.78	V	PK
4	15601.3000	29.74	54.00	24.26	1.78	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



Channel	TX Channel 48	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15720.3000	34.75	74.00	39.25	1.42	H	PK
2	15720.3000	28.64	54.00	25.36	1.42	H	AV
3	15720.3000	34.57	74.00	39.43	1.42	V	PK
4	15720.3000	29.49	54.00	24.51	1.42	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value =Limit value – Emission Level

Channel	TX Channel 52	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15781.5000	34.31	74.00	39.69	1.23	H	PK
2	15781.5000	28.86	54.00	25.14	1.23	H	AV
3	15781.5000	34.23	74.00	39.77	1.23	V	PK
4	15781.5000	27.65	54.00	26.35	1.23	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value =Limit value – Emission Level



Channel	TX Channel 60	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15900.5000	33.56	74.00	40.44	0.95	H	PK
2	15900.5000	29.25	54.00	24.75	0.95	H	AV
3	15900.5000	32.95	74.00	41.05	0.95	V	PK
4	15900.5000	27.78	54.00	26.22	0.95	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 64	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15960.0000	33.11	74.00	40.89	0.81	H	PK
2	15960.0000	27.99	54.00	26.01	0.81	H	AV
3	15960.0000	33.55	74.00	40.45	0.81	V	PK
4	15960.0000	27.74	54.00	26.26	0.81	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value =Limit value – Emission Level



Channel	TX Channel 100	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	16500.6000	34.71	74.00	39.29	2.87	H	PK
2	16500.6000	29.38	54.00	24.62	2.87	H	AV
3	16500.6000	34.23	74.00	39.77	2.87	V	PK
4	16500.6000	28.89	54.00	25.11	2.87	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 116	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	16740.3000	35.13	74.00	38.87	3.91	H	PK
2	16740.3000	31.23	54.00	22.77	3.91	H	AV
3	16740.3000	35.32	74.00	38.68	3.91	V	PK
4	16740.3000	29.08	54.00	24.92	3.91	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



Channel	TX Channel 140	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	17100.7000	39.17	74.00	34.83	5.96	H	PK
2	17100.7000	33.35	54.00	20.65	5.96	H	AV
3	17100.7000	36.77	74.00	37.23	5.96	V	PK
4	17100.7000	32.30	54.00	21.70	5.96	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 149	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	17235.0000	39.90	74.00	34.10	7.22	H	PK
2	17235.0000	33.89	54.00	20.11	7.22	H	AV
3	17235.0000	39.84	74.00	34.16	7.22	V	PK
4	17235.0000	35.67	54.00	18.33	7.22	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value =Limit value – Emission Level



Channel	TX Channel 157	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	17355.7000	39.85	74.00	34.15	8.37	H	PK
2	17355.7000	35.70	54.00	18.30	8.37	H	AV
3	17355.7000	40.63	74.00	33.37	8.37	V	PK
4	17355.7000	36.34	54.00	17.66	8.37	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 165	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	17476.4000	41.77	74.00	32.23	9.43	H	PK
2	17476.4000	36.77	54.00	17.23	9.43	H	AV
3	17476.4000	41.43	74.00	32.57	9.43	V	PK
4	17476.4000	35.67	54.00	18.33	9.43	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



802.11n (40MHz)

Channel	TX Channel 38	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15570.7000	33.58	74.00	40.42	1.86	H	PK
2	15570.7000	29.01	54.00	24.99	1.86	H	AV
3	15570.7000	34.30	74.00	39.70	1.86	V	PK
4	15570.7000	27.77	54.00	26.23	1.86	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 46	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15691.4000	34.59	74.00	39.41	1.51	H	PK
2	15691.4000	28.03	54.00	25.97	1.51	H	AV
3	15691.4000	33.58	74.00	40.42	1.51	V	PK
4	15691.4000	29.58	54.00	24.42	1.51	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



Channel	TX Channel 54	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15810.4000	32.14	74.00	41.86	1.15	H	PK
2	15810.4000	27.23	54.00	26.77	1.15	H	AV
3	15810.4000	32.82	74.00	41.18	1.15	V	PK
4	15810.4000	29.12	54.00	24.88	1.15	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 62	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15931.1000	32.43	74.00	41.57	0.88	H	PK
2	15931.1000	28.71	54.00	25.29	0.88	H	AV
3	15931.1000	31.67	74.00	42.33	0.88	V	PK
4	15931.1000	27.89	54.00	26.11	0.88	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



Channel	TX Channel 102	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	16531.2000	34.18	74.00	39.82	2.98	H	PK
2	16531.2000	29.66	54.00	24.34	2.98	H	AV
3	16531.2000	33.60	74.00	40.40	2.98	V	PK
4	16531.2000	27.52	54.00	26.48	2.98	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 118	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	16770.9000	34.43	74.00	39.57	4.05	H	PK
2	16770.9000	29.48	54.00	24.52	4.05	H	AV
3	16770.9000	34.42	74.00	39.58	4.05	V	PK
4	16770.9000	30.21	54.00	23.79	4.05	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



Channel	TX Channel 134	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	17010.6000	35.28	74.00	38.72	5.12	H	PK
2	17010.6000	31.69	54.00	22.31	5.12	H	AV
3	17010.6000	36.33	74.00	37.67	5.12	V	PK
4	17010.6000	31.21	54.00	22.79	5.12	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 151	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	17265.6000	39.16	74.00	34.84	7.51	H	PK
2	17265.6000	34.14	54.00	19.86	7.51	H	AV
3	17265.6000	39.76	74.00	34.24	7.51	V	PK
4	17265.6000	33.78	54.00	20.22	7.51	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



Channel	TX Channel 159	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	17386.3000	40.34	74.00	33.66	8.66	H	PK
2	17386.3000	36.24	54.00	17.76	8.66	H	AV
3	17386.3000	40.36	74.00	33.64	8.66	V	PK
4	17386.3000	36.07	54.00	17.93	8.66	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



802.11ac (80MHz)

Channel	TX Channel 42	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15630.2000	33.80	74.00	40.20	1.69	H	PK
2	15630.2000	29.06	54.00	24.94	1.69	H	AV
3	15630.2000	34.17	74.00	39.83	1.69	V	PK
4	15630.2000	28.98	54.00	25.02	1.69	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 58	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	15871.6000	33.77	74.00	40.23	1.01	H	PK
2	15871.6000	27.30	54.00	26.70	1.01	H	AV
3	15871.6000	33.26	74.00	40.74	1.01	V	PK
4	15871.6000	28.10	54.00	25.90	1.01	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



Channel	TX Channel 106	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	16590.7000	34.76	74.00	39.24	3.21	H	PK
2	16590.7000	28.59	54.00	25.41	3.21	H	AV
3	16590.7000	33.49	74.00	40.51	3.21	V	PK
4	16590.7000	28.59	54.00	25.41	3.21	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 122	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	16830.4000	35.05	74.00	38.95	4.32	H	PK
2	16830.4000	28.64	54.00	25.36	4.32	H	AV
3	16830.4000	34.25	74.00	39.75	4.32	V	PK
4	16830.4000	30.36	54.00	23.64	4.32	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



Channel	TX Channel 155	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	17325.1000	39.12	74.00	34.88	8.08	H	PK
2	17325.1000	35.17	54.00	18.83	8.08	H	AV
3	17325.1000	38.94	74.00	35.06	8.08	V	PK
4	17325.1000	35.13	54.00	18.87	8.08	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level



5 Pictures of Test Arrangements

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

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