

Partial FCC Test Report

Report No.: RF190925C38-1

FCC ID: WIYQSC20A

Original FCC ID: XMR201706SC20A

Model: SC20-A

Received Date: Sep. 25, 2019

Test Date: Oct. 15 ~ Oct. 21, 2019

Issued Date: Oct. 29, 2019

Applicant: CASTLES TECHNOLOGY CO., LTD.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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**FCC Registration/
Designation Number:** 788550 / TW0003



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Release Control Record

Issue No.	Description	Date Issued
RF190925C38-1	Original release	Oct. 29, 2019

1 Certificate of Conformity

Product: LTE module

Brand: Quectel

Model: SC20-A

Sample Status: Identical Prototype

Applicant: CASTLES TECHNOLOGY CO., LTD.

Test Date: Oct. 15 ~ Oct. 21, 2019

Standards: 47 CFR FCC Part 15, Subpart E (Section 15.407)
ANSI C63.10:2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, 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 RF characteristics under the conditions specified in this report.

Prepared by : Polly Chen, **Date:** Oct. 29, 2019
Polly Chen / Specialist

Approved by : Bruce Chen, **Date:** Oct. 29, 2019
Bruce Chen / Senior Project Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -20.80dB at 14.93475MHz.
15.407(b)(1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -0.7dB at 5150.00MHz & 5350.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	N/A	Refer to Note 1
---	Occupied Bandwidth Measurement	N/A	Refer to Note 1
15.407(a)(1/2/3)	Peak Power Spectral Density	N/A	Refer to Note 1
15.407(e)	6dB bandwidth	N/A	Refer to Note 1
15.407(g)	Frequency Stability	N/A	Refer to Note 1
15.203	Antenna Requirement	Pass	Antenna connectors are IPEX at antenna side not standard connector..

Note:

1. This report is a partial report. Therefore, only test item of AC Power Conducted Emissions and Radiated Spurious Emissions tests were performed for this report. Other testing data please refer to Sporton International (KunShan) INC. report no.: FR741007D & FR741007E for module (Brand: Quectel, Model: SC20-A).
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
3. For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB test plots were recorded in Annex A.

2.1 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	Frequency	Expanded Uncertainty (k=2) ($\pm$)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.94 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	3.59 dB
	200MHz ~ 1000MHz	3.60 dB
	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	LTE module
Brand	Quectel
Model	SC20-A
Status of EUT	Identical Prototype
Power Supply Rating	9Vdc~48Vdc, 1.5A~0.5A 3Vdc (Battery)
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	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 MCS0
Operating Frequency	5180~5250MHz, 5260~5320MHz, 5500~5700MHz, 5745~5825MHz
Number of Channel	5180~5240MHz: 802.11a, 802.11n (HT20): 4 802.11n (HT40): 2 5260~5320MHz: 802.11a, 802.11n (HT20): 4 802.11n (HT40): 2 5500~5700MHz: 802.11a, 802.11n (HT20): 11 802.11n (HT40): 5 5745~5825MHz: 802.11a, 802.11n (HT20): 5 802.11n (HT40): 2
Antenna Type	Dipole antenna with 4.9 dBi gain
Antenna Connector	IPEX
Accessory Device	Refer to note
Data Cable Supplied	NA

Note:

1. This report is a partial report. Therefore, only test item of AC Power Conducted Emissions and Radiated Spurious Emissions tests were performed for this report. Other testing data please refer to Sporton International (KunShan) INC. report no.: FR741007D & FR741007E for module (Brand: Quectel, Model: SC20-A).

2. The EUT was installed in a specific End-product.

Product	Brand	Model
POS Terminal	CASTLES TECHNOLOGY	SATURN1000-E UPT

3. The End-product contains following accessory device.

Product	Brand	Model	Description
Battery	MITSUBISHI Lithium Manganese Dioxide Battery	CR2032	3Vdc, 210mAh

4. The EUT provides one completed transmitter and one receiver.

Modulation Mode	TX Function
802.11a	1TX
802.11n (HT20)	1TX
802.11n (HT40)	1TX

5. The conducted power of EUT was listed as below.

802.11a

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	16.63	12.21	24	Pass
40	5200	19.05	12.80	24	Pass
48	5240	19.41	12.88	24	Pass
52	5260	19.95	13.00	24	Pass
60	5300	18.32	12.63	24	Pass
64	5320	18.11	12.58	24	Pass
100	5500	17.38	12.40	24	Pass
116	5580	19.63	12.93	24	Pass
140	5700	18.92	12.77	24	Pass
149	5745	15.31	11.85	30	Pass
157	5785	14.35	11.57	30	Pass
165	5825	13.80	11.40	30	Pass

802.11n (HT20)

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	19.19	12.83	24	Pass
40	5200	22.75	13.57	24	Pass
48	5240	23.07	13.63	24	Pass
52	5260	23.50	13.71	24	Pass
60	5300	23.39	13.69	24	Pass
64	5320	21.93	13.41	24	Pass
100	5500	16.75	12.24	24	Pass
116	5580	17.91	12.53	24	Pass
140	5700	20.56	13.13	24	Pass
149	5745	15.14	11.80	30	Pass
157	5785	13.24	11.22	30	Pass
165	5825	10.96	10.40	30	Pass

802.11n (HT40)

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	11.43	10.58	24	Pass
46	5230	19.50	12.90	24	Pass
54	5270	20.09	13.03	24	Pass
62	5310	12.47	10.96	24	Pass
102	5510	10.94	10.39	24	Pass
110	5550	11.14	10.47	24	Pass
134	5670	16.98	12.30	24	Pass
151	5755	10.33	10.14	30	Pass
159	5795	11.30	10.53	30	Pass

3.2 Description of Test Modes

5180~5240MHz:

4 channels are provided for 802.11a, 802.11n (HT20):

Channel	Frequency	Channel	Frequency
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

5260~5320MHz:

4 channels are provided for 802.11a, 802.11n (HT20):

Channel	Frequency	Channel	Frequency
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

5500~5700MHz:

11 channels are provided for 802.11a, 802.11n (HT20):

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 (HT40):

Channel	Frequency	Channel	Frequency
102	5510 MHz	126	5630 MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz		

5745~5825MHz:

5 channels are provided for 802.11a, 802.11n (HT20):

Channel	Frequency	Channel	Frequency
149	5745 MHz	161	5805 MHz
153	5765 MHz	165	5825 MHz
157	5785 MHz		

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT CONFIGURE MODE	APPLICABLE TO			DESCRIPTION
	RE $\geq$ 1G	RE<1G	PLC	
-	√	√	√	-

Where RE $\geq$ 1G: Radiated Emission above 1GHz & Bandedge Measurement
 RE<1G: Radiated Emission below 1GHz
 PLC: Power Line Conducted Emission

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

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	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)	Remark
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0	-
	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	7.2	-
	802.11n (HT40)		38 to 46	38, 46	OFDM	15.0	-
	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0	-
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	7.2	-
	802.11n (HT40)		54 to 62	54, 62	OFDM	15.0	-
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	6.0	-
	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	7.2	-
	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	15.0	-
	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0	-
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	7.2	-
	802.11n (HT40)		151 to 159	151, 159	OFDM	15.0	-

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	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)	Remark
-	802.11n (HT20)	5180-5240	36 to 48	52	OFDM	7.2	-
		5260-5320	52 to 64		OFDM	7.2	-
		5500-5700	100 to 140		OFDM	7.2	-
		5745-5825	149 to 165		OFDM	7.2	-

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	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)	Remark
-	802.11n (HT20)	5180-5240	36 to 48	52	OFDM	7.2	-
		5260-5320	52 to 64		OFDM	7.2	-
		5500-5700	100 to 140		OFDM	7.2	-
		5745-5825	149 to 165		OFDM	7.2	-

Test Condition:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (System)	TESTED BY
RE $\geq$ 1G	22deg. C, 66% RH	12Vdc	Han Wu
RE<1G	22deg. C, 66% RH	12Vdc	Han Wu
PLC	22deg. C, 66% RH	12Vdc	Han Wu

3.3 Description of Support Units

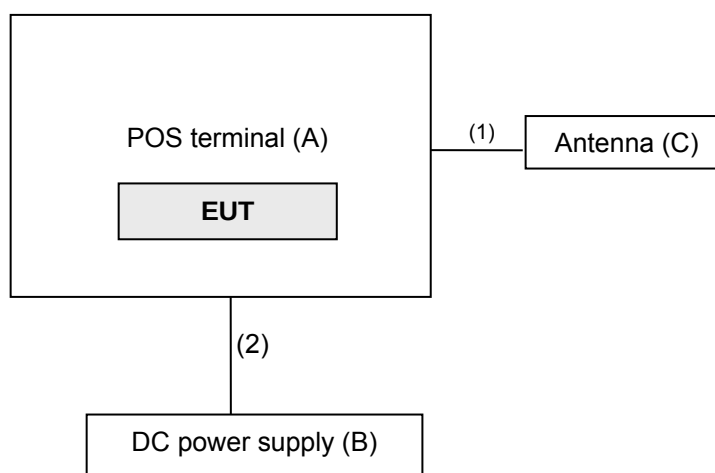
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	POS terminal	CASTLES TECHNOLOGY	SATURN1000-E UPT	NA	FCC DoC Approved	Provided by client.
B.	DC power supply	Keysight	U8002A	MY56330015	NA	-
C.	Antenna	ARISTOTLE ENTERPRISES INC.	RFA-LTE-T100-41-3M	NA	NA	Provided by client.

Note: All power cords of the above support units are non-shielded (1.8m).

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Antenna cable	1	3	N	0	Provided by client.
2.	Power cable	1	1	N	0	Provided by client.

3.3.1 Configuration of System under Test



3.4 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 UNII Test Procedure New Rules v02r01

ANSI C63.10-2013

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

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 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:

- The lower limit shall apply at the transition frequencies.
- Emission level (dBuV/m) = 20 log Emission level (uV/m).
- 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.

Limits of unwanted emission out of the restricted bands

Applicable To			Limit	
789033 D02 General UNII Test Procedure New Rules v02r01			Field Strength at 3m	
			PK:74 (dBµV/m)	AV:54 (dBµV/m)
Frequency Band	Applicable To		EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)		PK:-27 (dBm/MHz)	PK:68.2(dBµV/m)
5250~5350 MHz	15.407(b)(2)			
5470~5725 MHz	15.407(b)(3)			
5725~5850 MHz	☒	15.407(b)(4)(i)	PK:-27 (dBm/MHz) ^{*1} PK:10 (dBm/MHz) ^{*2} PK:15.6 (dBm/MHz) ^{*3} PK:27 (dBm/MHz) ^{*4}	PK: 68.2 (dBµV/m) ^{*1} PK: 105.2 (dBµV/m) ^{*2} PK: 110.8 (dBµV/m) ^{*3} PK: 122.2 (dBµV/m) ^{*4}
	☐	15.407(b)(4)(ii)	Emission limits in section 15.247(d)	
^{*1} beyond 75 MHz or more above of the band edge.			^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.	
^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.			^{*4} from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.	

Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver KEYSIGHT	N9038A	MY55420137	Apr. 15, 2019	Apr. 14, 2020
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Jun. 04, 2019	Jun. 03, 2020
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Nov. 21, 2018	Nov. 20, 2019
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-1169	Nov. 25, 2018	Nov. 24, 2019
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 25, 2018	Nov. 24, 2019
Loop Antenna TESEQ	HLA 6121	45745	Jul. 01, 2019	Jun. 30, 2020
Preamplifier Agilent (Below 1GHz)	8447D	2944A10638	Jul. 11, 2019	Jul. 10, 2020
Preamplifier Agilent (Above 1GHz)	8449B	3008A02367	Feb. 19, 2019	Feb. 18, 2020
RF signal cable HUBER+SUHNER&EMCI	SUCOFLEX 104 & EMC104-SM-SM8000	CABLE-CH9-02 (248780+171006)	Jan. 19, 2019	Jan. 18, 2020
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	Jul. 11, 2019	Jul. 10, 2020
RF signal cable Woken	8D-FB	Cable-CH9-01	Jul. 30, 2019	Jul. 29, 2020
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower & Turn BV ADT	AT100	AT93021705	NA	NA
Turn Table BV ADT	TT100	TT93021705	NA	NA
Turn Table Controller BV ADT	SC100	SC93021705	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Pre-amplifier (18GHz-40GHz) EMC	EMC184045B	980175	Nov. 14, 2018	Nov. 13, 2019

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 9.

4.1.3 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 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. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case 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.

NOTE:

1. 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 30MHz ~ 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 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 detects 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:

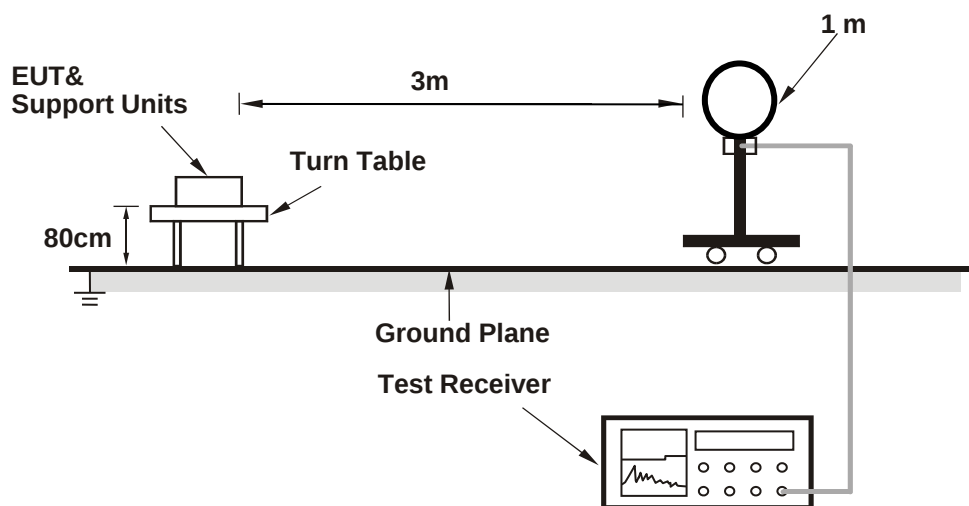
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

4.1.4 Deviation from Test Standard

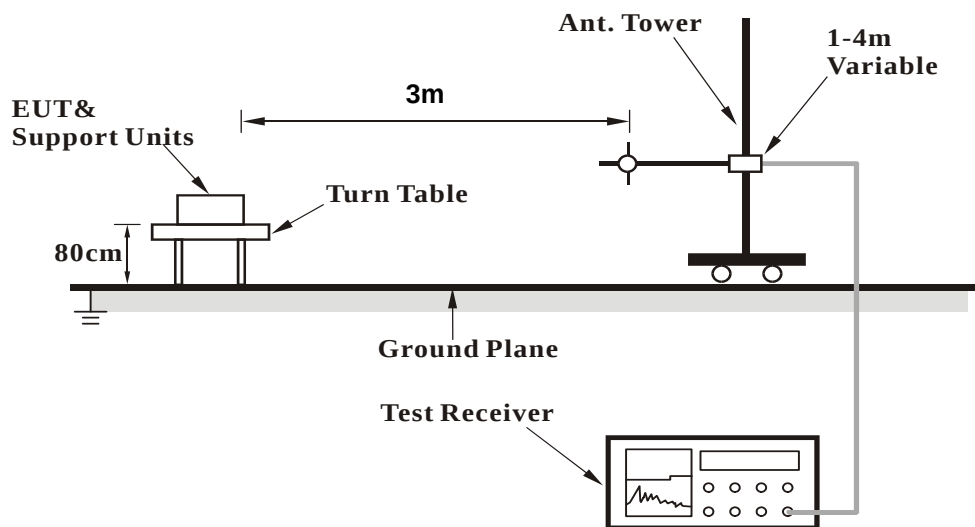
No deviation.

4.1.5 Test Set Up

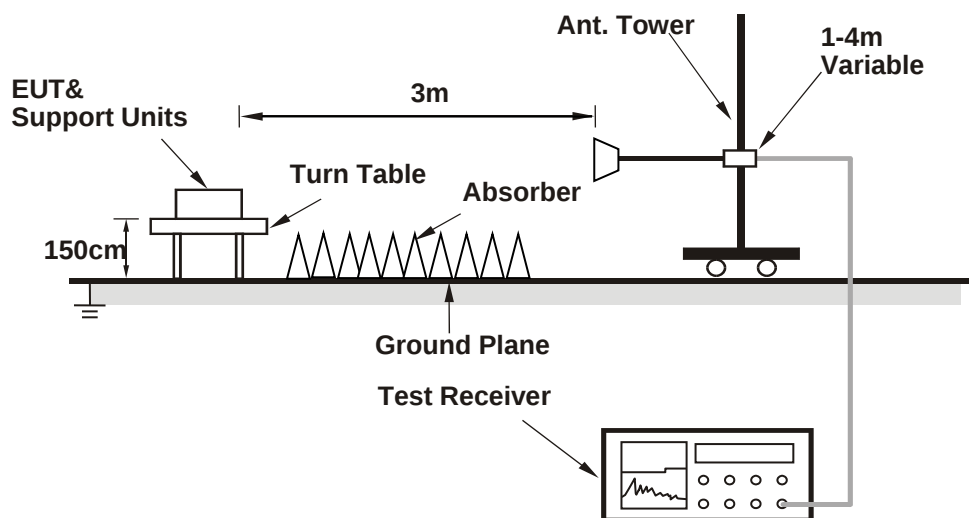
For Radiated emission below 30MHz



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).

4.1.6 EUT Operating Conditions

- Plugged the EUT into the POS terminal and placed them on the testing table.
- Set the EUT under transmission condition continuously at specific channel frequency.

4.1.7 Test Results

Above 1GHz data:

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.7 PK	74.0	-17.3	1.00 H	281	52.6	4.1
2	5150.00	42.4 AV	54.0	-11.6	1.00 H	281	38.3	4.1
3	*5180.00	102.4 PK			1.00 H	281	63.9	38.5
4	*5180.00	91.2 AV			1.00 H	281	52.7	38.5
5	#10360.00	56.2 PK	68.2	-12.0	1.40 H	288	39.7	16.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.5 PK	74.0	-18.5	1.09 V	334	51.4	4.1
2	5150.00	41.5 AV	54.0	-12.5	1.09 V	334	37.4	4.1
3	*5180.00	101.1 PK			1.00 V	335	62.6	38.5
4	*5180.00	90.6 AV			1.00 V	335	52.1	38.5
5	#10360.00	56.5 PK	74.0	-17.5	2.39 V	244	40.0	16.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	101.8 PK			1.00 H	282	63.4	38.4
2	*5200.00	91.9 AV			1.00 H	282	53.5	38.4
3	#10400.00	56.3 PK	68.2	-11.9	1.41 H	282	39.8	16.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	101.5 PK			1.10 V	337	63.1	38.4
2	*5200.00	91.5 AV			1.10 V	337	53.1	38.4
3	#10400.00	56.3 PK	68.2	-11.9	2.42 V	242	39.8	16.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	101.9 PK			1.05 H	290	63.6	38.3
2	*5240.00	91.5 AV			1.05 H	290	53.2	38.3
3	5350.00	53.4 PK	74.0	-20.6	1.14 H	297	49.5	3.9
4	5350.00	39.8 AV	54.0	-14.2	1.14 H	297	35.9	3.9
5	#10480.00	56.3 PK	68.2	-11.9	1.38 H	281	40.0	16.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	101.6 PK			1.10 V	333	63.3	38.3
2	*5240.00	91.0 AV			1.10 V	333	52.7	38.3
3	5350.00	53.4 PK	74.0	-20.6	1.10 V	335	49.5	3.9
4	5350.00	39.5 AV	54.0	-14.5	1.10 V	335	35.6	3.9
5	#10480.00	56.5 PK	68.2	-11.7	2.46 V	252	40.2	16.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	54.2 PK	74.0	-19.8	1.96 H	276	50.1	4.1
2	5150.00	39.6 AV	54.0	-14.4	1.96 H	276	35.5	4.1
3	*5260.00	104.4 PK			2.00 H	271	66.2	38.2
4	*5260.00	94.2 AV			2.00 H	271	56.0	38.2
5	#10520.00	56.2 PK	68.2	-12.0	1.35 H	285	39.9	16.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	54.2 PK	74.0	-19.8	1.08 V	338	50.1	4.1
2	5150.00	39.8 AV	54.0	-14.2	1.08 V	338	35.7	4.1
3	*5260.00	103.9 PK			1.10 V	333	65.7	38.2
4	*5260.00	93.8 AV			1.10 V	333	55.6	38.2
5	#10520.00	56.4 PK	68.2	-11.8	2.41 V	257	40.1	16.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	104.5 PK			1.83 H	267	66.4	38.1
2	*5300.00	93.9 AV			1.83 H	267	55.8	38.1
3	10600.00	56.1 PK	74.0	-17.9	1.46 H	291	39.6	16.5
4	10600.00	42.0 AV	54.0	-12.0	1.46 H	291	25.5	16.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	103.8 PK			1.08 V	333	65.7	38.1
2	*5300.00	93.6 AV			1.08 V	333	55.5	38.1
3	10600.00	56.6 PK	74.0	-17.4	2.38 V	241	40.1	16.5
4	10600.00	42.3 AV	54.0	-11.7	2.38 V	241	25.8	16.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	105.1 PK			1.95 H	267	66.9	38.2
2	*5320.00	94.0 AV			1.95 H	267	55.8	38.2
3	5350.00	60.2 PK	74.0	-13.8	4.00 H	264	56.3	3.9
4	5350.00	43.8 AV	54.0	-10.2	4.00 H	264	39.9	3.9
5	10640.00	56.3 PK	74.0	-17.7	1.42 H	282	39.6	16.7
6	10640.00	42.3 AV	54.0	-11.7	1.42 H	282	25.6	16.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	104.6 PK			1.09 V	337	66.4	38.2
2	*5320.00	93.3 AV			1.09 V	337	55.1	38.2
3	5350.00	59.2 PK	74.0	-14.8	1.02 V	335	55.3	3.9
4	5350.00	43.5 AV	54.0	-10.5	1.02 V	335	39.6	3.9
5	10640.00	56.3 PK	74.0	-17.7	2.35 V	257	39.6	16.7
6	10640.00	42.6 AV	54.0	-11.4	2.35 V	257	25.9	16.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.2 PK	74.0	-19.8	2.13 H	260	49.8	4.4
2	5460.00	41.2 AV	54.0	-12.8	2.13 H	260	36.8	4.4
3	#5470.00	53.7 PK	68.2	-14.5	2.18 H	264	49.2	4.5
4	*5500.00	98.5 PK			2.14 H	260	59.7	38.8
5	*5500.00	87.1 AV			2.14 H	260	48.3	38.8
6	11000.00	58.5 PK	74.0	-15.5	1.43 H	287	40.1	18.4
7	11000.00	44.0 AV	54.0	-10.0	1.43 H	287	25.6	18.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.5 PK	74.0	-19.5	1.40 V	333	50.1	4.4
2	5460.00	40.0 AV	54.0	-14.0	1.40 V	333	35.6	4.4
3	#5470.00	55.2 PK	68.2	-13.0	1.40 V	338	50.7	4.5
4	*5500.00	96.2 PK			1.45 V	337	57.4	38.8
5	*5500.00	84.8 AV			1.45 V	337	46.0	38.8
6	11000.00	58.6 PK	74.0	-15.4	2.43 V	257	40.2	18.4
7	11000.00	44.2 AV	54.0	-9.8	2.43 V	257	25.8	18.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	96.1 PK			2.06 H	255	57.4	38.7
2	*5580.00	85.4 AV			2.06 H	255	46.7	38.7
3	11160.00	57.3 PK	74.0	-16.7	1.40 H	277	40.2	17.1
4	11160.00	43.0 AV	54.0	-11.0	1.40 H	277	25.9	17.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	93.9 PK			1.47 V	334	55.2	38.7
2	*5580.00	83.2 AV			1.47 V	334	44.5	38.7
3	11160.00	57.2 PK	74.0	-16.8	2.36 V	248	40.1	17.1
4	11160.00	42.8 AV	54.0	-11.2	2.36 V	248	25.7	17.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	93.7 PK			2.04 H	247	54.8	38.9
2	*5700.00	83.2 AV			2.04 H	247	44.3	38.9
3	#5725.00	54.3 PK	68.2	-13.9	2.00 H	246	49.7	4.6
4	11400.00	57.2 PK	74.0	-16.8	1.34 H	291	39.7	17.5
5	11400.00	43.0 AV	54.0	-11.0	1.34 H	291	25.5	17.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	91.4 PK			1.40 V	336	52.5	38.9
2	*5700.00	81.2 AV			1.40 V	336	42.3	38.9
3	#5725.00	55.2 PK	68.2	-13.0	1.46 V	335	50.6	4.6
4	11400.00	57.4 PK	74.0	-16.6	2.42 V	241	39.9	17.5
5	11400.00	43.0 AV	54.0	-11.0	2.42 V	241	25.5	17.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5642.40	53.3 PK	68.2	-14.9	1.75 H	241	48.7	4.6
2	*5745.00	93.1 PK			1.75 H	241	54.1	39.0
3	*5745.00	82.2 AV			1.75 H	241	43.2	39.0
4	#5944.80	53.5 PK	68.2	-14.7	1.75 H	241	48.2	5.3
5	11490.00	57.0 PK	74.0	-17.0	1.32 H	283	40.2	16.8
6	11490.00	42.3 AV	54.0	-11.7	1.32 H	283	25.5	16.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5643.20	53.5 PK	68.2	-14.7	1.38 V	336	48.9	4.6
2	*5745.00	91.0 PK			1.38 V	336	52.0	39.0
3	*5745.00	80.1 AV			1.38 V	336	41.1	39.0
4	#5974.40	54.0 PK	68.2	-14.2	1.38 V	336	48.7	5.3
5	11490.00	56.3 PK	74.0	-17.7	2.40 V	247	39.5	16.8
6	11490.00	42.3 AV	54.0	-11.7	2.40 V	247	25.5	16.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5648.00	53.7 PK	68.2	-14.5	1.98 H	242	49.1	4.6
2	*5785.00	93.9 PK			1.98 H	242	54.7	39.2
3	*5785.00	82.6 AV			1.98 H	242	43.4	39.2
4	#5996.80	53.6 PK	68.2	-14.6	1.98 H	242	48.3	5.3
5	11570.00	56.7 PK	74.0	-17.3	1.42 H	282	40.1	16.6
6	11570.00	42.2 AV	54.0	-11.8	1.42 H	282	25.6	16.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5608.80	53.3 PK	68.2	-14.9	1.44 V	334	48.9	4.4
2	*5785.00	91.5 PK			1.44 V	334	52.3	39.2
3	*5785.00	80.4 AV			1.44 V	334	41.2	39.2
4	#5994.40	54.0 PK	68.2	-14.2	1.14 V	334	48.7	5.3
5	11570.00	56.4 PK	74.0	-17.6	2.46 V	248	39.8	16.6
6	11570.00	42.4 AV	54.0	-11.6	2.46 V	248	25.8	16.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5619.20	53.4 PK	68.2	-14.8	1.88 H	242	48.9	4.5
2	*5825.00	92.2 PK			1.88 H	242	52.8	39.4
3	*5825.00	81.8 AV			1.88 H	242	42.4	39.4
4	#5936.00	54.0 PK	68.2	-14.2	1.88 H	242	48.7	5.3
5	11650.00	56.7 PK	74.0	-17.3	1.42 H	290	40.2	16.5
6	11650.00	42.3 AV	54.0	-11.7	1.42 H	290	25.8	16.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5624.80	54.0 PK	68.2	-14.2	1.42 V	333	49.5	4.5
2	*5825.00	90.3 PK			1.42 V	333	50.9	39.4
3	*5825.00	79.7 AV			1.42 V	333	40.3	39.4
4	#5937.60	53.4 PK	68.2	-14.8	1.42 V	333	48.1	5.3
5	11650.00	56.4 PK	74.0	-17.6	2.37 V	255	39.9	16.5
6	11650.00	42.1 AV	54.0	-11.9	2.37 V	255	25.6	16.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11n (HT20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.4 PK	74.0	-14.6	1.96 H	269	55.3	4.1
2	5150.00	43.9 AV	54.0	-10.1	1.96 H	269	39.8	4.1
3	*5180.00	104.3 PK			1.95 H	266	65.8	38.5
4	*5180.00	92.6 AV			1.95 H	266	54.1	38.5
5	#10360.00	56.3 PK	68.2	-11.9	1.37 H	291	39.8	16.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.7 PK	74.0	-15.3	1.01 V	333	54.6	4.1
2	5150.00	43.4 AV	54.0	-10.6	1.01 V	333	39.3	4.1
3	*5180.00	103.6 PK			1.01 V	334	65.1	38.5
4	*5180.00	91.8 AV			1.01 V	334	53.3	38.5
5	#10360.00	56.4 PK	68.2	-11.8	2.35 V	243	39.9	16.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	103.1 PK			1.86 H	262	64.7	38.4
2	*5200.00	92.7 AV			1.86 H	262	54.3	38.4
3	#10400.00	56.0 PK	68.2	-12.2	1.36 H	276	39.5	16.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	102.9 PK			1.09 V	334	64.5	38.4
2	*5200.00	91.9 AV			1.09 V	334	53.5	38.4
3	#10400.00	56.1 PK	68.2	-12.1	2.46 V	243	39.6	16.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	104.7 PK			1.88 H	266	66.4	38.3
2	*5240.00	94.0 AV			1.88 H	266	55.7	38.3
3	5350.00	54.1 PK	74.0	-19.9	1.86 H	268	50.2	3.9
4	5350.00	39.4 AV	54.0	-14.6	1.86 H	268	35.5	3.9
5	#10480.00	56.5 PK	68.2	-11.7	1.34 H	287	40.2	16.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	104.5 PK			1.01 V	333	66.2	38.3
2	*5240.00	93.2 AV			1.01 V	333	54.9	38.3
3	5350.00	53.5 PK	74.0	-20.5	1.03 V	333	49.6	3.9
4	5350.00	39.6 AV	54.0	-14.4	1.03 V	333	35.7	3.9
5	#10480.00	55.8 PK	68.2	-12.4	2.36 V	241	39.5	16.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.6 PK	74.0	-20.4	1.96 H	270	49.5	4.1
2	5150.00	39.9 AV	54.0	-14.1	1.96 H	270	35.8	4.1
3	*5260.00	105.1 PK			2.00 H	270	66.9	38.2
4	*5260.00	94.4 AV			2.00 H	270	56.2	38.2
5	#10520.00	56.4 PK	68.2	-11.8	1.36 H	290	40.1	16.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.9 PK	74.0	-20.1	1.02 V	338	49.8	4.1
2	5150.00	39.8 AV	54.0	-14.2	1.02 V	338	35.7	4.1
3	*5260.00	104.1 PK			1.04 V	336	65.9	38.2
4	*5260.00	93.1 AV			1.04 V	336	54.9	38.2
5	#10520.00	56.4 PK	68.2	-11.8	2.35 V	243	40.1	16.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	105.8 PK			1.99 H	262	67.7	38.1
2	*5300.00	94.5 AV			1.99 H	262	56.4	38.1
3	10600.00	56.6 PK	74.0	-17.4	1.35 H	282	40.1	16.5
4	10600.00	42.0 AV	54.0	-12.0	1.35 H	282	25.5	16.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	105.3 PK			1.04 V	334	67.2	38.1
2	*5300.00	94.2 AV			1.04 V	334	56.1	38.1
3	10600.00	56.0 PK	74.0	-18.0	2.35 V	256	39.5	16.5
4	10600.00	42.3 AV	54.0	-11.7	2.35 V	256	25.8	16.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	104.4 PK			1.99 H	263	66.2	38.2
2	*5320.00	93.8 AV			1.99 H	263	55.6	38.2
3	5350.00	59.9 PK	74.0	-14.1	1.98 H	264	56.0	3.9
4	5350.00	44.7 AV	54.0	-9.3	1.98 H	264	40.8	3.9
5	10640.00	56.3 PK	74.0	-17.7	1.35 H	290	39.6	16.7
6	10640.00	42.2 AV	54.0	-11.8	1.35 H	290	25.5	16.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	103.8 PK			1.04 V	336	65.6	38.2
2	*5320.00	94.1 AV			1.04 V	336	55.9	38.2
3	5350.00	59.3 PK	74.0	-14.7	1.01 V	333	55.4	3.9
4	5350.00	44.0 AV	54.0	-10.0	1.01 V	333	40.1	3.9
5	10640.00	56.6 PK	74.0	-17.4	2.40 V	247	39.9	16.7
6	10640.00	42.5 AV	54.0	-11.5	2.40 V	247	25.8	16.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.0 PK	74.0	-20.0	1.94 H	263	49.6	4.4
2	5460.00	41.4 AV	54.0	-12.6	1.94 H	263	37.0	4.4
3	#5470.00	55.3 PK	68.2	-12.9	1.94 H	261	50.8	4.5
4	*5500.00	97.3 PK			1.94 H	261	58.5	38.8
5	*5500.00	86.5 AV			1.94 H	261	47.7	38.8
6	11000.00	58.3 PK	74.0	-15.7	1.32 H	283	39.9	18.4
7	11000.00	44.3 AV	54.0	-9.7	1.32 H	283	25.9	18.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	53.9 PK	74.0	-20.1	1.46 V	335	49.5	4.4
2	5460.00	40.1 AV	54.0	-13.9	1.46 V	335	35.7	4.4
3	#5470.00	55.0 PK	68.2	-13.2	1.44 V	337	50.5	4.5
4	*5500.00	95.2 PK			1.45 V	335	56.4	38.8
5	*5500.00	84.3 AV			1.45 V	335	45.5	38.8
6	11000.00	58.1 PK	74.0	-15.9	2.47 V	239	39.7	18.4
7	11000.00	44.1 AV	54.0	-9.9	2.47 V	239	25.7	18.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	95.5 PK			2.04 H	253	56.8	38.7
2	*5580.00	84.7 AV			2.04 H	253	46.0	38.7
3	11160.00	56.8 PK	74.0	-17.2	1.37 H	283	39.7	17.1
4	11160.00	42.7 AV	54.0	-11.3	1.37 H	283	25.6	17.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	93.2 PK			1.39 V	337	54.5	38.7
2	*5580.00	82.4 AV			1.39 V	337	43.7	38.7
3	11160.00	56.7 PK	74.0	-17.3	2.83 V	252	39.6	17.1
4	11160.00	42.7 AV	54.0	-11.3	2.83 V	252	25.6	17.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	93.5 PK			1.47 H	248	54.6	38.9
2	*5700.00	83.0 AV			1.47 H	248	44.1	38.9
3	#5725.00	55.4 PK	68.2	-12.8	1.42 H	245	50.8	4.6
4	11400.00	57.0 PK	74.0	-17.0	1.39 H	281	39.5	17.5
5	11400.00	43.3 AV	54.0	-10.7	1.39 H	281	25.8	17.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	91.5 PK			1.41 V	335	52.6	38.9
2	*5700.00	80.7 AV			1.41 V	335	41.8	38.9
3	#5725.00	54.8 PK	68.2	-13.4	1.47 V	337	50.2	4.6
4	11400.00	57.4 PK	74.0	-16.6	2.49 V	244	39.9	17.5
5	11400.00	42.8 AV	54.0	-11.2	2.49 V	244	25.3	17.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5648.80	52.6 PK	68.2	-15.6	1.74 H	243	48.0	4.6
2	*5745.00	92.7 PK			1.74 H	243	53.7	39.0
3	*5745.00	82.0 AV			1.74 H	243	43.0	39.0
4	#5961.60	53.6 PK	68.2	-14.6	1.74 H	243	48.2	5.4
5	11490.00	56.7 PK	74.0	-17.3	1.34 H	283	39.9	16.8
6	11490.00	42.6 AV	54.0	-11.4	1.34 H	283	25.8	16.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5642.40	52.9 PK	68.2	-15.3	1.40 V	333	48.3	4.6
2	*5745.00	90.7 PK			1.40 V	333	51.7	39.0
3	*5745.00	79.9 AV			1.40 V	333	40.9	39.0
4	#5999.20	53.6 PK	68.2	-14.6	1.40 V	333	48.3	5.3
5	11490.00	56.5 PK	74.0	-17.5	2.49 V	254	39.7	16.8
6	11490.00	42.3 AV	54.0	-11.7	2.49 V	254	25.5	16.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5621.60	53.9 PK	68.2	-14.3	1.95 H	241	49.4	4.5
2	*5785.00	92.1 PK			1.95 H	241	52.9	39.2
3	*5785.00	81.7 AV			1.95 H	241	42.5	39.2
4	#5934.40	53.5 PK	68.2	-14.7	1.95 H	241	48.2	5.3
5	11570.00	56.5 PK	74.0	-17.5	1.46 H	278	39.9	16.6
6	11570.00	42.1 AV	54.0	-11.9	1.46 H	278	25.5	16.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5620.80	53.6 PK	68.2	-14.6	1.43 V	336	49.1	4.5
2	*5785.00	90.2 PK			1.43 V	336	51.0	39.2
3	*5785.00	79.4 AV			1.43 V	336	40.2	39.2
4	#5981.60	54.3 PK	68.2	-13.9	1.43 V	336	49.0	5.3
5	11570.00	56.8 PK	74.0	-17.2	2.43 V	246	40.2	16.6
6	11570.00	42.2 AV	54.0	-11.8	2.43 V	246	25.6	16.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5634.40	53.4 PK	68.2	-14.8	1.89 H	243	48.8	4.6
2	*5825.00	91.0 PK			1.89 H	243	51.6	39.4
3	*5825.00	81.1 AV			1.89 H	243	41.7	39.4
4	#5964.00	53.6 PK	68.2	-14.6	1.89 H	243	48.2	5.4
5	11650.00	56.6 PK	74.0	-17.4	1.44 H	278	40.1	16.5
6	11650.00	42.2 AV	54.0	-11.8	1.44 H	278	25.7	16.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5627.20	53.0 PK	68.2	-15.2	1.40 V	338	48.5	4.5
2	*5825.00	88.9 PK			1.40 V	338	49.5	39.4
3	*5825.00	78.8 AV			1.40 V	338	39.4	39.4
4	#5969.60	53.6 PK	68.2	-14.6	1.40 V	338	48.2	5.4
5	11650.00	56.1 PK	74.0	-17.9	2.35 V	253	39.6	16.5
6	11650.00	42.3 AV	54.0	-11.7	2.35 V	253	25.8	16.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11n (HT40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	69.6 PK	74.0	-4.4	1.96 H	260	65.5	4.1
2	5150.00	53.3 AV	54.0	-0.7	1.96 H	260	49.2	4.1
3	*5190.00	100.1 PK			1.93 H	259	61.7	38.4
4	*5190.00	89.1 AV			1.93 H	259	50.7	38.4
5	#10380.00	56.2 PK	68.2	-12.0	1.38 H	289	39.6	16.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	67.2 PK	74.0	-6.8	1.05 V	335	63.1	4.1
2	5150.00	51.7 AV	54.0	-2.3	1.05 V	335	47.6	4.1
3	*5190.00	99.4 PK			1.03 V	333	61.0	38.4
4	*5190.00	88.0 AV			1.03 V	333	49.6	38.4
5	#10380.00	56.1 PK	68.2	-12.1	2.49 V	256	39.5	16.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	102.1 PK			1.90 H	262	63.9	38.2
2	*5230.00	91.8 AV			1.90 H	262	53.6	38.2
3	5350.00	53.8 PK	74.0	-20.2	1.86 H	269	49.9	3.9
4	5350.00	39.7 AV	54.0	-14.3	1.86 H	269	35.8	3.9
5	#10460.00	56.2 PK	68.2	-12.0	1.37 H	284	39.9	16.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	101.5 PK			1.04 V	334	63.3	38.2
2	*5230.00	91.0 AV			1.04 V	334	52.8	38.2
3	5350.00	53.4 PK	74.0	-20.6	1.02 V	338	49.5	3.9
4	5350.00	39.7 AV	54.0	-14.3	1.02 V	338	35.8	3.9
5	#10460.00	56.3 PK	68.2	-11.9	2.52 V	242	40.0	16.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	54.2 PK	74.0	-19.8	2.03 H	260	50.1	4.1
2	5150.00	40.0 AV	54.0	-14.0	2.03 H	260	35.9	4.1
3	*5270.00	102.5 PK			2.04 H	262	64.3	38.2
4	*5270.00	92.8 AV			2.04 H	262	54.6	38.2
5	#10540.00	56.2 PK	68.2	-12.0	1.32 H	285	39.8	16.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.6 PK	74.0	-20.4	1.07 V	334	49.5	4.1
2	5150.00	39.6 AV	54.0	-14.4	1.07 V	334	35.5	4.1
3	*5270.00	102.3 PK			1.07 V	334	64.1	38.2
4	*5270.00	92.2 AV			1.07 V	334	54.0	38.2
5	#10540.00	56.0 PK	68.2	-12.2	2.37 V	246	39.6	16.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	100.5 PK			1.94 H	268	62.3	38.2
2	*5310.00	89.9 AV			1.94 H	268	51.7	38.2
3	5350.00	70.2 PK	74.0	-3.8	1.94 H	268	66.3	3.9
4	5350.00	53.3 AV	54.0	-0.7	1.94 H	268	49.4	3.9
5	10620.00	56.8 PK	74.0	-17.2	1.32 H	280	40.1	16.7
6	10620.00	42.4 AV	54.0	-11.6	1.32 H	280	25.7	16.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	100.2 PK			1.02 V	333	62.0	38.2
2	*5310.00	89.6 AV			1.02 V	333	51.4	38.2
3	5350.00	69.5 PK	74.0	-4.5	1.10 V	336	65.6	3.9
4	5350.00	52.1 AV	54.0	-1.9	1.10 V	336	48.2	3.9
5	10620.00	56.8 PK	74.0	-17.2	2.39 V	241	40.1	16.7
6	10620.00	42.5 AV	54.0	-11.5	2.39 V	241	25.8	16.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.8 PK	74.0	-19.2	2.11 H	265	50.4	4.4
2	5460.00	42.1 AV	54.0	-11.9	2.11 H	265	37.7	4.4
3	#5470.00	58.9 PK	68.2	-9.3	2.16 H	259	54.4	4.5
4	*5510.00	93.7 PK			2.17 H	260	54.9	38.8
5	*5510.00	83.6 AV			2.17 H	260	44.8	38.8
6	11020.00	57.9 PK	74.0	-16.1	1.38 H	279	39.8	18.1
7	11020.00	44.0 AV	54.0	-10.0	1.38 H	279	25.9	18.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	53.2 PK	74.0	-20.8	1.41 V	338	48.8	4.4
2	5460.00	40.9 AV	54.0	-13.1	1.41 V	338	36.5	4.4
3	#5470.00	58.1 PK	68.2	-10.1	1.39 V	337	53.6	4.5
4	*5510.00	91.5 PK			1.45 V	336	52.7	38.8
5	*5510.00	81.6 AV			1.45 V	336	42.8	38.8
6	11020.00	57.7 PK	74.0	-16.3	2.50 V	254	39.6	18.1
7	11020.00	43.7 AV	54.0	-10.3	2.50 V	254	25.6	18.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	91.7 PK			1.39 H	272	53.0	38.7
2	*5550.00	82.1 AV			1.39 H	272	43.4	38.7
3	11100.00	56.9 PK	74.0	-17.1	1.31 H	283	39.7	17.2
4	11100.00	42.8 AV	54.0	-11.2	1.31 H	283	25.6	17.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	89.6 PK			1.45 V	335	50.9	38.7
2	*5550.00	79.7 AV			1.45 V	335	41.0	38.7
3	11100.00	56.9 PK	74.0	-17.1	2.44 V	255	39.7	17.2
4	11100.00	42.8 AV	54.0	-11.2	2.44 V	255	25.6	17.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	90.8 PK			1.75 H	254	51.8	39.0
2	*5670.00	81.0 AV			1.75 H	254	42.0	39.0
3	#5725.00	54.2 PK	68.2	-14.0	1.73 H	255	49.6	4.6
4	11340.00	57.9 PK	74.0	-16.1	1.38 H	283	40.2	17.7
5	11340.00	43.5 AV	54.0	-10.5	1.38 H	283	25.8	17.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	88.7 PK			1.38 V	337	49.7	39.0
2	*5670.00	79.0 AV			1.38 V	337	40.0	39.0
3	#5725.00	54.3 PK	68.2	-13.9	1.40 V	334	49.7	4.6
4	11340.00	57.3 PK	74.0	-16.7	2.36 V	254	39.6	17.7
5	11340.00	43.2 AV	54.0	-10.8	2.36 V	254	25.5	17.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5631.20	53.1 PK	68.2	-15.1	1.92 H	245	48.6	4.5
2	*5755.00	88.1 PK			1.92 H	245	49.0	39.1
3	*5755.00	78.1 AV			1.92 H	245	39.0	39.1
4	#5946.40	53.8 PK	68.2	-14.4	1.92 H	245	48.5	5.3
5	11510.00	56.9 PK	74.0	-17.1	1.33 H	281	40.1	16.8
6	11510.00	42.3 AV	54.0	-11.7	1.33 H	281	25.5	16.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5629.60	53.6 PK	68.2	-14.6	1.41 V	338	49.1	4.5
2	*5755.00	88.1 PK			1.41 V	338	49.0	39.1
3	*5755.00	75.7 AV			1.41 V	338	36.6	39.1
4	#5972.00	54.0 PK	68.2	-14.2	1.41 V	338	48.7	5.3
5	11510.00	56.8 PK	74.0	-17.2	2.36 V	244	40.0	16.8
6	11510.00	42.3 AV	54.0	-11.7	2.36 V	244	25.5	16.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5605.60	53.7 PK	68.2	-14.5	1.85 H	246	49.3	4.4
2	*5795.00	89.1 PK			1.85 H	246	49.9	39.2
3	*5795.00	78.7 AV			1.85 H	246	39.5	39.2
4	#5956.80	53.4 PK	68.2	-14.8	1.85 H	246	48.1	5.3
5	11590.00	56.1 PK	74.0	-17.9	1.39 H	280	39.6	16.5
6	11590.00	42.0 AV	54.0	-12.0	1.39 H	280	25.5	16.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5620.00	53.9 PK	68.2	-14.3	1.45 V	336	49.4	4.5
2	*5795.00	87.1 PK			1.45 V	336	47.9	39.2
3	*5795.00	76.5 AV			1.45 V	336	37.3	39.2
4	#5988.80	54.6 PK	68.2	-13.6	1.45 V	336	49.3	5.3
5	11590.00	56.5 PK	74.0	-17.5	2.36 V	240	40.0	16.5
6	11590.00	42.0 AV	54.0	-12.0	2.36 V	240	25.5	16.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

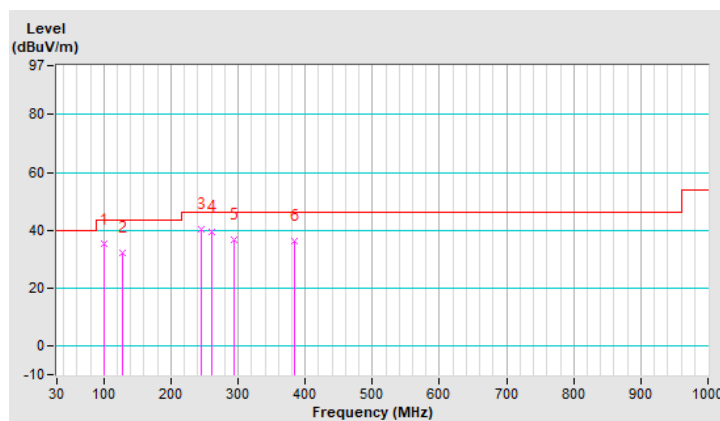
Below 1GHz Worst-Case Data: 802.11n (HT20)

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	99.84	35.1 QP	43.5	-8.4	1.49 H	137	48.7	-13.6
2	127.97	32.3 QP	43.5	-11.2	1.49 H	12	43.2	-10.9
3	244.37	40.4 QP	46.0	-5.6	1.00 H	275	50.4	-10.0
4	259.89	39.3 QP	46.0	-6.7	1.00 H	141	48.9	-9.6
5	293.84	36.9 QP	46.0	-9.1	1.00 H	151	45.0	-8.1
6	384.05	36.2 QP	46.0	-9.8	1.00 H	309	42.3	-6.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.

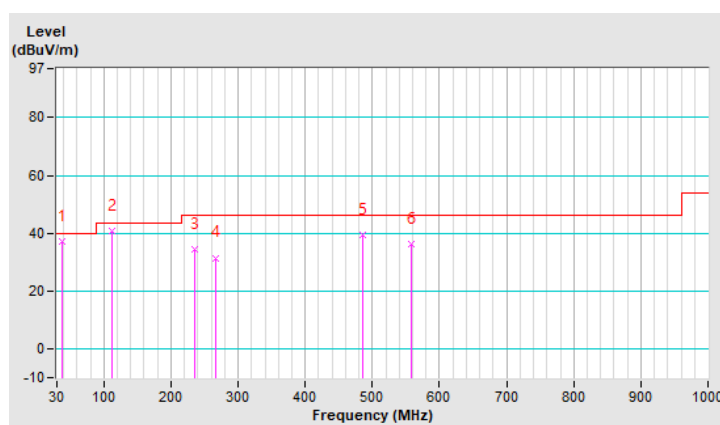


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	37.76	37.0 QP	40.0	-3.0	1.01 V	218	47.6	-10.6
2	112.45	40.9 QP	43.5	-2.6	1.01 V	14	53.1	-12.2
3	235.64	34.6 QP	46.0	-11.4	1.50 V	167	45.1	-10.5
4	266.68	31.5 QP	46.0	-14.5	1.01 V	116	40.5	-9.0
5	484.93	39.2 QP	46.0	-6.8	1.01 V	25	43.4	-4.2
6	557.68	36.4 QP	46.0	-9.6	1.01 V	15	39.4	-3.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(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 of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.



4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

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.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESR3	102412	Feb. 14, 2019	Feb. 13, 2020
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond2-01	Sep. 05, 2019	Sep. 04, 2020
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Jan. 30, 2019	Jan. 29, 2020
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Aug. 13, 2019	Aug. 12, 2020
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HwaYa Shielded Room 2.

3. The VCCI Site Registration No. is C-12047.

4.2.3 Test Procedures

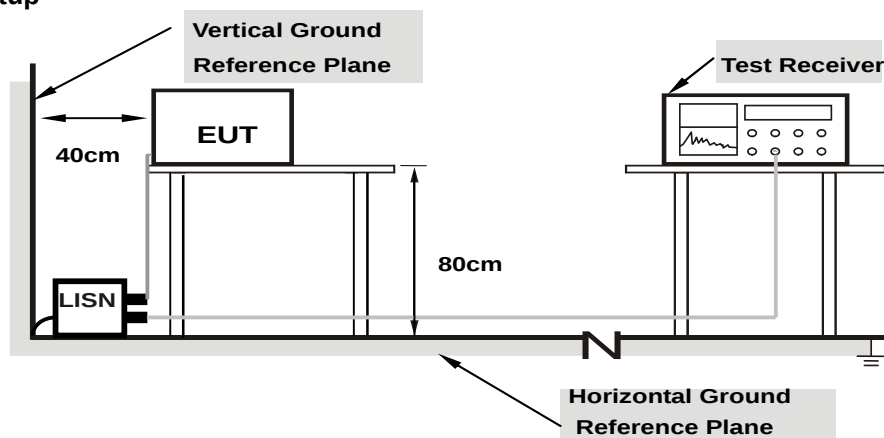
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance 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.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 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).

4.2.6 EUT Operating Conditions

Same as 4.1.6.

4.2.7 Test Results

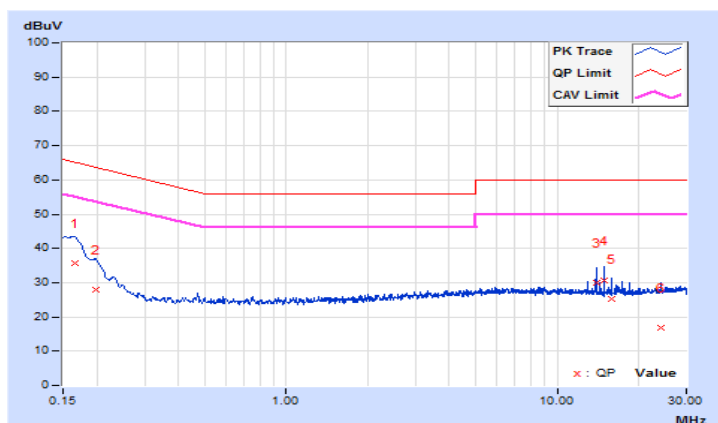
Worst-Case Data: 802.11n (HT20)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16575	10.11	25.70	7.58	35.81	17.69	65.17	55.17	-29.36	-37.48
2	0.19721	10.12	17.89	5.70	28.01	15.82	63.73	53.73	-35.72	-37.91
3	13.94025	10.50	19.49	18.43	29.99	28.93	60.00	50.00	-30.01	-21.07
4	14.93475	10.51	20.05	18.69	30.56	29.20	60.00	50.00	-29.44	-20.80
5	15.93150	10.54	14.57	12.51	25.11	23.05	60.00	50.00	-34.89	-26.95
6	24.24300	10.53	6.43	4.73	16.96	15.26	60.00	50.00	-43.04	-34.74

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.

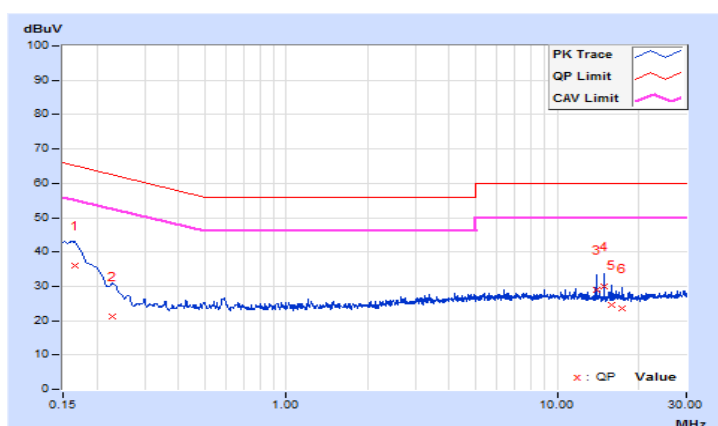


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16524	10.17	25.93	7.68	36.10	17.85	65.20	55.20	-29.10	-37.35
2	0.22743	10.19	10.86	4.79	21.05	14.98	62.54	52.54	-41.49	-37.56
3	13.93800	10.63	18.41	17.23	29.04	27.86	60.00	50.00	-30.96	-22.14
4	14.93475	10.65	19.20	17.90	29.85	28.55	60.00	50.00	-30.15	-21.45
5	15.92925	10.68	13.85	11.88	24.53	22.56	60.00	50.00	-35.47	-27.44
6	17.42100	10.73	12.81	11.05	23.54	21.78	60.00	50.00	-36.46	-28.22

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.

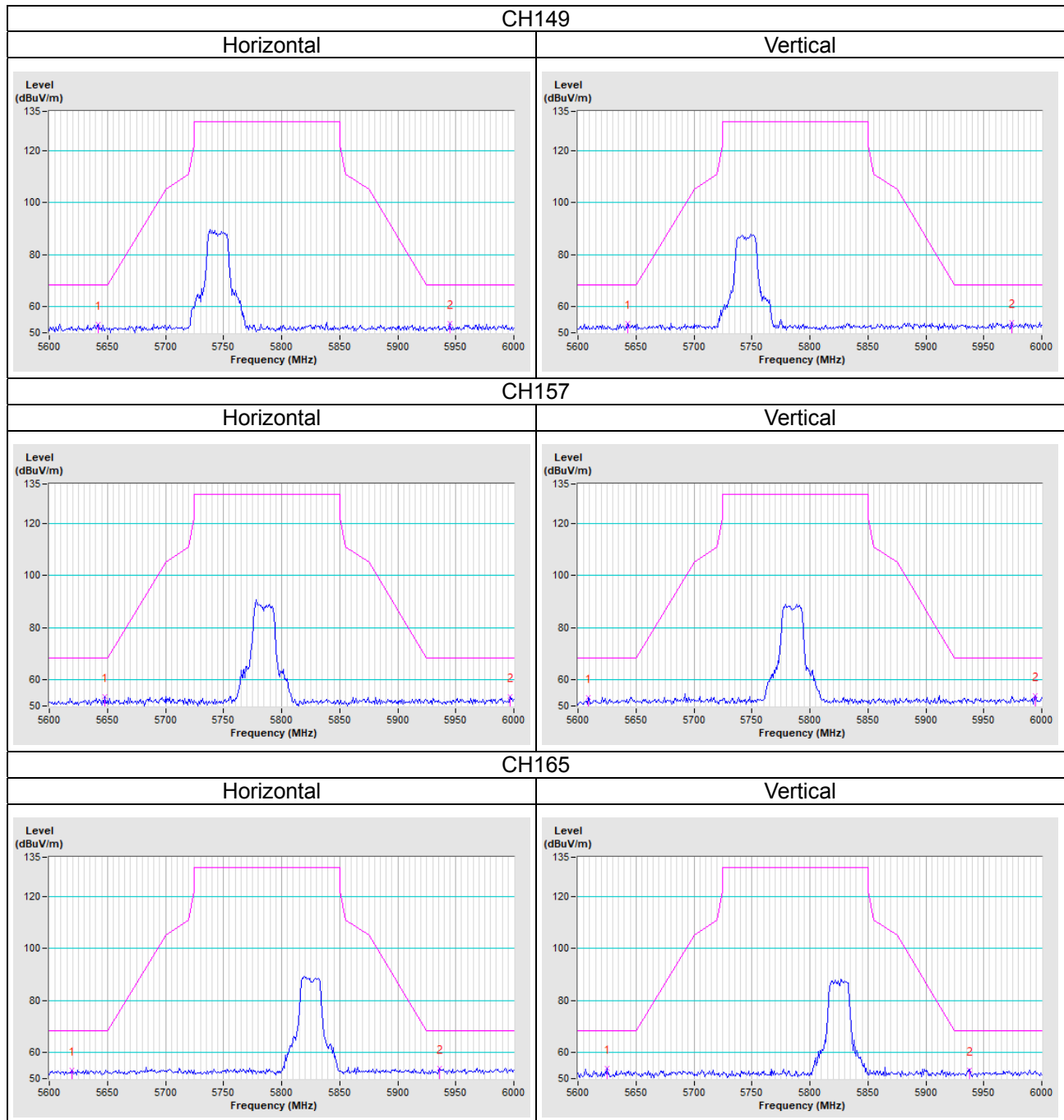


5 Pictures of Test Arrangements

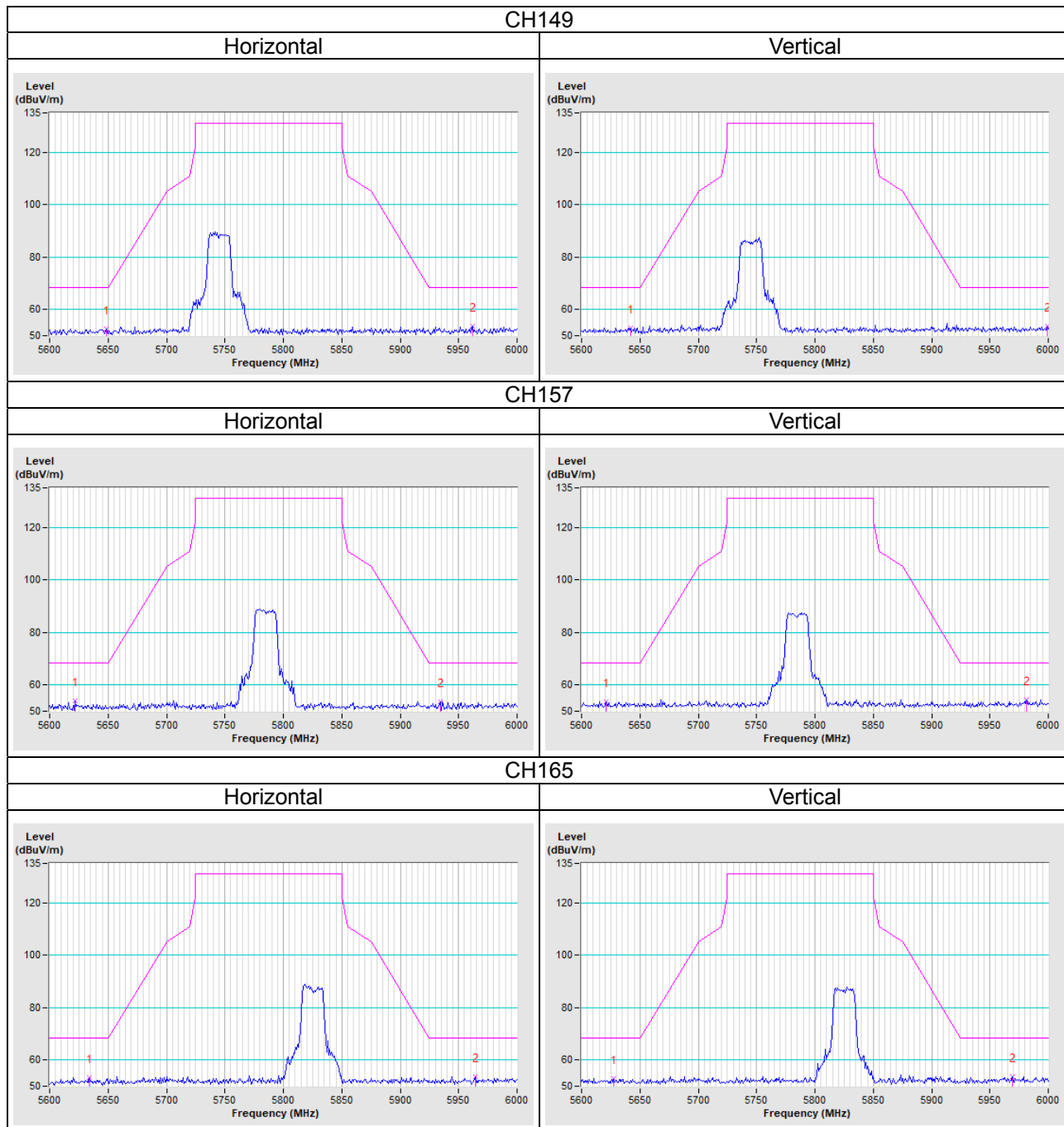
Please refer to the attached file (Test Setup Photo).

Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)

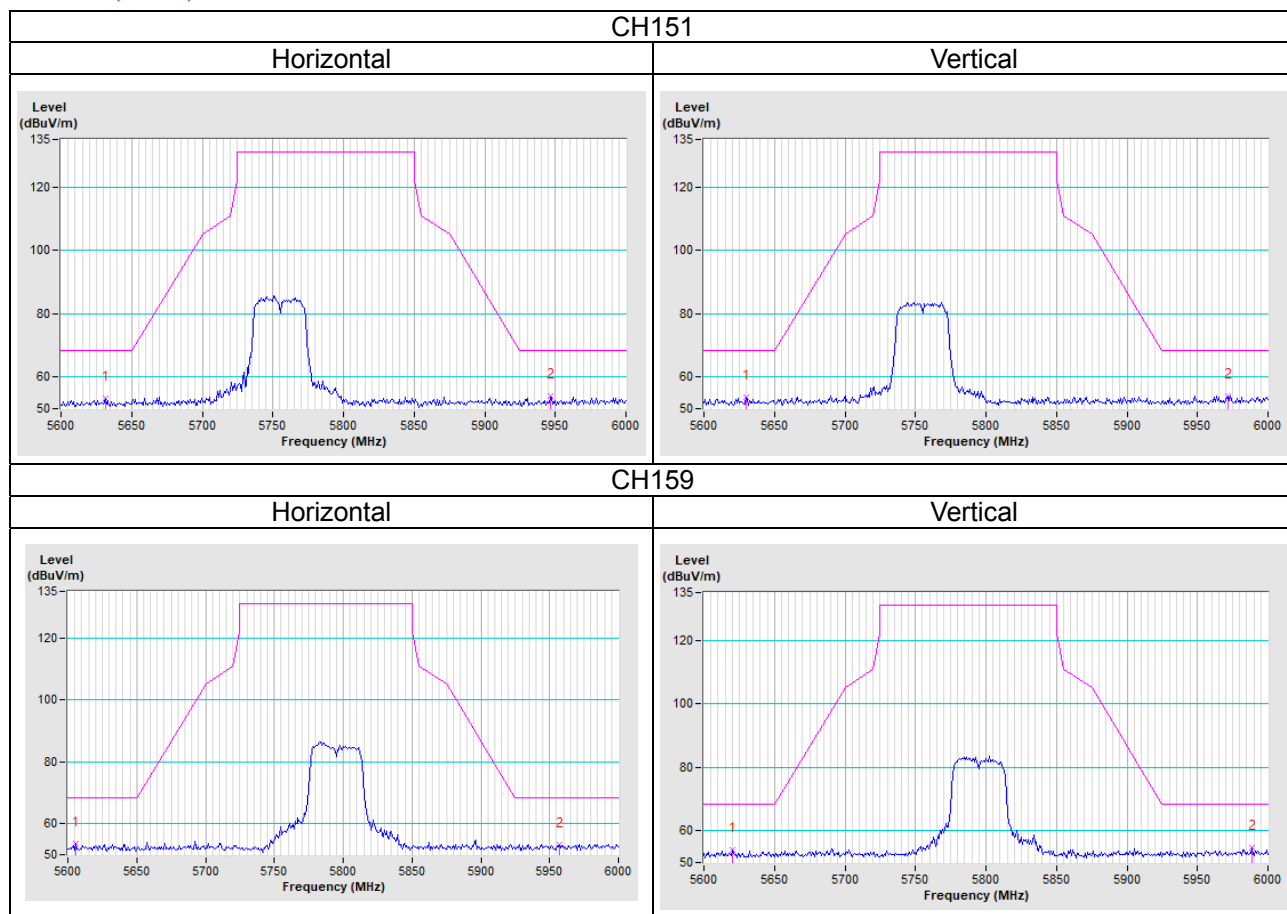
802.11a



802.11n (HT20)



802.11n (HT40)



Appendix – Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Fax: 886-2-26051924

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Tel: 886-3-6668565

Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab

Tel: 886-3-3183232

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Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

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