

FCC Test Report (WLAN)

Report No.: RF161110E09-1

FCC ID: MQT-E200NP

Test Model: xCL_E200NP-UN5

Series Model: xCL_E200NP-UNN, xCL_E200NP-NN5, xCL_E200NP-NNN

Received Date: Nov. 10, 2016

Test Date: Nov. 22 to 30, 2016

Issued Date: Jan. 23, 2017

Applicant: XAC AUTOMATION CORP.

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Release Control Record

Issue No.	Description	Date Issued
RF161110E09-1	Original release.	Jan. 23, 2017

1 Certificate of Conformity

Product: Portable terminal

Brand: XAC

Test Model: xCL_E200NP-UN5

Series Model: xCL_E200NP-UNN, xCL_E200NP-NN5, xCL_E200NP-NNN

Sample Status: ENGINEERING SAMPLE

Applicant: XAC AUTOMATION CORP.

Test Date: Nov. 22 to 30, 2016

Standard: 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 EMC characteristics under the conditions specified in this report.

Prepared by : Midoli Peng , **Date:** Jan. 23, 2017
Midoli Peng / Specialist

Approved by : May Chen , **Date:** Jan. 23, 2017
May Chen / Manager

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 -13.28dB at 2.78906MHz.
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 -0.3dB at 5150.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	-	Reference only.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6dB bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is i-pex(MHF) not a standard connector.

*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) (±)
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	3.41 dB
	6GHz ~ 18GHz	3.49 dB
	18GHz ~ 40GHz	3.30 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT (WLAN)

Product	Portable terminal
Brand	XAC
Test Model	xCL_E200NP-UN5
Series Model	xCL_E200NP-UNN, xCL_E200NP-NN5, xCL_E200NP-NNN
Status of EUT	ENGINEERING SAMPLE
Power Supply Rating	DC 3.85V or DC 3.7V from battery DC 5V from USB interface
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	DSSS, OFDM
Transfer Rate	802.11b: up to 11Mbps 802.11g: up to 54Mbps 802.11n: up to 150Mbps
Operating Frequency	For 15.247: 2.412 ~ 2.462GHz
	For 15.407: 5.18~5.24GHz, 5.26~5.32GHz, 5.50~5.70GHz, 5.745~5.825GHz
Number of Channel	For 15.247: 802.11b, 802.11g, 802.11n (HT20): 11 802.11n (HT40): 7
	For 15.407: 802.11a, 802.11n (HT20): 24 802.11n (HT40): 11
Output Power	For 15.247: 151.705mW For 15.407: 5180-5240MHz : 11.722mW 5260-5320MHz : 12.972mW 5500-5720MHz : 23.988mW 5745-5825MHz : 23.121mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	Battery x1 (option)
Data Cable Supplied	NA

Note:

1. All models are listed as below.

Model Name	Function				
	WLAN(b/g/n/an)	RFID	BT	2G/3G	Camera
				US	Rear 5M
xCL_E200NP-UN5	v	v	v	v	v
xCL_E200NP-UNN	v	v	v	v	-
xCL_E200NP-NN5	v	v	v	-	v
xCL_E200NP-NNN	v	v	v	-	-

From the above models, model: **xCL_E200NP-UN5** was selected as representative model for the test and its data was recorded in this report.

2. There are WLAN, Bluetooth WWAN and RFID technology used for the EUT.

3. EUT contains one certified WWAN module which FCC ID: QIPEHS5-US.

4. Simultaneously transmission condition.

Condition	Technology		
1	WLAN (2.4GHz)	Bluetooth	RFID
2	WLAN (5GHz)	Bluetooth	RFID
3	WWAN	Bluetooth	RFID

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

5. The antennas provided to the EUT, please refer to the following table:

WLAN/BT Antenna Spec.				
No.	Antenna Net Gain (dBi)	Frequency range	Antenna Type	Connector Type
1	0.26	2.4~2.4835GHz	PCB	i-pex(MHF)
	2.38	5.15~5.85GHz		
WWAN Antenna Spec.				
No.	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connector Type
1	-1.61	824-891MHz	PCB	i-pex(MHF)
	0.58	1850-1990MHz		
RFID Antenna Spec.				
No.	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connector Type
1	13	13.56MHz	Loop	NA

6. The EUT power needs to be supplied from one power adapter or battery, the information is as below table:

Power adapter (only for test not for sale)				
Brand		Model Name	Specification	
MOSO		MSA-C2000IC5.0-12W-US	Input: AC100-240V, 0.5A, 50/60Hz Output: DC 5V, 2A DC output cable (Unshielded, 1.2 m)	
Battery (option)				
No.	Brand	Model Name	Specification	Remark
1	TWS	E200NP	3.85V, 2900mAh, 11.17Wh	Black
2	HYB	J529/ICP575374P	3.7V, 3000mAh, 11.1Wh	Silver

7. For radiated emission test, the EUT was pre-tested under the following test modes :

Pre-test Mode	Power
Mode A	Power from battery 1
Mode B	Power from battery 2
Mode C	Power from USB interface (Adapter)

The worst radiated emission was found in **Mode C**. Therefore only the test data of the modes were recorded in this report.

8. The EUT incorporates a SISO function.

2.4GHz Band			
MODULATION MODE	DATA RATE (MCS)	TX & RX CONFIGURATION	
802.11b	1 ~ 11Mbps	1TX	1RX
802.11g	6 ~ 54Mbps	1TX	1RX
802.11n (HT20)	MCS 0~7	1TX	1RX
802.11n (HT40)	MCS 0~7	1TX	1RX
5GHz Band			
MODULATION MODE	DATA RATE (MCS)	TX & RX CONFIGURATION	
802.11a	6 ~ 54Mbps	1TX	1RX
802.11n (HT20)	MCS 0~7	1TX	1RX
802.11n (HT40)	MCS 0~7	1TX	1RX

9. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 Description of Test Modes

FOR 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

FOR 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

FOR 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		

FOR 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	APCM	
1	√	√	√	√	Power from USB interface (Adapter)
2	-	-	√	-	Power from USB interface (Host)

Where **RE $\geq$ 1G**: Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

NOTE: 1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on Z-plane(below 1GHz) & X-plane(above 1GHz) .

2. "-" means no effect.

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.

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6
802.11n (HT20)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	13.5
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
802.11n (HT20)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11n (HT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6
802.11n (HT20)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
802.11n (HT40)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6
802.11n (HT20)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
802.11n (HT40)		151 to 159	151, 159	OFDM	BPSK	13.5

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.

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11n (HT20)	5180-5240	36 to 48	116	OFDM	BPSK	6.5
	5260-5320	52 to 64				
	5500-5700	100 to 140				
	5745-5825	149 to 165				

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.

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11n (HT20)	5180-5240	36 to 48	116	OFDM	BPSK	6.5
	5260-5320	52 to 64				
	5500-5700	100 to 140				
	5745-5825	149 to 165				

Antenna Port Conducted Measurement:

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

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6
802.11n (HT20)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	13.5
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
802.11n (HT20)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11n (HT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6
802.11n (HT20)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
802.11n (HT40)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6
802.11n (HT20)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
802.11n (HT40)		151 to 159	151, 159	OFDM	BPSK	13.5

Test Condition:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (System)	TESTED BY
RE $\geq$ 1G	23deg. C, 67%RH	120Vac, 60Hz	Terry Liao
RE $<$ 1G	24deg. C, 64%RH	120Vac, 60Hz	Jyunchun Lin
PLC	25deg. C, 75%RH	120Vac, 60Hz	Andy Ho
APCM	25deg. C, 60%RH	120Vac, 60Hz	Anderson Chen

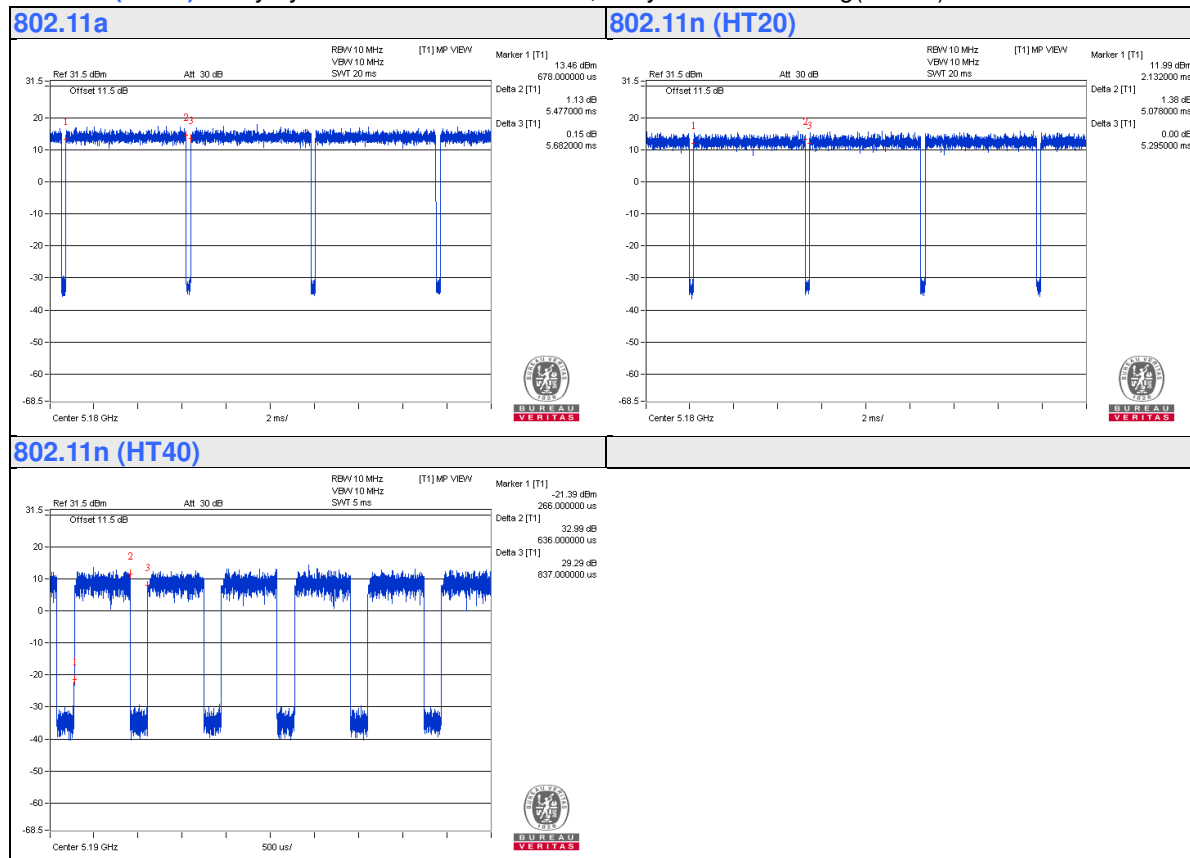
3.3 Duty Cycle of Test Signal

Duty cycle of test signal is < 98 %, duty factor is required

802.11a: Duty cycle = $5.477/5.682 = 0.964$, Duty factor = $10 * \log(1/0.964) = 0.16$

802.11n (HT20): Duty cycle = $5.078/5.295 = 0.959$, Duty factor = $10 * \log(1/0.959) = 0.18$

802.11n (HT40): Duty cycle = $0.636/0.837 = 0.76$, Duty factor = $10 * \log(1/0.76) = 1.19$



3.4 Description of Support Units

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

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Earphone	Apple	NA	NA	NA	Provided by Lab
B	SIM Card	NA	NA	NA	NA	Supplied by client
C	SAM Card	NA	NA	NA	NA	Supplied by client
D	Adapter	MOSO	MSA-C2000IC5.0-12W-US	NA	NA	Supplied by client
E	Laptop	DELL	E5430	4YV4VY1	FCC DoC	Provided by Lab

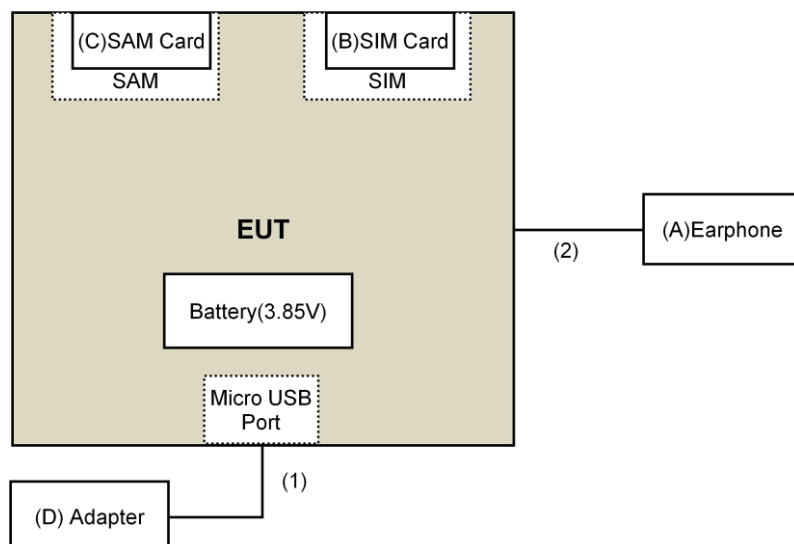
Note:

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

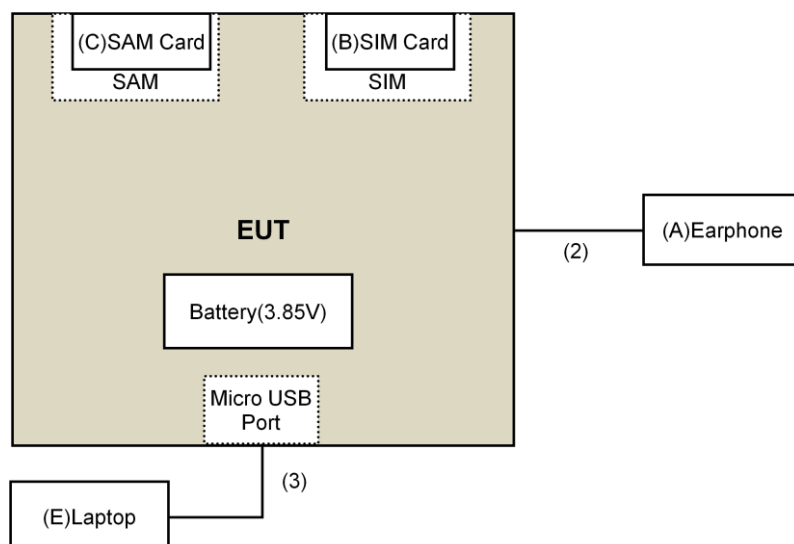
ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	DC Cable	1	1.2	No	0	Supplied by client
2	Audio Cable	1	1.2	No	0	Provided by Lab
3	USB Cable	1	1	Yes	0	Provided by Lab

3.4.1 Configuration of System under Test

Mode 1



Mode 2



3.5 General Description of Applied Standard

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 v01r03

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 v01r03			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:

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

4.1.2 Test Instruments

For below 1GHz test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY50010156	Aug. 18, 2016	Aug. 17, 2017
Pre-Amplifier ^(*) EMCI	EMC001340	980142	Jan. 20, 2016	Jan. 19, 2018
Loop Antenna ^(*) Electro-Metrics	EM-6879	264	Dec. 16, 2014	Dec. 15, 2016
RF Cable	NA	LOOPCAB-001 LOOPCAB-002	Jan. 18, 2016	Jan. 17, 2017
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-05	May 07, 2016	May 06, 2017
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-156	Jan. 04, 2016	Jan. 03, 2017
RF Cable	8D	966-3-1 966-3-2 966-3-3	Apr. 02, 2016	Apr. 01, 2017
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-3-01	Oct. 05, 2016	Oct. 04, 2017
Software	ADT_Radiated _V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	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 calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. Loop antenna was used for all emissions below 30 MHz.
4. The test was performed in 966 Chamber No. 3.
5. The FCC Site Registration No. is 147459
6. The CANADA Site Registration No. is 20331-1
7. Tested Date: Nov. 25, 2016

For other test items:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Keysight	N9038A	MY54450088	July 20, 2016	July 19, 2017
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-783	Jan. 19, 2016	Jan. 18, 2017
Pre-Amplifier Agilent	8449B	3008A01922	Sep. 18, 2016	Sep. 17, 2017
RF Cable	EMC104-SM-SM-2000 EMC104-SM-SM-5000 EMC104-SM-SM-5000	150318 150323 150324	Mar. 30, 2016	Mar. 29, 2017
Pre-Amplifier EMCI	EMC184045	980143	Jan. 15, 2016	Jan. 14, 2017
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170608	Jan. 08, 2016	Jan. 07, 2017
RF Cable	SUCOFLEX 102	36432/2 36441/2	Jan. 16, 2016	Jan. 15, 2017
Software	ADT_Radiated _V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208410	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP02	NA	NA
Spectrum Analyzer Keysight	N9030A	MY54490679	July 23, 2016	July 22, 2017
Power meter Anritsu	ML2495A	0824006	May 26, 2016	May 25, 2017
Power sensor Anritsu	MA2411B	0738172	May 26, 2016	May 25, 2017
DC Power Supply GOOD WILL INSTRUMENT CO., LTD.	GPC - 3030D	7700087	NA	NA
Temperature & Humidity Chamber TERCHY	MHU-225AU	911033	Dec. 03, 2015	Dec. 02, 2016
Digital Multimeter FLUKE	87III	73680266	Nov. 10, 2016	Nov. 09, 2017

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 966 Chamber No. 4.
3. The FCC Site Registration No. is 292998
4. The CANADA Site Registration No. is 20331-2
5. Tested Date: Nov. 22 to 30, 2016

4.1.3 Test Procedure

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. 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 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 detect 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:

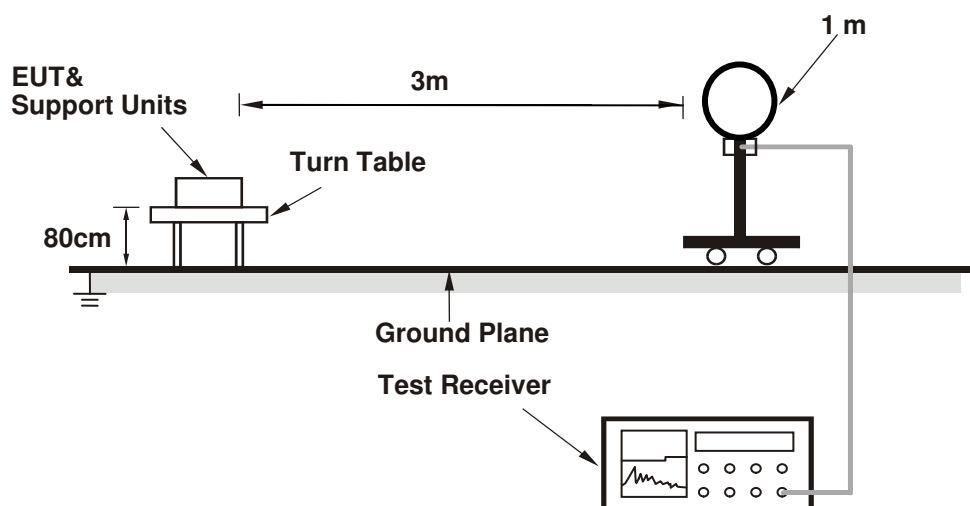
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

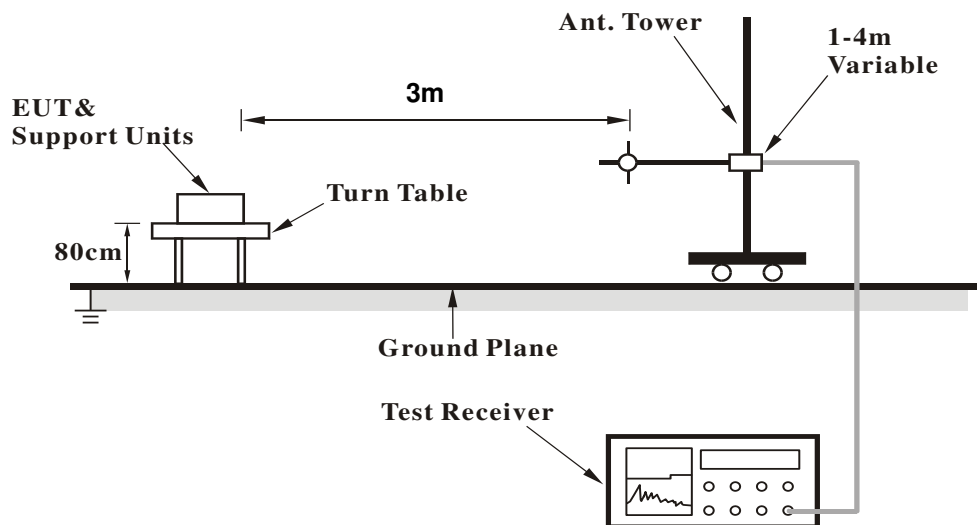
No deviation.

4.1.5 Test Setup

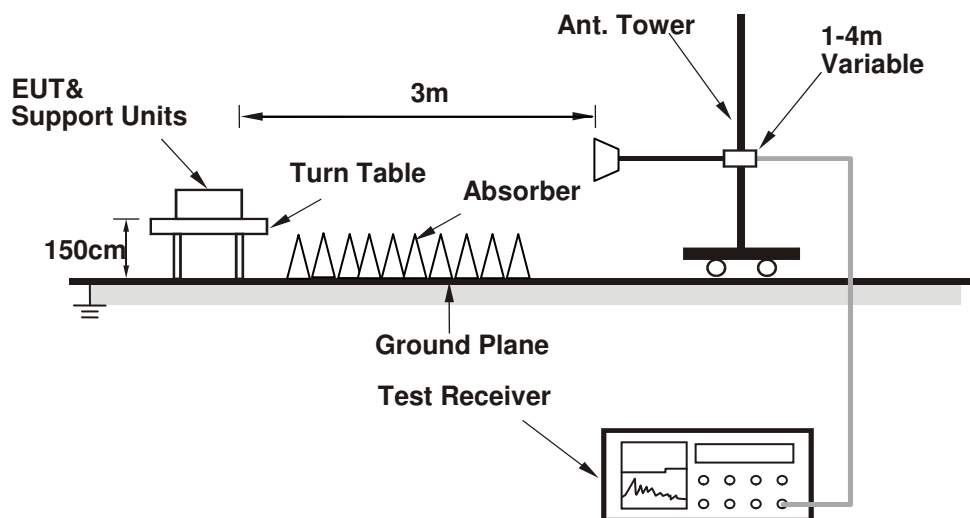
For Radiated emission below 30MHz



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).

4.1.6 EUT Operating Condition

The communication partner run test program “QRCT.exe (Ver3.0.124.0)” to enable EUT under transmission/receiving 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	50.9 PK	74.0	-23.1	1.00 H	230	49.4	1.5
2	5150.00	39.1 AV	54.0	-14.9	1.00 H	230	37.6	1.5
3	*5180.00	103.5 PK			1.00 H	233	101.9	1.6
4	*5180.00	93.0 AV			1.00 H	233	91.4	1.6
5	#10360.00	49.4 PK	74.0	-24.6	1.84 H	187	37.9	11.5
6	#10360.00	37.4 AV	54.0	-16.6	1.84 H	187	25.9	11.5
7	15540.00	50.9 PK	74.0	-23.1	2.64 H	333	37.8	13.1
8	15540.00	38.8 AV	54.0	-15.2	2.64 H	333	25.7	13.1
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	5150.00	51.1 PK	74.0	-22.9	1.00 V	130	49.6	1.5
2	5150.00	38.9 AV	54.0	-15.1	1.00 V	130	37.4	1.5
3	*5180.00	102.7 PK			1.00 V	130	101.1	1.6
4	*5180.00	91.9 AV			1.00 V	130	90.3	1.6
5	#10360.00	50.2 PK	74.0	-23.8	1.35 V	318	38.7	11.5
6	#10360.00	38.1 AV	54.0	-15.9	1.35 V	318	26.6	11.5
7	15540.00	50.6 PK	74.0	-23.4	3.58 V	163	37.5	13.1
8	15540.00	38.4 AV	54.0	-15.6	3.58 V	163	25.3	13.1

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 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	103.0 PK			1.00 H	223	101.3	1.7
2	*5200.00	92.4 AV			1.00 H	223	90.7	1.7
3	#10400.00	49.7 PK	74.0	-24.3	1.84 H	186	38.1	11.6
4	#10400.00	37.9 AV	54.0	-16.1	1.84 H	186	26.3	11.6
5	15600.00	50.8 PK	74.0	-23.2	2.67 H	334	37.7	13.1
6	15600.00	38.4 AV	54.0	-15.6	2.67 H	334	25.3	13.1
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	*5200.00	102.5 PK			1.00 V	133	100.8	1.7
2	*5200.00	92.0 AV			1.00 V	133	90.3	1.7
3	#10400.00	50.6 PK	74.0	-23.4	1.37 V	330	39.0	11.6
4	#10400.00	38.5 AV	54.0	-15.5	1.37 V	330	26.9	11.6
5	15600.00	50.5 PK	74.0	-23.5	3.58 V	169	37.4	13.1
6	15600.00	38.4 AV	54.0	-15.6	3.58 V	169	25.3	13.1

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 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	103.4 PK			1.00 H	228	101.8	1.6
2	*5240.00	92.6 AV			1.00 H	228	91.0	1.6
3	5350.00	51.7 PK	74.0	-22.3	1.00 H	228	49.8	1.9
4	5350.00	39.5 AV	54.0	-14.5	1.00 H	228	37.6	1.9
5	#10480.00	49.1 PK	74.0	-24.9	1.86 H	177	37.1	12.0
6	#10480.00	37.5 AV	54.0	-16.5	1.86 H	177	25.5	12.0
7	15720.00	50.8 PK	74.0	-23.2	2.63 H	334	37.6	13.2
8	15720.00	38.2 AV	54.0	-15.8	2.63 H	334	25.0	13.2
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	*5240.00	102.4 PK			1.00 V	139	100.8	1.6
2	*5240.00	92.1 AV			1.00 V	139	90.5	1.6
3	5350.00	52.3 PK	74.0	-21.7	1.00 V	139	50.4	1.9
4	5350.00	40.4 AV	54.0	-13.6	1.00 V	139	38.5	1.9
5	#10480.00	50.2 PK	74.0	-23.8	1.37 V	344	38.2	12.0
6	#10480.00	38.1 AV	54.0	-15.9	1.37 V	344	26.1	12.0
7	15720.00	51.1 PK	74.0	-22.9	3.63 V	158	37.9	13.2
8	15720.00	38.8 AV	54.0	-15.2	3.63 V	158	25.6	13.2

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 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	51.9 PK	74.0	-22.1	1.00 H	230	50.4	1.5
2	5150.00	39.1 AV	54.0	-14.9	1.00 H	230	37.6	1.5
3	*5260.00	102.4 PK			1.00 H	230	100.7	1.7
4	*5260.00	92.0 AV			1.00 H	230	90.3	1.7
5	#10520.00	50.7 PK	74.0	-23.3	1.83 H	199	38.4	12.3
6	#10520.00	38.9 AV	54.0	-15.1	1.83 H	199	26.6	12.3
7	15780.00	51.7 PK	74.0	-22.3	2.66 H	338	38.6	13.1
8	15780.00	39.1 AV	54.0	-14.9	2.66 H	338	26.0	13.1

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	5150.00	52.1 PK	74.0	-21.9	1.00 V	145	50.6	1.5
2	5150.00	39.7 AV	54.0	-14.3	1.00 V	145	38.2	1.5
3	*5260.00	102.9 PK			1.00 V	145	101.2	1.7
4	*5260.00	92.1 AV			1.00 V	145	90.4	1.7
5	#10520.00	50.4 PK	74.0	-23.6	3.64 V	186	38.1	12.3
6	#10520.00	39.2 AV	54.0	-14.8	3.64 V	186	26.9	12.3
7	15780.00	50.9 PK	74.0	-23.1	1.10 V	155	37.8	13.1
8	15780.00	38.5 AV	54.0	-15.5	1.10 V	155	25.4	13.1

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 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	101.6 PK			1.00 H	229	99.8	1.8
2	*5300.00	90.3 AV			1.00 H	229	88.5	1.8
3	10600.00	50.1 PK	74.0	-23.9	1.79 H	208	37.6	12.5
4	10600.00	38.5 AV	54.0	-15.5	1.79 H	208	26.0	12.5
5	15900.00	51.4 PK	74.0	-22.6	2.62 H	346	38.4	13.0
6	15900.00	38.7 AV	54.0	-15.3	2.62 H	346	25.7	13.0
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	101.0 PK			1.00 V	143	99.2	1.8
2	*5300.00	91.0 AV			1.00 V	143	89.2	1.8
3	10600.00	51.0 PK	74.0	-23.0	3.59 V	171	38.5	12.5
4	10600.00	39.6 AV	54.0	-14.4	3.59 V	171	27.1	12.5
5	15900.00	50.8 PK	74.0	-23.2	1.05 V	140	37.8	13.0
6	15900.00	38.3 AV	54.0	-15.7	1.05 V	140	25.3	13.0

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.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

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	99.7 PK			1.00 H	233	97.9	1.8
2	*5320.00	89.5 AV			1.00 H	233	87.7	1.8
3	5350.00	52.1 PK	74.0	-21.9	1.00 H	233	50.2	1.9
4	5350.00	41.4 AV	54.0	-12.6	1.00 H	233	39.5	1.9
5	10640.00	49.4 PK	74.0	-24.6	1.84 H	208	36.9	12.5
6	10640.00	38.1 AV	54.0	-15.9	1.84 H	208	25.6	12.5
7	15960.00	51.0 PK	74.0	-23.0	2.62 H	331	38.1	12.9
8	15960.00	38.2 AV	54.0	-15.8	2.62 H	331	25.3	12.9
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	96.3 PK			1.00 V	151	94.5	1.8
2	*5320.00	88.9 AV			1.00 V	151	87.1	1.8
3	5350.00	55.4 PK	74.0	-18.6	1.00 V	151	53.5	1.9
4	5350.00	42.5 AV	54.0	-11.5	1.00 V	151	40.6	1.9
5	10640.00	51.2 PK	74.0	-22.8	3.62 V	182	38.7	12.5
6	10640.00	40.1 AV	54.0	-13.9	3.62 V	182	27.6	12.5
7	15960.00	51.5 PK	74.0	-22.5	1.05 V	144	38.6	12.9
8	15960.00	38.8 AV	54.0	-15.2	1.05 V	144	25.9	12.9

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.

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	#5470.00	52.9 PK	74.0	-21.1	1.00 H	240	50.8	2.1
2	#5470.00	41.1 AV	54.0	-12.9	1.00 H	240	39.0	2.1
3	*5500.00	97.0 PK			1.00 H	240	94.9	2.1
4	*5500.00	86.8 AV			1.00 H	240	84.7	2.1
5	11000.00	53.0 PK	74.0	-21.0	1.77 H	204	39.8	13.2
6	11000.00	39.4 AV	54.0	-14.6	1.77 H	204	26.2	13.2
7	#16500.00	52.8 PK	74.0	-21.2	2.57 H	344	37.8	15.0
8	#16500.00	41.7 AV	54.0	-12.3	2.57 H	344	26.7	15.0

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	#5470.00	52.4 PK	74.0	-21.6	1.00 V	160	50.3	2.1
2	#5470.00	41.3 AV	54.0	-12.7	1.00 V	160	39.2	2.1
3	*5500.00	98.7 PK			1.00 V	160	96.6	2.1
4	*5500.00	87.8 AV			1.00 V	160	85.7	2.1
5	11000.00	50.9 PK	74.0	-23.1	3.60 V	169	37.7	13.2
6	11000.00	39.6 AV	54.0	-14.4	3.60 V	169	26.4	13.2
7	#16500.00	50.5 PK	74.0	-23.5	1.10 V	141	35.5	15.0
8	#16500.00	37.9 AV	54.0	-16.1	1.10 V	141	22.9	15.0

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.
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	98.6 PK			1.00 H	238	96.3	2.3
2	*5580.00	87.6 AV			1.00 H	238	85.3	2.3
3	11160.00	52.2 PK	74.0	-21.8	1.74 H	194	39.1	13.1
4	11160.00	38.9 AV	54.0	-15.1	1.74 H	194	25.8	13.1
5	#16740.00	52.4 PK	74.0	-21.6	2.57 H	331	36.3	16.1
6	#16740.00	41.2 AV	54.0	-12.8	2.57 H	331	25.1	16.1
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	98.9 PK			1.00 V	157	96.6	2.3
2	*5580.00	89.2 AV			1.00 V	157	86.9	2.3
3	11160.00	51.1 PK	74.0	-22.9	3.66 V	179	38.0	13.1
4	11160.00	40.0 AV	54.0	-14.0	3.66 V	179	26.9	13.1
5	#16740.00	50.3 PK	74.0	-23.7	1.03 V	145	34.2	16.1
6	#16740.00	38.1 AV	54.0	-15.9	1.03 V	145	22.0	16.1

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	96.9 PK			1.00 H	235	94.2	2.7
2	*5700.00	86.5 AV			1.00 H	235	83.8	2.7
3	#5725.00	59.7 PK	74.0	-14.3	1.00 H	235	57.0	2.7
4	#5725.00	44.7 AV	54.0	-9.3	1.00 H	235	42.0	2.7
5	11400.00	52.2 PK	74.0	-21.8	1.73 H	191	38.9	13.3
6	11400.00	38.8 AV	54.0	-15.2	1.73 H	191	25.5	13.3
7	#17100.00	53.0 PK	74.0	-21.0	2.51 H	343	35.3	17.7
8	#17100.00	41.6 AV	54.0	-12.4	2.51 H	343	23.9	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	*5700.00	98.3 PK			1.00 V	173	95.6	2.7
2	*5700.00	87.2 AV			1.00 V	173	84.5	2.7
3	#5725.00	52.7 PK	74.0	-21.3	1.00 V	173	50.0	2.7
4	#5725.00	40.7 AV	54.0	-13.3	1.00 V	173	38.0	2.7
5	11400.00	51.3 PK	74.0	-22.7	3.68 V	171	38.0	13.3
6	11400.00	40.2 AV	54.0	-13.8	3.68 V	171	26.9	13.3
7	#17100.00	50.0 PK	74.0	-24.0	1.00 V	140	32.3	17.7
8	#17100.00	37.7 AV	54.0	-16.3	1.00 V	140	20.0	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 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	#5645.95	58.5 PK	68.2	-9.7	1.13 H	238	56.0	2.5
2	*5745.00	97.0 PK			1.13 H	238	94.3	2.7
3	*5745.00	87.3 AV			1.13 H	238	84.6	2.7
4	#5978.93	57.0 PK	68.2	-11.2	1.13 H	238	53.8	3.2
5	11490.00	51.3 PK	74.0	-22.7	1.78 H	208	37.9	13.4
6	11490.00	39.1 AV	54.0	-14.9	1.78 H	208	25.7	13.4
7	#17235.00	54.5 PK	74.0	-19.5	2.52 H	322	36.2	18.3
8	#17235.00	43.2 AV	54.0	-10.8	2.52 H	322	24.9	18.3

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	#5597.02	57.9 PK	68.2	-10.3	1.00 V	115	55.6	2.3
2	*5745.00	99.0 PK			1.00 V	114	96.3	2.7
3	*5745.00	88.0 AV			1.00 V	114	85.3	2.7
4	#6008.85	58.1 PK	68.2	-10.1	1.00 V	115	54.8	3.3
5	11490.00	51.7 PK	74.0	-22.3	3.74 V	188	38.3	13.4
6	11490.00	40.2 AV	54.0	-13.8	3.74 V	188	26.8	13.4
7	#17235.00	57.0 PK	74.0	-17.0	1.06 V	153	38.7	18.3
8	#17235.00	44.0 AV	54.0	-10.0	1.06 V	153	25.7	18.3

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 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	#5600.35	57.9 PK	68.2	-10.3	1.00 H	236	55.5	2.4
2	*5785.00	97.3 PK			1.00 H	236	94.6	2.7
3	*5785.00	87.2 AV			1.00 H	236	84.5	2.7
4	#5965.15	58.0 PK	68.2	-10.2	1.00 H	236	55.0	3.0
5	11570.00	50.9 PK	74.0	-23.1	1.76 H	215	37.8	13.1
6	11570.00	38.6 AV	54.0	-15.4	1.76 H	215	25.5	13.1
7	#17355.00	54.4 PK	74.0	-19.6	2.53 H	337	35.6	18.8
8	#17355.00	43.4 AV	54.0	-10.6	2.53 H	337	24.6	18.8

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	#5625.05	58.0 PK	68.2	-10.2	1.16 V	146	55.5	2.5
2	*5785.00	98.3 PK			1.16 V	146	95.6	2.7
3	*5785.00	87.5 AV			1.16 V	146	84.8	2.7
4	#5985.57	58.2 PK	68.2	-10.0	1.16 V	146	55.0	3.2
5	11570.00	51.6 PK	74.0	-22.4	3.69 V	186	38.5	13.1
6	11570.00	40.5 AV	54.0	-13.5	3.69 V	186	27.4	13.1
7	#17355.00	56.5 PK	74.0	-17.5	1.01 V	153	37.7	18.8
8	#17355.00	43.6 AV	54.0	-10.4	1.01 V	153	24.8	18.8

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 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	#5586.10	57.6 PK	68.2	-10.6	1.00 H	239	55.3	2.3
2	*5825.00	98.1 PK			1.00 H	239	95.4	2.7
3	*5825.00	87.0 AV			1.00 H	239	84.3	2.7
4	#6010.27	58.0 PK	68.2	-10.2	1.00 H	239	54.7	3.3
5	11650.00	50.4 PK	74.0	-23.6	1.69 H	216	37.3	13.1
6	11650.00	38.8 AV	54.0	-15.2	1.69 H	216	25.7	13.1
7	#17475.00	55.1 PK	74.0	-18.9	2.63 H	328	35.9	19.2
8	#17475.00	43.5 AV	54.0	-10.5	2.63 H	328	24.3	19.2

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	#5627.90	57.9 PK	68.2	-10.3	1.19 V	143	55.4	2.5
2	*5825.00	97.7 PK			1.19 V	143	95.0	2.7
3	*5825.00	88.2 AV			1.19 V	143	85.5	2.7
4	#6006.95	57.8 PK	68.2	-10.4	1.19 V	143	54.5	3.3
5	11650.00	51.5 PK	74.0	-22.5	3.70 V	185	38.4	13.1
6	11650.00	40.2 AV	54.0	-13.8	3.70 V	185	27.1	13.1
7	#17475.00	56.5 PK	74.0	-17.5	1.02 V	139	37.3	19.2
8	#17475.00	43.6 AV	54.0	-10.4	1.02 V	139	24.4	19.2

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.

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	56.8 PK	74.0	-17.2	1.00 H	233	55.3	1.5
2	5150.00	44.8 AV	54.0	-9.2	1.00 H	233	43.3	1.5
3	*5180.00	102.7 PK			1.00 H	233	101.1	1.6
4	*5180.00	93.0 AV			1.00 H	233	91.4	1.6
5	#10360.00	49.5 PK	74.0	-24.5	1.79 H	174	38.0	11.5
6	#10360.00	37.5 AV	54.0	-16.5	1.79 H	174	26.0	11.5
7	15540.00	51.0 PK	74.0	-23.0	2.71 H	343	37.9	13.1
8	15540.00	38.7 AV	54.0	-15.3	2.71 H	343	25.6	13.1
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	5150.00	55.9 PK	74.0	-18.1	1.00 V	138	54.4	1.5
2	5150.00	43.1 AV	54.0	-10.9	1.00 V	138	41.6	1.5
3	*5180.00	101.9 PK			1.00 V	138	100.3	1.6
4	*5180.00	91.2 AV			1.00 V	138	89.6	1.6
5	#10360.00	50.6 PK	74.0	-23.4	1.40 V	318	39.1	11.5
6	#10360.00	38.5 AV	54.0	-15.5	1.40 V	318	27.0	11.5
7	15540.00	50.7 PK	74.0	-23.3	3.53 V	183	37.6	13.1
8	15540.00	38.8 AV	54.0	-15.2	3.53 V	183	25.7	13.1

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 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	103.8 PK			1.00 H	234	102.1	1.7
2	*5200.00	93.7 AV			1.00 H	234	92.0	1.7
3	#10400.00	49.6 PK	74.0	-24.4	1.84 H	185	38.0	11.6
4	#10400.00	38.0 AV	54.0	-16.0	1.84 H	185	26.4	11.6
5	15600.00	50.4 PK	74.0	-23.6	2.62 H	348	37.3	13.1
6	15600.00	38.3 AV	54.0	-15.7	2.62 H	348	25.2	13.1
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	*5200.00	103.2 PK			1.08 V	143	101.5	1.7
2	*5200.00	93.1 AV			1.08 V	143	91.4	1.7
3	#10400.00	50.7 PK	74.0	-23.3	1.35 V	328	39.1	11.6
4	#10400.00	38.6 AV	54.0	-15.4	1.35 V	328	27.0	11.6
5	15600.00	50.3 PK	74.0	-23.7	3.53 V	168	37.2	13.1
6	15600.00	38.2 AV	54.0	-15.8	3.53 V	168	25.1	13.1

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 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	102.7 PK			1.00 H	238	101.1	1.6
2	*5240.00	93.1 AV			1.00 H	238	91.5	1.6
3	5350.00	53.4 PK	74.0	-20.6	1.00 H	238	51.5	1.9
4	5350.00	39.4 AV	54.0	-14.6	1.00 H	238	37.5	1.9
5	#10480.00	50.4 PK	74.0	-23.6	1.82 H	191	38.4	12.0
6	#10480.00	38.3 AV	54.0	-15.7	1.82 H	191	26.3	12.0
7	15720.00	50.6 PK	74.0	-23.4	2.61 H	326	37.4	13.2
8	15720.00	38.1 AV	54.0	-15.9	2.61 H	326	24.9	13.2

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	*5240.00	102.3 PK			1.11 V	140	100.7	1.6
2	*5240.00	92.8 AV			1.11 V	140	91.2	1.6
3	5350.00	52.4 PK	74.0	-21.6	1.11 V	251	50.5	1.9
4	5350.00	39.5 AV	54.0	-14.5	1.11 V	251	37.6	1.9
5	#10480.00	50.5 PK	74.0	-23.5	1.33 V	334	38.5	12.0
6	#10480.00	38.6 AV	54.0	-15.4	1.33 V	334	26.6	12.0
7	15720.00	50.7 PK	74.0	-23.3	3.63 V	158	37.5	13.2
8	15720.00	38.4 AV	54.0	-15.6	3.63 V	158	25.2	13.2

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 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	52.7 PK	74.0	-21.3	1.00 H	218	51.2	1.5
2	5150.00	40.2 AV	54.0	-13.8	1.00 H	218	38.7	1.5
3	*5260.00	101.1 PK			1.00 H	218	99.4	1.7
4	*5260.00	92.4 AV			1.00 H	218	90.7	1.7
5	#10520.00	50.4 PK	74.0	-23.6	1.77 H	197	38.1	12.3
6	#10520.00	38.6 AV	54.0	-15.4	1.77 H	197	26.3	12.3
7	15780.00	51.3 PK	74.0	-22.7	2.64 H	359	38.2	13.1
8	15780.00	38.9 AV	54.0	-15.1	2.64 H	359	25.8	13.1

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	5150.00	53.9 PK	74.0	-20.1	1.00 V	134	52.4	1.5
2	5150.00	39.8 AV	54.0	-14.2	1.00 V	134	38.3	1.5
3	*5260.00	101.7 PK			1.00 V	134	100.0	1.7
4	*5260.00	92.4 AV			1.00 V	134	90.7	1.7
5	#10520.00	50.3 PK	74.0	-23.7	3.61 V	195	38.0	12.3
6	#10520.00	38.8 AV	54.0	-15.2	3.61 V	195	26.5	12.3
7	15780.00	51.1 PK	74.0	-22.9	1.04 V	143	38.0	13.1
8	15780.00	39.0 AV	54.0	-15.0	1.04 V	143	25.9	13.1

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 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	100.5 PK			1.14 H	220	98.7	1.8
2	*5300.00	91.2 AV			1.14 H	220	89.4	1.8
3	10600.00	50.4 PK	74.0	-23.6	1.84 H	202	37.9	12.5
4	10600.00	38.8 AV	54.0	-15.2	1.84 H	202	26.3	12.5
5	15900.00	51.6 PK	74.0	-22.4	2.58 H	345	38.6	13.0
6	15900.00	38.6 AV	54.0	-15.4	2.58 H	345	25.6	13.0
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	101.6 PK			1.00 V	142	99.8	1.8
2	*5300.00	92.3 AV			1.00 V	142	90.5	1.8
3	10600.00	50.1 PK	74.0	-23.9	3.68 V	190	37.6	12.5
4	10600.00	39.2 AV	54.0	-14.8	3.68 V	190	26.7	12.5
5	15900.00	50.4 PK	74.0	-23.6	1.14 V	152	37.4	13.0
6	15900.00	38.1 AV	54.0	-15.9	1.14 V	152	25.1	13.0

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.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

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	100.0 PK			1.00 H	216	98.2	1.8
2	*5320.00	90.6 AV			1.00 H	216	88.8	1.8
3	5350.00	53.9 PK	74.0	-20.1	1.00 H	216	52.0	1.9
4	5350.00	42.0 AV	54.0	-12.0	1.00 H	216	40.1	1.9
5	10640.00	49.9 PK	74.0	-24.1	1.73 H	205	37.4	12.5
6	10640.00	38.3 AV	54.0	-15.7	1.73 H	205	25.8	12.5
7	15960.00	51.8 PK	74.0	-22.2	2.61 H	332	38.9	12.9
8	15960.00	39.0 AV	54.0	-15.0	2.61 H	332	26.1	12.9
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	101.4 PK			1.07 V	144	99.6	1.8
2	*5320.00	91.6 AV			1.07 V	144	89.8	1.8
3	5350.00	53.5 PK	74.0	-20.5	1.07 V	144	51.6	1.9
4	5350.00	42.8 AV	54.0	-11.2	1.07 V	144	40.9	1.9
5	10640.00	49.9 PK	74.0	-24.1	3.58 V	180	37.4	12.5
6	10640.00	38.8 AV	54.0	-15.2	3.58 V	180	26.3	12.5
7	15960.00	51.2 PK	74.0	-22.8	1.04 V	140	38.3	12.9
8	15960.00	38.8 AV	54.0	-15.2	1.04 V	140	25.9	12.9

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.

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	#5470.00	53.5 PK	74.0	-20.5	1.00 H	233	51.4	2.1
2	#5470.00	41.8 AV	54.0	-12.2	1.00 H	233	39.7	2.1
3	*5500.00	96.9 PK			1.00 H	233	94.8	2.1
4	*5500.00	87.6 AV			1.00 H	233	85.5	2.1
5	11000.00	52.4 PK	74.0	-21.6	1.70 H	183	39.2	13.2
6	11000.00	39.4 AV	54.0	-14.6	1.70 H	183	26.2	13.2
7	#16500.00	51.8 PK	74.0	-22.2	2.53 H	327	36.8	15.0
8	#16500.00	40.9 AV	54.0	-13.1	2.53 H	327	25.9	15.0

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	#5470.00	55.1 PK	74.0	-18.9	1.12 V	146	53.0	2.1
2	#5470.00	41.5 AV	54.0	-12.5	1.12 V	146	39.4	2.1
3	*5500.00	97.9 PK			1.12 V	146	95.8	2.1
4	*5500.00	88.4 AV			1.12 V	146	86.3	2.1
5	11000.00	51.4 PK	74.0	-22.6	3.61 V	174	38.2	13.2
6	11000.00	40.3 AV	54.0	-13.7	3.61 V	174	27.1	13.2
7	#16500.00	51.0 PK	74.0	-23.0	1.05 V	142	36.0	15.0
8	#16500.00	38.5 AV	54.0	-15.5	1.05 V	142	23.5	15.0

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.
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	98.9 PK			1.00 H	231	96.6	2.3
2	*5580.00	89.8 AV			1.00 H	231	87.5	2.3
3	11160.00	52.0 PK	74.0	-22.0	1.78 H	188	38.9	13.1
4	11160.00	38.6 AV	54.0	-15.4	1.78 H	188	25.5	13.1
5	#16740.00	52.7 PK	74.0	-21.3	2.59 H	323	36.6	16.1
6	#16740.00	41.7 AV	54.0	-12.3	2.59 H	323	25.6	16.1
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	99.4 PK			1.00 V	166	97.1	2.3
2	*5580.00	89.7 AV			1.00 V	166	87.4	2.3
3	11160.00	50.8 PK	74.0	-23.2	3.70 V	192	37.7	13.1
4	11160.00	39.9 AV	54.0	-14.1	3.70 V	192	26.8	13.1
5	#16740.00	49.9 PK	74.0	-24.1	1.03 V	138	33.8	16.1
6	#16740.00	37.7 AV	54.0	-16.3	1.03 V	138	21.6	16.1

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	97.8 PK			1.00 H	225	95.1	2.7
2	*5700.00	88.6 AV			1.00 H	225	85.9	2.7
3	#5725.00	56.3 PK	74.0	-17.7	1.00 H	255	53.6	2.7
4	#5725.00	45.0 AV	54.0	-9.0	1.00 H	255	42.3	2.7
5	11400.00	52.1 PK	74.0	-21.9	1.79 H	207	38.8	13.3
6	11400.00	38.6 AV	54.0	-15.4	1.79 H	207	25.3	13.3
7	#17100.00	52.0 PK	74.0	-22.0	2.60 H	323	34.3	17.7
8	#17100.00	40.9 AV	54.0	-13.1	2.60 H	323	23.2	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	*5700.00	97.8 PK			1.33 V	158	95.1	2.7
2	*5700.00	89.1 AV			1.33 V	158	86.4	2.7
3	#5725.00	55.9 PK	74.0	-18.1	1.33 V	158	53.2	2.7
4	#5725.00	45.2 AV	54.0	-8.8	1.33 V	158	42.5	2.7
5	11400.00	50.9 PK	74.0	-23.1	3.60 V	179	37.6	13.3
6	11400.00	39.7 AV	54.0	-14.3	3.60 V	179	26.4	13.3
7	#17100.00	50.5 PK	74.0	-23.5	1.08 V	134	32.8	17.7
8	#17100.00	38.3 AV	54.0	-15.7	1.08 V	134	20.6	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 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	#5622.20	57.0 PK	68.2	-11.2	1.00 H	230	54.5	2.5
2	*5745.00	96.5 PK			1.00 H	230	93.8	2.7
3	*5745.00	87.4 AV			1.00 H	230	84.7	2.7
4	#5975.60	57.9 PK	68.2	-10.3	1.00 H	230	54.8	3.1
5	11490.00	51.0 PK	74.0	-23.0	1.76 H	227	37.6	13.4
6	11490.00	38.8 AV	54.0	-15.2	1.76 H	227	25.4	13.4
7	#17235.00	54.8 PK	74.0	-19.2	2.52 H	349	36.5	18.3
8	#17235.00	43.6 AV	54.0	-10.4	2.52 H	349	25.3	18.3

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	#5645.48	57.5 PK	68.2	-10.7	1.00 V	171	55.0	2.5
2	*5745.00	97.5 PK			1.00 V	171	94.8	2.7
3	*5745.00	88.1 AV			1.00 V	171	85.4	2.7
4	#6006.95	57.6 PK	68.2	-10.6	1.00 V	171	54.3	3.3
5	11490.00	51.1 PK	74.0	-22.9	3.70 V	188	37.7	13.4
6	11490.00	40.2 AV	54.0	-13.8	3.70 V	188	26.8	13.4
7	#17235.00	56.0 PK	74.0	-18.0	1.00 V	159	37.7	18.3
8	#17235.00	43.2 AV	54.0	-10.8	1.00 V	159	24.9	18.3

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 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	#5624.10	58.2 PK	68.2	-10.0	1.00 H	233	55.7	2.5
2	*5785.00	99.2 PK			1.00 H	233	96.5	2.7
3	*5785.00	88.0 AV			1.00 H	233	85.3	2.7
4	#5940.93	57.6 PK	68.2	-10.6	1.00 H	233	54.7	2.9
5	11570.00	50.7 PK	74.0	-23.3	1.79 H	206	37.6	13.1
6	11570.00	38.3 AV	54.0	-15.7	1.79 H	206	25.2	13.1
7	#17355.00	54.5 PK	74.0	-19.5	2.55 H	334	35.7	18.8
8	#17355.00	43.7 AV	54.0	-10.3	2.55 H	334	24.9	18.8

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	#5627.43	57.5 PK	68.2	-10.7	1.00 V	113	55.0	2.5
2	*5785.00	98.9 PK			1.00 V	113	96.2	2.7
3	*5785.00	89.4 AV			1.00 V	113	86.7	2.7
4	#5958.98	57.5 PK	68.2	-10.7	1.00 V	113	54.5	3.0
5	11570.00	51.3 PK	74.0	-22.7	3.70 V	201	38.2	13.1
6	11570.00	40.3 AV	54.0	-13.7	3.70 V	201	27.2	13.1
7	#17355.00	56.4 PK	74.0	-17.6	1.05 V	162	37.6	18.8
8	#17355.00	43.7 AV	54.0	-10.3	1.05 V	162	24.9	18.8

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 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	#5619.82	57.0 PK	68.2	-11.2	1.00 H	239	54.5	2.5
2	*5825.00	97.3 PK			1.00 H	239	94.6	2.7
3	*5825.00	87.8 AV			1.00 H	239	85.1	2.7
4	#5978.93	56.4 PK	68.2	-11.8	1.00 H	239	53.2	3.2
5	11650.00	50.5 PK	74.0	-23.5	1.76 H	212	37.4	13.1
6	11650.00	38.2 AV	54.0	-15.8	1.76 H	212	25.1	13.1
7	#17475.00	54.3 PK	74.0	-19.7	2.54 H	323	35.1	19.2
8	#17475.00	43.1 AV	54.0	-10.9	2.54 H	323	23.9	19.2
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	#5562.82	57.1 PK	68.2	-11.1	1.00 V	113	54.8	2.3
2	*5825.00	99.2 PK			1.00 V	114	96.5	2.7
3	*5825.00	90.0 AV			1.00 V	114	87.3	2.7
4	#5995.07	57.9 PK	68.2	-10.3	1.00 V	113	54.6	3.3
5	11650.00	51.3 PK	74.0	-22.7	3.70 V	187	38.2	13.1
6	11650.00	40.1 AV	54.0	-13.9	3.70 V	187	27.0	13.1
7	#17475.00	56.8 PK	74.0	-17.2	1.00 V	161	37.6	19.2
8	#17475.00	43.6 AV	54.0	-10.4	1.00 V	161	24.4	19.2

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.

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	64.9 PK	74.0	-9.1	1.00 H	238	63.4	1.5
2	5150.00	53.7 AV	54.0	-0.3	1.00 H	238	52.2	1.5
3	*5190.00	100.6 PK			1.00 H	238	98.9	1.7
4	*5190.00	90.8 AV			1.00 H	238	89.1	1.7
5	5350.00	51.7 PK	74.0	-22.3	1.00 H	238	49.8	1.9
6	5350.00	40.1 AV	54.0	-13.9	1.00 H	238	38.2	1.9
7	#10380.00	50.2 PK	74.0	-23.8	1.87 H	204	38.7	11.5
8	#10380.00	38.4 AV	54.0	-15.6	1.87 H	204	26.9	11.5
9	15570.00	50.4 PK	74.0	-23.6	2.58 H	312	37.3	13.1
10	15570.00	37.9 AV	54.0	-16.1	2.58 H	312	24.8	13.1
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	5150.00	68.7 PK	74.0	-5.3	1.00 V	138	67.2	1.5
2	5150.00	52.4 AV	54.0	-1.6	1.00 V	138	50.9	1.5
3	*5190.00	99.6 PK			1.00 V	138	97.9	1.7
4	*5190.00	89.6 AV			1.00 V	138	87.9	1.7
5	5350.00	51.9 PK	74.0	-22.1	1.00 V	138	50.0	1.9
6	5350.00	40.0 AV	54.0	-14.0	1.00 V	138	38.1	1.9
7	#10380.00	50.7 PK	74.0	-23.3	1.37 V	328	39.2	11.5
8	#10380.00	39.0 AV	54.0	-15.0	1.37 V	328	27.5	11.5
9	15570.00	50.5 PK	74.0	-23.5	3.60 V	159	37.4	13.1
10	15570.00	38.2 AV	54.0	-15.8	3.60 V	159	25.1	13.1

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 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	100.0 PK			1.02 H	221	98.4	1.6
2	*5230.00	90.3 AV			1.02 H	221	88.7	1.6
3	5350.00	51.6 PK	74.0	-22.4	1.02 H	221	49.7	1.9
4	5350.00	40.0 AV	54.0	-14.0	1.02 H	221	38.1	1.9
5	#10460.00	51.0 PK	74.0	-23.0	1.84 H	194	39.1	11.9
6	#10460.00	38.7 AV	54.0	-15.3	1.84 H	194	26.8	11.9
7	15690.00	50.4 PK	74.0	-23.6	2.55 H	337	37.1	13.3
8	15690.00	38.1 AV	54.0	-15.9	2.55 H	337	24.8	13.3

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	99.3 PK			1.00 V	134	97.7	1.6
2	*5230.00	90.0 AV			1.00 V	134	88.4	1.6
3	5350.00	52.4 PK	74.0	-21.6	1.00 V	134	50.5	1.9
4	5350.00	40.0 AV	54.0	-14.0	1.00 V	134	38.1	1.9
5	#10460.00	51.2 PK	74.0	-22.8	1.28 V	346	39.3	11.9
6	#10460.00	39.1 AV	54.0	-14.9	1.28 V	346	27.2	11.9
7	15690.00	51.2 PK	74.0	-22.8	3.59 V	144	37.9	13.3
8	15690.00	38.8 AV	54.0	-15.2	3.59 V	144	25.5	13.3

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	51.9 PK	74.0	-22.1	1.00 H	222	50.4	1.5
2	5150.00	40.1 AV	54.0	-13.9	1.00 H	222	38.6	1.5
3	*5270.00	98.8 PK			1.00 H	222	97.0	1.8
4	*5270.00	88.9 AV			1.00 H	222	87.1	1.8
5	#10540.00	50.5 PK	74.0	-23.5	1.83 H	215	38.2	12.3
6	#10540.00	39.2 AV	54.0	-14.8	1.83 H	215	26.9	12.3
7	15810.00	51.3 PK	74.0	-22.7	2.54 H	351	38.3	13.0
8	15810.00	38.5 AV	54.0	-15.5	2.54 H	351	25.5	13.0

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	52.7 PK	74.0	-21.3	1.00 V	140	51.2	1.5
2	5150.00	40.2 AV	54.0	-13.8	1.00 V	140	38.7	1.5
3	*5270.00	98.7 PK			1.00 V	140	96.9	1.8
4	*5270.00	88.5 AV			1.00 V	140	86.7	1.8
5	#10540.00	49.6 PK	74.0	-24.4	3.63 V	202	37.3	12.3
6	#10540.00	38.9 AV	54.0	-15.1	3.63 V	202	26.6	12.3
7	15810.00	49.8 PK	74.0	-24.2	1.09 V	165	36.8	13.0
8	15810.00	37.7 AV	54.0	-16.3	1.09 V	165	24.7	13.0

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.
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	98.4 PK			1.00 H	233	96.6	1.8
2	*5310.00	90.5 AV			1.00 H	233	88.7	1.8
3	5350.00	63.8 PK	74.0	-10.2	1.00 H	233	61.9	1.9
4	5350.00	52.9 AV	54.0	-1.1	1.00 H	233	51.0	1.9
5	10620.00	50.4 PK	74.0	-23.6	1.82 H	209	37.9	12.5
6	10620.00	38.8 AV	54.0	-15.2	1.82 H	209	26.3	12.5
7	15930.00	51.8 PK	74.0	-22.2	2.53 H	360	38.8	13.0
8	15930.00	39.0 AV	54.0	-15.0	2.53 H	360	26.0	13.0
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	100.4 PK			1.00 V	138	98.6	1.8
2	*5310.00	90.1 AV			1.00 V	138	88.3	1.8
3	5350.00	63.4 PK	74.0	-10.6	1.00 V	138	61.5	1.9
4	5350.00	53.0 AV	54.0	-1.0	1.00 V	138	51.1	1.9
5	10620.00	50.8 PK	74.0	-23.2	3.63 V	187	38.3	12.5
6	10620.00	39.7 AV	54.0	-14.3	3.63 V	187	27.2	12.5
7	15930.00	50.1 PK	74.0	-23.9	1.16 V	166	37.1	13.0
8	15930.00	37.9 AV	54.0	-16.1	1.16 V	166	24.9	13.0

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.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

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	#5470.00	64.9 PK	74.0	-9.1	1.00 H	225	62.8	2.1
2	#5470.00	51.5 AV	54.0	-2.5	1.00 H	225	49.4	2.1
3	*5510.00	97.5 PK			1.00 H	225	95.4	2.1
4	*5510.00	87.7 AV			1.00 H	225	85.6	2.1
5	11020.00	52.3 PK	74.0	-21.7	1.74 H	167	39.1	13.2
6	11020.00	39.2 AV	54.0	-14.8	1.74 H	167	26.0	13.2
7	#16530.00	51.3 PK	74.0	-22.7	2.50 H	333	35.9	15.4
8	#16530.00	40.7 AV	54.0	-13.3	2.50 H	333	25.3	15.4

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	#5470.00	64.7 PK	74.0	-9.3	1.03 V	155	62.6	2.1
2	#5470.00	50.2 AV	54.0	-3.8	1.03 V	155	48.1	2.1
3	*5510.00	97.0 PK			1.03 V	155	94.9	2.1
4	*5510.00	86.6 AV			1.03 V	155	84.5	2.1
5	11020.00	51.1 PK	74.0	-22.9	3.67 V	165	37.9	13.2
6	11020.00	39.8 AV	54.0	-14.2	3.67 V	165	26.6	13.2
7	#16530.00	50.3 PK	74.0	-23.7	1.01 V	148	34.9	15.4
8	#16530.00	38.0 AV	54.0	-16.0	1.01 V	148	22.6	15.4

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 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	98.1 PK			1.00 H	226	95.8	2.3
2	*5550.00	88.9 AV			1.00 H	226	86.6	2.3
3	11100.00	52.4 PK	74.0	-21.6	1.72 H	174	39.4	13.0
4	11100.00	39.6 AV	54.0	-14.4	1.72 H	174	26.6	13.0
5	#16650.00	52.2 PK	74.0	-21.8	2.57 H	326	36.1	16.1
6	#16650.00	41.1 AV	54.0	-12.9	2.57 H	326	25.0	16.1
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	*5550.00	98.6 PK			1.05 V	113	96.3	2.3
2	*5550.00	87.4 AV			1.05 V	113	85.1	2.3
3	11100.00	50.9 PK	74.0	-23.1	3.59 V	160	37.9	13.0
4	11100.00	40.1 AV	54.0	-13.9	3.59 V	160	27.1	13.0
5	#16650.00	51.0 PK	74.0	-23.0	1.02 V	153	34.9	16.1
6	#16650.00	38.2 AV	54.0	-15.8	1.02 V	153	22.1	16.1

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 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	98.6 PK			1.00 H	230	96.1	2.5
2	*5670.00	89.1 AV			1.00 H	230	86.6	2.5
3	#5725.00	55.3 PK	74.0	-18.7	1.00 H	230	52.6	2.7
4	#5725.00	45.4 AV	54.0	-8.6	1.00 H	230	42.7	2.7
5	11340.00	51.9 PK	74.0	-22.1	1.75 H	196	38.3	13.6
6	11340.00	38.7 AV	54.0	-15.3	1.75 H	196	25.1	13.6
7	#17010.00	52.6 PK	74.0	-21.4	2.63 H	330	34.8	17.8
8	#17010.00	41.4 AV	54.0	-12.6	2.63 H	330	23.6	17.8

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	*5670.00	97.6 PK			1.25 V	147	95.1	2.5
2	*5670.00	87.3 AV			1.25 V	147	84.8	2.5
3	#5725.00	56.0 PK	74.0	-18.0	1.25 V	147	53.3	2.7
4	#5725.00	43.7 AV	54.0	-10.3	1.25 V	147	41.0	2.7
5	11340.00	51.2 PK	74.0	-22.8	3.62 V	170	37.6	13.6
6	11340.00	40.0 AV	54.0	-14.0	3.62 V	170	26.4	13.6
7	#17010.00	50.8 PK	74.0	-23.2	1.08 V	149	33.0	17.8
8	#17010.00	38.5 AV	54.0	-15.5	1.08 V	149	20.7	17.8

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 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	#5647.37	58.3 PK	68.2	-9.9	1.00 H	231	55.8	2.5
2	*5755.00	95.7 PK			1.00 H	231	93.0	2.7
3	*5755.00	87.8 AV			1.00 H	231	85.1	2.7
4	#6020.73	58.6 PK	68.2	-9.6	1.00 H	231	55.3	3.3
5	11510.00	50.2 PK	74.0	-23.8	1.70 H	240	36.8	13.4
6	11510.00	38.3 AV	54.0	-15.7	1.70 H	240	24.9	13.4
7	#17265.00	54.4 PK	74.0	-19.6	2.57 H	360	36.1	18.3
8	#17265.00	43.2 AV	54.0	-10.8	2.57 H	360	24.9	18.3

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	#5610.32	59.4 PK	68.2	-8.8	1.00 V	137	56.9	2.5
2	*5755.00	95.7 PK			1.00 V	137	93.0	2.7
3	*5755.00	86.5 AV			1.00 V	137	83.8	2.7
4	#5955.65	58.5 PK	68.2	-9.7	1.00 V	137	55.5	3.0
5	11510.00	50.6 PK	74.0	-23.4	3.70 V	194	37.2	13.4
6	11510.00	39.7 AV	54.0	-14.3	3.70 V	194	26.3	13.4
7	#17265.00	56.3 PK	74.0	-17.7	1.00 V	158	38.0	18.3
8	#17265.00	43.4 AV	54.0	-10.6	1.00 V	158	25.1	18.3

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 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	#5637.40	57.2 PK	68.2	-11.0	1.00 H	230	54.7	2.5
2	*5795.00	94.9 PK			1.00 H	230	92.2	2.7
3	*5795.00	87.8 AV			1.00 H	230	85.1	2.7
4	#5937.60	58.1 PK	68.2	-10.1	1.00 H	230	55.2	2.9
5	11590.00	51.0 PK	74.0	-23.0	1.82 H	218	38.0	13.0
6	11590.00	38.6 AV	54.0	-15.4	1.82 H	218	25.6	13.0
7	#17385.00	54.7 PK	74.0	-19.3	2.51 H	360	35.7	19.0
8	#17385.00	43.3 AV	54.0	-10.7	2.51 H	360	24.3	19.0
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	#5635.50	58.1 PK	68.2	-10.1	1.15 V	145	55.6	2.5
2	*5795.00	95.6 PK			1.16 V	145	92.9	2.7
3	*5795.00	88.2 AV			1.16 V	145	85.5	2.7
4	#5990.80	58.0 PK	68.2	-10.2	1.15 V	145	54.7	3.3
5	11590.00	51.5 PK	74.0	-22.5	3.66 V	198	38.5	13.0
6	11590.00	40.5 AV	54.0	-13.5	3.66 V	198	27.5	13.0
7	#17385.00	56.2 PK	74.0	-17.8	1.02 V	143	37.2	19.0
8	#17385.00	43.4 AV	54.0	-10.6	1.02 V	143	24.4	19.0

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.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Below 1GHz Data:

802.11n (HT20)

CHANNEL	TX Channel 116	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	84.32	27.1 QP	40.0	-12.9	2.00 H	217	40.7	-13.6
2	137.65	29.5 QP	43.5	-14.0	2.00 H	283	38.7	-9.2
3	280.75	27.0 QP	46.0	-19.0	1.00 H	274	35.0	-8.0
4	311.83	27.3 QP	46.0	-18.7	1.00 H	42	34.3	-7.0
5	672.99	28.6 QP	46.0	-17.4	1.00 H	24	27.8	0.8
6	787.16	30.4 QP	46.0	-15.6	1.00 H	223	27.3	3.1
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	79.79	29.6 QP	40.0	-10.4	1.50 V	224	42.3	-12.7
2	158.74	29.7 QP	43.5	-13.8	1.00 V	106	38.0	-8.3
3	310.26	24.8 QP	46.0	-21.2	1.50 V	66	31.9	-7.1
4	615.71	29.5 QP	46.0	-16.5	1.00 V	200	29.3	0.2
5	673.01	29.6 QP	46.0	-16.4	1.50 V	350	28.8	0.8
6	916.85	31.8 QP	46.0	-14.2	1.50 V	345	27.1	4.7

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.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver R&S	ESCS 30	847124/029	Oct. 24, 2016	Oct. 23, 2017
Line-Impedance Stabilization Network (for EUT) R&S	ESH3-Z5	848773/004	Oct. 26, 2016	Oct. 25, 2017
Line-Impedance Stabilization Network (for Peripheral) R&S	ENV216	100072	June 13, 2016	June 12, 2017
RF Cable	5D-FB	COCCAB-001	Sep. 30, 2016	Sep. 29, 2017
10 dB PAD Mini-Circuits	HAT-10+	CONATT-004	June 20, 2016	June 19, 2017
Software BVADT	BVADT_Cond_ V7.3.7.4	NA	NA	NA

Note:

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Shielded Room No. 1.
- 3 Tested Date: Nov. 23, 2016

4.2.3 Test Procedure

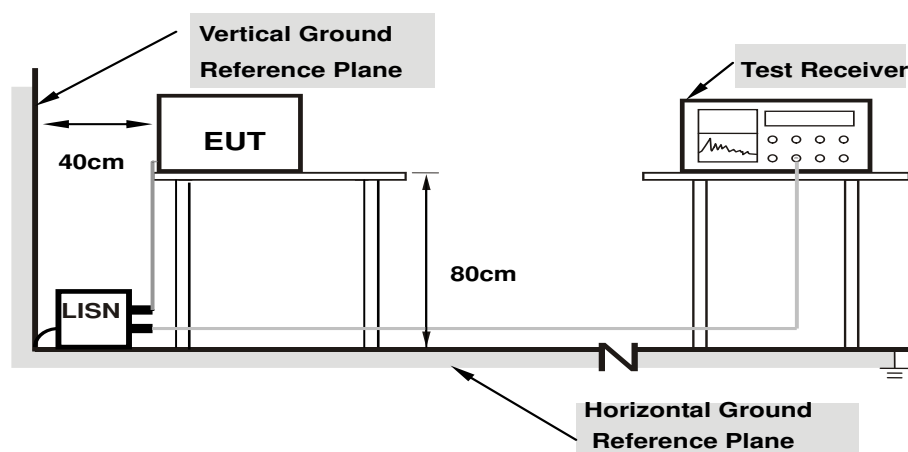
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance 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: All modes of operation were investigated and the worst-case emissions are reported.

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 Condition

Same as 4.1.6.

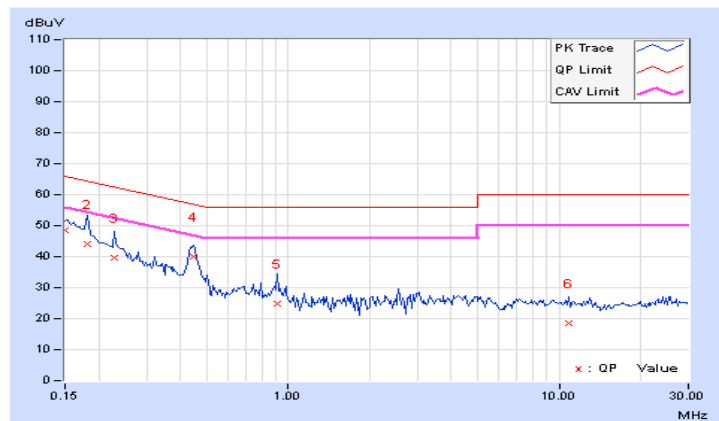
4.2.7 Test Results (Mode 1)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
-------	----------	-------------------	--------------------------------

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.20	38.30	23.49	48.50	33.69	66.00	56.00	-17.50	-22.31
2	0.18125	10.20	34.01	19.70	44.21	29.90	64.43	54.43	-20.22	-24.53
3	0.22812	10.21	29.36	16.97	39.57	27.18	62.52	52.52	-22.95	-25.34
4	0.44688	10.24	29.70	20.45	39.94	30.69	56.93	46.93	-16.99	-16.24
5	0.91172	10.29	14.37	6.56	24.66	16.85	56.00	46.00	-31.34	-29.15
6	10.85156	10.83	7.54	0.27	18.37	11.10	60.00	50.00	-41.63	-38.90

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



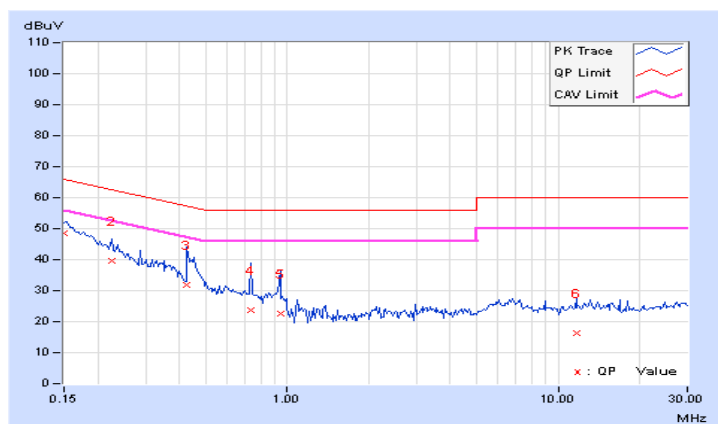
Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 75%RH
Tested by	Andy		
Test Mode	Mode 1		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.19	38.21	22.73	48.40	32.92	66.00	56.00	-17.60	-23.08
2	0.22422	10.18	29.53	14.06	39.71	24.24	62.66	52.66	-22.95	-28.42
3	0.42734	10.24	21.73	11.91	31.97	22.15	57.30	47.30	-25.33	-25.15
4	0.73203	10.25	13.43	0.63	23.68	10.88	56.00	46.00	-32.32	-35.12
5	0.94297	10.26	12.34	3.09	22.60	13.35	56.00	46.00	-33.40	-32.65
6	11.67578	10.78	5.59	-1.23	16.37	9.55	60.00	50.00	-43.63	-40.45

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



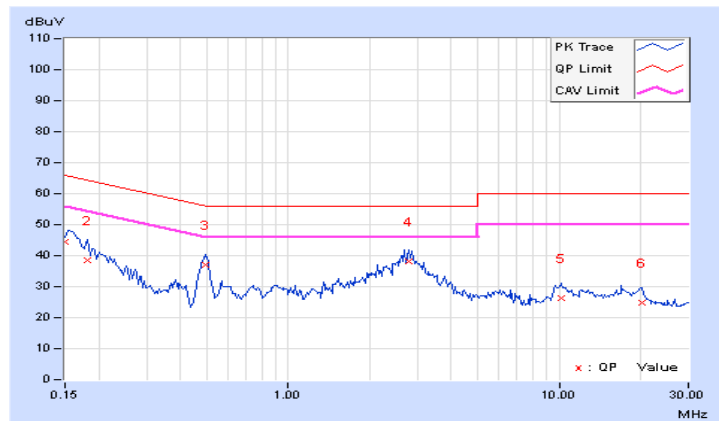
4.2.8 Test Results (Mode 2)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
-------	----------	-------------------	--------------------------------

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.19	34.24	19.95	44.43	30.14	66.00	56.00	-21.57	-25.86
2	0.18125	10.19	28.41	15.53	38.60	25.72	64.43	54.43	-25.83	-28.71
3	0.49375	10.23	26.85	21.53	37.08	31.76	56.10	46.10	-19.02	-14.34
4	2.78906	10.24	28.04	22.48	38.28	32.72	56.00	46.00	-17.72	-13.28
5	10.16797	10.57	15.70	9.88	26.27	20.45	60.00	50.00	-33.73	-29.55
6	20.17188	11.38	13.31	7.69	24.69	19.07	60.00	50.00	-35.31	-30.93

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

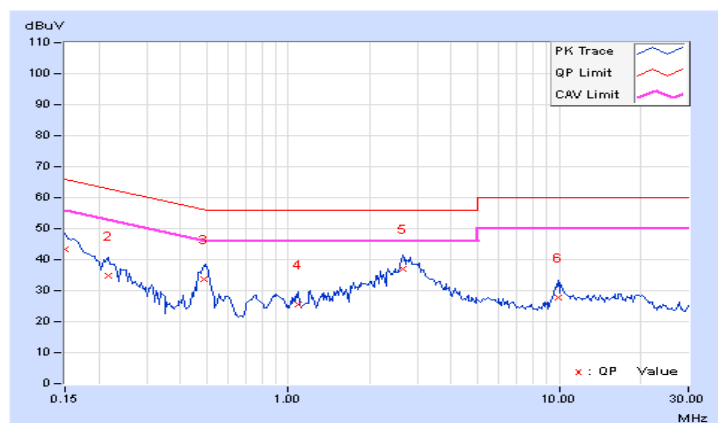


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
-------	-------------	-------------------	--------------------------------

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.18	33.29	17.61	43.47	27.79	66.00	56.00	-22.53	-28.21
2	0.21641	10.16	24.59	13.60	34.75	23.76	62.96	52.96	-28.21	-29.20
3	0.48594	10.21	23.64	16.24	33.85	26.45	56.24	46.24	-22.39	-19.79
4	1.08984	10.23	15.15	9.76	25.38	19.99	56.00	46.00	-30.62	-26.01
5	2.65234	10.24	26.69	20.75	36.93	30.99	56.00	46.00	-19.07	-15.01
6	9.87891	10.48	17.13	10.50	27.61	20.98	60.00	50.00	-32.39	-29.02

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



4.3 Transmit Power Measurement

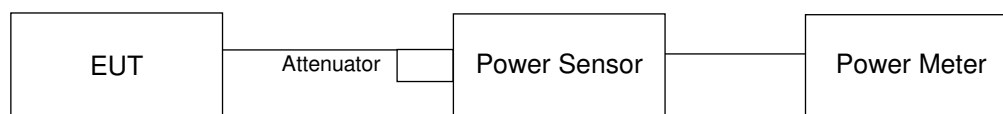
4.3.1 Limits of Transmit Power Measurement

Operation Band	EUT Category		Limit
U-NII-1		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)
	√	Mobile and Portable client device	250mW (24 dBm)
U-NII-2A		√	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C		√	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3		√	1 Watt (30 dBm)

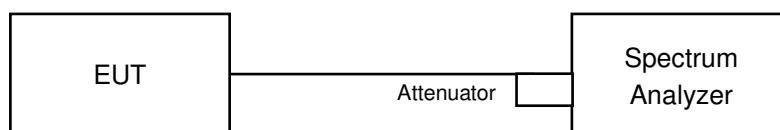
*B is the 26 dB emission bandwidth in megahertz

4.3.2 Test Setup

FOR POWER OUTPUT MEASUREMENT



FOR 26dB OCCUPIED BANDWIDTH



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

For AVERAGE POWER MEASUREMENT

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.

FOR 26dB OCCUPIED BANDWIDTH

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%.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Condition

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 Test Result

802.11a

Power Output:

Channel	Channel Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass/Fail
36	5180	11.722	10.69	24.00	Pass
40	5200	11.272	10.52	24.00	Pass
48	5240	10.839	10.35	24.00	Pass
52	5260	11.117	10.46	24.00	Pass
60	5300	11.967	10.78	24.00	Pass
64	5320	12.618	11.01	24.00	Pass
100	5500	19.543	12.91	24.00	Pass
116	5580	23.55	13.72	24.00	Pass
140	5700	22.856	13.59	24.00	Pass
149	5745	22.542	13.53	30.00	Pass
157	5785	21.33	13.29	30.00	Pass
165	5825	20.464	13.11	30.00	Pass

26dB Bandwidth:

Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)
52	5260	24.89
60	5300	26.59
64	5320	25.67
100	5500	32.27
116	5580	35.83
140	5700	35.21

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	24.89	24.96 > 24
60	5300	26.59	25.24 > 24
64	5320	25.67	25.09 > 24
100	5500	32.27	26.08 > 24
116	5580	35.83	26.54 > 24
140	5700	35.21	26.46 > 24

802.11n (HT20)

Power Output:

Channel	Channel Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass/Fail
36	5180	11.376	10.56	24.00	Pass
40	5200	11.35	10.55	24.00	Pass
48	5240	10.94	10.39	24.00	Pass
52	5260	11.402	10.57	24.00	Pass
60	5300	12.19	10.86	24.00	Pass
64	5320	12.972	11.13	24.00	Pass
100	5500	20.091	13.03	24.00	Pass
116	5580	23.988	13.80	24.00	Pass
140	5700	23.174	13.65	24.00	Pass
149	5745	23.121	13.64	30.00	Pass
157	5785	21.928	13.41	30.00	Pass
165	5825	20.941	13.21	30.00	Pass

26dB Bandwidth:

Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)
52	5260	29.17
60	5300	24.31
64	5320	25.14
100	5500	31.51
116	5580	32.93
140	5700	35.41

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	29.17	25.64 > 24
60	5300	24.31	24.85 > 24
64	5320	25.14	25 > 24
100	5500	31.51	25.98 > 24
116	5580	32.93	26.17 > 24
140	5700	35.41	26.49 > 24

802.11n (HT40)

Power Output:

Channel	Channel Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass/Fail
38	5190	11.722	10.69	24.00	Pass
46	5230	11.117	10.46	24.00	Pass
54	5270	11.35	10.55	24.00	Pass
62	5310	12.359	10.92	24.00	Pass
102	5510	20.512	13.12	24.00	Pass
110	5550	21.528	13.33	24.00	Pass
134	5670	23.227	13.66	24.00	Pass
151	5755	22.961	13.61	30.00	Pass
159	5795	21.478	13.32	30.00	Pass

26dB Bandwidth:

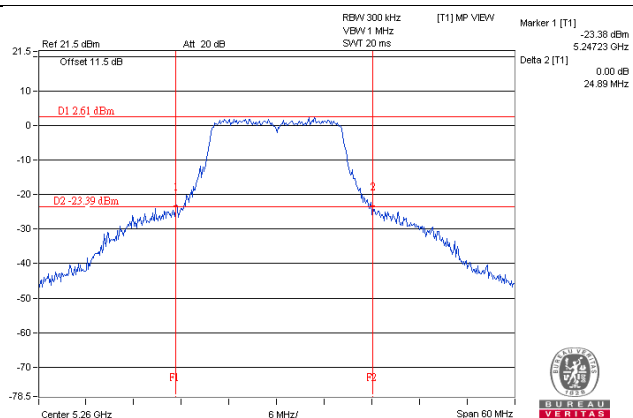
Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)
54	5270	60.08
62	5310	55.51
102	5510	57.36
110	5550	71.93
134	5670	76.93

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

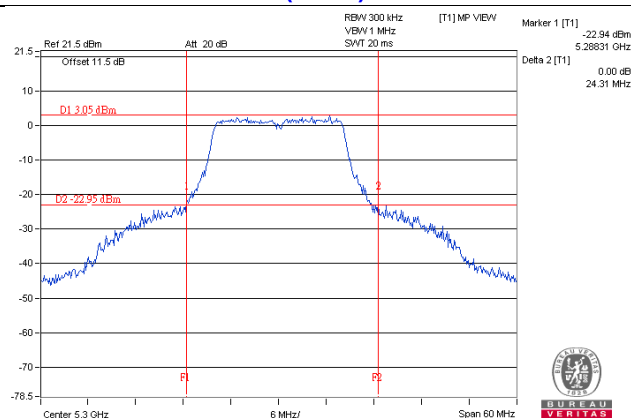
Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	60.08	28.78 > 24
62	5310	55.51	28.44 > 24
102	5510	57.36	28.58 > 24
110	5550	71.93	29.56 > 24
134	5670	76.93	29.86 > 24

Spectrum Plot of Worst Value

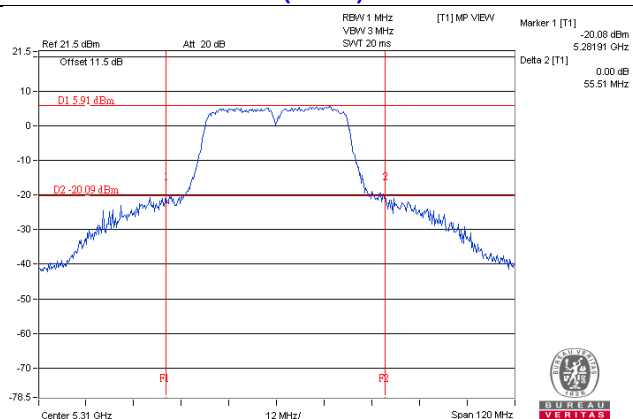
802.11a / CH52



802.11n (HT20) / CH60

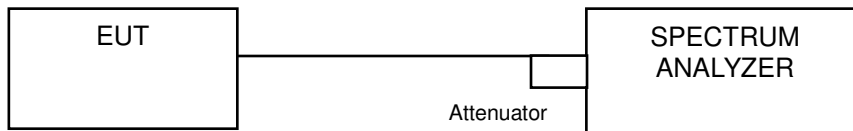


802.11n (HT40) / CH62



4.4 Occupied Bandwidth Measurement

4.4.1 Test Setup



4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to SAMPLE. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

4.4.4 Test Results

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.16
40	5200	17.04
48	5240	17.28
52	5260	17.28
60	5300	17.16
64	5320	17.16
100	5500	17.16
116	5580	17.40
140	5700	17.52
149	5745	17.40
157	5785	17.40
165	5825	17.28

802.11n (HT20)

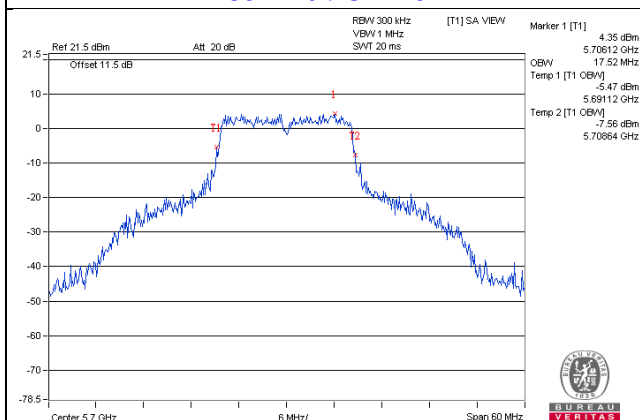
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.16
40	5200	17.04
48	5240	17.28
52	5260	17.16
60	5300	17.16
64	5320	17.04
100	5500	17.16
116	5580	17.40
140	5700	17.28
149	5745	17.52
157	5785	17.40
165	5825	17.28

802.11n (HT40)

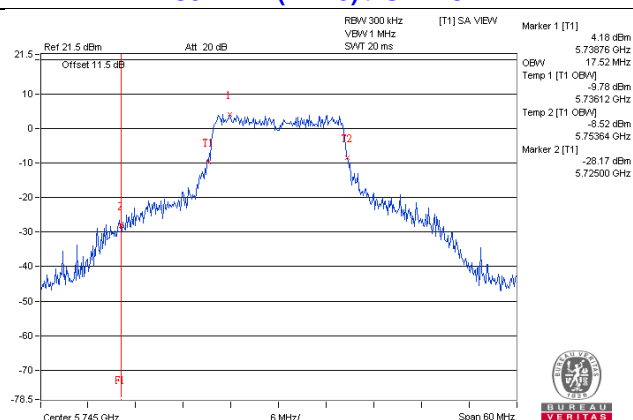
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	36.96
46	5230	36.72
54	5270	36.72
62	5310	36.72
102	5510	36.96
110	5550	36.96
134	5670	37.20
151	5755	37.20
159	5795	36.96

Spectrum Plot of Worst Value

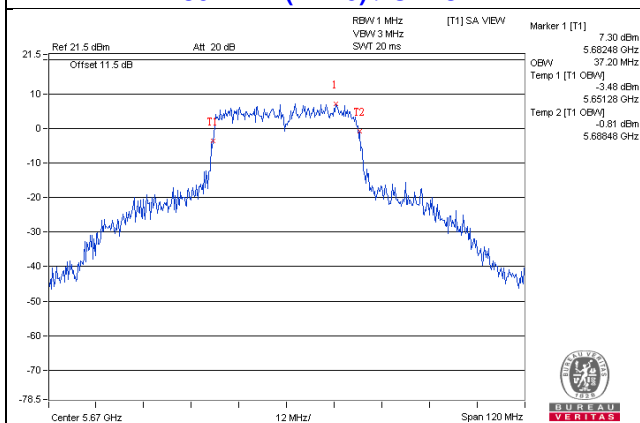
802.11a / CH140



802.11n (HT20) / CH149



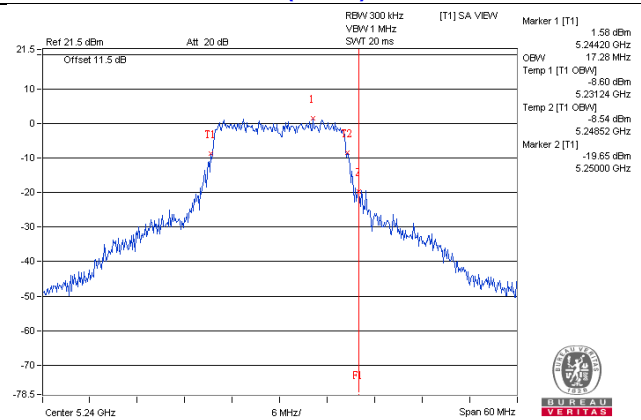
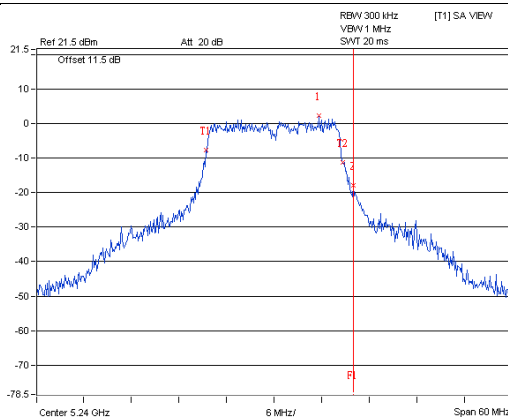
802.11n (HT40) / CH134



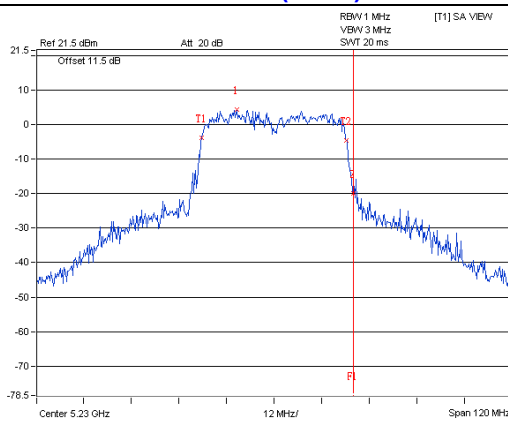
Spectrum Plot for near by DFS band
(DFS is required, if 99% OCP straddle into U-NII-2A band)

802.11a / CH48

802.11n (HT20) / CH48



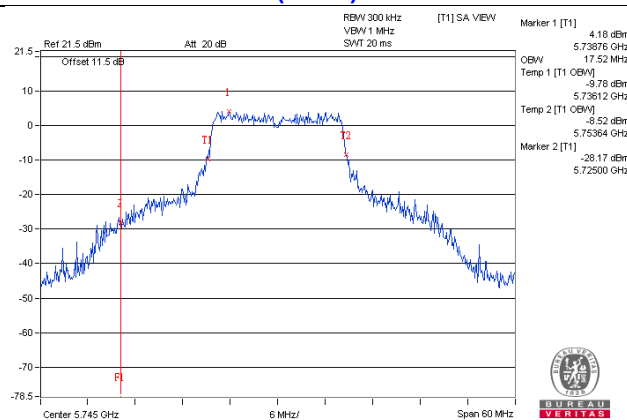
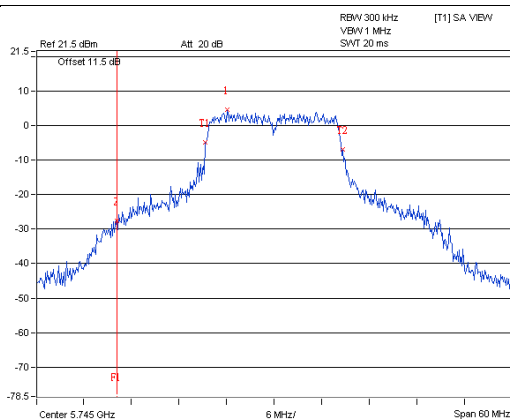
802.11n (HT40) / CH46



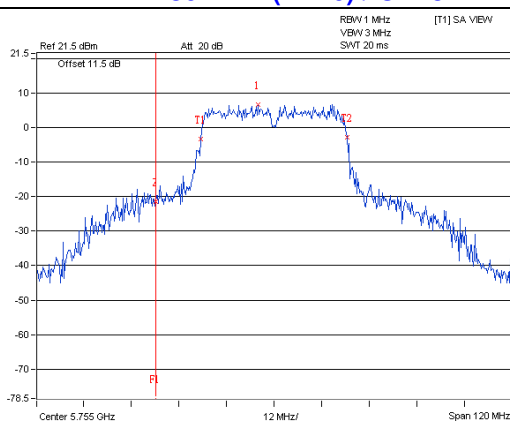
Spectrum Plot for near by DFS band
(DFS is required, if 99% OCP straddle into U-NII-2C band)

802.11a / CH149

802.11n (HT20) / CH149



802.11n (HT40) / CH151



4.5 Peak Power Spectral Density Measurement

4.5.1 Limits of Peak Power Spectral Density Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Mobile and Portable client device	11dBm/ MHz
U-NII-2A	√		11dBm/ MHz
U-NII-2C	√		11dBm/ MHz
U-NII-3	√		30dBm/ 500kHz

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedure

For U-NII-1, U-NII-2A, U-NII-2C band:

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. Sweep time = auto, trigger set to "free run".
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value and add 10 log (1/duty cycle)

For U-NII-3:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
4. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log(500\text{ kHz}/300\text{kHz})$
5. Sweep time = auto, trigger set to "free run".
6. Trace average at least 100 traces in power averaging mode.
7. Record the max value and add 10 log (1/duty cycle)

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Condition

Same as Item 4.3.6.

4.5.7 Test Results

For U-NII-1, U-NII-2A, U-NII-2C:

802.11a

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
36	5180	-2.50	0.16	-2.34	11	Pass
40	5200	-2.45	0.16	-2.29	11	Pass
48	5240	-2.76	0.16	-2.60	11	Pass
52	5260	-2.90	0.16	-2.74	11	Pass
60	5300	-2.61	0.16	-2.45	11	Pass
64	5320	-2.30	0.16	-2.14	11	Pass
100	5500	0.37	0.16	0.53	11	Pass
116	5580	0.73	0.16	0.89	11	Pass
140	5700	0.48	0.16	0.64	11	Pass

Note: 1. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
36	5180	-2.39	0.18	-2.21	11	Pass
40	5200	-2.33	0.18	-2.15	11	Pass
48	5240	-2.71	0.18	-2.53	11	Pass
52	5260	-2.85	0.18	-2.67	11	Pass
60	5300	-2.53	0.18	-2.35	11	Pass
64	5320	-2.27	0.18	-2.09	11	Pass
100	5500	0.49	0.18	0.67	11	Pass
116	5580	0.81	0.18	0.99	11	Pass
140	5700	0.60	0.18	0.78	11	Pass

Note: 1. Refer to section 3.3 for duty cycle spectrum plot.

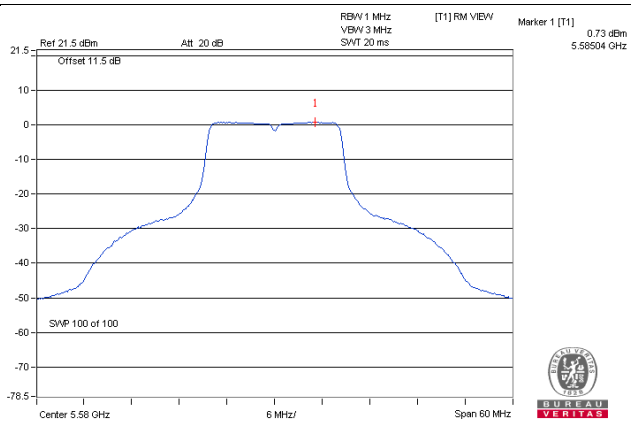
802.11n (HT40)

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
38	5190	-11.62	1.19	-10.43	11	Pass
46	5230	-7.88	1.19	-6.69	11	Pass
54	5270	-8.01	1.19	-6.82	11	Pass
62	5310	-8.26	1.19	-7.07	11	Pass
102	5510	-6.54	1.19	-5.35	11	Pass
110	5550	-6.28	1.19	-5.09	11	Pass
134	5670	-10.70	1.19	-9.51	11	Pass

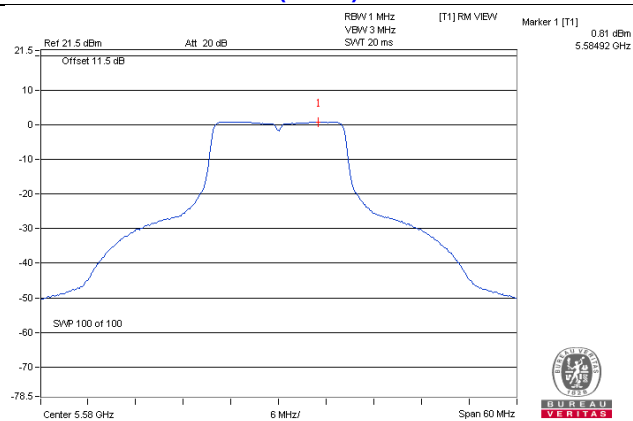
Note: 1. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

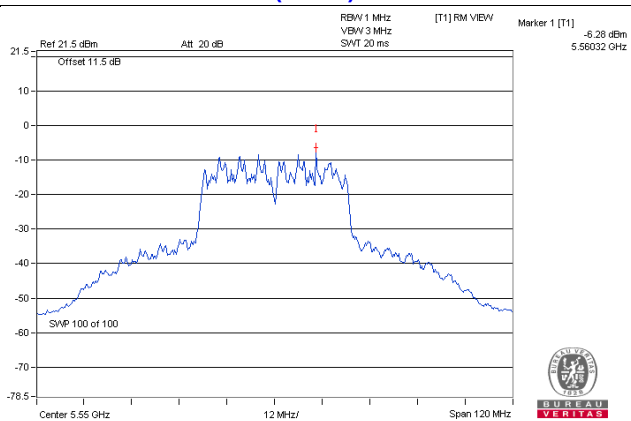
802.11a / CH116



802.11n (HT20) / CH116



802.11n (HT40) / CH110



For U-NII-3:

802.11a

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor		Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
		(dBm/300kHz)	(dBm/500kHz)				
149	5745	-8.05	-5.83	0.16	-5.67	30	Pass
157	5785	-8.61	-6.39	0.16	-6.23	30	Pass
165	5825	-8.64	-6.42	0.16	-6.26	30	Pass

Note: 1. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor		Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
		(dBm/300kHz)	(dBm/500kHz)				
149	5745	-7.85	-5.63	0.18	-5.45	30	Pass
157	5785	-8.50	-6.28	0.18	-6.10	30	Pass
165	5825	-8.61	-6.39	0.18	-6.21	30	Pass

Note: 1. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

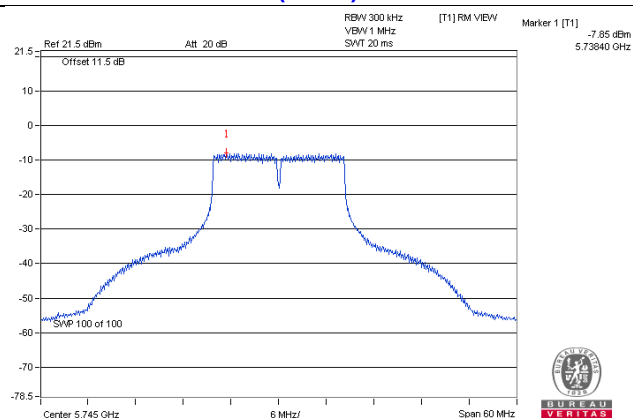
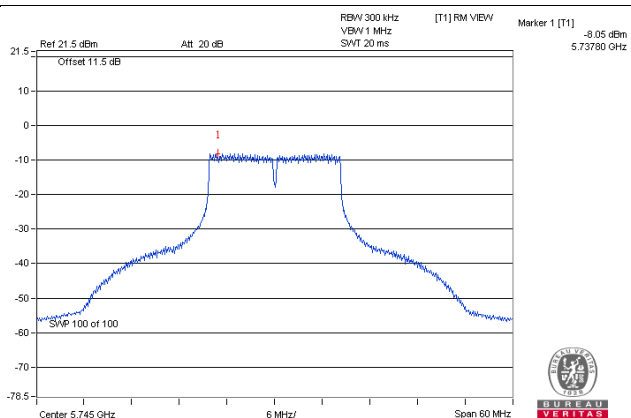
Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor		Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
		(dBm/300kHz)	(dBm/500kHz)				
151	5755	-15.36	-13.14	1.19	-11.95	30	Pass
159	5795	-12.26	-10.04	1.19	-8.85	30	Pass

Note: 1. Refer to section 3.3 for duty cycle spectrum plot.

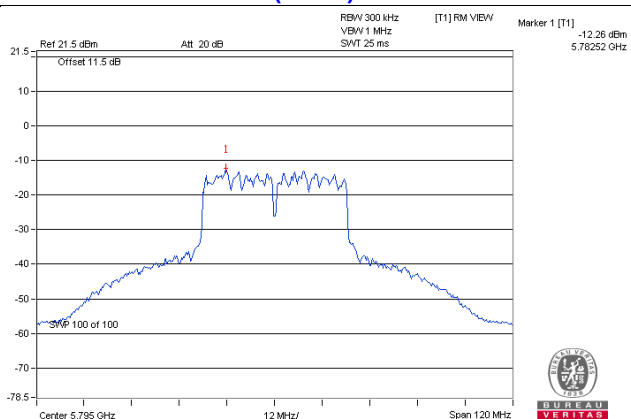
Spectrum Plot of Worst Value

802.11a / CH149

802.11n (HT20) / CH149



802.11n (HT40) / CH159

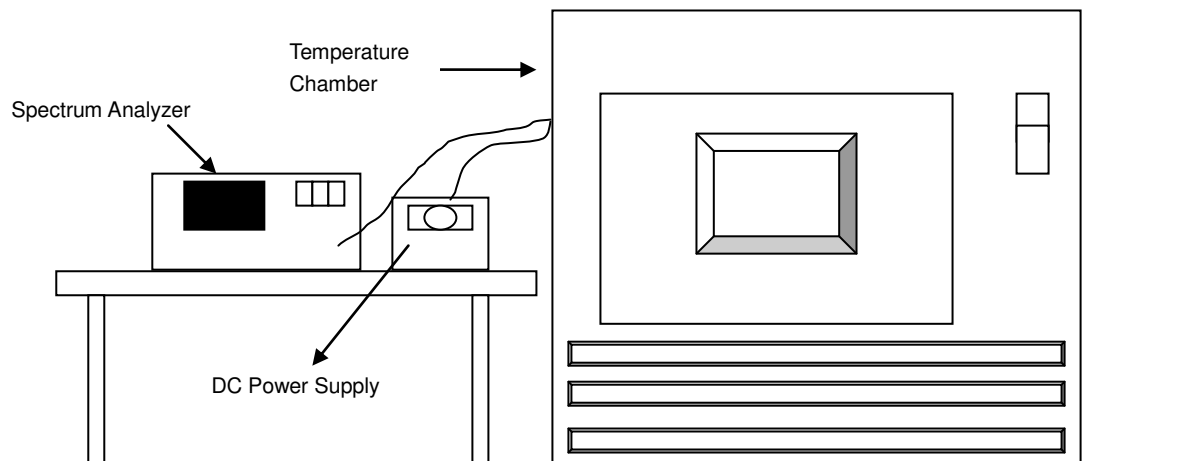


4.6 Frequency Stability Measurement

4.6.1 Limits of Frequency Stability Measurement

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

4.6.2 Test Setup



4.6.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.6.4 Test Procedure

- The EUT was placed inside the environmental test chamber and powered by nominal DC 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 (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 Minutes.
- Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 Minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

Set the EUT transmit at un-modulation mode to test frequency stability.

4.6.7 Test Results

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
TEMP. (°C)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
50	3.85	5179.9745	Pass	5179.9758	Pass	5179.9741	Pass	5179.9762	Pass
40	3.85	5179.9782	Pass	5179.978	Pass	5179.9765	Pass	5179.9764	Pass
30	3.85	5180.0239	Pass	5180.024	Pass	5180.0255	Pass	5180.0272	Pass
20	3.85	5180.0135	Pass	5180.0142	Pass	5180.0135	Pass	5180.0139	Pass
10	3.85	5180.0094	Pass	5180.008	Pass	5180.0067	Pass	5180.0043	Pass
0	3.85	5180.0253	Pass	5180.0266	Pass	5180.0227	Pass	5180.0238	Pass
-10	3.85	5179.9825	Pass	5179.9838	Pass	5179.9838	Pass	5179.9834	Pass
-20	3.85	5179.9842	Pass	5179.9835	Pass	5179.9851	Pass	5179.9838	Pass
-30	3.85	5180.0061	Pass	5180.0023	Pass	5180.003	Pass	5180.0055	Pass

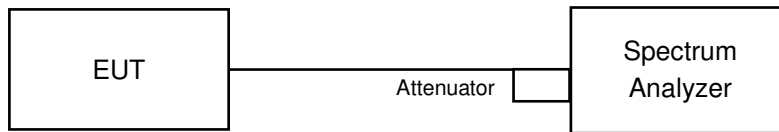
Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
TEMP. (°C)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
20	4.4275	5180.0137	Pass	5180.0132	Pass	5180.0138	Pass	5180.0129	Pass
	3.85	5180.0135	Pass	5180.0142	Pass	5180.0135	Pass	5180.0139	Pass
	3.2725	5180.0135	Pass	5180.0139	Pass	5180.0128	Pass	5180.0146	Pass

4.7 6dB Bandwidth Measurement

4.7.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

4.7.2 Test Setup



4.7.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.7.4 Test Procedure

MEASUREMENT PROCEDURE REF

- Set resolution bandwidth (RBW) = 100kHz
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.7.5 Deviation from Test Standard

No deviation.

4.7.6 EUT Operating Condition

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.7.7 Test Results

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	16.42	0.5	PASS
157	5785	16.42	0.5	PASS
165	5825	16.41	0.5	PASS

802.11n (HT20)

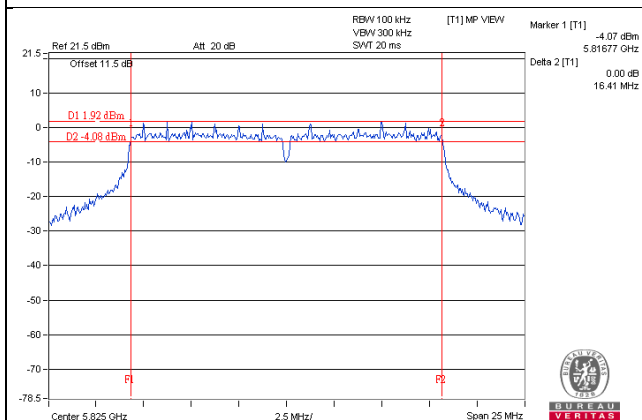
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	16.42	0.5	PASS
157	5785	16.41	0.5	PASS
165	5825	16.44	0.5	PASS

802.11n (HT40)

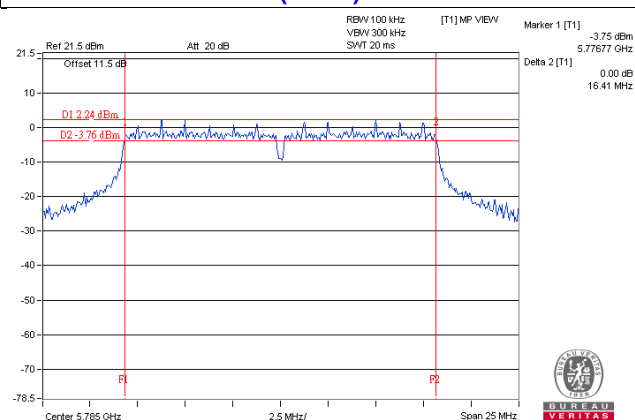
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
151	5755	35.59	0.5	PASS
159	5795	35.41	0.5	PASS

Spectrum Plot of Worst Value

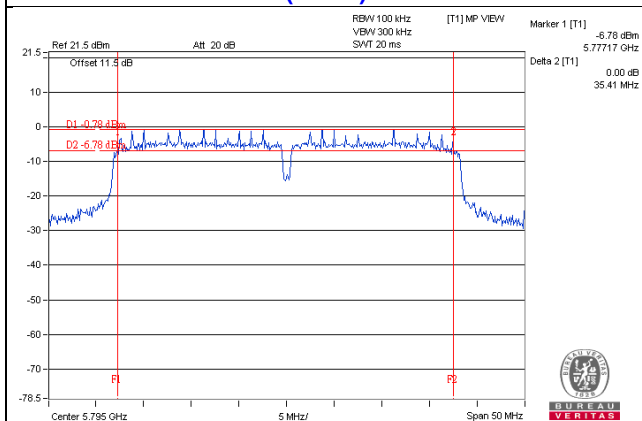
802.11a / CH165



802.11n (HT20) / CH157



802.11n (HT40) / CH159



5 Pictures of Test Arrangements

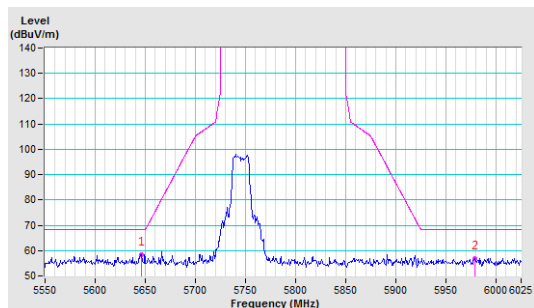
Please refer to the attached file (Test Setup Photo).

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

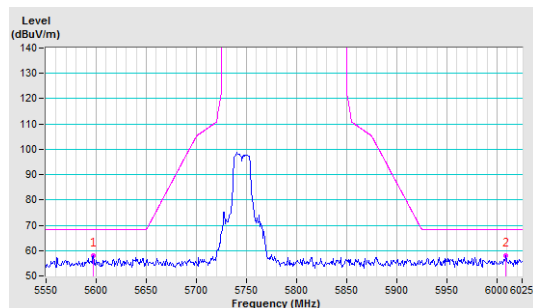
802.11a

CH 149 5745 MHz

Horizontal

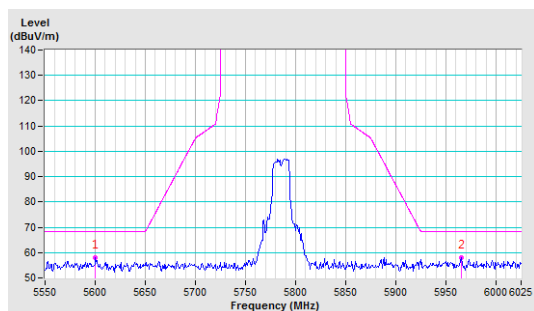


Vertical

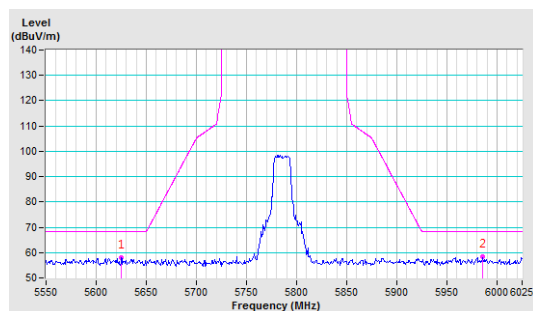


CH 157 5785 MHz

Horizontal

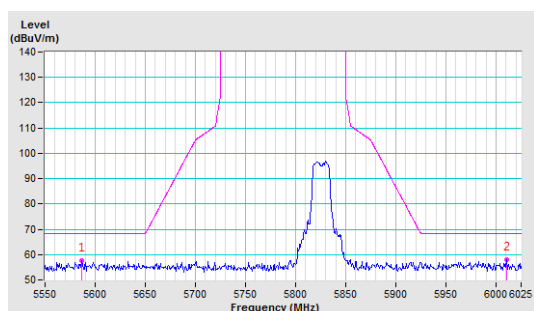


Vertical

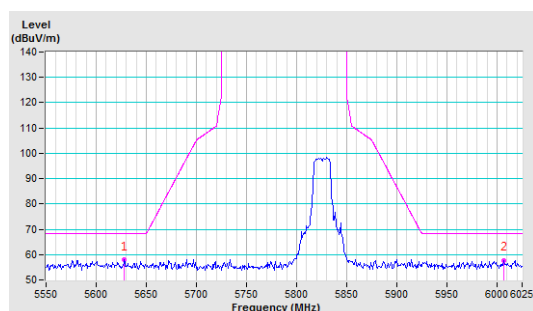


CH 165 5825 MHz

Horizontal



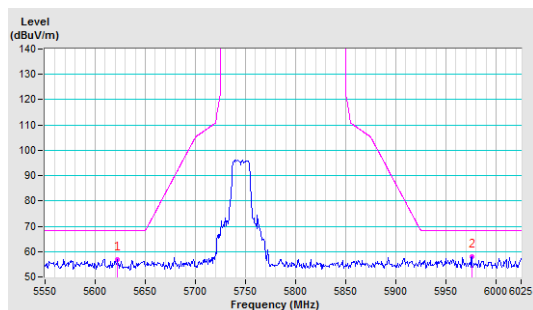
Vertical



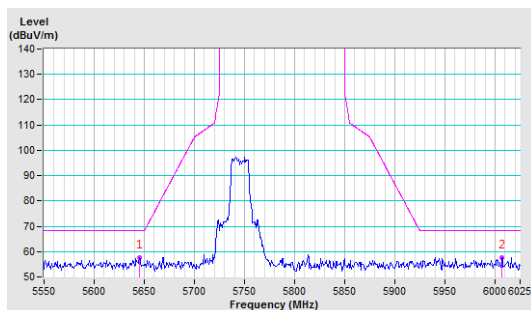
802.11n (HT20)

CH 149 5745 MHz

Horizontal

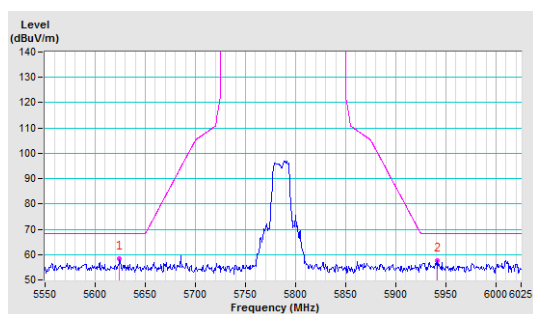


Vertical

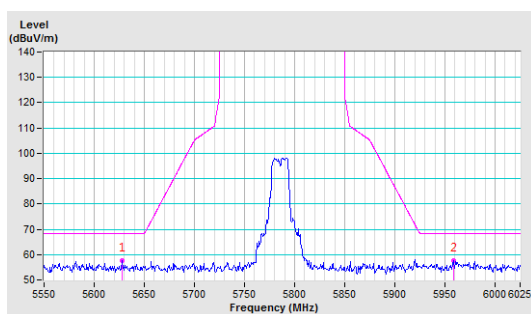


CH 157 5785 MHz

Horizontal

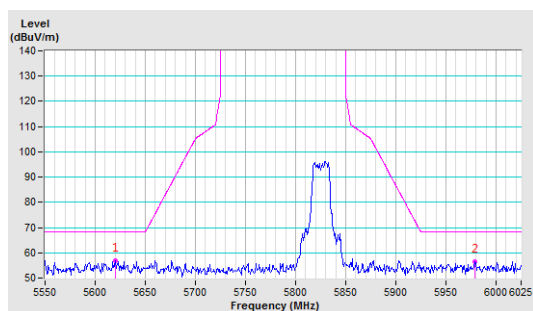


Vertical

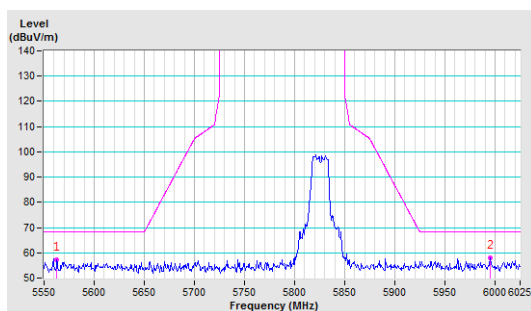


CH 165 5825 MHz

Horizontal



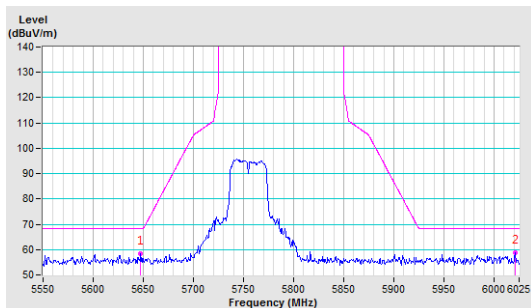
Vertical



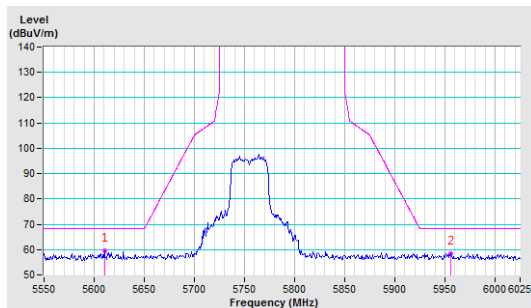
802.11n (HT40)

CH 151 5755 MHz

Horizontal

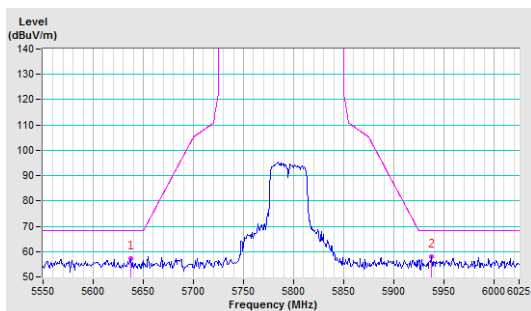


Vertical

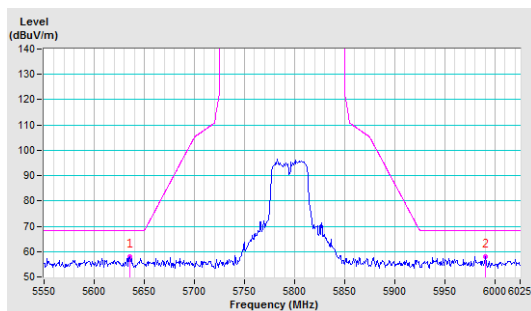


CH 159 5795 MHz

Horizontal



Vertical



Appendix – Information on 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 accredited and approved according to ISO/IEC 17025.

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

Linko EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

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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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