

FCC TEST REPORT

(WALN 15.407)

REPORT NO.: RF141013D01-1

MODEL NO.: AM30

FCC ID: QCIAM30

RECEIVED: Oct. 13, 2014

TESTED: Oct. 29 ~ Dec. 15, 2014

ISSUED: Dec. 23, 2014

APPLICANT: SMART Technologies Inc.

ADDRESS: 3636 Research Road NW Calgary, AB T2L 1Y1
CANADA

ISSUED BY: Bureau Veritas Consumer Products Services
(H.K.) Ltd., Taoyuan Branch

LAB ADDRESS: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist.,
New Taipei City, Taiwan, R.O.C.

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A D T

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF141013D01-1	Original release.	Dec. 23, 2014

1. CERTIFICATION

PRODUCT: PC Device
BRAND NAME: SMART
MODEL: AM30
APPLICANT: SMART Technologies Inc.
TESTED: Oct. 29 ~ Dec. 15, 2014
TEST SAMPLE: ENGINEERING SAMPLE
STANDARDS: **FCC Part 15, Subpart E (Section 15.407)**
ANSI C63.10-2009

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 : Annie Chang , **DATE:** Dec. 23, 2014
(Annie Chang / Supervisor)

APPROVED BY : Rex Lai , **DATE:** Dec. 23, 2014
(Rex Lai / Assistant Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407 Under New Rule)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.407(b)(6)	AC Power Conducted Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -11.24dB at 0.17997MHz.
15.407(b)(1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -2.2dB at 5725.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	PASS	Meet the requirement of limit.
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	No antenna connector is used.

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	Uncertainty
Conducted emissions	150kHz~30MHz	3.43 dB
Radiated emissions	30MHz ~ 1GHz	4.00 dB
	Above 1GHz	3.36 dB

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	PC Device
MODEL NO.	AM30
POWER SUPPLY	19Vdc, 5A
MODULATION TYPE	64QAM, 16QAM, QPSK, BPSK
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54/ 48/ 36/ 24/ 18/ 12/ 9/ 6Mbps 802.11n: up to 72.2Mbps 802.11ac: up to 433.3Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5700MHz 5745 ~ 5825MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 1 for 802.11ac (80MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 1 for 802.11ac (80MHz) 5500 ~ 5700MHz: 8 for 802.11a, 802.11n (20MHz) 3 for 802.11n (40MHz) 1 for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 1 for 802.11ac (80MHz)
OUTPUT POWER	5180 ~ 5240MHz: 15.0mW 5260 ~ 5320MHz: 14.6mW 5500 ~ 5700MHz: 14.3mW 5745 ~ 5825MHz: 15.8mW
ANTENNA TYPE	Dipole antenna with 3.02dBi gain
ANTENNA CONNECTOR	N/A
DATA CABLE	N/A
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	N/A

NOTE:

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

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

2. The EUT was configured with the following key components:

Component	Brand	Model No.	Spec.
Processor	Qualcomm	APQ8074AC	4 cores /2.45GHz
RAM	Samsung	K3QF7F70DM-QGCF	3GB LPDDR3 SDRAM
Flash Storage	Toshiba	THGBMBG6D1KBAIL	8GB
Wi-Fi/BT Chip	Qualcomm	WCN3680	Dual -band 2.4GHz and 5GHz WLAN / BT 4.0

3. 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 (20MHz)

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

2 channels are provided for 802.11n (40 MHz)

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

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

CHANNEL	FREQUENCY
42	5210MHz

FOR 5260 ~ 5320MHz

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

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

2 channels are provided for 802.11n (40 MHz)

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

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

CHANNEL	FREQUENCY
58	5290MHz

FOR 5500 ~ 5700MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	116	5580 MHz
104	5520 MHz	132	5660 MHz
108	5540 MHz	136	5680 MHz
112	5560 MHz	140	5700 MHz

3 channels are provided for 802.11n (40 MHz)

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	134	5670 MHz
110	5550 MHz		

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

CHANNEL	FREQUENCY
106	5530MHz

FOR 5745 ~ 5825MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745MHz	161	5805MHz
153	5765MHz	165	5825MHz
157	5785MHz		

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz

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

CHANNEL	FREQUENCY
155	5775MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

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

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

RADIATED EMISSION TEST (ABOVE 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13
-	802.11ac (80MHz)		42	42	OFDM	BPSK	29.3
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13
-	802.11ac (80MHz)		58	58	OFDM	BPSK	29.3
-	802.11a	5500-5700	100 to 140	100, 116, 132, 140	OFDM	BPSK	6
-	802.11n (20MHz)		100 to 140	100, 116, 132, 140	OFDM	BPSK	6.5
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	13
-	802.11ac (80MHz)		106	106	OFDM	BPSK	29.3
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6
-	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	13
-	802.11ac (80MHz)		155	155	OFDM	BPSK	29.3

RADIATED EMISSION TEST (BELOW 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5180-5240	36 to 48	36	OFDM	BPSK	6

POWER LINE CONDUCTED EMISSION TEST:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5180-5240	36 to 48	36	OFDM	BPSK	6

ANTENNA PORT CONDUCTED MEASUREMENT:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13
-	802.11ac (80MHz)		42	42	OFDM	BPSK	29.3
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13
-	802.11ac (80MHz)		58	58	OFDM	BPSK	29.3
-	802.11a	5500-5700	100 to 140	100, 116, 132, 140	OFDM	BPSK	6
-	802.11n (20MHz)		100 to 140	100, 116, 132, 140	OFDM	BPSK	6.5
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	13
-	802.11ac (80MHz)		106	106	OFDM	BPSK	29.3
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6
-	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	13
-	802.11ac (80MHz)		155	155	OFDM	BPSK	29.3

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	26deg. C, 71% RH	120Vac, 60Hz	Aaron You
RE<1G	26deg. C, 73% RH	120Vac, 60Hz	Aaron You
PLC	21deg. C, 73% RH	120Vac, 60Hz	Aaron You
APCM	25deg. C, 60% RH	120Vac, 60Hz	Saxon Lee

3.3 DUTY CYCLE OF TEST SIGNAL

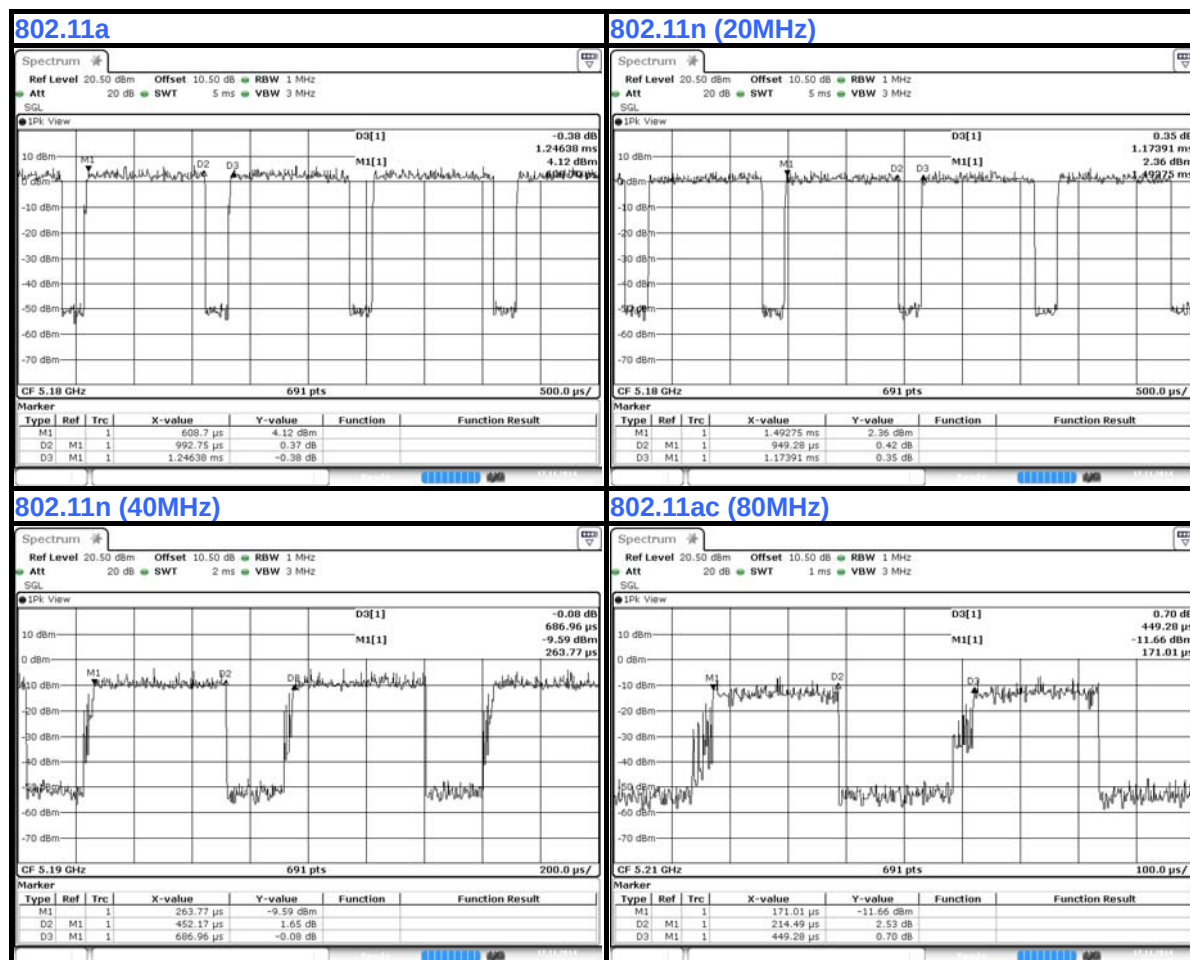
Duty cycle is < 98%, duty factor shall be considered.

802.11a: Duty cycle = $0.992/1.246 = 0.796$, Duty factor = $10 * \log(1/0.796) = 0.99$

802.11n (20MHz): Duty cycle = $0.949/1.173 = 0.809$, Duty factor = $10 * \log(1/0.809) = 0.92$

802.11n (40MHz): Duty cycle = $0.452/0.686 = 0.659$, Duty factor = $10 * \log(1/0.659) = 1.81$

802.11ac (80MHz): Duty cycle = $0.214/0.449 = 0.477$, Duty factor = $10 * \log(1/0.477) = 3.21$



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.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Mechanical tool	N/A	N/A	N/A	N/A
2	ADAPTER	FPS	FSP120-AAB	N/A	N/A
3	LCD MONITOR	DELL	U2410	CN082WXD728 720CC0KDL	FCC DoC Approved
4	USB KEYBOARD	BTC	5200U	G09302046353	E5XKB5122U
5	USB Mouse	Microsoft	1113	9170515772226	FCC DoC Approved

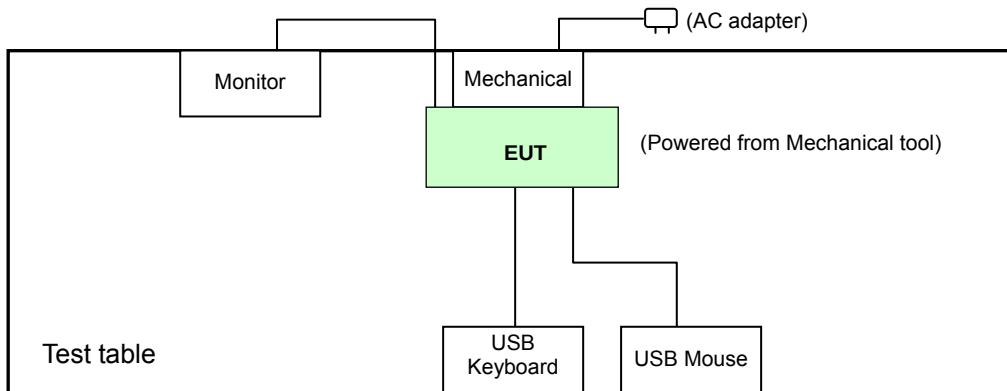
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A
2	DC cable (1.5m)
3	1.8m shielded HDMI cable
4	1.5 m braid shielded wire, terminated with USB connector via drain wire, w/o core.
5	1.5 m braid shielded wire, terminated with USB connector via drain wire, w/o core.

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

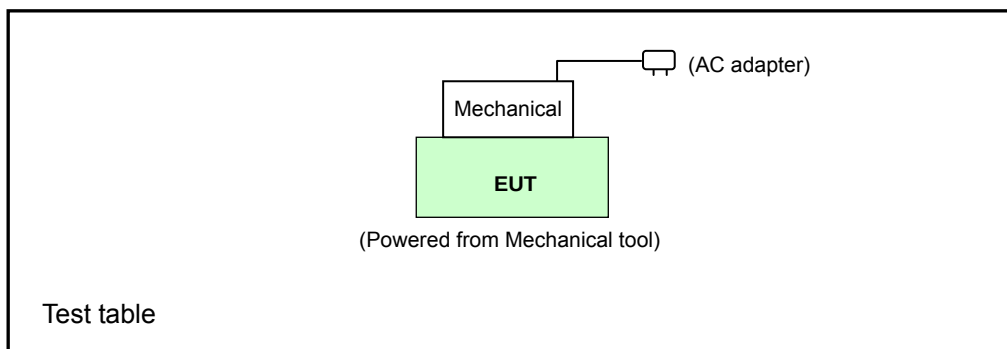
2. The support units 1-2 were provided by client.

3.4.1 CONFIGURATION OF SYSTEM UNDER TEST

For Conduction test only:



For Other tests except for Conduction test:



3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specification of the EUT declared by the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart E (15.407)

789033 D02 General UNII Test Procedures New Rules v01

ANSI C63.10-2009

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

NOTE: The product has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

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:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT	
789033 D02 General UNII Test Procedures New Rules v01	FIELD STRENGTH AT 3m	
	PK: 74 (dBuV/m)	AV: 54 (dBuV/m)
APPLICABLE TO	EIRP LIMIT	EQUIVALENT FIELD STRENGTH AT 3m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBuV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	PK: -27 (dBm/MHz) ^{*1} PK: -17 (dBm/MHz) ^{*2}	PK: 68.2 (dBuV/m) ^{*1} PK: 78.2 (dBuV/m) ^{*2}

NOTE: ^{*1} beyond 10MHz of the band edge ^{*2} within 10 MHz of band edge

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

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

4.1.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
HP Preamplifier	8447D	2432A03504	Feb. 26, 2014	Feb. 25, 2015
HP Preamplifier	8449B	3008A01201	Feb. 26, 2014	Feb. 25, 2015
MITEQ Preamplifier	AMF-6F-260400-3 3-8P	892164	Mar. 01, 2014	Feb. 28, 2015
Agilent Spectrum	E4446A	MY51100050	Oct. 24, 2014	Oct. 23, 2015
Agilent TEST RECEIVER	N9038A	MY51210129	Jan. 18, 2014	Jan. 17, 2015
Schwarzbeck Antenna	VULB 9168	139	Feb. 24, 2014	Feb. 23, 2015
Schwarzbeck Antenna	VHBA 9123	480	May 29, 2013	May 28, 2015
Schwarzbeck Horn Antenna	BBHA-9170	212	Aug. 26, 2014	Aug. 25, 2015
Schwarzbeck Horn Antenna	BBHA 9120-D1	D130	Aug. 26, 2014	Aug. 25, 2015
ADT. Turn Table	TT100	0306	NA	NA
ADT. Tower	AT100	0306	NA	NA
Software	ADT_Radiated_V7. 6.15.9.4	NA	NA	NA
SUHNER RF cable	SF104	CABLE-CH6	Aug. 15, 2014	Aug. 14, 2015
SUHNER RF cable	SF102	Cable-CH8-3.6m	Aug. 15, 2014	Aug. 14, 2015
EMCO Horn Antenna	3115	00028257	Aug. 28, 2014	Aug. 27, 2015
Highpass filter Wainwright Instruments	WHK 3.1/18G-10SS	SN 8	NA	NA
ROHDE & SCHWARZ Spectrum Analyzer	FSV40	101042	Sep. 29, 2014	Sep. 28, 2015
Anritsu Power Sensor	MA2411B	0738404	Apr. 21, 2014	Apr. 20, 2015
Anritsu Power Meter	ML2495A	0842014	Apr. 21, 2014	Apr. 20, 2015

- NOTE:** 1. The calibration interval of the above test instruments is 12/24 months. And the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in Chamber No. 6.
4. The Industry Canada Reference No. IC 7450E-6.
5. The FCC Site Registration No. is 447212.

4.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

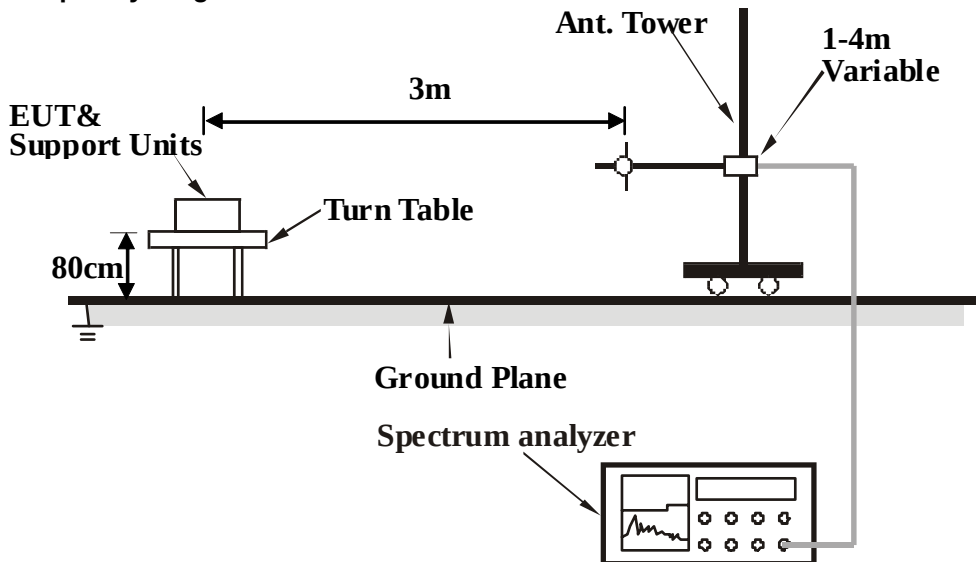
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution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

4.1.5 DEVIATION FROM TEST STANDARD

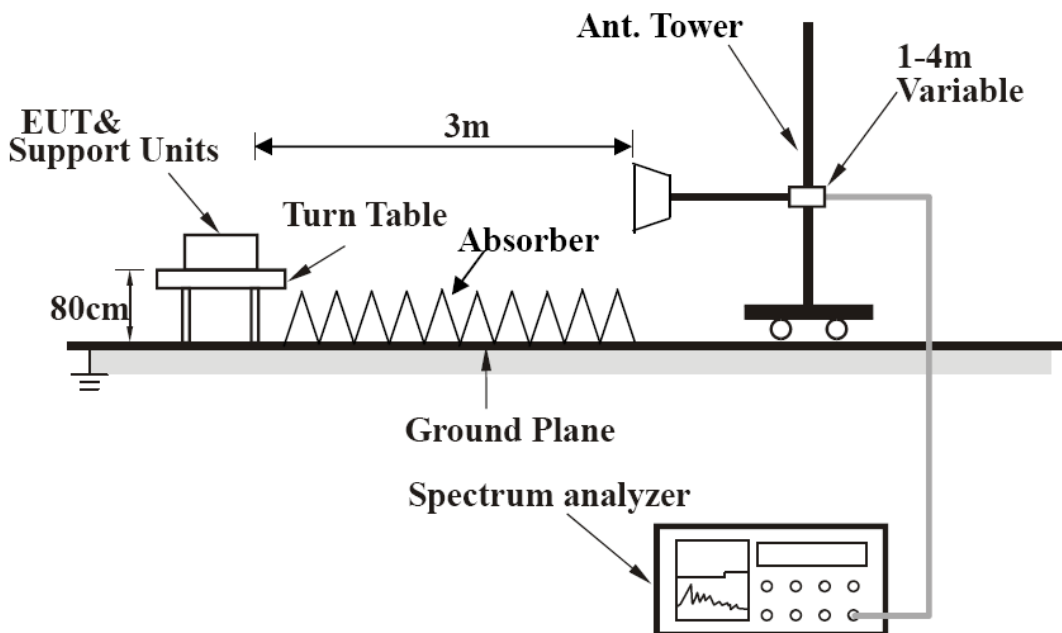
No deviation.

4.1.6 TEST SETUP

Frequency range 30MHz~1GHz



Frequency range above 1GHz



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

4.1.7 EUT OPERATING CONDITION

Set the EUT under transmission condition continuously at specific channel frequency.

4.1.8 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	55.3 PK	74.0	-18.8	1.02 H	92	51.98	3.27
2	5150.00	43.5 AV	54.0	-10.5	1.02 H	92	40.19	3.27
3	*5180.00	90.5 PK			1.02 H	92	87.27	3.25
4	*5180.00	79.3 AV			1.02 H	92	76.09	3.25
5	#10360.00	56.1 PK	74.0	-18.0	1.03 H	257	42.22	13.83
6	#10360.00	43.3 AV	54.0	-10.7	1.03 H	257	29.46	13.83
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	56.6 PK	74.0	-17.4	1.29 V	244	53.36	3.27
2	5150.00	44.6 AV	54.0	-9.4	1.29 V	244	41.33	3.27
3	*5180.00	102.8 PK			1.29 V	244	99.56	3.25
4	*5180.00	91.8 AV			1.29 V	244	88.53	3.25
5	#10360.00	58.2 PK	74.0	-15.8	1.10 V	232	44.34	13.83
6	#10360.00	46.9 AV	54.0	-7.1	1.10 V	232	33.10	13.83

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	90.5 PK			1.03 H	92	87.26	3.22
2	*5200.00	79.4 AV			1.03 H	92	76.19	3.22
3	#10400.00	57.0 PK	74.0	-17.0	1.17 H	206	43.18	13.80
4	#10400.00	44.3 AV	54.0	-9.7	1.17 H	206	30.50	13.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	101.1 PK			1.43 V	244	97.83	3.22
2	*5200.00	90.7 AV			1.43 V	244	87.47	3.22
3	#10400.00	58.8 PK	74.0	-15.2	1.12 V	250	45.02	13.80
4	#10400.00	46.9 AV	54.0	-7.1	1.12 V	250	33.07	13.80

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	92.7 PK			1.41 H	90	89.36	3.29
2	*5240.00	81.3 AV			1.41 H	90	78.03	3.29
3	5350.00	55.1 PK	74.0	-18.9	1.41 H	90	51.60	3.48
4	5350.00	42.8 AV	54.0	-11.3	1.41 H	90	39.27	3.48
5	#10480.00	56.5 PK	74.0	-17.5	1.21 H	295	42.06	14.45
6	#10480.00	46.2 AV	54.0	-7.8	1.21 H	295	31.72	14.45
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	103.8 PK			1.28 V	245	100.48	3.29
2	*5240.00	93.1 AV			1.28 V	245	89.78	3.29
3	5350.00	55.2 PK	74.0	-18.8	1.28 V	245	51.73	3.48
4	5350.00	43.0 AV	54.0	-11.0	1.28 V	245	39.54	3.48
5	#10480.00	58.0 PK	74.0	-16.0	1.02 V	183	43.58	14.45
6	#10480.00	46.5 AV	54.0	-7.5	1.02 V	183	32.06	14.45

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	55.7 PK	74.0	-18.3	1.39 H	78	52.46	3.27
2	5150.00	43.4 AV	54.0	-10.6	1.39 H	78	40.13	3.27
3	*5260.00	92.8 PK			1.39 H	78	89.53	3.31
4	*5260.00	82.3 AV			1.39 H	78	78.99	3.31
5	#10520.00	56.8 PK	74.0	-17.2	1.06 H	301	42.33	14.51
6	#10520.00	45.8 AV	54.0	-8.2	1.06 H	301	31.27	14.51
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	56.5 PK	74.0	-17.5	1.40 V	246	53.27	3.27
2	5150.00	45.3 AV	54.0	-8.7	1.40 V	246	42.03	3.27
3	*5260.00	103.3 PK			1.40 V	246	99.97	3.31
4	*5260.00	93.0 AV			1.40 V	246	89.68	3.31
5	#10520.00	57.6 PK	74.0	-16.4	1.00 V	149	43.05	14.51
6	#10520.00	46.7 AV	54.0	-7.3	1.00 V	149	32.18	14.51

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	91.9 PK			1.00 H	100	88.51	3.38
2	*5300.00	81.7 AV			1.00 H	100	78.36	3.38
3	10600.00	57.0 PK	74.0	-17.0	1.08 H	179	42.87	14.14
4	10600.00	45.2 AV	54.0	-8.8	1.08 H	179	31.06	14.14
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	104.0 PK			1.43 V	247	100.66	3.38
2	*5300.00	93.4 AV			1.43 V	247	90.03	3.38
3	10600.00	58.3 PK	74.0	-15.7	1.00 V	83	44.19	14.14
4	10600.00	47.2 AV	54.0	-6.8	1.00 V	83	33.05	14.14

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	91.4 PK			1.10 H	107	88.02	3.41
2	*5320.00	80.7 AV			1.10 H	107	77.29	3.41
3	5350.00	55.3 PK	74.0	-18.7	1.11 H	107	51.81	3.48
4	5350.00	43.2 AV	54.0	-10.8	1.11 H	107	39.72	3.48
5	10640.00	56.7 PK	74.0	-17.3	1.00 H	175	42.08	14.66
6	10640.00	45.9 AV	54.0	-8.1	1.00 H	175	31.27	14.66
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	102.2 PK			1.13 V	228	98.76	3.41
2	*5320.00	92.0 AV			1.13 V	228	88.54	3.41
3	5350.00	60.0 PK	74.0	-14.0	1.13 V	228	56.49	3.48
4	5350.00	46.1 AV	54.0	-7.9	1.13 V	228	42.59	3.48
5	10640.00	56.6 PK	74.0	-17.4	1.05 V	199	41.98	14.66
6	10640.00	44.9 AV	54.0	-9.1	1.05 V	199	30.21	14.66

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	5460.00	55.3 PK	74.0	-18.7	1.23 H	95	51.47	3.80
2	5460.00	43.4 AV	54.0	-10.6	1.23 H	95	39.57	3.80
3	#5470.00	55.0 PK	74.0	-19.0	1.23 H	95	51.20	3.83
4	#5470.00	43.8 AV	54.0	-10.3	1.23 H	95	39.92	3.83
5	*5500.00	88.8 PK			1.23 H	95	84.86	3.94
6	*5500.00	78.1 AV			1.23 H	95	74.11	3.94
7	11000.00	58.1 PK	74.0	-15.9	1.00 H	119	42.08	15.98
8	11000.00	45.9 AV	54.0	-8.1	1.00 H	119	29.89	15.98
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.0 PK	74.0	-17.0	1.34 V	244	53.21	3.80
2	5460.00	43.9 AV	54.0	-10.1	1.34 V	244	40.13	3.80
3	#5470.00	61.1 PK	74.0	-12.9	1.34 V	244	57.29	3.83
4	#5470.00	45.7 AV	54.0	-8.3	1.34 V	244	41.88	3.83
5	*5500.00	101.7 PK			1.34 V	244	97.76	3.94
6	*5500.00	90.6 AV			1.34 V	244	86.63	3.94
7	11000.00	59.0 PK	74.0	-15.0	1.08 V	295	43.02	15.98
8	11000.00	48.9 AV	54.0	-5.2	1.08 V	295	32.87	15.98

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	91.5 PK			1.32 H	29	87.19	4.31
2	*5580.00	81.3 AV			1.32 H	29	76.98	4.31
3	11160.00	58.7 PK	74.0	-15.3	1.03 H	295	42.55	16.15
4	11160.00	46.5 AV	54.0	-7.5	1.03 H	295	30.37	16.15
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	100.3 PK			1.13 V	263	95.97	4.31
2	*5580.00	90.0 AV			1.13 V	263	85.69	4.31
3	11160.00	60.0 PK	74.0	-14.0	1.00 V	139	43.87	16.15
4	11160.00	48.2 AV	54.0	-5.8	1.00 V	139	32.01	16.15

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 132	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	*5660.00	92.2 PK			1.04 H	294	87.90	4.30
2	*5660.00	81.6 AV			1.04 H	294	77.33	4.30
3	11320.00	57.9 PK	74.0	-16.1	1.13 H	58	42.13	15.76
4	11320.00	45.7 AV	54.0	-8.3	1.13 H	58	29.97	15.76
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	*5660.00	101.7 PK			1.14 V	245	97.36	4.30
2	*5660.00	90.6 AV			1.14 V	245	86.32	4.30
3	11320.00	59.3 PK	74.0	-14.7	1.00 V	202	43.56	15.76
4	11320.00	47.7 AV	54.0	-6.3	1.00 V	202	31.97	15.76

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 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	91.3 PK			1.22 H	324	87.06	4.22
2	*5700.00	80.9 AV			1.22 H	324	76.67	4.22
3	#5725.00	61.4 PK	74.0	-12.6	1.22 H	324	57.09	4.35
4	#5725.00	46.9 AV	54.0	-7.1	1.22 H	324	42.51	4.35
5	11400.00	58.6 PK	74.0	-15.4	1.28 H	106	42.38	16.19
6	11400.00	46.4 AV	54.0	-7.6	1.28 H	106	30.17	16.19
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	102.1 PK			1.26 V	245	97.86	4.22
2	*5700.00	91.2 AV			1.26 V	245	86.95	4.22
3	#5725.00	68.4 PK	74.0	-5.6	1.26 V	245	64.08	4.35
4	#5725.00	51.9 AV	54.0	-2.2	1.26 V	245	47.50	4.35
5	11400.00	59.9 PK	74.0	-14.1	1.32 V	160	43.71	16.19
6	11400.00	48.8 AV	54.0	-5.2	1.32 V	160	32.58	16.19

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	#5725.00	69.5 PK	78.2	-8.7	1.13 H	27	65.14	4.35
2	*5745.00	90.4 PK			1.13 H	27	85.93	4.46
3	*5745.00	80.3 AV			1.13 H	27	75.83	4.46
4	11490.00	59.3 PK	74.0	-14.7	1.09 H	227	42.93	16.33
5	11490.00	47.4 AV	54.0	-6.6	1.09 H	227	31.05	16.33
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	#5725.00	75.9 PK	78.2	-2.3	1.24 V	245	71.52	4.35
2	*5745.00	101.8 PK			1.24 V	245	97.37	4.46
3	*5745.00	90.9 AV			1.24 V	245	86.44	4.46
4	11490.00	60.5 PK	74.0	-13.5	1.02 V	177	44.17	16.33
5	11490.00	48.9 AV	54.0	-5.1	1.02 V	177	32.55	16.33

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	*5785.00	90.5 PK			1.00 H	27	85.85	4.68
2	*5785.00	80.5 AV			1.00 H	27	75.84	4.68
3	11570.00	57.9 PK	74.0	-16.1	1.16 H	135	42.55	15.36
4	11570.00	45.5 AV	54.0	-8.5	1.16 H	135	30.18	15.36
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	*5785.00	101.8 PK			1.08 V	267	97.08	4.68
2	*5785.00	91.4 AV			1.08 V	267	86.71	4.68
3	11570.00	58.6 PK	74.0	-15.4	1.03 V	117	43.26	15.36
4	11570.00	48.3 AV	54.0	-5.7	1.03 V	117	32.94	15.36

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 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	*5825.00	91.6 PK			1.28 H	14	86.76	4.80
2	*5825.00	80.2 AV			1.28 H	14	75.36	4.80
3	#5850.00	58.9 PK	74.0	-15.1	1.28 H	14	54.01	4.85
4	#5850.00	45.9 AV	54.0	-8.1	1.28 H	14	41.07	4.85
5	11650.00	57.4 PK	74.0	-16.7	1.42 H	117	42.11	15.24
6	11650.00	46.3 AV	54.0	-7.7	1.42 H	117	31.05	15.24
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	*5825.00	100.0 PK			1.21 V	245	95.15	4.80
2	*5825.00	89.9 AV			1.21 V	245	85.05	4.80
3	#5850.00	65.8 PK	74.0	-8.2	1.21 V	245	60.92	4.85
4	#5850.00	49.1 AV	54.0	-4.9	1.21 V	245	44.26	4.85
5	11650.00	58.2 PK	74.0	-15.8	1.11 V	209	42.97	15.24
6	11650.00	48.1 AV	54.0	-5.9	1.11 V	209	32.88	15.24

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 (20MHz)

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	56.0 PK	74.0	-18.0	1.15 H	284	52.72	3.27
2	5150.00	43.4 AV	54.0	-10.6	1.15 H	284	40.16	3.27
3	*5180.00	86.5 PK			1.15 H	284	83.26	3.25
4	*5180.00	76.2 AV			1.15 H	284	72.98	3.25
5	#10360.00	56.0 PK	74.0	-18.0	1.27 H	220	42.18	13.83
6	#10360.00	44.1 AV	54.0	-9.9	1.27 H	220	30.26	13.83
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	56.2 PK	74.0	-17.8	1.40 V	276	52.97	3.27
2	5150.00	43.7 AV	54.0	-10.3	1.40 V	276	40.41	3.27
3	*5180.00	97.9 PK			1.40 V	276	94.60	3.25
4	*5180.00	87.7 AV			1.40 V	276	84.41	3.25
5	11360.00	59.1 PK	74.0	-14.9	1.00 V	152	43.09	15.97
6	11360.00	47.7 AV	54.0	-6.3	1.00 V	152	31.77	15.97

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	87.2 PK			1.00 H	56	83.94	3.22
2	*5200.00	76.6 AV			1.00 H	56	73.33	3.22
3	#10400.00	56.0 PK	74.0	-18.0	1.21 H	119	42.18	13.80
4	#10400.00	44.7 AV	54.0	-9.3	1.21 H	119	30.94	13.80
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	99.8 PK			1.38 V	278	96.55	3.22
2	*5200.00	89.7 AV			1.38 V	278	86.47	3.22
3	#10400.00	56.9 PK	74.0	-17.1	1.08 V	177	43.09	13.80
4	#10400.00	46.5 AV	54.0	-7.5	1.08 V	177	32.70	13.80

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	88.8 PK			1.36 H	57	85.53	3.29
2	*5240.00	78.3 AV			1.36 H	57	74.98	3.29
3	5350.00	55.3 PK	74.0	-18.8	1.36 H	57	51.77	3.48
4	5350.00	42.7 AV	54.0	-11.3	1.36 H	57	39.24	3.48
5	#10480.00	57.2 PK	74.0	-16.8	1.27 H	94	42.71	14.45
6	#10480.00	45.0 AV	54.0	-9.0	1.27 H	94	30.55	14.45
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	101.8 PK			1.43 V	244	98.46	3.29
2	*5240.00	91.2 AV			1.43 V	244	87.92	3.29
3	5350.00	55.9 PK	74.0	-18.1	1.43 V	244	52.39	3.48
4	5350.00	43.6 AV	54.0	-10.4	1.43 V	244	40.11	3.48
5	#10480.00	58.5 PK	74.0	-15.5	1.09 V	124	44.02	14.45
6	#10480.00	46.7 AV	54.0	-7.3	1.09 V	124	32.25	14.45

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	54.4 PK	74.0	-19.6	1.02 H	100	51.13	3.27
2	5150.00	43.2 AV	54.0	-10.8	1.02 H	100	39.89	3.27
3	*5260.00	90.5 PK			1.02 H	100	87.20	3.31
4	*5260.00	80.1 AV			1.02 H	100	76.77	3.31
5	#10520.00	56.6 PK	74.0	-17.4	1.08 H	231	42.13	14.51
6	#10520.00	45.0 AV	54.0	-9.0	1.08 H	231	30.50	14.51
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	56.1 PK	74.0	-17.9	1.30 V	247	52.86	3.27
2	5150.00	43.4 AV	54.0	-10.6	1.30 V	247	40.17	3.27
3	*5260.00	101.4 PK			1.30 V	247	98.12	3.31
4	*5260.00	92.0 AV			1.30 V	247	88.64	3.31
5	#10520.00	57.4 PK	74.0	-16.6	1.01 V	111	42.87	14.51
6	#10520.00	47.5 AV	54.0	-6.5	1.01 V	111	33.02	14.51

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	90.9 PK			1.14 H	88	87.54	3.38
2	*5300.00	80.7 AV			1.14 H	88	77.27	3.38
3	10600.00	56.2 PK	74.0	-17.8	1.00 H	53	42.09	14.14
4	10600.00	44.1 AV	54.0	-9.9	1.00 H	53	29.93	14.14
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	101.9 PK			1.13 V	227	98.48	3.38
2	*5300.00	91.0 AV			1.13 V	227	87.66	3.38
3	10600.00	57.3 PK	74.0	-16.8	1.24 V	318	43.11	14.14
4	10600.00	45.2 AV	54.0	-8.8	1.24 V	318	31.08	14.14

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	92.9 PK			1.25 H	88	89.44	3.41
2	*5320.00	82.0 AV			1.25 H	88	78.55	3.41
3	5350.00	55.9 PK	74.0	-18.2	1.25 H	88	52.37	3.48
4	5350.00	43.0 AV	54.0	-11.0	1.25 H	88	39.48	3.48
5	10640.00	57.0 PK	74.0	-17.0	1.00 H	194	42.35	14.66
6	10640.00	44.9 AV	54.0	-9.1	1.00 H	194	30.21	14.66
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	102.3 PK			1.11 V	229	98.85	3.41
2	*5320.00	91.6 AV			1.11 V	229	88.17	3.41
3	5350.00	57.5 PK	74.0	-16.5	1.11 V	229	53.99	3.48
4	5350.00	44.0 AV	54.0	-10.0	1.11 V	229	40.55	3.48
5	10640.00	58.0 PK	74.0	-16.0	1.10 V	139	43.37	14.66
6	10640.00	46.6 AV	54.0	-7.4	1.10 V	139	31.98	14.66

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	5460.00	54.9 PK	74.0	-19.1	1.23 H	95	51.12	3.80
2	5460.00	43.4 AV	54.0	-10.6	1.23 H	95	39.56	3.80
3	#5470.00	55.3 PK	74.0	-18.7	1.23 H	95	51.49	3.83
4	#5470.00	43.5 AV	54.0	-10.5	1.23 H	95	39.68	3.83
5	*5500.00	89.6 PK			1.23 H	95	85.68	3.94
6	*5500.00	78.4 AV			1.23 H	95	74.49	3.94
7	11000.00	59.1 PK	74.0	-14.9	1.02 H	188	43.11	15.98
8	11000.00	48.1 AV	54.0	-6.0	1.02 H	188	32.07	15.98
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.5 PK	74.0	-17.5	1.02 V	311	52.74	3.80
2	5460.00	43.9 AV	54.0	-10.1	1.02 V	311	40.13	3.80
3	#5470.00	58.9 PK	74.0	-15.1	1.02 V	311	55.10	3.83
4	#5470.00	45.7 AV	54.0	-8.3	1.02 V	311	41.84	3.83
5	*5500.00	102.9 PK			1.02 V	311	98.91	3.94
6	*5500.00	92.6 AV			1.02 V	311	88.64	3.94
7	11000.00	59.3 PK	74.0	-14.8	1.22 V	154	43.27	15.98
8	11000.00	48.3 AV	54.0	-5.7	1.22 V	154	32.31	15.98

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	90.0 PK			1.28 H	29	85.73	4.31
2	*5580.00	79.3 AV			1.28 H	29	74.96	4.31
3	11160.00	58.1 PK	74.0	-15.9	1.10 H	210	41.96	16.15
4	11160.00	46.4 AV	54.0	-7.6	1.10 H	210	30.26	16.15
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	100.3 PK			1.13 V	305	96.02	4.31
2	*5580.00	90.4 AV			1.13 V	305	86.05	4.31
3	11160.00	58.8 PK	74.0	-15.2	1.08 V	293	42.69	16.15
4	11160.00	48.9 AV	54.0	-5.1	1.08 V	293	32.71	16.15

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 132	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	*5660.00	89.7 PK			1.30 H	32	85.35	4.30
2	*5660.00	79.3 AV			1.30 H	32	75.02	4.30
3	11320.00	57.8 PK	74.0	-16.2	1.00 H	119	42.08	15.76
4	11320.00	46.3 AV	54.0	-7.7	1.00 H	119	30.52	15.76
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	*5660.00	99.5 PK			1.00 V	306	95.19	4.30
2	*5660.00	88.7 AV			1.00 V	306	84.41	4.30
3	11320.00	58.7 PK	74.0	-15.3	1.07 V	308	42.97	15.76
4	11320.00	46.9 AV	54.0	-7.1	1.07 V	308	31.11	15.76

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	93.1 PK			1.16 H	295	88.86	4.22
2	*5700.00	82.1 AV			1.16 H	295	77.86	4.22
3	#5725.00	60.0 PK	74.0	-14.0	1.16 H	295	55.69	4.35
4	#5725.00	44.9 AV	54.0	-9.1	1.16 H	295	40.55	4.35
5	11400.00	58.6 PK	74.0	-15.4	1.03 H	144	42.37	16.19
6	11400.00	46.4 AV	54.0	-7.6	1.03 H	144	30.25	16.19
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	101.2 PK			1.13 V	266	96.99	4.22
2	*5700.00	90.4 AV			1.13 V	266	86.18	4.22
3	#5725.00	66.3 PK	74.0	-7.7	1.13 V	266	61.92	4.35
4	#5725.00	47.9 AV	54.0	-6.1	1.13 V	266	43.58	4.35
5	11400.00	59.5 PK	74.0	-14.6	1.00 V	354	43.26	16.19
6	11400.00	48.3 AV	54.0	-5.7	1.00 V	354	32.10	16.19

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	#5725.00	64.4 PK	74.0	-9.6	1.40 H	296	60.07	4.35
2	#5725.00	46.9 AV	54.0	-7.1	1.40 H	296	42.52	4.35
3	*5745.00	93.6 PK			1.40 H	296	89.14	4.46
4	*5745.00	83.2 AV			1.40 H	296	78.76	4.46
5	11490.00	58.9 PK	74.0	-15.1	1.27 H	86	42.59	16.33
6	11490.00	47.2 AV	54.0	-6.8	1.27 H	86	30.88	16.33
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	#5725.00	71.5 PK	74.0	-2.5	1.25 V	246	67.11	4.35
2	#5725.00	51.4 AV	54.0	-2.6	1.25 V	246	47.03	4.35
3	*5745.00	101.0 PK			1.25 V	246	96.55	4.46
4	*5745.00	90.2 AV			1.25 V	246	85.76	4.46
5	11490.00	60.2 PK	74.0	-13.9	1.00 V	108	43.82	16.33
6	11490.00	48.3 AV	54.0	-5.7	1.00 V	108	31.96	16.33

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	*5785.00	93.5 PK			1.37 H	296	88.86	4.68
2	*5785.00	83.0 AV			1.37 H	296	78.36	4.68
3	11570.00	58.0 PK	74.0	-16.0	1.00 H	124	42.67	15.36
4	11570.00	46.5 AV	54.0	-7.5	1.00 H	124	31.18	15.36
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	*5785.00	100.1 PK			1.22 V	247	95.43	4.68
2	*5785.00	89.7 AV			1.22 V	247	85.02	4.68
3	11570.00	59.4 PK	74.0	-14.6	1.29 V	20	44.01	15.36
4	11570.00	48.0 AV	54.0	-6.0	1.29 V	20	32.68	15.36

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 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	*5825.00	94.9 PK			1.39 H	299	90.06	4.80
2	*5825.00	82.9 AV			1.39 H	299	78.10	4.80
3	#5850.00	59.5 PK	74.0	-14.5	1.39 H	299	54.66	4.85
4	#5850.00	45.4 AV	54.0	-8.6	1.39 H	299	40.56	4.85
5	11650.00	57.7 PK	74.0	-16.3	1.19 H	203	42.49	15.24
6	11650.00	46.5 AV	54.0	-7.5	1.19 H	203	31.28	15.24
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	*5825.00	99.5 PK			1.21 V	246	94.72	4.80
2	*5825.00	88.2 AV			1.21 V	246	83.43	4.80
3	#5850.00	63.8 PK	74.0	-10.2	1.21 V	246	58.99	4.85
4	#5850.00	46.9 AV	54.0	-7.1	1.21 V	246	42.09	4.85
5	11650.00	58.4 PK	74.0	-15.6	1.09 V	141	43.20	15.24
6	11650.00	47.9 AV	54.0	-6.1	1.09 V	141	32.66	15.24

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 (40MHz)

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	55.0 PK	74.0	-19.0	1.56 H	57	51.75	3.27
2	5150.00	43.4 AV	54.0	-10.6	1.56 H	57	40.15	3.27
3	*5190.00	80.6 PK			1.56 H	57	77.33	3.23
4	*5190.00	70.7 AV			1.56 H	57	67.42	3.23
5	#10380.00	56.0 PK	74.0	-18.0	1.00 H	113	42.19	13.81
6	#10380.00	44.8 AV	54.0	-9.2	1.00 H	113	31.02	13.81
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	56.9 PK	74.0	-17.1	1.26 V	277	53.62	3.27
2	5150.00	44.4 AV	54.0	-9.7	1.26 V	277	41.08	3.27
3	*5190.00	91.7 PK			1.26 V	277	88.48	3.23
4	*5190.00	81.7 AV			1.26 V	277	78.43	3.23
5	#10380.00	57.2 PK	74.0	-16.8	1.20 V	119	43.43	13.81
6	#10380.00	46.4 AV	54.0	-7.6	1.20 V	119	32.61	13.81

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	82.2 PK			1.53 H	56	78.95	3.27
2	*5230.00	72.5 AV			1.53 H	56	69.23	3.27
3	5350.00	55.1 PK	74.0	-19.0	1.53 H	56	51.57	3.48
4	5350.00	42.9 AV	54.0	-11.2	1.53 H	56	39.37	3.48
5	#10460.00	56.4 PK	74.0	-17.6	1.33 H	172	42.08	14.28
6	#10460.00	45.1 AV	54.0	-8.9	1.33 H	172	30.83	14.28
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	95.4 PK			1.27 V	244	92.10	3.27
2	*5230.00	84.7 AV			1.27 V	244	81.38	3.27
3	5350.00	56.0 PK	74.0	-18.0	1.27 V	244	52.51	3.48
4	5350.00	44.0 AV	54.0	-10.1	1.27 V	244	40.47	3.48
5	#10460.00	57.3 PK	74.0	-16.7	1.07 V	241	43.00	14.28
6	#10460.00	46.1 AV	54.0	-7.9	1.07 V	241	31.80	14.28

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	55.8 PK	74.0	-18.2	1.00 H	101	52.55	3.27
2	5150.00	43.6 AV	54.0	-10.4	1.00 H	101	40.36	3.27
3	*5270.00	84.7 PK			1.00 H	101	81.38	3.33
4	*5270.00	73.8 AV			1.00 H	101	70.50	3.33
5	#10540.00	56.4 PK	74.0	-17.6	1.13 H	127	41.98	14.43
6	#10540.00	44.6 AV	54.0	-9.4	1.13 H	127	30.20	14.43
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	57.2 PK	74.0	-16.9	1.28 V	245	53.88	3.27
2	5150.00	45.4 AV	54.0	-8.6	1.28 V	245	42.12	3.27
3	*5270.00	97.1 PK			1.28 V	245	93.77	3.33
4	*5270.00	86.8 AV			1.28 V	245	83.45	3.33
5	#10540.00	57.7 PK	74.0	-16.4	1.11 V	209	43.22	14.43
6	#10540.00	46.3 AV	54.0	-7.7	1.11 V	209	31.89	14.43

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	84.5 PK			1.02 H	89	81.14	3.40
2	*5310.00	74.6 AV			1.02 H	89	71.23	3.40
3	5350.00	54.7 PK	74.0	-19.4	1.02 H	89	51.17	3.48
4	5350.00	43.1 AV	54.0	-10.9	1.02 H	89	39.58	3.48
5	10620.00	56.3 PK	74.0	-17.7	1.05 H	249	41.87	14.41
6	10620.00	44.4 AV	54.0	-9.6	1.05 H	249	29.99	14.41
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	96.4 PK			1.27 V	244	93.04	3.40
2	*5310.00	85.9 AV			1.27 V	244	82.48	3.40
3	5350.00	58.2 PK	74.0	-15.8	1.27 V	244	54.72	3.48
4	5350.00	45.1 AV	54.0	-8.9	1.27 V	244	41.58	3.48
5	10620.00	58.5 PK	74.0	-15.5	1.38 V	260	44.05	14.41
6	10620.00	47.3 AV	54.0	-6.7	1.38 V	260	32.87	14.41

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	5460.00	55.5 PK	74.0	-18.5	1.30 H	66	51.74	3.80
2	5460.00	43.4 AV	54.0	-10.6	1.30 H	66	39.56	3.80
3	#5470.00	55.3 PK	74.0	-18.7	1.30 H	66	51.46	3.83
4	#5470.00	43.4 AV	54.0	-10.7	1.30 H	66	39.52	3.83
5	*5510.00	84.3 PK			1.30 H	66	80.27	3.98
6	*5510.00	74.4 AV			1.30 H	66	70.39	3.98
7	11020.00	58.0 PK	74.0	-16.0	1.38 H	290	42.08	15.96
8	11020.00	47.7 AV	54.0	-6.3	1.38 H	290	31.70	15.96
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	55.6 PK	74.0	-18.4	1.20 V	246	51.80	3.80
2	5460.00	43.9 AV	54.0	-10.1	1.20 V	246	40.06	3.80
3	#5470.00	56.9 PK	74.0	-17.1	1.20 V	246	53.09	3.83
4	#5470.00	45.7 AV	54.0	-8.3	1.20 V	246	41.83	3.83
5	*5510.00	95.8 PK			1.20 V	246	91.81	3.98
6	*5510.00	84.8 AV			1.20 V	246	80.84	3.98
7	11020.00	59.9 PK	74.0	-14.2	1.07 V	131	43.89	15.96
8	11020.00	48.9 AV	54.0	-5.1	1.07 V	131	32.93	15.96

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	86.0 PK			1.43 H	90	81.83	4.17
2	*5550.00	74.6 AV			1.43 H	90	70.40	4.17
3	11100.00	58.2 PK	74.0	-15.8	1.03 H	109	42.31	15.86
4	11100.00	46.6 AV	54.0	-7.4	1.03 H	109	30.76	15.86
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	95.6 PK			1.01 V	312	91.45	4.17
2	*5550.00	86.8 AV			1.01 V	312	82.61	4.17
3	11100.00	59.1 PK	74.0	-15.0	1.02 V	343	43.19	15.86
4	11100.00	48.4 AV	54.0	-5.6	1.02 V	343	32.56	15.86

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 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	85.6 PK			1.03 H	296	81.37	4.27
2	*5670.00	75.1 AV			1.03 H	296	70.82	4.27
3	#5725.00	55.7 PK	74.0	-18.3	1.03 H	296	51.37	4.35
4	#5725.00	44.2 AV	54.0	-9.8	1.03 H	296	39.89	4.35
5	11340.00	57.8 PK	74.0	-16.2	1.08 H	174	41.92	15.87
6	11340.00	47.2 AV	54.0	-6.9	1.08 H	174	31.28	15.87
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	94.0 PK			1.14 V	270	89.68	4.27
2	*5670.00	83.2 AV			1.14 V	270	78.89	4.27
3	#5725.00	58.4 PK	74.0	-15.6	1.14 V	270	54.08	4.35
4	#5725.00	46.7 AV	54.0	-7.3	1.14 V	270	42.33	4.35
5	11340.00	58.8 PK	74.0	-15.2	1.42 V	143	42.89	15.87
6	11340.00	48.8 AV	54.0	-5.2	1.42 V	143	32.92	15.87

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	#5725.00	57.9 PK	74.0	-16.1	1.28 H	293	53.54	4.35
2	#5725.00	45.0 AV	54.0	-9.0	1.28 H	293	40.62	4.35
3	*5755.00	86.6 PK			1.28 H	293	82.08	4.52
4	*5755.00	75.8 AV			1.28 H	293	71.25	4.52
5	11510.00	58.5 PK	74.0	-15.5	1.23 H	237	42.31	16.21
6	11510.00	46.8 AV	54.0	-7.2	1.23 H	237	30.58	16.21
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	#5725.00	61.1 PK	74.0	-12.9	1.22 V	246	56.74	4.35
2	#5725.00	47.0 AV	54.0	-7.0	1.22 V	246	42.65	4.35
3	*5755.00	93.5 PK			1.22 V	246	88.94	4.52
4	*5755.00	83.3 AV			1.22 V	246	78.76	4.52
5	11510.00	59.1 PK	74.0	-14.9	1.00 V	351	42.86	16.21
6	11510.00	48.1 AV	54.0	-5.9	1.00 V	351	31.93	16.21

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	*5795.00	87.2 PK			1.43 H	298	82.45	4.73
2	*5795.00	76.7 AV			1.43 H	298	71.92	4.73
3	#5850.00	55.8 PK	74.0	-18.2	1.43 H	298	50.93	4.85
4	#5850.00	44.9 AV	54.0	-9.1	1.43 H	298	40.03	4.85
5	11590.00	57.0 PK	74.0	-17.0	1.10 H	257	41.93	15.08
6	11590.00	46.3 AV	54.0	-7.7	1.10 H	257	31.25	15.08
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	*5795.00	92.9 PK			1.07 V	253	88.15	4.73
2	*5795.00	82.8 AV			1.07 V	253	78.09	4.73
3	#5850.00	58.1 PK	74.0	-15.9	1.07 V	253	53.22	4.85
4	#5850.00	46.4 AV	54.0	-7.6	1.07 V	253	41.58	4.85
5	11590.00	58.0 PK	74.0	-16.0	1.12 V	169	42.91	15.08
6	11590.00	47.2 AV	54.0	-6.8	1.12 V	169	32.08	15.08

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.

802.11ac BW80

CHANNEL	TX Channel 42	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	56.0 PK	74.0	-18.0	1.73 H	91	52.69	3.27
2	5150.00	44.2 AV	54.0	-9.8	1.73 H	91	40.91	3.27
3	*5210.00	83.2 PK			1.73 H	91	79.93	3.23
4	*5210.00	72.3 AV			1.73 H	91	69.02	3.23
5	5350.00	54.8 PK	74.0	-19.2	1.73 H	91	51.34	3.48
6	5350.00	43.2 AV	54.0	-10.8	1.73 H	91	39.72	3.48
7	#10420.00	56.6 PK	74.0	-17.4	1.34 H	151	42.61	13.96
8	#10420.00	45.0 AV	54.0	-9.0	1.34 H	151	31.03	13.96
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.1 PK	74.0	-15.9	1.38 V	252	54.83	3.27
2	5150.00	45.1 AV	54.0	-8.9	1.38 V	252	41.79	3.27
3	*5210.00	91.8 PK			1.38 V	252	88.59	3.23
4	*5210.00	82.1 AV			1.38 V	252	78.82	3.23
5	5350.00	55.7 PK	74.0	-18.4	1.38 V	252	52.17	3.48
6	5350.00	44.2 AV	54.0	-9.8	1.38 V	252	40.73	3.48
7	#10420.00	57.0 PK	74.0	-17.0	1.27 V	283	43.08	13.96
8	#10420.00	46.6 AV	54.0	-7.5	1.27 V	283	32.59	13.96

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 58	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	55.0 PK	74.0	-19.0	1.56 H	89	51.72	3.27
2	5150.00	43.2 AV	54.0	-10.9	1.56 H	89	39.88	3.27
3	*5290.00	85.0 PK			1.56 H	89	81.59	3.37
4	*5290.00	74.0 AV			1.56 H	89	70.67	3.37
5	5350.00	55.6 PK	74.0	-18.4	1.56 H	89	52.16	3.48
6	5350.00	43.4 AV	54.0	-10.6	1.56 H	89	39.88	3.48
7	#10580.00	57.1 PK	74.0	-17.0	1.06 H	239	42.81	14.24
8	#10580.00	45.2 AV	54.0	-8.8	1.06 H	239	30.92	14.24
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	55.4 PK	74.0	-18.6	1.35 V	250	52.17	3.27
2	5150.00	43.6 AV	54.0	-10.4	1.35 V	250	40.31	3.27
3	*5290.00	95.1 PK			1.35 V	250	91.71	3.37
4	*5290.00	83.3 AV			1.35 V	250	79.88	3.37
5	5350.00	57.9 PK	74.0	-16.1	1.35 V	250	54.42	3.48
6	5350.00	46.3 AV	54.0	-7.7	1.35 V	250	42.79	3.48
7	#10580.00	58.3 PK	74.0	-15.7	1.26 V	217	44.02	14.24
8	#10580.00	46.8 AV	54.0	-7.2	1.26 V	217	32.56	14.24

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.4 PK	74.0	-17.6	1.42 H	92	52.64	3.80
2	5460.00	43.6 AV	54.0	-10.4	1.42 H	92	39.79	3.80
3	#5470.00	55.8 PK	74.0	-18.2	1.42 H	92	51.99	3.83
4	#5470.00	43.8 AV	54.0	-10.2	1.42 H	92	39.94	3.83
5	*5530.00	84.2 PK			1.42 H	92	80.17	4.07
6	*5530.00	72.9 AV			1.42 H	92	68.81	4.07
7	11060.00	58.1 PK	74.0	-15.9	1.02 H	37	42.18	15.91
8	11060.00	46.1 AV	54.0	-7.9	1.02 H	37	30.23	15.91
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	59.8 PK	74.0	-14.2	1.00 V	310	56.02	3.80
2	5460.00	46.6 AV	54.0	-7.4	1.00 V	310	42.77	3.80
3	#5470.00	58.3 PK	74.0	-15.7	1.00 V	310	54.49	3.83
4	#5470.00	47.0 AV	54.0	-7.0	1.00 V	310	43.19	3.83
5	*5530.00	94.8 PK			1.00 V	310	90.75	4.07
6	*5530.00	83.2 AV			1.00 V	310	79.08	4.07
7	11060.00	58.6 PK	74.0	-15.4	1.16 V	222	42.65	15.91
8	11060.00	47.2 AV	54.0	-6.9	1.16 V	222	31.24	15.91

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 155	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	#5725.00	57.2 PK	74.0	-16.8	1.71 H	300	52.87	4.35
2	#5725.00	45.1 AV	54.0	-8.9	1.71 H	300	40.77	4.35
3	*5775.00	85.9 PK			1.71 H	300	81.24	4.63
4	*5775.00	74.9 AV			1.71 H	300	70.31	4.63
5	#5850.00	56.7 PK	74.0	-17.3	1.71 H	300	51.84	4.85
6	#5850.00	44.8 AV	54.0	-9.2	1.71 H	300	39.96	4.85
7	11550.00	58.3 PK	74.0	-15.8	1.51 H	224	42.61	15.64
8	11550.00	46.5 AV	54.0	-7.5	1.51 H	224	30.83	15.64
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	#5725.00	59.1 PK	74.0	-14.9	1.23 V	246	54.72	4.35
2	#5725.00	47.2 AV	54.0	-6.8	1.23 V	246	42.84	4.35
3	*5775.00	91.6 PK			1.23 V	246	87.01	4.63
4	*5775.00	80.7 AV			1.23 V	246	76.03	4.63
5	#5850.00	57.6 PK	74.0	-16.4	1.23 V	246	52.79	4.85
6	#5850.00	45.0 AV	54.0	-9.0	1.23 V	246	40.14	4.85
7	11550.00	58.9 PK	74.0	-15.2	1.30 V	178	43.21	15.64
8	11550.00	47.4 AV	54.0	-6.6	1.30 V	178	31.76	15.64

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

BELOW 1GHz WORST-CASE DATA: 802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 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	34.41	29.1 QP	40.0	-10.9	2.37 H	352	44.29	-15.17
2	257.56	25.8 QP	46.0	-20.2	2.06 H	48	39.56	-13.72
3	325.41	34.5 QP	46.0	-11.5	2.18 H	101	45.93	-11.45
4	370.13	34.5 QP	46.0	-11.5	1.75 H	92	45.16	-10.64
5	421.39	32.8 QP	46.0	-13.2	1.69 H	96	42.57	-9.76
6	749.98	27.7 QP	46.0	-18.3	1.00 H	67	31.39	-3.68
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	34.66	33.2 QP	40.0	-6.8	1.41 V	3	48.36	-15.16
2	116.23	21.1 QP	43.5	-22.4	1.00 V	211	37.40	-16.32
3	182.63	22.6 QP	43.5	-20.9	1.00 V	268	37.83	-15.22
4	287.15	23.7 QP	46.0	-22.3	1.00 V	286	36.16	-12.42
5	321.82	26.6 QP	46.0	-19.4	1.52 V	129	38.14	-11.54
6	749.98	27.8 QP	46.0	-18.2	2.39 V	179	31.52	-3.68

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

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	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.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.2.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
ROHDE & SCHWARZ TEST RECEIVER	ESCS 30	100276	Apr. 18, 2014	Apr. 17, 2015
ROHDE & SCHWARZ Artificial Mains Network (for EUT)	ENV216	101197	Apr. 18, 2014	Apr. 17, 2015
LISN With Adapter (for EUT)	AD10	C10Ada-002	Apr. 18, 2014	Apr. 17, 2015
ROHDE & SCHWARZ Artificial Mains Network (for peripherals)	ESH3-Z5	100218	Nov. 25, 2014	Nov. 24, 2015
SCHWARZBECK Artificial Mains Network (For EUT)	NNLK8129	8129229	May 08, 2014	May 07, 2015
Software	ADT_Cond_V7.3.7	NA	NA	NA
RF cable (JYEBAO)	5D-FB	Cable-C10.01	Feb. 18, 2014	Feb. 17, 2015
SUHNER Terminator (For ROHDE & SCHWARZ LISN)	65BNC-5001	E1-011484	May 27, 2014	May 26, 2015
ROHDE & SCHWARZ Artificial Mains Network (For TV EUT)	ESH3-Z5	100220	Nov. 20, 2014	Nov. 19, 2015
LISN With Adapter (for TV EUT)	100220	N/A	Nov. 20, 2014	Nov. 19, 2015

Notes: 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 Shielded Room No. 10.
3. The VCCI Site Registration No. C-1852.

4.2.3 TEST PROCEDURES

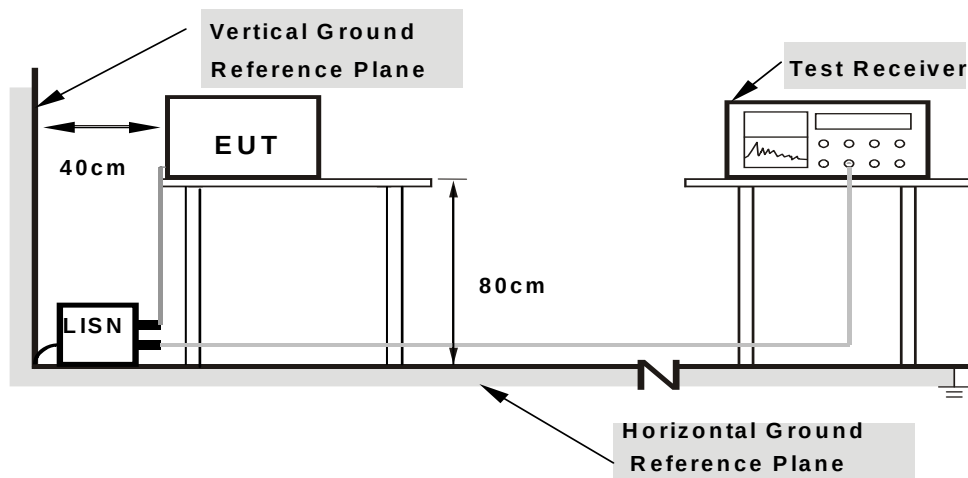
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were 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.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

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

4.2.6 EUT OPERATING CONDITIONS

- Set the EUT under transmission condition continuously at specific channel frequency.
- EUT sent messages to monitor and monitor displayed it on screen.

4.2.7 TEST RESULTS

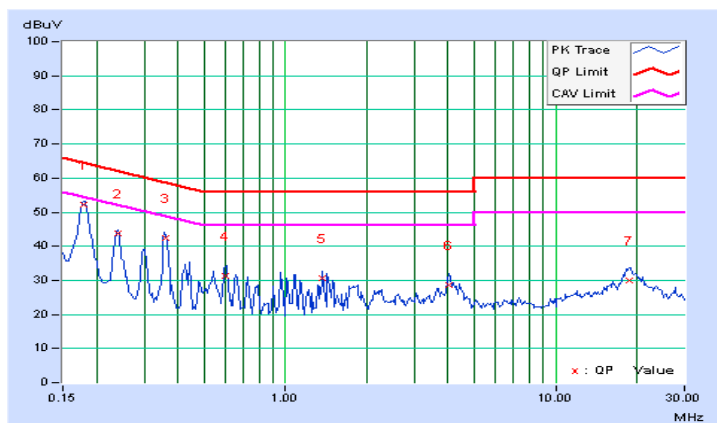
CONDUCTED WORST-CASE DATA

PHASE	Line 1	6dB BANDWIDTH	9kHz
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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	0.17997	9.66	42.51	33.58	52.17	43.24	64.49	54.49	-12.31	-11.24
2	0.23984	9.66	34.08	24.00	43.74	33.66	62.10	52.10	-18.36	-18.44
3	0.35958	9.67	32.84	25.61	42.51	35.28	58.74	48.74	-16.23	-13.46
4	0.59930	9.68	21.67	19.19	31.35	28.87	56.00	46.00	-24.65	-17.13
5	1.37500	9.69	20.94	16.32	30.63	26.01	56.00	46.00	-25.37	-19.99
6	4.05469	9.73	19.04	6.50	28.77	16.23	56.00	46.00	-27.23	-29.77
7	18.78125	9.95	19.86	12.69	29.81	22.64	60.00	50.00	-30.19	-27.36

Remarks:

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

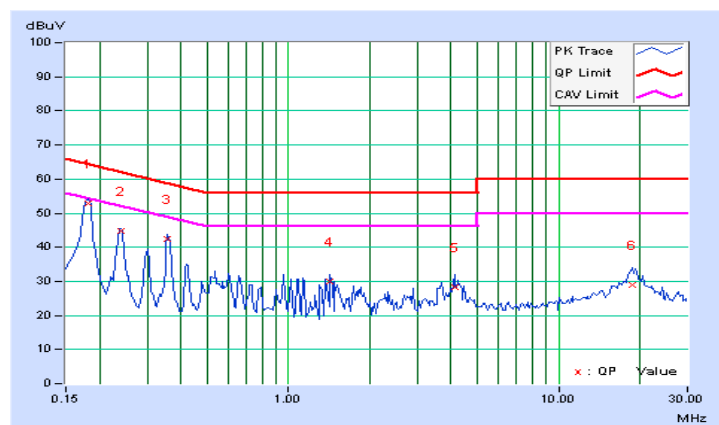


PHASE	Line 2	6dB BANDWIDTH	9kHz
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Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18125	9.67	43.11	32.93	52.78	42.60	64.43	54.43	-11.65	-11.83
2	0.23984	9.67	34.96	24.22	44.63	33.89	62.10	52.10	-17.47	-18.21
3	0.35703	9.68	32.66	25.27	42.34	34.95	58.80	48.80	-16.46	-13.85
4	1.42969	9.69	20.41	15.86	30.10	25.55	56.00	46.00	-25.90	-20.45
5	4.10938	9.74	18.59	8.27	28.33	18.01	56.00	46.00	-27.67	-27.99
6	18.67969	9.97	18.94	11.45	28.91	21.42	60.00	50.00	-31.09	-28.58

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



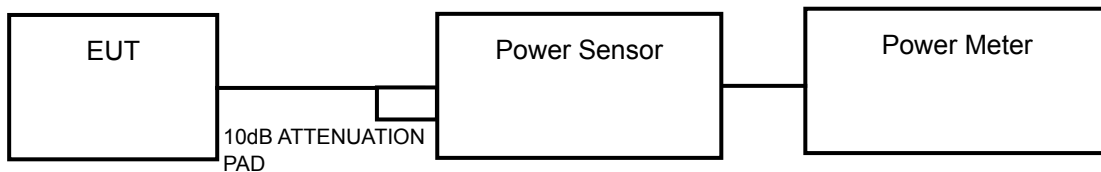
4.3 TRANSMIT POWER MEASUREMENT

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



4.3.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.3.4 TEST PROCEDURE

FOR AVERAGE POWER MEASUREMENT

For 802.11a, 802.11n (HT20), 802.11n (HT40)

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 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 CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

4.3.7 TEST RESULTS

POWER OUTPUT:

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	15.0	11.76	24	PASS
40	5200	14.3	11.54	24	PASS
48	5240	14.8	11.71	24	PASS
52	5260	14.6	11.64	24	PASS
60	5300	14.3	11.55	24	PASS
64	5320	14.0	11.47	24	PASS
100	5500	9.7	9.85	24	PASS
116	5580	9.7	9.87	24	PASS
132	5660	11.7	10.68	24	PASS
140	5700	14.3	11.54	24	PASS
149	5745	15.8	12.00	30	PASS
157	5785	15.5	11.91	30	PASS
165	5825	15.1	11.80	30	PASS

NOTE:

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

1. $11\text{dBm} + 10\log (24.02) = 24.81 > 24\text{dBm}$
2. $11\text{dBm} + 10\log (23.77) = 24.76 > 24\text{dBm}$
3. $11\text{dBm} + 10\log (24.28) = 24.85 > 24\text{dBm}$
4. $11\text{dBm} + 10\log (24.89) = 24.96 > 24\text{dBm}$
5. $11\text{dBm} + 10\log (23.37) = 24.69 > 24\text{dBm}$
6. $11\text{dBm} + 10\log (26.56) = 25.24 > 24\text{dBm}$
7. $11\text{dBm} + 10\log (32.89) = 26.17 > 24\text{dBm}$

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	9.7	9.87	24	PASS
40	5200	9.4	9.74	24	PASS
48	5240	10.1	10.05	24	PASS
52	5260	10.4	10.17	24	PASS
60	5300	9.0	9.56	24	PASS
64	5320	9.4	9.72	24	PASS
100	5500	8.8	9.45	24	PASS
116	5580	9.2	9.64	24	PASS
132	5660	10.1	10.03	24	PASS
140	5700	10.7	10.31	24	PASS
149	5745	10.0	9.98	30	PASS
157	5785	9.7	9.87	30	PASS
165	5825	9.6	9.80	30	PASS

NOTE:

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

1. $11\text{dBm} + 10\log (23.00) = 24.62 > 24\text{dBm}$
2. $11\text{dBm} + 10\log (22.77) = 24.57 > 24\text{dBm}$
3. $11\text{dBm} + 10\log (22.85) = 24.59 > 24\text{dBm}$
4. $11\text{dBm} + 10\log (22.91) = 24.60 > 24\text{dBm}$
5. $11\text{dBm} + 10\log (23.10) = 24.64 > 24\text{dBm}$
6. $11\text{dBm} + 10\log (22.97) = 24.61 > 24\text{dBm}$
7. $11\text{dBm} + 10\log (29.52) = 25.70 > 24\text{dBm}$

802.11n (40 MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	5.6	7.51	24	PASS
46	5230	6.1	7.84	24	PASS
54	5270	6.2	7.93	24	PASS
62	5310	6.0	7.75	24	PASS
102	5510	6.4	8.06	24	PASS
110	5550	5.9	7.69	24	PASS
134	5670	6.0	7.78	24	PASS
151	5755	6.1	7.87	30	PASS
159	5795	6.0	7.81	30	PASS

NOTE:

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

1. $11\text{dBm} + 10\log (44.93) = 27.53 > 24\text{dBm}$
2. $11\text{dBm} + 10\log (47.86) = 27.80 > 24\text{dBm}$
3. $11\text{dBm} + 10\log (46.23) = 27.65 > 24\text{dBm}$
4. $11\text{dBm} + 10\log (45.72) = 27.60 > 24\text{dBm}$
5. $11\text{dBm} + 10\log (45.32) = 27.56 > 24\text{dBm}$

802.11ac (80 MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
42	5210	6.1	7.84	24	PASS
58	5290	6.2	7.89	24	PASS
106	5530	6.2	7.92	24	PASS
155	5775	6.0	7.78	30	PASS

NOTE:

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

1. $11\text{dBm} + 10\log (85.17) = 30.30 > 24\text{dBm}$
2. $11\text{dBm} + 10\log (85.80) = 30.33 > 24\text{dBm}$

26dB BANDWIDTH:

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
52	5260	24.02	PASS
60	5300	23.77	PASS
64	5320	24.28	PASS
100	5500	24.89	PASS
116	5580	23.37	PASS
132	5660	26.56	PASS
140	5700	32.89	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
52	5260	23.00	PASS
60	5300	22.77	PASS
64	5320	22.85	PASS
100	5500	22.91	PASS
116	5580	23.10	PASS
132	5660	22.97	PASS
140	5700	29.52	PASS

802.11n (40MHz)

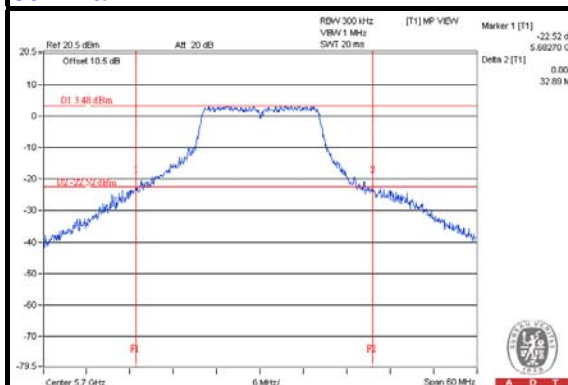
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
54	5270	44.93	PASS
62	5310	47.86	PASS
102	5510	46.23	PASS
110	5550	45.72	PASS
134	5670	45.32	PASS

802.11ac (80MHz)

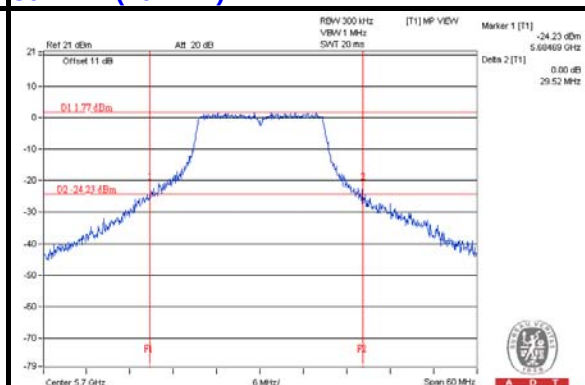
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
58	5290	85.17	PASS
106	5530	85.80	PASS

SPECTRUM PLOT OF WORST VALUE

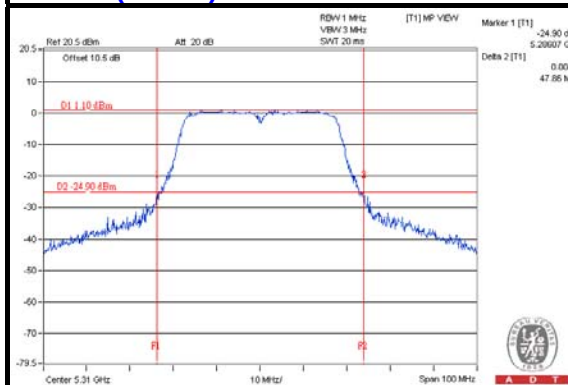
802.11a



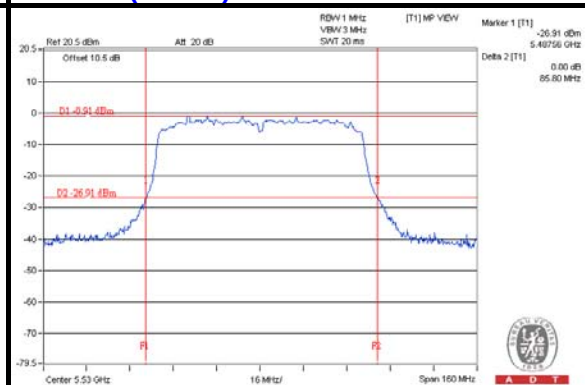
802.11n (20 MHz)



802.11n (40MHz)



802.11ac (80MHz)



EUT MAXIMUM CONDUCTED POWER

802.11a

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	14.6	11.64
5470~5725	14.3	11.54

802.11n (20MHz)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	10.4	10.17
5470~5725	10.7	10.31

802.11n (40MHz)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	6.2	7.93
5470~5725	6.4	8.06

802.11ac (80MHz)

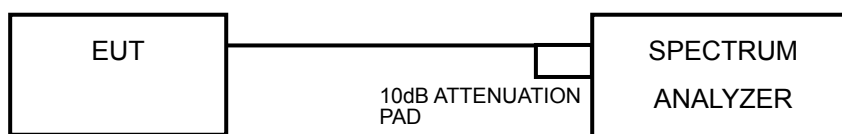
FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	6.2	7.89
5470~5725	6.2	7.92

4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 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

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.4.4 TEST PROCEDURES

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 = 30 kHz, Set VBW $\geq$ 1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to “free run”.
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value and add 10 log (1/duty cycle)

For U-NII-3 band:

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 500 kHz, Set VBW $\geq$ 3 RBW, 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)

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

Same as 4.3.6.

4.4.7 TEST RESULTS

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

802.11a

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	-5.47	0.99	-4.48	11	PASS
40	5200	-5.38	0.99	-4.39	11	PASS
48	5240	-5.23	0.99	-4.24	11	PASS
52	5260	-5.48	0.99	-4.49	11	PASS
60	5300	-5.34	0.99	-4.35	11	PASS
64	5320	-5.00	0.99	-4.01	11	PASS
100	5500	-4.47	0.99	-3.48	11	PASS
116	5580	-5.13	0.99	-4.14	11	PASS
132	5660	-5.33	0.99	-4.34	11	PASS
140	5700	-5.14	0.99	-4.15	11	PASS

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

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	-7.09	0.92	-6.17	11	PASS
40	5200	-7.14	0.92	-6.22	11	PASS
48	5240	-6.99	0.92	-6.07	11	PASS
52	5260	-7.00	0.92	-6.08	11	PASS
60	5300	-7.12	0.92	-6.20	11	PASS
64	5320	-6.99	0.92	-6.07	11	PASS
100	5500	-6.55	0.92	-5.63	11	PASS
116	5580	-6.40	0.92	-5.48	11	PASS
132	5660	-7.25	0.92	-6.33	11	PASS
140	5700	-6.86	0.92	-5.94	11	PASS

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

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
38	5190	-17.95	1.81	-16.14	11	PASS
46	5230	-18.41	1.81	-16.60	11	PASS
54	5270	-19.18	1.81	-17.37	11	PASS
62	5310	-17.62	1.81	-15.81	11	PASS
102	5510	-18.58	1.81	-16.77	11	PASS
110	5550	-17.74	1.81	-15.93	11	PASS
134	5670	-17.95	1.81	-16.14	11	PASS

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

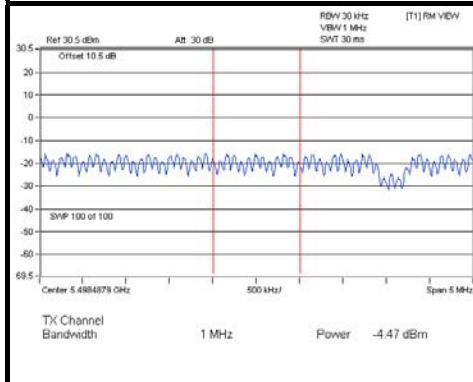
802.11ac (80MHz)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
42	5210	-23.36	3.21	-20.15	11	PASS
58	5290	-23.87	3.21	-20.66	11	PASS
106	5530	-23.60	3.21	-20.39	11	PASS

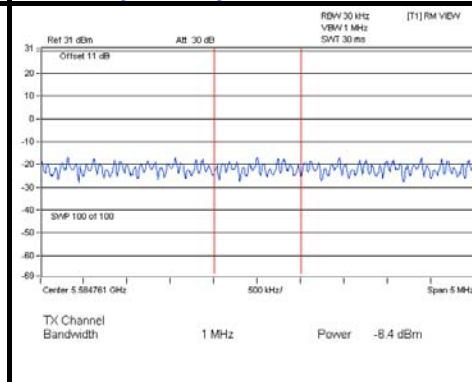
Note: Refer to section 3.3 for duty cycle spectrum plot.

SPECTRUM PLOT OF WORST VALUE

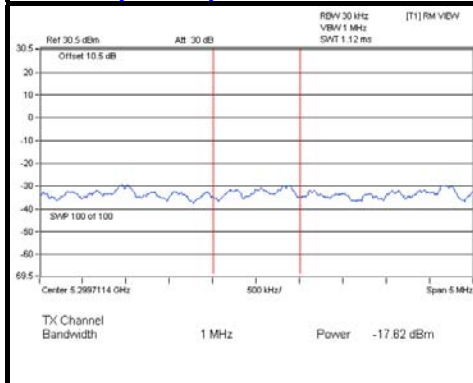
802.11a



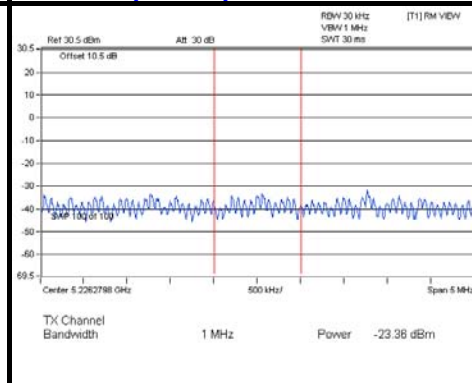
802.11n (20 MHz)



802.11n (40MHz)



802.11ac (80MHz)



For U-NII-3 Band

802.11a

Channel	Freq. (MHz)	PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS /FAIL
149	5745	6.87	30	PASS
157	5785	6.36	30	PASS
165	5825	6.48	30	PASS

802.11n (20MHz)

Channel	Freq. (MHz)	PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS /FAIL
149	5745	4.65	30	PASS
157	5785	4.74	30	PASS
165	5825	4.14	30	PASS

802.11n (40MHz)

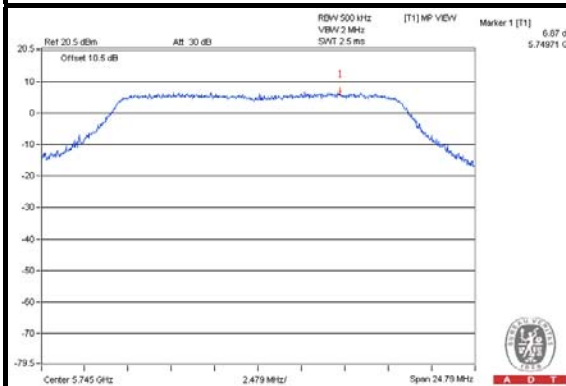
Channel	Freq. (MHz)	PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS /FAIL
151	5755	-1.98	30	PASS
159	5795	-2.43	30	PASS

802.11ac (80MHz)

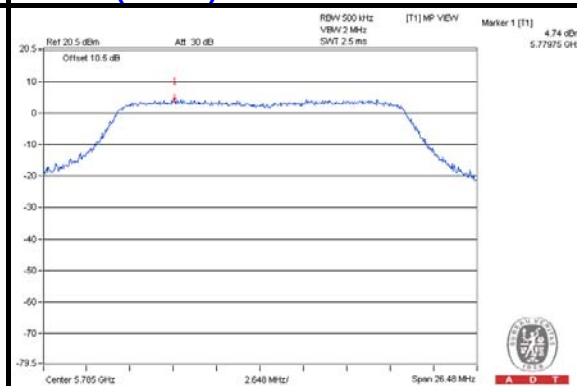
Channel	Freq. (MHz)	PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS /FAIL
155	5775	-1.92	30	PASS

SPECTRUM PLOT OF WORST VALUE

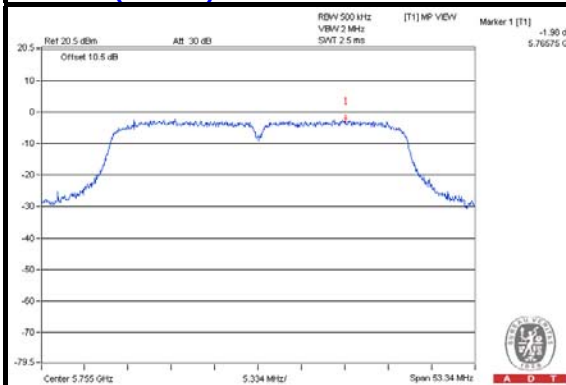
802.11a



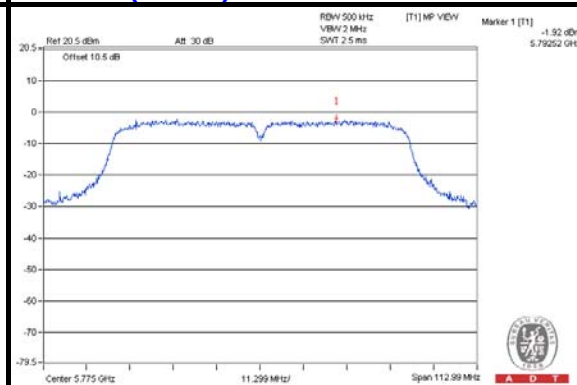
802.11n (20MHz)



802.11n (40MHz)



802.11ac (80MHz)

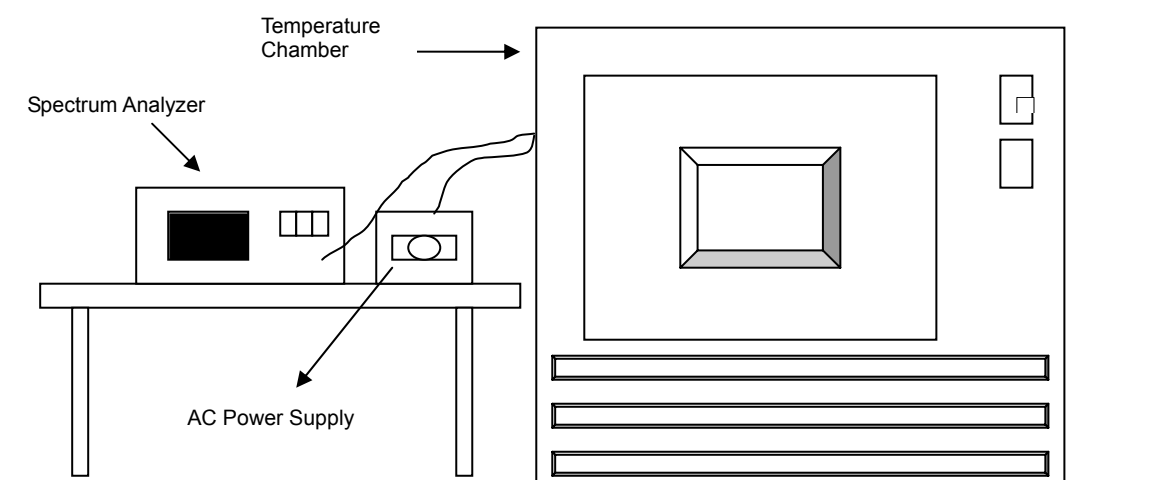


4.5 FREQUENCY STABILITY

4.5.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

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

4.5.2 TEST SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.5.4 TEST PROCEDURE

- a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- b. Turn the EUT on and couple its output to a spectrum analyzer.
- c. Turn the EUT off and set the chamber to the highest temperature specified.
- d. 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.
- e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- f. 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.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

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

4.5.7 TEST RESULTS

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
50	120	5180.042446	8.1942302	5180.042803	8.2630537	5180.042529	8.2102790	5180.042948	8.2911540
40	120	5180.042571	8.2183868	5180.042766	8.2559323	5180.042819	8.2661853	5180.042806	8.2637099
30	120	5180.042935	8.2885181	5180.042873	8.2765616	5180.042743	8.2514681	5180.0429	8.2818994
20	120	5180.042709	8.2449761	5180.042631	8.2298580	5180.042931	8.2878639	5180.042954	8.2923164
10	120	5180.043356	8.3699784	5180.04305	8.3108682	5180.042867	8.2755705	5180.043329	8.3647076
0	120	5180.042898	8.2813749	5180.043109	8.3222735	5180.042716	8.2463261	5180.042766	8.2560385
-10	120	5180.042577	8.2195410	5180.042726	8.2482636	5180.042412	8.1876281	5180.042599	8.2237507
-20	120	5180.042812	8.2649152	5180.043287	8.3566485	5180.042886	8.2792189	5180.043248	8.3490677

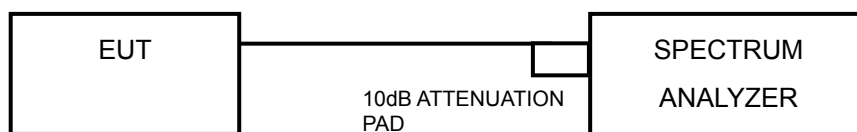
FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
20	138	5180.042935	8.2886831	5180.042756	8.2540417	5180.042677	8.2388990	5180.042982	8.2977178
	120	5180.042709	8.2449761	5180.042631	8.2298580	5180.042931	8.2878639	5180.042954	8.2923164
	102	5180.043064	8.3134808	5180.042788	8.2602843	5180.042906	8.2830344	5180.042854	8.2730456

4.6 6dB BANDWIDTH MEASUREMENT

4.6.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

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

- 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

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 EUT OPERATING CONDITIONS

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

4.6.7 TEST RESULTS

802.11a

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
149	5745	16.53	0.5	PASS
157	5785	16.51	0.5	PASS
165	5825	16.46	0.5	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
149	5745	17.65	0.5	PASS
157	5785	17.66	0.5	PASS
165	5825	17.66	0.5	PASS

802.11n (40MHz)

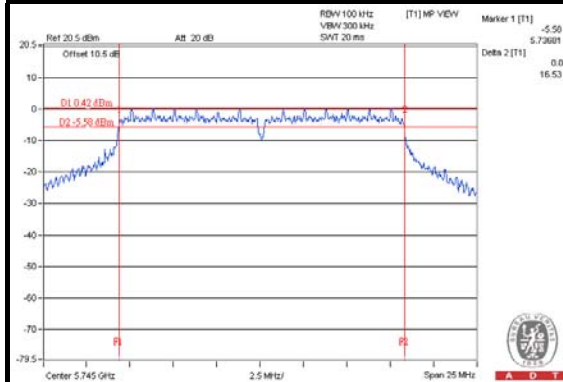
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
151	5755	35.56	0.5	PASS
159	5795	35.31	0.5	PASS

802.11ac (80MHz)

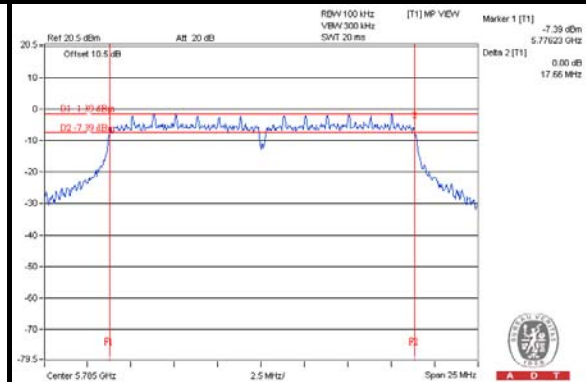
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
155	5775	75.33	0.5	PASS

SPECTRUM PLOT OF WORST VALUE

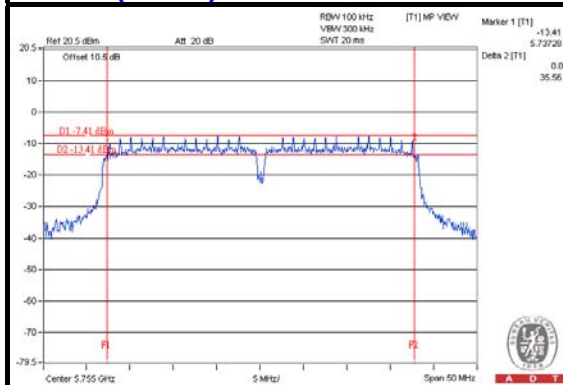
802.11a



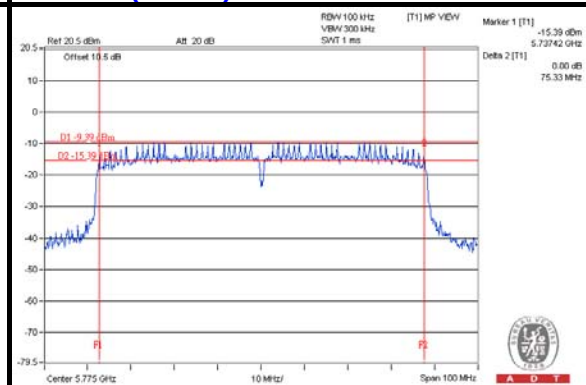
802.11n (20MHz)



802.11n (40MHz)



802.11ac (80MHz)



5. PHOTOGRAPHS OF THE TEST CONFIGURATION

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

6. 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

Hsin Chu EMC/RF/Telecom Lab:

Tel: 886-3-5935343

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Lab:

Tel: 886-3-3183232

Fax: 886-3-3270892

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.

7. APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

---END---