FCC TEST REPORT

(15.407)

REPORT NO.: RF141024D09-1

MODEL NO.: UVC-Micro

FCC ID: SWX-MICRO

RECEIVED: Oct. 27, 2014

TESTED: Nov. 5 ~ Dec. 11, 2014

ISSUED: Dec. 12, 2014

APPLICANT: Ubiquiti Networks, Inc.

ADDRESS: 12F, No105, Song Ren Rd., SinYi District, Taipei, Taiwan

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.

This report should not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF141024D09-1	Original release.	Dec. 12, 2014

1. CERTIFICATION

PRODUCT:	Video Camera
MODEL:	UVC-Micro
APPLICANT:	Ubiquiti Networks, Inc.
TESTED:	Nov. 5 ~ Dec. 11, 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. 12, 2014

(Annie Chang / Supervisor)

APPROVED BY : Rex. Lai , **DATE:** Dec. 12, 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)			
STANDARD SECTION	**TEST TYPE**	**RESULT**	**REMARK**
15.407(b)(6)	AC Power Conducted Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.01dB at 0.55234MHz.
15.407(b) (1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -0.4dB 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	Video Camera
MODEL NO.	UVC-Micro
POWER SUPPLY	5.5Vdc from Adapter
MODULATION TYPE	64QAM, 16QAM, QPSK, BPSK
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 150.0Mbps
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) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 5500 ~ 5700MHz: 8 for 802.11a, 802.11n (20MHz) 3 for 802.11n (40MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz)
OUTPUT POWER	5180 ~ 5240MHz: 19.1mW 5260 ~ 5320MHz: 13.5mW 5500 ~ 5700MHz: 30.8mW 5745 ~ 5825MHz: 55.5mW
ANTENNA TYPE	Metal antenna with 1dBi gain
ANTENNA CONNECTOR	N/A
DATA CABLE	N/A
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	Refer to Note as below

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

2. The EUT consumes power from following adapter:

BRAND	MODEL	Rating
UBIQUITI	G0725-550-150	AC I/P: 100-240Vac 50/60Hz MAX 0,5A (AC 2Pin) DC O/P: 5.5Vdc 1.5A Non-shielded DC cable (5m)

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

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

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		

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

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
-	√	√	√	√	-

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

RADIATED EMISSION TEST (ABOVE 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	6.0
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13.5
-	802.11a	5500-5700	100 to 140	100, 116, 132, 140	OFDM	BPSK	6.0
-	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	13.5
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	13.5

RADIATED EMISSION TEST (BELOW 1GHz):

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

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	6.0
-	802.11a	5745-5825	149 to 165	149	OFDM	BPSK	6.0

POWER LINE CONDUCTED EMISSION TEST:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5180-5240	36 to 48	36	OFDM	BPSK	6.0

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	6.0
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13.5
-	802.11a	5500-5700	100 to 140	100, 116, 132 140	OFDM	BPSK	6.0
-	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	13.5
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	13.5

TEST CONDITION:

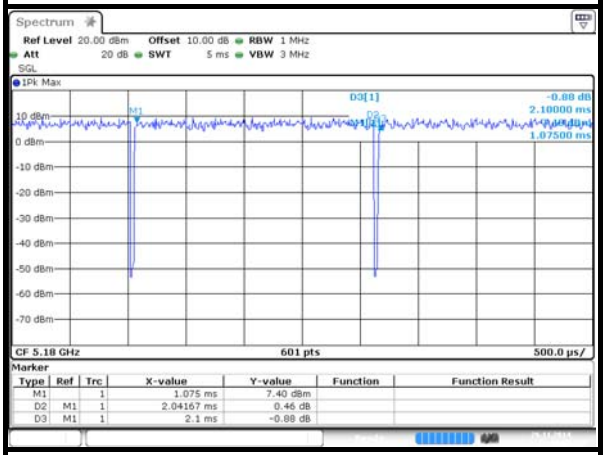
APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	24deg. C, 75% RH	120Vac, 60Hz	Aaron You
RE<1G	22deg. C, 79% RH	120Vac, 60Hz	Aaron You
PLC	25deg. C, 75% RH	120Vac, 60Hz	Chad Lee
APCM	25deg. C, 60% RH	120Vac, 60Hz	Saxon Lee

3.3 DUTY CYCLE OF TEST SIGNAL

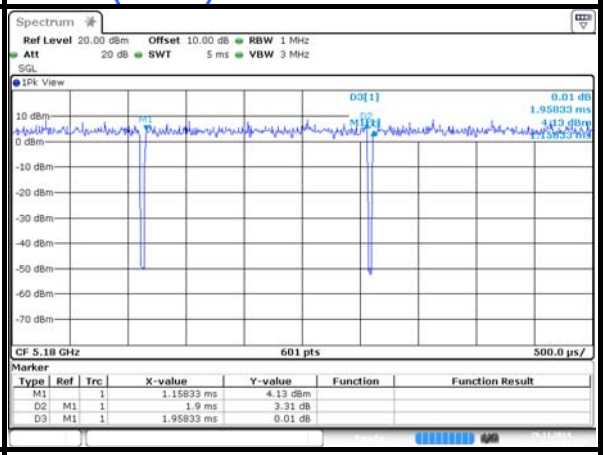
Duty cycle is < 98%, duty factor shall be considered.

802.11a: Duty cycle = 2.041/2.100 = 0.972, Duty factor = 10 * log(1/0.972) = 0.12
802.11n (20MHz): Duty cycle = 1.900/1.958 = 0.970, Duty factor = 10 * log(1/0.970) = 0.13
802.11n (40MHz): Duty cycle = 0.930/0.983 = 0.946, Duty factor = 10 * log(1/0.946) = 0.24

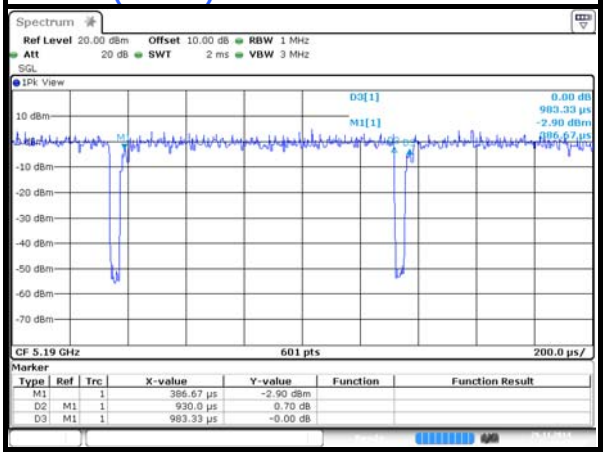
802.11a



802.11n (20MHz)



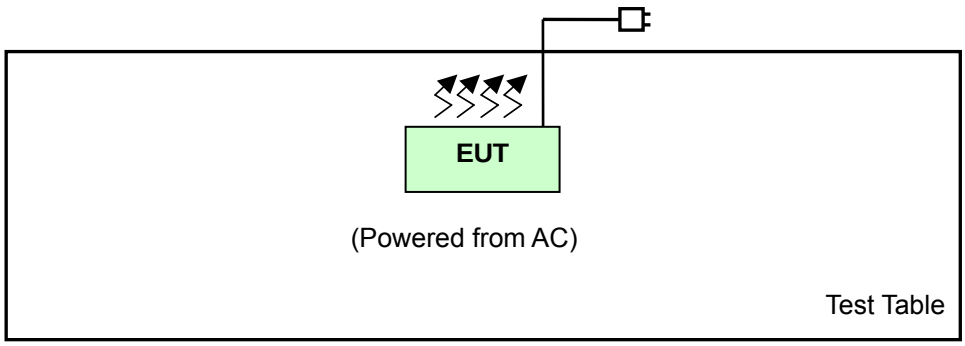
802.11n (40MHz)



3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together without other necessary accessories or support units.

3.4.1 CONFIGURATION OF SYSTEM UNDER 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.

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 (dBμV/m)	AV: 54 (dBμV/m)
APPLICABLE TO	**EIRP LIMIT**	**EQUIVALENT FIELD STRENGTH AT 3m**
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/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 (dBμV/m) *1 PK: 78.2 (dBμV/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:

$$E = \frac{1000000\sqrt{30P}}{3}$$ μV/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-260400-33-8P	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 camber. 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:

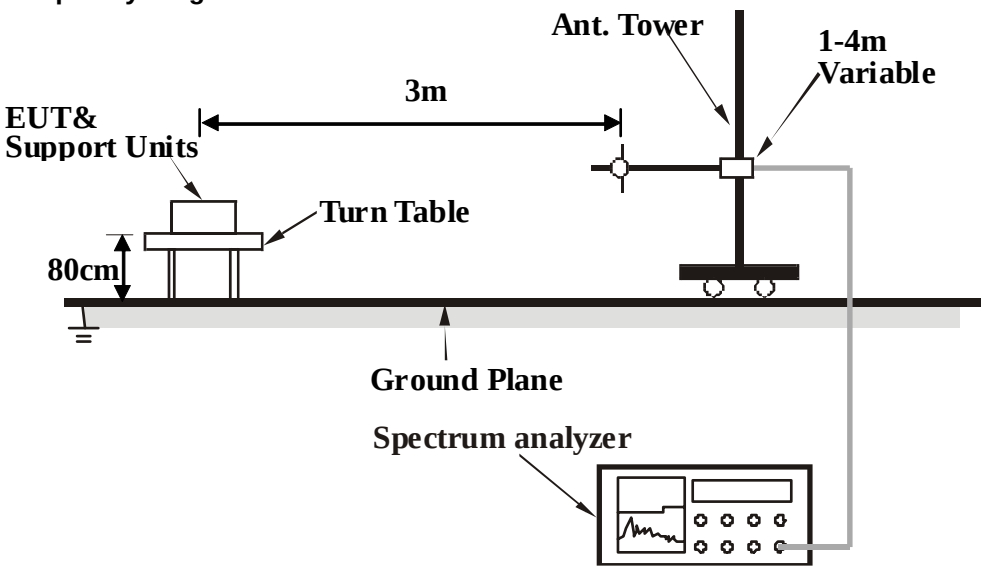
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution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

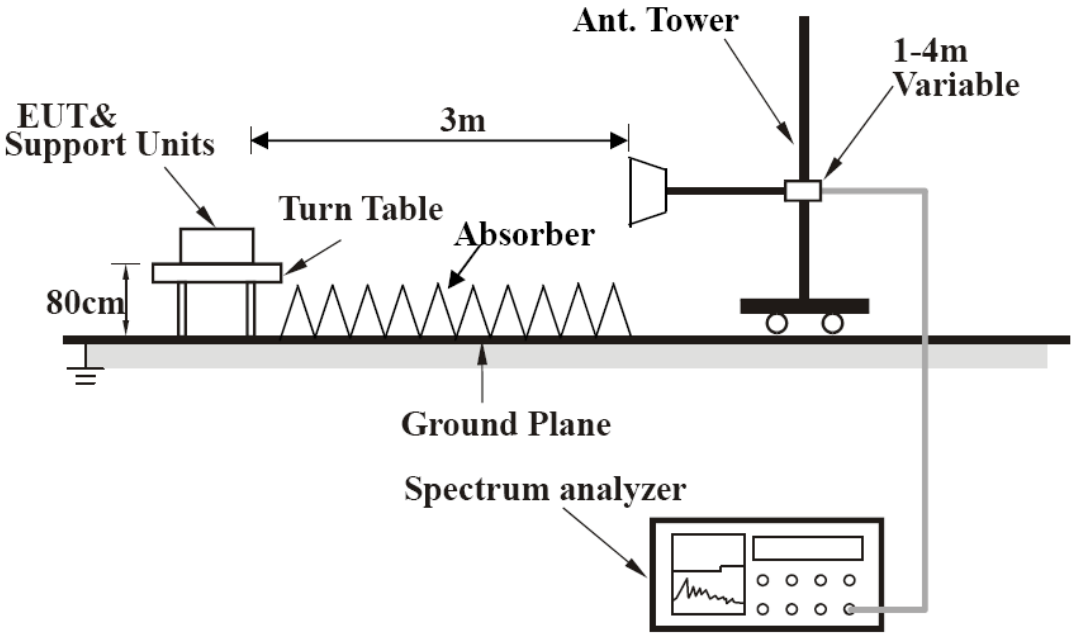
No deviation.

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) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	70.0 PK	74.0	-4.1	1.20 H	273	66.68	3.27
2	5150.00	53.0 AV	54.0	-1.0	1.20 H	273	49.73	3.27
3	*5180.00	103.3 PK			1.20 H	273	100.01	3.25
4	*5180.00	92.6 AV			1.20 H	273	89.32	3.25
5	#10360.00	63.4 PK	74.0	-10.6	1.00 H	127	49.54	13.83
6	#10360.00	49.2 AV	54.0	-4.8	1.00 H	127	35.35	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	68.4 PK	74.0	-5.6	1.00 V	139	65.11	3.27
2	5150.00	51.9 AV	54.0	-2.1	1.00 V	139	48.63	3.27
3	*5180.00	102.2 PK			1.00 V	139	98.99	3.25
4	*5180.00	91.9 AV			1.00 V	139	88.60	3.25
5	#10360.00	58.9 PK	74.0	-15.1	1.01 V	27	45.11	13.83
6	#10360.00	46.4 AV	54.0	-7.6	1.01 V	27	32.57	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	103.0 PK			1.33 H	273	99.81	3.22
2	*5200.00	91.6 AV			1.33 H	273	88.38	3.22
3	#10400.00	63.6 PK	74.0	-10.4	1.08 H	135	49.77	13.80
4	#10400.00	49.4 AV	54.0	-4.6	1.08 H	135	35.61	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	101.8 PK			1.00 V	144	98.56	3.22
2	*5200.00	91.4 AV			1.00 V	144	88.22	3.22
3	#10400.00	59.1 PK	74.0	-14.9	1.02 V	30	45.31	13.80
4	#10400.00	46.4 AV	54.0	-7.6	1.02 V	30	32.57	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	103.4 PK			1.32 H	272	100.11	3.29
2	*5240.00	93.1 AV			1.32 H	272	89.85	3.29
3	5350.00	55.0 PK	74.0	-19.0	1.32 H	272	51.52	3.48
4	5350.00	43.8 AV	54.0	-10.2	1.32 H	272	40.29	3.48
5	#10480.00	64.9 PK	74.0	-9.1	1.53 H	172	50.46	14.45
6	#10480.00	52.1 AV	54.0	-1.9	1.53 H	172	37.65	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	102.3 PK			1.10 V	21	98.98	3.29
2	*5240.00	92.0 AV			1.10 V	21	88.68	3.29
3	5350.00	54.1 PK	74.0	-19.9	1.10 V	21	50.66	3.48
4	5350.00	42.5 AV	54.0	-11.5	1.10 V	21	39.03	3.48
5	#10480.00	61.8 PK	74.0	-12.3	1.00 V	17	47.30	14.45
6	#10480.00	48.1 AV	54.0	-5.9	1.00 V	17	33.61	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) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	52.4 PK	74.0	-21.6	1.33 H	276	49.17	3.27
2	5150.00	40.5 AV	54.0	-13.5	1.33 H	276	37.22	3.27
3	*5260.00	99.2 PK			1.33 H	276	95.93	3.31
4	*5260.00	88.9 AV			1.33 H	276	85.57	3.31
5	#10520.00	60.5 PK	74.0	-13.5	1.03 H	215	45.99	14.51
6	#10520.00	47.7 AV	54.0	-6.3	1.03 H	215	33.20	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	51.7 PK	74.0	-22.3	1.01 V	11	48.45	3.27
2	5150.00	40.3 AV	54.0	-13.7	1.01 V	11	36.99	3.27
3	*5260.00	98.3 PK			1.01 V	11	94.96	3.31
4	*5260.00	88.0 AV			1.01 V	11	84.69	3.31
5	#10520.00	57.4 PK	74.0	-16.6	1.08 V	93	42.87	14.51
6	#10520.00	44.6 AV	54.0	-9.4	1.08 V	93	30.11	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	98.0 PK			1.18 H	270	94.61	3.38
2	*5300.00	87.6 AV			1.18 H	270	84.18	3.38
3	10600.00	59.3 PK	74.0	-14.7	1.30 H	251	45.17	14.14
4	10600.00	47.0 AV	54.0	-7.0	1.30 H	251	32.89	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	97.4 PK			1.00 V	173	93.98	3.38
2	*5300.00	87.3 AV			1.00 V	173	83.88	3.38
3	10600.00	57.3 PK	74.0	-16.7	1.21 V	134	43.18	14.14
4	10600.00	45.4 AV	54.0	-8.6	1.21 V	134	31.27	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) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	98.0 PK			1.18 H	270	94.54	3.41
2	*5320.00	87.9 AV			1.18 H	270	84.45	3.41
3	5350.00	58.9 PK	74.0	-15.1	1.18 H	270	55.44	3.48
4	5350.00	46.0 AV	54.0	-8.0	1.18 H	270	42.54	3.48
5	10640.00	60.7 PK	74.0	-13.3	1.27 H	234	46.08	14.66
6	10640.00	48.3 AV	54.0	-5.7	1.27 H	234	33.67	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	97.2 PK			1.00 V	149	93.81	3.41
2	*5320.00	87.4 AV			1.00 V	149	83.95	3.41
3	5350.00	58.2 PK	74.0	-15.9	1.00 V	149	54.67	3.48
4	5350.00	44.6 AV	54.0	-9.4	1.00 V	149	41.12	3.48
5	10640.00	58.6 PK	74.0	-15.4	1.08 V	253	43.96	14.66
6	10640.00	46.5 AV	54.0	-7.5	1.08 V	253	31.88	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	52.9 PK	74.0	-21.1	1.00 H	178	49.06	3.80
2	5460.00	41.7 AV	54.0	-12.3	1.00 H	178	37.88	3.80
3	#5470.00	63.1 PK	74.0	-10.9	1.00 H	178	59.27	3.83
4	#5470.00	47.8 AV	54.0	-6.2	1.00 H	178	43.96	3.83
5	*5500.00	100.0 PK			1.00 H	178	96.10	3.94
6	*5500.00	89.5 AV			1.00 H	178	85.58	3.94
7	11000.00	62.2 PK	74.0	-11.8	1.32 H	311	46.23	15.98
8	11000.00	50.8 AV	54.0	-3.2	1.32 H	311	34.85	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	52.7 PK	74.0	-21.3	1.08 V	163	48.88	3.80
2	5460.00	40.4 AV	54.0	-13.6	1.08 V	163	36.64	3.80
3	#5470.00	62.5 PK	74.0	-11.6	1.08 V	163	58.62	3.83
4	#5470.00	46.7 AV	54.0	-7.3	1.08 V	163	42.84	3.83
5	*5500.00	99.0 PK			1.08 V	163	95.01	3.94
6	*5500.00	88.7 AV			1.08 V	163	84.72	3.94
7	11000.00	59.6 PK	74.0	-14.4	1.13 V	207	43.59	15.98
8	11000.00	48.1 AV	54.0	-5.9	1.13 V	207	32.08	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	99.5 PK			1.21 H	270	95.21	4.31
2	*5580.00	89.8 AV			1.21 H	270	85.47	4.31
3	11160.00	62.3 PK	74.0	-11.7	1.24 H	308	46.18	16.15
4	11160.00	51.4 AV	54.0	-2.6	1.24 H	308	35.22	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	98.7 PK			1.03 V	213	94.41	4.31
2	*5580.00	88.9 AV			1.03 V	213	84.63	4.31
3	11160.00	60.4 PK	74.0	-13.6	1.29 V	330	44.28	16.15
4	11160.00	48.3 AV	54.0	-5.8	1.29 V	330	32.10	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	101.3 PK			1.09 H	169	97.03	4.30
2	*5660.00	92.1 AV			1.09 H	169	87.79	4.30
3	11320.00	60.4 PK	74.0	-13.7	1.03 H	227	44.59	15.76
4	11320.00	49.7 AV	54.0	-4.3	1.03 H	227	33.98	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	100.7 PK			1.00 V	307	96.42	4.30
2	*5660.00	90.5 AV			1.00 V	307	86.17	4.30
3	11320.00	60.0 PK	74.0	-14.1	1.12 V	274	44.19	15.76
4	11320.00	49.0 AV	54.0	-5.0	1.12 V	274	33.25	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	101.9 PK			1.20 H	274	97.72	4.22
2	*5700.00	91.9 AV			1.20 H	274	87.66	4.22
3	#5725.00	67.4 PK	74.0	-6.6	1.20 H	274	63.08	4.35
4	#5725.00	51.5 AV	54.0	-2.5	1.20 H	274	47.18	4.35
5	11400.00	61.8 PK	74.0	-12.2	1.10 H	124	45.61	16.19
6	11400.00	49.0 AV	54.0	-5.0	1.10 H	124	32.84	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	101.8 PK			1.00 V	306	97.55	4.22
2	*5700.00	91.1 AV			1.00 V	306	86.91	4.22
3	#5725.00	66.9 PK	74.0	-7.1	1.00 V	306	62.59	4.35
4	#5725.00	50.8 AV	54.0	-3.2	1.00 V	306	46.47	4.35
5	11400.00	60.0 PK	74.0	-14.0	1.30 V	229	43.81	16.19
6	11400.00	47.4 AV	54.0	-6.6	1.30 V	229	31.25	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	76.4 PK	78.2	-1.8	1.09 H	269	72.01	4.35
2	*5745.00	102.1 PK			1.09 H	269	97.63	4.46
3	*5745.00	92.4 AV			1.09 H	269	87.92	4.46
4	11490.00	61.2 PK	74.0	-12.8	1.00 H	271	44.89	16.33
5	11490.00	47.6 AV	54.0	-6.4	1.00 H	271	31.28	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	76.2 PK	78.2	-2.0	1.09 V	305	71.87	4.35
2	*5745.00	101.8 PK			1.09 V	305	97.38	4.46
3	*5745.00	91.5 AV			1.09 V	305	87.04	4.46
4	11490.00	59.5 PK	74.0	-14.5	1.25 V	260	43.19	16.33
5	11490.00	46.6 AV	54.0	-7.4	1.25 V	260	30.28	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	101.6 PK			1.08 H	272	96.89	4.68
2	*5785.00	92.0 AV			1.08 H	272	87.32	4.68
3	11570.00	59.2 PK	74.0	-14.8	1.42 H	339	43.82	15.36
4	11570.00	47.4 AV	54.0	-6.6	1.42 H	339	32.06	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	100.8 PK			1.20 V	306	96.10	4.68
2	*5785.00	90.8 AV			1.20 V	306	86.08	4.68
3	11570.00	58.6 PK	74.0	-15.4	1.19 V	317	43.27	15.36
4	11570.00	45.9 AV	54.0	-8.1	1.19 V	317	30.55	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	101.4 PK			1.08 H	271	96.62	4.80
2	*5825.00	90.8 AV			1.08 H	271	85.99	4.80
3	#5850.00	72.3 PK	78.2	-6.0	1.08 H	271	67.40	4.85
4	11650.00	59.5 PK	74.0	-14.5	1.09 H	241	44.26	15.24
5	11650.00	47.6 AV	54.0	-6.4	1.09 H	241	32.36	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	100.7 PK			1.02 V	333	95.89	4.80
2	*5825.00	90.2 AV			1.02 V	333	85.40	4.80
3	#5850.00	71.4 PK	78.2	-6.9	1.02 V	333	66.50	4.85
4	11650.00	59.2 PK	74.0	-14.9	1.38 V	296	43.91	15.24
5	11650.00	46.3 AV	54.0	-7.7	1.38 V	296	31.08	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) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	59.0 PK	74.0	-15.0	1.00 H	268	55.77	3.27
2	5150.00	45.7 AV	54.0	-8.3	1.00 H	268	42.43	3.27
3	*5180.00	98.9 PK			1.00 H	268	95.68	3.25
4	*5180.00	89.9 AV			1.00 H	268	86.61	3.25
5	#10360.00	57.9 PK	74.0	-16.1	1.13 H	347	44.08	13.83
6	#10360.00	45.9 AV	54.0	-8.1	1.13 H	347	32.10	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	55.8 PK	74.0	-18.2	1.03 V	199	52.53	3.27
2	5150.00	41.9 AV	54.0	-12.1	1.03 V	199	38.60	3.27
3	*5180.00	98.6 PK			1.03 V	199	95.30	3.25
4	*5180.00	88.6 AV			1.03 V	199	85.37	3.25
5	#10360.00	56.9 PK	74.0	-17.1	1.09 V	127	43.10	13.83
6	#10360.00	44.1 AV	54.0	-9.9	1.09 V	127	30.25	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	99.9 PK			1.00 H	272	96.63	3.22
2	*5200.00	89.9 AV			1.00 H	272	86.69	3.22
3	#10400.00	57.9 PK	74.0	-16.1	1.27 H	293	44.09	13.80
4	#10400.00	46.3 AV	54.0	-7.7	1.27 H	293	32.51	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	99.6 PK			1.10 V	217	96.42	3.22
2	*5200.00	89.8 AV			1.10 V	217	86.54	3.22
3	#10400.00	56.9 PK	74.0	-17.1	1.05 V	188	43.11	13.80
4	#10400.00	44.2 AV	54.0	-9.8	1.05 V	188	30.38	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	97.2 PK			1.00 H	274	93.86	3.29
2	*5240.00	87.1 AV			1.00 H	274	83.77	3.29
3	5350.00	53.8 PK	74.0	-20.2	1.00 H	274	50.31	3.48
4	5350.00	39.3 AV	54.0	-14.7	1.00 H	274	35.84	3.48
5	#10480.00	58.3 PK	74.0	-15.7	1.07 H	236	43.85	14.45
6	#10480.00	46.4 AV	54.0	-7.6	1.07 H	236	31.93	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	96.3 PK			1.06 V	213	92.97	3.29
2	*5240.00	86.5 AV			1.06 V	213	83.21	3.29
3	5350.00	53.4 PK	74.0	-20.6	1.06 V	213	49.88	3.48
4	5350.00	38.5 AV	54.0	-15.6	1.06 V	213	34.97	3.48
5	#10480.00	57.3 PK	74.0	-16.7	1.35 V	276	42.83	14.45
6	#10480.00	44.7 AV	54.0	-9.3	1.35 V	276	30.22	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	54.5 PK	74.0	-19.5	1.33 H	275	51.23	3.27
2	5150.00	41.8 AV	54.0	-12.2	1.33 H	275	38.56	3.27
3	*5260.00	99.9 PK			1.33 H	275	96.61	3.31
4	*5260.00	89.8 AV			1.33 H	275	86.48	3.31
5	#10520.00	58.3 PK	74.0	-15.7	1.02 H	285	43.79	14.51
6	#10520.00	46.7 AV	54.0	-7.3	1.02 H	285	32.15	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	53.8 PK	74.0	-20.2	1.22 V	214	50.51	3.27
2	5150.00	39.8 AV	54.0	-14.2	1.22 V	214	36.55	3.27
3	*5260.00	99.3 PK			1.22 V	214	95.95	3.31
4	*5260.00	89.2 AV			1.22 V	214	85.93	3.31
5	#10520.00	57.5 PK	74.0	-16.5	1.05 V	195	42.97	14.51
6	#10520.00	45.3 AV	54.0	-8.7	1.05 V	195	30.81	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	98.6 PK			1.06 H	271	95.17	3.38
2	*5300.00	88.4 AV			1.06 H	271	84.97	3.38
3	10600.00	57.7 PK	74.0	-16.3	1.00 H	309	43.59	14.14
4	10600.00	45.4 AV	54.0	-8.6	1.00 H	309	31.28	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	98.2 PK			1.00 V	148	94.77	3.38
2	*5300.00	88.1 AV			1.00 V	148	84.69	3.38
3	10600.00	57.1 PK	74.0	-16.9	1.21 V	230	42.98	14.14
4	10600.00	44.7 AV	54.0	-9.3	1.21 V	230	30.58	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	98.8 PK			1.07 H	269	95.34	3.41
2	*5320.00	89.1 AV			1.07 H	269	85.69	3.41
3	5350.00	64.5 PK	74.0	-9.5	1.07 H	269	61.02	3.48
4	5350.00	49.9 AV	54.0	-4.1	1.07 H	269	46.41	3.48
5	10640.00	58.5 PK	74.0	-15.5	1.00 H	354	43.86	14.66
6	10640.00	46.6 AV	54.0	-7.4	1.00 H	354	31.93	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	98.6 PK			1.00 V	149	95.19	3.41
2	*5320.00	89.0 AV			1.00 V	149	85.54	3.41
3	5350.00	64.1 PK	74.0	-9.9	1.00 V	149	60.61	3.48
4	5350.00	48.5 AV	54.0	-5.5	1.00 V	149	45.04	3.48
5	10640.00	58.3 PK	74.0	-15.7	1.12 V	146	43.67	14.66
6	10640.00	45.7 AV	54.0	-8.3	1.12 V	146	31.05	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	57.9 PK	74.0	-16.1	1.36 H	263	54.11	3.80
2	5460.00	45.6 AV	54.0	-8.4	1.36 H	263	41.82	3.80
3	#5470.00	66.8 PK	74.0	-7.2	1.36 H	263	62.98	3.83
4	#5470.00	53.5 AV	54.0	-0.5	1.36 H	263	49.63	3.83
5	*5500.00	105.6 PK			1.36 H	263	101.65	3.94
6	*5500.00	96.7 AV			1.36 H	263	92.73	3.94
7	11000.00	61.9 PK	74.0	-12.1	1.28 H	132	45.88	15.98
8	11000.00	48.2 AV	54.0	-5.8	1.28 H	132	32.19	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	56.9 PK	74.0	-17.1	1.01 V	340	53.09	3.80
2	5460.00	44.3 AV	54.0	-9.7	1.01 V	340	40.47	3.80
3	#5470.00	66.2 PK	74.0	-7.8	1.01 V	340	62.38	3.83
4	#5470.00	51.9 AV	54.0	-2.1	1.01 V	340	48.06	3.83
5	*5500.00	105.0 PK			1.01 V	340	101.05	3.94
6	*5500.00	95.2 AV			1.01 V	340	91.22	3.94
7	11000.00	61.0 PK	74.0	-13.0	1.08 V	292	45.02	15.98
8	11000.00	47.3 AV	54.0	-6.8	1.08 V	292	31.27	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	105.2 PK			1.31 H	258	100.92	4.31
2	*5580.00	95.1 AV			1.31 H	258	90.78	4.31
3	11160.00	61.4 PK	74.0	-12.7	1.20 H	47	45.20	16.15
4	11160.00	47.3 AV	54.0	-6.7	1.20 H	47	31.17	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	104.8 PK			1.13 V	339	100.46	4.31
2	*5580.00	94.7 AV			1.13 V	339	90.34	4.31
3	11160.00	61.1 PK	74.0	-12.9	1.42 V	169	44.93	16.15
4	11160.00	47.0 AV	54.0	-7.0	1.42 V	169	30.87	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	105.7 PK			1.44 H	263	101.36	4.30
2	*5660.00	96.2 AV			1.44 H	263	91.86	4.30
3	11320.00	61.0 PK	74.0	-13.0	1.17 H	254	45.26	15.76
4	11320.00	47.8 AV	54.0	-6.2	1.17 H	254	32.01	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	105.3 PK			1.07 V	187	100.99	4.30
2	*5660.00	95.9 AV			1.07 V	187	91.64	4.30
3	11320.00	58.9 PK	74.0	-15.1	1.05 V	278	43.15	15.76
4	11320.00	46.6 AV	54.0	-7.4	1.05 V	278	30.82	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	104.6 PK			1.41 H	260	100.38	4.22
2	*5700.00	94.9 AV			1.41 H	260	90.64	4.22
3	#5725.00	70.7 PK	74.0	-3.3	1.41 H	260	66.39	4.35
4	**#5725.00**	**53.6 AV**	**54.0**	**-0.4**	**1.41 H**	**260**	**49.29**	**4.35**
5	11400.00	59.5 PK	74.0	-14.5	1.00 H	183	43.29	16.19
6	11400.00	47.9 AV	54.0	-6.1	1.00 H	183	31.68	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	104.3 PK			1.22 V	327	100.07	4.22
2	*5700.00	94.2 AV			1.22 V	327	89.96	4.22
3	#5725.00	70.0 PK	74.0	-4.0	1.22 V	327	65.64	4.35
4	#5725.00	53.5 AV	54.0	-0.5	1.22 V	327	49.14	4.35
5	11400.00	58.8 PK	74.0	-15.2	1.08 V	226	42.58	16.19
6	11400.00	46.6 AV	54.0	-7.4	1.08 V	226	30.42	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	76.2 PK	78.2	-2.0	1.69 H	36	71.89	4.35
2	*5745.00	104.3 PK			1.69 H	36	99.86	4.46
3	*5745.00	94.6 AV			1.69 H	36	90.10	4.46
4	11490.00	59.9 PK	74.0	-14.1	1.03 H	124	43.60	16.33
5	11490.00	50.1 AV	54.0	-3.9	1.03 H	124	33.81	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	76.0 PK	78.2	-2.2	1.10 V	167	71.66	4.35
2	*5745.00	104.0 PK			1.10 V	167	99.51	4.46
3	*5745.00	93.8 AV			1.10 V	167	89.37	4.46
4	11490.00	59.1 PK	74.0	-14.9	1.07 V	193	42.78	16.33
5	11490.00	48.3 AV	54.0	-5.7	1.07 V	193	31.99	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	106.6 PK			1.62 H	36	101.87	4.68
2	*5785.00	98.3 AV			1.62 H	36	93.66	4.68
3	11570.00	59.6 PK	74.0	-14.4	1.35 H	209	44.27	15.36
4	11570.00	47.9 AV	54.0	-6.1	1.35 H	209	32.51	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	105.7 PK			1.19 V	167	101.02	4.68
2	*5785.00	97.0 AV			1.19 V	167	92.34	4.68
3	11570.00	58.4 PK	74.0	-15.6	1.02 V	308	43.05	15.36
4	11570.00	47.0 AV	54.0	-7.1	1.02 V	308	31.59	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	107.2 PK			1.78 H	11	102.37	4.80
2	*5825.00	96.9 AV			1.78 H	11	92.11	4.80
3	#5850.00	77.2 PK	78.2	-1.0	1.78 H	11	72.34	4.85
4	11650.00	59.5 PK	74.0	-14.5	1.00 H	163	44.27	15.24
5	11650.00	48.3 AV	54.0	-5.7	1.00 H	163	33.08	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	106.3 PK			1.17 V	165	101.45	4.80
2	*5825.00	96.4 AV			1.17 V	165	91.60	4.80
3	#5850.00	77.0 PK	78.2	-1.3	1.17 V	165	72.10	4.85
4	11650.00	58.9 PK	74.0	-15.1	1.24 V	199	43.66	15.24
5	11650.00	47.5 AV	54.0	-6.5	1.24 V	199	32.28	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) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	65.4 PK	74.0	-8.6	1.56 H	145	62.09	3.27
2	5150.00	52.7 AV	54.0	-1.4	1.56 H	145	49.38	3.27
3	*5190.00	100.3 PK			1.56 H	145	97.11	3.23
4	*5190.00	89.4 AV			1.56 H	145	86.20	3.23
5	#10380.00	56.8 PK	74.0	-17.2	1.00 H	109	42.97	13.81
6	#10380.00	45.4 AV	54.0	-8.6	1.00 H	109	31.58	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	64.6 PK	74.0	-9.4	1.47 V	191	61.32	3.27
2	5150.00	52.5 AV	54.0	-1.5	1.47 V	191	49.21	3.27
3	*5190.00	99.6 PK			1.47 V	191	96.38	3.23
4	*5190.00	88.8 AV			1.47 V	191	85.54	3.23
5	#10380.00	56.7 PK	74.0	-17.3	1.08 V	192	42.86	13.81
6	#10380.00	44.0 AV	54.0	-10.0	1.08 V	192	30.21	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	104.6 PK			1.49 H	141	101.29	3.27
2	*5230.00	94.4 AV			1.49 H	141	91.12	3.27
3	5350.00	55.8 PK	74.0	-18.2	1.49 H	141	52.31	3.48
4	5350.00	43.7 AV	54.0	-10.3	1.49 H	141	40.23	3.48
5	#10460.00	58.2 PK	74.0	-15.8	1.09 H	113	43.88	14.28
6	#10460.00	47.3 AV	54.0	-6.8	1.09 H	113	32.97	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	104.3 PK			1.45 V	192	101.01	3.27
2	*5230.00	93.5 AV			1.45 V	192	90.19	3.27
3	5350.00	54.8 PK	74.0	-19.2	1.45 V	192	51.30	3.48
4	5350.00	43.2 AV	54.0	-10.8	1.45 V	192	39.68	3.48
5	#10460.00	57.2 PK	74.0	-16.8	1.12 V	228	42.88	14.28
6	#10460.00	44.5 AV	54.0	-9.5	1.12 V	228	30.21	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	60.1 PK	74.0	-13.9	1.51 H	140	56.81	3.27
2	5150.00	45.6 AV	54.0	-8.4	1.51 H	140	42.32	3.27
3	*5270.00	104.6 PK			1.51 H	140	101.26	3.33
4	*5270.00	93.4 AV			1.51 H	140	90.02	3.33
5	#10540.00	60.1 PK	74.0	-13.9	1.07 H	291	45.66	14.43
6	#10540.00	48.5 AV	54.0	-5.5	1.07 H	291	34.08	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	58.4 PK	74.0	-15.6	1.48 V	194	55.13	3.27
2	5150.00	44.8 AV	54.0	-9.2	1.48 V	194	41.52	3.27
3	*5270.00	104.2 PK			1.48 V	194	100.85	3.33
4	*5270.00	92.8 AV			1.48 V	194	89.45	3.33
5	#10540.00	58.0 PK	74.0	-16.0	1.03 V	360	43.58	14.43
6	#10540.00	46.8 AV	54.0	-7.2	1.03 V	360	32.33	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	98.7 PK			1.37 H	148	95.26	3.40
2	*5310.00	87.7 AV			1.37 H	148	84.33	3.40
3	5350.00	64.5 PK	74.0	-9.5	1.37 H	148	61.05	3.48
4	5350.00	52.4 AV	54.0	-1.6	1.37 H	148	48.93	3.48
5	10620.00	58.4 PK	74.0	-15.6	1.32 H	199	44.02	14.41
6	10620.00	47.3 AV	54.0	-6.7	1.32 H	199	32.89	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	97.7 PK			1.30 V	196	94.31	3.40
2	*5310.00	86.8 AV			1.30 V	196	83.42	3.40
3	5350.00	64.0 PK	74.0	-10.0	1.30 V	196	60.48	3.48
4	5350.00	51.7 AV	54.0	-2.3	1.30 V	196	48.18	3.48
5	10620.00	57.7 PK	74.0	-16.3	1.00 V	127	43.25	14.41
6	10620.00	46.4 AV	54.0	-7.6	1.00 V	127	31.98	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	58.4 PK	74.0	-15.6	1.39 H	146	54.57	3.80
2	5460.00	45.1 AV	54.0	-8.9	1.39 H	146	41.26	3.80
3	#5470.00	66.1 PK	74.0	-7.9	1.39 H	146	62.27	3.83
4	#5470.00	53.0 AV	54.0	-1.0	1.39 H	146	49.13	3.83
5	*5510.00	99.2 PK			1.39 H	146	95.20	3.98
6	*5510.00	89.4 AV			1.39 H	146	85.39	3.98
7	11020.00	60.8 PK	74.0	-13.2	1.00 H	172	44.86	15.96
8	11020.00	49.9 AV	54.0	-4.1	1.00 H	172	33.97	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	58.1 PK	74.0	-15.9	1.39 V	202	54.28	3.80
2	5460.00	44.8 AV	54.0	-9.3	1.39 V	202	40.95	3.80
3	#5470.00	64.7 PK	74.0	-9.3	1.39 V	202	60.89	3.83
4	#5470.00	52.3 AV	54.0	-1.7	1.39 V	202	48.46	3.83
5	*5510.00	98.1 PK			1.39 V	202	94.11	3.98
6	*5510.00	87.8 AV			1.39 V	202	83.84	3.98
7	11020.00	59.1 PK	74.0	-14.9	1.03 V	290	43.17	15.96
8	11020.00	47.2 AV	54.0	-6.8	1.03 V	290	31.25	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	102.2 PK			1.40 H	144	98.07	4.17
2	*5550.00	92.4 AV			1.40 H	144	88.23	4.17
3	11100.00	61.3 PK	74.0	-12.8	1.09 H	293	45.39	15.86
4	11100.00	50.1 AV	54.0	-3.9	1.09 H	293	34.20	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	102.1 PK			1.49 V	172	97.96	4.17
2	*5550.00	91.3 AV			1.49 V	172	87.08	4.17
3	11100.00	59.9 PK	74.0	-14.1	1.00 V	261	44.01	15.86
4	11100.00	48.4 AV	54.0	-5.6	1.00 V	261	32.58	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	105.5 PK			1.55 H	146	101.24	4.27
2	*5670.00	94.5 AV			1.55 H	146	90.18	4.27
3	#5725.00	66.9 PK	74.0	-7.1	1.55 H	146	62.51	4.35
4	#5725.00	52.5 AV	54.0	-1.6	1.55 H	146	48.10	4.35
5	11340.00	61.1 PK	74.0	-12.9	1.02 H	235	45.26	15.87
6	11340.00	50.0 AV	54.0	-4.0	1.02 H	235	34.11	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	105.1 PK			1.32 V	173	100.84	4.27
2	*5670.00	94.2 AV			1.32 V	173	89.97	4.27
3	#5725.00	64.7 PK	74.0	-9.3	1.32 V	173	60.38	4.35
4	#5725.00	51.7 AV	54.0	-2.3	1.32 V	173	47.32	4.35
5	11340.00	59.7 PK	74.0	-14.3	1.28 V	315	43.81	15.87
6	11340.00	49.2 AV	54.0	-4.8	1.28 V	315	33.29	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	76.4 PK	78.2	-1.8	1.26 H	160	72.01	4.35
2	*5755.00	102.5 PK			1.26 H	160	97.96	4.52
3	*5755.00	92.7 AV			1.26 H	160	88.21	4.52
4	11510.00	62.0 PK	74.0	-12.0	1.11 H	53	45.81	16.21
5	11510.00	50.2 AV	54.0	-3.8	1.11 H	53	34.02	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	75.5 PK	78.2	-2.7	1.32 V	172	71.16	4.35
2	*5755.00	102.2 PK			1.32 V	172	97.69	4.52
3	*5755.00	92.0 AV			1.32 V	172	87.46	4.52
4	11510.00	60.2 PK	74.0	-13.8	1.19 V	97	43.97	16.21
5	11510.00	48.8 AV	54.0	-5.2	1.19 V	97	32.58	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	106.8 PK			1.32 H	148	102.09	4.73
2	*5795.00	96.7 AV			1.32 H	148	91.98	4.73
3	#5850.00	67.2 PK	78.2	-11.0	1.32 H	148	62.33	4.85
4	11590.00	60.3 PK	74.0	-13.7	1.17 H	192	45.23	15.08
5	11590.00	48.7 AV	54.0	-5.3	1.17 H	192	33.59	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	106.6 PK			1.20 V	169	101.88	4.73
2	*5795.00	96.1 AV			1.20 V	169	91.32	4.73
3	#5850.00	65.9 PK	78.2	-12.3	1.20 V	169	61.04	4.85
4	11590.00	59.3 PK	74.0	-14.8	1.25 V	208	44.17	15.08
5	11590.00	47.2 AV	54.0	-6.8	1.25 V	208	32.09	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.

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	58.62	25.1 QP	40.0	-14.9	2.37 H	115	39.40	-14.27
2	336.04	44.6 QP	46.0	-1.4	2.26 H	131	56.04	-11.43
3	504.04	42.7 QP	46.0	-3.3	1.65 H	120	50.94	-8.23
4	528.05	43.4 QP	46.0	-2.6	1.77 H	284	51.18	-7.77
5	552.05	41.7 QP	46.0	-4.3	1.84 H	266	49.09	-7.42
6	840.10	38.4 QP	46.0	-7.6	1.00 H	133	40.77	-2.38
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	33.83	37.9 QP	40.0	-2.1	1.10 V	153	53.15	-15.22
2	336.04	39.4 QP	46.0	-6.7	1.00 V	176	50.78	-11.43
3	456.07	42.1 QP	46.0	-3.9	1.83 V	203	51.22	-9.11
4	528.05	44.7 QP	46.0	-1.3	2.37 V	104	52.43	-7.77
5	624.08	44.1 QP	46.0	-1.9	2.65 V	332	49.95	-5.83
6	648.04	44.9 QP	46.0	-1.1	2.43 V	307	50.47	-5.55

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

CHANNEL	TX Channel 149	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	132.07	27.2 QP	43.5	-16.3	2.54 H	151	41.92	-14.73
2	336.04	44.3 QP	46.0	-1.8	3.01 H	132	55.68	-11.43
3	408.06	40.2 QP	46.0	-5.9	1.97 H	149	50.20	-10.05
4	455.98	40.2 QP	46.0	-5.8	2.03 H	184	49.30	-9.11
5	504.04	43.7 QP	46.0	-2.3	1.42 H	282	51.89	-8.23
6	528.05	43.5 QP	46.0	-2.5	1.62 H	352	51.24	-7.77
7	648.04	41.3 QP	46.0	-4.7	1.31 H	233	46.85	-5.55
8	792.03	38.0 QP	46.0	-8.0	1.00 H	160	40.95	-2.92
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	60.26	37.6 QP	40.0	-2.4	1.33 V	15	52.11	-14.50
2	336.04	36.9 QP	46.0	-9.2	1.08 V	172	48.28	-11.43
3	455.98	42.5 QP	46.0	-3.5	1.62 V	197	51.60	-9.11
4	504.04	42.5 QP	46.0	-3.5	2.09 V	265	50.75	-8.23
5	552.05	45.0 QP	46.0	-1.0	2.25 V	106	52.41	-7.42
6	840.10	36.2 QP	46.0	-9.8	1.78 V	103	38.61	-2.38

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 (dBμV)	
	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	834115/016	Apr. 28, 2014	Apr. 27, 2015
ROHDE & SCHWARZ Artificial Mains Network (For EUT)	ESH2-Z5	828075/003	Sep. 04, 2014	Sep. 03, 2015
LISN With Adapter (for EUT)	AD10	C03Ada-001	Sep. 04, 2014	Sep. 03, 2015
EMCO L.I.S.N. (For peripherals)	3825/2	9504-2359	Jul. 24, 2014	Jul. 23, 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-C03.01	Sep. 24, 2014	Sep. 23, 2015
LYNICS Terminator (For EMCO LISN)	0900510	E1-01-300	Jan. 17, 2014	Jan. 16, 2015
LYNICS Terminator (For EMCO LISN)	0900510	E1-01-301	Jan. 27, 2014	Jan. 26, 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. 3.

3. The VCCI Site Registration No. C-274.

4.2.3 TEST PROCEDURES

a. 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.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

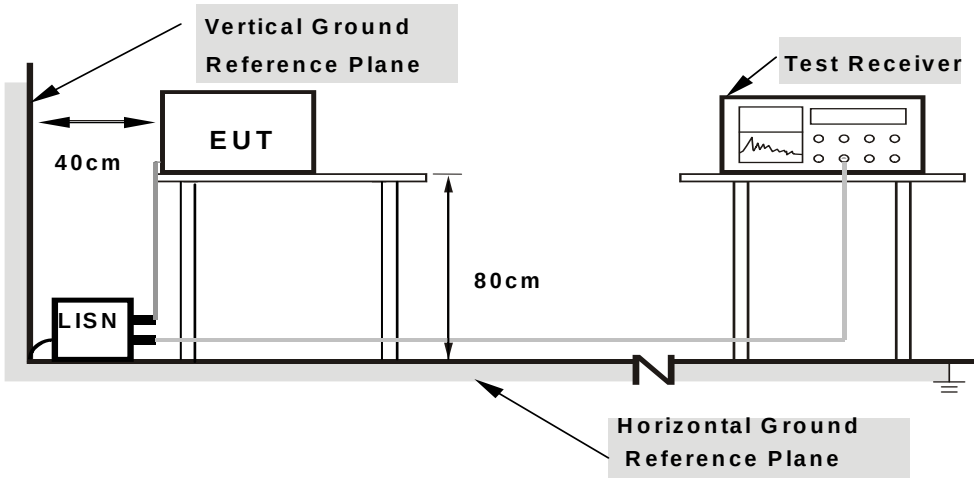
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

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 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

Same as 4.1.6.

4.2.7 TEST RESULTS

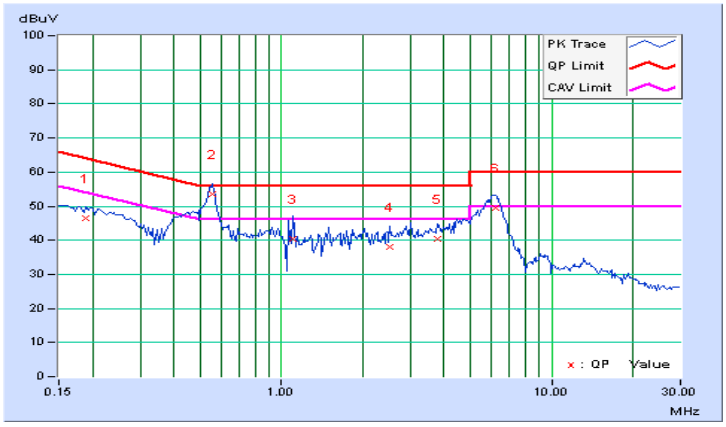
CONDUCTED WORST-CASE DATA

PHASE	Line 1	6dB BANDWIDTH	9kHz

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	0.18906	9.66	36.80	25.77	46.46	35.43	64.08	54.08	-17.62	-18.65
2	**0.55234**	**9.68**	**43.87**	**35.31**	**53.55**	**44.99**	**56.00**	**46.00**	**-2.45**	**-1.01**
3	1.09766	9.69	30.64	19.64	40.33	29.33	56.00	46.00	-15.67	-16.67
4	2.52734	9.71	28.42	19.94	38.13	29.65	56.00	46.00	-17.87	-16.35
5	3.77734	9.73	30.67	23.06	40.40	32.79	56.00	46.00	-15.60	-13.21
6	6.17969	9.76	39.57	30.86	49.33	40.62	60.00	50.00	-10.67	-9.38

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

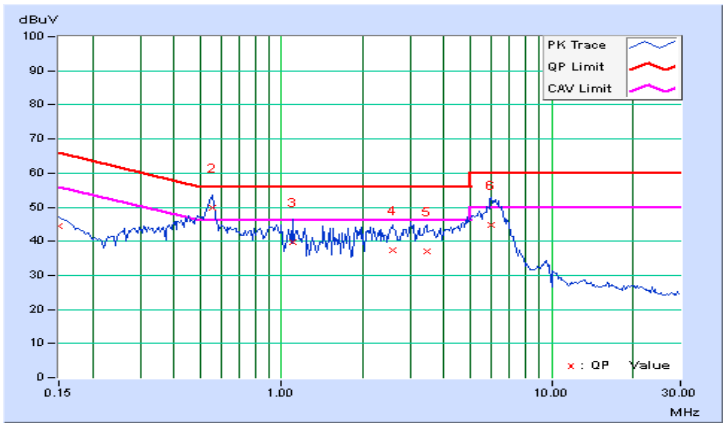


PHASE	Line 2	6dB BANDWIDTH	9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.67	34.65	20.07	44.32	29.74	66.00	56.00	-21.68	-26.26
2	0.55193	9.68	40.12	31.98	49.80	41.66	56.00	46.00	-6.20	-4.34
3	1.10156	9.69	30.12	15.89	39.81	25.58	56.00	46.00	-16.19	-20.42
4	2.58594	9.71	27.61	17.59	37.32	27.30	56.00	46.00	-18.68	-18.70
5	3.44922	9.73	27.25	17.73	36.98	27.46	56.00	46.00	-19.02	-18.54
6	6.01172	9.76	35.11	26.95	44.87	36.71	60.00	50.00	-15.13	-13.29

Remarks:

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



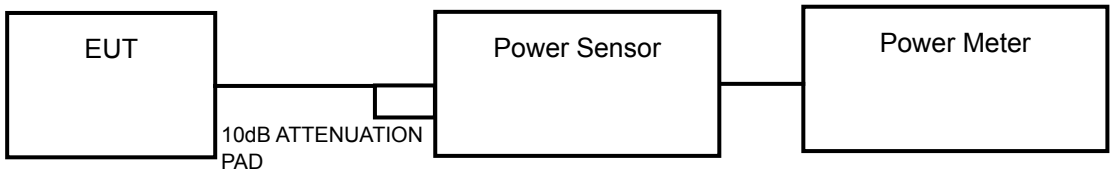
4.3 TRANSMIT POWER MEASUREMENT

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 ≦ 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	14.8	11.71	24	PASS
40	5200	10.9	10.39	24	PASS
48	5240	**19.1**	12.81	24	PASS
52	5260	12.8	11.08	24	PASS
60	5300	**13.5**	11.30	24	PASS
64	5320	13.2	11.20	24	PASS
100	5500	23.3	13.68	24	PASS
116	5580	23.0	13.61	24	PASS
132	5660	29.7	14.73	24	PASS
140	5700	**30.8**	14.88	24	PASS
149	5745	**55.8**	17.47	30	PASS
157	5785	53.0	17.24	30	PASS
165	5825	50.1	17.00	30	PASS

NOTE:

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

1. 11dBm + 10log (38.50) = 26.85 > 24dBm
2. 11dBm + 10log (38.29) = 26.83 > 24dBm
3. 11dBm + 10log (38.95) = 26.91 > 24dBm
4. 11dBm + 10log (42.96) = 27.33 > 24dBm
5. 11dBm + 10log (39.70) = 26.99 > 24dBm
6. 11dBm + 10log (43.11) = 27.35 > 24dBm
6. 11dBm + 10log (42.99) = 27.33 > 24dBm

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	13.2	11.19	24	PASS
40	5200	11.4	10.58	24	PASS
48	5240	8.8	9.44	24	PASS
52	5260	12.8	11.08	24	PASS
60	5300	12.6	10.99	24	PASS
64	5320	13.4	11.26	24	PASS
100	5500	19.2	12.84	24	PASS
116	5580	20.3	13.07	24	PASS
132	5660	27.9	14.46	24	PASS
140	5700	21.4	13.30	24	PASS
149	5745	45.8	16.61	30	PASS
157	5785	52.4	17.19	30	PASS
165	5825	43.3	16.36	30	PASS

NOTE:

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

1. 11dBm + 10log (41.56) = 27.19 > 24dBm
2. 11dBm + 10log (41.51) = 27.18 > 24dBm
3. 11dBm + 10log (39.66) = 26.98 > 24dBm
4. 11dBm + 10log (43.76) = 27.41 > 24dBm
5. 11dBm + 10log (45.67) = 27.60 > 24dBm
6. 11dBm + 10log (46.08) = 27.64 > 24dBm
6. 11dBm + 10log (40.99) = 27.13 > 24dBm

802.11n (40 MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	4.6	6.66	24	PASS
46	5230	17.4	12.41	24	PASS
54	5270	16.6	12.20	24	PASS
62	5310	7.3	8.64	24	PASS
102	5510	12.7	11.05	24	PASS
110	5550	21.9	13.40	24	PASS
134	5670	29.1	14.64	24	PASS
151	5755	33.1	15.20	30	PASS
159	5795	50.2	17.01	30	PASS

NOTE:

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

1. 11dBm + 10log (80.54) = 30.06 > 24dBm
2. 11dBm + 10log (50.35) = 28.02 > 24dBm
3. 11dBm + 10log (61.49) = 28.89 > 24dBm
4. 11dBm + 10log (81.07) = 30.09 > 24dBm
5. 11dBm + 10log (82.92) = 30.19 > 24dBm

26dB BANDWIDTH:

802.11a

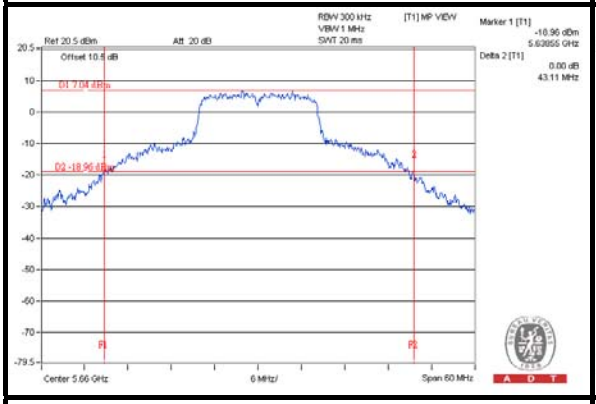
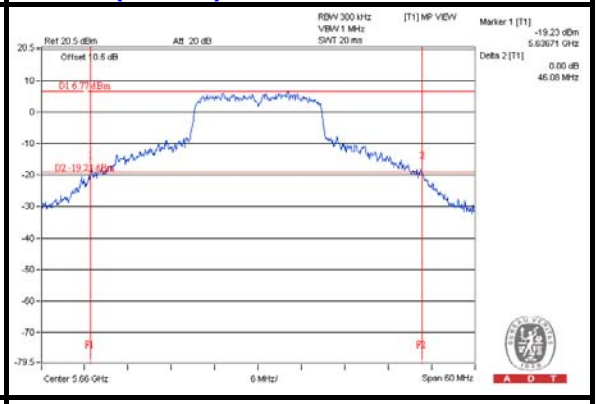
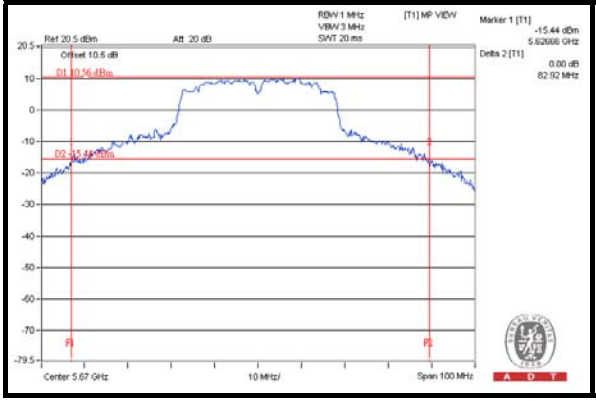
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
52	5260	38.50	PASS
60	5300	38.29	PASS
64	5320	38.95	PASS
100	5500	42.96	PASS
116	5580	39.70	PASS
132	5660	43.11	PASS
140	5700	42.99	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
52	5260	41.56	PASS
60	5300	41.51	PASS
64	5320	39.66	PASS
100	5500	43.76	PASS
116	5580	45.67	PASS
132	5660	46.08	PASS
140	5700	40.99	PASS

802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
54	5270	80.54	PASS
62	5310	50.35	PASS
102	5510	61.49	PASS
110	5550	81.07	PASS
134	5670	82.92	PASS

SPECTRUM PLOT OF WORST VALUE	
802.11a	**802.11n (20 MHz)**
	
802.11n (40MHz)	
	

EUT MAXIMUM CONDUCTED POWER

802.11a

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	13.5	11.30
5470~5725	30.8	14.88

802.11n (20MHz)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	13.4	11.26
5470~5725	27.9	14.46

802.11n (40MHz)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	16.6	12.20
5470~5725	29.1	14.64

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 ≥ 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 ≥ 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	-0.70	0.12	-0.58	11	PASS
40	5200	-2.01	0.12	-1.89	11	PASS
48	5240	0.37	0.12	0.49	11	PASS
52	5260	-2.09	0.12	-1.97	11	PASS
60	5300	-2.70	0.12	-2.58	11	PASS
64	5320	-2.65	0.12	-2.53	11	PASS
100	5500	0.71	0.12	0.83	11	PASS
116	5580	0.20	0.12	0.32	11	PASS
132	5660	1.63	0.12	1.75	11	PASS
140	5700	1.75	0.12	1.87	11	PASS

802.11n (20MHz)

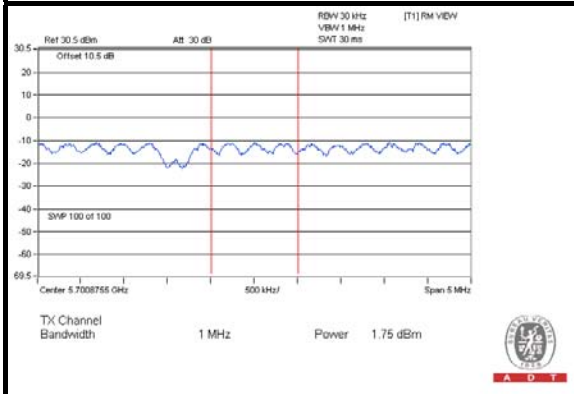
CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	-1.13	0.13	-1.00	11	PASS
40	5200	-2.21	0.13	-2.08	11	PASS
48	5240	-3.83	0.13	-3.70	11	PASS
52	5260	-2.55	0.13	-2.42	11	PASS
60	5300	-2.93	0.13	-2.80	11	PASS
64	5320	-3.09	0.13	-2.96	11	PASS
100	5500	-0.16	0.13	-0.03	11	PASS
116	5580	0.61	0.13	0.74	11	PASS
132	5660	1.45	0.13	1.58	11	PASS
140	5700	0.59	0.13	0.72	11	PASS

802.11n (40MHz)

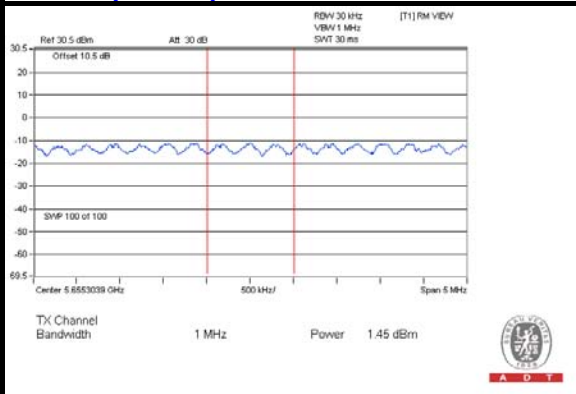
CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
38	5190	-9.85	0.24	-9.61	11	PASS
46	5230	-4.03	0.24	-3.79	11	PASS
54	5270	-5.43	0.24	-5.19	11	PASS
62	5310	-10.16	0.24	-9.92	11	PASS
102	5510	-6.61	0.24	-6.37	11	PASS
110	5550	-3.45	0.24	-3.21	11	PASS
134	5670	-2.23	0.24	-1.99	11	PASS

SPECTRUM PLOT OF WORST VALUE

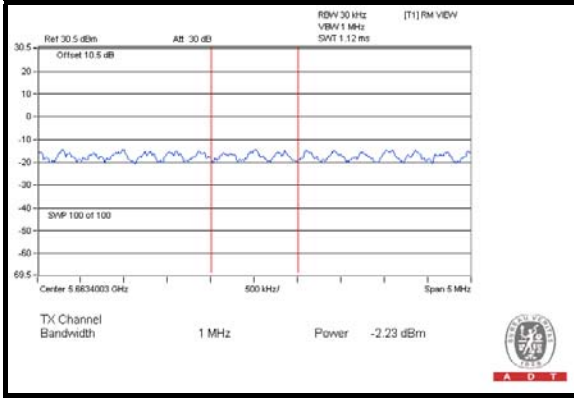
802.11a



802.11n (20 MHz)



802.11n (40MHz)



For U-NII-3 Band

802.11a

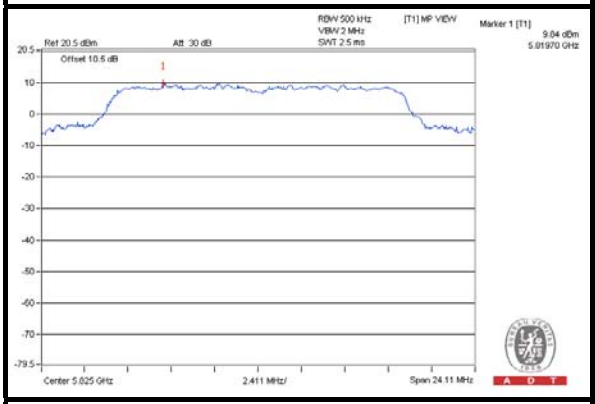
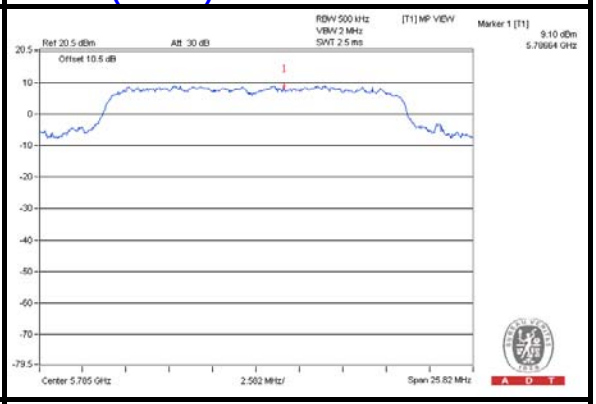
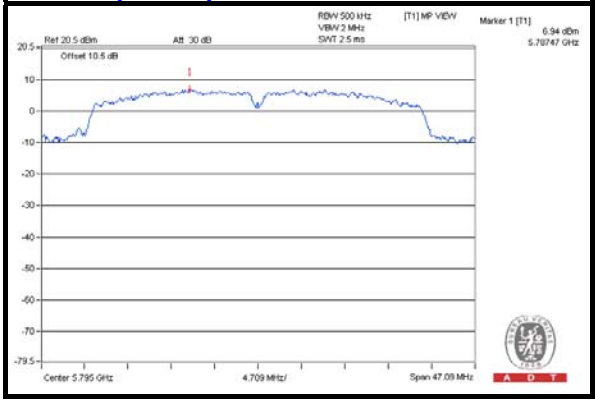
Channel	Freq. (MHz)	PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS /FAIL
149	5745	9.53	30	PASS
157	5785	9.43	30	PASS
165	5825	9.84	30	PASS

802.11n (20MHz)

Channel	Freq. (MHz)	PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS /FAIL
149	5745	6.68	30	PASS
157	5785	9.10	30	PASS
165	5825	9.07	30	PASS

802.11n (40MHz)

Channel	Freq. (MHz)	PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS /FAIL
151	5755	3.81	30	PASS
159	5795	6.94	30	PASS

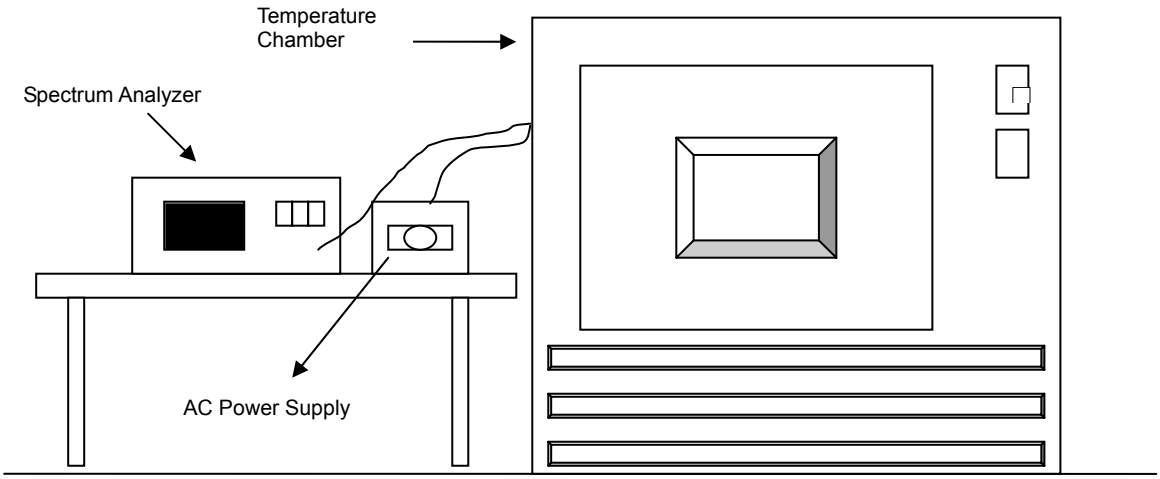
SPECTRUM PLOT OF WORST VALUE	
802.11a	**802.11n (20MHz)**
	
802.11n (40MHz)	
	

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

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
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

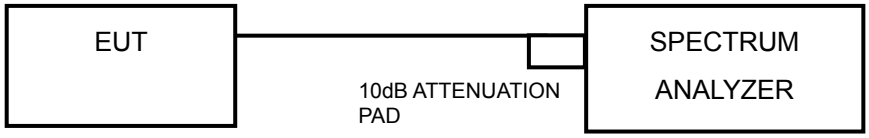
FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
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

a. Set resolution bandwidth (RBW) = 100kHz
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. 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

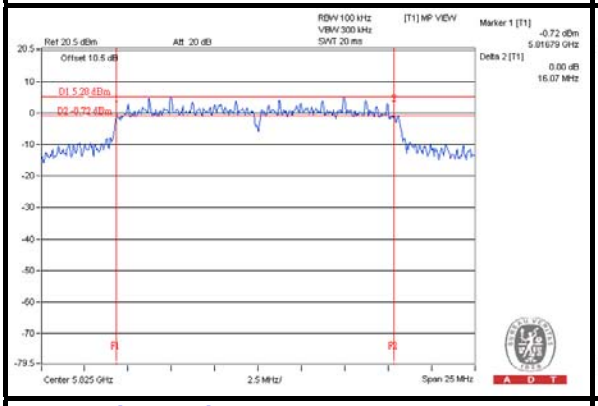
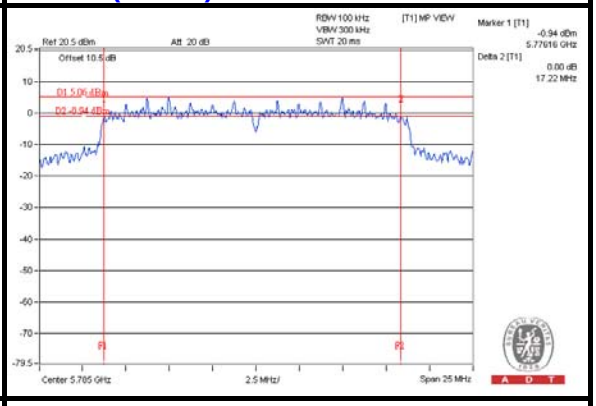
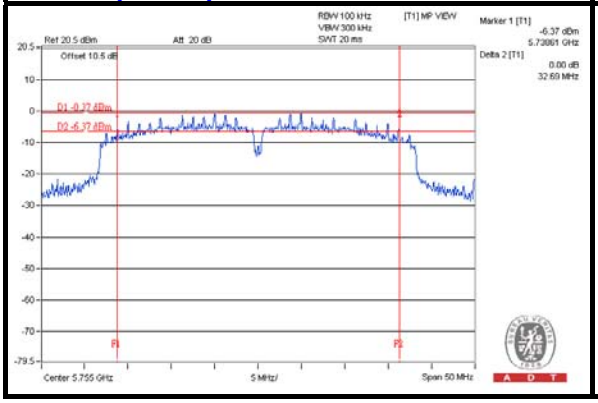
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
149	5745	15.38	0.5	PASS
157	5785	15.37	0.5	PASS
165	5825	16.07	0.5	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
149	5745	16.84	0.5	PASS
157	5785	17.22	0.5	PASS
165	5825	16.62	0.5	PASS

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
151	5755	32.69	0.5	PASS
159	5795	31.40	0.5	PASS

SPECTRUM PLOT OF WORST VALUE	
802.11a	802.11n (20MHz)
	
802.11n (40MHz)	
	

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
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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---