FCC TEST REPORT
(15.407)

REPORT NO.:	RF140820C01A
MODEL NO.:	MR32-HW
FCC ID:	UDX-60031010
RECEIVED:	Aug. 04, 2014
TESTED:	Aug. 04 ~ Oct. 13, 2014
ISSUED:	Nov. 18, 2014

APPLICANT:	Cisco Systems, Inc.
ADDRESS:	170 West Tasman Drive, San Jose, CA 95134

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.
TEST LOCATION:	No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, 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
RF140820C01A	Original release.	Nov. 18, 2014

1. CERTIFICATION

PRODUCT:	Wireless 802.11 abgn/ac AP
MODEL:	MR32-HW
BRAND:	Cisco
APPLICANT:	Cisco Systems, Inc.
TESTED:	Aug. 04 ~ Oct. 13, 2014
TEST SAMPLE:	ENGINEERING SAMPLE
STANDARDS:	**FCC Part 15, Subpart E (Section 15.407)**

The above equipment (model: MR32-HW) 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 : Celine Chou **, DATE :** Nov. 18, 2014

Celine Chou / Specialist

APPROVED BY : Ken Liu **, DATE :** Nov. 18, 2014

Ken Liu / Senior 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 -7.64dB at 0.15000MHz.
15.407(b) (1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -0.5dB at 171.83MHz.
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(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is IPEX not a standard connector.

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	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.86 dB
	200MHz ~1000MHz	3.87 dB
	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 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	Wireless 802.11 abgn/ac AP
MODEL NO.	MR32-HW
POWER SUPPLY	12Vdc (Adapter) 55Vdc (POE)
MODULATION TYPE	256QAM, 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 300.0Mbps 802.11ac: up to 866.6Mbps
OPERATING FREQUENCY	5260 ~ 5320MHz, 5500 ~ 5700MHz
NUMBER OF CHANNEL	5260 ~ 5320MHz: 4 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 2 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80) 5500 ~ 5700MHz: 8 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 3 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80)
OUTPUT POWER	1TX (Radio 2): 246.037mW for 5260 ~ 5320MHz 2TX (Radio 2): 220.807mW for 5260 ~ 5320MHz 1TX (Radio 3): 62.230mW for 5260 ~ 5320MHz 1TX (Radio 2): 250.035mW for 5500 ~ 5700MHz 2TX (Radio 2): 240.312mW for 5500 ~ 5700MHz 1TX (Radio 3): 133.045mW for 5500 ~ 5700MHz
ANTENNA TYPE	Refer to note
ANTENNA CONNECTOR	Refer to note
DATA CABLE	NA
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	NA

NOTE:

1. This report is prepared for FCC class II permissive change. This report is issued as a supplementary report of BV ADT report no.: RF140820C01-1. Difference compared with the original report is adding 5260~5320MHz and 5500~5700MHz band. Therefore, the EUT was re-tested and presented in the test report.

2. The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers.

MODULATION MODE	TX FUNCTION	REMARK
802.11a	1TX	Radio 3
	1TX / 2TX	Radio 2
802.11n (HT20)	1TX	Radio 3
	1TX / 2TX	Radio 2
802.11n (HT40)	1TX	Radio 3
	1TX / 2TX	Radio 2
802.11ac (VHT80)	1TX / 2TX	Radio 2

* The modulation and bandwidth are similar for 802.11n mode for 20MHz / 40MHz and 802.11ac mode for 20MHz / 40MHz, therefore investigated worst case to representative mode in test report. (Final test mode refer section 3.2.1)

3. There are 6 antennas for the EUT.

NO.	TYPE	GAIN(dBi)					CONNECTOR	REMARK
		2.4GHz	5GHz BAND 1	5GHz BAND 2	5GHz BAND 3	5GHz BAND 4		
1	PIFA	5.05	-	-	-	-	IPEX	WLAN (Radio 1)
2	PIFA	4.50	-	-	-	-	IPEX	
3	PIFA	-	5.31	4.40	5.01	5.60	IPEX	WLAN (Radio 2)
4	PIFA	-	5.07	4.06	5.75	5.12	IPEX	
5	PIFA	2.38	4.22	4.36	3.99	3.22	IPEX	WLAN (Radio 3)
6	PIFA	0.67	-	-	-	-	IPEX	BT (Radio 4)

4. The EUT consumes power from the following adapter and POE. (for supply unit only)

ADAPTER	
BRAND	Powertron Electronics Corp.
MODEL	PA1024-120HEB200
INPUT POWER	100-240Vac, 50-60Hz, 0.6A
OUTPUT POWER	12Vdc, 2A, 24W Max
POWER LINE	1.5m cable with one core attached on adapter

POE	
BRAND	CISCO
MODEL	PD-9001GR/AT/AC
INPUT POWER	100-240Vac, 50/60Hz, 0.67A
OUTPUT POWER	55Vdc, 0.6A

5. 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 5260 ~ 5320MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY
58	5290MHz

FOR 5500 ~ 5700MHz

8 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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 (HT40), 802.11ac (VHT40):

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

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY
106	5530MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	Powered by adapter
B	-	√	√	-	Powered by POE

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

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

RADIATED EMISSION TEST (ABOVE 1GHz):

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	REMARK
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0	1TX / 2TX (Radio 2)
			52 to 64	52, 60, 64	OFDM	BPSK	6.0	1TX (Radio 3)
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	BPSK	7.2	1TX (Radio 2)
			52 to 64	52, 60, 64	OFDM	BPSK	14.4	2TX (Radio 2)
			52 to 64	52, 60, 64	OFDM	BPSK	7.2	1TX (Radio 3)
	802.11n (HT40)		54 to 62	54, 62	OFDM	BPSK	15.0	1TX (Radio 2)
			54 to 62	54, 62	OFDM	BPSK	30.0	2TX (Radio 2)
			54 to 62	54, 62	OFDM	BPSK	15.0	1TX (Radio 3)
	802.11ac (VHT80)		58	58	OFDM	BPSK	32.5	1TX (Radio 2)
			58	58	OFDM	BPSK	65.0	2TX (Radio 2)
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0	1TX / 2TX (Radio 2)
			100 to 140	100, 116, 140	OFDM	BPSK	6.0	1TX (Radio 3)
	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	BPSK	7.2	1TX (Radio 2)
			100 to 140	100, 116, 140	OFDM	BPSK	14.4	2TX (Radio 2)
			100 to 140	100, 116, 140	OFDM	BPSK	7.2	1TX (Radio 3)
	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	BPSK	15.0	1TX (Radio 2)
			102 to 134	102, 110, 134	OFDM	BPSK	30.0	2TX (Radio 2)
			102 to 134	102, 110, 134	OFDM	BPSK	15.0	1TX (Radio 3)
	802.11ac (VHT80)		106	106	OFDM	BPSK	32.5	1TX (Radio 2)
			106	106	OFDM	BPSK	65.0	2TX (Radio 2)

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)	REMARK
A, B	802.11a	5260-5320	52 to 64	52	OFDM	BPSK	6.0	1TX / 2TX (Radio 2)
			52 to 64		OFDM	BPSK	6.0	1TX (Radio 3)
	802.11a	5500-5700	100 to 140		OFDM	BPSK	6.0	1TX / 2TX (Radio 2)
			100 to 140		OFDM	BPSK	6.0	1TX (Radio 3)

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)	REMARK
A, B	802.11a	5260-5320	52 to 64	52	OFDM	BPSK	6.0	1TX / 2TX (Radio 2)
			52 to 64		OFDM	BPSK	6.0	1TX (Radio 3)
	802.11a	5500-5700	100 to 140		OFDM	BPSK	6.0	1TX / 2TX (Radio 2)
			100 to 140		OFDM	BPSK	6.0	1TX (Radio 3)

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)	REMARK
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0	1TX / 2TX (Radio 2)
			52 to 64	52, 60, 64	OFDM	BPSK	6.0	1TX (Radio 3)
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	BPSK	7.2	1TX (Radio 2)
			52 to 64	52, 60, 64	OFDM	BPSK	14.4	2TX (Radio 2)
			52 to 64	52, 60, 64	OFDM	BPSK	7.2	1TX (Radio 3)
	802.11n (HT40)		54 to 62	54, 62	OFDM	BPSK	15.0	1TX (Radio 2)
			54 to 62	54, 62	OFDM	BPSK	30.0	2TX (Radio 2)
			54 to 62	54, 62	OFDM	BPSK	15.0	1TX (Radio 3)
	802.11ac (VHT80)		58	58	OFDM	BPSK	32.5	1TX (Radio 2)
			58	58	OFDM	BPSK	65.0	2TX (Radio 2)
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0	1TX / 2TX (Radio 2)
			100 to 140	100, 116, 140	OFDM	BPSK	6.0	1TX (Radio 3)
	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	BPSK	7.2	1TX (Radio 2)
			100 to 140	100, 116, 140	OFDM	BPSK	14.4	2TX (Radio 2)
			100 to 140	100, 116, 140	OFDM	BPSK	7.2	1TX (Radio 3)
	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	BPSK	15.0	1TX (Radio 2)
			102 to 134	102, 110, 134	OFDM	BPSK	30.0	2TX (Radio 2)
			102 to 134	102, 110, 134	OFDM	BPSK	15.0	1TX (Radio 3)
	802.11ac (VHT80)		106	106	OFDM	BPSK	32.5	1TX (Radio 2)
			106	106	OFDM	BPSK	65.0	2TX (Radio 2)

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE>1G	24deg. C, 69%RH 24deg. C, 72%RH 21deg. C, 71%RH	120Vac, 60Hz	Nick Hsu
RE<1G	22deg. C, 71%RH	120Vac, 60Hz 55Vdc	Jones Chang
PLC	22deg. C, 72%RH	120Vac, 60Hz 55Vdc	Nick Hsu
APCM	25deg. C, 60%RH	120Vac, 60Hz	Nick Hsu

3.3 DUTY CYCLE OF TEST SIGNAL

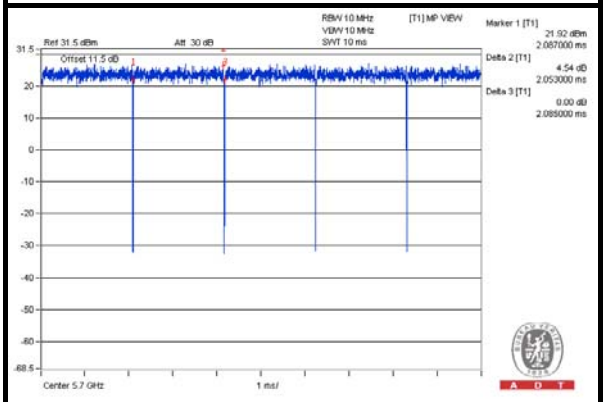
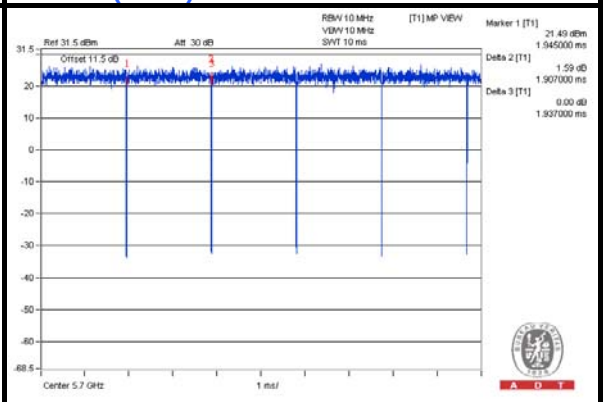
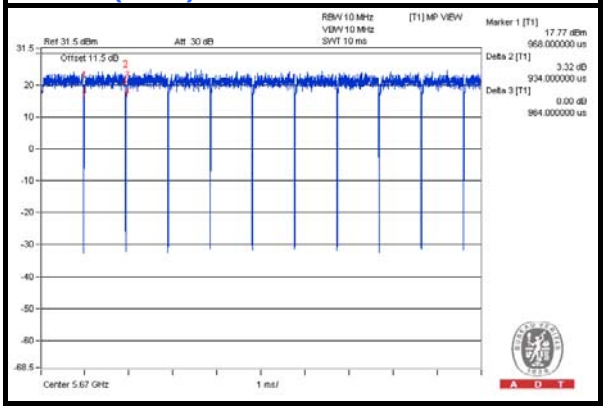
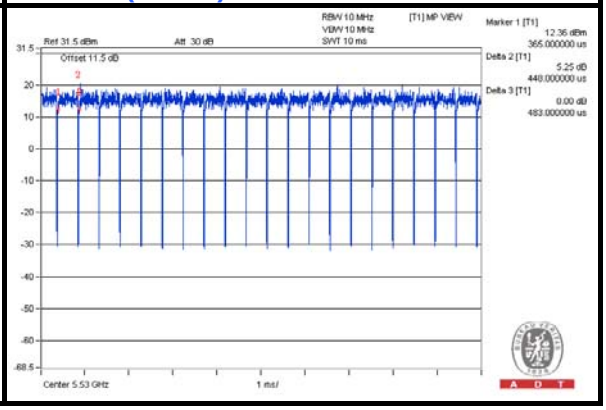
1TX (Radio 2)

802.11a, 802.11n (HT20): Duty cycle of test signal is > 98 %, duty factor is not required.

802.11n (HT40), 802.11ac (VHT80): Duty cycle is < 98%, duty factor shall be considered.

802.11n (HT40): Duty cycle = 0.934/0.964 = 0.969, Duty factor = 10 * log(1/0.969) = 0.14

802.11ac (VHT80): Duty cycle = 0.448/0.483 = 0.928, Duty factor = 10 * log(1/0.928) = 0.33

802.11a	802.11n (HT20)
	
802.11n (HT40)	**802.11ac (VHT80)**
	

2TX (Radio 2)

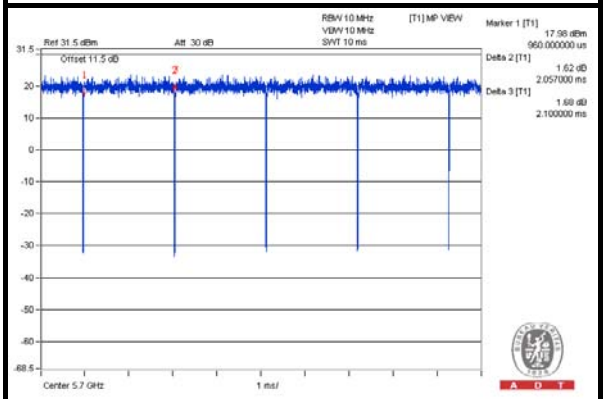
802.11a, 802.11n (HT20): Duty cycle of test signal is > 98 %, duty factor is not required.

802.11n (HT40), 802.11ac (VHT80): Duty cycle is < 98%, duty factor shall be considered.

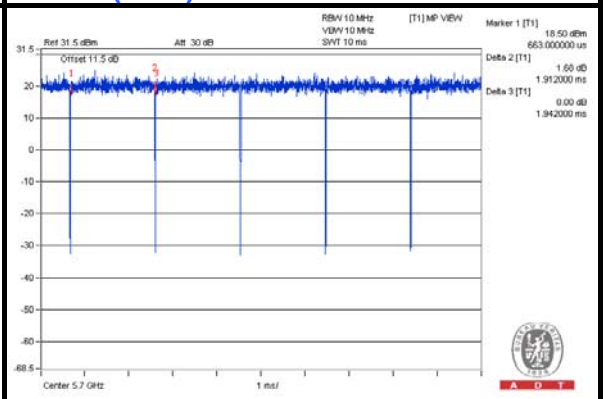
802.11n (HT40): Duty cycle = 0.920/0.980 = 0.939, Duty factor = 10 * log(1/0.939) = 0.27

802.11ac (VHT80): Duty cycle = 0.445/0.482 = 0.923, Duty factor = 10 * log(1/0.923) = 0.35

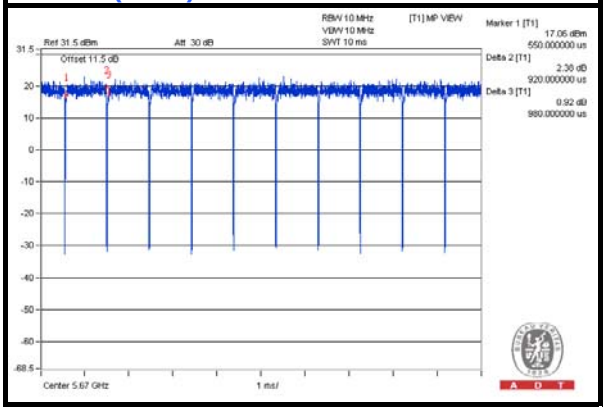
802.11a



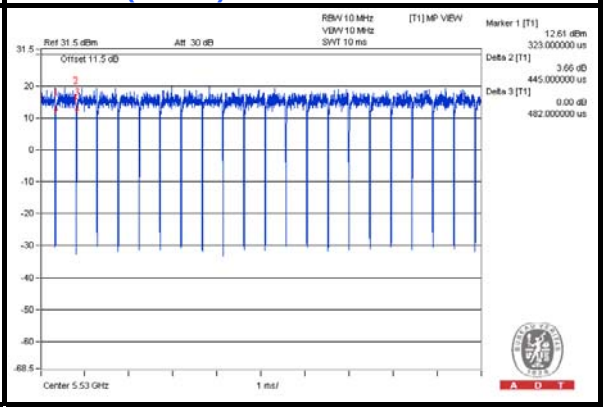
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



1TX (Radio 3)

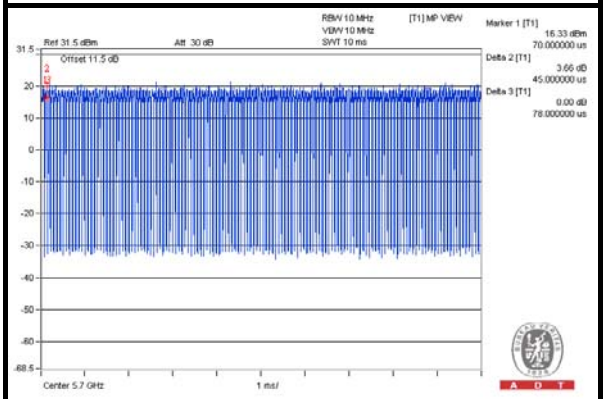
802.11a, 802.11n (HT20), 802.11n (HT40): Duty cycle is < 98%, duty factor shall be considered.

802.11a: Duty cycle = 0.045/0.078 = 0.577, Duty factor = 10 * log(1/0.577) = 2.39

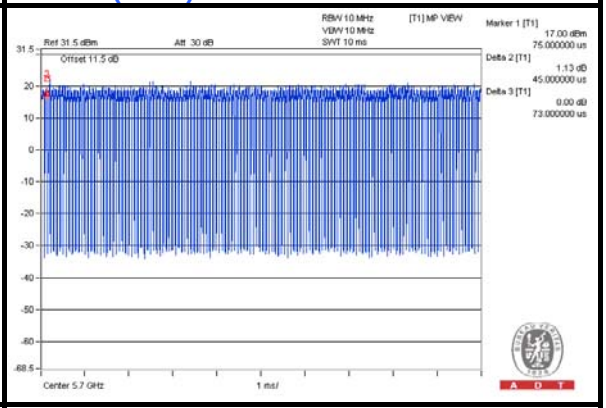
802.11n (HT20): Duty cycle = 0.045/0.073 = 0.616, Duty factor = 10 * log(1/0.616) = 2.10

802.11n (HT40): Duty cycle = 0.052/0.080 = 0.650, Duty factor = 10 * log(1/0.650) = 1.87

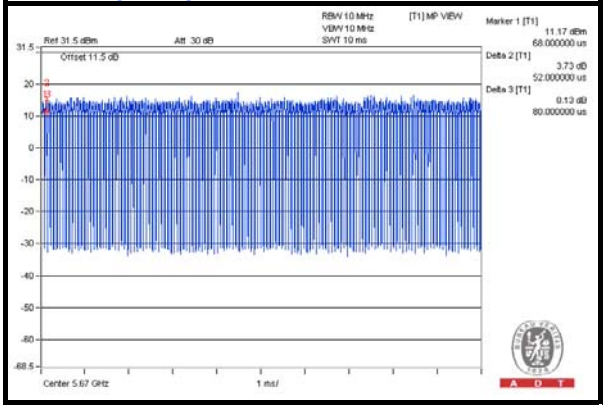
802.11a



802.11n (HT20)



802.11n (HT40)



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	NOTEBOOK	DELL	E5410	1HC2XM1	FCC Doc Approved
2	POE	CISCO	PD-9001GR/AT/AC	NA	NA
3	ADAPTER	Powertron Electronics Corp.	PA1024-120HEB200	NA	NA

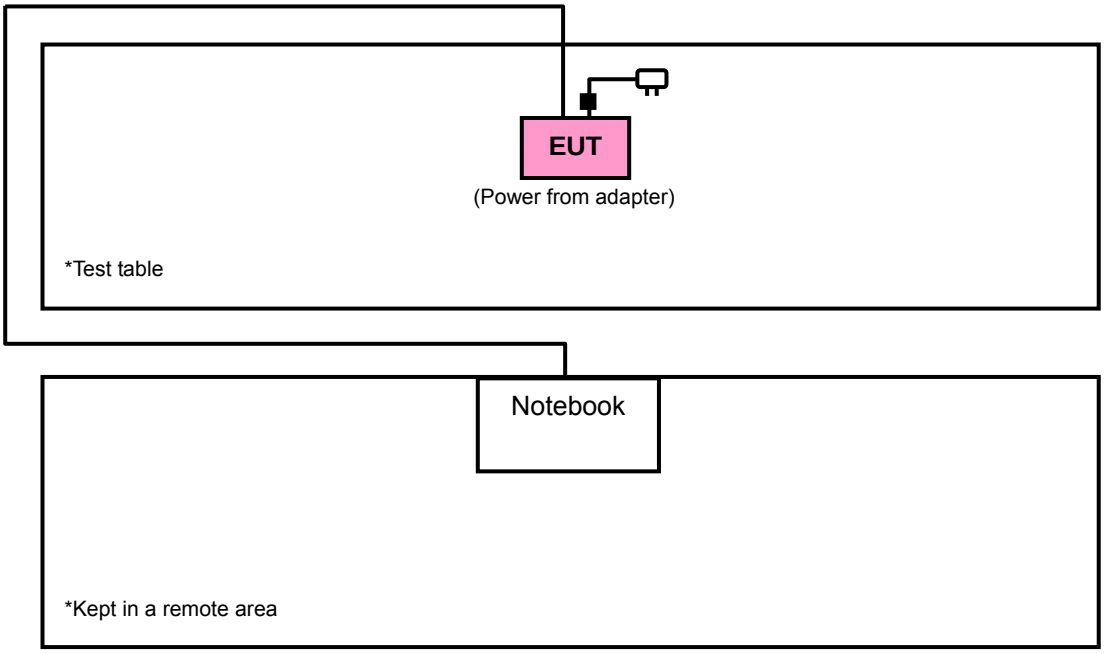
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	10m LAN cable for test mode A, 1.8m LAN cable for test mode B
2	10m LAN cable
3	NA

NOTE:

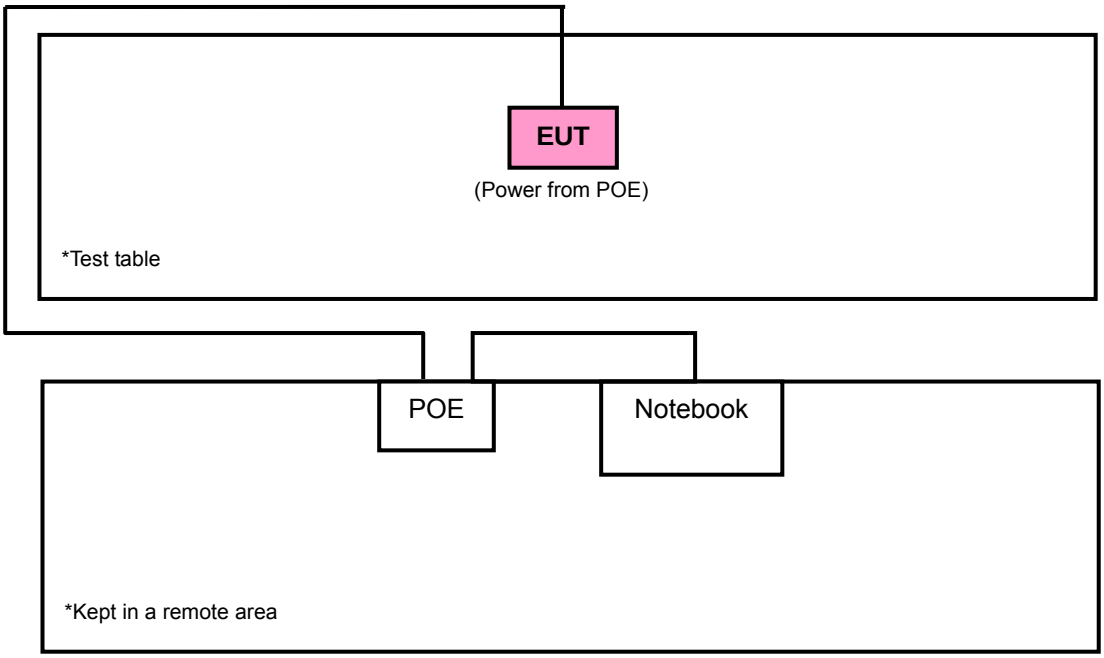
1. All power cords of the above support units are non-shielded (1.8 m).
2. Item 1 acted as a communication partner to transfer data.
3. Items 2-3 were provided by the manufacturer.

3.4.1 CONFIGURATION OF SYSTEM UNDER TEST

TEST MODE A



TEST MODE B



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
662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2009

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

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It 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 (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.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESIB7	100187	Jan. 02, 2014	Jan. 01, 2015
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Mar. 03, 2014	Mar. 02, 2015
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Feb. 26, 2014	Feb. 25, 2015
HORN Antenna SCHWARZBECK	9120D	209	Sep. 12, 2013	Sep. 11, 2014
			Sep. 12, 2014	Sep. 11, 2015
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Feb. 17, 2014	Feb. 16, 2015
Preamplifier Agilent	8447D	2944A10633	Oct. 07, 2013	Oct. 06, 2014
			Oct. 06, 2014	Oct. 05, 2015
Preamplifier Agilent	8449B	3008A01964	Aug. 26, 2013	Aug. 25, 2014
			Aug. 26, 2014	Aug. 25, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	214378/4	Aug. 26, 2013	Aug. 25, 2014
			Aug. 26, 2014	Aug. 25, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 106	12738/6 +309224/4	Aug. 26, 2013	Aug. 25, 2014
			Aug. 26, 2014	Aug. 25, 2015
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 18, 2013	Oct. 17, 2014
High Speed Peak Power Meter	ML2495A	0824011	Jul. 26, 2014	Jul. 25, 2015
Power Sensor	MA2411B	0738171	Jul. 26, 2014	Jul. 25, 2015
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 09, 2014	Jun. 08, 2015

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

2. The test was performed in HwaYa Chamber 3.

3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.

4. The FCC Site Registration No. is 988962.

5. The IC Site Registration No. is IC 7450F-3.

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:

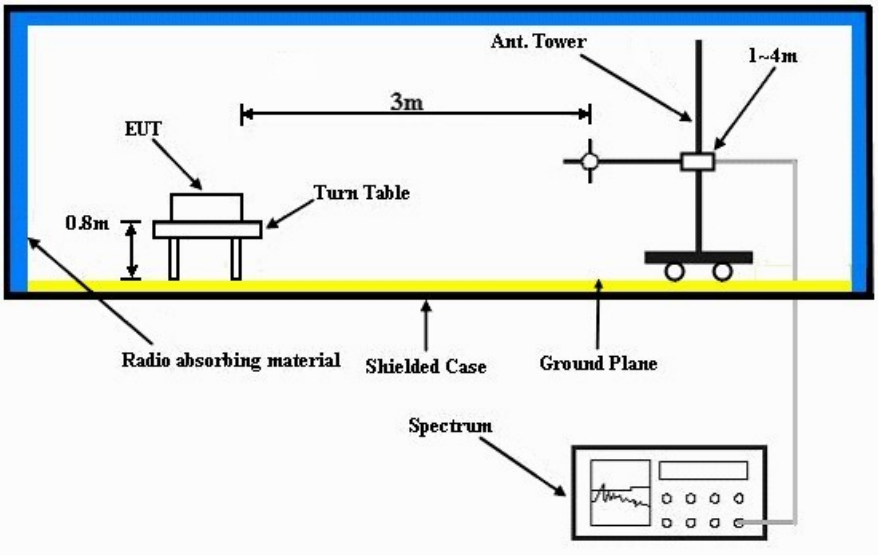
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution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

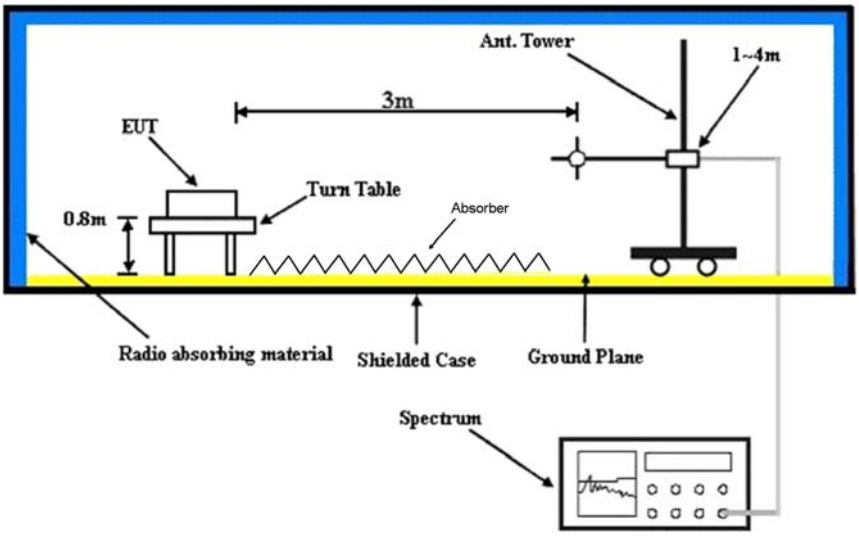
No deviation.

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

a. Placed the EUT on the testing table.
b. Prepared notebooks to act as communication partner and placed it outside of testing area.
c. The communication partner connected with EUT via a RJ45 cable and run a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
d. The communication partner sent data to EUT by command "PING".

4.1.8 TEST RESULTS

ABOVE 1GHz DATA

1TX (Radio 2)

802.11a

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	59.8 PK	74.0	-14.2	1.12 H	286	54.70	5.10
2	5150.00	46.1 AV	54.0	-7.9	1.12 H	286	41.00	5.10
3	*5260.00	116.3 PK			1.00 H	298	78.40	37.90
4	*5260.00	105.2 AV			1.00 H	298	67.30	37.90
5	5420.00	63.4 PK	74.0	-10.6	1.00 H	306	58.00	5.40
6	5420.00	51.2 AV	54.0	-2.8	1.00 H	306	45.80	5.40
7	#10520.00	62.4 PK	74.0	-11.6	1.11 H	288	43.00	19.40
8	#10520.00	49.2 AV	54.0	-4.8	1.11 H	288	29.80	19.40
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	1.45 V	344	53.00	5.10
2	5150.00	45.8 AV	54.0	-8.2	1.45 V	344	40.70	5.10
3	*5260.00	115.1 PK			1.41 V	321	77.20	37.90
4	*5260.00	104.1 AV			1.41 V	321	66.20	37.90
5	5420.00	62.2 PK	74.0	-11.8	1.38 V	340	56.80	5.40
6	5420.00	50.3 AV	54.0	-3.7	1.38 V	340	44.90	5.40
7	#10520.00	60.8 PK	74.0	-13.2	1.21 V	331	41.40	19.40
8	#10520.00	47.6 AV	54.0	-6.4	1.21 V	331	28.20	19.40

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	115.5 PK			1.00 H	302	77.60	37.90
2	*5300.00	104.4 AV			1.00 H	302	66.50	37.90
3	5460.00	62.8 PK	74.0	-11.2	1.00 H	302	57.20	5.60
4	5460.00	50.5 AV	54.0	-3.5	1.00 H	302	44.90	5.60
5	10600.00	61.8 PK	74.0	-12.2	1.09 H	305	42.80	19.00
6	10600.00	48.6 AV	54.0	-5.4	1.09 H	305	29.60	19.00
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	116.0 PK			1.52 V	345	78.10	37.90
2	*5300.00	105.3 AV			1.52 V	345	67.40	37.90
3	5460.00	62.5 PK	74.0	-11.5	1.01 V	352	56.90	5.60
4	5460.00	50.4 AV	54.0	-3.6	1.01 V	352	44.80	5.60
5	10600.00	60.7 PK	74.0	-13.3	1.10 V	279	41.70	19.00
6	10600.00	47.6 AV	54.0	-6.4	1.10 V	279	28.60	19.00

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	115.9 PK			1.00 H	302	77.90	38.00
2	*5320.00	105.0 AV			1.00 H	302	67.00	38.00
3	5350.00	68.6 PK	74.0	-5.4	1.00 H	306	63.20	5.40
4	5350.00	52.5 AV	54.0	-1.5	1.00 H	306	47.10	5.40
5	10640.00	60.4 PK	74.0	-13.6	1.13 H	330	41.60	18.80
6	10640.00	48.0 AV	54.0	-6.0	1.13 H	330	29.20	18.80
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	*5320.00	115.4 PK			1.51 V	345	77.40	38.00
2	*5320.00	104.5 AV			1.51 V	345	66.50	38.00
3	5350.00	64.8 PK	74.0	-9.2	1.25 V	300	59.40	5.40
4	5350.00	48.9 AV	54.0	-5.1	1.25 V	300	43.50	5.40
5	10640.00	59.6 PK	74.0	-14.4	1.39 V	299	40.80	18.80
6	10640.00	46.7 AV	54.0	-7.3	1.39 V	299	27.90	18.80

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.

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	66.4 PK	74.0	-7.6	1.00 H	302	60.80	5.60
2	5460.00	48.8 AV	54.0	-5.2	1.00 H	302	43.20	5.60
3	#5470.00	71.8 PK	74.0	-2.2	1.00 H	302	66.10	5.70
4	#5470.00	52.3 AV	54.0	-1.7	1.00 H	302	46.60	5.70
5	*5500.00	115.6 PK			1.00 H	303	77.30	38.30
6	*5500.00	104.8 AV			1.00 H	303	66.50	38.30
7	11000.00	62.4 PK	74.0	-11.6	1.05 H	311	42.60	19.80
8	11000.00	49.5 AV	54.0	-4.5	1.05 H	311	29.70	19.80
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	5460.00	66.0 PK	74.0	-8.0	1.28 V	300	60.40	5.60
2	5460.00	48.4 AV	54.0	-5.6	1.28 V	300	42.80	5.60
3	#5470.00	70.4 PK	74.0	-3.6	1.32 V	298	64.70	5.70
4	#5470.00	51.7 AV	54.0	-2.3	1.32 V	298	46.00	5.70
5	*5500.00	116.5 PK			1.12 V	348	78.20	38.30
6	*5500.00	105.7 AV			1.12 V	348	67.40	38.30
7	11000.00	62.1 PK	74.0	-11.9	1.07 V	302	42.30	19.80
8	11000.00	49.4 AV	54.0	-4.6	1.07 V	302	29.60	19.80

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 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	115.2 PK			1.03 H	298	76.90	38.30
2	*5580.00	104.3 AV			1.03 H	298	66.00	38.30
3	11160.00	62.1 PK	74.0	-11.9	1.09 H	301	42.20	19.90
4	11160.00	49.6 AV	54.0	-4.4	1.09 H	301	29.70	19.90
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	113.5 PK			1.39 V	302	75.20	38.30
2	*5580.00	102.6 AV			1.39 V	302	64.30	38.30
3	11160.00	62.5 PK	74.0	-11.5	1.26 V	296	42.60	19.90
4	11160.00	49.1 AV	54.0	-4.9	1.26 V	296	29.20	19.90

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	112.5 PK			1.10 H	290	74.00	38.50
2	*5700.00	101.4 AV			1.10 H	290	62.90	38.50
3	#5725.00	70.0 PK	74.0	-4.0	1.18 H	290	64.00	6.00
4	#5725.00	52.8 AV	54.0	-1.2	1.18 H	290	46.80	6.00
5	11400.00	63.3 PK	74.0	-10.7	1.10 H	302	43.30	20.00
6	11400.00	50.5 AV	54.0	-3.5	1.10 H	302	30.50	20.00
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	113.8 PK			1.38 V	10	75.30	38.50
2	*5700.00	103.3 AV			1.38 V	10	64.80	38.50
3	#5725.00	70.0 PK	74.0	-4.0	1.08 V	24	64.00	6.00
4	#5725.00	52.0 AV	54.0	-2.0	1.08 V	24	46.00	6.00
5	11400.00	62.4 PK	74.0	-11.6	1.15 V	21	42.40	20.00
6	11400.00	49.9 AV	54.0	-4.1	1.15 V	21	29.90	20.00

REMARKS:

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

802.11n (HT20)

CHANNEL	TX Channel 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	58.7 PK	74.0	-15.3	1.18 H	296	53.60	5.10
2	5150.00	46.2 AV	54.0	-7.8	1.18 H	296	41.10	5.10
3	*5260.00	118.1 PK			1.08 H	296	80.20	37.90
4	*5260.00	105.1 AV			1.08 H	296	67.20	37.90
5	5420.00	63.7 PK	74.0	-10.3	1.00 H	304	58.30	5.40
6	5420.00	51.8 AV	54.0	-2.2	1.00 H	304	46.40	5.40
7	#10520.00	61.6 PK	74.0	-12.4	1.06 H	221	42.20	19.40
8	#10520.00	48.8 AV	54.0	-5.2	1.06 H	221	29.40	19.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.7 PK	74.0	-15.3	1.58 V	343	53.60	5.10
2	5150.00	45.8 AV	54.0	-8.2	1.58 V	343	40.70	5.10
3	*5260.00	116.3 PK			1.53 V	346	78.40	37.90
4	*5260.00	104.9 AV			1.53 V	346	67.00	37.90
5	5420.00	62.3 PK	74.0	-11.7	1.60 V	340	56.90	5.40
6	5420.00	50.3 AV	54.0	-3.7	1.60 V	340	44.90	5.40
7	#10520.00	60.9 PK	74.0	-13.1	1.37 V	300	41.50	19.40
8	#10520.00	47.7 AV	54.0	-6.3	1.37 V	300	28.30	19.40

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	116.6 PK			1.00 H	299	78.70	37.90
2	*5300.00	105.0 AV			1.00 H	299	67.10	37.90
3	5460.00	62.5 PK	74.0	-11.5	1.00 H	302	56.90	5.60
4	5460.00	51.2 AV	54.0	-2.8	1.00 H	302	45.60	5.60
5	10600.00	60.2 PK	74.0	-13.8	1.06 H	300	41.20	19.00
6	10600.00	47.4 AV	54.0	-6.6	1.06 H	300	28.40	19.00
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	114.1 PK			1.26 V	310	76.20	37.90
2	*5300.00	102.6 AV			1.26 V	310	64.70	37.90
3	5460.00	62.4 PK	74.0	-11.6	1.21 V	301	56.80	5.60
4	5460.00	49.5 AV	54.0	-4.5	1.21 V	301	43.90	5.60
5	10600.00	61.6 PK	74.0	-12.4	1.15 V	285	42.60	19.00
6	10600.00	48.6 AV	54.0	-5.4	1.15 V	285	29.60	19.00

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	115.8 PK			1.00 H	304	77.80	38.00
2	*5320.00	104.4 AV			1.00 H	304	66.40	38.00
3	5350.00	71.0 PK	74.0	-3.0	1.00 H	307	65.60	5.40
4	5350.00	52.5 AV	54.0	-1.5	1.00 H	307	47.10	5.40
5	10640.00	59.2 PK	74.0	-14.8	1.10 H	301	40.40	18.80
6	10640.00	45.8 AV	54.0	-8.2	1.10 H	301	27.00	18.80
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	*5320.00	114.6 PK			1.37 V	346	76.60	38.00
2	*5320.00	103.7 AV			1.37 V	346	65.70	38.00
3	5350.00	68.1 PK	74.0	-5.9	1.26 V	345	62.70	5.40
4	5350.00	51.9 AV	54.0	-2.1	1.26 V	345	46.50	5.40
5	10640.00	61.5 PK	74.0	-12.5	1.26 V	302	42.70	18.80
6	10640.00	48.1 AV	54.0	-5.9	1.26 V	302	29.30	18.80

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.

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	65.7 PK	74.0	-8.3	1.10 H	300	60.10	5.60
2	5460.00	49.0 AV	54.0	-5.0	1.10 H	300	43.40	5.60
3	#5470.00	73.0 PK	74.0	-1.0	1.08 H	308	67.30	5.70
4	#5470.00	52.3 AV	54.0	-1.7	1.08 H	308	46.60	5.70
5	*5500.00	114.7 PK			1.07 H	307	76.40	38.30
6	*5500.00	103.3 AV			1.07 H	307	65.00	38.30
7	11000.00	63.0 PK	74.0	-11.0	1.12 H	316	43.20	19.80
8	11000.00	49.5 AV	54.0	-4.5	1.12 H	316	29.70	19.80
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	5460.00	65.6 PK	74.0	-8.4	1.03 V	348	60.00	5.60
2	5460.00	48.4 AV	54.0	-5.6	1.03 V	348	42.80	5.60
3	#5470.00	72.9 PK	74.0	-1.1	1.01 V	349	67.20	5.70
4	#5470.00	52.3 AV	54.0	-1.7	1.01 V	349	46.60	5.70
5	*5500.00	118.7 PK			1.13 V	350	80.40	38.30
6	*5500.00	104.5 AV			1.13 V	350	66.20	38.30
7	11000.00	62.9 PK	74.0	-11.1	1.07 V	303	43.10	19.80
8	11000.00	49.5 AV	54.0	-4.5	1.07 V	303	29.70	19.80

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 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	116.2 PK			1.10 H	291	77.90	38.30
2	*5580.00	104.4 AV			1.10 H	291	66.10	38.30
3	11160.00	62.3 PK	74.0	-11.7	1.00 H	302	42.40	19.90
4	11160.00	49.4 AV	54.0	-4.6	1.00 H	302	29.50	19.90
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	120.8 PK			1.00 V	349	82.50	38.30
2	*5580.00	105.4 AV			1.00 V	349	67.10	38.30
3	11160.00	61.9 PK	74.0	-12.1	1.10 V	285	42.00	19.90
4	11160.00	49.3 AV	54.0	-4.7	1.10 V	285	29.40	19.90

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	115.5 PK			1.00 H	288	77.00	38.50
2	*5700.00	102.4 AV			1.00 H	288	63.90	38.50
3	#5725.00	70.4 PK	74.0	-3.6	1.00 H	293	64.40	6.00
4	#5725.00	52.8 AV	54.0	-1.2	1.00 H	293	46.80	6.00
5	11400.00	63.7 PK	74.0	-10.3	1.04 H	295	43.70	20.00
6	11400.00	50.2 AV	54.0	-3.8	1.04 H	295	30.20	20.00
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	116.3 PK			1.38 V	345	77.80	38.50
2	*5700.00	101.7 AV			1.38 V	345	63.20	38.50
3	#5725.00	70.7 PK	74.0	-3.3	1.38 V	5	64.70	6.00
4	#5725.00	52.7 AV	54.0	-1.3	1.38 V	5	46.70	6.00
5	11400.00	62.6 PK	74.0	-11.4	1.27 V	291	42.60	20.00
6	11400.00	49.8 AV	54.0	-4.2	1.27 V	291	29.80	20.00

REMARKS:

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

802.11n (HT40)

CHANNEL	TX Channel 54	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	59.5 PK	74.0	-14.5	1.00 H	294	54.40	5.10
2	5150.00	46.1 AV	54.0	-7.9	1.00 H	294	41.00	5.10
3	*5270.00	113.8 PK			1.00 H	298	75.90	37.90
4	*5270.00	102.7 AV			1.00 H	298	64.80	37.90
5	5350.00	63.9 PK	74.0	-10.1	1.00 H	305	58.50	5.40
6	5350.00	50.2 AV	54.0	-3.8	1.00 H	305	44.80	5.40
7	#10540.00	61.9 PK	74.0	-12.1	1.07 H	309	42.60	19.30
8	#10540.00	49.0 AV	54.0	-5.0	1.07 H	309	29.70	19.30
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	58.2 PK	74.0	-15.8	1.18 V	305	53.10	5.10
2	5150.00	45.0 AV	54.0	-9.0	1.18 V	305	39.90	5.10
3	*5270.00	112.6 PK			1.07 V	341	74.70	37.90
4	*5270.00	101.3 AV			1.07 V	341	63.40	37.90
5	5350.00	63.0 PK	74.0	-11.0	1.50 V	347	57.60	5.40
6	5350.00	49.6 AV	54.0	-4.4	1.50 V	347	44.20	5.40
7	#10540.00	61.8 PK	74.0	-12.2	1.02 V	312	42.50	19.30
8	#10540.00	48.9 AV	54.0	-5.1	1.02 V	312	29.60	19.30

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	110.1 PK			1.06 H	289	72.20	37.90
2	*5310.00	98.3 AV			1.06 H	289	60.40	37.90
3	5350.00	71.8 PK	74.0	-2.2	1.06 H	297	66.40	5.40
4	5350.00	53.0 AV	54.0	-1.0	1.06 H	297	47.60	5.40
5	10620.00	61.0 PK	74.0	-13.0	1.12 H	300	42.10	18.90
6	10620.00	48.1 AV	54.0	-5.9	1.12 H	300	29.20	18.90
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	106.6 PK			1.26 V	311	68.70	37.90
2	*5310.00	95.4 AV			1.26 V	311	57.50	37.90
3	5350.00	68.8 PK	74.0	-5.2	1.24 V	301	63.40	5.40
4	5350.00	50.9 AV	54.0	-3.1	1.24 V	301	45.50	5.40
5	10620.00	62.5 PK	74.0	-11.5	1.15 V	279	43.60	18.90
6	10620.00	48.2 AV	54.0	-5.8	1.15 V	279	29.30	18.90

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	65.3 PK	74.0	-8.7	1.12 H	303	59.70	5.60
2	5460.00	49.0 AV	54.0	-5.0	1.12 H	303	43.40	5.60
3	#5470.00	71.5 PK	74.0	-2.5	1.16 H	296	65.80	5.70
4	#5470.00	52.8 AV	54.0	-1.2	1.16 H	296	47.10	5.70
5	*5510.00	109.0 PK			1.24 H	300	70.70	38.30
6	*5510.00	97.7 AV			1.24 H	300	59.40	38.30
7	11020.00	62.8 PK	74.0	-11.2	1.16 H	309	42.90	19.90
8	11020.00	49.7 AV	54.0	-4.3	1.16 H	309	29.80	19.90
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	65.3 PK	74.0	-8.7	1.44 V	326	59.70	5.60
2	5460.00	47.9 AV	54.0	-6.1	1.44 V	326	42.30	5.60
3	#5470.00	71.9 PK	74.0	-2.1	1.46 V	343	66.20	5.70
4	#5470.00	51.7 AV	54.0	-2.3	1.46 V	343	46.00	5.70
5	*5510.00	109.9 PK			1.56 V	339	71.60	38.30
6	*5510.00	97.6 AV			1.56 V	339	59.30	38.30
7	11020.00	63.0 PK	74.0	-11.0	1.44 V	303	43.10	19.90
8	11020.00	49.6 AV	54.0	-4.4	1.44 V	303	29.70	19.90

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	5460.00	64.6 PK	74.0	-9.4	1.10 H	304	59.00	5.60
2	5460.00	49.4 AV	54.0	-4.6	1.10 H	304	43.80	5.60
3	#5470.00	69.7 PK	74.0	-4.3	1.15 H	296	64.00	5.70
4	#5470.00	51.4 AV	54.0	-2.6	1.15 H	296	45.70	5.70
5	*5550.00	114.0 PK			1.24 H	304	75.70	38.30
6	*5550.00	102.0 AV			1.24 H	304	63.70	38.30
7	11100.00	61.6 PK	74.0	-12.4	1.05 H	306	41.80	19.80
8	11100.00	49.4 AV	54.0	-4.6	1.05 H	306	29.60	19.80
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	5460.00	66.6 PK	74.0	-7.4	1.15 V	336	61.00	5.60
2	5460.00	48.4 AV	54.0	-5.6	1.15 V	336	42.80	5.60
3	#5470.00	68.9 PK	74.0	-5.1	1.22 V	346	63.20	5.70
4	#5470.00	50.3 AV	54.0	-3.7	1.22 V	346	44.60	5.70
5	*5550.00	118.3 PK			1.21 V	349	80.00	38.30
6	*5550.00	102.7 AV			1.21 V	349	64.40	38.30
7	11100.00	62.5 PK	74.0	-11.5	1.07 V	296	42.70	19.80
8	11100.00	49.0 AV	54.0	-5.0	1.07 V	296	29.20	19.80

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 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	110.2 PK			1.00 H	293	71.80	38.40
2	*5670.00	99.1 AV			1.00 H	293	60.70	38.40
3	#5725.00	70.0 PK	74.0	-4.0	1.00 H	291	64.00	6.00
4	#5725.00	52.7 AV	54.0	-1.3	1.00 H	291	46.70	6.00
5	11340.00	62.1 PK	74.0	-11.9	1.10 H	305	42.20	19.90
6	11340.00	49.6 AV	54.0	-4.4	1.10 H	305	29.70	19.90
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	112.2 PK			1.18 V	349	73.80	38.40
2	*5670.00	100.3 AV			1.18 V	349	61.90	38.40
3	#5725.00	68.5 PK	74.0	-5.5	1.06 V	354	62.50	6.00
4	#5725.00	52.6 AV	54.0	-1.4	1.06 V	354	46.60	6.00
5	11340.00	62.3 PK	74.0	-11.7	1.12 V	300	42.40	19.90
6	11340.00	49.2 AV	54.0	-4.8	1.12 V	300	29.30	19.90

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 (VHT80)

CHANNEL	TX Channel 58	**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	*5290.00	105.6 PK			1.00 H	300	67.70	37.90
2	*5290.00	93.6 AV			1.00 H	300	55.70	37.90
3	5350.00	68.9 PK	74.0	-5.1	1.00 H	303	63.50	5.40
4	5350.00	52.6 AV	54.0	-1.4	1.00 H	303	47.20	5.40
5	#10580.00	61.8 PK	74.0	-12.2	1.04 H	286	42.60	19.20
6	#10580.00	48.8 AV	54.0	-5.2	1.04 H	286	29.60	19.20
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	*5290.00	101.4 PK			1.13 V	313	63.50	37.90
2	*5290.00	89.7 AV			1.13 V	313	51.80	37.90
3	5350.00	66.5 PK	74.0	-7.5	1.13 V	299	61.10	5.40
4	5350.00	49.6 AV	54.0	-4.4	1.13 V	299	44.20	5.40
5	#10580.00	61.8 PK	74.0	-12.2	1.22 V	310	42.60	19.20
6	#10580.00	48.9 AV	54.0	-5.1	1.22 V	310	29.70	19.20

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	68.5 PK	74.0	-5.5	1.05 H	306	62.90	5.60
2	5460.00	51.1 AV	54.0	-2.9	1.05 H	306	45.50	5.60
3	#5470.00	72.7 PK	74.0	-1.3	1.08 H	310	67.00	5.70
4	#5470.00	52.0 AV	54.0	-2.0	1.08 H	310	46.30	5.70
5	*5530.00	105.7 PK			1.08 H	308	67.50	38.20
6	*5530.00	93.5 AV			1.08 H	308	55.30	38.20
7	11060.00	62.5 PK	74.0	-11.5	1.18 H	320	42.80	19.70
8	11060.00	49.3 AV	54.0	-4.7	1.18 H	320	29.60	19.70
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	68.0 PK	74.0	-6.0	1.20 V	332	62.40	5.60
2	5460.00	50.1 AV	54.0	-3.9	1.20 V	332	44.50	5.60
3	#5470.00	72.1 PK	74.0	-1.9	1.23 V	349	66.40	5.70
4	#5470.00	51.9 AV	54.0	-2.1	1.23 V	349	46.20	5.70
5	*5530.00	106.5 PK			1.11 V	346	68.30	38.20
6	*5530.00	93.5 AV			1.11 V	346	55.30	38.20
7	11060.00	62.0 PK	74.0	-12.0	1.19 V	323	42.30	19.70
8	11060.00	49.1 AV	54.0	-4.9	1.19 V	323	29.40	19.70

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.

2TX (Radio 2)

802.11a

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	58.2 PK	74.0	-15.8	1.00 H	47	53.10	5.10
2	5150.00	45.9 AV	54.0	-8.1	1.00 H	47	40.80	5.10
3	*5260.00	116.9 PK			1.01 H	58	79.00	37.90
4	*5260.00	106.4 AV			1.01 H	58	68.50	37.90
5	5420.00	62.9 PK	74.0	-11.1	1.09 H	53	57.50	5.40
6	5420.00	50.6 AV	54.0	-3.4	1.09 H	53	45.20	5.40
7	#10520.00	60.7 PK	74.0	-13.3	1.18 H	77	41.30	19.40
8	#10520.00	46.5 AV	54.0	-7.5	1.18 H	77	27.10	19.40
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	-16.8	1.19 V	21	52.10	5.10
2	5150.00	45.0 AV	54.0	-9.0	1.19 V	21	39.90	5.10
3	*5260.00	117.7 PK			1.18 V	334	79.80	37.90
4	*5260.00	107.0 AV			1.18 V	334	69.10	37.90
5	5420.00	58.0 PK	74.0	-16.0	1.37 V	40	52.60	5.40
6	5420.00	46.5 AV	54.0	-7.5	1.37 V	40	41.10	5.40
7	#10520.00	60.4 PK	74.0	-13.6	1.12 V	326	41.00	19.40
8	#10520.00	47.5 AV	54.0	-6.5	1.12 V	326	28.10	19.40

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	115.8 PK			1.02 H	55	77.90	37.90
2	*5300.00	105.4 AV			1.02 H	55	67.50	37.90
3	5460.00	63.2 PK	74.0	-10.8	1.01 H	54	57.60	5.60
4	5460.00	51.6 AV	54.0	-2.4	1.01 H	54	46.00	5.60
5	10600.00	59.4 PK	74.0	-14.6	1.03 H	83	40.40	19.00
6	10600.00	46.1 AV	54.0	-7.9	1.03 H	83	27.10	19.00
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	116.8 PK			1.40 V	1	78.90	37.90
2	*5300.00	106.3 AV			1.40 V	1	68.40	37.90
3	5460.00	62.6 PK	74.0	-11.4	1.12 V	334	57.00	5.60
4	5460.00	51.5 AV	54.0	-2.5	1.12 V	334	45.90	5.60
5	10600.00	60.3 PK	74.0	-13.7	1.25 V	82	41.30	19.00
6	10600.00	47.6 AV	54.0	-6.4	1.25 V	82	28.60	19.00

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	116.6 PK			1.00 H	55	78.60	38.00
2	*5320.00	106.2 AV			1.00 H	55	68.20	38.00
3	5350.00	61.4 PK	74.0	-12.6	1.00 H	46	56.00	5.40
4	5350.00	48.3 AV	54.0	-5.7	1.00 H	46	42.90	5.40
5	10640.00	59.0 PK	74.0	-15.0	1.10 H	92	40.20	18.80
6	10640.00	45.4 AV	54.0	-8.6	1.10 H	92	26.60	18.80
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	*5320.00	118.1 PK			1.05 V	339	80.10	38.00
2	*5320.00	108.2 AV			1.05 V	339	70.20	38.00
3	5350.00	60.0 PK	74.0	-14.0	1.14 V	48	54.60	5.40
4	5350.00	45.8 AV	54.0	-8.2	1.14 V	48	40.40	5.40
5	10640.00	59.7 PK	74.0	-14.3	1.17 V	352	40.90	18.80
6	10640.00	46.6 AV	54.0	-7.4	1.17 V	352	27.80	18.80

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.

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	62.0 PK	74.0	-12.0	1.00 H	56	56.40	5.60
2	5460.00	46.5 AV	54.0	-7.5	1.00 H	56	40.90	5.60
3	#5470.00	67.6 PK	74.0	-6.4	1.02 H	50	61.90	5.70
4	#5470.00	51.3 AV	54.0	-2.7	1.02 H	50	45.60	5.70
5	*5500.00	117.1 PK			1.00 H	51	78.80	38.30
6	*5500.00	106.8 AV			1.00 H	51	68.50	38.30
7	11000.00	60.7 PK	74.0	-13.3	1.19 H	50	40.90	19.80
8	11000.00	48.0 AV	54.0	-6.0	1.19 H	50	28.20	19.80
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	5460.00	63.2 PK	74.0	-10.8	1.02 V	326	57.60	5.60
2	5460.00	46.7 AV	54.0	-7.3	1.02 V	326	41.10	5.60
3	#5470.00	66.1 PK	74.0	-7.9	1.00 V	341	60.40	5.70
4	#5470.00	50.2 AV	54.0	-3.8	1.00 V	341	44.50	5.70
5	*5500.00	119.6 PK			1.02 V	350	81.30	38.30
6	*5500.00	109.0 AV			1.02 V	350	70.70	38.30
7	11000.00	60.3 PK	74.0	-13.7	1.12 V	292	40.50	19.80
8	11000.00	47.7 AV	54.0	-6.3	1.12 V	292	27.90	19.80

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 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	116.6 PK			1.00 H	46	78.30	38.30
2	*5580.00	106.0 AV			1.00 H	46	67.70	38.30
3	11160.00	61.0 PK	74.0	-13.0	1.12 H	114	41.10	19.90
4	11160.00	48.6 AV	54.0	-5.4	1.12 H	114	28.70	19.90
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	119.5 PK			1.00 V	349	81.20	38.30
2	*5580.00	109.0 AV			1.00 V	349	70.70	38.30
3	11160.00	60.2 PK	74.0	-13.8	1.09 V	331	40.30	19.90
4	11160.00	47.2 AV	54.0	-6.8	1.09 V	331	27.30	19.90

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	114.1 PK			1.00 H	49	75.60	38.50
2	*5700.00	103.5 AV			1.00 H	49	65.00	38.50
3	#5725.00	71.2 PK	74.0	-2.8	1.01 H	56	65.20	6.00
4	#5725.00	53.0 AV	54.0	-1.0	1.01 H	56	47.00	6.00
5	11400.00	65.3 PK	74.0	-8.7	1.42 H	56	45.30	20.00
6	11400.00	52.2 AV	54.0	-1.8	1.42 H	56	32.20	20.00
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	116.2 PK			1.08 V	10	77.70	38.50
2	*5700.00	105.9 AV			1.08 V	10	67.40	38.50
3	#5725.00	71.0 PK	74.0	-3.0	1.15 V	343	65.00	6.00
4	#5725.00	52.8 AV	54.0	-1.2	1.15 V	343	46.80	6.00
5	11400.00	60.9 PK	74.0	-13.1	1.15 V	318	40.90	20.00
6	11400.00	48.2 AV	54.0	-5.8	1.15 V	318	28.20	20.00

REMARKS:

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

802.11n (HT20)

CHANNEL	TX Channel 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	57.4 PK	74.0	-16.6	1.00 H	286	52.30	5.10
2	5150.00	44.3 AV	54.0	-9.7	1.00 H	286	39.20	5.10
3	*5260.00	114.4 PK			1.00 H	39	76.50	37.90
4	*5260.00	103.0 AV			1.00 H	39	65.10	37.90
5	5420.00	61.7 PK	74.0	-12.3	1.00 H	284	56.30	5.40
6	5420.00	50.2 AV	54.0	-3.8	1.00 H	284	44.80	5.40
7	#10520.00	59.2 PK	74.0	-14.8	1.14 H	60	39.80	19.40
8	#10520.00	46.7 AV	54.0	-7.3	1.14 H	60	27.30	19.40
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	-16.8	1.31 V	4	52.10	5.10
2	5150.00	44.8 AV	54.0	-9.2	1.31 V	4	39.70	5.10
3	*5260.00	112.8 PK			1.12 V	284	74.90	37.90
4	*5260.00	100.0 AV			1.12 V	284	62.10	37.90
5	5420.00	61.7 PK	74.0	-12.3	1.02 V	7	56.30	5.40
6	5420.00	49.1 AV	54.0	-4.9	1.02 V	7	43.70	5.40
7	#10520.00	60.7 PK	74.0	-13.3	1.05 V	326	41.30	19.40
8	#10520.00	47.7 AV	54.0	-6.3	1.05 V	326	28.30	19.40

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	114.0 PK			1.00 H	40	76.10	37.90
2	*5300.00	101.9 AV			1.00 H	40	64.00	37.90
3	5460.00	60.8 PK	74.0	-13.2	1.00 H	53	55.20	5.60
4	5460.00	49.2 AV	54.0	-4.8	1.00 H	53	43.60	5.60
5	10600.00	60.1 PK	74.0	-13.9	1.13 H	60	41.10	19.00
6	10600.00	46.7 AV	54.0	-7.3	1.13 H	60	27.70	19.00
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	116.0 PK			1.05 V	345	78.10	37.90
2	*5300.00	102.2 AV			1.05 V	345	64.30	37.90
3	5460.00	62.9 PK	74.0	-11.1	1.02 V	339	57.30	5.60
4	5460.00	50.9 AV	54.0	-3.1	1.02 V	339	45.30	5.60
5	10600.00	61.1 PK	74.0	-12.9	1.12 V	256	42.10	19.00
6	10600.00	47.5 AV	54.0	-6.5	1.12 V	256	28.50	19.00

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	114.9 PK			1.03 H	55	76.90	38.00
2	*5320.00	103.2 AV			1.03 H	55	65.20	38.00
3	5350.00	61.5 PK	74.0	-12.5	1.03 H	59	56.10	5.40
4	5350.00	46.9 AV	54.0	-7.1	1.03 H	59	41.50	5.40
5	#5480.00	64.6 PK	68.2	-3.6	1.00 H	48	58.90	5.70
6	10640.00	58.9 PK	74.0	-15.1	1.13 H	47	40.10	18.80
7	10640.00	45.6 AV	54.0	-8.4	1.13 H	47	26.80	18.80
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	*5320.00	113.7 PK			1.11 V	43	75.70	38.00
2	*5320.00	101.9 AV			1.11 V	43	63.90	38.00
3	5350.00	57.8 PK	74.0	-16.2	1.07 V	293	52.40	5.40
4	5350.00	45.7 AV	54.0	-8.3	1.07 V	293	40.30	5.40
5	#5480.00	60.0 PK	74.0	-14.0	1.07 V	282	54.30	5.70
6	#5480.00	47.2 AV	54.0	-6.8	1.07 V	282	41.50	5.70
7	10640.00	59.6 PK	74.0	-14.4	1.01 V	53	40.80	18.80
8	10640.00	46.9 AV	54.0	-7.1	1.01 V	53	28.10	18.80

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 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	62.5 PK	74.0	-11.5	1.00 H	66	56.90	5.60
2	5460.00	45.8 AV	54.0	-8.2	1.00 H	66	40.20	5.60
3	#5470.00	67.9 PK	74.0	-6.1	1.00 H	59	62.20	5.70
4	#5470.00	49.7 AV	54.0	-4.3	1.00 H	59	44.00	5.70
5	*5500.00	114.4 PK			1.00 H	51	76.10	38.30
6	*5500.00	101.7 AV			1.00 H	51	63.40	38.30
7	11000.00	60.1 PK	74.0	-13.9	1.12 H	125	40.30	19.80
8	11000.00	47.1 AV	54.0	-6.9	1.12 H	125	27.30	19.80
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	5460.00	62.6 PK	74.0	-11.4	1.08 V	321	57.00	5.60
2	5460.00	47.5 AV	54.0	-6.5	1.08 V	321	41.90	5.60
3	#5470.00	68.3 PK	74.0	-5.7	1.13 V	340	62.60	5.70
4	#5470.00	49.6 AV	54.0	-4.4	1.13 V	340	43.90	5.70
5	*5500.00	117.3 PK			1.01 V	4	79.00	38.30
6	*5500.00	104.1 AV			1.01 V	4	65.80	38.30
7	11000.00	60.4 PK	74.0	-13.6	1.07 V	69	40.60	19.80
8	11000.00	46.8 AV	54.0	-7.2	1.07 V	69	27.00	19.80

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 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	114.0 PK			1.00 H	52	75.70	38.30
2	*5580.00	101.1 AV			1.00 H	52	62.80	38.30
3	11160.00	61.1 PK	74.0	-12.9	1.24 H	76	41.20	19.90
4	11160.00	47.5 AV	54.0	-6.5	1.24 H	76	27.60	19.90
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	117.7 PK			1.00 V	344	79.40	38.30
2	*5580.00	103.6 AV			1.00 V	344	65.30	38.30
3	11160.00	59.6 PK	74.0	-14.4	1.12 V	259	39.70	19.90
4	11160.00	47.4 AV	54.0	-6.6	1.12 V	259	27.50	19.90

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	113.0 PK			1.00 H	39	74.50	38.50
2	*5700.00	100.7 AV			1.00 H	39	62.20	38.50
3	#5725.00	72.2 PK	74.0	-1.8	1.35 H	39	66.20	6.00
4	#5725.00	52.6 AV	54.0	-1.4	1.35 H	39	46.60	6.00
5	11400.00	61.4 PK	74.0	-12.6	1.15 H	76	41.40	20.00
6	11400.00	48.9 AV	54.0	-5.1	1.15 H	76	28.90	20.00
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	115.0 PK			1.06 V	334	76.50	38.50
2	*5700.00	102.4 AV			1.06 V	334	63.90	38.50
3	#5725.00	72.1 PK	74.0	-1.9	1.16 V	331	66.10	6.00
4	#5725.00	52.7 AV	54.0	-1.3	1.16 V	331	46.70	6.00
5	11400.00	61.9 PK	74.0	-12.1	1.06 V	360	41.90	20.00
6	11400.00	48.1 AV	54.0	-5.9	1.06 V	360	28.10	20.00

REMARKS:

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

802.11n (HT40)

CHANNEL	TX Channel 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	57.1 PK	74.0	-16.9	1.00 H	44	52.00	5.10
2	5150.00	44.1 AV	54.0	-9.9	1.00 H	44	39.00	5.10
3	*5270.00	111.4 PK			1.15 H	51	73.50	37.90
4	*5270.00	99.5 AV			1.15 H	51	61.60	37.90
5	#10540.00	60.3 PK	74.0	-13.7	1.19 H	69	41.00	19.30
6	#10540.00	47.0 AV	54.0	-7.0	1.19 H	69	27.70	19.30
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	47.0 PK	74.0	-27.0	1.19 V	7	41.90	5.10
2	5150.00	44.5 AV	54.0	-9.5	1.19 V	7	39.40	5.10
3	*5270.00	107.6 PK			1.02 V	42	69.70	37.90
4	*5270.00	94.3 AV			1.02 V	42	56.40	37.90
5	#10540.00	60.5 PK	74.0	-13.5	1.10 V	52	41.20	19.30
6	#10540.00	47.7 AV	54.0	-6.3	1.10 V	52	28.40	19.30

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	111.3 PK			1.03 H	57	73.40	37.90
2	*5310.00	99.4 AV			1.03 H	57	61.50	37.90
3	5350.00	72.8 PK	74.0	-1.2	1.01 H	44	67.40	5.40
4	5350.00	52.0 AV	54.0	-2.0	1.01 H	44	46.60	5.40
5	10620.00	59.1 PK	74.0	-14.9	1.05 H	46	40.20	18.90
6	10620.00	46.2 AV	54.0	-7.8	1.05 H	46	27.30	18.90
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	106.4 PK			1.00 V	43	68.50	37.90
2	*5310.00	93.4 AV			1.00 V	43	55.50	37.90
3	5350.00	69.9 PK	74.0	-4.1	1.00 V	292	64.50	5.40
4	5350.00	49.7 AV	54.0	-4.3	1.00 V	292	44.30	5.40
5	10620.00	60.2 PK	74.0	-13.8	1.09 V	100	41.30	18.90
6	10620.00	47.0 AV	54.0	-7.0	1.09 V	100	28.10	18.90

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	60.9 PK	74.0	-13.1	1.02 H	53	55.30	5.60
2	5460.00	49.4 AV	54.0	-4.6	1.02 H	53	43.80	5.60
3	#5470.00	68.1 PK	74.0	-5.9	1.00 H	50	62.40	5.70
4	#5470.00	53.0 AV	54.0	-1.0	1.00 H	50	47.30	5.70
5	*5510.00	111.9 PK			1.00 H	52	73.60	38.30
6	*5510.00	100.9 AV			1.00 H	52	62.60	38.30
7	11020.00	63.5 PK	74.0	-10.5	1.14 H	142	43.60	19.90
8	11020.00	49.7 AV	54.0	-4.3	1.14 H	142	29.80	19.90
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	63.4 PK	74.0	-10.6	1.15 V	294	57.80	5.60
2	5460.00	47.5 AV	54.0	-6.5	1.15 V	294	41.90	5.60
3	#5470.00	68.0 PK	74.0	-6.0	1.13 V	347	62.30	5.70
4	#5470.00	50.7 AV	54.0	-3.3	1.13 V	347	45.00	5.70
5	*5510.00	110.8 PK			1.01 V	7	72.50	38.30
6	*5510.00	98.1 AV			1.01 V	7	59.80	38.30
7	11020.00	61.0 PK	74.0	-13.0	1.09 V	151	41.10	19.90
8	11020.00	47.8 AV	54.0	-6.2	1.09 V	151	27.90	19.90

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	114.3 PK			1.00 H	49	76.00	38.30
2	*5550.00	103.4 AV			1.00 H	49	65.10	38.30
3	11100.00	62.0 PK	74.0	-12.0	1.16 H	39	42.20	19.80
4	11100.00	49.3 AV	54.0	-4.7	1.16 H	39	29.50	19.80
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	*5550.00	113.8 PK			1.00 V	2	75.50	38.30
2	*5550.00	100.6 AV			1.00 V	2	62.30	38.30
3	11100.00	60.9 PK	74.0	-13.1	1.14 V	13	41.10	19.80
4	11100.00	47.9 AV	54.0	-6.1	1.14 V	13	28.10	19.80

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.

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	113.8 PK			1.00 H	51	75.40	38.40
2	*5670.00	102.7 AV			1.00 H	51	64.30	38.40
3	#5725.00	68.0 PK	74.0	-6.0	1.00 H	58	62.00	6.00
4	#5725.00	51.7 AV	54.0	-2.3	1.00 H	58	45.70	6.00
5	11340.00	64.4 PK	74.0	-9.6	1.16 H	61	44.50	19.90
6	11340.00	50.8 AV	54.0	-3.2	1.16 H	61	30.90	19.90
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	112.5 PK			1.00 V	4	74.10	38.40
2	*5670.00	99.4 AV			1.00 V	4	61.00	38.40
3	#5725.00	69.0 PK	74.0	-5.0	1.16 V	330	63.00	6.00
4	#5725.00	49.3 AV	54.0	-4.7	1.16 V	330	43.30	6.00
5	11340.00	60.3 PK	74.0	-13.7	1.08 V	104	40.40	19.90
6	11340.00	47.4 AV	54.0	-6.6	1.08 V	104	27.50	19.90

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 (VHT80)

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	*5290.00	107.9 PK			1.00 H	40	70.00	37.90
2	*5290.00	94.5 AV			1.00 H	40	56.60	37.90
3	5350.00	69.8 PK	74.0	-4.2	1.02 H	53	64.40	5.40
4	5350.00	52.7 AV	54.0	-1.3	1.02 H	53	47.30	5.40
5	#5875.00	59.7 PK	74.0	-14.3	1.14 H	15	53.30	6.40
6	#5875.00	51.9 AV	54.0	-2.1	1.14 H	15	45.50	6.40
7	#10580.00	60.0 PK	74.0	-14.0	1.09 H	40	40.80	19.20
8	#10580.00	47.2 AV	54.0	-6.8	1.09 H	40	28.00	19.20
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	*5290.00	104.0 PK			1.02 V	284	66.10	37.90
2	*5290.00	89.3 AV			1.02 V	284	51.40	37.90
3	5350.00	65.1 PK	74.0	-8.9	1.00 V	287	59.70	5.40
4	5350.00	49.6 AV	54.0	-4.4	1.00 V	287	44.20	5.40
5	#5875.00	59.1 PK	74.0	-14.9	1.02 V	315	52.70	6.40
6	#5875.00	49.3 AV	54.0	-4.7	1.02 V	315	42.90	6.40
7	#10580.00	60.2 PK	74.0	-13.8	1.06 V	293	41.00	19.20
8	#10580.00	47.7 AV	54.0	-6.3	1.06 V	293	28.50	19.20

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	68.5 PK	74.0	-5.5	1.06 H	46	62.90	5.60
2	5460.00	51.0 AV	54.0	-3.0	1.06 H	46	45.40	5.60
3	#5470.00	72.4 PK	74.0	-1.6	1.01 H	51	66.70	5.70
4	#5470.00	51.8 AV	54.0	-2.2	1.01 H	51	46.10	5.70
5	*5530.00	107.8 PK			1.00 H	49	69.60	38.20
6	*5530.00	93.6 AV			1.00 H	49	55.40	38.20
7	11060.00	62.7 PK	74.0	-11.3	1.12 H	65	43.00	19.70
8	11060.00	49.4 AV	54.0	-4.6	1.12 H	65	29.70	19.70
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	68.4 PK	74.0	-5.6	1.06 V	8	62.80	5.60
2	5460.00	50.8 AV	54.0	-3.2	1.06 V	8	45.20	5.60
3	#5470.00	70.3 PK	74.0	-3.7	1.02 V	4	64.60	5.70
4	#5470.00	51.7 AV	54.0	-2.3	1.02 V	4	46.00	5.70
5	*5530.00	109.2 PK			1.00 V	332	71.00	38.20
6	*5530.00	95.4 AV			1.00 V	332	57.20	38.20
7	11060.00	59.7 PK	74.0	-14.3	1.11 V	316	40.00	19.70
8	11060.00	47.8 AV	54.0	-6.2	1.11 V	316	28.10	19.70

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.

1TX (Radio 3)

802.11a

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	55.4 PK	74.0	-18.6	1.09 H	308	50.30	5.10
2	5150.00	43.1 AV	54.0	-10.9	1.09 H	308	38.00	5.10
3	*5260.00	104.5 PK			1.24 H	336	66.60	37.90
4	*5260.00	84.5 AV			1.24 H	336	46.60	37.90
5	#10520.00	60.5 PK	74.0	-13.5	1.25 H	94	41.10	19.40
6	#10520.00	48.6 AV	54.0	-5.4	1.25 H	94	29.20	19.40
7	15780.00	64.2 PK	74.0	-9.8	1.15 H	63	45.40	18.80
8	15780.00	50.4 AV	54.0	-3.6	1.15 H	63	31.60	18.80
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	5150.00	55.6 PK	74.0	-18.4	1.22 V	152	50.50	5.10
2	5150.00	42.8 AV	54.0	-11.2	1.22 V	152	37.70	5.10
3	*5260.00	113.1 PK			1.11 V	302	75.20	37.90
4	*5260.00	90.7 AV			1.11 V	302	52.80	37.90
5	#10520.00	60.7 PK	74.0	-13.3	1.08 V	76	41.30	19.40
6	#10520.00	47.8 AV	54.0	-6.2	1.08 V	76	28.40	19.40
7	15780.00	64.8 PK	74.0	-9.2	1.08 V	187	46.00	18.80
8	15780.00	52.2 AV	54.0	-1.8	1.08 V	187	33.40	18.80

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 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	106.3 PK			1.02 H	219	68.40	37.90
2	*5300.00	85.7 AV			1.02 H	219	47.80	37.90
3	5350.00	56.8 PK	74.0	-17.2	1.21 H	171	51.40	5.40
4	5350.00	44.5 AV	54.0	-9.5	1.21 H	171	39.10	5.40
5	10600.00	61.1 PK	74.0	-12.9	1.09 H	300	42.10	19.00
6	10600.00	47.7 AV	54.0	-6.3	1.09 H	300	28.70	19.00
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	113.1 PK			1.09 V	15	75.20	37.90
2	*5300.00	90.1 AV			1.09 V	15	52.20	37.90
3	5350.00	66.2 PK	74.0	-7.8	1.00 V	349	60.80	5.40
4	5350.00	48.2 AV	54.0	-5.8	1.00 V	349	42.80	5.40
5	10600.00	60.4 PK	74.0	-13.6	1.19 V	293	41.40	19.00
6	10600.00	47.4 AV	54.0	-6.6	1.19 V	293	28.40	19.00

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	106.1 PK			1.00 H	308	68.10	38.00
2	*5320.00	84.6 AV			1.00 H	308	46.60	38.00
3	5350.00	57.1 PK	74.0	-16.9	1.05 H	232	51.70	5.40
4	5350.00	46.7 AV	54.0	-7.3	1.05 H	232	41.30	5.40
5	10640.00	59.5 PK	74.0	-14.5	1.08 H	274	40.70	18.80
6	10640.00	46.5 AV	54.0	-7.5	1.08 H	274	27.70	18.80
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	*5320.00	111.8 PK			1.00 V	11	73.80	38.00
2	*5320.00	90.7 AV			1.00 V	11	52.70	38.00
3	5350.00	73.0 PK	74.0	-1.0	1.00 V	345	67.60	5.40
4	5350.00	51.4 AV	54.0	-2.6	1.00 V	345	46.00	5.40
5	10640.00	59.5 PK	74.0	-14.5	1.10 V	71	40.70	18.80
6	10640.00	46.5 AV	54.0	-7.5	1.10 V	71	27.70	18.80

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.

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	57.1 PK	74.0	-16.9	1.53 H	332	51.50	5.60
2	5460.00	44.7 AV	54.0	-9.3	1.53 H	332	39.10	5.60
3	#5470.00	63.9 PK	74.0	-10.1	1.53 H	332	58.20	5.70
4	#5470.00	47.3 AV	54.0	-6.7	1.53 H	332	41.60	5.70
5	*5500.00	106.5 PK			1.06 H	336	68.20	38.30
6	*5500.00	84.8 AV			1.06 H	336	46.50	38.30
7	11000.00	60.0 PK	74.0	-14.0	1.11 H	202	40.20	19.80
8	11000.00	47.6 AV	54.0	-6.4	1.11 H	202	27.80	19.80
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	5460.00	64.6 PK	74.0	-9.4	1.19 V	326	59.00	5.60
2	5460.00	47.0 AV	54.0	-7.0	1.19 V	326	41.40	5.60
3	#5470.00	72.9 PK	74.0	-1.1	1.22 V	343	67.20	5.70
4	#5470.00	50.8 AV	54.0	-3.2	1.22 V	343	45.10	5.70
5	*5500.00	111.3 PK			1.32 V	337	73.00	38.30
6	*5500.00	88.9 AV			1.32 V	337	50.60	38.30
7	11000.00	60.9 PK	74.0	-13.1	1.14 V	309	41.10	19.80
8	11000.00	47.5 AV	54.0	-6.5	1.14 V	309	27.70	19.80

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 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	108.8 PK			1.07 H	188	70.50	38.30
2	*5580.00	87.3 AV			1.07 H	188	49.00	38.30
3	11160.00	60.7 PK	74.0	-13.3	1.15 H	230	40.80	19.90
4	11160.00	48.3 AV	54.0	-5.7	1.15 H	230	28.40	19.90
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	115.5 PK			1.18 V	339	77.20	38.30
2	*5580.00	92.5 AV			1.18 V	339	54.20	38.30
3	11160.00	60.4 PK	74.0	-13.6	1.12 V	97	40.50	19.90
4	11160.00	48.8 AV	54.0	-5.2	1.12 V	97	28.90	19.90

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	106.0 PK			1.19 H	300	67.50	38.50
2	*5700.00	85.3 AV			1.19 H	300	46.80	38.50
3	#5725.00	70.0 PK	74.0	-4.0	1.39 H	331	64.00	6.00
4	#5725.00	49.5 AV	54.0	-4.5	1.39 H	331	43.50	6.00
5	11400.00	61.4 PK	74.0	-12.6	1.06 H	164	41.40	20.00
6	11400.00	48.8 AV	54.0	-5.2	1.06 H	164	28.80	20.00
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	111.3 PK			1.04 V	343	72.80	38.50
2	*5700.00	90.0 AV			1.04 V	343	51.50	38.50
3	#5725.00	72.1 PK	74.0	-1.9	1.39 V	296	66.10	6.00
4	#5725.00	50.7 AV	54.0	-3.3	1.39 V	296	44.70	6.00
5	11400.00	61.7 PK	74.0	-12.3	1.10 V	53	41.70	20.00
6	11400.00	49.0 AV	54.0	-5.0	1.10 V	53	29.00	20.00

REMARKS:

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

802.11n (HT20)

CHANNEL	TX Channel 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	55.8 PK	74.0	-18.2	1.12 H	170	50.70	5.10
2	5150.00	43.5 AV	54.0	-10.5	1.12 H	170	38.40	5.10
3	*5260.00	107.8 PK			1.00 H	310	69.90	37.90
4	*5260.00	86.5 AV			1.00 H	310	48.60	37.90
5	#10520.00	60.0 PK	74.0	-14.0	1.03 H	274	40.60	19.40
6	#10520.00	47.2 AV	54.0	-6.8	1.03 H	274	27.80	19.40
7	15780.00	63.3 PK	74.0	-10.7	1.03 H	49	44.50	18.80
8	15780.00	50.7 AV	54.0	-3.3	1.03 H	49	31.90	18.80
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	5150.00	57.2 PK	74.0	-16.8	1.07 V	5	52.10	5.10
2	5150.00	45.5 AV	54.0	-8.5	1.07 V	5	40.40	5.10
3	*5260.00	114.3 PK			1.00 V	305	76.40	37.90
4	*5260.00	91.4 AV			1.00 V	305	53.50	37.90
5	#10520.00	60.7 PK	74.0	-13.3	1.02 V	279	41.30	19.40
6	#10520.00	47.5 AV	54.0	-6.5	1.02 V	279	28.10	19.40
7	15780.00	65.8 PK	74.0	-8.2	1.04 V	189	47.00	18.80
8	15780.00	52.2 AV	54.0	-1.8	1.04 V	189	33.40	18.80

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 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	106.7 PK			1.01 H	220	68.80	37.90
2	*5300.00	85.8 AV			1.01 H	220	47.90	37.90
3	5350.00	56.5 PK	74.0	-17.5	1.11 H	118	51.10	5.40
4	5350.00	44.7 AV	54.0	-9.3	1.11 H	118	39.30	5.40
5	10600.00	60.7 PK	74.0	-13.3	1.01 H	293	41.70	19.00
6	10600.00	47.9 AV	54.0	-6.1	1.01 H	293	28.90	19.00
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	113.4 PK			1.11 V	347	75.50	37.90
2	*5300.00	91.0 AV			1.11 V	347	53.10	37.90
3	5350.00	65.9 PK	74.0	-8.1	1.00 V	345	60.50	5.40
4	5350.00	47.3 AV	54.0	-6.7	1.00 V	345	41.90	5.40
5	10600.00	60.2 PK	74.0	-13.8	1.04 V	60	41.20	19.00
6	10600.00	47.3 AV	54.0	-6.7	1.04 V	60	28.30	19.00

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	105.5 PK			1.00 H	307	67.50	38.00
2	*5320.00	84.6 AV			1.00 H	307	46.60	38.00
3	5350.00	60.4 PK	74.0	-13.6	1.12 H	328	55.00	5.40
4	5350.00	46.7 AV	54.0	-7.3	1.12 H	328	41.30	5.40
5	10640.00	60.4 PK	74.0	-13.6	1.05 H	280	41.60	18.80
6	10640.00	46.7 AV	54.0	-7.3	1.05 H	280	27.90	18.80
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	*5320.00	112.9 PK			1.00 V	348	74.90	38.00
2	*5320.00	90.6 AV			1.00 V	348	52.60	38.00
3	5350.00	72.3 PK	74.0	-1.7	1.00 V	0	66.90	5.40
4	5350.00	50.2 AV	54.0	-3.8	1.00 V	0	44.80	5.40
5	10640.00	59.0 PK	74.0	-15.0	1.09 V	294	40.20	18.80
6	10640.00	46.0 AV	54.0	-8.0	1.09 V	294	27.20	18.80

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.

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	60.4 PK	74.0	-13.6	1.22 H	200	54.80	5.60
2	5460.00	44.5 AV	54.0	-9.5	1.22 H	200	38.90	5.60
3	#5470.00	62.4 PK	74.0	-11.6	1.30 H	219	56.70	5.70
4	#5470.00	46.8 AV	54.0	-7.2	1.30 H	219	41.10	5.70
5	*5500.00	104.1 PK			1.04 H	330	65.80	38.30
6	*5500.00	84.3 AV			1.04 H	330	46.00	38.30
7	11000.00	60.2 PK	74.0	-13.8	1.10 H	242	40.40	19.80
8	11000.00	47.5 AV	54.0	-6.5	1.10 H	242	27.70	19.80
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	5460.00	65.5 PK	74.0	-8.5	1.06 V	39	59.90	5.60
2	5460.00	46.4 AV	54.0	-7.6	1.06 V	39	40.80	5.60
3	#5470.00	72.3 PK	74.0	-1.7	1.18 V	22	66.60	5.70
4	#5470.00	49.5 AV	54.0	-4.5	1.18 V	22	43.80	5.70
5	*5500.00	110.6 PK			1.32 V	346	72.30	38.30
6	*5500.00	88.8 AV			1.32 V	346	50.50	38.30
7	11000.00	60.7 PK	74.0	-13.3	1.22 V	307	40.90	19.80
8	11000.00	47.7 AV	54.0	-6.3	1.22 V	307	27.90	19.80

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 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	110.0 PK			1.15 H	330	71.70	38.30
2	*5580.00	88.7 AV			1.15 H	330	50.40	38.30
3	11160.00	61.1 PK	74.0	-12.9	1.22 H	241	41.20	19.90
4	11160.00	48.4 AV	54.0	-5.6	1.22 H	241	28.50	19.90
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	114.8 PK			1.18 V	340	76.50	38.30
2	*5580.00	92.7 AV			1.18 V	340	54.40	38.30
3	11160.00	61.1 PK	74.0	-12.9	1.25 V	294	41.20	19.90
4	11160.00	48.3 AV	54.0	-5.7	1.25 V	294	28.40	19.90

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	107.0 PK			1.24 H	332	68.50	38.50
2	*5700.00	86.1 AV			1.24 H	332	47.60	38.50
3	#5725.00	67.6 PK	74.0	-6.4	1.12 H	333	61.60	6.00
4	#5725.00	48.8 AV	54.0	-5.2	1.12 H	333	42.80	6.00
5	11400.00	64.2 PK	74.0	-9.8	1.06 H	241	44.20	20.00
6	11400.00	51.0 AV	54.0	-3.0	1.06 H	241	31.00	20.00
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	109.9 PK			1.25 V	22	71.40	38.50
2	*5700.00	88.4 AV			1.25 V	22	49.90	38.50
3	#5725.00	72.3 PK	74.0	-1.7	1.25 V	302	66.30	6.00
4	#5725.00	50.3 AV	54.0	-3.7	1.25 V	302	44.30	6.00
5	11400.00	62.2 PK	74.0	-11.8	1.13 V	97	42.20	20.00
6	11400.00	49.1 AV	54.0	-4.9	1.13 V	97	29.10	20.00

REMARKS:

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

802.11n (HT40)

CHANNEL	TX Channel 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	56.2 PK	74.0	-17.8	1.23 H	323	51.10	5.10
2	5150.00	43.2 AV	54.0	-10.8	1.23 H	323	38.10	5.10
3	*5270.00	102.1 PK			1.00 H	338	64.20	37.90
4	*5270.00	83.9 AV			1.00 H	338	46.00	37.90
5	5350.00	62.0 PK	74.0	-12.0	1.00 H	85	56.60	5.40
6	5350.00	46.4 AV	54.0	-7.6	1.00 H	85	41.00	5.40
7	#10540.00	60.2 PK	74.0	-13.8	1.04 H	214	40.90	19.30
8	#10540.00	47.9 AV	54.0	-6.1	1.04 H	214	28.60	19.30
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	57.7 PK	74.0	-16.3	1.07 V	26	52.60	5.10
2	5150.00	44.5 AV	54.0	-9.5	1.07 V	26	39.40	5.10
3	*5270.00	109.2 PK			1.00 V	15	71.30	37.90
4	*5270.00	88.9 AV			1.00 V	15	51.00	37.90
5	5350.00	72.9 PK	74.0	-1.1	1.00 V	347	67.50	5.40
6	5350.00	51.2 AV	54.0	-2.8	1.00 V	347	45.80	5.40
7	#10540.00	59.7 PK	74.0	-14.3	1.03 V	98	40.40	19.30
8	#10540.00	47.2 AV	54.0	-6.8	1.03 V	98	27.90	19.30

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	95.6 PK			1.00 H	310	57.70	37.90
2	*5310.00	78.6 AV			1.00 H	310	40.70	37.90
3	5350.00	60.9 PK	74.0	-13.1	1.46 H	190	55.50	5.40
4	5350.00	46.8 AV	54.0	-7.2	1.46 H	190	41.40	5.40
5	10620.00	60.7 PK	74.0	-13.3	1.06 H	253	41.80	18.90
6	10620.00	47.4 AV	54.0	-6.6	1.06 H	253	28.50	18.90
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	102.8 PK			1.00 V	15	64.90	37.90
2	*5310.00	84.0 AV			1.00 V	15	46.10	37.90
3	5350.00	72.9 PK	74.0	-1.1	1.00 V	348	67.50	5.40
4	5350.00	51.5 AV	54.0	-2.5	1.00 V	348	46.10	5.40
5	10620.00	59.6 PK	74.0	-14.4	1.11 V	85	40.70	18.90
6	10620.00	47.1 AV	54.0	-6.9	1.11 V	85	28.20	18.90

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	60.8 PK	74.0	-13.2	1.06 H	264	55.20	5.60
2	5460.00	45.5 AV	54.0	-8.5	1.06 H	264	39.90	5.60
3	#5470.00	65.6 PK	74.0	-8.4	1.17 H	308	59.90	5.70
4	#5470.00	48.8 AV	54.0	-5.2	1.17 H	308	43.10	5.70
5	*5510.00	97.6 PK			1.06 H	333	59.30	38.30
6	*5510.00	79.1 AV			1.06 H	333	40.80	38.30
7	11020.00	61.4 PK	74.0	-12.6	1.29 H	294	41.50	19.90
8	11020.00	48.6 AV	54.0	-5.4	1.29 H	294	28.70	19.90
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	67.3 PK	74.0	-6.7	1.19 V	316	61.70	5.60
2	5460.00	47.8 AV	54.0	-6.2	1.19 V	316	42.20	5.60
3	#5470.00	73.0 PK	74.0	-1.0	1.22 V	345	67.30	5.70
4	#5470.00	51.6 AV	54.0	-2.4	1.22 V	345	45.90	5.70
5	*5510.00	102.5 PK			1.32 V	338	64.20	38.30
6	*5510.00	84.0 AV			1.32 V	338	45.70	38.30
7	11020.00	61.2 PK	74.0	-12.8	1.11 V	327	41.30	19.90
8	11020.00	47.9 AV	54.0	-6.1	1.11 V	327	28.00	19.90

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	5460.00	59.4 PK	74.0	-14.6	1.24 H	309	53.80	5.60
2	5460.00	45.0 AV	54.0	-9.0	1.24 H	309	39.40	5.60
3	#5470.00	63.2 PK	74.0	-10.8	1.37 H	330	57.50	5.70
4	#5470.00	46.8 AV	54.0	-7.2	1.37 H	330	41.10	5.70
5	*5550.00	102.2 PK			1.16 H	331	63.90	38.30
6	*5550.00	83.7 AV			1.16 H	331	45.40	38.30
7	11100.00	61.4 PK	74.0	-12.6	1.03 H	142	41.60	19.80
8	11100.00	48.2 AV	54.0	-5.8	1.03 H	142	28.40	19.80
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	5460.00	67.0 PK	74.0	-7.0	1.06 V	323	61.40	5.60
2	5460.00	48.0 AV	54.0	-6.0	1.06 V	323	42.40	5.60
3	#5470.00	72.6 PK	74.0	-1.4	1.10 V	349	66.90	5.70
4	#5470.00	49.4 AV	54.0	-4.6	1.10 V	349	43.70	5.70
5	*5550.00	109.3 PK			1.08 V	340	71.00	38.30
6	*5550.00	88.7 AV			1.08 V	340	50.40	38.30
7	11100.00	61.1 PK	74.0	-12.9	1.14 V	234	41.30	19.80
8	11100.00	48.9 AV	54.0	-5.1	1.14 V	234	29.10	19.80

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 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	101.2 PK			1.05 H	333	62.80	38.40
2	*5670.00	83.3 AV			1.05 H	333	44.90	38.40
3	#5725.00	65.1 PK	74.0	-8.9	1.33 H	334	59.10	6.00
4	#5725.00	47.6 AV	54.0	-6.4	1.33 H	334	41.60	6.00
5	11340.00	60.8 PK	74.0	-13.2	1.07 H	130	40.90	19.90
6	11340.00	48.3 AV	54.0	-5.7	1.07 H	130	28.40	19.90
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	106.8 PK			1.16 V	342	68.40	38.40
2	*5670.00	87.5 AV			1.16 V	342	49.10	38.40
3	#5725.00	72.3 PK	74.0	-1.7	1.16 V	338	66.30	6.00
4	#5725.00	50.4 AV	54.0	-3.6	1.16 V	338	44.40	6.00
5	11340.00	61.6 PK	74.0	-12.4	1.26 V	270	41.70	19.90
6	11340.00	48.2 AV	54.0	-5.8	1.26 V	270	28.30	19.90

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

1TX (Radio 2)

802.11a

CHANNEL	TX Channel 52	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		
TEST MODE	A		

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	57.12	32.5 QP	40.0	-7.5	2.00 H	187	47.00	-14.50
2	92.12	31.9 QP	43.5	-11.6	2.00 H	239	51.50	-19.60
3	173.78	42.5 QP	43.5	-1.0	1.49 H	238	56.70	-14.20
4	401.26	34.5 QP	46.0	-11.5	1.00 H	131	44.70	-10.20
5	500.42	39.8 QP	46.0	-6.2	1.49 H	222	48.00	-8.20
6	799.84	37.1 QP	46.0	-8.9	1.49 H	151	38.90	-1.80
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	29.90	35.6 QP	40.0	-4.4	1.00 V	259	51.50	-15.90
2	90.17	33.9 QP	43.5	-9.6	1.00 V	109	53.60	-19.70
3	171.83	40.1 QP	43.5	-3.4	1.49 V	174	54.30	-14.20
4	193.22	41.8 QP	43.5	-1.7	1.00 V	174	58.10	-16.30
5	449.87	35.6 QP	46.0	-10.4	1.00 V	175	44.60	-9.00
6	500.42	41.9 QP	46.0	-4.1	1.00 V	180	50.10	-8.20

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 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		
TEST MODE	B		

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	57.12	33.7 QP	40.0	-6.3	2.00 H	38	48.20	-14.50
2	132.95	34.2 QP	43.5	-9.3	1.49 H	261	49.10	-14.90
3	162.11	41.6 QP	43.5	-1.9	1.49 H	244	55.30	-13.70
4	177.67	35.6 QP	43.5	-7.9	2.00 H	90	50.30	-14.70
5	224.33	32.6 QP	46.0	-13.4	1.49 H	307	48.80	-16.20
6	500.42	31.9 QP	46.0	-14.1	1.49 H	205	40.10	-8.20
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	47.40	38.6 QP	40.0	-1.4	1.00 V	358	53.20	-14.60
2	72.67	31.3 QP	40.0	-8.7	1.00 V	162	48.20	-16.90
3	162.11	34.3 QP	43.5	-9.2	1.00 V	313	48.00	-13.70
4	224.33	35.3 QP	46.0	-10.7	1.00 V	169	51.50	-16.20
5	500.42	32.7 QP	46.0	-13.3	1.00 V	251	40.90	-8.20
6	799.84	29.0 QP	46.0	-17.0	1.00 V	235	30.80	-1.80

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

2TX (Radio 2)

802.11a

CHANNEL	TX Channel 52	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		
TEST MODE	A		

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	57.12	32.6 QP	40.0	-7.4	2.00 H	87	47.10	-14.50
2	117.39	31.9 QP	43.5	-11.6	1.49 H	261	48.20	-16.30
3	183.05	42.5 QP	43.5	-1.0	2.00 H	106	57.90	-15.40
4	401.26	34.1 QP	46.0	-11.9	1.00 H	99	44.30	-10.20
5	500.42	39.1 QP	46.0	-6.9	2.00 H	127	47.30	-8.20
6	799.84	36.5 QP	46.0	-9.5	1.49 H	142	38.30	-1.80
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	37.68	36.6 QP	40.0	-3.4	1.00 V	217	51.90	-15.30
2	88.23	33.3 QP	43.5	-10.2	1.00 V	87	52.90	-19.60
3	173.78	41.5 QP	43.5	-2.0	1.00 V	196	55.70	-14.20
4	465.42	35.7 QP	46.0	-10.3	1.00 V	175	44.40	-8.70
5	500.42	42.1 QP	46.0	-3.9	1.00 V	187	50.30	-8.20
6	891.22	34.4 QP	46.0	-11.6	1.00 V	64	34.90	-0.50

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 52	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		
TEST MODE	B		

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	57.12	33.4 QP	40.0	-6.6	1.99 H	60	47.90	-14.50
2	154.33	37.8 QP	43.5	-5.7	1.50 H	226	51.40	-13.60
3	197.75	41.7 QP	43.5	-1.8	2.00 H	114	58.20	-16.50
4	243.77	32.6 QP	46.0	-13.4	1.99 H	259	47.00	-14.40
5	500.42	32.0 QP	46.0	-14.0	1.99 H	212	40.20	-8.20
6	543.19	32.9 QP	46.0	-13.1	1.50 H	166	40.40	-7.50
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	45.45	38.3 QP	40.0	-1.7	1.00 V	291	53.00	-14.70
2	164.06	34.3 QP	43.5	-9.2	1.00 V	336	48.00	-13.70
3	193.22	33.5 QP	43.5	-10.0	1.00 V	41	49.80	-16.30
4	224.33	35.5 QP	46.0	-10.5	1.00 V	158	51.70	-16.20
5	500.42	33.0 QP	46.0	-13.0	1.00 V	17	41.20	-8.20
6	799.84	31.4 QP	46.0	-14.6	1.00 V	231	33.20	-1.80

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

1TX (Radio 3)

802.11a

CHANNEL	TX Channel 52	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		
TEST MODE	A		

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	49.34	28.8 QP	40.0	-11.2	1.49 H	28	43.20	-14.40
2	88.23	31.4 QP	43.5	-12.1	2.00 H	96	51.00	-19.60
3	**171.83**	**43.0 QP**	**43.5**	**-0.5**	**1.49 H**	**257**	**57.20**	**-14.20**
4	290.43	32.0 QP	46.0	-14.0	1.00 H	213	44.40	-12.40
5	500.42	39.8 QP	46.0	-6.2	1.49 H	202	48.00	-8.20
6	799.84	37.1 QP	46.0	-8.9	1.50 H	151	38.90	-1.80
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	49.34	34.0 QP	40.0	-6.0	1.49 V	14	48.40	-14.40
2	86.28	33.7 QP	40.0	-6.3	1.00 V	92	53.10	-19.40
3	185.44	42.4 QP	43.5	-1.1	1.00 V	179	58.10	-15.70
4	401.26	33.2 QP	46.0	-12.8	1.00 V	255	43.40	-10.20
5	500.42	42.3 QP	46.0	-3.7	1.00 V	188	50.50	-8.20
6	799.84	33.0 QP	46.0	-13.0	1.49 V	51	34.80	-1.80

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

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		
TEST MODE	B		

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	49.34	29.0 QP	40.0	-11.0	1.49 H	12	43.40	-14.40
2	156.28	41.9 QP	43.5	-1.6	1.49 H	239	55.50	-13.60
3	193.22	33.6 QP	43.5	-9.9	2.00 H	100	49.90	-16.30
4	539.30	31.8 QP	46.0	-14.2	1.49 H	199	39.30	-7.50
5	603.47	27.3 QP	46.0	-18.7	1.49 H	211	33.00	-5.70
6	1000.00	32.5 QP	54.0	-21.5	1.49 H	328	31.10	1.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	37.68	38.4 QP	40.0	-1.6	1.00 V	167	53.70	-15.30
2	152.39	33.5 QP	43.5	-10.0	1.00 V	307	47.20	-13.70
3	193.22	32.1 QP	43.5	-11.4	1.00 V	38	48.40	-16.30
4	224.33	35.3 QP	46.0	-10.7	1.00 V	169	51.50	-16.20
5	510.14	27.1 QP	46.0	-18.9	1.00 V	198	35.00	-7.90
6	830.95	29.0 QP	46.0	-17.0	1.00 V	160	30.30	-1.30

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.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Apr. 24, 2014	Apr. 23, 2015
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 27, 2013	Dec. 26, 2014
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 23, 2013	Dec. 22, 2014
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Jul. 10, 2014	Jul. 09, 2015
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

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

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

3. The VCCI Site Registration No. is C-2047.

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.

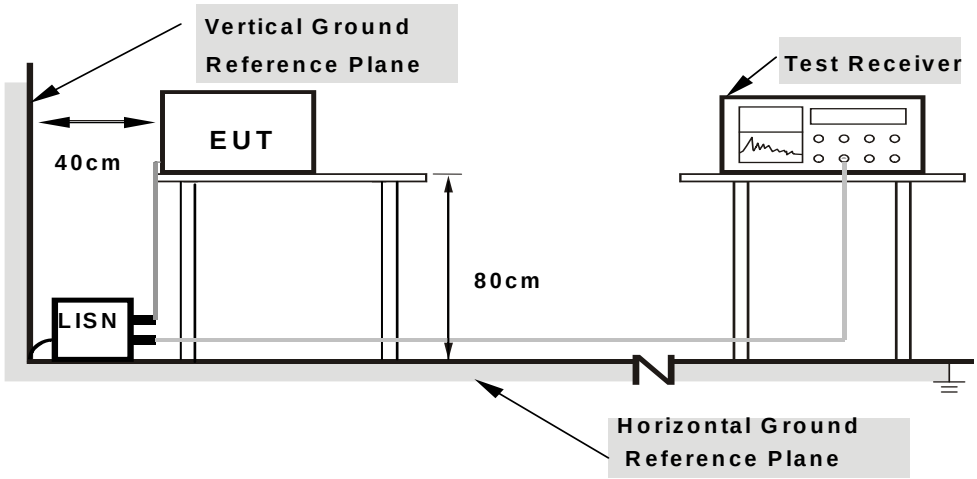
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

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：802.11a

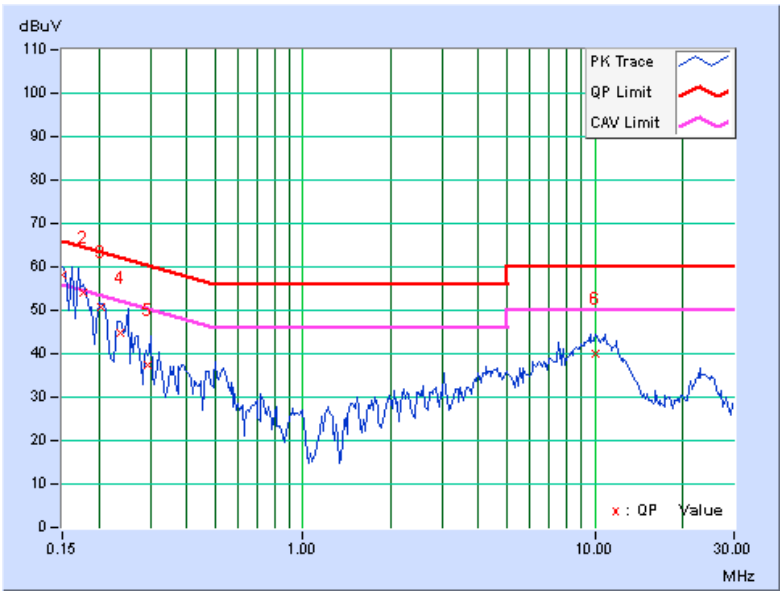
1TX (Radio 2)

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.21	57.99	46.33	58.20	46.54	66.00	56.00	-7.80	-9.46
2	0.17590	0.23	53.90	43.52	54.13	43.75	64.68	54.68	-10.55	-10.93
3	0.20459	0.24	50.33	38.33	50.57	38.57	63.42	53.42	-12.85	-14.85
4	0.23601	0.24	44.61	34.66	44.85	34.90	62.24	52.24	-17.39	-17.34
5	0.29515	0.23	37.03	25.50	37.26	25.73	60.38	50.38	-23.12	-24.65
6	10.08203	0.51	39.65	34.35	40.16	34.86	60.00	50.00	-19.84	-15.14

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

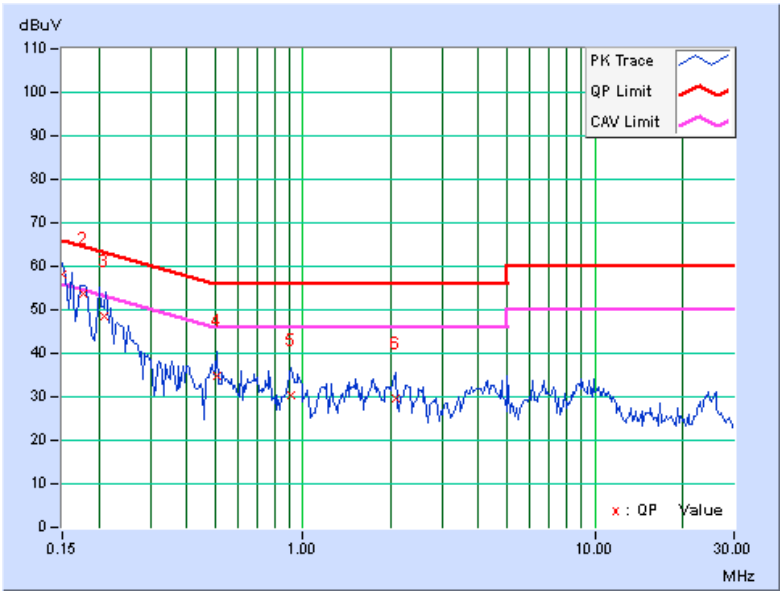


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.23	57.89	46.23	58.12	46.46	66.00	56.00	-7.88	-9.54
2	0.17734	0.23	53.46	42.82	53.69	43.05	64.61	54.61	-10.92	-11.56
3	0.20868	0.24	48.34	36.23	48.58	36.47	63.26	53.26	-14.68	-16.79
4	0.50938	0.30	34.56	25.93	34.86	26.23	56.00	46.00	-21.14	-19.77
5	0.91563	0.29	30.24	23.26	30.53	23.55	56.00	46.00	-25.47	-22.45
6	2.08594	0.39	29.21	22.77	29.60	23.16	56.00	46.00	-26.40	-22.84

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

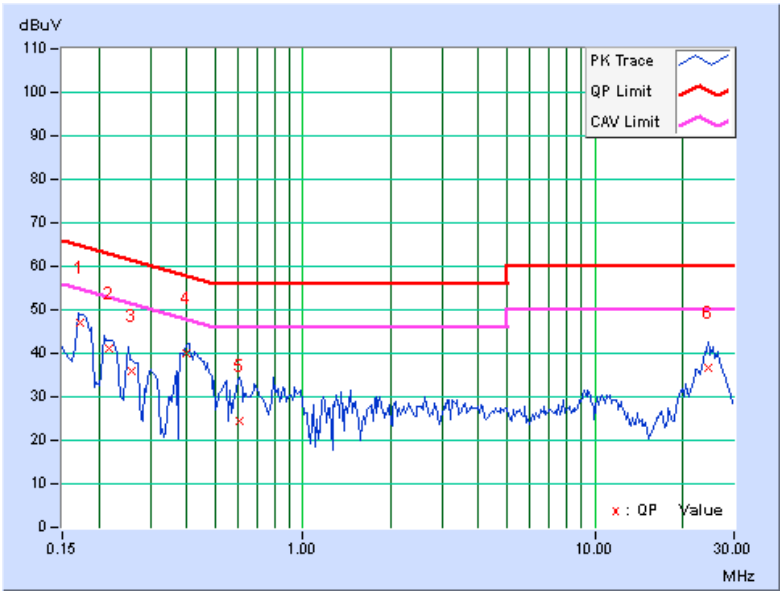


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17335	0.27	46.74	37.75	47.01	38.02	64.80	54.80	-17.79	-16.78
2	0.21749	0.28	40.73	33.56	41.01	33.84	62.91	52.91	-21.90	-19.07
3	0.26046	0.29	35.80	28.31	36.09	28.60	61.42	51.42	-25.33	-22.82
4	0.40098	0.30	39.77	31.87	40.07	32.17	57.83	47.83	-17.76	-15.66
5	0.60313	0.31	23.98	13.82	24.29	14.13	56.00	46.00	-31.71	-31.87
6	24.58594	0.54	36.09	30.50	36.63	31.04	60.00	50.00	-23.37	-18.96

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

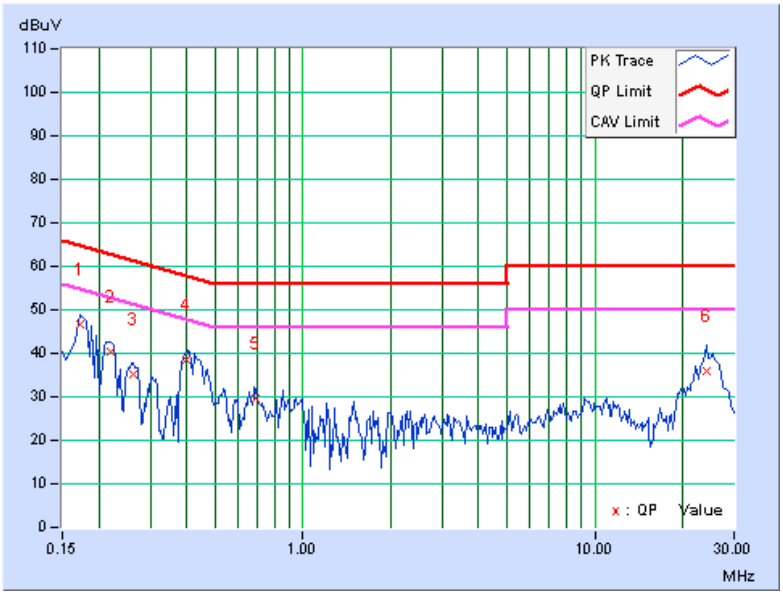


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17344	0.27	46.32	37.16	46.59	37.43	64.79	54.79	-18.20	-17.36
2	0.22030	0.28	39.91	32.22	40.19	32.50	62.81	52.81	-22.62	-20.31
3	0.26328	0.29	34.90	26.25	35.19	26.54	61.33	51.33	-26.14	-24.79
4	0.39778	0.30	38.36	32.88	38.66	33.18	57.90	47.90	-19.24	-14.72
5	0.68888	0.32	29.19	20.32	29.51	20.64	56.00	46.00	-26.49	-25.36
6	24.14453	0.58	35.33	29.69	35.91	30.27	60.00	50.00	-24.09	-19.73

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



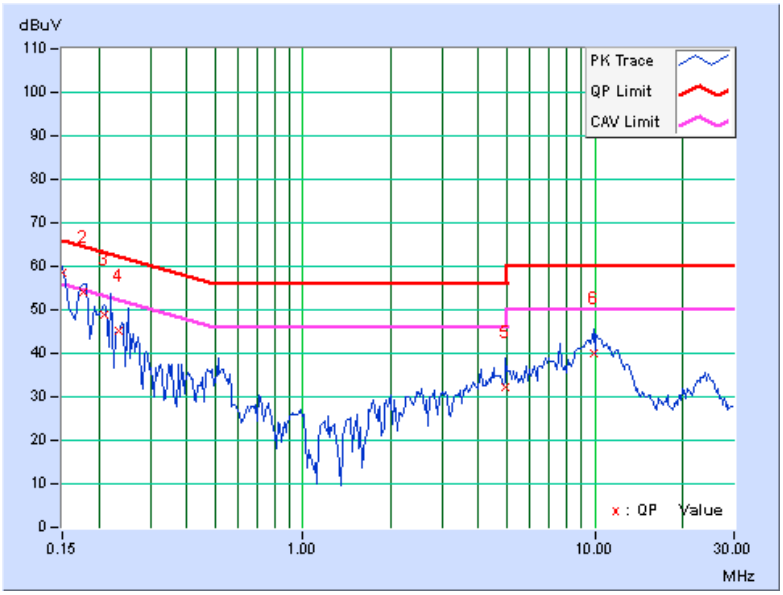
2TX (Radio 2)

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	**0.15000**	**0.21**	**58.15**	**46.58**	**58.36**	**46.79**	**66.00**	**56.00**	**-7.64**	**-9.21**
2	0.17734	0.23	53.66	43.50	53.89	43.73	64.61	54.61	-10.72	-10.88
3	0.20859	0.24	48.72	37.68	48.96	37.92	63.26	53.26	-14.30	-15.34
4	0.23348	0.24	44.92	34.37	45.16	34.61	62.32	52.32	-17.17	-17.72
5	4.96094	0.45	31.82	25.30	32.27	25.75	56.00	46.00	-23.73	-20.25
6	9.91016	0.51	39.67	34.19	40.18	34.70	60.00	50.00	-19.82	-15.30

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

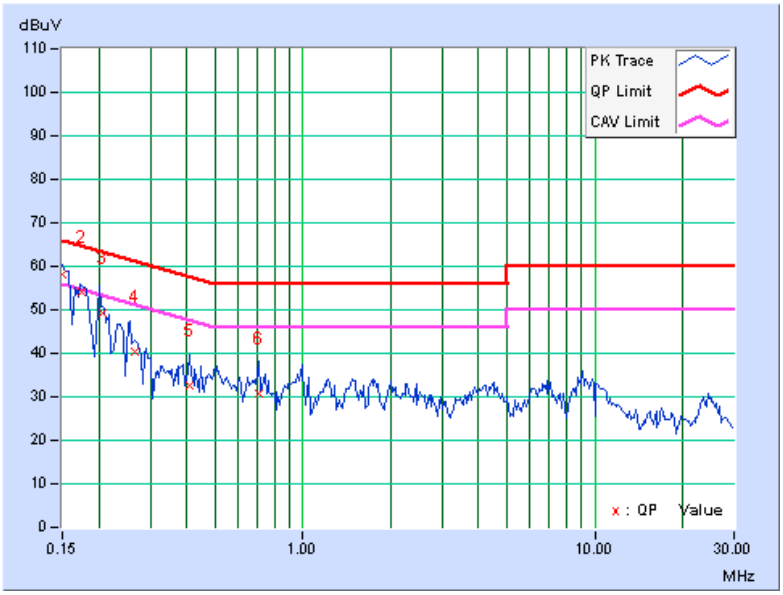


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.23	57.89	46.49	58.12	46.72	66.00	56.00	-7.88	-9.28
2	0.17472	0.23	53.88	42.41	54.11	42.64	64.73	54.73	-10.62	-12.09
3	0.20587	0.24	48.98	37.66	49.22	37.90	63.37	53.37	-14.15	-15.47
4	0.26437	0.26	40.28	29.87	40.54	30.13	61.29	51.29	-20.75	-21.16
5	0.40781	0.30	32.23	26.84	32.53	27.14	57.69	47.69	-25.16	-20.55
6	0.70469	0.29	30.35	22.53	30.64	22.82	56.00	46.00	-25.36	-23.18

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

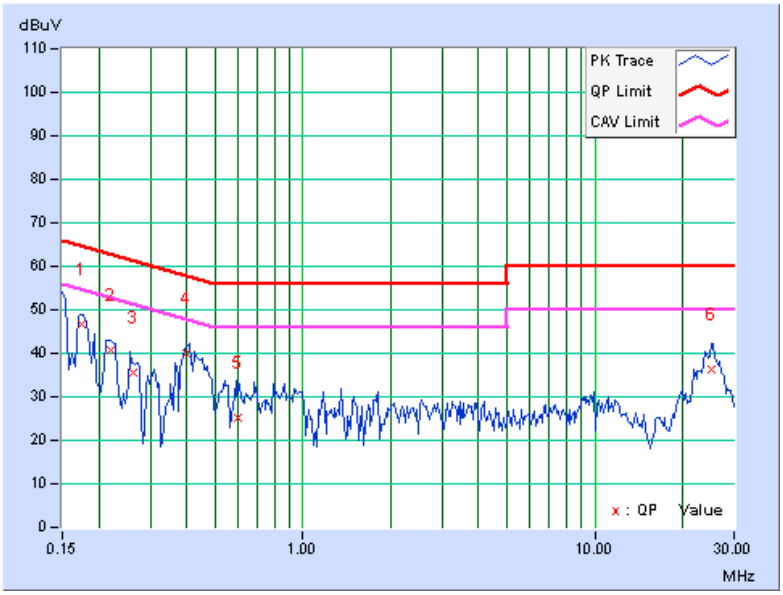


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17479	0.27	46.42	37.73	46.69	38.00	64.73	54.73	-18.04	-16.73
2	0.22031	0.28	40.47	33.07	40.75	33.35	62.81	52.81	-22.06	-19.46
3	0.26310	0.29	35.29	27.37	35.58	27.66	61.33	51.33	-25.76	-23.68
4	0.40144	0.30	39.81	32.14	40.11	32.44	57.82	47.82	-17.71	-15.38
5	0.59603	0.31	24.88	11.18	25.19	11.49	56.00	46.00	-30.81	-34.51
6	24.98438	0.54	35.71	30.21	36.25	30.75	60.00	50.00	-23.75	-19.25

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

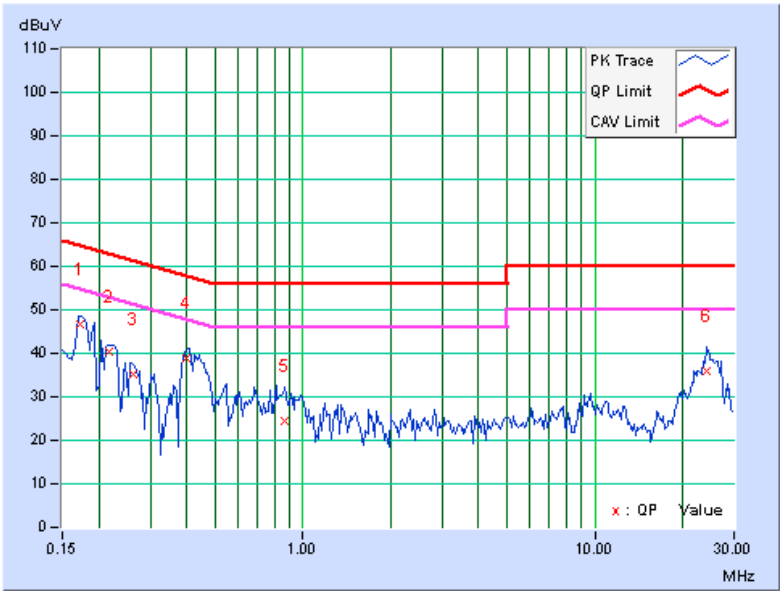


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17344	0.27	46.24	36.92	46.51	37.19	64.79	54.79	-18.28	-17.60
2	0.21786	0.28	40.03	32.65	40.31	32.93	62.90	52.90	-22.59	-19.97
3	0.26320	0.29	34.82	26.35	35.11	26.64	61.33	51.33	-26.22	-24.69
4	0.39882	0.30	38.58	32.56	38.88	32.86	57.88	47.88	-19.00	-15.02
5	0.86875	0.33	24.22	14.90	24.55	15.23	56.00	46.00	-31.45	-30.77
6	24.30859	0.58	35.27	29.84	35.85	30.42	60.00	50.00	-24.15	-19.58

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



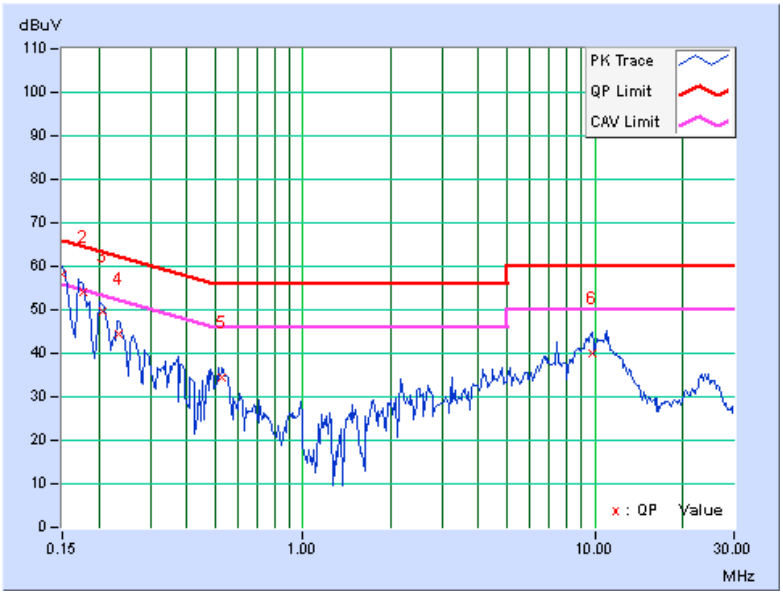
1TX (Radio 3)

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.21	57.83	46.72	58.04	46.93	66.00	56.00	-7.96	-9.07
2	0.17589	0.23	53.78	43.34	54.01	43.57	64.68	54.68	-10.67	-11.11
3	0.20587	0.24	49.22	38.31	49.46	38.55	63.37	53.37	-13.91	-14.82
4	0.23458	0.24	44.31	34.70	44.55	34.94	62.29	52.29	-17.74	-17.35
5	0.52891	0.24	34.23	29.09	34.47	29.33	56.00	46.00	-21.53	-16.67
6	9.79297	0.51	39.46	33.82	39.97	34.33	60.00	50.00	-20.03	-15.67

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

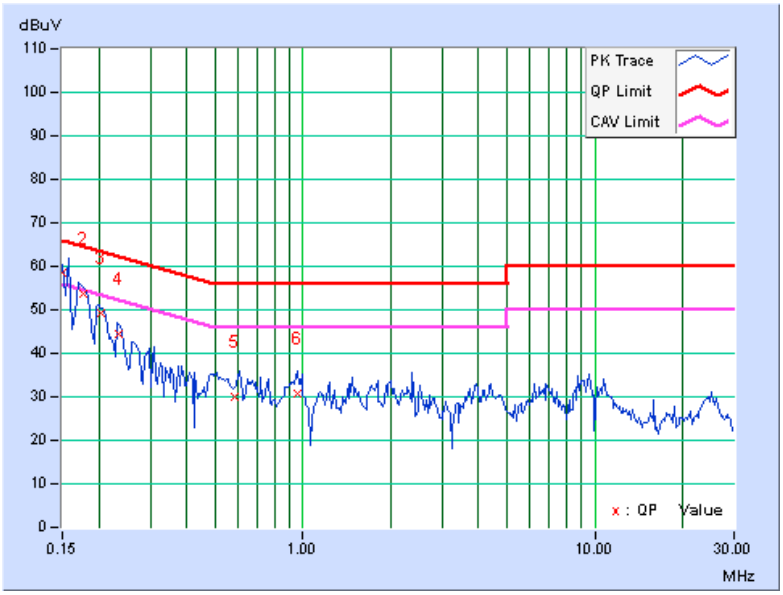


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	**0.15000**	**0.23**	**58.13**	**46.45**	**58.36**	**46.68**	**66.00**	**56.00**	**-7.64**	**-9.32**
2	0.17589	0.23	53.38	42.66	53.61	42.89	64.68	54.68	-11.06	-11.78
3	0.20460	0.24	49.00	37.23	49.24	37.47	63.42	53.42	-14.18	-15.95
4	0.23458	0.25	44.13	32.99	44.38	33.24	62.29	52.29	-17.91	-19.05
5	0.58766	0.30	29.65	23.76	29.95	24.06	56.00	46.00	-26.05	-21.94
6	0.95469	0.29	30.27	24.09	30.56	24.38	56.00	46.00	-25.44	-21.62

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

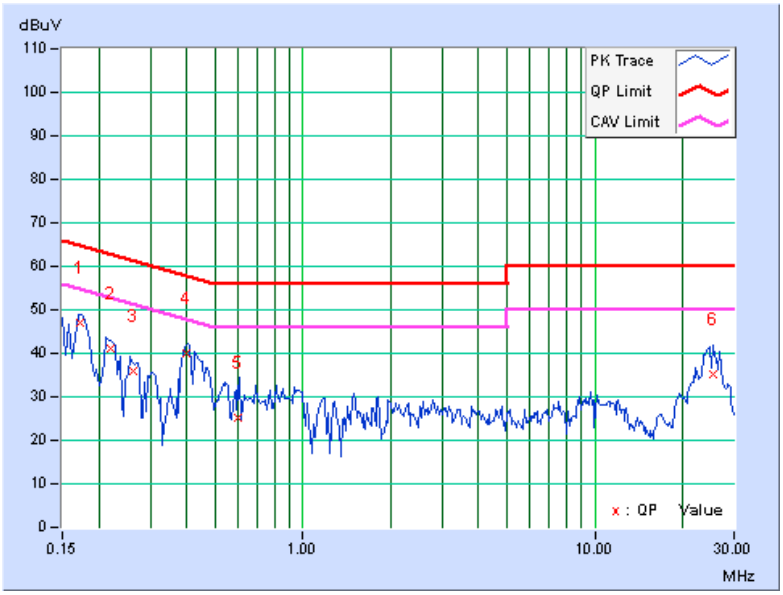


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17344	0.27	46.76	37.36	47.03	37.63	64.79	54.79	-17.76	-17.16
2	0.21886	0.28	40.69	33.58	40.97	33.86	62.86	52.86	-21.89	-19.00
3	0.26310	0.29	35.51	27.41	35.80	27.70	61.33	51.33	-25.54	-23.64
4	0.40061	0.30	39.69	32.04	39.99	32.34	57.84	47.84	-17.85	-15.50
5	0.60016	0.31	24.76	13.94	25.07	14.25	56.00	46.00	-30.93	-31.75
6	25.51563	0.53	34.77	29.29	35.30	29.82	60.00	50.00	-24.70	-20.18

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

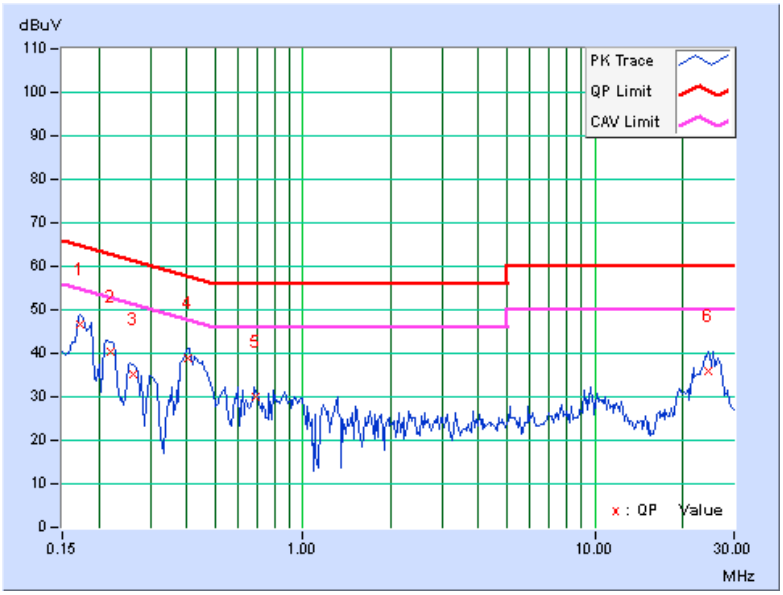


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17344	0.27	46.46	37.16	46.73	37.43	64.79	54.79	-18.06	-17.36
2	0.22031	0.28	40.05	32.32	40.33	32.60	62.81	52.81	-22.48	-20.21
3	0.26183	0.29	35.07	26.75	35.36	27.04	61.37	51.37	-26.02	-24.34
4	0.40191	0.30	38.61	30.12	38.91	30.42	57.81	47.81	-18.90	-17.39
5	0.68550	0.32	29.57	19.94	29.89	20.26	56.00	46.00	-26.11	-25.74
6	24.51953	0.57	35.40	29.95	35.97	30.52	60.00	50.00	-24.03	-19.48

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

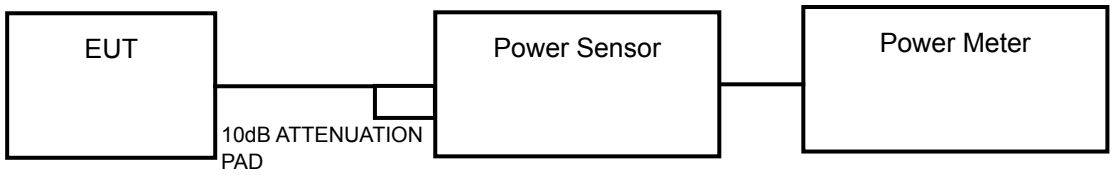
Per KDB 662911 D01 Multiple Transmitter Output v02r01 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any NANT;
Array Gain = 5 log(NANT/NSS) dB or 3 dB, whichever is less for 20-MHz channel widths with NANT ≥ 5.

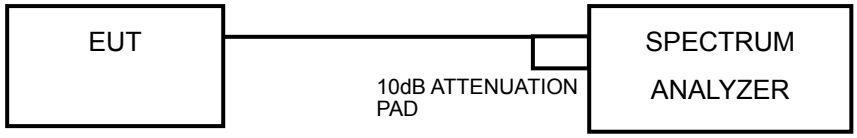
For power measurements on all other devices: Array Gain = 10 log(NANT/NSS) dB.

4.3.2 TEST SETUP

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



For 802.11ac (VHT80)



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 802.11ac (VHT80)

1) Set span to encompass the entire 26 dB EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
2) Set sweep trigger to “free run”.
3) Set RBW = 1 MHz.
4) Set VBW ≥ 3 MHz
5) Number of points in sweep ≥ 2 Span / RBW.
6) Sweep time ≤ (number of points in sweep) * T
7) Detector = RMS.
8) Trace mode = max hold.
9) Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

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:

1TX (Radio 2)

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
52	5260	239.332	23.79	24	PASS
60	5300	236.048	23.73	24	PASS
64	5320	221.309	23.45	24	PASS
100	5500	206.063	23.14	24	PASS
116	5580	174.985	22.43	24	PASS
140	5700	166.341	22.21	24	PASS

NOTE:
1. 11dBm + 10log(29.74) = 25.73 dBm > 24dBm.
2. 11dBm + 10log(29.41) = 25.68 dBm > 24dBm.
3. 11dBm + 10log(29.31) = 25.67 dBm > 24dBm.
4. 11dBm + 10log(28.93) = 25.61 dBm > 24dBm.
5. 11dBm + 10log(21.84) = 24.39 dBm > 24dBm.
6. 11dBm + 10log(21.68) = 24.36 dBm > 24dBm.

802.11n (HT20)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
52	5260	233.346	23.68	24	PASS
60	5300	238.781	23.78	24	PASS
64	5320	210.378	23.23	24	PASS
100	5500	162.181	22.10	24	PASS
116	5580	214.783	23.32	24	PASS
140	5700	158.125	21.99	24	PASS

NOTE:
1. 11dBm + 10log(32.57) = 26.13 dBm > 24dBm.
2. 11dBm + 10log(36.74) = 26.65 dBm > 24dBm.
3. 11dBm + 10log(36.01) = 26.56 dBm > 24dBm.
4. 11dBm + 10log(24.29) = 24.85 dBm > 24dBm.
5. 11dBm + 10log(34.53) = 26.38 dBm > 24dBm.
6. 11dBm + 10log(26.07) = 25.16 dBm > 24dBm.

802.11n (HT40)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
54	5270	246.037	23.91	24	PASS
62	5310	91.201	19.60	24	PASS
102	5510	92.257	19.65	24	PASS
110	5550	250.035	23.98	24	PASS
134	5670	205.116	23.12	24	PASS

NOTE:
1. 11dBm + 10log(76.62) = 29.84 dBm > 24dBm.
2. 11dBm + 10log(42.02) = 27.23 dBm > 24dBm.
3. 11dBm + 10log(41.73) = 27.20 dBm > 24dBm.
4. 11dBm + 10log(82.67) = 30.17 dBm > 24dBm.
5. 11dBm + 10log(79.45) = 30.00 dBm > 24dBm.

802.11ac (VHT80)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
58	5290	73.961	18.69	24	PASS
106	5530	92.045	19.64	24	PASS

NOTE:
1. 11dBm + 10log(83.22) = 30.20 dBm > 24dBm.
2. 11dBm + 10log(82.91) = 30.19 dBm > 24dBm.

2TX (Radio 2)

802.11a

CHAN.	CHAN. FREQ. (MHz)	MAXIMUM CONDUCTED POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
52	5260	17.28	17.49	109.561	20.40	24	PASS
60	5300	17.23	17.58	110.125	20.42	24	PASS
64	5320	17.36	17.84	115.264	20.62	24	PASS
100	5500	17.61	17.10	108.963	20.37	24	PASS
116	5580	17.28	16.94	102.887	20.12	24	PASS
140	5700	17.73	17.34	113.493	20.55	24	PASS

NOTE:

CHAIN 0

1. 11dBm + 10log(20.42) = 24.10 dBm > 24dBm.
2. 11dBm + 10log(20.40) = 24.10 dBm > 24dBm.
3. 11dBm + 10log(20.39) = 24.09 dBm > 24dBm.
4. 11dBm + 10log(20.45) = 24.11 dBm > 24dBm.
5. 11dBm + 10log(20.34) = 24.08 dBm > 24dBm.
6. 11dBm + 10log(20.45) = 24.11 dBm > 24dBm.

CHAIN 1

1. 11dBm + 10log(20.46) = 24.11 dBm > 24dBm.
2. 11dBm + 10log(20.45) = 24.11 dBm > 24dBm.
3. 11dBm + 10log(20.40) = 24.10 dBm > 24dBm.
4. 11dBm + 10log(20.49) = 24.12 dBm > 24dBm.
5. 11dBm + 10log(20.36) = 24.09 dBm > 24dBm.
6. 11dBm + 10log(20.50) = 24.12 dBm > 24dBm.

802.11n (HT20)

CHAN.	CHAN. FREQ. (MHz)	MAXIMUM CONDUCTED POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
52	5260	18.04	18.62	136.458	21.35	24	PASS
60	5300	18.08	18.54	135.719	21.33	24	PASS
64	5320	18.26	18.50	137.783	21.39	24	PASS
100	5500	18.06	17.36	118.423	20.73	24	PASS
116	5580	17.81	17.30	114.098	20.57	24	PASS
140	5700	17.72	17.25	112.244	20.50	24	PASS

NOTE:

CHAIN 0

1. 11dBm + 10log(20.73) = 24.17 dBm > 24dBm.
2. 11dBm + 10log(20.76) = 24.17 dBm > 24dBm.
3. 11dBm + 10log(20.79) = 24.18 dBm > 24dBm.
4. 11dBm + 10log(20.83) = 24.19 dBm > 24dBm.
5. 11dBm + 10log(20.97) = 24.22 dBm > 24dBm.
6. 11dBm + 10log(20.86) = 24.19 dBm > 24dBm.

CHAIN 1

1. 11dBm + 10log(20.43) = 24.10 dBm > 24dBm.
2. 11dBm + 10log(20.48) = 24.11 dBm > 24dBm.
3. 11dBm + 10log(20.52) = 24.12 dBm > 24dBm.
4. 11dBm + 10log(20.59) = 24.14 dBm > 24dBm.
5. 11dBm + 10log(20.53) = 24.12 dBm > 24dBm.
6. 11dBm + 10log(20.53) = 24.12 dBm > 24dBm.

802.11n (HT40)

CHAN.	CHAN. FREQ. (MHz)	MAXIMUM CONDUCTED POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
54	5270	20.22	20.63	220.807	23.44	24	PASS
62	5310	18.03	18.44	133.356	21.25	24	PASS
102	5510	18.34	18.06	132.207	21.21	24	PASS
110	5550	20.74	20.77	237.976	23.77	24	PASS
134	5670	20.94	20.65	240.312	23.81	24	PASS

NOTE:
CHAIN 0
1. 11dBm + 10log(41.72) = 27.20 dBm > 24dBm.
2. 11dBm + 10log(43.87) = 27.42 dBm > 24dBm.
3. 11dBm + 10log(41.63) = 27.19 dBm > 24dBm.
4. 11dBm + 10log(47.68) = 27.78 dBm > 24dBm.
5. 11dBm + 10log(48.46) = 27.85 dBm > 24dBm.

CHAIN 1
1. 11dBm + 10log(41.36) = 27.17 dBm > 24dBm.
2. 11dBm + 10log(41.07) = 27.14 dBm > 24dBm.
3. 11dBm + 10log(41.14) = 27.14 dBm > 24dBm.
4. 11dBm + 10log(41.12) = 27.14 dBm > 24dBm.
5. 11dBm + 10log(41.51) = 27.18 dBm > 24dBm.

802.11ac (VHT80)

CHAN.	CHAN. FREQ. (MHz)	MAXIMUM CONDUCTED POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
58	5290	16.13	16.89	89.885	19.54	24	PASS
106	5530	16.69	16.27	89.030	19.50	24	PASS

NOTE:
CHAIN 0
1. 11dBm + 10log(83.49) = 30.22 dBm > 24dBm.
2. 11dBm + 10log(83.06) = 30.19 dBm > 24dBm.

CHAIN 1
1. 11dBm + 10log(82.44) = 30.16 dBm > 24dBm.
2. 11dBm + 10log(82.64) = 30.17 dBm > 24dBm.

1TX (Radio 3)

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
52	5260	62.230	17.94	24	PASS
60	5300	57.544	17.60	24	PASS
64	5320	38.548	15.86	24	PASS
100	5500	38.994	15.91	24	PASS
116	5580	133.045	21.24	24	PASS
140	5700	40.458	16.07	24	PASS

NOTE:
1. 11dBm + 10log(30.30) = 25.81 dBm > 24dBm.
2. 11dBm + 10log(32.45) = 26.11 dBm > 24dBm.
3. 11dBm + 10log(30.89) = 25.90 dBm > 24dBm.
4. 11dBm + 10log(25.87) = 25.13 dBm > 24dBm.
5. 11dBm + 10log(43.41) = 27.38 dBm > 24dBm.
6. 11dBm + 10log(24.92) = 24.97 dBm > 24dBm.

802.11n (HT20)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
52	5260	61.660	17.90	24	PASS
60	5300	58.076	17.64	24	PASS
64	5320	38.194	15.82	24	PASS
100	5500	37.239	15.71	24	PASS
116	5580	116.145	20.65	24	PASS
140	5700	48.195	16.83	24	PASS

NOTE:
1. 11dBm + 10log(30.79) = 25.88 dBm > 24dBm.
2. 11dBm + 10log(35.29) = 26.48 dBm > 24dBm.
3. 11dBm + 10log(29.56) = 25.71 dBm > 24dBm.
4. 11dBm + 10log(31.04) = 25.92 dBm > 24dBm.
5. 11dBm + 10log(46.46) = 27.67 dBm > 24dBm.
6. 11dBm + 10log(29.42) = 25.69 dBm > 24dBm.

802.11n (HT40)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAXIMUM CONDUCTED POWER (mW)	MAXIMUM CONDUCTED POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
54	5270	44.875	16.52	24	PASS
62	5310	12.912	11.11	24	PASS
102	5510	13.521	11.31	24	PASS
110	5550	38.282	15.83	24	PASS
134	5670	38.548	15.86	24	PASS

NOTE:

1. 11dBm + 10log(90.44) = 30.56 dBm > 24dBm.
2. 11dBm + 10log(76.40) = 29.83 dBm > 24dBm.
3. 11dBm + 10log(75.94) = 29.80 dBm > 24dBm.
4. 11dBm + 10log(88.65) = 30.48 dBm > 24dBm.
5. 11dBm + 10log(90.64) = 30.57 dBm > 24dBm.

26dB BANDWIDTH:

1TX (Radio 2)

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
52	5260	29.74	PASS
60	5300	29.41	PASS
64	5320	29.31	PASS
100	5500	28.93	PASS
116	5580	21.84	PASS
140	5700	21.68	PASS

802.11n (HT20)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
52	5260	32.57	PASS
60	5300	36.74	PASS
64	5320	36.01	PASS
100	5500	24.29	PASS
116	5580	34.53	PASS
140	5700	26.07	PASS

802.11n (HT40)

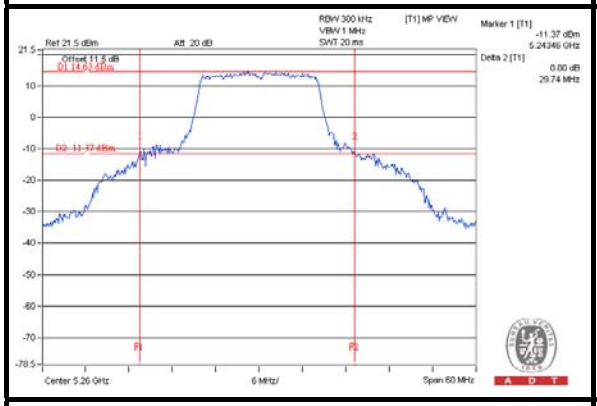
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
54	5270	76.62	PASS
62	5310	42.02	PASS
102	5510	41.73	PASS
110	5550	82.67	PASS
134	5670	79.45	PASS

802.11ac (VHT80)

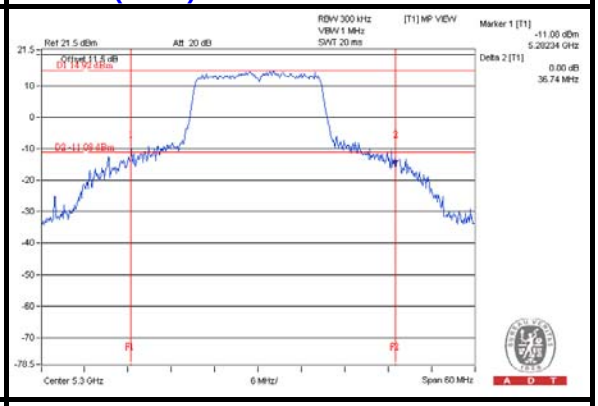
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
58	5290	83.22	PASS
106	5530	82.91	PASS

SPECTRUM PLOT OF WORST VALUE

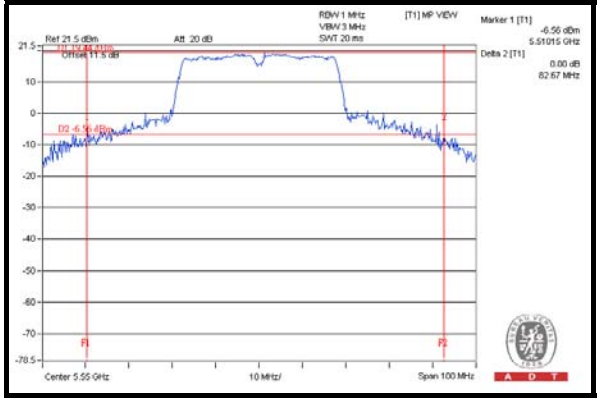
802.11a



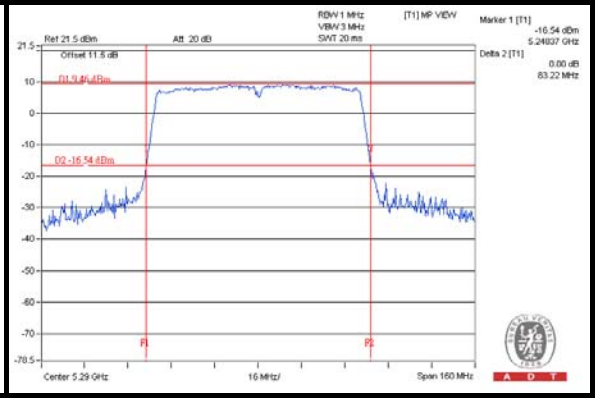
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



2TX (Radio 2)

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
52	5260	20.42	20.46	PASS
60	5300	20.40	20.45	PASS
64	5320	20.39	20.40	PASS
100	5500	20.45	20.49	PASS
116	5580	20.34	20.36	PASS
140	5700	20.45	20.50	PASS

802.11n (HT20)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
52	5260	20.73	20.43	PASS
60	5300	20.76	20.48	PASS
64	5320	20.79	20.52	PASS
100	5500	20.83	20.59	PASS
116	5580	20.97	20.53	PASS
140	5700	20.86	20.53	PASS

802.11n (HT40)

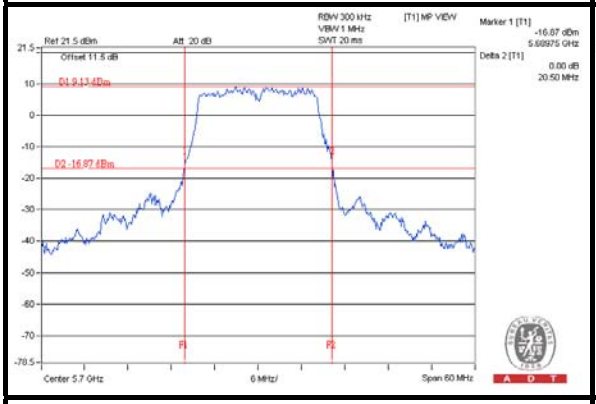
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
54	5270	41.72	41.36	PASS
62	5310	43.87	41.07	PASS
102	5510	41.63	41.14	PASS
110	5550	47.68	41.12	PASS
134	5670	48.46	41.51	PASS

802.11ac (VHT80)

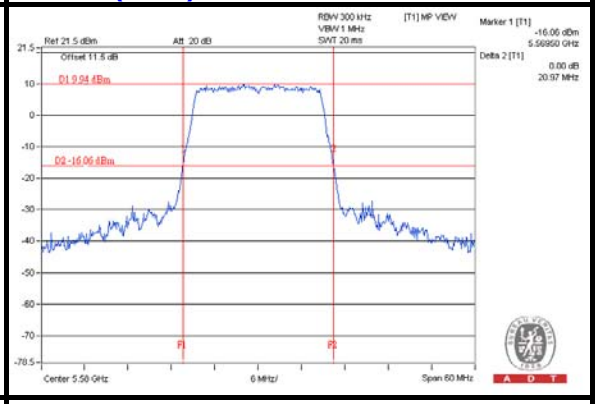
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
58	5290	83.49	82.44	PASS
106	5530	83.06	82.64	PASS

SPECTRUM PLOT OF WORST VALUE

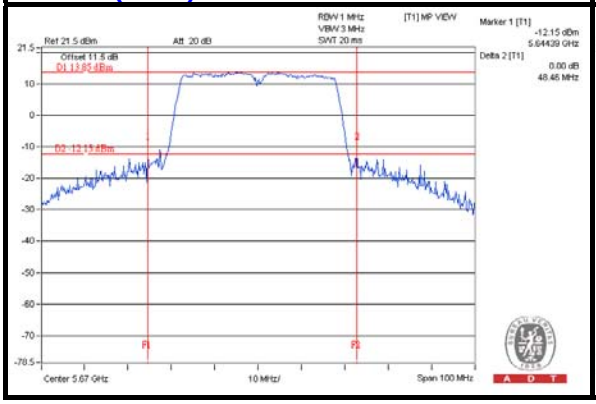
802.11a



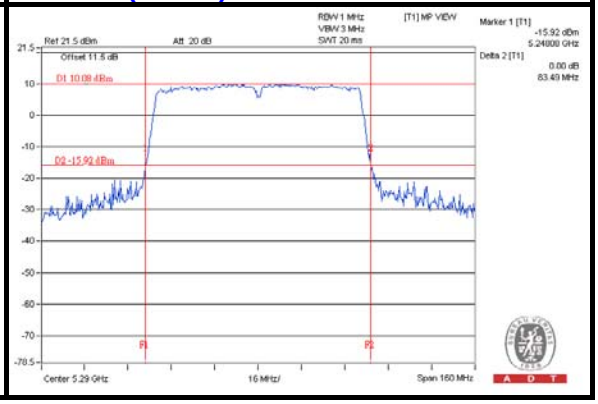
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



1TX (Radio 3)

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
52	5260	30.30	PASS
60	5300	32.45	PASS
64	5320	30.89	PASS
100	5500	25.87	PASS
116	5580	43.41	PASS
140	5700	24.92	PASS

802.11n (HT20)

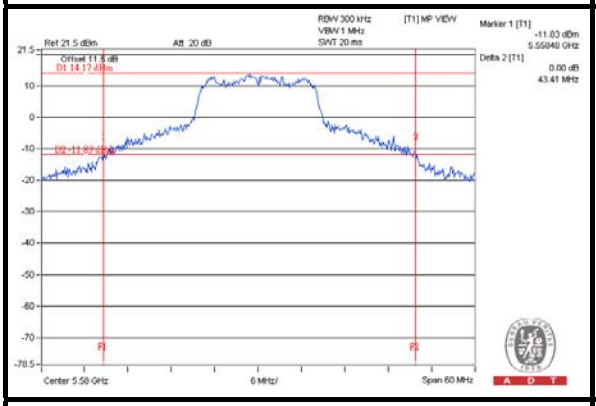
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
52	5260	30.79	PASS
60	5300	35.29	PASS
64	5320	29.56	PASS
100	5500	31.04	PASS
116	5580	46.46	PASS
140	5700	29.42	PASS

802.11n (HT40)

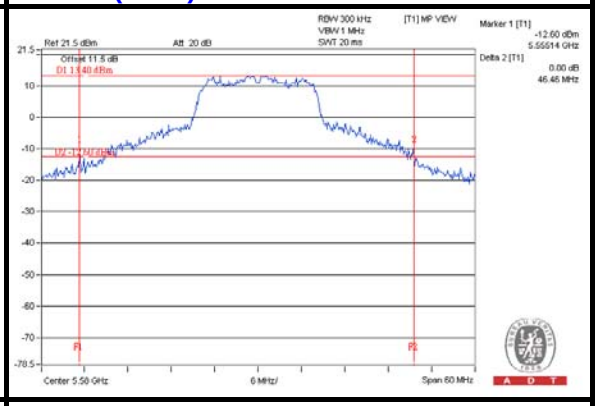
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
54	5270	90.44	PASS
62	5310	76.40	PASS
102	5510	75.94	PASS
110	5550	88.65	PASS
134	5670	90.64	PASS

SPECTRUM PLOT OF WORST VALUE

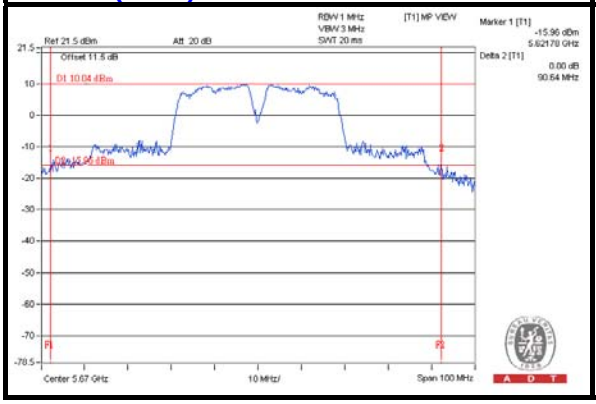
802.11a



802.11n (HT20)



802.11n (HT40)



EUT MAXIMUM CONDUCTED POWER

1TX (Radio 2)

802.11a

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	239.332	23.79
5470~5725	206.063	23.14

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11n (HT20)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	238.781	23.78
5470~5725	214.783	23.32

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11n (HT40)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	246.037	23.91
5470~5725	250.035	23.98

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11ac (VHT80)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	73.961	18.69
5470~5725	92.045	19.64

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

2TX (Radio 2)

802.11a

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	115.264	20.62
5470~5725	113.493	20.55

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11n (HT20)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	137.783	21.39
5470~5725	118.423	20.73

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11n (HT40)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	220.807	23.44
5470~5725	240.312	23.81

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11ac (VHT80)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	89.885	19.54
5470~5725	89.030	19.50

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

1TX (Radio 3)

802.11a

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	62.230	17.94
5470~5725	133.045	21.24

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11n (HT20)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	61.660	17.90
5470~5725	116.145	20.65

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11n (HT40)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	44.875	16.52
5470~5725	38.548	15.86

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

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/ MHz

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

Without duty factor:

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

With duty factor:

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)

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

1TX (Radio 2)

802.11a

CHANNEL	FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
52	5260	10.53	11	PASS
60	5300	10.73	11	PASS
64	5320	10.42	11	PASS
100	5500	10.90	11	PASS
116	5580	10.54	11	PASS
140	5700	8.65	11	PASS

802.11n (HT20)

CHANNEL	FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
52	5260	10.43	11	PASS
60	5300	10.32	11	PASS
64	5320	10.03	11	PASS
100	5500	9.58	11	PASS
116	5580	10.91	11	PASS
140	5700	7.85	11	PASS

802.11n (HT40)

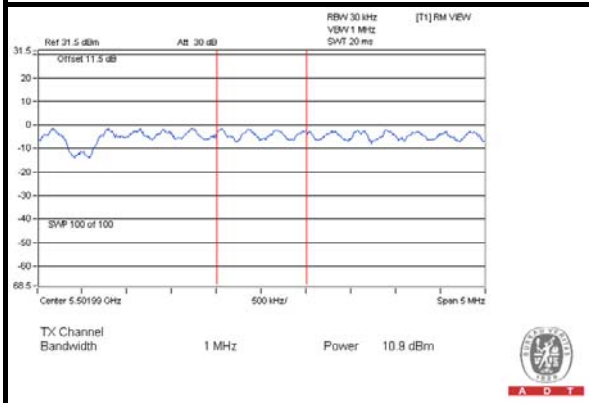
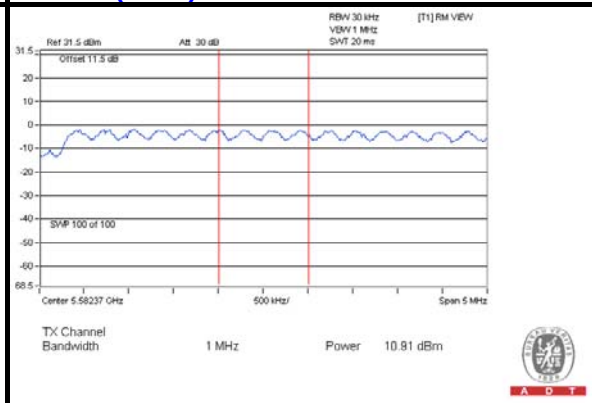
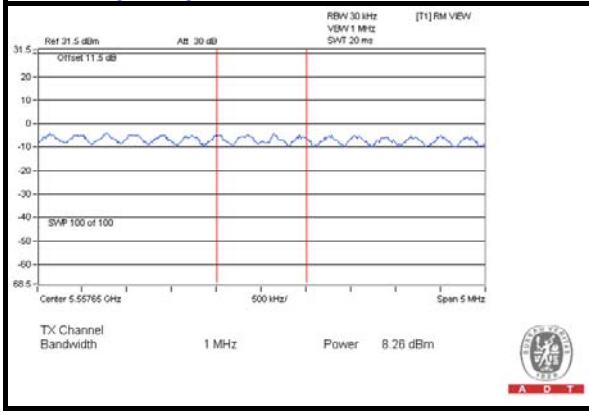
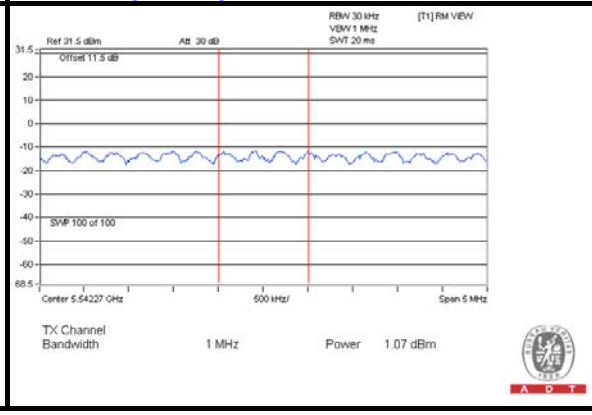
CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
54	5270	6.89	0.14	7.03	11	PASS
62	5310	3.33	0.14	3.47	11	PASS
102	5510	4.19	0.14	4.33	11	PASS
110	5550	8.26	0.14	8.40	11	PASS
134	5670	6.53	0.14	6.67	11	PASS

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

802.11ac (VHT80)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
58	5290	-1.10	0.33	-0.78	11	PASS
106	5530	1.07	0.33	1.39	11	PASS

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

SPECTRUM PLOT OF WORST VALUE	
802.11a	**802.11n (HT20)**
	
802.11n (HT40)	**802.11ac (VHT80)**
	

2TX (Radio 2)

802.11a

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
52	5260	5.86	5.41	8.65	9.76	PASS
60	5300	5.70	5.57	8.65	9.76	PASS
64	5320	5.17	5.68	8.44	9.76	PASS
100	5500	5.22	5.77	8.51	8.60	PASS
116	5580	5.52	5.48	8.51	8.60	PASS
140	5700	5.71	5.45	8.59	8.60	PASS

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-2A Band:** Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$]= 7.24 > 6dBi, so the power density limit shall be reduced to 11-(7.24-6) = 9.76dBm.
   For U-NII-2C Band: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$]= 8.40 > 6dBi, so the power density limit shall be reduced to 11-(8.40-6) = 8.60dBm.

802.11n (HT20)

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
52	5260	5.21	5.58	8.41	9.76	PASS
60	5300	5.17	5.69	8.45	9.76	PASS
64	5320	5.38	5.64	8.52	9.76	PASS
100	5500	5.61	5.22	8.43	8.60	PASS
116	5580	5.54	5.43	8.50	8.60	PASS
140	5700	5.23	5.16	8.21	8.60	PASS

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-2A Band:** Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$]= 7.24 > 6dBi, so the power density limit shall be reduced to 11-(7.24-6) = 9.76dBm.
   For U-NII-2C Band: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$]= 8.40 > 6dBi, so the power density limit shall be reduced to 11-(8.40-6) = 8.60dBm.

802.11n (HT40)

CHAN.	FREQ. (MHz)	PSD (dBm)		TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1					
54	5270	3.93	4.56	7.27	0.27	7.54	9.76	PASS
62	5310	3.42	3.26	6.35	0.27	6.62	9.76	PASS
102	5510	3.50	2.99	6.27	0.27	6.54	8.60	PASS
110	5550	3.50	3.12	6.33	0.27	6.60	8.60	PASS
134	5670	3.02	3.23	6.14	0.27	6.41	8.60	PASS

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-2A Band:** Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$]= 7.24 > 6dBi, so the power density limit shall be reduced to 11-(7.24-6) = 9.76dBm.
   For U-NII-2C Band: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$]= 8.40 > 6dBi, so the power density limit shall be reduced to 11-(8.40-6) = 8.60dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

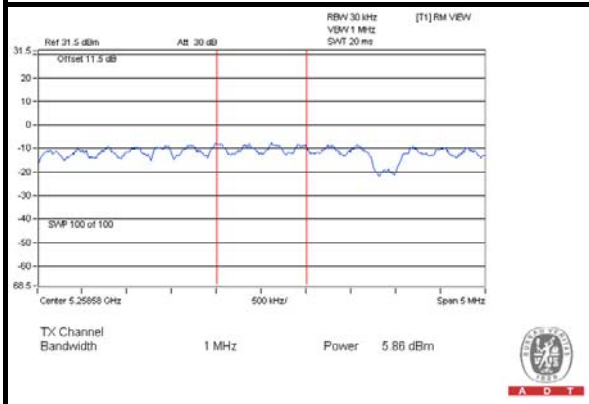
CHAN.	FREQ. (MHz)	PSD (dBm)		TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1					
58	5290	0.07	0.11	3.10	0.35	3.45	9.76	PASS
106	5530	1.41	0.68	4.07	0.35	4.42	8.60	PASS

NOTE:

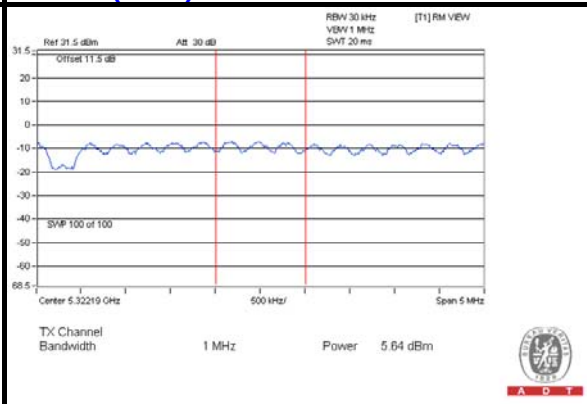
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-2A Band:** Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$]= 7.24 > 6dBi, so the power density limit shall be reduced to 11-(7.24-6) = 9.76dBm.
   For U-NII-2C Band: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$]= 8.40 > 6dBi, so the power density limit shall be reduced to 11-(8.40-6) = 8.60dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

SPECTRUM PLOT OF WORST VALUE

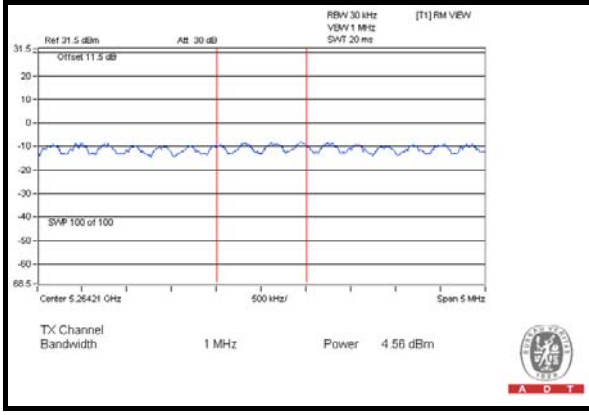
802.11a



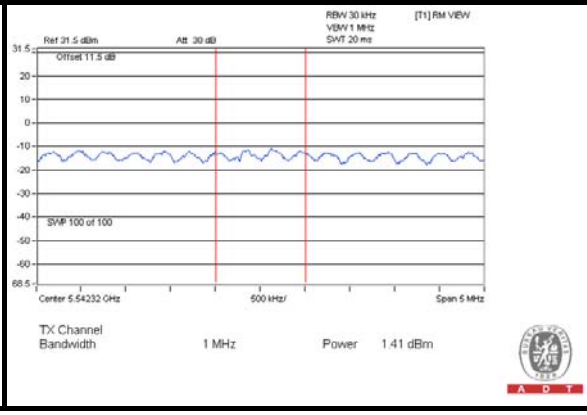
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



1TX (Radio 3)

802.11a

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
52	5260	3.78	2.39	6.17	11	PASS
60	5300	3.47	2.39	5.86	11	PASS
64	5320	3.40	2.39	5.79	11	PASS
100	5500	3.42	2.39	5.81	11	PASS
116	5580	8.44	2.39	10.83	11	PASS
140	5700	1.88	2.39	4.27	11	PASS

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

802.11n (HT20)

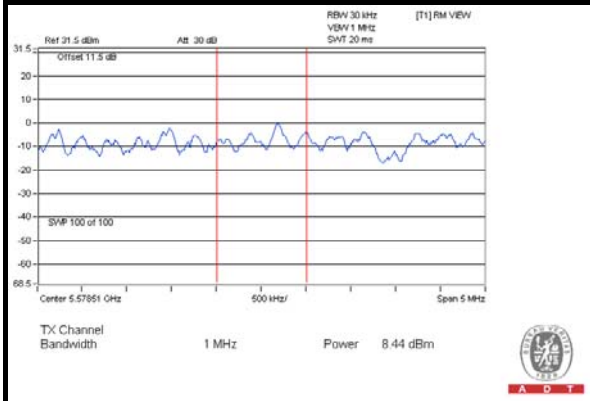
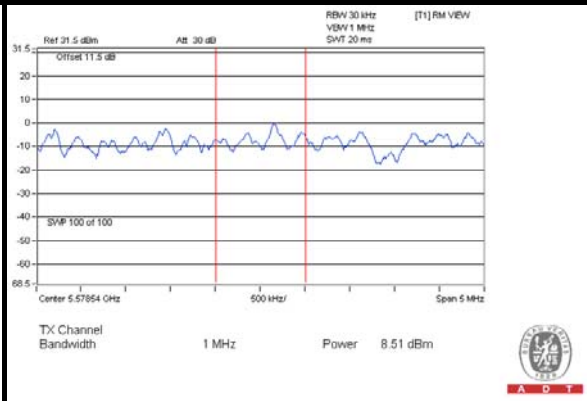
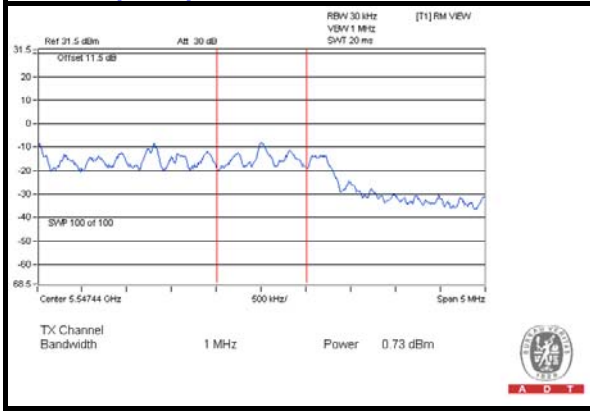
CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
52	5260	2.80	2.10	4.90	11	PASS
60	5300	3.76	2.10	5.86	11	PASS
64	5320	1.97	2.10	4.07	11	PASS
100	5500	3.44	2.10	5.54	11	PASS
116	5580	8.51	2.10	10.61	11	PASS
140	5700	2.48	2.10	4.58	11	PASS

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

802.11n (HT40)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
54	5270	-0.84	1.87	1.03	11	PASS
62	5310	-5.36	1.87	-3.49	11	PASS
102	5510	-3.96	1.87	-2.09	11	PASS
110	5550	0.73	1.87	2.60	11	PASS
134	5670	-0.81	1.87	1.06	11	PASS

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

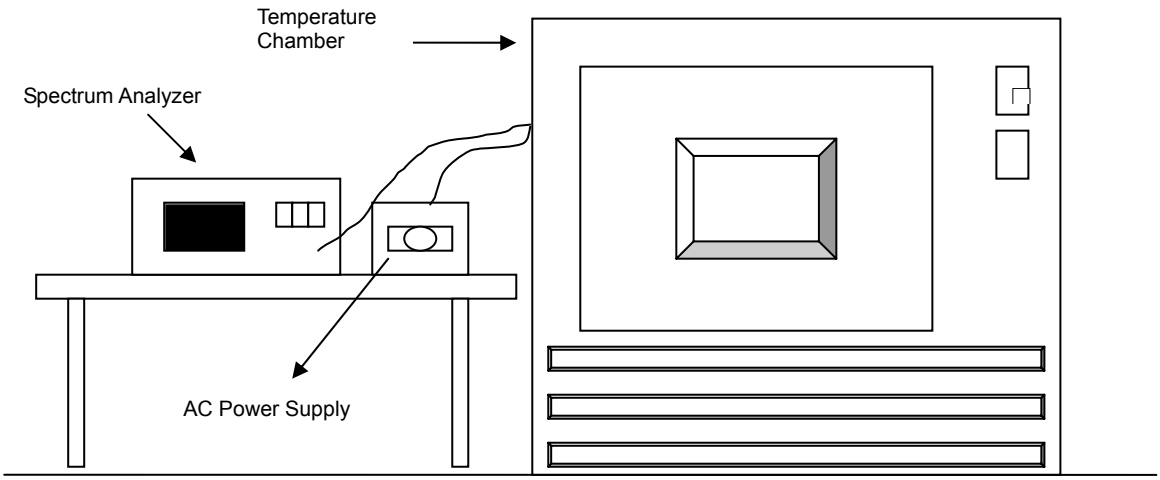
SPECTRUM PLOT OF WORST VALUE	
802.11a	**802.11n (HT20)**
	
802.11n (HT40)	
	

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

1TX (Radio 2)

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
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	5320.0194	0.00036	5320.0181	0.00034	5320.0181	0.00034	5320.0173	0.00033
40	120	5319.9733	-0.00050	5319.9767	-0.00044	5319.9769	-0.00043	5319.9763	-0.00045
30	120	5319.9856	-0.00027	5319.9839	-0.00030	5319.9847	-0.00029	5319.9854	-0.00027
20	120	5320.0108	0.00020	5320.0109	0.00020	5320.0138	0.00026	5320.0135	0.00025
10	120	5320.0162	0.00030	5320.0135	0.00025	5320.0155	0.00029	5320.0158	0.00030
0	120	5320.0159	0.00030	5320.0183	0.00034	5320.0183	0.00034	5320.0173	0.00033
-10	120	5320.0159	0.00030	5320.0117	0.00022	5320.0118	0.00022	5320.013	0.00024
-20	120	5319.9821	-0.00034	5319.9817	-0.00034	5319.9794	-0.00039	5319.9784	-0.00041
-30	120	5320.0091	0.00017	5320.0103	0.00019	5320.0111	0.00021	5320.0102	0.00019

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
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	5320.0097	0.00018	5320.0111	0.00021	5320.0133	0.00025	5320.0137	0.00026
	120	5320.0108	0.00020	5320.0109	0.00020	5320.0138	0.00026	5320.0135	0.00025
	102	5320.0114	0.00021	5320.0106	0.00020	5320.0133	0.00025	5320.0133	0.00025

2TX (Radio 2)

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
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	5319.9947	-0.00010	5319.9988	-0.00002	5319.9953	-0.00009	5319.9991	-0.00002
40	120	5320.0016	0.00003	5320.0035	0.00007	5320.0025	0.00005	5320.0022	0.00004
30	120	5319.9999	0.00000	5320.0037	0.00007	5320.0008	0.00002	5320.0012	0.00002
20	120	5319.9844	-0.00029	5319.9848	-0.00029	5319.9863	-0.00026	5319.9866	-0.00025
10	120	5320.0155	0.00029	5320.0163	0.00031	5320.0148	0.00028	5320.0142	0.00027
0	120	5319.9925	-0.00014	5319.9886	-0.00021	5319.991	-0.00017	5319.9901	-0.00019
-10	120	5320.0019	0.00004	5320.0025	0.00005	5320.0007	0.00001	5320.0019	0.00004
-20	120	5320.0145	0.00027	5320.0151	0.00028	5320.0144	0.00027	5320.016	0.00030
-30	120	5319.9965	-0.00007	5319.9986	-0.00003	5319.9985	-0.00003	5319.9996	-0.00001

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
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	5319.9847	-0.00029	5319.9843	-0.00030	5319.9871	-0.00024	5319.9858	-0.00027
	120	5319.9844	-0.00029	5319.9848	-0.00029	5319.9863	-0.00026	5319.9866	-0.00025
	102	5319.9845	-0.00029	5319.9843	-0.00030	5319.9865	-0.00025	5319.9862	-0.00026

1TX (Radio 3)

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
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	5319.9806	-0.00036	5319.9815	-0.00035	5319.9838	-0.00030	5319.9819	-0.00034
40	120	5320.0137	0.00026	5320.0149	0.00028	5320.0171	0.00032	5320.0137	0.00026
30	120	5319.9971	-0.00005	5319.9988	-0.00002	5319.9981	-0.00004	5319.9987	-0.00002
20	120	5320.0024	0.00005	5319.9999	0.00000	5320.0009	0.00002	5319.9989	-0.00002
10	120	5320.002	0.00004	5320.0005	0.00001	5320.0021	0.00004	5319.9988	-0.00002
0	120	5320.0263	0.00049	5320.0286	0.00054	5320.0243	0.00046	5320.0287	0.00054
-10	120	5319.9981	-0.00004	5319.9952	-0.00009	5319.9948	-0.00010	5319.9982	-0.00003
-20	120	5319.9768	-0.00044	5319.9755	-0.00046	5319.9765	-0.00044	5319.9743	-0.00048
-30	120	5320.0023	0.00004	5320.0046	0.00009	5320.0051	0.00010	5320.0057	0.00011

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
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	5320.0022	0.00004	5319.9992	-0.00002	5320.001	0.00002	5319.9982	-0.00003
	120	5320.0024	0.00005	5319.9999	0.00000	5320.0009	0.00002	5319.9989	-0.00002
	102	5320.0033	0.00006	5320.0006	0.00001	5320.0003	0.00001	5319.9983	-0.00003

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:
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Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Lab:
Tel: 886-3-3183232
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Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

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

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---