FCC TEST REPORT
(WLAN 15.407)

REPORT NO.:	RF140612E02-1
MODEL NO.:	DWA-582
FCC ID:	KA2WA582A1
RECEIVED:	June 12, 2014
TESTED:	June 18 to 26, 2014
ISSUED:	July 17, 2014

APPLICANT:	D-Link Corporation
ADDRESS:	No.289, Sinhu 3rd Rd., Neihu District, Taipei City 114, Taiwan, R.O.C.

ISSUED BY:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
LAB ADDRESS :	No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan, R.O.C.
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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
RF140612E02-1	Original release	July 17, 2014

1. CERTIFICATION

PRODUCT:	Wireless AC1200 Dual Band PCI Express Adapter
BRAND NAME:	D-Link
MODEL NO.:	DWA-582
TEST SAMPLE:	ENGINEERING SAMPLE
APPLICANT:	D-Link Corporation
TESTED:	June 18 to 26, 2014
STANDARDS:	**FCC Part 15, Subpart E (Section 15.407)**
	ANSI C63.10-2009

The above equipment (Model: DWA-582) 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 : _____ , **DATE:** *July 17, 2014*
(Lori Chung, Specialist)

APPROVED BY : _____ , **DATE:** *July 17, 2014*
(May Chen, 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 Emission	PASS	Meet the requirement of limit. Minimum passing margin is -17.33dB at 0.18125MHz
15.407 (b)(1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -0.1dB at 5725.00MHz & 5150.00MHz & 10520.00MHz & 5350.00MHz & 5715.00MHz.
15.407(a/1/2/3)	Transmit Power	PASS	Meet the requirement of limit.
15.407(a/1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(e)	6dB bandwidth	PASS	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is R-SMA not a standard connector.

NOTE: 1. For WLAN: The EUT was operating in 2400 ~ 2483.5MHz, 5.15~5.35GHz, 5.47~5.725GHz and 5.725~5.850GHz frequencies band. This report was recorded the RF parameters including 5.15~5.35GHz, 5.47~5.725GHz and 5.725~5.850GHz. For the 2400 ~ 2483.5MHz RF parameters was recorded in another test report.

2. The DFS report was recorded in another test report.

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:

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

Measurement	Value
Conducted emissions	2.86 dB
Radiated emissions (30MHz-1GHz)	5.37 dB
Radiated emissions (1GHz -6GHz)	3.65 dB
Radiated emissions (6GHz -18GHz)	3.88 dB
Radiated emissions (18GHz -40GHz)	4.11 dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wireless AC1200 Dual Band PCI Express Adapter
MODEL NO.	DWA-582
POWER SUPPLY	3.3Vdc (from host equipment)
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode only
MODULATION TECHNOLOGY	DSSS,OFDM
TRANSFER RATE	802.11b: up to 11Mbps 802.11a / g: up to 54Mbps 802.11n: up to 300Mbps 802.11ac: up to 866.7Mbps
OPERATING FREQUENCY	**For 15.407** 5.18 ~ 5.24GHz, 5.26 ~ 5.32GHz, 5.50 ~ 5.58GHz, 5.66GHz ~ 5.70GHz, 5.745 ~ 5.825GHz
	For 15.247 2.412 ~ 2.462GHz
NUMBER OF CHANNEL	**For 15.407** 21 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 9 for 802.11n (HT40), 802.11ac (VHT40) 4 for 802.11ac (VHT80)
	For 15.247 11 for 802.11b, 802.11g, 802.11n (HT20) 7 for 802.11n (HT40)
MAXIMUM OUTPUT POWER	**For 15.407** 802.11a: 191.867mW 802.11ac (VHT20): 236.671mW 802.11ac (VHT40): 135.001mW 802.11ac (VHT80): 31.959mW **For 15.247** 802.11b: 126.183mW 802.11g: 430.527mW 802.11n (HT20): 738.584mW 802.11n (HT40): 483.42mW
ANTENNA TYPE	Please see NOTE
DATA CABLE	NA
I/O PORTS	Refer to user's manual
ASSOCIATED DEVICES	NA

Note:

1. 2.4GHz and 5GHz technology can not transmit at same time.
2. The antennas provided to the EUT, please refer to the following table:

Antenna No.	Transmitter Circuit	Antenna Gain(dBi) < including cable loss>	Frequency range (GHz ~ GHz)	Antenna Type	Connecter Type
1	Chain (0)	3.5	2.4~2.4835	Dipole	R-SMA
		4.5	5.15~5.850		
2	Chain (1)	3.5	2.4~2.4835	Dipole	R-SMA
		4.5	5.15~5.850		

3. The EUT incorporates a MIMO function without beamforming.

MODULATION MODE	DATA RATE (MCS)	TX & RX CONFIGURATION	
802.11a	6 ~ 54Mbps	1TX (Diversity)	2RX
802.11b	1 ~ 11Mbps	1TX (Diversity)	2RX
802.11g	6 ~ 54Mbps	1TX (Diversity)	2RX
802.11n (HT20)	MCS 0~7	1TX (Diversity)	2RX
	MCS 8~15	2TX	2RX
802.11n (HT40)	MCS 0~7	1TX (Diversity)	2RX
	MCS 8~15	2TX	2RX
802.11ac (VHT20) (5GHz)	MCS0~8 (256QAM) Nss= 1	1TX (Diversity)	2RX
	MCS0~8 (256QAM) Nss= 2	2TX	2RX
802.11ac (VHT40) (5GHz)	MCS0~9 (256QAM) Nss= 1	1TX (Diversity)	2RX
	MCS0~9 (256QAM) Nss= 2	2TX	2RX
802.11ac (VHT80) (5GHz)	MCS0~9 (256QAM) Nss= 1	1TX (Diversity)	2RX
	MCS0~9 (256QAM) Nss= 2	2TX	2RX

Note: 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)

4. The above EUT information was declared by the manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

Operated in 5150 ~ 5250MHz band:

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY
42	5210 MHz

Operated in 5250 ~ 5350MHz band:

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	5290 MHz

Operated in 5470MHz ~ 5600MHz & 5650MHz ~ 5725MHz bands:

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 are provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY
106	5530 MHz

Operated in 5725 ~ 5850MHz band:

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

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

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

CHANNEL	FREQUENCY
151	5755 MHz
159	5795 MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY
155	5775 MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

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

Where **PLC:** Power Line Conducted Emission **RE < 1G:** Radiated Emission below 1GHz

RE ≥ 1G: Radiated Emission above 1GHz **APCM:** Antenna Port Conducted Measurement

POWER LINE CONDUCTED EMISSION TEST:

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

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (MBPS)
802.11ac (VHT20)	36 to 165	52	OFDM	BPSK	13

RADIATED EMISSION TEST (BELOW 1 GHz):

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

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11ac (VHT20)	36 to 165	52	OFDM	BPSK	13

RADIATED EMISSION TEST (ABOVE 1 GHz):

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

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	36 to 165	36, 40, 48, 52, 60, 64, 100, 116, 132, 140, 149, 157, 165	OFDM	BPSK	6
802.11ac (VHT20)	36 to 165	36, 40, 48, 52, 60, 64, 100, 116, 132, 140, 149, 157, 165	OFDM	BPSK	13
802.11ac (VHT40)	38 to 159	38, 46, 54, 62, 102, 110, 134, 151, 159	OFDM	BPSK	27
802.11ac (VHT80)	42 to 155	42, 58, 106, 155	OFDM	BPSK	58.5

ANTENNA PORT CONDUCTED MEASUREMENT:

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

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	36 to 165	36, 40, 48, 52, 60, 64, 100, 116, 132, 140, 149, 157, 165	OFDM	BPSK	6
802.11ac (VHT20)	36 to 165	36, 40, 48, 52, 60, 64, 100, 116, 132, 140, 149, 157, 165	OFDM	BPSK	13
802.11ac (VHT40)	38 to 159	38, 46, 54, 62, 102, 110, 134, 151, 159	OFDM	BPSK	27
802.11ac (VHT80)	42 to 155	42, 58, 106, 155	OFDM	BPSK	58.5

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
PLC	26deg. C, 65%RH	120Vac, 60Hz	Ping Liu
RE<1G	24deg. C, 68%RH	120Vac, 60Hz	Robert Cheng
RE≥1G	21deg. C, 69%RH 23deg. C, 65%RH	120Vac, 60Hz	Robert Cheng
APCM	25deg. C, 60%RH	120Vac, 60Hz	Robert Cheng

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart E (15.407)

789033 D02 General UNII Test Procedures New Rules v01

662911 D01 Multiple Transmitter Output v02r01

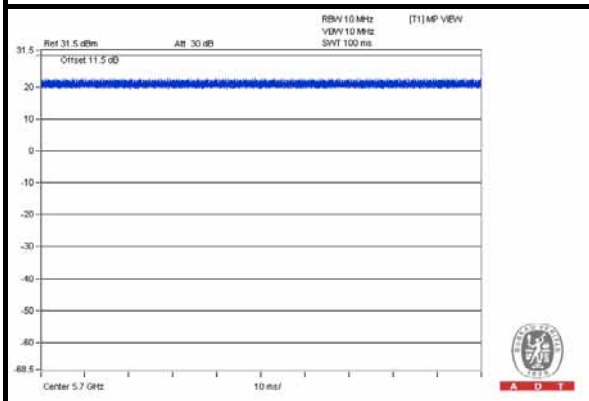
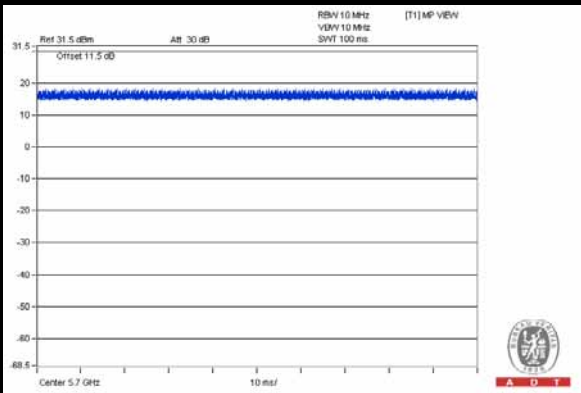
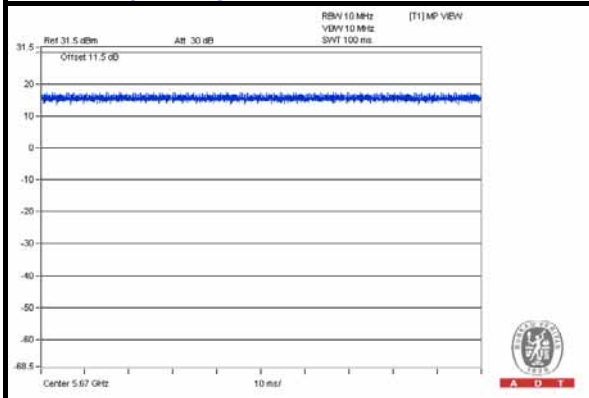
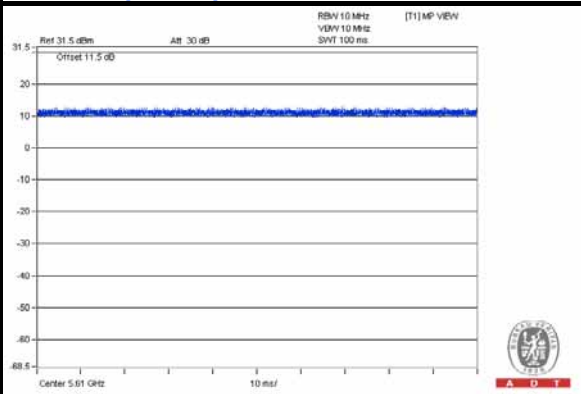
ANSI C63.10-2009

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

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

3.4 DUTY CYCLE OF TEST SIGNAL

Duty cycle of test signal is 100 %, duty factor is not required.

802.11a	802.11ac (VHT20)
	
802.11ac (VHT40)	**802.11ac (VHT80)**
	

3.5 DESCRIPTION OF SUPPORT UNITS

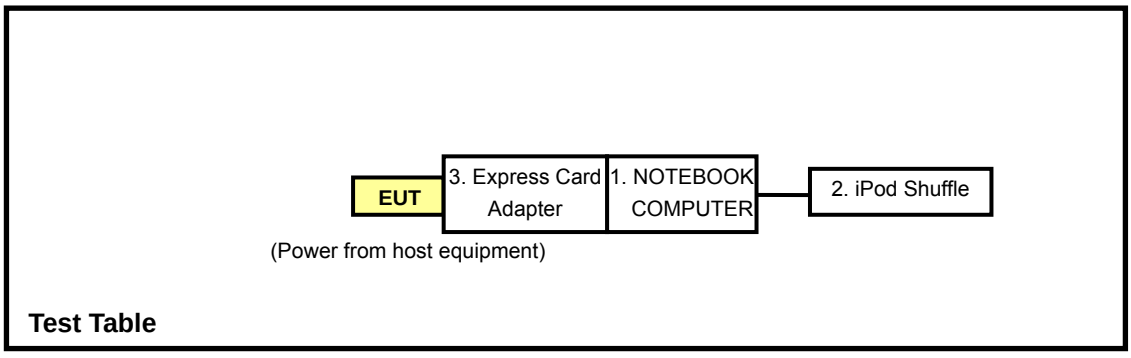
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Product	Brand	Model No.	Serial No.	FCC ID
1	NOTEBOOK COMPUTER	DELL	E6420	H62T3R1	FCC DoC
2	iPod Shuffle	Apple	MC749TA/A	CC4DMFJUDFDM	NA
3	Express Card Adapter	Alpha	NA	NA	NA

No.	Signal cable description
1	NA
2	USB cable (0.1m)
3	NA

Note: The power cords of the above support units were unshielded (1.8m).

3.6 CONFIGURATION OF SYSTEM UNDER TEST



4. TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15-0.5 0.5-5 5-30	66 to 56 56 60	56 to 46 46 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 0.50 MHz.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS 30	100375	Apr. 29, 2014	Apr. 28, 2015
Line-Impedance Stabilization Network (for EUT) SCHWARZBECK	NSLK8127	8127-522	Sep. 12, 2013	Sep. 11, 2014
Line-Impedance Stabilization Network (for Peripheral)	ENV216	100071	Nov. 13, 2013	Nov. 12, 2014
RF Cable (JYEBAO)	5DFB	COCCAB-001	Mar. 10 , 2014	Mar. 09, 2015
50 ohms Terminator	N/A	EMC-03	Sep. 24, 2013	Sep. 23, 2014
50 ohms Terminator	N/A	EMC-02	Oct. 01, 2013	Sep. 30, 2014
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 Shielded Room No. C.
3 The VCCI Con C Registration No. is C-3611.
4 Tested Date: June 18, 2014

4.1.3 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.

b. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

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

d. The frequency range from 150kHz to 30MHz was searched. Emission level under (Limit – 20dB) was not recorded.

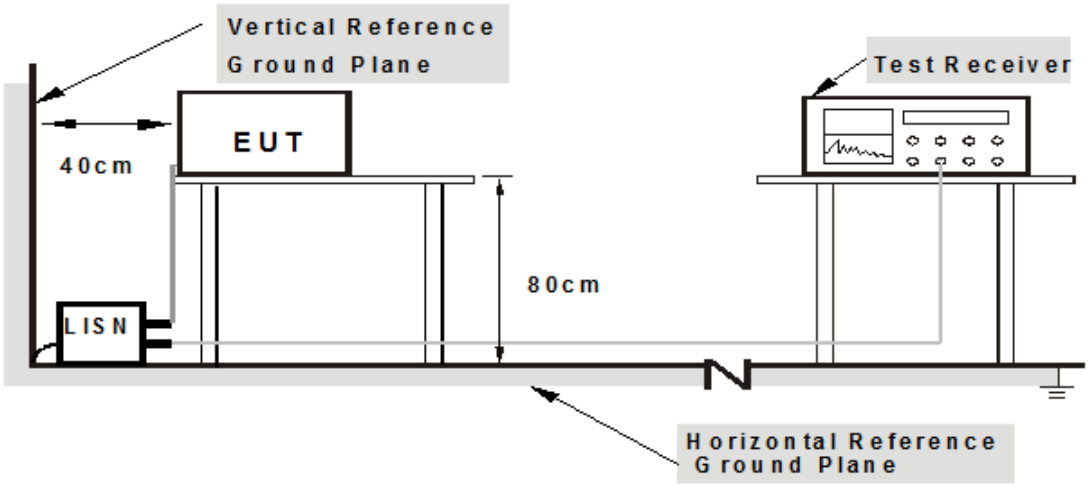
NOTE:

1. The resolution bandwidth of test receiver is 9kHz for Quasi-peak detection (QP) & Average detection (AV).

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.1.6 EUT OPERATING CONDITIONS

1. Connect the EUT with the support unit 1 (Notebook Computer) which is placed on a testing table.
2. The communication partner run test program “MP_Kit_RTL11ac_8812AE_PCIE_[Ver0.0057.07.20140328]” to enable EUT under transmission/receiving condition continuously at specific channel frequency.

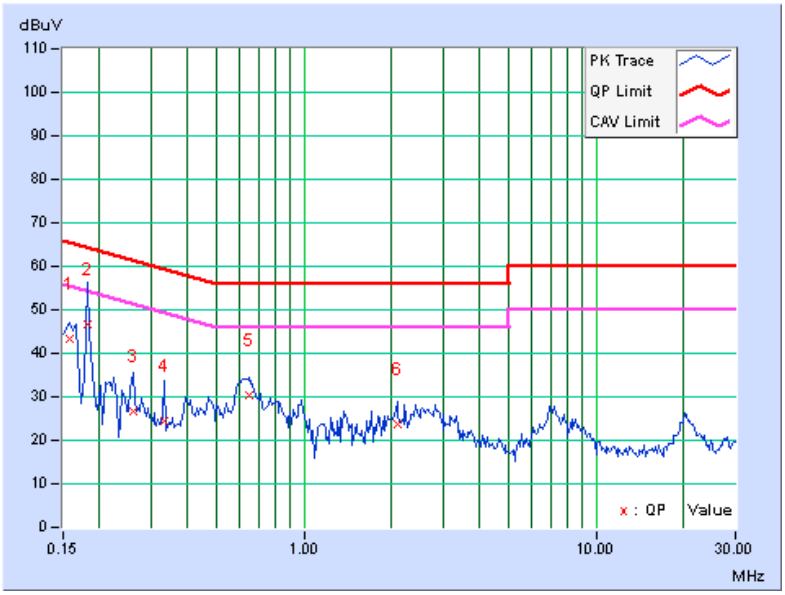
4.1.7 TEST RESULTS

PHASE	Line (L)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	0.07	43.39	33.05	43.46	33.12	65.58	55.58	-22.12	-22.46
2	0.18125	0.07	46.75	28.33	46.82	28.40	64.43	54.43	-17.61	-26.03
3	0.25938	0.08	26.44	9.48	26.52	9.56	61.45	51.45	-34.94	-41.90
4	0.33359	0.08	24.28	16.61	24.36	16.69	59.36	49.36	-35.00	-32.67
5	0.64609	0.11	30.31	19.59	30.42	19.70	56.00	46.00	-25.58	-26.30
6	2.08594	0.17	23.58	17.66	23.75	17.83	56.00	46.00	-32.25	-28.17

REMARKS:

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

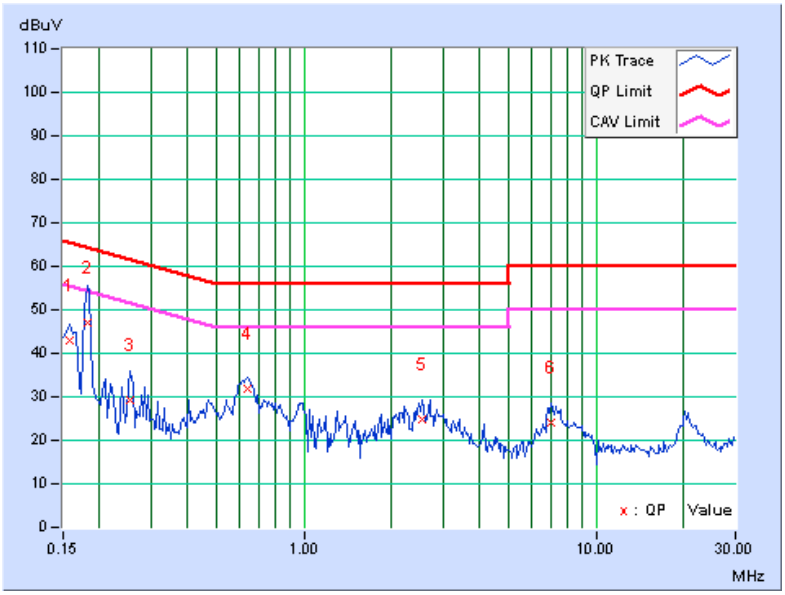


PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	0.07	42.72	32.60	42.79	32.67	65.58	55.58	-22.78	-22.90
2	**0.18125**	**0.07**	**47.03**	**28.03**	**47.10**	**28.10**	**64.43**	**54.43**	**-17.33**	**-26.33**
3	0.25547	0.08	29.24	12.34	29.32	12.42	61.58	51.58	-32.26	-39.16
4	0.63828	0.11	31.66	23.45	31.77	23.56	56.00	46.00	-24.23	-22.44
5	2.55078	0.20	24.68	19.84	24.88	20.04	56.00	46.00	-31.12	-25.96
6	7.04297	0.36	23.65	17.25	24.01	17.61	60.00	50.00	-35.99	-32.39

REMARKS:

6. Q.P. and AV. are abbreviations of quasi-peak and average individually.
7. The emission levels of other frequencies were very low against the limit.
8. Margin value = Emission Level – Limit value
9. Correction Factor = Insertion loss + Cable loss
10. Emission Level = Correction Factor + Reading Value



4.2 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.2.1 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.

4.2.2 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).

4.2.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
MXE EMI Receiver Agilent	N9038A	MY51210105	Jan. 21, 2014	Jan. 20, 2015
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-03	Nov. 13, 2013	Nov. 12, 2014
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-360	Feb. 26, 2014	Feb. 25, 2015
RF Cable	NA	CHGCAB_001	Oct. 05, 2013	Oct. 04, 2014
Spectrum Analyzer R&S	FSV40	100964	July 15, 2013	July 14, 2014
Horn_Antenna AISI	AIH.8018	0000320091110	Nov. 18, 2013	Nov. 17, 2014
Pre-Amplifier Agilent	8449B	3008A02578	June 25, 2013	June 24, 2014
RF Cable	NA	RF104-201 RF104-203 RF104-204	Dec. 12, 2013	Dec. 11, 2014
Spectrum Analyzer Agilent	E4446A	MY48250253	Aug. 28, 2013	Aug. 27, 2014
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Nov. 13, 2013	Nov. 12, 2014
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Oct. 08, 2013	Oct. 07, 2014
Software	ADT_Radiated _V8.7.07	NA	NA	NA
Antenna Tower & Turn Table CT	NA	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 horn antenna, preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
3 The test was performed in 966 Chamber No. G.
4. The FCC Site Registration No. is 966073.
5 The VCCI Site Registration No. is G-137.
6 The CANADA Site Registration No. is IC 7450H-2.
7 Tested Date: June 18 to 19, 2014

4.2.4 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

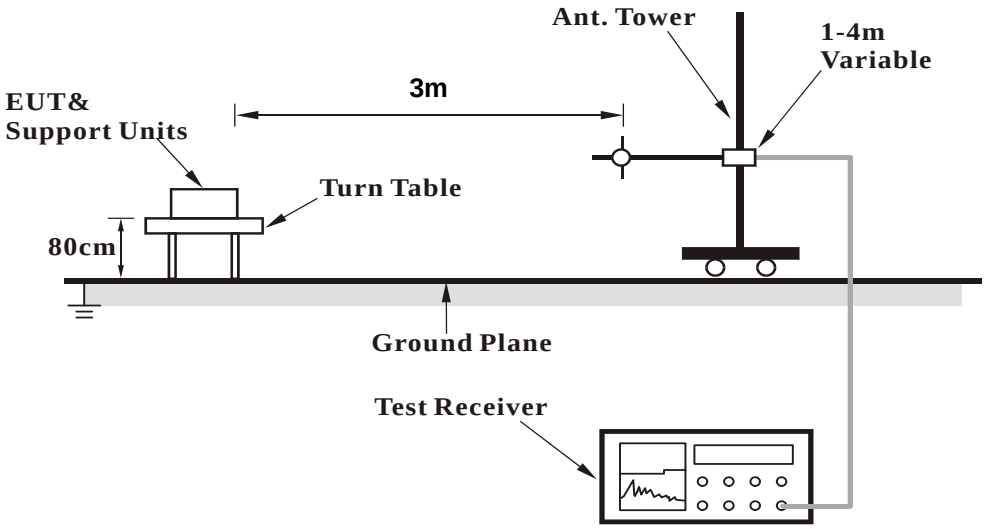
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (10 log(1/duty cycle)).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

4.2.5 DEVIATION FROM TEST STANDARD

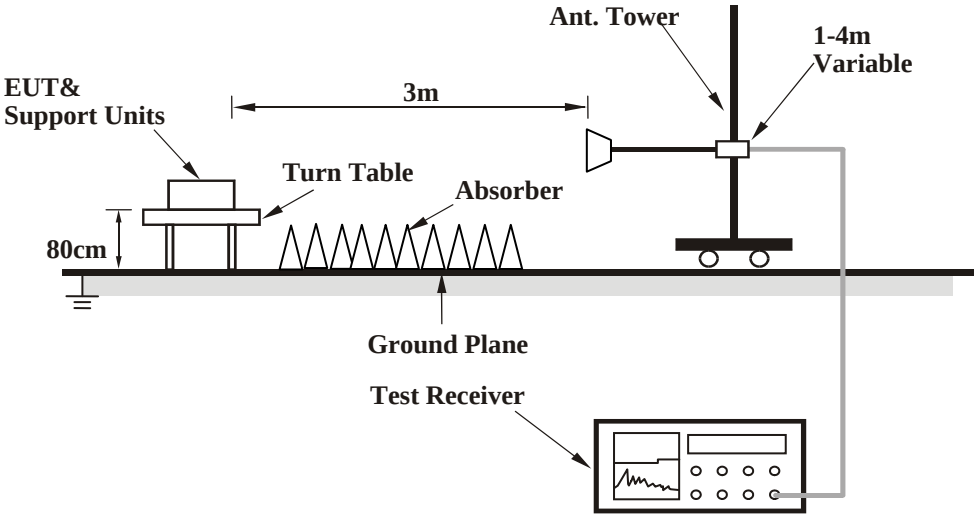
No deviation

4.2.6 TEST SETUP

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.2.7 EUT OPERATING CONDITION

Same as 4.1.6

4.2.8 TEST RESULTS

BELOW 1GHz WORST-CASE DATA

802.11ac (VHT20)

CHANNEL	TX Channel 52	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	Below 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	101.11	31.8 QP	43.5	-11.8	1.75 H	301	49.39	-17.64
2	199.89	35.9 QP	43.5	-7.6	1.15 H	201	52.17	-16.30
3	232.51	42.5 QP	46.0	-3.5	1.45 H	152	58.06	-15.55
4	283.41	34.8 QP	46.0	-11.2	1.24 H	164	47.68	-12.87
5	666.62	34.0 QP	46.0	-12.0	1.24 H	96	38.00	-3.99
6	942.21	35.4 QP	46.0	-10.6	1.75 H	301	34.53	0.90
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	132.55	32.5 QP	43.5	-11.0	1.24 V	68	46.59	-14.12
2	199.49	34.3 QP	43.5	-9.2	1.75 V	62	50.64	-16.30
3	233.34	40.2 QP	46.0	-5.8	1.75 V	64	55.66	-15.45
4	560.12	31.1 QP	46.0	-14.9	1.75 V	211	37.28	-6.17
5	640.11	34.6 QP	46.0	-11.4	1.64 V	185	38.76	-4.14
6	663.92	32.3 QP	46.0	-13.7	1.45 V	206	36.37	-4.03

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

ABOVE 1GHz DATA

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	62.4 PK	74.0	-11.6	1.00 H	215	55.60	6.80
2	5150.00	46.7 AV	54.0	-7.3	1.00 H	215	39.90	6.80
3	*5180.00	102.7 PK			1.00 H	215	95.75	6.95
4	*5180.00	93.4 AV			1.00 H	215	86.45	6.95
5	#10360.00	60.3 PK	74.0	-13.7	1.10 H	67	47.19	13.11
6	#10360.00	46.2 AV	54.0	-7.8	1.10 H	67	33.09	13.11
7	15540.00	59.7 PK	74.0	-14.3	1.00 H	219	41.01	18.69
8	15540.00	49.4 AV	54.0	-4.6	1.00 H	219	30.71	18.69
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	71.6 PK	74.0	-2.4	1.02 V	156	64.80	6.80
2	5150.00	53.8 AV	54.0	-0.2	1.02 V	156	47.00	6.80
3	*5180.00	112.8 PK			1.02 V	156	105.85	6.95
4	*5180.00	104.0 AV			1.02 V	156	97.05	6.95
5	#10360.00	61.2 PK	74.0	-12.8	1.32 V	64	48.09	13.11
6	#10360.00	50.1 AV	54.0	-3.9	1.32 V	64	36.99	13.11
7	15540.00	59.7 PK	74.0	-14.3	1.26 V	162	41.01	18.69
8	15540.00	49.1 AV	54.0	-4.9	1.26 V	162	30.41	18.69

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	62.4 PK	74.0	-11.6	1.00 H	206	55.60	6.80
2	5150.00	47.1 AV	54.0	-6.9	1.00 H	206	40.30	6.80
3	*5200.00	108.1 PK			1.00 H	206	101.05	7.05
4	*5200.00	97.6 AV			1.00 H	206	90.55	7.05
5	#10400.00	60.6 PK	74.0	-13.4	1.06 H	75	47.38	13.22
6	#10400.00	45.8 AV	54.0	-8.2	1.06 H	75	32.58	13.22
7	15600.00	59.9 PK	74.0	-14.1	1.01 H	177	41.20	18.70
8	15600.00	49.5 AV	54.0	-4.5	1.01 H	177	30.80	18.70
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	5150.00	69.9 PK	74.0	-4.1	1.02 V	160	63.10	6.80
2	5150.00	53.6 AV	54.0	-0.4	1.02 V	160	46.80	6.80
3	*5200.00	116.9 PK			1.02 V	156	109.85	7.05
4	*5200.00	108.1 AV			1.02 V	156	101.05	7.05
5	#10400.00	61.7 PK	74.0	-12.3	1.27 V	59	48.48	13.22
6	#10400.00	50.5 AV	54.0	-3.5	1.27 V	59	37.28	13.22
7	15600.00	60.1 PK	74.0	-13.9	1.22 V	167	41.40	18.70
8	15600.00	49.5 AV	54.0	-4.5	1.22 V	167	30.80	18.70

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	61.6 PK	74.0	-12.4	1.00 H	210	54.80	6.80
2	5150.00	45.5 AV	54.0	-8.5	1.00 H	210	38.70	6.80
3	*5240.00	108.7 PK			1.00 H	210	101.54	7.16
4	*5240.00	98.2 AV			1.00 H	210	91.04	7.16
5	#10480.00	61.4 PK	74.0	-12.6	1.14 H	62	48.24	13.16
6	#10480.00	46.5 AV	54.0	-7.5	1.14 H	62	33.34	13.16
7	15720.00	60.1 PK	74.0	-13.9	1.02 H	214	41.70	18.40
8	15720.00	49.2 AV	54.0	-4.8	1.02 H	214	30.80	18.40
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	64.9 PK	74.0	-9.1	1.01 V	160	58.10	6.80
2	5150.00	47.2 AV	54.0	-6.8	1.01 V	160	40.40	6.80
3	*5240.00	119.1 PK			1.01 V	160	111.94	7.16
4	*5240.00	109.8 AV			1.01 V	160	102.64	7.16
5	5350.00	55.1 PK	74.0	-18.9	1.01 V	160	47.61	7.49
6	5350.00	41.5 AV	54.0	-12.5	1.01 V	160	34.01	7.49
7	#10480.00	65.5 PK	74.0	-8.5	1.24 V	10	52.34	13.16
8	#10480.00	53.5 AV	54.0	-0.5	1.24 V	10	40.34	13.16
9	15720.00	61.5 PK	74.0	-12.5	1.34 V	212	43.10	18.40
10	15720.00	50.6 AV	54.0	-3.4	1.34 V	212	32.20	18.40

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 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	*5260.00	109.2 PK			1.00 H	106	102.02	7.18
2	*5260.00	98.4 AV			1.00 H	106	91.22	7.18
3	#10520.00	61.4 PK	74.0	-12.6	1.14 H	51	48.18	13.22
4	#10520.00	46.4 AV	54.0	-7.6	1.14 H	51	33.18	13.22
5	15780.00	60.1 PK	74.0	-13.9	1.07 H	217	41.59	18.51
6	15780.00	49.0 AV	54.0	-5.0	1.07 H	217	30.49	18.51
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	118.2 PK			1.02 V	160	111.02	7.18
2	*5260.00	109.7 AV			1.02 V	160	102.52	7.18
3	#10520.00	66.4 PK	74.0	-7.6	1.44 V	2	53.18	13.22
4	#10520.00	53.8 AV	54.0	-0.2	1.44 V	2	40.58	13.22
5	15780.00	61.8 PK	74.0	-12.2	1.27 V	194	43.29	18.51
6	15780.00	50.8 AV	54.0	-3.2	1.27 V	194	32.29	18.51

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	107.2 PK			1.00 H	106	99.91	7.29
2	*5300.00	96.1 AV			1.00 H	106	88.81	7.29
3	5350.00	62.1 PK	74.0	-11.9	1.00 H	106	54.61	7.49
4	5350.00	46.6 AV	54.0	-7.4	1.00 H	106	39.11	7.49
5	10600.00	61.1 PK	74.0	-12.9	1.12 H	52	47.57	13.53
6	10600.00	46.3 AV	54.0	-7.7	1.12 H	52	32.77	13.53
7	15900.00	59.7 PK	74.0	-14.3	1.07 H	221	41.05	18.65
8	15900.00	48.7 AV	54.0	-5.3	1.07 H	221	30.05	18.65
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	116.1 PK			1.02 V	156	108.81	7.29
2	*5300.00	107.2 AV			1.02 V	156	99.91	7.29
3	5350.00	69.7 PK	74.0	-4.3	1.45 V	183	62.21	7.49
4	5350.00	53.1 AV	54.0	-0.9	1.45 V	183	45.61	7.49
5	10600.00	66.2 PK	74.0	-7.8	1.40 V	23	52.67	13.53
6	10600.00	53.4 AV	54.0	-0.6	1.40 V	23	39.87	13.53
7	15900.00	61.1 PK	74.0	-12.9	1.31 V	197	42.45	18.65
8	15900.00	50.3 AV	54.0	-3.7	1.31 V	197	31.65	18.65

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	101.1 PK			1.01 H	181	93.72	7.38
2	*5320.00	90.4 AV			1.01 H	181	83.02	7.38
3	5350.00	62.4 PK	74.0	-11.6	1.01 H	181	54.91	7.49
4	5350.00	46.6 AV	54.0	-7.4	1.01 H	181	39.11	7.49
5	10640.00	60.0 PK	74.0	-14.0	1.01 H	67	46.37	13.63
6	10640.00	45.4 AV	54.0	-8.6	1.01 H	67	31.77	13.63
7	15960.00	59.6 PK	74.0	-14.4	1.08 H	218	40.99	18.61
8	15960.00	48.9 AV	54.0	-5.1	1.08 H	218	30.29	18.61
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	111.2 PK			1.00 V	161	103.82	7.38
2	*5320.00	101.6 AV			1.00 V	161	94.22	7.38
3	5350.00	71.5 PK	74.0	-2.5	1.23 V	180	64.01	7.49
4	5350.00	53.4 AV	54.0	-0.6	1.23 V	180	45.91	7.49
5	10640.00	62.7 PK	74.0	-11.3	1.44 V	62	49.07	13.63
6	10640.00	50.6 AV	54.0	-3.4	1.44 V	62	36.97	13.63
7	15960.00	61.0 PK	74.0	-13.0	1.29 V	205	42.39	18.61
8	15960.00	50.2 AV	54.0	-3.8	1.29 V	205	31.59	18.61

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	62.8 PK	74.0	-11.2	1.00 H	221	54.90	7.90
2	5460.00	44.1 AV	54.0	-9.9	1.00 H	221	36.20	7.90
3	#5470.00	61.4 PK	74.0	-12.6	1.00 H	221	53.47	7.93
4	#5470.00	45.9 AV	54.0	-8.1	1.00 H	221	37.97	7.93
5	*5500.00	101.1 PK			1.00 H	221	93.08	8.02
6	*5500.00	91.4 AV			1.00 H	221	83.38	8.02
7	11000.00	61.4 PK	74.0	-12.6	1.20 H	66	46.98	14.42
8	11000.00	46.8 AV	54.0	-7.2	1.20 H	66	32.38	14.42
9	#16500.00	60.1 PK	74.0	-13.9	1.04 H	213	39.16	20.94
10	#16500.00	49.6 AV	54.0	-4.4	1.04 H	213	28.66	20.94
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	64.8 PK	74.0	-9.2	1.00 V	175	56.90	7.90
2	5460.00	46.9 AV	54.0	-7.1	1.00 V	175	39.00	7.90
3	#5470.00	69.1 PK	74.0	-4.9	1.30 V	180	61.17	7.93
4	#5470.00	53.4 AV	54.0	-0.6	1.30 V	180	45.47	7.93
5	*5500.00	111.2 PK			1.30 V	180	103.18	8.02
6	*5500.00	102.4 AV			1.30 V	180	94.38	8.02
7	11000.00	61.5 PK	74.0	-12.5	1.36 V	56	47.08	14.42
8	11000.00	50.5 AV	54.0	-3.5	1.36 V	56	36.08	14.42
9	#16500.00	61.0 PK	74.0	-13.0	1.26 V	171	40.06	20.94
10	#16500.00	50.2 AV	54.0	-3.8	1.26 V	171	29.26	20.94

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	#5470.00	53.9 PK	74.0	-20.1	1.00 H	221	45.97	7.93
2	#5470.00	40.2 AV	54.0	-13.8	1.00 H	221	32.27	7.93
3	*5580.00	107.1 PK			1.00 H	221	98.93	8.17
4	*5580.00	97.8 AV			1.00 H	221	89.63	8.17
5	11160.00	61.2 PK	74.0	-12.8	1.19 H	75	46.97	14.23
6	11160.00	46.6 AV	54.0	-7.4	1.19 H	75	32.37	14.23
7	#16740.00	59.8 PK	74.0	-14.2	1.00 H	203	38.69	21.11
8	#16740.00	48.9 AV	54.0	-5.1	1.00 H	203	27.79	21.11
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	55.4 PK	74.0	-18.6	1.30 V	180	47.47	7.93
2	#5470.00	42.1 AV	54.0	-11.9	1.30 V	180	34.17	7.93
3	*5580.00	117.5 PK			1.21 V	176	109.33	8.17
4	*5580.00	108.2 AV			1.21 V	176	100.03	8.17
5	11160.00	61.9 PK	74.0	-12.1	1.31 V	60	47.67	14.23
6	11160.00	50.9 AV	54.0	-3.1	1.31 V	60	36.67	14.23
7	#16740.00	59.8 PK	74.0	-14.2	1.18 V	159	38.69	21.11
8	#16740.00	49.2 AV	54.0	-4.8	1.18 V	159	28.09	21.11

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5660.00	106.7 PK			1.00 H	207	98.41	8.29
2	*5660.00	96.8 AV			1.00 H	207	88.51	8.29
3	#5725.00	60.7 PK	74.0	-13.3	1.00 H	207	52.31	8.39
4	#5725.00	45.3 AV	54.0	-8.7	1.00 H	207	36.91	8.39
5	11320.00	60.6 PK	74.0	-13.4	1.11 H	55	46.32	14.28
6	11320.00	45.7 AV	54.0	-8.3	1.11 H	55	31.42	14.28
7	#16980.00	60.3 PK	74.0	-13.7	1.04 H	204	38.82	21.48
8	#16980.00	49.6 AV	54.0	-4.4	1.04 H	204	28.12	21.48
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5660.00	117.0 PK			1.19 V	178	108.71	8.29
2	*5660.00	107.6 AV			1.19 V	178	99.31	8.29
3	#5725.00	71.2 PK	74.0	-2.8	1.06 V	180	62.81	8.39
4	#5725.00	53.1 AV	54.0	-0.9	1.06 V	180	44.71	8.39
5	11320.00	60.7 PK	74.0	-13.3	1.33 V	174	46.42	14.28
6	11320.00	50.2 AV	54.0	-3.8	1.33 V	174	35.92	14.28
7	#16980.00	60.2 PK	74.0	-13.8	1.28 V	202	38.72	21.48
8	#16980.00	50.2 AV	54.0	-3.8	1.28 V	202	28.72	21.48

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	101.2 PK			1.00 H	198	92.85	8.35
2	*5700.00	91.6 AV			1.00 H	198	83.25	8.35
3	#5725.00	61.5 PK	74.0	-12.5	1.00 H	198	53.11	8.39
4	#5725.00	45.9 AV	54.0	-8.1	1.00 H	198	37.51	8.39
5	11400.00	61.7 PK	74.0	-12.3	1.13 H	52	47.28	14.42
6	11400.00	46.8 AV	54.0	-7.2	1.13 H	52	32.38	14.42
7	#17100.00	59.3 PK	74.0	-14.7	1.00 H	183	37.53	21.77
8	#17100.00	48.7 AV	54.0	-5.3	1.00 H	183	26.93	21.77
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	112.1 PK			1.07 V	174	103.75	8.35
2	*5700.00	102.8 AV			1.07 V	174	94.45	8.35
3	#5725.00	70.6 PK	74.0	-3.4	1.07 V	174	62.21	8.39
4	**#5725.00**	**53.9 AV**	**54.0**	**-0.1**	**1.07 V**	**174**	**45.51**	**8.39**
5	11400.00	60.8 PK	74.0	-13.2	1.27 V	174	46.38	14.42
6	11400.00	49.3 AV	54.0	-4.7	1.27 V	174	34.88	14.42
7	#17100.00	61.5 PK	74.0	-12.5	1.30 V	197	39.73	21.77
8	#17100.00	50.5 AV	54.0	-3.5	1.30 V	197	28.73	21.77

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5715.00	58.2 PK	74.0	-15.8	1.10 H	200	16.71	41.49
2	#5715.00	40.6 AV	54.0	-13.4	1.10 H	200	-0.89	41.49
3	#5725.00	67.1 PK	78.2	-11.1	1.10 H	200	25.59	41.51
4	*5745.00	100.1 PK			1.10 H	200	58.55	41.55
5	*5745.00	91.1 AV			1.10 H	200	49.55	41.55
6	11490.00	52.2 PK	74.0	-21.8	1.00 H	226	5.11	47.09
7	11490.00	37.7 AV	54.0	-16.3	1.00 H	226	-9.39	47.09
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	#5715.00	65.1 PK	74.0	-8.9	1.07 V	174	23.61	41.49
2	#5715.00	47.2 AV	54.0	-6.8	1.07 V	174	5.71	41.49
3	#5725.00	77.7 PK	78.2	-0.5	1.07 V	174	36.19	41.51
4	*5745.00	110.7 PK			1.07 V	174	69.15	41.55
5	*5745.00	102.0 AV			1.07 V	174	60.45	41.55
6	11490.00	60.4 PK	74.0	-13.6	1.29 V	178	13.31	47.09
7	11490.00	49.2 AV	54.0	-4.8	1.29 V	178	2.11	47.09

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5715.00	62.4 PK	74.0	-11.6	1.09 H	212	20.91	41.49
2	#5715.00	46.2 AV	54.0	-7.8	1.09 H	212	4.71	41.49
3	#5725.00	65.2 PK	78.2	-13.0	1.09 H	212	23.69	41.51
4	*5785.00	110.1 PK			1.09 H	212	68.47	41.63
5	*5785.00	100.1 AV			1.09 H	212	58.47	41.63
6	#5850.00	59.4 PK	78.2	-18.8	1.09 H	212	17.56	41.84
7	#5860.00	57.1 PK	74.0	-16.9	1.09 H	212	15.22	41.88
8	#5860.00	44.3 AV	54.0	-9.7	1.09 H	212	2.42	41.88
9	11570.00	51.7 PK	74.0	-22.3	1.04 H	218	4.63	47.07
10	11570.00	37.5 AV	54.0	-16.5	1.04 H	218	-9.57	47.07
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	#5715.00	71.5 PK	74.0	-2.5	1.07 V	174	30.01	41.49
2	#5715.00	53.3 AV	54.0	-0.7	1.07 V	174	11.81	41.49
3	#5725.00	74.5 PK	78.2	-3.7	1.07 V	174	32.99	41.51
4	*5785.00	120.1 PK			1.07 V	174	78.47	41.63
5	*5785.00	110.1 AV			1.07 V	174	68.47	41.63
6	#5850.00	68.1 PK	78.2	-10.1	1.07 V	174	26.26	41.84
7	#5860.00	66.3 PK	74.0	-7.7	1.07 V	174	24.42	41.88
8	#5860.00	51.1 AV	54.0	-2.9	1.07 V	174	9.22	41.88
9	11570.00	61.2 PK	74.0	-12.8	1.27 V	183	14.13	47.07
10	11570.00	49.6 AV	54.0	-4.4	1.27 V	183	2.53	47.07

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	103.1 PK			1.14 H	203	61.35	41.75
2	*5825.00	94.4 AV			1.14 H	203	52.65	41.75
3	#5850.00	59.9 PK	78.2	-18.3	1.14 H	203	18.06	41.84
4	#5860.00	57.5 PK	74.0	-16.5	1.14 H	203	15.62	41.88
5	#5860.00	44.8 AV	54.0	-9.2	1.14 H	203	2.92	41.88
6	11650.00	51.8 PK	74.0	-22.2	1.04 H	218	4.71	47.09
7	11650.00	37.7 AV	54.0	-16.3	1.04 H	218	-9.39	47.09
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	113.7 PK			1.07 V	174	71.95	41.75
2	*5825.00	105.2 AV			1.07 V	174	63.45	41.75
3	#5850.00	77.3 PK	78.2	-0.9	1.07 V	174	35.46	41.84
4	#5860.00	69.5 PK	74.0	-4.5	1.07 V	174	27.62	41.88
5	#5860.00	53.1 AV	54.0	-0.9	1.07 V	174	11.22	41.88
6	11650.00	61.3 PK	74.0	-12.7	1.31 V	164	14.21	47.09
7	11650.00	49.5 AV	54.0	-4.5	1.31 V	164	2.41	47.09

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	61.2 PK	74.0	-12.8	1.03 H	161	54.40	6.80
2	5150.00	45.5 AV	54.0	-8.5	1.03 H	161	38.70	6.80
3	*5180.00	104.2 PK			1.03 H	161	97.25	6.95
4	*5180.00	94.6 AV			1.03 H	161	87.65	6.95
5	#10360.00	60.6 PK	74.0	-13.4	1.17 H	62	47.49	13.11
6	#10360.00	45.8 AV	54.0	-8.2	1.17 H	62	32.69	13.11
7	15540.00	60.0 PK	74.0	-14.0	1.07 H	184	41.31	18.69
8	15540.00	49.3 AV	54.0	-4.7	1.07 H	184	30.61	18.69
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	68.6 PK	74.0	-5.4	1.03 V	160	61.80	6.80
2	5150.00	53.4 AV	54.0	-0.6	1.03 V	160	46.60	6.80
3	*5180.00	115.3 PK			1.03 V	160	108.35	6.95
4	*5180.00	105.9 AV			1.03 V	160	98.95	6.95
5	#10360.00	64.1 PK	74.0	-9.9	1.05 V	322	50.99	13.11
6	#10360.00	51.1 AV	54.0	-2.9	1.05 V	322	37.99	13.11
7	15540.00	60.1 PK	74.0	-13.9	1.00 V	168	41.41	18.69
8	15540.00	49.1 AV	54.0	-4.9	1.00 V	168	30.41	18.69

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	61.5 PK	74.0	-12.5	1.00 H	222	54.70	6.80
2	5150.00	46.2 AV	54.0	-7.8	1.00 H	222	39.40	6.80
3	*5200.00	109.7 PK			1.00 H	222	102.65	7.05
4	*5200.00	98.2 AV			1.00 H	222	91.15	7.05
5	#10400.00	60.7 PK	74.0	-13.3	1.13 H	52	47.48	13.22
6	#10400.00	46.0 AV	54.0	-8.0	1.13 H	52	32.78	13.22
7	15600.00	60.0 PK	74.0	-14.0	1.02 H	229	41.30	18.70
8	15600.00	48.8 AV	54.0	-5.2	1.02 H	229	30.10	18.70
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	5150.00	71.0 PK	74.0	-3.0	1.03 V	159	64.20	6.80
2	**5150.00**	**53.9 AV**	**54.0**	**-0.1**	**1.03 V**	**159**	**47.10**	**6.80**
3	*5200.00	119.6 PK			1.03 V	160	112.55	7.05
4	*5200.00	109.9 AV			1.03 V	160	102.85	7.05
5	5360.00	64.8 PK	74.0	-9.2	1.07 V	140	57.26	7.54
6	5360.00	47.0 AV	54.0	-7.0	1.07 V	140	39.46	7.54
7	#10400.00	66.0 PK	74.0	-8.0	1.02 V	315	52.78	13.22
8	#10400.00	53.0 AV	54.0	-1.0	1.02 V	315	39.78	13.22
9	15600.00	60.1 PK	74.0	-13.9	1.00 V	205	41.40	18.70
10	15600.00	48.8 AV	54.0	-5.2	1.00 V	205	30.10	18.70

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	62.1 PK	74.0	-11.9	1.00 H	214	55.30	6.80
2	5150.00	44.1 AV	54.0	-9.9	1.00 H	214	37.30	6.80
3	*5240.00	107.6 PK			1.00 H	214	100.44	7.16
4	*5240.00	98.1 AV			1.00 H	214	90.94	7.16
5	#10480.00	60.9 PK	74.0	-13.1	1.14 H	56	47.74	13.16
6	#10480.00	46.2 AV	54.0	-7.8	1.14 H	56	33.04	13.16
7	15720.00	60.1 PK	74.0	-13.9	1.00 H	213	41.70	18.40
8	15720.00	49.5 AV	54.0	-4.5	1.00 H	213	31.10	18.40
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	64.9 PK	74.0	-9.1	1.03 V	159	58.10	6.80
2	5150.00	47.6 AV	54.0	-6.4	1.03 V	159	40.80	6.80
3	*5240.00	118.3 PK			1.01 V	159	111.14	7.16
4	*5240.00	109.1 AV			1.01 V	159	101.94	7.16
5	#10480.00	66.2 PK	74.0	-7.8	1.03 V	336	53.04	13.16
6	#10480.00	53.4 AV	54.0	-0.6	1.03 V	336	40.24	13.16
7	15720.00	60.7 PK	74.0	-13.3	1.00 V	204	42.30	18.40
8	15720.00	49.2 AV	54.0	-4.8	1.00 V	204	30.80	18.40

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 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	*5260.00	108.5 PK			1.00 H	204	101.32	7.18
2	*5260.00	98.1 AV			1.00 H	204	90.92	7.18
3	5350.00	61.1 PK	74.0	-12.9	1.00 H	204	53.61	7.49
4	5350.00	44.1 AV	54.0	-9.9	1.00 H	204	36.61	7.49
5	#10520.00	60.8 PK	74.0	-13.2	1.18 H	53	47.58	13.22
6	#10520.00	46.2 AV	54.0	-7.8	1.18 H	53	32.98	13.22
7	15780.00	60.3 PK	74.0	-13.7	1.06 H	181	41.79	18.51
8	15780.00	49.4 AV	54.0	-4.6	1.06 H	181	30.89	18.51
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	119.1 PK			1.00 V	144	111.92	7.18
2	*5260.00	109.4 AV			1.00 V	144	102.22	7.18
3	5350.00	64.9 PK	74.0	-9.1	1.00 V	144	57.41	7.49
4	5350.00	47.9 AV	54.0	-6.1	1.00 V	144	40.41	7.49
5	#10520.00	66.1 PK	74.0	-7.9	1.26 V	338	52.88	13.22
6	**#10520.00**	**53.9 AV**	**54.0**	**-0.1**	**1.26 V**	**338**	**40.68**	**13.22**
7	15780.00	60.1 PK	74.0	-13.9	1.00 V	155	41.59	18.51
8	15780.00	49.1 AV	54.0	-4.9	1.00 V	155	30.59	18.51

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	109.4 PK			1.00 H	203	102.11	7.29
2	*5300.00	98.7 AV			1.00 H	203	91.41	7.29
3	5350.00	64.2 PK	74.0	-9.8	1.00 H	203	56.71	7.49
4	5350.00	47.5 AV	54.0	-6.5	1.00 H	203	40.01	7.49
5	10600.00	61.1 PK	74.0	-12.9	1.00 H	49	47.57	13.53
6	10600.00	46.1 AV	54.0	-7.9	1.00 H	49	32.57	13.53
7	15900.00	60.3 PK	74.0	-13.7	1.06 H	183	41.65	18.65
8	15900.00	49.6 AV	54.0	-4.4	1.06 H	183	30.95	18.65
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	119.5 PK			1.00 V	152	112.21	7.29
2	*5300.00	109.7 AV			1.00 V	152	102.41	7.29
3	5350.00	70.8 PK	74.0	-3.2	1.17 V	133	63.31	7.49
4	**5350.00**	**53.9 AV**	**54.0**	**-0.1**	**1.17 V**	**133**	**46.41**	**7.49**
5	10600.00	64.1 PK	74.0	-9.9	1.02 V	331	50.57	13.53
6	10600.00	52.6 AV	54.0	-1.4	1.02 V	331	39.07	13.53
7	15900.00	60.3 PK	74.0	-13.7	1.02 V	207	41.65	18.65
8	15900.00	48.6 AV	54.0	-5.4	1.02 V	207	29.95	18.65

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	104.2 PK			1.00 H	190	96.82	7.38
2	*5320.00	94.2 AV			1.00 H	190	86.82	7.38
3	5350.00	63.6 PK	74.0	-10.4	1.00 H	190	56.11	7.49
4	5350.00	47.0 AV	54.0	-7.0	1.00 H	190	39.51	7.49
5	10640.00	60.5 PK	74.0	-13.5	1.19 H	43	46.87	13.63
6	10640.00	46.0 AV	54.0	-8.0	1.19 H	43	32.37	13.63
7	15960.00	59.3 PK	74.0	-14.7	1.00 H	211	40.69	18.61
8	15960.00	48.7 AV	54.0	-5.3	1.00 H	211	30.09	18.61
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	113.4 PK			1.23 V	181	106.02	7.38
2	*5320.00	103.2 AV			1.23 V	181	95.82	7.38
3	5350.00	70.3 PK	74.0	-3.7	1.23 V	181	62.81	7.49
4	5350.00	53.8 AV	54.0	-0.2	1.23 V	181	46.31	7.49
5	10640.00	62.1 PK	74.0	-11.9	1.00 V	317	48.47	13.63
6	10640.00	50.2 AV	54.0	-3.8	1.00 V	317	36.57	13.63
7	15960.00	60.8 PK	74.0	-13.2	1.01 V	180	42.19	18.61
8	15960.00	49.1 AV	54.0	-4.9	1.01 V	180	30.49	18.61

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	5413.00	62.0 PK	74.0	-12.0	1.00 H	220	54.26	7.74
2	5413.00	43.5 AV	54.0	-10.5	1.00 H	220	35.76	7.74
3	#5470.00	61.7 PK	74.0	-12.3	1.00 H	220	53.77	7.93
4	#5470.00	46.4 AV	54.0	-7.6	1.00 H	220	38.47	7.93
5	*5500.00	104.3 PK			1.00 H	220	96.28	8.02
6	*5500.00	94.2 AV			1.00 H	220	86.18	8.02
7	11000.00	61.9 PK	74.0	-12.1	1.20 H	69	47.48	14.42
8	11000.00	46.9 AV	54.0	-7.1	1.20 H	69	32.48	14.42
9	#16500.00	60.0 PK	74.0	-14.0	1.01 H	183	39.06	20.94
10	#16500.00	49.1 AV	54.0	-4.9	1.01 H	183	28.16	20.94
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	70.1 PK	74.0	-3.9	1.28 V	182	62.17	7.93
2	#5470.00	53.5 AV	54.0	-0.5	1.28 V	182	45.57	7.93
3	*5500.00	115.6 PK			1.28 V	182	107.58	8.02
4	*5500.00	104.9 AV			1.28 V	182	96.88	8.02
5	11000.00	62.0 PK	74.0	-12.0	1.00 V	322	47.58	14.42
6	11000.00	50.1 AV	54.0	-3.9	1.00 V	322	35.68	14.42
7	#16500.00	60.3 PK	74.0	-13.7	1.01 V	160	39.36	20.94
8	#16500.00	48.6 AV	54.0	-5.4	1.01 V	160	27.66	20.94

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	110.1 PK			1.00 H	219	101.93	8.17
2	*5580.00	100.2 AV			1.00 H	219	92.03	8.17
3	11160.00	60.9 PK	74.0	-13.1	1.11 H	145	46.67	14.23
4	11160.00	46.0 AV	54.0	-8.0	1.11 H	145	31.77	14.23
5	#16740.00	59.9 PK	74.0	-14.1	1.08 H	192	38.79	21.11
6	#16740.00	49.2 AV	54.0	-4.8	1.08 H	192	28.09	21.11
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	120.2 PK			1.02 V	158	112.03	8.17
2	*5580.00	110.3 AV			1.02 V	158	102.13	8.17
3	11160.00	56.5 PK	74.0	-17.5	1.00 V	309	42.27	14.23
4	11160.00	47.8 AV	54.0	-6.2	1.00 V	309	33.57	14.23
5	#16740.00	62.9 PK	74.0	-11.1	1.00 V	70	41.79	21.11
6	#16740.00	50.8 AV	54.0	-3.2	1.00 V	70	29.69	21.11

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5660.00	111.1 PK			1.00 H	228	102.81	8.29
2	*5660.00	101.2 AV			1.00 H	228	92.91	8.29
3	#5725.00	61.4 PK	74.0	-12.6	1.00 H	228	53.01	8.39
4	#5725.00	46.0 AV	54.0	-8.0	1.00 H	228	37.61	8.39
5	11320.00	61.2 PK	74.0	-12.8	1.17 H	38	46.92	14.28
6	11320.00	46.1 AV	54.0	-7.9	1.17 H	38	31.82	14.28
7	#16980.00	60.7 PK	74.0	-13.3	1.01 H	179	39.22	21.48
8	#16980.00	49.5 AV	54.0	-4.5	1.01 H	179	28.02	21.48
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5660.00	121.4 PK			1.17 V	176	113.11	8.29
2	*5660.00	111.6 AV			1.17 V	176	103.31	8.29
3	#5725.00	71.1 PK	74.0	-2.9	1.17 V	176	62.71	8.39
4	#5725.00	53.6 AV	54.0	-0.4	1.17 V	176	45.21	8.39
5	11320.00	57.4 PK	74.0	-16.6	1.03 V	316	43.12	14.28
6	11320.00	48.5 AV	54.0	-5.5	1.03 V	316	34.22	14.28
7	#16980.00	63.2 PK	74.0	-10.8	1.00 V	98	41.72	21.48
8	#16980.00	51.1 AV	54.0	-2.9	1.00 V	98	29.62	21.48

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	104.1 PK			1.00 H	232	95.75	8.35
2	*5700.00	93.8 AV			1.00 H	232	85.45	8.35
3	#5725.00	60.5 PK	74.0	-13.5	1.00 H	232	52.11	8.39
4	#5725.00	45.2 AV	54.0	-8.8	1.00 H	232	36.81	8.39
5	11400.00	60.7 PK	74.0	-13.3	1.17 H	65	46.28	14.42
6	11400.00	46.1 AV	54.0	-7.9	1.17 H	65	31.68	14.42
7	#17100.00	59.9 PK	74.0	-14.1	1.00 H	229	38.13	21.77
8	#17100.00	49.3 AV	54.0	-4.7	1.00 H	229	27.53	21.77
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			1.07 V	180	106.65	8.35
2	*5700.00	104.2 AV			1.07 V	180	95.85	8.35
3	#5725.00	70.8 PK	74.0	-3.2	1.07 V	180	62.41	8.39
4	**#5725.00**	**53.9 AV**	**54.0**	**-0.1**	**1.07 V**	**180**	**45.51**	**8.39**
5	11400.00	57.2 PK	74.0	-16.8	1.00 V	319	42.78	14.42
6	11400.00	48.4 AV	54.0	-5.6	1.00 V	319	33.98	14.42
7	#17100.00	62.2 PK	74.0	-11.8	1.00 V	87	40.43	21.77
8	#17100.00	50.4 AV	54.0	-3.6	1.00 V	87	28.63	21.77

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5715.00	56.5 PK	74.0	-17.5	1.15 H	193	15.01	41.49
2	#5715.00	43.8 AV	54.0	-10.2	1.15 H	193	2.31	41.49
3	#5725.00	59.3 PK	78.2	-18.9	1.15 H	193	17.79	41.51
4	*5745.00	105.1 PK			1.15 H	193	63.55	41.55
5	*5745.00	95.4 AV			1.15 H	193	53.85	41.55
6	11490.00	51.7 PK	74.0	-22.3	1.00 H	216	4.61	47.09
7	11490.00	37.6 AV	54.0	-16.4	1.00 H	216	-9.49	47.09
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	#5715.00	69.1 PK	74.0	-4.9	1.06 V	176	27.61	41.49
2	#5715.00	50.7 AV	54.0	-3.3	1.06 V	176	9.21	41.49
3	#5725.00	77.7 PK	78.2	-0.5	1.06 V	176	36.19	41.51
4	*5745.00	116.1 PK			1.06 V	176	74.55	41.55
5	*5745.00	106.8 AV			1.06 V	176	65.25	41.55
6	11490.00	61.0 PK	74.0	-13.0	1.30 V	171	13.91	47.09
7	11490.00	49.6 AV	54.0	-4.4	1.30 V	171	2.51	47.09

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5715.00	62.3 PK	74.0	-11.7	1.16 H	201	20.81	41.49
2	#5715.00	46.3 AV	54.0	-7.7	1.16 H	201	4.81	41.49
3	#5725.00	65.8 PK	78.2	-12.4	1.16 H	201	24.29	41.51
4	*5785.00	112.1 PK			1.16 H	201	70.47	41.63
5	*5785.00	103.1 AV			1.16 H	201	61.47	41.63
6	#5850.00	59.2 PK	78.2	-19.0	1.16 H	201	17.36	41.84
7	#5860.00	56.7 PK	74.0	-17.3	1.16 H	201	14.82	41.88
8	#5860.00	43.8 AV	54.0	-10.2	1.16 H	201	1.92	41.88
9	11570.00	51.6 PK	74.0	-22.4	1.00 H	222	4.53	47.07
10	11570.00	37.4 AV	54.0	-16.6	1.00 H	222	-9.67	47.07
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	#5715.00	70.1 PK	74.0	-3.9	1.06 V	176	28.61	41.49
2	#5715.00	50.2 AV	54.0	-3.8	1.06 V	176	8.71	41.49
3	#5725.00	71.6 PK	78.2	-6.6	1.06 V	176	30.09	41.51
4	*5785.00	122.9 PK			1.06 V	176	81.27	41.63
5	*5785.00	113.5 AV			1.06 V	176	71.87	41.63
6	#5850.00	72.2 PK	78.2	-6.0	1.06 V	176	30.36	41.84
7	#5860.00	71.5 PK	74.0	-2.5	1.06 V	176	29.62	41.88
8	#5860.00	53.7 AV	54.0	-0.3	1.06 V	176	11.82	41.88
9	11570.00	60.4 PK	74.0	-13.6	1.27 V	178	13.33	47.07
10	11570.00	49.0 AV	54.0	-5.0	1.27 V	178	1.93	47.07

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	106.4 PK			1.16 H	119	64.65	41.75
2	*5825.00	97.4 AV			1.16 H	119	55.65	41.75
3	#5850.00	60.0 PK	78.2	-18.2	1.16 H	119	18.16	41.84
4	#5860.00	57.9 PK	74.0	-16.1	1.16 H	119	16.02	41.88
5	#5860.00	45.2 AV	54.0	-8.8	1.16 H	119	3.32	41.88
6	11650.00	52.4 PK	74.0	-21.6	1.02 H	216	5.31	47.09
7	11650.00	38.1 AV	54.0	-15.9	1.02 H	216	-8.99	47.09
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	117.3 PK			1.06 V	176	75.55	41.75
2	*5825.00	108.2 AV			1.06 V	176	66.45	41.75
3	#5850.00	77.5 PK	78.2	-0.7	1.06 V	176	35.66	41.84
4	#5860.00	72.4 PK	74.0	-1.6	1.06 V	176	30.52	41.88
5	#5860.00	53.0 AV	54.0	-1.0	1.06 V	176	11.12	41.88
6	11650.00	60.3 PK	74.0	-13.7	1.31 V	177	13.21	47.09
7	11650.00	49.1 AV	54.0	-4.9	1.31 V	177	2.01	47.09

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	62.1 PK	74.0	-11.9	1.00 H	219	55.30	6.80
2	5150.00	47.2 AV	54.0	-6.8	1.00 H	219	40.40	6.80
3	*5190.00	97.2 PK			1.00 H	219	90.20	7.00
4	*5190.00	88.9 AV			1.00 H	219	81.90	7.00
5	#10380.00	61.4 PK	74.0	-12.6	1.10 H	62	48.23	13.17
6	#10380.00	46.6 AV	54.0	-7.4	1.10 H	62	33.43	13.17
7	15570.00	59.6 PK	74.0	-14.4	1.06 H	207	40.91	18.69
8	15570.00	49.0 AV	54.0	-5.0	1.06 H	207	30.31	18.69
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	67.2 PK	74.0	-6.8	1.03 V	160	60.40	6.80
2	5150.00	53.5 AV	54.0	-0.5	1.03 V	160	46.70	6.80
3	*5190.00	107.9 PK			1.03 V	160	100.90	7.00
4	*5190.00	98.3 AV			1.03 V	160	91.30	7.00
5	#10380.00	56.7 PK	74.0	-17.3	1.00 V	320	43.53	13.17
6	#10380.00	47.8 AV	54.0	-6.2	1.00 V	320	34.63	13.17
7	15570.00	62.3 PK	74.0	-11.7	1.00 V	81	43.61	18.69
8	15570.00	50.2 AV	54.0	-3.8	1.00 V	81	31.51	18.69

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	102.9 PK			1.00 H	235	95.78	7.12
2	*5230.00	93.8 AV			1.00 H	235	86.68	7.12
3	5350.00	61.1 PK	74.0	-12.9	1.00 H	235	53.61	7.49
4	5350.00	46.2 AV	54.0	-7.8	1.00 H	235	38.71	7.49
5	#10460.00	61.2 PK	74.0	-12.8	1.17 H	26	48.02	13.18
6	#10460.00	46.5 AV	54.0	-7.5	1.17 H	26	33.32	13.18
7	15690.00	59.4 PK	74.0	-14.6	1.03 H	194	41.02	18.38
8	15690.00	49.0 AV	54.0	-5.0	1.03 H	194	30.62	18.38
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	113.5 PK			1.03 V	158	106.38	7.12
2	*5230.00	104.0 AV			1.03 V	158	96.88	7.12
3	5350.00	66.2 PK	74.0	-7.8	1.03 V	158	58.71	7.49
4	5350.00	53.3 AV	54.0	-0.7	1.03 V	158	45.81	7.49
5	#10460.00	57.0 PK	74.0	-17.0	1.00 V	323	43.82	13.18
6	#10460.00	48.6 AV	54.0	-5.4	1.00 V	323	35.42	13.18
7	15690.00	62.3 PK	74.0	-11.7	1.00 V	91	43.92	18.38
8	15690.00	50.4 AV	54.0	-3.6	1.00 V	91	32.02	18.38

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	101.4 PK			1.00 H	223	94.18	7.22
2	*5270.00	90.5 AV			1.00 H	223	83.28	7.22
3	5350.00	61.2 PK	74.0	-12.8	1.00 H	223	53.71	7.49
4	5350.00	46.1 AV	54.0	-7.9	1.00 H	223	38.61	7.49
5	#10540.00	61.4 PK	74.0	-12.6	1.14 H	76	48.11	13.29
6	#10540.00	46.3 AV	54.0	-7.7	1.14 H	76	33.01	13.29
7	15810.00	59.6 PK	74.0	-14.4	1.07 H	191	41.03	18.57
8	15810.00	48.7 AV	54.0	-5.3	1.07 H	191	30.13	18.57
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	*5270.00	112.5 PK			1.17 V	132	105.28	7.22
2	*5270.00	101.6 AV			1.17 V	132	94.38	7.22
3	5350.00	68.4 PK	74.0	-5.6	1.17 V	132	60.91	7.49
4	5350.00	53.7 AV	54.0	-0.3	1.17 V	132	46.21	7.49
5	#10540.00	57.1 PK	74.0	-16.9	1.00 V	307	43.81	13.29
6	#10540.00	48.5 AV	54.0	-5.5	1.00 V	307	35.21	13.29
7	15810.00	61.9 PK	74.0	-12.1	1.00 V	86	43.33	18.57
8	15810.00	50.0 AV	54.0	-4.0	1.00 V	86	31.43	18.57

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	94.3 PK			1.00 H	230	86.97	7.33
2	*5310.00	85.9 AV			1.00 H	230	78.57	7.33
3	5350.00	59.7 PK	74.0	-14.3	1.00 H	230	52.21	7.49
4	5350.00	45.1 AV	54.0	-8.9	1.00 H	230	37.61	7.49
5	10620.00	61.6 PK	74.0	-12.4	1.12 H	36	48.01	13.59
6	10620.00	46.4 AV	54.0	-7.6	1.12 H	36	32.81	13.59
7	15930.00	60.0 PK	74.0	-14.0	1.04 H	209	41.36	18.64
8	15930.00	49.3 AV	54.0	-4.7	1.04 H	209	30.66	18.64
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	105.8 PK			1.08 V	223	98.47	7.33
2	*5310.00	96.3 AV			1.08 V	223	88.97	7.33
3	5350.00	66.8 PK	74.0	-7.2	1.08 V	223	59.31	7.49
4	5350.00	53.5 AV	54.0	-0.5	1.08 V	223	46.01	7.49
5	10620.00	56.1 PK	74.0	-17.9	1.00 V	317	42.51	13.59
6	10620.00	47.3 AV	54.0	-6.7	1.00 V	317	33.71	13.59
7	15930.00	61.7 PK	74.0	-12.3	1.00 V	42	43.06	18.64
8	15930.00	50.3 AV	54.0	-3.7	1.00 V	42	31.66	18.64

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	58.2 PK	74.0	-15.8	1.00 H	244	50.30	7.90
2	5460.00	45.7 AV	54.0	-8.3	1.00 H	244	37.80	7.90
3	#5470.00	60.8 PK	74.0	-13.2	1.00 H	244	52.87	7.93
4	#5470.00	47.9 AV	54.0	-6.1	1.00 H	244	39.97	7.93
5	*5510.00	100.1 PK			1.00 H	244	92.06	8.04
6	*5510.00	90.4 AV			1.00 H	244	82.36	8.04
7	11020.00	61.6 PK	74.0	-12.4	1.08 H	56	47.23	14.37
8	11020.00	46.8 AV	54.0	-7.2	1.08 H	56	32.43	14.37
9	#16530.00	59.7 PK	74.0	-14.3	1.00 H	182	38.78	20.92
10	#16530.00	49.0 AV	54.0	-5.0	1.00 H	182	28.08	20.92
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	67.2 PK	74.0	-6.8	1.29 V	178	59.30	7.90
2	5460.00	52.7 AV	54.0	-1.3	1.29 V	178	44.80	7.90
3	#5470.00	68.6 PK	74.0	-5.4	1.29 V	178	60.67	7.93
4	#5470.00	53.3 AV	54.0	-0.7	1.29 V	178	45.37	7.93
5	*5510.00	110.2 PK			1.29 V	178	102.16	8.04
6	*5510.00	101.1 AV			1.29 V	178	93.06	8.04
7	11020.00	57.5 PK	74.0	-16.5	1.00 V	284	43.13	14.37
8	11020.00	48.5 AV	54.0	-5.5	1.00 V	284	34.13	14.37
9	#16530.00	61.5 PK	74.0	-12.5	1.00 V	101	40.58	20.92
10	#16530.00	50.0 AV	54.0	-4.0	1.00 V	101	29.08	20.92

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	#5470.00	61.1 PK	74.0	-12.9	1.00 H	231	53.17	7.93
2	#5470.00	48.3 AV	54.0	-5.7	1.00 H	231	40.37	7.93
3	*5550.00	101.4 PK			1.00 H	231	93.29	8.11
4	*5550.00	91.8 AV			1.00 H	231	83.69	8.11
5	11100.00	61.2 PK	74.0	-12.8	1.12 H	44	46.98	14.22
6	11100.00	46.3 AV	54.0	-7.7	1.12 H	44	32.08	14.22
7	#16650.00	59.8 PK	74.0	-14.2	1.05 H	207	38.86	20.94
8	#16650.00	49.1 AV	54.0	-4.9	1.05 H	207	28.16	20.94
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	66.1 PK	74.0	-7.9	1.40 V	177	58.17	7.93
2	#5470.00	53.5 AV	54.0	-0.5	1.40 V	177	45.57	7.93
3	*5550.00	112.1 PK			1.40 V	177	103.99	8.11
4	*5550.00	102.6 AV			1.40 V	177	94.49	8.11
5	11100.00	56.6 PK	74.0	-17.4	1.00 V	307	42.38	14.22
6	11100.00	48.0 AV	54.0	-6.0	1.00 V	307	33.78	14.22
7	#16650.00	61.7 PK	74.0	-12.3	1.00 V	87	40.76	20.94
8	#16650.00	49.7 AV	54.0	-4.3	1.00 V	87	28.76	20.94

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	101.9 PK			1.00 H	234	93.59	8.31
2	*5670.00	91.1 AV			1.00 H	234	82.79	8.31
3	#5725.00	60.0 PK	74.0	-14.0	1.00 H	234	51.61	8.39
4	#5725.00	47.6 AV	54.0	-6.4	1.00 H	234	39.21	8.39
5	11340.00	60.2 PK	74.0	-13.8	1.19 H	36	45.88	14.32
6	11340.00	45.4 AV	54.0	-8.6	1.19 H	36	31.08	14.32
7	#17010.00	59.4 PK	74.0	-14.6	1.00 H	214	37.87	21.53
8	#17010.00	48.6 AV	54.0	-5.4	1.00 H	214	27.07	21.53
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	112.9 PK			1.06 V	179	104.59	8.31
2	*5670.00	102.1 AV			1.06 V	179	93.79	8.31
3	#5725.00	71.7 PK	74.0	-2.3	1.06 V	179	63.31	8.39
4	**#5725.00**	**53.9 AV**	**54.0**	**-0.1**	**1.06 V**	**179**	**45.51**	**8.39**
5	11340.00	56.6 PK	74.0	-17.4	1.00 V	329	42.28	14.32
6	11340.00	48.2 AV	54.0	-5.8	1.00 V	329	33.88	14.32
7	#17010.00	62.7 PK	74.0	-11.3	1.00 V	95	41.17	21.53
8	#17010.00	50.8 AV	54.0	-3.2	1.00 V	95	29.27	21.53

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5715.00	57.2 PK	74.0	-16.8	1.16 H	119	15.71	41.49
2	#5715.00	44.2 AV	54.0	-9.8	1.16 H	119	2.71	41.49
3	#5725.00	59.0 PK	78.2	-19.2	1.16 H	119	17.49	41.51
4	*5755.00	101.1 PK			1.16 H	119	59.53	41.57
5	*5755.00	90.1 AV			1.16 H	119	48.53	41.57
6	11510.00	51.6 PK	74.0	-22.4	1.00 H	223	4.50	47.10
7	11510.00	37.4 AV	54.0	-16.6	1.00 H	223	-9.70	47.10
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	#5715.00	72.2 PK	74.0	-1.8	1.06 V	176	30.71	41.49
2	#5715.00	53.1 AV	54.0	-0.9	1.06 V	176	11.61	41.49
3	#5725.00	73.2 PK	78.2	-5.0	1.06 V	176	31.69	41.51
4	*5755.00	111.6 PK			1.06 V	176	70.03	41.57
5	*5755.00	101.1 AV			1.06 V	176	59.53	41.57
6	11510.00	61.4 PK	74.0	-12.6	1.25 V	188	14.30	47.10
7	11510.00	49.8 AV	54.0	-4.2	1.25 V	188	2.70	47.10

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	103.1 PK			1.15 H	120	61.45	41.65
2	*5795.00	92.6 AV			1.15 H	120	50.95	41.65
3	#5850.00	60.1 PK	78.2	-18.1	1.15 H	120	18.26	41.84
4	#5860.00	57.3 PK	74.0	-16.7	1.15 H	120	15.42	41.88
5	#5860.00	44.4 AV	54.0	-9.6	1.15 H	120	2.52	41.88
6	11590.00	52.1 PK	74.0	-21.9	1.00 H	229	5.04	47.06
7	11590.00	37.9 AV	54.0	-16.1	1.00 H	229	-9.16	47.06
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	114.1 PK			1.06 V	176	72.45	41.65
2	*5795.00	103.8 AV			1.06 V	176	62.15	41.65
3	#5850.00	72.7 PK	78.2	-5.5	1.06 V	176	30.86	41.84
4	#5860.00	69.5 PK	74.0	-4.5	1.06 V	176	27.62	41.88
5	#5860.00	53.1 AV	54.0	-0.9	1.06 V	176	11.22	41.88
6	11590.00	61.2 PK	74.0	-12.8	1.24 V	187	14.14	47.06
7	11590.00	49.8 AV	54.0	-4.2	1.24 V	187	2.74	47.06

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.

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CHANNEL	TX Channel 42	**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	60.4 PK	74.0	-13.6	1.00 H	248	53.60	6.80
2	5150.00	47.3 AV	54.0	-6.7	1.00 H	248	40.50	6.80
3	*5210.00	95.8 PK			1.00 H	248	88.74	7.06
4	*5210.00	84.9 AV			1.00 H	248	77.84	7.06
5	#10420.00	60.9 PK	74.0	-13.1	1.07 H	48	47.70	13.20
6	#10420.00	46.6 AV	54.0	-7.4	1.07 H	48	33.40	13.20
7	15630.00	59.1 PK	74.0	-14.9	1.00 H	227	40.50	18.60
8	15630.00	48.9 AV	54.0	-5.1	1.00 H	227	30.30	18.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	68.7 PK	74.0	-5.3	1.01 V	160	61.90	6.80
2	5150.00	53.6 AV	54.0	-0.4	1.01 V	160	46.80	6.80
3	*5210.00	106.8 PK			1.01 V	160	99.74	7.06
4	*5210.00	94.9 AV			1.01 V	160	87.84	7.06
5	#10420.00	56.1 PK	74.0	-17.9	1.00 V	317	42.90	13.20
6	#10420.00	46.2 AV	54.0	-7.8	1.00 V	317	33.00	13.20
7	15630.00	59.9 PK	74.0	-14.1	1.00 V	79	41.30	18.60
8	15630.00	48.1 AV	54.0	-5.9	1.00 V	79	29.50	18.60

REMARKS:

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

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.9 PK	74.0	-15.1	1.00 H	219	52.10	6.80
2	5150.00	48.7 AV	54.0	-5.3	1.00 H	219	41.90	6.80
3	*5290.00	92.1 PK			1.00 H	234	84.82	7.28
4	*5290.00	82.1 AV			1.00 H	234	74.82	7.28
5	5350.00	60.1 PK	74.0	-13.9	1.00 H	234	52.61	7.49
6	5350.00	47.5 AV	54.0	-6.5	1.00 H	234	40.01	7.49
7	#10580.00	60.8 PK	74.0	-13.2	1.13 H	75	47.35	13.45
8	#10580.00	46.1 AV	54.0	-7.9	1.13 H	75	32.65	13.45
9	15870.00	60.1 PK	74.0	-13.9	1.05 H	182	41.48	18.62
10	15870.00	49.3 AV	54.0	-4.7	1.05 H	182	30.68	18.62
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.2 PK	74.0	-9.8	1.43 V	181	57.40	6.80
2	5150.00	51.6 AV	54.0	-2.4	1.43 V	181	44.80	6.80
3	*5290.00	103.2 PK			1.43 V	181	95.92	7.28
4	*5290.00	92.8 AV			1.43 V	181	85.52	7.28
5	5350.00	66.9 PK	74.0	-7.1	1.43 V	181	59.41	7.49
6	**5350.00**	**53.9 AV**	**54.0**	**-0.1**	**1.43 V**	**181**	**46.41**	**7.49**
7	#10580.00	55.4 PK	74.0	-18.6	1.00 V	306	41.95	13.45
8	#10580.00	45.6 AV	54.0	-8.4	1.00 V	306	32.15	13.45
9	15870.00	59.0 PK	74.0	-15.0	1.00 V	72	40.38	18.62
10	15870.00	47.6 AV	54.0	-6.4	1.00 V	72	28.98	18.62

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	#5470.00	61.1 PK	74.0	-12.9	1.00 H	235	53.17	7.93
2	#5470.00	48.2 AV	54.0	-5.8	1.00 H	235	40.27	7.93
3	*5530.00	92.2 PK			1.00 H	232	84.12	8.08
4	*5530.00	82.9 AV			1.00 H	232	74.82	8.08
5	11060.00	61.6 PK	74.0	-12.4	1.13 H	33	47.30	14.30
6	11060.00	46.7 AV	54.0	-7.3	1.13 H	33	32.40	14.30
7	#16590.00	59.8 PK	74.0	-14.2	1.00 H	229	38.90	20.90
8	#16590.00	49.0 AV	54.0	-5.0	1.00 H	229	28.10	20.90
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	#5470.00	65.6 PK	74.0	-8.4	1.39 V	178	57.67	7.93
2	#5470.00	53.6 AV	54.0	-0.4	1.39 V	178	45.67	7.93
3	*5530.00	103.7 PK			1.19 V	173	95.62	8.08
4	*5530.00	93.0 AV			1.19 V	173	84.92	8.08
5	11060.00	54.8 PK	74.0	-19.2	1.00 V	300	40.50	14.30
6	11060.00	45.2 AV	54.0	-8.8	1.00 V	300	30.90	14.30
7	#16590.00	59.5 PK	74.0	-14.5	1.00 V	49	38.60	20.90
8	#16590.00	48.2 AV	54.0	-5.8	1.00 V	49	27.30	20.90

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5715.00	62.3 PK	74.0	-11.7	1.05 H	180	20.81	41.49
2	#5715.00	46.2 AV	54.0	-7.8	1.05 H	180	4.71	41.49
3	#5725.00	65.4 PK	78.2	-12.8	1.05 H	180	23.89	41.51
4	*5775.00	96.1 PK			1.05 H	180	54.49	41.61
5	*5775.00	85.1 AV			1.05 H	180	43.49	41.61
6	#5850.00	59.4 PK	78.2	-18.8	1.05 H	180	17.56	41.84
7	#5860.00	57.5 PK	74.0	-16.5	1.05 H	180	15.62	41.88
8	#5860.00	44.3 AV	54.0	-9.7	1.05 H	180	2.42	41.88
9	11550.00	52.0 PK	74.0	-22.0	1.01 H	220	4.92	47.08
10	11550.00	38.0 AV	54.0	-16.0	1.01 H	220	-9.08	47.08
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5715.00	69.4 PK	74.0	-4.6	1.06 V	176	27.91	41.49
2	**#5715.00**	**53.9 AV**	**54.0**	**-0.1**	**1.06 V**	**176**	**12.41**	**41.49**
3	#5725.00	72.1 PK	78.2	-6.1	1.06 V	176	30.59	41.51
4	*5775.00	107.4 PK			1.06 V	176	65.79	41.61
5	*5775.00	96.7 AV			1.06 V	176	55.09	41.61
6	#5850.00	68.7 PK	78.2	-9.5	1.06 V	176	26.86	41.84
7	#5860.00	67.8 PK	74.0	-6.2	1.06 V	176	25.92	41.88
8	#5860.00	53.7 AV	54.0	-0.3	1.06 V	176	11.82	41.88
9	11550.00	61.1 PK	74.0	-12.9	1.24 V	176	14.02	47.08
10	11550.00	49.8 AV	54.0	-4.2	1.24 V	176	2.72	47.08

REMARKS:

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

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)

Note: Where B is the 26dB emission bandwidth in MHz.

Per KDB 662911 D01 Multiple Transmitter Output 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 INSTRUMENTS

FOR POWER OUTPUT MEASUREMENT

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Power meter Anritsu	ML2495A	1014008	Apr. 30, 2014	Apr. 29, 2015
Power sensor Anritsu	MA2411B	0917122	Apr. 30, 2014	Apr. 29, 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. Tested date : June 26, 2014

FOR 26dB OCCUPIED BANDWIDTH

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
SPECTRUM ANALYZER R&S	FSV 40	100964	July 15, 2013	July 14, 2014

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. Tested date : June 26, 2014

4.3.3 TEST PROCEDURE

FOR POWER OUTPUT MEASUREMENT

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

FOR 26dB OCCUPIED BANDWIDTH

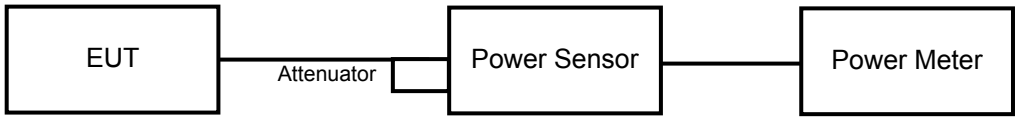
1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.3.4 DEVIATION FROM TEST STANDARD

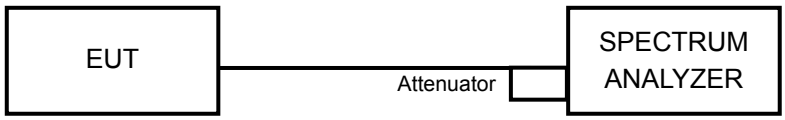
No deviation

4.3.5 TEST SETUP

FOR POWER OUTPUT MEASUREMENT



FOR 26dB OCCUPIED BANDWIDTH



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

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	55.976	17.48	24	PASS
40	5200	133.968	21.27	24	PASS
48	5240	64.863	18.12	24	PASS
52	5260	191.867	22.83	24	PASS
60	5300	100.925	20.04	24	PASS
64	5320	41.976	16.23	24	PASS
100	5500	47.753	16.79	24	PASS
116	5580	163.305	22.13	24	PASS
132	5660	91.622	19.62	24	PASS
140	5700	39.355	15.95	24	PASS
149	5745	24.099	13.82	30	PASS
157	5785	129.122	21.11	30	PASS
165	5825	47.973	16.81	30	PASS

26dB OCCUPIED BANDWIDTH:

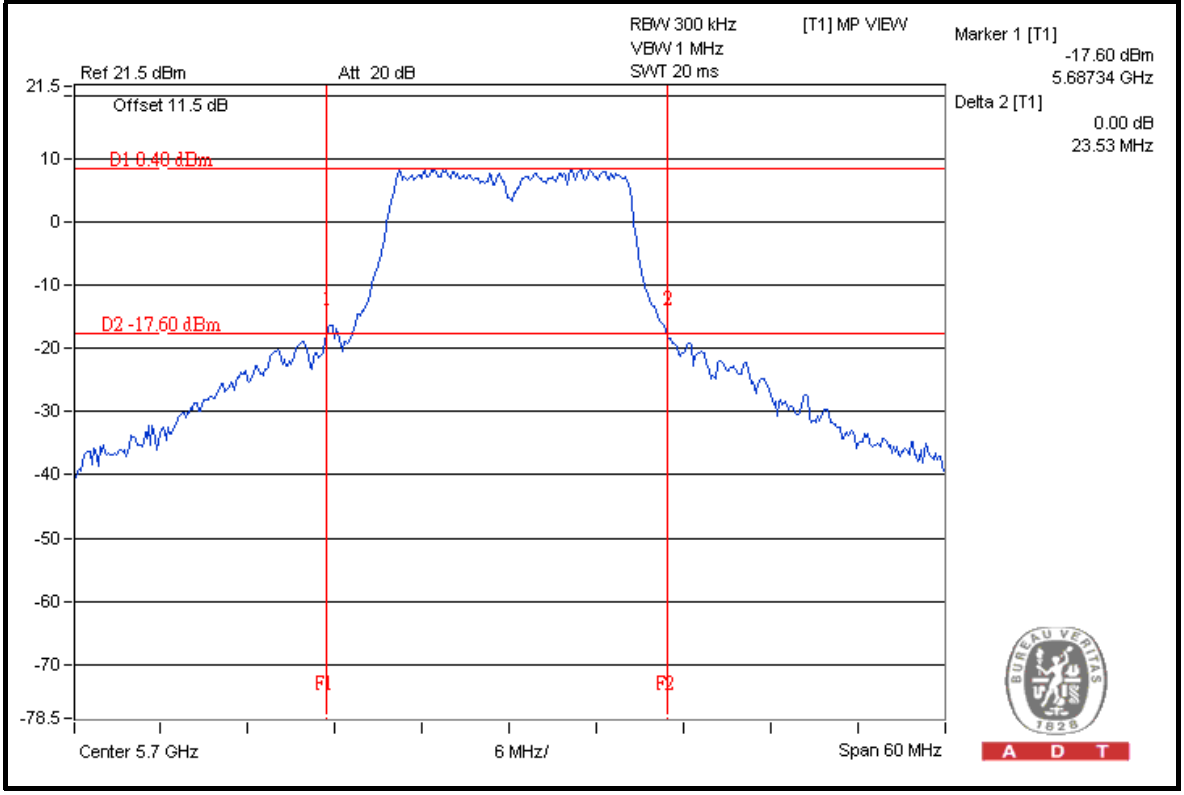
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)
36	5180	26.27
40	5200	42.44
48	5240	30.89
52	5260	48.40
60	5300	41.14
64	5320	25.86
100	5500	23.73
116	5580	43.70
132	5660	34.35
140	5700	23.53

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

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	48.40	27.84 > 24
60	5300	41.14	27.14 > 24
64	5320	25.86	25.12 > 24
100	5500	23.73	24.75 > 24
116	5580	43.70	27.4 > 24
132	5660	34.35	26.35 > 24
140	5700	23.53	24.71 > 24

SPECTRUM PLOT OF WORST VALUE

802.11a : CH140



802.11ac (VHT20)

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	15.51	15.47	70.8	18.50	24	PASS
40	5200	19.47	19.65	180.769	22.57	24	PASS
48	5240	19.51	19.55	179.488	22.54	24	PASS
52	5260	20.83	20.63	236.671	23.74	24	PASS
60	5300	19.76	19.39	181.52	22.59	24	PASS
64	5320	14.59	14.19	55.016	17.40	24	PASS
100	5500	15.15	15.67	69.632	18.43	24	PASS
116	5580	20.44	20.81	231.166	23.64	24	PASS
132	5660	19.41	20.01	187.528	22.73	24	PASS
140	5700	12.81	12.76	37.979	15.80	24	PASS
149	5745	14.99	15.47	66.787	18.25	30	PASS
157	5785	20.22	20.94	229.361	23.61	30	PASS
165	5825	14.91	15.01	62.67	17.97	30	PASS

26dB OCCUPIED BANDWIDTH:

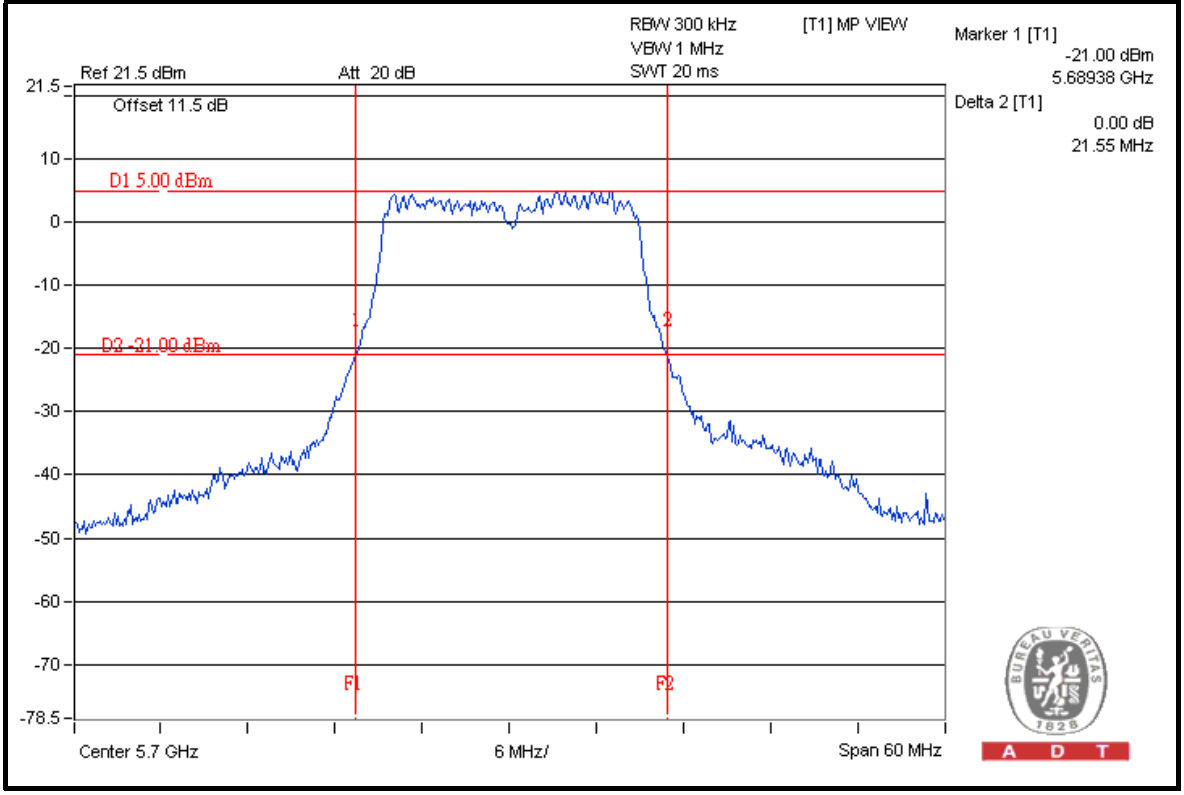
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
36	5180	22.44	21.62
40	5200	39.43	31.48
48	5240	37.98	27.51
52	5260	45.23	40.93
60	5300	39.34	24.01
64	5320	22.08	21.58
100	5500	22.01	21.71
116	5580	40.99	37.65
132	5660	34.32	37.10
140	5700	21.56	21.55

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

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	40.93	27.12 > 24
60	5300	24.01	24.8 > 24
64	5320	21.58	24.34 > 24
100	5500	21.71	24.36 > 24
116	5580	37.65	26.75 > 24
132	5660	34.32	26.35 > 24
140	5700	21.55	24.33 > 24

SPECTRUM PLOT OF WORST VALUE

802.11ac (VHT20) / Chain(1) : CH140



802.11ac (VHT40)

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
38	5190	12.91	12.69	38.121	15.81	24	PASS
46	5230	17.71	17.89	120.538	20.81	24	PASS
54	5270	18.11	17.81	125.109	20.97	24	PASS
62	5310	10.11	9.56	19.293	12.85	24	PASS
102	5510	13.61	13.76	46.729	16.70	24	PASS
110	5550	18.02	18.55	135.001	21.30	24	PASS
134	5670	14.11	14.21	52.126	17.17	24	PASS
151	5755	12.38	12.21	33.932	15.31	30	PASS
159	5795	14.27	14.67	56.039	17.48	30	PASS

26dB OCCUPIED BANDWIDTH:

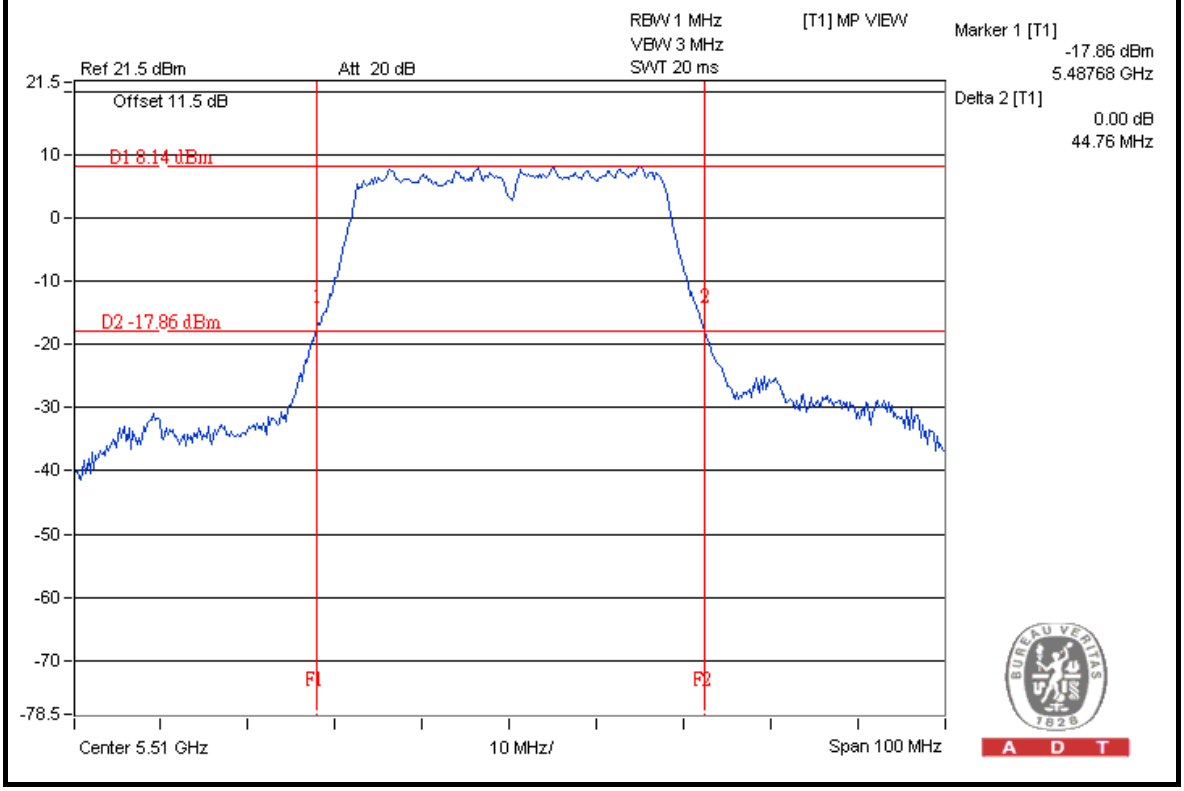
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
38	5190	46.18	44.68
46	5230	65.86	45.76
54	5270	61.63	45.07
62	5310	46.08	44.82
102	5510	45.33	44.76
110	5550	48.94	45.65
134	5670	45.18	44.77

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

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	45.07	27.53 > 24
62	5310	44.82	27.51 > 24
102	5510	44.76	27.5 > 24
110	5550	45.65	27.59 > 24
134	5670	44.77	27.5 > 24

SPECTRUM PLOT OF WORST VALUE

802.11ac (VHT40) / Chain(1) : CH102



802.11ac (VHT80)

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
42	5210	11.35	10.77	25.586	14.08	24	PASS
58	5290	10.47	9.54	20.138	13.04	24	PASS
106	5530	11.96	12.11	31.959	15.05	24	PASS
155	5775	11.01	11.27	26.015	14.15	30	PASS

26dB OCCUPIED BANDWIDTH:

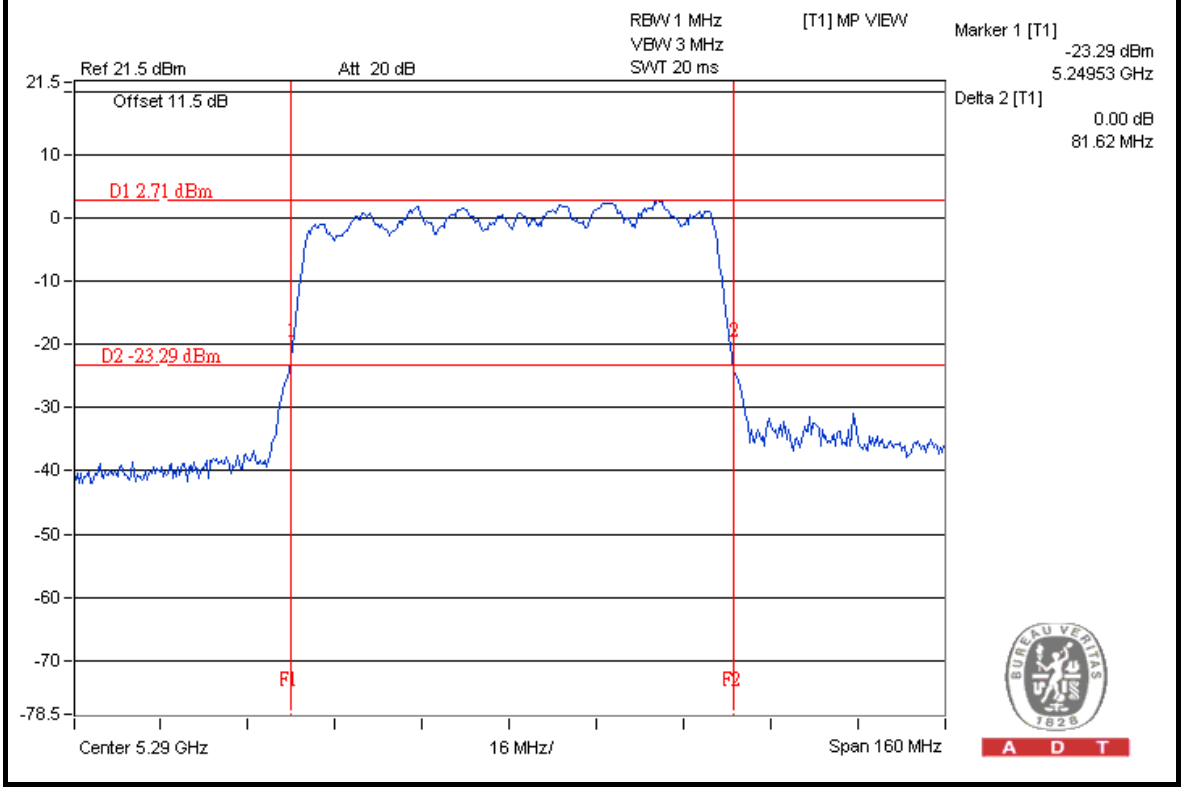
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
42	5210	82.44	81.64
58	5290	82.62	81.62
106	5530	82.64	81.79

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

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	81.62	30.11 > 24
106	5530	81.79	30.12 > 24

SPECTRUM PLOT OF WORST VALUE

802.11ac (VHT80) / Chain(1) : CH58



4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

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

4.4.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
SPECTRUM ANALYZER R&S	FSV 40	100964	July 15, 2013	July 14, 2014

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. Tested date : June 26, 2014

4.4.3 TEST PROCEDURES

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

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
3. Sweep time = auto, trigger set to “free run”.
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value and for duty cycle of test signal is < 98% add 10 log (1/duty cycle)

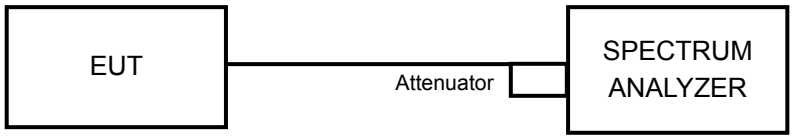
For U-NII-3:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
4. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz/300kHz)
5. Sweep time = auto, trigger set to “free run”.
6. Trace average at least 100 traces in power averaging mode.
7. Record the max value and for duty cycle of test signal is < 98% add 10 log (1/duty cycle)

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP



4.4.6 EUT OPERATING CONDITIONS

Same as 4.3.6

4.4.7 TEST RESULTS

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

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	4.88	11	PASS
40	5200	9.17	11	PASS
48	5240	5.96	11	PASS
52	5260	10.54	11	PASS
60	5300	8.59	11	PASS
64	5320	4.51	11	PASS
100	5500	4.39	11	PASS
116	5580	9.96	11	PASS
132	5660	6.62	11	PASS
140	5700	3.49	11	PASS

802.11ac (VHT20)

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1			
36	5180	2.54	2.41	5.49	11	PASS
40	5200	6.51	6.50	9.52	11	PASS
48	5240	6.33	6.06	9.21	11	PASS
52	5260	7.70	7.27	10.50	11	PASS
60	5300	6.47	5.99	9.25	11	PASS
64	5320	1.55	1.68	4.63	11	PASS
100	5500	1.78	2.34	5.08	11	PASS
116	5580	7.15	7.12	10.15	11	PASS
132	5660	5.41	6.17	8.82	11	PASS
140	5700	-1.23	-0.73	2.04	11	PASS

NOTE: 1. Method a) 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.

802.11ac (VHT40)

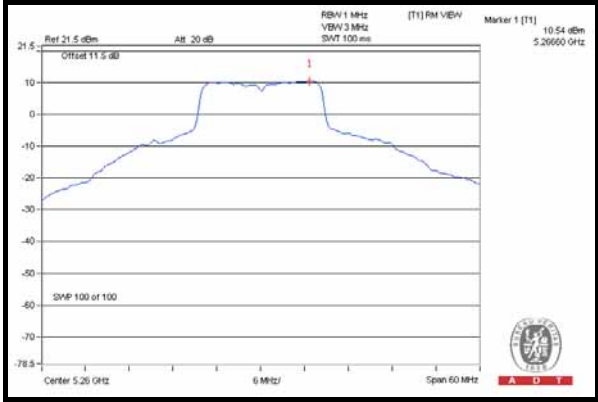
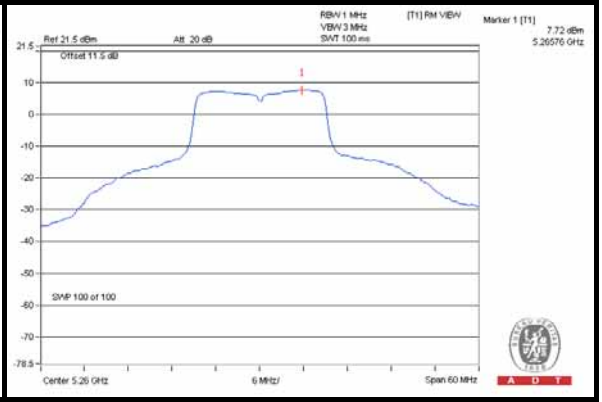
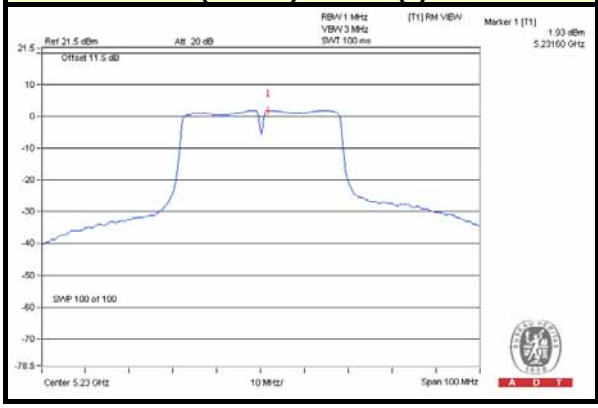
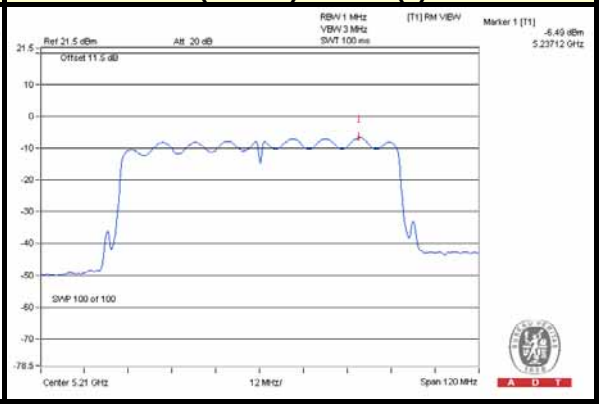
CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1			
38	5190	-3.11	-3.52	-0.30	11	PASS
46	5230	1.93	1.42	4.69	11	PASS
54	5270	1.79	1.21	4.52	11	PASS
62	5310	-6.30	-6.61	-3.44	11	PASS
102	5510	-2.81	-3.27	-0.02	11	PASS
110	5550	1.26	1.30	4.29	11	PASS
134	5670	-2.15	-2.53	0.67	11	PASS

NOTE: 1. Method a) 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.

802.11ac (VHT80)

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1			
42	5210	-6.49	-7.28	-3.86	11	PASS
58	5290	-7.11	-7.78	-4.42	11	PASS
106	5530	-7.02	-6.74	-3.87	11	PASS

NOTE: 1. Method a) 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.

SPECTRUM PLOT OF WORST VALUE	
802.11a : CH52	**802.11ac (VHT20) / Chain(0) : CH52**
	
802.11ac (VHT40) / Chain(0) : CH46	**802.11ac (VHT80) / Chain(0) : CH42**
	

For U-NII-3:

802.11a

CHANNEL	FREQUENCY (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
149	5745	-5.71	-3.49	30	PASS
157	5785	1.36	3.58	30	PASS
165	5825	-3.03	-0.81	30	PASS

802.11ac (VHT20)

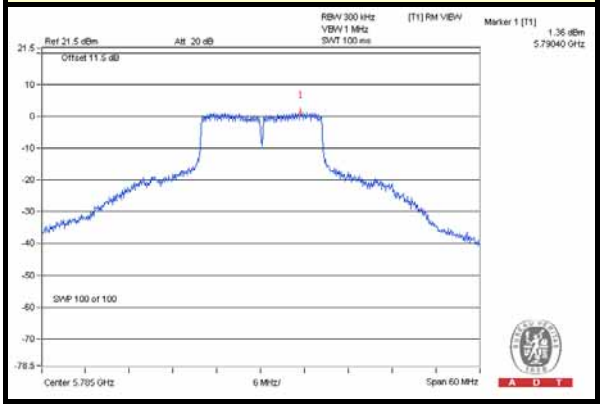
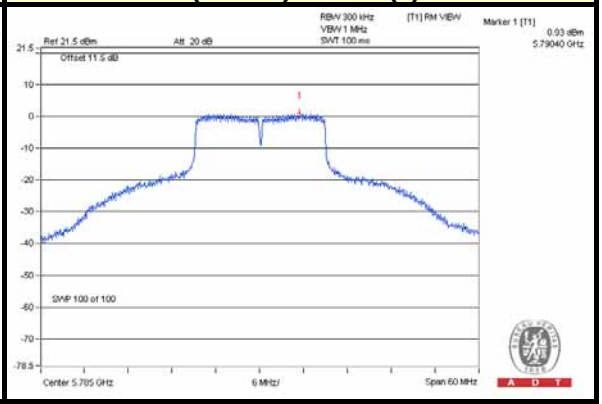
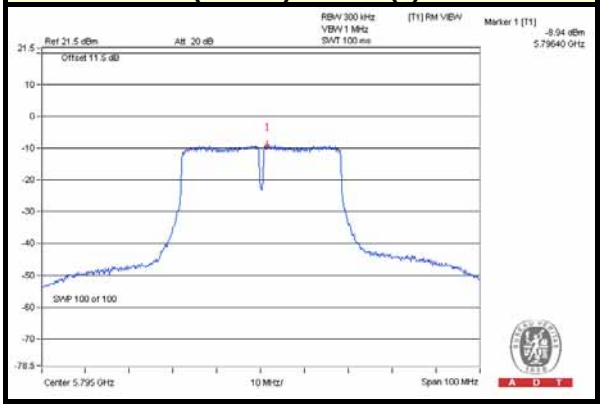
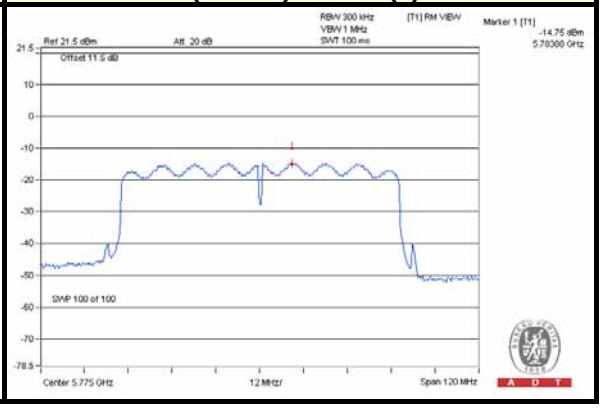
TX CHAIN	CHANNEL	FREQUENCY (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	TOTAL PSD (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
0	149	5745	-5.19	-2.97	3.01	0.04	30	PASS
	157	5785	0.85	3.07	3.01	6.08	30	PASS
	165	5825	-5.23	-3.01	3.01	0.00	30	PASS
1	149	5745	-3.31	-1.09	3.01	1.92	30	PASS
	157	5785	0.93	3.15	3.01	6.16	30	PASS
	165	5825	-4.52	-2.30	3.01	0.71	30	PASS

802.11ac (VHT40)

TX CHAIN	CHANNEL	FREQUENCY (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	TOTAL PSD (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
0	151	5755	-11.43	-9.21	3.01	-6.20	30	PASS
	159	5795	-8.96	-6.74	3.01	-3.73	30	PASS
1	151	5755	-11.92	-9.70	3.01	-6.69	30	PASS
	159	5795	-8.94	-6.72	3.01	-3.71	30	PASS

802.11ac (VHT80)

TX CHAIN	CHANNEL	FREQUENCY (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	TOTAL PSD (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
0	155	5775	-14.75	-12.53	3.01	-9.52	30	PASS
1	155	5775	-15.21	-12.99	3.01	-9.98	30	PASS

SPECTRUM PLOT OF WORST VALUE	
802.11a : CH157	**802.11ac (VHT20) / Chain(1) : CH157**
	
802.11ac (VHT40) / Chain(1) : CH159	**802.11ac (VHT80) / Chain(0) : CH155**
	

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 INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
SPECTRUM ANALYZER R&S	FSV 40	100964	July 15, 2013	July 14, 2014
Temperature & Humidity Chamber GIANTFORCE	GTH-150-40-SP-AR	MAA0812-008	Jan. 13, 2014	Jan. 12, 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. Tested date : June 26, 2014

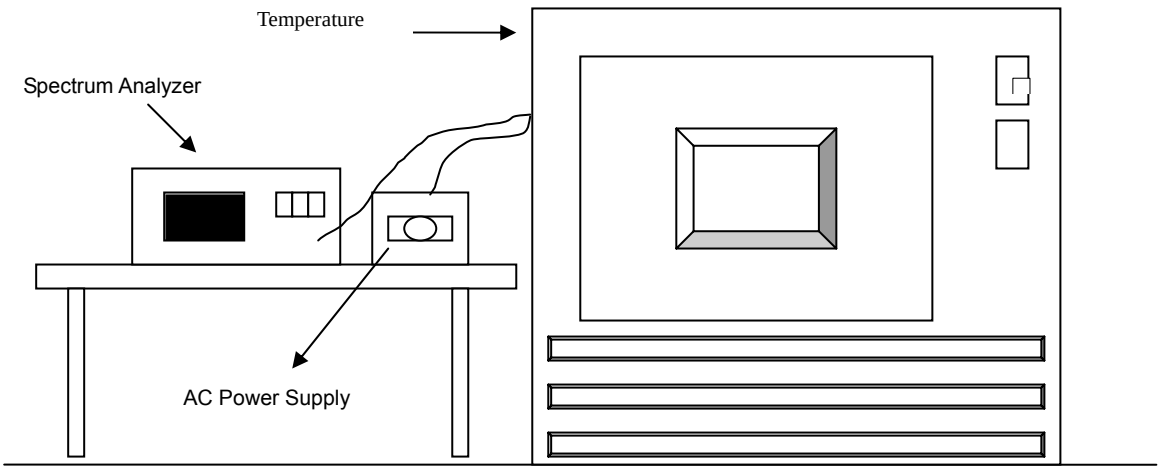
4.5.3 TEST PROCEDURE

1. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
2. Turn the EUT on and couple its output to a spectrum analyzer.
3. Turn the EUT off and set the chamber to the highest temperature specified.
4. 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.
5. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
6. 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.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITION

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

4.5.7 TEST RESULTS

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift
		(MHz)	%	(MHz)	%	(MHz)	%	(MHz)	%
50	120	5320	0.00000	5320.0018	0.00003	5320.0008	0.00002	5320.0002	0.00000
40	120	5320.0132	0.00025	5320.0122	0.00023	5320.0124	0.00023	5320.0146	0.00027
30	120	5319.9777	-0.00042	5319.9737	-0.00049	5319.9734	-0.00050	5319.9746	-0.00048
20	120	5320.0238	0.00045	5320.0199	0.00037	5320.0218	0.00041	5320.0214	0.00040
10	120	5319.9926	-0.00014	5319.9911	-0.00017	5319.9922	-0.00015	5319.9926	-0.00014
0	120	5320.0046	0.00009	5320.006	0.00011	5320.0065	0.00012	5320.0066	0.00012
-10	120	5320.0151	0.00028	5320.015	0.00028	5320.0158	0.00030	5320.0124	0.00023
-20	120	5319.9866	-0.00025	5319.987	-0.00024	5319.9847	-0.00029	5319.9863	-0.00026
-30	120	5320.0043	0.00008	5320.0029	0.00005	5320.0034	0.00006	5320.0058	0.00011

FREQUEMCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5320MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift
		(MHz)	%	(MHz)	%	(MHz)	%	(MHz)	%
20	138	5320.0247	0.00046	5320.0204	0.00038	5320.0213	0.00040	5320.021	0.00039
	120	5320.0238	0.00045	5320.0199	0.00037	5320.0218	0.00041	5320.0214	0.00040
	102	5320.0235	0.00044	5320.0195	0.00037	5320.0221	0.00042	5320.0219	0.00041

4.6 6dB BANDWIDTH MEASUREMENT

4.6.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.6.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
SPECTRUM ANALYZER R&S	FSV 40	100964	July 15, 2013	July 14, 2014

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. Tested date : June 26, 2014

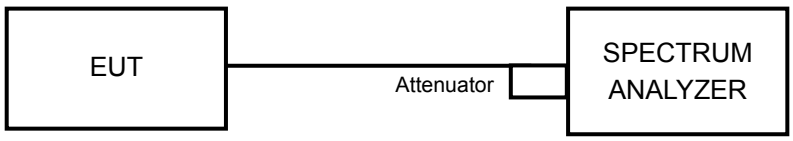
4.6.3 TEST PROCEDURE

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

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 TEST SETUP



4.6.6 EUT OPERATING CONDITIONS

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

4.6.7 TEST RESULTS

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
149	5745	16.59	0.5	PASS
157	5785	16.53	0.5	PASS
165	5825	16.62	0.5	PASS

802.11ac (VHT20)

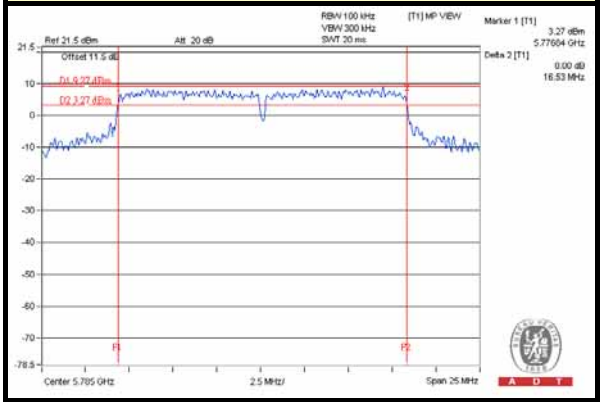
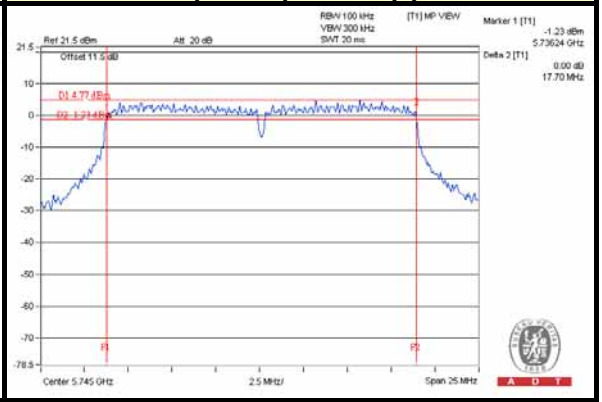
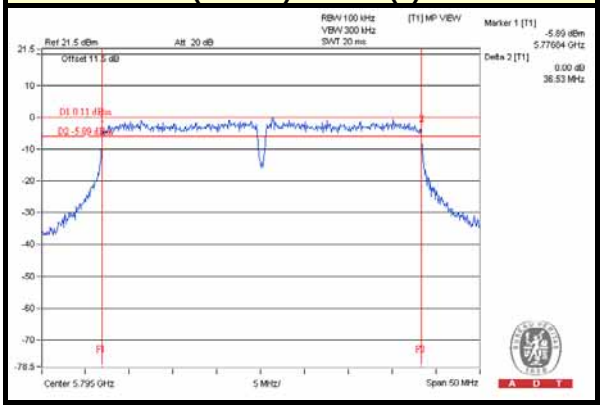
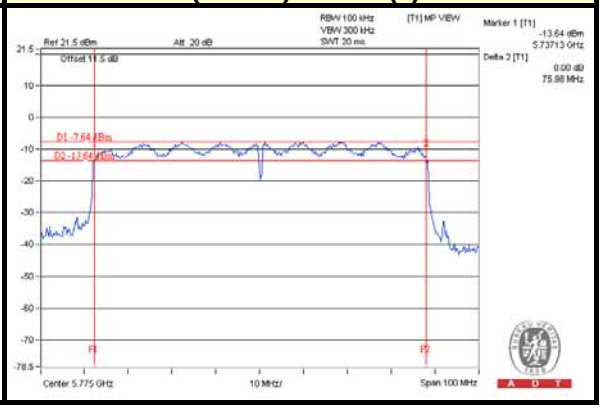
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
149	5745	17.83	17.70	0.5	PASS
157	5785	17.79	17.78	0.5	PASS
165	5825	17.83	17.73	0.5	PASS

802.11ac (VHT40)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
151	5755	36.62	36.54	0.5	PASS
159	5795	36.63	36.53	0.5	PASS

802.11ac (VHT80)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
155	5775	75.98	76.00	0.5	PASS

SPECTRUM PLOT OF WORST VALUE	
802.11a : CH157	802.11ac (VHT20) / Chain(1) : CH149
	
802.11ac (VHT40) / Chain(1) : CH159	802.11ac (VHT80) / Chain(0) : CH155
	

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:
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Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

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

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

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

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