FCC TEST REPORT (15.407)

REPORT NO.:	RF130725E04-1 R3
MODEL NO.:	MR34-HW
FCC ID:	UDX-60025010
RECEIVED:	July 25, 2013
TESTED:	Aug. 01 to Sep. 12, 2013
ISSUED:	Sep. 13, 2013

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

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.
TEST LOCATION (1):	No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan, R.O.C.
TEST LOCATION (2):	No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan, R.O.C.

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF130725E04-1	Original release	Aug. 09, 2013
RF130725E04-1 R1	Modified description of section 3.2.1	Aug. 15, 2013
RF130725E04-1 R2	Revised the conducted emission & radiated emission (below 1GHz) data.	Sep. 06, 2013
RF130725E04-1 R3	Revised the Radio Card 0 802.11n (HT20) transmit power, peak power excursion and peak power spectral density data.	Sep. 13, 2013

1. CERTIFICATION

PRODUCT:	Cisco Meraki MR34
BRAND NAME:	Cisco
MODEL NO.:	MR34-HW
TEST SAMPLE:	R&D SAMPLE
APPLICANT:	Cisco Systems, Inc.
TESTED:	Aug. 01 to Sep. 12, 2013
STANDARDS:	FCC Part 15, Subpart E (Section 15.407)
	ANSI C63.10-2009

The above equipment (Model: MR34-HW) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Phoenix Huang , **DATE:** Sep. 13, 2013
(Phoenix Huang, Specialist)

APPROVED BY : , **DATE:** Sep. 13, 2013
(May Chen, Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

For 5GHz, 5150~5250MHz

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 -7.07dB at 0.45469MHz
15.407(b/1/2/3) (b)(5)	Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -0.2dB at 5150.00MHz
15.407(a/1/2/3)	Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(6)	Peak Power Excursion	PASS	Meet the requirement of limit.
15.407(a/1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is IPEX not a standard connector.

NOTE: The EUT was operating in 2.400 ~ 2.4835GHz, 5.15~5.25GHz and 5.725~5.850GHz frequencies band. This report was recorded the RF parameters including 5.15~5.25GHz. For the 2.400 ~ 2.4835GHz and 5.725~5.850GHz RF parameters 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	2.98 dB
Radiated emissions (30MHz-1GHz) -Chamber G	5.63 dB
Radiated emissions (30MHz-1GHz)-Chamber H	5.46 dB
Radiated emissions (1GHz -6GHz)	3.54 dB
Radiated emissions (6GHz -18GHz)	4.08 dB
Radiated emissions (18GHz -40GHz)	4.11 dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Cisco Meraki MR34
MODEL NO.	MR34-HW
POWER SUPPLY	DC 12V from power adapter, DC 37~57V_{dc}, 0.5~0.3A from POE
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 450Mbps 802.11ac: up to 1300Mbps
OPERATING FREQUENCY	**For 15.407** 5GHz: 5.18 ~ 5.24GHz
	For 15.247 2.4GHz: 2.412 ~ 2.462GHz 5GHz: 5.745 ~ 5.825GHz
NUMBER OF CHANNEL	**For 15.407** 4 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 2 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80)
	For 15.247 (2.4GHz) 11 for 802.11b, 802.11g, 802.11n (HT20) 7 for 802.11n (HT40) **For 15.247 (5GHz)** 5 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 2 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80)
MAXIMUM OUTPUT POWER	Please see NOTE
ANTENNA TYPE	Please see NOTE
DATA CABLE	NA
I/O PORTS	Refer to user's manual
ASSOCIATED DEVICES	Adapter x1

NOTE:

1. The maximum output power table as below table:

MAXIMUM OUTPUT POWER (mW)					
Radio Card 1					
15.247 (2.4GHz)		**15.247 (5GHz)**		**15.407**	
802.11b	158.855	**802.11a**	76.208	**802.11a**	9.772
802.11g	68.707	**802.11n (HT20)**	79.983	**802.11n (HT20)**	9.727
802.11n (HT20)	77.446	**802.11n (HT40)**	77.804	**802.11n (HT40)**	9.750
802.11n (HT40)	10.023				
Radio Card 0					
15.247 (5GHz)			**15.407**		
802.11a	714.410		**802.11a**	18.154	
802.11n (HT20)	679.235		**802.11n (HT20)**	36.543	
802.11n (HT40)	489.847		**802.11n (HT40)**	38.927	
802.11ac (VHT80)	234.328		**802.11ac (VHT80)**	38.785	
Radio Card 2					
15.247 (2.4GHz)					
802.11b	256.291				
802.11g	502.244				
802.11n (HT20)	510.234				
802.11n (HT40)	182.636				

2. The EUT is a 2.4GHz & 5GHz WLAN device.

3. The lower channel and higher channel of radio 1 will reduce 3dB from maximum power by software automatically when radio 1 and radio 2 transmit simultaneously at 2.4GHz mode.

4. The EUT must be supplied with a adapter or POE (only for test not for sale) as below information:

Adapter		
Brand	Model No.	Spec.
Powertron Electronics Corp.	PA1015-2HU	AC Input : 100-240V, 0.4A, 50-60Hz DC Output : 12V, 1.5A DC output cable(unshielded ,1.6m)
POE(only for test not for sale)		
Brand	Model No.	Spec.
Power Dsine	PD-9501G/AC	AC Input : 100-240V, 1.5A, 50-60Hz DC Output : 55V, 1.35A
For radiated emission: From above power sources, the worst case was found in Adapter (Model: **PA1015-2HU**). Therefore only the test data of the mode was recorded in this report.		

5. The three radio cards and antennas provided to the EUT, please refer to the following table:

Radio Card 0 (Single band 3Tx)					
Transmitter Circuit	Gain (dBi) (Include cable loss)	Antenna Type	Connecter Type	Frequency range (MHz to MHz)	Cable Length (mm)
Chain (0)	5.6	PIFA	IPEX	5150~5850	185
Chain (1)	5.5	PIFA	IPEX	5150~5850	270
Chain (2)	5.2	PIFA	IPEX	5150~5850	75
Radio Card 1 (Dual band 1Tx)					
Transmitter Circuit	Gain (dBi) (Include cable loss)	Antenna Type	Connecter Type	Frequency range (MHz to MHz)	Cable Length (mm)
Chain (0)	4.3	PIFA	IPEX	2400~2500	95
	5.4	PIFA	IPEX	5150~5850	95
Radio Card 2 (Single band 3Tx)					
Transmitter Circuit	Gain (dBi) (Include cable loss)	Antenna Type	Connecter Type	Frequency range (MHz to MHz)	Cable Length (mm)
Chain (0)	4.8	PIFA	IPEX	2400~2500	45
Chain (1)	2	PIFA	IPEX	2400~2500	195
Chain (2)	2.3	PIFA	IPEX	2400~2500	165

6. The EUT incorporates a MIMO function without beam forming.

MODULATION MODE	RADIO CARD	TX/RX FUNCTION
802.11b **802.11g** **802.11n (HT20) <2.4GHz>** **802.11n (HT40) <2.4GHz>**	Card 1	1Tx/1Rx
	Card 2	1Tx/1Rx (Diversity) 2Tx/2Rx (Diversity) 3Tx/3Rx
802.11a **802.11n (HT20) <5GHz>** **802.11n (HT40) <5GHz>**	Card 1	1Tx/1Rx
802.11a **802.11n (HT20) <5GHz>** **802.11n (HT40) <5GHz>** **802.11ac (VHT20)** **802.11ac (VHT40)** **802.11ac (VHT80)**	Card 0	1Tx/1Rx (Diversity) 2Tx/2Rx (Diversity) 3Tx/3Rx

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)

7. When the EUT operating in 802.11n, the software operation, which is defined by manufacturer, MCS (Modulation and Coding Schemes) from 0 to 23.
8. When the EUT operating in 802.11ac, the software operation, which is defined by manufacturer, MCS (Modulation and Coding Schemes) from 0 to 9.
9. 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
38	5190 MHz
46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY
42	5210 MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	PLC	RE < 1G	RE ³ 1G	APCM	
1	√	√	√	√	Radio Card 1 <5GHz> with Adapter
2	√	√	√	√	Radio Card 0 <5GHz> with Adapter
3	√	-	-	-	Radio Card 1 <5GHz> with POE
4	√	-	-	-	Radio Card 0 <5GHz> with POE

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

RE ³ 1G: Radiated Emission above 1GHz **APCM:** Antenna Port Conducted Measurement

Note: The EUT had been pre-tested on the positioned of each 2 axis. The worst case was found when positioned on **X-plane** (for below 1GHz) and **Z-plane** (for above 1GHz).

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)
802.11a (Radio Card 1)	36 to 48	36, 40, 48	OFDM	BPSK	6
802.11n (HT40) (Radio Card 0)	38 to 46	38, 46	OFDM	BPSK	40.5

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)
802.11a (Radio Card 1)	36 to 48	36, 40, 48	OFDM	BPSK	6
802.11n (HT40) (Radio Card 0)	38 to 46	38, 46	OFDM	BPSK	40.5

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.

Radio Card 1 <5GHz>					
MODE	**AVAILABLE CHANNEL**	**TESTED CHANNEL**	**MODULATION TECHNOLOGY**	**MODULATION TYPE**	**DATA RATE (Mbps)**
802.11a	36 to 48	36, 40, 48	OFDM	BPSK	6
802.11n (HT20)	36 to 48	36, 40, 48	OFDM	BPSK	6.5
802.11n (HT40)	38 to 46	38, 46	OFDM	BPSK	13.5
Radio Card 0 <5GHz>					
MODE	**AVAILABLE CHANNEL**	**TESTED CHANNEL**	**MODULATION TECHNOLOGY**	**MODULATION TYPE**	**DATA RATE (Mbps)**
802.11a	36 to 48	36, 40, 48	OFDM	BPSK	6
802.11n (HT20)	36 to 48	36, 40, 48	OFDM	BPSK	19.5
802.11n (HT40)	38 to 46	38, 46	OFDM	BPSK	40.5
802.11ac (VHT80)	42	42	OFDM	BPSK	87.5

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.

Radio Card 1 <5GHz>					
MODE	**AVAILABLE CHANNEL**	**TESTED CHANNEL**	**MODULATION TECHNOLOGY**	**MODULATION TYPE**	**DATA RATE (Mbps)**
802.11a	36 to 48	36, 40, 48	OFDM	BPSK	6
802.11n (HT20)	36 to 48	36, 40, 48	OFDM	BPSK	6.5
802.11n (HT40)	38 to 46	38, 46	OFDM	BPSK	13.5
Radio Card 0 <5GHz>					
MODE	**AVAILABLE CHANNEL**	**TESTED CHANNEL**	**MODULATION TECHNOLOGY**	**MODULATION TYPE**	**DATA RATE (Mbps)**
802.11a	36 to 48	36, 40, 48	OFDM	BPSK	6
802.11n (HT20)	36 to 48	36, 40, 48	OFDM	BPSK	19.5
802.11n (HT40)	38 to 46	38, 46	OFDM	BPSK	40.5
802.11ac (VHT80)	42	42	OFDM	BPSK	87.5

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
PLC	26deg. C,66%RH	120Vac, 60Hz	JyunChun Lin
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Nelson Teng
RE≥1G	23deg. C, 70%RH	120Vac, 60Hz	Tim Ho
	30deg. C, 70%RH	120Vac, 60Hz	Tim Ho
APCM	25deg. C, 60%RH	120Vac, 60Hz	James Chan / Nelson Teng

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 D01 General UNII Test Procedures v01 r03

662911 D01 Multiple Transmitter Output v01 r02

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

If duty cycle of test signal is > 98 %, duty factor is not required.

If duty cycle of test signal is < 98%, duty factor shall be considered.

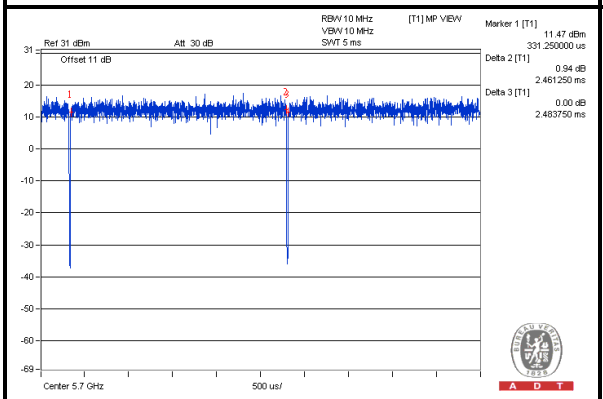
Radio Card 1 (5G)

802.11a: Duty cycle = 2.461 ms/2.484 ms = 0.991

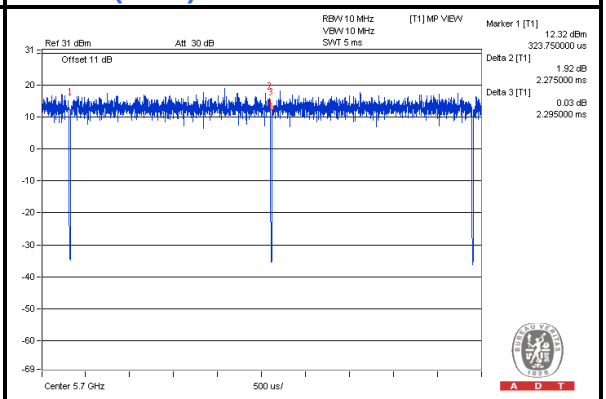
802.11n (HT20): Duty cycle = 2.275 ms/2.295 ms = 0.991

802.11n (HT40): Duty cycle = 1.113 ms/1.131 ms = 0.984

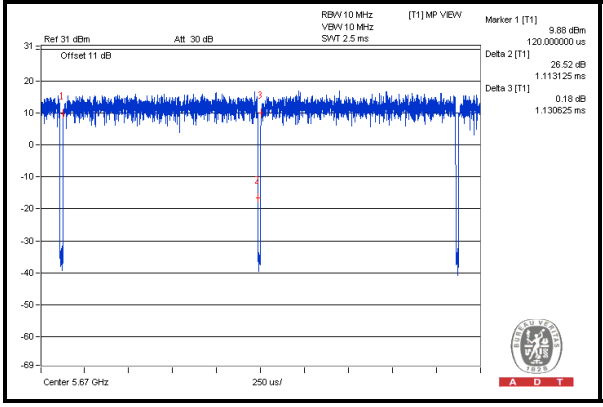
802.11a



802.11n (HT20)



802.11n (HT40)



Radio Card 0

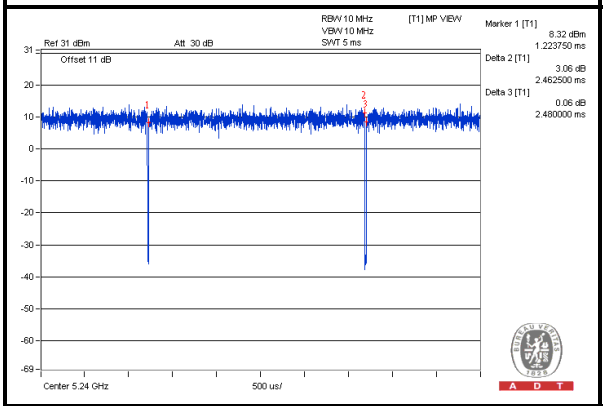
802.11a: Duty cycle = 2.462 ms/2.48 ms = 0.993

802.11n (HT20): Duty cycle = 0.798 ms/0.817 ms = 0.977, Duty factor = 10 * log(1/0.977) = 0.1

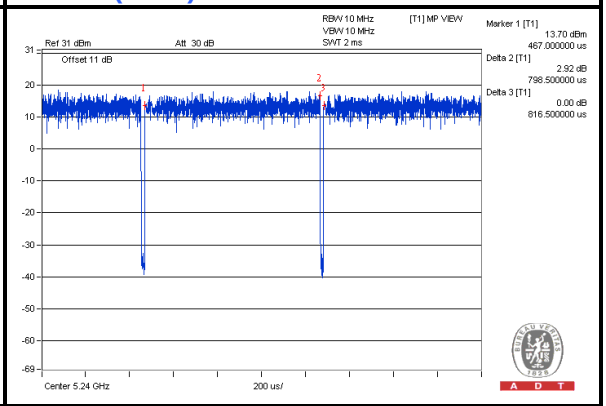
802.11n (HT40): Duty cycle = 0.411 ms/0.429 ms = 0.958, Duty factor = 10 * log(1/0.958) = 0.19

802.11ac (VHT80): Duty cycle = 0.22 ms/0.237 ms = 0.928, Duty factor = 10 * log(1/0.928) = 0.32

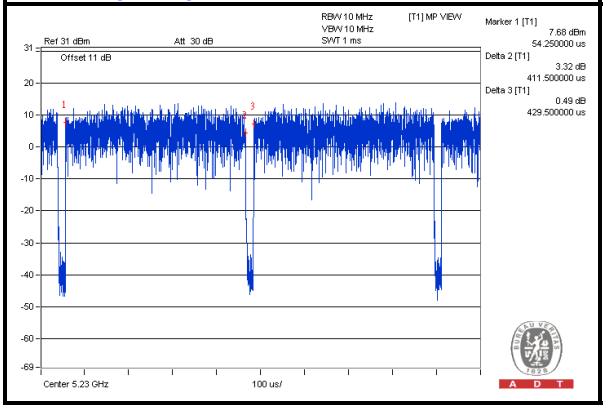
802.11a



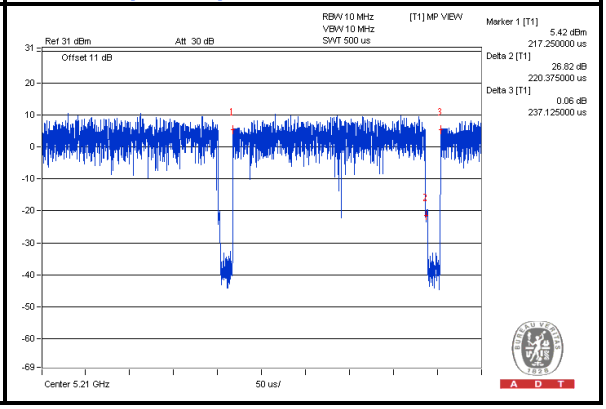
802.11n (HT20)



802.11n (HT40)



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.

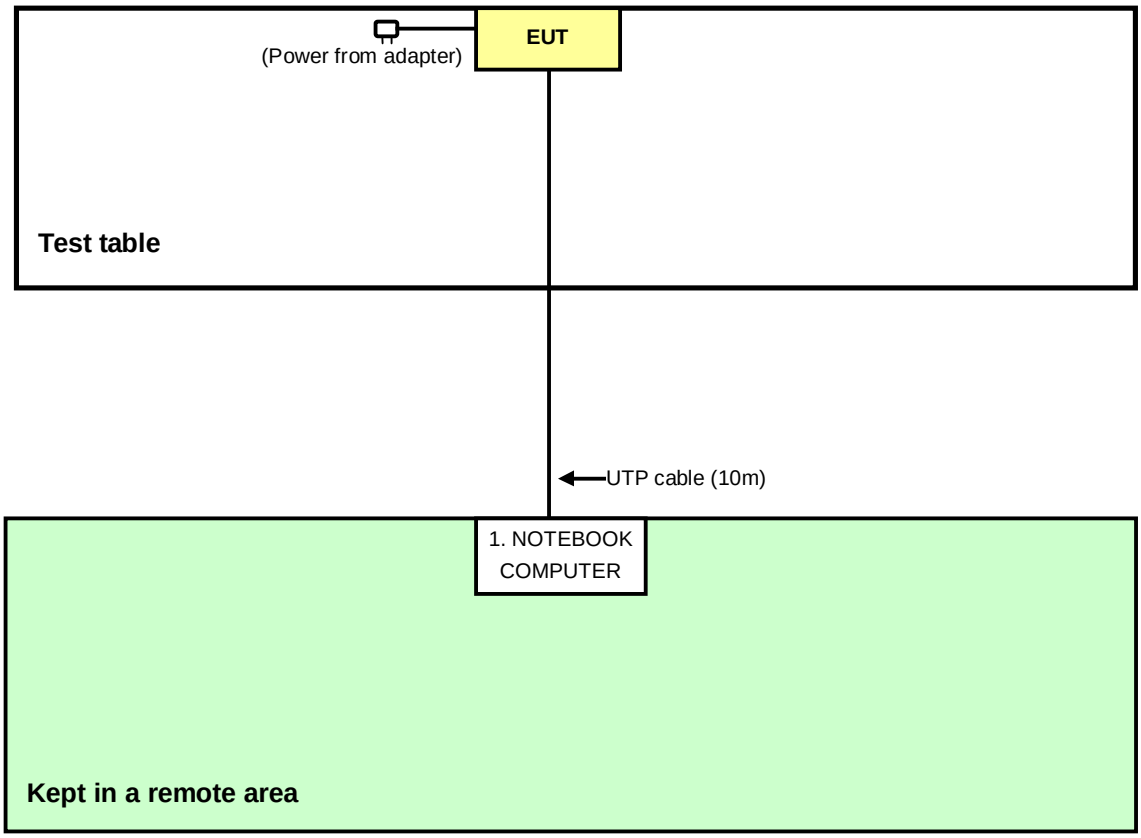
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP32LA	FSLB32S	FCC DoC
2	POE	Power Dsine	PD-9501G/AC	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	UTP cable, 10m
2	UTP cable, 10m

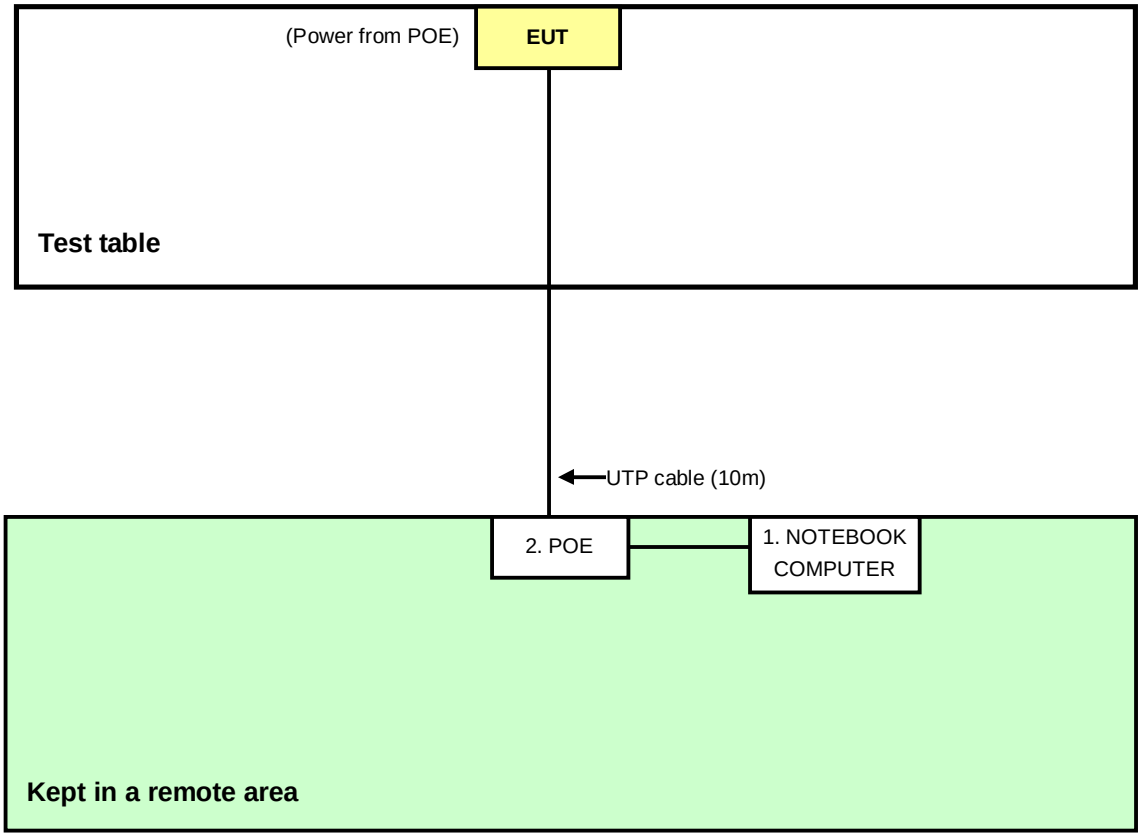
NOTE: All power cords of the above support units are non shielded (1.8m).

3.6 CONFIGURATION OF SYSTEM UNDER TEST

For Conducted Emission (Mode 1~2) / Radiated Emission test:



For Conducted Emission (Mode 3~4) 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	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

NOTE: 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS 30	100375	Mar. 08, 2013	Mar. 07, 2014
Line-Impedance Stabilization Network (for EUT) SCHWARZBECK	NSLK8127	8127-522	Sep. 06, 2012	Sep. 05, 2013
Line-Impedance Stabilization Network (for Peripheral)	ENV216	100072	June 07,2013	June 06,2014
RF Cable (JYEBAO)	5DFB	COCCAB-001	Mar. 11, 2013	Mar. 10, 2014
50 ohms Terminator	50	EMC-3	Sep. 25, 2012	Sep. 24, 2013
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: Aug. 02 to Sep. 05, 2013

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.

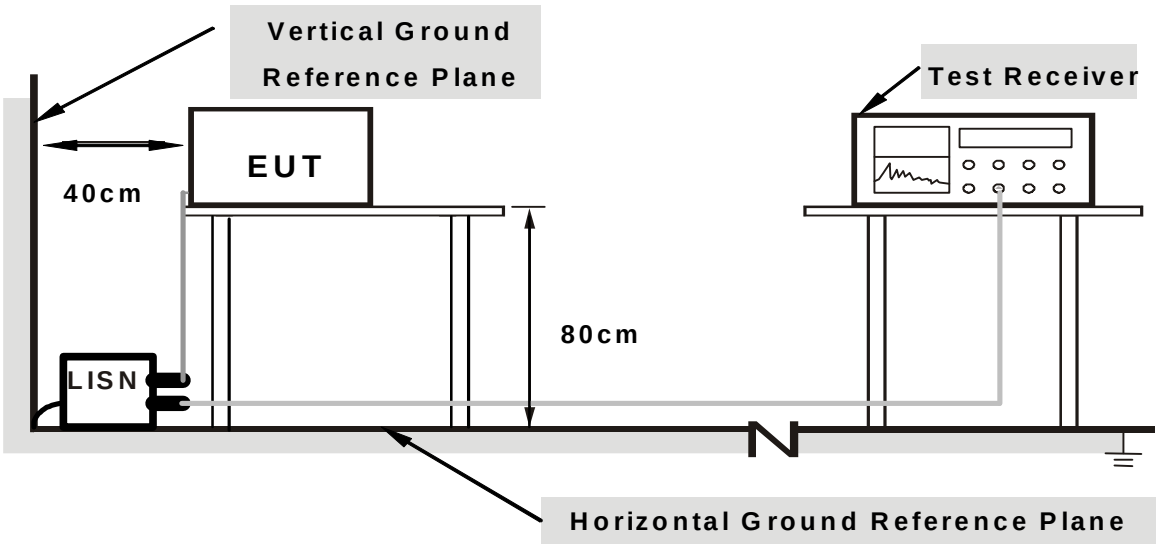
NOTE:

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. Turn on the power of EUT.
2. The communication partner run test program “MTool V1.0.0.10.exe” to enable EUT under transmission/receiving condition continuously at specific channel frequency.

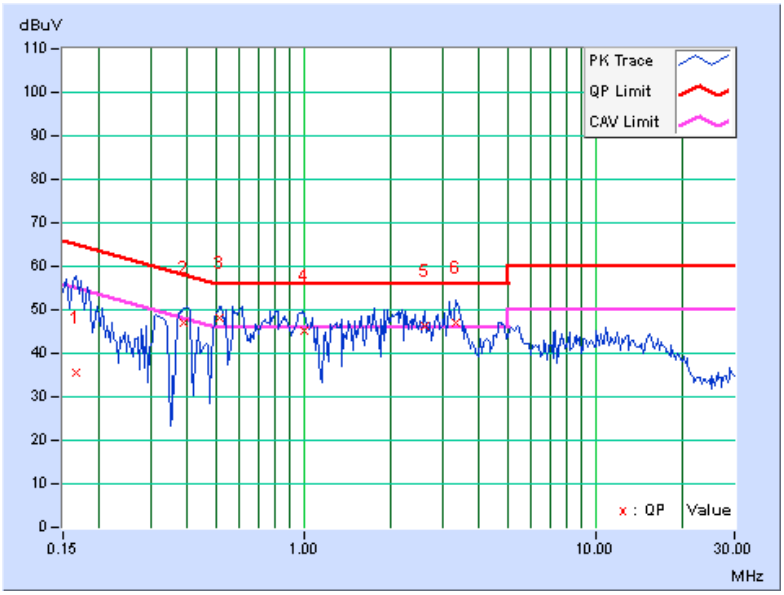
4.1.7 TEST RESULTS (MODE 1)

CHANNEL	Channel 36		
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	0.16562	0.12	35.62	11.98	35.74	12.10	65.18	55.18	-29.44	-43.08
2	0.38828	0.18	46.79	36.66	46.97	36.84	58.10	48.10	-11.13	-11.26
3	0.51328	0.19	47.81	34.70	48.00	34.89	56.00	46.00	-8.00	-11.11
4	1.00000	0.22	44.83	31.85	45.05	32.07	56.00	46.00	-10.95	-13.93
5	2.60156	0.33	45.88	32.45	46.21	32.78	56.00	46.00	-9.79	-13.22
6	3.33984	0.38	46.69	34.56	47.07	34.94	56.00	46.00	-8.93	-11.06

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

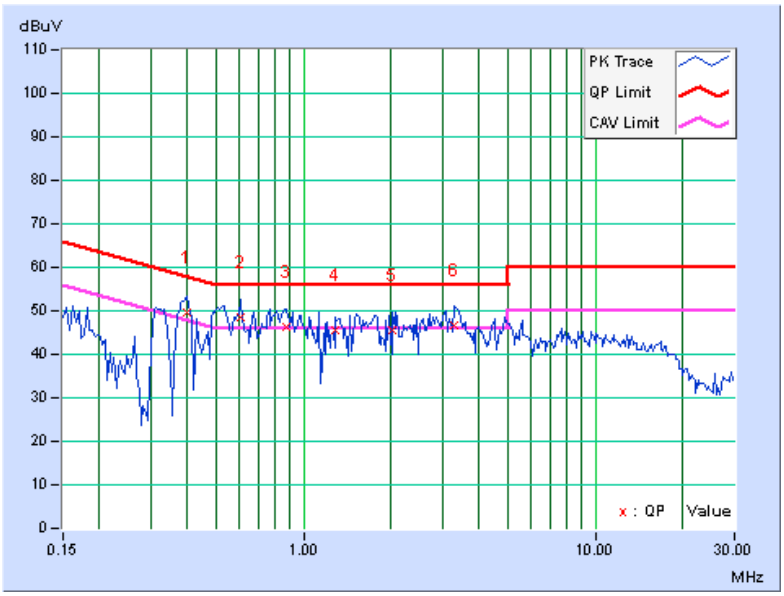


CHANNEL	Channel 36		
PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.39609	0.21	49.54	39.48	49.75	39.69	57.93	47.93	-8.19	-8.25
2	0.60703	0.22	48.35	34.03	48.57	34.25	56.00	46.00	-7.43	-11.75
3	0.87266	0.24	46.03	33.89	46.27	34.13	56.00	46.00	-9.73	-11.87
4	1.28906	0.27	45.24	32.56	45.51	32.83	56.00	46.00	-10.49	-13.17
5	2.01563	0.31	45.40	32.95	45.71	33.26	56.00	46.00	-10.29	-12.74
6	3.28906	0.39	46.32	34.95	46.71	35.34	56.00	46.00	-9.29	-10.66

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

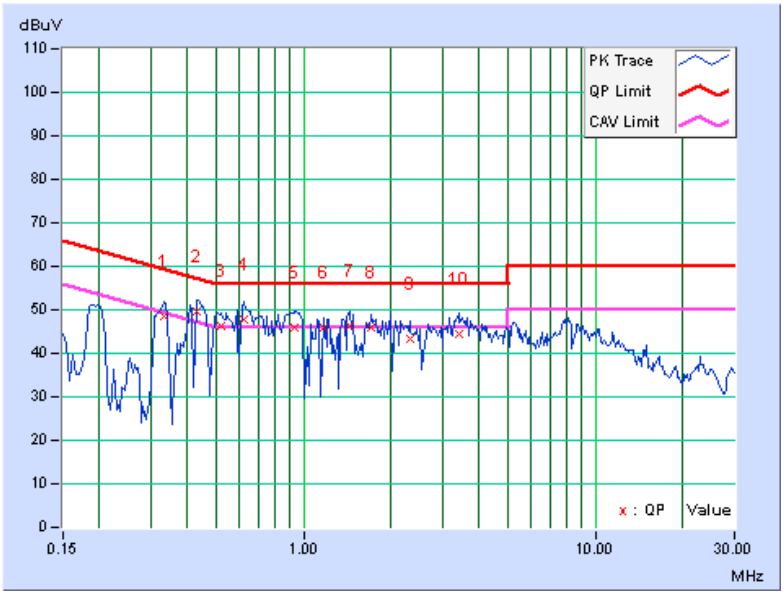


CHANNEL	Channel 40		
PHASE	Line (L)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.33359	0.18	48.17	35.83	48.35	36.01	59.36	49.36	-11.01	-13.35
2	0.43125	0.20	49.30	35.18	49.50	35.38	57.23	47.23	-7.73	-11.85
3	0.51928	0.21	46.12	34.82	46.33	35.03	56.00	46.00	-9.67	-10.97
4	0.62266	0.22	47.55	35.17	47.77	35.39	56.00	46.00	-8.23	-10.61
5	0.93516	0.24	45.51	33.65	45.75	33.89	56.00	46.00	-10.25	-12.11
6	1.16797	0.27	45.77	33.23	46.04	33.50	56.00	46.00	-9.96	-12.50
7	1.43359	0.29	45.95	34.25	46.24	34.54	56.00	46.00	-9.76	-11.46
8	1.69531	0.31	45.54	33.40	45.85	33.71	56.00	46.00	-10.15	-12.29
9	2.30859	0.36	42.99	30.35	43.35	30.71	56.00	46.00	-12.65	-15.29
10	3.41406	0.43	43.97	33.12	44.40	33.55	56.00	46.00	-11.60	-12.45

REMARKS:

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

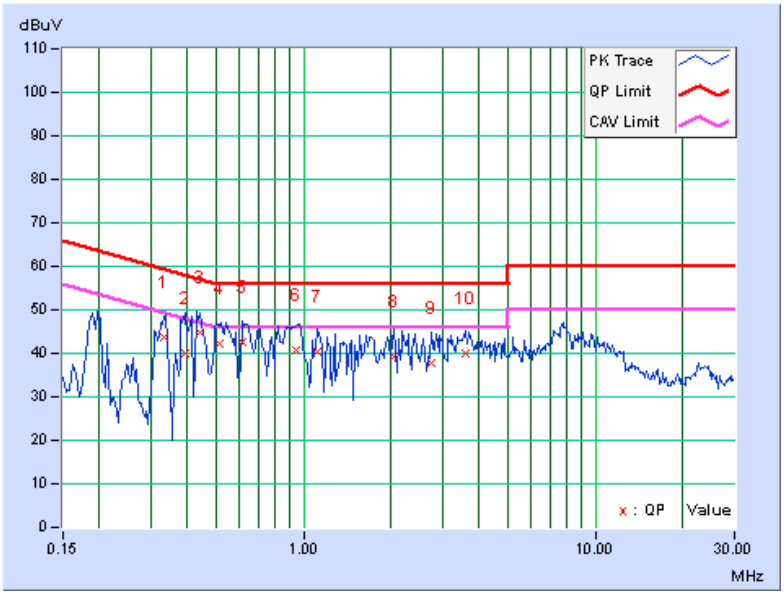


CHANNEL	Channel 40		
PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.33150	0.17	43.42	31.78	43.59	31.95	59.41	49.41	-15.82	-17.46
2	0.39594	0.19	39.86	26.63	40.05	26.82	57.94	47.94	-17.89	-21.12
3	0.43906	0.19	44.66	33.97	44.85	34.16	57.08	47.08	-12.23	-12.92
4	0.51328	0.20	42.04	30.77	42.24	30.97	56.00	46.00	-13.76	-15.03
5	0.61834	0.20	42.38	28.87	42.58	29.07	56.00	46.00	-13.42	-16.93
6	0.94688	0.22	40.60	26.74	40.82	26.96	56.00	46.00	-15.18	-19.04
7	1.10938	0.23	40.17	26.53	40.40	26.76	56.00	46.00	-15.60	-19.24
8	2.04688	0.30	38.88	26.17	39.18	26.47	56.00	46.00	-16.82	-19.53
9	2.73438	0.35	37.56	25.66	37.91	26.01	56.00	46.00	-18.09	-19.99
10	3.59375	0.40	39.76	28.73	40.16	29.13	56.00	46.00	-15.84	-16.87

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

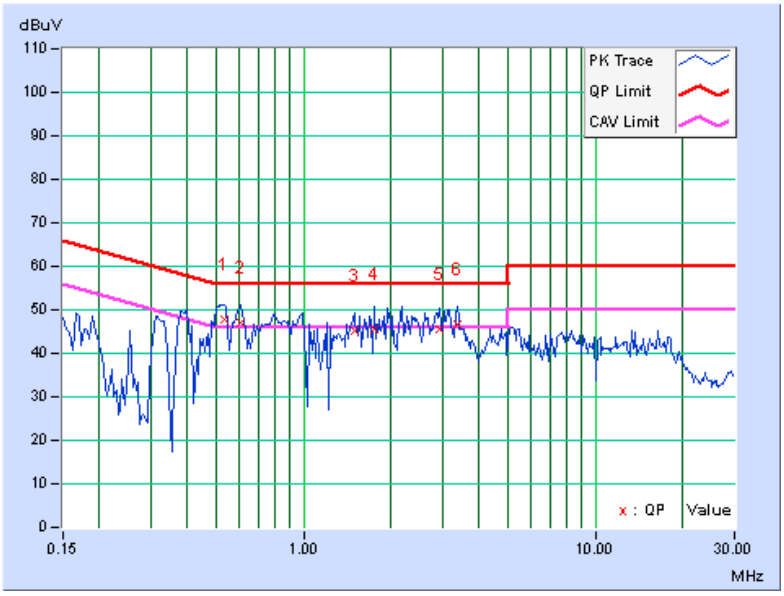


CHANNEL	Channel 48		
PHASE	Line (L)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.53281	0.19	47.73	35.46	47.92	35.65	56.00	46.00	-8.08	-10.35
2	0.61094	0.19	46.75	31.55	46.94	31.74	56.00	46.00	-9.06	-14.26
3	1.49219	0.25	44.86	31.65	45.11	31.90	56.00	46.00	-10.89	-14.10
4	1.74609	0.27	45.34	32.56	45.61	32.83	56.00	46.00	-10.39	-13.17
5	2.91797	0.35	45.23	32.53	45.58	32.88	56.00	46.00	-10.42	-13.12
6	3.35156	0.38	46.31	34.61	46.69	34.99	56.00	46.00	-9.31	-11.01

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

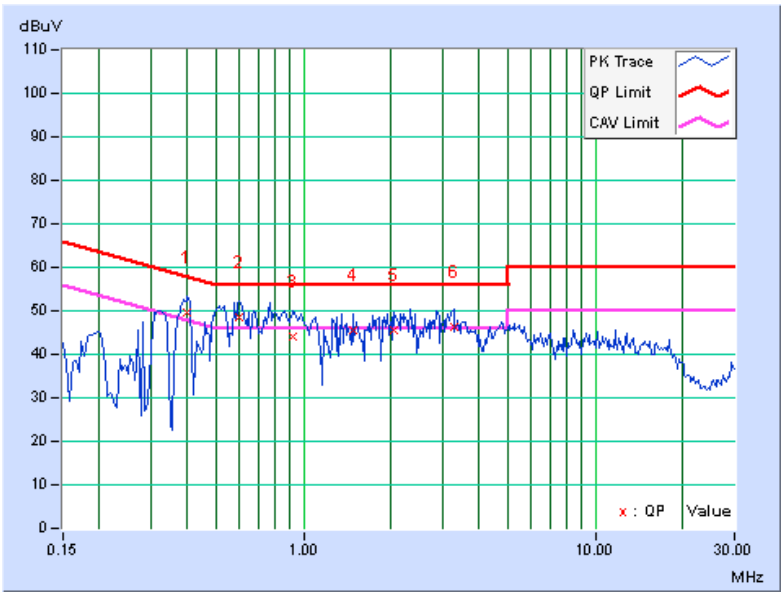


CHANNEL	Channel 48		
PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.40000	0.21	49.60	38.91	49.81	39.12	57.85	47.85	-8.04	-8.73
2	0.60313	0.22	48.41	35.22	48.63	35.44	56.00	46.00	-7.37	-10.56
3	0.92344	0.24	43.90	30.31	44.14	30.55	56.00	46.00	-11.86	-15.45
4	1.47266	0.28	45.26	33.05	45.54	33.33	56.00	46.00	-10.46	-12.67
5	2.04297	0.31	45.07	32.76	45.38	33.07	56.00	46.00	-10.62	-12.93
6	3.26563	0.39	46.08	34.82	46.47	35.21	56.00	46.00	-9.53	-10.79

REMARKS:

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



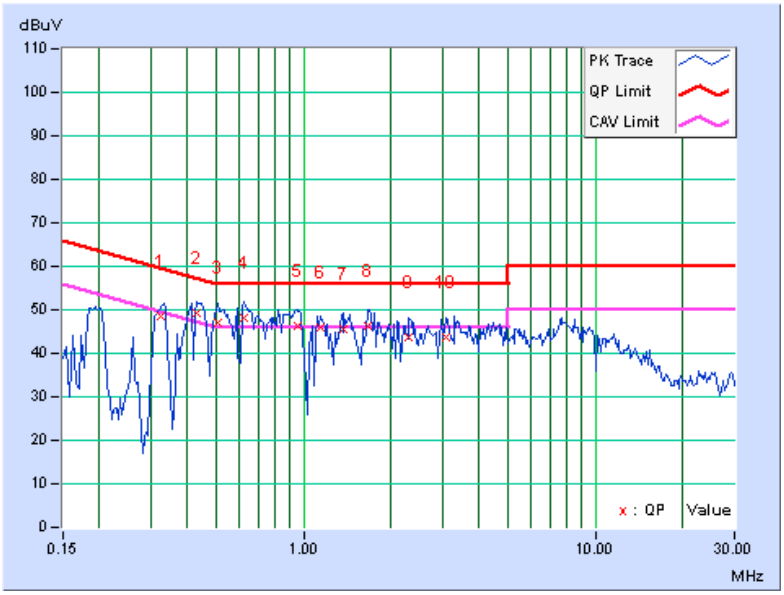
4.1.8 TEST RESULTS (MODE 2)

CHANNEL	Channel 38		
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	0.32559	0.18	48.17	40.19	48.35	40.37	59.56	49.56	-11.21	-9.19
2	0.43125	0.20	49.20	36.04	49.40	36.24	57.23	47.23	-7.83	-10.99
3	0.50938	0.21	46.75	36.14	46.96	36.35	56.00	46.00	-9.04	-9.65
4	0.62656	0.22	47.97	36.24	48.19	36.46	56.00	46.00	-7.81	-9.54
5	0.95469	0.25	45.94	31.40	46.19	31.65	56.00	46.00	-9.81	-14.35
6	1.14063	0.26	45.71	32.75	45.97	33.01	56.00	46.00	-10.03	-12.99
7	1.36719	0.28	45.34	33.19	45.62	33.47	56.00	46.00	-10.38	-12.53
8	1.66797	0.31	45.85	34.37	46.16	34.68	56.00	46.00	-9.84	-11.32
9	2.29688	0.36	43.21	31.02	43.57	31.38	56.00	46.00	-12.43	-14.62
10	3.09766	0.41	43.41	32.14	43.82	32.55	56.00	46.00	-12.18	-13.45

REMARKS:

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

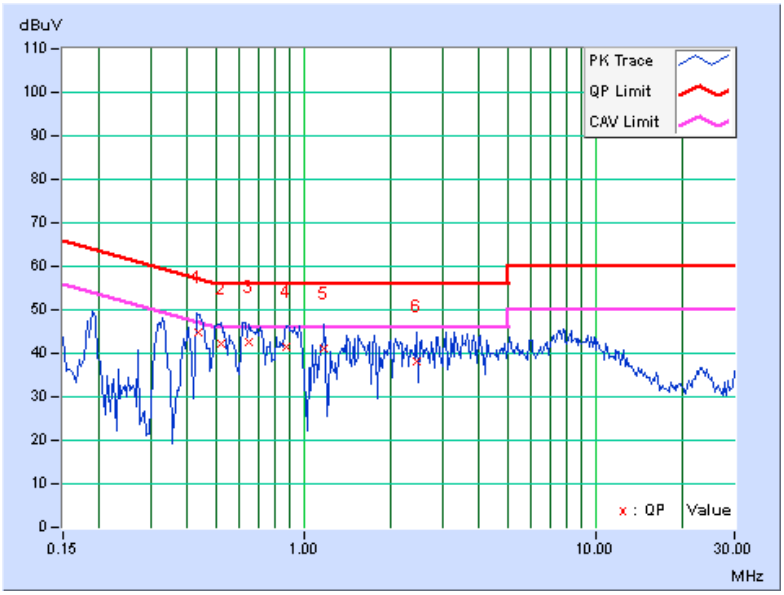


CHANNEL	Channel 38		
PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.43450	0.19	44.44	32.86	44.63	33.05	57.17	47.17	-12.53	-14.11
2	0.52109	0.20	41.90	30.48	42.10	30.68	56.00	46.00	-13.90	-15.32
3	0.65000	0.20	42.31	30.48	42.51	30.68	56.00	46.00	-13.49	-15.32
4	0.87266	0.21	41.13	28.68	41.34	28.89	56.00	46.00	-14.66	-17.11
5	1.17969	0.23	40.88	29.86	41.11	30.09	56.00	46.00	-14.89	-15.91
6	2.45313	0.33	37.71	25.67	38.04	26.00	56.00	46.00	-17.96	-20.00

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

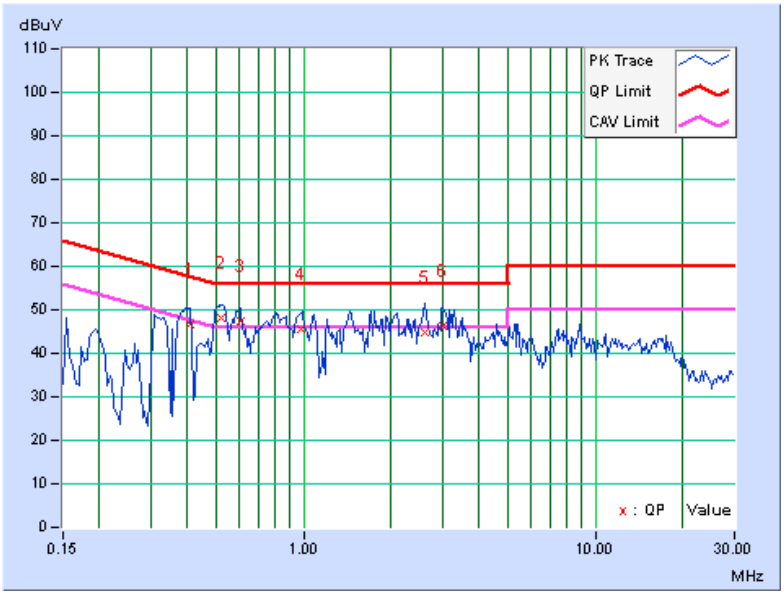


CHANNEL	Channel 46		
PHASE	Line (L)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.40781	0.18	46.57	30.90	46.75	31.08	57.69	47.69	-10.94	-16.61
2	0.52109	0.19	48.03	35.48	48.22	35.67	56.00	46.00	-7.78	-10.33
3	0.60703	0.19	47.34	33.25	47.53	33.44	56.00	46.00	-8.47	-12.56
4	0.98203	0.22	45.37	30.04	45.59	30.26	56.00	46.00	-10.41	-15.74
5	2.59375	0.33	44.36	31.70	44.69	32.03	56.00	46.00	-11.31	-13.97
6	3.01563	0.36	46.12	33.42	46.48	33.78	56.00	46.00	-9.52	-12.22

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

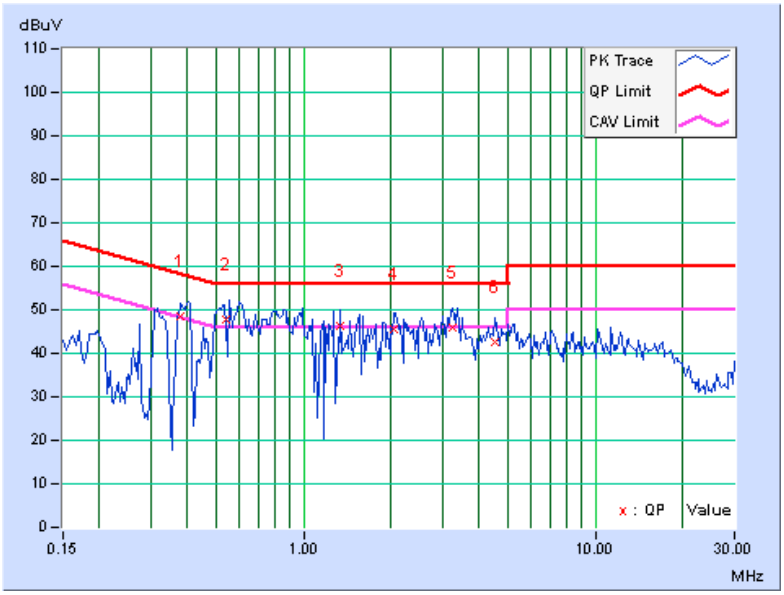


CHANNEL	Channel 46		
PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.38047	0.21	48.33	37.77	48.54	37.98	58.27	48.27	-9.73	-10.29
2	0.54103	0.22	47.42	31.65	47.64	31.87	56.00	46.00	-8.36	-14.13
3	1.33984	0.27	45.86	32.16	46.13	32.43	56.00	46.00	-9.87	-13.57
4	2.03125	0.31	45.27	32.51	45.58	32.82	56.00	46.00	-10.42	-13.18
5	3.25781	0.39	45.40	34.39	45.79	34.78	56.00	46.00	-10.21	-11.22
6	4.52344	0.47	42.09	31.49	42.56	31.96	56.00	46.00	-13.44	-14.04

REMARKS:

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



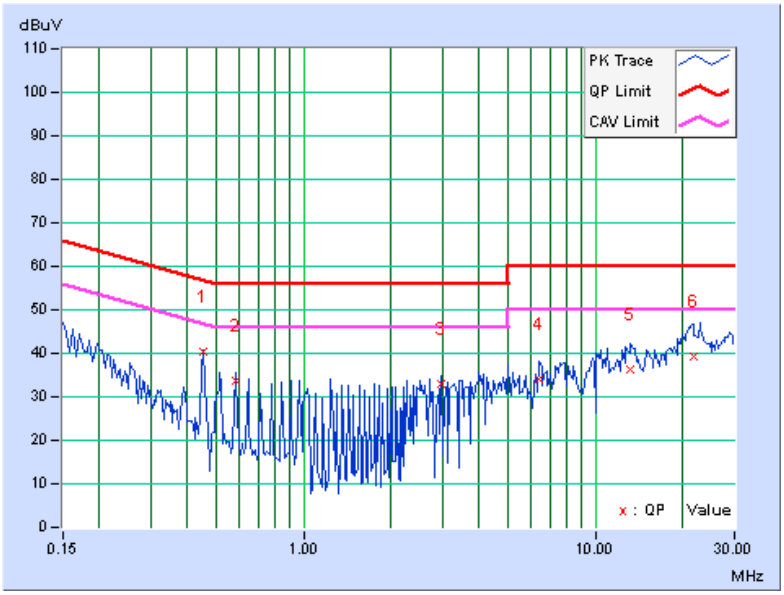
4.1.9 TEST RESULTS (MODE 3)

CHANNEL	Channel 36		
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	0.45469	0.16	40.08	39.52	40.24	39.68	56.79	46.79	-16.55	-7.11
2	0.58359	0.17	33.67	33.58	33.84	33.75	56.00	46.00	-22.16	-12.25
3	2.98047	0.27	32.52	29.32	32.79	29.59	56.00	46.00	-23.21	-16.41
4	6.41019	0.41	33.75	30.19	34.16	30.60	60.00	50.00	-25.84	-19.40
5	13.21094	0.71	35.57	30.19	36.28	30.90	60.00	50.00	-23.72	-19.10
6	21.63281	1.05	38.23	31.08	39.28	32.13	60.00	50.00	-20.72	-17.87

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

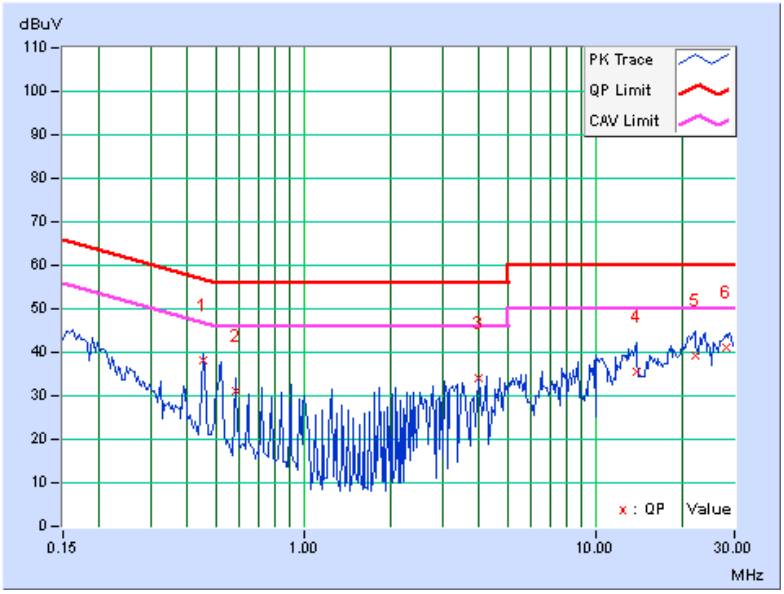


CHANNEL	Channel 36		
PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.45469	0.19	37.94	38.14	38.13	38.33	56.79	46.79	-18.66	-8.46
2	0.58359	0.20	31.03	30.84	31.23	31.04	56.00	46.00	-24.77	-14.96
3	4.00781	0.34	33.83	33.05	34.17	33.39	56.00	46.00	-21.83	-12.61
4	13.91406	0.65	34.95	30.40	35.60	31.05	60.00	50.00	-24.40	-18.95
5	22.00000	0.83	38.49	33.68	39.32	34.51	60.00	50.00	-20.68	-15.49
6	28.04297	0.98	40.26	36.05	41.24	37.03	60.00	50.00	-18.76	-12.97

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

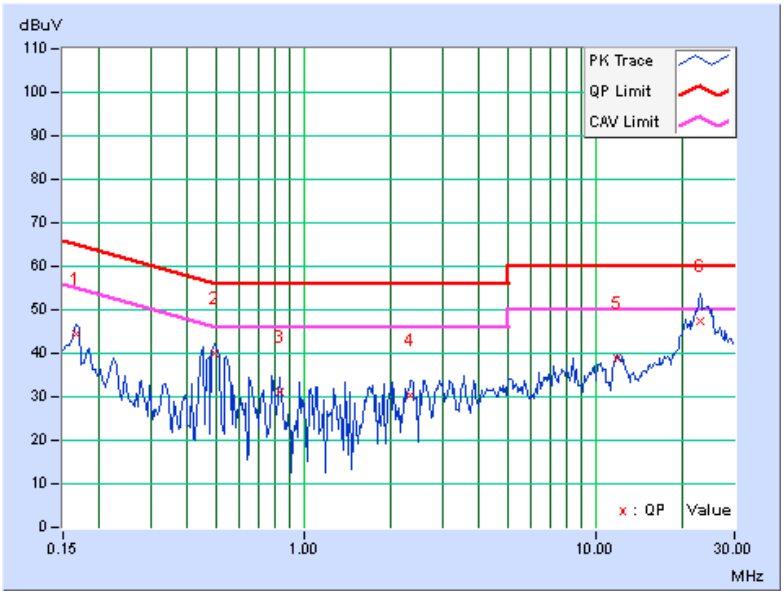


CHANNEL	Channel 40		
PHASE	Line (L)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.16562	0.13	44.45	36.59	44.58	36.72	65.18	55.18	-20.60	-18.46
2	0.49766	0.19	39.92	38.10	40.11	38.29	56.04	46.04	-15.93	-7.75
3	0.82578	0.21	31.02	23.57	31.23	23.78	56.00	46.00	-24.77	-22.22
4	2.33203	0.29	29.95	23.86	30.24	24.15	56.00	46.00	-25.76	-21.85
5	11.88416	0.74	38.19	35.28	38.93	36.02	60.00	50.00	-21.07	-13.98
6	22.82813	1.12	46.32	40.09	47.44	41.21	60.00	50.00	-12.56	-8.79

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

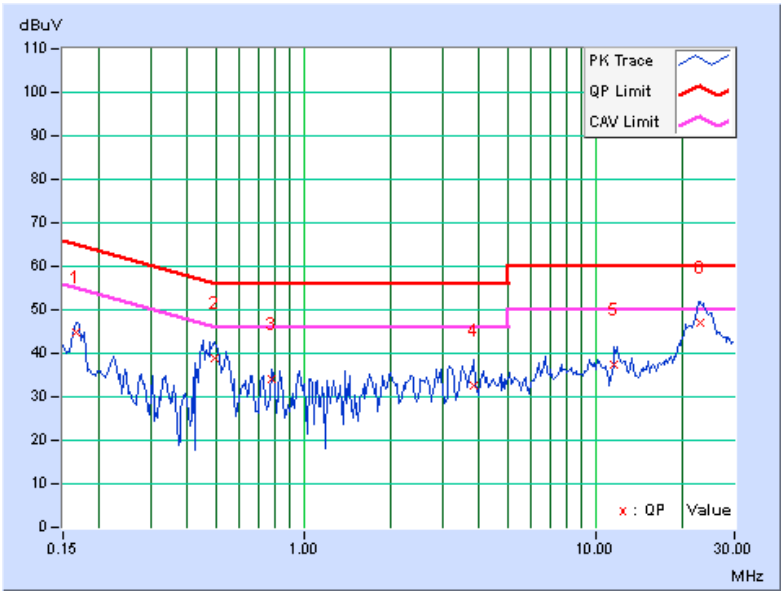


CHANNEL	Channel 40		
PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.16562	0.11	44.79	37.49	44.90	37.60	65.18	55.18	-20.28	-17.58
2	0.49375	0.17	38.86	32.81	39.03	32.98	56.10	46.10	-17.07	-13.12
3	0.77500	0.19	33.77	31.47	33.96	31.66	56.00	46.00	-22.04	-14.34
4	3.82422	0.32	32.10	25.04	32.42	25.36	56.00	46.00	-23.58	-20.64
5	11.61719	0.56	36.97	33.50	37.53	34.06	60.00	50.00	-22.47	-15.94
6	22.83984	0.79	46.17	40.03	46.96	40.82	60.00	50.00	-13.04	-9.18

REMARKS:

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

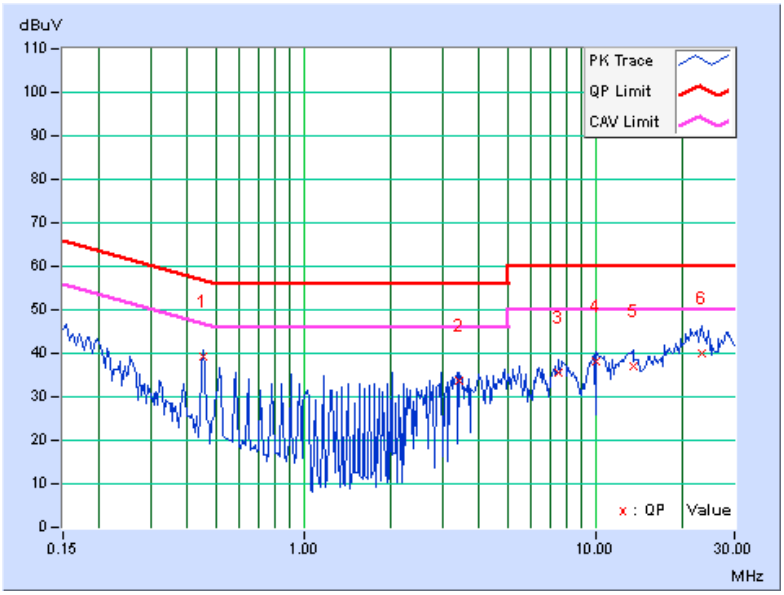


CHANNEL	Channel 48		
PHASE	Line (L)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	**0.45469**	**0.16**	**39.16**	**39.56**	**39.32**	**39.72**	**56.79**	**46.79**	**-17.47**	**-7.07**
2	3.42969	0.29	33.39	29.89	33.68	30.18	56.00	46.00	-22.32	-15.82
3	7.51172	0.46	35.24	30.31	35.70	30.77	60.00	50.00	-24.30	-19.23
4	10.09766	0.56	37.58	33.64	38.14	34.20	60.00	50.00	-21.86	-15.80
5	13.52728	0.73	36.42	32.44	37.15	33.17	60.00	50.00	-22.85	-16.83
6	23.29688	1.13	39.04	33.56	40.17	34.69	60.00	50.00	-19.83	-15.31

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

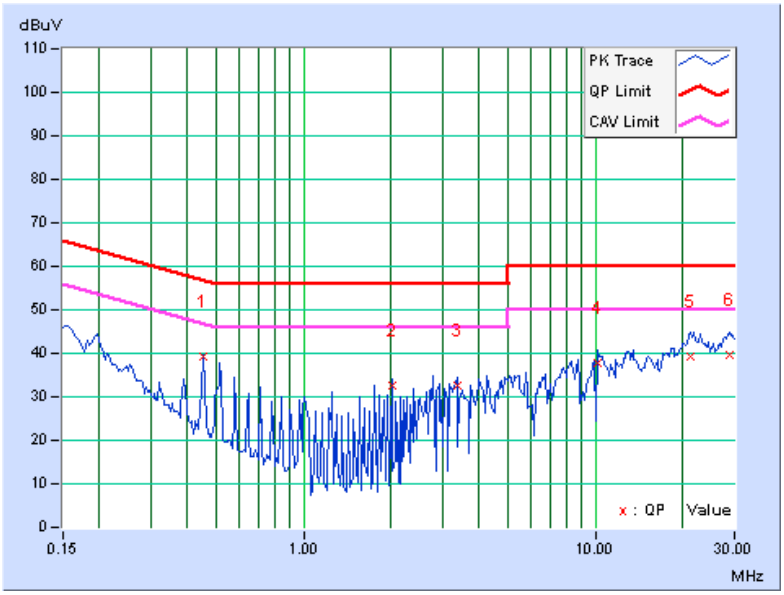


CHANNEL	Channel 48		
PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.45469	0.19	39.03	38.28	39.22	38.47	56.79	46.79	-17.57	-8.32
2	2.00391	0.27	32.16	28.69	32.43	28.96	56.00	46.00	-23.57	-17.04
3	3.36719	0.32	32.37	27.72	32.69	28.04	56.00	46.00	-23.31	-17.96
4	10.22656	0.54	37.17	34.03	37.71	34.57	60.00	50.00	-22.29	-15.43
5	21.08984	0.81	38.43	32.40	39.24	33.21	60.00	50.00	-20.76	-16.79
6	28.78516	1.00	38.70	33.94	39.70	34.94	60.00	50.00	-20.30	-15.06

REMARKS:

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



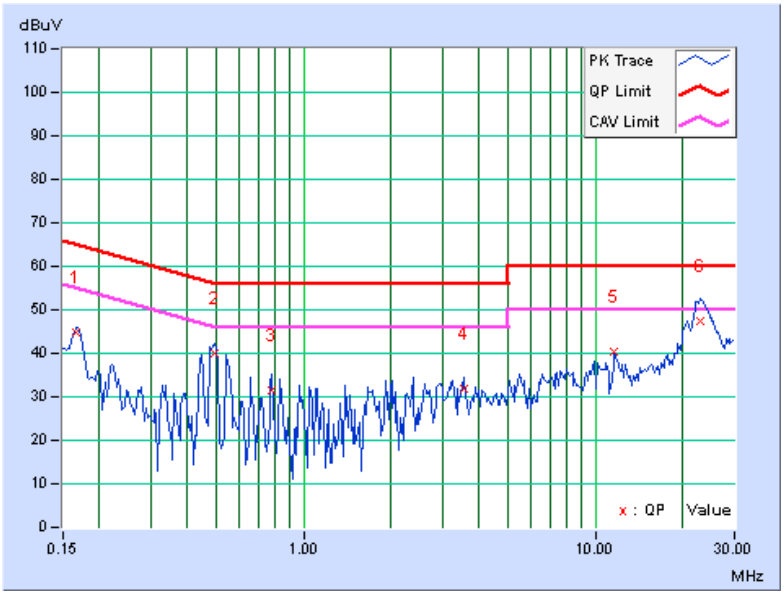
4.1.10 TEST RESULTS (MODE 4)

CHANNEL	Channel 38		
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	0.16562	0.13	44.77	36.96	44.90	37.09	65.18	55.18	-20.28	-18.09
2	0.49375	0.19	39.86	35.88	40.05	36.07	56.10	46.10	-16.06	-10.04
3	0.77891	0.21	31.32	27.88	31.53	28.09	56.00	46.00	-24.47	-17.91
4	3.55469	0.34	31.42	24.02	31.76	24.36	56.00	46.00	-24.24	-21.64
5	11.62125	0.73	39.74	37.91	40.47	38.64	60.00	50.00	-19.53	-11.36
6	23.00781	1.12	46.18	40.30	47.30	41.42	60.00	50.00	-12.70	-8.58

REMARKS:

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

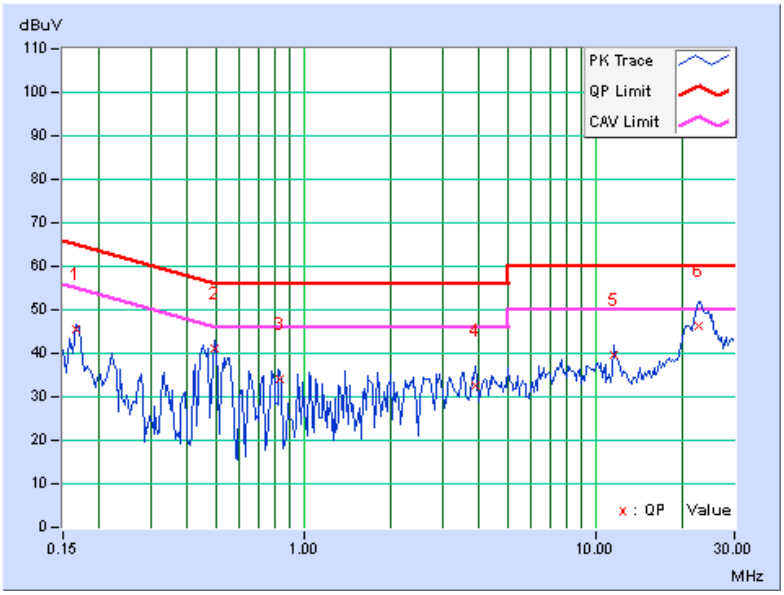


CHANNEL	Channel 38		
PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.16562	0.11	45.32	38.02	45.43	38.13	65.18	55.18	-19.75	-17.05
2	0.49375	0.17	40.83	36.66	41.00	36.83	56.10	46.10	-15.10	-9.27
3	0.82537	0.19	33.96	28.13	34.15	28.32	56.00	46.00	-21.85	-17.68
4	3.87109	0.33	32.35	25.50	32.68	25.83	56.00	46.00	-23.32	-20.17
5	11.62500	0.56	39.24	36.86	39.80	37.42	60.00	50.00	-20.20	-12.58
6	22.55078	0.78	45.62	39.64	46.40	40.42	60.00	50.00	-13.60	-9.58

REMARKS:

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

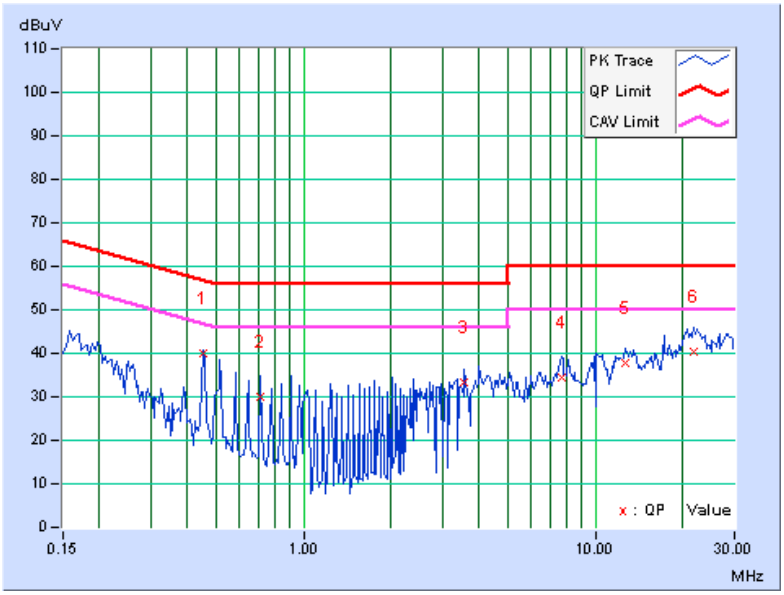


CHANNEL	Channel 46		
PHASE	Line (L)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.45469	0.16	39.94	39.25	40.10	39.41	56.79	46.79	-16.69	-7.38
2	0.71250	0.18	29.96	24.91	30.14	25.09	56.00	46.00	-25.86	-20.91
3	3.56250	0.29	33.11	28.95	33.40	29.24	56.00	46.00	-22.60	-16.76
4	7.64063	0.46	34.08	26.89	34.54	27.35	60.00	50.00	-25.46	-22.65
5	12.61719	0.68	37.05	32.73	37.73	33.41	60.00	50.00	-22.27	-16.59
6	21.69141	1.05	39.32	32.85	40.37	33.90	60.00	50.00	-19.63	-16.10

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

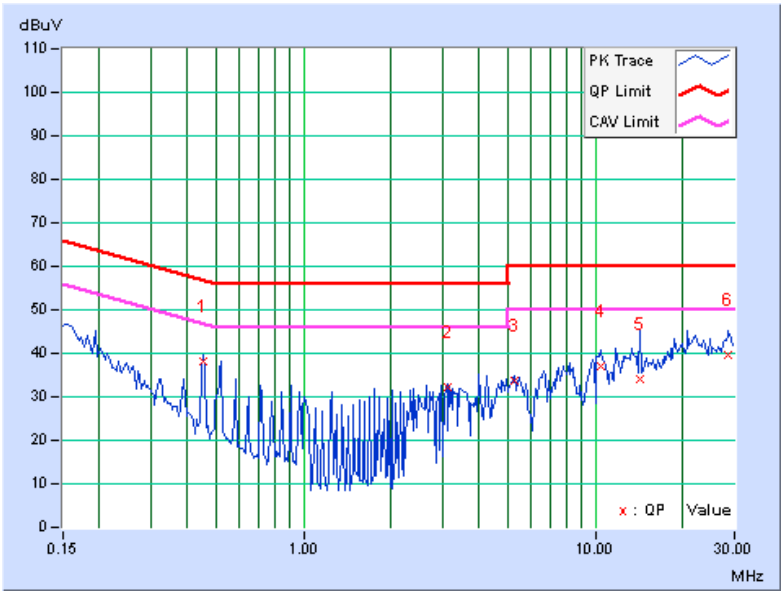


CHANNEL	Channel 46		
PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)

	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	0.45469	0.19	37.78	38.10	37.97	38.29	56.79	46.79	-18.82	-8.50
2	3.10547	0.31	31.78	27.70	32.09	28.01	56.00	46.00	-23.91	-17.99
3	5.30859	0.38	33.19	29.70	33.57	30.08	60.00	50.00	-26.43	-19.92
4	10.42578	0.54	36.59	30.32	37.13	30.86	60.00	50.00	-22.87	-19.14
5	14.17969	0.66	33.49	27.26	34.15	27.92	60.00	50.00	-25.85	-22.08
6	28.53516	0.99	38.55	33.78	39.54	34.77	60.00	50.00	-20.46	-15.23

REMARKS:

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



4.2 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	
√	FIELD STRENGTH AT 3m (dBμV/m)	
	PK	AV
	74	54
-	EIRP LIMIT (dBm)	EQUIVALENT FIELD STRENGTH AT 3m (dBμV/m)
	PK	PK
	-27	68.3

NOTE:

1. 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

For below 1GHz (Mode 1:CH 36 & CH48 / Mode 2:CH 46)

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer Agilent	E4446A	MY48250253	Aug. 28, 2013	Aug. 27, 2014
MXE EMI Receiver Agilent	N9038A	MY51210105	Jan. 29,2013	Jan. 28,2014
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-03	Nov. 14, 2012	Nov. 13, 2013
Pre-Amplifier Agilent	8449B	3008A02578	June 25, 2013	June 24, 2014
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Nov. 14, 2012	Nov. 13, 2013
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-360	Mar. 19, 2013	Mar. 18, 2014
Horn_Antenna AISI	AIH.8018	0000320091110	Nov. 19, 2012	Nov. 18, 2013
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Oct. 12, 2012	Oct. 11, 2013
RF Cable	NA	RF104-201 RF104-203 RF104-204	Dec. 25, 2012	Dec. 24, 2013
RF Cable	NA	CHGCAB_001	Oct. 06, 2012	Oct. 05, 2013
Software	ADT_Radiated _V8.7.05	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: Sep. 05, 2013

For other test items

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer Agilent	E4446A	MY48250253	Sep. 03, 2012	Sep. 02, 2013
MXE EMI Receiver Agilent	N9038A	MY50010156	Jan. 16, 2013	Jan. 15, 2014
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-04	Nov. 14, 2012	Nov. 13, 2013
Pre-Amplifier Agilent	8449B	3008A01923	Oct. 30, 2012	Oct. 29, 2013
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Nov. 14, 2012	Nov. 13, 2013
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Mar. 25, 2013	Mar. 24, 2014
Horn_Antenna AISI	AIH.8018	0000220091110	Nov. 27, 2012	Nov. 26, 2013
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Oct. 12, 2012	Oct. 11, 2013
RF Cable	NA	RF104-205 RF104-207 RF104-202	Dec. 26, 2012	Dec. 25, 2013
RF Cable	NA	CHHCAB_001	Oct. 07, 2012	Oct. 06, 2013
Software	ADT_Radiated_V8.7.05	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. H.
4. The FCC Site Registration No. is 797305.
5 The CANADA Site Registration No. is IC 7450H-3.
6 Tested Date: Aug. 01 to 02, 2013

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:

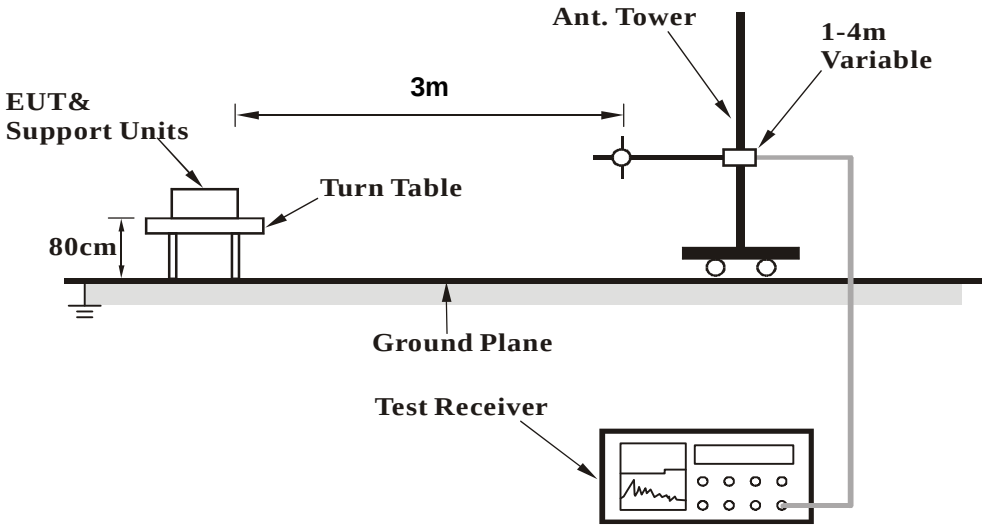
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.2.5 DEVIATION FROM TEST STANDARD

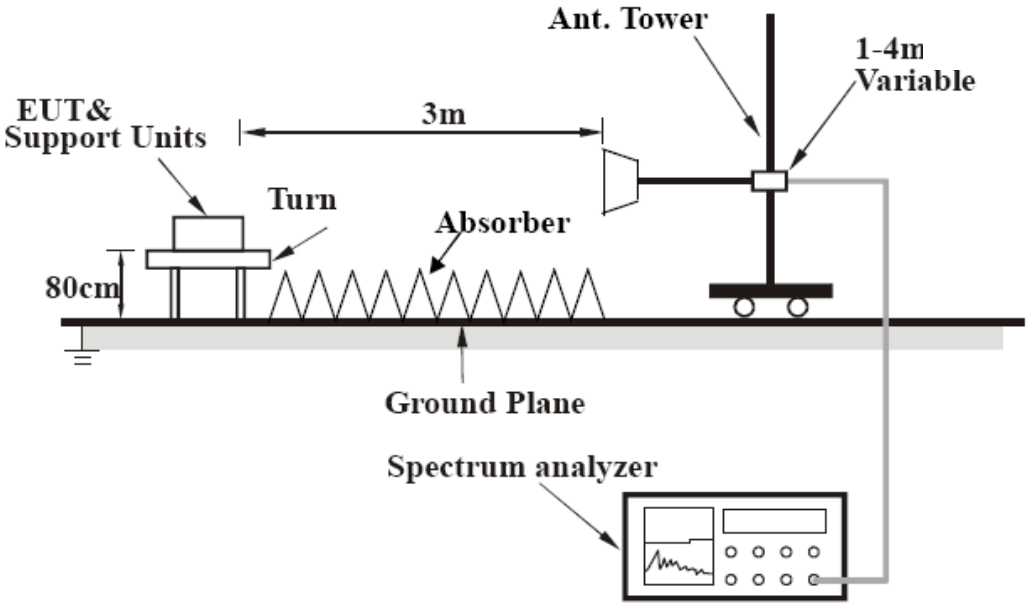
No deviation

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 (MODE 1)

BELOW 1GHz WORST-CASE DATA

802.11a

CHANNEL	TX Channel 36	**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	99.06	35.3 QP	43.5	-8.2	1.50 H	66	53.74	-18.42
2	125.01	32.9 QP	43.5	-10.6	1.50 H	74	47.87	-14.95
3	600.02	40.6 QP	46.0	-5.4	1.50 H	360	46.07	-5.47
4	625.00	41.7 QP	46.0	-4.3	1.25 H	15	46.47	-4.79
5	875.02	40.3 QP	46.0	-5.7	1.00 H	172	41.25	-0.94
6	1000.00	45.5 QP	54.0	-8.5	1.25 H	123	44.54	0.95
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	62.98	37.1 QP	40.0	-2.9	1.00 V	0	51.22	-14.11
2	118.42	29.6 QP	43.5	-14.0	1.00 V	351	45.02	-15.47
3	172.88	29.0 QP	43.5	-14.6	1.00 V	298	43.19	-14.24
4	207.27	28.5 QP	43.5	-15.0	1.00 V	262	45.04	-16.57
5	250.00	24.4 QP	46.0	-21.7	1.50 V	0	38.79	-14.44
6	875.02	41.9 QP	46.0	-4.1	1.50 V	357	42.86	-0.94

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

CHANNEL	TX Channel 40	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	95.33	29.0 QP	43.5	-14.5	2.00 H	214	47.54	-18.54
2	172.20	34.5 QP	43.5	-9.0	1.50 H	88	48.15	-13.68
3	301.70	34.2 QP	46.0	-11.8	1.00 H	134	46.33	-12.11
4	625.00	36.7 QP	46.0	-9.3	1.50 H	43	41.49	-4.78
5	750.03	39.3 QP	46.0	-6.7	1.00 H	332	41.85	-2.55
6	875.02	42.7 QP	46.0	-3.3	1.50 H	332	43.51	-0.82
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	37.66	33.7 QP	40.0	-6.3	1.00 V	315	47.40	-13.70
2	333.37	36.8 QP	46.0	-9.2	1.50 V	234	47.90	-11.06
3	466.69	36.6 QP	46.0	-9.4	1.00 V	65	44.80	-8.21
4	750.03	38.4 QP	46.0	-7.6	1.50 V	360	40.96	-2.55
5	866.72	37.3 QP	46.0	-8.7	1.50 V	233	38.24	-0.98
6	875.02	39.8 QP	46.0	-6.2	1.00 V	73	40.58	-0.82

REMARKS:

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

CHANNEL	TX Channel 48	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	47.46	33.4 QP	40.0	-6.6	1.50 H	271	46.95	-13.52
2	98.87	33.9 QP	43.5	-9.6	1.50 H	95	52.40	-18.54
3	125.01	33.4 QP	43.5	-10.1	1.50 H	82	48.37	-14.95
4	171.77	31.0 QP	43.5	-12.5	1.50 H	264	44.93	-13.95
5	875.02	41.0 QP	46.0	-5.0	1.00 H	175	41.97	-0.94
6	1000.00	43.1 QP	54.0	-10.9	1.50 H	136	42.15	0.95
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	73.70	36.0 QP	40.0	-4.0	1.00 V	360	52.52	-16.56
2	173.32	27.7 QP	43.5	-15.8	1.00 V	310	42.03	-14.37
3	375.03	27.9 QP	46.0	-18.1	1.50 V	220	38.64	-10.77
4	625.00	39.1 QP	46.0	-6.9	1.50 V	345	43.93	-4.79
5	875.02	41.2 QP	46.0	-4.8	1.50 V	360	42.14	-0.94
6	1000.00	42.5 QP	54.0	-11.5	1.00 V	169	41.58	0.95

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	73.6 PK	74.0	-0.4	1.25 H	256	32.14	41.46
2	5150.00	53.3 AV	54.0	-0.7	1.25 H	256	11.84	41.46
3	*5180.00	110.1 PK			1.25 H	256	68.52	41.58
4	*5180.00	101.9 AV			1.25 H	256	60.32	41.58
5	#10360.00	50.5 PK	74.0	-23.5	1.27 H	158	2.21	48.29
6	#10360.00	38.2 AV	54.0	-15.8	1.27 H	158	-10.09	48.29
7	15540.00	60.4 PK	74.0	-13.6	1.30 H	150	6.51	53.89
8	15540.00	48.5 AV	54.0	-5.5	1.30 H	150	-5.39	53.89
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	54.6 PK	74.0	-19.4	1.03 V	360	13.14	41.46
2	5150.00	42.6 AV	54.0	-11.4	1.03 V	360	1.14	41.46
3	*5180.00	96.7 PK			1.03 V	360	55.12	41.58
4	*5180.00	86.9 AV			1.03 V	360	45.32	41.58
5	#10360.00	50.5 PK	74.0	-23.5	1.00 V	169	2.21	48.29
6	#10360.00	38.0 AV	54.0	-16.0	1.00 V	169	-10.29	48.29
7	15540.00	59.0 PK	74.0	-15.0	1.17 V	110	5.11	53.89
8	15540.00	46.2 AV	54.0	-7.8	1.17 V	110	-7.69	53.89

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	72.1 PK	74.0	-1.9	1.32 H	243	30.64	41.46
2	5150.00	50.0 AV	54.0	-4.0	1.32 H	243	8.54	41.46
3	*5200.00	112.9 PK			1.32 H	243	71.23	41.67
4	*5200.00	105.5 AV			1.32 H	243	63.83	41.67
5	#10400.00	50.0 PK	74.0	-24.0	1.25 H	153	2.03	47.97
6	#10400.00	38.1 AV	54.0	-15.9	1.25 H	153	-9.87	47.97
7	15600.00	60.6 PK	74.0	-13.4	1.31 H	144	6.68	53.92
8	15600.00	48.7 AV	54.0	-5.3	1.31 H	144	-5.22	53.92
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	5150.00	54.4 PK	74.0	-19.6	1.07 V	360	12.94	41.46
2	5150.00	40.2 AV	54.0	-13.8	1.07 V	360	-1.26	41.46
3	*5200.00	99.5 PK			1.07 V	360	57.83	41.67
4	*5200.00	90.3 AV			1.07 V	360	48.63	41.67
5	#10400.00	50.8 PK	74.0	-23.2	1.22 V	164	2.83	47.97
6	#10400.00	38.0 AV	54.0	-16.0	1.22 V	164	-9.97	47.97
7	15600.00	58.7 PK	74.0	-15.3	1.30 V	91	4.78	53.92
8	15600.00	45.5 AV	54.0	-8.5	1.30 V	91	-8.42	53.92

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 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	70.5 PK	74.0	-3.5	1.31 H	244	29.04	41.46
2	5150.00	47.4 AV	54.0	-6.6	1.31 H	244	5.94	41.46
3	*5240.00	116.4 PK			1.31 H	244	74.63	41.77
4	*5240.00	108.7 AV			1.31 H	244	66.93	41.77
5	5350.00	61.3 PK	74.0	-12.7	1.31 H	244	19.30	42.00
6	5350.00	44.5 AV	54.0	-9.5	1.31 H	244	2.50	42.00
7	#10480.00	51.6 PK	74.0	-22.4	1.00 H	152	3.17	48.43
8	#10480.00	39.1 AV	54.0	-14.9	1.00 H	152	-9.33	48.43
9	15720.00	60.7 PK	74.0	-13.3	1.00 H	155	7.19	53.51
10	15720.00	48.7 AV	54.0	-5.3	1.00 H	155	-4.81	53.51
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	70.9 PK	74.0	-3.1	1.03 V	360	29.44	41.46
2	5150.00	47.6 AV	54.0	-6.4	1.03 V	360	6.14	41.46
3	*5240.00	103.8 PK			1.03 V	360	62.03	41.77
4	*5240.00	93.9 AV			1.03 V	360	52.13	41.77
5	5350.00	60.5 PK	74.0	-13.5	1.03 V	360	18.50	42.00
6	5350.00	44.6 AV	54.0	-9.4	1.03 V	360	2.60	42.00
7	#10480.00	50.8 PK	74.0	-23.2	1.00 V	165	2.37	48.43
8	#10480.00	38.3 AV	54.0	-15.7	1.00 V	165	-10.13	48.43
9	15720.00	58.8 PK	74.0	-15.2	1.33 V	95	5.29	53.51
10	15720.00	45.7 AV	54.0	-8.3	1.33 V	95	-7.81	53.51

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.

802.11n (HT20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	73.5 PK	74.0	-0.5	1.09 H	259	32.04	41.46
2	**5150.00**	**53.8 AV**	**54.0**	**-0.2**	**1.09 H**	**259**	**12.34**	**41.46**
3	*5180.00	109.7 PK			1.09 H	258	68.12	41.58
4	*5180.00	101.3 AV			1.09 H	258	59.72	41.58
5	#10360.00	49.4 PK	74.0	-24.6	1.11 H	156	1.11	48.29
6	#10360.00	37.6 AV	54.0	-16.4	1.11 H	156	-10.69	48.29
7	15540.00	58.8 PK	74.0	-15.2	1.31 H	129	4.91	53.89
8	15540.00	47.7 AV	54.0	-6.3	1.31 H	129	-6.19	53.89
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.0 PK	74.0	-19.0	1.03 V	346	13.54	41.46
2	5150.00	43.6 AV	54.0	-10.4	1.03 V	346	2.14	41.46
3	*5180.00	96.0 PK			1.03 V	346	54.42	41.58
4	*5180.00	85.9 AV			1.03 V	346	44.32	41.58
5	#10360.00	50.0 PK	74.0	-24.0	1.20 V	152	1.71	48.29
6	#10360.00	37.2 AV	54.0	-16.8	1.20 V	152	-11.09	48.29
7	15540.00	57.1 PK	74.0	-16.9	1.18 V	88	3.21	53.89
8	15540.00	44.9 AV	54.0	-9.1	1.18 V	88	-8.99	53.89

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	66.7 PK	74.0	-7.3	1.27 H	99	25.24	41.46
2	5150.00	50.5 AV	54.0	-3.5	1.27 H	99	9.04	41.46
3	*5200.00	115.4 PK			1.27 H	99	73.73	41.67
4	*5200.00	105.1 AV			1.27 H	99	63.43	41.67
5	#10400.00	49.4 PK	74.0	-24.6	1.19 H	124	1.43	47.97
6	#10400.00	37.7 AV	54.0	-16.3	1.19 H	124	-10.27	47.97
7	15600.00	59.9 PK	74.0	-14.1	1.21 H	121	5.98	53.92
8	15600.00	48.9 AV	54.0	-5.1	1.21 H	121	-5.02	53.92
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	5150.00	48.4 PK	74.0	-25.6	1.03 V	342	6.94	41.46
2	5150.00	40.2 AV	54.0	-13.8	1.03 V	342	-1.26	41.46
3	*5200.00	102.0 PK			1.03 V	342	60.33	41.67
4	*5200.00	89.8 AV			1.03 V	342	48.13	41.67
5	#10400.00	50.0 PK	74.0	-24.0	1.14 V	167	2.03	47.97
6	#10400.00	37.0 AV	54.0	-17.0	1.14 V	167	-10.97	47.97
7	15600.00	57.9 PK	74.0	-16.1	1.29 V	88	3.98	53.92
8	15600.00	45.6 AV	54.0	-8.4	1.29 V	88	-8.32	53.92

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 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	69.8 PK	74.0	-4.2	1.24 H	99	28.34	41.46
2	5150.00	48.9 AV	54.0	-5.1	1.24 H	99	7.44	41.46
3	*5240.00	119.0 PK			1.24 H	99	77.23	41.77
4	*5240.00	108.9 AV			1.24 H	99	67.13	41.77
5	5350.00	67.8 PK	74.0	-6.2	1.24 H	99	25.80	42.00
6	5350.00	45.8 AV	54.0	-8.2	1.24 H	99	3.80	42.00
7	#10480.00	49.7 PK	74.0	-24.3	1.23 H	157	1.27	48.43
8	#10480.00	37.8 AV	54.0	-16.2	1.23 H	157	-10.63	48.43
9	15720.00	59.0 PK	74.0	-15.0	1.22 H	132	5.49	53.51
10	15720.00	48.0 AV	54.0	-6.0	1.22 H	132	-5.51	53.51
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	69.1 PK	74.0	-4.9	1.07 V	351	27.64	41.46
2	5150.00	48.5 AV	54.0	-5.5	1.07 V	351	7.04	41.46
3	*5240.00	105.7 PK			1.07 V	351	63.93	41.77
4	*5240.00	93.9 AV			1.07 V	351	52.13	41.77
5	5350.00	67.9 PK	74.0	-6.1	1.07 V	351	25.90	42.00
6	5350.00	45.6 AV	54.0	-8.4	1.07 V	351	3.60	42.00
7	#10480.00	49.6 PK	74.0	-24.4	1.22 V	148	1.17	48.43
8	#10480.00	37.2 AV	54.0	-16.8	1.22 V	148	-11.23	48.43
9	15720.00	58.0 PK	74.0	-16.0	1.12 V	89	4.49	53.51
10	15720.00	45.6 AV	54.0	-8.4	1.12 V	89	-7.91	53.51

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.

802.11n (HT40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	73.6 PK	74.0	-0.4	1.22 H	281	32.14	41.46
2	5150.00	51.0 AV	54.0	-3.0	1.22 H	281	9.54	41.46
3	*5190.00	101.9 PK			1.22 H	281	60.27	41.63
4	*5190.00	94.0 AV			1.22 H	281	52.37	41.63
5	#10380.00	49.5 PK	74.0	-24.5	1.35 H	160	1.37	48.13
6	#10380.00	38.2 AV	54.0	-15.8	1.35 H	160	-9.93	48.13
7	15570.00	59.1 PK	74.0	-14.9	1.23 H	128	5.20	53.90
8	15570.00	47.9 AV	54.0	-6.1	1.23 H	128	-6.00	53.90
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	5150.00	56.1 PK	74.0	-17.9	1.18 V	350	14.64	41.46
2	5150.00	40.8 AV	54.0	-13.2	1.18 V	350	-0.66	41.46
3	*5190.00	88.2 PK			1.18 V	350	46.57	41.63
4	*5190.00	78.6 AV			1.18 V	350	36.97	41.63
5	#10380.00	49.9 PK	74.0	-24.1	1.29 V	161	1.77	48.13
6	#10380.00	37.1 AV	54.0	-16.9	1.29 V	161	-11.03	48.13
7	15570.00	58.3 PK	74.0	-15.7	1.23 V	99	4.40	53.90
8	15570.00	45.4 AV	54.0	-8.6	1.23 V	99	-8.50	53.90

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 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	5147.00	72.1 PK	74.0	-1.9	1.24 H	100	30.66	41.44
2	5147.00	53.6 AV	54.0	-0.4	1.24 H	100	12.16	41.44
3	*5230.00	111.2 PK			1.24 H	100	69.46	41.74
4	*5230.00	103.5 AV			1.24 H	100	61.76	41.74
5	#10460.00	48.8 PK	74.0	-25.2	1.28 H	154	0.49	48.31
6	#10460.00	37.8 AV	54.0	-16.2	1.28 H	154	-10.51	48.31
7	15690.00	59.0 PK	74.0	-15.0	1.23 H	131	5.51	53.49
8	15690.00	47.9 AV	54.0	-6.1	1.23 H	131	-5.59	53.49
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	5147.00	55.2 PK	74.0	-18.8	1.24 V	357	13.76	41.44
2	5147.00	43.7 AV	54.0	-10.3	1.24 V	357	2.26	41.44
3	*5230.00	98.2 PK			1.24 V	357	56.46	41.74
4	*5230.00	88.3 AV			1.24 V	357	46.56	41.74
5	#10460.00	50.7 PK	74.0	-23.3	1.28 V	136	2.39	48.31
6	#10460.00	37.9 AV	54.0	-16.1	1.28 V	136	-10.41	48.31
7	15690.00	57.5 PK	74.0	-16.5	1.17 V	116	4.01	53.49
8	15690.00	45.1 AV	54.0	-8.9	1.17 V	116	-8.39	53.49

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.

4.2.9 TEST RESULTS (MODE 2)

BELOW 1GHz WORST-CASE DATA

802.11n (HT40)

CHANNEL	TX Channel 38	**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	47.65	27.2 QP	40.0	-12.8	2.00 H	65	40.63	-13.44
2	84.08	30.5 QP	40.0	-9.5	2.00 H	101	49.50	-18.97
3	151.78	35.1 QP	43.5	-8.4	2.00 H	294	48.00	-12.91
4	375.03	34.8 QP	46.0	-11.2	2.00 H	257	45.07	-10.30
5	625.00	38.9 QP	46.0	-7.1	1.50 H	317	43.64	-4.78
6	875.02	39.7 QP	46.0	-6.3	2.00 H	0	40.53	-0.82
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	38.24	34.2 QP	40.0	-5.8	1.00 V	292	48.03	-13.79
2	333.37	36.7 QP	46.0	-9.3	1.50 V	229	47.79	-11.06
3	466.69	36.2 QP	46.0	-9.9	1.00 V	56	44.36	-8.21
4	625.00	35.1 QP	46.0	-10.9	1.50 V	32	39.84	-4.78
5	750.03	36.4 QP	46.0	-9.6	1.00 V	23	38.97	-2.55
6	875.02	39.4 QP	46.0	-6.6	1.00 V	73	40.20	-0.82

REMARKS:

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

CHANNEL	TX Channel 46	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	47.85	34.1 QP	40.0	-5.9	1.75 H	238	47.75	-13.63
2	99.06	36.4 QP	43.5	-7.1	1.50 H	35	54.86	-18.42
3	600.02	40.7 QP	46.0	-5.4	1.25 H	360	46.12	-5.47
4	625.00	41.4 QP	46.0	-4.6	1.25 H	21	46.19	-4.79
5	875.02	41.3 QP	46.0	-4.7	1.00 H	173	42.26	-0.94
6	1000.00	45.1 QP	54.0	-8.9	1.25 H	126	44.11	0.95
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	72.78	36.2 QP	40.0	-3.8	1.25 V	73	52.25	-16.07
2	125.01	29.6 QP	43.5	-14.0	1.00 V	47	44.50	-14.95
3	171.38	30.3 QP	43.5	-13.2	1.00 V	312	44.17	-13.89
4	375.03	28.1 QP	46.0	-17.9	1.25 V	214	38.83	-10.77
5	875.02	41.5 QP	46.0	-4.5	1.50 V	360	42.43	-0.94
6	1000.00	43.6 QP	54.0	-10.4	1.25 V	147	42.68	0.95

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	5000.00	56.6 PK	74.0	-17.4	1.51 H	152	15.64	40.96
2	5000.00	47.4 AV	54.0	-6.6	1.51 H	152	6.44	40.96
3	5100.00	63.3 PK	74.0	-10.7	1.00 H	25	22.05	41.25
4	5100.00	53.2 AV	54.0	-0.8	1.00 H	25	11.95	41.25
5	5150.00	67.7 PK	74.0	-6.3	1.00 H	25	26.24	41.46
6	5150.00	48.6 AV	54.0	-5.4	1.00 H	25	7.14	41.46
7	*5180.00	111.9 PK			1.00 H	25	70.32	41.58
8	*5180.00	104.6 AV			1.00 H	25	63.02	41.58
9	5395.00	56.8 PK	74.0	-17.2	1.00 H	153	14.72	42.08
10	5395.00	46.1 AV	54.0	-7.9	1.00 H	153	4.02	42.08
11	#10360.00	47.8 PK	74.0	-26.2	1.02 H	156	-0.49	48.29
12	#10360.00	35.5 AV	54.0	-18.5	1.02 H	156	-12.79	48.29
13	15540.00	53.6 PK	74.0	-20.4	1.16 H	165	-0.29	53.89
14	15540.00	40.8 AV	54.0	-13.2	1.16 H	165	-13.09	53.89
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	5000.00	56.6 PK	74.0	-17.4	1.51 V	152	15.64	40.96
2	5000.00	47.5 AV	54.0	-6.5	1.51 V	152	6.54	40.96
3	5100.00	57.3 PK	74.0	-16.7	1.00 V	321	16.05	41.25
4	5100.00	49.3 AV	54.0	-4.7	1.00 V	321	8.05	41.25
5	5150.00	63.7 PK	74.0	-10.3	1.00 V	321	22.24	41.46
6	5150.00	44.6 AV	54.0	-9.4	1.00 V	321	3.14	41.46
7	*5180.00	104.6 PK			1.00 V	321	63.02	41.58
8	*5180.00	97.1 AV			1.00 V	321	55.52	41.58
9	5395.00	57.0 PK	74.0	-17.0	1.00 V	159	14.92	42.08
10	5395.00	46.3 AV	54.0	-7.7	1.00 V	159	4.22	42.08
11	#10360.00	47.7 PK	74.0	-26.3	1.11 V	106	-0.59	48.29
12	#10360.00	35.6 AV	54.0	-18.4	1.11 V	106	-12.69	48.29
13	15540.00	53.3 PK	74.0	-20.7	1.24 V	26	-0.59	53.89
14	15540.00	40.9 AV	54.0	-13.1	1.24 V	26	-12.99	53.89

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	5121.00	63.3 PK	74.0	-10.7	1.00 H	25	21.96	41.34
2	5121.00	53.5 AV	54.0	-0.5	1.00 H	25	12.16	41.34
3	*5200.00	111.2 PK			1.00 H	25	69.53	41.67
4	*5200.00	104.1 AV			1.00 H	25	62.43	41.67
5	#10400.00	47.4 PK	74.0	-26.6	1.01 H	156	-0.57	47.97
6	#10400.00	35.3 AV	54.0	-18.7	1.01 H	156	-12.67	47.97
7	15600.00	53.3 PK	74.0	-20.7	1.14 H	176	-0.62	53.92
8	15600.00	40.6 AV	54.0	-13.4	1.14 H	176	-13.32	53.92
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	5121.00	57.2 PK	74.0	-16.8	1.02 V	331	15.86	41.34
2	5121.00	49.4 AV	54.0	-4.6	1.02 V	331	8.06	41.34
3	*5200.00	104.9 PK			1.02 V	331	63.23	41.67
4	*5200.00	97.2 AV			1.02 V	331	55.53	41.67
5	#10400.00	47.3 PK	74.0	-26.7	1.16 V	114	-0.67	47.97
6	#10400.00	35.3 AV	54.0	-18.7	1.16 V	114	-12.67	47.97
7	15600.00	53.5 PK	74.0	-20.5	1.29 V	36	-0.42	53.92
8	15600.00	41.1 AV	54.0	-12.9	1.29 V	36	-12.82	53.92

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 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	5081.00	58.0 PK	74.0	-16.0	1.04 H	157	16.81	41.19
2	5081.00	50.5 AV	54.0	-3.5	1.04 H	157	9.31	41.19
3	*5240.00	116.9 PK			1.04 H	157	75.13	41.77
4	*5240.00	109.5 AV			1.04 H	157	67.73	41.77
5	5400.00	62.5 PK	74.0	-11.5	1.04 H	157	20.41	42.09
6	5400.00	53.5 AV	54.0	-0.5	1.04 H	157	11.41	42.09
7	#10480.00	48.3 PK	74.0	-25.7	1.05 H	147	-0.13	48.43
8	#10480.00	35.9 AV	54.0	-18.1	1.05 H	147	-12.53	48.43
9	15720.00	53.4 PK	74.0	-20.6	1.14 H	158	-0.11	53.51
10	15720.00	40.6 AV	54.0	-13.4	1.14 H	158	-12.91	53.51
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	5081.00	56.1 PK	74.0	-17.9	1.08 V	320	14.91	41.19
2	5081.00	48.1 AV	54.0	-5.9	1.08 V	320	6.91	41.19
3	*5240.00	110.3 PK			1.08 V	320	68.53	41.77
4	*5240.00	102.7 AV			1.08 V	320	60.93	41.77
5	5400.00	61.9 PK	74.0	-12.1	1.08 V	320	19.81	42.09
6	5400.00	51.8 AV	54.0	-2.2	1.08 V	320	9.71	42.09
7	#10480.00	49.3 PK	74.0	-24.7	1.10 V	109	0.87	48.43
8	#10480.00	37.2 AV	54.0	-16.8	1.10 V	109	-11.23	48.43
9	15720.00	52.9 PK	74.0	-21.1	1.26 V	22	-0.61	53.51
10	15720.00	40.5 AV	54.0	-13.5	1.26 V	22	-13.01	53.51

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.

802.11n (HT20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5100.00	65.1 PK	74.0	-8.9	1.04 H	156	23.85	41.25
2	5100.00	53.3 AV	54.0	-0.7	1.04 H	156	12.05	41.25
3	5150.00	67.9 PK	74.0	-6.1	1.04 H	156	26.44	41.46
4	5150.00	48.9 AV	54.0	-5.1	1.04 H	156	7.44	41.46
5	*5180.00	116.3 PK			1.04 H	156	74.72	41.58
6	*5180.00	106.1 AV			1.04 H	156	64.52	41.58
7	#10360.00	47.4 PK	74.0	-26.6	1.03 H	151	-0.89	48.29
8	#10360.00	35.4 AV	54.0	-18.6	1.03 H	151	-12.89	48.29
9	15540.00	53.4 PK	74.0	-20.6	1.11 H	186	-0.49	53.89
10	15540.00	40.6 AV	54.0	-13.4	1.11 H	186	-13.29	53.89
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	5100.00	61.1 PK	74.0	-12.9	1.04 V	304	19.85	41.25
2	5100.00	49.3 AV	54.0	-4.7	1.04 V	304	8.05	41.25
3	5150.00	64.0 PK	74.0	-10.0	1.04 V	304	22.54	41.46
4	5150.00	45.1 AV	54.0	-8.9	1.04 V	304	3.64	41.46
5	*5180.00	109.3 PK			1.04 V	304	67.72	41.58
6	*5180.00	99.1 AV			1.04 V	304	57.52	41.58
7	#10360.00	51.8 PK	74.0	-22.2	1.00 V	114	3.51	48.29
8	#10360.00	38.9 AV	54.0	-15.1	1.00 V	114	-9.39	48.29
9	15540.00	53.6 PK	74.0	-20.4	1.22 V	36	-0.29	53.89
10	15540.00	41.1 AV	54.0	-12.9	1.22 V	36	-12.79	53.89

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	5041.00	59.0 PK	74.0	-15.0	1.00 H	25	17.92	41.08
2	5041.00	46.4 AV	54.0	-7.6	1.00 H	25	5.32	41.08
3	5119.00	65.5 PK	74.0	-8.5	1.00 H	25	24.17	41.33
4	5119.00	53.4 AV	54.0	-0.6	1.00 H	25	12.07	41.33
5	*5200.00	114.2 PK			1.00 H	25	72.53	41.67
6	*5200.00	103.5 AV			1.00 H	25	61.83	41.67
7	#10400.00	47.5 PK	74.0	-26.5	1.02 H	140	-0.47	47.97
8	#10400.00	35.2 AV	54.0	-18.8	1.02 H	140	-12.77	47.97
9	15600.00	53.3 PK	74.0	-20.7	1.06 H	166	-0.62	53.92
10	15600.00	40.3 AV	54.0	-13.7	1.06 H	166	-13.62	53.92
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	5041.00	54.5 PK	74.0	-19.5	1.02 V	317	13.42	41.08
2	5041.00	42.1 AV	54.0	-11.9	1.02 V	317	1.02	41.08
3	5119.00	61.6 PK	74.0	-12.4	1.02 V	317	20.27	41.33
4	5119.00	49.6 AV	54.0	-4.4	1.02 V	317	8.27	41.33
5	*5200.00	106.7 PK			1.02 V	317	65.03	41.67
6	*5200.00	96.2 AV			1.02 V	317	54.53	41.67
7	#10400.00	51.3 PK	74.0	-22.7	1.02 V	115	3.33	47.97
8	#10400.00	38.6 AV	54.0	-15.4	1.02 V	115	-9.37	47.97
9	15600.00	54.0 PK	74.0	-20.0	1.22 V	44	0.08	53.92
10	15600.00	41.7 AV	54.0	-12.3	1.22 V	44	-12.22	53.92

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 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	5081.00	61.8 PK	74.0	-12.2	1.03 H	156	20.61	41.19
2	5081.00	49.3 AV	54.0	-4.7	1.03 H	156	8.11	41.19
3	*5240.00	117.8 PK			1.03 H	156	76.03	41.77
4	*5240.00	107.6 AV			1.03 H	156	65.83	41.77
5	5400.00	65.7 PK	74.0	-8.3	1.03 H	156	23.61	42.09
6	5400.00	53.5 AV	54.0	-0.5	1.03 H	156	11.41	42.09
7	#10480.00	47.5 PK	74.0	-26.5	1.06 H	139	-0.93	48.43
8	#10480.00	35.3 AV	54.0	-18.7	1.06 H	139	-13.13	48.43
9	15720.00	53.8 PK	74.0	-20.2	1.13 H	169	0.29	53.51
10	15720.00	40.7 AV	54.0	-13.3	1.13 H	169	-12.81	53.51
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	5081.00	57.6 PK	74.0	-16.4	1.10 V	307	16.41	41.19
2	5081.00	45.1 AV	54.0	-8.9	1.10 V	307	3.91	41.19
3	*5240.00	110.1 PK			1.10 V	307	68.33	41.77
4	*5240.00	100.2 AV			1.10 V	307	58.43	41.77
5	5400.00	62.0 PK	74.0	-12.0	1.10 V	307	19.91	42.09
6	5400.00	49.7 AV	54.0	-4.3	1.10 V	307	7.61	42.09
7	#10480.00	51.4 PK	74.0	-22.6	1.04 V	129	2.97	48.43
8	#10480.00	38.7 AV	54.0	-15.3	1.04 V	129	-9.73	48.43
9	15720.00	54.2 PK	74.0	-19.8	1.18 V	37	0.69	53.51
10	15720.00	41.6 AV	54.0	-12.4	1.18 V	37	-11.91	53.51

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.

802.11n (HT40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	72.1 PK	74.0	-1.9	1.07 H	155	30.64	41.46
2	5150.00	53.3 AV	54.0	-0.7	1.07 H	155	11.84	41.46
3	*5190.00	110.1 PK			1.07 H	155	68.47	41.63
4	*5190.00	97.6 AV			1.07 H	155	55.97	41.63
5	#10380.00	47.5 PK	74.0	-26.5	1.06 H	140	-0.63	48.13
6	#10380.00	36.0 AV	54.0	-18.0	1.06 H	140	-12.13	48.13
7	15570.00	52.6 PK	74.0	-21.4	1.15 H	151	-1.30	53.90
8	15570.00	40.1 AV	54.0	-13.9	1.15 H	151	-13.80	53.90
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	5150.00	66.5 PK	74.0	-7.5	1.00 V	18	25.04	41.46
2	5150.00	51.0 AV	54.0	-3.0	1.00 V	18	9.54	41.46
3	*5190.00	102.2 PK			1.00 V	18	60.57	41.63
4	*5190.00	94.4 AV			1.00 V	18	52.77	41.63
5	#10380.00	48.3 PK	74.0	-25.7	1.09 V	101	0.17	48.13
6	#10380.00	36.1 AV	54.0	-17.9	1.09 V	101	-12.03	48.13
7	15570.00	52.3 PK	74.0	-21.7	1.21 V	21	-1.60	53.90
8	15570.00	40.3 AV	54.0	-13.7	1.21 V	21	-13.60	53.90

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 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	5147.00	68.6 PK	74.0	-5.4	1.08 H	150	27.16	41.44
2	5147.00	53.3 AV	54.0	-0.7	1.08 H	150	11.86	41.44
3	*5230.00	114.2 PK			1.08 H	150	72.46	41.74
4	*5230.00	101.3 AV			1.08 H	150	59.56	41.74
5	#10460.00	48.0 PK	74.0	-26.0	1.04 H	142	-0.31	48.31
6	#10460.00	35.9 AV	54.0	-18.1	1.04 H	142	-12.41	48.31
7	15690.00	52.9 PK	74.0	-21.1	1.09 H	169	-0.59	53.49
8	15690.00	40.1 AV	54.0	-13.9	1.09 H	169	-13.39	53.49
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	5147.00	64.8 PK	74.0	-9.2	1.00 V	25	23.36	41.44
2	5147.00	49.7 AV	54.0	-4.3	1.00 V	25	8.26	41.44
3	*5230.00	111.8 PK			1.00 V	25	70.06	41.74
4	*5230.00	98.7 AV			1.00 V	25	56.96	41.74
5	#10460.00	50.3 PK	74.0	-23.7	1.12 V	106	1.99	48.31
6	#10460.00	38.4 AV	54.0	-15.6	1.12 V	106	-9.91	48.31
7	15690.00	53.4 PK	74.0	-20.6	1.27 V	26	-0.09	53.49
8	15690.00	41.2 AV	54.0	-12.8	1.27 V	26	-12.29	53.49

REMARKS:

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

802.11ac (VHT80)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	68.3 PK	74.0	-5.7	1.16 H	302	26.84	41.46
2	5150.00	53.2 AV	54.0	-0.8	1.16 H	302	11.74	41.46
3	*5210.00	108.1 PK			1.16 H	302	66.41	41.69
4	*5210.00	98.9 AV			1.16 H	302	57.21	41.69
5	#10420.00	47.3 PK	74.0	-26.7	1.03 H	157	-0.78	48.08
6	#10420.00	36.0 AV	54.0	-18.0	1.03 H	157	-12.08	48.08
7	15630.00	52.5 PK	74.0	-21.5	1.00 H	173	-1.28	53.78
8	15630.00	39.9 AV	54.0	-14.1	1.00 H	173	-13.88	53.78
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	67.8 PK	74.0	-6.2	1.12 V	157	26.34	41.46
2	5150.00	50.5 AV	54.0	-3.5	1.12 V	157	9.04	41.46
3	*5210.00	102.0 PK			1.12 V	157	60.31	41.69
4	*5210.00	89.6 AV			1.12 V	157	47.91	41.69
5	#10420.00	54.3 PK	74.0	-19.7	1.08 V	107	6.22	48.08
6	#10420.00	42.5 AV	54.0	-11.5	1.08 V	107	-5.58	48.08
7	15630.00	57.6 PK	74.0	-16.4	1.05 V	128	3.82	53.78
8	15630.00	45.0 AV	54.0	-9.0	1.05 V	128	-8.78	53.78

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

Frequency Band	Limit
5.15 – 5.25GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB
5.25 – 5.35GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.47 – 5.725GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.725 – 5.825GHz	The lesser of 1W (30dBm) or 17dBm + 10logB

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

Per KDB 662911 D01 Multiple Transmitter Output v01r02 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	0824006	May 20, 2013	May 19, 2014
Power sensor Anritsu	MA2411B	0738172	May 20, 2013	May 19, 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 : Aug. 02 to Sep. 12, 2013

FOR 26dB OCCUPIED BANDWIDTH

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSP 40	100036	Jan. 21, 2013	Jan. 20, 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 : Aug. 02 to Sep. 12, 2013

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.

Duty cycle of test signal is < 98 %. 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

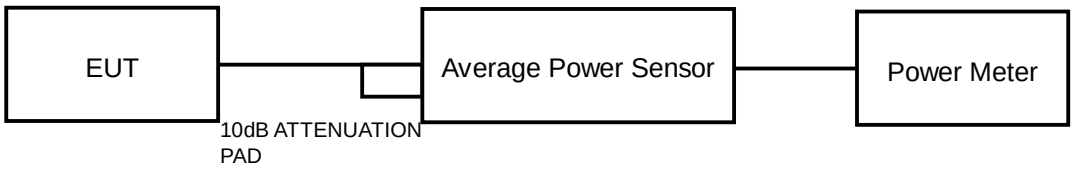
1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement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

4.3.4 DEVIATION FROM TEST STANDARD

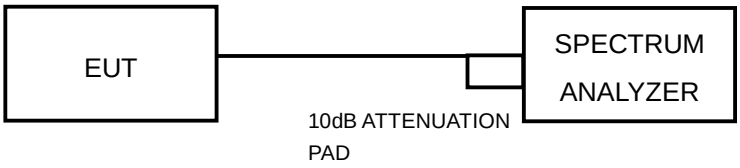
No deviation

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 (MODE 1)

POWER OUTPUT:

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	9.572	9.81	16.93	PASS
40	5200	9.772	9.90	16.92	PASS
48	5240	9.616	9.83	16.92	PASS

26dB OCCUPIED BANDWIDTH:

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)
36	5180	19.67
40	5200	19.62
48	5240	19.61

Note: For output power limitation is determined based on 26dBc bandwidth.

Power Limit = 4dBm + 10logB < Band 1>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Limit (dBm)
36	5180	19.67	16.93 < 17
40	5200	19.62	16.92 < 17
48	5240	19.61	16.92 < 17

802.11n (HT20)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	9.528	9.79	16.99	PASS
40	5200	9.727	9.88	16.98	PASS
48	5240	9.572	9.81	16.95	PASS

26dB OCCUPIED BANDWIDTH:

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)
36	5180	19.92
40	5200	19.89
48	5240	19.76

Note: For output power limitation is determined based on 26dBc bandwidth.

Power Limit = 4dBm + 10logB < Band 1>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Limit (dBm)
36	5180	19.92	16.99 < 17
40	5200	19.89	16.98 < 17
48	5240	19.76	16.95 < 17

802.11n (HT40)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	5.483	7.39	17	PASS
46	5230	9.750	9.89	17	PASS

26dB OCCUPIED BANDWIDTH:

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)
38	5190	41.67
46	5230	54.82

Note: For output power limitation is determined based on 26dBc bandwidth.

Power Limit = 4dBm + 10logB < Band 1>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Limit (dBm)
38	5190	41.67	20.19 > 17
46	5230	54.82	21.38 > 17

4.3.8 TEST RESULTS (MODE 2)

POWER OUTPUT:

802.11a

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
36	5180	8.45	7.49	7.44	18.154	12.59	17	PASS
40	5200	7.88	7.87	7.60	18.016	12.56	17	PASS
48	5240	7.73	7.67	7.35	17.210	12.36	17	PASS

26dB OCCUPIED BANDWIDTH:

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		
		CHAIN 0	CHAIN 1	CHAIN 2
36	5180	20.48	20.32	20.32
40	5200	20.55	20.38	20.51
48	5240	20.62	20.49	20.39

Note: For output power limitation is determined based on 26dBc bandwidth.

Power Limit = 4dBm + 10logB < Band 1>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Limit (dBm)
36	5180	20.32	17.07 > 17
40	5200	20.38	17.09 > 17
48	5240	20.39	17.09 > 17

802.11n (HT20)

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
36	5180	10.52	10.65	10.65	34.500	15.38	17	PASS
40	5200	10.65	10.43	10.53	33.953	15.31	17	PASS
48	5240	10.81	10.91	10.85	36.543	15.63	17	PASS

26dB OCCUPIED BANDWIDTH:

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		
		CHAIN 0	CHAIN 1	CHAIN 2
36	5180	20.71	20.61	20.97
40	5200	20.71	20.57	20.92
48	5240	20.68	20.56	20.82

Note: For output power limitation is determined based on 26dBc bandwidth.

Power Limit = 4dBm + 10logB < Band 1>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Limit (dBm)
36	5180	20.61	17.14 > 17
40	5200	20.57	17.13 > 17
48	5240	20.56	17.13 > 17

802.11n (HT40)

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
38	5190	11.13	11.26	11.00	38.927	15.90	17	PASS
46	5230	10.98	10.97	10.98	37.565	15.75	17	PASS

26dB OCCUPIED BANDWIDTH:

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		
		CHAIN 0	CHAIN 1	CHAIN 2
38	5190	41.44	41.35	41.10
46	5230	41.53	41.33	41.08

Note: For output power limitation is determined based on 26dBc bandwidth.

Power Limit = 4dBm + 10logB < Band 1>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Limit (dBm)
38	5190	41.10	20.13 > 17
46	5230	41.08	20.13 > 17

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	CHAIN 2				
42	5210	10.92	11.21	11.21	38.785	15.89	17	PASS

26dB OCCUPIED BANDWIDTH:

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)		
		CHAIN 0	CHAIN 1	CHAIN 2
42	5210	83.00	82.72	82.51

Note: For output power limitation is determined based on 26dBc bandwidth.

Power Limit = 4dBm + 10logB < Band 1>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Limit (dBm)
42	5210	82.51	23.16 > 17

4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Frequency Band	Limit
5.15 ~ 5.25GHz	4dBm
5.25 ~ 5.35GHz	11dBm
5.47 – 5.725GHz	11dBm
5.725 ~ 5.825GHz	17dBm

4.4.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSP 40	100036	Jan. 21, 2013	Jan. 20, 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 : Aug. 02 to Sep. 12, 2013

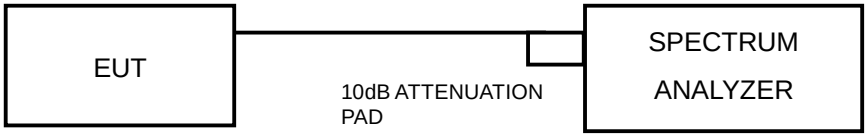
4.4.3 TEST PROCEDURES

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)

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 (MODE 1)

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	-2.02	4	PASS
40	5200	-1.78	4	PASS
48	5240	-2.01	4	PASS

802.11n (HT20)

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	-2.12	4	PASS
40	5200	-1.87	4	PASS
48	5240	-2.20	4	PASS

802.11n (HT40)

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
38	5190	-7.05	4	PASS
46	5230	-5.05	4	PASS

4.4.8 TEST RESULTS (MODE 2)

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
36	5180	-5.99	-4.60	-6.23	-0.77	-0.21	PASS
40	5200	-5.82	-4.51	-6.76	-0.83	-0.21	PASS
48	5240	-6.88	-4.39	-5.12	-0.57	-0.21	PASS

NOTE:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[($10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$)^2 / 3] = 10.21dBi > 6dBi , so the power density limit shall be reduced to 4-(10.21-6) = -0.21dBm.

802.11n (HT20)

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)			DUTY FACTOR (dB)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
36	5180	-2.53	-2.49	-2.88	0.1	2.24	4	PASS
40	5200	-2.62	-2.48	-2.69	0.1	2.28	4	PASS
48	5240	-2.42	-2.43	-2.51	0.1	2.42	4	PASS

NOTE:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.4 for duty cycle spectrum plot.

802.11n (HT40)

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)			DUTY FACTOR (dB)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
38	5190	-4.03	-3.68	-3.93	0.19	1.08	4	PASS
46	5230	-3.88	-3.37	-3.65	0.19	1.33	4	PASS

NOTE:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.4 for duty cycle spectrum plot.

802.11ac (VHT80)

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)			DUTY FACTOR (dBm)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
42	5210	-7.97	-7.13	-7.68	0.32	-2.49	4	PASS

NOTE:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.4 for duty cycle spectrum plot.

4.5 PEAK POWER EXCURSION MEASUREMENT

4.5.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

Shall not exceed 13 dB

4.5.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSP 40	100036	Jan. 21, 2013	Jan. 20, 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 : Aug. 02 to Sep. 12, 2013

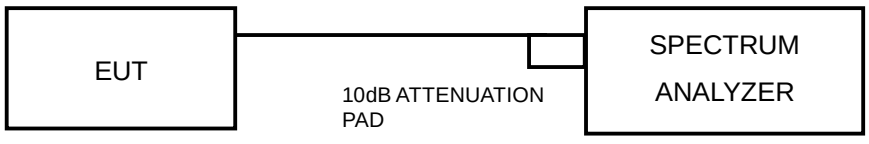
4.5.3 TEST PROCEDURE

1. Set RBW = 1 MHz, VBW ≥ 3 MHz, Detector = peak.
2. Trace mode = max-hold. Allow the sweeps to continue until the trace stabilizes.
3. Use the peak search function to find the peak of the spectrum.
4. Measure the PPSD.
5. Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITIONS

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

4.5.7 TEST RESULTS (MODE 1)

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD (dBm)	PEAK EXCURSION (dB)	LIMIT (dB)	PASS/FAIL
36	5180	7.71	-2.02	9.73	13	PASS
40	5200	7.61	-1.78	9.39	13	PASS
48	5240	7.08	-2.01	9.09	13	PASS

802.11n (HT20)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD (dBm)	PEAK EXCURSION (dB)	LIMIT (dB)	PASS/FAIL
36	5180	6.64	-2.12	8.76	13	PASS
40	5200	6.87	-1.87	8.74	13	PASS
48	5240	7.55	-2.20	9.75	13	PASS

802.11n (HT40)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD (dBm)	PEAK EXCURSION (dB)	LIMIT (dB)	PASS/FAIL
38	5190	1.63	-7.05	8.68	13	PASS
46	5230	3.76	-5.05	8.81	13	PASS

4.5.8 TEST RESULTS (MODE 2)

802.11a

CHAN.	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)			PPSD (dBm)			PEAK EXCURSION (dB)			LIMIT (dB)	PASS/ FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2		
36	5180	2.43	3.39	3.83	-5.99	-4.60	-6.23	8.42	7.99	10.06	13	PASS
40	5200	2.64	3.62	3.87	-5.82	-4.51	-6.76	8.46	8.13	10.63	13	PASS
48	5240	2.93	4.20	4.74	-6.88	-4.39	-5.12	9.81	8.59	9.86	13	PASS

802.11n (HT20)

CHAN.	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)			DUTY FACTOR (dB)	PPSD WITH DUTY FACTOR (dBm)			PEAK EXCURSION (dB)			LIMIT (dB)	PASS/ FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2		
36	5180	7.80	7.56	5.99	0.1	-2.43	-2.39	-2.78	10.23	9.95	8.77	13	PASS
40	5200	7.51	7.51	6.71	0.1	-2.52	-2.38	-2.59	10.03	9.89	9.30	13	PASS
48	5240	7.40	8.18	6.47	0.1	-2.32	-2.33	-2.41	9.72	10.51	8.88	13	PASS

802.11n (HT40)

CHAN.	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)			DUTY FACTOR (dB)	PPSD WITH DUTY FACTOR (dBm)			PEAK EXCURSION (dB)			LIMIT (dB)	PASS/ FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2		
38	5190	5.21	6.69	5.75	0.19	-3.84	-3.49	-3.74	9.05	10.18	9.49	13	PASS
46	5230	5.73	7.06	6.29	0.19	-3.69	-3.18	-3.46	9.42	10.24	9.75	13	PASS

802.11ac (VHT80)

CHAN.	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)			DUTY FACTOR (dB)	PPSD WITH DUTY FACTOR (dBm)			PEAK EXCURSION (dB)			LIMIT (dB)	PASS/ FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2		
42	5210	1.20	3.27	3.24	0.32	-7.65	-6.81	-7.36	8.85	10.08	10.60	13	PASS

4.6 FREQUENCY STABILITY

4.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSP 40	100036	Jan. 21, 2013	Jan. 20, 2014
Temperature & Humidity Chamber GIANTFORCE	GTH-150-40 -SP-AR	MAA0812-008	Jan. 17, 2013	Jan. 16, 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 : Aug. 02 to 03, 2013

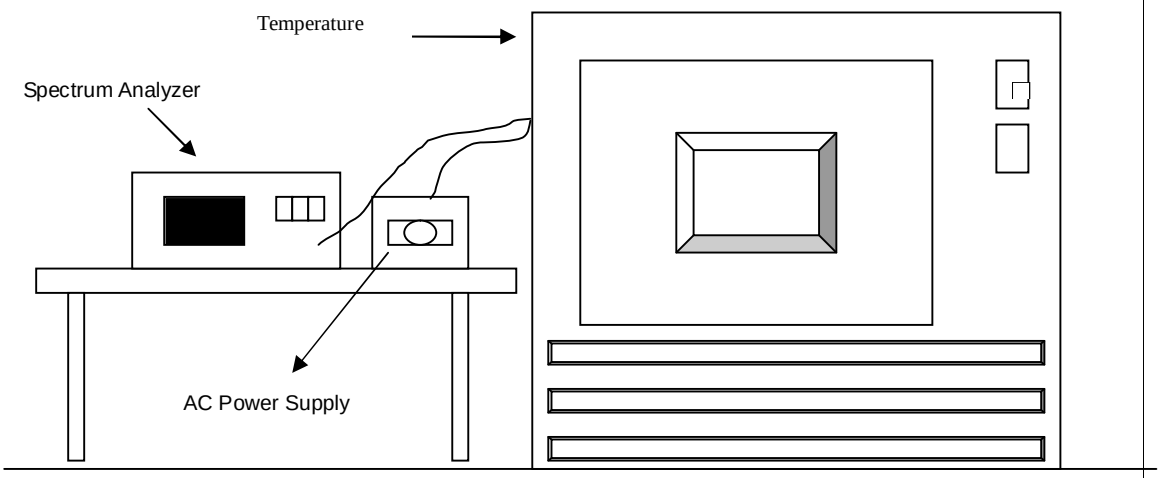
4.6.3 TEST PROCEDURE

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.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 TEST SETUP



4.6.6 EUT OPERATING CONDITION

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

4.6.7 TEST RESULTS (MODE 1)

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5240MHz									
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	5239.9976	-0.00005	5239.998	-0.00004	5239.9904	-0.00018	5239.9911	-0.00017
40	120	5239.9961	-0.00007	5239.9897	-0.00020	5239.9902	-0.00019	5239.9986	-0.00003
30	120	5239.9836	-0.00031	5239.9842	-0.00030	5239.9885	-0.00022	5239.9803	-0.00038
20	120	5240.0087	0.00017	5240.0077	0.00015	5240.0173	0.00033	5240.0159	0.00030
10	120	5240.0237	0.00045	5240.0175	0.00033	5240.0192	0.00037	5240.0234	0.00045
0	120	5239.9998	0.00000	5239.9997	-0.00001	5239.9967	-0.00006	5240.0031	0.00006
-10	120	5240.0199	0.00038	5240.0179	0.00034	5240.0151	0.00029	5240.0129	0.00025
-20	120	5239.9958	-0.00008	5239.9937	-0.00012	5239.9978	-0.00004	5239.9996	-0.00001
-30	120	5239.9897	-0.00020	5239.996	-0.00008	5239.993	-0.00013	5239.9967	-0.00006

FREQUEMCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5240MHz									
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	5240.0083	0.00016	5240.0075	0.00014	5240.0175	0.00033	5240.0167	0.00032
	120	5240.0087	0.00017	5240.0077	0.00015	5240.0173	0.00033	5240.0159	0.00030
	102	5240.0091	0.00017	5240.0077	0.00015	5240.0171	0.00033	5240.016	0.00031

4.6.8 TEST RESULTS (MODE 2)

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5240MHz									
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	5240.0225	0.00043	5240.0243	0.00046	5240.0269	0.00051	5240.0205	0.00039
40	120	5239.9923	-0.00015	5239.9993	-0.00001	5239.994	-0.00011	5240.0009	0.00002
30	120	5240.0192	0.00037	5240.0198	0.00038	5240.0132	0.00025	5240.016	0.00031
20	120	5239.9816	-0.00035	5239.9867	-0.00025	5239.9835	-0.00031	5239.9863	-0.00026
10	120	5240.013	0.00025	5240.0129	0.00025	5240.0154	0.00029	5240.0164	0.00031
0	120	5240.0127	0.00024	5240.0137	0.00026	5240.0142	0.00027	5240.0099	0.00019
-10	120	5240.023	0.00044	5240.0221	0.00042	5240.0226	0.00043	5240.0189	0.00036
-20	120	5239.9897	-0.00020	5239.9881	-0.00023	5239.9852	-0.00028	5239.9909	-0.00017
-30	120	5240.0018	0.00003	5239.9991	-0.00002	5240.0011	0.00002	5239.998	-0.00004

FREQUEMCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5240MHz									
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	5239.9815	-0.00035	5239.987	-0.00025	5239.9826	-0.00033	5239.9863	-0.00026
	120	5239.9816	-0.00035	5239.9867	-0.00025	5239.9835	-0.00031	5239.9863	-0.00026
	102	5239.9826	-0.00033	5239.9864	-0.00026	5239.9837	-0.00031	5239.9858	-0.00027

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:

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

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

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

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

--- END ---