FCC Test Report

Report No.:	RF121012C11B
FCC ID:	HDCWLAN193XF1
Test Model:	BSAP-1930, BSAP-1935
Received Date:	Aug. 14, 2015
Test Date:	Aug. 21 ~ Sep. 23, 2015
Issued Date:	Sep. 23, 2015
Applicant:	Adtran
Address:	901 Explorer Boulevard, Huntsville Alabama, United States, 35806-2807
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
RF121012C11B	Original release	Sep. 23, 2015

1 Certificate of Conformity

Product:	Wireless 802.11 abgn AP
Brand:	Adtran
Test Model:	BSAP-1930, BSAP-1935
Sample Status:	ENGINEERING SAMPLE
Applicant:	Adtran
Test Date:	Aug. 21 ~ Sep. 23, 2015
Standards:	47 CFR FCC Part 15, Subpart E (Section 15.407) ANSI C63.10:2013

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

Prepared by : _____ , **Date:** Sep. 23, 2015

Ivy Lin / Specialist

Approved by : _____ , **Date:** Sep. 23, 2015

Ken Liu / Senior Manager

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.207 15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -18.99dB at 0.15391MHz.
15.407(b) (1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1.0dB at 5470.00MHz, 5725.00MHz, 300.16MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	PIFA antenna: Antenna connector is IPEX not a standard connector. Dipole antenna: Antenna connector is RSMA not a standard connector.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expended Uncertainty (k=2) (

3 General Information

3.1 General Description of EUT

Product	Wireless 802.11 abgn AP
Brand	Adtran
Test Model	BSAP-1930, BSAP-1935
Model Difference	Refer to Note
Status of EUT	Engineering sample
Power Supply Rating	5Vdc (host)
Modulation Type	64QAM, 16QAM, QPSK, BPSK
Modulation Technology	OFDM
Transfer Rate	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 450.0Mbps
Operating Frequency	5260 ~ 5320MHz, 5500 ~ 5700MHz
Number of Channel	5260 ~ 5320MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 5500 ~ 5700MHz: 8 for 802.11a, 802.11n (HT20) 3 for 802.11n (HT40)
Output Power	3TX: 5260 ~ 5320MHz: 179.163mW 5500 ~ 5700MHz: 86.902mW 1TX: 5260 ~ 5320MHz: 76.736mW 5500 ~ 5700MHz: 56.494mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Data Cable Supplied	NA

Note:

1. This report is prepared for FCC class II permissive change. The difference compared with the original report (BV ADT report no.: RF121012C11A) is adding 5.26GHz to 5.32GHz and 5.50GHz to 5.70GHz by software.
2. The following models are provided to this EUT.

Brand	Model	Description
Adtran	BSAP-1930	Internal antenna
	BSAP-1935	External antenna

3. The EUT incorporates a MIMO function. Physically, the EUT provides 3 completed transmitters and 3 receivers.

Modulation Mode	TX Function
802.11a	1TX/ 3TX
802.11n (HT20)	3TX
802.11n (HT40)	3TX

4. The following antenna types are provided to the EUT.

Antenna type	Antenna connector	Antenna Gain (dBi)	
		2.4GHz	5GHz
PIFA	IPEX	5	6
Dipole	RSMA	3	3

3.2 Description of Test Modes

For 5260 ~ 5320MHz

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

Channel	Frequency	Channel	Frequency
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

For 5500 ~ 5700MHz

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

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

3 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
102	5510 MHz	134	5670 MHz
110	5550 MHz		

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A1	√	√	√	√	PIFA antenna: 3TX
A2	√	-	-	√	PIFA antenna: 1TX
B1	√	√	√	-	Dipole antenna: 3TX
B2	√	-	-	-	Dipole antenna: 1TX

Where **RE≥1G:** Radiated Emission above 1GHz & Bandedge Measurement **RE<1G:** Radiated Emission below 1GHz

PLC: Power Line Conducted Emission **APCM:** Antenna Port Conducted Measurement

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

Radiated Emission Test (Above 1GHz):

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	Antenna & TX function
A1	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0	PIFA antenna, 3TX
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	BPSK	7.2	
	802.11n (HT40)		54 to 62	54, 62	OFDM	BPSK	15.0	
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0	
	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	BPSK	7.2	
	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	BPSK	15.0	
A2	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0	PIFA antenna, 1TX
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0	
B1	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0	Dipole antenna, 3TX
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	BPSK	7.2	
	802.11n (HT40)		54 to 62	54, 62	OFDM	BPSK	15.0	
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0	
	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	BPSK	7.2	
	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	BPSK	15.0	
B2	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0	Dipole antenna, 1TX
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0	

Radiated Emission Test (Below 1GHz):

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	Antenna & TX function
A1	802.11n (HT20)	5260-5320, 5500-5700	52 to 64, 100 to 140	52	OFDM	BPSK	7.2	PIFA antenna, 3TX
B1	802.11n (HT20)	5260-5320, 5500-5700	52 to 64, 100 to 140	52	OFDM	BPSK	7.2	Dipole antenna, 3TX

Power Line Conducted Emission Test:

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	Antenna & TX function
A1	802.11n (HT20)	5260-5320, 5500-5700	52 to 64, 100 to 140	52	OFDM	BPSK	7.2	PIFA antenna, 3TX
B1	802.11n (HT20)	5260-5320, 5500-5700	52 to 64, 100 to 140	52	OFDM	BPSK	7.2	Dipole antenna, 3TX

Antenna Port Conducted Measurement:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	Antenna & TX function
A1	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0	PIFA antenna, 3TX
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	BPSK	7.2	
	802.11n (HT40)		54 to 62	54, 62	OFDM	BPSK	15.0	
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0	
	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	BPSK	7.2	
	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	BPSK	15.0	
A2	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0	PIFA antenna, 1TX
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0	

Test Condition:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
RE≥1G	18deg. C, 70%RH	120Vac, 60Hz	Jones Chang, Nick Hsu
RE<1G	18deg. C, 70%RH	120Vac, 60Hz	Jones Chang
PLC	20deg. C, 70%RH	120Vac, 60Hz	Jones Chang
APCM	25deg. C, 60%RH	120Vac, 60Hz	Nick Chen

3.3 Duty Cycle of Test Signal

Duty cycle of test signal is < 98 %, duty factor is required.

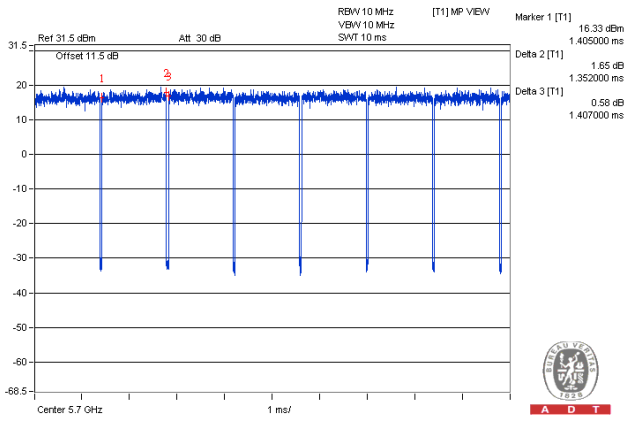
3TX:

802.11a: Duty cycle = 1.352/1.407 = 0.961, Duty factor = 10 * log(1/0.961) = 0.17

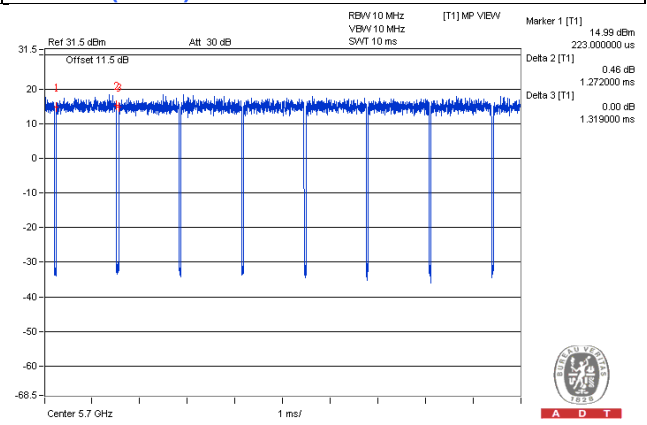
802.11n (HT20): Duty cycle = 1.272/1.319 = 0.964, Duty factor = 10 * log(1/0.964) = 0.16

802.11n (HT40): Duty cycle = 0.627/0.672 = 0.933, Duty factor = 10 * log(1/0.933) = 0.30

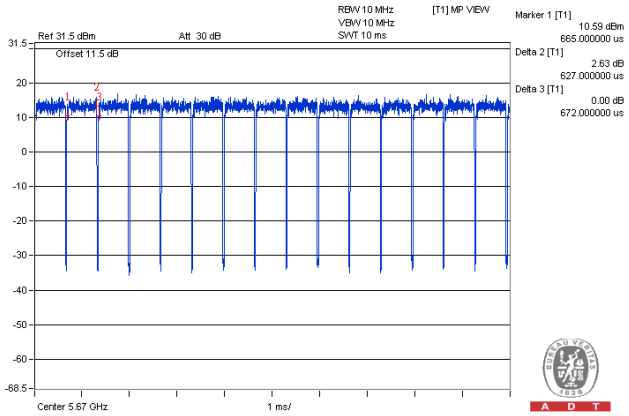
802.11a



802.11n (HT20)



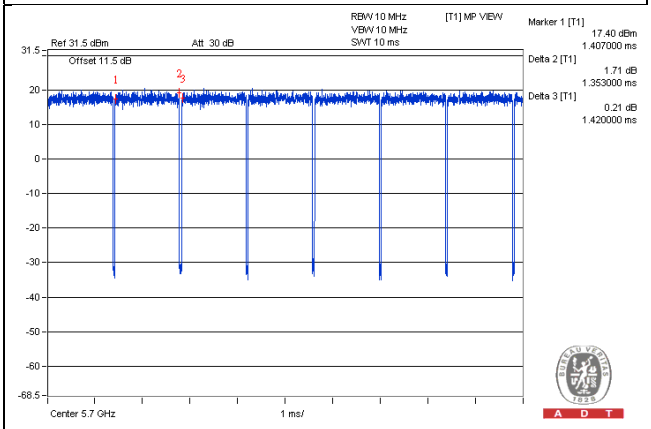
802.11n (HT40)



1TX:

802.11a: Duty cycle = 1.353/1.420 = 0.953, Duty factor = 10 * log(1/0.953) = 0.21

802.11a



3.4 Description of Support Units

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

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	E5410	1HC2XM1	FCC DoC Approved	-
B.	Convertible board	NA	NA	NA	NA	Provided by client
C.	Power Supply	Topward	33010D	807748	NA	-

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

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Power	1	1.8	N	0	-

3.5 General Description of Applied Standards

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

FCC Part 15, Subpart E (15.407)

789033 D02 General UNII Test Procedures New Rules v01

662911 D01 Multiple Transmitter Output v02r01

ANSI C63.10-2013

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

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Note:

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

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Applicable To	Limit	
789033 D02 General UNII Test Procedures New Rules v01	FIELD STRENGTH AT 3m	
	PK:74 (dBμV/m)	AV:54 (dBμV/m)
Applicable To	**EIRP Limit**	**Equivalent Field Strength at 3m**
15.407(b)(1)	PK:-27 (dBm/MHz)	PK:68.2(dBμV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	PK:-27 (dBm/MHz) [*1] PK:-17 (dBm/MHz) [*2]	PK: 68.2(dBμV/m) [*1] PK:78.2 (dBμV/m) [*2]

Note: [*1] beyond 10MHz of the band edge [*2] within 10 MHz of band edge

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

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESIB7	100187	Apr. 10, 2015	Apr. 09, 2016
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Jul. 08, 2015	Jul. 07, 2016
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Feb. 05, 2015	Feb. 04, 2016
HORN Antenna SCHWARZBECK	9120D	209	Feb. 09, 2015	Feb. 08, 2016
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Feb. 09, 2015	Feb. 08, 2016
Preamplifier Agilent	8447D	2944A10738	Oct.18, 2014	Oct. 17, 2015
Preamplifier Agilent	8449B	3008A01964	Aug. 22, 2014	Aug. 21, 2015
			Aug. 22, 2015	Aug. 21, 2016
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH3-03(214378)	Aug. 22, 2014	Aug. 21, 2015
			Aug. 22, 2015	Aug. 21, 2016
RF signal cable HUBER+SUHNER	SUCOFLEX 106	Cable-CH3-03(309224+ 12738)	Aug. 22, 2014	Aug. 21, 2015
			Aug. 22, 2015	Aug. 21, 2016
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021702	NA	NA
Turn Table BV ADT	TT100	TT93021702	NA	NA
Turn Table Controller BV ADT	SC100	SC93021702	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 18, 2014	Oct. 17, 2015
High Speed Peak Power Meter	ML2495A	0824011	Jul. 09, 2015	Jul. 08, 2016
Power Sensor	MA2411B	0738171	Jul. 09, 2015	Jul. 08, 2016
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 08, 2015	Jun. 07, 2016

Note:
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 3.
3. The horn antenna and preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 988962.
5. The IC Site Registration No. is IC 7450F-3.

4.1.3 Test Procedures

a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

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

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

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

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

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

Note:

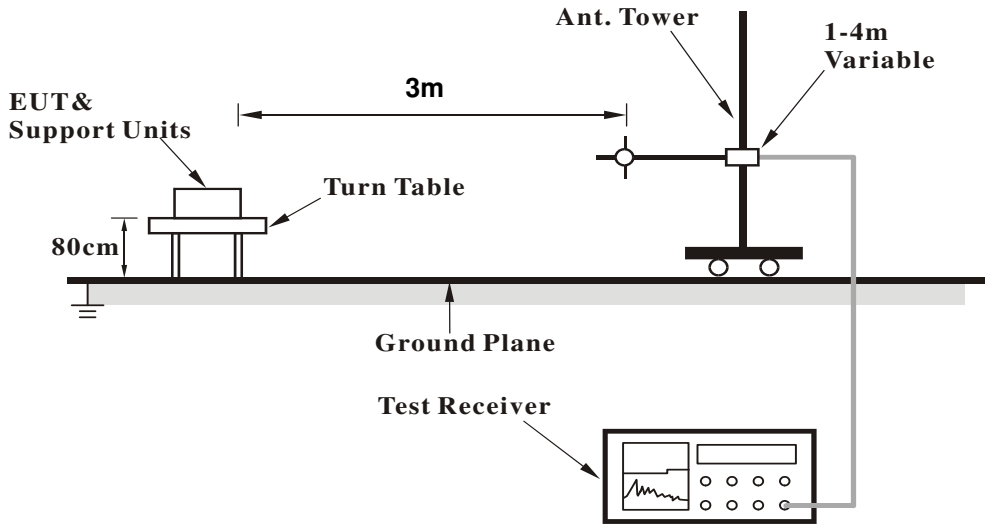
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

4.1.4 Deviation from Test Standard

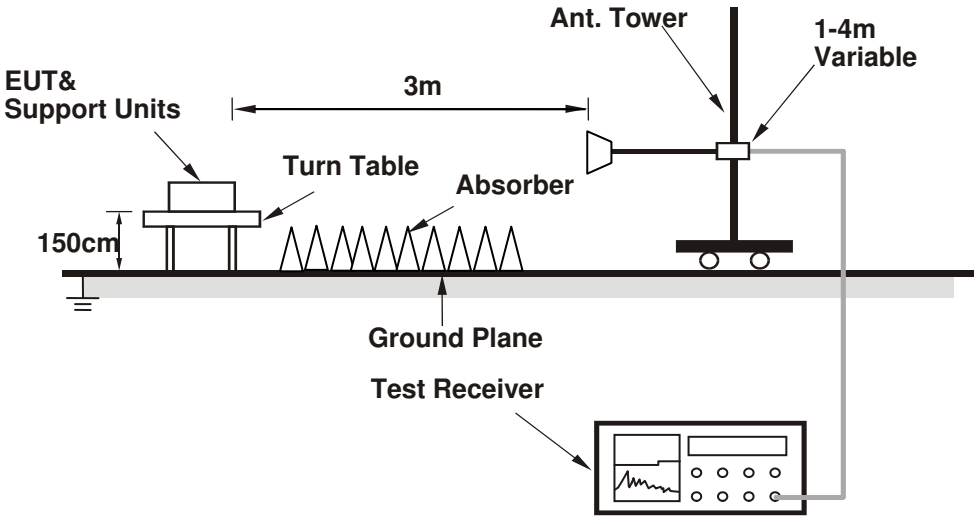
No deviation.

4.1.5 Test Set Up

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



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

4.1.6 EUT Operating Conditions

a. Plugged the EUT into notebook via a convertible board and placed them on the testing table.
b. The notebook system ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
c. The necessary accessories enable the system in full functions.

4.1.7 Test Results

Above 1GHz Worst-Case data

Test Mode A1 – PIFA Antenna: 3TX

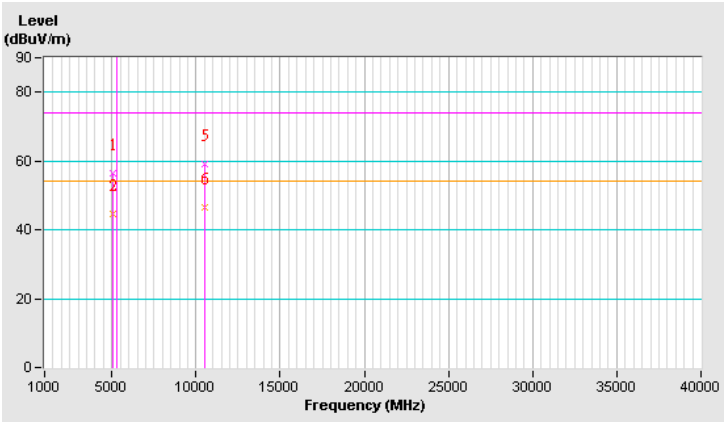
802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5080.00	56.6 PK	74.0	-17.4	1.07 H	2	50.60	6.00
2	5080.00	44.6 AV	54.0	-9.4	1.07 H	2	38.60	6.00
3	*5260.00	113.0 PK			1.39 H	269	73.30	39.70
4	*5260.00	102.2 AV			1.39 H	269	62.50	39.70
5	#10520.00	59.0 PK	74.0	-15.0	1.02 H	220	40.70	18.30
6	#10520.00	46.4 AV	54.0	-7.6	1.02 H	220	28.10	18.30

REMARKS:

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

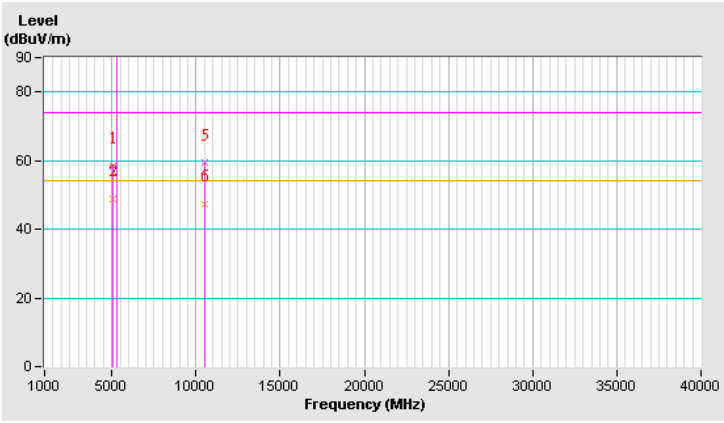


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: 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	5080.00	58.5 PK	74.0	-15.5	1.01 V	2	52.50	6.00
2	5080.00	48.9 AV	54.0	-5.1	1.01 V	2	42.90	6.00
3	*5260.00	115.7 PK			1.58 V	31	76.00	39.70
4	*5260.00	104.9 AV			1.58 V	31	65.20	39.70
5	#10520.00	59.3 PK	74.0	-14.7	1.11 V	12	41.00	18.30
6	#10520.00	47.2 AV	54.0	-6.8	1.11 V	12	28.90	18.30

REMARKS:

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

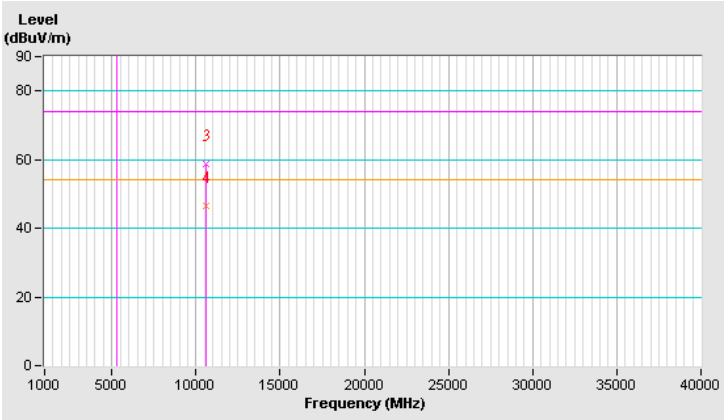


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5300.00	110.9 PK			1.37 H	271	71.20	39.70
2	*5300.00	100.7 AV			1.37 H	271	61.00	39.70
3	10600.00	58.8 PK	74.0	-15.2	1.02 H	121	40.60	18.20
4	10600.00	46.5 AV	54.0	-7.5	1.02 H	121	28.30	18.20

REMARKS:

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

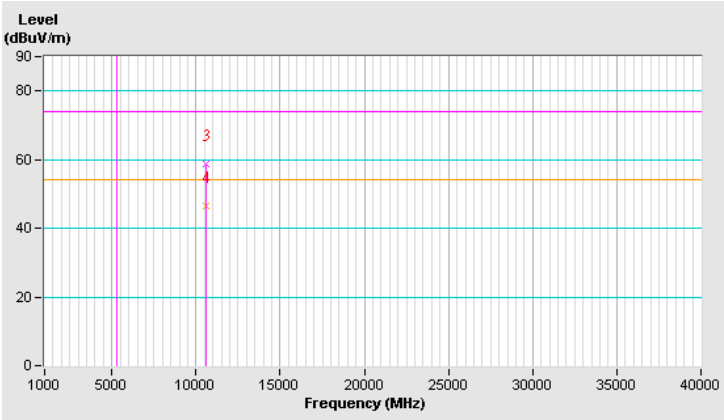


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	115.5 PK			1.65 V	32	75.80	39.70
2	*5300.00	104.4 AV			1.65 V	32	64.70	39.70
3	10600.00	58.9 PK	74.0	-15.1	1.31 V	192	40.70	18.20
4	10600.00	46.6 AV	54.0	-7.4	1.31 V	192	28.40	18.20

REMARKS:

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

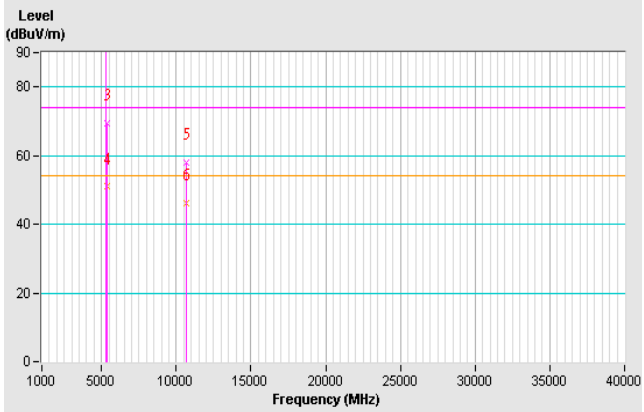


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

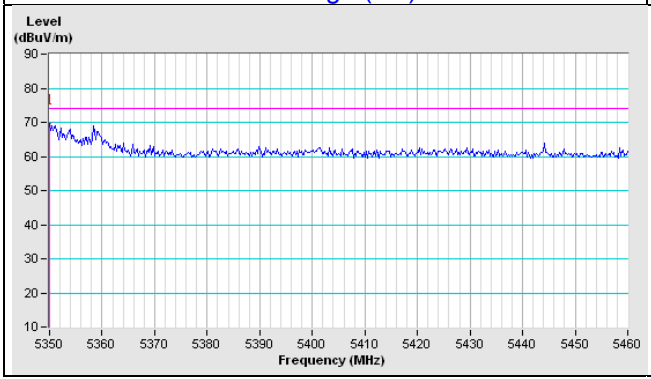
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	107.4 PK			1.00 H	33	67.70	39.70
2	*5320.00	97.1 AV			1.00 H	33	57.40	39.70
3	5350.00	69.3 PK	74.0	-4.7	1.13 H	171	62.90	6.40
4	5350.00	50.9 AV	54.0	-3.1	1.13 H	171	44.50	6.40
5	10640.00	57.9 PK	74.0	-16.1	1.02 H	194	39.80	18.10
6	10640.00	46.2 AV	54.0	-7.8	1.02 H	194	28.10	18.10

REMARKS:

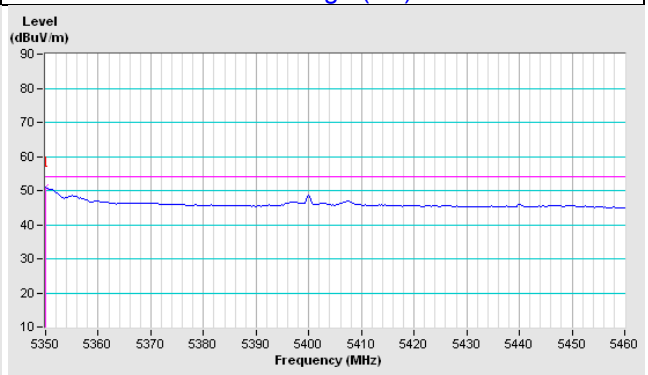
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)



Bandedge (AV)

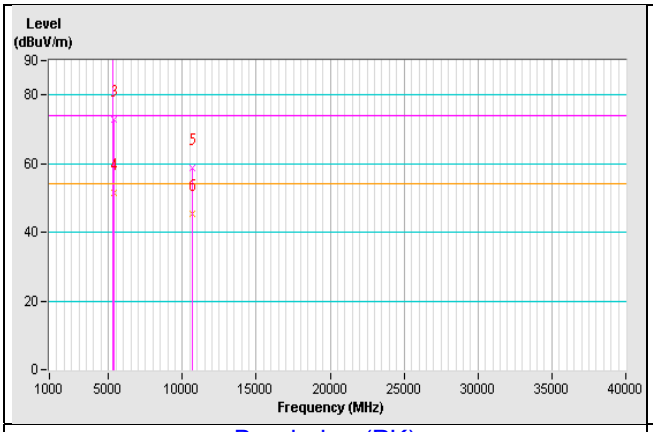


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	112.2 PK			1.64 V	12	72.50	39.70
2	*5320.00	101.8 AV			1.64 V	12	62.10	39.70
3	5350.00	72.9 PK	74.0	-1.1	1.38 V	124	66.50	6.40
4	5350.00	51.4 AV	54.0	-2.6	1.38 V	124	45.00	6.40
5	10640.00	58.7 PK	74.0	-15.3	1.52 V	255	40.60	18.10
6	10640.00	45.5 AV	54.0	-8.5	1.52 V	255	27.40	18.10

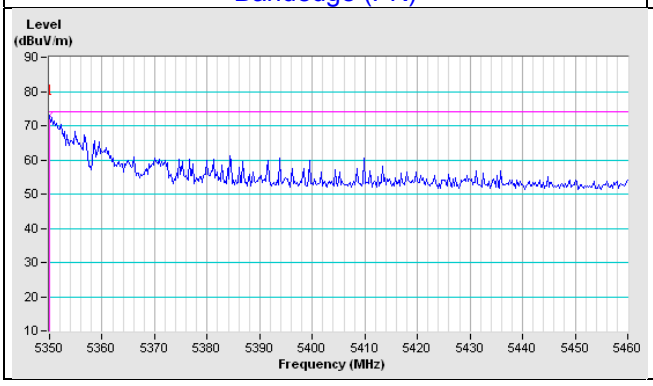
REMARKS:

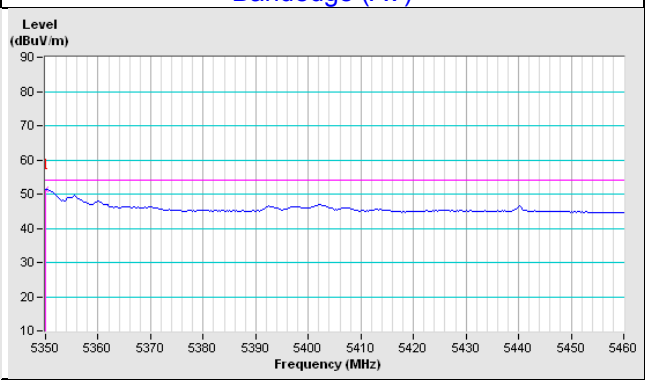
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)

Bandedge (AV)



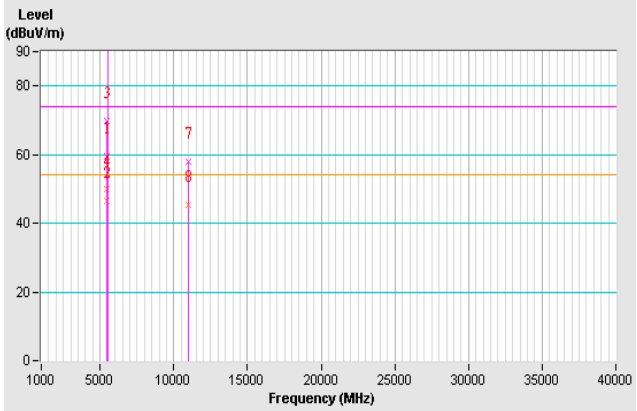


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

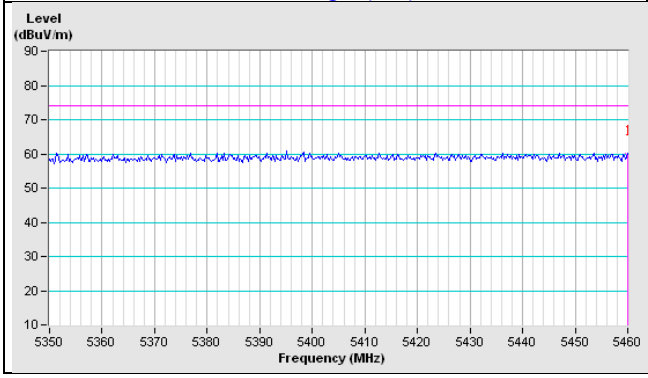
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	59.5 PK	74.0	-14.5	1.35 H	181	52.70	6.80
2	5460.00	46.6 AV	54.0	-7.4	1.35 H	181	39.80	6.80
3	#5470.00	69.8 PK	74.0	-4.2	1.47 H	172	63.00	6.80
4	#5470.00	50.0 AV	54.0	-4.0	1.47 H	172	43.20	6.80
5	*5500.00	108.1 PK			1.00 H	41	68.10	40.00
6	*5500.00	98.5 AV			1.00 H	41	58.50	40.00
7	11000.00	57.8 PK	74.0	-16.2	1.12 H	185	38.70	19.10
8	11000.00	45.5 AV	54.0	-8.5	1.12 H	185	26.40	19.10

REMARKS:

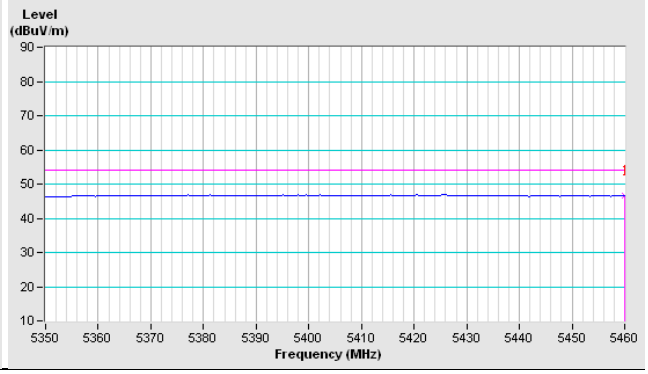
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated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



Bandedge (PK)



Bandedge (AV)

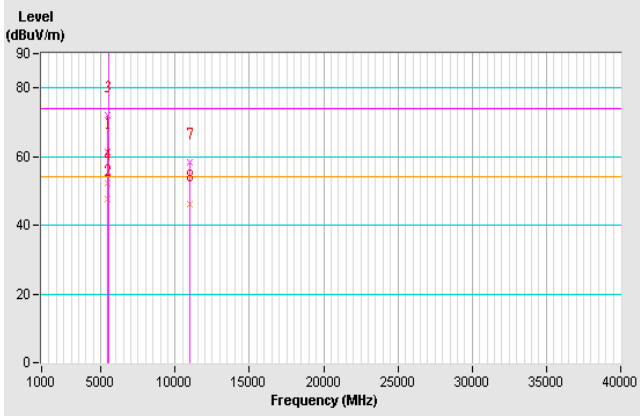


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

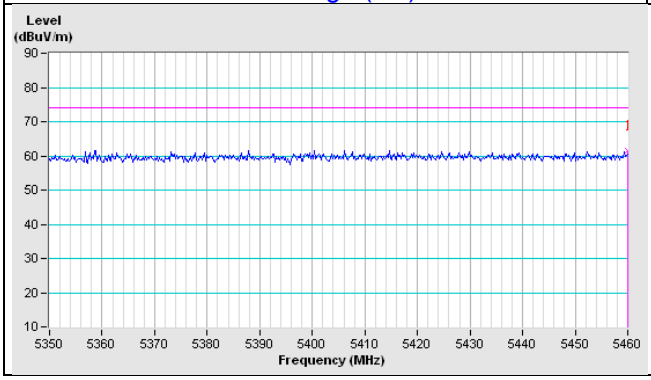
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	61.4 PK	74.0	-12.6	1.83 V	178	54.60	6.80
2	5460.00	47.7 AV	54.0	-6.3	1.83 V	178	40.90	6.80
3	#5470.00	72.0 PK	74.0	-2.0	1.82 V	180	65.20	6.80
4	#5470.00	52.4 AV	54.0	-1.6	1.82 V	180	45.60	6.80
5	*5500.00	112.2 PK			1.28 V	278	72.20	40.00
6	*5500.00	101.7 AV			1.28 V	278	61.70	40.00
7	11000.00	58.4 PK	74.0	-15.6	1.18 V	213	39.30	19.10
8	11000.00	46.2 AV	54.0	-7.8	1.18 V	213	27.10	19.10

REMARKS:

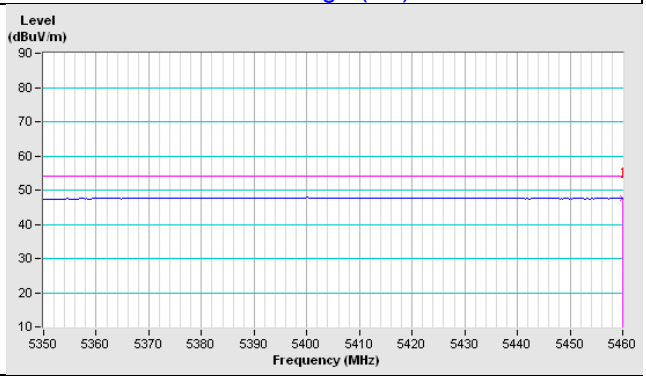
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated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



Bandedge (PK)



Bandedge (AV)

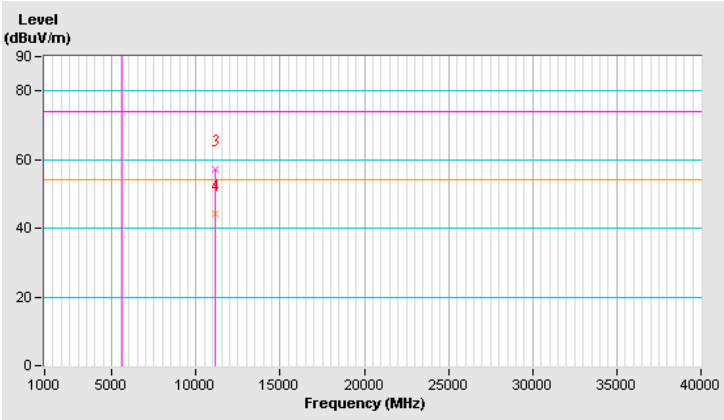


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5580.00	111.7 PK			1.40 H	37	71.60	40.10
2	*5580.00	100.7 AV			1.40 H	37	60.60	40.10
3	11160.00	57.2 PK	74.0	-16.8	1.06 H	102	38.50	18.70
4	11160.00	44.2 AV	54.0	-9.8	1.06 H	102	25.50	18.70

REMARKS:

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

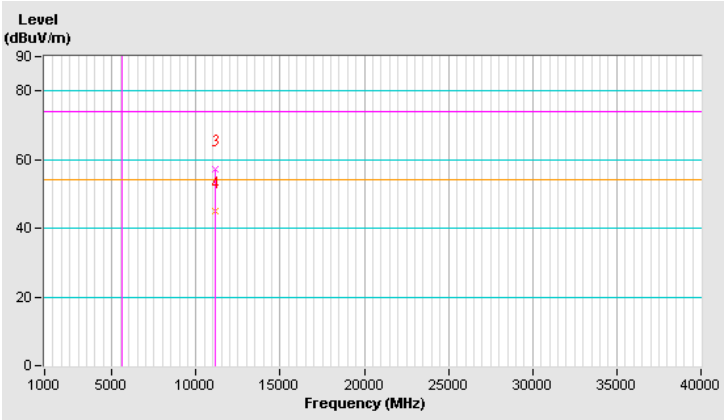


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	114.7 PK			1.06 V	30	74.60	40.10
2	*5580.00	104.6 AV			1.06 V	30	64.50	40.10
3	11160.00	57.1 PK	74.0	-16.9	1.06 V	86	38.40	18.70
4	11160.00	45.0 AV	54.0	-9.0	1.06 V	86	26.30	18.70

REMARKS:

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

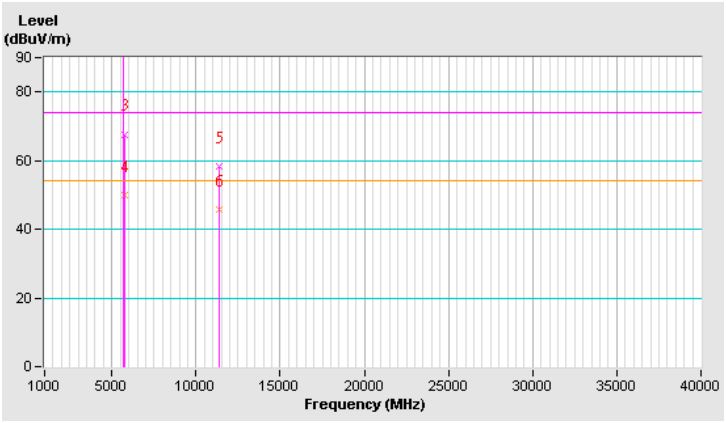


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5700.00	109.7 PK			1.00 H	269	69.40	40.30
2	*5700.00	99.5 AV			1.00 H	269	59.20	40.30
3	#5725.00	67.7 PK	74.0	-6.3	1.00 H	61	60.50	7.20
4	#5725.00	49.9 AV	54.0	-4.1	1.00 H	61	42.70	7.20
5	11400.00	58.4 PK	74.0	-15.6	1.03 H	116	40.10	18.30
6	11400.00	45.6 AV	54.0	-8.4	1.03 H	116	27.30	18.30

REMARKS:

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

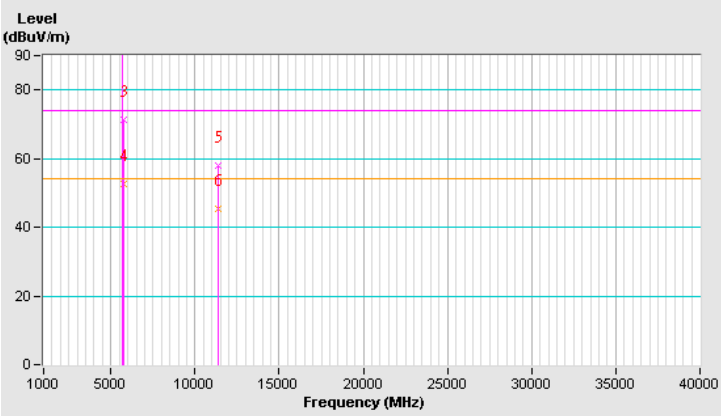


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	109.7 PK			1.00 V	241	69.40	40.30
2	*5700.00	100.2 AV			1.00 V	241	59.90	40.30
3	#5725.00	71.3 PK	74.0	-2.7	1.02 V	33	64.10	7.20
4	#5725.00	52.5 AV	54.0	-1.5	1.02 V	33	45.30	7.20
5	11400.00	58.1 PK	74.0	-15.9	1.12 V	171	39.80	18.30
6	11400.00	45.3 AV	54.0	-8.7	1.12 V	171	27.00	18.30

REMARKS:

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



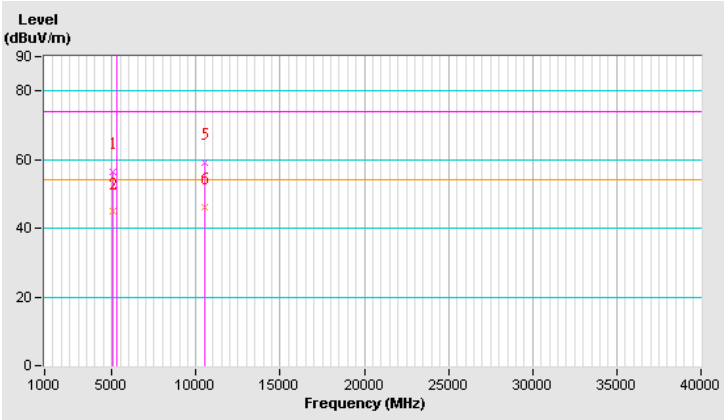
802.11n (HT20)

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) 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	5080.00	56.3 PK	74.0	-17.7	1.12 H	55	50.30	6.00
2	5080.00	44.8 AV	54.0	-9.2	1.12 H	55	38.80	6.00
3	*5260.00	110.9 PK			1.00 H	159	71.20	39.70
4	*5260.00	100.6 AV			1.00 H	159	60.90	39.70
5	#10520.00	59.1 PK	74.0	-14.9	1.18 H	134	40.80	18.30
6	#10520.00	46.2 AV	54.0	-7.8	1.18 H	134	27.90	18.30

REMARKS:

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

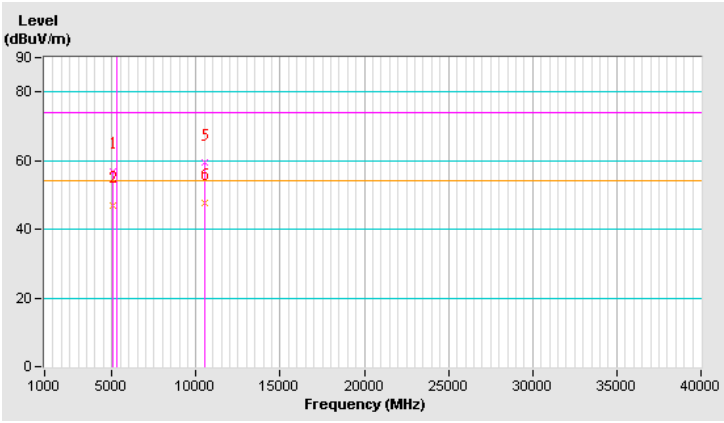


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: 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	5080.00	56.9 PK	74.0	-17.1	1.31 V	352	50.90	6.00
2	5080.00	46.8 AV	54.0	-7.2	1.31 V	352	40.80	6.00
3	*5260.00	113.1 PK			1.41 V	33	73.40	39.70
4	*5260.00	102.7 AV			1.41 V	33	63.00	39.70
5	#10520.00	59.3 PK	74.0	-14.7	1.02 V	0	41.00	18.30
6	#10520.00	47.7 AV	54.0	-6.3	1.02 V	0	29.40	18.30

REMARKS:

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

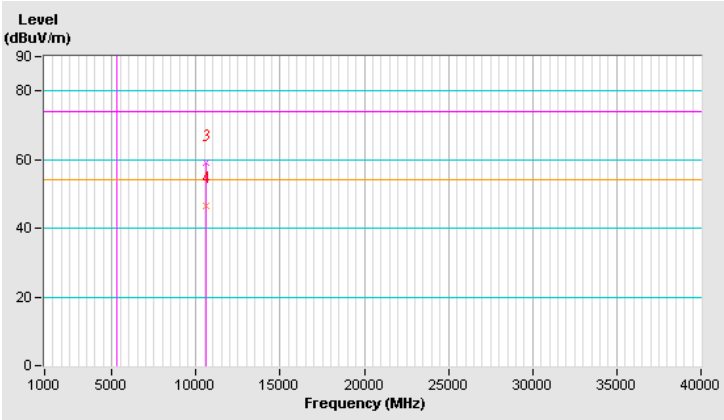


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5300.00	111.0 PK			1.70 H	169	71.30	39.70
2	*5300.00	100.8 AV			1.70 H	169	61.10	39.70
3	10600.00	58.9 PK	74.0	-15.1	1.15 H	154	40.70	18.20
4	10600.00	46.6 AV	54.0	-7.4	1.15 H	154	28.40	18.20

REMARKS:

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

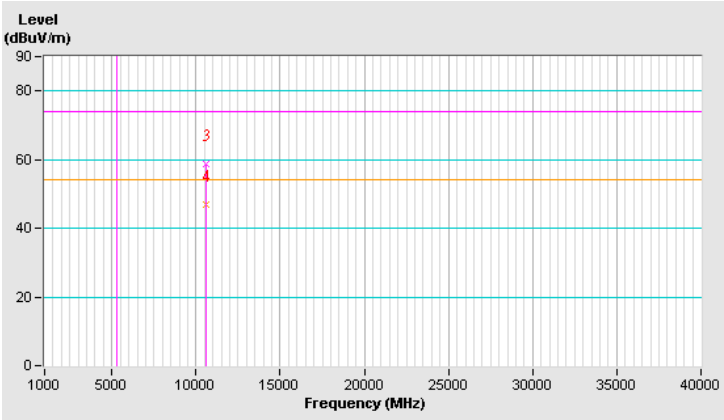


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	113.0 PK			1.04 V	138	73.30	39.70
2	*5300.00	102.8 AV			1.04 V	138	63.10	39.70
3	10600.00	58.9 PK	74.0	-15.1	1.15 V	69	40.70	18.20
4	10600.00	47.0 AV	54.0	-7.0	1.15 V	69	28.80	18.20

REMARKS:

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

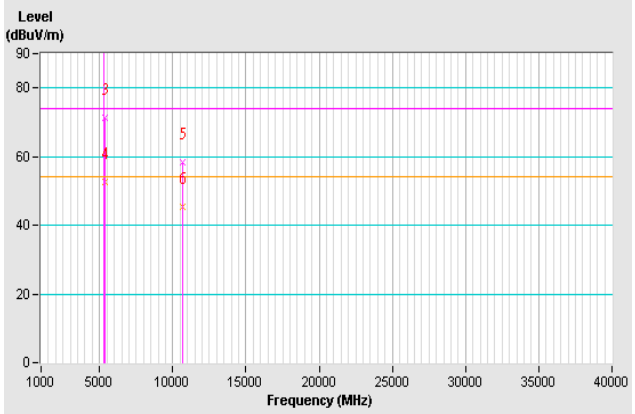


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	107.9 PK			1.72 H	172	68.20	39.70
2	*5320.00	97.5 AV			1.72 H	172	57.80	39.70
3	5350.00	71.4 PK	74.0	-2.6	1.69 H	171	65.00	6.40
4	5350.00	52.6 AV	54.0	-1.4	1.69 H	171	46.20	6.40
5	10640.00	58.4 PK	74.0	-15.6	1.13 H	202	40.30	18.10
6	10640.00	45.3 AV	54.0	-8.7	1.13 H	202	27.20	18.10

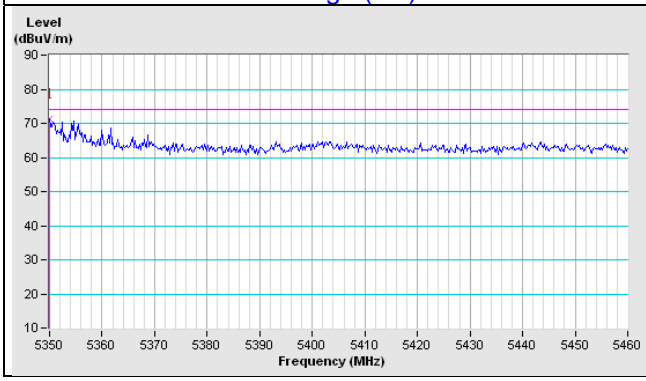
REMARKS:

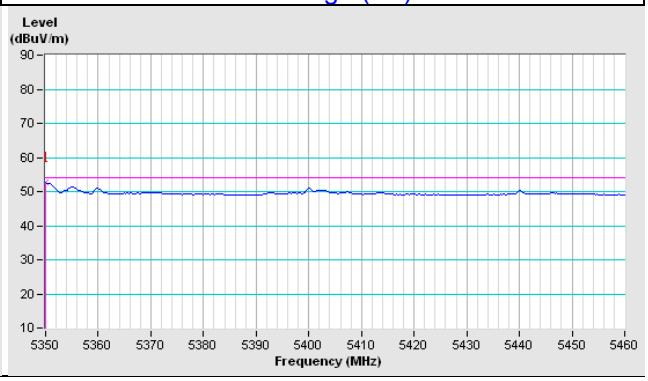
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)

Bandedge (AV)



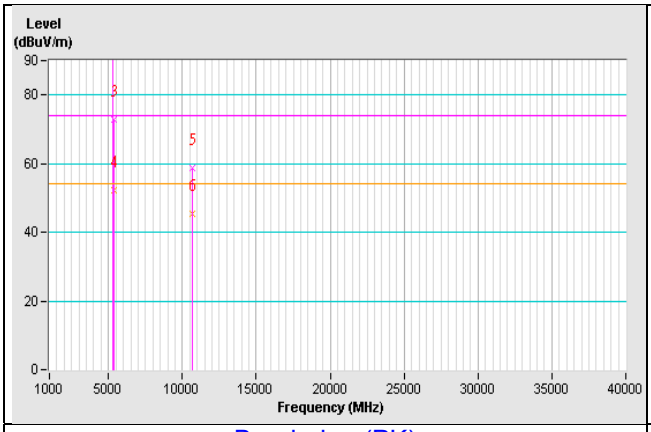


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	111.7 PK			1.46 V	38	72.00	39.70
2	*5320.00	101.4 AV			1.46 V	38	61.70	39.70
3	5350.00	72.9 PK	74.0	-1.1	1.00 V	115	66.50	6.40
4	5350.00	52.1 AV	54.0	-1.9	1.00 V	115	45.70	6.40
5	10640.00	58.7 PK	74.0	-15.3	1.35 V	0	40.60	18.10
6	10640.00	45.5 AV	54.0	-8.5	1.35 V	0	27.40	18.10

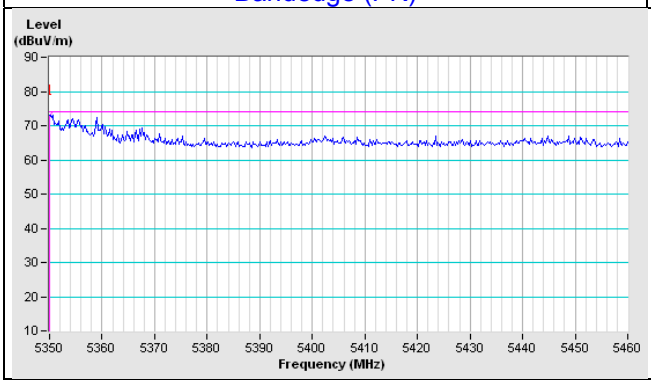
REMARKS:

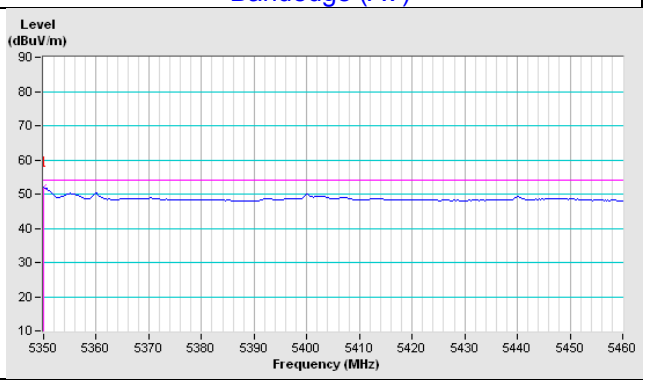
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)

Bandedge (AV)



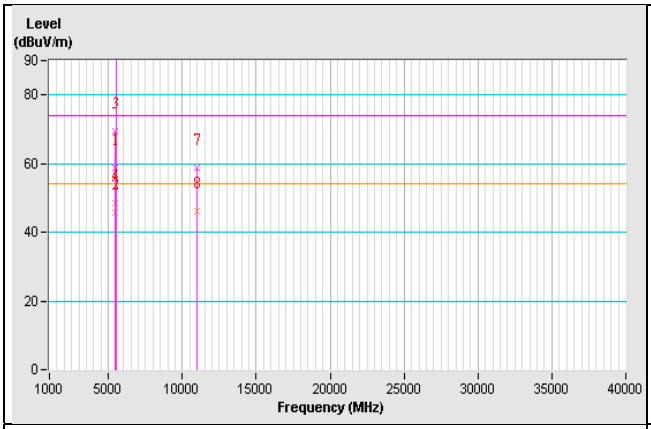


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	5460.00	58.6 PK	74.0	-15.4	1.00 H	40	51.80	6.80
2	5460.00	45.9 AV	54.0	-8.1	1.00 H	40	39.10	6.80
3	#5470.00	69.4 PK	74.0	-4.6	1.00 H	40	62.60	6.80
4	#5470.00	48.5 AV	54.0	-5.5	1.00 H	40	41.70	6.80
5	*5500.00	108.5 PK			1.00 H	36	68.50	40.00
6	*5500.00	98.7 AV			1.00 H	36	58.70	40.00
7	11000.00	58.6 PK	74.0	-15.4	1.17 H	83	39.50	19.10
8	11000.00	46.0 AV	54.0	-8.0	1.17 H	83	26.90	19.10

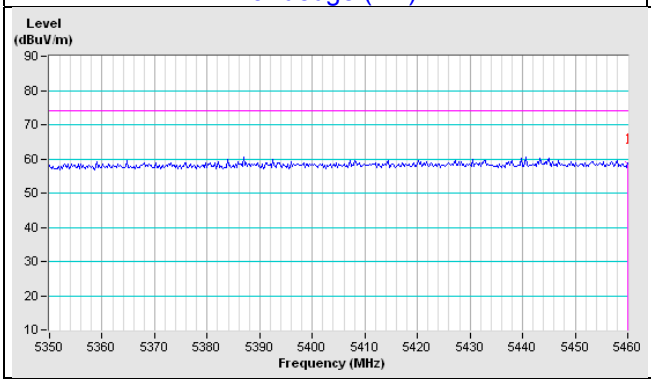
REMARKS:

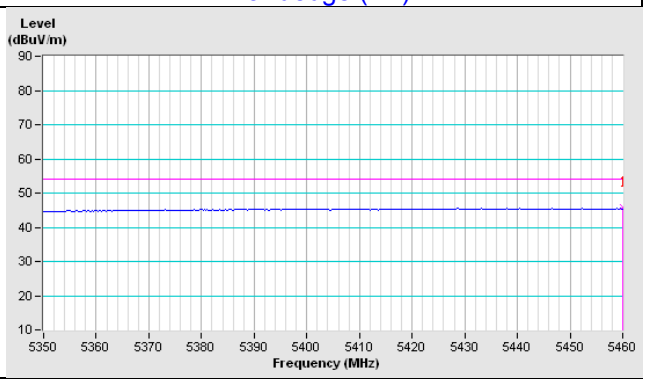
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated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



Bandedge (PK)

Bandedge (AV)



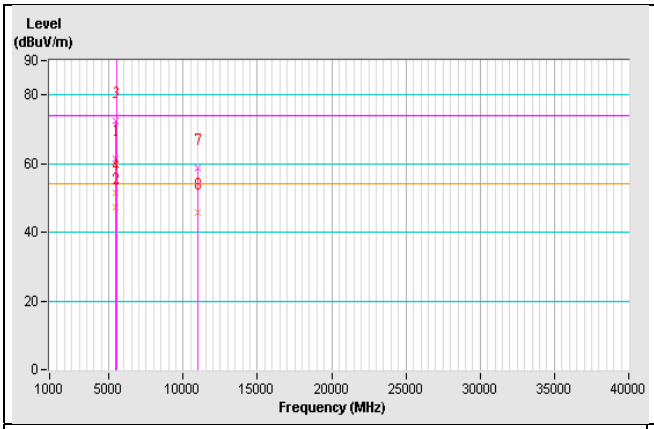


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

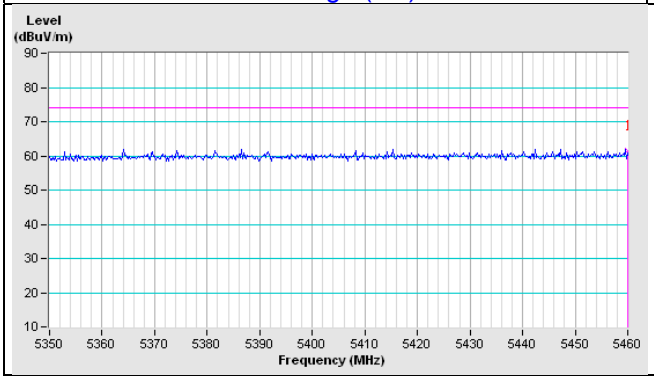
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	61.5 PK	74.0	-12.5	1.14 V	179	54.70	6.80
2	5460.00	47.4 AV	54.0	-6.6	1.14 V	179	40.60	6.80
3	#5470.00	72.3 PK	74.0	-1.7	1.00 V	171	65.50	6.80
4	#5470.00	51.3 AV	54.0	-2.7	1.00 V	171	44.50	6.80
5	*5500.00	112.7 PK			1.00 V	171	72.70	40.00
6	*5500.00	103.1 AV			1.00 V	171	63.10	40.00
7	11000.00	58.8 PK	74.0	-15.2	1.20 V	104	39.70	19.10
8	11000.00	45.7 AV	54.0	-8.3	1.20 V	104	26.60	19.10

REMARKS:

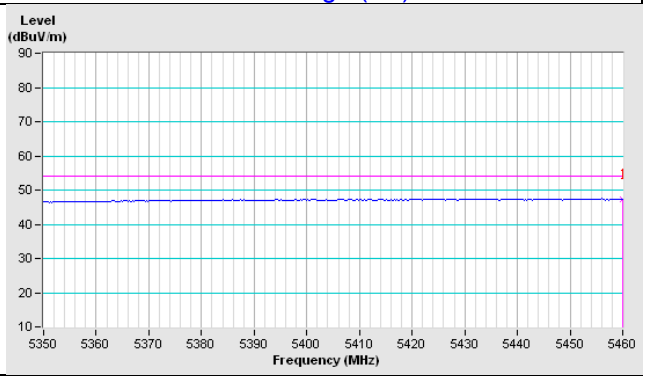
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated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



Bandedge (PK)



Bandedge (AV)

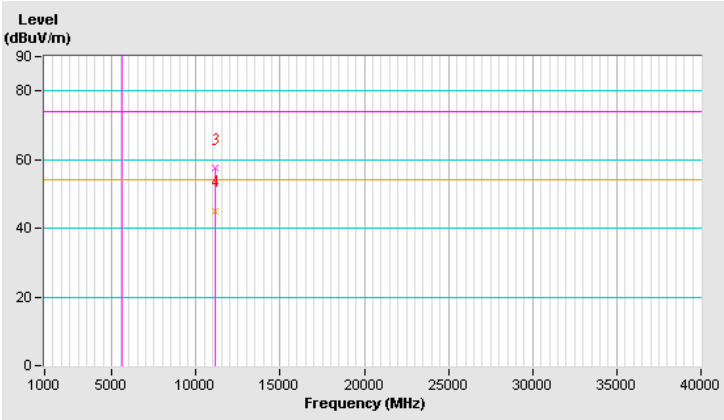


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5580.00	111.6 PK			1.36 H	31	71.50	40.10
2	*5580.00	100.9 AV			1.36 H	31	60.80	40.10
3	11160.00	57.7 PK	74.0	-16.3	1.06 H	221	39.00	18.70
4	11160.00	45.2 AV	54.0	-8.8	1.06 H	221	26.50	18.70

REMARKS:

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

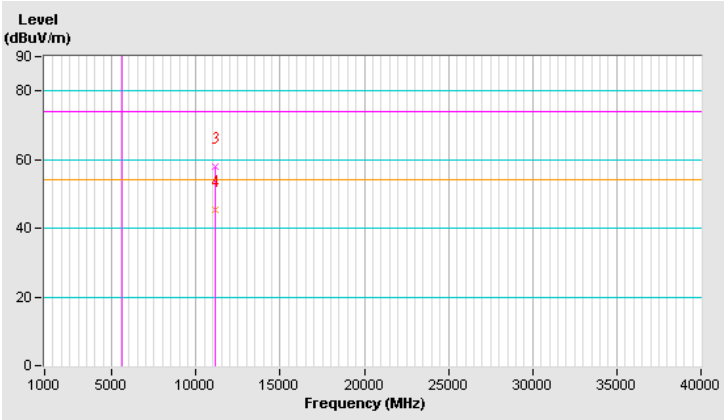


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	114.9 PK			1.79 V	150	74.80	40.10
2	*5580.00	104.5 AV			1.79 V	150	64.40	40.10
3	11160.00	57.9 PK	74.0	-16.1	1.16 V	96	39.20	18.70
4	11160.00	45.3 AV	54.0	-8.7	1.16 V	96	26.60	18.70

REMARKS:

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

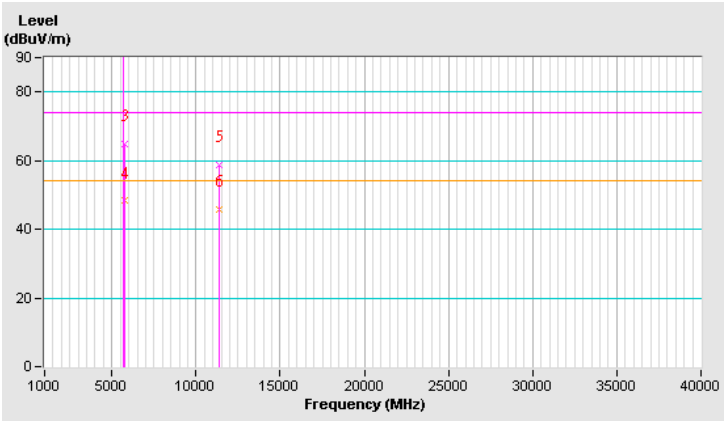


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5700.00	108.1 PK			1.00 H	269	67.80	40.30
2	*5700.00	98.2 AV			1.00 H	269	57.90	40.30
3	#5725.00	64.8 PK	74.0	-9.2	1.20 H	283	57.60	7.20
4	#5725.00	48.2 AV	54.0	-5.8	1.20 H	283	41.00	7.20
5	11400.00	58.6 PK	74.0	-15.4	1.00 H	69	40.30	18.30
6	11400.00	45.7 AV	54.0	-8.3	1.00 H	69	27.40	18.30

REMARKS:

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

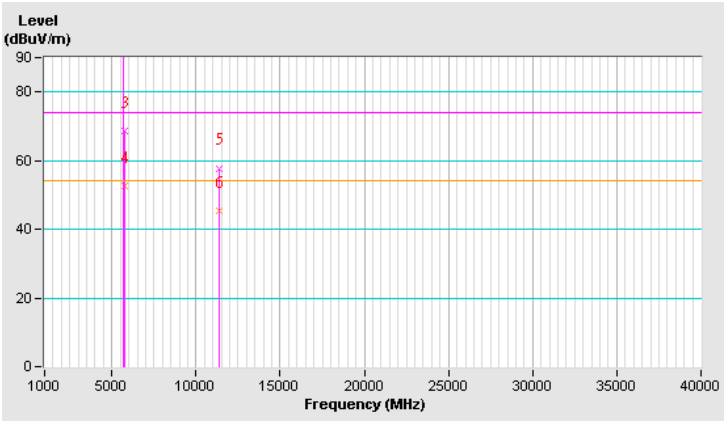


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	108.5 PK			1.00 V	243	68.20	40.30
2	*5700.00	98.6 AV			1.00 V	243	58.30	40.30
3	#5725.00	68.8 PK	74.0	-5.2	1.41 V	8	61.60	7.20
4	#5725.00	52.8 AV	54.0	-1.2	1.41 V	8	45.60	7.20
5	11400.00	57.8 PK	74.0	-16.2	1.11 V	186	39.50	18.30
6	11400.00	45.3 AV	54.0	-8.7	1.11 V	186	27.00	18.30

REMARKS:

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



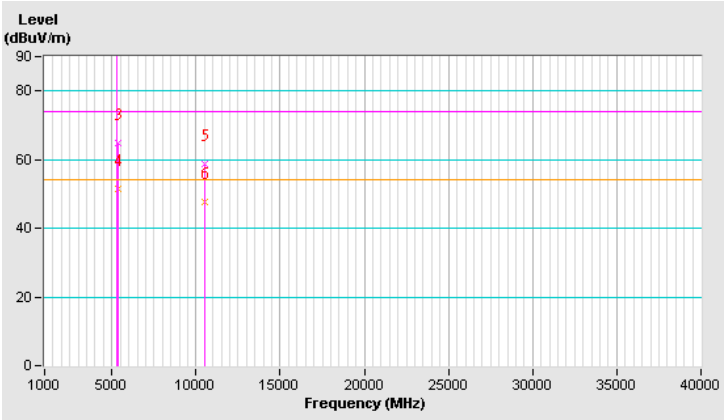
802.11n (HT40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	108.0 PK			1.62 H	177	68.30	39.70
2	*5270.00	98.7 AV			1.62 H	177	59.00	39.70
3	5350.00	64.9 PK	74.0	-9.1	1.63 H	165	58.50	6.40
4	5350.00	51.4 AV	54.0	-2.6	1.63 H	165	45.00	6.40
5	#10540.00	58.9 PK	74.0	-15.1	1.10 H	69	40.50	18.40
6	#10540.00	47.8 AV	54.0	-6.2	1.10 H	69	29.40	18.40

REMARKS:

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

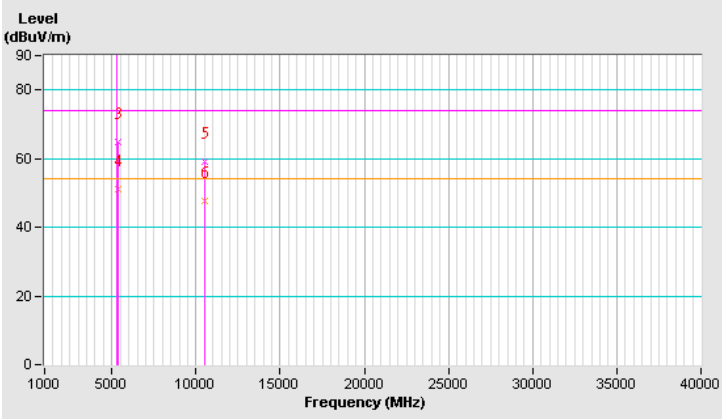


CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	112.3 PK			1.74 V	7	72.60	39.70
2	*5270.00	102.3 AV			1.74 V	7	62.60	39.70
3	5350.00	64.8 PK	74.0	-9.2	1.00 V	115	58.40	6.40
4	5350.00	51.2 AV	54.0	-2.8	1.00 V	115	44.80	6.40
5	#10540.00	59.0 PK	74.0	-15.0	1.41 V	242	40.60	18.40
6	#10540.00	47.5 AV	54.0	-6.5	1.41 V	242	29.10	18.40

REMARKS:

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

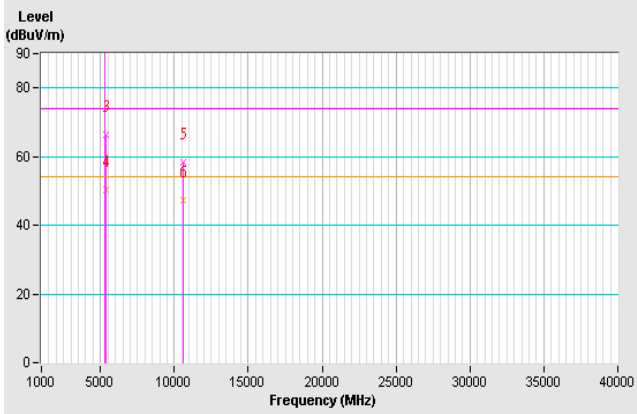


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5310.00	101.3 PK			1.07 H	171	61.60	39.70
2	*5310.00	92.0 AV			1.07 H	171	52.30	39.70
3	5350.00	66.4 PK	74.0	-7.6	1.72 H	168	60.00	6.40
4	5350.00	50.3 AV	54.0	-3.7	1.72 H	168	43.90	6.40
5	10620.00	58.4 PK	74.0	-15.6	1.02 H	114	40.20	18.20
6	10620.00	47.4 AV	54.0	-6.6	1.02 H	114	29.20	18.20

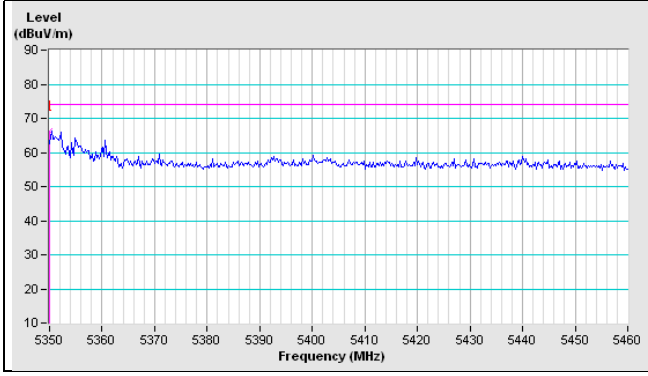
REMARKS:

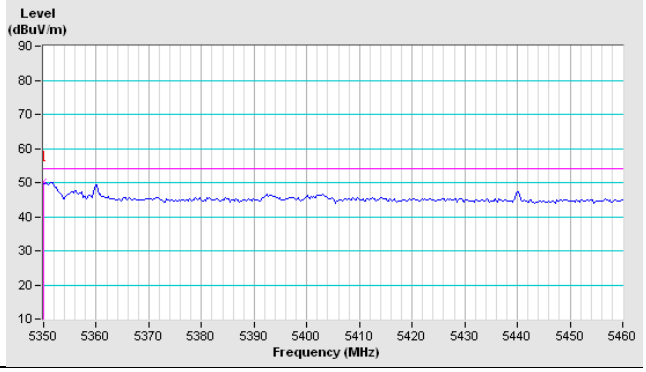
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)

Bandedge (AV)



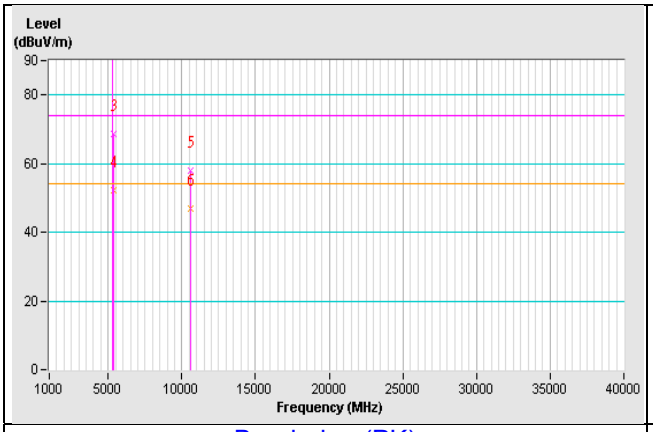


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

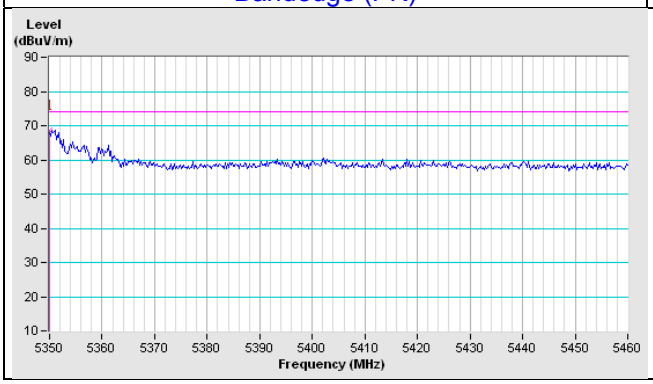
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	104.4 PK			1.26 V	133	64.70	39.70
2	*5310.00	95.1 AV			1.26 V	133	55.40	39.70
3	5350.00	68.6 PK	74.0	-5.4	1.00 V	116	62.20	6.40
4	5350.00	52.2 AV	54.0	-1.8	1.00 V	116	45.80	6.40
5	10620.00	58.0 PK	74.0	-16.0	1.34 V	102	39.80	18.20
6	10620.00	46.9 AV	54.0	-7.1	1.34 V	102	28.70	18.20

REMARKS:

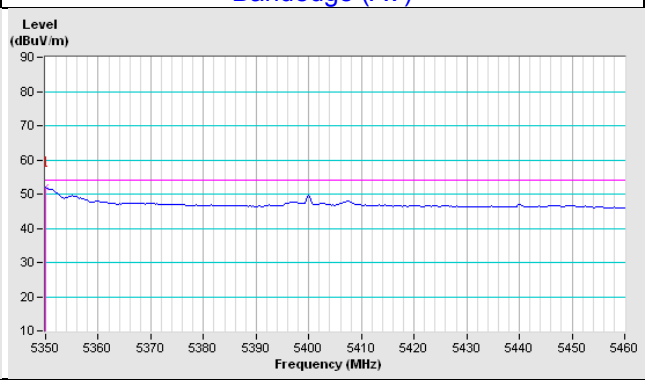
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)



Bandedge (AV)

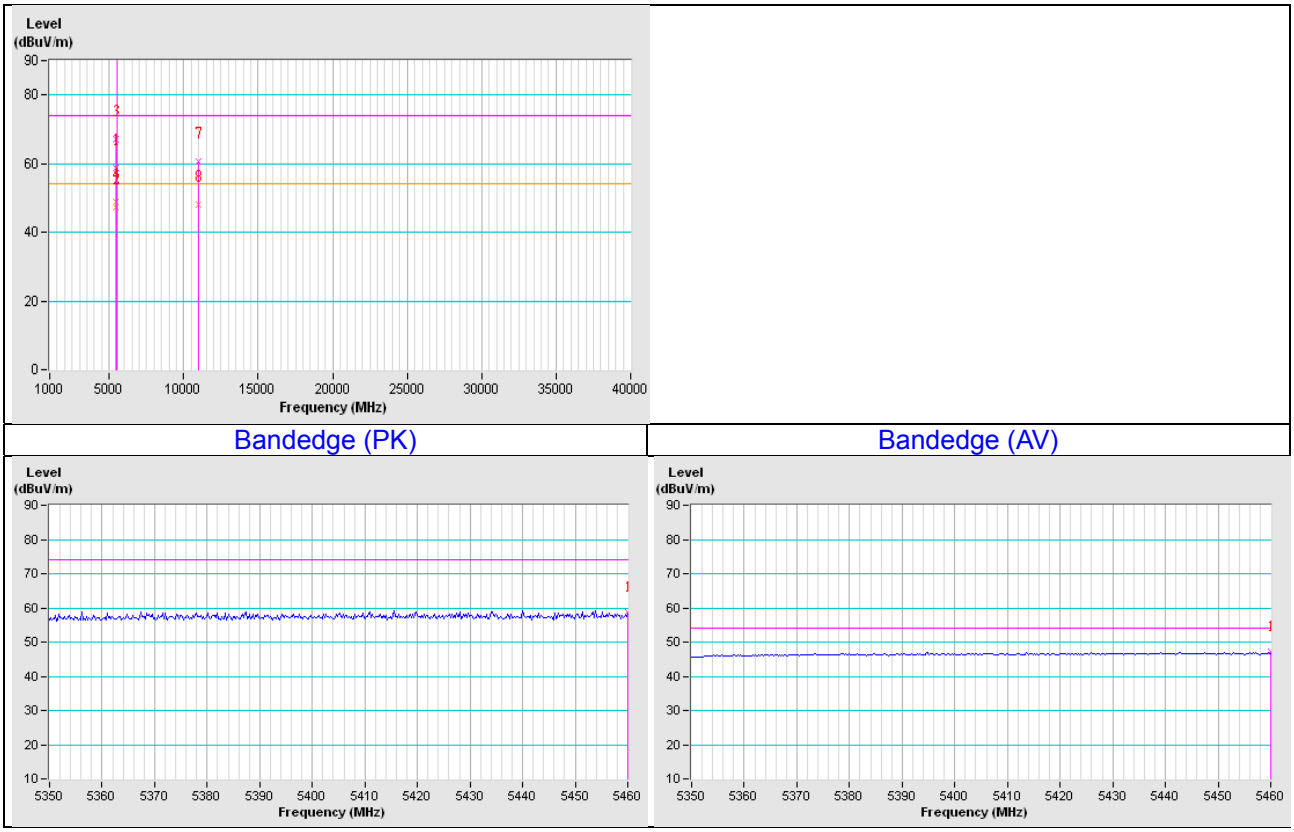


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	5460.00	58.7 PK	74.0	-15.3	1.63 H	197	51.90	6.80
2	5460.00	47.2 AV	54.0	-6.8	1.63 H	197	40.40	6.80
3	#5470.00	67.3 PK	74.0	-6.7	1.63 H	197	60.50	6.80
4	#5470.00	49.0 AV	54.0	-5.0	1.63 H	197	42.20	6.80
5	*5510.00	100.1 PK			1.00 H	41	60.10	40.00
6	*5510.00	91.1 AV			1.00 H	41	51.10	40.00
7	11020.00	60.6 PK	74.0	-13.4	1.27 H	88	41.60	19.00
8	11020.00	47.9 AV	54.0	-6.1	1.27 H	88	28.90	19.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
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.

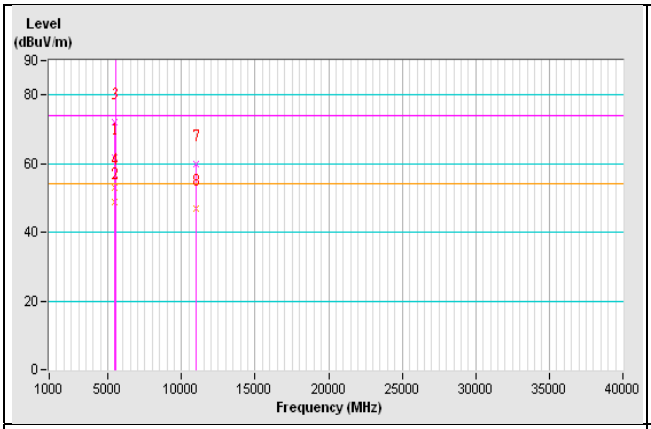


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

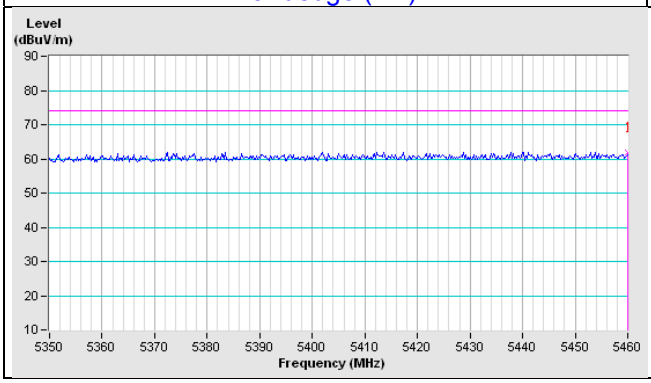
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	61.7 PK	74.0	-12.3	1.67 V	156	54.90	6.80
2	5460.00	48.8 AV	54.0	-5.2	1.67 V	156	42.00	6.80
3	#5470.00	72.2 PK	74.0	-1.8	1.67 V	157	65.40	6.80
4	**#5470.00**	**53.0 AV**	**54.0**	**-1.0**	**1.67 V**	**157**	**46.20**	**6.80**
5	*5510.00	105.4 PK			1.00 V	171	65.40	40.00
6	*5510.00	95.5 AV			1.00 V	171	55.50	40.00
7	11020.00	60.0 PK	74.0	-14.0	1.23 V	100	41.00	19.00
8	11020.00	47.0 AV	54.0	-7.0	1.23 V	100	28.00	19.00

REMARKS:

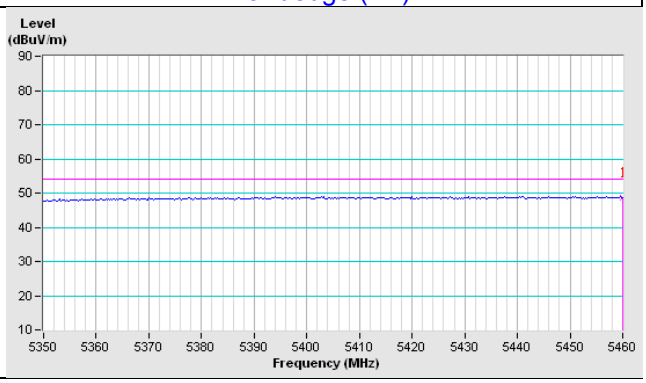
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated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



Bandedge (PK)



Bandedge (AV)

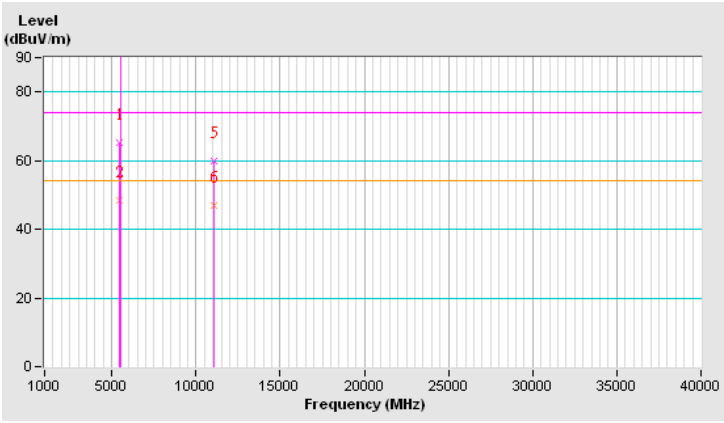


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	#5470.00	65.3 PK	74.0	-8.7	1.35 H	176	58.50	6.80
2	#5470.00	48.3 AV	54.0	-5.7	1.35 H	176	41.50	6.80
3	*5550.00	107.5 PK			1.44 H	37	67.40	40.10
4	*5550.00	96.7 AV			1.44 H	37	56.60	40.10
5	11100.00	60.0 PK	74.0	-14.0	1.20 H	200	41.50	18.50
6	11100.00	46.9 AV	54.0	-7.1	1.20 H	200	28.40	18.50

REMARKS:

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

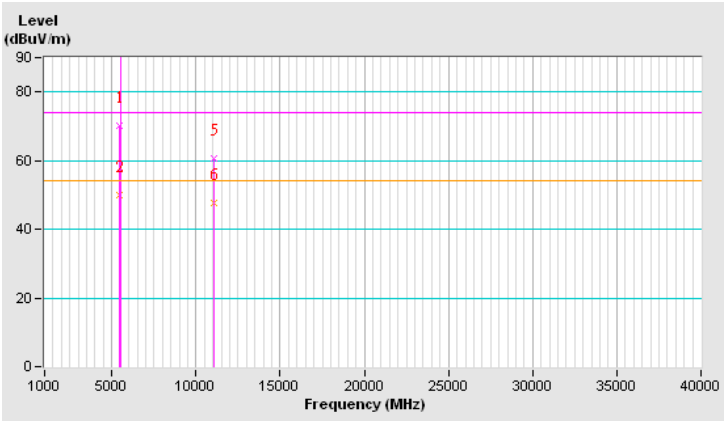


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	70.1 PK	74.0	-3.9	1.62 V	196	63.30	6.80
2	#5470.00	50.1 AV	54.0	-3.9	1.62 V	196	43.30	6.80
3	*5550.00	110.5 PK			1.51 V	285	70.40	40.10
4	*5550.00	100.5 AV			1.51 V	285	60.40	40.10
5	11100.00	60.5 PK	74.0	-13.5	1.11 V	222	42.00	18.50
6	11100.00	47.5 AV	54.0	-6.5	1.11 V	222	29.00	18.50

REMARKS:

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

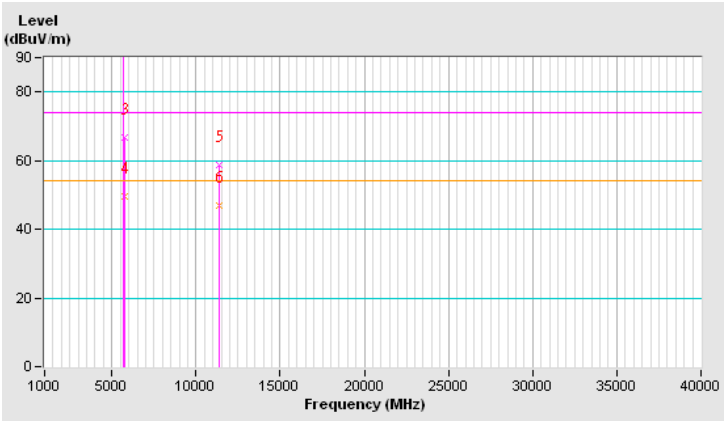


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5670.00	105.9 PK			1.35 H	32	65.70	40.20
2	*5670.00	95.8 AV			1.35 H	32	55.60	40.20
3	#5725.00	66.8 PK	74.0	-7.2	1.35 H	33	59.60	7.20
4	#5725.00	49.7 AV	54.0	-4.3	1.35 H	33	42.50	7.20
5	11340.00	58.7 PK	74.0	-15.3	1.19 H	133	40.00	18.70
6	11340.00	46.8 AV	54.0	-7.2	1.19 H	133	28.10	18.70

REMARKS:

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

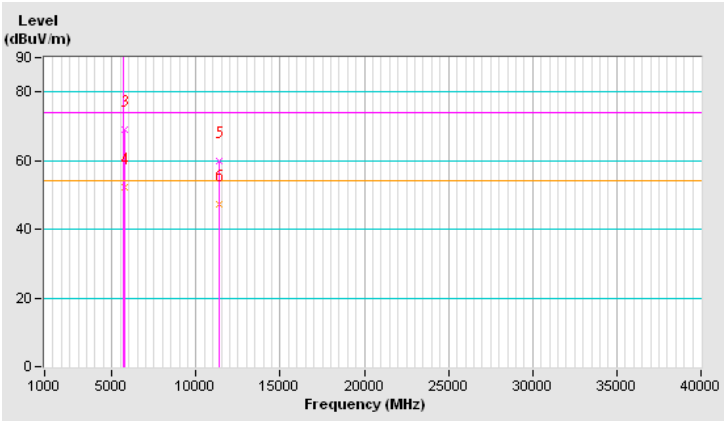


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	109.6 PK			1.51 V	16	69.40	40.20
2	*5670.00	99.8 AV			1.51 V	16	59.60	40.20
3	#5725.00	69.1 PK	74.0	-4.9	1.43 V	36	61.90	7.20
4	#5725.00	52.2 AV	54.0	-1.8	1.43 V	36	45.00	7.20
5	11340.00	60.0 PK	74.0	-14.0	1.21 V	116	41.30	18.70
6	11340.00	47.2 AV	54.0	-6.8	1.21 V	116	28.50	18.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
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.



Test Mode A2 – PIFA Antenna: 1TX

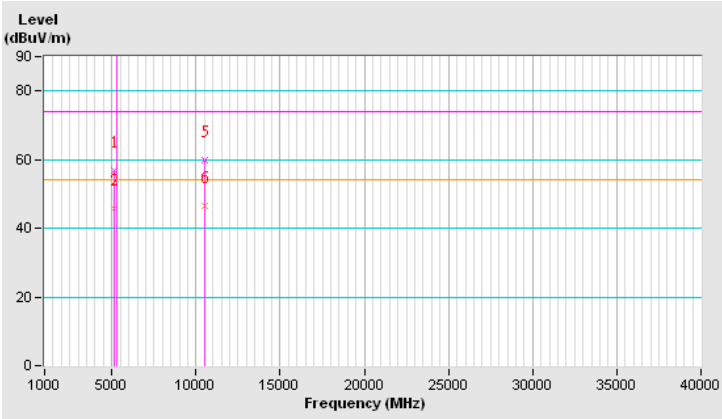
802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.0 PK	74.0	-17.0	1.65 H	170	50.80	6.20
2	5150.00	45.9 AV	54.0	-8.1	1.65 H	170	39.70	6.20
3	*5260.00	106.4 PK			1.65 H	170	66.70	39.70
4	*5260.00	95.4 AV			1.65 H	170	55.70	39.70
5	#10520.00	59.8 PK	74.0	-14.2	1.00 H	70	41.50	18.30
6	#10520.00	46.4 AV	54.0	-7.6	1.00 H	70	28.10	18.30

REMARKS:

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

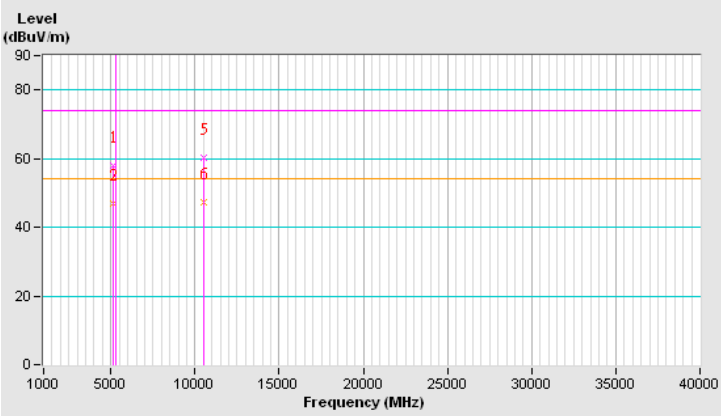


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.1 PK	74.0	-15.9	1.60 V	75	51.90	6.20
2	5150.00	47.0 AV	54.0	-7.0	1.60 V	75	40.80	6.20
3	*5260.00	111.2 PK			1.59 V	74	71.50	39.70
4	*5260.00	99.9 AV			1.59 V	74	60.20	39.70
5	#10520.00	60.3 PK	74.0	-13.7	1.70 V	184	42.00	18.30
6	#10520.00	47.2 AV	54.0	-6.8	1.70 V	184	28.90	18.30

REMARKS:

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

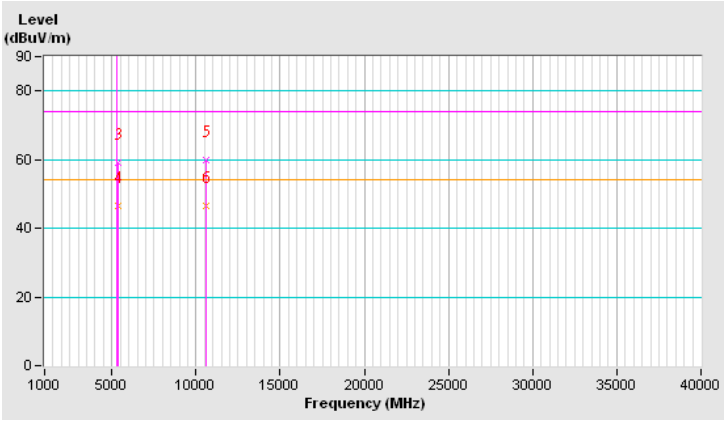


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5300.00	105.9 PK			1.64 H	179	66.20	39.70
2	*5300.00	95.0 AV			1.64 H	179	55.30	39.70
3	5350.00	59.3 PK	74.0	-14.7	1.66 H	180	52.90	6.40
4	5350.00	46.4 AV	54.0	-7.6	1.66 H	180	40.00	6.40
5	10600.00	59.7 PK	74.0	-14.3	1.11 H	124	41.50	18.20
6	10600.00	46.7 AV	54.0	-7.3	1.11 H	124	28.50	18.20

REMARKS:

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

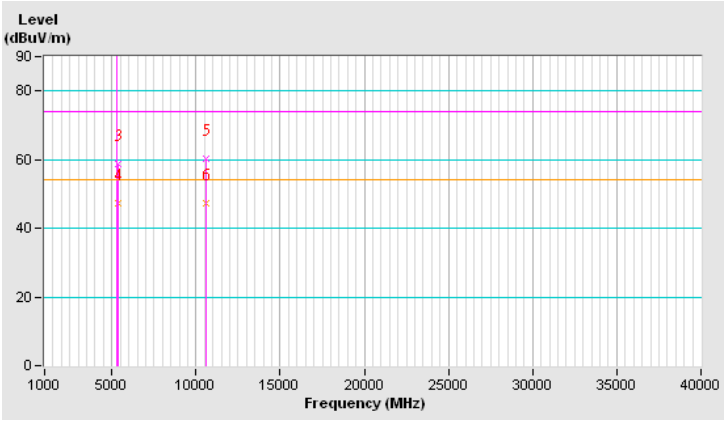


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	110.4 PK			1.66 V	74	70.70	39.70
2	*5300.00	99.6 AV			1.66 V	74	59.90	39.70
3	5350.00	58.9 PK	74.0	-15.1	1.64 V	79	52.50	6.40
4	5350.00	47.1 AV	54.0	-6.9	1.64 V	79	40.70	6.40
5	10600.00	60.1 PK	74.0	-13.9	1.70 V	277	41.90	18.20
6	10600.00	47.2 AV	54.0	-6.8	1.70 V	277	29.00	18.20

REMARKS:

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

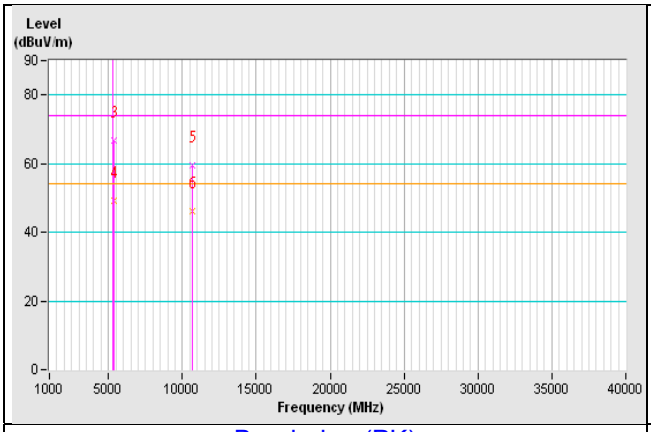


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	105.1 PK			1.61 H	175	65.40	39.70
2	*5320.00	94.1 AV			1.61 H	175	54.40	39.70
3	5350.00	66.9 PK	74.0	-7.1	1.61 H	175	60.50	6.40
4	5350.00	49.2 AV	54.0	-4.8	1.61 H	175	42.80	6.40
5	10640.00	59.4 PK	74.0	-14.6	1.20 H	95	41.30	18.10
6	10640.00	46.2 AV	54.0	-7.8	1.20 H	95	28.10	18.10

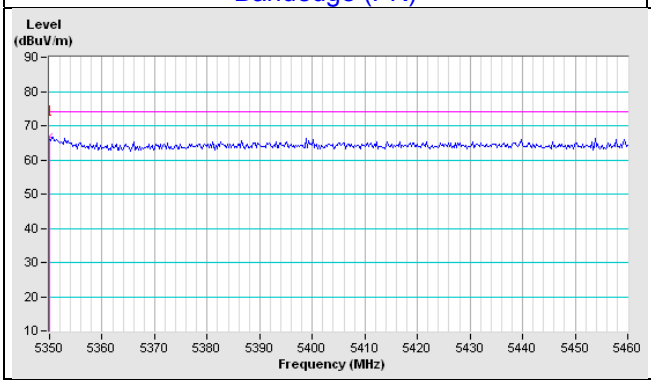
REMARKS:

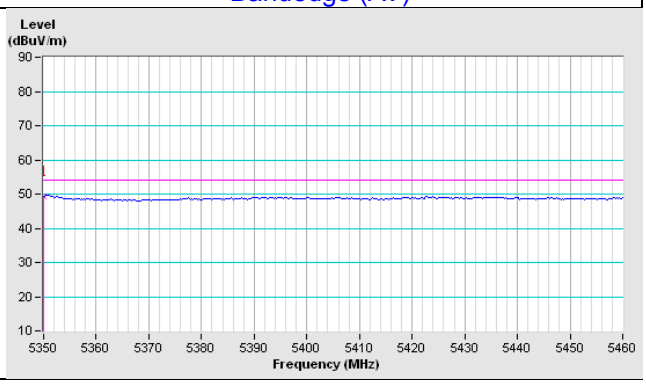
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)

Bandedge (AV)



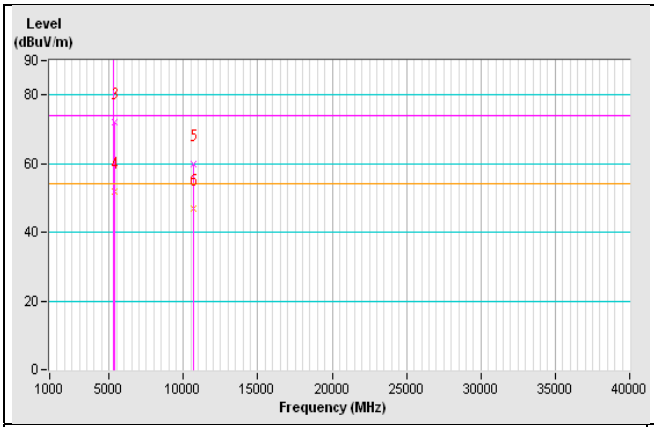


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

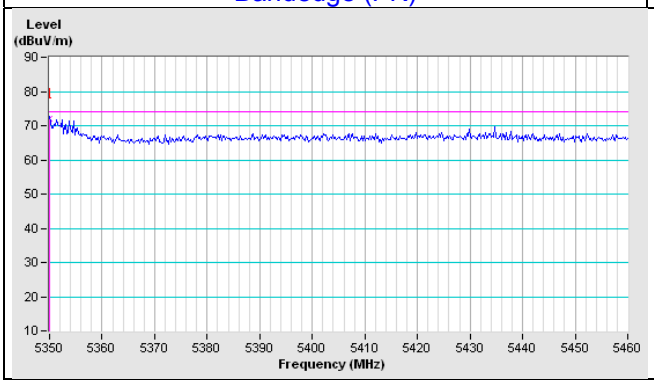
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	108.8 PK			1.63 V	76	69.10	39.70
2	*5320.00	97.9 AV			1.63 V	76	58.20	39.70
3	5350.00	72.1 PK	74.0	-1.9	1.78 V	79	65.70	6.40
4	5350.00	51.8 AV	54.0	-2.2	1.78 V	79	45.40	6.40
5	10640.00	59.9 PK	74.0	-14.1	1.72 V	280	41.80	18.10
6	10640.00	46.8 AV	54.0	-7.2	1.72 V	280	28.70	18.10

REMARKS:

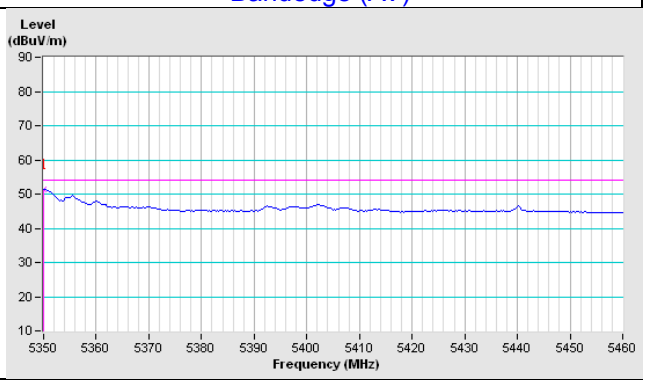
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)



Bandedge (AV)

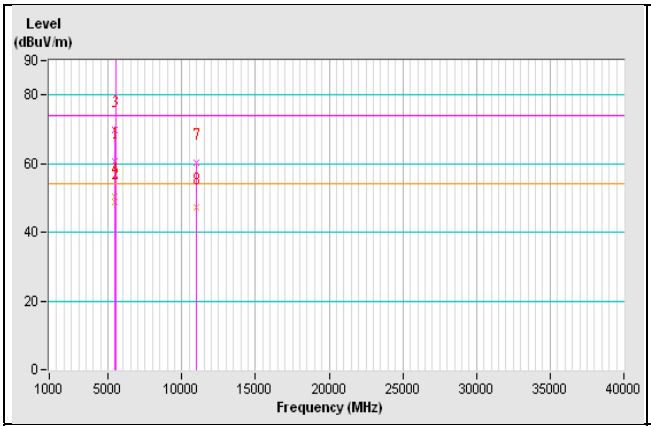


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	5460.00	60.7 PK	74.0	-13.3	1.49 H	178	53.90	6.80
2	5460.00	48.8 AV	54.0	-5.2	1.49 H	178	42.00	6.80
3	#5470.00	69.9 PK	74.0	-4.1	1.50 H	179	63.10	6.80
4	#5470.00	50.5 AV	54.0	-3.5	1.50 H	179	43.70	6.80
5	*5500.00	103.4 PK			1.49 H	178	63.40	40.00
6	*5500.00	93.2 AV			1.49 H	178	53.20	40.00
7	11000.00	60.1 PK	74.0	-13.9	1.24 H	189	41.00	19.10
8	11000.00	47.1 AV	54.0	-6.9	1.24 H	189	28.00	19.10

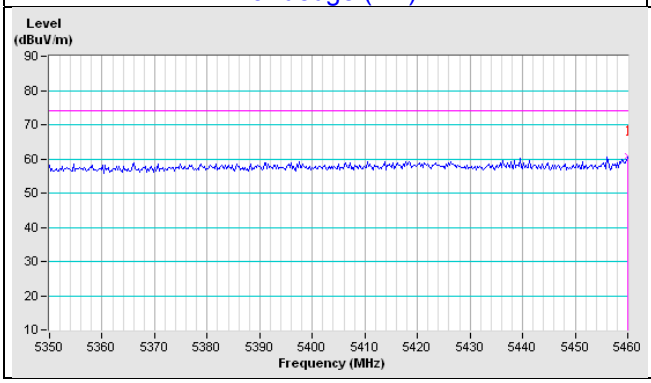
REMARKS:

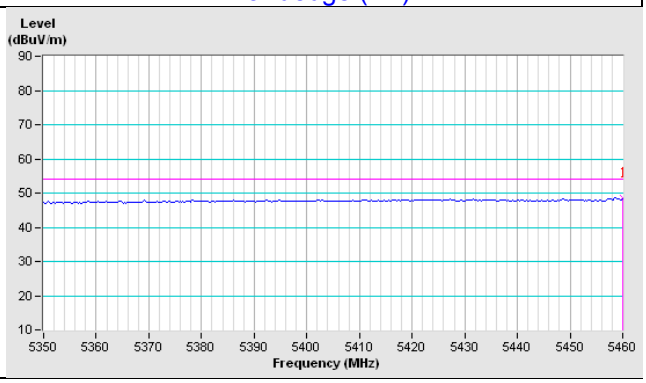
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated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



Bandedge (PK)

Bandedge (AV)



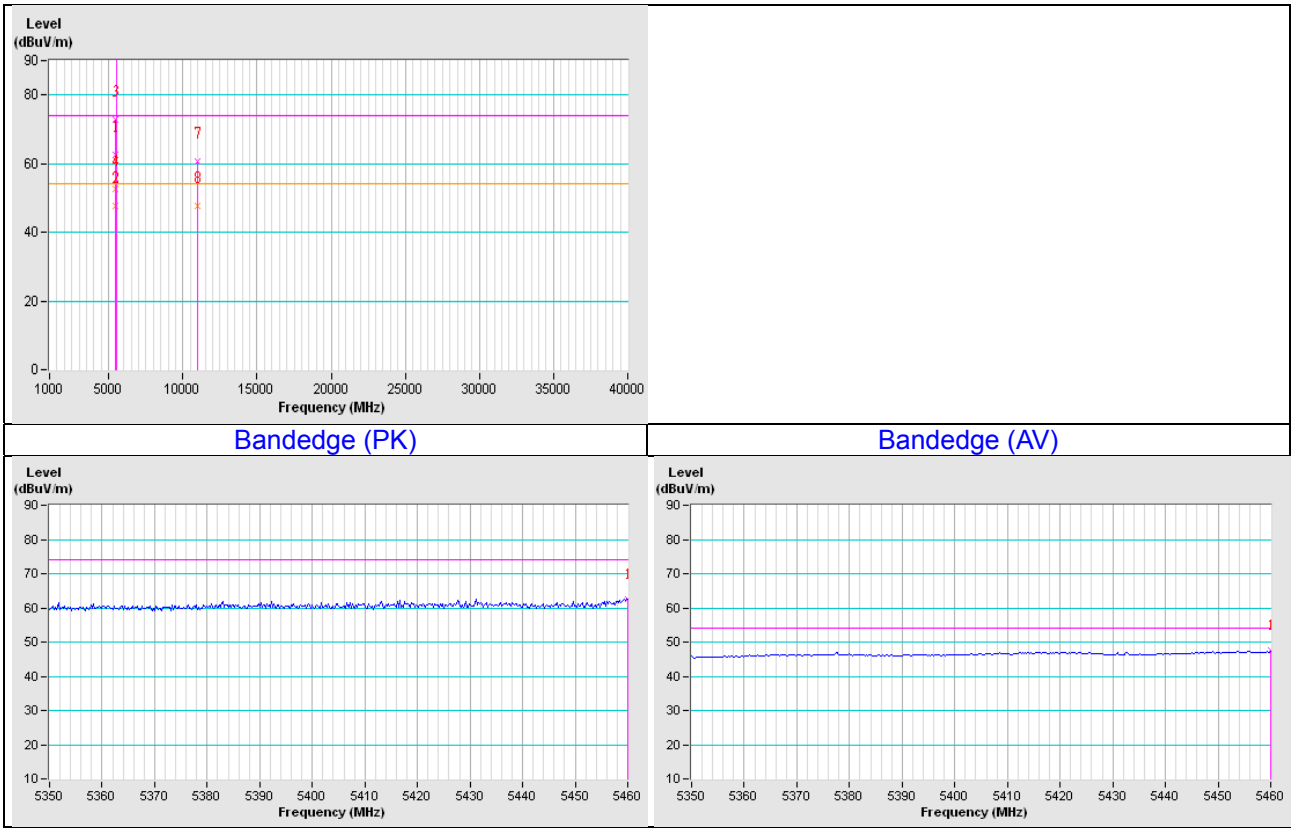


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.6 PK	74.0	-11.4	1.75 V	145	55.80	6.80
2	5460.00	47.5 AV	54.0	-6.5	1.75 V	145	40.70	6.80
3	**#5470.00**	**73.0 PK**	**74.0**	**-1.0**	**1.75 V**	**145**	**66.20**	**6.80**
4	#5470.00	52.5 AV	54.0	-1.5	1.75 V	145	45.70	6.80
5	*5500.00	109.6 PK			1.20 V	96	69.60	40.00
6	*5500.00	98.8 AV			1.20 V	96	58.80	40.00
7	11000.00	60.6 PK	74.0	-13.4	1.50 V	131	41.50	19.10
8	11000.00	47.5 AV	54.0	-6.5	1.50 V	131	28.40	19.10

REMARKS:

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

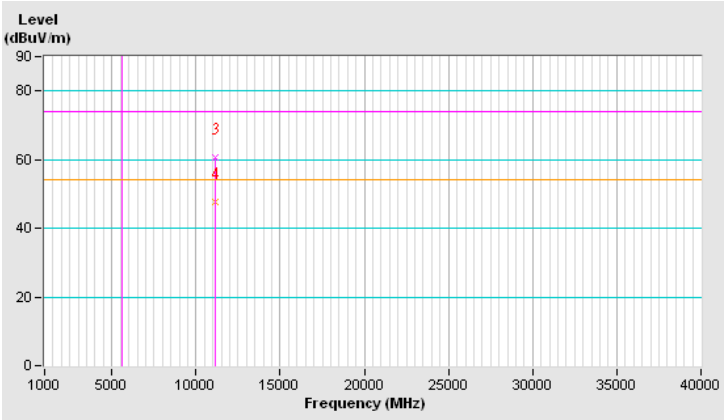


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5580.00	105.6 PK			1.64 H	185	65.50	40.10
2	*5580.00	94.7 AV			1.64 H	185	54.60	40.10
3	11160.00	60.6 PK	74.0	-13.4	1.09 H	99	41.90	18.70
4	11160.00	47.5 AV	54.0	-6.5	1.09 H	99	28.80	18.70

REMARKS:

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

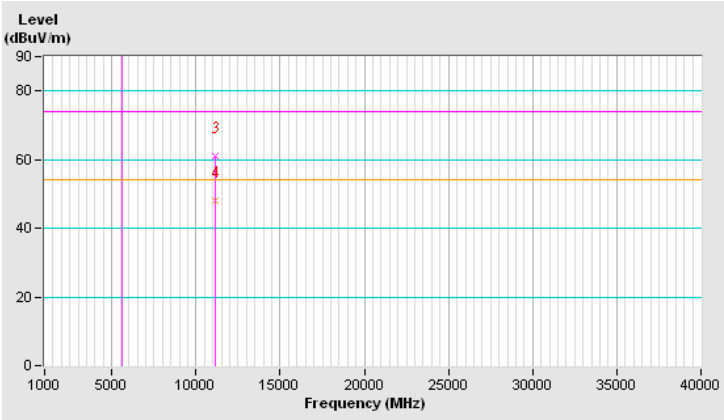


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	109.3 PK			1.32 V	126	69.20	40.10
2	*5580.00	98.4 AV			1.32 V	126	58.30	40.10
3	11160.00	61.0 PK	74.0	-13.0	1.40 V	244	42.30	18.70
4	11160.00	47.9 AV	54.0	-6.1	1.40 V	244	29.20	18.70

REMARKS:

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

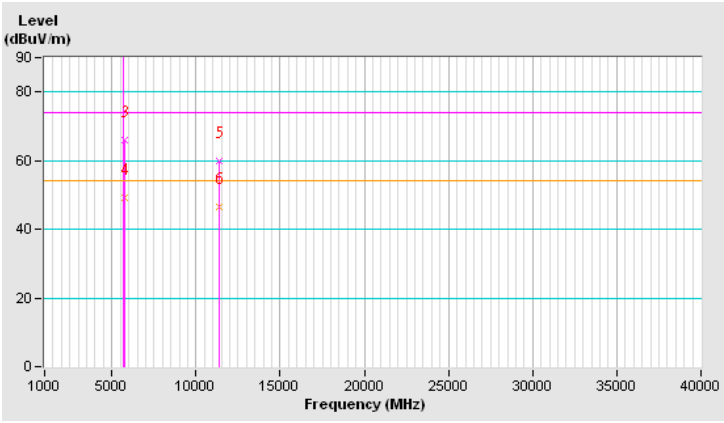


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5700.00	103.8 PK			1.62 H	186	63.50	40.30
2	*5700.00	93.2 AV			1.62 H	186	52.90	40.30
3	#5725.00	66.1 PK	74.0	-7.9	1.62 H	190	58.90	7.20
4	#5725.00	49.2 AV	54.0	-4.8	1.62 H	190	42.00	7.20
5	11400.00	59.7 PK	74.0	-14.3	1.11 H	88	41.40	18.30
6	11400.00	46.6 AV	54.0	-7.4	1.11 H	88	28.30	18.30

REMARKS:

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

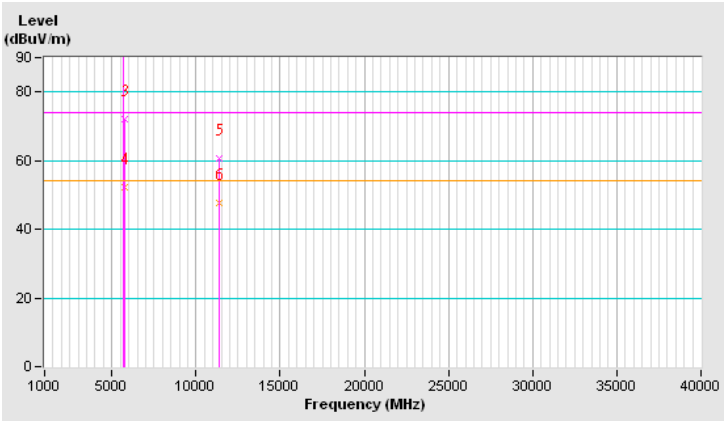


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	108.7 PK			1.59 V	76	68.40	40.30
2	*5700.00	98.3 AV			1.59 V	76	58.00	40.30
3	#5725.00	72.1 PK	74.0	-1.9	1.35 V	93	64.90	7.20
4	#5725.00	52.1 AV	54.0	-1.9	1.35 V	93	44.90	7.20
5	11400.00	60.6 PK	74.0	-13.4	1.36 V	173	42.30	18.30
6	11400.00	47.8 AV	54.0	-6.2	1.36 V	173	29.50	18.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
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.



Test Mode B1 – Dipole Antenna: 3TX

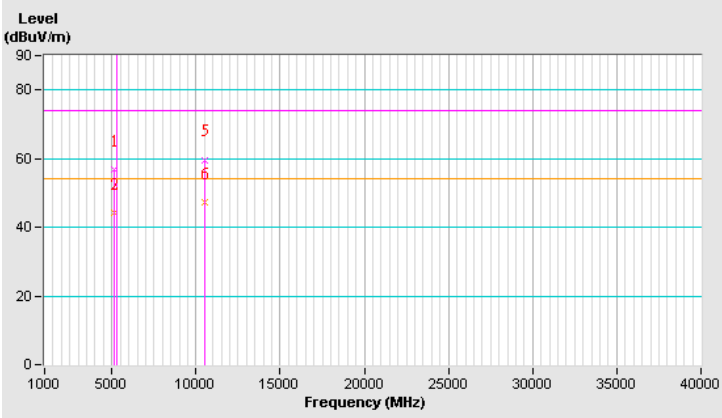
802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.7 PK	74.0	-17.3	1.17 H	50	50.70	6.00
2	5150.00	44.4 AV	54.0	-9.6	1.17 H	50	38.40	6.00
3	*5260.00	107.0 PK			1.00 H	55	67.30	39.70
4	*5260.00	96.9 AV			1.00 H	55	57.20	39.70
5	#10520.00	59.7 PK	74.0	-14.3	1.12 H	241	40.50	19.20
6	#10520.00	47.1 AV	54.0	-6.9	1.12 H	241	27.90	19.20

REMARKS:

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

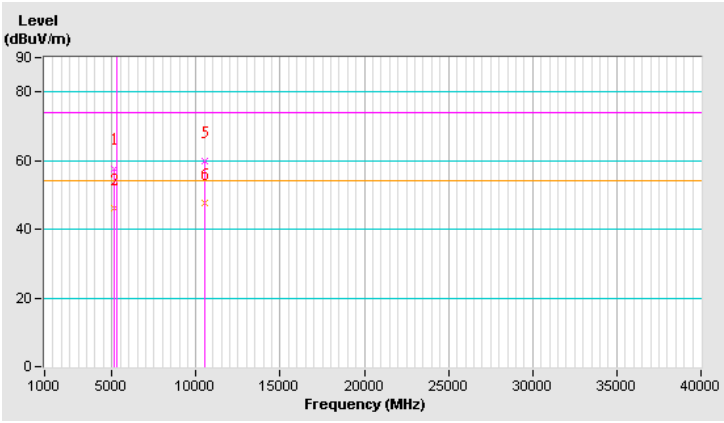


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.8 PK	74.0	-16.2	1.79 V	126	51.80	6.00
2	5150.00	46.3 AV	54.0	-7.7	1.79 V	126	40.30	6.00
3	*5260.00	117.3 PK			1.96 V	126	77.60	39.70
4	*5260.00	106.4 AV			1.96 V	126	66.70	39.70
5	#10520.00	60.0 PK	74.0	-14.0	1.27 V	61	40.80	19.20
6	#10520.00	47.6 AV	54.0	-6.4	1.27 V	61	28.40	19.20

REMARKS:

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

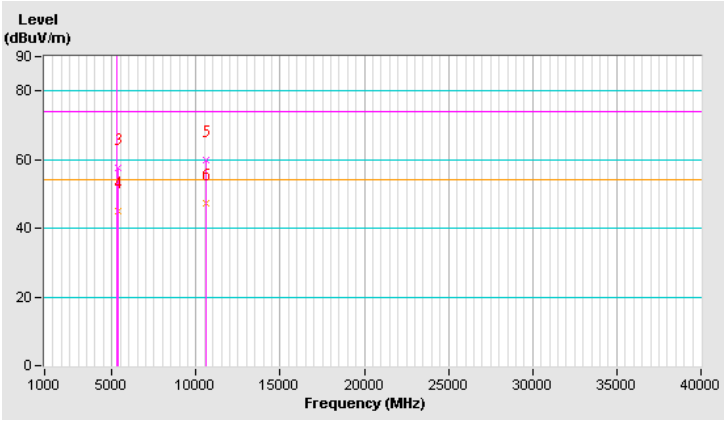


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5300.00	107.8 PK			1.00 H	61	68.10	39.70
2	*5300.00	97.8 AV			1.00 H	61	58.10	39.70
3	5350.00	57.6 PK	74.0	-16.4	1.05 H	66	51.50	6.10
4	5350.00	44.9 AV	54.0	-9.1	1.05 H	66	38.80	6.10
5	10600.00	59.8 PK	74.0	-14.2	1.08 H	91	40.70	19.10
6	10600.00	47.3 AV	54.0	-6.7	1.08 H	91	28.20	19.10

REMARKS:

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

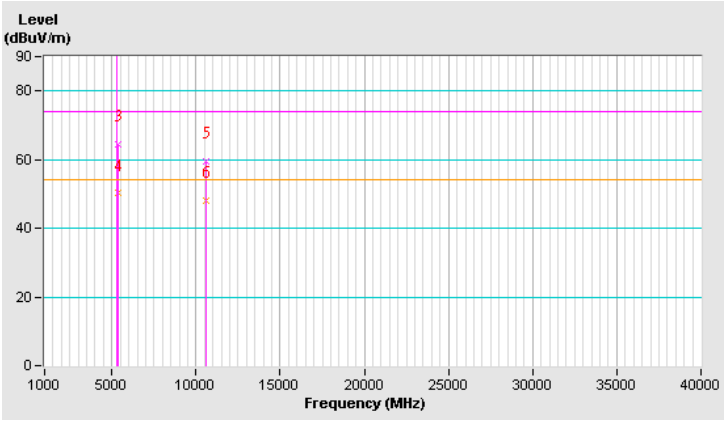


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	116.6 PK			1.69 V	165	76.90	39.70
2	*5300.00	106.9 AV			1.69 V	165	67.20	39.70
3	5350.00	64.5 PK	74.0	-9.5	1.75 V	161	58.40	6.10
4	5350.00	50.1 AV	54.0	-3.9	1.75 V	161	44.00	6.10
5	10600.00	59.4 PK	74.0	-14.6	1.06 V	218	40.30	19.10
6	10600.00	48.1 AV	54.0	-5.9	1.06 V	218	29.00	19.10

REMARKS:

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

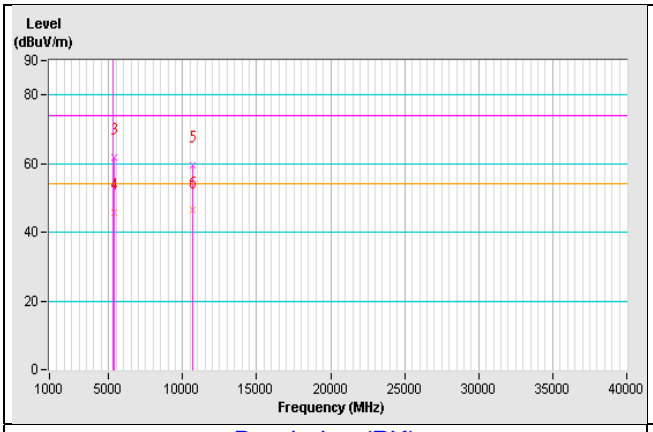


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	104.4 PK			1.04 H	60	64.70	39.70
2	*5320.00	94.5 AV			1.04 H	60	54.80	39.70
3	5350.00	61.9 PK	74.0	-12.1	1.04 H	68	55.80	6.10
4	5350.00	45.7 AV	54.0	-8.3	1.04 H	68	39.60	6.10
5	10640.00	59.5 PK	74.0	-14.5	1.18 H	108	40.60	18.90
6	10640.00	46.3 AV	54.0	-7.7	1.18 H	108	27.40	18.90

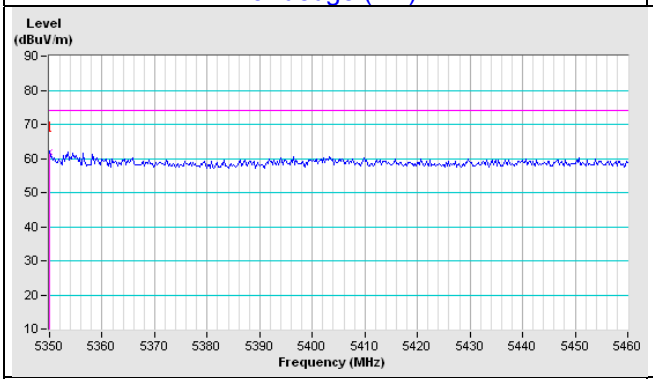
REMARKS:

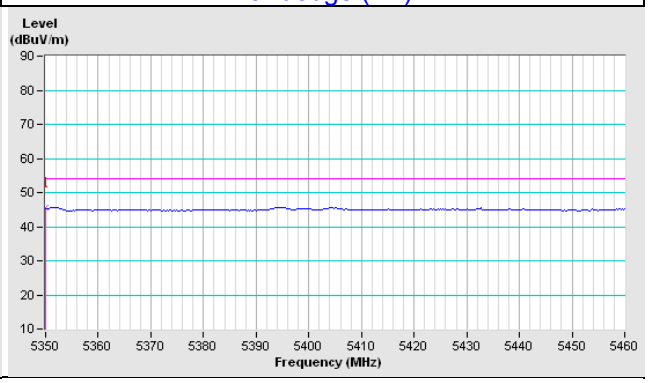
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)

Bandedge (AV)



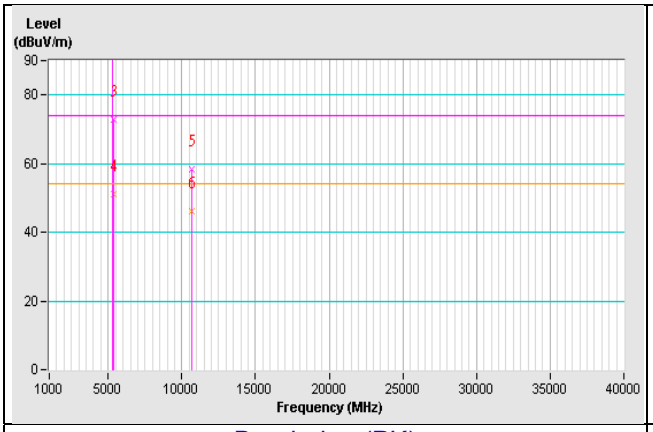


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	114.1 PK			1.67 V	158	74.40	39.70
2	*5320.00	104.0 AV			1.67 V	158	64.30	39.70
3	5350.00	72.7 PK	74.0	-1.3	1.49 V	290	66.60	6.10
4	5350.00	51.2 AV	54.0	-2.8	1.49 V	290	45.10	6.10
5	10640.00	58.3 PK	74.0	-15.7	1.40 V	243	39.40	18.90
6	10640.00	46.2 AV	54.0	-7.8	1.40 V	243	27.30	18.90

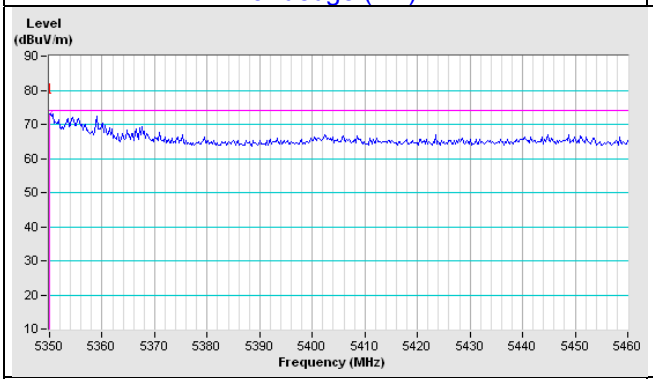
REMARKS:

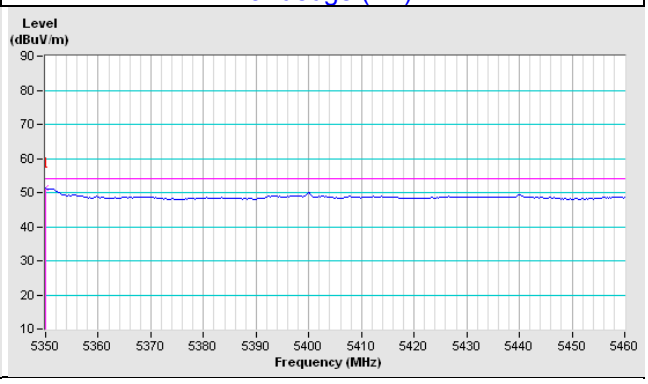
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)

Bandedge (AV)



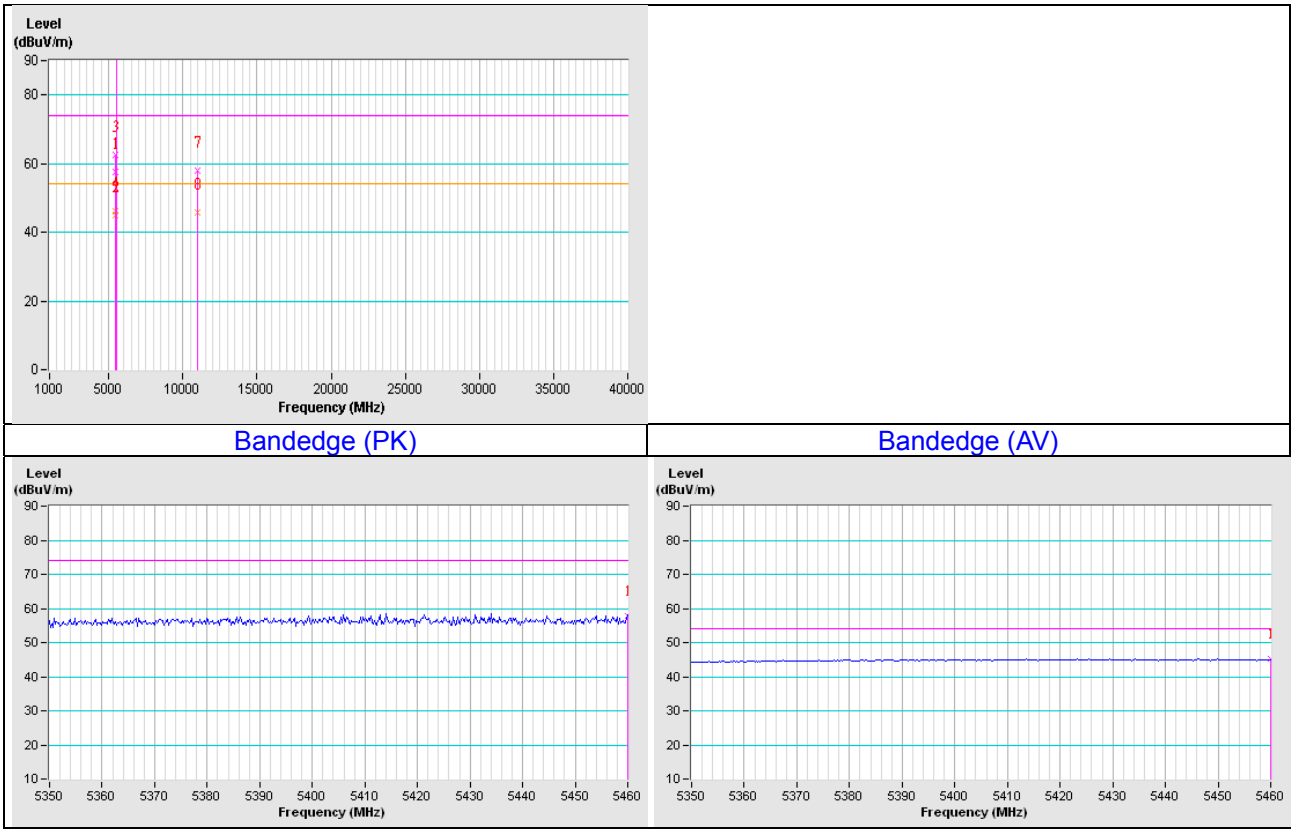


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	5460.00	57.7 PK	74.0	-16.3	1.23 H	183	51.30	6.40
2	5460.00	45.1 AV	54.0	-8.9	1.23 H	183	38.70	6.40
3	#5470.00	62.6 PK	74.0	-11.4	1.14 H	182	56.20	6.40
4	#5470.00	46.3 AV	54.0	-7.7	1.14 H	182	39.90	6.40
5	*5500.00	106.3 PK			1.19 H	108	66.30	40.00
6	*5500.00	95.8 AV			1.19 H	108	55.80	40.00
7	11000.00	58.1 PK	74.0	-15.9	1.10 H	59	38.50	19.60
8	11000.00	45.6 AV	54.0	-8.4	1.10 H	59	26.00	19.60

REMARKS:

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

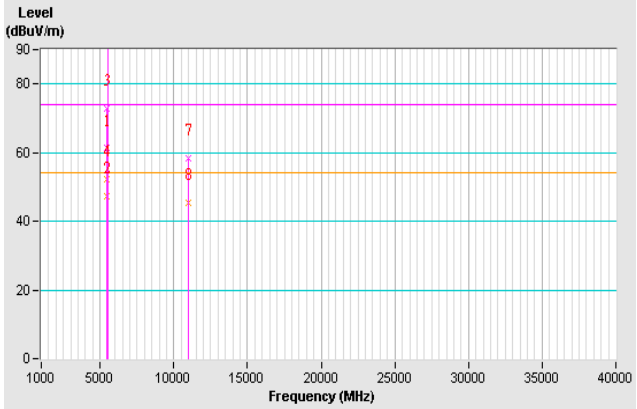


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	61.2 PK	74.0	-12.8	1.61 V	290	54.80	6.40
2	5460.00	47.3 AV	54.0	-6.7	1.61 V	290	40.90	6.40
3	#5470.00	72.8 PK	74.0	-1.2	1.56 V	275	66.40	6.40
4	#5470.00	52.4 AV	54.0	-1.6	1.56 V	275	46.00	6.40
5	*5500.00	114.6 PK			1.56 V	288	74.60	40.00
6	*5500.00	104.2 AV			1.56 V	288	64.20	40.00
7	11000.00	58.2 PK	74.0	-15.8	1.32 V	224	38.60	19.60
8	11000.00	45.3 AV	54.0	-8.7	1.32 V	224	25.70	19.60

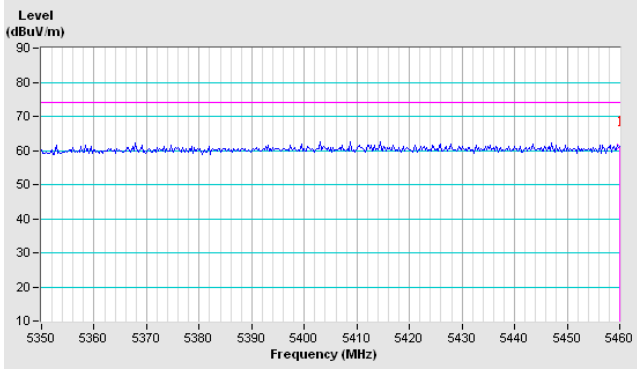
REMARKS:

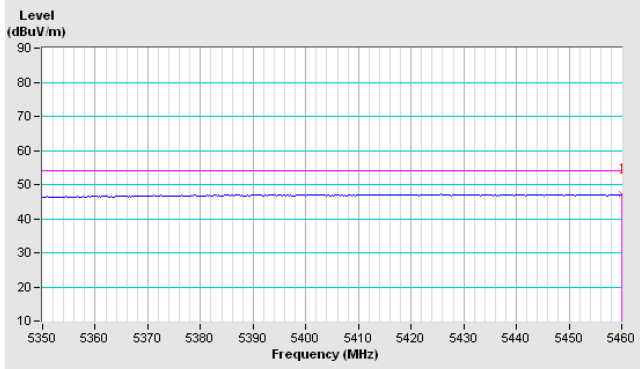
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated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



Bandedge (PK)

Bandedge (AV)



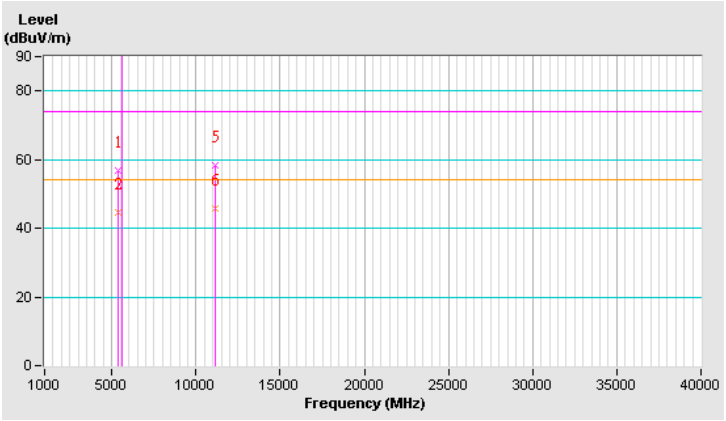


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	5360.00	56.9 PK	74.0	-17.1	1.10 H	12	50.80	6.10
2	5360.00	44.7 AV	54.0	-9.3	1.10 H	12	38.60	6.10
3	*5580.00	103.6 PK			1.01 H	109	63.50	40.10
4	*5580.00	93.5 AV			1.01 H	109	53.40	40.10
5	11160.00	58.5 PK	74.0	-15.5	1.10 H	108	39.30	19.20
6	11160.00	45.9 AV	54.0	-8.1	1.10 H	108	26.70	19.20

REMARKS:

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

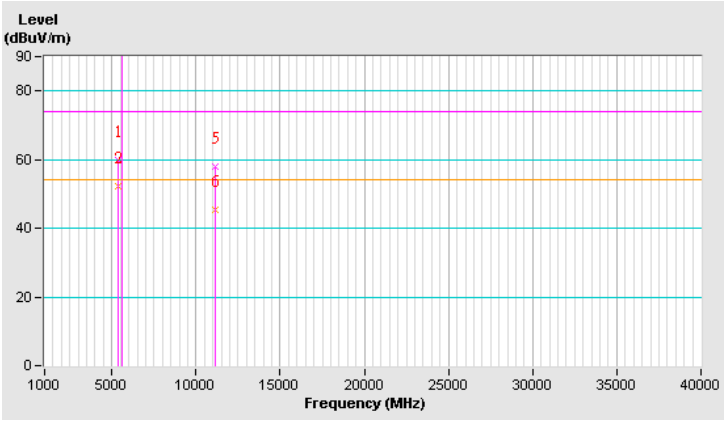


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	5360.00	59.9 PK	74.0	-14.1	1.73 V	55	53.80	6.10
2	5360.00	52.2 AV	54.0	-1.8	1.73 V	55	46.10	6.10
3	*5580.00	112.8 PK			1.32 V	287	72.70	40.10
4	*5580.00	102.7 AV			1.32 V	287	62.60	40.10
5	11160.00	57.9 PK	74.0	-16.1	1.21 V	228	38.70	19.20
6	11160.00	45.2 AV	54.0	-8.8	1.21 V	228	26.00	19.20

REMARKS:

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

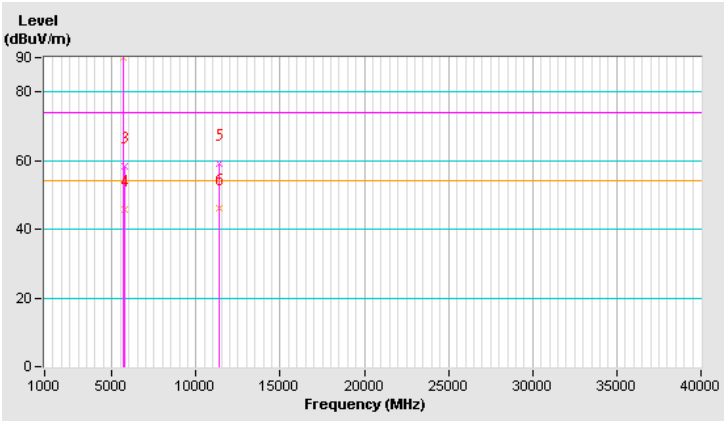


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5700.00	100.2 PK			1.76 H	230	59.90	40.30
2	*5700.00	90.2 AV			1.76 H	230	49.90	40.30
3	#5725.00	58.4 PK	74.0	-15.6	1.27 H	161	51.60	6.80
4	#5725.00	45.7 AV	54.0	-8.3	1.27 H	161	38.90	6.80
5	11400.00	59.0 PK	74.0	-15.0	1.08 H	200	40.50	18.50
6	11400.00	46.1 AV	54.0	-7.9	1.08 H	200	27.60	18.50

REMARKS:

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

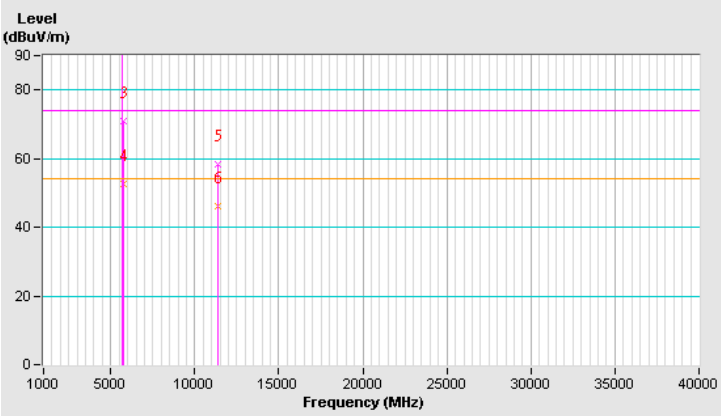


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	113.9 PK			1.11 V	290	73.60	40.30
2	*5700.00	103.7 AV			1.11 V	290	63.40	40.30
3	#5725.00	70.9 PK	74.0	-3.1	2.05 V	302	64.10	6.80
4	#5725.00	52.7 AV	54.0	-1.3	2.05 V	302	45.90	6.80
5	11400.00	58.5 PK	74.0	-15.5	1.21 V	202	40.00	18.50
6	11400.00	46.1 AV	54.0	-7.9	1.21 V	202	27.60	18.50

REMARKS:

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



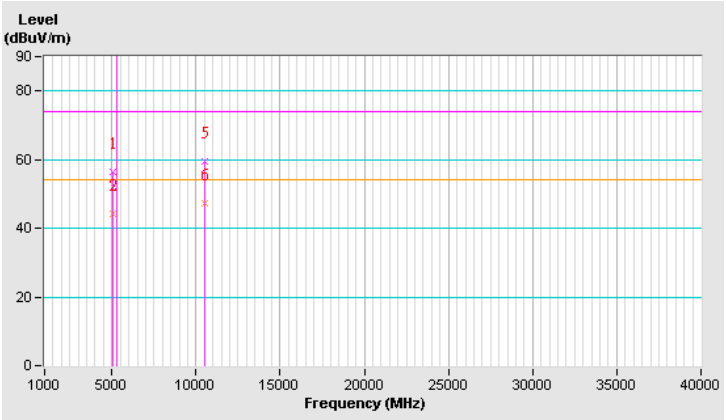
802.11n (HT20)

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) 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	5040.00	56.6 PK	74.0	-17.4	1.22 H	99	50.90	5.70
2	5040.00	44.4 AV	54.0	-9.6	1.22 H	99	38.70	5.70
3	*5260.00	105.3 PK			1.00 H	90	65.60	39.70
4	*5260.00	95.6 AV			1.00 H	90	55.90	39.70
5	#10520.00	59.5 PK	74.0	-14.5	1.16 H	94	40.30	19.20
6	#10520.00	47.1 AV	54.0	-6.9	1.16 H	94	27.90	19.20

REMARKS:

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

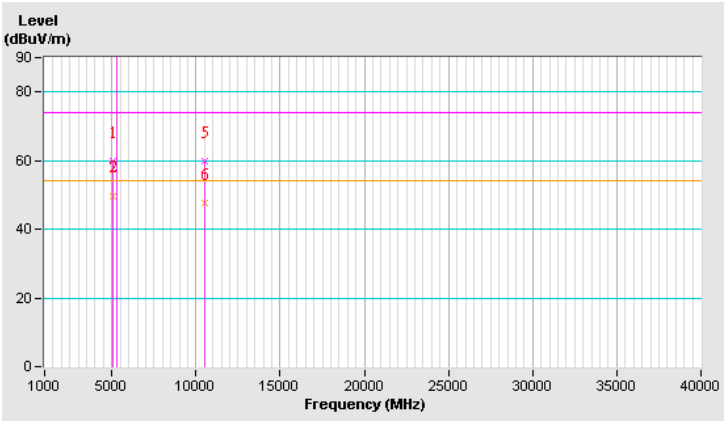


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: 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	5040.00	59.9 PK	74.0	-14.1	1.90 V	100	54.20	5.70
2	5040.00	49.8 AV	54.0	-4.2	1.90 V	100	44.10	5.70
3	*5260.00	116.5 PK			1.49 V	276	76.80	39.70
4	*5260.00	106.1 AV			1.49 V	276	66.40	39.70
5	#10520.00	59.8 PK	74.0	-14.2	1.85 V	122	40.60	19.20
6	#10520.00	47.6 AV	54.0	-6.4	1.85 V	122	28.40	19.20

REMARKS:

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

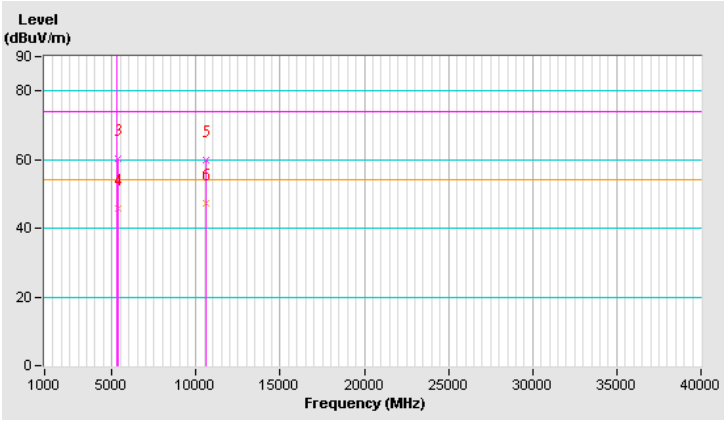


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5300.00	107.7 PK			1.12 H	60	68.00	39.70
2	*5300.00	97.0 AV			1.12 H	60	57.30	39.70
3	5350.00	60.3 PK	74.0	-13.7	1.21 H	61	54.20	6.10
4	5350.00	45.6 AV	54.0	-8.4	1.21 H	61	39.50	6.10
5	10600.00	59.8 PK	74.0	-14.2	1.23 H	131	40.70	19.10
6	10600.00	47.4 AV	54.0	-6.6	1.23 H	131	28.30	19.10

REMARKS:

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

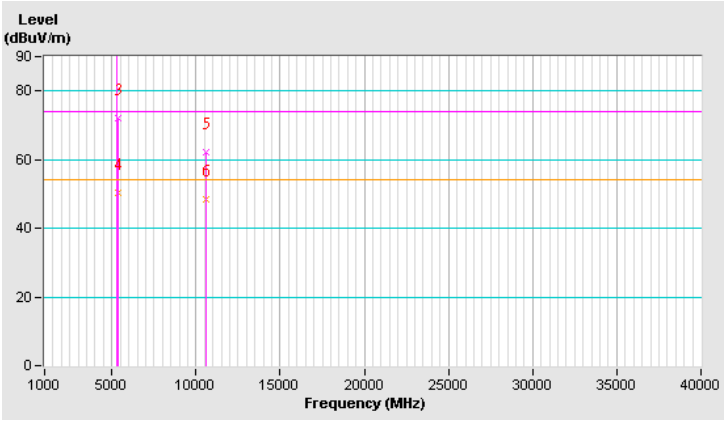


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	115.9 PK			1.69 V	289	76.20	39.70
2	*5300.00	105.4 AV			1.69 V	289	65.70	39.70
3	5350.00	72.0 PK	74.0	-2.0	1.48 V	293	65.90	6.10
4	5350.00	50.4 AV	54.0	-3.6	1.48 V	293	44.30	6.10
5	10600.00	62.2 PK	74.0	-11.8	1.36 V	293	43.10	19.10
6	10600.00	48.3 AV	54.0	-5.7	1.36 V	293	29.20	19.10

REMARKS:

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

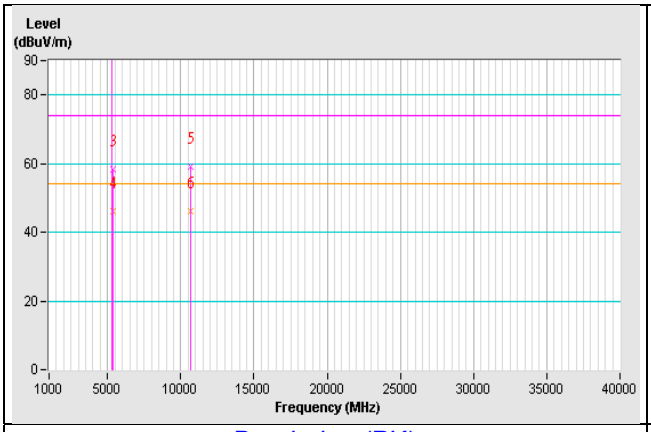


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	102.7 PK			1.00 H	59	63.00	39.70
2	*5320.00	93.0 AV			1.00 H	59	53.30	39.70
3	5350.00	58.5 PK	74.0	-15.5	1.20 H	64	52.40	6.10
4	5350.00	46.0 AV	54.0	-8.0	1.20 H	64	39.90	6.10
5	10640.00	59.2 PK	74.0	-14.8	1.18 H	210	40.30	18.90
6	10640.00	46.3 AV	54.0	-7.7	1.18 H	210	27.40	18.90

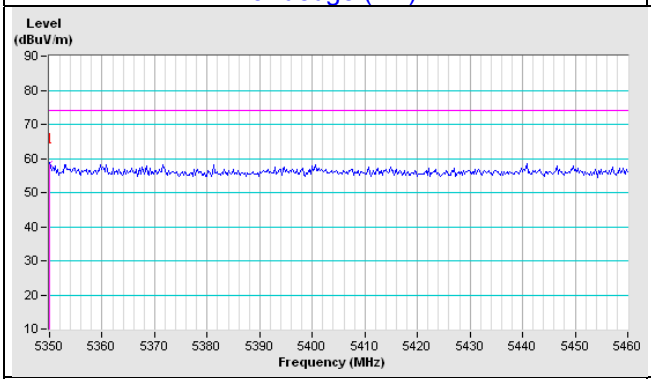
REMARKS:

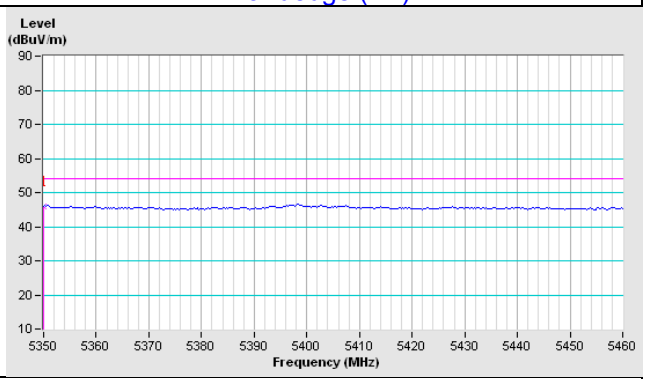
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)

Bandedge (AV)



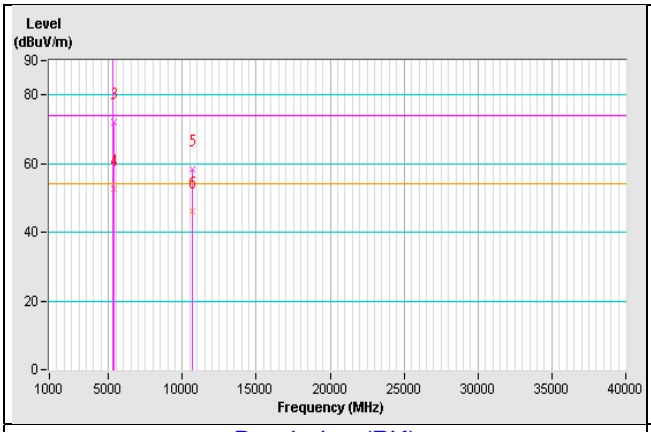


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	113.3 PK			1.69 V	292	73.60	39.70
2	*5320.00	102.9 AV			1.69 V	292	63.20	39.70
3	5350.00	72.1 PK	74.0	-1.9	1.74 V	54	66.00	6.10
4	5350.00	52.7 AV	54.0	-1.3	1.74 V	54	46.60	6.10
5	10640.00	58.5 PK	74.0	-15.5	1.16 V	96	39.60	18.90
6	10640.00	46.3 AV	54.0	-7.7	1.16 V	96	27.40	18.90

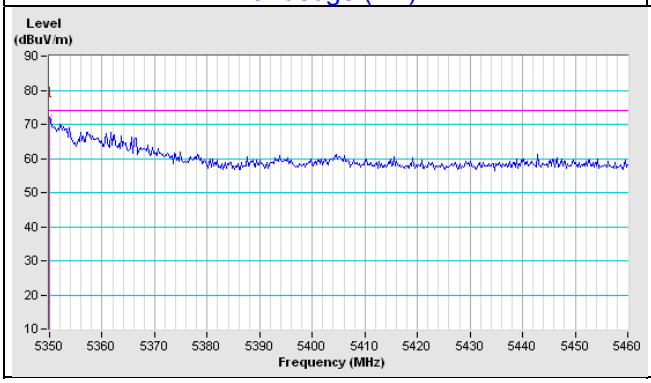
REMARKS:

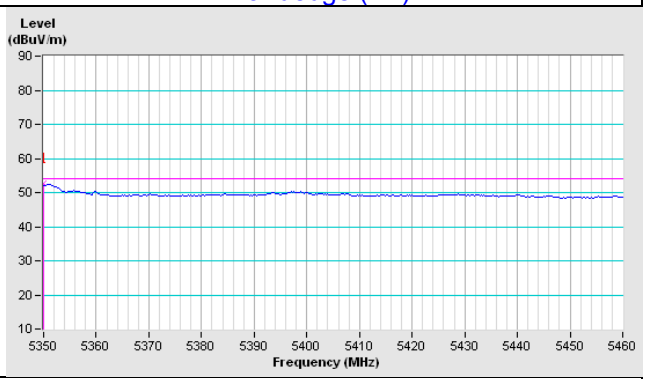
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)

Bandedge (AV)



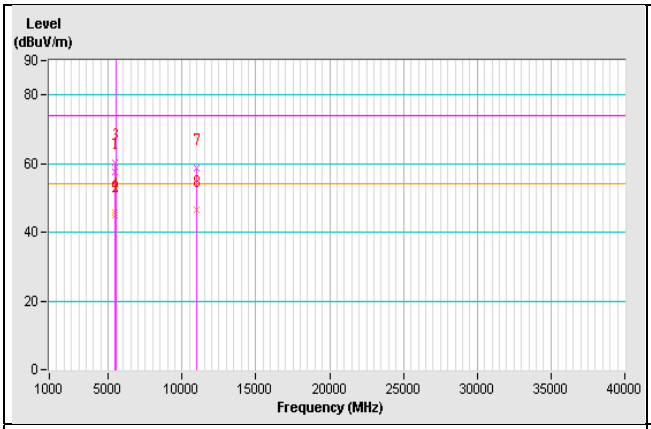


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	5460.00	57.4 PK	74.0	-16.6	1.07 H	105	51.00	6.40
2	5460.00	45.1 AV	54.0	-8.9	1.07 H	105	38.70	6.40
3	#5470.00	60.4 PK	74.0	-13.6	1.21 H	108	54.00	6.40
4	#5470.00	45.8 AV	54.0	-8.2	1.21 H	108	39.40	6.40
5	*5500.00	104.9 PK			1.23 H	107	64.90	40.00
6	*5500.00	95.2 AV			1.23 H	107	55.20	40.00
7	11000.00	58.7 PK	74.0	-15.3	1.16 H	94	39.10	19.60
8	11000.00	46.5 AV	54.0	-7.5	1.16 H	94	26.90	19.60

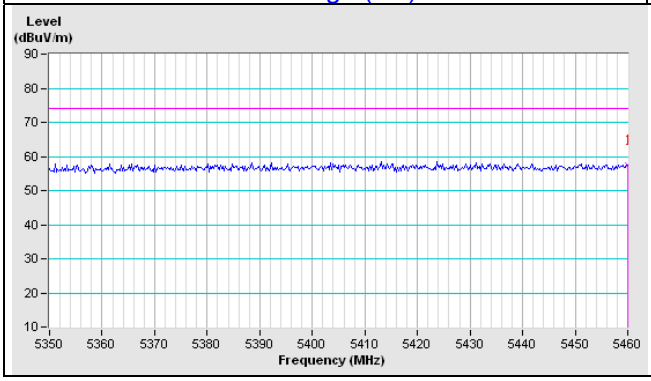
REMARKS:

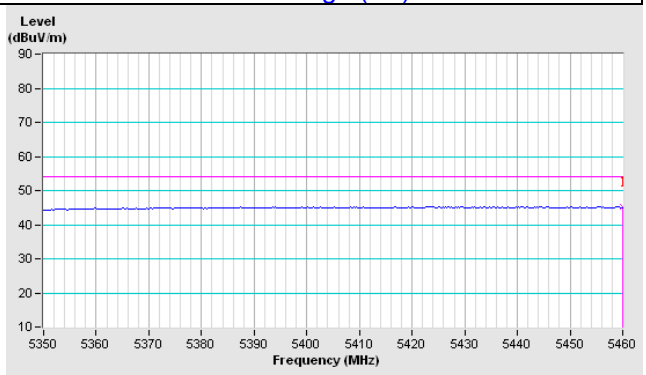
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated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



Bandedge (PK)

Bandedge (AV)



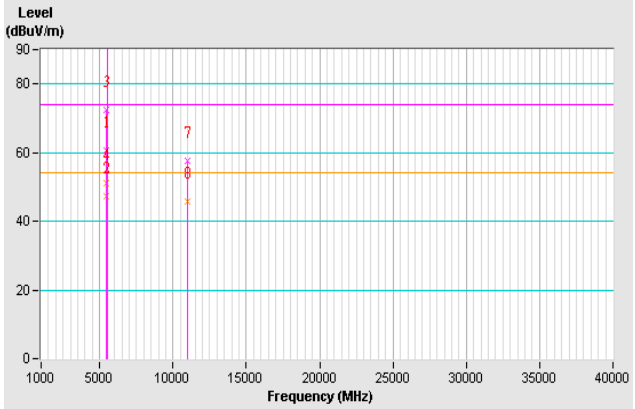


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

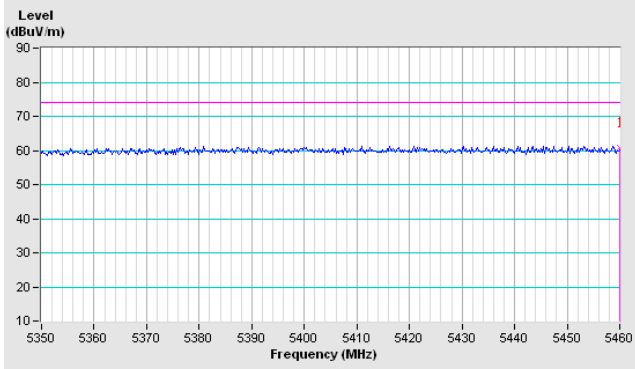
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	60.7 PK	74.0	-13.3	1.49 V	306	54.30	6.40
2	5460.00	47.3 AV	54.0	-6.7	1.49 V	306	40.90	6.40
3	#5470.00	72.3 PK	74.0	-1.7	1.44 V	304	65.90	6.40
4	#5470.00	51.2 AV	54.0	-2.8	1.44 V	304	44.80	6.40
5	*5500.00	115.4 PK			1.70 V	55	75.40	40.00
6	*5500.00	104.8 AV			1.70 V	55	64.80	40.00
7	11000.00	57.5 PK	74.0	-16.5	1.41 V	87	37.90	19.60
8	11000.00	45.9 AV	54.0	-8.1	1.41 V	87	26.30	19.60

REMARKS:

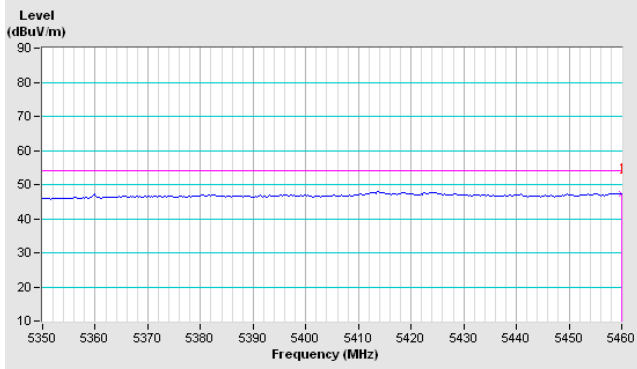
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated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



Bandedge (PK)



Bandedge (AV)

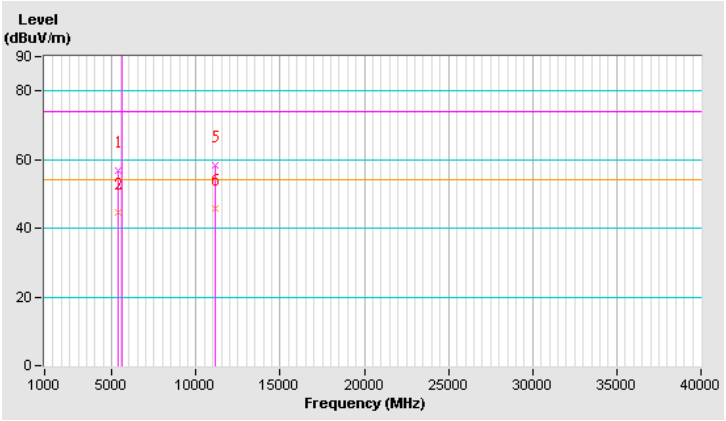


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	5360.00	56.8 PK	74.0	-17.2	1.10 H	69	50.70	6.10
2	5360.00	44.6 AV	54.0	-9.4	1.10 H	69	38.50	6.10
3	*5580.00	103.6 PK			1.00 H	108	63.50	40.10
4	*5580.00	94.3 AV			1.00 H	108	54.20	40.10
5	11160.00	58.3 PK	74.0	-15.7	1.22 H	102	39.10	19.20
6	11160.00	45.7 AV	54.0	-8.3	1.22 H	102	26.50	19.20

REMARKS:

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

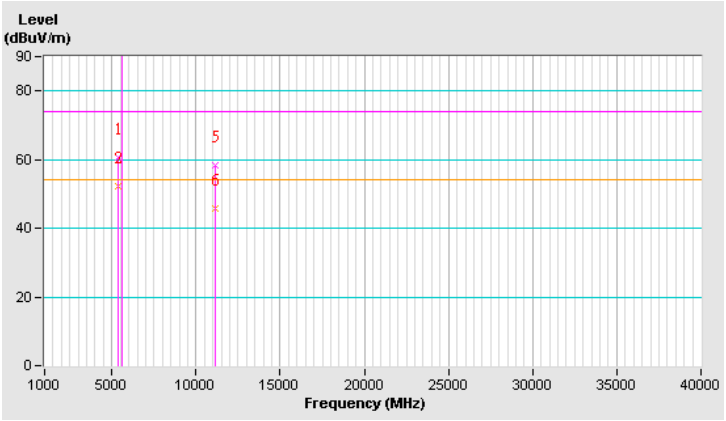


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	5360.00	60.5 PK	74.0	-13.5	1.71 V	54	54.40	6.10
2	5360.00	52.2 AV	54.0	-1.8	1.71 V	54	46.10	6.10
3	*5580.00	113.3 PK			1.60 V	289	73.20	40.10
4	*5580.00	103.2 AV			1.60 V	289	63.10	40.10
5	11160.00	58.2 PK	74.0	-15.8	1.44 V	233	39.00	19.20
6	11160.00	45.8 AV	54.0	-8.2	1.44 V	233	26.60	19.20

REMARKS:

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

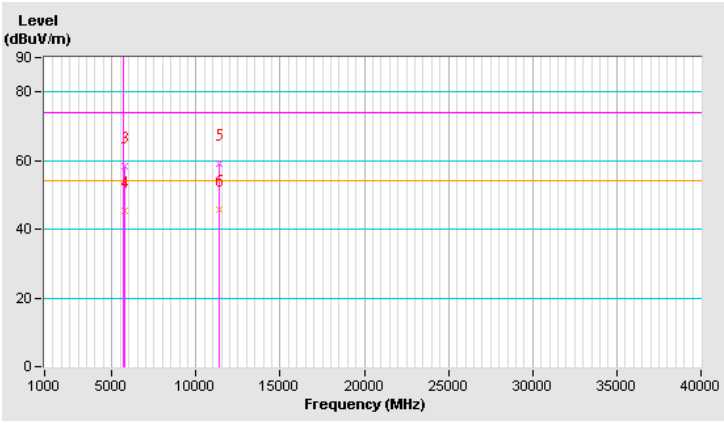


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5700.00	104.4 PK			1.12 H	112	64.10	40.30
2	*5700.00	94.4 AV			1.12 H	112	54.10	40.30
3	#5725.00	58.3 PK	74.0	-15.7	1.09 H	172	51.50	6.80
4	#5725.00	45.3 AV	54.0	-8.7	1.09 H	172	38.50	6.80
5	11400.00	59.0 PK	74.0	-15.0	1.06 H	94	40.50	18.50
6	11400.00	45.8 AV	54.0	-8.2	1.06 H	94	27.30	18.50

REMARKS:

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

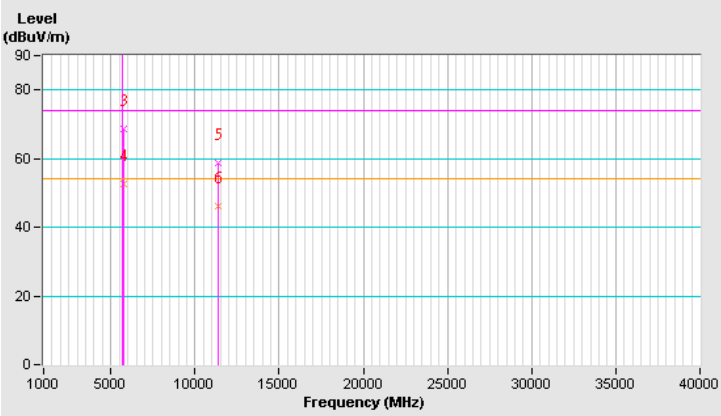


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	112.3 PK			1.29 V	288	72.00	40.30
2	*5700.00	102.2 AV			1.29 V	288	61.90	40.30
3	#5725.00	68.7 PK	74.0	-5.3	2.07 V	317	61.90	6.80
4	#5725.00	52.6 AV	54.0	-1.4	2.07 V	317	45.80	6.80
5	11400.00	58.6 PK	74.0	-15.4	1.16 V	228	40.10	18.50
6	11400.00	46.2 AV	54.0	-7.8	1.16 V	228	27.70	18.50

REMARKS:

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



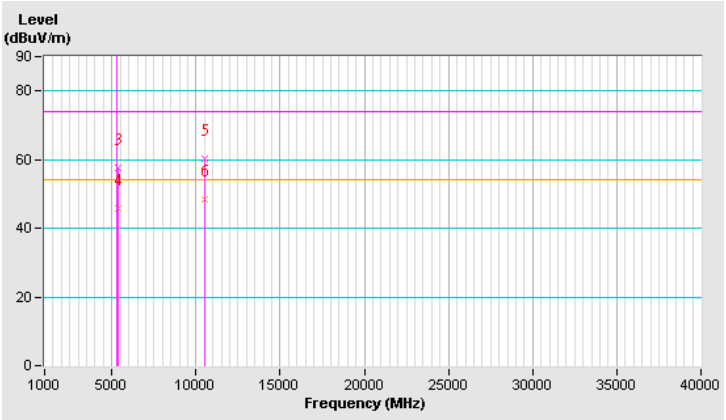
802.11n (HT40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	102.4 PK			1.05 H	63	62.70	39.70
2	*5270.00	92.8 AV			1.05 H	63	53.10	39.70
3	5350.00	57.4 PK	74.0	-16.6	1.20 H	61	51.30	6.10
4	5350.00	45.9 AV	54.0	-8.1	1.20 H	61	39.80	6.10
5	#10540.00	60.4 PK	74.0	-13.6	1.11 H	152	41.20	19.20
6	#10540.00	48.4 AV	54.0	-5.6	1.11 H	152	29.20	19.20

REMARKS:

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

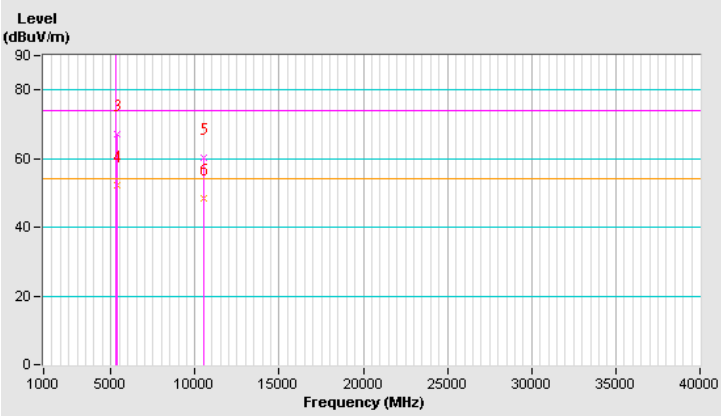


CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	112.8 PK			1.68 V	305	73.10	39.70
2	*5270.00	102.9 AV			1.68 V	305	63.20	39.70
3	5350.00	67.1 PK	74.0	-6.9	1.58 V	289	61.00	6.10
4	5350.00	52.4 AV	54.0	-1.6	1.58 V	289	46.30	6.10
5	#10540.00	60.2 PK	74.0	-13.8	1.47 V	211	41.00	19.20
6	#10540.00	48.6 AV	54.0	-5.4	1.47 V	211	29.40	19.20

REMARKS:

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

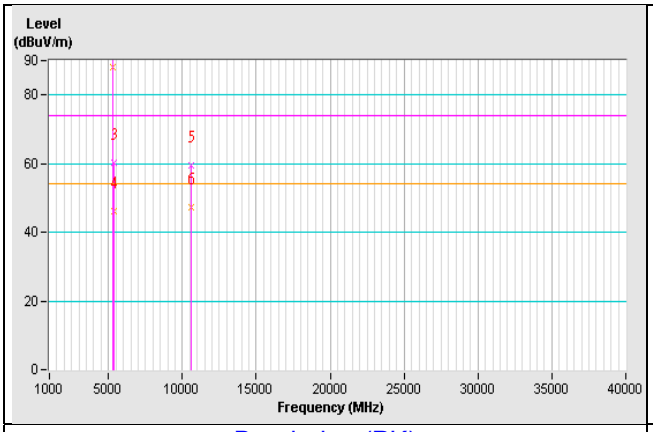


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5310.00	97.5 PK			1.00 H	60	57.80	39.70
2	*5310.00	88.1 AV			1.00 H	60	48.40	39.70
3	5350.00	60.3 PK	74.0	-13.7	1.23 H	64	54.20	6.10
4	5350.00	46.3 AV	54.0	-7.7	1.23 H	64	40.20	6.10
5	10620.00	59.6 PK	74.0	-14.4	1.05 H	227	40.60	19.00
6	10620.00	47.3 AV	54.0	-6.7	1.05 H	227	28.30	19.00

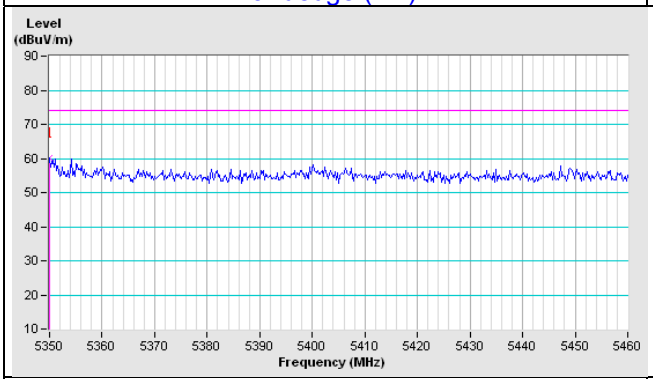
REMARKS:

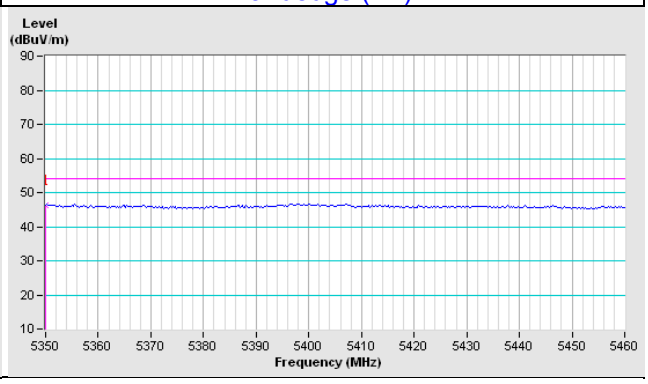
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)

Bandedge (AV)



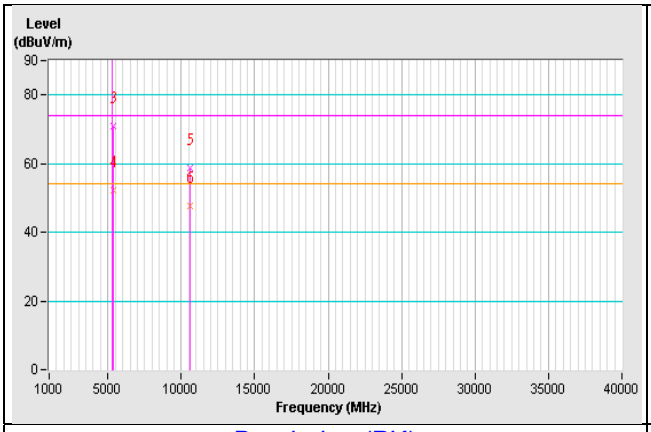


CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	106.2 PK			1.70 V	321	66.50	39.70
2	*5310.00	97.0 AV			1.70 V	321	57.30	39.70
3	5350.00	71.0 PK	74.0	-3.0	1.73 V	290	64.90	6.10
4	5350.00	52.2 AV	54.0	-1.8	1.73 V	290	46.10	6.10
5	10620.00	58.6 PK	74.0	-15.4	1.39 V	254	39.60	19.00
6	10620.00	47.6 AV	54.0	-6.4	1.39 V	254	28.60	19.00

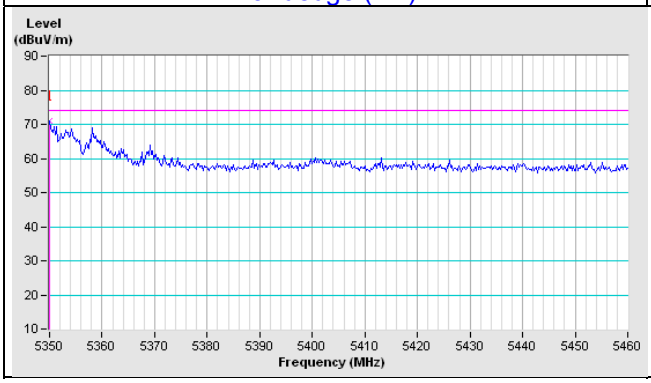
REMARKS:

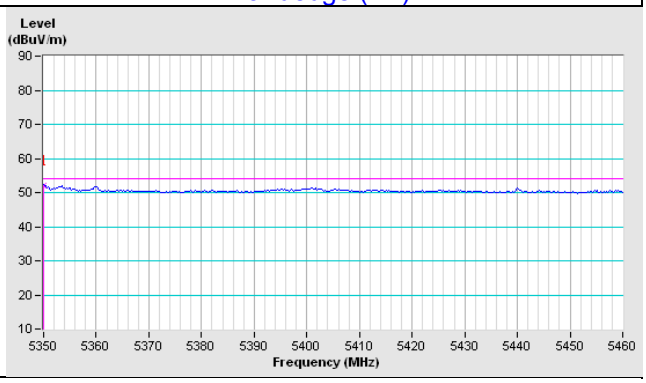
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)

Bandedge (AV)



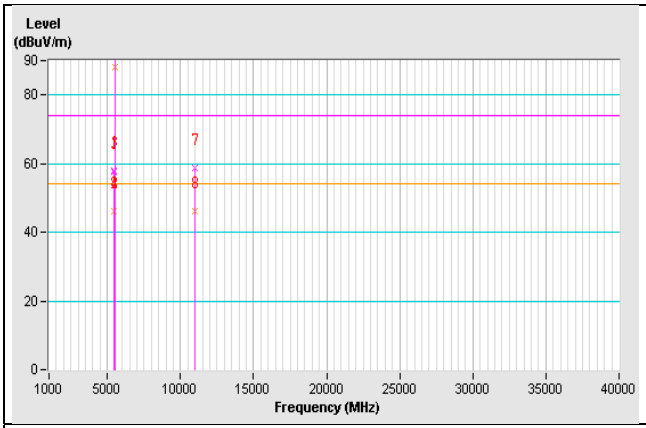


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

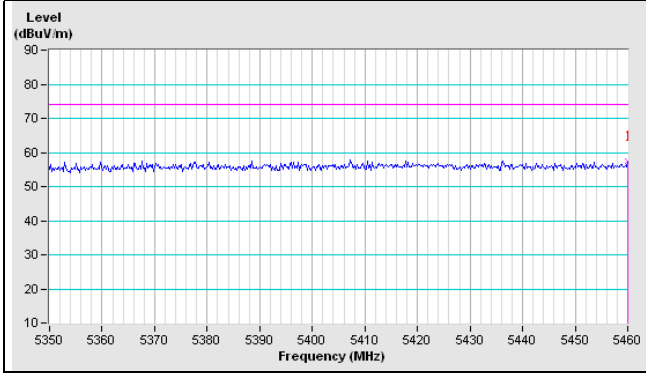
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.6 PK	74.0	-16.4	1.02 H	140	51.20	6.40
2	5460.00	46.1 AV	54.0	-7.9	1.02 H	140	39.70	6.40
3	#5470.00	58.0 PK	74.0	-16.0	1.18 H	122	51.60	6.40
4	#5470.00	46.1 AV	54.0	-7.9	1.18 H	122	39.70	6.40
5	*5510.00	97.6 PK			1.02 H	107	57.60	40.00
6	*5510.00	88.1 AV			1.02 H	107	48.10	40.00
7	11020.00	58.9 PK	74.0	-15.1	1.12 H	200	39.50	19.40
8	11020.00	46.2 AV	54.0	-7.8	1.12 H	200	26.80	19.40

REMARKS:

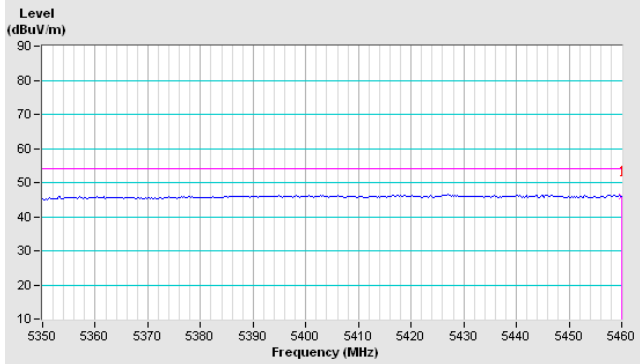
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated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



Bandedge (PK)



Bandedge (AV)

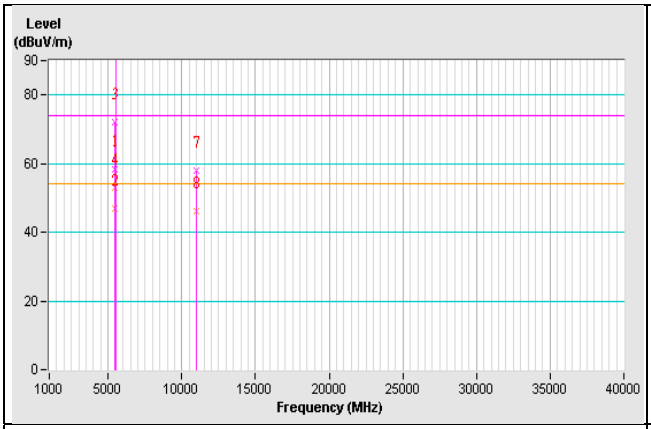


CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	58.2 PK	74.0	-15.8	1.56 V	177	51.80	6.40
2	5460.00	46.9 AV	54.0	-7.1	1.56 V	177	40.50	6.40
3	#5470.00	71.9 PK	74.0	-2.1	1.66 V	162	65.50	6.40
4	#5470.00	52.9 AV	54.0	-1.1	1.66 V	162	46.50	6.40
5	*5510.00	106.5 PK			1.61 V	288	66.50	40.00
6	*5510.00	96.4 AV			1.61 V	288	56.40	40.00
7	11020.00	57.9 PK	74.0	-16.1	1.39 V	211	38.50	19.40
8	11020.00	46.3 AV	54.0	-7.7	1.39 V	211	26.90	19.40

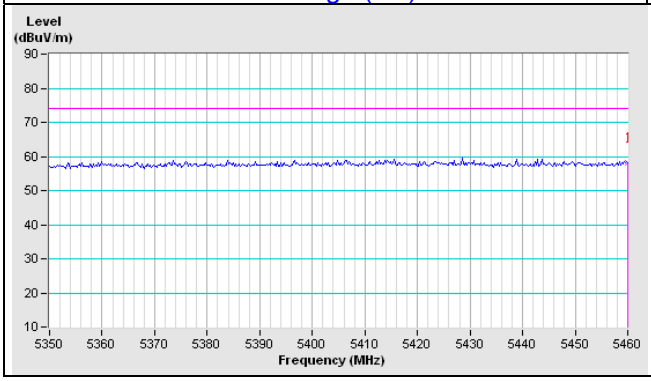
REMARKS:

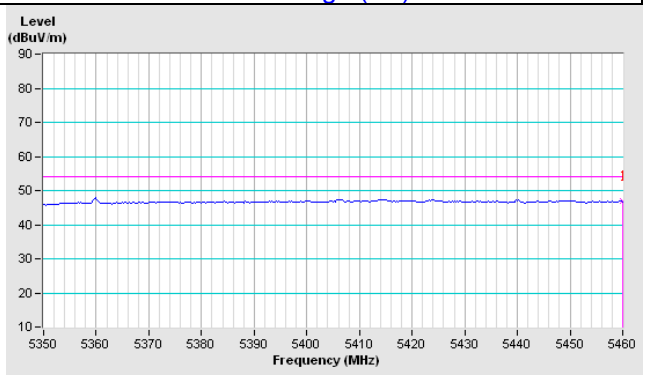
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated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



Bandedge (PK)

Bandedge (AV)



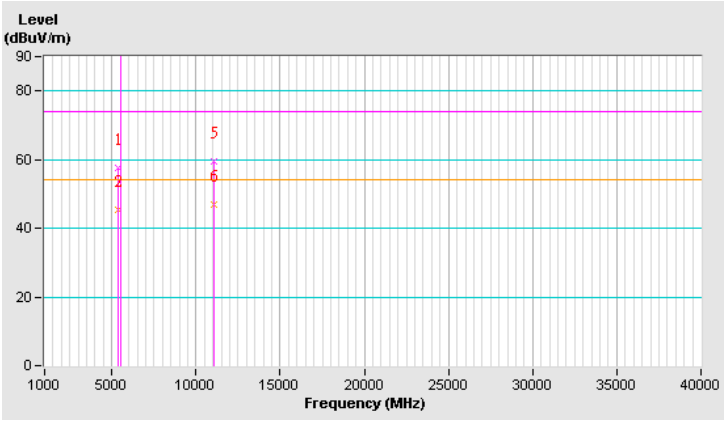


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	5360.00	57.6 PK	74.0	-16.4	1.11 H	86	51.50	6.10
2	5360.00	45.4 AV	54.0	-8.6	1.11 H	86	39.30	6.10
3	*5550.00	102.1 PK			1.10 H	108	62.00	40.10
4	*5550.00	92.5 AV			1.10 H	108	52.40	40.10
5	11100.00	59.6 PK	74.0	-14.4	1.09 H	99	40.70	18.90
6	11100.00	47.0 AV	54.0	-7.0	1.09 H	99	28.10	18.90

REMARKS:

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

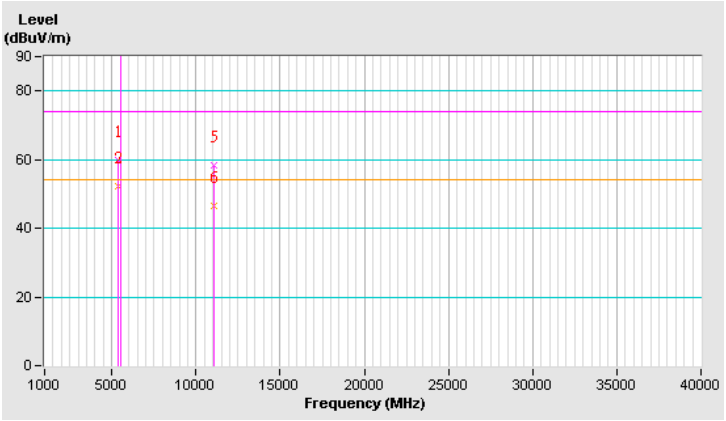


CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	5360.00	59.9 PK	74.0	-14.1	1.80 V	55	53.80	6.10
2	5360.00	52.2 AV	54.0	-1.8	1.80 V	55	46.10	6.10
3	*5550.00	110.2 PK			1.28 V	290	70.10	40.10
4	*5550.00	101.0 AV			1.28 V	290	60.90	40.10
5	11100.00	58.2 PK	74.0	-15.8	1.14 V	208	39.30	18.90
6	11100.00	46.6 AV	54.0	-7.4	1.14 V	208	27.70	18.90

REMARKS:

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

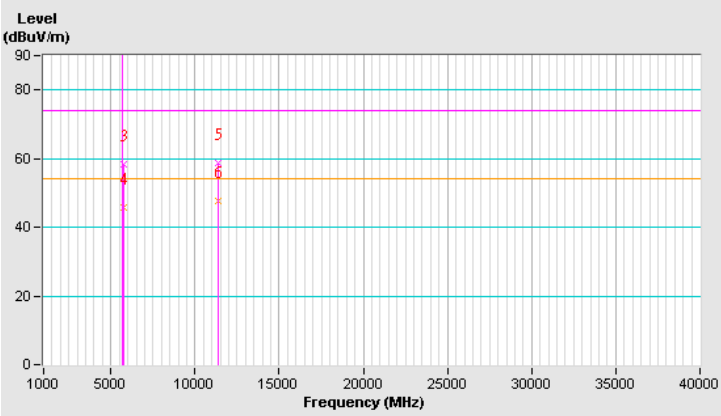


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5670.00	101.3 PK			1.14 H	111	61.10	40.20
2	*5670.00	92.2 AV			1.14 H	111	52.00	40.20
3	#5725.00	58.5 PK	74.0	-15.5	1.20 H	99	51.70	6.80
4	#5725.00	45.9 AV	54.0	-8.1	1.20 H	99	39.10	6.80
5	11340.00	58.9 PK	74.0	-15.1	1.10 H	134	39.70	19.20
6	11340.00	47.5 AV	54.0	-6.5	1.10 H	134	28.30	19.20

REMARKS:

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

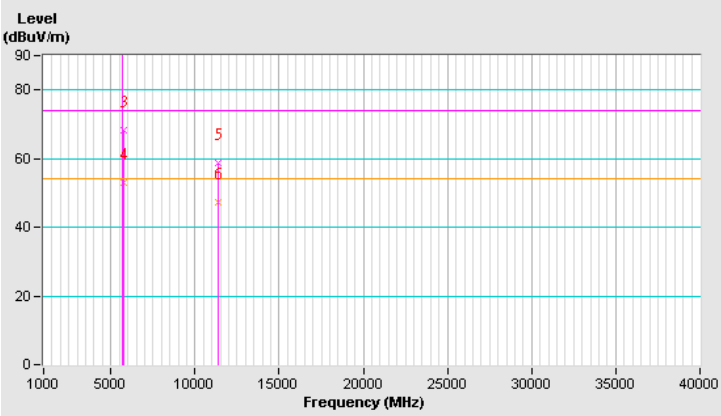


CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	110.0 PK			1.58 V	289	69.80	40.20
2	*5670.00	100.3 AV			1.58 V	289	60.10	40.20
3	#5725.00	68.2 PK	74.0	-5.8	1.90 V	88	61.40	6.80
4	**#5725.00**	**53.0 AV**	**54.0**	**-1.0**	**1.90 V**	**88**	**46.20**	**6.80**
5	11340.00	58.6 PK	74.0	-15.4	1.42 V	265	39.40	19.20
6	11340.00	47.3 AV	54.0	-6.7	1.42 V	265	28.10	19.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
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.



Test Mode B2 – Dipole Antenna: 1TX

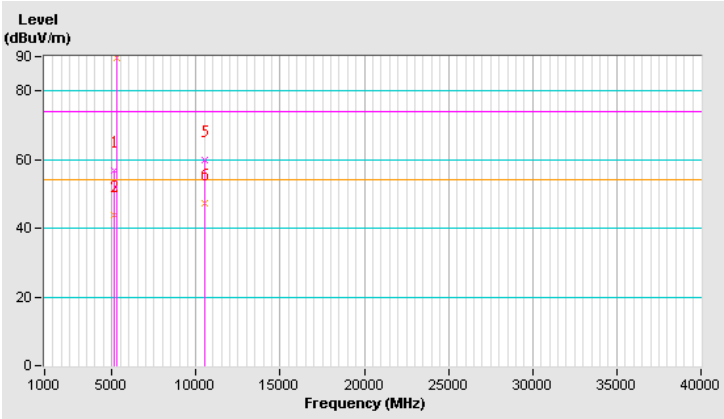
802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.9 PK	74.0	-17.1	1.08 H	170	50.90	6.00
2	5150.00	43.9 AV	54.0	-10.1	1.08 H	170	37.90	6.00
3	*5260.00	100.2 PK			1.27 H	175	60.50	39.70
4	*5260.00	89.8 AV			1.27 H	175	50.10	39.70
5	#10520.00	59.9 PK	74.0	-14.1	1.05 H	69	40.70	19.20
6	#10520.00	47.4 AV	54.0	-6.6	1.05 H	69	28.20	19.20

REMARKS:

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

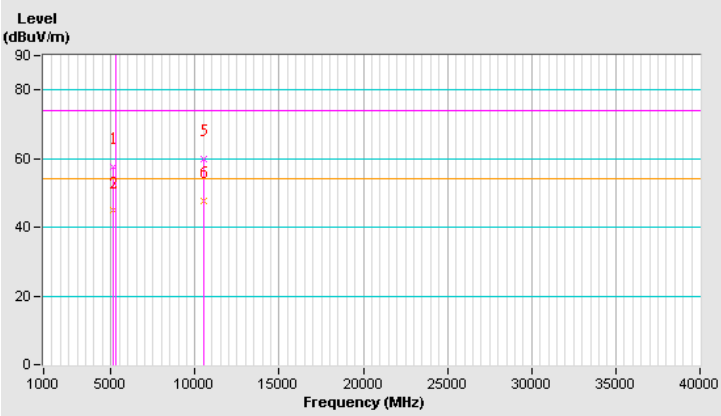


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.6 PK	74.0	-16.4	1.65 V	292	51.60	6.00
2	5150.00	44.8 AV	54.0	-9.2	1.65 V	292	38.80	6.00
3	*5260.00	111.4 PK			1.59 V	292	71.70	39.70
4	*5260.00	100.8 AV			1.59 V	292	61.10	39.70
5	#10520.00	60.0 PK	74.0	-14.0	1.70 V	284	40.80	19.20
6	#10520.00	47.8 AV	54.0	-6.2	1.70 V	284	28.60	19.20

REMARKS:

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

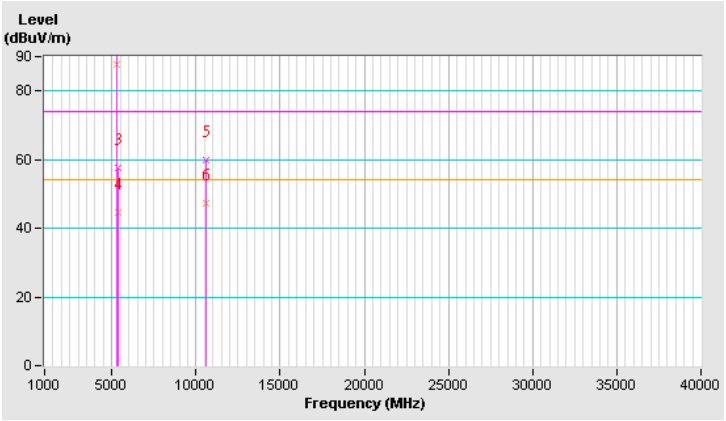


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5300.00	98.7 PK			1.10 H	58	59.00	39.70
2	*5300.00	87.8 AV			1.10 H	58	48.10	39.70
3	5350.00	57.5 PK	74.0	-16.5	1.06 H	61	51.40	6.10
4	5350.00	44.8 AV	54.0	-9.2	1.06 H	61	38.70	6.10
5	10600.00	60.0 PK	74.0	-14.0	1.07 H	114	40.90	19.10
6	10600.00	47.4 AV	54.0	-6.6	1.07 H	114	28.30	19.10

REMARKS:

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

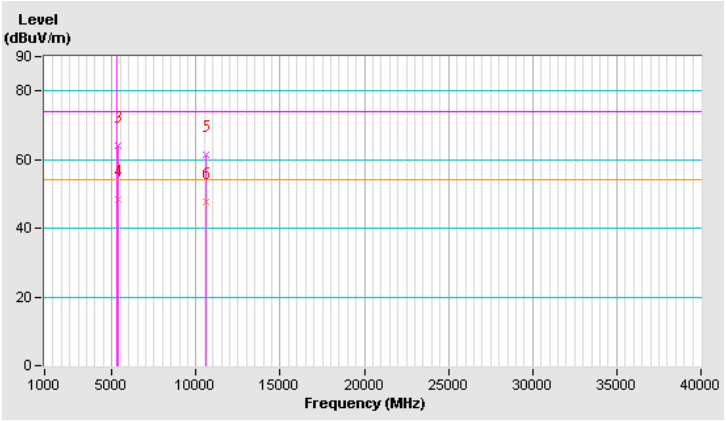


CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	111.4 PK			1.51 V	280	71.70	39.70
2	*5300.00	100.8 AV			1.51 V	280	61.10	39.70
3	5350.00	63.9 PK	74.0	-10.1	1.56 V	281	57.80	6.10
4	5350.00	48.4 AV	54.0	-5.6	1.56 V	281	42.30	6.10
5	10600.00	61.5 PK	74.0	-12.5	1.68 V	281	42.40	19.10
6	10600.00	47.7 AV	54.0	-6.3	1.68 V	281	28.60	19.10

REMARKS:

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

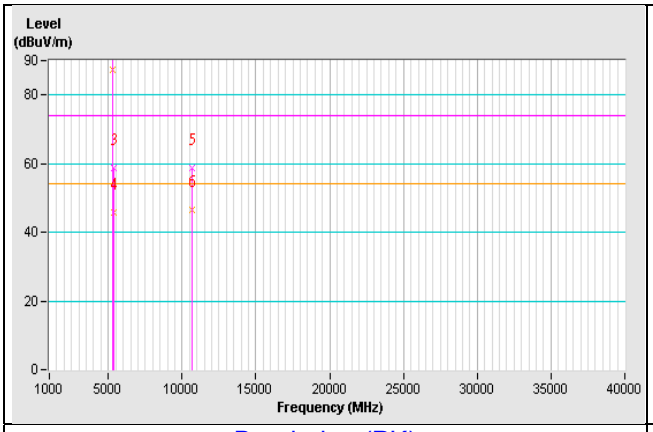


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	98.2 PK			1.18 H	175	58.50	39.70
2	*5320.00	87.3 AV			1.18 H	175	47.60	39.70
3	5350.00	58.7 PK	74.0	-15.3	1.20 H	173	52.60	6.10
4	5350.00	45.8 AV	54.0	-8.2	1.20 H	173	39.70	6.10
5	10640.00	58.9 PK	74.0	-15.1	1.12 H	64	40.00	18.90
6	10640.00	46.7 AV	54.0	-7.3	1.12 H	64	27.80	18.90

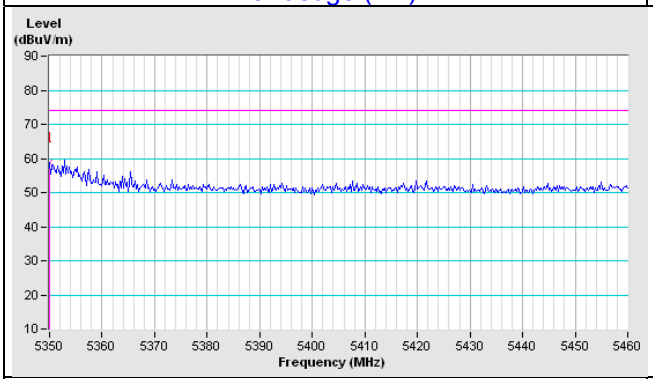
REMARKS:

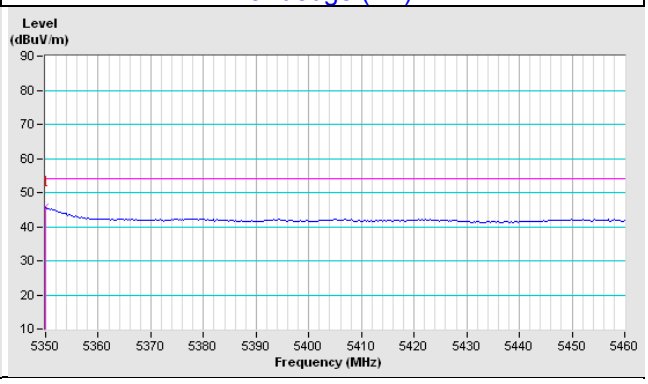
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)

Bandedge (AV)



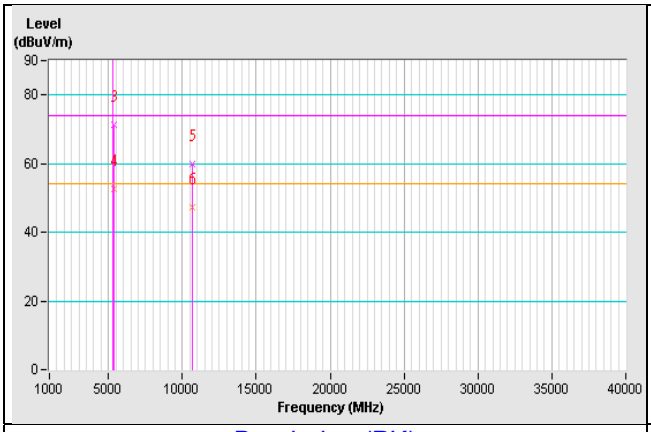


CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	109.4 PK			1.65 V	281	69.70	39.70
2	*5320.00	99.6 AV			1.65 V	281	59.90	39.70
3	5350.00	71.4 PK	74.0	-2.6	1.64 V	303	65.30	6.10
4	5350.00	52.7 AV	54.0	-1.3	1.64 V	303	46.60	6.10
5	10640.00	59.9 PK	74.0	-14.1	1.70 V	284	41.00	18.90
6	10640.00	47.1 AV	54.0	-6.9	1.70 V	284	28.20	18.90

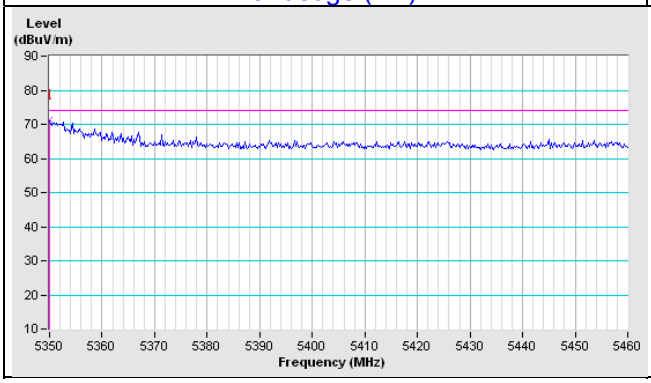
REMARKS:

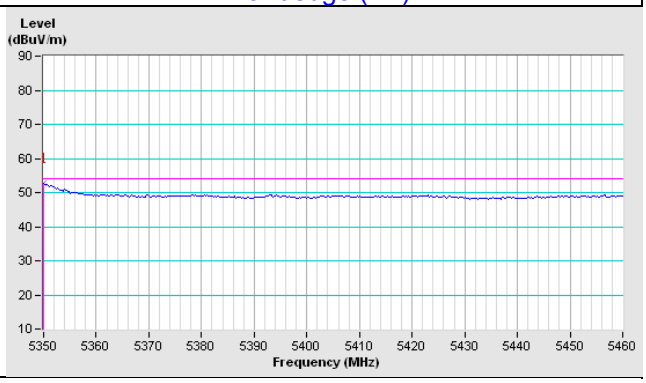
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



Bandedge (PK)

Bandedge (AV)



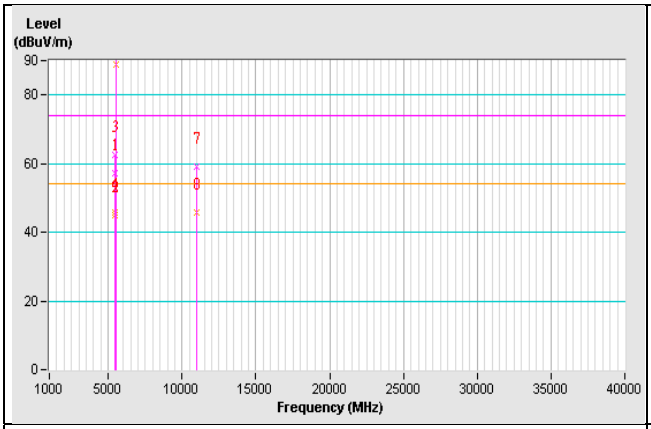


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	5460.00	57.3 PK	74.0	-16.7	1.13 H	174	50.90	6.40
2	5460.00	45.1 AV	54.0	-8.9	1.13 H	174	38.70	6.40
3	#5470.00	62.7 PK	74.0	-11.3	1.08 H	175	56.30	6.40
4	#5470.00	45.9 AV	54.0	-8.1	1.08 H	175	39.50	6.40
5	*5500.00	98.9 PK			1.12 H	174	58.90	40.00
6	*5500.00	88.7 AV			1.12 H	174	48.70	40.00
7	11000.00	59.3 PK	74.0	-14.7	1.14 H	184	39.70	19.60
8	11000.00	45.7 AV	54.0	-8.3	1.14 H	184	26.10	19.60

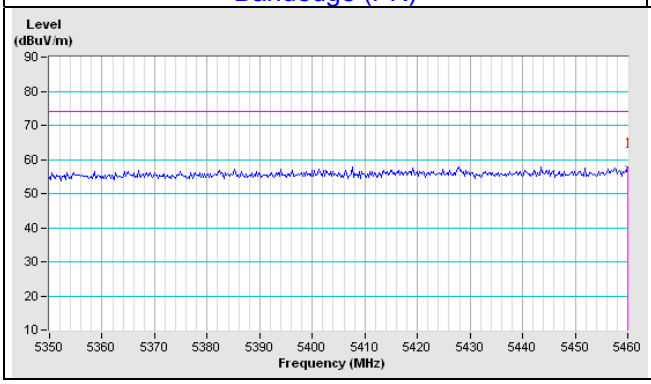
REMARKS:

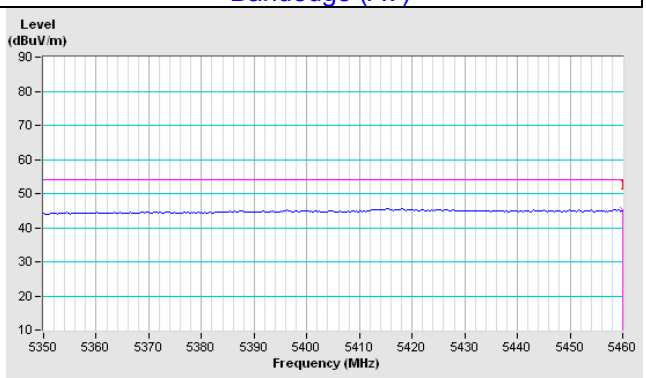
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated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



Bandedge (PK)

Bandedge (AV)



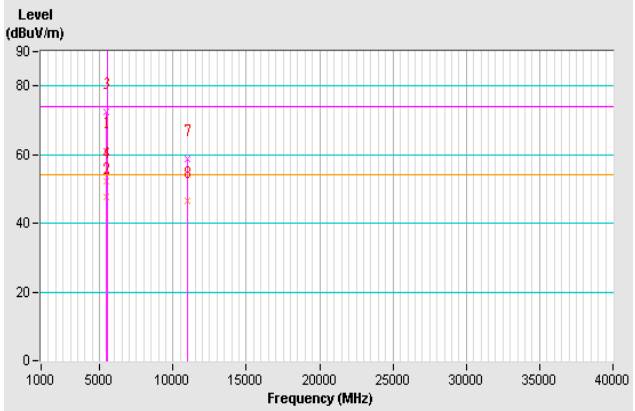


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	61.2 PK	74.0	-12.8	1.78 V	94	54.80	6.40
2	5460.00	47.7 AV	54.0	-6.3	1.78 V	94	41.30	6.40
3	#5470.00	72.6 PK	74.0	-1.4	1.79 V	94	66.20	6.40
4	#5470.00	52.4 AV	54.0	-1.6	1.79 V	94	46.00	6.40
5	*5500.00	109.8 PK			1.77 V	86	69.80	40.00
6	*5500.00	98.9 AV			1.77 V	86	58.90	40.00
7	11000.00	58.8 PK	74.0	-15.2	1.59 V	127	39.20	19.60
8	11000.00	46.7 AV	54.0	-7.3	1.59 V	127	27.10	19.60

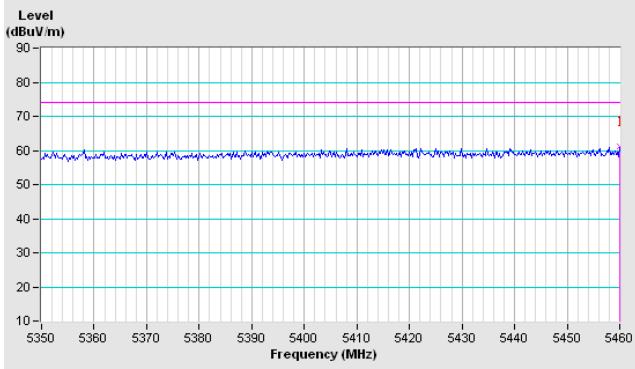
REMARKS:

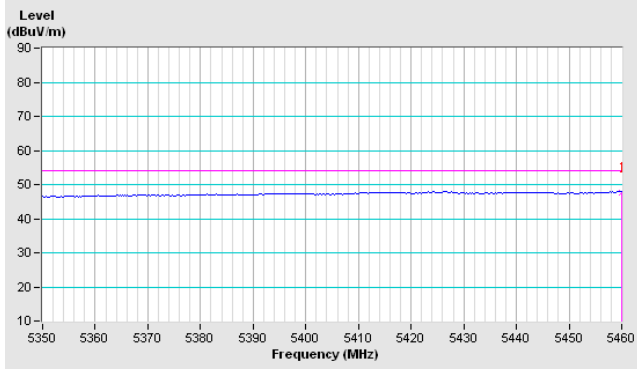
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated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



Bandedge (PK)

Bandedge (AV)



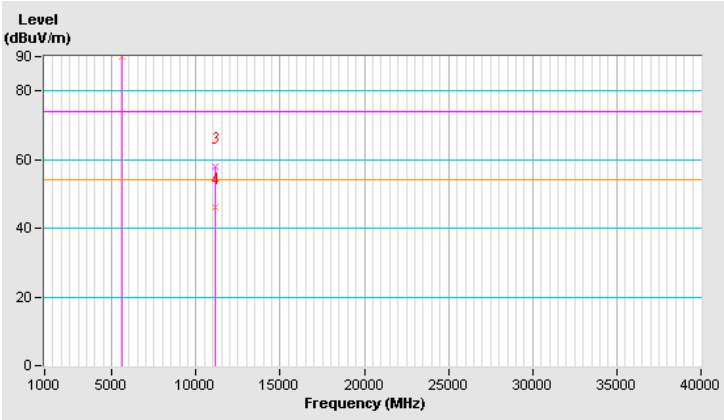


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5580.00	100.4 PK			1.11 H	172	60.30	40.10
2	*5580.00	90.1 AV			1.11 H	172	50.00	40.10
3	11160.00	57.9 PK	74.0	-16.1	1.05 H	97	38.70	19.20
4	11160.00	46.0 AV	54.0	-8.0	1.05 H	97	26.80	19.20

REMARKS:

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

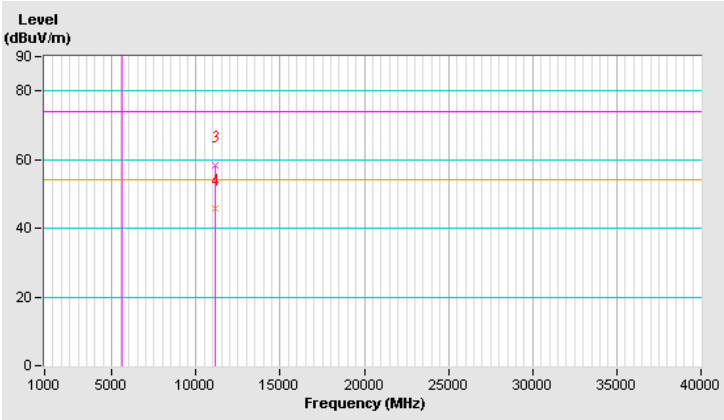


CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	111.2 PK			1.46 V	302	71.10	40.10
2	*5580.00	101.0 AV			1.46 V	302	60.90	40.10
3	11160.00	58.3 PK	74.0	-15.7	1.39 V	254	39.10	19.20
4	11160.00	45.9 AV	54.0	-8.1	1.39 V	254	26.70	19.20

REMARKS:

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

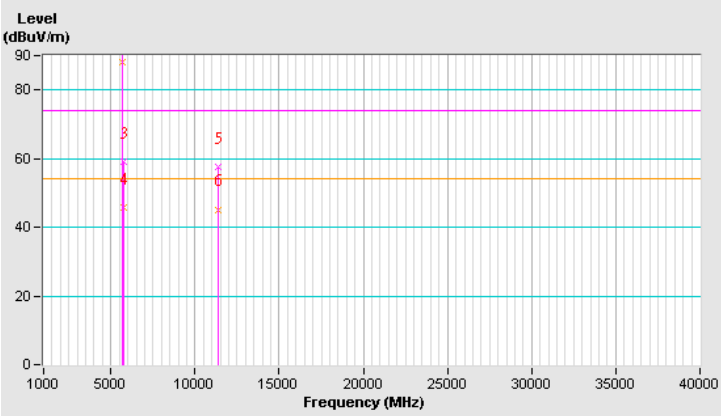


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

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	*5700.00	97.9 PK			1.00 H	116	57.60	40.30
2	*5700.00	88.0 AV			1.00 H	116	47.70	40.30
3	#5725.00	59.0 PK	74.0	-15.0	1.03 H	115	52.20	6.80
4	#5725.00	45.9 AV	54.0	-8.1	1.03 H	115	39.10	6.80
5	11400.00	57.6 PK	74.0	-16.4	1.10 H	86	39.10	18.50
6	11400.00	45.2 AV	54.0	-8.8	1.10 H	86	26.70	18.50

REMARKS:

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

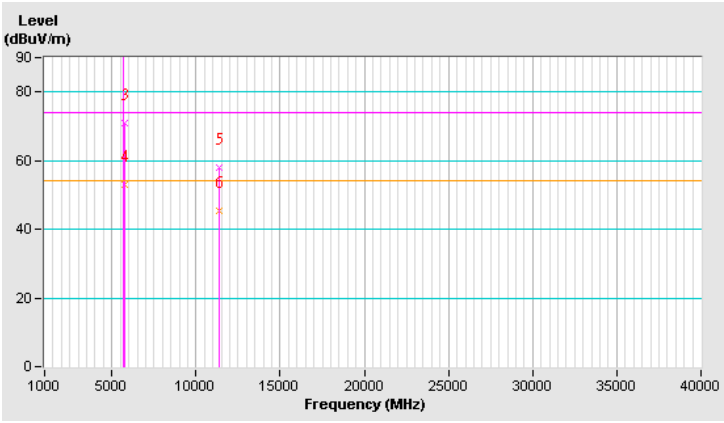


CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	110.3 PK			1.41 V	278	70.00	40.30
2	*5700.00	99.5 AV			1.41 V	278	59.20	40.30
3	#5725.00	71.0 PK	74.0	-3.0	1.34 V	278	64.20	6.80
4	#5725.00	52.9 AV	54.0	-1.1	1.34 V	278	46.10	6.80
5	11400.00	57.8 PK	74.0	-16.2	1.35 V	274	39.30	18.50
6	11400.00	45.2 AV	54.0	-8.8	1.35 V	274	26.70	18.50

REMARKS:

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



Below 1GHz Worst-Case Data

Test Mode A1 – PIFA Antenna: 3TX

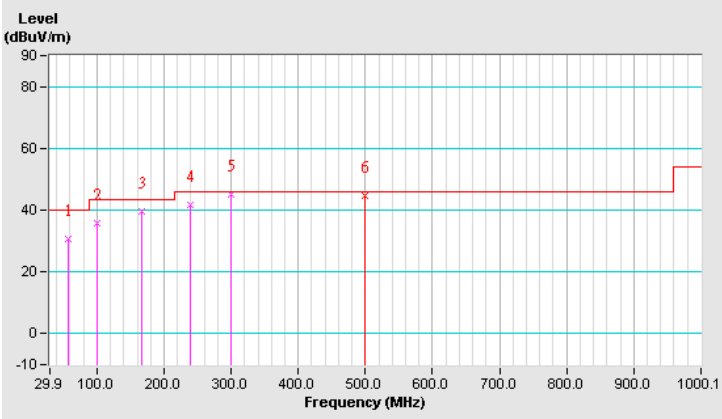
802.11n (HT20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	57.12	30.6 QP	40.0	-9.4	2.00 H	342	45.40	-14.80
2	100.02	35.9 QP	43.5	-7.6	1.84 H	105	54.80	-18.90
3	166.00	39.6 QP	43.5	-3.9	1.43 H	20	53.80	-14.20
4	240.11	41.9 QP	46.0	-4.1	1.00 H	134	56.80	-14.90
5	**300.16**	**45.0 QP**	**46.0**	**-1.0**	**1.01 H**	**13**	**57.40**	**-12.40**
6	499.95	44.8 QP	46.0	-1.2	1.33 H	180	53.10	-8.30

REMARKS:

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

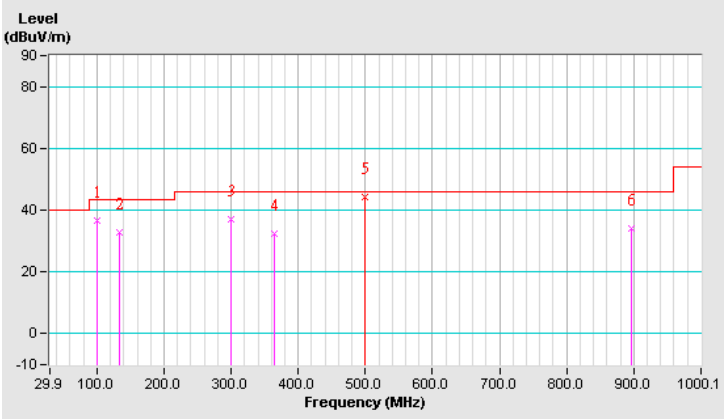


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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	99.93	36.5 QP	43.5	-7.0	1.00 V	134	55.40	-18.90
2	132.95	32.8 QP	43.5	-10.7	1.00 V	216	48.10	-15.30
3	300.08	37.0 QP	46.0	-9.0	1.00 V	283	49.40	-12.40
4	364.32	32.4 QP	46.0	-13.6	1.49 V	67	43.50	-11.10
5	500.13	44.4 QP	46.0	-1.6	1.86 V	165	52.70	-8.30
6	897.05	34.2 QP	46.0	-11.8	1.49 V	71	34.90	-0.70

REMARKS:

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



Test Mode B1 – Dipole Antenna: 3TX

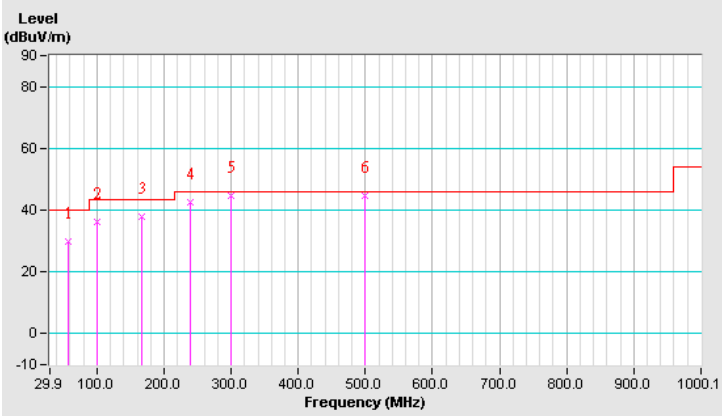
802.11n (HT20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	57.12	30.0 QP	40.0	-10.0	1.99 H	30	44.80	-14.80
2	99.96	36.3 QP	43.5	-7.2	1.82 H	131	55.20	-18.90
3	166.33	38.0 QP	43.5	-5.5	1.83 H	52	52.20	-14.20
4	239.98	42.6 QP	46.0	-3.4	1.02 H	202	57.60	-15.00
5	300.06	44.8 QP	46.0	-1.2	1.00 H	138	57.20	-12.40
6	500.11	44.8 QP	46.0	-1.2	1.58 H	141	53.10	-8.30

REMARKS:

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

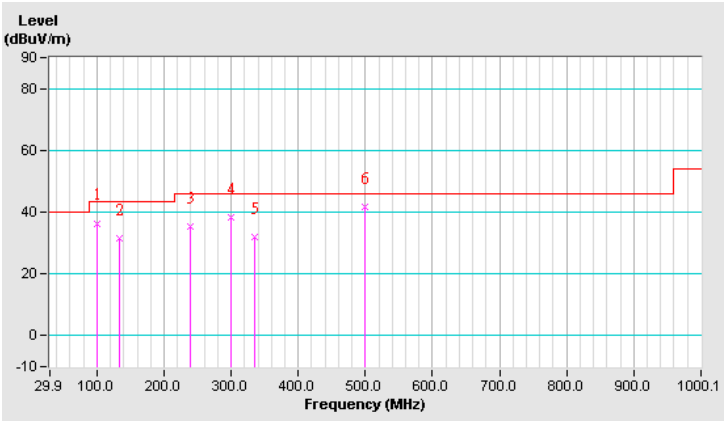


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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	100.00	36.4 QP	43.5	-7.1	1.00 V	131	55.30	-18.90
2	132.95	31.4 QP	43.5	-12.1	1.01 V	227	46.70	-15.30
3	240.08	35.4 QP	46.0	-10.6	1.00 V	221	50.30	-14.90
4	300.00	38.3 QP	46.0	-7.7	1.00 V	164	50.70	-12.40
5	335.15	32.1 QP	46.0	-13.9	1.01 V	58	43.80	-11.70
6	500.22	41.9 QP	46.0	-4.1	1.38 V	64	50.20	-8.30

REMARKS:

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



4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Note: 1.

4.2.3 Test Procedures

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

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

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

Note: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup

4.2.7 Test Results

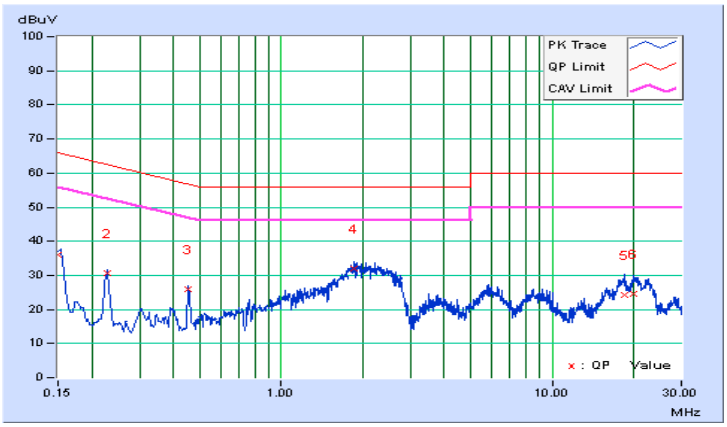
Test Mode A1 – PIFA Antenna: 3TX

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.82	26.19	26.17	36.01	35.99	66.00	56.00	-29.99	-20.01
2	0.22820	9.85	20.81	20.79	30.66	30.64	62.51	52.51	-31.86	-21.88
3	0.45498	9.88	16.00	12.89	25.88	22.77	56.78	46.78	-30.90	-24.01
4	1.86258	9.99	22.00	16.55	31.99	26.54	56.00	46.00	-24.01	-19.46
5	18.40970	11.00	13.30	8.43	24.30	19.43	60.00	50.00	-35.70	-30.57
6	19.87595	11.08	13.44	8.81	24.52	19.89	60.00	50.00	-35.48	-30.11

REMARKS:

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

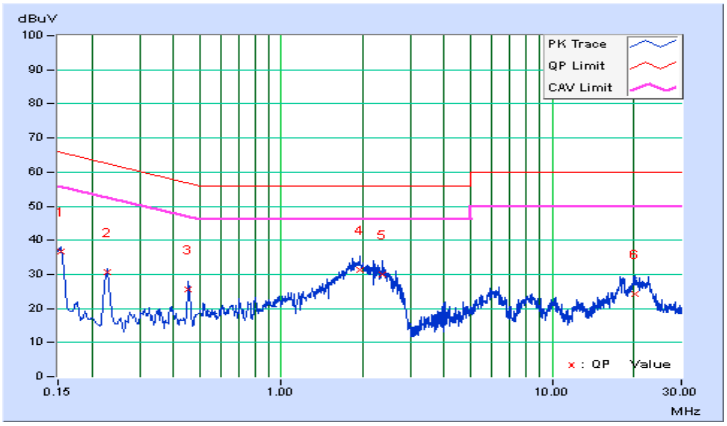


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.82	26.85	26.80	36.67	36.62	65.79	55.79	-29.12	-19.17
2	0.22791	9.84	20.70	20.67	30.54	30.51	62.53	52.53	-31.99	-22.02
3	0.45498	9.88	15.69	12.56	25.57	22.44	56.78	46.78	-31.21	-24.34
4	1.94469	9.99	21.35	16.19	31.34	26.18	56.00	46.00	-24.66	-19.82
5	2.35524	10.01	19.99	14.73	30.00	24.74	56.00	46.00	-26.00	-21.26
6	20.36079	10.93	13.22	8.32	24.15	19.25	60.00	50.00	-35.85	-30.75

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.



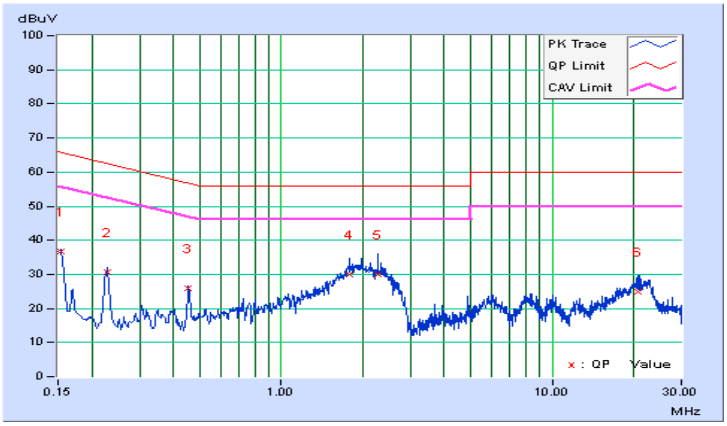
Test Mode B1 – Dipole Antenna: 3TX

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.82	26.92	26.88	36.74	36.70	65.79	55.79	-29.04	-19.08
2	0.22791	9.85	20.82	20.74	30.67	30.59	62.53	52.53	-31.86	-21.94
3	0.45575	9.88	16.00	12.52	25.88	22.40	56.77	46.77	-30.89	-24.37
4	1.78436	9.98	19.98	15.61	29.96	25.59	56.00	46.00	-26.04	-20.41
5	2.28095	10.02	19.90	14.40	29.92	24.42	56.00	46.00	-26.08	-21.58
6	20.83781	11.12	13.79	8.68	24.91	19.80	60.00	50.00	-35.09	-30.20

REMARKS:

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

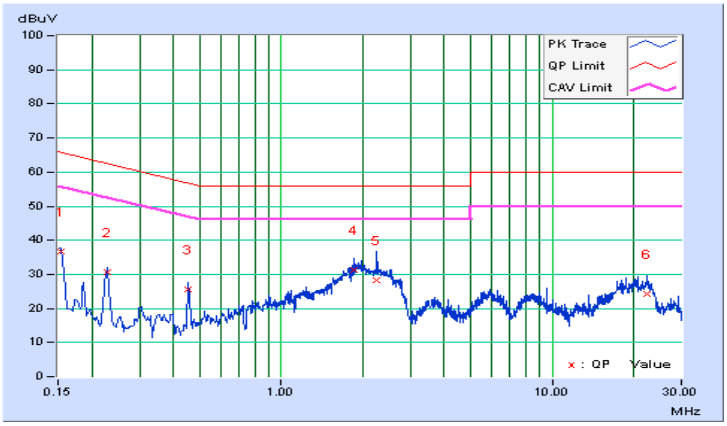


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	**0.15391**	**9.82**	**26.99**	**26.98**	**36.81**	**36.80**	**65.79**	**55.79**	**-28.98**	**-18.99**
2	0.22820	9.84	20.79	20.72	30.63	30.56	62.51	52.51	-31.89	-21.96
3	0.45498	9.88	15.79	12.68	25.67	22.56	56.78	46.78	-31.11	-24.22
4	1.86258	9.98	21.32	16.83	31.30	26.81	56.00	46.00	-24.70	-19.19
5	2.24967	10.01	18.31	13.63	28.32	23.64	56.00	46.00	-27.68	-22.36
6	22.35098	10.98	13.11	8.22	24.09	19.20	60.00	50.00	-35.91	-30.80

REMARKS:

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



4.3 Transmit Power Measurment

4.3.1 Limits of Transmit Power Measurement

Operation Band	EUT Category	Limit
U-NII-1	--- Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p

*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.
For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.3.2 Test Setup

4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

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.

4.3.5 Deviation fromTest Standard

No deviation.

4.3.6 EUT Operating Conditions

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

4.3.7 Test Result

Power Output:

Test Mode A1 – PIFA Antenna: 3TX

802.11a

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
52	5260	15.63	15.32	16.06	110.965	20.45	24.00	Pass
60	5300	15.41	15.39	16.22	111.227	20.46	24.00	Pass
64	5320	15.82	14.08	15.80	101.799	20.08	24.00	Pass
100	5500	14.84	13.88	15.05	**86.902**	19.39	24.00	Pass
116	5580	14.92	13.81	14.98	86.567	19.37	24.00	Pass
140	5700	14.23	13.99	14.02	76.781	18.85	24.00	Pass

Note:
Chain 0
1. 11dBm + 10log(37.01)= 26.68>24dBm
2. 11dBm + 10log(38.57)= 26.86>24dBm
3. 11dBm + 10log(38.76)= 26.88>24dBm
4. 11dBm + 10log(40.06)= 27.03>24dBm
5. 11dBm + 10log(37.37)= 26.73>24dBm
6. 11dBm + 10log(29.78)= 25.74>24dBm

Chain 1
1. 11dBm + 10log(29.70)= 25.73>24dBm
2. 11dBm + 10log(27.31)= 25.36>24dBm
3. 11dBm + 10log(25.17)= 25.01>24dBm
4. 11dBm + 10log(23.99)= 24.80>24dBm
5. 11dBm + 10log(26.82)= 25.28>24dBm
6. 11dBm + 10log(22.78)= 24.58>24dBm

Chain 2
1. 11dBm + 10log(26.23)= 25.19>24dBm
2. 11dBm + 10log(29.11)= 25.64>24dBm
3. 11dBm + 10log(31.07)= 25.92>24dBm
4. 11dBm + 10log(33.02)= 26.19>24dBm
5. 11dBm + 10log(29.68)= 25.72>24dBm
6. 11dBm + 10log(28.01)= 25.47>24dBm

802.11n (HT20)

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
52	5260	16.32	15.32	16.11	117.728	20.71	24.00	Pass
60	5300	16.28	15.18	16.21	117.206	20.69	24.00	Pass
64	5320	15.44	14.23	15.62	97.955	19.91	24.00	Pass
100	5500	14.41	13.03	14.32	74.737	18.74	24.00	Pass
116	5580	14.78	13.93	15.04	86.693	19.38	24.00	Pass
140	5700	12.91	12.41	12.92	56.549	17.52	24.00	Pass

Note:
Chain 0
1. 11dBm + 10log(40.87)= 27.11>24dBm
2. 11dBm + 10log(40.51)= 27.08>24dBm
3. 11dBm + 10log(41.68)= 27.20>24dBm
4. 11dBm + 10log(40.61)= 27.09>24dBm
5. 11dBm + 10log(41.18)= 27.15>24dBm
6. 11dBm + 10log(24.88)= 24.96>24dBm
Chain 1
1. 11dBm + 10log(25.42)= 25.05>24dBm
2. 11dBm + 10log(25.57)= 25.08>24dBm
3. 11dBm + 10log(27.09)= 25.33>24dBm
4. 11dBm + 10log(24.82)= 24.95>24dBm
5. 11dBm + 10log(27.15)= 25.34>24dBm
6. 11dBm + 10log(23.58)= 24.73>24dBm
Chain 2
1. 11dBm + 10log(29.20)= 25.65>24dBm
2. 11dBm + 10log(30.06)= 25.78>24dBm
3. 11dBm + 10log(30.14)= 25.79>24dBm
4. 11dBm + 10log(27.43)= 25.38>24dBm
5. 11dBm + 10log(32.85)= 26.17>24dBm
6. 11dBm + 10log(23.24)= 24.66>24dBm

802.11n (HT40)

Channel	Channel Frequency (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
54	5270	17.71	17.23	18.28	**179.163**	22.53	24.00	Pass
62	5310	11.33	9.71	11.05	35.672	15.52	24.00	Pass
102	5510	11.03	9.10	10.17	31.204	14.94	24.00	Pass
110	5550	14.93	13.74	14.93	85.893	19.34	24.00	Pass
134	5670	14.62	14.11	14.51	82.985	19.19	24.00	Pass

Note:
Chain 0
1. 11dBm + 10log(94.63)= 30.76>24dBm
2. 11dBm + 10log(53.82)= 28.31>24dBm
3. 11dBm + 10log(53.27)= 28.26>24dBm
4. 11dBm + 10log(93.68)= 30.72>24dBm
5. 11dBm + 10log(89.48)= 30.52>24dBm

Chain 1
1. 11dBm + 10log(88.66)= 30.48>24dBm
2. 11dBm + 10log(48.69)= 27.87>24dBm
3. 11dBm + 10log(48.75)= 27.88>24dBm
4. 11dBm + 10log(65.43)= 29.16>24dBm
5. 11dBm + 10log(53.34)= 28.27>24dBm

Chain 2
1. 11dBm + 10log(91.43)= 30.61>24dBm
2. 11dBm + 10log(48.07)= 27.82>24dBm
3. 11dBm + 10log(48.21)= 27.83>24dBm
4. 11dBm + 10log(73.39)= 29.66>24dBm
5. 11dBm + 10log(64.27)= 29.08>24dBm

Test Mode A2 – PIFA Antenna: 1TX

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
52	5260	69.663	18.43	24.00	Pass
60	5300	76.736	18.85	24.00	Pass
64	5320	48.529	16.86	24.00	Pass
100	5500	38.994	15.91	24.00	Pass
116	5580	56.494	17.52	24.00	Pass
140	5700	33.574	15.26	24.00	Pass

Note:
1. 11dBm + 10log(45.11)= 27.54>24dBm
2. 11dBm + 10log(45.31)= 27.56>24dBm
3. 11dBm + 10log(40.56)= 27.08>24dBm
4. 11dBm + 10log(39.38)= 26.95>24dBm
5. 11dBm + 10log(43.31)= 27.37>24dBm
6. 11dBm + 10log(31.46)= 25.98>24dBm

26dB Bandwidth:

Test Mode A1 – PIFA Antenna: 3TX

802.11a

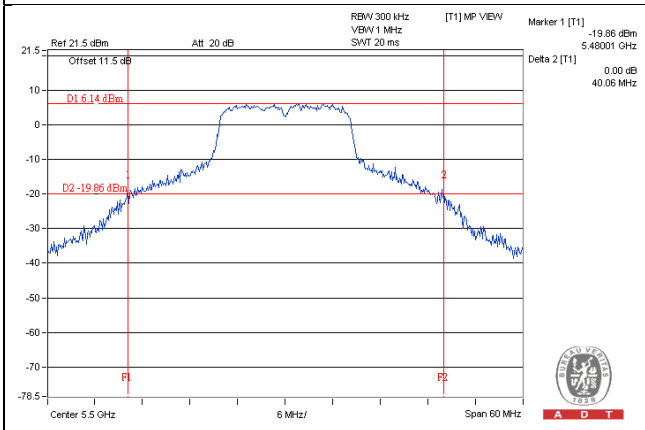
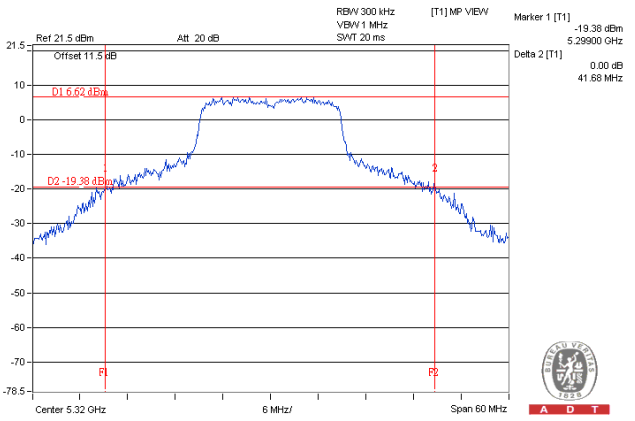
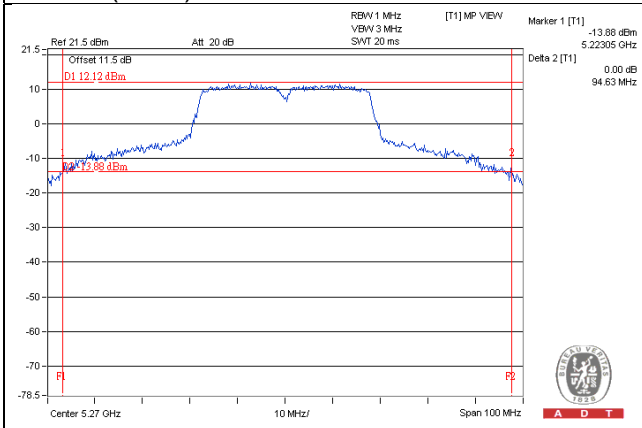
Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)			Pass / Fail
		Chain 0	Chain 1	Chain 2	
52	5260	37.01	29.70	26.23	Pass
60	5300	38.57	27.31	29.11	Pass
64	5320	38.76	25.17	31.07	Pass
100	5500	40.06	23.99	33.02	Pass
116	5580	37.37	26.82	29.68	Pass
140	5700	29.78	22.78	28.01	Pass

802.11n (HT20)

Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)			Pass / Fail
		Chain 0	Chain 1	Chain 2	
52	5260	40.87	25.42	29.20	Pass
60	5300	40.51	25.57	30.06	Pass
64	5320	41.68	27.09	30.14	Pass
100	5500	40.61	24.82	27.43	Pass
116	5580	41.18	27.15	32.85	Pass
140	5700	24.88	23.58	23.24	Pass

802.11n (HT40)

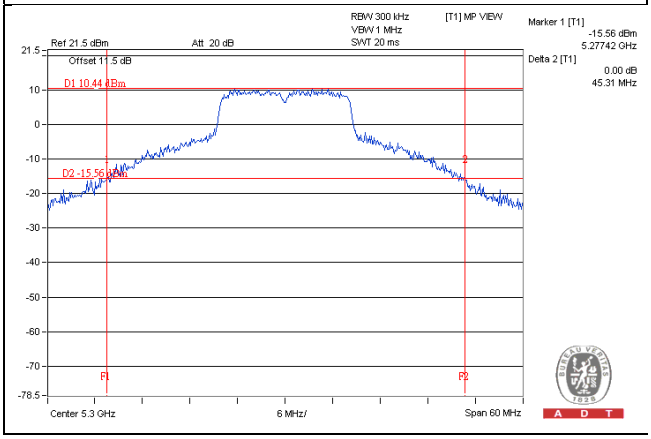
Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)			Pass / Fail
		Chain 0	Chain 1	Chain 2	
54	5270	94.63	88.66	91.43	Pass
62	5310	53.82	48.69	48.07	Pass
102	5510	53.27	48.75	48.21	Pass
110	5550	93.68	65.43	73.39	Pass
134	5670	89.48	53.34	64.27	Pass

Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

Test Mode A2 – PIFA Antenna: 1TX

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	Pass / Fail
52	5260	45.11	Pass
60	5300	45.31	Pass
64	5320	40.56	Pass
100	5500	39.38	Pass
116	5580	43.31	Pass
140	5700	31.46	Pass

Spectrum Plot of Worst Value
802.11a



Occupied Bandwidth:

Test Mode A1 – PIFA Antenna: 3TX

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
52	5260	18.72	16.68	16.80
60	5300	18.72	16.68	16.92
64	5320	19.20	16.68	17.04
100	5500	18.84	16.92	17.16
116	5580	18.12	16.80	17.04
140	5700	16.92	16.68	16.80

802.11n (HT20)

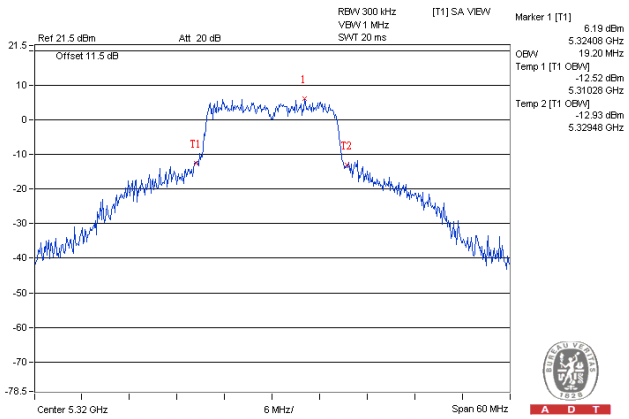
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
52	5260	19.20	17.88	18.00
60	5300	19.80	17.76	18.00
64	5320	20.52	17.88	18.12
100	5500	18.96	17.76	18.00
116	5580	18.96	17.76	18.00
140	5700	17.88	17.88	17.88

802.11n (HT40)

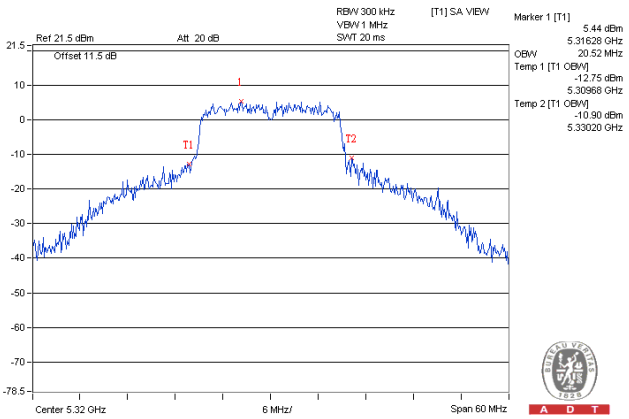
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
54	5270	41.04	37.80	38.16
62	5310	36.72	36.84	36.72
102	5510	36.72	36.84	36.84
110	5550	37.56	36.96	36.84
134	5670	37.08	36.84	37.08

Spectrum Plot of Worst Value

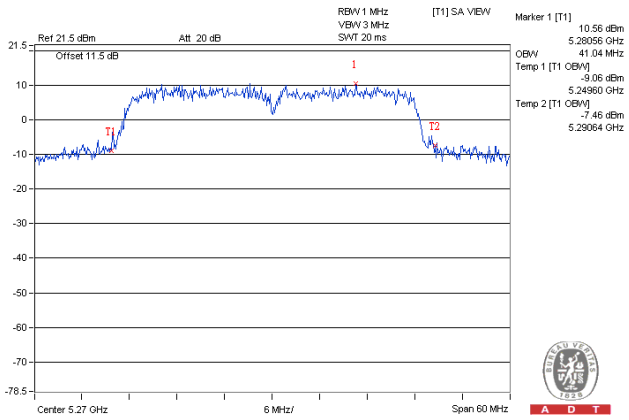
802.11a



802.11n (HT20)



802.11n (HT40)

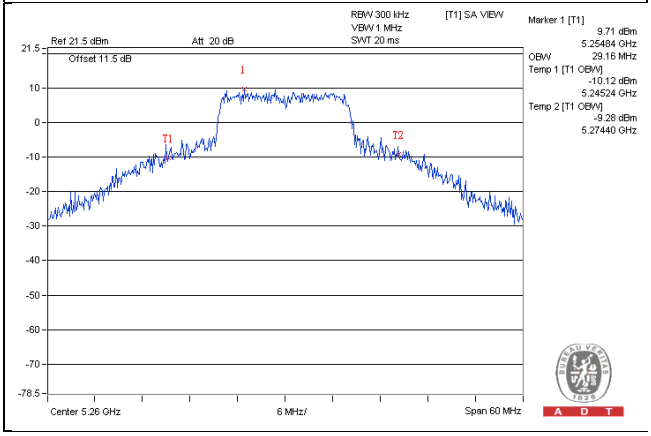


Test Mode A2 – PIFA Antenna: 1TX

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
52	5260	29.16
60	5300	28.56
64	5320	20.88
100	5500	19.80
116	5580	27.12
140	5700	16.92

Spectrum Plot of Worst Value
802.11a



EUT MAXIMUM CONDUCTED POWER

Test Mode A1 – PIFA Antenna: 3TX

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	111.227	20.46
5470~5725	86.902	19.39

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

802.11n (HT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	117.728	20.71
5470~5725	86.693	19.38

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

802.11n (HT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	179.163	22.53
5470~5725	85.893	19.34

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

Test Mode A2 – PIFA Antenna: 1TX

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	76.736	18.85
5470~5725	56.494	17.52

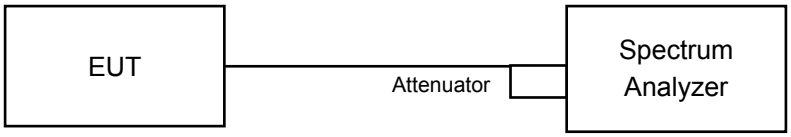
Note: Manufacturer provides Transmit Power Control description to meet this requirement.

4.4 Peak Power Spectral Density Measurement

4.4.1 Limits of Peak Power Spectral Density Measurement

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

4.4.2 Test Setup



4.4.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.4 Test Procedures

Using method SA-2

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Sweep time = auto, trigger set to “free run”.
d. Trace average at least 100 traces in power averaging mode.
e. Record the max value and add 10 log (1/duty cycle)

4.4.5 Deviation from Test Standard

No deviation.

4.4.6 EUT Operating Conditions

Same as Item 4.3.6.

4.4.7 Test Results

Test Mode A1 – PIFA Antenna: 3TX

802.11a

Chan.	Frequency (MHz)	PSD (dBm/MHz)			Total PSD W/O Duty Factor (dBm/MHz)	Duty Factor	Total PSD With Duty Factor (dBm/MHz)	Maximum Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2					
52	5260	1.37	0.73	1.38	5.94	0.17	6.11	6.23	Pass
60	5300	1.88	0.12	1.28	5.92	0.17	6.09	6.23	Pass
64	5320	1.35	-0.83	1.58	5.60	0.17	5.77	6.23	Pass
100	5500	0.63	-0.46	0.49	5.02	0.17	5.19	6.23	Pass
116	5580	0.94	-0.70	0.52	5.08	0.17	5.25	6.23	Pass
140	5700	-0.01	-0.83	0.13	4.55	0.17	4.72	6.23	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 = 6dBi + 10log(3) = 10.77dBi > 6dBi, so the power density limit shall be reduced to 11-(10.77-6) = 6.23dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Chan.	Frequency (MHz)	PSD (dBm/MHz)			Total PSD W/O Duty Factor (dBm/MHz)	Duty Factor	Total PSD With Duty Factor (dBm/MHz)	Maximum Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2					
52	5260	1.07	0.57	1.18	5.72	0.16	5.88	6.23	Pass
60	5300	1.67	-0.05	1.37	5.83	0.16	5.99	6.23	Pass
64	5320	1.25	-0.69	1.33	5.49	0.16	5.65	6.23	Pass
100	5500	-0.17	-1.82	-0.74	3.91	0.16	4.07	6.23	Pass
116	5580	0.78	-0.60	-0.04	4.85	0.16	5.01	6.23	Pass
140	5700	-1.57	-2.57	-1.29	2.99	0.16	3.15	6.23	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 = 6dBi + 10log(3) = 10.77dBi > 6dBi, so the power density limit shall be reduced to 11-(10.77-6) = 6.23dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

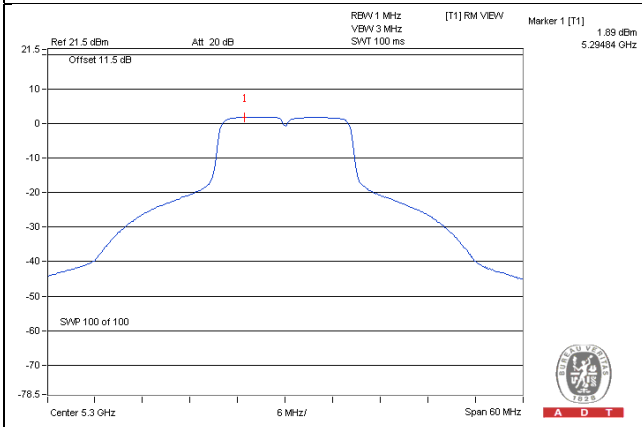
802.11n (HT40)

Chan.	Frequency (MHz)	PSD (dBm/MHz)			Total PSD W/O Duty Factor (dBm/MHz)	Duty Factor	Total PSD With Duty Factor (dBm/MHz)	Maximum Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2					
54	5270	0.07	-0.06	0.78	5.05	0.30	5.35	6.23	Pass
62	5310	-6.06	-8.89	-7.24	-2.48	0.30	-2.18	6.23	Pass
102	5510	-6.76	-8.88	-7.34	-2.81	0.30	-2.51	6.23	Pass
110	5550	-2.34	-4.29	-2.94	1.65	0.30	1.95	6.23	Pass
134	5670	-2.85	-4.29	-2.42	1.65	0.30	1.95	6.23	Pass

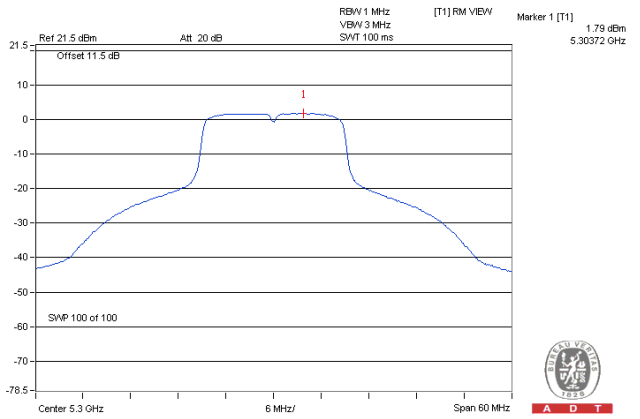
Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 6dBi + 10log(3) = 10.77dBi > 6dBi, so the power density limit shall be reduced to 11-(10.77-6) = 6.23dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

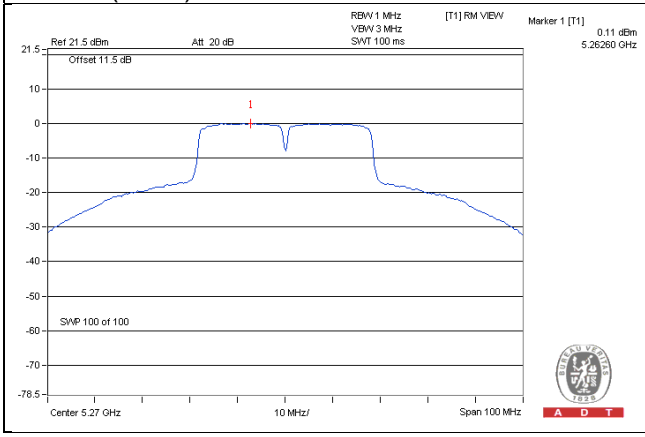
802.11a / CH 60 / Chain 0



802.11n (HT20) / CH 60 / Chain 0



802.11n (HT40) / CH 54 / Chain 0



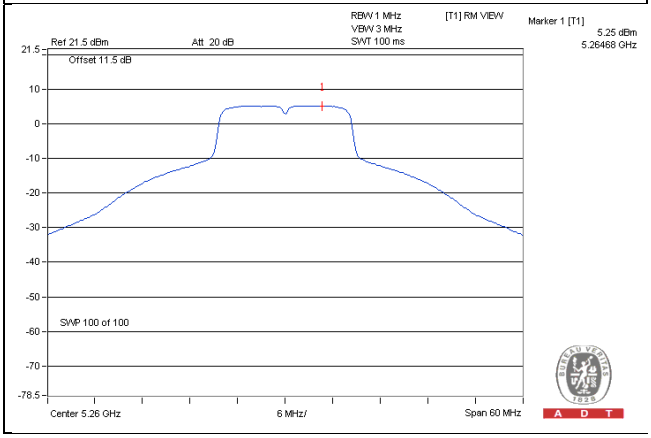
Test Mode A2 – PIFA Antenna: 1TX

802.11a

Chan.	Frequency (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor	PSD With Duty Factor (dBm/MHz)	Maximum Limit (dBm/MHz)	Pass / Fail
52	5260	5.25	0.21	5.46	11.00	Pass
60	5300	4.68	0.21	4.89	11.00	Pass
64	5320	2.58	0.21	2.79	11.00	Pass
100	5500	1.88	0.21	2.09	11.00	Pass
116	5580	3.68	0.21	3.89	11.00	Pass
140	5700	1.51	0.21	1.72	11.00	Pass

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

Spectrum Plot of Worst Value
802.11a

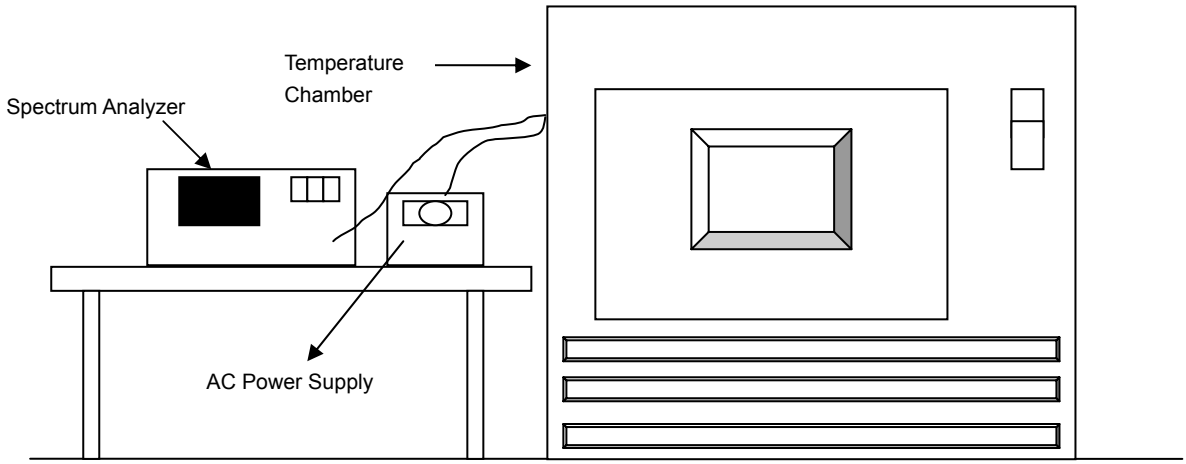


4.5 Frequency Stability

4.5.1 Limits of Frequency Stability Measurement

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

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.

b. Turn the EUT on and couple its output to a spectrum analyzer.

c. Turn the EUT off and set the chamber to the highest temperature specified.

d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.

e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.

f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Condition

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

4.5.7 Test Results

Test Mode A1 – PIFA Antenna: 3TX

Frequemcy Stability Versus Temp.	
Operating Frequency: 5260MHz	
Temp. (	

Test Mode A2 – PIFA Antenna: 1TX

Frequemcy Stability Versus Temp.
Operating Frequency: 5260MHz

Temp. (

5 Pictures of Test Arrangements

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

Appendix – Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
Tel: 886-3-5935343
Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Lab
Tel: 886-3-3183232
Fax: 886-3-3270892

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

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

--- END ---