Test Report No.:
FCC2023-0034-RF

RF Test Report

EUT	:	**Oclean WiFi Smart Sonic Electric Toothbrush**
MODEL	:	**V8100**
BRAND NAME	:	**Oclean**
APPLICANT	:	**Shenzhen Yunding Information Technology Co., Ltd.**
Classification Of Test	:	**N/A**

CVC Testing Technology Co., Ltd.

Applicant	**Name: Shenzhen Yunding Information Technology Co., Ltd.** **Address: 28G, Building 3, Dachong Business Center(Phase 3), No.18, Dachong 1st Road，Dachong Community, Yuehai Street, Nanshan District,Shenzhen City, Guangdong Province, China**
Manufacturer	**Name: Shenzhen Yunding Information Technology Co., Ltd.** **Address: 28G, Building 3, Dachong Business Center(Phase 3), No.18, Dachong 1st Road，Dachong Community, Yuehai Street, Nanshan District,Shenzhen City, Guangdong Province, China**
Equipment Under Test	**Product Name: Oclean WiFi Smart Sonic Electric Toothbrush** **Model/Type: V8100** **Brand Name: Oclean** **Serial NO.: N/A** **Sample NO.:4-1**

Date of Receipt.	**2023.06.21**	Date of Testing	**2023.06.21～2023.07.09**

Test Specification	**Test Result**
FCC Part 15, Subpart C, Section 15.247	PASS

Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied. Seal of CVC **Issue Date: 2023.07.13**

Tested by:	Tested by:	Approved by:
Lu WeiJi	Xu ZhenFei	Chen HuaWen
Name Signature	Name Signature	Name Signature

Other Aspects: NONE.

Abbreviations:OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested

TABLE OF CONTENTS

RELEASE CONTROL RECORD **4**

1 SUMMARY OF TEST RESULTS **5**

1.1 LIST OF TEST AND MEASUREMENT INSTRUMENTS 6
1.2 MEASUREMENT UNCERTAINTY 7
1.3 TEST LOCATION 7

2 GENERAL INFORMATION **8**

2.1 GENERAL PRODUCT INFORMATION 8
2.2 OTHER INFORMATION 9
2.3 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL 10
2.4 GENERAL DESCRIPTION OF APPLIED STANDARDS 12
2.5 DESCRIPTION OF SUPPORT UNITS 12

3 TEST TYPES AND RESULTS **13**

3.1 CONDUCTED EMISSION MEASUREMENT 13
3.1.1 *Limit* *13*
3.1.2 *Measurement procedure* *13*
3.1.3 *Test setup* *13*
3.1.4 *Test results* *14*
3.2 RADIATED EMISSION AND BANDEDGE MEASUREMENT 16
3.2.1 *Limit* *16*
3.2.2 *Measurement procedure* *16*
3.2.3 *Test setup* *17*
3.2.4 *Test results* *19*
3.3 6DB BANDWIDTH MEASUREMENT 51
3.3.1 *Limits* *51*
3.3.2 *Measurement procedure* *51*
3.3.3 *Test setup* *51*
3.4 CONDUCTED OUTPUT POWER 52
3.4.1 *Limits* *52*
3.4.2 *Measurement procedure* *52*
3.4.3 *Test setup* *52*
3.5 POWER SPECTRAL DENSITY MEASUREMENT 53
3.5.1 *Limits* *53*
3.5.2 *Measurement procedure* *53*
3.5.3 *Test setup* *53*
3.6 OUT OF BAND EMISSION MEASUREMENT 54
3.6.1 *Limits* *54*
3.6.2 *Measurement procedure* *54*
3.6.3 *Test setup* *54*
3.7 OCCUPIED BANDWIDTH MEASUREMENT 55
3.7.1 *Measurement procedure* *55*
3.7.2 *TEST SETUP* *55*

4 PHOTOGRAPHS OF TEST SETUP **56**

5 PHOTOGRAPHS OF THE EUT **57**

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCC2023-0034-RF	Original release	2023.07.13

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**REMARK**
FCC 15.207	AC Power Conducted Emission	PASS	See section 3.1 of this report
FCC 15.247(d) FCC 15.209	Radiated Emissions	PASS	See section 3.2 of this report
FCC 15.247(a)(2) RSS-247 5.2(a)	6dB bandwidth	PASS	Appendix A of FCC2023-0034-RF-A1&A2
---	Occupied Bandwidth Measurement	PASS	Appendix B of FCC2023-0034-RF-A1&A2
FCC 15.247(b)	Conducted Output power	PASS	Appendix C of FCC2023-0034-RF-A1&A2
FCC 15.247(e)	Power Spectral Density	PASS	Appendix D of FCC2023-0034-RF-A1&A2
FCC 15.247(d) RSS-247 5.5	Out of band Emission Measurement	PASS	Appendix E&F&G of FCC2023-0034-RF-A1&A2
FCC 15.203	Antenna Requirement	PASS	No antenna connector is used

1.1 LIST OF TEST AND MEASUREMENT INSTRUMENTS

Test Equipment	Type/Mode	SERIAL NO.	Equipment No.	Manufacturer	Cal. Due
WIFI & Bluetooth Test System 1					/
Communication Shielded Room 1	4m*3m*3m	CRTDSWKSR44301	VGDS-0699	CRT	2024/04/24
Spectrum Analyzer	FSV40	101580	DZ-000238-3	R&S	2024/04/22
Comprehensive Test Instrument	CMW270	100304	DZ-000240-1	R&S	2023/12/06
Analog Signal Generator	SMB100A	181858	DZ-000238-2	R&S	2024/05/29
Vector Signal Generator	SGT100A	111661	DZ-000238-1	R&S	2024/05/29
RF Radio Frequency Switch	JS0806-2	19H9080187	`	Tonscend	2024/05/29
Programmable DC Power Supply	E3644A	MY58036222	DZ-000178	KEYSIGHT	2024/04/12
Radiation SpuriousTest System					/
3m Semi-Anechoic Chamber	FACT-4	ST08035	WKNA-0024	ETS	2024/12/12
Loop Antenna	FMZB1513	1513-170	EM-000384	SCHWARZBECK	2024/02/24
Spectrum Analyzer	N9010B	MY57470323	DZ-000174	KEYSIGHT	2024/02/22
EMI Test Receiver	N9038A-508	MY532290079	EM-000397	Agilent	2024/02/22
Broadband Antenna	VULB 9163	9163-530	EM-000342	SCHWARZBECK	2024/05/29
Waveguide Horn Antenna	HF906	360306/008	EM-000093	R&S	2024/02/24
Waveguide Horn Antenna	BBHA9170	00949	DZ-000209-2	SCHWARZBECK	2023/07/31
Preamplifier	BBV 9721	9721-050	DZ-000209-1	SCHWARZBECK	2024/05/29
5G Bandstop Filters	WRCJV12-4900-5100-5900-6100-50EE	851770	DZ-000186	WI	2023/12/06
Conducted emission					/
EMI Test Receiver	ESR3	102394	VGDY-0705	R&S	2024-02-22
LISN	NSLK 8127	8127644	VGDY-0150	SCHWARZBECK	2023-09-03
LISN	NSLK 8128	8128-316	VGDY-0149	SCHWARZBECK	2023-09-03
DC LISN	PVDC8301-017	PVDC8301#17	VGDY-0692	SCHWARZBECK	2023-10-07
LISN	NSLK 8129	8129-268	EM-000388	SCHWARZBECK	2024-02-22
Plus Limiter（#1）	VTSD 9561 F-N	00515	VGDY-0808	SCHWARZBECK	2024-03-03
Impedance Stabilization Network	ISN T800	27095	WKNE-0195	TESEQ	2023-09-03
ImpedanceStabilizationNetwork	NTFM8131	#184	EM-000498	SCHWARZBECK	2024-05-29
Voltage Probe	TK9420	9420-499	VGDY-0128	SCHWARZBECK	2024-02-22
Power Divider	4901.17.B	22643830	DB-0016	HUBER+SUHNER	2023-08-31
Video Signal Generator	GV-798+	151064920001	VGDS-0215	PROMAX	2024-05-29
AudioSignalGenerator	GAG-810	EK871591	EM-000309	GW	2023-12-06
Shielding Room(#1)	GP1A	001	WKNF-0001	LEINING	2024-08-07

1.2 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:

No.	ITEM	FREQUENCY	UNCERTAINTY
1	Conducted emissions	9kHz~30MHz	±2.66dB
2	Radiated emissions	9KHz ~ 30MHz	±0.769dB
		30MHz ~ 1GMHz	±0.877dB
		1GHz ~ 18GHz	±0.777dB
		18GHz ~ 40GHz	±1.315dB

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

1.3 TEST LOCATION

The tests and measurements refer to this report were performed by EMC testing Lab. of CVC Testing Technology Co., Ltd.

CABID:CN0103
Address: No.3,TiantaiyiRoad,KaitaiAvenue,ScienceCity,Guangzhou,China
Post Code：510663 Tel：0755-23763060-8805
Fax：0755-23763060 E-mail：sz-kf@cvc.org.cn
http://www.cvc.org.cn

2 GENERAL INFORMATION

2.1 GENERAL PRODUCT INFORMATION

PRODUCT	Oclean WiFi Smart Sonic Electric Toothbrush
BRAND	Oclean
TEST MODEL	V8100
ADDITIONAL MODEL	N/A
FCC ID	2AN5D-V8100
POWER SUPPLY	DC 3.7V from battery or DC 5V from WPT
MODULATIONTECHNOLOGY	DSSS, GFKS, OFDM
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM GKSK for BT-LE
OPERATING FREQUENCY	2412MHz ~ 2462MHz for 11b/g/n(HT20) 2422MHz ~ 2452MHz for 11n(HT40) 2402MHz ~ 2480MHz for BT-LE
NUMBER OF CHANNEL	802.11b/g/n(HT20) 11 802.11n(HT40)/: 7 BT-LE: 40
PEAK OUTPUT POWER	WLAN: 16.54dBm (Maximum) BLE:7.90dBm (Maximum)
ANTENNA TYPE（Note 4）	WLAN:FPC Antenna, with 1.35dBi gain BT-LE: PIFA Antenna, with 1.35dBi gain
HARDWARE REVISION	V0.2
SOFTWARE REVISION	1.0.6.7
FIX FREQUENCY SOFTWARE	EspRFTestTool_v2.8
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	N/A

Note:

1. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. Please refer to the EUT photo document for detailed product photo. (Report NO.:FCC2023-0034-E)
4. Since the above data and/or information is provided by the client, CVC is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.
5. The EUT have SISO function, provides 1 completed transmitter and 1 receiver

2.2 OTHER INFORMATION

Operating frequency of each channel

2.4G WIFI					
802.11b/g/n(HT20)					
CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)
1	**2412**	5	2432	9	2452
2	2417	**6**	**2437**	10	2457
3	2422	7	2442	**11**	**2462**
4	2427	8	2447		
802.11/n(HT40)					
CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)
3	**2422**	**6**	**2437**	**9**	**2452**
4	2427	7	2442		
5	2432	8	2447		

BT-LE(1 Mbps+2Mbps)							
CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)
0	**2402**	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	**19**	**2440**	29	2460	**39**	**2480**

1. The channels which were indicated in bold type of the above channel list were selected as representative test channel. Therefore only the data of the test channels were recorded in this report.

2. By means of test software which provided by manufacture, the power levels during the tests were set

2.4G WIFI							
802.11b		802.11g		802.11n(HT20)		802.11n(HT40)	
FREQUENCY(MHZ)	POWER SETTING	FREQUENCY(MHZ)	POWER SETTING	FREQUENCY(MHZ)	POWER SETTING	FREQUENCY(MHZ)	POWER SETTING
2412	32	**2412**	32	**2412**	32	**2422**	12
2437	32	**2437**	32	**2437**	32	**2437**	32
2462	32	**2462**	32	**2462**	32	**2452**	32

BT-LE(1Mbps+2Mbps)					
GFSK					
CHANNEL	POWER SETTING	CHANNEL	POWER SETTING	CHANNEL	POWER SETTING
0	11	**19**	11	**39**	11

2.3 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, xyz axis and antenna ports

EUT CONFIGURE MODE	APPLICABLE TEST ITEMS				DESCRIPTION
	RE<1G	RE≥1G	PLC	APCM	
A	√	√	√	√	2.4G WIFI Function
B	√	√	√	√	BT Function

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

RADIATED EMISSION TEST (BELOW 1 GHz):

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

☒ The worst case was found when positioned on x axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11b	1 to 11	1	DSSS	DBPSK	1.0

For the test results, only the worst case was shown in test report.

RADIATED EMISSION TEST (ABOVE 1 GHz):

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

☒ The worst case was found when positioned on x axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE PARAMETER
A	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0 Mbps
A	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0 Mbps
A	802.11n(HT20)	1 to 11	1, 6, 11	OFDM	BPSK	MCS0
A	802.11n(HT40)	3 to 9	3, 6, 9	OFDM	BPSK	MCS0
B	BT-LE	0 to 39	0,19, 39	DTS	GFSK	1.0 Mbps
B	BT-LE	0 to 39	0,19, 39	DTS	GFSK	2.0 Mbps

POWER LINE CONDUCTED EMISSION TEST:

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

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

EUT CONFIGURE MODE	TESTED CONDITION
-	BT LINK + WIFI (2.4G) Link

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, antenna ports (if EUT with antenna diversity architecture), and packet types.

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

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0 Mbps
A	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0 Mbps
A	802.11n(HT20)	1 to 11	1, 6, 11	OFDM	BPSK	MCS0
A	802.11n(HT40)	3 to 9	3, 6, 9	OFDM	BPSK	MCS0
B	BT-LE	0 to 39	0,19, 39	DTS	GFSK	1.0 Mbps
B	BT-LE	0 to 39	0,19, 39	DTS	GFSK	2.0 Mbps

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	TEST VOLTAGE (SYSTEM)	TESTED BY
RE<1G	24deg. C, 55%RH	DC 3.89V from battery	Li Jialing
RE≥1G	24deg. C, 55%RH	DC 3.89V from battery	Li Jialing
PLC	24deg. C, 55%RH	DC 3.89V from battery	Li Jialing
APCM	25deg. C, 58%RH	DC 3.89V from battery	Li Jialing

2.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product, according to the specifications of the manufacturers. It must comply with the requirements of the following standards:

FCC PART 15, Subpart C. Section 15.247
KDB 558074 D01 15.247 Meas Guidance v05r02
KDB 662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2013

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

2.5 DESCRIPTION OF SUPPORT UNITS

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

Support Equipment					
NO	Description	Brand	Model No.	Serial Number	Supplied by
N/A	N/A	N/A	N/A	N/A	N/A

Support Cable							
NO	Description	Quantity (Number)	Length (cm)	Detachable (Yes/ No)	Shielded (Yes/ No)	Cores (Number)	Supplied by
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

3 TEST TYPES AND RESULTS

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 Limit

Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50
NOTE: 1. The lower limit shall apply at the transition frequencies. NOTE: 2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.		

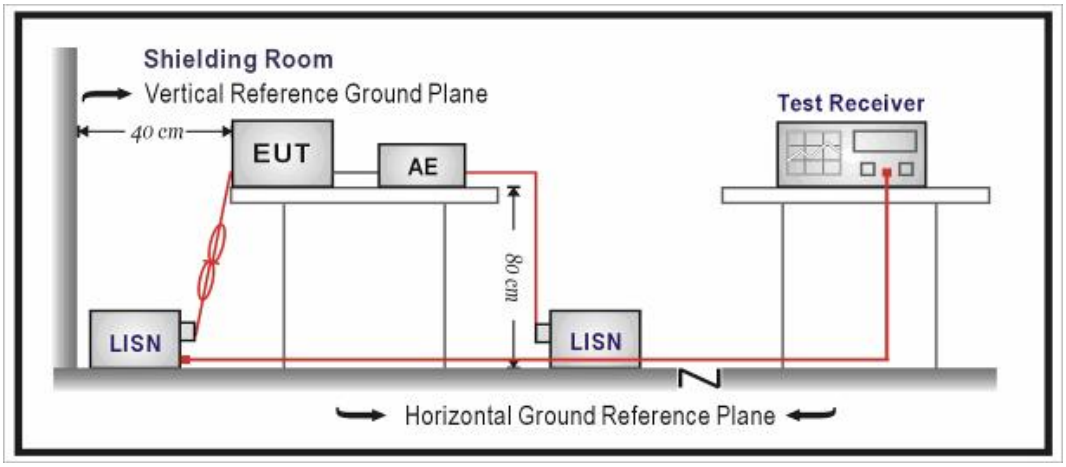
3.1.2 Measurement procedure

a. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the Test photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.The equipment under test shall be placed on a support of non-metallic material, the height of which shall be1.5m above the ground,

b. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

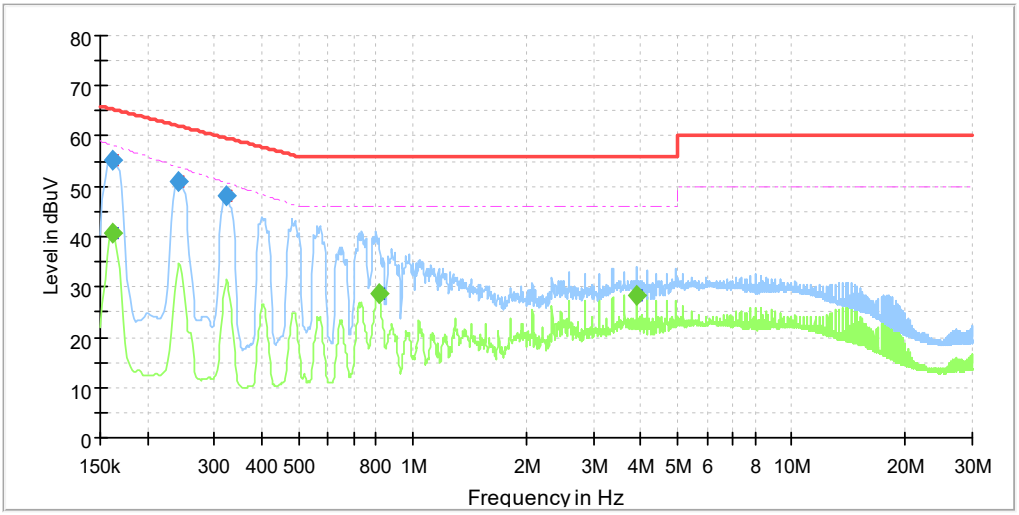
c. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

3.1.3 Test setup



3.1.4 Test results

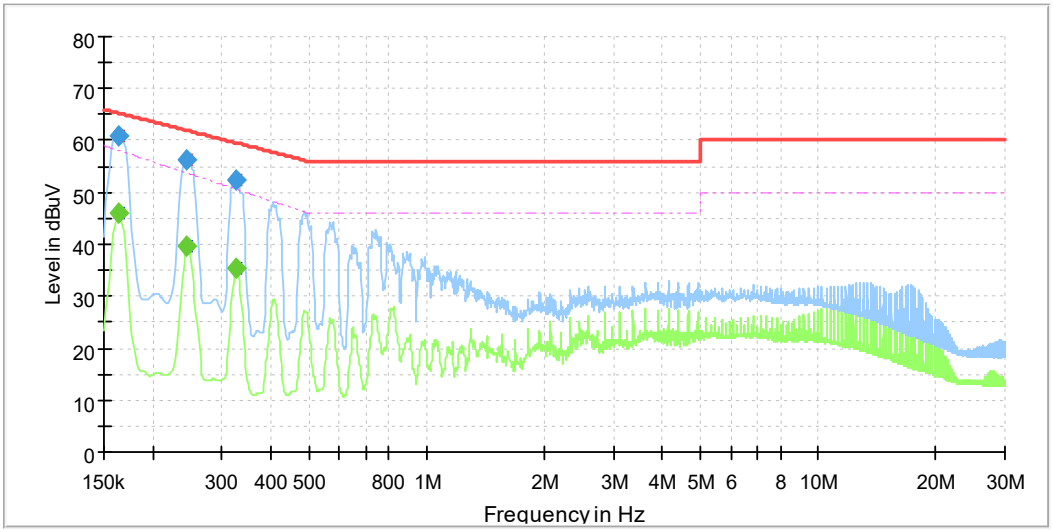
Test Mode	BT Link+2.4G WIFI Link	Frequency Range	150KHz ~ 30MHz
PHASE	Line (L)		



NO	Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr.Factor (dB)
1	0.161	55.4	---	65.4	10.0	L1	20.4
2	0.161	---	40.7	58.2	17.5	L1	20.4
3	0.242	51.0	---	62.0	11.0	L1	20.4
4	0.321	48.2	---	59.7	11.5	L1	20.5
5	0.816	---	28.8	46.0	17.2	L1	20.7
6	3.892	---	28.4	46.0	17.6	L1	20.7

Remark: The emission levels of other frequencies were very low against the limit.

Test Mode	BT Link+2.4G WIFI Link	Frequency Range	150KHz ~ 30MHz
PHASE	Line (N)		



NO	Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr.Factor (dB)
1	0.164	60.8	---	65.3	4.5	N	20.5
2	0.164	---	46.0	58.1	12.1	N	20.5
3	0.245	56.1	---	61.9	5.8	N	20.5
4	0.245	---	39.8	53.7	13.9	N	20.5
5	0.326	52.5	---	59.6	7.0	N	20.6
6	0.328	---	35.4	50.6	15.1	N	20.6

Remark: The emission levels of other frequencies were very low against the limit.

3.2 RADIATED EMISSION AND BANDEDGE MEASUREMENT

3.2.1 Limit

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

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.
NOTE: 2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
NOTE: 3. As shown in 15.35(b), 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.

3.2.2 Measurement procedure

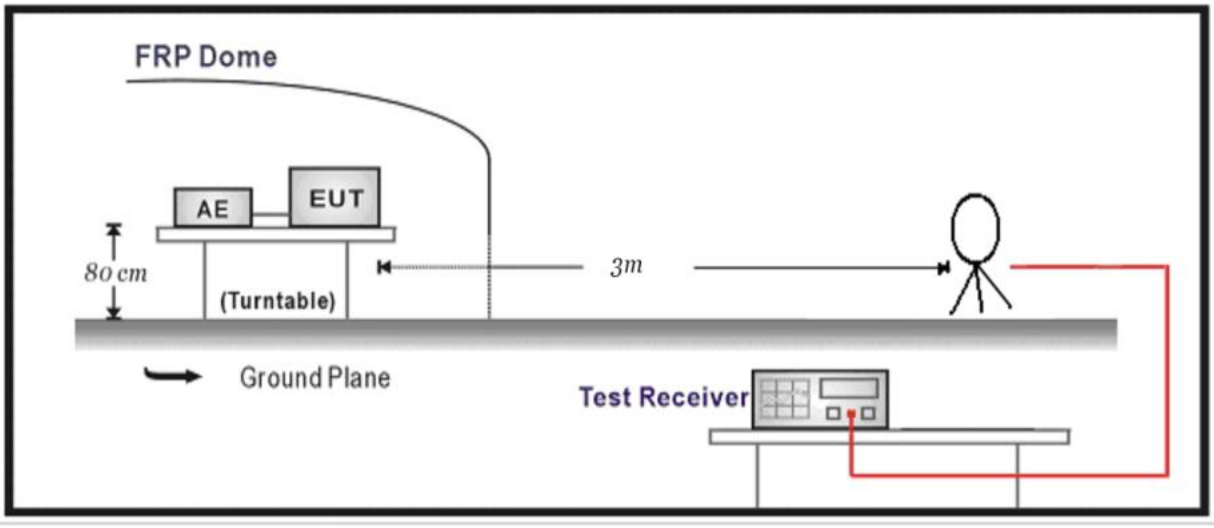
a. The EUT was placed on the top of a rotating table 1.5 meters(above 1GHz) and 0.8 meters(below 1GHz) above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. For below 1GHz was used bilog antenna, and above 1GHz was used horn antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. For below 30MHz, a loop antenna with its vertical plane is place 3m from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. And the centre of the loop shall be 1m above the ground.
g. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, For battery operated equipment, the equipment tests shall be perform using fresh batteries. The turntable was rotated to maximize the emission level.

NOTE:

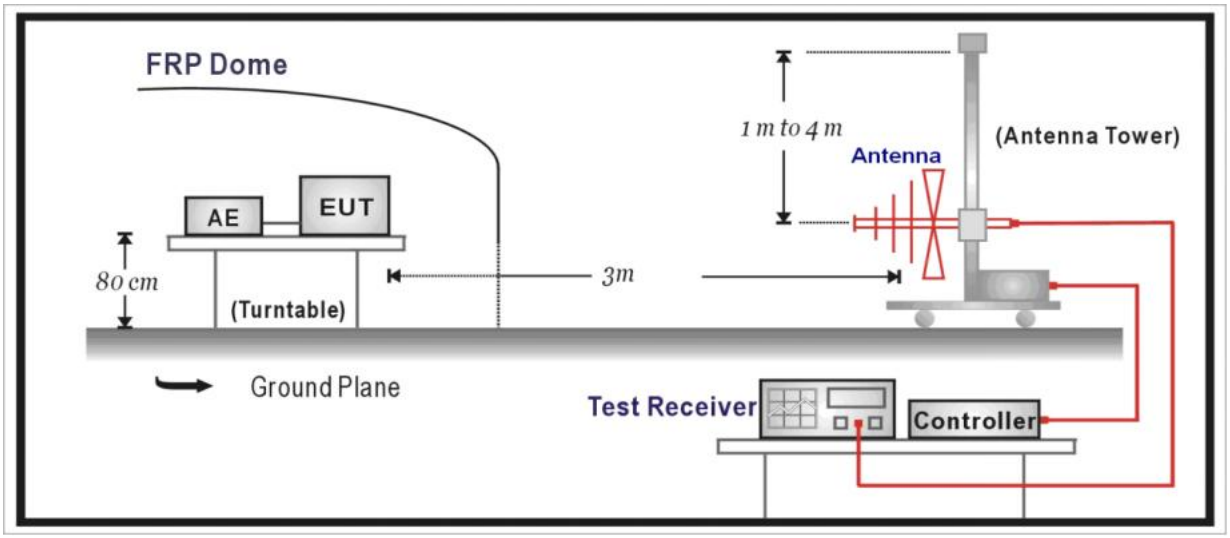
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ⩾ 1/T (Duty cycle < 98%) or 10Hz(Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.
5. The testing of the EUT was performed on all 3 orthogonal axes; the worst-case test configuration was reported on the file test setup photo.

3.2.3 Test setup

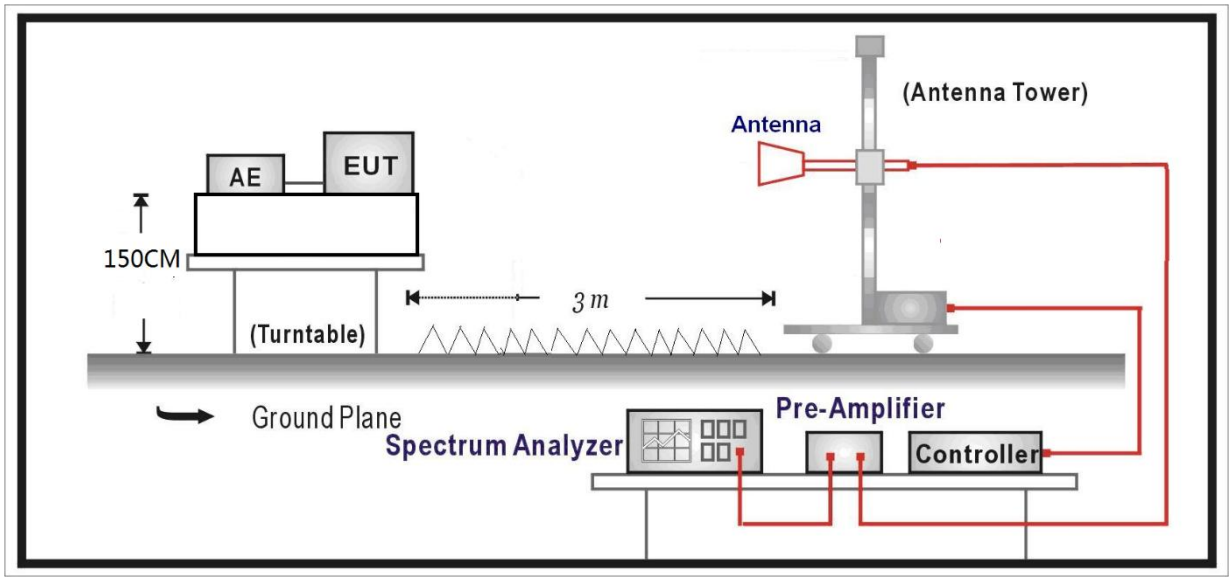
Below 30MHz Test Setup:



Below 1GHz Test Setup:



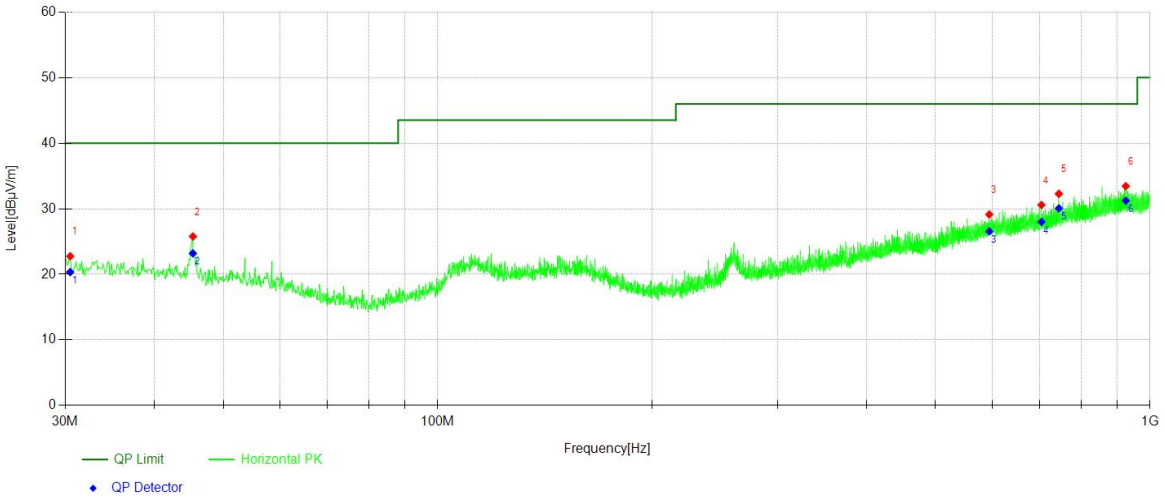
Above 1GHz Test Setup:



3.2.4 Test results

BELOW 1GHz WORST-CASE DATA:

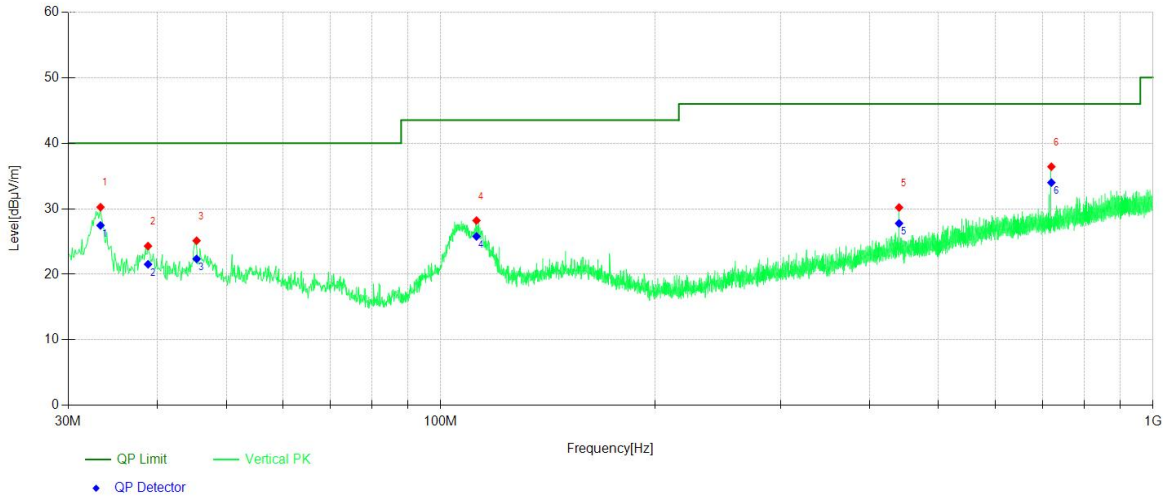
Worst Test Mode	802.11b	Channel	CH 1
Frequency Range	9KHz ~ 1GHz	Detector Function	Quasi-Peak (QP)



Final Data List							
NO.	Freq. [MHz]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	30.485	20.34	40.00	19.66	200	198	Horizontal
2	45.3275	23.20	40.00	16.80	100	243	Horizontal
3	594.7905	26.55	46.00	19.45	100	263	Horizontal
4	704.0234	28.00	46.00	18.00	200	118	Horizontal
5	744.8645	30.06	46.00	15.94	100	202	Horizontal
6	924.7205	31.23	46.00	14.77	100	162	Horizontal

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Worst Test Mode	802.11b	Channel	CH 1
Frequency Range	9KHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

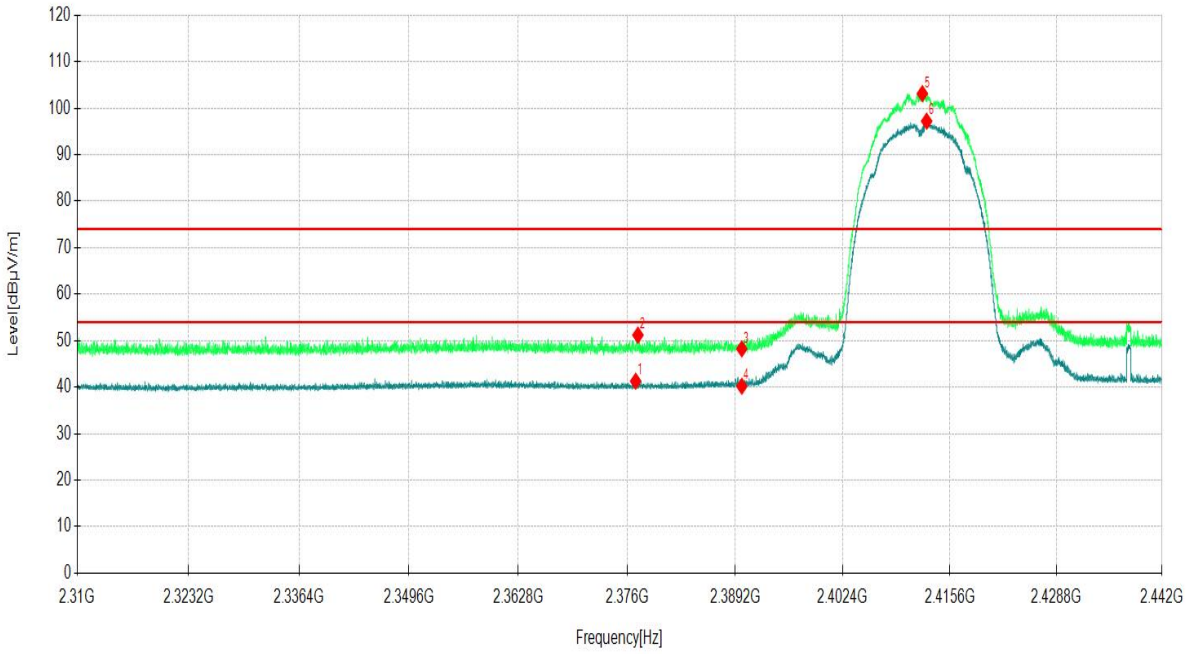


Final Data List							
NO.	Freq. [MHz]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	33.2983	27.46	40.00	12.54	100	359	Vertical
2	38.8279	21.53	40.00	18.47	100	212	Vertical
3	45.4245	22.35	40.00	17.65	100	273	Vertical
4	112.2642	25.78	43.50	17.72	100	360	Vertical
5	440.06	27.77	46.00	18.23	100	50	Vertical
6	720.03	33.99	46.00	12.01	100	263	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

ABOVE 1GHz DATA

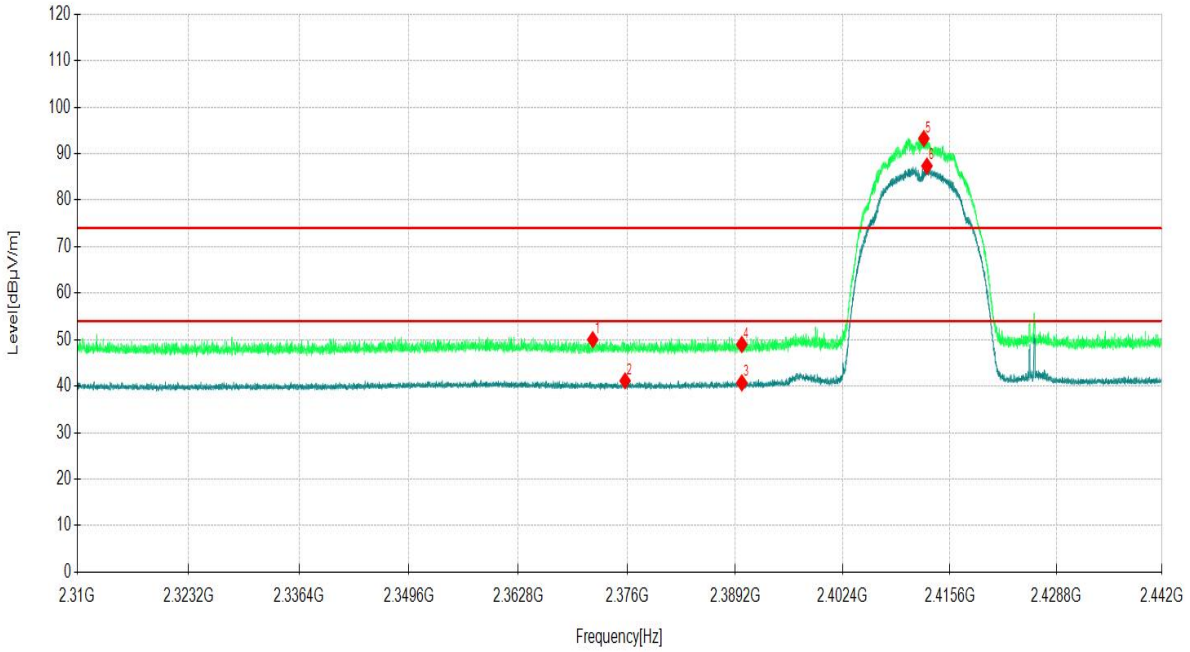
Channel	**802.11b CH 1**	**Frequency**	2412MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2377.04	41.57	-0.28	41.29	54.00	12.71	400	75	AV	Horizonta
2	2377.31	51.48	-0.28	51.20	74.00	22.80	100	167	PK	Horizonta
3	2390.00	48.38	-0.15	48.23	74.00	25.77	100	193	PK	Horizonta
4	2390.00	40.35	-0.15	40.20	54.00	13.80	300	82	AV	Horizonta
5	2412.20	102.95	0.16	103.11	74.00		400	75	PK	Horizonta
6	2412.73	97.04	0.16	97.20	54.00		100	75	AV	Horizonta
7	4824.09	42.36	9.68	52.04	54.00	1.96	300	264	AV	Horizonta
8	4824.75	49.08	9.69	58.77	74.00	15.23	100	274	PK	Horizonta
9	7234.92	26.18	12.40	38.58	54.00	15.42	400	255	AV	Horizonta
10	7237.26	32.99	12.37	45.36	74.00	28.64	400	270	PK	Horizonta
11	9647.70	23.43	13.14	36.57	54.00	17.43	100	300	AV	Horizonta
12	9963.64	29.22	13.74	42.96	74.00	31.04	400	245	PK	Horizonta

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Channel	**802.11b CH 1**	**Frequency**	2412MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2371.82	50.27	-0.27	50.00	74.00	24.00	300	147	PK	Vertical
2	2375.76	41.41	-0.27	41.14	54.00	12.86	200	73	AV	Vertical
3	2390.00	40.86	-0.15	40.71	54.00	13.29	100	255	AV	Vertical
4	2390.00	49.12	-0.15	48.97	74.00	25.03	200	3	PK	Vertical
5	2412.39	93.08	0.16	93.24	74.00		100	32	PK	Vertical
6	2412.77	87.19	0.16	87.35	54.00		400	32	AV	Vertical
7	4824.09	42.60	9.68	52.28	54.00	1.72	400	66	AV	Vertical
8	4824.09	49.78	9.68	59.46	74.00	14.54	400	66	PK	Vertical
9	7234.92	41.05	12.40	53.45	74.00	20.55	300	290	PK	Vertical
10	7234.92	34.73	12.40	47.13	54.00	6.87	100	296	AV	Vertical
11	9647.70	25.79	13.14	38.93	54.00	15.07	300	270	AV	Vertical
12	9647.70	30.77	13.14	43.91	74.00	30.09	300	275	PK	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Channel	**802.11b CH 6**	**Frequency**	2437MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV

Horizontal

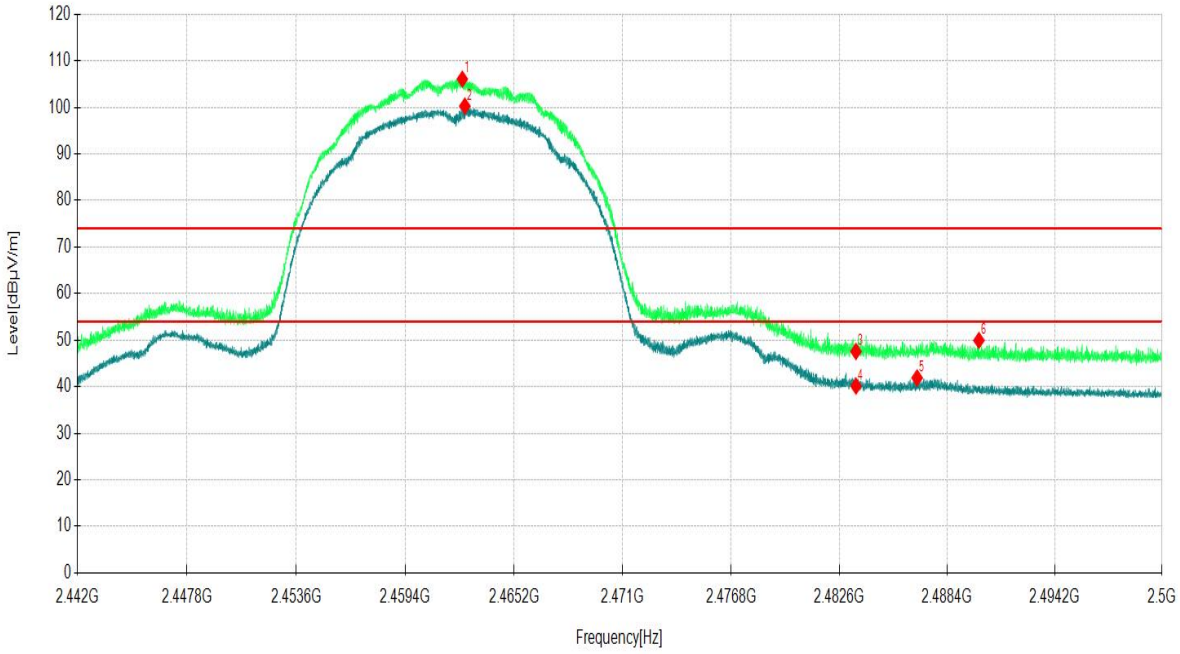
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	4873.27	43.07	9.69	52.76	54.00	1.24	400	243	AV
2	4873.93	53.37	9.69	63.06	74.00	10.94	400	243	PK
3	7308.64	33.66	11.06	44.72	74.00	29.28	100	262	PK
4	7312.15	27.58	11.03	38.61	54.00	15.39	300	180	AV
5	9748.33	23.99	13.24	37.23	54.00	16.77	400	232	AV
6	9748.33	32.02	13.24	45.26	74.00	28.74	400	232	PK

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4873.27	50.10	9.69	59.79	74.00	14.21	100	298	PK
2	4875.25	42.26	9.72	51.98	54.00	2.02	300	304	AV
3	7309.81	35.93	11.04	46.97	54.00	7.03	200	271	AV
4	7310.98	41.98	11.03	53.01	74.00	20.99	300	271	PK
5	9748.33	26.24	13.24	39.48	54.00	14.52	300	251	AV
6	9748.33	32.59	13.24	45.83	74.00	28.17	300	255	PK

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

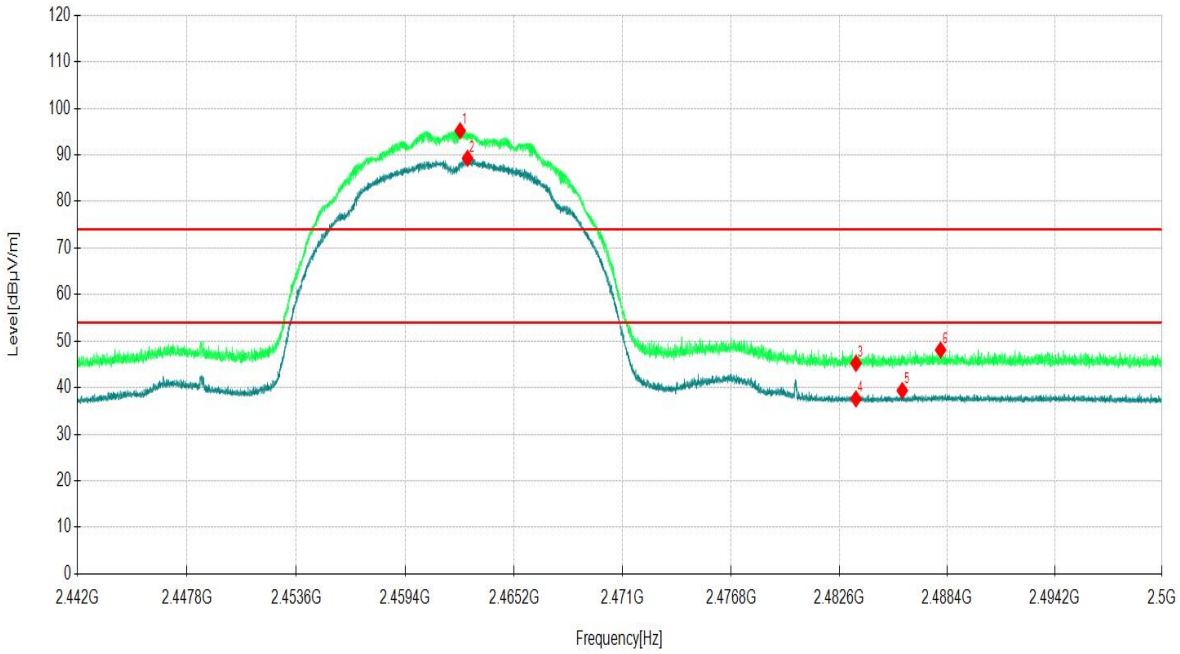
Channel	802.11b CH 11	Frequency	2462MHz
Frequency Range	Above 1G	Detector Function	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2462.44	105.42	0.64	106.06	74.00		300	72	PK	Horizonta
2	2462.57	99.64	0.63	100.27	54.00		100	72	AV	Horizonta
3	2483.50	47.12	0.45	47.57	74.00	26.43	300	65	PK	Horizonta
4	2483.50	39.69	0.45	40.14	54.00	13.86	400	72	AV	Horizonta
5	2486.79	41.31	0.59	41.90	54.00	12.10	100	72	AV	Horizonta
6	2490.12	49.22	0.72	49.94	74.00	24.06	200	72	PK	Horizonta
7	4923.43	53.01	10.16	63.17	74.00	10.83	100	244	PK	Horizonta
8	4930.69	42.24	9.96	52.20	54.00	1.80	400	244	AV	Horizonta
9	7383.53	34.85	9.87	44.72	74.00	29.28	200	180	PK	Horizonta
10	7383.53	29.12	9.87	38.99	54.00	15.01	400	180	AV	Horizonta
11	9847.79	24.05	13.24	37.29	54.00	16.71	100	299	AV	Horizonta
12	10245.6	28.63	13.80	42.43	74.00	31.57	300	3	PK	Horizonta

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

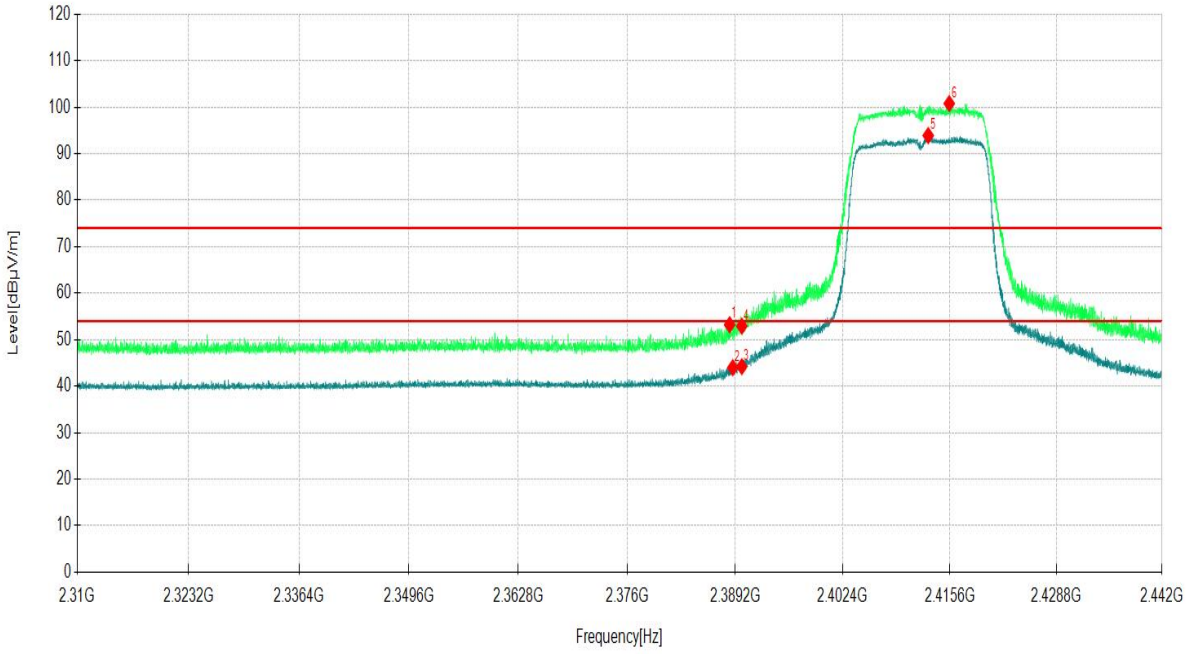
Channel	**802.11b CH 11**	**Frequency**	2462MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2462.3	94.54	0.63	95.17	74.00		100	110	PK	Vertical
2	2462.7	88.64	0.64	89.28	54.00		400	110	AV	Vertical
3	2483.5	44.78	0.45	45.23	74.00	28.77	300	263	PK	Vertical
4	2483.5	37.15	0.45	37.60	54.00	16.40	300	256	AV	Vertical
5	2485.9	38.84	0.55	39.39	54.00	14.61	300	276	AV	Vertical
6	2488.0	47.47	0.63	48.10	74.00	25.90	300	97	PK	Vertical
7	4920.1	41.68	10.27	51.95	54.00	2.05	300	309	AV	Vertical
8	4920.1	49.77	10.27	60.04	74.00	13.96	400	309	PK	Vertical
9	7384.7	36.77	9.85	46.62	54.00	7.38	100	296	AV	Vertical
10	7385.8	41.91	9.82	51.73	74.00	22.27	400	306	PK	Vertical
11	9847.7	33.08	13.24	46.32	74.00	27.68	300	256	PK	Vertical
12	9847.7	27.45	13.24	40.69	54.00	13.31	200	252	AV	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

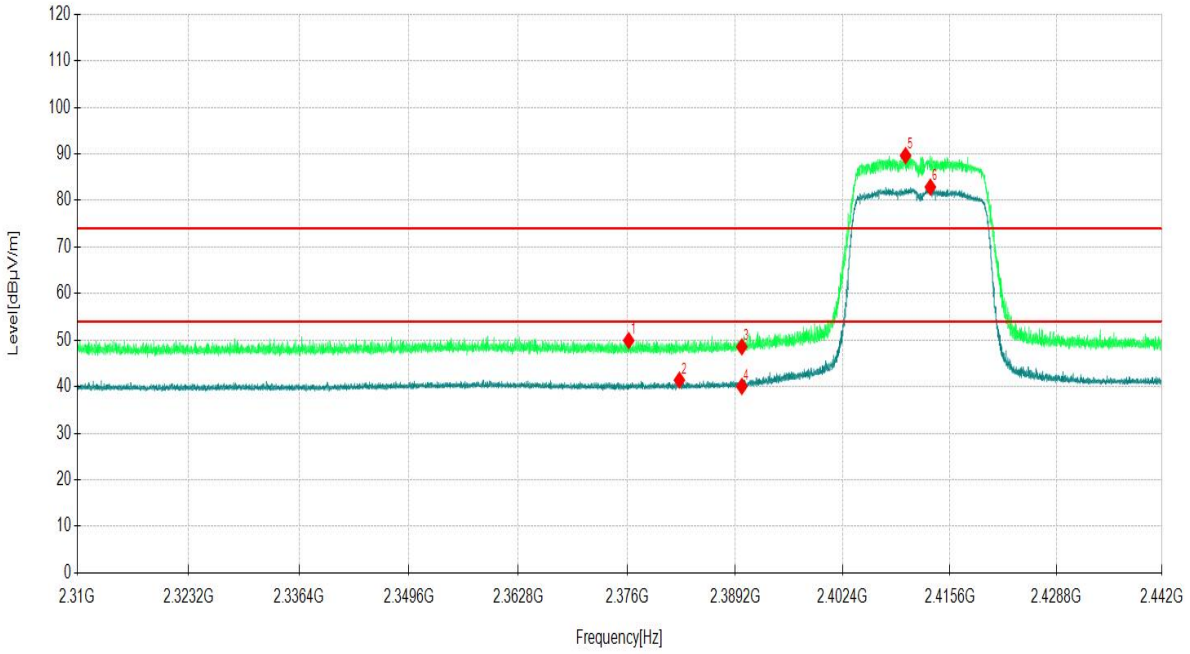
Channel	**802.11g CH 1**	**Frequency**	2412MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2388.51	53.39	-0.17	53.22	74.00	20.78	200	56	PK	Horizonta
2	2388.89	44.14	-0.16	43.98	54.00	10.02	300	169	AV	Horizonta
3	2390.00	44.36	-0.15	44.21	54.00	9.79	200	63	AV	Horizonta
4	2390.00	53.06	-0.15	52.91	74.00	21.09	100	156	PK	Horizonta
5	2412.93	93.73	0.17	93.90	54.00		200	76	AV	Horizonta
6	2415.53	100.56	0.21	100.77	74.00		100	76	PK	Horizonta
7	4825.41	42.48	9.70	52.18	54.00	1.82	100	267	AV	Horizonta
8	4825.74	51.73	9.70	61.43	74.00	12.57	400	128	PK	Horizonta
9	7230.24	24.60	12.48	37.08	54.00	16.92	400	259	AV	Horizonta
10	7233.75	32.63	12.42	45.05	74.00	28.95	300	264	PK	Horizonta
11	9648.87	21.54	13.13	34.67	54.00	19.33	200	244	AV	Horizonta
12	9648.87	30.09	13.13	43.22	74.00	30.78	400	244	PK	Horizonta

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Channel	**802.11g CH 1**	**Frequency**	2412MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2376.19	50.19	-0.27	49.92	74.00	24.08	200	91	PK	Vertical
2	2382.37	41.67	-0.26	41.41	54.00	12.59	300	302	AV	Vertical
3	2390.00	48.72	-0.15	48.57	74.00	25.43	200	104	PK	Vertical
4	2390.00	40.21	-0.15	40.06	54.00	13.94	200	349	AV	Vertical
5	2410.13	89.51	0.13	89.64	74.00		300	38	PK	Vertical
6	2413.19	82.71	0.17	82.88	54.00		200	38	AV	Vertical
7	4825.41	48.11	9.70	57.81	74.00	16.19	400	351	PK	Vertical
8	4831.02	38.75	9.79	48.54	54.00	5.46	300	311	AV	Vertical
9	7238.43	41.68	12.35	54.03	74.00	19.97	400	298	PK	Vertical
10	7238.43	32.27	12.35	44.62	54.00	9.38	300	298	AV	Vertical
11	9643.02	30.86	13.19	44.05	74.00	29.95	400	353	PK	Vertical
12	9647.70	21.94	13.14	35.08	54.00	18.92	200	288	AV	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Channel	**802.11g CH 6**	**Frequency**	2437MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV

Horizontal

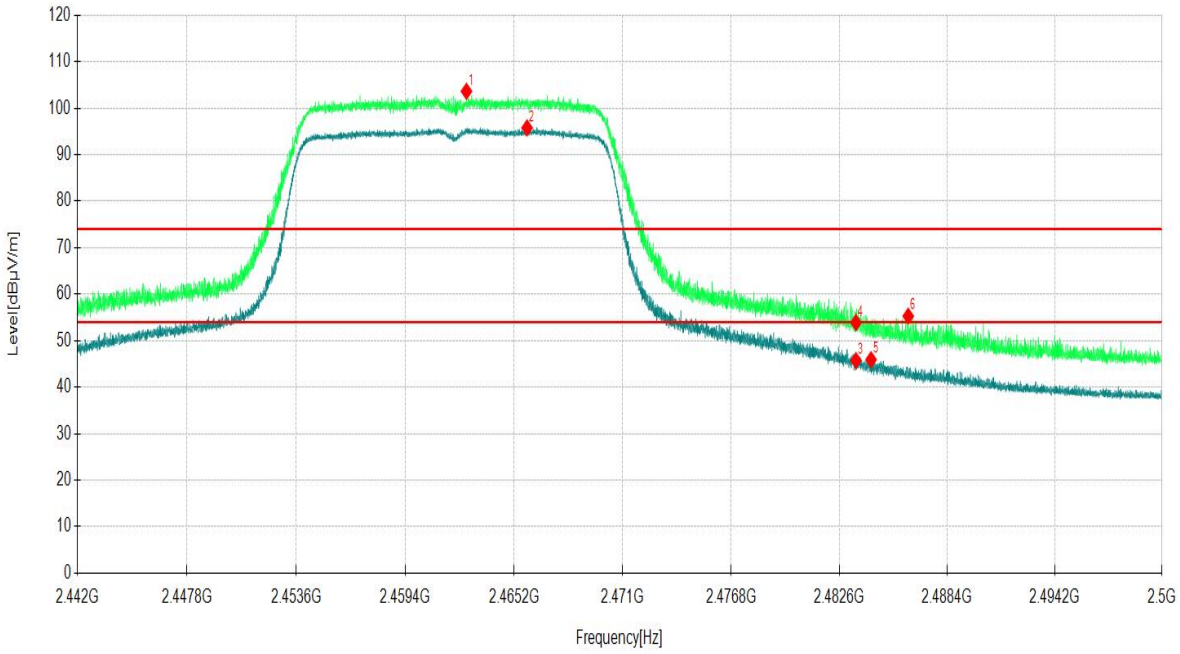
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	4868.98	42.39	9.62	52.01	54.00	1.99	100	242	AV
2	4879.21	52.83	9.78	62.61	74.00	11.39	100	242	PK
3	7312.15	34.45	11.03	45.48	74.00	28.52	100	183	PK
4	7314.49	25.95	11.03	36.98	54.00	17.02	300	261	AV
5	9749.51	20.59	13.24	33.83	54.00	20.17	100	250	AV
6	9753.02	29.64	13.24	42.88	74.00	31.12	300	357	PK

Vertical

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4874.92	42.49	9.71	52.20	54.00	1.80	400	304	AV
2	4875.91	51.33	9.72	61.05	74.00	12.95	200	304	PK
3	7308.64	41.87	11.06	52.93	74.00	21.07	400	270	PK
4	7308.64	34.14	11.06	45.20	54.00	8.80	100	270	AV
5	9744.82	30.04	13.22	43.26	74.00	30.74	200	281	PK
6	9747.16	21.25	13.22	34.47	54.00	19.53	400	255	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

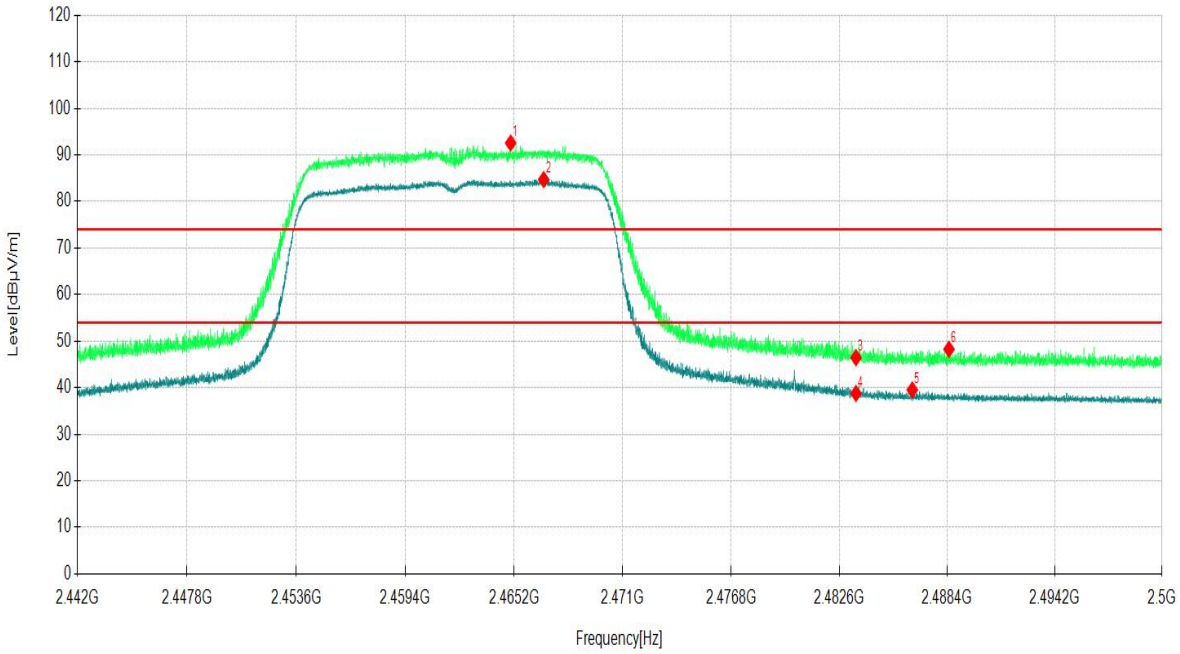
Channel	**802.11g CH 11**	**Frequency**	2462MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2462.66	102.99	0.63	103.62	74.00		100	68	PK	Horizonta
2	2465.89	95.02	0.73	95.75	54.00		300	68	AV	Horizonta
3	2483.50	45.28	0.45	45.73	54.00	8.27	200	68	AV	Horizonta
4	2483.50	53.43	0.45	53.88	74.00	20.12	100	68	PK	Horizonta
5	2484.31	45.43	0.48	45.91	54.00	8.09	100	68	AV	Horizonta
6	2486.31	54.70	0.57	55.27	74.00	18.73	300	68	PK	Horizonta
7	4917.49	41.14	10.23	51.37	54.00	2.63	300	240	AV	Horizonta
8	4922.11	52.04	10.21	62.25	74.00	11.75	300	240	PK	Horizonta
9	7380.02	33.63	9.95	43.58	74.00	30.42	400	266	PK	Horizonta
1	7383.53	26.63	9.87	36.50	54.00	17.50	300	195	AV	Horizonta
1	9847.79	20.74	13.24	33.98	54.00	20.02	200	241	AV	Horizonta
1	9850.14	30.52	13.24	43.76	74.00	30.24	300	287	PK	Horizonta

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

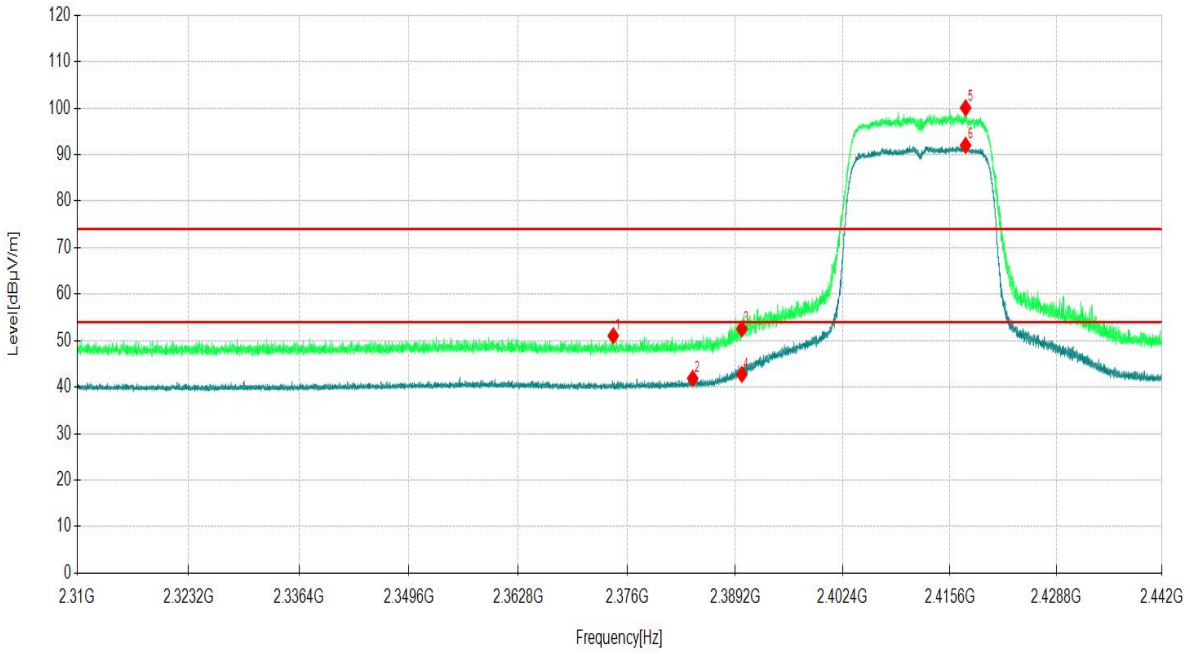
Channel	802.11g CH 11	Frequency	2462MHz
Frequency Range	Above 1G	Detector Function	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2465.01	91.84	0.71	92.55	74.00		100	119	PK	Vertical
2	2466.77	83.94	0.76	84.70	54.00		400	119	AV	Vertical
3	2483.50	46.00	0.45	46.45	74.00	27.55	200	112	PK	Vertical
4	2483.50	38.31	0.45	38.76	54.00	15.24	400	112	AV	Vertical
5	2486.53	38.94	0.58	39.52	54.00	14.48	300	284	AV	Vertical
6	2488.50	47.59	0.66	48.25	74.00	25.75	100	284	PK	Vertical
7	4917.49	41.82	10.23	52.05	54.00	1.95	400	315	AV	Vertical
8	4918.15	50.30	10.24	60.54	74.00	13.46	100	86	PK	Vertical
9	7383.53	34.98	9.87	44.85	54.00	9.15	400	284	AV	Vertical
10	7384.70	43.19	9.85	53.04	74.00	20.96	400	294	PK	Vertical
11	9847.79	29.63	13.24	42.87	74.00	31.13	400	334	PK	Vertical
12	9852.48	21.52	13.26	34.78	54.00	19.22	400	269	AV	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

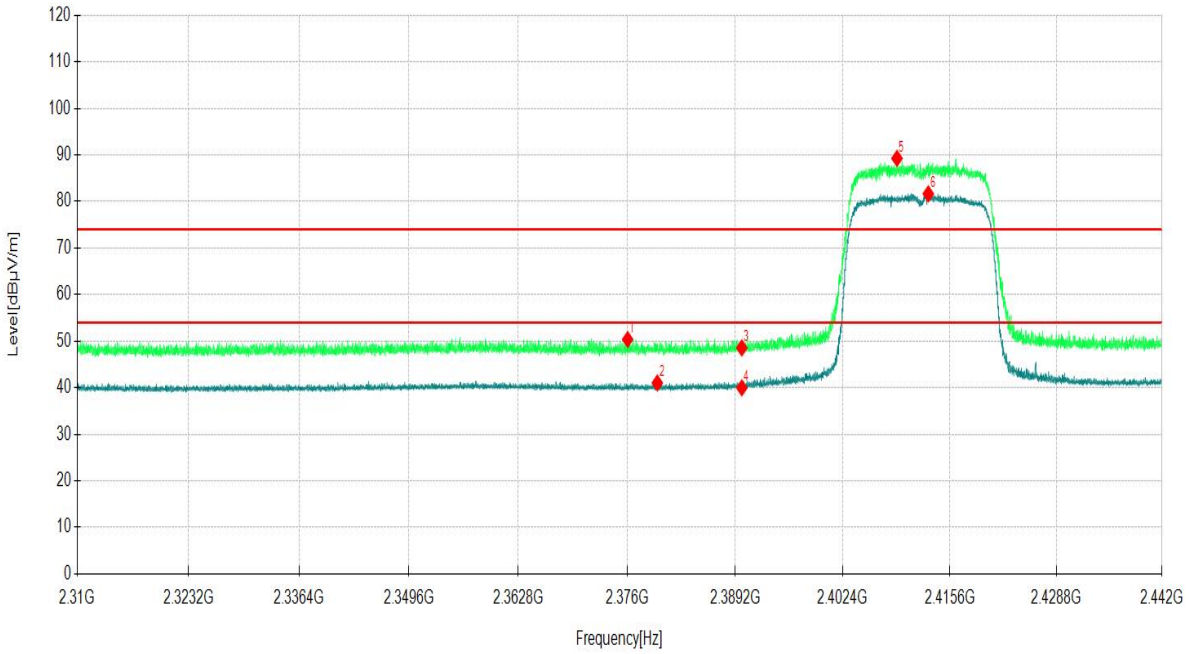
Channel	**802.11n20 CH 1**	**Frequency**	2412MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2374.32	51.32	-0.27	51.05	74.00	22.95	400	175	PK	Horizonta
2	2383.99	42.13	-0.24	41.89	54.00	12.11	300	55	AV	Horizonta
3	2390.00	52.69	-0.15	52.54	74.00	21.46	100	175	PK	Horizonta
4	2390.00	42.89	-0.15	42.74	54.00	11.26	100	162	AV	Horizonta
5	2417.55	99.83	0.23	100.06	74.00		200	75	PK	Horizonta
6	2417.55	91.77	0.23	92.00	54.00		100	75	AV	Horizonta
7	4828.38	40.13	9.76	49.89	54.00	4.11	300	264	AV	Horizonta
8	4829.04	47.75	9.77	57.52	74.00	16.48	400	179	PK	Horizonta
9	7659.68	31.25	12.44	43.69	74.00	30.31	300	62	PK	Horizonta
1	7748.60	21.43	12.86	34.29	54.00	19.71	400	1	AV	Horizonta
1	9771.74	29.05	13.20	42.25	74.00	31.75	400	316	PK	Horizonta
1	9957.79	20.09	13.74	33.83	54.00	20.17	300	166	AV	Horizonta

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Channel	**802.11n20 CH 1**	**Frequency**	2412MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2376.06	50.63	-0.27	50.36	74.00	23.64	400	114	PK	Vertical
2	2379.68	41.32	-0.29	41.03	54.00	12.97	200	74	AV	Vertical
3	2390.00	48.70	-0.15	48.55	74.00	25.45	200	341	PK	Vertical
4	2390.00	40.13	-0.15	39.98	54.00	14.02	100	195	AV	Vertical
5	2409.08	89.15	0.10	89.25	74.00		100	28	PK	Vertical
6	2412.94	81.46	0.17	81.63	54.00		100	35	AV	Vertical
7	4825.74	46.80	9.70	56.50	74.00	17.50	400	70	PK	Vertical
8	4827.06	37.75	9.73	47.48	54.00	6.52	300	303	AV	Vertical
9	7232.58	37.41	12.44	49.85	74.00	24.15	400	265	PK	Vertical
10	7234.92	30.06	12.40	42.46	54.00	11.54	400	296	AV	Vertical
11	9647.70	21.53	13.14	34.67	54.00	19.33	400	307	AV	Vertical
12	9647.70	30.14	13.14	43.28	74.00	30.72	300	281	PK	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Channel	**802.11n20 CH 6**	**Frequency**	2437MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV

Horizontal

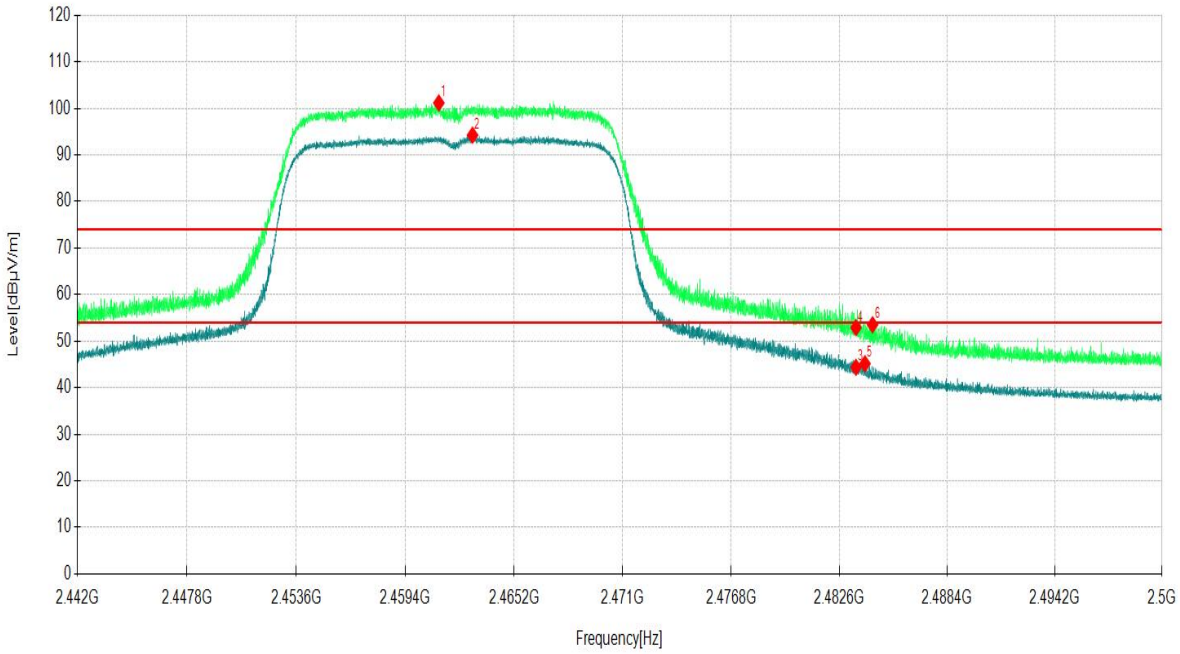
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	4874.92	51.57	9.71	61.28	74.00	12.72	200	183	PK
2	4877.23	42.18	9.75	51.93	54.00	2.07	200	238	AV
3	7179.93	30.51	12.45	42.96	74.00	31.04	200	67	PK
4	7184.61	22.01	12.56	34.57	54.00	19.43	100	1	AV
5	8841.49	30.14	13.28	43.42	74.00	30.58	300	234	PK
6	8908.19	21.31	12.96	34.27	54.00	19.73	300	169	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4870.30	47.87	9.64	57.51	74.00	16.49	300	243	PK
2	4871.29	40.03	9.65	49.68	54.00	4.32	100	304	AV
3	7310.98	29.62	11.03	40.65	54.00	13.35	300	273	AV
4	7318.00	37.52	11.03	48.55	74.00	25.45	300	278	PK
5	9613.77	29.20	13.34	42.54	74.00	31.46	300	328	PK
6	9678.13	20.27	13.14	33.41	54.00	20.59	300	120	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

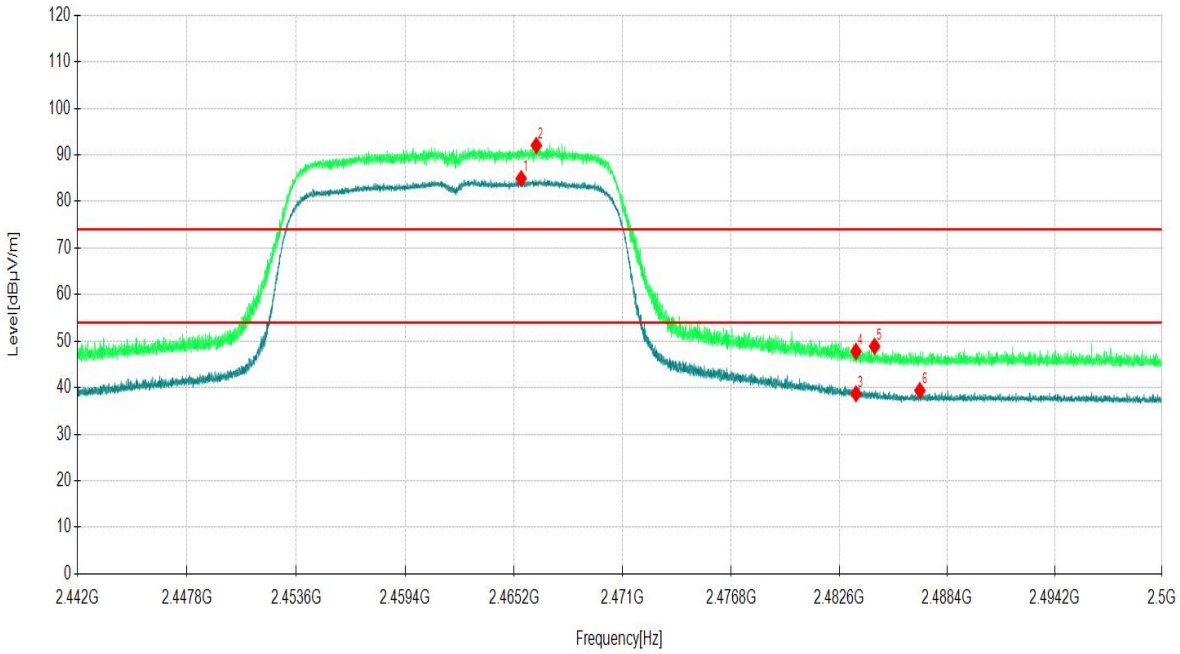
Channel	**802.11n20 CH 11**	**Frequency**	2462MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2461.18	100.55	0.60	101.15	74.00		300	65	PK	Horizonta
2	2462.98	93.59	0.65	94.24	54.00		200	65	AV	Horizonta
3	2483.50	43.93	0.45	44.38	54.00	9.62	100	72	AV	Horizonta
4	2483.50	52.45	0.45	52.90	74.00	21.10	100	72	PK	Horizonta
5	2483.98	44.67	0.48	45.15	54.00	8.85	300	72	AV	Horizonta
6	2484.39	53.04	0.49	53.53	74.00	20.47	400	65	PK	Horizonta
7	4915.18	50.60	10.19	60.79	74.00	13.21	200	238	PK	Horizonta
8	4928.05	42.68	10.00	52.68	54.00	1.32	200	243	AV	Horizonta
9	7387.04	32.12	9.80	41.92	74.00	32.08	300	190	PK	Horizonta
10	7388.21	24.24	9.78	34.02	54.00	19.98	200	190	AV	Horizonta
11	9609.09	29.43	13.32	42.75	74.00	31.25	400	231	PK	Horizonta
12	9639.51	20.38	13.22	33.60	54.00	20.40	400	32	AV	Horizonta

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

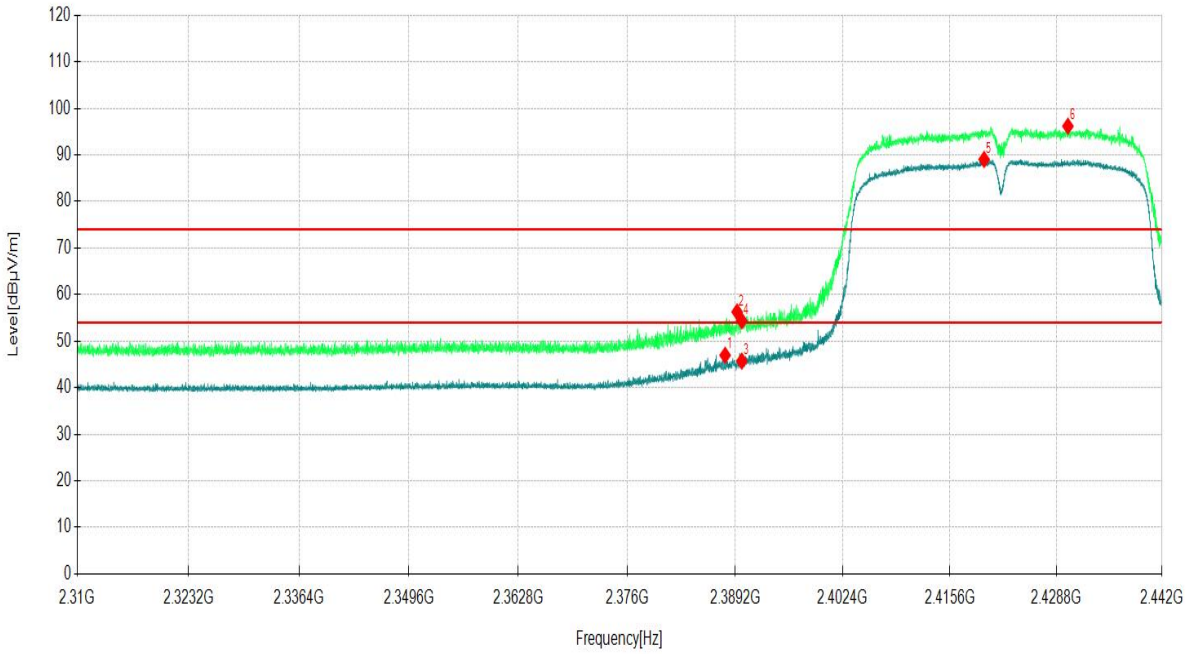
Channel	802.11n20 CH 11	Frequency	2462MHz
Frequency Range	Above 1G	Detector Function	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2465.57	84.19	0.73	84.92	54.00		300	121	AV	Vertical
2	2466.38	91.29	0.74	92.03	74.00		400	114	PK	Vertical
3	2483.50	38.25	0.45	38.70	54.00	15.30	300	338	AV	Vertical
4	2483.50	47.35	0.45	47.80	74.00	26.20	300	284	PK	Vertical
5	2484.50	48.39	0.50	48.89	74.00	25.11	300	297	PK	Vertical
6	2486.94	38.80	0.60	39.40	54.00	14.60	100	291	AV	Vertical
7	4926.73	41.54	10.04	51.58	54.00	2.42	200	316	AV	Vertical
8	4928.71	50.62	9.97	60.59	74.00	13.41	100	316	PK	Vertical
9	7385.87	39.14	9.82	48.96	74.00	25.04	400	284	PK	Vertical
10	7385.87	30.72	9.82	40.54	54.00	13.46	200	284	AV	Vertical
11	9581.01	29.18	13.32	42.50	74.00	31.50	300	128	PK	Vertical
12	9600.90	20.38	13.35	33.73	54.00	20.27	200	2	AV	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

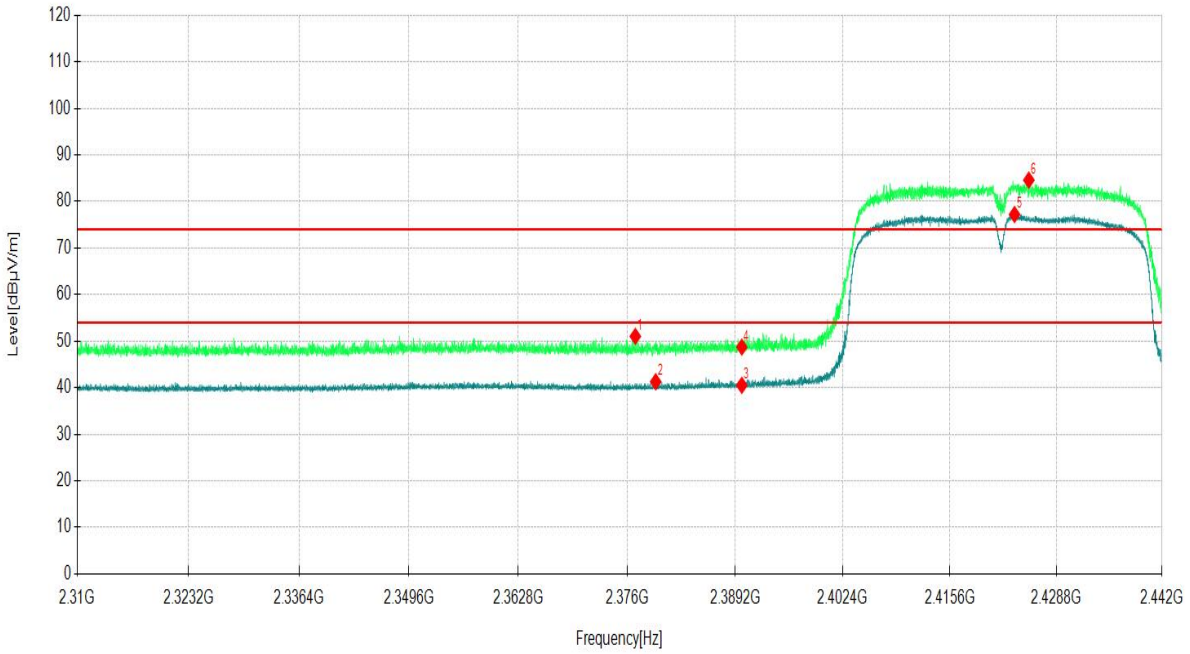
Channel	**802.11n40 CH 3**	**Frequency**	2422MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2387.95	47.15	-0.18	46.97	54.00	7.03	300	177	AV	Horizonta
2	2389.42	56.45	-0.16	56.29	74.00	17.71	300	78	PK	Horizonta
3	2390.00	45.86	-0.15	45.71	54.00	8.29	400	164	AV	Horizonta
4	2390.00	54.50	-0.15	54.35	74.00	19.65	100	59	PK	Horizonta
5	2419.85	88.76	0.26	89.02	54.00		300	78	AV	Horizonta
6	2430.26	95.80	0.36	96.16	74.00		300	177	PK	Horizonta
7	4844.00	45.34	9.94	55.28	74.00	18.72	400	359	PK	Horizonta
8	4844.00	37.12	9.94	47.06	54.00	6.94	400	269	AV	Horizonta
9	7266.00	20.31	12.00	32.31	54.00	21.69	400	208	AV	Horizonta
10	7266.00	28.35	12.00	40.35	74.00	33.65	200	258	PK	Horizonta
11	9688.00	27.62	13.15	40.77	74.00	33.23	200	61	PK	Horizonta
12	9688.00	19.07	13.15	32.22	54.00	21.78	100	127	AV	Horizonta

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Channel	**802.11n40 CH 3**	**Frequency**	2422MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2377.00	51.32	-0.28	51.04	74.00	22.96	300	226	PK	Vertical
2	2379.48	41.58	-0.29	41.29	54.00	12.71	200	260	AV	Vertical
3	2390.00	40.66	-0.15	40.51	54.00	13.49	300	266	AV	Vertical
4	2390.00	48.87	-0.15	48.72	74.00	25.28	400	62	PK	Vertical
5	2423.62	76.91	0.29	77.20	54.00		300	260	AV	Vertical
6	2425.41	84.28	0.30	84.58	74.00		200	260	PK	Vertical
7	4844.00	35.41	9.94	45.35	54.00	8.65	300	344	AV	Vertical
8	4844.00	43.98	9.94	53.92	74.00	20.08	400	82	PK	Vertical
9	7266.00	32.23	12.00	44.23	74.00	29.77	100	318	PK	Vertical
10	7266.00	25.33	12.00	37.33	54.00	16.67	200	302	AV	Vertical
11	9688.00	19.59	13.15	32.74	54.00	21.26	100	343	AV	Vertical
12	9688.00	27.93	13.15	41.08	74.00	32.92	200	272	PK	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Channel	802.11n40 CH 6	Frequency	2437MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

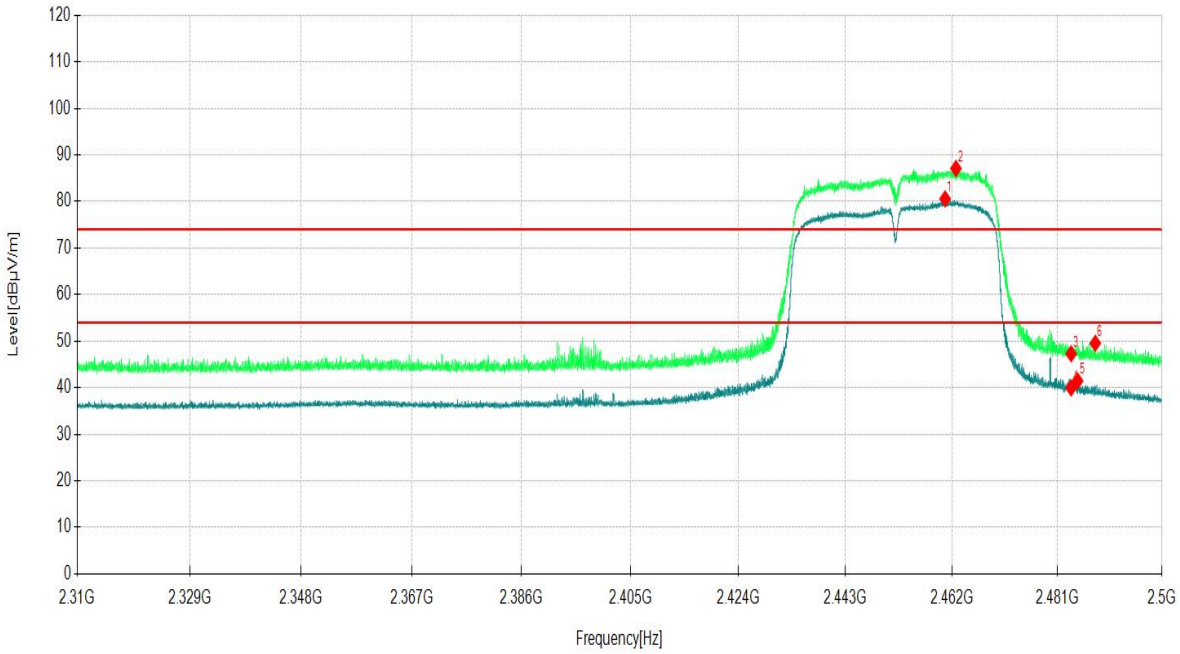
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	4874.00	44.20	9.71	53.91	74.00	20.09	300	324	PK
2	4874.00	36.92	9.71	46.63	54.00	7.37	400	309	AV
3	7311.00	33.07	11.03	44.10	74.00	29.90	300	297	PK
4	7311.00	25.81	11.03	36.84	54.00	17.16	100	302	AV
5	9748.00	27.59	13.24	40.83	74.00	33.17	400	333	PK
6	9748.00	20.25	13.24	33.49	54.00	20.51	200	338	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4874.00	36.00	9.71	45.71	54.00	8.29	200	304	AV
2	4874.00	44.25	9.71	53.96	74.00	20.04	100	96	PK
3	7311.00	25.48	11.03	36.51	54.00	17.49	300	271	AV
4	7311.00	33.75	11.03	44.78	74.00	29.22	200	271	PK
5	9748.00	19.62	13.24	32.86	54.00	21.14	200	277	AV
6	9748.00	27.94	13.24	41.18	74.00	32.82	400	277	PK

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

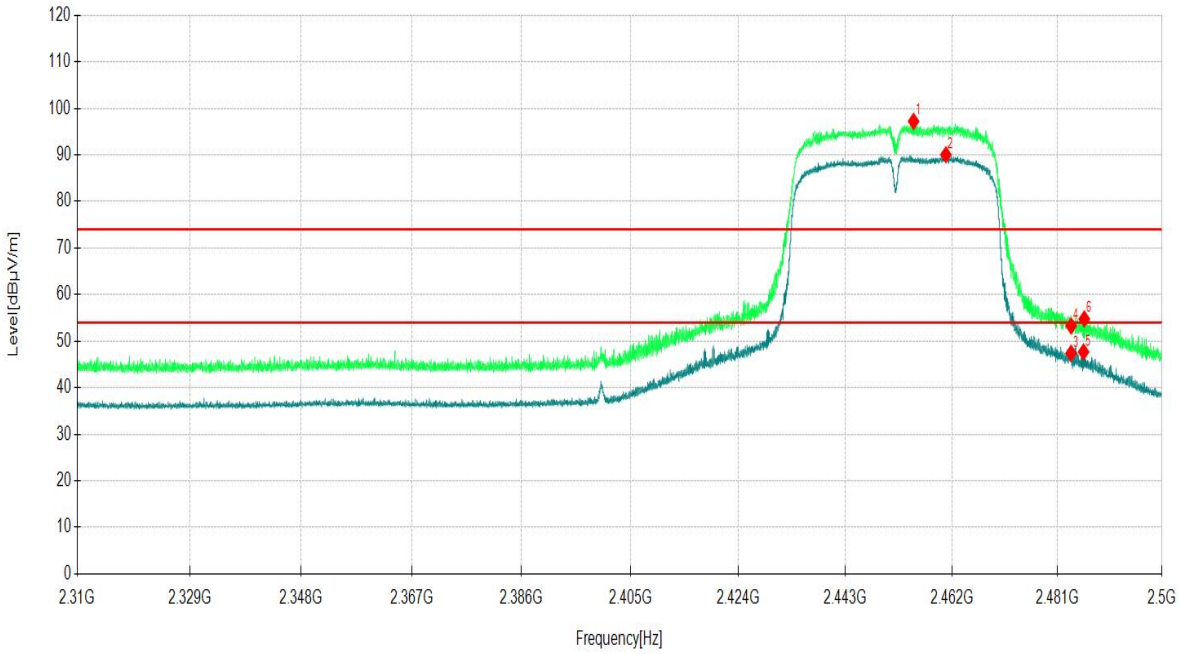
Channel	802.11n40 CH 9	Frequency	2452MHz
Frequency Range	Above 1G	Detector Function	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2460.80	79.95	0.60	80.55	54.00		400	115	AV	Horizonta
2	2462.74	86.44	0.64	87.08	74.00		300	120	PK	Horizonta
3	2483.50	46.84	0.45	47.29	74.00	26.71	300	105	PK	Horizonta
4	2483.50	39.51	0.45	39.96	54.00	14.04	300	120	AV	Horizonta
5	2484.67	40.97	0.51	41.48	54.00	12.52	100	282	AV	Horizonta
6	2487.88	48.91	0.63	49.54	74.00	24.46	100	288	PK	Horizonta
7	4904.00	44.39	10.10	54.49	74.00	19.51	300	90	PK	Horizonta
8	4904.00	36.57	10.10	46.67	54.00	7.33	300	304	AV	Horizonta
9	7356.00	33.64	10.31	43.95	74.00	30.05	200	282	PK	Horizonta
10	7356.00	25.40	10.31	35.71	54.00	18.29	300	293	AV	Horizonta
11	9808.00	28.70	13.20	41.90	74.00	32.10	400	339	PK	Horizonta
12	9808.00	20.91	13.20	34.11	54.00	19.89	400	288	AV	Horizonta

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

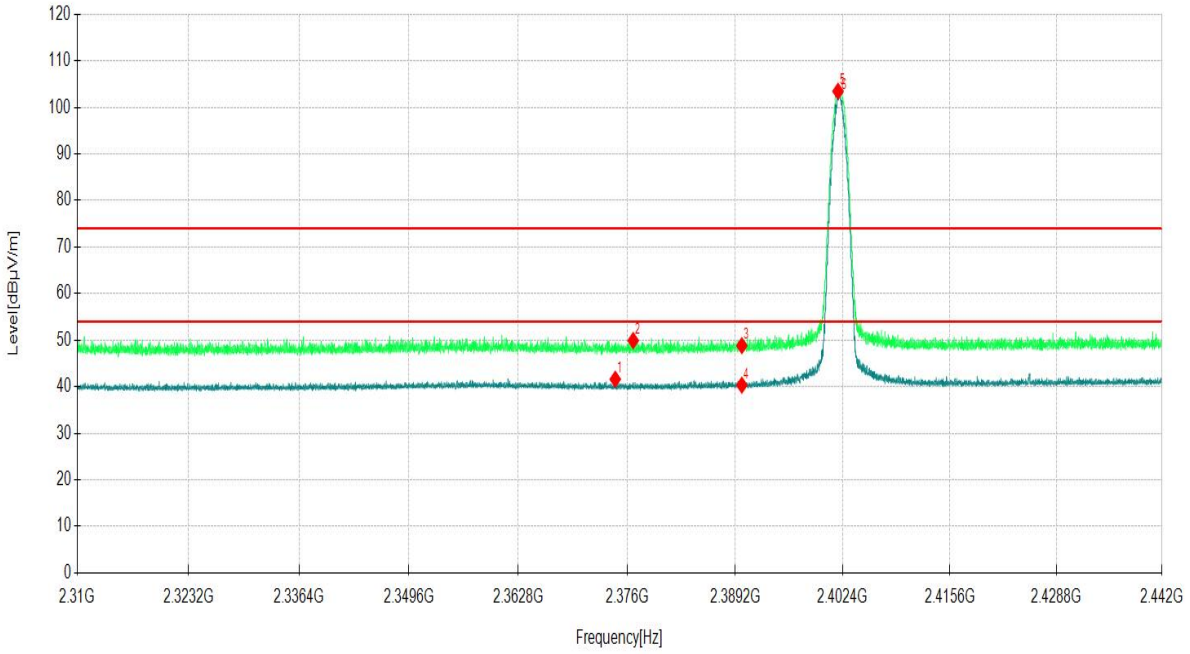
Channel	802.11n40 CH 9	Frequency	2452MHz
Frequency Range	Above 1G	Detector Function	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2455.16	96.63	0.57	97.20	74.00		300	70	PK	Vertical
2	2460.93	89.45	0.59	90.04	54.00		300	70	AV	Vertical
3	2483.50	46.95	0.45	47.40	54.00	6.60	300	81	AV	Vertical
4	2483.50	52.82	0.45	53.27	74.00	20.73	400	81	PK	Vertical
5	2485.75	47.14	0.55	47.69	54.00	6.31	100	70	AV	Vertical
6	2485.88	54.22	0.55	54.77	74.00	19.23	300	70	PK	Vertical
7	4904.00	38.80	10.10	48.90	54.00	5.10	300	186	AV	Vertical
8	4904.00	47.52	10.10	57.62	74.00	16.38	400	236	PK	Vertical
9	7356.00	21.87	10.31	32.18	54.00	21.82	400	191	AV	Vertical
10	7356.00	29.11	10.31	39.42	74.00	34.58	100	191	PK	Vertical
11	9808.00	20.41	13.20	33.61	54.00	20.39	400	248	AV	Vertical
12	9808.00	28.61	13.20	41.81	74.00	32.19	100	248	PK	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

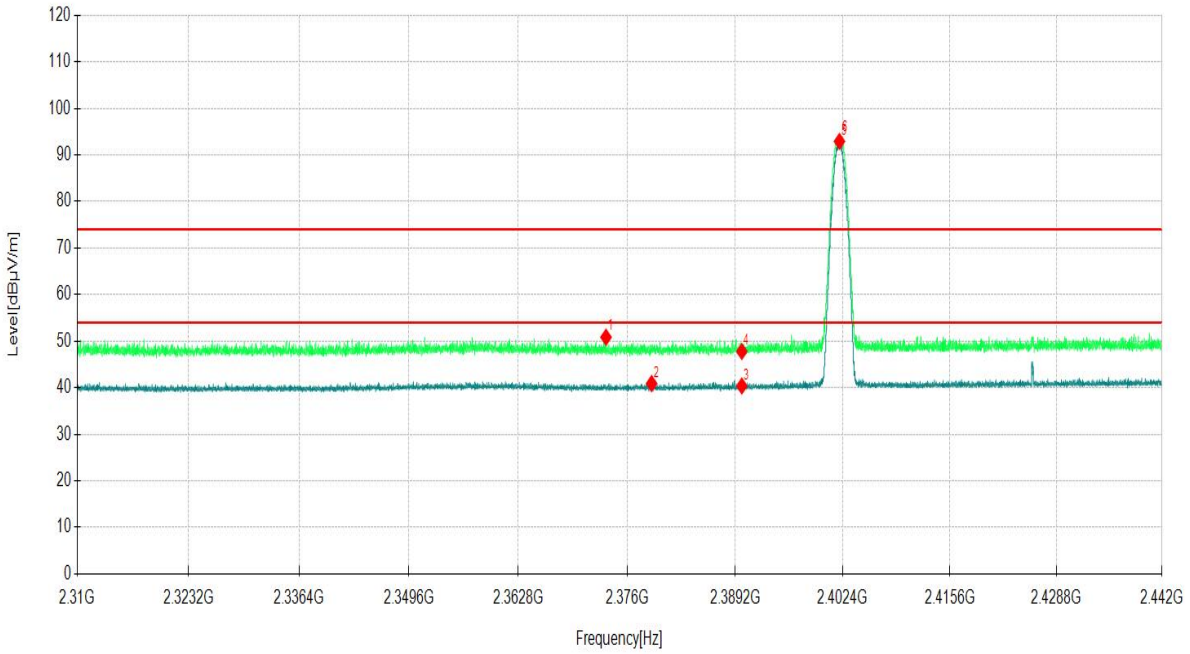
Channel	BT-LE CH0 (1Mbps)	**Frequency**	2402MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2374.55	41.88	-0.27	41.61	54.00	12.39	400	110	AV	Horizonta
2	2376.73	50.19	-0.28	49.91	74.00	24.09	200	249	PK	Horizonta
3	2390.00	48.97	-0.15	48.82	74.00	25.18	400	242	PK	Horizonta
4	2390.00	40.49	-0.15	40.34	54.00	13.66	300	322	AV	Horizonta
5	2401.80	103.48	-0.04	103.44	74.00		400	268	PK	Horizonta
6	2402.01	102.52	-0.04	102.48	54.00		400	268	AV	Horizonta
7	4804.29	48.07	9.29	57.36	74.00	16.64	100	300	PK	Horizonta
8	4804.62	42.00	9.30	51.30	54.00	2.70	200	270	AV	Horizonta
9	7204.50	39.19	12.83	52.02	74.00	21.98	400	249	PK	Horizonta
10	7205.67	33.58	12.82	46.40	54.00	7.60	100	254	AV	Horizonta
11	9607.92	23.10	13.32	36.42	54.00	17.58	100	238	AV	Horizonta
12	9685.15	29.72	13.15	42.87	74.00	31.13	400	357	PK	Horizonta

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Channel	BT-LE CH0 (1Mbps)	**Frequency**	2402MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2373.43	51.11	-0.27	50.84	74.00	23.16	200	321	PK	Vertical
2	2378.98	41.17	-0.29	40.88	54.00	13.12	200	321	AV	Vertical
3	2390.00	40.51	-0.15	40.36	54.00	13.64	100	281	AV	Vertical
4	2390.00	47.93	-0.15	47.78	74.00	26.22	300	281	PK	Vertical
5	2401.99	92.94	-0.04	92.90	54.00		400	248	AV	Vertical
6	2402.08	93.80	-0.04	93.76	74.00		400	255	PK	Vertical
7	4803.96	42.30	9.28	51.58	54.00	2.42	300	294	AV	Vertical
8	4804.29	47.92	9.29	57.21	74.00	16.79	300	264	PK	Vertical
9	7205.67	33.97	12.82	46.79	54.00	7.21	100	243	AV	Vertical
10	7205.67	38.63	12.82	51.45	74.00	22.55	200	243	PK	Vertical
11	9607.92	22.12	13.32	35.44	54.00	18.56	100	238	AV	Vertical
12	9607.92	29.26	13.32	42.58	74.00	31.42	400	72	PK	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Channel	BT-LE CH19 (1Mbps)	Frequency	2440MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

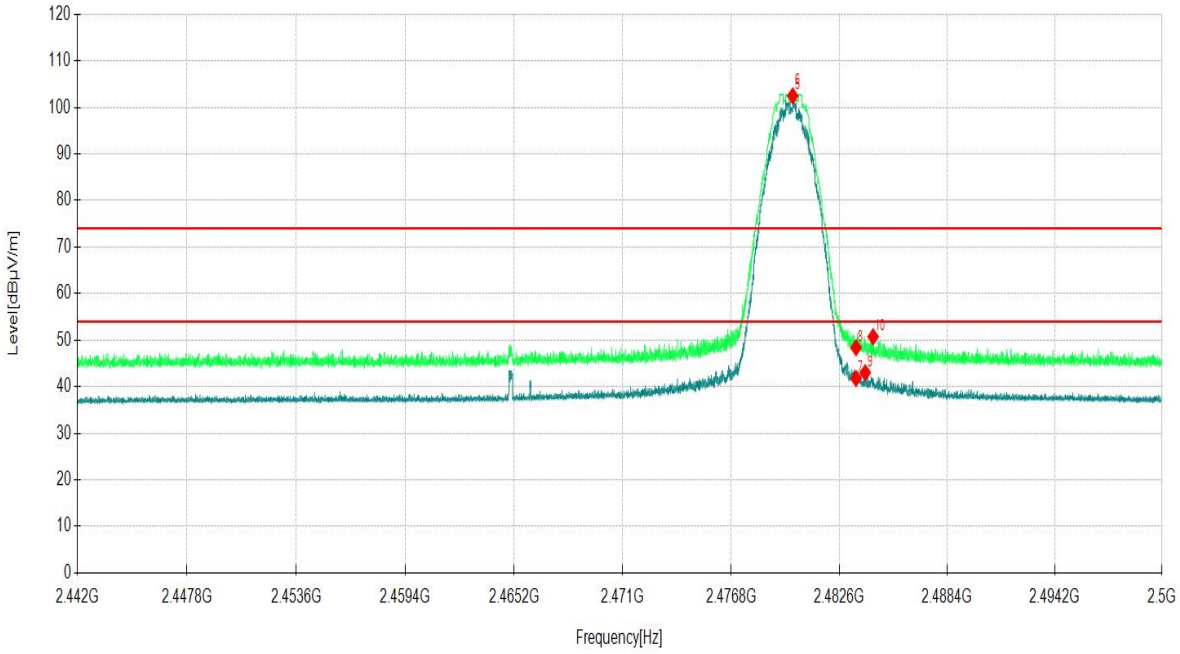
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	4879.54	47.80	9.78	57.58	74.00	16.42	200	295	PK
2	4879.54	39.32	9.78	49.10	54.00	4.90	100	304	AV
3	7319.17	26.10	11.02	37.12	54.00	16.88	300	278	AV
4	7319.17	33.31	11.02	44.33	74.00	29.67	200	278	PK
5	10499.55	28.70	14.34	43.04	74.00	30.96	200	323	PK
6	10525.29	19.51	14.28	33.79	54.00	20.21	200	77	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4880.20	48.73	9.79	58.52	74.00	15.48	300	274	PK
2	4880.53	40.97	9.81	50.78	54.00	3.22	300	294	AV
3	7319.17	32.95	11.02	43.97	74.00	30.03	100	214	PK
4	7319.17	26.29	11.02	37.31	54.00	16.69	100	279	AV
5	9909.81	29.57	13.65	43.22	74.00	30.78	400	184	PK
6	9957.79	20.21	13.74	33.95	54.00	20.05	400	300	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

Channel	BT-LE CH39 (1Mbps)	**Frequency**	2480MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV

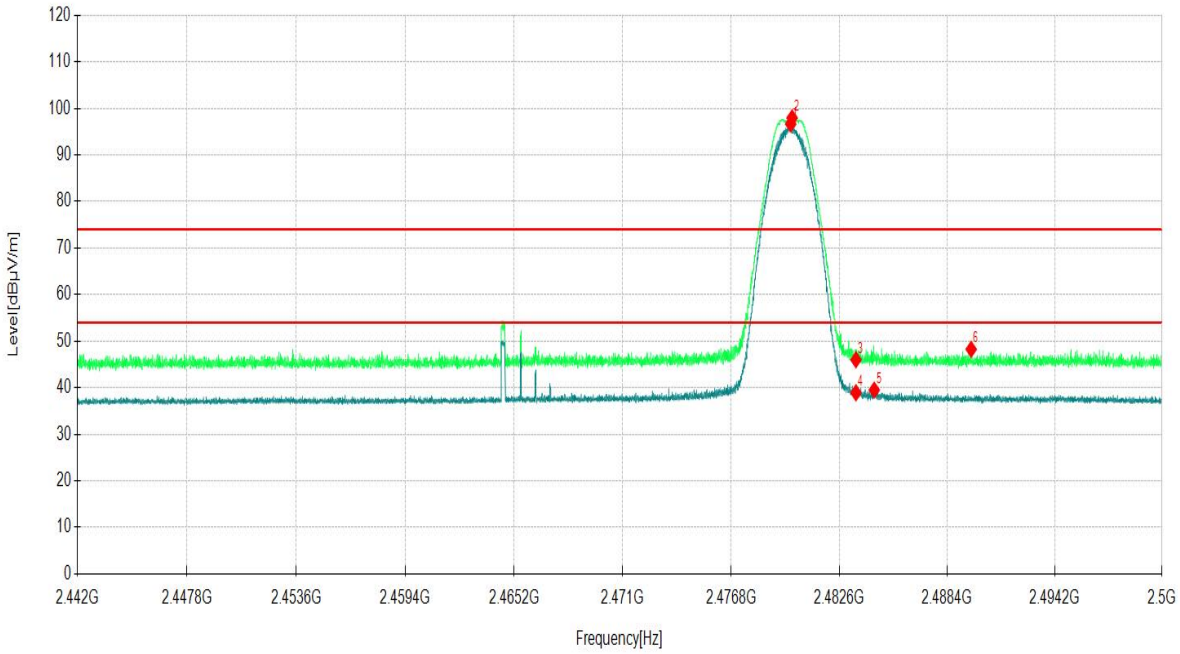


Suspected Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2480.10	102.13	0.31	102.44	54.00		200	276	AV	Horizonta
2	2480.10	103.11	0.31	103.42	74.00		300	276	PK	Horizonta
3	2483.50	41.33	0.45	41.78	54.00	12.22	200	104	AV	Horizonta
4	2483.50	47.95	0.45	48.40	74.00	25.60	300	282	PK	Horizonta
5	2484.00	42.54	0.48	43.02	54.00	10.98	100	276	AV	Horizonta
6	2484.42	50.25	0.49	50.74	74.00	23.26	200	276	PK	Horizonta
7	4959.74	38.68	10.68	49.36	54.00	4.64	200	101	AV	Horizonta
8	4961.06	47.58	10.64	58.22	74.00	15.78	100	237	PK	Horizonta
9	7438.52	41.87	9.72	51.59	74.00	22.41	300	255	PK	Horizonta
10	7439.69	36.69	9.73	46.42	54.00	7.58	100	255	AV	Horizonta
11	9920.34	20.57	13.83	34.40	54.00	19.60	100	240	AV	Horizonta
12	10100.5	28.20	14.53	42.73	74.00	31.27	400	57	PK	Horizonta

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

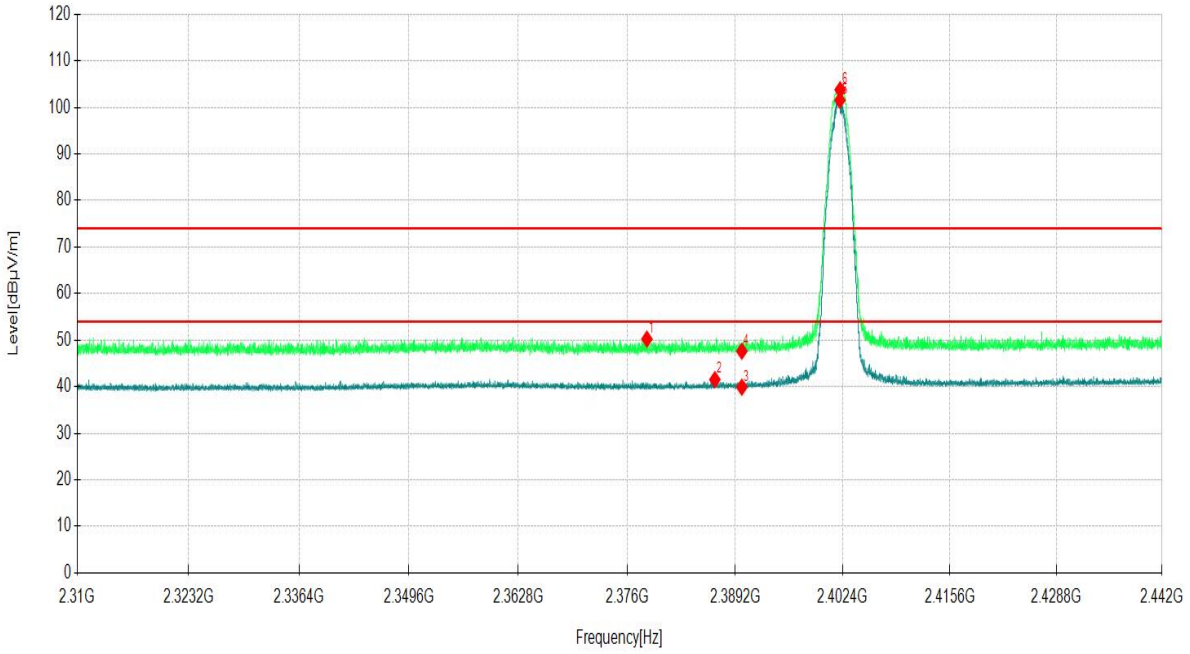
Channel	BT-LE CH39 (1Mbps)	**Frequency**	2480MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2479.9	96.31	0.31	96.62	54.00		400	249	AV	Vertical
2	2480.0	97.63	0.31	97.94	74.00		400	243	PK	Vertical
3	2483.5	45.55	0.45	46.00	74.00	28.00	100	230	PK	Vertical
4	2483.5	38.47	0.45	38.92	54.00	15.08	400	249	AV	Vertical
5	2484.4	39.00	0.50	39.50	54.00	14.50	200	243	AV	Vertical
6	2489.7	47.55	0.71	48.26	74.00	25.74	300	249	PK	Vertical
7	4960.0	38.44	10.70	49.14	54.00	4.86	300	240	AV	Vertical
8	4960.7	45.12	10.66	55.78	74.00	18.22	200	91	PK	Vertical
9	7438.5	42.21	9.72	51.93	74.00	22.07	300	243	PK	Vertical
10	7439.6	36.35	9.73	46.08	54.00	7.92	200	243	AV	Vertical
11	9611.4	20.24	13.32	33.56	54.00	20.44	400	6	AV	Vertical
12	9721.4	30.17	13.18	43.35	74.00	30.65	400	268	PK	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

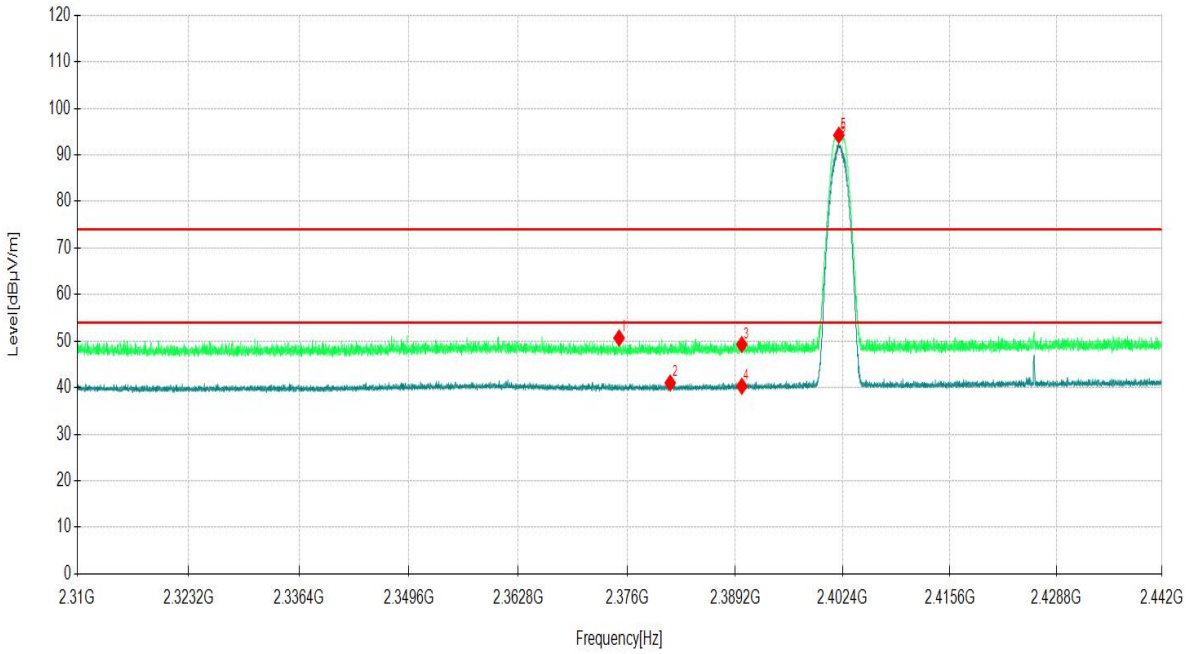
Channel	BT-LE CH0 (2Mbps)	**Frequency**	2402MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2378.41	50.51	-0.28	50.23	74.00	23.77	400	281	PK	Horizonta
2	2386.70	41.72	-0.19	41.53	54.00	12.47	200	1	AV	Horizonta
3	2390.00	40.05	-0.15	39.90	54.00	14.10	100	117	AV	Horizonta
4	2390.00	47.79	-0.15	47.64	74.00	26.36	100	150	PK	Horizonta
5	2402.04	101.58	-0.04	101.54	54.00		200	268	AV	Horizonta
6	2402.07	103.81	-0.04	103.77	74.00		300	274	PK	Horizonta
7	4803.96	42.98	9.28	52.26	54.00	1.74	100	265	AV	Horizonta
8	4804.62	48.21	9.30	57.51	74.00	16.49	400	220	PK	Horizonta
9	7204.50	39.17	12.83	52.00	74.00	22.00	300	254	PK	Horizonta
10	7205.67	34.37	12.82	47.19	54.00	6.81	300	263	AV	Horizonta
11	9607.92	21.90	13.32	35.22	54.00	18.78	300	233	AV	Horizonta
12	9664.09	28.94	13.16	42.10	74.00	31.90	300	213	PK	Horizonta

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Channel	BT-LE CH0 (2Mbps)	**Frequency**	2402MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2375.02	50.94	-0.27	50.67	74.00	23.33	200	315	PK	Vertical
2	2381.25	41.29	-0.27	41.02	54.00	12.98	300	8	AV	Vertical
3	2390.00	49.42	-0.15	49.27	74.00	24.73	400	27	PK	Vertical
4	2390.00	40.47	-0.15	40.32	54.00	13.68	200	27	AV	Vertical
5	2401.91	94.27	-0.04	94.23	74.00		300	244	PK	Vertical
6	2401.91	93.35	-0.04	93.31	54.00		300	250	AV	Vertical
7	4804.29	41.83	9.29	51.12	54.00	2.88	200	270	AV	Vertical
8	4804.62	48.12	9.30	57.42	74.00	16.58	400	309	PK	Vertical
9	7205.67	39.72	12.82	52.54	74.00	21.46	400	252	PK	Vertical
10	7205.67	35.88	12.82	48.70	54.00	5.30	100	252	AV	Vertical
11	9488.57	29.63	13.12	42.75	74.00	31.25	100	15	PK	Vertical
12	9607.92	22.35	13.32	35.67	54.00	18.33	200	238	AV	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Channel	**BT-LE CH19** (2Mbps)	**Frequency**	2440MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV

Horizontal

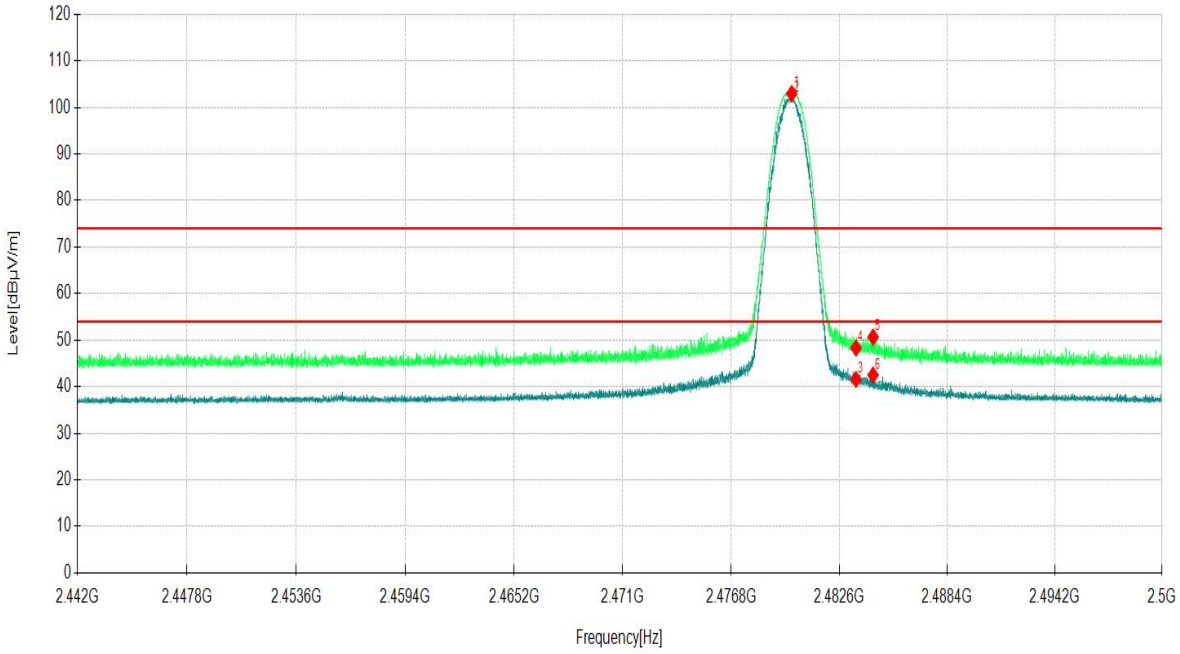
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	4880.20	39.06	9.79	48.85	54.00	5.15	300	295	AV
2	4880.86	48.34	9.81	58.15	74.00	15.85	100	1	PK
3	7319.17	26.91	11.02	37.93	54.00	16.07	400	212	AV
4	7319.17	33.43	11.02	44.45	74.00	29.55	100	212	PK
5	9698.02	29.71	13.07	42.78	74.00	31.22	100	29	PK
6	9760.04	20.50	13.25	33.75	54.00	20.25	300	283	AV

Vertical

NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4879.87	49.40	9.79	59.19	74.00	14.81	300	11	PK
2	4880.53	40.55	9.81	50.36	54.00	3.64	100	299	AV
3	7319.17	26.75	11.02	37.77	54.00	16.23	100	324	AV
4	7320.34	32.77	11.02	43.79	74.00	30.21	300	208	PK
5	9921.51	29.17	13.82	42.99	74.00	31.01	400	273	PK
6	10094.69	19.25	14.51	33.76	54.00	20.24	100	122	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

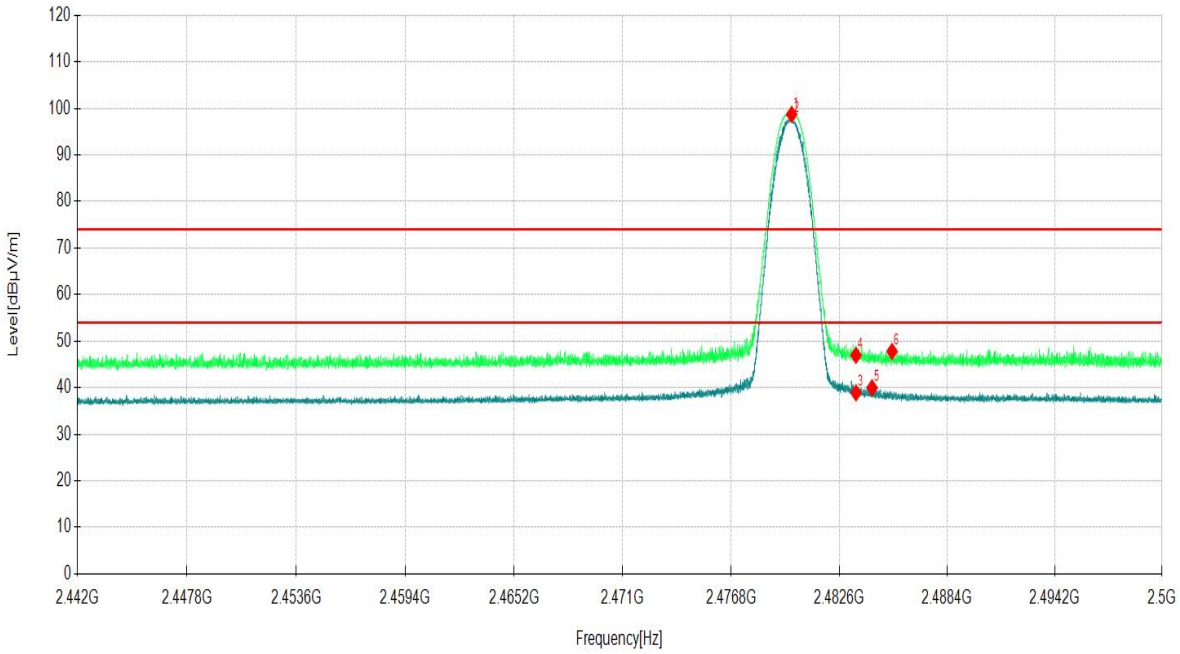
Channel	BT-LE CH39 (2Mbps)	**Frequency**	2480MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2480.05	102.66	0.31	102.97	74.00		200	269	PK	Horizonta
2	2480.06	101.75	0.31	102.06	54.00		200	269	AV	Horizonta
3	2483.50	41.13	0.45	41.58	54.00	12.42	200	86	AV	Horizonta
4	2483.50	47.84	0.45	48.29	74.00	25.71	100	119	PK	Horizonta
5	2484.42	50.17	0.49	50.66	74.00	23.34	300	269	PK	Horizonta
6	2484.42	42.02	0.49	42.51	54.00	11.49	100	269	AV	Horizonta
7	4959.41	39.64	10.66	50.30	54.00	3.70	400	230	AV	Horizonta
8	4959.41	46.07	10.66	56.73	74.00	17.27	100	235	PK	Horizonta
9	7438.52	41.70	9.72	51.42	74.00	22.58	400	243	PK	Horizonta
10	7438.52	36.74	9.72	46.46	54.00	7.54	100	243	AV	Horizonta
11	9584.52	20.22	13.33	33.55	54.00	20.45	400	309	AV	Horizonta
12	9653.56	30.61	13.14	43.75	74.00	30.25	400	213	PK	Horizonta

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Channel	BT-LE CH39 (2Mbps)	**Frequency**	2480MHz
Frequency Range	Above 1G	**Detector Function**	PK/AV



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2480.05	98.39	0.31	98.70	74.00		100	255	PK	Vertical
2	2480.05	97.47	0.31	97.78	54.00		100	255	AV	Vertical
3	2483.50	38.45	0.45	38.90	54.00	15.10	200	255	AV	Vertical
4	2483.50	46.52	0.45	46.97	74.00	27.03	200	3	PK	Vertical
5	2484.36	39.48	0.49	39.97	54.00	14.03	100	255	AV	Vertical
6	2485.44	47.26	0.54	47.80	74.00	26.20	100	357	PK	Vertical
7	4959.74	46.84	10.68	57.52	74.00	16.48	400	239	PK	Vertical
8	4961.06	39.93	10.64	50.57	54.00	3.43	200	239	AV	Vertical
9	7439.69	39.55	9.73	49.28	54.00	4.72	200	250	AV	Vertical
10	7439.69	43.61	9.73	53.34	74.00	20.66	100	256	PK	Vertical
11	9920.34	21.10	13.83	34.93	54.00	19.07	100	245	AV	Vertical
12	9981.19	29.57	13.94	43.51	74.00	30.49	100	41	PK	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

3.3 6dB BANDWIDTH MEASUREMENT

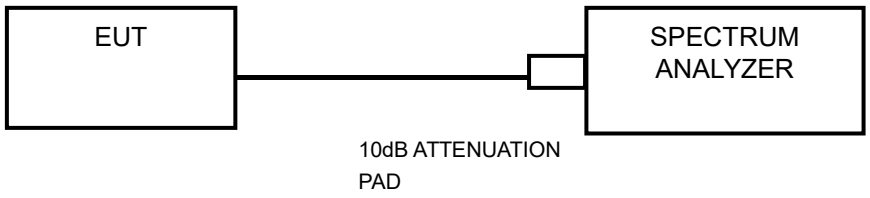
3.3.1 Limits

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

3.3.2 Measurement procedure

a. Set resolution bandwidth (RBW) = 100KHz
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. Measure the maximum width of the emission that is constrained by the frequencies associatedwith the two amplitude points (upper and lower) that are attenuated by 6 dB relative to themaximum level measured in the fundamental emission.

3.3.3 Test setup



3.4 CONDUCTED OUTPUT POWER

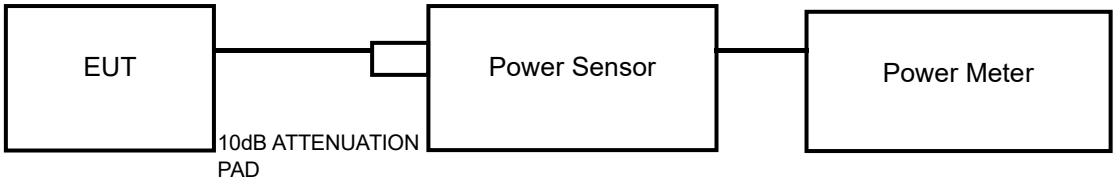
3.4.1 Limits

Forsystems using digital modulation in the 2400–2483.5 MHz band: 1 Watt (30dBm).

3.4.2 Measurement procedure

a. A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor and set the detector to PEAK. Record the power level.
b. Anaverage power sensor was used on the output port of the EUT. A power meter was used to read the response of the average power senso and set the detector to AVERAGE. Record the power level.

3.4.3 Test setup



3.5 POWER SPECTRAL DENSITY MEASUREMENT

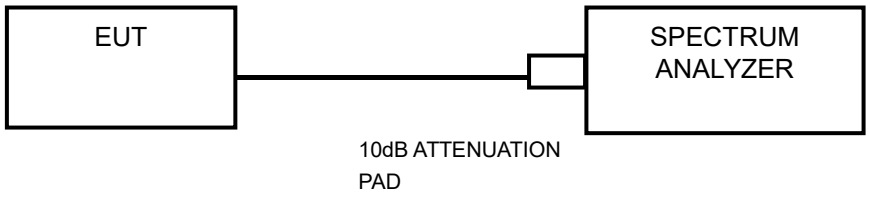
3.5.1 Limits

The Maximum of Power Spectral Density Measurement is 8dBm/3KHz.

3.5.2 Measurement procedure

a. Set instrument center frequency to DTS channel center frequency.
b. Set the span to 1.5 times the DTS bandwidth.
c. Set RBW to: 3KHz
d. Set VBW ≥3 x RBW.
e. Detector = peak
f. Ensure that the number of measurement points in the sweep ≥ 2 x span/RBW.
g. Sweep time = auto couple.
h. Use the peak marker function to determine the maximum amplitude level.

3.5.3 Test setup



3.6 OUT OF BAND EMISSION MEASUREMENT

3.6.1 Limits

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

3.6.2 Measurement procedure

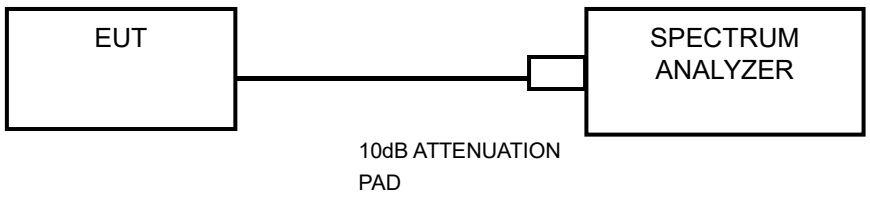
Measurement Procedure -Reference Level

a. Set the RBW = 100 kHz.
b. Set the VBW ≥ 300 kHz.
c. Detector = peak.
d. Sweep time = auto couple.
e. Trace mode = max hold.
f. Allow trace to fully stabilize.
g. Use the peak marker function to determine the maximum power level in any 100 kHzband segment within the fundamental EBW.

Measurement Procedure –Unwanted Emission Level

a. Set RBW = 100 kHz.
b. Set VBW ≥ 300 kHz.
c. Set span to encompass the spectrum to be examined
d. Detector = peak.
e. Trace Mode = max hold.
f. Sweep = auto couple.

3.6.3 Test setup



3.7 OCCUPIED BANDWIDTH MEASUREMENT

3.7.1 Measurement procedure

The transmitter antenna output was connected to the spectrum analyzer through an attenuator. The resolution bandwidth shall be set to the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth.
below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

3.7.2 TEST SETUP

4 PHOTOGRAPHS OF TEST SETUP

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

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5 PHOTOGRAPHS OF THE EUT

Please refer to the attached file (External Photos report and Internal Photos).

Important

(1) The test report is valid with the official seal of the laboratory and the signatures of Test engineer, Author and Reviewer simultaneously.

(2) The test report is invalid if altered.

(3) Any photocopies or part photocopies in the test report are forbidden without the written permission from the laboratory.

(4) Objections to the test report must be submitted to the laboratory within 15 days.

(5) Generally, commission test is responsible for the tested samples only.

Address of the laboratory:

CVC Testing Technology Co., Ltd.

Address: No.3,TiantaiyiRoad,KaitaiAvenue,ScienceCity,Guangzhou,China

Post Code：510663 Tel：020-32293888

FAX：020-32293889 E-mail：office@cvc.org.cn