

FCC Test Report

Product Name	Bluetooth Headset
Model No.	HSC110W

Applicant	GN Audio A/S
Address	Lautrupbjerg 7, 2750 Ballerup, Denmark

Date of Receipt	Nov. 04, 2019
Issued Date	Jan. 14, 2020
Report No.	19B0039R-RFUSP01V00
Report Version	V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

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Test Report

Issued Date: Jan. 14, 2020

Report No.: 19B0039R-RFUSP01V00



Product Name	Bluetooth Headset
Applicant	GN Audio A/S
Address	Lautrupbjerg 7, 2750 Ballerup, Denmark
Manufacturer	GN Audio A/S
Model No.	HSC110W
EUT Rated Voltage	DC 3.8V by Battery
EUT Test Voltage	DC 3.8V by Battery
Trade Name	Jabra
Applicable Standard	FCC CFR Title 47 Part 15 Subpart B ANSI C63.4: 2014, ANSI C63.10: 2013
Test Result	Complied

Documented By : Elephant Chen
(Adm. Specialist / Elephant Chen)

Tested By : Yun Che Chen
(Engineer / Yunche Chen)

Approved By : 
(Director / Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Bluetooth Headset
Trade Name	Jabra
Model No.	HSC110W
Frequency Range	BT: 2402 – 2480MHz
Number of Channels	Bluetooth: V2.1+EDR: 79CH, V5.0: 40CH
Type of Modulation	Bluetooth: V2.1+EDR: GFSK(1Mbps) / π /4DQPSK(2Mbps) / 8DPSK(3Mbps), V5.0:GFSK (2Mbps)
Antenna Type	PIFA Antenna
Antenna Gain	Refer to the table “Antenna List”
Channel Control	Auto
USB Cable	Shielded, 1.2m
USB Cable	Shielded, 0.25m

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Jabra	Jabra HSC110W	PIFA Antenna	-0.52dBi for 2.4GHz

Note: The antenna of EUT is conform to FCC 15.203.

Frequency of Each Channel (Bluetooth: For V2.1+EDR):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 00:	2402 MHz	Channel 20:	2422 MHz	Channel 40:	2442 MHz	Channel 60:	2462 MHz
Channel 01:	2403 MHz	Channel 21:	2423 MHz	Channel 41:	2443 MHz	Channel 61:	2463 MHz
Channel 02:	2404 MHz	Channel 22:	2424 MHz	Channel 42:	2444 MHz	Channel 62:	2464 MHz
Channel 03:	2405 MHz	Channel 23:	2425 MHz	Channel 43:	2445 MHz	Channel 63:	2465 MHz
Channel 04:	2406 MHz	Channel 24:	2426 MHz	Channel 44:	2446 MHz	Channel 64:	2466 MHz
Channel 05:	2407 MHz	Channel 25:	2427 MHz	Channel 45:	2447 MHz	Channel 65:	2467 MHz
Channel 06:	2408 MHz	Channel 26:	2428 MHz	Channel 46:	2448 MHz	Channel 66:	2468 MHz
Channel 07:	2409 MHz	Channel 27:	2429 MHz	Channel 47:	2449 MHz	Channel 67:	2469 MHz
Channel 08:	2410 MHz	Channel 28:	2430 MHz	Channel 48:	2450 MHz	Channel 68:	2470 MHz
Channel 09:	2411 MHz	Channel 29:	2431 MHz	Channel 49:	2451 MHz	Channel 69:	2471 MHz
Channel 10:	2412 MHz	Channel 30:	2432 MHz	Channel 50:	2452 MHz	Channel 70:	2472 MHz
Channel 11:	2413 MHz	Channel 31:	2433 MHz	Channel 51:	2453 MHz	Channel 71:	2473 MHz
Channel 12:	2414 MHz	Channel 32:	2434 MHz	Channel 52:	2454 MHz	Channel 72:	2474 MHz
Channel 13:	2415 MHz	Channel 33:	2435 MHz	Channel 53:	2455 MHz	Channel 73:	2475 MHz
Channel 14:	2416 MHz	Channel 34:	2436 MHz	Channel 54:	2456 MHz	Channel 74:	2476 MHz
Channel 15:	2417 MHz	Channel 35:	2437 MHz	Channel 55:	2457 MHz	Channel 75:	2477 MHz
Channel 16:	2418 MHz	Channel 36:	2438 MHz	Channel 56:	2458 MHz	Channel 76:	2478 MHz
Channel 17:	2419 MHz	Channel 37:	2439 MHz	Channel 57:	2459 MHz	Channel 77:	2479 MHz
Channel 18:	2420 MHz	Channel 38:	2440 MHz	Channel 58:	2460 MHz	Channel 78:	2480 MHz
Channel 19:	2421 MHz	Channel 39:	2441 MHz	Channel 59:	2461 MHz		

Frequency of Each Channel: (Bluetooth: For V5.0)

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 00:	2402 MHz	Channel 01:	2404 MHz	Channel 02:	2406 MHz	Channel 03:	2408 MHz
Channel 04:	2410 MHz	Channel 05:	2412 MHz	Channel 06:	2414 MHz	Channel 07:	2416 MHz
Channel 08:	2418 MHz	Channel 09:	2420 MHz	Channel 10:	2422 MHz	Channel 11:	2424 MHz
Channel 12:	2426 MHz	Channel 13:	2428 MHz	Channel 14:	2430 MHz	Channel 15:	2432 MHz
Channel 16:	2434 MHz	Channel 17:	2436 MHz	Channel 18:	2438 MHz	Channel 19:	2440 MHz
Channel 20:	2442 MHz	Channel 21:	2444 MHz	Channel 22:	2446 MHz	Channel 23:	2448 MHz
Channel 24:	2450 MHz	Channel 25:	2452 MHz	Channel 26:	2454 MHz	Channel 27:	2456 MHz
Channel 28:	2458 MHz	Channel 29:	2460 MHz	Channel 30:	2462 MHz	Channel 31:	2464 MHz
Channel 32:	2466 MHz	Channel 33:	2468 MHz	Channel 34:	2470 MHz	Channel 35:	2472 MHz
Channel 36:	2474 MHz	Channel 37:	2476 MHz	Channel 38:	2478 MHz	Channel 39:	2480 MHz

Note:

1. The EUT is a Bluetooth Headset with a built-in Bluetooth V5.0,V2.1+EDR transceiver.
2. Regarding to the operation frequency band, the lowest, middle, and highest frequency are selected to perform the test.
3. This device is a composite device in accordance with Part 15 regulations. The function for the 2.4GHz transmitting was measured and made a test report that the report number is 19B0039R-RFUSP01V00-B 、 19B0039R-RFUSP01V00-A, certified under FCC ID: BCE-HSC110W.
4. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.
5. The EUT are three types, only non-RF components are removed(#2) from #1, all test data(#1) and radiated emission below 1GHz(#2) are shown in the report.

The type is:

#1: stereo headset with adjustable arm.

#2: mono earphone with adjustable arm.

#3: stereo headset.

Test Mode	Mode 1: Receive - Bluetooth-3Mbps
	Mode 2: Receive - BLE-2Mbps

1.2. Test System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

BT mode

Product	Manufacturer	Model No.	Serial No.	Power Cord
1 Notebook PC	DELL	Latitude E5440	FS9TK32	Non-Shielded, 0.8m
2 Adapter	SAMSUNG	EP-TA20JWS	R37H2CMJ8F3DK3	N/A

Charge mode

Product	Manufacturer	Model No.	Serial No.	Power Cord
1 Notebook PC	DELL	Latitude E5440	FS9TK32	Non-Shielded, 0.8m
2 Deskatand	Jabra	DIV020	N/A	Non-Shielded, 1.1m
3 Adapter	SAMSUNG	EP-TA20JWS	R37H2CMJ8F3DK3	N/A

BT mode(stereo headset with adjustable arm & mono earphone with adjustable arm)

Signal Cable Type	Signal cable Description
A USB Cable	Shielded, 1.2m

BT mode(stereo headset)

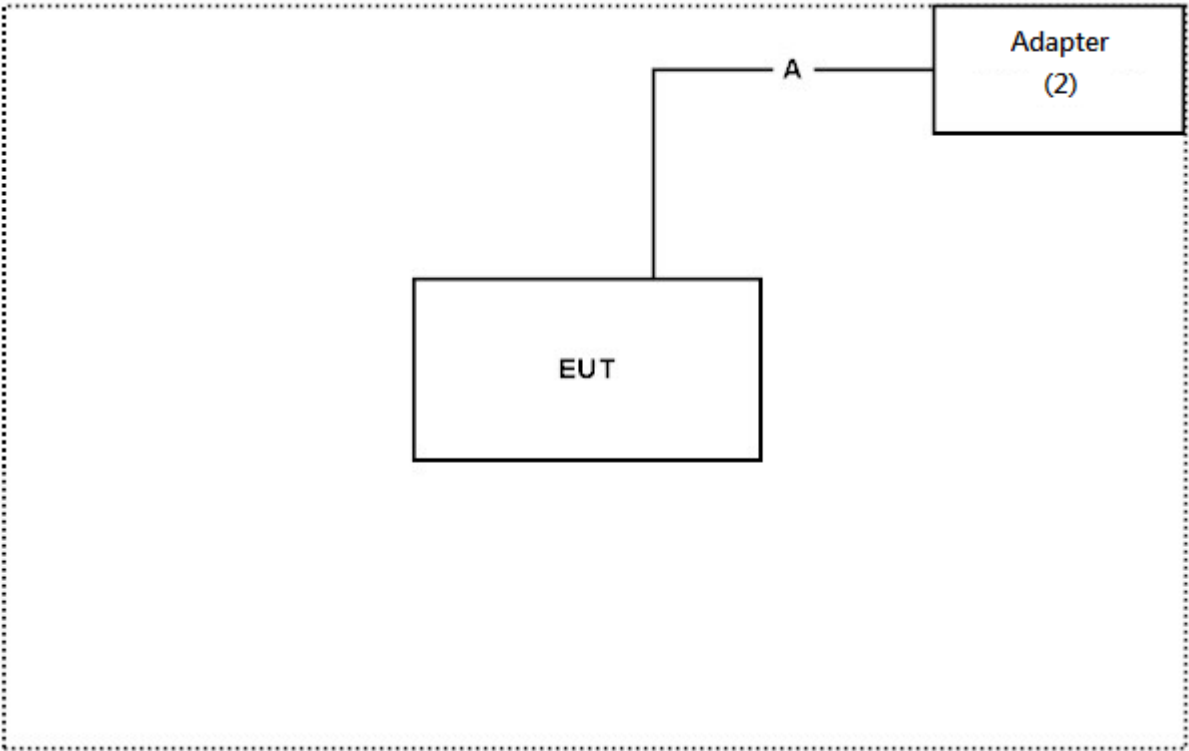
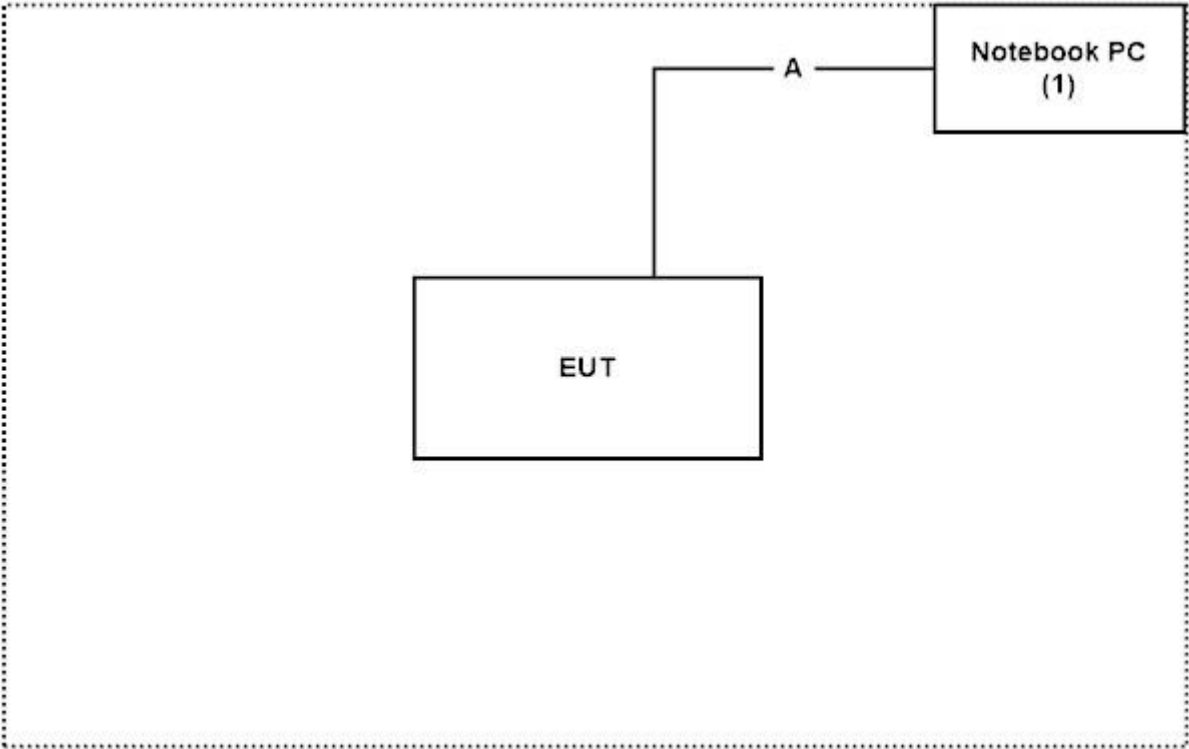
Signal Cable Type	Signal cable Description
A USB Cable	Shielded, 0.25m
B USB Cable	Shielded, 1.7m

Charge mode

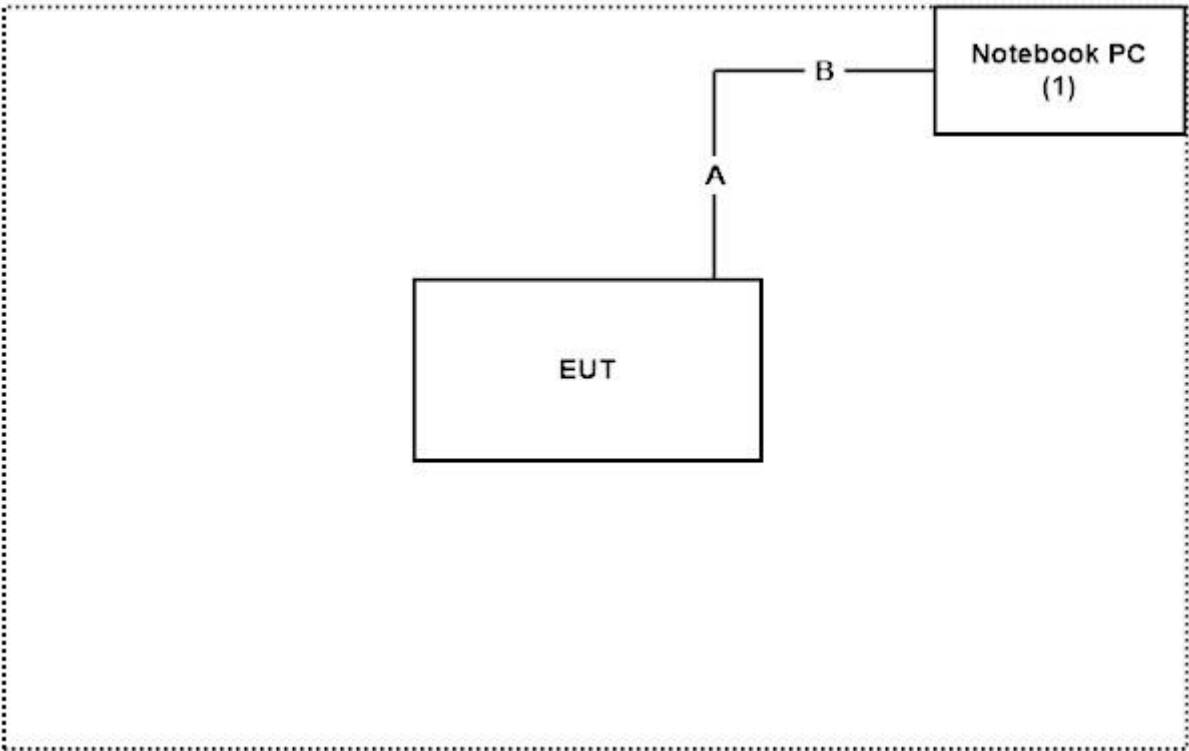
Signal Cable Type	Signal cable Description
A USB Cable	Shielded, 1.2m

1.3. Configuration of Tested System

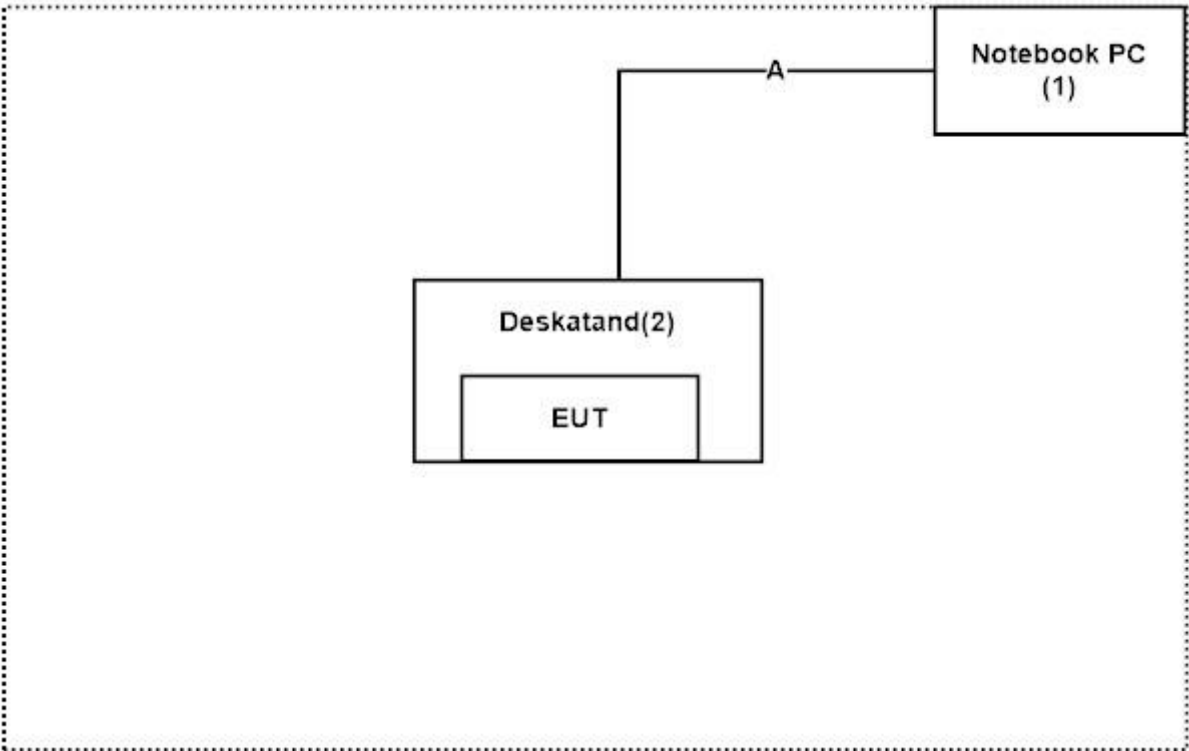
BT mode(stereo headset with adjustable arm & mono earphone with adjustable arm)

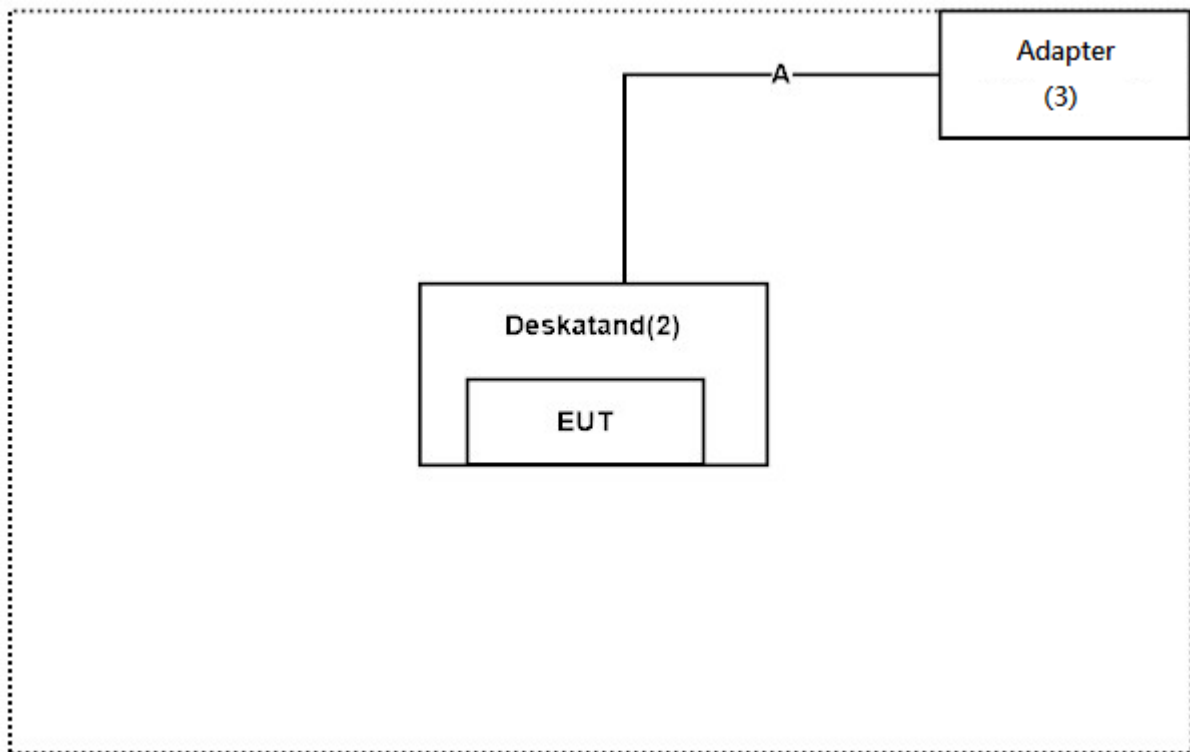


BT mode(stereo headset)



Charge mode





1.4. EUT Exercise Software

1. Setup the EUT as shown in Section 1.3.
2. Execute software "Blue test3, Ver.3.2" on the EUT.
3. Configure the test mode, the test channel, and the data rate.
4. Press "OK" to start the continuous Transmit.
5. Verify that the EUT works properly.

1.5. Test Facility

Ambient conditions in the laboratory:

Performed Item	Items	Required	Actual
Conducted Emission	Temperature (°C)	10~40 °C	23.5 °C
	Humidity (%RH)	10~90 %	44 %
Radiated Emission	Temperature (°C)	10~40 °C	22 °C
	Humidity (%RH)	10~90 %	63 %

USA : FCC Registration Number: TW1014

Site Description: Accredited by TAF
Accredited Number: 3023

Test Laboratory: DEKRA Testing and Certification Co., Ltd
Address: No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451,
Taiwan, R.O.C.
Phone number: 886-2-8601-3788
Fax number: 886-2-8601-3789
Email address: info.tw@dekra.com
Website: <http://www.dekra.com.tw>

1.6. List of Test Equipment

For Conducted measurements /CB3/SR8

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Date	Due. Date
	Temperature Chamber	WIT GROUP	TH-1S-B	EQ-201-00146	2019/02/26	2020/02/25
X	Spectrum Analyzer	Agilent	N9010A	MY53470892	2019/09/25	2020/09/24
	Peak Power Analyzer	Keysight	8990B	MY51000410	2019/07/30	2020/07/29
	Wideband Power Sensor	Keysight	N1923A	MY56080003	2019/07/30	2020/07/29
	Wideband Power Sensor	Keysight	N1923A	MY56080004	2019/07/30	2020/07/29
X	EMI Test Receiver	R&S	ESCS 30	100369	2018/11/19	2019/11/18
X	LISN	R&S	ENV216	101105	2019/04/10	2020/04/09
X	LISN	R&S	ESH3-Z5	836679/014	2019/04/10	2020/04/09
X	Coaxial Cable	DEKRA	RG 400	LC018-RG	2019/06/20	2020/06/19

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with “X” are used to measure the final test results.
3. Test Software version :DEKRA Conduction Test SystemV9.0.5.

For Radiated measurements /Site3/CB8

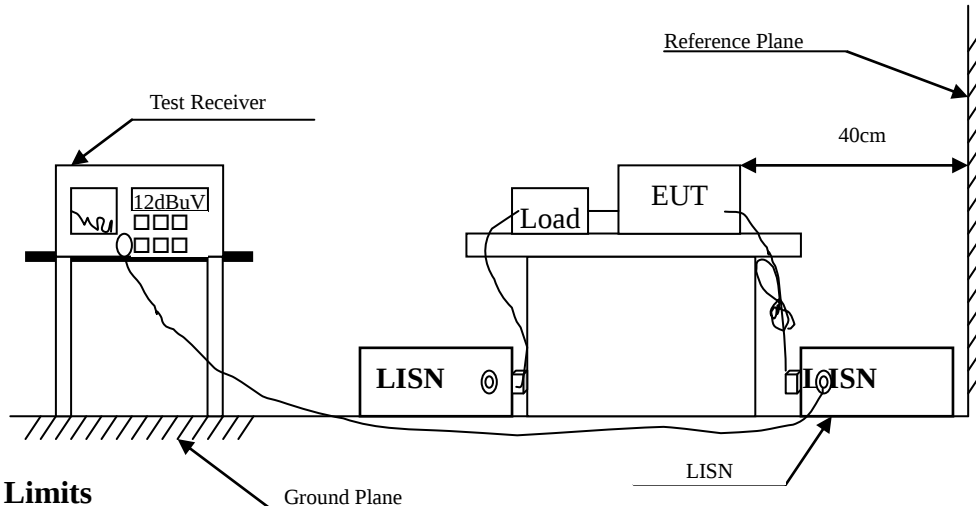
	Equipment	Manufacturer	Model No.	Serial No.	Cali. Date	Due. Date
X	Spectrum Analyzer	R&S	FSP40	100170	2019/03/11	2020/03/10
X	Loop Antenna	Teseq	HLA6121	37133	2019/10/15	2021/10/14
X	Bilog Antenna	Schaffner Chase	CBL6112B	2794	2019/06/23	2020/06/22
X	Coaxial Cable	DEKRA	L1907-001C	280280.F141.1 000D	2019/07/10	2020/07/09
X	Amplifier	EMCI	EMC001330	980254	2019/08/22	2020/08/21
X	Horn Antenna	ETS-LINDGREN	3117	00228113	2019/05/02	2020/05/01
X	Coaxial Cable	DEKRA	L1907-002C	280280.F141.1 000D	2019/07/10	2020/07/09
X	Amplifier	EMCI	EMC05820SE	980362	2019/06/26	2020/06/25
X	Amplifier	EMCI	EMC051845SE	SN980632	2019/08/08	2020/08/07
	Horn Antenna	Com-Power	AH-1840	101101	2019/10/31	2020/10/30
	Amplifier + Cable	EMCI	EMC184045SE	980369	2019/04/16	2020/04/15
	Bilog Antenna	Schaffner Chase	CBL6112B	2916	2019/06/23	2020/06/22
	Coaxial Cable	DEKRA	L1907-003C	00100A1B3A 120M	2019/07/10	2020/07/09
	Amplifier	EMCI	EMC001330	980255	2019/06/28	2020/06/27
X	Filter	MICRO-TRONICS	BRM50702	G270	2019/08/08	2020/08/07
	Filter	MICRO-TRONICS	BRM50716	G196	2019/08/08	2020/08/07

Note:

1. Loop Antenna is calibrated every two years, the other equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version :QuiTek EMI System V2.1.134.

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart B Paragraph 15.107 (dBuV) Limit		
Frequency MHz	Limits	
	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

2.3. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.

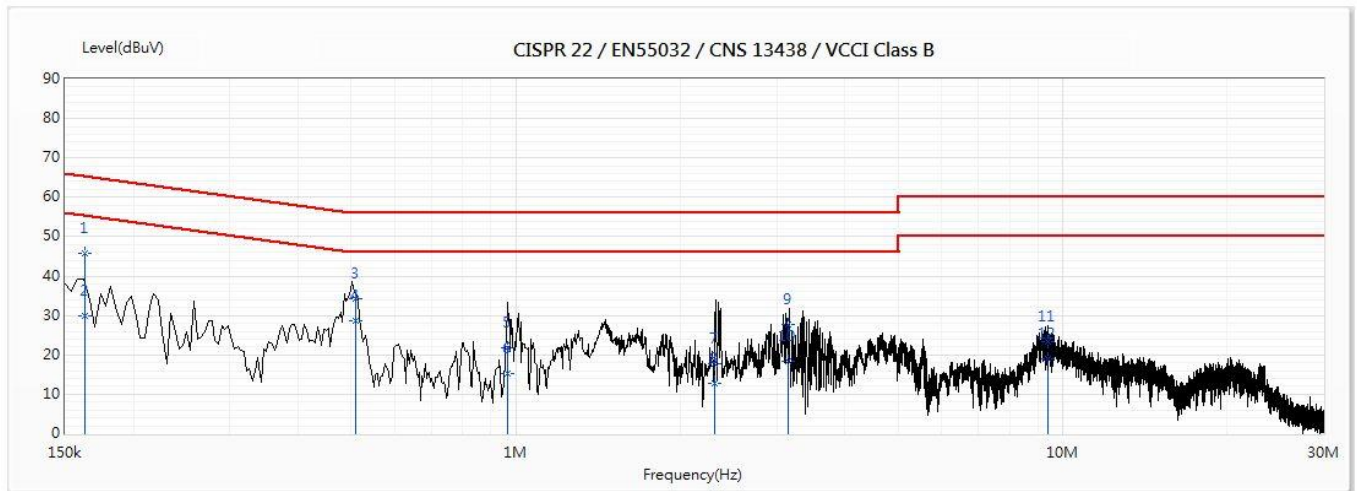
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.4. Uncertainty

± 2.26 dB

2.5. Test Result of Conducted Emission

Product : Bluetooth Headset
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Date : 2019/11/08
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2441MHz)

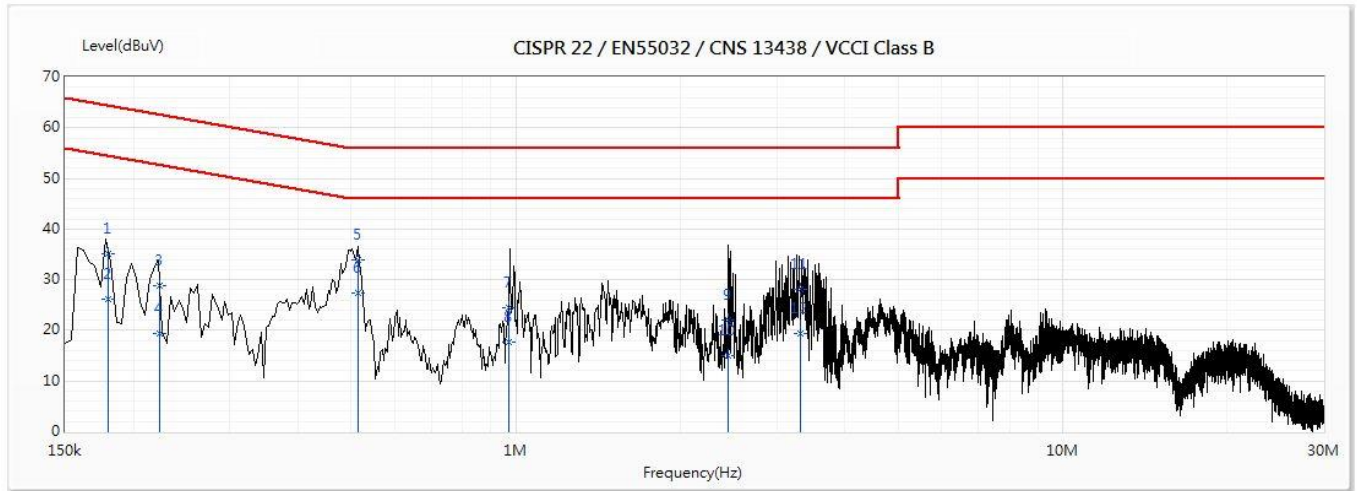


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Cable Loss (dB)	LISN (dB)	Detector Type
1	0.163	45.90	65.31	-19.41	36.21	0.12	9.57	QP
2	0.163	30.04	55.31	-25.27	20.35	0.12	9.57	AV
3	0.51	34.37	56.00	-21.63	24.67	0.13	9.57	QP
*4	0.51	28.74	46.00	-17.26	19.03	0.13	9.57	AV
5	0.967	21.95	56.00	-34.05	12.22	0.16	9.57	QP
6	0.967	15.13	46.00	-30.87	5.40	0.16	9.57	AV
7	2.314	17.61	56.00	-38.39	7.82	0.21	9.58	QP
8	2.314	12.65	46.00	-33.35	2.86	0.21	9.58	AV
9	3.155	27.58	56.00	-28.42	17.76	0.23	9.59	QP
10	3.155	18.41	46.00	-27.59	8.60	0.23	9.59	AV
11	9.418	23.21	60.00	-36.79	13.21	0.37	9.64	QP
12	9.418	18.89	50.00	-31.11	8.88	0.37	9.64	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.

Product : Bluetooth Headset
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Date : 2019/11/08
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2441MHz)

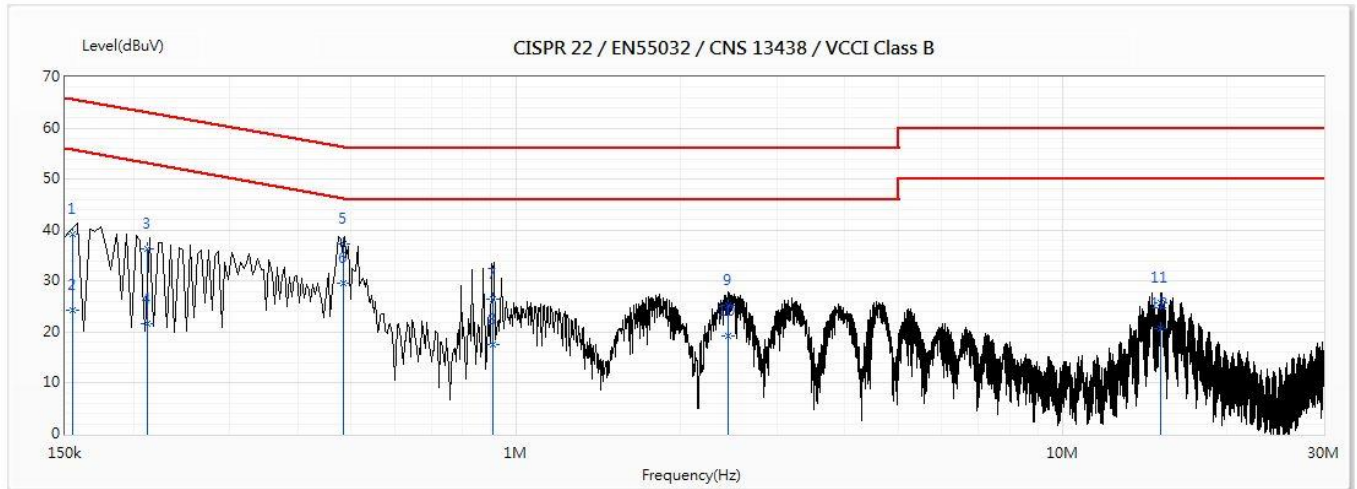


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Cable Loss (dB)	LISN (dB)	Detector Type
1	0.18	35.24	64.49	-29.25	25.51	0.12	9.60	QP
2	0.18	26.17	54.49	-28.32	16.44	0.12	9.60	AV
3	0.223	28.80	62.70	-33.90	19.08	0.12	9.60	QP
4	0.223	19.33	52.70	-33.37	9.61	0.12	9.60	AV
5	0.514	33.93	56.00	-22.07	24.19	0.13	9.60	QP
*6	0.514	27.46	46.00	-18.54	17.73	0.13	9.60	AV
7	0.972	24.42	56.00	-31.58	14.65	0.16	9.61	QP
8	0.972	17.80	46.00	-28.20	8.04	0.16	9.61	AV
9	2.448	22.02	56.00	-33.98	12.18	0.21	9.62	QP
10	2.448	14.94	46.00	-31.06	5.11	0.21	9.62	AV
11	3.306	28.05	56.00	-27.95	18.19	0.23	9.63	QP
12	3.306	19.33	46.00	-26.67	9.47	0.23	9.63	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.

Product : Bluetooth Headset
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Date : 2020/01/13
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2441MHz)-Adapter

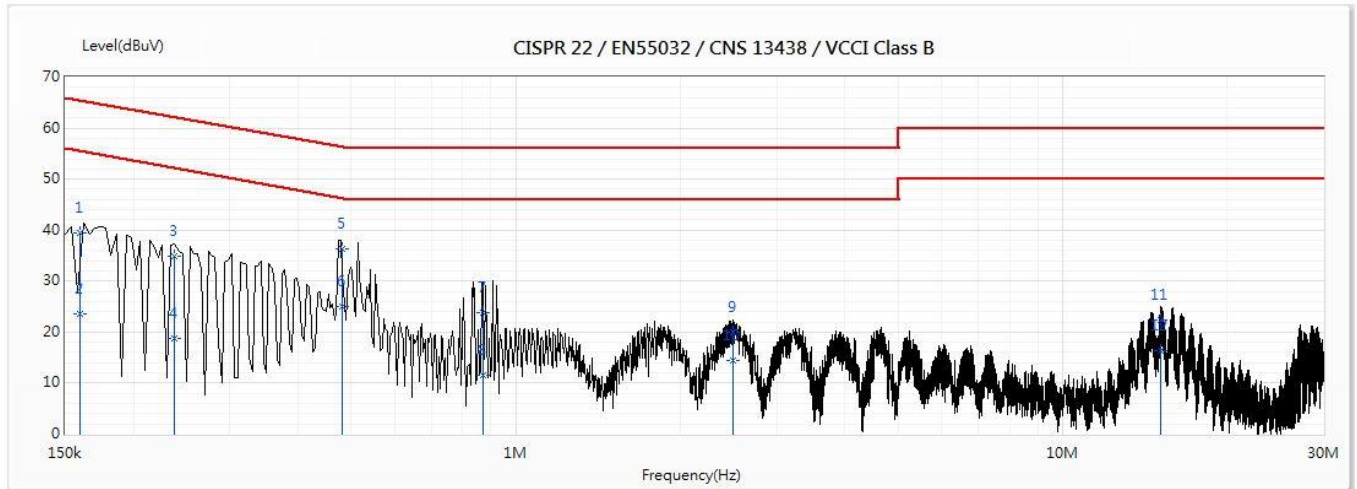


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.155	39.24	65.75	-26.51	29.55	9.69	QP
2	0.155	24.40	55.75	-31.35	14.71	9.69	AV
3	0.211	36.29	63.15	-26.86	26.59	9.69	QP
4	0.211	21.58	53.15	-31.57	11.89	9.69	AV
5	0.484	37.19	56.27	-19.08	27.49	9.70	QP
*6	0.484	29.50	46.27	-16.77	19.80	9.70	AV
7	0.909	26.35	56.00	-29.65	16.63	9.72	QP
8	0.909	17.48	46.00	-28.52	7.75	9.72	AV
9	2.442	25.17	56.00	-30.83	15.38	9.79	QP
10	2.442	19.33	46.00	-26.67	9.54	9.79	AV
11	15.137	25.63	60.00	-34.37	15.53	10.10	QP
12	15.137	20.60	50.00	-29.40	10.49	10.10	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.

Product : Bluetooth Headset
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Date : 2020/01/13
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2441MHz)-Adapter

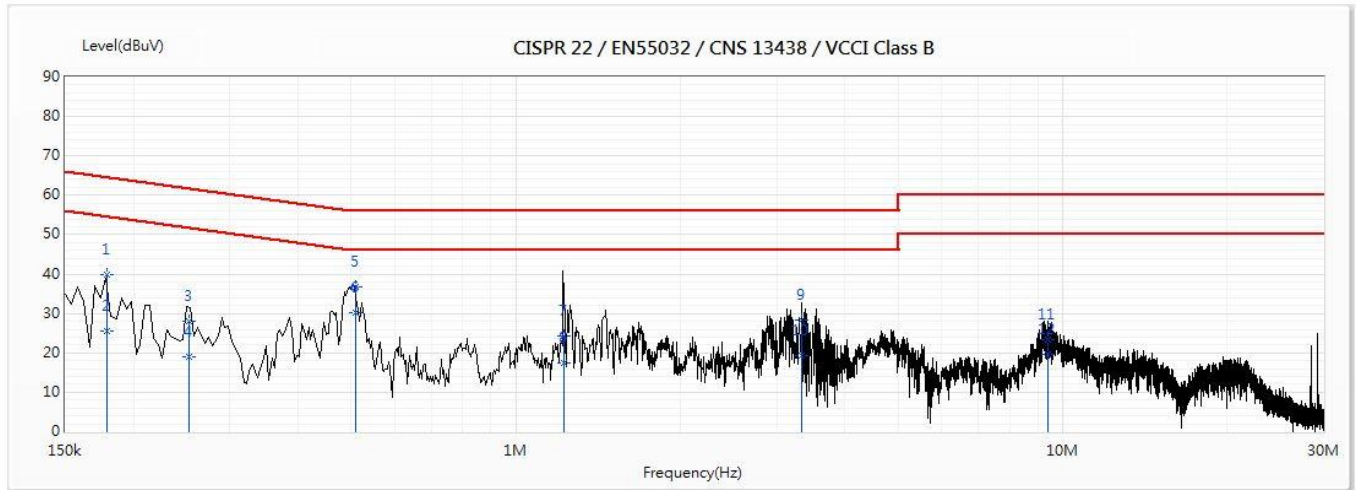


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.159	39.54	65.50	-25.96	29.81	9.73	QP
2	0.159	23.67	55.50	-31.83	13.94	9.73	AV
3	0.238	34.81	62.17	-27.36	25.09	9.72	QP
4	0.238	18.68	52.17	-33.49	8.96	9.72	AV
*5	0.482	36.22	56.30	-20.09	26.49	9.73	QP
6	0.482	25.13	46.30	-21.18	15.39	9.73	AV
7	0.872	23.85	56.00	-32.15	14.09	9.76	QP
8	0.872	11.43	46.00	-34.57	1.67	9.76	AV
9	2.495	20.00	56.00	-36.00	10.17	9.83	QP
10	2.495	14.37	46.00	-31.63	4.53	9.83	AV
11	15.115	22.49	60.00	-37.51	12.26	10.23	QP
12	15.115	16.35	50.00	-33.65	6.13	10.23	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.

Product : Bluetooth Headset
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Date : 2019/11/08
 Test Mode : Mode 2: Receive - BLE-2Mbps (2440MHz)

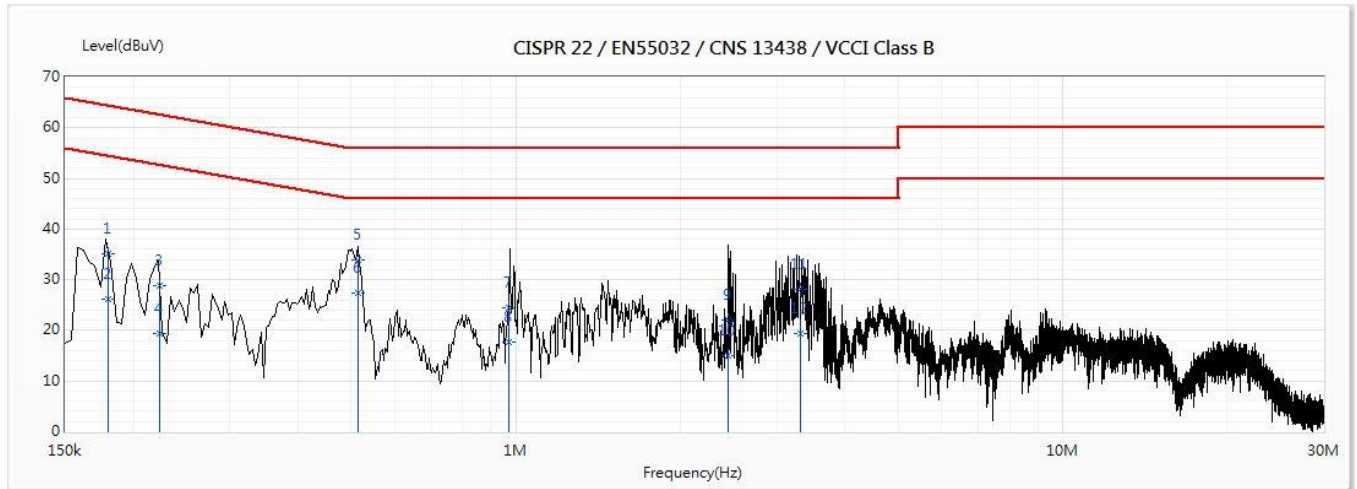


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Cable Loss (dB)	LISN (dB)	Detector Type
1	0.179	39.92	64.53	-24.61	30.23	0.12	9.57	QP
2	0.179	25.43	54.53	-29.10	15.74	0.12	9.57	AV
3	0.253	28.12	61.66	-33.54	18.43	0.12	9.57	QP
4	0.253	18.96	51.66	-32.70	9.27	0.12	9.57	AV
5	0.509	36.88	56.00	-19.12	27.18	0.13	9.57	QP
*6	0.509	30.30	46.00	-15.70	20.59	0.13	9.57	AV
7	1.224	24.41	56.00	-31.59	14.67	0.17	9.57	QP
8	1.224	17.48	46.00	-28.52	7.74	0.17	9.57	AV
9	3.34	28.36	56.00	-27.64	18.54	0.24	9.59	QP
10	3.34	19.34	46.00	-26.66	9.52	0.24	9.59	AV
11	9.391	23.32	60.00	-36.68	13.31	0.37	9.63	QP
12	9.391	19.61	50.00	-30.39	9.60	0.37	9.63	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.

Product : Bluetooth Headset
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Date : 2019/11/08
 Test Mode : Mode 2: Receive - BLE-2Mbps (2440MHz)

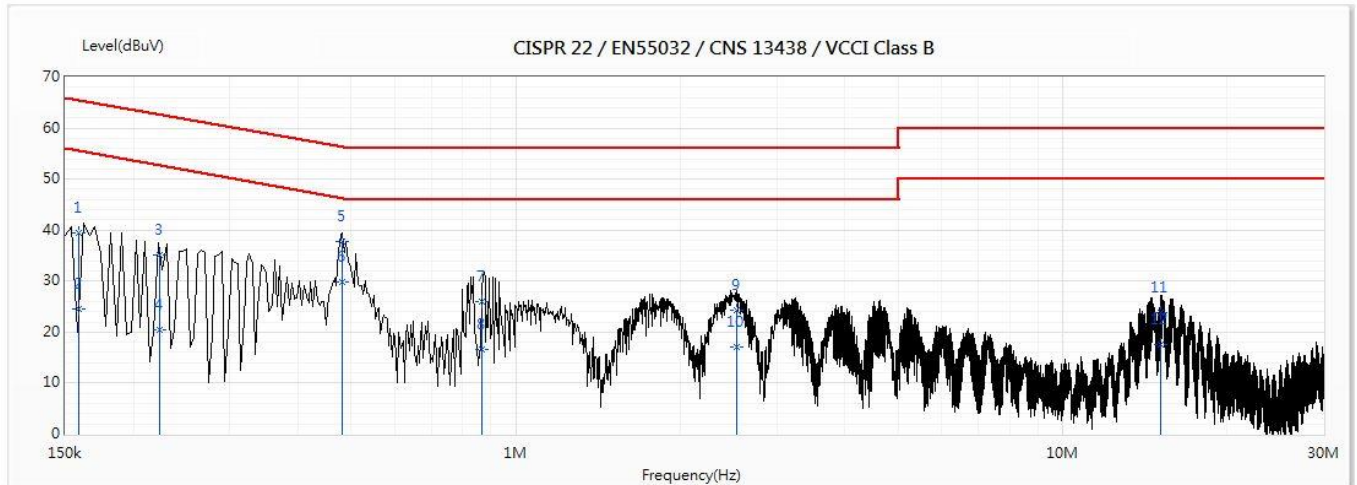


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Cable Loss (dB)	LISN (dB)	Detector Type
1	0.18	35.24	64.49	-29.25	25.51	0.12	9.60	QP
2	0.18	26.17	54.49	-28.32	16.44	0.12	9.60	AV
3	0.223	28.80	62.70	-33.90	19.08	0.12	9.60	QP
4	0.223	19.33	52.70	-33.37	9.61	0.12	9.60	AV
5	0.514	33.93	56.00	-22.07	24.19	0.13	9.60	QP
*6	0.514	27.46	46.00	-18.54	17.73	0.13	9.60	AV
7	0.972	24.42	56.00	-31.58	14.65	0.16	9.61	QP
8	0.972	17.80	46.00	-28.20	8.04	0.16	9.61	AV
9	2.448	22.02	56.00	-33.98	12.18	0.21	9.62	QP
10	2.448	14.94	46.00	-31.06	5.11	0.21	9.62	AV
11	3.306	28.05	56.00	-27.95	18.19	0.23	9.63	QP
12	3.306	19.33	46.00	-26.67	9.47	0.23	9.63	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.

Product : Bluetooth Headset
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Date : 2020/01/13
 Test Mode : Mode 2: Receive - BLE-2Mbps (2440MHz)-Adapter

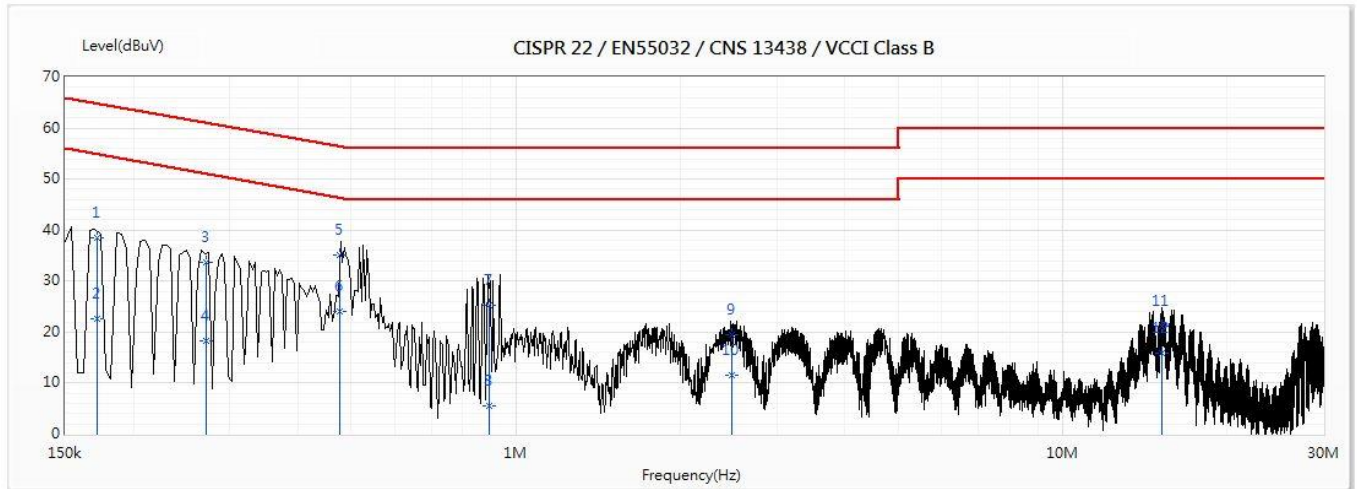


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.159	39.44	65.51	-26.06	29.75	9.69	QP
2	0.159	24.50	55.51	-31.01	14.81	9.69	AV
3	0.224	35.09	62.68	-27.59	25.39	9.69	QP
4	0.224	20.36	52.68	-32.32	10.67	9.69	AV
5	0.481	37.85	56.31	-18.46	28.15	9.70	QP
*6	0.481	29.85	46.31	-16.46	20.15	9.70	AV
7	0.868	25.92	56.00	-30.08	16.20	9.72	QP
8	0.868	16.68	46.00	-29.32	6.96	9.72	AV
9	2.534	24.40	56.00	-31.60	14.60	9.79	QP
10	2.534	17.15	46.00	-28.85	7.35	9.79	AV
11	15.122	23.77	60.00	-36.23	13.67	10.10	QP
12	15.122	17.50	50.00	-32.50	7.39	10.10	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.

Product : Bluetooth Headset
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Date : 2020/01/13
 Test Mode : Mode 2: Receive - BLE-2Mbps (2440MHz)-Adapter



No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.171	38.51	64.89	-26.38	28.78	9.73	QP
2	0.171	22.52	54.89	-32.37	12.79	9.73	AV
3	0.272	33.70	61.07	-27.36	23.98	9.72	QP
4	0.272	18.31	51.07	-32.75	8.59	9.72	AV
*5	0.476	35.20	56.41	-21.20	25.47	9.73	QP
6	0.476	24.02	46.41	-22.38	14.29	9.73	AV
7	0.893	25.35	56.00	-30.65	15.59	9.76	QP
8	0.893	5.62	46.00	-40.38	-4.14	9.76	AV
9	2.479	19.46	56.00	-36.54	9.63	9.83	QP
10	2.479	11.65	46.00	-34.35	1.81	9.83	AV
11	15.163	21.16	60.00	-38.84	10.93	10.23	QP
12	15.163	15.92	50.00	-34.08	5.69	10.23	AV

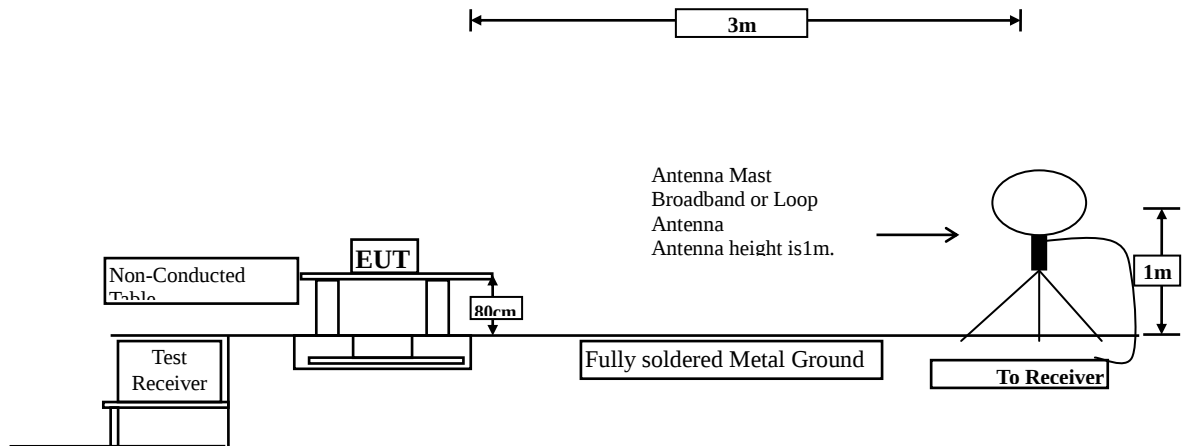
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.

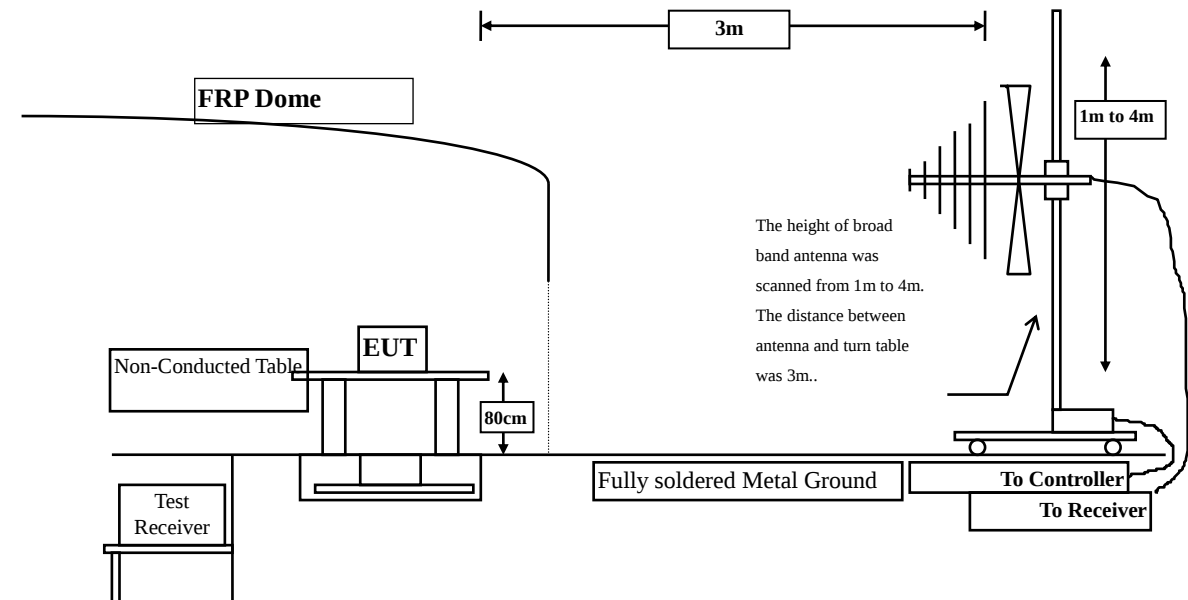
3. Radiated Emission

3.1. Test Setup

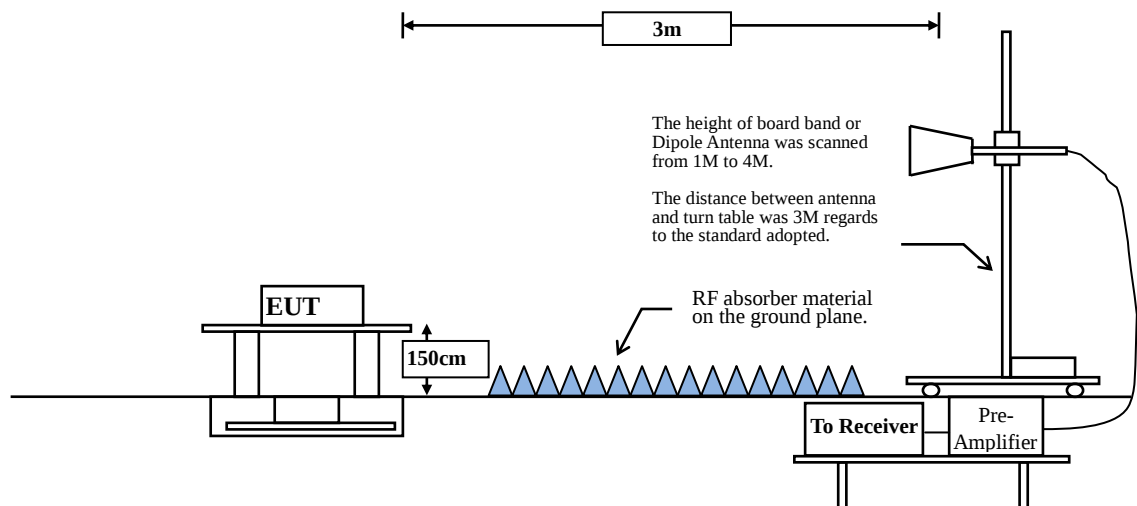
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



3.2. Limits

FCC Part 15 Subpart B Paragraph 15.109 Limits		
Frequency MHz	uV/m @3m	DBuV /m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

- Remarks :
1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
 2. In the Above Table, the tighter limit applies at the band edges.
 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

3.3. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz. Radiated emission measurements below 1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The worst radiated emission is measured on the Final Measurement.

The measurement frequency range from 30MHz - 10th Harmonic of fundamental was investigated.

3.4. Uncertainty

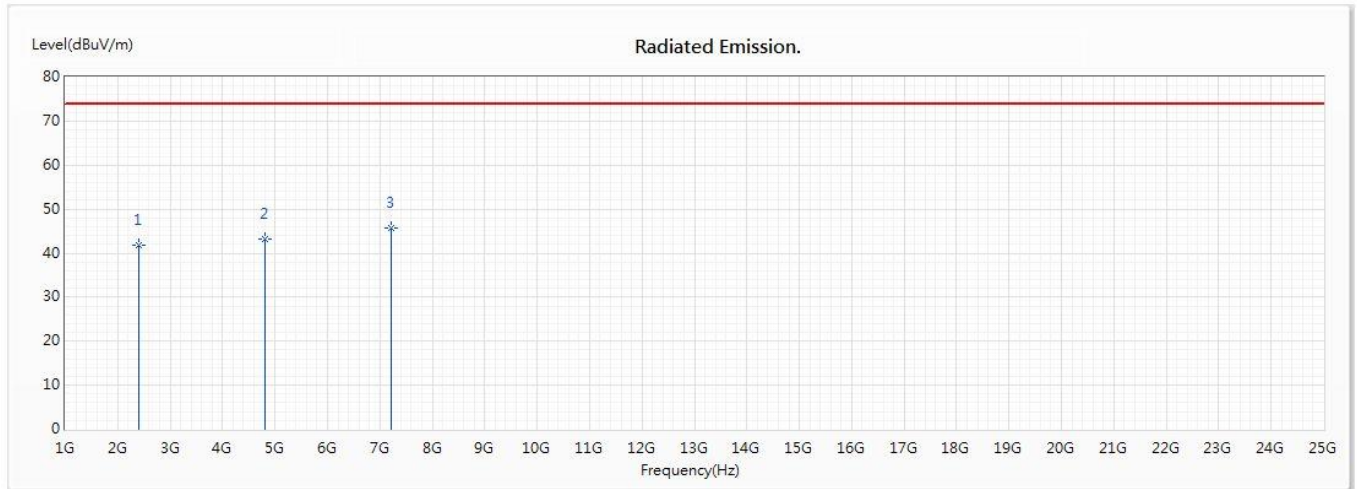
± 4.08 dB above 1GHz

± 4.22 dB below 1GHz

3.5. Test Result of Radiated Emission

Product : Bluetooth Headset
 Test Item : Harmonic Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2402MHz)

Horizontal



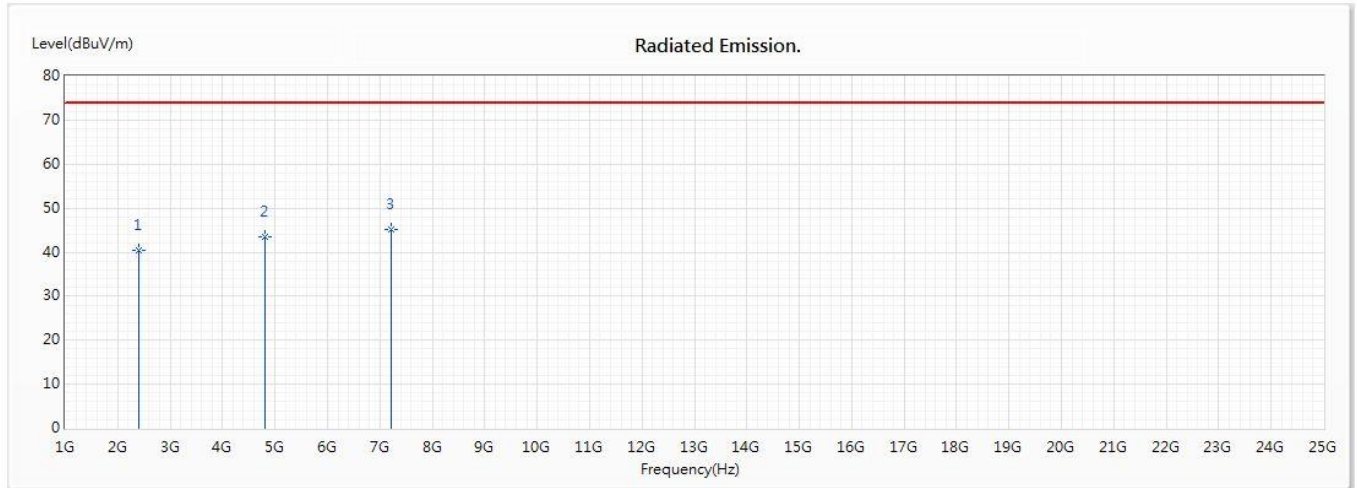
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	2402	41.74	74.00	-32.26	56.48	-14.74	PK
2	4804	43.34	74.00	-30.66	55.49	-12.15	PK
* 3	7206	45.69	74.00	-28.31	58.83	-13.14	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report..

Product : Bluetooth Headset
 Test Item : Harmonic Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2402MHz)

Vertical



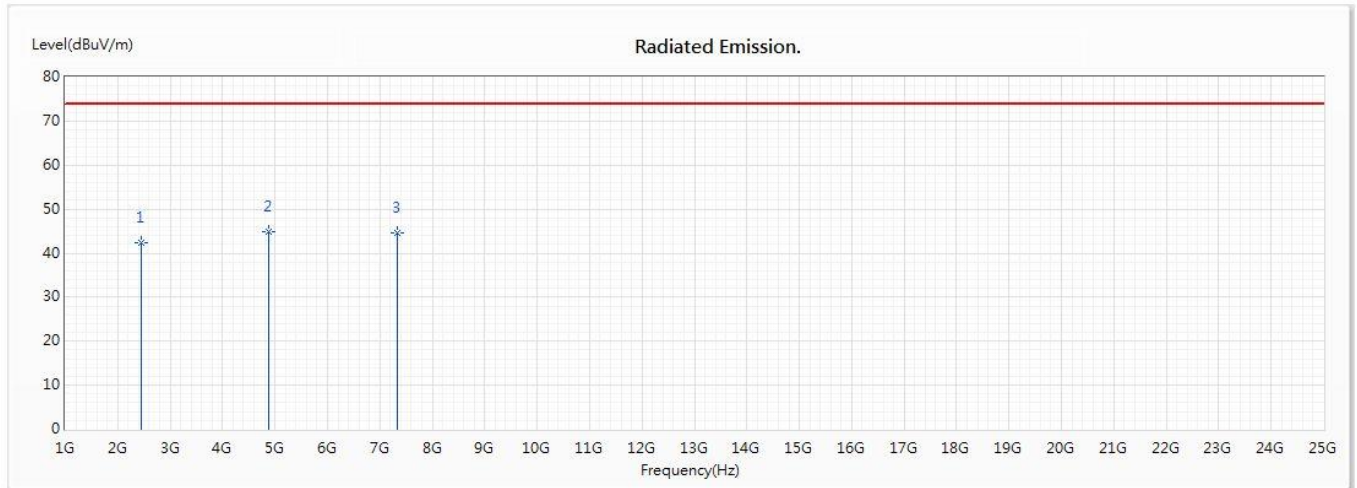
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	2402	40.44	74.00	-33.56	55.18	-14.74	PK
2	4804	43.61	74.00	-30.39	55.76	-12.15	PK
* 3	7206	45.20	74.00	-28.80	58.34	-13.14	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report..

Product : Bluetooth Headset
 Test Item : Harmonic Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2441MHz)

Horizontal



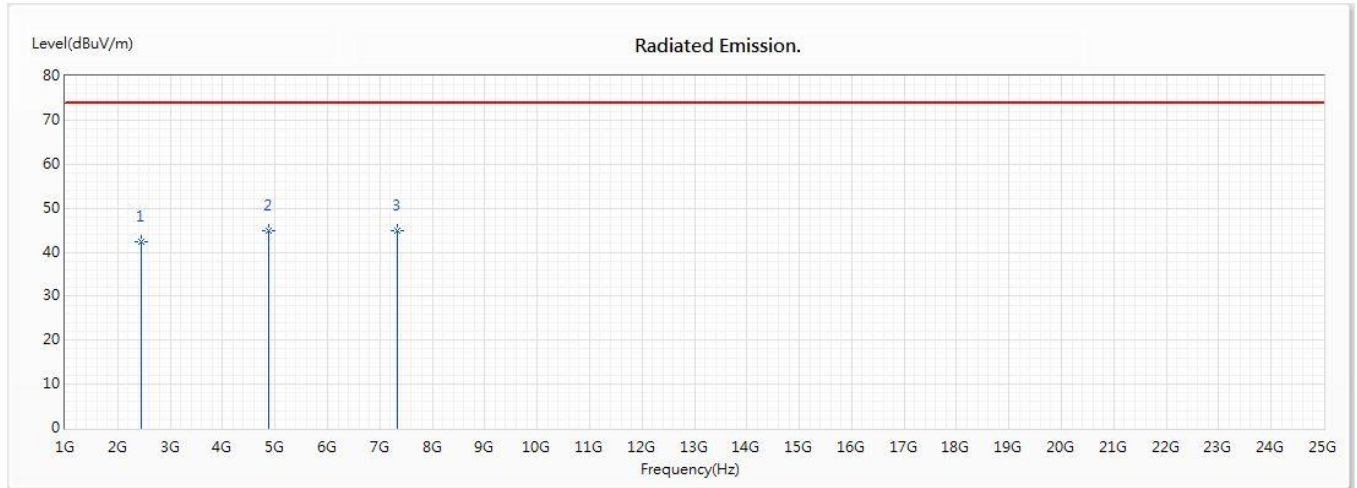
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	2441	42.47	74.00	-31.53	56.94	-14.47	PK
* 2	4882	44.96	74.00	-29.04	56.55	-11.59	PK
3	7323	44.62	74.00	-29.38	58.19	-13.57	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report..

Product : Bluetooth Headset
 Test Item : Harmonic Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2441MHz)

Vertical



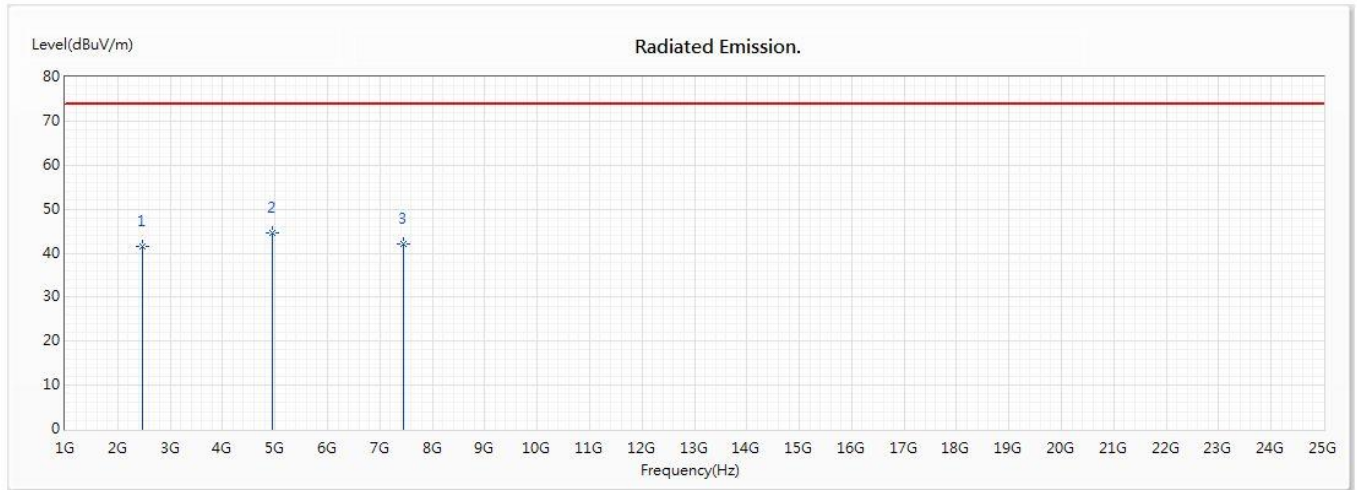
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	2441	42.45	74.00	-31.55	56.92	-14.47	PK
2	4882	44.81	74.00	-29.19	56.40	-11.59	PK
* 3	7323	44.82	74.00	-29.18	58.39	-13.57	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report..

Product : Bluetooth Headset
 Test Item : Harmonic Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2480MHz)

Horizontal



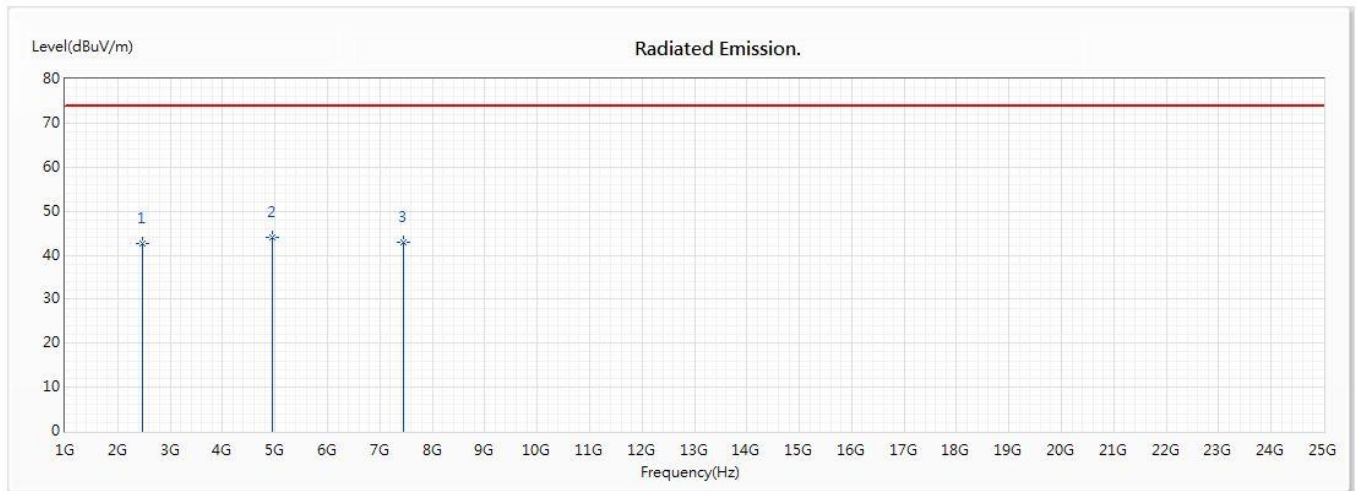
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	2480	41.61	74.00	-32.39	55.99	-14.38	PK
* 2	4960	44.51	74.00	-29.49	55.40	-10.89	PK
3	7440	42.15	74.00	-31.85	56.77	-14.62	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report..

Product : Bluetooth Headset
 Test Item : Harmonic Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2480MHz)

Vertical



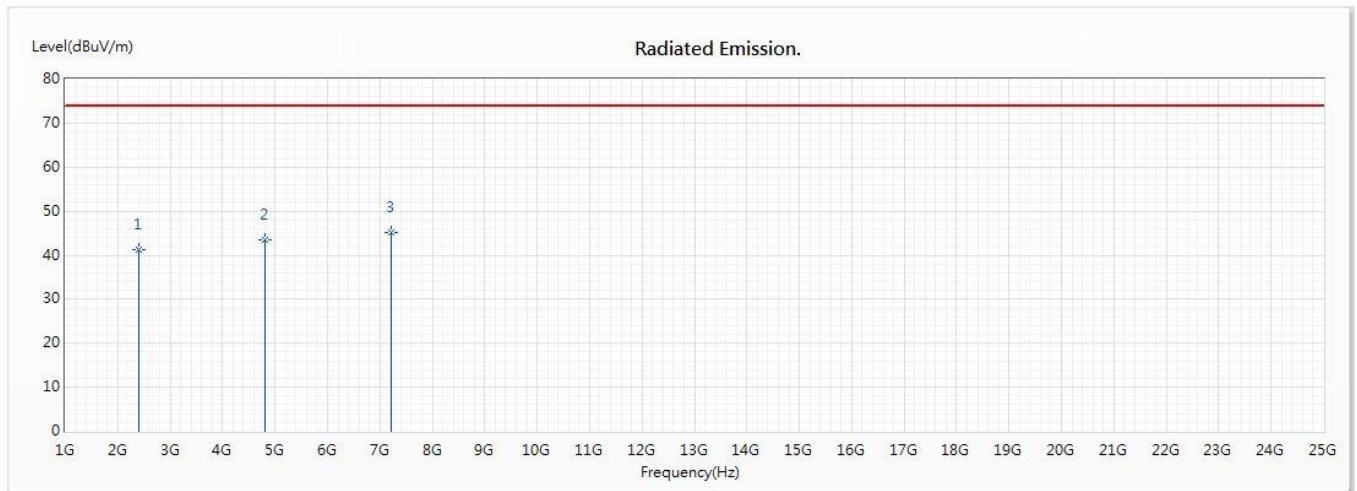
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	2480	42.54	74.00	-31.46	56.92	-14.38	PK
* 2	4960	44.09	74.00	-29.91	54.98	-10.89	PK
3	7440	43.00	74.00	-31.00	57.62	-14.62	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report..

Product : Bluetooth Headset
 Test Item : Harmonic Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 2: Receive - BLE-2Mbps (2402MHz)

Horizontal



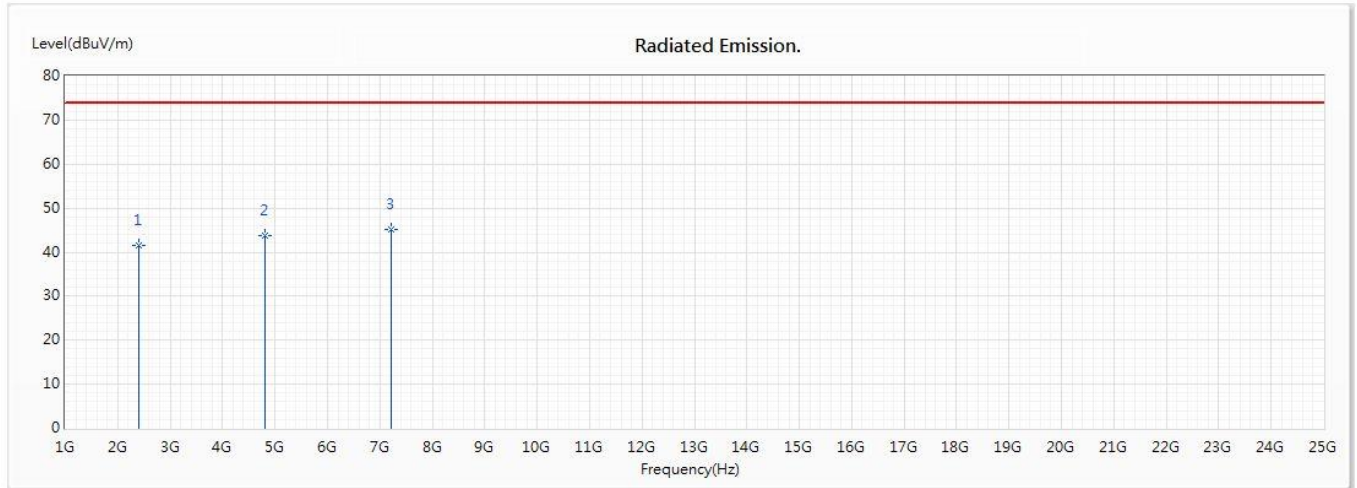
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	2402	41.12	74.00	-32.88	55.86	-14.74	PK
2	4804	43.57	74.00	-30.43	55.72	-12.15	PK
* 3	7206	45.29	74.00	-28.71	58.43	-13.14	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report..

Product : Bluetooth Headset
 Test Item : Harmonic Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 2: Receive - BLE-2Mbps (2402MHz)

Vertical



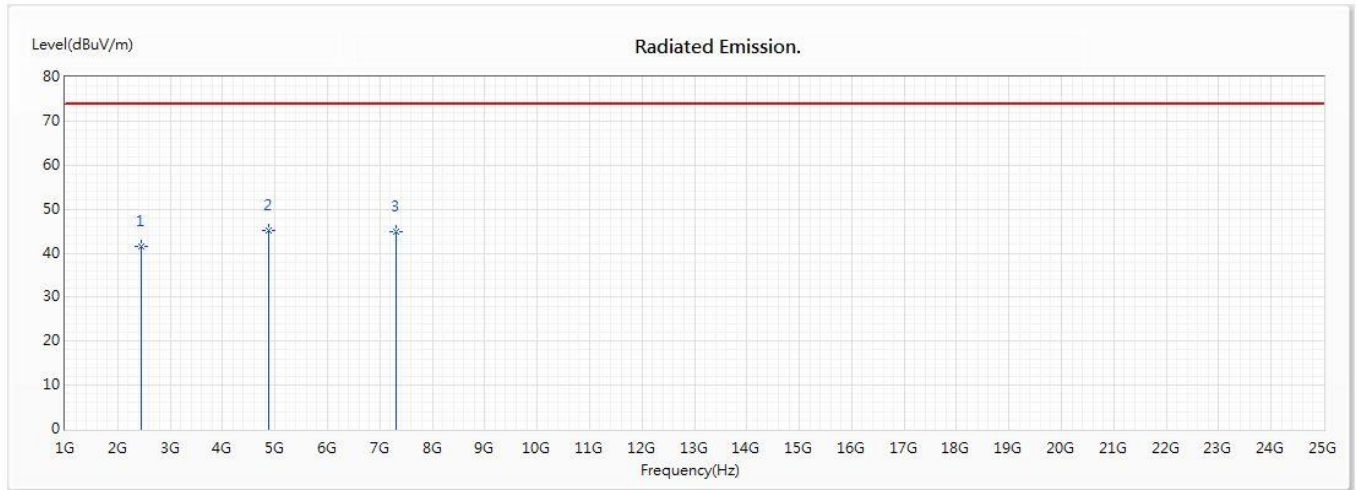
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	2402	41.53	74.00	-32.47	56.27	-14.74	PK
2	4804	43.70	74.00	-30.30	55.85	-12.15	PK
* 3	7206	45.24	74.00	-28.76	58.38	-13.14	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report..

Product : Bluetooth Headset
 Test Item : Harmonic Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 2: Receive - BLE-2Mbps (2440MHz)

Horizontal



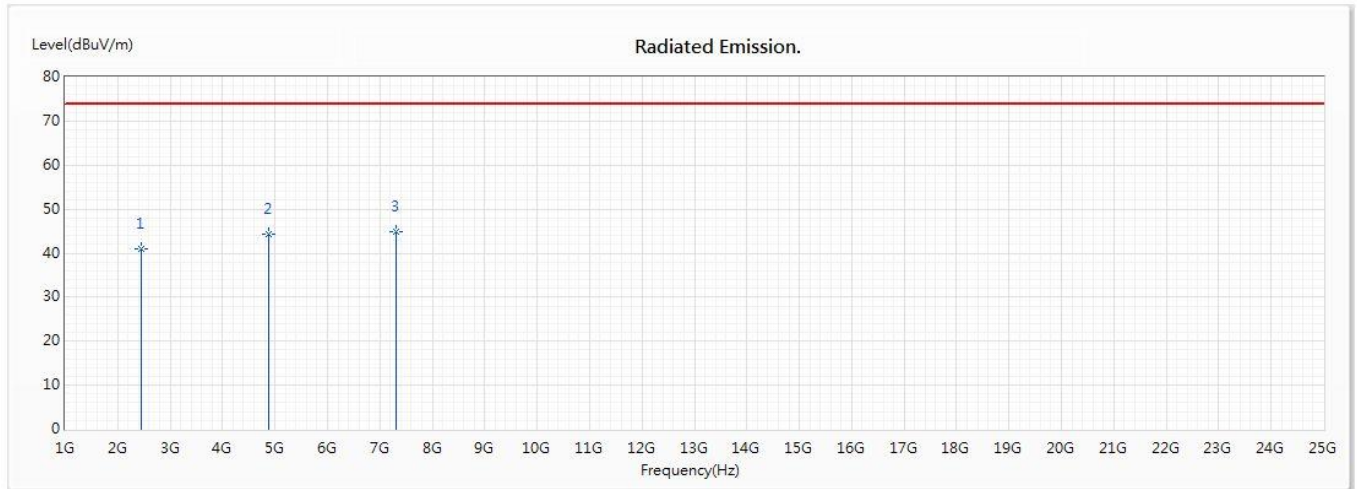
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	2440	41.45	74.00	-32.55	55.92	-14.47	PK
* 2	4880	45.08	74.00	-28.92	56.68	-11.60	PK
3	7320	44.76	74.00	-29.24	58.31	-13.55	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Bluetooth Headset
 Test Item : Harmonic Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 2: Receive - BLE-2Mbps (2440MHz)

Vertical



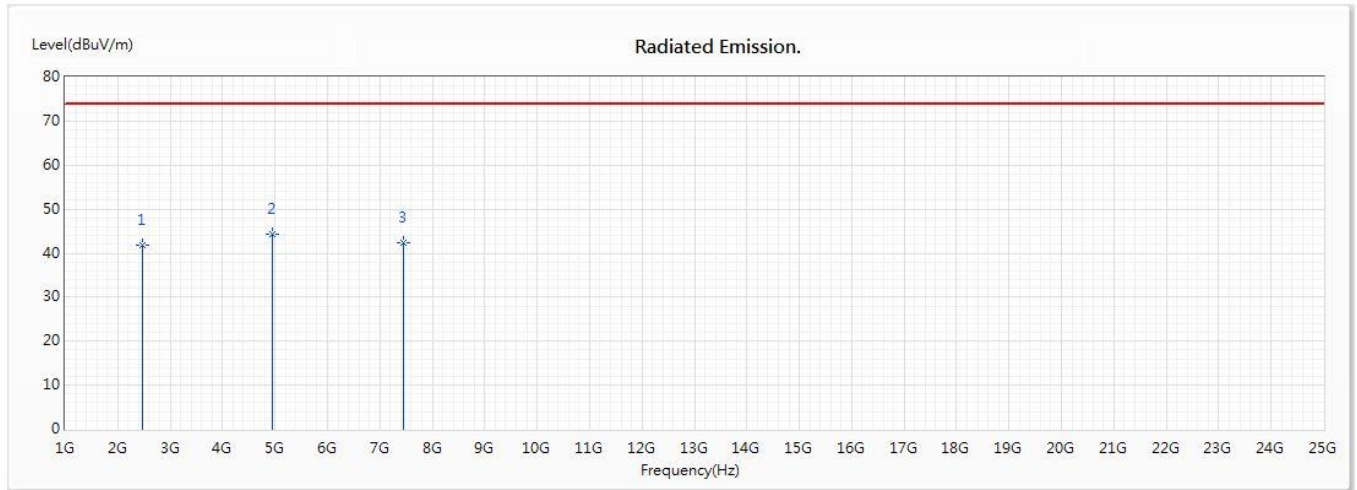
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	2440	41.08	74.00	-32.92	55.55	-14.47	PK
2	4880	44.29	74.00	-29.71	55.89	-11.60	PK
* 3	7320	44.83	74.00	-29.17	58.38	-13.55	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Bluetooth Headset
 Test Item : Harmonic Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 2: Receive - BLE-2Mbps (2480MHz)

Horizontal



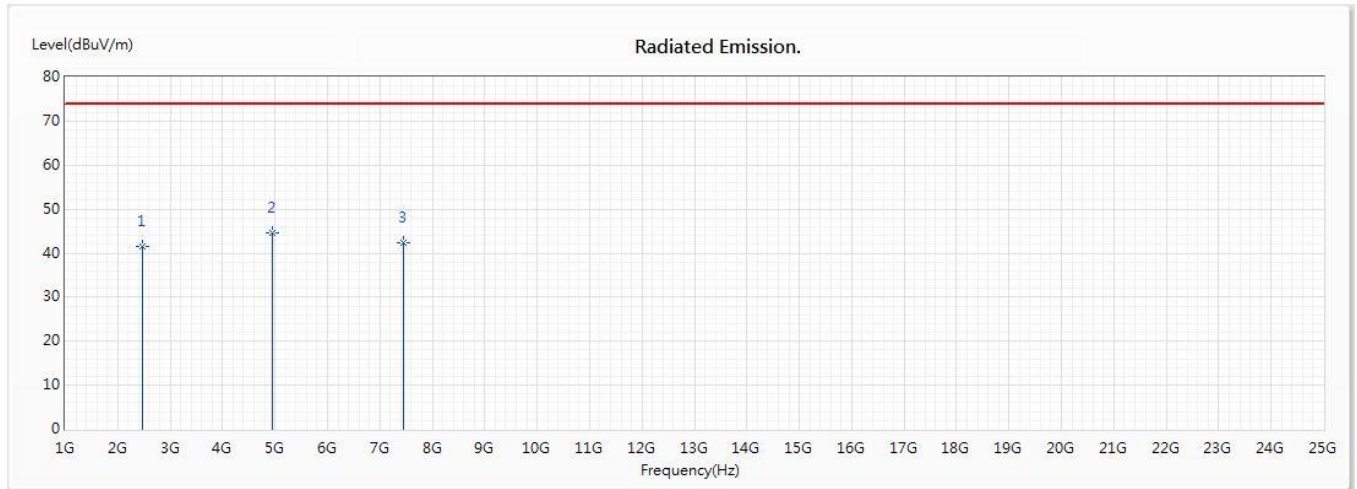
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	2480	41.74	74.00	-32.26	56.12	-14.38	PK
* 2	4960	44.35	74.00	-29.65	55.24	-10.89	PK
3	7440	42.29	74.00	-31.71	56.91	-14.62	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Bluetooth Headset
 Test Item : Harmonic Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 2: Receive - BLE-2Mbps (2480MHz)

Vertical



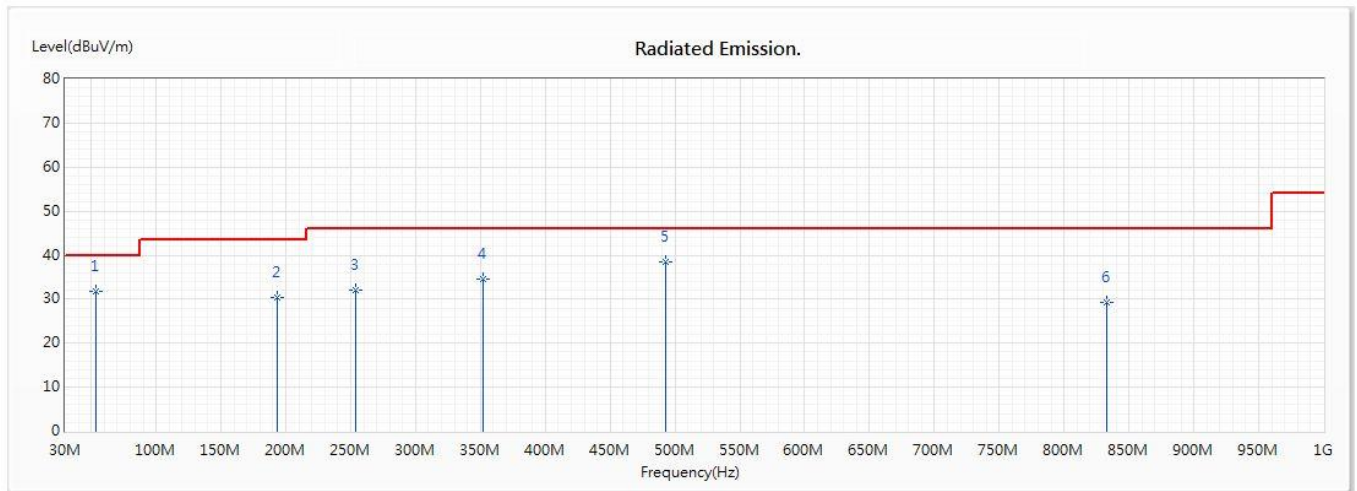
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	2480	41.54	74.00	-32.46	55.92	-14.38	PK
* 2	4960	44.62	74.00	-29.38	55.51	-10.89	PK
3	7440	42.49	74.00	-31.51	57.11	-14.62	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Bluetooth Headset
 Test Item : General Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2441MHz)(stereo headset with adjustable arm)

Horizontal



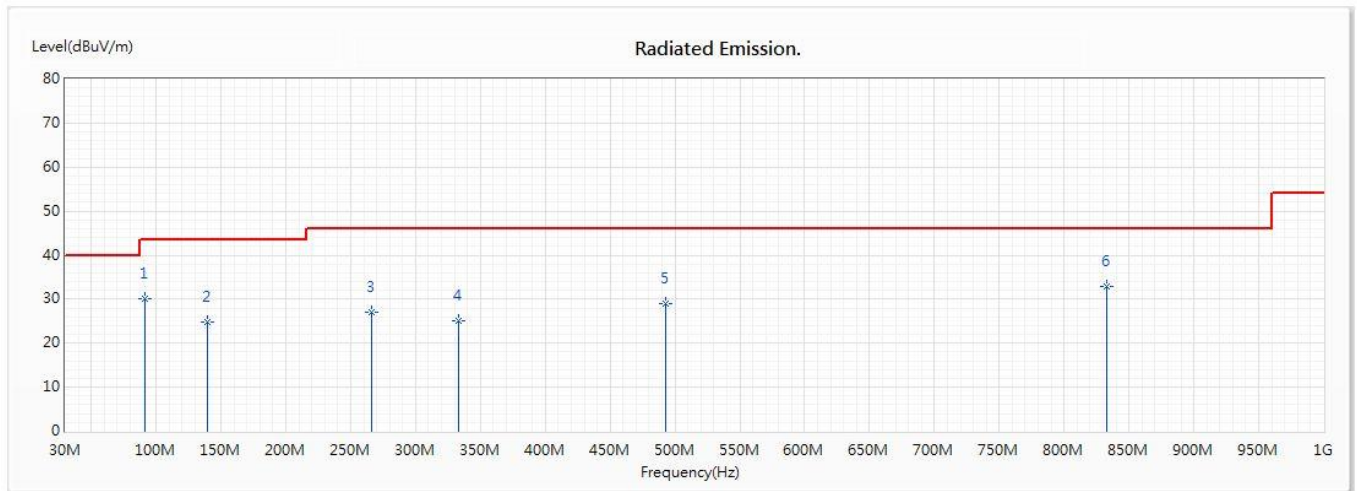
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	53.899	31.82	40.00	-8.18	49.50	-17.68	QP
2	193.072	30.36	43.50	-13.14	48.92	-18.56	QP
3	253.522	31.93	46.00	-14.07	49.96	-18.03	QP
4	351.928	34.68	46.00	-11.32	47.89	-13.21	QP
* 5	492.507	38.35	46.00	-7.65	49.69	-11.34	QP
6	832.71	29.33	46.00	-16.67	37.96	-8.63	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Bluetooth Headset
 Test Item : General Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2441MHz) (stereo headset with adjustable arm)

Vertical



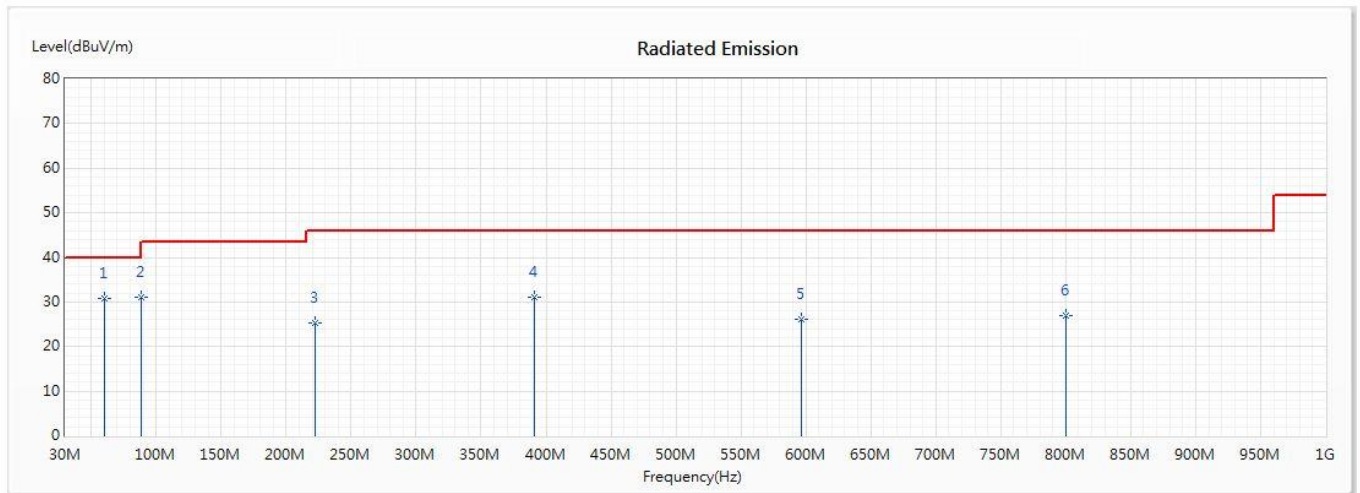
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	91.855	30.04	43.50	-13.46	47.09	-17.05	QP
2	139.652	24.84	43.50	-18.66	42.40	-17.56	QP
3	266.174	27.17	46.00	-18.83	45.66	-18.49	QP
4	333.652	25.00	46.00	-21.00	38.99	-13.99	QP
5	492.507	29.09	46.00	-16.91	40.43	-11.34	QP
* 6	832.71	32.99	46.00	-13.01	41.62	-8.63	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Bluetooth Headset
 Test Item : General Radiated Emission
 Test Date : 2019/12/12
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2441MHz)(mono earphone with adjustable arm)

Horizontal



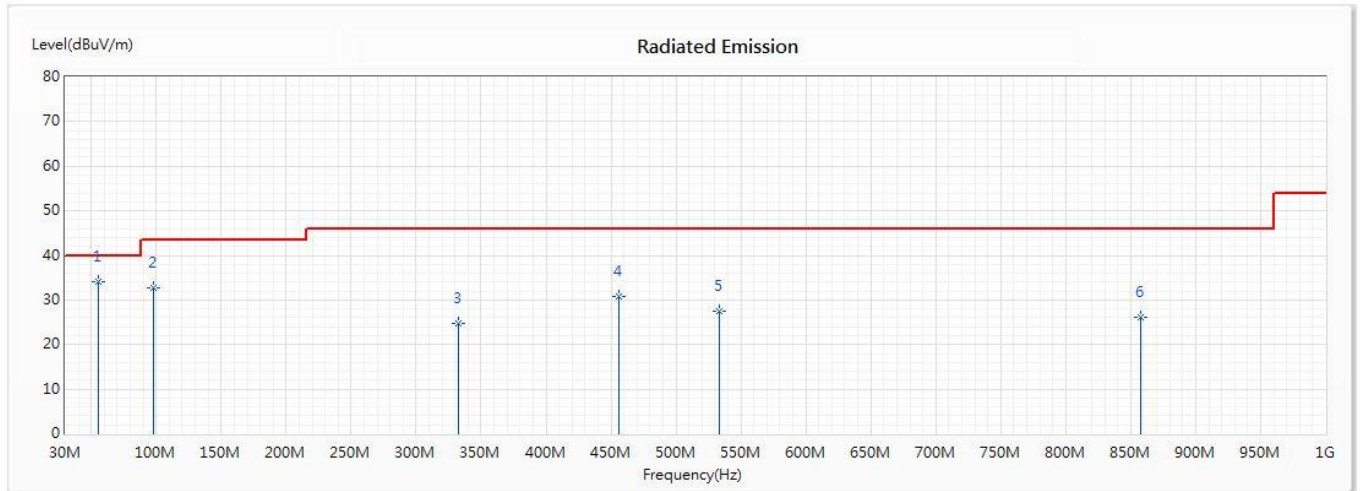
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
* 1	60.07	30.68	40.00	-9.32	48.97	-18.29	QP
2	88.2	31.18	43.50	-12.32	47.74	-16.56	QP
3	222.06	25.32	46.00	-20.68	41.93	-16.61	QP
4	390.84	31.20	46.00	-14.80	42.52	-11.32	QP
5	596.48	25.98	46.00	-20.02	31.93	-5.95	QP
6	800.18	26.83	46.00	-19.17	33.96	-7.13	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Bluetooth Headset
 Test Item : General Radiated Emission
 Test Date : 2019/12/12
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2441MHz) (mono earphone with adjustable arm)

Vertical



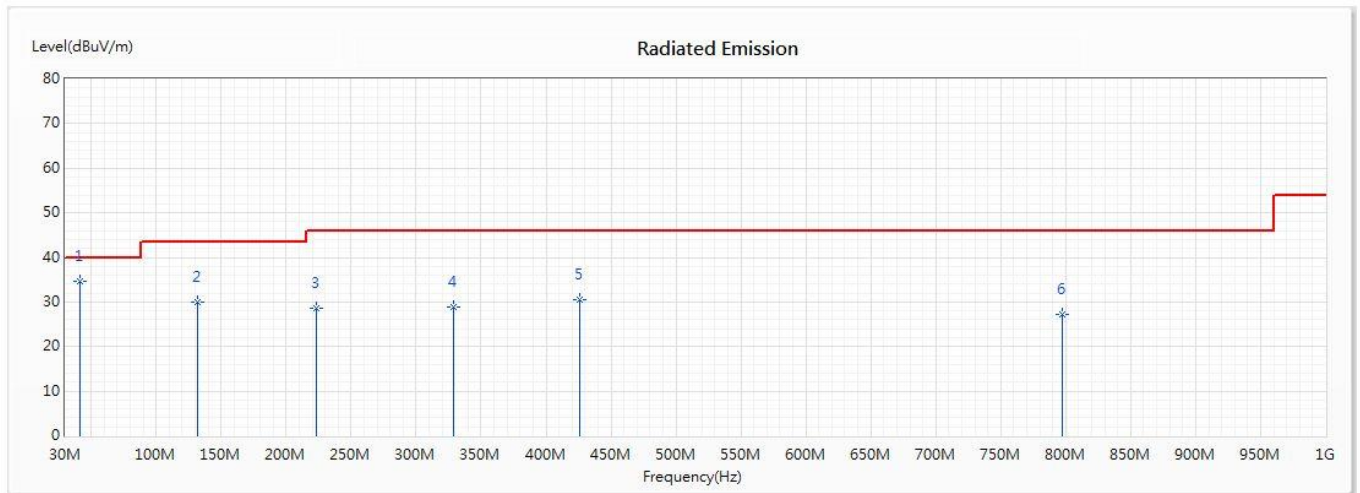
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
* 1	55.22	34.15	40.00	-5.85	51.41	-17.26	QP
2	97.9	32.62	43.50	-10.88	48.62	-16.00	QP
3	332.64	24.81	46.00	-21.19	37.03	-12.22	QP
4	455.83	30.66	46.00	-15.34	38.98	-8.32	QP
5	533.43	27.39	46.00	-18.61	36.65	-9.26	QP
6	857.41	26.20	46.00	-19.80	33.32	-7.12	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Bluetooth Headset
 Test Item : General Radiated Emission
 Test Date : 2019/12/12
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2441MHz)(stereo headset)

Horizontal



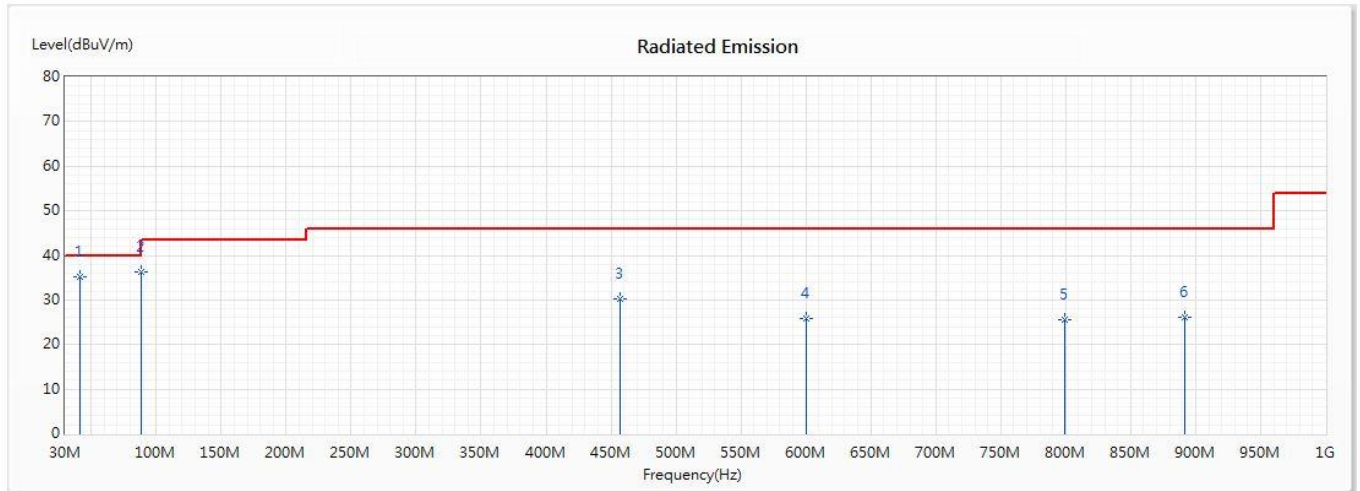
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
* 1	41.64	34.59	40.00	-5.41	51.52	-16.93	QP
2	131.85	29.93	43.50	-13.57	44.43	-14.50	QP
3	223.03	28.47	46.00	-17.53	44.97	-16.50	QP
4	328.76	28.73	46.00	-17.27	41.01	-12.28	QP
5	425.76	30.51	46.00	-15.49	40.00	-9.49	QP
6	797.27	27.18	46.00	-18.82	34.27	-7.09	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Bluetooth Headset
 Test Item : General Radiated Emission
 Test Date : 2019/12/12
 Test Mode : Mode 1: Receive - Bluetooth-3Mbps (2441MHz) (stereo headset)

Vertical



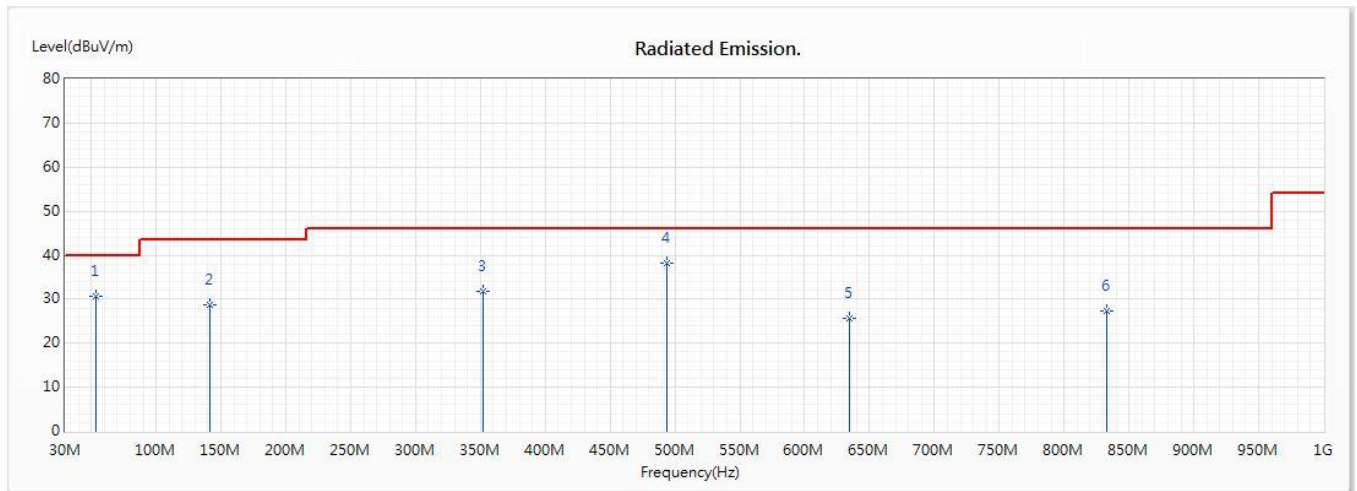
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
* 1	41.64	35.32	40.00	-4.68	52.25	-16.93	QP
2	88.2	36.38	43.50	-7.12	52.94	-16.56	QP
3	456.8	30.37	46.00	-15.63	38.73	-8.36	QP
4	600.36	25.78	46.00	-20.22	31.75	-5.97	QP
5	799.21	25.59	46.00	-20.41	32.70	-7.11	QP
6	891.36	26.06	46.00	-19.94	33.01	-6.95	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Bluetooth Headset
 Test Item : General Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 2: Receive - BLE-2Mbps (2440MHz) (stereo headset with adjustable arm)

Horizontal



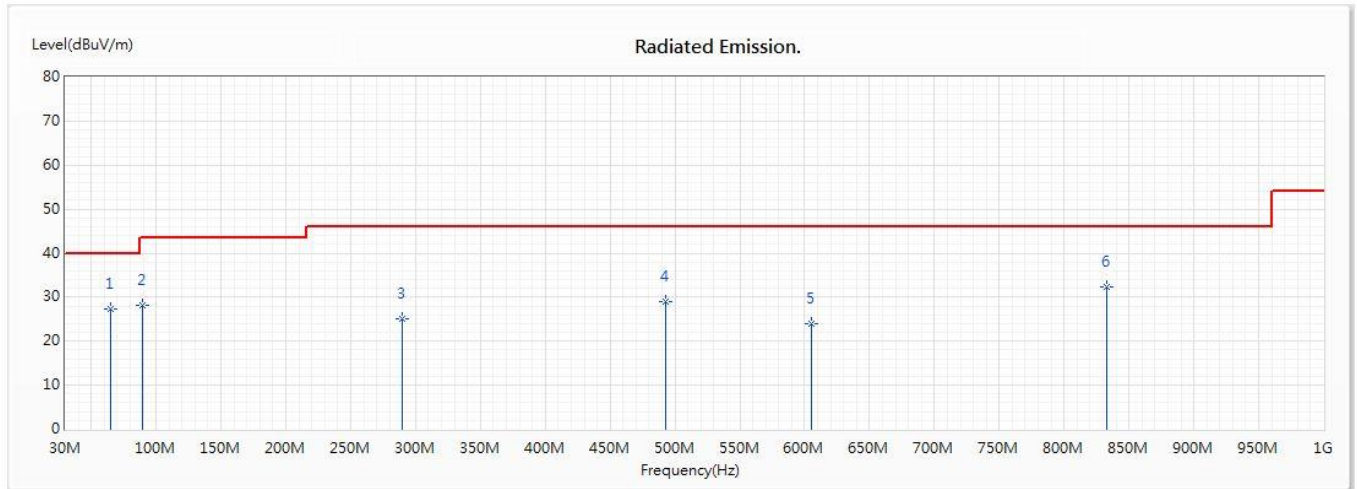
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	53.899	30.59	40.00	-9.41	48.27	-17.68	QP
2	141.058	28.72	43.50	-14.78	46.57	-17.85	QP
3	351.928	31.87	46.00	-14.13	45.08	-13.21	QP
* 4	493.913	38.15	46.00	-7.85	49.40	-11.25	QP
5	634.493	25.74	46.00	-20.26	34.37	-8.63	QP
6	832.71	27.18	46.00	-18.82	35.81	-8.63	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Bluetooth Headset
 Test Item : General Radiated Emission
 Test Date : 2019/11/14
 Test Mode : Mode 2: Receive - BLE-2Mbps (2440MHz) (stereo headset with adjustable arm)

Vertical



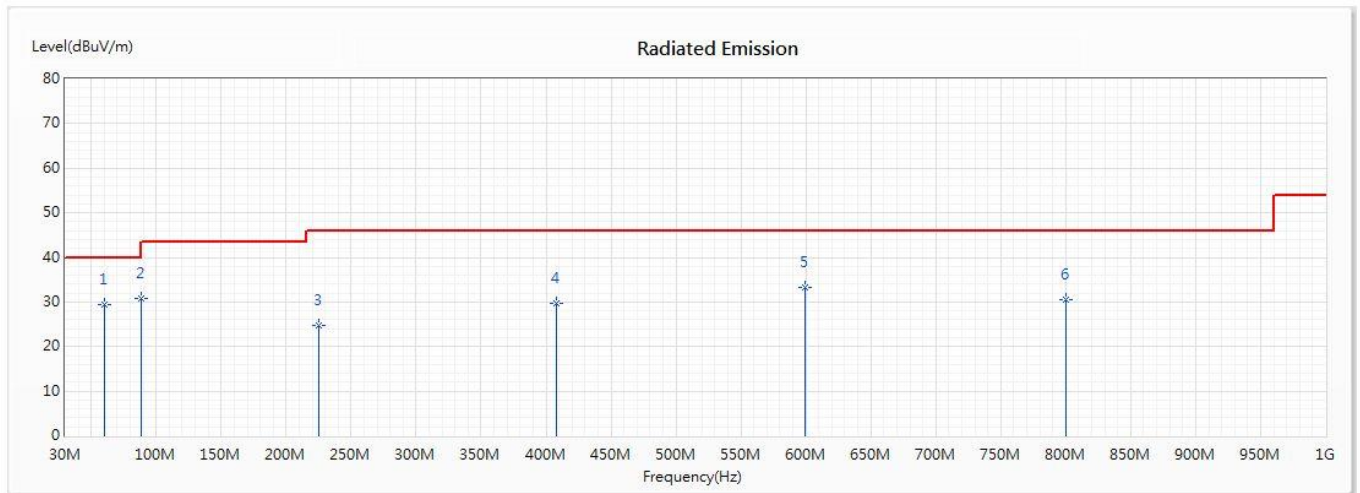
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
* 1	65.145	27.22	40.00	-12.78	47.85	-20.63	QP
2	89.043	28.21	43.50	-15.29	45.50	-17.29	QP
3	290.072	25.06	46.00	-20.94	42.09	-17.03	QP
4	492.507	29.01	46.00	-16.99	40.35	-11.34	QP
5	604.971	23.91	46.00	-22.09	30.88	-6.97	QP
6	832.71	32.43	46.00	-13.57	41.06	-8.63	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Bluetooth Headset
 Test Item : General Radiated Emission
 Test Date : 2019/12/12
 Test Mode : Mode 2: Receive - BLE-2Mbps (2440MHz) (mono earphone with adjustable arm)

Horizontal



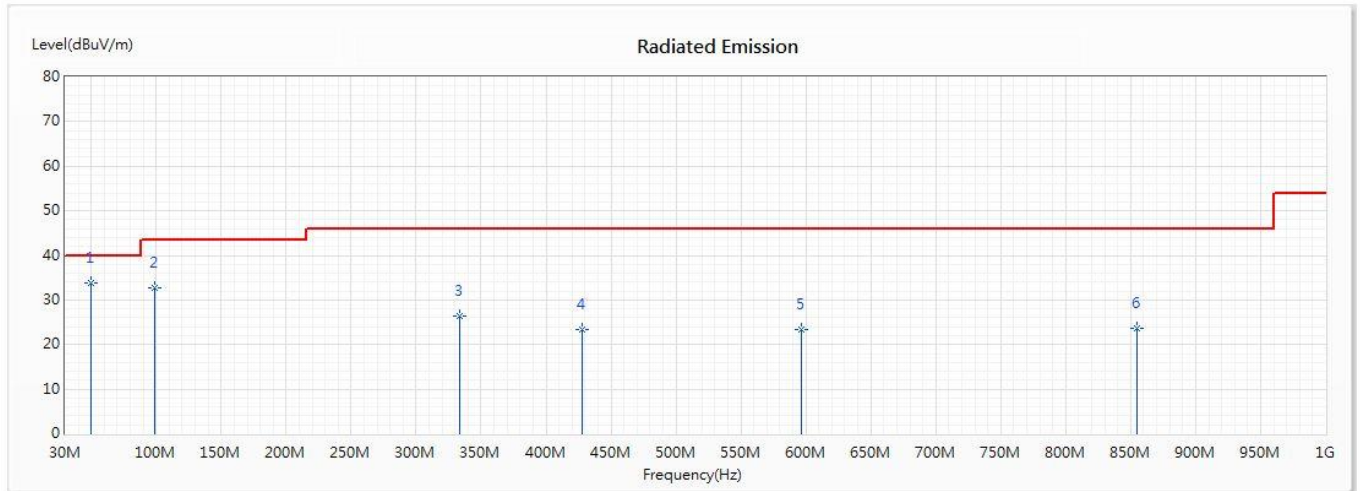
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
* 1	60.07	29.50	40.00	-10.50	47.79	-18.29	QP
2	88.2	30.78	43.50	-12.72	47.34	-16.56	QP
3	224.97	24.68	46.00	-21.32	40.96	-16.28	QP
4	408.3	29.64	46.00	-16.36	40.94	-11.30	QP
5	599.39	33.22	46.00	-12.78	39.17	-5.95	QP
6	800.18	30.62	46.00	-15.38	37.75	-7.13	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Bluetooth Headset
 Test Item : General Radiated Emission
 Test Date : 2019/12/12
 Test Mode : Mode 2: Receive - BLE-2Mbps (2440MHz) (mono earphone with adjustable arm)

Vertical



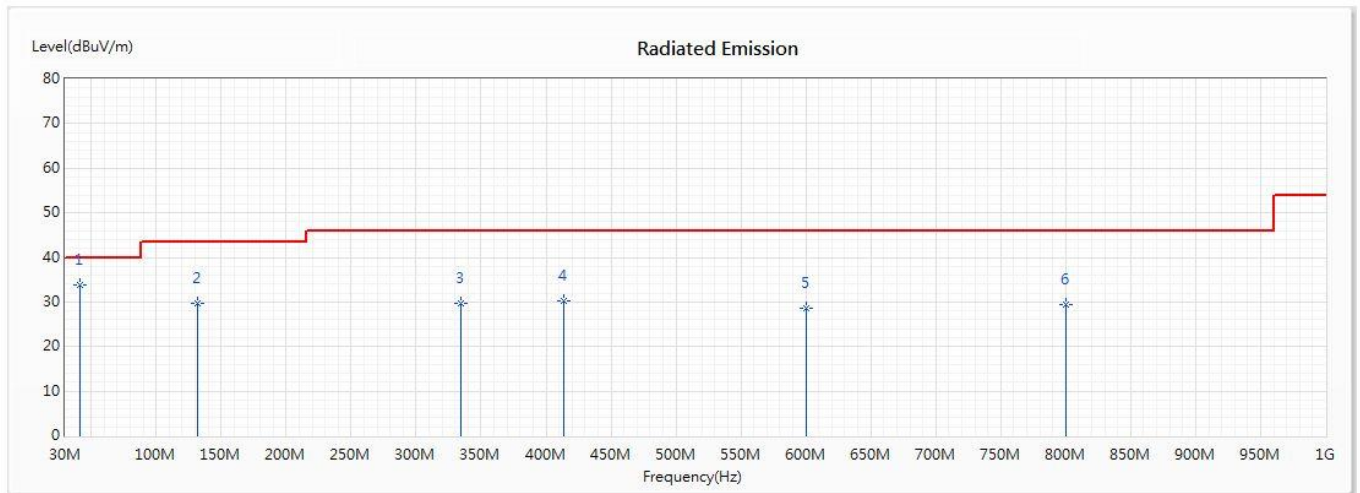
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
* 1	49.4	33.95	40.00	-6.05	51.09	-17.14	QP
2	98.87	32.75	43.50	-10.75	48.62	-15.87	QP
3	333.61	26.37	46.00	-19.63	38.58	-12.21	QP
4	427.7	23.31	46.00	-22.69	32.56	-9.25	QP
5	596.48	23.48	46.00	-22.52	29.43	-5.95	QP
6	854.5	23.54	46.00	-22.46	30.63	-7.09	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Bluetooth Headset
 Test Item : General Radiated Emission
 Test Date : 2019/12/12
 Test Mode : Mode 2: Receive - BLE-2Mbps (2440MHz) (stereo headset)

Horizontal



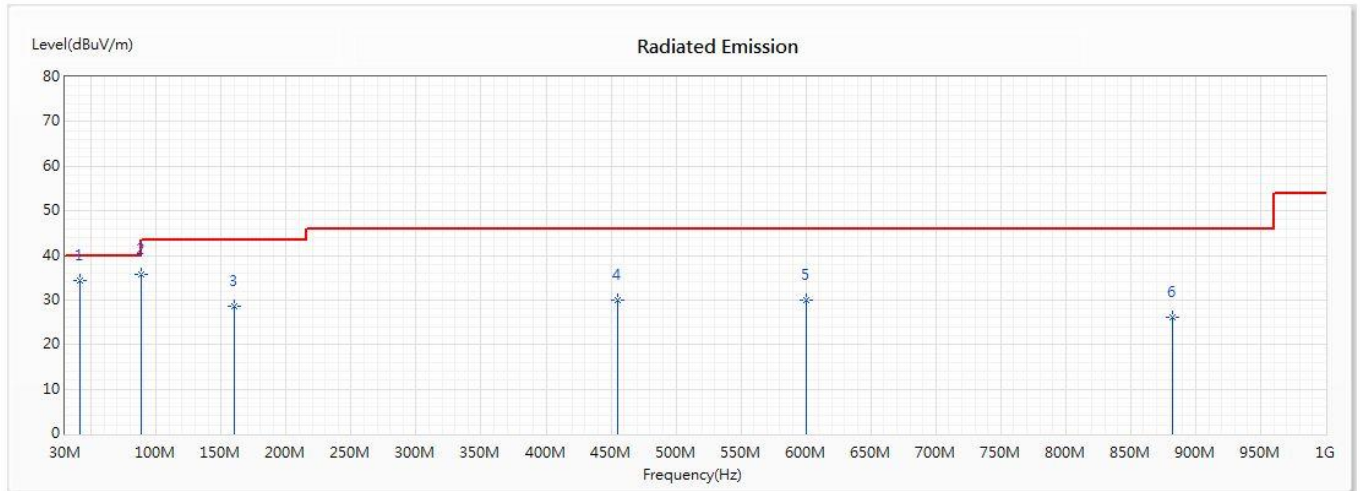
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
* 1	41.64	33.92	40.00	-6.08	50.85	-16.93	QP
2	131.85	29.75	43.50	-13.75	44.25	-14.50	QP
3	334.58	29.65	46.00	-16.35	41.85	-12.20	QP
4	414.12	30.16	46.00	-15.84	41.08	-10.92	QP
5	600.36	28.49	46.00	-17.51	34.46	-5.97	QP
6	800.18	29.34	46.00	-16.66	36.47	-7.13	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Bluetooth Headset
 Test Item : General Radiated Emission
 Test Date : 2019/12/12
 Test Mode : Mode 2: Receive - BLE-2Mbps (2440MHz) (stereo headset)

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
* 1	41.64	34.50	40.00	-5.50	51.43	-16.93	QP
2	88.2	35.71	43.50	-7.79	52.27	-16.56	QP
3	159.98	28.53	43.50	-14.97	47.17	-18.64	QP
4	454.86	30.09	46.00	-15.91	38.36	-8.27	QP
5	600.36	30.10	46.00	-15.90	36.07	-5.97	QP
6	882.63	26.00	46.00	-20.00	32.41	-6.41	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

4. EMI Reduction Method During Compliance Testing

No modification was made during testing.