



Test Report

FCC Part15 Subpart C

Product Name : Bluetooth headset
Model No. : FITE15
FCC ID : AL8-FITE15

Applicant : Plantronics, Inc

Address : 345 Encinal Street, Santa Cruz, CA95060 USA

Date of Receipt : Oct. 13, 2017
Test Date : Oct. 13, 2017~ Nov. 07, 2017
Issued Date : Nov. 08, 2017
Report No. : 17A2031R-RF-US-P06V01
Report Version : V 1.1

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 of the equipment and evaluated measurement uncertainty herein.

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Test Report Certification

Issued Date : Nov. 14, 2017

Report No. : 17A2031R-RF-US-P06V01



Product Name : Bluetooth headset
 Applicant : Plantronics, Inc
 Address : 345 Encinal Street, Santa Cruz, CA95060 USA
 Manufacturer : Plantronics, Inc
 Address : 345 Encinal Street, Santa Cruz, CA95060 USA
 Model No. : FITE15
 FCC ID : AL8-FITE15
 Brand Name : Plantronics
 EUT Voltage : 3.7V
 Test Voltage : AC120V/60Hz
 Applicable Standard : FCC CFR Title 47 Part 15 Subpart C: 2017
 KDB DA 00-705 Released March 30, 2000
 ANSI C63.10: 2013
 Test Result : Complied
 Performed Location : DEKRA Testing & Certification (Suzhou) Co., Ltd.
 No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006,
 Jiangsu, China
 TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
 FCC Registration Number: CN1199

Documented By : Kathy Feng
 (Project Assistant: Kathy Feng)

Reviewed By : Frank He
 (Senior Engineer: Frank He)

Approved By : Harry Zhao
 (Engineering Manager: Harry Zhao)

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
17A2031R-RF-US-P06V01	V1.0	Initial Issued Report	Nov. 08, 2017
17A2031R-RF-US-P06V01	V1.1	1) Page 17, delete ANSI 63.4 2) Page55-60, update the limit	Nov. 14, 2017

1. General Information

1.1. EUT Description

Product Name	Bluetooth headset
Model No.	FITE15
Working Voltage	3.7V
Test Voltage	AC120V/60Hz
Bluetooth Specification	V3.0
Frequency Range	2402- 2480 MHz
Channel Number	V3.0: 79
Channel Separation	V3.0: 1MHz
Type of Modulation	V3.0: GFSK, Pi/4 DQPSK, 8DPSK
Data Rate	V3.0: 1Mbps(GFSK), 2Mbps(Pi/4 DQPSK), 3Mbps(8DPSK)
Antenna Type	Reference to Antenna List
Peak Antenna Gain	Reference to Antenna List

Bluetooth Working Frequency of Each Channel: (For V3.0)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2403 MHz	02	2404 MHz	03	2405 MHz
04	2406 MHz	05	2407 MHz	06	2408 MHz	07	2409 MHz
08	2410 MHz	09	2411 MHz	10	2412 MHz	11	2413 MHz
12	2414 MHz	13	2415 MHz	14	2416 MHz	15	2417 MHz
16	2418 MHz	17	2419 MHz	18	2420 MHz	19	2421 MHz
20	2422 MHz	21	2423 MHz	22	2424 MHz	23	2425 MHz
24	2426 MHz	25	2427 MHz	26	2428 MHz	27	2429 MHz
28	2430 MHz	29	2431 MHz	30	2432 MHz	31	2433 MHz
32	2434 MHz	33	2435 MHz	34	2436 MHz	35	2437 MHz
36	2438 MHz	37	2439 MHz	38	2440 MHz	39	2441 MHz
40	2442 MHz	41	2443 MHz	42	2444 MHz	43	2445 MHz
44	2446 MHz	45	2447 MHz	46	2448 MHz	47	2449 MHz
48	2450 MHz	49	2451 MHz	50	2452 MHz	51	2453 MHz
52	2454 MHz	53	2455 MHz	54	2456 MHz	55	2457 MHz
56	2458 MHz	57	2459 MHz	58	2460 MHz	59	2461 MHz
60	2462 MHz	61	2463 MHz	62	2464 MHz	63	2465 MHz
64	2466 MHz	65	2467 MHz	66	2468 MHz	67	2469 MHz
68	2470 MHz	69	2471 MHz	70	2472 MHz	71	2473 MHz
72	2474 MHz	73	2475 MHz	74	2476 MHz	75	2477 MHz
76	2478 MHz	77	2479 MHz	78	2480 MHz	N/A	N/A

1.2 Antenna information

Model No.	N/A		
Antenna manufacturer	N/A		
Antenna Delivery	<input checked="" type="checkbox"/> 1*TX+1*RX	<input type="checkbox"/> 2*TX+2*RX	<input type="checkbox"/> 3*TX+3*RX
Antenna technology	<input checked="" type="checkbox"/> SISO		
	<input type="checkbox"/> MIMO	<input type="checkbox"/> Basic	
		<input type="checkbox"/> CDD	
		<input type="checkbox"/> Beam-forming	
Antenna Type	<input type="checkbox"/> External	<input type="checkbox"/> Dipole	
	<input checked="" type="checkbox"/> Internal	<input type="checkbox"/> PIFA	
		<input type="checkbox"/> PCB	
		<input type="checkbox"/> Ceramic Chip Antenna	
		<input type="checkbox"/> Metal plate type F antenna	
		<input checked="" type="checkbox"/> Printed Antenna	
Antenna Gain	1.2dBi		

1.3 Mode of Operation

DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Transmitter-1Mbps(GFSK_DH5)
Mode 2: Transmitter-2Mbps(Pi/4 DQPSK_DH5)
Mode 3: Transmitter-3Mbps(8DPSK_DH5)
Mode 4: Transmitter-Hopping

Note:

1. For portable device, radiated spurious emission was verified over X, Y, Z Axis, and shown the worst case on this report.
2. Regards to the frequency band operation for systems using FHSS modulation: normal operation (hopping) was selected to test for conducted spurious test.
3. The extreme test condition for voltage and temperature were declared by the manufacturer.
4. The reading values of all the test items contain cable loss.

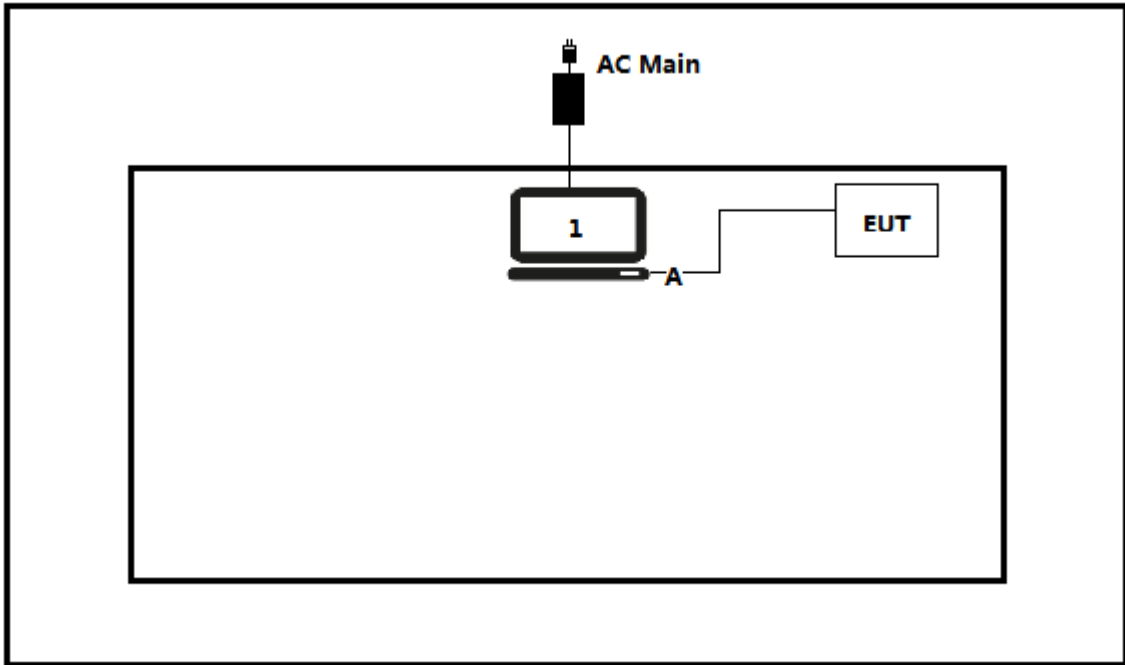
1.4 Tested System Details

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

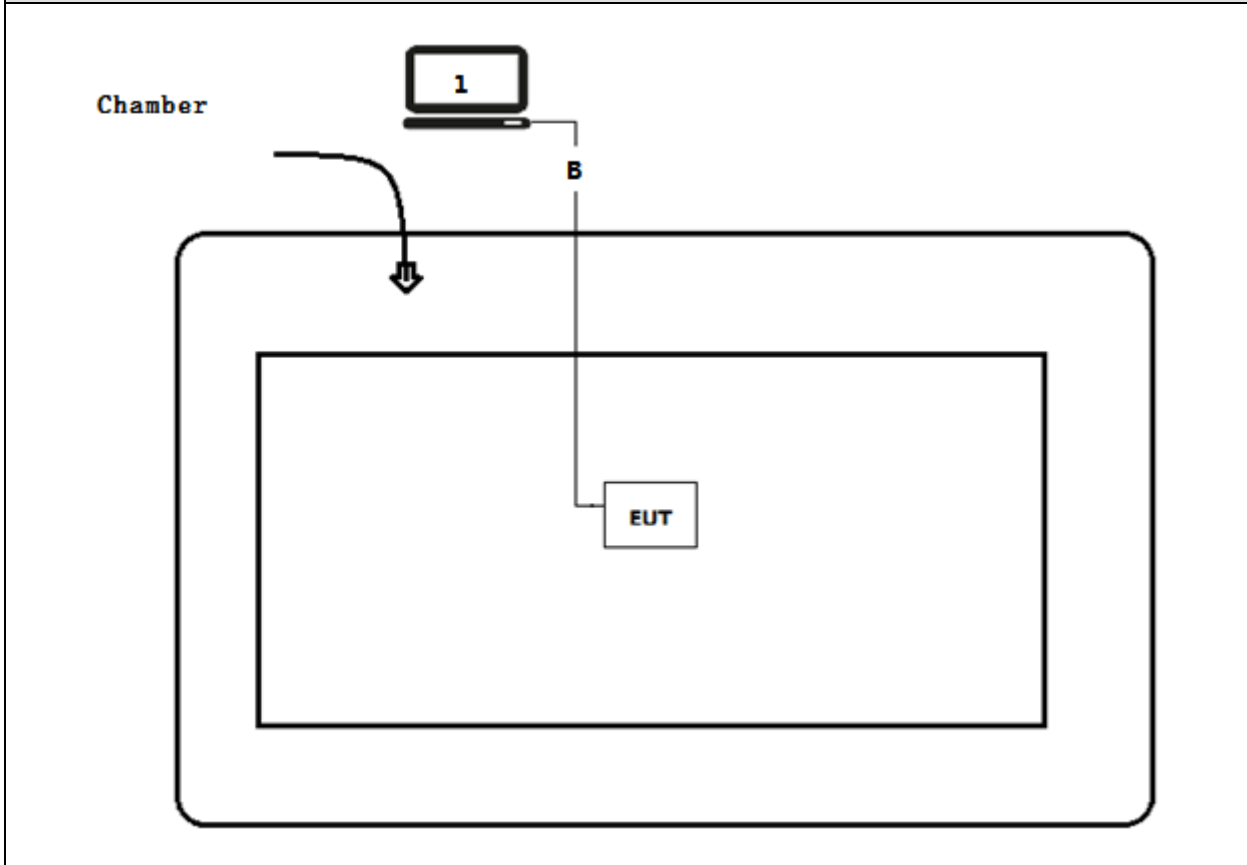
Product	Manufacturer	Model No.	Serial No.	Power Cord
1 Notebook	Think Pad	2526	LV-A3285	Power by adapter
A USB Cable	N/A	N/A	N/A	Shield, 0.75m
B USB Cable	N/A	N/A	N/A	Shield, 10m

1.5 Configuration of Tested System

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Radiated Emission



1.6 EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of all equipment.
3	Run the Bluetest3 software, and set the test mode and channel, then press OK to start continue Transmit.

2. Technical Test

2.1. Summary of Test Result

Performed Test Item	Normative References	Test Performed	Deviation
Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.207	Yes	No
Emissions in restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.209	Yes	No
20dB Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(1)	Yes	No
Carrier Frequency Separation	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(1)	Yes	No
Number of Hopping Frequencies	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(1)(iii)	Yes	No
Time of Occupancy (Dwell Time)	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(1)(iii)	Yes	No
Peak Output Power	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(b)(1)	Yes	No
Emissions in non-restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.215(c), 15.247(d)	Yes	No
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 2015 15.247(d)	Yes	No
Antenna Requirement	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.203	Yes	No

2.2. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

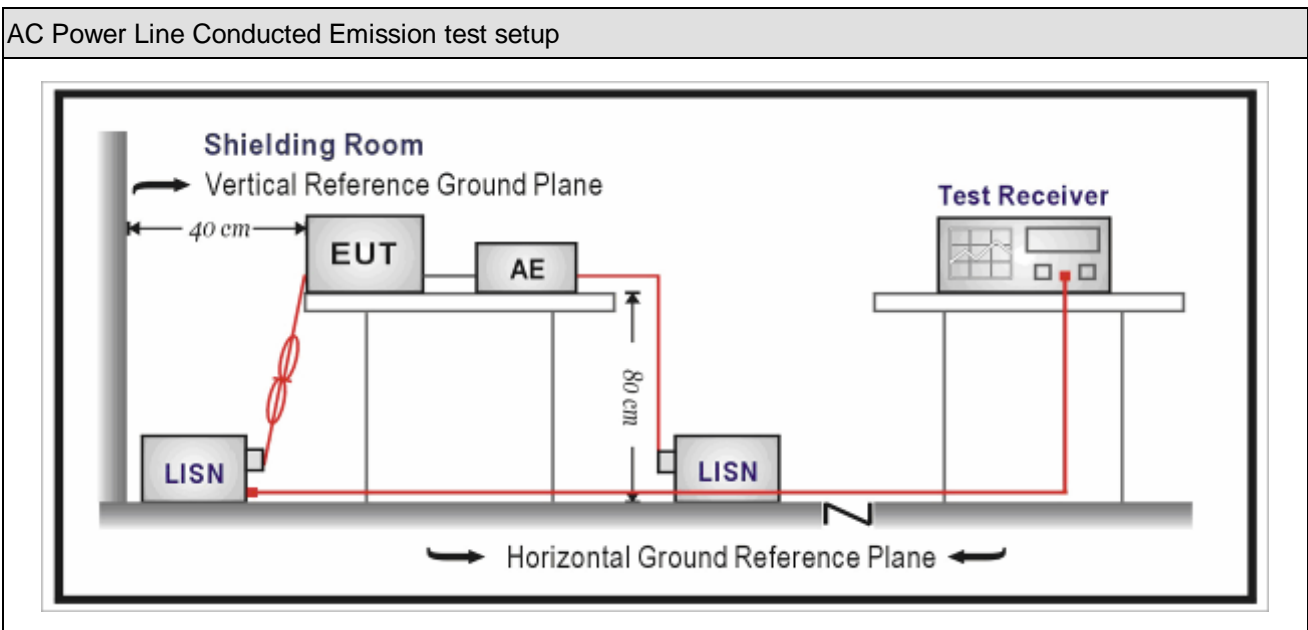
3. Conducted Emission

3.1. Test Equipment

AC Power Line Conducted Emission / TR-1					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100906	2017.03.05	2018.03.04
Two-Line V-Network	R&S	ENV 216	101189	2017.07.16	2018.07.15
Two-Line V-Network	R&S	ENV 216	101044	2017.09.15	2018.09.15
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	N/A	N/A
50ohm Termination	SHX	TF2	07081402	2017.09.15	2018.09.15
Temperature/Humidity Meter	Zhichen	ZC1-2	TR1-TH	2017.01.05	2018.01.04

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

3.2. Test Setup



3.3. Limit

Frequency of Emission (MHz)	Conducted Limit	
	Quasi-peak (dB μ V)	Average (dB μ V)
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 linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

3.4. Test Procedure

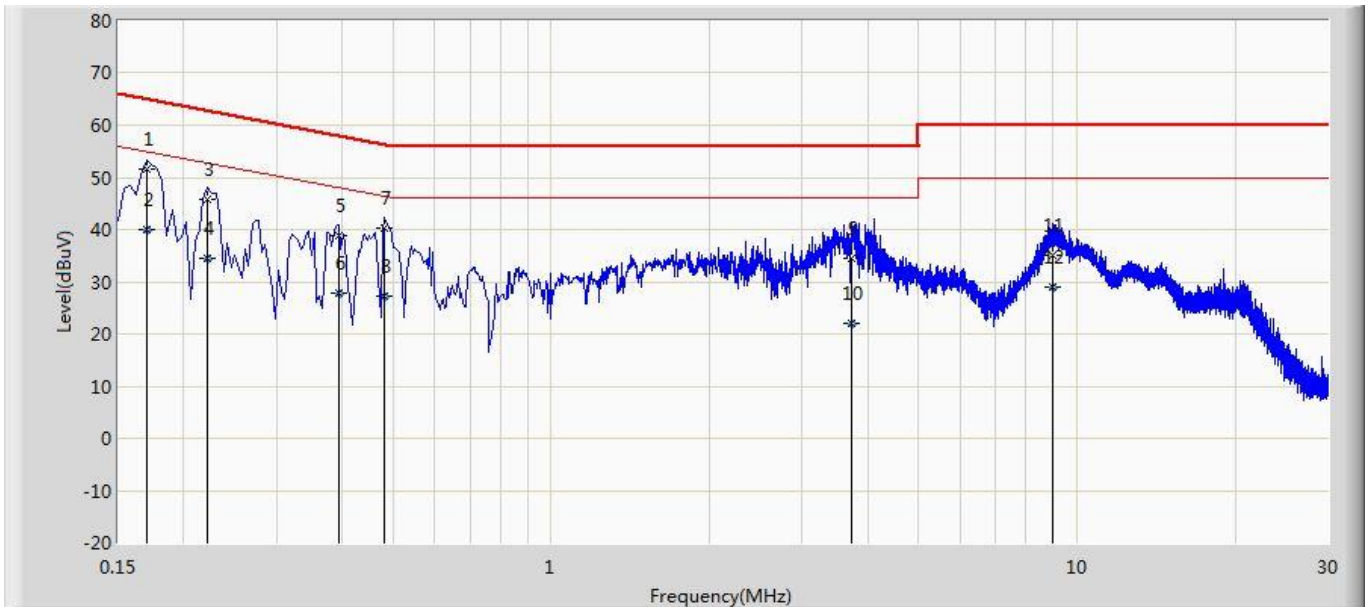
Test Method			
	References Rule	Chapter	Item
<input checked="" type="checkbox"/>	ANSI C63.10-2013	6.2	Standard test method for ac power-line conducted emissions from unlicensed wireless devices

3.5. Uncertainty

The measurement uncertainty is defined as ± 2.02 dB

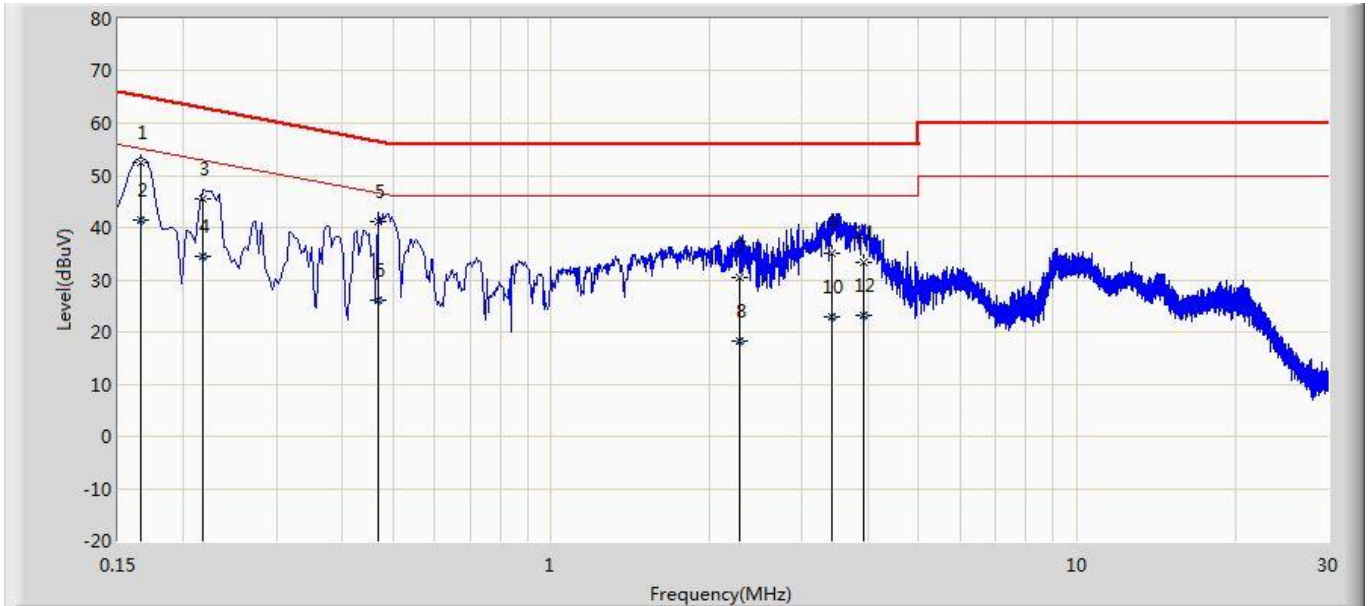
3.6. Test Result

Engineer: Eric	
Site: TR1	Time: 2017/11/05 - 16:51
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2402MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.170	51.703	42.084	-13.257	64.960	9.620	QP
2		0.170	39.867	30.247	-15.094	54.960	9.620	AV
3		0.222	45.714	36.093	-17.030	62.744	9.621	QP
4		0.222	34.578	24.957	-18.165	52.744	9.621	AV
5		0.394	38.859	29.229	-19.120	57.979	9.630	QP
6		0.394	27.808	18.178	-20.171	47.979	9.630	AV
7		0.482	40.396	30.763	-15.909	56.305	9.632	QP
8		0.482	27.317	17.685	-18.988	46.305	9.632	AV
9		3.714	34.476	24.737	-21.524	56.000	9.739	QP
10		3.714	22.145	12.406	-23.855	46.000	9.739	AV
11		8.998	35.101	25.265	-24.899	60.000	9.836	QP
12		8.998	29.115	19.279	-20.885	50.000	9.836	AV

Engineer: Eric	
Site: TR1	Time: 2017/11/05 - 16:56
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2402MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.166	52.595	42.995	-12.563	65.158	9.600	QP
2		0.166	41.379	31.779	-13.779	55.158	9.600	AV
3		0.218	45.486	35.883	-17.409	62.895	9.603	QP
4		0.218	34.609	25.006	-18.286	52.895	9.603	AV
5		0.470	41.251	31.629	-15.263	56.514	9.622	QP
6		0.470	26.059	16.437	-20.455	46.514	9.622	AV
7		2.282	30.320	20.636	-25.680	56.000	9.684	QP
8		2.282	18.357	8.673	-27.643	46.000	9.684	AV
9		3.418	35.167	25.448	-20.833	56.000	9.719	QP
10		3.418	22.764	13.045	-23.236	46.000	9.719	AV
11		3.934	33.382	23.650	-22.618	56.000	9.732	QP
12		3.934	23.205	13.472	-22.795	46.000	9.732	AV

4. Emissions in restricted frequency bands

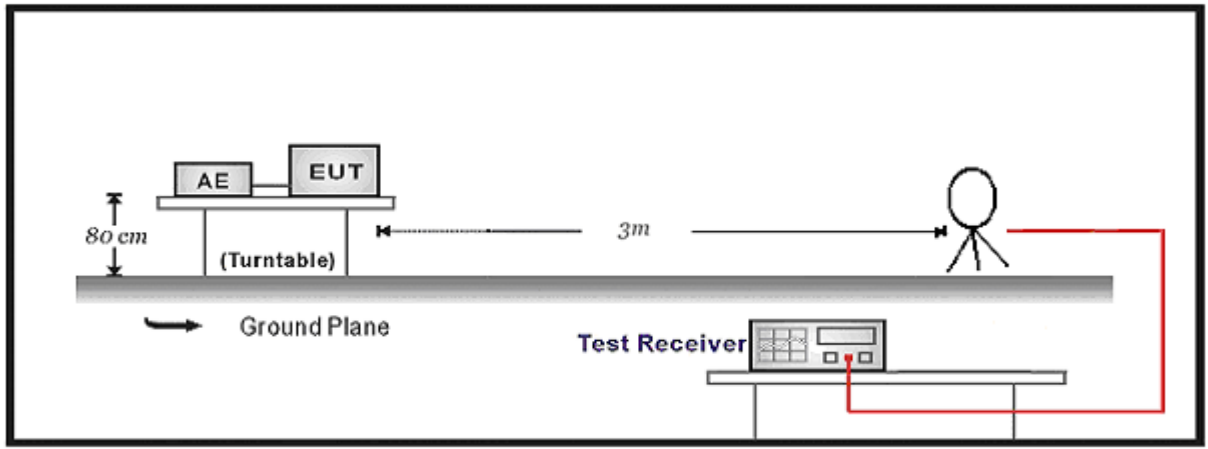
4.1. Test Equipment

Radiated Emission(Below 1GHz) / AC-2					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2017.03.29	2018.03.28
Loop Antenna	R&S	HFH2-Z2	833799/003	2016.11.16	2017.11.15
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2017.10.16	2018.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2017.03.02	2018.03.01
Temperature/Humidity Meter	Zhichen	ZC1-2	AC2-TH	2017.01.04	2018.01.03
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

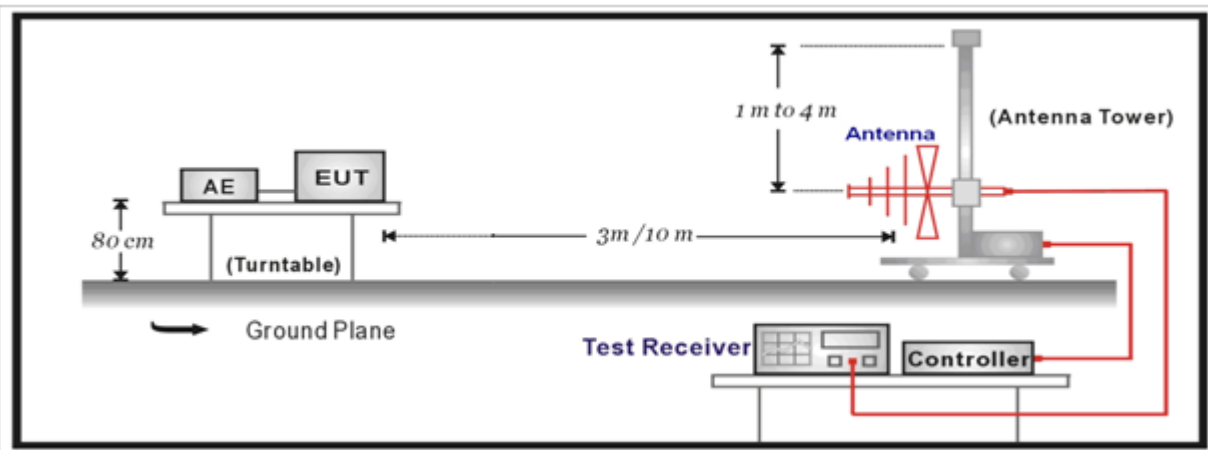
Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2017.01.04	2018.01.03
Preamplifier	Miteq	NSP1800-25	1364185	2017.05.06	2018.05.05
Preamplifier	QuieTek	AP-040G	CHM-0906001	2017.05.06	2018.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2017.01.22	2018.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2016.11.25	2017.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2017.03.02	2018.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2017.03.02	2018.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2017.03.02	2018.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2017.06.10	2018.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2017.01.04	2018.01.03
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

4.2. Test Setup

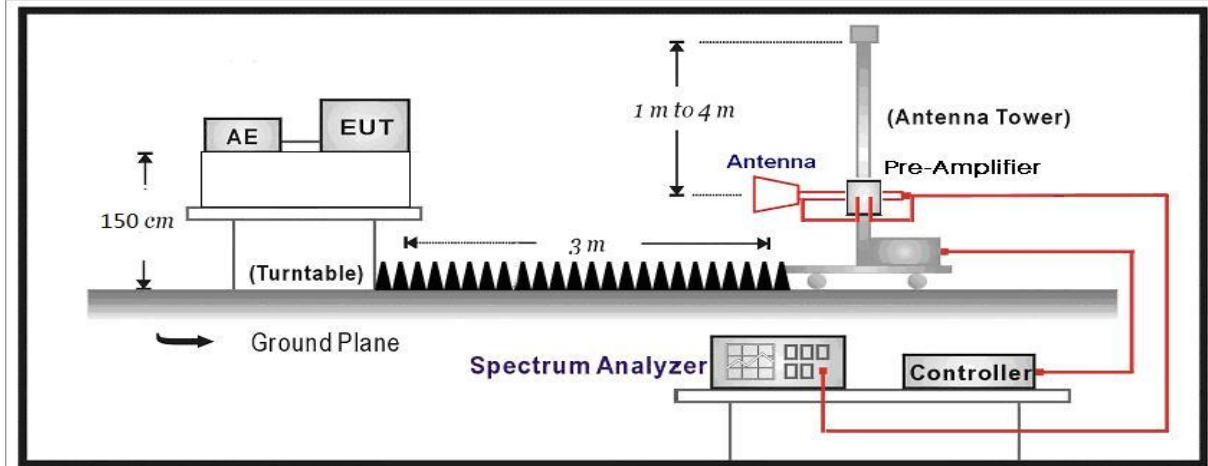
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

Restricted Bands of operation			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.69475 – 16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 – 8.81475	162.0125 – 167.17	3260 – 3267	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3332 – 3339	31.2 – 31.8
12.51975 – 12.52025	240 – 285	3345.8 – 3358	36.43 – 36.5
12.57675 – 12.57725	322 – 335.4	3600 – 4400	
13.36 – 13.41			

Restricted Band Emissions Limit			
Frequency (MHz)	Field strength (μ V/m)	Field strength (dB μ V/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300 _(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 _(Note 1)
1.705 - 30	30	29.5	30 _(Note 1)
30 - 88	100	40	3 _(Note 2)
88 - 216	150	43.5	3 _(Note 2)
216 - 960	200	46	3 _(Note 2)
Above 960	500	54	3 _(Note 2)

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.4. Test Procedure

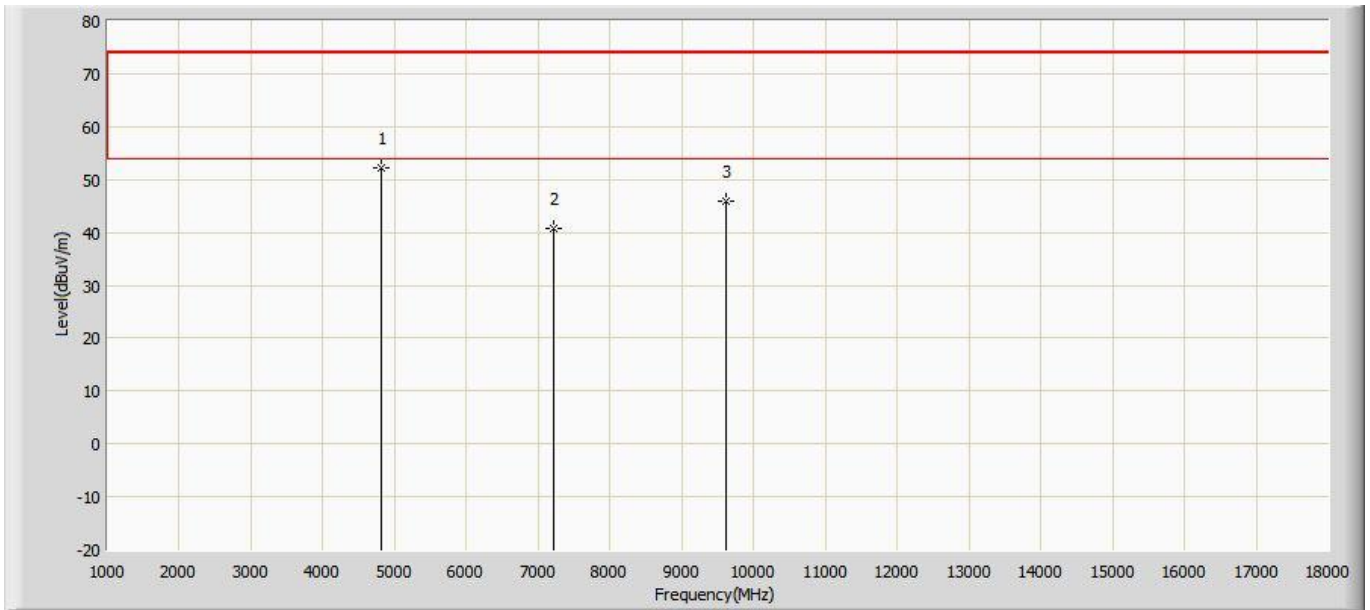
Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
<input checked="" type="checkbox"/>	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
<input checked="" type="checkbox"/>	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

4.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB
 below 1G is defined as ± 3.8 dB

4.6. Test Result

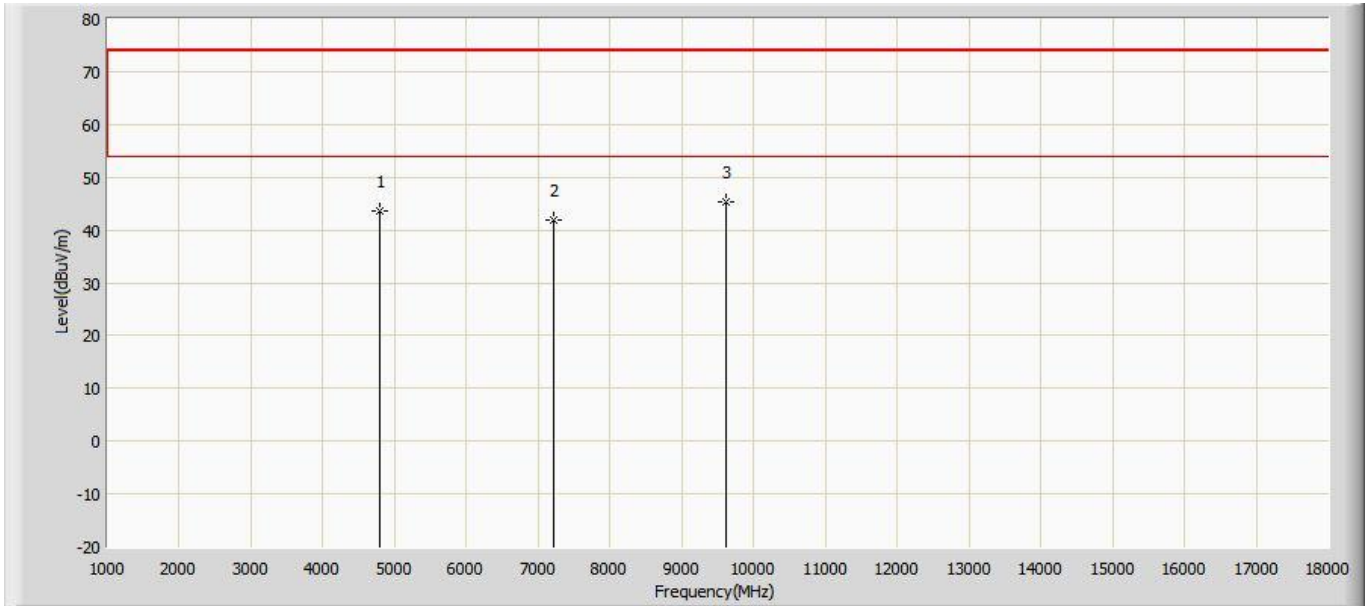
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	52.077	65.087	-21.923	74.000	-13.010	PK
2		7206.000	40.858	48.568	-33.142	74.000	-7.710	PK
3		9608.000	45.996	47.586	-28.004	74.000	-1.590	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4808.000	52.077	20.704	-33.296	54.000	-31.373	AV
2	*	7206.000	40.858	9.485	-44.515	54.000	-31.373	AV
3	*	9608.000	45.996	14.623	-39.377	54.000	-31.373	AV

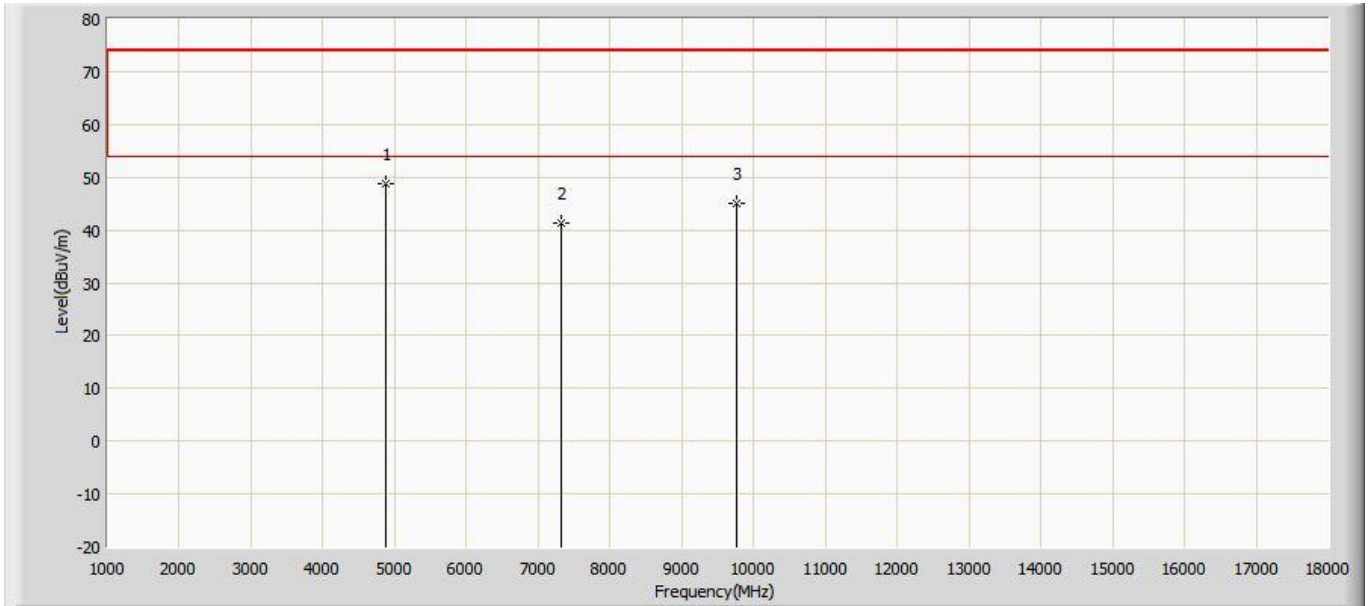
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4799.500	43.702	56.712	-30.298	74.000	-13.010	PK
2		7206.000	41.788	49.498	-32.212	74.000	-7.710	PK
3	*	9608.000	45.386	46.976	-28.614	74.000	-1.590	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4799.500	43.702	12.329	-41.671	54.000	-31.373	AV
2	*	7206.000	41.788	10.415	-43.585	54.000	-31.373	AV
3	*	9608.000	45.386	14.013	-39.987	54.000	-31.373	AV

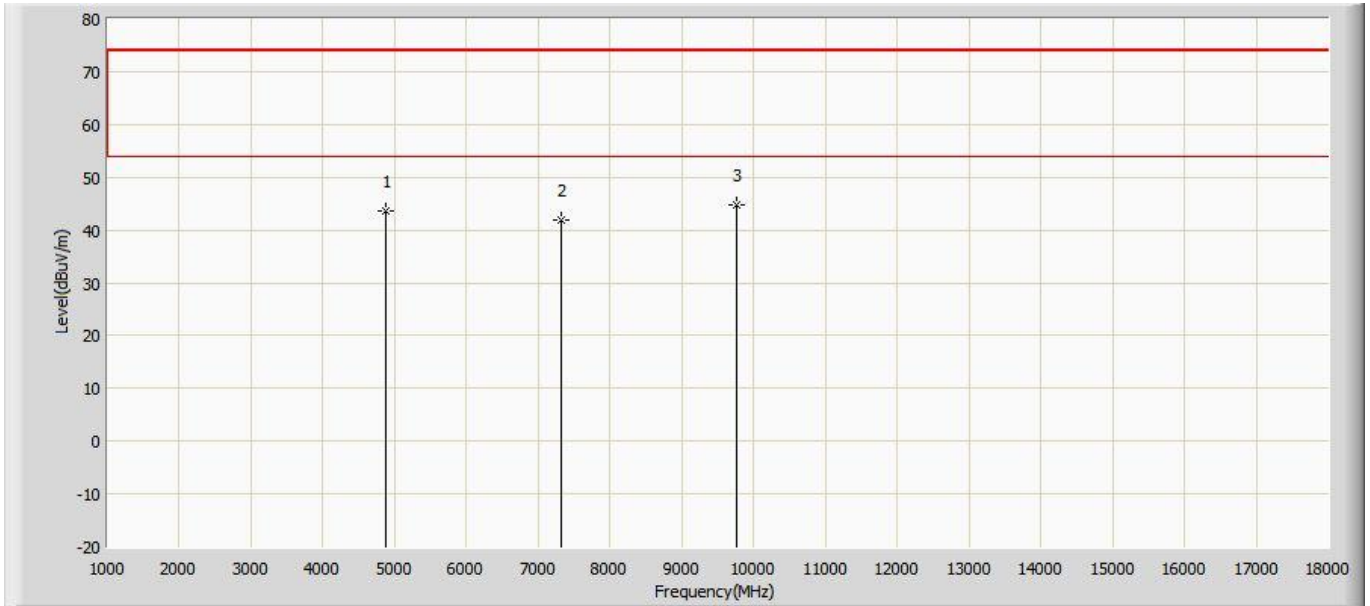
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2441MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4884.500	48.750	61.760	-25.250	74.000	-13.010	PK
2		7323.000	41.204	48.914	-32.796	74.000	-7.710	PK
3		9764.000	45.169	46.759	-28.831	74.000	-1.590	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4884.500	48.750	17.377	-36.623	54.000	-31.373	AV
2	*	7323.000	41.204	9.831	-44.169	54.000	-31.373	AV
3	*	9764.000	45.169	13.796	-40.204	54.000	-31.373	AV

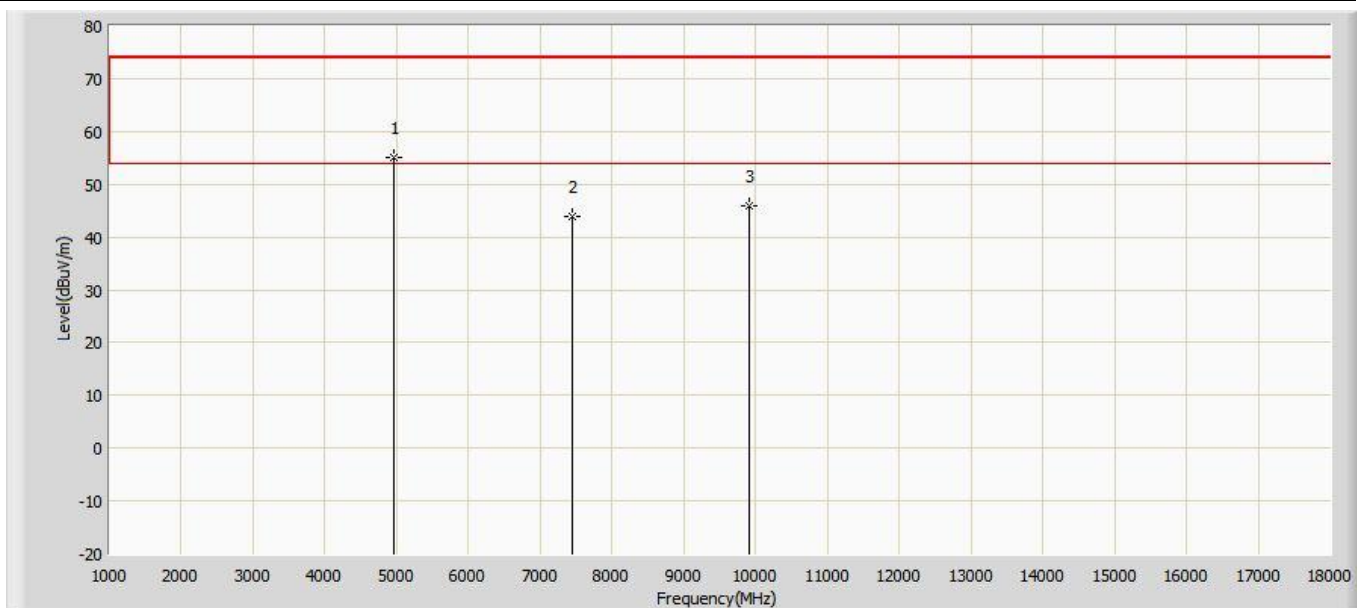
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2441MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4884.500	43.697	56.707	-30.303	74.000	-13.010	PK
2		7323.000	41.922	49.632	-32.078	74.000	-7.710	PK
3	*	9764.000	44.665	46.255	-29.335	74.000	-1.590	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4884.500	43.697	12.324	-41.676	54.000	-31.373	AV
2	*	7323.000	41.922	10.549	-43.451	54.000	-31.373	AV
3	*	9764.000	44.665	13.292	-40.708	54.000	-31.373	AV

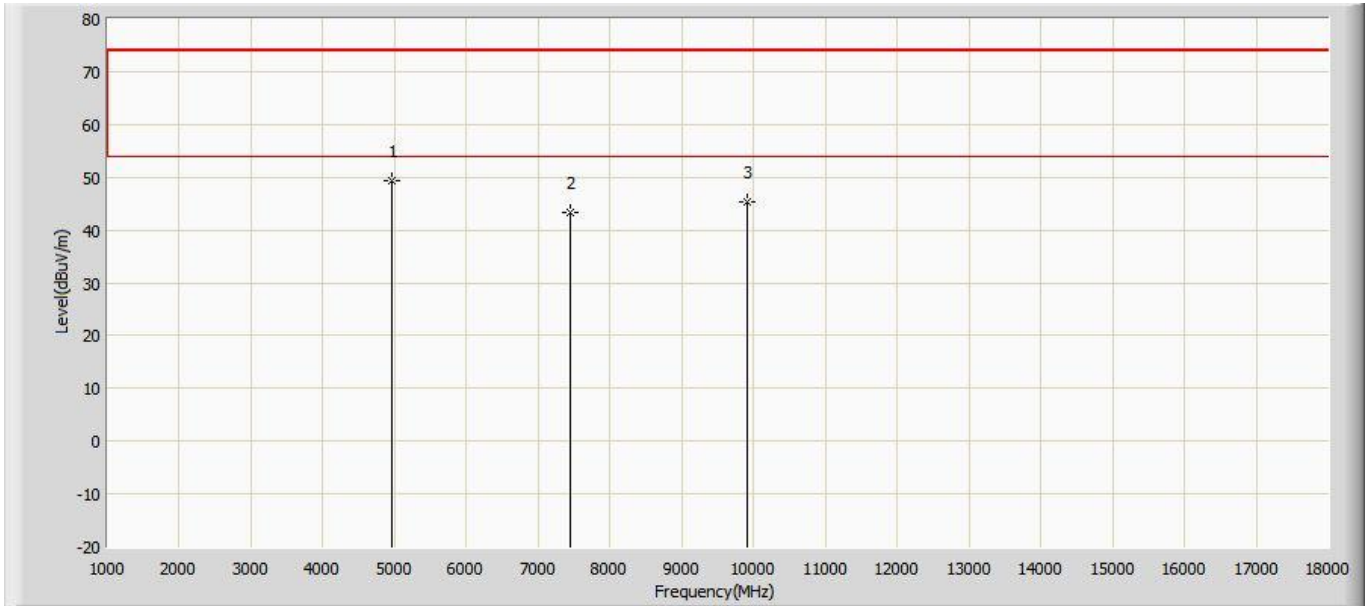
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	55.180	67.410	-18.820	74.000	-12.230	PK
2		7440.000	43.992	50.652	-30.008	74.000	-6.660	PK
3		9920.000	45.893	47.853	-28.107	74.000	-1.960	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4961.000	55.180	23.807	-30.193	54.000	-31.373	AV
2	*	7440.000	43.992	12.619	-41.381	54.000	-31.373	AV
3	*	9920.000	45.893	14.520	-39.480	54.000	-31.373	AV

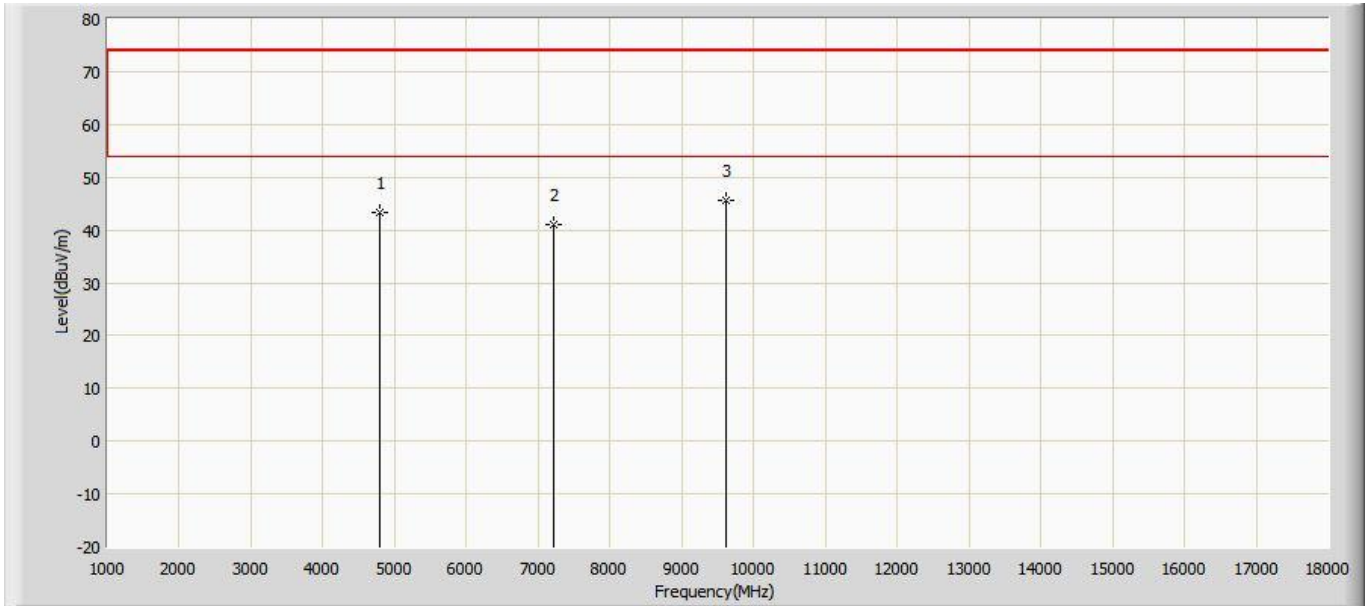
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	49.297	61.527	-24.703	74.000	-12.230	PK
2		7440.000	43.387	50.047	-30.613	74.000	-6.660	PK
3		9920.000	45.303	47.263	-28.697	74.000	-1.960	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4961.000	49.297	17.924	-36.076	54.000	-31.373	AV
2	*	7440.000	43.387	12.014	-41.986	54.000	-31.373	AV
3	*	9920.000	45.303	13.930	-40.070	54.000	-31.373	AV

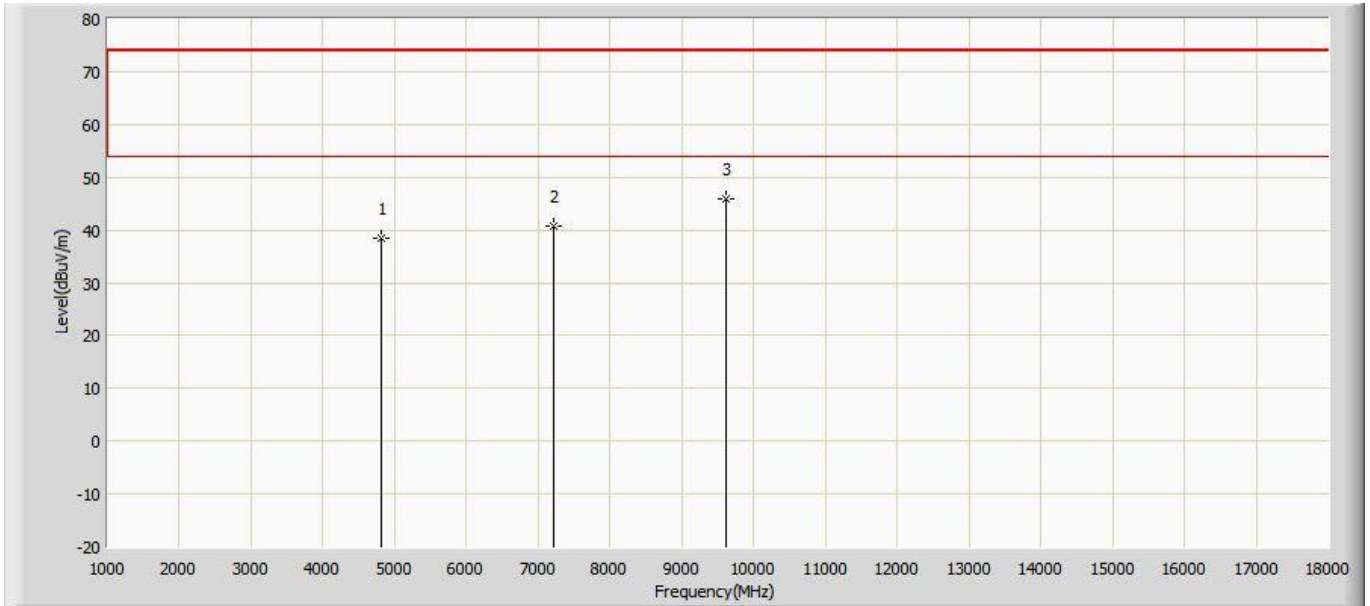
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4799.500	43.314	56.324	-30.686	74.000	-13.010	PK
2		7206.000	40.970	48.680	-33.030	74.000	-7.710	PK
3	*	9608.000	45.616	47.206	-28.384	74.000	-1.590	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4799.500	43.314	11.941	-42.059	54.000	-31.373	AV
2	*	7206.000	40.970	9.597	-44.403	54.000	-31.373	AV
3	*	9608.000	45.616	14.243	-39.757	54.000	-31.373	AV

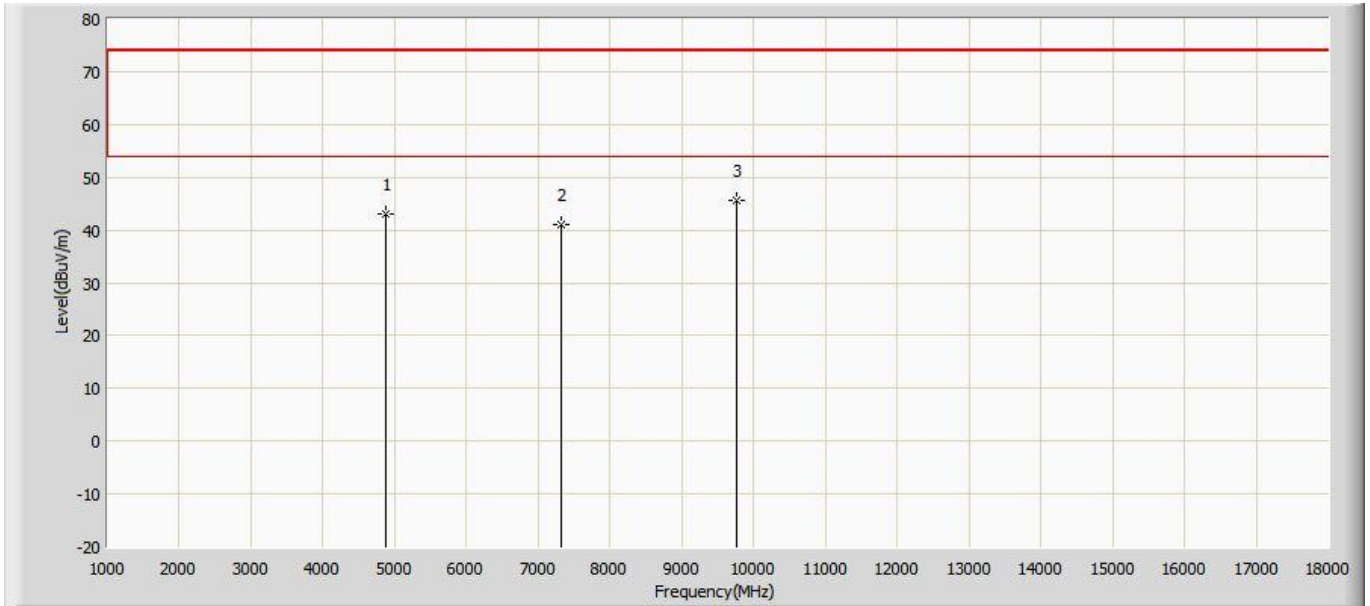
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	38.311	51.321	-35.689	74.000	-13.010	PK
2		7206.000	40.748	48.458	-33.252	74.000	-7.710	PK
3	*	9608.000	45.779	47.369	-28.221	74.000	-1.590	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4804.000	38.311	6.938	-47.062	54.000	-31.373	AV
2	*	7206.000	40.748	9.375	-44.625	54.000	-31.373	AV
3	*	9608.000	45.779	14.406	-39.594	54.000	-31.373	AV

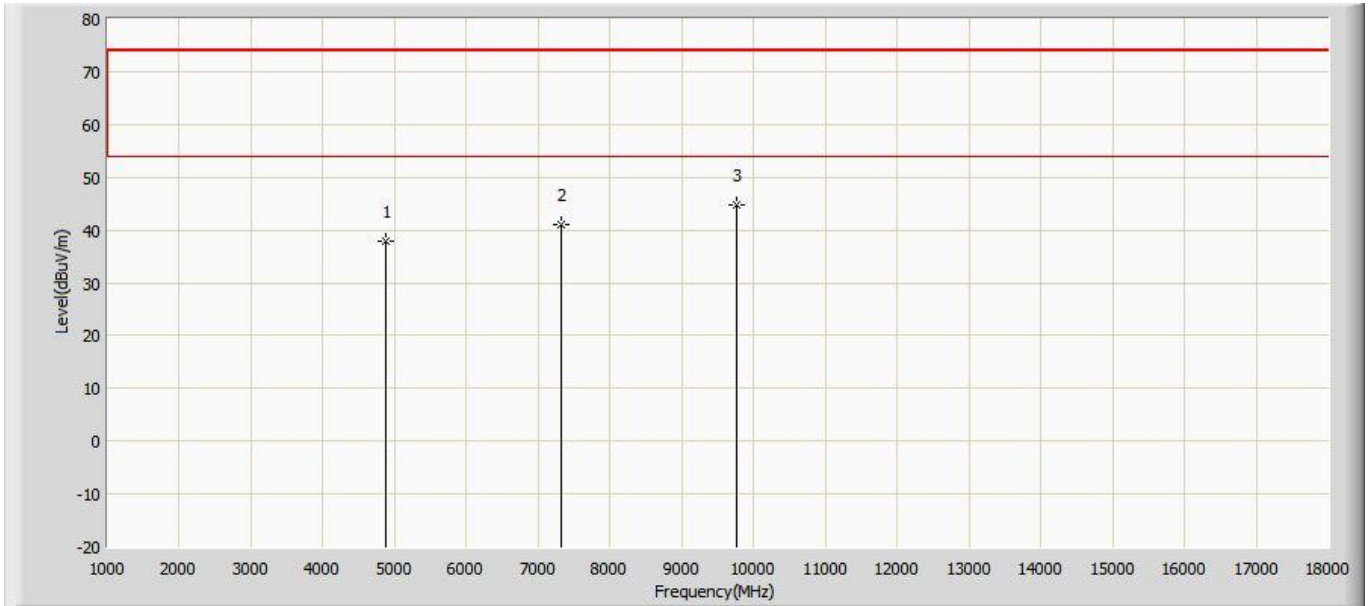
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2441MHz by 2DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4884.500	43.025	56.035	-30.975	74.000	-13.010	PK
2		7323.000	40.912	48.622	-33.088	74.000	-7.710	PK
3	*	9764.000	45.591	47.181	-28.409	74.000	-1.590	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4884.500	43.025	11.652	-42.348	54.000	-31.373	AV
2	*	7323.000	40.912	9.539	-44.461	54.000	-31.373	AV
3	*	9764.000	45.591	14.218	-39.782	54.000	-31.373	AV

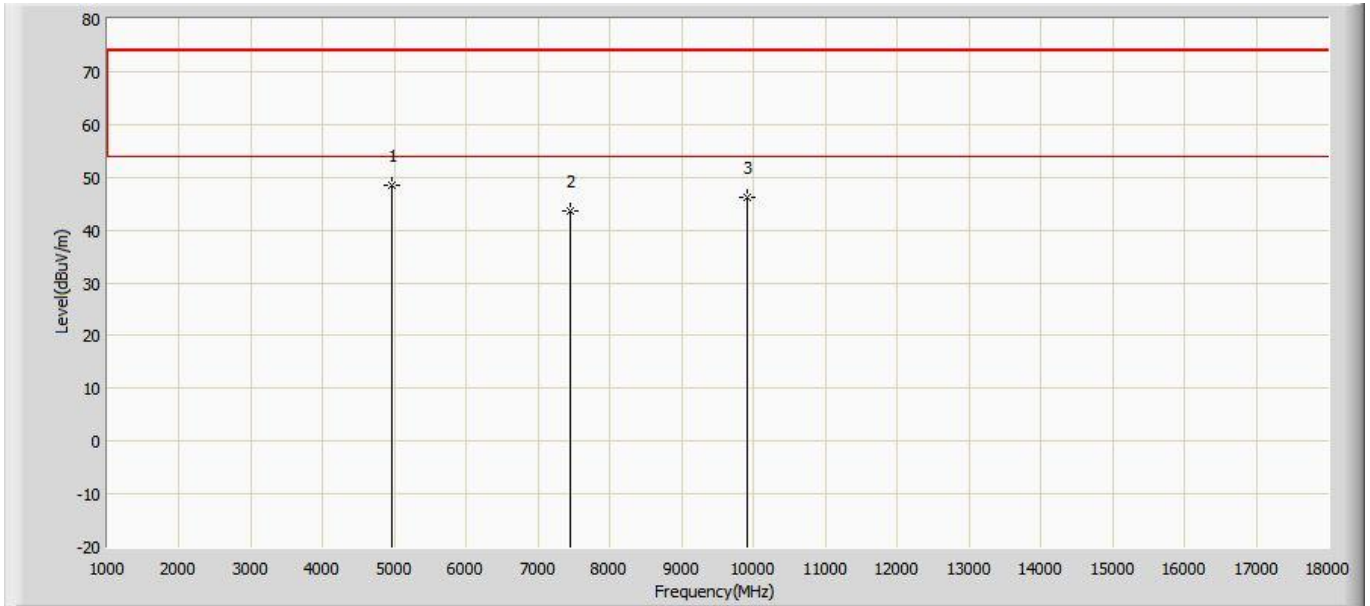
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2441MHz by 2DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4882.000	37.982	50.992	-36.018	74.000	-13.010	PK
2		7323.000	41.123	48.833	-32.877	74.000	-7.710	PK
3	*	9764.000	44.654	46.244	-29.346	74.000	-1.590	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4882.000	37.982	6.609	-47.391	54.000	-31.373	AV
2	*	7323.000	41.123	9.750	-44.250	54.000	-31.373	AV
3	*	9764.000	44.654	13.281	-40.719	54.000	-31.373	AV

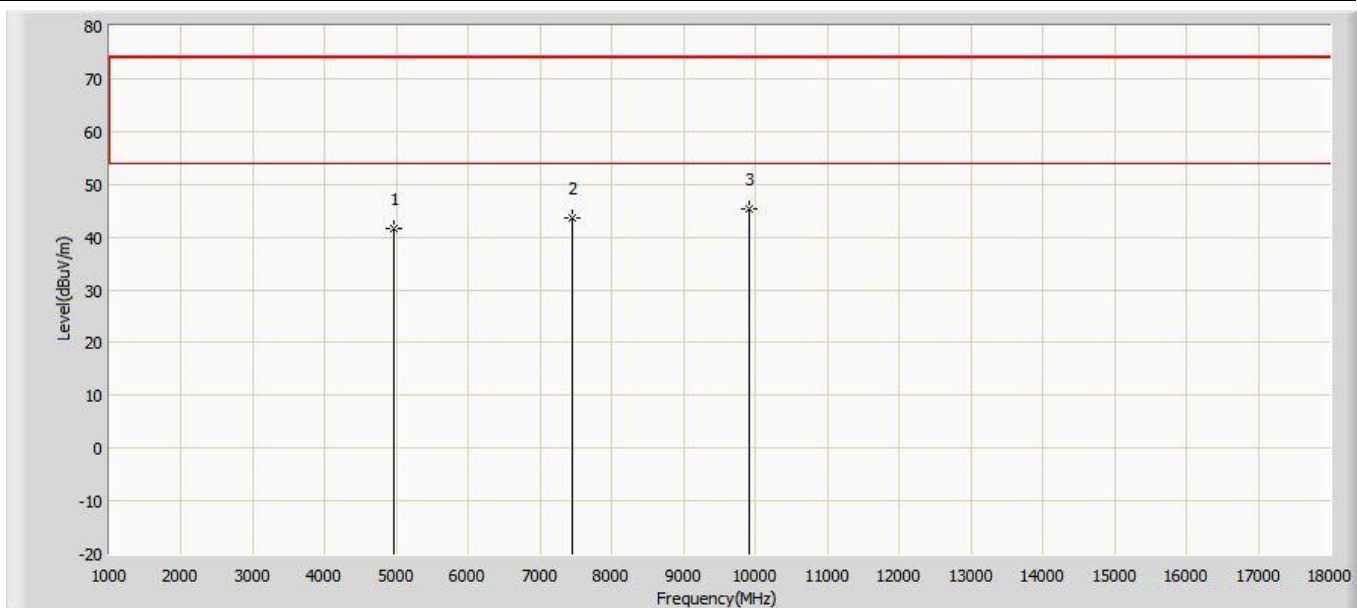
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	48.376	60.606	-25.624	74.000	-12.230	PK
2		7440.000	43.721	50.381	-30.279	74.000	-6.660	PK
3		9920.000	46.197	48.157	-27.803	74.000	-1.960	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4961.000	48.376	17.003	-36.997	54.000	-31.373	AV
2	*	7440.000	43.721	12.348	-41.652	54.000	-31.373	AV
3	*	9920.000	46.197	14.824	-39.176	54.000	-31.373	AV

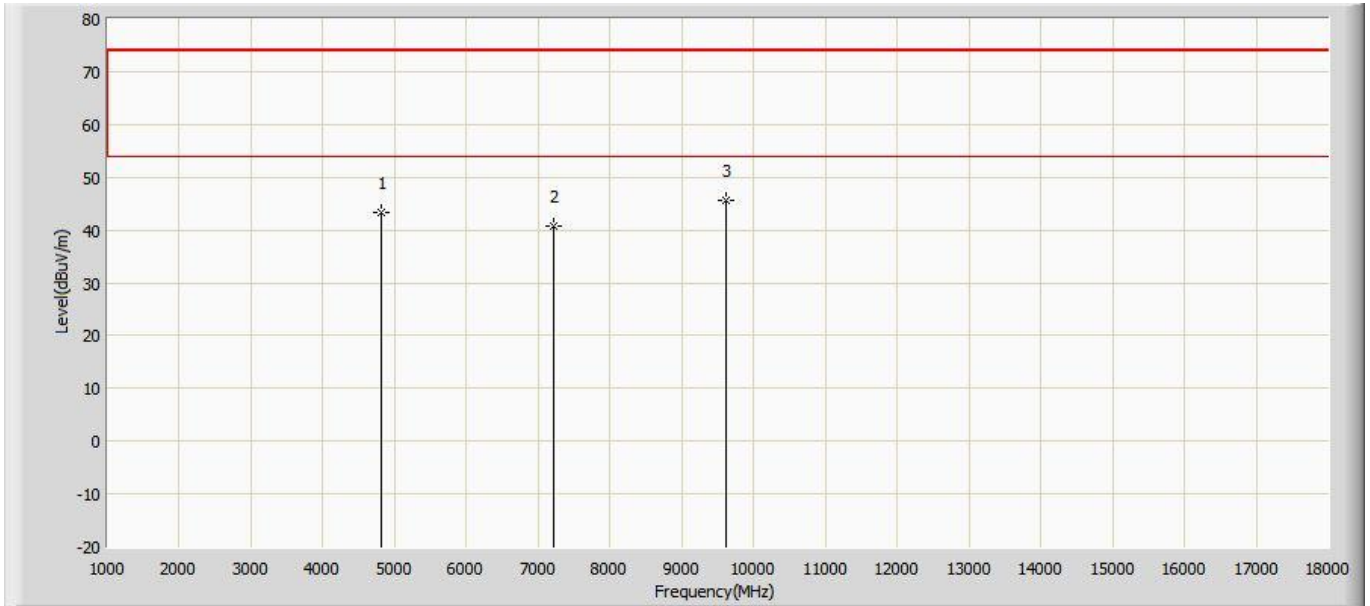
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.610	53.840	-32.390	74.000	-12.230	PK
2		7440.000	43.670	50.330	-30.330	74.000	-6.660	PK
3	*	9920.000	45.187	47.147	-28.813	74.000	-1.960	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4960.000	41.610	10.237	-43.763	54.000	-31.373	AV
2	*	7440.000	43.670	12.297	-41.703	54.000	-31.373	AV
3	*	9920.000	45.187	13.814	-40.186	54.000	-31.373	AV

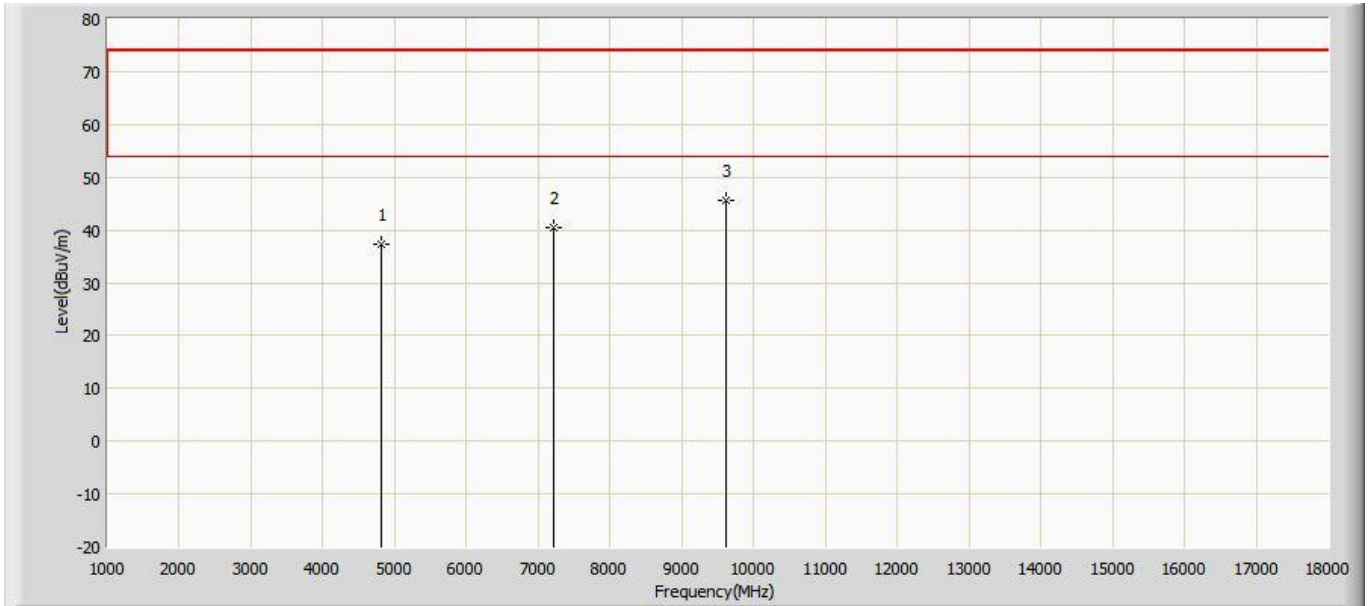
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by 3DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4808.000	43.184	56.194	-30.816	74.000	-13.010	PK
2		7206.000	40.825	48.535	-33.175	74.000	-7.710	PK
3	*	9608.000	45.712	47.302	-28.288	74.000	-1.590	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4808.000	43.184	11.811	-42.189	54.000	-31.373	AV
2	*	7206.000	40.825	9.452	-44.548	54.000	-31.373	AV
3	*	9608.000	45.712	14.339	-39.661	54.000	-31.373	AV

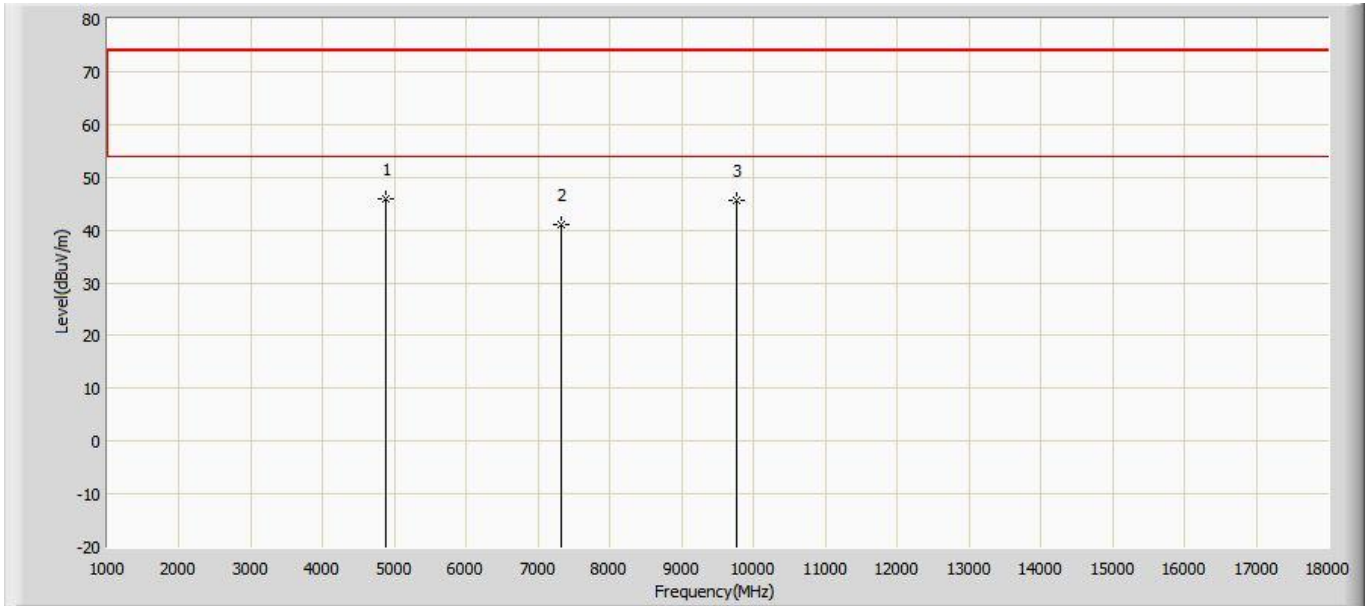
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by 3DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	37.306	50.316	-36.694	74.000	-13.010	PK
2		7206.000	40.482	48.192	-33.518	74.000	-7.710	PK
3	*	9608.000	45.483	47.073	-28.517	74.000	-1.590	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4804.000	37.306	5.933	-48.067	54.000	-31.373	AV
2	*	7206.000	40.482	9.109	-44.891	54.000	-31.373	AV
3	*	9608.000	45.483	14.110	-39.890	54.000	-31.373	AV

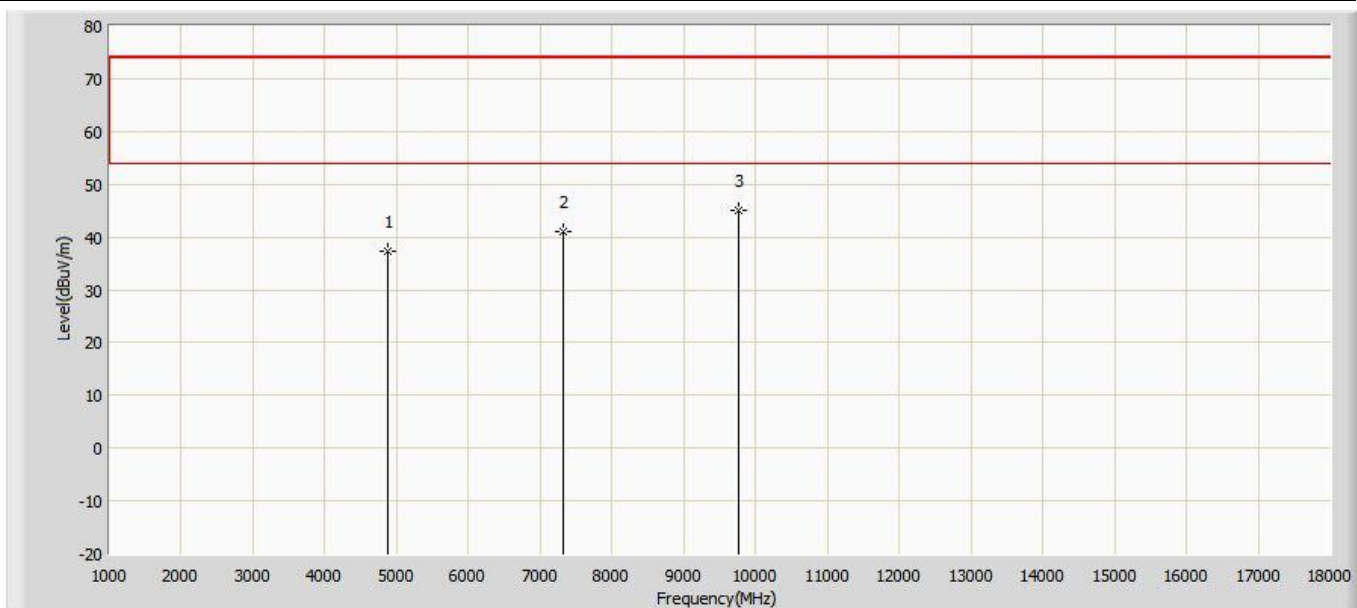
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2441MHz by 3DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4884.500	45.924	58.934	-28.076	74.000	-13.010	PK
2		7323.000	41.080	48.790	-32.920	74.000	-7.710	PK
3		9764.000	45.499	47.089	-28.501	74.000	-1.590	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4884.500	45.924	14.551	-39.449	54.000	-31.373	AV
2	*	7323.000	41.080	9.707	-44.293	54.000	-31.373	AV
3	*	9764.000	45.499	14.126	-39.874	54.000	-31.373	AV

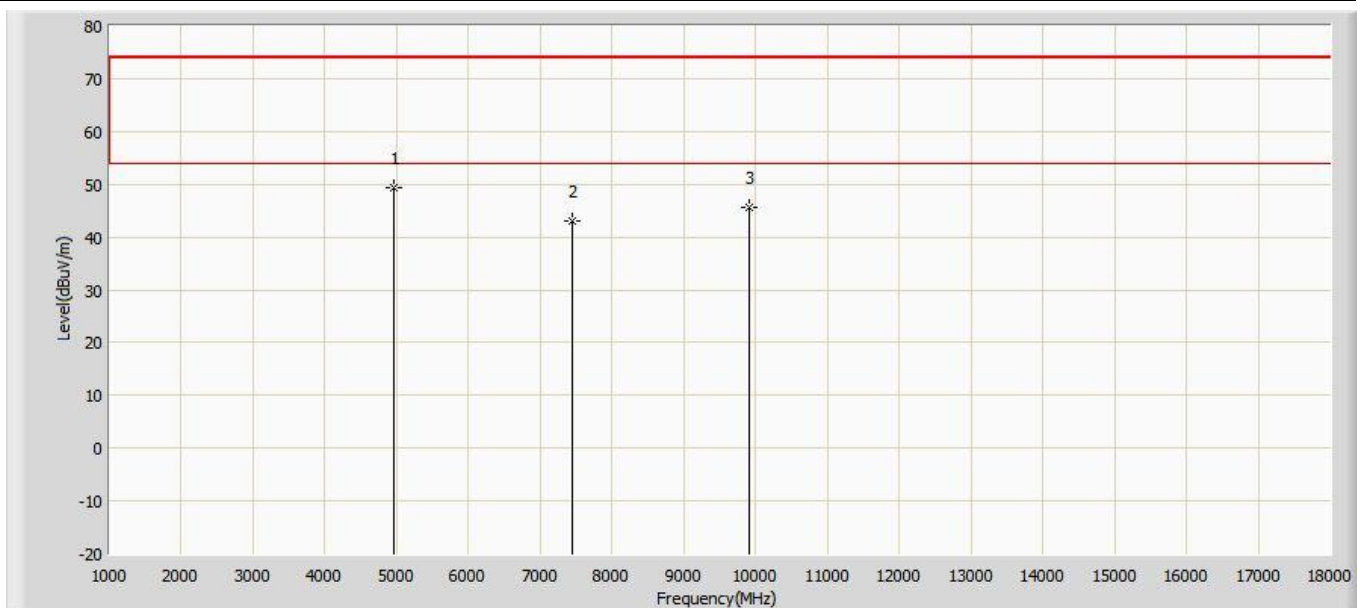
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2441MHz by 3DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4882.000	37.296	50.306	-36.704	74.000	-13.010	PK
2		7323.000	40.902	48.612	-33.098	74.000	-7.710	PK
3	*	9764.000	44.997	46.587	-29.003	74.000	-1.590	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4882.000	37.296	5.923	-48.077	54.000	-31.373	AV
2	*	7323.000	40.902	9.529	-44.471	54.000	-31.373	AV
3	*	9764.000	44.997	13.624	-40.376	54.000	-31.373	AV

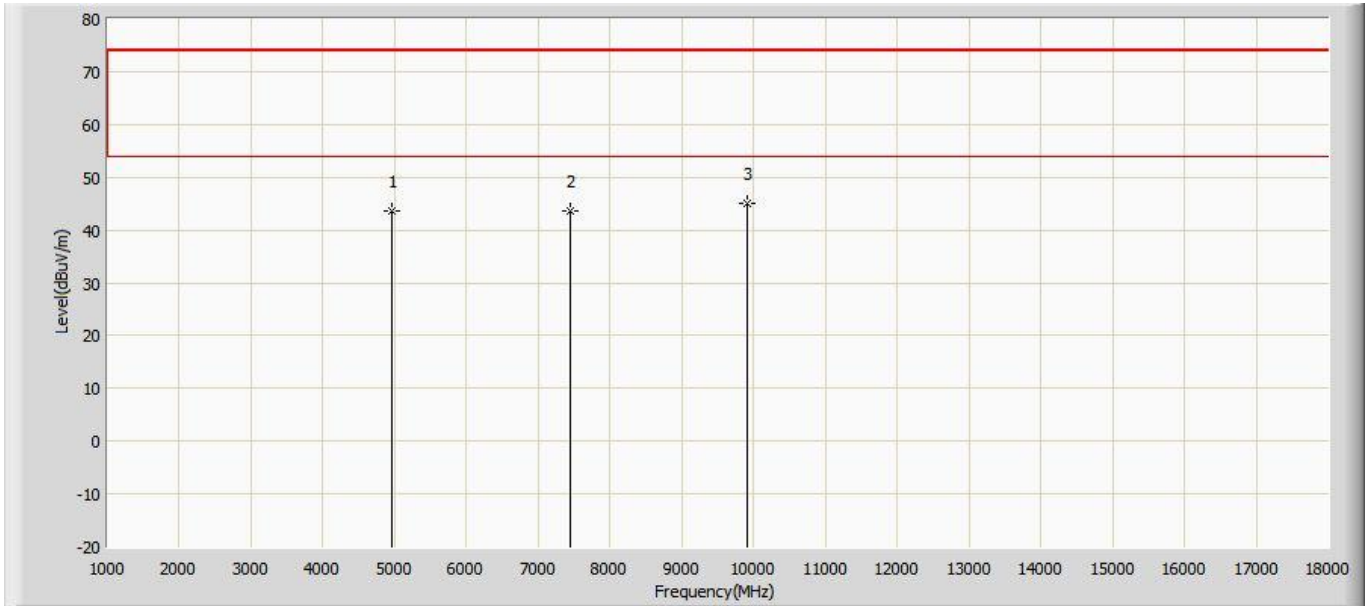
Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by 3DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	49.213	61.443	-24.787	74.000	-12.230	PK
2		7440.000	43.117	49.777	-30.883	74.000	-6.660	PK
3		9920.000	45.624	47.584	-28.376	74.000	-1.960	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4961.000	49.213	17.840	-36.160	54.000	-31.373	AV
2	*	7440.000	43.117	11.744	-42.256	54.000	-31.373	AV
3	*	9920.000	45.624	14.251	-39.749	54.000	-31.373	AV

Engineer: Slark	
Site:AC5	Time: 2017/11/03 - 09:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by 3DH5	

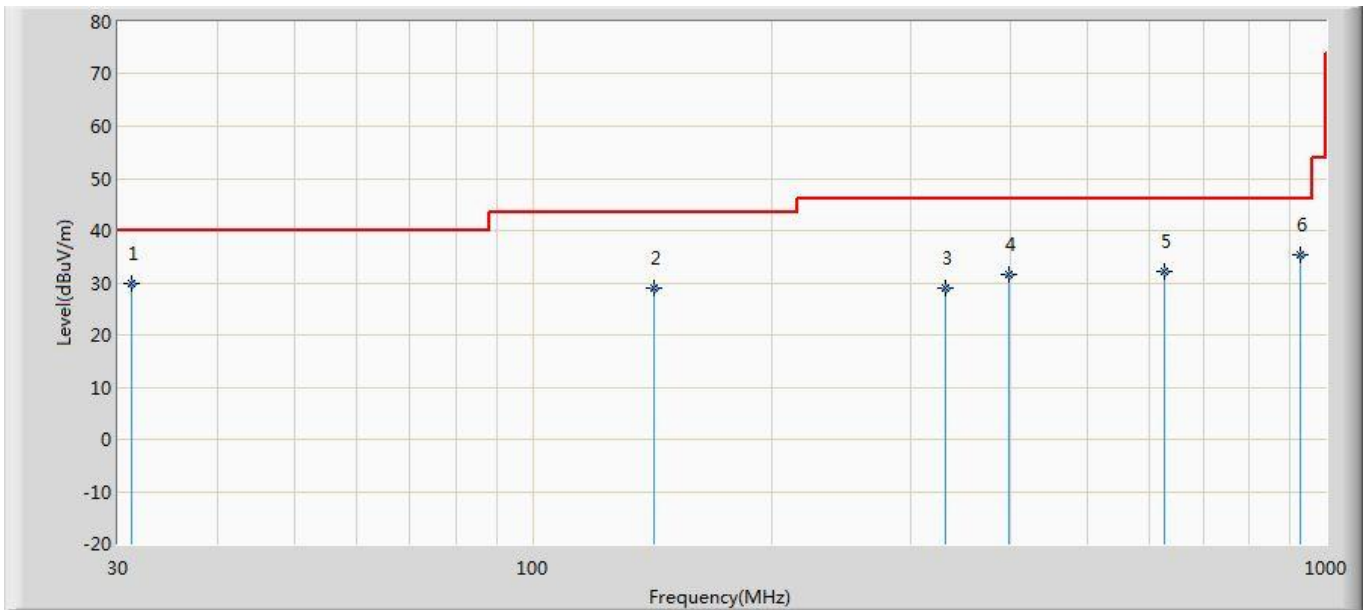


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4961.000	43.620	55.850	-30.380	74.000	-12.230	PK
2		7440.000	43.506	50.166	-30.494	74.000	-6.660	PK
3	*	9920.000	45.102	47.062	-28.898	74.000	-1.960	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Duty Factor (dB)	Type
1		4961.000	43.620	12.247	-41.753	54.000	-31.373	AV
2	*	7440.000	43.506	12.133	-41.867	54.000	-31.373	AV
3	*	9920.000	45.102	13.729	-40.271	54.000	-31.373	AV

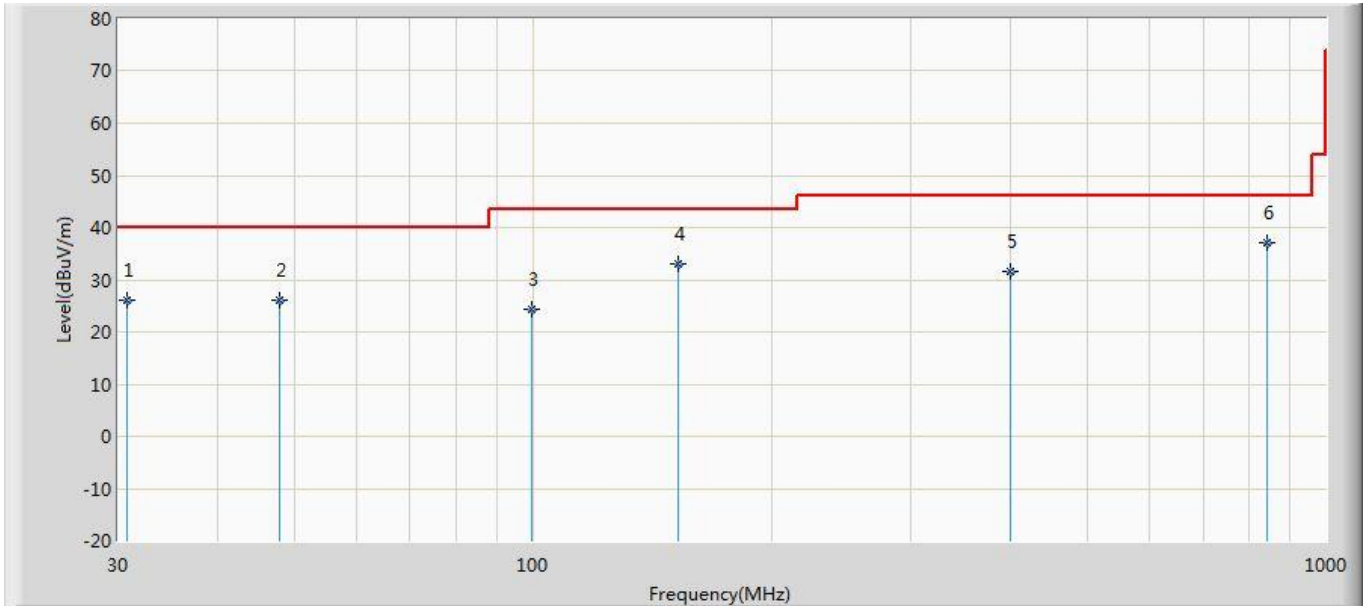
The worst case of Radiated Emission below 1GHz:

Engineer: Eric	
Site: AC2	Time: 2017/11/04 - 15:12
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC2_3m (30-1000MHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2402MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	31.212	29.761	23.300	-10.239	40.000	6.461	QP
2		142.035	28.846	21.800	-14.654	43.500	7.046	QP
3		331.670	29.012	21.300	-16.988	46.000	7.712	QP
4		398.721	31.503	23.600	-14.497	46.000	7.903	QP
5		625.216	32.289	23.800	-13.711	46.000	8.489	QP
6		926.280	35.257	26.100	-10.743	46.000	9.157	QP

Engineer: Eric	
Site: AC2	Time: 2017/11/04 - 15:15
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC2_3m (30-1000MHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2402MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		30.849	26.160	19.700	-13.840	40.000	6.460	QP
2		47.945	26.173	19.600	-13.827	40.000	6.573	QP
3		99.598	24.447	17.600	-19.053	43.500	6.847	QP
4		152.705	33.087	26.000	-10.413	43.500	7.087	QP
5		399.328	31.604	23.700	-14.396	46.000	7.904	QP
6	*	842.617	36.975	28.000	-9.025	46.000	8.975	QP

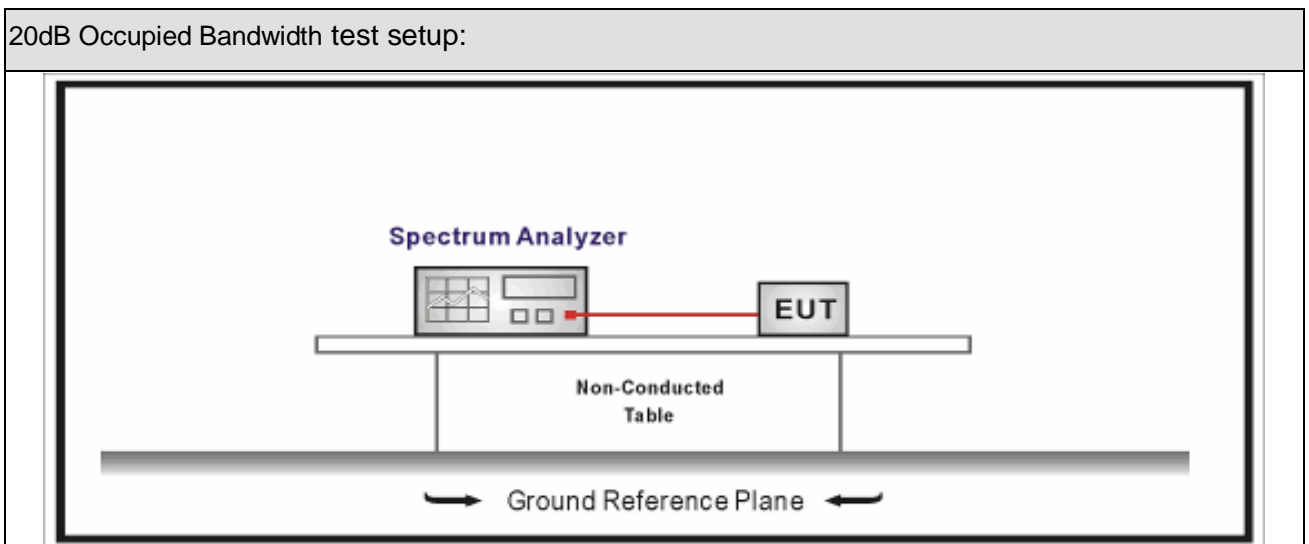
5. 20dB Bandwidth

5.1 Test Equipment

20dB Occupied Bandwidth / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2017.04.09	2018.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2017.04.10	2018.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

5.2 Test Setup



5.3 Limit

Carrier Frequency Separation	
<input checked="" type="checkbox"/>	For frequency hopping systems operating in 2400-2483.5 MHz band, within frequency range.
<input type="checkbox"/>	For frequency hopping systems operating in 902-928 MHz band, the maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.
<input type="checkbox"/>	For frequency hopping systems operating in 5725-5850 MHz band, the maximum 20 dB bandwidth of the hopping channel is 1 MHz.

5.4 Test Procedure

Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	DA 00-705	N/A	20 dB Bandwidth

5.5 Uncertainty

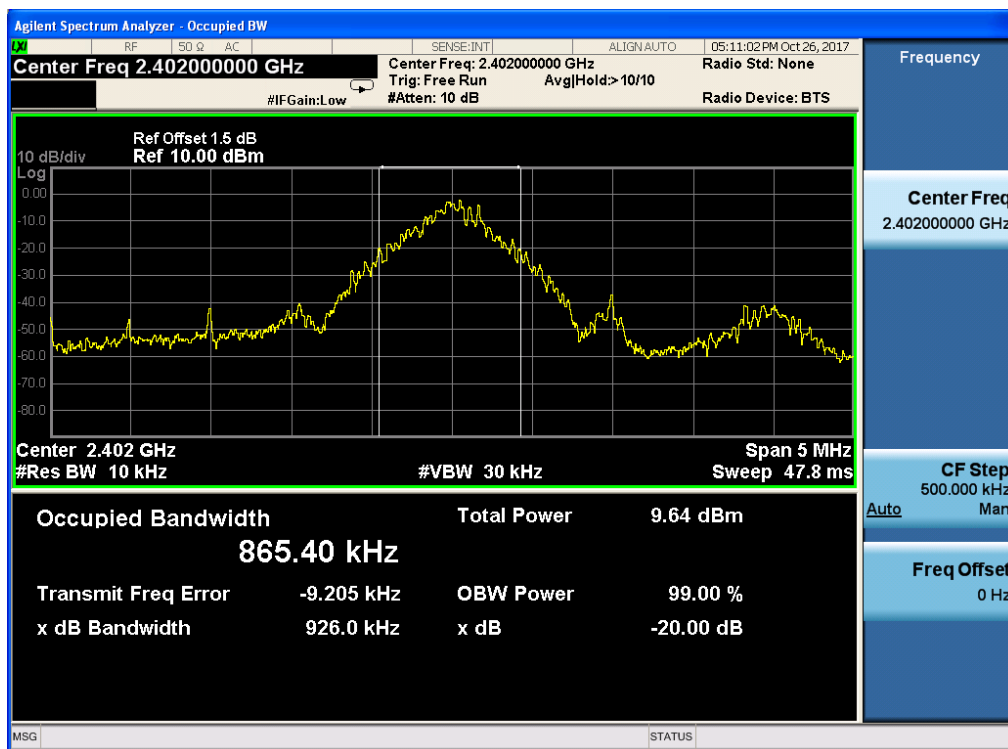
The measurement uncertainty is defined as ± 1 kHz

5.6 Test Result

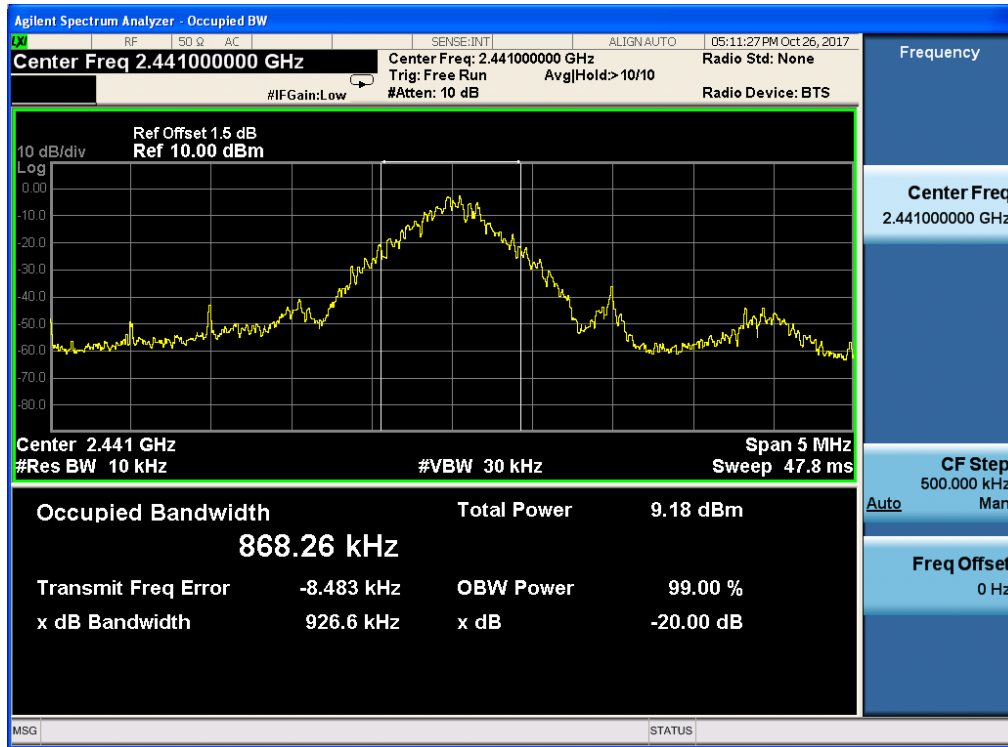
Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 1	Test Site	: TR-8
Test Date	: 2017.10.26		

Channel No.	Frequency (MHz)	20dB Bandwidth (kHz)	99% Bandwidth (kHz)
00	2402	926.00	865.40
39	2441	926.60	868.26
78	2480	925.30	864.70

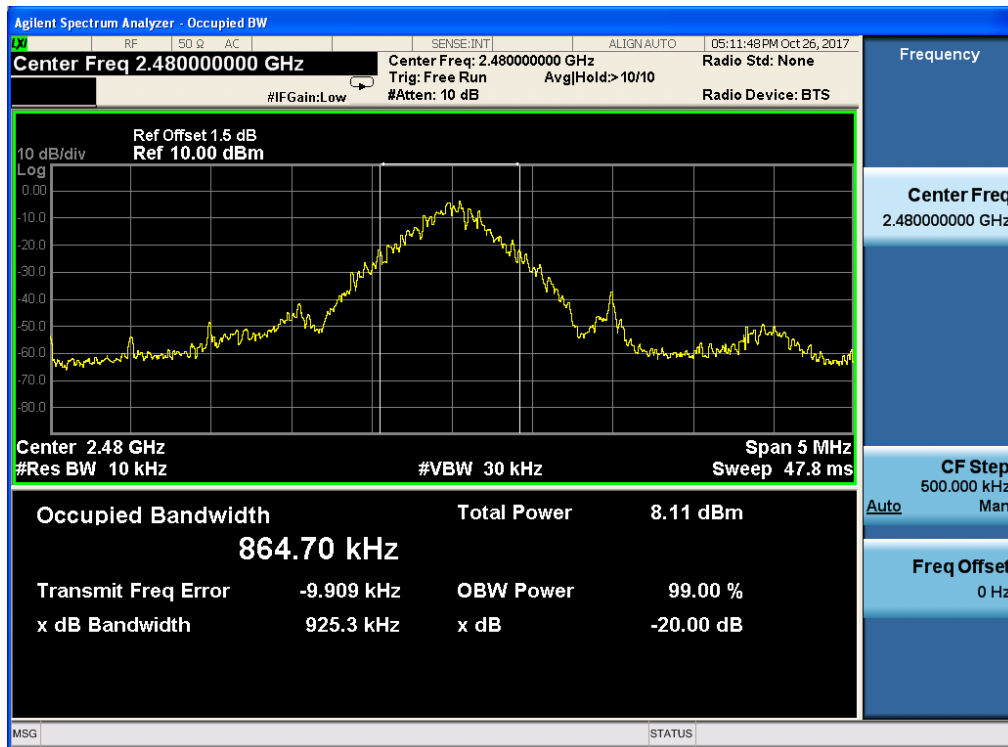
Channel 00 (2402MHz)



Channel 39 (2441MHz)



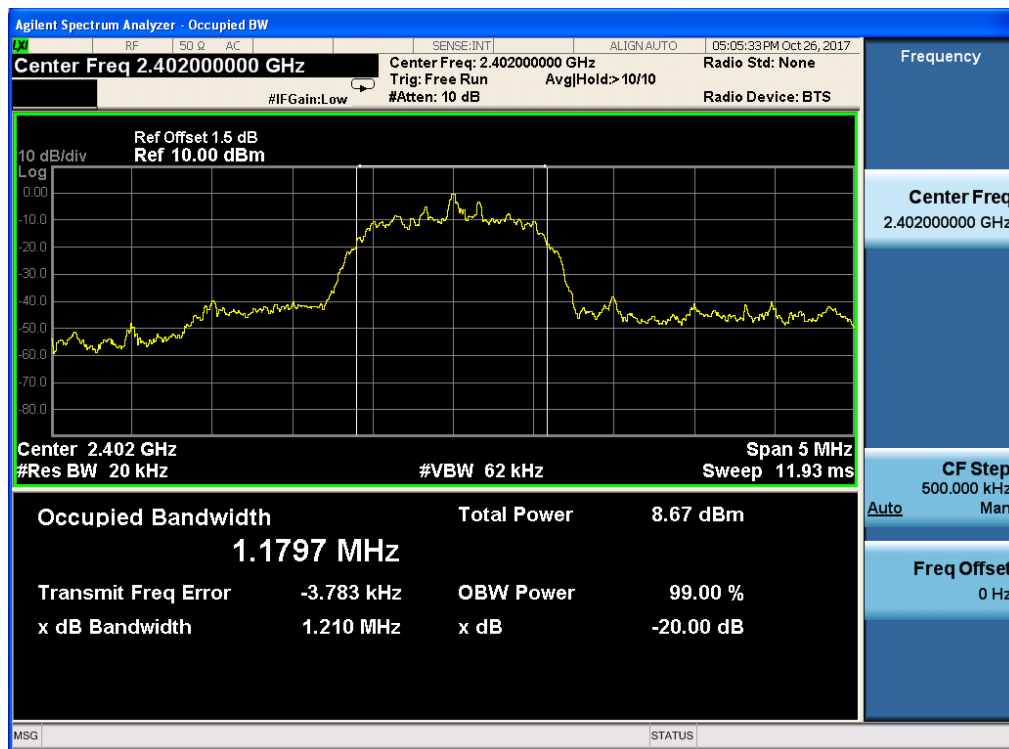
Channel 78 (2480MHz)



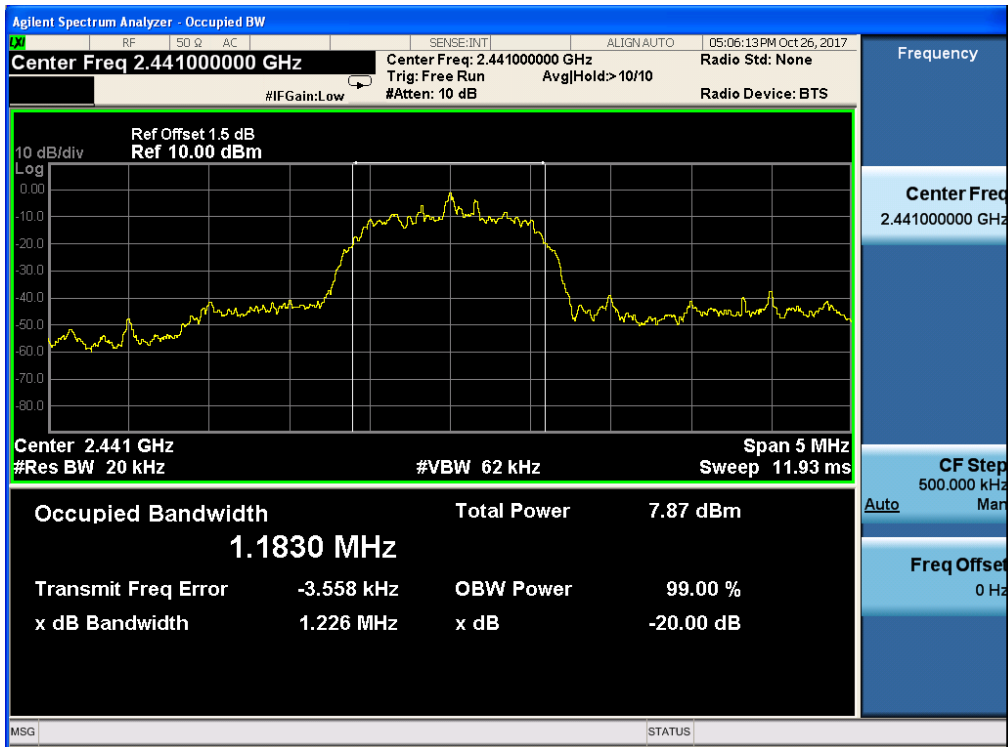
Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 2	Test Site	: TR-8
Test Date	: 2017.10.26		

Channel No.	Frequency (MHz)	20dB Bandwidth (kHz)	99% Bandwidth (kHz)
00	2402	1210	1179.7
39	2441	1226	1183.0
78	2480	1240	1182.7

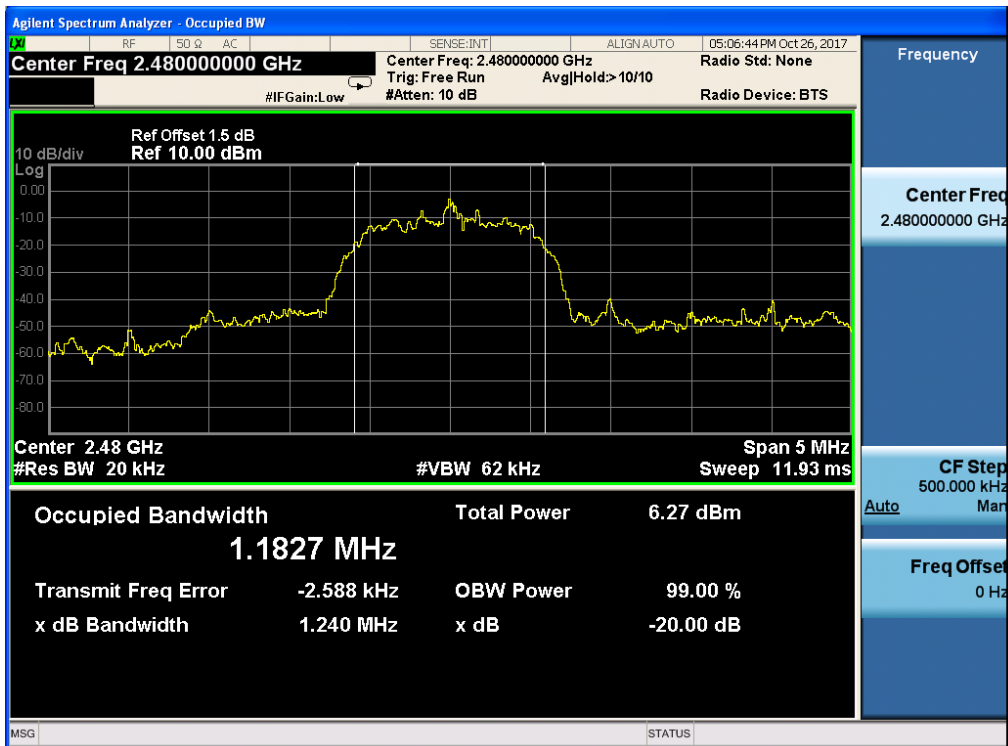
Channel 00 (2402MHz)



Channel 39 (2441MHz)



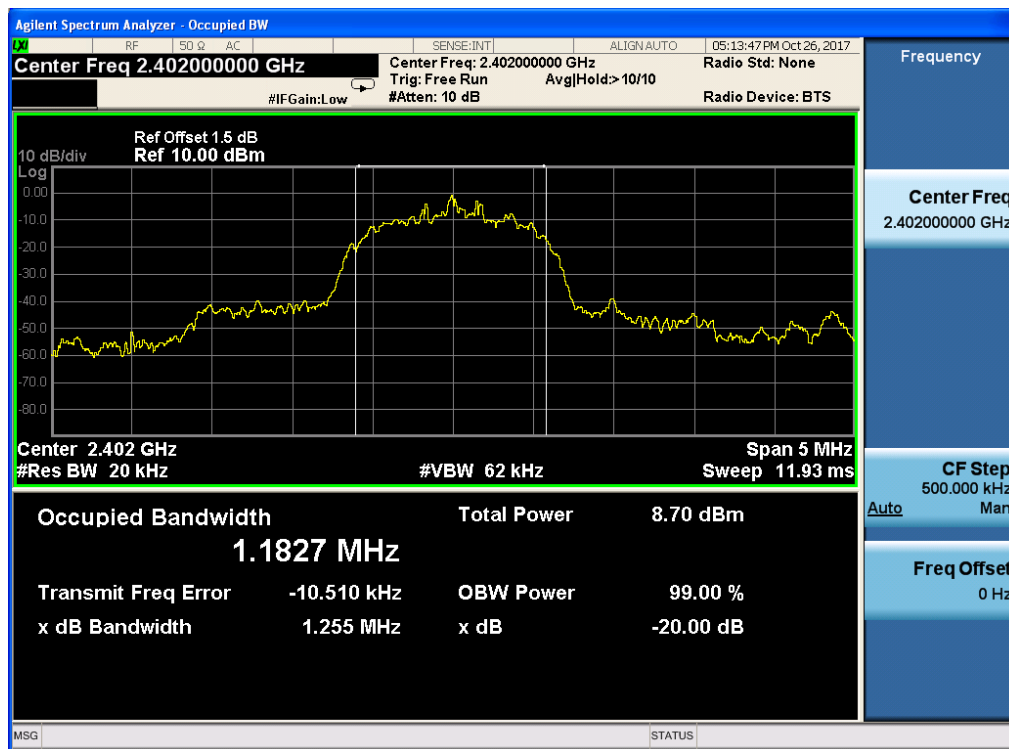
Channel 78 (2480MHz)



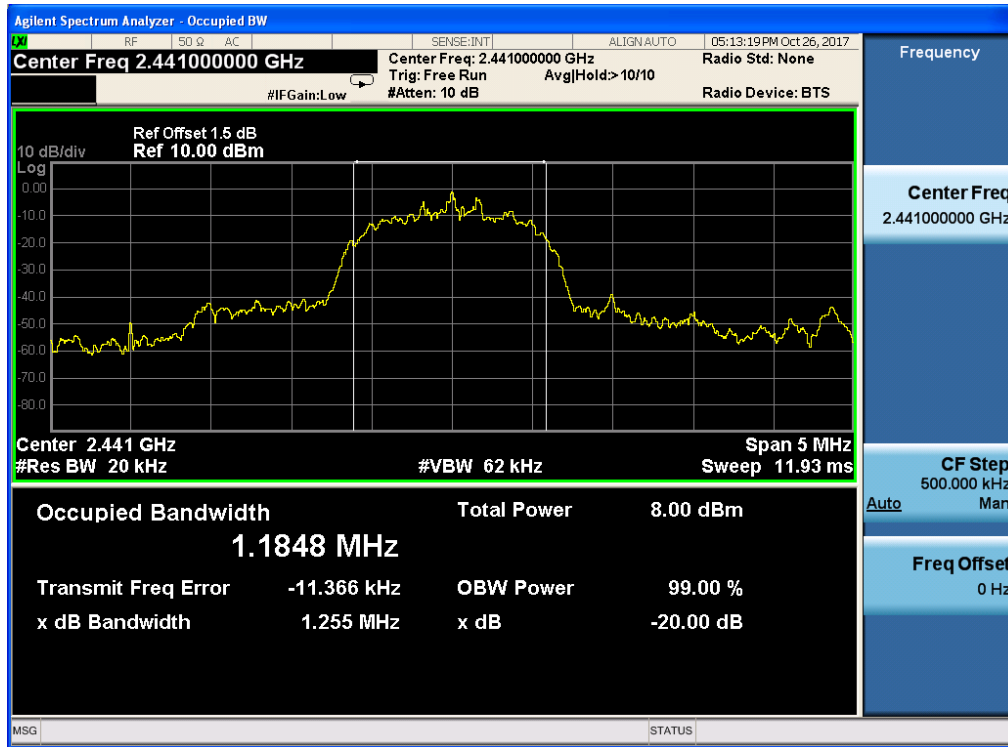
Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 3	Test Site	: TR-8
Test Date	: 2017.10.26		

Channel No.	Frequency (MHz)	20dB Bandwidth (kHz)	99% Bandwidth (kHz)
00	2402	1255	1182.7
39	2441	1255	1184.8
78	2480	1260	1166.5

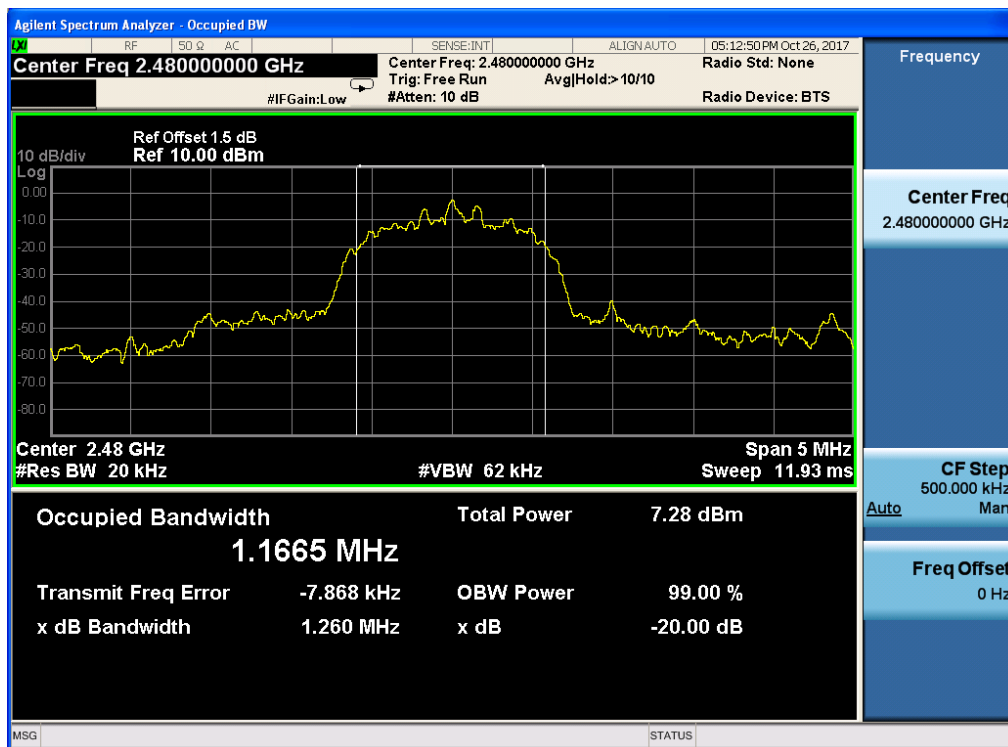
Channel 00 (2402MHz)



Channel 39 (2441MHz)



Channel 78 (2480MHz)



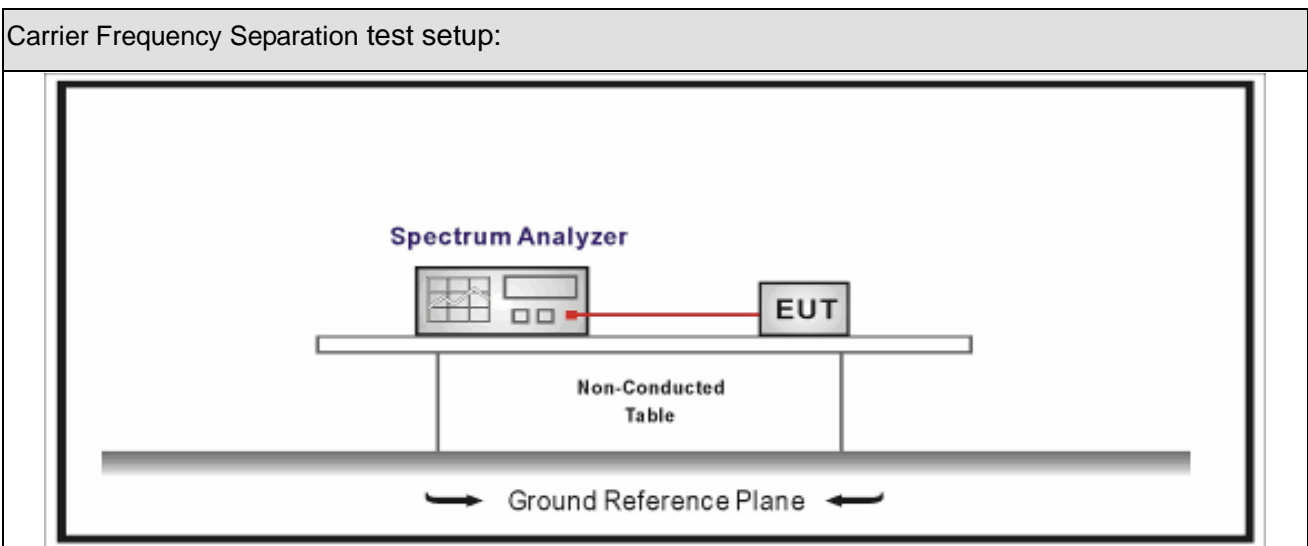
6. Carrier Frequency Separation

6.1. Test Equipment

Carrier Frequency Separation / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2017.04.09	2018.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2017.04.10	2018.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

6.2. Test Setup



6.3. Limit

Carrier Frequency Separation	
<input type="checkbox"/>	Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.
<input checked="" type="checkbox"/>	Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel.
<input type="checkbox"/>	The 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period;
<input type="checkbox"/>	The 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.
<input type="checkbox"/>	Frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies. The maximum 20 dB bandwidth of the hopping channel is 1 MHz.

6.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	7.8.2	Carrier frequency separation

6.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

6.6. Test Result

Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 1	Test Site	: TR-8
Test Date	: 2017.10.30		

Channel No.	Frequency (MHz)	Carrier Frequency Separation (kHz)	Limit (kHz)	Result
00	2402	1000	617.3	Pass
39	2441	1000	617.7	Pass
78	2480	1000	616.9	Pass

Channel 00 (2402MHz)



Channel 39 (2441MHz)



Channel 78 (2480MHz)



Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 2	Test Site	: TR-8
Test Date	: 2017.10.30		

Channel No.	Frequency (MHz)	Carrier Frequency Separation (kHz)	Limit (kHz)	Result
00	2402	1000	806.7	Pass
39	2441	1000	817.3	Pass
78	2480	1000	826.7	Pass

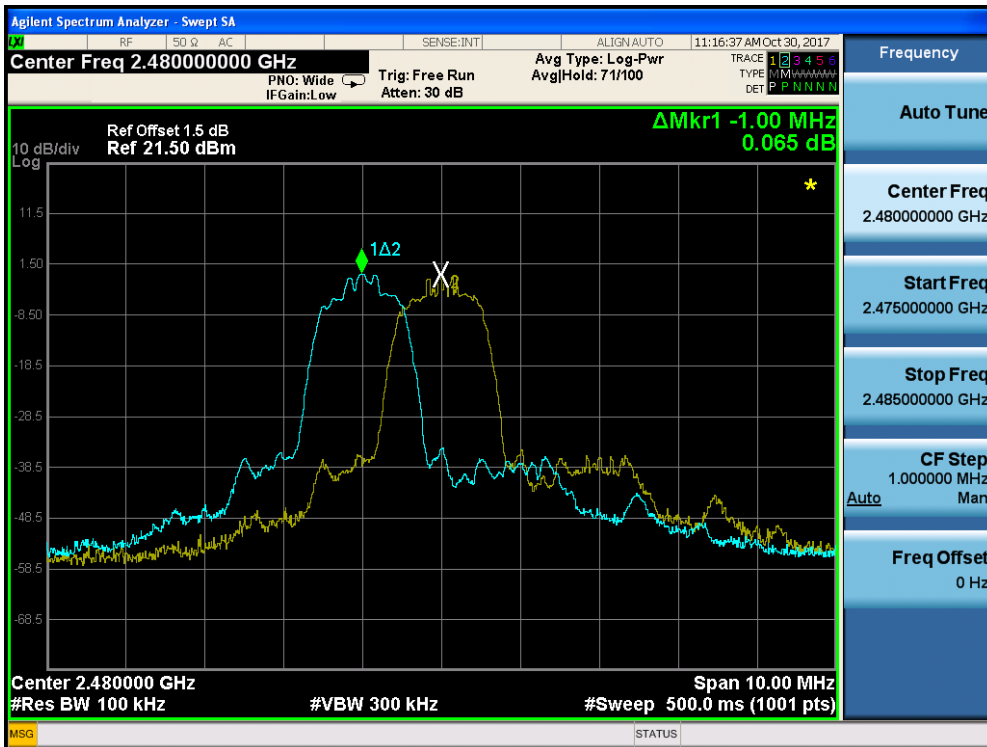
Channel 00 (2402MHz)



Channel 39 (2441MHz)



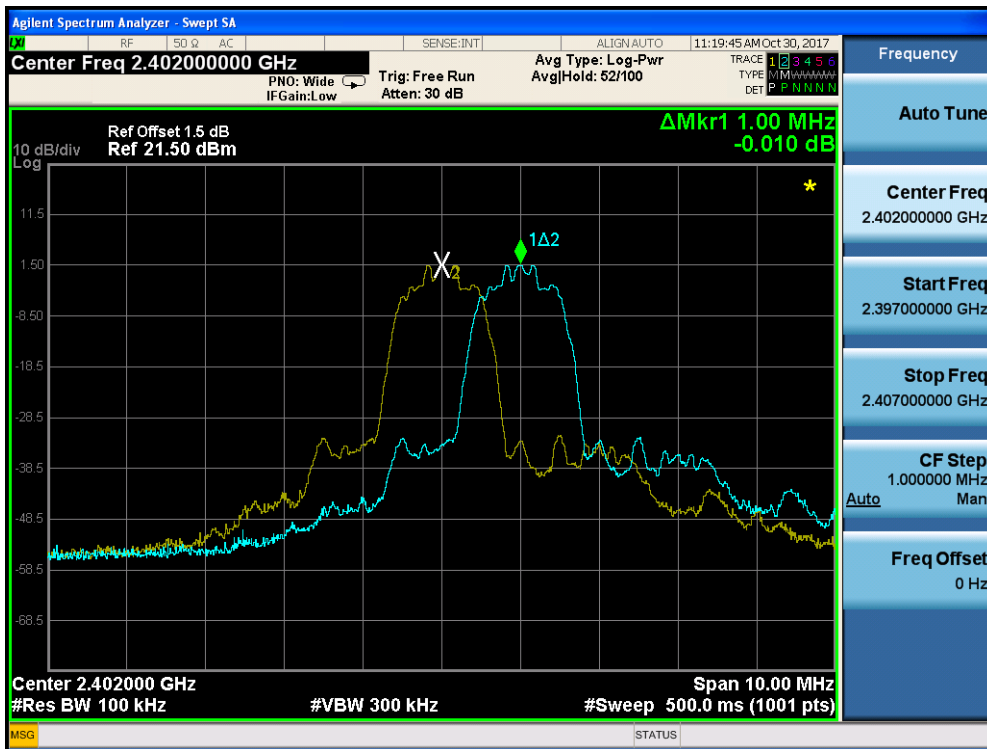
Channel 78 (2480MHz)



Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 3	Test Site	: TR-8
Test Date	: 2017.10.30		

Channel No.	Frequency (MHz)	Carrier Frequency Separation (kHz)	Limit (kHz)	Result
00	2402	1000	836.7	Pass
39	2441	1000	836.7	Pass
78	2480	1000	840.0	Pass

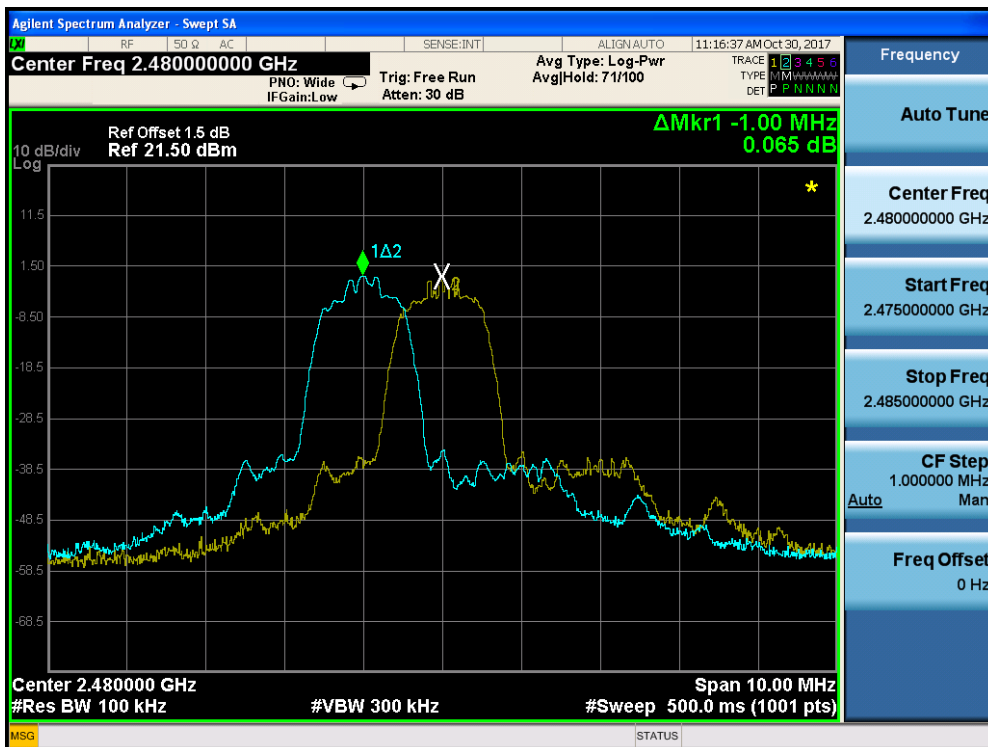
Channel 00 (2402MHz)



Channel 39 (2441MHz)



Channel 78 (2480MHz)



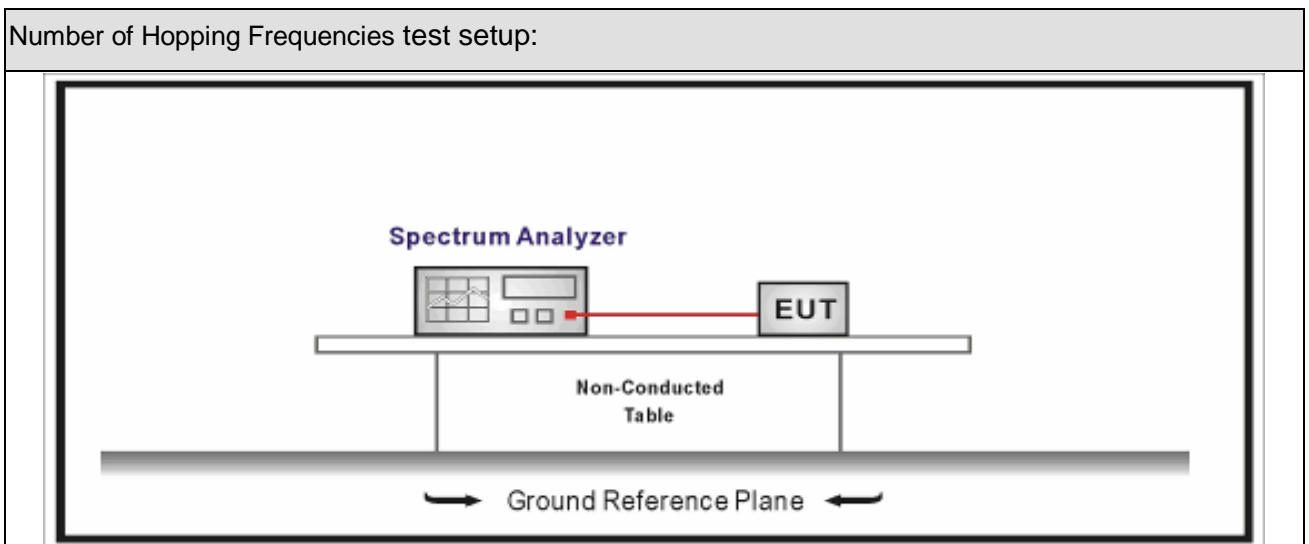
7. Number of Hopping Frequencies

7.1. Test Equipment

Number of Hopping Frequencies / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2017.04.09	2018.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2017.04.10	2018.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

7.2. Test Setup



7.3. Limit

Carrier Frequency Separation	
<input checked="" type="checkbox"/>	For frequency hopping systems operating in the 2400-2483.5 MHz band shall use at least 15 hopping frequencies.
<input type="checkbox"/>	For frequency hopping systems operating in 902-928 MHz band, if the 20 dB bandwidth of the hopping channel is less than 250 kHz, shall use at least 50 hopping frequencies.
<input type="checkbox"/>	For frequency hopping systems operating in 902-928 MHz band, if the 20 dB bandwidth of the hopping channel is higher than 250 kHz, shall use at least 25 hopping frequencies.
<input type="checkbox"/>	For frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies.

7.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	7.8.3	Number of Hopping Frequencies

7.5. Uncertainty

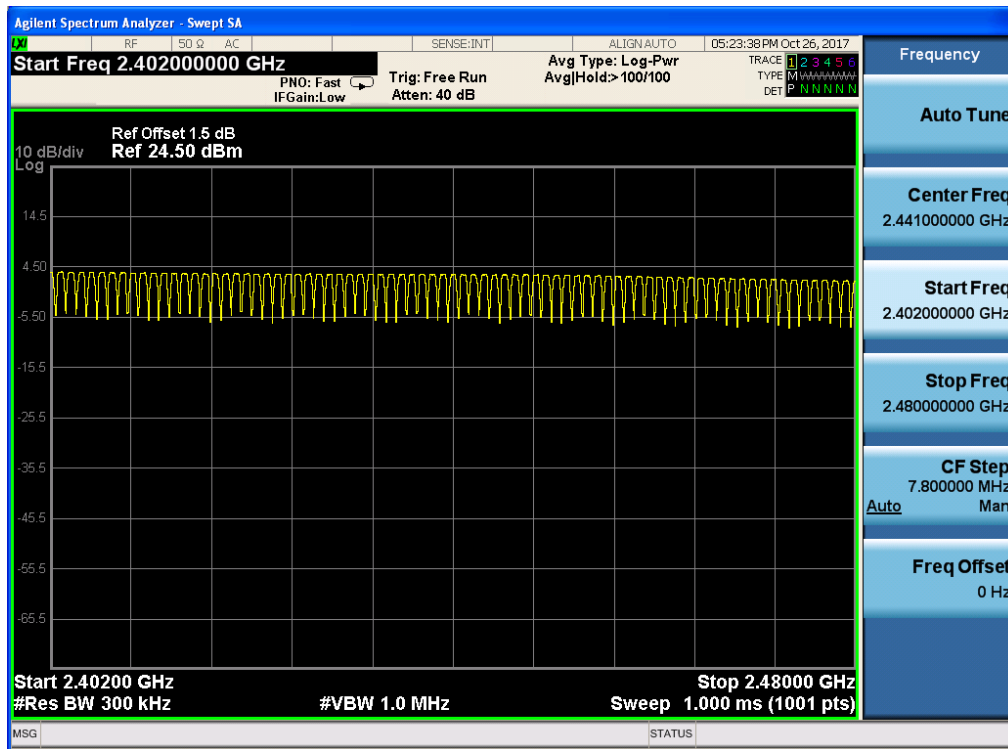
The measurement uncertainty is defined as ± 1 kHz

7.6. Test Result

Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 1	Test Site	: TR-8
Test Date	: 2017.10.26		

Frequency Band (MHz)	Number of Hopping Frequencies	Limit	Result
2400 - 2483.5	79	>15	Pass

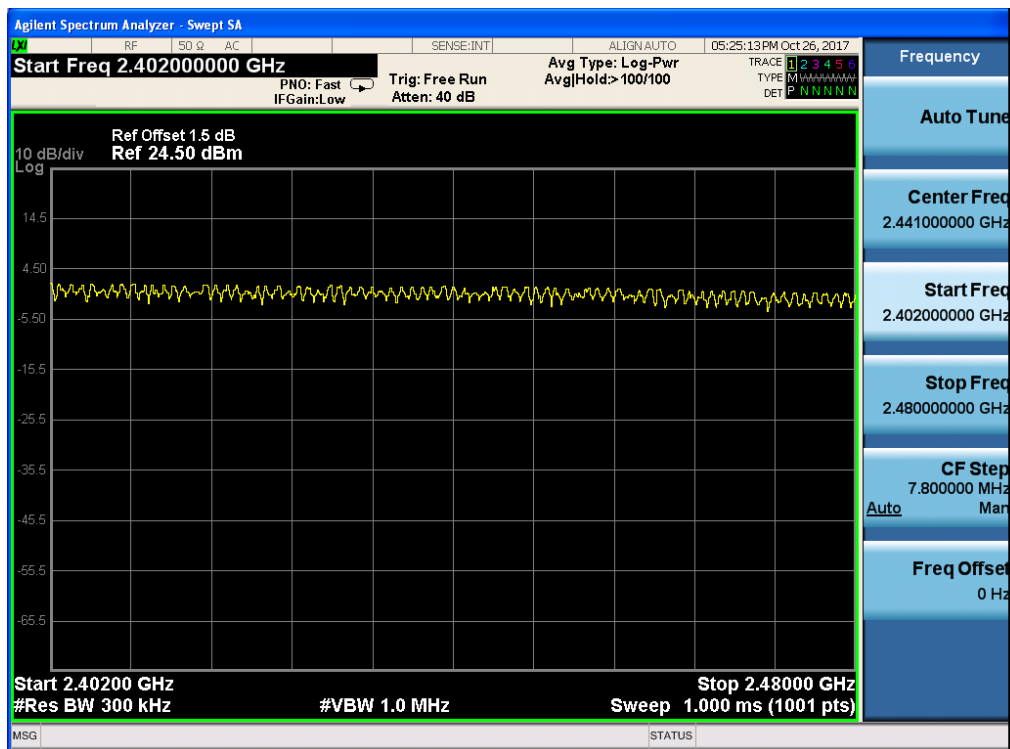
2402 - 2480MHz



Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 2	Test Site	: TR-8
Test Date	: 2017.10.26		

Frequency Band (MHz)	Number of Hopping Frequencies	Limit	Result
2400 - 2483.5	79	>15	Pass

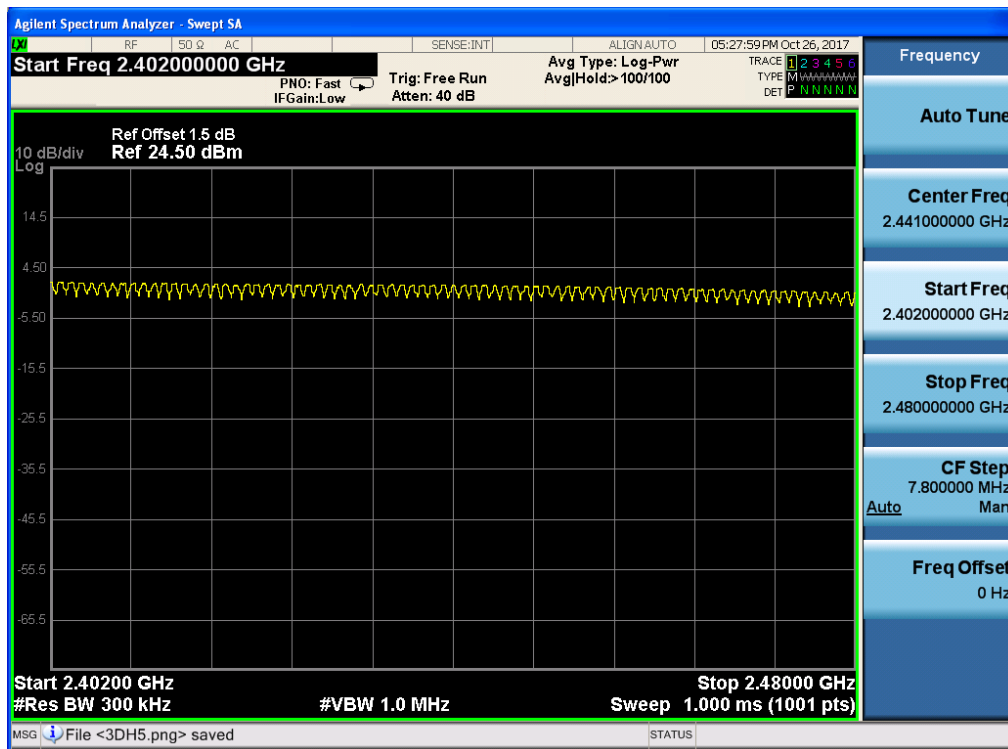
2402 - 2480 MHz



Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 3	Test Site	: TR-8
Test Date	: 2017.10.26		

Frequency Band (MHz)	Number of Hopping Frequencies	Limit	Result
2400 - 2483.5	79	>15	Pass

2402 - 2480 MHz



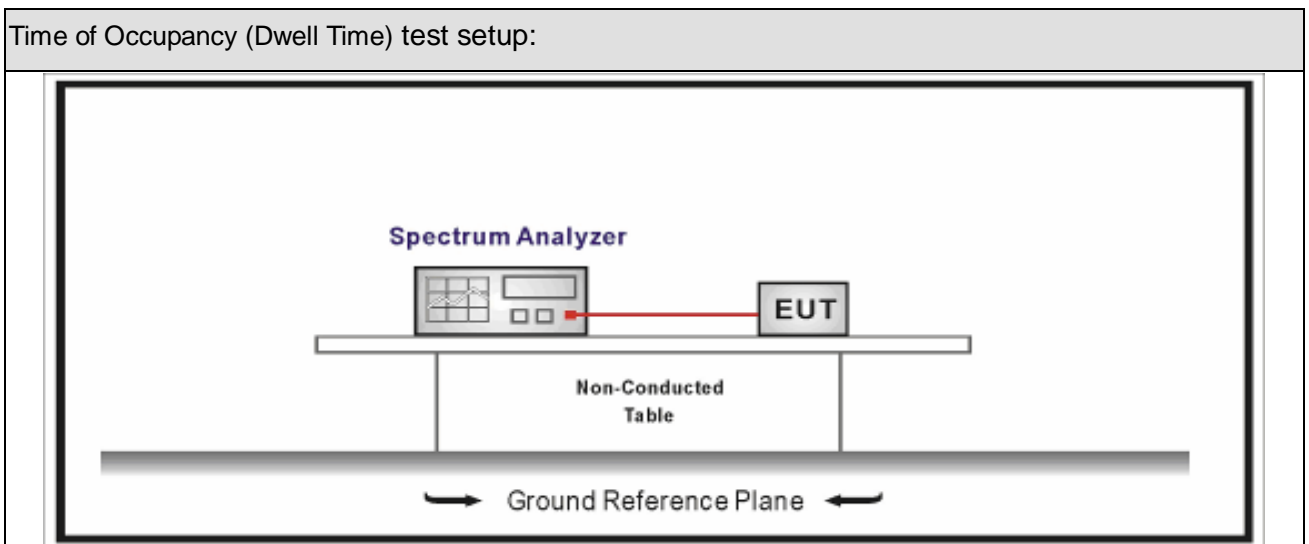
8. Time of Occupancy (Dwell Time)

8.1. Test Equipment

Time of Occupancy (Dwell Time) / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2017.04.09	2018.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2017.04.10	2018.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

8.2. Test Setup



8.3. Limit

Time of Occupancy (Dwell Time)	
<input checked="" type="checkbox"/>	Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.
<input type="checkbox"/>	For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period
<input type="checkbox"/>	For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping

	frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.
<input type="checkbox"/>	Frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies. The maximum 20 dB bandwidth of the hopping channel is 1 MHz. The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.

8.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	7.8.4	Time of Occupancy (Dwell Time)

8.5. Uncertainty

The measurement uncertainty is defined as $\pm 0.1 \text{ us}$

8.6. Test Result

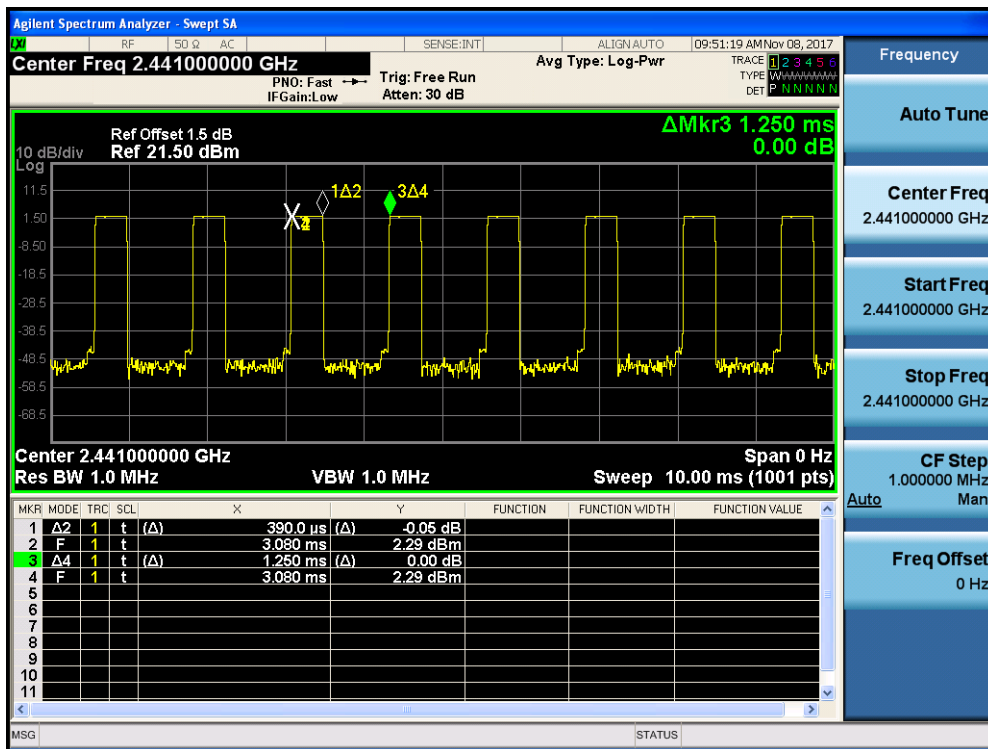
Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 1	Test Site	: TR-8
Test Date	: 2017.10.26		

Channel No.	Frequency (MHz)	Time of Occupancy (ms)	Limit (ms)	Result
39	2441	124.8	< 400	Pass

Note1: Test Time Period: $0.4 \times 79 = 31.6$ sec

Note2: Time of Occupancy = pulse time $\times (1600 / (2 \times 79)) \times 31.6$

Channel 39 (2441MHz)-(DH1)



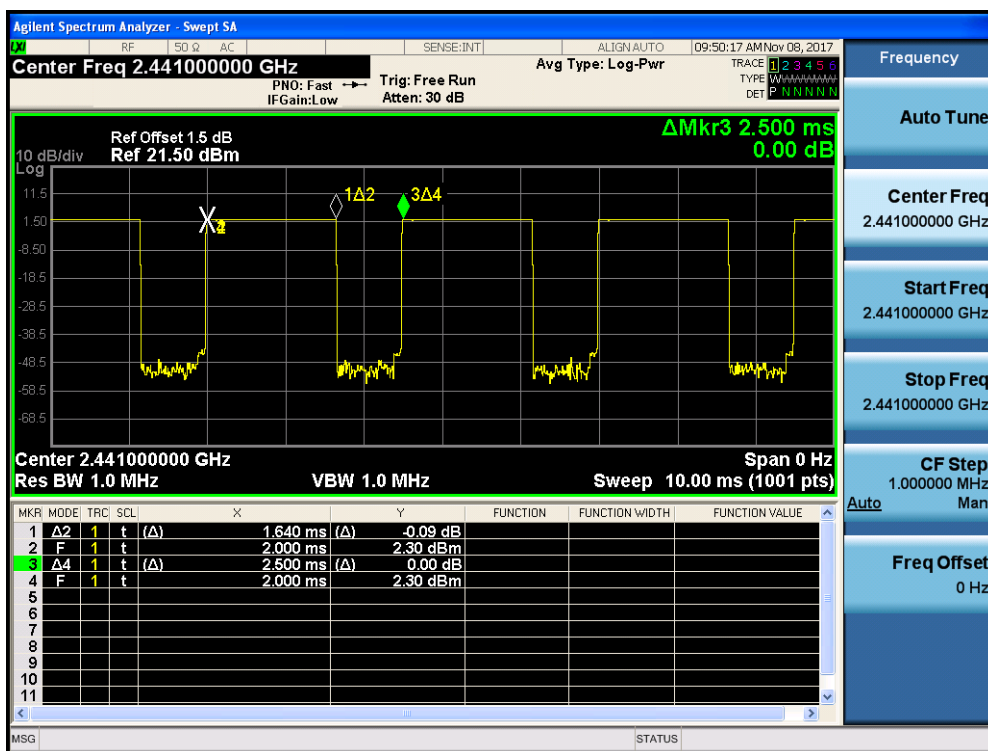
Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 2	Test Site	: TR-8
Test Date	: 2017.10.26		

Channel No.	Frequency (MHz)	Time of Occupancy (ms)	Limit (ms)	Result
39	2441	262.4	< 400	Pass

Note1: Test Time Period: $0.4 * 79 = 31.6$ sec

Note2: Time of Occupancy = pulse time * $(1600 / (4 * 79)) * 31.6$

Channel 39 (2441 MHz) - (DH3)



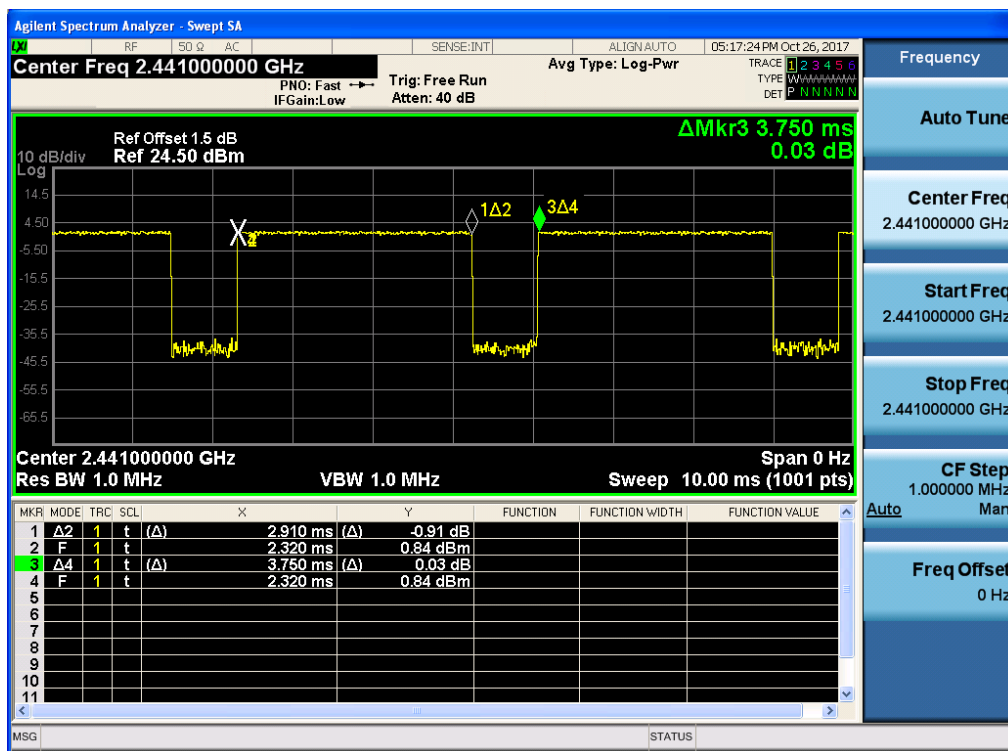
Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 3	Test Site	: TR-8
Test Date	: 2017.10.26		

Channel No.	Frequency (MHz)	Time of Occupancy (ms)	Limit (ms)	Result
39	2441	310.40	< 400	Pass

Note1: Test Time Period: $0.4 \times 79 = 31.6$ sec

Note2: Time of Occupancy = pulse time $\times (1600 / (6 \times 79)) \times 31.6$

Channel 39 (2441 MHz) - (DH5)



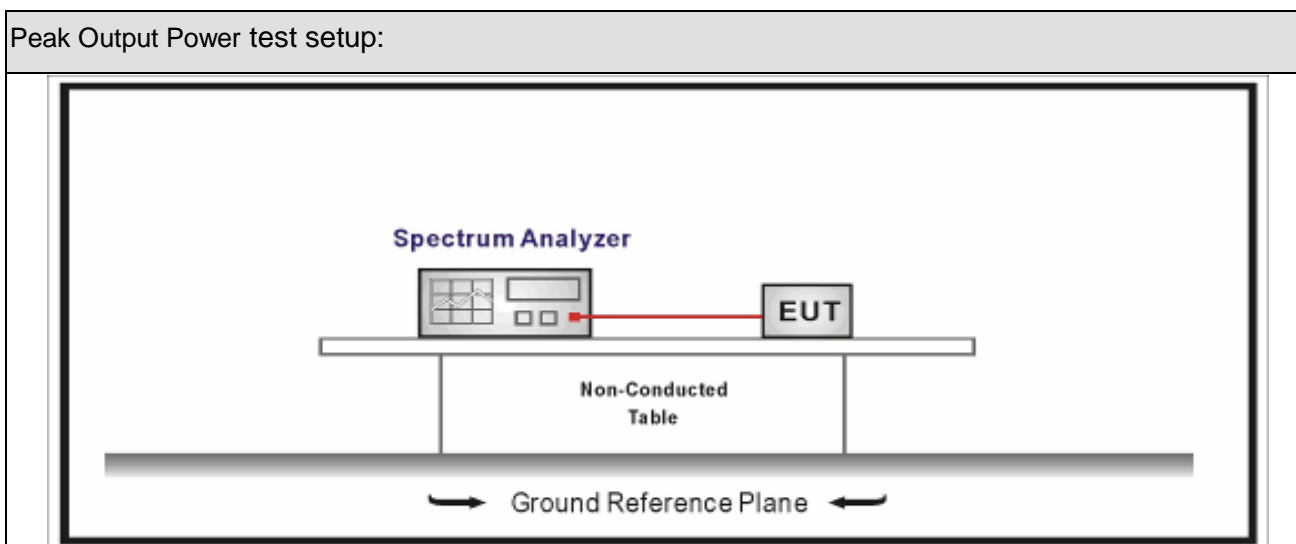
9. Peak Output Power

9.1. Test Equipment

Peak Output Power / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2017.04.09	2018.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2017.04.10	2018.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

9.2. Test Setup



9.3. Limit

Peak Output Power	
<input type="checkbox"/>	Frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.
<input checked="" type="checkbox"/>	Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.
<input type="checkbox"/>	For frequency hopping systems operating in the 902-928 MHz band: 1 watt for systems employing at least 50 hopping channels; and, 0.25 watts for systems employing less than 50 hopping channels, but at least 25 hopping channels

9.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	7.8.5	Output power test procedure for frequency-hopping spread-spectrum (FHSS) devices

9.5. Uncertainty

The measurement uncertainty is defined as ± 1.0 dB

9.6. Test Result

Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 1	Test Site	: TR-8
Test Date	: 2017.11.06		

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)	Limit (dBm)	Result
00	2402	3.32	21.00	Pass
39	2441	2.71	21.00	Pass
78	2480	1.95	21.00	Pass

Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 2	Test Site	: TR-8
Test Date	: 2017.11.06		

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)	Limit (dBm)	Result
00	2402	2.34	21.00	Pass
39	2441	1.92	21.00	Pass
78	2480	0.84	21.00	Pass

Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 3	Test Site	: TR-8
Test Date	: 2017.11.06		

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)	Limit (dBm)	Result
00	2402	2.52	21.00	Pass
39	2441	1.94	21.00	Pass
78	2480	1.12	21.00	Pass

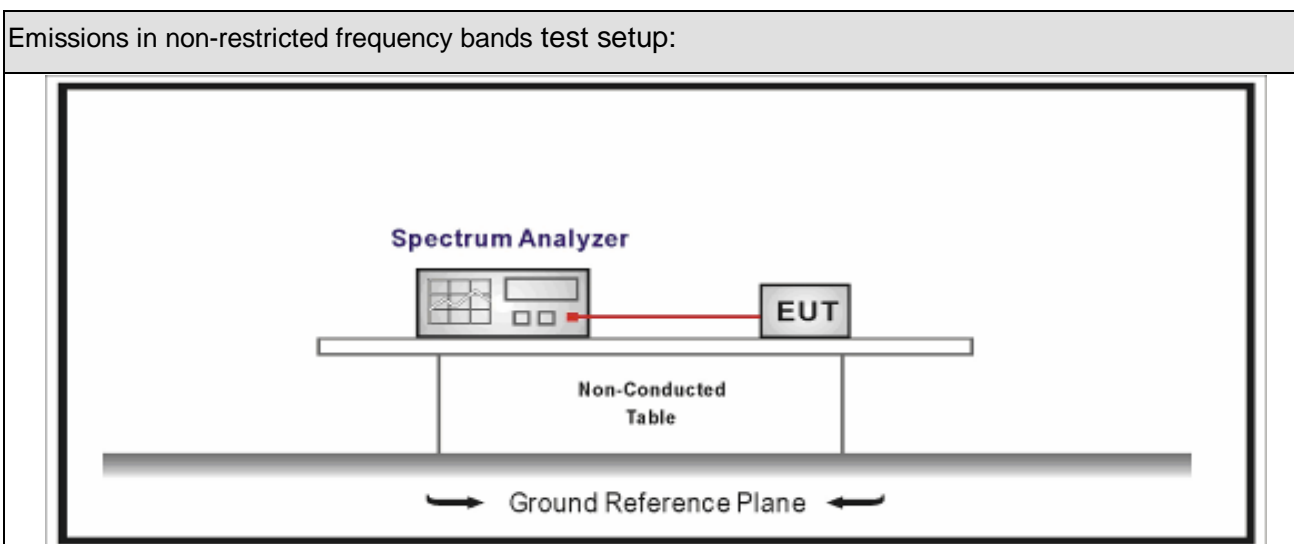
10. Emissions in non-restricted frequency bands

10.1. Test Equipment

Emissions in non-restricted frequency bands / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2017.04.09	2018.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2017.04.10	2018.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

10.2. Test Setup



10.3. Limit

Un-Restricted Band Emissions Limit	
RF Output power (Detection methods)	Limit(dB)
RF Output power(Average detector)	30c(Note1)
RF Output power(PK detector)	20c(Note2)
<p>Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).</p> <p>Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).</p>	

10.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	7.8.6	Band-edge Compliance of RF Conducted Emissions

10.5. Uncertainty

The measurement uncertainty is defined as ± 1.0 dB

10.6. Test Result

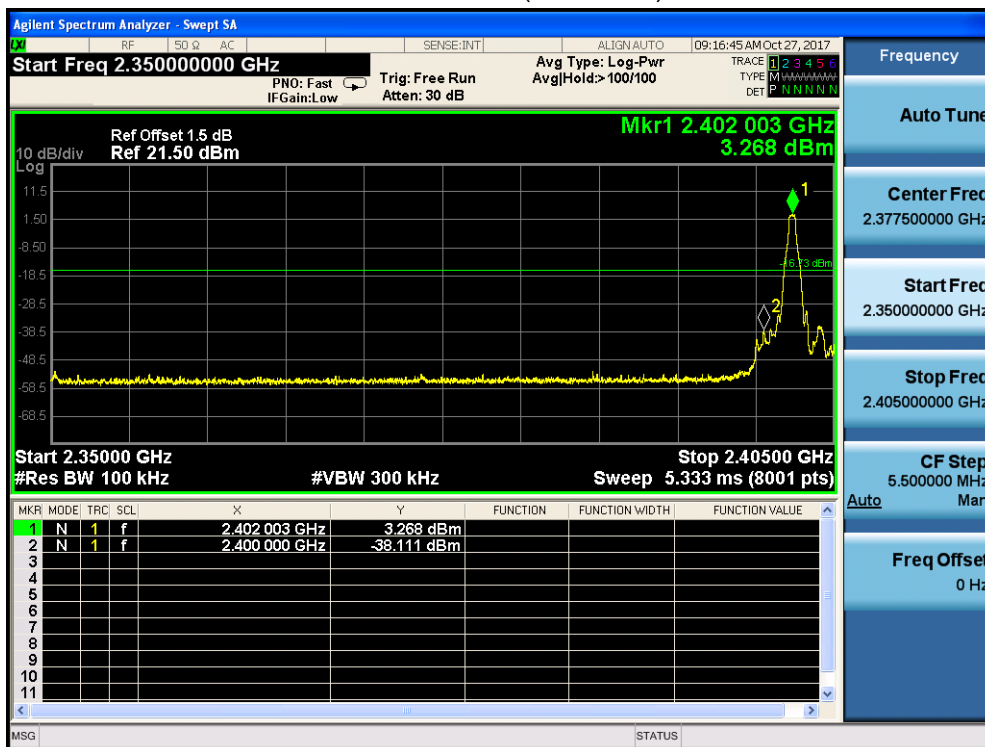
Product Name	: Bluetooth headset	Power	: AC 120V/60Hz
Test Mode	: Mode 1~4	Test Site	: TR-8
Test Date	: 2017.11.06		

Mode	Channel	Test Frequency (MHz)	In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	00	2402	3.268	2400.00	-38.111	41.379	>20	Pass
1	78	2480	1.520	2500.00	-53.571	55.091	>20	Pass
2	00	2402	1.473	2400.00	-44.515	45.988	>20	Pass
2	78	2480	-0.582	2500.00	-52.802	52.220	>20	Pass
3	00	2402	1.549	2400.00	-45.457	47.006	>20	Pass
3	78	2480	-0.522	2500.00	-53.243	52.721	>20	Pass
4	00~78	00~78	2.982	2400.00	-42.767	45.749	>20	Pass

Note1: The worst case of Emissions in non-restricted frequency bands as below:

2: Mode 1-3, The In-Band PSD is the highest PSD of All channels.

Mode 1 CH00(2402MHz)

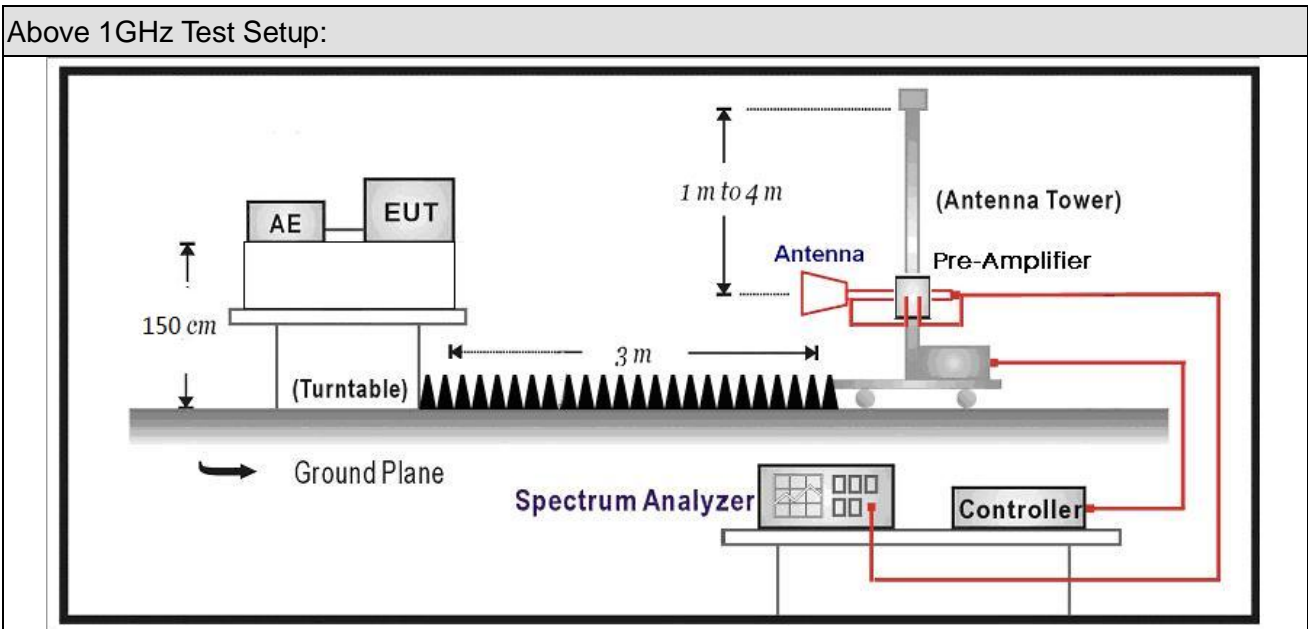


11. Radiated Emission Band Edge

11.1. Test Equipment

Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Receiver	Agilent	N9038A	MY51210196	2017.07.16	2018.07.15
Pre-Amplifier	Miteq	NSP1800-25	1364185	2017.05.03	2018.05.02
DRG Horn Antenna	ETS-Lindgren	3117	00167055	2017.07.12	2018.07.11
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2017.09.18	2018.09.17
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2017.02.28	2018.02.27
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2017.02.28	2018.02.27
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2017.01.05	2018.01.04

11.2. Test Setup



11.3. Limit

Band edge Limit				
Frequency bands (MHz)	Detector	Limit (dB μ V/m)	RBW (MHz)	Distance (m)
2310-2390	PK	74	1	3
2483.5-2500	AV	54	1	3

Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.

11.4. Test Procedure

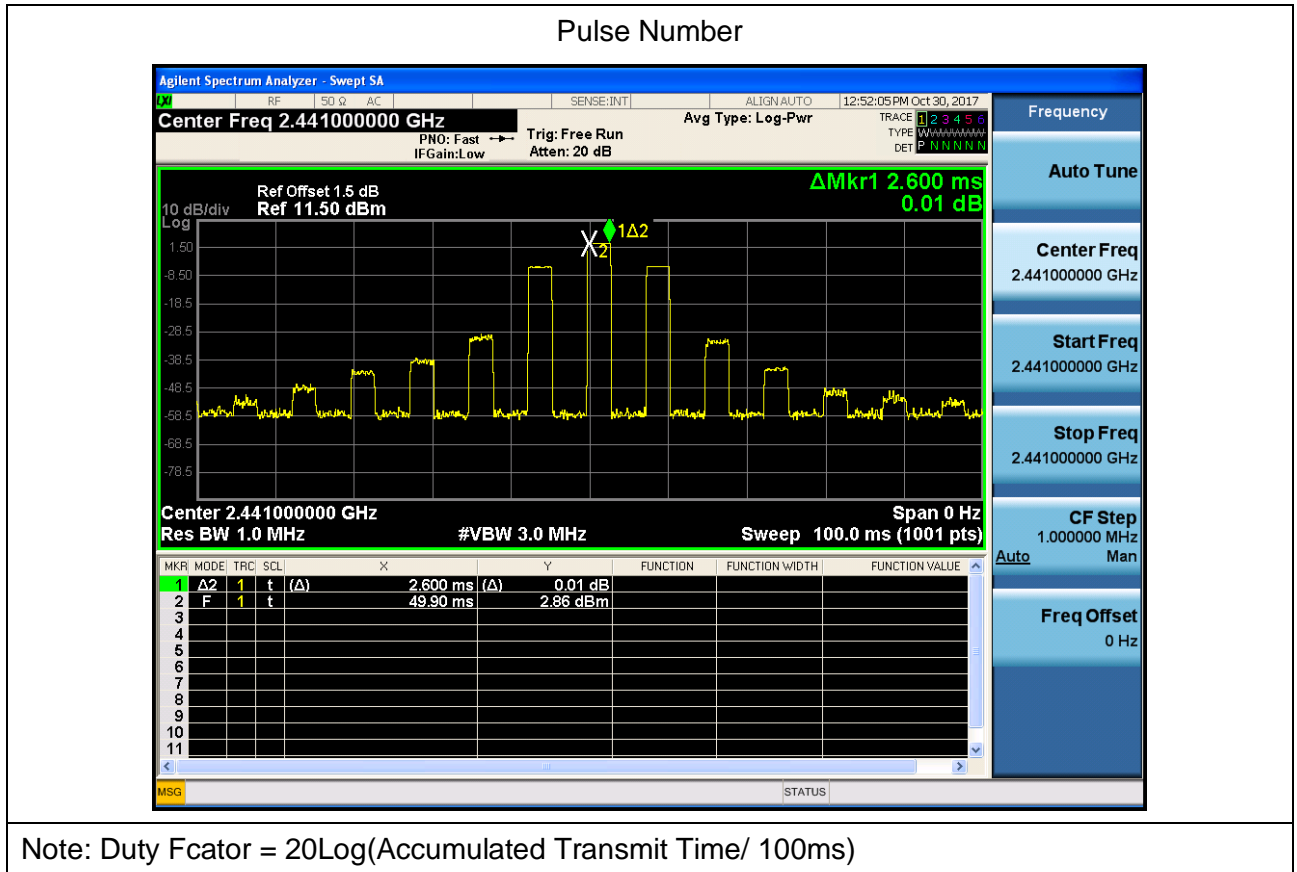
Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	DA 00-705	N/A	duty cycle correction factor
<input checked="" type="checkbox"/>	ANSI C63.10	6.10	Band-edge testing
	<input checked="" type="checkbox"/> ANSI C63.10	6.10.5	Restricted-band band-edge measurements
	<input type="checkbox"/> ANSI C63.10	6.10.6	Marker-delta method
<input type="checkbox"/>	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
<input type="checkbox"/>	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
<input checked="" type="checkbox"/>	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

11.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB
 below 1G is defined as ± 3.8 dB

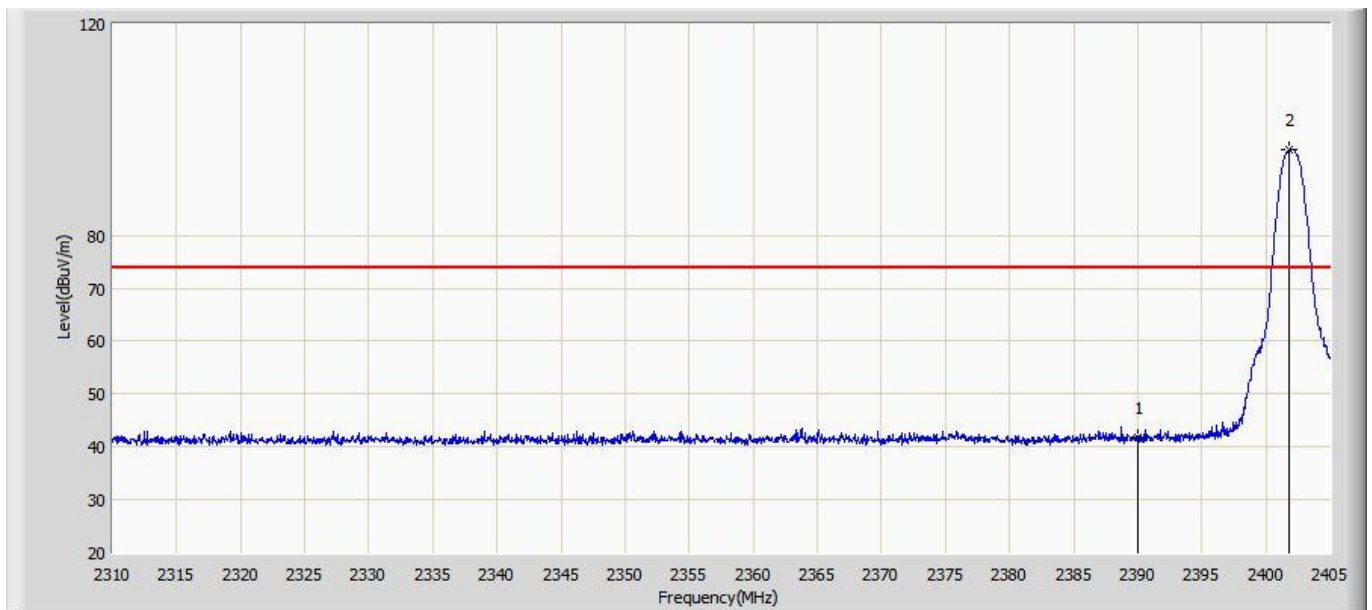
11.6. Duty Factor

Test Mode	Pluse Time (ms)	Pluse Number	Accumulated Transmit Time (ms)	Duty Factor (dB)
Mode 1	2.6	1	2.6	-31.7



11.7. Test Result

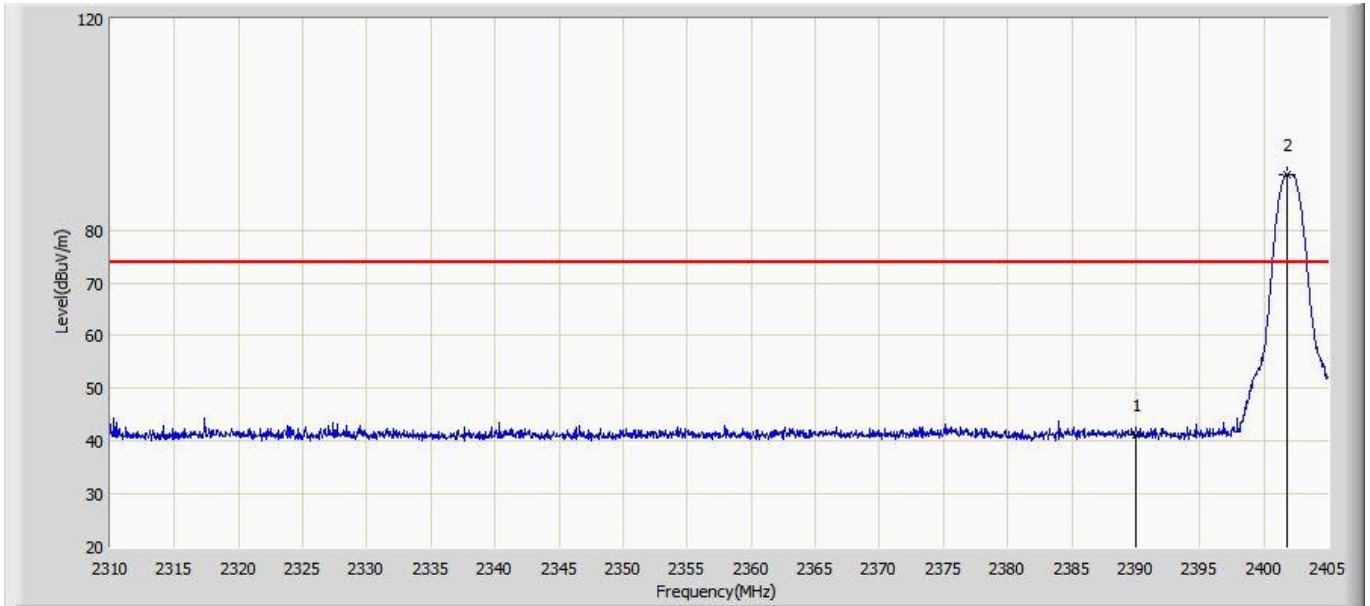
Engineer: Slark	
Site:AC5	Time: 2017/11/02 - 09:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.841	12.793	-32.159	74.000	29.048	PK
2	*	2401.770	96.196	67.233	N/A	N/A	28.963	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.841	10.468	-43.532	54.000	-31.373	AV
2	*	2401.770	96.196	64.823	N/A	N/A	-31.373	AV

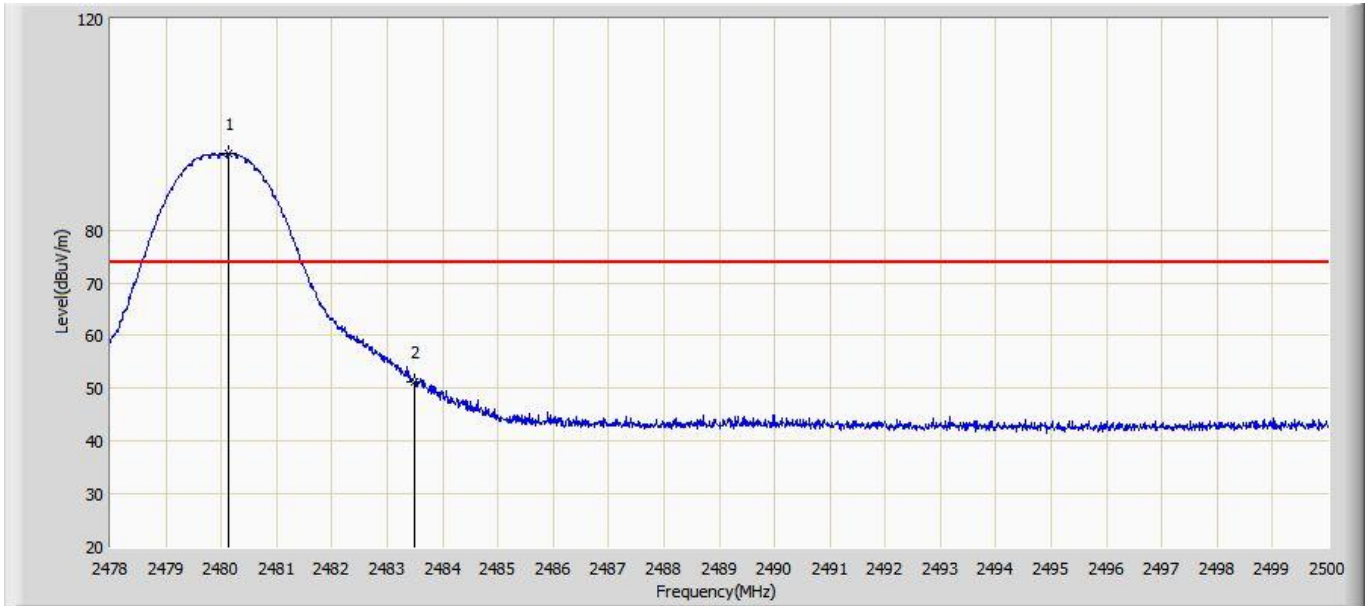
Engineer: Slark	
Site:AC5	Time: 2017/11/02 - 15:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.091	12.043	-32.909	74.000	29.048	PK
2	*	2401.817	90.549	61.587	N/A	N/A	28.962	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.091	9.718	-44.282	54.000	-31.373	AV
2	*	2401.817	90.549	59.176	N/A	N/A	-31.373	AV

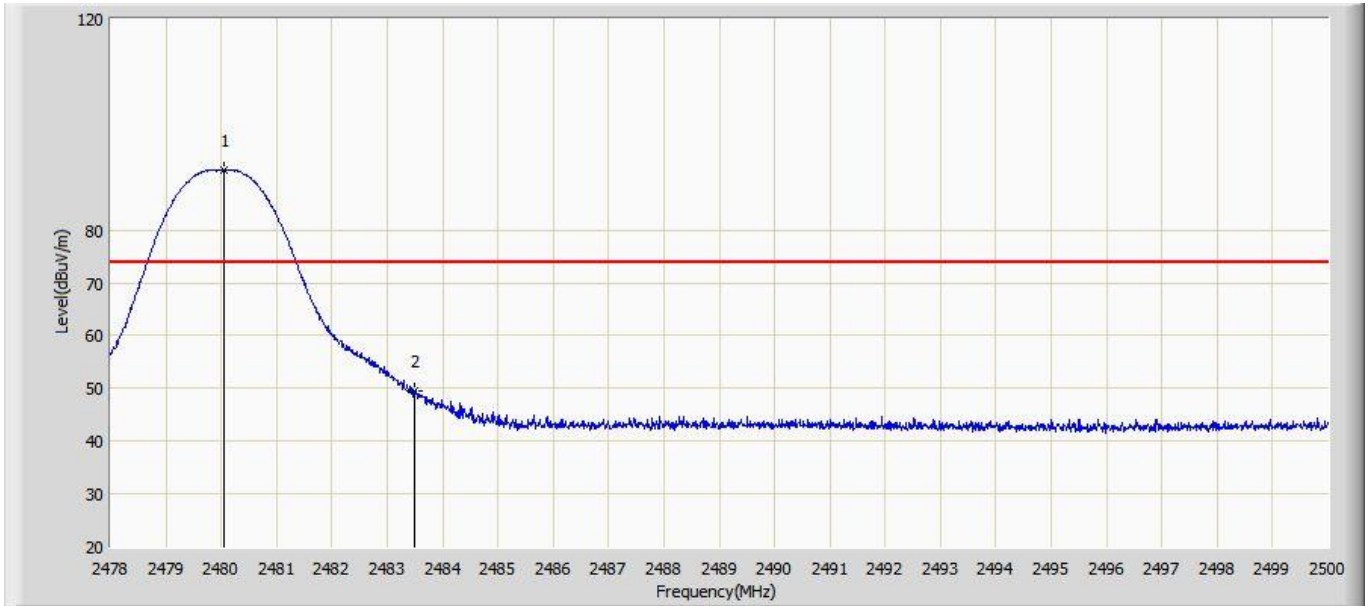
Engineer: Slark	
Site:AC5	Time: 2017/11/02 - 15:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.134	94.395	63.880	N/A	N/A	30.515	PK
2		2483.500	51.160	20.676	-22.840	74.000	30.484	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2480.134	94.395	63.022	N/A	N/A	-31.373	AV
2	*	2483.500	51.160	19.787	-34.213	54.000	-31.373	AV

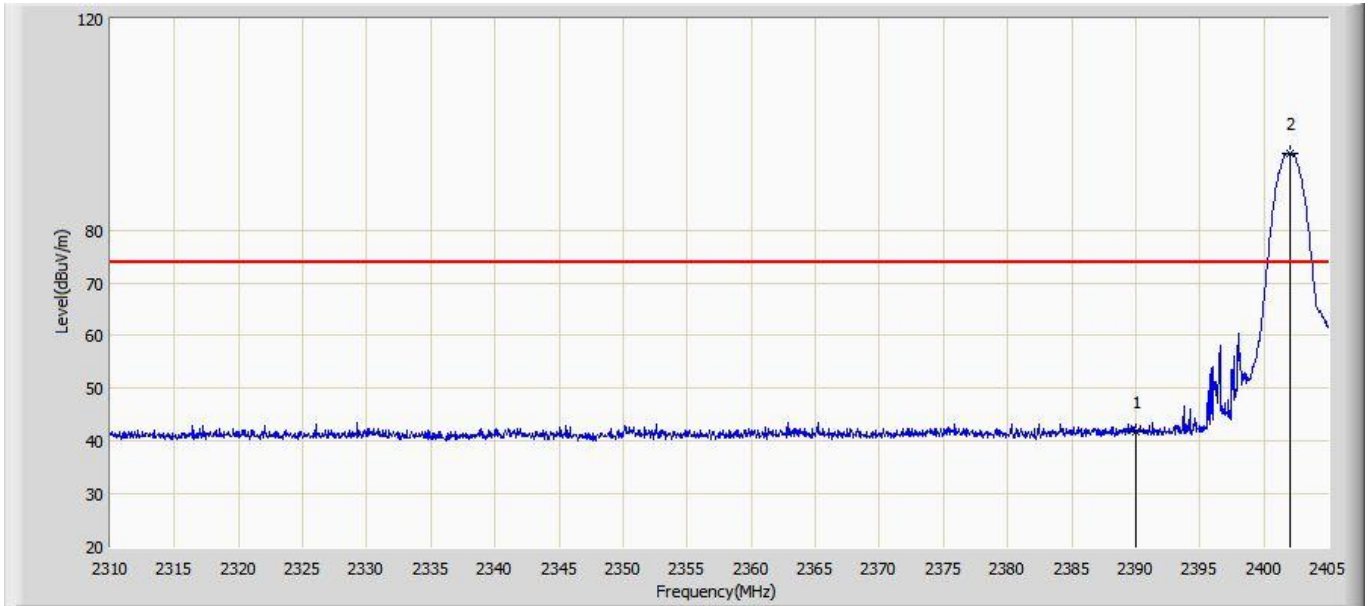
Engineer: Slark	
Site:AC5	Time: 2017/11/02 - 15:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.057	91.347	60.832	N/A	N/A	30.515	PK
2		2483.500	49.620	19.135	-24.380	74.000	30.484	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2480.057	91.347	59.974	N/A	N/A	-31.373	AV
2	*	2483.500	49.620	18.247	-35.753	54.000	-31.373	AV

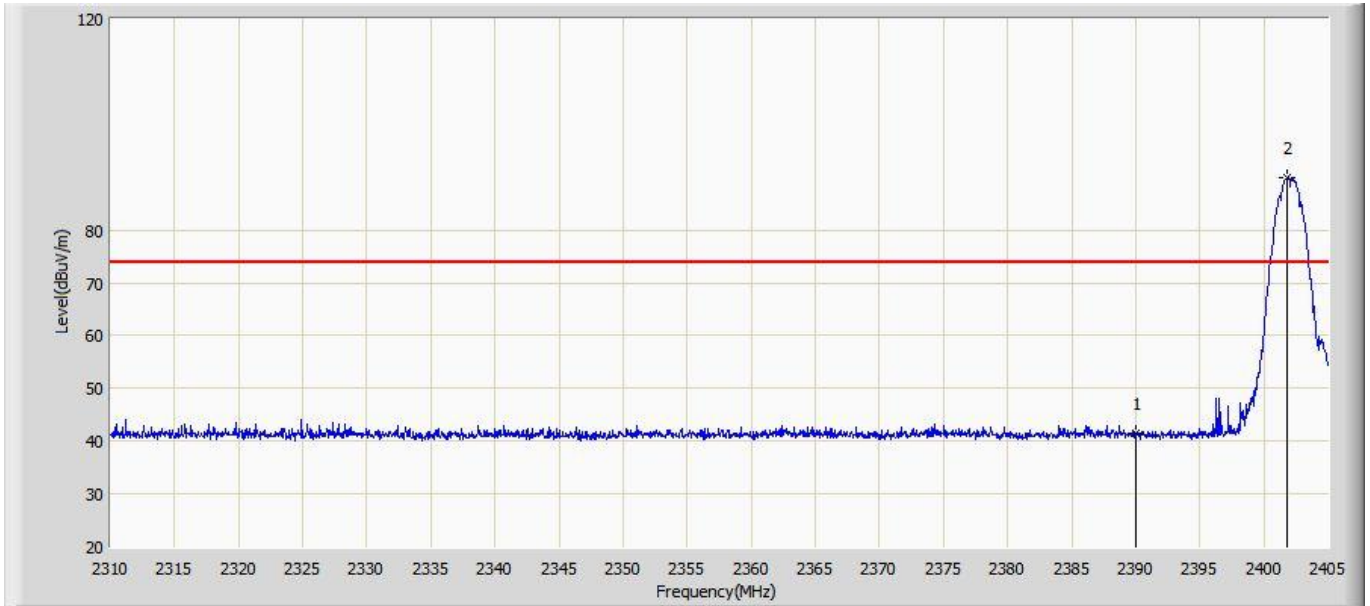
Engineer: Slark	
Site:AC5	Time: 2017/11/02 - 15:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.642	12.594	-32.358	74.000	29.048	PK
2	*	2402.103	94.562	65.603	N/A	N/A	28.959	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.642	10.269	-43.731	54.000	-31.373	AV
2	*	2402.103	94.562	63.189	N/A	N/A	-31.373	AV

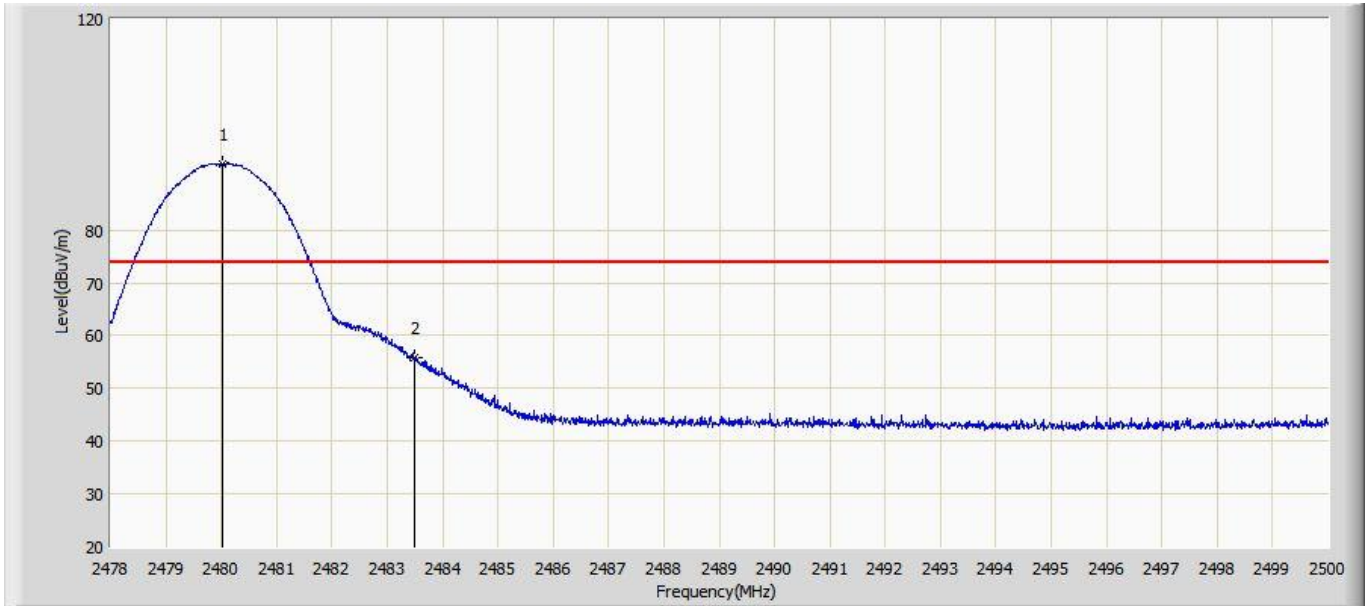
Engineer: Slark	
Site:AC5	Time: 2017/11/02 - 15:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.474	12.426	-32.526	74.000	29.048	PK
2	*	2401.817	89.780	60.818	N/A	N/A	28.962	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.474	10.101	-43.899	54.000	-31.373	AV
2	*	2401.817	89.780	58.407	N/A	N/A	-31.373	AV

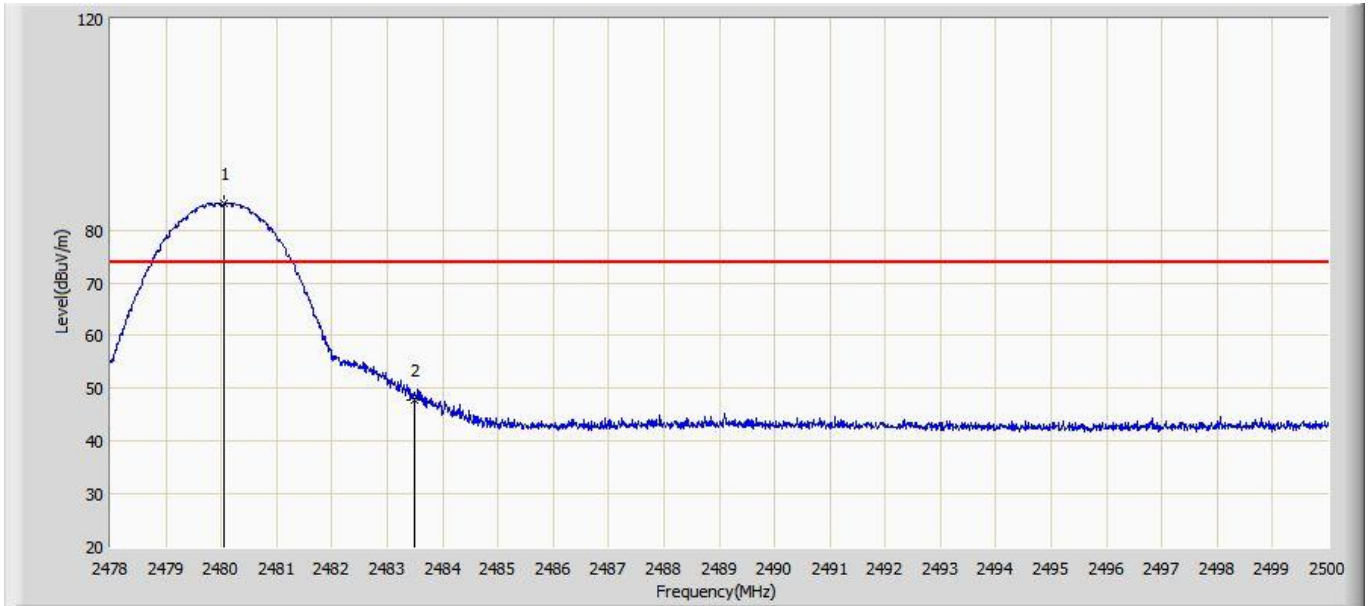
Engineer: Slark	
Site:AC5	Time: 2017/11/02 - 15:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.035	92.540	62.024	N/A	N/A	30.516	PK
2		2483.500	55.751	25.267	-18.249	74.000	30.484	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2480.035	92.540	61.167	N/A	N/A	-31.373	AV
2	*	2483.500	55.751	24.378	-29.622	54.000	-31.373	AV

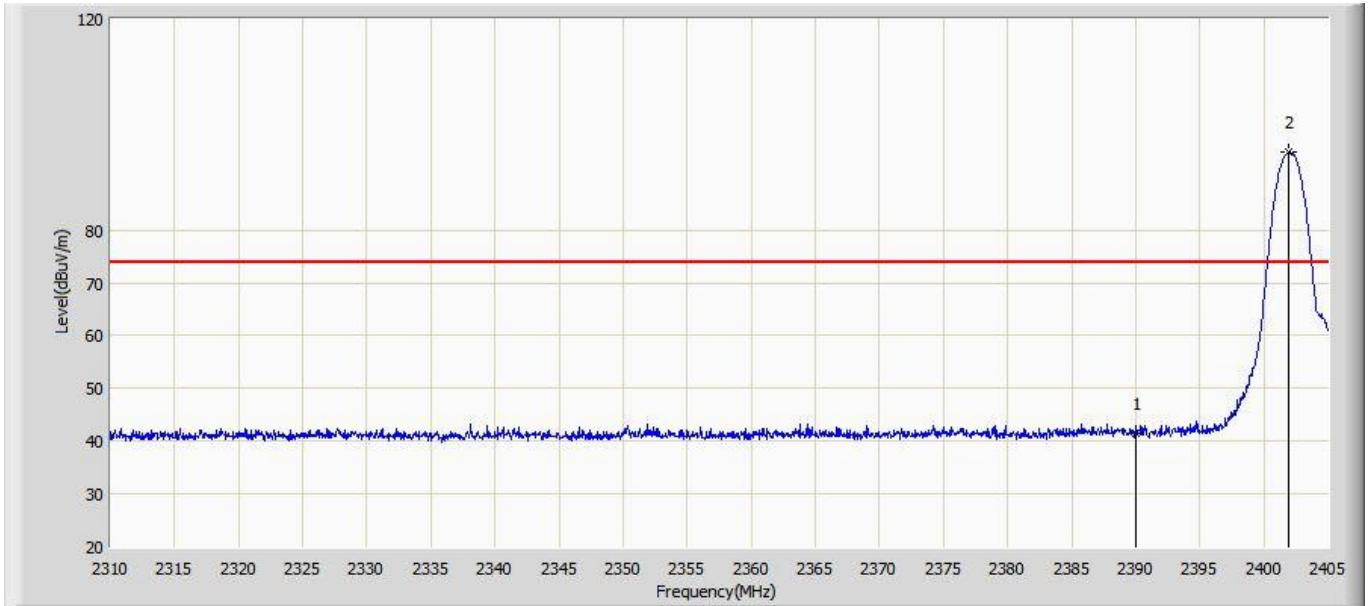
Engineer: Slark	
Site:AC5	Time: 2017/11/02 - 15:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.057	85.175	54.660	N/A	N/A	30.515	PK
2		2483.500	47.816	17.332	-26.184	74.000	30.484	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2480.057	85.175	53.802	N/A	N/A	-31.373	AV
2	*	2483.500	47.816	16.443	-37.557	54.000	-31.373	AV

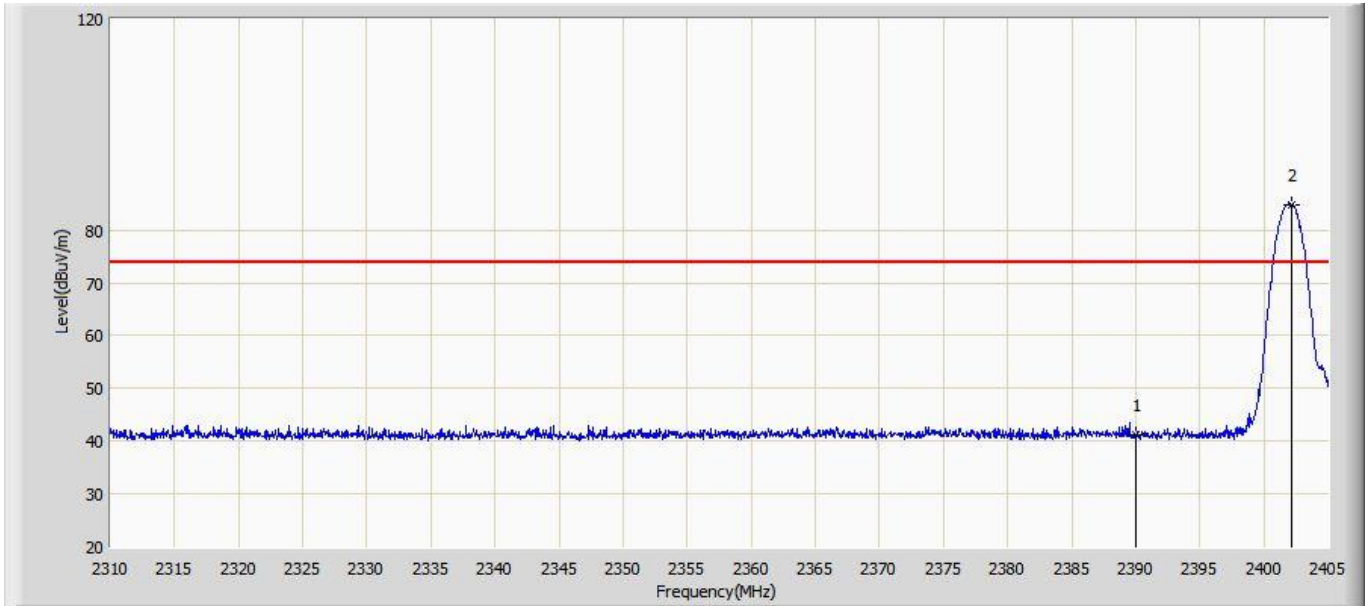
Engineer: Slark	
Site:AC5	Time: 2017/11/02 - 15:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by 3DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.497	12.449	-32.503	74.000	29.048	PK
2	*	2401.913	94.781	65.820	N/A	N/A	28.961	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.497	10.124	-43.876	54.000	-31.373	AV
2	*	2401.913	94.781	63.408	N/A	N/A	-31.373	AV

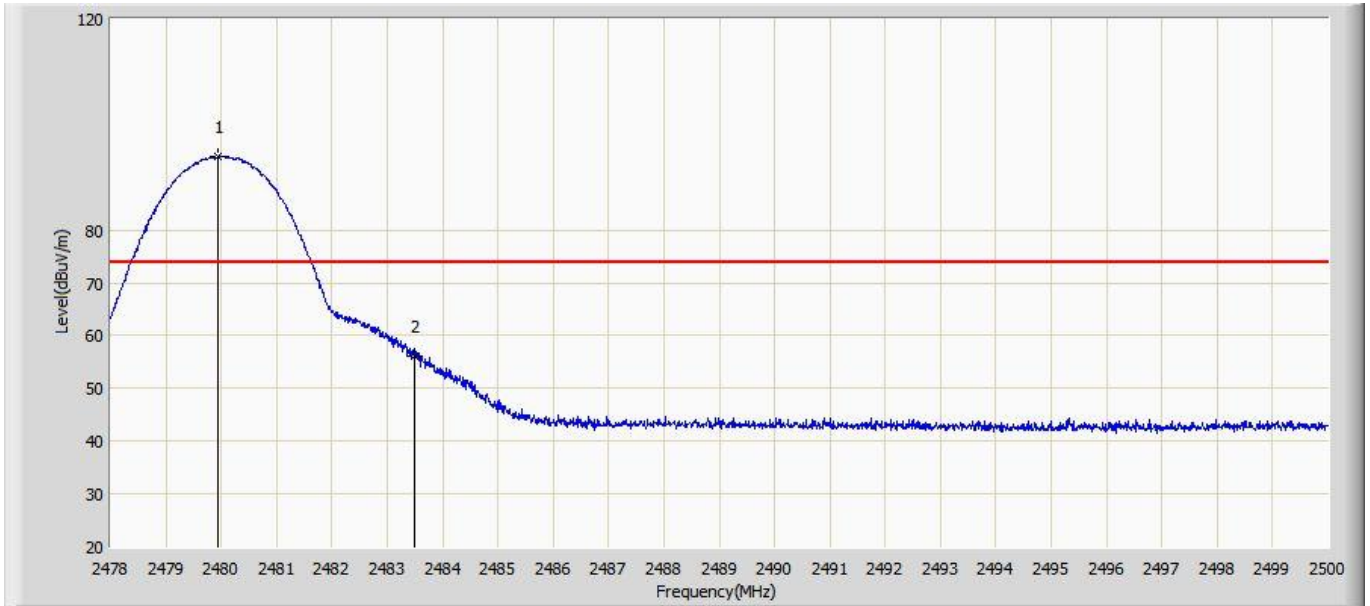
Engineer: Slark	
Site:AC5	Time: 2017/11/02 - 15:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by 3DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.091	12.043	-32.909	74.000	29.048	PK
2	*	2402.150	84.879	55.920	N/A	N/A	28.959	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.091	9.718	-44.282	54.000	-31.373	AV
2	*	2402.150	84.879	53.506	N/A	N/A	-31.373	AV

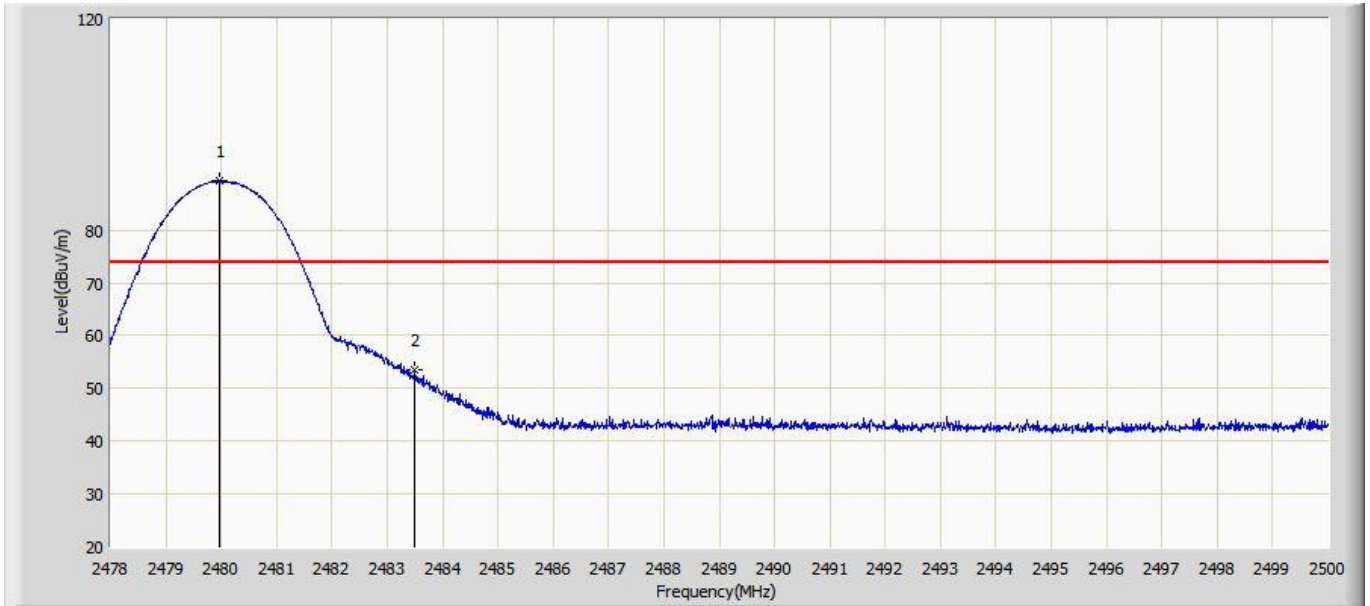
Engineer: Slark	
Site:AC5	Time: 2017/11/02 - 16:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by 3DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.947	93.877	63.361	N/A	N/A	30.516	PK
2		2483.500	56.001	25.517	-17.999	74.000	30.484	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2479.947	93.877	62.504	N/A	N/A	-31.373	AV
2	*	2483.500	56.001	24.628	-29.372	54.000	-31.373	AV

Engineer: Slark	
Site:AC5	Time: 2017/11/02 - 16:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Bluetooth headset	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by 3DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.980	89.356	58.840	N/A	N/A	30.516	PK
2		2483.500	53.546	23.062	-20.454	74.000	30.484	PK

No	Mark	Frequency (MHz)	PK Level (dBuV/m)	AV Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2479.980	89.356	57.983	N/A	N/A	-31.373	AV
2	*	2483.500	53.546	22.173	-31.827	54.000	-31.373	AV

12. Antenna Requirement

12.1. Limit

Antenna Requirement Limit
<p>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.</p>

12.2. Antenna Connector Construction

Antenna Connector Construction	
<input checked="" type="checkbox"/>	The use of a permanently attached antenna
<input type="checkbox"/>	The antenna use of a unique coupling to the intentional radiator
<input type="checkbox"/>	The use of a nonstandard antenna jack or electrical connector
Please refer to the attached document "Internal Photograph" to show the antenna connector.	

_____ The End _____