FCC Test Report

Equipment	:	**Bluetooth Headset**
Brand Name	:	**Bang & Olufsen**
Model No.	:	**Beoplay H9**
FCC ID	:	**TTUBEOPLAYH9**
Standard	:	**47 CFR FCC Part 15.247**
RF Specification	:	**Bluetooth LE**
Frequency	:	**2400 MHz – 2483.5 MHz**
FCC Classification	:	**DTS**
Applicant / Manufacturer	:	**Bang & Olufsen A/S** Peter Bangs Vej 15, DK-7600 Struer, Denmark

The product sample received on Oct. 12, 2016 and completely tested on Oct. 20, 2016. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:

Kevin Liang / Assistant Manager

Testing Laboratory
1190

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Summary of Test Result

Conformance Test Specifications				
Report Clause	**Ref. Std. Clause**	**Description**	**Limit**	**Result**
1.1.3	15.203	Antenna Requirement	FCC 15.203	Complied
3.1	15.207	AC Power-line Conducted Emissions	FCC 15.207	Complied
3.2	15.247(a)	DTS Bandwidth	≥500kHz	Complied
3.3	15.247(b)	Fundamental Emission Output Power	Power [dBm]:30	Complied
3.4	15.247(e)	Power Spectral Density	PSD [dBm/3kHz]:8	Complied
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	Non-Restricted Bands: > 20 dBc	Complied
3.6	15.247(d)	Emissions in Restricted Frequency Bands	Restricted Bands: FCC 15.209	Complied

Revision History

Report No.	Version	Description	Issued Date
FR6O1231AL	Rev. 01	Initial issue of report	Nov. 02, 2016

1 General Description

1.1 Information

1.1.1 Product Details

The difference between the report no. : N/A	
The Difference	N/A

Evaluated Test Items	N/A

1.1.2 RF General Information

Band	Mode	BWch (MHz)	Channel Number	Nss-Min	Nant
2.4G	BT-LE	1	0-39[40]	1	1

Note:
- 2.4G is the 2.4GHz Band (2.4-2.4835GHz).
- Bluetooth LE (Low Energy) using GFSK modulation for DTS digital modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs.

1.1.3 Antenna Information

Antenna Category	
☒	Integral antenna (antenna permanently attached)
	☐ Temporary RF connector provided
	☒ No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.
☐	External antenna (dedicated antennas)
	☐ Single power level with corresponding antenna(s).
	☐ Multiple power level and corresponding antenna(s).

Antenna General Information				
No.	Ant. Cat.	Ant. Type	Model No.	Gain (dBi)
A	Integral	Chip	SDBTPTR3015	1.99

1.1.4 Type of EUT

Identify EUT	
EUT Serial Number	N/A
HW Ver. / FW Ver.	V1.0 / V5.0.0
Mac Address	00-09-A7-0D-F0-39
Presentation of Equipment	☐ Production ; ☒ Pre-Production ; ☐ Prototype

Type of EUT	
☒	Stand-alone
☐	Combined (EUT where the radio part is fully integrated within another device) Combined Equipment - Brand Name / Model No.: …
☐	Plug-in radio (EUT intended for a variety of host systems) Host System - Brand Name / Model No.: …
☐	Other:

1.1.5 Mode Test Duty Cycle

Mode	DC	T(s)
BT-LE	0.64	413.125u

1.1.6 EUT Operational Condition

Supply Voltage	☐ AC mains	☒ DC	
Type of DC Source	☐ Internal DC supply	☒ From System	☒ Battery

1.1.7 EUT Operate Information

Items	Description			
Operate Condition	☒	Point-to-multipoint (P2M)	☐	Point-to-point (P2P)

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- KDB 558074 D01 v03r05

1.3 Testing Location Information

Testing Location						
☒	HWA YA	ADD :	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.			
		TEL :	886-3-327-3456	FAX :	886-3-327-0973	

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Ryan	22°C / 55%	14/10/2016
RF Conducted	TH01-HY	Ryan	24.5°C / 66%	14/10/2016
Radiated	03CH09-HY	Thor	25.1°C / 57.9%	20/10/2016

Test site registered number [553509] with FCC.

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Measurement Uncertainty		
Test Item		Uncertainty
AC power-line conducted emissions		±2.3 dB
Emission bandwidth, 6dB bandwidth		±0.6 %
RF output power, conducted		±0.1 dB
Power density, conducted		±0.6 dB
Unwanted emissions, conducted	9 – 150 kHz	±0.4 dB
	0.15 – 30 MHz	±0.4 dB
	30 – 1000 MHz	±0.6 dB
	1 – 18 GHz	±0.5 dB
	18 – 40 GHz	±0.5 dB
	40 – 200 GHz	N/A
All emissions, radiated	9 – 150 kHz	±2.5 dB
	0.15 – 30 MHz	±2.3 dB
	30 – 1000 MHz	±2.6 dB
	1 – 18 GHz	±3.6 dB
	18 – 40 GHz	±3.8 dB
	40 – 200 GHz	N/A
Temperature		±0.8 °C
Humidity		±5 %
DC and low frequency voltages		±0.9%
Time		±1.4 %
Duty Cycle		±0.6 %

2 Test Configuration of EUT

2.1 Test Condition

RF Conducted	Abbreviation	Remark
TN,VN	TN	20°C
-	VN	3.7V
Radiated RF	**Remark**	-
TX	USB	-

2.2 Test Channel Mode

Test Software Version	InstallBlueSuite_2_6_2_632

Band	Mode	BWch (MHz)	Nss-Min	Nant	Ch. (MHz)	Range	Power Setting
2.4G	BT-LE	1	1	1	2402	L	default
2.4G	BT-LE	1	1	1	2440	M	default
2.4G	BT-LE	1	1	1	2480	H	default

Abbreviation Explanation

Band	Mode	BWch (MHz)	Nss-Min	Nant	Ch. (MHz)	Range	Test Cond.	Abbreviation
2.4G	BT-LE,	1	1	1	2402	L	TN,VN	2.4G;BT-LE;1;1;1;2402;TN,VN

Note:
- Test range channel consist of L (Low Ch.), M (Middle Ch.), H (High Ch.).

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	Operating Mode Description
1	USB Mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth, Fundamental Emission Output Power, Power Spectral Density, Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests			
Tests Item	Emissions in Restricted Frequency Bands		
Test Condition	Radiated measurement		
User Position	☐ EUT will be placed in fixed position.		
	☐ EUT will be placed in mobile position and operating multiple positions.		
	☒ EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions.		
Operating Mode < 1GHz	☒ 1. USB Mode		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
Worst Planes of EUT	V		

2.4 Accessories and Support Equipment

Accessories Information				
Battery	**Brand Name**	Bang & Olufsen	**Model Name**	PLB-103
	Power Rating	3.7 Vdc, 770 mAh	**Type**	Li-ion
USB Cable	**Brand Name**	Bang & Olufsen	**Model Name**	-
	Signal Line	0.25 meter, non-shielded cable, w/o ferrite core		
Audio Cable	**Brand Name**	Bang & Olufsen	**Model Name**	-
	Signal Line	1.25 meter, non-shielded cable, w/o ferrite core		

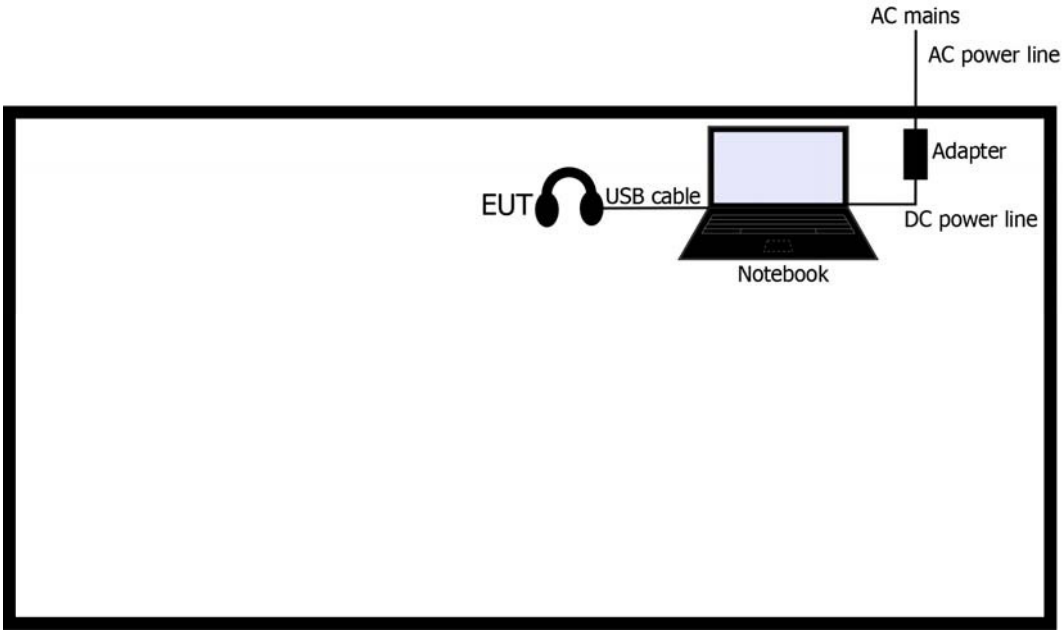
Reminder: Regarding to more detail and other information, please refer to user manual.

Support Equipment - RF Conducted			
No.	**Equipment**	**Brand Name**	**Model Name**
1	Notebook	DELL	E6400
2	AC Adapter for Notebook	DELL	HA65NM130

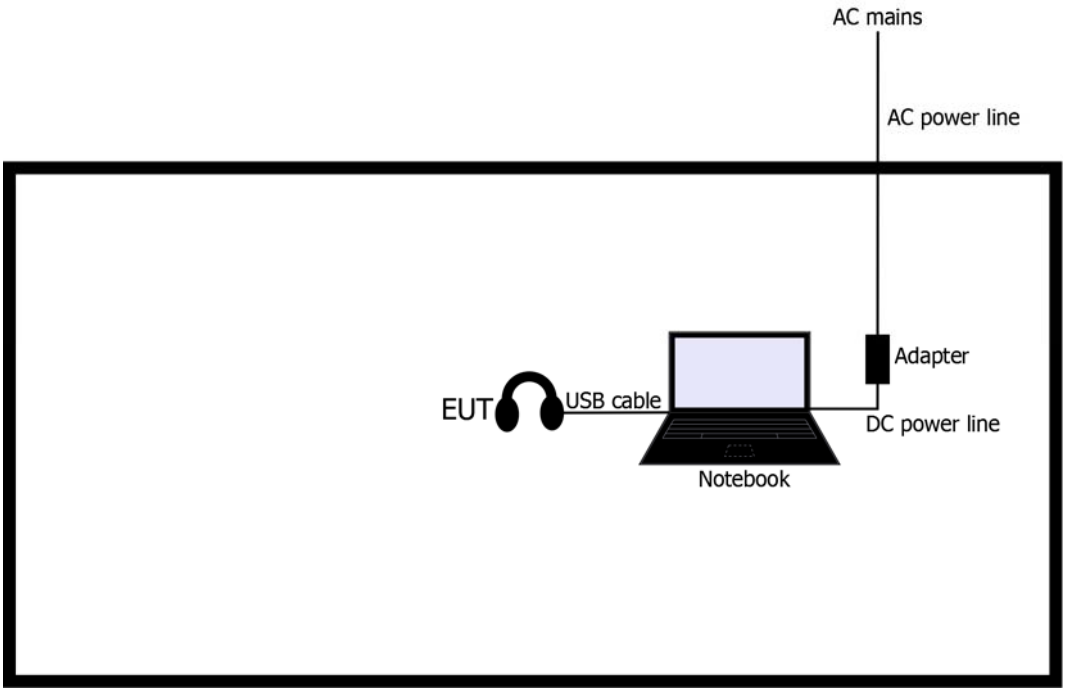
Support Equipment - AC Conduction and Radiated Emission			
No.	**Equipment**	**Brand Name**	**Model Name**
1	Notebook	DELL	E5520
2	AC Adapter for Notebook	DELL	LA65NS2-01

2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Test Setup Diagram - Radiated Test



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

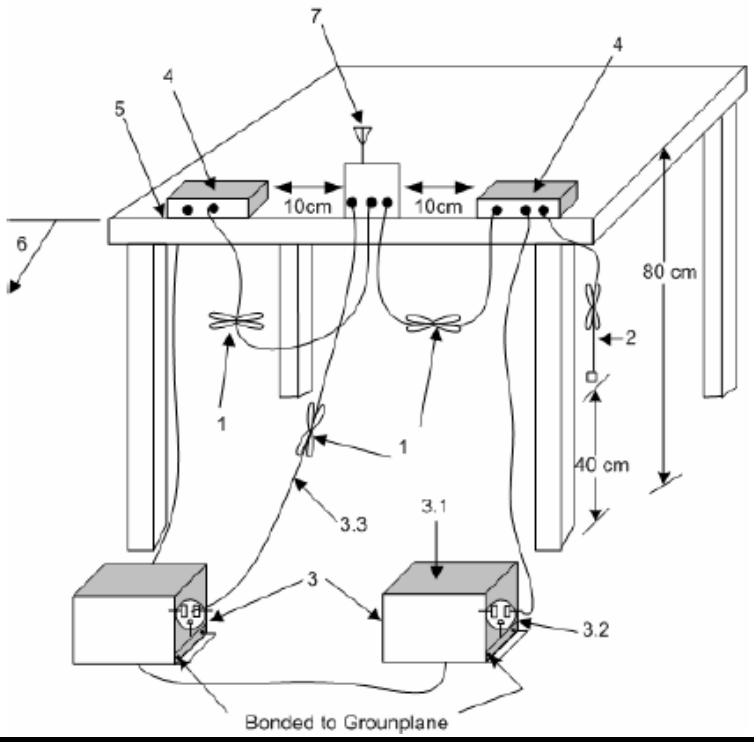
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix I

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
▪ 6 dB bandwidth ≥ 500 kHz.

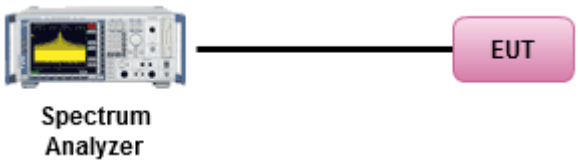
3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
	☒ Refer as KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
	☐ Refer as KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
	☐ Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth


3.2.5 Test Result of Emission Bandwidth

Refer as Appendix A

3.3 Fundamental Emission Output Power

3.3.1 Fundamental Emission Output Power Limit

Maximum Peak Conducted Output Power or Maximum Conducted Output Power Limit			
▪ 2400-2483.5 MHz Band:			
	▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)		
	▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)$ dBm		
	▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm		
	▪ Smart antenna system (SAS):		
		- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm	
		- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm	
		- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3 + 8$dB dBm	
e.i.r.p. Power Limit:			
▪ 2400-2483.5 MHz Band			
	▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)		
	▪ Point-to-point systems (P2P): $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX}])$ dBm		
	▪ Smart antenna system (SAS)		
		- Single beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm	
		- Overlap beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm	
		- Aggregate power on all beams: $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX} + 8])$ dBm	
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi. **P_{eirp}** = e.i.r.p. Power in dBm.			

3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
▪ Maximum Peak Conducted Output Power	
	☐ Refer as KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
	☒ Refer as KDB 558074, clause 9.1.2 Option 2 (peak power meter for VBW ≥ DTS BW)
▪ Maximum Conducted Output Power	
	Duty cycle ≥ 98%
	☐ Refer as KDB 558074, clause 9.2.2.4 Method AVGSA-2. (spectral trace averaging)
	Duty cycle < 98%
	☐ Refer as KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
	RF power meter and average over on/off periods with duty factor or gated trigger
	☒ Refer as KDB 558074, clause 9.2.3 Method AVGPM (using an RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

RF Output Power (Power Meter)

3.3.5 Test Result of Maximum Peak Conducted Output Power

Refer as Appendix B.1

3.3.6 Test Result of Maximum Average Conducted Output Power

Refer as Appendix B.2

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
▪ Power Spectral Density (PSD) ≤ 8 dBm/3kHz

3.4.2 Measuring Instruments

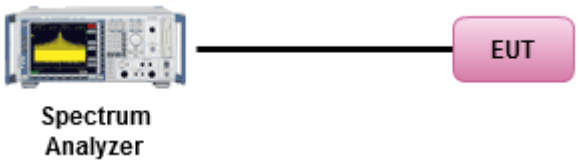
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method			
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).			
	☒ Refer as KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak).		
	Duty cycle ≥ 98%		
	☐ Refer as KDB 558074, clause 10.5 Method AVGPSD-2 (spectral trace averaging).		
	Duty cycle < 98%		
	☐ Refer as KDB 558074, clause 10.6 Method AVGPSD-2 Alt. (slow sweep speed)		
▪ For conducted measurement.			
	▪ If The EUT supports multiple transmit chains using options given below:		
		☐ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the N_{TX} output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.	
		☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,	
		☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.	

3.4.4 Test Setup

Power Spectral Density



3.4.5 Test Result of Power Spectral Density

Refer as Appendix C

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	**Limit (dB)**
Peak output power procedure	20
Average output power procedure	30

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

3.5.2 Measuring Instruments

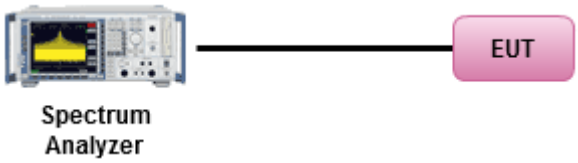
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
▪ Refer as KDB 558074, clause 11 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup

Emissions in Non-restricted Frequency Bands



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix D

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. 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 of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more 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). The test report shall specify the extrapolation method used to determine compliance of the EUT.

3.6.2 Measuring Instruments

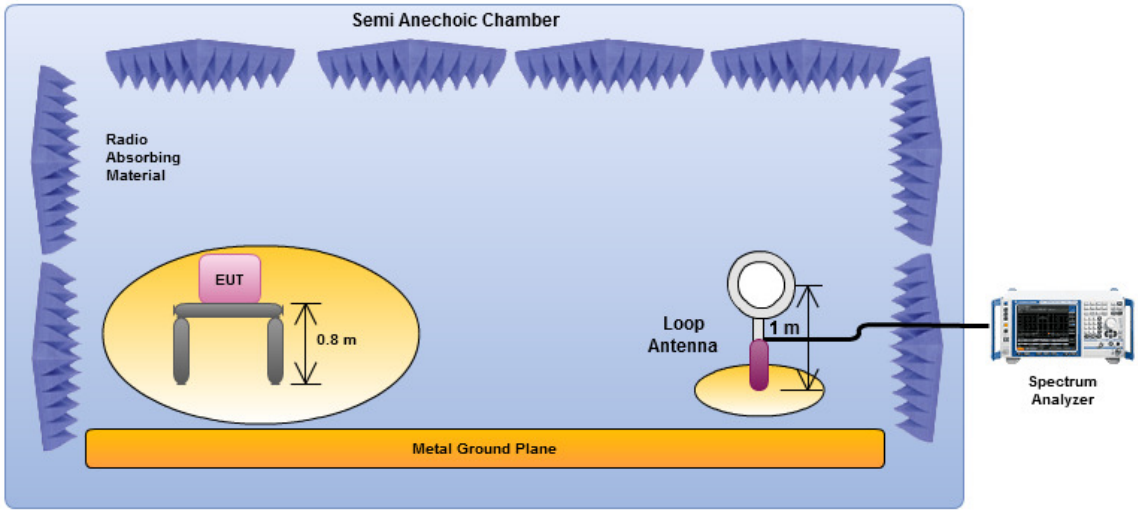
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method			
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].			
▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.			
▪ For the transmitter unwanted emissions shall be measured using following options below:			
	▪ Refer as KDB 558074, clause 12 for unwanted emissions into restricted bands.		
		☐	Refer as KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle ≥98%)
		☐	Refer as KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
		☒	Refer as KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW≥1/T).
		☐	Refer as ANSI C63.10, clause 4.1.4.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐	Refer as ANSI C63.10, clause 4.1.4.2.4 average value of pulsed emissions.
		☒	Refer as KDB 558074, clause 11.3 and 12.2.4 measurement procedure peak limit.
		☒	Refer as KDB 558074, clause 12.2.3 measurement procedure Quasi-Peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:			
	▪ Refer as KDB 558074 clause 13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.		
	▪ Refer as KDB 558074, clause 13.2 (ANSI C63.10, clause 6.9.3) for marker-delta method for band-edge measurements.		
	▪ Refer as KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).		
▪ For conducted and cabinet radiation measurement, refer as KDB 558074, clause 12.2.2.			
	▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB		
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.		

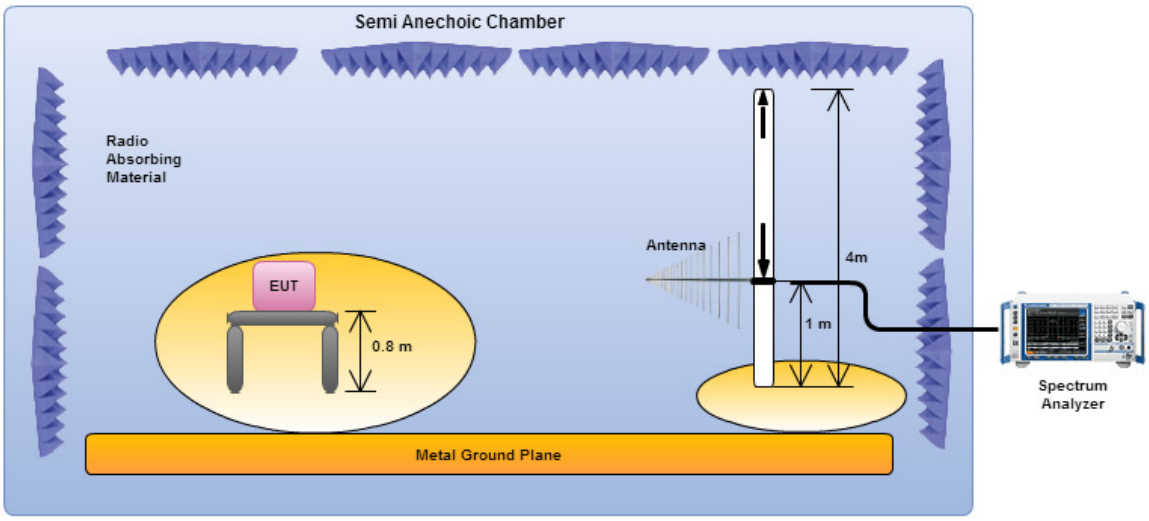
3.6.4 Test Setup

Transmitter Spurious and Out of Band Emissions (9 kHz - 30 MHz)



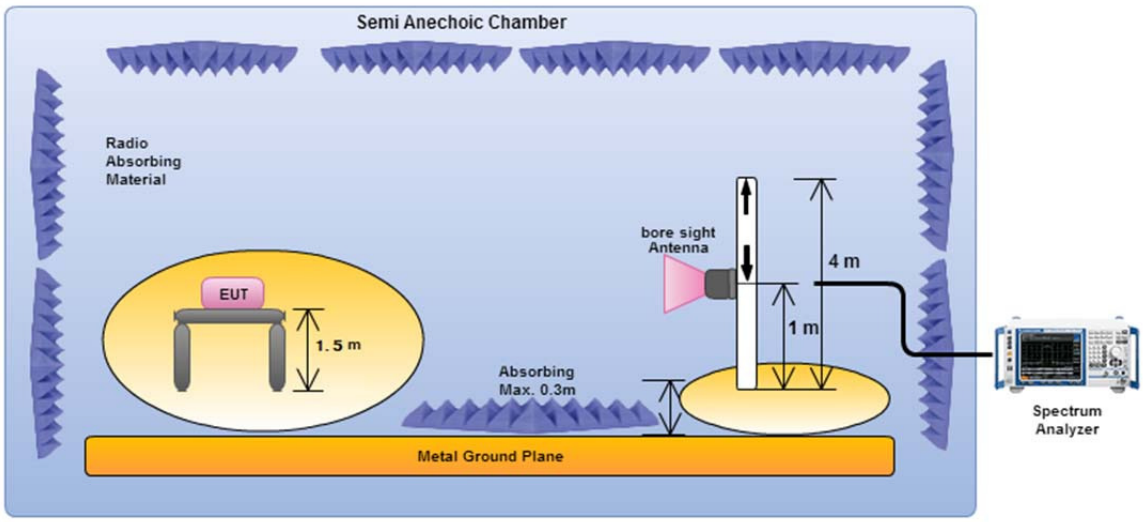
Magnetic field tests shall be performed in the frequency range of 9 kHz to 30 MHz using a calibrated loop antenna.

Transmitter Radiated Unwanted Emissions (below 1GHz)



Electric field tests shall be performed in the frequency range of 30 MHz to 1000 MHz using a calibrated bi-log antenna.

Transmitter Radiated Unwanted Emissions (above 1GHz)



Electric field tests shall be performed in the frequency range of 1 GHz to 10th harmonic of highest fundamental frequency or 40 GHz using a calibrated horn antenna.

3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported. Any spurious which has more than 20 dB of margin compared to the applicable limit is not necessarily reported.

3.6.6 Transmitter Radiated Unwanted Emissions

Refer as Appendix E.1~E.2

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR-3	102051	9 kHz ~ 3.6 GHz	19/04/2016	18/04/2017
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9 kHz ~ 30 MHz	26/01/2016	25/01/2017
LISN (Support Unit)	R&S	ENV216	101295	9 kHz ~ 30 MHz	04/11/2015	03/11/2016
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9 kHz ~ 30 MHz	30/10/2015	29/10/2016
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	NCR	NCR

NCR: Non-Calibration Require

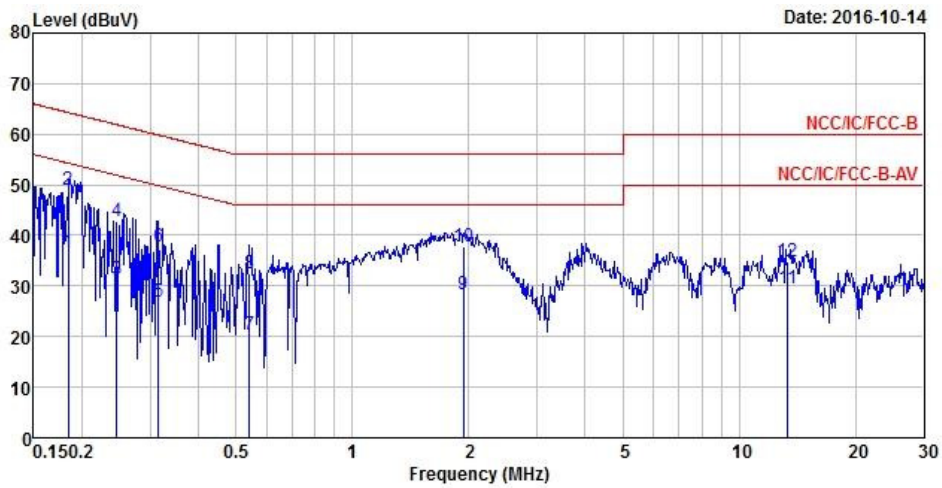
Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30 MHz ~ 1 GHz	25/04/2016	24/04/2017
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1 GHz ~ 18 GHz	21/06/2016	20/06/2017
Amplifier	Agilent	8449B	3008A02096	1 GHz ~ 26.5 GHz	11/04/2016	10/04/2017
Amplifier	EMC	EMC9135	980232	9 kHz ~ 1 GHz	29/01/2016	28/01/2017
Spectrum Analyzer	KEYSIGHT	N9010A	MY54200885	10 Hz ~ 44 GHz	04/07/2016	03/07/2017
Bilog Antenna	TESEQ	CBL 6111D	35418	30 MHz ~ 1 GHz	01/10/2016	30/09/2017
Horn Antenna	SCHWARZBECK	BBHA 9120D	BBHA9120D 1534	1 GHz ~ 18 GHz	22/04/2016	21/04/2017
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18 GHz ~ 40 GHz	04/01/2016	03/01/2017
Loop Antenna	R&S	HFH2-Z2	100330	9 kHz ~ 30 MHz	10/11/2015	09/11/2016

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101500	9 kHz ~ 40 GHz	12/05/2016	11/05/ 2017
Power Sensor	Anritsu	MA2411B	917017	300 MHz ~ 40 GHz	04/02/2016	03/02/2017
Power Meter	Anritsu	ML2495A	949003	300 MHz ~ 40 GHz	04/02/2016	03/02/2017
Signal Generator	R&S	SMR40	100116	10 MHz ~ 40 GHz	21/07/2016	20/07/2017

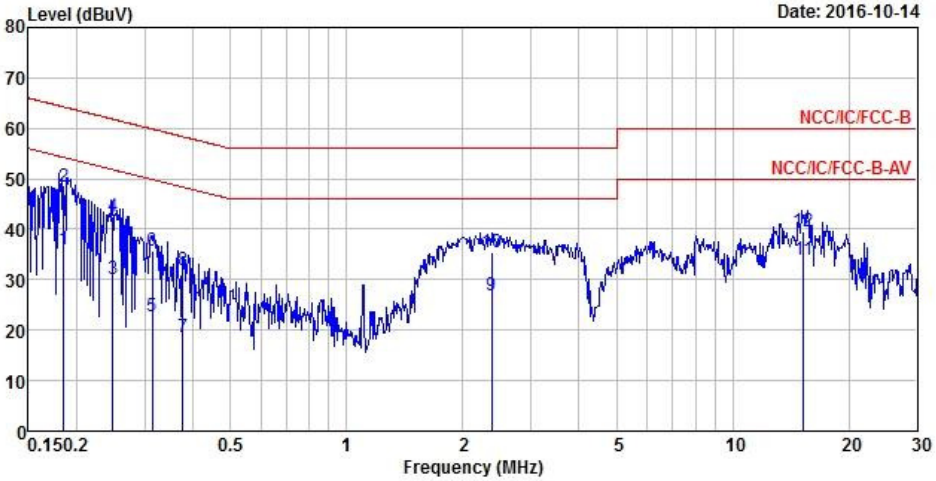
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Adapter Mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Aux Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.18	36.62	-17.67	54.29	26.36	0.11	0.28	9.87	Average
2	0.18	49.00	-15.29	64.29	38.74	0.11	0.28	9.87	QP
3	0.25	31.37	-20.54	51.91	21.15	0.11	0.24	9.87	Average
4	0.25	42.87	-19.04	61.91	32.65	0.11	0.24	9.87	QP
5	0.31	26.78	-23.07	49.85	16.61	0.12	0.17	9.88	Average
6	0.31	37.88	-21.97	59.85	27.71	0.12	0.17	9.88	QP
7	0.54	20.40	-25.60	46.00	10.30	0.12	0.10	9.88	Average
8	0.54	32.54	-23.46	56.00	22.44	0.12	0.10	9.88	QP
9	1.94	28.40	-17.60	46.00	18.07	0.15	0.29	9.89	Average
10	1.94	37.81	-18.19	56.00	27.48	0.15	0.29	9.89	QP
11	13.33	29.52	-20.48	50.00	19.07	0.32	0.20	9.93	Average
12	13.33	34.74	-25.26	60.00	24.29	0.32	0.20	9.93	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	Adapter Mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Aux Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.19	36.00	-18.24	54.24	25.74	0.11	0.28	9.87	Average
2	0.19	48.29	-15.95	64.24	38.03	0.11	0.28	9.87	QP
3	0.25	30.08	-21.74	51.82	19.86	0.11	0.24	9.87	Average
4	0.25	42.43	-19.39	61.82	32.21	0.11	0.24	9.87	QP
5	0.31	22.65	-27.22	49.87	12.48	0.12	0.17	9.88	Average
6	0.31	35.59	-24.28	59.87	25.42	0.12	0.17	9.88	QP
7	0.38	18.47	-29.87	48.34	8.35	0.12	0.12	9.88	Average
8	0.38	31.73	-26.61	58.34	21.61	0.12	0.12	9.88	QP
9	2.37	26.90	-19.10	46.00	16.61	0.15	0.25	9.89	Average
10	2.37	35.56	-20.44	56.00	25.27	0.15	0.25	9.89	QP
11	15.28	34.00	-16.00	50.00	23.54	0.32	0.20	9.94	Average
12	15.28	39.41	-20.59	60.00	28.95	0.32	0.20	9.94	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

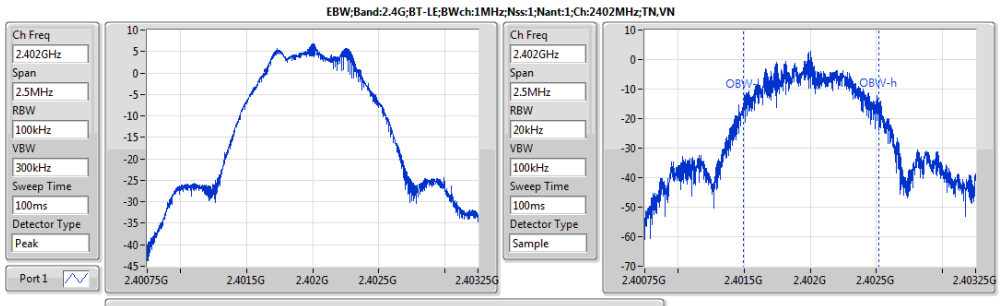
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4G;BT-LE;1;1;1	701.25k	1.026M	1M03F1D	688.75k	1.024M

Result

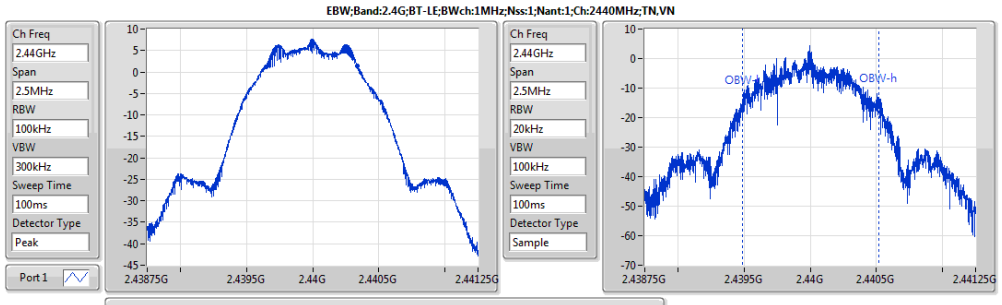
Mode	Result	Limit	P1-N dB (Hz)	P1-OBW (Hz)
2.4G;BT-LE;1;1;1;2402;L;TN,VN	Pass	500k	701.25k	1.026M
2.4G;BT-LE;1;1;1;2440;M;TN,VN	Pass	500k	688.75k	1.026M
2.4G;BT-LE;1;1;1;2480;H;TN,VN	Pass	500k	693.75k	1.024M

EBW;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2402MHz;TN,VN



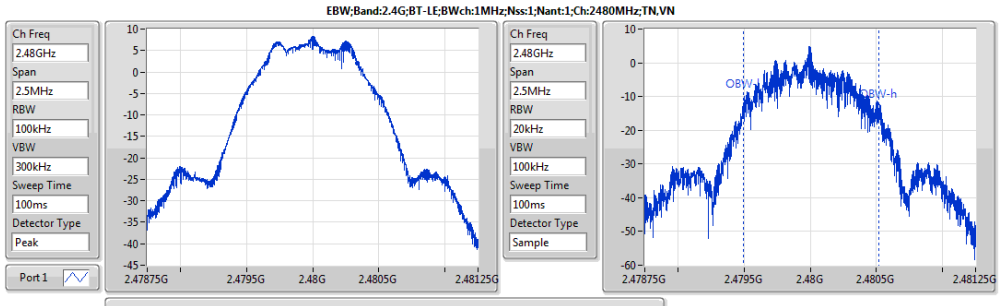
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
701.25k	2.401649G	2.40235G	1.026M	2.401497G	2.402522G	500k	1

EBW;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2440MHz;TN,VN



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
688.75k	2.439646G	2.440335G	1.026M	2.43949G	2.440516G	500k	1

EBW;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2480MHz;TN,VN



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
693.75k	2.479645G	2.480339G	1.024M	2.479495G	2.48052G	500k	1

Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
2.4G;BT-LE;1;1;1	8.08	0.00643	10.07	0.01016

Result

Mode	Result	DG (dBi)	Sum (dBm)	Sum Lim. (dBm)	EIRP (dBm)	EIRP Lim. (dBm)	P1 (dBm)
2.4G;BT-LE;1;1;1;2402;L;TN,VN	Pass	1.99	6.69	30.00	8.68	36.00	6.69
2.4G;BT-LE;1;1;1;2440;M;TN,VN	Pass	1.99	7.64	30.00	9.63	36.00	7.64
2.4G;BT-LE;1;1;1;2480;H;TN,VN	Pass	1.99	8.08	30.00	10.07	36.00	8.08

Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
2.4G;BT-LE;1;1;1	7.40	0.0055	9.39	0.00869

Result

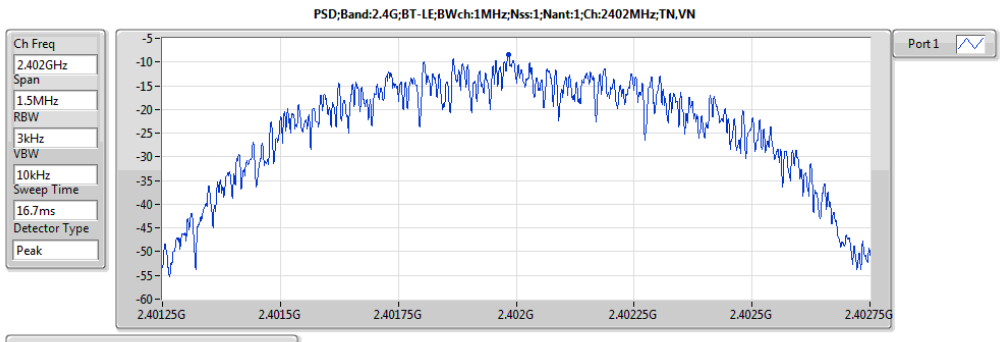
Mode	Result	DG (dBi)	Sum (dBm)	Sum Lim. (dBm)	EIRP (dBm)	EIRP Lim. (dBm)	P1 (dBm)
2.4G;BT-LE;1;1;1;2402;L;TN,VN	Pass	1.99	6.01	30.00	8.00	36.00	6.01
2.4G;BT-LE;1;1;1;2440;M;TN,VN	Pass	1.99	6.68	30.00	8.67	36.00	6.68
2.4G;BT-LE;1;1;1;2480;H;TN,VN	Pass	1.99	7.40	30.00	9.39	36.00	7.40

Summary

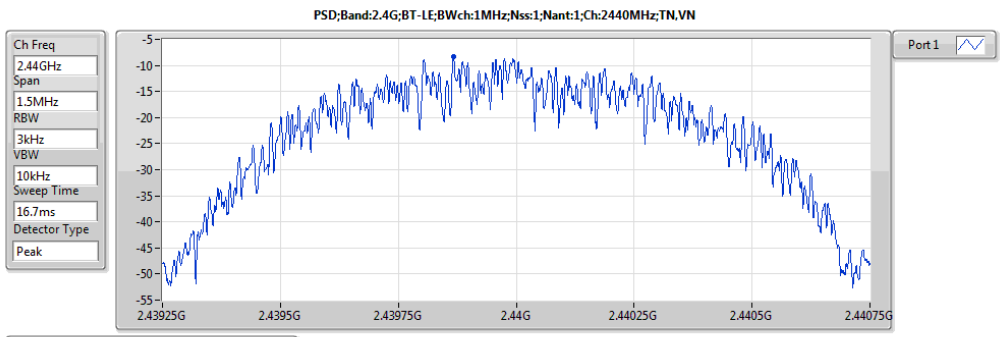
Mode	PD (dBm/RBW)	EIRP.PD (dBm/RBW)
2.4G;BT-LE;1;1;1	-7.61	-5.62

Result

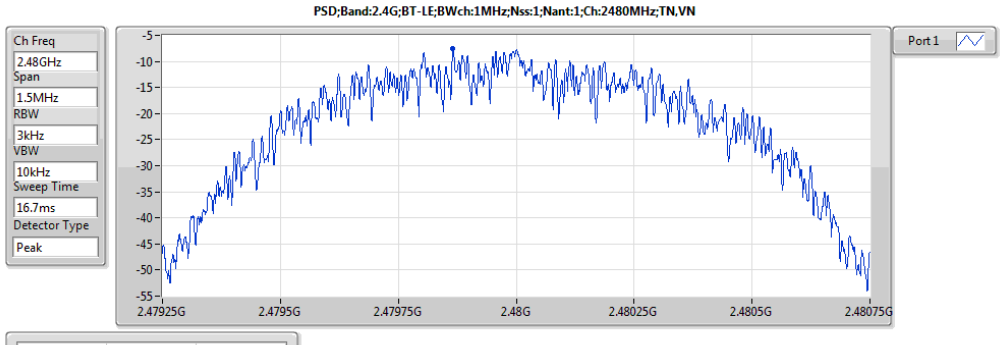
Mode	Result	Meas.RBW (Hz)	Lim.RBW (Hz)	BWCF (dB)	DG (dBi)	PD (dBm/RBW)	PD.Limit (dBm/RBW)	EIRP.PD (dBm/RBW)	EIRP.PD.Lim (dBm/RBW)	P1 (dBm/RBW)
2.4G;BT-LE;1;1;1;2402;L;TN,VN	Pass	3k	3k	0.00	1.99	-8.40	8.00	-6.41	Inf	-8.40
2.4G;BT-LE;1;1;1;2440;M;TN,VN	Pass	3k	3k	0.00	1.99	-8.33	8.00	-6.34	Inf	-8.33
2.4G;BT-LE;1;1;1;2480;H;TN,VN	Pass	3k	3k	0.00	1.99	-7.61	8.00	-5.62	Inf	-7.61



Sum.Max	PD	P1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.40	-8.40	-8.40



Sum.Max	PD	P1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.33	-8.33	-8.33



Sum.Max	PD	P1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.61	-7.61	-7.61

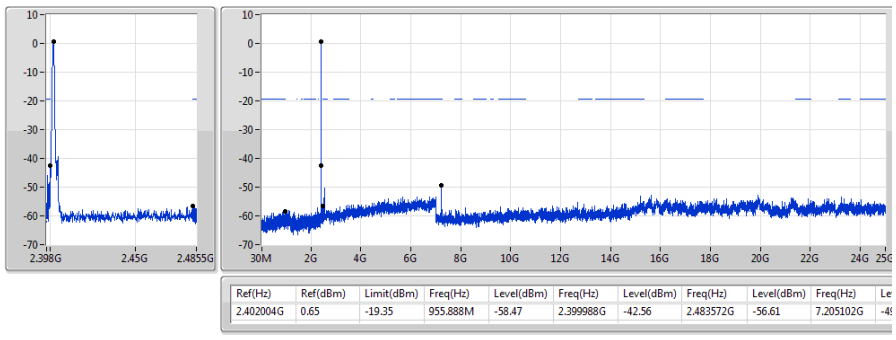
Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4G;BT-LE;1;1;1;2402;L;TN,VN	Pass	2.402004G	0.65	-19.35	955.888M	-58.47	2.399988G	-42.56	2.483572G	-56.61	7.205102G	-49.39	1

Result

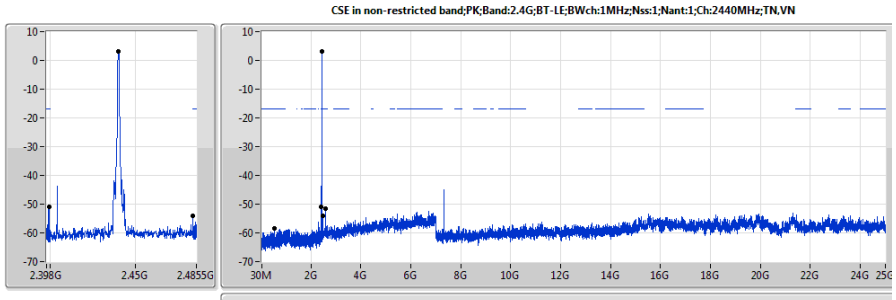
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4G;BT-LE;1;1;1;2402;L;TN,VN	Pass	2.402004G	0.65	-19.35	955.888M	-58.47	2.399988G	-42.56	2.483572G	-56.61	7.205102G	-49.39	1
2.4G;BT-LE;1;1;1;2440;M;TN,VN	Pass	2.439746G	3.25	-16.75	540.304M	-58.52	2.399512G	-50.83	2.483524G	-54.09	2.569929G	-51.64	1
2.4G;BT-LE;1;1;1;2480;H;TN,VN	Pass	2.479826G	3.25	-16.75	942.864M	-58.13	2.399988G	-43.32	2.483504G	-52.06	2.634659G	-49.67	1

CSE in non-restricted band;PK;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2402MHz;TN,VN



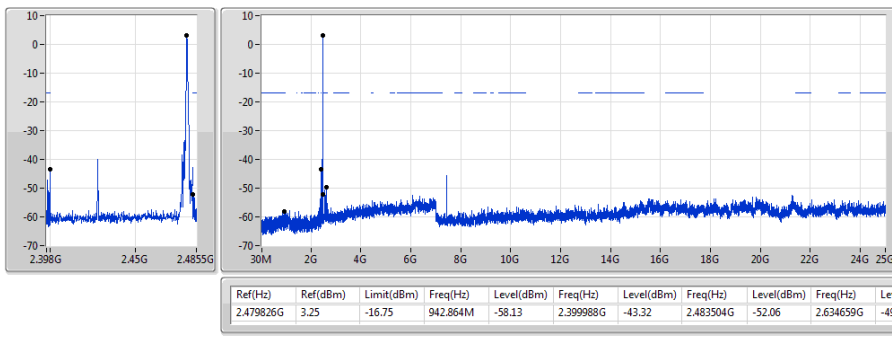
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Le
2.402004G	0.65	-19.35	955.888M	-58.47	2.399988G	-42.56	2.483572G	-56.61	7.205102G	-4

CSE in non-restricted band;PK;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2440MHz;TN,VN



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Le
2.439746G	3.25	-16.75	540.304M	-58.52	2.399512G	-50.83	2.483524G	-54.09	2.569929G	-5

CSE in non-restricted band;PK;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2480MHz;TN,VN



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Le
2.479826G	3.25	-16.75	942.864M	-58.13	2.399988G	-43.32	2.483504G	-52.06	2.634659G	-4

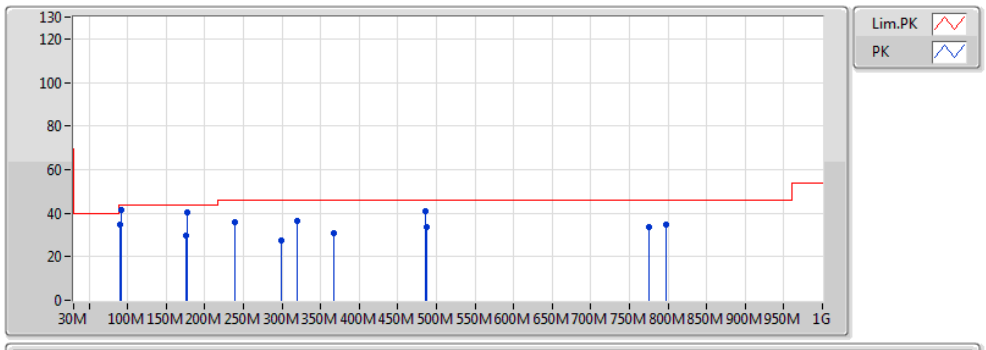
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2.4G;BT-LE;1;1;1;2440;M;USB Mode	Pass	QP	92.08M	41.42	43.50	-2.08	-21.98	3	H	NaN	NaN	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2.4G;BT-LE;1;1;1;2440;M;USB Mode	Pass	QP	92.08M	41.42	43.50	-2.08	-21.98	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;USB Mode	Pass	PK	177.44M	40.21	43.50	-3.29	-21.08	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;USB Mode	Pass	PK	239.52M	35.88	46.00	-10.12	-18.57	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;USB Mode	Pass	PK	319.06M	36.22	46.00	-9.78	-16.08	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;USB Mode	Pass	PK	485.9M	41.08	46.00	-4.92	-12.63	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;USB Mode	Pass	PK	774.96M	33.90	46.00	-12.10	-8.75	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;USB Mode	Pass	QP	90.8287M	34.96	43.50	-8.54	-22.14	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;USB Mode	Pass	PK	175.7619M	29.90	43.50	-13.60	-21.00	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;USB Mode	Pass	PK	299.3011M	27.35	46.00	-18.65	-16.65	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;USB Mode	Pass	PK	366.8616M	30.63	46.00	-15.37	-14.80	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;USB Mode	Pass	PK	486.5402M	33.37	46.00	-12.63	-12.62	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;USB Mode	Pass	PK	797.3185M	34.85	46.00	-11.15	-8.50	3	V	NaN	NaN	-

RE TX below 1GHz;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2440MHz;USB Mode



EUT: 藍芽耳機
Mode: Beoplay H9
Form NB
Power Set: 37
EUT=X

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
QP	92.08M	41.42	43.50	-2.08	-21.98	3	H	NaN	NaN	-
PK	177.44M	40.21	43.50	-3.29	-21.08	3	H	NaN	NaN	-
PK	239.52M	35.88	46.00	-10.12	-18.57	3	H	NaN	NaN	-
PK	319.06M	36.22	46.00	-9.78	-16.08	3	H	NaN	NaN	-
PK	485.9M	41.08	46.00	-4.92	-12.63	3	H	NaN	NaN	-
PK	774.96M	33.90	46.00	-12.10	-8.75	3	H	NaN	NaN	-
QP	90.8287M	34.96	43.50	-8.54	-22.14	3	V	NaN	NaN	-
PK	175.7619M	29.90	43.50	-13.60	-21.00	3	V	NaN	NaN	-
PK	299.3011M	27.35	46.00	-18.65	-16.65	3	V	NaN	NaN	-
PK	366.8616M	30.63	46.00	-15.37	-14.80	3	V	NaN	NaN	-
PK	486.5402M	33.37	46.00	-12.63	-12.62	3	V	NaN	NaN	-
PK	797.3185M	34.85	46.00	-11.15	-8.50	3	V	NaN	NaN	-

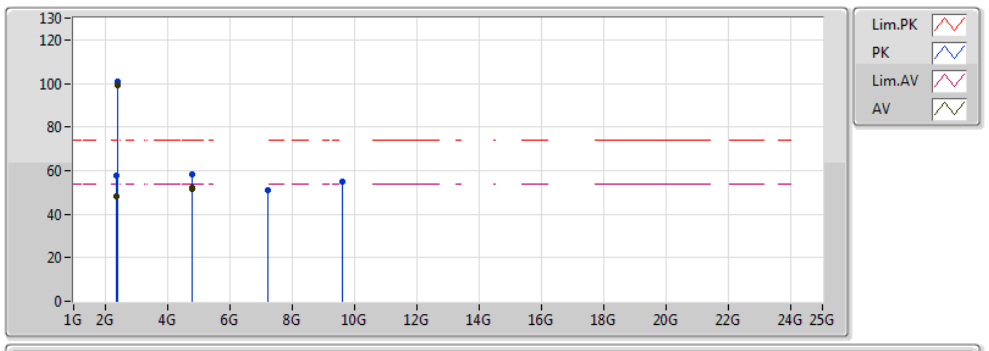
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2.4G;BT-LE;1;1;1;2402;L;TX	Pass	AV	4.804G	52.11	54.00	-1.89	2.06	3	V	NaN	NaN	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2.4G;BT-LE;1;1;1;2402;L;TX	Pass	AV	2.389764G	47.93	54.00	-6.07	31.28	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2402;L;TX	Pass	AV	2.402004G	99.14	Inf	-Inf	31.33	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2402;L;TX	Pass	PK	2.36916G	57.76	74.00	-16.24	31.21	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2402;L;TX	Pass	PK	2.402208G	100.83	Inf	-Inf	31.33	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2402;L;TX	Pass	AV	4.804G	51.43	54.00	-2.57	2.06	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2402;L;TX	Pass	PK	4.804G	58.34	74.00	-15.66	2.06	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2402;L;TX	Pass	PK	7.206G	50.76	Inf	-Inf	7.99	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2402;L;TX	Pass	PK	9.608G	54.65	Inf	-Inf	11.47	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2402;L;TX	Pass	AV	4.804G	52.11	54.00	-1.89	2.06	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2402;L;TX	Pass	PK	4.804G	58.06	74.00	-15.94	2.06	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2402;L;TX	Pass	PK	7.206G	51.18	Inf	-Inf	7.99	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2402;L;TX	Pass	PK	9.608G	55.02	Inf	-Inf	11.47	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	AV	2.38638G	47.65	54.00	-6.35	31.27	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	AV	2.43996G	101.41	Inf	-Inf	31.45	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	AV	2.4886G	48.42	54.00	-5.58	31.61	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	PK	2.35522G	57.77	74.00	-16.23	31.16	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	PK	2.43958G	103.12	Inf	-Inf	31.45	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	PK	2.4905G	58.40	74.00	-15.60	31.62	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	AV	4.88G	50.17	54.00	-3.83	2.22	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	PK	4.88G	56.33	74.00	-17.67	2.22	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	AV	7.32G	39.07	54.00	-14.93	8.32	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	PK	7.32G	51.92	54.00	-2.08	8.32	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	PK	9.76G	55.21	Inf	-Inf	11.73	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	AV	4.88G	50.73	54.00	-3.27	2.22	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	PK	4.88G	56.45	74.00	-17.55	2.22	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	AV	7.32G	39.53	54.00	-14.47	8.32	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	PK	7.32G	51.44	54.00	-2.56	8.32	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2440;M;TX	Pass	PK	9.76G	55.14	Inf	-Inf	11.73	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	AV	2.48G	96.30	Inf	-Inf	31.58	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	AV	2.48352G	48.89	54.00	-5.11	31.60	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	PK	2.47968G	98.01	Inf	-Inf	31.58	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	PK	2.48752G	58.47	74.00	-15.53	31.61	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	AV	4.96G	51.48	54.00	-2.52	2.38	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	PK	4.96G	57.23	74.00	-16.77	2.38	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	AV	7.44G	39.19	54.00	-14.81	8.66	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	PK	7.44G	51.59	74.00	-22.41	8.66	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	PK	9.92G	55.30	Inf	-Inf	12.00	3	H	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	AV	4.96G	52.05	54.00	-1.95	2.38	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	PK	4.96G	57.73	74.00	-16.27	2.38	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	AV	7.44G	39.55	54.00	-14.45	8.66	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	PK	7.44G	51.07	74.00	-22.93	8.66	3	V	NaN	NaN	-
2.4G;BT-LE;1;1;1;2480;H;TX	Pass	PK	9.92G	55.30	Inf	-Inf	12.00	3	V	NaN	NaN	-

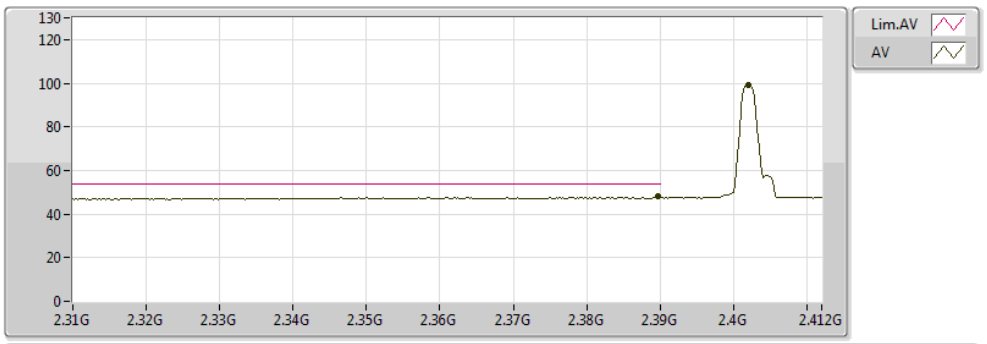
RE TX above 1GHz;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2402MHz;TX



EUT: 藍芽耳機
Mode: Beoplay H9
Form NB
Power Set: 37
EUT=X

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389764G	47.93	54.00	-6.07	31.28	3	V	NaN	NaN	-
AV	2.402004G	99.14	Inf	-Inf	31.33	3	V	NaN	NaN	-
PK	2.36916G	57.76	74.00	-16.24	31.21	3	V	NaN	NaN	-
PK	2.402208G	100.83	Inf	-Inf	31.33	3	V	NaN	NaN	-
AV	4.804G	51.43	54.00	-2.57	2.06	3	H	NaN	NaN	-
PK	4.804G	58.34	74.00	-15.66	2.06	3	H	NaN	NaN	-
PK	7.206G	50.76	Inf	-Inf	7.99	3	H	NaN	NaN	-
PK	9.608G	54.65	Inf	-Inf	11.47	3	H	NaN	NaN	-
AV	4.804G	52.11	54.00	-1.89	2.06	3	V	NaN	NaN	-
PK	4.804G	58.06	74.00	-15.94	2.06	3	V	NaN	NaN	-
PK	7.206G	51.18	Inf	-Inf	7.99	3	V	NaN	NaN	-
PK	9.608G	55.02	Inf	-Inf	11.47	3	V	NaN	NaN	-

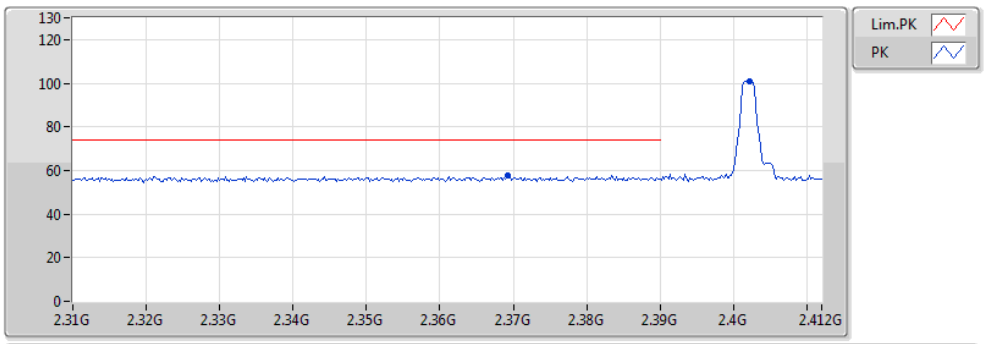
RE TX above 1GHz;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2402MHz;TX



EUT: 藍芽耳機
Mode: Beoplay H9
Form NB
Power Set: 37
EUT=X

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.402004G	99.14	Inf	-Inf	31.33	3	V	NaN	NaN	-
AV	2.389764G	47.93	54.00	-6.07	31.28	3	V	NaN	NaN	-

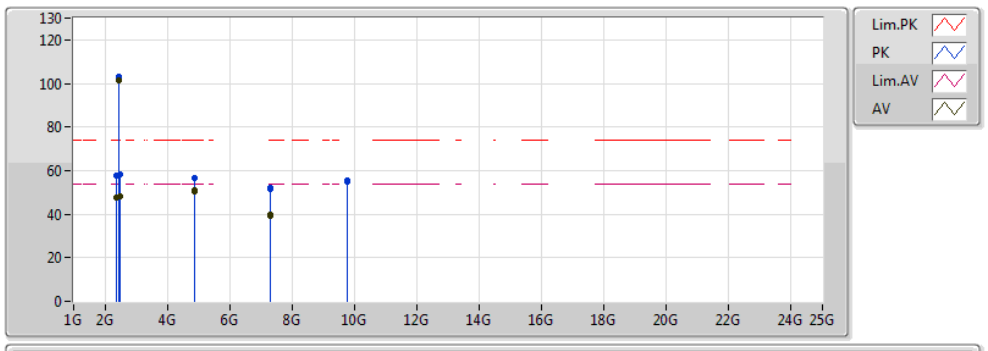
RE TX above 1GHz;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2402MHz;TX



EUT: 藍芽耳機
Mode: Beoplay H9
Form NB
Power Set: 37
EUT=X

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	2.402208G	100.83	Inf	-Inf	31.33	3	V	NaN	NaN	-
PK	2.36916G	57.76	74.00	-16.24	31.21	3	V	NaN	NaN	-

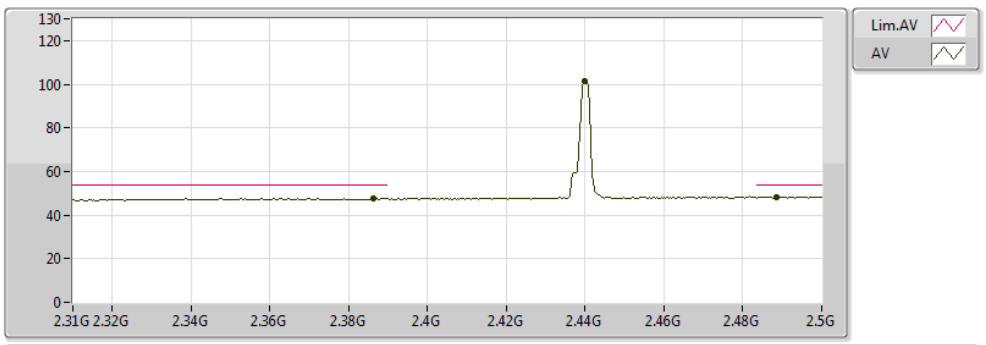
RE TX above 1GHz;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2440MHz;TX



EUT: 藍芽耳機
Mode: Beoplay H9
Form NB
Power Set: 37
EUT=X

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.38638G	47.65	54.00	-6.35	31.27	3	V	NaN	NaN	-
AV	2.43996G	101.41	Inf	-Inf	31.45	3	V	NaN	NaN	-
AV	2.4886G	48.42	54.00	-5.58	31.61	3	V	NaN	NaN	-
PK	2.35522G	57.77	74.00	-16.23	31.16	3	V	NaN	NaN	-
PK	2.43958G	103.12	Inf	-Inf	31.45	3	V	NaN	NaN	-
PK	2.4905G	58.40	74.00	-15.60	31.62	3	V	NaN	NaN	-
AV	4.88G	50.17	54.00	-3.83	2.22	3	H	NaN	NaN	-
PK	4.88G	56.33	74.00	-17.67	2.22	3	H	NaN	NaN	-
AV	7.32G	39.07	54.00	-14.93	8.32	3	H	NaN	NaN	-
PK	7.32G	51.92	54.00	-2.08	8.32	3	H	NaN	NaN	-
PK	9.76G	55.21	Inf	-Inf	11.73	3	H	NaN	NaN	-
AV	4.88G	50.73	54.00	-3.27	2.22	3	V	NaN	NaN	-
PK	4.88G	56.45	74.00	-17.55	2.22	3	V	NaN	NaN	-
AV	7.32G	39.53	54.00	-14.47	8.32	3	V	NaN	NaN	-
PK	7.32G	51.44	54.00	-2.56	8.32	3	V	NaN	NaN	-
PK	9.76G	55.14	Inf	-Inf	11.73	3	V	NaN	NaN	-

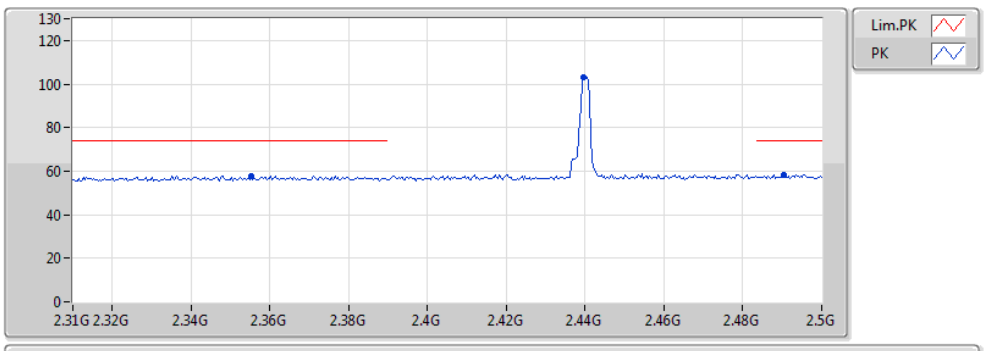
RE TX above 1GHz;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2440MHz;TX



EUT: 藍芽耳機
Mode: Beoplay H9
Form NB
Power Set: 37
EUT=X

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.43996G	101.41	Inf	-Inf	31.45	3	V	NaN	NaN	-
AV	2.38638G	47.65	54.00	-6.35	31.27	3	V	NaN	NaN	-
AV	2.4886G	48.42	54.00	-5.58	31.61	3	V	NaN	NaN	-

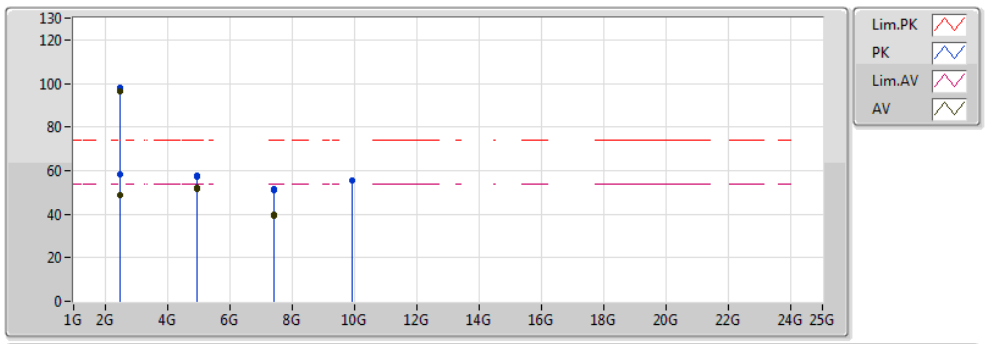
RE TX above 1GHz;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2440MHz;TX



EUT: 藍芽耳機
Mode: Beoplay H9
Form NB
Power Set: 37
EUT=X

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	2.43958G	103.12	Inf	-Inf	31.45	3	V	NaN	NaN	-
PK	2.35522G	57.77	74.00	-16.23	31.16	3	V	NaN	NaN	-
PK	2.4905G	58.40	74.00	-15.60	31.62	3	V	NaN	NaN	-

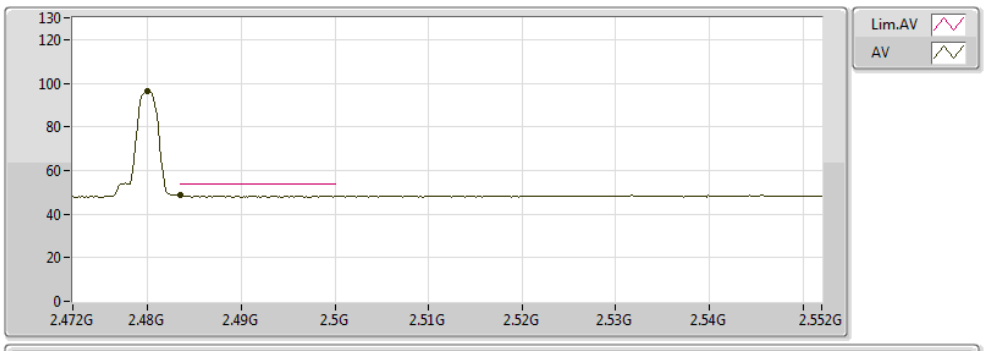
RE TX above 1GHz;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2480MHz;TX



EUT: 藍芽耳機
Mode: Beoplay H9
Form NB
Power Set: 37
EUT=X

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.48G	96.30	Inf	-Inf	31.58	3	V	NaN	NaN	-
AV	2.48352G	48.89	54.00	-5.11	31.60	3	V	NaN	NaN	-
PK	2.47968G	98.01	Inf	-Inf	31.58	3	V	NaN	NaN	-
PK	2.48752G	58.47	74.00	-15.53	31.61	3	V	NaN	NaN	-
AV	4.96G	51.48	54.00	-2.52	2.38	3	H	NaN	NaN	-
PK	4.96G	57.23	74.00	-16.77	2.38	3	H	NaN	NaN	-
AV	7.44G	39.19	54.00	-14.81	8.66	3	H	NaN	NaN	-
PK	7.44G	51.59	74.00	-22.41	8.66	3	H	NaN	NaN	-
PK	9.92G	55.30	Inf	-Inf	12.00	3	H	NaN	NaN	-
AV	4.96G	52.05	54.00	-1.95	2.38	3	V	NaN	NaN	-
PK	4.96G	57.73	74.00	-16.27	2.38	3	V	NaN	NaN	-
AV	7.44G	39.55	54.00	-14.45	8.66	3	V	NaN	NaN	-
PK	7.44G	51.07	74.00	-22.93	8.66	3	V	NaN	NaN	-
PK	9.92G	55.30	Inf	-Inf	12.00	3	V	NaN	NaN	-

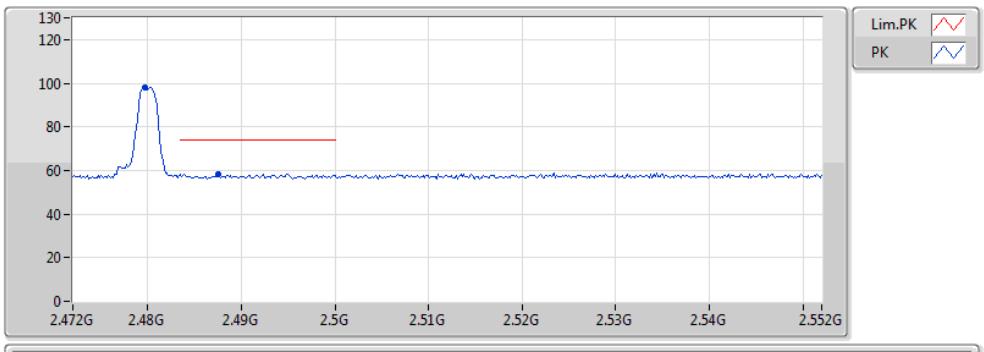
RE TX above 1GHz;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2480MHz;TX



EUT: 藍芽耳機
Mode: Beoplay H9
Form NB
Power Set: 37
EUT=X

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.48G	96.30	Inf	-Inf	31.58	3	V	NaN	NaN	-
AV	2.48352G	48.89	54.00	-5.11	31.60	3	V	NaN	NaN	-

RE TX above 1GHz;Band:2.4G;BT-LE;BWch:1MHz;Nss:1;Nant:1;Ch:2480MHz;TX



EUT: 藍芽耳機
Mode: Beoplay H9
Form NB
Power Set: 37
EUT=X

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	2.47968G	98.01	Inf	-Inf	31.58	3	V	NaN	NaN	-
PK	2.48752G	58.47	74.00	-15.53	31.61	3	V	NaN	NaN	-