

FCC Test Report

Report No.: AGC00427190402FE03

FCC ID : 2ADDH-MP38542
APPLICATION PURPOSE : Original Equipment
PRODUCT DESIGNATION : Bluetooth earphones
BRAND NAME : IIIP
MODEL NAME : MP38542
CLIENT : Monoprice, Inc.
DATE OF ISSUE : May 09, 2019
STANDARD(S) : FCC Part 15 Subpart C Section 15.249
TEST PROCEDURE(S)
REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	May 09, 2019	Valid	Initial release

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1. VERIFICATION OF CONFORMITY

Applicant	Monoprice, Inc.
Address	1 Pointe Drive Suite #400, Brea, CA 92821.
Manufacturer	SHENZHEN TRENDWOO TECH CO., LTD
Address	the 12th Floor, Block B, Building 6, Baoneng Tech Park, No.1 Qingxiang Road, Longhua, Shenzhen, China
Factory	SHENZHEN TRENDWOO TECH CO., LTD
Address	the 12th Floor, Block B, Building 6, Baoneng Tech Park, No.1 Qingxiang Road, Longhua, Shenzhen, China
Product Designation	IIIP braided headphones
Brand Name	IIIP
Test Model	MP38542
Date of test	Apr. 30, 2019 to May 09, 2019
Deviation	None
Condition of Test Sample	Normal
Test Result	Pass
Report Template	AGCRT-US-BR/RF

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, the energy emitted by the sample tested as described in this report is in compliance with the requirements of FCC Rules Part 15.249. The test results of this report relate only to the tested sample identified in this report.

Tested By

Draven Li

Draven Li(Li Ming Liang)

May 08, 2019

Reviewed By

Max Zhang

Max Zhang(Zhang Yi)

May 08, 2019

Approved By

Forrest Lei

Forrest Lei(Lei Yonggang)
Authorized Officer

May 08, 2019

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2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

A major technical description of EUT is described as following

Operation Frequency	2.402 GHz to 2.480GHz
Bluetooth Version	V5.0
Maximum field strength	77.78dBuV/m(average)@3m
Modulation	BR ☒ GFSK, EDR ☒ $\pi/4$ -DQPSK, ☒ 8DPSK BLE ☐ GFSK 1Mbps ☐ GFSK 2Mbps
Number of channels	79 for BR/EDR
Hardware Version	V1.0
Software Version	6.31
Antenna Designation	Chip Antenna
Antenna Gain	1.9dBi
Power Supply	DC 3.7V by battery

Note: The left and right channel headsets are the same. Only the test data of right headset recorded in this report.

2.2. TABLE OF CARRIER FREQUENCIES

BR/EDR channel List

Frequency Band	Channel Number	Frequency
2400~2483.5MHz	00	2402MHz
	01	2403MHz
	:	:
	38	2440 MHz
	39	2441 MHz
	40	2442 MHz
	:	:
	77	2479 MHz
	78	2480 MHz

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3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%.

- Uncertainty of Conducted Emission, $U_c = \pm 3.2$ dB
- Uncertainty of Radiated Emission below 1GHz, $U_c = \pm 3.9$ dB
- Uncertainty of Radiated Emission above 1GHz, $U_c = \pm 4.8$ dB
- Uncertainty of Occupied Channel Bandwidth: $U_c = \pm 2$ %

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4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel GFSK
2	Middle channel GFSK
3	High channel GFSK
4	Low channel $\pi/4$ -DQPSK
5	Middle channel $\pi/4$ -DQPSK
6	High channel $\pi/4$ -DQPSK
7	Low channel 8DPSK
8	Middle channel 8DPSK
9	High channel 8DPSK

- Note: 1. All the test modes can be supply by battery, only the result of the worst case was recorded in the report, if no other cases.
2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
3. The EUT used fully-charged battery when tested.
4. The test software is the Bluetest_V2.5.8.667 which can set the EUT into the individual test modes.

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5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Configure :



5.2. EQUIPMENT USED IN EUT SYSTEM

Item	Equipment	Mfr/Brand	Model/Type No.	Remark
1	IIIP braided	IIIP	MP38542	EUT

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
\$15.249(a) \$15.209	Radiated Emission	Compliant
\$15.249(d)	Band Edges	Compliant
\$15.207	Conduction Emission	N/A
\$15.215	Band Width	Compliant

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6. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Designation Number	CN1259
FCC Test Firm Registration Number	975832
A2LA Cert. No.	5054.02
Description	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by A2LA

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7. TEST EQUIPMENT LIST

TEST EQUIPMENT OF RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	Jun. 12, 2018	Jun. 11, 2019
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 20, 2018	Dec. 19, 2019
2.4GHz Fliter	Micro-tronics	087	N/A	Jun. 12, 2018	Jun. 11, 2019
Attenuator	Weinachel Corp	58-30-33	N/A	Jun. 12, 2018	Jun. 11, 2019
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Sep. 21, 2017	Sep. 20, 2020
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	Jun. 14, 2018	Jun. 13, 2020
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	May. 26, 2018	May. 25, 2020
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Oct. 25, 2018	Oct. 24, 2019
ANTENNA	SCHWARZBECK	VULB9168	D69250	Sep. 28, 2017	Sep. 27, 2019

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8. RADIATED EMISSION

8.1 TEST LIMIT

Standard FCC15.249

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of Harmonics (microvolts/meter)
900-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

Standard FCC 15.209

Frequency (MHz)	Distance Meters	Field Strengths Limit	
		$\mu V/m$	$dB(\mu V)/m$
0.009 ~ 0.490	300	$2400/F(kHz)$	---
0.490 ~ 1.705	30	$24000/F(kHz)$	---
1.705 ~ 30	30	30	---
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	Other: 74.0 $dB(\mu V)/m$ (Peak) 54.0 $dB(\mu V)/m$ (Average)	

Remark: (1) Emission level $dB \mu V = 20 \log$ Emission level $\mu V/m$
 (2) The smaller limit shall apply at the cross point between two frequency bands.
 (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

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8.2. MEASUREMENT PROCEDURE

1. The measuring distance of 3m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation(Below 1GHz)
2. The measuring distance of 3m shall used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation(Above 1GHz)
3. The height of the test antenna shall vary between 1m to 4m.Both horizontal and vertical polarization Of the antenna are set to make the measurement.
4. The initial step in collecting radiated emission data is a receive peak detector mode. Pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
5. All readings are peak unless otherwise stated QP in column of Note. Peak denoted that the Peak reading compliance with the QP limits and then QP Mode measurement didn't perform(Below 1GHz)
6. All readings are Peak mode value unless otherwise stated AVG in column of Note. If the Peak mode measured value compliance with the Peak limits and lower than AVG Limits, the EUT shall be deemed to meet Peak & AVG limits and then only Peak mode was measured, but AVG mode didn't perform.(Above 1GHz)

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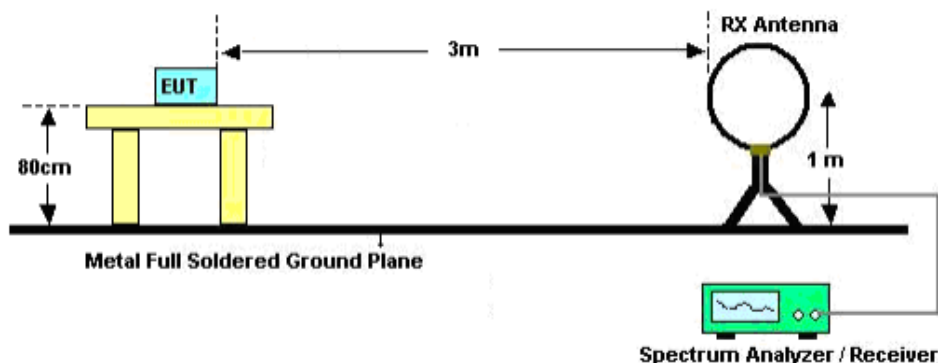
The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP
Start ~Stop Frequency	Fundamental: 2.4~2.483GHz RBW 2MHz/ VBW 6MHz for Peak, RBW 2MHz/ VBW 10Hz for Average Harmonics: 1GHz~25GHz RBW 1MHz/ VBW 3MHz for Peak, RBW 1MHz/ VBW 10Hz for Average
Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

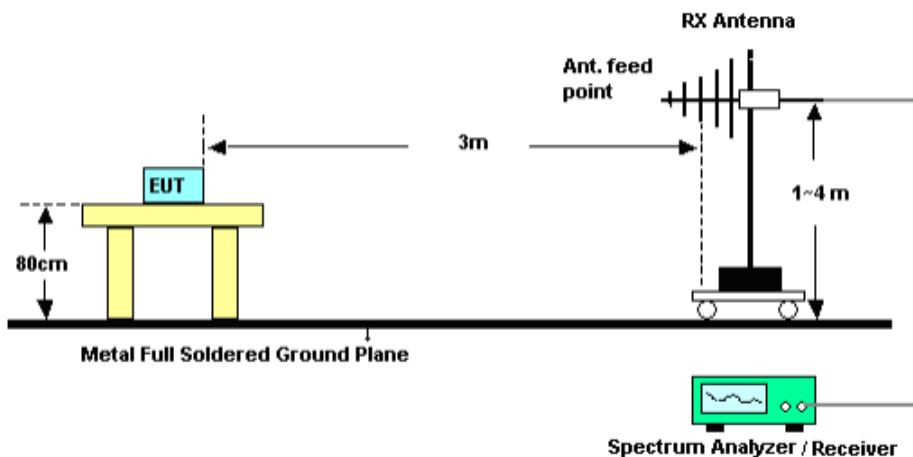
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8.3. TEST SETUP

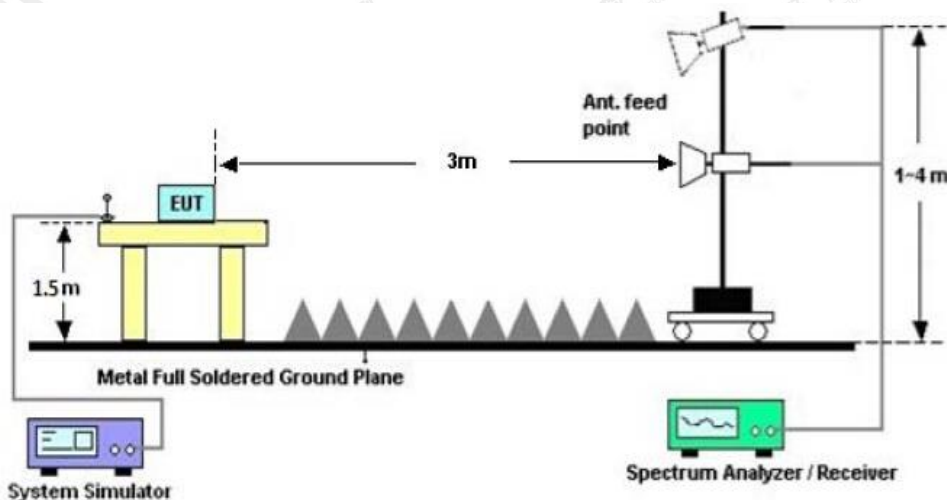
Radiated Emission Test-Setup Frequency Below 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



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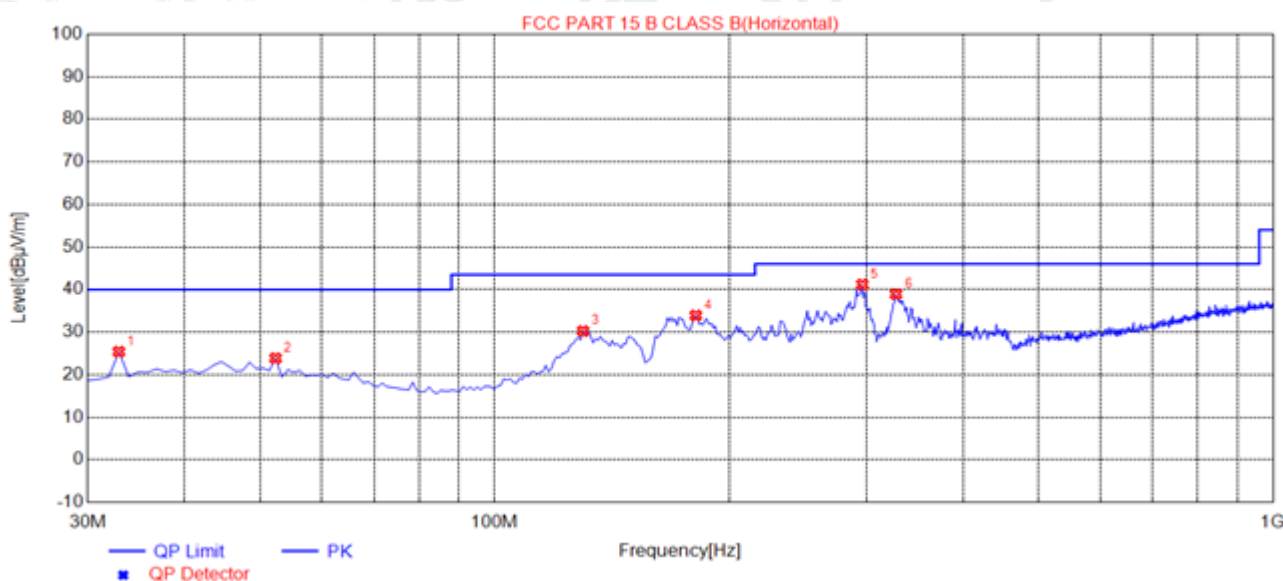
8.4. TEST RESULT

RADIATED EMISSION BELOW 30MHz

No emission found between lowest internal used/generated frequencies to 30MHz.

RADIATED EMISSION 30MHz- 1GHz FOR BR/EDR

EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 7	Polarization :	Horizontal

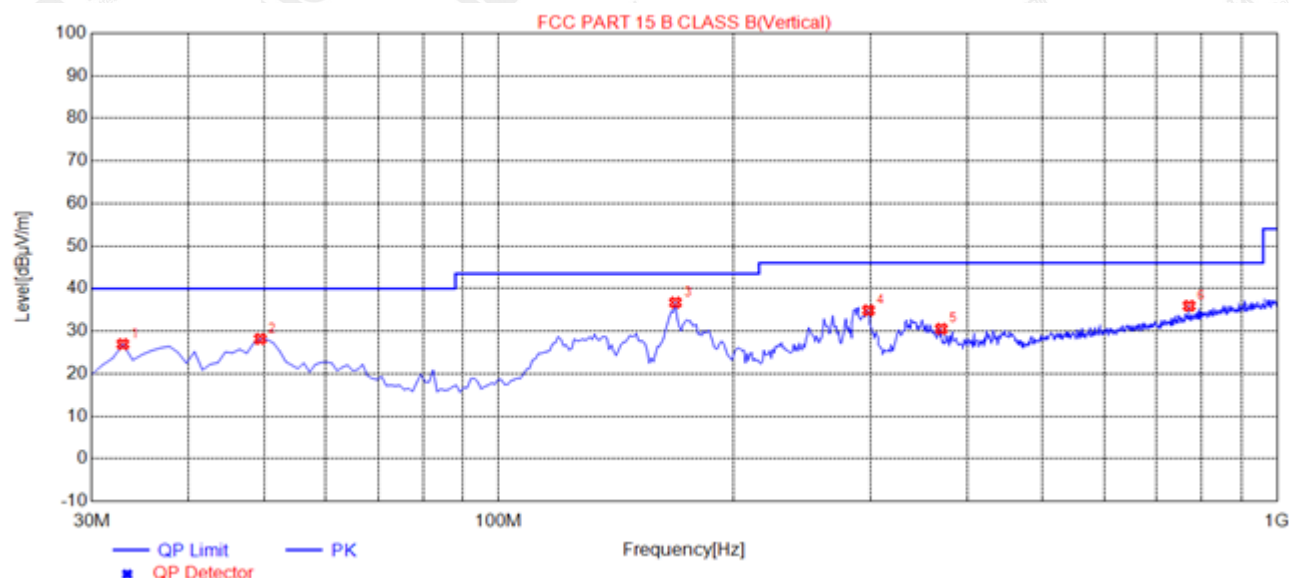


NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	32.9100	25.40	13.36	40.00	14.60	100	359	Horizontal
2	52.3100	23.86	14.49	40.00	16.14	100	208	Horizontal
3	129.9100	30.24	14.14	43.50	13.26	150	202	Horizontal
4	181.3200	33.91	12.93	43.50	9.59	200	190	Horizontal
5	296.7500	41.19	15.96	46.00	4.81	100	67	Horizontal
6	327.7900	38.92	16.99	46.00	7.08	100	208	Horizontal

RESULT: PASS

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EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 7	Polarization :	Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	32.9100	26.93	13.36	40.00	13.07	100	250	Vertical
2	49.4000	28.16	14.69	40.00	11.84	100	279	Vertical
3	168.7100	36.71	14.08	43.50	6.79	100	304	Vertical
4	298.6900	34.87	15.92	46.00	11.13	100	246	Vertical
5	370.4700	30.54	18.63	46.00	15.46	150	193	Vertical
6	771.0800	35.92	27.71	46.00	10.08	100	192	Vertical

RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss, Margin= Limit -Level.

2. The “Factor” value can be calculated automatically by software of measurement system.

3. The mode 7 is the worst case, and only the data of the worst case recorded in this test report.

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FIELD STRENGTH OF FUNDAMENTAL FOR BR/EDR

EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Modulation :	GFSK	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2402.021	65.45	13.46	78.91	114.00	-35.09	peak
2402.021	64.32	13.46	77.78	94.00	-16.22	AVG
2441.021	64.84	13.88	78.72	114.00	-35.28	peak
2441.021	63.66	13.88	77.54	94.00	-16.46	AVG
2480.021	64.32	14.11	78.43	114.00	-35.57	peak
2480.021	63.07	14.11	77.18	94.00	-16.82	AVG

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Modulation :	GFSK	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2402.021	63.50	13.46	76.96	114.00	-37.04	peak
2402.021	61.95	13.46	75.41	94.00	-18.59	AVG
2441.021	62.90	13.88	76.78	114.00	-37.22	peak
2441.021	61.31	13.88	75.19	94.00	-18.81	AVG
2480.021	62.23	14.11	76.34	114.00	-37.66	peak
2480.021	60.67	14.11	74.78	94.00	-19.22	AVG

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

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EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Modulation :	π /4-DQPSK	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
2402.021	65.08	13.46	78.54	114.00	-35.46	peak
2402.021	62.79	13.46	76.25	94.00	-17.75	AVG
2441.021	63.80	13.88	77.68	114.00	-36.32	peak
2441.021	61.54	13.88	75.42	94.00	-18.58	AVG
2480.021	63.25	14.11	77.36	114.00	-36.64	peak
2480.021	61.08	14.11	75.19	94.00	-18.81	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Modulation :	π /4-DQPSK	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
2402.021	62.02	13.46	75.48	114.00	-38.52	peak
2402.021	60.35	13.46	73.81	94.00	-20.19	AVG
2441.021	61.66	13.88	75.54	114.00	-38.46	peak
2441.021	59.80	13.88	73.68	94.00	-20.32	AVG
2480.021	60.87	14.11	74.98	114.00	-39.02	peak
2480.021	58.54	14.11	72.65	94.00	-21.35	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

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EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Modulation :	8DPSK	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2402.021	64.68	13.46	78.14	114.00	-35.86	peak
2402.021	62.39	13.46	75.85	94.00	-18.15	AVG
2441.021	63.27	13.88	77.15	114.00	-36.85	peak
2441.021	61.38	13.88	75.26	94.00	-18.74	AVG
2480.021	62.28	14.11	76.39	114.00	-37.61	peak
2480.021	60.15	14.11	74.26	94.00	-19.74	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Modulation :	8DPSK	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2402.021	62.22	13.46	75.68	114.00	-38.32	peak
2402.021	60.59	13.46	74.05	94.00	-19.95	AVG
2441.021	61.81	13.88	75.69	114.00	-38.31	peak
2441.021	59.96	13.88	73.84	94.00	-20.16	AVG
2480.021	61.04	14.11	75.15	114.00	-38.85	peak
2480.021	59.55	14.11	73.66	94.00	-20.34	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

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RADIATED EMISSION ABOVE 1GHZ FOR BR/EDR

EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 1	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4804.026	46.63	3.76	50.39	74.00	-23.61	peak
4804.026	42.46	3.76	46.22	54.00	-7.78	AVG
7206.039	41.50	8.17	49.67	74.00	-24.33	peak
7206.039	38.80	8.17	46.97	54.00	-7.03	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 1	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4804.026	48.55	3.76	52.31	74.00	-21.69	peak
4804.026	46.41	3.76	50.17	54.00	-3.83	AVG
7206.039	41.60	8.17	49.77	74.00	-24.23	peak
7206.039	39.89	8.17	48.06	54.00	-5.94	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

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EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 2	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4882.042	49.69	3.78	53.47	74.00	-20.53	peak
4882.042	47.47	3.78	51.25	54.00	-2.75	AVG
7323.063	40.38	8.23	48.61	74.00	-25.39	peak
7323.063	36.86	8.23	45.09	54.00	-8.91	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 2	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4882.042	47.55	3.78	51.33	74.00	-22.67	peak
4882.042	45.53	3.78	49.31	54.00	-4.69	AVG
7323.063	39.43	8.23	47.66	74.00	-26.34	peak
7323.063	38.04	8.23	46.27	54.00	-7.73	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

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EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 3	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4960.042	48.13	3.81	51.94	74.00	-22.06	peak
4960.042	44.86	3.81	48.67	54.00	-5.33	AVG
7440.063	38.10	8.27	46.37	74.00	-27.63	peak
7440.063	35.79	8.27	44.06	54.00	-9.94	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 3	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4960.042	46.01	3.81	49.82	74.00	-24.18	peak
4960.042	42.96	3.81	46.77	54.00	-7.23	AVG
7440.063	34.94	8.27	43.21	74.00	-30.79	peak
7440.063	32.61	8.27	40.88	54.00	-13.12	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Note: Other emissions from 8G to 25 GHz are considered as ambient noise. No recording in the test report.

Factor=Antenna Factor + Cable loss - Amplifier gain, Margin=Measurement-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

The GFSK modulation was the worst case and only the data of worst recorded in this report.

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9. BAND EDGE EMISSION

9.1 TEST LIMIT

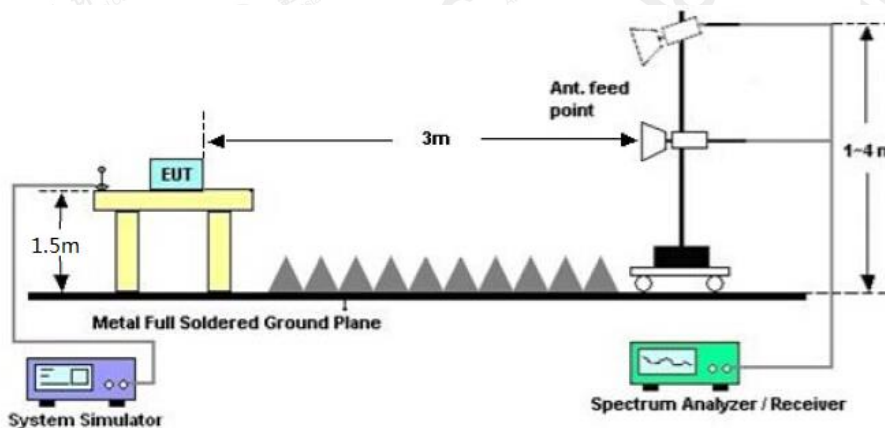
Frequency Band	Limit of the Field Strength (dB μ V/m)	
	Peak	Average
$f \leq 2400\text{MHz}$	74	54
$f \geq 2483.5\text{MHz}$	74	54

9.2. MEASUREMENT PROCEDURE

1. The EUT operates at transmitting mode. The operate channel is tested to verify the largest transmission and spurious emissions power at the continuous transmission mode.
2. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission: (a) PEAK: RBW=1MHz, VBW=3MHz / Sweep=AUTO
(b) AVERAGE: RBW=1MHz ; VBW=3MHz / Sweep=AUTO
3. Other procedures refer to clause 8.2.

9.3 TEST SETUP

RADIATED EMISSION TEST SETUP



9.4 TEST RESULT

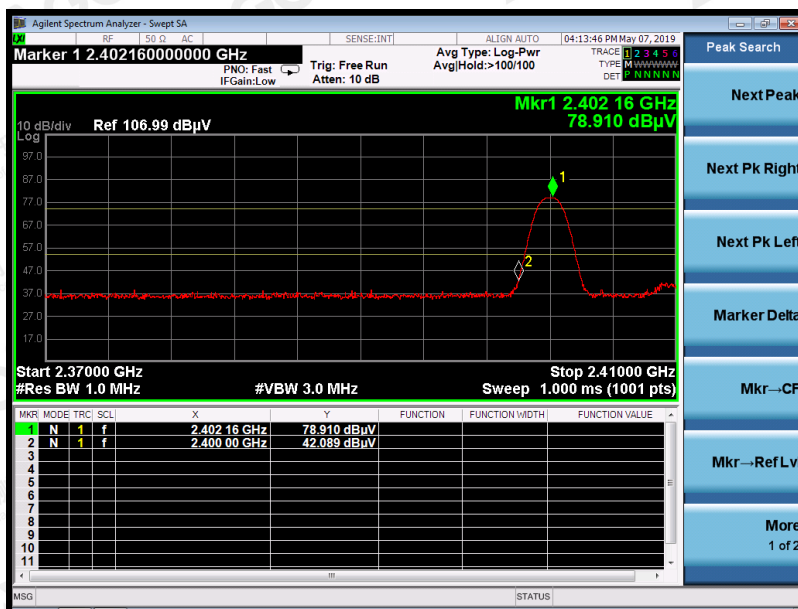
Note:

1. Factor=Antenna Factor + Cable loss - Amplifier gain. Field Strength=Factor + Reading level
2. The factor had been edited in the "Input Correction" of the Spectrum Analyzer. So the Amplitude of test plots is equal to Reading level plus the Factor in dB. Use the A dB(μ V) to represent the Amplitude. Use the F dB(μ V/m) to represent the Field Strength. So A=F.

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EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humiditytity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 1	Polarization :	Horizontal

Peak Value



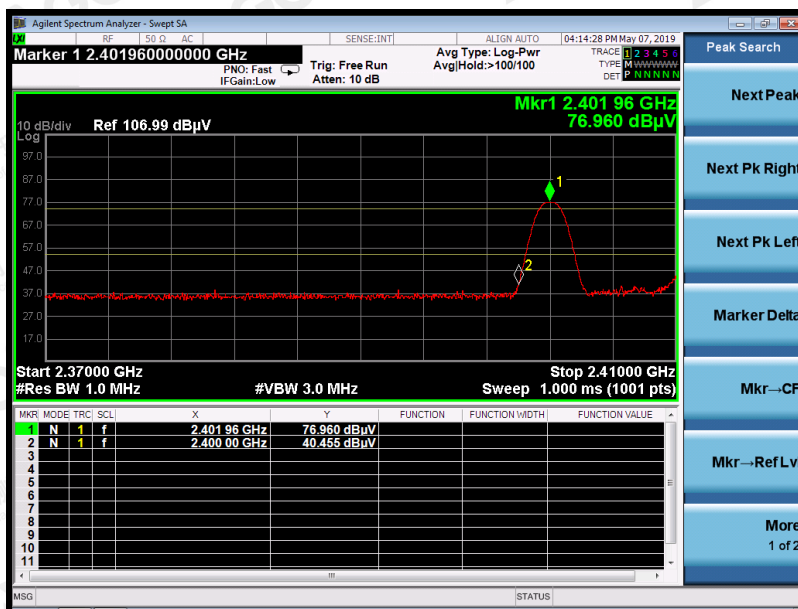
Average Value



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EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humiditytity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 1	Polarization :	Vertical

Peak Value



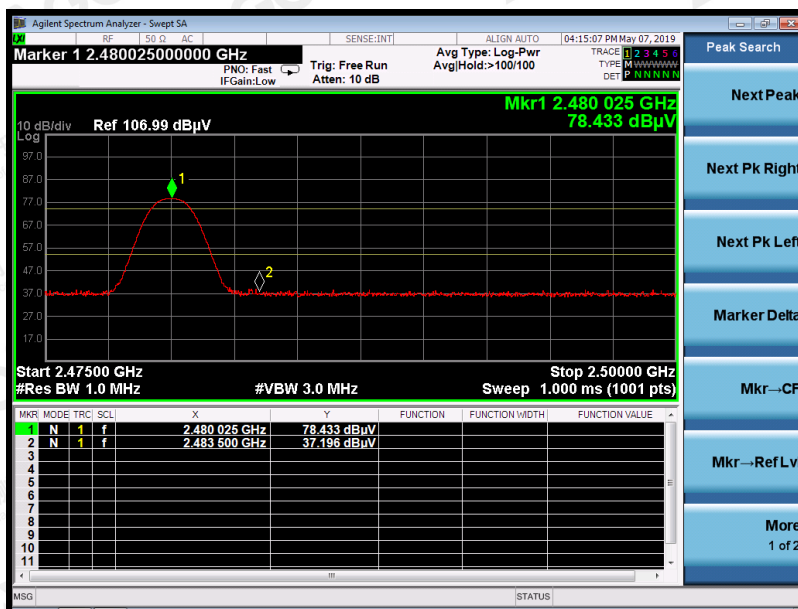
Average Value



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EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 3	Polarization :	Horizontal

Peak Value



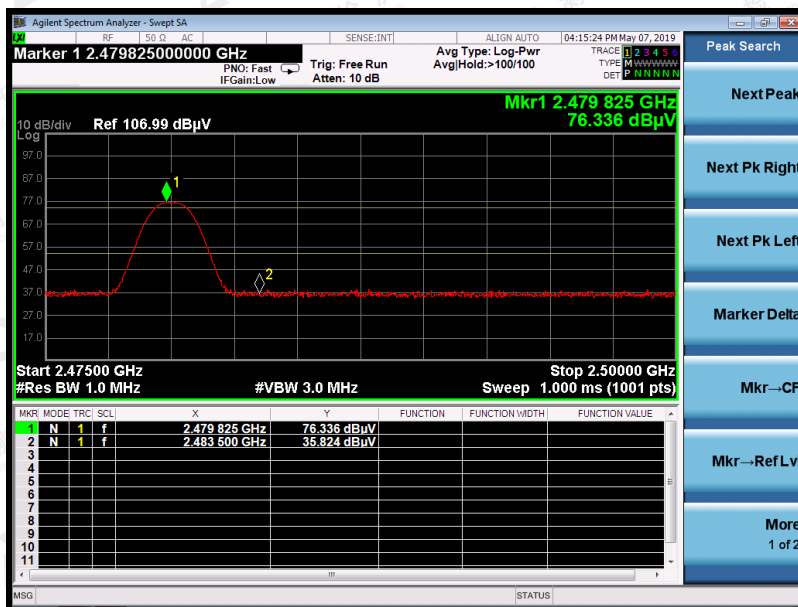
Average Value



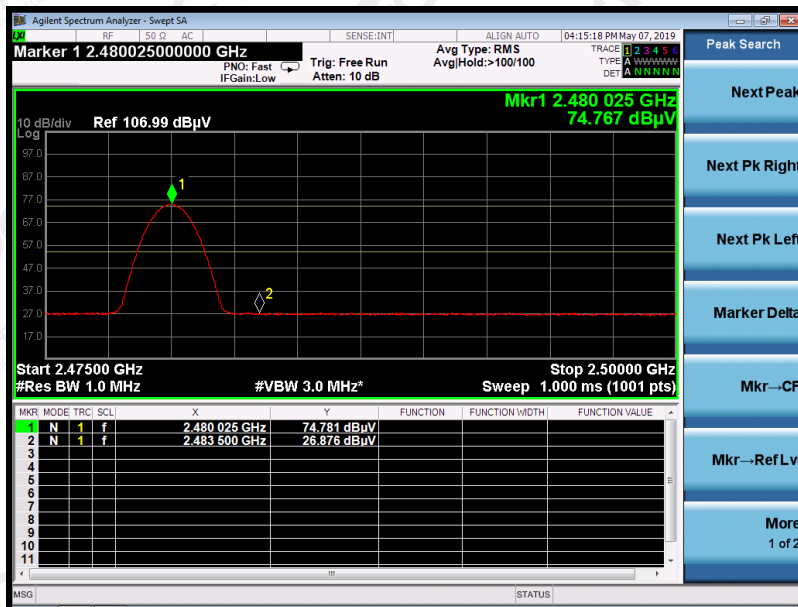
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EUT :	IIIP braided headphones	Model Name. :	MP38542
Temperature :	20 °C	Relative Humiditytity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 3	Polarization :	Vertical

Peak Value



Average Value



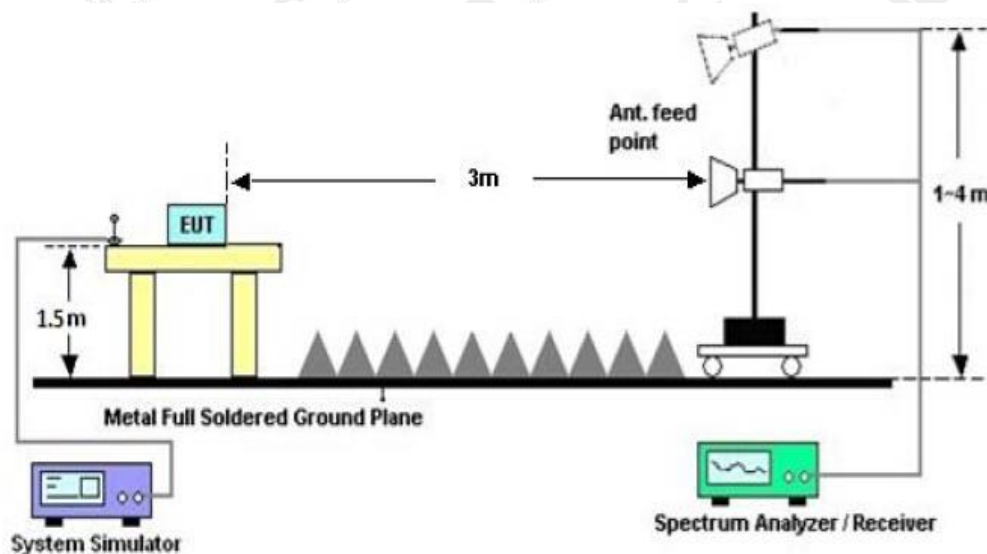
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10. 20DB BANDWIDTH

10.1. MEASUREMENT PROCEDURE

1. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
2. Set Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hoping channel
RBW $\geq$ 1% of the 20 dB bandwidth, VBW $\geq$ 3RBW; Sweep = auto; Detector function = peak
3. Set SPA Trace 1 Max hold, then View.

10.2. TEST SET-UP



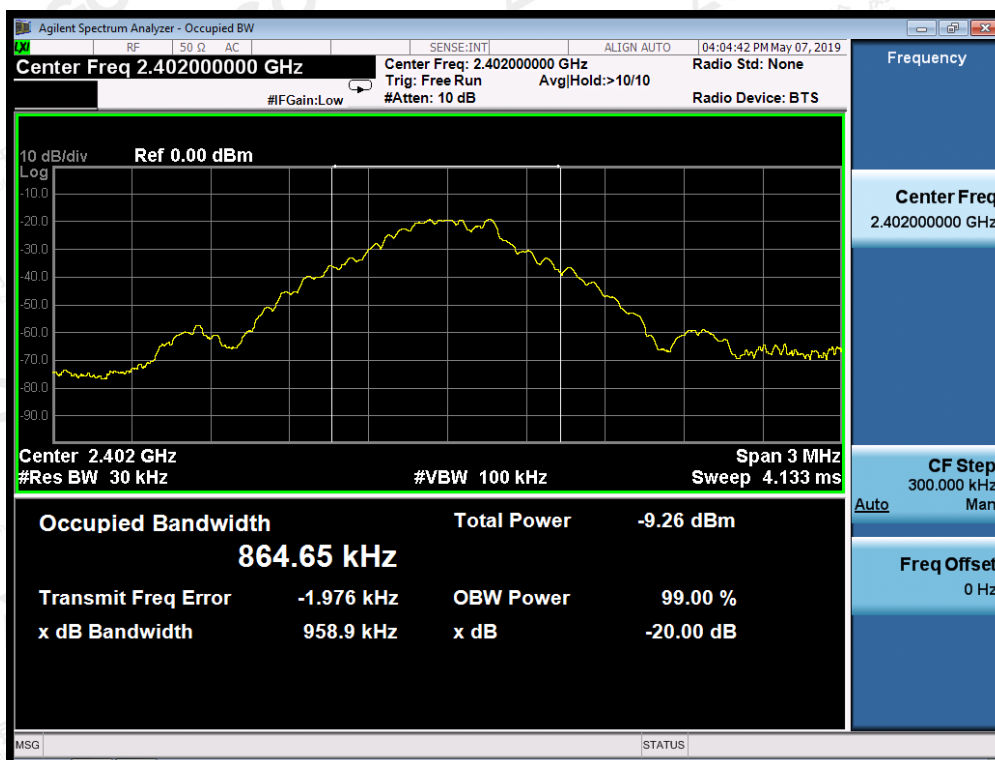
10.3. LIMITS AND MEASUREMENT RESULTS

TEST ITEM	20DB BANDWIDTH
TEST MODULATION	GFSK for BR/EDR

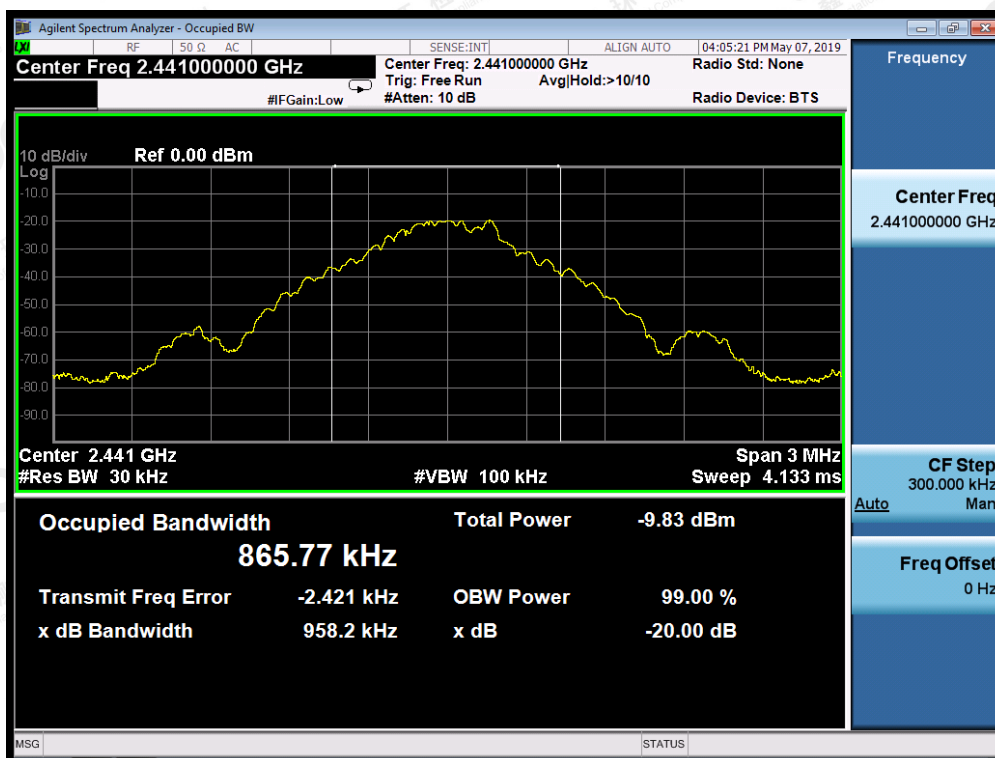
Test Data (MHz)		Criteria
Low Channel	0.9589	PASS
Middle Channel	0.9582	PASS
High Channel	0.9574	PASS

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TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

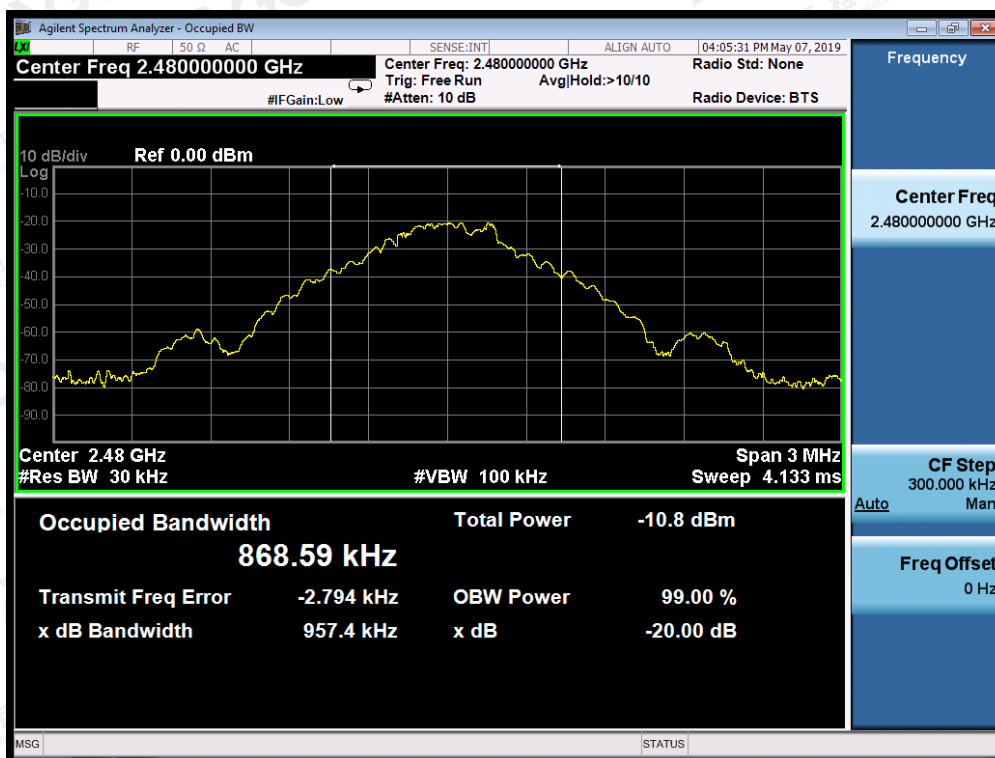


TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



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TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

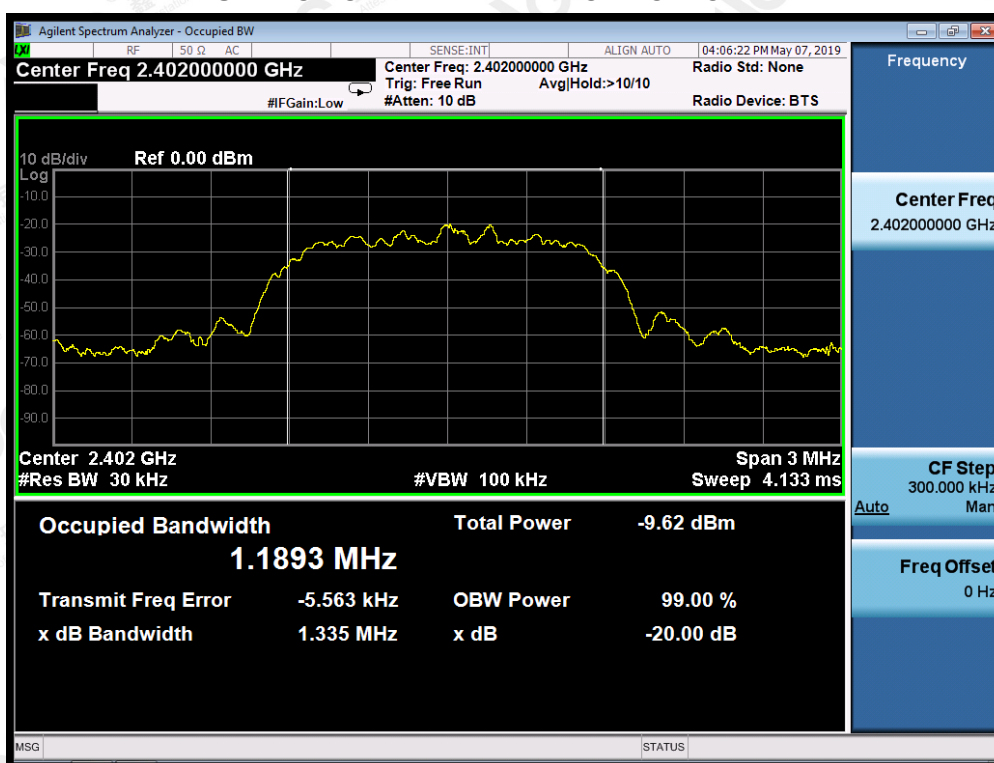


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TEST ITEM	20DB BANDWIDTH
TEST MODULATION	π /4-DQPSK for BR/EDR

Test Data (MHz)		Criteria
Low Channel	1.335	PASS
Middle Channel	1.332	PASS
High Channel	1.340	PASS

TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

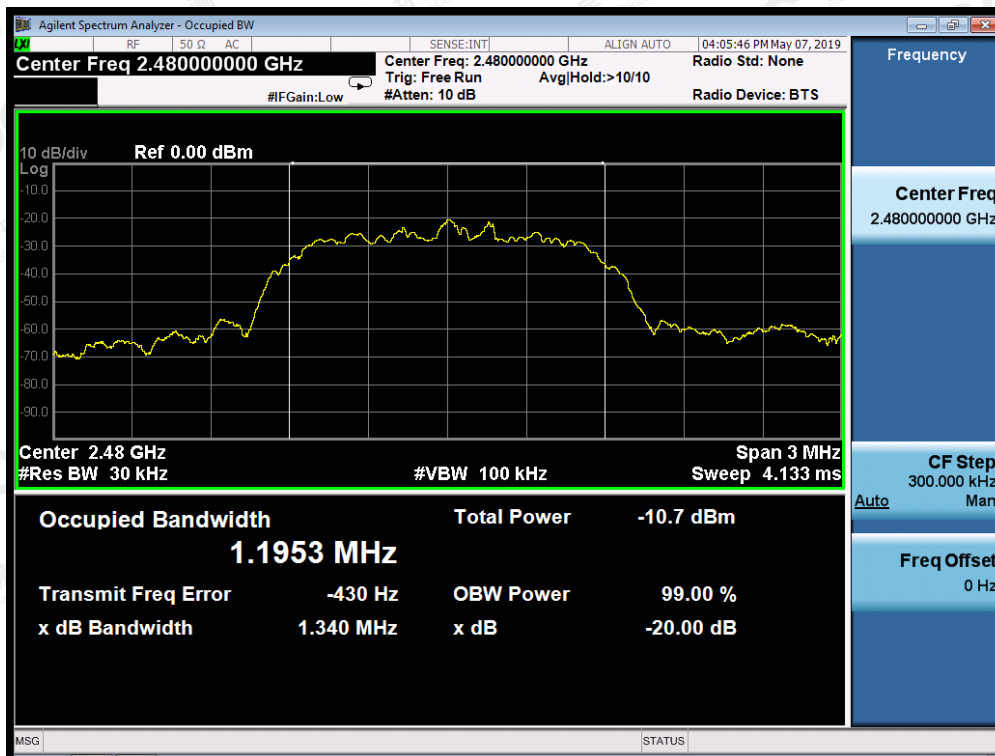


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TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

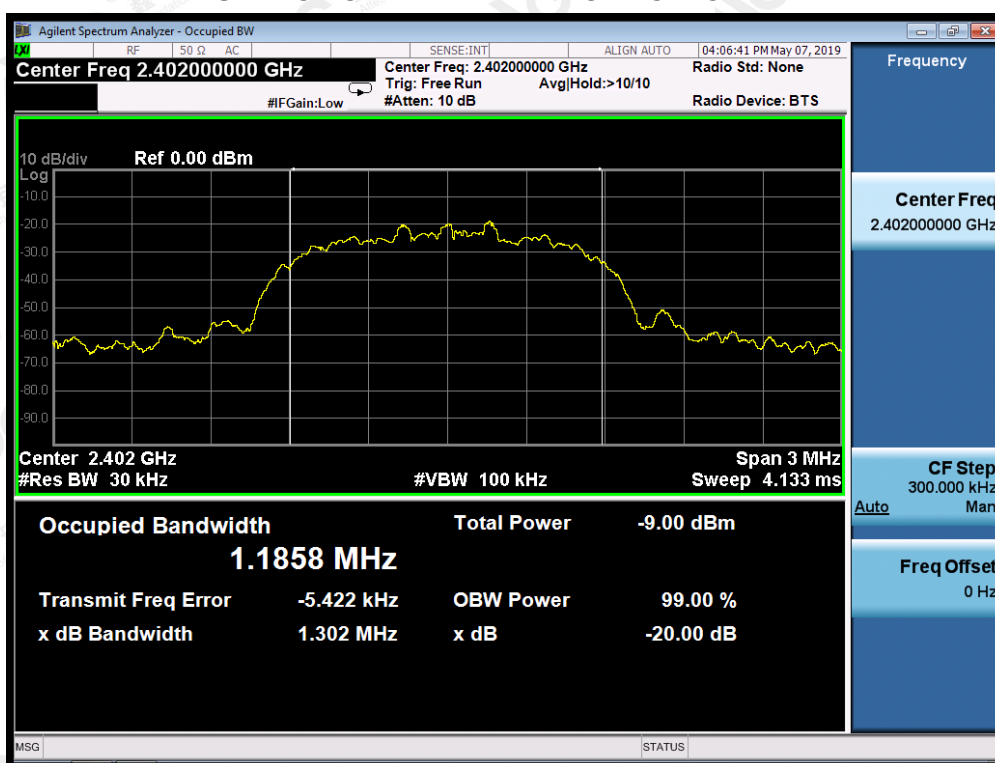


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TEST ITEM	20DB BANDWIDTH
TEST MODULATION	8DPSK for BR/EDR

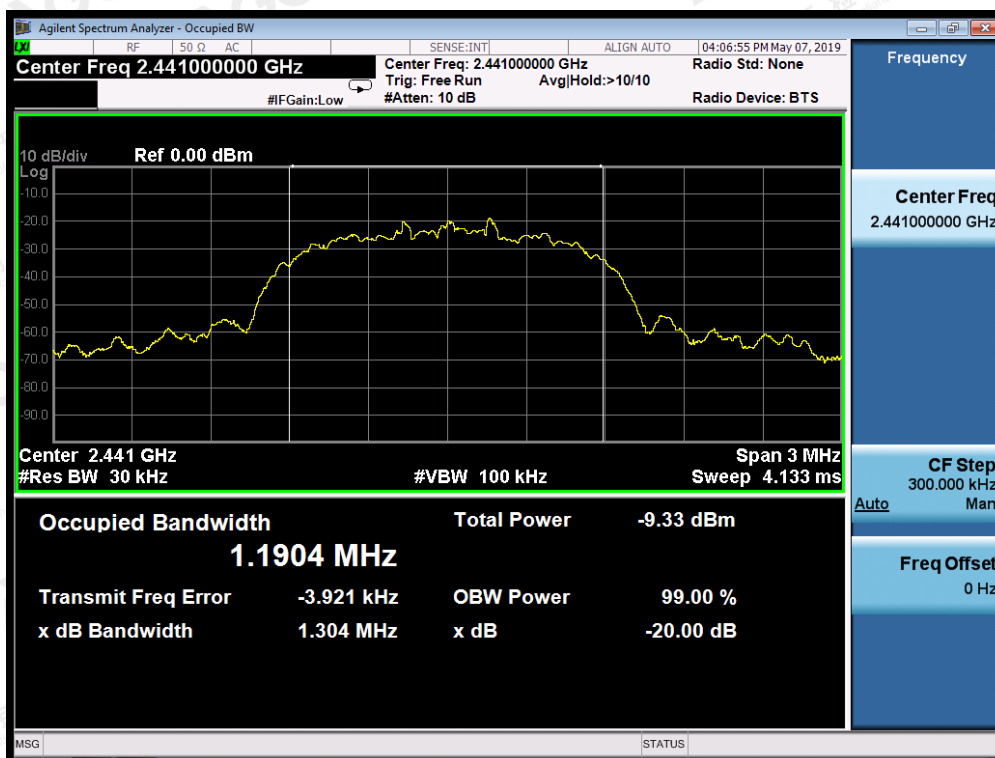
Test Data (MHz)		Criteria
Low Channel	1.302	PASS
Middle Channel	1.304	PASS
High Channel	1.308	PASS

TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

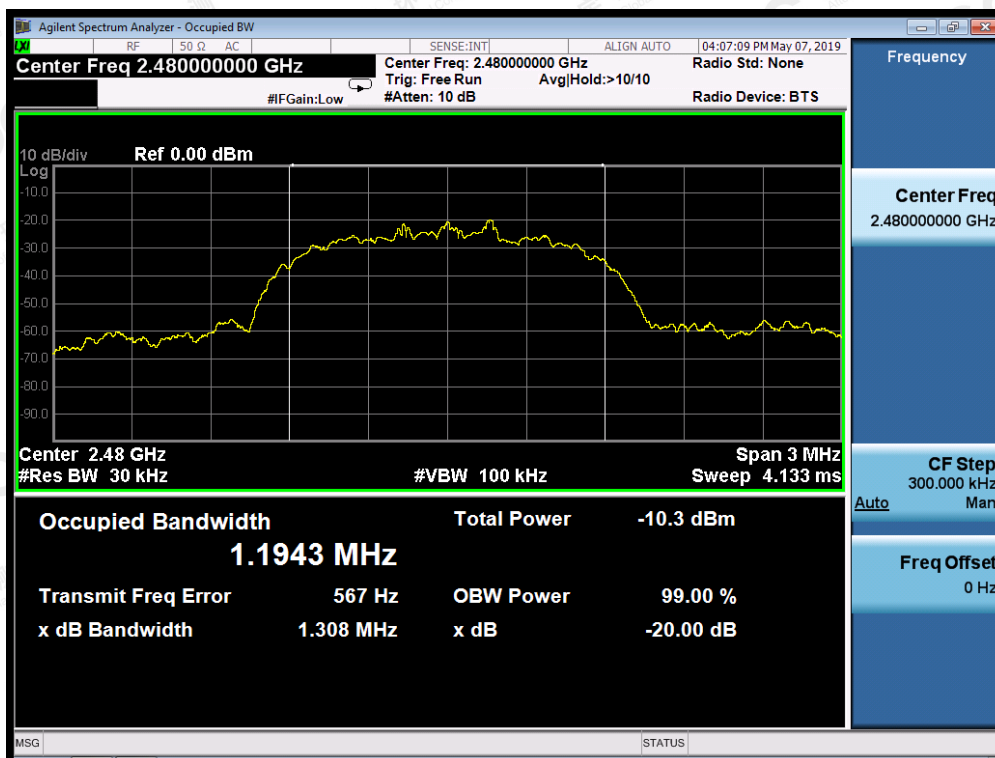


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TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



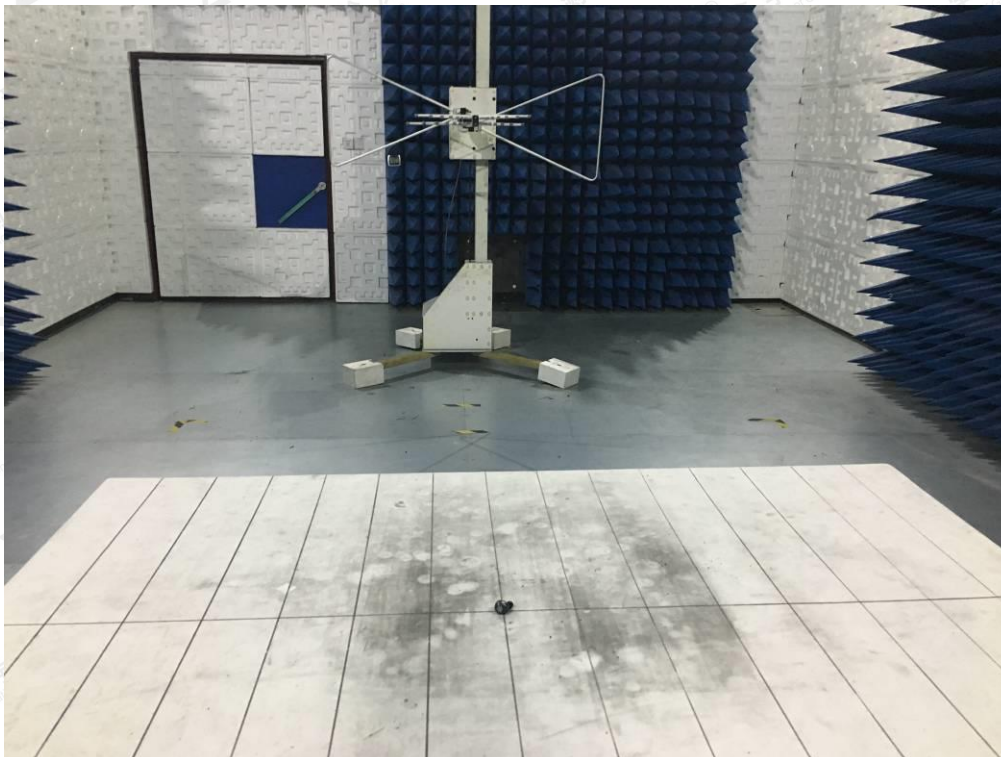
TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



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APPENDIX A: PHOTOGRAPHS OF TEST SETUP

FCC RADIATED EMISSION TEST SETUP



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APPENDIX B: PHOTOGRAPHS OF EUT

TOTAL VIEW OF EUT



TOP VIEW OF EUT



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BOTTOM VIEW OF EUT



FRONT VIEW OF EUT



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BACK VIEW OF EUT



LEFT VIEW OF EUT

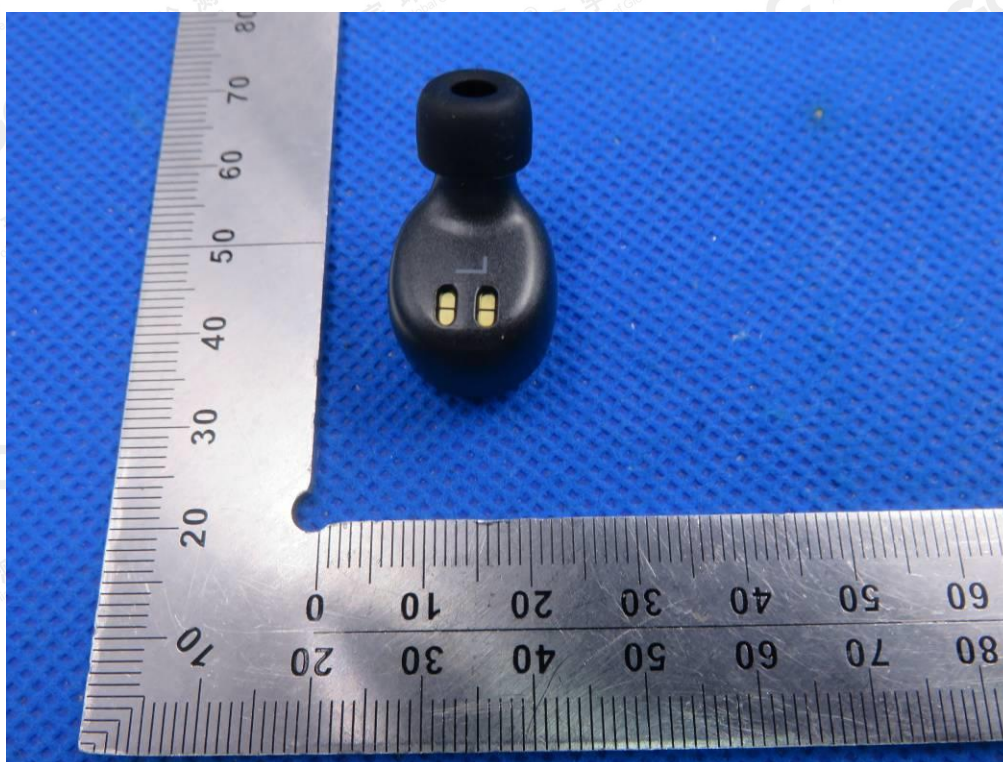


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RIGHT VIEW OF EUT



OPEN VIEW-1 OF EUT(left)

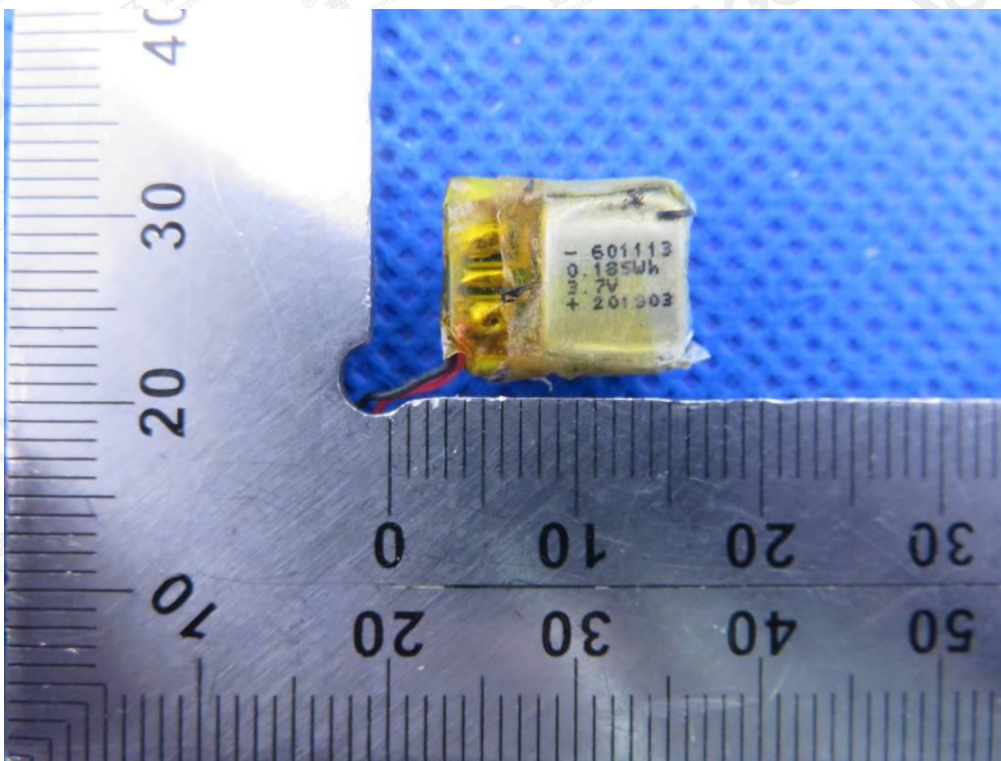


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OPEN VIEW-2 OF EUT

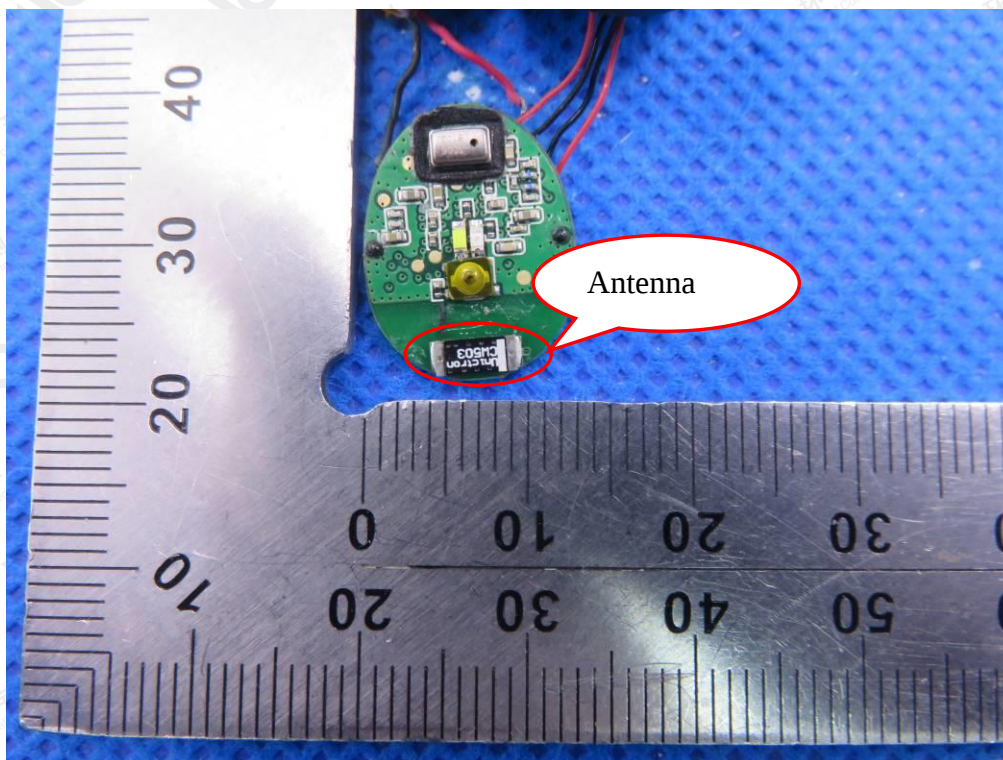


VIEW OF BATTERY

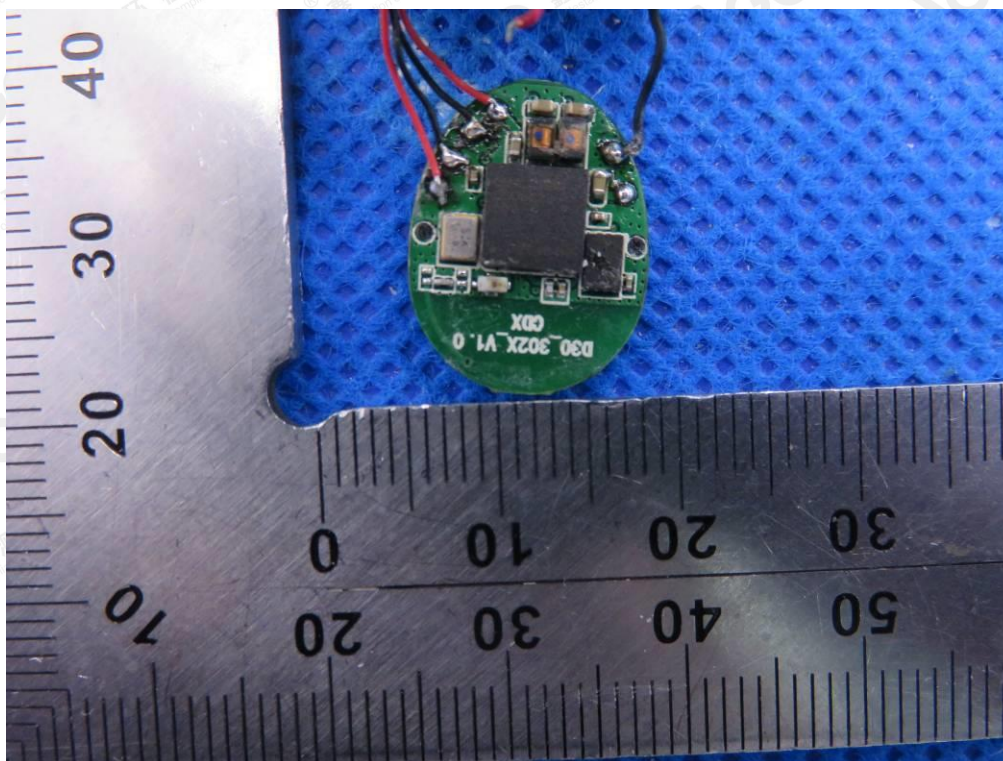


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INTERNAL VIEW-1 OF EUT



INTERNAL VIEW-2 OF EUT

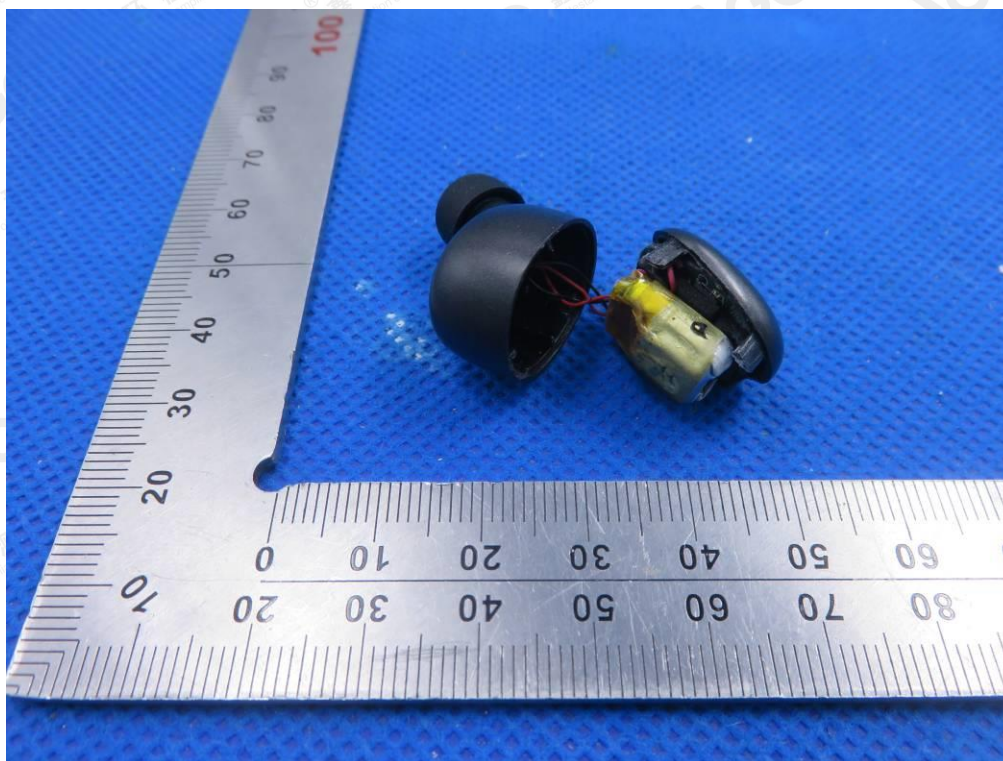


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OPEN VIEW-1 OF EUT(right)

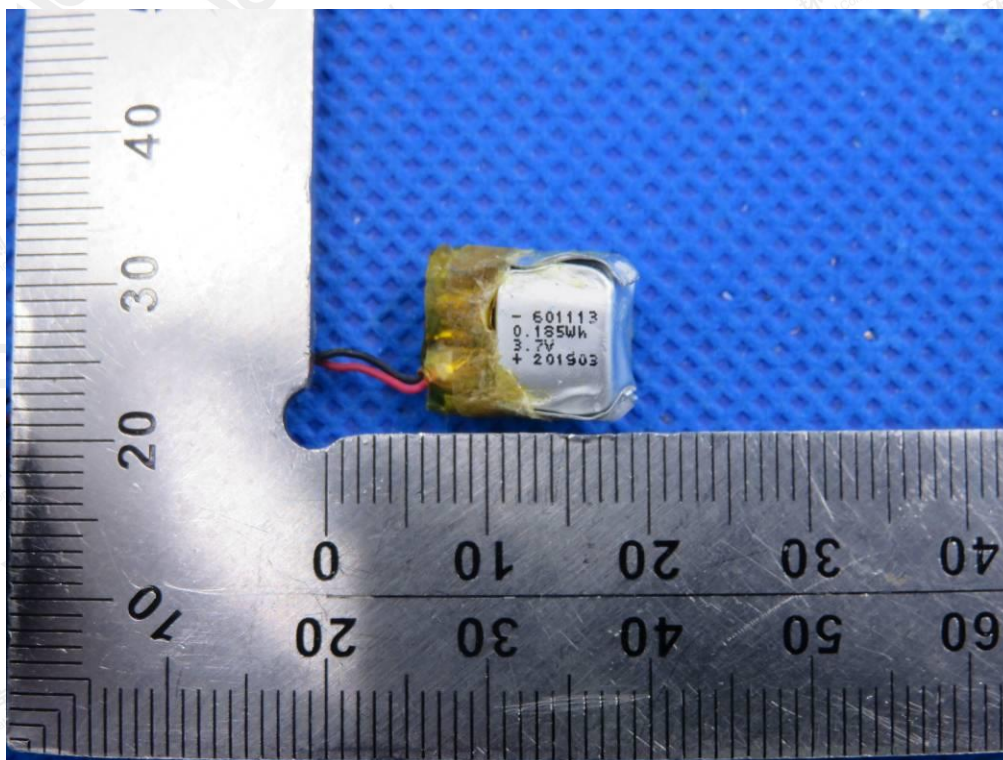


OPEN VIEW-2 OF EUT

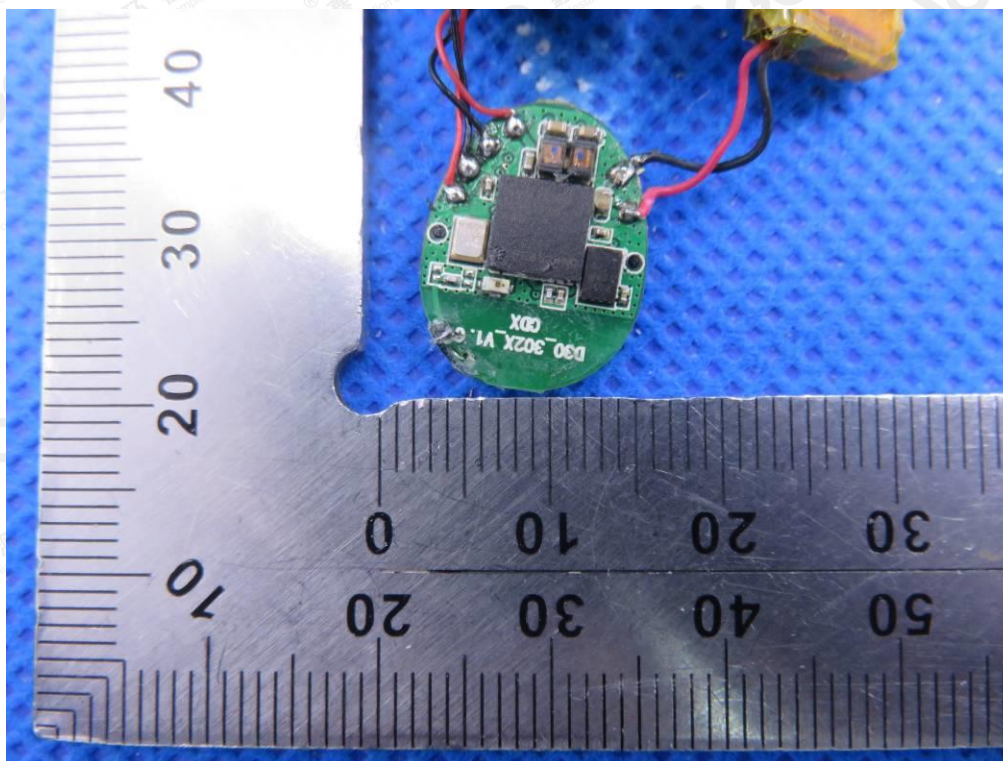


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VIEW OF BATTERY

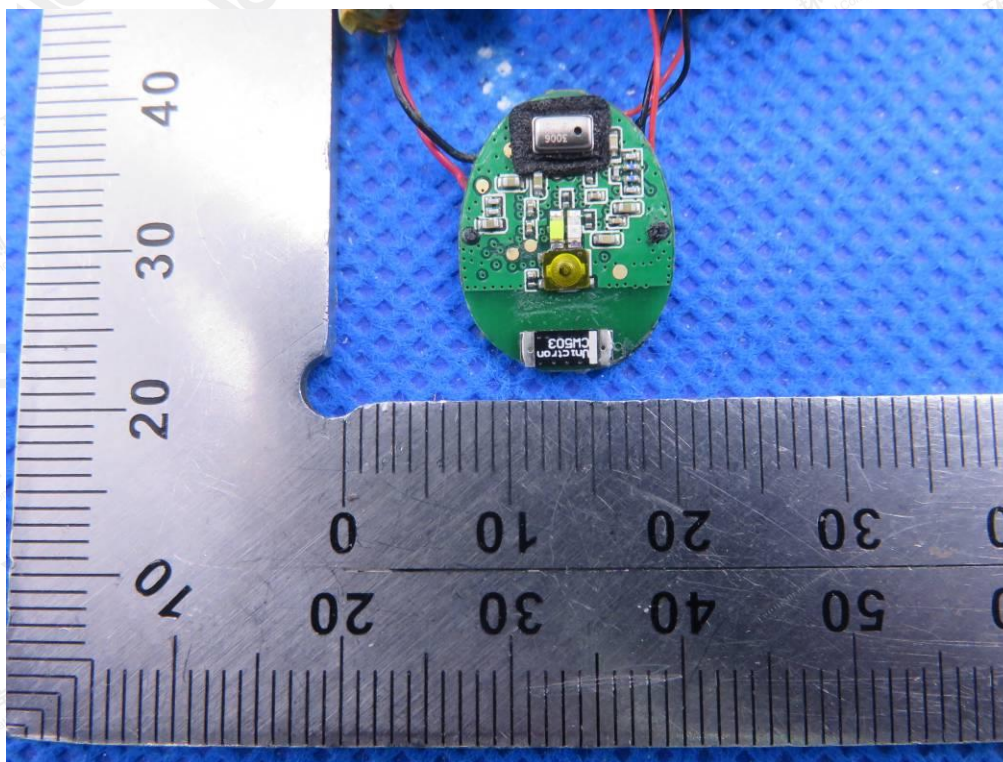


INTERNAL VIEW-1 OF EUT



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INTERNAL VIEW-2 OF EUT



----END OF REPORT----

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