TEST REPORT

FCC ID: 2AJJ2-HEADPHONE

For

NOKTA MUHENDISLIK INS. ELEK. PLAS. GIDA VE REKLAM SAN. TIC. LTD. STI.

WIRELESS HEADPHONES

Model No.	:	NOKTA 2.4 GHz WIRELESS HEADPHONES（MAKRO 2.4 GHz WIRELESS HEADPHONES）
Trade name	:	NOKTA DETECTION TECHNOLOGIES
Prepared for	:	NOKTA MUHENDISLIK INS. ELEK. PLAS. GIDA VE REKLAM SAN. TIC. LTD. STI.
Address	:	EMEK MAH. SIVATYOLU CAD. SAKIZ SOK. NO4 SANCAKTEPE ISTANBUL TURKEY
Prepared by	:	Shenzhen Alpha Product Testing Co., Ltd.
Address	:	Building B, East Area of Nanchang Second, Industrial Zone, Gushu 2nd Road, Bao'an, Shenzhen, China
Report No.	:	T1861218 04
Date of Receipt	:	July 04, 2016
Date of Test	:	August 14-August 18, 2016
Date of Report	:	August 19, 2016
Version Number	:	REV0

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Description **Page**

DECLARATION

Applicant	:	NOKTA MUHENDISLIK INS. ELEK. PLAS. GIDA VE REKLAM SAN. TIC. LTD. STI.
Manufacturer	:	NOKTA MUHENDISLIK INS. ELEK. PLAS. GIDA VE REKLAM SAN. TIC. LTD. STI.
Product	:	WIRELESS HEADPHONES
(A) Model No.	:	NOKTA 2.4 GHz WIRELESS HEADPHONES（ MAKRO 2.4 GHz WIRELESS HEADPHONES）
(B) Trade Name	:	NOKTA DETECTION TECHNOLOGIES
(C) Power supply	:	DC 3.7V from battery, DC 5V From USB Port for charge

Measurement Standard Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.249: 2016, ANSI C63.10-2013

The device described above is tested by Shenzhen Alpha Product Testing Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B Class B limits both conducted and radiated emissions. The test results are contained in this test report and Shenzhen Alpha Product Testing Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After the test, our opinion is that EUT compliance with the requirement of the above standards.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen Alpha Product Testing Co., Ltd.

Tested by (name + signature).....…..:	Reak Yang Test Engineer	Reak Yang ……
Approved by (name + signature)…....:	Simple Guan Project Manager	……
Date of issue…… ……..:		August 19, 2016

1 General Information

1.1 Description of Device (EUT)

EUT	:	WIRELESS HEADPHONES
Model No.	:	NOKTA 2.4 GHz WIRELESS HEADPHONES（MAKRO 2.4 GHz WIRELESS HEADPHONES）
DIFF.	:	N/A
Trade mark	:	NOKTA DETECTION TECHNOLOGIES
Power supply	:	DC 3.7V from battery, DC 5V From USB Port for charge
Radio Technology	:	2.4G ISM
Operation frequency	:	2440-2445MHz
Channel No.		6 Channels
Channel Separation	:	2MHz
Modulation	:	GFSK
Antenna Type	:	PCB Antenna, max gain 1dBi.
Applicant	:	NOKTA MUHENDISLIK INS. ELEK. PLAS. GIDA VE REKLAM SAN. TIC. LTD. STI.
Address	:	EMEK MAH. SIVATYOLU CAD. SAKIZ SOK. NO4 SANCAKTEPE ISTANBUL TURKEY
Manufacturer	:	NOKTA MUHENDISLIK INS. ELEK. PLAS. GIDA VE REKLAM SAN. TIC. LTD. STI.
Address	:	EMEK MAH. SIVATYOLU CAD. SAKIZ SOK. NO4 SANCAKTEPE ISTANBUL TURKEY

1.2 Description of Test Facility

Shenzhen Alpha Product Testing Co., Ltd.

Building B, East Area of Nanchang Second, Industrial Zone, Gushu 2nd Road, Bao'an, Shenzhen, China

March 25, 2015 File on Federal Communication Commission
Registration Number: 203110

July 18, 2014 Certificated by IC
Registration Number: 12135A

2 EMC Equipment List

Equipment	Manufacture	Model No.	Serial No.	Due cal.	Cal Interval
3m Semi-Anechoic	CHENYU	N/A	N/A	2018.01.18	2Year
Spectrum analyzer	Agilent	E4407B	MY46185649	2017.01.16	1Year
Receiver	R&S	ESPI	101873	2017.01.16	1Year
Receiver	R&S	ESCI	101165	2017.01.16	1Year
Bilog Antenna	SCHWARZBECK	VULB 9168	VULB9168-438	2018.01.18	2Year
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D(1201)	2017.01.20	2Year
L.I.S.N.#1	Schwarzbeck	NSLK8126	8126466	2017.01.16	1 Year
L.I.S.N.#2	ROHDE&SCHWARZ	ENV216	101043	2017.01.16	1 Year
Cable	Resenberger	N/A	No.1	2017.01.16	1Year
Cable	SCHWARZBECK	N/A	No.2	2017.01.16	1Year
Cable	SCHWARZBECK	N/A	No.3	2017.01.16	1Year
Pre-amplifier	HP	HP8347A	2834A00455	2017.01.18	1Year
Pre-amplifier	Agilent	8449B	3008A02664	2017.01.18	1Year
vector Signal Generator	Agilent	N5182A	MY49060042	2016.11.16	1 Year
vector Signal Generator	Agilent	E4438C	US44271917	2016.11.16	1 Year
X-series USB Peak and Average Power Sensor	Agilent	U2021XA	MY54080020	2016.11.16	1 Year
X-series USB Peak and Average Power Sensor	Agilent	U2021XA	MY54110001	2016.11.16	1 Year
Signal Analyzer	Agilent	N9020A	MY48030494	2016.11.16	1 Year

3 Test Procedure

POWER LINE CONDUCTED INTERFERENCE: The test procedure used was ANSI Standard C63.10-2013 using a 50 u H LISN. Both Lines were observed. The bandwidth of the receiver was 10kHz with an appropriate sweep speed. The ambient temperature of the EUT was 25℃with a humidity of 58%.

RADIATION INTERFERENCE: The test procedure used was ANSI Standard C63.10-2013 using a ANRITSU spectrum analyzer with a pre-selector. The analyzer was calibrated in dB above a micro volt at the output of the antenna. The resolution bandwidth was 100kHz and the video bandwidth was 300 kHz up to 1 GHz and 1 MHz with a video BW of 3MHz above 1 GHz. The ambient temperature of the EUT was 25℃with a humidity of 58%.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dBuV) to the antenna correction factor supplied by the antenna manufacturer and cable loss. The antenna correction factors and cable loss are stated in terms of dB. The gain of the Pre-selector was accounted for in the Spectrum Analyzer Meter Reading.
Example:
Freq (MHz) METER READING + ACF + CABLE = FS
33.20 dBuV + 10.36 dB + 0.9 dB= 44.46 dBuV/m @ 3m
ANSI STANDARD C63.10-2013 10.1.7 MEASUREMENT PROCEDURES: The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m. The EUT was placed in the center of the table (1.5m side). The table used for radiated measurements is capable of continuous rotation. When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes. The situation was similar for the conducted measurement except that the table did not rotate. The EUT was setup as described in ANSI Standard C63.10-2013 10.1.7 with the EUT 40 cm from the vertical ground wall.

4 Summary of Measurement

4.1 Summary of test result

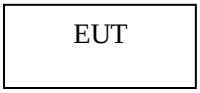
Test Item	Test Requirement	Stanadard Paragraph	Result
Spurious Emission	FCC PART 15: 2016	Section 15.249&15.209	Compliance
Conduction Emission	FCC PART 15: 2016	Section 15.207	Compliance
Occupied bandwidth	FCC PART 15: 2016	Section 15.215	Compliance
Band edge Requirement	FCC PART 15: 2016	Section 15.249	Compliance
Antenna Requirement	FCC PART 15: 2016	Section 15.203	Compliance

Note: The EUT has been tested as an independent unit. And Continual Transmitting in maximum power.

4.2 Test connection

EUT was placed on a turn table, which is 0.8 meter high above ground for blew 1GHz, 1.5 meter high above ground for above 1GHz.

TX Mode:



4.3 Assistant equipment used for test

Description	:	Notebook
Manufacturer	:	ACER
Model No.	:	ZQR
Note: FCC DOC approved.		

4.4 Test mode

The EUT was controlled to work in Continuous TX mode, and select test channel, Wireless mode.

Channel List

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
1	2440	3	2442	5	2444
2	2441	4	2443	6	2445

4.5 Test Conditions

Temperature range	21-25℃
Humidity range	40-75%
Pressure range	86-106kPa

4.6 Measurement Uncertainty (95% confidence levels, k=2)

Item	MU	Remark
Uncertainty for Power point Conducted Emissions Test	2.71dB	
Uncertainty for Radiation Emission test in 3m chamber (below 30MHz)	2.13 dB	Polarize: V
	2.57dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.90 dB	Polarize: V
	3.92dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	4.26 dB	Polarize: H
	4.28 dB	Polarize: V
Uncertainty for radio frequency	1×10-9	
Uncertainty for DC and low frequency voltages	0.06%	

5 Spurious Emission

5.1 Radiation Emission

5.2 Radiation Emission Limits(15.209&249)

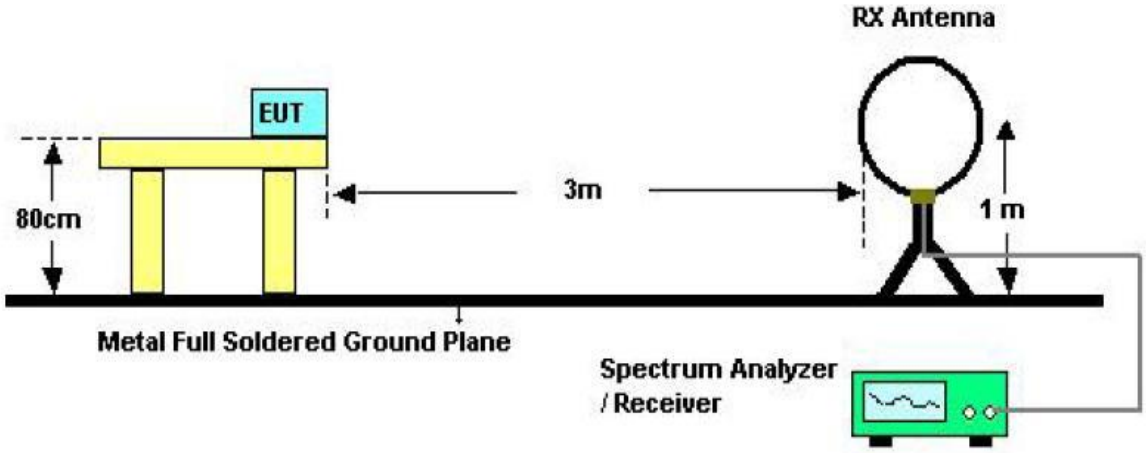
Frequency (MHz)	**Field Strength Limits at 3 metres (watts, e.i.r.p.)**		
	uV/m	dB uV/m	Measurement distance(m)
0.009-0.490	2400/F(kHz)	XX	300
0.490-1.705	24000/F(kHz)	XX	30
1.705-30	30	29.5	30
30~88	100(3nW)	40	3
88~216	150(6.8nW)	43.5	3
216~960	200(12nW)	46	3
Above960	500(75nW)	54	3
Carrier frequency		93.97(AV)	3
Carrier frequency		113.97(PK)	3

NOTE:

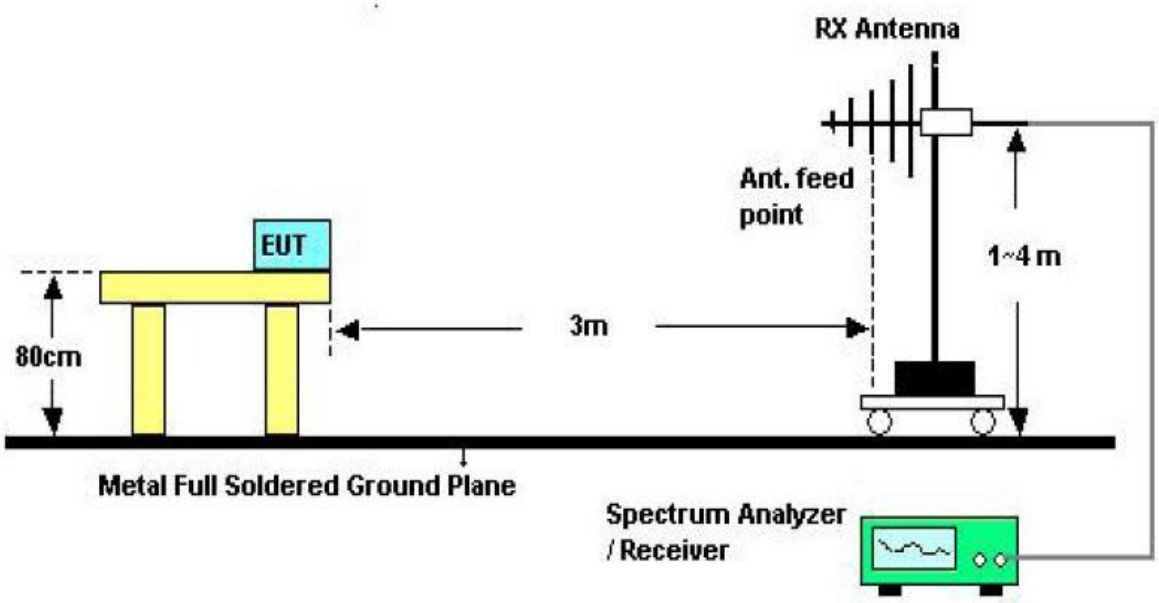
a) The tighter limit applies at the band edges.
b) Emission Level(dB uV/m)=20log Emission Level(uV /m)

5.3 Test Setup

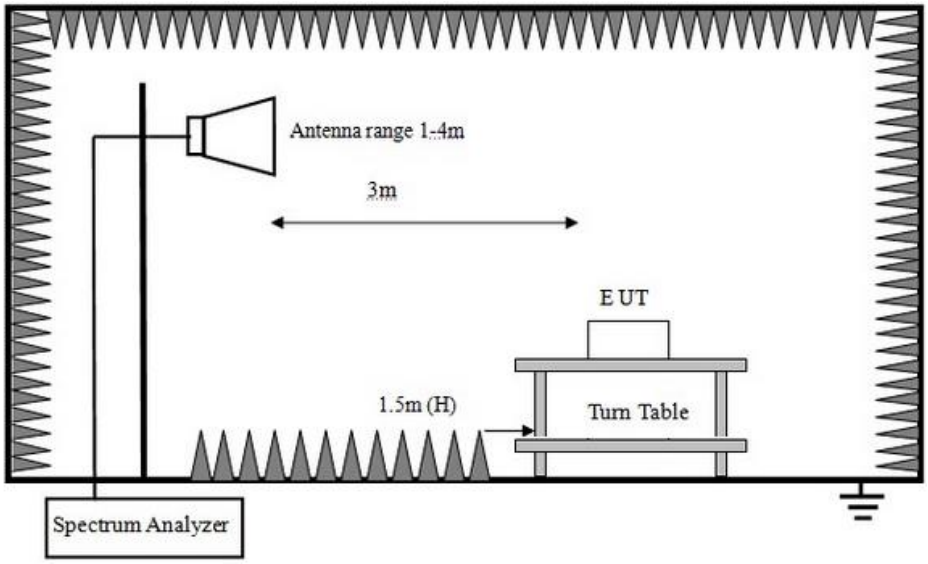
See the next page



Below 30MHz Test Setup



Above 30MHz Test Setup



Above 1GHz Test Setup

Note: For harmonic emissions test a appropriate high pass filter was inserted in the input port of AMP.

5.4 Test Procedure

a) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1GHz, The EUT was placed on a rotating 0.8 m high above ground for below 1GHz and 1.5m high for above1GHz testing, The table was rotated 360 degrees to determine the position of the highest radiation
b) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set of make measurement.
c) The initial step in collecting conducted emission data is a spectrum analyzer Peak detector mode pre-scanning the measurement frequency range. Significant Peaks are then marked. and then Qusia Peak Detector mode premeasured
d) If Peak value comply with QP limit Below 1GHz.The EUT deemed to comply with QP limit. But the Peak value and average value both need to comply with applicable limit above 1GHz.
e) For the actual test configuration, please see the test setup photo.
f) Test for all x, y, z axes is performed and only the worst case of X xes was recorded in the test report.
g) For the radiated emission test above 1GHz:
Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

5.5 Test Equipment Setting For emission test Result.

9KHz~150KHz	RBW 200Hz	VBW1KHz
150KHz~30MHz	RBW 9KHz	VBW 30KHz
30MHZ~1GHz	RBW 120KHz	VBW 300KHz
Above 1GHz	RBW 1MHz	VBW 3MHz

5.6 Test Condition

Continual Transmitting in maximum power.

5.7 Test Result

We have scanned the 10th harmonic from 9KHz to the EUT.
Detailed information please see the following page.

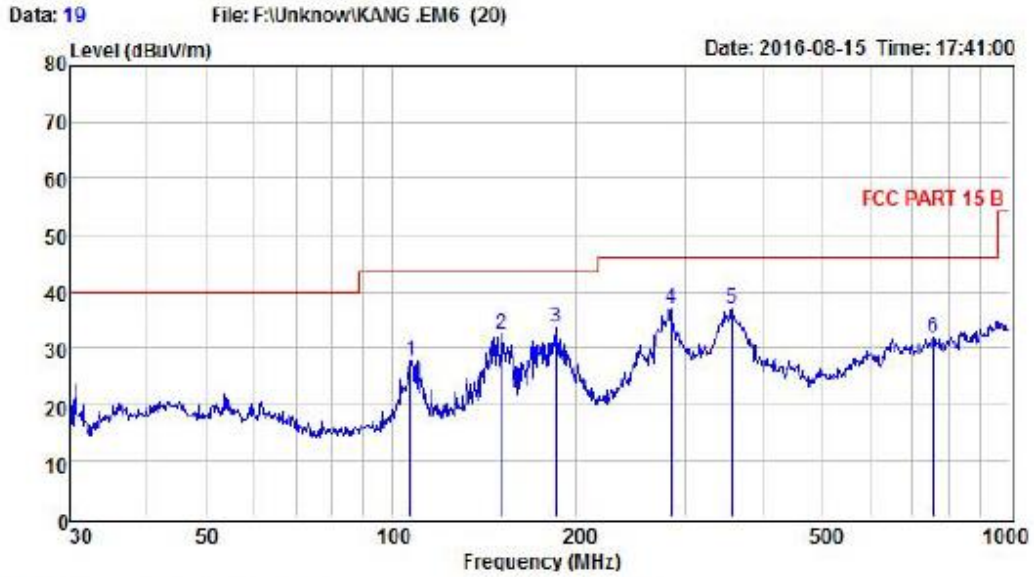
From 9KHz to 30MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Remark: Only show the test data of the worst Channel in this report.

From 30MHz to 1000MHz: Conclusion: PASS

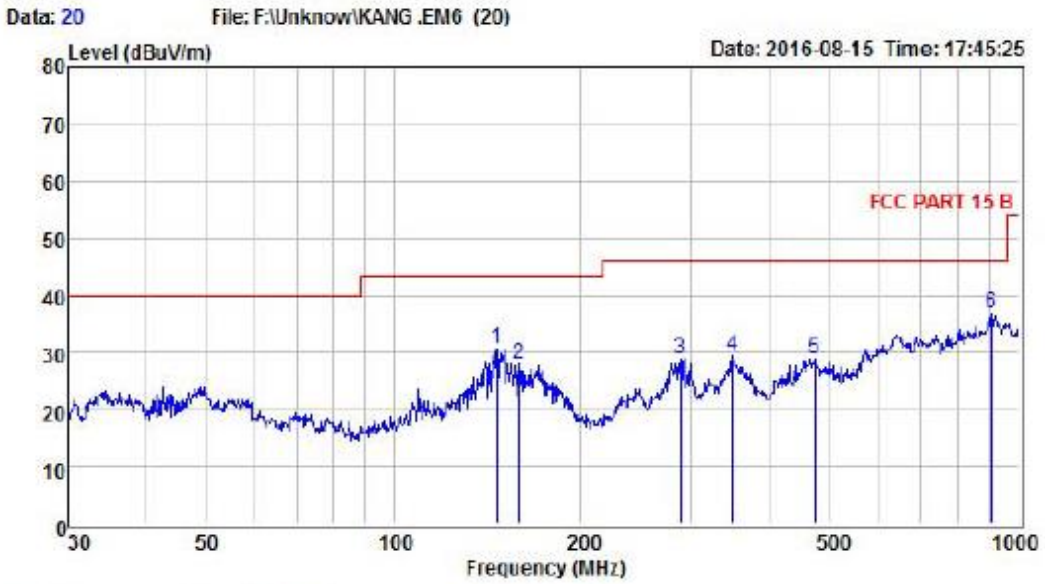
Below 1GHz



Condition : FCC PART 15 B POL: HORIZONIAL
EUT : WIRELESS HEAD PHONES
Model No :
Test Mode :
Power :
Test Engineer :
Remark :
Temp :
Hum :

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	107.51	46.35	10.93	29.96	0.44	27.76	43.50	-15.74	Peak
2	150.54	47.34	14.16	29.41	0.39	32.48	43.50	-11.02	Peak
3	184.49	50.80	11.20	28.96	0.56	33.56	43.50	-9.92	Peak
4	284.96	51.82	12.50	28.07	0.67	36.92	46.00	-9.08	Peak
5	356.68	50.06	13.95	27.72	0.66	36.95	46.00	-9.05	Peak
6	752.74	35.61	20.29	25.33	1.37	31.94	46.00	-14.06	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss



Condition : FCC PART 15 B POL: VERTICAL
EUT : WIRELESS HEAD PHONES
Model No :
Test Mode :
Power :
Test Engineer :
Remark :
Temp :
Hum :

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	146.37	45.59	13.90	29.41	0.41	30.49	43.50	-13.01	Peak
2	158.67	42.43	14.14	29.17	0.41	27.81	43.50	-15.69	Peak
3	287.99	43.81	12.54	28.06	0.66	28.95	46.00	-17.05	Peak
4	349.25	42.94	13.80	27.80	0.60	29.54	46.00	-16.46	Peak
5	473.83	39.12	16.18	27.22	0.81	28.89	46.00	-17.11	Peak
6	903.31	38.91	21.69	25.11	1.46	36.95	46.00	-9.05	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

Notes: Above is below 1GHz test data. This report only shall the worst case mode for TX 2440MHz.

Radiated Emissions Result of Inside band and out of band

EUT: WIRELESS HEADPHONES M/N: NOKTA 2.4 GHz WIRELESS HEADPHONES（MAKRO 2.4 GHz WIRELESS HEADPHONES）

Power: DC 3.7V from battery

Test date: 2016-08-15 Test site: 3m Chamber Tested by: Reak Yang

Test mode: 2440MHz

Antenna polarity: Vertical

No	Freq (MHz)	Read Level (dBuV/m)	Antenna Factor (dB/m)	Cable loss(dB)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2440	90.92	27.60	3.97	34.97	87.52	114	26.48	PK
2	2440	69.78	27.60	3.97	34.97	66.38	94	27.62	AV
3	4880	58.30	31.38	5.75	34.14	61.29	74	12.71	PK
4	4880	42.64	31.38	5.75	34.14	45.63	54	8.37	AV
5	2400	49.77	27.62	3.94	34.97	46.36	74	27.64	PK
6	2400	41.56	27.62	3.94	34.97	38.15	54	15.85	AV
Antenna Polarity: Horizontal									
1	2440	83.51	27.60	3.97	34.97	80.11	114	33.89	PK
2	2440	64.24	27.60	3.97	34.97	60.84	94	33.16	AV
3	4880	57.89	31.38	5.75	34.14	60.88	74	13.12	PK
4	4880	38.67	31.38	5.75	34.14	41.66	54	12.34	AV
5	2400	50.24	27.62	3.94	34.97	46.83	74	27.17	PK
6	2400	41.03	27.62	3.94	34.97	37.62	54	16.38	AV

Note:
1, Measuring frequency from 1GHz to 25GHz
2,Spectrum Set for PK measure: RBW=1MHz, VBW=1MHz, Sweep time=Auto, Detector: PK
2,Spectrum Set for AV measure: RBW=1MHz, VBW=3MHz, Sweep time=Auto, Detector: RMS
3, Result = Read level + Antenna factor + cable loss-Amp factor
4, All the other emissions not reported were too low to read and deemed to comply with FCC limit.
5，For fundamental frequency ， RBW=3MHz, VBW=3MHz, Peak detector is for PK ，RMS detector is for AV

EUT: WIRELESS HEADPHONES M/N: NOKTA 2.4 GHz WIRELESS HEADPHONES（MAKRO 2.4 GHz WIRELESS HEADPHONES）

Power: DC 3.7V from battery

Test date: 2016-08-15 Test site: 3m Chamber Tested by: Reak Yang

Test mode: 2445MHz

Antenna polarity: Vertical

No	Freq (MHz)	Read Level (dBuV/m)	Antenna Factor (dB/m)	Cable loss (dB)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2445	91.66	27.59	4.00	34.97	88.28	114	25.72	PK
2	2445	72.35	27.59	4.00	34.97	68.97	94	25.03	AV
3	4890	64.00	31.41	5.75	34.12	67.04	74	6.96	PK
4	4890	42.94	31.41	5.75	34.12	45.98	54	8.02	AV
5	2483.5	51.41	27.59	4.00	34.97	48.03	74	25.97	PK
6	2483.5	40.83	27.59	4.00	34.97	37.45	54	16.55	AV
	/	/							

Antenna Polarity: Horizontal

1	2445	80.98	27.59	4.00	34.97	77.60	114	36.40	PK
2	2445	71.52	27.59	4.00	34.97	68.14	94	25.86	AV
3	4960	60.69	31.41	5.75	34.12	63.73	74	10.27	PK
4	4960	38.58	31.41	5.75	34.12	41.62	54	12.38	AV
5	2483.5	49.42	27.59	4.00	34.97	46.04	74	27.96	PK
6	2483.5	39.89	27.59	4.00	34.97	36.51	54	17.49	AV
	/	/							

Note:

1, Measuring frequency from 1GHz to 25GHz

2, Spectrum Set for PK measure: RBW=1MHz, VBW=1MHz, Sweep time=Auto, Detector: PK

2,Spectrum Set for AV measure: RBW=1MHz, VBW=3MHz, Sweep time=Auto, Detector: RMS

3, Result = Read level + Antenna factor + cable loss-Amp factor

4, All the other emissions not reported were too low to read and deemed to comply with FCC limit.

5，For fundamental frequency ， RBW=3MHz, VBW=3MHz, Peak detector is for PK ，RMS detector is for AV

6 POWER LINE CONDUCTED EMISSION

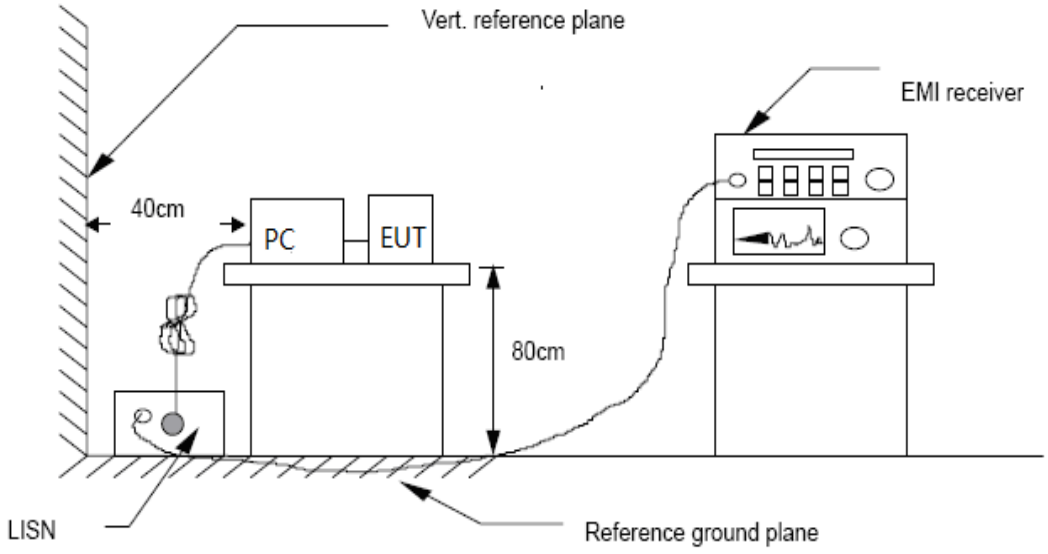
6.1 Conducted Emission Limits(15.207)

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 -0.50	66 -56*	56 - 46*
0.50 -5.00	56	46
5.00 -30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

6.2 Test Setup

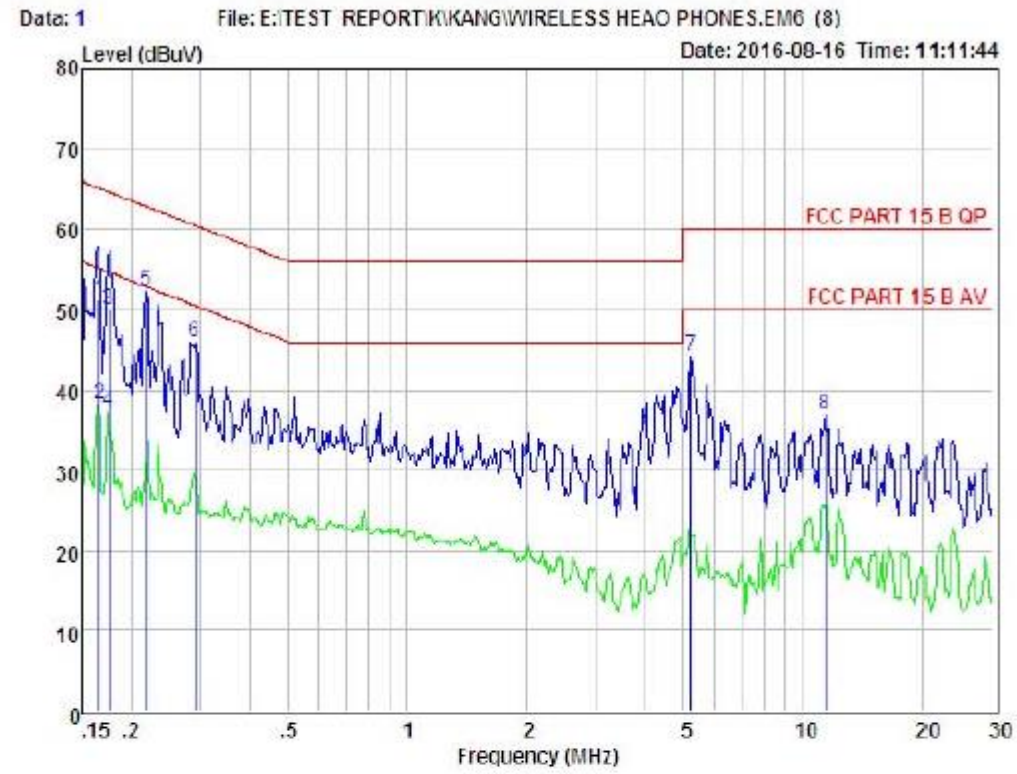


6.3 Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10-2013 on Conducted Emission Measurement.
The bandwidth of test receiver (R & S ESCS30) is set at 9 kHz.

6.4 Test Results

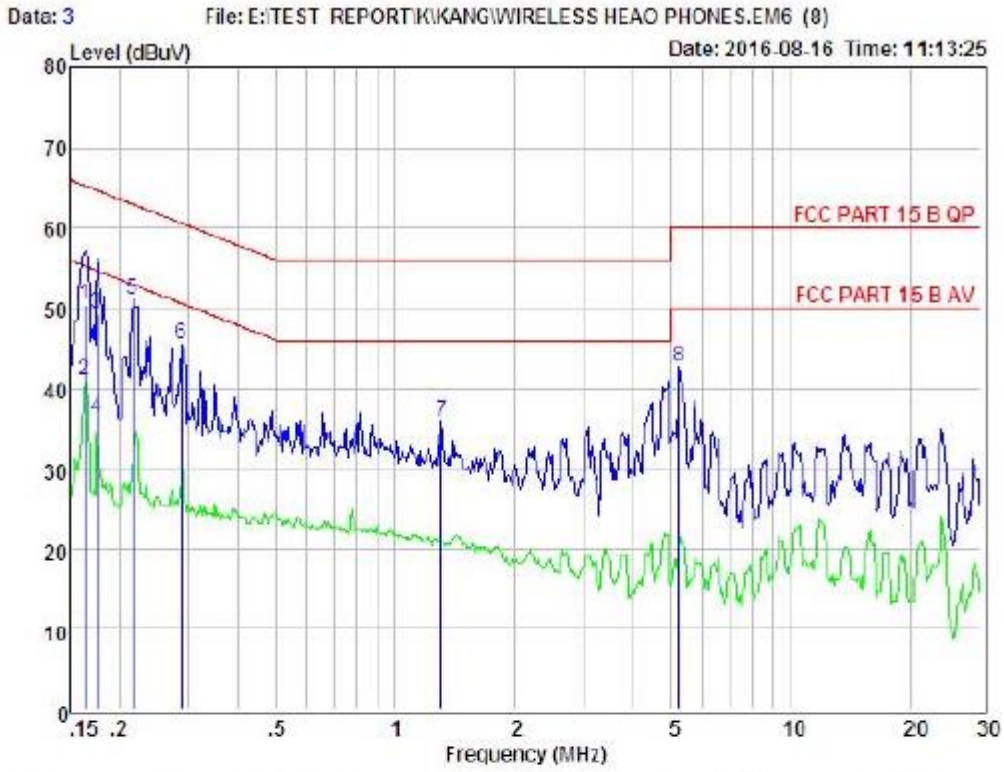
Pass



Condition : FCC PART 15 B QP POL: LINE Temp: 25℃ Hum: 51 %
EUT :
Model No :
Test Mode :
Power : AC 120V/60Hz
Test Engineer :
Remark :

Item	Freq	Read Level	LISN Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	0.166	41.50	0.03	-9.52	0.10	51.15	65.16	-14.01	QP
2	0.166	28.50	0.03	-9.52	0.10	38.15	55.16	-17.01	Average
3	0.176	40.30	0.03	-9.52	0.10	49.95	64.68	-14.73	QP
4	0.176	27.61	0.03	-9.52	0.10	37.26	54.68	-17.42	Average
5	0.219	42.73	0.03	-9.52	0.10	52.38	62.88	-10.50	Peak
6	0.289	36.19	0.03	-9.56	0.10	45.88	60.54	-14.66	Peak
7	5.221	33.92	0.10	-9.94	0.12	44.08	60.00	-15.92	Peak
8	11.438	26.44	0.24	-9.91	0.22	36.81	60.00	-23.19	Peak

Remark: Level = Read Level + LISN Factor - Preamp Factor + Cable Loss



Condition : FCC PART 15 B QP POL: NEUTRAL Temp: 25'C Hum: 51 %
EUT :
Model No :
Test Mode :
Power : AC 120V/60Hz
Test Engineer :
Remark :

Item	Freq	Read Level	LISN Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	0.164	40.80	0.03	-9.52	0.10	50.45	65.25	-14.80	QP
2	0.164	31.30	0.03	-9.52	0.10	40.95	55.25	-14.30	Average
3	0.176	39.61	0.03	-9.52	0.10	49.26	64.68	-15.42	QP
4	0.176	26.50	0.03	-9.52	0.10	36.15	54.68	-18.53	Average
5	0.216	41.31	0.03	-9.52	0.10	50.96	62.96	-12.00	Peak
6	0.286	35.78	0.03	-9.56	0.10	45.47	60.63	-15.16	Peak
7	1.310	25.92	0.05	-9.65	0.10	35.72	56.00	-20.28	Peak
8	5.221	32.44	0.10	-9.94	0.12	42.60	60.00	-17.40	Peak

Remark: Level = Read Level + LISN Factor - Preamp Factor + Cable Loss

7 Bandwidth

7.1 Test limit

Please refer section15.215

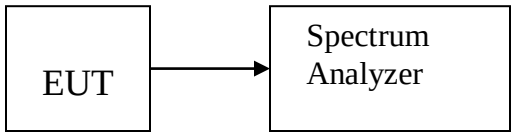
7.2 Method of measurement

a) The bandwidth is measured at an amplitude level reduced 20dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.

b)The test receiver RBW set 100Hz,VBW set 300KHz,Sweep time set auto.

c) Peak detector is used

7.3 Test Setup



7.4 Test Results

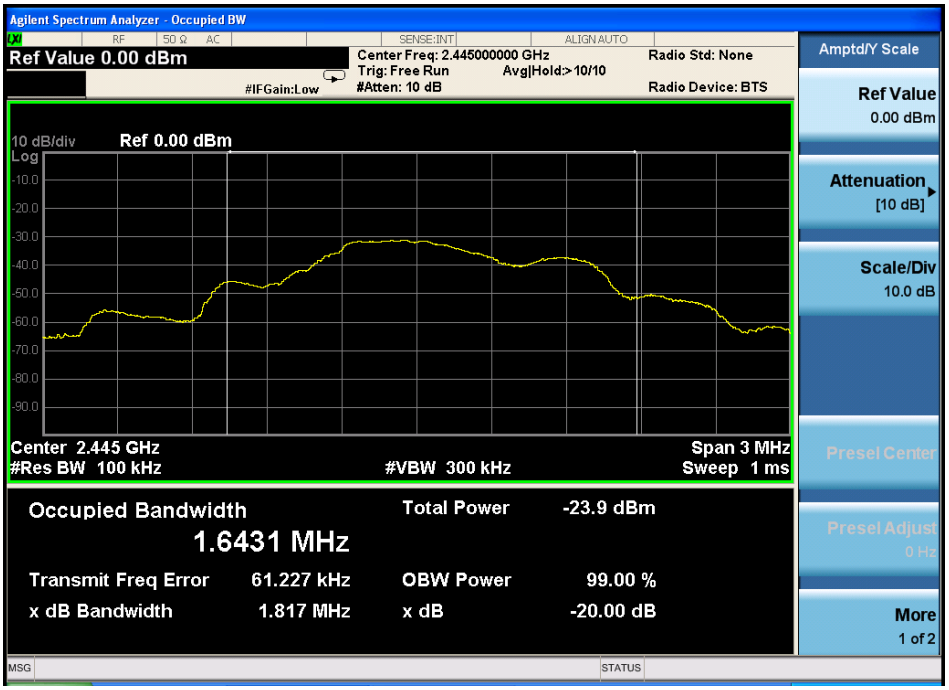
PASS.

Detailed information please see the following page.

Channel	Frequency (MHz)	20dB Bandwidth (KHz)	Limit (KHz)	Result
CH1	2440	2096	/	PASS
CH6	2445	1817	/	PASS

CH Low :

CH High :



8 Antenna Requirement

8.1 Standard Requirement

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.

8.2 Antenna Connected Construction

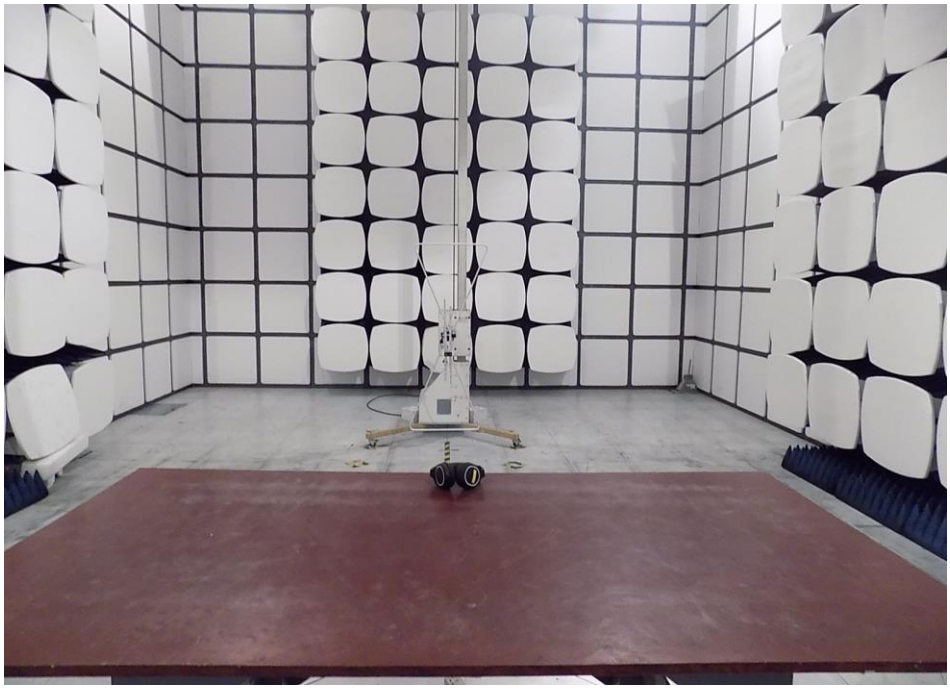
The directional gains of antenna used for transmitting is 1dBi, and is a PCB Antenna and no consideration of replacement. Please see EUT photo for details.

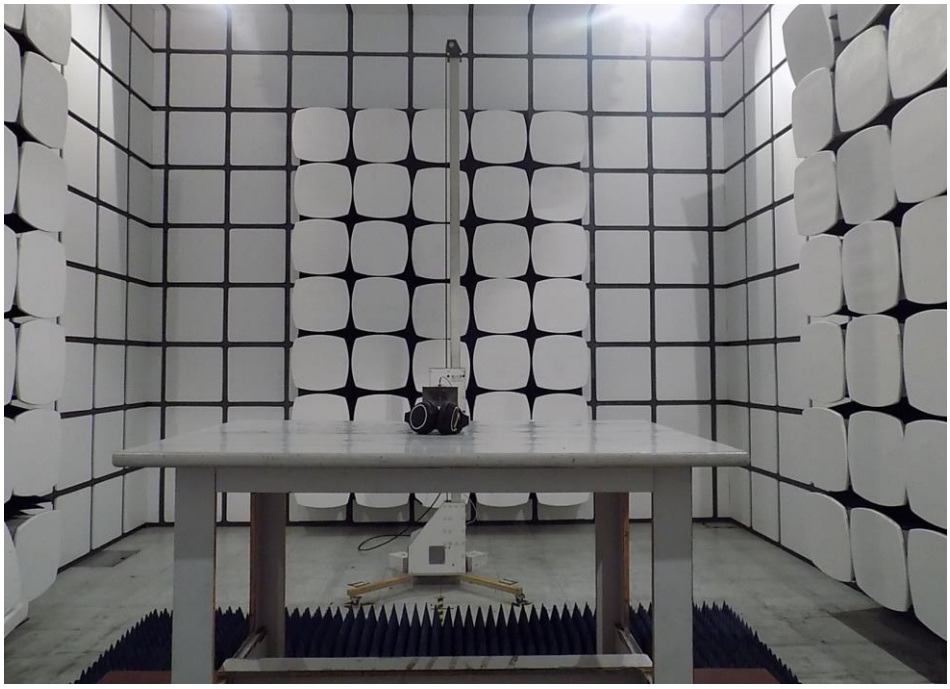
8.3 Result

The EUT antenna is PCB Antenna. It comply with the standard requirement.

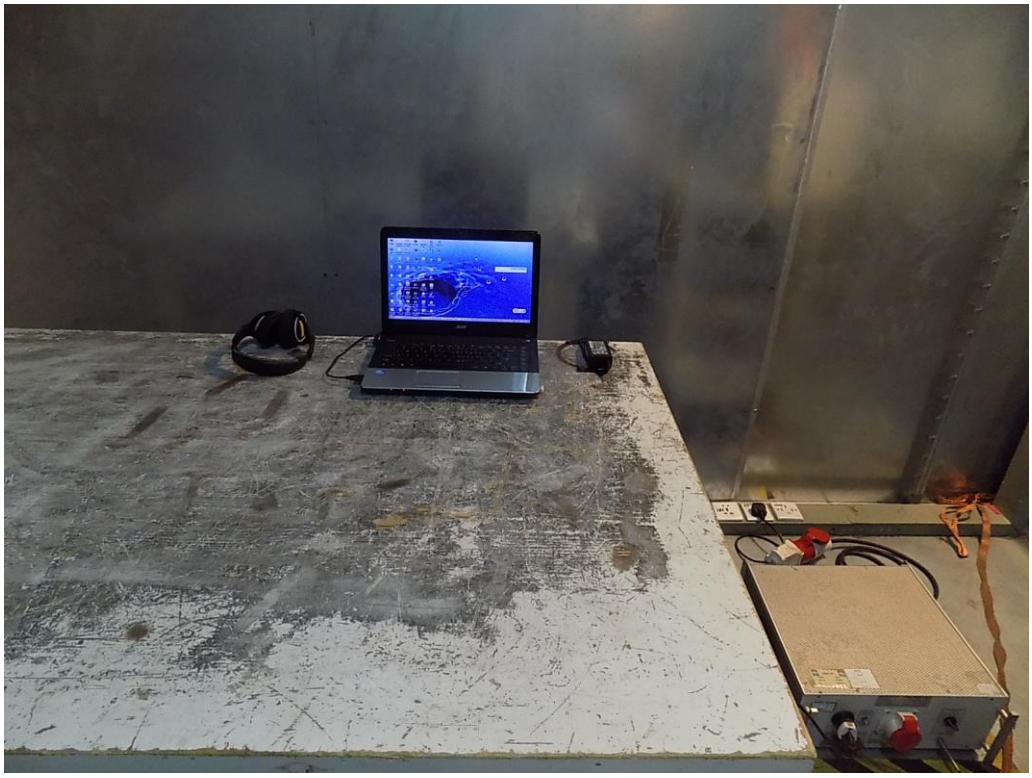
9 Photographs of Test Setup

9.1 Photos of Radiated emission

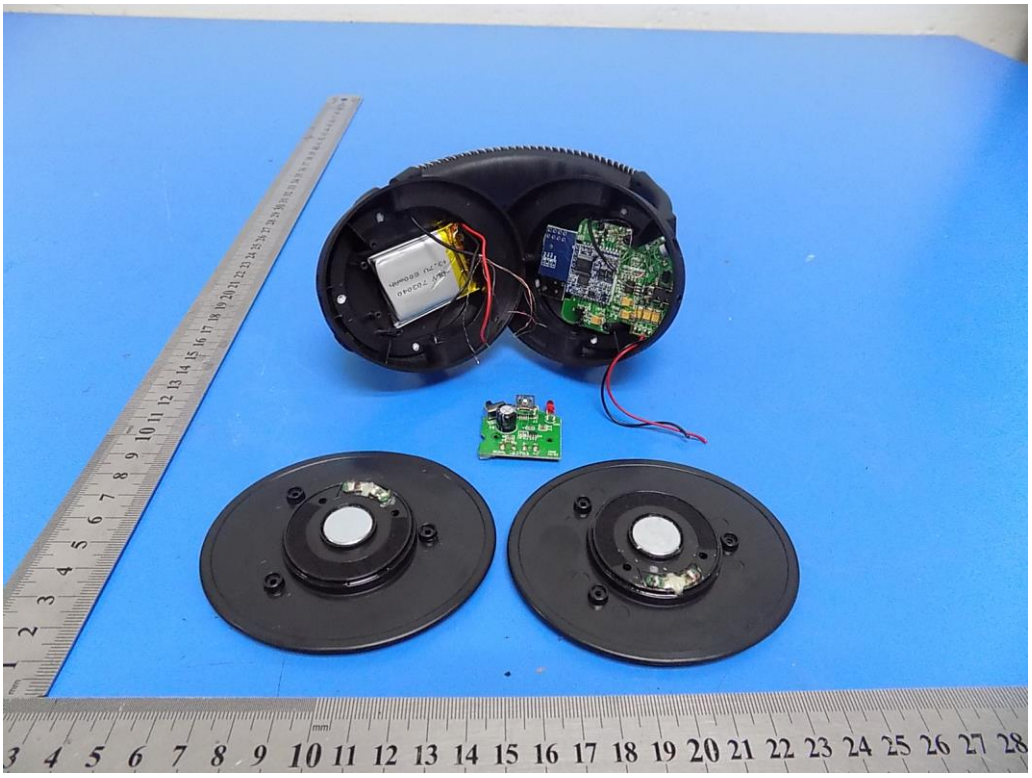


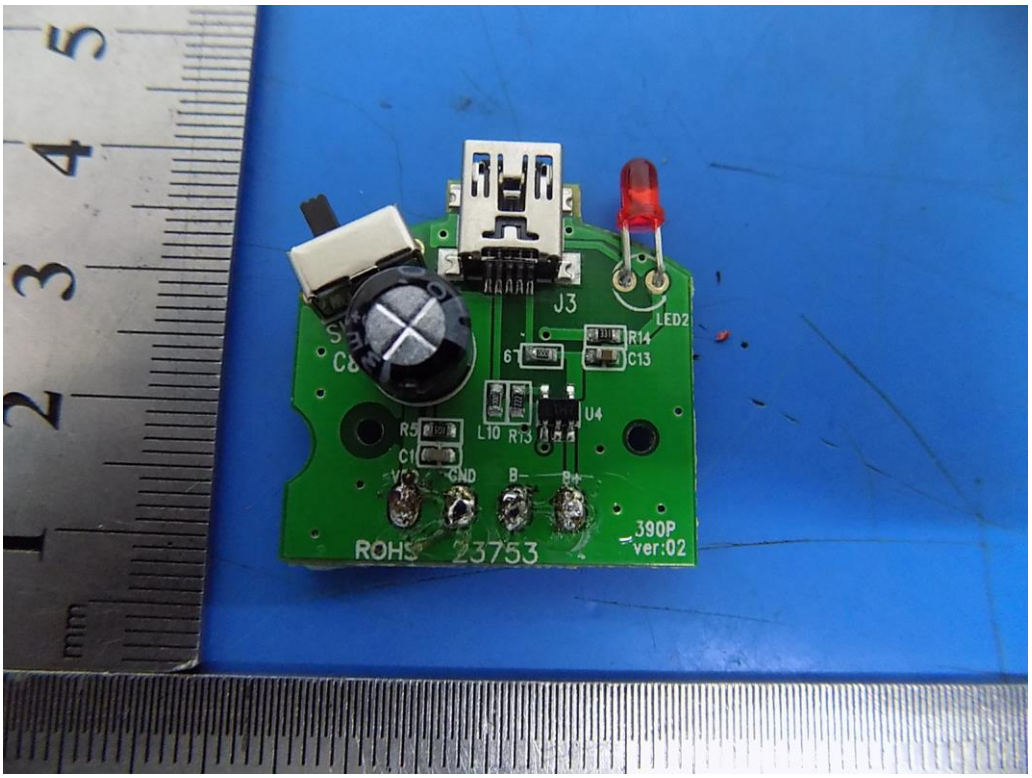


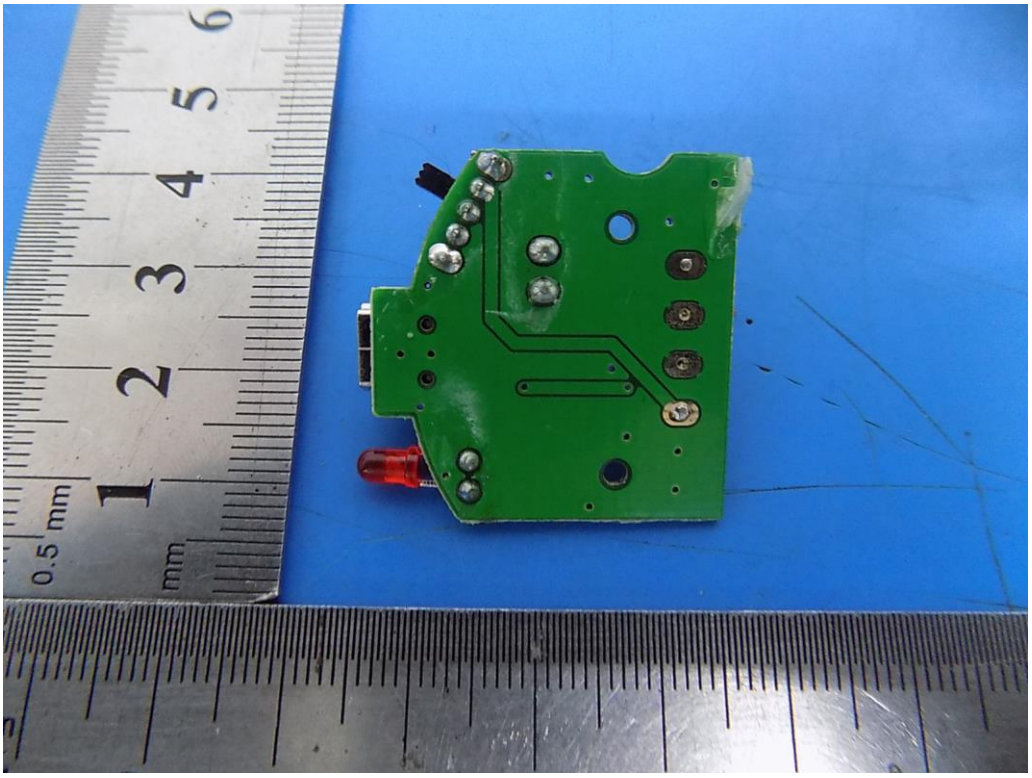
9.2 Photos of Power Line Conducted Emission

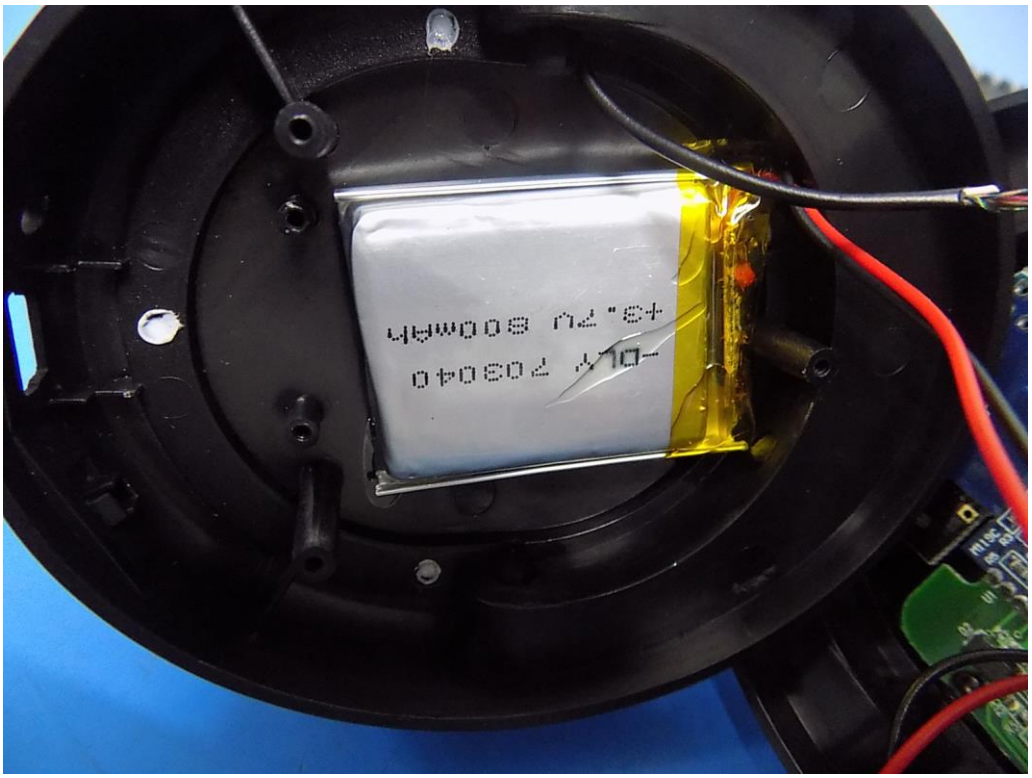


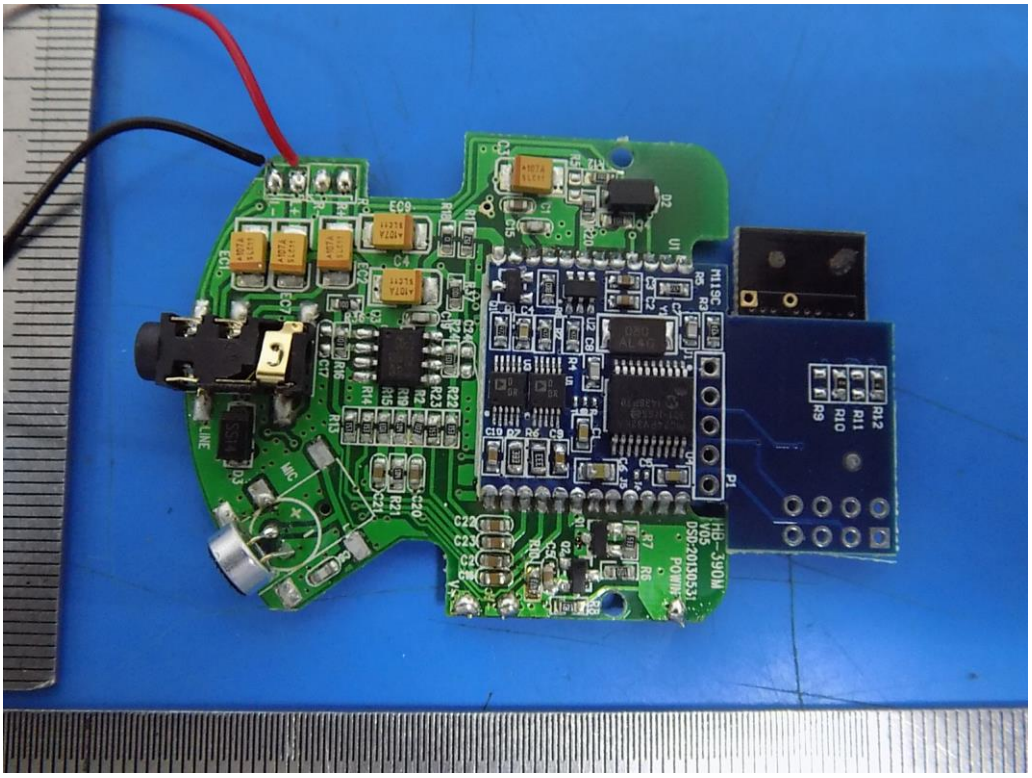
10 Photographs of EUT

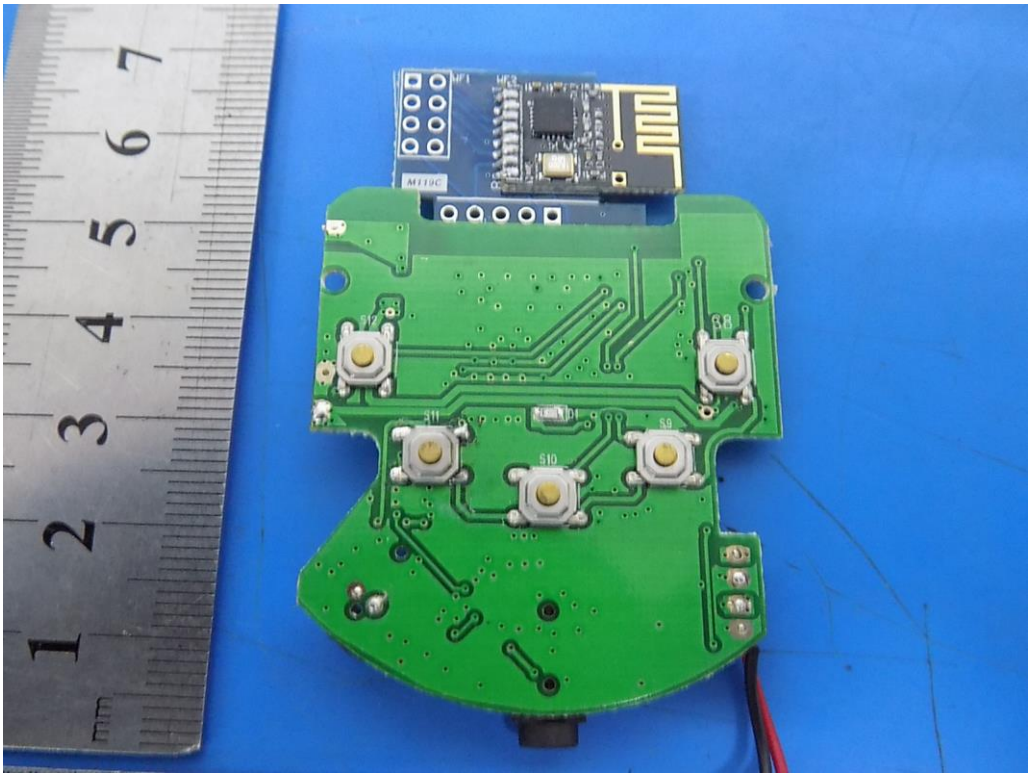



J3
LED2
R14
C13
U4
R5
C1
L10
R13
VCC
GND
B-
B+
ROHS
23753
390P
ver:02









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