



## Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 1 of 27

**Applicant** : Kell Electronics Limited  
Unit 509A, Harbour Crystal Centre, 100 Granville Road, Tsim Sha Tsui, Kowloon, Hong Kong

**Supplier / Manufacturer** : Kell Electronics Limited  
Unit 509A, Harbour Crystal Centre, 100 Granville Road, Tsim Sha Tsui, Kowloon, Hong Kong

**Description of Sample(s)** : Submitted sample(s) said to be  
Product: Baby Alert System  
Brand Name: KELL  
Model No.: BINC  
FCC ID: 2ARR8BINC22

**Date Samples Received** : 2018-10-10

**Date Tested** : 2018-10-18 to 2018-10-22

**Investigation Requested** : Perform ElectroMagnetic Interference measurement in accordance with FCC 47CFR [Codes of Federal Regulations] Part 15: 2017 and ANSI C63.10: 2013 for FCC Certification.

**Conclusions** : The submitted product COMPLIED with the requirements of Federal Communications Commission [FCC] Rules and Regulations Part 15. The tests were performed in accordance with the standards described above and on Section 2.2 in this Test Report.

**Remarks** : ---



  
CHEUNG Chi, Kenneth  
Authorized Signatory



## Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 2 of 27

### CONTENT:

Cover	Page 1 of 27	
Content	Page 2 of 27	
<b><u>1.0</u></b>	<b><u>General Details</u></b>	
1.1	Test Laboratory	Page 3 of 27
1.2	Equipment Under Test [EUT]	Page 3 of 27
1.3	Description of EUT operation	Page 3 of 27
1.4	Date of Order	Page 3 of 27
1.5	Submitted Sample(s)	Page 3 of 27
1.6	Test Duration	Page 3 of 27
1.7	Country of Origin	Page 3 of 27
<b><u>2.0</u></b>	<b><u>Technical Details</u></b>	
2.1	Investigations Requested	Page 4 of 27
2.2	Test Standards and Results Summary	Page 4 of 27
<b><u>3.0</u></b>	<b><u>Test Results</u></b>	
3.1	Emission	Page 5-23 of 27
<b><u>Appendix A</u></b>		
List of Measurement Equipment		Page 24 of 27
<b><u>Appendix B</u></b>		
Photograph(s) of Product		Page 25-27 of 27

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## Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 3 of 27

### 1.0 General Details

#### **1.1 Test Laboratory**

The Hong Kong Standards and Testing Centre Ltd.  
EMC Laboratory  
10 Dai Wang Street, Taipo Industrial Estate, New Territories, Hong Kong  
Telephone: 852 2666 1888  
Fax: 852 2664 4353

#### **1.2 Equipment Under Test [EUT]**

##### **Description of Sample(s)**

Product: Baby Alert System  
Manufacturer: Kell Electronics Limited  
Unit 509A, Harbour Crystal Centre, 100 Granville Road, Tsim Sha Tsui, Kowloon, Hong Kong  
Brand Name: KELL  
Model Number: BINC  
Rating: 5.0Vd.c. (Powered by USB port) / Li-ion rechargeable battery x1  
= 3.7Vd.c

#### **1.3 Description of EUT Operation**

The Equipment Under Test (EUT) is a Baby Alert System. It is a transceiver operating at 2402MHz~2480MHz and the RF signal was modulated by IC.

#### **1.4 Date of Order**

2018-10-10

#### **1.5 Submitted Sample(s):**

1 Sample

#### **1.6 Test Duration**

2018-10-18 to 2018-10-22

#### **1.7 Country of Origin**

China

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## Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 4 of 27

### 2.0 Technical Details

#### **2.1 Investigations Requested**

Perform Electromagnetic Interference measurements in accordance with FCC 47CFR [Codes of Federal Regulations] Part 15: 2017 Regulations and ANSI C63.10: 2013 for FCC Certification. The device was realized by test software.

#### **2.2 Test Standards and Results Summary Tables**

EMISSION Results Summary						
Test Condition	Test Requirement	Test Method	Class / Severity	Test Result		
				Pass	Failed	N/A
Field Strength of Fundamental & Harmonics Emissions	FCC 47CFR 15.249	ANSI C63.10: 2013	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radiated Emissions	FCC 47CFR 15.209	ANSI C63.10: 2013	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AC Mains Conducted Emissions	FCC 47CFR 15.207	ANSI C63.10: 2013	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Antenna requirement	FCC 47CFR 15.203	N/A	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: N/A - Not Applicable

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## Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 5 of 27

### **3.0 Test Results**

#### **3.1 Emission**

##### **3.1.1 Radiated Emissions**

Ambient temperature 25°C

Relative humidity 57%

Test Requirement:	FCC 47CFR 15.249 & FCC 47CFR 15.209
Test Method:	ANSI C63.10:2013
Test Date:	2018-10-18
Mode of Operation:	Tx mode

#### **Test Method:**

For emission measurements at or below 1 GHz, the sample was placed 0.8m above the ground plane of semi-anechoic Chamber\*. For emission measurements above 1 GHz, the sample was placed 1.5m above the ground plane of semi-anechoic Chamber\*. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

\* Semi-Anechoic chamber located on the G/F of The Hong Kong Standards and Testing Centre Ltd. with a metal ground plane filed with the FCC pursuant to section 2.948 of the FCC rules, with Registration Number: 607756.

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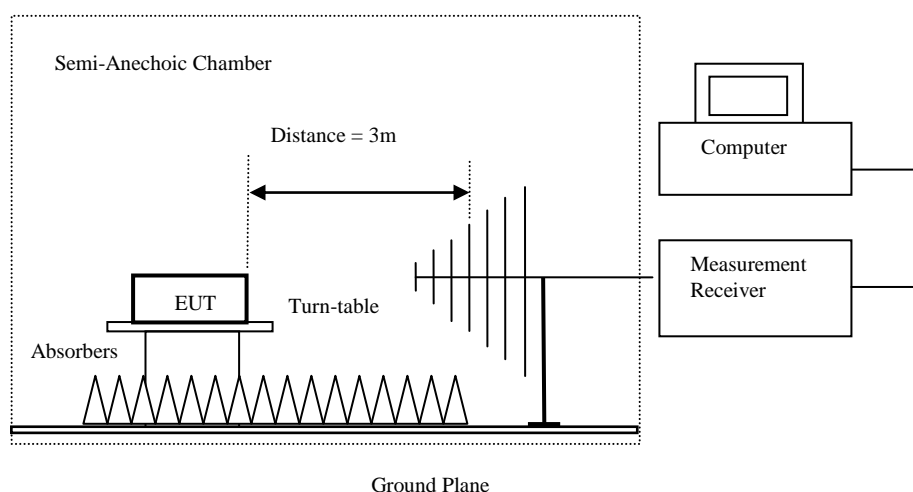
Date : 2018-10-23  
No. : HMD18100023

Page 6 of 27

### Spectrum Analyzer Setting:

9KHz – 30MHz (Pk & Av)	RBW: 10kHz VBW: 30kHz Sweep: Auto Span: Fully capture the emissions being measured Trace: Max. hold
30MHz – 1GHz (QP)	RBW: 120kHz VBW: 120kHz Sweep: Auto Span: Fully capture the emissions being measured Trace: Max. hold
Above 1GHz (Pk)	RBW: 1MHz VBW: 1MHz Sweep: Auto Span: Fully capture the emissions being measured Trace: Max. hold
Above 1GHz (Av)	RBW: 1MHz VBW: 10Hz Sweep: Auto Span: Fully capture the emissions being measured Trace: Max. hold

### Test Setup:



- Absorbers placed on top of the ground plane are for measurements above 1000MHz only.
- Measurements between 30MHz to 1000MHz made with Bi-log antennas, above 1000MHz horn antennas are used, 9kHz to 30MHz loop antennas are used.

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## Test Report

Date : 2018-10-23  
 No. : HMD18100023

Page 7 of 27

**Limits for Field Strength of Fundamental & Harmonics Emissions [FCC 47CFR 15.249]:**

Frequency Range of Fundamental [MHz]	Field Strength of Fundamental Emission [microvolts/meter]	Field Strength of Harmonics Emission [microvolts/meter]
902-928	50,000 [Quasi-Peak]	500 [Average]
2400-2483.5	50,000 [Average]	500 [Average]

**Results of Tx mode (Lowest Frequency Channel-2403 MHz): Pass**

<b>Field Strength of Fundamental Emissions Peak Value</b>						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
2403.00	48.3	36.8	85.1	17,988.7	500,000	Vertical
2403.00	50.3	36.4	86.7	21,702.0	500,000	Horizontal

<b>Field Strength of Fundamental Emissions Average Value</b>						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
2403.00	36.4	36.8	73.2	4,570.9	50,000	Vertical
2403.00	37.5	36.4	73.9	4,954.5	50,000	Horizontal

<b>Field Strength of Harmonics Emission Peak Value</b>						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
4806.0	3.8	41.5	45.3	184.1	5,000	Vertical
4806.0	3.1	42.4	45.5	188.4	5,000	Horizontal
7209.0	3.4	45.1	48.5	266.1	5,000	Vertical
7209.0	1.9	46.2	48.1	254.1	5,000	Horizontal
9612.0	2.3	48.0	50.3	327.3	5,000	Vertical
9612.0	1.2	48.8	50.0	316.2	5,000	Horizontal



## Test Report

Date : 2018-10-23  
 No. : HMD18100023

Page 8 of 27

<b>Field Strength of Harmonics Emission</b>						
<b>Average Value</b>						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
4806.0	-8.4	41.5	33.1	45.2	500	Vertical
4806.0	-9.6	42.4	32.8	43.7	500	Horizontal
7209.0	-11.0	45.1	34.1	50.7	500	Vertical
7209.0	-10.0	46.2	36.2	64.6	500	Horizontal
9612.0	-8.9	48.0	39.1	90.2	500	Vertical
9612.0	-11.4	48.8	37.4	74.1	500	Horizontal

**Results of Tx mode (Middle Frequency Channel- 2440MHz): Pass**

<b>Field Strength of Fundamental Emissions</b>						
<b>Peak Value</b>						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
2440.00	47.9	36.8	84.7	17,179.1	500,000	Vertical
2440.00	49.4	36.4	85.8	19,498.4	500,000	Horizontal

<b>Field Strength of Fundamental Emissions</b>						
<b>Average Value</b>						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
2440.00	36.0	36.8	72.8	4,365.2	50,000	Vertical
2440.00	36.7	36.4	73.1	4,518.6	50,000	Horizontal





## Test Report

Date : 2018-10-23  
 No. : HMD18100023

Page 9 of 27

<b>Field Strength of Harmonics Emission</b>						
<b>Peak Value</b>						
Frequency	Measured Level @3m	Correction Factor	Field Strength	Field Strength	Limit @3m	E-Field Polarity
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB $\mu$ V/m	$\mu$ V/m	$\mu$ V/m	
4880.0	3.5	41.6	45.1	179.9	5,000	Vertical
4880.0	2.7	42.5	45.2	182.0	5,000	Horizontal
7320.0	2.2	45.2	47.4	234.4	5,000	Vertical
7320.0	1.6	46.3	47.9	248.3	5,000	Horizontal
9760.0	2.4	48.1	50.5	335.0	5,000	Vertical
9760.0	0.7	48.9	49.6	302.0	5,000	Horizontal

<b>Field Strength of Harmonics Emission</b>						
<b>Average Value</b>						
Frequency	Measured Level @3m	Correction Factor	Field Strength	Field Strength	Limit @3m	E-Field Polarity
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB $\mu$ V/m	$\mu$ V/m	$\mu$ V/m	
4880.0	-8.2	41.6	33.4	46.8	500	Vertical
4880.0	-10.0	42.5	32.5	42.2	500	Horizontal
7320.0	-10.7	45.2	34.5	53.1	500	Vertical
7320.0	-11.4	46.3	34.9	55.6	500	Horizontal
9760.0	-10.3	48.1	37.8	77.6	500	Vertical
9760.0	-12.1	48.9	36.8	69.2	500	Horizontal

**Results of Tx mode (Highest Frequency Channel – 2480MHz): Pass**

<b>Field Strength of Fundamental Emissions</b>						
<b>Peak Value</b>						
Frequency	Measured Level @3m	Correction Factor	Field Strength	Field Strength	Limit @3m	E-Field Polarity
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB $\mu$ V/m	$\mu$ V/m	$\mu$ V/m	
2480.00	47.1	36.8	83.9	15,739.8	500,000	Vertical
2480.00	48.7	36.4	85.1	17,988.7	500,000	Horizontal



## Test Report

Date : 2018-10-23  
 No. : HMD18100023

Page 10 of 27

<b>Field Strength of Fundamental Emissions</b>						
<b>Average Value</b>						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
2480.00	34.9	36.8	71.7	3,845.9	50,000	Vertical
2480.00	36.2	36.4	72.6	4,265.8	50,000	Horizontal

<b>Field Strength of Harmonics Emission</b>						
<b>Peak Value</b>						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
4960.0	4.0	41.4	45.4	186.2	5,000	Vertical
4960.0	2.0	42.7	44.7	171.8	5,000	Horizontal
7440.0	1.5	45.6	47.1	226.5	5,000	Vertical
7440.0	1.0	46.5	47.5	237.1	5,000	Horizontal
9920.0	1.0	48.6	49.6	302.0	5,000	Vertical
9920.0	0.5	49.7	50.2	323.6	5,000	Horizontal

<b>Field Strength of Harmonics Emission</b>						
<b>Average Value</b>						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
4960.0	-8.5	41.4	32.9	44.2	500	Vertical
4960.0	-10.0	42.7	32.7	43.2	500	Horizontal
7440.0	-10.9	45.6	34.7	54.3	500	Vertical
7440.0	-11.0	46.5	35.5	59.6	500	Horizontal
9920.0	-11.2	48.6	37.4	74.1	500	Vertical
9920.0	-12.8	49.7	36.9	70.0	500	Horizontal

**Remarks:**

No additional spurious emissions found between lowest internal used/generated frequency and 30 MHz

Calculated measurement uncertainty (9kHz-30MHz): 2.0dB

(30MHz -1GHz): 4.9dB

(1GHz -6GHz): 4.02dB

(6GHz -26.5GHz): 4.03dB

Emissions in the vertical and horizontal polarizations have been investigated and the worst-case test results are recorded in this report.

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## Test Report

Date : 2018-10-23  
 No. : HMD18100023

Page 11 of 27

**Radiated Emissions Measurement:**

**Limit :**

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 5.205(c)).

**Result: RF Radiated Emissions (1GHz-26GHz) (Lowest)-GFSK**

<b>Field Strength of Band-edge Compliance Peak Value</b>						
Frequency MHz	Measured Level @3m dB $\mu$ V	Correction Factor dB/m	Field Strength dB $\mu$ V/m	Limit @3m dB $\mu$ V/m	Margin dB $\mu$ V/m	E-Field Polarity
2400.0	3.9	36.8	40.7	74.0	33.3	Vertical

<b>Field Strength of Band-edge Compliance Average Value</b>						
Frequency MHz	Measured Level @3m dB $\mu$ V	Correction Factor dB/m	Field Strength dB $\mu$ V/m	Limit @3m dB $\mu$ V/m	Margin dB $\mu$ V/m	E-Field Polarity
2400.0	-6.8	36.8	30.0	54.0	24.0	Vertical

**Result: RF Radiated Emissions (1GHz-26GHz) (Highest) -GFSK**

<b>Field Strength of Band-edge Compliance Peak Value</b>						
Frequency MHz	Measured Level @3m dB $\mu$ V	Correction Factor dB/m	Field Strength dB $\mu$ V/m	Limit @3m dB $\mu$ V/m	Margin dB $\mu$ V/m	E-Field Polarity
2483.5	4.0	36.4	40.4	74.0	33.6	Horizontal

<b>Field Strength of Band-edge Compliance Average Value</b>						
Frequency MHz	Measured Level @3m dB $\mu$ V	Correction Factor dB/m	Field Strength dB $\mu$ V/m	Limit @3m dB $\mu$ V/m	Margin dB $\mu$ V/m	E-Field Polarity
2483.5	-5.9	36.4	30.5	54.0	23.5	Horizontal

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## Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 12 of 27

### Limits for Radiated Emissions [FCC 47 CFR 15.209 Class B]:

Frequency Range [MHz]	Quasi-Peak Limits [ $\mu$ V/m]
0.009-0.490	2400/F (kHz)
0.490-1.705	24000/F (kHz)
1.705-30	30
30-88	100
88-216	150
216-960	200
Above960	500

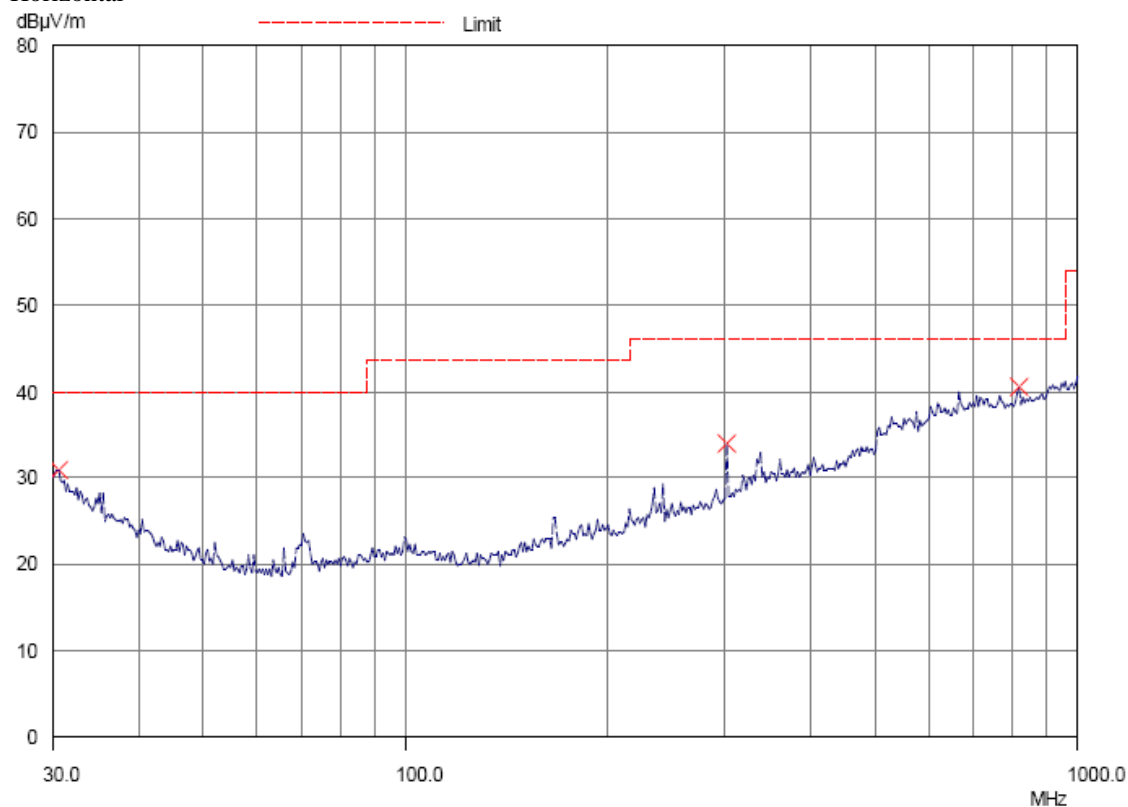
The emission limits shown in the above table are based on measurement employing a CISPR quasi-peak detector and above 1000MHz are based on measurements employing an average detector.

### Results of TX mode (9kHz – 30MHz): PASS

Emissions detected are more than 20 dB below the FCC Limits

### Results of TX mode (30MHz – 1GHz)(2403MHz worst case): PASS

Horizontal



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## Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 13 of 27

Results of TX mode (30MHz – 1GHz) (2403MHz worst case): PASS

Radiated Emissions Quasi-Peak					
Emission Frequency MHz	E-Field Polarity	Level @3m dB $\mu$ V/m	Limit @3m dB $\mu$ V/m	Level @3m $\mu$ V/m	Limit @3m $\mu$ V/m
30.4	Horizontal	27.8	40.0	24.5	100
299.8	Horizontal	33.9	46.0	49.5	200
816.3	Horizontal	36.6	46.0	67.6	200

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## Test Report

Date : 2018-10-23  
 No. : HMD18100023

Page 14 of 27

**Limits for Radiated Emissions [FCC 47 CFR 15.209 Class B]:**

Frequency Range [MHz]	Quasi-Peak Limits [ $\mu$ V/m]
0.009-0.490	2400/F (kHz)
0.490-1.705	24000/F (kHz)
1.705-30	30
30-88	100
88-216	150
216-960	200
Above960	500

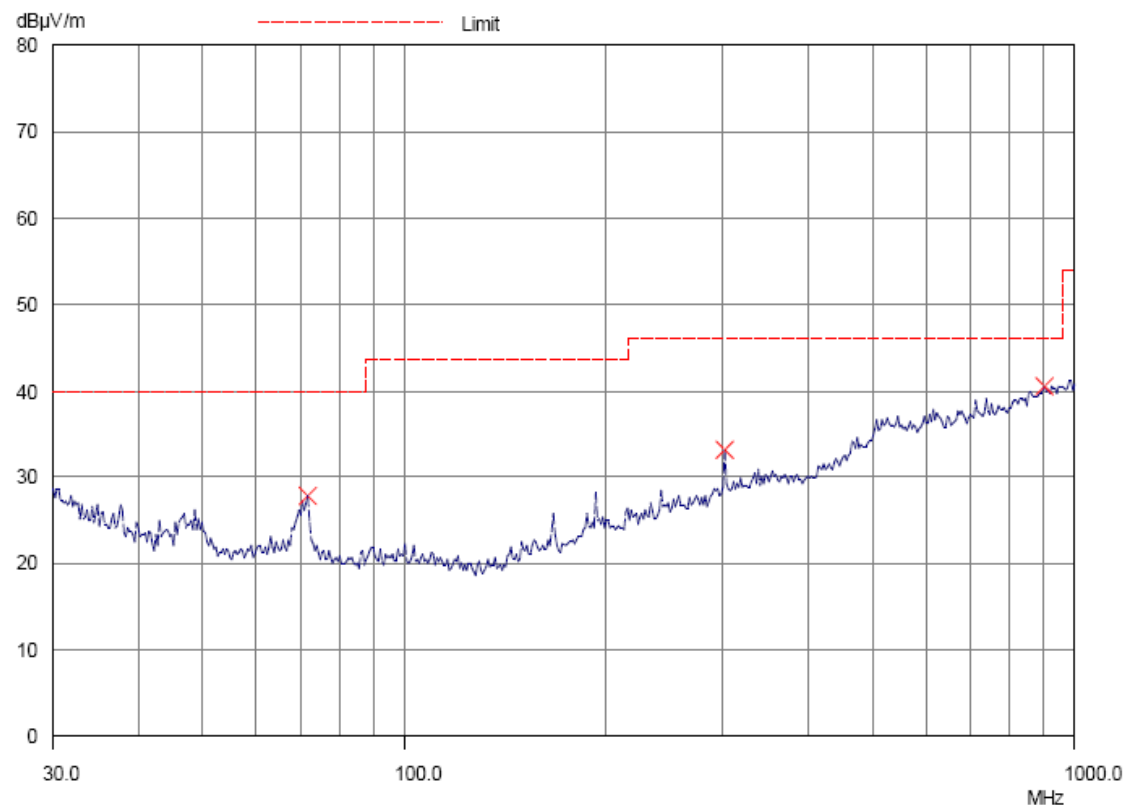
The emission limits shown in the above table are based on measurement employing a CISPR quasi-peak detector and above 1000MHz are based on measurements employing an average detector.

**Results of TX mode (9kHz – 30MHz): PASS**

Emissions detected are more than 20 dB below the FCC Limits

**Results of TX mode (30MHz – 1GHz) (2403MHz worst case): PASS**

Vertical



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## Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 15 of 27

Results of TX mode (30MHz – 1GHz) (2403MHz worst case): PASS

Radiated Emissions Quasi-Peak					
Emission Frequency MHz	E-Field Polarity	Level @3m dB $\mu$ V/m	Limit @3m dB $\mu$ V/m	Level @3m $\mu$ V/m	Limit @3m $\mu$ V/m
71.6	Vertical	26.8	40.0	21.9	100
299.8	Vertical	33.0	46.0	44.7	200
897.3	Vertical	37.1	46.0	71.6	200

Remarks:

Calculated measurement uncertainty (30MHz – 1GHz): 4.9dB

Emissions in the vertical and horizontal polarizations have been investigated and the worst-case test results are recorded in this report.

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## Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 16 of 27

### 3.1.2 AC Mains Conducted Emissions (0.15MHz to 30MHz)

Ambient temperature 25°C

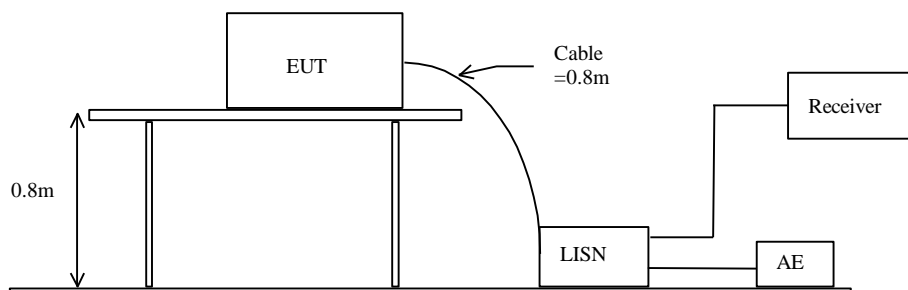
Relative humidity 57%

Test Requirement:	FCC 47CFR 15.249 & FCC 47CFR 15.207
Test Method:	ANSI C63.10:2013
Test Date:	2018-10-19
Mode of Operation:	TX mode
Test Voltage:	120V a.c. 60Hz

#### Test Method:

The test was performed in accordance with ANSI C63.10:2013, with the following: an initial measurement was performed in peak and average detection mode on the live line, any emissions recorded within 30dB of the relevant limit line were re-measured using quasi-peak and average detection on the live and neutral lines with the worst case recorded in the table of results.

#### Test Setup:





## Test Report

Date : 2018-10-23  
 No. : HMD18100023

Page 17 of 27

**Limits for Conducted Emissions (FCC 47 CFR 15.207):**

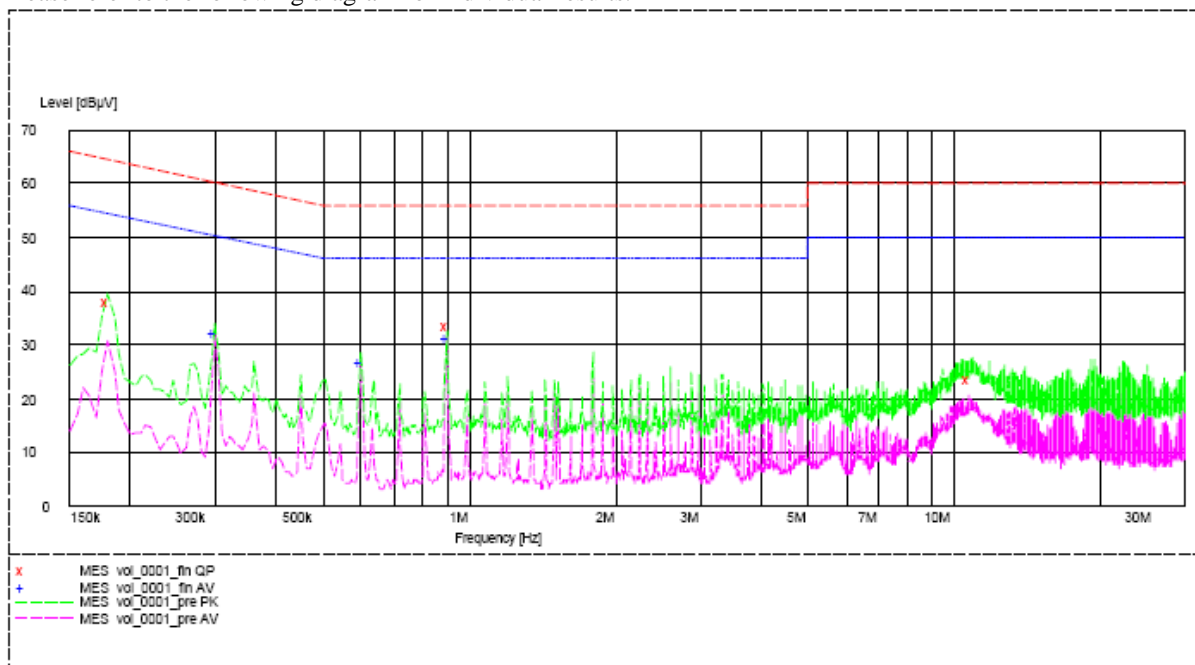
Frequency Range [MHz]	Quasi-Peak Limits [dB $\mu$ V]	Average [dB $\mu$ V]
0.15-0.5	66 to 56*	56 to 46*
0.5-5.0	56	46
5.0-30.0	60	50

\* Decreases with the logarithm of the frequency.

Limits for Conducted Emissions Test, please refer to limit lines (Quasi-Peak and Average) in the following diagram.

**Results of TX mode (Connected to PC, PC mains) (L): PASS**

Please refer to the following diagram for individual results.



Conductor Live or Neutral	Frequency MHz	Quasi-peak		Average	
		Level dB $\mu$ V	Limit dB $\mu$ V	Level dB $\mu$ V	Limit dB $\mu$ V
Live	0.180	38.2	65.0	-*-	-*-
Live	0.900	33.4	56.0	-*-	-*-
Live	10.795	23.9	60.0	-*-	-*-
Live	0.300	-*-	-*-	32.2	50.0
Live	0.600	-*-	-*-	27.0	46.0
Live	0.900	-*-	-*-	31.5	46.0

## Test Report

Date : 2018-10-23  
 No. : HMD18100023

Page 18 of 27

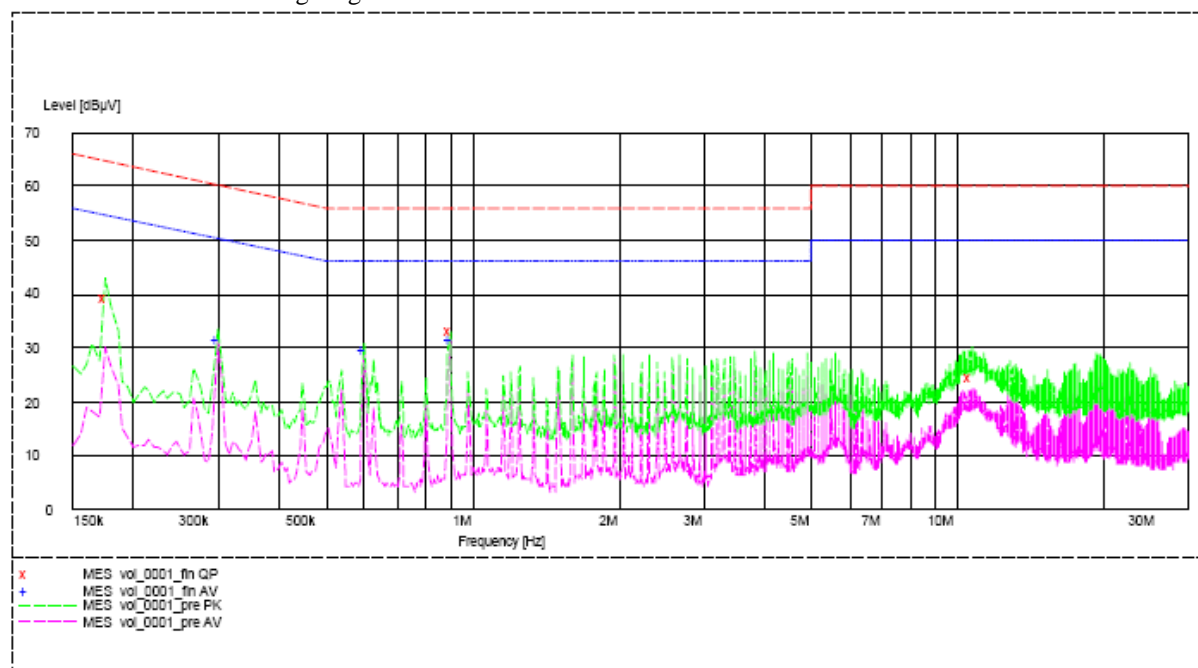
Frequency Range [MHz]	Quasi-Peak Limits [dB $\mu$ V]	Average [dB $\mu$ V]
0.15-0.5	66 to 56*	56 to 46*
0.5-5.0	56	46
5.0-30.0	60	50

\* Decreases with the logarithm of the frequency.

Limits for Conducted Emissions Test, please refer to limit lines (Quasi-Peak and Average) in the following diagram.

**Results of TX mode(Connected to PC, PC mains) (N): PASS**

Please refer to the following diagram for individual results.



Conductor Live or Neutral	Frequency MHz	Quasi-peak		Average	
		Level dB $\mu$ V	Limit dB $\mu$ V	Level dB $\mu$ V	Limit dB $\mu$ V
Neutral	0.175	39.4	65.0	-*-	-*-
Neutral	0.900	33.3	56.0	-*-	-*-
Neutral	10.710	24.5	60.0	-*-	-*-
Neutral	0.300	-*-	-*-	31.9	50.0
Neutral	0.600	-*-	-*-	29.5	46.0
Neutral	0.900	-*-	-*-	31.7	46.0

**Remarks:**

Calculated measurement uncertainty (0.15MHz – 30MHz): 3.2dB

-\*- Emission(s) that is far below the corresponding limit line.



## Test Report

**Date : 2018-10-23**  
**No. : HMD18100023**

**Page 19 of 27**

### **3.1.3 Antenna Requirement**

Ambient temperature 25°C

Relative humidity 57%

**Test Requirements: § 15.203**

#### **Test Specification:**

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.

#### **Test Results:**

This is PCB antenna. There is no external antenna, the antenna gain =0dBi. User is unable to remove or changed the Antenna.

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## Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 20 of 27

### 3.1.4 20dB Bandwidth of Fundamental Emission

Ambient temperature 25°C

Relative humidity 57%

Test Requirement: FCC 47 CFR 15.249  
Test Method: ANSI C63.10:2013  
Test Date: 2018-10-22  
Mode of Operation: Tx mode

#### **Test Method:**

The bandwidth is measured at an amplitude level reduced from the reference level by a specified ratio. 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.

#### **Test Setup:**

As Test Setup of clause 3.1.1 in this test report.

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# Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 21 of 27

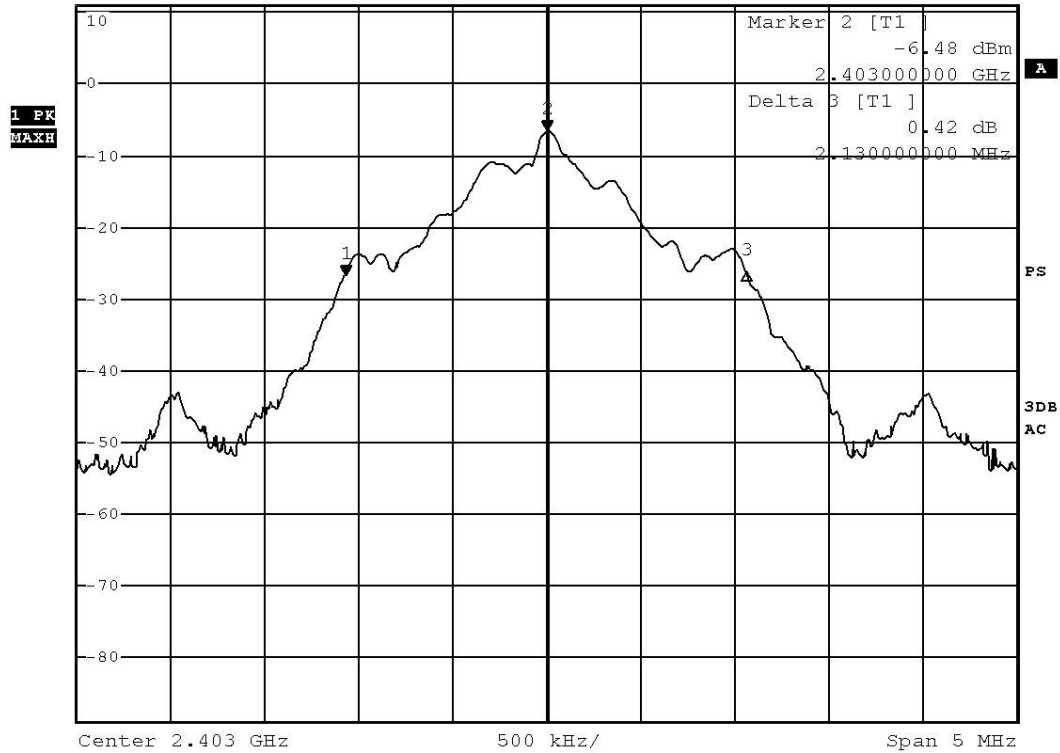
### Limits for 20dB Bandwidth of Fundamental Emission (Low Frequency Channel):

Frequency Range [MHz]	20dB Bandwidth [MHz]
2403.0	2.13

### 20dB Bandwidth of Fundamental Emission (2403MHz)



\*RBW 100 kHz Marker 1 [T1]  
 \*VBW 300 kHz -26.55 dBm  
 Ref 11 dBm Att 45 dB SWT 2.5 ms 2.401930000 GHz



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## Test Report

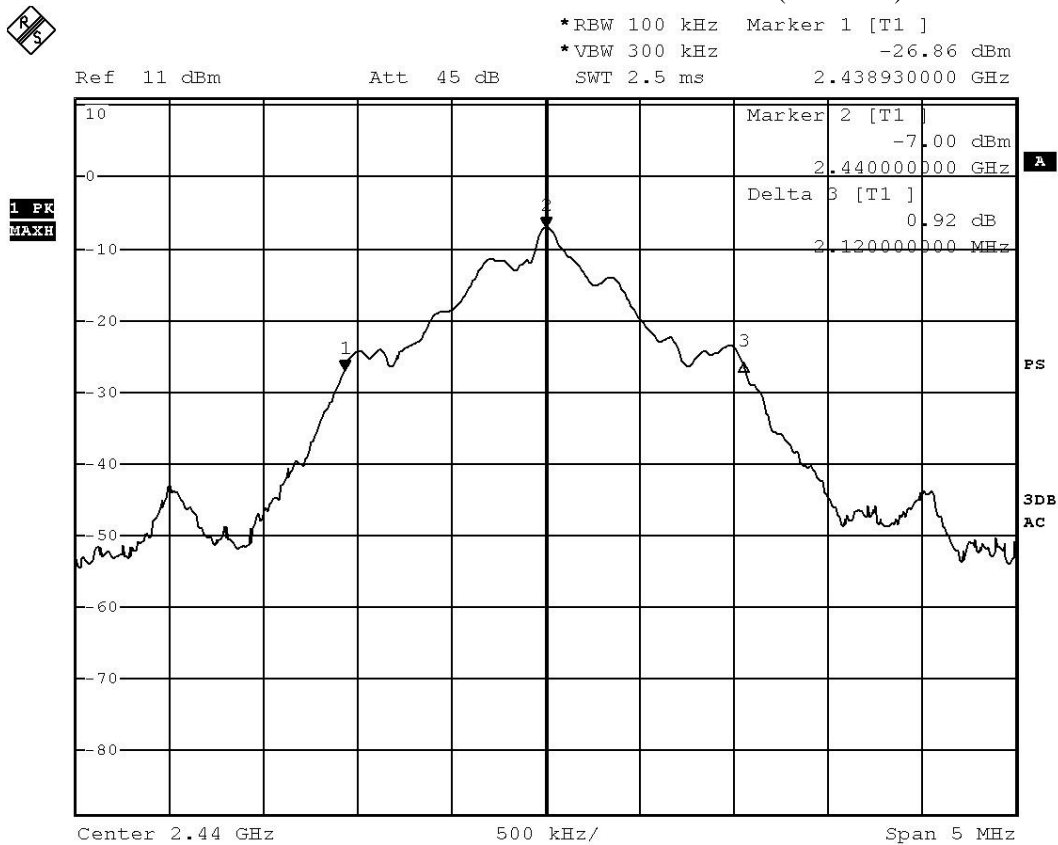
Date : 2018-10-23  
 No. : HMD18100023

Page 22 of 27

**Limits for 20dB Bandwidth of Fundamental Emission (Middle Frequency Channel):**

Frequency Range [MHz]	20dB Bandwidth [MHz]
2440.0	2.12

20dB Bandwidth of Fundamental Emission (2440MHz)





## Test Report

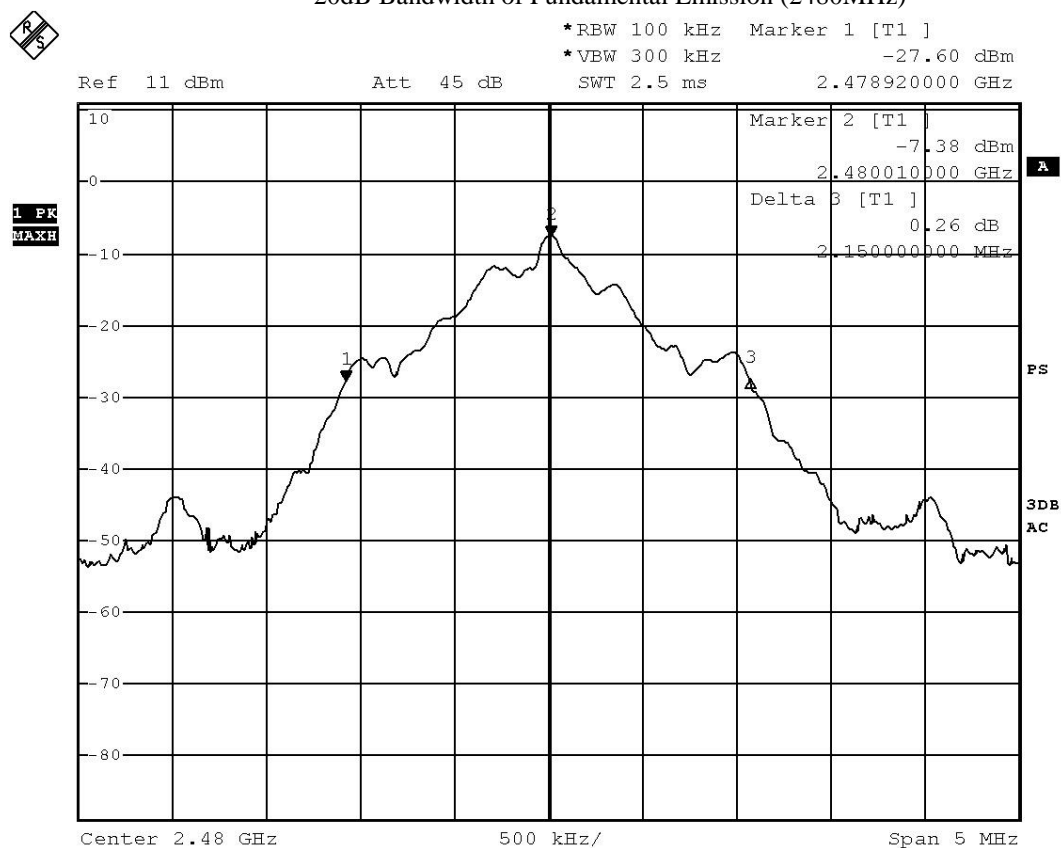
Date : 2018-10-23  
 No. : HMD18100023

Page 23 of 27

### Limits for 20dB Bandwidth of Fundamental Emission (High Frequency Channel):

Frequency Range [MHz]	20dB Bandwidth [MHz]
2480.0	2.15

20dB Bandwidth of Fundamental Emission (2480MHz)





## Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 24 of 27

### Appendix A

#### List of Measurement Equipment

##### Radiated Emission

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL	DUE CAL
EM215	MULTIDEVICE CONTROLLER	EMCO	2090	00024676	N/A	N/A
EM217	ELECTRIC POWERED TURNTABLE	EMCO	2088	00029144	N/A	N/A
EM218	ANECHOIC CHAMBER	ETS-LINDGREN	FACT-3	--	2018/01/24	2019/01/24
EM356	ANTENNA POSITIONING TOWER	ETS-LINDGREN	2171B	00150346	N/A	N/A
EM354	BICONILOG ANTENNA	ETS-LINDGREN	3143B	00142073	2018/03/29	2020/03/29
EM229	EMI TEST RECEIVER	R&S	ESIB40	100248	2018/06/01	2019/06/01
EM276	BROADBAND HORN ANTENNA	A-INFOMW	JXTXLB-10180-SF	J2031090903007	2018/04/27	2020/04/27
EM300	PYRAMIDAL STANDARD GAIN HORN ANTENNA	ETS-LINDGREN	3160-09	00130130	2018/05/13	2019/05/13
EM301	PYRAMIDAL STANDARD GAIN HORN ANTENNA	ETS-LINDGREN	3160-10	00130988	2018/05/13	2019/05/13
EM302	PRECISION OMNIDIRECTIONAL DIPOLE (1 – 6GHZ)	SEIBERSDORF LABORATORIES	POD 16	161806/L	2018/05/11	2020/05/11
EM303	PRECISION OMNIDIRECTIONAL DIPOLE (6 – 18GHZ)	SEIBERSDORF LABORATORIES	POD 618	6181908/L	2018/05/11	2020/05/11
EM353	LOOP ANTENNA	ETS_LINDGREN	6502	00206533	2018/04/16	2020/04/16
EM045	POWER METER	ROHDE & SCHWARZ	NRVD	843246/028	2018/06/01	2020/06/01

##### Line Conducted

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL	DUE CAL
EM119	LISN	R & S	ESH3-Z5	0831.5518.52	2017/11/29	2018/11/29
EM145	EMI TEST RECEIVER	R & S	ESCS 30	830245/021	2018/06/01	2019/06/01
EM179	IMPULSE LIMITER	ROHDE & SCHWARZ	ESH3-Z2	357-8810.52/54	2018/01/11	2019/01/11
EM154	SHIELDING ROOM	SIEMENS MATSUSHITA COMPONENTS	N/A	803-740-057-99A	2017/02/02	2022/02/02
N/A	MEASUREMENT AND EVALUATION SOFTWARE	ROHDE & SCHWARZ	BSIB-K1	V1.20	N/A	N/A

Remarks:-

N/A Not Applicable or Not Available

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## Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 25 of 27

### Appendix B

#### Photographs of EUT

**View of the product**



**View of the product**



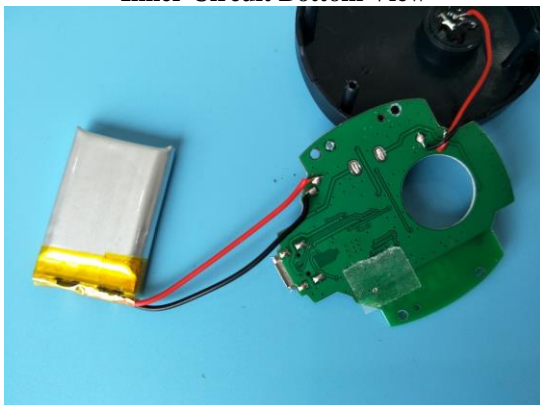
**Inside View of the product**



**Inner Circuit Top View**



**Inner Circuit Bottom View**



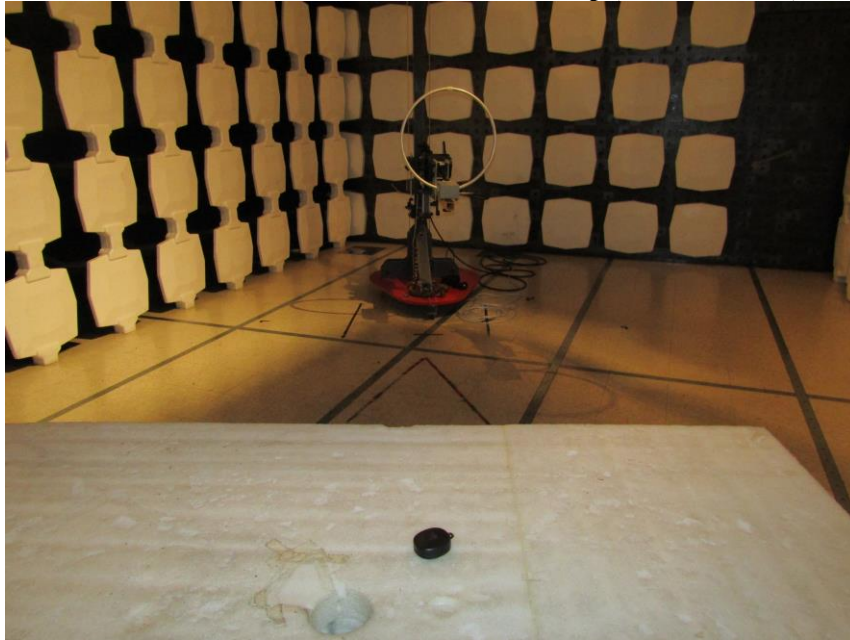
## Test Report

Date : 2018-10-23  
No. : HMD18100023

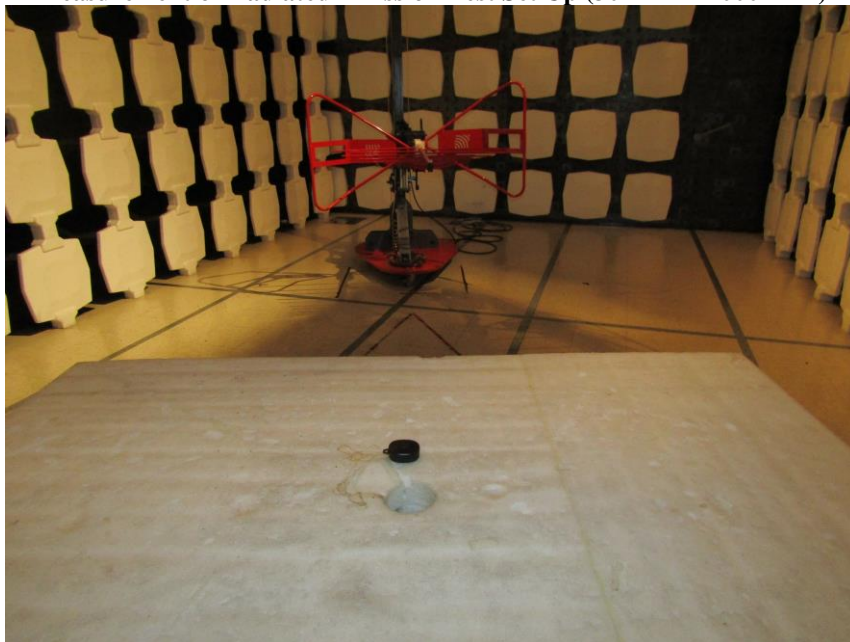
Page 26 of 27

### Photographs of EUT

**Measurement of Radiated Emission Test Set Up (9kHz – 30MHz)**



**Measurement of Radiated Emission Test Set Up (30MHz – 1000MHz)**



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## Test Report

Date : 2018-10-23  
No. : HMD18100023

Page 27 of 27

### Photographs of EUT

**Measurement of Radiated Emission Test Set Up (above 1000MHz)**



**Measurement of Conducted Emission Test Set Up**



**\*\*\*\*\* End of Test Report \*\*\*\*\***

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