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Applicant:	inMusic Brands	Inc
	200 Scenic View RI 02864 USA	Drive Cumberland,
Manufacturer:	inMusic Brands	Inc
	200 Scenic View RI 02864 USA	Drive Cumberland,
Description of Sample(s):	Submitted sampl	e(s) said to be
	Product:	Bluetooth Receiver with XLR outputs
	Brand Name:	ALTO PROFESSIONAL
	Model No.:	BLUETOOTH <sup>®</sup> TOTAL MK2
	FCC ID:	Y4O-TBT2
Date Samples Received:	2020-08-24	
Date Tested:	2020-09-02 to 20	)20-09-12
Investigation Requested:	Perform Electrol FCC 47CFR [Co C63.10:2013 for	Magnetic Interference measurement in accordance with des of Federal Regulations] Part 15: 2018 and ANSI FCC Certification.
Conclusions:	The submitted pr Communications The tests were po above and on Sec	roduct <u>COMPLIED</u> with the requirements of Federal Commission [FCC] Rules and Regulations Part 15. erformed in accordance with the standards described ction 2.2 in this Test Report.
Remarks:	FCC C2PC	NONG KONG ST READ

Dr. LEE Kam Chuen, Authorized Signatory

30 DNI153



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### <u>1.0</u> <u>General Details</u>

1.1 Test Laboratory

Test EndotratoryThe Hong Kong Standards and Testing Centre Ltd.EMC LaboratoryHead Office: 10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong KongTelephone:852 2666 1888Fax:852 2664 4353

FCC Test Firm Registration Number <u>723883</u> Designation Number <u>HK0001</u>

### 1.2 Equipment Under Test [EUT] Description of Sample(s) Product Name: Manufacturer:

Brand Name:

Model Number:

Rating:



inMusic Brands Inc

Bluetooth Receiver with XLR outputs

200 Scenic View Drive Cumberland,

### **1.2.1** Description of EUT Operation

Internal Product Code:

The Equipment Under Test (EUT) is a 2.4GHz Bluetooth Audio Receiver. The tests were conducted under RF Test mode to maintain continuous transmission during test. The transmission signal is digital modulated with channel frequency range 2402-2480MHz. The R.F. signal was modulated by IC. The test mode was controlled by test software – "FCC\_assist.exe "used during tests, which was provided by manufacturer.

**1.3** Date of Order

2020-08-24

- **1.4** Submitted Sample(s): 2 Samples
- **1.5 Test Duration** 2020-09-02 to 2020-09-12
- **1.6 Country of Origin** Not Provided

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### 1.7 **RF Module Details**

Module Model Number:	SS-6904-M
Module FCC ID:	N/A
Module Transmission Type:	Bluetooth BR +EDR + BLE
Modulation:	GFSK, π/4-DQPSK
Data Rates:	2Mbps (Max)
Frequency Range:	2400-2483.5MHz
Carrier Frequencies:	2402MHz - 2480MHz

Module Specification (specification provided by manufacturer)

### 1.8 **Channel List**

Channel	Frequency (MHz)
0 - 78 (BR + EDR)	2402 - 2480
0-40 (BLE)	2402 - 2480

### 1.9 **Permissive Change Information**

This report is a supplementary report of report no. HM20080050 and HM20080062 class II permissive change. The EUT modification concerned with following:

	Original	Additional
Model no.	BLUETOOTH ® ULTIMATE	BLUETOOTH ® TOTAL MK2
	(Internal Product Code: TBT2)	(Internal Product Code: TBT3)
XLR port	2	1
Bulit-in rechargeable battery	Model: 503035	Model: 602030
	3.7V 500mAh	3.7V 300mAh
Mono / Stereo switch	Yes	No

The modified parts do not affect RF performance, thus radiated emission and conducted emission tests applied and presented in the following sections.

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### 2.0 <u>Technical Details</u>

### 2.1 Investigations Requested

Perform Electromagnetic Interference measurements in accordance with FCC 47CFR [Codes of Federal Regulations] Part 15: 2018 Regulations. ANSI C63.10:2013 for FCC Certification. The device was realized by test software.

### 2.2 Test Standards and Results Summary Tables

	E Resi	EMISSION ults Summary				
Test Condition	Test Requirement	Test Method	Class /	Т	est Result	
			Severity	Pass	Failed	N/A
Radiated Spurious Emissions	FCC 47CFR 15.209	ANSI C63.10:2013	N/A	$\boxtimes$		
AC Mains Conducted Emissions	FCC 47CFR 15.207	ANSI C63.10:2013	N/A	$\boxtimes$		

Note: N/A - Not Applicable



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### 2.3 Table for Test Modes

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate in the table below is the worst case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test software	FCC_assist.exe
Power level setting	10

Duty Cycle				
DH5	77%			
2DH5	77%			
BLE	85%			



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- 3.0 Test Results
- 3.1 Emission
- 3.1.1 Radiated Emissions

Test Requirement: Test Method: Test Date: Mode of Operation: FCC 47CFR 15.209 ANSI C63.10:2013 2020-09-07 Tx mode

### **Test Method:**

For emission measurements at or below 1 GHz, the sample was placed 0.8m above the ground plane of semianechoic 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, 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. The measured field strength would be calculated as EIRP.

### **Test Setup:**



Ground Plane

- 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.

-For emissions testing at or below 1 GHz, the table height shall be 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m.

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Limits for Radiated Emissions FCC 47 CFR 15.247 Class B]:

Frequency Range	Quasi-Pea	ak Limits
[MHz]	[µV/m]	[dBµV/m]
0.009-0.490	2400/F (kHz)	48.5 - 13.8
0.490-1.705	24000/F (kHz)	33.8 - 23.0
1.705-30	30	29.0
30-88	100	40.0
88-216	150	43.5
216-960	200	46.0
Above960	500	54.0

Frequency Range	Peak Limits	Average Limits
[MHz]	[dBµV/m]	[dBµV/m]
Above 1000	74.0	54.0

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.

Spectrum Analyzer and EMI Test Receiver setting parameters are referred to RSS-Gen, ANSI 63.10, KDB 558074 and CISPR 16-1-1

Frequency range	RBW	VBW
9 kHz to 150 kHz	200 Hz	
0.15 MHz to 30 MHz	9 kHz	2 DDW
30 MHz to 1 000 MHz	120 kHz	J X KD W
1 GHz to 40 GHz	1 MHz	

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Start 18.0 GHz

Pre-scan graph of result of Tx mode Horizontal

₽ Spectrum Ref Level 87.00 dBµV/m ● RBW 1 MHz SWT 68 ms - VBW 3 MHz Att 0 dB Mode Auto Sweep TDF ⊖1Pk View 80 dBµV/m 70 dBµV/r 60 dBµV/r 50 dBµV/ Murryman printerallister termonities Astern 40 dBµV/r why I half 30 dBµV/m A. 1. 1. 1. Mullio 20 dBµV/m 10 dBµV/m 0 dBµV/m--10 dBµV/m Start 1.0 GHz 691 pts Stop 18.0 GHz Spectrum Ref Level 87.00 dBµV/m RBW 1 MHz 0 dB SWT 32 ms 👄 VBW 3 MHz Att Mode Auto Sweep TDF 1Pk Max 80 dBµV/m 70 dBµV/m 60 dBµV/m

# 10k Max 80 dBµV/m 70 dBµV/m 60 dBµV/m 90 dBµV/m

691 pts

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Stop 26.0 GHz

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Spectrum								
Ref Level 87.00	dBµ∀/m		RBW 1 MHz					( .
e Att	0 dB <b>SW</b>	<b>/T</b> 68 ms 👄 🕯	VBW 3 MHz	Mode Au	uto Sweep			
TDF								
			1	<u> </u>				T
80 dBµV/m	-							
70 dBµV/m								
60 dBµV/m								
50 dBuV/m								July the Mart
						~ workywhite	how when the	willing on the second sec
40 dBµV/m	-		1.A	www.authuko	And we have a set of the			
		mannahum	maker and a					
30 dBµV/m	hand then -		-					-
multion when								
20 dBµV/m		5	1	-				
10 dBu)//m				c				
0 dBµV/m-						-		
and the second								
-10 dBµV/m					-			
Start 1.0 GHz			601				Stor	18 0 CHz
			091	pts			3(0)	10.0 012
			091	pts			3(0)	. 10.0 GH2
Spectrum			091	pts			3.01	
Spectrum Ref Level 87.00	dBµV/m	• 1	RBW 1 MHz	prs			3.0	(₩ (\)
Spectrum Ref Level 87.00 ( Att	dBµV/m OdB <b>S₩</b>	● I /T 32 ms ● \	RBW 1 MHz VBW 3 MHz	Mode Au	to Sweep			(Tota driz
Spectrum Ref Level 87.00 ( Att TDF • 1Pk Max	dвµV/m 0 dв <b>S₩</b>	● I /T 32 ms ● V	RBW 1 MHz /BW 3 MHz	Mode Au	ito Sweep			(The second seco
Spectrum Ref Level 87.00 ( Att TDF 1Pk Max	dBµV/m 0 dB <b>SW</b>	● I /T 32 ms ● 1	RBW 1 MHz /BW 3 MHz	Mode Au	to Sweep			(The second seco
Spectrum Ref Level 87.00 ( Att TDF 1Pk Max 80 dBµV/m	dBµV/m 0 dB <b>S₩</b>	● F /T 32 ms ● Y	RBW 1 MHz VBW 3 MHz	Mode Au	to Sweep			
Spectrum Ref Level 87.00 ( Att TDF 1Pk Max 80 dBµV/m-	d8µV/m 0 dB <b>S₩</b>	● I 7T 32 ms ● V	NBW 1 MHz NBW 3 MHz	Mode Au	ito Sweep			
Spectrum           Ref Level           Att           TDF           1Pk           Max           80           dBµV/m	dвµV/m 0 dв <b>sw</b>	● I 7T 32 ms ● V	BBW 1 MHz BBW 3 MHz	Mode Au	to Sweep			
Spectrum           Ref Level         87.00 (***********************************	dвµV/m 0 dв <b>sw</b>	/T 32 ms • 1	RBW 1 MHz /BW 3 MHz	Mode Au	to Sweep			
Spectrum           Ref Level 87.00 (           Att           TDF           1Pk Max           80 dBµV/m           70 dBµV/m           60 dBµV/m	dBµV/m 0 dB SW	/T 32 ms • 1	BBW 1 MHz /BW 3 MHz	Mode Au	to Sweep			
Spectrum           Ref Level 87.00 €           Att           TDF           1Pk Max           80 dBµV/m           70 dBµV/m           60 dBµV/m           50 dBµV/m		۲T 32 ms • ۲	BW 1 MHz BW 3 MHz	Mode Au	to Sweep	Jul-whenter	weller well	
Spectrum           Ref Level 87.00 (€)           Att           TDF           1Pk Max           80 dBµV/m           70 dBµV/m           60 dBµV/m           50 dBµV/m		T 32 ms • V	BW 1 MHz BW 3 MHz	Mode Au	to Sweep	y how mand the	When we	
Spectrum Ref Level 87.00 ( Att TDF 1Pk Max 80 dBµV/m 70 dBµV/m 60 dBµV/m 40 dBµV/m 40 dBµV/m	dBµV/m 0 dB <b>SW</b>	PT 32 ms • V	BW 1 MHz BW 3 MHz	Mode Au	to Sweep	y de la constante de	When when	
Spectrum Ref Level 87.00 ( Att TDF 1Pk Max 80 dBµV/m 70 dBµV/m 60 dBµV/m 50 dBµV/m 40 dBµV/m	IBµV/m 0 dB <b>SW</b>	IT 32 ms • 1	BW 1 MHz BW 3 MHz	Mode Au	to Sweep	Julianus		
Spectrum Ref Level 87.00 ( Att TDF 1Pk Max 80 dBµV/m 70 dBµV/m 60 dBµV/m 40 dBµV/m 30 dBµV/m	dBµ∨/m 0 dB <b>sw</b>	IT 32 ms • 1	BW 1 MHz BW 3 MHz	Mode Au	to Sweep	a share a shar	when	
Spectrum Ref Level 87.00 ( Att TDF 1Pk Max 80 dBµV/m 70 dBµV/m 60 dBµV/m 40 dBµV/m 30 dBµV/m 20 dBµV/m		IT 32 ms • 1	BW 1 MHz BW 3 MHz BW 3 MHz	Mode Au	to Sweep	Jul ~ where w	whith	
Spectrum Ref Level 87.00 ( Att TDF 1Pk Max 80 dBµV/m 70 dBµV/m 60 dBµV/m 40 dBµV/m 30 dBµV/m 20 dBµV/m		/Т 32 ms ● Г	BW 1 MHz /BW 3 MHz	Mode Au	to Sweep	and a start of	weller and the second	
Spectrum Ref Level 87.00 ( Att TDF 1Pk Max 80 dBµV/m 70 dBµV/m 60 dBµV/m 40 dBµV/m 30 dBµV/m 20 dBµV/m 10 dBµV/m 10 dBµV/m		IT 32 ms • 1	BBW 1 MHz /BW 3 MHz	Mode Au	to Sweep	e fal marter a	worker and	
Spectrum Ref Level 87.00 ( Att TDF 1Pk Max 80 dBµV/m 70 dBµV/m 60 dBµV/m 40 dBµV/m 30 dBµV/m 20 dBµV/m 10 dBµV/m 10 dBµV/m		IT 32 ms • 1	BBW 1 MHz /BW 3 MHz	Mode Au	to Sweep	a de la constante de	weber and the second	
Spectrum           Ref Level 87.00 f           Att           TDF           1Pk Max           80 dBµV/m           70 dBµV/m           60 dBµV/m           40 dBµV/m           30 dBµV/m           20 dBµV/m           10 dBµV/m           10 dBµV/m		IT 32 ms • 1	BW 1 MHz BW 3 MHz	Mode Au	to Sweep	e for the second s	weller and a second	
Spectrum           Ref Level 87.00 f           Att           TDF           1Pk Max           80 dBµV/m           70 dBµV/m           60 dBµV/m           40 dBµV/m           30 dBµV/m           20 dBµV/m           10 dBµV/m           0 dBµV/m	IBUV/m 0 dB SW	AT 32 ms • V	BW 1 MHz BW 3 MHz	Mode Au	to Sweep	Julian	When we are a constrained of the	
Spectrum           Ref Level 87.00 f           Att           TDF           • 1Pk Max           80 dBµV/m           70 dBµV/m           60 dBµV/m           40 dBµV/m           30 dBµV/m           20 dBµV/m           10 dBµV/m           10 dBµV/m           10 dBµV/m		T 32 ms • 1	BW 1 MHz BW 3 MHz	Mode Au	to Sweep		When we have a second s	

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### Result of Tx mode (Above 1GHz): Pass

Field Strength of Spurious Emissions						
			Peak Value			
Frequency	Measured	Correction	Field	Limit	Margin	E-Field
	Level @3m	Factor	Strength	@3m		Polarity
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dBuV/m	
2399.9	33.1	27.9	61.0	70.4	9.4	Vertical
4804.0	5.1	32.1	37.2	74.0	36.8	Vertical
7206.0	-3.0	38.6	35.6	74.0	38.4	Vertical
9608.0	-3.3	41.3	38.0	74.0	36.0	Vertical

	Field Strength of Spurious Emissions						
		A	verage Valu	e			
Frequency	Measured	Correction	Field	Limit	Margin	E-Field	
	Level @3m	Factor	Strength	@3m		Polarity	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dBuV/m		
2399.9	22.0	27.9	49.9	56.2	6.3	Vertical	
4804.0	-0.5	32.1	31.6	54.0	22.4	Vertical	
7206.0	-5.9	38.6	32.7	54.0	21.3	Vertical	
9608.0	-6.9	41.3	34.4	54.0	19.6	Vertical	

	Field Strength of Spurious Emissions						
			Peak Value				
Frequency	Measured	Correction	Field	Limit	Margin	E-Field	
	Level @3m	Factor	Strength	@3m		Polarity	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dBuV/m		
2399.9	32.8	27.9	60.7	70.4	9.7	Horizontal	
4804.0	8.5	32.1	40.6	74.0	33.4	Horizontal	
7206.0	-3.3	38.6	35.3	74.0	38.7	Horizontal	
9608.0	-3.6	41.3	37.7	74.0	36.3	Horizontal	

	Field Strength of Spurious Emissions						
		A	verage Valu	e			
Frequency	Measured	Correction	Field	Limit	Margin	E-Field	
	Level @3m	Factor	Strength	@3m		Polarity	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dBuV/m		
2399.9	30.0	27.9	57.9	66.7	8.8	Horizontal	
4804.0	1.3	32.1	33.4	54.0	20.6	Horizontal	
7206.0	-5.2	38.6	33.4	54.0	20.6	Horizontal	
9608.0	-6.3	41.3	35.0	54.0	19.0	Horizontal	

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Remarks:

No additional spurious emissions found between lowest internal used/generated frequency and 30 MHz \* Denotes restricted band of operation.

Measurements were made using a peak detector. Any emission less than 1000MHz and falling within the restricted bands of FCC Rules Part 15 Section 15.205 and the limits of FCC Rules Part 15 Section 15.209 were applied.

Correction Factor included Antenna Factor and Cable Attenuation.

Calculated measurement uncertainty	:	9kHz-30MHz	3.3dB
		30MHz -1GHz	4.6dB
		1GHz -26GHz	4.4dB

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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### Pre-scan result of Tx mode (30MHz – 1GHz): Horizontal

Spectrum													
Ref Level	77.00 dB	µV/m odn	0.UIT	0.7	R	RBW	100	kHz		A. 4- C			
TDF		U UB	511	9.7 ms	• •	0 99	300	KITZ	Moue	Auto Sweep	)		
●1Pk View		1	Т					ŕ		1	1		ř
70 dBµV/m		-			-			2					
60 dBµV/m-					-			_					
50 dBµV/m-								0					
FCC15BF	Ţ		dia materia	mulut	wy	arout	luin	www	percention	- wearing the	been a defensioned	unhanouther	unontrentont
30 dBUV/mt	white here and a second	and the second second						-				0	
20 dBµV/m−													
10 dBµV/m-								0					
0 dBµV/m								-					
-10 dBµV/m-													
-20 dBµV/m-													
Start 30.0 M	MHz						69	1 pts				Sto	p 1.0 GHz

## Vertical

Spectrum							
Ref Level	77.00 dBµV/m		RBW 100 kHz				
👄 Att	0 dB	SWT 9.7 ms 🖷 🕈	VBW 300 kHz	Mode Auto Swee	эр		
TDF							
●1Pk View							
70 dBµV/m-							
60 dBµV/m-							
50 dBµV/m-							
FCC15BF		a how the	Malandoronalenter	a Landrand and a state of the s	and and a second and a second	menonwhile	Hurmannin
30 dBUV	wayda at how we	www.dealers.com					
20 dBµV/m-							
10 dBµV/m-							
0 dBµV/m							
-10 dBµV/m-							
-20 dBµV/m-							
Start 30.0 M	/IHz		691 pts			Sto	p 1.0 GHz

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### Result of Tx mode (30MHz – 1GHz): PASS

	Field Strength of Fundamental and Harmonics Emissions						
		Qı	iasi-Peak Va	lue			
Frequency	Measured	Correction	Field	Limit @3m	E-Field		
	Level @3m	Factor	Strength		Polarity		
MHz	dBµV/m	dBµV/m	dBµV/m	dBµV/m			
71.4	21.2	7.3	28.5	40.0	Horizontal		
100.9	21.7	8.3	30.0	43.5	Horizontal		
129.0	22.4	7.6	30.0	43.5	Horizontal		
168.3	22.0	10.0	32.0	43.5	Horizontal		
192.1	28.4	10.3	38.7	43.5	Horizontal		
940.3	18.2	25.0	43.2	46.0	Horizontal		
47.5	17.2	7.5	24.7	40.0	Vertical		
53.2	17.6	6.8	24.4	40.0	Vertical		
100.9	23.4	8.3	31.7	43.5	Vertical		
192.1	22.5	9.8	32.3	43.5	Vertical		
213.20	18.5	10.8	29.3	43.5	Vertical		
910.9	16.8	25.7	42.5	46.0	Vertical		

### Result of Tx mode (9kHz - 30MHz): Pass

Field Strength of Spurious Emissions							
Peak Value							
Frequency	Measured	Correction	Field	Field	Limit	E-Field	
	Level	Factor	Strength	Strength		Polarity	
MHz dBuV dB/m dBuV/m uV/m uV/m							
Emissions detected are more than 20 dB below the Limits							

### Remarks:

The pre-scan results are for reference, the frequencies found will perform final measurement which shown on the table below the graphs, therefore, there may be some different in measured frequencies and field strength shown on the graph and the table.

No additional spurious emissions found between lowest internal used/generated frequency and 30 MHz Correction Factor included Antenna Factor and Cable Attenuation.

Calculated measurement uncertainty	:	(9kHz – 30MHz):	3.3dB
		(30MHz – 18GHz):	4.6dB
		(18GHz - 26GHz):	4.4dB

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

Test Requirement:	FCC 47CFR 15.207 Class B
Test Method:	ANSI C63.10: 2013
Test Date:	2020-09-12
Mode of Operation:	TX mode

### **Test Method:**

The test was performed in accordance with ANSI C63.10: 2013, with the following: initial measurements were performed in peak and average detection modes on the live line, any emissions recorded within 30dB of the relevant limit lines 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:**





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

Frequency Range	Quasi-Peak Limits	Average
[MHz]	[dBµV]	[dBµV]
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 (Live and Neutral): PASS**

Please refer to the following diagram for individual results.



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### MEASUREMENT RESULT: "vol\_0001\_fin QP"

Frequency	Level	Transd	Limit	Margin	Line	PE
MHz	dBµV	dB	dBµV	dB		
0.155000	45.20	9.9	66	20.5	Ν	GND
0.265000	42.70	9.9	61	18.5	L1	GND
0.450000	33.80	10.0	57	23.0	L1	GND
0.525000	39.90	10.0	56	16.1	Ν	GND
0.920000	27.80	10.0	56	28.2	L1	GND
2.070000	22.40	10.1	56	33.6	L1	GND
2.835000	21.90	10.1	56	34.1	L1	GND
4.210000	21.20	10.2	56	34.8	L1	GND
15.945000	44.70	10.6	60	15.3	Ν	GND
17.670000	37.60	10.3	60	22.4	Ν	GND

### MEASUREMENT RESULT: "vol\_0001\_fin AV"

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.205000	24.30	9.9	53	29.1	N	GND
0.400000	20.30	10.0	48	27.6	Ν	GND
0.530000	30.60	10.0	46	15.4	L1	GND
0.995000	16.20	10.0	46	29.8	Ν	GND
2.060000	16.30	10.1	46	29.7	L1	GND
3.520000	17.00	10.2	46	29.0	Ν	GND
4.520000	15.30	10.3	46	30.7	L1	GND
10.100000	17.60	10.4	50	32.4	Ν	GND
15.945000	33.70	10.6	50	16.3	Ν	GND
17.670000	27.00	10.3	50	23.0	Ν	GND

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### 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		2020/04/13	2021/04/13
EM356	ANTENNA	ETS-LINDGREN	2171B	00150346	N/A	N/A
	POSITIONING TOWER					
EM229	EMI TEST RECEIVER	R&S	ESIB40	100248	2020/05/13	2021/05/13
EM022	LOOP ANTENNA	ETS_LINDGREN	6502	00206533	2019/11/30	2021/11/30
EM276	BROADBAND HORN ANTENNA	A-INFOMW	JXTXLB- 10180-SF	J203109090300 7	2019/03/15	2021/03/15
EM300	PYRAMIDAL STANDARD GAIN HORN ANTENNA	ETS-LINDGREN	3160-09	00130130	2019/05/13	2021/05/13
EM354	BICONILOG ANTENNA	ETS-LINDGREN	3143B	142073	2020/06/17	2022/06/17

### Line Conducted

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL	DUE CAL
EM119	LISN	R & S	ESH3-Z5	0831.5518.52	2020/06/30	2021/06/30
EM181	EMI TEST RECEIVER	ROHDE & SCHWARZ	ESIB7	100072	2020/05/13	2021/05/13
EM179	IMPULSE LIMITER	ROHDE & SCHWARZ	ESH3-Z2	357-8810.52/54	2020/01/13	2021/01/11

### **Support Equipment**

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	
COMPUTER - THINKPAD X1 CARBON	LENOVO	TP00086A	SL10P98060	
USB 5V ADAPTOR	APPLE	A1299	QU119D0PWT3DAG	
USB TO MICRO CABLE (1M)	MOMAX	DM16	N/A	

### Remarks:-

CM Corrective Maintenance

N/A Not Applicable

TBD To Be Determined

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# **Appendix B**

**Photographs of EUT** 

### **External View of the product**









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**Photographs of EUT** 

Internal View of the product









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**Photographs of EUT** 

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



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Photographs of EUT





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Photographs of EUT

### Measurement of Conducted Emission Test Set Up



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

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