

TEST REPORT

Product : Bluetooth Speaker
Trade mark : NUDE AUDIO
Model/Type reference : Nude SuperM, PS039STD, PS039BKG, PS039CLG, PS039MTG, PS039PTG, PS039PNG, PS039PLG, PS039YLE, PS039MTJ, PS039KCG, PS039KSG, PS039CPG, PS039DSG, PS039NLG
Serial number : N/A
Ratings : Charging input: 5V $\overline{=}$, 1A
lithium ion battery: 3.7V $\overline{=}$, IPX5, Class III
FCC ID : 2AACFPS039
Report number : EESZG07160009-2
Date : July 29, 2014
Regulations : See below

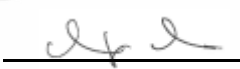
Test Standards	Results
☒ 47 CFR FCC Part 15 Subpart C 15.247: 2013	PASS

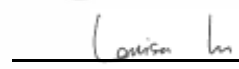
Prepared for:

Disruptive Hong Kong Limited
Room 2002,20/F, King Palace Plaza, 52A Sha Tsui Road, Tsuen Wan, N.T.
Hong Kong

Prepared by:

Centre Testing International (Shenzhen) Corporation
Hongwei Industrial Zone, 70 Area, Bao'an District,
Shenzhen, Guangdong, China
TEL: +86-755-3368 3668
FAX: +86-755-3368 3385

Tested by: 

Reviewed by: 

Approved by: 

Date: July 29, 2014



Check No.: 1702005401

TABLE OF CONTENTS

1. CERTIFICATION INFORMATION	4
2. TEST SUMMARY	4
3. MEASUREMENT UNCERTAINTY	5
4. PRODUCT INFORMATION	5
5. TEST EQUIPMENT LIST	5
6. SUPPORT EQUIPMENT LIST	5
7. 99% BANDWIDTH MEASUREMENT	6
7.1. LIMITS	6
7.2. BLOCK DIAGRAM OF TEST SETUP	6
7.3. TEST PROCEDURE	6
7.4. TEST RESULT	6
8. 6DB BANDWIDTH MEASUREMENT	9
8.1. LIMITS	9
8.2. BLOCK DIAGRAM OF TEST SETUP	9
8.3. TEST PROCEDURE	9
8.4. TEST RESULT	9
9. POWER SPECTRAL DENSITY	12
9.1. LIMITS	12
9.2. BLOCK DIAGRAM OF TEST SETUP	12
9.3. TEST PROCEDURE	12
9.4. TEST RESULT	12
10. MAXIMUM PEAK CONDUCTED OUTPUT POWER MEASUREMENT	15
10.1. LIMITS	15
10.2. BLOCK DIAGRAM OF TEST SETUP	15
10.3. TEST PROCEDURE	15
10.4. TEST RESULT	15
11. CONDUCTED BANDEDGE EMISSION MEASUREMENT	18

11.1.	LIMITS	18
11.2.	BLOCK DIAGRAM OF TEST SETUP	18
11.3.	TEST PROCEDURE	18
11.4.	TEST RESULT	18
12.	CONDUCTED SPURIOUS EMISSION MEASUREMENT	20
12.1.	LIMITS	20
12.2.	BLOCK DIAGRAM OF TEST SETUP	20
12.3.	TEST PROCEDURE	20
12.4.	TEST RESULT	20
13.	RADIATED BANDEDGE EMISSION / RADIATED SPURIOUS EMISSION MEASUREMENT	23
13.1.	LIMITS	23
13.2.	BLOCK DIAGRAM OF TEST SETUP	23
13.3.	TEST PROCEDURE	24
13.4.	TEST RESULT	25
14.	AC CONDUCTED EMISSION TEST	29
14.1.	LIMITS	29
14.2.	BLOCK DIAGRAM OF TEST SETUP	29
14.3.	PROCEDURE OF CONDUCTED EMISSION TEST	29
14.4.	GRAPHS AND DATA	30
	APPENDIX 1 PHOTOGRAPHS OF TEST SETUP	32
	APPENDIX 2 EXTERNAL PHOTOGRAPHS OF PRODUCT	34
	APPENDIX 3 INTERNAL PHOTOGRAPHS OF PRODUCT	36

N/A means not applicable.

1. CERTIFICATION INFORMATION

Applicant: Disruptive Hong Kong Limited
 Room 2002,20/F, King Palace Plaza,52A Sha Tsui Road, Tsuen Wan, N.T. Hong Kong

Manufacturer: Disruptive Hong Kong Limited
 Room 2002,20/F, King Palace Plaza,52A Sha Tsui Road, Tsuen Wan, N.T. Hong Kong

FCC ID: 2AACFPS039

Product: Bluetooth Speaker

Model/Type reference: Nude SuperM, PS039STD, PS039BKG, PS039CLG, PS039MTG, PS039PTG, PS039PNG, PS039PLG, PS039YLE, PS039MTJ, PS039KCG, PS039KSG, PS039CPG, PS039DSG, PS039NLG

Trade Name: NUDE AUDIO

Serial Number: N/A

Report Number: EESZG07160009-2

Sample Received Date: July 19, 2014

Sample tested Date: July 19, 2014 to July 28, 2014

The above equipment was tested by Centre Testing International (Shenzhen) Corporation for compliance with the requirements set forth in the IC/FCC Rules and the measurement procedure according to ANSI C63.4:2009.

2. TEST SUMMARY

No.	Test Item	Rule	Result
1	99% Bandwidth	RSS-Gen 4.6.1	PASS
2	6dB Bandwidth	FCC PART15.247(a)(2) & RSS-210 A8.2	PASS
3	Transmitter Output Power	FCC PART15.247(b)(3) & RSS-210 A8.4	PASS
4	Power Spectral Density	FCC PART15.247(e) & RSS-210 A8.2	PASS
5	Conducted Bandedge Emission / Conducted Spurious Emission	FCC PART15.247(d) & RSS-210 A8.5	PASS
6	Radiated Bandedge Emission / Radiated Spurious Emission	FCC PART15.247(d) & RSS-210 A8.5	PASS
7	AC Conducted Emission	FCC PART15.207 & RSS-Gen 7.2.4	PASS
8	Antenna requirements	FCC PART15.203 & RSS-Gen 7.1.2	PASS (See Notes)

*: According to Section 15.203 and RSS-Gen 7.1.2, 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 EUT has a built in antenna which is a short wire solder on the PCB, this is permanently attached antenna and meets the requirements of this section.

3. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Test item	Value (dB)
Conducted Emission Test	3.2 dB
Radiated Emissions / Bandedge Emission	4.5 dB

4. PRODUCT INFORMATION

Items	Description
Rating	Charging input: 5V $\overline{\text{---}}$, 1A lithium ion battery: 3.7V $\overline{\text{---}}$, IPX5, Class III
Type of Modulation	BT4.0: GFSK
Antenna Type	Integral antenna
Frequency Range	2402 ~ 2480 MHz
Gain	-0.6dBi

All the models are same product just different model names and outer colors. The test model is PS039BKG, and test results are applicable to others.

5. TEST EQUIPMENT LIST

Equipment	Manufacturer	Model	Serial No.	Due Date
3M Chamber & Accessory Equipment	ETS-LINDGREN	FACT-3	3510	07/12/2016
Spectrum Analyzer	Agilent	E4443A	MY45300910	01/15/2015
Receiver	R&S	ESCI	100435	07/19/2015
TRILOG Broadband Antenna	schwarzbeck	VULB 9163	618	06/25/2015
Multi device Controller	ETS-LINGREN	2090	00057230	N/A
Horn Antenna	ETS-LINGREN	3117	00057407	07/19/2015
Microwave Preamplifier	Agilent	8449B	3008A02425	03/19/2015
Spectrum Analyzer	R&S	FSP40	100416	07/06/2015
Receiver	R&S	ESCI	100009	07/19/2015
LISN	R&S	ENV216	100098	07/19/2015

6. SUPPORT EQUIPMENT LIST

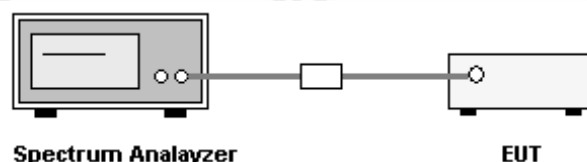
Device Type	Brand	Model	Series No.	Data Cable	Remark
Notebook	DELL	Vostro 3400	GYQTVP1	N/A	FCC DOC
Mouse	L.Selectron	M004	02284699	Un-shielded 1.2M	FCC DOC

7. 99% BANDWIDTH MEASUREMENT

7.1. LIMITS

None

7.2. BLOCK DIAGRAM OF TEST SETUP



7.3. TEST PROCEDURE

1. The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings for 99 % Bandwidth measurement. For 99% Bandwidth measurement, the RBW=30 kHz, and VBW = 100 kHz. Sweep = auto; Detector function = peak. Trace = max hold.
4. Measure and record the results in the test report.

7.4. TEST RESULT

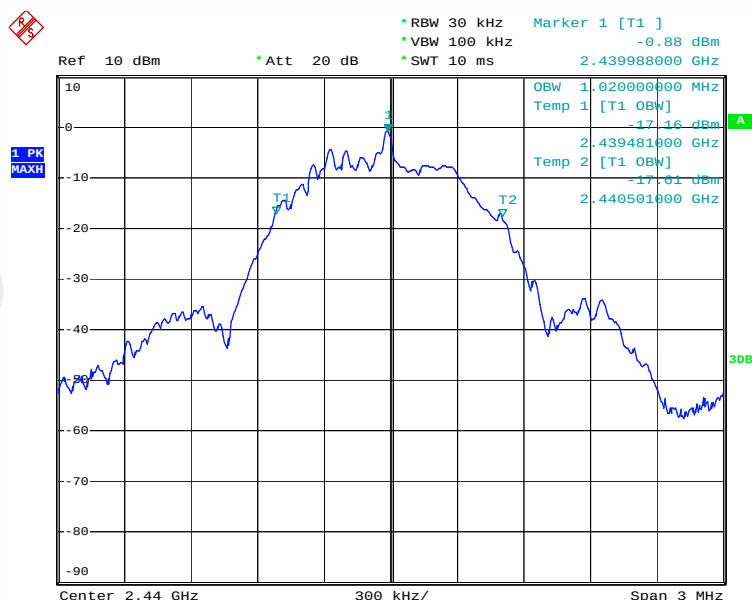
The test data of worst case are below:

Frequency (MHz)	99% BW (MHz)	Result
2402	1.023	PASS
2440	1.020	PASS
2480	1.020	PASS

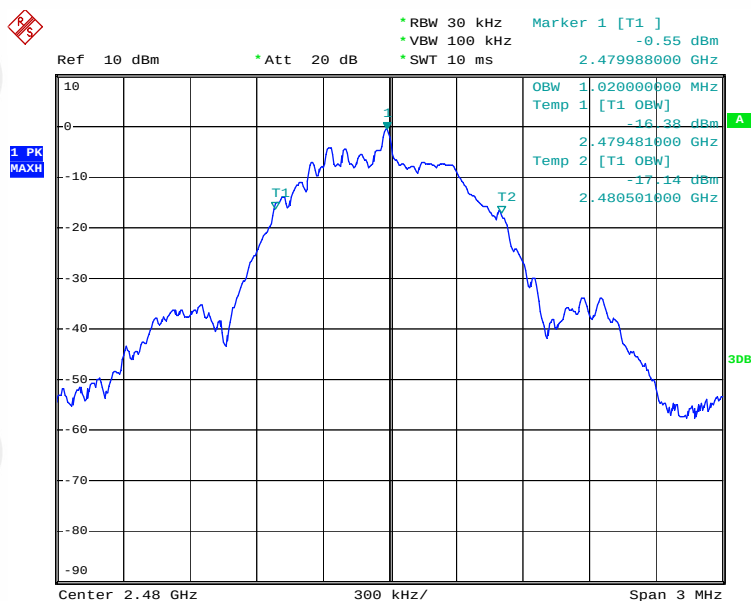
Please see the following plots (worst case):



2402MHz



2440MHz



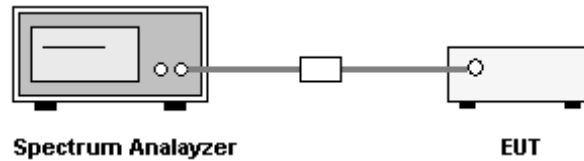
2480MHz

8. 6DB BANDWIDTH MEASUREMENT

8.1. LIMITS

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

8.2. BLOCK DIAGRAM OF TEST SETUP



8.3. TEST PROCEDURE

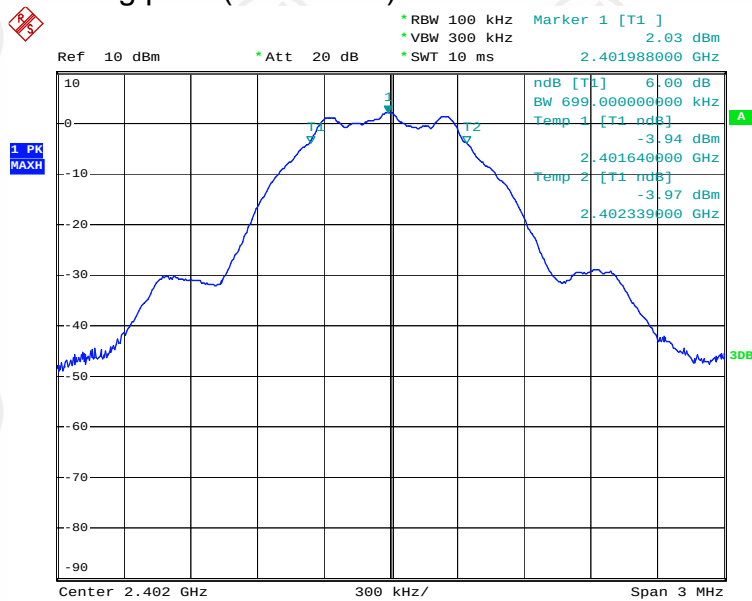
- Set RBW = 100 kHz.
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Allow the trace to stabilize.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

8.4. TEST RESULT

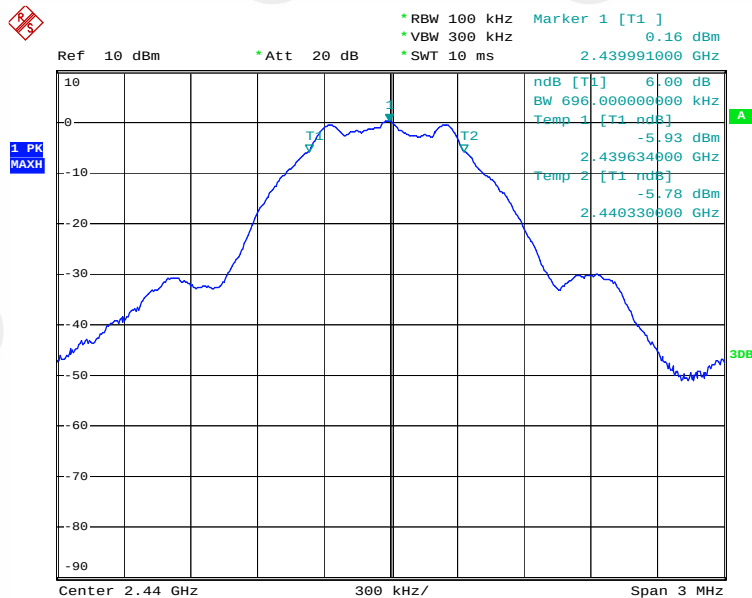
The test data of worst case are below:

Frequency (MHz)	Measured Value (kHz)	Result
2402	699	PASS
2440	696	PASS
2480	690	PASS

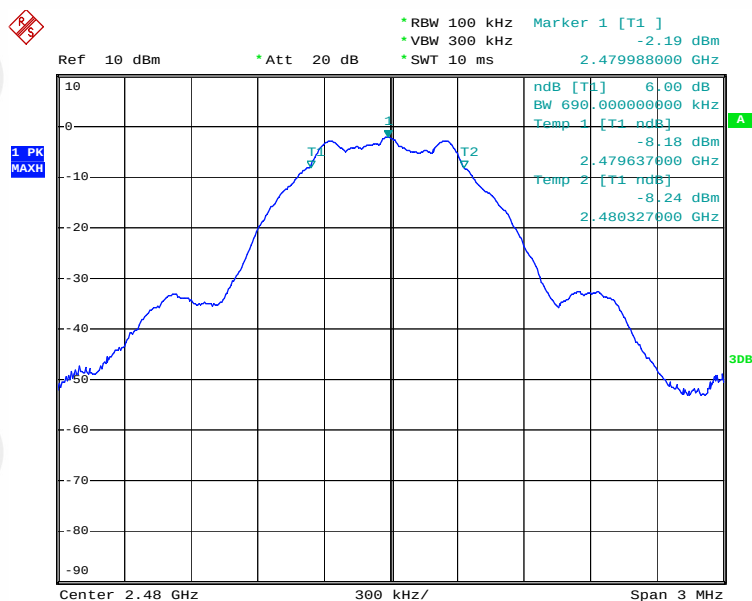
Please see the following plots (worst case):



2402MHz



2440MHz



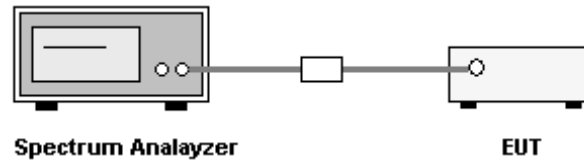
2480MHz

9. POWER SPECTRAL DENSITY

9.1. LIMITS

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

9.2. BLOCK DIAGRAM OF TEST SETUP



9.3. TEST PROCEDURE

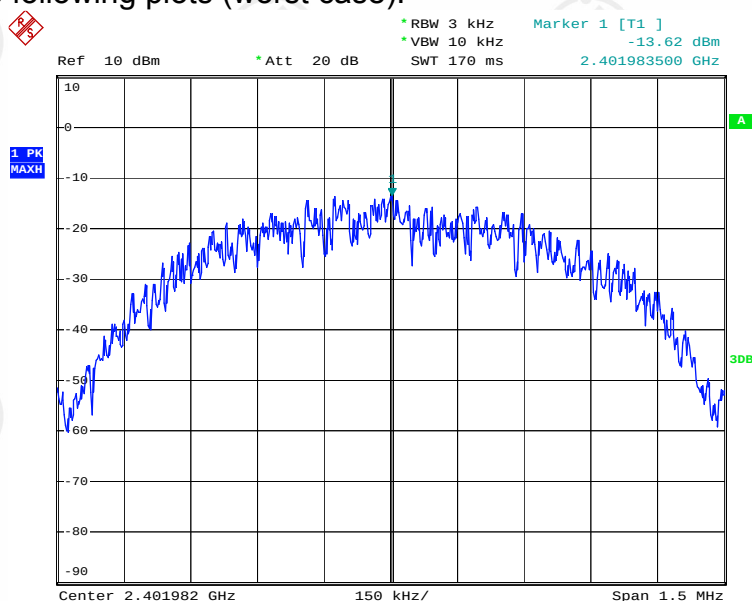
- Set analyzer center frequency to DTS channel center frequency.
- Set the span to 1.5 times the DTS bandwidth.
- Set the RBW to 3 kHz.
- Set the VBW $\geq 3 \times$ RBW.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level within the RBW.

9.4. TEST RESULT

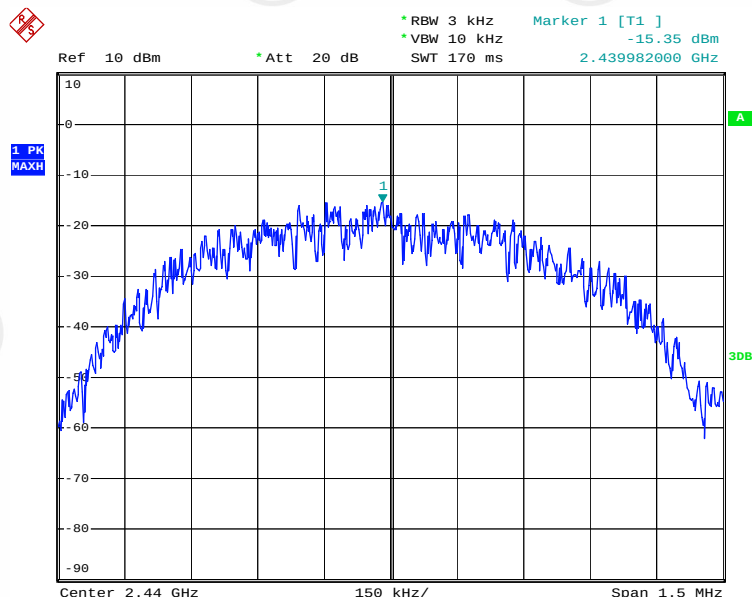
The test data of worst case are below:

Frequency (MHz)	Measured Value (dBm)	Result
2402	-13.62	PASS
2440	-15.35	PASS
2480	-17.73	PASS

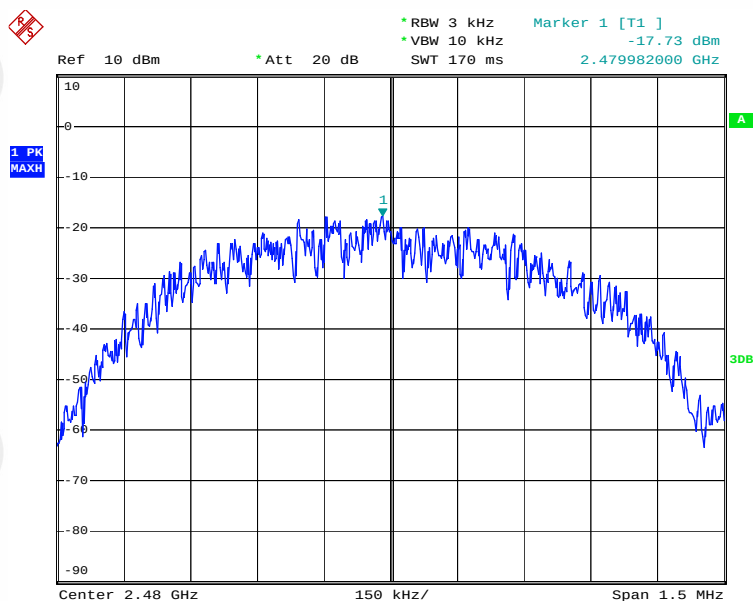
Please see the following plots (worst case):



2402MHz



2440MHz



2480MHz

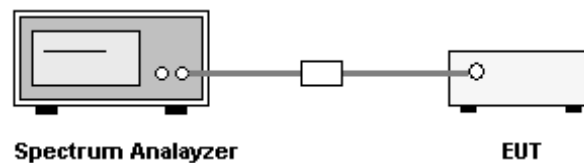
10. MAXIMUM PEAK CONDUCTED OUTPUT POWER MEASUREMENT

10.1. LIMITS

The maximum peak conducted output power of the intentional radiator shall not exceed the following:

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt (30dBm).

10.2. BLOCK DIAGRAM OF TEST SETUP



10.3. TEST PROCEDURE

- Set the RBW $\geq$ DTS bandwidth.
- Set the VBW $\geq 3 \times$ RBW
- Set span $\geq 3 \times$ RBW
- Sweep time = auto couple.
- Detector = peak.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use peak marker function to determine the peak amplitude level.

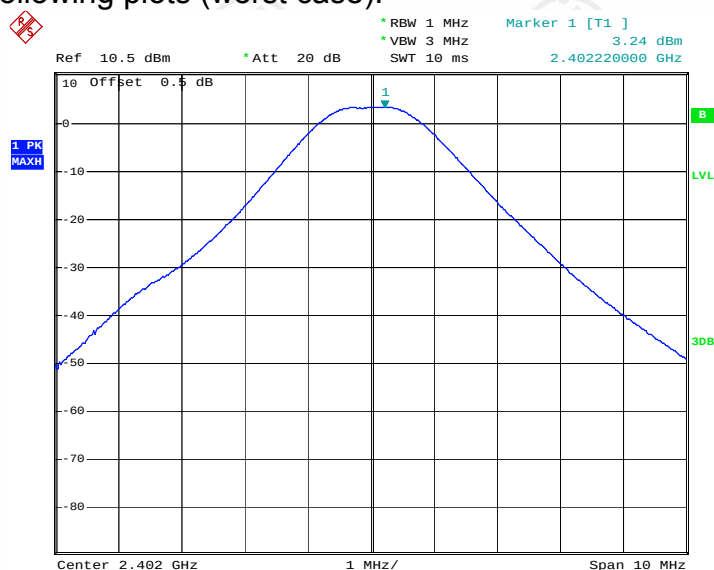
10.4. TEST RESULT

The test data of worst case are below:

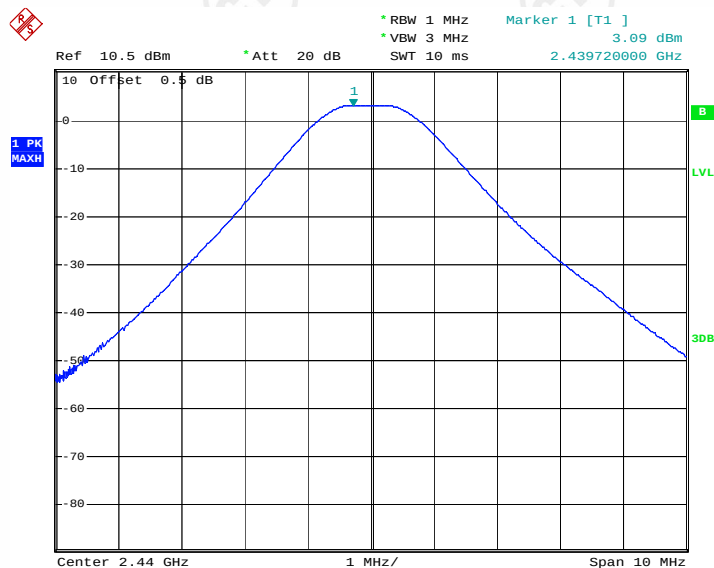
Frequency (MHz)	Measured Value (dBm)	Result
2402	3.24	PASS
2440	3.09	PASS
2480	1.85	PASS

Remark:
Antenna Gain: -0.6dBi

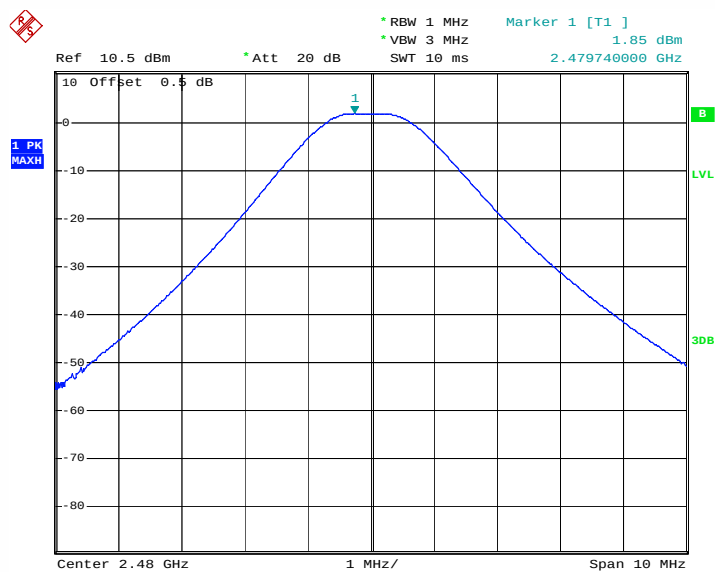
Please see the following plots (worst case):



2402MHz



2440MHz



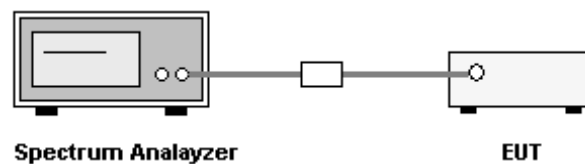
2480MHz

11. CONDUCTED BANDEDGE EMISSION MEASUREMENT

11.1. LIMITS

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, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

11.2. BLOCK DIAGRAM OF TEST SETUP



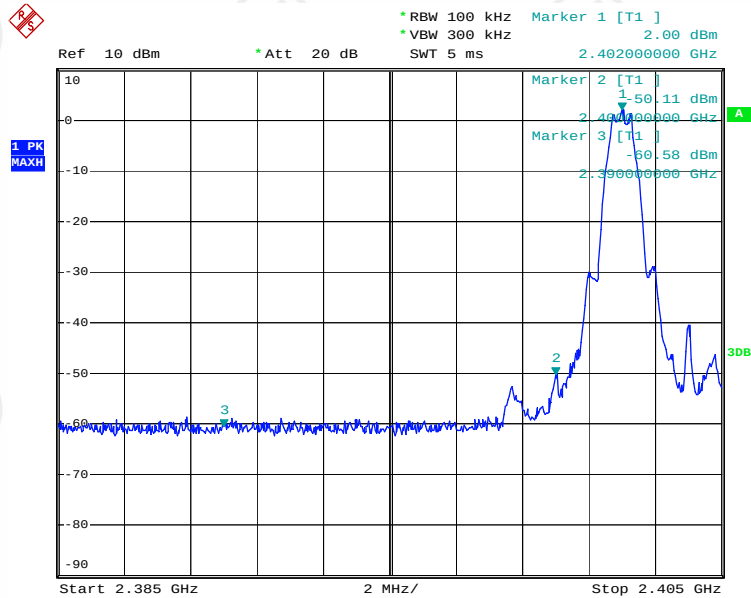
11.3. TEST PROCEDURE

- Set to the maximum power setting and enable the EUT transmit continuously.
- Set RBW = 100 kHz, VBW = 300 kHz ($\geq$ RBW). Band edge emissions must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.
- Enable hopping function of the EUT and then repeat step a and b.
- Measure and record the results in the test report.

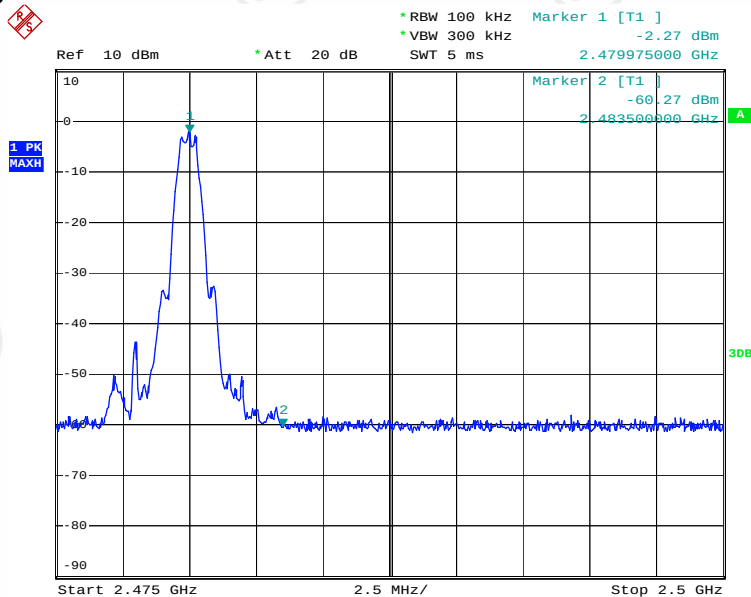
11.4. TEST RESULT

Worst case data attached.--- please see the following plots.

Low Band Edge Plot on 2402MHz:



High Band Edge Plot on 2480MHz:

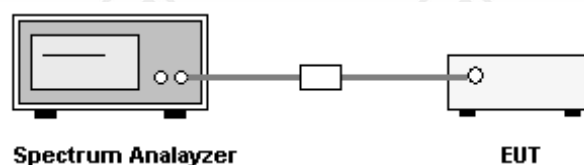


12. CONDUCTED SPURIOUS EMISSION MEASUREMENT

12.1. LIMITS

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, provided the transmitter demonstrates compliance with the peak conducted power limits.

12.2. BLOCK DIAGRAM OF TEST SETUP

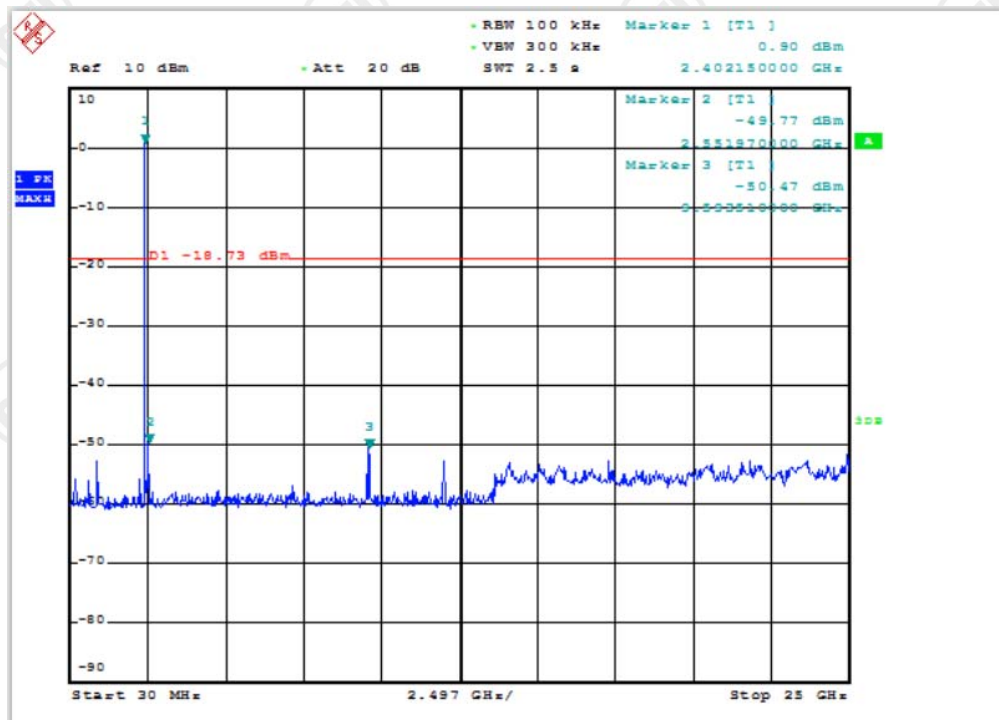


12.3. TEST PROCEDURE

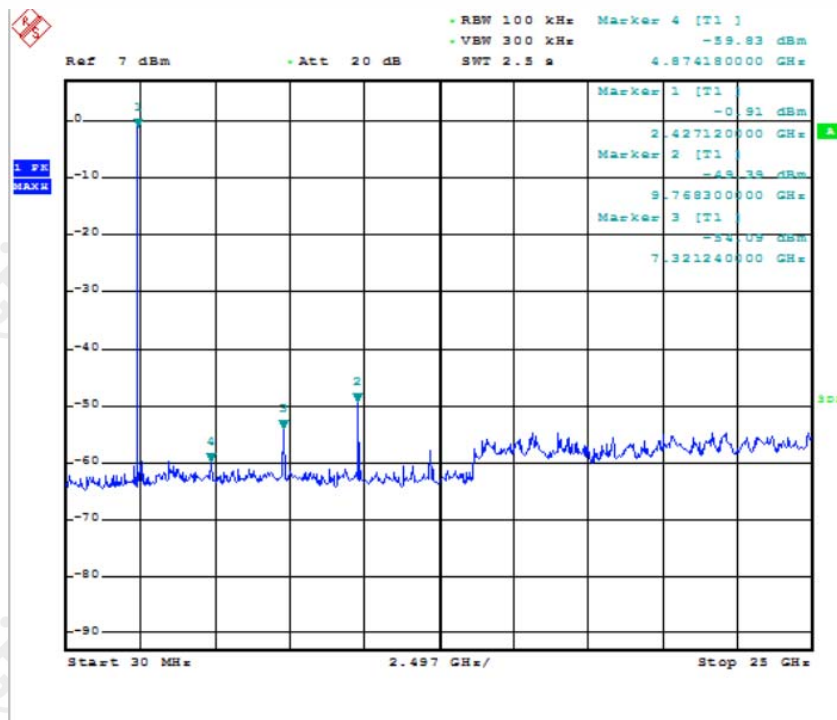
- The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
- Set to the maximum power setting and enable the EUT transmit continuously.
- Set RBW = 100 kHz, VBW = 300 kHz, scan up through 10th harmonic. All harmonics / spurs must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.
- Measure and record the results in the test report.
- The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

12.4. TEST RESULT

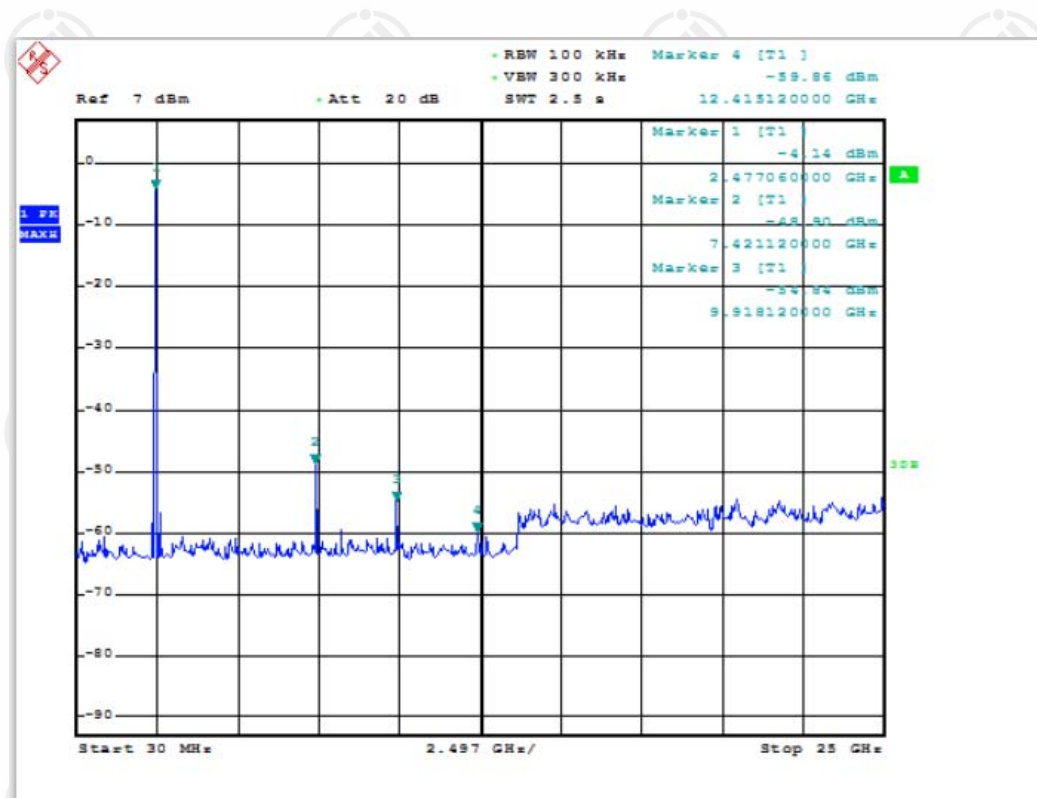
Worst case data---Please see the following plots.



2402MHz:



2440MHz:



2480MHz:

13. RADIATED BANDEDGE EMISSION / RADIATED SPURIOUS EMISSION MEASUREMENT

13.1. LIMITS

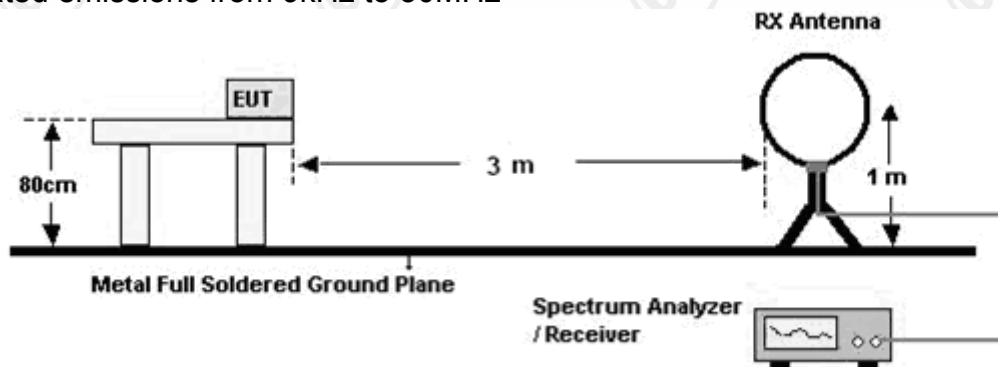
The field strength of any emissions, which appear outside of operating frequency band and restricted band specified on 15.205(a), shall not exceed the general radiated emission limits as below.

Frequency (MHz)	Field strength ($\mu\text{V/m}$)	Distance (m)
0.009-0.490	$2400/F(\text{kHz})$	300
0.490-1.705	$24000/F(\text{kHz})$	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

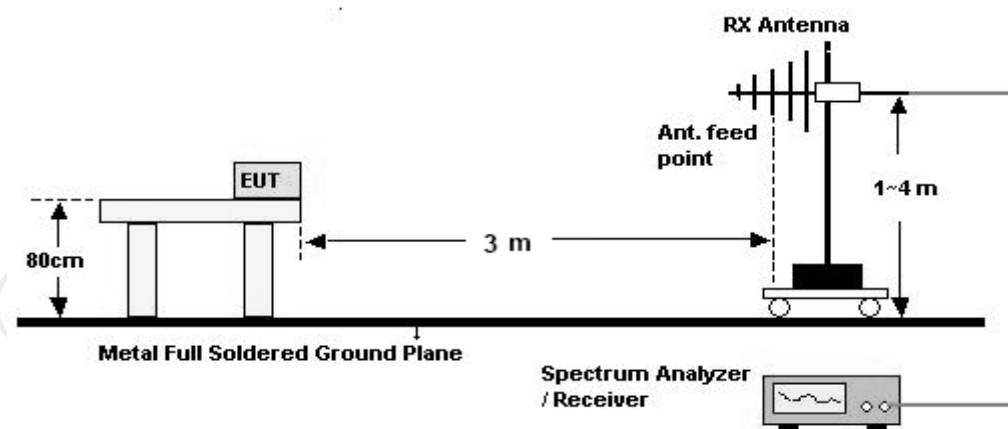
Note: the tighter limit applies at the band edges.

13.2. BLOCK DIAGRAM OF TEST SETUP

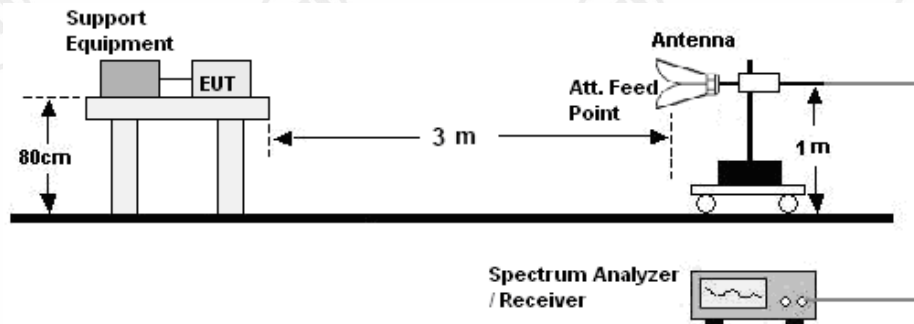
For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30 - 1000MHz



For radiated emissions from 1GHz to 25GHz



13.3. TEST PROCEDURE

Below 30MHz

- The Product is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna (loop antenna). The maximum values of the field strength are recorded by adjusting the polarizations of the test antenna and rotating the turntable.
- For each suspected emission, the Product was arranged to its worst case and then turn table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test frequency analyzer system was set to Peak Detect (300Hz RBW in 9kHz to 150kHz and 10kHz RBW in 150kHz to 30MHz) Function and Specified Bandwidth with Maximum Hold Mode.

30MHz ~ 1GHz:

- The Product was placed on the non-conductive turntable 0.8m above the ground at a chamber.
- Set the spectrum analyzer/receiver in Peak detector, Max Hold mode, and 100 kHz RBW. Record the maximum field strength of all the pre-scan process in the full band when the antenna is varied between 1~4 m in both horizontal and vertical, and the turntable is rotated from 0 to 360 degrees.
- For each frequency whose maximum record was higher or close to limit, measure its QP value (120 kHz RBW): vary the antenna's height and rotate the turntable from 0 to 360 degrees to find the height and degree where Product radiated the maximum emission, then set the test frequency analyzer/receiver to QP Detector and specified bandwidth with Maximum Hold Mode, and record the maximum value.

Above 1GHz:

- The EUT was placed on the non-conductive turntable 0.8 m above the ground at a chamber.
- Set the spectrum analyzer/receiver in Peak detector, Max Hold mode, and 1MHz RBW. Record the maximum field strength of all the pre-scan process in the full band when the antenna is varied in both horizontal and vertical, and the turntable is rotated from 0 to 360 degrees.
- For AV vale testing, set the spectrum analyzer/receiver in RMS detector, Max Hold mode, and 1MHz RBW, VBW 3MHz.

13.4. TEST RESULT

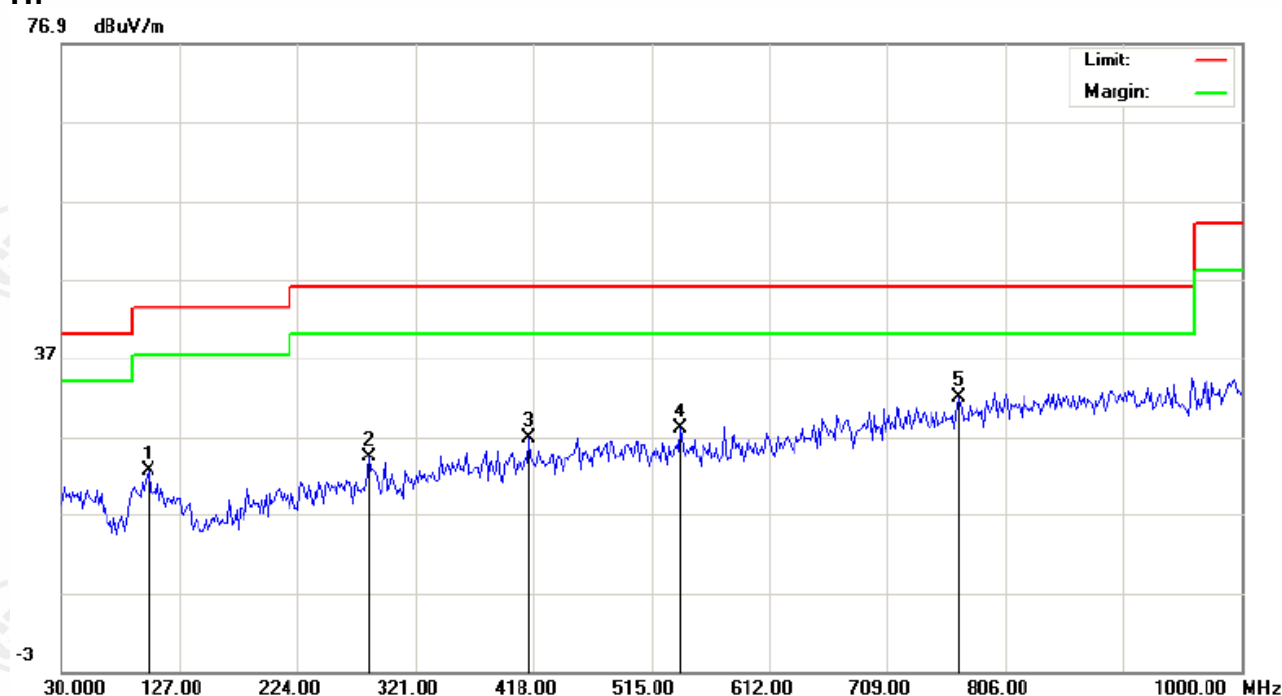
Below 30MHz:

No emissions were found higher than the background below 30MHz and background is lower than the limit, so it deems to compliance with the limit without recorded.

30MHz ~ 1GHz:

The test data of low channel, middle channel and high channel are almost same in frequency bands 30MHz to 1GHz, and the data of middle channel are chosen as representative in below:

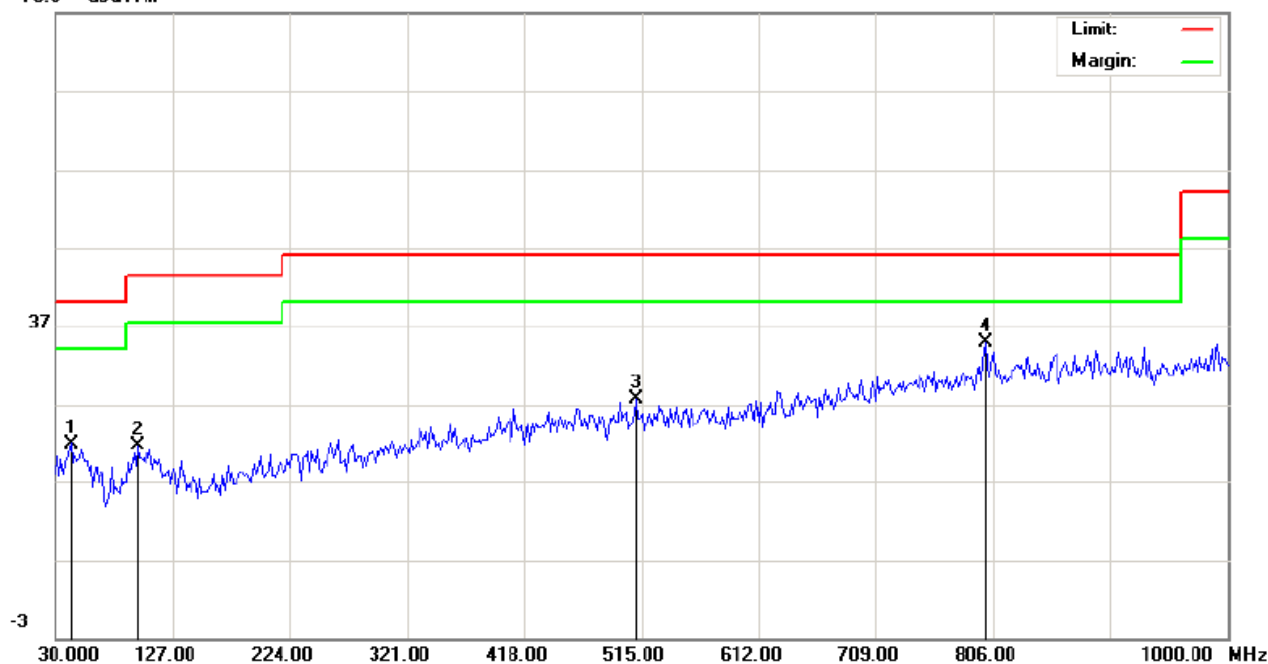
H:



No.	Freq. MHz	Reading_Level (dBuV)			Correct Factor dB	Measurement (dBuV/m)			Limit (dBuV/m)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		peak	QP	AVG	QP	AVG	QP	AVG		
1	101.1333	6.77			15.85	22.62			43.50		-20.88		P	
2	282.2000	8.91			15.52	24.43			46.00		-21.57		P	
3	414.7667	8.20			18.53	26.73			46.00		-19.27		P	
4	539.2500	8.07			20.00	28.07			46.00		-17.93		P	
5	767.2000	7.54			24.40	31.94			46.00		-14.06		P	

V:

76.9 dBuV/m



No.	Freq. MHz	Reading_Level (dBuV)			Correct Factor dB	Measurement (dBuV/m)			Limit (dBuV/m)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		peak	QP	AVG	QP	AVG	QP	AVG		
1	42.9333	6.89			15.01	21.90			40.00		-18.10		P	
2	97.9000	6.08			15.59	21.67			43.50		-21.83		P	
3	510.1500	7.76			19.88	27.64			46.00		-18.36		P	
4	799.5333	9.63			25.11	34.74			46.00		-11.26		P	

Above 1GHz:
Test Results-(Measurement Distance: 3m) Channel low 2402MHz GFSK mode:

Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limit (dBuV/m)	Detector Type	Antenna (H/V)	Result (P/F)
2390.0	35.67	1.99	37.66	74	PK	H	P
2400.0	48.10	2.01	50.11	74	PK	H	P
2402.0*	96.72	2.01	98.73	---	PK	H	P
4804.0	44.73	6.13	50.86	74	PK	H	P
7206.0	50.48	11.6	62.08	74	PK	H	P
7206.0	38.73	11.6	50.33	54	AV	H	P
2390.0	33.12	1.99	35.11	74	PK	V	P
2400.0	48.71	2.01	50.72	74	PK	V	P
2402.0*	95.12	2.01	97.13	---	PK	V	P
4804.0	43.23	6.13	49.36	74	PK	V	P
7206.0	53.15	11.6	64.75	74	PK	V	P
7206.0	39.67	11.6	51.27	54	AV	V	P

*: fundamental frequency

Test Results-(Measurement Distance: 3m) Channel middle 2440MHz GFSK mode:

Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limit (dBuV/m)	Detector Type	Antenna (H/V)	Result (P/F)
2440.0*	92.07	2.11	94.18	---	PK	H	P
4880.0	43.68	6.18	49.86	74	PK	H	P
7320.0	50.21	11.9	62.11	74	PK	H	P
7320.0	38.31	11.9	50.21	54	AV	H	P
2440.0*	86.22	2.11	88.33	---	PK	V	P
4880.0	45.33	6.18	51.51	74	PK	V	P
7320.0	53.73	11.9	65.63	74	PK	V	P
7320.0	38.14	11.9	50.04	54	AV	V	P

*: fundamental frequency

Test Results-(Measurement Distance: 3m) Channel high 2480MHz GFSK mode:

Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limit (dBuV/m)	Detector Type	Antenna (H/V)	Result (P/F)
2480.0*	89.42	2.18	91.60	---	PK	H	P
2483.5	43.15	2.18	45.33	74	PK	H	P
4960.0	43.83	6.21	50.04	74	PK	H	P
7440.0	50.51	12.3	62.81	74	PK	H	P
7440.0	38.79	12.3	51.09	54	AV	H	P
2480.0*	87.97	2.18	90.15	---	PK	V	P
2483.5	43.80	2.18	45.98	74	PK	V	P
4960.0	43.81	6.21	50.02	74	PK	V	P
7440.0	49.15	12.3	61.45	74	PK	V	P
7440.0	38.68	12.3	50.98	54	AV	V	P

*: fundamental frequency

Remark:

1. The above tables show that the frequencies peak data are all below the average limit, so the average data of these frequencies are deemed to fulfill the average limits and not reported.
2. No emission found from 18GHz to 25GHz.
3. All outside of operating frequency band and restricted band specified are below 15.209.

14. AC CONDUCTED EMISSION TEST

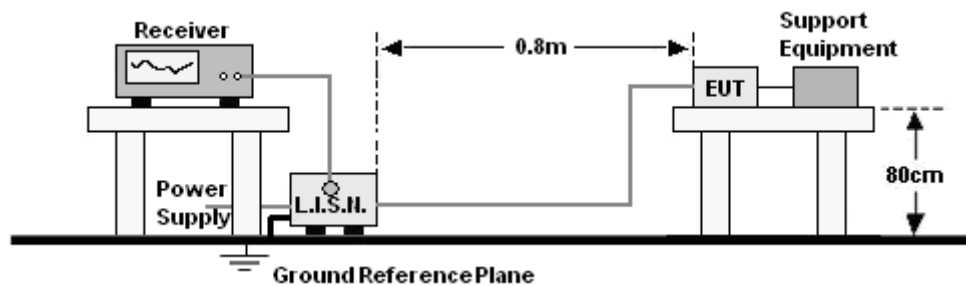
14.1. LIMITS

Limits for Class B digital devices

Frequency range (MHz)	Limits dB(μV)	
	Quasi-peak	Average
0,15 to 0,50	66 to 56	56 to 46
0,50 to 5	56	46
5 to 30	60	50

NOTE: 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50 MHz.

14.2. BLOCK DIAGRAM OF TEST SETUP



14.3. PROCEDURE OF CONDUCTED EMISSION TEST

- The Product was placed on a nonconductive table above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
- The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.
- For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

14.4. GRAPHS AND DATA

Product : Bluetooth Speaker

Model/Type reference : PS039BKG

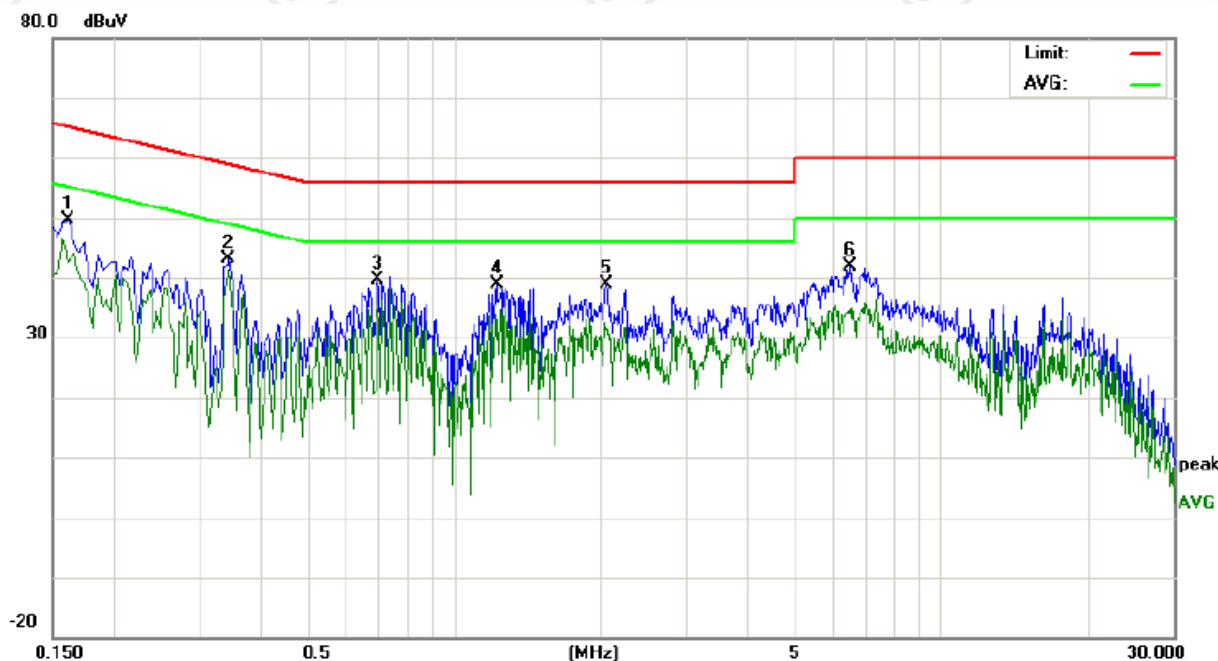
Power : DC 5V

Temperature : 23℃

Mode : Keeping TX

Humidity : 52%

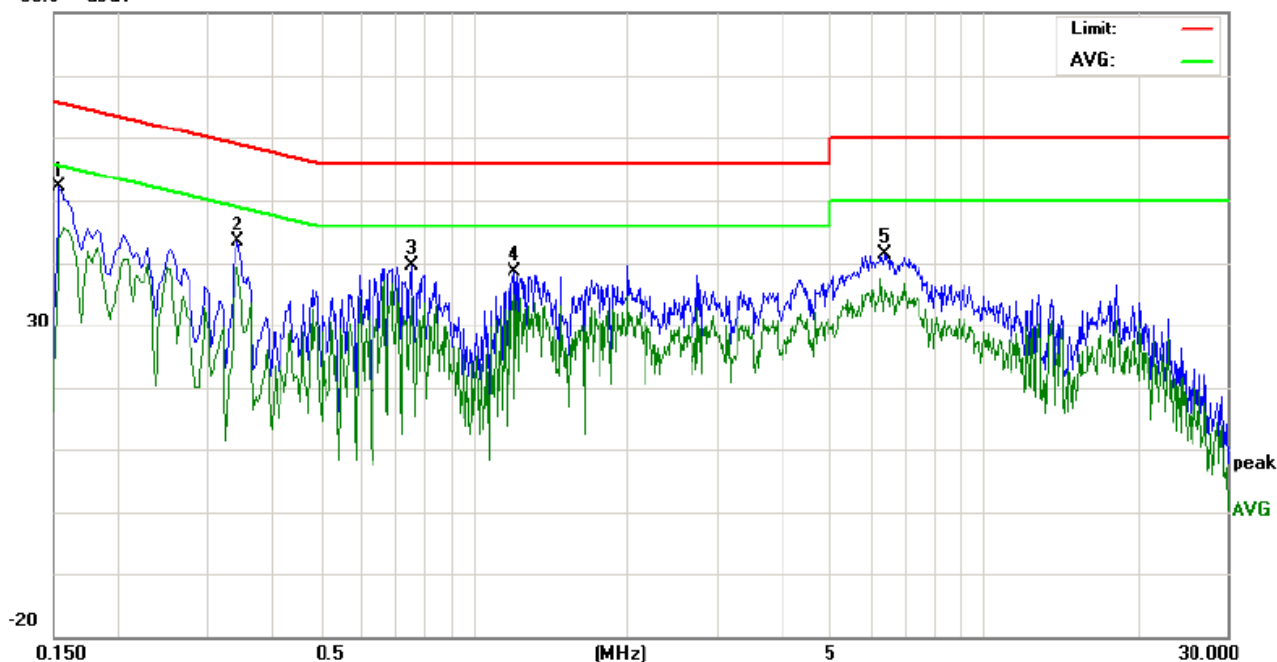
L:



No.	Freq. MHz	Reading_Level (dBuV)			Correct Factor dB	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1620	39.88		32.95	9.76	49.64		42.71	65.36	55.36	-15.72	-12.65	P	
2	0.3460	33.21		31.66	9.80	43.01		41.46	59.06	49.06	-16.05	-7.60	P	
3	0.6980	29.90		24.63	9.80	39.70		34.43	56.00	46.00	-16.30	-11.57	P	
4	1.2260	29.11		23.12	9.82	38.93		32.94	56.00	46.00	-17.07	-13.06	P	
5	2.0620	29.06		21.57	9.90	38.96		31.47	56.00	46.00	-17.04	-14.53	P	
6	6.5100	38.41		30.44	10.00	48.41		40.44	60.00	50.00	-11.59	-9.56	P	

N:

80.0 dBuV



No.	Freq. MHz	Reading_Level (dBuV)			Correct Factor dB	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1539	42.27		33.91	9.75	52.02		43.66	65.78	55.78	-13.76	-12.12	P	
2	0.3460	33.52		29.56	9.80	43.32		39.36	59.06	49.06	-15.74	-9.70	P	
3	0.7580	29.72		24.49	9.80	39.52		34.29	56.00	46.00	-16.48	-11.71	P	
4	1.1980	28.74		24.95	9.82	38.56		34.77	56.00	46.00	-17.44	-11.23	P	
5	6.4460	31.31		25.65	10.00	41.31		35.65	60.00	50.00	-18.69	-14.35	P	

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP



TEST SETUP OF RADIATED EMISSION (30MHz-1GHz)



TEST SETUP OF RADIATED EMISSION (above 1GHz)



TEST SETUP OF CONDUCTED EMISSION

APPENDIX 2 EXTERNAL PHOTOGRAPHS OF PRODUCT



External View of product-1



External View of product-2



External View of product-3

APPENDIX 3 INTERNAL PHOTOGRAPHS OF PRODUCT



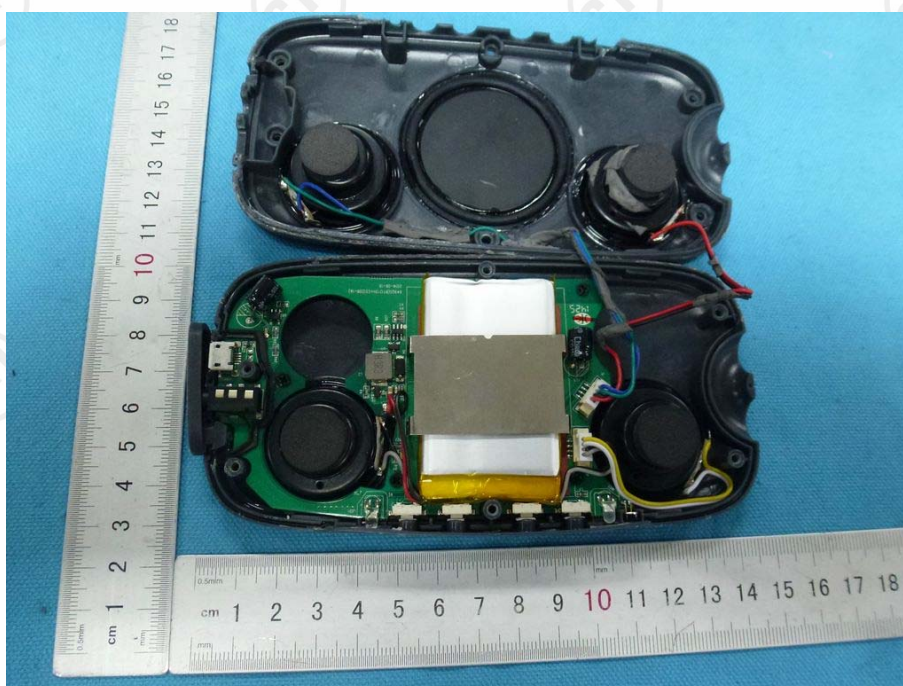
Internal View of product-1



Internal View of product-2



Internal View of product-3



Internal View of product-4



Internal View of product-5

*** End of Report ***

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.