

# FCC Test Report

Report No.: AGC01125180411FE03

**FCC ID** : 2AM9IPI0I0STP00200

**APPLICATION PURPOSE** : Original Equipment

**PRODUCT DESIGNATION** : Smart Target

**BRAND NAME** : IoTTargeting

**MODEL NAME** : PIOI0STP00200, PIOI0STA00200

**CLIENT** : IoTTargeting, LLC.

**DATE OF ISSUE** : Jul 13, 2018

**STANDARD(S)** : FCC Part 15.247

**REPORT VERSION** : V1.0

**Attestation of Global Compliance (Shenzhen) Co., Ltd**

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**REPORT REVISE RECORD**

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jul. 13, 2018	Valid	Initial Release

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**TABLE OF CONTENTS**

<b>1. VERIFICATION OF COMPLIANCE.....</b>	<b>5</b>
<b>2. GENERAL INFORMATION.....</b>	<b>6</b>
2.1 PRODUCT DESCRIPTION .....	6
2.2. TABLE OF CARRIER FREQUENCYS .....	6
2.3 RELATED SUBMITTAL(S)/GRANT(S).....	7
2.4 TEST METHODOLOGY .....	7
2.5 SPECIAL ACCESSORIES.....	7
2.6 EQUIPMENT MODIFICATIONS.....	7
<b>3. MEASUREMENT UNCERTAINTY .....</b>	<b>8</b>
<b>4. DESCRIPTION OF TEST MODES .....</b>	<b>9</b>
<b>5. SYSTEM TEST CONFIGURATION .....</b>	<b>10</b>
5.1 CONFIGURATION OF TESTED SYSTEM.....	10
5.2 EQUIPMENT USED IN TESTED SYSTEM .....	10
5.3. SUMMARY OF TEST RESULTS .....	10
<b>6. TEST FACILITY .....</b>	<b>11</b>
<b>7. PEAK OUTPUT POWER.....</b>	<b>12</b>
7.1. MEASUREMENT PROCEDURE.....	12
7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION).....	12
7.3. LIMITS AND MEASUREMENT RESULT.....	13
<b>8. 6 DB BANDWIDTH.....</b>	<b>16</b>
8.1. MEASUREMENT PROCEDURE.....	16
8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION).....	16
8.3. LIMITS AND MEASUREMENT RESULTS .....	16
<b>9. CONDUCTED SPURIOUS EMISSION.....</b>	<b>19</b>
9.1. MEASUREMENT PROCEDURE.....	19
9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION).....	19
9.3. MEASUREMENT EQUIPMENT USED .....	19
9.4. LIMITS AND MEASUREMENT RESULT .....	19
<b>10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY .....</b>	<b>26</b>

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10.1 MEASUREMENT PROCEDURE .....	26
10.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION) .....	26
10.3 MEASUREMENT EQUIPMENT USED .....	26
10.4 LIMITS AND MEASUREMENT RESULT .....	26
<b>11. RADIATED EMISSION .....</b>	<b>29</b>
11.1. MEASUREMENT PROCEDURE .....	29
11.2. TEST SETUP .....	30
11.3. LIMITS AND MEASUREMENT RESULT .....	31
11.4. TEST RESULT .....	31
<b>APPENDIX A: PHOTOGRAPHS OF TEST SETUP .....</b>	<b>44</b>
<b>APPENDIX B: PHOTOGRAPHS OF EUT .....</b>	<b>45</b>

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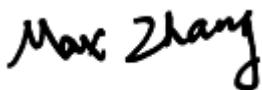
## 1. VERIFICATION OF COMPLIANCE

<b>Applicant</b>	IoTargeting, LLC.
<b>Address</b>	511 N Washington Ave, Marshall, Texas, USA 75670.
<b>Manufacturer</b>	System Level Solutions (India) Pvt. Ltd
<b>Address</b>	Plot#32, Zone-D/4, Phase-1, GIDC Estate, V.U. Nagar - 388 121, Gujarat, India
<b>Product Designation</b>	Smart Target
<b>Brand Name</b>	IOTargeting
<b>Test Model</b>	PI0I0STP00200
<b>Series Model</b>	PI0I0STA00200
<b>Difference description</b>	The series model contains front part of Enclosure made from Aluminum instead of Plastic. Two products had been pre-test, the PI0I0STP00200 was the worst case which recorded in the report.
<b>Date of test</b>	May 25, 2018 to Jun. 07, 2018
<b>Deviation</b>	None
<b>Condition of Test Sample</b>	Normal
<b>Test Result</b>	Pass
<b>Report Template</b>	AGCRT-US-BLE/RF

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC part 15.247.

Tested By



Max Zhang(Zhang Yi)

Jul. 13, 2018

Reviewed By



Bart Xie(Xie Xiaobin)

Jul. 13, 2018

Approved By



Forrest Lei(Lei Yonggang)

Authorized Officer

Jul. 13, 2018

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## 2.GENERAL INFORMATION

### 2.1 PRODUCT DESCRIPTION

The EUT is designed as a "Smart Target". It is designed by way of utilizing the O-QPSK technology to achieve the system operation.

A major technical description of EUT is described as following

<b>Operation Frequency</b>	2405~2480MHZ
<b>RF Output Power</b>	7.831dBm(Max)
<b>Modulation</b>	O-QPSK
<b>Number of channels</b>	16 Channel
<b>Antenna Designation</b>	PCB Antenna
<b>Antenna Gain</b>	-3dBi
<b>Hardware Version</b>	REV1B
<b>Software Version</b>	V1.0
<b>Power Supply</b>	DC 6V by battery

### 2.2. TABLE OF CARRIER FREQUENCYS

<b>Frequency Band</b>	<b>Channel Number</b>	<b>Frequency</b>
2400~2483.5MHZ	0	2405MHZ
	1	2410MHZ
	:	:
	14	2475MHZ
	15	2480MHZ

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**2.3 RELATED SUBMITTAL(S)/GRANT(S)**

This submittal(s) (test report) is intended for **FCC ID: 2AM9IPI0I0STP00200** filing to comply with the FCC Part 15.247 requirements.

**2.4 TEST METHODOLOGY**

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

**2.5 SPECIAL ACCESSORIES**

Refer to section 2.2.

**2.6 EQUIPMENT MODIFICATIONS**

Not available for this EUT intended for grant.

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### 3. MEASUREMENT UNCERTAINTY

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in measurement" (GUM) published by CISPR and ANSI.

- Uncertainty of Radiated Emission below 1GHz,  $U_c = \pm 3.9$  dB
- Uncertainty of Radiated Emission above 1GHz,  $U_c = \pm 4.8$  dB

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#### 4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel TX at 2405MHz
2	Middle channel TX at 2440MHz
3	High channel TX at 2475MHz
4	High channel TX at 2480MHz

**Note:**

1. Only the result of the worst case was recorded in the report, if no other cases.
2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.

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## 5. SYSTEM TEST CONFIGURATION

### 5.1 CONFIGURATION OF TESTED SYSTEM



### 5.2 EQUIPMENT USED IN TESTED SYSTEM

Item	Equipment	Model	ID	Remark
1	Smart Target	PI0I0STP00200	2AM9IPI0I0STP00200	EUT

### 5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
15.247	Peak Output Power	Compliant
15.247	6 dB Bandwidth	Compliant
15.247	Conducted Spurious Emission and Band Edges	Compliant
15.247	Maximum Conducted Output Power Density	Compliant
15.247&15.209	Radiated Emission	Compliant

Note: All the test data are re-used from the Report No.: AGC01125180408FE03(FCC ID: 2AM9IPI0I0MTP00200) except the Radiated Emission.

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## 6. TEST FACILITY

<b>Test Site</b>	Attestation of Global Compliance (Shenzhen) Co., Ltd
<b>Location</b>	1-2F., Bldg.2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Bao'an District B112-B113, Bldg.12, Baoan Bldg Materials Center, No.1 of Xixiang Inner Ring Road, Baoan District, Shenzhen 518012
<b>NVLAP LAB CODE</b>	600153-0
<b>Designation Number</b>	CN5028
<b>FCC Test Firm Registration Number</b>	682566
<b>Description</b>	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by National Voluntary Laboratory Accreditation program, NVLAP Code 600153-0

## TEST EQUIPMENT OF RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	Jun. 20, 2017	Jun. 19, 2018
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 08, 2017	Dec. 07, 2018
2.4GHz Fliter	Micro-tronics	087	N/A	Jun. 20, 2017	Jun. 19, 2018
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Sep. 20, 2017	Sep. 19, 2018
preamplifier	ChengYi	EMC184045SE	980508	Sep. 15, 2017	Sep. 14, 2018
Active loop antenna (9K-30MHz)	A.H.	SAS-562B	N/A	Mar. 01, 2018	Feb. 28, 2019
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	May 18, 2017	May 17, 2019
Broadband Preamplifier	SCHWARZBECK	BBV 9718	9718-205	Jun. 20, 2017	Jun. 19, 2018
ANTENNA	SCHWARZBECK	VULB9168	D69250	Sep. 28, 2017	Sep. 27, 2018

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## 7. PEAK OUTPUT POWER

### 7.1. MEASUREMENT PROCEDURE

For peak power test:

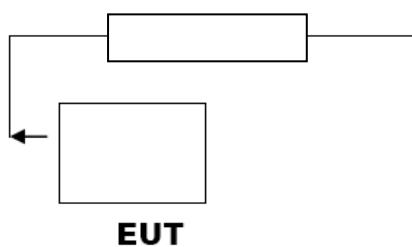
1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2.  $RBW \geq DTS$  bandwidth
3.  $VBW \geq 3 \times RBW$ .
4.  $SPAN \geq VBW$ .
5. Sweep: Auto.
6. Detector function: Peak.
7. Trace: Max hold.

Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power, after any corrections for external attenuators and cables.

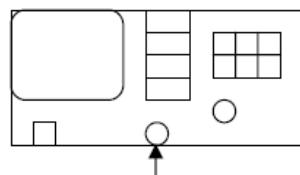
### 7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

#### PEAK POWER TEST SETUP

**RF Attenuator**



**Spectrum Analyzer**



**RF Cable**



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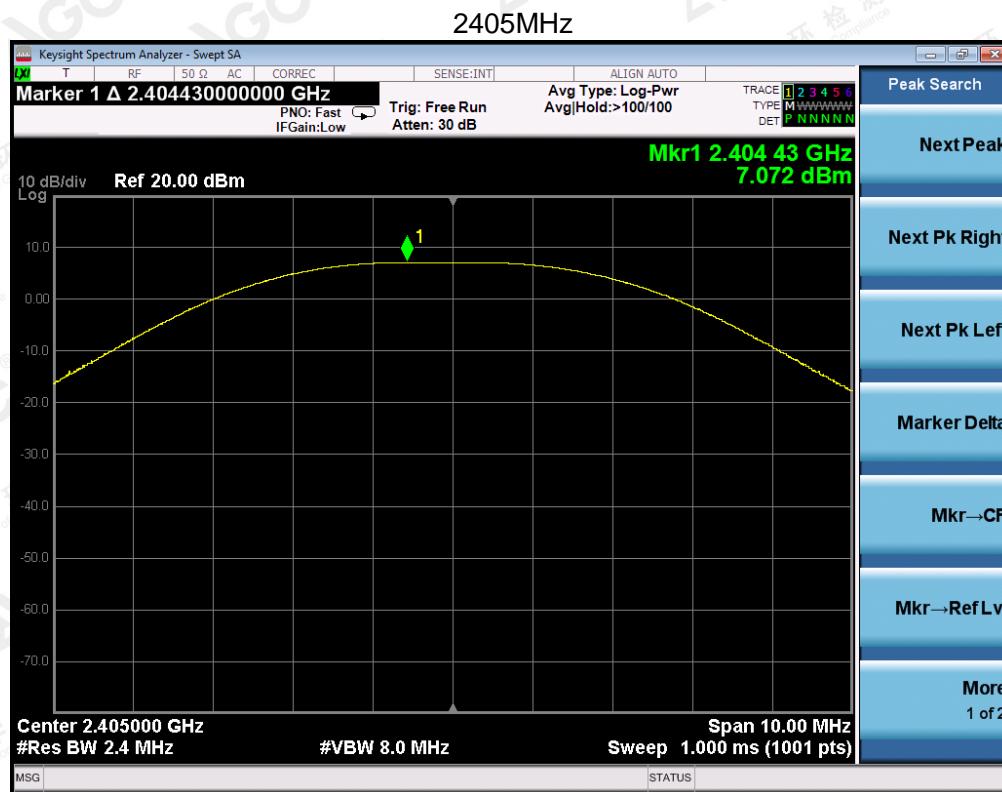
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**7.3. LIMITS AND MEASUREMENT RESULT**

PEAK OUTPUT POWER MEASUREMENT RESULT			
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.405	7.072	30	Pass
2.440	7.785	30	Pass
2475	7.831	30	Pass
2.480	-7.709	30	Pass

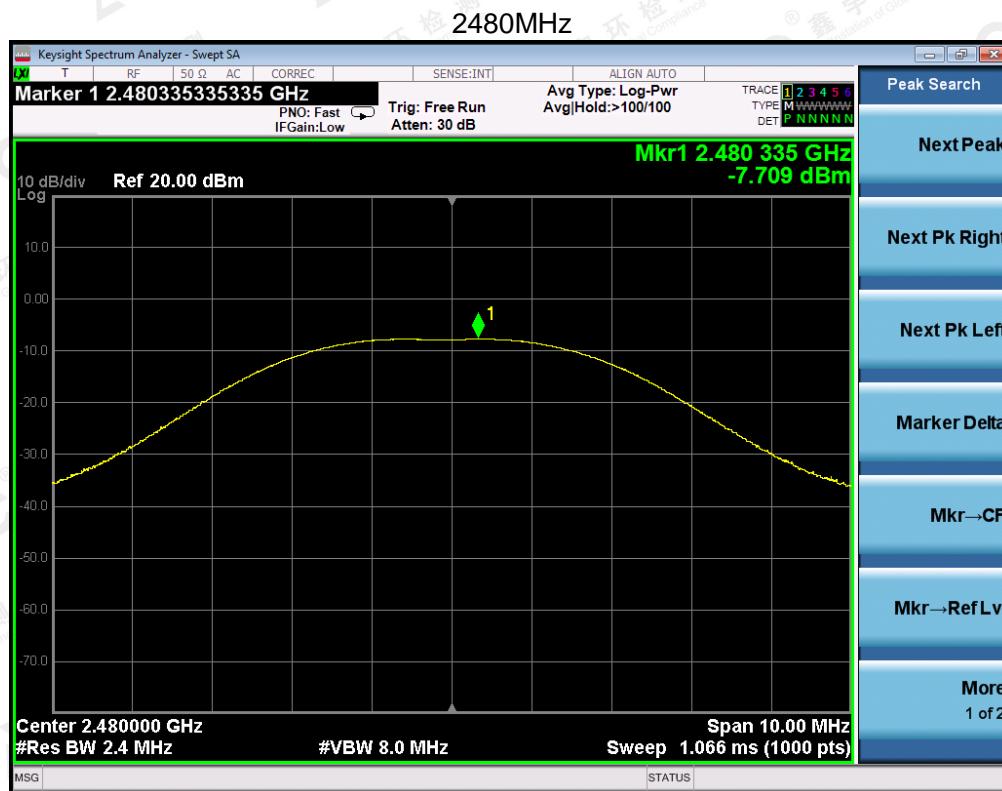
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## 8.6 DB BANDWIDTH

### 8.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
3. Set SPA Centre Frequency = Operation Frequency, RBW= 100 KHz, VBW $\geqslant$ 3 $\times$ RBW.
4. Set SPA Trace 1 Max hold, then View.

**Note:** The EUT was tested according to ANSI C63.10 for compliance to FCC PART 15.247 requirements.

### 8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

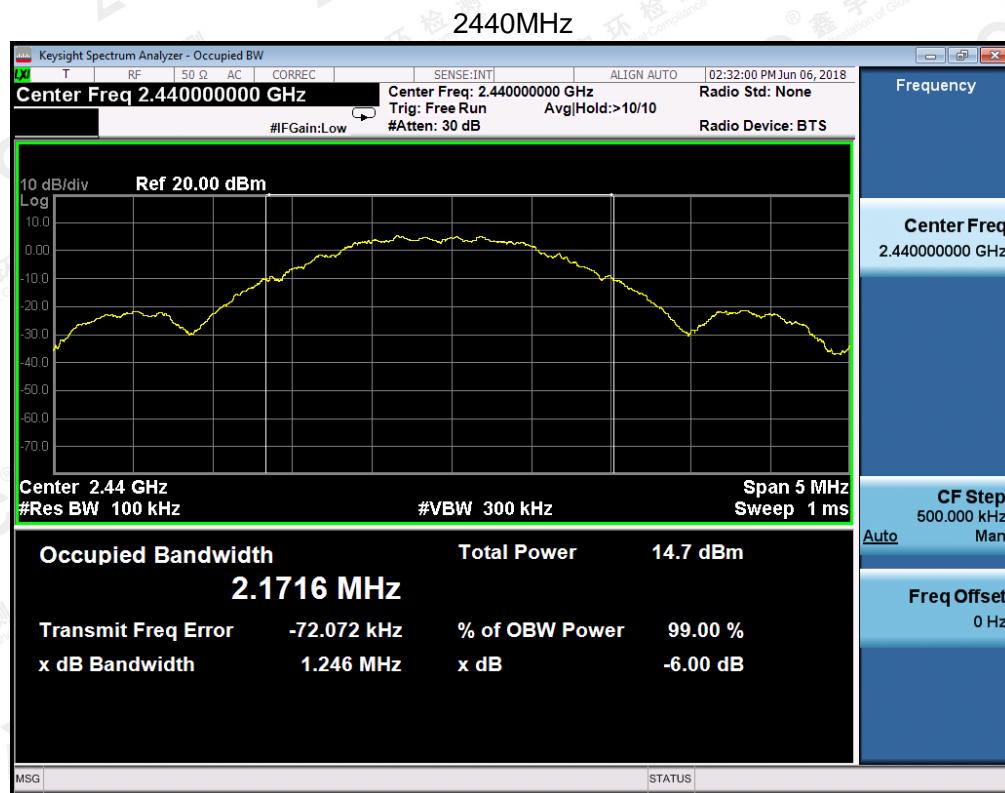
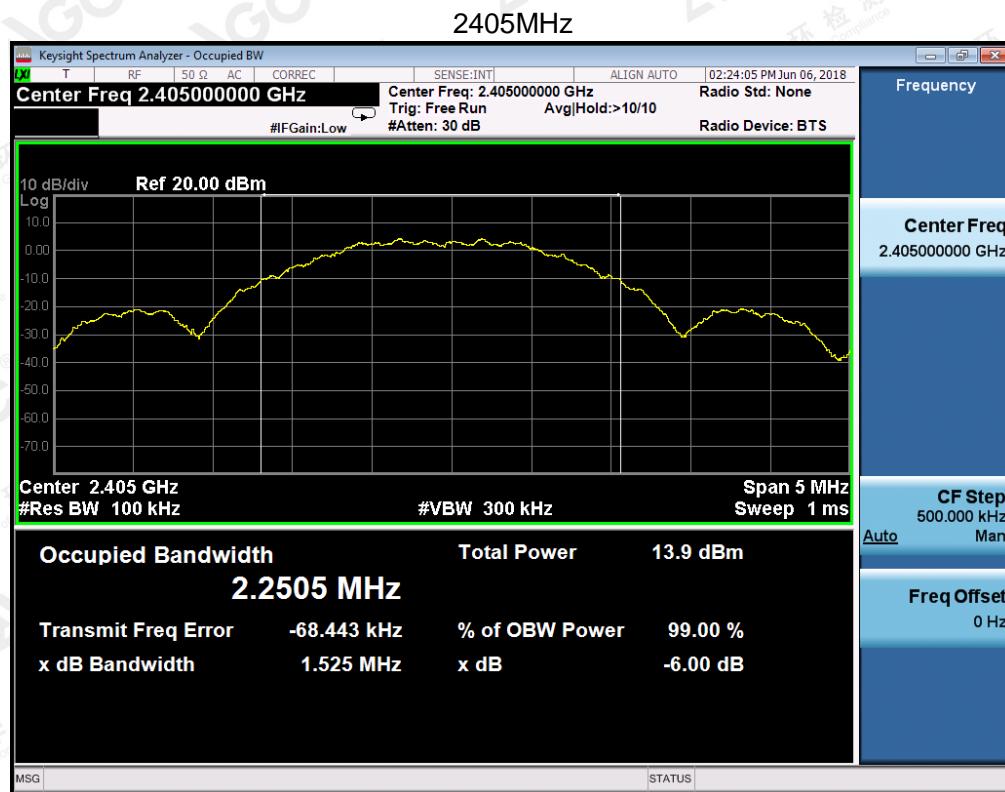
The same as described in section 7.2.

### 8.3. LIMITS AND MEASUREMENT RESULTS

LIMITS AND MEASUREMENT RESULT			
Applicable Limits	Applicable Limits		
	Test Data (MHz)	Criteria	
>500KHZ	2405	1.525	PASS
	2440	1.246	PASS
	2475	1.297	PASS
	2480	1.582	PASS

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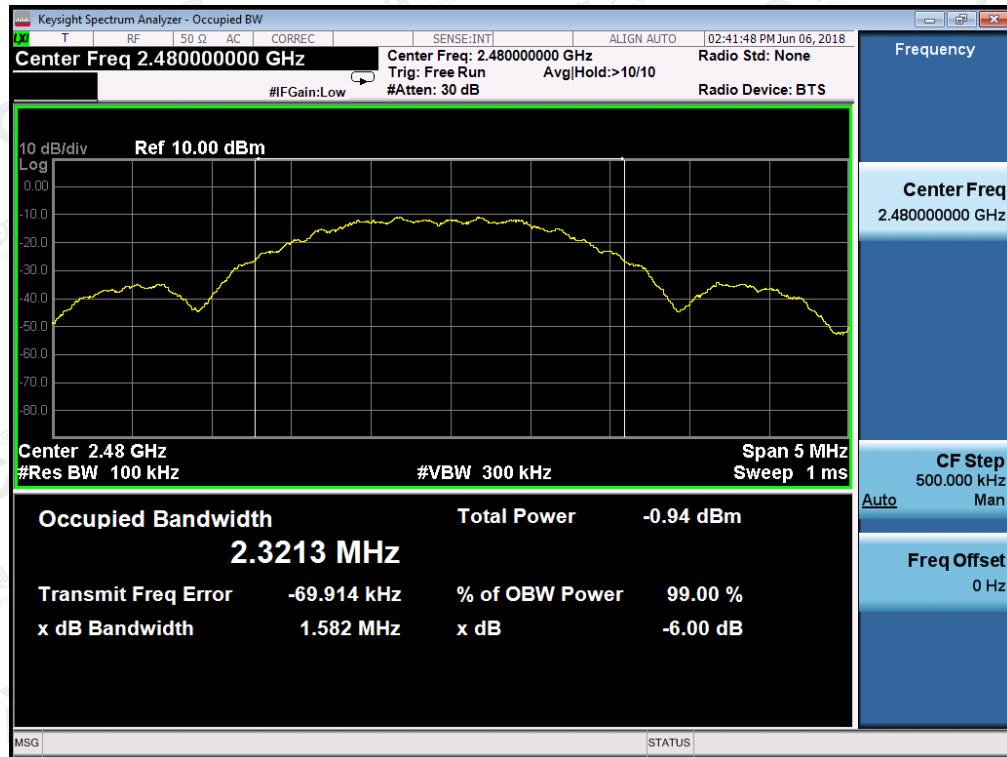
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2475MHz



2480MHz



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## 9. CONDUCTED SPURIOUS EMISSION

### 9.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
3. Set SPA Trace 1 Max hold, then View.

**Note:** The EUT was tested according to ANSI C63.10 for compliance to FCC PART 15.247 requirements.

### 9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 7.2.

### 9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6.

### 9.4. LIMITS AND MEASUREMENT RESULT

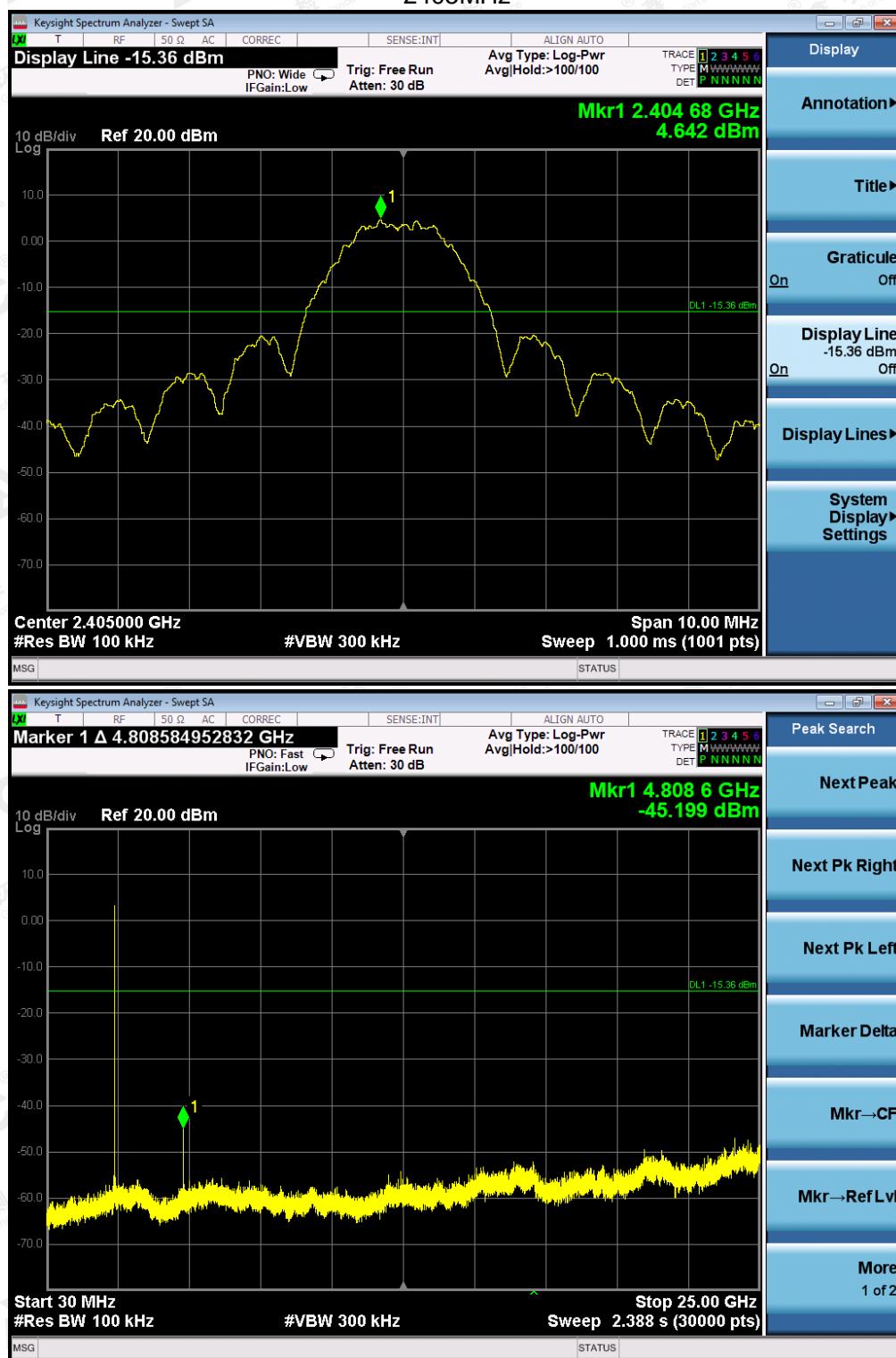
LIMITS AND MEASUREMENT RESULT		
Applicable Limits	Measurement Result	
	Test Data	Criteria
In any 100 KHz Bandwidth Outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produce by the intentional radiator shall be at least 20 dB below that in 100KHz bandwidth within the band that contains the highest level of the desired power.	At least -20dBc than the reference level	PASS

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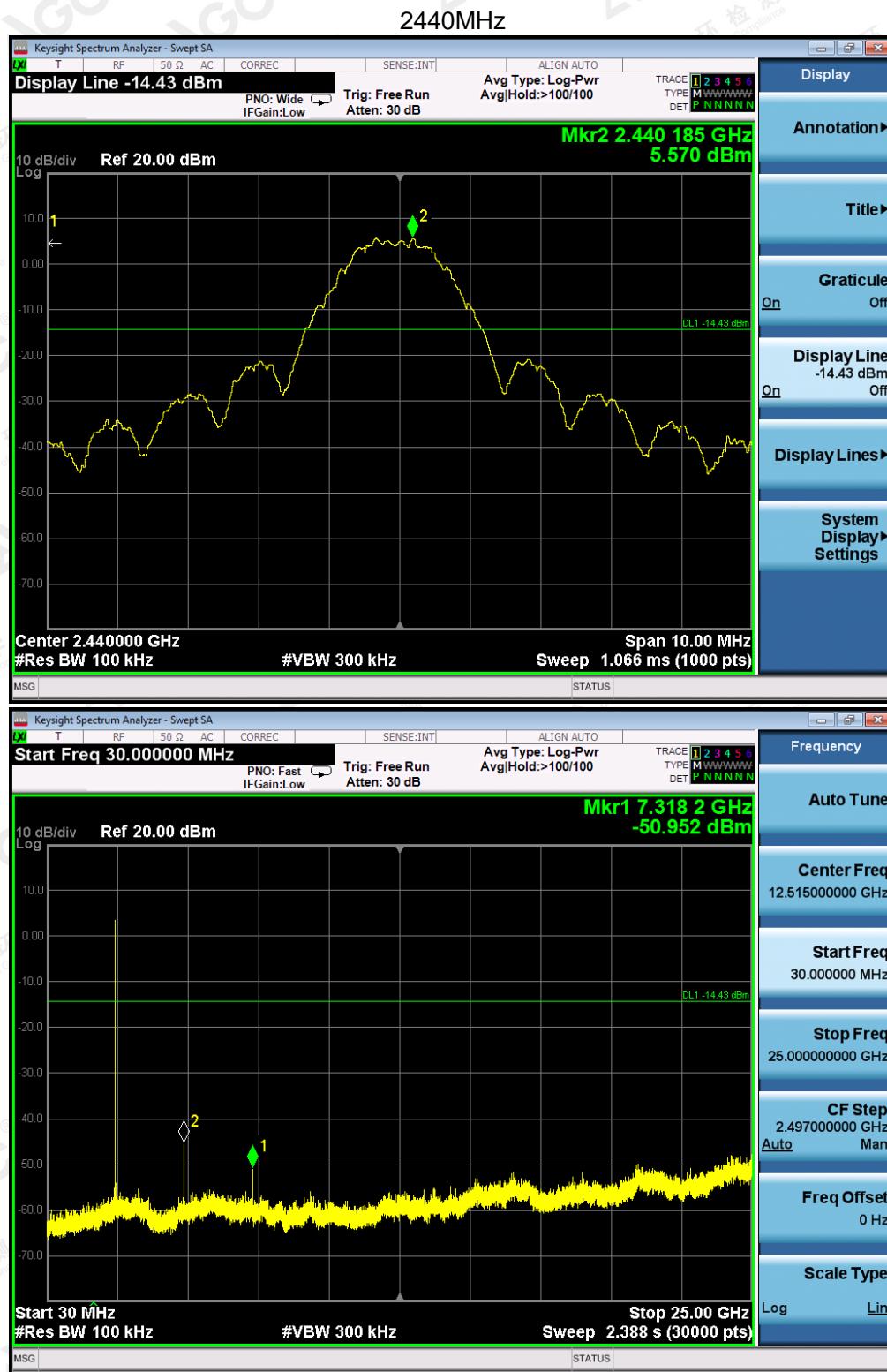
TEST RESULT FOR ENTIRE FREQUENCY RANGE

2405MHz



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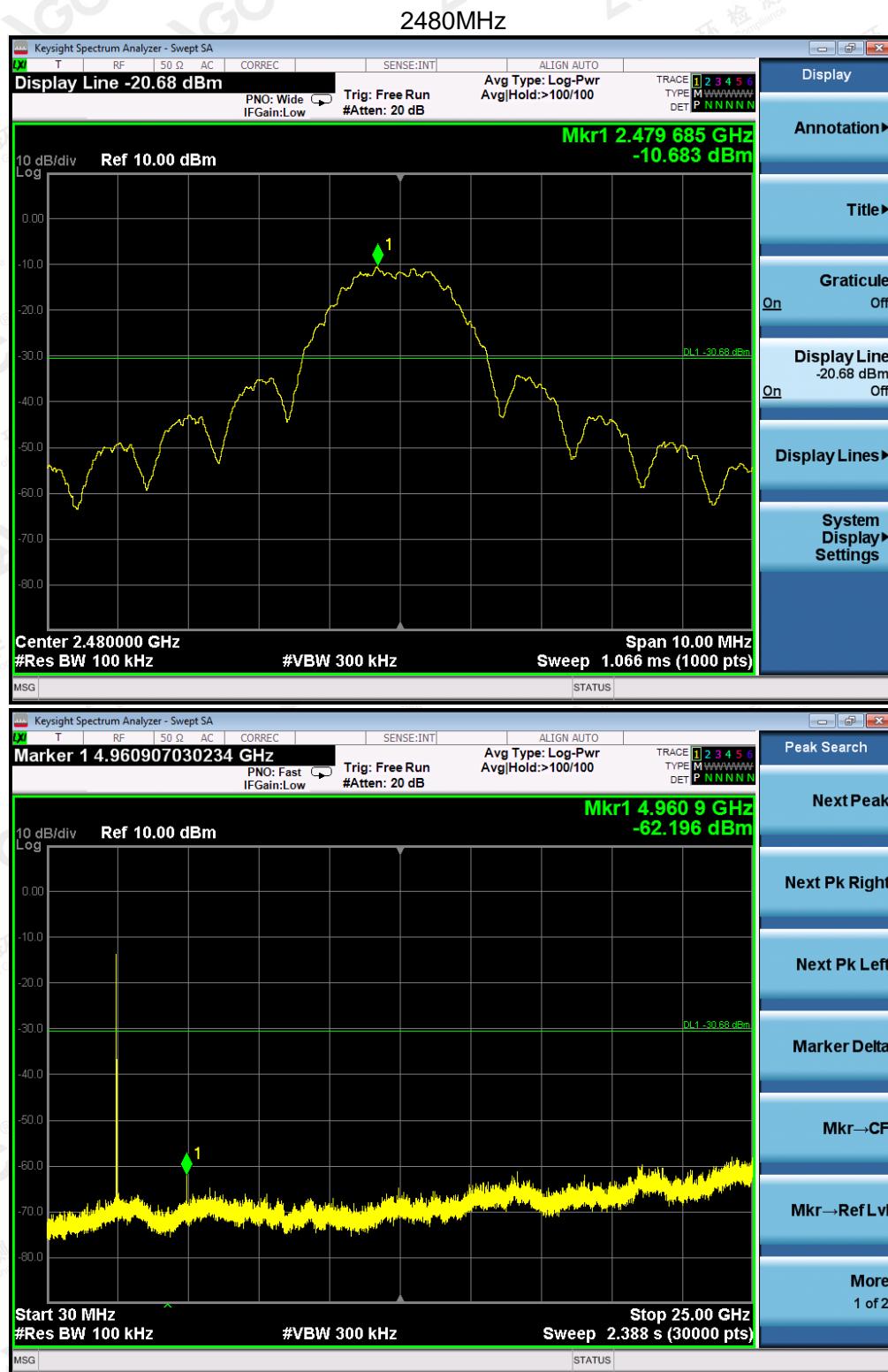
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Note: The peak emissions without marker on the above plots are fundamental wave and need not to compare with the limit.

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## TEST RESULT FOR BAND EDGE

2405MHz



2475MHz



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## 10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY

### 10.1 MEASUREMENT PROCEDURE

- (1). Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- (2). Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- (3). Set SPA Trace 1 Max hold, then View.

Note: The method of PKPSD in the KDB 558074 item 10.2 was used in this testing.

### 10.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

Refer To Section 7.2.

### 10.3 MEASUREMENT EQUIPMENT USED

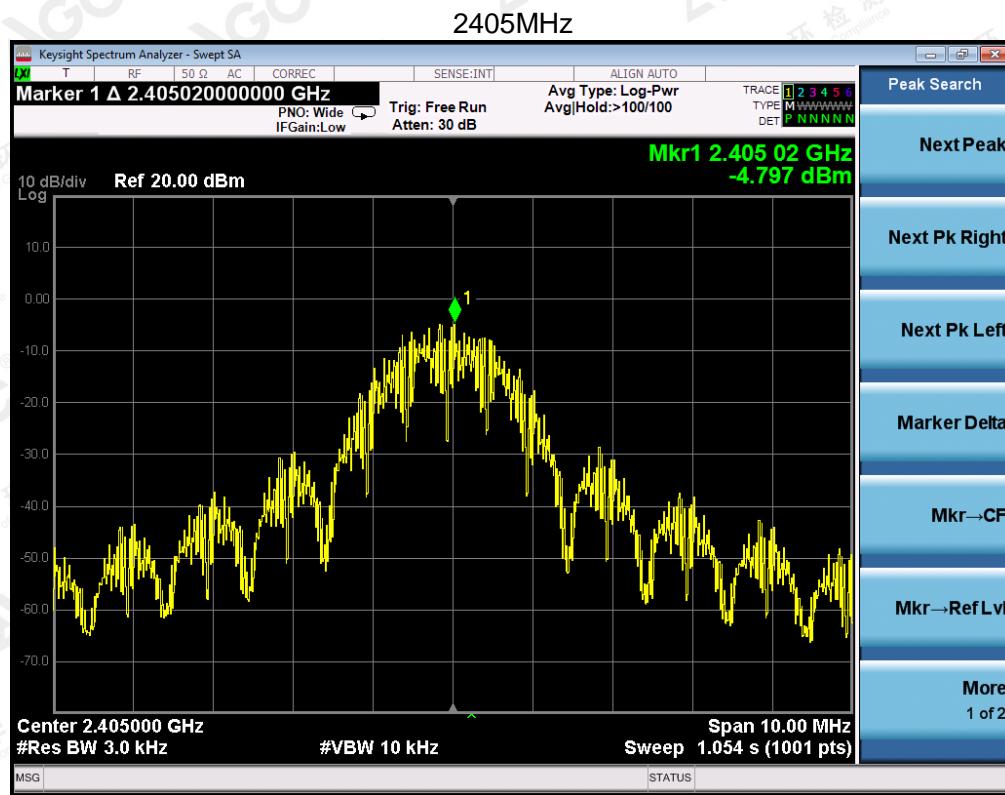
Refer To Section 6.

### 10.4 LIMITS AND MEASUREMENT RESULT

Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2405MHz	-4.797	8	Pass
2440MHz	-3.018	8	Pass
2475MHz	-3.364	8	Pass
2480MHz	-20.162	8	Pass

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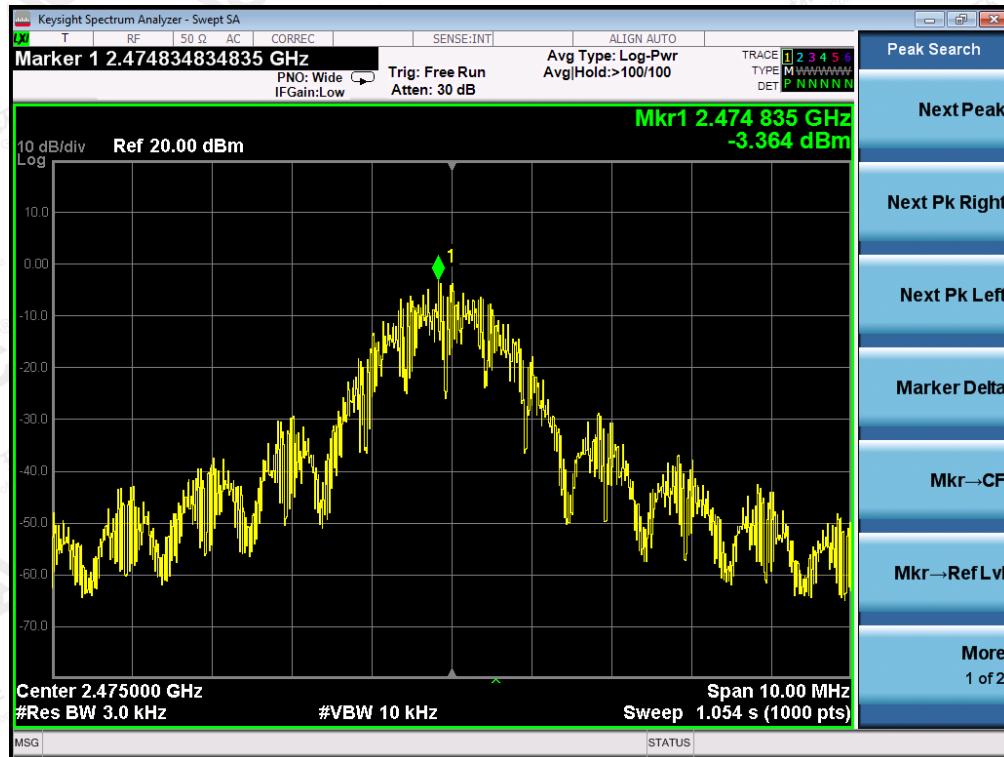




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2475MHz



2480MHz



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## 11. RADIATED EMISSION

### 11.1. MEASUREMENT PROCEDURE

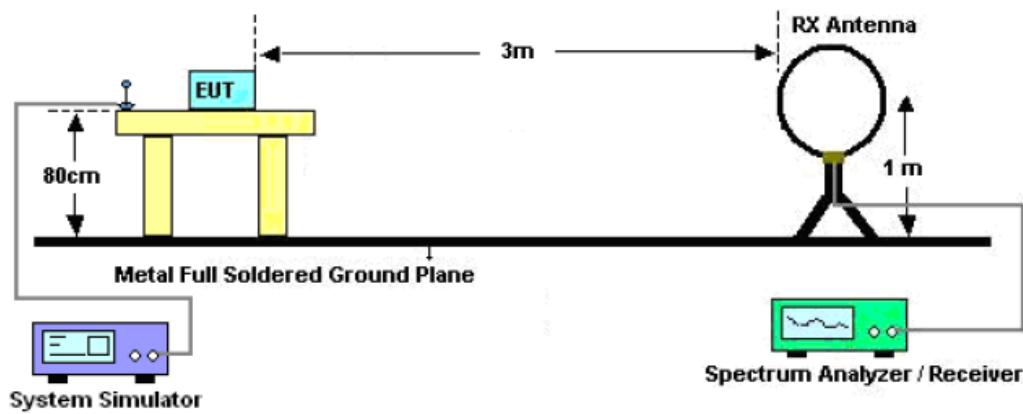
1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. 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.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High - Low scan is not required in this case.

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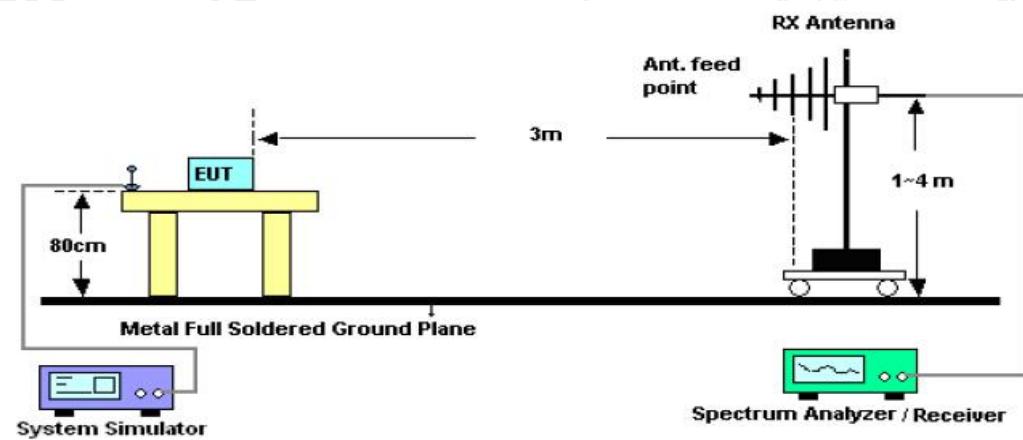


## 11.2. TEST SETUP

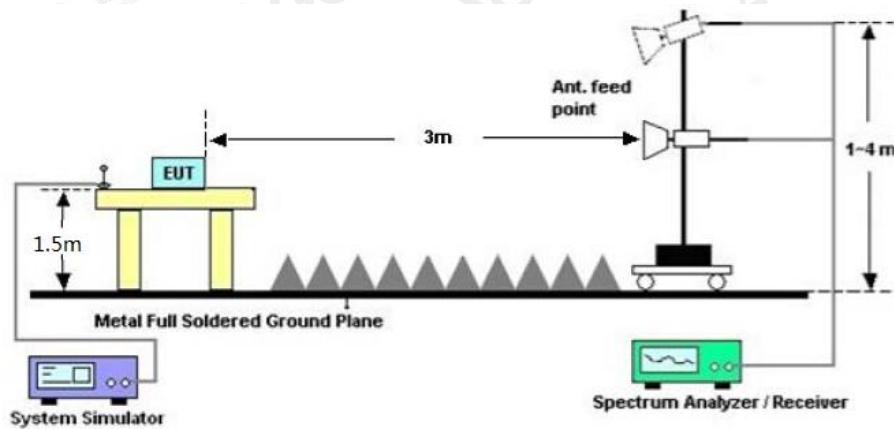
### Radiated Emission Test-Setup Frequency Below 30MHz



### RADIATED EMISSION TEST SETUP 30MHz-1000MHz



### RADIATED EMISSION TEST SETUP ABOVE 1000MHz



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**11.3. LIMITS AND MEASUREMENT RESULT**

15.209 Limit in the below table has to be followed

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Note: All modes were tested For restricted band radiated emission,  
the test records reported below are the worst result compared to other modes.

**11.4. TEST RESULT****RADIATED EMISSION BELOW 30MHZ**

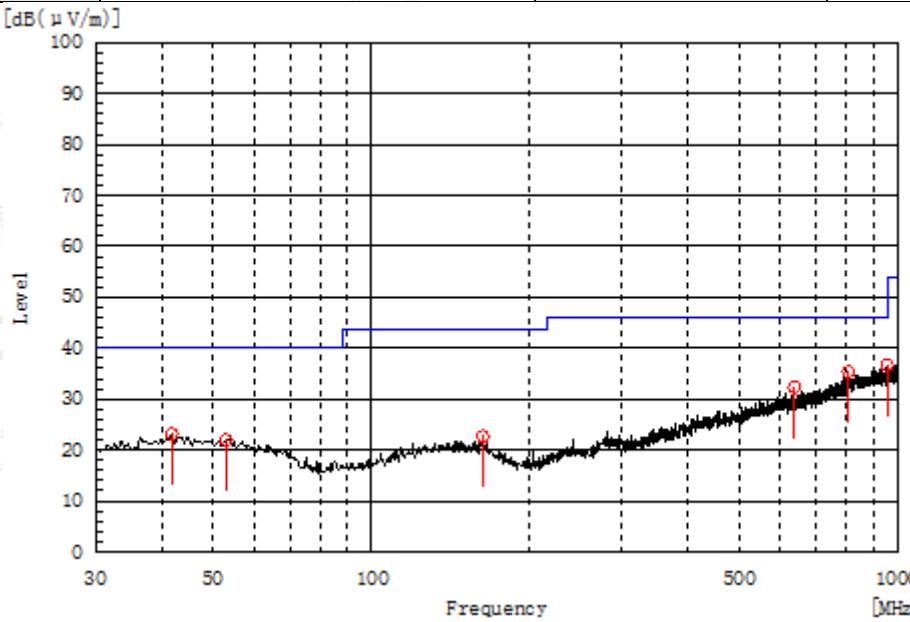
No emission found between lowest internal used/generated frequencies to 30MHz.

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### RADIATED EMISSION BELOW 1GHZ

<b>EUT</b>	Smart Target	<b>Model Name</b>	PI01OSTP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 4	<b>Antenna</b>	Horizontal



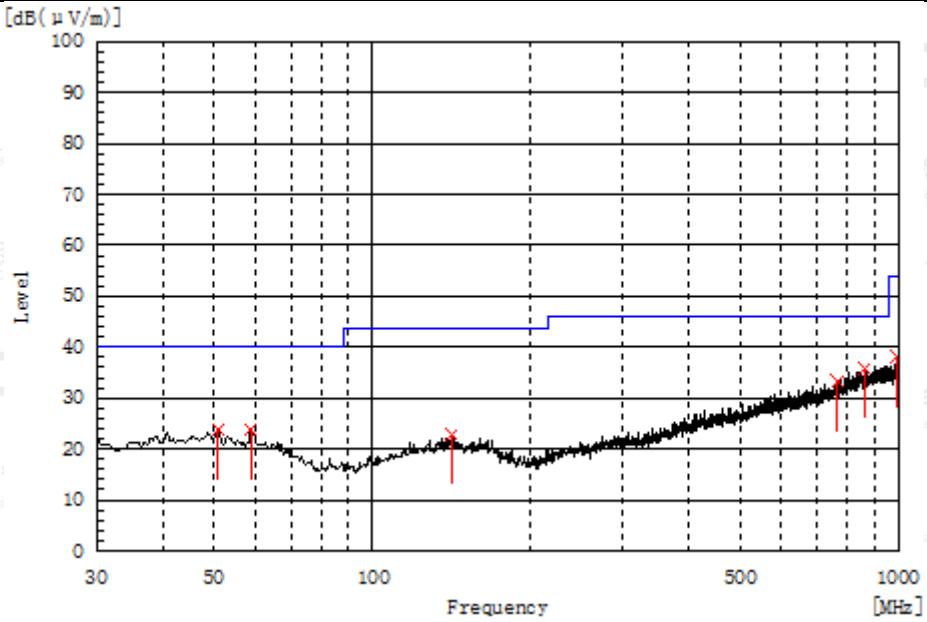
Frequency MHz	Polarization	Reading dB(uV)	Factor dB (1/m)	Level dB(uV/m) PK	Limit dB(uV/m) QP	Margin dB	Pass/Fail	Height cm	Angle deg
41.640	H	5.8	17.4	23.2	40.0	16.8	Pass	200.0	338.1
52.795	H	5.1	16.9	22.0	40.0	18.0	Pass	150.0	144.1
162.890	H	6.2	16.5	22.7	43.5	20.8	Pass	150.0	324.1
637.220	H	6.9	25.5	32.4	46.0	13.6	Pass	200.0	85.4
806.970	H	6.5	28.9	35.4	46.0	10.6	Pass	100.0	72.2
956.835	H	5.9	30.7	36.6	46.0	9.4	Pass	150.0	70.6

**RESULT: PASS**

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<b>EUT</b>	Smart Target	<b>Model Name</b>	PI0I0STP00200
<b>Temperature</b>	25 ° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 4	<b>Antenna</b>	Vertical



Frequency MHz	Polarization	Reading dB(uV)	Factor dB (1/m)	Level dB(uV/m) PK	Limit dB(uV/m) QP	Margin dB	Pass/Fail	Height cm	Angle deg
50.855	V	6.8	17.0	23.8	40.0	16.2	Pass	200.0	71.4
58.615	V	7.4	16.4	23.8	40.0	16.2	Pass	150.0	109.4
141.550	V	6.2	16.6	22.8	43.5	20.7	Pass	100.0	266.9
765.260	V	5.4	27.9	33.3	46.0	12.7	Pass	200.0	143.3
862.745	V	6.2	29.7	35.9	46.0	10.1	Pass	200.0	71.4
995.635	V	7.0	31.1	38.1	54.0	15.9	Pass	100.0	305.3

## RESULT: PASS

### Note:

1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.
2. All test modes had been tested. The mode 1 is the worst case and recorded in the report.

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**RADIATED EMISSION ABOVE 1GHZ**

<b>EUT</b>	Smart Target	<b>Model Name</b>	PI0I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 1	<b>Antenna</b>	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4810.035	45.85	7.12	52.97	74	-21.03	peak
4810.035	41.14	7.12	48.26	54	-5.74	AVG
7215.028	42.74	9.84	52.58	74	-21.42	peak
7215.028	35.45	9.84	45.29	54	-8.71	AVG
<b>Remark:</b>						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

<b>EUT</b>	Smart Target	<b>Model Name</b>	PI0I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 1	<b>Antenna</b>	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4810.035	44.24	7.12	51.36	74	-22.64	peak
4810.035	39.57	7.12	46.69	54	-7.31	AVG
7215.028	43.18	9.84	53.02	74	-20.98	peak
7215.028	38.27	9.84	48.11	54	-5.89	AVG
<b>Remark:</b>						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

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<b>EUT</b>	Smart Target	<b>Model Name</b>	PI0I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 2	<b>Antenna</b>	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4880.065	45.74	7.12	52.86	74	-21.14	
4880.065	42.05	7.12	49.17	54	-4.83	AVG
7320.115	40.54	9.84	50.38	74	-23.62	peak
7320.115	34.12	9.84	43.96	54	-10.04	AVG

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

<b>EUT</b>	Smart Target	<b>Model Name</b>	PI0I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 2	<b>Antenna</b>	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4880.052	41.52	7.12	48.64	74	-25.36	
4880.052	37.04	7.12	44.16	54	-9.84	AVG
7320.013	42.25	9.84	52.09	74	-21.91	peak
7320.013	36.74	9.84	46.58	54	-7.42	AVG

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

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<b>EUT</b>	Smart Target	<b>Model Name</b>	PI0I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 3	<b>Antenna</b>	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4950.065	45.85	7.12	52.97	74	-21.03	
4950.065	41.62	7.12	48.74	54	-5.26	AVG
7425.058	40.74	9.84	50.58	74	-23.42	peak
7425.058	39.21	9.84	49.05	54	-4.95	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

<b>EUT</b>	Smart Target	<b>Model Name</b>	PI0I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 3	<b>Antenna</b>	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4950.065	42.72	7.12	49.84	74	-24.16	
4950.065	40.44	7.12	47.56	54	-6.44	AVG
7425.058	43.31	9.84	53.15	74	-20.85	peak
7425.058	39.25	9.84	49.09	54	-4.91	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

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<b>EUT</b>	Smart Target	<b>Model Name</b>	PI0I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 4	<b>Antenna</b>	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4960.065	42.33	7.12	49.45	74	-24.55	peak
4960.065	37.04	7.12	44.16	54	-9.84	AVG
7440.058	38.54	9.84	48.38	74	-25.62	peak
7440.058	34.32	9.84	44.16	54	-9.84	AVG
<b>Remark:</b>						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

<b>EUT</b>	Smart Target	<b>Model Name</b>	PI0I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 4	<b>Antenna</b>	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4960.084	39.52	7.12	46.64	74	-27.36	peak
4960.084	34.85	7.12	41.97	54	-12.03	AVG
7440.065	37.28	9.84	47.12	74	-26.88	peak
7440.065	33.04	9.84	42.88	54	-11.12	AVG
<b>Remark:</b>						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

**RESULT: PASS**
**Note:**

Other emissions from 1G to 25 GHz are considered as ambient noise. No recording in the test report.

Factor = Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

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

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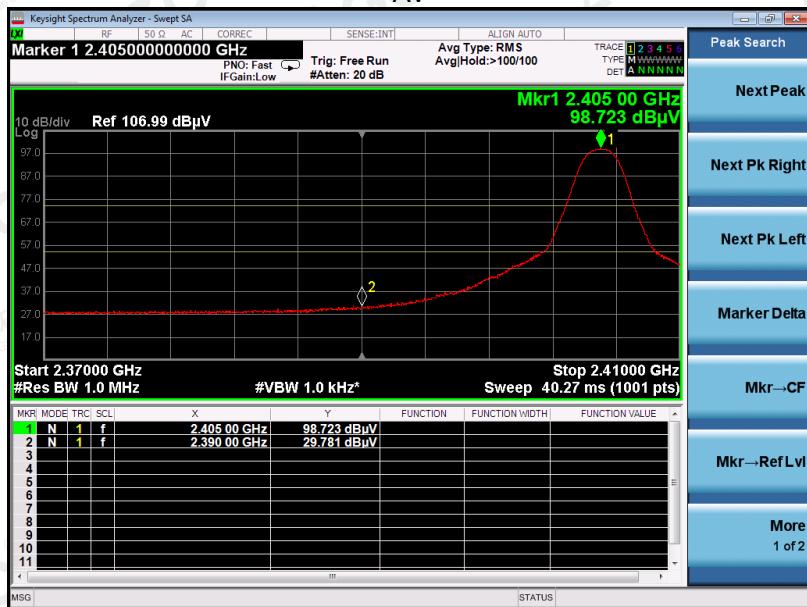
### TEST RESULT FOR RESTRICTED BANDS REQUIREMENTS

<b>EUT</b>	Smart Target	<b>Model Name</b>	P10I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 1	<b>Antenna</b>	Horizontal

PK



AV



**RESULT: PASS**

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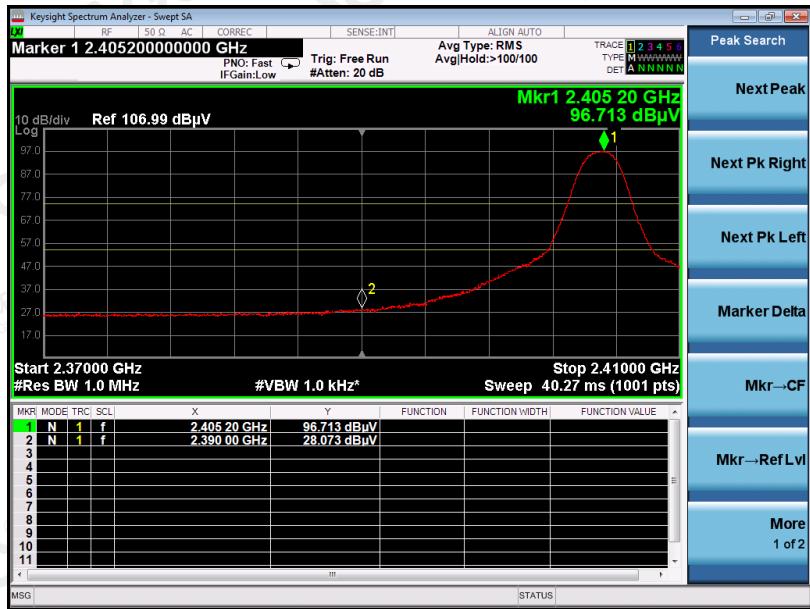


<b>EUT</b>	Smart Target	<b>Model Name</b>	P10I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 1	<b>Antenna</b>	Vertical

PK



AV

**RESULT: PASS**

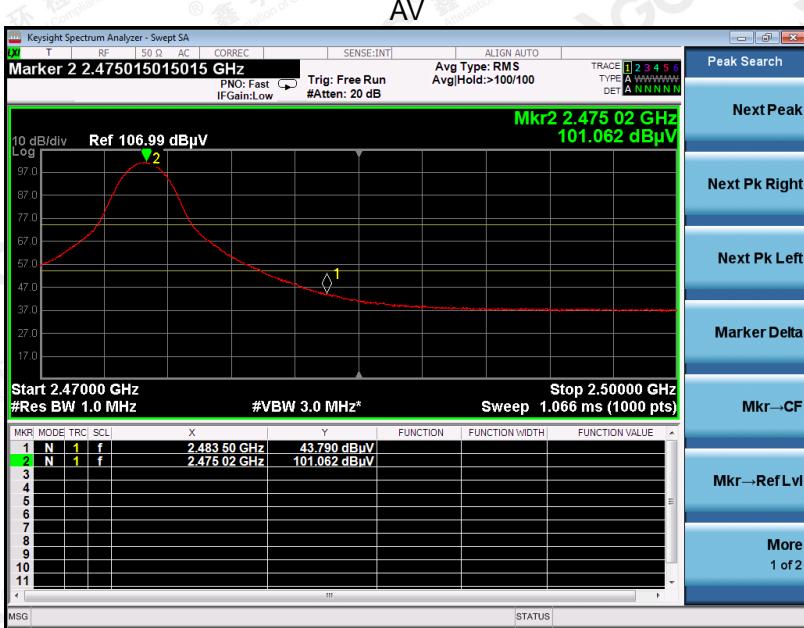
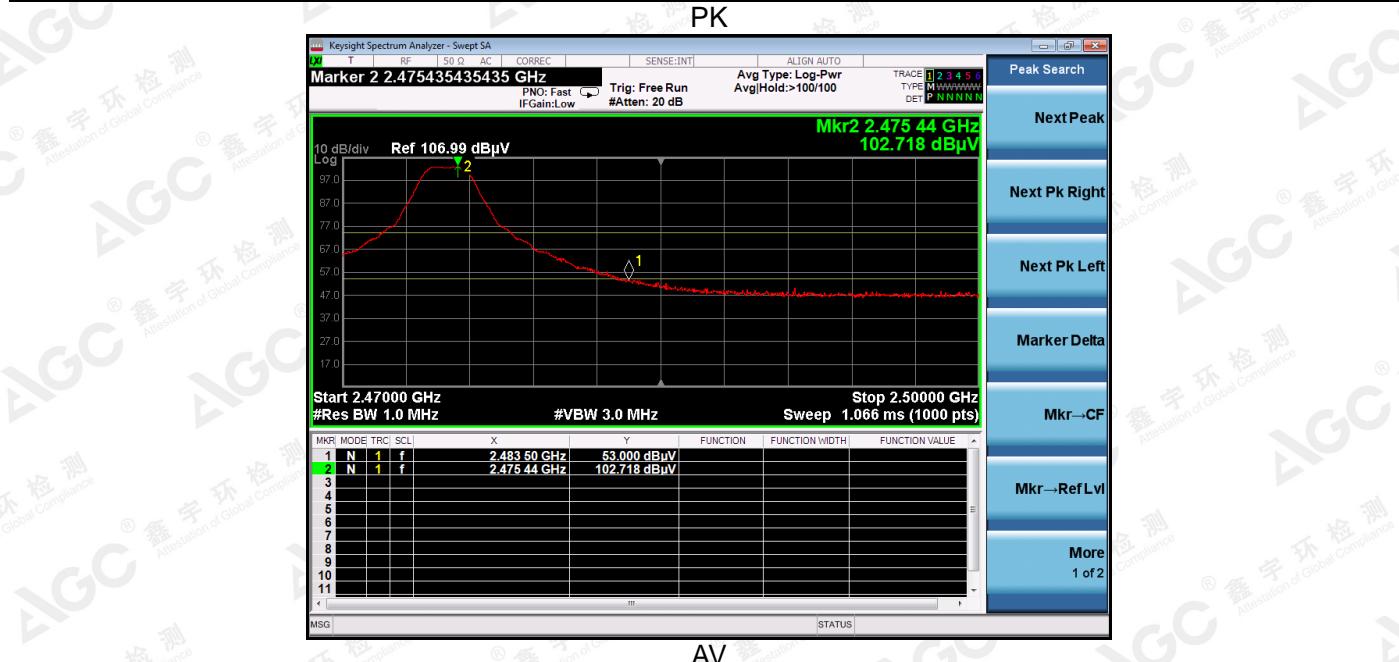
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<b>EUT</b>	Smart Target	<b>Model Name</b>	PI0I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 3	<b>Antenna</b>	Horizontal



**RESULT: PASS**

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<b>EUT</b>	Smart Target	<b>Model Name</b>	P10I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 3	<b>Antenna</b>	Vertical

PK



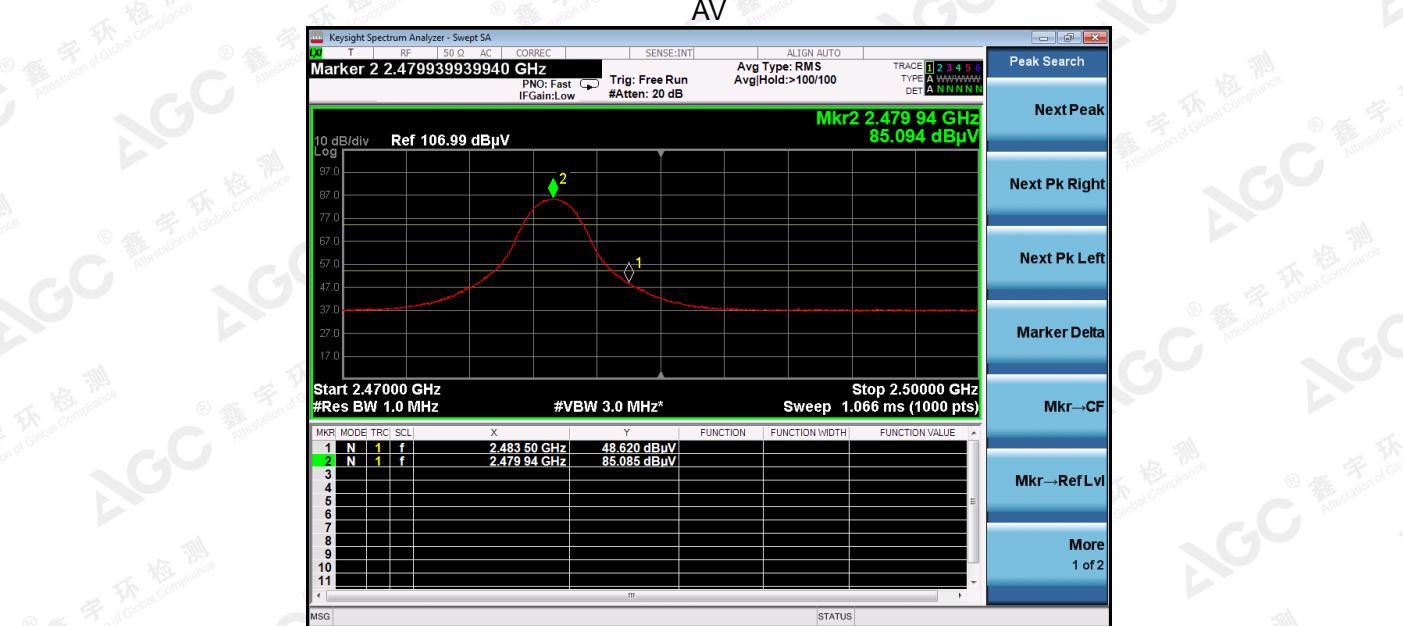
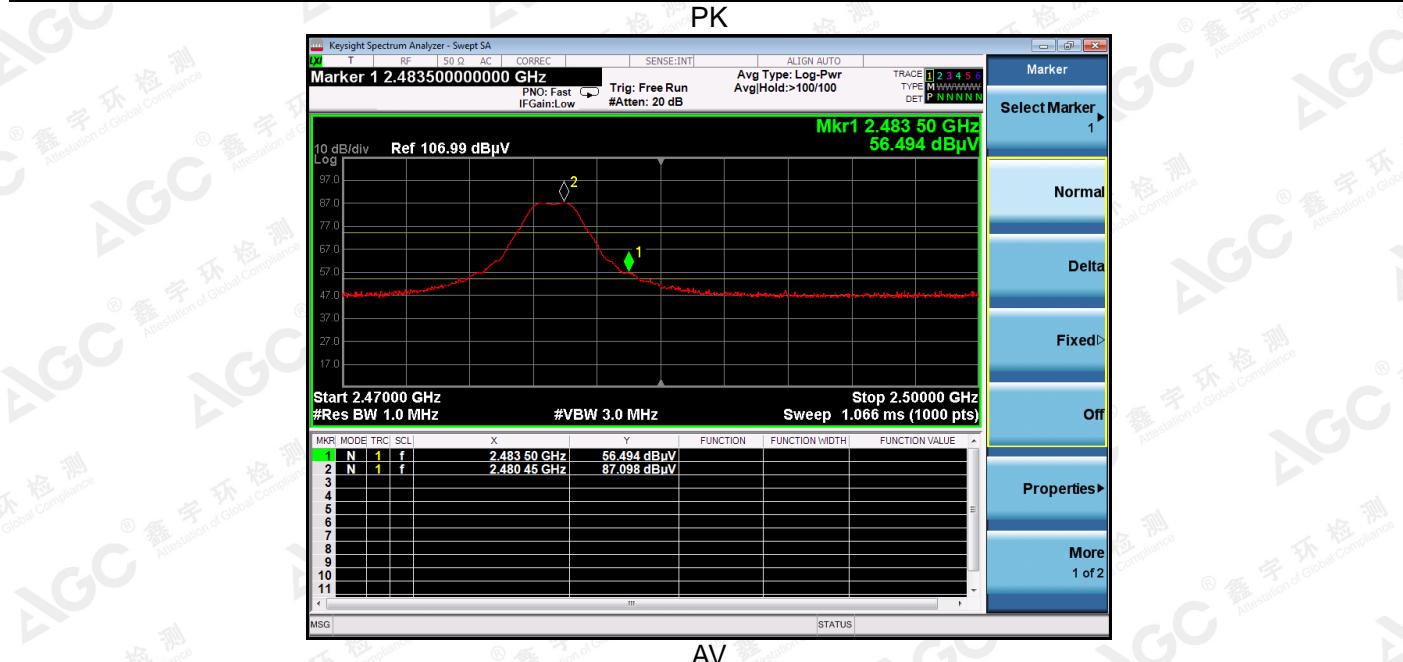
AV



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<b>EUT</b>	Smart Target	<b>Model Name</b>	PI0I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 4	<b>Antenna</b>	Horizontal

**RESULT: PASS**

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<b>EUT</b>	Smart Target	<b>Model Name</b>	P10I0STP00200
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 4	<b>Antenna</b>	Vertical

PK



AV



## RESULT: PASS

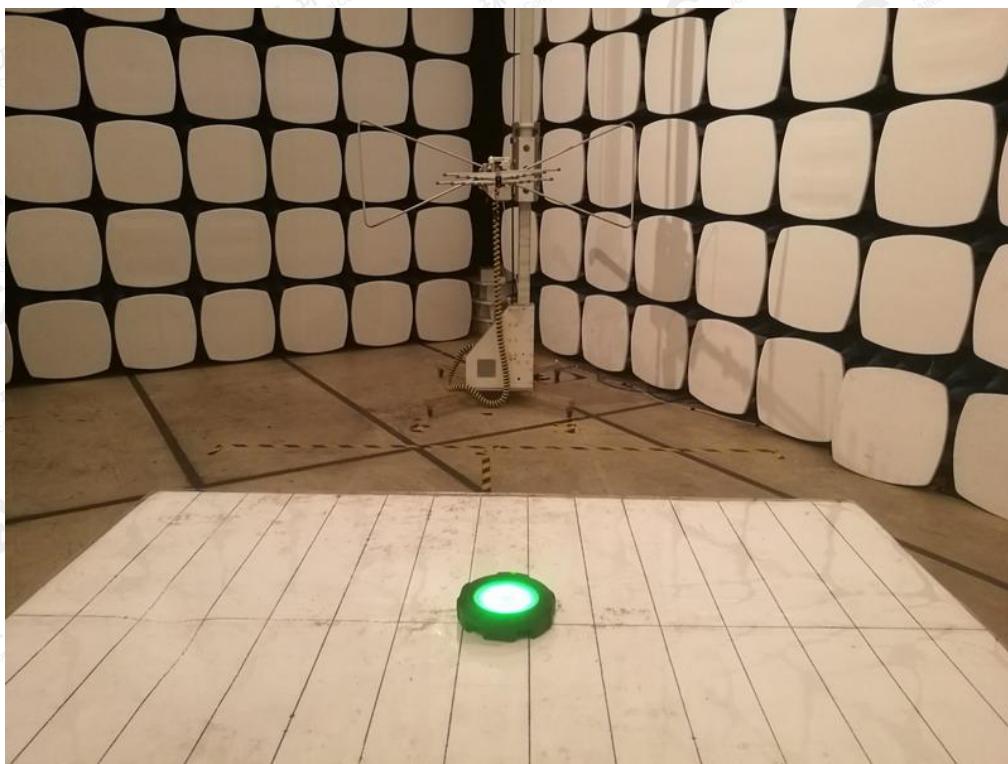
**Note:** The factor had been edited in the “Input Correction” of the Spectrum Analyzer. So the Amplitude of test plots is equal to Reading level plus the Factor in dB. Use the A dB(μV) to represent the Amplitude. Use the F dB(μV/m) to represent the Field Strength. So A=F.

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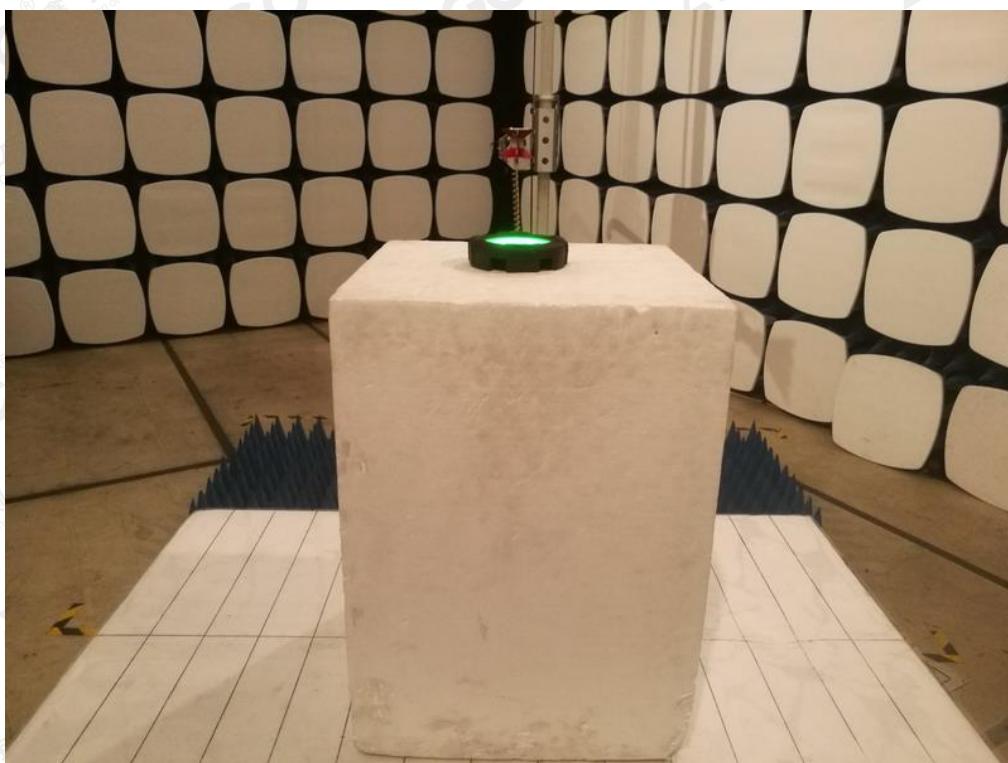


## APPENDIX A: PHOTOGRAPHS OF TEST SETUP

### RADIATED EMISSION TEST SETUP BELOW 1GHZ

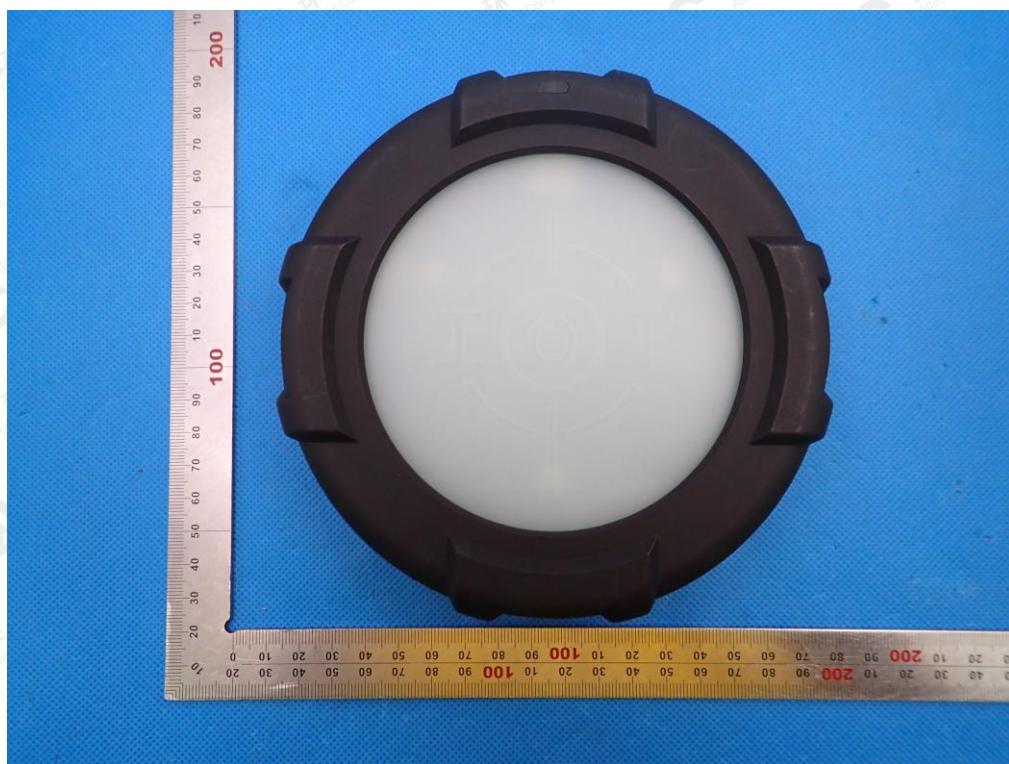


### RADIATED EMISSION TEST SETUP ABOVE 1GHZ



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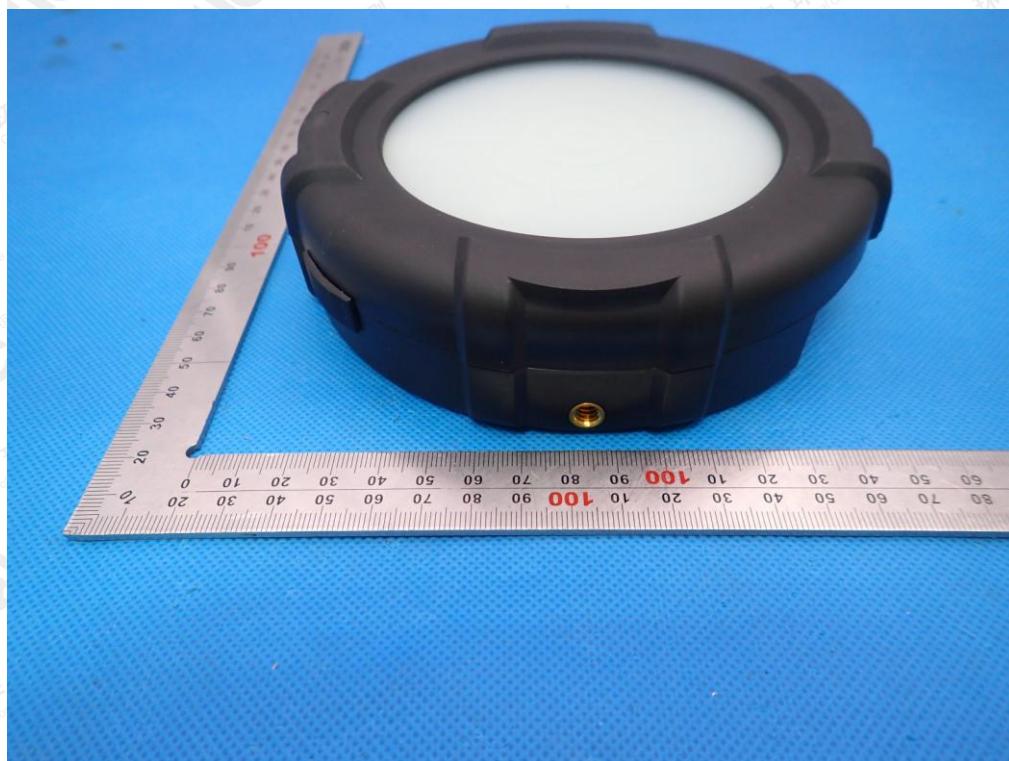


**APPENDIX B: PHOTOGRAPHS OF EUT****TOP VIEW OF EUT****BOTTOM VIEW OF EUT**

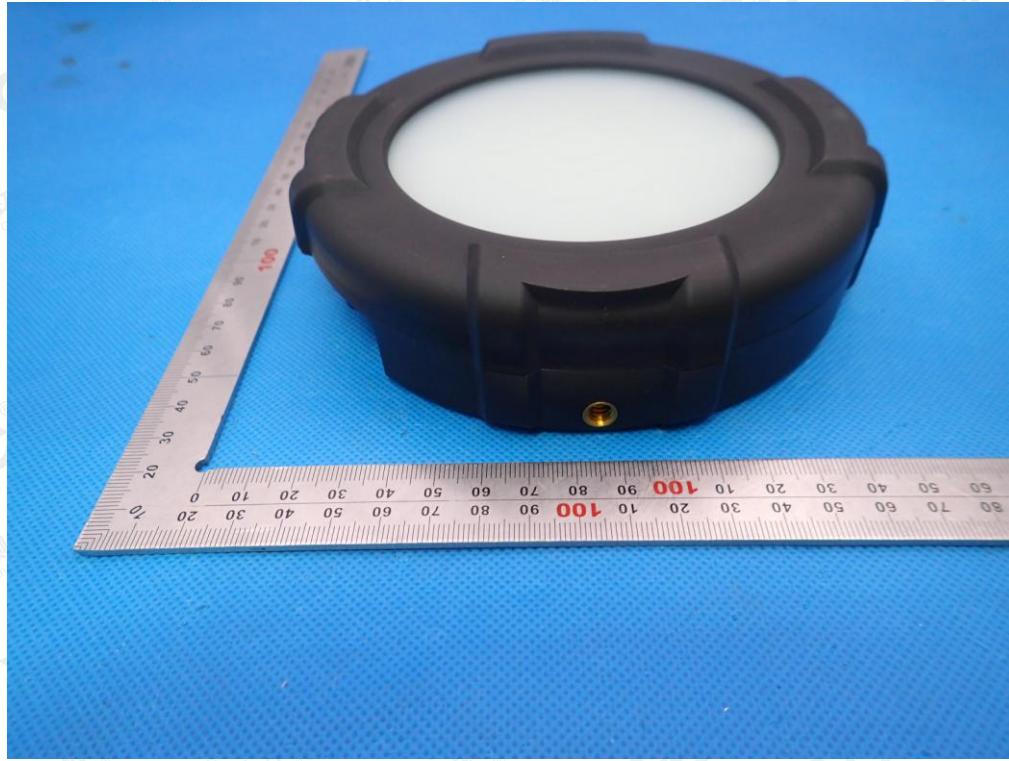
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FRONT VIEW OF EUT



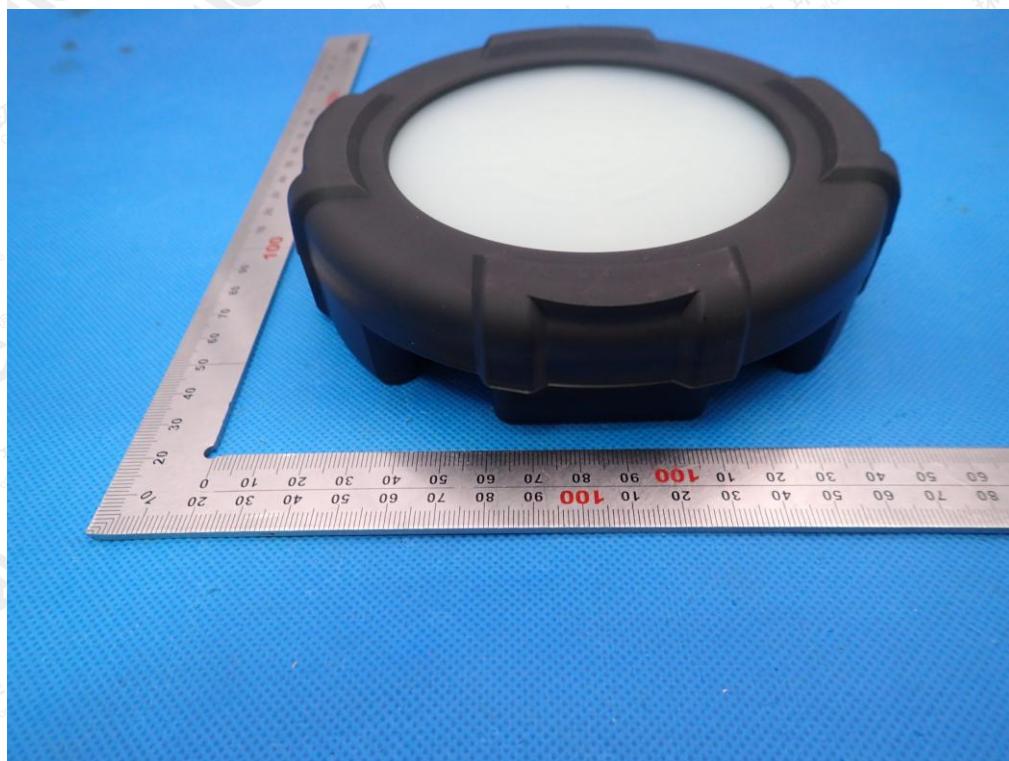
BACK VIEW OF EUT



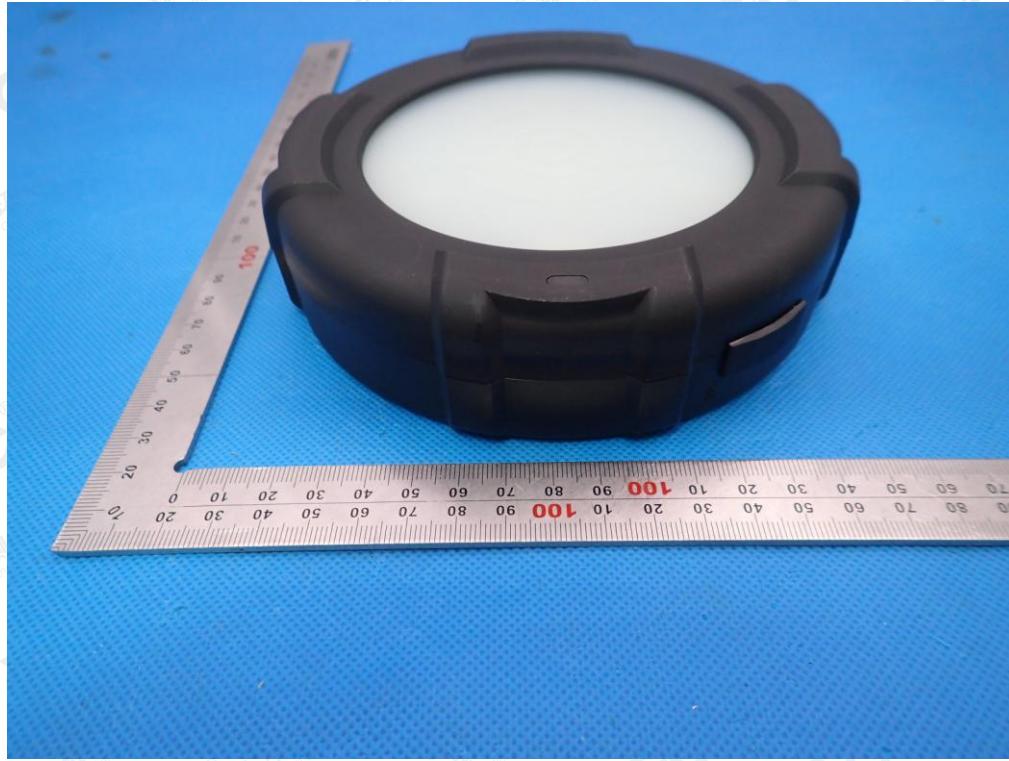
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LEFT VIEW OF EUT



RIGHT VIEW OF EUT



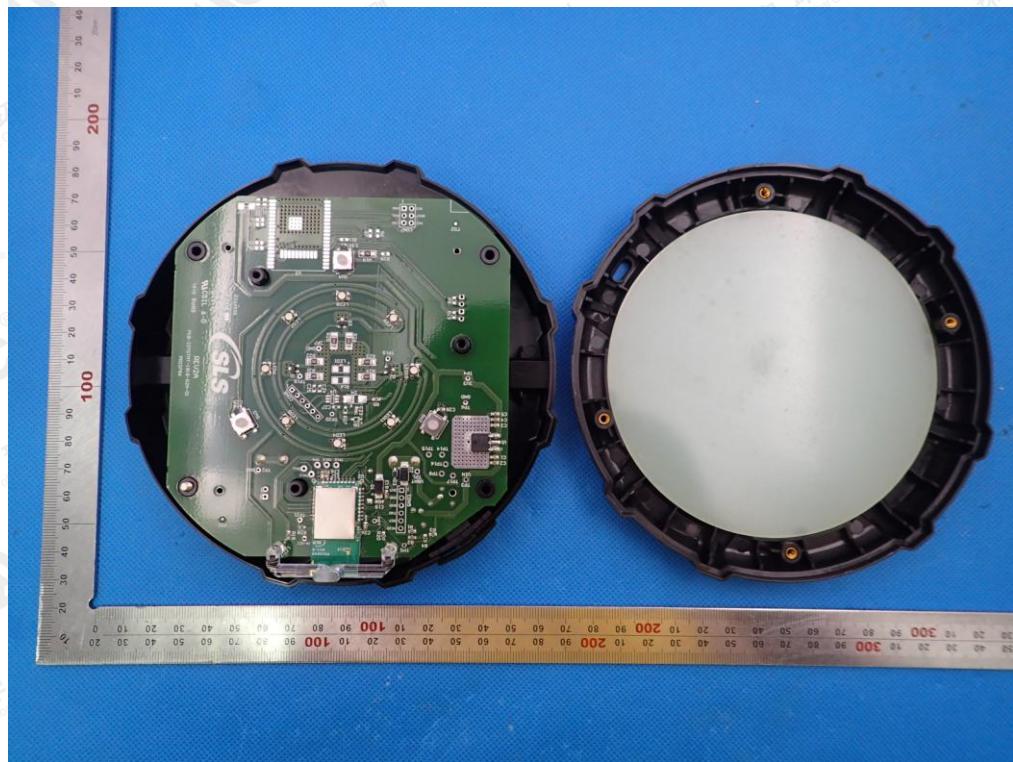
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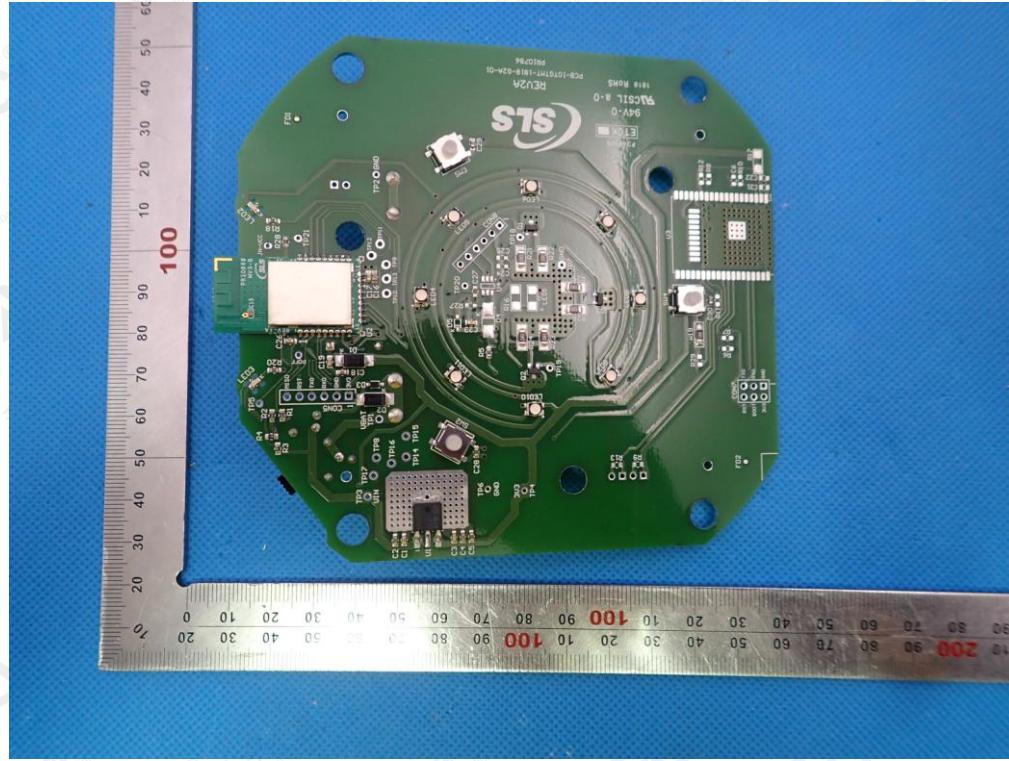
Attestation of Global Compliance

Tel: +86-755 2908 1955    Fax: +86-755 2600 8484    E-mail: [agc@agc-cert.com](mailto:agc@agc-cert.com)    400 089 2118  
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China

## OPEN VIEW-1 OF EUT



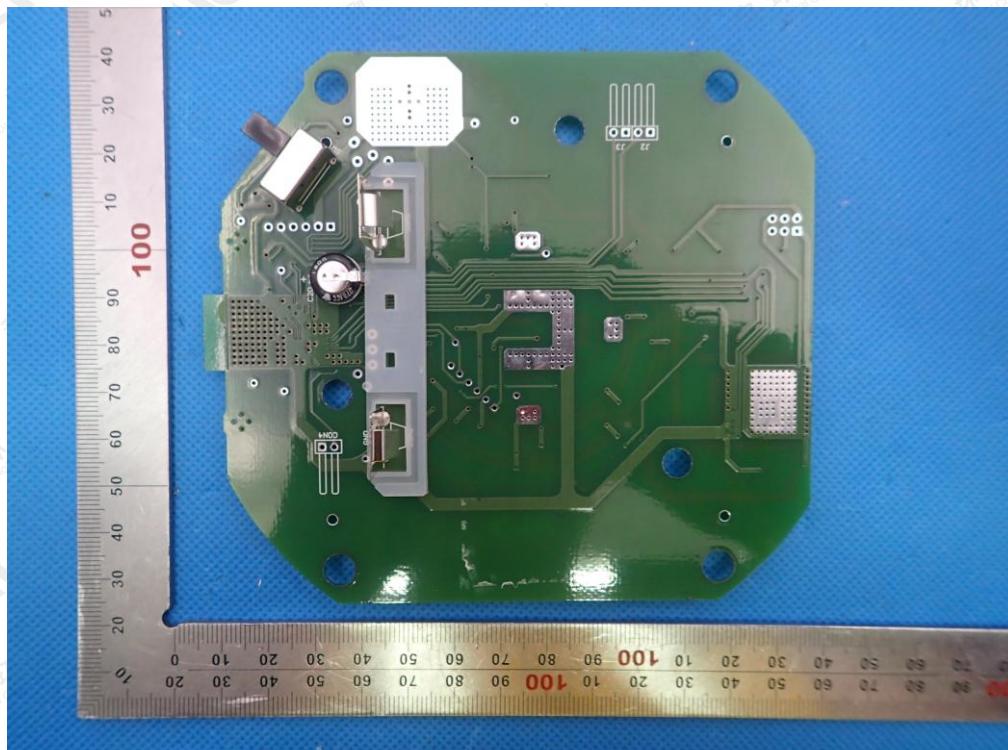
## INTERNAL VIEW-1 OF EUT



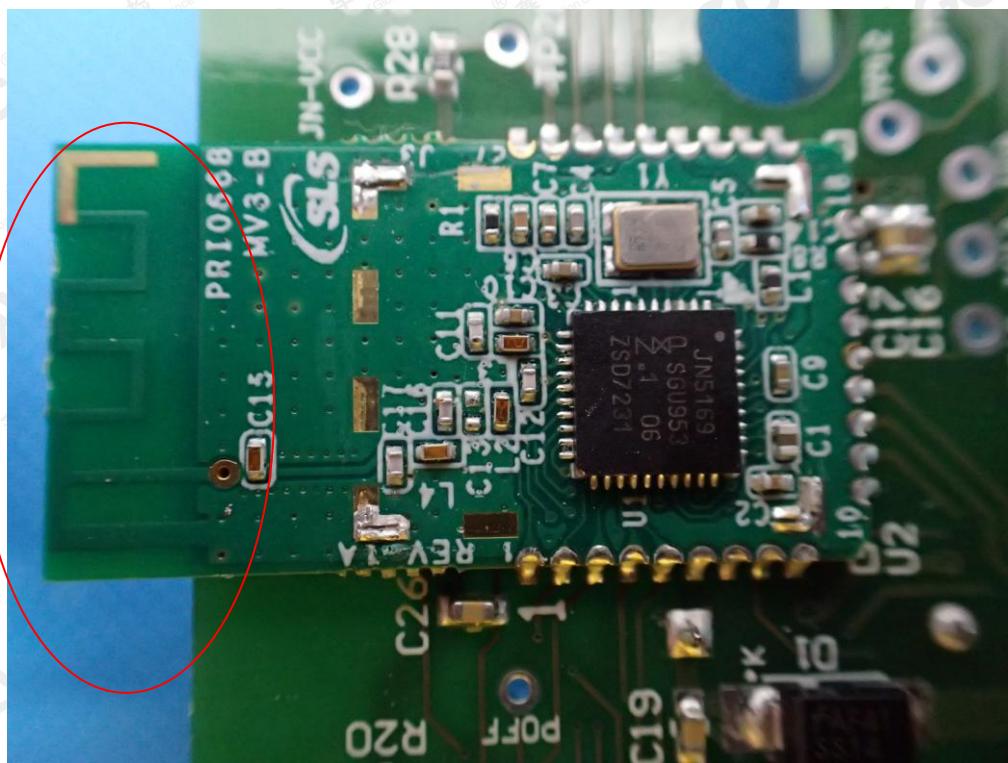
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## INTERNAL VIEW-2 OF EUT



## INTERNAL VIEW-3 OF EUT



----END OF REPORT----

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