

FCC - TEST REPORT

Report Number : **60.790.17.033.01R01** Date of Issue : September 8, 2017

Model : **THIM0290**

Product Type : **USB Bluetooth Monitoring Device**

Applicant : Dayton Industrial Co., Ltd.

Address : 2-12 Kwai Fat Road, 11-A Kwai Chung, New Territories, Hong Kong

Production Facility : KENDY ENTERPRISE LTD

Address : 2-12 Kwai Fat Road, 11-A Kwai Chung, New Territories, Hong Kong

Test Result : **Positive** **Negative**

Total pages including Appendices : 41

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2 Description of Equipment Under Test

Description of the Equipment Under Test

Product:	USB Bluetooth Monitoring Device
Model no.:	THIM0290
FCC ID:	O4GTHIMØ29Ø
Rating:	1. 3.7VDC (1 x 3.7VDC rechargeable battery) 2. 5.0VDC (USB port)
Frequency:	2402MHz-2480MHz
Antenna gain:	0 dBi
Number of operated channel:	40
Modulation:	GFSK



3 Summary of Test Standards

Test Standards

FCC Part 15 Subpart C 10-1-16 Edition Federal Communications Commission, PART 15 — Radio Frequency Devices, Subpart C — Unintentional Radiators

4 Details about the Test Laboratory

Site 1

Company name: TÜV SÜD Hong Kong Ltd.
3/F, West Wing, Lakeside 2,
10 Science Park West Avenue,
Science Park, Shatin, Hong Kong

Site 2

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Building 12&13 Zhiheng Wisdomland Business Park,
Nantou Checkpoint Road 2,
Shenzhen 518052, P.R.China
FCC Registration Number: 502708

Emission Tests	
Test Item	Test Site
FCC Part 15 Subpart C	
FCC Title 47 Part 15.205, 15.209 & 15.247(d) Spurious Radiated Emission	Site 2
FCC Title 47 Part 15.207 Conduct Emission	Site 2
FCC Title 47 Part 15.247(a)(1) 6dB & 99% Bandwidth	Site 2
FCC Title 47 Part 15.247(b) Peak Output Power	Site 2
FCC Title 47 Part 2.1051 & 15.247(d) Spurious Emissions at Antenna Terminals	Site 2
FCC Title 47 Part 15.247(d) 100kHz Bandwidth of band edges	Site 2
FCC Title 47 Part 15.247(e) Power Spectral Density	Site 2
FCC Title 47 Part 15.203 & 15.247(b) Antenna Requirement	Site 2

4.1 Test Equipment Site List

Radiated emission Test – Site 2

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	101269	2018-7-14
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9163	707	2018-7-14
Horn Antenna	Rohde & Schwarz	HF907	102294	2018-7-14
Pre-amplifier	Rohde & Schwarz	SCU 18	102230	2018-7-14
Signal Generator	Rohde & Schwarz	SMY01	839369/005	2018-7-7
Attenuator	Agilent	8491A	MY39264334	2018-7-7
3m Semi-anechoic chamber	TDK	9X6X6	----	2020-7-7
Test software	Rohde & Schwarz	EMC32	Version 9.15.00	N/A

Conducted Emission Test – Site 2

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 3	101782	2018-7-14
LISN	Rohde & Schwarz	ENV4200	100249	2018-7-14
LISN	Rohde & Schwarz	ENV432	101318	2018-7-14
LISN	Rohde & Schwarz	ENV216	100326	2018-7-14
ISN	Rohde & Schwarz	ENY81	100177	2018-7-14
ISN	Rohde & Schwarz	ENY81-CA6	101664	2018-7-14
High Voltage Probe	Rohde & Schwarz	TK9420(VT9420)	9420-584	2018-7-14
RF Current Probe	Rohde & Schwarz	EZ-17	100816	2018-7-14
Attenuator	Shanghai Huaxiang	TS2-26-3	080928189	2018-7-7
Test software	Rohde & Schwarz	EMC32	Version9.15.00	N/A

20dB & 99% Bandwidth, Peak Output Power, Spurious Emissions at Antenna Terminals, 100kHz Bandwidth of band edges, Power Spectral Density – Site 2

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
Signal Generator	Rohde & Schwarz	SMB100A	108272	2018-7-7
EMI Test Receiver	Rohde & Schwarz	ESR 26	101269	2018-7-14
Vector Signal Generator	Rohde & Schwarz	SMU 200A	105324	2018-7-7
RF Switch Module	Rohde & Schwarz	OSP120/OSP-B157	101226/100851	2018-7-7

4.2 Measurement System Uncertainty

Measurement System Uncertainty Emissions

System Measurement Uncertainty	
Items	Extended Uncertainty
Uncertainty for Radiated Emission in 3m chamber 9kHz-30MHz	4.54dB
Uncertainty for Radiated Emission in 3m chamber 30MHz-1000MHz	Horizontal: 4.83dB; Vertical: 4.91dB;
Uncertainty for Radiated Emission in 3m chamber 1000MHz-25000MHz	Horizontal: 4.89dB; Vertical: 4.88dB;
Uncertainty for Conducted RF test	2.04dB

5 Summary of Test Results

Emission Tests				
FCC Part 15 Subpart C				
Test Condition	Pages	Test Result		
		Pass	Fail	N/A
FCC Title 47 Part 15.205, 15.209 & 15.247(d) Spurious Radiated Emission	10-15	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FCC Title 47 Part 15.207 Conduct Emission	16-17	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FCC Title 47 Part 15.247(a)(2) 6dB & 99% Bandwidth	18-20	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FCC Title 47 Part 15.247(b) Peak Output Power	21-23	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FCC Title 47 Part 2.1051 & 15.247(d) Spurious Emissions at Antenna Terminals	24-26	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FCC Title 47 Part 15.247(d) 100kHz Bandwidth of band edges	27-30	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FCC Title 47 Part 15.247(e) Power Spectral Density	31-33	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FCC Title 47 Part 15.203 & 15.247(b) Antenna Requirement	34	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6 General Remarks

Remarks

NIL.

SUMMARY:

- All tests according to the regulations cited on page 5 were

- Performed

- **Not** Performed

- The Equipment Under Test

- **Fulfills** the general approval requirements.

- **Does not** fulfill the general approval requirements.

Sample Received Date: July 18, 2017

Testing Start Date: July 19, 2017

Testing End Date: August 31, 2017

- TÜV SÜD HONG KONG LTD. -

Reviewed by:



CHAN Kwong Ngai
EMC Test Engineer



Prepared by:



Alex CHAN
EMC Project Engineer

7 Emission Test Results

7.1 Spurious Radiated Emission

EUT: THIM0290
 Op Condition: Operated, TX Mode (2402MHz)
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Horizontal
 Comment: 3.7VDC
 Remark: 9kHz to 25GHz

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

Frequency MHz	Result dB μ V/m	Limit dB μ V/m	Margin dB	Detector
72.030	33.62	40.0	-6.38	Quasi Peak
119.970	31.03	43.5	-12.47	Quasi Peak
240.006	41.32	46.0	-4.68	Quasi Peak
1104.581	41.07	74.0	-32.93	Peak
1104.581	32.25	54.0	-21.75	Average
1856.445	41.25	74.0	-32.75	Peak
1856.445	33.08	54.0	-20.92	Average
4803.685	43.17	74.0	-30.83	Peak
4803.685	34.85	54.0	-19.15	Average
7213.942	50.50	74.0	-23.50	Peak
7213.942	39.88	54.0	-14.12	Average
9577.724	49.20	74.0	-24.80	Peak
9577.724	40.17	54.0	-13.83	Average
14993.437	47.21	74.0	-13.83	Peak
14993.437	38.62	54.0	-13.83	Average

Spurious Radiated Emission

EUT: THIM0290
 Op Condition: Operated, TX Mode (2402MHz)
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Vertical
 Comment: 3.7VDC
 Remark: 9kHz to 25GHz

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

Frequency MHz	Result dB μ V/m	Limit dB μ V/m	Margin dB	Detector
72.000	29.00	40.0	-11.00	Quasi Peak
95.940	31.64	43.5	-11.86	Quasi Peak
240.015	40.97	46.0	-5.03	Quasi Peak
1025.550	42.68	74.0	-31.32	Peak
1025.550	33.71	54.0	-20.29	Average
1805.725	47.65	74.0	-26.35	Peak
1805.725	39.41	54.0	-14.59	Average
4803.685	45.20	74.0	-28.80	Peak
4803.685	36.29	54.0	-17.71	Average
7213.942	51.68	74.0	-22.32	Peak
7213.942	42.95	54.0	-11.05	Average
9577.724	50.21	74.0	-23.79	Peak
9577.724	42.33	54.0	-11.67	Average
14992.031	47.27	74.0	-26.73	Peak
14992.031	38.29	54.0	-15.71	Average

Spurious Radiated Emission

EUT: THIM0290
 Op Condition: Operated, TX Mode (2442MHz)
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Horizontal
 Comment: 3.7VDC
 Remark: 9kHz to 25GHz

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

Frequency MHz	Result dBµV/m	Limit dBµV/m	Margin dB	Detector
72.160	28.32	40.0	-11.68	Quasi Peak
120.000	36.67	43.5	-6.83	Quasi Peak
240.005	41.25	46.0	-4.75	Quasi Peak
1024.624	42.97	74.0	-31.03	Peak
1024.624	31.63	54.0	-22.37	Average
1756.445	43.85	74.0	-30.15	Peak
1756.445	32.91	54.0	-21.09	Average
4879.800	57.30	74.0	-16.70	Peak
4879.800	41.33	54.0	-12.67	Average
7326.755	57.72	74.0	-16.28	Peak
7326.755	47.12	54.0	-6.88	Average
9598.664	50.62	74.0	-23.38	Peak
9598.664	40.24	54.0	-13.76	Average
16292.812	48.31	74.0	-25.69	Peak
16292.812	39.14	54.0	-14.86	Average

Spurious Radiated Emission

EUT: THIM0290
 Op Condition: Operated, TX Mode (2442MHz)
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Vertical
 Comment: 3.7VDC
 Remark: 9kHz to 25GHz

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

Frequency MHz	Result dB μ V/m	Limit dB μ V/m	Margin dB	Detector
72.160	27.65	40.0	-12.35	Quasi Peak
120.000	35.69	43.5	-7.81	Quasi Peak
240.015	40.33	46.0	-5.67	Quasi Peak
1024.624	41.72	74.0	-32.28	Peak
1024.624	30.82	54.0	-23.18	Average
1756.445	42.44	74.0	-31.56	Peak
1756.445	31.56	54.0	-22.44	Average
4879.800	56.21	74.0	-17.79	Peak
4879.800	44.39	54.0	-9.61	Average
7320.755	54.27	74.0	-19.73	Peak
7320.755	42.98	54.0	-11.02	Average
9598.664	49.32	74.0	-24.68	Peak
9598.664	38.86	54.0	-15.14	Average
14993.906	45.53	74.0	-28.47	Peak
14993.906	34.28	54.0	-19.72	Average

Spurious Radiated Emission

EUT: THIM0290
 Op Condition: Operated, TX Mode (2480MHz)
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Horizontal
 Comment: 3.7VDC
 Remark: 9kHz to 25GHz

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

Frequency MHz	Result dBµV/m	Limit dBµV/m	Margin dB	Detector
71.790	32.86	40.0	-7.14	Quasi Peak
120.000	30.49	43.5	-13.01	Quasi Peak
240.017	38.55	46.0	-7.45	Quasi Peak
1195.260	41.63	74.0	-32.37	Peak
1195.150	31.22	54.0	-22.78	Average
1854.505	43.28	74.0	-30.72	Peak
1854.505	32.99	54.0	-21.01	Average
4958.125	40.67	74.0	-33.33	Peak
4958.125	30.12	54.0	-23.88	Average
7444.711	53.28	74.0	-20.72	Peak
7444.711	42.18	54.0	-11.82	Average
10212.339	57.58	74.0	-16.42	Peak
10212.339	45.22	54.0	-8.78	Average
14997.656	49.23	74.0	-24.77	Peak
14997.656	40.05	54.0	-13.95	Average

Spurious Radiated Emission

EUT: THIM0290
 Op Condition: Operated, TX Mode (2480MHz)
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Vertical
 Comment: 3.7VDC
 Remark: 9kHz to 25GHz

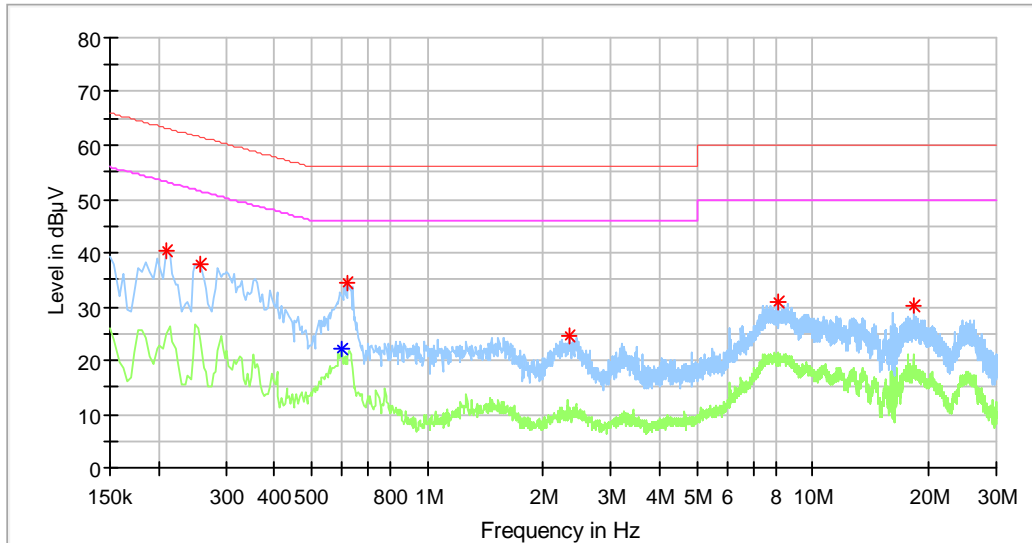
Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

Frequency MHz	Result dB μ V/m	Limit dB μ V/m	Margin dB	Detector
71.790	32.99	40.0	-7.01	Quasi Peak
120.000	31.87	43.5	-11.63	Quasi Peak
240.017	39.95	46.0	-6.05	Quasi Peak
1195.260	42.71	74.0	-31.29	Peak
1195.150	33.03	54.0	-20.97	Average
1854.505	41.05	74.0	-32.95	Peak
1854.505	31.12	54.0	-22.88	Average
4958.125	42.41	74.0	-31.59	Peak
4958.125	31.76	54.0	-22.24	Average
7444.711	52.41	74.0	-21.59	Peak
7444.711	41.89	54.0	-12.11	Average
10212.339	59.32	74.0	-14.68	Peak
10212.339	45.65	54.0	-8.35	Average
14997.656	47.23	74.0	-26.77	Peak
14997.656	37.94	54.0	-16.06	Average

7.2 Conducted Emission

EUT: THIM0290
 Op Condition: Operated, Normal Link
 Test Specification: FCC 15.207 Conduct Emission, N Line
 Comment: 120VAC, 60Hz (For external adaptor)

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

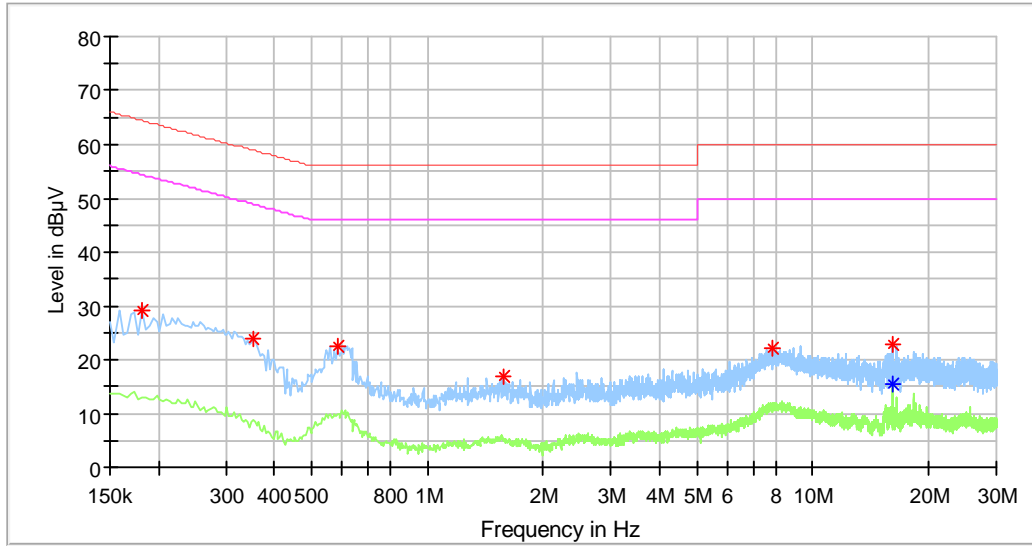


Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)
0.210000	40.47	---	63.21	-22.73
0.258000	37.95	---	61.50	-23.55
0.598000	---	22.19	46.00	23.81
0.622000	34.31	---	56.00	-21.69
2.338000	24.48	---	56.00	-31.52
8.114000	30.94	---	60.00	-29.06
18.246000	30.20	---	60.00	-29.80

Conducted Emission

EUT: THIM0290
 Op Condition: Operated, Normal Link
 Test Specification: FCC 15.207 Conduct Emission, L Line
 Comment: 120VAC, 60Hz (For external adaptor)

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

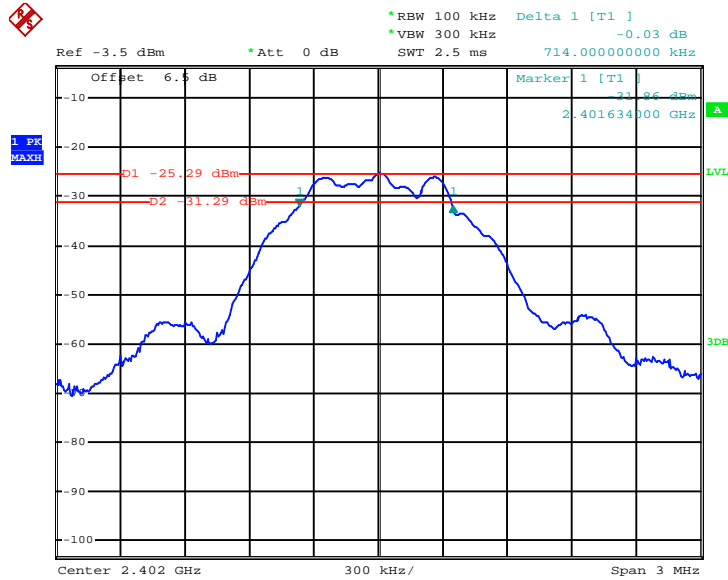


Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)
0.182000	29.01	---	64.39	-35.39
0.354000	23.80	---	58.87	-35.06
0.582000	22.61	---	56.00	-33.39
1.578000	16.88	---	56.00	-39.12
7.830000	22.13	---	60.00	-37.87
16.230000	22.93	---	60.00	-37.07
16.230000	---	15.44	50.00	-34.56

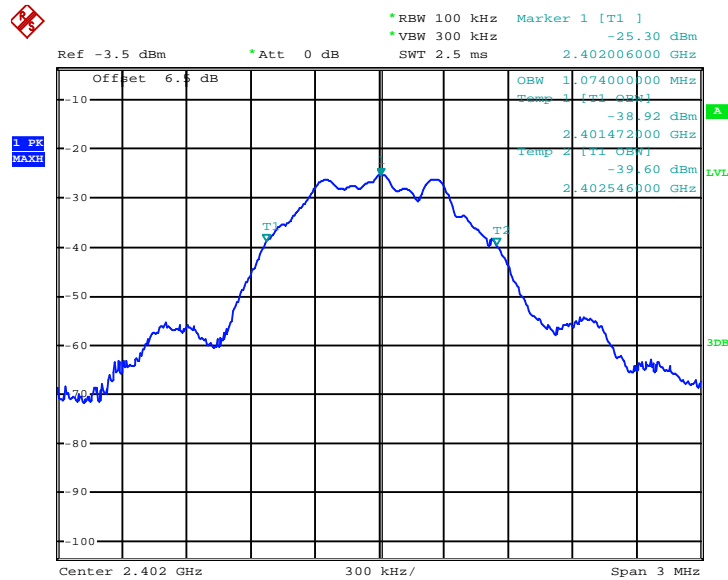
7.3 6dB & 99% Bandwidth

EUT: THIM0290
 Op Condition: Operated, TX Mode (2402MHz)
 Test Specification: FCC15.247(a)(2), 6dB Bandwidth & 99% Bandwidth
 Comment: 3.7VDC

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed



6dB bandwidth	Limit
714.000 kHz	> 500 kHz

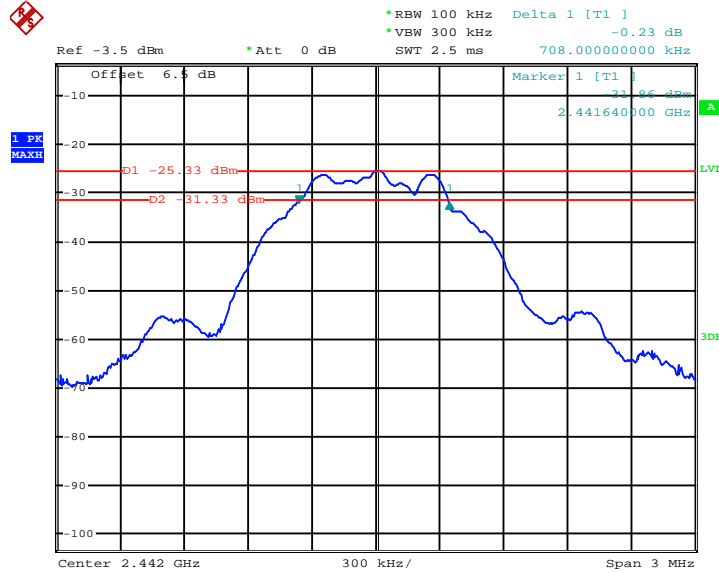


99% bandwidth
1074.000 kHz

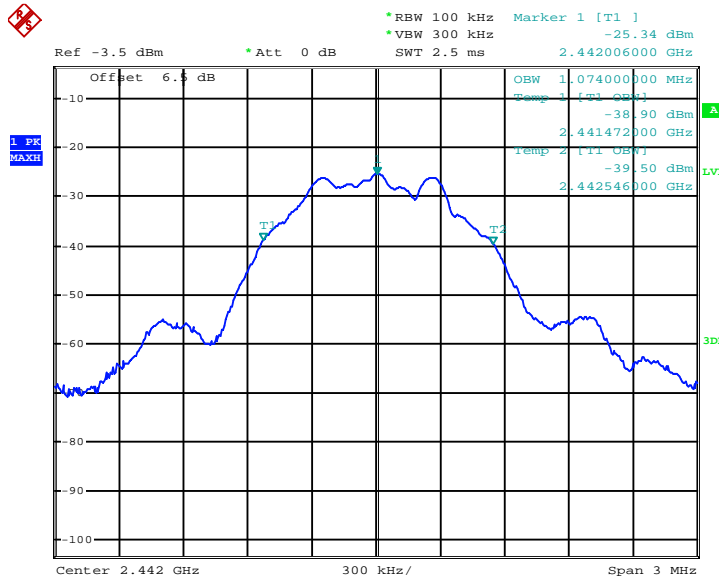
6dB & 99% Bandwidth

EUT: THIM0290
 Op Condition: Operated, TX Mode (2442MHz)
 Test Specification: FCC15.247(a)(2), 6dB Bandwidth & 99% Bandwidth
 Comment: 3.7VDC

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed



6dB bandwidth	Limit
708.000 kHz	> 500 kHz

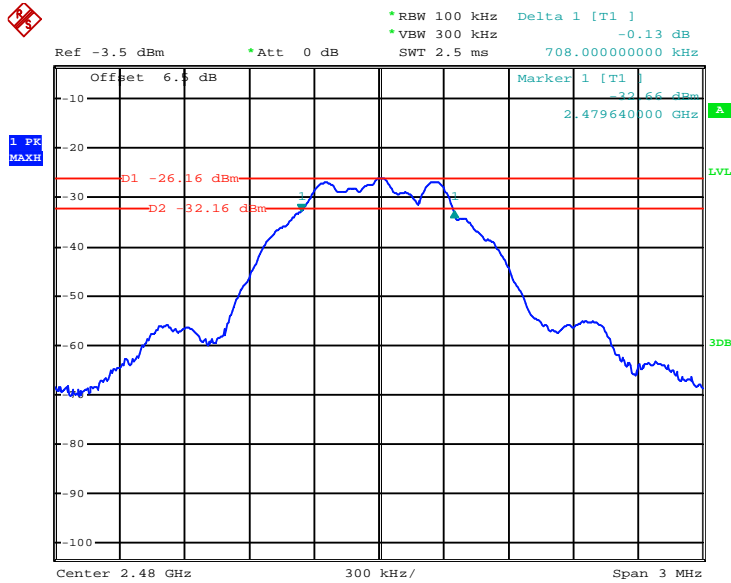


99% bandwidth
1074.000 kHz

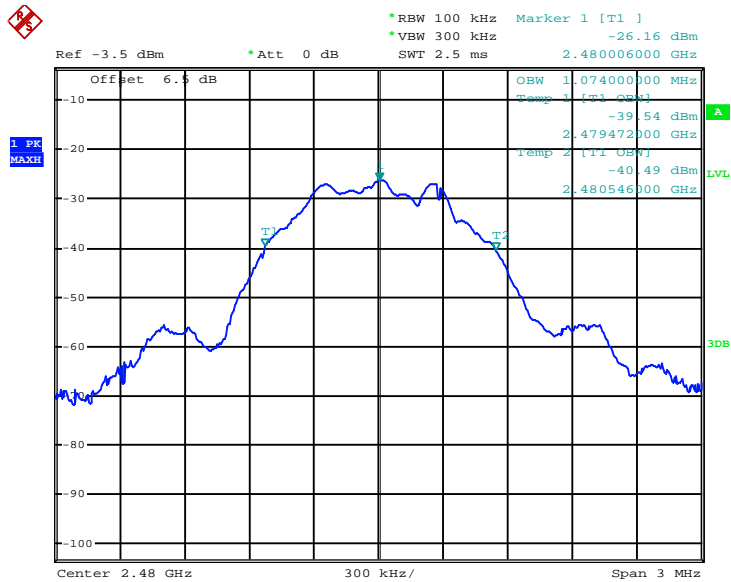
6dB & 99% Bandwidth

EUT: THIM0290
 Op Condition: Operated, TX Mode (2480MHz)
 Test Specification: FCC15.247(a)(2), 6dB Bandwidth & 99% Bandwidth
 Comment: 3.7VDC

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed



6dB bandwidth	Limit
708.000 kHz	>500 kHz

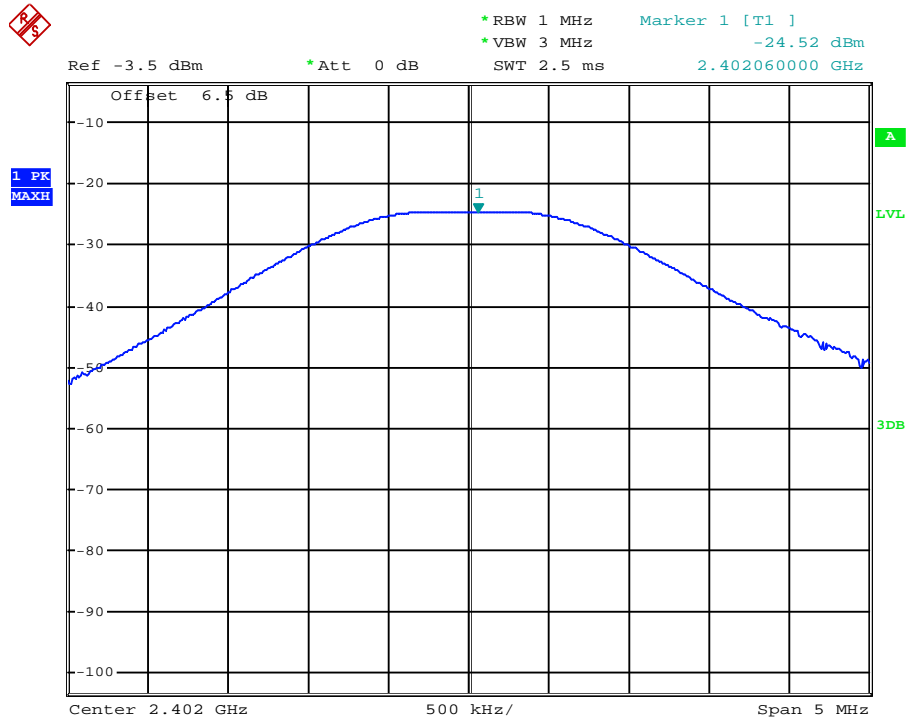


99% bandwidth
1074.000 kHz

7.4 Peak Output Power

EUT: THIM0290
 Op Condition: Operated, TX Mode (2402MHz)
 Test Specification: FCC15.247(b)
 Comment: 3.7VDC, Antenna gain: 0 dBi,
 Cable Loss: 1.0dB

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

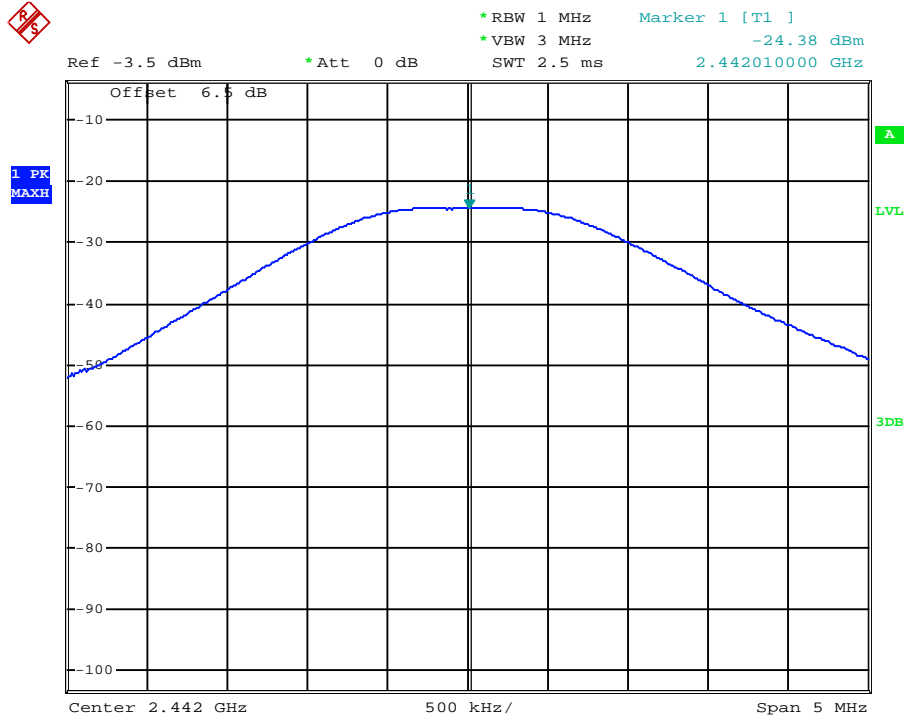


Conducted Output Power	Limit
-24.32 dBm	< 30dBm

Peak Output Power

EUT: THIM0290
 Op Condition: Operated, TX Mode (2442MHz)
 Test Specification: FCC15.247(b)
 Comment: 3.7VDC, Antenna gain: 0 dBi,
 Cable Loss: 1.0dB

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

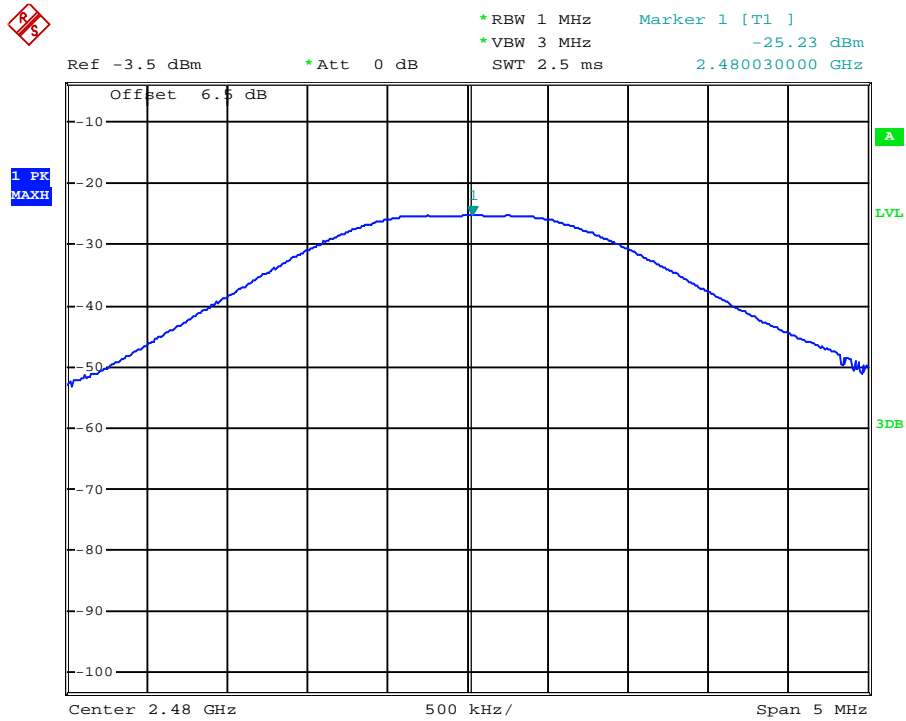


Conducted Output Power	Limit
-24.38 dBm	< 30dBm

Peak Output Power

EUT: THIM0290
 Op Condition: Operated, TX Mode (2480MHz)
 Test Specification: FCC15.247(b)
 Comment: 3.7VDC, Antenna gain: 0 dBi,
 Cable Loss: 1.0dB

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

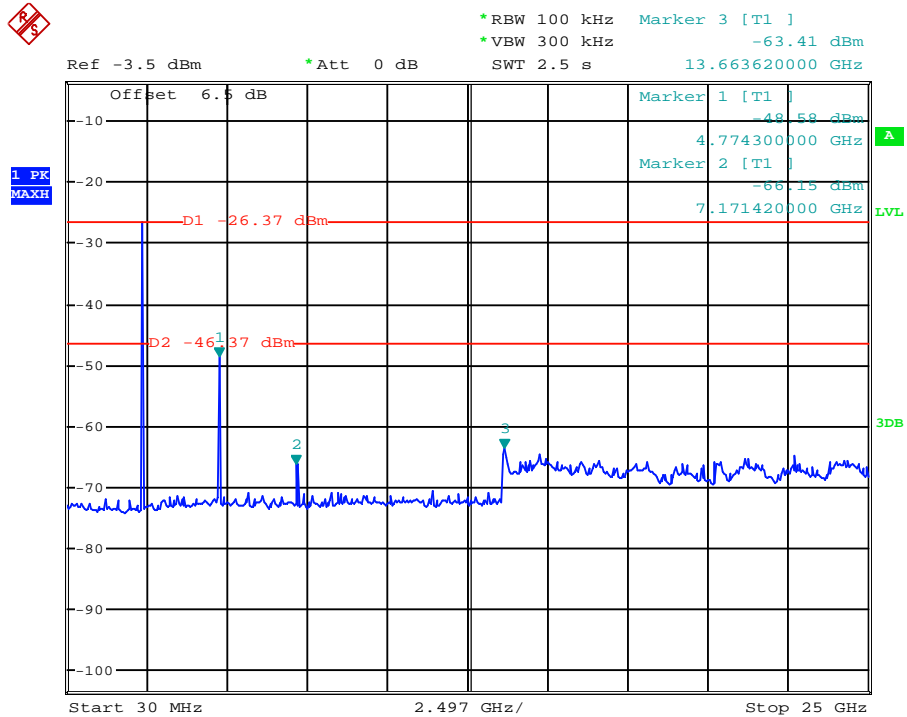


Conducted Output Power	Limit
-25.23 dBm	< 30dBm

7.5 Spurious Emissions at Antenna Terminals

EUT: THIM0290
 Op Condition: Operated, TX Mode (2402MHz)
 Test Specification: FCC2.1051 & 15.247(d)
 Comment: 3.7VDC

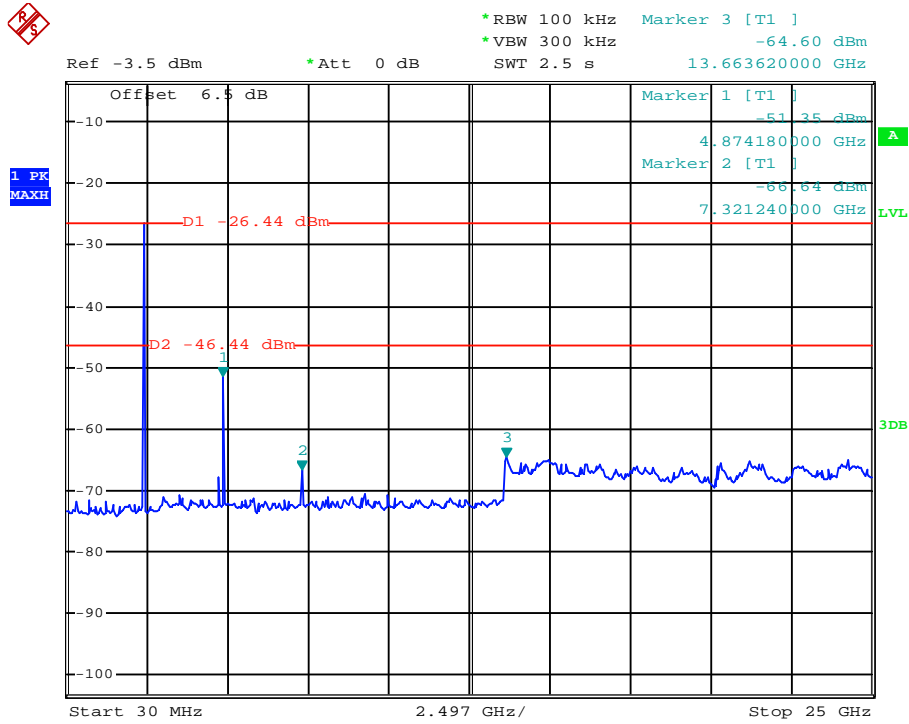
Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed



Spurious Emissions at Antenna Terminals

EUT: THIM0290
Op Condition: Operated, TX Mode (2442MHz)
Test Specification: FCC2.1051 & 15.247(d)
Comment: 3.7VDC

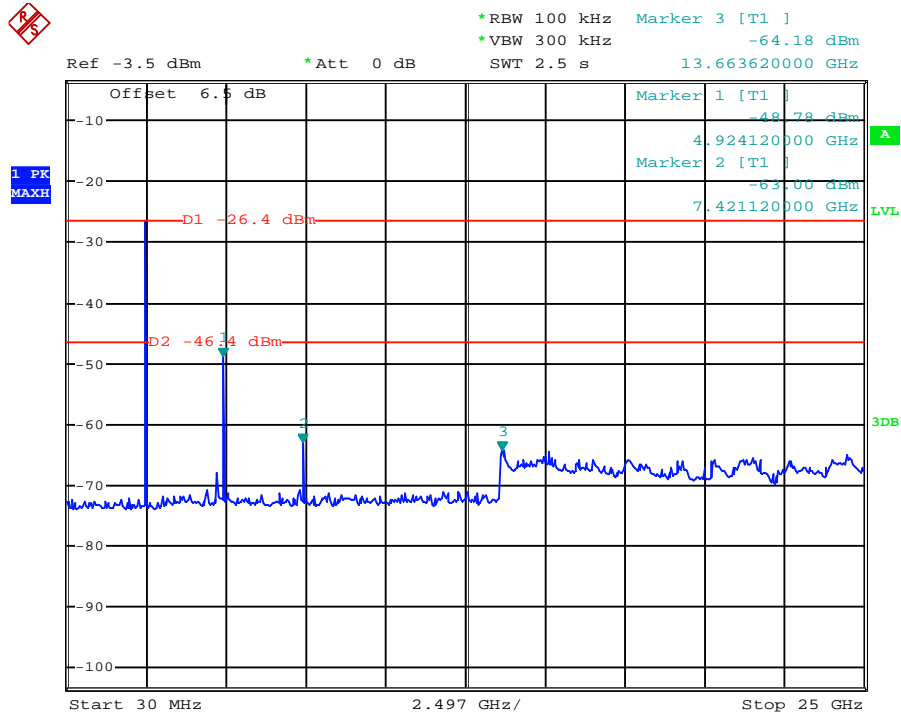
Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed



Spurious Emissions at Antenna Terminals

EUT: THIM0290
Op Condition: Operated, TX Mode (2480MHz)
Test Specification: FCC2.1051 & 15.247(d)
Comment: 3.7VDC

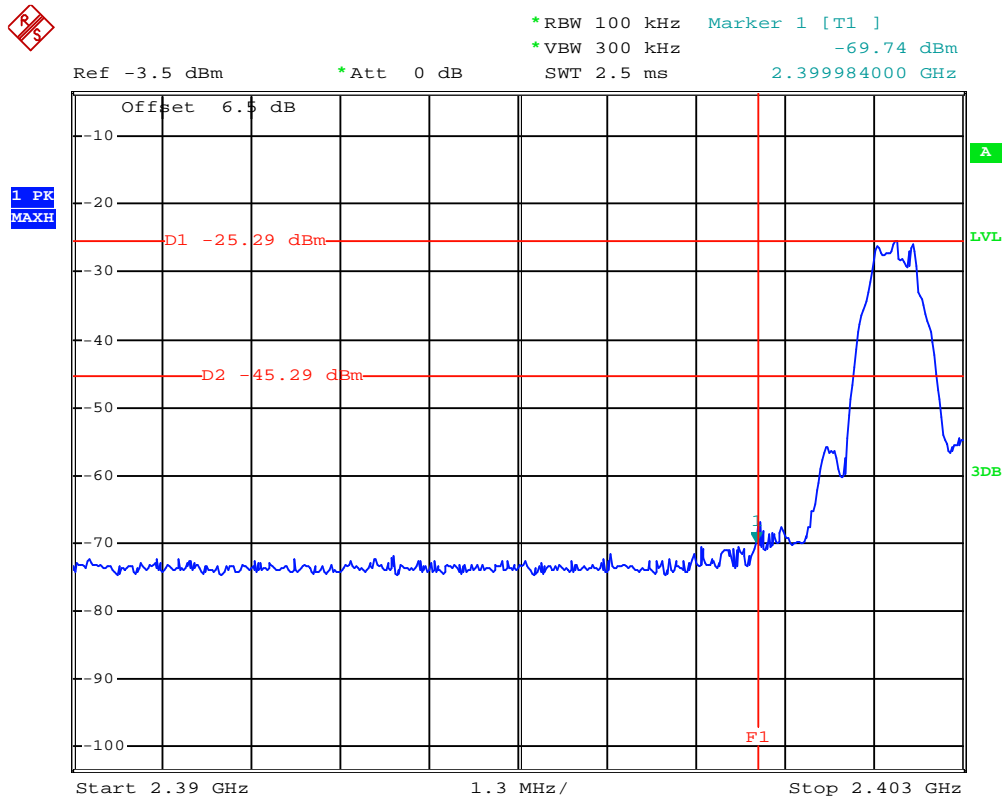
Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed



7.6 100kHz Bandwidth of band edges

EUT: THIM0290
 Op Condition: Operated, TX Mode (2402MHz)
 Test Specification: FCC15.247(d), Conducted
 Comment: 3.7VDC

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed



Band edges	Limit
44.45 dB	> 20dB

100kHz Bandwidth of band edges

EUT: THIM0290
 Op Condition: Operated, TX Mode (2402MHz)
 Test Specification: FCC15.247(d), Radiated
 Comment: 3.7VDC

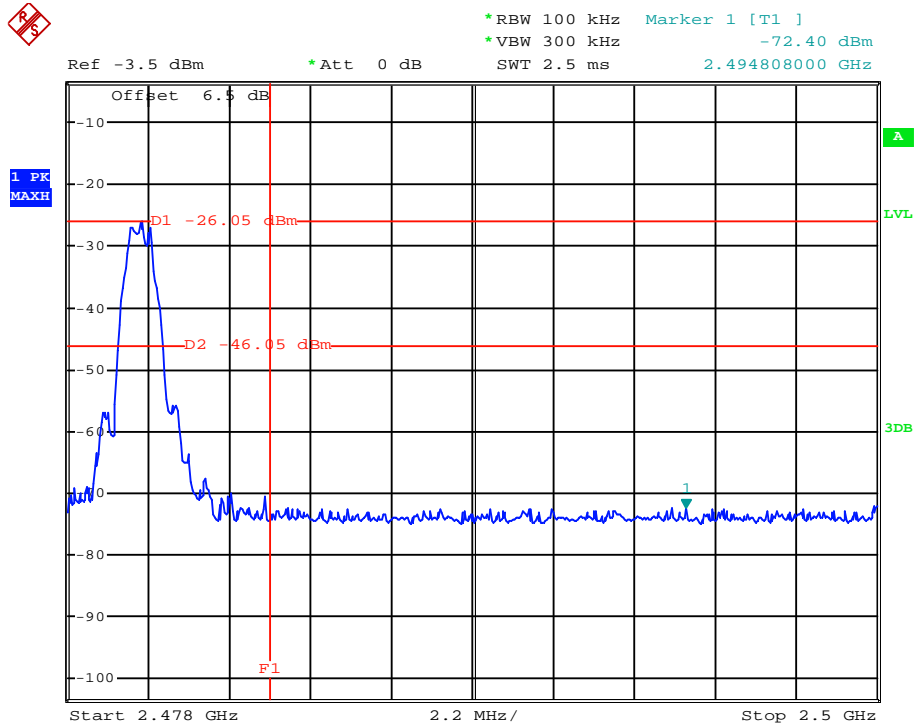
Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

Frequency MHz	Result dB μ V/m	Limit dB μ V/m	Margin dB	Detector
2390.000	22.73	74	-51.27	Peak
2390.000	19.14	54	-34.86	Average

100kHz Bandwidth of band edges

EUT: THIM0290
 Op Condition: Operated, TX Mode (2480MHz)
 Test Specification: FCC15.247(d), Conducted
 Comment: 3.7VDC

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed



Band edges	Limit
44.60 dB	> 20dB

100kHz Bandwidth of band edges

EUT: THIM0290
 Op Condition: Operated, TX Mode (2480MHz)
 Test Specification: FCC15.247(d), Radiated
 Comment: 3.7VDC

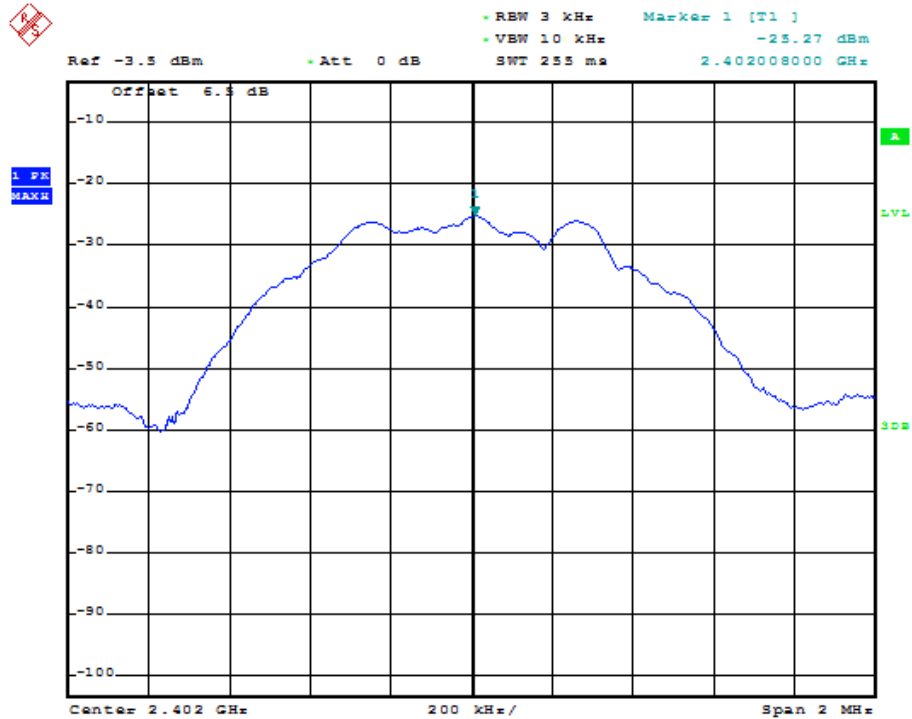
Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

Frequency MHz	Result dB μ V/m	Limit dB μ V/m	Margin dB	Detector
2483.500	22.83	74	-51.17	Peak
2483.500	17.92	54	-36.08	Average

7.7 Power Special Density

EUT: THIM0290
 Op Condition: Operated, TX Mode (2402MHz)
 Test Specification: FCC15.247(e)
 Comment: 3.7VDC

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

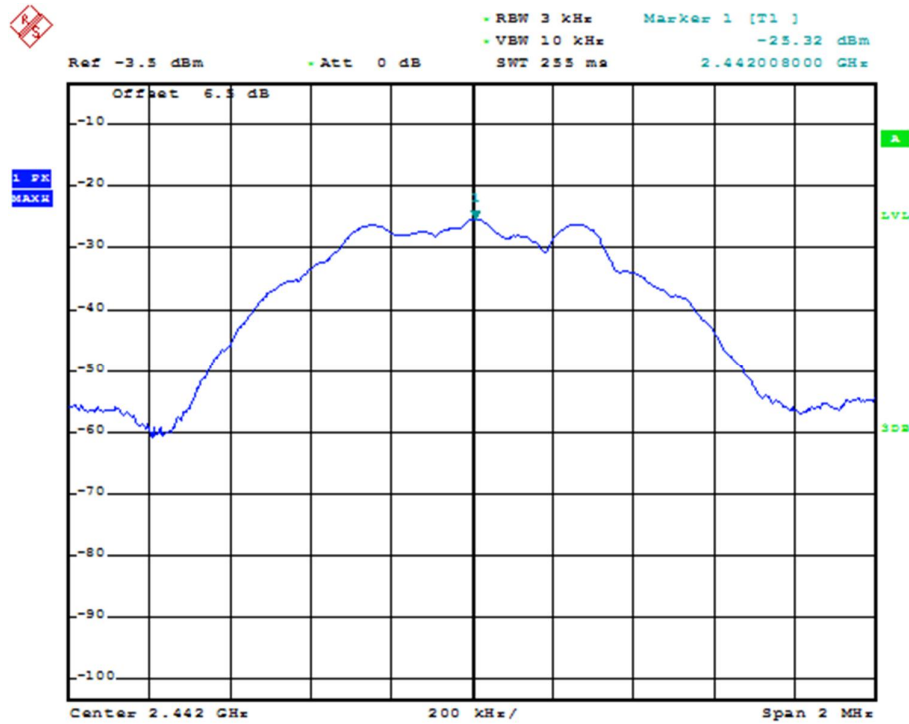


PSD	Limit
-25.27 dBm	< 8 dBm

Power Special Density

EUT: THIM0290
 Op Condition: Operated, TX Mode (2442MHz)
 Test Specification: FCC15.247(e)
 Comment: 3.7VDC

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

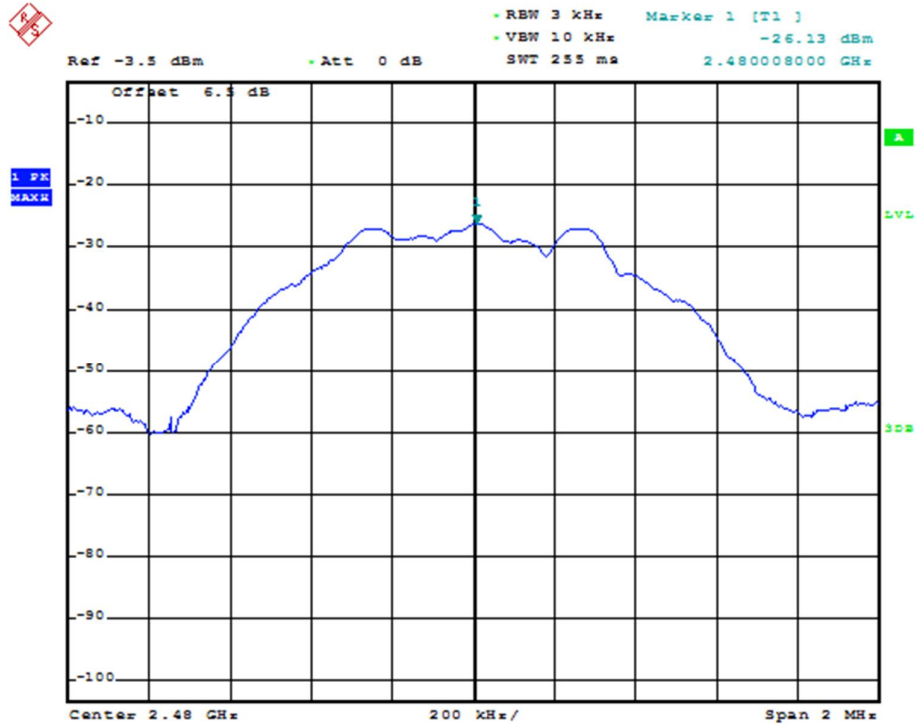


PSD	Limit
-23.32 dBm	< 8 dBm

Power Special Density

EUT: THIM0290
 Op Condition: Operated, TX Mode (2480MHz)
 Test Specification: FCC15.247(e)
 Comment: 3.7VDC

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed



PSD	Limit
-26.13 dBm	< 8 dBm

7.8 Antenna Requirement

EUT: THIM0290
Op Condition: Operated, TX Mode
Test Specification: FCC15.203 & 15.247(b)
Comment: 3.7VDC

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

Limit

For intentional device, according to FCC Title 47 Part 15.203, 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. And according to FCC Title 47 Part 15.247(b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The antenna used in this product is PCB antenna, and the maximum gain of this antenna is 0.0 dBi.

8 Appendix A - Photographs of EUT



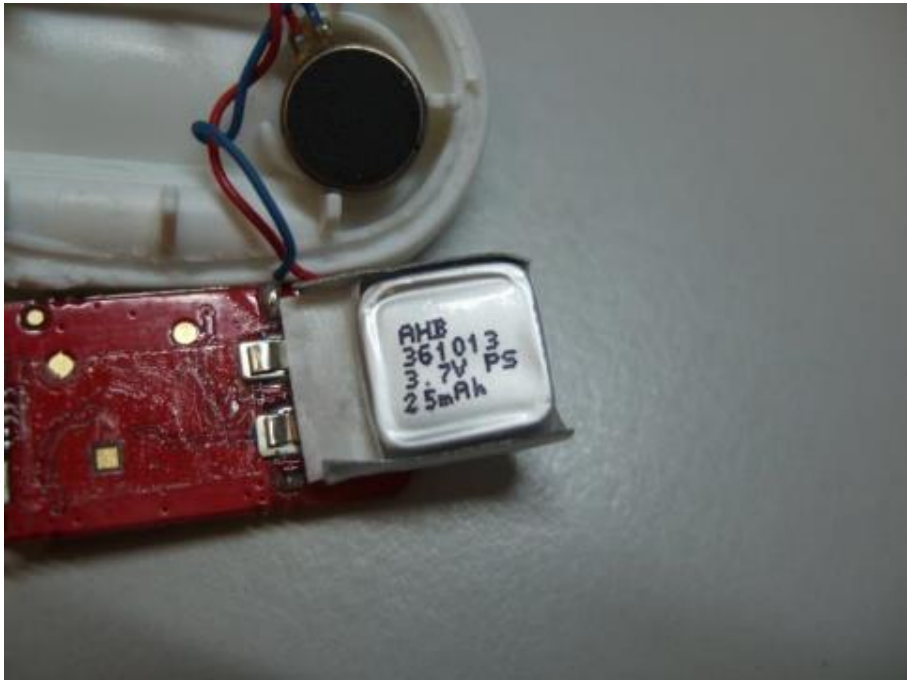
Appendix A



Appendix A



Appendix A



9 Appendix B - Setup Photographs of EUT

Spurious Radiated Emission

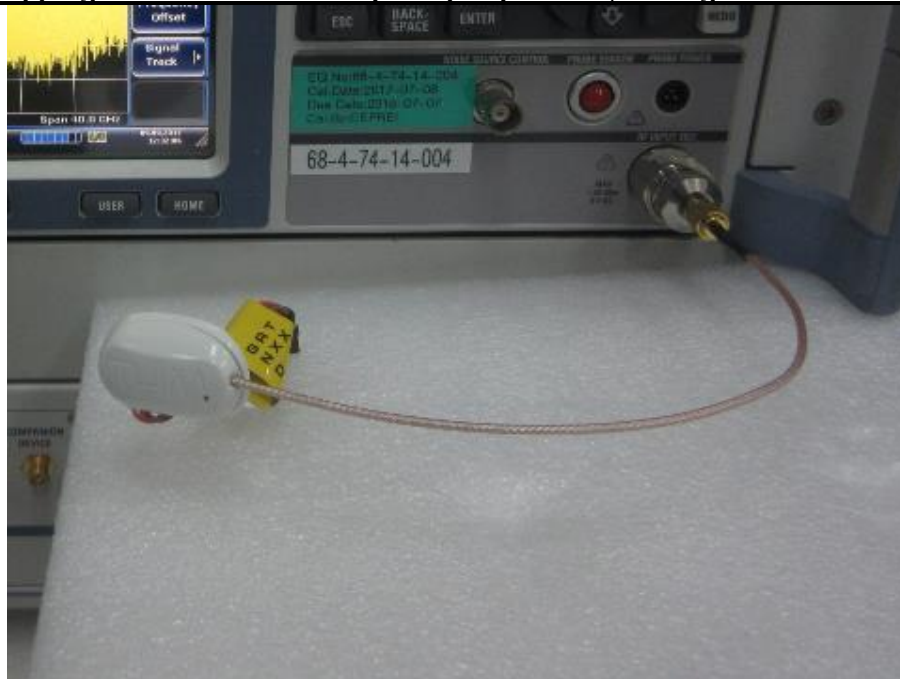


Appendix B

Conducted Emission



**20dB & 99% Bandwidth, Peak Output Power,
Spurious Emissions at Antenna Terminals,
100kHz Bandwidth of band edges, Min. No. of Hopping Frequencies,
Min. Hopping Channel Carrier Frequency Separation, Average Time of Occupancy**



10 Appendix C - General Product Information

Radiofrequency radiation exposure evaluation

According to KDB 447498 D01v06 section 4.3.1, For frequencies between 100 MHz to 6GHz and test separation distances ≤ 50 mm, the Numeric threshold is determined as:

Step a)

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)]
· $[\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR

>> The fundamental frequency of the EUT is 2402-2480MHz,
the test separation distance is ≤ 50 mm.
(Manufacturer specified the separation distance is: 20mm)

Step a)

>> Numeric threshold (2402MHz), $\text{mW} / 20\text{mm} * \sqrt{2.402\text{GHz}} \leq 3.0$
Numeric threshold (2402MHz) $\leq 38.713\text{mW}$

>> Numeric threshold (2442MHz), $\text{mW} / 20\text{mm} * \sqrt{2.440\text{GHz}} \leq 3.0$
Numeric threshold (2442MHz) $\leq 38.411\text{mW}$

>> Numeric threshold (2480MHz), $\text{mW} / 20\text{mm} * \sqrt{2.480\text{GHz}} \leq 3.0$
Numeric threshold (2480MHz) $\leq 38.100\text{mW}$

>> The power of EUT measured (2402MHz) is: $-24.32\text{dBm} = 0.004\text{mW}$
The power of EUT measured (2442MHz) is: $-24.38\text{dBm} = 0.004\text{mW}$
The power of EUT measured (2480MHz) is: $-25.23\text{dBm} = 0.003\text{mW}$

Which is smaller than the Numeric threshold.

Therefore, the device is exempt from stand-alone SAR test requirements.