

## FCC - TEST REPORT

Report Number : **60.790.18.033.01R01** Date of Issue : June 23, 2018

Model : HAC1.2

Product Type : Bicycle Computer

Applicant : Dayton Industrial Co. LTd

Address : 11A, 11/F, Tai Tak Industrial Building, 2-12 Kwai Fat Road, Kwai Chung, N.T. 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 : 36

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## 2 Description of Equipment Under Test

### Description of the Equipment Under Test

Product:	Bicycle Computer
Model no.:	HAC1.2
FCC ID:	O4GHAC
Rating:	3 VDC (1 x CR2302 battery)
Frequency:	2402MHz-2480MHz
Antenna gain:	0 dBi
Number of operated channel:	40
Modulation:	GFSK



### 3 Summary of Test Standards

Test Standards
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FCC Part 15 Subpart C 10-1-17 Edition Federal Communications Commission, PART 15 — Radio Frequency Devices, Subpart C — Unintentional Radiators
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## 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
<b>FCC Part 15 Subpart C</b>	
FCC Title 47 Part 15.205, 15.209 & 15.247(d) Spurious Radiated Emission	Site 2
FCC Title 47 Part 15.207 Conduct Emission	NIL
FCC Title 47 Part 15.247 Bandedge 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

### 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
Signal Analyzer	Rohde & Schwarz	FSV40	101030	2018-7-7
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 (1)	NIL	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
FCC Title 47 Part 15.247 Bandedge 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	24-29	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FCC Title 47 Part 15.247(d) 100kHz Bandwidth of band edges	30-31	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FCC Title 47 Part 15.247(e) Power Spectral Density	32-34	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FCC Title 47 Part 15.203 & 15.247(b) Antenna Requirement	35	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Remark:**

- 1) These requirements do not apply for equipment which employ battery power for operation and which do not operate from the AC power lines.



## 6 General Remarks

### Remarks

All mode has been tested, only worst case has shown.

### SUMMARY:

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

- Performed

- **Not** Performed

- The Equipment Under Test

- **Fulfills** the general approval requirements.

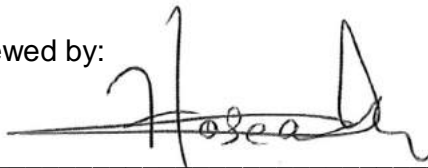
- **Does not** fulfill the general approval requirements.

Sample Received Date: May 29, 2018

Testing Start Date: May 30, 2018

Testing End Date: June 15, 2018

Reviewed by:



Hosea CHAN  
EMC Project Engineer

Prepared by:



Eric LI  
EMC Senior Project Engineer

## 7 Emission Test Results

### 7.1 Spurious Radiated Emission

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (worst case)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Horizontal  
 Comment: 3 VDC  
 Remark: 9kHz to 1GHz

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

Frequency MHz	Result dB $\mu$ V/m	Limit dB $\mu$ V/m	Margin dB	Detector
58.183	18.71	40.00	-21.29	Quasi Peak
96.552	11.87	43.50	-31.63	Quasi Peak
180.134	13.26	43.50	-30.24	Quasi Peak
277.727	20.52	46.00	-25.48	Quasi Peak
437.453	22.81	46.00	-23.19	Quasi Peak
869.750	30.48	46.00	-15.52	Quasi Peak

**Spurious Radiated Emission**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (worst case)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Horizontal  
 Comment: 3 VDC  
 Remark: 9kHz to 1GHz

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

Frequency MHz	Result dBµV/m	Limit dBµV/m	Margin dB	Detector
42.125	19.99	40.00	-20.01	Quasi Peak
60.932	21.41	40.00	-18.59	Quasi Peak
175.607	11.06	43.50	-32.44	Quasi Peak
274.332	19.77	46.00	-26.23	Quasi Peak
438.908	27.41	46.00	-18.59	Quasi Peak
864.469	33.61	46.00	-12.39	Quasi Peak



**Spurious Radiated Emission**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2402MHz)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Horizontal  
 Comment: 3 VDC  
 Remark: 1GHz 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
2337.687	46.09	74	-27.91	Peak
2337.687	39.21	54	-14.79	Average
4803.750	42.38*	54	-11.62	Peak
7023.000	39.75*	54	-14.25	Peak

Remark\*: As the peak value were below the average limit, so average value no need to be measured.

**Spurious Radiated Emission**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2402MHz)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Vertical  
 Comment: 3 VDC  
 Remark: 1GHz 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
1273.593750	29.33*	54	-24.67	Peak
2465.718750	42.52*	54	-11.48	Peak
12058.500000	43.61*	54	-10.39	Peak

Remark\*: As the peak value were below the average limit, so average value no need to be measured.

### Spurious Radiated Emission

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2440MHz)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Horizontal  
 Comment: 3 VDC  
 Remark: 1GHz to 25GHz

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

Frequency MHz	Result dB $\mu$ V/m	Limit dB $\mu$ V/m	Margin dB	Detector
2503.968750	43.41*	54	-10.59	Peak
4879.718750	43.60*	54	-10.40	Peak
12058.500000	43.39*	54	-10.61	Peak

Remark\*: As the peak value were below the average limit, so average value no need to be measured.

**Spurious Radiated Emission**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2440MHz)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Vertical  
 Comment: 3 VDC  
 Remark: 1GHz 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
1272.000000	27.84*	54	-26.16	Peak
2503.968750	39.08*	54	-14.92	Peak
12058.500000	40.61*	54	-13.39	Peak

Remark\*: As the peak value were below the average limit, so average value no need to be measured.

**Spurious Radiated Emission**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2480MHz)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Horizontal  
 Comment: 3 VDC  
 Remark: 1GHz 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
2543.812500	42.78	54	-11.22	Peak
4959.406250	42.74	54	-11.26	Peak
12058.500000	41.38*	54	-12.62	Peak

Remark\*: As the peak value were below the average limit, so average value no need to be measured.



**Spurious Radiated Emission**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2480MHz)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Vertical  
 Comment: 3 VDC  
 Remark: 1GHz 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
1253.937500	28.43*	54	-25.57	Peak
7065.281250	40.18*	54	-13.82	Peak
12058.500000	40.94*	54	-13.06	Peak

Remark\*: As the peak value were below the average limit, so average value no need to be measured.

## 7.2 Bandedge Emission

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2402 and 2480)  
 Test Specification: FCC15.247, Antenna: Horizontal  
 Comment: 3 VDC

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

Band	Frequency MHz	Result dB $\mu$ V/m	Limit dB $\mu$ V/m	Margin dB	Detector
Low	2399.875	48.98	74	-25.02	Peak
Low	2399.875	36.30	54	-17.70	Average
High	2483.500	43.46	74	-30.54	Peak
High	2483.500	33.79	54	-20.21	Average

**Bandedge Emission**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2402 and 2480)  
 Test Specification: FCC15.247, Antenna: Vertical  
 Comment: 3 VDC

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

Band	Frequency MHz	Result dBµV/m	Limit dBµV/m	Margin dB	Detector
Low	2399.875	46.42	74	-27.58	Peak
Low	2399.875	35.84	54	-18.16	Average
High	2483.500	43.87	74	-30.13	Peak
High	2483.500	33.67	54	-20.33	Average

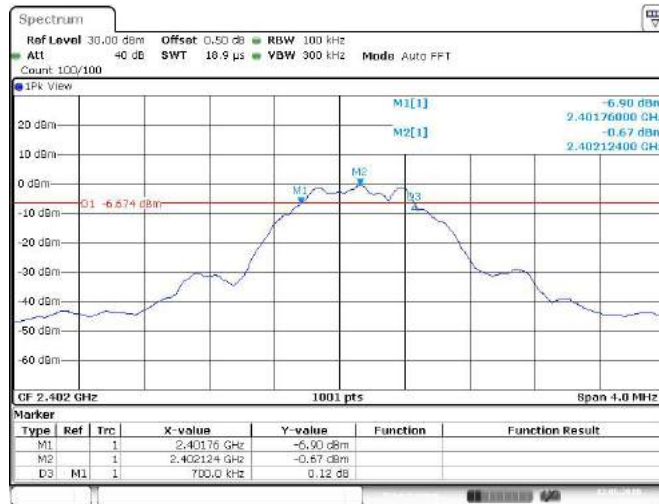
### 7.3 6dB & 99% Bandwidth

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2402MHz)  
 Test Specification: FCC15.247(a)(2), 6dB Bandwidth & 99% Bandwidth  
 Comment: 3 VDC

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2402MHz)  
 Test Specification: FCC15.247(a)(2), 6dB Bandwidth & 99% Bandwidth  
 Comment: 3 VDC

Test Result  
 Passed  
 Not Passed

Test Result  
 Passed  
 Not Passed



Date: 12 JUN 2018 15:03:41



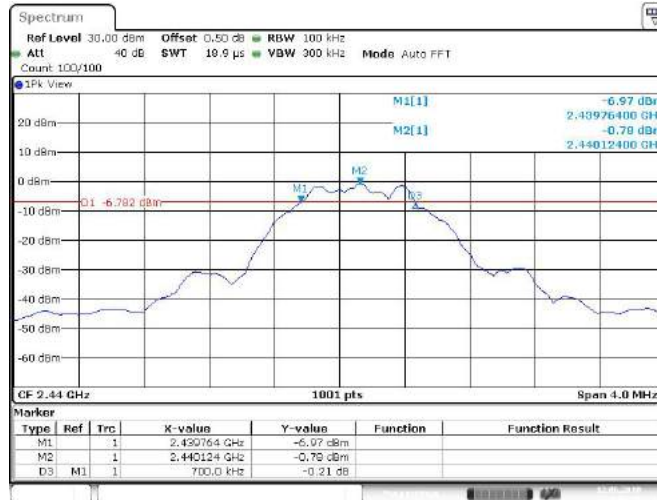
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Bandwidth	Measured Value	Limit
6dB bandwidth	700.000 kHz	> 500 kHz
99% OCB	1054.945 kHz	NA

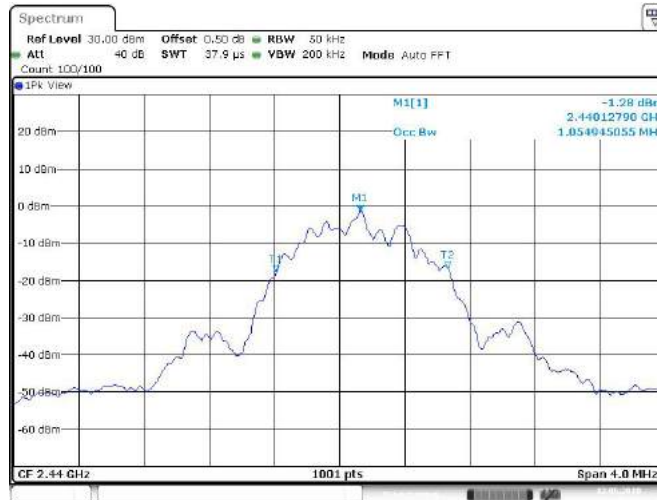
**6dB & 99% Bandwidth**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2440MHz)  
 Test Specification: FCC15.247(a)(2), 6dB Bandwidth & 99% Bandwidth  
 Comment: 3 VDC

Test Result  
 Passed  
 Not Passed



Date: 12 JUN 2018 15:05:20



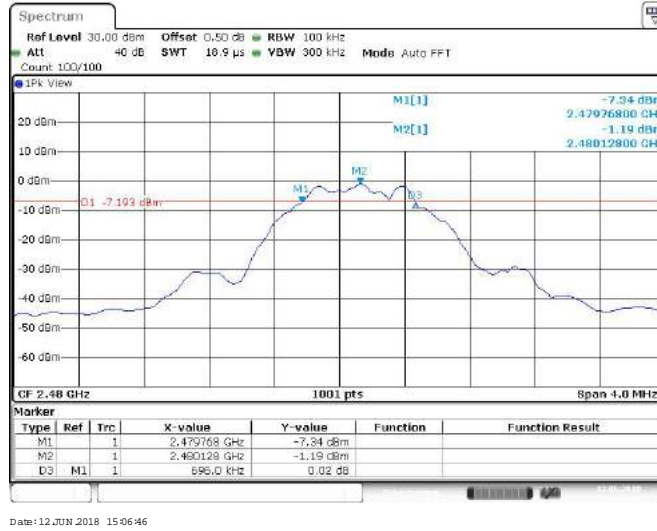
Date: 12 JUN 2018 15:05:31

Bandwidth	Measured Value	Limit
6dB bandwidth	700.000 kHz	> 500 kHz
99% OCB	1054.945 kHz	NA

**6dB & 99% Bandwidth**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2480MHz)  
 Test Specification: FCC15.247(a)(2), 6dB Bandwidth & 99% Bandwidth  
 Comment: 3 VDC

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

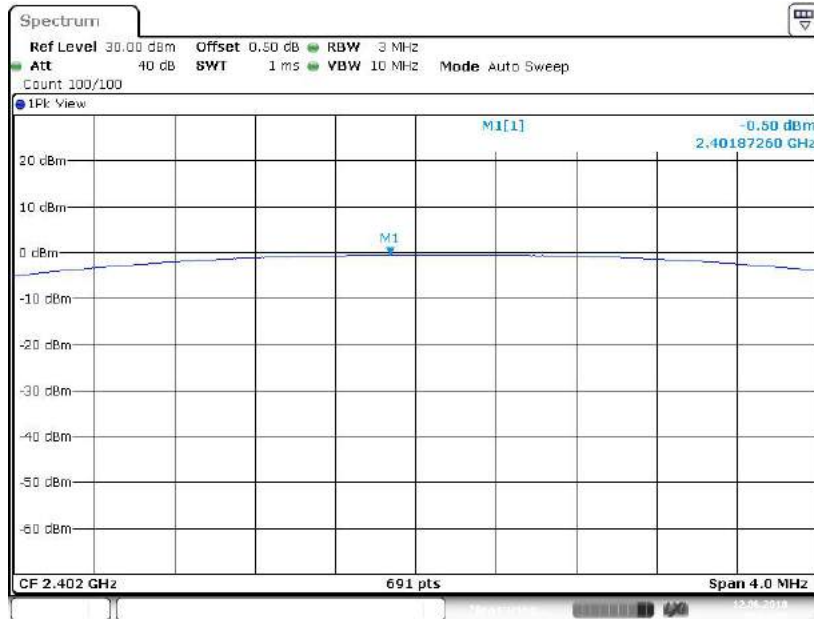


Bandwidth	Measured Value	Limit
6dB bandwidth	696.000 kHz	> 500 kHz
99% OCB	1054.945 kHz	NA

## 7.4 Peak Output Power

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2402MHz)  
 Test Specification: FCC15.247(b)  
 Comment: 3 VDC, Antenna gain: 0 dBi,  
 Cable Loss: 0.5 dB

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



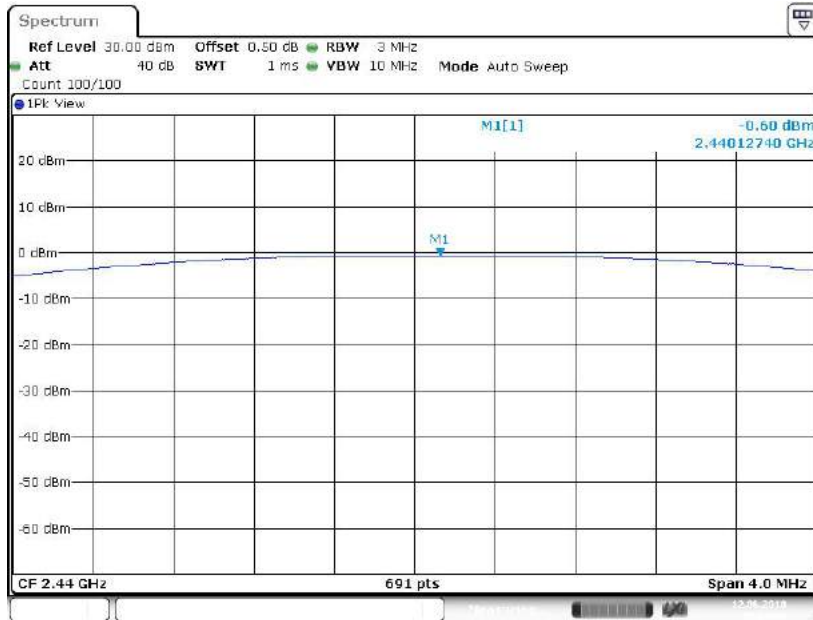
Date: 12 JUN 2018 15:03:59

Conducted Output Power	Limit
-0.5 dBm	< 30dBm

**Peak Output Power**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2440MHz)  
 Test Specification: FCC15.247(b)  
 Comment: 3 VDC, Antenna gain: 0 dBi,  
 Cable Loss: 0.5 dB

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



Date: 12 JUN 2018 15:05:38

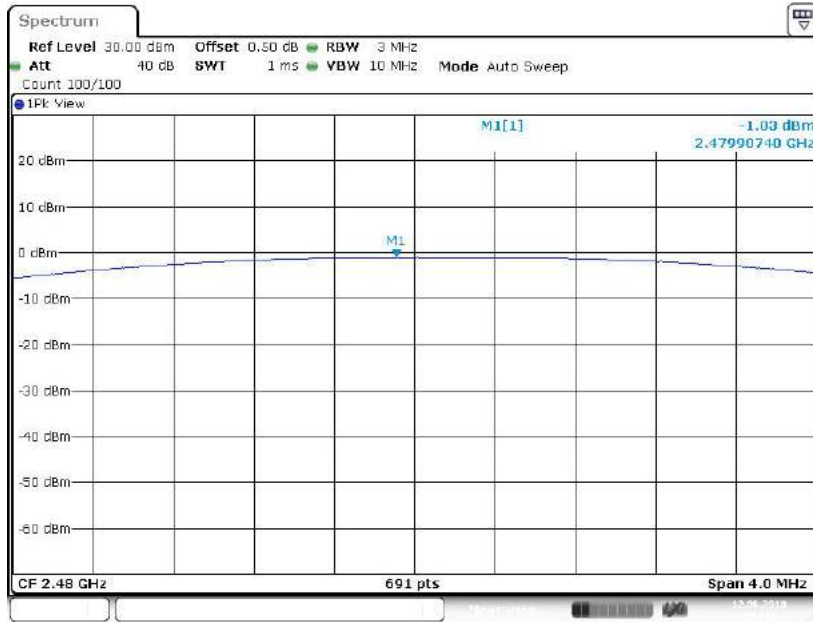
Conducted Output Power	Limit
-0.6 dBm	< 30dBm



**Peak Output Power**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2480MHz)  
 Test Specification: FCC15.247(b)  
 Comment: 3 VDC, Antenna gain: 0 dBi,  
 Cable Loss: 0.5 dB

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



Date: 12 JUN 2018 15:11:31

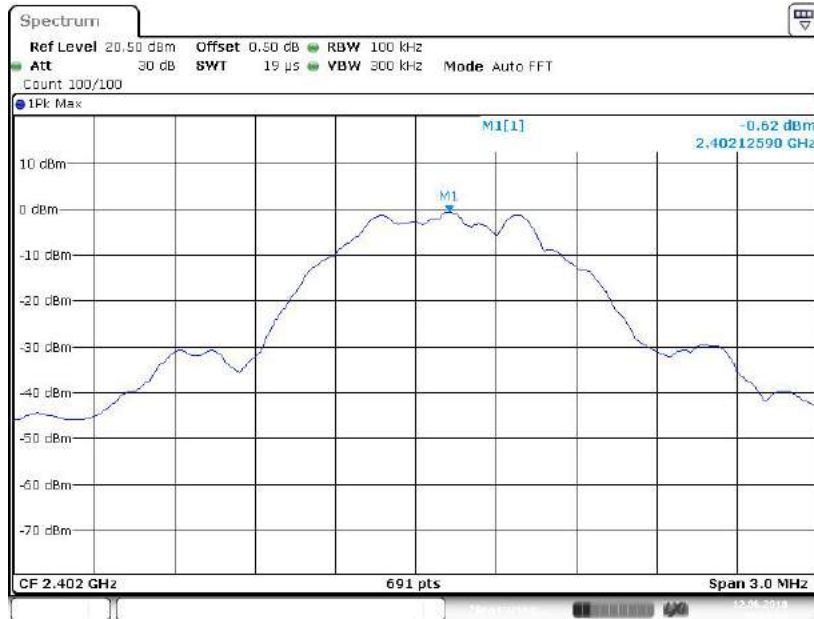
Conducted Output Power	Limit
-1.03 dBm	< 30dBm

## 7.5 Spurious Emissions at Antenna Terminals

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2402MHz)  
 Test Specification: FCC2.1051 & 15.247(d)  
 Comment: 3 VDC

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

Channel	FreqRange	RefLevel	Result	Limit	Verdict
2402	Reference	-0.62	-0.62	---	PASS
2402	30~1000	-0.62	-60.55	-20.62	PASS
2402	1000~26500	-0.62	-44.64	-20.62	PASS

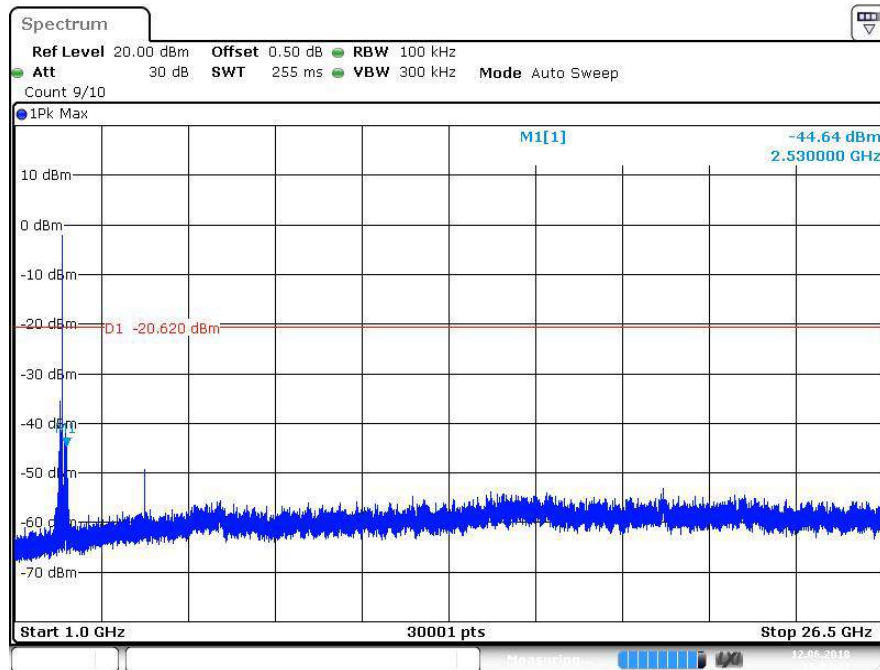
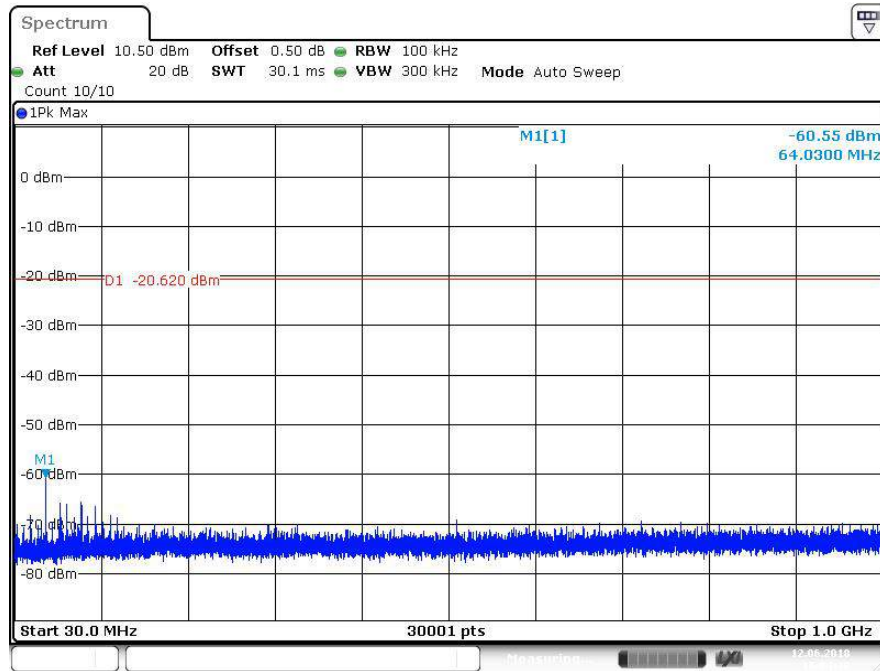


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### Spurious Emissions at Antenna Terminals

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2402MHz)  
 Test Specification: FCC2.1051 & 15.247(d)  
 Comment: 3 VDC

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



### Spurious Emissions at Antenna Terminals

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2440MHz)  
 Test Specification: FCC2.1051 & 15.247(d)  
 Comment: 3 VDC

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

Channel	FreqRange	RefLevel	Result	Limit	Verdict
2440	Reference	-0.80	-0.80	---	PASS
2440	30~1000	-0.80	-61.22	-20.8	PASS
2440	1000~26500	-0.80	-45.17	-20.8	PASS

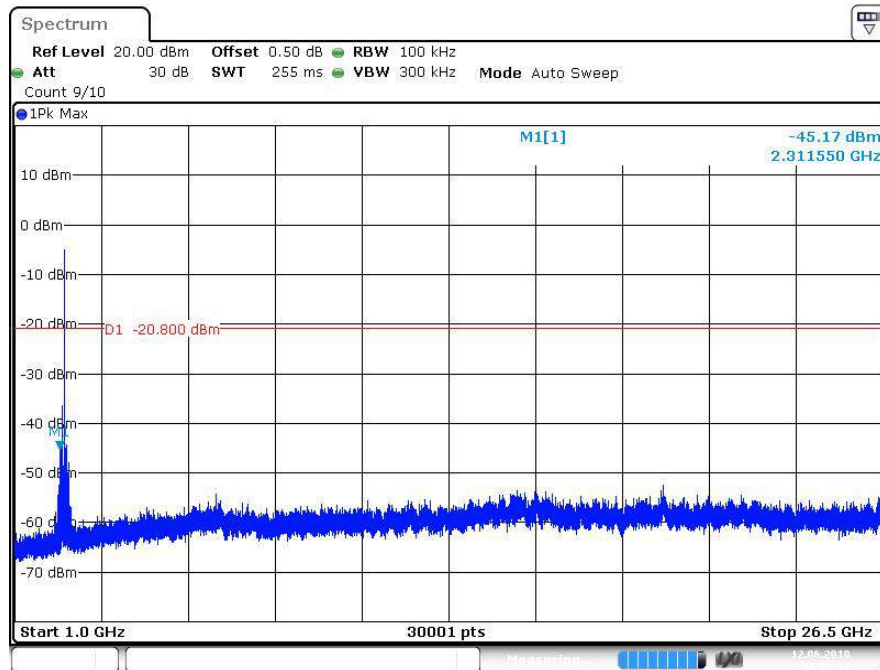
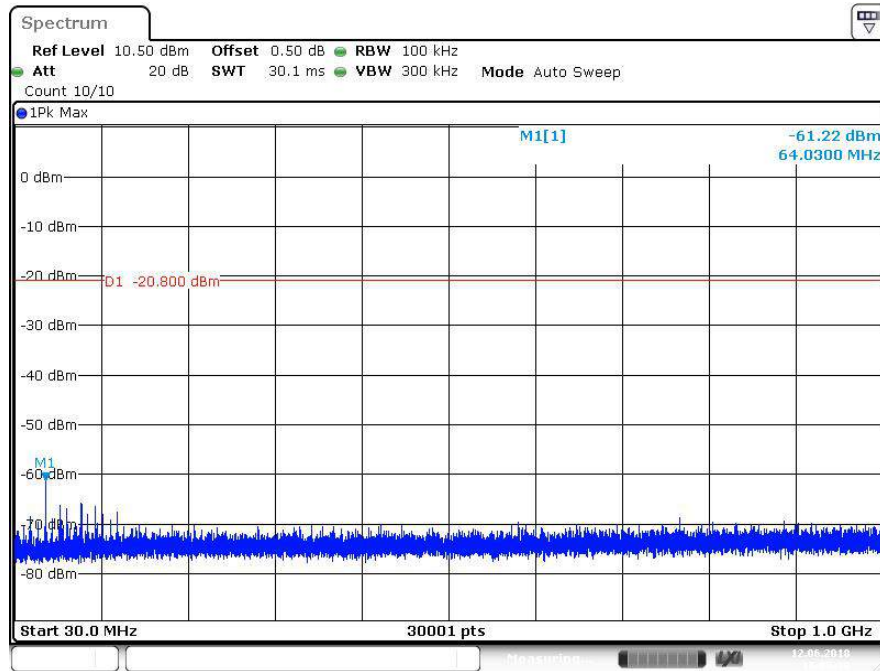


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### Spurious Emissions at Antenna Terminals

EUT: HAC1.2  
Op Condition: Operated, TX Mode (2440MHz)  
Test Specification: FCC2.1051 & 15.247(d)  
Comment: 3 VDC

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

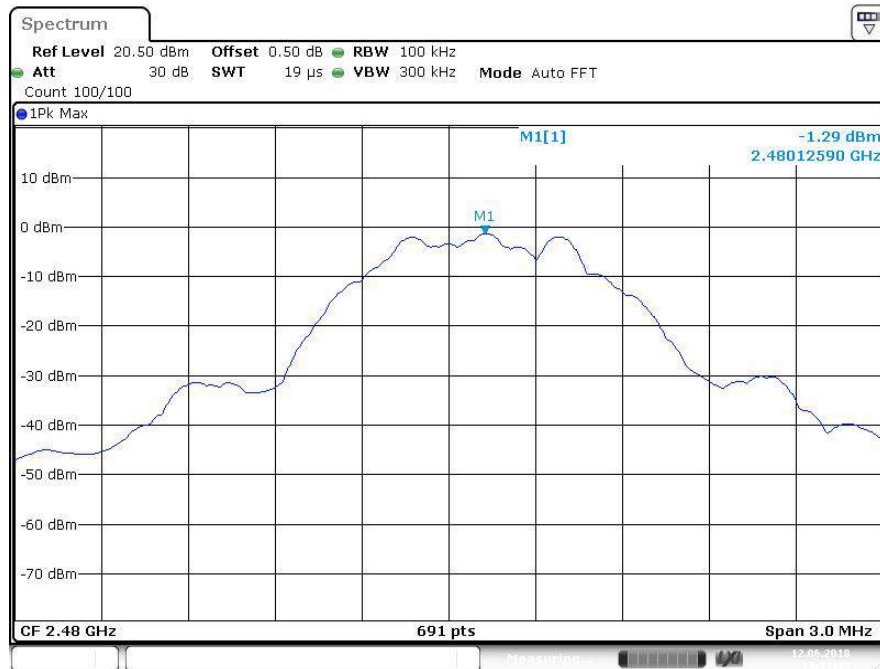


### Spurious Emissions at Antenna Terminals

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2480MHz)  
 Test Specification: FCC2.1051 & 15.247(d)  
 Comment: 3 VDC

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

Channel	FreqRange	RefLevel	Result	Limit	Verdict
2480	Reference	-1.29	-1.29	---	PASS
2480	30~1000	-1.29	-60.83	-21.29	PASS
2480	1000~26500	-1.29	-45.18	-21.29	PASS

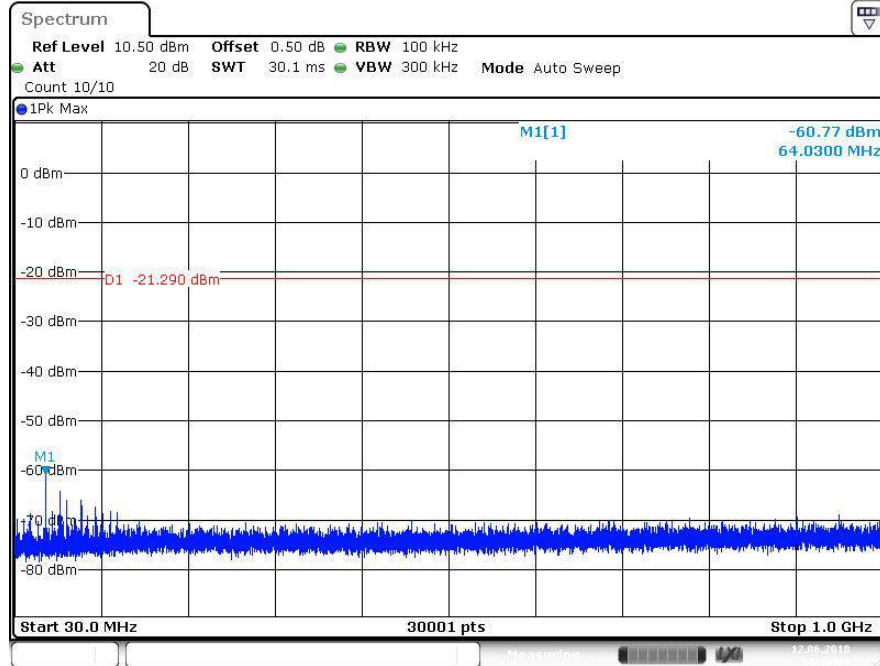


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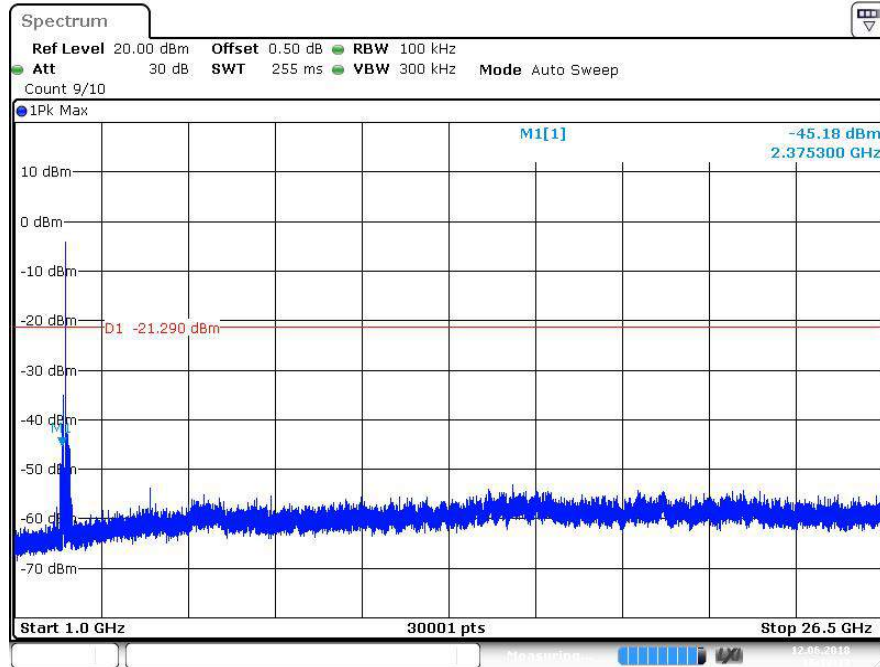
### Spurious Emissions at Antenna Terminals

EUT: HAC1.2  
Op Condition: Operated, TX Mode (2480MHz)  
Test Specification: FCC2.1051 & 15.247(d)  
Comment: 3 VDC

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



Date: 12 JUN 2018 15:12:02

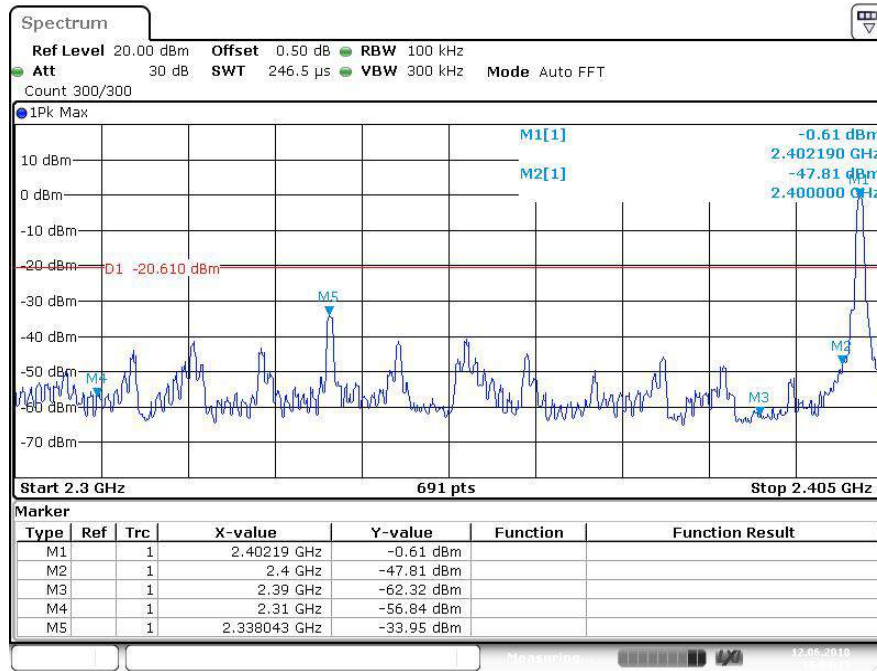


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## 7.6 100kHz Bandwidth of band edges

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2402MHz)  
 Test Specification: FCC15.247(d), Conducted  
 Comment: 3 VDC

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



Date: 12 JUN 2018 15:04:15

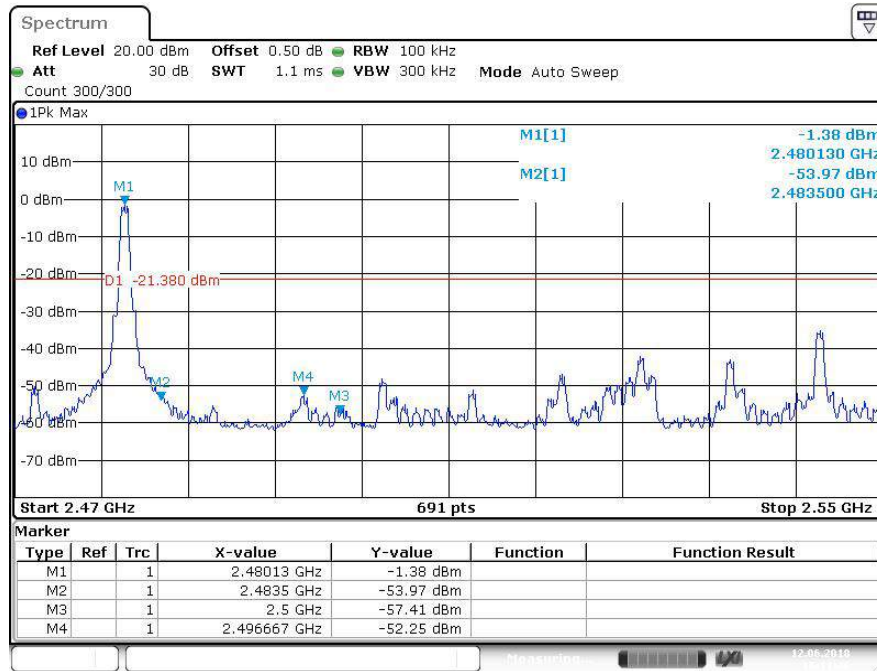
Band edges	Limit
34.56 dB	> 20dB



**100kHz Bandwidth of band edges**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2480MHz)  
 Test Specification: FCC15.247(d), Conducted  
 Comment: 3 VDC

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



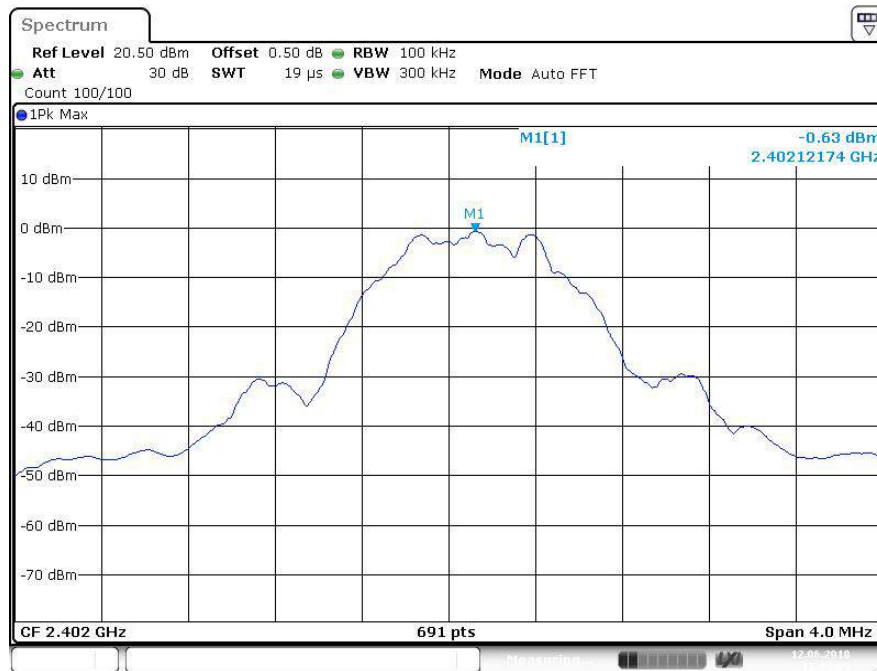
Date: 12 JUN 2018 15:11:47

Band edges	Limit
53.63 dB	> 20dB

## 7.7 Power Spectral Density

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2402MHz)  
 Test Specification: FCC15.247(e)  
 Comment: 3 VDC

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



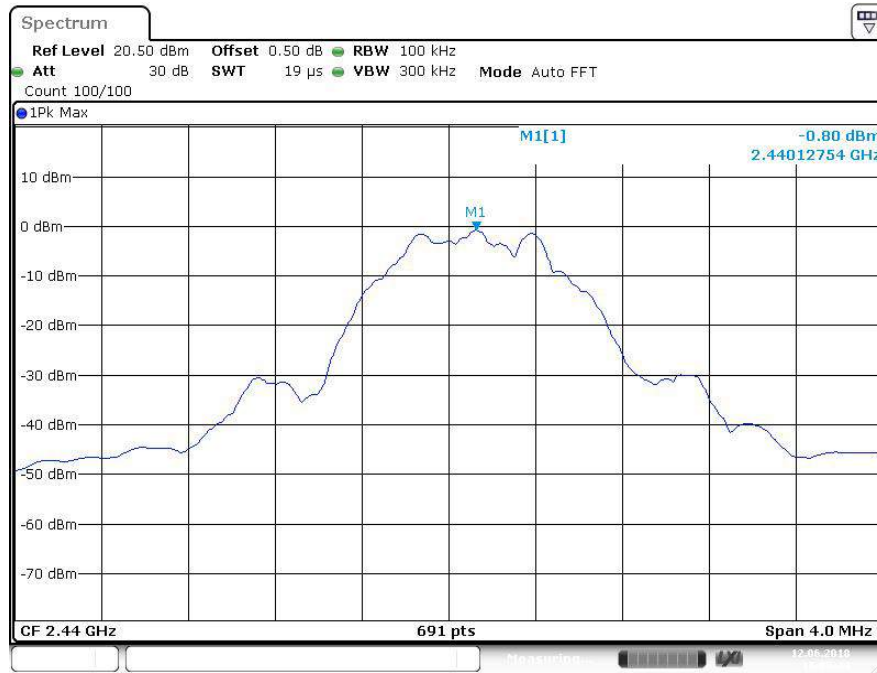
Date: 12 JUN 2018 15:04:05

PSD	Limit
0.63dBm	< 8 dBm

**Power Spectral Density**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2440MHz)  
 Test Specification: FCC15.247(e)  
 Comment: 3 VDC

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



Date: 12 JUN 2018 15:05:44

PSD	Limit
-0.8 dBm	< 8 dBm

**Power Spectral Density**

EUT: HAC1.2  
 Op Condition: Operated, TX Mode (2480MHz)  
 Test Specification: FCC15.247(e)  
 Comment: 3 VDC

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



Date: 12 JUN 2018 15:11:37

PSD	Limit
1.30 dBm	< 8 dBm

## 7.8 Antenna Requirement

EUT: HAC1.2  
Op Condition: Operated, TX Mode  
Test Specification: FCC15.203 & 15.247(b)  
Comment: 3 VDC

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 integrated antenna on PCB, and the maximum gain of this antenna is 0.0 dBi.

## 8 Appendix A - 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  $\leq 50$  mm, the Numeric threshold is determined as:

Step a)

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

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

Step a)

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

>> Numeric threshold (2440MHz),  $\text{mW} / 20\text{mm} \cdot \sqrt{2.440\text{GHz}} \leq 3.0$   
Numeric threshold (2440MHz)  $\leq 38.411\text{mW}$

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

>> The power of EUT measured (2402MHz) is:  $-0.5\text{dBm} = 0.891\text{mW}$   
The power of EUT measured (2440MHz) is:  $-0.6\text{dBm} = 0.871\text{mW}$   
The power of EUT measured (2480MHz) is:  $-1.03\text{dBm} = 0.789\text{mW}$

Which is smaller than the Numeric threshold.

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