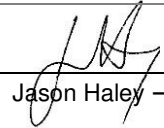
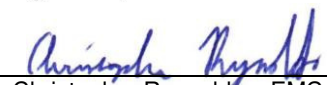




**BUREAU
VERITAS**

Test Report

Curtis-Straus LLC, a wholly owned subsidiary of BV CPS

Report No	EP3237-1
Client	Schechter Tech LLC DBA Temperature Alert
Address	108 Lincoln Street, Suite BA Boston, MA 02111
Phone	617-326-7300
Items tested	Zpoint OEM Module
FCC ID	SZ9TM-ZP05X
IC ID	10940A- TMZP05X
FRN	0022436158
Equipment Type	DTS
FCC/IC Rule Parts	47 CFR 15.247, RSS 247 issue 1
Test Dates	12/16/2015 through 12/18/2016
Results	As detailed within this report
Prepared by	 Jason Haley – Test Engineer
Authorized by	 Christopher Reynolds – EMC Supervisor
Issue Date	5/10/16
Conditions of Issue	This Test Report is issued subject to the conditions stated in the 'Conditions of Testing' section on page 35 of this report.

Curtis-Straus LLC is accredited by the American Association for Laboratory Accreditation for the specific scope of accreditation under Certificate Number 1627-01. This report may contain data which is not covered by the A2LA accreditation.



Curtis-Straus LLC, a wholly owned subsidiary of BV CPS
One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



Contents

Contents.....	2
Summary.....	3
Test Methodology.....	4
Product Tested - Configuration Documentation	5
<i>Statement of Conformity</i>	6
Modifications Required for Compliance	6
Test Results	7
<i>Bandwidth</i>	7
<i>Peak Power</i>	10
<i>Band Edge Measurements</i>	13
<i>Duty Cycle Correction Calculation</i>	15
<i>Radiated Spurious Emissions</i>	17
<i>Conducted Spurious Emissions</i>	25
<i>Power Spectral Density</i>	28
<i>Occupied Bandwidth</i>	31
Measurement Uncertainty.....	34
Conditions Of Testing.....	35

Form Final Report REV 12-07-15



Summary

This test report supports an application for certification of a transmitter operating pursuant to 47 CFR 15.247 and RSS-247. The product is the ZPoint OEM Module. It is a transmitter that operates in the range of 2405MHz to 2475MHz.

We found that the product met the above requirements with modification (see *Modifications Required for Compliance* section on page 6). Simi Mitra from Temperature Alert was present during testing. The test sample was received in good condition.

Release Control Record

Issue No.	Reason for change	Date Issued
1	Original Release	May 10, 2016



Curtis-Straus LLC, a wholly owned subsidiary of BV CPS
One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



page 3 of 36

Test Methodology

Radiated emissions testing was performed according to DTS guidance document 558074D01 v03r04 specified in FCC guidance for performing compliance measurements on DTS devices under section 15.247, April 19, 2013, and ANSI C63.10 (2013), and RSS-GEN. Radiated Emissions were maximized by rotating the device around three orthogonal axes as well as varying the test antenna's height and polarity.

Conducted emission at the antenna port was performed, as required by rule section.

The EUT operating voltage is 3V battery.

The environmental conditions are shown below.

Date	Temperature	Humidity
12/16/15	23	26
12/17/15	22	28
12/18/15	23	30

The following bandwidths were used during radiated spurious emissions.

Frequency	RBW	VBW
0.15-30MHz	9kHz	30kHz
30-1000MHz	120kHz	1MHz
1-25GHz	1MHz	3MHz

Product Tested - Configuration Documentation

EUT Configuration												
Work Order:	P3237											
Company:	Schechter Tech LLC DBA Temperature Alert											
Company Address:	108 Lincoln Street, Suite BA											
	Boston, MA, 02111											
Contact:	Harry Schechter											
	MN			PN			SN					
EUT:	TM-ZP050						3 (EUT with trace antenna), 2 (EUT with external antenna)					
EUT Description:	ZPoint OEM Module											
EUT Max Frequency:	2475 MHz											
EUT Min Frequency:	2405 MHz											
EUT ISM Frequency:												
EUT Components	MN			SN								
TM-ZP050 with trace antenna	TM-ZP050			3								
TM-ZP050 with external antenna	TM-ZP050			2								
External antenna	N/A			none								
External antenna (2nd one)	N/A			none								
Support Equipment	MN			SN								
Lenovo Laptop	Thinkpad											
Port Label	Port Type	# ports	# populated	cable type	shielded	ferrite s	length (m)	max length (m)	in/out	under test	comment	
Comm used to configure radio	USB	2	0	USB	Yes	No	2	3	in	no	Setup only	
DC Power	DC Power	1	1	2 wire-twisted pair	No	No	0.1	0.1	in	yes		
Software Operating Mode Description:												
NodeTest per customer supplied document "TempAlert OEM FCC Testing Instructions."												

BUREAU
VERITAS

Curtis-Straus LLC, a wholly owned subsidiary of BV CPS

One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



page 5 of 36

Statement of Conformity

The ZPoint OEM Module has been found to conform to the following parts of 47 CFR and RSS 247 as detailed below:

RSS-GEN	RSP-100	RSS 247	Part 15	Comments
6.3			15.15(b)	There are no controls accessible to the user that varies the output power to operate in violation of the regulatory requirements.
	3.1		15.19	The label is shown in the label exhibit.
	3.2		15.21	Information to the user is shown in the instruction manual exhibit.
			15.27	No special accessories are required for compliance.
6.1, 6.5			15.31	The EUT was tested in accordance with the measurement standards in this section.
			15.33	Frequency range was investigated according to this section, unless noted in specific rule section under which the equipment operates.
8.1			15.35	The EUT emissions were measured using the measurement detector and bandwidth specified in this section, unless noted in specific rule section under which the equipment operates.
8.3			15.203	The antenna for this device can be integrated with the PCB, or external. The external antenna gain is 2.45dBi. The PCB antenna gain is 1dBi
8.8			15.207	No AC Line conducted emissions testing was performed as the EUT is battery powered
8.10			15.205 15.209	The fundamental is not in a Restricted band and the spurious and harmonic emissions in the Restricted bands comply with the general emission limits of 15.209 or RSS-Gen as applicable
			15.247	The unit complies with the requirements of 15.247
		RSS 247		The unit complies with the requirements of RSS-247
6.6				Occupied Bandwidth measurements were made.

Modifications Required for Compliance

In order to pass the spurious emissions in restricted band criteria, the following modifications were made:

1. Limited transmitter duty cycle to 10% maximum.
2. Reduced output power to -1dBm for the EUT with the trace antenna.
3. Reduced output power to -2dBm for the EUT with the external antenna.

Test Results**Bandwidth****LIMIT**

The minimum 6 dB bandwidth shall be at least 500 kHz. [15.247(a) (2)]

MEASUREMENTS / RESULTS

6dB Emission Bandwidth (Conducted) Table				
Date: 18-Dec-15		Company: Temperature Alert		Work Order: P3237
Engineer: Jason Haley		EUT Desc: Zpoint OEM Module -EUT with External antenna		EUT Operating Voltage/Frequency: Battery
Temp: 23°C		Humidity: 30%		Pressure: 997mBar
Frequency Range: 2405-2475MHz				
Notes: Transmitting with modulation at 10% Duty Cycle. Output power at -2.0 dBm			EUT Max Freq: 2475MHz	
Frequency (MHz)	6dB Bandwidth (kHz)	FCC Part 15.247 15.247(a) (2) Emission Bandwidth		
		Limit (kHz minimum)	Result (Pass/Fail)	
2475.0	1254.0	500.0	Pass	
2440.0	1208.0	500.0	Pass	
2405.0	1256.0	500.0	Pass	

Rev.12/14/2015

Spectrum Analyzers / Receivers / Preselectors		Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Gold		100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	4/22/2016	4/22/2015
Meteorological Meters			MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)			BA928	Oregon Scientific	C3166-1	831	I	3/19/2016	3/19/2014
TH A#2081			HTC-1	HDE		2081	II	4/2/2016	

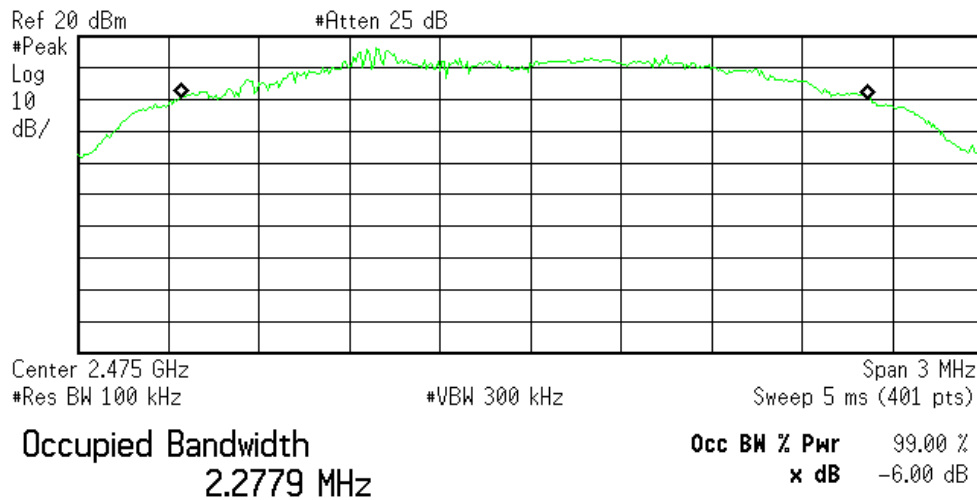
All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



PLOT

Agilent 11:42:57 Dec 18, 2015

R T



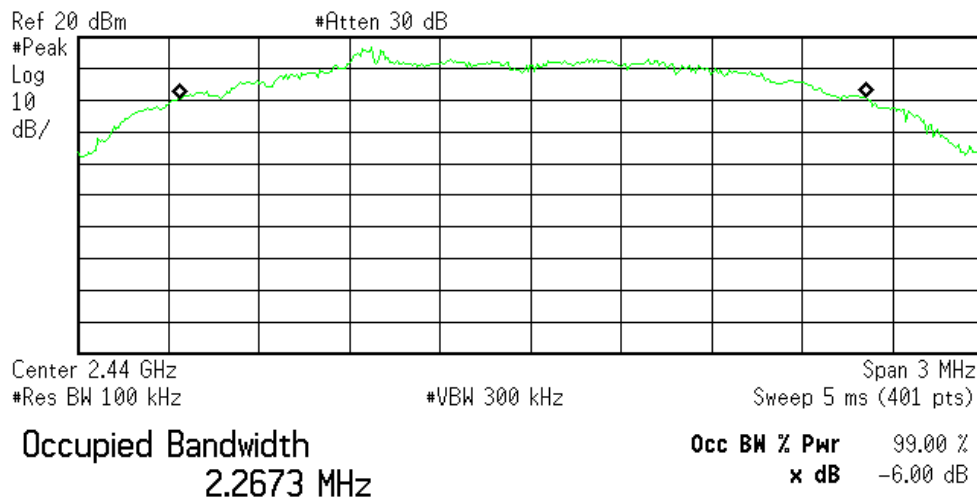
Transmit Freq Error -18.662 kHz
x dB Bandwidth 1.254 MHz

C:\temp.gif file saved

6dB Bandwidth High Channel, Conducted Measurement

Agilent 15:10:08 Dec 18, 2015

R T



Transmit Freq Error -26.532 kHz
x dB Bandwidth 1.208 MHz

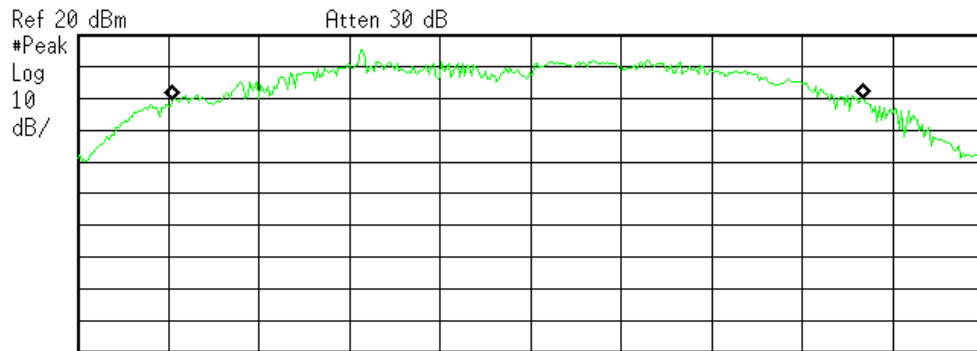
C:\temp.gif file saved

6dB Bandwidth Middle Channel, Conducted Measurement



Agilent 14:39:15 Dec 18, 2015

R T



Center 2.405 GHz Span 3 MHz
 #Res BW 100 kHz #VBW 300 kHz Sweep 5 ms (401 pts)

Occupied Bandwidth
 2.2847 MHz

Occ BW % Pwr 99.00 %
 x dB -6.00 dB

Transmit Freq Error -41.196 kHz
 x dB Bandwidth 1.256 MHz

C:\temp.gif file saved

6dB Bandwidth Low Channel, Conducted Measurement

Peak Power**LIMIT**

Conducted Output Power

1 Watt

[15.247(b) (3)]

Radiated Output Power

1W (EIRP) = 30dBm = 125.2dBμV/m @ 3m

[15.247(b) (3)]

MEASUREMENTS / RESULTS**Conducted Output Power Table**

Date: 02-Feb-16		Company: Temperature Alert		Work Order: P3237		
Engineer: Chris Reynolds		EUT Desc: Zpoint OEM Module		EUT Operating Voltage/Frequency: 3V		
Temp: 24°C		Humidity: 30%		Pressure: 1015mB		
Frequency Range: Fundamental						
Notes: Output power at -1 dBm. Measured per DTS Meas Guidance V03r04 Section 9.1.1						
Frequency (MHz)	Measured Reading (dBm)	Attenuation (dB)	Adjusted Conducted Output Power (dBm)	FCC Part 15.247 b 3. Conducted Output Power		
				Limit (dBm)	Margin (dB)	Result (Pass/Fail)
2405	-3.0	19.9	16.9	30.0	-13.1	Pass
2440	-2.7	19.9	17.2	30.0	-12.8	Pass
2475	-2.9	19.9	17.0	30.0	-13.0	Pass
Table Result: <i>Pass</i> by -12.8 dB Worst Freq: 2440.0 MHz						

Rev. 2/1/2016

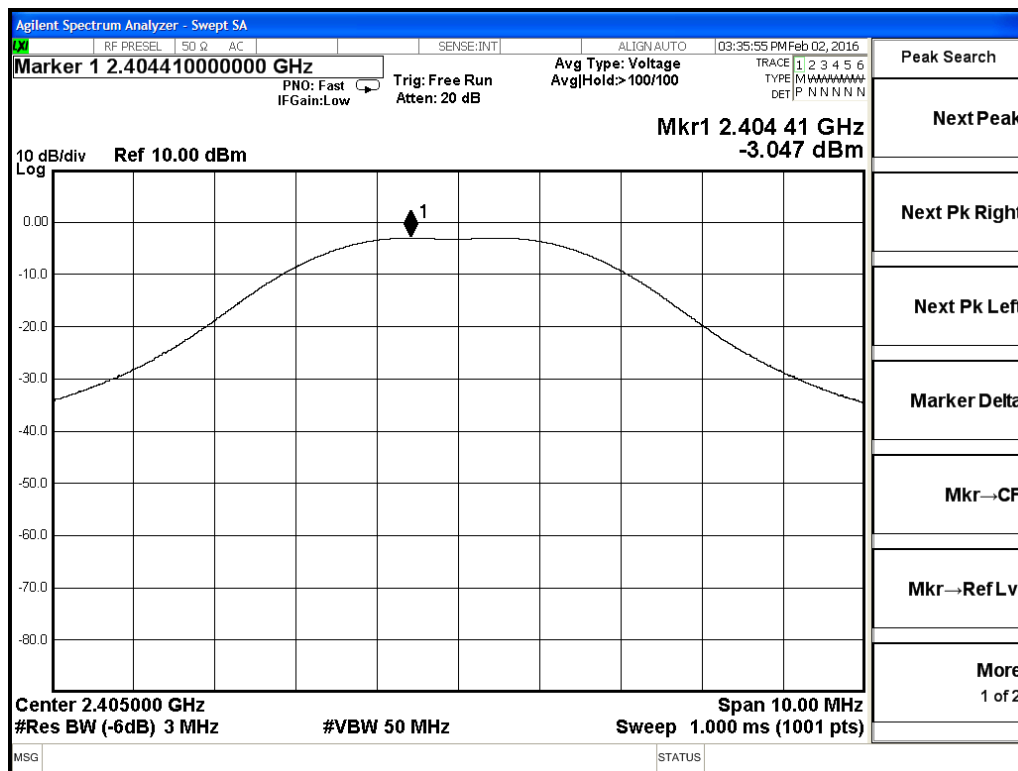
Spectrum Analyzers / Receivers / Preselectors
MXE EMI ReceiverRange
20Hz-8.4GHzMN
N9038AMfr
AgilentSN
MY53290009Asset
1168255Cat
ICalibration Due
6/16/2016Calibrated on
6/16/2015Conducted Test Sites (Mains / Telco)
CEMI 2FCC Code
719150VCCI Code
A-0015Cat
IIICalibration Due
NACalibrated on
N/AMeteorological Meters
Weather Clock (Pressure Only)
TH A#2079MN
BA928
HTC-1Mfr
Oregon Scientific
HDESN
C3166-1Asset
831
2079Cat
IICalibration Due
3/19/2016
4/2/2016Calibrated on
3/19/2014
4/2/2015Preamps / Couplers Attenuators / Filters
HF 20dB 50W AttenuatorRange
0.009-18 GHzMN
PE 7019-20Mfr
PasternackSN
1Asset
791Cat
IICalibration Due
7/31/2016Calibrated on
7/31/2015

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.

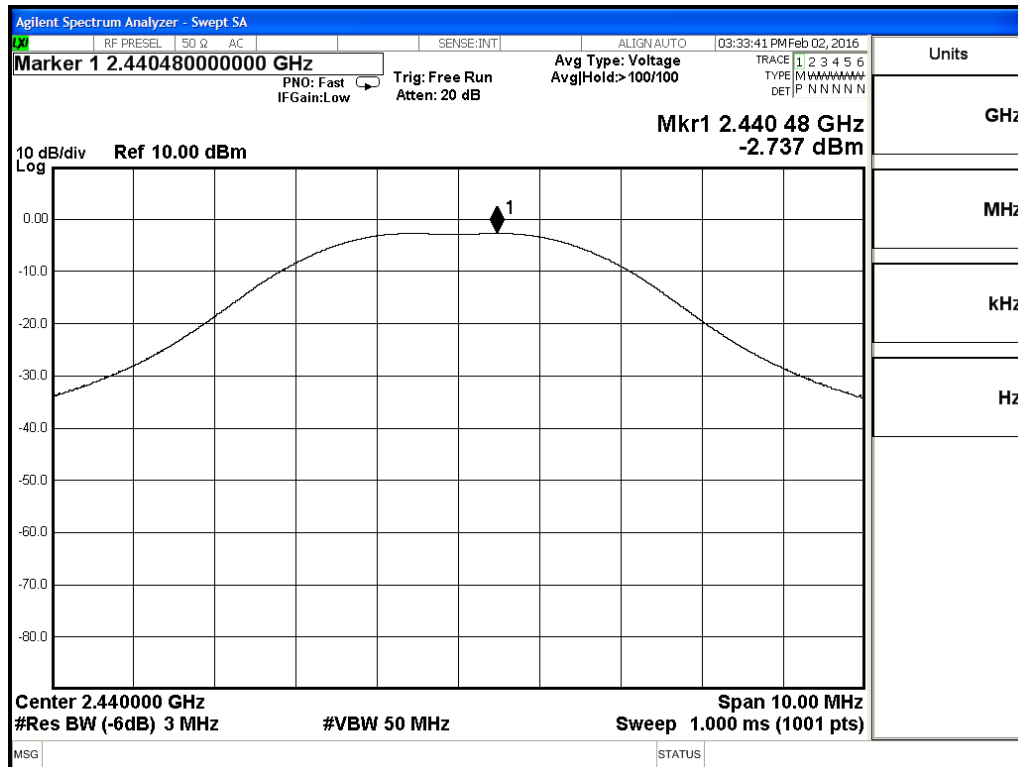


Curtis-Straus LLC, a wholly owned subsidiary of BV CPS
One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828

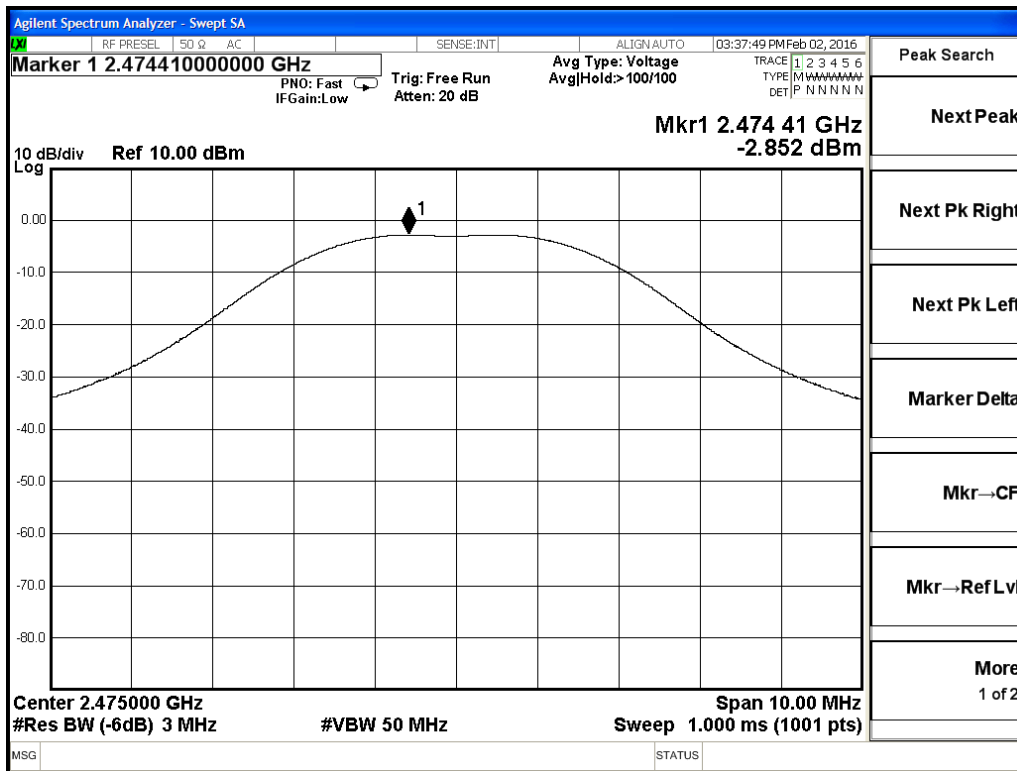




Low Channel – with a -1dBm setting



Mid Channel – with a -1dBm setting



High Channel – with a -1dBm setting

Band Edge Measurements

LIMITS

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

[15.247(d)]

MEASUREMENTS / RESULTS

Band Edge Radiated Emissions Table														
Date: 17-Dec-15				Company: Temperature Alert					Work Order: P3237					
Engineer: Jason Haley				EUT Desc: Zpoint OEM Module -EUT with external antenna					EUT Operating Voltage/Frequency: Battery					
Temp: 22°C				Humidity: 28%					Pressure: 1010mBar					
Frequency Range: Bandedge									Measurement Distance: 3 m					
Notes: Transmitting 2475MHz modulated at 10% Duty Cycle. Output power at -2.0 dBm. Y-axis.									EUT Max Freq: 2475MHz					
* Average Reading is the Peak Reading Minus the Duty Cycle Correction Factor of 20dB.														
Antenna Polarization (H / V)	Frequency (MHz)	Peak Reading (dBμV)	Average Reading (dBμV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBμV/m)	Adjusted Avg Reading (dBμV/m)	FCC Part 15.247 High Frequency - Peak			FCC Part 15.247 High Frequency - Average		
									Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)
H	2483.5	51.0	31.0	20.2	32.4	3.3	66.5	46.5	74.0	-7.5	Pass	54.0	-7.5	Pass
H	2485	47.0	27.0	20.2	32.4	3.3	62.5	42.5	74.0	-11.5	Pass	54.0	-11.5	Pass
V	2483.5	49.1	29.1	20.2	32.4	3.3	64.6	44.6	74.0	-9.4	Pass	54.0	-9.4	Pass
V	2485	46.9	26.9	20.2	32.4	3.3	62.4	42.4	74.0	-11.6	Pass	54.0	-11.6	Pass
V	2395.0	44.2	24.2	19.9	32.3	3.3	59.9	39.9	74.0	-14.1	Pass	54.0	-14.1	Pass
V	2400.0	55.5	35.5	19.9	32.3	3.3	71.2	51.2	74.0	-2.8	Pass	54.0	-2.8	Pass
H	2395.0	44.55	24.6	19.9	32.3	3.3	60.3	40.3	74.0	-13.7	Pass	54.0	-13.7	Pass
H	2400.0	55.0	35.0	19.9	32.3	3.3	70.7	50.7	74.0	-3.3	Pass	54.0	-3.3	Pass
Table Result:				Pass		by		-2.8 dB		Worst Freq: 2400.0 MHz				
Test Site: EMI Chamber 2				Cable 1: Asset #2052				Cable 2: Asset #2053				Cable 3: ---		
Analyzer: Gold				Preamp: Asset #1517				Antenna: Blue Horn				Preselector: ---		
CSsoft Radiated Emissions Calculator v 1.017.148														
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor														
Copyright Curtis-Straus LLC 2006														

Rev. 12/14/2015

Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Gold	100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	4/22/2016	4/22/2015
Radiated Emissions Sites	FCC Code	IC Code	VCCI Code	Range		Cat	Calibration Due	Calibrated on
EMI Chamber 2	719150	2762A-7	A-0015	30-1000MHz		II	3/22/2017	3/22/2015
Preamps / Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
1517 HF Preamp	1-20GHz	CS	CS	N/A	1517	II	8/6/2016	8/6/2015
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Blue Horn	1-18GHz	3117	ETS	157647	1861	I	2/8/2017	2/8/2015
Cables	Range		Mfr			Cat	Calibration Due	Calibrated on
Asset #2052	9kHz - 18GHz		Florida RF			II	3/8/2016	3/8/2015
Asset #2053	9kHz - 18GHz		Florida RF			II	3/8/2016	3/8/2015
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	I	3/19/2016	3/19/2014
TH A#2081		HTC-1	HDE		2081	II	4/2/2016	

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



Curtis-Straus LLC, a wholly owned subsidiary of BV CPS
One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



Band Edge Radiated Emissions Table

Date: 17-Dec-15			Company: Temperature Alert						Work Order: P3237								
Engineer: Jason Haley			EUT Desc: Zpoint OEM Module -EUT with trace antenna						EUT Operating Voltage/Frequency: Battery								
Temp: 22°C			Humidity: 28%						Pressure: 1010mBar								
Frequency Range: Bandedge									Measurement Distance: 3 m								
Notes: Transmitting 2475MHz modulated at 10% Duty Cycle. Output power at -1.0 dBm. X-axis.												EUT Max Freq: 2475MHz					
* Average Reading is the Peak Reading Minus the Duty Cycle Correction Factor of 20dB.																	
Antenna Polarization (H / V)	Frequency (MHz)	Peak Reading (dBμV)	Average Reading (dBμV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBμV/m)	Adjusted Avg Reading (dBμV/m)	FCC Part 15.247 High Frequency - Peak			FCC Part 15.247 High Frequency - Average					
									Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)			
H	2483.5	55.76	35.8	20.2	32.4	3.3	71.3	51.3	74.0	-2.7	Pass	54.0	-2.7	Pass			
H	2485.0	53.64	33.6	20.2	32.4	3.3	69.1	49.1	74.0	-4.9	Pass	54.0	-4.9	Pass			
V	2483.5	52.48	32.5	20.2	32.4	3.3	68.0	48.0	74.0	-6.0	Pass	54.0	-6.0	Pass			
V	2485.0	51.49	31.5	20.2	32.4	3.3	67.0	47.0	74.0	-7.0	Pass	54.0	-7.0	Pass			
V	2395.0	51.92	31.9	19.9	32.3	3.3	67.6	47.6	74.0	-6.4	Pass	54.0	-6.4	Pass			
V	2400.0	57.38	37.4	19.9	32.3	3.3	73.1	53.1	74.0	-0.9	Pass	54.0	-0.9	Pass			
H	2400.0	57.29	37.3	19.9	32.3	3.3	73.0	53.0	74.0	-1.0	Pass	54.0	-1.0	Pass			
H	2395.0	51.24	31.2	19.9	32.3	3.3	66.9	46.9	74.0	-7.1	Pass	54.0	-7.1	Pass			
Table Result:				Pass				by				-0.9 dB					
Test Site: EMI Chamber 2				Cable 1: Asset #2052				Cable 2: Asset #2053				Cable 3: ---					
Analyzer: Gold				Preamp: Asset #1517				Antenna: Blue Horn				Preselector: ---					
CSsoft Radiated Emissions Calculator v 1.017.148																	
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor																	
Copyright Curtis-Straus LLC 2006																	

Rev. 12/14/2015

Spectrum Analyzers / Receivers / Preselectors
Gold

Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	4/22/2016	4/22/2015

Radiated Emissions Sites
EMI Chamber 2

FCC Code	IC Code	VCCI Code	Range	Cat	Calibration Due	Calibrated on
719150	2762A-7	A-0015	30-1000MHz	II	3/22/2017	3/22/2015

Preamps / Couplers Attenuators / Filters
1517 HF Preamp

Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
1-20GHz	CS	CS	N/A	1517	II	8/6/2016	8/6/2015

Antennas
Blue Horn

Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
1-18GHz	3117	ETS	157647	1861	I	2/8/2017	2/8/2015

Cables
Asset #2052
Asset #2053

Range	Mfr	Cat	Calibration Due	Calibrated on
9kHz - 18GHz	Florida RF	II	3/8/2016	3/8/2015
9kHz - 18GHz	Florida RF	II	3/8/2016	3/8/2015

Meteorological Meters
Weather Clock (Pressure Only)
TH A#2081

MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
BA928	Oregon Scientific	C3166-1	831	I	3/19/2016	3/19/2014
HTC-1	HDE		2081	II	4/2/2016	

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



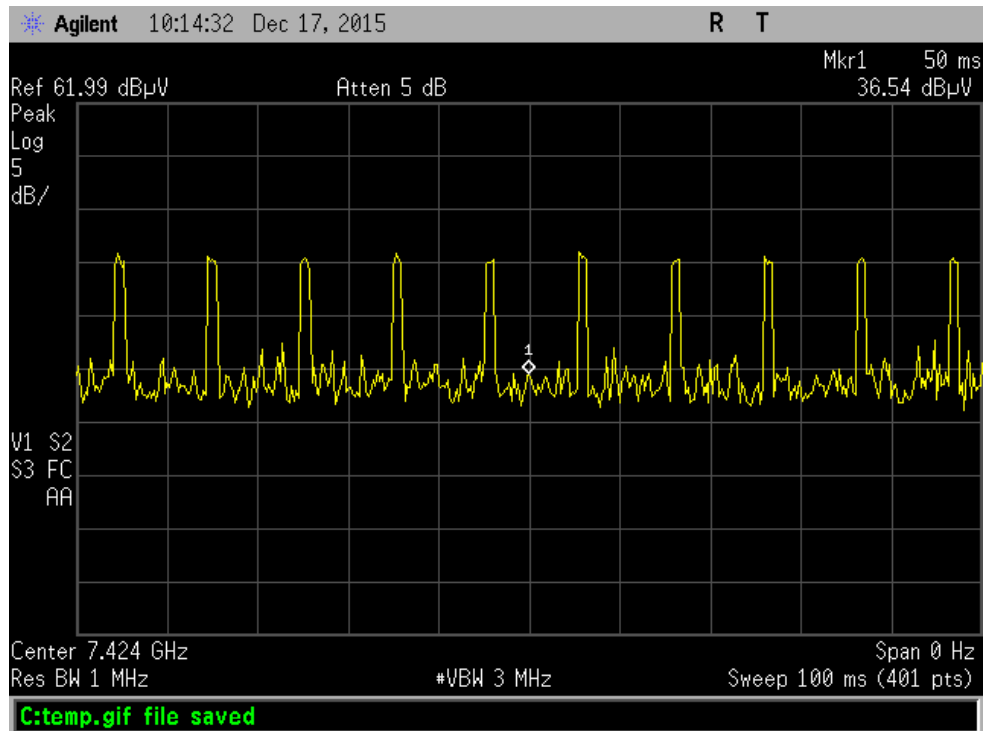
Duty Cycle Correction Calculation

MEASUREMENTS / CALCULATIONS

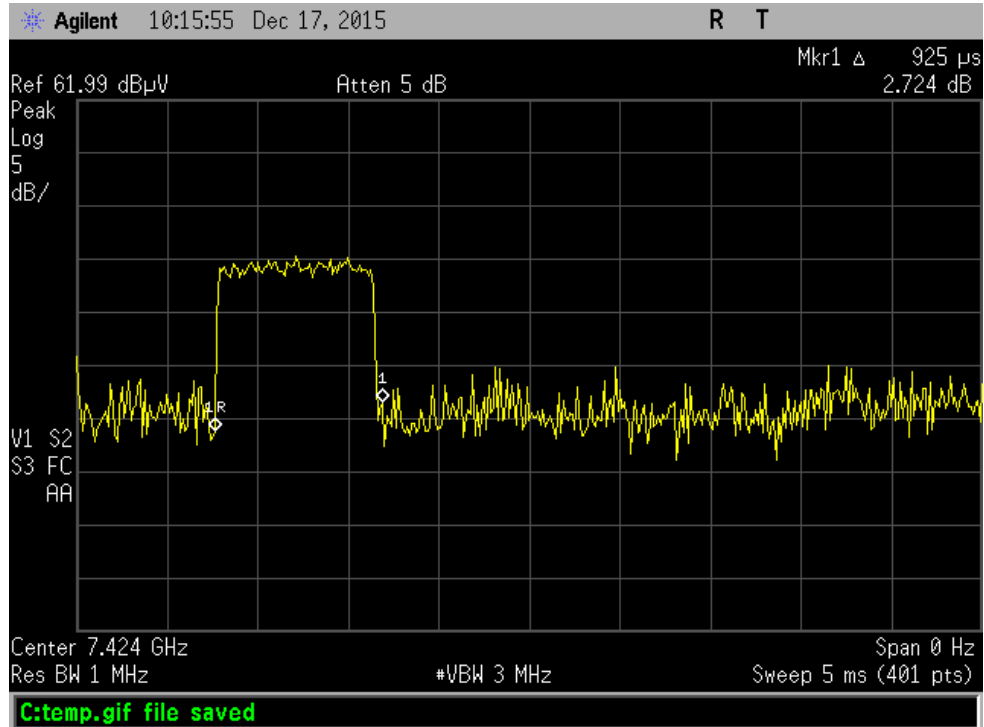
Duty Cycle Correction Factor = $20 \cdot \text{LOG}(0.925 \cdot 10 / 100) = -20.68\text{dB}$. Max is -20dB



PLOTS



Duty Cycle Correction Factor 10 pulses in 100ms

Duty Cycle Correction Factor Pulse Width is 925 μ s

Radiated Spurious Emissions

LIMITS

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

[15.247(d)]

Note: Evaluation showed that the worst case orientation was the X-axis and the worst case channel was 2475MHz. Spurious emissions were taken with those settings.

MEASUREMENTS / RESULTS

Radiated Emissions Table												
Date: 17-Dec-15			Company: Temperature Alert						Work Order: P3237			
Engineer: Jason Haley			EUT Desc: Zpoint OEM Module -EUT with external antenna						EUT Operating Voltage/Frequency: Battery			
Temp: 22°C			Humidity: 28%			Pressure: 1010mBar						
Frequency Range: 30-1000MHz.							Measurement Distance: 3 m					
Notes: Transmitting 2475MHz modulated at 10% Duty Cycle. Output power at -2.0 dBm. X-axis.							EUT Max Freq: 2475MHz					
Antenna Polarization (H/V)	Frequency (MHz)	Reading (dBμV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Reading (dBμV/m)	---			FCC Part 15.247		
							Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)
Vertical peak	37.57905	37.6	25.3	15.7	0.4	28.4	---	---	---	40.0	-11.6	Pass
Vertical peak	38.289586	34.0	25.3	15.1	0.4	24.2	---	---	---	40.0	-15.8	Pass
Horizontal peak	150.25821	29.6	25.1	12.5	0.7	17.7	---	---	---	43.5	-25.8	Pass
Horizontal peak	336.00415	29.3	25.3	14.0	1.1	19.1	---	---	---	46.0	-26.9	Pass
Horizontal peak	384.024539	32.3	25.1	15.1	1.1	23.4	---	---	---	46.0	-22.6	Pass
Horizontal peak	466.387498	31.6	25.6	17.3	1.4	24.7	---	---	---	46.0	-21.3	Pass
Vertical peak	466.387498	34.2	25.6	17.3	1.4	27.3	---	---	---	46.0	-18.7	Pass
Vertical peak	712.410572	34.7	25.1	20.4	1.8	31.8	---	---	---	46.0	-14.2	Pass
Horizontal peak	819.227811	32.3	25.4	21.7	1.7	30.3	---	---	---	46.0	-15.7	Pass
Vertical peak	820.885728	34.3	25.4	21.7	1.7	32.3	---	---	---	46.0	-13.7	Pass
Vertical peak	822.010743	33.6	25.5	21.7	1.7	31.5	---	---	---	46.0	-14.5	Pass
Table Result: Pass by -11.6 dB							Worst Freq: 37.57905 MHz					
Test Site: EMI Chamber 2			Cable 1: Asset #2052				Cable 2: Asset #2053			Cable 3: ---		
Analyzer: Gold			Preamp: Blue-Blk				Antenna: Red-Brown			Preselector: ---		
CSsoft Radiated Emissions Calculator			v1.017.148				Copyright Curtis-Straus LLC 2000					
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor												

Rev.12/14/2015

Spectrum Analyzers / Receivers/Preselectors Gold	Range 100Hz-26.5 GHz	MN E4407B	Mfr Agilent	SN MY45113816	Asset 1284	Cat I	Calibration Due 4/22/2016	Calibrated on 4/22/2015
Radiated Emissions Sites EMI Chamber 2	FCC Code 719150	IC Code 2762A-7	VCCI Code A-0015	Range 30-1000MHz		Cat II	Calibration Due 3/22/2017	Calibrated on 3/22/2015
Preamps /Couplers Attenuators / Filters Blue-Black	Range 0.009-2000MHz	MN ZFL-1000-LN	Mfr CS	SN N/A	Asset 800	Cat II	Calibration Due 12/26/2015	Calibrated on 12/26/2014
Antennas Red-Brown Bilog	Range 30-2000MHz	MN JB1	Mfr Sunol	SN A0032406	Asset 1218	Cat I	Calibration Due 12/4/2016	Calibrated on 12/4/2014
Cables Asset #2052 Asset #2053	Range 9kHz - 18GHz 9kHz - 18GHz		Mfr Florida RF Florida RF			Cat II II	Calibration Due 3/8/2016 3/8/2016	Calibrated on 3/8/2015 3/8/2015
Meteorological Meters Weather Clock (Pressure Only) TH A#2081		MN BA928 HTC-1	Mfr Oregon Scientific HDE	SN C3166-1	Asset 831 2081	Cat I II	Calibration Due 3/19/2016 4/2/2016	Calibrated on 3/19/2014

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



Curtis-Straus LLC, a wholly owned subsidiary of BV CPS
One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



Radiated Emissions Table

Date: 17-Dec-15		Company: Temperature Alert						Work Order: P3237						
Engineer: Jason Haley		EUT Desc: Zpoint OEM Module -EUT with external antenna						EUT Operating Voltage/Frequency: Battery						
Temp: 22°C		Humidity: 28%						Pressure: 1010mBar						
Frequency Range: 1-6GHz									Measurement Distance: 3 m					
Notes: Transmitting 2475MHz modulated at 10% Duty Cycle. Output power at -2.0 dBm. Y-axis. Using High Pass Filter 1311									EUT Max Freq: 2475MHz					
* Average Reading is the Peak Reading Minus the Duty Cycle Correction Factor of 20dB.														
Antenna Polarization (H / V)	Frequency (MHz)	Peak Reading (dBμV)	Average Reading (dBμV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBμV/m)	Adjusted Avg Reading (dBμV/m)	FCC Part 15.247 High Frequency - Peak			FCC Part 15.247 High Frequency - Average		
									Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)
V	4950.0	41.58	21.6	17.9	34.4	4.8	62.9	42.9	74.0	-11.1	Pass	54.0	-11.1	Pass
H	4950.0	45.32	25.3	17.9	34.4	4.8	66.6	46.6	74.0	-7.4	Pass	54.0	-7.4	Pass
Table Result:		Pass		by		-7.4 dB		Worst Freq: 4950.0 MHz						
Test Site: EMI Chamber 2				Cable 1: Asset #2052				Cable 2: Asset #2053				Cable 3: ---		
Analyzer: Gold				Preamp: Asset #1517				Antenna: Blue Horn				Preselector: ---		
CSsoft Radiated Emissions Calculator v 1.017.148														
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor														
Copyright Curtis-Straus LLC 2000														

Rev. 12/14/2015

Spectrum Analyzers / Receivers / Preselectors

Gold

Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	4/22/2016	4/22/2015

Radiated Emissions Sites

EMI Chamber 2

FCC Code	IC Code	VCCI Code	Range	Cat	Calibration Due	Calibrated on
719150	2762A-7	A-0015	30-1000MHz	II	3/22/2017	3/22/2015

Preamps / Couplers Attenuators / Filters

1517 HF Preamp

High Pass Filter

Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
1-20GHz	CS	CS	N/A	1517	II	8/6/2016	8/6/2015
0.03-14.5 GHz	10-3000/T901	K&L	1	1311	II	1/13/2016	1/13/2015

Antennas

Blue Horn

Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
1-18GHz	3117	ETS	157647	1861	I	2/8/2017	2/8/2015

Cables

Asset #2052

Asset #2053

Range	Mfr	Cat	Calibration Due	Calibrated on
9kHz - 18GHz	Florida RF	II	3/8/2016	3/8/2015
9kHz - 18GHz	Florida RF	II	3/8/2016	3/8/2015

Meteorological Meters

Weather Clock (Pressure Only)

TH A#2081

MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
BA928	Oregon Scientific	C3166-1	831	I	3/19/2016	3/19/2014
HTC-1	HDE		2081	II	4/2/2016	

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



Curtis-Straus LLC, a wholly owned subsidiary of BV CPS

One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



Radiated Emissions Table

Date: 17-Dec-15		Company: Temperature Alert				Work Order: P3237								
Engineer: Jason Haley		EUT Desc: Zpoint OEM Module -EUT with external antenna				EUT Operating Voltage/Frequency: Battery								
Temp: 22°C		Humidity: 28%				Pressure: 1010mBar								
Frequency Range: 6-18GHz						Measurement Distance: 1 m								
Notes: Transmitting 2475MHz modulated at 10% Duty Cycle. Output power at -2.0 dBm. Y-axis. Using High Pass Filter 1311						EUT Max Freq: 2475MHz								
* Average Reading is the Peak Reading Minus the Duty Cycle Correction Factor of 20dB.														
Antenna Polarization (H / V)	Frequency (MHz)	Peak Reading (dBμV)	Average Reading (dBμV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBμV/m)	Adjusted Avg Reading (dBμV/m)	FCC Part 15.247 High Frequency - Peak			FCC Part 15.247 High Frequency - Average		
									Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)
V	7425.0	50.0	30.0	17.2	36.0	5.7	74.5	54.5	83.5	-9.0	Pass	63.5	-9.0	Pass
H	7425.0	50.7	30.7	17.2	36.0	5.7	75.2	55.2	83.5	-8.3	Pass	63.5	-8.3	Pass
Table Result:		Pass		by		-8.3 dB		Worst Freq:		7425.0 MHz				
Test Site: EMI Chamber 2		Cable 1: Asset #2052				Cable 2: Asset #2053				Cable 3: ---				
Analyzer: Gold		Preamp: Asset #1517				Antenna: Blue Horn				Preselector: ---				
CSsoft Radiated Emissions Calculator v 1.017.148										Copyright Curtis-Straus LLC 2000				
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor														

Rev. 12/14/2015

Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Gold	100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	4/22/2016	4/22/2015
Radiated Emissions Sites	FCC Code	IC Code	VCCI Code	Range		Cat	Calibration Due	Calibrated on
EMI Chamber 2	719150	2762A-7	A-0015	30-1000MHz		II	3/22/2017	3/22/2015
Preamps / Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
1517 HF Preamp	1-20GHz	CS	CS	N/A	1517	II	8/6/2016	8/6/2015
High Pass Filter	0.03-14.5 GHz	10-3000/T901	K&L	1	1311	II	1/13/2016	1/13/2015
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Blue Horn	1-18GHz	3117	ETS	157647	1861	I	2/8/2017	2/8/2015
Cables	Range		Mfr			Cat	Calibration Due	Calibrated on
Asset #2052	9kHz - 18GHz		Florida RF			II	3/8/2016	3/8/2015
Asset #2053	9kHz - 18GHz		Florida RF			II	3/8/2016	3/8/2015
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	I	3/19/2016	3/19/2014
TH A#2081		HTC-1	HDE		2081	II	4/2/2016	

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



Curtis-Straus LLC, a wholly owned subsidiary of BV CPS

One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



Radiated Emissions Table

Date: 18-Dec-15			Company: Temperature Alert						Work Order: P3237								
Engineer: Jason Haley			EUT Desc: Zpoint OEM Module -EUT with external antenna						EUT Operating Voltage/Frequency: Battery								
Temp: 23°C			Humidity: 30%						Pressure: 997mBar								
Frequency Range: 18-25GHz									Measurement Distance: 0.1 m								
Notes: Transmitting 2475MHz modulated at 10% Duty Cycle. Output power at -2.0 dBm. Y-axis. Using High Pass Filter 1311									EUT Max Freq: 2475 MHz								
* Average Reading is the Peak Reading Minus the Duty Cycle Correction Factor of 20dB.																	
Antenna Polarization (H / V)	Frequency (MHz)	Peak Reading (dBμV)	Average Reading (dBμV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBμV/m)	Adjusted Avg Reading (dBμV/m)	FCC Class B High Frequency - Peak			FCC Class B High Frequency - Average					
									Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)			
V	19800.0	52.4	32.4	41.1	40.3	5.9	57.5	37.5	103.5	-46.0	Pass	83.5	-46.0	Pass			
V	24136.0	47.6	27.6	41.1	40.3	6.9	53.7	33.7	103.5	-49.8	Pass	83.5	-49.8	Pass			
H	24750.0	61.0	41.0	40.8	40.2	7.1	67.5	47.5	103.5	-36.0	Pass	83.5	-36.0	Pass			
Table Result:			Pass			by -36.0 dB			Worst Freq:			24750.0 MHz					
Test Site: EMI Chamber 2			Cable 1: EMIR-HIGH-07						Cable 2: ---			Cable 3: ---					
Analyzer: Gold			Preamp: 18-26.5GHz						Antenna: 18-26.5GHz Horn			Preselector: ---					
CSsoft Radiated Emissions Calculator v 1.017.148																	
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor																	
Copyright Curtis-Straus LLC 2000																	

Rev.12/14/2015

Spectrum Analyzers / Receivers / Preselectors Gold	Range 100Hz-26.5 GHz	MN E4407B	Mfr Agilent	SN MY45113816	Asset 1284	Cat I	Calibration Due 4/22/2016	Calibrated on 4/22/2015
Radiated Emissions Sites EMI Chamber 2	FCC Code 719150	IC Code 2762A-7	VCCI Code A-0015	Range 30-1000MHz		Cat II	Calibration Due 3/22/2017	Calibrated on 3/22/2015
Preamps / Couplers Attenuators / Filters HF (Yellow)	Range 18-26.5GHz	MN AFS4-18002650-60-8P-4	Mfr CS	SN 467559	Asset 1266	Cat II	Calibration Due 3/13/2016	Calibrated on 3/13/2015
Antennas HF (White) Horn	Range 18-26.5GHz	MN 801-WLM	Mfr Waveline	SN 758	Asset 758	Cat III	Calibration Due Verify before Use	Calibrated on date of test
Cables REMI-High-07	Range 1 - 26.5GHz		Mfr TRU			Cat II	Calibration Due 8/7/2016	Calibrated on 8/7/2015
Meteorological Meters Weather Clock (Pressure Only) TH A#2081		MN BA928 HTC-1	Mfr Oregon Scientific HDE	SN C3166-1	Asset 831 2081	Cat I II	Calibration Due 3/19/2016 4/2/2016	Calibrated on 3/19/2014

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



Radiated Emissions Table

Date: 17-Dec-15			Company: Temperature Alert				Work Order: P3237					
Engineer: Jason Haley			EUT Desc: Zpoint OEM Module -EUT with trace antenna				EUT Operating Voltage/Frequency: Battery					
Temp: 22°C			Humidity: 28%				Pressure: 1010mBar					
Frequency Range: 30-1000MHz							Measurement Distance: 3 m					
Notes: Transmitting 2475MHz modulated at 10% Duty Cycle. Output power at -1.0 dBm. X-axis.							EUT Max Freq: 2475MHz					
Antenna Polarization (H / V)	Frequency (MHz)	Reading (dBμV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Reading (dBμV/m)	---			FCC Part 15.247		
							Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)
Vertical, Peak	37.57905	34.8	25.3	15.7	0.4	25.6	---	---	---	40.0	-14.4	Pass
Vertical, Peak	44.743621	35.2	25.3	10.6	0.4	20.9	---	---	---	40.0	-19.1	Pass
Vertical, Peak	45.454157	35.0	25.3	10.2	0.4	20.3	---	---	---	40.0	-19.7	Pass
Vertical, Peak	47.82261	34.5	25.4	9.1	0.4	18.6	---	---	---	40.0	-21.4	Pass
Horizontal, Peak	52.026614	31.8	25.4	7.7	0.4	14.5	---	---	---	40.0	-25.5	Pass
Vertical, Peak	154.521425	34.5	25.1	12.4	0.8	22.6	---	---	---	43.5	-20.9	Pass
Horizontal, Peak	384.024539	37.1	25.1	15.1	1.1	28.2	---	---	---	46.0	-17.8	Pass
Vertical, Peak	699.502502	30.5	25.2	20.3	1.8	27.4	---	---	---	46.0	-18.6	Pass
Vertical, Peak	819.227811	29.9	25.4	21.7	1.7	27.9	---	---	---	46.0	-18.1	Pass
Horizontal, Peak	823.550238	35.3	25.5	21.7	1.7	33.2	---	---	---	46.0	-12.8	Pass
Horizontal, Peak	845.754486	34.8	25.6	21.8	1.8	32.8	---	---	---	46.0	-13.2	Pass
Table Result: Pass							by		-12.8 dB		Worst Freq: 823.55 MHz	
Test Site: EMI Chamber 2			Cable 1: Asset #2052				Cable 2: Asset #2053			Cable 3: ---		
Analyzer: Gold			Preamp: Blue-Blk				Antenna: Red-Brown			Preselector: ---		
CSsoft Radiated Emissions Calculator v 1.017.148												
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor												
Copyright Curtis-Straus LLC 2000												

Rev.12/14/2015

Spectrum Analyzers / Receivers/Preselectors

	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Gold	100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	4/22/2016	4/22/2015

Radiated Emissions Sites

	FCC Code	IC Code	VCCI Code	Range	Cat	Calibration Due	Calibrated on
EMI Chamber 2	719150	2762A-7	A-0015	30-1000MHz	II	3/22/2017	3/22/2015

Preamps/Couplers Attenuators / Filters

	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Blue-Black	0.009-2000MHz	ZFL-1000-LN	CS	N/A	800	II	12/26/2015	12/26/2014

Antennas

	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Red-Brown Bilog	30-2000MHz	JB1	Sunol	A0032406	1218	I	12/4/2016	12/4/2014

Cables

	Range	Mfr	Cat	Calibration Due	Calibrated on
Asset #2052	9kHz - 18GHz	Florida RF	II	3/8/2016	3/8/2015
Asset #2053	9kHz - 18GHz	Florida RF	II	3/8/2016	3/8/2015

Meteorological Meters

	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)	BA928	Oregon Scientific	C3166-1	831	I	3/19/2016	3/19/2014
TH A#2081	HTC-1	HDE		2081	II	4/2/2016	

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



Curtis-Straus LLC, a wholly owned subsidiary of BV CPS

One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



Radiated Emissions Table

Date: 17-Dec-15		Company: Temperature Alert						Work Order: P3237							
Engineer: Jason Haley		EUT Desc: Zpoint OEM Module -EUT with trace antenna						EUT Operating Voltage/Frequency: Battery							
Temp: 22°C		Humidity: 28%						Pressure: 1010mBar							
Frequency Range: 1-6GHz									Measurement Distance: 3 m						
Notes: Transmitting 2475MHz modulated at 10% Duty Cycle. Output power at -1.0 dBm. X-axis. Using High Pass Filter 1311									EUT Max Freq: 2475MHz						
* Average Reading is the Peak Reading Minus the Duty Cycle Correction Factor of 20dB.															
Antenna Polarization (H / V)	Frequency (MHz)	Peak Reading (dBμV)	Average Reading (dBμV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBμV/m)	Adjusted Avg Reading (dBμV/m)	FCC Part 15.247 High Frequency - Peak			FCC Part 15.247 High Frequency - Average			
									Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)	
V	4950.0	43.05	23.1	17.9	34.4	4.8	64.4	44.4	74.0	-9.6	Pass	54.0	-9.6	Pass	
H	4950.0	43.73	23.7	17.9	34.4	4.8	65.0	45.0	74.0	-9.0	Pass	54.0	-9.0	Pass	
Table Result:				Pass		by		-9.0 dB		Worst Freq:				4950.0 MHz	
Test Site: EMI Chamber 2				Cable 1: Asset #2052				Cable 2: Asset #2053				Cable 3: ---			
Analyzer: Gold				Preamp: Asset #1517				Antenna: Blue Horn				Preselector: ---			
CSsoft Radiated Emissions Calculator v 1.017.148															
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor															
Copyright Curtis-Straus LLC 2000															

Rev. 12/14/2015

Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Gold	100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	4/22/2016	4/22/2015
Radiated Emissions Sites	FCC Code	IC Code	VCCI Code	Range		Cat	Calibration Due	Calibrated on
EMI Chamber 2	719150	2762A-7	A-0015	30-1000MHz		II	3/22/2017	3/22/2015
Preamps / Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
1517 HF Preamp	1-20GHz	CS	CS	N/A	1517	II	8/6/2016	8/6/2015
High Pass Filter	0.03-14.5 GHz	10-3000/T901	K&L	1	1311	II	1/13/2016	1/13/2015
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Blue Horn	1-18GHz	3117	ETS	157647	1861	I	2/8/2017	2/8/2015
Cables	Range		Mfr			Cat	Calibration Due	Calibrated on
Asset #2052	9kHz - 18GHz		Florida RF			II	3/8/2016	3/8/2015
Asset #2053	9kHz - 18GHz		Florida RF			II	3/8/2016	3/8/2015
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	I	3/19/2016	3/19/2014
TH A#2081		HTC-1	HDE		2081	II	4/2/2016	

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



Curtis-Straus LLC, a wholly owned subsidiary of BV CPS

One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



Radiated Emissions Table

Date: 17-Dec-15			Company: Temperature Alert						Work Order: P3237										
Engineer: Jason Haley			EUT Desc: Zpoint OEM Module -EUT with trace antenna						EUT Operating Voltage/Frequency: Battery										
Temp: 22°C			Humidity: 28%						Pressure: 1010mBar										
Frequency Range: 6-18GHz									Measurement Distance: 1 m										
Notes: Transmitting 2475MHz modulated at 10% Duty Cycle. Output power at -1.0 dBm. X-axis. Using High Pass Filter 1311									EUT Max Freq: 2475MHz										
* Average Reading is the Peak Reading Minus the Duty Cycle Correction Factor of 20dB.																			
Antenna Polarization (H / V)	Frequency (MHz)	Peak Reading (dBμV)	Average Reading (dBμV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBμV/m)	Adjusted Avg Reading (dBμV/m)	FCC Part 15.247 High Frequency - Peak			FCC Part 15.247 High Frequency - Average							
									Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)					
V	7425.0	55.11	35.1	17.2	36.0	5.7	79.6	59.6	83.5	-3.9	Pass	63.5	-3.9	Pass					
H	7425.0	54.37	34.4	17.2	36.0	5.7	78.9	58.9	83.5	-4.6	Pass	63.5	-4.6	Pass					
V	9900.0	43.73	23.7	17.4	37.7	6.7	70.7	50.7	83.5	-12.8	Pass	63.5	-12.8	Pass					
Table Result: Pass by -3.9 dB Worst Freq: 7425.0 MHz																			
Test Site: EMI Chamber 2					Cable 1: Asset #2052					Cable 2: Asset #2053					Cable 3: ---				
Analyzer: Gold					Preamp: Asset #1517					Antenna: Blue Horn					Preselector: ---				
CSsoft Radiated Emissions Calculator v 1.017.148																			
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor																			
Copyright Curtis-Straus LLC 2000																			

Rev. 12/14/2015

Spectrum Analyzers / Receivers / Preselectors		Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Gold		100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	4/22/2016	4/22/2015
Radiated Emissions Sites		FCC Code	IC Code	VCCI Code	Range		Cat	Calibration Due	Calibrated on
EMI Chamber 2		719150	2762A-7	A-0015	30-1000MHz		II	3/22/2017	3/22/2015
Preamps / Couplers Attenuators / Filters		Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
1517 HF Preamp		1-20GHz	CS	CS	N/A	1517	II	8/6/2016	8/6/2015
High Pass Filter		0.03-14.5 GHz	10-3000/T90I	K&L	1	1311	II	1/13/2016	1/13/2015
Antennas		Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Blue Horn		1-18Ghz	3117	ETS	157647	1861	I	2/8/2017	2/8/2015
Cables		Range		Mfr			Cat	Calibration Due	Calibrated on
Asset #2052		9kHz - 18GHz		Florida RF			II	3/8/2016	3/8/2015
Asset #2053		9kHz - 18GHz		Florida RF			II	3/8/2016	3/8/2015
Meteorological Meters			MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)			BA928	Oregon Scientific	C3166-1	831	I	3/19/2016	3/19/2014
TH A#2081			HTC-1	HDE		2081	II	4/2/2016	

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



Radiated Emissions Table

Date: 18-Dec-15		Company: Temperature Alert						Work Order: P3237							
Engineer: Jason Haley		EUT Desc: Zpoint OEM Module -EUT with trace antenna						EUT Operating Voltage/Frequency: Battery							
Temp: 23°C		Humidity: 30%						Pressure: 997mBar							
Frequency Range: 18-25GHz								Measurement Distance: 0.1 m							
Notes: Transmitting 2475MHz modulated at 10% Duty Cycle. Output power at -1.0 dBm. Y-axis. Using High Pass Filter 1311								EUT Max Freq: 2475 MHz							
* Average Reading is the Peak Reading Minus the Duty Cycle Correction Factor of 20dB.															
Antenna Polarization (H / V)	Frequency (MHz)	Peak Reading (dBμV)	Average Reading (dBμV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBμV/m)	Adjusted Avg Reading (dBμV/m)	FCC Class B High Frequency - Peak			FCC Class B High Frequency - Average			
									Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBμV/m)	Margin (dB)	Result (Pass/Fail)	
V	19800.0	57.39	37.4	41.1	40.3	5.9	62.5	42.5	103.5	-41.0	Pass	83.5	-41.0	Pass	
H	22275.0	66.13	46.1	41.8	40.5	6.6	71.4	51.4	103.5	-32.1	Pass	83.5	-32.1	Pass	
V	24136.0	44.66	24.4	41.1	40.3	6.9	50.8	30.5	103.5	-52.7	Pass	83.5	-53.0	Pass	
H	24750.0	70.32	50.3	40.8	40.2	7.1	76.8	56.8	103.5	-26.7	Pass	83.5	-26.7	Pass	
Table Result:		Pass by -26.7 dB						Worst Freq: 24750.0 MHz							
Test Site: EMI Chamber 2				Cable 1: EMIR-HIGH-07				Cable 2: ---				Cable 3: ---			
Analyzer: Gold				Preamp: 18-26.5GHz				Antenna: 18-26.5GHz Horn				Preselector: ---			
CSsoft Radiated Emissions Calculator v 1.017.148															
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor															
Copyright Cirius-Straus LLC 2000															

Rev.12/14/2015

Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Gold	100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	4/22/2016	4/22/2015
Radiated Emissions Sites	FCC Code	IC Code	VCCI Code	Range		Cat	Calibration Due	Calibrated on
EMI Chamber 2	719150	2762A-7	A-0015	30-1000MHz		II	3/22/2017	3/22/2015
Preamps / Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
HF (Yellow)	18-26.5GHz	AFS4-18002650-60-8P-4	CS	467559	1266	II	3/13/2016	3/13/2015
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
HF (White) Horn	18-26.5GHz	801-WLM	Waveline	758	758	III	Verify before Use	date of test
Cables	Range		Mfr			Cat	Calibration Due	Calibrated on
REMI-High-07	1 - 26.5GHz	TRU-21B0707-120	TRU			II	8/7/2016	8/7/2015
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	I	3/19/2016	3/19/2014
TH A#2081		HTC-1	HDE		2081	II	4/2/2016	

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



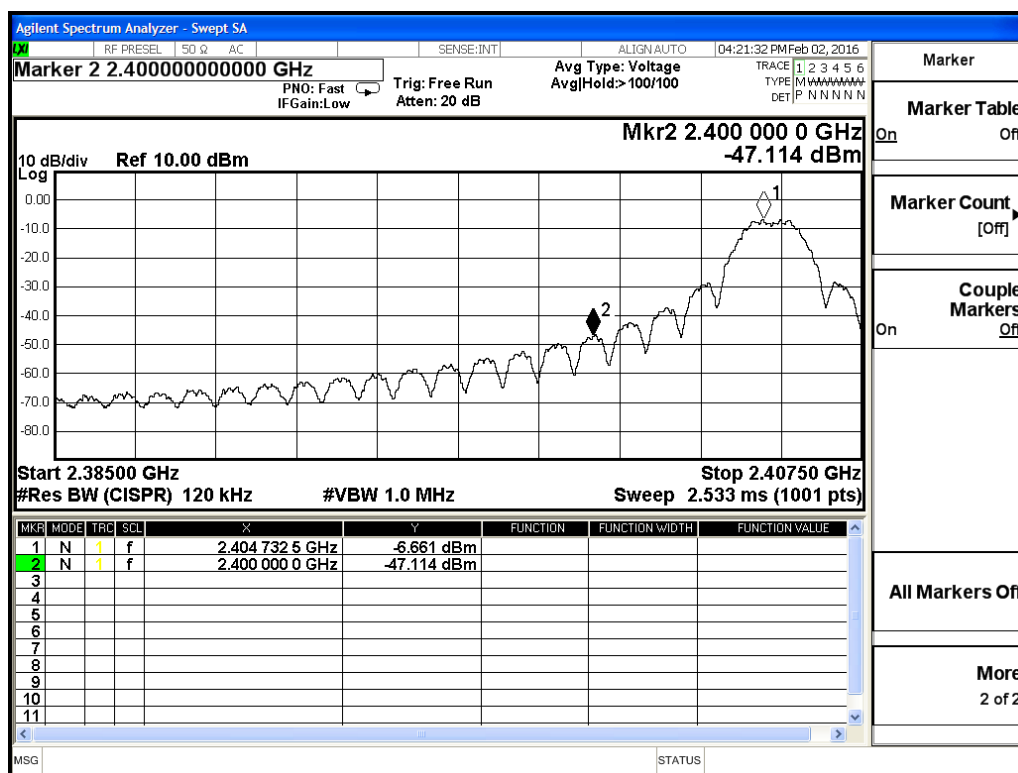
Conducted Spurious Emissions

LIMITS

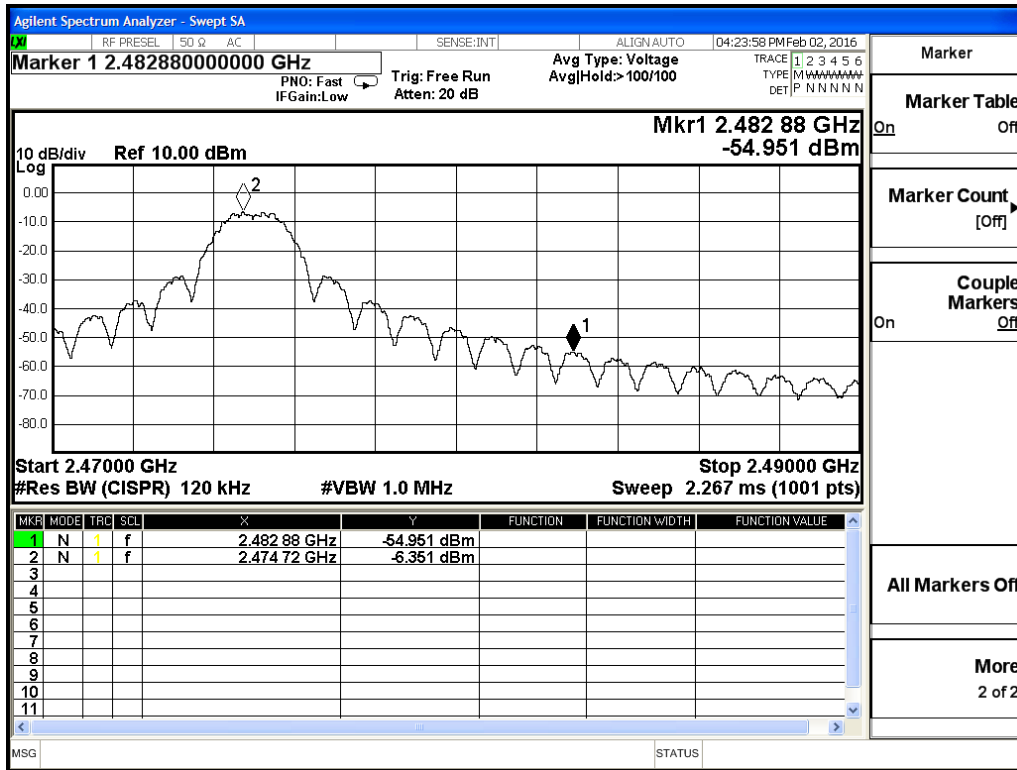
In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth that contains the highest level of desired power...

[15.247(d)]

Conducted BandEdge



Lower BandEdge with a -1 setting



Upper BandEdge with -1 setting

Rev. 2/1/2016

Spectrum Analyzers / Receivers / Preselectors
MXE EMI Receiver

Range
20Hz-8.4GHz

MN
N9038A

Mfr
Agilent

SN
MY53290009

Asset
1168255

Cat
I

Calibration Due
6/16/2016

Calibrated on
6/16/2015

Conducted Test Sites (Mains / Telco)
CEMI 2

FCC Code
719150

VCCI Code
A-0015

Cat
III

Calibration Due
NA

Calibrated on
N/A

Meteorological Meters
Weather Clock (Pressure Only)
TH A#2079

MN
BA928
HTC-1

Mfr
Oregon Scientific
HDE

SN
C3166-1

Asset
831
2079

Cat
I
II

Calibration Due
3/19/2016
4/2/2016

Calibrated on
3/19/2014
4/2/2015

Preamps / Couplers Attenuators / Filters
HF 20dB 50W Attenuator

Range
0.009-18 GHz

MN
PE 7019-20

Mfr
Pasternack

SN
1

Asset
791

Cat
II

Calibration Due
7/31/2016

Calibrated on
7/31/2015

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



Curtis-Straus LLC, a wholly owned subsidiary of BV CPS
One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



MEASUREMENTS / RESULTS

No emissions found within 20dB of the limit. The limit was set to 20dB below that of the 100kHz bandwidth that contains the highest level of desired power.

Conducted Spurious emissions							
Date: 18-Dec-15		Company: Temperature Alert			Work Order: P3237		
Engineer: Jason Haley		EUT Desc: Zpoint OEM Module			EUT Operating Voltage/Frequency: 3V		
Temp: 23°C		Humidity: 30%			Pressure: 997mB		
Frequency Range: 9kHz-25GHz							
Notes: Measured per DTS Meas Guidance V03r04 Section 10.2 *Noise Floor							
Notes:	Frequency (MHz)	Measured Reading (dBm)	Attenuation (dB)	Adjusted Conducted Peak PSD 100kHz (dBm)	FCC 15.247 Conducted Spurious -20dBC		
					Limit (dBm)	Margin (dB)	Result (Pass/Fail)
Worst Case PSD in 100kHz rbw	2440	-3.9	19.9	16.0	NA	NA	NA
Noise Floor	*2490	-54.86	19.9	-34.96	-4.0	-31.0	Pass

9kHz-10GHz frequency range was investigated for all 3 channels (low, middle and high) at the EUT antenna port. Except for the fundamental, all emissions were at instrument noise floor.

Rev.12/14/2015

Spectrum Analyzers / Receivers / Preselectors

Gold

Range
100Hz-26.5 GHz**MN**
E4407B**Mfr**
Agilent**SN**
MY45113816**Asset**
1284**Cat**
I**Calibration Due**
4/22/2016**Calibrated on**
4/22/2015**Meteorological Meters**Weather Clock (Pressure Only)
TH A#2081**MN**
BA928
HTC-1**Mfr**
Oregon Scientific
HDE**SN**
C3166-1**Asset**
831
2081**Cat**
I
II**Calibration Due**
3/19/2016
4/2/2016**Calibrated on**
3/19/2014

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



Power Spectral Density

LIMIT

...the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.
[15.247(e)]

MEASUREMENTS / RESULTS

Power Spectral Density - Conducted Table

Date: 02-Feb-16		Company: Temperature Alert		Work Order: P3237		
Engineer: Chris Reynolds		EUT Desc: Zpoint OEM Module		EUT Operating Voltage/Frequency: 3V		
Temp: 24°C		Humidity: 30%		Pressure: 1015mB		
Frequency Range: Fundamental						
Notes: Output power at -1 dBm. Measured per DTS Meas Guidance V03r04 Section 10.2						
Frequency (MHz)	Measured Reading (dBm)	Attenuation (dB)	Adjusted Conducted Peak PSD (dBm)	FCC Part 15.247 e		
				Limit (dBm)	Margin (dB)	Result (Pass/Fail)
2405	-18.9	19.9	0.9	8.0	-7.1	Pass
2440	-18.7	19.9	1.2	8.0	-6.8	Pass
2475	-18.7	19.9	1.2	8.0	-6.8	Pass
Table Result: Pass by -6.8 dB Worst Freq: 2475.0 MHz						

Rev. 2/1/2016

Spectrum Analyzers / Receivers / Preselectors

MXE EMI Receiver

Range
20Hz-8.4GHzMN
N9038AMfr
AgilentSN
MY53290009Asset
1168255Cat
ICalibration Due
6/16/2016Calibrated on
6/16/2015

Conducted Test Sites (Mains / Telco)

CEMI 2

FCC Code
719150VCCI Code
A-0015Cat
IIICalibration Due
NACalibrated on
N/A

Meteorological Meters

Weather Clock (Pressure Only)
TH A#2079MN
BA928
HTC-1Mfr
Oregon Scientific
HDESN
C3166-1Asset
831
2079Cat
I
IICalibration Due
3/19/2016
4/2/2016Calibrated on
3/19/2014
4/2/2015

Preamps / Couplers Attenuators / Filters

HF 20dB 50W Attenuator

Range
0.009-18 GHzMN
PE 7019-20Mfr
PasternackSN
1Asset
791Cat
IICalibration Due
7/31/2016Calibrated on
7/31/2015

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



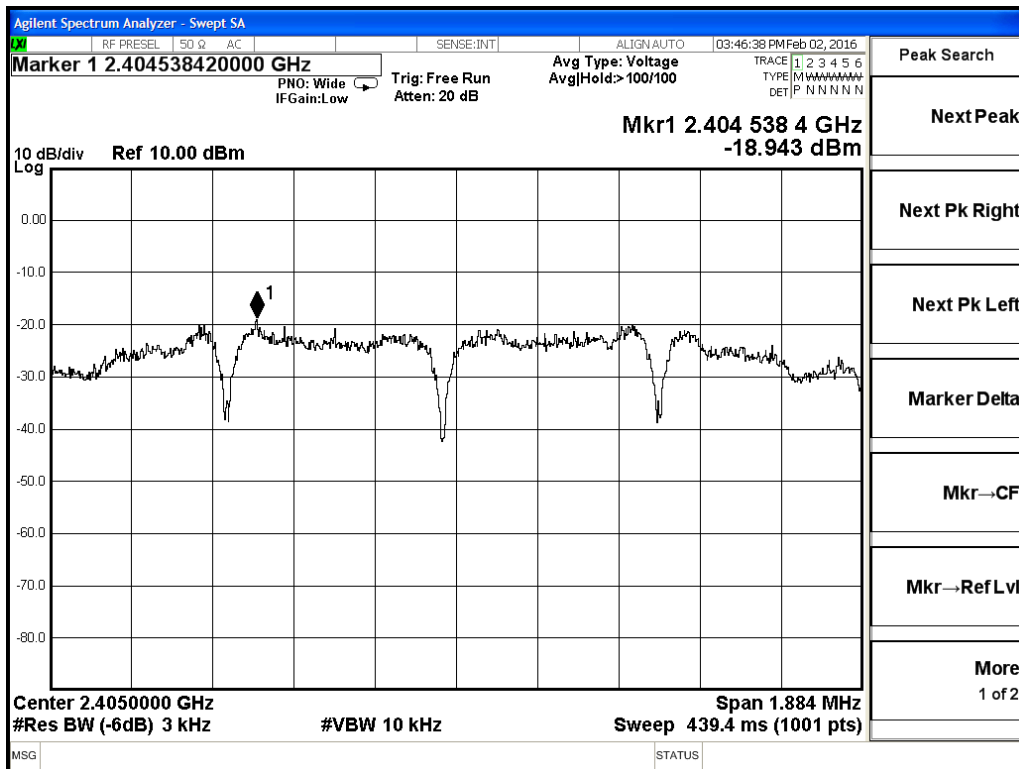
Curtis-Straus LLC, a wholly owned subsidiary of BV CPS

One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828

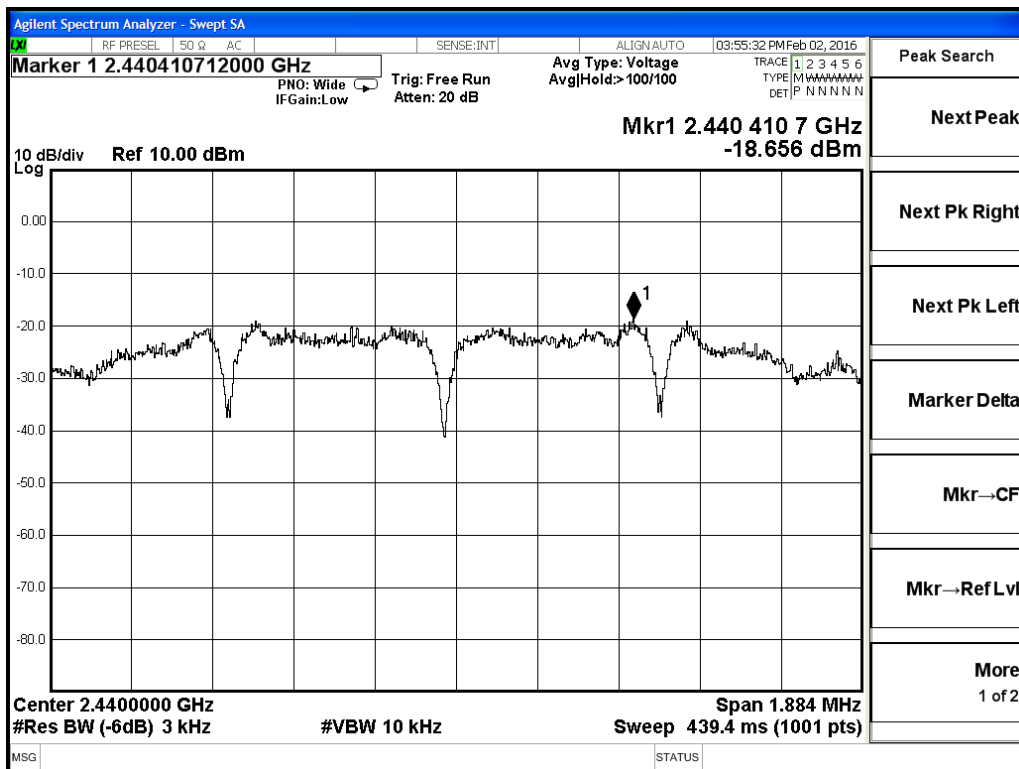


page 28 of 36

PLOTS

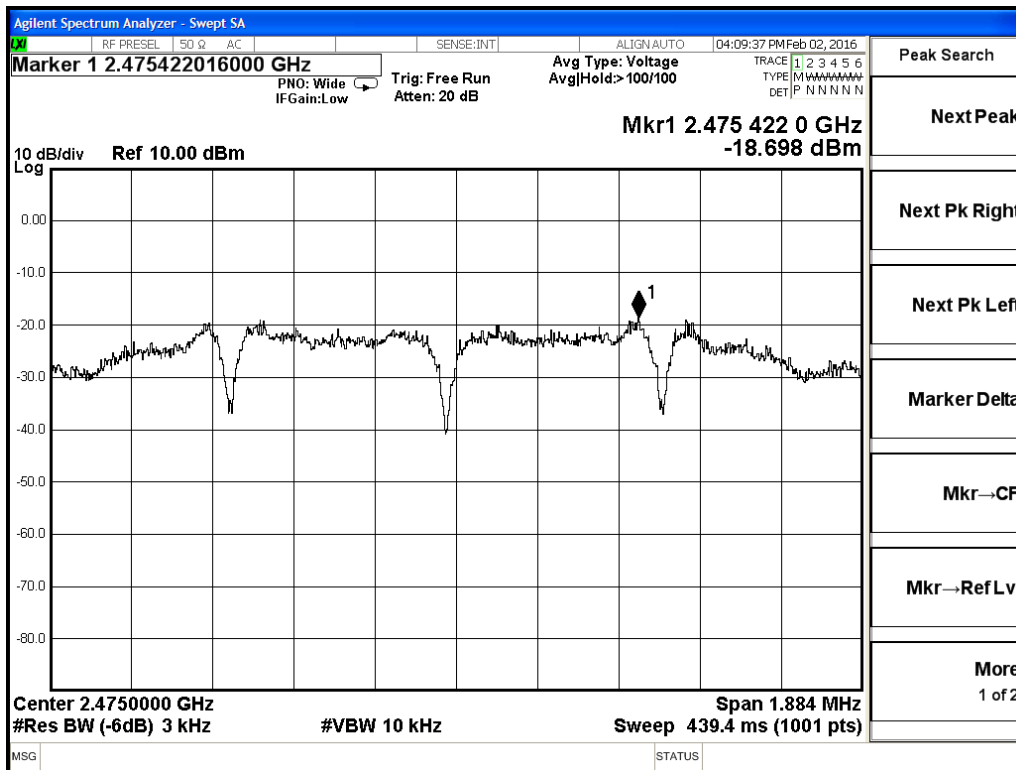


PSD, Low Channel, Conducted Measurement - with a -1dBm setting



PSD, Mid Channel, Conducted Measurement - with a -1dBm setting





PSD, High Channel, Conducted Measurement - with a -1dBm setting

Occupied Bandwidth

REQUIREMENT

When an occupied bandwidth is not specified in the applicable RSS, the transmitted signal bandwidth to be reported is to be its 99% emission bandwidth, as calculated or measured. [RSS-GEN 4.6.1]

MEASUREMENTS / RESULTS

RSS-GEN 4.6.1 Occupied Bandwidth (Conducted) Table				
Date: 13-Jan-16		Company: Temperature Alert		Work Order: P3237
Engineer: Jason Haley		EUT Desc: Zpoint OEM Module -EUT with External antenna		EUT Operating Voltage/Frequency: Battery
Temp: 22.4°C		Humidity: 32%		Pressure: 997mBar
Frequency Range:		2405-2475MHz		
Notes: Transmitting with modulation at 10% Duty Cycle. Output power at -2.0 dBm				EUT Max Freq: 2475MHz
Frequency (MHz)	Resolution Bandwidth Setting (kHz)	Video Bandwidth Setting (kHz)	Frequency Span Setting (MHz)	Occupied Bandwidth (MHz)
2475.0	100	300	5	2.384
2440.0	100	300	5	2.430
2405.0	100	300	5	2.447

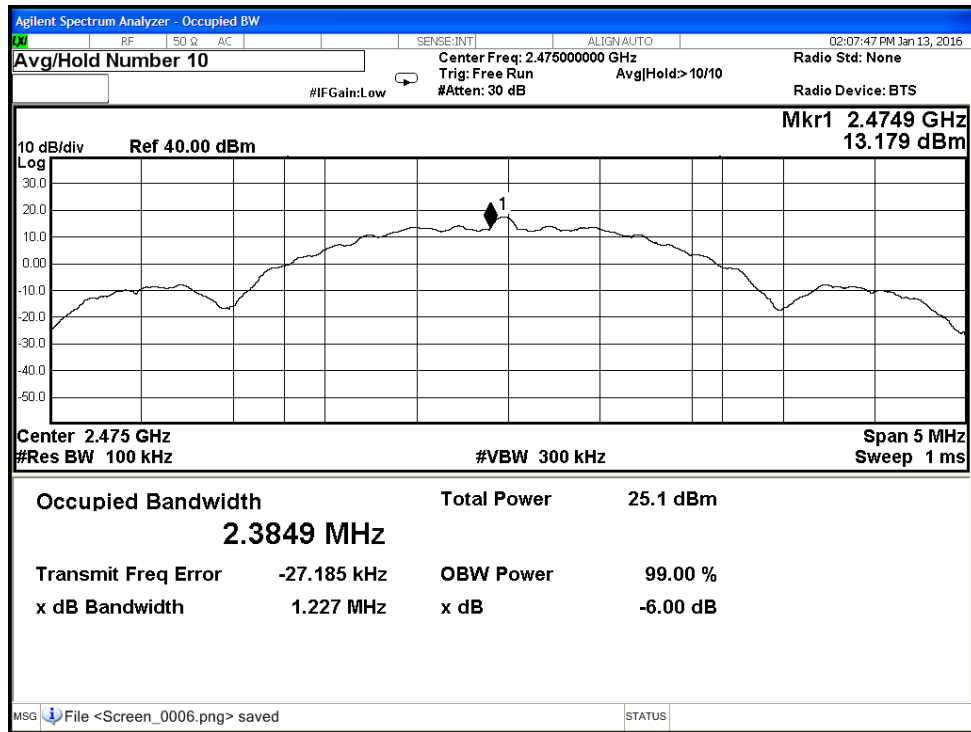
Rev. 1/12/2016

Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
MXE EMI Receiver	20Hz-8.4GHz	N9038A	Agilent	MY53290009	1168255	I	6/16/2016	6/16/2015

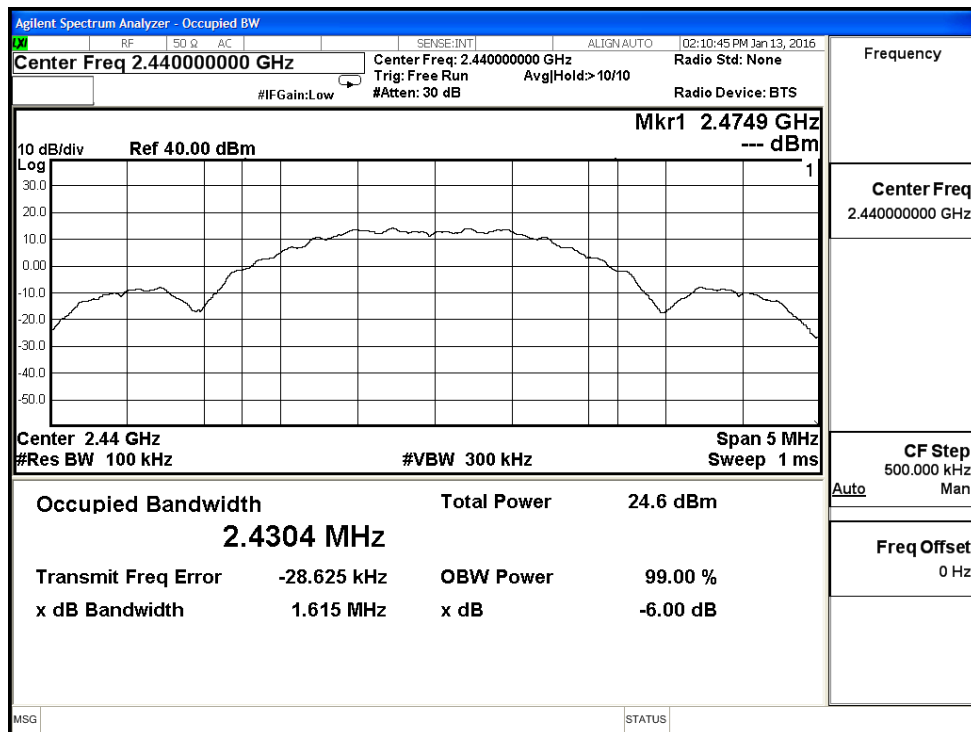
Preamps / Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
HF 20dB 50W Attenuator	0.009-18 GHz	PE 7019-20	Pasternack	1	791	II	7/31/2016	7/31/2015

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.

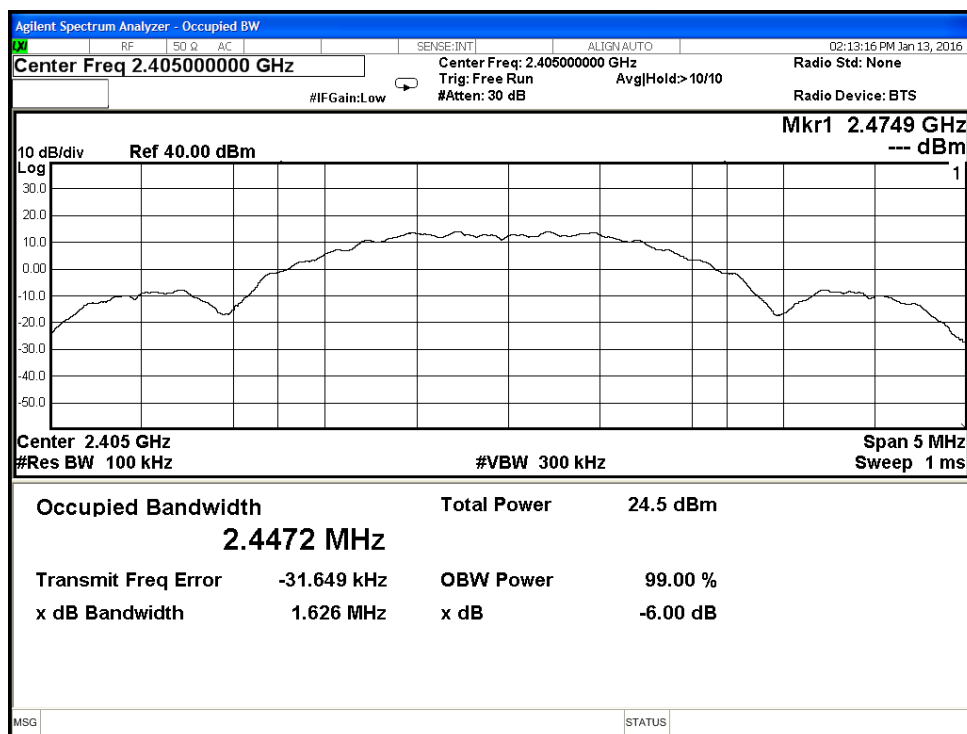
PLOTS



Occupied Bandwidth, High Channel, Conducted



Occupied Bandwidth, Mid Channel, Conducted



Occupied Bandwidth, Low Channel, Conducted

Measurement Uncertainty

The listed uncertainties are the worst case uncertainty for the entire range of measurement. Please note that the uncertainty values are provided for informational purposes only and are not used in determining the PASS/FAIL results.

Measurement	Expanded Uncertainty k=2	Maximum allowable uncertainty
Radiated Emissions (30-1000MHz)	5.6dB	N/A
NIST	4.6dB	5.2dB (Ucisprr)
CISPR		
Radiated Emissions (1-26.5GHz)	4.6dB	N/A
Radiated Emissions (above 26.5GHz)	4.9dB	N/A
Magnetic Radiated Emissions	5.6dB	N/A
Conducted Emissions		
NIST	3.9dB	N/A
CISPR	3.6dB	3.6dB (Ucisprr)
Telco Conducted Emissions (Current)	2.9dB	N/A
Telco Conducted Emissions (Voltage)	4.4dB	N/A
Electrostatic Discharge	11.5%	N/A
Radiated RF Immunity (Uniform Field)	1.6dB	N/A
Electrical Fast Transients	23.1%	N/A
Surge	23.1%	N/A
Conducted RF Immunity	3dB	N/A
Magnetic Immunity	12.8%	N/A
Dips and Interrupts	2.3V	N/A
Harmonics	3.5%	N/A
Flicker	3.5%	N/A
Radio frequency (@ 2.4GHz)	3.23×10^{-8}	1×10^{-7}
RF power, conducted	0.40dB	0.75dB
Maximum frequency deviation:		
• Within 300Hz and 6kHz of audio frequency / Within 6kHz and 25kHz of audio frequency	3.4%	5%
	0.3dB	3dB
Adjacent channel power	1.9dB	3dB
Conducted spurious emission of transmitter, valid up to 12.75GHz	2.39dB	3dB
Conducted emission of receivers	1.3dB	3dB
Radiated emission of transmitter, valid up to 26.5GHz	3.9dB	6dB
Radiated emission of transmitter, valid up to 80GHz	3.3dB	6dB
Radiated emission of receiver, valid up to 26.5GHz	3.9dB	6dB
Radiated emission of receiver, valid up to 80GHz	3.3dB	6dB
Humidity	2.37%	5%
Temperature	0.7°C	1.0°C
Time	4.1%	10%
RF Power Density, Conducted	0.4dB	3dB
DC and low frequency voltages	1.3%	3%
Voltage (AC, <10kHz)	1.3%	2%
Voltage (DC)	0.62%	1%
The above reflects a 95% confidence level		



BUREAU
VERITAS

Curtis-Straus LLC, a wholly owned subsidiary of BV CPS

One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



Conditions Of Testing

[Bureau Veritas Consumer Products Services, Inc., a Massachusetts corporation], and/or its affiliates (collectively, the "Company") will conduct, at the request of the Submitter ("Client"), the tests specified on the submitted Test Request Form or equivalent in accordance with, and subject to, the following terms and conditions (collectively, "Conditions"):

1. All orders for tests are subject to acceptance by the Company, and no order will constitute a binding commitment of the Company unless and until such order is accepted by it, as evidenced by the issuance of a written report ("Test Report") by the Company. The Test Report is issued solely by the Company, is intended for the exclusive use of Client and shall not be published, used for advertising purposes, copied or replicated for distribution to any other person or entity or otherwise publicly disclosed without the prior written consent of the Company. By submitting a request for services to the Company, Client consents to the disclosure to accreditation bodies of those records of Client relevant to the accreditation body's assessment of the Company's competence and compliance with relevant accreditation criteria. The Company shall not be liable for any loss or damage whatsoever resulting from the failure of the Company to provide its services within any time period for completion estimated by the Company. If Client anticipates using the Test Report in any legal proceeding, arbitration, dispute resolution forum or other proceeding, it shall so notify the Company prior to submitting the Test Report in such proceeding. The Company has no obligation to provide a fact or expert witness at such proceeding unless the Company agrees in advance to do so for a separate and additional fee.

2. The Test Report will set forth the findings of the Company solely with respect to the test samples identified therein. Unless specifically and expressly indicated in the Test Report, the results set forth in such Test Report are not intended to be indicative or representative of the quality or characteristics of the lot from which a test sample is taken, and Client shall not rely upon the Test Report as being so indicative or representative of the lot or of the tested product in general. The Test Report will reflect the findings of the Company at the time of testing only, and the Company shall have no obligation to update the Test Report after its issuance. The Test Report will set forth the results of the tests performed by the Company based upon the written information provided to the Company. The Test Report will be based solely on the samples and written information submitted to the Company by Client, and the Company shall not be obligated to conduct any independent investigation or inquiry with respect thereto.

3. The Company may, in its sole discretion, destroy samples which have been furnished to the Company for testing and which have not been destroyed in the course of testing. The Company may delegate the performance of all or a portion of the services contemplated hereunder to an affiliate, agent or subcontractor of the Company, and Client consents to such delegation.

4. These Conditions and the Test Report represent the entire understanding of the parties hereto with respect to the subject matter hereof and of the Test Report, and no modification, variance or extrapolation with respect thereto shall be permitted without the prior written consent of the Company.

5. The names, service marks, trademarks and copyrights of the Company and its affiliates, including the names "BUREAU VERITAS," "BUREAU VERITAS CONSUMER PRODUCTS SERVICES," "BVCPS," "MTL," "ACTS," "MTL-ACTS" and CURTIS-STRAUS (collectively, the "Marks") are and shall remain the sole property of the Company or its affiliates and shall not be used by Client except solely to the extent that Client obtains the prior written approval of the Company and then only in the manner prescribed by the Company. Client shall not contest the validity of the Marks or take any action that might impair the value or goodwill associated with the Marks or the image or reputation of the Company or its affiliates.

6. Payment in full shall be due 30 days after the date of invoice. Interest shall be due on overdue amounts from the due date until paid at an interest rate of 1.5% per month or, if less, the maximum rate permitted by law. The Company reserves the right, at any time and from time to time, to revoke any credit extended to Client. Client shall reimburse the Company for any costs it incurs in collecting past due amounts, including court costs and fees and expenses of attorneys and collection agencies. The Test Report may not be used or relied upon by Client if and for so long as Client fails to pay when due any invoice issued by the Company or any affiliate of it to Client or any affiliate or subsidiary of Client together with interest and penalties, if any, accrued thereon.

7. The Company disclaims any and all responsibility or liability arising out of or in connection with e-mail transmissions of such information.

8. Client understands and agrees that the Company is neither an insurer nor a guarantor, that the Company does not take the place of Client or any designer, manufacturer, agent, buyer, distributor or transportation or shipping company, and that the Company disclaims all liability in such capacities. Client further understands that if it seeks assurance against loss or damage, it should obtain appropriate insurance.

9. Client agrees that the Company, by providing the services, does not take the place of Client nor any third party, nor does the Company release them from any of their obligations, nor does the Company otherwise assume, abridge, abrogate or undertake to discharge any duty of any third party to Client or any duty of Client or any third party to any other third party, and Client will not release any third party from its obligations and duties with respect to the tested goods.

10. Client shall, on a timely basis, (a) provide adequate instructions to the Company in order to enable the Company to perform properly its services, (b) provide, or cause Client's suppliers and contractors to provide, the Company with all documents necessary to enable the Company to perform its services, (c) furnish the Company with all relevant information regarding Client's intended use and purposes of the tested goods, (d) advise the Company of essential dates and deadlines relevant to the tested goods and (e) fully exercise all rights and remedies available to Client against third parties in respect of the tested goods.

11. The Company shall undertake due care and ordinary skill in the performance of its services to Client, and the Company shall accept responsibility only where such skill has not been exercised and, even in such event, only to the extent of the limitation of liability set forth herein.

12. If Client desires to assert a claim arising from or relating to (i) the performance, purported performance or non-performance of any services by the Company or (ii) the sale, resale, manufacture, distribution or use of any tested goods, it must submit that claim to the Company in a writing that sets forth with particularity the basis for such claim within 60 days from discovery of the potential claim and not more than six months after the date of issuance of the Test Report to Client. Client waives any and all such claims including, without limitation, claims that the Test Report is inaccurate, incomplete or misleading or that additional or different testing is required, unless and then only to the extent that Client submits a written claim to the Company within both such time periods.

13. CLIENT SHALL, EXCEPT TO THE EXTENT OF COMPANY'S LIABILITY TO CLIENT HEREUNDER (WHICH IN NO EVENT SHALL EXCEED THE LIMITATION OF LIABILITY HEREIN), HOLD HARMLESS AND INDEMNIFY THE COMPANY, ITS AFFILIATES AND THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, AGENTS AND SUBCONTRACTORS AGAINST ALL ACTUAL OR ALLEGED THIRD PARTY CLAIMS FOR LOSS, DAMAGE OR EXPENSE OF WHATSOEVER NATURE AND HOWSOEVER ARISING FROM OR RELATING TO (i) THE PERFORMANCE, PURPORTED PERFORMANCE OR NON-PERFORMANCE OF ANY SERVICES BY THE COMPANY OR (ii) THE SALE, RESALE, MANUFACTURE, DISTRIBUTION OR USE OF ANY TESTED GOODS.

14. EXCEPT AS MAY OTHERWISE BE EXPRESSLY AGREED TO IN WRITING BY THE COMPANY AND NOTWITHSTANDING ANY PROVISION TO THE CONTRARY CONTAINED HEREIN OR IN ANY TEST REPORT, NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, IS MADE.



Curtis-Straus LLC, a wholly owned subsidiary of BV CPS

One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



15. (A) IN NO EVENT WHATSOEVER SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL, EXEMPLARY OR PUNITIVE DAMAGES IN CONNECTION WITH, RELATING TO OR ARISING OUT OF THE TEST REPORT OR THE SERVICES PROVIDED BY THE COMPANY HEREUNDER, INCLUDING WITHOUT LIMITATION LOSS OF OR DAMAGE TO PROPERTY; LOSS OF INCOME, PROFIT OR USE; OR ANY CLAIMS OR DEMANDS MADE AGAINST CLIENT OR ANY OTHER PERSON BY ANY THIRD PARTY IN CONNECTION WITH, RELATING TO OR ARISING OUT OF THE SERVICES PROVIDED BY THE COMPANY HEREUNDER.

(B) NOTWITHSTANDING ANY PROVISION TO THE CONTRARY CONTAINED HEREIN, AND IN RECOGNITION OF THE RELATIVE RISKS AND BENEFITS TO CLIENT AND THE COMPANY ASSOCIATED WITH THE TESTING SERVICES CONTEMPLATED HEREBY, THE RISKS HAVE BEEN ALLOCATED SUCH THAT UNDER NO CIRCUMSTANCES WHATSOEVER SHALL THE LIABILITY OF THE COMPANY TO CLIENT OR ANY THIRD PARTY IN RESPECT OF ANY CLAIM FOR LOSS, DAMAGE OR EXPENSE, OF WHATSOEVER NATURE OR MAGNITUDE, AND HOWSOEVER ARISING, EXCEED AN AMOUNT EQUAL TO FIVE (5) TIMES THE AMOUNT OF THE FEES PAID TO THE COMPANY FOR THE SPECIFIC SERVICES WHICH GAVE RISE TO SUCH CLAIM OR U.S.\$10,000, WHICHEVER IS THE LESSER AMOUNT.

16. The Company shall not be liable for any loss or damage resulting from any delay or failure in performance of its obligations hereunder resulting directly or indirectly from any event of force majeure or any event outside the control of the Company. If any such event occurs, the Company may immediately cancel or suspend its performance hereunder without incurring any liability whatsoever to Client.

17. Company's services, including these Conditions, shall be governed by, and construed in accordance with, the local laws of the country where the Company performs the tests or, in the case of tests performed in the United States of America, the laws of Massachusetts without regard to conflicts of laws principles. If any aspect(s) of these Conditions is found to be illegal or unenforceable, the validity, legality and enforceability of all remaining aspects of these Conditions shall not in any way be affected or impaired thereby. Any proceeding related to the subject matter hereof shall be brought, if at all, in the courts of the country where the Company performs the tests or, in the case of tests performed in the United States of America, in the courts of Massachusetts. Client waives the right to interpose any counterclaim or setoffs of any nature in any litigation arising hereunder.

The complete list of the Approved Subcontractors Curtis-Straus may use to delegate the performance of work can be provided upon request.
Rev.160009121(2)_#684340 v14CS

