

Radio Test Report (BT-LE)

Report No.: RJ161216E08J-3

Test Model: AW-CM276NF

Received Date: Dec. 16, 2016

Test Date: Jan. 03, 2017

Issued Date: Aug. 24, 2020

Applicant: AzureWave Technologies, Inc.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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Release Control Record

Issue No.	Description	Date Issued
RJ161216E08J-3	Original release.	Aug. 24, 2020

1 Certificate of Conformity

Product: IEEE 802.11 2X2 MU-MIMO ac/a/b/g/n Wireless LAN + Bluetooth NGFF Module

Brand: AzureWave

Model No.: AW-CM276NF

Sample Status: ENGINEERING SAMPLE

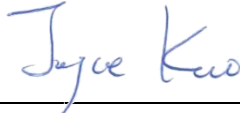
Applicant: AzureWave Technologies, Inc.

Test Date: Jan. 03, 2017

Standards: ARIB STD-T66 (V3.7), MIC notice 88 Appendix 43
MIC No.88(2004) Test method of specified radio equipments
Annex no. 43 Article 2 paragraph 1 item (19)

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by :


Joyce Kuo / Specialist

Date:

Aug. 24, 2020

Approved by :



Clark Lin / Technical Manager

Date:

Aug. 24, 2020

2 Summary of Test Results

The EUT has been tested according to the following specifications:

Notice 88 Appendix 43 Reference	ARIB STD-T66 Ref.	Report Reference	Parameter	Test Results (Note)
General Provisions				
C	3.2 (4)	4.1	Frequency tolerance	C
D	3.2 (7)	4.2	Occupied bandwidth	C
E	3.2 (6)	4.3	Spurious emissions	C
Transmitting Equipment				
F	--	4.4	Antenna power	C
--	--	--	SAR	NA
Transmitting Antenna				
--	--	3.5	Type, configuration, etc. of transmitting antenna	C
--	--	3.5	Direction pattern of transmitting antenna	C
Receiving Equipment				
G	3.3 (1)	4.5	Spurious emissions of receiver	C
--	--	3.5	Refer to all articles for transmitting antenna	C
Operating Frequency 2400 to 2483.5MHz				
--	3.7 (1)	3.4	High frequency / modulation section cannot be opened easily	C
--	3.1 (1)	3.1	Communication method	C
--	3.2 (1)a	3.1	Modulation method	C
--	3.2 (1)a	3.1	Spread spectrum method	C
--	3.2 (2)	4.4	Antenna power	C
--	3.6 (2)	4.4	Absolute gain of transmitting antenna	C
--	3.6 (2)	--	Angular width of principal radiation (AWPR)	NA
--	3.2 (10)	--	Number of carriers within 1 MHz bandwidth in OFDM	NA
--	3.2 (8)	--	Spreading bandwidth	NA
--	3.2 (9)	--	Spreading factor	NA
--	3.2 (11)	--	Frequency retention time (FH employed)	NA
--	3.4.1(1)	4.6	Interference Prevention Function	C
--	3.4.1(3)	--	Carrier Sense Capability	NA
Note: C = Conform NC = Not Conform NT = Not Tested NA = Not Applicable				

2.1 Test Instruments

Description & Manufacturer	Model no.	Serial No.	Calibrated Date	Calibrated Until	Calibration Authority	Calibration Method
Spectrum Analyzer R&S	FSV40	100964	June 28, 2016	June 27, 2017	ETC	(c)
ESG Vector signal generator Agilent	E4438C	MY45094468/005 506 602 UK6 UNJ	Nov. 25, 2016	Nov. 24, 2017	ETC	(c)
Power Meter Anritsu	ML2495A	1014008	May 05, 2016	May 04, 2017	ETC	(c)
Power Sensor Anritsu	MA2411B	0917122	May 05, 2016	May 04, 2017	ETC	(c)
DC Power Supply Topward	6603D	795558	NA	NA	NA	NA
Digital Multimeter FLUKE	87III	73680266	Nov. 10, 2016	Nov. 09, 2017	ETC	(c)

- NOTE:**
- The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 - Calibration method :
 - Calibration conducted by the National Institute of Information and Communications Technology (NICT) or a designated calibration agency under Article 102-18 paragraph (1).
 - Calibration conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992) Japan Calibration Service System.
 - Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).
 - Calibration conducted by using other equipment that listed above from a) to c).
 - For power supply no evaluation calibrated, because when supplying power, used digital multimeter calibrated.
 - Tested Date: Jan. 03, 2017

2.2 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in TR 100 028-1.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Parameter	Uncertainty
Occupied Bandwidth	703.56 Hz
Spurious emissions	2.52 dB
Output power density	1.37 dB
Out of band radiated power	2.52 dB
Frequency Tolerance	703.56 Hz

2.3 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT (BT-LE)

Product	IEEE 802.11 2X2 MU-MIMO ac/a/b/g/n Wireless LAN + Bluetooth NGFF Module
Brand	AzureWave
Model No.	AW-CM276NF
Status of EUT	ENGINEERING SAMPLE
Nominal Voltage	DC 3.3V from host equipment
Modulation Type	GFSK
Modulation Technology	DTS
Transfer Rate	up to 1Mbps
Operating Frequency	2402MHz ~ 2480MHz
Number of Channel	40
Rated RF Output Power	3 mW
Conducted RF Output Power	2.729 mW
Radiated RF Output Power	5.42 mW
Antenna Type	Refer to section 3.5
Antenna Connector	Refer to section 3.5
Accessory Device	NA

Note:

1. This report is issued as a duplicate report of BV CPS report no.: RJ161216E08H-3. The difference compared with original report are changing applicant, brand, new antenna and model for marketing purpose; therefore all test data was copied from the original test report.
2. The test data are copied which have obtained authorization from applicant and brand company both of the original test report (Report No.: RJ161216E08H-3).
3. There are WLAN, BT technology used for the EUT.
4. Simultaneously transmission condition.

Condition	Technology	
1	WLAN (2.4GHz)	Bluetooth
2	WLAN (5GHz)	Bluetooth

5. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 Description of Test Modes

40 channels are provided for BT-LE mode:

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

Note:

1. The channels which were indicated in bold type of the above channel list were selected as representative test channel. Therefore only the data of the test channels were recorded in this report.

By means of test software (DutApiMimoBt.exe[Ver1.0.0.109]) provided by manufacturer, the power levels during the tests were set according to the following codes:

Channel	Power Setting
0	5
19	5
39	5

3.3 Test Conditions

Test Conditions	Voltage (Vdc)
V_{normal}	3.3
$V_{+10\%}$	3.63
$V_{-10\%}$	2.97

3.4 Assembly

The EUT is constructed as an IEEE 802.11 2X2 MU-MIMO ac/a/b/g/n Wireless LAN + Bluetooth NGFF Module. The RF circuit was covered by metal shielding case, and the metal shielding case was soldered on PCB.

3.5 Antenna Specifications

3.5.1 Antenna Gain

Original

Ant. Set	Brand	Model	Chain No.	Antenna Net. Gain(dBi)	Frequency range (MHz)	Antenna Type	Connector Type	
1	MAG.LAYERS	MSA-4008-25GC1-A1	Chain 0 (Aux)	2.98	2400~2500	PIFA	i-pex(MHF)	
				5.16	4900~5900			
			Chain 1 (Main)	2.98	2400~2500			
				5.16	4900~5900			
2	Taoglas	GW.59.3153	Chain 0 (Aux)	2.37	2400~2500	Dipole	RP-SMA	120
				2.93	5150~5900			
			Chain 1 (Main)	2.37	2400~2500			120
				2.93	4900~5900			
3	Bondale	G-RAOK10090176-1436	Chain 0 (Aux)	1.73	2400~2500	Dipole	SMA	120
				3.96	5150~5900			
			Chain 1 (Main)	1.73	2400~2500			120
				3.96	4900~5900			
4	Bondale	G-RAOK10090176-1436B	Chain 0 (Aux)	1.9	2400~2500	Dipole	RP-SMA	120
				3.6	4900~5800			
			Chain 1 (Main)	1.9	2400~2500			120
				3.6	4900~5800			
5	San Jose	UEN-201	Chain 0 (Aux)	2.4	2400~2500	Dipole	RP-SMA	120
				4.4	4900~5800			
			Chain 1 (Main)	2.4	2400~2500			120
				4.4	4900~5800			
6	ACON	AEP6Y-100007	Chain 0 (Aux)	-2.31	2400~2500	PIFA	I-pex (MHF4)	65
				0.09	5150~5850			
		AEP6Y-100006	Chain 1 (Main)	0.33	2400~2500			52.5
				-1.76	5150~5850			
7	MAG.LAYERS	MSA-4008-25GC1-A2	Chain 0 (Aux)	2.98	2400~2500	PIFA	i-pex(MHF)	NA
				5.16	4900~5900			
			Chain 1 (Main)	2.98	2400~2500			
				5.16	4900~5900			
8	ACON	AEP6Y-100009	Chain 0 (Aux)	1.08	2400~2500	PIFA	I-pex	134.3
				4.05	5150~5850			
		AEP6Y-100008	Chain 1 (Main)	0.78	2400~2500			43
				3.04	5150~5850			
9	Unictron	H2B1PC1A1C175L	Chain 0 (Aux)	1.6	2400~2500	PCB	I-pex	100±5
				4.8	5150~5850			
		H2B1PC1A1C175L	Chain 1 (Main)	1.6	2400~2500			100±5
				4.8	5150~5850			
10	LSR	001-0012	Chain 0 (Aux)	2	2400~2500	Dipole	RP-SMA	100
				2	5150~5850			
		001-0012	Chain 1 (Main)	2	2400~2500			100
				2	5150~5850			

11	Laird	MAF94051	Chain 0 (Aux)	2.4	2400~2500	Dipole	RP-SMA	100
				3.4	5150~5850			100
		MAF94051	Chain 1 (Main)	2.4	2400~2500			
				3.4	5150~5850			100
12	Taoglas	GW.59.3153	Chain 0 (Aux)	2.86	2400~2500	Dipole	RP-SMA	100
				4.74	5150~5850			100
		GW.59.3153	Chain 1 (Main)	2.86	2400~2500			
				4.74	5150~5850			100
13	Chang Hong	DA-2458-02-SMR	Chain 0 (Aux)	2.85	2400~2500	Dipole	RP-SMA	100
				2.17	5150~5850			100
		DA-2458-02-SMR	Chain 1 (Main)	2.85	2400~2500			
				3.13	5150~5850			100
14	Unictron	H2B1PD1A1C385L	Chain 0 (Aux)	2.8	2400~2500	PCB	I-pex	100
				4.2	5150~5850			100
		H2B1PD1A1C385L	Chain 1 (Main)	2.8	2400~2500			
				4.2	5150~5850			100
15	Molex	2042811100	Chain 0 (Aux)	2.562	2400~2500	PCB	I-pex	100
				3.094	5150~5850			100
		2042811100	Chain 1 (Main)	2.562	2400~2500			
				3.094	5150~5850			100
16	Molex	1461531100	Chain 0 (Aux)	1.829	2400~2500	PCB	I-pex	100
				2.485	5150~5850			100
		1461531100	Chain 1 (Main)	1.829	2400~2500			
				2.485	5150~5850			100

Newly

Antenna Set.	Brand	Model	Chain No.	Antenna Net Gain (dBi) included cable loss	Frequency Range (MHz)	Antenna Type	Connector Type	Cable Length
17	LYNwave	5-PP005049	Chain 0(Aux)	2.7	2400-2500	PCB	IPEX 4L	30mm
				4.4	5150~5850			
			Chain 1(Main)	2.7	2400-2500	PCB	IPEX 4L	30mm
				4.5	5150~5850			

Antenna set 1 was chosen for test.

*The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

3.5.2 Antenna Pattern

Please refer to the attached file (Antenna pattern).

4 Test Results

4.1 Frequency Tolerance Measurement

4.1.1 Limits of Frequency Tolerance Measurement

Tolerance of frequency shall be +/- 50ppm

4.1.2 Test Setup



4.1.3 Test Results

Environmental Conditions		24 deg.C, 64% RH					
Channel	Frequency (MHz)	Voltage normal		Voltage +10%		Voltage -10%	
		Carrier frequency (MHz)	Frequency tolerance (ppm)	Carrier frequency (MHz)	Frequency tolerance (ppm)	Carrier frequency (MHz)	Frequency tolerance (ppm)
0	2402	2401.999840	-0.066	2401.999840	-0.066	2401.999840	-0.066
19	2440	2439.999560	-0.180	2439.999640	-0.147	2439.999640	-0.147
39	2480	2479.999640	-0.145	2479.999640	-0.145	2479.999680	-0.129

4.2 Occupied Bandwidth Measurement (99% power bandwidth)

4.2.1 Limits of Occupied Bandwidth Measurement

Item	Limit
Occupied bandwidth	<26MHz

4.2.2 Test Setup

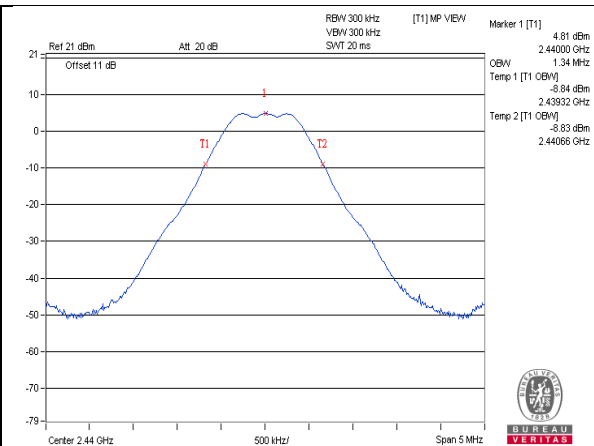
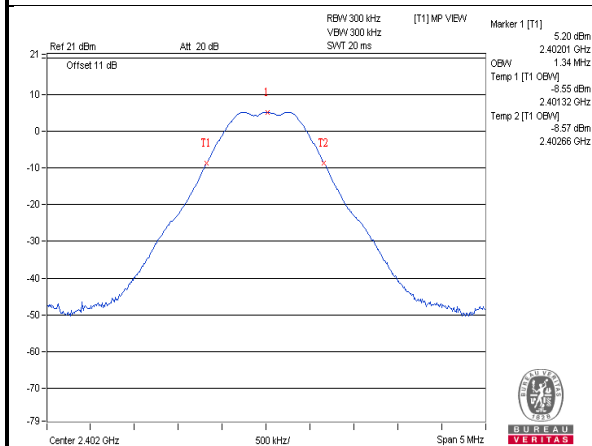


4.2.3 Test Results

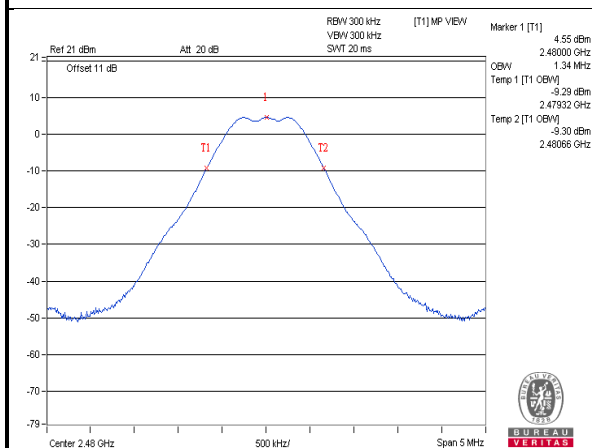
Environmental Conditions		25 deg.C, 60% RH		
Channel	Frequency (MHz)	V _{normal}	V _{+10%}	V _{-10%}
		Occupied Bandwidth (MHz)	Occupied Bandwidth (MHz)	Occupied Bandwidth (MHz)
0	2402	1.34	1.34	1.34
19	2440	1.34	1.34	1.34
39	2480	1.34	1.34	1.34

Note: 1. For the test plots please refer to the below pages.

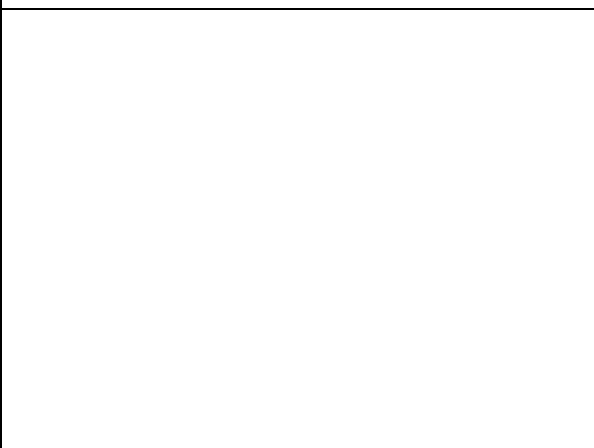
Vnormal



Channel 0



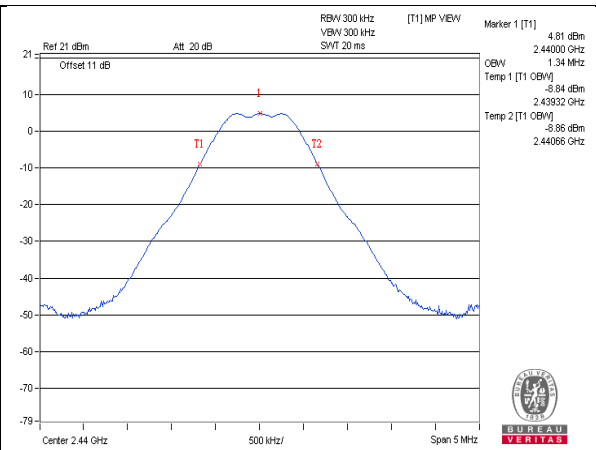
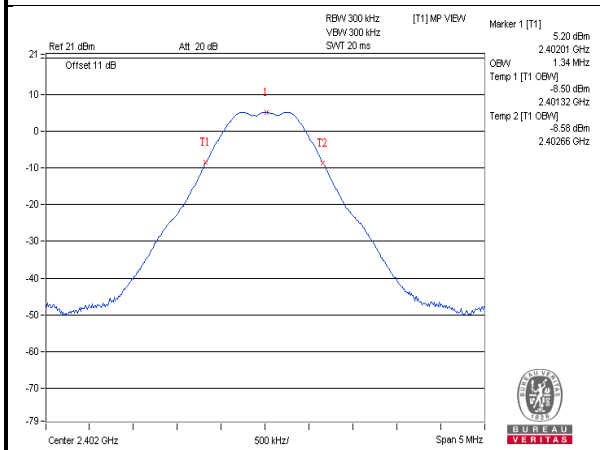
Channel 19



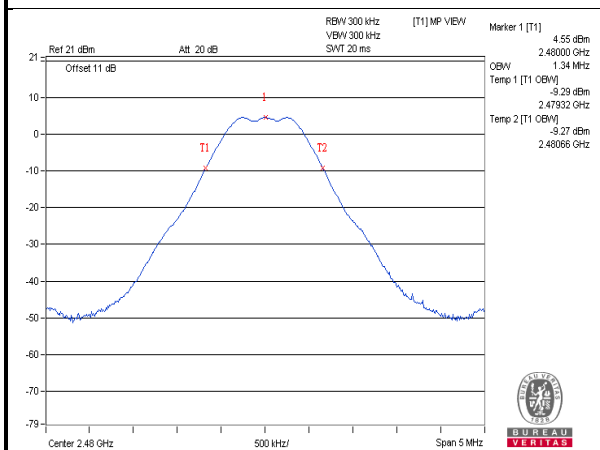
Channel 39



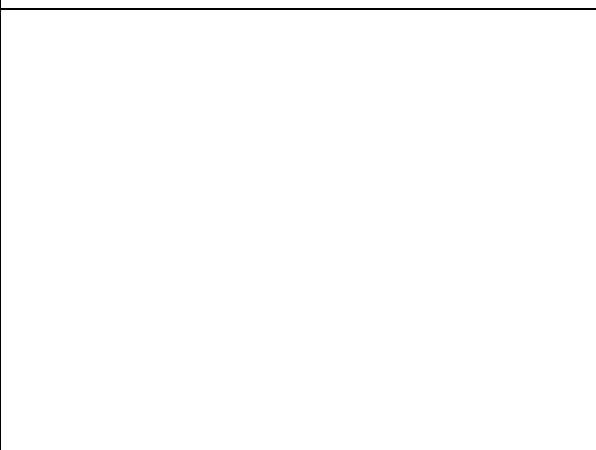
V+10%



Channel 0



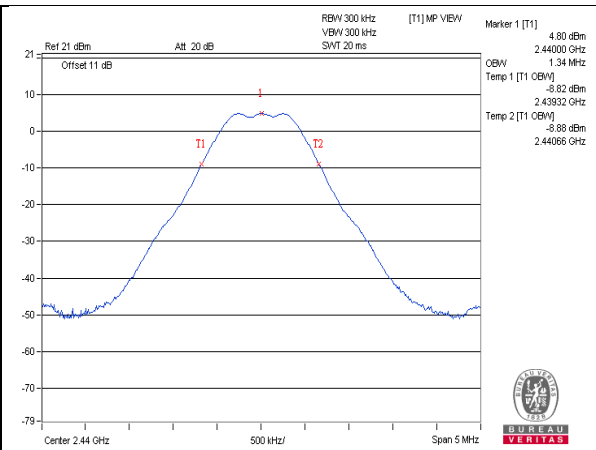
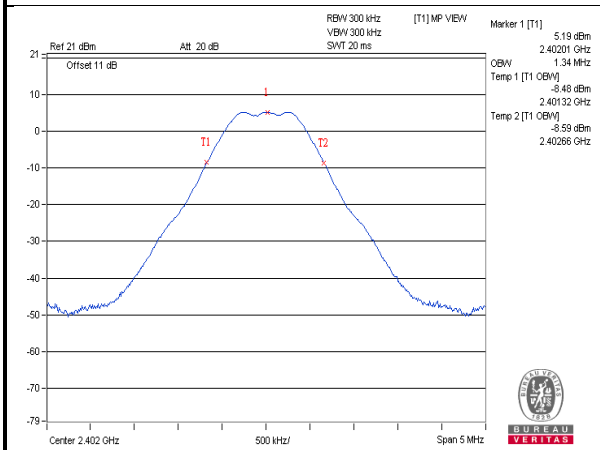
Channel 19



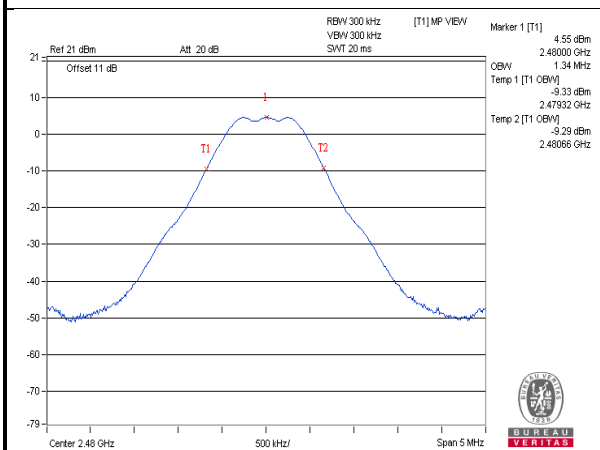
Channel 39



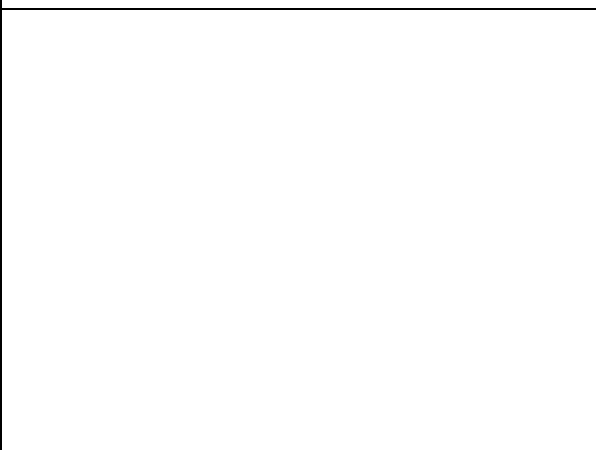
V-10%



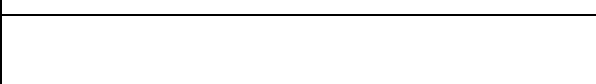
Channel 0



Channel 19



Channel 39

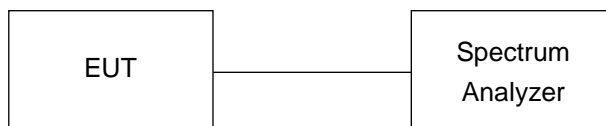


4.3 Spurious Emissions for Transmitter Measurement

4.3.1 Limits of Spurious Emissions

Frequencies (MHz)	Limit
Operating frequency 2400 to 2483.5MHz	
30.0MHz to 1000.0MHz	$\leq 0.25 \mu\text{W}/100\text{kHz}$
1000.0MHz to 2387MHz	$\leq 2.5 \mu\text{W}/\text{MHz}$
2387.0MHz to 2400.0MHz	$\leq 25 \mu\text{W}/\text{MHz}$
2483.5MHz to 2496.5MHz	$\leq 25 \mu\text{W}/\text{MHz}$
2496.5MHz to 12500.0MHz	$\leq 2.5 \mu\text{W}/\text{MHz}$

4.3.2 Test Setup



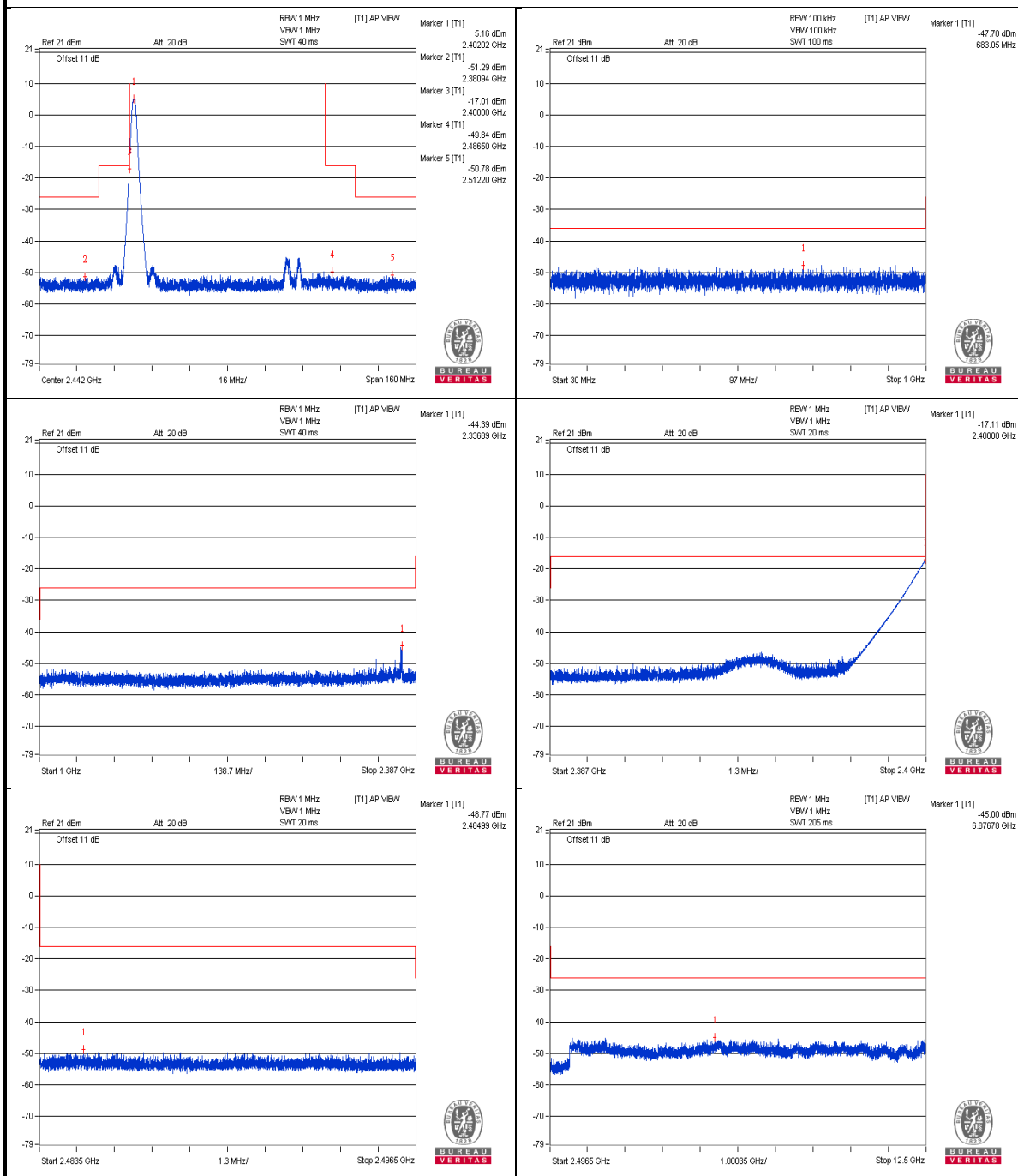
4.3.3 Test Results

Environmental Conditions		24 deg.C, 64% RH					
Test Channel		CH 0 (2402MHz)		CH 19 (2440MHz)		Limit	Result
Test Condition	Frequency Range	Frequency (MHz)	Measured Value	Frequency (MHz)	Measured Value		
V_{normal}	30.0MHz to 1000.0MHz	683.050	0.016uW	327.420	0.018uW	0.25 uW/100kHz	PASS
	1000.0MHz to 2387MHz	2336.890	0.036uW	2366.710	0.03uW	2.5uW/MHz	PASS
	2387.0MHz to 2400.0MHz	2400.000	19.453uW	2391.340	0.009uW	25uW/MHz	PASS
	2483.5MHz to 2496.5MHz	2484.990	0.013uW	2490.220	0.008uW	25uW/MHz	PASS
	2496.5MHz to 12500.0MHz	6876.780	0.031uW	3091.700	0.033uW	2.5uW/MHz	PASS
V_{+10%}	30.0MHz to 1000.0MHz	293.350	0.018uW	73.650	0.015uW	0.25 uW/100kHz	PASS
	1000.0MHz to 2387MHz	2332.210	0.028uW	2369.830	0.035uW	2.5uW/MHz	PASS
	2387.0MHz to 2400.0MHz	2399.990	19.543uW	2399.830	0.01uW	25uW/MHz	PASS
	2483.5MHz to 2496.5MHz	2493.040	0.012uW	2489.410	0.008uW	25uW/MHz	PASS
	2496.5MHz to 12500.0MHz	10859.420	0.031uW	6974.310	0.032uW	2.5uW/MHz	PASS
V_{-10%}	30.0MHz to 1000.0MHz	695.900	0.019uW	815.570	0.018uW	0.25 uW/100kHz	PASS
	1000.0MHz to 2387MHz	2332.380	0.031uW	2369.660	0.033uW	2.5uW/MHz	PASS
	2387.0MHz to 2400.0MHz	2400.000	19.815uW	2399.680	0.01uW	25uW/MHz	PASS
	2483.5MHz to 2496.5MHz	2485.210	0.011uW	2488.350	0.008uW	25uW/MHz	PASS
	2496.5MHz to 12500.0MHz	3253.010	0.032uW	7877.130	0.031uW	2.5uW/MHz	PASS

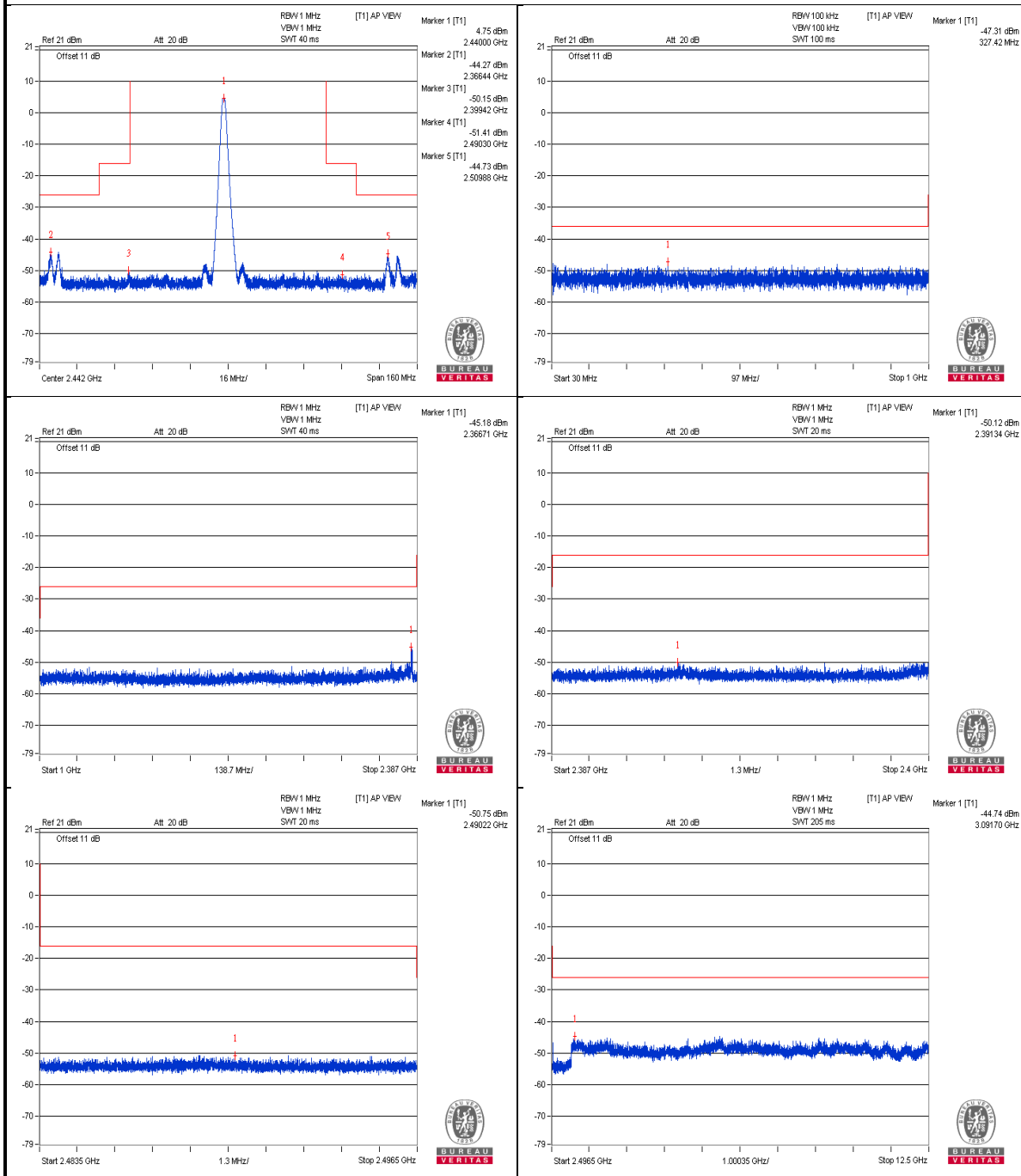
Test Channel		CH 39 (2480MHz)		Limit	Result
Test Condition	Frequency Range	Frequency (MHz)	Measured Value		
V _{normal}	30.0MHz to 1000.0MHz	971.990	0.02uW	0.25 uW/100kHz	PASS
	1000.0MHz to 2387MHz	2386.470	0.009uW	2.5uW/MHz	PASS
	2387.0MHz to 2400.0MHz	2393.770	0.012uW	25uW/MHz	PASS
	2483.5MHz to 2496.5MHz	2483.500	0.39uW	25uW/MHz	PASS
	2496.5MHz to 12500.0MHz	7954.650	0.042uW	2.5uW/MHz	PASS
V _{+10%}	30.0MHz to 1000.0MHz	571.620	0.016uW	0.25 uW/100kHz	PASS
	1000.0MHz to 2387MHz	2318.340	0.012uW	2.5uW/MHz	PASS
	2387.0MHz to 2400.0MHz	2399.280	0.013uW	25uW/MHz	PASS
	2483.5MHz to 2496.5MHz	2483.500	0.395uW	25uW/MHz	PASS
	2496.5MHz to 12500.0MHz	10099.160	0.033uW	2.5uW/MHz	PASS
V _{-10%}	30.0MHz to 1000.0MHz	253.460	0.014uW	0.25 uW/100kHz	PASS
	1000.0MHz to 2387MHz	2319.380	0.007uW	2.5uW/MHz	PASS
	2387.0MHz to 2400.0MHz	2398.890	0.013uW	25uW/MHz	PASS
	2483.5MHz to 2496.5MHz	2483.500	0.395uW	25uW/MHz	PASS
	2496.5MHz to 12500.0MHz	6913.040	0.036uW	2.5uW/MHz	PASS

Note: 1. The worst value in each frequency range v.s. each channel has been marked by boldface.
2. The spectrum plots are attached on the following pages.

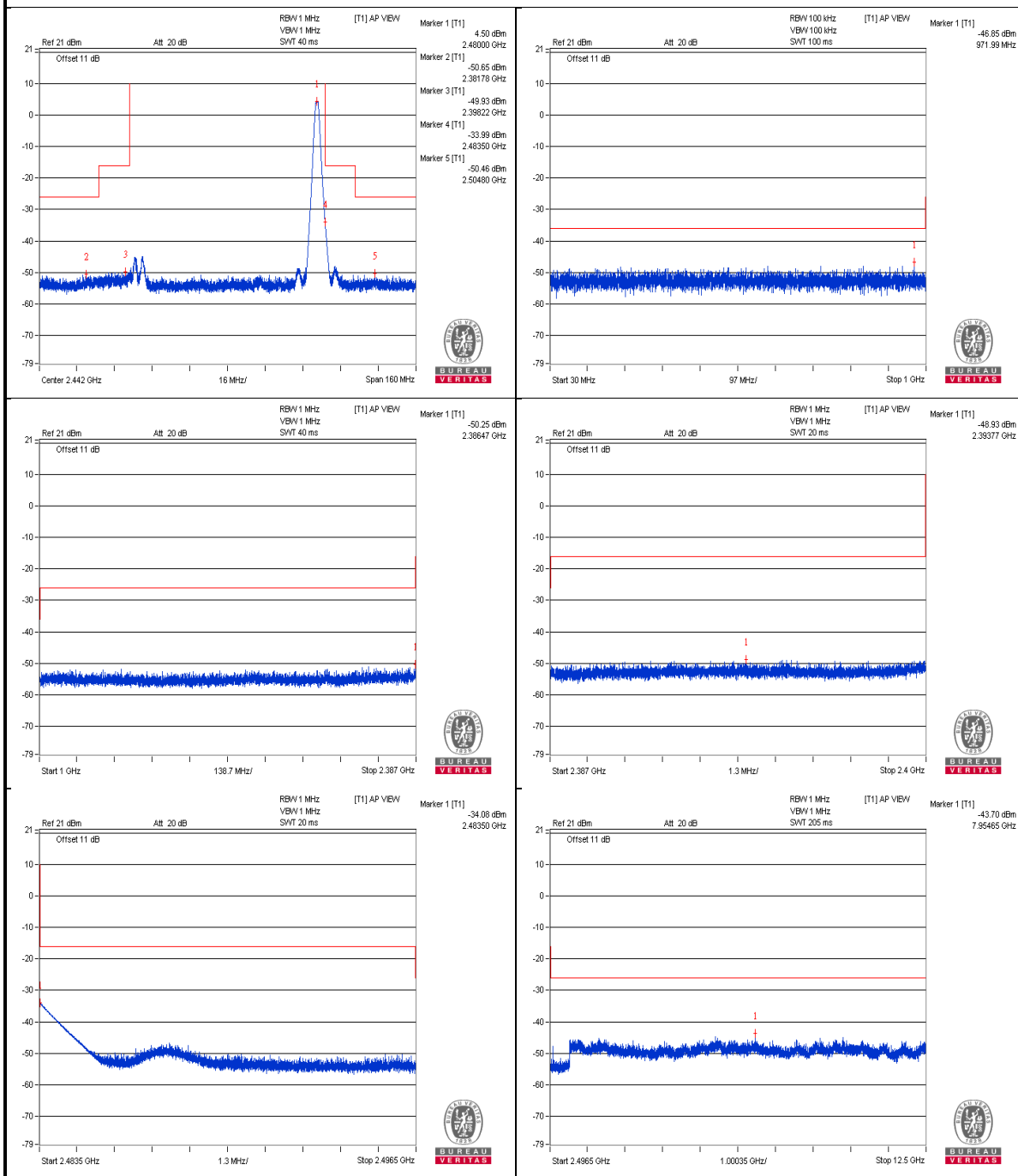
Vnormal Channel 0



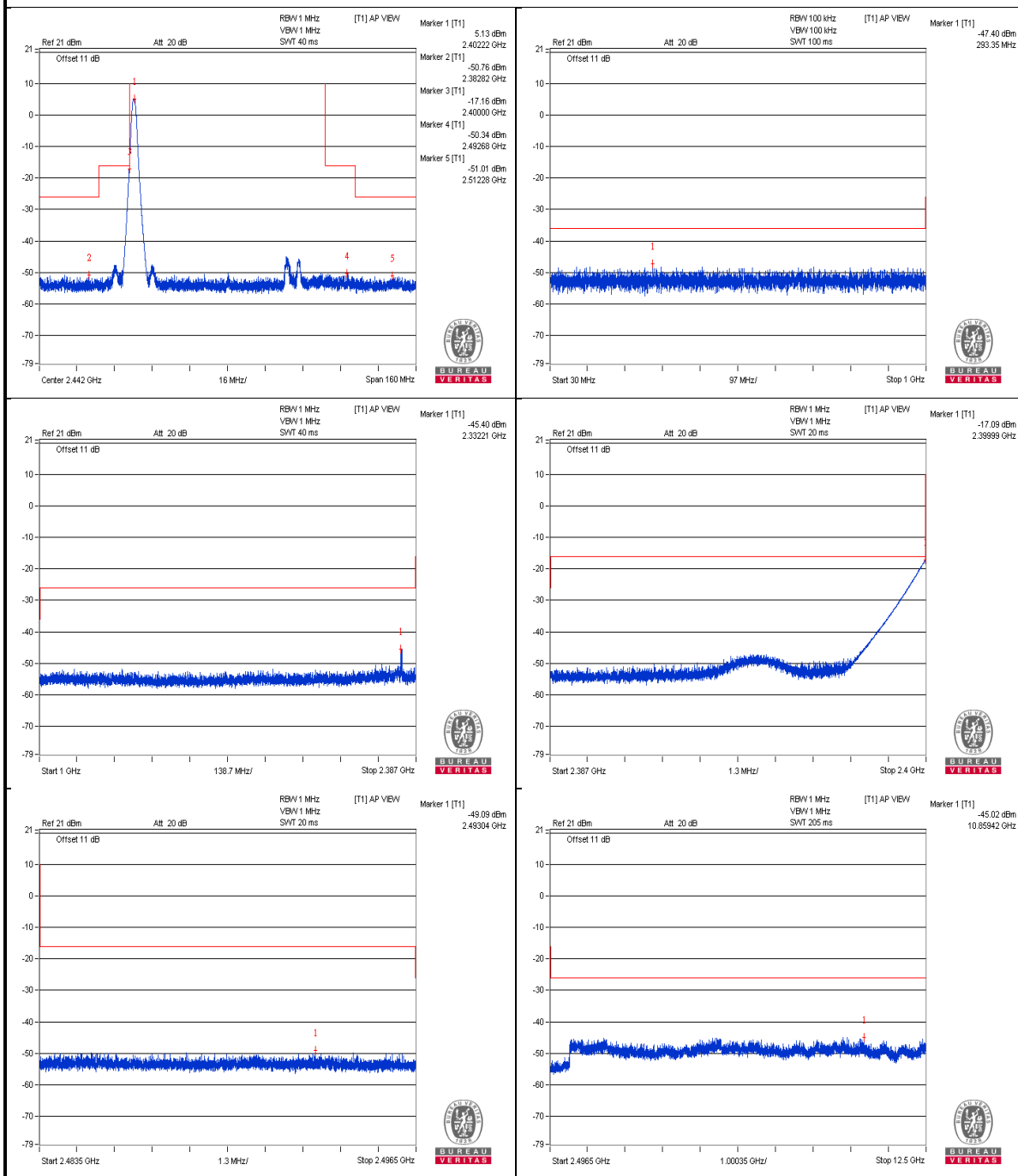
Vnormal Channel 19



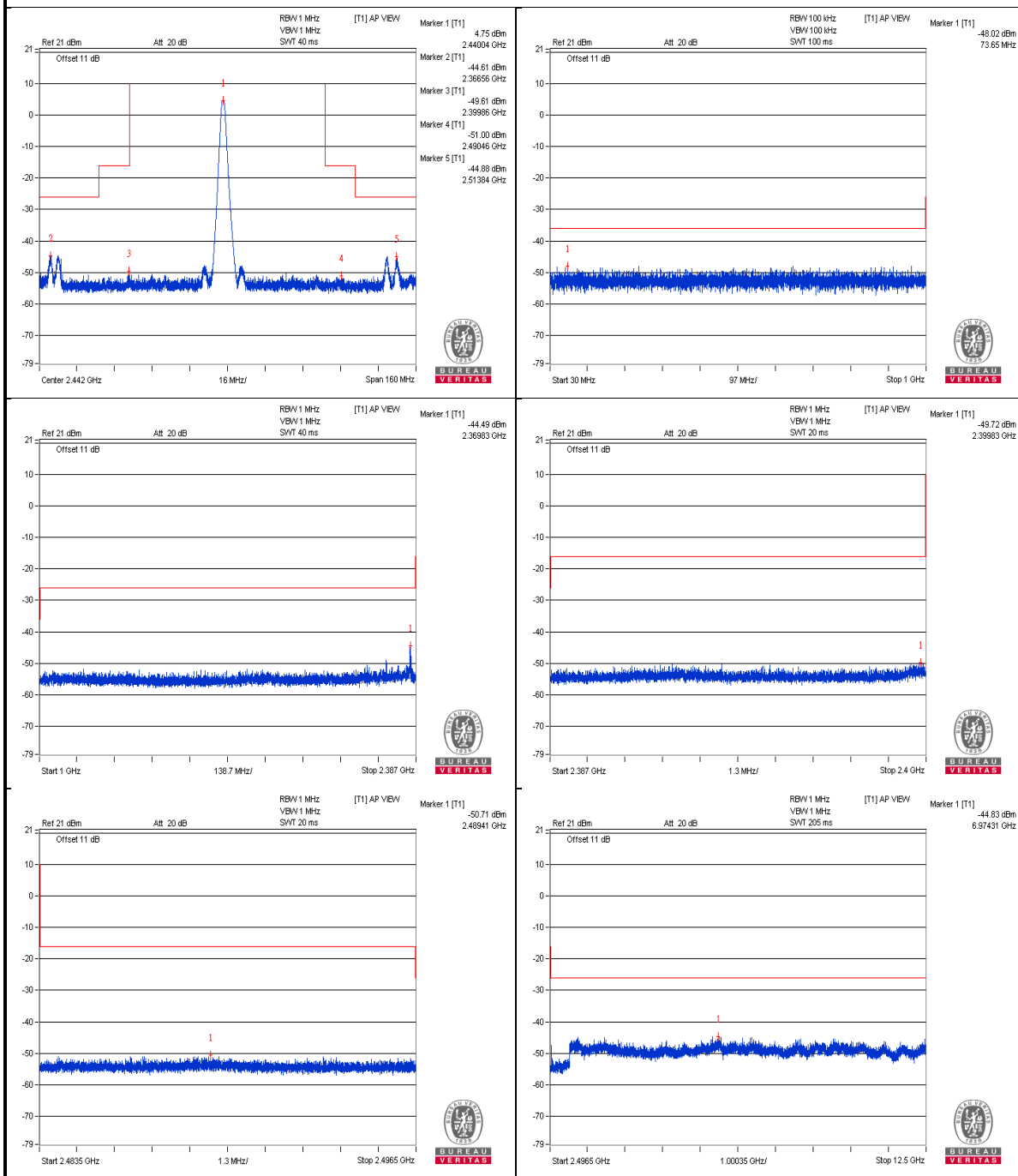
Vnormal Channel 39



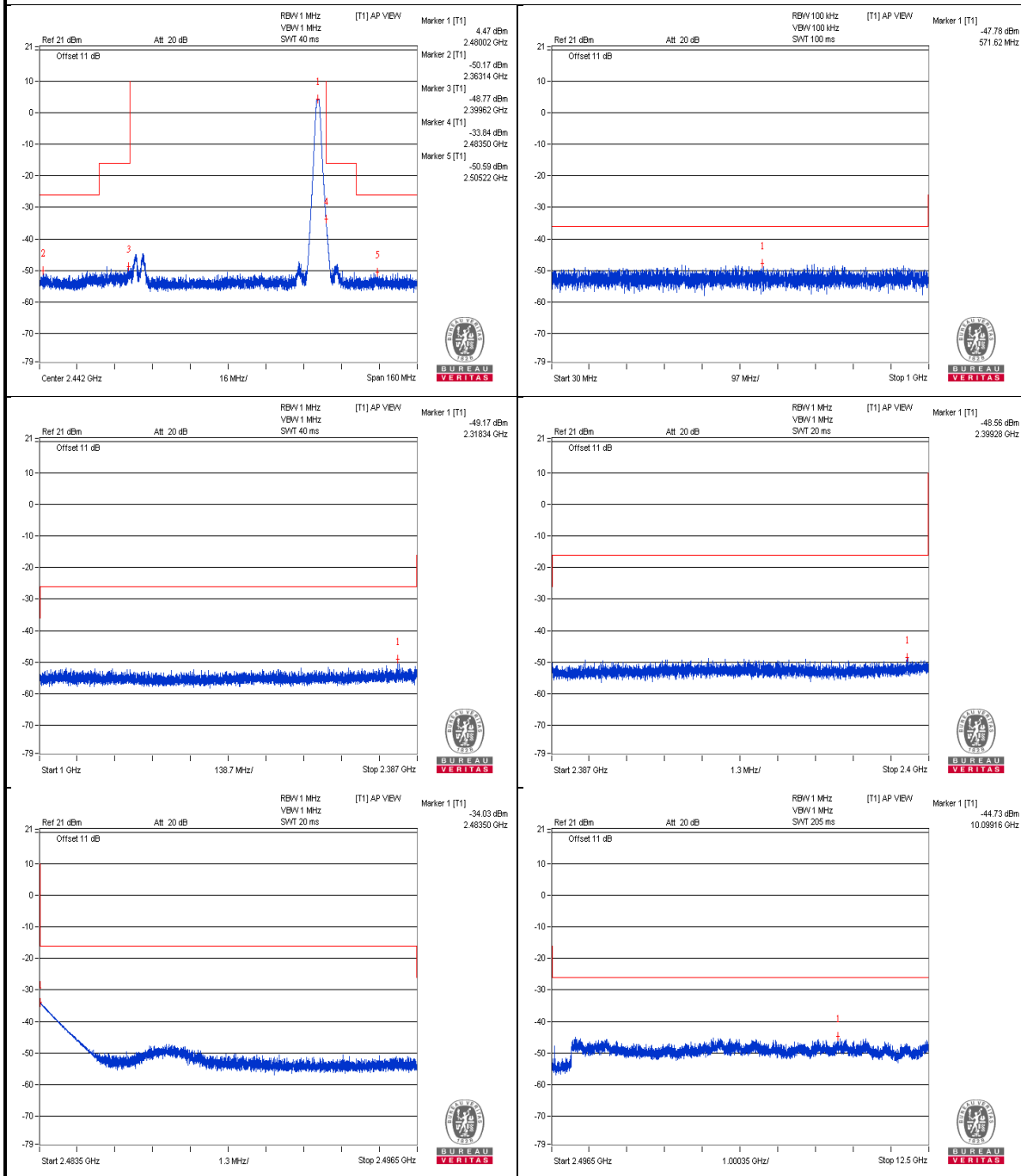
V+10% Channel 0



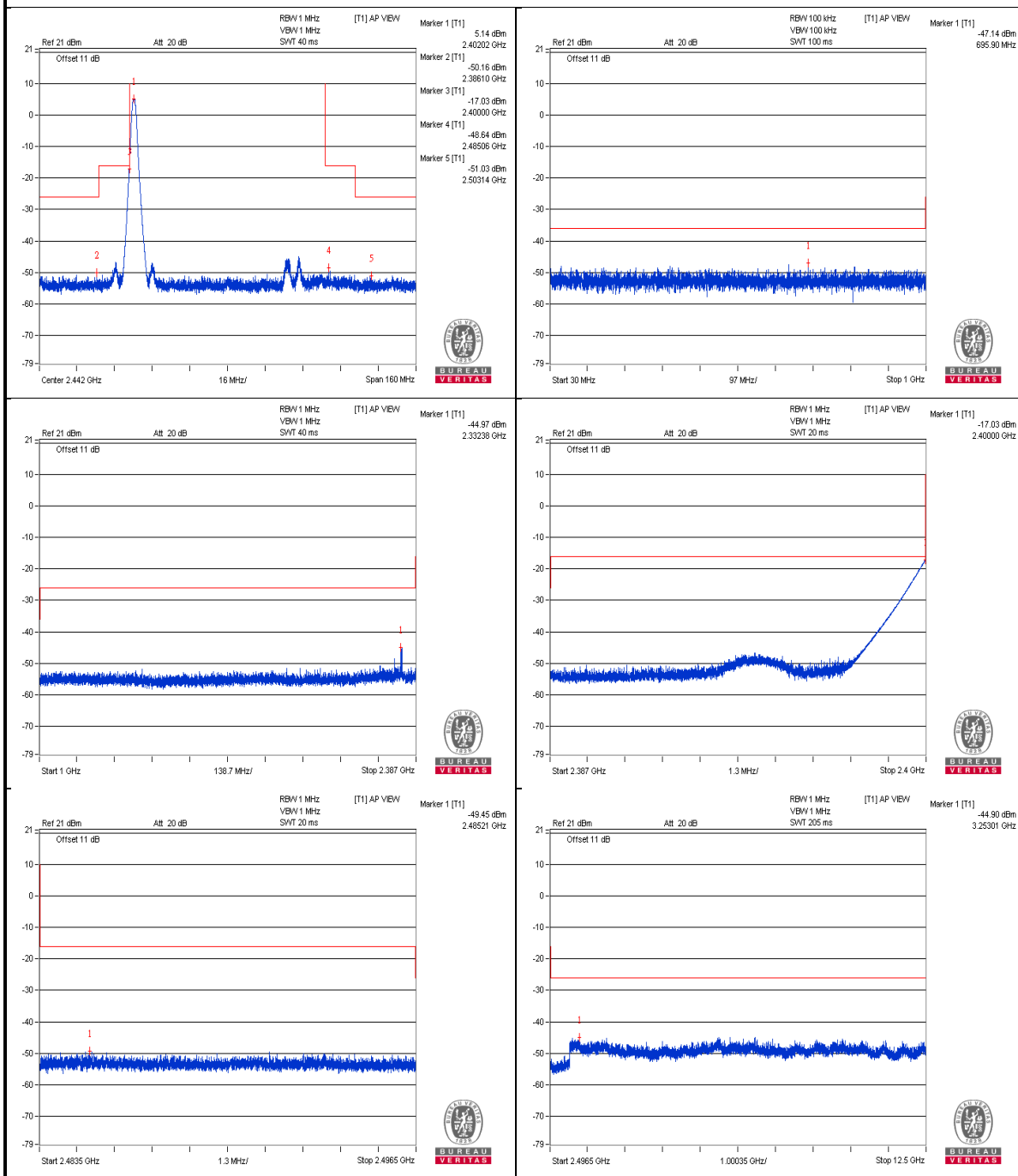
V+10% Channel 19



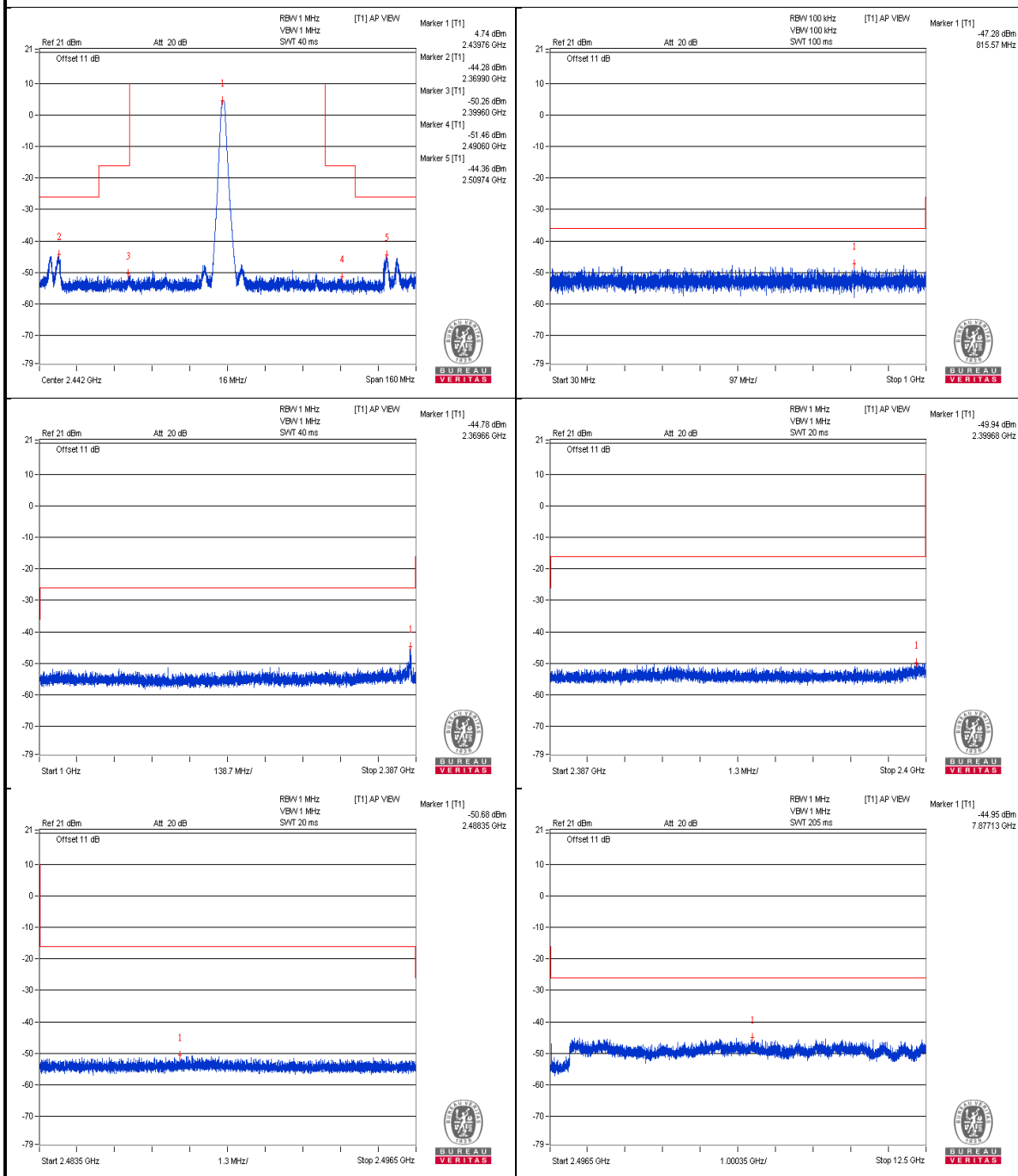
V+10% Channel 39



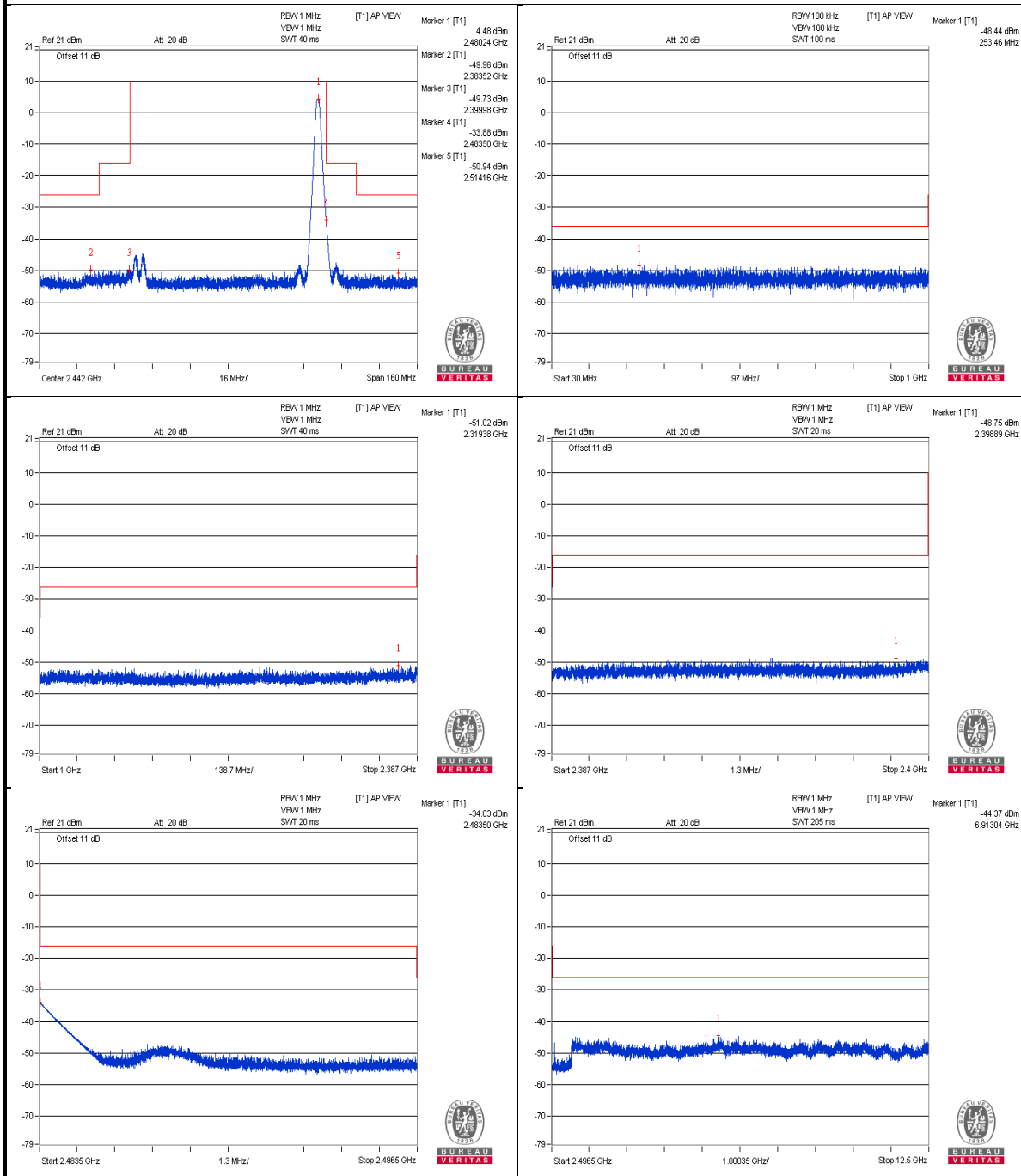
V-10% Channel 0



V-10% Channel 19



V-10% Channel 39



4.4 Antenna Power Measurement

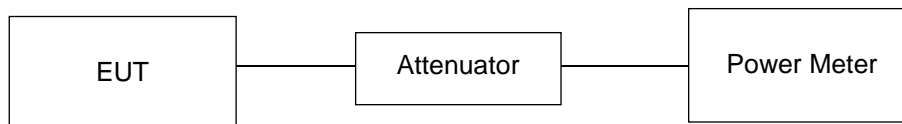
4.4.1 Limits of Antenna Power

Modulation System	Frequency Band Used	Antenna Power (Max.)	EIRP (Max.)	
			Omni-Directional Case	Directional Case
DS	2400 – 2483.5 MHz	10 mW/MHz	12.14 dBm/MHz (16.368 mW/MHz)	22.14 dBm/MHz (163.68 mW/MHz)
OFDM (Note 1)	2400 – 2483.5 MHz	10 mW/MHz	12.14 dBm/MHz (16.368 mW/MHz)	22.14 dBm/MHz (163.68 mW/MHz)
OFDM (Note 2)	2400 – 2483.5 MHz	5 mW/MHz	9.14 dBm/MHz (8.20 mW/MHz)	19.14 dBm/MHz (82.03 mW/MHz)
Other than the above	2400 – 2483.5 MHz	10 mW	12.14 dBm (16.368 mW)	22.14 dBm (163.68 mW)

Note:

1. Occupied bandwidth is less than 26MHz
2. Occupied bandwidth is more than 26MHz and less than 38MHz
3. The half-power beam width for directional antenna shall be 360/A degrees or less, where A is a ratio which causes the EIRP concerned to exceed the omnidirectional EIRP upper limit.
4. Tolerance of antenna power shall be +20% (upper value) and –80% (lower value).

4.4.2 Test Setup



4.4.3 Test Results

Environmental Conditions	24 deg.C, 64% RH			
Test Condition	Conducted RF Output Power (mW)			
	Channel 0 2402MHz	Channel 19 2440MHz	Channel 39 2480MHz	Max. Limit (mW)
V _{normal}	2.729	2.661	2.57	10
V _{normal}	2.729	2.661	2.57	10
V _{normal}	2.729	2.661	2.57	10
Rated Power	3			
Tolerance of Antenna Power	0.6 ~ 3.6			

PIFA antenna with antenna gain: 2.98dBi

Environmental Conditions	24 deg.C, 64% RH			
Test Condition	Radiated RF Output Power (mW)			
	Channel 0 2402MHz	Channel 19 2440MHz	Channel 39 2480MHz	Max. Limit (mW)
V _{normal}	5.42	5.285	5.104	16.368
V _{normal}	5.42	5.285	5.104	16.368
V _{normal}	5.42	5.285	5.104	16.368

Note: 1. The radiated RF output power is a “calculated” value derived from the conducted value.

2. Formula: Radiated RF output power = Conducted RF output power + Maximum Antenna Gain

4.5 Spurious Emissions for Receiver

4.5.1 Limits of Spurious Emissions for Receiver

Frequencies (MHz)	Limit
Below 1GHz	$\leq 4\text{nW}$ (-54dBm)
Above 1GHz	$\leq 20\text{nW}$ (-47dBm)

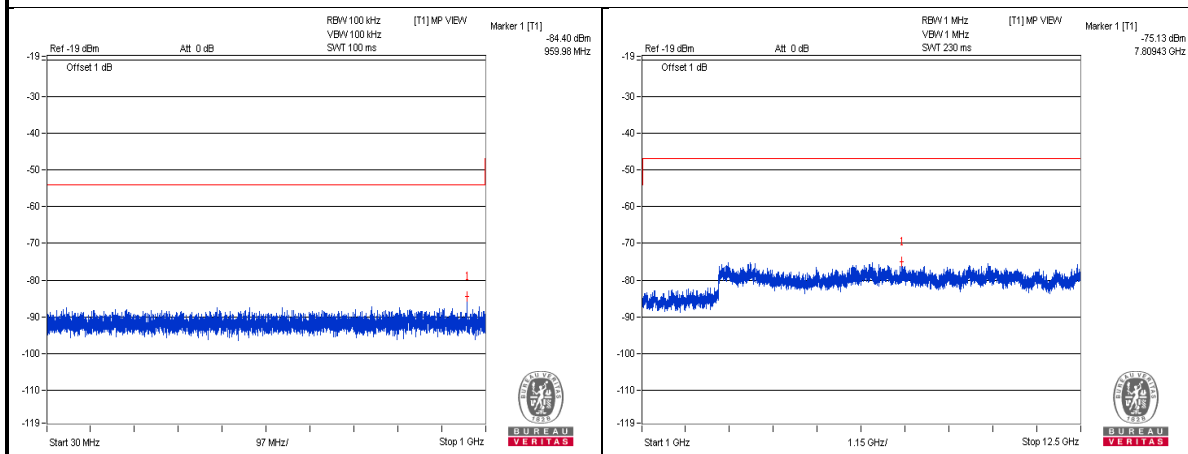
4.5.2 Test Setup



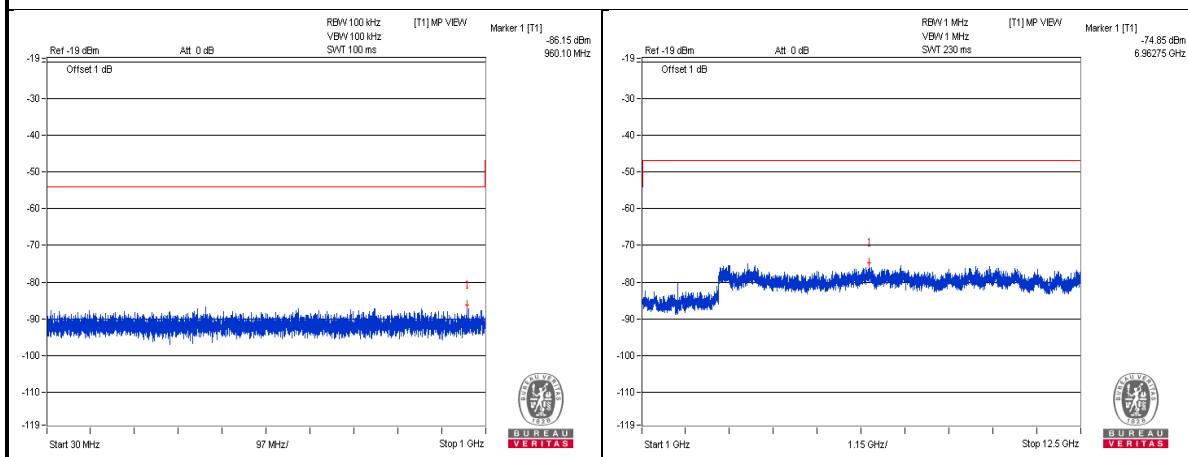
4.5.3 Test Result

Environmental Conditions		24 deg.C, 64% RH					
Test Channel		CH 0 (2402MHz)		CH 19 (2440MHz)		Limit	Result
Test Condition	Frequency Range	Frequency (MHz)	Measured Value	Frequency (MHz)	Measured Value		
V _{normal}	Below 1GHz	959.980	0.003631nW	960.100	0.002427nW	4nW/ 100kHz	PASS
	Above 1GHz	7809.430	0.03069nW	6962.750	0.032734nW	20nW/MHz	PASS
V _{+10%}	Below 1GHz	960.100	0.003428nW	960.100	0.00302nW	4nW/ 100kHz	PASS
	Above 1GHz	3249.680	0.029923nW	3249.680	0.031623nW	20nW/MHz	PASS
V _{-10%}	Below 1GHz	960.100	0.004808nW	960.100	0.003908nW	4nW/ 100kHz	PASS
	Above 1GHz	6867.870	0.031989nW	9607.750	0.033651nW	20nW/MHz	PASS
Test Channel		CH 39 (2480MHz)				Limit	Result
Test Condition	Frequency Range	Frequency (MHz) Measured Value		Measured Value			
V _{normal}	Below 1GHz	960.100		0.003828nW		4nW/ 100kHz	PASS
	Above 1GHz	9560.310		0.033189nW		20nW/MHz	PASS
V _{+10%}	Below 1GHz	960.100		0.003334nW		4nW/ 100kHz	PASS
	Above 1GHz	3249.680		0.034594nW		20nW/MHz	PASS
V _{-10%}	Below 1GHz	960.100		0.00241nW		4nW/ 100kHz	PASS
	Above 1GHz	3111.680		0.031477nW		20nW/MHz	PASS

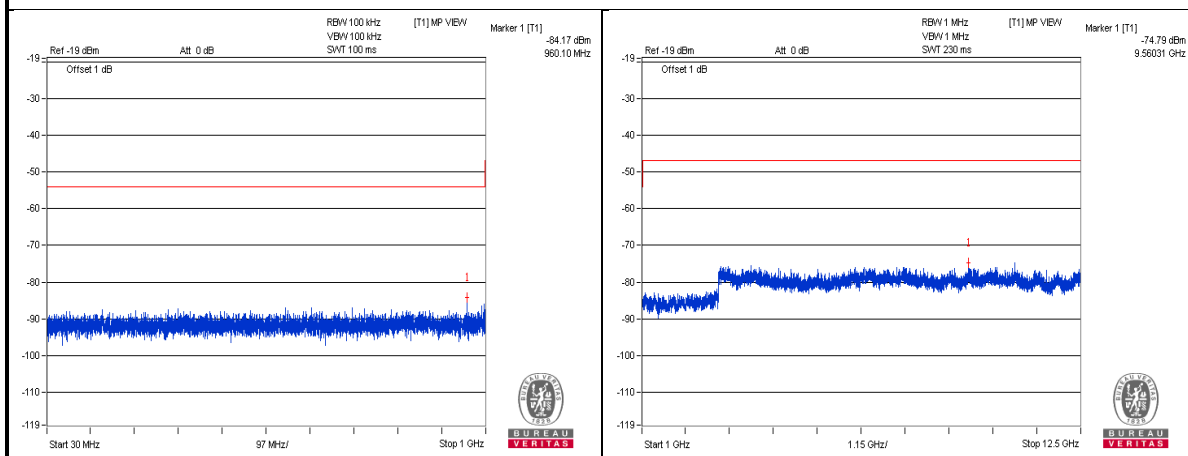
Vnormal



Channel 0

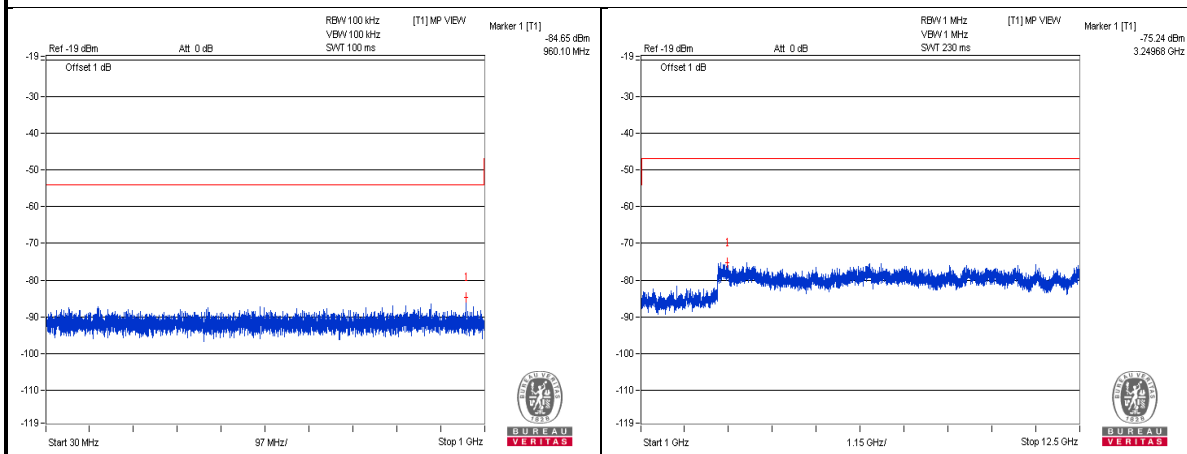


Channel 19

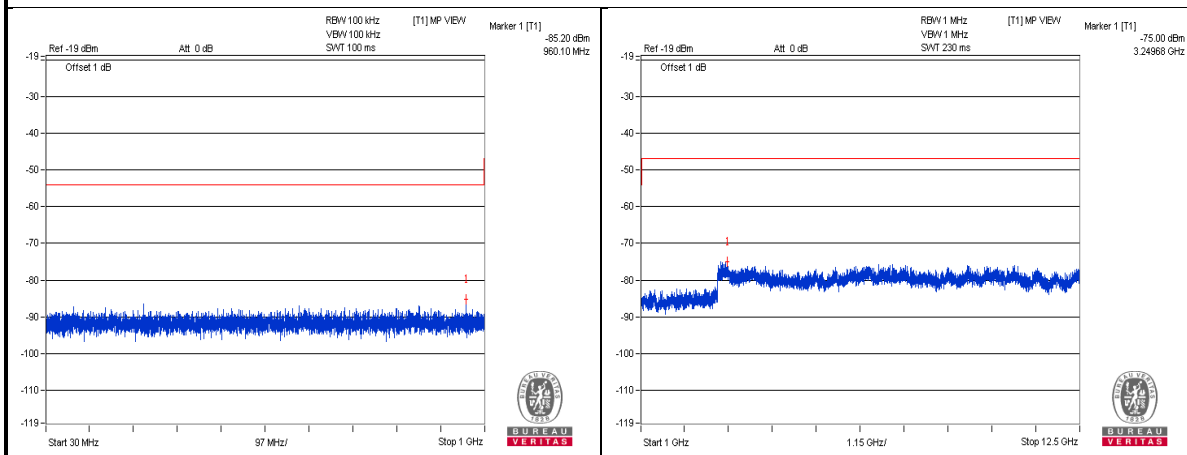


Channel 39

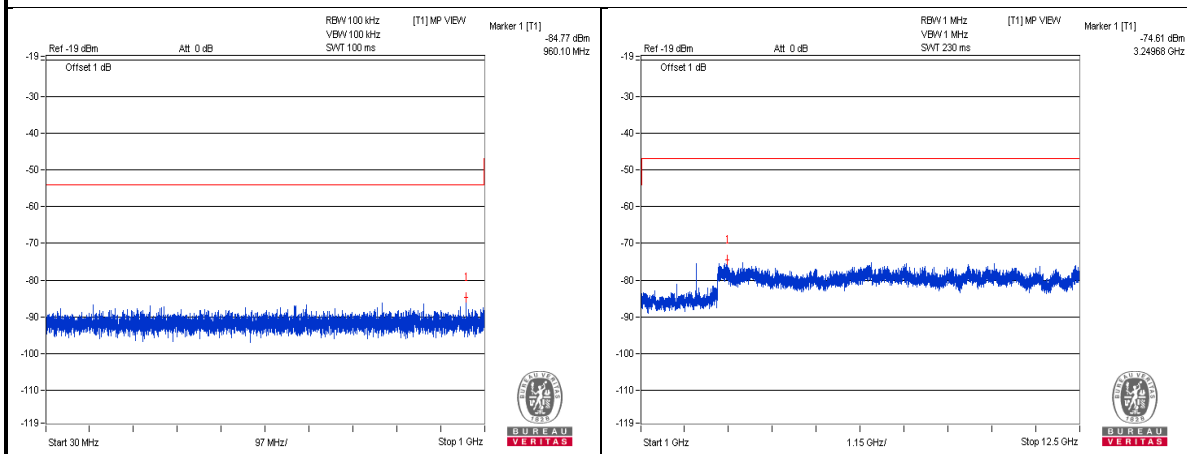
V+10%



Channel 0

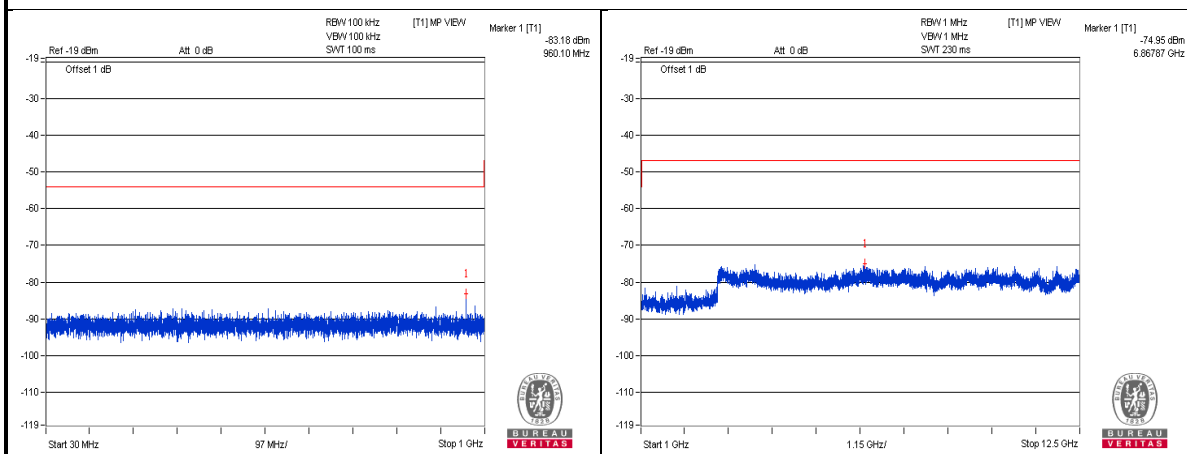


Channel 19

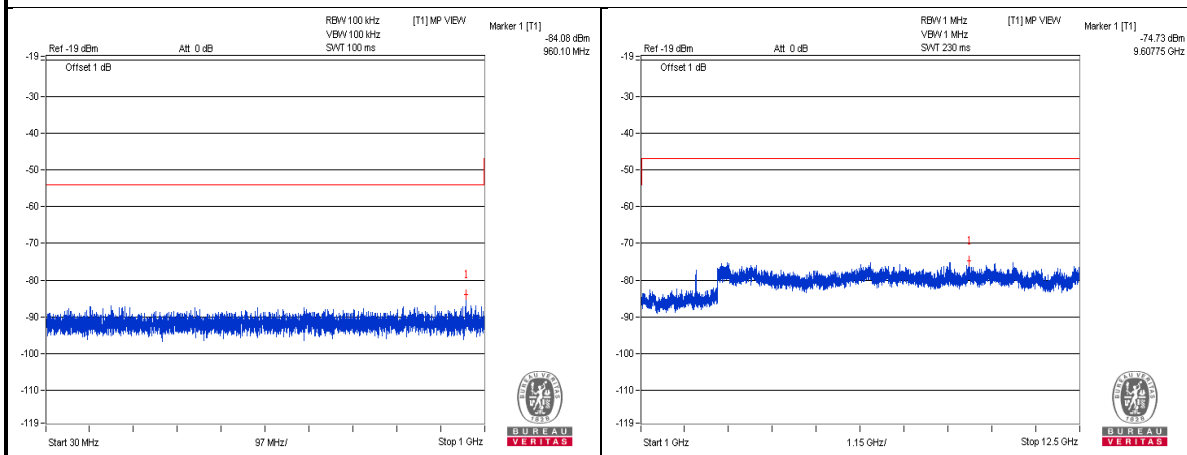


Channel 39

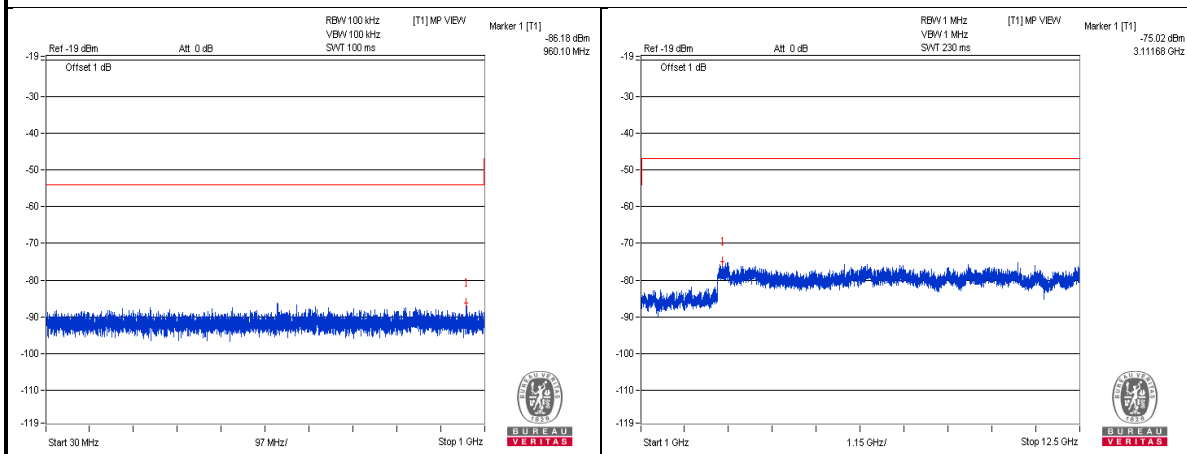
V-10%



Channel 0



Channel 19



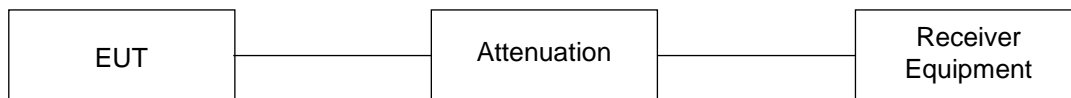
Channel 39

4.6 Interference Prevention Function

4.6.1 Limits of Interference Prevention Function

Radio equipment used mainly on the same premises and automatically transmits or receives identification code.

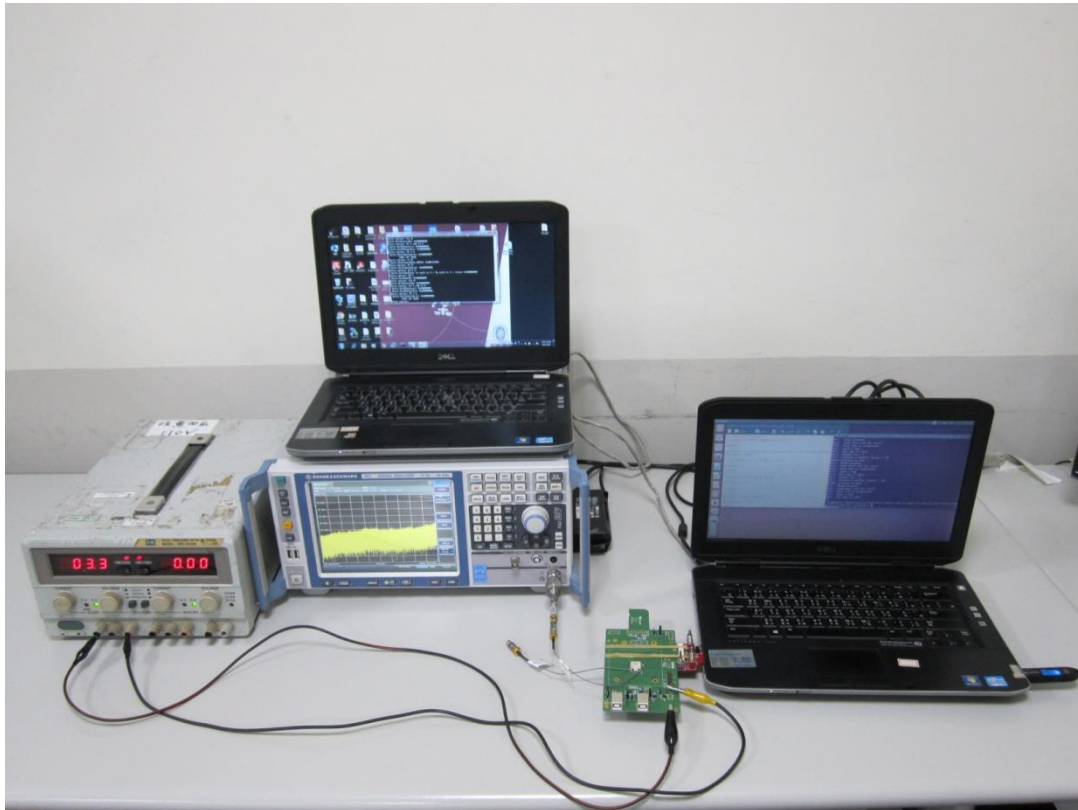
4.6.2 Test Setup



4.6.3 Test Results

Environmental Conditions	24 deg.C, 64% RH
Link Mode	Test Result
BT-LE	PASS

5 Photographs of the Test Configuration



Appendix - Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

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Fax: 886-2-26051924

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Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

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