FCC Test Report

Product Name	Transparent One Encore
Model No.	T1E
FCC ID.	2AJAAT1E

Applicant	Dongguan Meiloon Acoustic Equipment Co., Ltd.
Address	77, Yuanlin Road, Feng Huang Gang Ind Estate, Tangxia Town, 523727 Dongguan City, Guangdong Province,

Date of Receipt	Oct. 04, 2018
Issued Date	Jan. 07, 2019
Report No.	18A0064R-RFUSP03V00
Report Version	V1.0

Testing Laboratory
3023

The test results relate only to the samples tested.
The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
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Test Report

Issued Date: Jan. 07, 2019
Report No.: 18A0064R-RFUSP03V00

Product Name	Transparent One Encore
Applicant	Dongguan Meiloon Acoustic Equipment Co., Ltd.
Address	77, Yuanlin Road, Feng Huang Gang Ind Estate, Tangxia Town, 523727 Dongguan City, Guangdong Province,
Manufacturer	Vanatoo LLC.
Model No.	T1E
FCC ID.	2AJAAT1E
EUT Rated Voltage	AC 100-240V / 47-63Hz
EUT Test Voltage	AC 120V / 60Hz
Trade Name	Vanatoo
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2017 ANSI C63.4: 2014, ANSI C63.10: 2013 KDB 558074 D01 15.247 Meas Guidance v05
Test Result	Complied

Documented By : Jinn Chen

(Senior Adm. Specialist / Jinn Chen)

Tested By : Nova chu

(Engineer / Nova Chu)

Approved By :

(Director / Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Transparent One Encore
Trade Name	Vanatoo
Model No.	T1E
FCC ID.	2AJAAT1E
Frequency Range	2402 – 2480MHz
Channel Number	79
Type of Modulation	FHSS: GFSK(1Mbps) / π /4DQPSK(2Mbps) / 8DPSK(3Mbps)
Antenna Type	IFA Antenna
Channel Control	Auto
Antenna Gain	Refer to the table “Antenna List”

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Meiloon	1560634S	IFA Antenna	0.5dBi in 2.4 GHz

Note: The antenna of EUT conforms to FCC 15.203.

Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 00:	2402 MHz	Channel 20:	2422 MHz	Channel 40:	2442 MHz	Channel 60:	2462 MHz
Channel 01:	2403 MHz	Channel 21:	2423 MHz	Channel 41:	2443 MHz	Channel 61:	2463 MHz
Channel 02:	2404 MHz	Channel 22:	2424 MHz	Channel 42:	2444 MHz	Channel 62:	2464 MHz
Channel 03:	2405 MHz	Channel 23:	2425 MHz	Channel 43:	2445 MHz	Channel 63:	2465 MHz
Channel 04:	2406 MHz	Channel 24:	2426 MHz	Channel 44:	2446 MHz	Channel 64:	2466 MHz
Channel 05:	2407 MHz	Channel 25:	2427 MHz	Channel 45:	2447 MHz	Channel 65:	2467 MHz
Channel 06:	2408 MHz	Channel 26:	2428 MHz	Channel 46:	2448 MHz	Channel 66:	2468 MHz
Channel 07:	2409 MHz	Channel 27:	2429 MHz	Channel 47:	2449 MHz	Channel 67:	2469 MHz
Channel 08:	2410 MHz	Channel 28:	2430 MHz	Channel 48:	2450 MHz	Channel 68:	2470 MHz
Channel 09:	2411 MHz	Channel 29:	2431 MHz	Channel 49:	2451 MHz	Channel 69:	2471 MHz
Channel 10:	2412 MHz	Channel 30:	2432 MHz	Channel 50:	2452 MHz	Channel 70:	2472 MHz
Channel 11:	2413 MHz	Channel 31:	2433 MHz	Channel 51:	2453 MHz	Channel 71:	2473 MHz
Channel 12:	2414 MHz	Channel 32:	2434 MHz	Channel 52:	2454 MHz	Channel 72:	2474 MHz
Channel 13:	2415 MHz	Channel 33:	2435 MHz	Channel 53:	2455 MHz	Channel 73:	2475 MHz
Channel 14:	2416 MHz	Channel 34:	2436 MHz	Channel 54:	2456 MHz	Channel 74:	2476 MHz
Channel 15:	2417 MHz	Channel 35:	2437 MHz	Channel 55:	2457 MHz	Channel 75:	2477 MHz
Channel 16:	2418 MHz	Channel 36:	2438 MHz	Channel 56:	2458 MHz	Channel 76:	2478 MHz
Channel 17:	2419 MHz	Channel 37:	2439 MHz	Channel 57:	2459 MHz	Channel 77:	2479 MHz
Channel 18:	2420 MHz	Channel 38:	2440 MHz	Channel 58:	2460 MHz	Channel 78:	2480 MHz
Channel 19:	2421 MHz	Channel 39:	2441 MHz	Channel 59:	2461 MHz		

Note:

1. The EUT is a Transparent One Encore with a built-in Bluetooth transceiver.
2. These tests were conducted on a sample for the purpose of demonstrating compliance of Bluetooth transmitter with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
3. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.

Test Mode	Mode 1: Transmit - 1Mbps Mode 2: Transmit - 2Mbps Mode 3: Transmit - 3Mbps

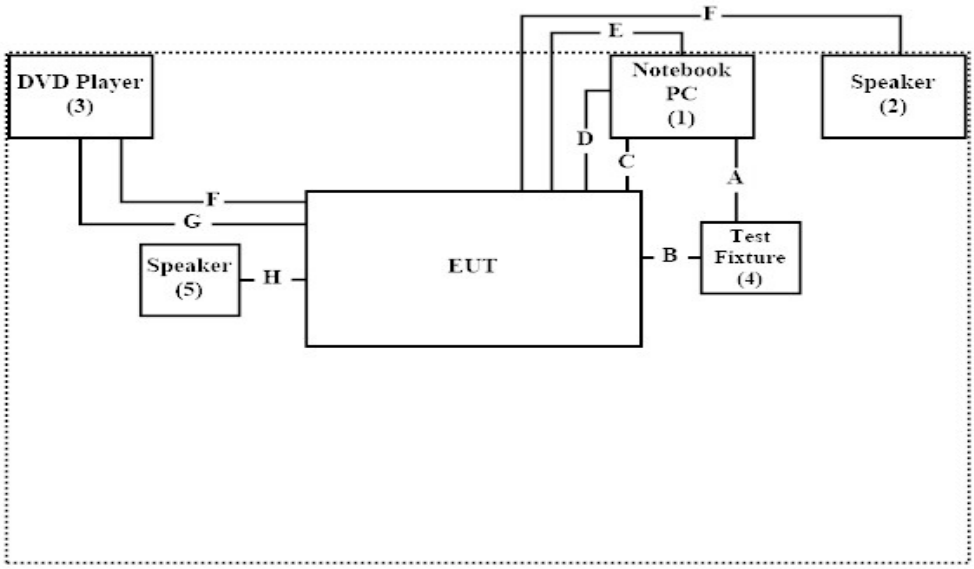
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	DELL	P62G	229FJC2	N/A
2	Speaker	PHILIPS	N/A	N/A	N/A
3	DVD Player	Dowei	AV-267	ZOO-13011	N/A
4	Test Fixture	Meiloon	N/A	N/A	N/A
5	Speaker	Meiloon	N/A	N/A	N/A

Signal Cable Type		Signal cable Description
A	USB Cable	Non-shielded, 1.8m
B	Single Cable	Non-shielded, 0.5m
C	Audio Cable	Non-shielded, 1.75m
D	USB Cable	Non-shielded, 1.85m
E	USB Cable	Non-shielded, 1.2m
F	RCA Cable	Non-shielded, 1.5m, two pcs.
G	Optical Fiber Cable	Non-shielded, 2.1m
H	Audio Cable	Non-shielded, 6.1m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

1. Setup the EUT as shown in Section 1.4.
2. Execute “Blue test 3 V2.6.2” on the Notebook.
3. Configure the test mode, the test channel, and the data rate.
4. Press “OK” to start the continuous Transmit.
5. Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site:
http://www.dekra.com.tw/english/about/certificates.aspx?bval=5
The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: http://www.dekra.com.tw/index_en

Site Description: Accredited by TAF
Accredited Number: 3023

Site Name: DEKRA Testing and Certification Co., Ltd.
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New Taipei City 24457, Taiwan.
TEL: 886-2-2602-7968 / FAX : 866-2-2602-3286
E-Mail : info.tw@dekra.com

FCC Accreditation Number: TW0023

1.7. List of Test Equipment

For Conduction measurements /ASR1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	EMI Test Receiver	R&S	ESR7	101601	2018.02.08	2019.02.07
X	Two-Line V-Network	R&S	ENV216	101306	2018.03.09	2019.03.08
X	Two-Line V-Network	R&S	ENV216	101307	2018.03.20	2019.03.19
X	Coaxial Cable	Quietek	RG400_BNC	RF001	2018.05.24	2019.05.23

Note:
1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : QuieTek EMI 2.0 V2.1.113

For Conducted measurements /ASR4

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Spectrum Analyzer	R&S	FSV30	103464	2018.01.23	2019.01.22
X	Power Meter	Anritsu	ML2496A	1548003	2017.12.11	2018.12.10
X	Power Sensor	Anritsu	MA2411B	1531024	2017.12.11	2018.12.10
X	Power Sensor	Anritsu	MA2411B	1531025	2017.12.11	2018.12.10
	Bluetooth Tester	R&S	CBT	101238	2018.01.18	2019.01.17

Note:
1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : QuieTek Conduction Test System V8.0.110

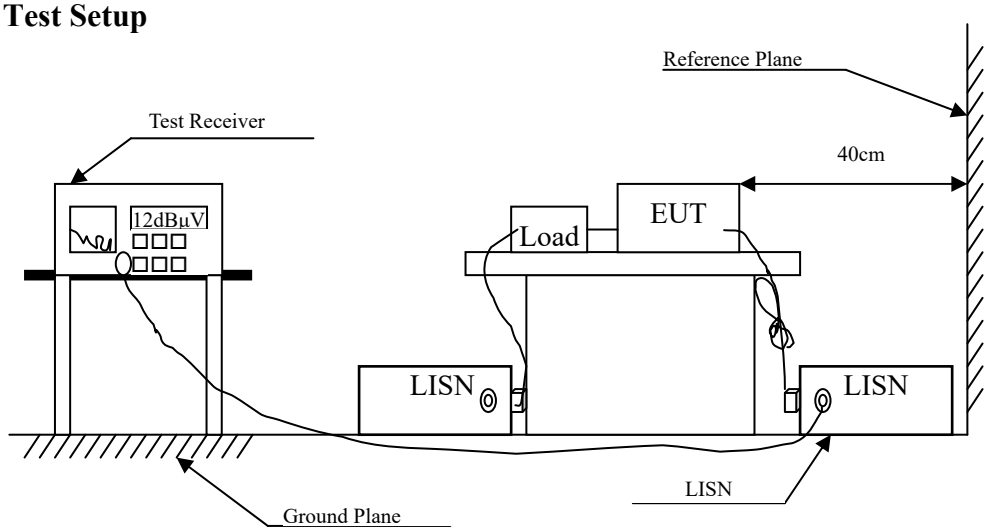
For Radiated measurements /ACB1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Loop Antenna	AMETEK	HLA6121	49611	2018.01.26	2019.01.25
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-674	2018.04.02	2019.04.01
X	Horn Antenna	ETS-Lindgren	3117	00203761	2018.11.01	2019.10.30
X	Horn Antenna	Com-Power	AH-840	101087	2018.06.01	2019.05.31
X	Pre-Amplifier	EMCI	EMC001330	980316	2018.06.01	2019.05.31
X	Pre-Amplifier	EMCI	EMC051835SE	980311	2018.06.04	2019.06.03
X	Pre-Amplifier	EMCI	EMC05820SE	980310	2018.06.04	2019.06.03
X	Pre-Amplifier	EMCI	EMC184045SE	980314	2018.05.16	2019.05.15
X	Filter	MICRO TRONICS	BRM50702	G251	2018.09.04	2019.09.03
	Filter	MICRO TRONICS	BRM50716	G188	2018.09.04	2019.09.03
X	EMI Test Receiver	R&S	ESR7	101602	2017.12.11	2018.12.10
X	Spectrum Analyzer	R&S	FSV40	101148	2018.02.08	2019.02.07
X	Coaxial Cable	SUHNER	SUCOFLEX 106	RF002	2018.05.25	2019.05.24
X	Mircoflex Cable	HUBER SUHNER	SUCOFLEX 102	MY3381/2	2018.05.16	2019.05.15

Note:
1. Loop Antenna is calibrated every two year, the other equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : QuieTek EMI 2.0 V2.1.113

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBµV) Limit		
Frequency MHz	Limits	
	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

2.3. Test Procedure

The EUT and Peripherals are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

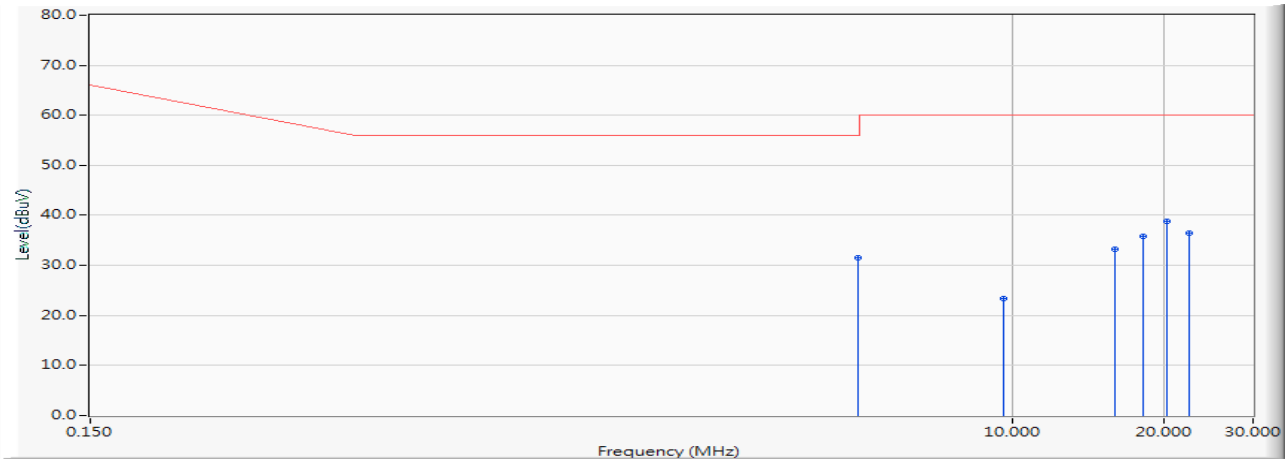
The EUT setup and the test procedure are according to ANSI C63.4, 2014 to comply with the requirements of FCC 47CFR Subpart C.

2.4. Uncertainty

±2.35dB

2.5. Test Result of Conducted Emission

Product : Transparent One Encore
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
Test Date : 2018/10/30

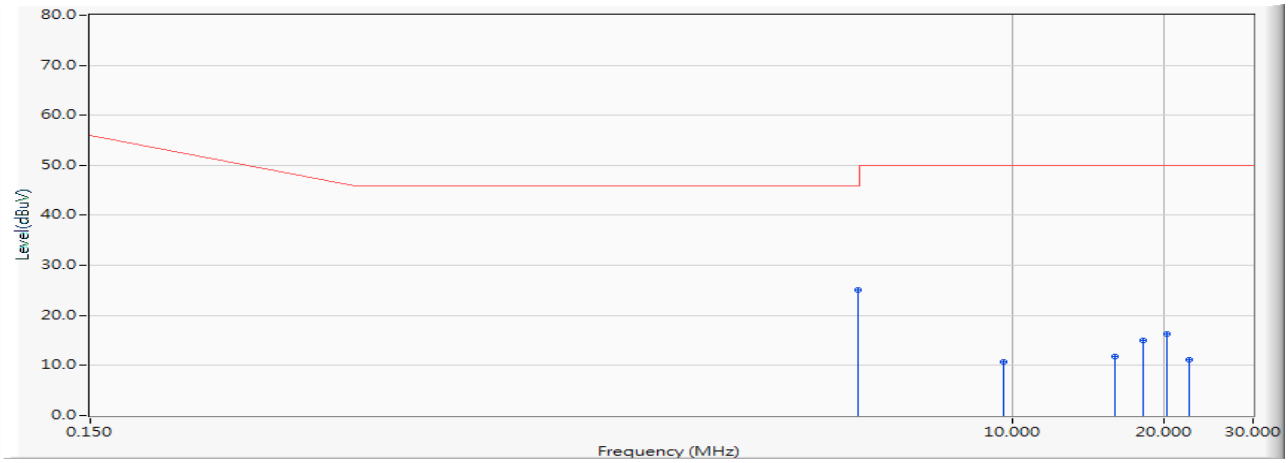


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		4.965	9.781	21.686	31.466	-24.534	56.000	QUASIPEAK
2		9.611	9.877	13.546	23.422	-36.578	60.000	QUASIPEAK
3		15.999	9.984	23.268	33.252	-26.748	60.000	QUASIPEAK
4		18.139	10.009	25.771	35.780	-24.220	60.000	QUASIPEAK
5	*	20.252	10.031	28.831	38.862	-21.138	60.000	QUASIPEAK
6		22.387	10.055	26.302	36.357	-23.643	60.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Transparent One Encore
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
Test Date : 2018/10/30

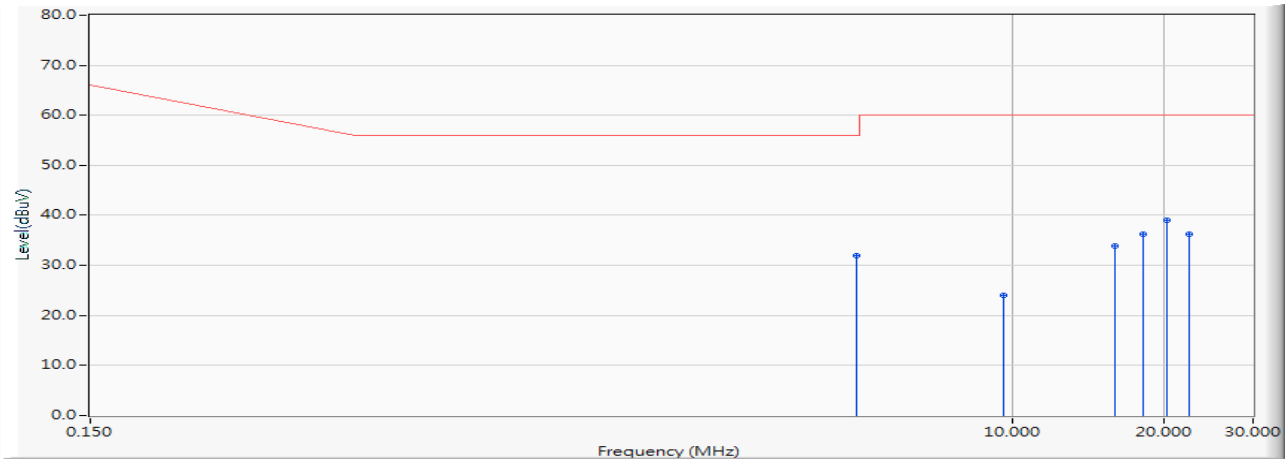


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	4.965	9.781	15.288	25.069	-20.931	46.000	AVERAGE
2		9.611	9.877	0.927	10.804	-39.196	50.000	AVERAGE
3		15.999	9.984	1.756	11.740	-38.260	50.000	AVERAGE
4		18.139	10.009	5.041	15.050	-34.950	50.000	AVERAGE
5		20.252	10.031	6.238	16.269	-33.731	50.000	AVERAGE
6		22.387	10.055	1.130	11.185	-38.815	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Transparent One Encore
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
Test Date : 2018/10/30

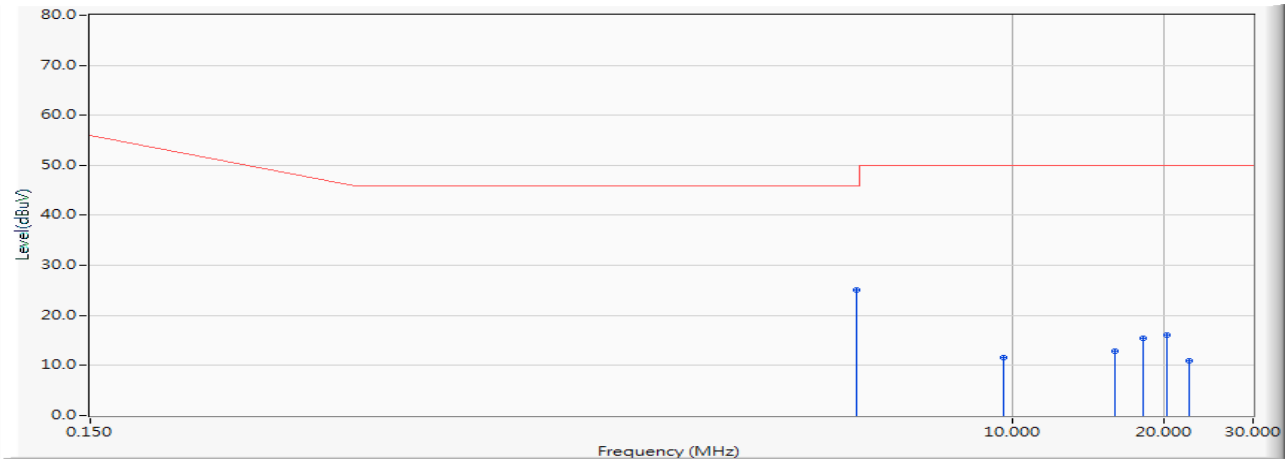


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		4.942	9.782	22.094	31.875	-24.125	56.000	QUASIPEAK
2		9.609	9.867	14.244	24.111	-35.889	60.000	QUASIPEAK
3		15.999	9.988	23.924	33.912	-26.088	60.000	QUASIPEAK
4		18.139	10.021	26.225	36.247	-23.753	60.000	QUASIPEAK
5	*	20.252	10.051	28.929	38.980	-21.020	60.000	QUASIPEAK
6		22.389	10.080	26.179	36.259	-23.741	60.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Transparent One Encore
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
Test Date : 2018/10/30



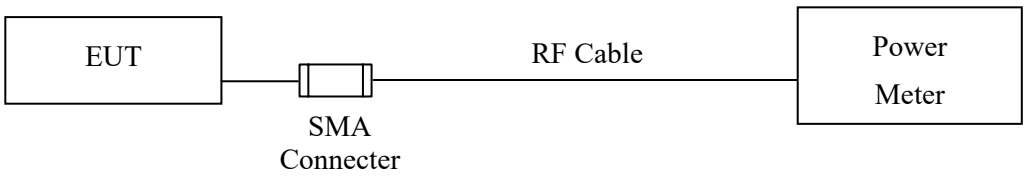
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	4.942	9.782	15.320	25.101	-20.899	46.000	AVERAGE
2		9.609	9.867	1.773	11.640	-38.360	50.000	AVERAGE
3		15.999	9.988	2.986	12.974	-37.026	50.000	AVERAGE
4		18.139	10.021	5.336	15.357	-34.643	50.000	AVERAGE
5		20.252	10.051	5.937	15.988	-34.012	50.000	AVERAGE
6		22.389	10.080	0.799	10.879	-39.121	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3. Peak Power Output

3.1. Test Setup



3.2. Limit

The maximum peak power shall be less 1Watt.

3.3. Test Procedure

Tested according to FHSS test procedure of KDB 558074 section 9 (b for compliance to FCC 47CFR 15.247 requirements.

3.4. Uncertainty

±0.86 dB

3.5. Test Result of Peak Power Output

Product : Transparent One Encore
Test Item : Peak Power Output
Test Mode : Mode 1: Transmit - 1Mbps
Test Date : 2018/11/12

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	2.07	1 Watt= 30 dBm	Pass
Channel 39	2441.00	2.32	1 Watt= 30 dBm	Pass
Channel 78	2480.00	1.92	1 Watt= 30 dBm	Pass

Product : Transparent One Encore
Test Item : Peak Power Output
Test Mode : Mode 2: Transmit - 2Mbps
Test Date : 2018/11/12

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	1.88	1 Watt= 30 dBm	Pass
Channel 39	2441.00	2.02	1 Watt= 30 dBm	Pass
Channel 78	2480.00	1.27	1 Watt= 30 dBm	Pass

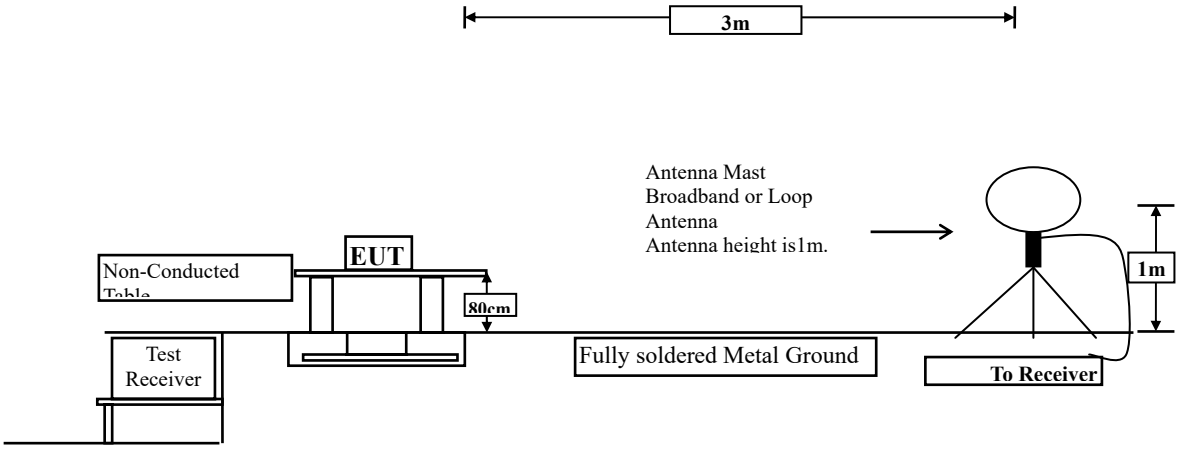
Product : Transparent One Encore
Test Item : Peak Power Output
Test Mode : Mode 3: Transmit - 3Mbps
Test Date : 2018/11/12

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	1.07	1 Watt= 30 dBm	Pass
Channel 39	2441.00	1.32	1 Watt= 30 dBm	Pass
Channel 78	2480.00	1.16	1 Watt= 30 dBm	Pass

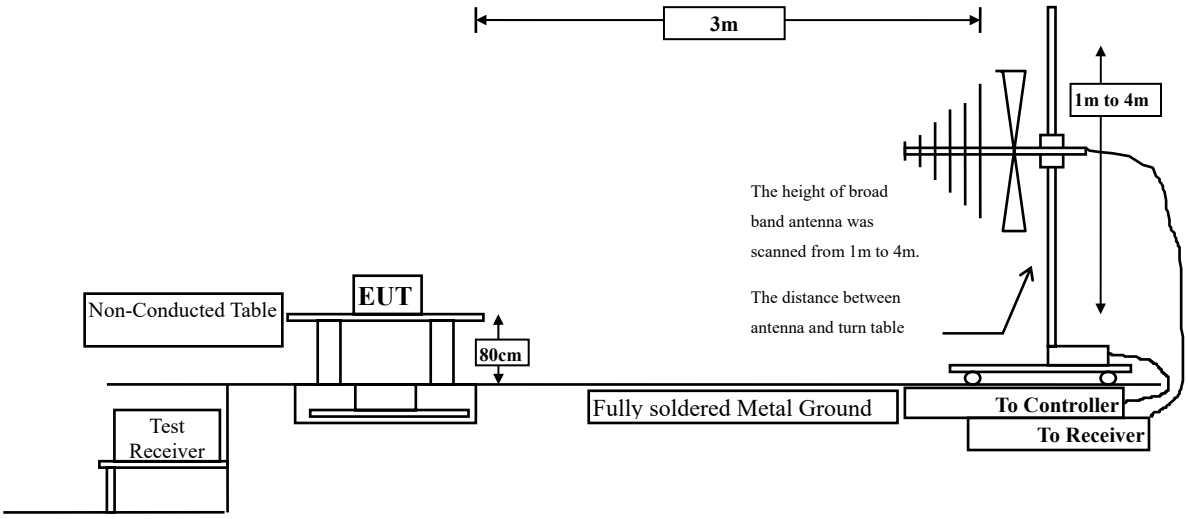
4. Radiated Emission

4.1. Test Setup

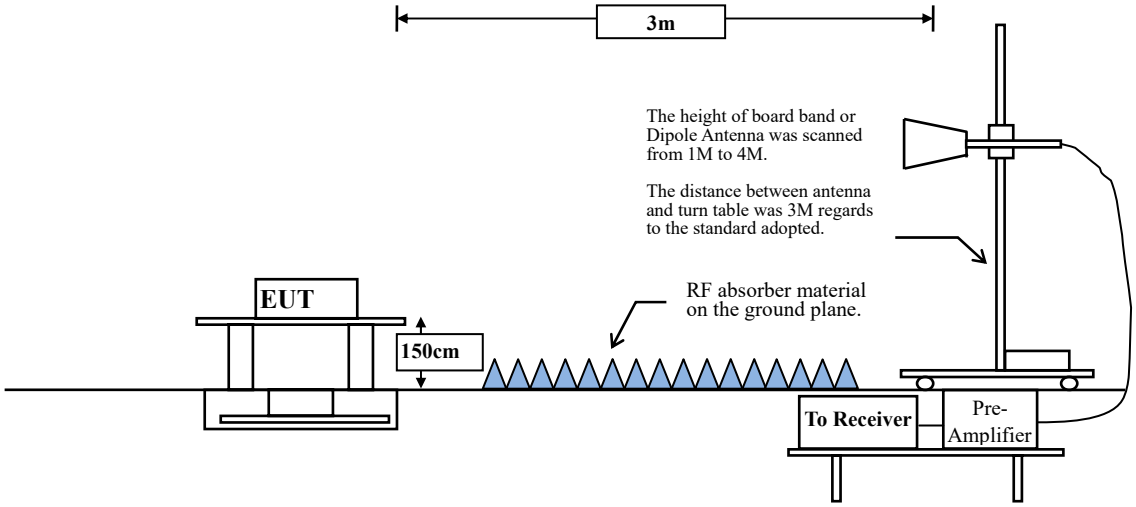
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.2. Limits

➢ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remarks: 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

4.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested compliance to FCC 47CFR 15.247 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground,when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 360 degrees to determine the position of the maximum emission level.

The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The measurement frequency range form 9kHz - 10th Harmonic of fundamental was investigated.

4.4. Uncertainty

Horizontal polarization：

30-300MHz: ±4.08dB；300M-1GHz: ±3.86dB；1-18GHz: ±3.77dB；18-40GHz: ±3.98dB

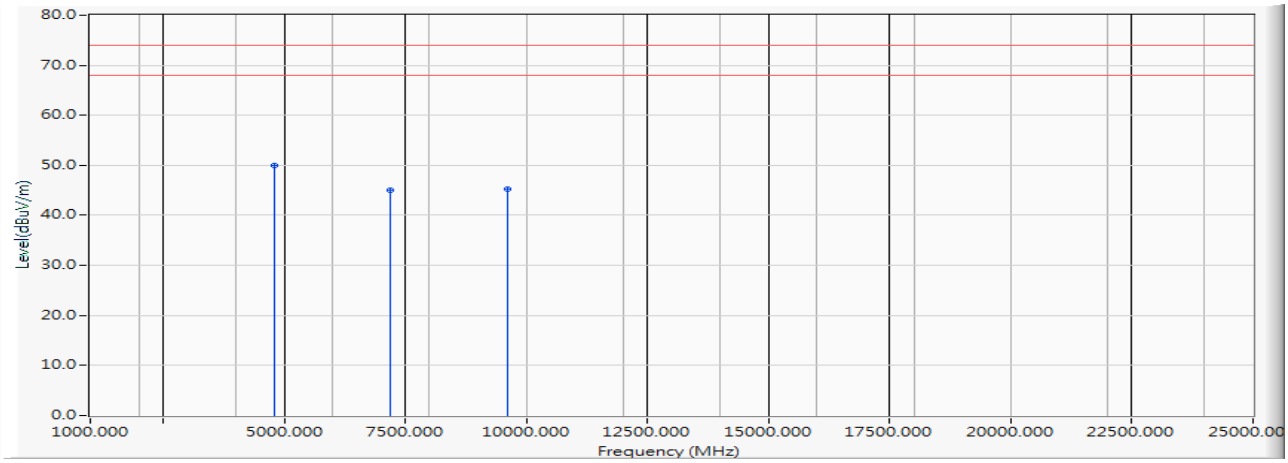
Vertical polarization：

30-300MHz: ±4.81dB；300M-1GHz: ±3.87dB；1-18GHz：±3.83dB；18-40GHz: ±3.98dB

4.5. Test Result of Radiated Emission

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 1: Transmit - 1Mbps(2402MHz)
Test Date : 2018/10/20

Horizontal



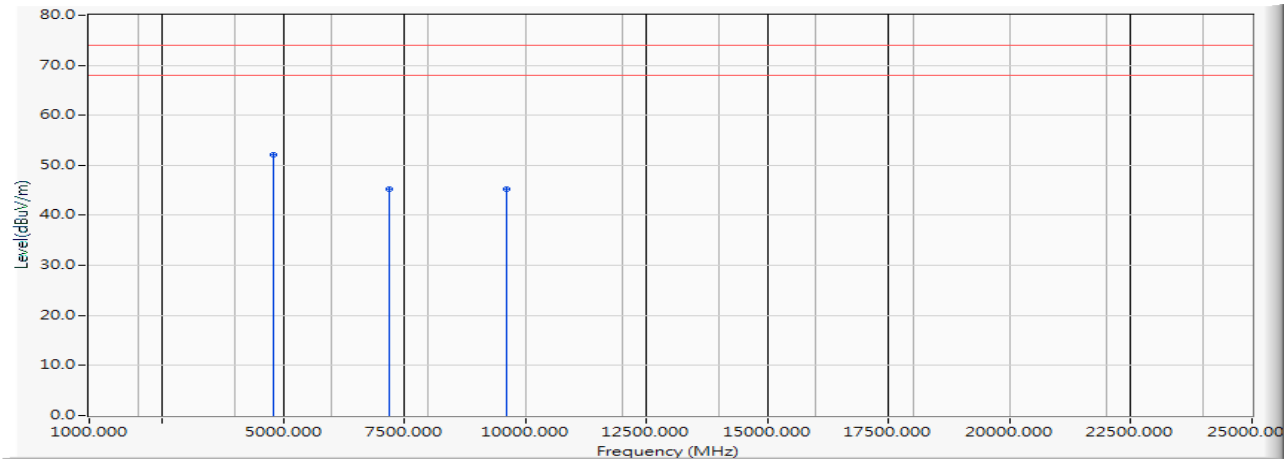
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4804.000	-6.081	56.080	49.999	-24.001	74.000	PEAK
2		7206.000	-3.033	48.000	44.967	-29.033	74.000	PEAK
3		9608.000	-0.774	45.950	45.177	-28.823	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 1: Transmit - 1Mbps(2402MHz)
Test Date : 2018/10/20

Vertical



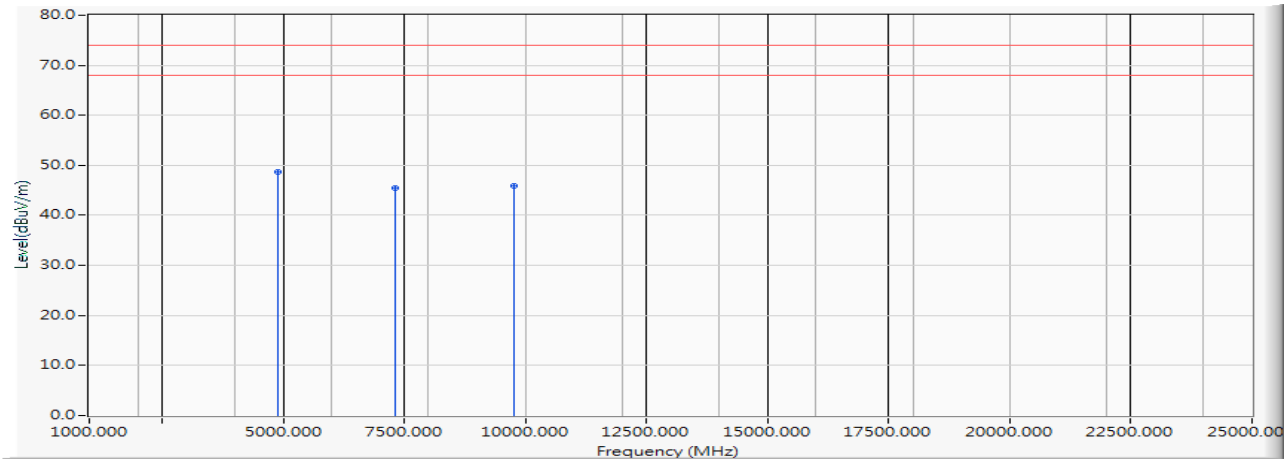
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4804.000	-6.081	58.100	52.019	-21.981	74.000	PEAK
2		7206.000	-3.033	48.200	45.167	-28.833	74.000	PEAK
3		9608.000	-0.774	46.100	45.327	-28.673	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 1: Transmit - 1Mbps(2441MHz)
Test Date : 2018/10/20

Horizontal



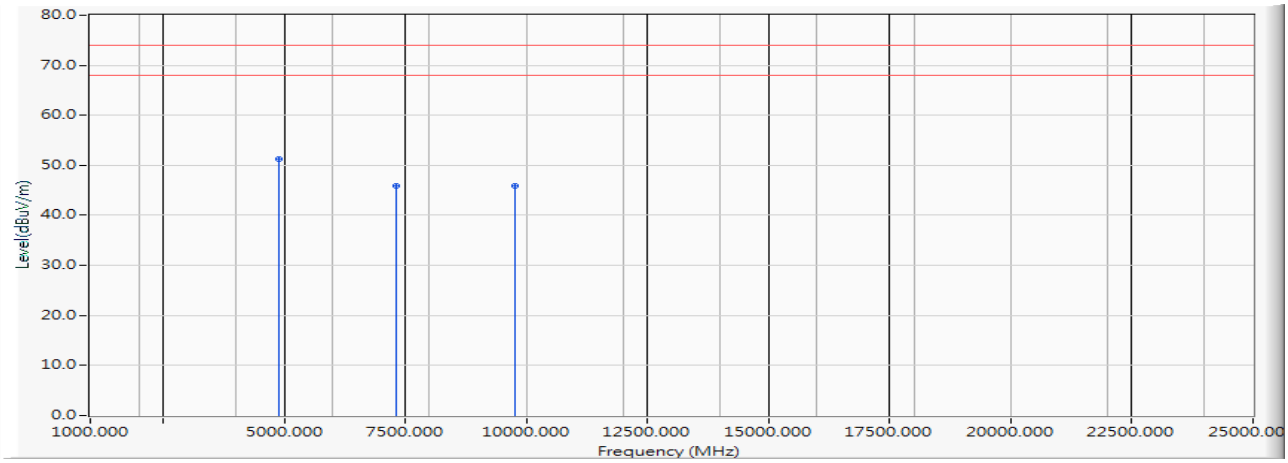
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4882.000	-6.042	54.760	48.718	-25.282	74.000	PEAK
2		7323.000	-2.954	48.470	45.516	-28.484	74.000	PEAK
3		9764.000	-0.487	46.430	45.943	-28.057	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 1: Transmit - 1Mbps(2441MHz)
Test Date : 2018/10/20

Vertical



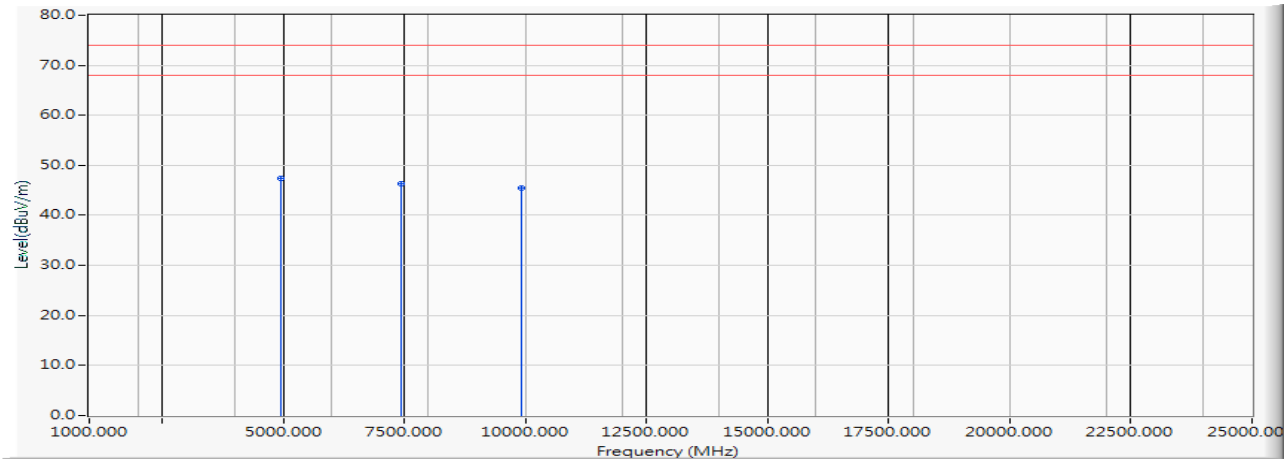
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4882.000	-6.042	57.250	51.208	-22.792	74.000	PEAK
2		7323.000	-2.954	48.860	45.906	-28.094	74.000	PEAK
3		9764.000	-0.487	46.430	45.943	-28.057	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 1: Transmit - 1Mbps(2480MHz)
Test Date : 2018/10/20

Horizontal



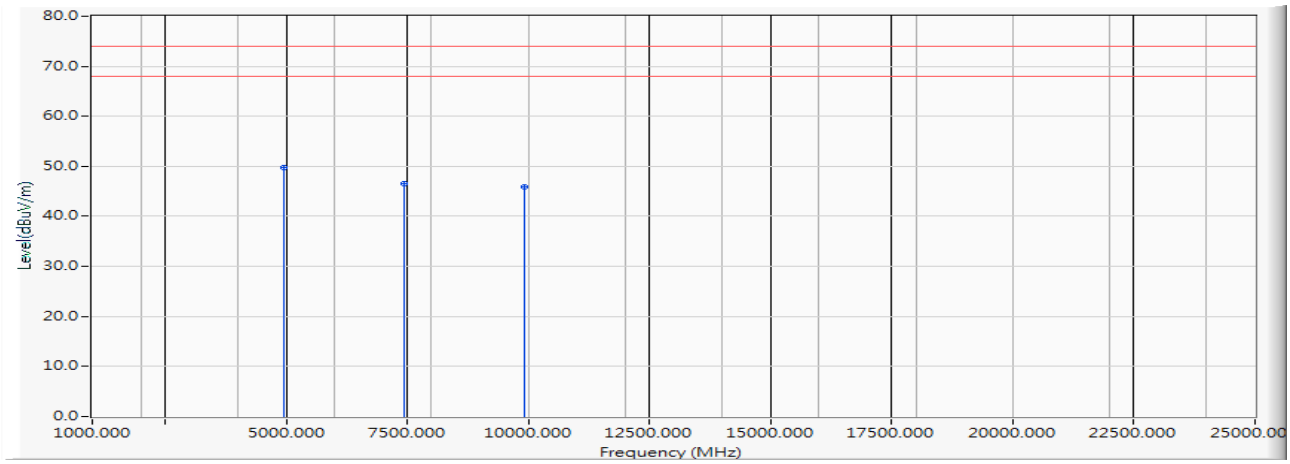
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4960.000	-6.041	53.490	47.449	-26.551	74.000	PEAK
2		7440.000	-2.805	49.170	46.365	-27.635	74.000	PEAK
3		9920.000	-0.260	45.710	45.450	-28.550	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 1: Transmit - 1Mbps(2480MHz)
Test Date : 2018/10/20

Vertical



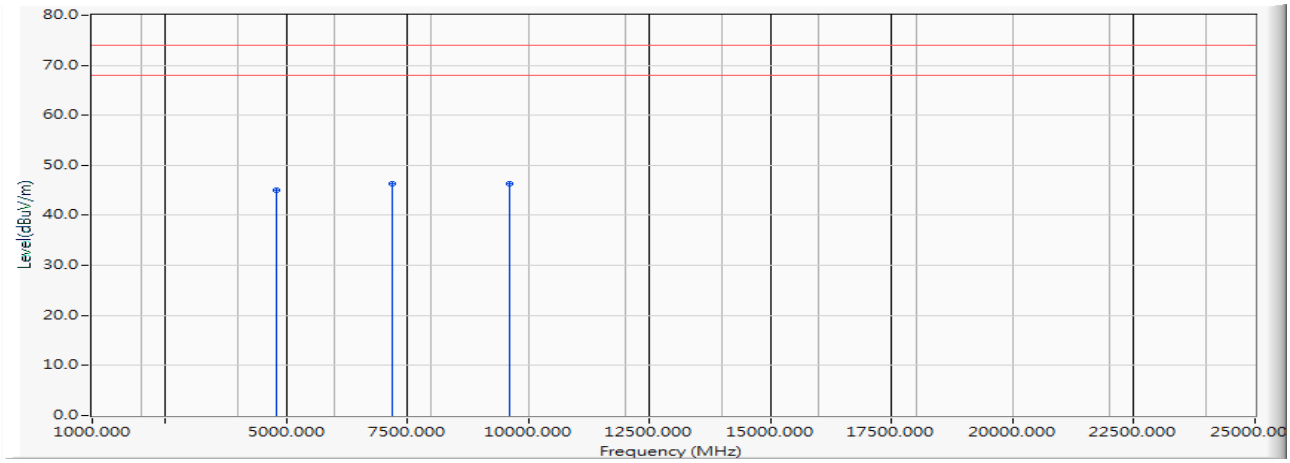
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4960.000	-6.041	55.890	49.849	-24.151	74.000	PEAK
2		7440.000	-2.805	49.250	46.445	-27.555	74.000	PEAK
3		9920.000	-0.260	46.170	45.910	-28.090	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 2: Transmit - 2Mbps(2402MHz)
Test Date : 2018/10/20

Horizontal



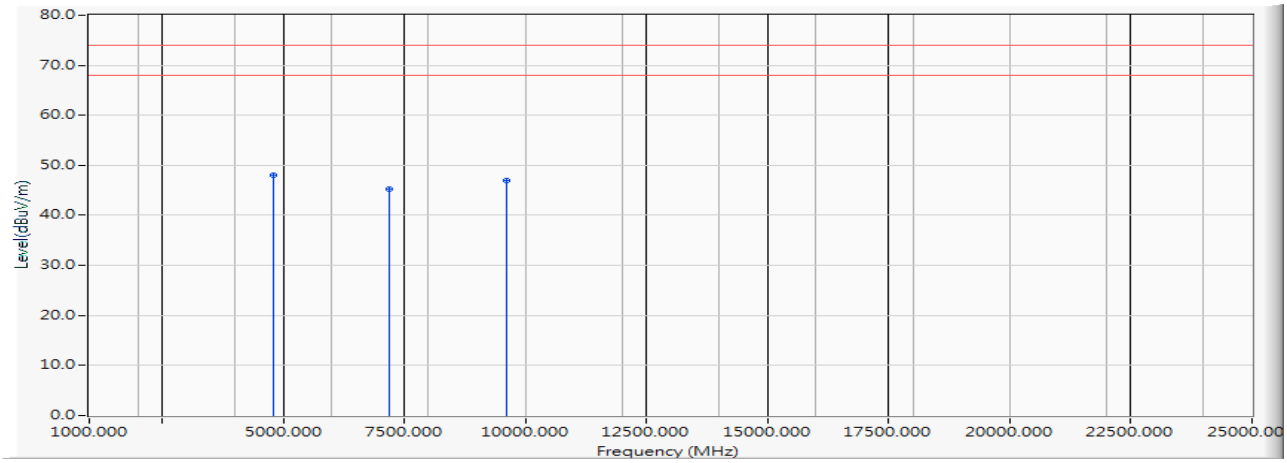
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-6.081	51.120	45.039	-28.961	74.000	PEAK
2	*	7206.000	-3.033	49.320	46.287	-27.713	74.000	PEAK
3		9608.000	-0.774	47.020	46.247	-27.753	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 2: Transmit - 2Mbps(2402MHz)
Test Date : 2018/10/20

Vertical



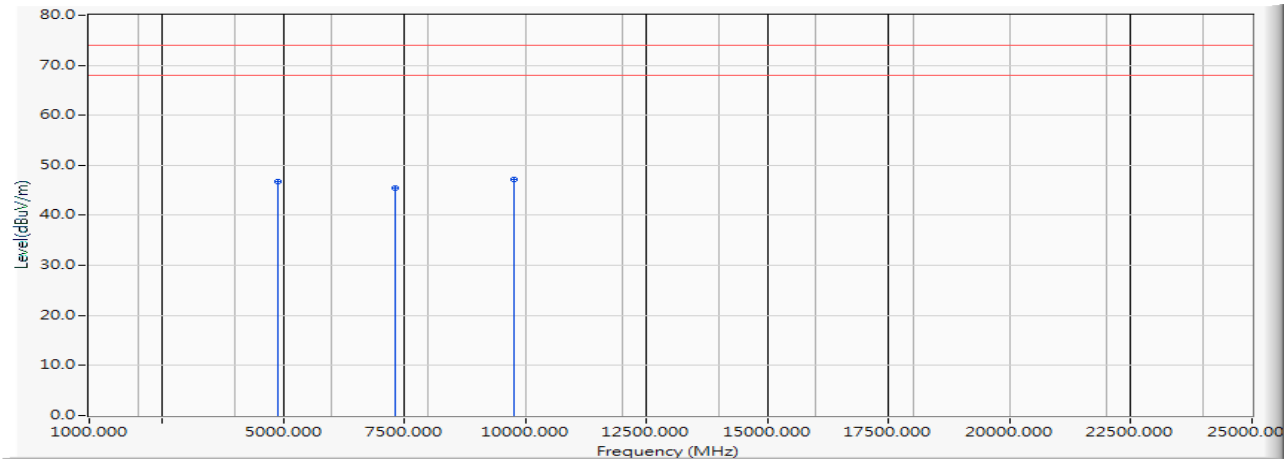
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4804.000	-6.081	54.060	47.979	-26.021	74.000	PEAK
2		7206.000	-3.033	48.320	45.287	-28.713	74.000	PEAK
3		9608.000	-0.774	47.810	47.037	-26.963	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 2: Transmit - 2Mbps(2441MHz)
Test Date : 2018/10/20

Horizontal



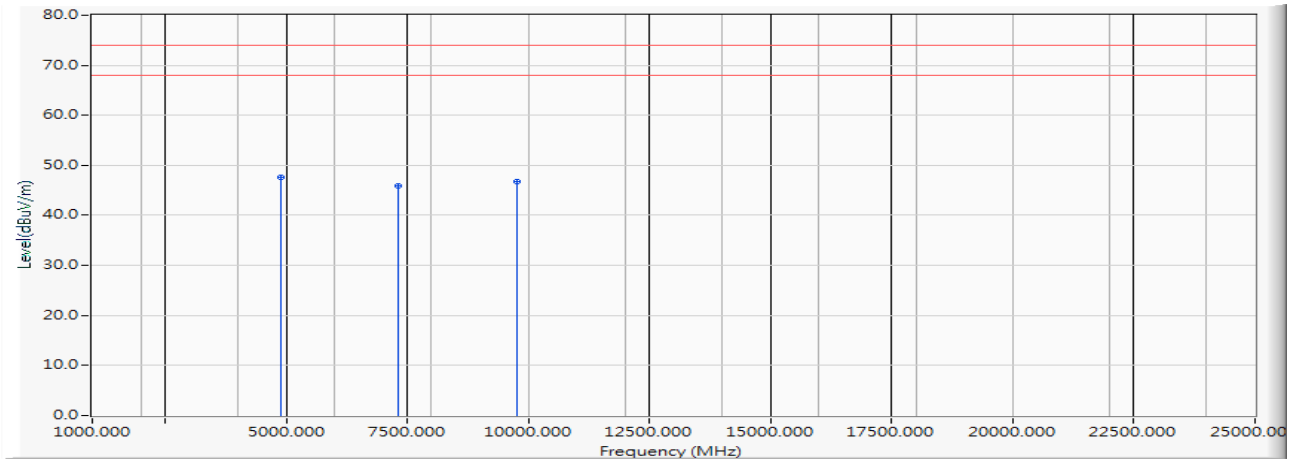
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.000	-6.042	52.740	46.698	-27.302	74.000	PEAK
2		7323.000	-2.954	48.320	45.366	-28.634	74.000	PEAK
3	*	9764.000	-0.487	47.590	47.103	-26.897	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 2: Transmit - 2Mbps(2441MHz)
Test Date : 2018/10/20

Vertical



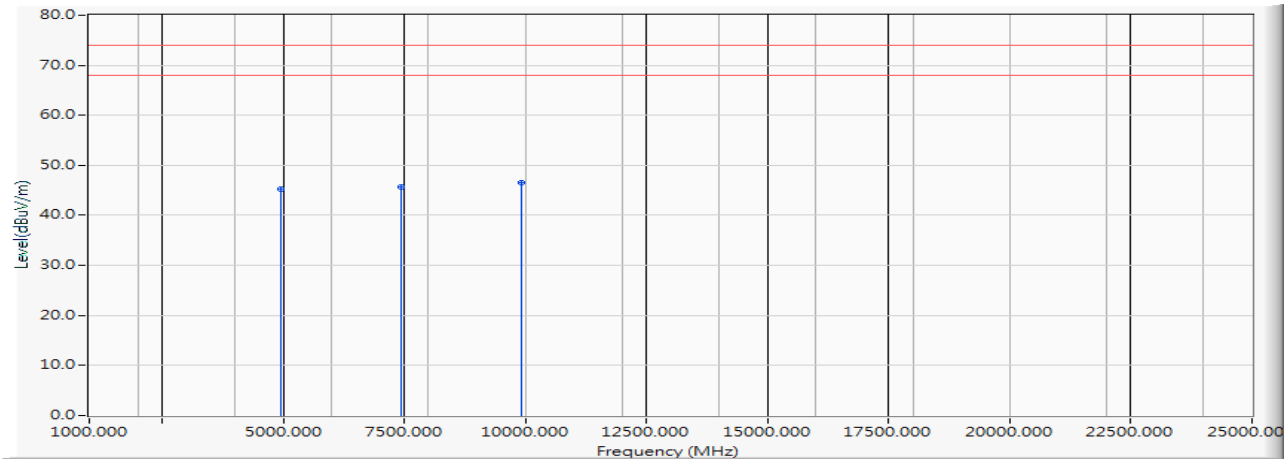
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4882.000	-6.042	53.620	47.578	-26.422	74.000	PEAK
2		7323.000	-2.954	48.790	45.836	-28.164	74.000	PEAK
3		9764.000	-0.487	47.190	46.703	-27.297	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 2: Transmit - 2Mbps(2480MHz)
Test Date : 2018/10/20

Horizontal



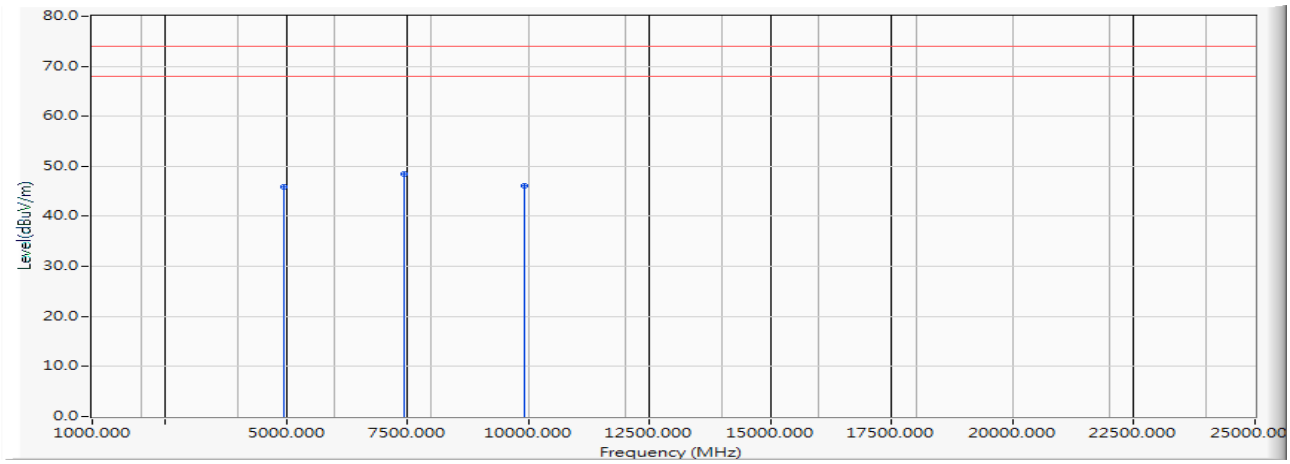
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	-6.041	51.260	45.219	-28.781	74.000	PEAK
2		7440.000	-2.805	48.570	45.765	-28.235	74.000	PEAK
3	*	9920.000	-0.260	46.740	46.480	-27.520	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 2: Transmit - 2Mbps(2480MHz)
Test Date : 2018/10/20

Vertical



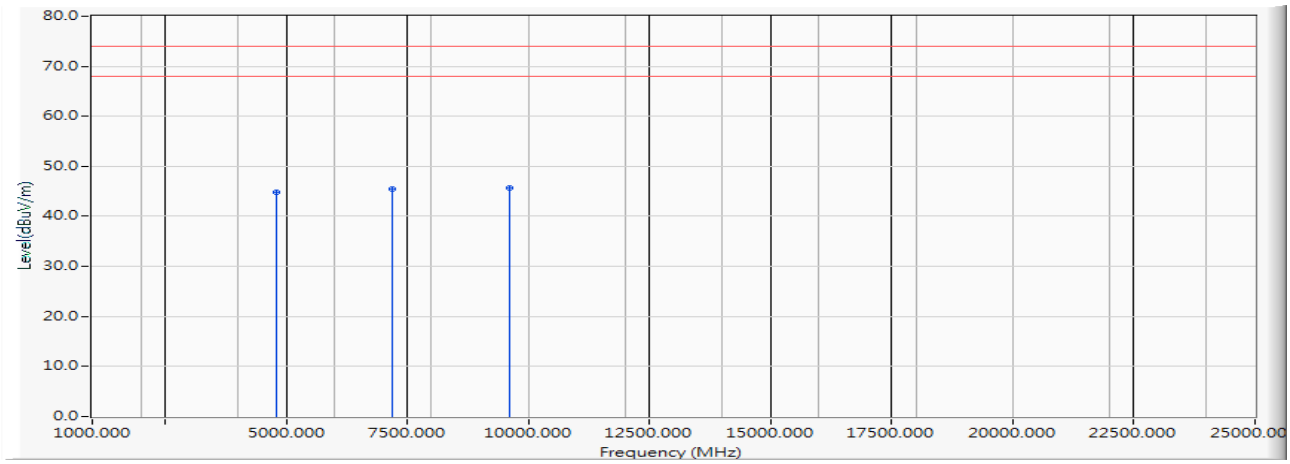
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	-6.041	52.030	45.989	-28.011	74.000	PEAK
2	*	7440.000	-2.805	51.190	48.385	-25.615	74.000	PEAK
3		9920.000	-0.260	46.270	46.010	-27.990	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 3: Transmit - 3Mbps(2402MHz)
Test Date : 2018/10/20

Horizontal



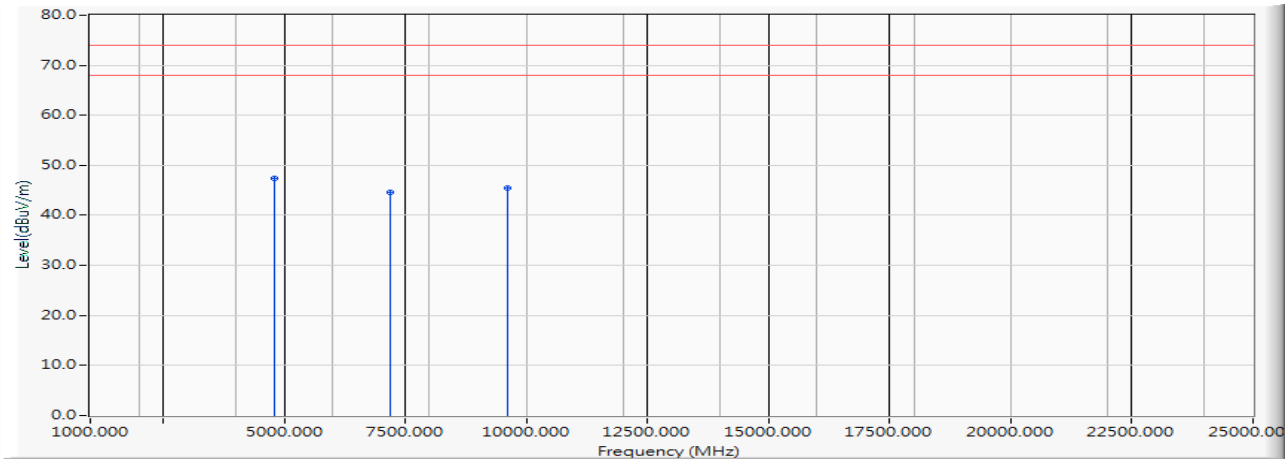
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-6.081	50.910	44.829	-29.171	74.000	PEAK
2		7206.000	-3.033	48.500	45.467	-28.533	74.000	PEAK
3	*	9608.000	-0.774	46.510	45.737	-28.263	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 3: Transmit - 3Mbps(2402MHz)
Test Date : 2018/10/20

Vertical



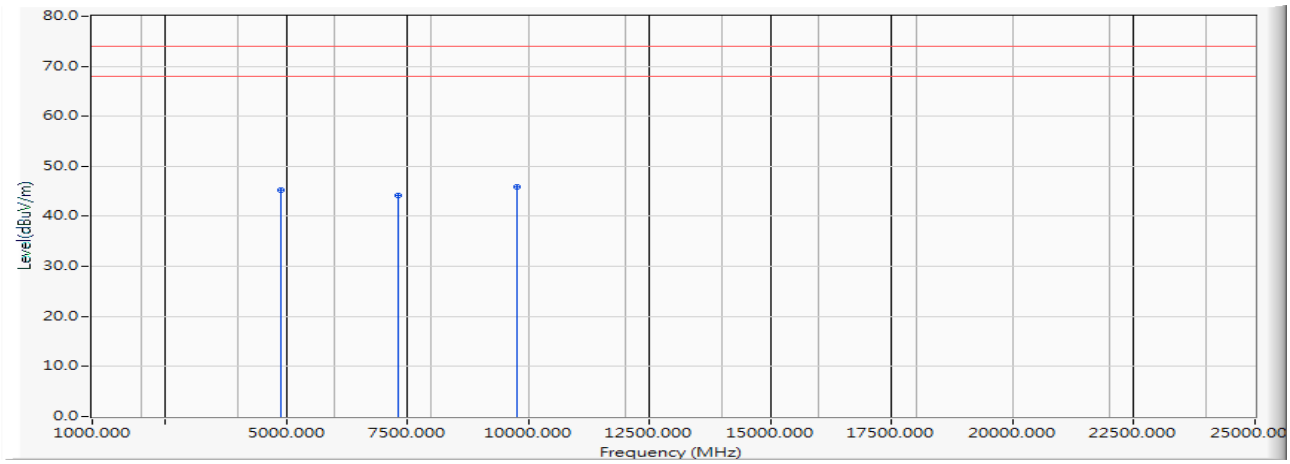
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4804.000	-6.081	53.560	47.479	-26.521	74.000	PEAK
2		7206.000	-3.033	47.680	44.647	-29.353	74.000	PEAK
3		9608.000	-0.774	46.310	45.537	-28.463	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
Test Date : 2018/10/20

Horizontal



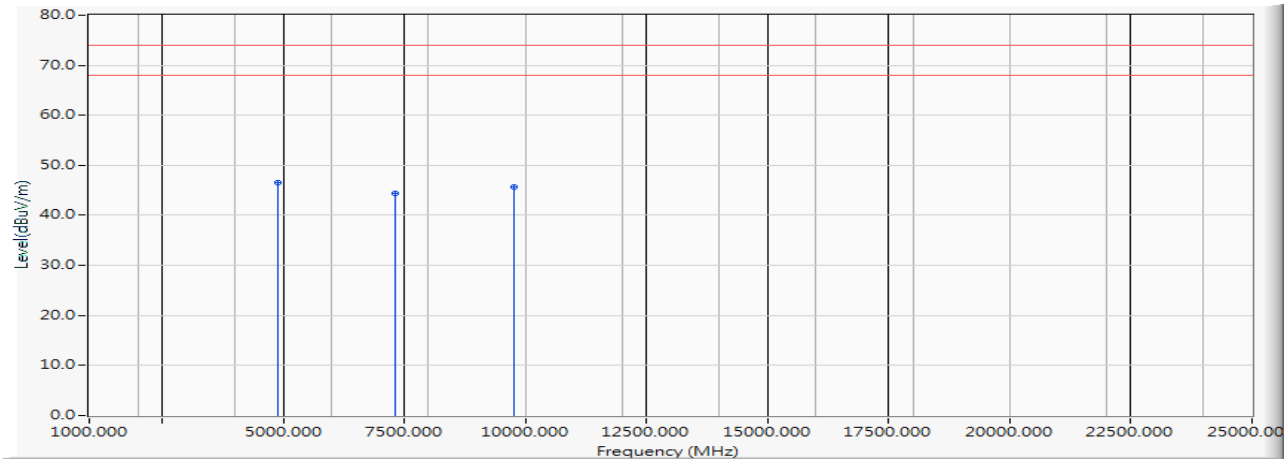
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.000	-6.042	51.330	45.288	-28.712	74.000	PEAK
2		7323.000	-2.954	47.110	44.156	-29.844	74.000	PEAK
3	*	9764.000	-0.487	46.420	45.933	-28.067	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
Test Date : 2018/10/20

Vertical



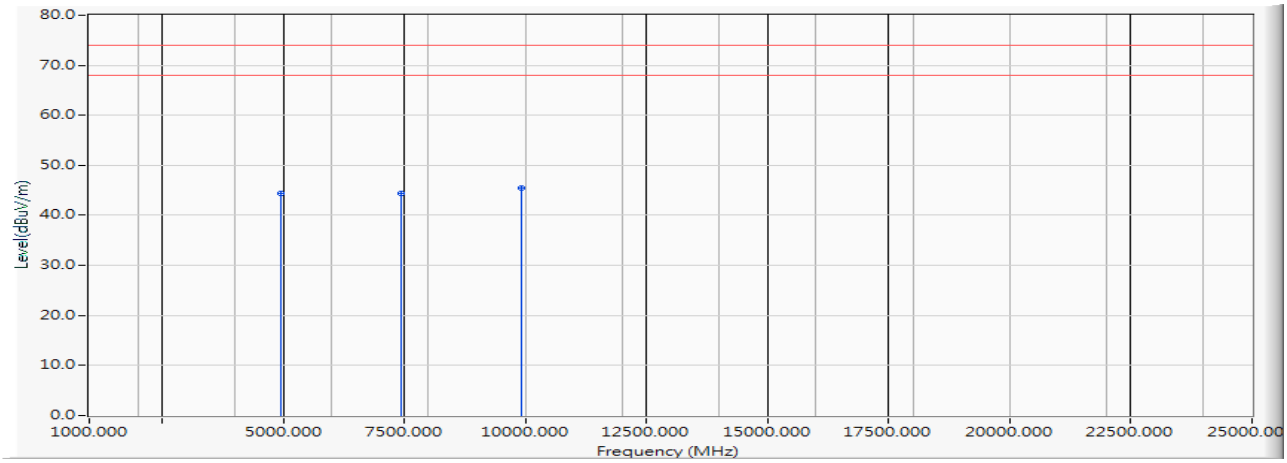
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4882.000	-6.042	52.630	46.588	-27.412	74.000	PEAK
2		7323.000	-2.954	47.450	44.496	-29.504	74.000	PEAK
3		9764.000	-0.487	46.090	45.603	-28.397	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 3: Transmit - 3Mbps (2480MHz)
Test Date : 2018/10/20

Horizontal



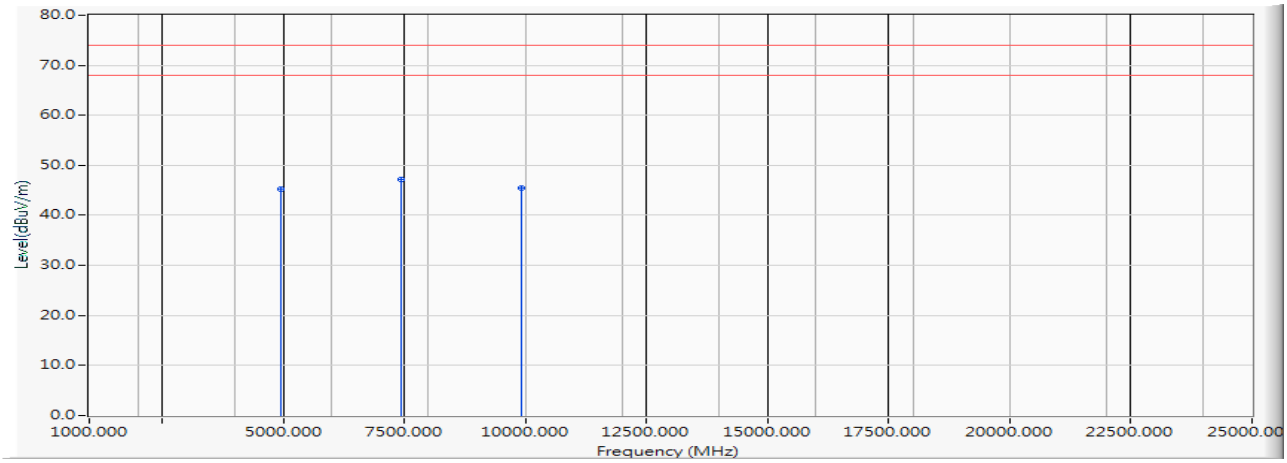
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	-6.041	50.380	44.339	-29.661	74.000	PEAK
2		7440.000	-2.805	47.260	44.455	-29.545	74.000	PEAK
3	*	9920.000	-0.260	45.650	45.390	-28.610	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : Harmonic Radiated Emission
Test Mode : Mode 3: Transmit - 3Mbps (2480MHz)
Test Date : 2018/10/20

Vertical



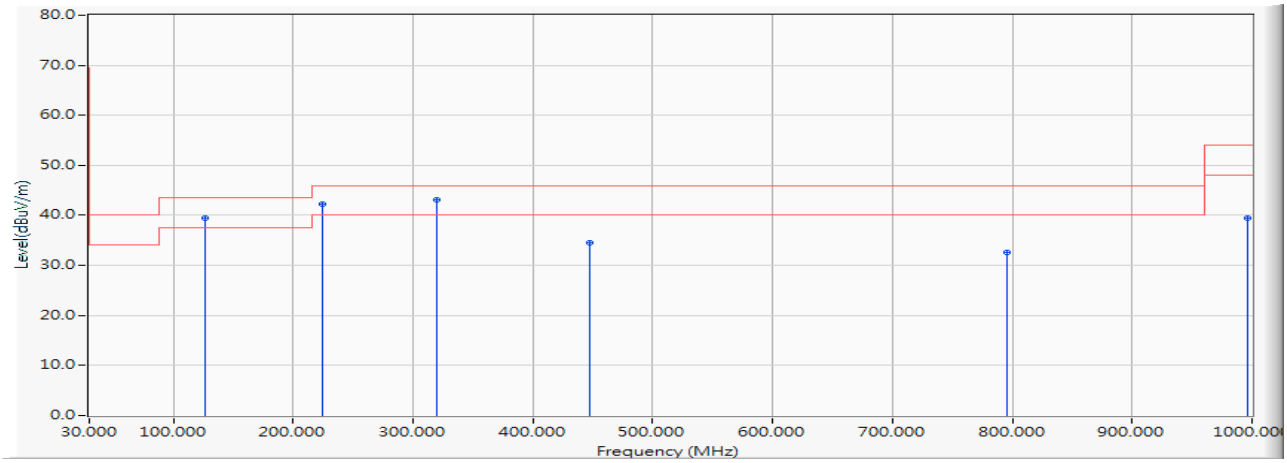
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	-6.041	51.190	45.149	-28.851	74.000	PEAK
2	*	7440.000	-2.805	50.050	47.245	-26.755	74.000	PEAK
3		9920.000	-0.260	45.630	45.370	-28.630	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Transparent One Encore
Test Item : General Radiated Emission
Test Mode : Mode 1: Transmit - 1Mbps (2441MHz)
Test Date : 2018/10/20

Horizontal



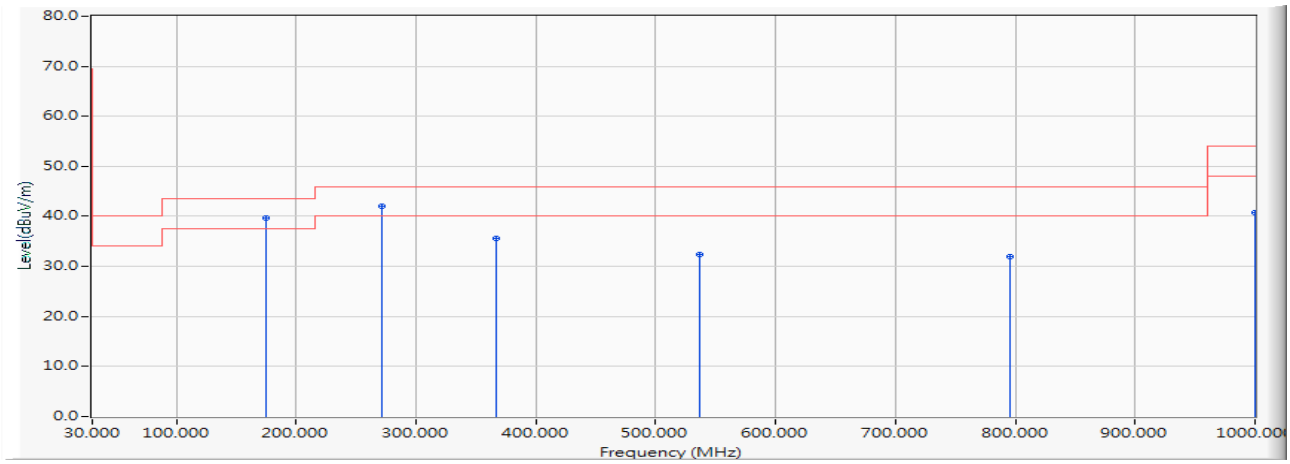
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		127.000	-12.696	52.085	39.389	-4.111	43.500	QUASIPEAK
2		224.000	-13.137	55.317	42.180	-3.820	46.000	QUASIPEAK
3	*	319.594	-9.880	52.998	43.118	-2.882	46.000	QUASIPEAK
4		447.522	-6.857	41.310	34.452	-11.548	46.000	QUASIPEAK
5		796.159	-1.687	34.191	32.504	-13.496	46.000	QUASIPEAK
6		995.783	0.952	38.486	39.438	-14.562	54.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Transparent One Encore
Test Item : General Radiated Emission
Test Mode : Mode 1: Transmit - 1Mbps (2441MHz)
Test Date : 2018/10/20

Vertical



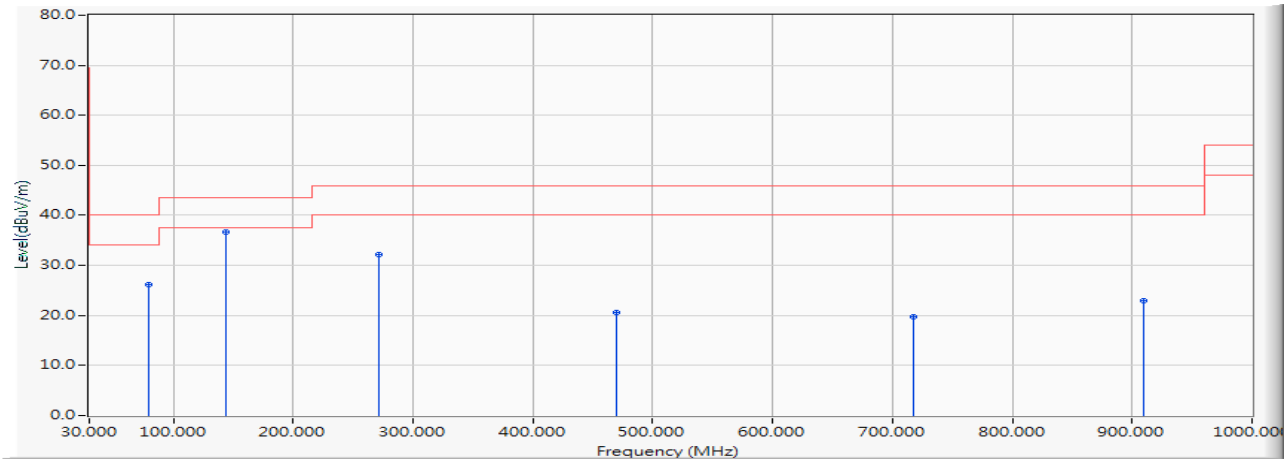
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	174.797	-11.826	51.589	39.763	-3.737	43.500	QUASIPEAK
2		271.797	-11.243	53.245	42.002	-3.998	46.000	QUASIPEAK
3		367.391	-8.784	44.443	35.659	-10.341	46.000	QUASIPEAK
4		536.087	-5.396	37.680	32.284	-13.716	46.000	QUASIPEAK
5		796.159	-1.687	33.748	32.061	-13.939	46.000	QUASIPEAK
6		1000.000	1.007	39.652	40.659	-13.341	54.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Transparent One Encore
Test Item : General Radiated Emission
Test Mode : Mode 2: Transmit - 2Mbps (2441MHz)
Test Date : 2018/10/20

Horizontal



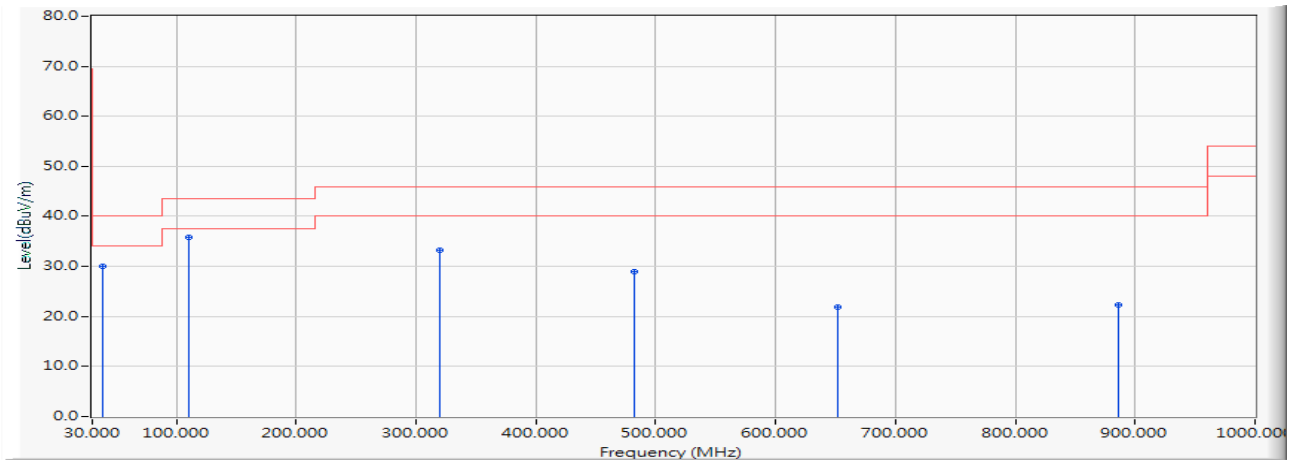
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		79.203	-15.483	41.683	26.200	-13.800	40.000	QUASIPEAK
2	*	143.870	-11.295	47.863	36.569	-6.931	43.500	QUASIPEAK
3		271.797	-11.243	43.329	32.086	-13.914	46.000	QUASIPEAK
4		470.014	-6.457	27.007	20.550	-25.450	46.000	QUASIPEAK
5		717.435	-2.654	22.343	19.689	-26.311	46.000	QUASIPEAK
6		910.029	-0.091	23.079	22.989	-23.011	46.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Transparent One Encore
Test Item : General Radiated Emission
Test Mode : Mode 2: Transmit - 2Mbps (2441MHz)
Test Date : 2018/10/20

Vertical



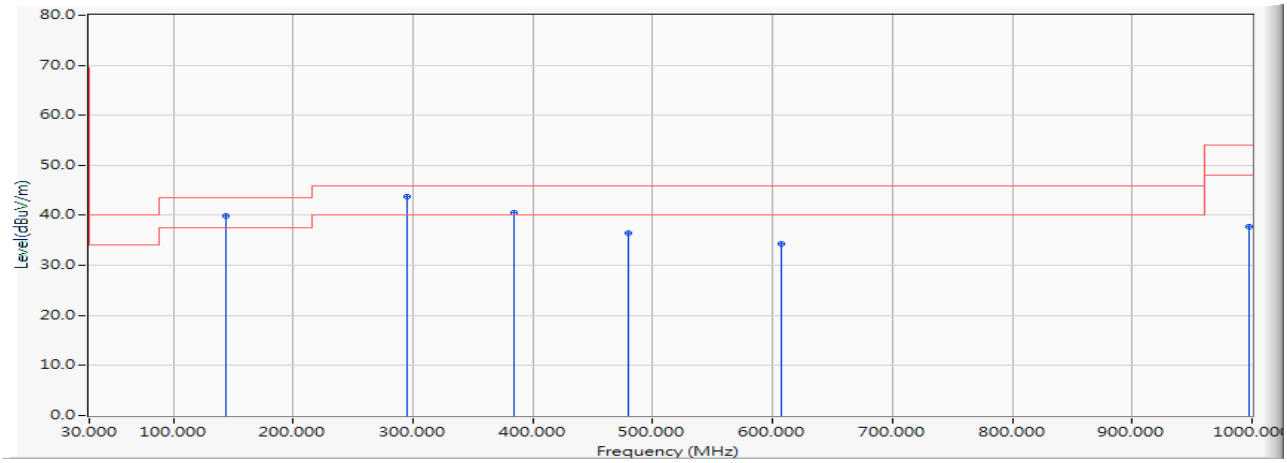
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		38.730	-11.305	41.403	30.098	-9.902	40.000	QUASIPEAK
2	*	110.510	-14.341	50.238	35.896	-7.604	43.500	QUASIPEAK
3		320.030	-9.869	43.172	33.303	-12.697	46.000	QUASIPEAK
4		482.020	-6.256	35.122	28.866	-17.134	46.000	QUASIPEAK
5		651.770	-3.672	25.447	21.775	-24.225	46.000	QUASIPEAK
6		885.540	-0.397	22.733	22.337	-23.663	46.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Transparent One Encore
Test Item : General Radiated Emission
Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
Test Date : 2018/10/20

Horizontal



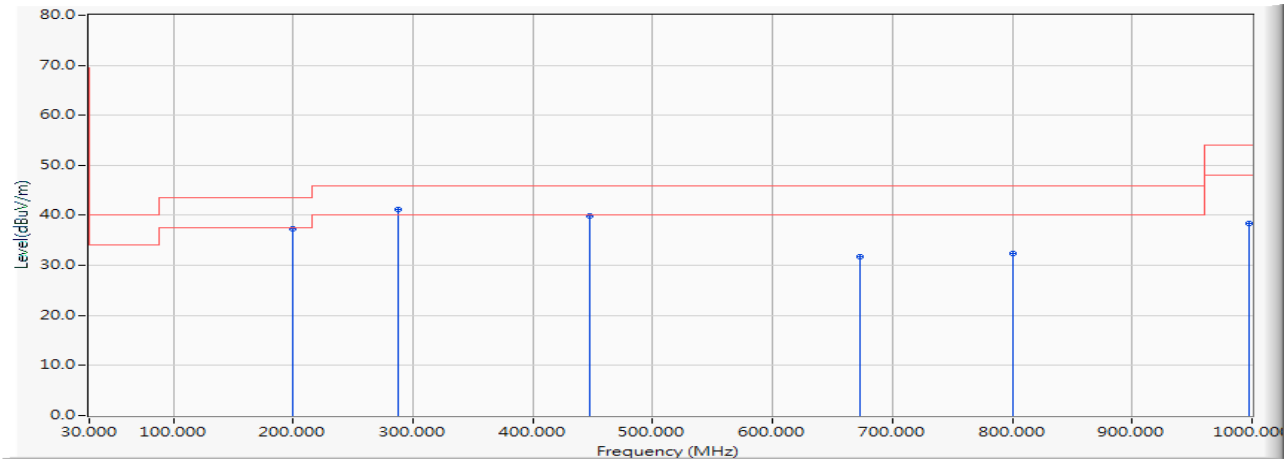
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		143.870	-11.295	51.132	39.838	-3.662	43.500	QUASIPEAK
2	*	295.696	-10.481	54.169	43.688	-2.312	46.000	QUASIPEAK
3		384.261	-8.395	48.921	40.525	-5.475	46.000	QUASIPEAK
4		479.855	-6.292	42.666	36.374	-9.626	46.000	QUASIPEAK
5		607.783	-3.956	38.241	34.284	-11.716	46.000	QUASIPEAK
6		997.188	0.970	36.813	37.783	-16.217	54.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Transparent One Encore
Test Item : General Radiated Emission
Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
Test Date : 2018/10/20

Vertical



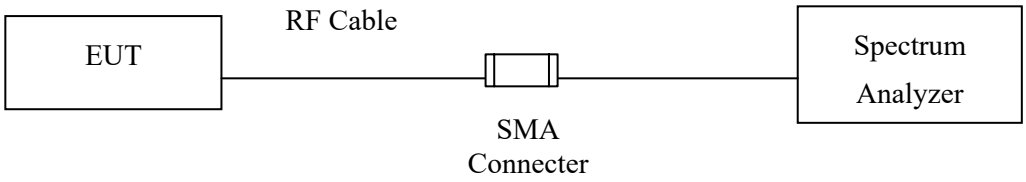
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		200.101	-13.722	50.959	37.237	-6.263	43.500	QUASIPEAK
2	*	287.261	-10.727	51.927	41.200	-4.800	46.000	QUASIPEAK
3		447.522	-6.857	46.812	39.954	-6.046	46.000	QUASIPEAK
4		672.449	-3.380	35.058	31.678	-14.322	46.000	QUASIPEAK
5		800.377	-1.651	34.090	32.439	-13.561	46.000	QUASIPEAK
6		997.188	0.970	37.519	38.489	-15.511	54.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

5. RF Antenna Conducted Test

5.1. Test Setup



5.2. Limits

According to FCC Section 15.247(d). In any 100 kHz 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 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

5.3. Test Procedure

Tested according to FHSS test procedure of KDB558074 section 9 b) for compliance to FCC 47CFR 15.247 requirements.

5.4. Uncertainty

±1.23dB

5.5. Test Result of RF Antenna Conducted Test

Product	:	Transparent One Encore
Test Item	:	RF Antenna Conducted Test
Test Mode	:	Mode 1: Transmit - 1Mbps
Test Date	:	2019/01/03

Figure Channel 00:

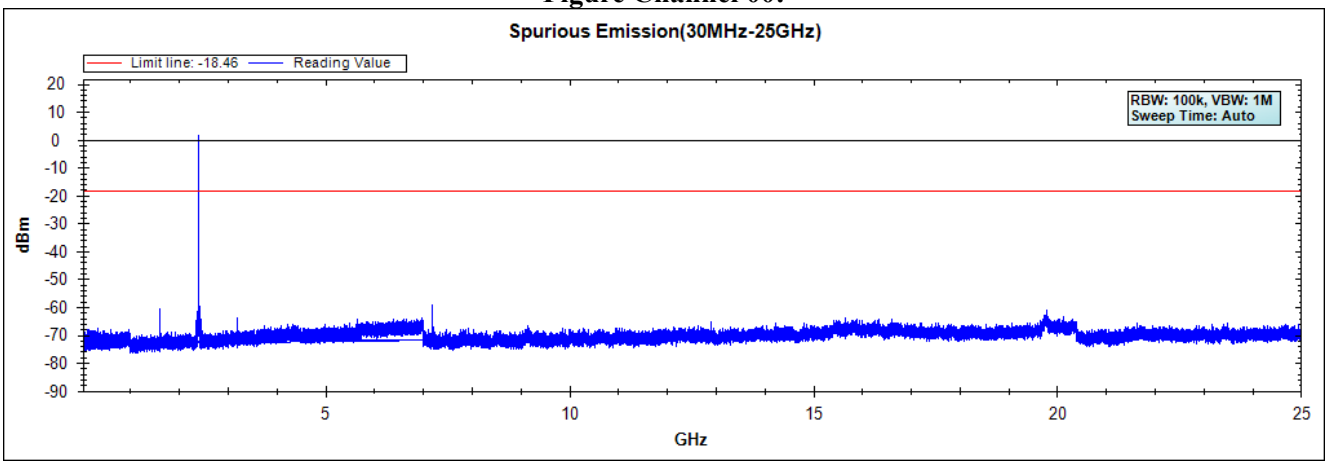


Figure Channel 39:

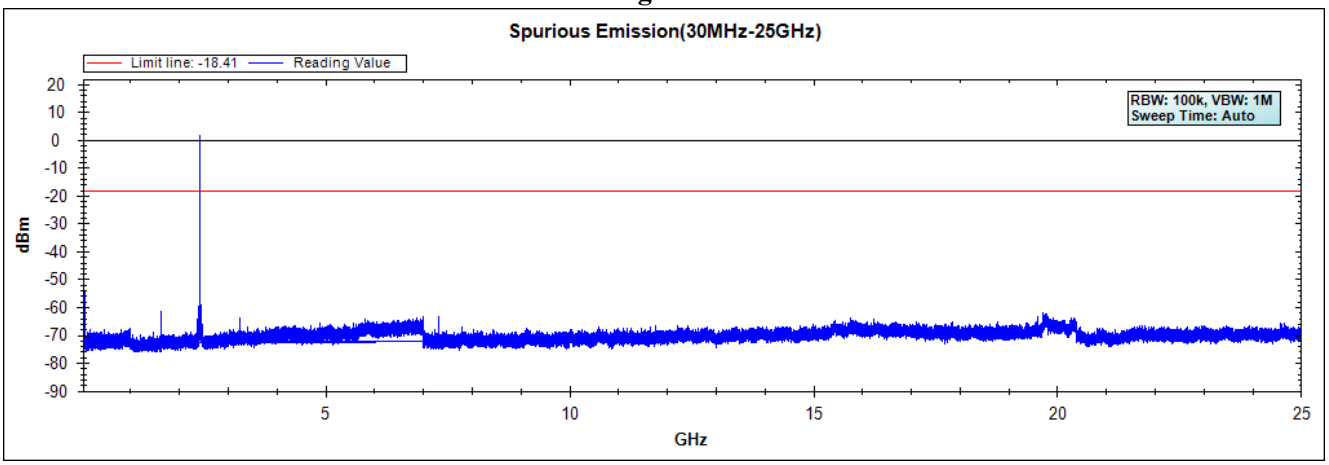
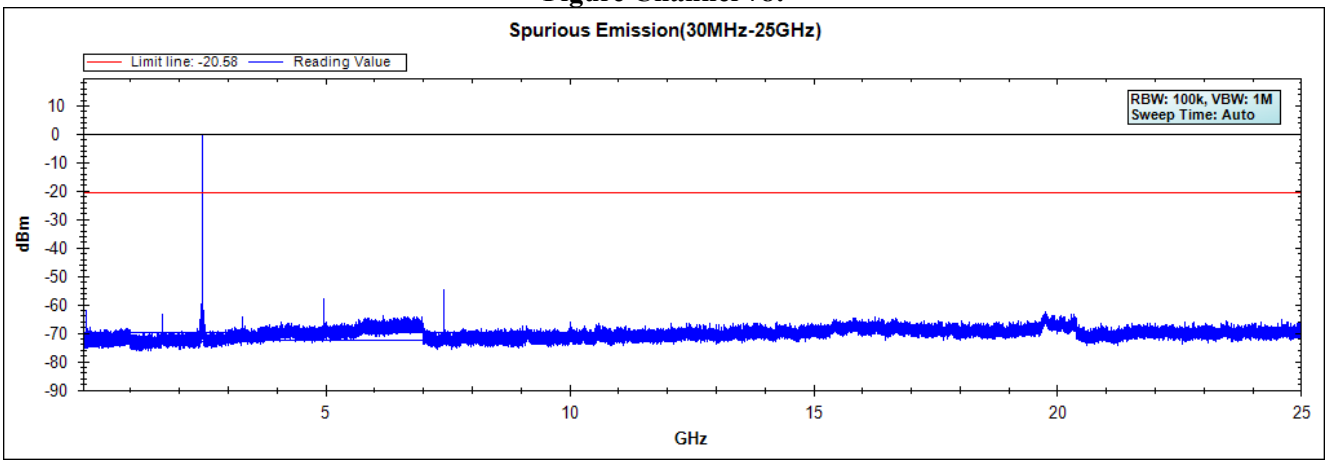


Figure Channel 78:



Note: The above test pattern is synthesized by multiple of the frequency range.

Product	:	Transparent One Encore
Test Item	:	RF Antenna Conducted Test
Test Mode	:	Mode 2: Transmit - 2Mbps
Test Date	:	2019/01/03

Figure Channel 00:

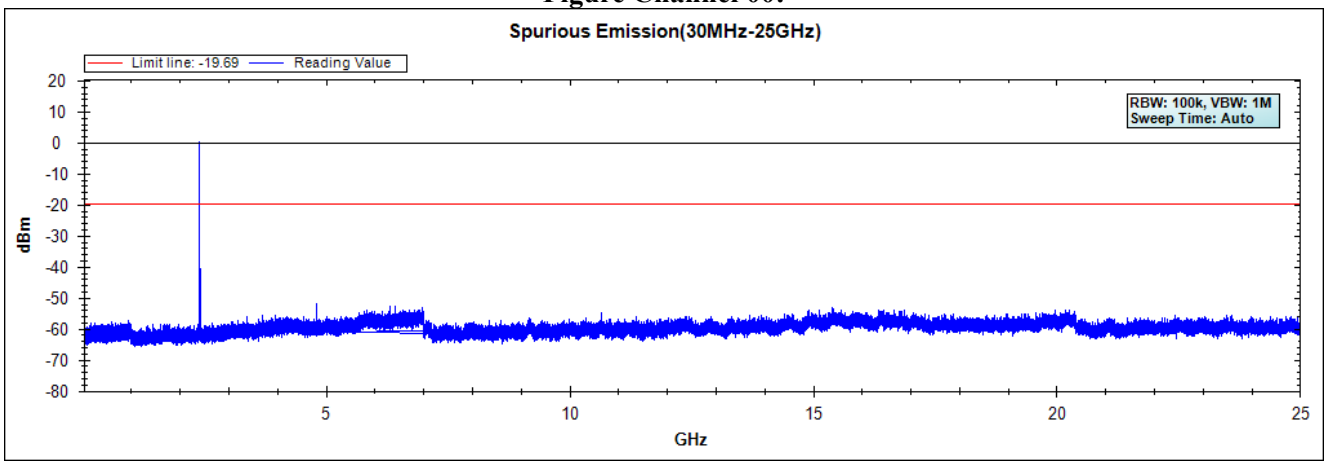


Figure Channel 39:

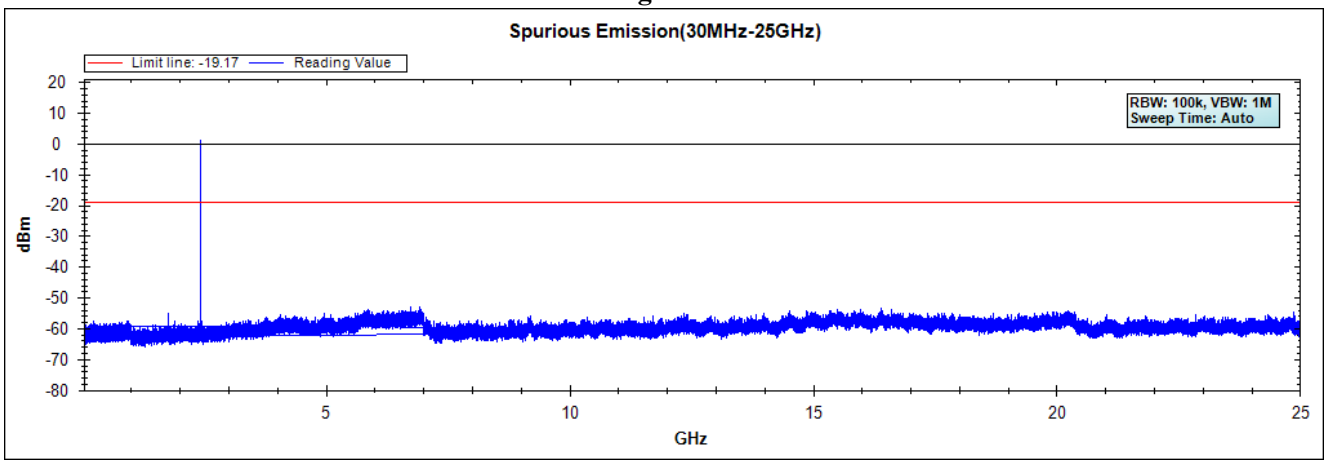
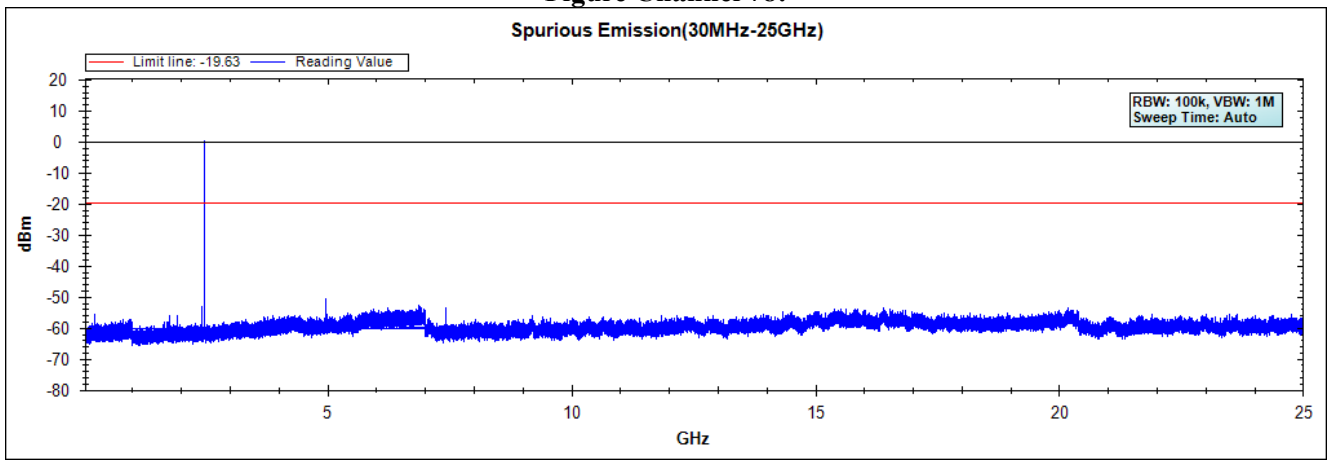


Figure Channel 78:



Note: The above test pattern is synthesized by multiple of the frequency range.

Product	:	Transparent One Encore
Test Item	:	RF Antenna Conducted Test
Test Mode	:	Mode 3: Transmit - 3Mbps
Test Date	:	2019/01/03

Figure Channel 00:

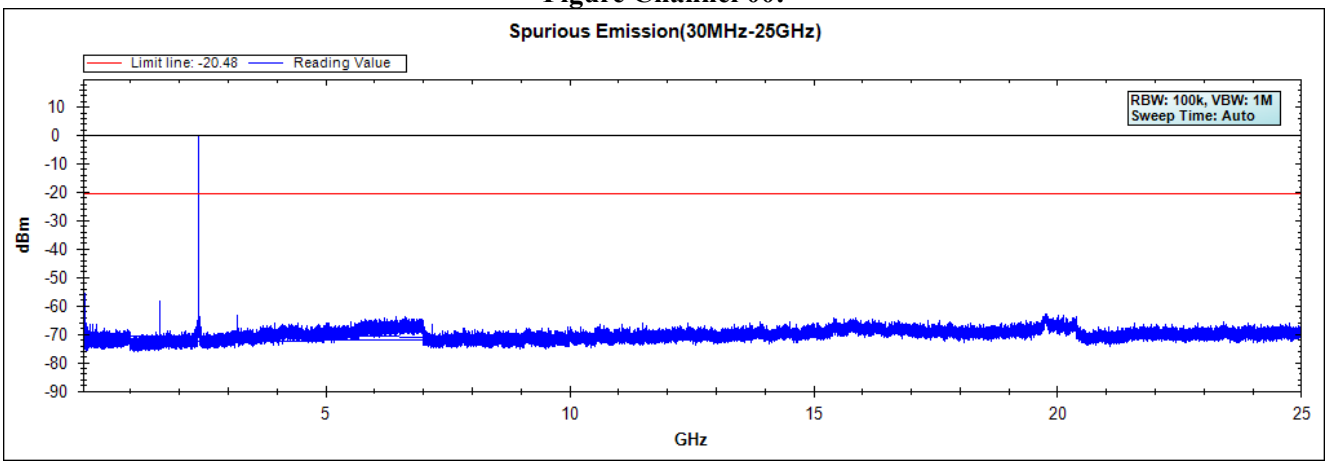


Figure Channel 39:

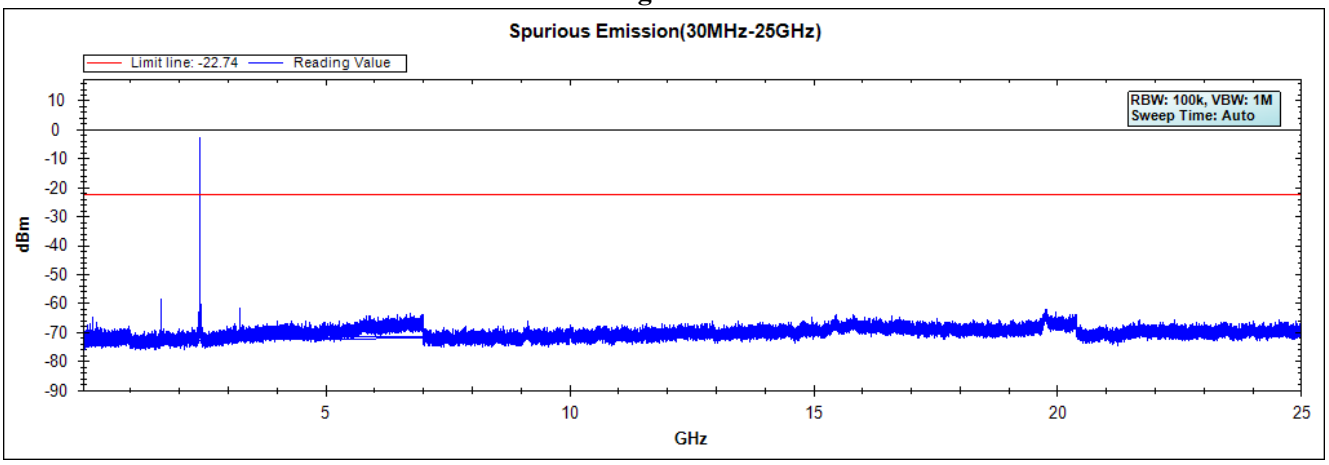
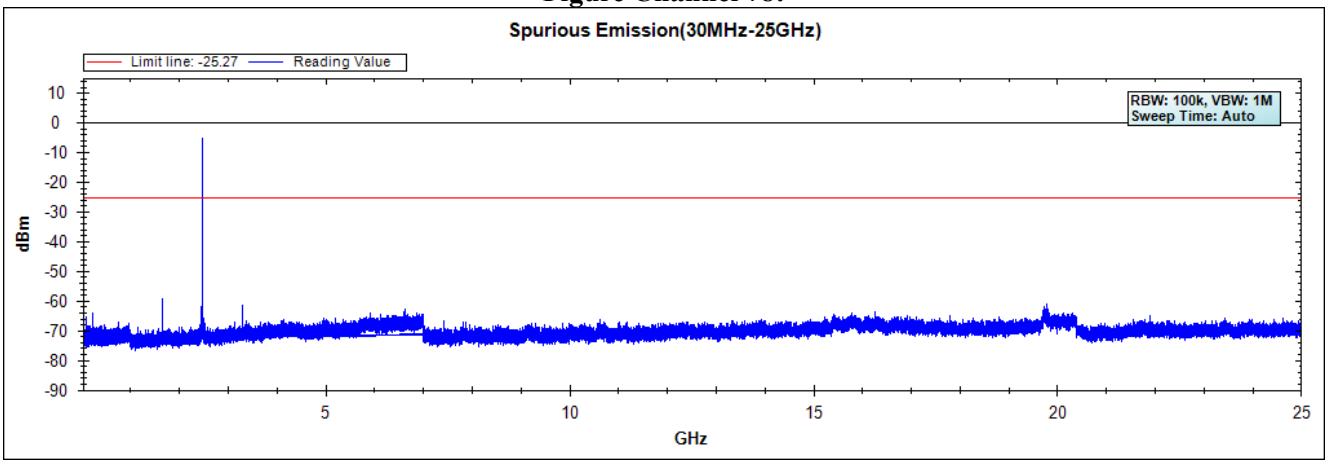


Figure Channel 78:

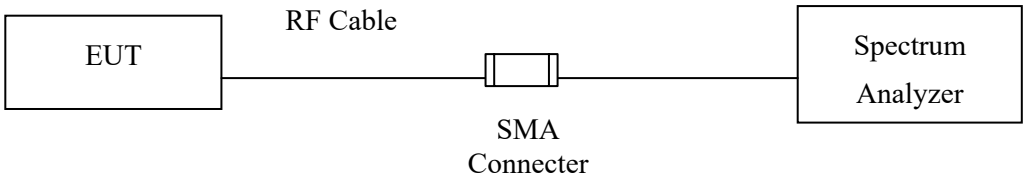


Note: The above test pattern is synthesized by multiple of the frequency range.

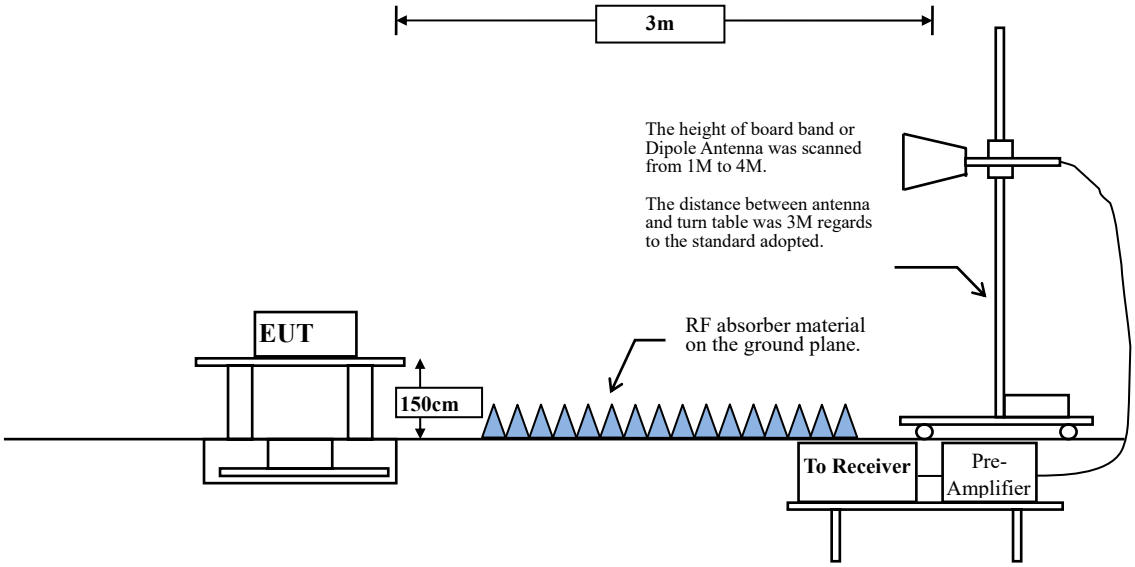
6. Band Edge

6.1. Test Setup

RF Conducted Measurement



RF Radiated Measurement:



6.2. Limit

According to FCC Section 15.247(d). In any 100 kHz 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 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, 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) (see Section 15.205(c)).

6.3. Test Procedure

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.
The bandwidth setting below 1GHz and above 1GHz on the field strength meter is 120 kHz and 1MHz, respectively.

6.4. Uncertainty

Conducted: ±1.23dB
Radiated:
Horizontal polarization：1-18GHz: ±3.77dB
Vertical polarization：1-18GHz : ±3.83dB

6.5. Test Result of Band Edge

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 1: Transmit - 1Mbps (2402MHz)
Test Date : 2018/10/20

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
00 (Peak)	2375.942	10.205	33.549	43.754	74.00	54.00	Pass
00 (Peak)	2390.000	10.262	32.795	43.057	74.00	54.00	Pass
00 (Peak)	2400.000	10.304	55.708	66.011	--	--	--
00 (Peak)	2402.899	10.315	88.015	98.330	--	--	--
00 (Average)	2375.942	10.205	22.123	32.328	74.00	54.00	Pass
00 (Average)	2390.000	10.262	18.509	28.771	74.00	54.00	Pass
00 (Average)	2400.000	10.304	39.026	49.329	--	--	--
00 (Average)	2402.899	10.315	79.112	89.427	--	--	--

Figure Channel 00: Horizontal (Peak)

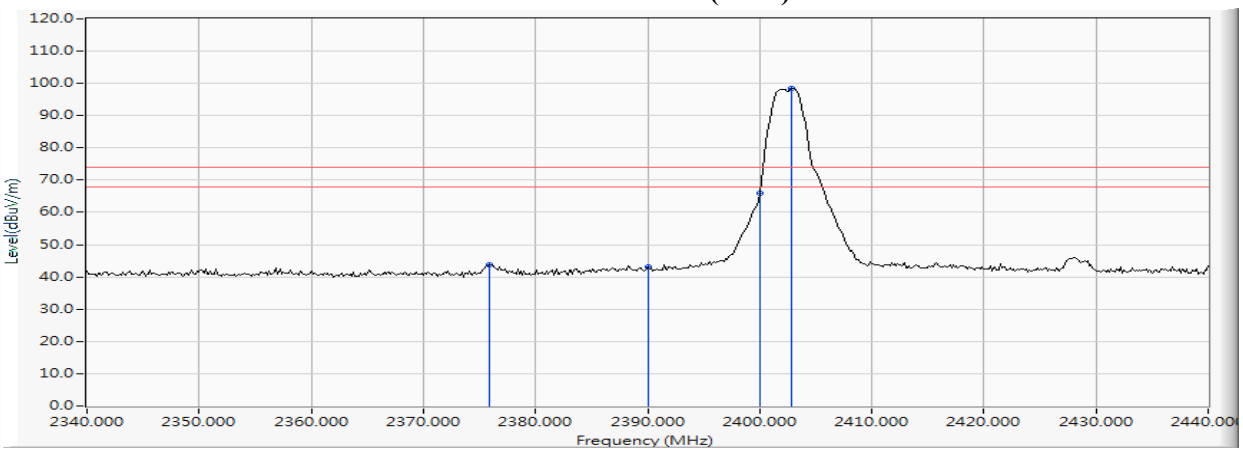
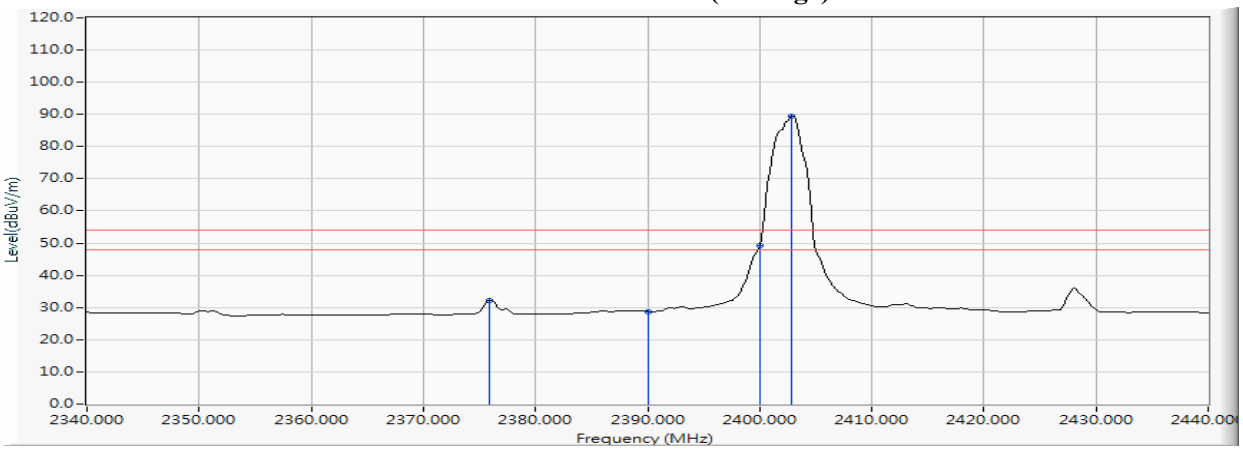


Figure Channel 00: Horizontal (Average)



Note:
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 1: Transmit - 1Mbps (2402MHz)
Test Date : 2018/10/20

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
00 (Peak)	2390.000	10.262	35.425	45.687	74.00	54.00	Pass
00 (Peak)	2400.000	10.304	58.220	68.523	--	--	--
00 (Peak)	2403.043	10.316	90.367	100.683	--	--	--
00 (Average)	2375.942	10.205	23.569	33.774	74.00	54.00	Pass
00 (Average)	2390.000	10.262	19.195	29.457	74.00	54.00	Pass
00 (Average)	2400.000	10.304	40.645	50.948	--	--	--
00 (Average)	2402.899	10.315	82.206	92.521	--	--	--

Figure Channel 00: VERTICAL (Peak)

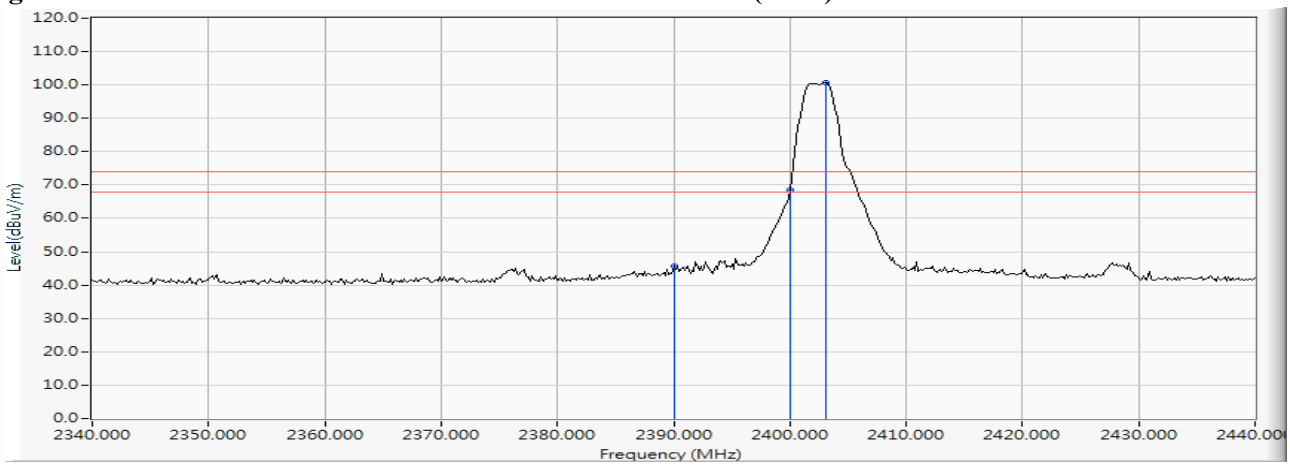
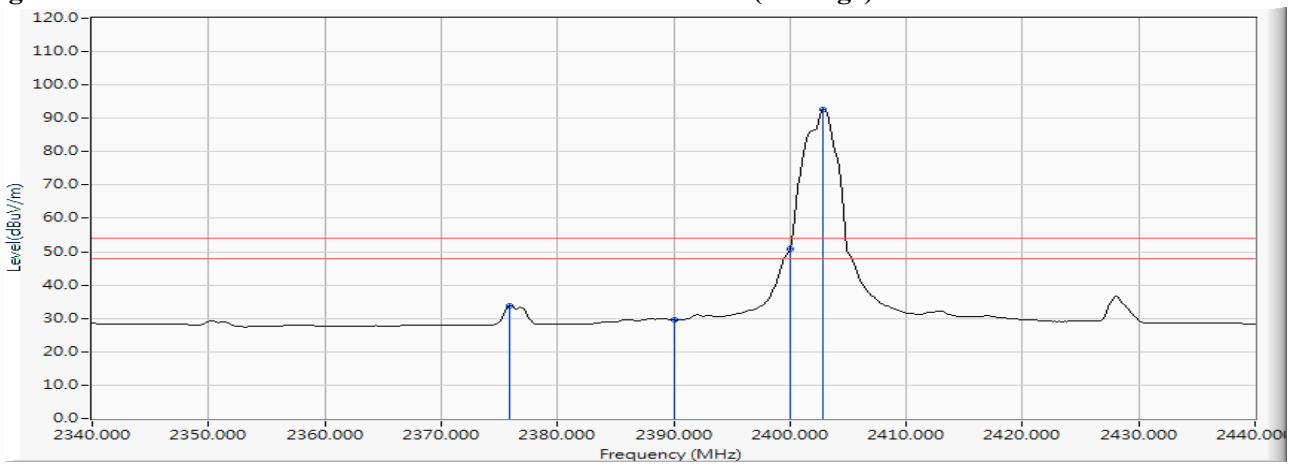


Figure Channel 00: VERTICAL (Average)



Note:
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 1: Transmit - 1Mbps (2480MHz)
Test Date : 2018/10/20

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
78 (Peak)	2479.007	10.624	88.055	98.679	--	--	--
78 (Peak)	2483.500	10.640	42.457	53.098	74.00	54.00	Pass
78 (Average)	2480.022	10.628	74.904	85.532	--	--	--
78 (Average)	2483.500	10.640	26.443	37.084	74.00	54.00	Pass

Figure Channel 78: Horizontal (Peak)

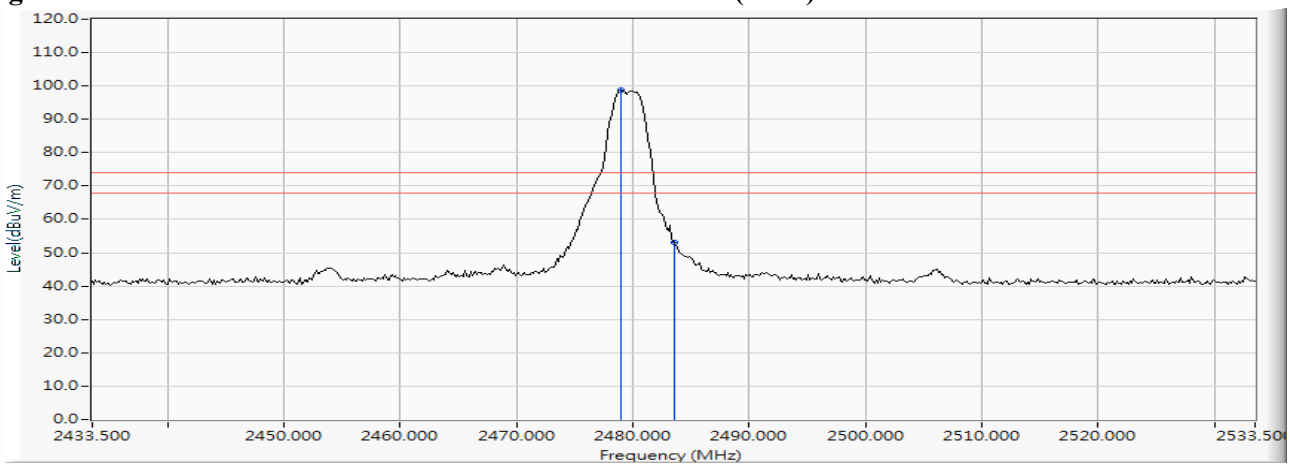
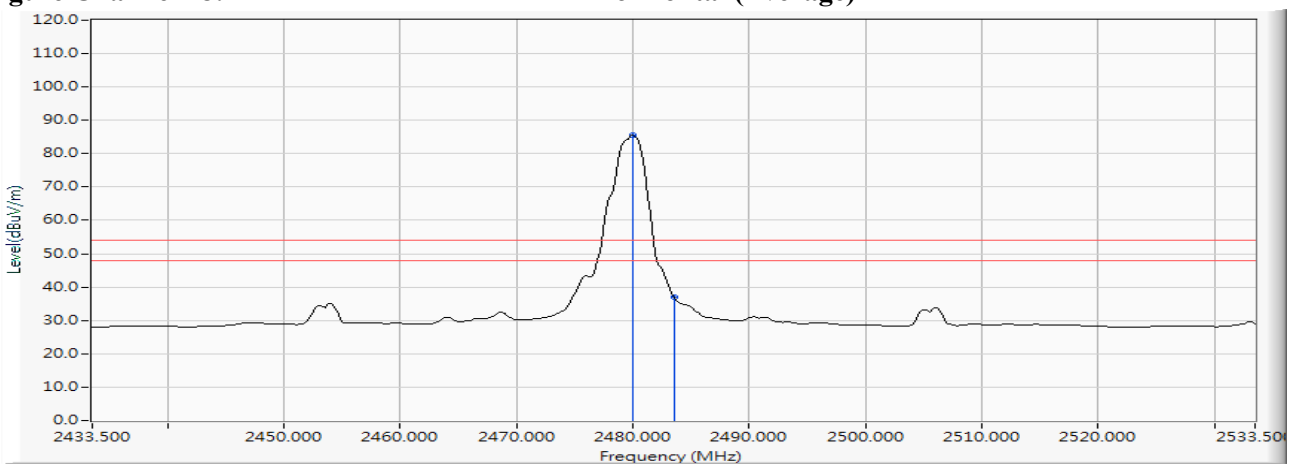


Figure Channel 78: Horizontal (Average)



Note:
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 1: Transmit - 1Mbps (2480MHz)
Test Date : 2018/10/20

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Arerage Limit (dBµV/m)	Result
78 (Peak)	2479.007	10.624	89.545	100.169	--	--	--
78 (Peak)	2483.500	10.640	44.939	55.580	74.00	54.00	Pass
78 (Peak)	2483.790	10.643	45.796	56.438	74.00	54.00	Pass
78 (Average)	2479.297	10.625	82.377	93.002	--	--	--
78 (Average)	2489.877	10.667	34.761	45.427	74.00	54.00	Pass

Figure Channel 78: VERTICAL (Peak)

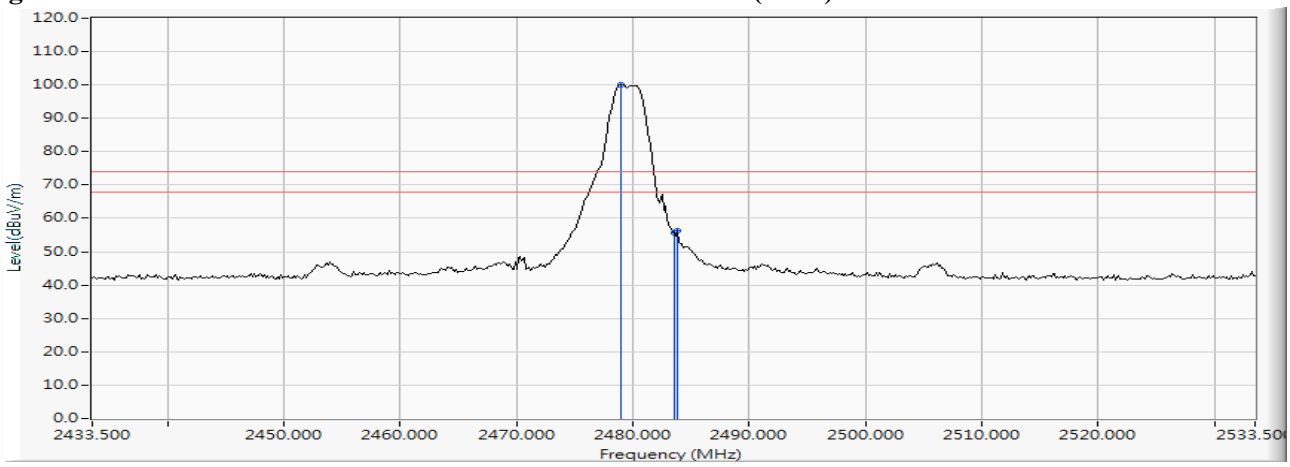
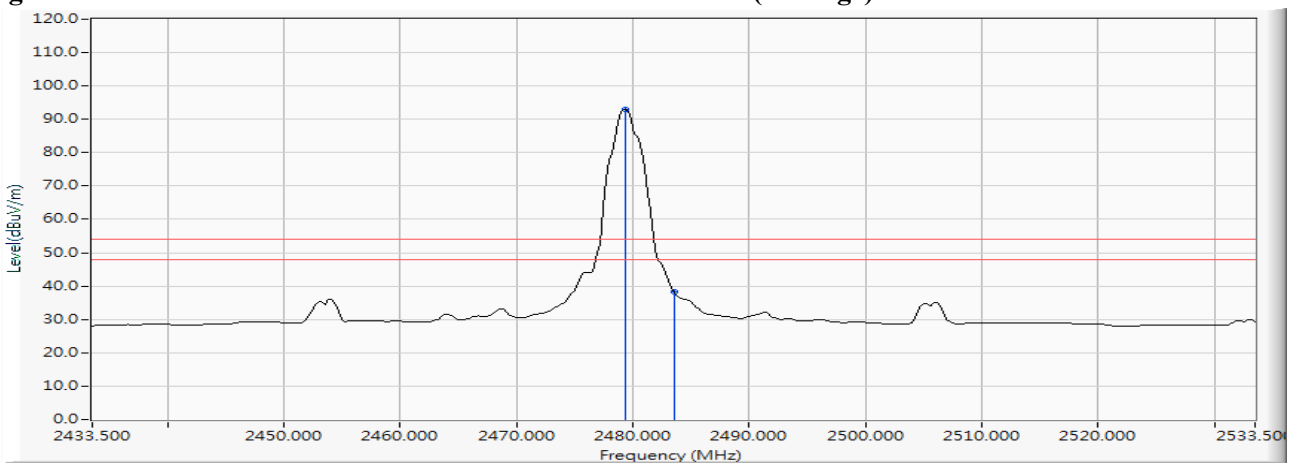


Figure Channel 78: VERTICAL (Average)



Note:
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 2: Transmit - 2Mbps (2402MHz)
Test Date : 2018/10/20

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
00 (Peak)	2376.100	10.205	32.215	42.420	74.00	54.00	Pass
00 (Peak)	2390.000	10.262	31.327	41.589	74.00	54.00	Pass
00 (Peak)	2400.000	10.304	56.340	66.643	--	--	--
00 (Peak)	2403.000	10.316	85.182	95.498	--	--	--
00 (Average)	2376.232	10.206	18.867	29.073	74.00	54.00	Pass
00 (Average)	2390.000	10.262	17.799	28.061	74.00	54.00	Pass
00 (Average)	2400.000	10.304	41.016	51.319	--	--	--
00 (Average)	2402.029	10.312	68.573	78.885	--	--	--

Figure Channel 00: Horizontal (Peak)

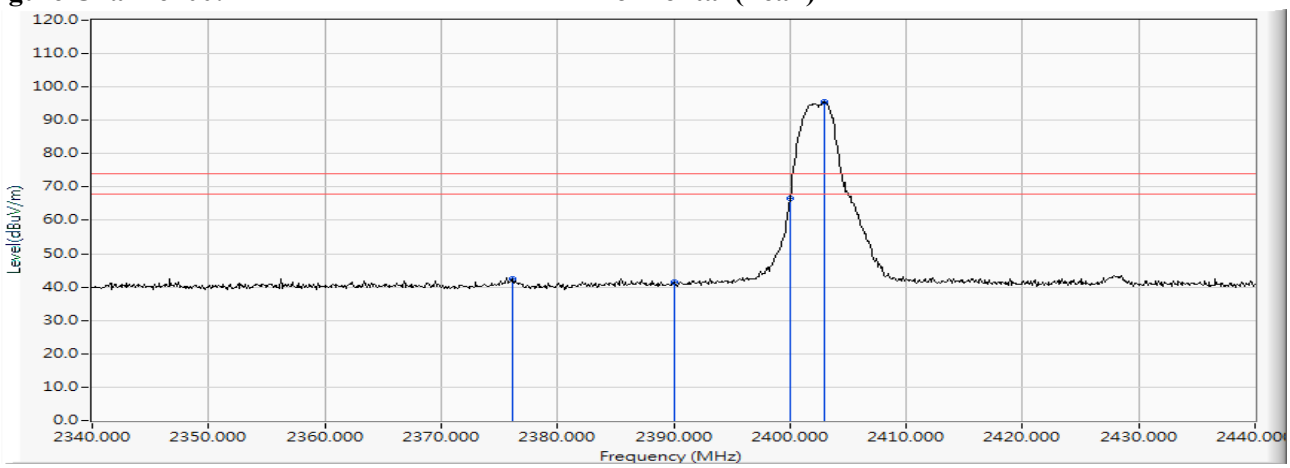
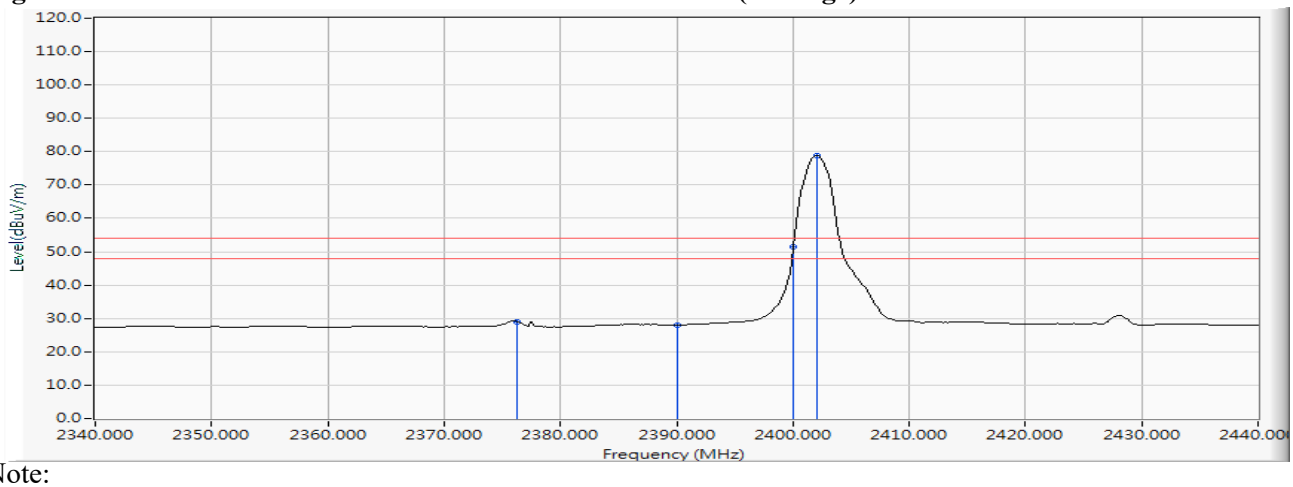


Figure Channel 00: Horizontal (Average)



Note:
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 2: Transmit - 2Mbps (2402MHz)
Test Date : 2018/10/20

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
00 (Peak)	2375.700	10.204	33.590	43.794	74.00	54.00	Pass
00 (Peak)	2390.000	10.262	31.836	42.098	74.00	54.00	Pass
00 (Peak)	2400.000	10.304	60.686	70.989	--	--	--
00 (Peak)	2403.200	10.317	89.182	99.499			
00 (Average)	2376.087	10.205	21.177	31.382	74.00	54.00	Pass
00 (Average)	2390.000	10.262	18.787	29.049	74.00	54.00	Pass
00 (Average)	2400.000	10.304	44.316	54.619	--	--	--
00 (Average)	2402.754	10.315	76.365	86.680	--	--	--

Figure Channel 00: VERTICAL (Peak)

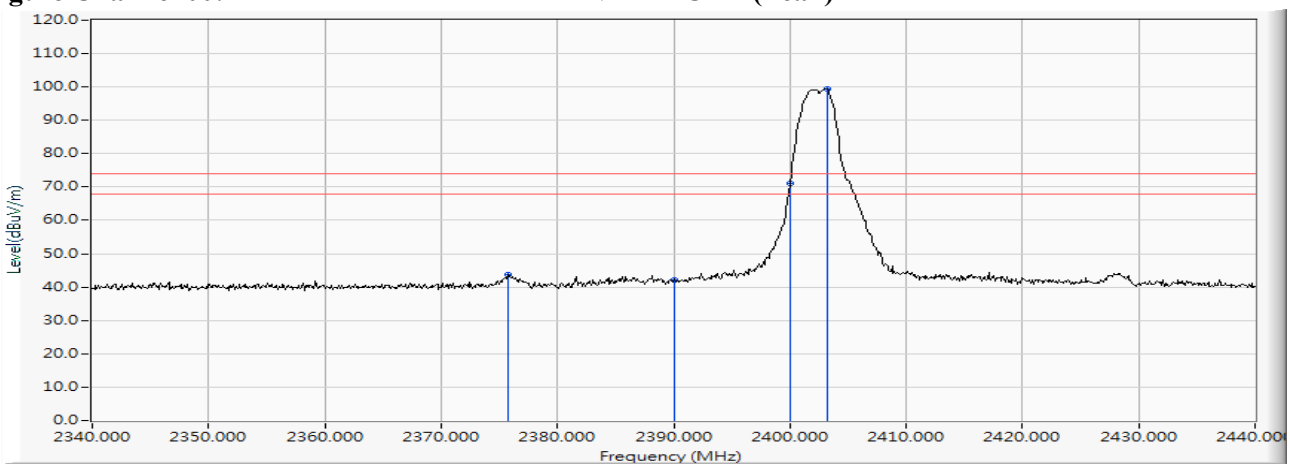
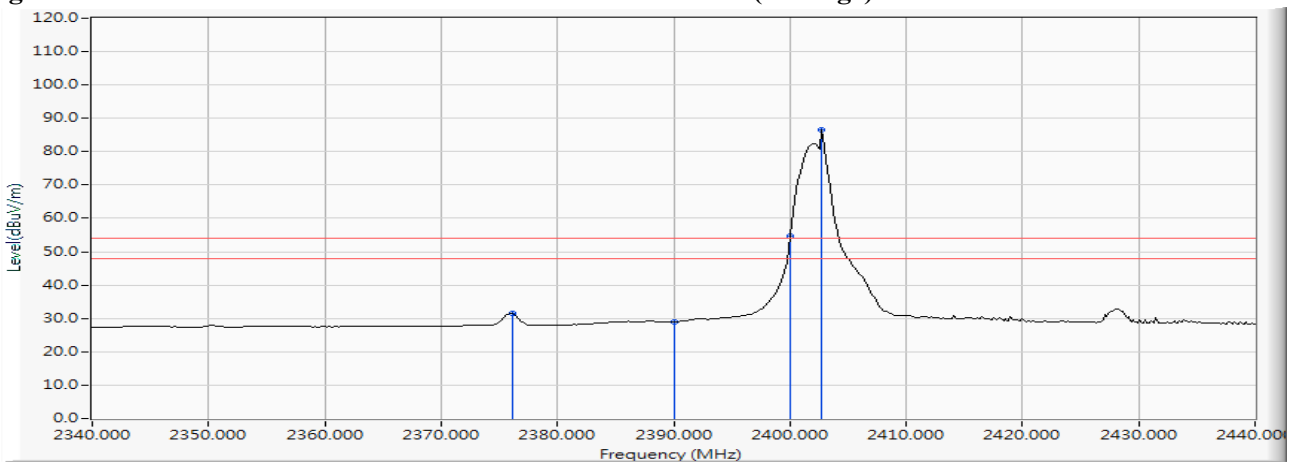


Figure Channel 00: VERTICAL (Average)



Note:
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 2: Transmit - 2Mbps (2480MHz)
Test Date : 2018/10/20

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
78 (Peak)	2479.900	10.628	83.343	93.970	--	--	--
78 (Peak)	2483.500	10.640	35.416	46.057	74.00	54.00	Pass
78 (Average)	2480.022	10.628	67.775	78.403	--	--	--
78 (Average)	2483.500	10.640	22.904	33.545	74.00	54.00	Pass

Figure Channel 78: Horizontal (Peak)

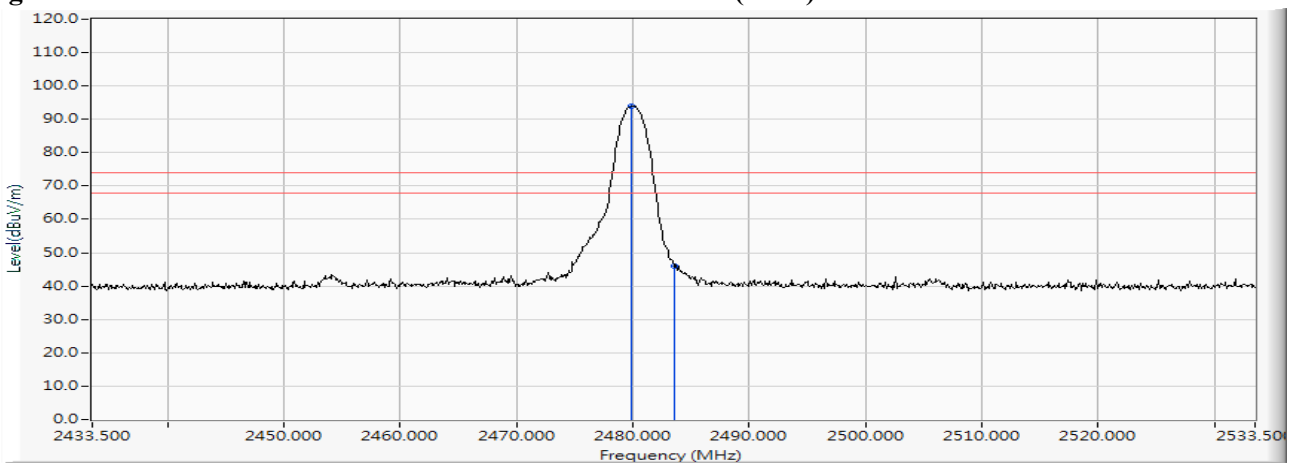
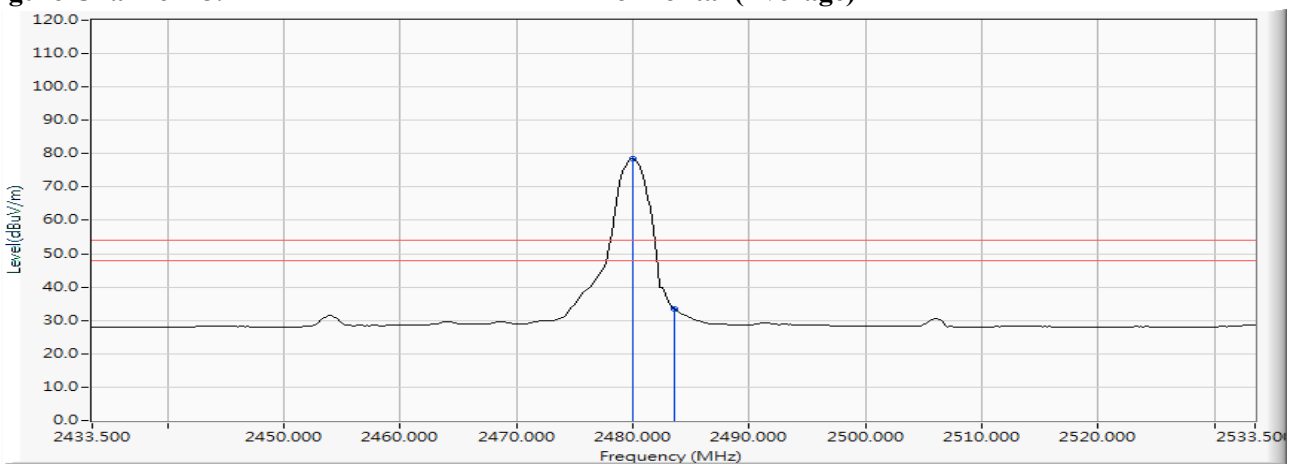


Figure Channel 78: Horizontal (Average)



Note:
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 2: Transmit - 2Mbps (2480MHz)
Test Date : 2018/10/20

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Arerage Limit (dBµV/m)	Result
78 (Peak)	2479.000	10.624	87.966	98.590	--	--	--
78 (Peak)	2483.500	10.640	41.555	52.196	74.00	54.00	Pass
78 (Peak)	2505.900	10.707	33.061	43.768	74.00	54.00	Pass
78 (Average)	2480.022	10.628	71.565	82.193	--	--	--
78 (Average)	2483.500	10.640	26.224	36.865	74.00	54.00	Pass

Figure Channel 78: VERTICAL (Peak)

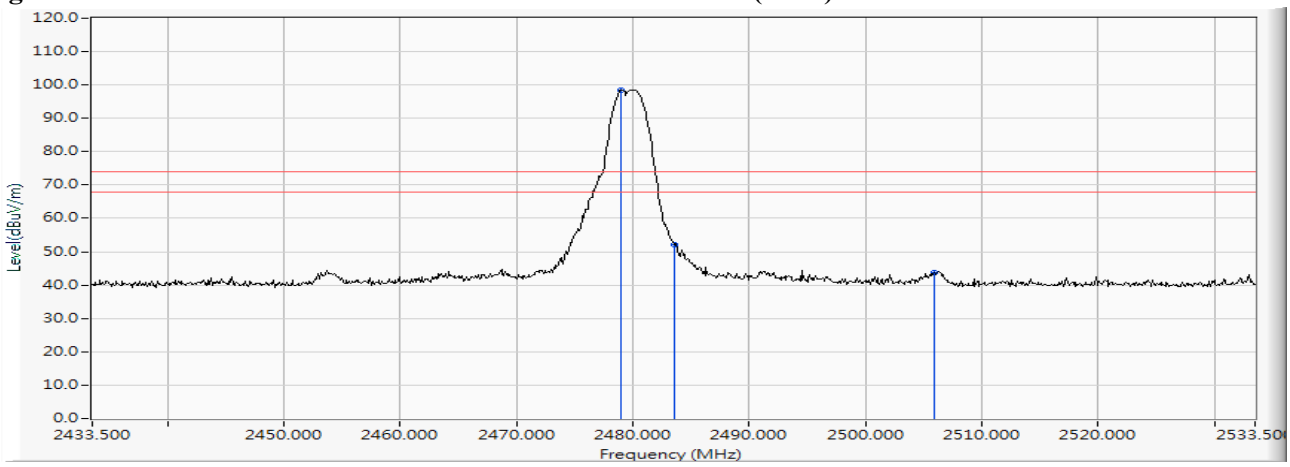
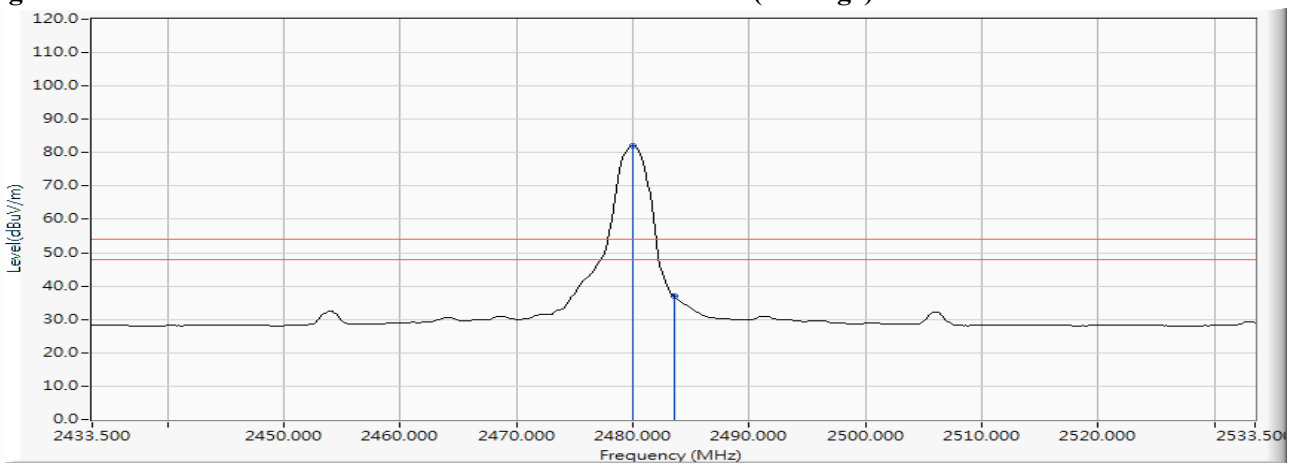


Figure Channel 78: VERTICAL (Average)



Note:
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 3: Transmit - 3Mbps (2402MHz)
Test Date : 2018/10/20

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
00 (Peak)	2375.942	10.205	32.992	43.197	74.00	54.00	Pass
00 (Peak)	2390.000	10.262	30.760	41.022	74.00	54.00	Pass
00 (Peak)	2400.000	10.304	58.443	68.746	--	--	--
00 (Peak)	2403.043	10.316	86.408	96.724	--	--	--
00 (Average)	2375.942	10.205	19.731	29.936	74.00	54.00	Pass
00 (Average)	2390.000	10.262	18.075	28.337	74.00	54.00	Pass
00 (Average)	2400.000	10.304	38.124	48.427	--	--	--
00 (Average)	2402.319	10.312	71.727	82.040	--	--	--

Figure Channel 00: Horizontal (Peak)

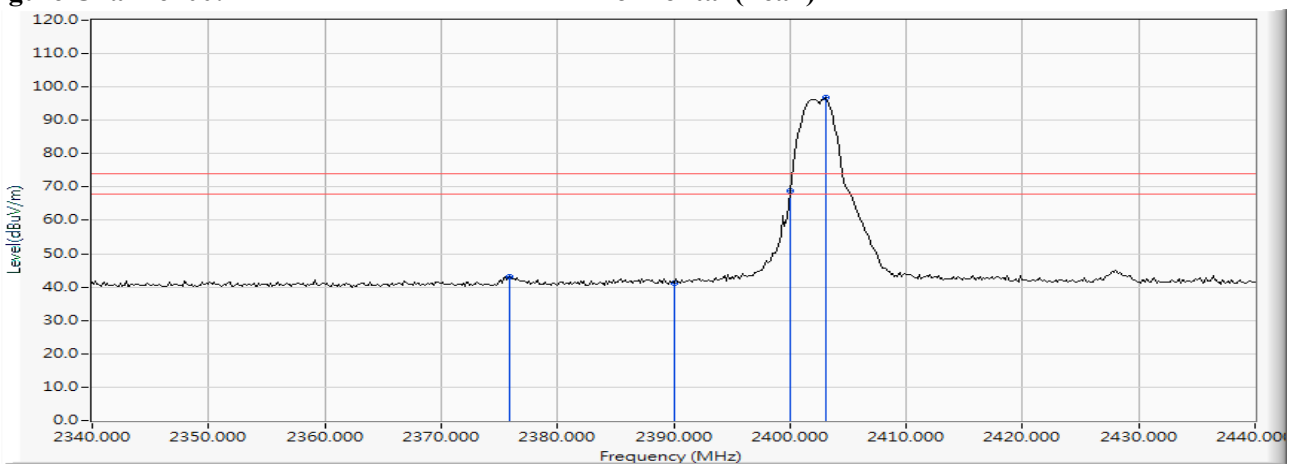
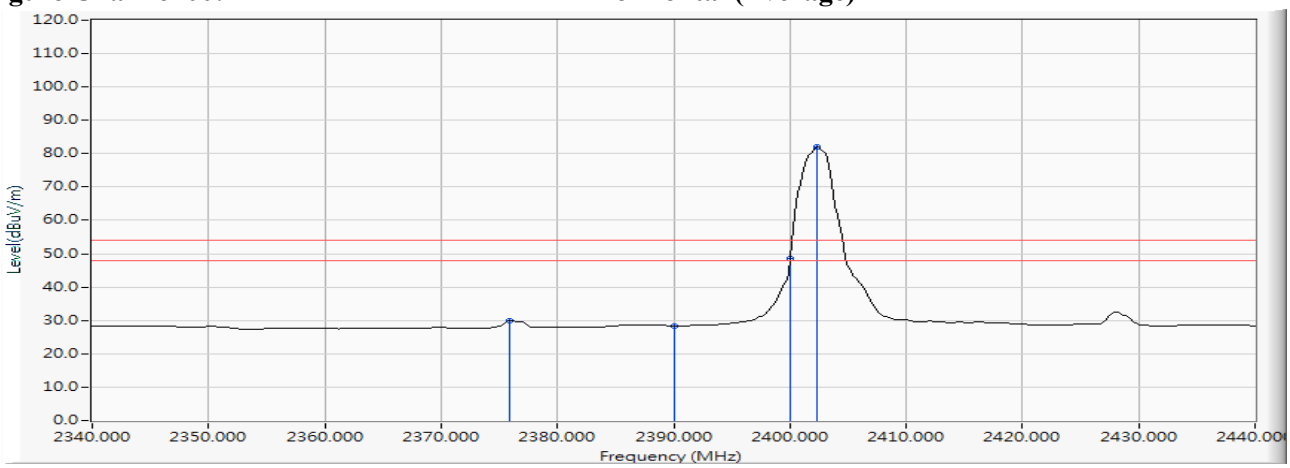


Figure Channel 00: Horizontal (Average)



Note:
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 3: Transmit - 3Mbps (2402MHz)
Test Date : 2018/10/20

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
00 (Peak)	2388.551	10.256	34.541	44.797	74.00	54.00	Pass
00 (Peak)	2390.000	10.262	31.829	42.091	74.00	54.00	Pass
00 (Peak)	2400.000	10.304	60.927	71.230	--	--	--
00 (Peak)	2402.754	10.315	88.969	99.284	--	--	--
00 (Average)	2376.812	10.207	21.200	31.408	74.00	54.00	Pass
00 (Average)	2390.000	10.262	19.035	29.297	74.00	54.00	Pass
00 (Average)	2400.000	10.304	40.659	50.962	--	--	--
00 (Average)	2402.319	10.312	75.398	85.711	--	--	--

Figure Channel 00: VERTICAL (Peak)

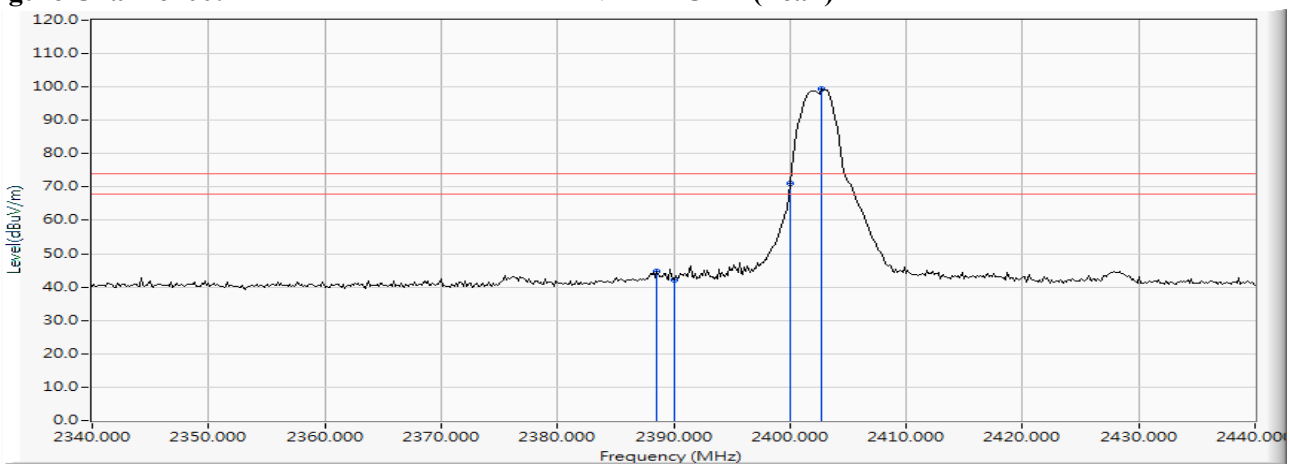
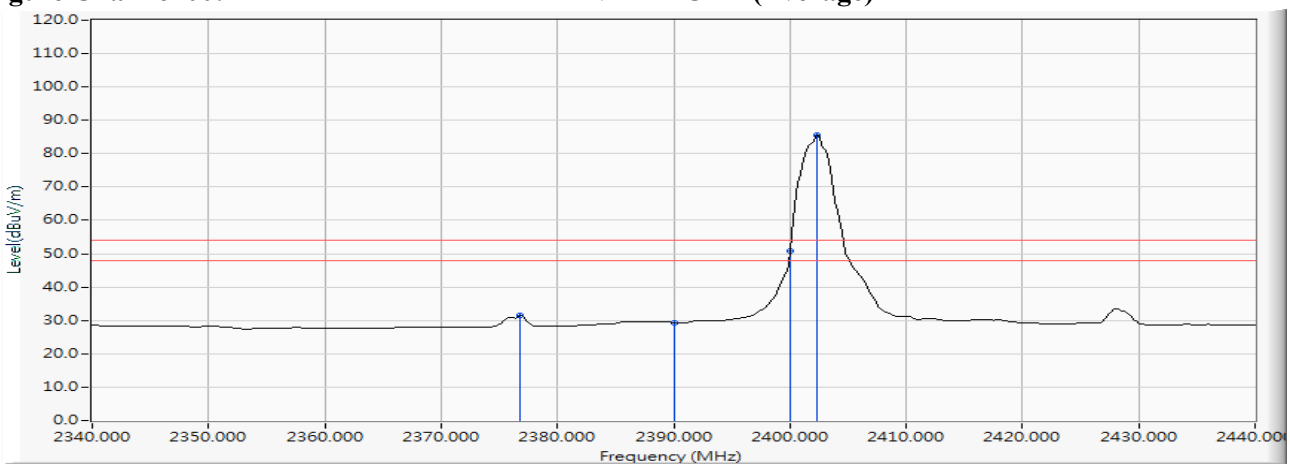


Figure Channel 00: VERTICAL (Average)



Note:
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 3: Transmit - 3Mbps (2480MHz)
Test Date : 2018/10/20

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
78 (Peak)	2479.297	10.625	74.132	84.757	--	--	--
78 (Peak)	2483.500	10.640	24.835	35.476	74.00	54.00	Pass
78 (Average)	2479.152	10.624	88.622	99.247	--	--	--
78 (Average)	2483.500	10.640	42.215	52.856	74.00	54.00	Pass

Figure Channel 00: Horizontal (Peak)

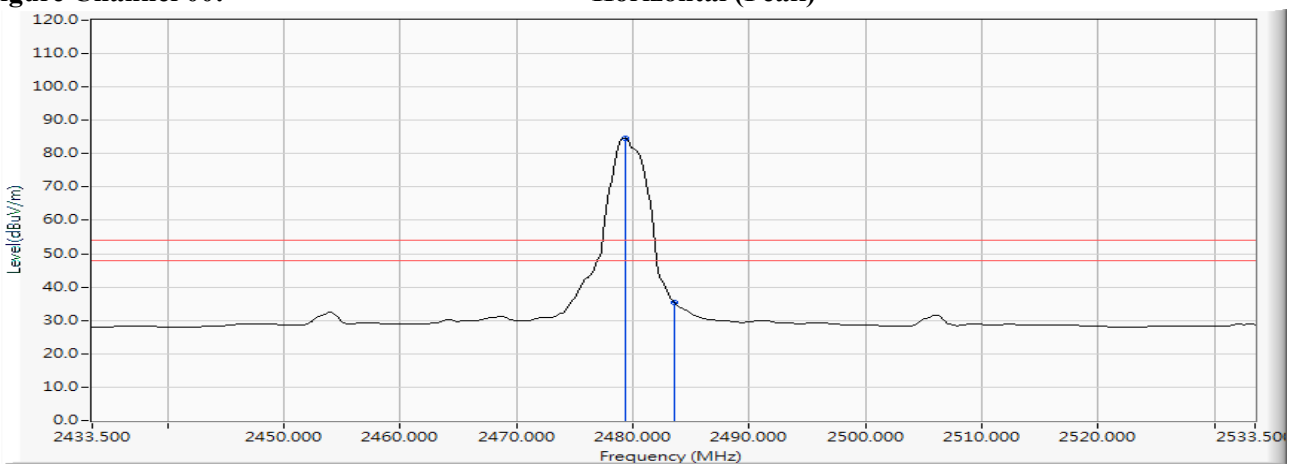
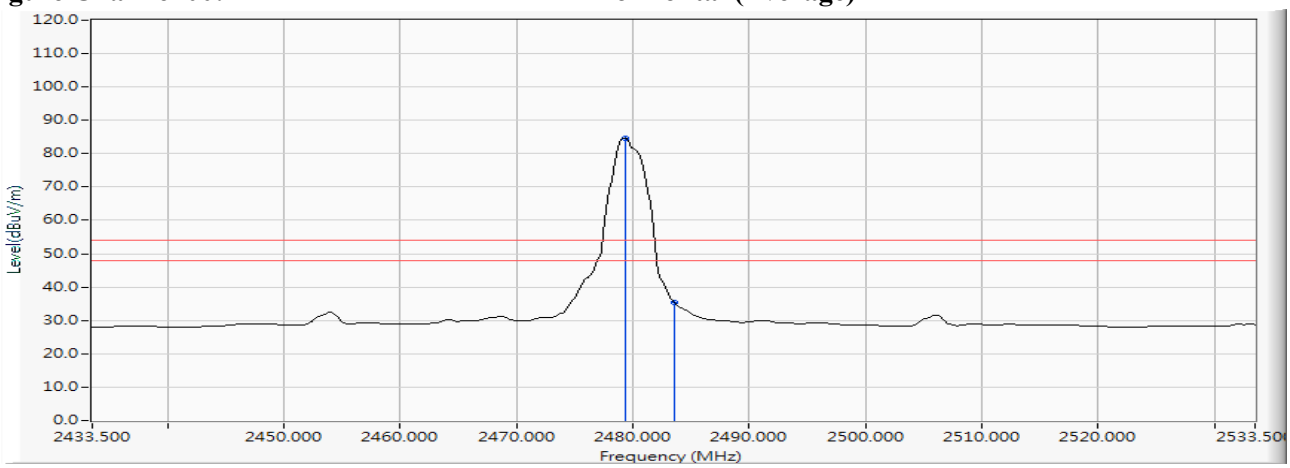


Figure Channel 00: Horizontal (Average)



Note:
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 3: Transmit - 3Mbps (2480MHz)
Test Date : 2018/10/20

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
78 (Peak)	2479.152	10.624	88.622	99.247	--	--	--
78 (Peak)	2483.500	10.640	42.215	52.856	74.00	54.00	Pass
78 (Average)	2479.442	10.625	73.197	83.823	--	--	--
78 (Average)	2483.500	10.640	25.957	36.598	74.00	54.00	Pass

Figure Channel 78: VERTICAL (Peak)

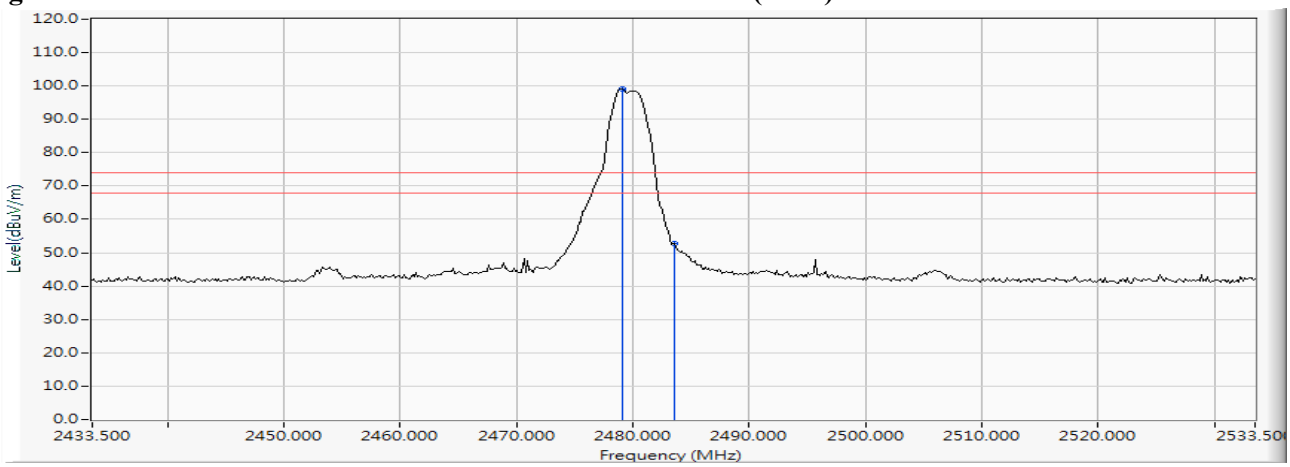
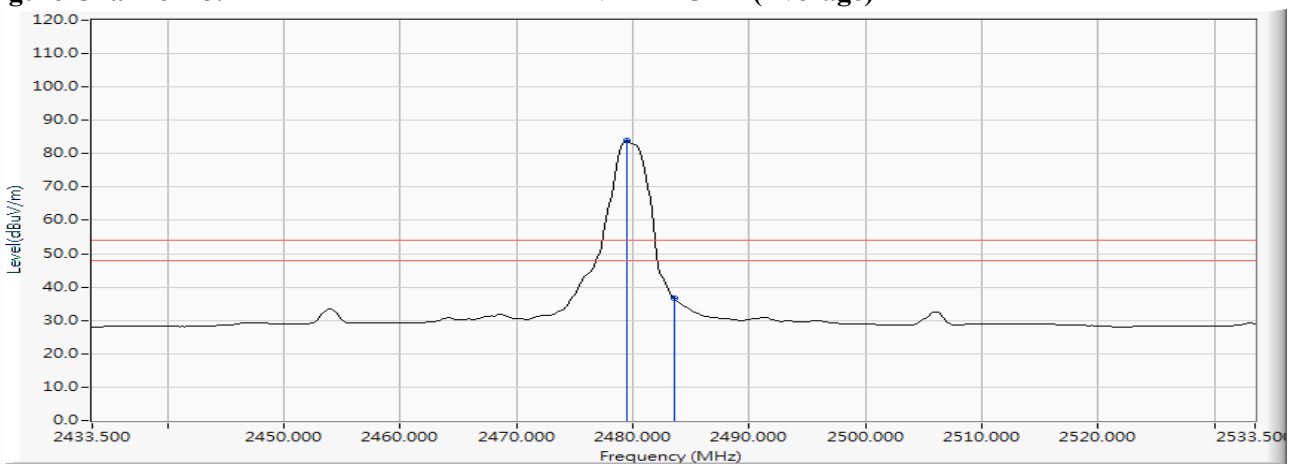


Figure Channel 78: VERTICAL (Average)



Note:
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 1: Transmit - 1Mbps(Hopping off)
Test Date : 2018/11/12

Measurement Level Δ (dB)	Result
> 20	PASS

Figure Channel 00:

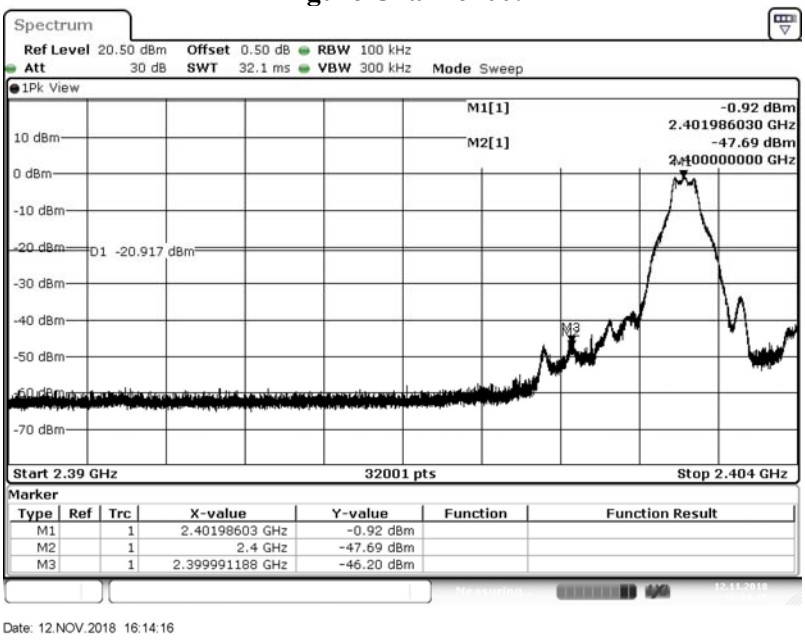
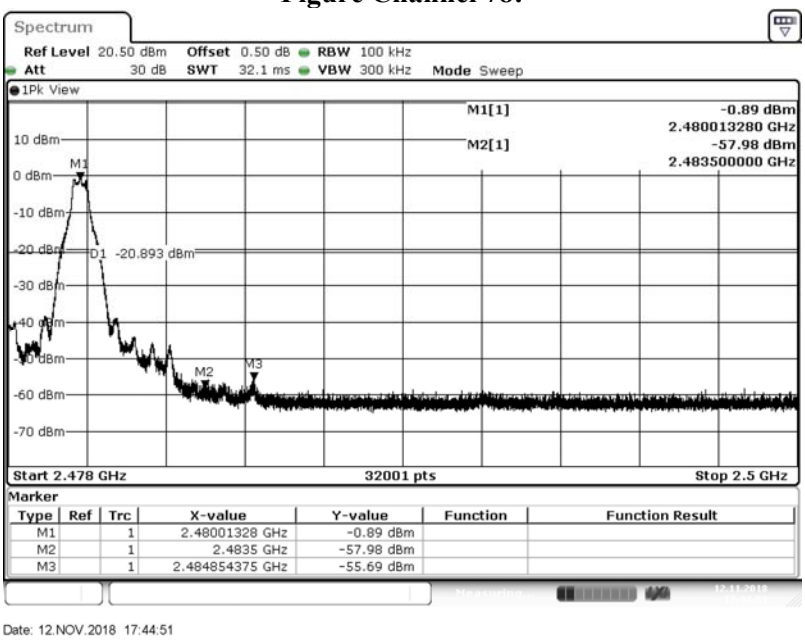


Figure Channel 78:



Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 2: Transmit - 2Mbps(Hopping off)
Test Date : 2018/11/12

Measurement Level Δ (dB)	Result
> 20	PASS

Figure Channel 00:

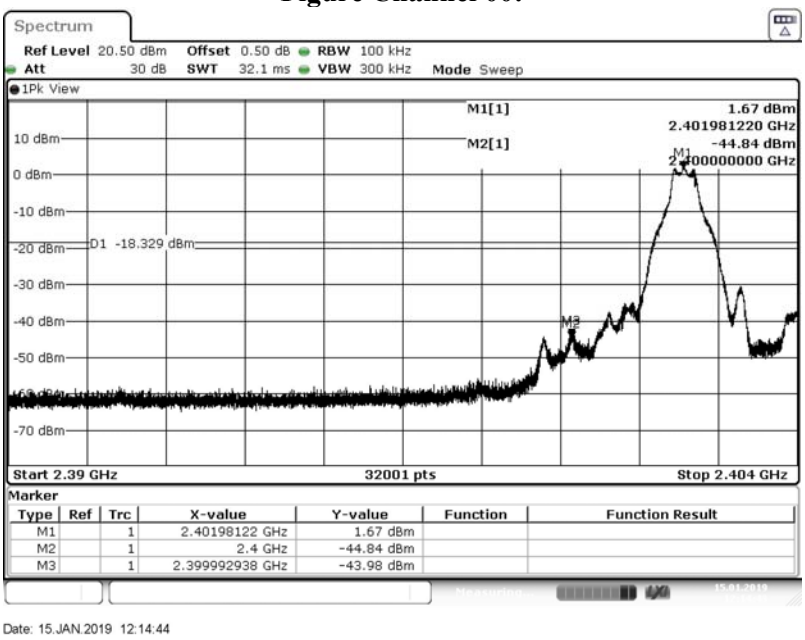
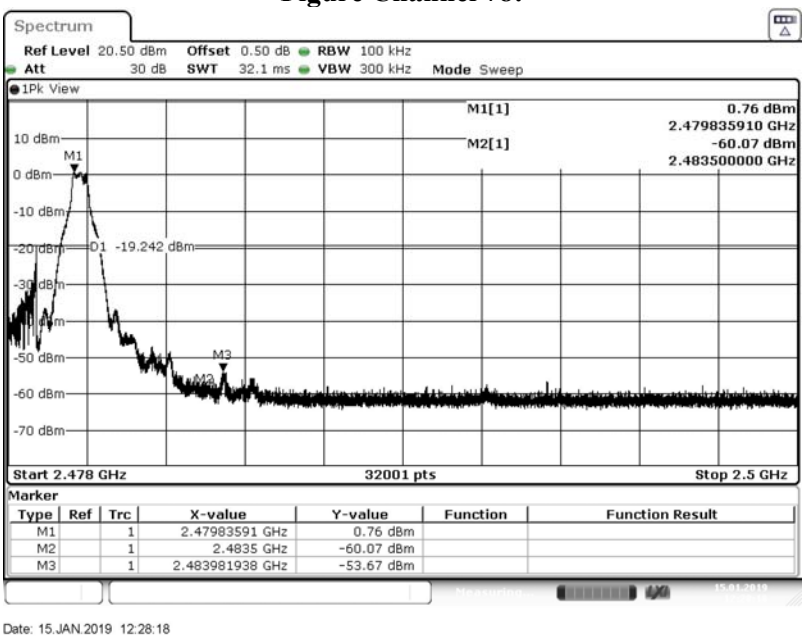


Figure Channel 78:



Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 3: Transmit - 3Mbps (Hopping off)
Test Date : 2018/11/12

Measurement Level Δ (dB)	Result
> 20	PASS

Figure Channel 00:

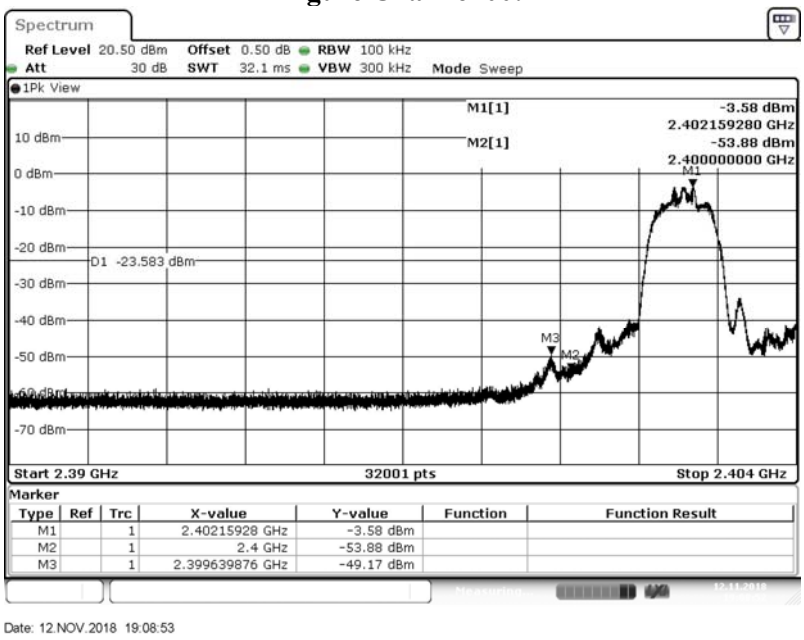
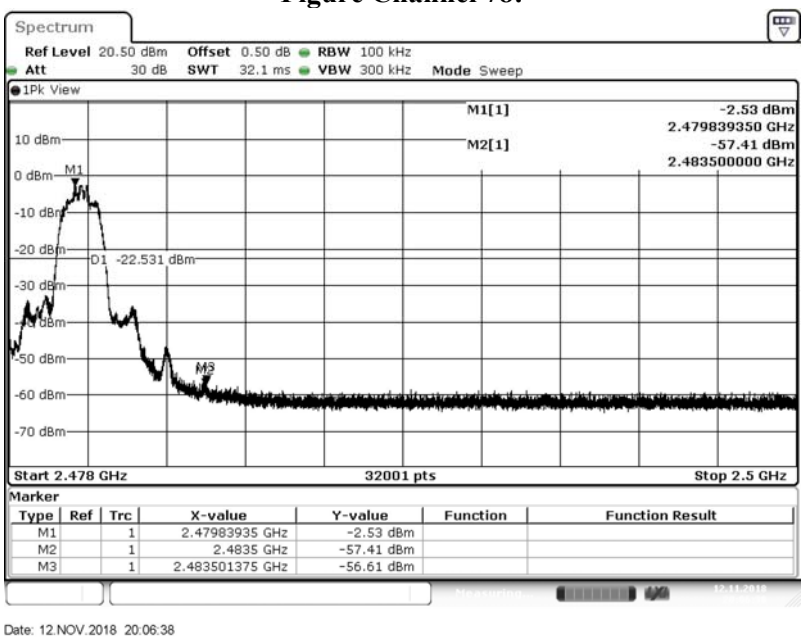


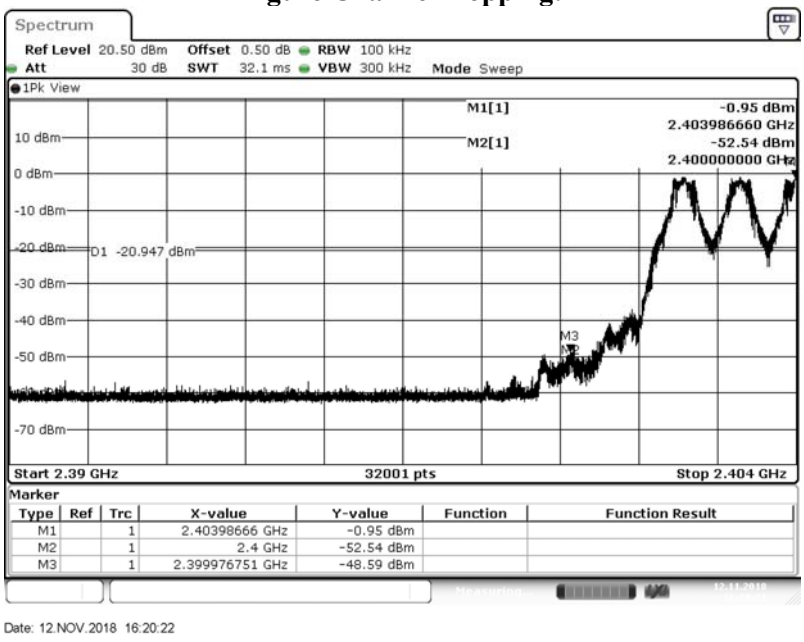
Figure Channel 78:



Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 1: Transmit - 1Mbps(Hopping on)
Test Date : 2018/10/20

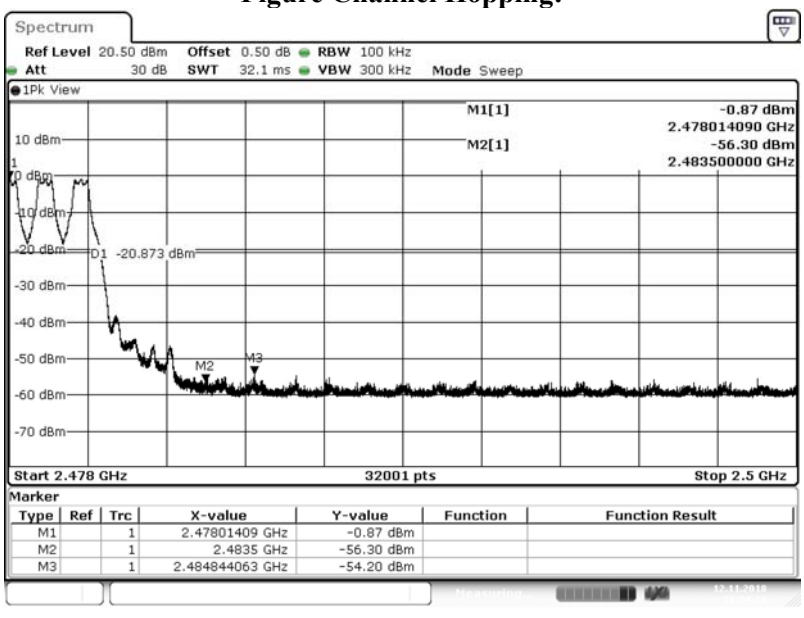
Measurement Level Δ (dB)	Result
> 20	PASS

Figure Channel Hopping:



Date: 12.NOV.2018 16:20:22

Figure Channel Hopping:

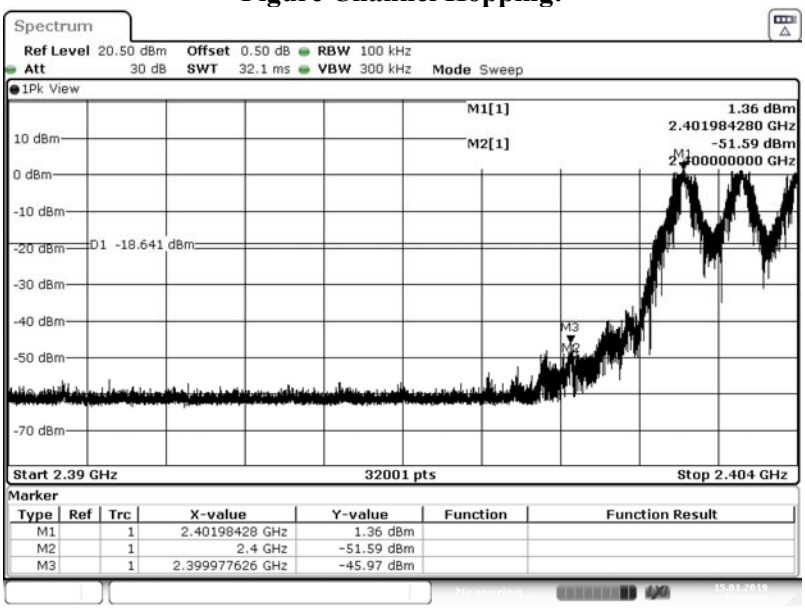


Date: 12.NOV.2018 18:34:14

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 2: Transmit - 2Mbps(Hopping on)
Test Date : 2018/10/20

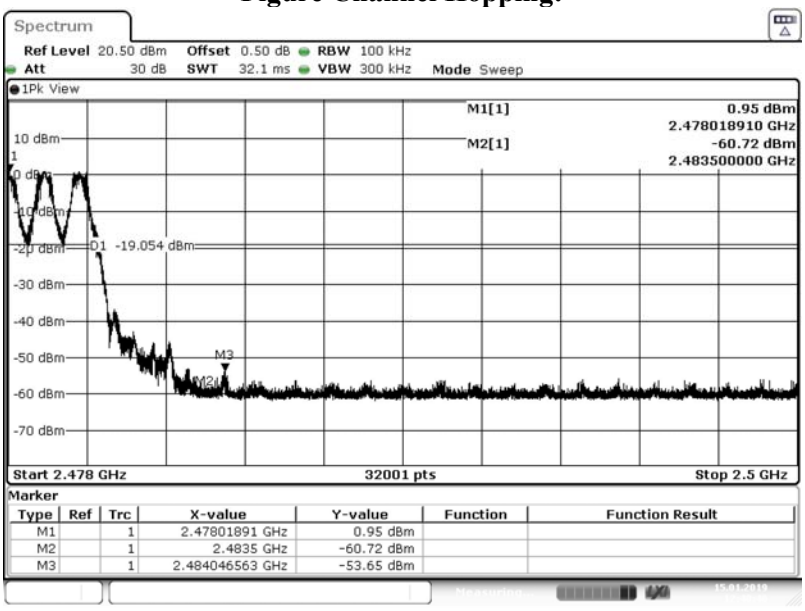
Measurement Level Δ (dB)	Result
> 20	PASS

Figure Channel Hopping:



Date: 15.JAN.2019 12:17:05

Figure Channel Hopping:

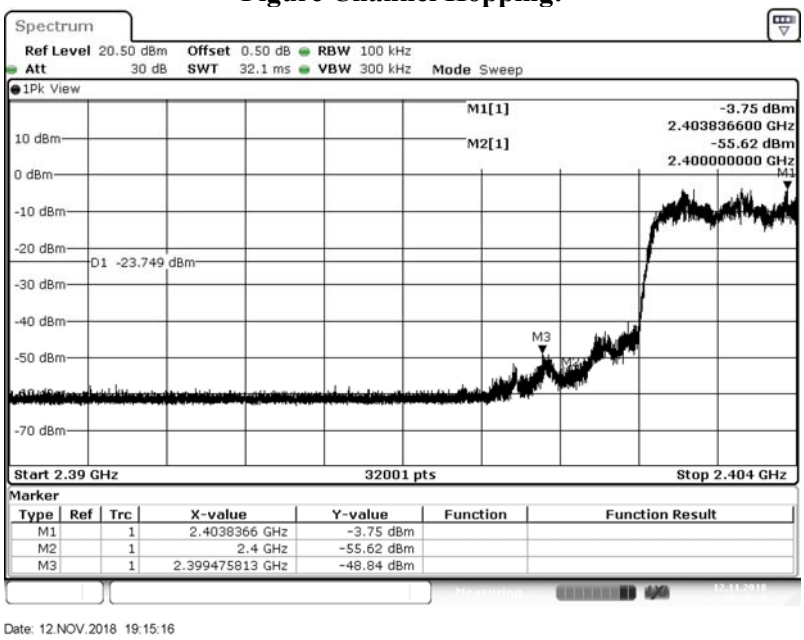


Date: 15.JAN.2019 12:40:40

Product : Transparent One Encore
Test Item : Band Edge
Test Mode : Mode 3: Transmit - 3Mbps (Hopping on)
Test Date : 2018/11/12

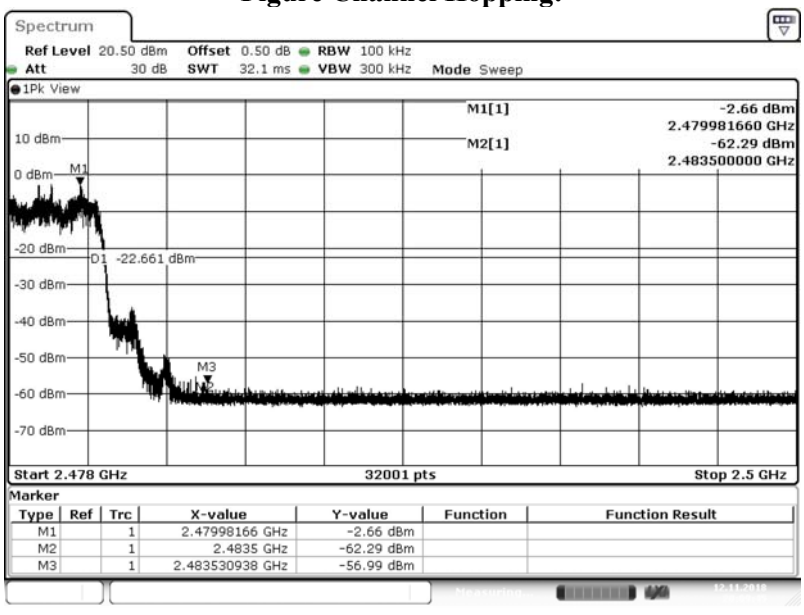
Measurement Level Δ (dB)	Result
> 20	PASS

Figure Channel Hopping:



Date: 12.NOV.2018 19:15:16

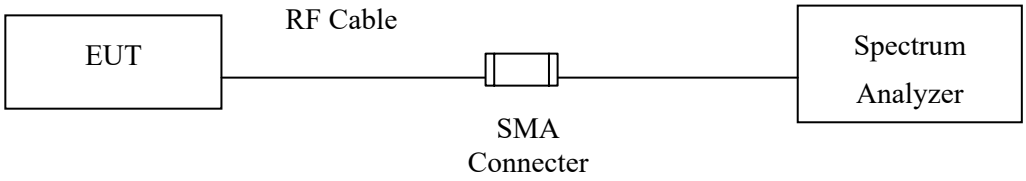
Figure Channel Hopping:



Date: 12.NOV.2018 20:09:45

7. Channel Number

7.1. Test Setup



7.2. Limit

Frequency hopping systems operating in the 2400-2483.5 MHz bands shall use at least 75 hopping frequencies.

7.3. Test Procedure

Tested according to FHSS test procedure of KDB558074 section 9 (b for compliance to FCC 47CFR 15.247 requirements.

7.4. Uncertainty

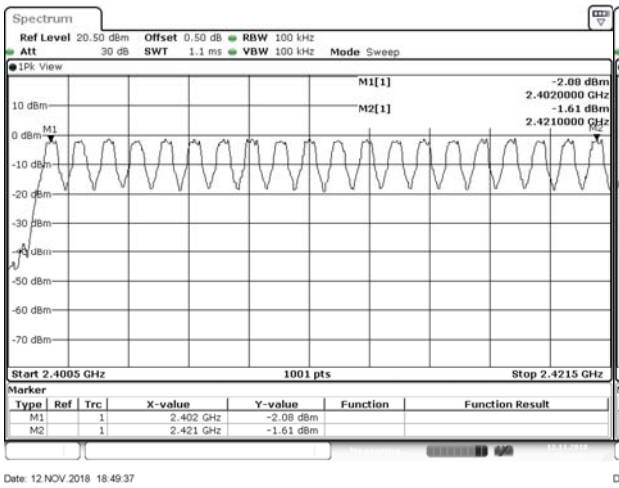
N/A

7.5. Test Result of Channel Number

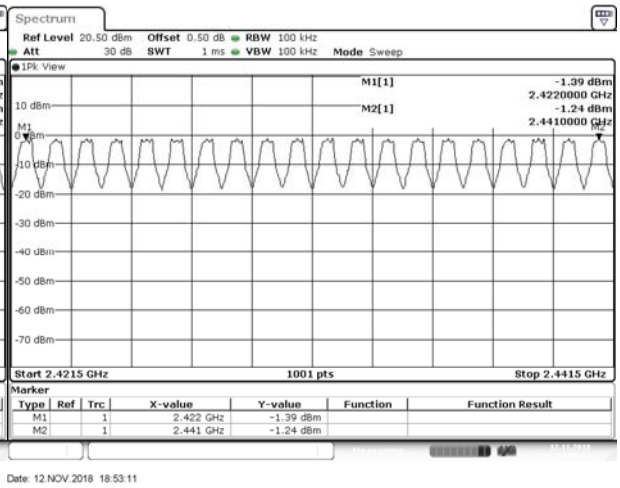
Product : Transparent One Encore
Test Item : Channel Number
Test Mode : Mode 1: Transmit - 1Mbps
Test Date : 2018/11/12

Frequency Range (MHz)	Measurement (Hopping Channel)	Required Limit (Hopping Channel)	Result
2402 ~ 2480	79	>75	Pass

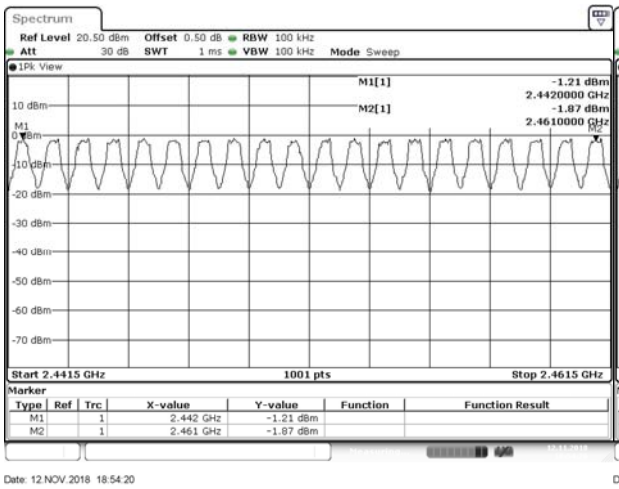
2402-2421MHz



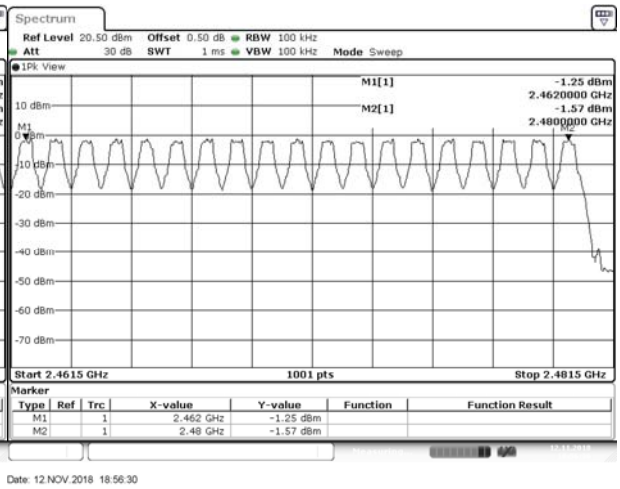
2422-2441MHz



2442-2461MHz



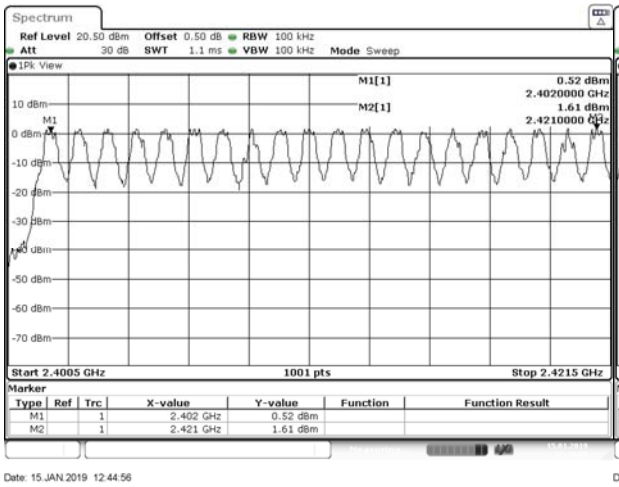
2462-2480MHz



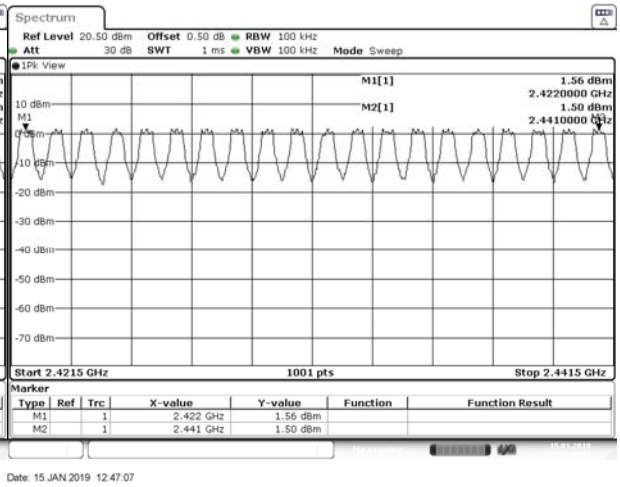
Product : Transparent One Encore
Test Item : Channel Number
Test Mode : Mode 2: Transmit - 2Mbps
Test Date : 2018/11/12

Frequency Range (MHz)	Measurement (Hopping Channel)	Required Limit (Hopping Channel)	Result
2402 ~ 2480	79	>75	Pass

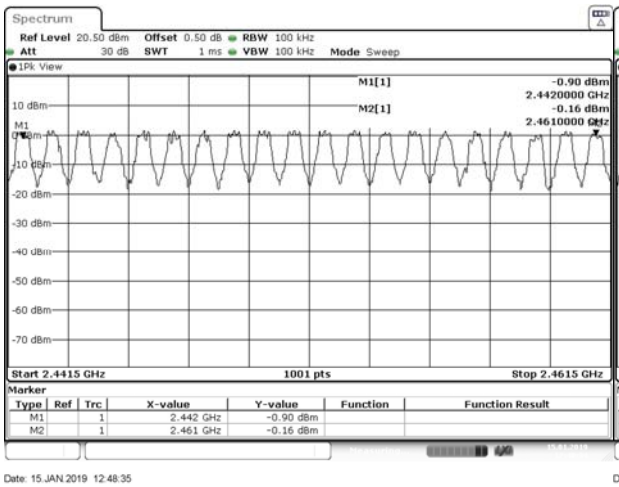
2402-2421MHz



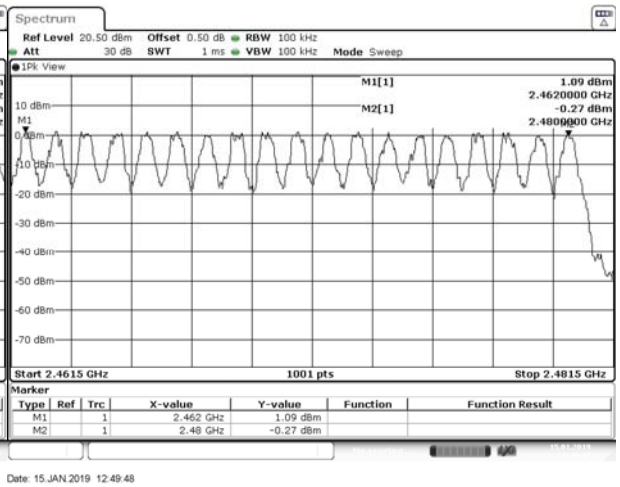
2422-2441MHz



2442-2461MHz



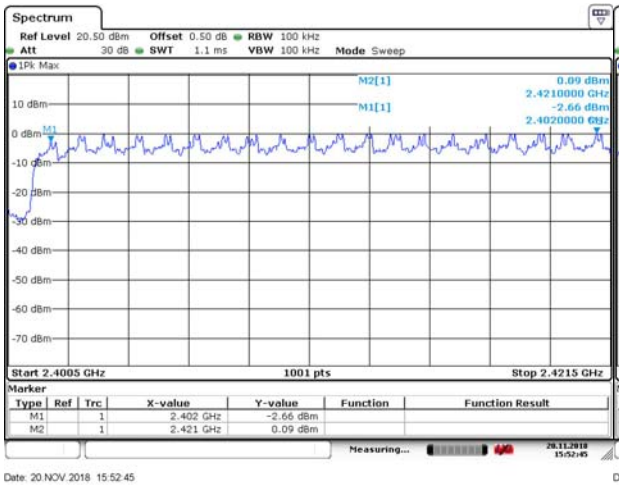
2462-2480MHz



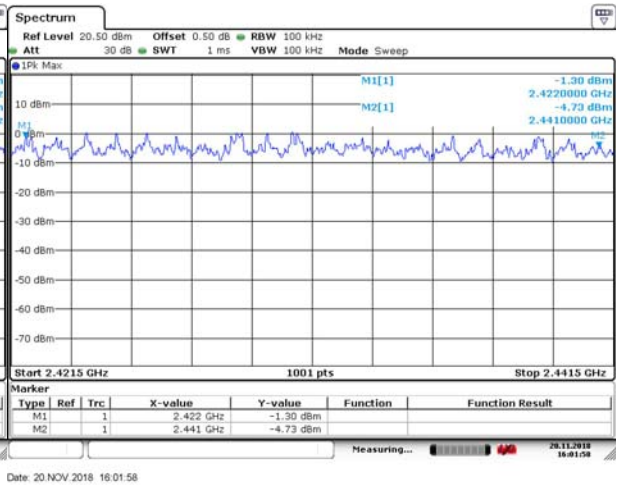
Product : Transparent One Encore
Test Item : Channel Number
Test Mode : Mode 3: Transmit - 3Mbps
Test Date : 2018/11/12

Frequency Range (MHz)	Measurement (Hopping Channel)	Required Limit (Hopping Channel)	Result
2402 ~ 2480	79	>75	Pass

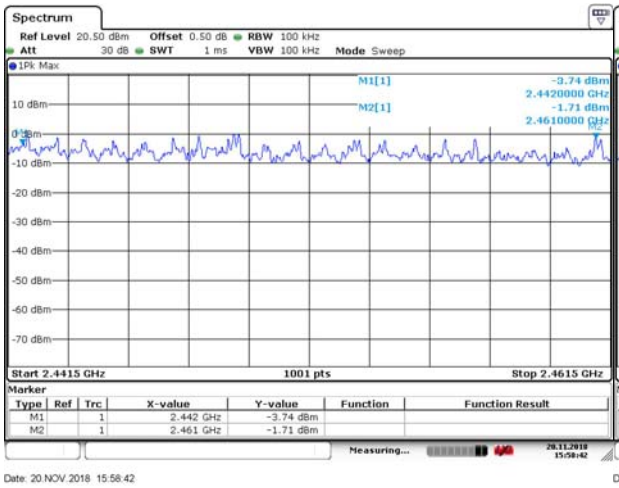
2402-2421MHz



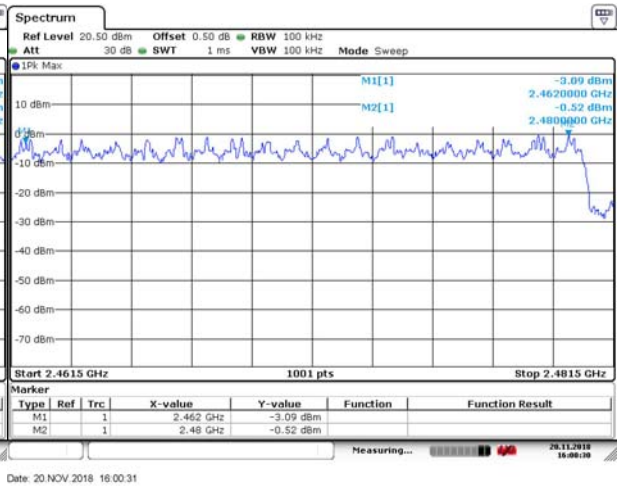
2422-2441MHz



2442-2461MHz

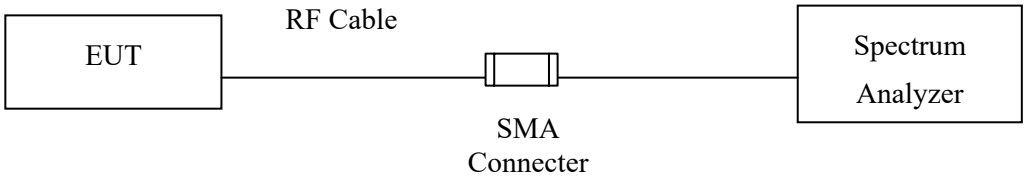


2462-2480MHz



8. Channel Separation

8.1. Test Setup



8.2. Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

8.3. Test Procedure

Tested according to FHSS test procedure of KDB558074 section 9 (b for compliance to FCC 47CFR 15.247 requirements.

8.4. Uncertainty

±279.2Hz

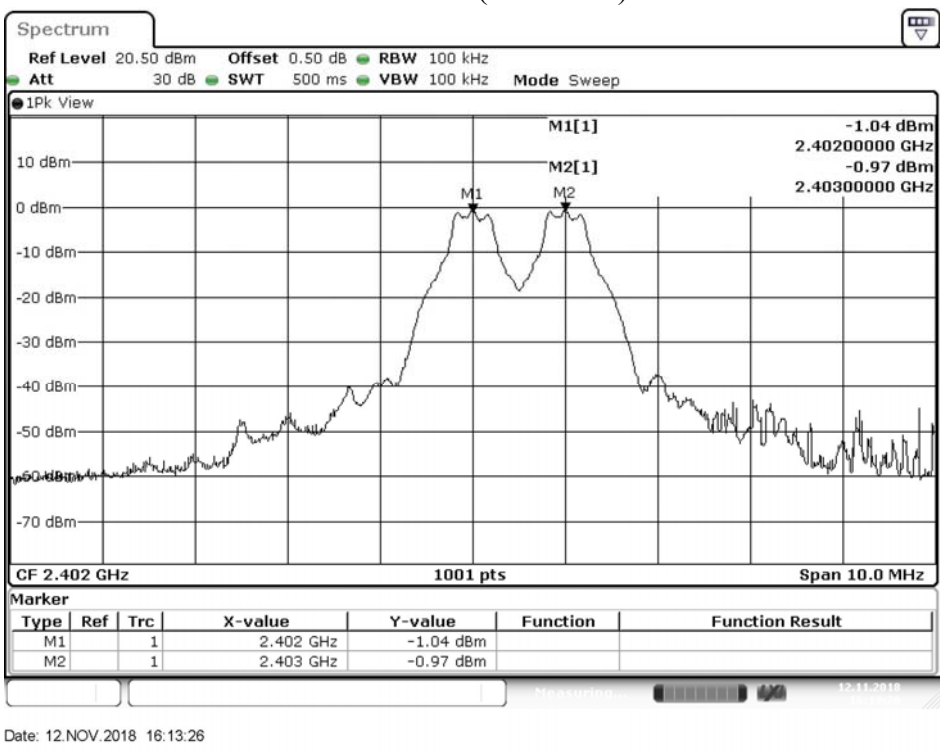
8.5. Test Result of Channel Separation

Product : Transparent One Encore
Test Item : Channel Separation
Test Mode : Mode 1: Transmit - 1Mbps
Test Date : 2018/11/12

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Limit (kHz)	Limit of (2/3)*20dB Bandwidth (kHz)	Result
00	2402	1000	>25 kHz	625.3	Pass
39	2441	1000	>25 kHz	621.3	Pass
78	2480	1000	>25 kHz	626.7	Pass

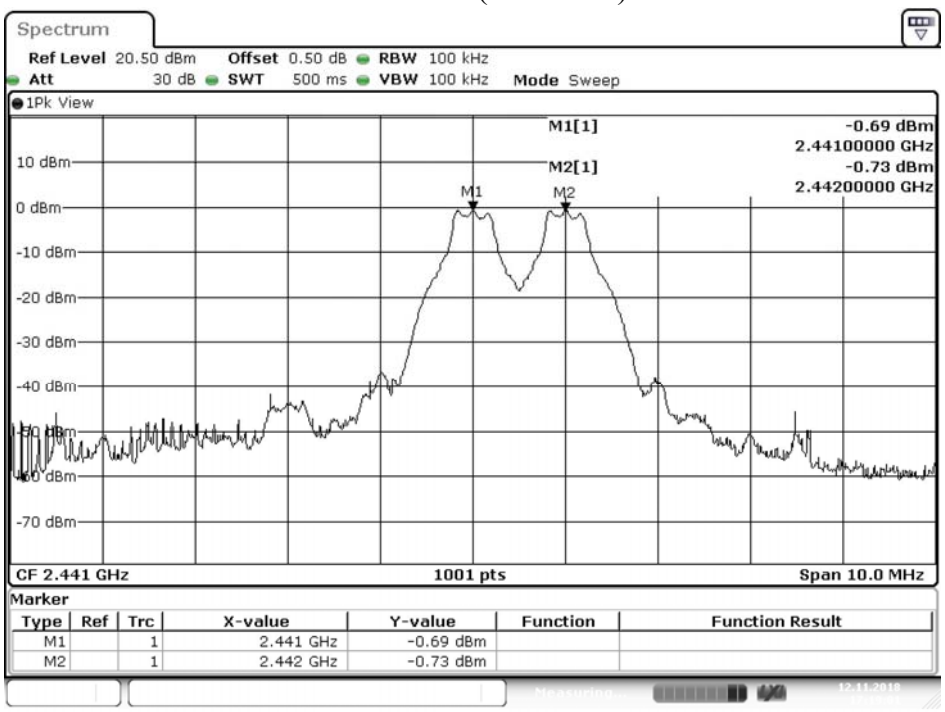
NOTE: The 20dB Bandwidth is refer to section 10.

Channel 00 (2402MHz)



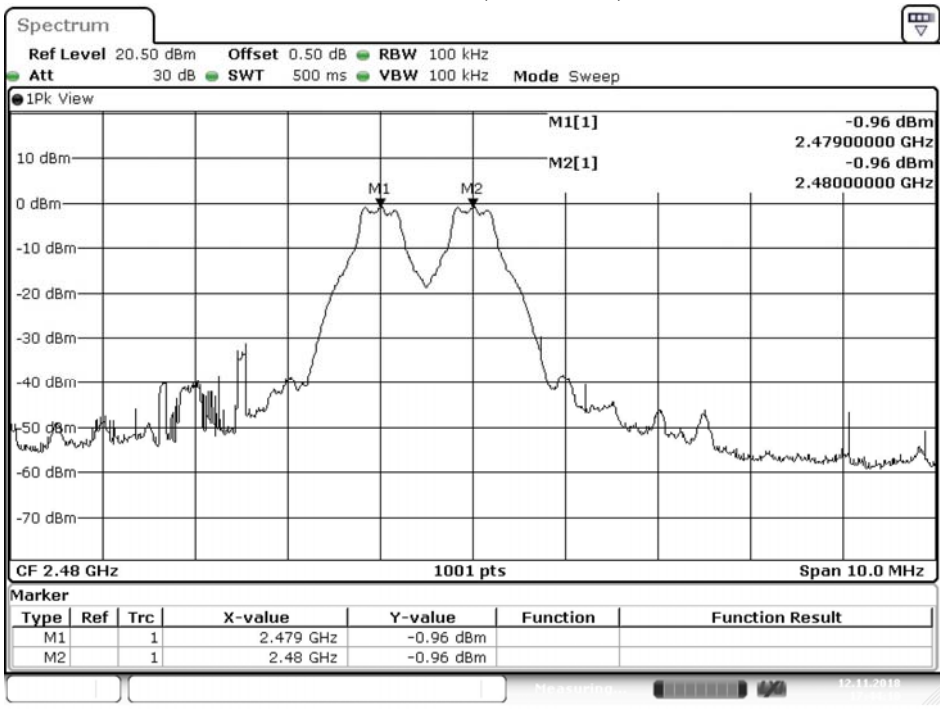
Date: 12.NOV.2018 16:13:26

Channel 39 (2441MHz)



Date: 12.NOV.2018 17:19:01

Channel 78 (2480MHz)



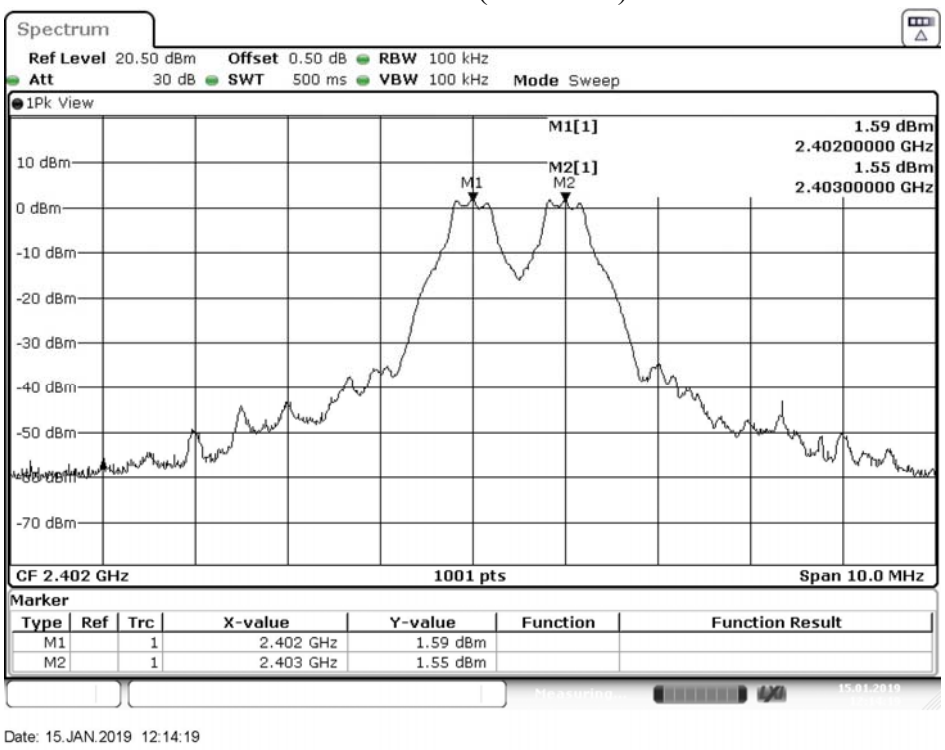
Date: 12.NOV.2018 17:44:10

Product : Transparent One Encore
Test Item : Channel Separation
Test Mode : Mode 2: Transmit - 2Mbps
Test Date : 2018/11/12

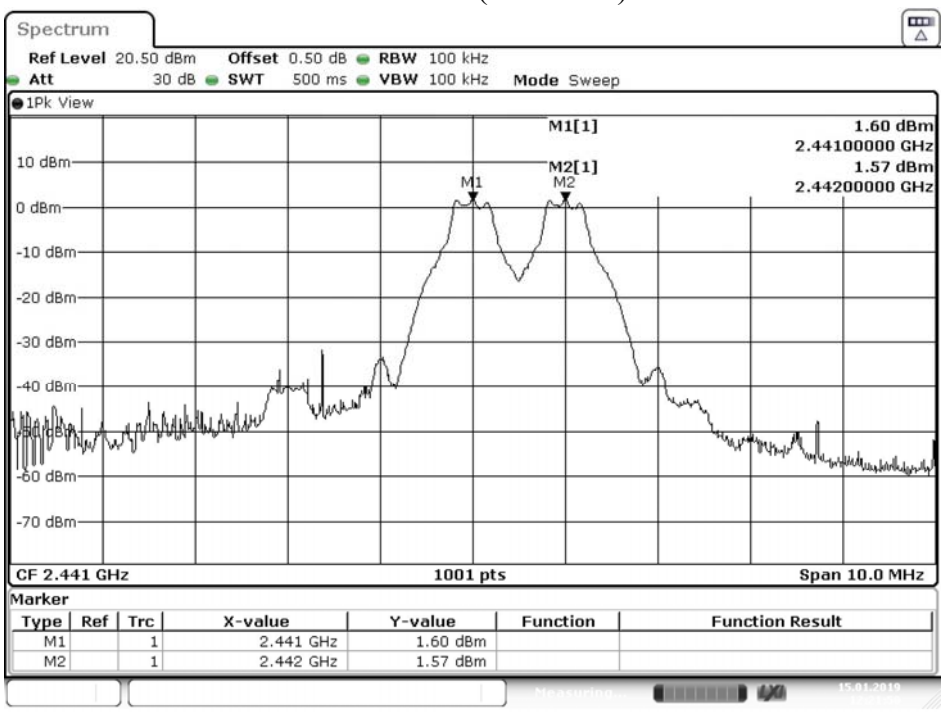
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Limit (kHz)	Limit of (2/3)*20dB Bandwidth (kHz)	Result
00	2402	1000	>25 kHz	828.7	Pass
39	2441	1000	>25 kHz	820.7	Pass
78	2480	1000	>25 kHz	824.7	Pass

NOTE: The 20dB Bandwidth is refer to section 10.

Channel 00 (2402MHz)

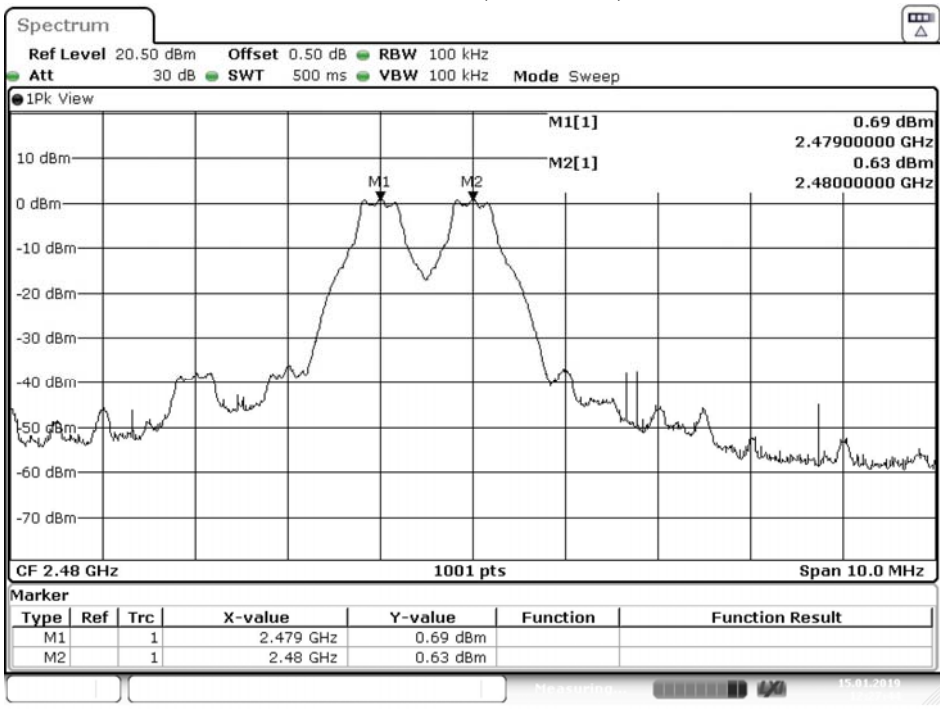


Channel 39 (2441MHz)



Date: 15.JAN.2019 12:21:51

Channel 78 (2480MHz)



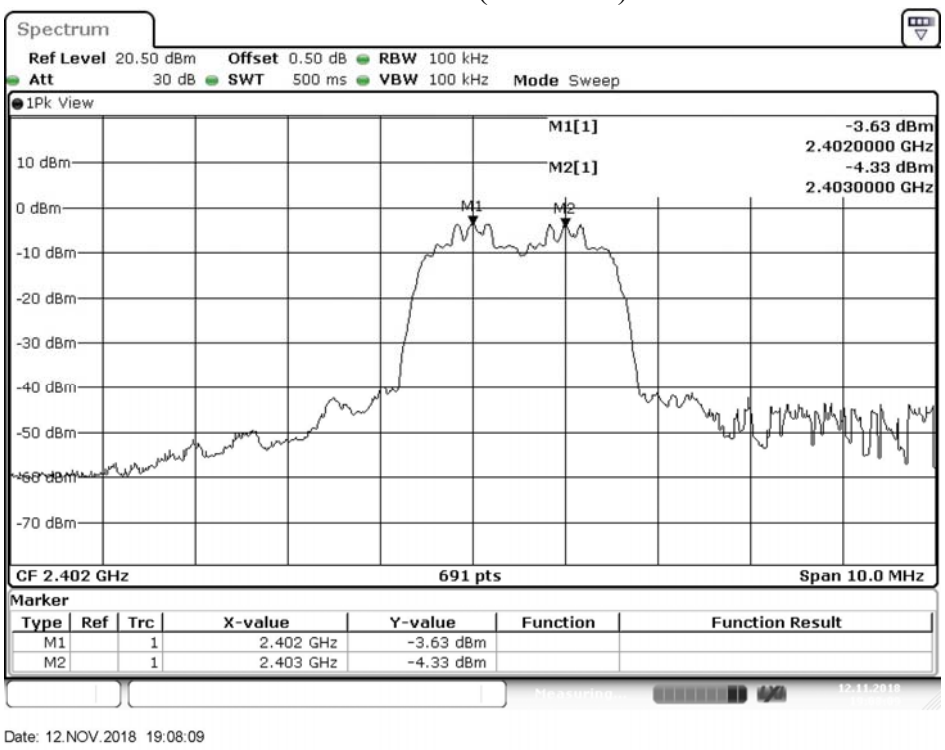
Date: 15.JAN.2019 12:27:44

Product : Transparent One Encore
Test Item : Channel Separation
Test Mode : Mode 3: Transmit - 3Mbps
Test Date : 2018/11/12

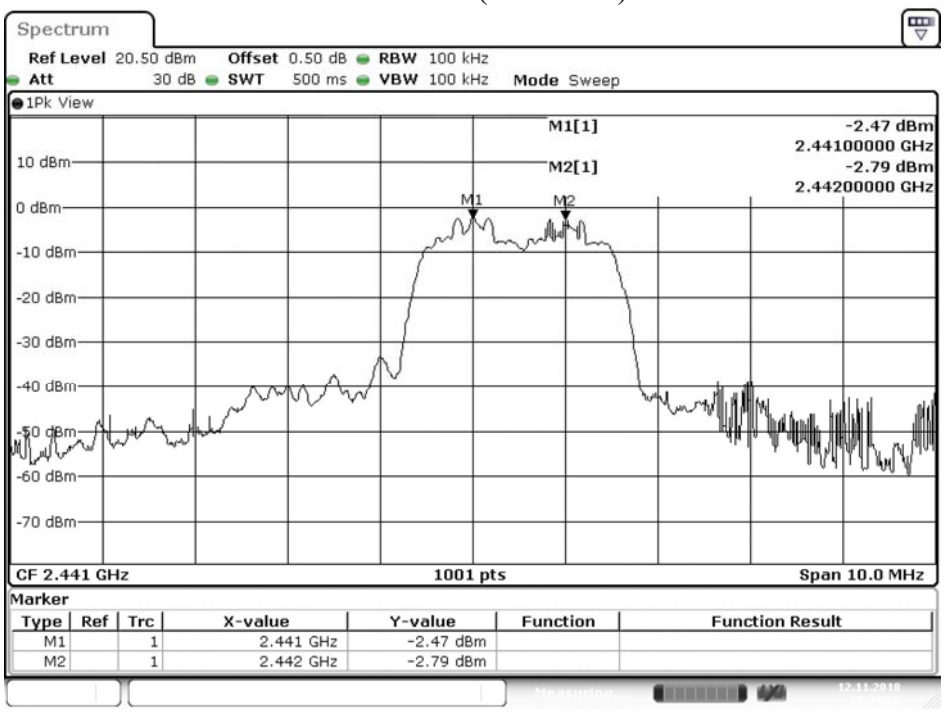
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Limit (kHz)	Limit of (2/3)*20dB Bandwidth (kHz)	Result
00	2402	1000	>25 kHz	840.0	Pass
39	2441	1000	>25 kHz	840.0	Pass
78	2480	1000	>25 kHz	840.0	Pass

NOTE: The 20dB Bandwidth is refer to section 10.

Channel 00 (2402MHz)

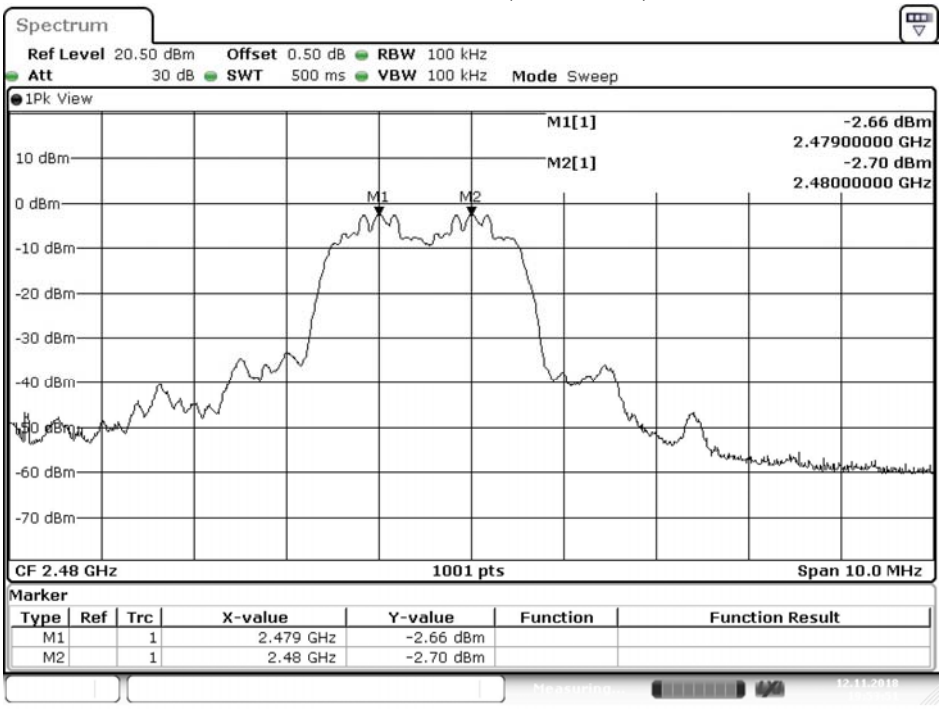


Channel 39 (2441MHz)



Date: 12.NOV.2018 19:34:21

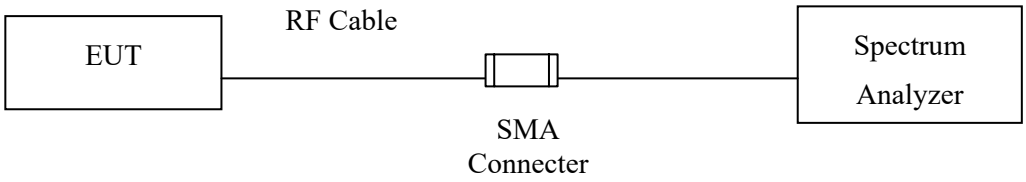
Channel 78 (2480MHz)



Date: 12.NOV.2018 19:53:51

9. Dwell Time

9.1. Test Setup



9.2. Limit

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

9.3. Test Procedure

Tested according to FHSS test procedure of KDB558074 section 9 (b for compliance to FCC 47CFR 15.247 requirements.

9.4. Uncertainty

±2.31msec

9.5. Test Result of Dwell Time

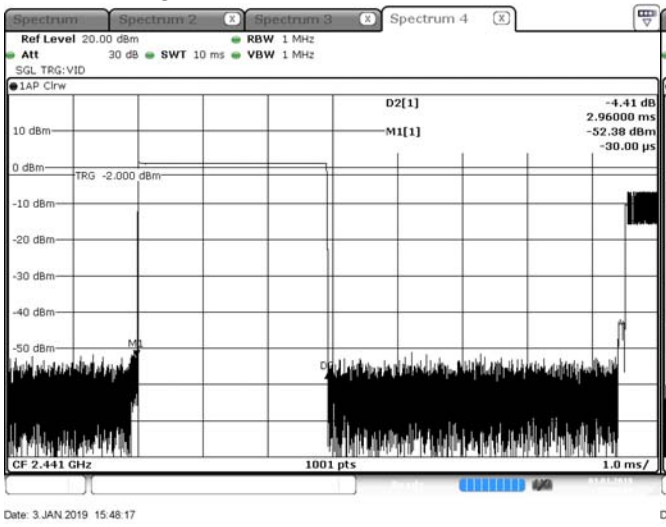
Product : Transparent One Encore
Test Item : Dwell Time
Test Mode : Mode 1: Transmit - 1Mbps
Test Date : 2019/01/03

Test Mode	Time slot length (ms)	Hopping of Number	Dwell Time (Sec)	Limit (Sec)	Result
Hopping	2.960	125	0.37000	0.4	Pass

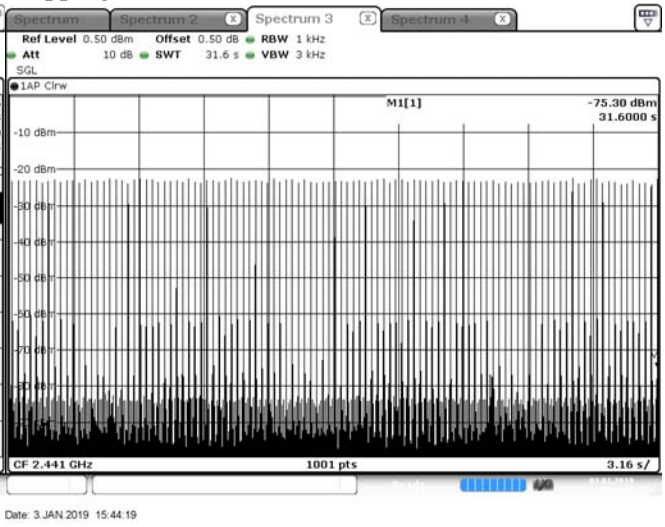
Observation time = 79*0.4 (Sec)=31.6 (Sec)

* Dwell time= Transmission Time (ms) * Number of hopping

Time slot length ……



.Hopping of Number



Note:

The dwell times of the packet type of DH1, DH3, and DH5 are tested. Only the worst case is shown on the report.

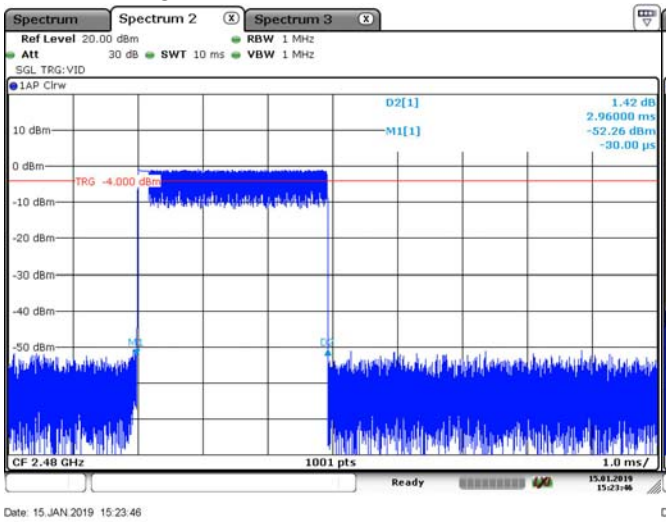
Product : Transparent One Encore
Test Item : Dwell Time
Test Mode : Mode 2: Transmit - 2Mbps
Test Date : 2019/01/03

Test Mode	Time slot length (ms)	Hopping of Number	Dwell Time (Sec)	Limit (Sec)	Result
Hopping	2.960	119	0.35224	0.4	Pass

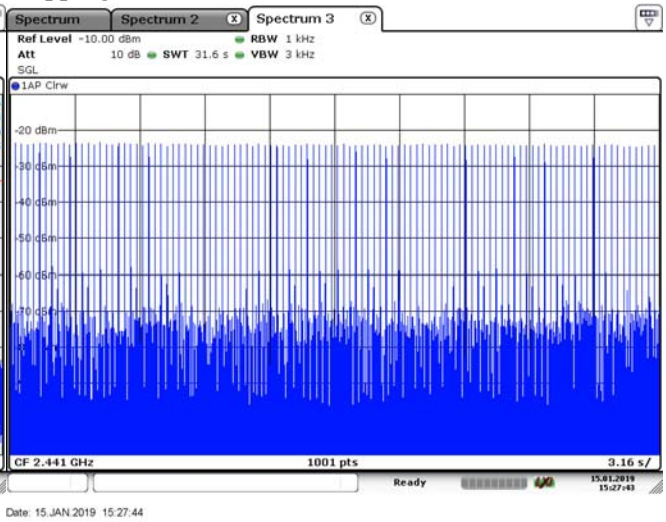
Observation time = 79*0.4 (Sec)=31.6 (Sec)

* Dwell time= Transmission Time (ms) * Number of hopping

Time slot length ……



.Hopping of Number



Note:

The dwell times of the packet type of DH1, DH3, and DH5 are tested. Only the worst case is shown on the report.

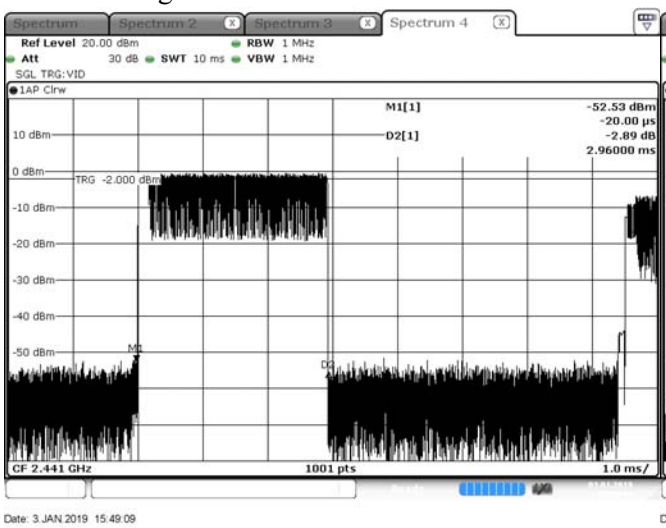
Product : Transparent One Encore
Test Item : Dwell Time
Test Mode : Mode 3: Transmit - 3Mbps
Test Date : 2019/01/03

Test Mode	Time slot length (ms)	Hopping of Number	Dwell Time (Sec)	Limit (Sec)	Result
Hopping	2.960	120	0.35520	0.4	Pass

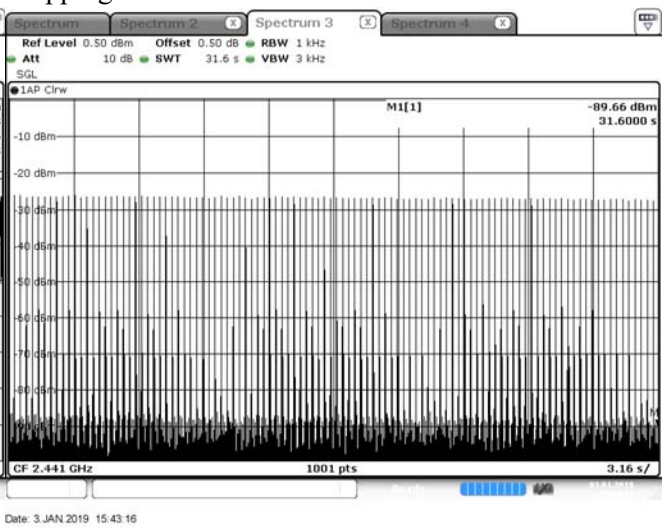
Observation time = 79*0.4 (Sec)=31.6 (Sec)

* Dwell time= Transmission Time (ms) * Number of hopping

Time slot length ……



.Hopping of Number

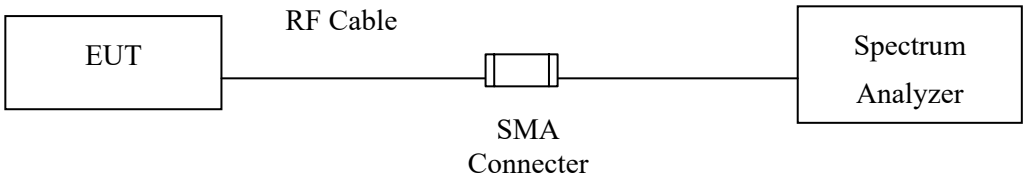


Note:

The dwell times of the packet type of DH1, DH3, and DH5 are tested. Only the worst case is shown on the report.

10. Occupied Bandwidth

10.1. Test Setup



10.2. Limits

N/A

10.3. Test Procedure

Tested according to FHSS test procedure of KDB558074 section 9 (b for compliance to FCC 47CFR 15.247 requirements.

10.4. Uncertainty

±279.2Hz

10.5. Test Result of Occupied Bandwidth

Product : Transparent One Encore
Test Item : Occupied Bandwidth Data
Test Mode : Mode 1: Transmit - 1Mbps
Test Date : 2018/11/13

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
00	2402	938	--	NA
39	2441	932	--	NA
78	2480	939	--	NA

Figure Channel 00:

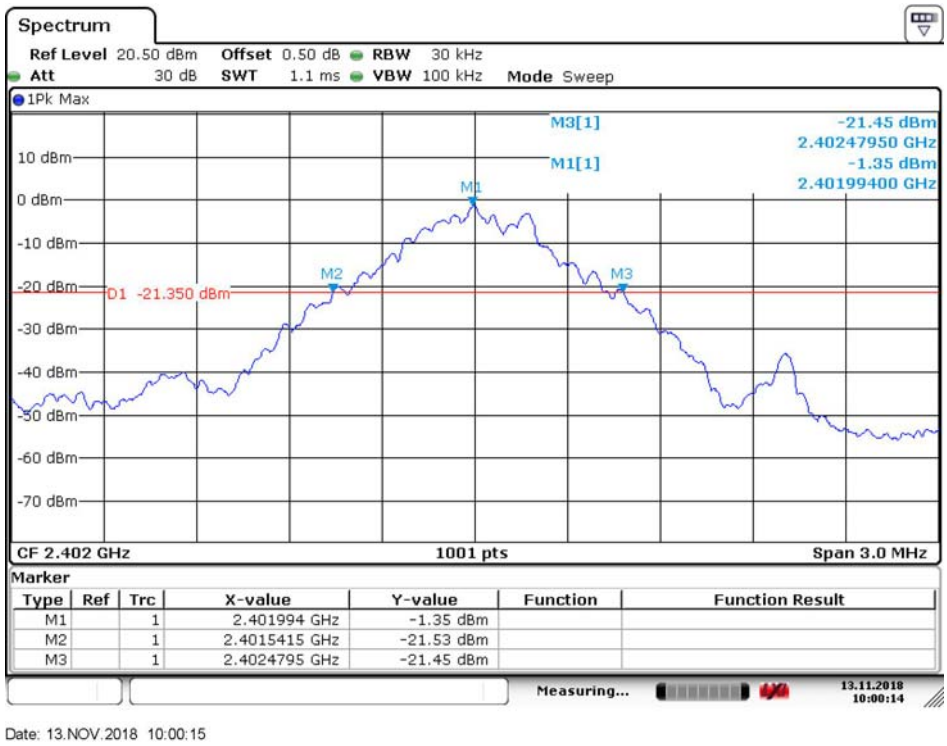
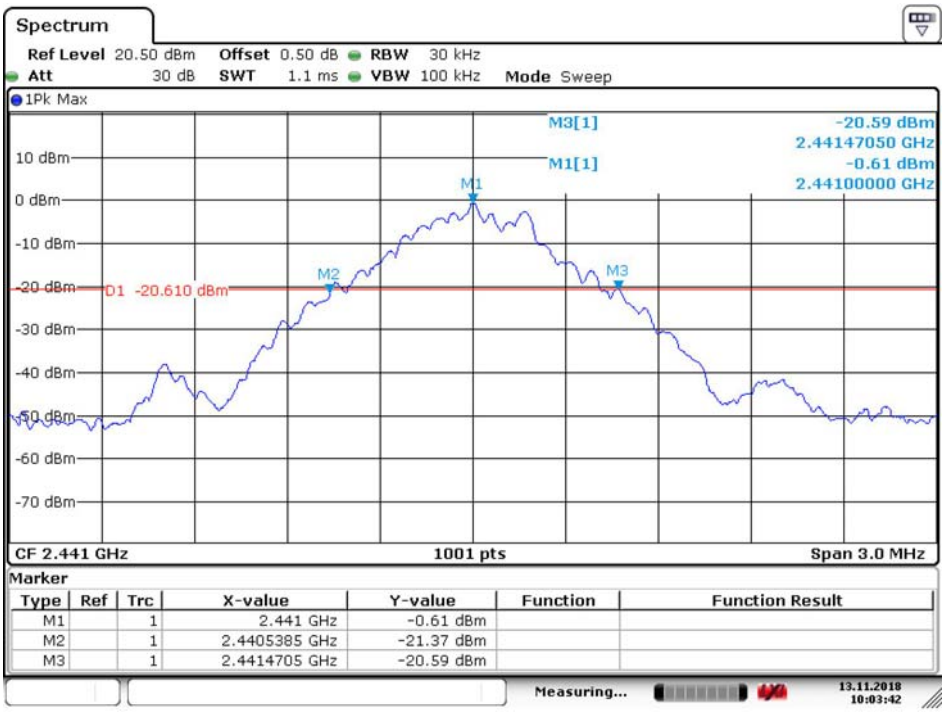
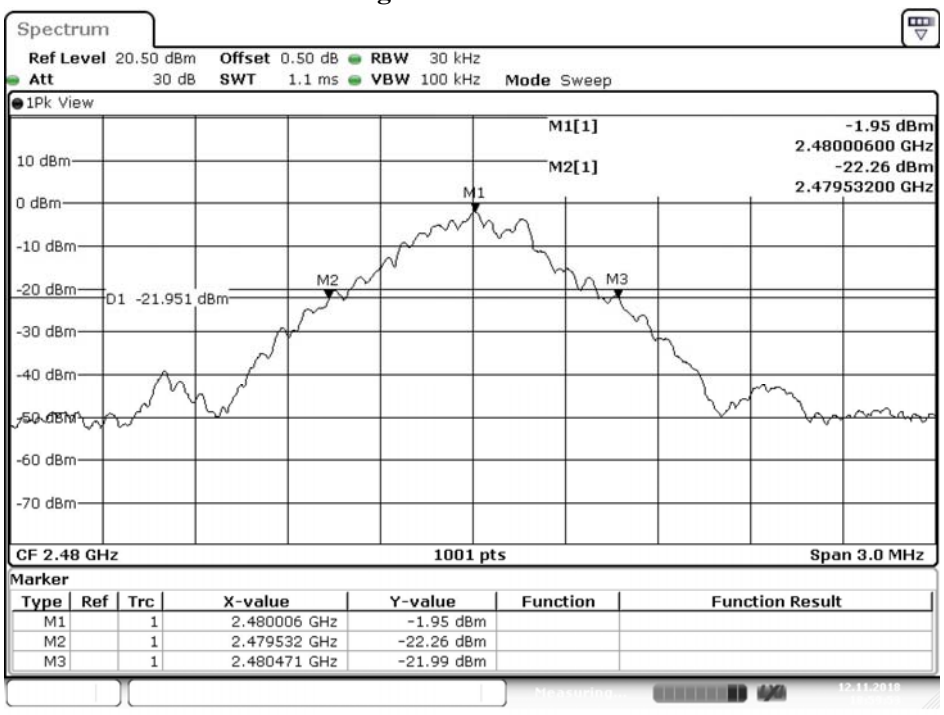


Figure Channel 39:



Date: 13.NOV.2018 10:03:42

Figure Channel 78:



Date: 12.NOV.2018 18:59:54

Product : Transparent One Encore
Test Item : Occupied Bandwidth Data
Test Mode : Mode 2: Transmit - 2Mbps
Test Date : 2018/11/13

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
00	2402	1243	--	NA
39	2441	1231	--	NA
78	2480	1237	--	NA

Figure Channel 00:

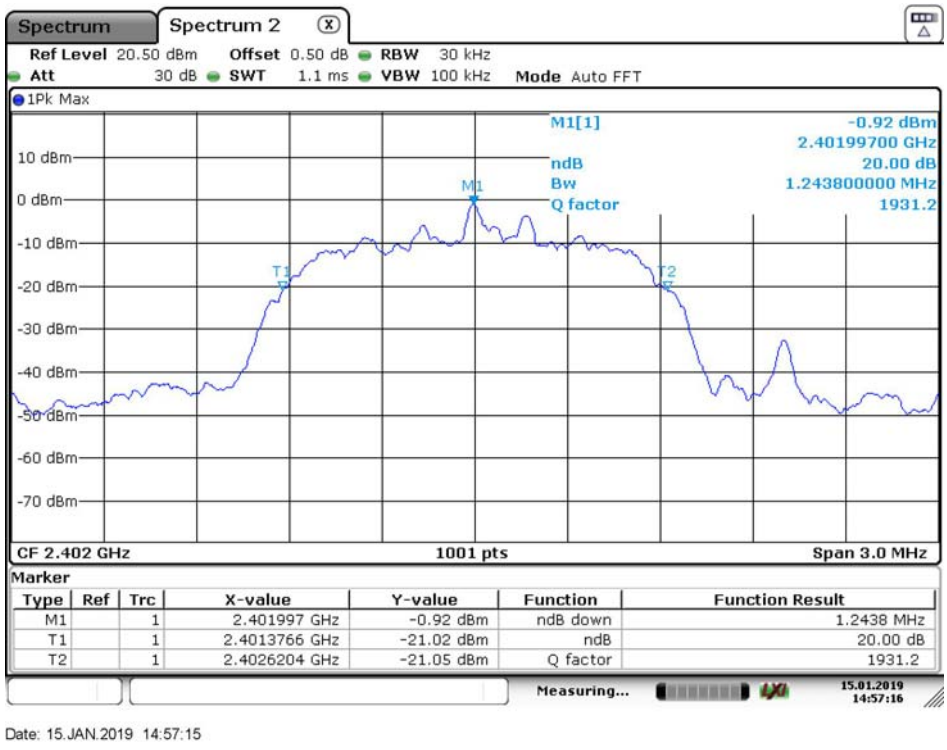
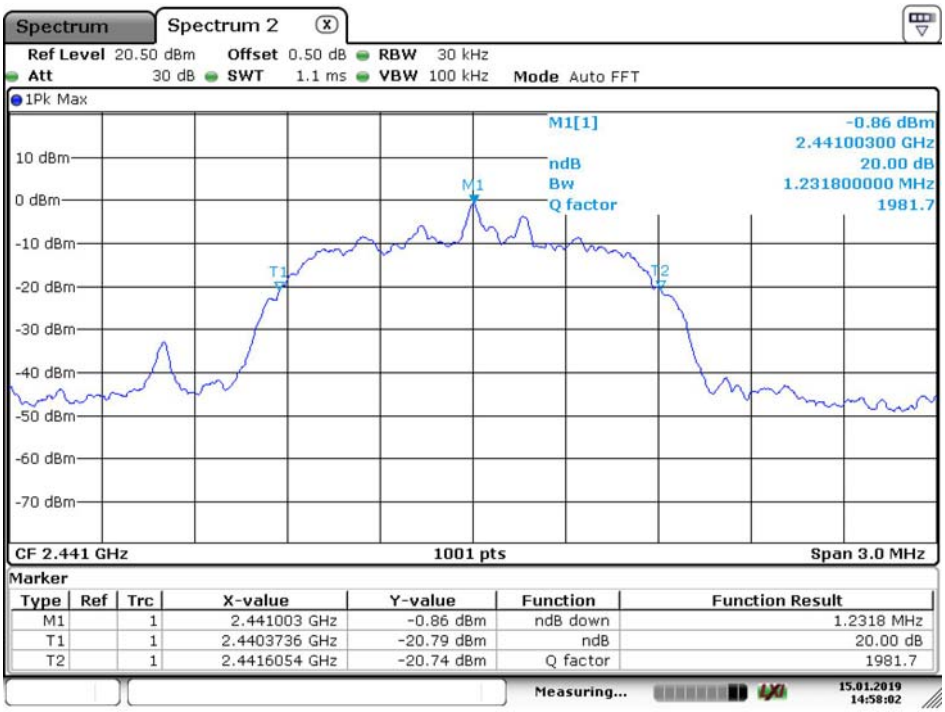
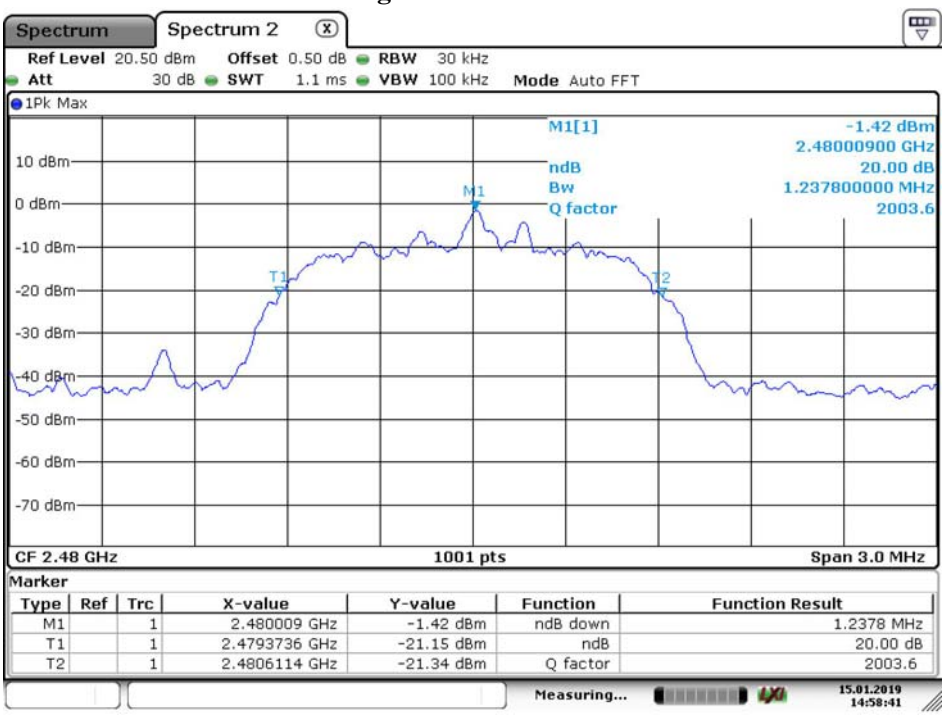


Figure Channel 39:



Date: 15.JAN.2019 14:58:02

Figure Channel 78:



Date: 15.JAN.2019 14:58:42

Product : Transparent One Encore
Test Item : Occupied Bandwidth Data
Test Mode : Mode 3: Transmit - 3Mbps
Test Date : 2018/11/12

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
00	2402	1257	--	NA
39	2441	1260	--	NA
78	2480	1266	--	NA

Figure Channel 00:

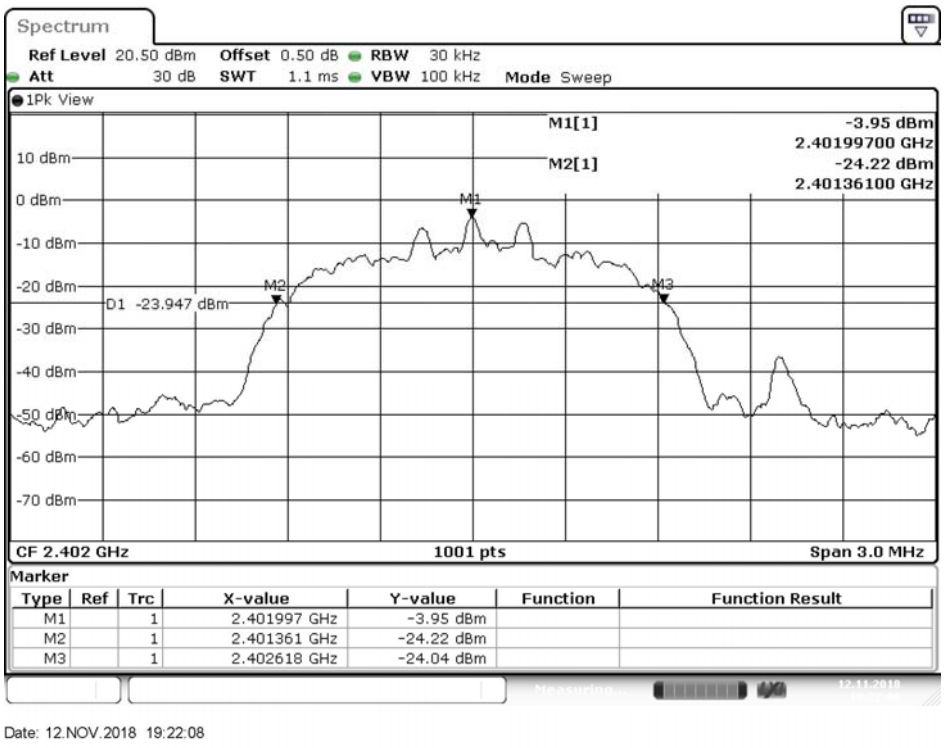
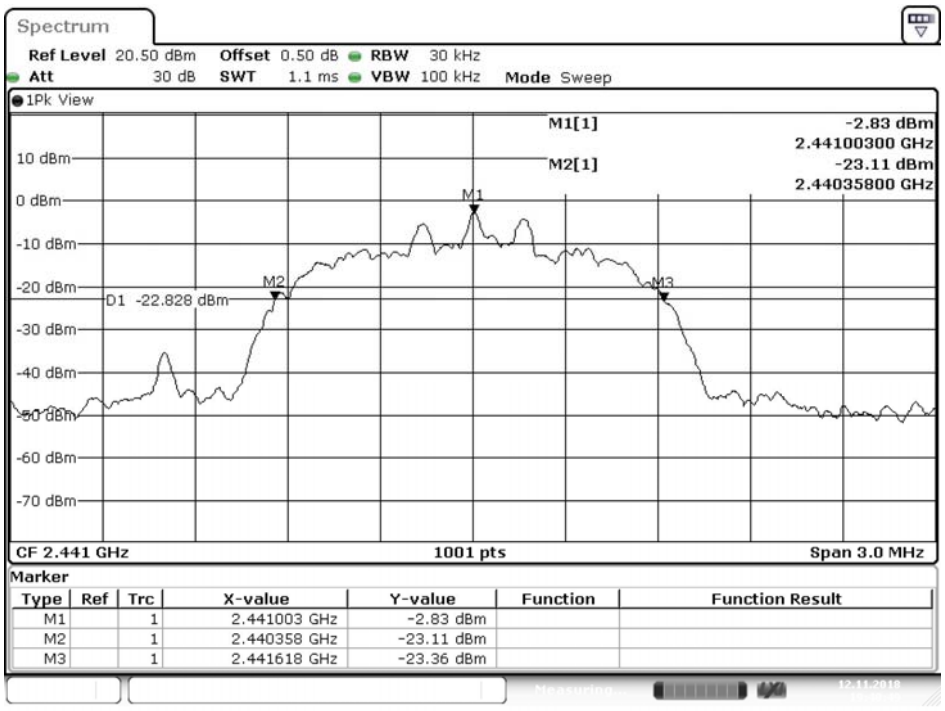
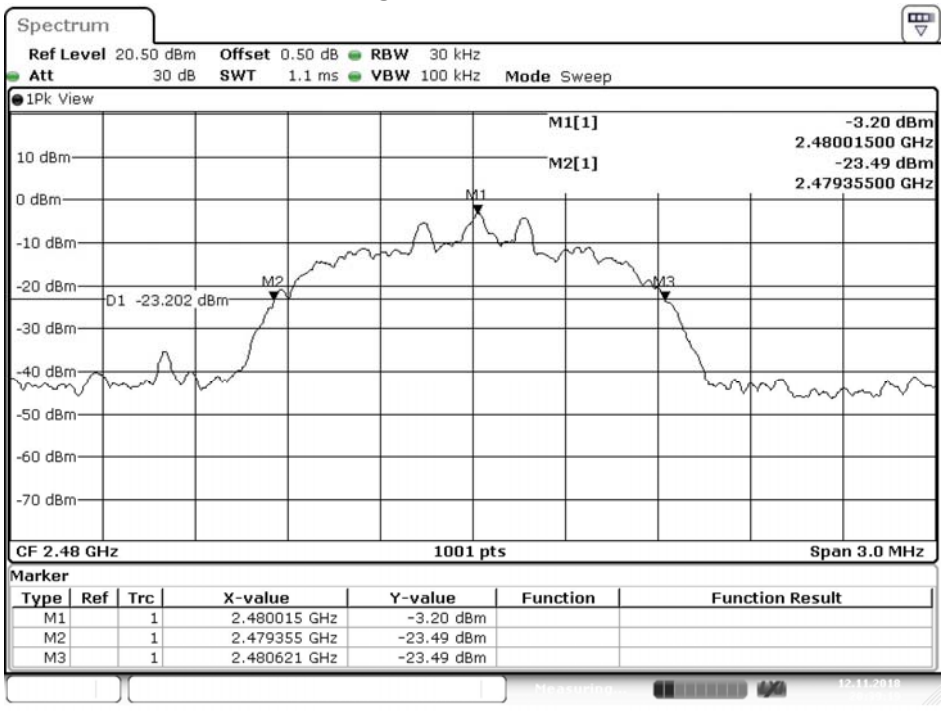


Figure Channel 39:



Date: 12.NOV.2018 19:40:48

Figure Channel 78:



Date: 12.NOV.2018 20:39:20

11. EMI Reduction Method During Compliance Testing

No modification was made during testing.