

FCC Test Report

Product Name	Bluetooth Headset
Model No.	OTE140L (left earbud), OTE140R (right earbud)
FCC ID.	BCE-OTE140

Applicant	GN Audio A/S
Address	Lautrupbjerg 7, 2750 Ballerup, Denmark

Date of Receipt	May. 06, 2021
Issued Date	Aug. 06, 2021
Report No.	2150110R-E3032110108
Report Version	V1.0



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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Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.



Test Report

Issued Date: Aug. 06, 2021

Report No.: 2150110R-E3032110108



Product Name	Bluetooth Headset			
Applicant	GN Audio A/S			
Address	Lautrupbjerg 7, 2750 Ballerup, Denmark			
Manufacturer	GN Audio A/S			
Model No.	OTE140L (left earbud), OTE140R (right earbud)			
FCC ID.	CE-OTE140			
EUT Rated Voltage	DC 3.7V by battery			
EUT Test Voltage	DC 5V by USB			
Trade Name	Jabra			
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C			
	ANSI C63.4: 2014, ANSI C63.10: 2013			
Test Result	Complied			

Documented By	:	April	Chen
		, , , , , ,	Chen

(Senior Adm. Specialist / April Chen)

Tested By : Ivan Chuang

(Senior Engineer / Ivan Chuang)

Approved By :

(Senior Engineer / Jack Hsu)



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Revision History

Report No.	Version	Description	Issued Date
2150110R-E3032110108	V1.0	Initial issue of report.	Aug. 06, 2021



1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Bluetooth Headset
Trade Name	Jabra
Model No.	OTE140L (left earbud), OTE140R (right earbud)
FCC ID.	BCE-OTE140
Frequency Range	2402 – 2480MHz
Channel Number	79
Type of Modulation	FHSS: GFSK(1Mbps) / π /4DQPSK(2Mbps) / 8DPSK(3Mbps)
Antenna Type	Monopole Antenna
Channel Control	Auto
Antenna Gain	Refer to the table "Antenna List"

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	GN Audio A/S(PRO)	50-09588/9	Monopole Antenna	-2.99dBi for 2.4 GHz
2	GN Audio A/S(Active)	50-09673/4	Monopole Antenna	-4.13 dBi for 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		

- 1. The EUT is an Bluetooth Headset with built-in Bluetooth transceiver, this report for Bluetooth V2.1+EDR.
- 2. These tests were conducted on a sample for the purpose of demonstrating compliance of 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.
- 4. OTE140R/L earbuds have a PRO variant and an Active variant, the two variants are identical except the PRO variant contains an additional VPU(voice protection unit) microphone for better noise cancelation and is not mounted on an Active variant.
- 5. The test mode is based on the Bluetooth technology, while testing 1Mbps, 2Mbps and 3Mbps, the worst case is 1Mbps and 3Mbps, and only worse case data is recorded in this report.

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



1.2. 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	Latitude 5580	GDZN7H2	Non-Shielded, 0.8m
2	Test Fixture	GN Audio A/S	Fixture	N/A	N/A

Signal Cable Type		Manufacturer	Model No.	Signal cable Description
A	Signal Cable	GN Audio A/S	Test Cable	Non-shielded, 0.05m, With Core*1
В	USB Cable	Cing Kang	UB-272	Shielded, 1.8m, With Core*1

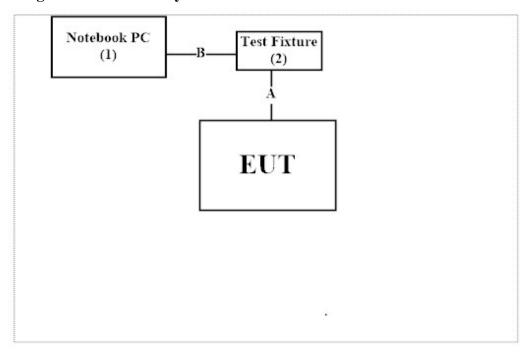
For Charge Mode

Pro	oduct	ct Manufacturer Model No.		Serial No.	Power Cord
1	Power Adapter	НТС	TC U250	N/A	N/A
2	Wireless Charging Cradle	GN Audio A/S	CPB140	N/A	N/A

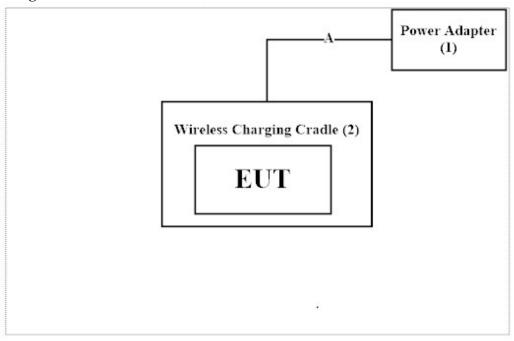
Signal Cable Type		Manufacturer	Model No.	Signal cable Description	
A	USB Cable	HTC	TC U250	Shielded, 1m	



1.3. Configuration of Tested System



For Charge Mode



1.4. EUT Exercise Software

- 1. Setup the EUT as shown in Section 1.3.
- 2. Execute software "CSR Blue Test 3Version 3.3.6.926" on the EUT.
- 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.



1.5. Test Facility

Ambient conditions in the laboratory:

Performed Item	Items	Required	Actual
Can la stal Englacia	Temperature (°C)	10~40 °C	26.2 °C
Conducted Emission	Humidity (%RH)	10~90 %	86.7 %
D 11 / 15 1	Temperature (°C)	10~40 °C	24.9 °C
Radiated Emission	Humidity (%RH)	10~90 %	56.1 %
	Temperature (°C)	10~40 °C	22.0 °C
Conductive	Humidity (%RH)	10~90 %	55.0 %

USA : FCC Registration Number: TW0033

Canada : IC Registration Number: 26930

Site Description : Accredited by TAF

Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd

Address : No. 26, Huaya 1st Rd., Guishan Dist., Taoyuan City

Phone number : 886-2-2602-7968
Fax number : 866-2-2602-3286
Email address : info.tw@dekra.com

Website : http://www.dekra.com.tw



1.6. List of Test Equipment

For Conduction measurements /SH1

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	EMI Test Receiver	R&S	ESR7	101601	2021.01.04	2022.01.03
X	Two-Line V-Network	R&S	ENV216	101306	2021.04.08	2022.04.07
X	Two-Line V-Network	R&S	ENV216	101307	2021.05.04	2022.05.03
X	Coaxial Cable	DEKRA	RG400_BNC	RF001	2021.05.24	2022.05.23

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: DEKRA Testing System V2.0

For Conducted measurements /SH2

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	Spectrum Analyzer	R&S	FSV30	103466	2020.12.28	2021.12.27
X	Peak Power Analyzer	KEYSIGHT	8990B	MY51000410	2020.07.01	2021.06.30
X	Wideband Power Sensor	KEYSIGHT	N1923A	MY56080003	2020.07.01	2021.06.30
X	Wideband Power Sensor	KEYSIGHT	N1923A	MY56080004	2020.07.01	2021.06.30

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 : DEKRA Conduction Test System V9.0.5.

For Radiated measurements /966-3

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	Loop Antenna	AMETEK	HLA6121	56736	2021.04.14	2022.04.13
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-678	2020.09.04	2021.09.03
X	Horn Antenna	ETS-Lindgren	3117	00201259	2020.10.23	2021.10.22
X	Horn Antenna	Com-Power	AH-840	101087	2021.06.16	2022.06.15
X	Pre-Amplifier	EMCI	EMC001330	980316	2021.06.22	2022.06.21
X	Pre-Amplifier	EMCI	EMC051835SE	980312	2021.02.24	2022.02.23
X	Pre-Amplifier	EMCI	EMC05820SE	980361	2020.12.21	2021.12.20
X	Pre-Amplifier	EMCI	EMC184045SE	980314	2021.06.24	2022.06.23
X	Filter	MICRO TRONICS	BRM50702	G251	2020.09.17	2021.09.16
	Filter	MICRO TRONICS	BRM50716	G188	2020.09.17	2021.09.16
X	EMI Test Receiver	R&S	ESR	102793	2020.12.17	2021.12.16
X	Spectrum Analyzer	R&S	FSV3044	101113	2021.02.03	2022.02.02
X	Coaxial Cable	SUHNER	SUCOFLEX 106	RF002	2021.03.03	2022.03.02
X	Mircoflex Cable	HUBER SUHNER	SUCOFLEX 102	MY3381/2	2021.06.25	2022.06.24

- 1. Loop Antenna is calibrated every two years, 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 : DEKRA Testing System V2.0



1.7. Uncertainty

Uncertainties have been calculated according to the DEKRA internal document, and is described in each test chapter of this report.

The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

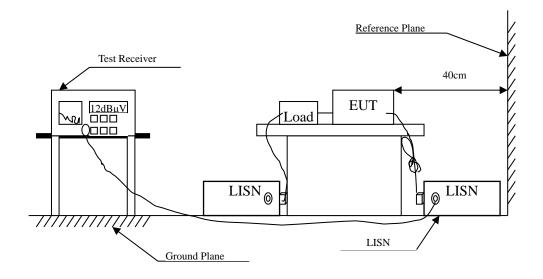
Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Test item	Uncertainty		
Conducted Emission	±3.4	2 dB	
Peak Power Output	±0.9	1 dB	
Dedicated Environmen	Under 1GHz	Above 1GHz	
Radiated Emission	±4.06 dB	±3.73 dB	
RF Antenna Conducted Test	±2.53 dB		
D 151	Under 1GHz	Above 1GHz	
Band Edge	±4.06 dB	±3.73 dB	
Channel Number	N/	/A	
Channel Separation	±682.	83 Hz	
Dwell Time	±2.31 ms		
Occupied Bandwidth	±682.83 Hz		
Duty Cycle	±2.3	1 ms	



2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBμV) Limit						
Frequency	Limits					
MHz	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.

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2.4. Test Result of Conducted Emission

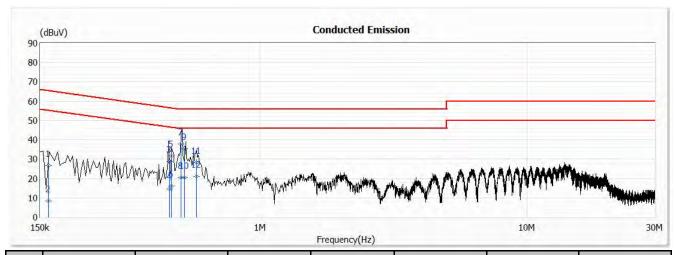
Product : Bluetooth Headset

Test Item : Conducted Emission Test

Power Line : L1

Test Mode : Mode 3: Charge Mode

Test Date : 2021/08/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV)	(dB)	(dBuV)	(dB)	Type
		(dBuV)					
1	0.162	26.72	65.38	-38.66	17.06	9.66	QP
2	0.162	8.47	55.38	-46.91	-1.19	9.66	AV
3	0.457	28.76	56.74	-27.98	19.10	9.66	QP
4	0.457	14.61	46.74	-32.13	4.95	9.66	AV
5	0.465	31.61	56.60	-24.99	21.95	9.66	QP
6	0.465	16.10	46.60	-30.50	6.44	9.66	AV
*7	0.506	37.91	56.00	-18.09	28.25	9.66	QP
8	0.506	20.36	46.00	-25.64	10.70	9.66	AV
9	0.522	35.40	56.00	-20.60	25.74	9.66	QP
10	0.522	20.36	46.00	-25.64	10.70	9.66	AV
11	0.577	28.17	56.00	-27.83	18.51	9.66	QP
12	0.577	21.21	46.00	-24.79	11.55	9.66	AV

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

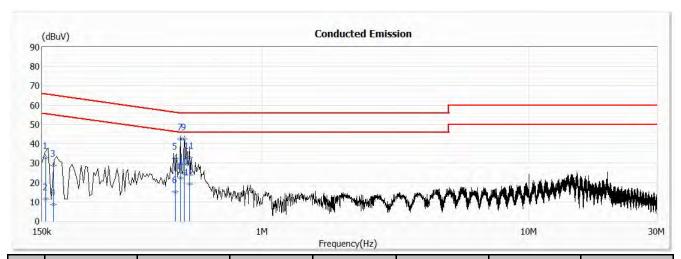


Test Item : Conducted Emission Test

Power Line : N

Test Mode : Mode 3: Charge Mode

Test Date : 2021/08/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV)	(dB)	(dBuV)	(dB)	Type
		(dBuV)					
1	0.155	32.89	65.75	-32.86	23.22	9.67	QP
2	0.155	11.55	55.75	-44.20	1.88	9.67	AV
3	0.166	28.82	65.17	-36.35	19.15	9.67	QP
4	0.166	8.81	55.17	-46.36	-0.86	9.67	AV
5	0.473	32.56	56.45	-23.89	22.89	9.67	QP
6	0.473	15.32	46.45	-31.13	5.65	9.67	AV
7	0.494	42.53	56.09	-13.56	32.86	9.67	QP
8	0.494	22.48	46.09	-23.61	12.81	9.67	AV
*9	0.512	42.62	56.00	-13.38	32.95	9.67	QP
10	0.512	24.96	46.00	-21.04	15.29	9.67	AV
11	0.535	32.99	56.00	-23.01	23.32	9.67	QP
12	0.535	19.19	46.00	-26.81	9.52	9.67	AV

- 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. Test Result of Peak Power Output

Product : Bluetooth Headset
Test Item : Peak Power Output

Test Mode : Mode 1: Transmit - 1Mbps (PRO variant -OTE140L)

Test Date : 2021/05/18

Channel No.	Frequency	Measurement	Required Limit	Result
	(MHz)	(dBm)	(dBm)	
Channel 00	2402	12.36	1 Watt= 30 dBm	Pass
Channel 39	2441	12.17	1 Watt= 30 dBm	Pass
Channel 78	2480	11.90	1 Watt= 30 dBm	Pass

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Product : Bluetooth Headset
Test Item : Peak Power Output

Test Mode : Mode 2: Transmit - 3Mbps (PRO variant -OTE140L)

Test Date : 2021/05/18

Channel No.	Frequency	Measurement	Required Limit	Result
	(MHz)	(dBm)		
Channel 00	2402	12.44	1 Watt= 30 dBm	Pass
Channel 39	2441	12.46	1 Watt= 30 dBm	Pass
Channel 78	2480	12.17	1 Watt= 30 dBm	Pass



Product : Bluetooth Headset
Test Item : Peak Power Output

Test Mode : Mode 1: Transmit - 1Mbps (PRO variant -OTE140R)

Test Date : 2021/05/18

Channel No.	Frequency	Measurement	Required Limit	Result
	(MHz)	(dBm)		
Channel 00	2402	12.33	1 Watt= 30 dBm	Pass
Channel 39	2441	12.34	1 Watt= 30 dBm	Pass
Channel 78	2480	12.25	1 Watt= 30 dBm	Pass



Product : Bluetooth Headset
Test Item : Peak Power Output

Test Mode : Mode 2: Transmit - 3Mbps (PRO variant -OTE140R)

Test Date : 2021/05/18

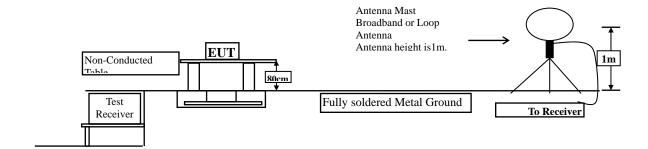
Channel No.	Frequency	Measurement	Required Limit	Result
	(MHz)	(dBm)		
Channel 00	2402	12.66	1 Watt= 30 dBm	Pass
Channel 39	2441	13.04	1 Watt= 30 dBm	Pass
Channel 78	2480	12.92	1 Watt= 30 dBm	Pass



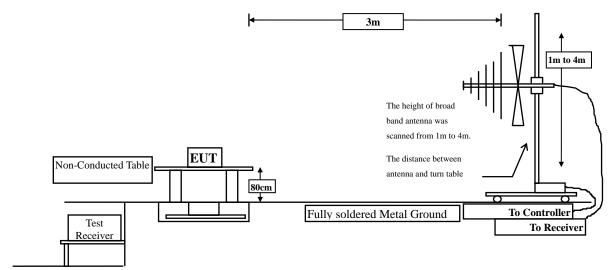
4. Radiated Emission

4.1. Test Setup

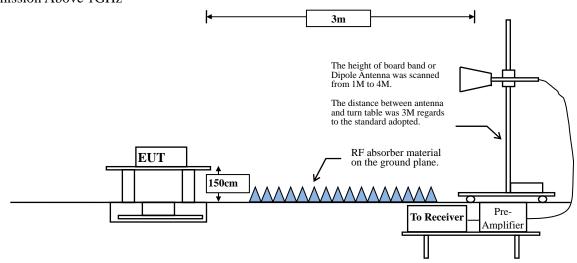
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



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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	Measurement distance						
IVIIIZ	(meter) (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 $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 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. Test Result of Radiated Emission

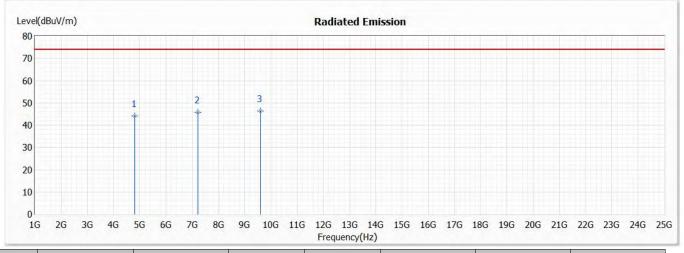
Product : Bluetooth Headset

Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2402MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4804.000	44.06	74.00	-29.94	43.57	0.49	PK
2	7206.000	45.84	74.00	-28.16	41.13	4.71	PK
* 3	9608.000	46.25	74.00	-27.75	39.40	6.85	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

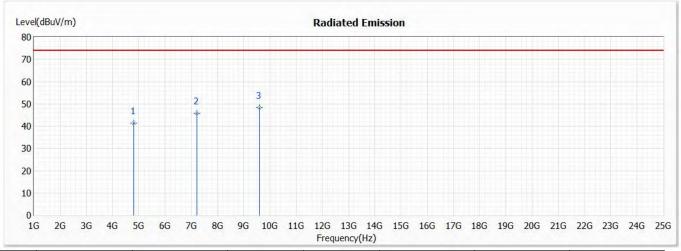


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2402MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4804.000	41.46	74.00	-32.54	40.97	0.49	PK
2	7206.000	45.69	74.00	-28.31	40.98	4.71	PK
* 3	9608.000	48.33	74.00	-25.67	41.48	6.85	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

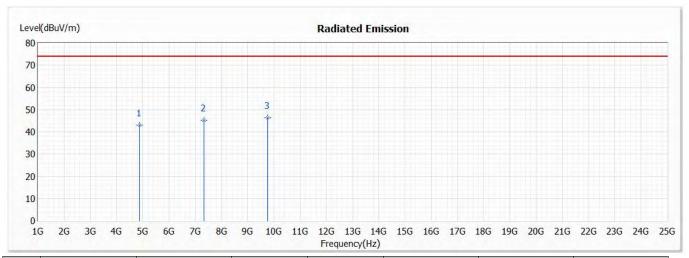


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2441MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4882.000	43.03	74.00	-30.97	42.43	0.60	PK
2	7323.000	45.31	74.00	-28.69	40.47	4.84	PK
* 3	9764.000	46.33	74.00	-27.67	39.10	7.23	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

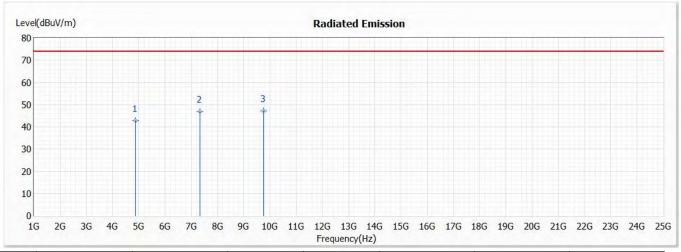


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2441MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4882.000	42.77	74.00	-31.23	42.17	0.60	PK
2	7323.000	46.78	74.00	-27.22	41.94	4.84	PK
* 3	9764.000	47.26	74.00	-26.74	40.03	7.23	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

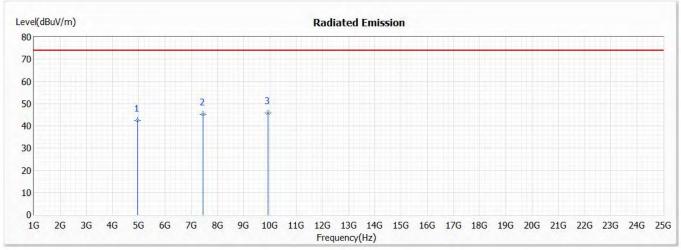


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2480MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4960.000	42.44	74.00	-31.56	41.74	0.70	PK
2	7440.000	45.21	74.00	-28.79	40.28	4.93	PK
* 3	9920.000	45.75	74.00	-28.25	38.35	7.40	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

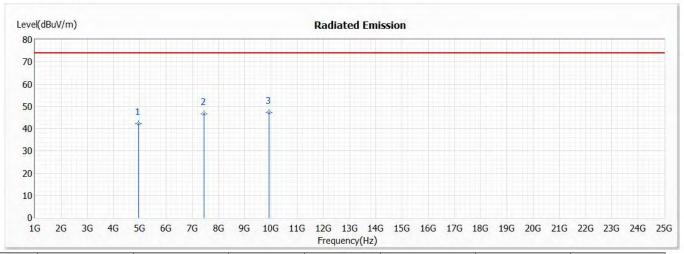


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2480MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4960.000	42.34	74.00	-31.66	41.64	0.70	PK
2	7440.000	46.49	74.00	-27.51	41.56	4.93	PK
* 3	9920.000	47.16	74.00	-26.84	39.76	7.40	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

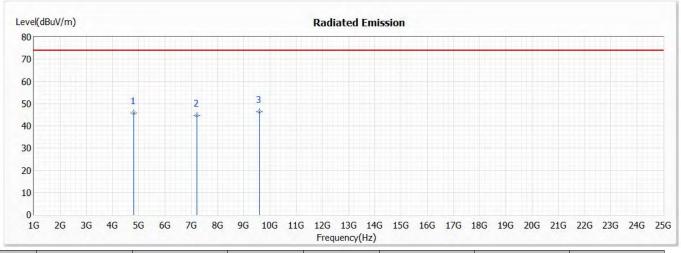


Test Item : Harmonic Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps(2402MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4804.000	45.88	74.00	-28.12	45.39	0.49	PK
2	7206.000	44.75	74.00	-29.25	40.04	4.71	PK
* 3	9608.000	46.34	74.00	-27.66	39.49	6.85	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

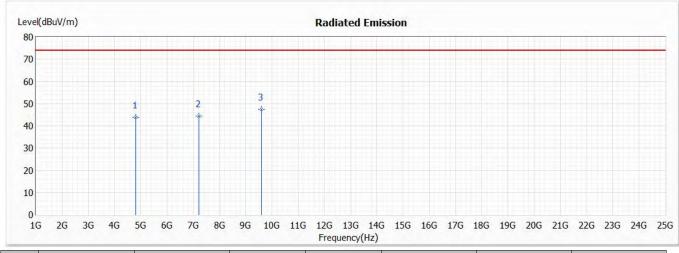


Test Item : Harmonic Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps(2402MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4804.000	43.84	74.00	-30.16	43.35	0.49	PK
2	7206.000	44.47	74.00	-29.53	39.76	4.71	PK
* 3	9608.000	47.53	74.00	-26.47	40.68	6.85	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

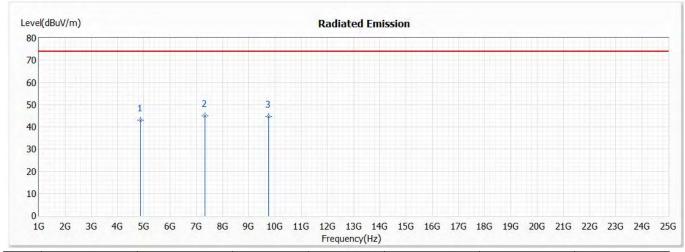


Test Item : Harmonic Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2441MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4882.000	42.99	74.00	-31.01	42.39	0.60	PK
* 2	7323.000	45.09	74.00	-28.91	40.25	4.84	PK
3	9764.000	44.73	74.00	-29.27	37.50	7.23	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

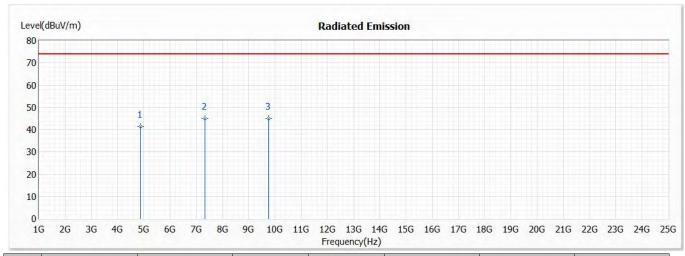


Test Item : Harmonic Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2441MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4882.000	41.41	74.00	-32.59	40.81	0.60	PK
* 2	7323.000	45.09	74.00	-28.91	40.25	4.84	PK
3	9764.000	44.98	74.00	-29.02	37.75	7.23	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

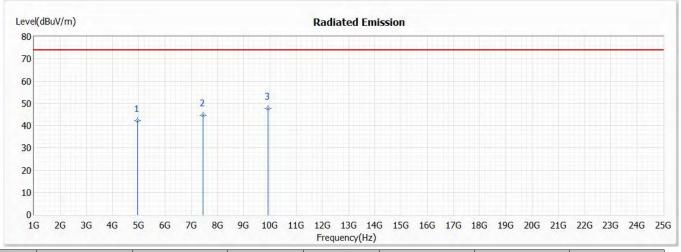


Test Item : Harmonic Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2480MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4960.000	42.10	74.00	-31.90	41.40	0.70	PK
2	7440.000	44.70	74.00	-29.30	39.77	4.93	PK
* 3	9920.000	47.69	74.00	-26.31	40.29	7.40	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

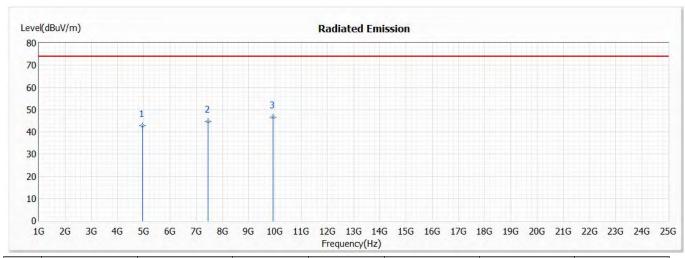


Test Item : Harmonic Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2480MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4960.000	42.68	74.00	-31.32	41.98	0.70	PK
2	7440.000	44.81	74.00	-29.19	39.88	4.93	PK
* 3	9920.000	46.59	74.00	-27.41	39.19	7.40	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

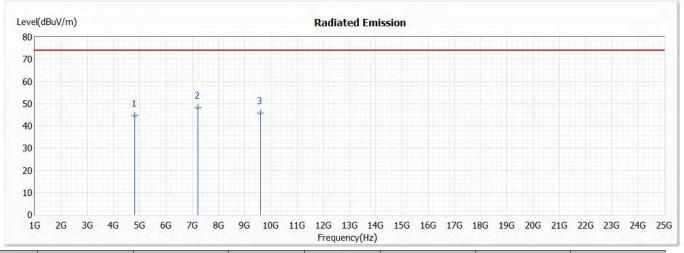


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2402MHz) (Active variant -OTE140L)

Test Date : 2021/07/27

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4804.000	44.66	74.00	-29.34	44.17	0.49	PK
* 2	7206.000	48.37	74.00	-25.63	43.66	4.71	PK
3	9608.000	45.79	74.00	-28.21	38.94	6.85	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

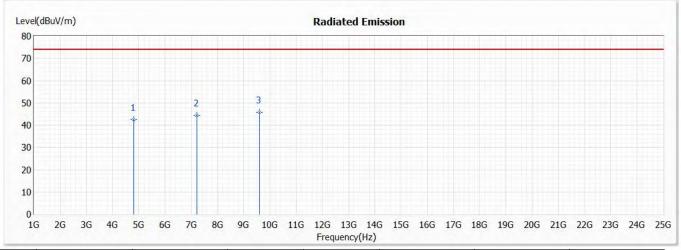


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2402MHz) (Active variant -OTE140L)

Test Date : 2021/07/27

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4804.000	42.55	74.00	-31.45	42.06	0.49	PK
2	7206.000	44.35	74.00	-29.65	39.64	4.71	PK
* 3	9608.000	45.92	74.00	-28.08	39.07	6.85	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

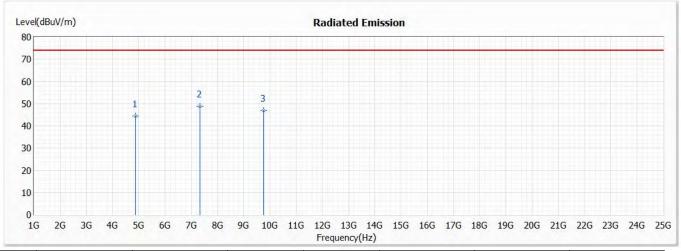


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2441MHz) (Active variant -OTE140L)

Test Date : 2021/07/27

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4882.000	44.38	74.00	-29.62	43.78	0.60	PK
* 2	7323.000	48.84	74.00	-25.16	44.00	4.84	PK
3	9764.000	46.87	74.00	-27.13	39.64	7.23	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

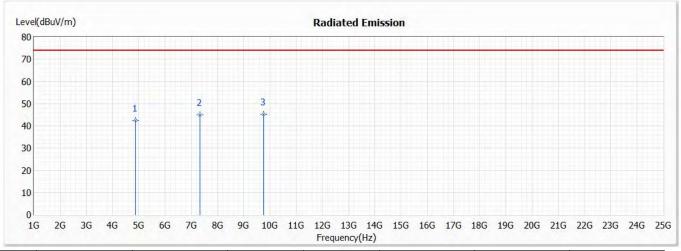


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2441MHz) (Active variant -OTE140L)

Test Date : 2021/07/27

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4882.000	42.38	74.00	-31.62	41.78	0.60	PK
2	7323.000	45.08	74.00	-28.92	40.24	4.84	PK
* 3	9764.000	45.13	74.00	-28.87	37.90	7.23	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss -Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

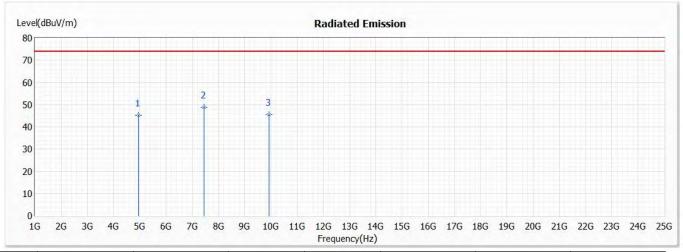


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2480MHz) (Active variant -OTE140L)

Test Date : 2021/07/27

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4960.000	45.11	74.00	-28.89	44.41	0.70	PK
* 2	7440.000	48.77	74.00	-25.23	43.84	4.93	PK
3	9920.000	45.64	74.00	-28.36	38.24	7.40	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

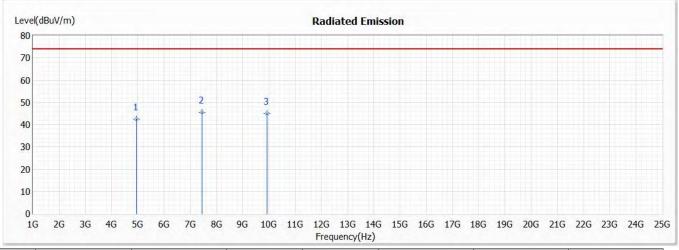


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2480MHz) (Active variant -OTE140L)

Test Date : 2021/07/27

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4960.000	42.58	74.00	-31.42	41.88	0.70	PK
* 2	7440.000	45.43	74.00	-28.57	40.50	4.93	PK
3	9920.000	44.99	74.00	-29.01	37.59	7.40	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

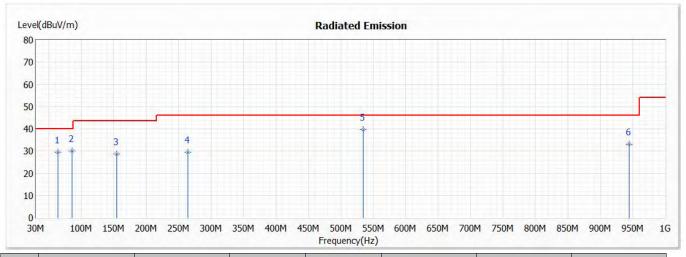


Test Item : General Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2441MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	63.950	29.63	40.00	-10.37	41.65	-12.02	QP
2	85.290	30.13	40.00	-9.87	46.63	-16.50	QP
3	155.130	28.72	43.50	-14.78	39.14	-10.42	QP
4	263.770	29.57	46.00	-16.43	40.44	-10.87	QP
* 5	534.400	39.66	46.00	-6.34	44.01	-4.35	QP
6	944.710	32.97	46.00	-13.03	31.12	1.85	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.

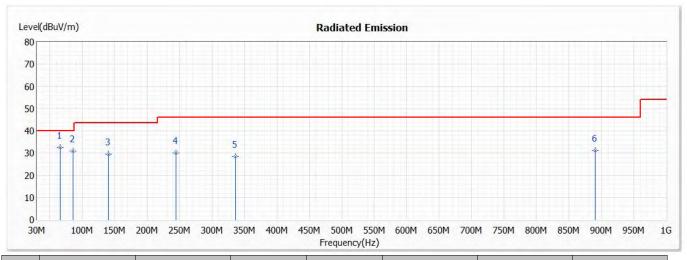


Test Item : General Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2441MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
* 1	65.890	32.51	40.00	-7.49	45.07	-12.56	QP
2	85.290	30.80	40.00	-9.20	47.30	-16.50	QP
3	140.580	29.49	43.50	-14.01	40.30	-10.81	QP
4	244.370	29.99	46.00	-16.01	41.32	-11.33	QP
5	335.550	28.30	46.00	-17.70	37.00	-8.70	QP
6	890.390	31.19	46.00	-14.81	30.24	0.95	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.

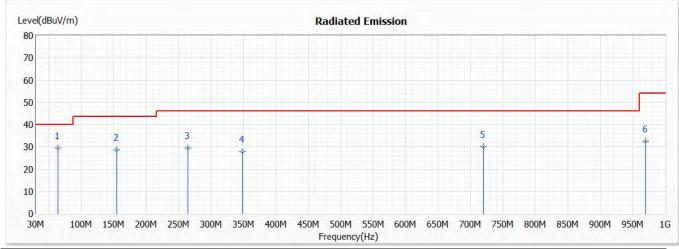


Test Item : General Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2441MHz) (Active variant -OTE140L)

Test Date : 2021/06/17

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
* 1	63.950	29.63	40.00	-10.37	41.65	-12.02	QP
2	155.130	28.72	43.50	-14.78	39.14	-10.42	QP
3	263.770	29.57	46.00	-16.43	40.44	-10.87	QP
4	348.160	27.85	46.00	-18.15	36.35	-8.50	QP
5	719.670	30.15	46.00	-15.85	31.40	-1.25	QP
6	969.930	32.42	54.00	-21.58	30.32	2.10	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.

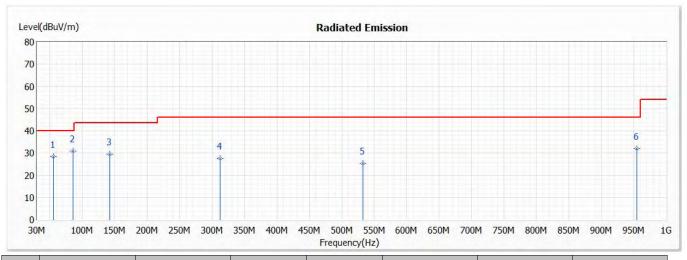


Test Item : General Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2441MHz) (Active variant -OTE140L)

Test Date : 2021/06/17

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	55.220	28.44	40.00	-11.56	39.13	-10.69	QP
* 2	85.290	30.80	40.00	-9.20	47.30	-16.50	QP
3	142.520	29.50	43.50	-14.00	40.14	-10.64	QP
4	312.270	27.58	46.00	-18.42	37.01	-9.43	QP
5	532.460	25.29	46.00	-20.71	29.72	-4.43	QP
6	954.410	32.10	46.00	-13.90	30.12	1.98	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.

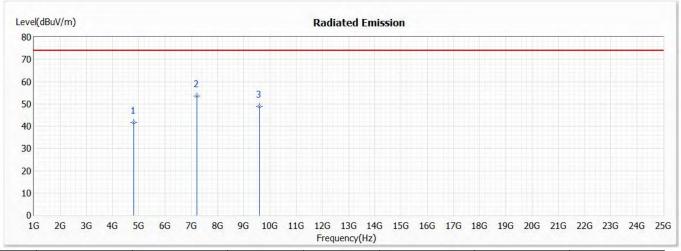


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2402MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4804.000	41.67	74.00	-32.33	41.18	0.49	PK
* 2	7206.000	53.52	74.00	-20.48	48.81	4.71	PK
3	9608.000	48.84	74.00	-25.16	41.99	6.85	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

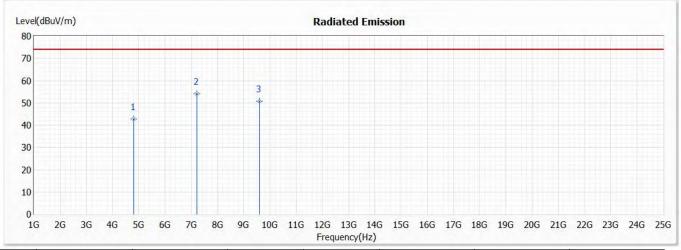


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2402MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4804.000	42.85	74.00	-31.15	42.36	0.49	PK
* 2	7206.000	54.15	74.00	-19.85	49.44	4.71	PK
3	9608.000	50.74	74.00	-23.26	43.89	6.85	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

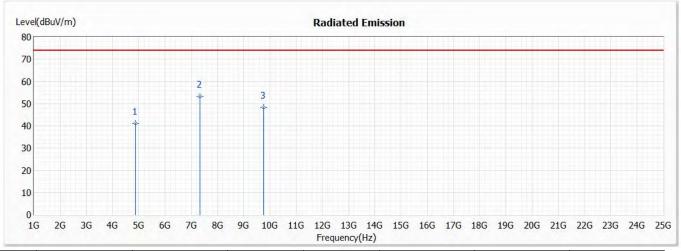


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2441MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4882.000	41.24	74.00	-32.76	40.64	0.60	PK
* 2	7323.000	53.16	74.00	-20.84	48.32	4.84	PK
3	9764.000	48.40	74.00	-25.60	41.17	7.23	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

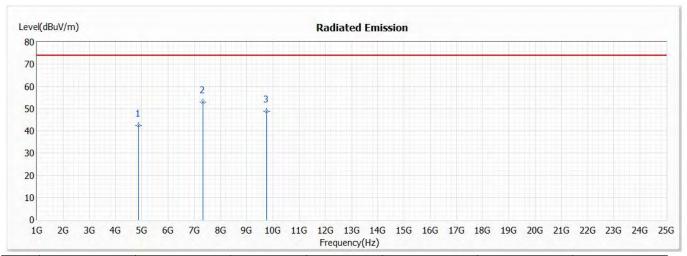


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2441MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4882.000	42.59	74.00	-31.41	41.99	0.60	PK
* 2	7323.000	52.91	74.00	-21.09	48.07	4.84	PK
3	9764.000	48.75	74.00	-25.25	41.52	7.23	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

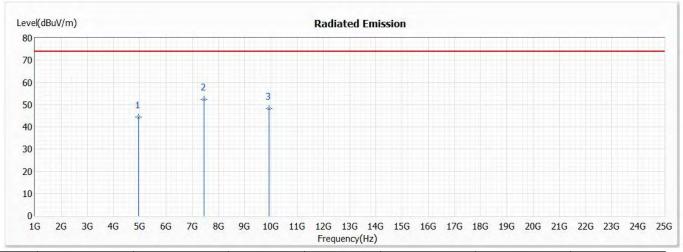


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2480MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4960.000	44.53	74.00	-29.47	43.83	0.70	PK
* 2	7440.000	52.35	74.00	-21.65	47.42	4.93	PK
3	9920.000	48.29	74.00	-25.71	40.89	7.40	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

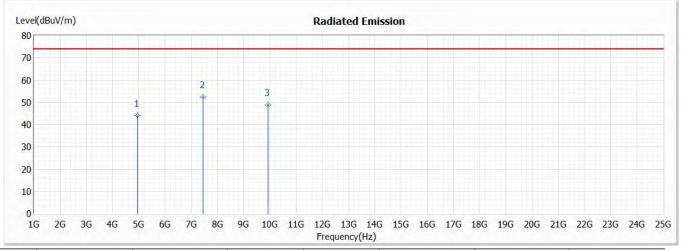


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2480MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4960.000	44.08	74.00	-29.92	43.38	0.70	PK
* 2	7440.000	52.28	74.00	-21.72	47.35	4.93	PK
3	9920.000	48.92	74.00	-25.08	41.52	7.40	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

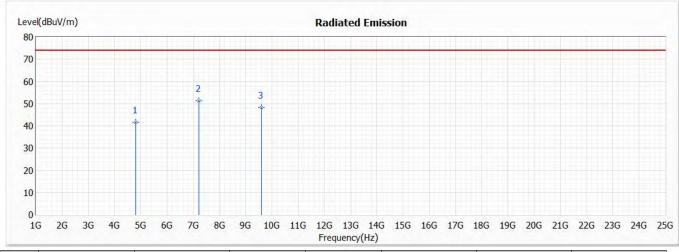


Test Item : Harmonic Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps(2402MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4804.000	41.54	74.00	-32.46	41.05	0.49	PK
* 2	7206.000	51.24	74.00	-22.76	46.53	4.71	PK
3	9608.000	48.34	74.00	-25.66	41.49	6.85	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

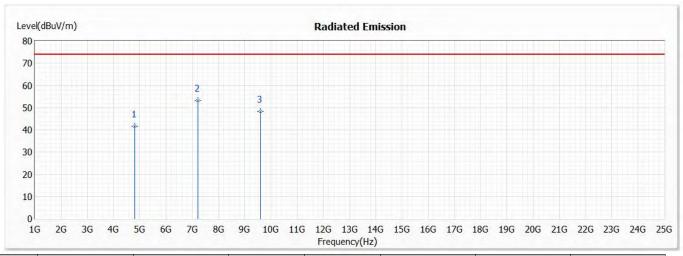


Test Item : Harmonic Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps(2402MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4804.000	41.73	74.00	-32.27	41.24	0.49	PK
* 2	7206.000	53.19	74.00	-20.81	48.48	4.71	PK
3	9608.000	48.41	74.00	-25.59	41.56	6.85	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

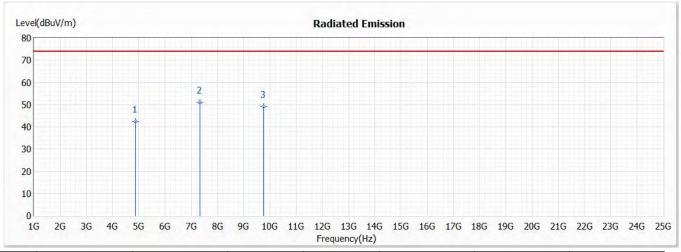


Test Item : Harmonic Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2441MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4882.000	42.61	74.00	-31.39	42.01	0.60	PK
* 2	7323.000	51.15	74.00	-22.85	46.31	4.84	PK
3	9764.000	49.03	74.00	-24.97	41.80	7.23	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

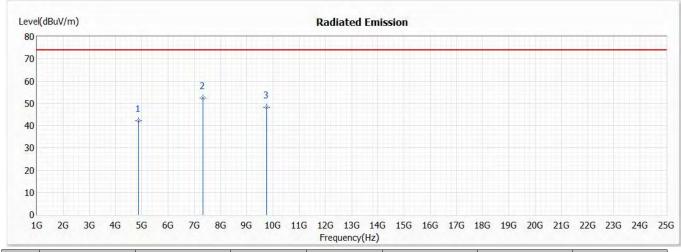


Test Item : Harmonic Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2441MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4882.000	42.28	74.00	-31.72	41.68	0.60	PK
* 2	7323.000	52.55	74.00	-21.45	47.71	4.84	PK
3	9764.000	48.38	74.00	-25.62	41.15	7.23	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

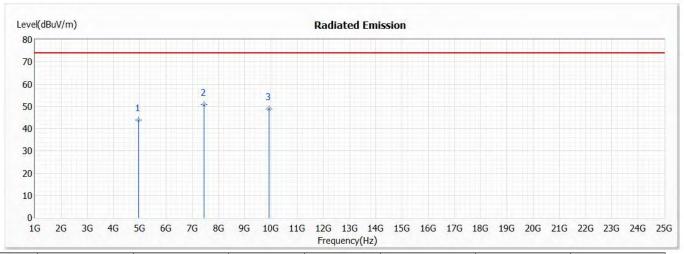


Test Item : Harmonic Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2480MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4960.000	43.78	74.00	-30.22	43.08	0.70	PK
* 2	7440.000	50.65	74.00	-23.35	45.72	4.93	PK
3	9920.000	48.95	74.00	-25.05	41.55	7.40	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

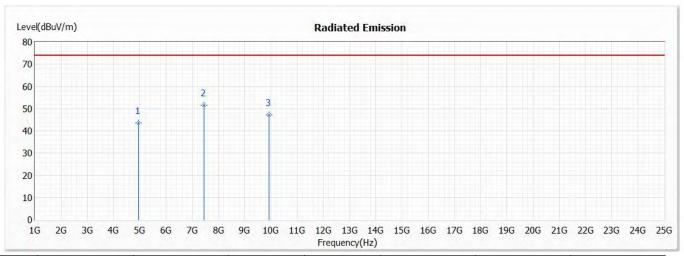


Test Item : Harmonic Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2480MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4960.000	43.45	74.00	-30.55	42.75	0.70	PK
* 2	7440.000	51.47	74.00	-22.53	46.54	4.93	PK
3	9920.000	47.31	74.00	-26.69	39.91	7.40	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

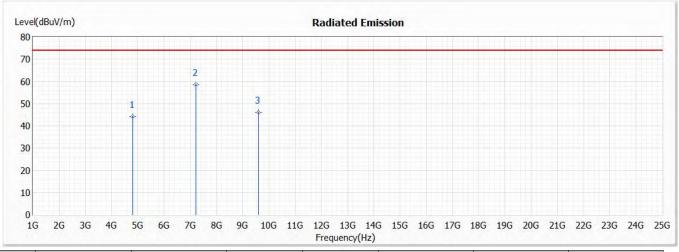


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2402MHz) (Active variant -OTE140R)

Test Date : 2021/07/27

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4804.000	44.11	74.00	-29.89	43.62	0.49	PK
* 2	7206.000	58.59	74.00	-15.41	53.88	4.71	PK
3	9608.000	46.12	74.00	-27.88	39.27	6.85	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

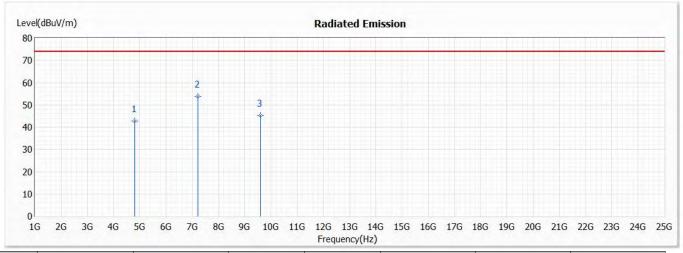


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2402MHz) (Active variant -OTE140R)

Test Date : 2021/07/27

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4804.000	42.65	74.00	-31.35	42.16	0.49	PK
* 2	7206.000	53.93	74.00	-20.07	49.22	4.71	PK
3	9608.000	45.37	74.00	-28.63	38.52	6.85	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

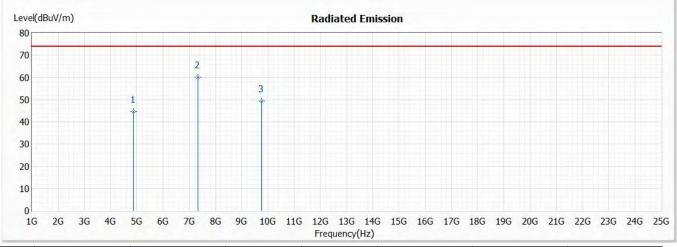


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2441MHz) (Active variant -OTE140R)

Test Date : 2021/07/27

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4882.000	44.66	74.00	-29.34	44.06	0.60	PK
* 2	7323.000	60.04	74.00	-13.96	55.20	4.84	PK
3	9764.000	49.44	74.00	-24.56	42.21	7.23	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

	Frequency	Peak	Duty Cycle	Average	Margin	Peak	Average	
		Measurement	Factor	Measurement		Limit	Limit	
	MHz	$dB\mu V/m \\$	dB	$dB\mu V/m$	dB	$dB\mu V/m$	$dB\mu V/m$	
A	verage Detector:							_
	7323	60.04	-30.669	29.371	-24.629	74.000	54.000	

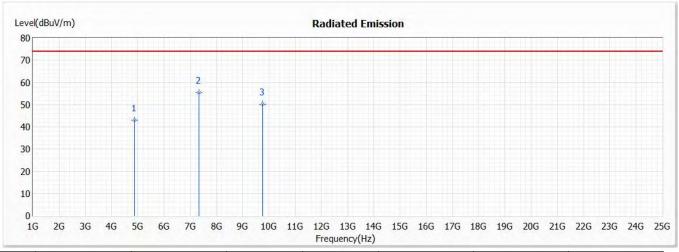


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2441MHz) (Active variant -OTE140R)

Test Date : 2021/07/27

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4882.000	43.11	74.00	-30.89	42.51	0.60	PK
* 2	7323.000	55.56	74.00	-18.44	50.72	4.84	PK
3	9764.000	50.20	74.00	-23.80	42.97	7.23	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

	Frequency	Peak	Duty Cycle	Average	Margin	Peak	Average
		Measurement	Factor	Measurement		Limit	Limit
	MHz	$dB\mu V/m$	dB	$dB\mu V/m$	dB	$dB\mu V/m$	$dB\mu V/m$
A	verage Detector:						
	7323	55.56	-30.669	24.891	-29.109	74.000	54.000

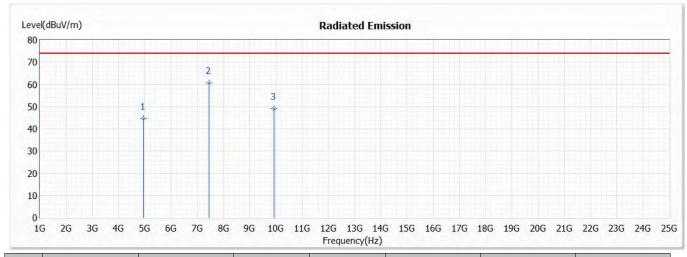


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2480MHz) (Active variant -OTE140R)

Test Date : 2021/07/27

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4960.000	44.64	74.00	-29.36	43.94	0.70	PK
* 2	7440.000	60.77	74.00	-13.23	55.84	4.93	PK
3	9920.000	49.12	74.00	-24.88	41.72	7.40	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

	Frequency	Peak	Duty Cycle	Average	Margin	Peak	Average
		Measurement	Factor	Measurement		Limit	Limit
_	MHz	$dB\mu V/m$	dB	$dB\mu V/m$	dB	$dB\mu V/m$	$dB\mu V/m$
A	Average Detector:						
	7440	60.77	-30.669	30.101	-23.899	74.000	54.000

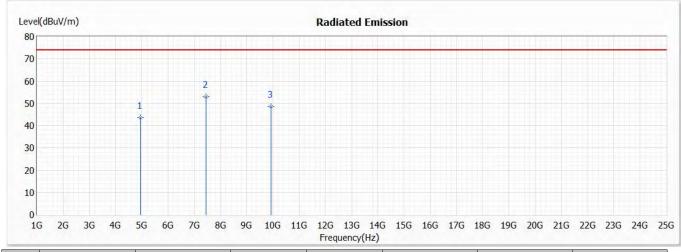


Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2480MHz) (Active variant -OTE140R)

Test Date : 2021/07/27

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	4960.000	43.67	74.00	-30.33	42.97	0.70	PK
* 2	7440.000	52.84	74.00	-21.16	47.91	4.93	PK
3	9920.000	48.53	74.00	-25.47	41.13	7.40	PK

- 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. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

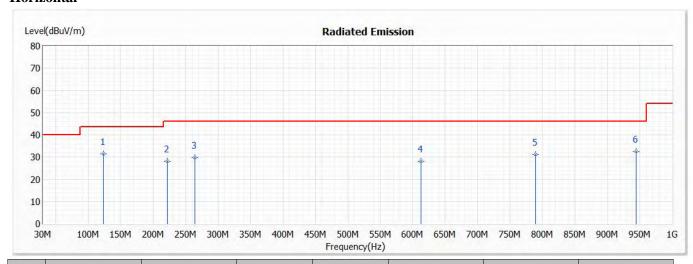


Test Item : General Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2441MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
* 1	123.120	31.34	43.50	-12.16	44.08	-12.74	QP
2	222.060	28.06	46.00	-17.94	40.51	-12.45	QP
3	263.770	29.81	46.00	-16.19	40.68	-10.87	QP
4	612.970	28.19	46.00	-17.81	30.94	-2.75	QP
5	789.510	31.26	46.00	-14.74	31.40	-0.14	QP
6	944.710	32.68	46.00	-13.32	30.83	1.85	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.

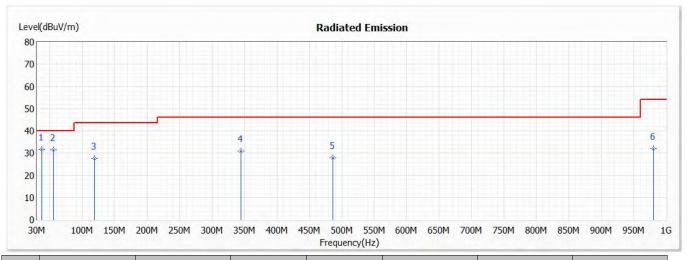


Test Item : General Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2441MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
* 1	37.760	31.66	40.00	-8.34	42.88	-11.22	QP
2	55.220	31.44	40.00	-8.56	42.13	-10.69	QP
3	119.240	27.70	43.50	-15.80	40.78	-13.08	QP
4	344.280	30.92	46.00	-15.08	39.50	-8.58	QP
5	485.900	27.77	46.00	-18.23	33.17	-5.40	QP
6	980.600	32.08	54.00	-21.92	30.05	2.03	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.

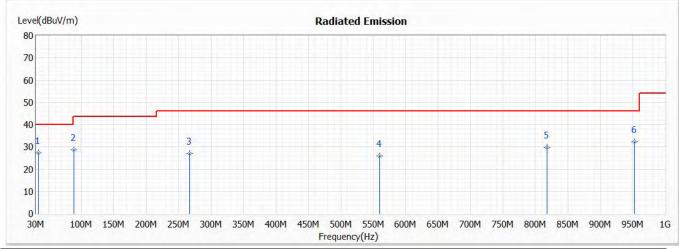


Test Item : General Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2441MHz) (Active variant - OTE140R)

Test Date : 2021/06/17

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
* 1	33.880	27.20	40.00	-12.80	38.91	-11.71	QP
2	88.200	28.70	43.50	-14.80	45.64	-16.94	QP
3	266.680	27.07	46.00	-18.93	37.82	-10.75	QP
4	559.620	26.01	46.00	-19.99	29.87	-3.86	QP
5	817.640	29.73	46.00	-16.27	29.69	0.04	QP
6	952.470	32.36	46.00	-13.64	30.39	1.97	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.

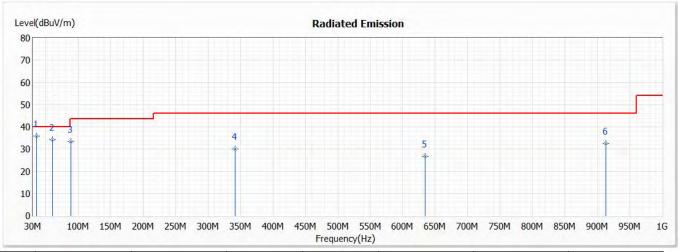


Test Item : General Radiated Emission

Test Mode : Mode 2: Transmit - 3Mbps (2441MHz) (Active variant - OTE140R)

Test Date : 2021/06/17

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
* 1	35.820	35.88	40.00	-4.12	47.29	-11.41	QP
2	60.070	34.16	40.00	-5.84	45.41	-11.25	QP
3	88.200	33.51	43.50	-9.99	50.45	-16.94	QP
4	341.370	30.07	46.00	-15.93	38.73	-8.66	QP
5	634.310	26.63	46.00	-19.37	29.19	-2.56	QP
6	912.700	32.54	46.00	-13.46	31.20	1.34	QP

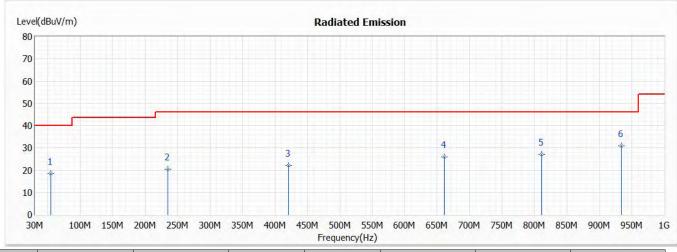
- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Test Item : General Radiated Emission
Test Mode : Mode 3: Charge Mode

Test Date : 2021/06/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	54.250	18.43	40.00	-21.57	29.05	-10.62	QP
2	234.670	20.55	46.00	-25.45	32.02	-11.47	QP
3	420.910	22.14	46.00	-23.86	28.76	-6.62	QP
4	660.500	26.01	46.00	-19.99	28.24	-2.23	QP
5	810.850	27.10	46.00	-18.90	27.02	0.08	QP
* 6	934.040	30.76	46.00	-15.24	29.06	1.70	QP

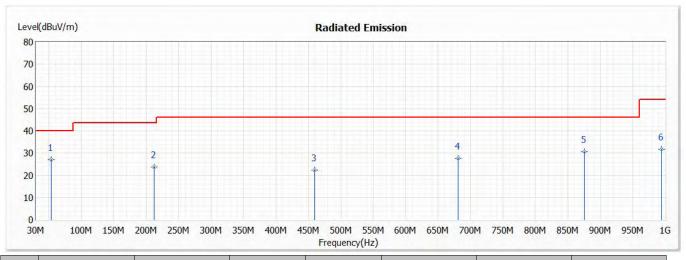
- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Test Item : General Radiated Emission
Test Mode : Mode 3: Charge Mode

Test Date : 2021/06/28

Vertical



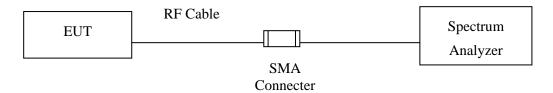
No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
* 1	53.280	27.07	40.00	-12.93	37.67	-10.60	QP
2	212.360	23.71	43.50	-19.79	36.68	-12.97	QP
3	459.710	22.47	46.00	-23.53	28.30	-5.83	QP
4	680.870	27.52	46.00	-18.48	29.41	-1.89	QP
5	874.870	30.66	46.00	-15.34	29.99	0.67	QP
6	994.180	31.72	54.00	-22.28	29.65	2.07	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. 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. Test Result of RF Antenna Conducted Test

Product : Bluetooth Headset

Test Item : RF Antenna Conducted Test

Test Mode : Mode 1: Transmit - 1Mbps (PRO variant -OTE140L)

Test Date : 2021/05/18

Figure Channel 00:

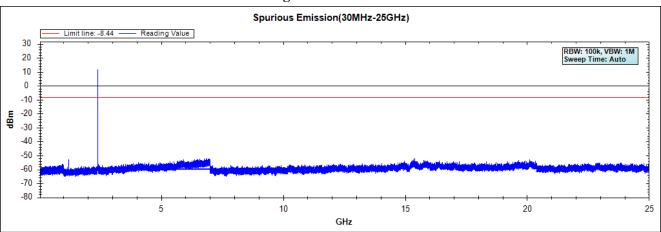


Figure Channel 39:

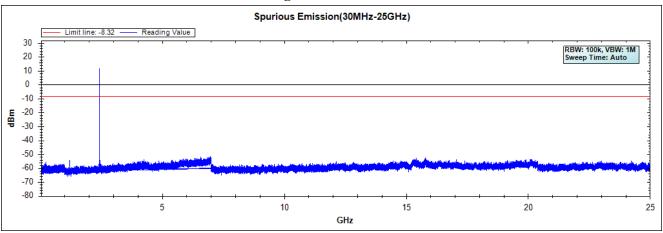
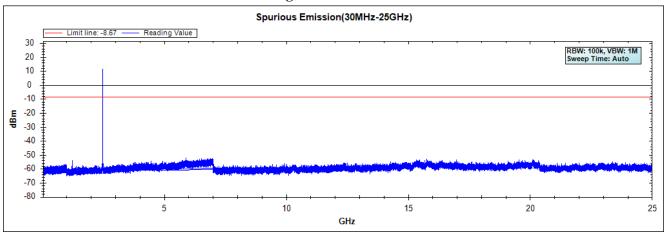


Figure Channel 78:



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



Test Item : RF Antenna Conducted Test

Test Mode : Mode 2: Transmit - 3Mbps (PRO variant -OTE140L)

Test Date : 2021/05/18

Figure Channel 00:

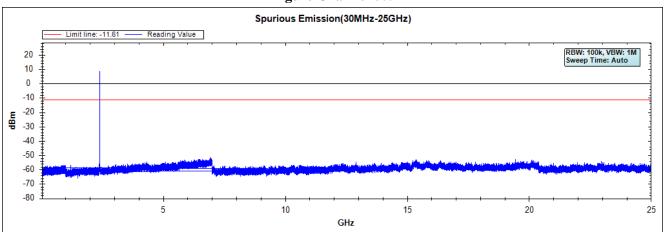


Figure Channel 39:

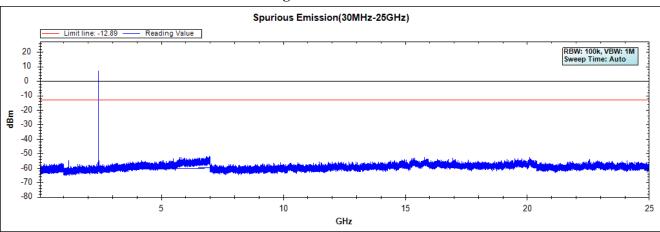
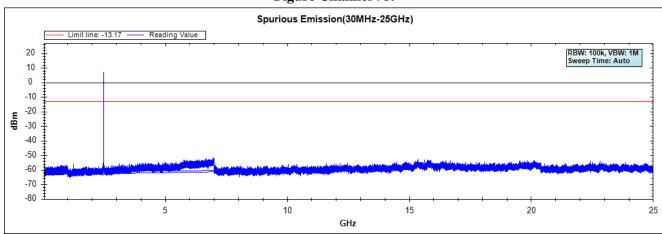


Figure Channel 78:



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



Test Item : RF Antenna Conducted Test

Test Mode : Mode 1: Transmit - 1Mbps (PRO variant -OTE140R)

Test Date : 2021/05/18

Figure Channel 00:

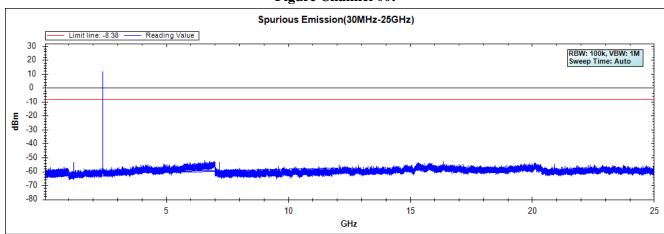


Figure Channel 39:

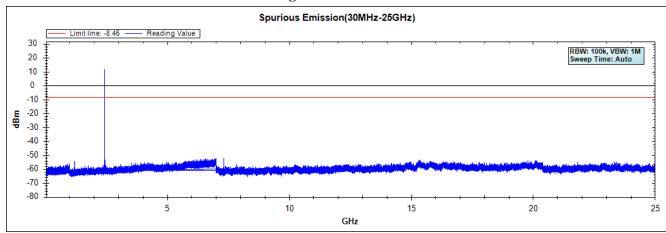
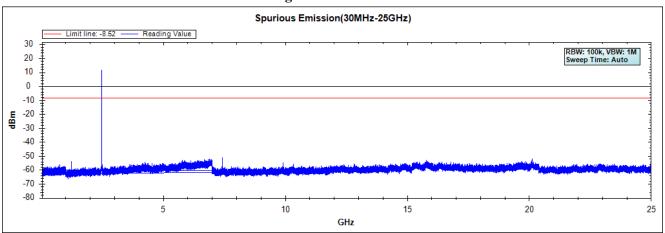


Figure Channel 78:



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



Test Item : RF Antenna Conducted Test

Test Mode : Mode 2: Transmit - 3Mbps (PRO variant -OTE140R)

Test Date : 2021/05/18

Figure Channel 00:

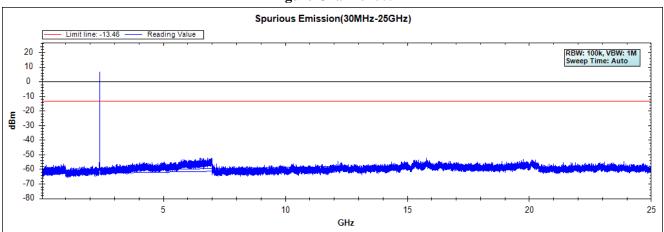


Figure Channel 39:

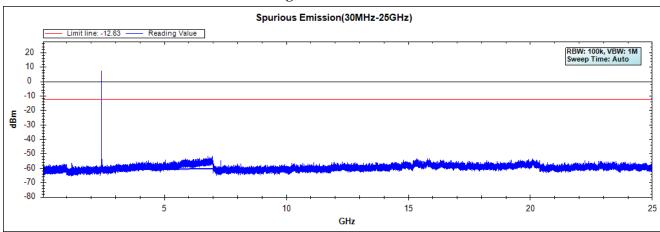
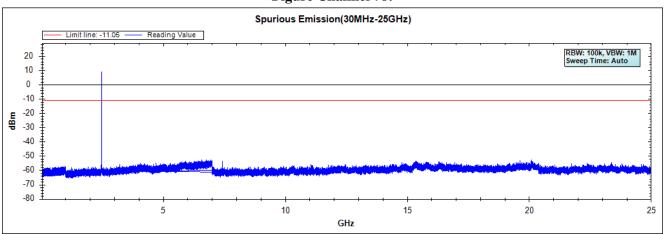


Figure Channel 78:



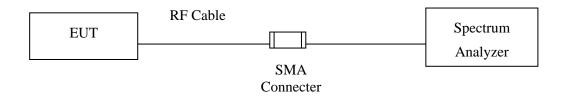
Note: The above test pattern is synthesized by multiple of the frequency range.



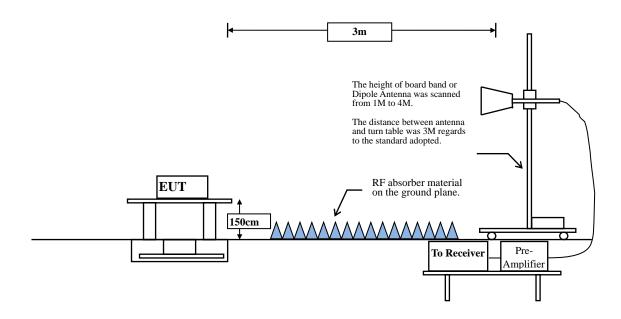
6. Band Edge

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. Test Result of Band Edge

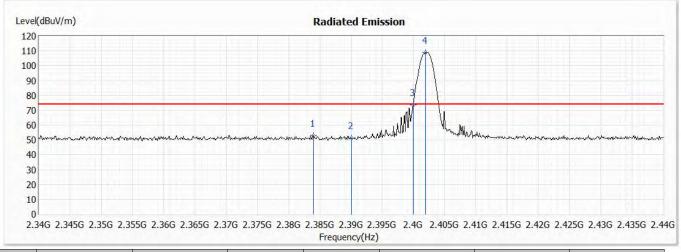
Product : Bluetooth Headset

Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2402MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2384.000	53.13	74.00	-20.87	39.97	13.16	PK
2	2390.000	51.15	74.00	-22.85	37.99	13.16	PK
3	2400.000	73.66		-	60.48	13.18	PK
4	2401.900	108.71		-	95.53	13.18	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2384	53.13	-30.755	22.375	-31.625	54.000	Pass
00 (Average)	2390	51.15	-30.755	20.395	-33.605	54.000	Pass
00 (Average)	2400	73.66	-30.755	42.905			Pass
00 (Average)	2401.9	108.71	-30.755	77.955			Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

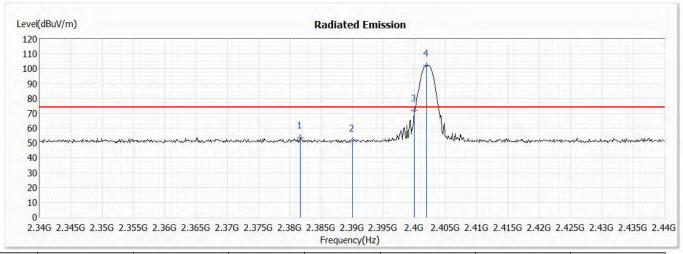


Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2402MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2381.700	53.70	74.00	-20.30	40.55	13.15	PK
2	2390.000	51.77	74.00	-22.23	38.61	13.16	PK
3	2400.000	71.83	-	-	58.65	13.18	PK
4	2401.900	102.09			88.91	13.18	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2381.7	53.7	-30.755	22.945	-31.055	54.000	Pass
00 (Average)	2390	51.77	-30.755	21.015	-32.985	54.000	Pass
00 (Average)	2400	71.83	-30.755	41.075			Pass
00 (Average)	2401.9	102.09	-30.755	71.335			Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

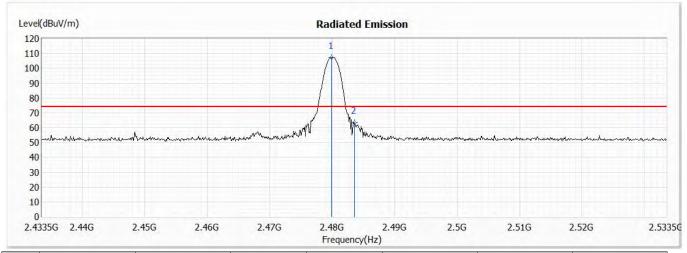


Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2480MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2479.900	107.30		-	94.11	13.19	PK
2	2483.500	63.29	74.00	-10.71	50.10	13.19	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
78 (Average)	2479.9	107.3	-30.755	76.545			Pass
78 (Average)	2483.5	63.29	-30.755	32.535	-21.465	54.000	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

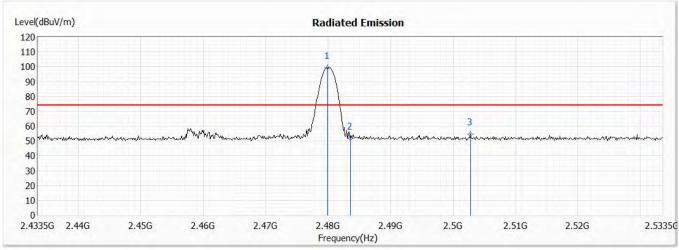


Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2480MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2479.900	99.47			86.28	13.19	PK
2	2483.500	51.91	74.00	-22.09	38.72	13.19	PK
3	2502.800	54.44	74.00	-19.56	41.24	13.20	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
78 (Average)	2479.9	99.47	-30.755	68.715			Pass
78 (Average)	2483.5	51.91	-30.755	21.155	-32.845	54.000	Pass
78 (Average)	2502.8	54.44	-30.755	23.685	-30.315	54.000	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

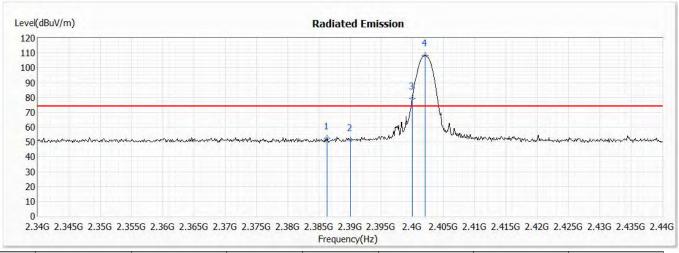


Test Item : Band Edge

Test Mode : Mode 2: Transmit - 3Mbps (2402MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2386.300	52.75	74.00	-21.25	39.59	13.16	PK
2	2390.000	51.15	74.00	-22.85	37.99	13.16	PK
3	2400.000	79.33	-		66.15	13.18	PK
4	2402.000	108.47			95.29	13.18	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2386.3	52.75	-30.669	22.081	-31.919	54.000	Pass
00 (Average)	2390	51.15	-30.669	20.481	-33.519	54.000	Pass
00 (Average)	2400	79.33	-30.669	48.661			Pass
00 (Average)	2402	108.47	-30.669	77.801			Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

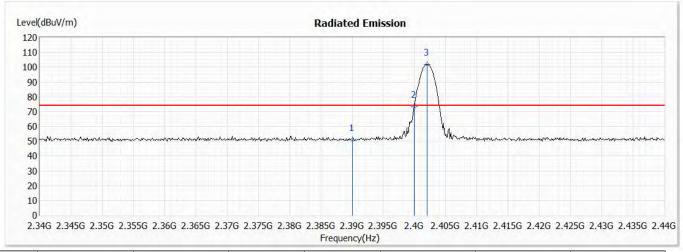


Test Item : Band Edge

Test Mode : Mode 2: Transmit - 3Mbps (2402MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2390.000	50.76	74.00	-23.24	37.60	13.16	PK
2	2400.000	73.27			60.09	13.18	PK
3	2402.000	101.90			88.72	13.18	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2390	50.76	-30.669	20.091	-33.909	54.000	Pass
00 (Average)	2400	73.27	-30.669	42.601			Pass
00 (Average)	2402	101.9	-30.669	71.231			Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

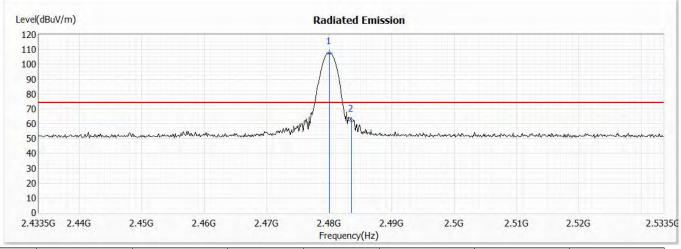


Test Item : Band Edge

Test Mode : Mode 2: Transmit - 3Mbps (2480MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2480.000	107.72			94.53	13.19	PK
2	2483.500	62.19	74.00	-11.81	49.00	13.19	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
78 (Average)	2480	107.72	-30.669	77.051			Pass
78 (Average)	2483.5	62.19	-30.669	31.521	-22.479	54.000	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

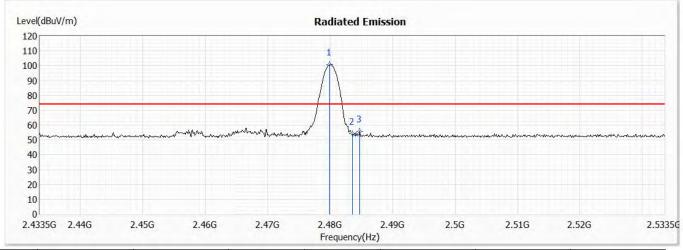


Test Item : Band Edge

Test Mode : Mode 2: Transmit - 3Mbps (2480MHz) (PRO variant -OTE140L)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2479.900	100.89			87.70	13.19	PK
2	2483.500	54.20	74.00	-19.80	41.01	13.19	PK
3	2484.700	55.94	74.00	-18.06	42.75	13.19	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency	Peak	Duty Cycle	Average	Margin	Average Limit	D14
	(MHz)	/IH7)		Measurement (dBm)	(dB)	(dBm)	Result
78 (Average)	2479.9	100.89	-30.669	70.221			Pass
78 (Average)	2483.5	54.2	-30.669	23.531	-30.469	54.000	Pass
78 (Average)	2484.7	55.94	-30.669	25.271	-28.729	54.000	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.



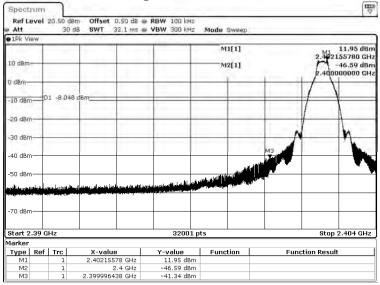
Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps(Hopping off) (PRO variant -OTE140L)

Test Date : 2021/05/28

Measurement Level	Result
Δ (dB)	
> 20	PASS





Date: 17.MAY.2021 22:17:07

Date: 17.MAY.2021 22:36:39

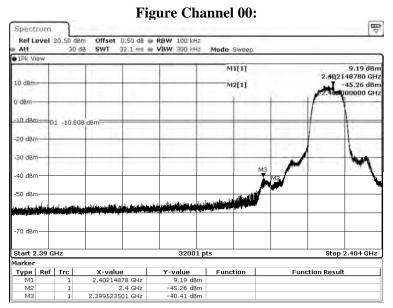


Test Item : Band Edge

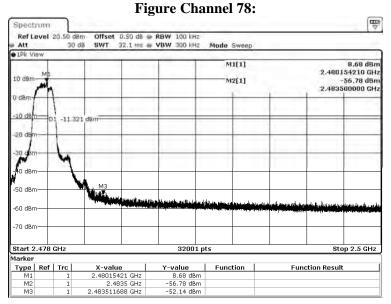
Test Mode : Mode 2: Transmit - 3Mbps (Hopping off) (PRO variant -OTE140L)

Test Date : 2021/05/28

Measurement Level	Result
Δ (dB)	
> 20	PASS



Date: 17.MAY.2021 23:34:38



Date: 17.MAY.2021 23:55:17

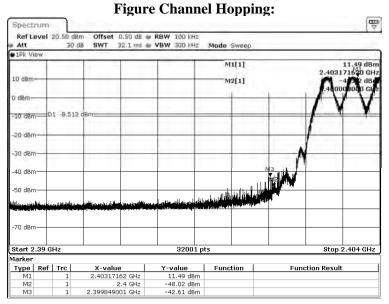


Test Item : Band Edge

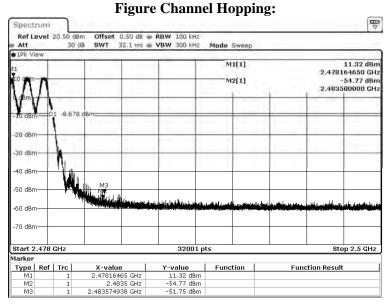
Test Mode : Mode 1: Transmit - 1Mbps(Hopping on) (PRO variant -OTE140L)

Test Date : 2021/05/28

Measurement Level	Result
Δ (dB)	
> 20	PASS



Date: 17.MAY.2021 22:21:55



Date: 17.MAY.2021 22:39:46

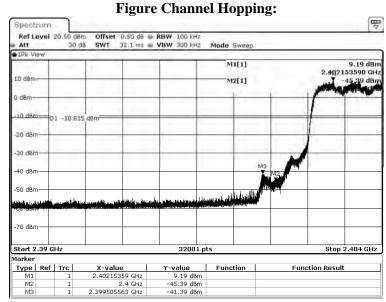


Test Item : Band Edge

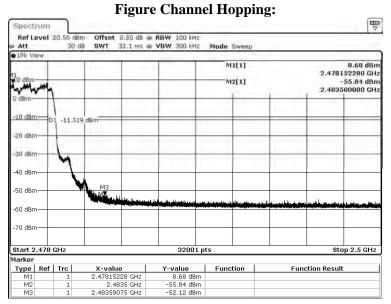
Test Mode : Mode 2: Transmit - 3Mbps (Hopping on) (PRO variant -OTE140L)

Test Date : 2021/05/28

Measurement Level	Result
Δ (dB)	
> 20	PASS



Date: 17.MAY.2021 23:39:29



Date: 18.MAY.2021 00:14:50

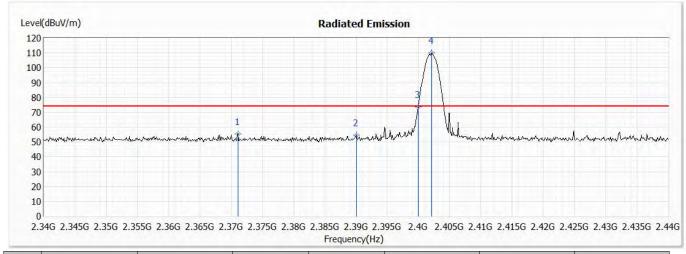


Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2402MHz) (Active variant -OTE140L)

Test Date : 2021/07/27

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2371.100	55.26	74.00	-18.74	42.10	13.16	PK
2	2390.000	54.70	74.00	-19.30	41.51	13.19	PK
3	2400.000	73.83	74.00	-0.17	60.63	13.20	PK
4	2402.100	109.91	74.00	35.91	96.71	13.20	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2371.1	55.26	-30.755	24.505	-29.495	54.000	Pass
00 (Average)	2390	54.7	-30.755	23.945	-30.055	54.000	Pass
00 (Average)	2400	73.83	-30.755	43.075			Pass
00 (Average)	2402.1	109.91	-30.755	79.155			Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

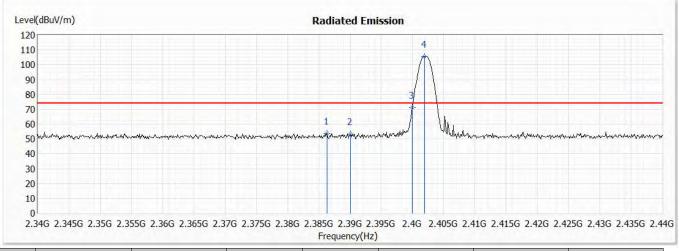


Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2402MHz) (Active variant -OTE140L)

Test Date : 2021/07/27

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2386.300	53.67	74.00	-20.33	40.49	13.18	PK
2	2390.000	53.21	74.00	-20.79	40.02	13.19	PK
3	2400.000	71.06	74.00	-2.94	57.86	13.20	PK
4	2401.900	105.50	74.00	31.50	92.30	13.20	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2386.3	53.67	-30.755	22.915	-31.085	54.000	Pass
00 (Average)	2390	53.21	-30.755	22.455	-31.545	54.000	Pass
00 (Average)	2400	71.06	-30.755	40.305			Pass
00 (Average)	2401.9	105.5	-30.755	74.745			Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

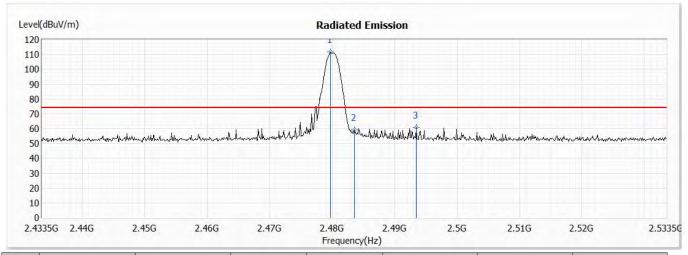


Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2480MHz) (Active variant -OTE140L)

Test Date : 2021/07/27

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2479.700	111.66	74.00	37.66	98.45	13.21	PK
2	2483.500	59.13	74.00	-14.87	45.92	13.21	PK
3	2493.500	60.73	74.00	-13.27	47.51	13.22	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
78 (Average)	2479.7	111.66	-30.755	80.905			Pass
78 (Average)	2483.5	59.13	-30.755	28.375	-25.625	54.000	Pass
78 (Average)	2493.5	60.73	-30.755	29.975	-24.025	54.000	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

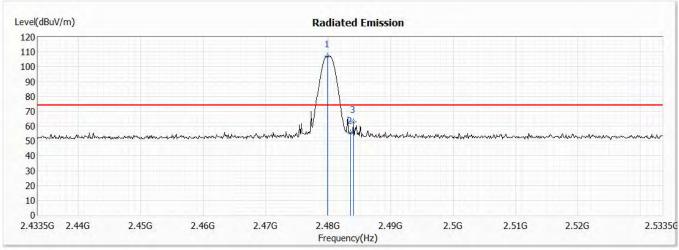


Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2480MHz) (Active variant -OTE140L)

Test Date : 2021/07/27

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2479.900	107.04	74.00	33.04	93.83	13.21	PK
2	2483.500	55.33	74.00	-18.67	42.12	13.21	PK
3	2484.000	63.01	74.00	-10.99	49.80	13.21	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
78 (Average)	2479.9	107.04	-30.755	76.285			Pass
78 (Average)	2483.5	55.33	-30.755	24.575	-29.425	54.000	Pass
78 (Average)	2484	63.01	-30.755	32.255	-21.745	54.000	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

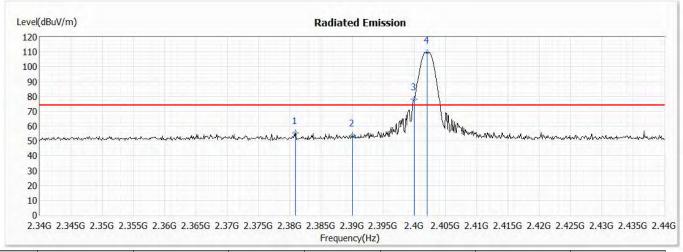


Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2402MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2380.900	55.63	74.00	-18.37	42.48	13.15	PK
2	2390.000	53.99	74.00	-20.01	40.83	13.16	PK
3	2400.000	78.34			65.16	13.18	PK
4	2402.000	109.79			96.61	13.18	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2380.9	55.63	-30.669	24.961	-29.039	54.000	Pass
00 (Average)	2390	53.99	-30.669	23.321	-30.679	54.000	Pass
00 (Average)	2400	78.34	-30.669	47.671			Pass
00 (Average)	2402	109.79	-30.669	79.121			Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

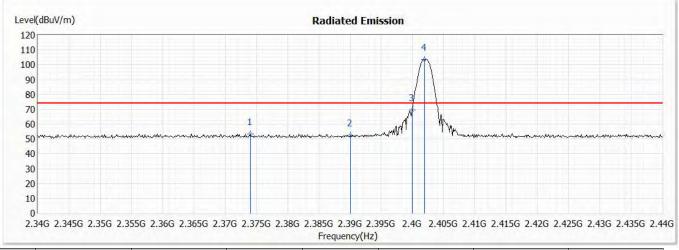


Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2402MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2374.100	53.56	74.00	-20.44	40.42	13.14	PK
2	2390.000	52.57	74.00	-21.43	39.41	13.16	PK
3	2400.000	69.60	-	-	56.42	13.18	PK
4	2401.900	103.44			90.26	13.18	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2374.1	53.56	-30.669	22.891	-31.109	54.000	Pass
00 (Average)	2390	52.57	-30.669	21.901	-32.099	54.000	Pass
00 (Average)	2400	69.6	-30.669	38.931			Pass
00 (Average)	2401.9	103.44	-30.669	72.771			Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

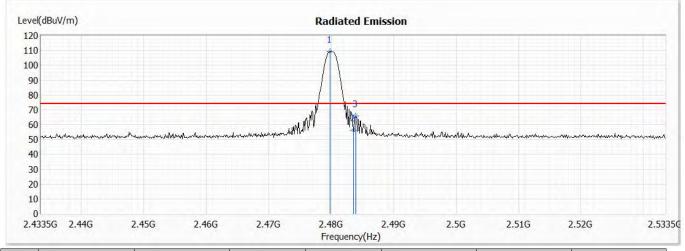


Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2480MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2479.800	109.38			96.19	13.19	PK
2	2483.500	56.22	74.00	-17.78	43.03	13.19	PK
3	2483.900	65.71	74.00	-8.29	52.52	13.19	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
78 (Average)	2479.8	109.38	-30.669	78.711			Pass
78 (Average)	2483.5	56.22	-30.669	25.551	-28.449	54.000	Pass
78 (Average)	2483.9	65.71	-30.669	35.041	-18.959	54.000	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

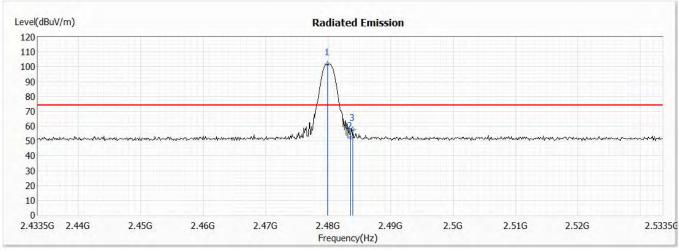


Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2480MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2479.900	101.98			88.79	13.19	PK
2	2483.500	52.30	74.00	-21.70	39.11	13.19	PK
3	2483.900	57.56	74.00	-16.44	44.37	13.19	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
78 (Average)	2479.9	101.98	-30.669	71.311			Pass
78 (Average)	2483.5	52.3	-30.669	21.631	-32.369	54.000	Pass
78 (Average)	2483.9	57.56	-30.669	26.891	-27.109	54.000	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

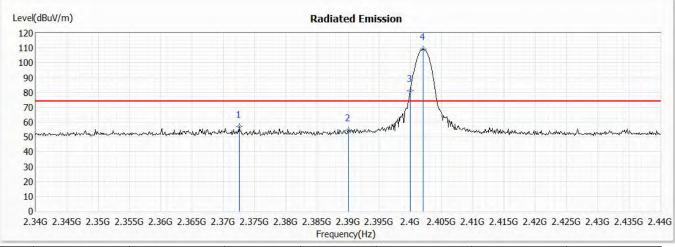


Test Item : Band Edge

Test Mode : Mode 2: Transmit - 3Mbps (2402MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2372.600	56.99	74.00	-17.01	43.85	13.14	PK
2	2390.000	54.76	74.00	-19.24	41.60	13.16	PK
3	2400.000	81.24			68.06	13.18	PK
4	2402.000	109.15			95.97	13.18	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

	Frequency	Peak	Duty Cycle	Average	Margin	Average Limit	
Channel No.	(MHz)	Measurement	Factor	Measurement	(dB)	(dBm)	Result
	(MHZ)	(dBm)	(dB)	(dBm)	(ub)	(ubiii)	
00 (Average)	2372.6	56.99	-30.669	26.321	-27.679	54.000	Pass
00 (Average)	2390	54.76	-30.669	24.091	-29.909	54.000	Pass
00 (Average)	2400	81.24	-30.669	50.571	-		Pass
00 (Average)	2402	109.15	-30.669	78.481			Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

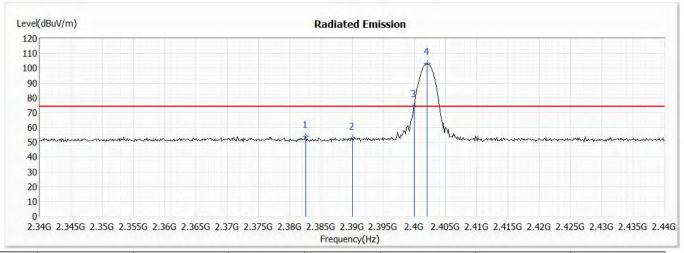


Test Item : Band Edge

Test Mode : Mode 2: Transmit - 3Mbps (2402MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2382.600	53.98	74.00	-20.02	40.83	13.15	PK
2	2390.000	52.49	74.00	-21.51	39.33	13.16	PK
3	2400.000	74.67			61.49	13.18	PK
4	2402.000	103.00			89.82	13.18	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2382.6	53.98	-30.669	23.311	-30.689	54.000	Pass
00 (Average)	2390	52.49	-30.669	21.821	-32.179	54.000	Pass
00 (Average)	2400	74.67	-30.669	44.001			Pass
00 (Average)	2402	103	-30.669	72.331			Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

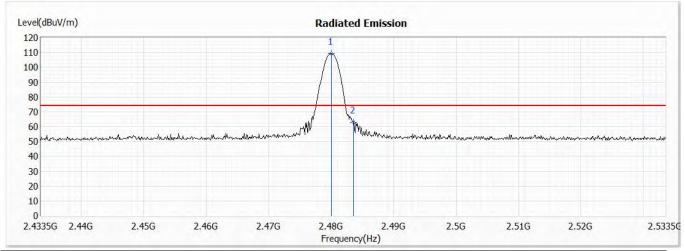


Test Item : Band Edge

Test Mode : Mode 2: Transmit - 3Mbps (2480MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2480.000	109.35			96.16	13.19	PK
2	2483.500	63.03	74.00	-10.97	49.84	13.19	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
78 (Average)	2480	109.35	-30.669	78.681			Pass
78 (Average)	2483.5	63.03	-30.669	32.361	-21.639	54.000	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

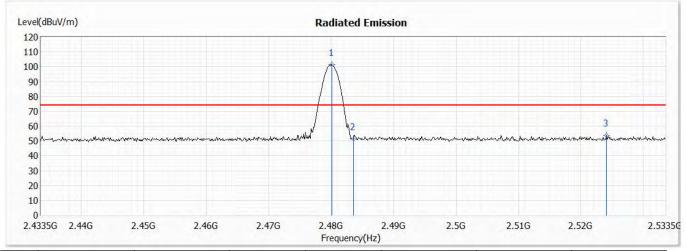


Test Item : Band Edge

Test Mode : Mode 2: Transmit - 3Mbps (2480MHz) (PRO variant -OTE140R)

Test Date : 2021/05/28

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2480.100	101.39			88.20	13.19	PK
2	2483.500	51.28	74.00	-22.72	38.09	13.19	PK
3	2524.100	53.85	74.00	-20.15	40.66	13.19	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency	Peak Measurement	Duty Cycle	Average	Margin	Average Limit	Result
Channel No.	(MHz)	(dBm)	Factor (dB)	Measurement (dBm)	(dB)	(dBm)	Result
78 (Average)	2480.1	101.39	-30.669	70.721			Pass
78 (Average)	2483.5	51.28	-30.669	20.611	-33.389	54.000	Pass
78 (Average)	2524.1	53.85	-30.669	23.181	-30.819	54.000	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.



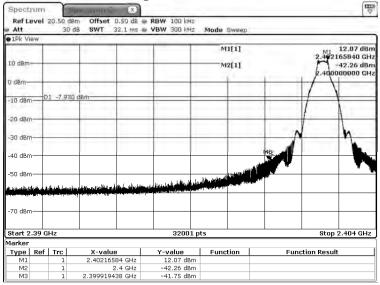
Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps(Hopping off) (PRO variant -OTE140R)

Test Date : 2021/05/28

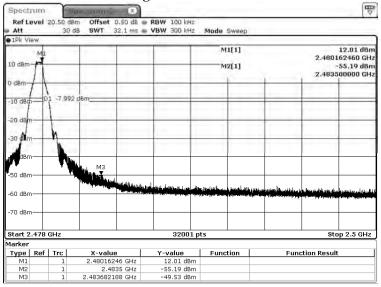
Measurement Level	Result
Δ (dB)	
> 20	PASS





Date: 18.MAY.2021 19:39:35

Figure Channel 78:



Date: 18.MAY.2021 19:56:19

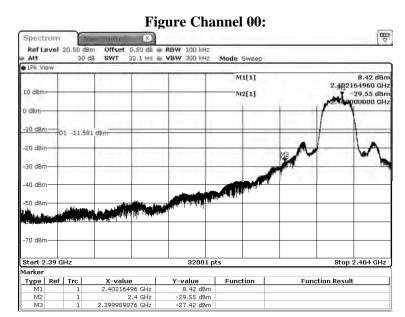


Test Item : Band Edge

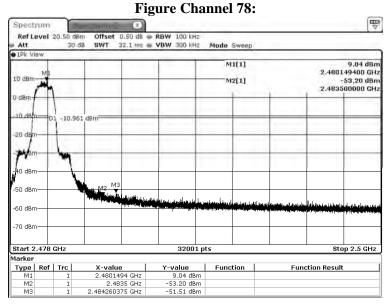
Test Mode : Mode 2: Transmit - 3Mbps (Hopping off) (PRO variant -OTE140R)

Test Date : 2021/05/28

Measurement Level	Result
Δ (dB)	
> 20	PASS



Date: 18.MAY.2021 21:23:02



Date: 18.MAY.2021 21:48:15

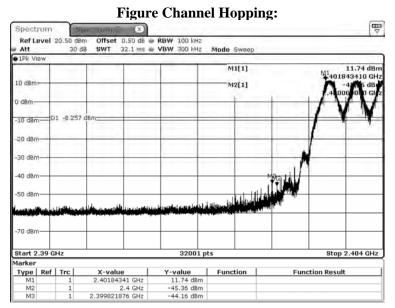


Test Item : Band Edge

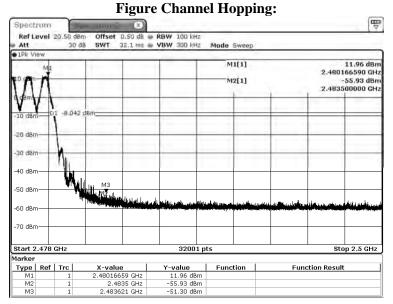
Test Mode : Mode 1: Transmit - 1Mbps(Hopping on) (PRO variant -OTE140R)

Test Date : 2021/05/28

Measurement Level	Result
Δ (dB)	
> 20	PASS



Date: 18.MAY.2021 19:42:33



Date: 18.MAY.2021 19:59:47

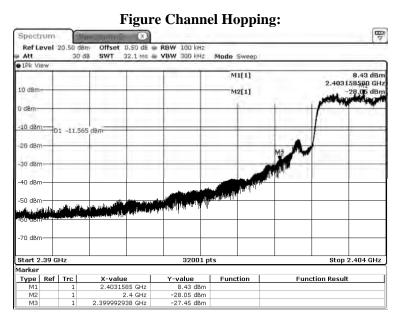


Test Item : Band Edge

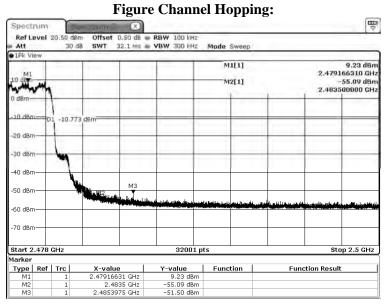
Test Mode : Mode 2: Transmit - 3Mbps (Hopping on) (PRO variant -OTE140R)

Test Date : 2021/05/28

Measurement Level	Result
Δ (dB)	
> 20	PASS



Date: 18.MAY.2021 21:32:03



Date: 18.MAY.2021 22:03:06

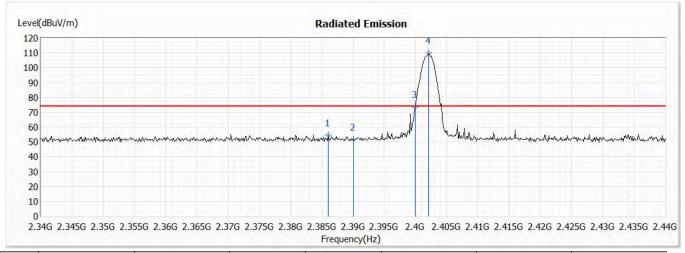


Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2402MHz) (Active variant -OTE140R)

Test Date : 2021/07/27

Horizontal



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2386.000	54.82	74.00	-19.18	41.64	13.18	PK
2	2390.000	51.75	74.00	-22.25	38.56	13.19	PK
3	2400.000	73.64	74.00	-0.36	60.44	13.20	PK
4	2402.100	109.87	74.00	35.87	96.67	13.20	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2386	54.82	-30.669	24.151	-29.849	54.000	Pass
00 (Average)	2390	51.75	-30.669	21.081	-32.919	54.000	Pass
00 (Average)	2400	73.64	-30.669	42.971			Pass
00 (Average)	2402.1	109.87	-30.669	79.201			Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.

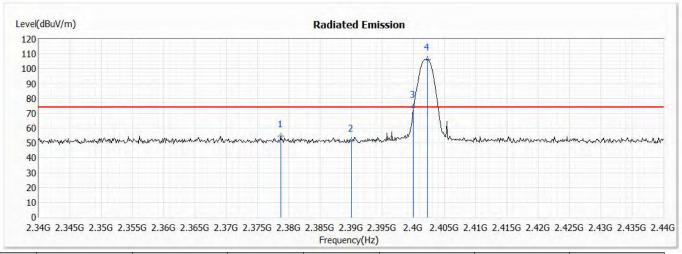


Test Item : Band Edge

Test Mode : Mode 1: Transmit - 1Mbps (2402MHz) (Active variant -OTE140R)

Test Date : 2021/07/27

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB)	Type
		(dBuV/m)					
1	2378.800	54.47	74.00	-19.53	41.30	13.17	PK
2	2390.000	51.85	74.00	-22.15	38.66	13.19	PK
3	2400.000	74.59	74.00	0.59	61.39	13.20	PK
4	2402.200	106.21	74.00	32.21	93.01	13.20	PK

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. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2378.8	54.47	-30.669	23.801	-30.199	54.000	Pass
00 (Average)	2390	51.85	-30.669	21.181	-32.819	54.000	Pass
00 (Average)	2400	74.59	-30.669	43.921			Pass
00 (Average)	2402.2	106.21	-30.669	75.541			Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 15.