FCC Part 15C
Measurement and Test Report

For

DewertOkin GmbH

Weststr. 1, 32278 Kirchlengern, Germany

FCC ID: OY3RF075C

FCC Rule(s):	FCC Part 15.249
Product Description:	REMOTE RF LITE
Tested Model:	RF075C-6
Report No.:	STR16128231I
Tested Date:	2016-12-22 to 2017-02-10
Issued Date:	2017-02-11
Tested By:	Iven Guo / Engineer
Reviewed By:	Silin Chen / EMC Manager
Approved & Authorized By:	Jandy So / PSQ Manager

Prepared By:

Shenzhen SEM.Test Technology Co., Ltd.
1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road,
Bao'an District, Shenzhen, P.R.C.（518101）
Tel.: +86-755-33663308 Fax.: +86-755-33663309 Website: www.semtest.com.cn

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen SEM.Test Technology Co., Ltd.

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	DewertOkin GmbH
Address of applicant:	Weststr. 1, 32278 Kirchlengern, Germany
Manufacturer:	Shenzhen C&D Electronics Co., Ltd
Address of manufacturer:	9 floor, 9th A building, Baoneng Science and Technology Park, Qing Xiang Road No.1, Longhua District, Shenzhen, Guangdong, China

General Description of EUT	
Product Name:	REMOTE RF LITE
Trade Name:	/
Model No.:	RF075C-6
Adding Model(s):	RF075C-4
Rated Voltage:	Battery DC 3V
Power Adapter Model:	/
Note: The test data is gathered from a production sample, provided by the manufacturer. The appearance of others models listed in the report is different from main-test model RF075C-6, but the circuit and the electronic construction do not change, declared by the manufacturer.	

Technical Characteristics of EUT	
Frequency Range:	2402MHz-2481MHz
Max. Field Strength:	103.09dBuV/m(3m)
Data Rate:	1Mbps
Modulation:	GFSK
Quantity of Channels:	16
Antenna Type:	PCB
Antenna Gain:	0dBi

1.2 Test Standards

The following report is prepared on behalf of the DewertOkin GmbH in accordance with FCC Part 15, Subpart B, Subpart C, and section 15.107, 15.203, 15.205, 15.207, 15.209 and 15.249 of the Federal Communication Commissions rules.

The objective is to determine compliance with FCC Part 15, Subpart C, and section 15.107,15.203, 15.205, 15.207, 15.209 and 15.249 of the Federal Communication Commissions rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which results in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard for Testing Unlicensed Wireless Devices, and ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

1.4 Test Facility

FCC – Registration No.: 934118

Shenzhen SEM.Test Technology Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files and the Registration is 934118.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Shenzhen SEM.Test Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

CNAS Registration No.: L4062

Shenzhen SEM.Test Technology Co., Ltd. is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L4062. All measurement facilities used to collect the measurement data are located at 1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C (518101).

1.5 EUT Setup and Test Mode

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	Low Channel	2402MHz
TM2	Middle Channel	2442MHz
TM3	High Channel	2480MHz/2481MHz
Note: 2481MHz is use to Match Code.		

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
/	/	/	/

1.6 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
RF Output Power	Conducted	±0.42dB
Occupied Bandwidth	Conducted	±1.5%
Conducted Spurious Emission	Conducted	±2.17dB
Conducted Emissions	Conducted	±2.88dB
Transmitter Spurious Emissions	Radiated	±5.1dB

1.7 Test Equipment List and Details

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due Date
SEMT-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2016-06-04	2017-06-03
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2016-06-04	2017-06-03
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2016-06-04	2017-06-03
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2016-06-04	2017-06-03
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2016-06-04	2017-06-03
SEMT-1011	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2016-06-04	2017-06-03
SEMT-1042	Horn Antenna	ETS	3117	00086197	2016-06-04	2017-06-03
SEMT-1121	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170582	2016-06-04	2017-06-03
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2016-06-04	2017-06-03
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2016-06-04	2017-06-03
SEMT-1003	L.I.S.N	Schwarz beck	NSLK8126	8126-224	2016-06-04	2017-06-03
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2016-06-04	2017-06-03

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§ 15.203	Antenna Requirement	Compliant
§15.205	Restricted Band of Operation	Compliant
§ 15.207(a)	Conducted Emission	N/A
§ 15.209(a)(f)	Radiated Spurious Emissions	Compliant
§15.249(a)	Field Strength of Emissions	Compliant
§15.249(d)	Out of Band Emission	Compliant
§15.215 (c)	Emission Bandwidth	Compliant

N/A: not applicable

3. Antenna Requirements

3.1 Standard Applicable

According to FCC Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

3.2 Test Result

This product has a PCB antenna, fulfill the requirement of this section.

4. Radiated Emissions

4.1 Standard Applicable

According to §15.249(a), the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

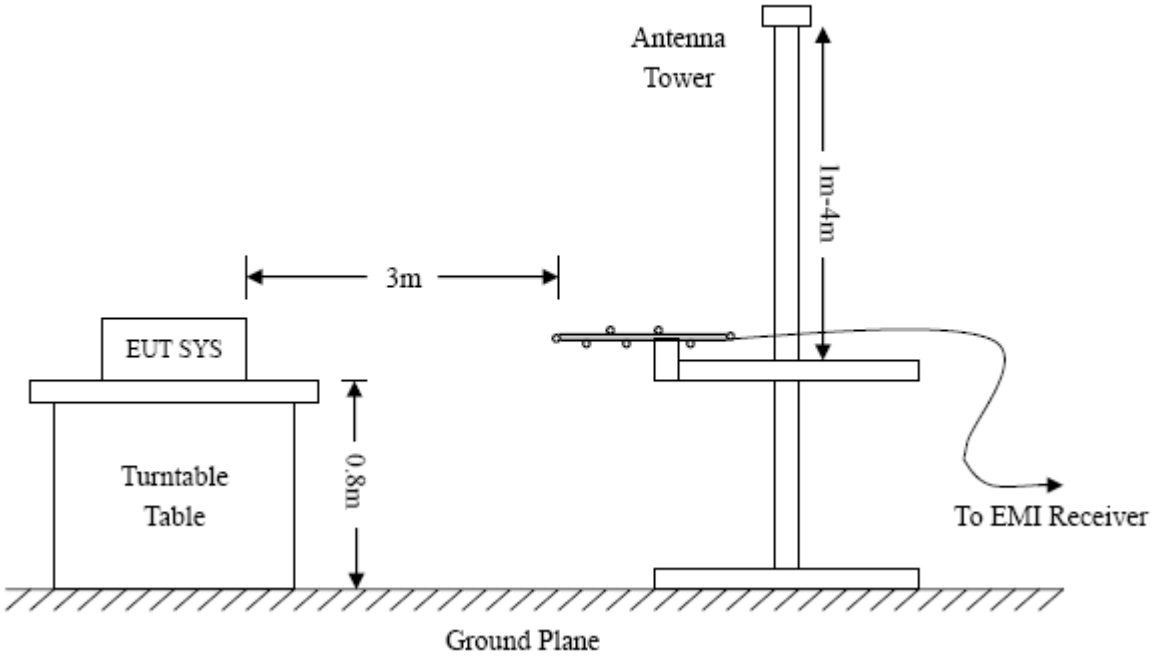
Fundamental Frequency	Field strength of fundamental (milli-volts/meter)	Field strength of Harmonics (micro-volts/meter)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	250	2500

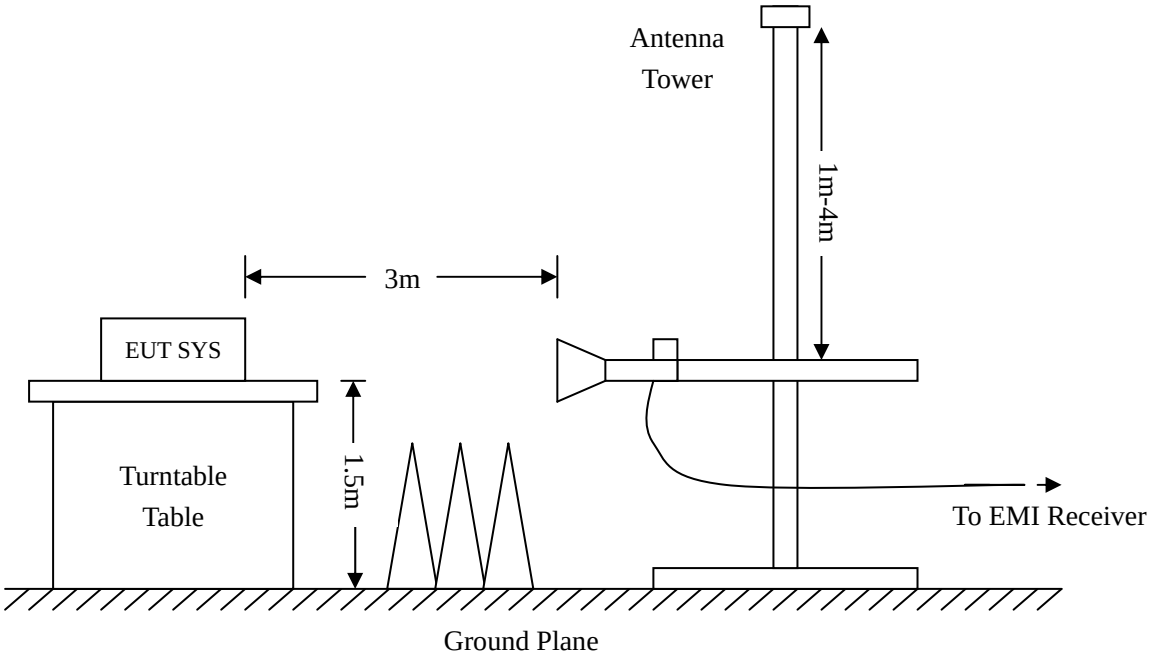
(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply. Spurious Radiated Emissions measurements starting below or at the lowest crystal frequency.

4.2 Test Procedure

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.205 15.249(a) and FCC Part 15.209 Limit.
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.
The spacing between the peripherals was 10 cm.





Frequency :9kHz-30MHz	Frequency :30MHz-1GHz	Frequency :Above 1GHz
RBW=10KHz,	RBW=120KHz,	RBW=1MHz,
VBW =30KHz	VBW=300KHz	VBW=3MHz(Peak), 10Hz(AV)
Sweep time= Auto	Sweep time= Auto	Sweep time= Auto
Trace = max hold	Trace = max hold	Trace = max hold
Detector function = peak	Detector function = peak, QP	Detector function = peak, AV

4.3 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Ant. Factor + Cable Loss – Ampl. Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – FCC Part 15C Limit

4.4 Environmental Conditions

Temperature:	24 °C
Relative Humidity:	60 %
ATM Pressure:	1012 mbar

4.5 Summary of Test Results/Plots

According to the data below, the FCC Part 15.205, 15.209 and 15.249 standards, and had the worst margin of:

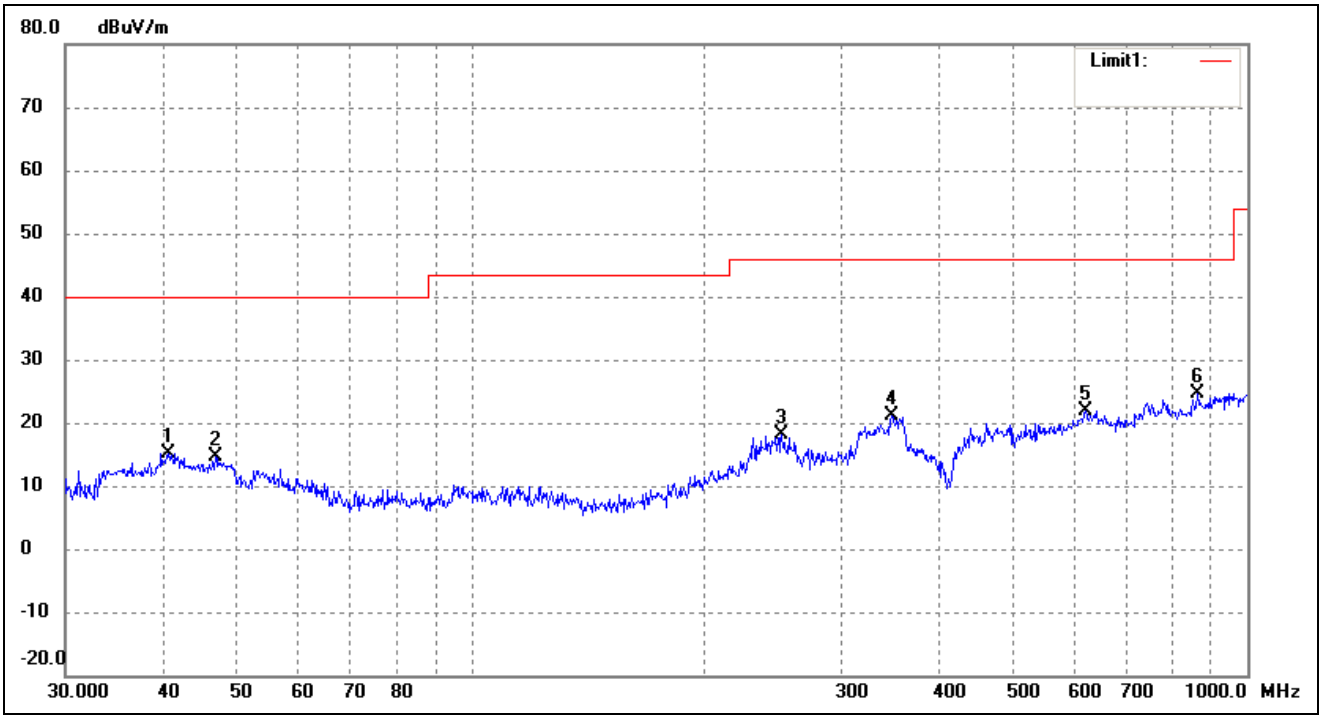
-12.11 dB at **900.1474 MHz** in the **Vertical** polarization, **High Channel, 9 kHz to 25 GHz, 3Meters**

Note: this EUT was tested in 3 orthogonal positions and the worst case position data was reported.

Plot of Radiated Emissions Test Data (30MHz to 1GHz)

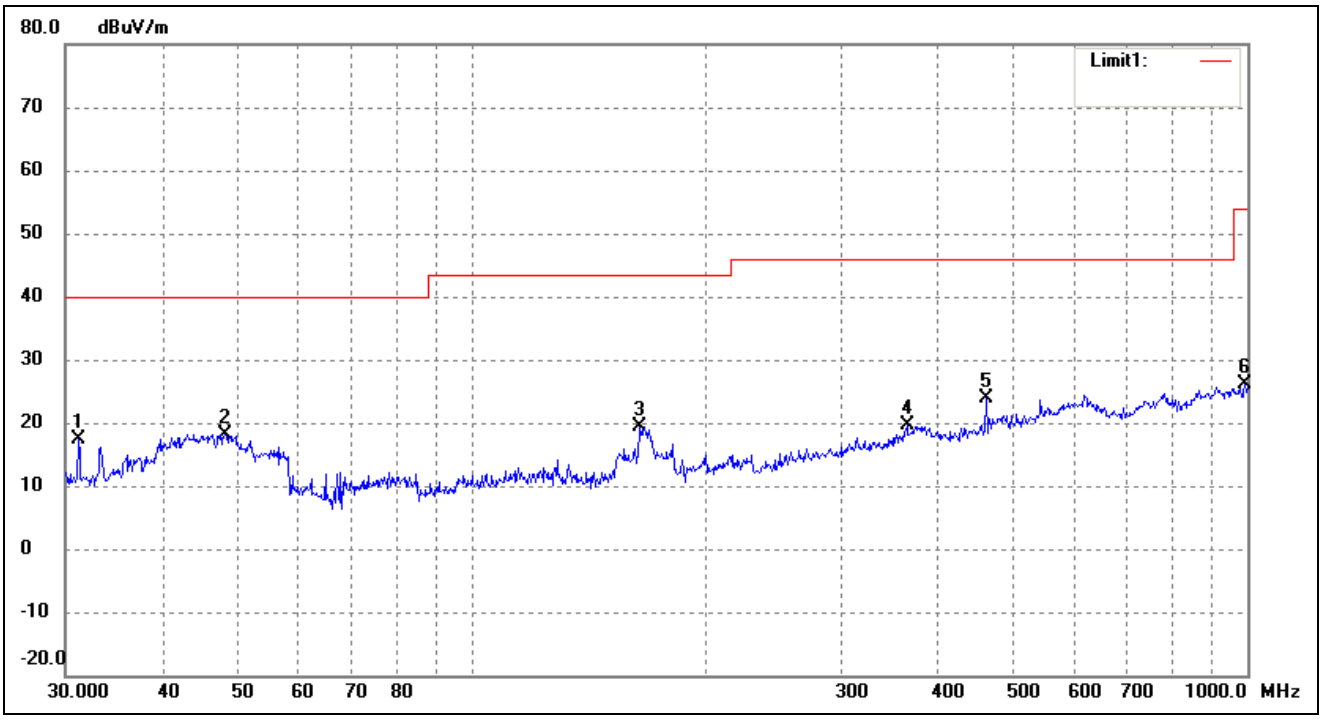
EUT: *REMOTE RF LITE*
Tested Model: *RF075C-6*
Operating Condition: *Transmitting Low Channel (2402MHz)*
Comment: *DC 3V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	40.7016	22.87	-7.71	15.16	40.00	-24.84	289	100	peak
2	46.8303	22.69	-8.11	14.58	40.00	-25.42	96	100	peak
3	251.1804	25.67	-7.55	18.12	46.00	-27.88	126	100	peak
4	348.0274	25.50	-4.29	21.21	46.00	-24.79	90	100	peak
5	618.5369	20.71	1.14	21.85	46.00	-24.15	328	100	peak
6	863.0562	21.63	2.97	24.60	46.00	-21.40	153	100	peak

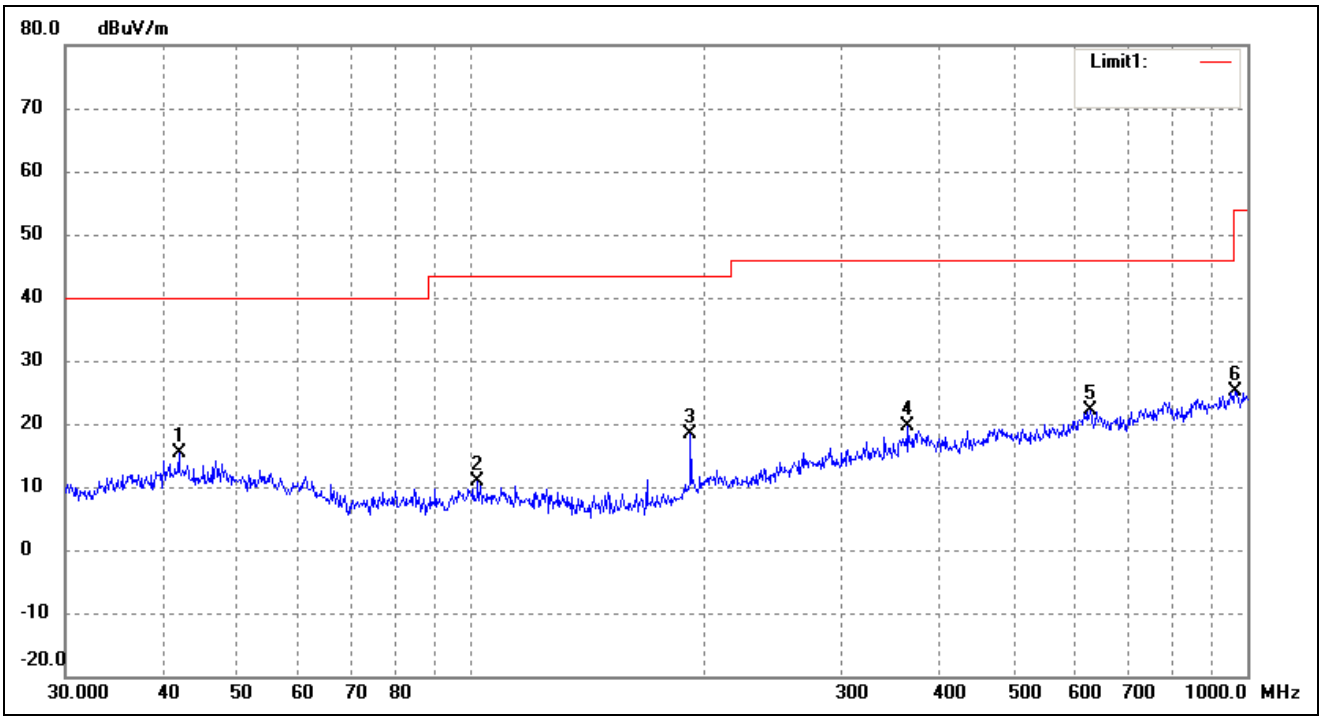
Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.1798	27.34	-10.01	17.33	40.00	-22.67	198	100	peak
2	48.1626	26.30	-8.20	18.10	40.00	-21.90	151	100	peak
3	164.9075	31.47	-12.04	19.43	43.50	-24.07	60	100	peak
4	364.2595	22.54	-3.00	19.54	46.00	-26.46	91	100	peak
5	460.7271	26.62	-2.63	23.99	46.00	-22.01	220	100	peak
6	993.0114	21.73	4.49	26.22	54.00	-27.78	316	100	peak

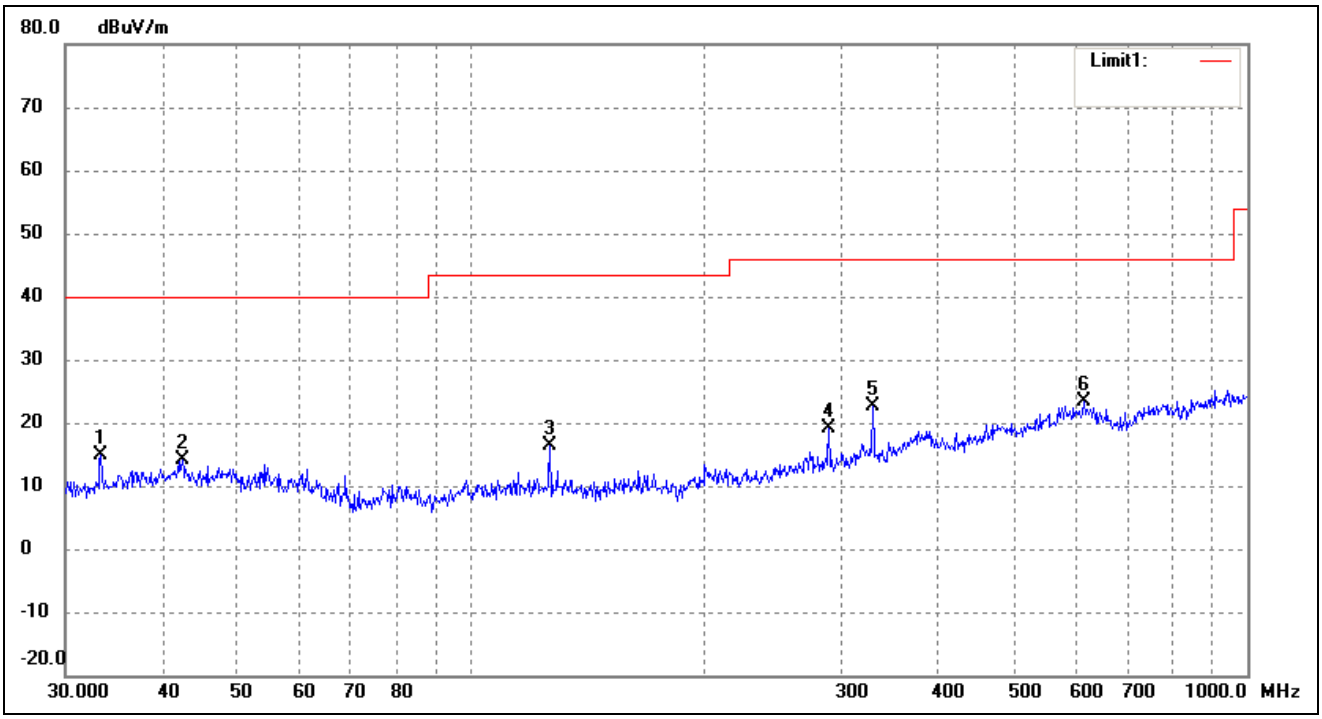
Operating Condition: *Transmitting Middle Channel (2442MHz)*
Comment: *DC 3V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	42.0066	23.25	-7.80	15.45	40.00	-24.55	145	100	peak
2	102.0014	21.78	-10.96	10.82	43.50	-32.68	336	100	peak
3	191.7450	28.14	-9.77	18.37	43.50	-25.13	71	100	peak
4	365.5391	22.44	-2.93	19.51	46.00	-26.49	199	100	peak
5	627.2738	21.09	1.05	22.14	46.00	-23.86	133	100	peak
6	965.5421	21.42	3.67	25.09	54.00	-28.91	262	100	peak

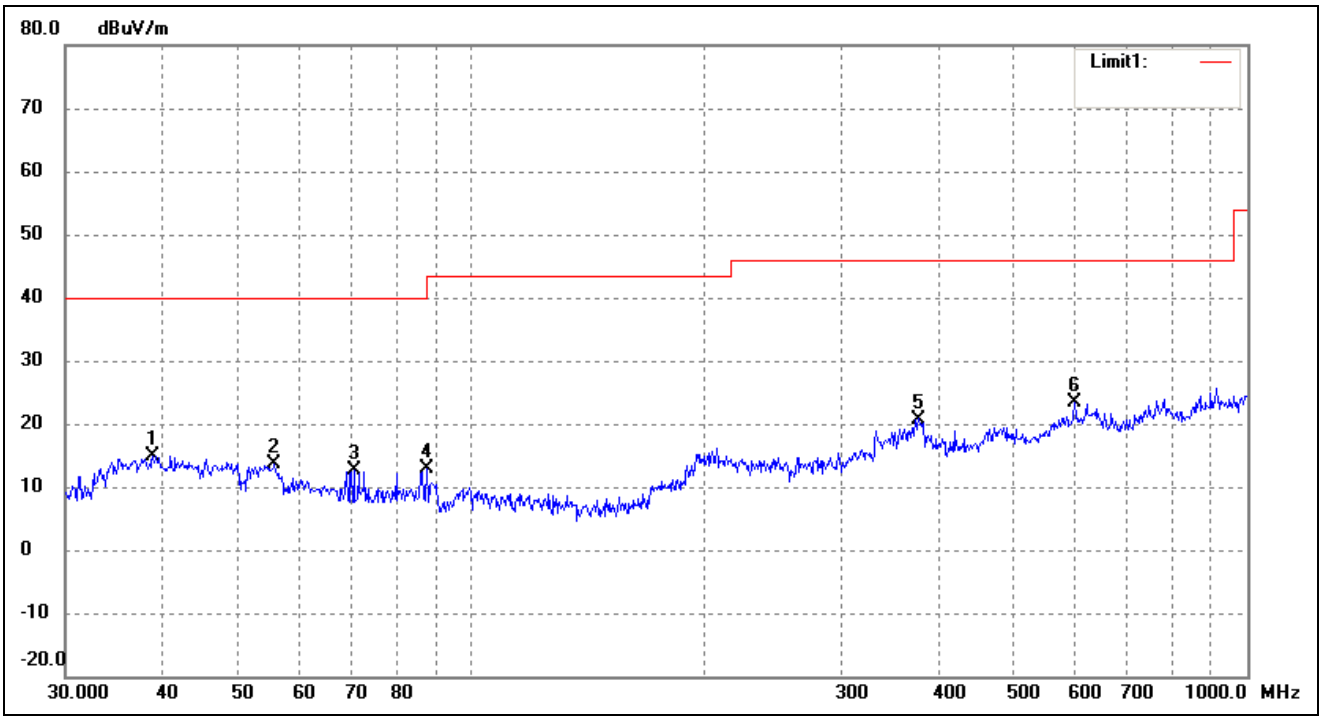
Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	33.3279	24.29	-9.46	14.83	40.00	-25.17	190	100	peak
2	42.4508	21.93	-7.83	14.10	40.00	-25.90	249	100	peak
3	126.3286	28.28	-11.79	16.49	43.50	-27.01	94	100	peak
4	289.0021	25.12	-5.90	19.22	46.00	-26.78	288	100	peak
5	329.0390	27.45	-4.78	22.67	46.00	-23.33	124	100	peak
6	616.3718	22.41	0.99	23.40	46.00	-22.60	327	100	peak

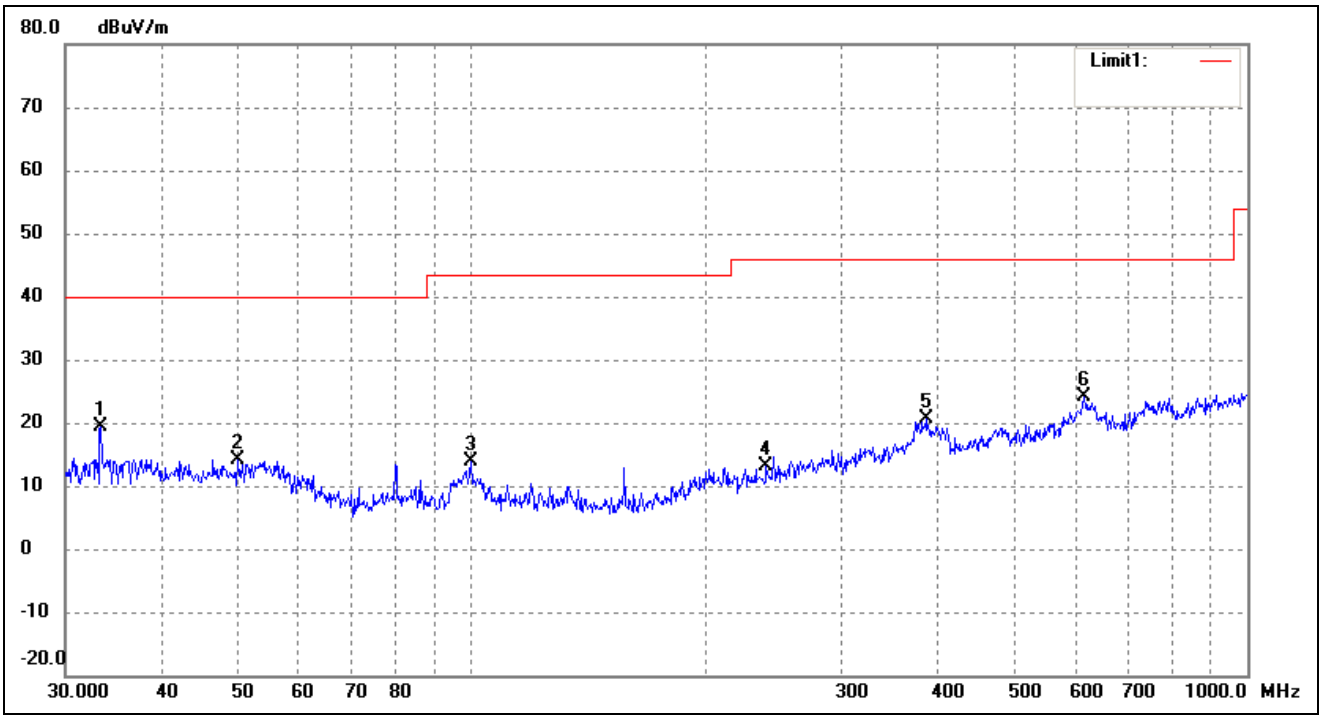
Operating Condition: *Transmitting High Channel (2480MHz)*
Comment: *DC 3V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	38.8879	22.88	-7.97	14.91	40.00	-25.09	118	100	peak
2	55.8047	22.56	-9.05	13.51	40.00	-26.49	173	100	peak
3	70.5836	25.31	-12.79	12.52	40.00	-27.48	138	100	peak
4	87.7248	25.54	-12.73	12.81	40.00	-27.19	144	100	peak
5	377.2591	23.01	-2.26	20.75	46.00	-25.25	82	100	peak
6	599.3213	23.43	-0.17	23.26	46.00	-22.74	182	100	peak

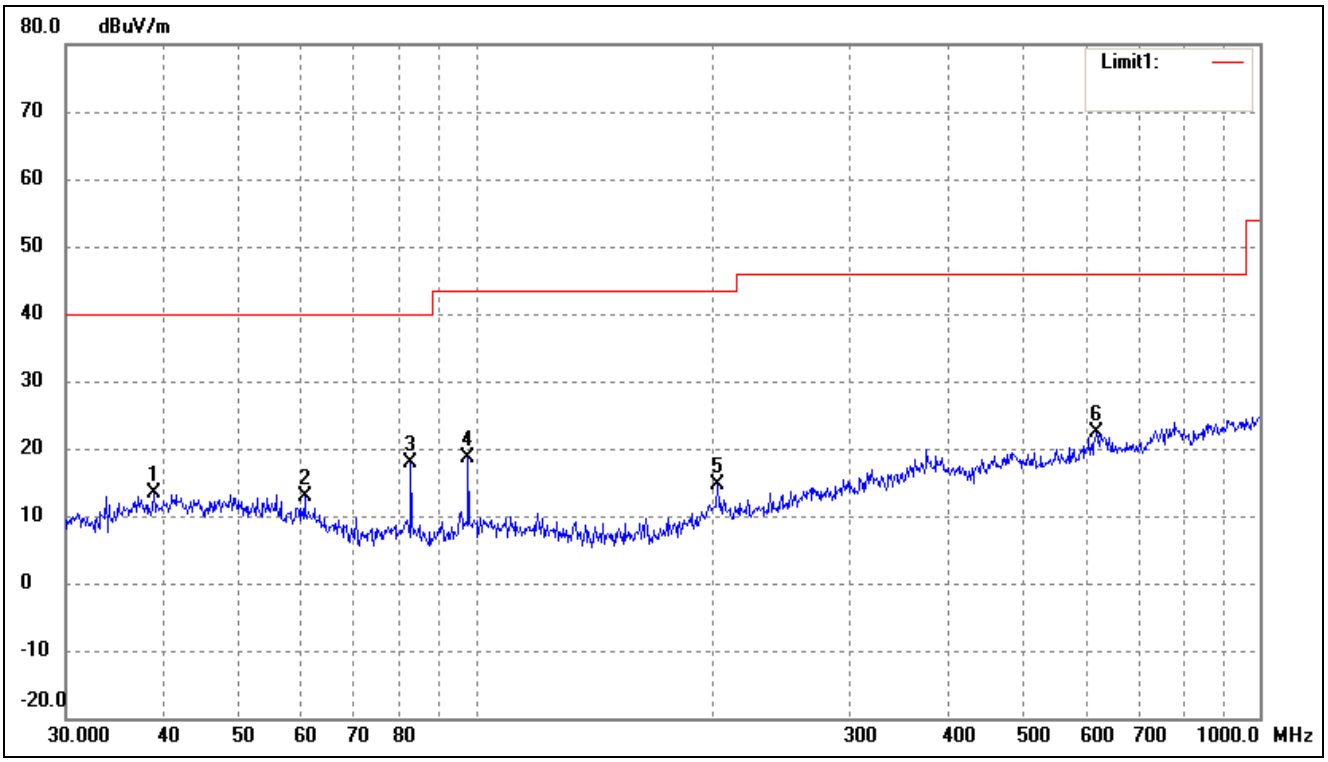
Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	33.3279	28.78	-9.46	19.32	40.00	-20.68	78	100	peak
2	50.0566	22.39	-8.33	14.06	40.00	-25.94	139	100	peak
3	99.8777	24.79	-10.93	13.86	43.50	-29.64	94	100	peak
4	239.9874	21.48	-8.33	13.15	46.00	-32.85	113	100	peak
5	385.2805	22.95	-2.38	20.57	46.00	-25.43	71	100	peak
6	616.3718	23.16	0.99	24.15	46.00	-21.85	168	100	peak

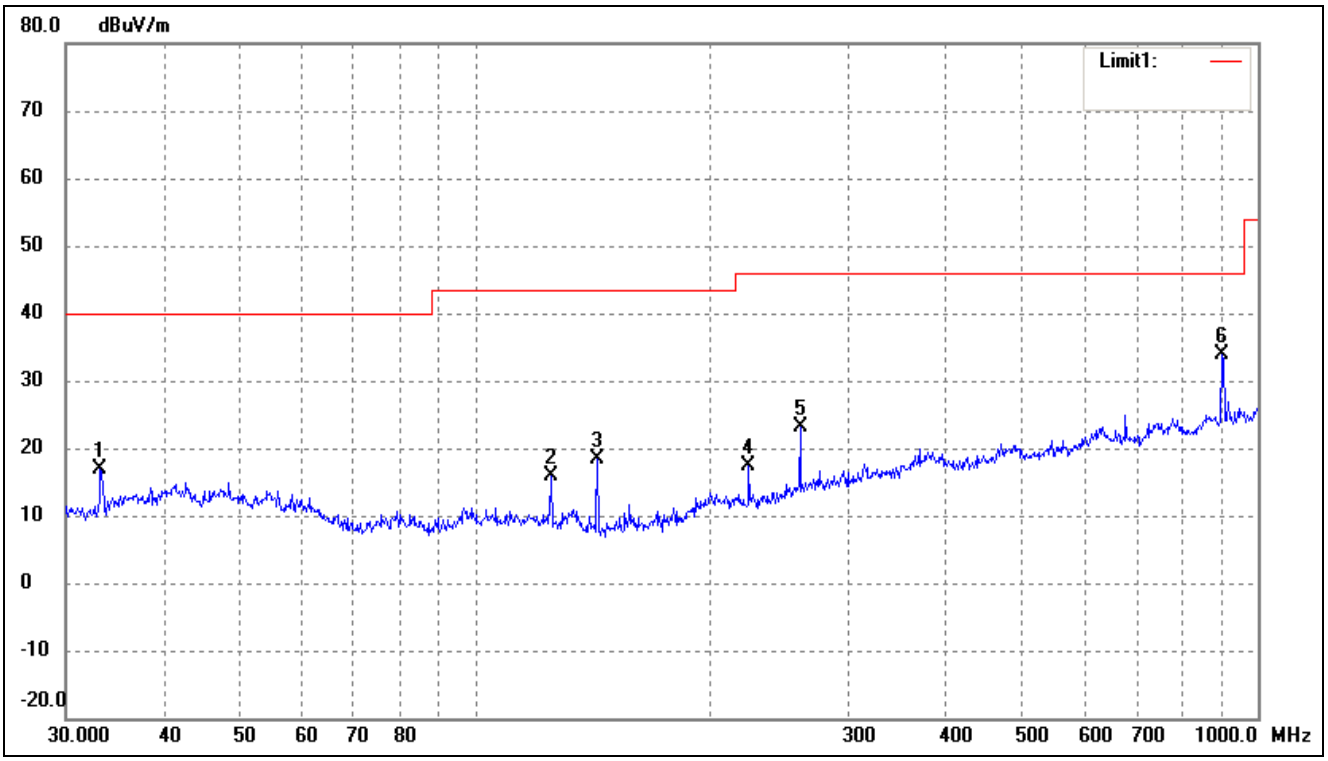
Operating Condition: *Transmitting Match code Channel (2481MHz)*
Comment: *DC 3V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	38.8879	21.46	-7.97	13.49	40.00	-26.51	121	100	peak
2	60.4919	22.55	-9.74	12.81	40.00	-27.19	133	100	peak
3	82.6482	30.03	-12.24	17.79	40.00	-22.21	111	100	peak
4	97.7983	30.01	-11.35	18.66	43.50	-24.84	12	100	peak
5	203.5228	23.30	-8.68	14.62	43.50	-28.88	32	100	peak
6	618.5369	21.34	1.14	22.48	46.00	-23.52	181	100	peak

Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	33.2112	26.29	-9.50	16.79	40.00	-23.21	21	100	peak
2	125.0066	27.64	-11.71	15.93	43.50	-27.57	131	100	peak
3	143.3261	30.89	-12.51	18.38	43.50	-25.12	121	100	peak
4	223.7334	26.10	-8.75	17.35	46.00	-28.65	301	100	peak
5	260.1444	30.02	-6.95	23.07	46.00	-22.93	212	100	peak
6	900.1474	30.74	3.15	33.89	46.00	-12.11	22	100	peak

Spurious Emissions Above 1GHz

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel-2402MHz							
2402.00	88.53	-3.59	84.94	114	-29.06	H	PK
2402.00	79.64	-3.59	76.05	94	-17.95	H	AV
4804.00	54.56	-3.59	50.97	74	-23.03	H	PK
4804.00	41.26	-3.59	37.67	54	-16.33	H	AV
7206.00	42.29	-0.52	41.77	74	-32.23	H	PK
7206.00	28.40	-0.52	27.88	54	-26.12	H	AV
2402.00	97.78	-3.59	94.19	114	-19.81	V	PK
2402.00	89.02	-3.59	85.43	94	-8.57	V	AV
4804.00	52.18	-3.59	48.59	74	-25.41	V	PK
4804.00	43.25	-3.59	39.66	54	-14.34	V	AV
7206.00	43.37	-0.52	42.85	74	-31.15	V	PK
7206.00	29.03	-0.52	28.51	54	-25.49	V	AV
Middle Channel-2442MHz							
2442.00	87.91	-3.59	84.32	114	-29.68	H	PK
2442.00	79.52	-3.59	75.93	94	-18.07	H	AV
4884.00	53.21	-3.49	49.72	74	-24.28	H	PK
4884.00	42.41	-3.49	38.92	54	-15.08	H	AV
7326.00	43.85	-0.47	43.38	74	-30.62	H	PK
7326.00	30.47	-0.47	30.00	54	-24.00	H	AV
2442.00	97.62	-3.59	94.03	114	-19.97	V	PK
2442.00	89.56	-3.59	85.97	94	-8.03	V	AV
4884.00	53.01	-3.49	49.52	74	-24.48	V	PK
4884.00	41.02	-3.49	37.53	54	-16.47	V	AV
7326.00	44.82	-0.47	44.35	74	-29.65	V	PK
7326.00	30.53	-0.47	30.06	54	-23.94	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V	
High Channel-2480MHz							
2480.00	92.44	-3.59	88.85	114	-25.15	H	PK
2480.00	77.76	-3.59	74.17	94	-19.83	H	AV
4960.00	36.94	-3.41	33.53	74	-40.47	H	PK
4960.00	25.74	-3.41	22.33	54	-31.67	H	AV
7440.00	31.08	-0.42	30.66	74	-43.34	H	PK
7440.00	23.11	-0.42	22.69	54	-31.31	H	AV
2480.00	106.68	-3.59	103.09	114	-10.91	V	PK
2480.00	92.69	-3.59	89.10	94	-4.90	V	AV
4960.00	35.70	-3.41	32.29	74	-41.71	V	PK
4960.00	25.44	-3.41	22.03	54	-31.97	V	AV
7440.00	32.15	-0.42	31.73	74	-42.27	V	PK
7440.00	23.05	-0.42	22.63	54	-31.37	V	AV
Match code Channel-2481MHz							
2481.00	68.95	-3.59	65.36	114	-48.64	H	PK
2481.00	58.19	-3.59	54.60	94	-39.40	H	AV
4962.00	36.94	-3.41	33.53	74	-40.47	H	PK
4962.00	25.74	-3.41	22.33	54	-31.67	H	AV
7443.00	31.08	-0.42	30.66	74	-43.34	H	PK
7443.00	23.11	-0.42	22.69	54	-31.31	H	AV
2481.00	77.62	-3.59	74.03	114	-39.97	V	PK
2481.00	64.92	-3.59	61.33	94	-32.67	V	AV
4962.00	35.70	-3.41	32.29	74	-41.71	V	PK
4962.00	25.44	-3.41	22.03	54	-31.97	V	AV
7443.00	32.15	-0.42	31.73	74	-42.27	V	PK
7443.00	23.05	-0.42	22.63	54	-31.37	V	AV

Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, which above 5th Harmonics are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
The measurements greater than 20dB below the limit from 9kHz to 30MHz.

5. Out of Band Emissions

5.1 Standard Applicable

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

5.2 Test Procedure

As the radiation test, set the Lowest and Highest Transmitting Channel, observed the outside band of 2400MHz to 2483.5MHz, than mark the higher-level emission for comparing with the FCC rules.

5.3 Environmental Conditions

Temperature:	24 °C
Relative Humidity:	60 %
ATM Pressure:	1012 mbar

5.4 Summary of Test Results/Plots

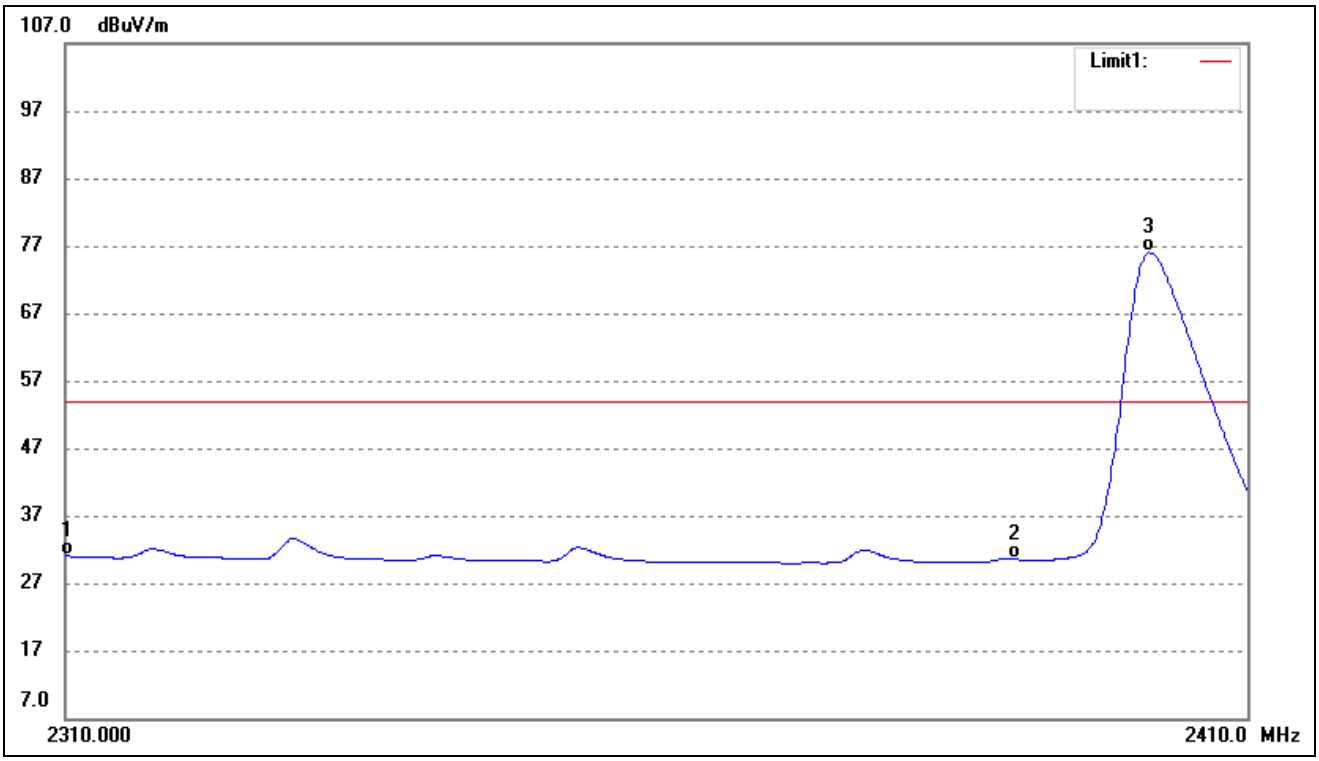
Test mode	Frequency	Limit	Result
	MHz	dBuV / dBc	
Lowest	2310.00	<54 dBuV	Pass
	2390.00	<54 dBuV	Pass
	2400.00	<54 dBuV	Pass
Highest	2483.50	<54 dBuV	Pass
	2500.00	<54 dBuV	Pass

The edge emissions are below the FCC 15.209 Limits or complies with the 15.249 requirements.

Please refer to the test plots as below.

Restricted Bandedge Lowest

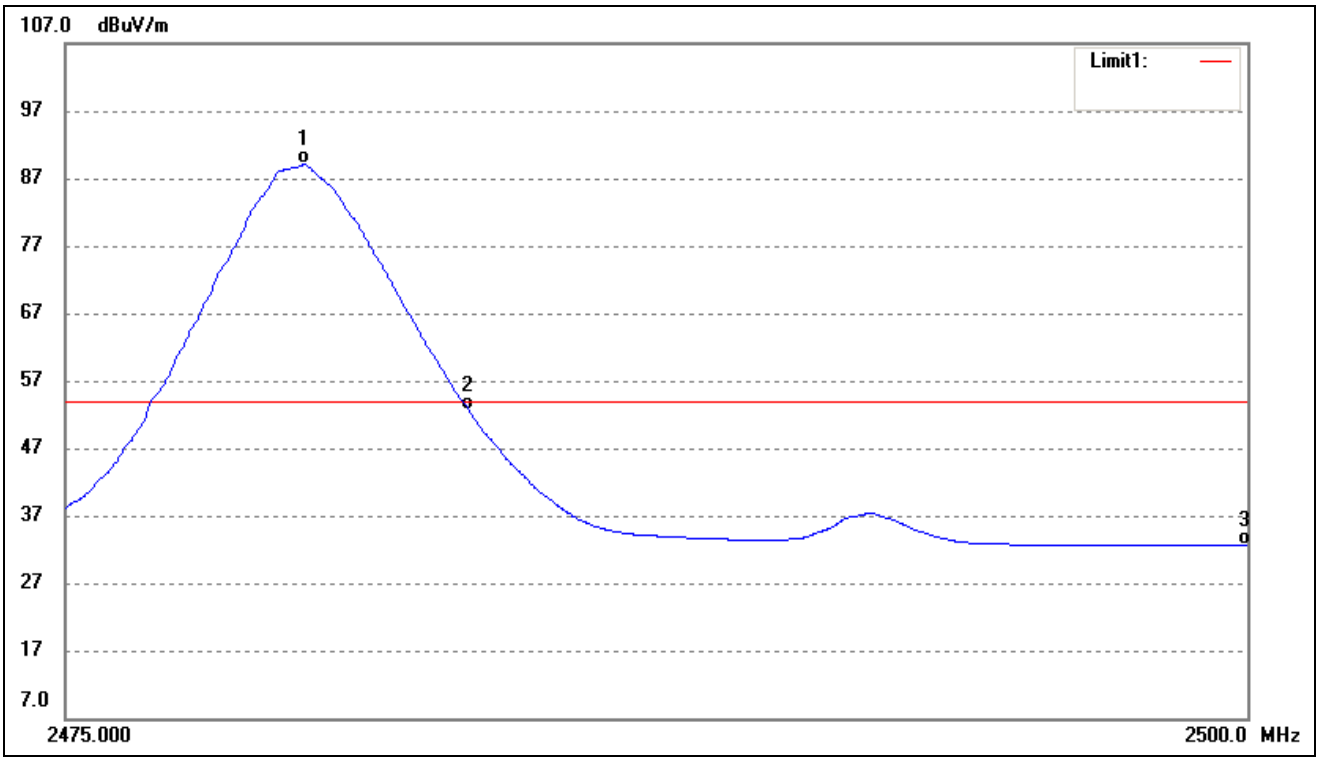
Vertical (Worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2310.000	34.39	-3.35	31.04	54.00	-22.96	Ave Detector
	2310.000	45.93	-3.35	42.58	74.00	-31.42	Peak Detector
2	2390.000	34.83	-4.29	30.54	54.00	-23.46	Ave Detector
	2390.000	55.20	-4.29	50.91	74.00	-23.09	Peak Detector
3	2401.436	80.46	-4.41	76.05	/	/	Ave Detector
	2401.436	98.62	-4.43	94.19	/	/	Peak Detector

Bandedge Highest (2480MHz)

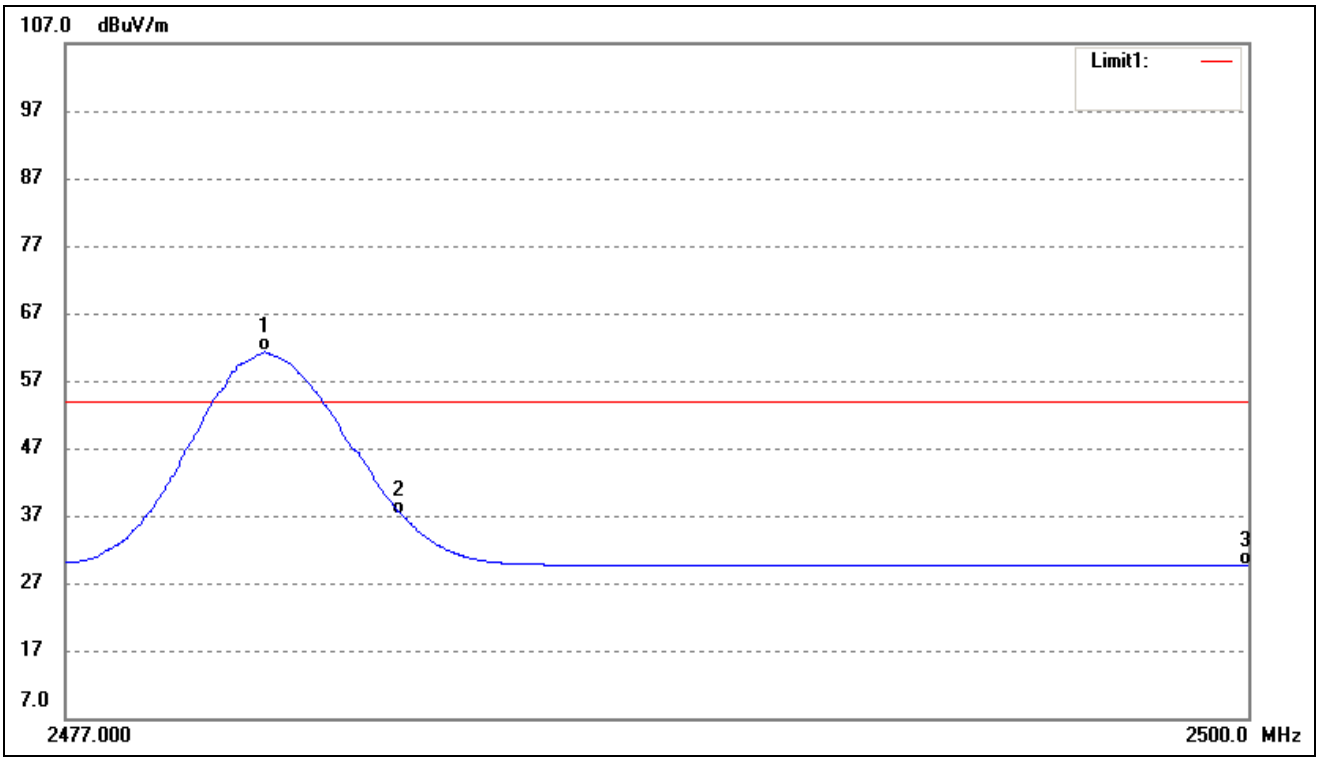
Vertical (Worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2480.030	93.46	-4.36	89.10	/	/	Ave Detector
	2480.030	107.45	-4.36	103.09	/	/	Peak Detector
2	2483.500	56.88	-4.36	52.52	54.00	-1.48	Ave Detector
	2483.500	70.17	-4.36	65.81	74.00	-8.19	Peak Detector
3	2500.000	36.94	-4.34	32.60	54.00	-21.40	Ave Detector
	2500.000	54.62	-4.34	50.28	74.00	-23.72	Peak Detector

Bandedge Match code channel (2481MHz)

Vertical (Worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2480.872	65.69	-4.36	61.33	/	/	Ave Detector
	2480.030	78.39	-4.36	74.03	/	/	Peak Detector
2	2483.500	41.58	-4.36	37.22	54.00	-16.78	Ave Detector
	2483.500	55.09	-4.36	50.73	74.00	-23.27	Peak Detector
3	2500.000	34.07	-4.34	29.73	54.00	-24.27	Ave Detector
	2483.500	55.09	-4.36	50.73	74.00	-23.27	Peak Detector

6. Emission Bandwidth

6.1 Standard Applicable

According to 15.215 (c), intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

6.2 Test Procedure

According to the ANSI 63.10-2013, the emission bandwidth test method as follows.

Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
Set span = 1MHz, centered on a transmitting channel
RBW ≥1% 20dB Bandwidth, VBW ≥RBW
Sweep = auto
Detector function = peak
Trace = max hold
All the trace to stabilize, use the marker-to-peak function to set the marker to the peak of the emission, use the marker-delta function to measure and record the 20dB down and 99% bandwidth of the emission.

6.3 Environmental Conditions

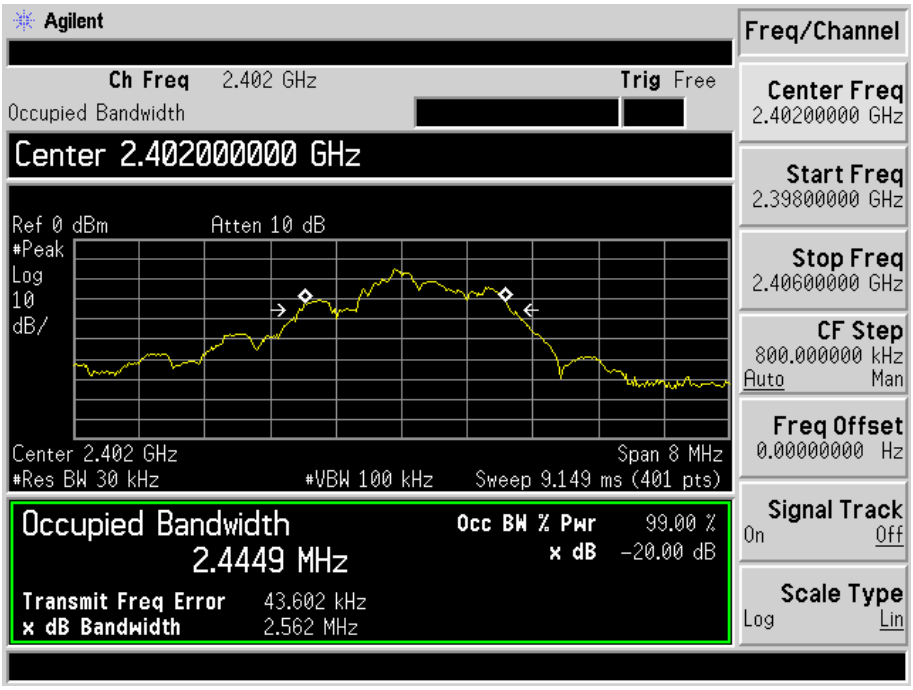
Temperature:	25 °C
Relative Humidity:	53%
ATM Pressure:	1018 mbar

6.4 Summary of Test Results/Plots

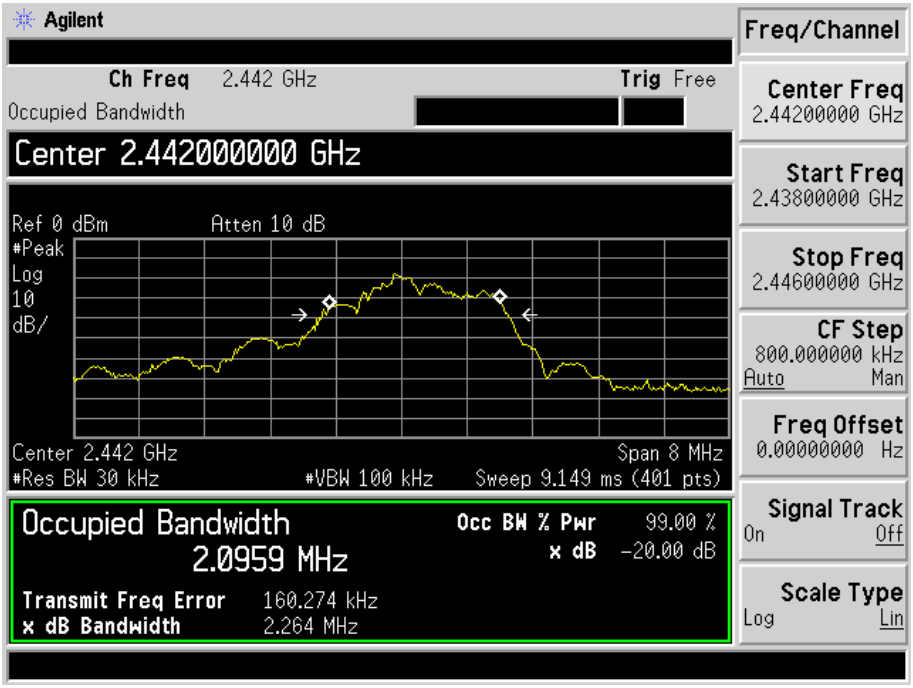
Channel	Frequency MHz	20dB Bandwidth MHz	99% Bandwidth MHz
Low Channel	2402	2.562	2.4449
Middle Channel	2442	2.264	2.0959
High Channel	2480	2.291	2.2464
Match code Channel	2481	1.520	1.4533

Please refer to the following test plots

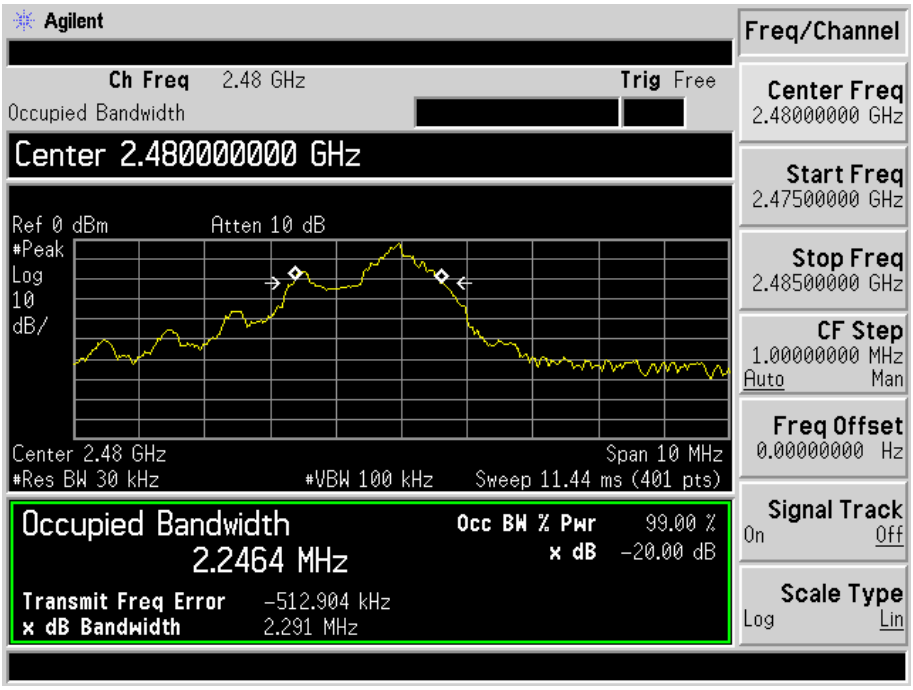
Low Channel:



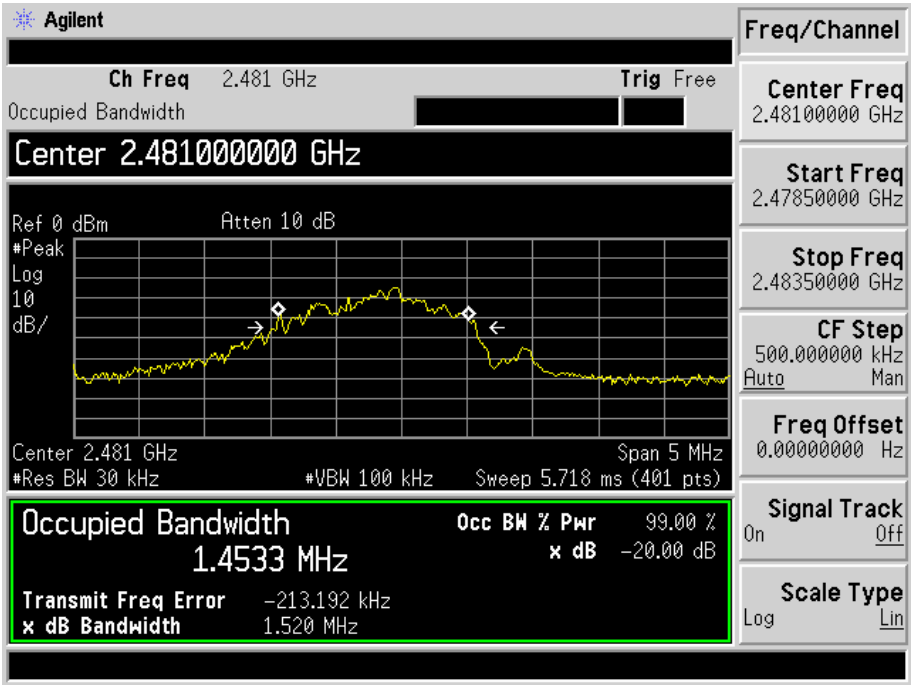
Middle Channel:



High Channel:



Match code Channel:



******* END OF REPORT *******