



Test Report No.:
FCC2021-0013-RF

TEST REPORT

FCC ID : 2AWMK-BTP-MK
Applicant : Guangzhou Pinzhong Electronic Technology
CO., Ltd.
Product Name : BEITONG iOS GAME CONTROLLER EX
Mode No. : BTP-iG6

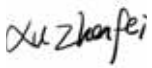
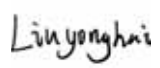
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Applicant	Name: Guangzhou Pinzhong Electronic Technology CO., Ltd. Address: Room 611-612, Greenland Center of Financial City, No. 662, Huangpu Avenue Middle Road, Tianhe District, Guangzhou City, Guangdong Province, China		
Manufacturer	Name: Guangzhou Pinzhong Electronic Technology CO., Ltd. Address: Room 611-612, Greenland Center of Financial City, No. 662, Huangpu Avenue Middle Road, Tianhe District, Guangzhou City, Guangdong Province, China		
Equipment Under Test	Product Name : BEITONG iOS GAME CONTROLLER EX Model No. : BTP-iG6 Trade mark :  Serial no. : 2430-624-010 Sampling : 1-1		
Date of Receipt.	2021.06.08	Date of Testing	2021.06.08~2021.07.26
Test Specification		Test Result	
FCC CFR47 Part 15C (2020) Radio Frequency Devices ANSI C63.10 (2013) DA00-705 Filing and Frequency Measurement Guidelines For Frequency Hopping Spread Spectrum System (2000).		PASS	
Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied.  Issue Date: 2021.07.26		
Tested by:  Xu Zhenfei	Reviewed by:  Liu Yonghai	Approved by:  Chen Huawen	
Other Aspects: NONE.			
Abbreviations:OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			
This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC .			

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1. General Product Information

1.1 General information

Product Name	BEITONG iOS GAME CONTROLLER EX	
Model No.	BTP-iG6	
Serial Number(SN)	2430-624-010	
Power Supply	Adapter	DC 5V
	Battery	DC 3.7V
Antenna Type	PCB Antenna	
Antenna Connector	A permanently attached antenna (meet with the standard FCC Part 15.203 requirement)	
Antenna Gain	Antenna 1: 1.5 dBi (provided by client)	
Frequency Range	2402MHz~2480MHz	
Bluetooth Version:	BT4.1	
Channel Number	79	
Type of Modulation	GFSK, π/4DQPSK, 8DPSK	
Hopping Channel Type:	Non-Adaptive Frequency Hopping systems	
Max. Conducted Power	DH5: 0.13dBm 2DH5: -3.16dBm 3DH5: -2.74dBm	
Operate Temp.Range	-20°C to +60°C	
Note: 1. The information of the EUT is declared by the manufacturer. 2. The laboratory is not responsible for the product technical specification provided by the client.		

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2. Test Sites

2.1 Test Facilities

The tests and measurements refer to this report were performed by EMC testing Lab. of CVC Testing Technology Co., Ltd.

Add.: No.3, Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, Guangdong, 510663, People's Republic of China

Telephone : +86-20-32293888

Fax : +86-20-32293889

FCC(Test firm designation number: CN1282)

IC(Test firm CAB identifier number: CN0103)

2.2 Description of Non-standard Method and Deviations

The testing and measurement methods used in this report are applied by all standard methods. Not any non-standard method or deviation from the used standards was used.

2.3 List of Test and Measurement Instruments

Refer to **Appendix E**.

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3. Test Configuration

3.1 Test Mode

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the worst case was recorded.

In order to find the worst case condition, Pre-tests are needed at the presence of different data rate. Preliminary tests have been done on all the configuration for confirming worst case. Data rate below means worst-case rate of each test item.

Worst-case data rates are shown as following table.

Test Mode	Antenna Delivery	Test Channel
DH5/2DH5/3DH5	1TX / 1RX	0,39,78

Test Mode	Test Modes
Conducted Emissions	NA
Radiated Emissions	DH5/3DH5
Peak Power Output -Conducted	DH5/2DH5/3DH5
20dB Emission Bandwidth	DH5/2DH5/3DH5
Occupied Channel Bandwidth	DH5/2DH5/3DH5
Frequency Separation	DH5/2DH5/3DH5
Time of Occupancy (Dwell Time)	DH5/2DH5/3DH5
Band Edge Compliance	DH5/2DH5/3DH5
Number of Hopping Frequency	DH5/2DH5/3DH5
Spurious RF Conducted Emissions	DH5/2DH5/3DH5

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3.2 Duty cycle

Test Mode	Antenna	Center Freency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
DH5	Ant1	2402	0.00	6.21	46.54	---	PASS
		2441	0.00	6.21	46.54	---	PASS
		2480	0.00	6.21	46.54	---	PASS
2DH5	Ant1	2402	0.00	6.23	46.54	---	PASS
		2441	0.00	6.21	46.54	---	PASS
		2480	0.00	6.21	46.54	---	PASS
3DH5	Ant1	2402	0.00	6.21	46.54	---	PASS
		2441	0.00	6.21	46.54	---	PASS
		2480	0.00	6.21	46.54	---	PASS

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4. Summary of measurement results

Summary of measurements of results	Clause in FCC rules	Verdict	Note
Conducted Emissions	15.207	NA	/
Radiated Emissions	15.247(d),15.205,15.209	PASS	/
Peak Power Output -Conducted	15.247(b)(1)	PASS	/
20dB Emission Bandwidth	15.247(a)(1)	PASS	/
Occupied Channel Bandwidth	15.247(a)(1)	PASS	/
Frequency Separation	15.247(a)(1)	PASS	/
Time of Occupancy (Dwell Time)	15.247(a)(1)(iii)	PASS	/
Band Edge Compliance	15.247(d)	PASS	/
Number of Hopping Frequency	15.247(a)(1)(iii)	PASS	/
Spurious RF Conducted Emissions	15.247(d)	PASS	/

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5. Measurement procedure

5.1 Conducted Emission

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement:

The EUT was setup according to ANSI C63.10, 2013 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

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

Limits:

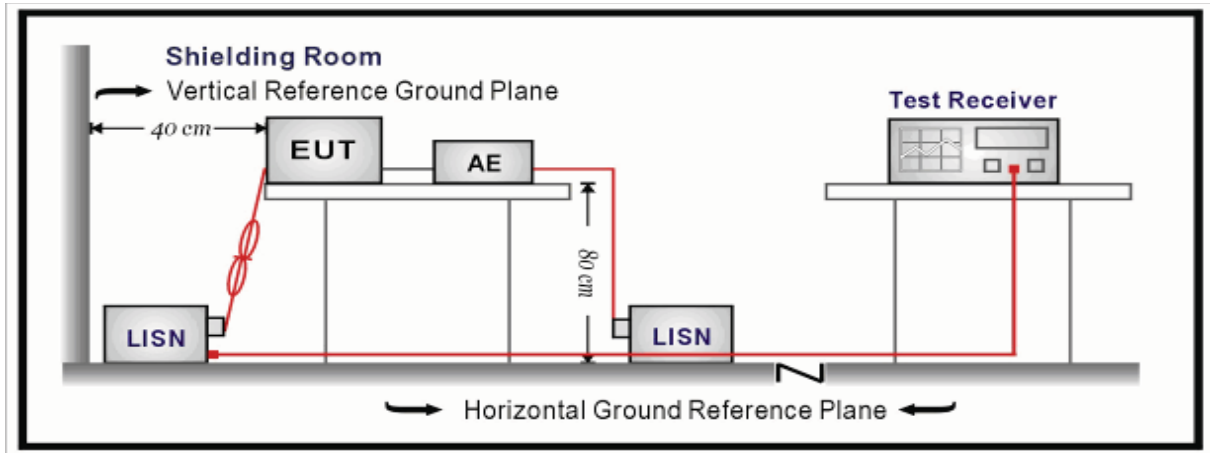
Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50
Note 1: The lower limit shall apply at the transition frequencies.		
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.		

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Test Setup:



Note: AC Power source is used to change the voltage 220V/60Hz.

Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Level = Reading + Factor.

Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$. $U = 3.12$ dB.

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Test Results:

The device is powered by a built-in battery and does not require this test.

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5.2 Radiated Emission

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement:

The EUT was setup and tested according to ANSI C63.10, 2013.

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 from 1 meter to 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 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

The frequency range from 30MHz to 10th harmonic is checked.

Note: When doing emission measurement above 1GHz, the horn Antenna will be bended down a little (as horn

Antenna has the narrow beamwidth) in order to keeping the Antenna in the “cone of radiation” of EUT. The 3dB beamwidth is 10~60 degrees for H-plane and 10~90 degrees for E-plane.

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Limits:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

Frequency	Limit (dBμV/m @3m)	Remark
30MHz-88MHz	40.0	Quasi-peak Level
88MHz-216MHz	43.5	Quasi-peak Level
216MHz-960MHz	46.0	Quasi-peak Level
960MHz-1GHz	54.0	Quasi-peak Level
Above 1GHz	54.0	Average Level
	74.0	Peak Level

Spurious Radiated Emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.
12.57675-12.57725	322-335.4	3600-4400	/
13.36-13.41	/	/	/

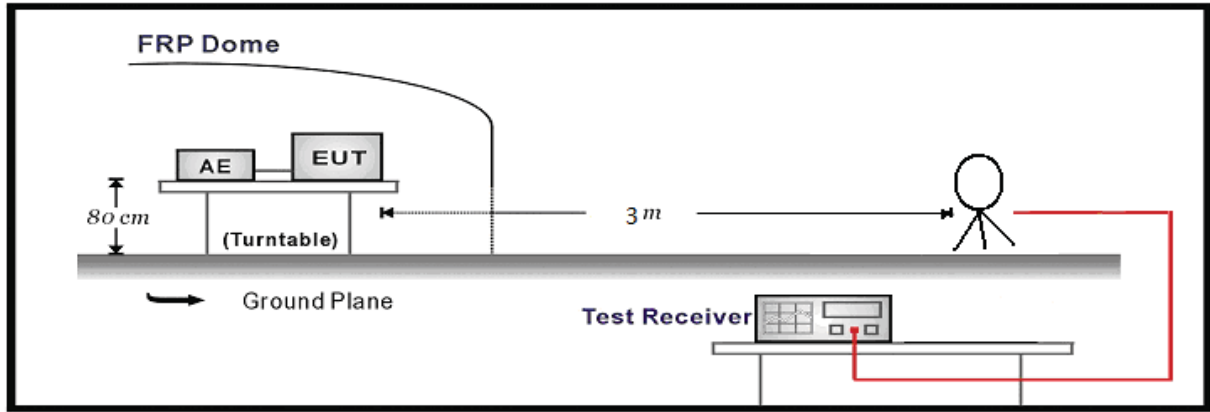
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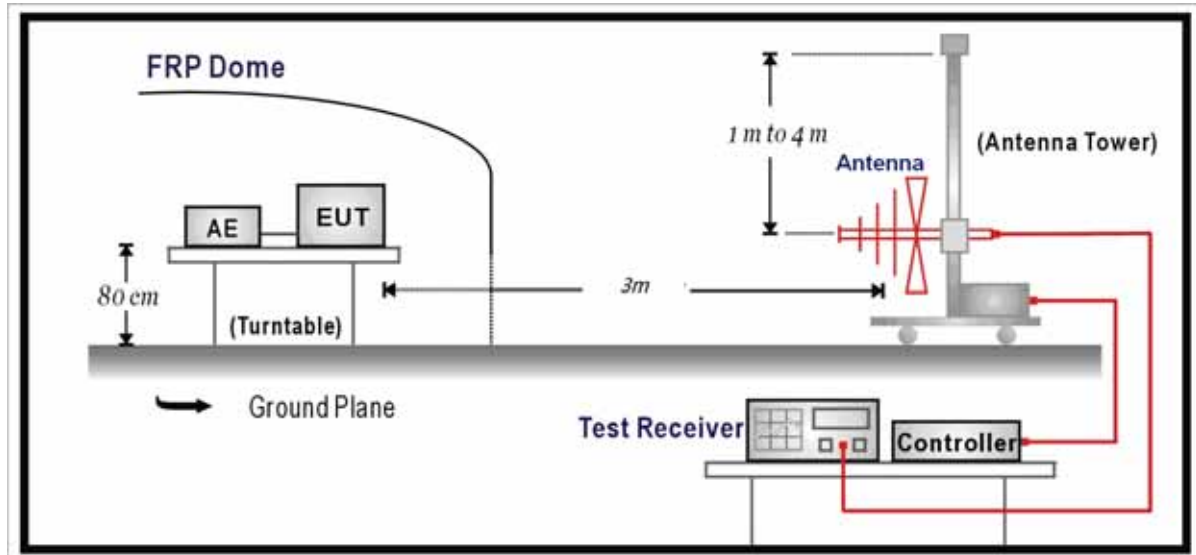
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Test Setup:

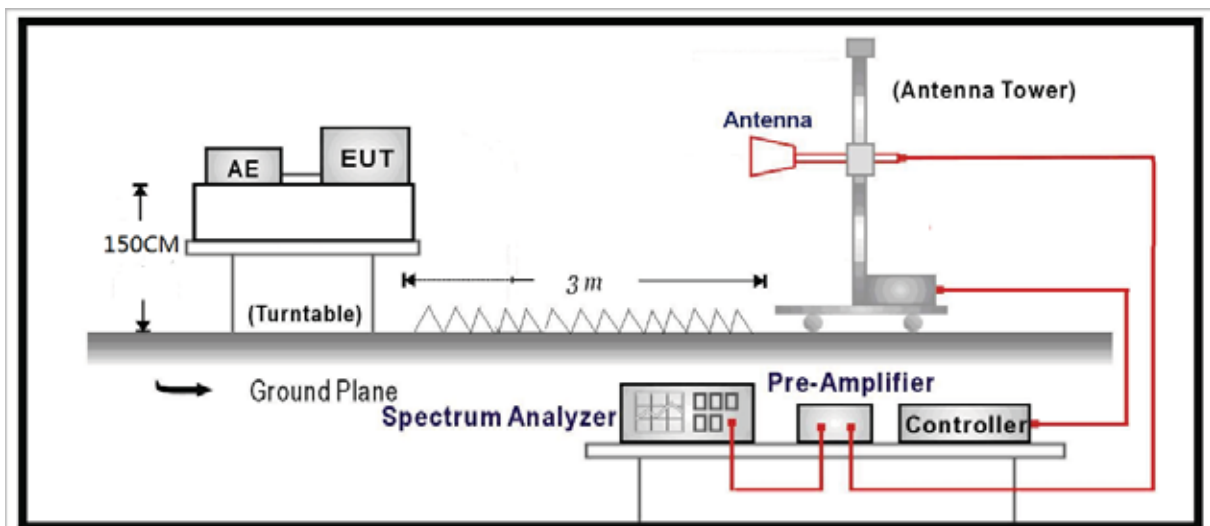
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



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Measurement Data:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Level = Reading - Factor

Factor = Preamplifier Factor – Antenna Factor–Cable Loss

Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
9KHz-30MHz	3.55 dB
30MHz-200MHz	4.19 dB
200MHz-1GHz	3.63 dB
Above 1GHz	3.68 dB

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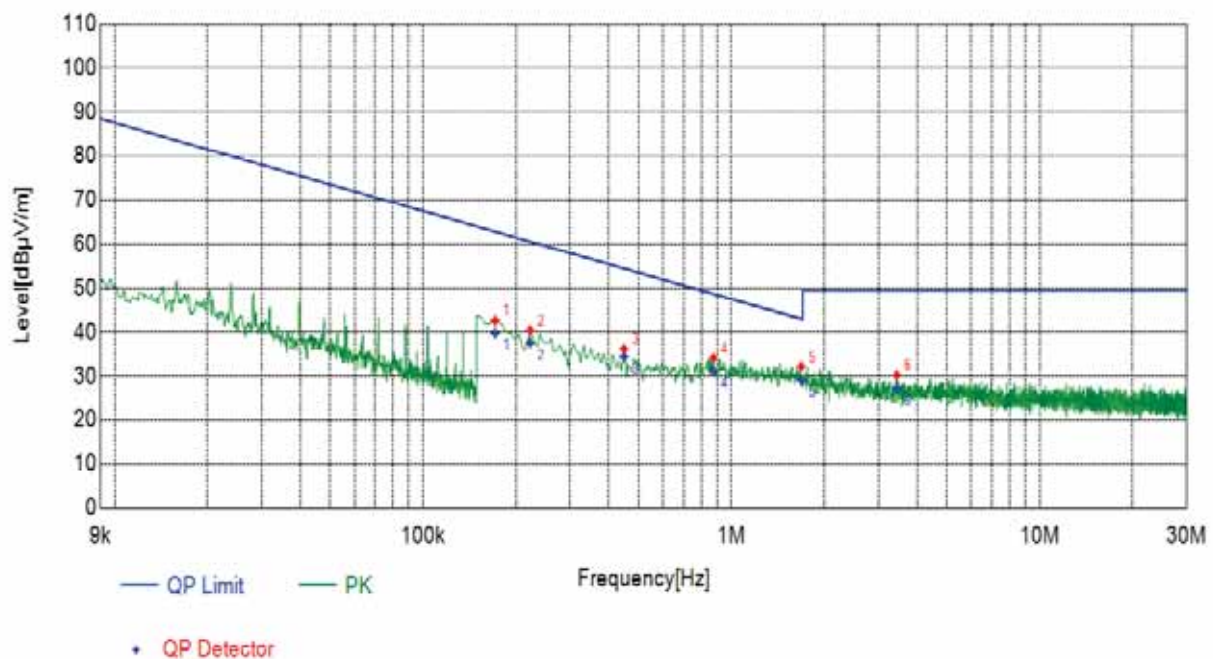
Test Results:

During the test, the Radiates Emission from 9KHz to 40GHz was performed in all modes with all channels, and all antenna, BT GFSK Channel 78, antenna 1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

SPURIOUS EMISSIONS:

Radiated Emission	9KHz-30MHz
Polarity	X axis
Test channel	Worst-Case

Final Data List								
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dB μ V/m]	QP Limit [dB μ V/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail
0.1713	X axis	20.40	39.78	62.85	23.07	100	150	PASS
0.2225	X axis	20.37	37.61	60.57	22.96	100	90	PASS
0.4485	X axis	20.41	34.47	54.47	20.00	100	250	PASS
0.8750	X axis	20.59	31.21	48.68	17.47	100	320	PASS
1.6854	X axis	20.73	29.14	43.00	13.86	100	40	PASS
3.4425	X axis	20.99	27.26	49.50	22.24	100	0	PASS



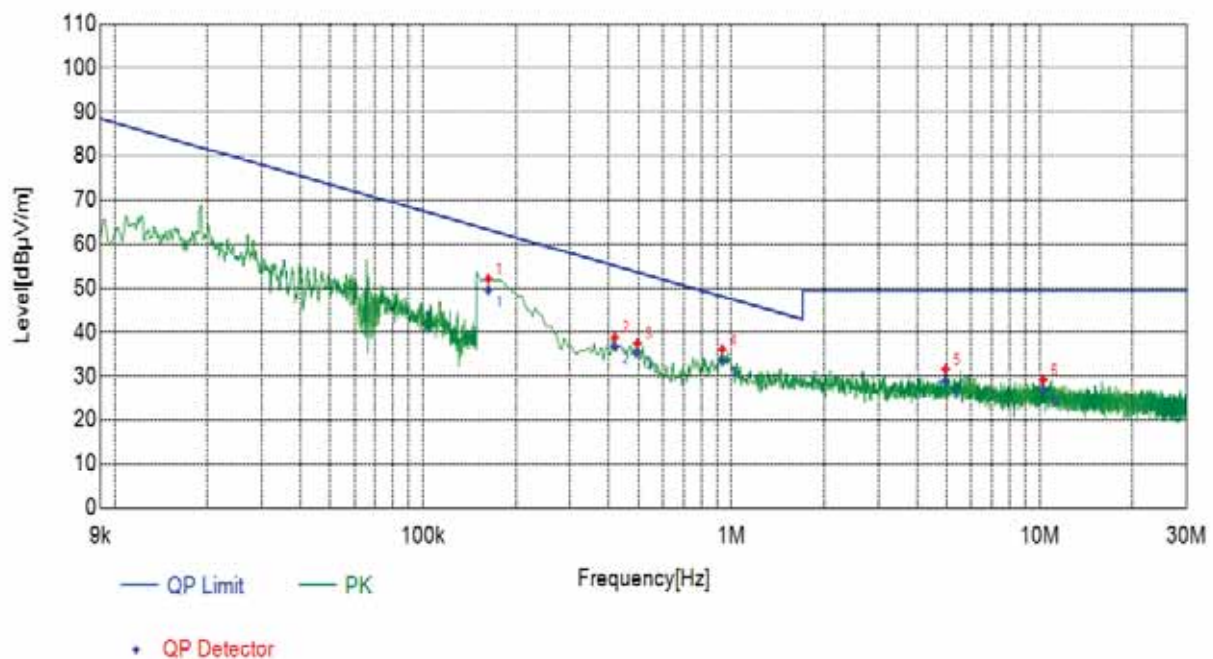
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Radiated Emission	9KHz-30MHz
Polarity	Y axis
Test channel	Worst-Case

Final Data List								
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dB μ V/m]	QP Limit [dB μ V/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail
0.1628	Y axis	20.41	49.61	63.29	13.68	100	270	PASS
0.4187	Y axis	20.32	36.75	55.07	18.32	100	300	PASS
0.4955	Y axis	20.56	35.47	53.60	18.13	100	320	PASS
0.9347	Y axis	20.56	33.49	48.11	14.62	100	90	PASS
4.9480	Y axis	21.13	28.87	49.50	20.63	100	270	PASS
10.2578	Y axis	20.95	26.98	49.50	22.52	100	230	PASS



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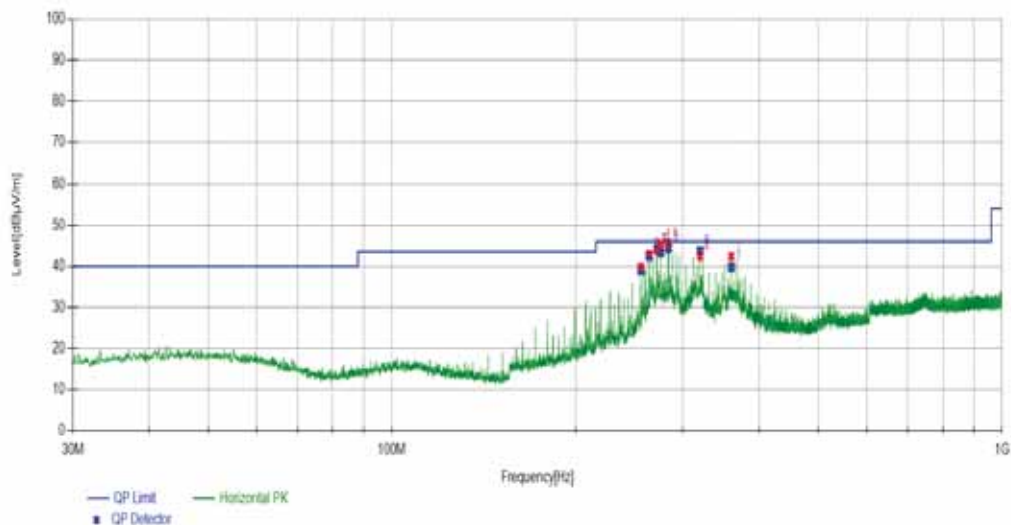
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Radiates Emission	30M~1G
Test channel	Worst-Case

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dB μ V/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/Fail
255.9662	Horizontal	14.98	25.01	39.99	46.02	6.03	PK	150	82	PASS
264.0120	Horizontal	15.04	27.90	42.94	46.02	3.08	PK	150	125	PASS
272.0007	Horizontal	15.11	28.75	43.86	46.02	2.16	PK	150	270	PASS
275.9951	Horizontal	15.14	30.35	45.49	46.02	0.53	PK	150	92	PASS
283.9838	Horizontal	15.20	30.36	45.56	46.02	0.46	PK	150	261	PASS
319.9900	Horizontal	15.68	26.70	42.38	46.02	3.64	PK	150	227	PASS
359.9906	Horizontal	16.43	25.97	42.40	46.02	3.62	PK	150	72	PASS

Final Data List								
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail
256.0148	Horizontal	14.98	39.10	46.02	6.92	100	82	PASS
264.0120	Horizontal	15.04	42.55	46.02	3.47	100	125	PASS
271.9980	Horizontal	15.10	44.26	46.02	1.76	100	270	PASS
276.0144	Horizontal	15.14	43.38	46.02	2.64	100	92	PASS
284.0150	Horizontal	15.20	44.42	46.02	1.60	100	261	PASS
319.9900	Horizontal	15.68	43.67	46.02	2.35	100	227	PASS
359.9834	Horizontal	16.43	39.81	46.02	6.21	100	72	PASS



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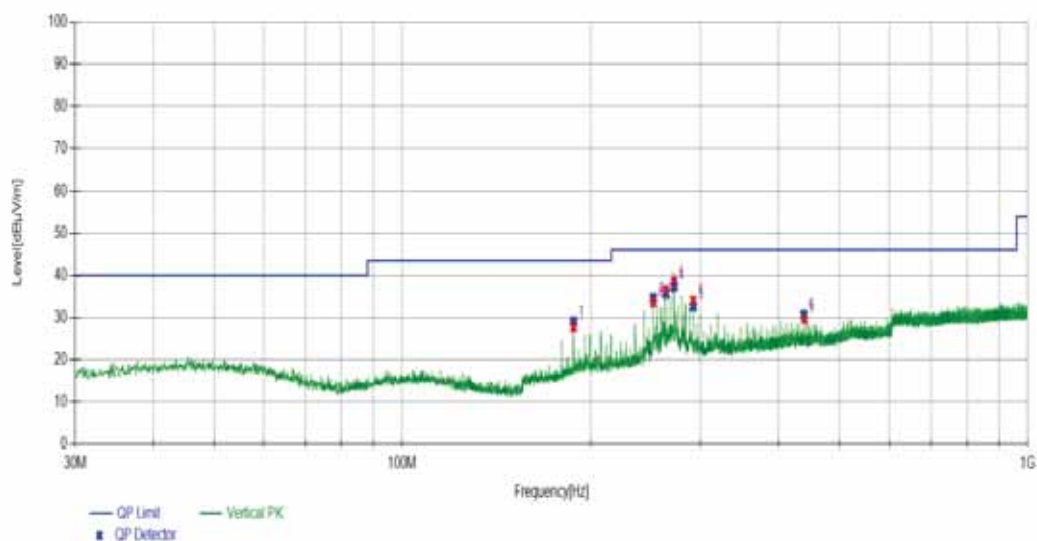
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Radiates Emission	30M~1G
Test channel	Worst-Case

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/Fail
188.0052	Vertical	11.88	15.76	27.64	43.52	15.88	PK	150	11	PASS
251.9719	Vertical	14.95	18.54	33.49	46.02	12.53	PK	150	357	PASS
264.0120	Vertical	15.04	21.73	36.77	46.02	9.25	PK	150	11	PASS
272.0007	Vertical	15.11	23.53	38.64	46.02	7.38	PK	150	342	PASS
291.9725	Vertical	15.27	18.87	34.14	46.02	11.88	PK	150	11	PASS
440.0488	Vertical	17.90	11.62	29.52	46.02	16.50	PK	150	11	PASS

Final Data List								
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail
187.9996	Vertical	11.88	29.13	43.52	14.39	100	11	PASS
252.0097	Vertical	14.94	34.58	46.02	11.44	100	357	PASS
264.0014	Vertical	15.04	35.70	46.02	10.32	100	11	PASS
271.9817	Vertical	15.10	37.37	46.02	8.65	100	342	PASS
292.0017	Vertical	15.26	32.70	46.02	13.32	100	304	PASS
438.8343	Vertical	17.90	30.63	46.02	15.39	100	11	PASS



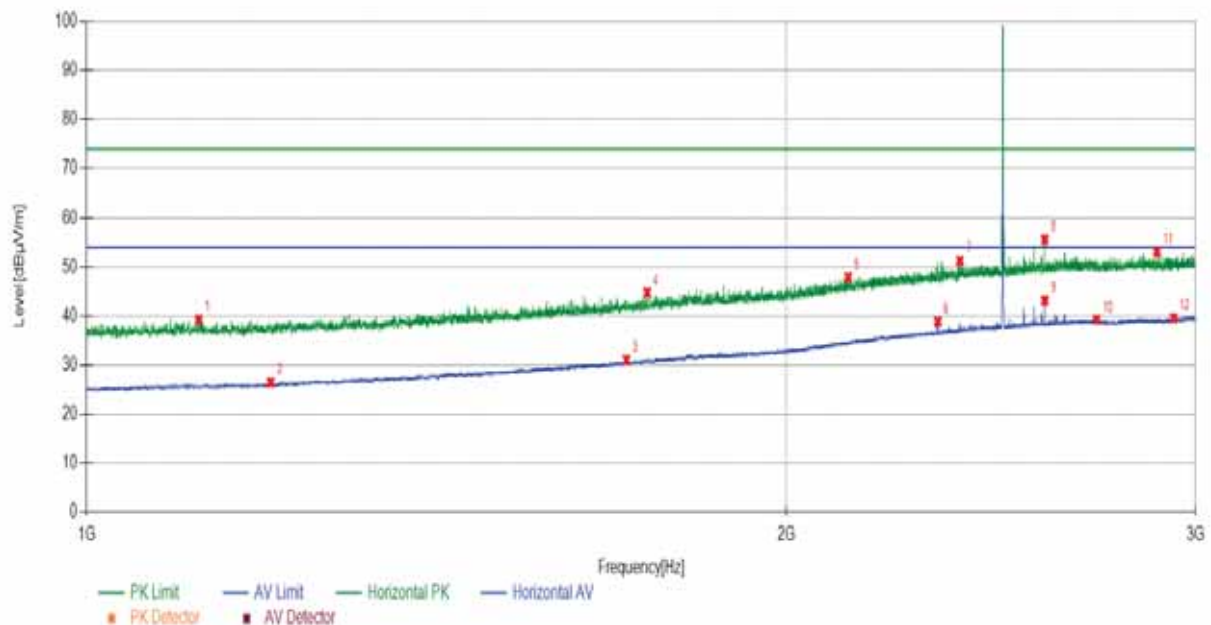
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Radiates Emission	1G~3G
Test channel	Worst-Case

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/Fail
1117.4117	Horizontal	25.88	13.39	39.27	74.00	34.73	PK	150	154	PASS
1200.2200	Horizontal	26.22	0.21	26.43	54.00	27.57	AV	150	178	PASS
1707.0707	Horizontal	30.06	0.95	31.01	54.00	22.99	AV	150	318	PASS
1742.4742	Horizontal	30.39	14.39	44.78	74.00	29.22	PK	150	330	PASS
2126.5127	Horizontal	33.42	14.46	47.88	74.00	26.12	PK	150	360	PASS
2323.9324	Horizontal	35.26	3.55	38.81	54.00	15.19	AV	150	66	PASS
2375.5376	Horizontal	35.67	15.60	51.27	74.00	22.73	PK	150	48	PASS
2583.7584	Horizontal	36.62	18.98	55.60	74.00	18.40	PK	150	60	PASS
2583.7584	Horizontal	36.62	6.56	43.18	54.00	10.82	AV	150	78	PASS
2719.9720	Horizontal	37.07	2.17	39.24	54.00	14.76	AV	150	178	PASS
2887.3887	Horizontal	37.59	15.50	53.09	74.00	20.91	PK	150	251	PASS
2935.1935	Horizontal	37.75	1.86	39.61	54.00	14.39	AV	150	222	PASS



Note: The signal beyond the limit is carrier

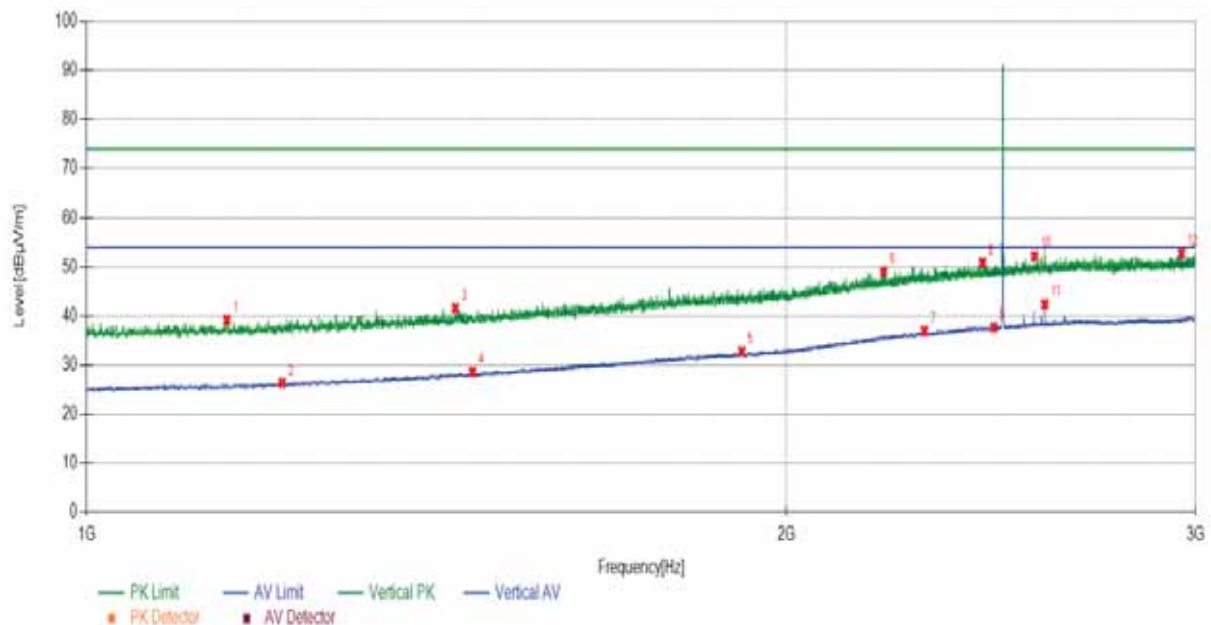
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Radiates Emission	1G~3G
Test channel	Worst-Case

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/Fail
1149.0149	Vertical	26.01	13.20	39.21	74.00	34.79	PK	150	316	PASS
1213.8214	Vertical	26.30	0.03	26.33	54.00	27.67	AV	150	219	PASS
1441.0441	Vertical	27.74	13.94	41.68	74.00	32.32	PK	150	32	PASS
1465.6466	Vertical	27.93	0.62	28.55	54.00	25.45	AV	150	287	PASS
1913.6914	Vertical	31.52	1.22	32.74	54.00	21.26	AV	150	341	PASS
2202.5203	Vertical	34.29	14.77	49.06	74.00	24.94	PK	150	3	PASS
2293.1293	Vertical	35.02	1.90	36.92	54.00	17.08	AV	150	39	PASS
2429.1429	Vertical	35.99	14.94	50.93	74.00	23.07	PK	150	0	PASS
2456.7457	Vertical	36.10	1.63	37.73	54.00	16.27	AV	150	149	PASS
2557.9558	Vertical	36.51	15.74	52.25	74.00	21.75	PK	150	120	PASS
2583.7584	Vertical	36.62	5.81	42.43	54.00	11.57	AV	150	138	PASS
2958.5959	Vertical	37.82	14.92	52.74	74.00	21.26	PK	150	281	PASS



Note: The signal beyond the limit is carrier

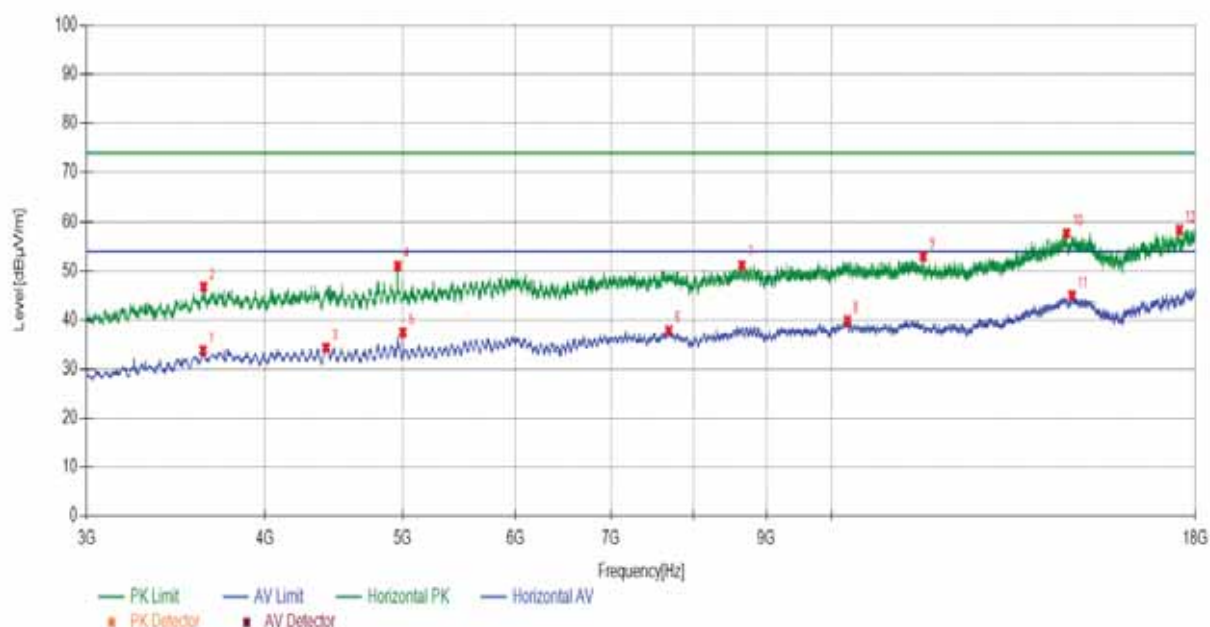
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Radiates Emission	3G~18G
Test channel	Worst-Case

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
3621.0621	Horizontal	-7.23	41.11	33.88	54.00	20.12	AV	150	346	PASS
3624.0624	Horizontal	-7.23	53.99	46.76	74.00	27.24	PK	150	163	PASS
4417.6418	Horizontal	-6.24	40.61	34.37	54.00	19.63	AV	150	346	PASS
4959.1959	Horizontal	-5.62	56.71	51.09	74.00	22.91	PK	150	103	PASS
5001.2001	Horizontal	-5.57	43.07	37.50	54.00	16.50	AV	150	326	PASS
7684.9685	Horizontal	-0.26	38.14	37.88	54.00	16.12	AV	150	340	PASS
8648.0648	Horizontal	0.47	50.74	51.21	74.00	22.79	PK	150	139	PASS
10257.7258	Horizontal	4.22	35.71	39.93	54.00	14.07	AV	150	343	PASS
11592.8593	Horizontal	4.77	48.17	52.94	74.00	21.06	PK	150	35	PASS
14614.1614	Horizontal	8.62	49.03	57.65	74.00	16.35	PK	150	183	PASS
14743.1743	Horizontal	8.62	36.43	45.05	54.00	8.95	AV	150	343	PASS
17536.4536	Horizontal	13.05	45.35	58.40	74.00	15.60	PK	150	250	PASS



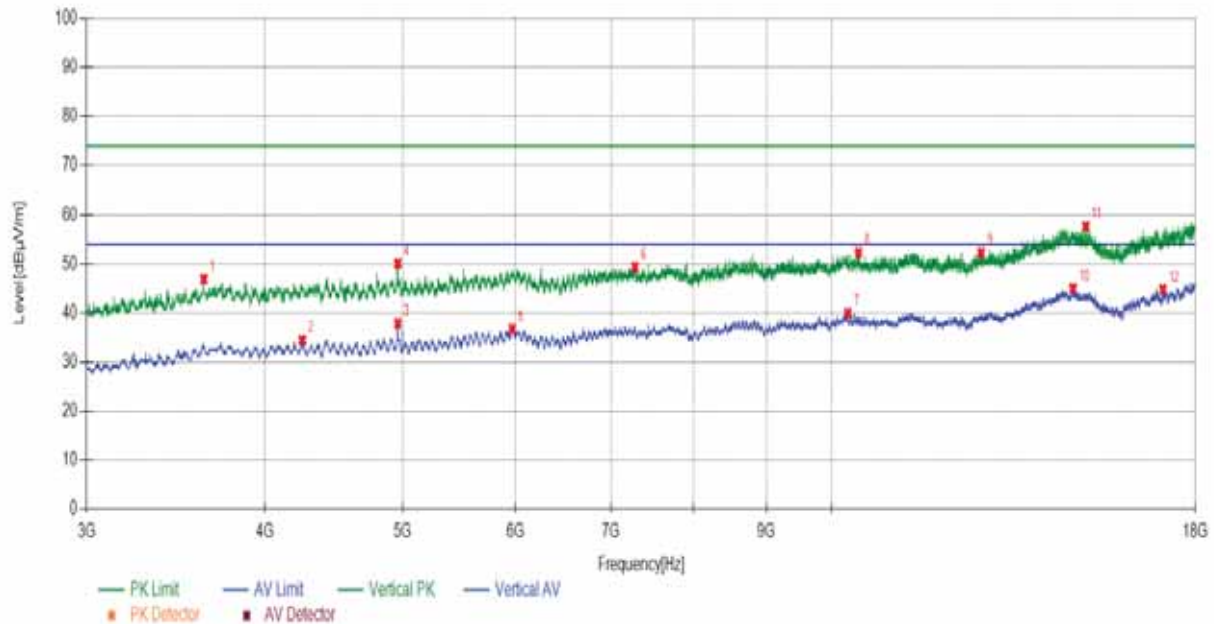
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Radiates Emission	3G~18G
Test channel	Worst-Case

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/Fail
3625.5626	Vertical	-7.22	54.13	46.91	74.00	27.09	PK	150	141	PASS
4251.1251	Vertical	-6.36	40.85	34.49	54.00	19.51	AV	150	16	PASS
4960.6961	Vertical	-5.62	43.54	37.92	54.00	16.08	AV	150	54	PASS
4960.6961	Vertical	-5.62	55.73	50.11	74.00	23.89	PK	150	82	PASS
5967.2967	Vertical	-4.13	40.86	36.73	54.00	17.27	AV	150	30	PASS
7275.4275	Vertical	-0.86	50.31	49.45	74.00	24.55	PK	150	292	PASS
10265.2265	Vertical	4.24	35.73	39.97	54.00	14.03	AV	150	13	PASS
10439.2439	Vertical	4.67	47.65	52.32	74.00	21.68	PK	150	360	PASS
12726.9727	Vertical	4.86	47.47	52.33	74.00	21.67	PK	150	278	PASS
14764.1764	Vertical	8.63	36.40	45.03	54.00	8.97	AV	150	13	PASS
15074.7075	Vertical	8.42	49.20	57.62	74.00	16.38	PK	150	241	PASS
17072.9073	Vertical	10.52	34.29	44.81	54.00	9.19	AV	150	13	PASS



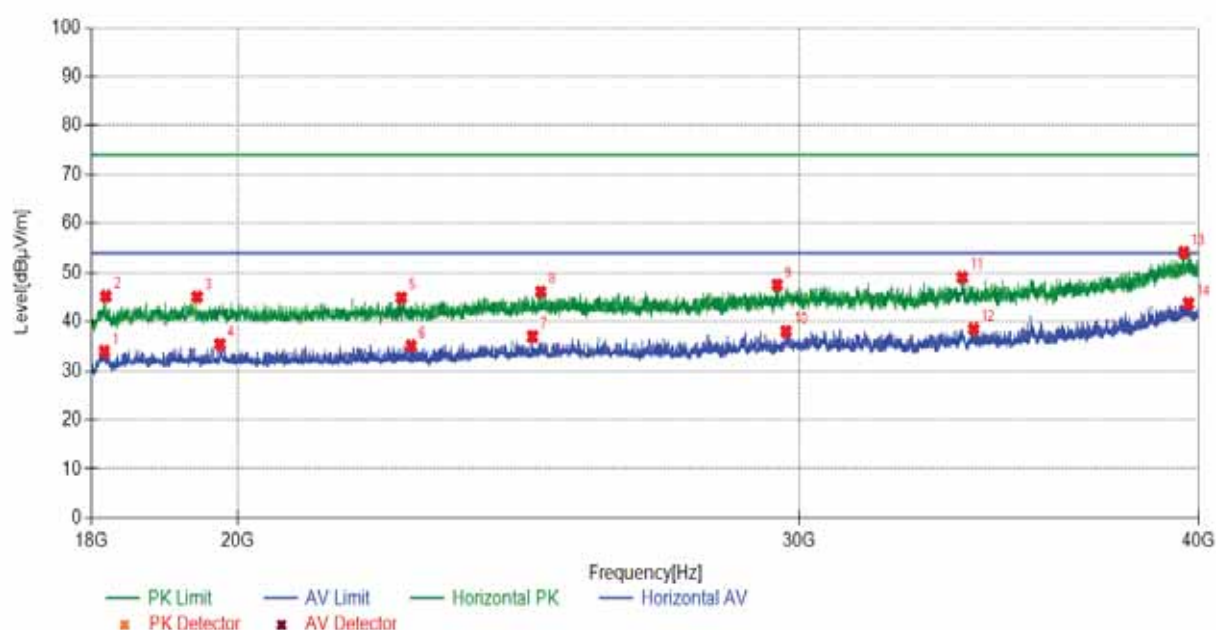
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Radiates Emission	18G~40G
Test channel	Worst-Case

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
19423.5424	Horizontal	1.33	43.74	45.07	74.00	28.93	PK	100	100	PASS
24888.8889	Horizontal	4.06	42.06	46.12	74.00	27.88	PK	100	60	PASS
39575.3575	Horizontal	10.78	43.33	54.11	74.00	19.89	PK	100	150	PASS
18187.0187	Horizontal	1.15	44.03	45.18	74.00	28.82	PK	100	60	PASS
33731.5732	Horizontal	6.52	42.56	49.08	74.00	24.92	PK	100	180	PASS
22506.0506	Horizontal	2.41	42.47	44.88	74.00	29.12	PK	100	90	PASS
29515.9516	Horizontal	6.36	41.10	47.46	74.00	26.54	PK	100	170	PASS
19744.7745	Horizontal	1.31	34.14	35.45	54.00	18.55	AV	100	10	PASS
22666.6667	Horizontal	2.57	32.56	35.13	54.00	18.87	AV	100	10	PASS
24739.2739	Horizontal	4.00	32.99	36.99	54.00	17.01	AV	100	10	PASS
39709.5710	Horizontal	10.79	32.95	43.74	54.00	10.26	AV	100	10	PASS
29705.1705	Horizontal	6.49	31.53	38.02	54.00	15.98	AV	100	10	PASS
34008.8009	Horizontal	6.60	31.94	38.54	54.00	15.46	AV	100	10	PASS
18167.2167	Horizontal	1.14	32.82	33.96	54.00	20.04	AV	100	10	PASS



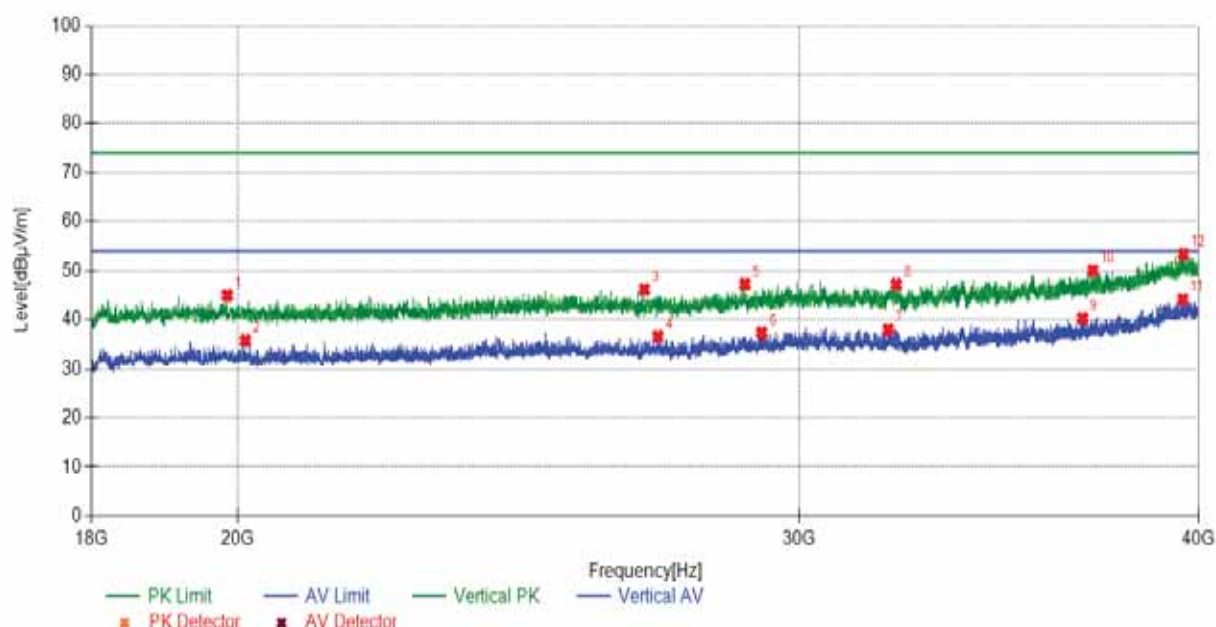
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Radiates Emission	18G~40G
Test channel	Worst-Case

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
39564.3564	Vertical	10.78	42.57	53.35	74.00	20.65	PK	100	50	PASS
37064.9065	Vertical	7.93	42.16	50.09	74.00	23.91	PK	100	120	PASS
19850.3850	Vertical	1.31	43.64	44.95	74.00	29.05	PK	100	120	PASS
32162.8163	Vertical	5.97	41.22	47.19	74.00	26.81	PK	100	20	PASS
28838.2838	Vertical	5.90	41.35	47.25	74.00	26.75	PK	100	70	PASS
26818.4818	Vertical	4.83	41.34	46.17	74.00	27.83	PK	100	70	PASS
39548.9549	Vertical	10.78	33.39	44.17	54.00	9.83	AV	100	10	PASS
20112.2112	Vertical	1.34	34.44	35.78	54.00	18.22	AV	100	10	PASS
27082.5083	Vertical	4.94	31.62	36.56	54.00	17.44	AV	100	10	PASS
36789.8790	Vertical	7.72	32.59	40.31	54.00	13.69	AV	100	10	PASS
31975.7976	Vertical	5.91	32.08	37.99	54.00	16.01	AV	100	10	PASS
29185.9186	Vertical	6.13	31.27	37.40	54.00	16.60	AV	100	10	PASS



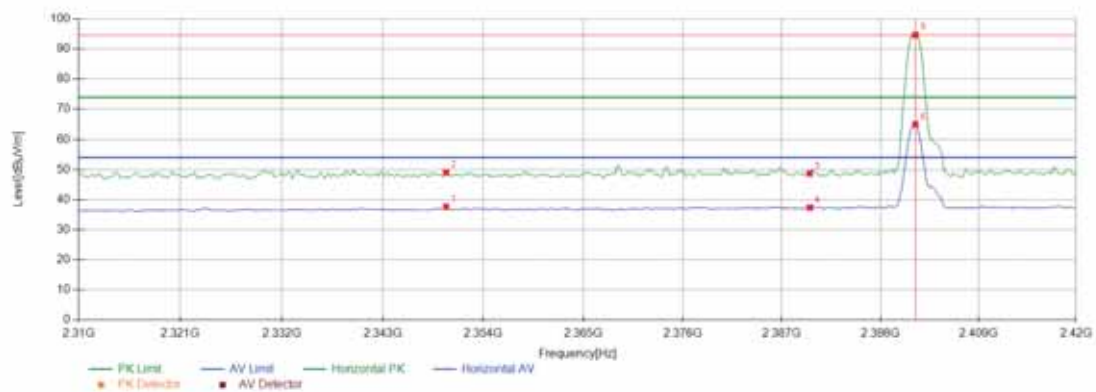
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Band Edge:

Test mode			DH5							
Test channel			LOW channel							
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV /m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/F ail
2349.9350	Horizontal	35.47	2.15	37.62	54.00	16.38	AV	150	151	PASS
2349.9350	Horizontal	35.47	13.54	49.01	74.00	24.99	PK	150	250	PASS
2390.1390	Horizontal	35.79	12.81	48.60	74.00	25.40	PK	150	274	PASS
2390.1390	Horizontal	35.79	1.55	37.34	54.00	16.66	AV	150	16	PASS
2401.9402	Horizontal	35.88	58.87	94.75	---	---	PK	150	133	---
2401.9402	Horizontal	35.88	29.14	65.02	---	---	AV	150	151	---

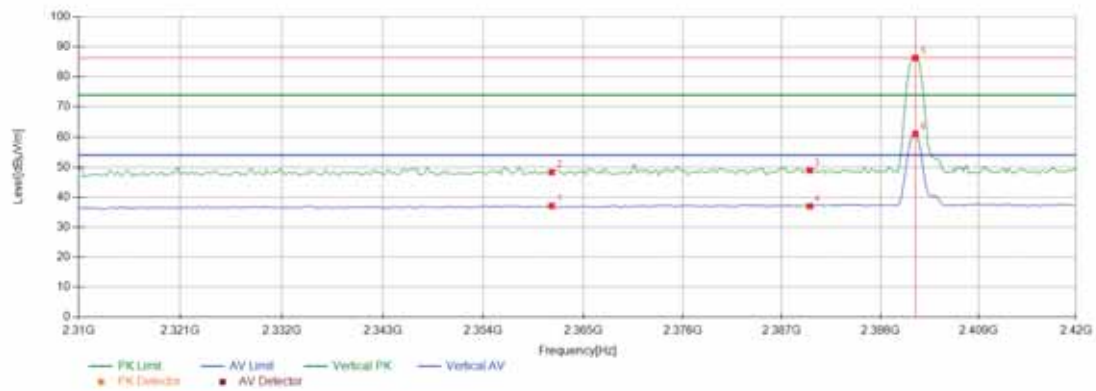


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Test mode			3DH5							
Test channel			LOW channel							
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Readin g [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV /m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/F ail
2361.5362	Vertical	35.56	1.51	37.07	54.00	16.93	AV	150	343	PASS
2361.5362	Vertical	35.56	12.73	48.29	74.00	25.71	PK	150	61	PASS
2390.1390	Vertical	35.79	13.10	48.89	74.00	25.11	PK	150	249	PASS
2390.1390	Vertical	35.79	1.14	36.93	54.00	17.07	AV	150	55	PASS
2401.9402	Vertical	35.88	50.49	86.37	--	---	PK	150	308	---
2401.9402	Vertical	35.88	25.22	61.10	---	---	AV	150	290	---

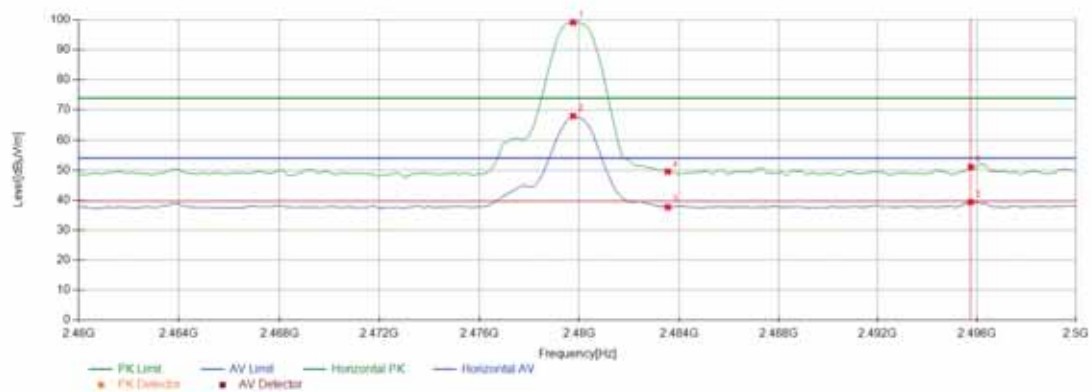


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Test mode			DH5							
Test channel			HIGH channel							
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
2479.7480	Horizontal	36.19	63.00	99.19	---	---	PK	150	60	---
2479.7480	Horizontal	36.19	31.83	68.02	---	---	AV	150	19	---
2483.5484	Horizontal	36.20	1.42	37.62	54.00	16.38	AV	150	130	PASS
2483.5484	Horizontal	36.20	13.27	49.47	74.00	24.53	PK	150	183	PASS
2495.7496	Horizontal	36.25	3.09	39.34	54.00	14.66	AV	150	276	PASS
2495.7496	Horizontal	36.25	14.73	50.98	74.00	23.02	PK	150	276	PASS

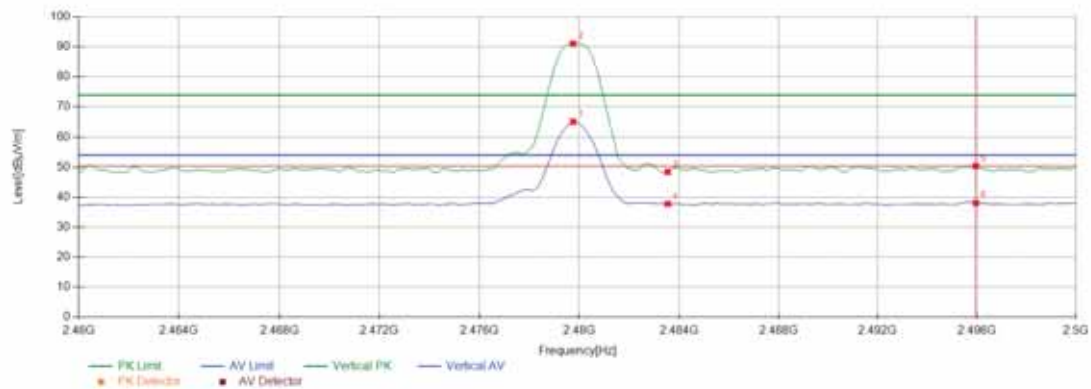


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Test mode			3DH5							
Test channel			HIGH channel							
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Readin g [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV /m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/F ail
2479.7480	Vertical	36.19	28.92	65.11	---	---	AV	150	138	---
2479.7480	Vertical	36.19	54.98	91.17	---	---	PK	150	138	---
2483.5484	Vertical	36.20	12.19	48.39	74.00	25.61	PK	150	316	PASS
2483.5484	Vertical	36.20	1.54	37.74	54.00	16.26	AV	150	293	PASS
2495.9496	Vertical	36.25	14.12	50.37	74.00	23.63	PK	150	138	PASS
2495.9496	Vertical	36.25	1.79	38.04	54.00	15.96	AV	150	143	PASS



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5.3 Peak Power Output -Conducted

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement:

During the process of the testing, The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss. The EUT is controlled by the Bluetooth test set to ensure max power transmission with proper modulation. The peak detector is used.

Limits:

Rule Part 15.247 (b) (1) specifies that " For frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725–5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts."

Peak Output Power	$\leq 0.125\text{W}$ (21dBm)
-------------------	------------------------------

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.44$ dB.

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Test Results:

Test Mode	Antenna	Center Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-3.41	<=30	PASS
		2441	-0.1	<=30	PASS
		2480	0.13	<=30	PASS
2DH5	Ant1	2402	-6.45	<=20.97	PASS
		2441	-3.26	<=20.97	PASS
		2480	-3.16	<=20.97	PASS
3DH5	Ant1	2402	-6.46	<=20.97	PASS
		2441	-3.02	<=20.97	PASS
		2480	-2.74	<=20.97	PASS

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5.4 20dB Emission Bandwidth

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable. RBW is set to 20 kHz; VBW is set to 100 kHz on spectrum analyzer.

Detector=Peak, Trace mode=Max hold.

Limits:

No specific occupied bandwidth requirements in part 15.247(a) (1).

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936$ Hz.

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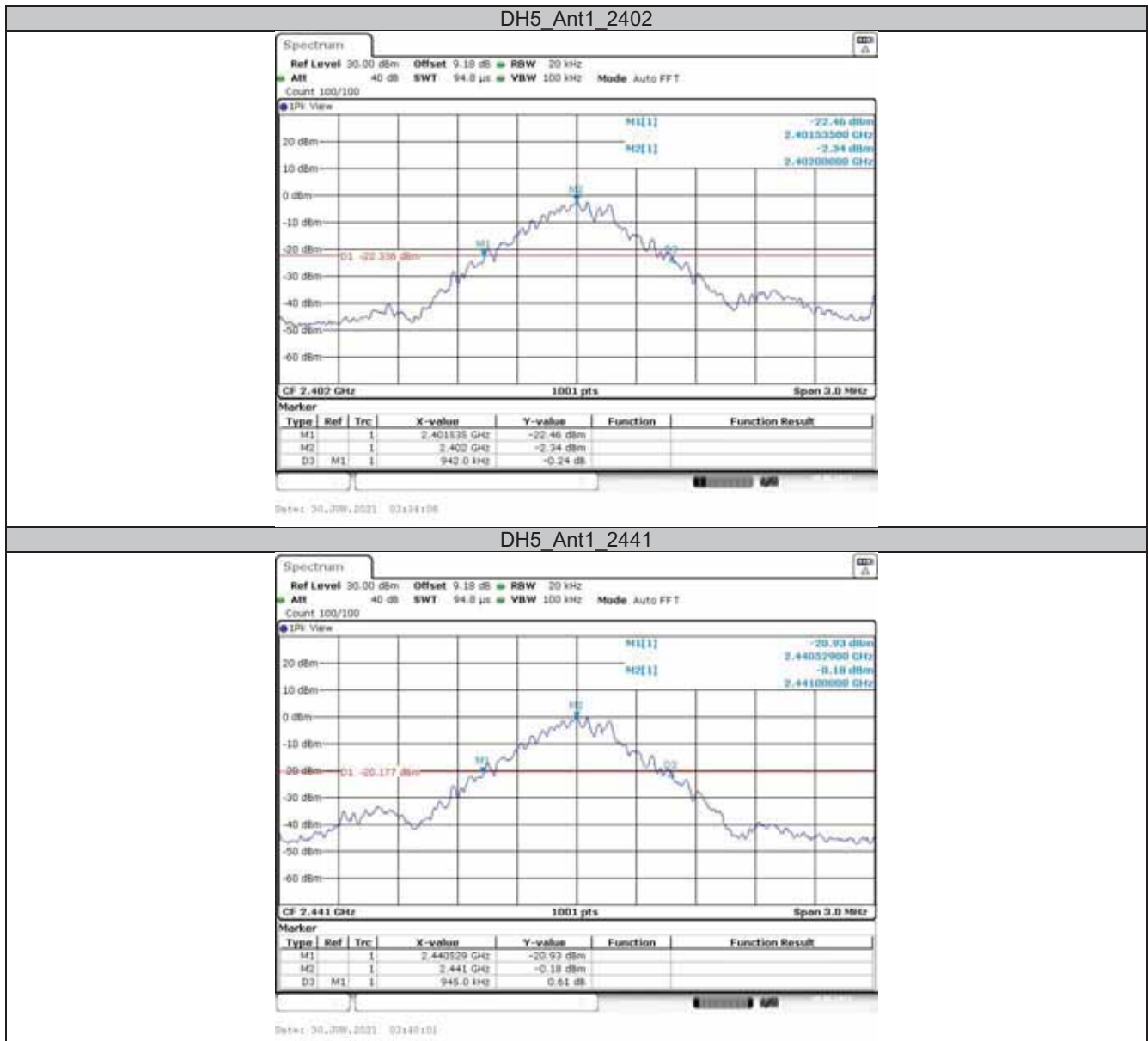
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Test Results:

Test Mode	Antenna	Center Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.942	2401.535	2402.477	---	PASS
		2441	0.945	2440.529	2441.474	---	PASS
		2480	0.942	2479.532	2480.474	---	PASS
2DH5	Ant1	2402	1.281	2401.370	2402.651	---	PASS
		2441	1.242	2440.364	2441.606	---	PASS
		2480	1.242	2479.364	2480.606	---	PASS
3DH5	Ant1	2402	1.254	2401.361	2402.615	---	PASS
		2441	1.260	2440.352	2441.612	---	PASS
		2480	1.260	2479.352	2480.612	---	PASS

Test Graphs



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DH5_Ant1_2480



2DH5_Ant1_2402



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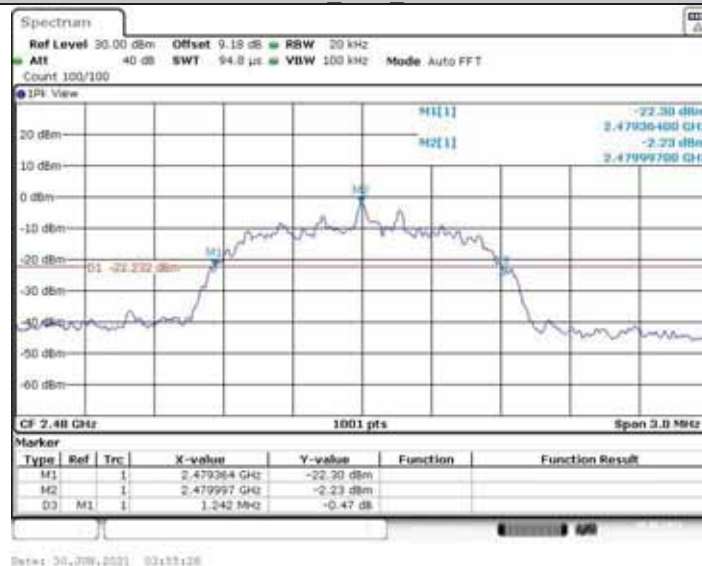
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2DH5_Ant1_2441



2DH5_Ant1_2480



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3DH5_Ant1_2402



3DH5_Ant1_2441



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5.5 Occupied Channel Bandwidth

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable. RBW is set to 20 kHz; VBW is set to 100 kHz on spectrum analyzer.

Detector=Peak, Trace mode=Max hold.

Limits:

No specific occupied bandwidth requirements in part 15.247(a) (1).

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936$ Hz.

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Test Results:

Test Mode	Antenna	Center Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.881	2401.565	2402.447	---	PASS
		2441	0.866	2440.550	2441.417	---	PASS
		2480	0.863	2479.553	2480.417	---	PASS
2DH5	Ant1	2402	1.187	2401.410	2402.596	---	PASS
		2441	1.175	2440.401	2441.575	---	PASS
		2480	1.175	2479.401	2480.575	---	PASS
3DH5	Ant1	2402	1.175	2401.416	2402.590	---	PASS
		2441	1.172	2440.401	2441.572	---	PASS
		2480	1.172	2479.401	2480.572	---	PASS

Test Graphs



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DH5_Ant1_2480



2DH5_Ant1_2402



2DH5_Ant1_2441



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2DH5_Ant1_2480



3DH5_Ant1_2402



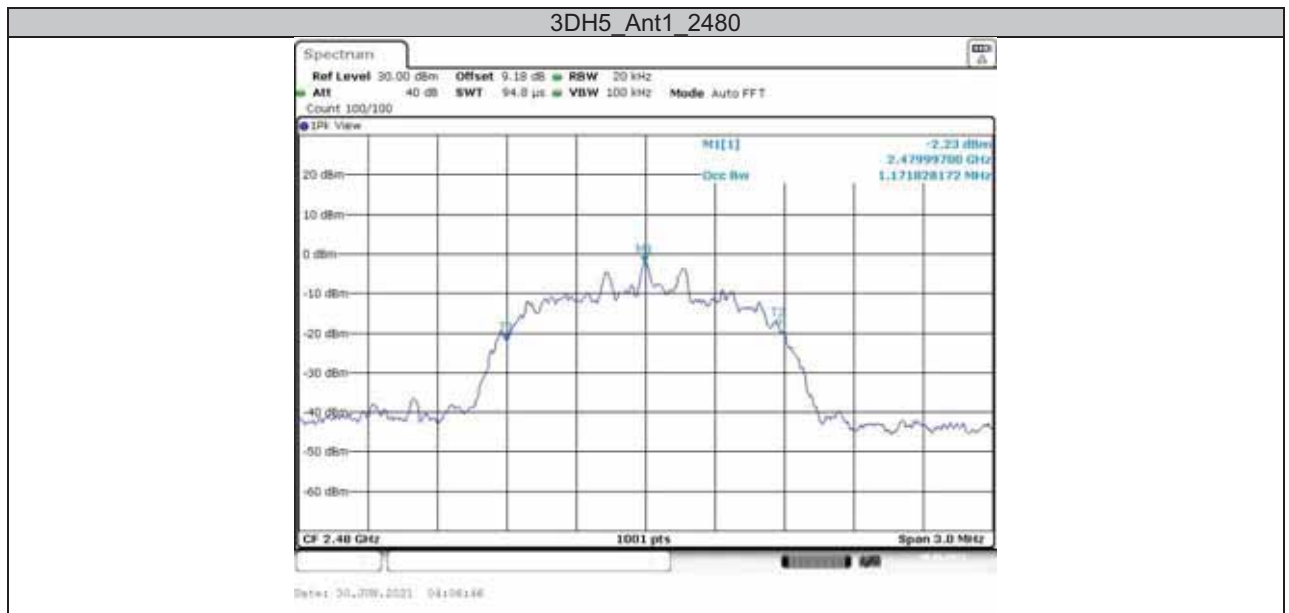
3DH5_Ant1_2441



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5.6 Frequency Separation

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable the band edge of the lowest and highest channels were measured. The peak detector is used and RBW is set to 100 kHz and VBW is set to 300 kHz on spectrum analyzer.

Limits:

Rule Part 15.247(a)(1) specifies that "Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. "

Note: The value of two-thirds of 20 dB bandwidth is always greater than 25 kHz.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U=936$ Hz.

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Test Results:

Test Mode	Antenna	Center Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1	≥ 0.945	PASS
2DH5	Ant1	Hop	1.003	≥ 0.854	PASS
3DH5	Ant1	Hop	1.003	≥ 0.840	PASS

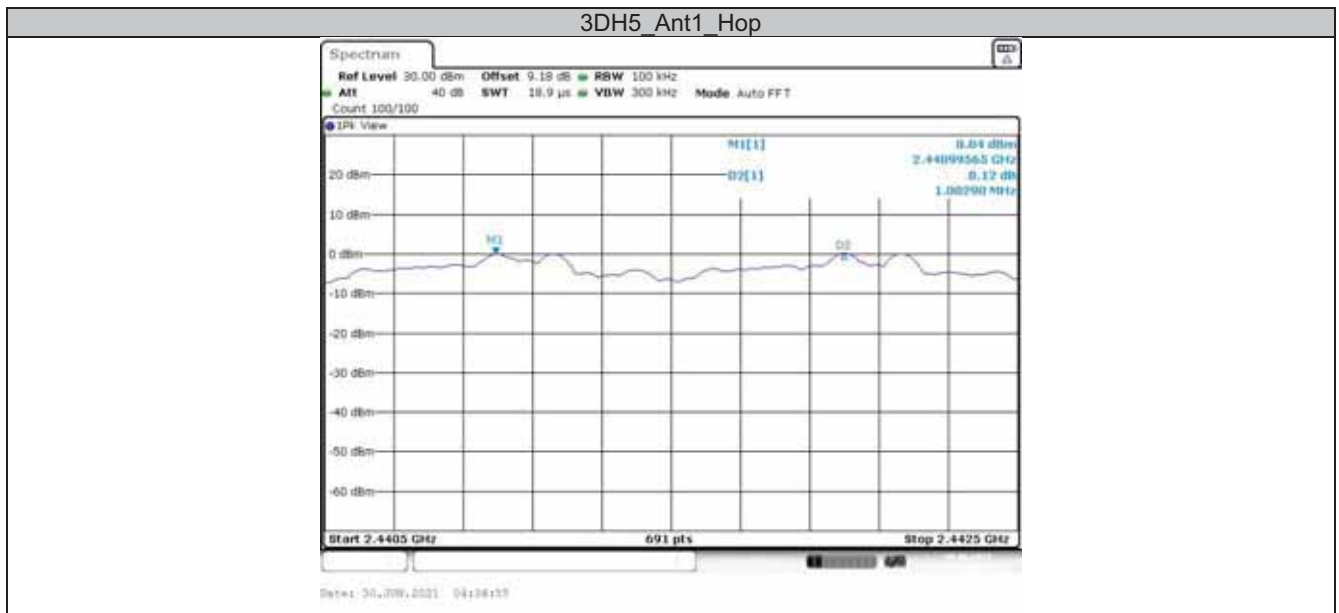
Test Graphs



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5.7 Time of Occupancy (Dwell Time)

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement:

The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss. RBW is set to 1MHz and VBW is set to 3MHz on spectrum analyzer. The dwell time is calculated by:

Dwell time = time slot length * hop rate * 0.4s with:

The selected EUT Packet type uses a slot type of 5-Tx&1-Rx and a hopping rate of 1600(ch*hop/s) for all channels. So the final hopping rate for all channel is $1600/6=266.67(\text{ch*hop/s})$

Limits:

Rule Part15.247(a) specifies that " Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed."

Dwell time	$\leq 400\text{ms}$
------------	---------------------

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$.

Requirements	Uncertainty					
Dwell Time	DH5	U=0.70ms	2DH5	U=0.70ms	3DH5	U=0.70ms

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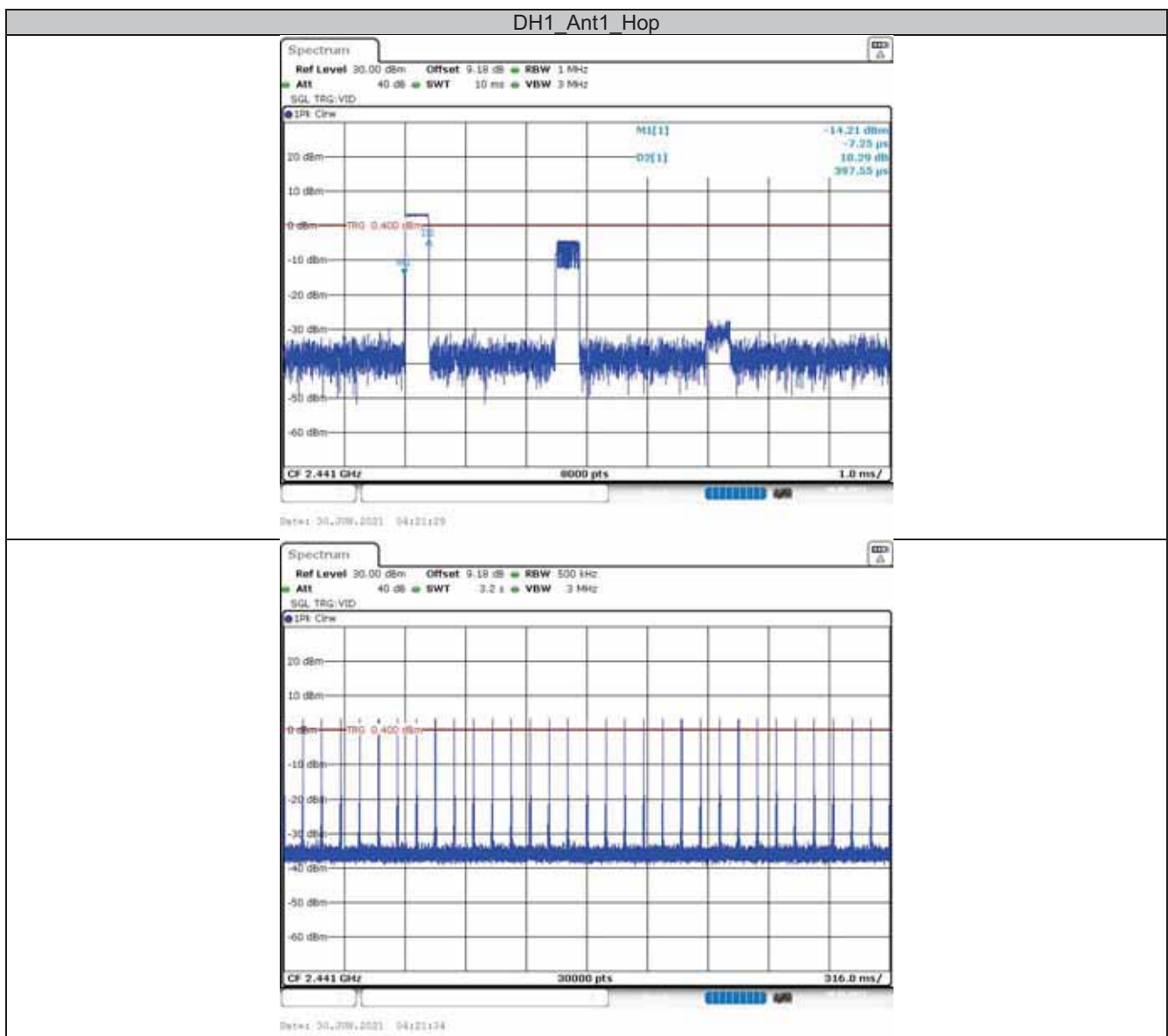
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Test Results:

Test Mode	Antenna	Center Frequency[MHz]	Burst Width [ms]	Total Hops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.40	320	0.127	<=0.4	PASS
DH3	Ant1	Hop	1.65	110	0.181	<=0.4	PASS
DH5	Ant1	Hop	2.88	70	0.202	<=0.4	PASS
2DH1	Ant1	Hop	0.41	320	0.131	<=0.4	PASS
2DH3	Ant1	Hop	1.65	110	0.182	<=0.4	PASS
2DH5	Ant1	Hop	2.90	70	0.203	<=0.4	PASS
3DH1	Ant1	Hop	0.41	320	0.131	<=0.4	PASS
3DH3	Ant1	Hop	1.65	110	0.182	<=0.4	PASS
3DH5	Ant1	Hop	2.90	70	0.203	<=0.4	PASS

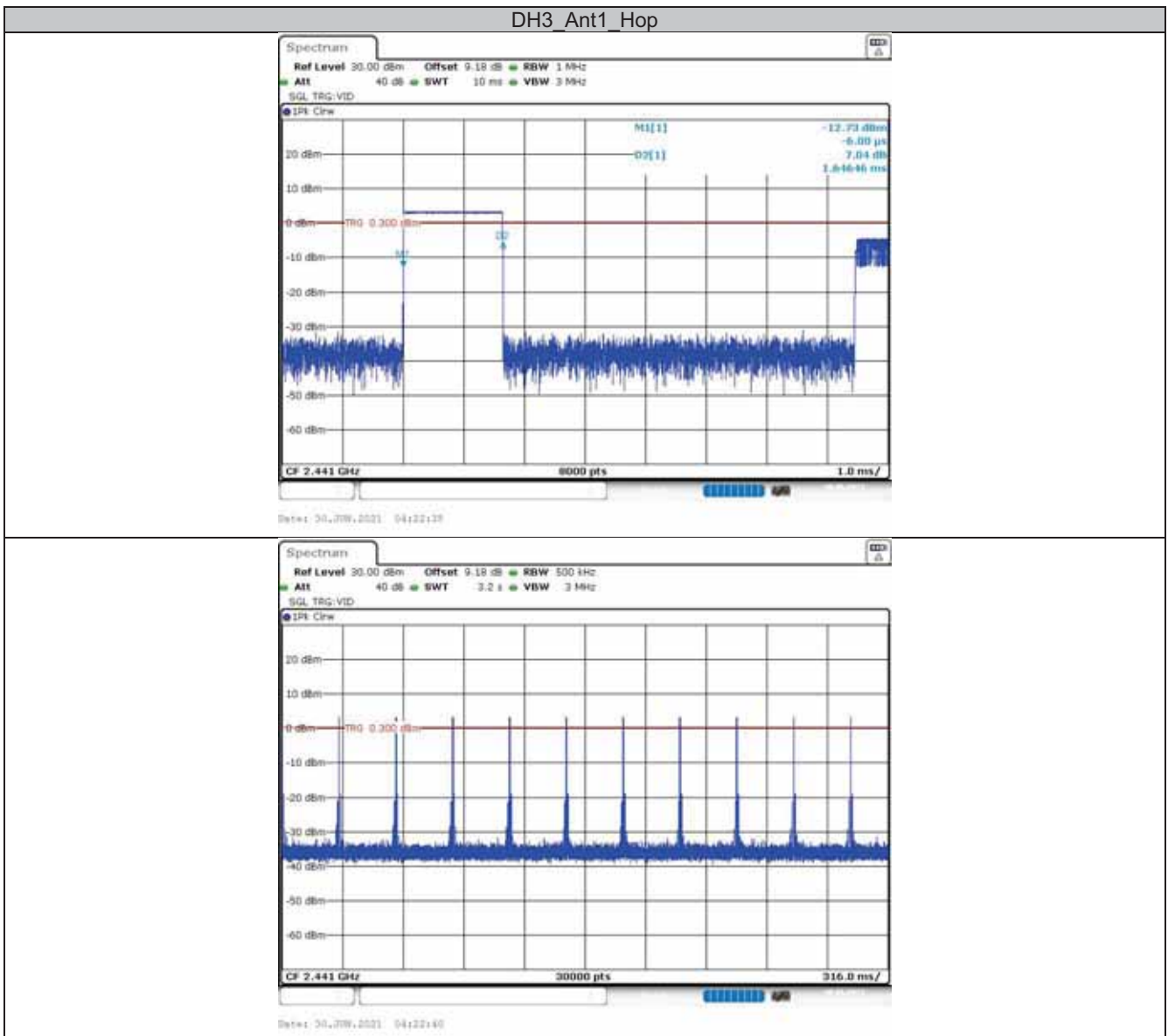
Test Graphs:



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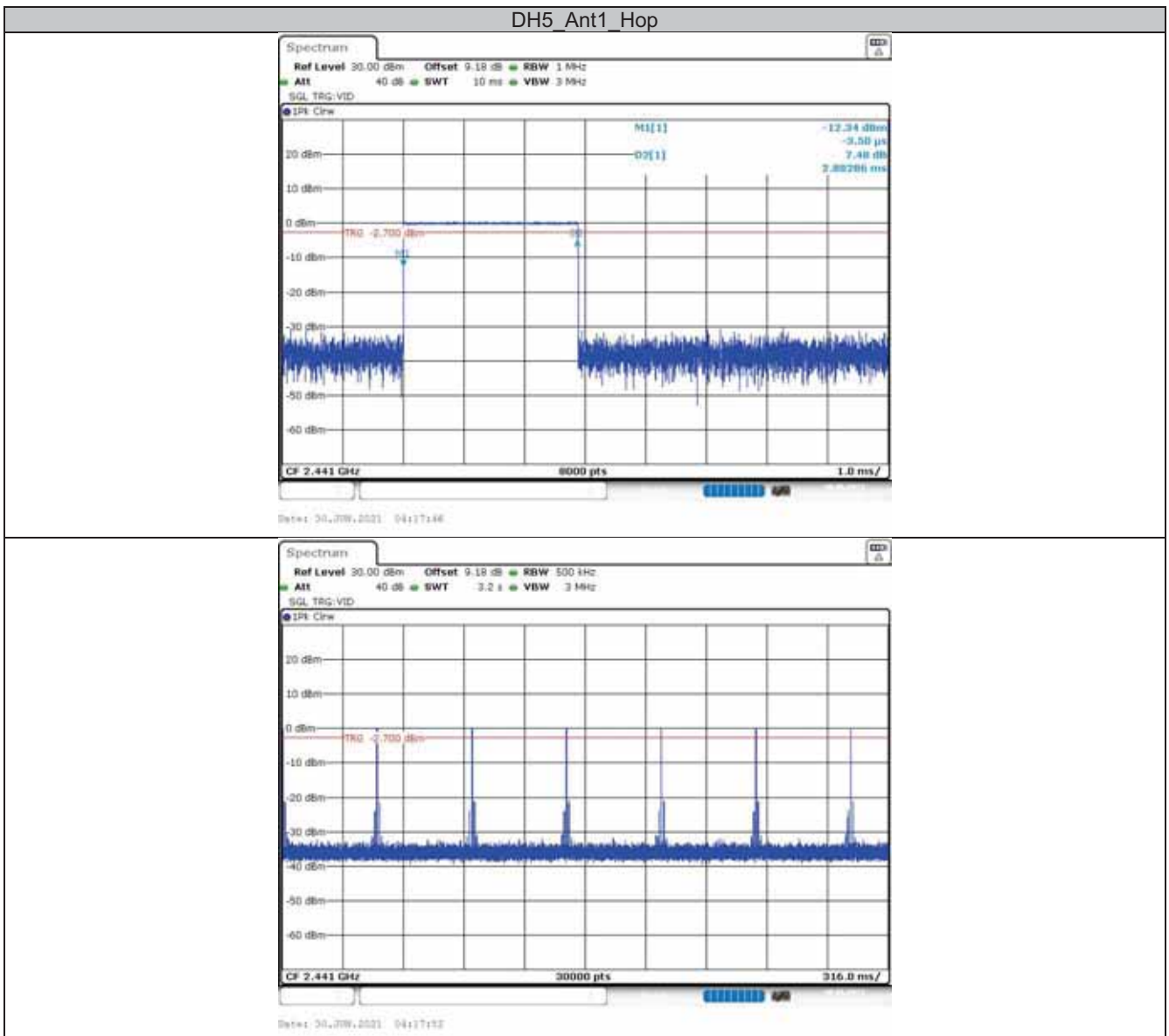
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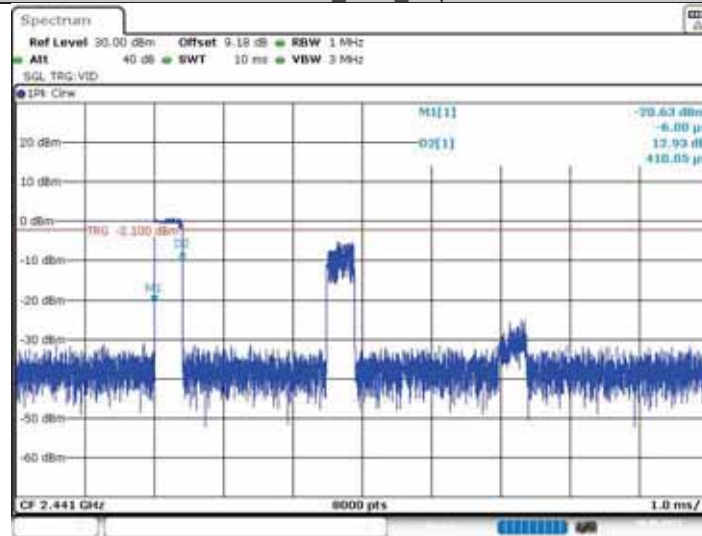


CVC Testing Technology Co., Ltd.

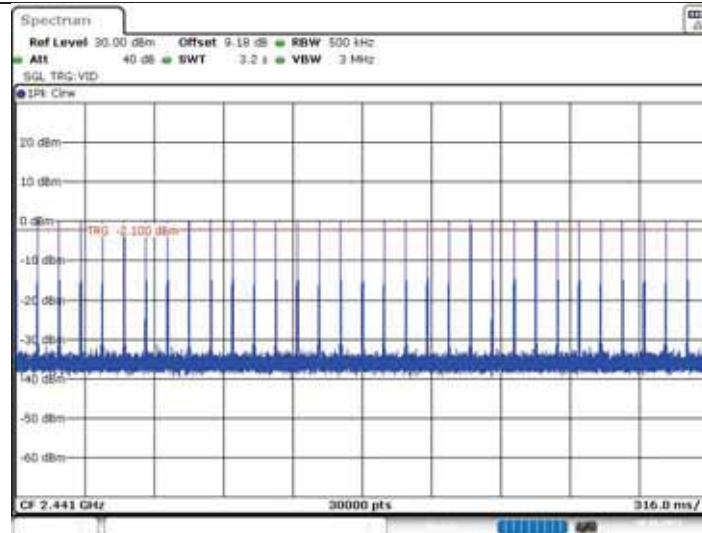
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2DH1_Ant1_Hop



Date: 30, JUNE, 2021 04:32:12

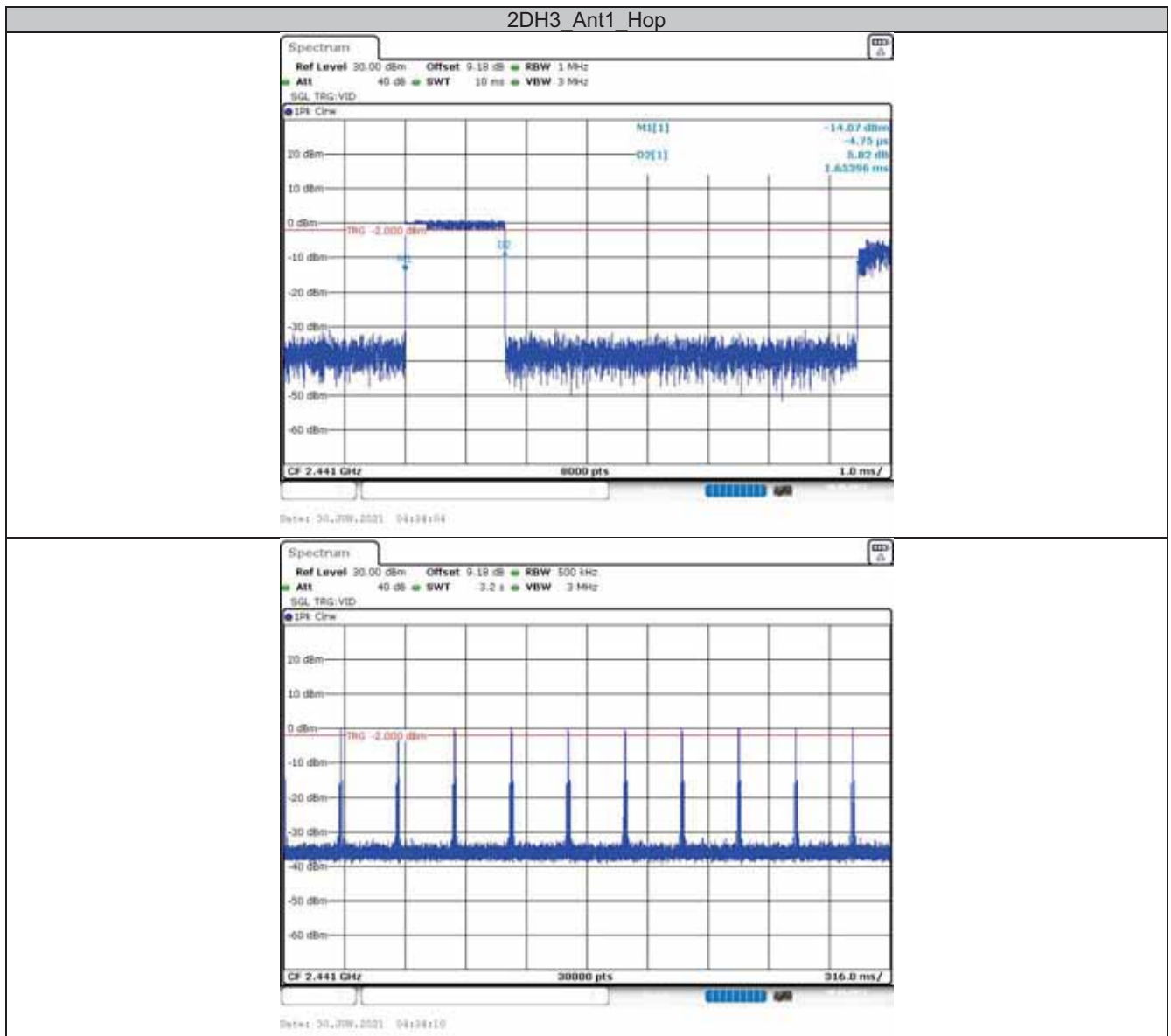


Date: 30, JUNE, 2021 04:32:17

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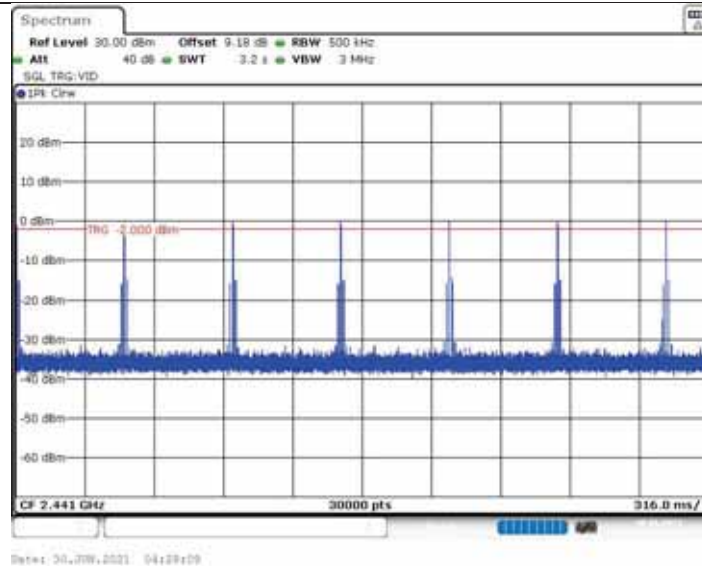
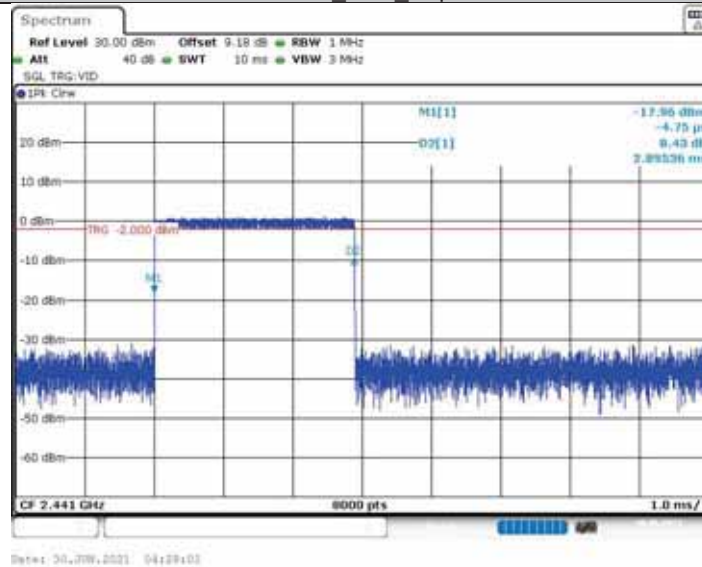


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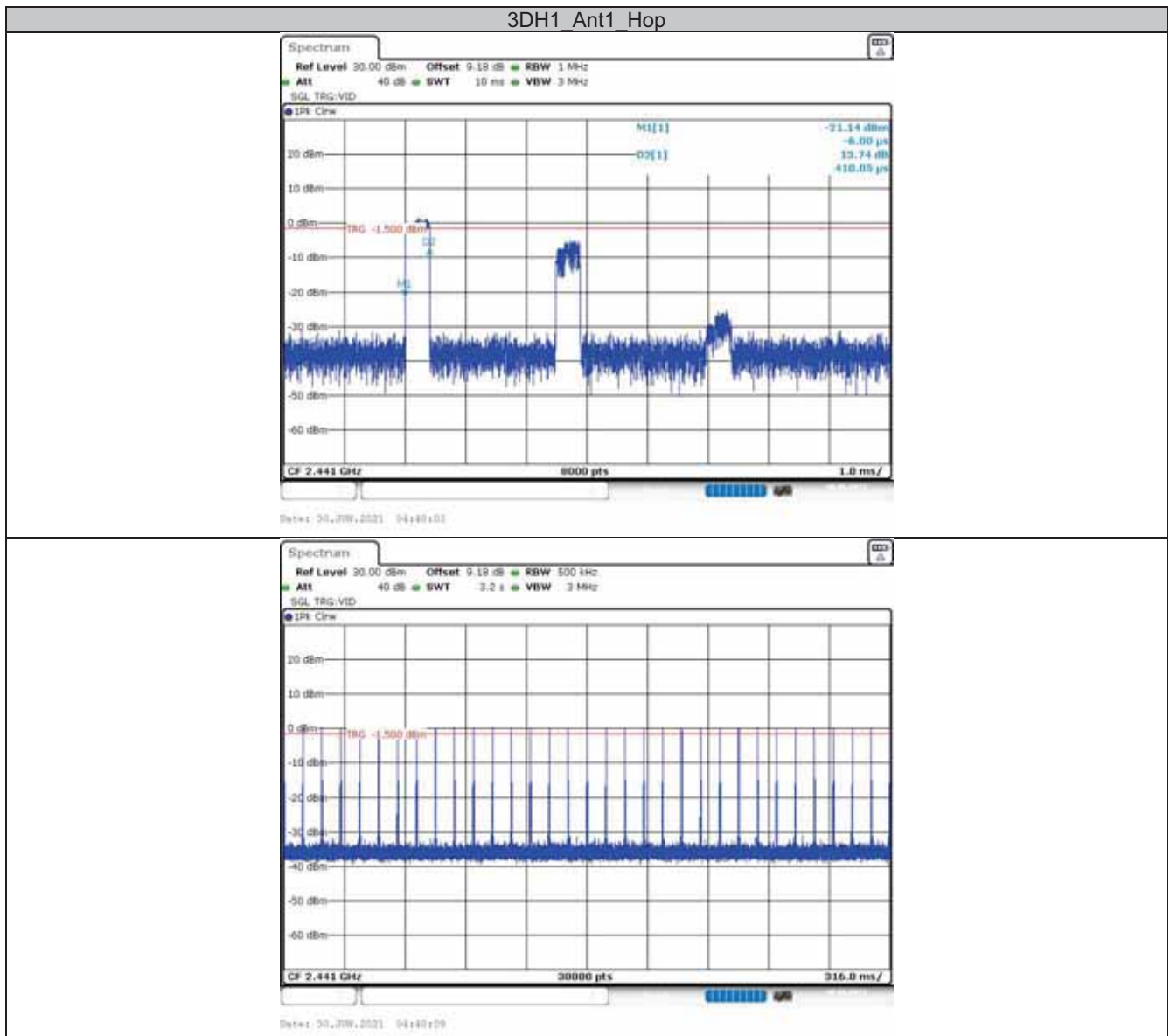
2DH5_Ant1_Hop



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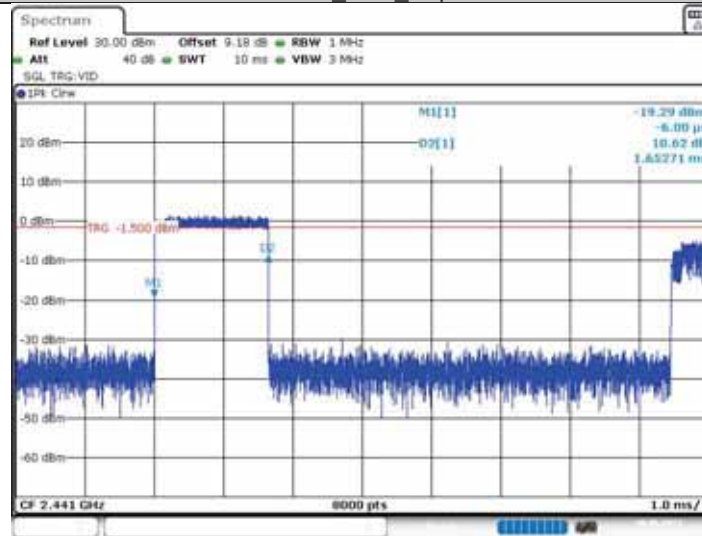


CVC Testing Technology Co., Ltd.

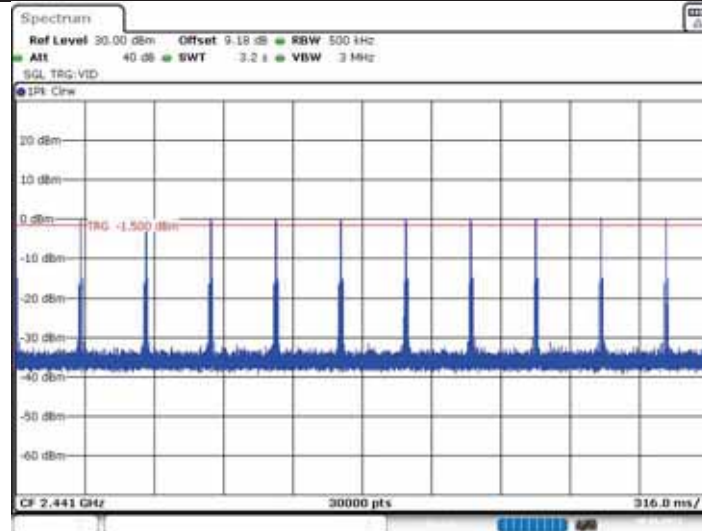
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3DH3_Ant1_Hop



Date: 30,09,2021 04:40:13



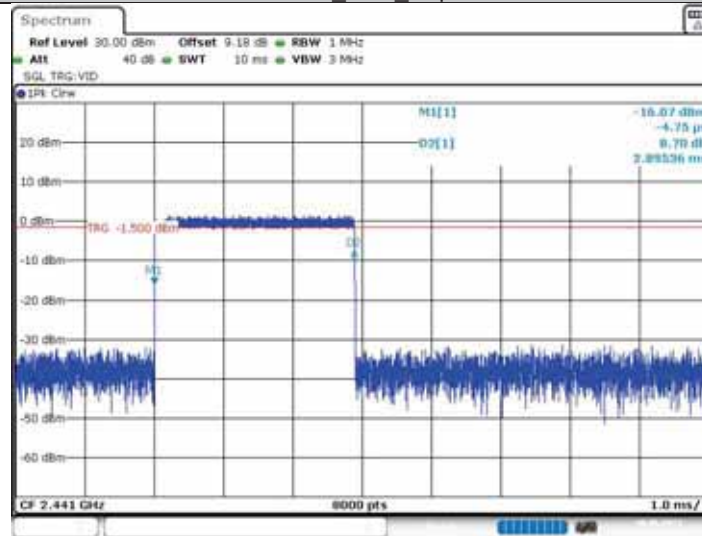
Date: 30,09,2021 04:40:17

CVC Testing Technology Co., Ltd.

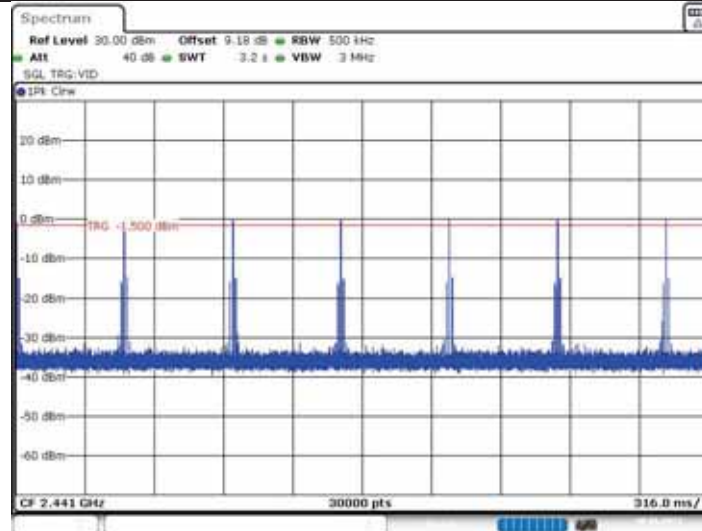
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3DH5_Ant1_Hop



Date: 30,09,2021 04:37:22



Date: 30,09,2021 04:37:27

5.8 Band Edge Measurement

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable the band edge of the lowest and highest channels were measured. The peak detector is used and RBW is set to 100 kHz and VBW is set to 300 kHz on spectrum analyzer.

Limits:

Rule Part 15.247(d) specifies that "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 a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 936 \text{ Hz}$, $2 \text{ GHz} - 3 \text{ GHz} = 1.407 \text{ dB}$.

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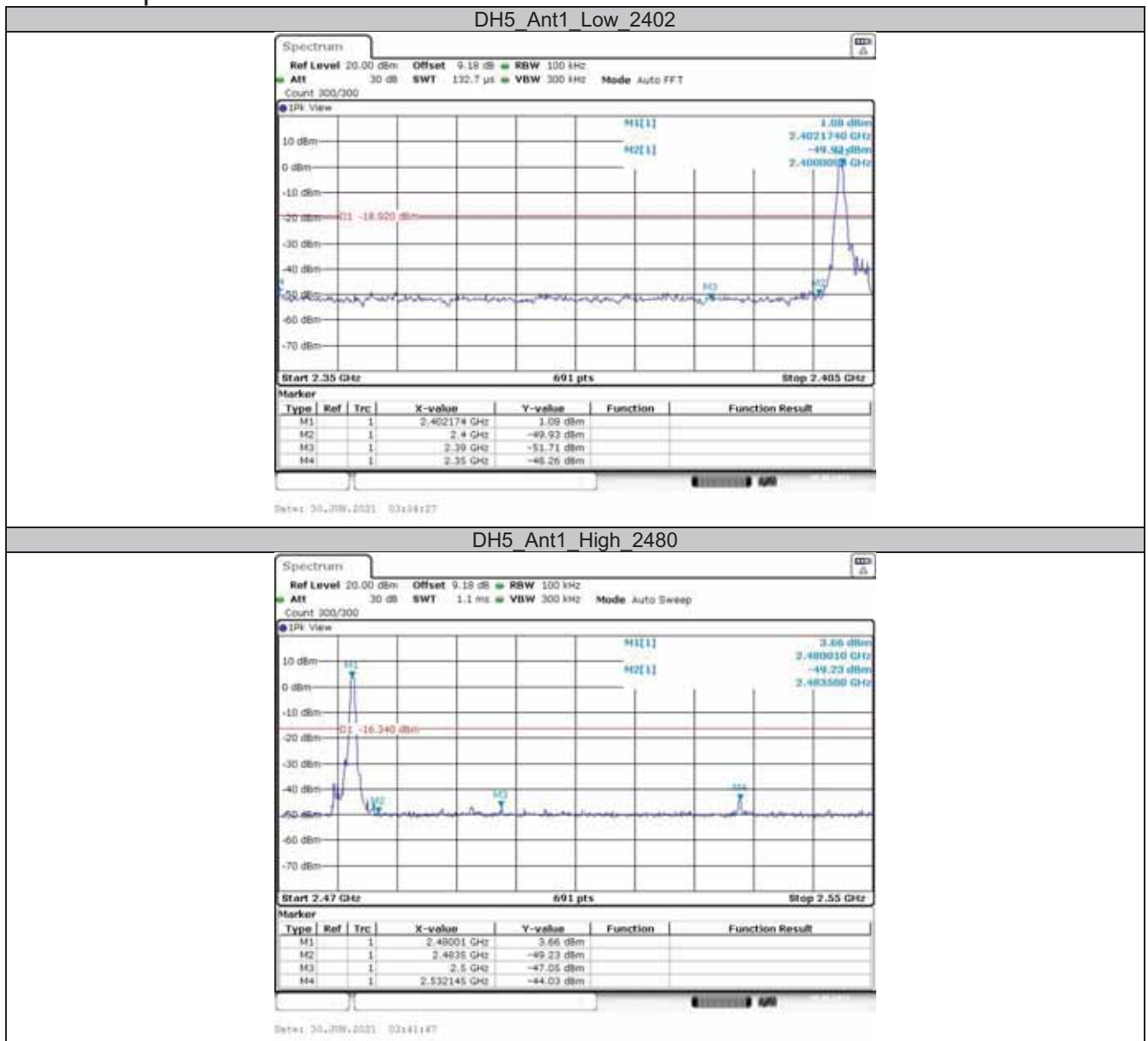
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Test Result:

Test Mode	Antenna	Ch Name	Center Frequency[MHz]	Ref Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	1.08	-48.26	<=-18.92	PASS
		High	2480	3.66	-44.03	<=-16.34	PASS
		Low	Hop 2402	-1.41	-49.18	<=-21.41	PASS
		High	Hop 2480	0.50	-44.29	<=-19.5	PASS
2DH5	Ant1	Low	2402	-2.44	-49	<=-22.44	PASS
		High	2480	0.54	-45.72	<=-19.46	PASS
		Low	Hop 2402	-5.37	-49.98	<=-25.37	PASS
		High	Hop 2480	0.43	-45.12	<=-19.57	PASS
3DH5	Ant1	Low	2402	-2.31	-49.08	<=-22.31	PASS
		High	2480	0.64	-46.02	<=-19.36	PASS
		Low	Hop 2402	-1.00	-49.31	<=-21	PASS
		High	Hop 2480	0.45	-43.81	<=-19.55	PASS

Test Graphs:

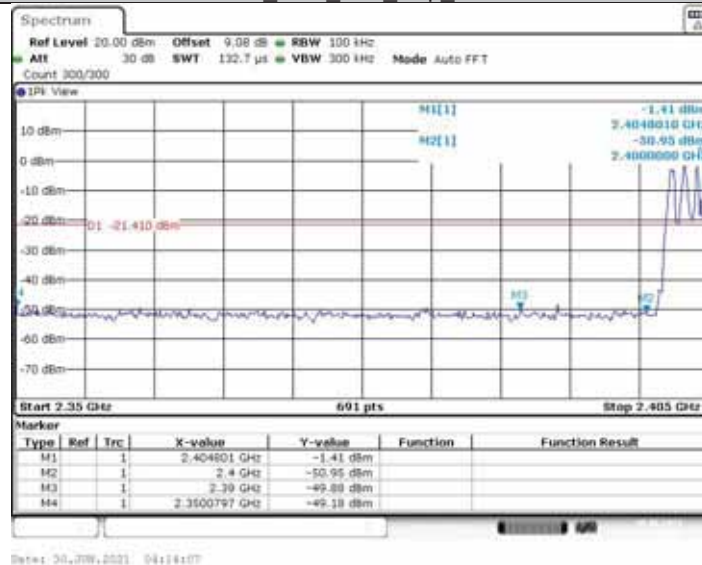


CVC Testing Technology Co., Ltd.

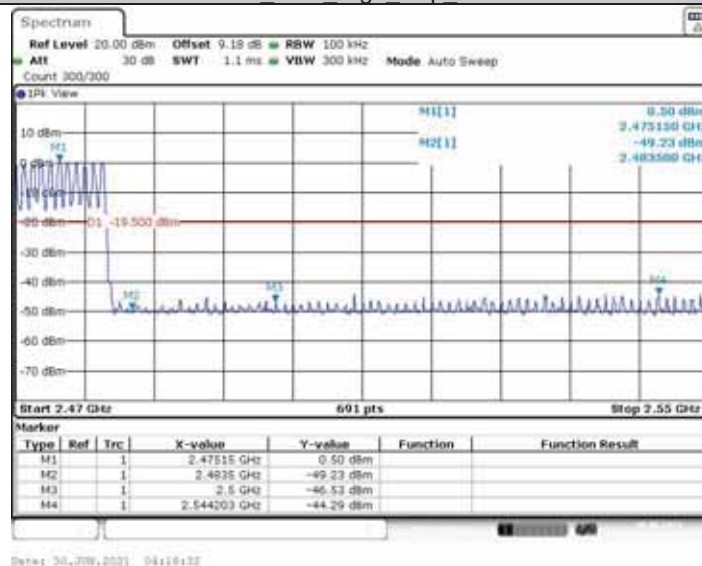
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DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480

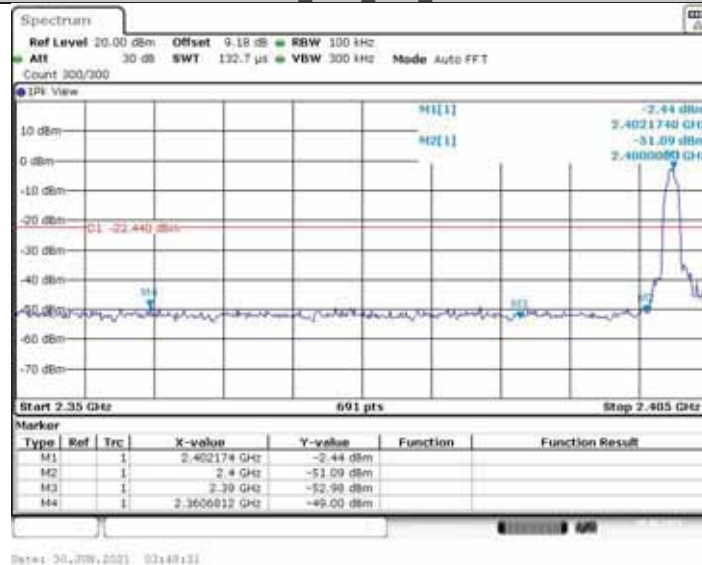


CVC Testing Technology Co., Ltd.

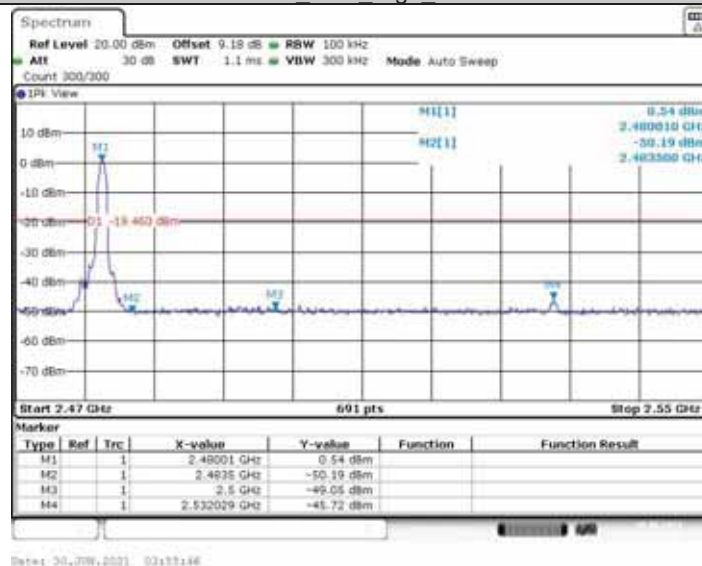
Test Report No. FCC2021-0013-RF

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2DH5_Ant1_Low_2402



2DH5_Ant1_High_2480

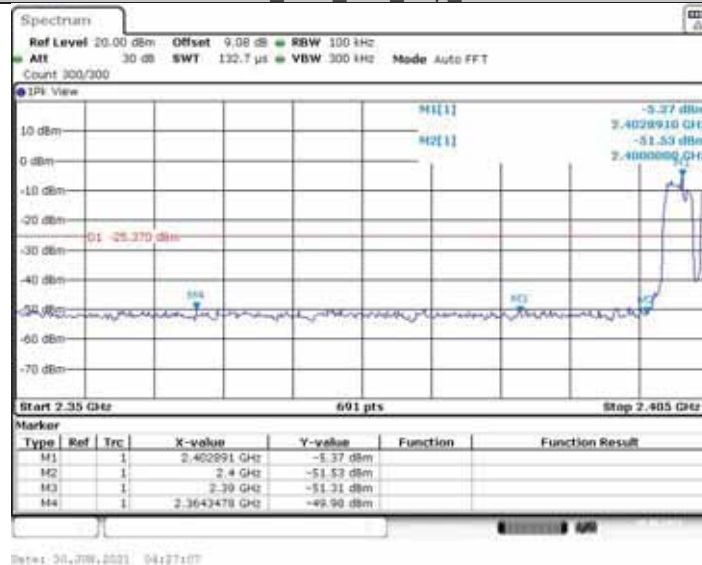


CVC Testing Technology Co., Ltd.

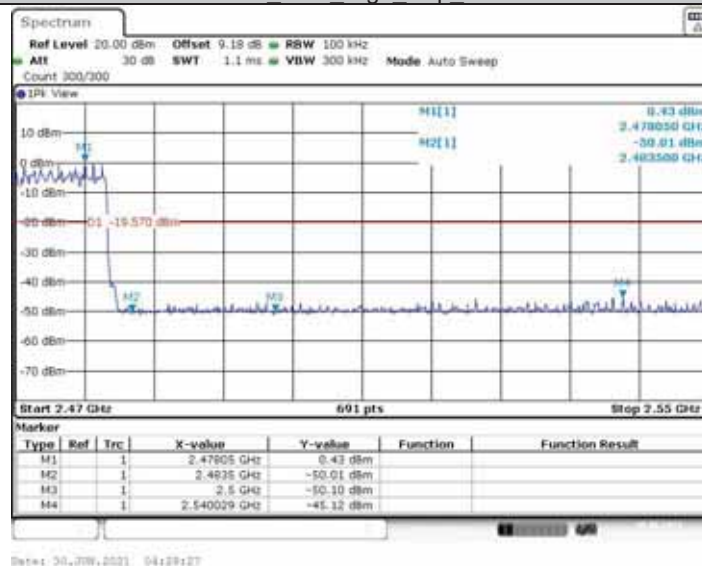
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2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

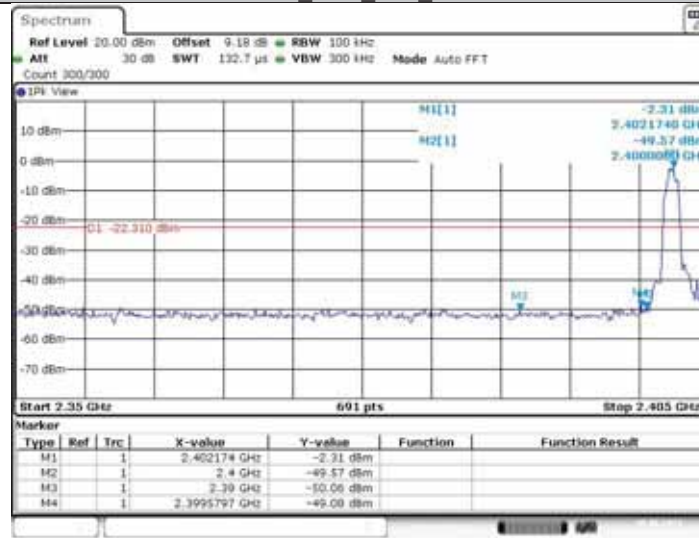


CVC Testing Technology Co., Ltd.

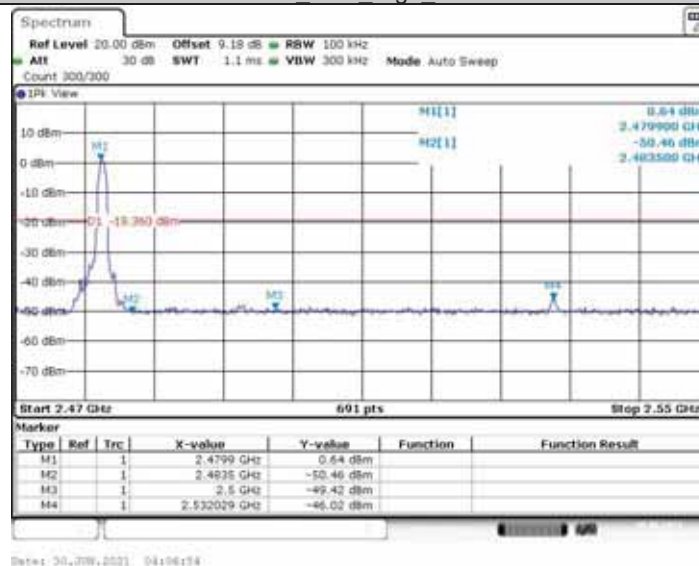
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3DH5_Ant1_Low_2402



3DH5_Ant1_High_2480

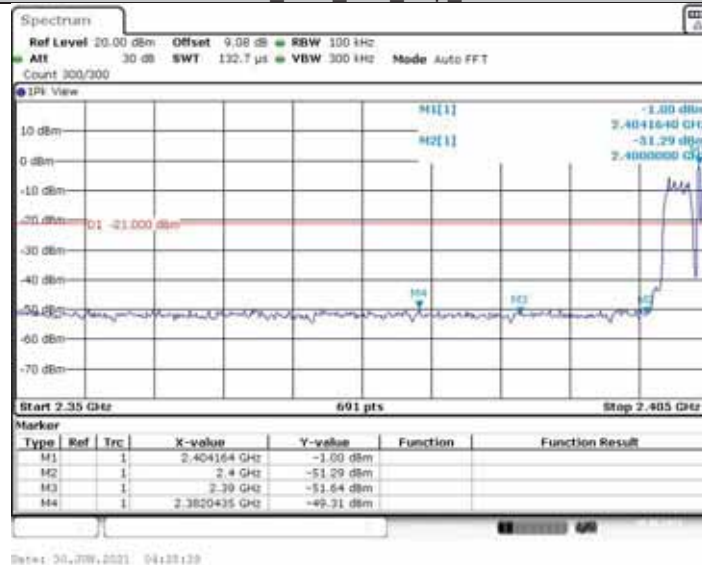


CVC Testing Technology Co., Ltd.

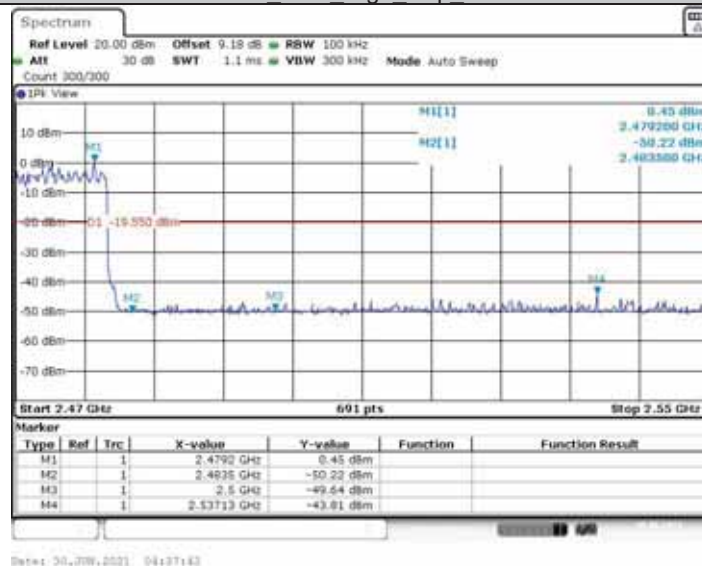
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3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



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5.9 Number of hopping Frequency

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement:

The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss. RBW is set to 100KHz and VBW is set to 300KHz on spectrum analyzer. Set EUT on Hopping on mode.

Limits:

Rule Part 15.247(a) (1) (iii) specifies that" Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels."

Limits	≥ 15 channels
--------	--------------------

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.75\text{dB}$.

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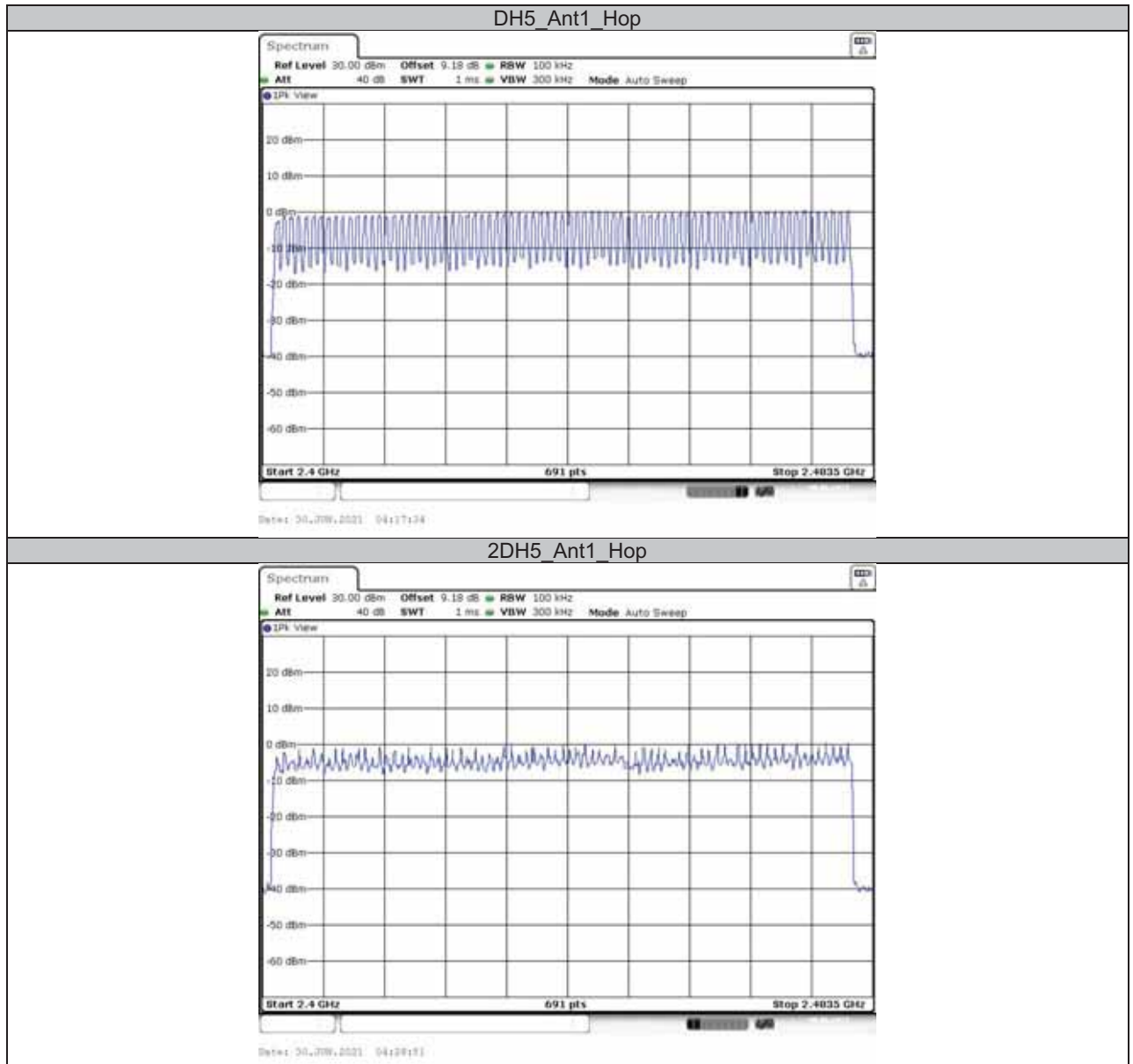
Test Report No. FCC2021-0013-RF

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Test Results:

TestMode	Antenna	Center Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥ 15	PASS
2DH5	Ant1	Hop	79	≥ 15	PASS
3DH5	Ant1	Hop	79	≥ 15	PASS

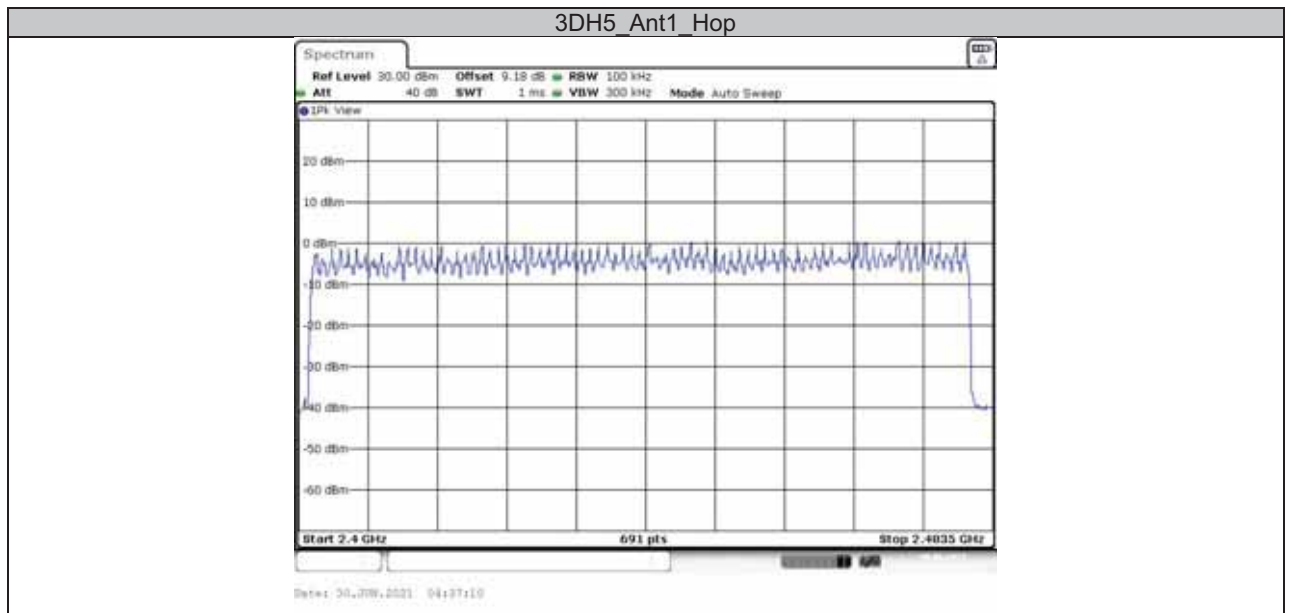
Test Graphs:



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5.10 Spurious RF Conducted Emissions

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement:

The EUT was connected to the spectrum analyzer with a known loss. The spectrum analyzer scans from 30MHz to the 10th harmonic of the carrier. The peak detector is used. Set RBW to 100kHz and VBW to 300 kHz, Sweep is set to AUTO .The test is in transmitting mode.

Limits:

Rule Part 15.247(d) pacifies that "In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
100kHz-2GHz	0.684 dB
2GHz-26GHz	1.407 dB

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Test Results:

Test Mode	Antenna	Center Frequency[MHz]	Freq Range [MHz]	Ref Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	1.11	1.11	---	PASS
			30~1000	1.11	-59.58	<=-28.89	PASS
			1000~26500	1.11	-45.15	<=-28.89	PASS
		2441	Reference	3.16	3.16	---	PASS
			30~1000	3.16	-60.36	<=-26.84	PASS
			1000~26500	3.16	-45.25	<=-26.84	PASS
		2480	Reference	3.68	3.68	---	PASS
			30~1000	3.68	-60.16	<=-26.32	PASS
			1000~26500	3.68	-44.69	<=-26.32	PASS
2DH5	Ant1	2402	Reference	-2.40	-2.40	---	PASS
			30~1000	-2.40	-60.31	<=-32.4	PASS
			1000~26500	-2.40	-49.67	<=-32.4	PASS
		2441	Reference	0.06	0.06	---	PASS
			30~1000	0.06	-59.9	<=-29.94	PASS
			1000~26500	0.06	-48.22	<=-29.94	PASS
		2480	Reference	0.55	0.55	---	PASS
			30~1000	0.55	-59.94	<=-29.45	PASS
			1000~26500	0.55	-47.54	<=-29.45	PASS
3DH5	Ant1	2402	Reference	-2.27	-2.27	---	PASS
			30~1000	-2.27	-59.96	<=-32.27	PASS
			1000~26500	-2.27	-48.4	<=-32.27	PASS
		2441	Reference	0.18	0.18	---	PASS
			30~1000	0.18	-60.36	<=-29.82	PASS
			1000~26500	0.18	-48.77	<=-29.82	PASS
		2480	Reference	0.65	0.65	---	PASS
			30~1000	0.65	-60.09	<=-29.35	PASS
			1000~26500	0.65	-49.75	<=-29.35	PASS

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Test Graphs:

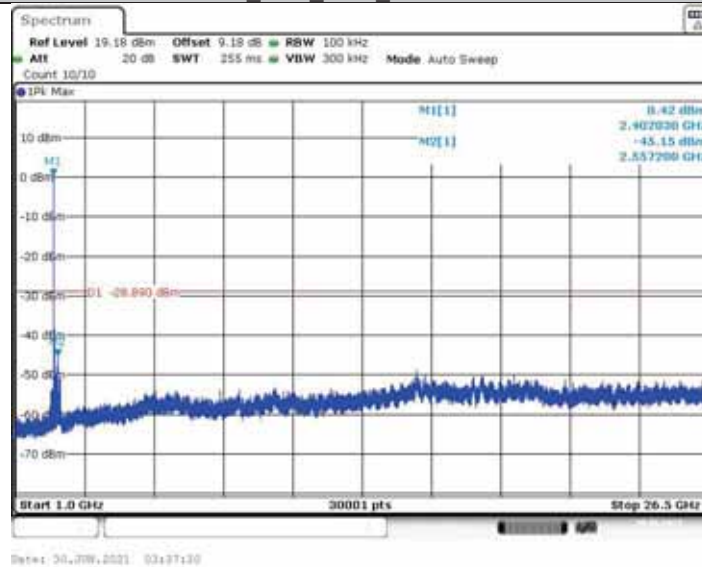


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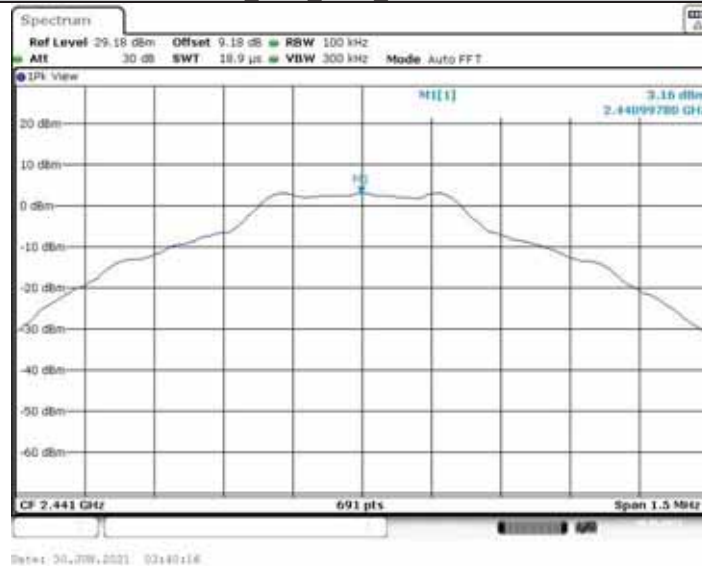
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DH5_Ant1_2402_1000~26500



DH5_Ant1_2441_0~Reference

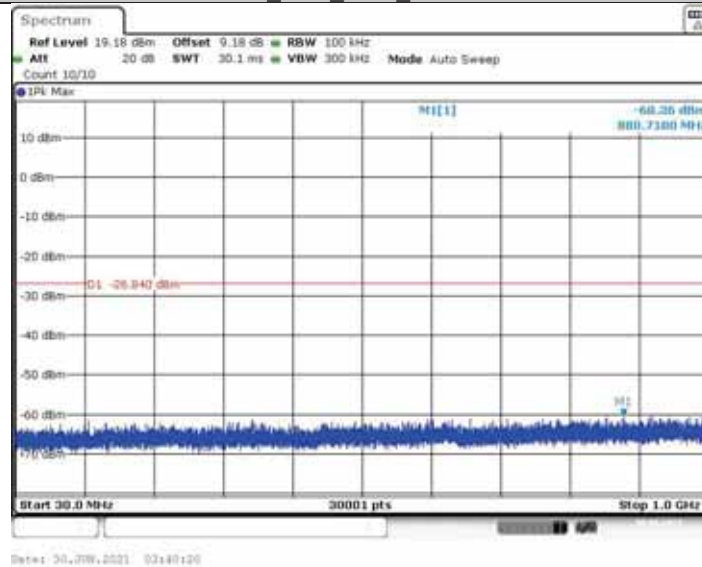


CVC Testing Technology Co., Ltd.

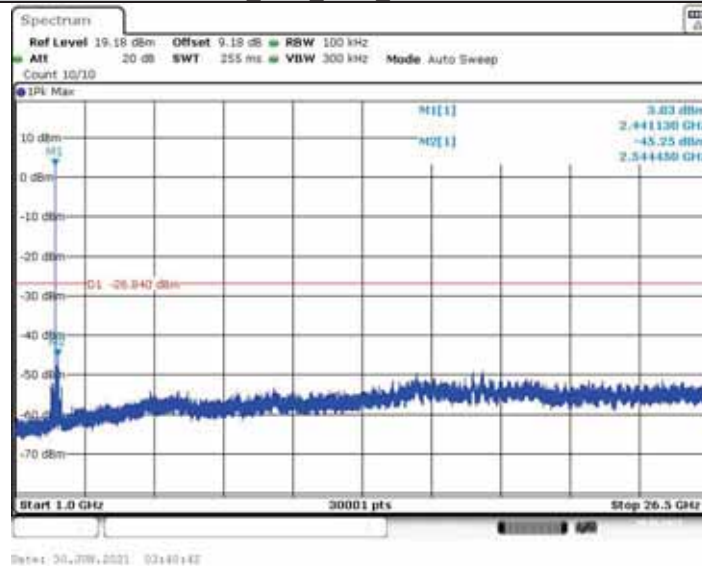
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DH5_Ant1 2441 30~1000



DH5_Ant1 2441 1000~26500



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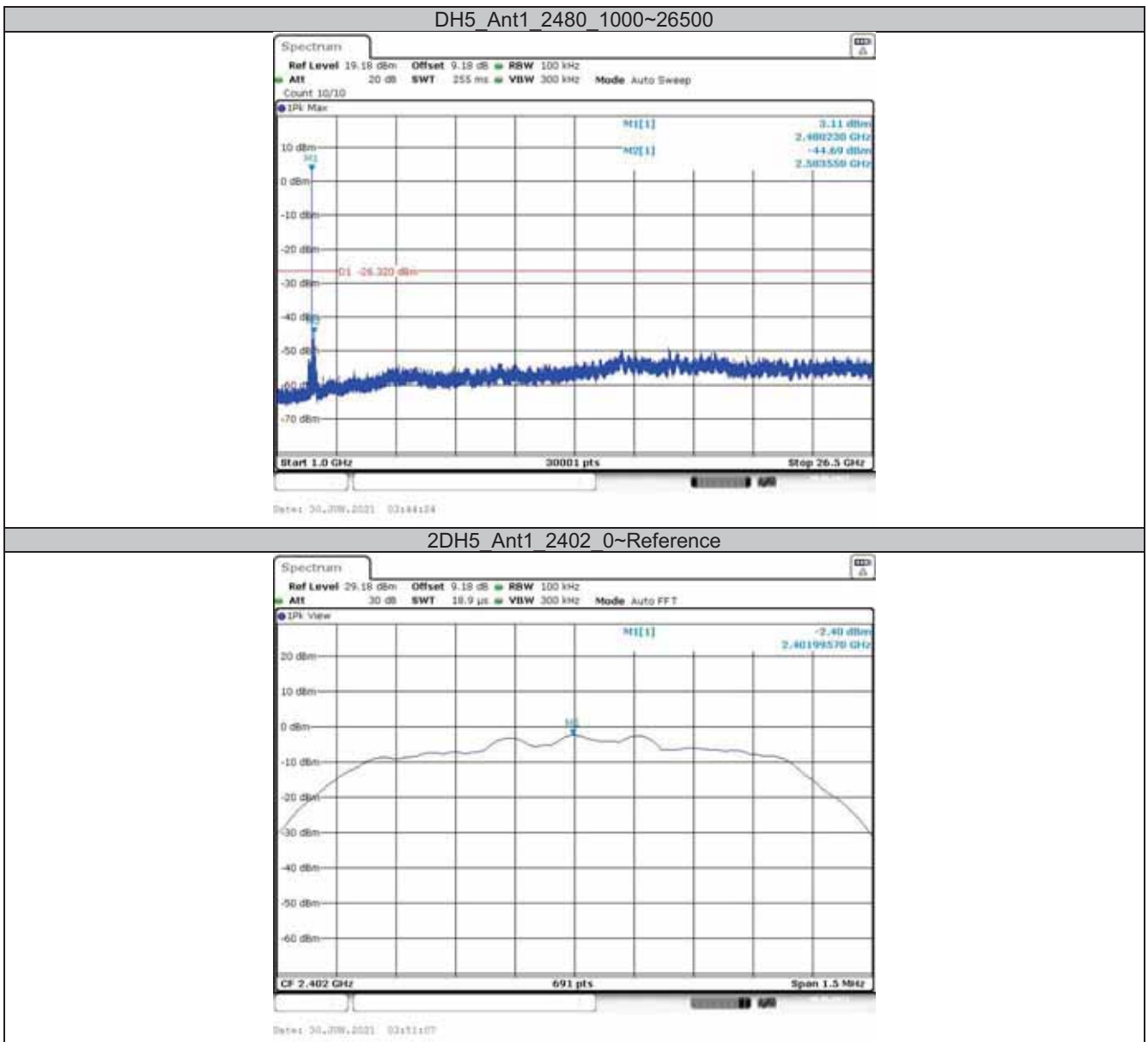
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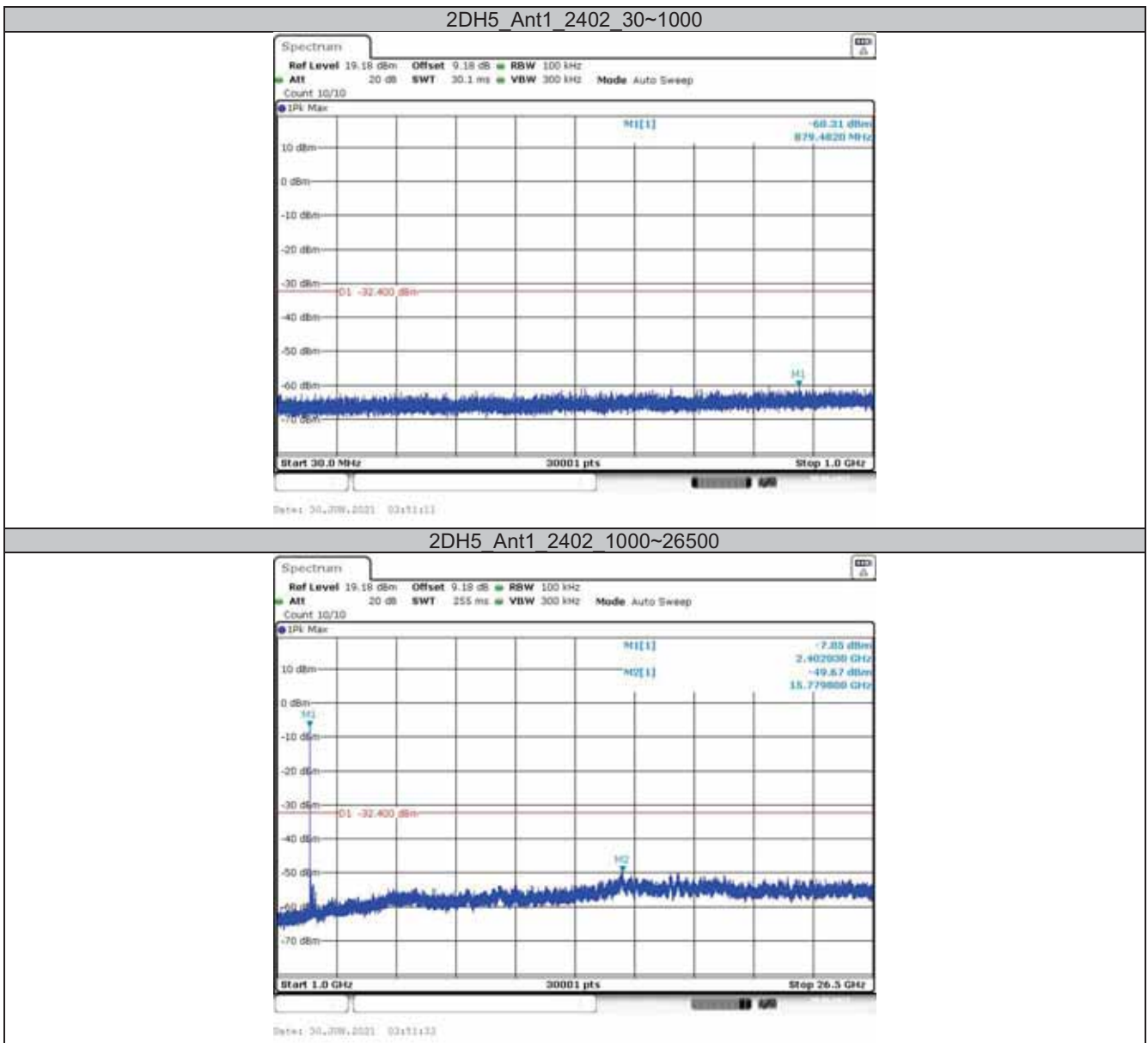
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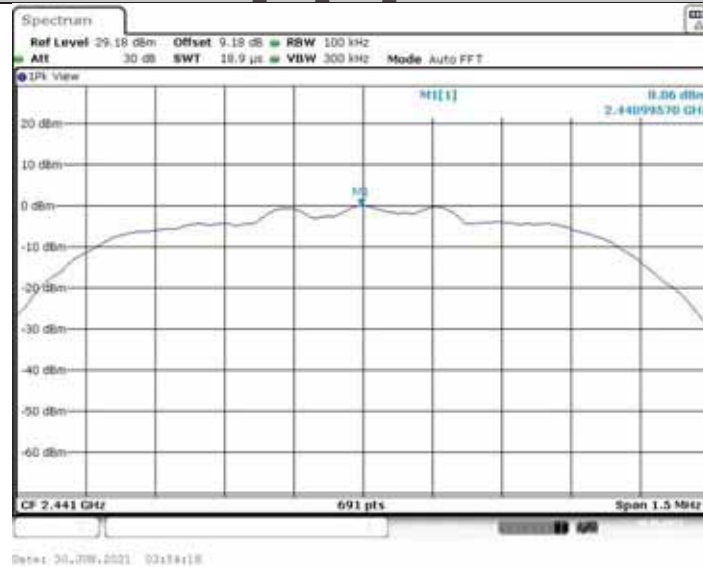


CVC Testing Technology Co., Ltd.

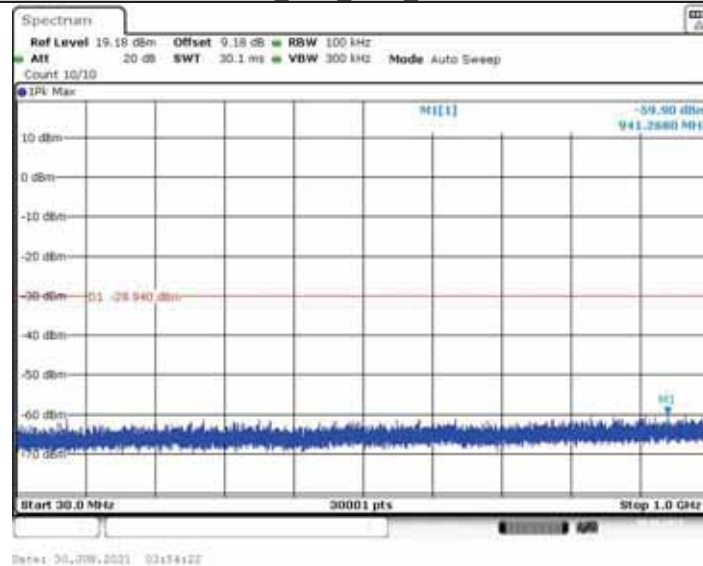
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2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000

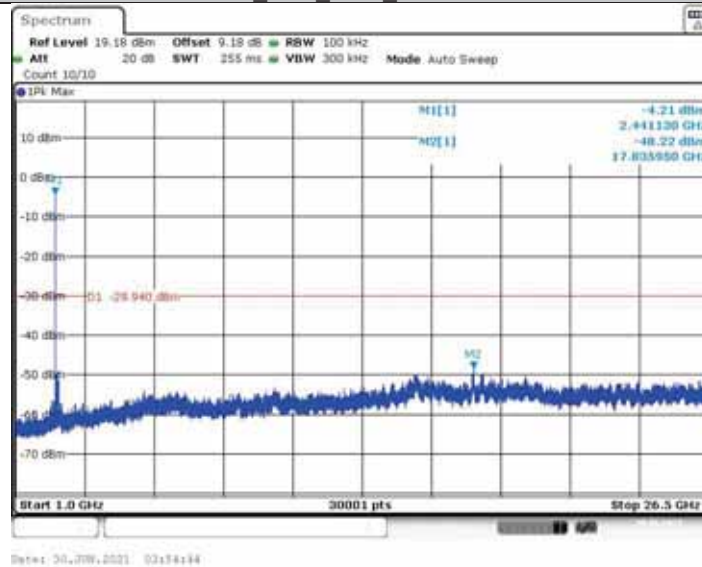


CVC Testing Technology Co., Ltd.

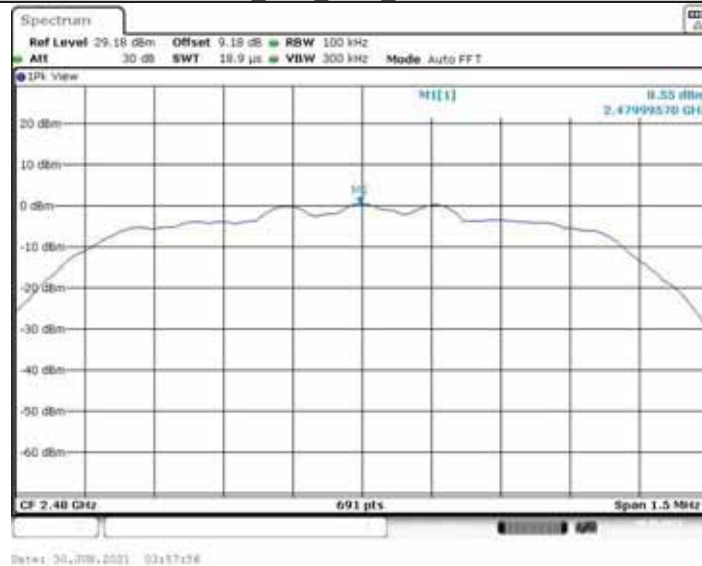
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2DH5_Ant1_2441_1000~26500



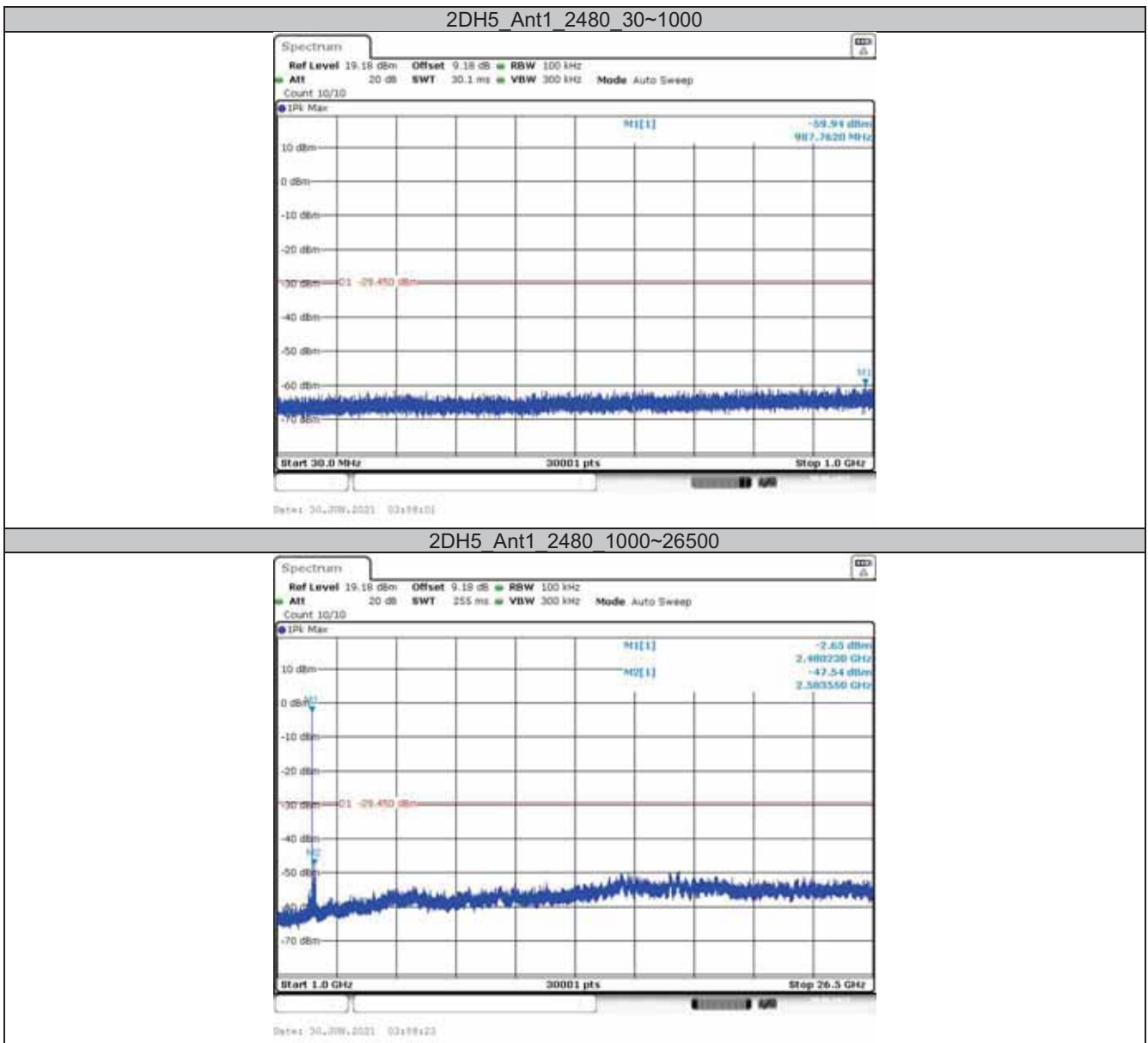
2DH5_Ant1_2480_0~Reference



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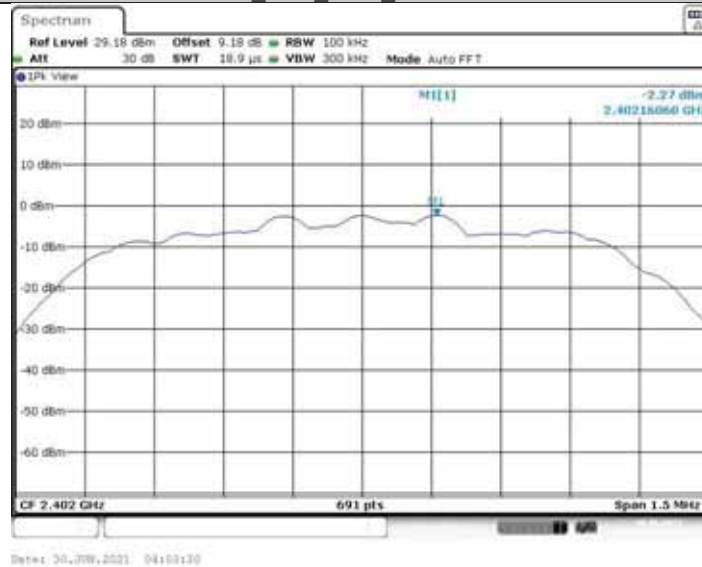


CVC Testing Technology Co., Ltd.

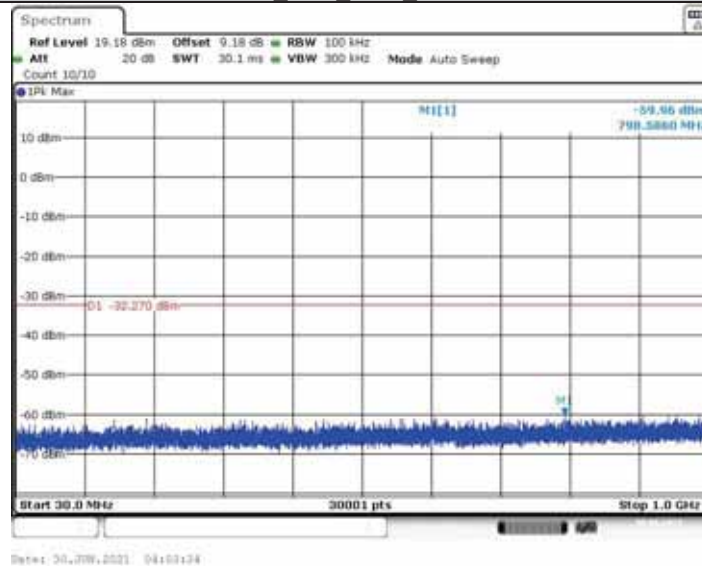
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3DH5_Ant1_2402_0~Reference



3DH5_Ant1_2402_30~1000

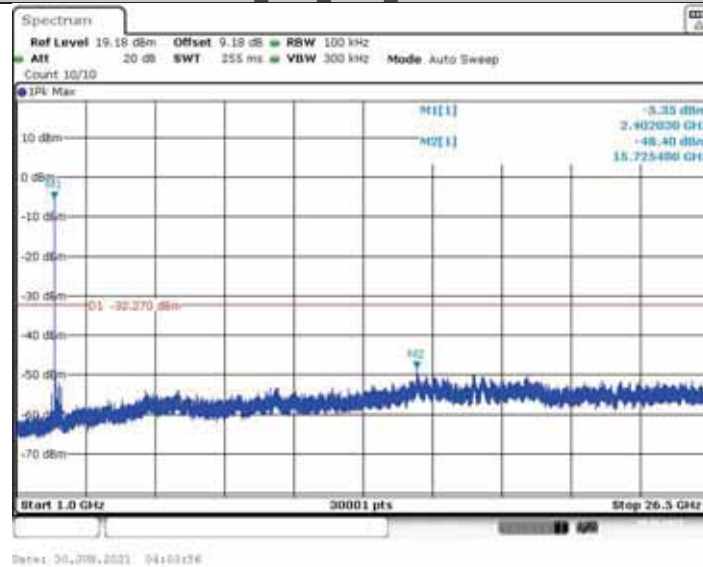


CVC Testing Technology Co., Ltd.

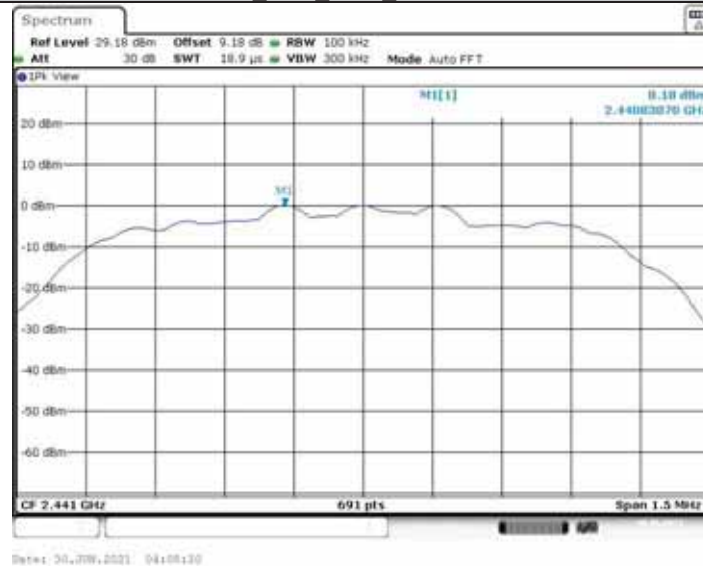
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3DH5_Ant1_2402_1000~26500



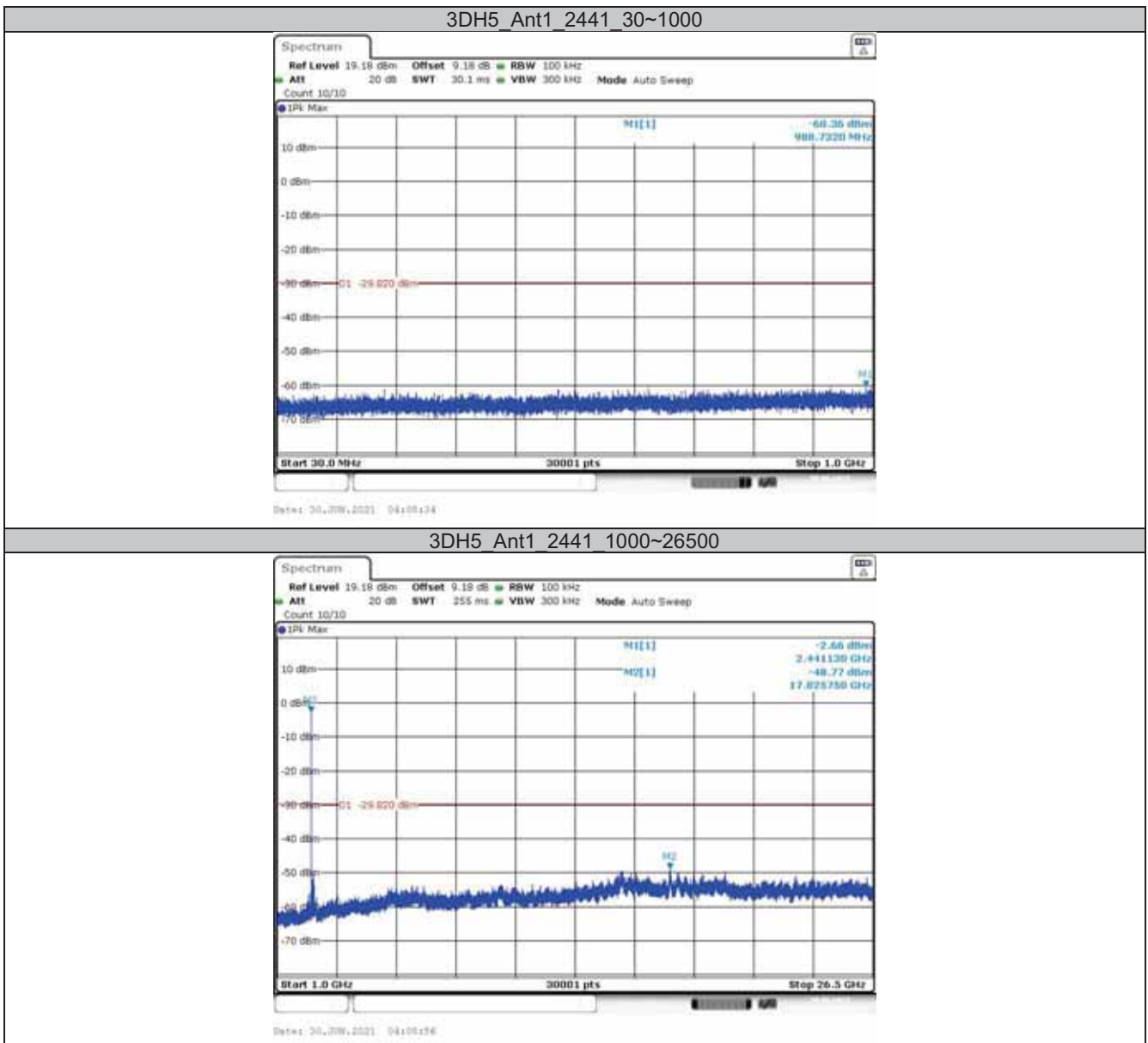
3DH5_Ant1_2441_0~Reference



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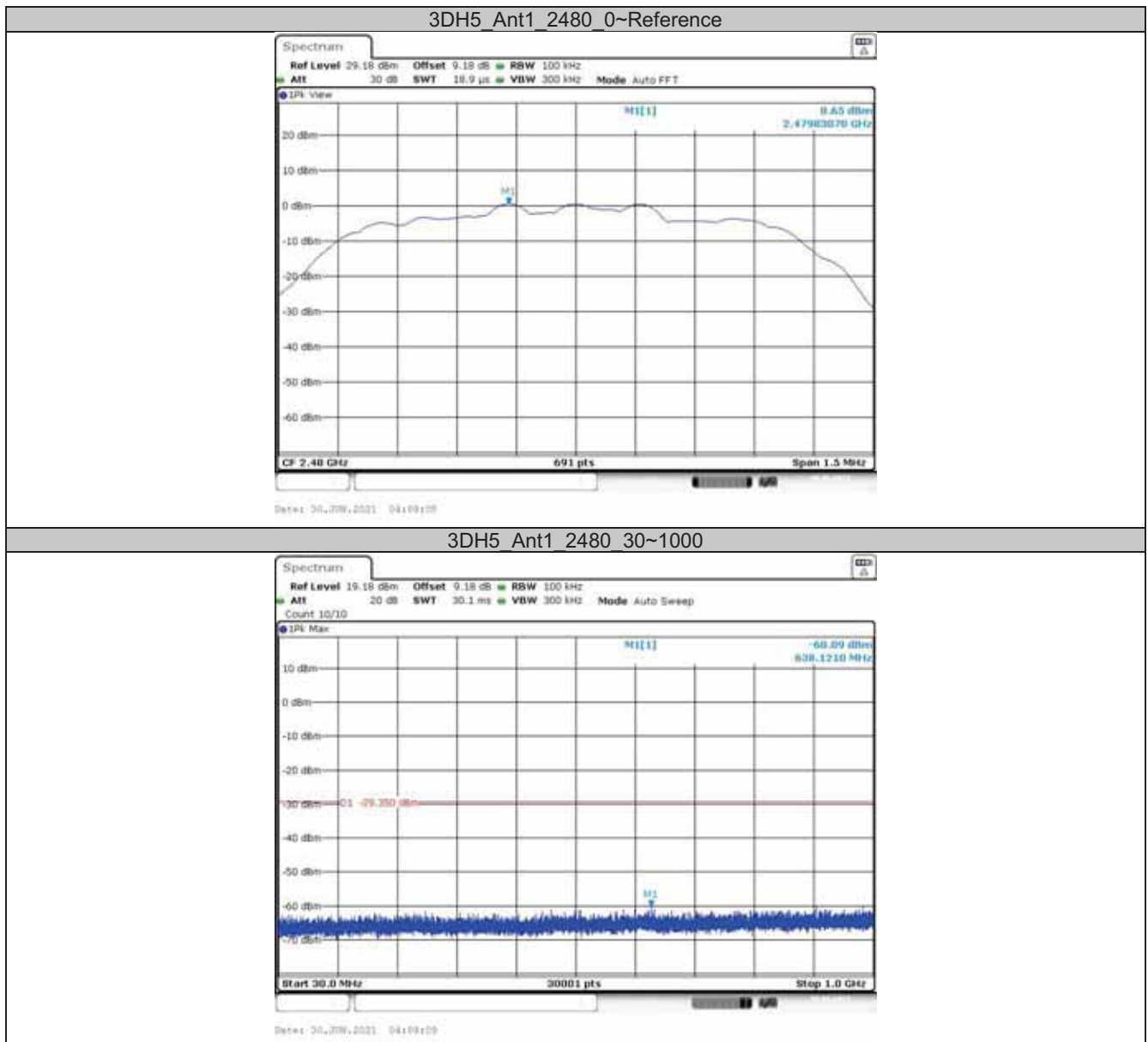
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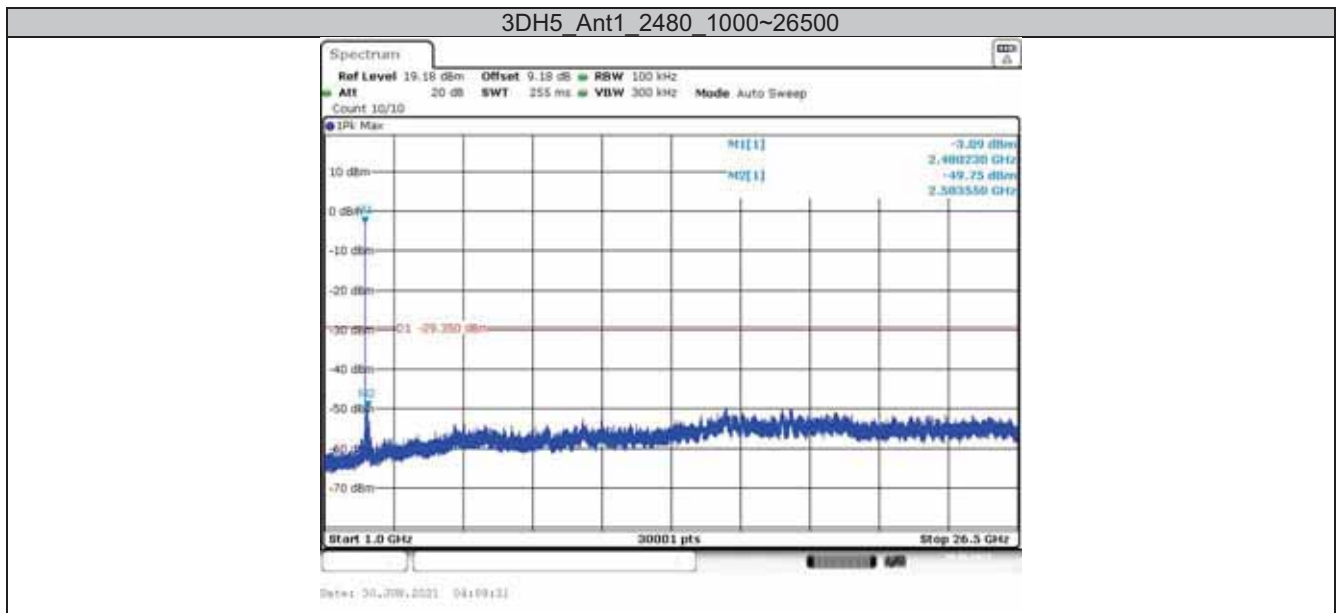
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6. Appendix E

Test Equipment	Type/Mode	SERIAL NO.	Equipment No.	Manufacturer	Cal. Due
Spectrum Analyzer	FSV40	101580	DZ-000238-3	R&S	2022/06/30
Comprehensive Test Instrument	CMW270	100304	DZ-000240-1	R&S	2021/12/08
Analog Signal Generator	SMB100A	181858	DZ-000238-2	R&S	2022/06/30
Vector Signal Generator	SGT100A	111661	DZ-000238-1	R&S	2022/06/30
RF Radio Frequency Switch	JS0806-2	19H9080187	DZ-000241	Tonscend	2022/06/30
Programmable DC Power Supply	E3644A	MY58036222	DZ-000178	KEYSIGHT	2022/04/24
3m Semi-Anechoic Chamber	FACT-4	ST08035	WKNA-0024	ETS	2024/12/12
Spectrum Analyzer	N9010B	MY57470323	DZ-000174	KEYSIGHT	2022/03/05
EMI Test Receiver	N9038A-508	MY532290079	EM-000397	Agilent	2022/03/05
Broadband Antenna	VULB 9163	9163-530	EM-000342	SCHWARZBECK	2022/06/22
Waveguide Horn Antenna	HF906	360306/008	WKNA-0024-8	R&S	2022/03/05
Bandstop Filters	SW-BSF-2400-100-7-A1	/	EM-000495	/	2021/09/04
5G Bandstop Filters	WRCJV12-4900-5100-5900-6100-50EE	1	DZ-000186	WI	2021/12/16
EMI Test Receiver	N9038A-508	MY532290079	EM-000397	Agilent	2022-03-05
EMI Test Receiver	ESR7	102235	VG DY-0956	R&S	2022-03-05
Loop Antenna	HLA 6121	540046	EM-000546	TESEQ	2022-06-05
Semi-Anechoic Chamber(5m)	SAC-5	SAC-5-2.0	EM-000557	COMTEST	2024-11-02

The End