Test Report No.:
FCC2021-0039-RF

RF Test Report

EUT	:	**True Wireless earphones**
MODEL	:	**Air05**
BRAND NAME	:	shinelark KOORUI
APPLICANT	:	**Shenzhen Koorui technology Co., Ltd.**
Classification Of Test	:	**N/A**

CVC Testing Technology Co., Ltd.

Client	**Name : Shenzhen Koorui technology Co., Ltd.** **Address : 3rd Floor, Building A1, No. 663, Bulong Road,Dafapu Community, Bantian Street,Longgang District, ShenZhen Guangdong P.R. China**
Manufacturer	**Name : Shenzhen Koorui technology Co., Ltd.** **Address : 3rd Floor, Building A1, No. 663, Bulong Road,Dafapu Community, Bantian Street,Longgang District, ShenZhen Guangdong P.R. China**
Factor	**Name : Shenzhen fuchang technology Co., Ltd.** **Address : No.602,6th Floor,Building A,Yongshenhui Industrial Park,NO.3 Chuangye Road,Shilongzi Industrial Zone,Shiyan Street, Shenzhen City**
Equipment Under Test	**Name : True Wireless earphones** **Model/Type: Air05** **Trade mark :** shinelark KOORUI **Serial NO.:N/A** **Sampe NO.:3-1**

Date of Receipt.	**2021.12.01**	Date of Testing	**2021.12.01～2021.12.16**

Test Specification	**Test Result**
FCC Part 15, Subpart C, Section 15.247	PASS

Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied. **Issue Date: 2021.12.27**

Tested by:	Reviewed by:	Approved by:
Xu ZhenFei	Liu YongHai	Chen HuaWen
Name Signature	Name Signature	Name Signature

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.

TABLE OF CONTENTS

1 SUMMARY OF TEST RESULTS 6

1.1 LIST OF TEST AND MEASUREMENT INSTRUMENTS 7
1.2 MEASUREMENT UNCERTAINTY 7
1.3 TEST LOCATION 7

2 GENERAL INFORMATION 8

2.1 GENERAL PRODUCT INFORMATION 8
2.2 OTHER INFORMATION 9
2.3 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL 10
2.4 GENERAL DESCRIPTION OF APPLIED STANDARDS 12
2.5 DESCRIPTION OF SUPPORT UNITS 12

3 TEST TYPES AND RESULTS 13

3.1 RADIATED EMISSIONS 13
3.1.1 Limits 13
3.1.2 Measurement procedure 13
3.1.3 Test setup 15
3.1.4 Test results 17
3.2 NUMBER OF HOPPING FREQUENCY USED 37
3.2.1 Limits 37
3.2.2 Measurement procedure 37
3.2.3 Test setup 37
3.2.4 Test result 37
3.3 DWELL TIME ON EACH CHANNEL 38
3.3.1 Limits 38
3.3.2 Measurement procedure 38
3.3.3 Test setup 38
3.3.4 Test result 38
3.4 20DB EMISSION BANDWIDTH 39
3.4.1 Limits 39
3.4.2 Measurement procedure 39
3.4.3 Test setup 39
3.4.4 Test result 39
3.5 HOPPING CHANNEL SEPARATION 40
3.5.1 Limits 40
3.5.2 Measurement procedure 40
3.5.3 Test setup 40
3.5.4 Test result 40
3.6 CONDUCTED OUTPUT POWER 41
3.6.1 Limits 41
3.6.2 Measurement procedure 41
3.6.3 Test setup 41
3.6.4 Test result 41
3.7 OUT OF BAND EMISSION MEASUREMENT 42
3.7.1 Limits 42
3.7.2 Measurement procedure 42
3.7.3 Test setup 42
3.7.4 Test result 42

4 PHOTOGRAPHS OF TEST SETUP 43

5 PHOTOGRAPHS OF THE EUT 44

6 APPENDIX A.....45

7 APPENDIX B.....46

7.1 20DB EMISSION BANDWIDTH..... 46
7.1.1 Test Result-Left..... 46
7.1.1 Test Result-Right..... 46
7.1.2 Test Graphs-Left.....47
7.1.1 Test Graphs-Right..... 50
7.2 CONDUCTED OUTPUT POWER..... 53
7.2.1 Test Result-Left Peak.....53
7.2.1 Test Result-Right Peak..... 53
7.2.2 Test Result-Left Average..... 54
7.2.3 Test Result-Right Average..... 54
7.3 HOPPING CHANNEL SEPARATION.....55
7.3.1 Test Result-Left..... 55
7.3.1 Test Result-Right..... 55
7.3.2 Test Graphs-Left.....56
7.3.1 Test Graphs-Right..... 57
7.4 DELL TIME OF EACH CHANNEL.....58
7.4.1 Test Result-Left..... 58
7.4.2 Test Result-Right..... 58
7.4.3 Test Graphs-Left.....59
7.4.4 Test Graphs-Right..... 68
7.5 NUMBER OF HOPPING CHANNELS.....77
7.5.1 Test Result-Left..... 77
7.5.1 Test Result-Right..... 77
7.5.2 Test Graphs-Left.....78
7.5.1 Test Graphs-Right..... 79
7.6 BAND EDGE MEASUREMENTS.....80
7.6.1 Test Result-Left..... 80
7.6.1 Test Result-Right..... 80
7.6.2 Test Graphs-Left.....81
7.6.1 Test Graphs-Right..... 85
7.7 OUT OF BAND EMISSION MEASUREMENT.....89
7.7.1 Test Result-Left..... 89
7.7.1 Test Result-Right..... 90
7.7.2 Test Graphs-Left.....91
7.7.1 Test Graphs-Right..... 100

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCC2021-0039-RF	Original release	2021.12.27

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
FCC STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**REMARK**
15.207	AC Power Conducted Emission	N/A	Power form battery
15.247(a)(1)	Number of Hopping Frequency Used	PASS	Meet the requirement of limit.
15.247(a)(1)	Hopping Channel Separation	PASS	Meet the requirement of limit.
15.247(a)(1)	Dell Time of Each Channel	PASS	Meet the requirement of limit.
15.247(a)(1)	20dB EMISSION BANDWIDTH	PASS	Meet the requirement of limit.
15.247(b)	Conducted Output Power	PASS	Meet the requirement of limit.
15.247(d), 15.209,15.205	Radiated Emissions	PASS	Meet the requirement of limit.
15.247(d)	Out of band Emission Measurement	PASS	Meet the requirement of limit.
15.203 14.247(b)	Antenna Requirement	PASS	No antenna connector is used.

1.1 LIST OF TEST AND MEASUREMENT INSTRUMENTS

Refer to Appendix A.

1.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

No.	ITEM	FREQUENCY	UNCERTAINTY
1	Conducted Emissions	9kHz~30MHz	±2.66dB
2	Radiated Spurious Emissions	9KHz ~ 30MHz	±0.769dB
		30MHz ~ 1GMHz	±0.877dB
		1GHz ~ 18GHz	±0.777dB
		18GHz ~ 40GHz	±1.315dB

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

1.3 TEST LOCATION

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

Address: No.3,TiantaiyiRoad,KaitaiAvenue,ScienceCity,Guangzhou,China
Post Code：510663 Tel：020-32293888
FAX：020-32293889 E-mail：office@cvc.org.cn
Test Firm Registration Number: 937273
CN Number：26239 Wireless Test Site Registration Number：CN0103

2 GENERAL INFORMATION

2.1 GENERAL PRODUCT INFORMATION

PRODUCT	True Wireless earphones
BRAND	shinelark KOORUI
MODEL	Air05
ADDITIONAL MODEL	N/A
FCC ID	2A23CAIR05
POWER SUPPLY	DC 3.7V From battery or DC 5V from charging case
MODULATION TYPE	GFSK, π/4 DQPSK, 8DPSK
OPERATING FREQUENCY	2402MHz~2480MHz
NUMBER OF CHANNEL	79
PEAK OUTPUT POWER	3.12dBm (Max. Measured)
ANTENNA TYPE	Chip Antenna , 2.67dBi Gain
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	N/A

Remark:

1. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. This product is wireless earphone, divided into left ear and right ear.
4. EUT photo refer to the report (Report NO.: FCC2021-0039-E).
5. The EUT have SISO function, provides 1 completed transmitter and 1 receiver.

2.2 OTHER INFORMATION

Operation frequency each of channel.

Operation Frequency Each of Channel							
For BT (GFSK, π/4 DQPSK, 8 DPSK)							
CHANNEL	**FREQ. (MHz)**	**CHANNEL**	**FREQ. (MHz)**	**CHANNEL**	**FREQ. (MHz)**	**CHANNEL**	**FREQ. (MHz)**
0	**2402**	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	**78**	**2480**
19	2421	**39**	**2441**	59	2461		

1. By means of test software which provided by manufacture, the power levels during the tests were set according to the following codes:

GFSK		π/4-DQPSK		8DPSK	
CHANNEL	**POWER SETTING**	**CHANNEL**	**POWER SETTING**	**CHANNEL**	**POWER SETTING**
0	4	**0**	4	**0**	4
39	4	**39**	4	**39**	4
78	4	**78**	4	**78**	4

2.3 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, xyz axis and antenna ports

The worst case was found when positioned on xaxis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	APPLICABLE TEST ITEMS				DESCRIPTION
	RSE<1G	RSE≥1G	PLC	APCM	
A	√	√	-	√	BT LINK

Where **RSE<1G:** Radiated Emission below 1GHz. **RSE≥1G:** Radiated Emission above 1GHz.
PLC: Power Line Conducted Emission. **APCM:** Antenna Port Conducted Measurement.

RADIATED EMISSION TEST (BELOW 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, XYZ axis, antenna ports (if EUT with antenna diversity architecture) and packet type.
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	PACKET TYPE
A	0	FHSS	GFSK	DH5

RADIATED EMISSION TEST (ABOVE 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, XYZ axis, antenna ports (if EUT with antenna diversity architecture) and packet type.
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	PACKET TYPE
A	0, 39, 78	FHSS	GFSK	DH5
A	0, 39, 78	FHSS	π/4 DQPSK	2DH5
A	0, 39, 78	FHSS	8DPSK	3DH5

ANTENNA PORT CONDUCTED MEASUREMENT:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, antenna ports (if EUT with antenna diversity architecture), and packet types.

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	PACKET TYPE
A	0, 39, 78	FHSS	GFSK	DH5
A	0, 39, 78	FHSS	π/4 DQPSK	2DH5
A	0, 39, 78	FHSS	8DPSK	3DH5

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	TEST VOLTAGE (SYSTEM)	TESTED BY
RSE<1G	25deg. C, 55%RH	DC 3.7V From Full Battery	Li JiaLing
RSE≥1G	25deg. C, 55%RH	DC 3.7V From Full Battery	Li JiaLing
PLC	-	-	-
APCM	25deg. C, 60%RH	DC 3.7V From Full Battery	Li JiaLing

2.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product, according to the specifications of the manufacturers. It must comply with the requirements of the following standards:

FCC PART 15, Subpart C. Section 15.247
KDB 558074 D01 15.247 Meas Guidance v05r02
ANSI C63.10-2020

All test items have been performed and recorded as per the above standards

2.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Support Equipment					
NO	**Description**	**Brand**	**Model No.**	**Serial Number**	**Supplied by**
1	Latop	Lenovo	V14	PFNXB1628023	Lab

Support Cable							
NO	**Description**	**Quantity (Number)**	**Length (m)**	**Detachable (Yes/ No)**	**Shielded (Yes/ No)**	**Cores (Number)**	**Supplied by**
1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

3 TEST TYPES AND RESULTS

3.1 RADIATED EMISSIONS

3.1.1 Limits

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). Other emissions shall be at least 20dB below the highest level of the desired power.

FREQUENCIES (MHz)	FIELD STRENGTH (Microvolts/Meter)	MEASUREMENT DISTANCE (Meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE: 1. The lower limit shall apply at the transition frequencies.
NOTE: 2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
NOTE: 3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

3.1.2 Measurement procedure

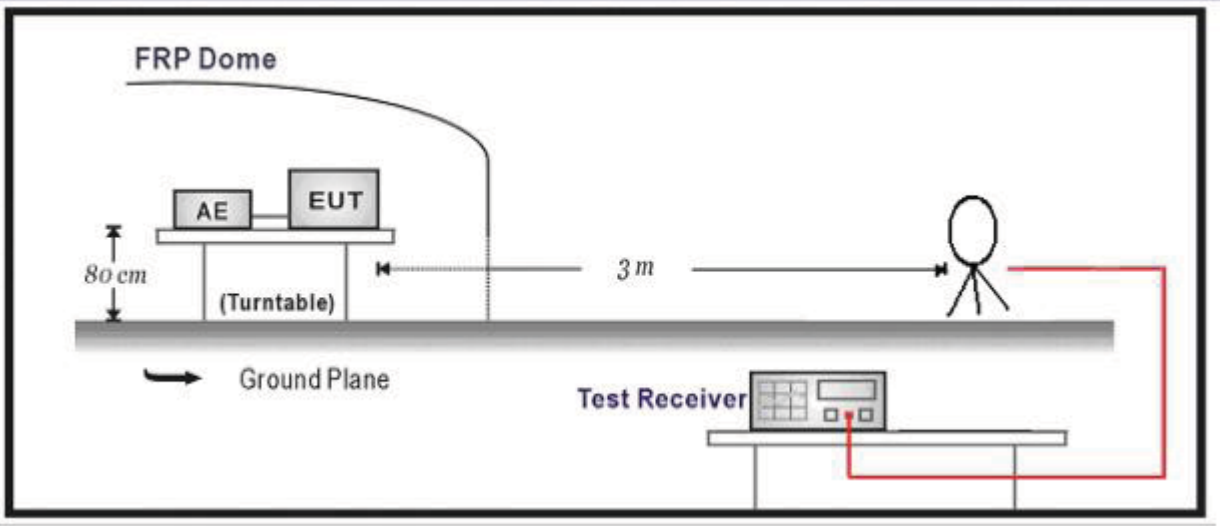
a. The EUT was placed on the top of a rotating table 1.5 meters(above 1GHz) and 0.8 meters(below 1GHz) above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. For below 1GHz was used bilog antenna, and above 1GHz was used horn antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. For below 30MHz, a loop antenna with its vertical plane is place 3m from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. And the centre of the loop shall be 1m above the ground.
g. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, For battery operated equipment, the equipment tests shall be perform using fresh batteries. The turntable was rotated to maximize the emission level.

NOTE:

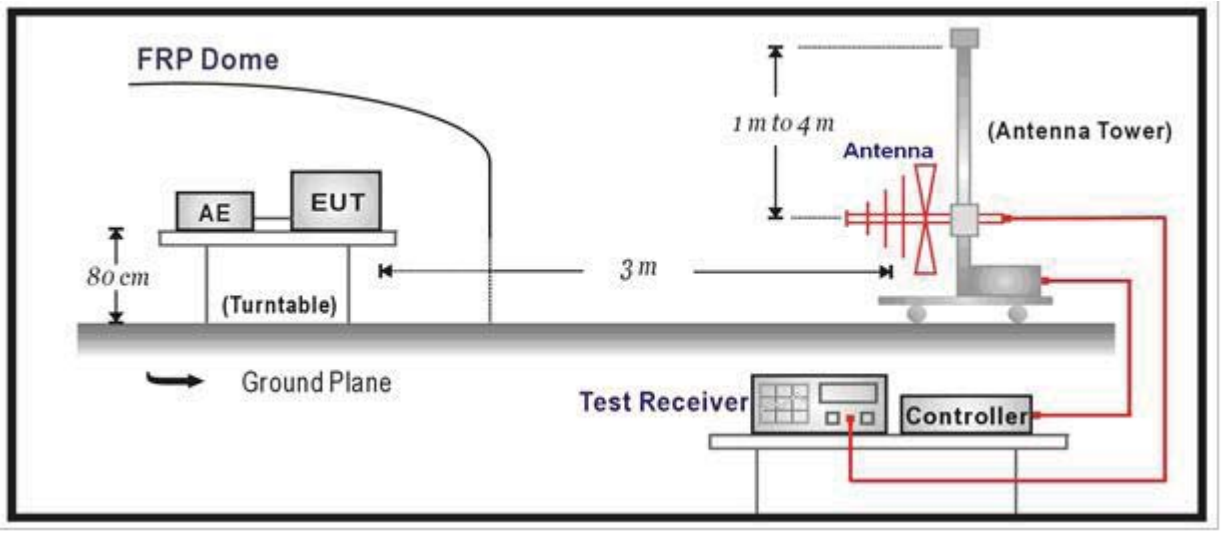
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ⩾ 1/T (Duty cycle < 98%) or 10Hz(Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.
5. The testing of the EUT was performed on all 3 orthogonal axes; the worst-case test configuration was reported on the file test setup photo.

3.1.3 Test setup

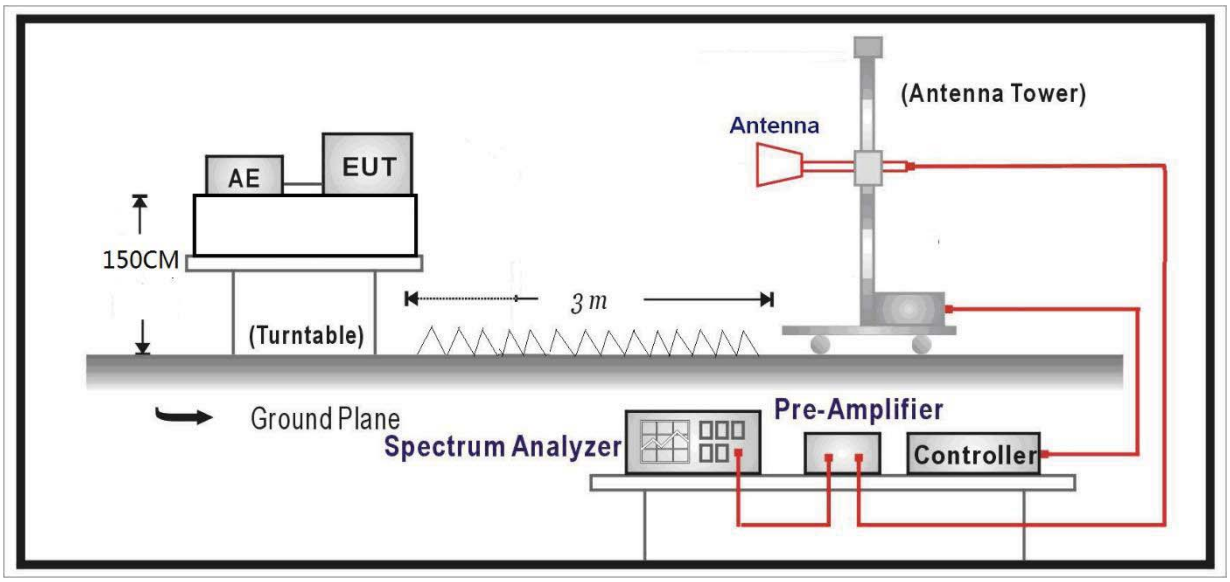
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:

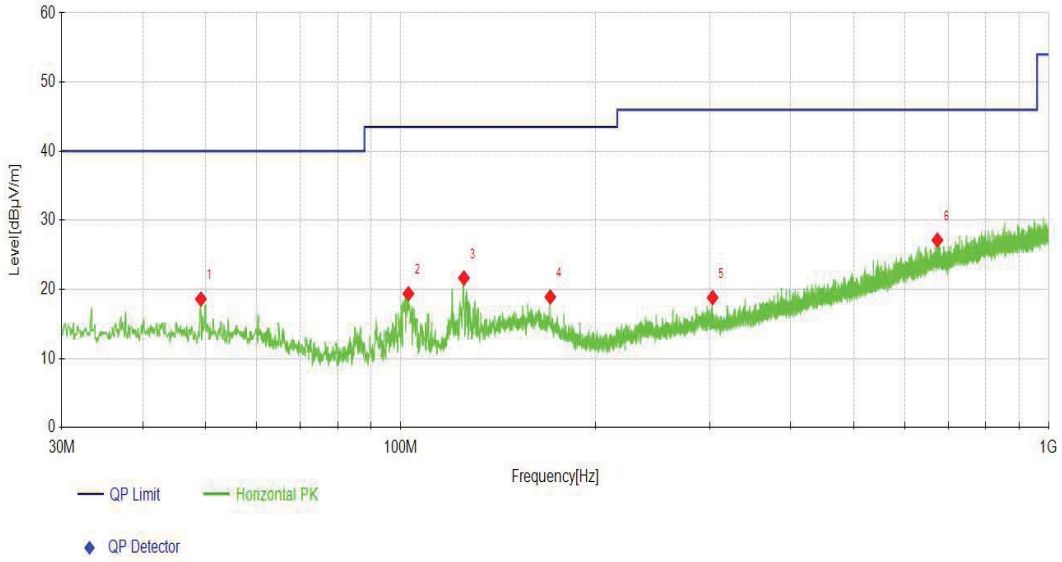


3.1.4 Test results

BELOW 1GHz WORST-CASE DATA:

Worst Test Mode	DR0	Channel	CH 0
Frequency Range	9KHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Horizontal

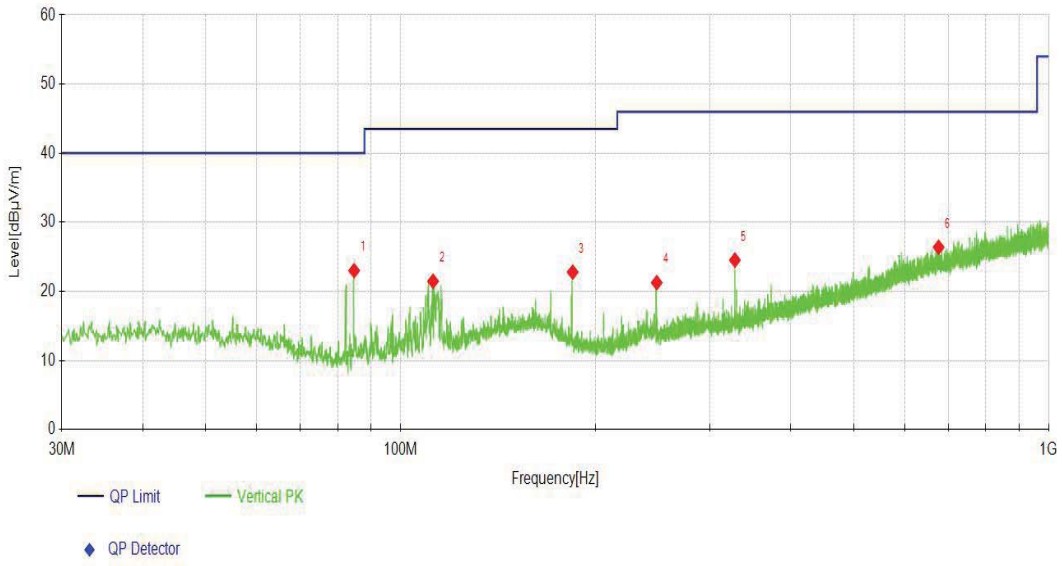


NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]
1	49.2079	4.30	18.59	14.29	40.00	21.41	200	0
2	102.8543	7.92	19.37	11.45	43.50	24.13	200	115
3	125.2635	8.41	21.63	13.22	43.50	21.87	200	289
4	170.2760	3.89	18.89	15.00	43.50	24.61	200	31
5	303.0823	3.91	18.80	14.89	46.00	27.20	200	49
6	673.6594	4.61	27.12	22.51	46.00	18.88	100	101

Remark: 1. 9KHz~30MHz have been test and test data more than 20dB margin.
2. The emission levels of other frequencies were greater than 20dB margin.
3. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
4. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
5. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

Worst Test Mode	DR0	Channel	CH 0
Frequency Range	9KHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Vertical



NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]
1	84.8105	12.59	23.00	10.41	40.00	17.00	200	233
2	112.2642	9.44	21.46	12.02	43.50	22.04	200	2
3	184.3424	9.93	22.78	12.85	43.50	20.72	100	103
4	248.5629	8.14	21.26	13.12	46.00	24.74	100	277
5	328.1108	9.23	24.52	15.29	46.00	21.48	200	106
6	676.5697	3.86	26.38	22.52	46.00	19.62	100	175

Remark: 1. 9KHz~30MHz have been test and test data more than 20dB margin.
2. The emission levels of other frequencies were greater than 20dB margin.
3. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
4. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
5. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

ABOVE 1GHz DATA

DH5-CH 0- Left

Channel	CH 0	Frequency	2402MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2362	54.92	0.00	54.92	74.00	19.08	198	245	PK
2	2362	50.82	0.00	50.82	54.00	3.18	198	238	AV
3	2402	90.30	-0.03	90.27			198	318	AV
4	2402	90.67	-0.03	90.64			198	318	PK
5	4804	45.11	9.79	54.90	74.00	19.10	218	191	PK
6	4804	35.51	10.10	45.61	54.00	8.39	218	184	AV
7	7206	30.43	12.45	42.88	74.00	31.12	218	258	PK
8	7206	23.92	12.82	36.74	54.00	17.26	218	81	AV
9	9608	31.43	13.32	44.75	74.00	29.25	218	320	PK
10	9608	26.77	13.32	40.09	54.00	13.91	218	312	AV

Vertical

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2362	53.90	0.02	53.92	74.00	20.08	222	334	PK
2	2362	49.04	0.01	49.05	54.00	4.95	222	218	AV
3	2402	89.77	-0.03	89.74			222	35	PK
4	2402	89.41	-0.03	89.38			222	35	AV
5	4804	44.99	9.54	54.53	74.00	19.47	171	161	PK
6	4804	35.59	10.23	45.82	54.00	8.18	171	27	AV
7	7206	31.12	12.38	43.50	74.00	30.50	171	170	PK
8	7206	23.67	12.82	36.49	54.00	17.51	171	253	AV
9	9608	23.65	13.17	36.82	54.00	17.18	171	6	AV
10	9608	31.06	45.92	14.86	54.00	8.08	171	108	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBµV/m] - Level [dBµV/m]

DH5-CH 39-Left

Channel	CH 0	Frequency	2441MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4882	44.94	9.92	54.86	74.00	19.14	218	46	PK
2	4882	35.53	10.19	45.72	54.00	8.28	218	134	AV
3	7323	30.34	12.25	42.59	74.00	31.41	218	1	PK
4	7323	25.64	10.98	36.62	54.00	17.38	218	240	AV
5	9764	29.12	13.13	42.25	74.00	31.75	218	301	PK
6	9764	22.07	13.24	35.31	54.00	18.69	218	314	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4882	45.73	10.49	56.22	74.00	17.78	143	79	PK
2	4882	35.23	11.00	46.23	54.00	7.77	143	154	AV
3	7323	29.94	12.48	42.42	74.00	31.58	143	341	PK
4	7323	24.40	10.98	35.38	54.00	18.62	143	0	AV
5	9764	21.53	13.23	34.76	54.00	19.24	143	261	AV
6	9764	28.16	13.16	41.32	74.00	32.68	143	341	PK

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

DH5-CH 78- Left

Channel	CH 78	Frequency	2480MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2480	89.88	0.32	90.20			267	336	PK
2	2480	89.49	0.32	89.81			267	336	AV
3	2483.5	41.61	0.46	42.07	54.00	11.93	267	274	AV
4	2483.5	48.32	0.46	48.78	74.00	25.22	267	233	PK
5	4960	44.40	10.62	55.02	74.00	18.98	173	230	PK
6	4960	35.20	10.65	45.85	54.00	8.15	173	201	AV
7	7440	26.94	9.73	36.67	54.00	17.33	173	248	AV
8	7440	30.96	10.59	41.55	74.00	32.45	173	76	PK
9	9920	22.99	13.81	36.80	54.00	17.20	173	316	AV
10	9920	29.42	13.83	43.25	74.00	30.75	173	316	PK

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2480	86.05	0.32	86.37			217	24	AV
2	2480	86.48	0.32	86.80			217	17	PK
3	2483.5	49.29	0.46	49.75	74.00	24.25	217	266	PK
4	2483.5	41.14	0.46	41.60	54.00	12.40	217	1	AV
5	4960	42.05	10.69	52.74	74.00	21.26	125	139	PK
6	4960	34.39	10.69	45.08	54.00	8.92	125	21	AV
7	7440	23.48	9.75	33.23	54.00	20.77	125	256	AV
8	7440	29.74	9.75	39.49	74.00	34.51	125	71	PK
9	9920	28.78	13.83	42.61	74.00	31.39	125	289	PK
10	9920	21.38	13.83	35.21	54.00	18.79	125	289	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

2DH5-CH 0- Left

Channel	CH 0	Frequency	2402MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2362	51.39	-0.26	51.13	74.00	22.87	209	127	PK
2	2362	41.64	-0.25	41.39	54.00	12.61	209	244	AV
3	2402	85.99	-0.03	85.96			209	327	AV
4	2402	88.51	-0.03	88.48			209	314	PK
5	4804	42.91	9.29	52.20	74.00	21.80	251	14	PK
6	4804	34.82	9.29	44.11	54.00	9.89	251	273	AV
7	7206	22.36	12.81	35.17	54.00	18.83	251	334	AV
8	7206	28.22	12.81	41.03	74.00	32.97	251	1	PK
9	9608	26.70	13.32	40.02	74.00	33.98	251	115	PK
10	9608	20.71	13.32	34.03	54.00	19.97	251	224	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2362	51.21	-0.07	51.14	74.00	22.86	262	115	PK
2	2362	42.26	-0.28	41.98	54.00	12.02	262	286	AV
3	2402	86.83	-0.03	86.80			262	32	PK
4	2402	84.18	-0.03	84.15			262	32	AV
5	4804	42.79	9.29	52.08	54.00	1.92	140	198	PK
6	4804	34.64	9.29	43.93	54.00	10.07	140	219	AV
7	7206	22.08	12.81	34.89	54.00	19.11	140	89	AV
8	7206	27.80	12.81	40.61	74.00	33.39	140	348	PK
9	9608	29.59	13.32	42.91	54.00	11.09	140	320	PK
10	9608	20.92	13.32	34.24	54.00	19.76	140	157	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

2DH5-CH 39-Left

Channel	CH 0	Frequency	2441MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4882	43.24	9.84	53.08	74.00	20.92	127	346	PK
2	4882	34.64	9.84	44.48	54.00	9.52	127	346	AV
3	7323	26.94	10.96	37.90	54.00	16.10	127	122	AV
4	7323	32.11	10.96	43.07	74.00	30.93	127	359	PK
5	9764	30.14	13.23	43.37	74.00	30.63	127	341	PK
6	9764	24.47	13.23	37.70	54.00	16.30	127	198	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4882	43.41	9.84	53.25	74.00	20.75	284	21	PK
2	4882	34.81	9.84	44.65	54.00	9.35	284	186	AV
3	7323	25.53	10.96	36.49	54.00	17.51	284	33	AV
4	7323	31.93	10.96	42.89	74.00	31.11	284	107	PK
5	9764	30.37	13.23	43.60	74.00	30.40	284	107	PK
6	9764	24.58	13.23	37.81	54.00	16.19	284	107	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

2DH5-CH 78- Left

Channel	CH 78	Frequency	2480MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2480	87.02	0.32	87.34			155	338	PK
2	2480	84.38	0.32	84.70			155	338	AV
3	2483.5	40.90	0.46	41.36	54.00	12.64	155	285	AV
4	2483.5	52.86	0.48	53.34	74.00	20.66	155	238	PK
5	4960	35.71	9.98	45.69	54.00	8.31	186	210	AV
6	4960	45.23	10.10	55.33	74.00	18.67	186	189	PK
7	7440	30.60	12.81	43.41	74.00	30.59	186	1	PK
8	7440	22.99	12.80	35.79	54.00	18.21	186	139	AV
9	9920	22.97	13.37	36.34	54.00	17.66	186	223	AV
10	9920	28.89	13.83	42.72	74.00	31.28	186	313	PK

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2480	80.94	0.31	81.25			124	301	AV
2	2480	83.57	0.32	83.89			124	301	PK
3	2483.5	51.19	0.46	51.65	74.00	22.35	124	308	PK
4	2483.5	41.15	0.46	41.61	54.00	12.39	124	308	AV
5	4960	44.24	10.39	54.63	74.00	19.37	189	274	PK
6	4960	35.63	10.94	46.57	54.00	7.43	189	237	AV
7	7440	23.04	12.81	35.85	54.00	18.15	189	14	AV
8	7440	30.87	12.63	43.50	74.00	30.50	189	48	PK
9	9920	27.98	13.79	41.77	74.00	32.23	189	226	PK
10	9920	21.71	13.91	35.62	54.00	18.38	189	164	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

3DH5-CH 0- Left

Channel	CH 0	Frequency	2402MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2390	48.72	-0.15	48.57	74.00	25.43	152	170	PK
2	2390	40.57	-0.15	40.42	54.00	13.58	152	163	AV
3	2402	88.43	-0.03	88.40			152	190	AV
4	2402	91.46	-0.03	91.43			152	198	PK
5	4804	43.44	9.29	52.73	74.00	21.27	201	359	PK
6	4804	34.53	9.29	43.82	54.00	10.18	201	176	AV
7	7206	21.78	12.81	34.59	54.00	19.41	201	107	AV
8	7206	29.06	12.81	41.87	74.00	32.13	201	107	PK
9	9608	26.43	13.32	39.75	74.00	34.25	201	100	PK
10	9608	20.63	13.32	33.95	54.00	20.05	201	60	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2362	51.36	0.02	51.38	74.00	22.62	248	224	PK
2	2362	42.45	0.00	42.45	54.00	11.55	248	224	AV
3	2402	92.97	-0.03	92.94			248	210	AV
4	2402	96.09	-0.03	96.06			248	210	PK
5	4804	34.52	9.29	43.81	54.00	10.19	249	8	AV
6	4804	41.97	9.29	51.26	74.00	22.74	249	53	PK
7	7206	21.87	12.81	34.68	54.00	19.32	249	30	AV
8	7206	28.47	12.81	41.28	74.00	32.72	249	97	PK
9	9608	19.61	13.32	32.93	54.00	21.07	249	1	AV
10	9608	26.32	13.32	39.64	74.00	34.36	249	131	PK

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

3DH5-CH 39-Left

Channel	CH 0	Frequency	2441MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4882	44.36	9.95	54.31	74.00	19.69	269	190	PK
2	4882	35.51	10.04	45.55	54.00	8.45	269	26	AV
3	7323	23.85	12.43	36.28	54.00	17.72	269	46	AV
4	7323	30.71	12.74	43.45	74.00	30.55	269	244	PK
5	9764	29.34	13.13	42.47	74.00	31.53	269	177	PK
6	9764	21.60	13.13	34.73	54.00	19.27	269	177	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4882	43.49	9.88	53.37	74.00	20.63	169	101	PK
2	4882	36.00	9.88	45.88	54.00	8.12	169	101	AV
3	7323	23.11	10.92	34.03	54.00	19.97	169	7	AV
4	7323	28.95	10.92	39.87	74.00	34.13	169	266	PK
5	9764	27.21	13.21	40.42	74.00	33.58	169	40	PK
6	9764	20.11	13.21	33.32	54.00	20.68	169	33	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

3DH5-CH 78- Left

Channel	CH 78	Frequency	2480MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2480	92.39	0.32	92.71			130	216	PK
2	2480	89.40	0.32	89.72			130	216	AV
3	2483.5	49.34	0.46	49.80	74.00	24.20	130	326	PK
4	2483.5	41.37	0.46	41.83	54.00	12.17	130	161	AV
5	4960	42.86	10.69	53.55	74.00	20.45	115	271	PK
6	4960	34.22	10.69	44.91	54.00	9.09	115	355	AV
7	7440	23.04	9.75	32.79	54.00	21.21	115	33	AV
8	7440	30.02	9.75	39.77	74.00	34.23	115	26	PK
9	9920	27.27	13.83	41.10	74.00	32.90	115	237	PK
10	9920	20.91	13.83	34.74	54.00	19.26	115	354	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2480	90.18	0.32	90.50			208	212	PK
2	2480	87.20	0.31	87.51			208	212	AV
3	2483.5	48.85	0.46	49.31	74.00	24.69	208	34	PK
4	2483.5	41.36	0.46	41.82	54.00	12.18	208	1	AV
5	4960	42.30	10.69	52.99	74.00	21.01	218	149	PK
6	4960	34.01	10.69	44.70	54.00	9.30	218	269	AV
7	7440	22.87	9.75	32.62	54.00	21.38	218	45	AV
8	7440	30.69	9.75	40.44	74.00	33.56	218	224	PK
9	9920	28.27	13.83	42.10	74.00	31.90	218	1	PK
10	9920	21.25	13.83	35.08	54.00	18.92	218	350	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

DH5-CH 0- Right

Channel	CH 0	Frequency	2402MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2362	46.28	0.01	46.29	54.00	7.71	271	288	AV
2	2362	52.28	0.01	52.29	74.00	21.71	271	281	PK
3	2402	91.07	-0.03	91.04			271	288	AV
4	2402	91.40	-0.03	91.37			271	288	PK
5	4804	43.08	9.29	52.37	74.00	21.63	175	99	PK
6	4804	34.68	9.29	43.97	54.00	10.03	175	146	AV
7	7206	21.85	12.81	34.66	54.00	19.34	175	214	AV
8	7206	29.21	12.81	42.02	74.00	31.98	175	335	PK
9	9608	26.20	13.32	39.52	74.00	34.48	175	328	PK
10	9608	20.12	13.32	33.44	54.00	20.56	175	181	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2362	46.07	0.00	46.07	54.00	7.93	210	32	AV
2	2362	52.44	0.00	52.44	74.00	21.56	210	26	PK
3	2402	89.35	-0.03	89.32			210	192	PK
4	2402	88.99	-0.03	88.96			210	192	AV
5	4804	42.73	9.29	52.02	74.00	21.98	113	82	PK
6	4804	34.70	9.29	43.99	54.00	10.01	113	136	AV
7	7206	22.05	12.81	34.86	54.00	19.14	113	105	AV
8	7206	29.33	12.81	42.14	74.00	31.86	113	19	PK
9	9608	26.79	13.32	40.11	74.00	33.89	113	198	PK
10	9608	20.25	13.32	33.57	54.00	20.43	113	66	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

DH5-CH 39-Right

Channel	CH 0	Frequency	2441MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4882	34.74	9.84	44.58	54.00	9.42	277	304	AV
2	4882	44.57	9.84	54.41	74.00	19.59	277	304	PK
3	7323	29.74	10.96	40.70	74.00	33.30	277	89	PK
4	7323	23.09	10.96	34.05	54.00	19.95	277	359	AV
5	9764	22.17	13.23	35.40	54.00	18.60	277	335	AV
6	9764	28.48	13.23	41.71	74.00	32.29	277	82	PK

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4882	43.35	9.84	53.19	74.00	20.81	247	1	PK
2	4882	34.55	9.84	44.39	54.00	9.61	247	230	AV
3	7323	22.97	10.96	33.93	54.00	20.07	247	277	AV
4	7323	29.48	10.96	40.44	74.00	33.56	247	38	PK
5	9764	27.09	13.23	40.32	74.00	33.68	247	197	PK
6	9764	21.92	13.23	35.15	54.00	18.85	247	277	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

DH5-CH 78- Right

Channel	CH 78	Frequency	2480MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2480	88.25	0.32	88.57			236	341	PK
2	2480	87.92	0.32	88.24			236	341	AV
3	2483.5	41.18	0.46	41.64	54.00	12.36	236	5	AV
4	2483.5	48.89	0.46	49.35	74.00	24.65	236	161	PK
5	4960	42.22	10.69	52.91	74.00	21.09	129	295	PK
6	4960	34.55	10.69	45.24	54.00	8.76	129	335	AV
7	7440	24.42	9.75	34.17	54.00	19.83	129	242	AV
8	7440	30.94	9.75	40.69	74.00	33.31	129	242	PK
9	9920	29.08	13.83	42.91	74.00	31.09	129	322	PK
10	9920	22.40	13.83	36.23	54.00	17.77	129	322	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2480	86.49	0.32	86.81			169	19	PK
2	2480	86.12	0.31	86.43			169	19	AV
3	2483.5	48.91	0.46	49.37	74.00	24.63	169	259	PK
4	2483.5	41.08	0.46	41.54	54.00	12.46	169	205	AV
5	4960	42.55	10.69	53.24	74.00	20.76	141	28	PK
6	4960	34.66	10.69	45.35	54.00	8.65	141	234	AV
7	7440	24.37	9.75	34.12	54.00	19.88	141	52	AV
8	7440	31.05	9.75	40.80	74.00	33.20	141	360	PK
9	9920	27.53	13.83	41.36	74.00	32.64	141	266	PK
10	9920	21.79	13.83	35.62	54.00	18.38	141	59	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

2H5-CH 0- Right

Channel	CH 0	Frequency	2402MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2362	40.25	-0.15	40.10	54.00	13.90	244	201	AV
2	2362	48.06	-0.15	47.91	74.00	26.09	244	354	PK
3	2402	88.84	-0.03	88.81			244	287	PK
4	2402	86.19	-0.03	86.16			244	281	AV
5	4804	42.46	9.29	51.75	74.00	22.25	291	285	PK
6	4804	34.67	9.29	43.96	54.00	10.04	291	218	AV
7	7206	21.95	12.81	34.76	54.00	19.24	291	255	AV
8	7206	27.96	12.81	40.77	74.00	33.23	291	248	PK
9	9608	26.50	13.32	39.82	74.00	34.18	291	288	PK
10	9608	19.59	13.32	32.91	54.00	21.09	291	288	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2362	50.79	0.07	50.86	74.00	23.14	139	184	PK
2	2362	43.38	0.00	43.38	54.00	10.62	139	26	AV
3	2402	86.85	-0.03	86.82			139	191	PK
4	2402	84.14	-0.03	84.11			139	191	AV
5	4804	42.49	9.29	51.78	74.00	22.22	152	4	PK
6	4804	34.57	9.29	43.86	54.00	10.14	152	341	AV
7	7206	21.84	12.81	34.65	54.00	19.35	152	266	AV
8	7206	28.90	12.81	41.71	74.00	32.29	152	273	PK
9	9608	25.49	13.32	38.81	74.00	35.19	152	72	PK
10	9608	20.66	13.32	33.98	54.00	20.02	152	72	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

2H5-CH 39-Right

Channel	CH 0	Frequency	2441MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4882	42.22	9.84	52.06	74.00	21.94	253	279	PK
2	4882	34.80	9.84	44.64	54.00	9.36	253	132	AV
3	7323	22.74	10.96	33.70	54.00	20.30	253	54	AV
4	7323	28.52	10.96	39.48	74.00	34.52	253	241	PK
5	9764	27.54	13.23	40.77	74.00	33.23	253	348	PK
6	9764	20.65	13.23	33.88	54.00	20.12	253	348	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4882	43.20	9.84	53.04	74.00	20.96	231	293	PK
2	4882	34.48	9.84	44.32	54.00	9.68	231	22	AV
3	7323	22.68	10.96	33.64	54.00	20.36	231	277	AV
4	7323	29.90	10.96	40.86	74.00	33.14	231	310	PK
5	9764	27.21	13.23	40.44	74.00	33.56	231	26	PK
6	9764	20.42	13.23	33.65	54.00	20.35	231	310	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

2H5-CH 78- Right

Channel	CH 78	Frequency	2480MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2480	85.44	0.33	85.77			149	341	PK
2	2480	82.54	0.32	82.86			149	341	AV
3	2483.5	49.07	0.46	49.53	74.00	24.47	149	20	PK
4	2483.5	41.21	0.46	41.67	54.00	12.33	149	334	AV
5	4960	42.57	10.69	53.26	74.00	20.74	193	257	PK
6	4960	34.09	10.69	44.78	54.00	9.22	193	204	AV
7	7440	22.56	9.75	32.31	54.00	21.69	193	241	AV
8	7440	29.80	9.75	39.55	74.00	34.45	193	275	PK
9	9920	27.08	13.83	40.91	74.00	33.09	193	359	PK
10	9920	20.69	13.83	34.52	54.00	19.48	193	359	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2480	83.64	0.32	83.96			286	19	PK
2	2480	83.64	0.32	83.96			286	19	PK
3	2483.5	41.47	0.46	41.93	54.00	12.07	286	298	AV
4	2483.5	49.83	0.46	50.29	74.00	23.71	286	292	PK
5	4960	42.34	10.69	53.03	74.00	20.97	270	54	PK
6	4960	34.29	10.69	44.98	54.00	9.02	270	54	AV
7	7440	23.26	9.75	33.01	54.00	20.99	270	265	AV
8	7440	30.08	9.75	39.83	74.00	34.17	270	59	PK
9	9920	27.81	13.83	41.64	74.00	32.36	270	271	PK
10	9920	20.44	13.83	34.27	54.00	19.73	270	59	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

3DH5-CH 0- Right

Channel	CH 0	Frequency	2402MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2362	43.35	0.00	43.35	54.00	10.65	247	275	AV
2	2362	51.62	-0.01	51.61	74.00	22.39	247	268	PK
3	2402	86.22	-0.03	86.19			247	275	AV
4	2402	89.27	-0.03	89.24			247	275	PK
5	4804	43.91	9.29	53.20	74.00	20.80	148	165	PK
6	4804	34.25	9.29	43.54	54.00	10.46	148	206	AV
7	7206	21.92	12.81	34.73	54.00	19.27	148	73	AV
8	7206	28.46	12.81	41.27	74.00	32.73	148	270	PK
9	9608	25.83	13.32	39.15	74.00	34.85	148	40	PK
10	9608	19.96	13.32	33.28	54.00	20.72	148	324	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2362	43.27	0.01	43.28	54.00	10.72	173	32	AV
2	2362	51.25	-0.01	51.24	74.00	22.76	173	1	PK
3	2402	87.50	-0.03	87.47			173	193	PK
4	2402	84.53	-0.03	84.50			173	186	AV
5	4804	34.49	9.29	43.78	54.00	10.22	201	4	AV
6	4804	42.72	9.29	52.01	74.00	21.99	201	40	PK
7	7206	21.61	12.81	34.42	54.00	19.58	201	295	AV
8	7206	28.34	12.81	41.15	74.00	32.85	201	222	PK
9	9608	26.80	13.32	40.12	74.00	33.88	201	308	PK
10	9608	19.60	13.32	32.92	54.00	21.08	201	196	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

3DH5-CH 39-Right

Channel	CH 0	Frequency	2441MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4882	42.48	9.84	52.32	74.00	21.68	284	131	PK
2	4882	34.49	9.84	44.33	54.00	9.67	284	131	AV
3	7323	22.27	10.96	33.23	54.00	20.77	284	129	AV
4	7323	30.54	10.96	41.50	74.00	32.50	284	169	PK
5	9764	27.24	13.23	40.47	74.00	33.53	284	334	PK
6	9764	20.26	13.23	33.49	54.00	20.51	284	348	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4882	43.15	9.84	52.99	74.00	21.01	185	72	PK
2	4882	34.63	9.84	44.47	54.00	9.53	185	72	AV
3	7323	23.57	10.96	34.53	54.00	19.47	185	39	AV
4	7323	30.11	10.96	41.07	74.00	32.93	185	260	PK
5	9764	26.74	13.23	39.97	74.00	34.03	185	286	PK
6	9764	20.86	13.23	34.09	54.00	19.91	185	72	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

3DH5-CH 78- Right

Channel	CH 78	Frequency	2480MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2480	86.31	0.31	86.62			125	334	PK
2	2480	83.13	0.32	83.45			125	334	AV
3	2483.5	53.20	0.46	53.66	74.00	20.34	125	334	PK
4	2483.5	42.31	0.46	42.77	54.00	11.23	125	220	AV
5	4960	43.21	10.69	53.90	74.00	20.10	233	215	PK
6	4960	34.10	10.69	44.79	54.00	9.21	233	321	AV
7	7440	23.97	9.75	33.72	54.00	20.28	233	1	AV
8	7440	30.03	9.75	39.78	74.00	34.22	233	138	PK
9	9920	27.28	13.83	41.11	74.00	32.89	233	112	PK
10	9920	21.01	13.83	34.84	54.00	19.16	233	145	AV

Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	2480	83.85	0.32	84.17			178	29	PK
2	2480	80.86	0.32	81.18			178	12	AV
3	2483.5	51.76	0.46	52.22	74.00	21.78	178	29	PK
4	2483.5	41.83	0.46	42.29	54.00	11.71	178	3	AV
5	4960	43.09	10.69	53.78	74.00	20.22	104	270	PK
6	4960	34.41	10.69	45.10	54.00	8.90	104	111	AV
7	7440	23.15	9.75	32.90	54.00	21.10	104	275	AV
8	7440	29.65	9.75	39.40	74.00	34.60	104	31	PK
9	9920	27.79	13.83	41.62	74.00	32.38	104	255	PK
10	9920	20.56	13.83	34.39	54.00	19.61	104	77	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

3.2 NUMBER OF HOPPING FREQUENCY USED

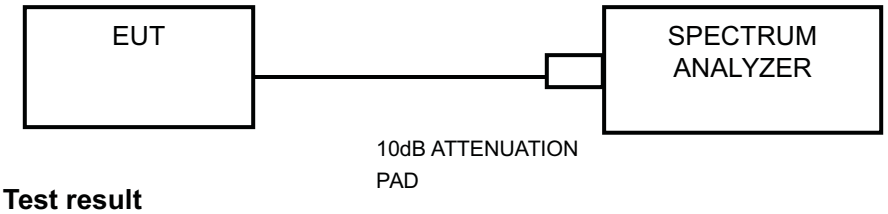
3.2.1 Limits

At least 15 channels frequencies, and should be equally spaced.

3.2.2 Measurement procedure

a. Check the calibration of the measuring instrument (SA) using either an internal calibrator or a known signal from an external generator.
b. Turn on the EUT and connect its antenna terminal to measurement via a low loss cable. Then set it to any one measured frequency within its operating range and make sure the instrument is operated in its linear range.
c. Set the SA on MaxHold Mode, and then keep the EUT in hopping mode. Record all the signals from each channel until each one has been recorded.
d. Set the SA on View mode and then plot the result on SA screen.
e. Repeat above procedures until all frequencies measured were completed.

3.2.3 Test setup



3.2.4 Test result

Refer to Appendix B.

3.3 DWELL TIME ON EACH CHANNEL

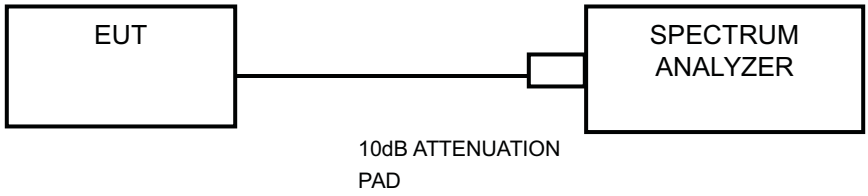
3.3.1 Limits

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.

3.3.2 Measurement procedure

a. Check the calibration of the measuring instrument (SA) using either an internal calibrator or a known signal from an external generator.
b. Turn on the EUT and connect its antenna terminal to measurement via a low loss cable. Then set it to any one measured frequency within its operating range and make sure the instrument is operated in its linear range.
c. Adjust the center frequency of SA on any frequency be measured and set SA to zero span mode. And then, set RBW and VBW of spectrum analyzer to proper value.
d. Measure the time duration of one transmission on the measured frequency. And then plot the result with time difference of this time duration.
e. Repeat above procedures until all different time-slot modes have been completed.

3.3.3 Test setup



3.3.4 Test result

Refer to Appendix B.

3.4 20dB EMISSION BANDWIDTH

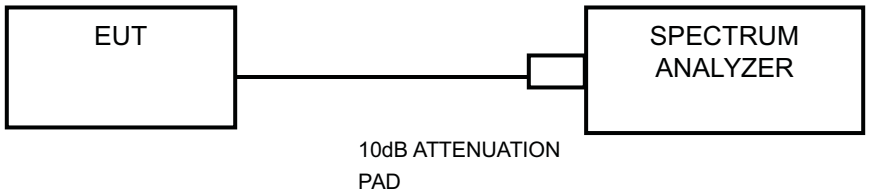
3.4.1 Limits

For frequency hopping system operating in the 2400-2483.5MHz, If the 20dB bandwidth of hopping channel is greater than 25kHz, two-thirds 20dBbandwidth of hopping channel shell be a minimum limit for the hopping channel separation

3.4.2 Measurement procedure

a. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
b. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
c. Measure the frequency difference of two frequencies that were attenuated 20dB from the reference level. Record the frequency difference as the emission bandwidth.
d. Repeat above procedures until all frequencies measured were complete.

3.4.3 Test setup



3.4.4 Test result

Refer to Appendix B.

3.5 HOPPING CHANNEL SEPARATION

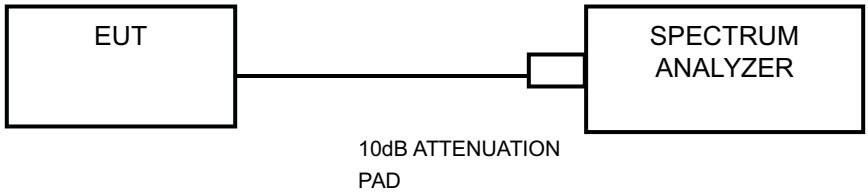
3.5.1 Limits

At least 25kHz or two-third of 20dB hopping channel bandwidth (whichever is greater).

3.5.2 Measurement procedure

a. Span: Wide enough to capture the peaks of two adjacent channels.
b. RBW: Start with the RBW set to approximately 30% of the channel spacing; adjust as necessary to best identify the center of each individual channel.
c. Video (or average) bandwidth (VBW) ⩾ RBW.
d. Sweep: Auto.
e. Detector function: Peak.
f. Trace: Max hold.
g. Allow the trace to stabilize.

3.5.3 Test setup



3.5.4 Test result

Refer to Appendix B.

3.6 CONDUCTED OUTPUT POWER

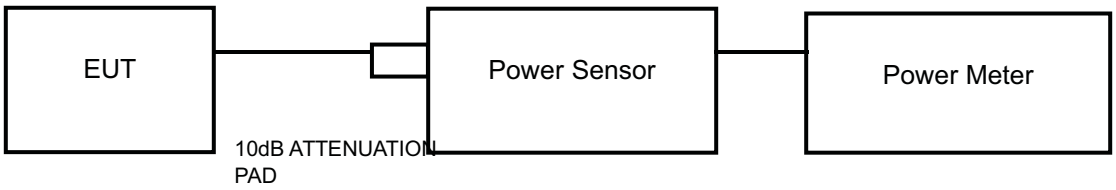
3.6.1 Limits

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.

3.6.2 Measurement procedure

a. A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor and set the detector to PEAK. Record the power level.
b. Anaverage power sensor was used on the output port of the EUT. A power meter was used to read the response of the average power senso and set the detector to AVERAGE. Record the power level.

3.6.3 Test setup



3.6.4 Test result

Refer to Appendix B.

3.7 OUT OF BAND EMISSION MEASUREMENT

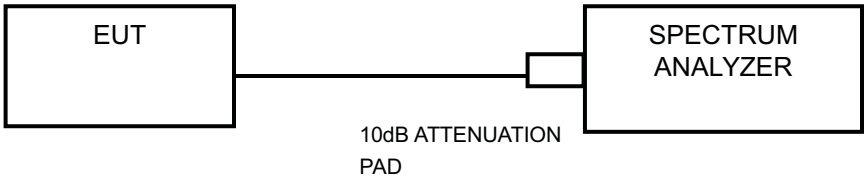
3.7.1 Limits

Below –20dB of the highest emission level of operating band (in 100KHz RBW).

3.7.2 Measurement procedure

The transmitter output was connected to the spectrum analyzer via a low loss cable. of Spectrum Analyzer was set RBW to 100 kHz and VBW to 300 kHz with suitable frequency span including 100 MHz bandwidth from band edge. Detector = PEAK and Trace mode = Max Hold. The band edges was measured and recorded.

3.7.3 Test setup



3.7.4 Test result

Refer to Appendix B.

4 PHOTOGRAPHS OF TEST SETUP

Please refer to the attached file (Test Photos).

5 PHOTOGRAPHS OF THE EUT

Please refer to the attached file (External Photos report and Internal Photos).

6 Appendix A

Antenna Port Conducted Test				
Equipment	Model No.	Serial Number	Manufacturer	Cal. Due
Communication Shielded Room 2	4m*3m*3m	CRTDSWKSR44301	CRT	2023/04/25
Spectrum Analyzer	FSV40	101580	R&S	2022/06/30
Analog Signal Generator	SMB100A	181858	R&S	2022/06/30
Vector Signal Generator	SGT100A	111661	R&S	2022/06/30
RF Radio Frequency Switch	JS0806-2	19H9080187	Tonscend	2022/06/30
Programmable DC Power Supply	E3644A	MY58036222	KEYSIGHT	2022/04/22

Radiated Emission Test - 3M Chamber				
Equipment	Model No.	Serial Number	Manufacturer	Cal. Due
3m Semi-Anechoic Chamber	FACT-4	ST08035	ETS	2024/12/12
Spectrum Analyzer	N9010B	MY57470323	KEYSIGHT	2022/03/05
EMI Test Receiver	N9038A-508	MY532290079	Agilent	2022/03/05
Broadband Antenna	VULB 9163	9163-530	SCHWARZBECK	2022/06/26
Waveguide Horn Antenna	HF906	360306/008	R&S	2022/03/05
Waveguide Horn Antenna	BBHA9170	00949	SCHWARZBECK	2022/03/05
Preamplifier	BBV 9721	9721-050	SCHWARZBECK	2022/06/30
5G Bandstop Filters	WRCJV12-4900-5100-5900-6100-50EE	1	WI	2021/12/16
Comprehensive tester	CMW500	159000	R&S	2022/01/04

7 Appendix B

7.1 20dB Emission Bandwidth

7.1.1 Test Result-Left

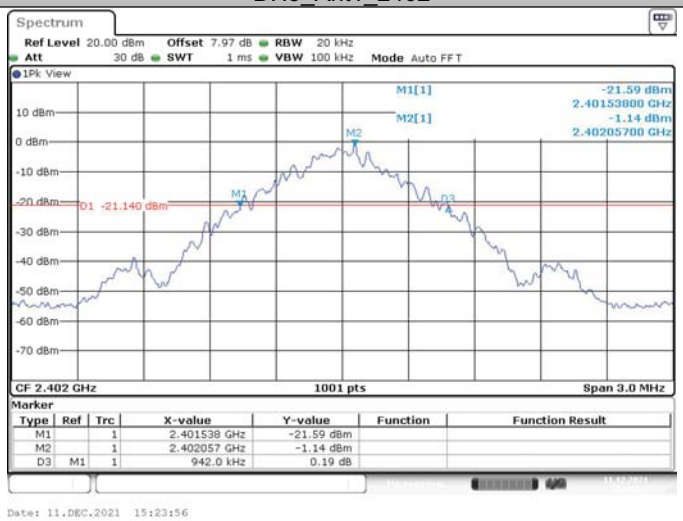
TestMode	Antenna	Channel	20db EBW[MHz]
DH5	Ant1	2402	0.94
		2441	0.94
		2480	0.94
2DH5	Ant1	2402	1.35
		2441	1.35
		2480	1.35
3DH5	Ant1	2402	1.35
		2441	1.35
		2480	1.35

7.1.1 Test Result-Right

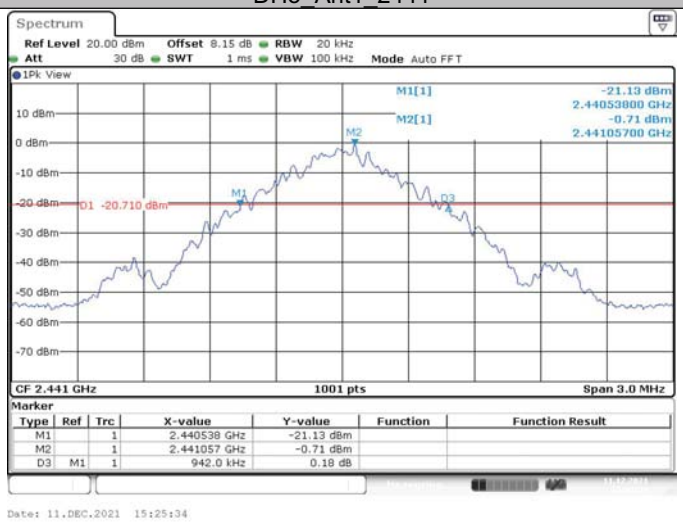
TestMode	Antenna	Channel	20db EBW[MHz]
DH5	Ant1	2402	0.94
		2441	0.94
		2480	0.94
2DH5	Ant1	2402	1.35
		2441	1.35
		2480	1.35
3DH5	Ant1	2402	1.35
		2441	1.35
		2480	1.35

7.1.2 Test Graphs-Left

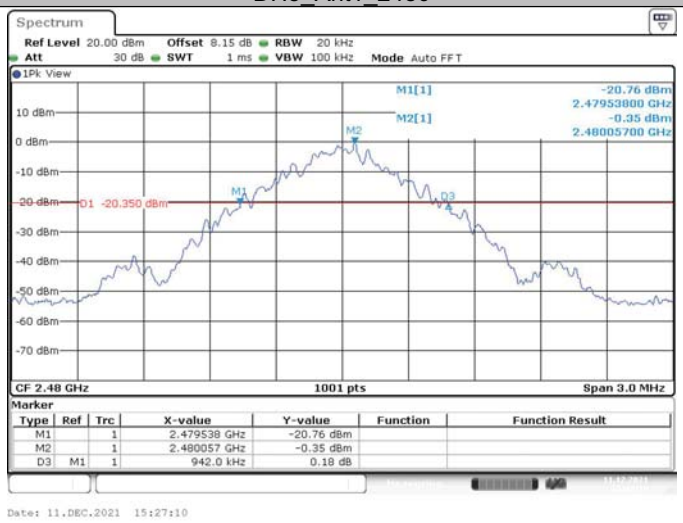
DH5_Ant1_2402



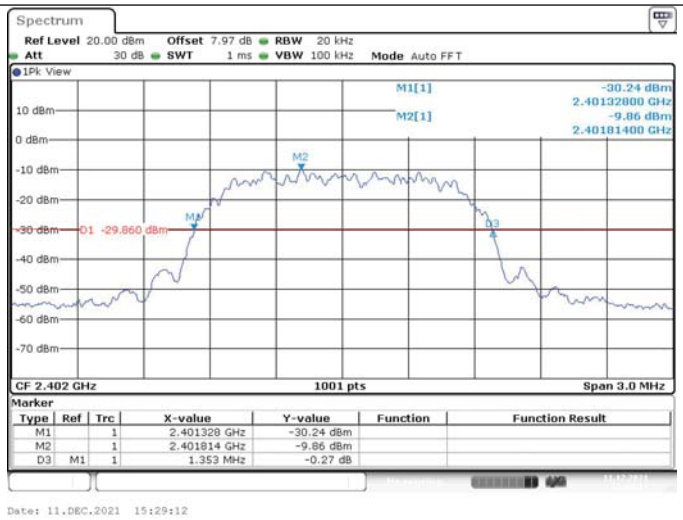
DH5_Ant1_2441



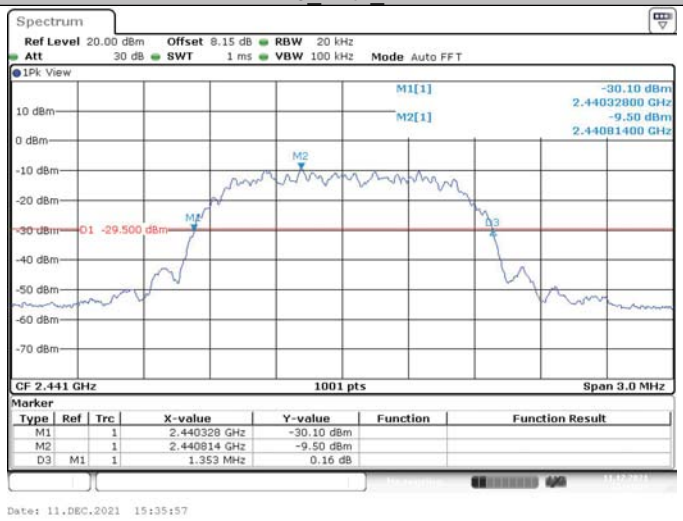
DH5_Ant1_2480



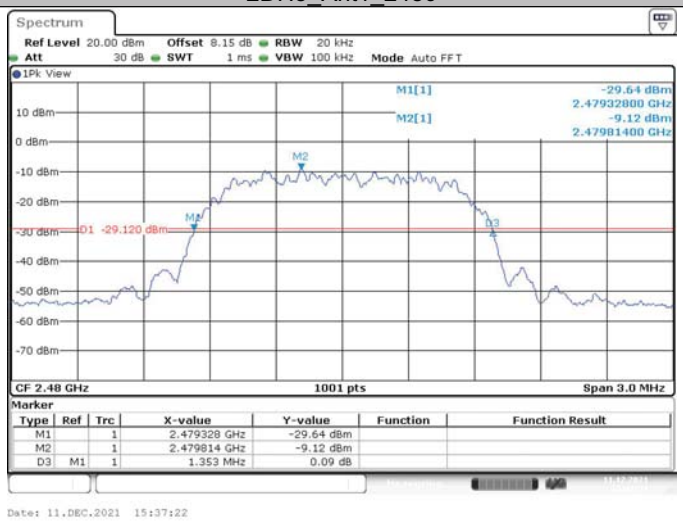
2DH5_Ant1_2402



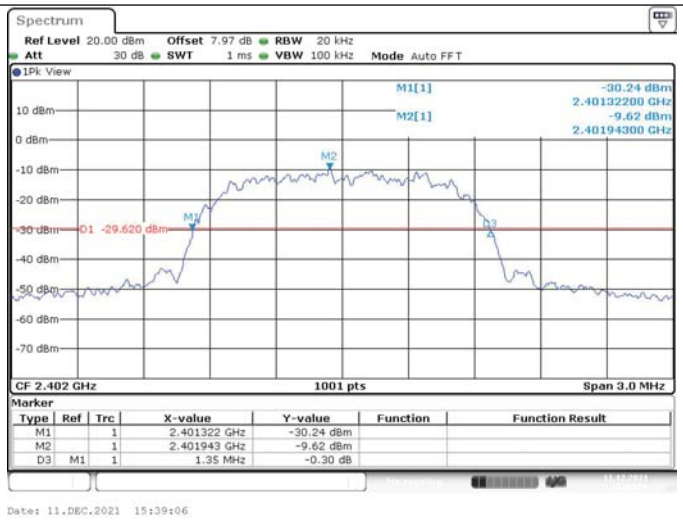
2DH5_Ant1_2441



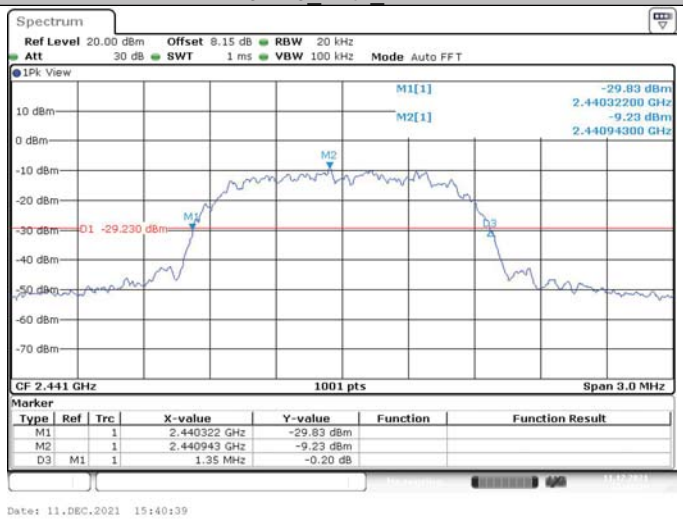
2DH5_Ant1_2480



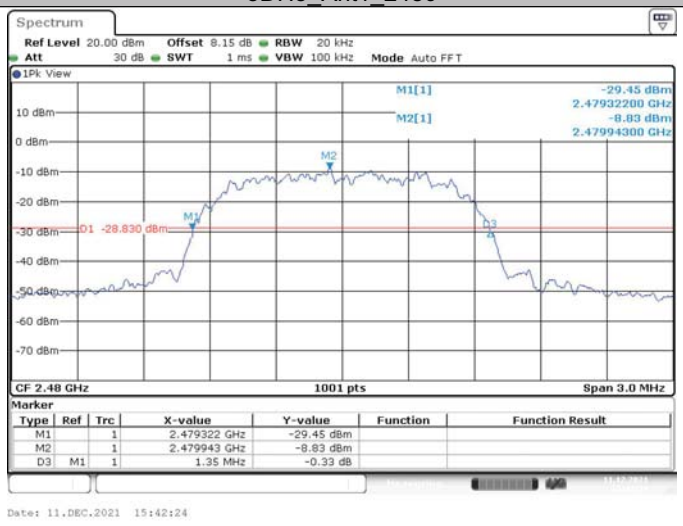
3DH5_Ant1_2402



3DH5_Ant1_2441

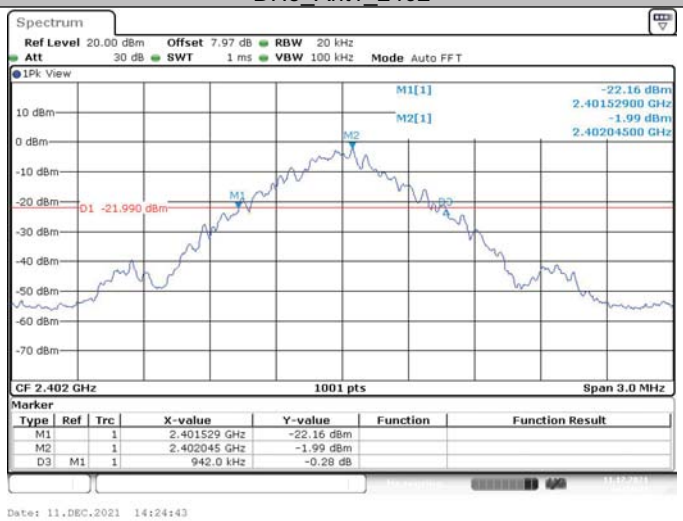


3DH5_Ant1_2480



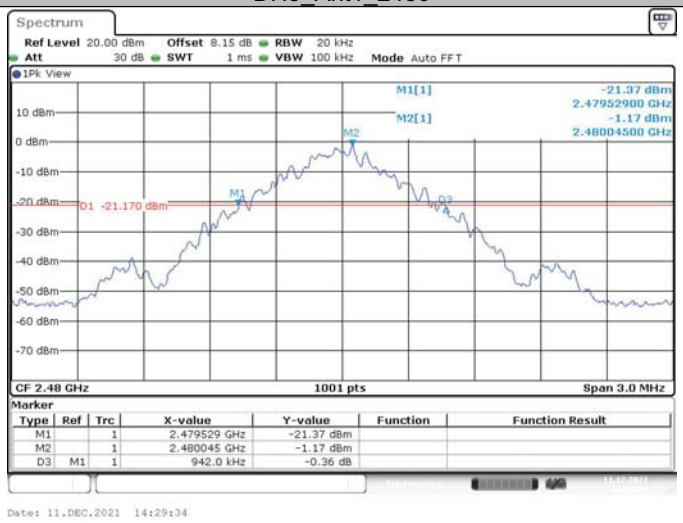
7.1.1 Test Graphs-Right

DH5_Ant1_2402

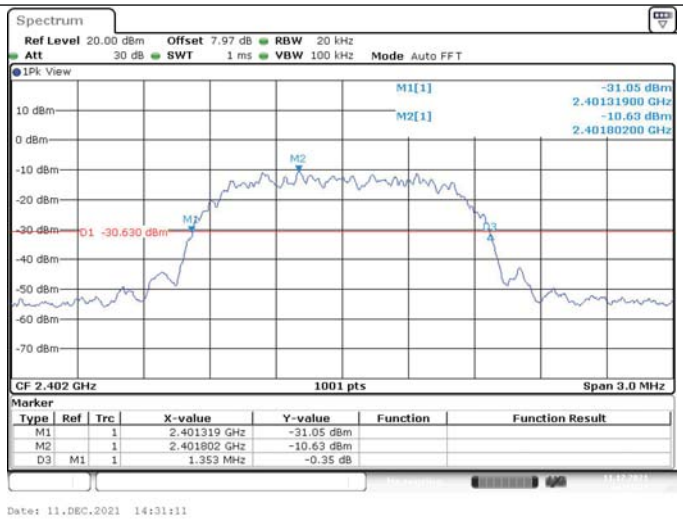


DH5_Ant1_2441

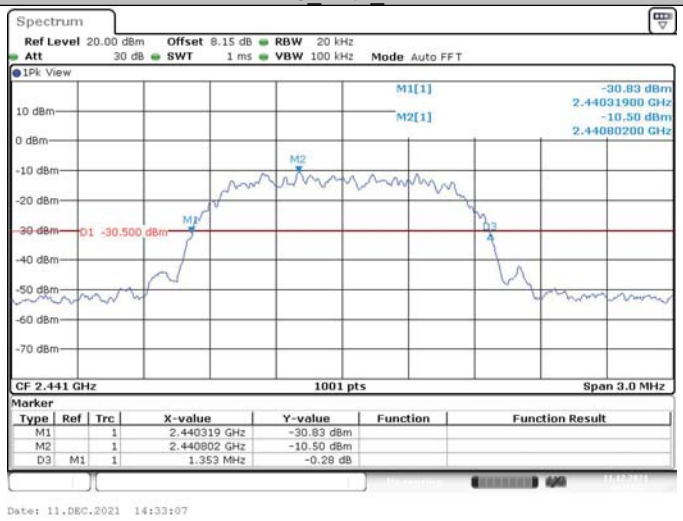
DH5_Ant1_2480



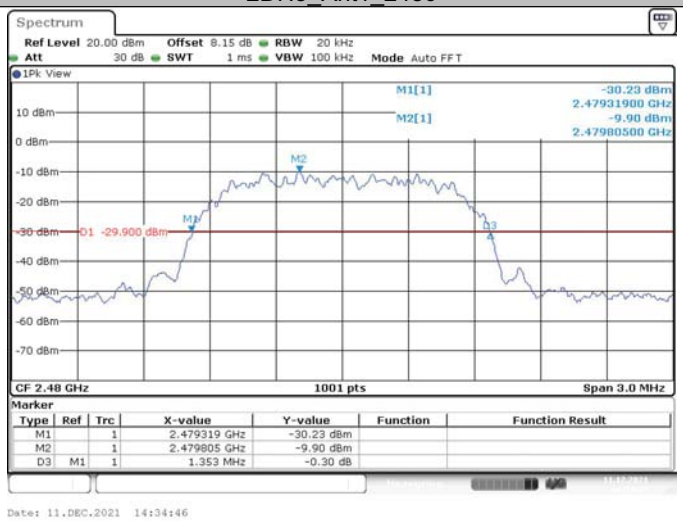
2DH5_Ant1_2402



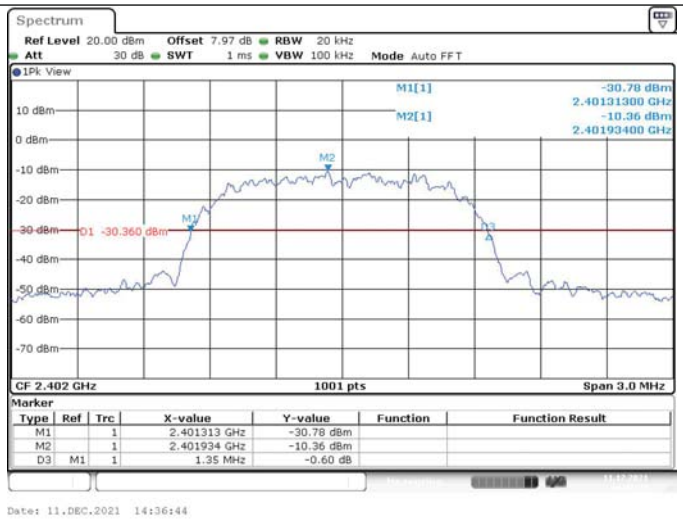
2DH5_Ant1_2441



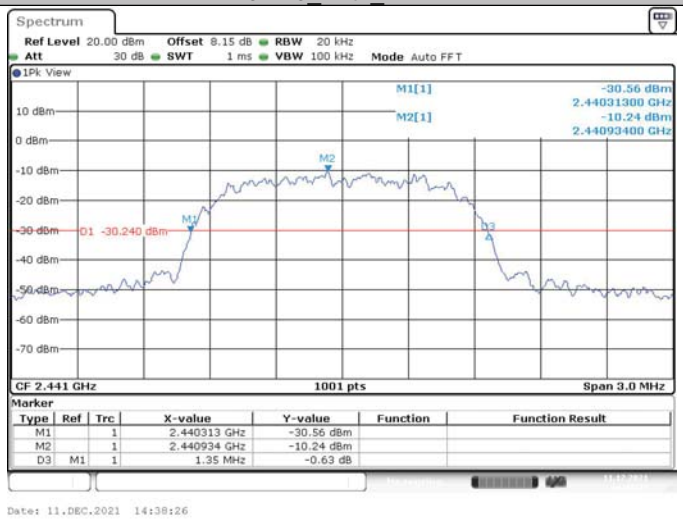
2DH5_Ant1_2480



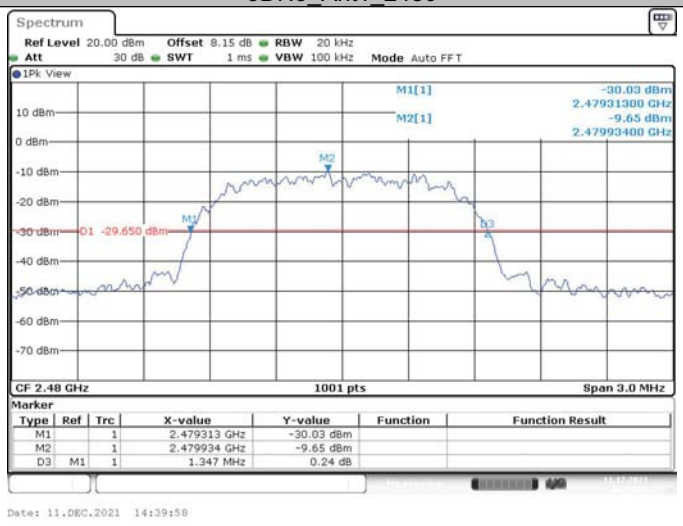
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



7.2 Conducted Output Power

7.2.1 Test Result-Left Peak

Test Mode	Antenna	Channel	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	2.37	≤20.97	PASS
		2441	2.75	≤20.97	PASS
		2480	3.12	≤20.97	PASS
2DH5	Ant1	2402	0.42	≤20.97	PASS
		2441	0.81	≤20.97	PASS
		2480	1.19	≤20.97	PASS
3DH5	Ant1	2402	0.97	≤20.97	PASS
		2441	1.39	≤20.97	PASS
		2480	1.76	≤20.97	PASS

7.2.1 Test Result-Right Peak

Test Mode	Antenna	Channel	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	1.52	≤20.97	PASS
		2441	1.73	≤20.97	PASS
		2480	2.32	≤20.97	PASS
2DH5	Ant1	2402	-0.39	≤20.97	PASS
		2441	-0.20	≤20.97	PASS
		2480	0.37	≤20.97	PASS
3DH5	Ant1	2402	0.18	≤20.97	PASS
		2441	0.40	≤20.97	PASS
		2480	0.95	≤20.97	PASS

7.2.2 Test Result-Left Average

Test Mode	Antenna	Channel	Conducted AV Powert[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	2.20	≤20.97	PASS
		2441	2.59	≤20.97	PASS
		2480	2.96	≤20.97	PASS
2DH5	Ant1	2402	-2.61	≤20.97	PASS
		2441	-2.25	≤20.97	PASS
		2480	-1.87	≤20.97	PASS
3DH5	Ant1	2402	-2.65	≤20.97	PASS
		2441	-2.26	≤20.97	PASS
		2480	-1.80	≤20.97	PASS

7.2.3 Test Result-Right Average

Test Mode	Antenna	Channel	Conducted AV Powert[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	1.33	≤20.97	PASS
		2441	1.55	≤20.97	PASS
		2480	2.14	≤20.97	PASS
2DH5	Ant1	2402	-3.41	≤20.97	PASS
		2441	-3.24	≤20.97	PASS
		2480	-2.71	≤20.97	PASS
3DH5	Ant1	2402	-3.43	≤20.97	PASS
		2441	-3.28	≤20.97	PASS
		2480	-2.70	≤20.97	PASS

7.3 Hopping Channel Separation

7.3.1 Test Result-Left

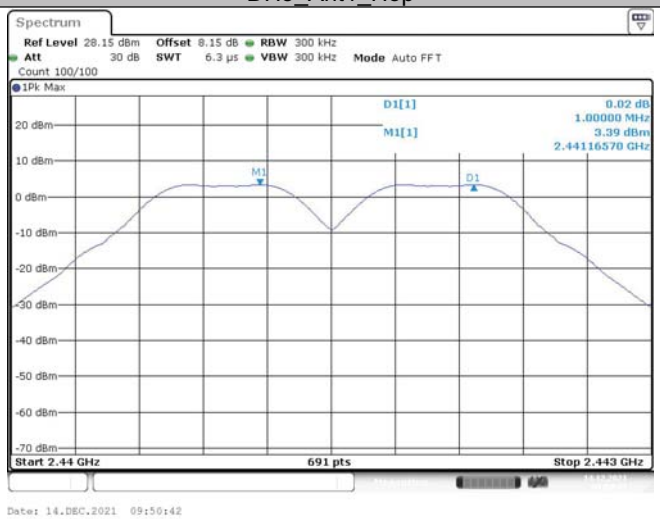
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.0	≥0.940	PASS
2DH5	Ant1	Hop	1.0	≥0.900	PASS
3DH5	Ant1	Hop	1.0	≥0.900	PASS

7.3.1 Test Result-Right

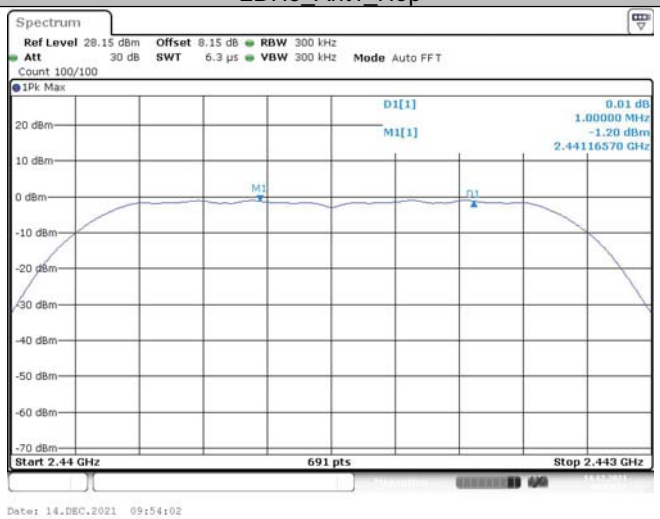
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.0	≥0.940	PASS
2DH5	Ant1	Hop	1.0	≥0.900	PASS
3DH5	Ant1	Hop	1.0	≥0.900	PASS

7.3.2 Test Graphs-Left

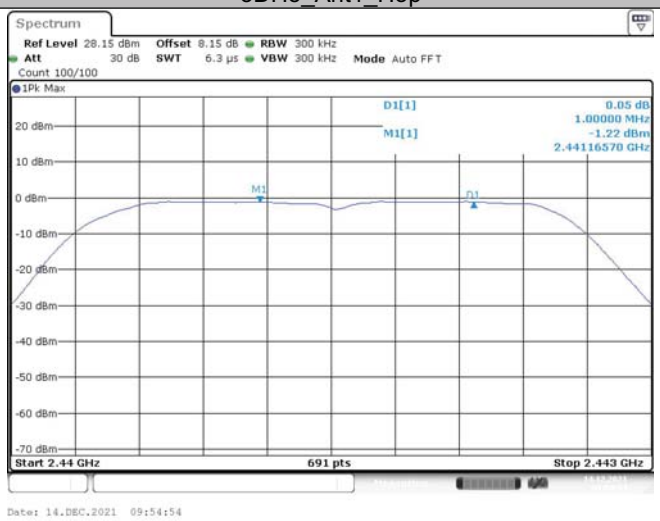
DH5_Ant1_Hop



2DH5_Ant1_Hop

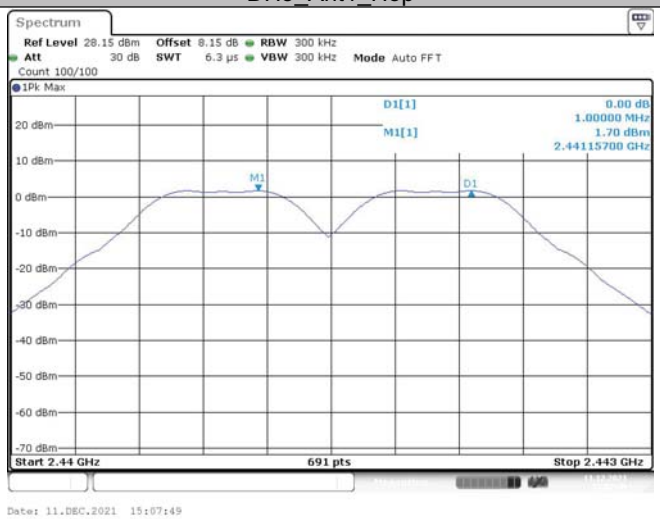


3DH5_Ant1_Hop

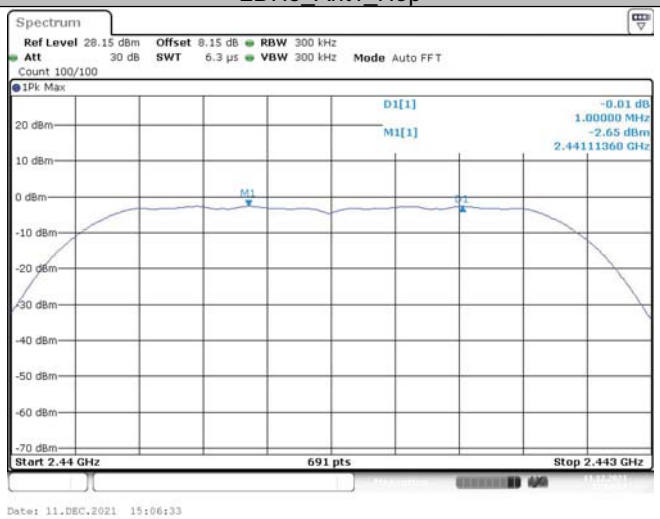


7.3.1 Test Graphs-Right

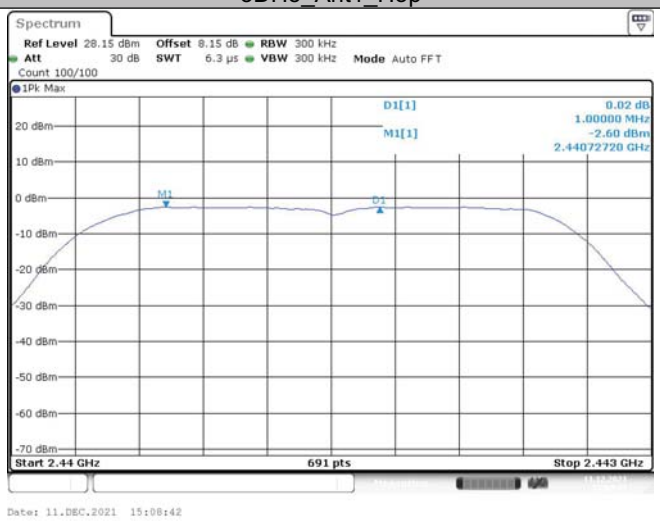
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



7.4 Dell Time of Each Channel

7.4.1 Test Result-Left

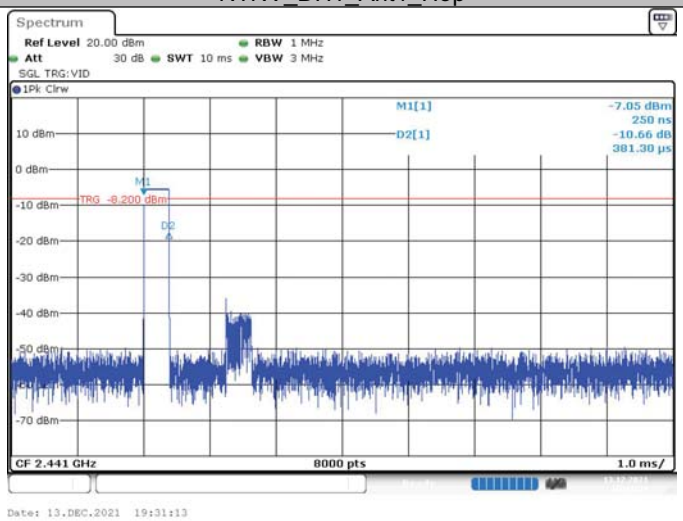
Test Condition	Test Mode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit [s]	Verdict
NTNV	DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
	DH3	Ant1	Hop	1.63	130	0.212	≤0.4	PASS
	DH5	Ant1	Hop	2.87	100	0.287	≤0.4	PASS
	2DH1	Ant1	Hop	0.38	320	0.123	≤0.4	PASS
	2DH3	Ant1	Hop	1.63	170	0.277	≤0.4	PASS
	2DH5	Ant1	Hop	2.87	100	0.287	≤0.4	PASS
	3DH1	Ant1	Hop	0.38	320	0.123	≤0.4	PASS
	3DH3	Ant1	Hop	1.63	170	0.277	≤0.4	PASS
	3DH5	Ant1	Hop	2.87	80	0.23	≤0.4	PASS

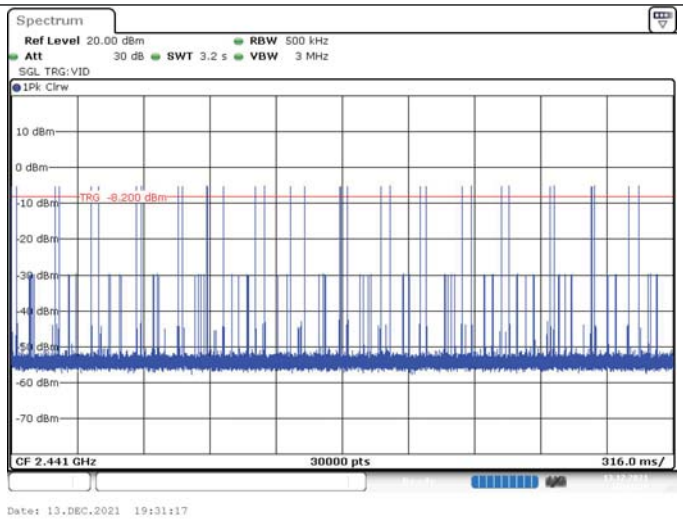
7.4.2 Test Result-Right

Test Condition	Test Mode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit [s]	Verdict
NTNV	DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
	DH3	Ant1	Hop	0.83	130	0.108	≤0.4	PASS
	DH5	Ant1	Hop	2.87	100	0.287	≤0.4	PASS
	2DH1	Ant1	Hop	0.39	330	0.127	≤0.4	PASS
	2DH3	Ant1	Hop	1.63	210	0.342	≤0.4	PASS
	2DH5	Ant1	Hop	2.87	100	0.287	≤0.4	PASS
	3DH1	Ant1	Hop	0.38	330	0.127	≤0.4	PASS
	3DH3	Ant1	Hop	1.63	140	0.228	≤0.4	PASS
	3DH5	Ant1	Hop	2.87	100	0.287	≤0.4	PASS

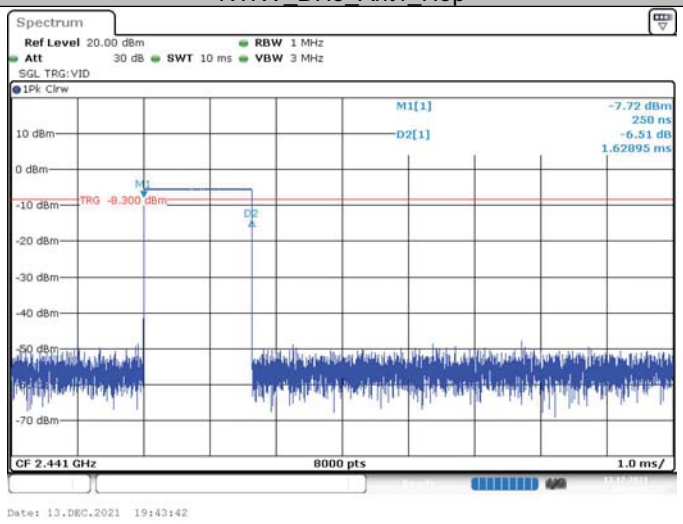
7.4.3 Test Graphs-Left

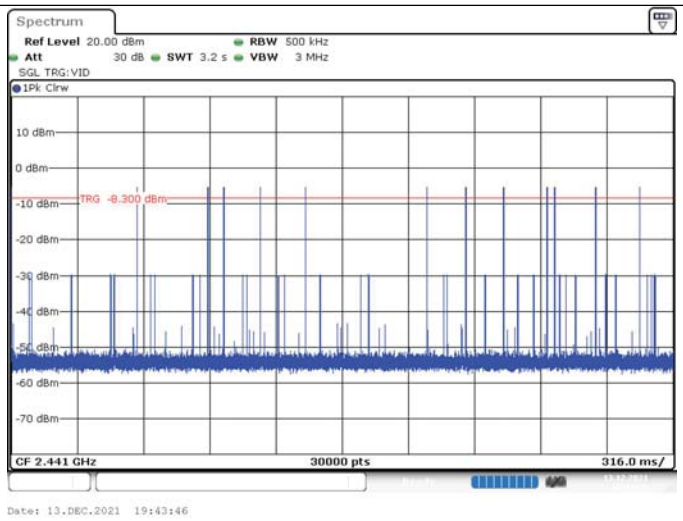
NTNV_DH1_Ant1_Hop



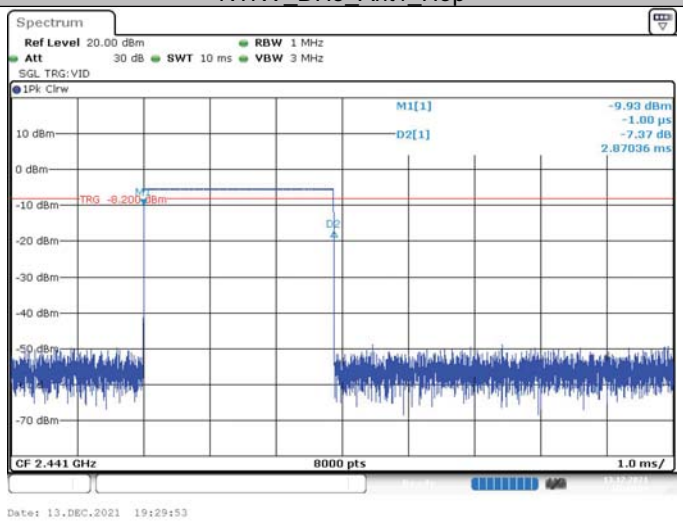


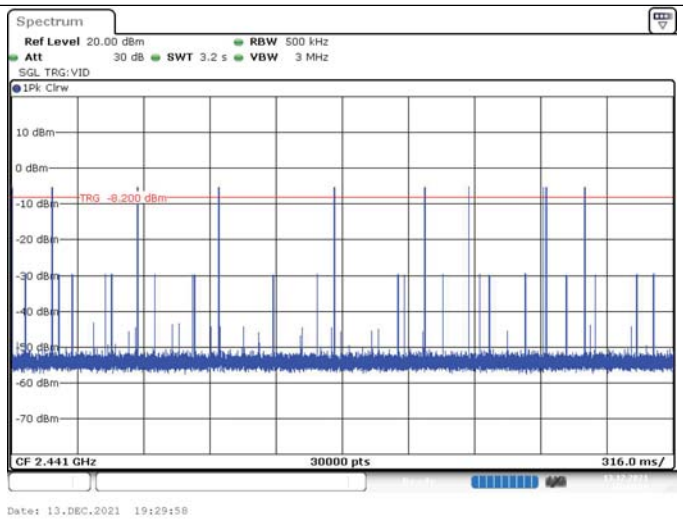
NTNV_DH3_Ant1_Hop



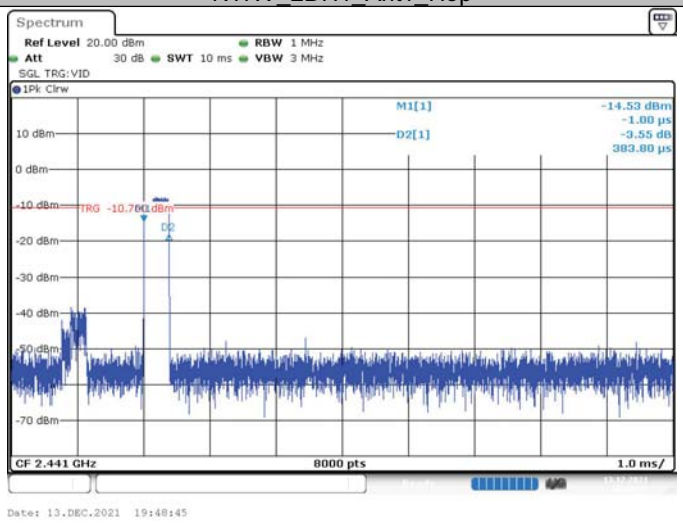


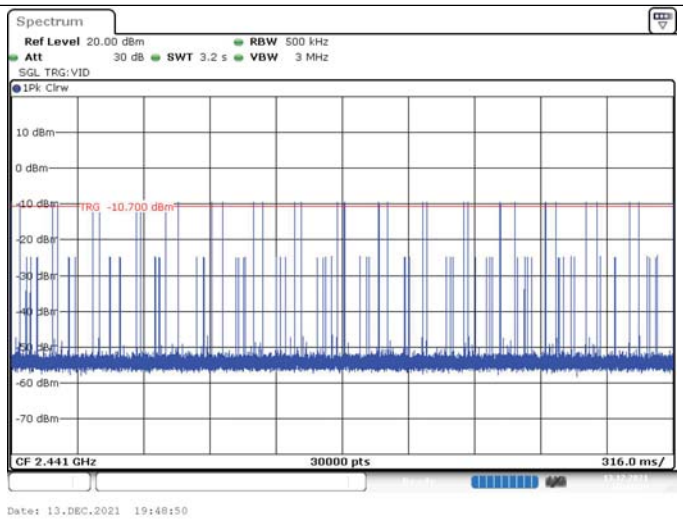
NTNV_DH5_Ant1_Hop



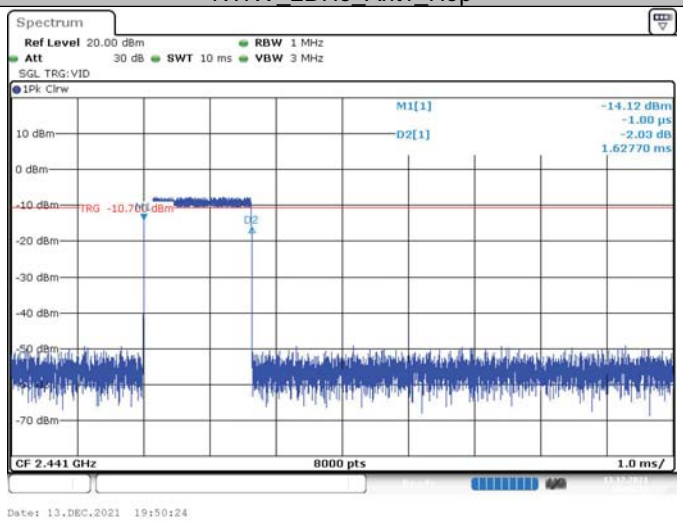


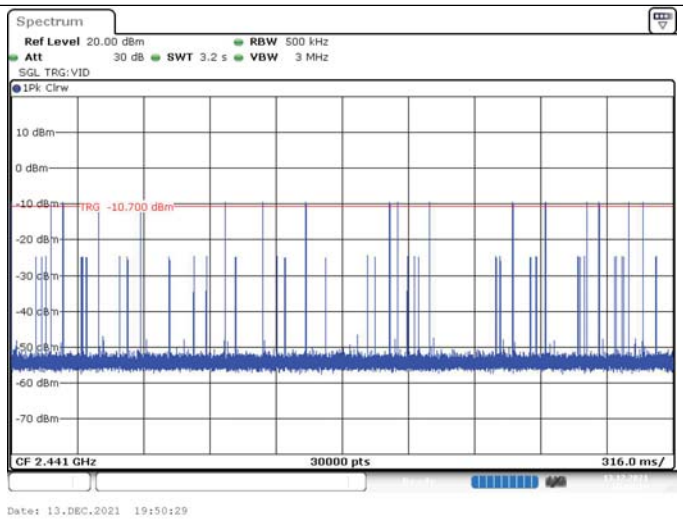
NTNV_2DH1_Ant1_Hop



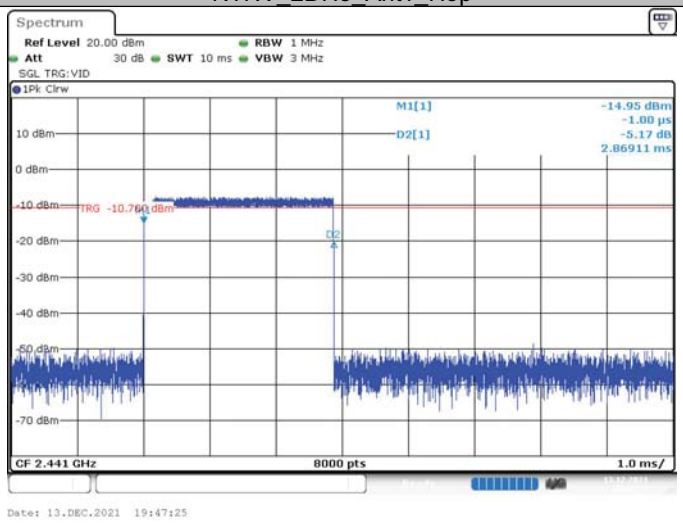


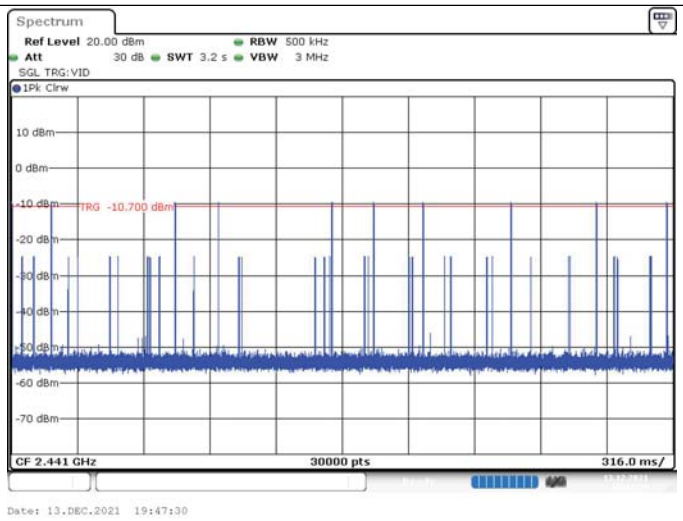
NTNV_2DH3_Ant1_Hop



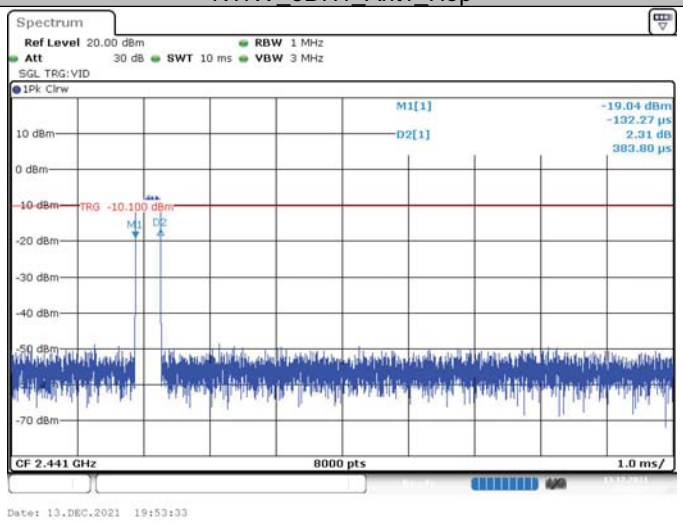


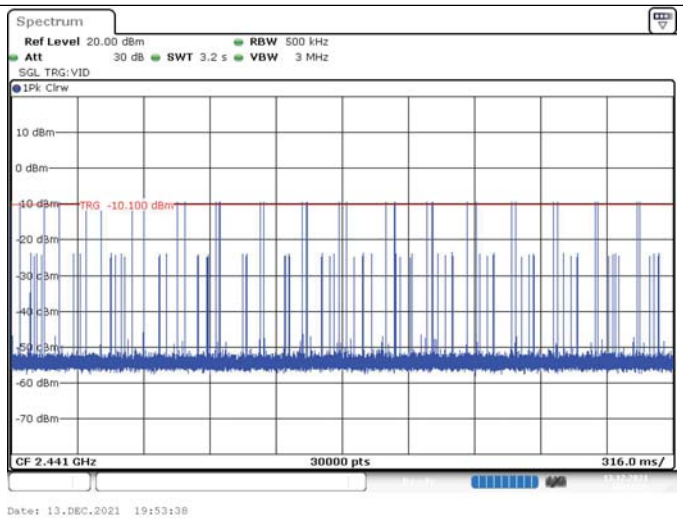
NTNV_2DH5_Ant1_Hop



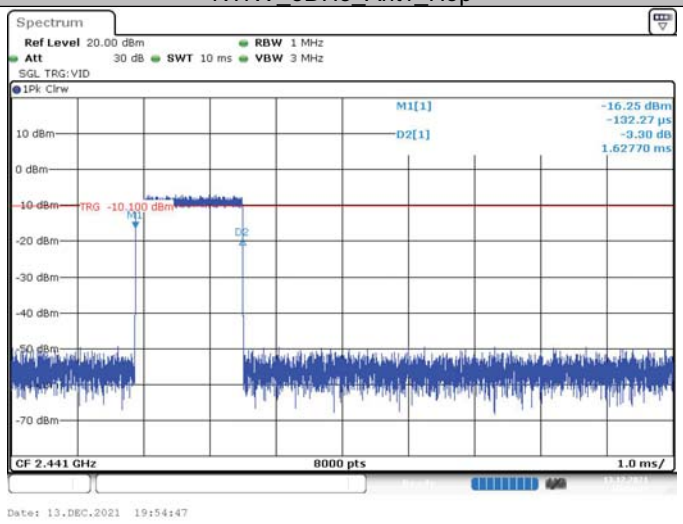


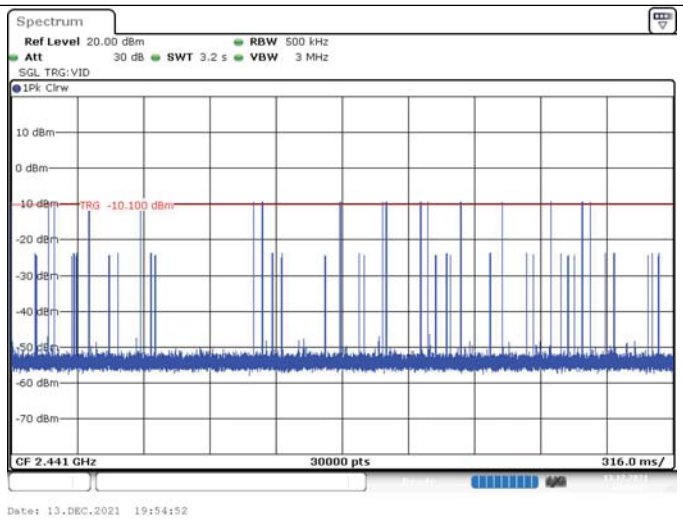
NTNV_3DH1_Ant1_Hop



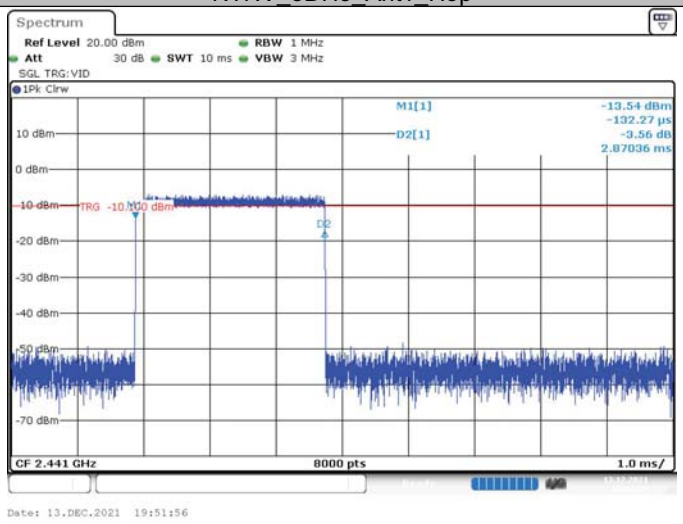


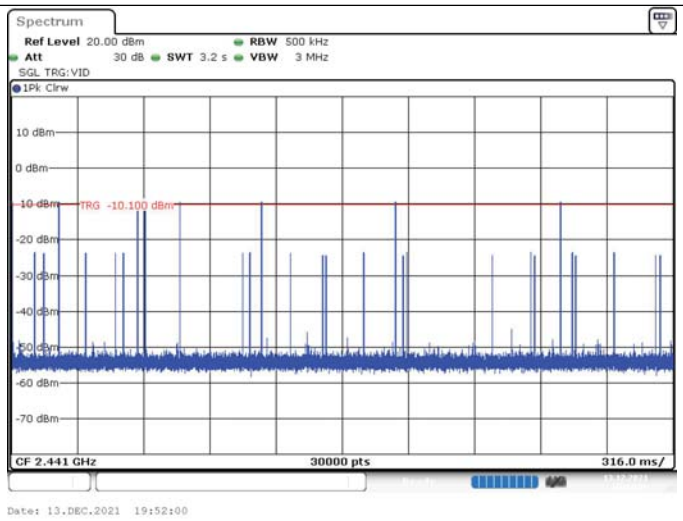
NTNV_3DH3_Ant1_Hop



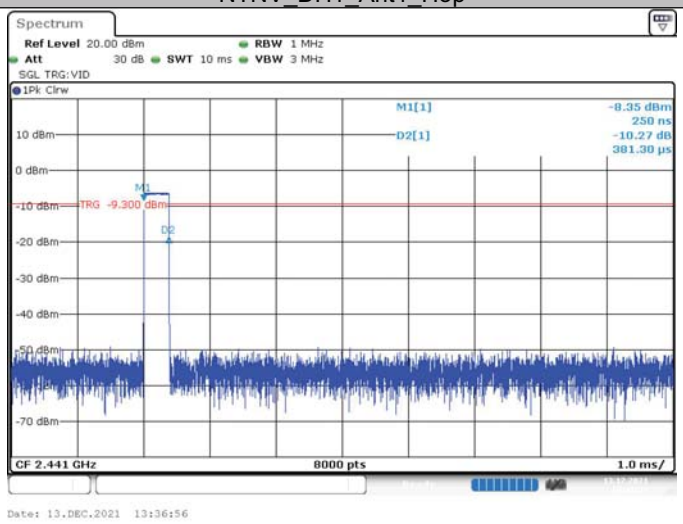
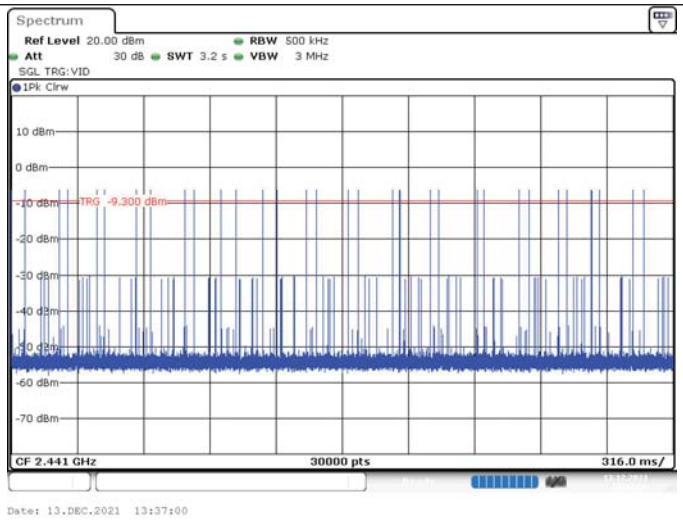


NTNV_3DH5_Ant1_Hop

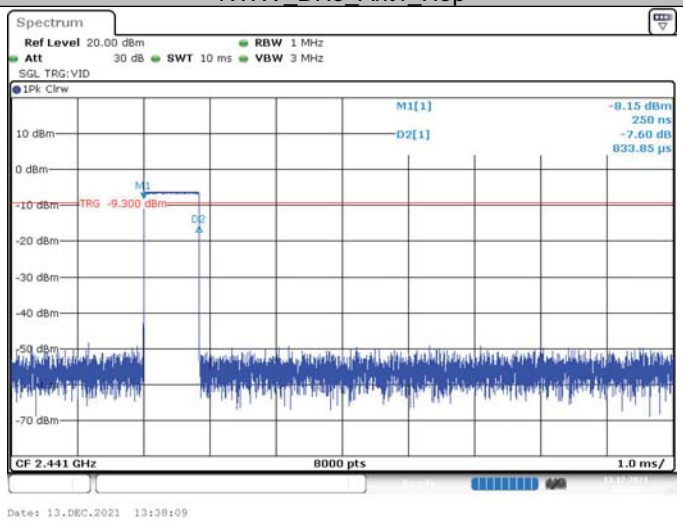


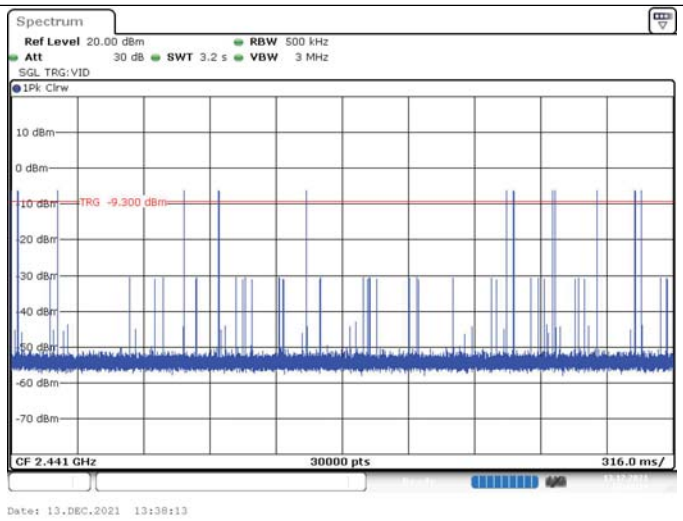


7.4.4 Test Graphs-Right

NTNV_DH1_Ant1_Hop



NTNV_DH3_Ant1_Hop





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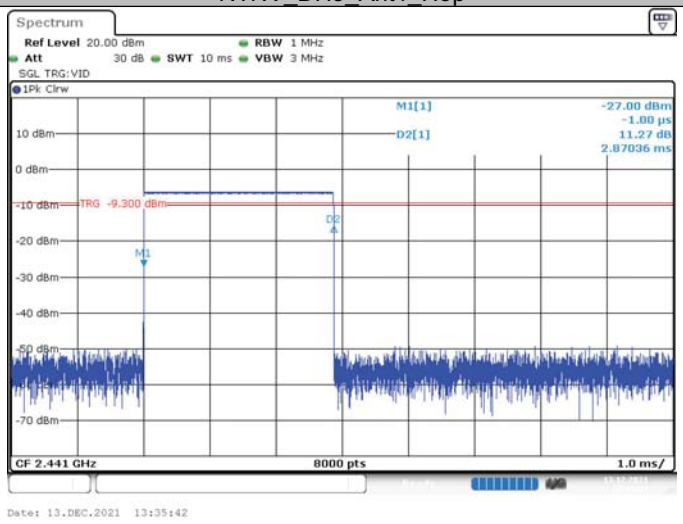

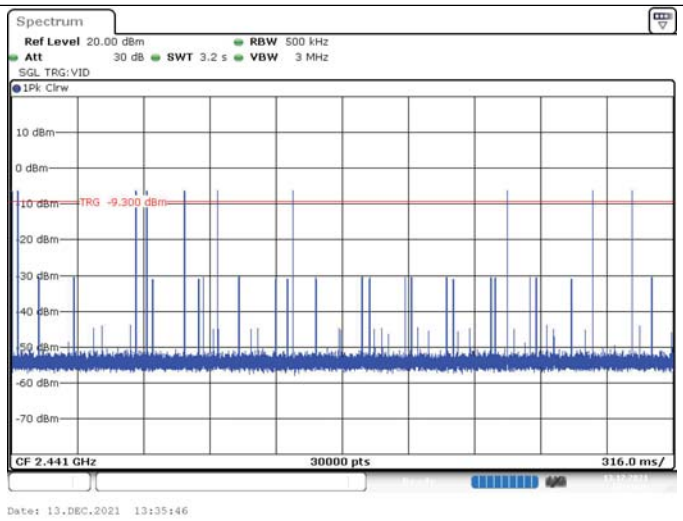

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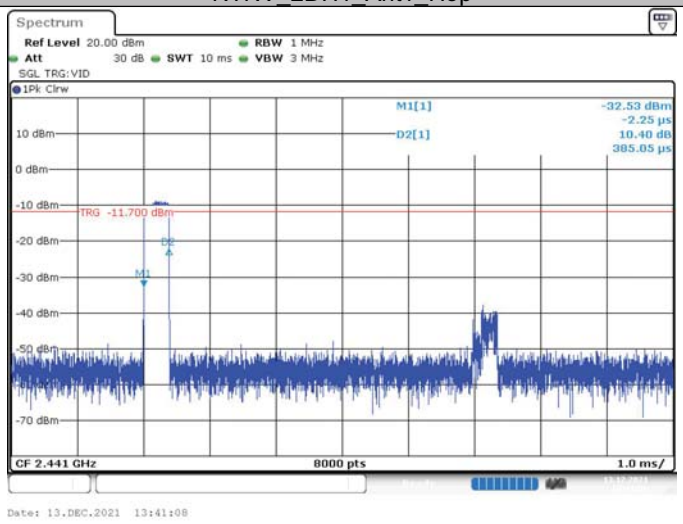
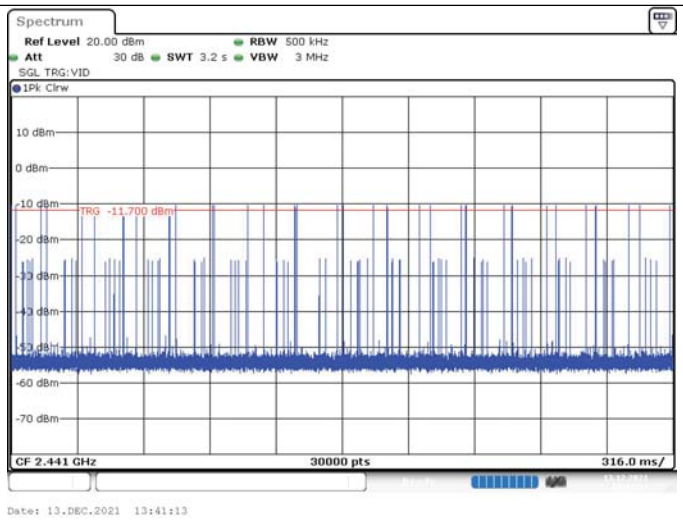
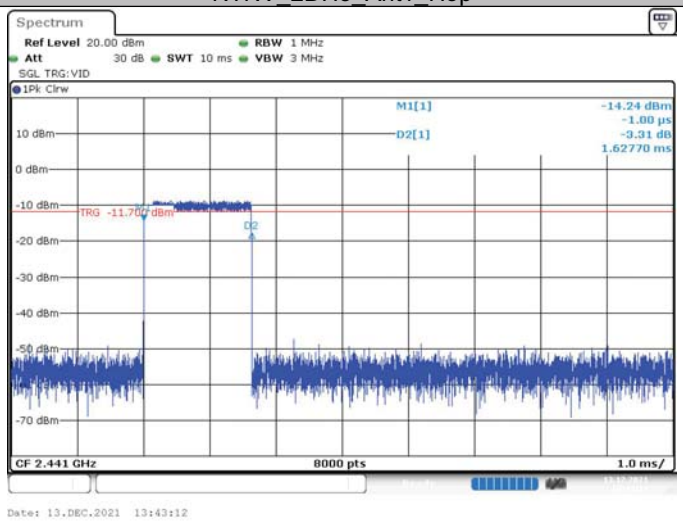
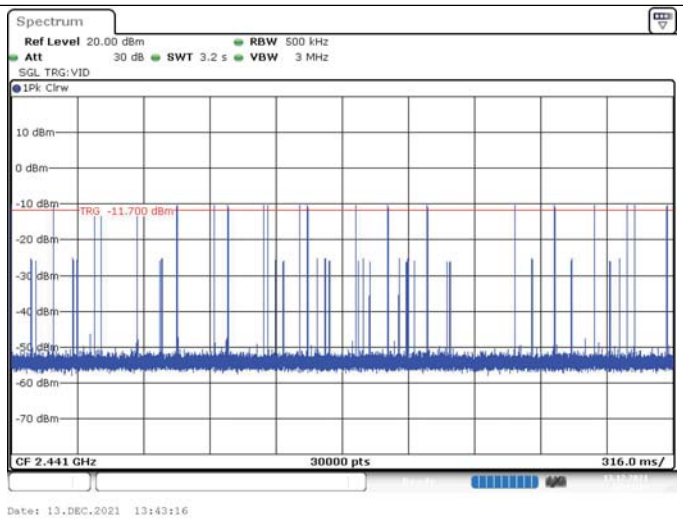


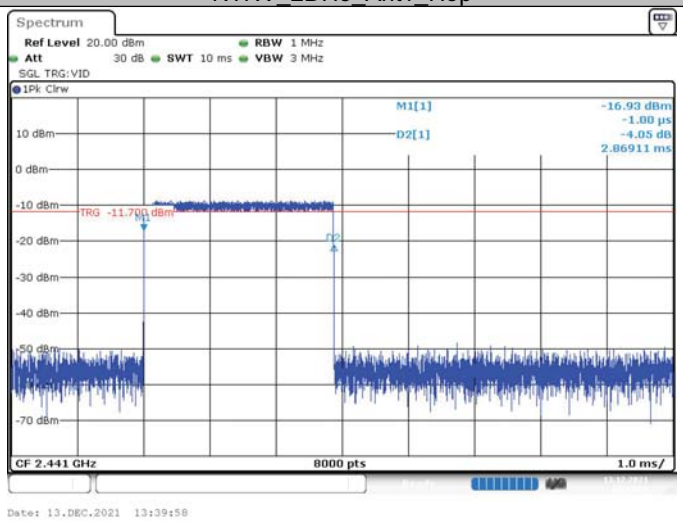


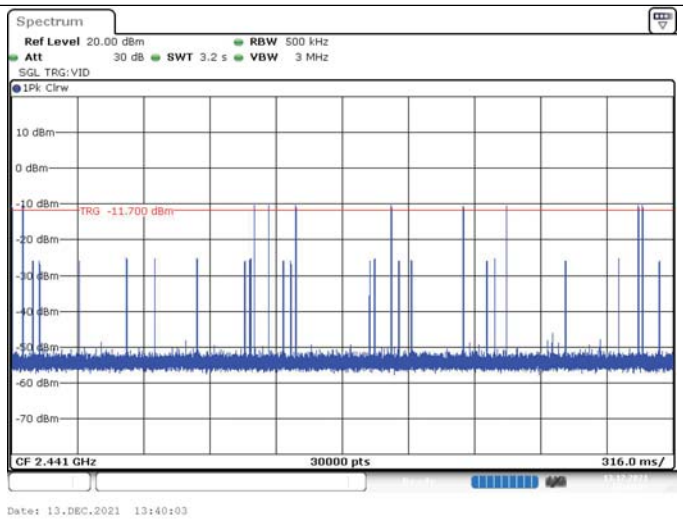
NTNV_2DH3_Ant1_Hop



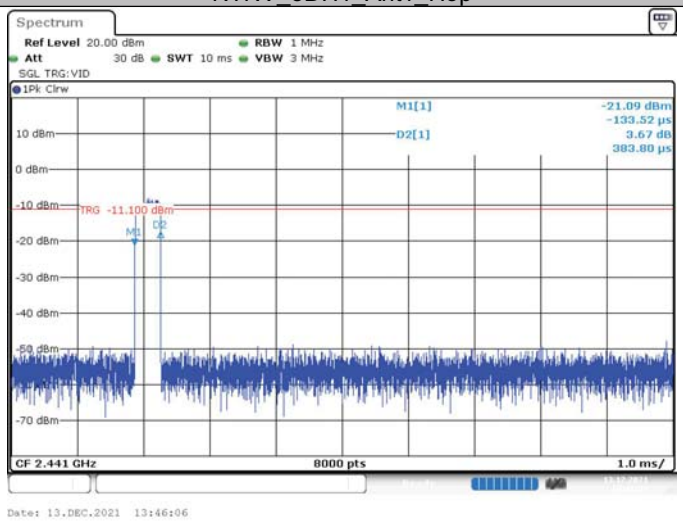


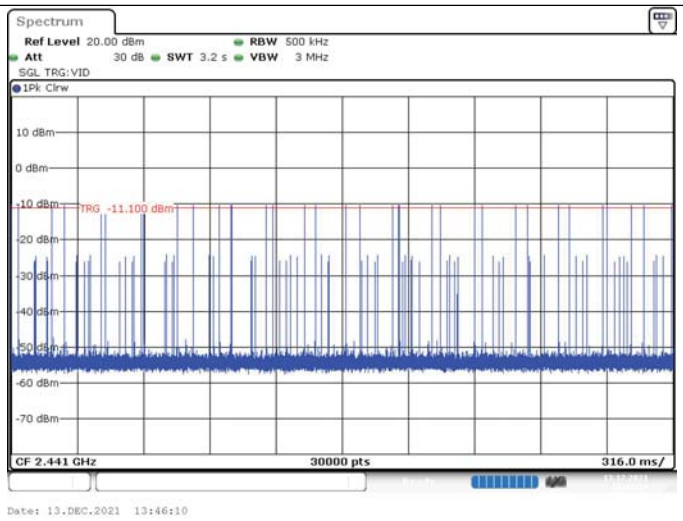
NTNV_2DH5_Ant1_Hop



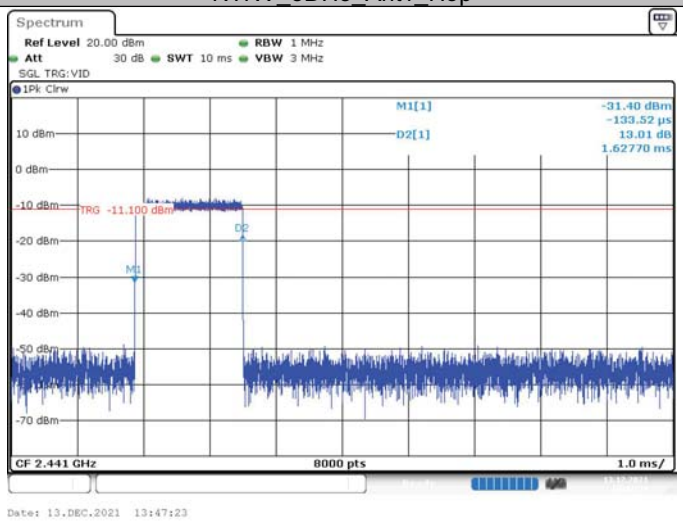


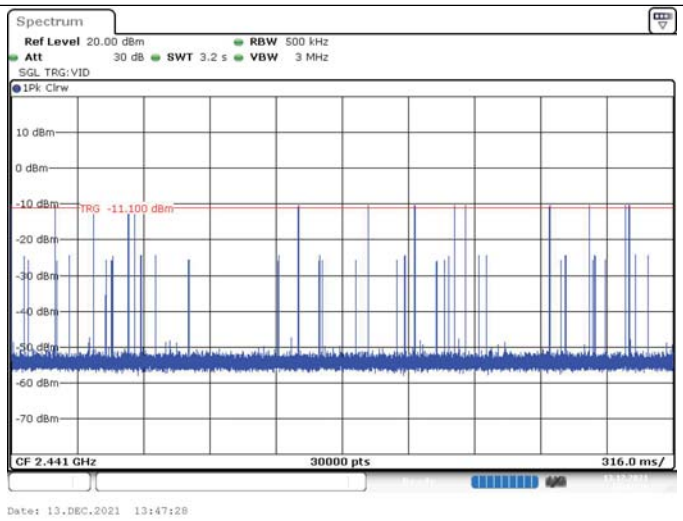
NTNV_3DH1_Ant1_Hop



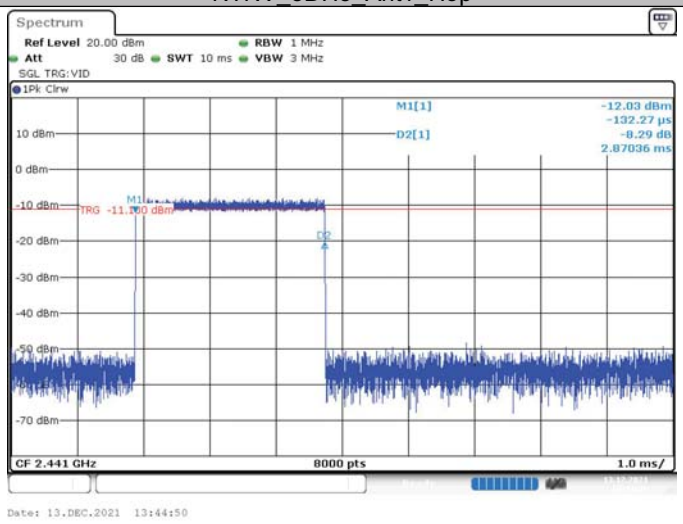


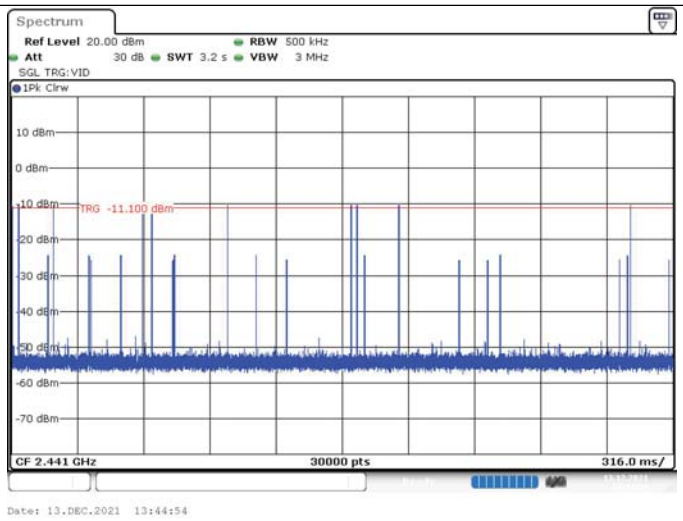
NTNV_3DH3_Ant1_Hop





NTNV_3DH5_Ant1_Hop





7.5 Number of hopping channels

7.5.1 Test Result-Left

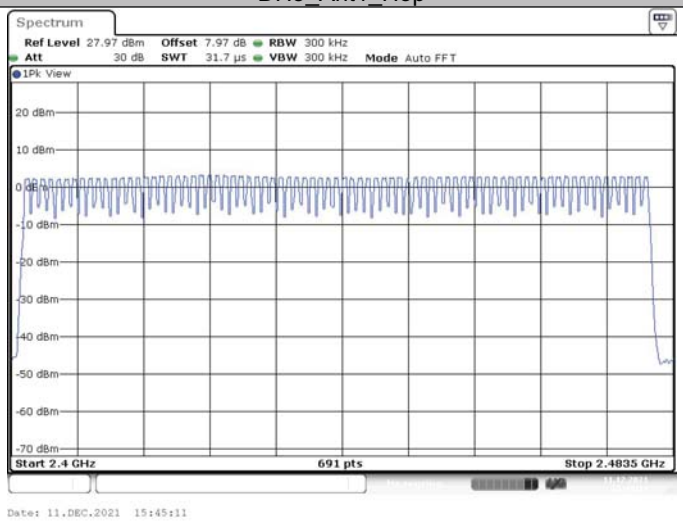
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

7.5.1 Test Result-Right

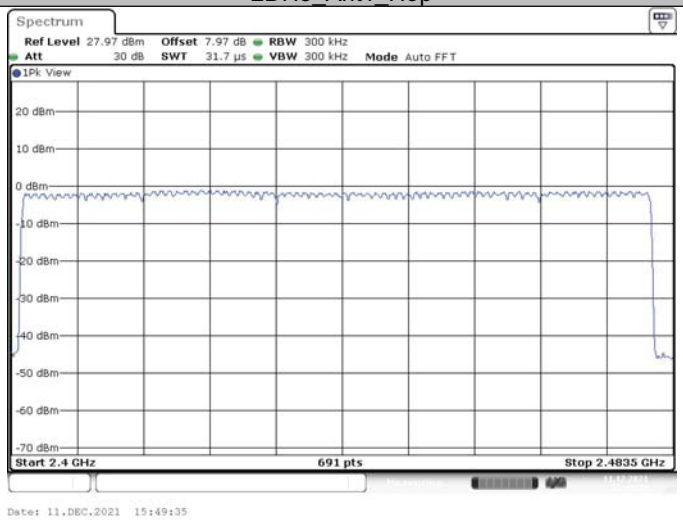
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

7.5.2 Test Graphs-Left

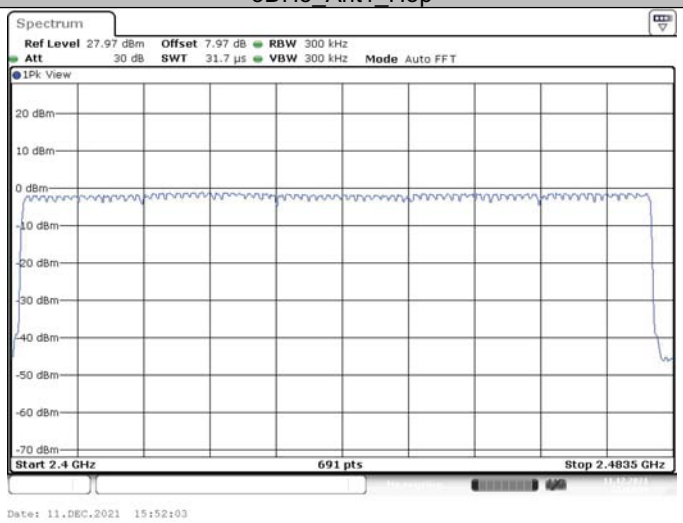
DH5_Ant1_Hop



2DH5_Ant1_Hop

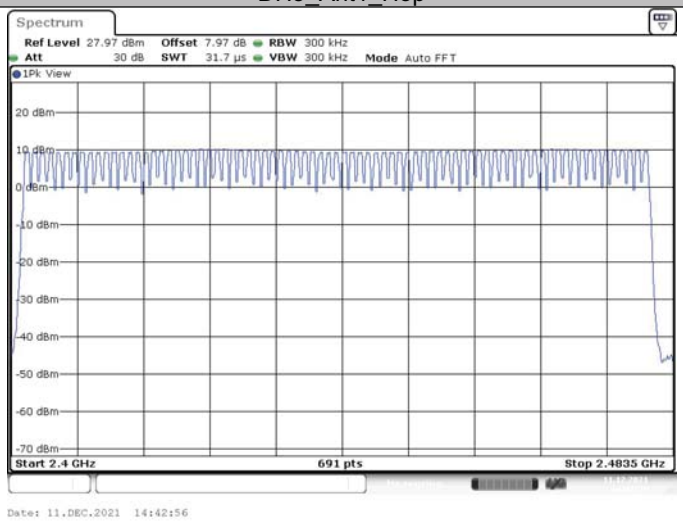


3DH5_Ant1_Hop

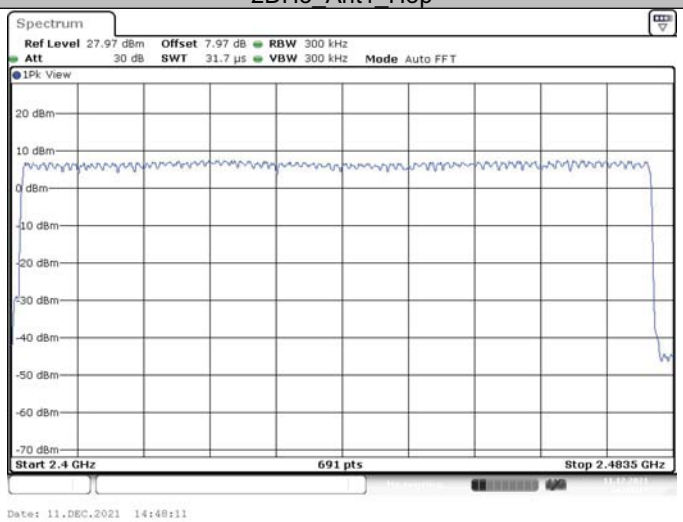


7.5.1 Test Graphs-Right

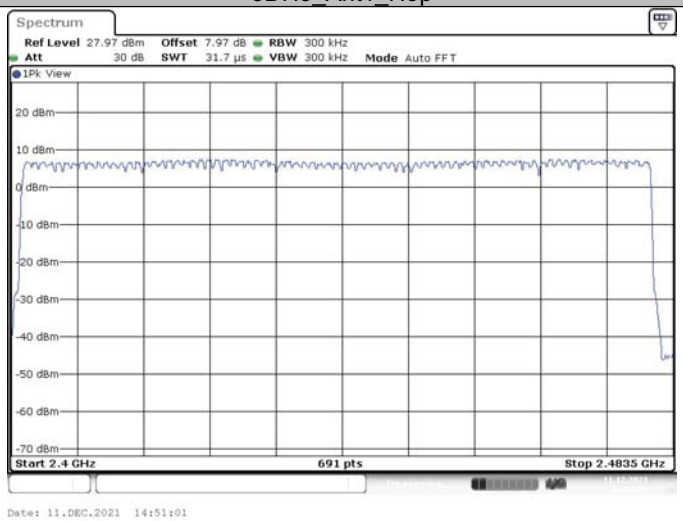
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



7.6 Band edge measurements

7.6.1 Test Result-Left

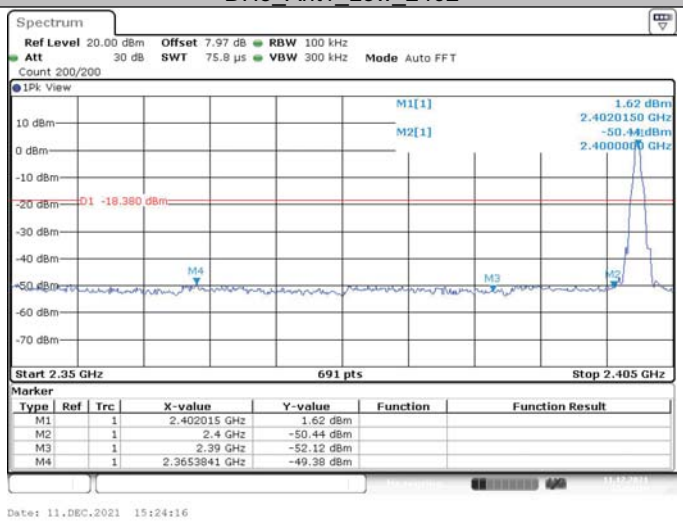
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	1.62	-49.38	≤-18.38	PASS
		High	2480	2.45	-47.46	≤-17.55	PASS
		Low	Hop_2402	1.37	-49.07	≤-18.63	PASS
		High	Hop_2480	2.33	-47.57	≤-17.67	PASS
2DH5	Ant1	Low	2402	-3.92	-48.71	≤-23.92	PASS
		High	2480	-3.20	-48.1	≤-23.2	PASS
		Low	Hop_2402	-3.90	-48.41	≤-23.9	PASS
		High	Hop_2480	-3.37	-48.2	≤-23.37	PASS
3DH5	Ant1	Low	2402	-4.09	-49.8	≤-24.09	PASS
		High	2480	-3.23	-47.16	≤-23.23	PASS
		Low	Hop_2402	-3.46	-48.16	≤-23.46	PASS
		High	Hop_2480	-1.42	-47.66	≤-21.42	PASS

7.6.1 Test Result-Right

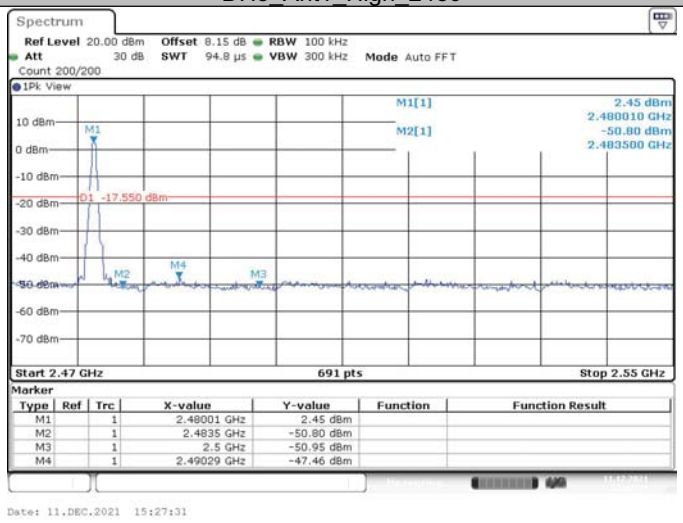
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.81	-49.49	≤-19.19	PASS
		High	2480	1.66	-47.41	≤-18.34	PASS
		Low	Hop_2402	8.88	-48.25	≤-11.12	PASS
		High	Hop_2480	9.40	-48.15	≤-10.6	PASS
2DH5	Ant1	Low	2402	-4.78	-48.83	≤-24.78	PASS
		High	2480	-3.98	-48	≤-23.98	PASS
		Low	Hop_2402	5.31	-48.85	≤-14.69	PASS
		High	Hop_2480	7.14	-48.05	≤-12.86	PASS
3DH5	Ant1	Low	2402	-4.83	-48.37	≤-24.83	PASS
		High	2480	-4.05	-47.88	≤-24.05	PASS
		Low	Hop_2402	4.67	-49.8	≤-15.33	PASS
		High	Hop_2480	5.84	-47.51	≤-14.16	PASS

7.6.2 Test Graphs-Left

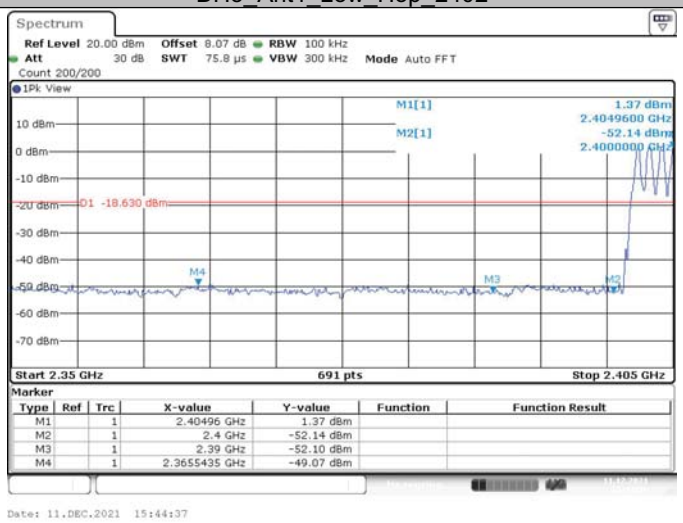
DH5_Ant1_Low_2402



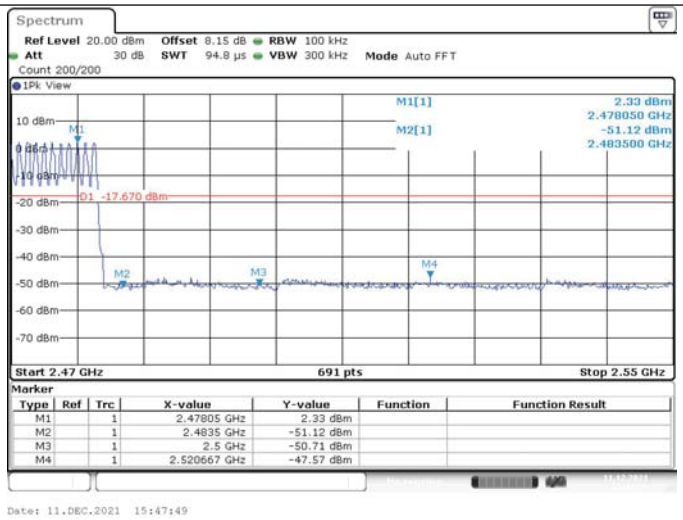
DH5_Ant1_High_2480



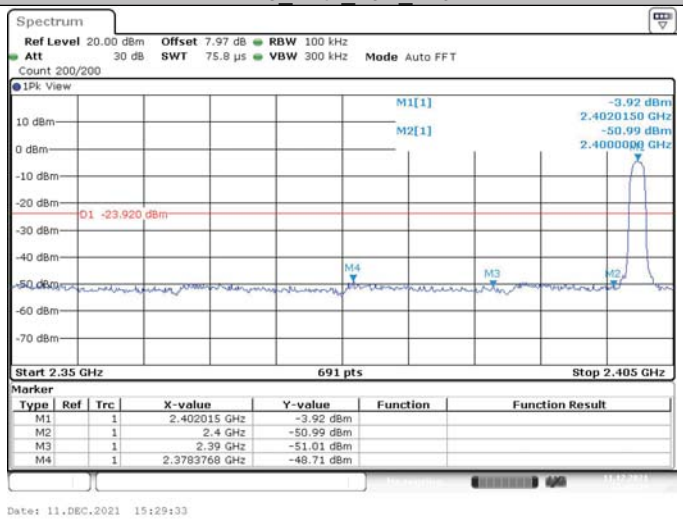
DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480



2DH5_Ant1_Low_2402



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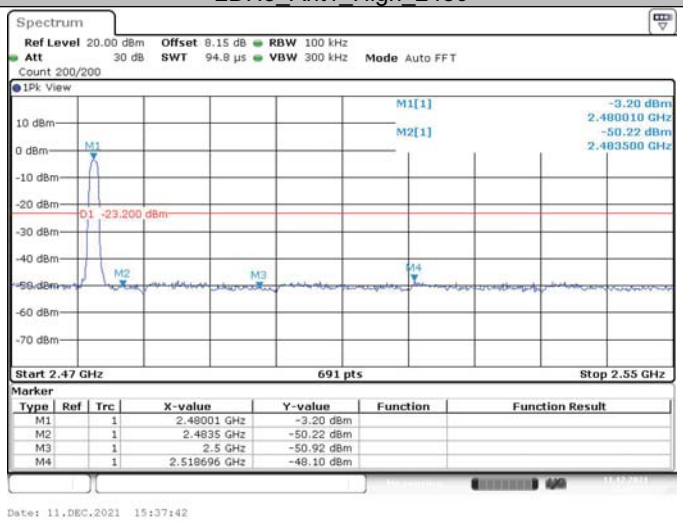

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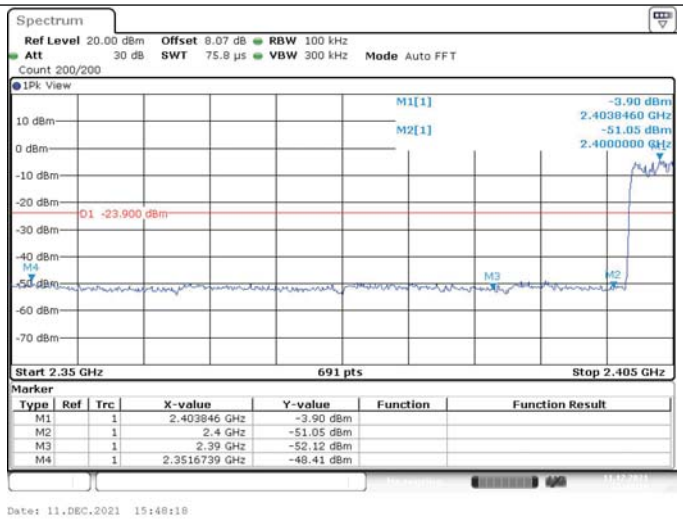

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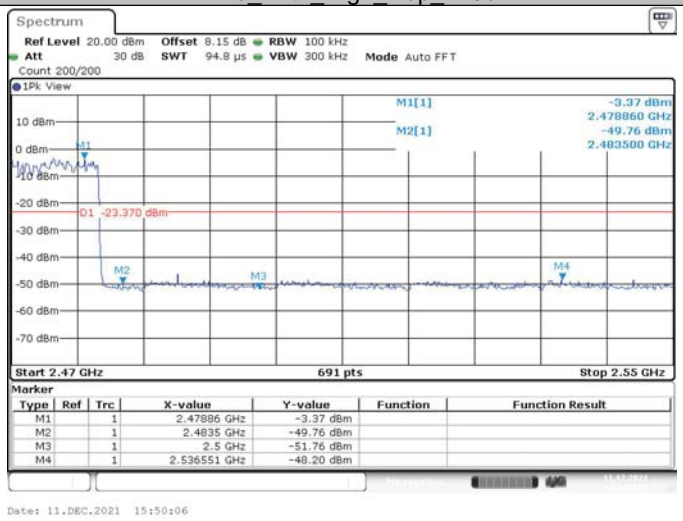
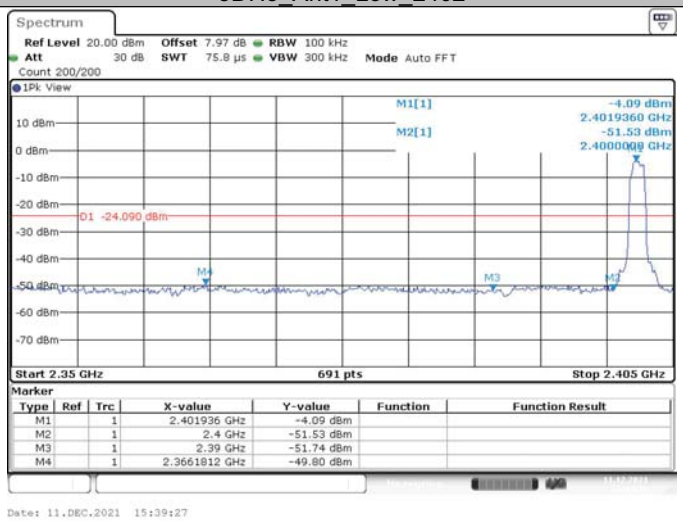


3DH5_Ant1_Low_2402



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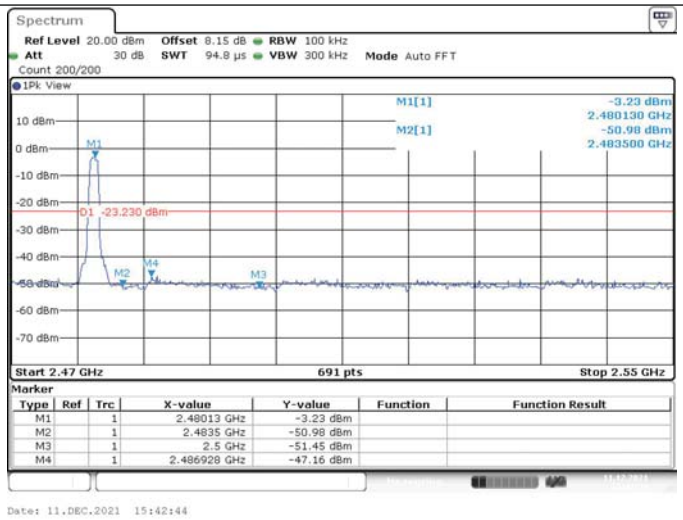

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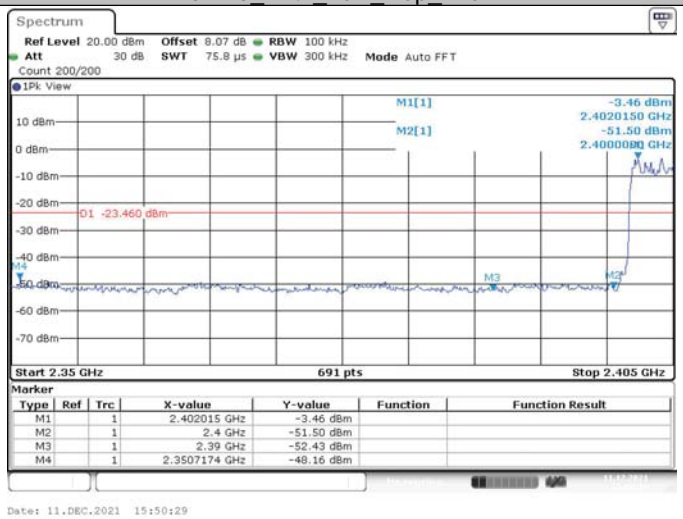

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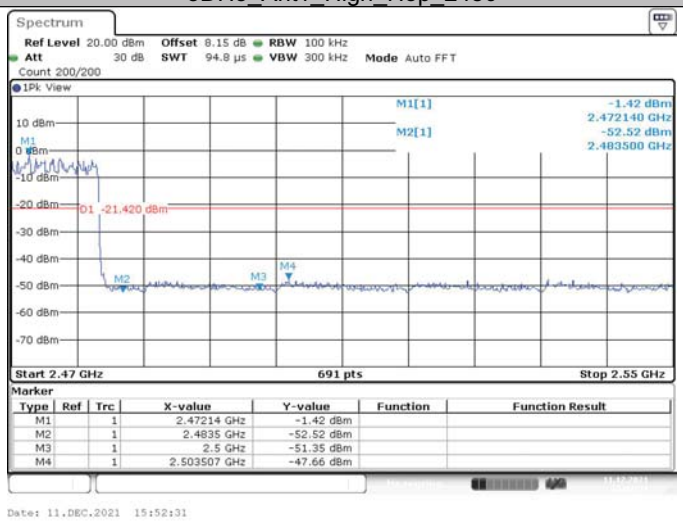
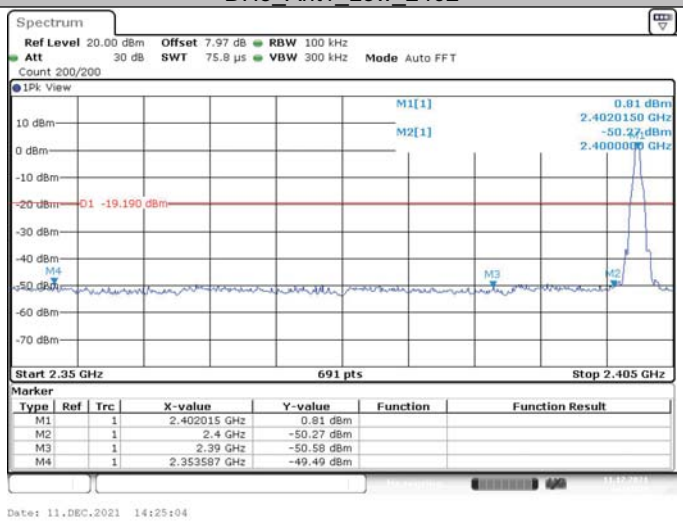


7.6.1 Test Graphs-Right

DH5_Ant1_Low_2402



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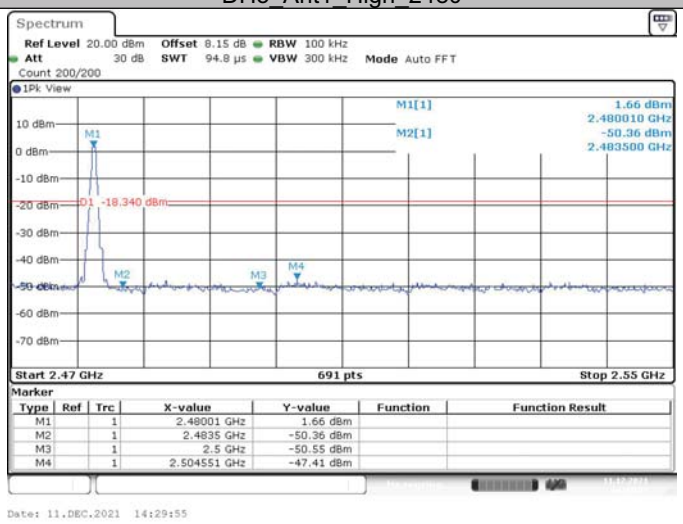
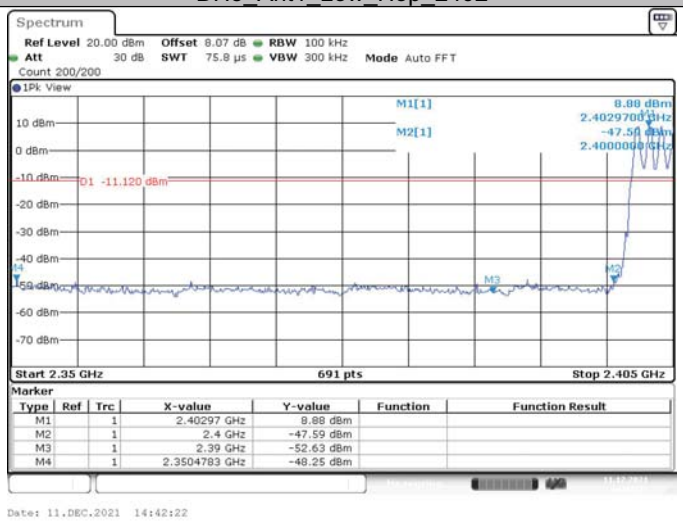


DH5_Ant1_Low_Hop_2402



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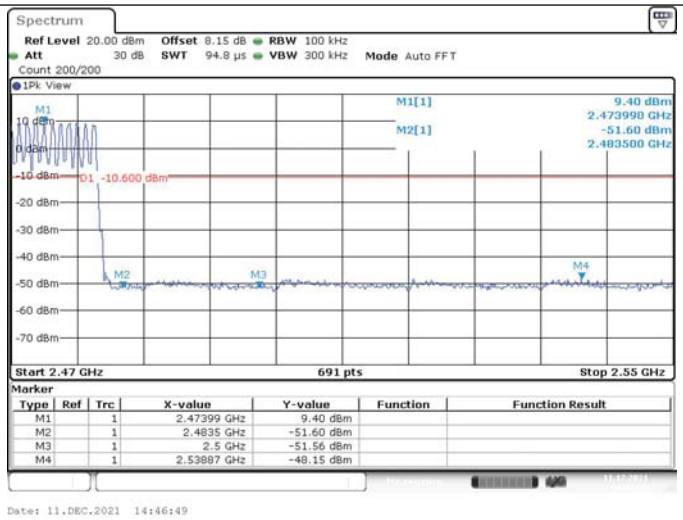
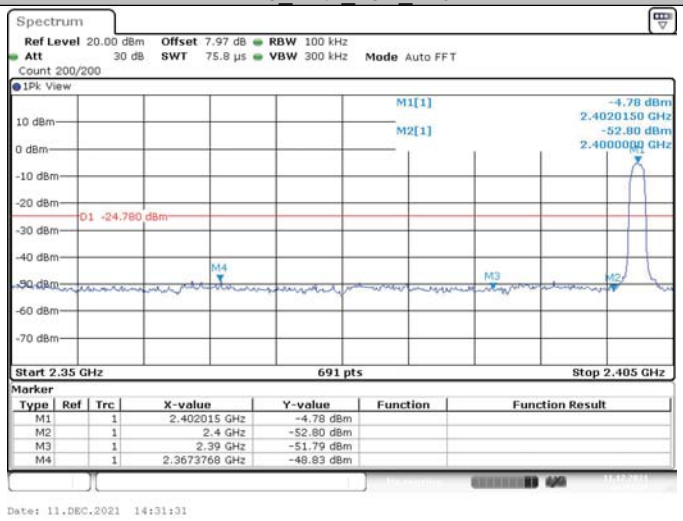


2DH5_Ant1_Low_2402



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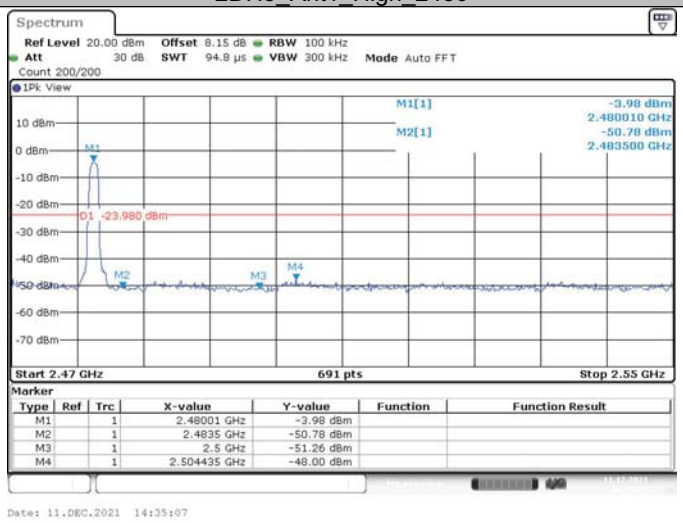
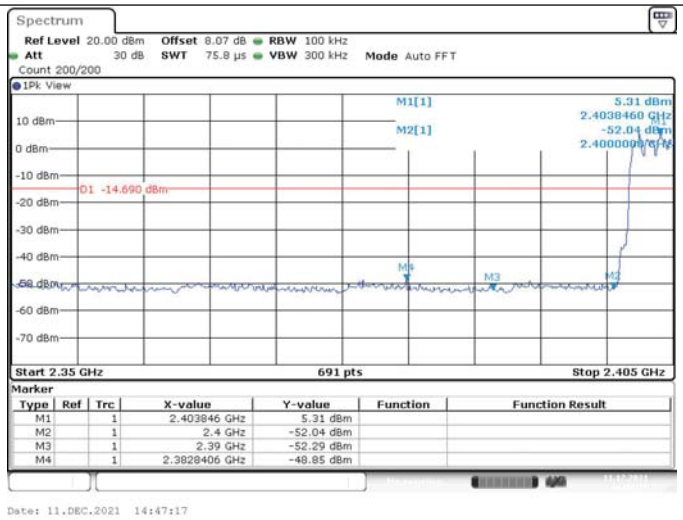


2DH5_Ant1_Low_Hop_2402



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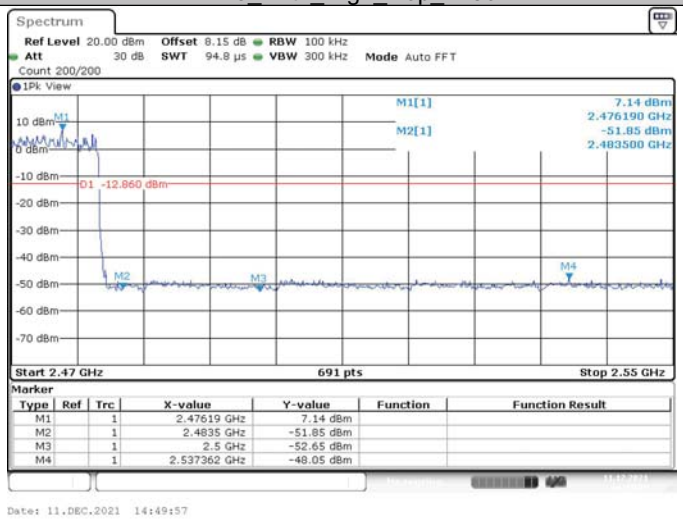
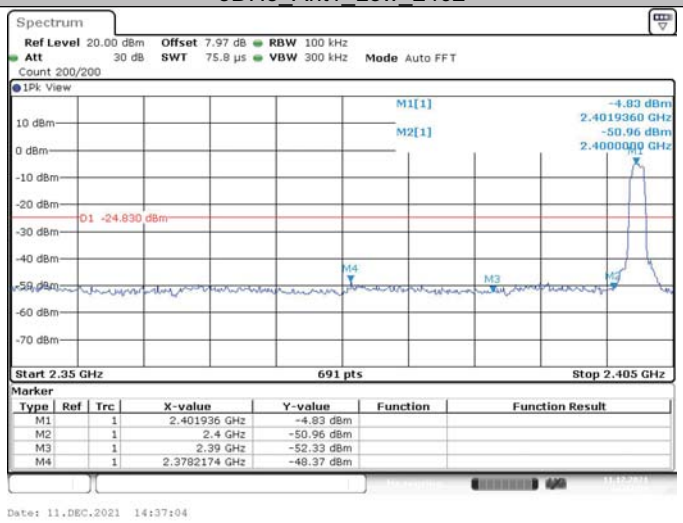
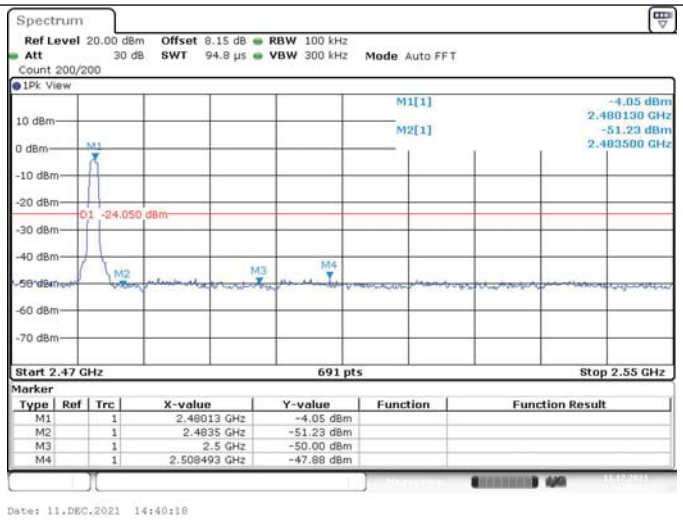


3DH5_Ant1_Low_2402



3DH5_Ant1_High_2480



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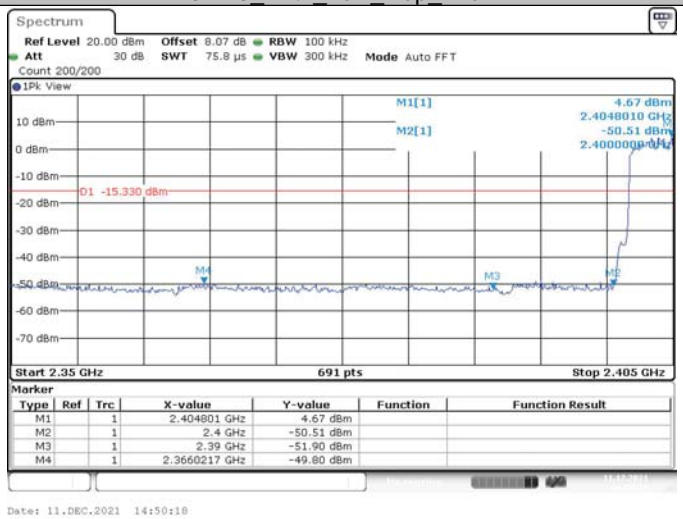
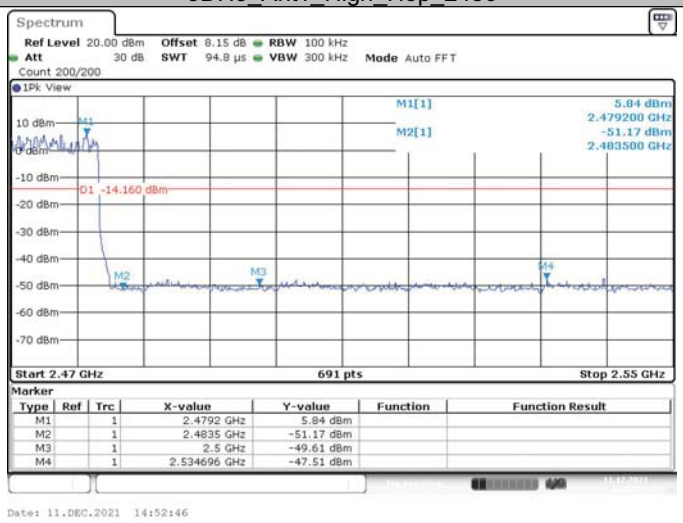


3DH5_Ant1_High_Hop_2480



7.7 Out of band Emission Measurement

7.7.1 Test Result-Left

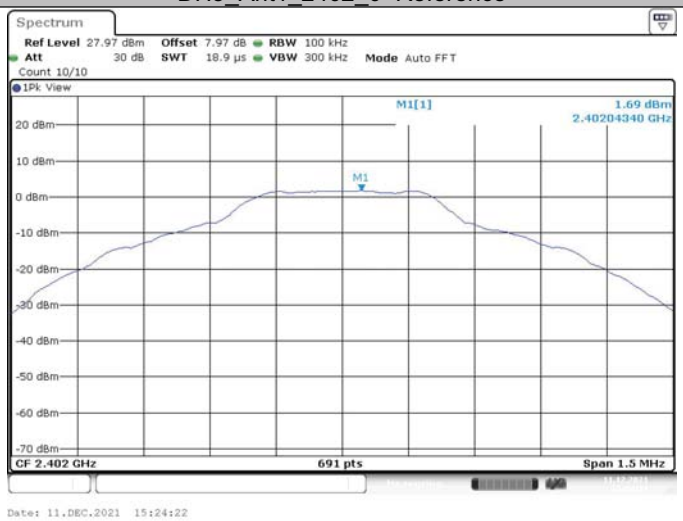
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	1.69	1.69	---	PASS
			30~1000	1.69	-56.1	≤-18.31	PASS
			1000~26500	1.69	-48.88	≤-18.31	PASS
		2441	Reference	2.08	2.08	---	PASS
			30~1000	2.08	-55.3	≤-17.92	PASS
			1000~26500	2.08	-48.17	≤-17.92	PASS
		2480	Reference	2.43	2.43	---	PASS
			30~1000	2.43	-55.52	≤-17.57	PASS
			1000~26500	2.43	-48.87	≤-17.57	PASS
2DH5	Ant1	2402	Reference	-3.87	-3.87	---	PASS
			30~1000	-3.87	-55.46	≤-23.87	PASS
			1000~26500	-3.87	-47.84	≤-23.87	PASS
		2441	Reference	-3.53	-3.53	---	PASS
			30~1000	-3.53	-55.77	≤-23.53	PASS
			1000~26500	-3.53	-47.09	≤-23.53	PASS
		2480	Reference	-3.12	-3.12	---	PASS
			30~1000	-3.12	-55.58	≤-23.12	PASS
			1000~26500	-3.12	-48.75	≤-23.12	PASS
3DH5	Ant1	2402	Reference	-4.01	-4.01	---	PASS
			30~1000	-4.01	-55.65	≤-24.01	PASS
			1000~26500	-4.01	-49.29	≤-24.01	PASS
		2441	Reference	-3.60	-3.60	---	PASS
			30~1000	-3.60	-55.75	≤-23.6	PASS
			1000~26500	-3.60	-48.68	≤-23.6	PASS
		2480	Reference	-3.26	-3.26	---	PASS
			30~1000	-3.26	-55.55	≤-23.26	PASS
			1000~26500	-3.26	-47.92	≤-23.26	PASS

7.7.1 Test Result-Right

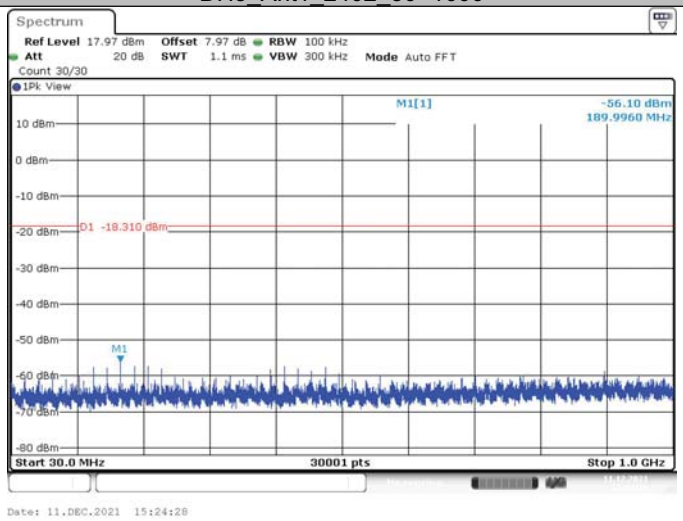
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.84	0.84	---	PASS
			30~1000	0.84	-50.19	≤-19.16	PASS
			1000~26500	0.84	-49.09	≤-19.16	PASS
		2441	Reference	1.05	1.05	---	PASS
			30~1000	1.05	-49.97	≤-18.95	PASS
			1000~26500	1.05	-48.52	≤-18.95	PASS
		2480	Reference	1.63	1.63	---	PASS
			30~1000	1.63	-50.11	≤-18.37	PASS
			1000~26500	1.63	-48.69	≤-18.37	PASS
2DH5	Ant1	2402	Reference	-4.61	-4.61	---	PASS
			30~1000	-4.61	-50.11	≤-24.61	PASS
			1000~26500	-4.61	-48.89	≤-24.61	PASS
		2441	Reference	-4.50	-4.50	---	PASS
			30~1000	-4.50	-49.9	≤-24.5	PASS
			1000~26500	-4.50	-48.92	≤-24.5	PASS
		2480	Reference	-3.95	-3.95	---	PASS
			30~1000	-3.95	-50.05	≤-23.95	PASS
			1000~26500	-3.95	-48.48	≤-23.95	PASS
3DH5	Ant1	2402	Reference	-4.73	-4.73	---	PASS
			30~1000	-4.73	-49.93	≤-24.73	PASS
			1000~26500	-4.73	-48.76	≤-24.73	PASS
		2441	Reference	-4.59	-4.59	---	PASS
			30~1000	-4.59	-49.75	≤-24.59	PASS
			1000~26500	-4.59	-49.03	≤-24.59	PASS
		2480	Reference	-3.99	-3.99	---	PASS
			30~1000	-3.99	-49.78	≤-23.99	PASS
			1000~26500	-3.99	-48.08	≤-23.99	PASS

7.7.2 Test Graphs-Left

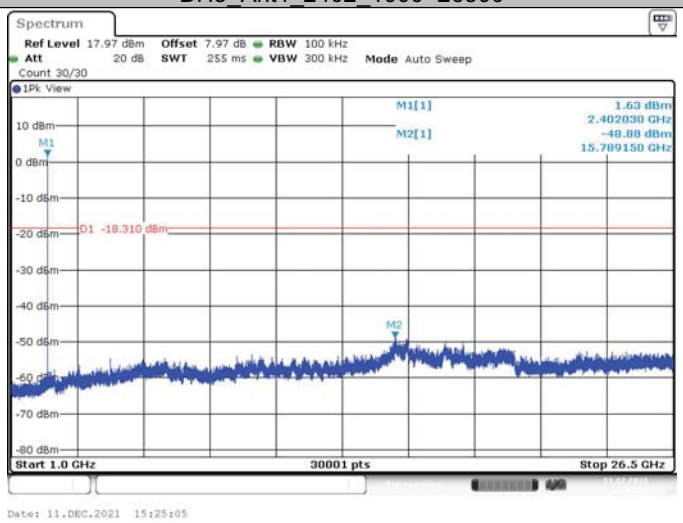
DH5_Ant1_2402_0~Reference



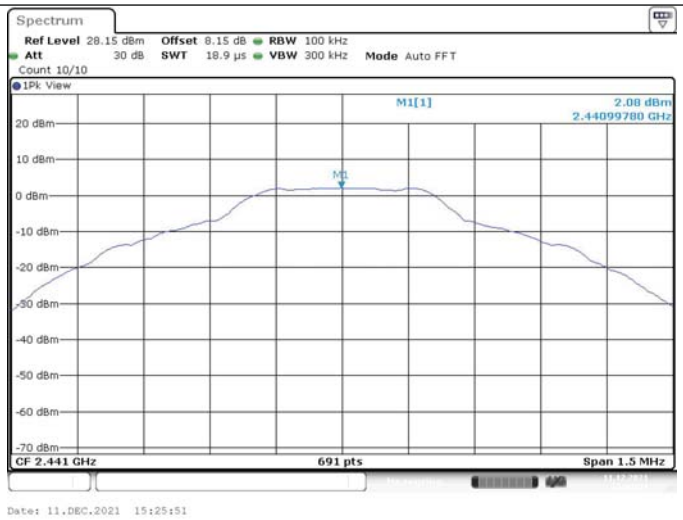
DH5_Ant1_2402_30~1000



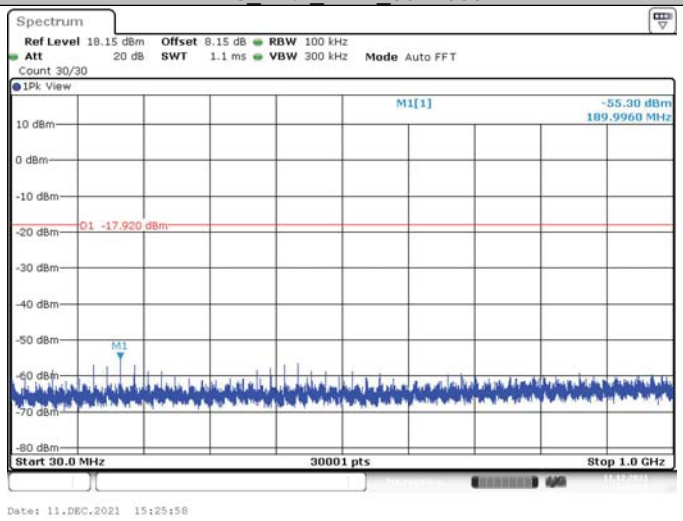
DH5_Ant1_2402_1000~26500



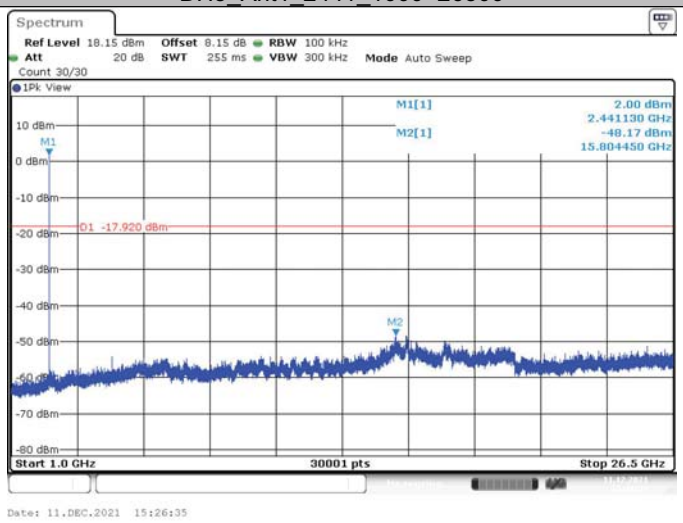
DH5_Ant1_2441_0~Reference



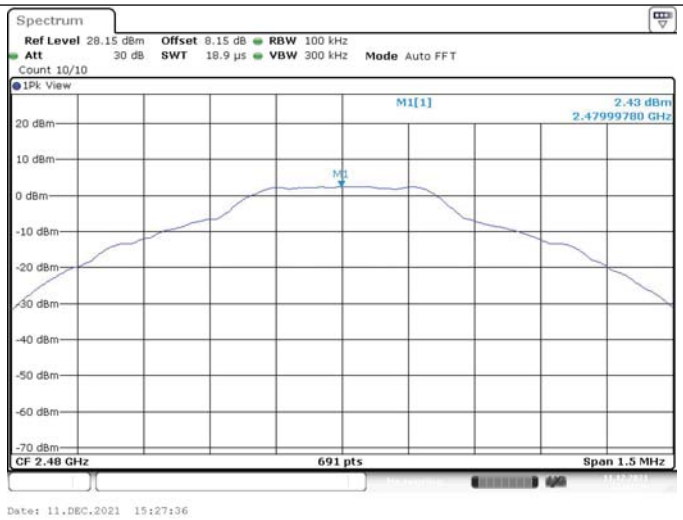
DH5_Ant1_2441_30~1000



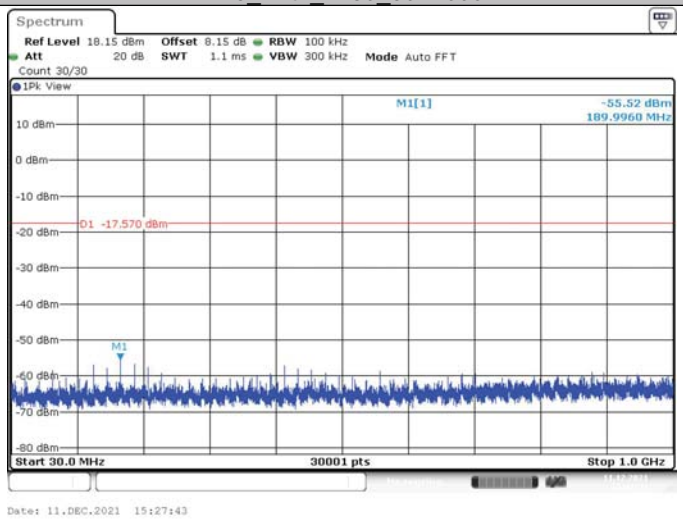
DH5_Ant1_2441_1000~26500



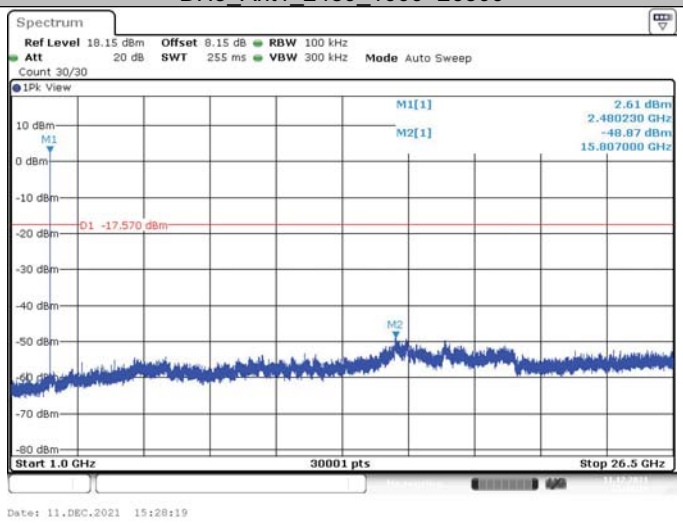
DH5_Ant1_2480_0~Reference



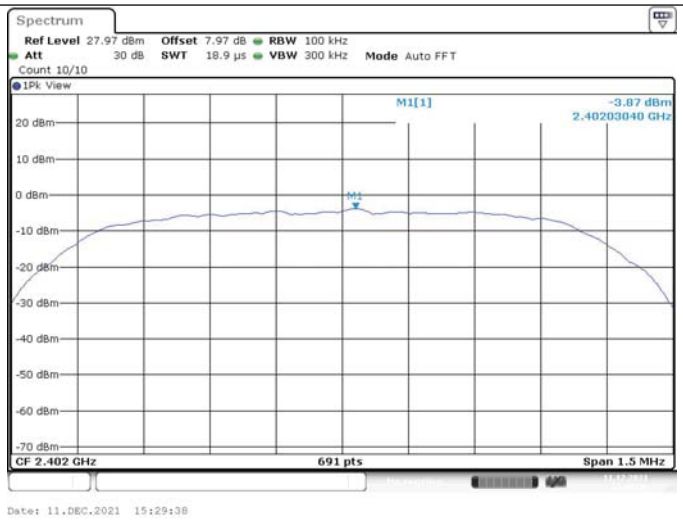
DH5_Ant1_2480_30~1000



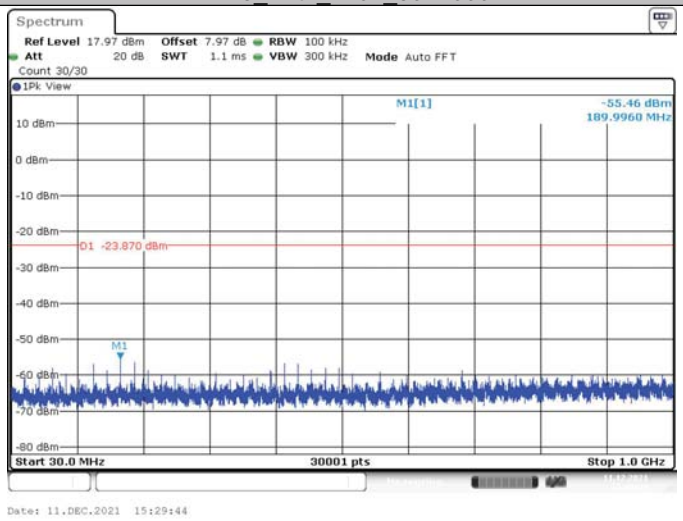
DH5_Ant1_2480_1000~26500



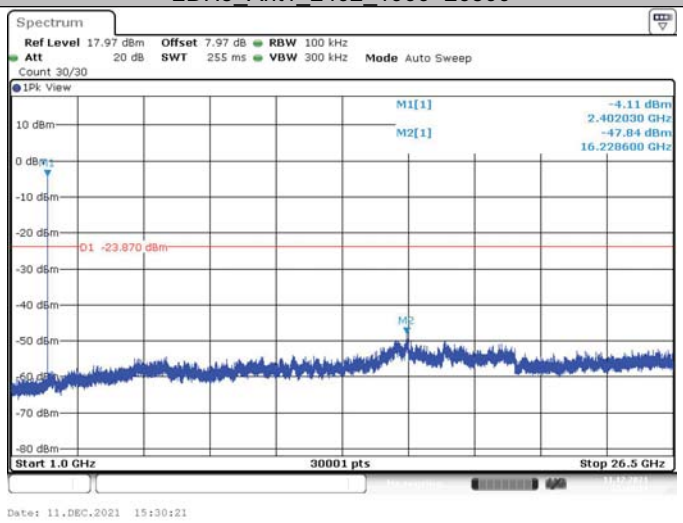
2DH5_Ant1_2402_0~Reference



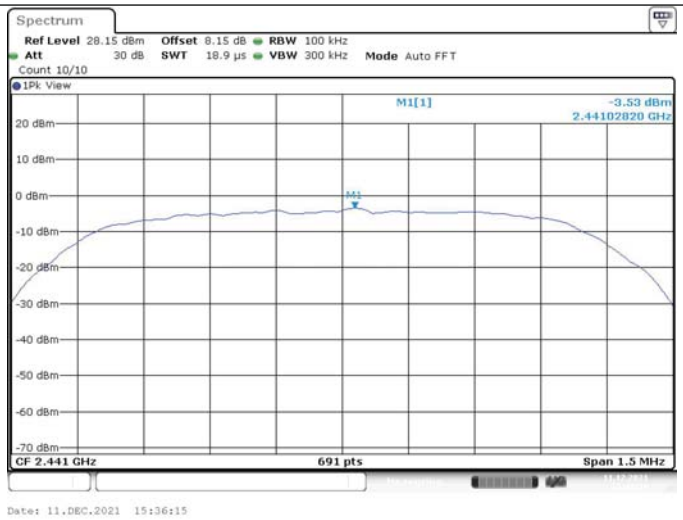
2DH5_Ant1_2402_30~1000



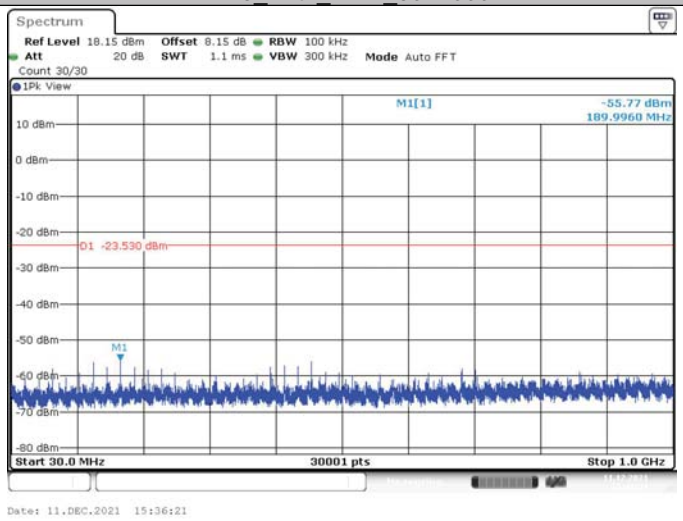
2DH5_Ant1_2402_1000~26500



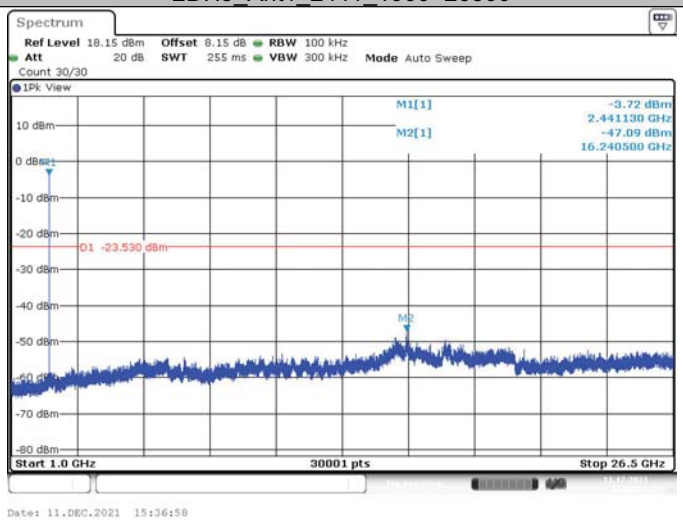
2DH5_Ant1_2441_0~Reference



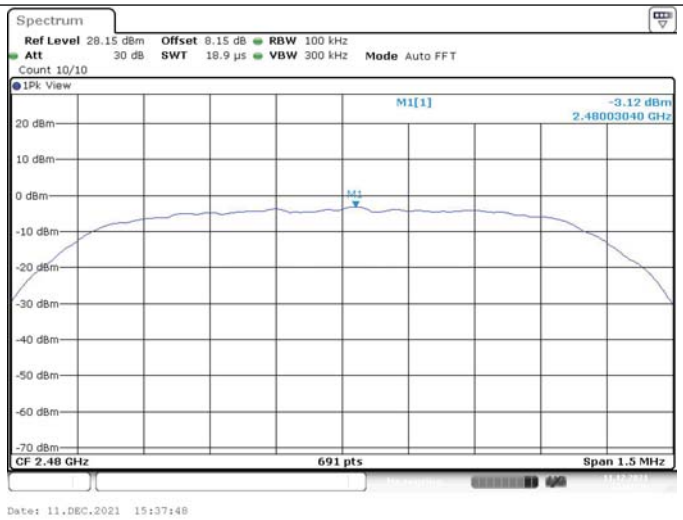
2DH5_Ant1_2441_30~1000



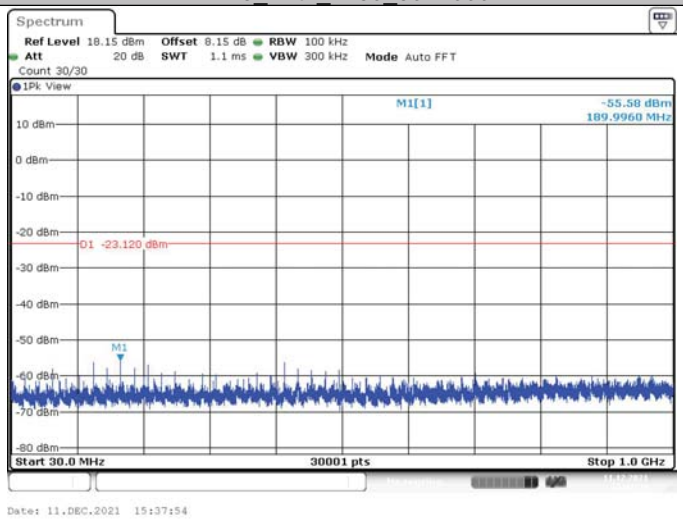
2DH5_Ant1_2441_1000~26500



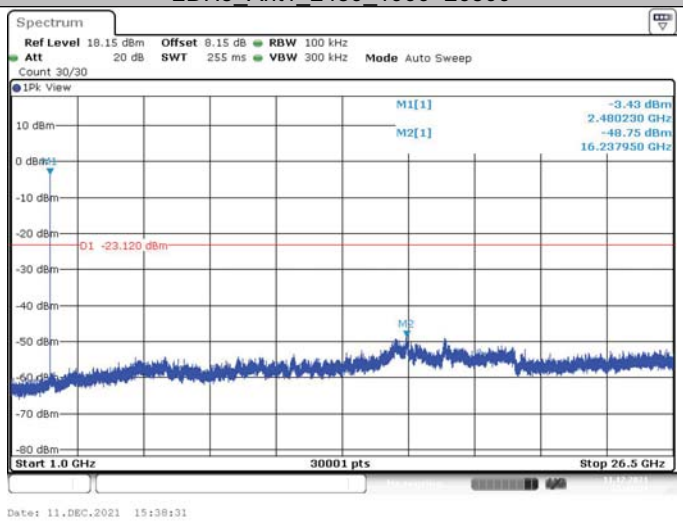
2DH5_Ant1_2480_0~Reference



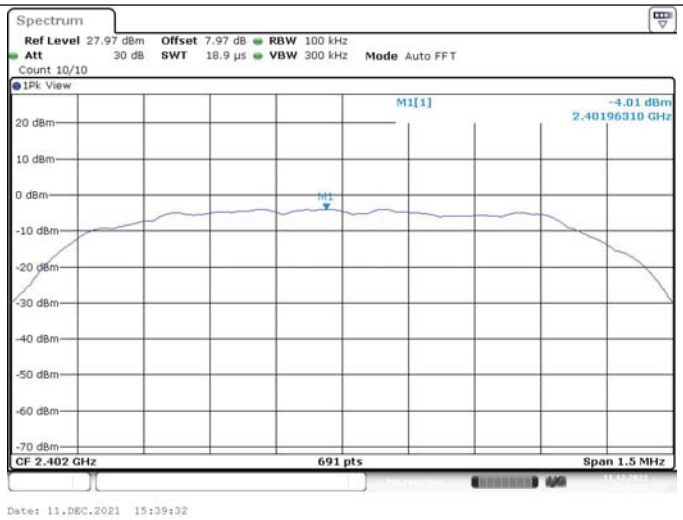
2DH5_Ant1_2480_30~1000



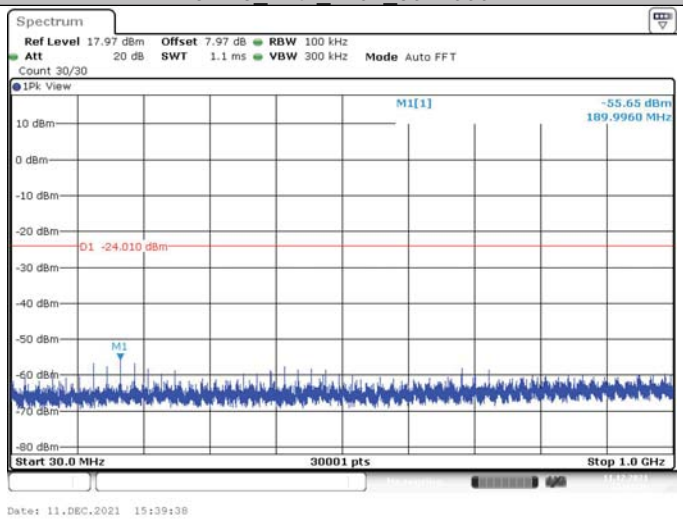
2DH5_Ant1_2480_1000~26500



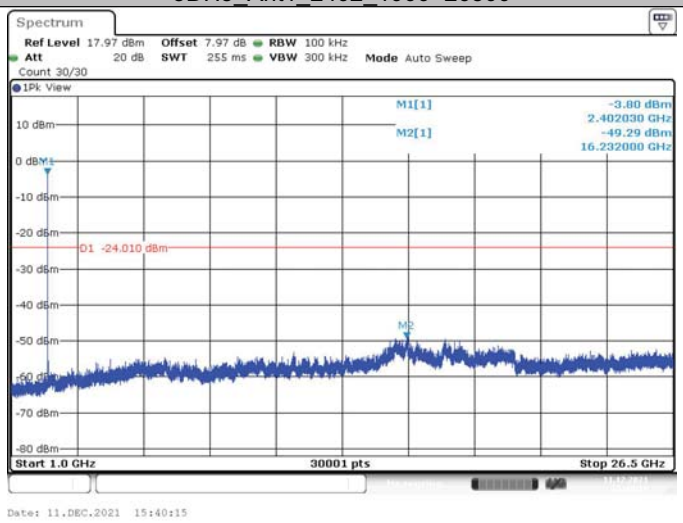
3DH5_Ant1_2402_0~Reference



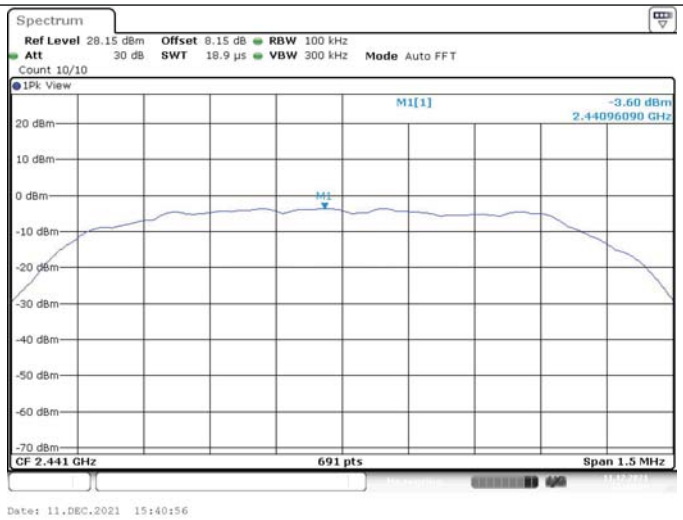
3DH5_Ant1_2402_30~1000



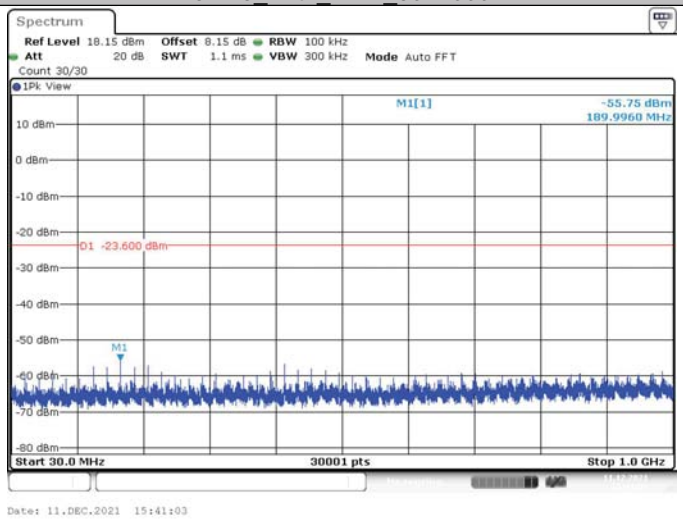
3DH5_Ant1_2402_1000~26500



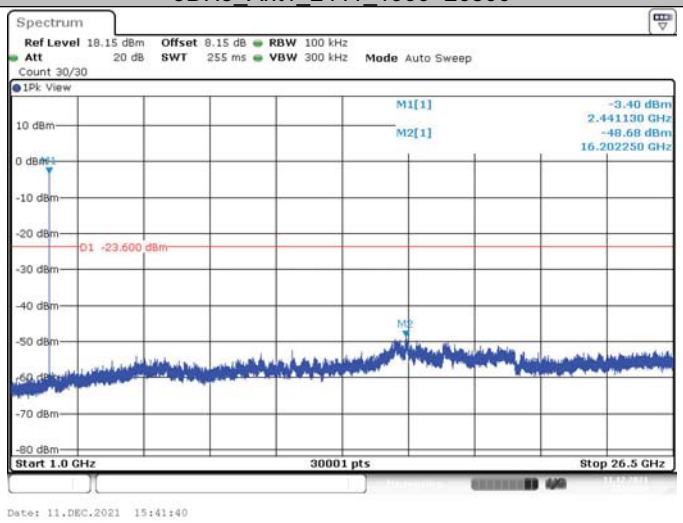
3DH5_Ant1_2441_0~Reference



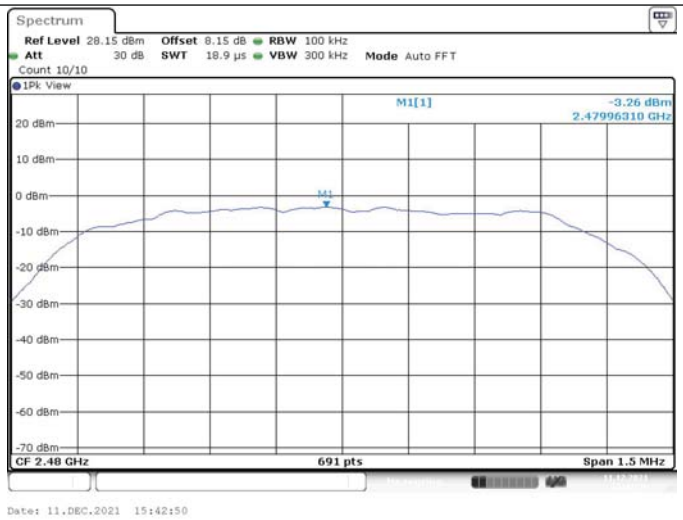
3DH5_Ant1_2441_30~1000



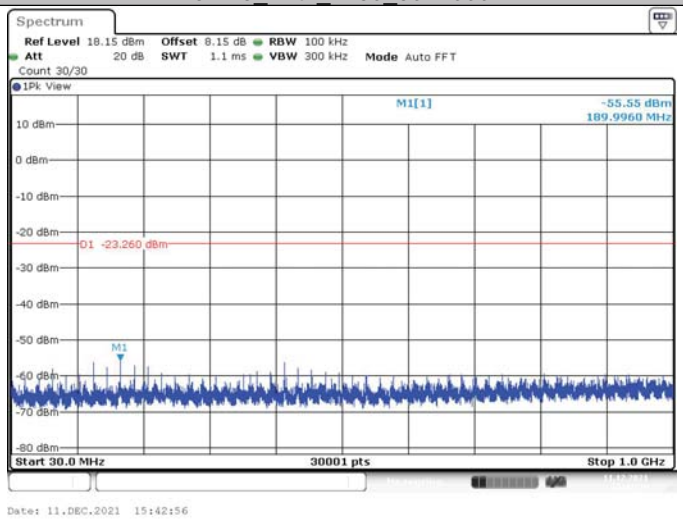
3DH5_Ant1_2441_1000~26500



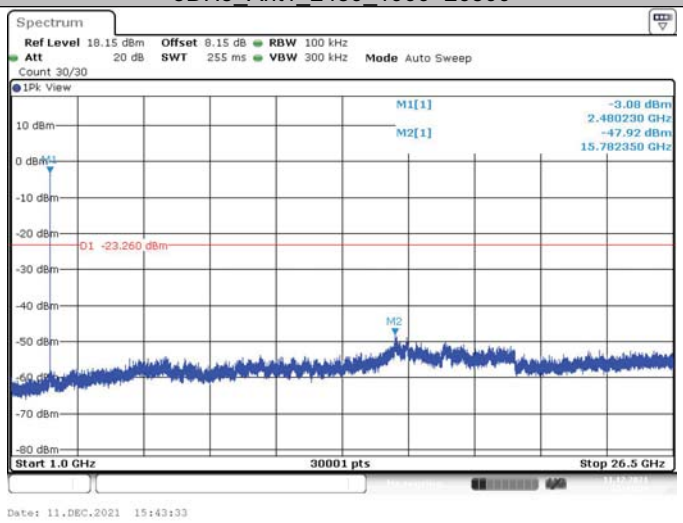
3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000

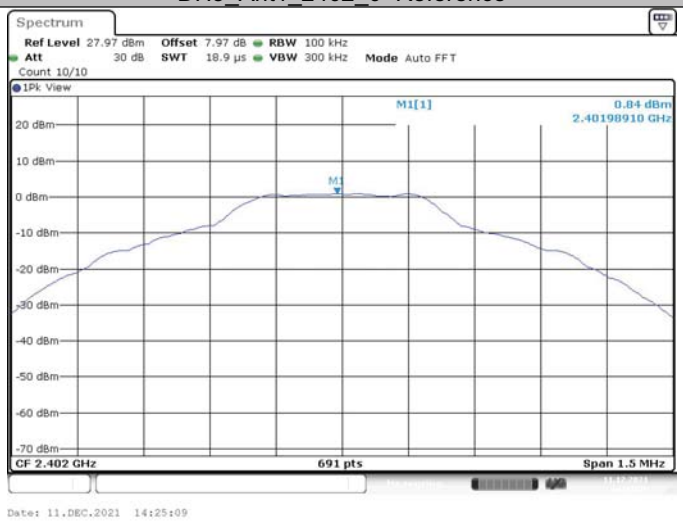


3DH5_Ant1_2480_1000~26500

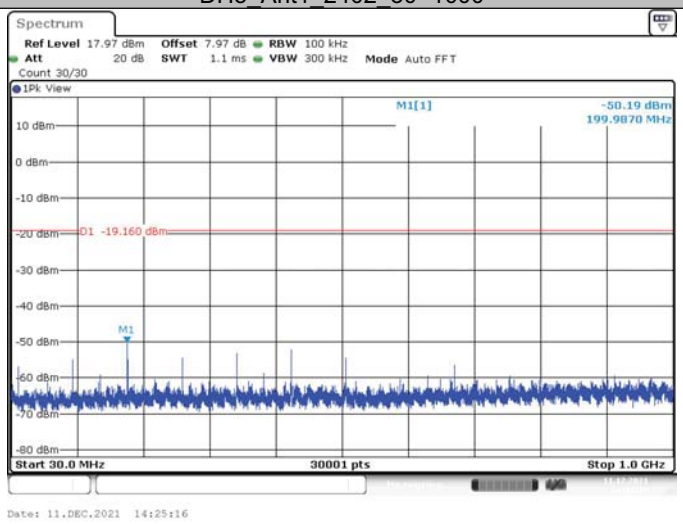


7.7.1 Test Graphs-Right

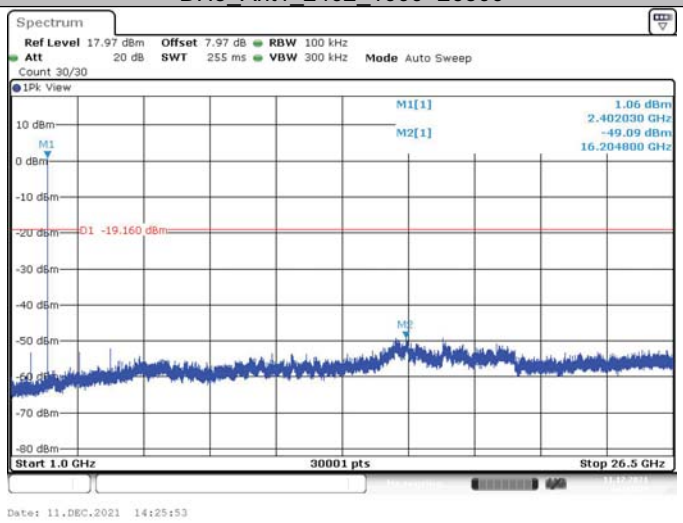
DH5_Ant1_2402_0~Reference



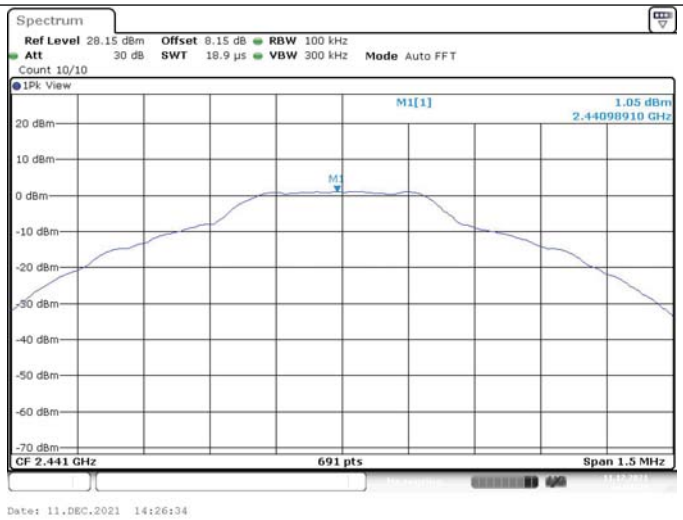
DH5_Ant1_2402_30~1000



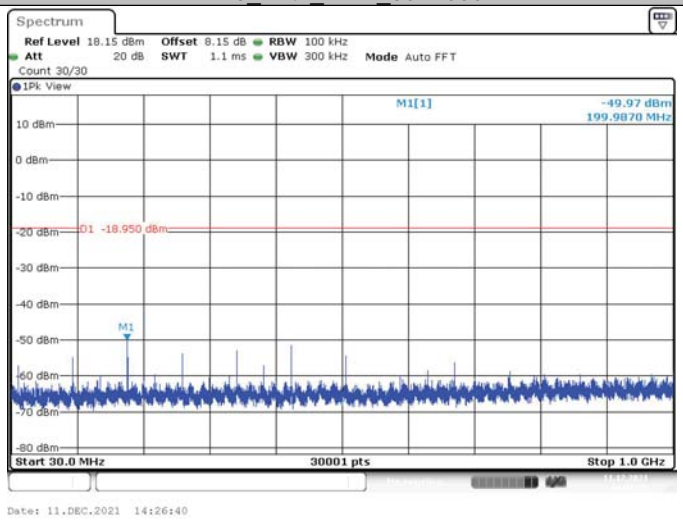
DH5_Ant1_2402_1000~26500



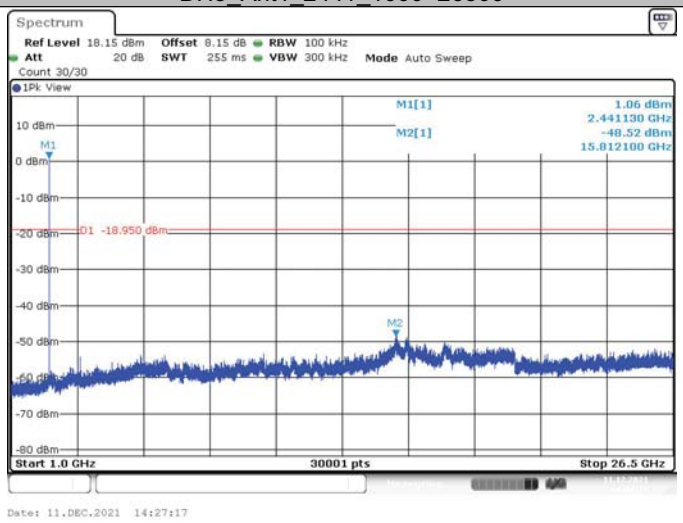
DH5_Ant1_2441_0~Reference



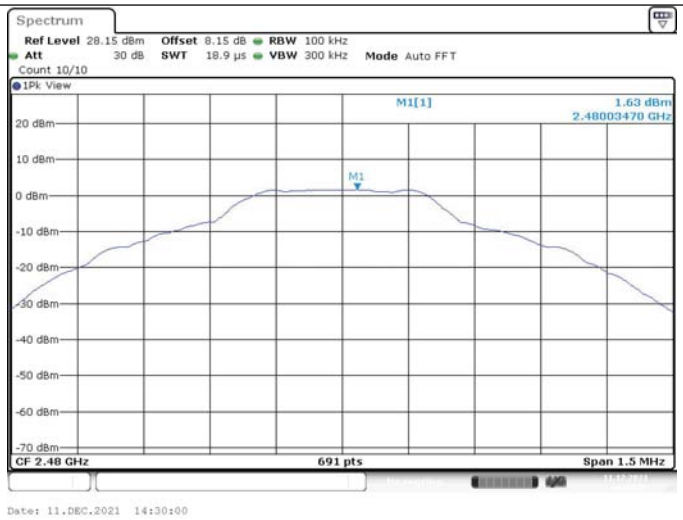
DH5_Ant1_2441_30~1000



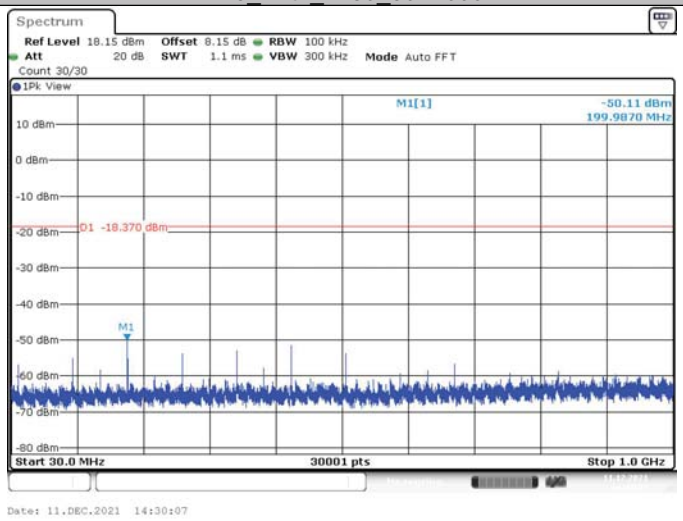
DH5_Ant1_2441_1000~26500



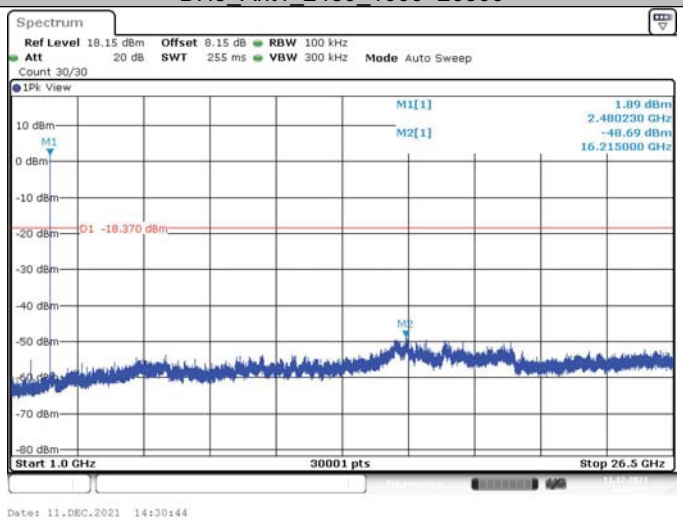
DH5_Ant1_2480_0~Reference



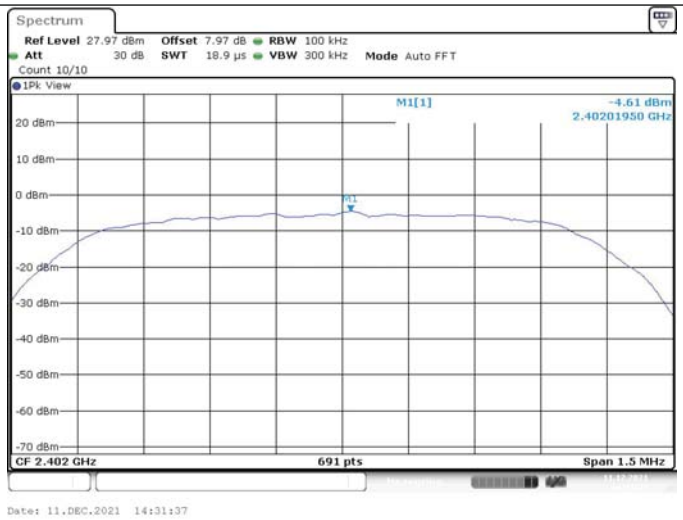
DH5_Ant1_2480_30~1000



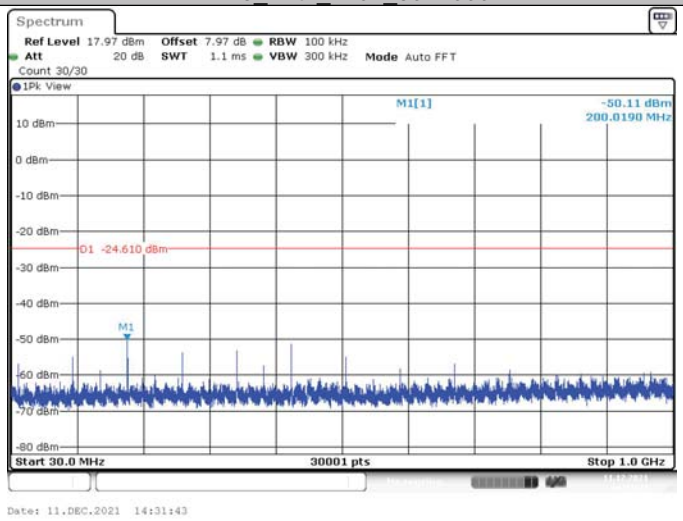
DH5_Ant1_2480_1000~26500



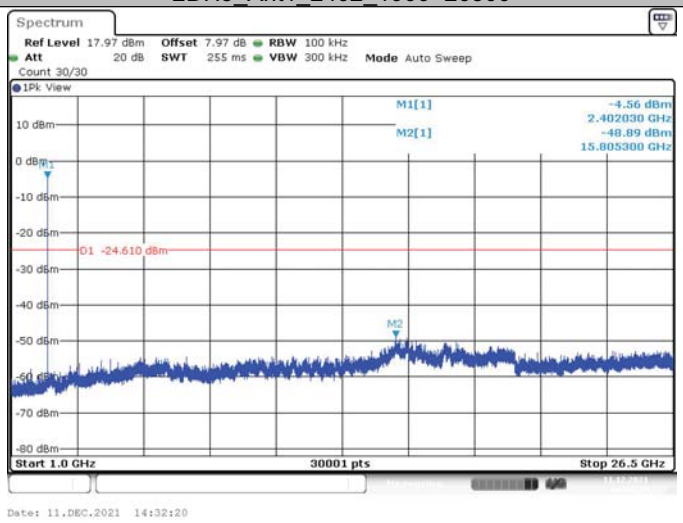
2DH5_Ant1_2402_0~Reference



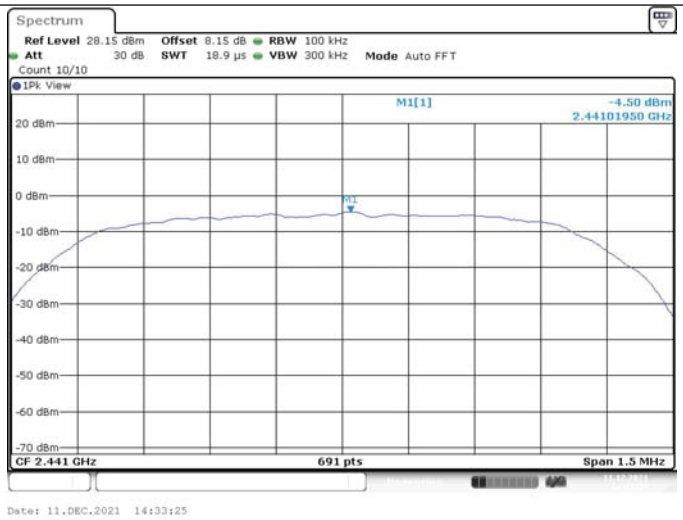
2DH5_Ant1_2402_30~1000



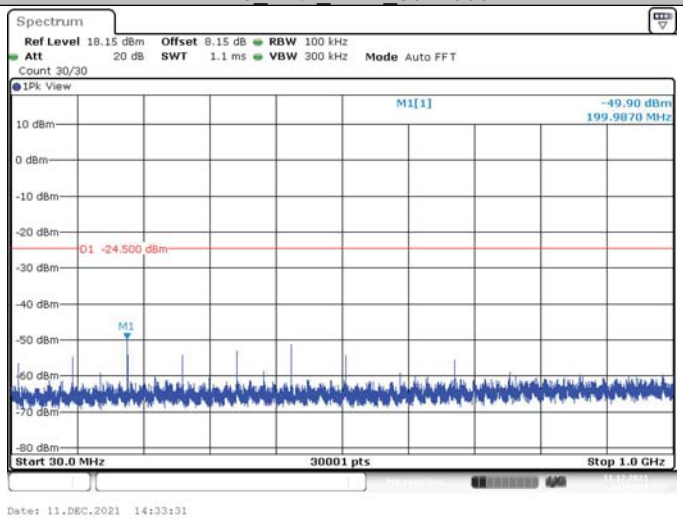
2DH5_Ant1_2402_1000~26500



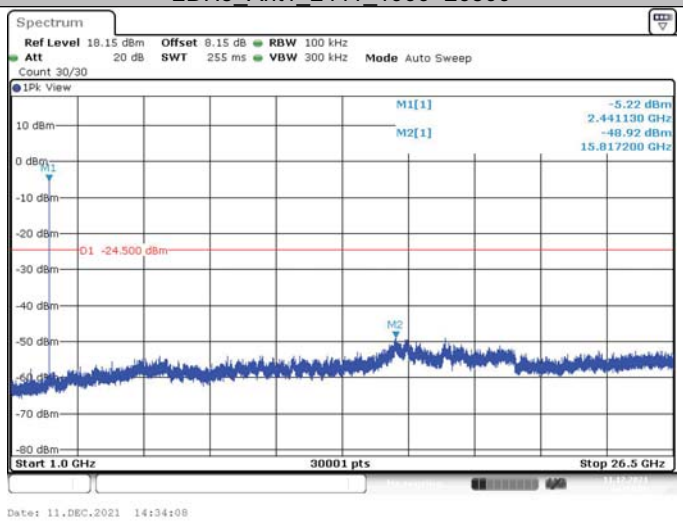
2DH5_Ant1_2441_0~Reference



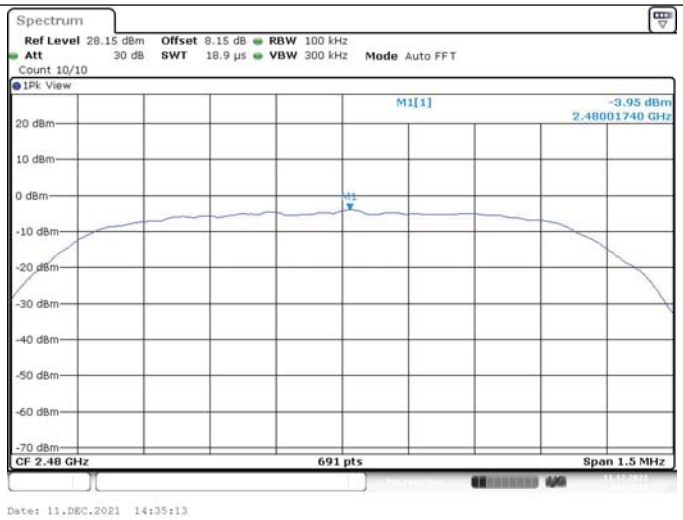
2DH5_Ant1_2441_30~1000



2DH5_Ant1_2441_1000~26500



2DH5_Ant1_2480_0~Reference



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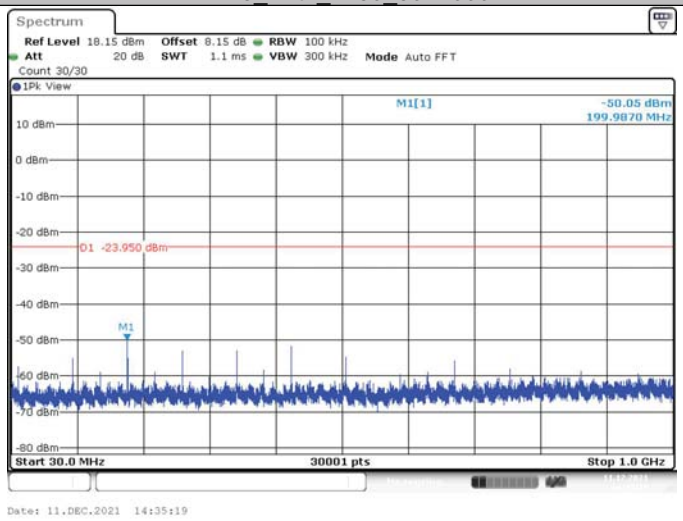

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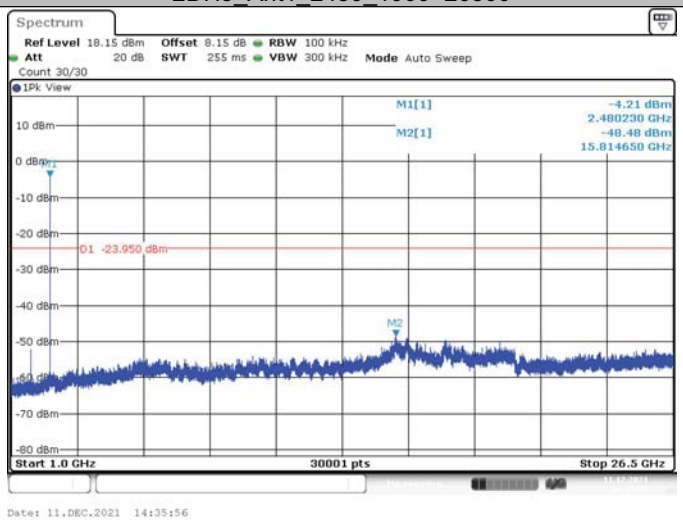

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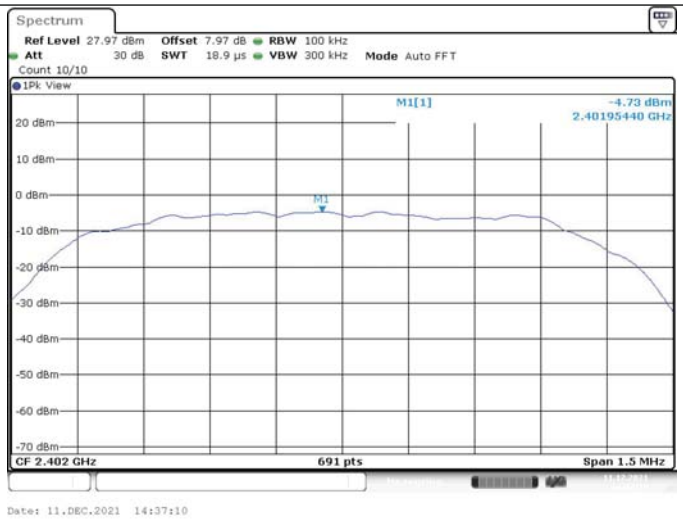

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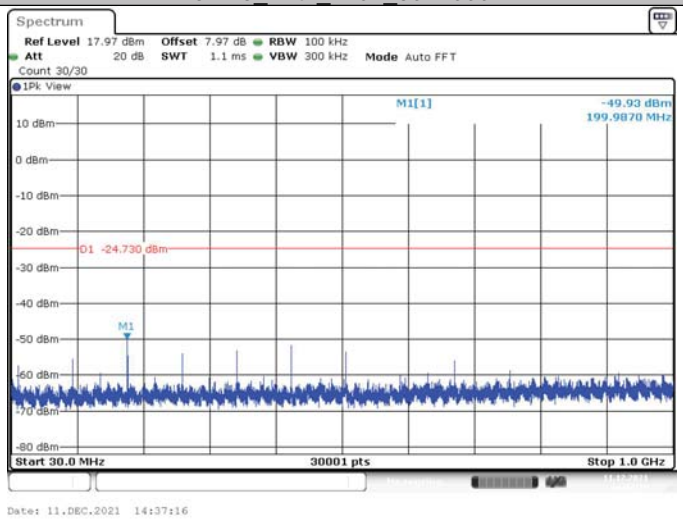

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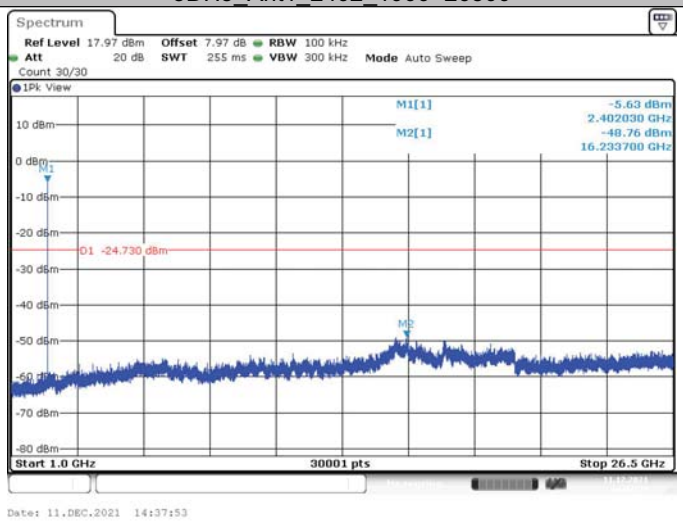

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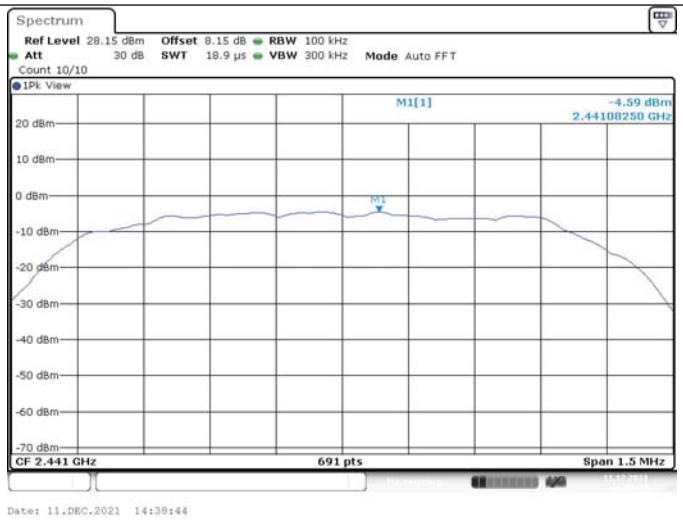

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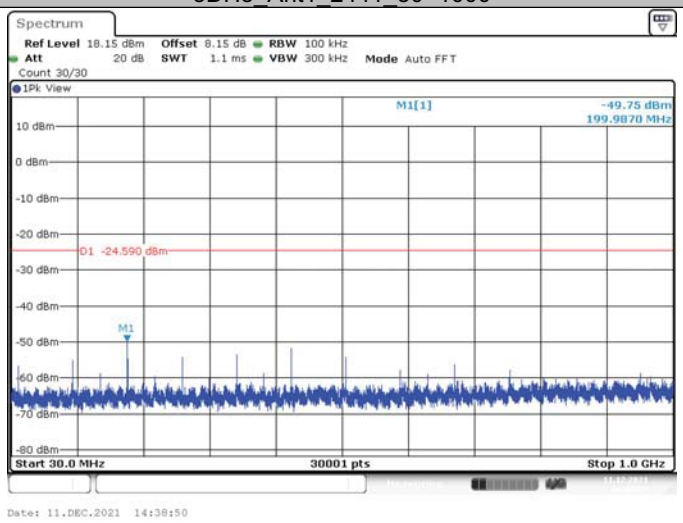

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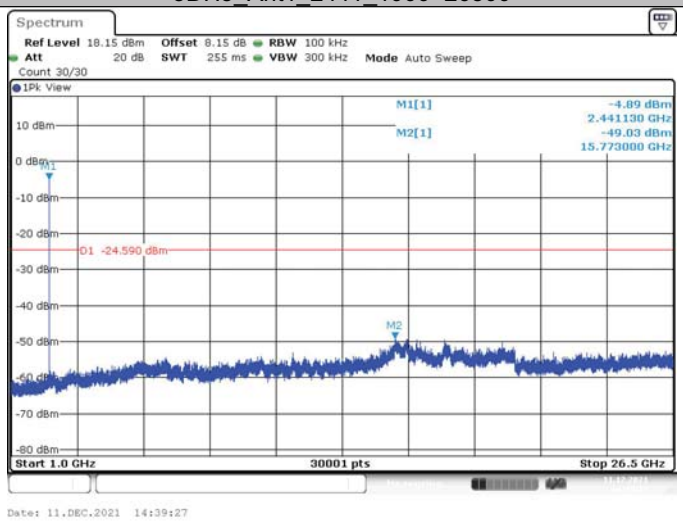

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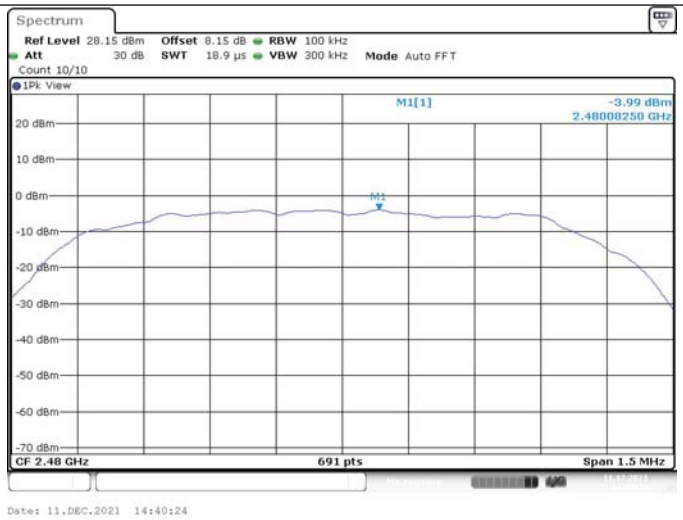

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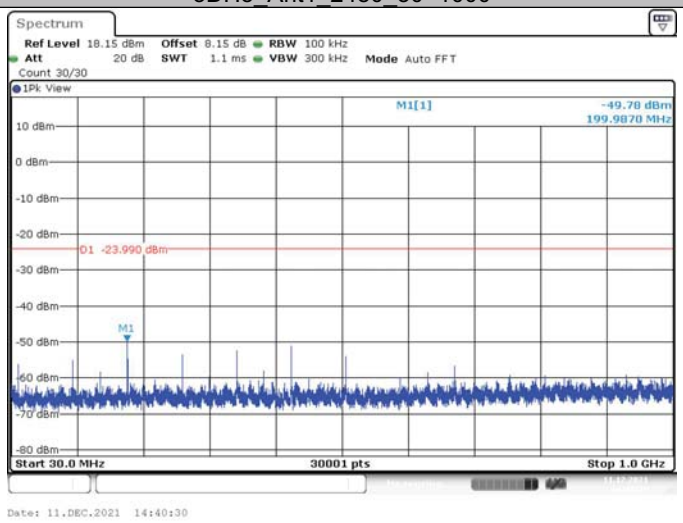

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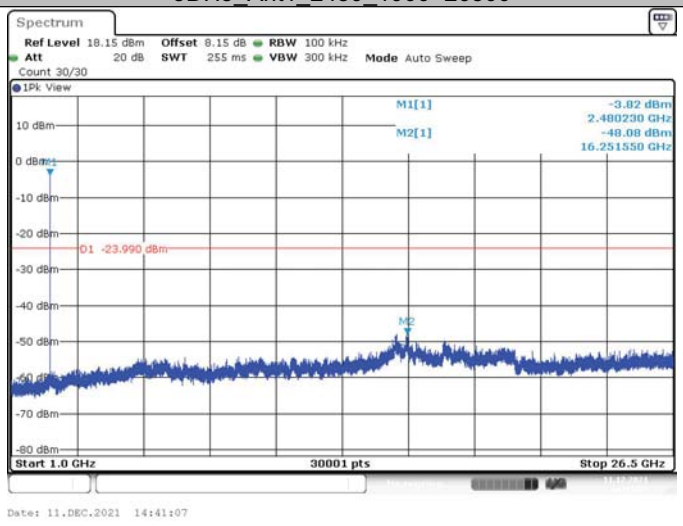

Important

(1) The test report is valid with the official seal of the laboratory and the signatures of Test engineer, Author and Reviewer simultaneously.

(2) The test report is invalid if altered.

(3) Any photocopies or part photocopies in the test report are forbidden without the written permission from the laboratory.

(4) Objections to the test report must be submitted to the laboratory within 15 days.

(5) Generally, commission test is responsible for the tested samples only.

(6)Any photocopies or part photocopies of the test report are forbidden without the written permission from CVC;

Address of the laboratory:

CVC Testing Technology Co., Ltd.
Address: No.3,TiantaiyiRoad,KaitaiAvenue,ScienceCity,Guangzhou,China
Post Code：510663 Tel：020-32293888
FAX：020-32293889 E-mail：office@cvc.org.cn