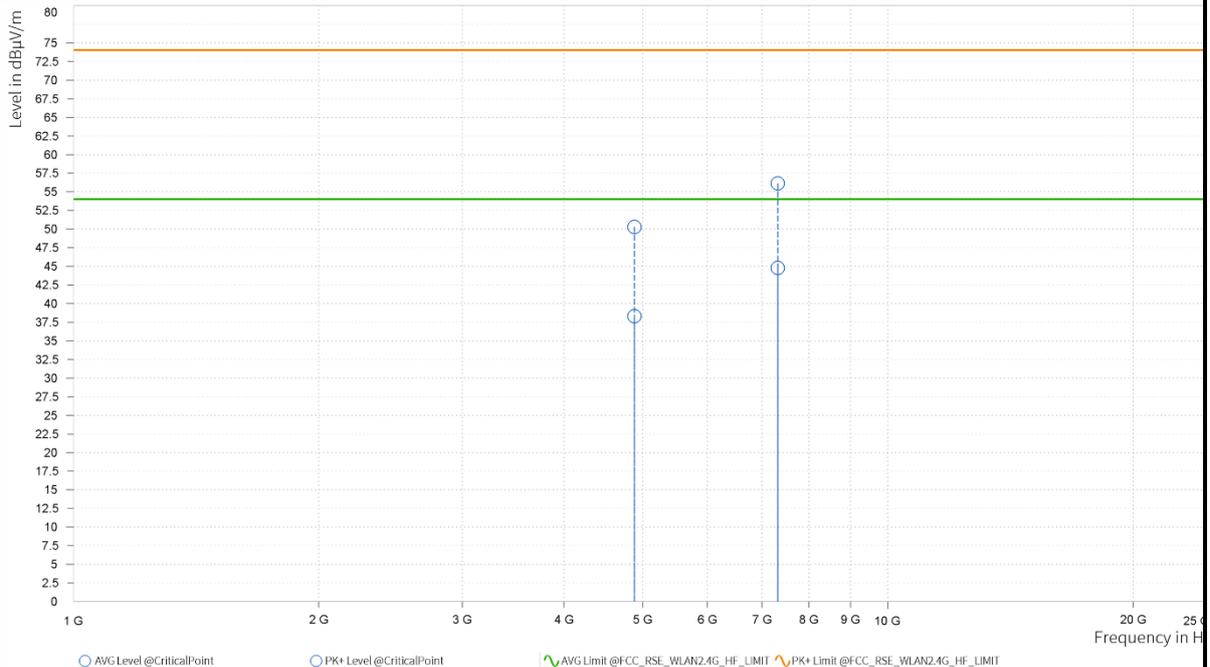


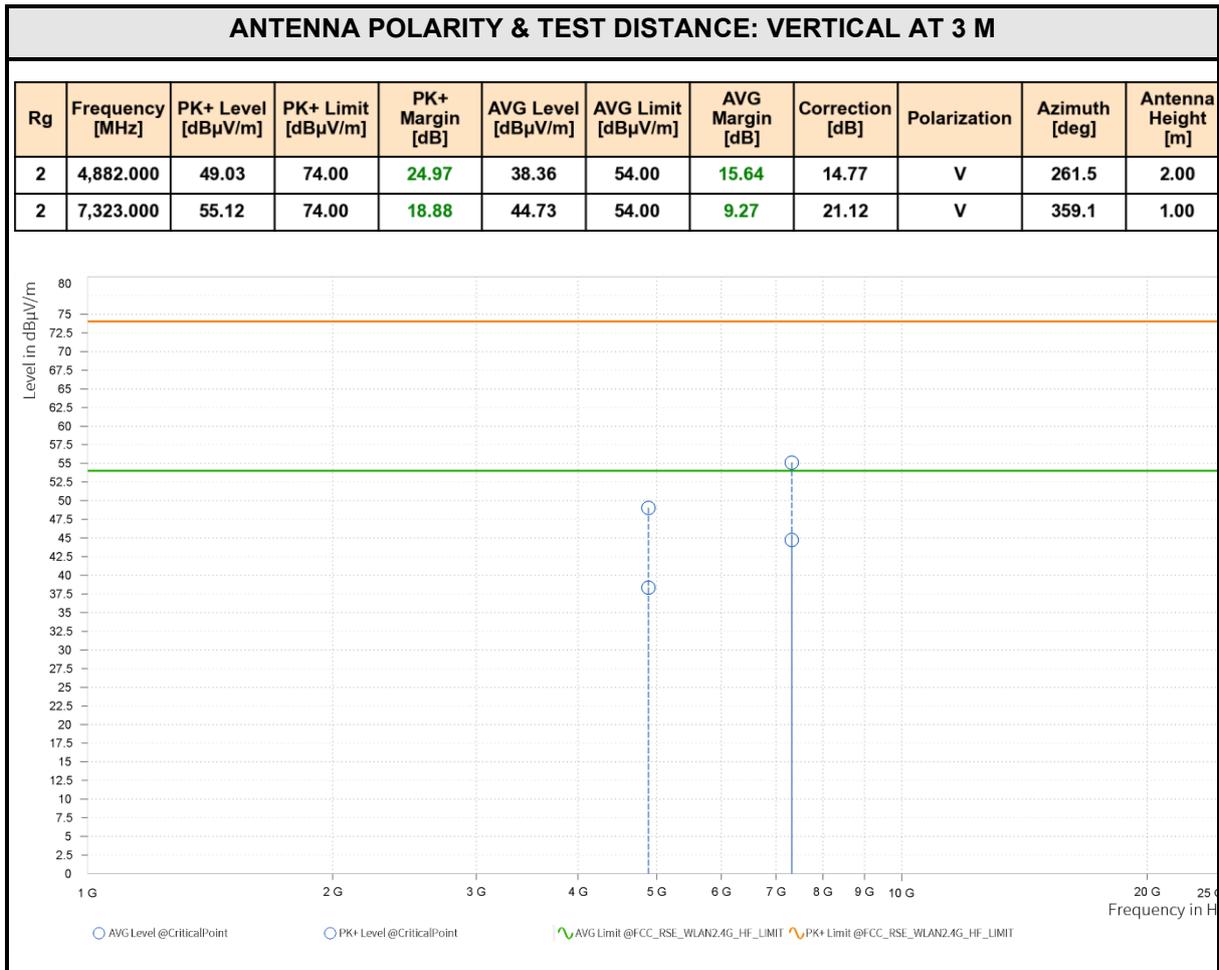


CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,882.000	50.29	74.00	23.71	38.28	54.00	15.72	14.77	H	0.9	2.00
2	7,323.000	56.12	74.00	17.88	44.80	54.00	9.20	21.12	H	96.1	1.00





REMARKS:

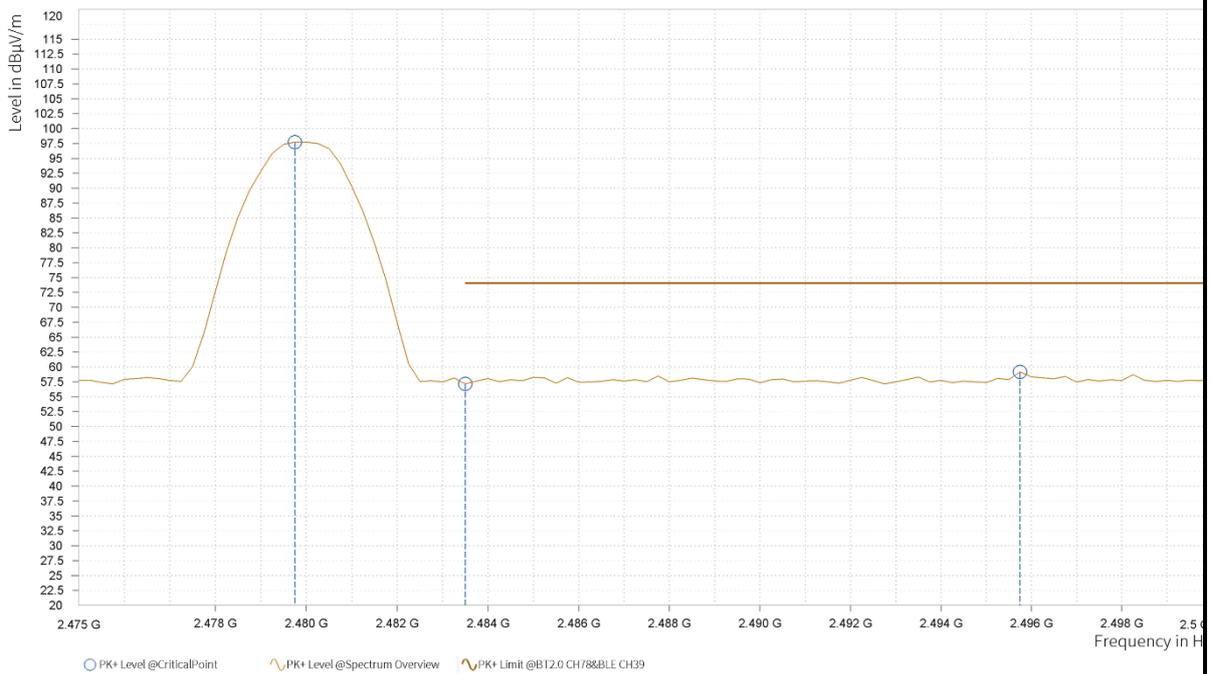
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value – Emission level.
3. 2402MHz: Fundamental frequency.



CHANNEL	TX Channel 78	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,479.750	97.73			37.87	H	177.7	1.00
6	2,483.500	57.16	74.00	16.84	37.88	H	7.8	2.00
6	2,495.750	59.16	74.00	14.84	37.90	H	40.2	1.00





ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

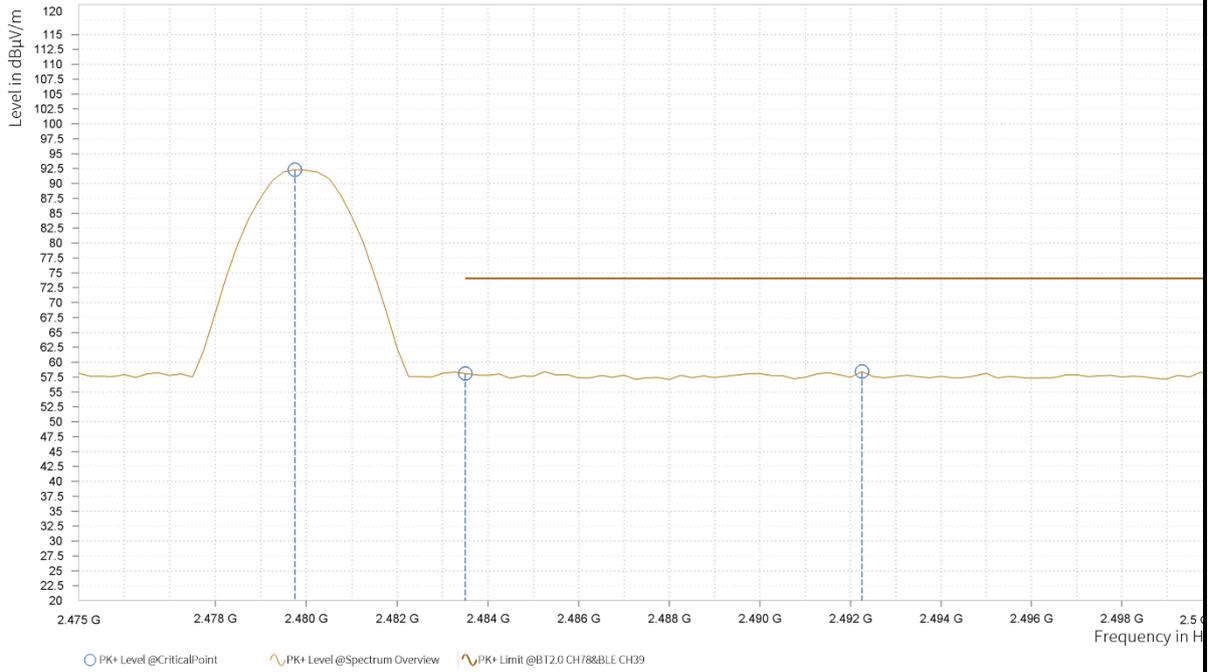
Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.000	89.97			37.87	H	272	1.00
6	2,483.500	43.24	54.00	10.76	37.88	H	272	1.00
6	2,496.500	43.32	54.00	10.68	37.91	H	1	1.00

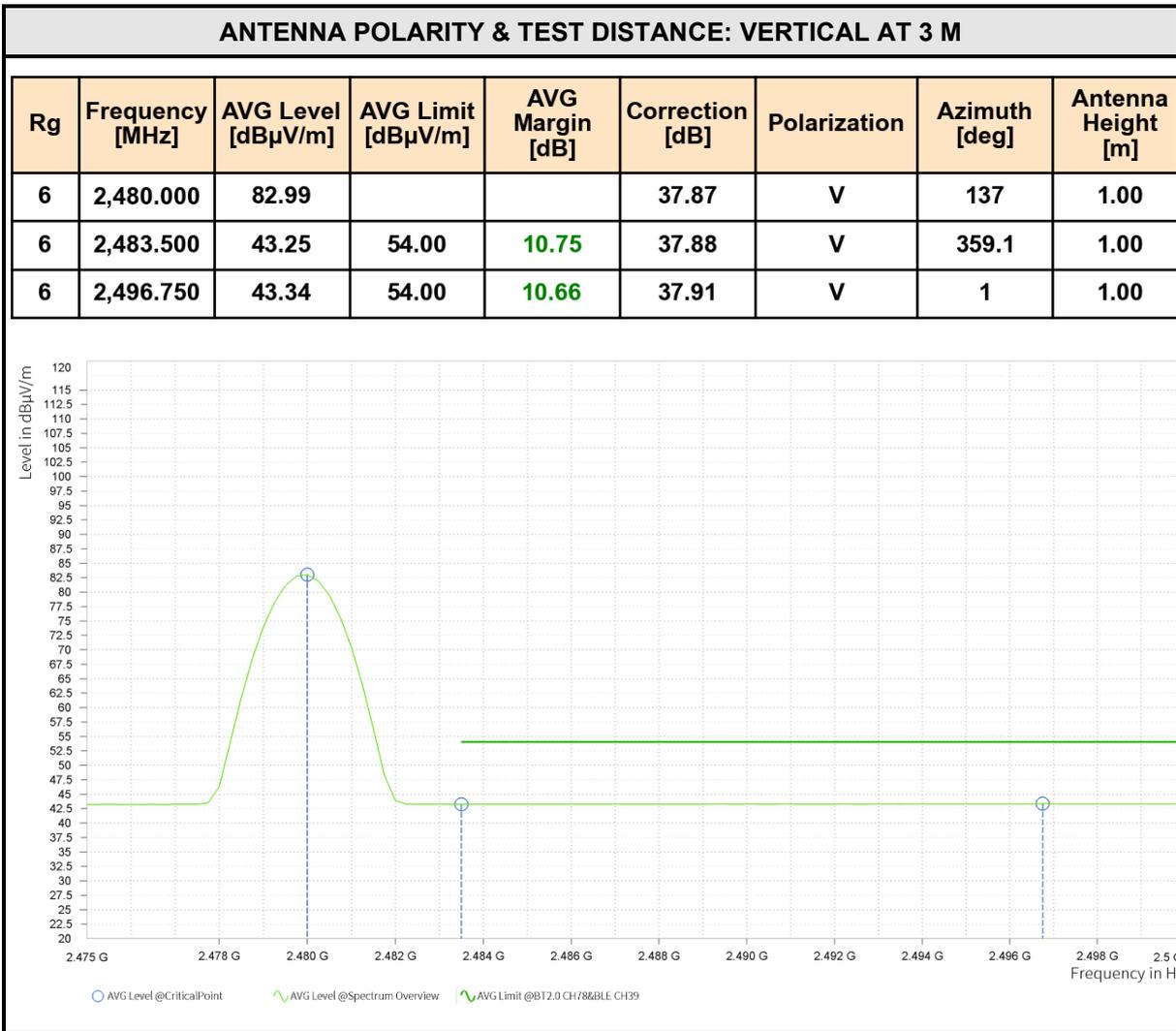




ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,479.750	92.30			37.87	V	133.4	1.00
6	2,483.500	58.10	74.00	15.90	37.88	V	358.9	1.00
6	2,492.250	58.42	74.00	15.58	37.90	V	1	1.00





REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value – Emission level.
3. 2402MHz: Fundamental frequency.

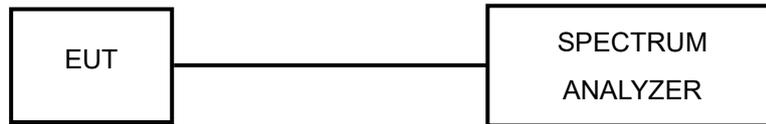


3.3 NUMBER OF HOPPING FREQUENCY USED

3.3.1 LIMIT OF HOPPING FREQUENCY USED

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

3.3.2 TEST SETUP





3.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	R&S	ESW 44	101973	Mar.28,24	Mar.27,26
Open Switch and Control Unit	R&S	OSP-B157W8	100836	N/A	N/A
Vector Signal Generator	R&S	SMBV100B	102176	Mar.29,24	Mar.28,26
Signal Generator	R&S	SMB100A03	182185	Mar.29,24	Mar.28,26
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.19,24	Jun.18,26
Hygrothermograph	DELI	20210528	SZ015	Mar.18,25	Mar.17,27
PC	LENOVO	E14	HRSW0024	N/A	N/A
CABLE	R&S	J12J103539-00-1	SEP-03-20-069	Apr.26,25	Apr.25,26
CABLE	R&S	J12J103539-00-1	SEP-03-20-070	Apr.26,25	Apr.25,26
Test Software	EMC32	EMC32	N/A	N/A	N/A
Temperature Chamber	votsch	VT4002	58566078100050	May.30,24	May.29,26
Power Meter	R&S	NRX	102380	Mar.28,24	Mar.27,26
Power Meter probe	R&S	NRP6A	102942	Mar.28,24	Mar.27,26

NOTE:

1. The calibration interval of the above test instruments is 12 /24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF Oven room.



3.3.4 TEST PROCEDURES

- 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.

3.3.5 DEVIATION FROM TEST STANDARD

No deviation.

3.3.6 TEST RESULTS

There are 79 hopping frequencies in the hopping mode. Please refer to next two pages for the test result. On the plots, it shows that the hopping frequencies are equally spaced.

Please Refer to Appendix of this test report.

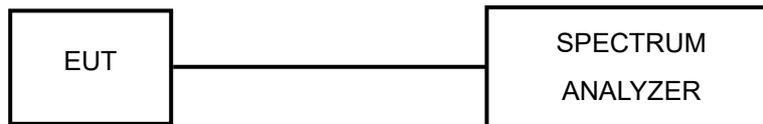


3.4 DWELL TIME ON EACH CHANNEL

3.4.1 LIMIT OF DWELL TIME USED

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.

3.4.2 TEST SETUP



3.4.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

3.4.4 TEST PROCEDURES

- 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.



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3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 TEST RESULTS

Please Refer to Appendix of this test report

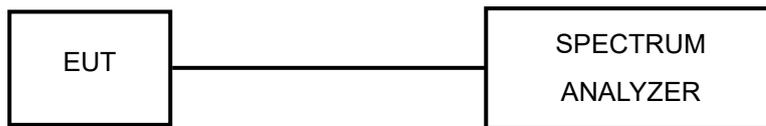


3.5 CHANNEL BANDWIDTH

3.5.1 LIMITS OF CHANNEL BANDWIDTH

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

3.5.2 TEST SETUP



3.5.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

3.5.4 TEST 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.

3.5.5 DEVIATION FROM TEST STANDARD

No deviation.



3.5.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.5.7 TEST RESULTS

Please Refer to Appendix of this test report.

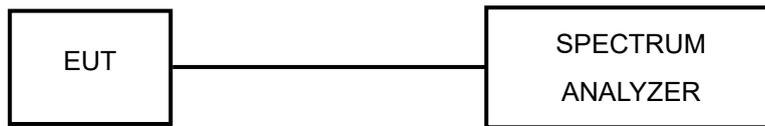


3.6 HOPPING CHANNEL SEPARATION

3.6.1 LIMIT OF HOPPING CHANNEL SEPARATION

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

3.6.2 TEST SETUP



3.6.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

3.6.4 TEST PROCEDURES

- 1 Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2 Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range.
- 3 By using the MaxHold function record the separation of two adjacent channels.
- 4 Measure the frequency difference of these two adjacent channels by SA MARK function. And then plot the result on SA screen.
- 5 Repeat above procedures until all frequencies measured were complete.

3.6.1 DEVIATION FROM TEST STANDARD

No deviation.

3.6.2 TEST RESULTS

Please Refer to Appendix of this test report.

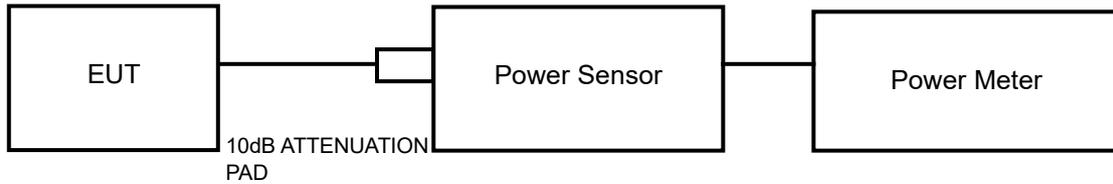


3.7 MAXIMUM OUTPUT POWER

3.7.1 LIMITS OF MAXIMUM OUTPUT POWER MEASUREMENT

The Maximum Output Power Measurement is 125mW.

3.7.2 TEST SETUP



3.7.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

3.7.4 TEST PROCEDURES

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. Record the power level.



3.7.5 DEVIATION FROM TEST STANDARD

No deviation.

3.7.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.7.7 TEST RESULTS

3.7.7.1 MAXIMUM PEAK OUTPUT POWER

Please Refer to Appendix of this test report.

3.7.7.2 AVERAGE OUTPUT POWER (FOR REFERENCE)

The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. Record the power level.

Please Refer to Appendix of this test report.



3.8 OUT OF BAND MEASUREMENT

3.8.1 LIMITS OF OUT OF BAND MEASUREMENT

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

3.8.2 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

3.8.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low loss cable. 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.

3.8.4 DEVIATION FROM TEST STANDARD

No deviation.

3.8.5 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.8.6 TEST RESULTS

The spectrum plots are attached on the following images. D1 line indicates the highest level. D2 line indicates the 20dB offset below D1. It shows compliance to the requirement.

Please Refer to Appendix of this test report.



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4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



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5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.



6 Appendix

BT

20DB EMISSION BANDWIDTH

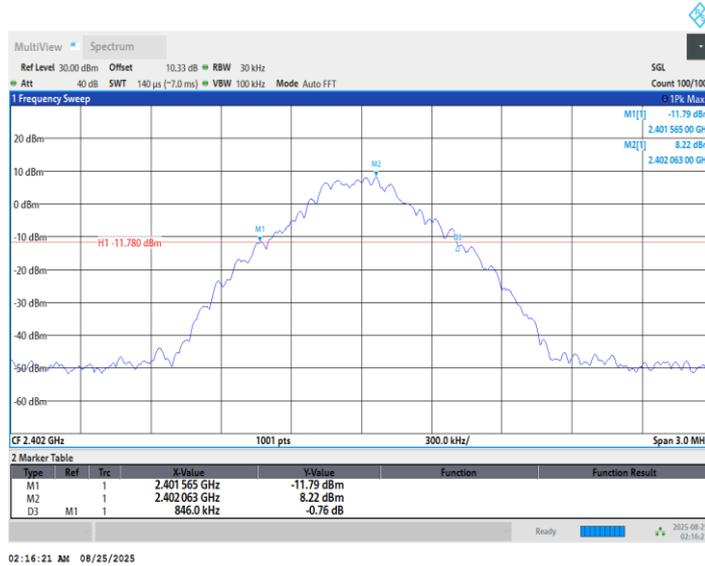
TEST RESULT

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant4	2402	0.85	2401.57	2402.41	---	---
		2441	0.85	2440.57	2441.41	---	---
		2480	0.86	2479.55	2480.41	---	---
2DH5	Ant4	2402	1.28	2401.37	2402.65	---	---
		2441	1.29	2440.37	2441.66	---	---
		2480	1.30	2479.36	2480.66	---	---
3DH5	Ant4	2402	1.28	2401.36	2402.64	---	---
		2441	1.28	2440.37	2441.65	---	---
		2480	1.29	2479.36	2480.65	---	---

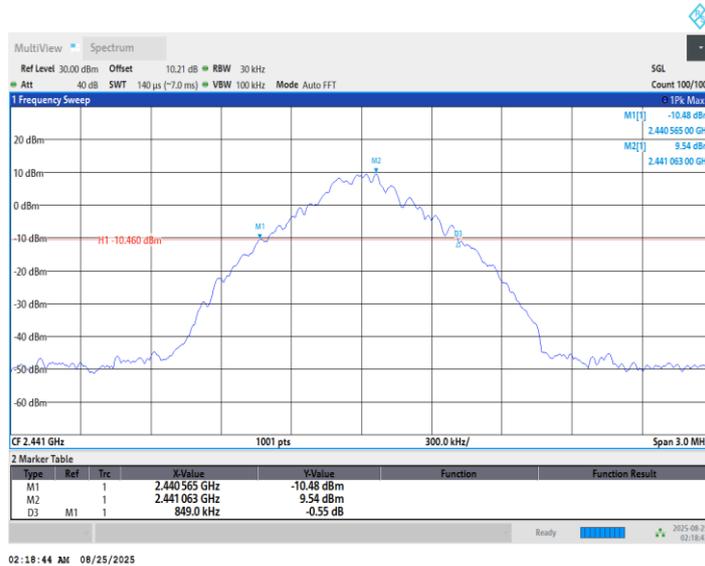


6.1.1 TEST GRAPHS

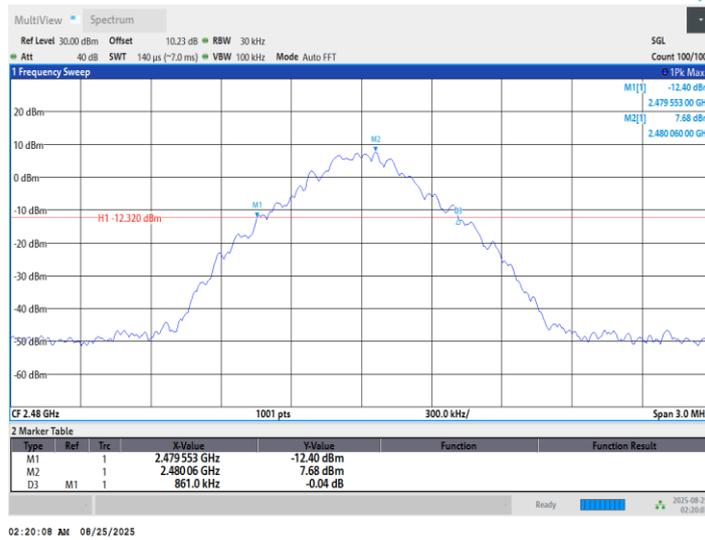
DH5_Ant4_2402



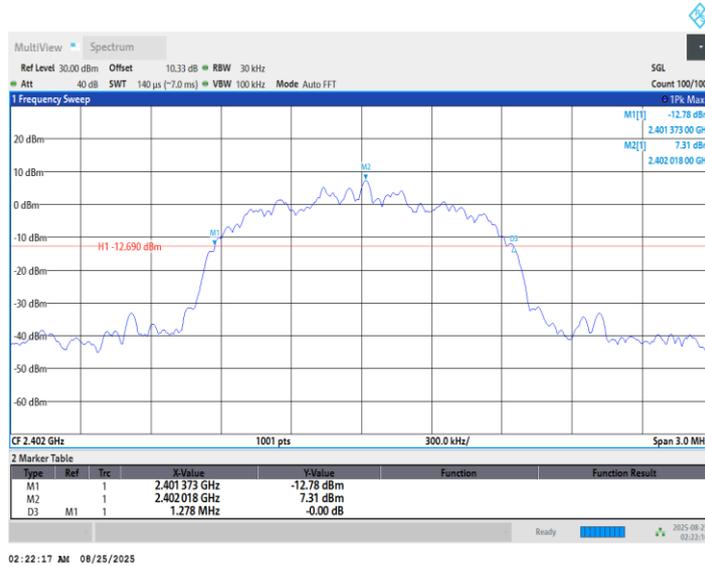
DH5_Ant4_2441



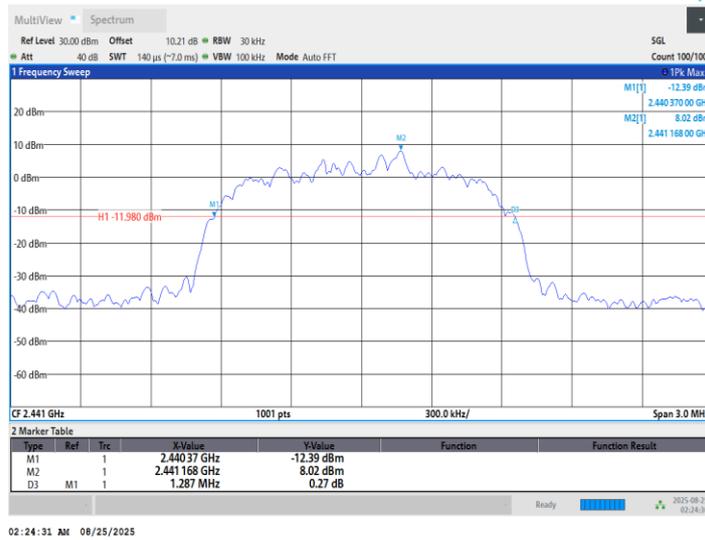
DH5_Ant4_2480



2DH5_Ant4_2402



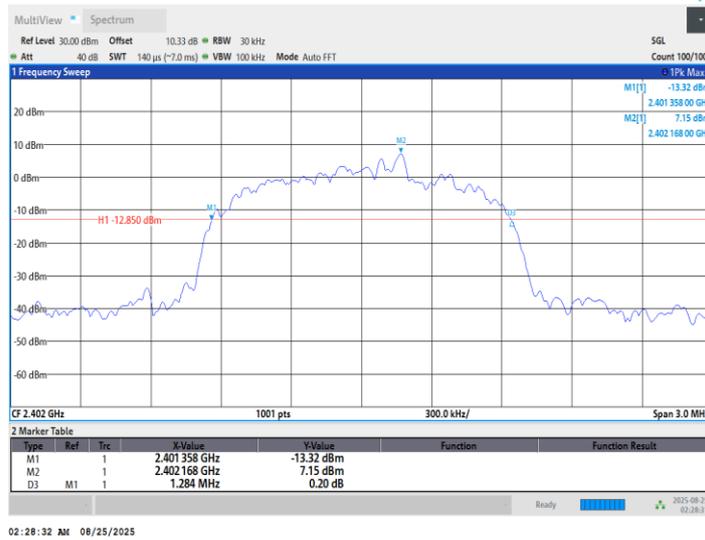
2DH5_Ant4_2441



2DH5_Ant4_2480

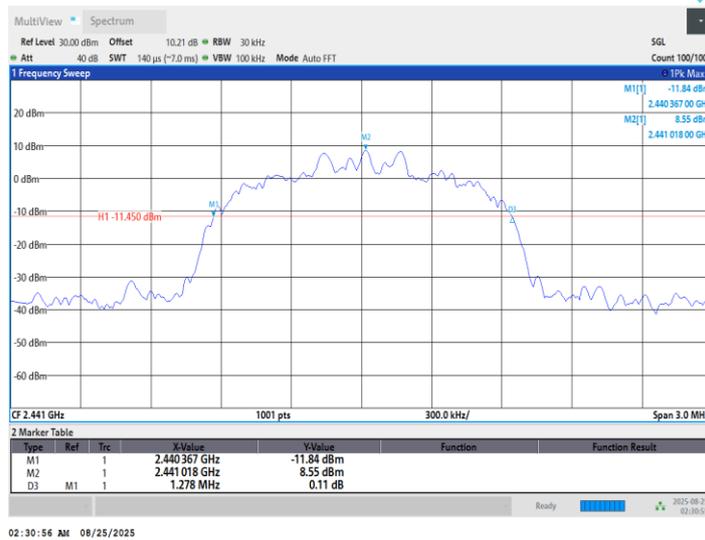


3DH5_Ant4_2402



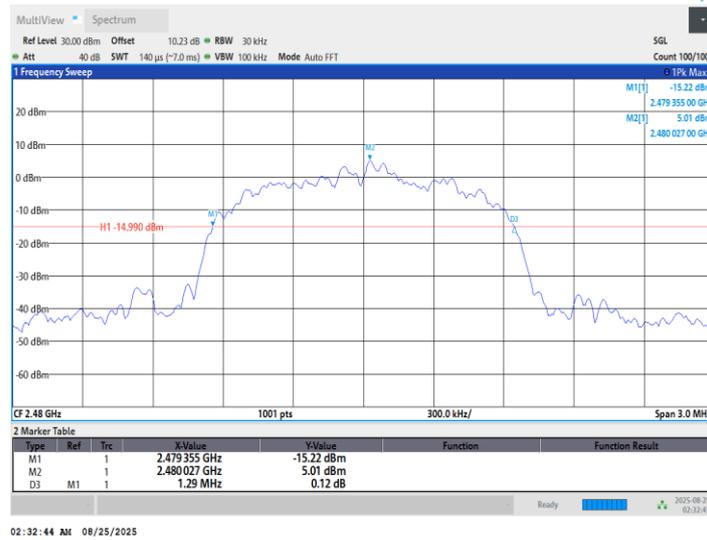
02:28:32 AM 08/25/2025

3DH5_Ant4_2441



02:30:56 AM 08/25/2025

3DH5_Ant4_2480





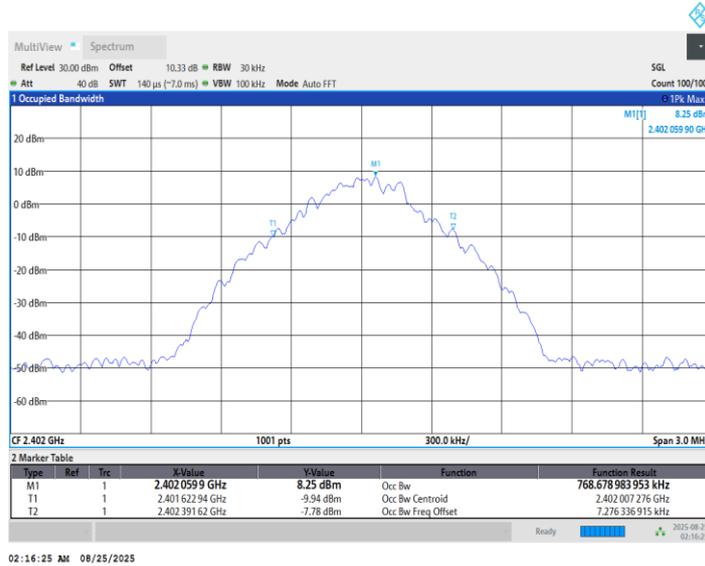
OCCUPIED CHANNEL BANDWIDTH

TEST RESULT

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant4	2402	0.76868	2401.6229	2402.3916	---	---
		2441	0.75563	2440.6275	2441.3831	---	---
		2480	0.75498	2479.6271	2480.3821	---	---
2DH5	Ant4	2402	1.1661	2401.4199	2402.5860	---	---
		2441	1.1621	2440.4174	2441.5796	---	---
		2480	1.1732	2479.4090	2480.5823	---	---
3DH5	Ant4	2402	1.1848	2401.4110	2402.5958	---	---
		2441	1.1915	2440.4081	2441.5996	---	---
		2480	1.1552	2479.4244	2480.5796	---	---



DH5_Ant4_2402



DH5_Ant4_2441



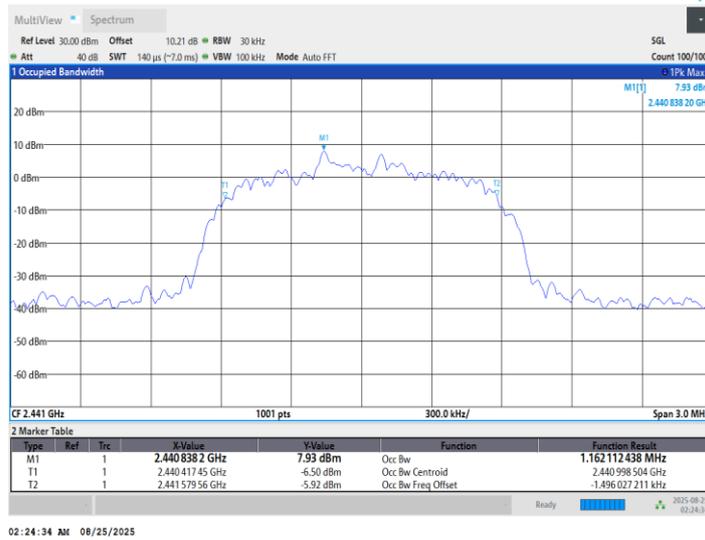
DH5_Ant4_2480



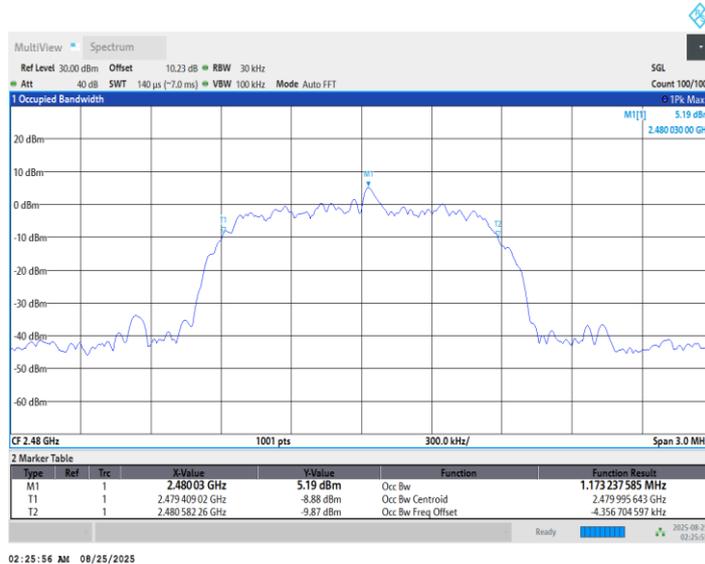
2DH5_Ant4_2402



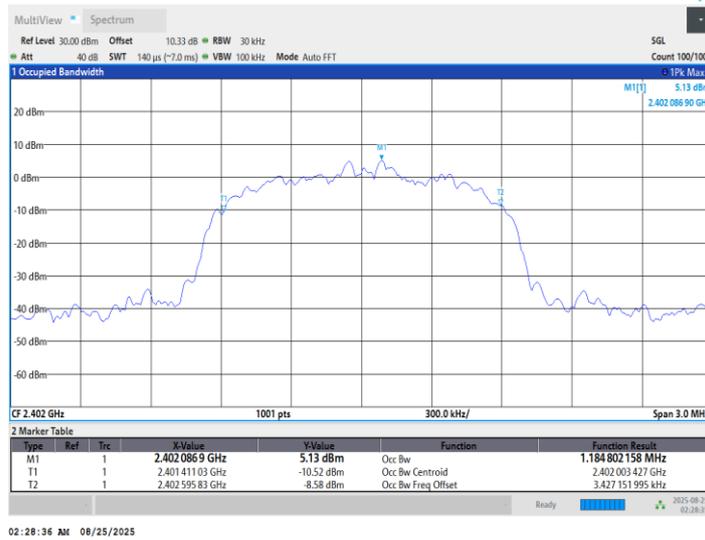
2DH5_Ant4_2441



2DH5_Ant4_2480



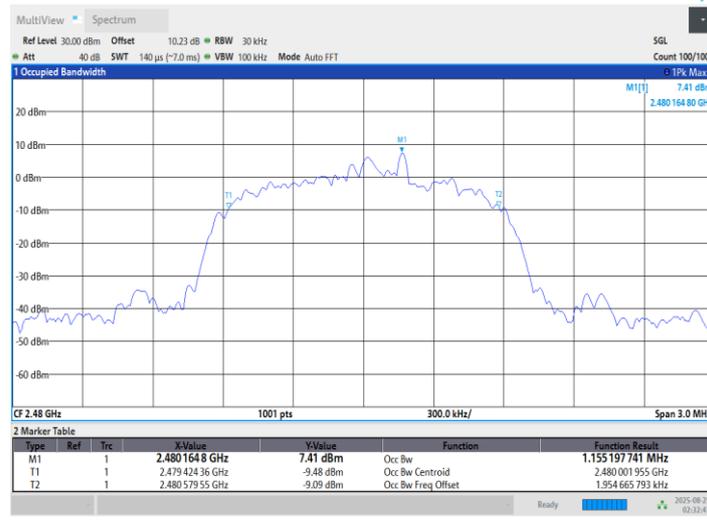
3DH5_Ant4_2402



3DH5_Ant4_2441



3DH5_Ant4_2480



02:32:48 AM 08/25/2025



MAXIMUM CONDUCTED OUTPUT POWER

TEST RESULT

TestMode	Antenna	Frequency [MHz]	Average power [dBm]	Peak Power [dBm]	Peak Power [mw]	Conducted Limit [dBm]	Verdict
DH5	Ant4	2402	11.08	11.6	14.45	≤21	PASS
		2441	11.75	12.31	17.02	≤21	PASS
		2480	10.21	10.37	10.89	≤21	PASS
2DH5	Ant4	2402	8.66	11.64	14.59	≤21	PASS
		2441	8.58	11.53	14.22	≤21	PASS
		2480	7.07	9.59	9.10	≤21	PASS
3DH5	Ant4	2402	8.5	11.52	14.19	≤21	PASS
		2441	8.39	11.43	13.90	≤21	PASS
		2480	6.81	9.46	8.83	≤21	PASS



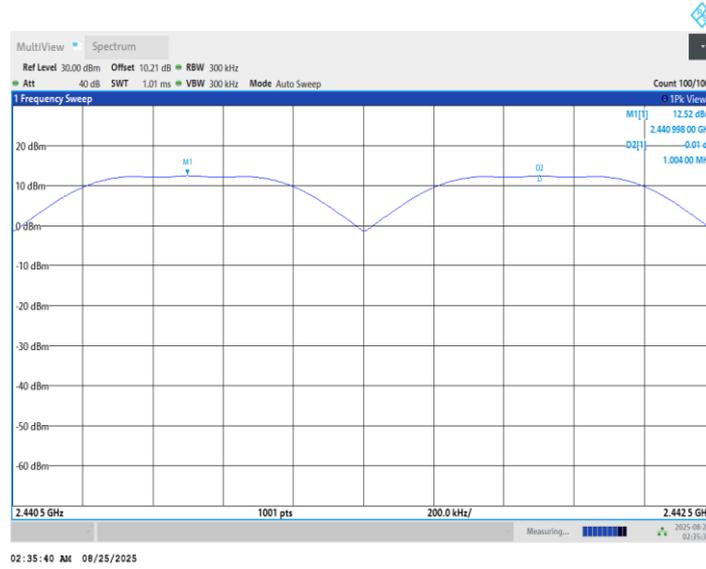
CARRIER FREQUENCY SEPARATION

TEST RESULT

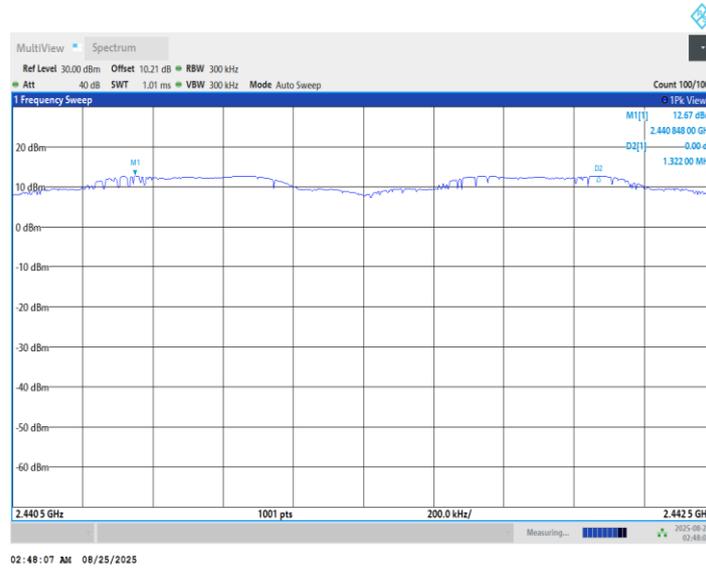
TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant4	Hop	1.004	≥0.860	PASS
2DH5	Ant4	Hop	1.322	≥1.300	PASS
3DH5	Ant4	Hop	1.006	≥0.860	PASS



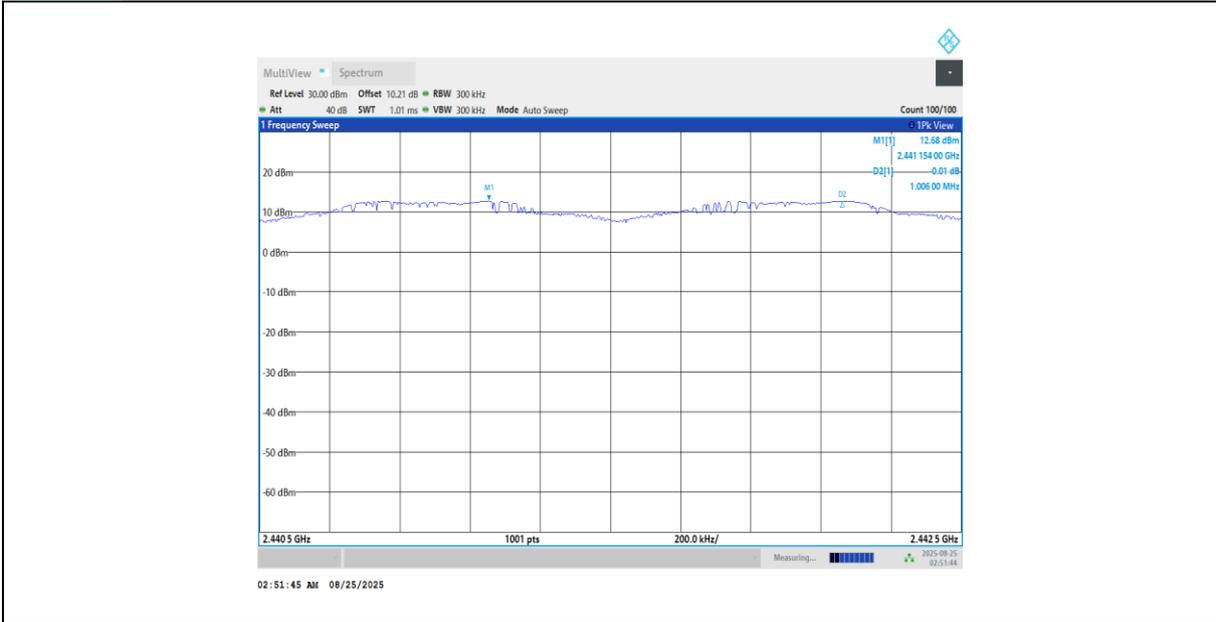
DH5_Ant4_Hop



2DH5_Ant4_Hop



3DH5_Ant4_Hop





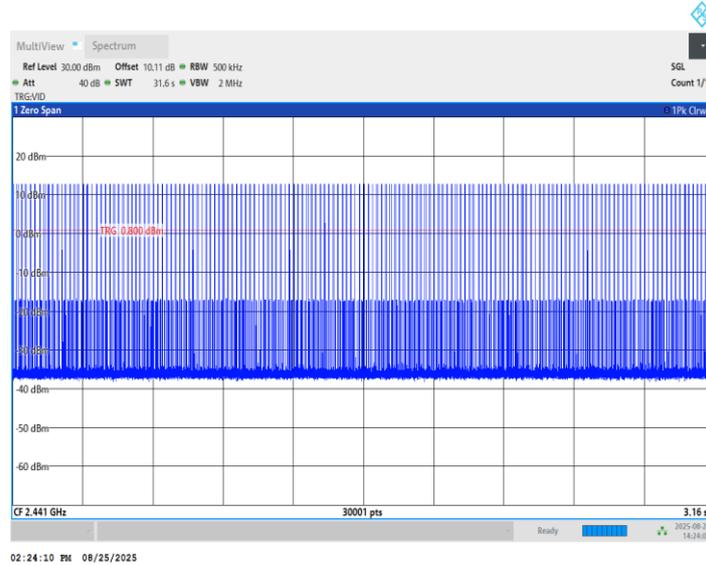
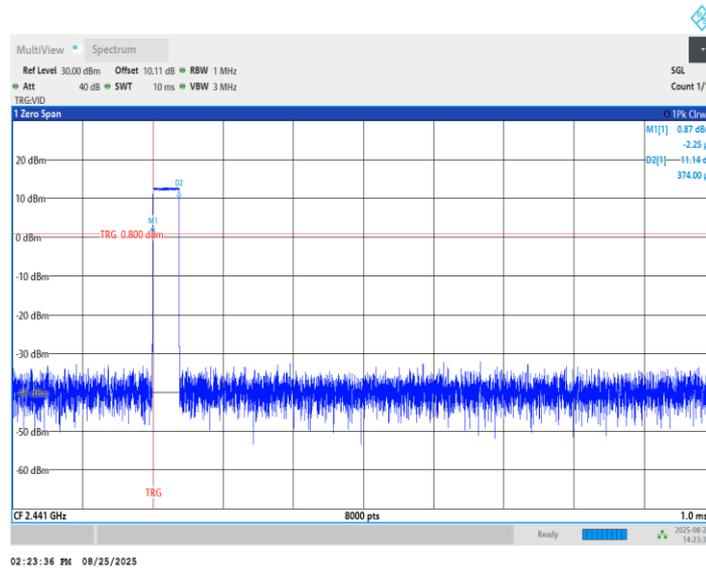
TIME OF OCCUPANCY

TEST RESULT

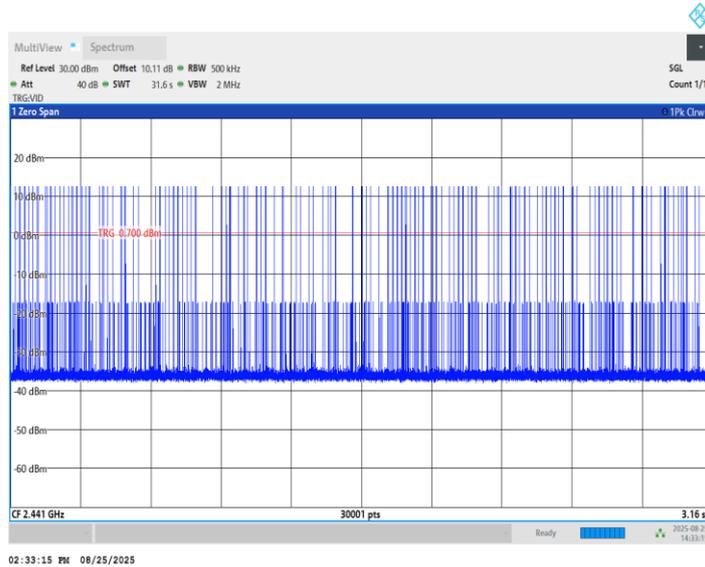
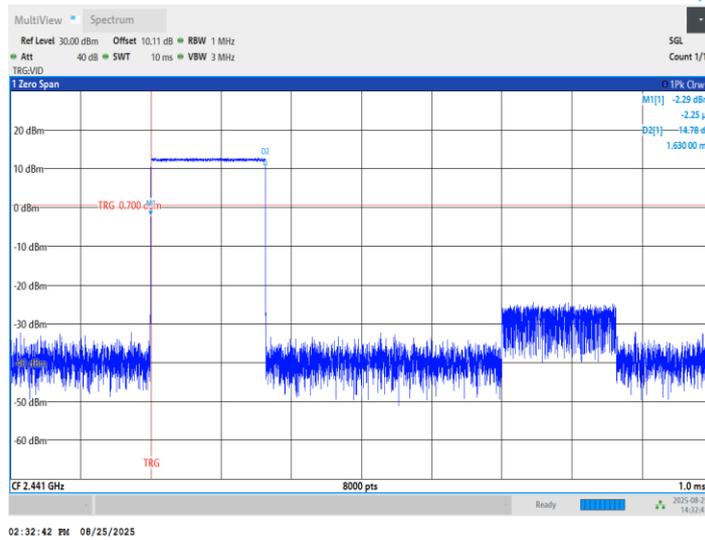
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant4	Hop	0.374	314	0.117	≤0.4	PASS
DH3	Ant4	Hop	1.630	170	0.277	≤0.4	PASS
DH5	Ant4	Hop	2.879	110	0.317	≤0.4	PASS
2DH1	Ant4	Hop	0.383	314	0.12	≤0.4	PASS
2DH3	Ant4	Hop	1.635	158	0.258	≤0.4	PASS
2DH5	Ant4	Hop	2.882	111	0.32	≤0.4	PASS
3DH1	Ant4	Hop	0.383	314	0.12	≤0.4	PASS
3DH3	Ant4	Hop	1.633	158	0.258	≤0.4	PASS
3DH5	Ant4	Hop	2.884	101	0.291	≤0.4	PASS



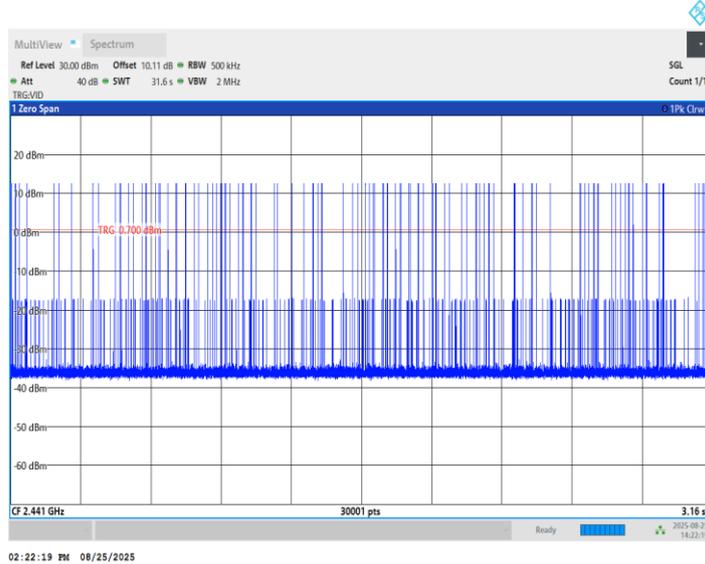
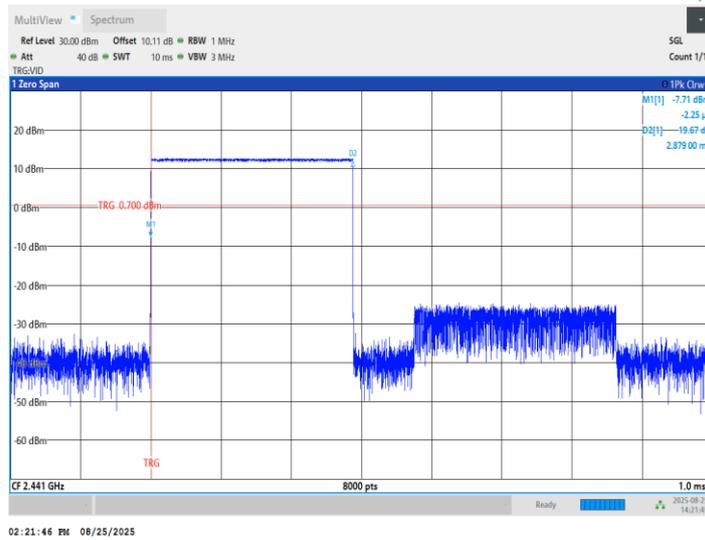
DH1_Ant4_Hop



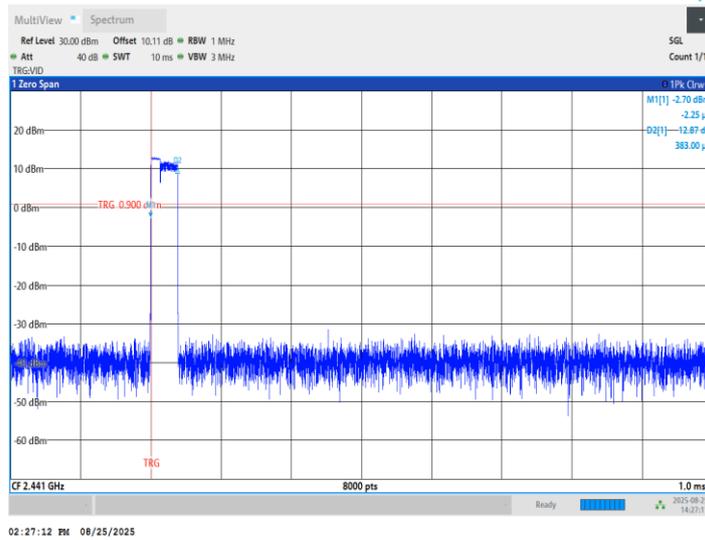
DH3_Ant4_Hop



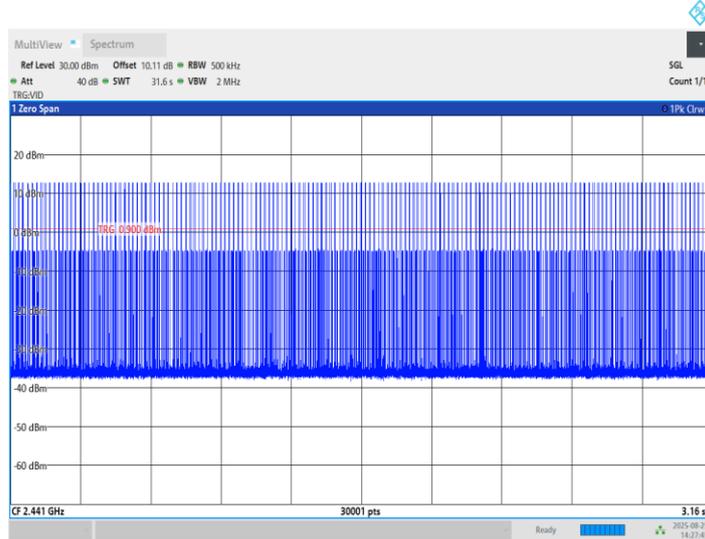
DH5_Ant4_Hop



2DH1_Ant4_Hop

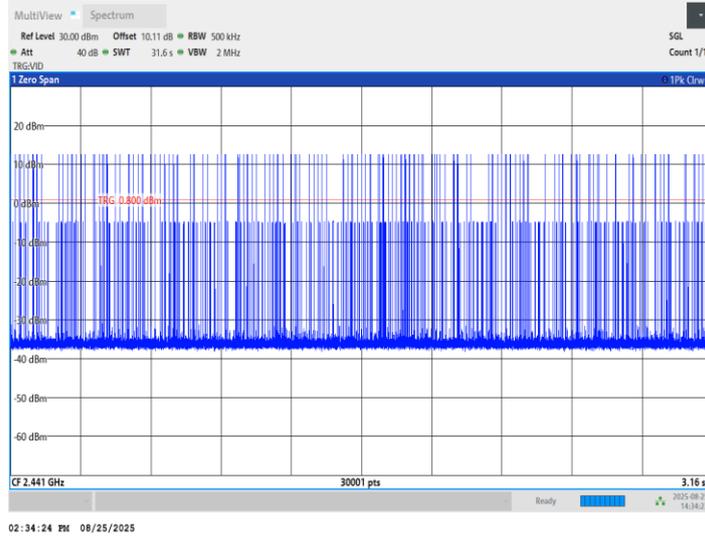
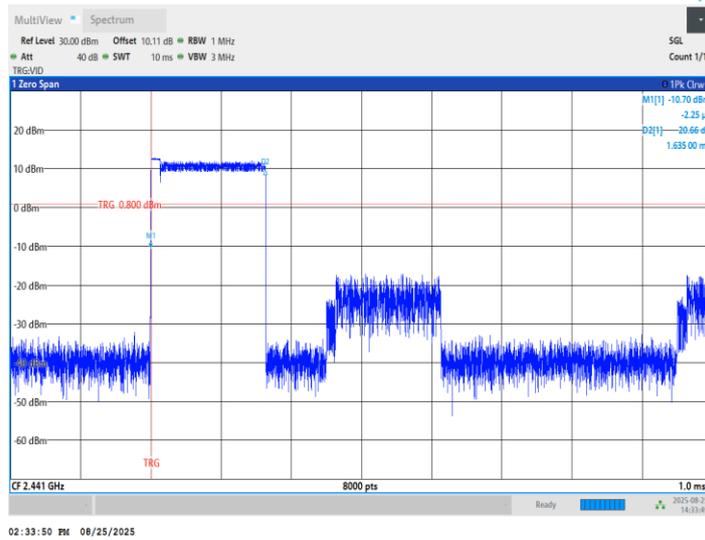


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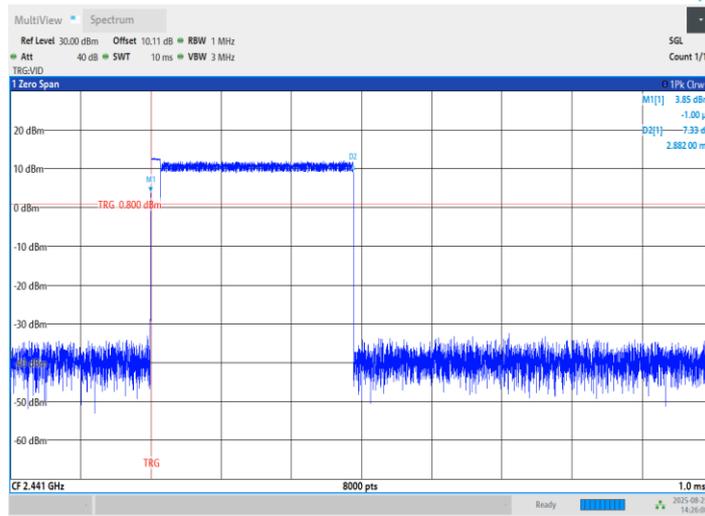


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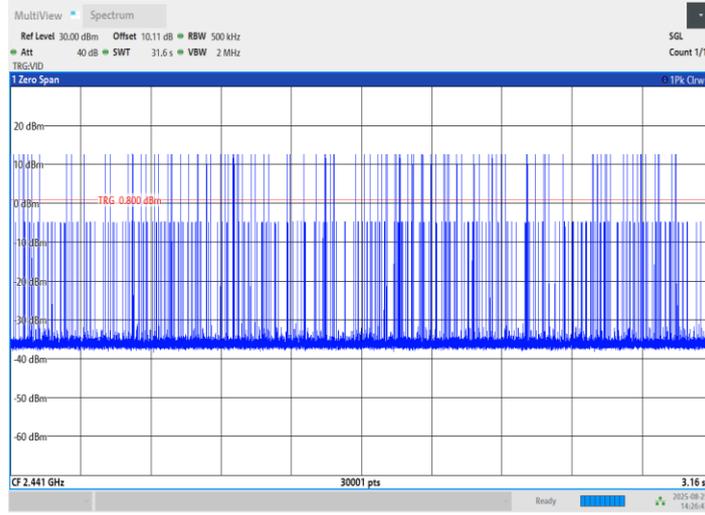
2DH3_Ant4_Hop



2DH5_Ant4_Hop

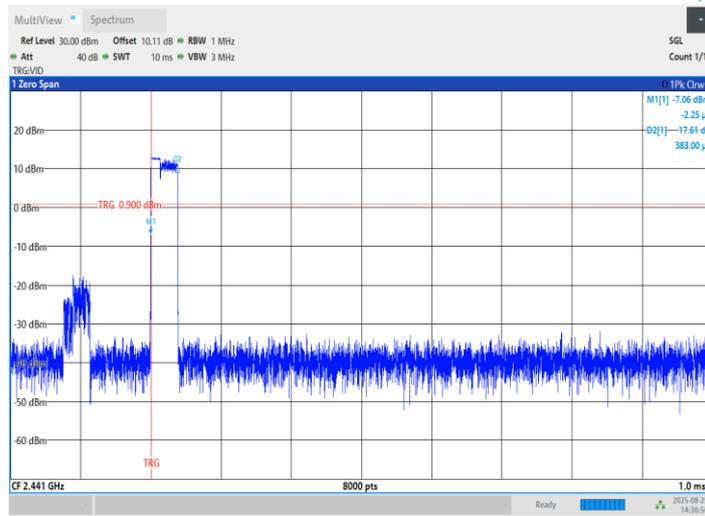


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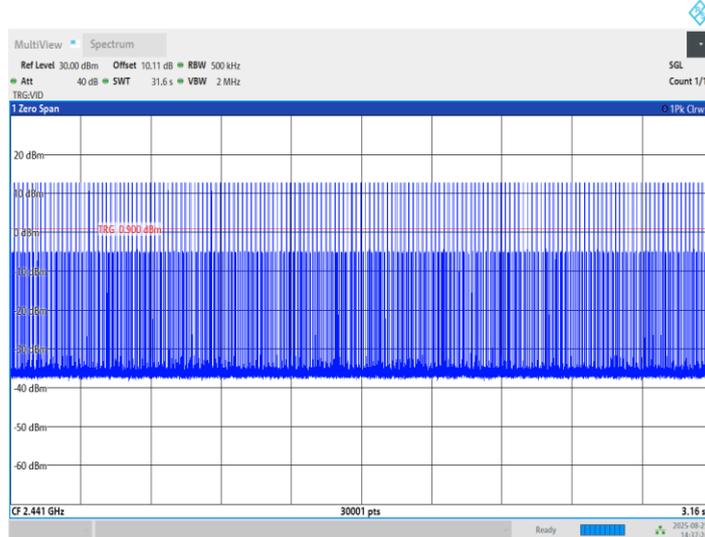


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3DH1_Ant4_Hop

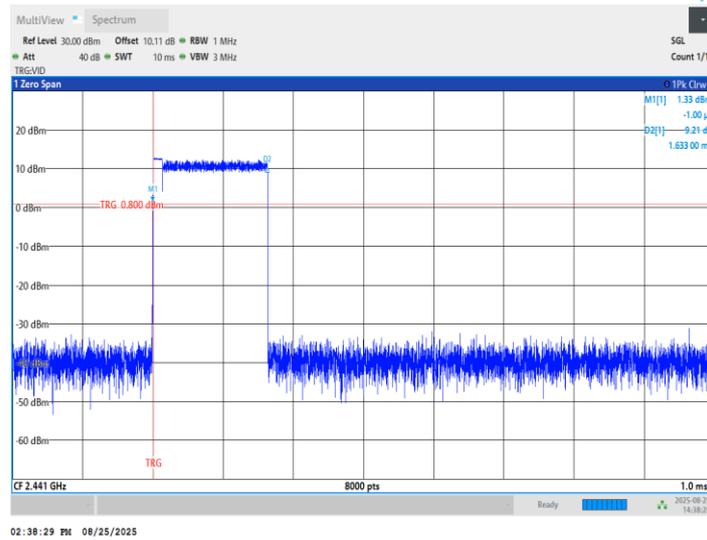


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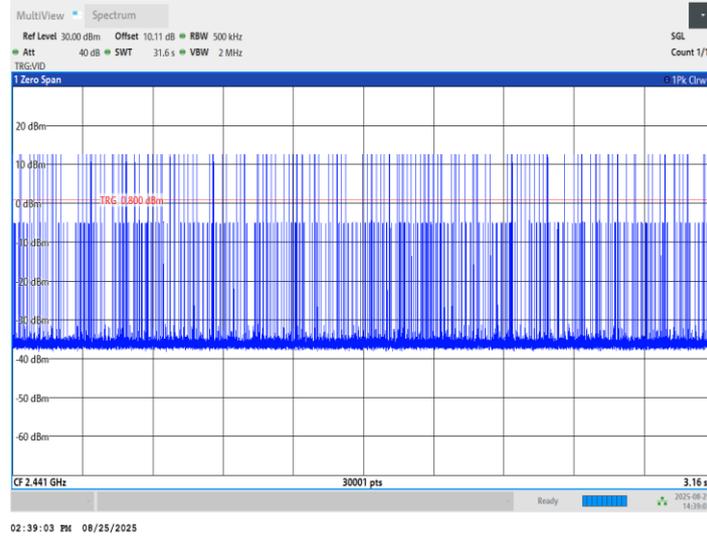


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3DH3_Ant4_Hop

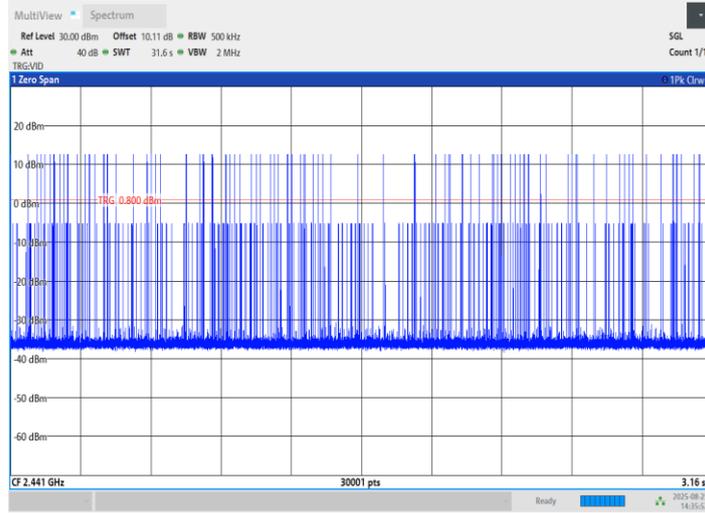
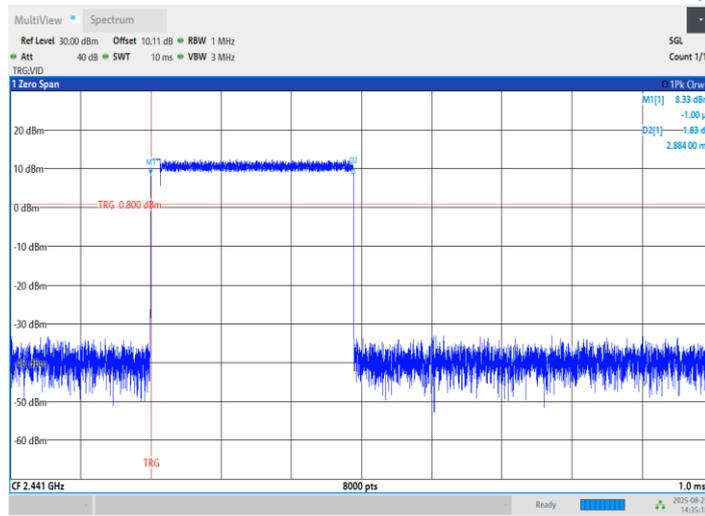


02:38:29 PM 08/25/2025



02:39:03 PM 08/25/2025

3DH5_Ant4_Hop





NUMBER OF HOPPING CHANNELS

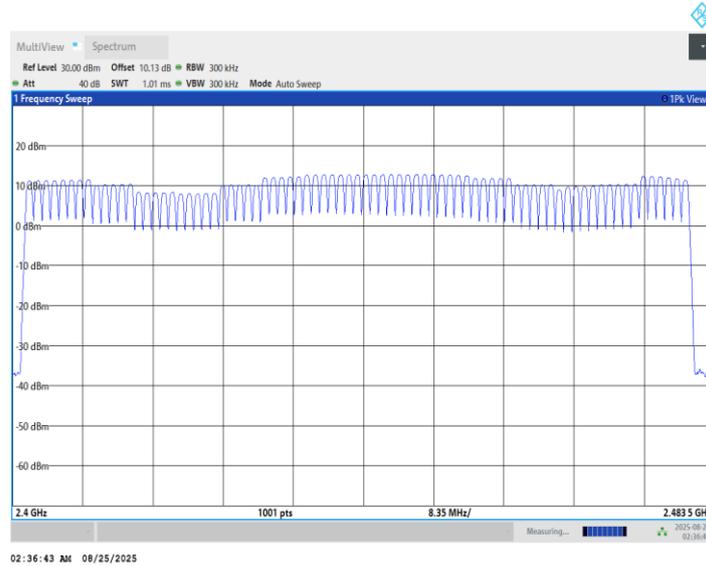
TEST RESULT

TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant4	Hop	79	≥15	PASS
2DH5	Ant4	Hop	79	≥15	PASS
3DH5	Ant4	Hop	79	≥15	PASS

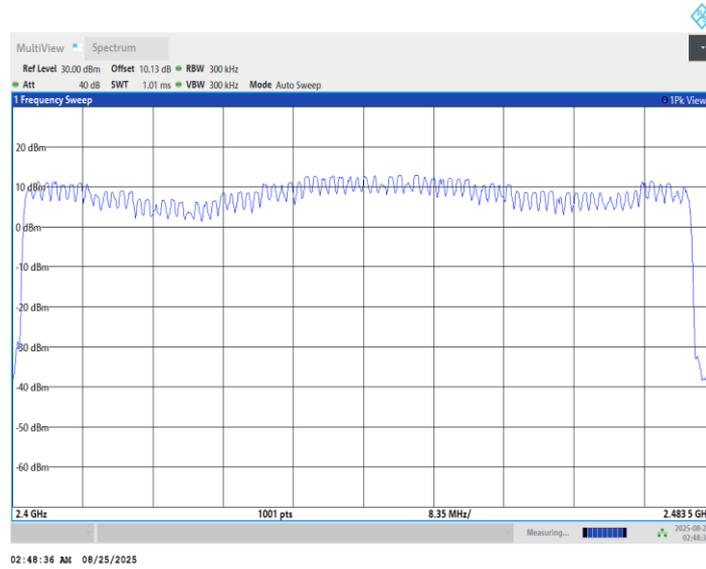


TEST GRAPHS

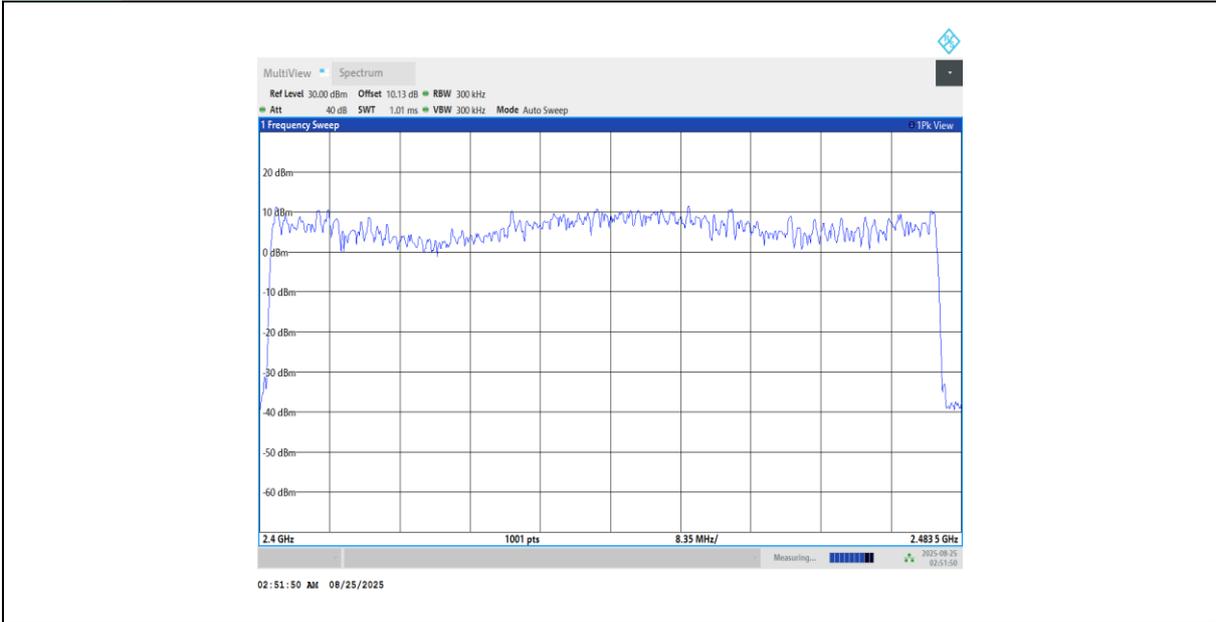
DH5_Ant4_Hop



2DH5_Ant4_Hop



3DH5_Ant4_Hop





BAND EDGE MEASUREMENTS

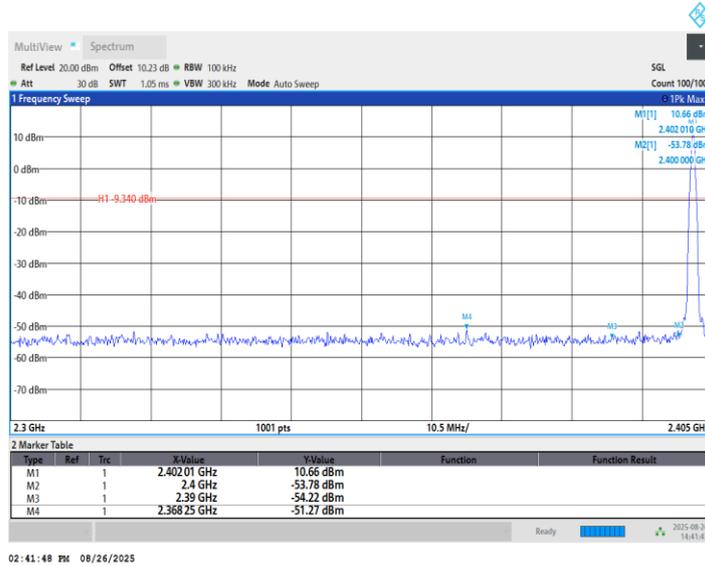
TEST RESULT

TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant4	Low	2402	10.66	-51.27	≤-9.34	PASS
		High	2480	10.46	-51.49	≤-9.54	PASS
		Low	Hop_2402	10.30	-50.54	≤-9.7	PASS
		High	Hop_2480	11.27	-50.98	≤-8.73	PASS
2DH5	Ant4	Low	2402	8.98	-50.82	≤-11.02	PASS
		High	2480	7.41	-50.78	≤-12.59	PASS
		Low	Hop_2402	10.13	-50.66	≤-9.87	PASS
		High	Hop_2480	9.26	-50.5	≤-10.74	PASS
3DH5	Ant4	Low	2402	10.12	-50.67	≤-9.88	PASS
		High	2480	8.87	-51.25	≤-11.13	PASS
		Low	Hop_2402	10.89	-50.9	≤-9.11	PASS
		High	Hop_2480	10.77	-50.51	≤-9.23	PASS

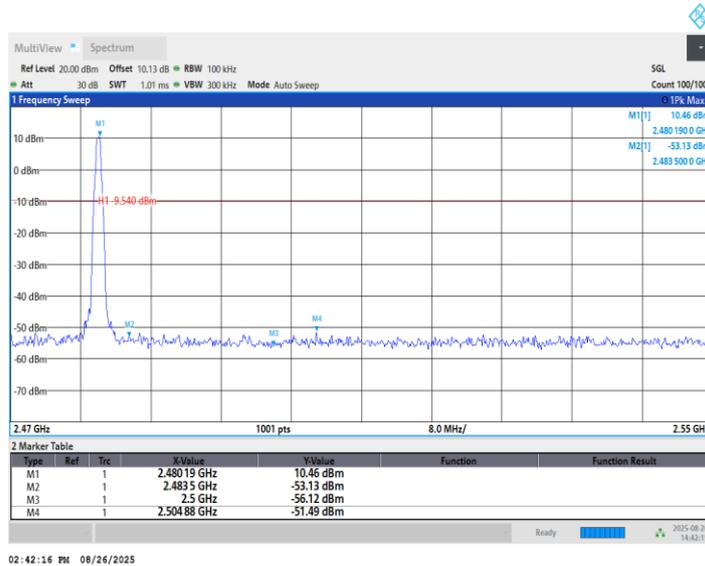


TEST GRAPHS

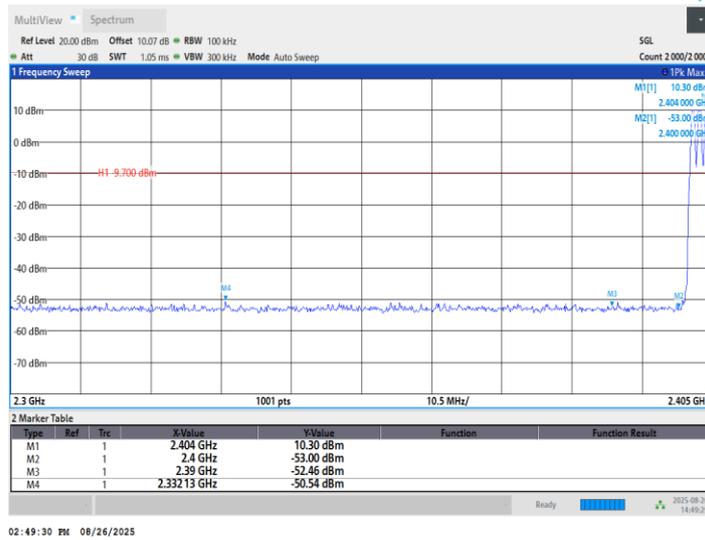
DH5_Ant4_Low_2402



DH5_Ant4_High_2480

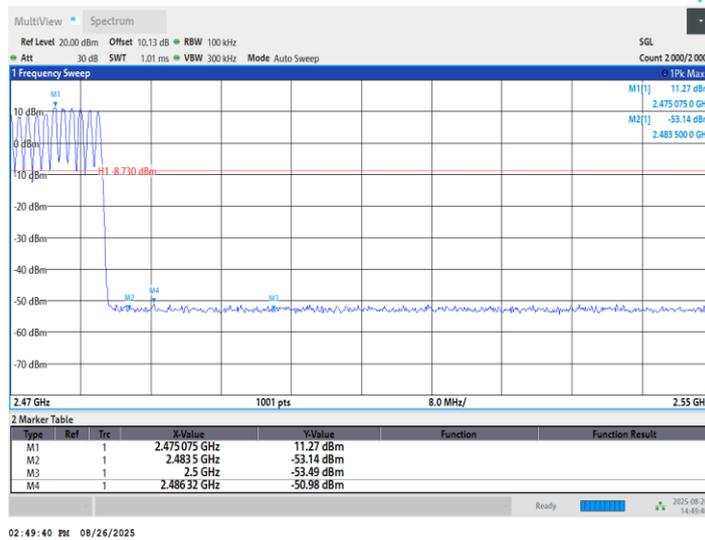


DH5_Ant4_Low_Hop_2402



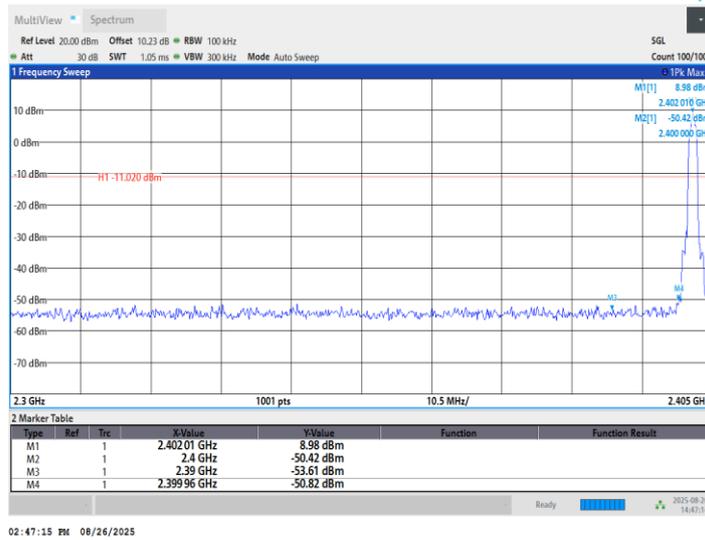
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DH5_Ant4_High_Hop_2480

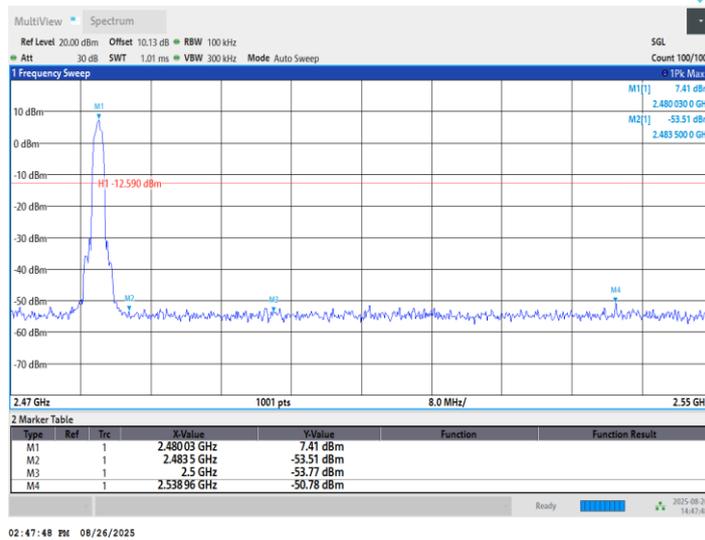


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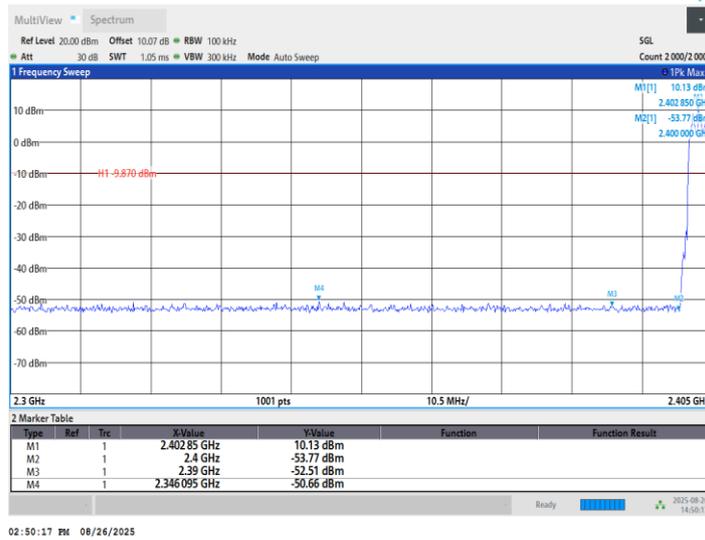
2DH5_Ant4_Low_2402



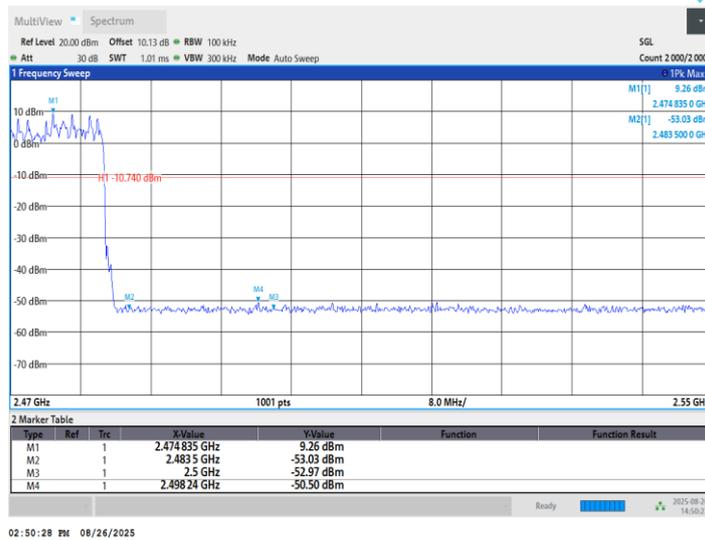
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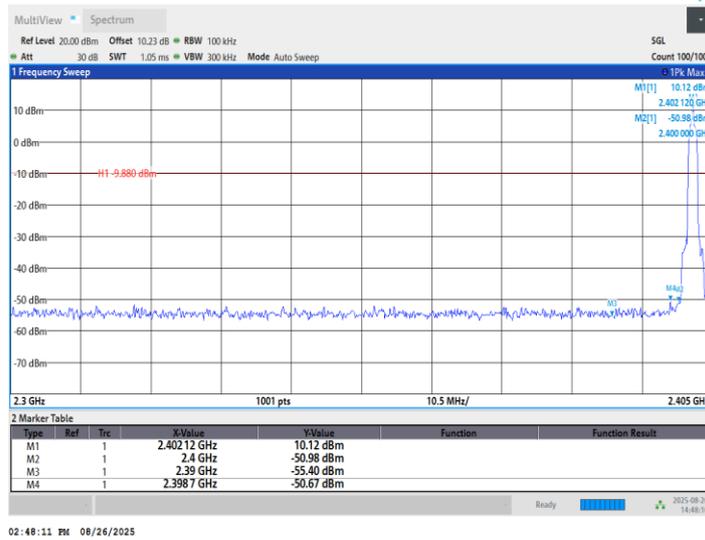
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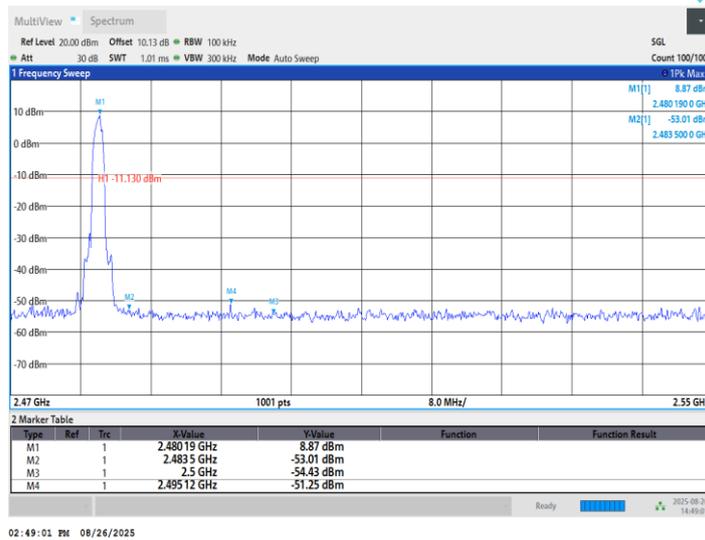
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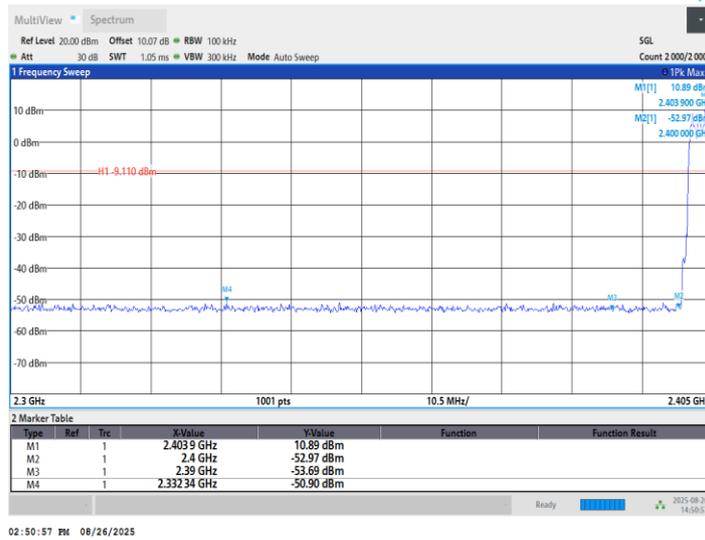
3DH5_Ant4_Low_2402



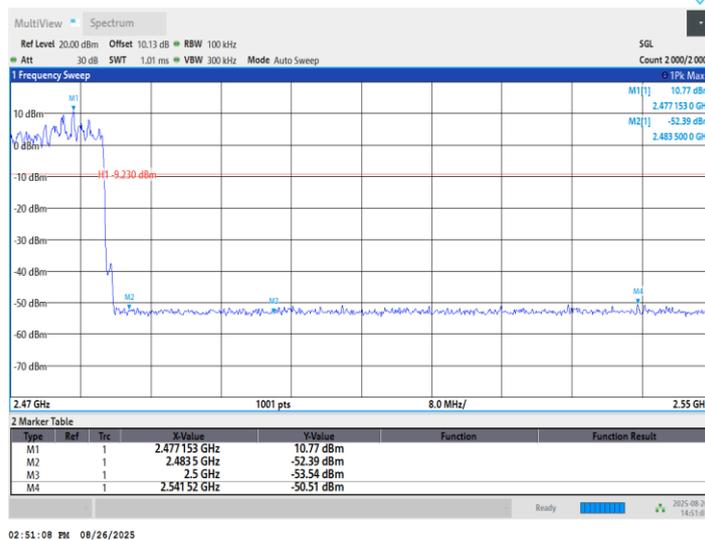
3DH5_Ant4_High_2480



3DH5_Ant4_Low_Hop_2402



3DH5_Ant4_High_Hop_2480





CONDUCTED SPURIOUS EMISSION

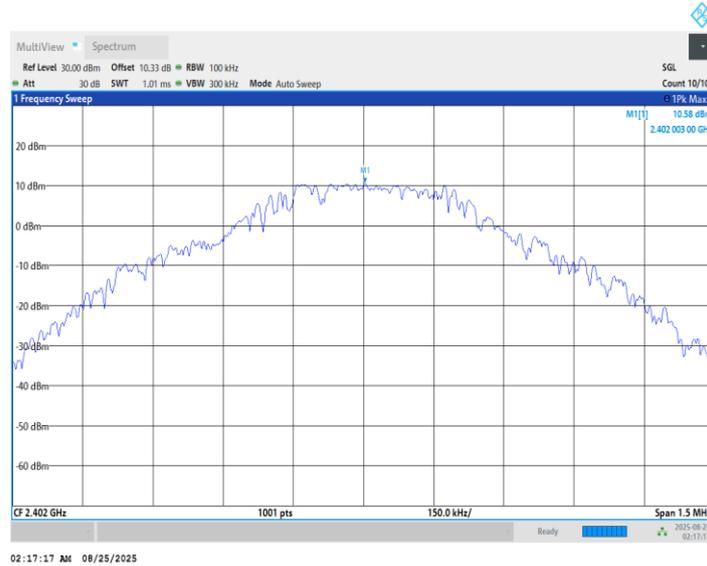
TEST RESULT

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict		
DH5	Ant4	2402	Reference	10.58	10.58	---	PASS		
			30~1000	10.58	-60.23	≤-9.42	PASS		
			1000~26500	10.58	-51.22	≤-9.42	PASS		
		2441	Reference	11.46	11.46	---	PASS		
			30~1000	11.46	-60.07	≤-8.54	PASS		
			1000~26500	11.46	-50.77	≤-8.54	PASS		
		2480	Reference	10.68	10.68	---	PASS		
		2DH5	Ant4	2402	Reference	8.77	8.77	---	PASS
					30~1000	8.77	-60.74	≤-11.23	PASS
1000~26500	8.77				-51.69	≤-11.23	PASS		
2441	Reference			7.65	7.65	---	PASS		
2480	Reference			7.20	7.20	---	PASS		
	30~1000			7.20	-60.08	≤-12.8	PASS		
	1000~26500			7.20	-51.33	≤-12.8	PASS		
3DH5	Ant4			2402	Reference	6.87	6.87	---	PASS
					30~1000	6.87	-58.96	≤-13.13	PASS
		1000~26500	6.87		-51.61	≤-13.13	PASS		
		2441	Reference	8.28	8.28	---	PASS		
			30~1000	8.28	-61.07	≤-11.72	PASS		
			1000~26500	8.28	-52.23	≤-11.72	PASS		
		2480	Reference	6.96	6.96	---	PASS		
			30~1000	6.96	-59.93	≤-13.04	PASS		
			1000~26500	6.96	-52.04	≤-13.04	PASS		

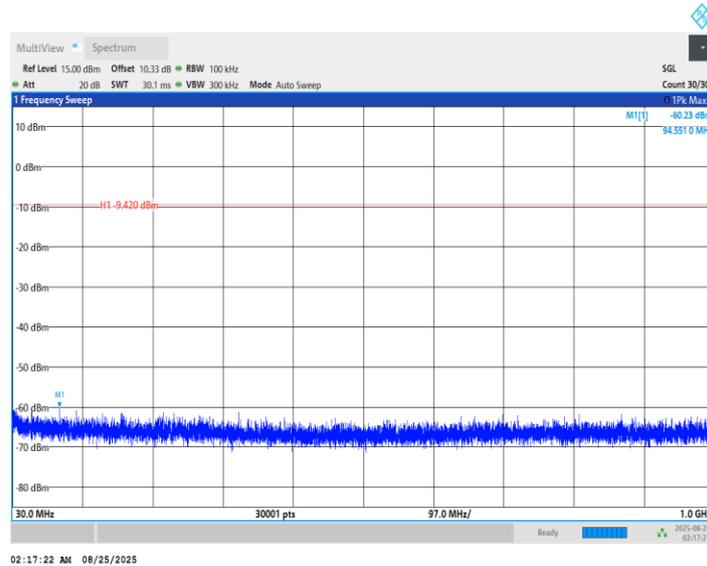


TEST GRAPHS

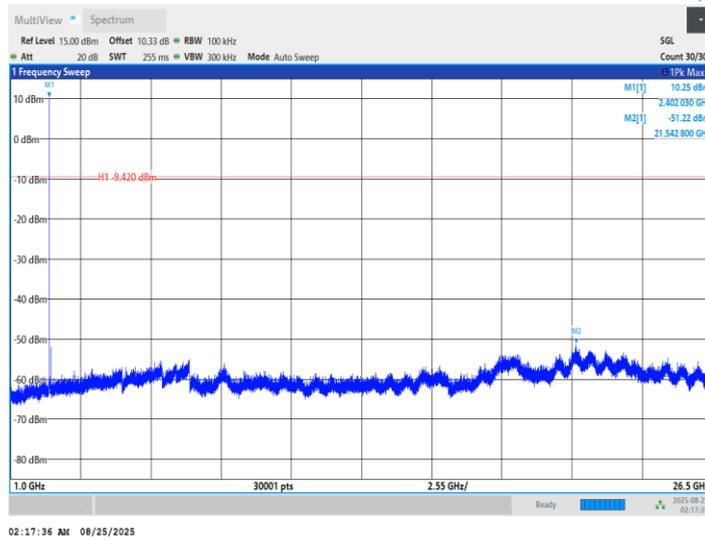
DH5_Ant4_2402_0~Reference



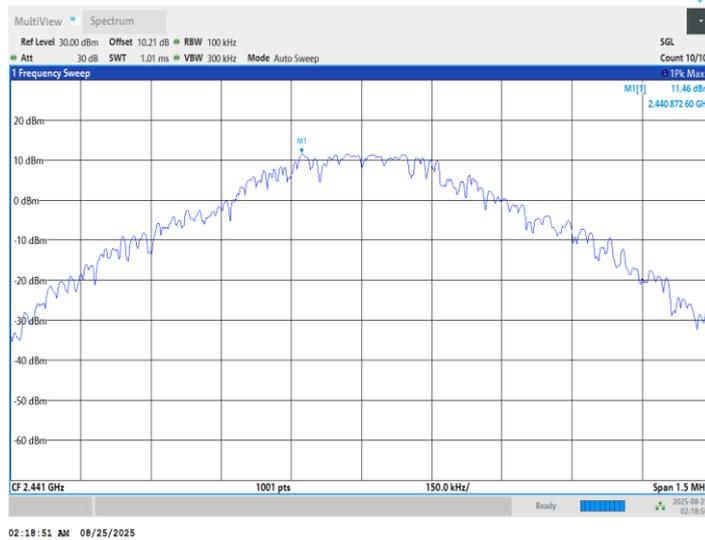
DH5_Ant4_2402_30~1000



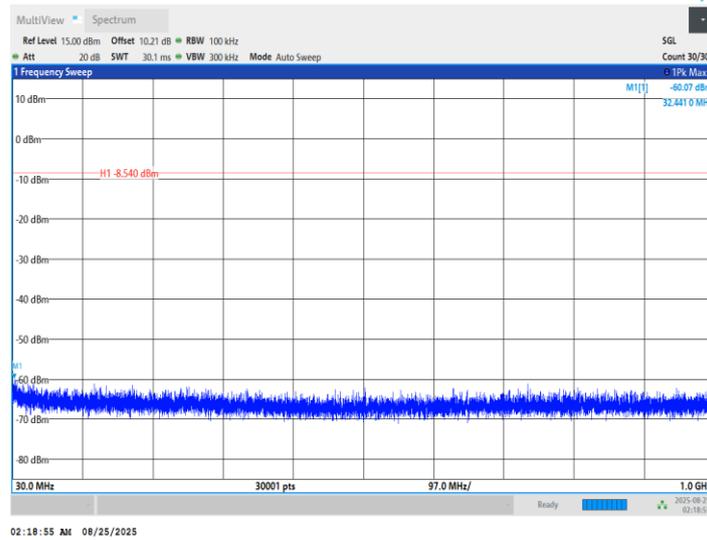
DH5_Ant4_2402_1000~26500



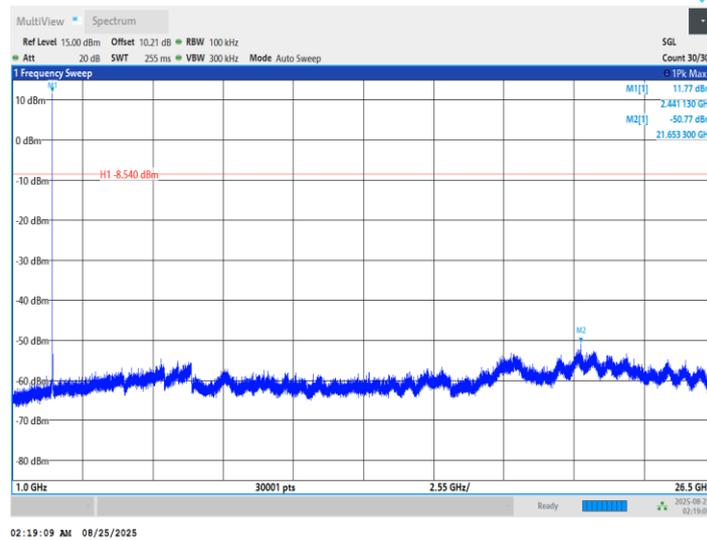
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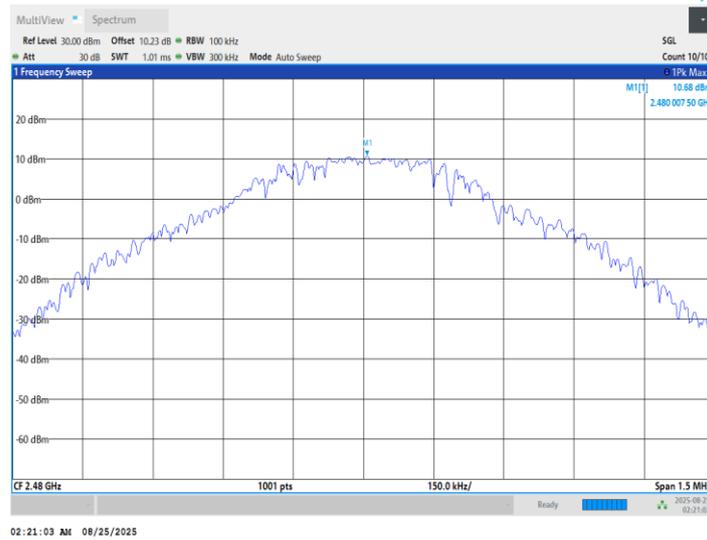
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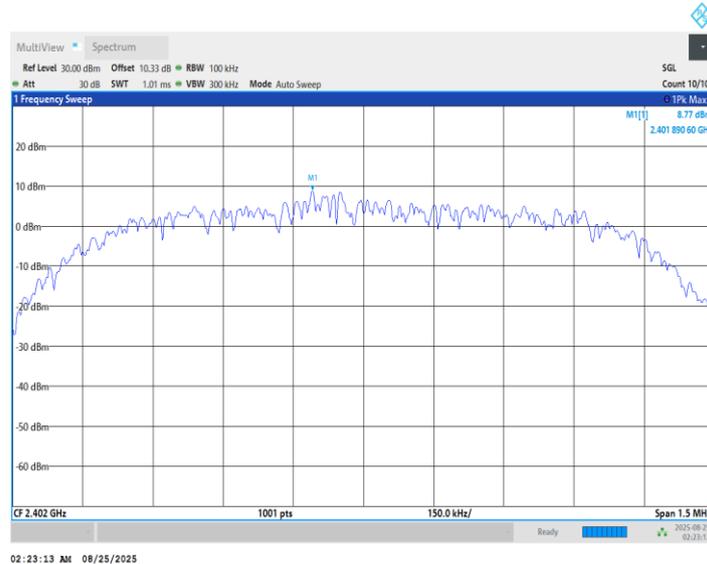
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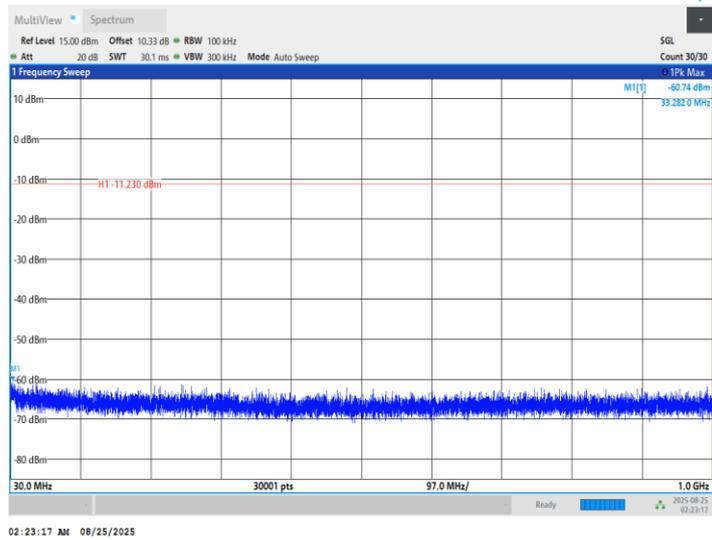
DH5_Ant4_2480_0~Reference



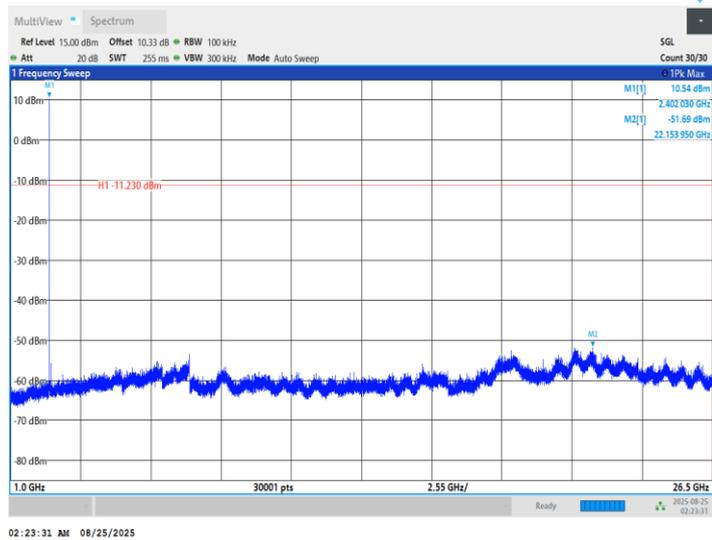
2DH5_Ant4_2402_0~Reference



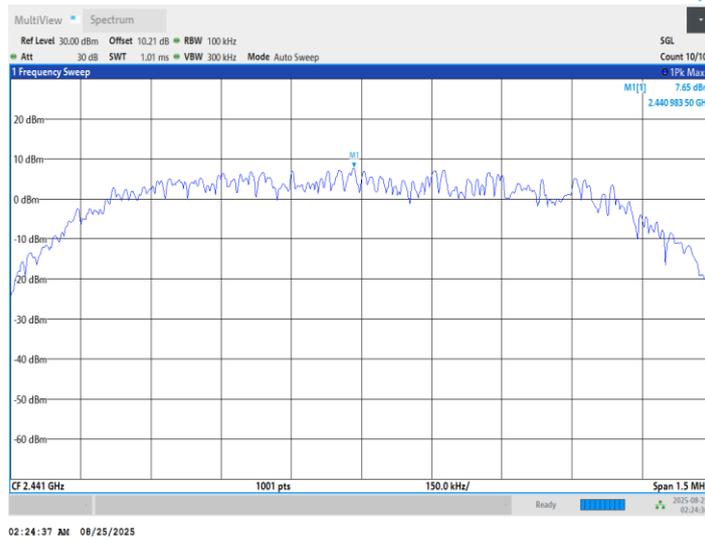
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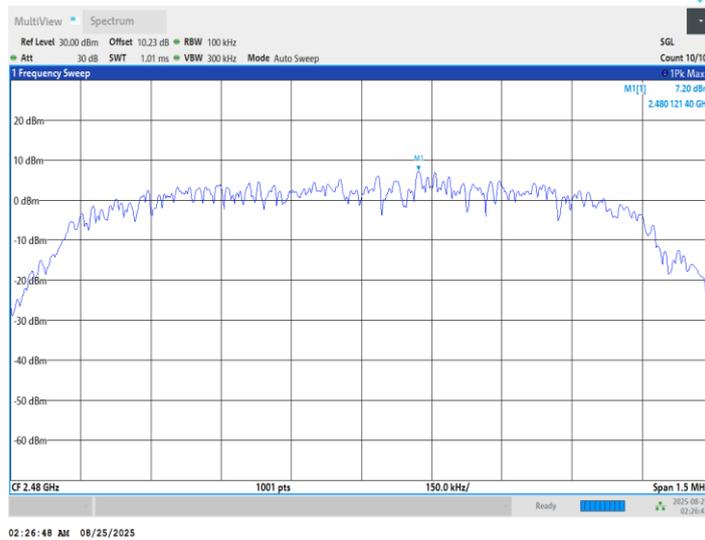
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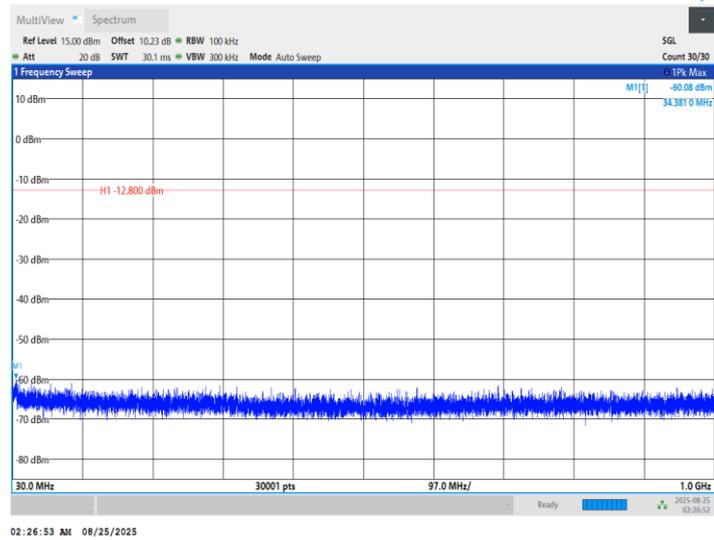
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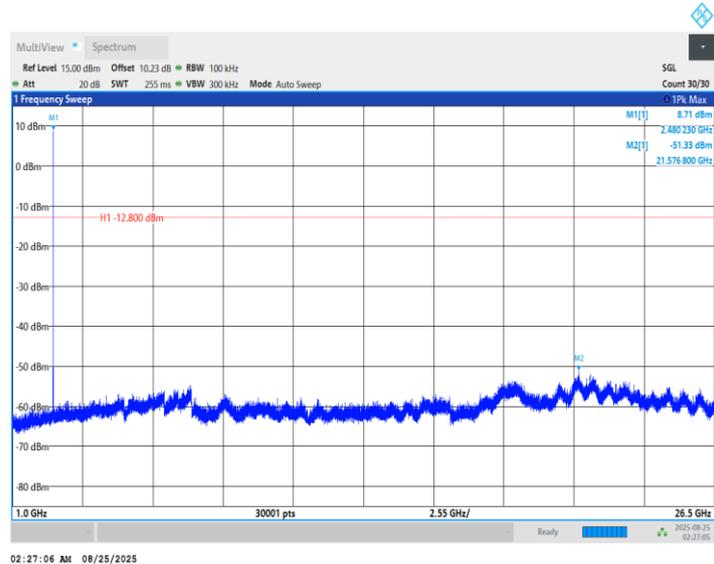
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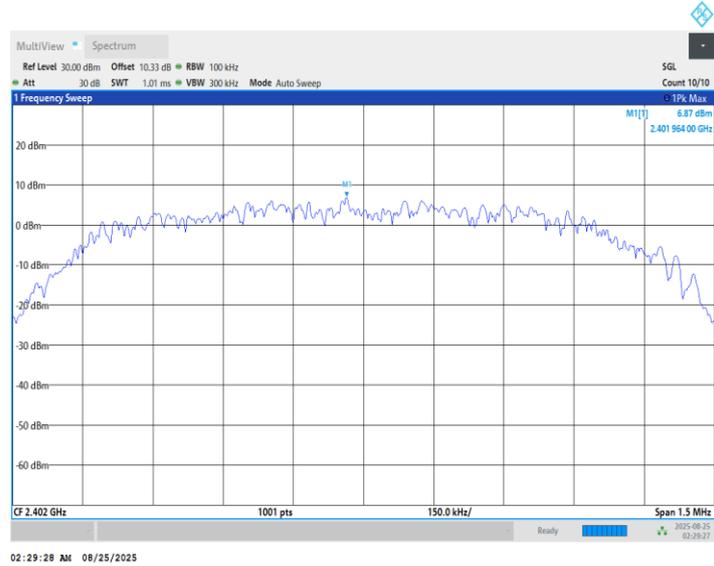
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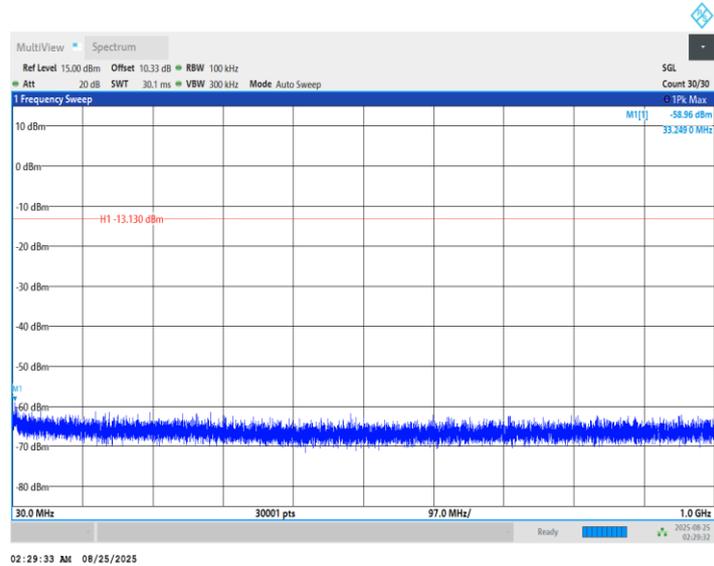
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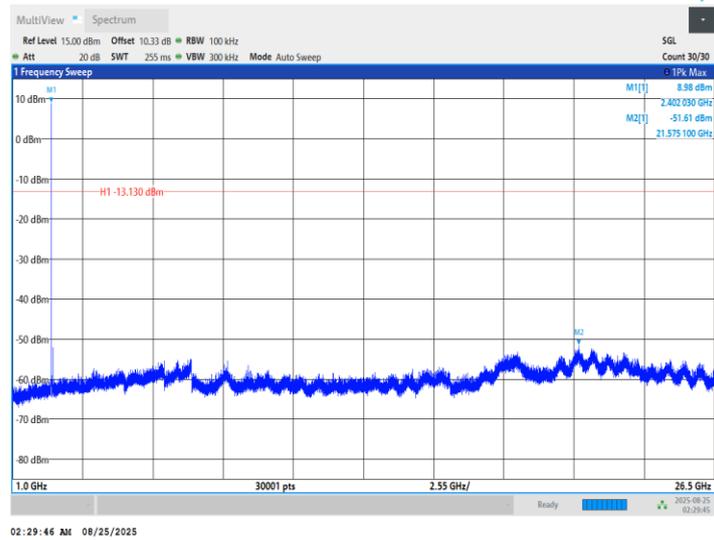
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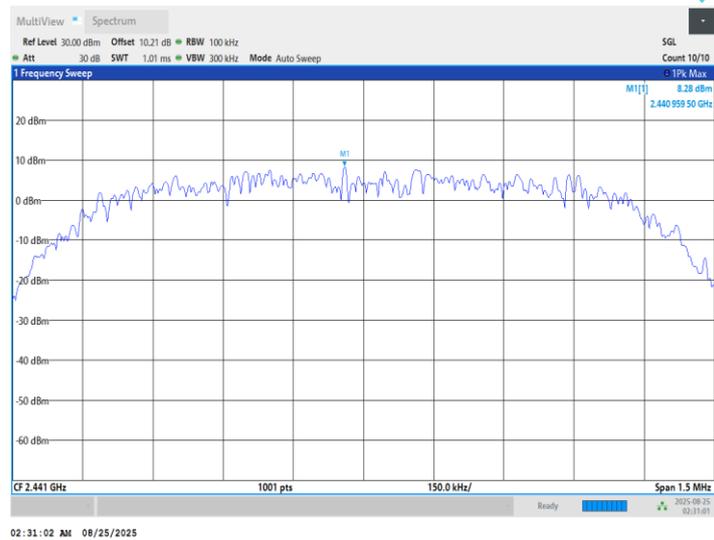
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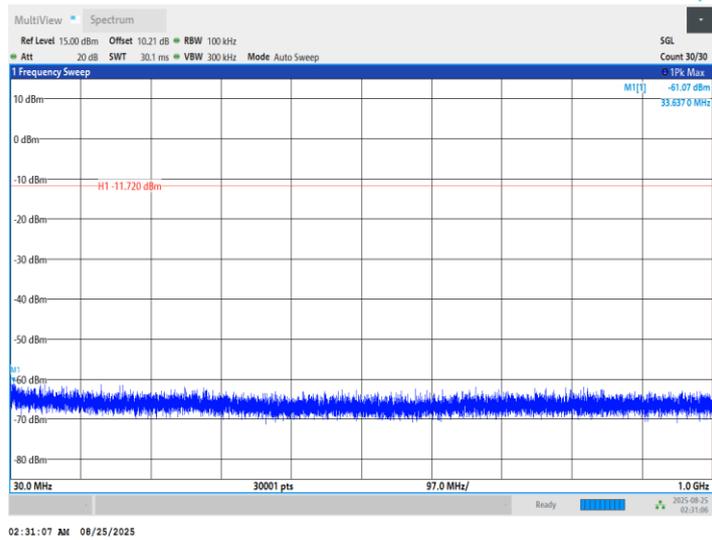
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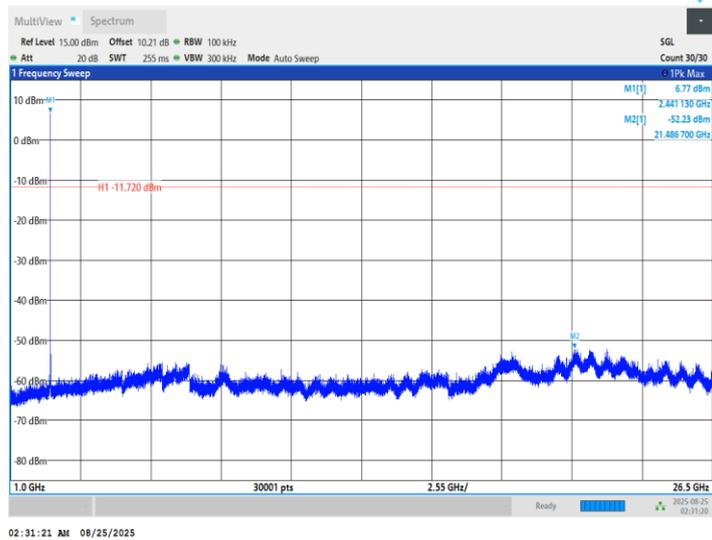
3DH5_Ant4_2441_0~Reference



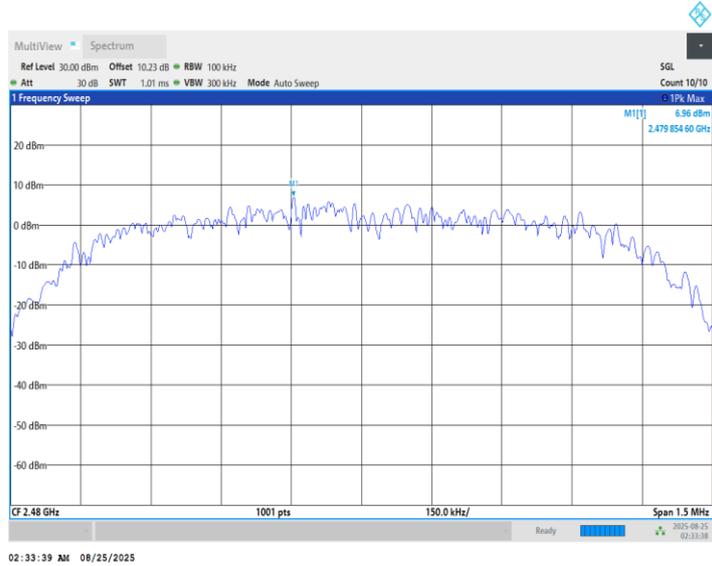
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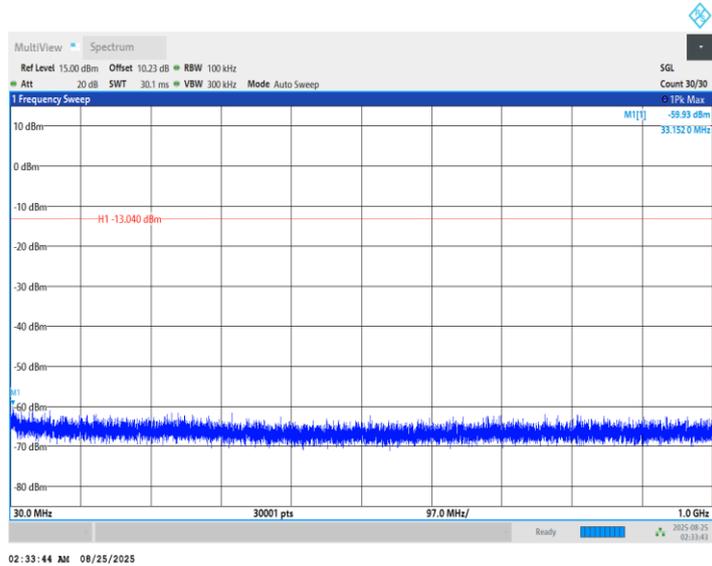
3DH5_Ant4_2441_1000~26500



3DH5_Ant4_2480_0~Reference



3DH5_Ant4_2480_30~1000



3DH5_Ant4_2480_1000~26500