

Duty Cycle

Appendix A: Test result for Bluetooth BR/EDR mode

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1.1 Appendix A: 20dB Emission Bandwidth

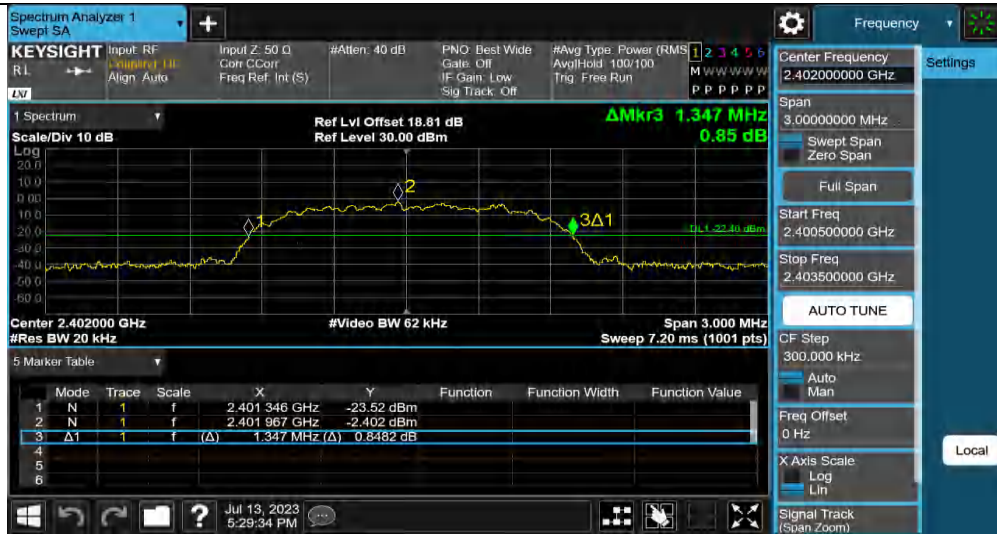
1.1.1 Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.559	2402.504	---	---
		2441	0.951	2440.559	2441.510	---	---
		2480	0.942	2479.565	2480.507	---	---
3DH5	Ant1	2402	1.347	2401.346	2402.693	---	---
		2441	1.347	2440.346	2441.693	---	---
		2480	1.347	2479.346	2480.693	---	---

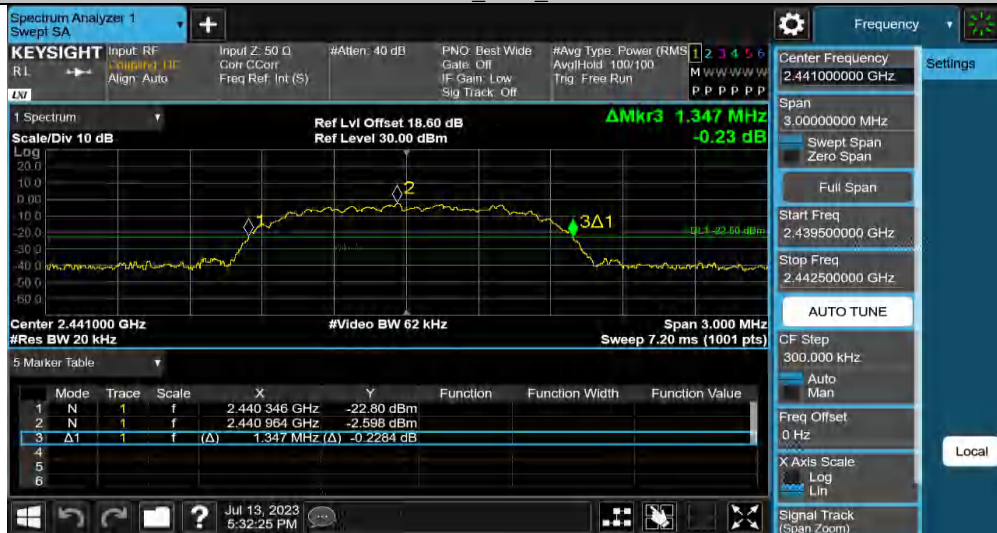
1.1.2 Test Graphs



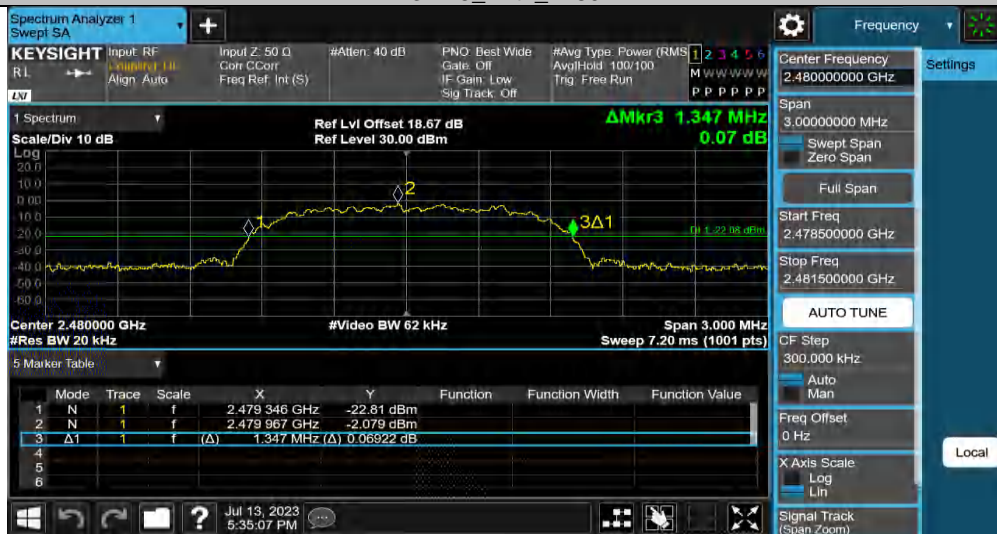
3DH5_Ant1_2402



3DH5 Ant1 2441



3DH5 Ant1 2480

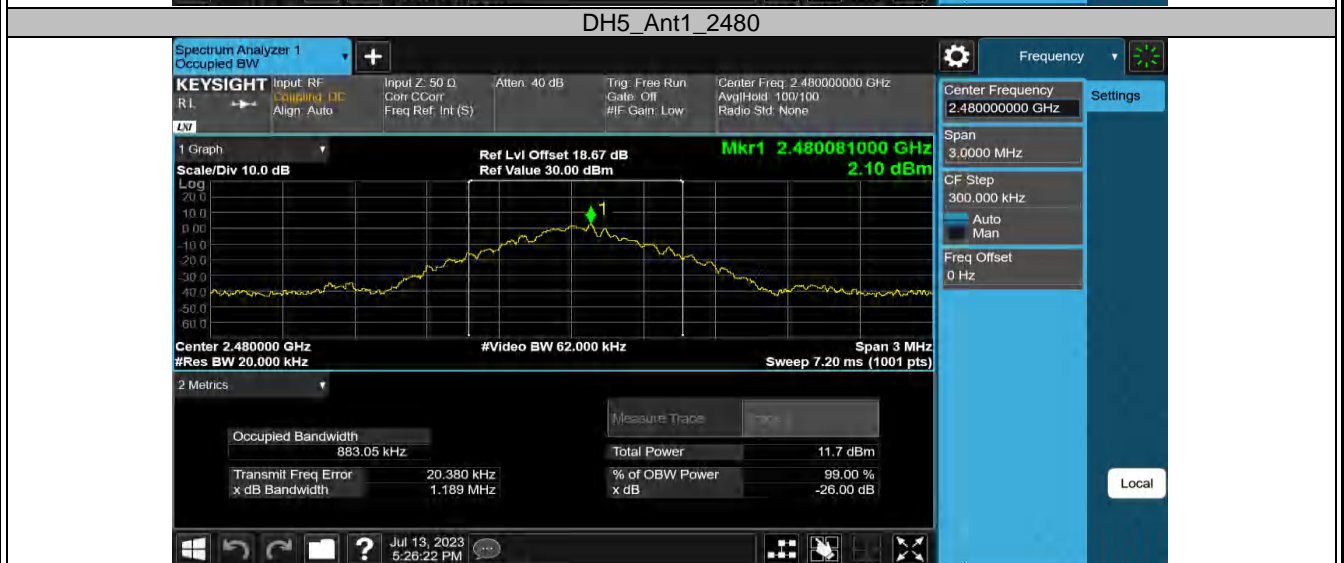
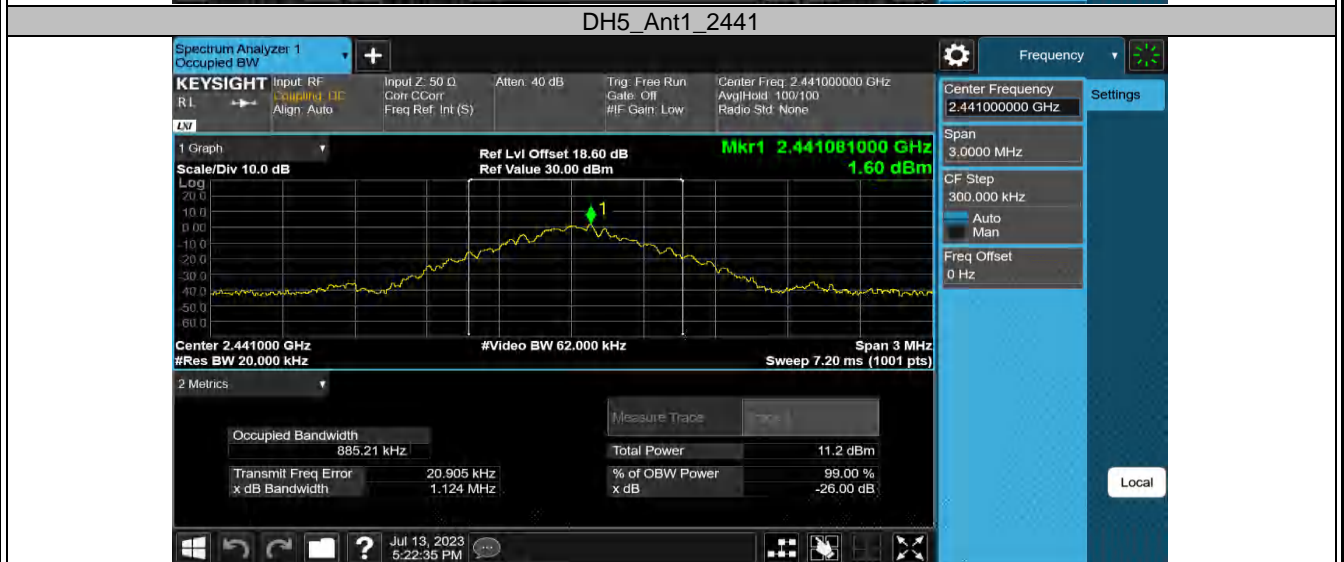
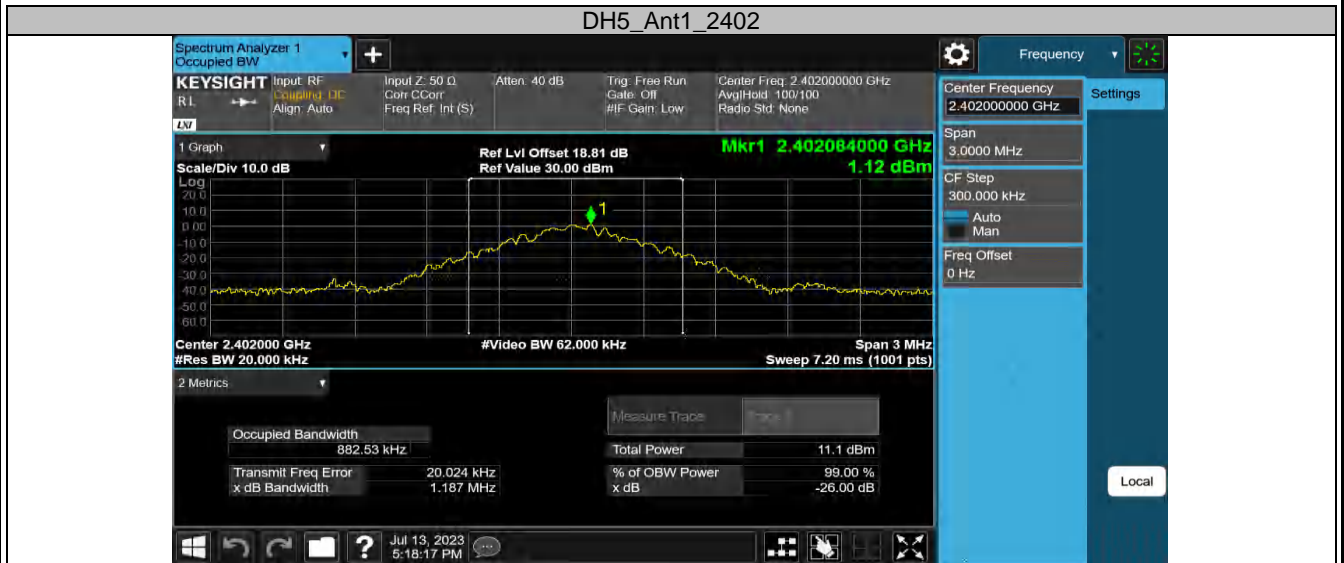


1.2 Appendix B: Occupied Channel Bandwidth

1.2.1 Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.88253	2401.5788	2402.4613	---	---
		2441	0.88521	2440.5783	2441.4635	---	---
		2480	0.88305	2479.5789	2480.4619	---	---
3DH5	Ant1	2402	1.2036	2401.4129	2402.6165	---	---
		2441	1.2054	2440.4103	2441.6157	---	---
		2480	1.1989	2479.4148	2480.6137	---	---

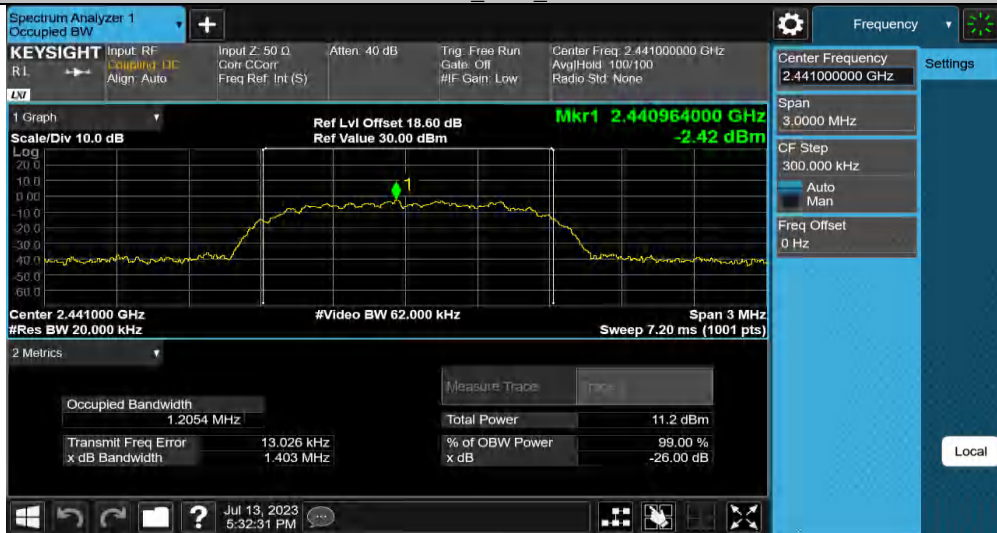
1.2.2 Test Graphs



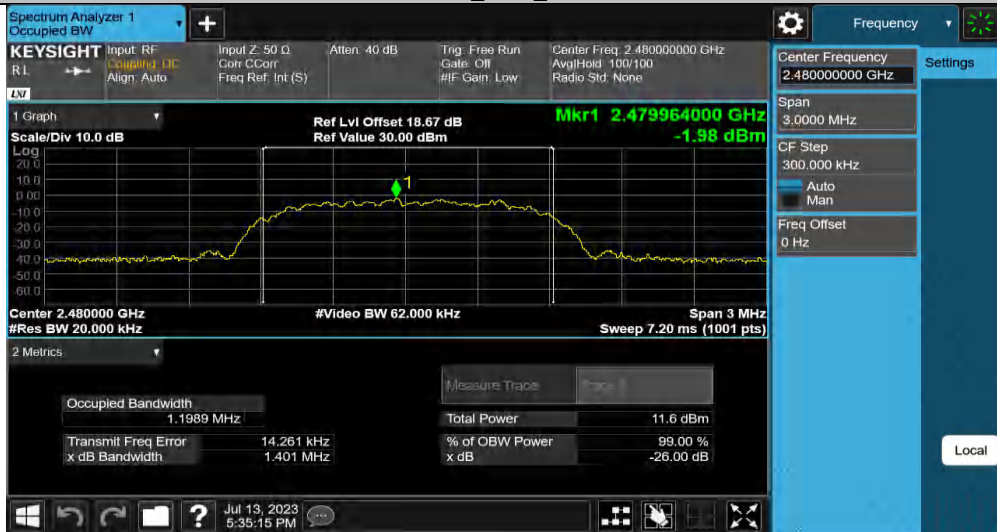
3DH5_Ant1_2402



3DH5 Ant1 2441



3DH5 Ant1 2480

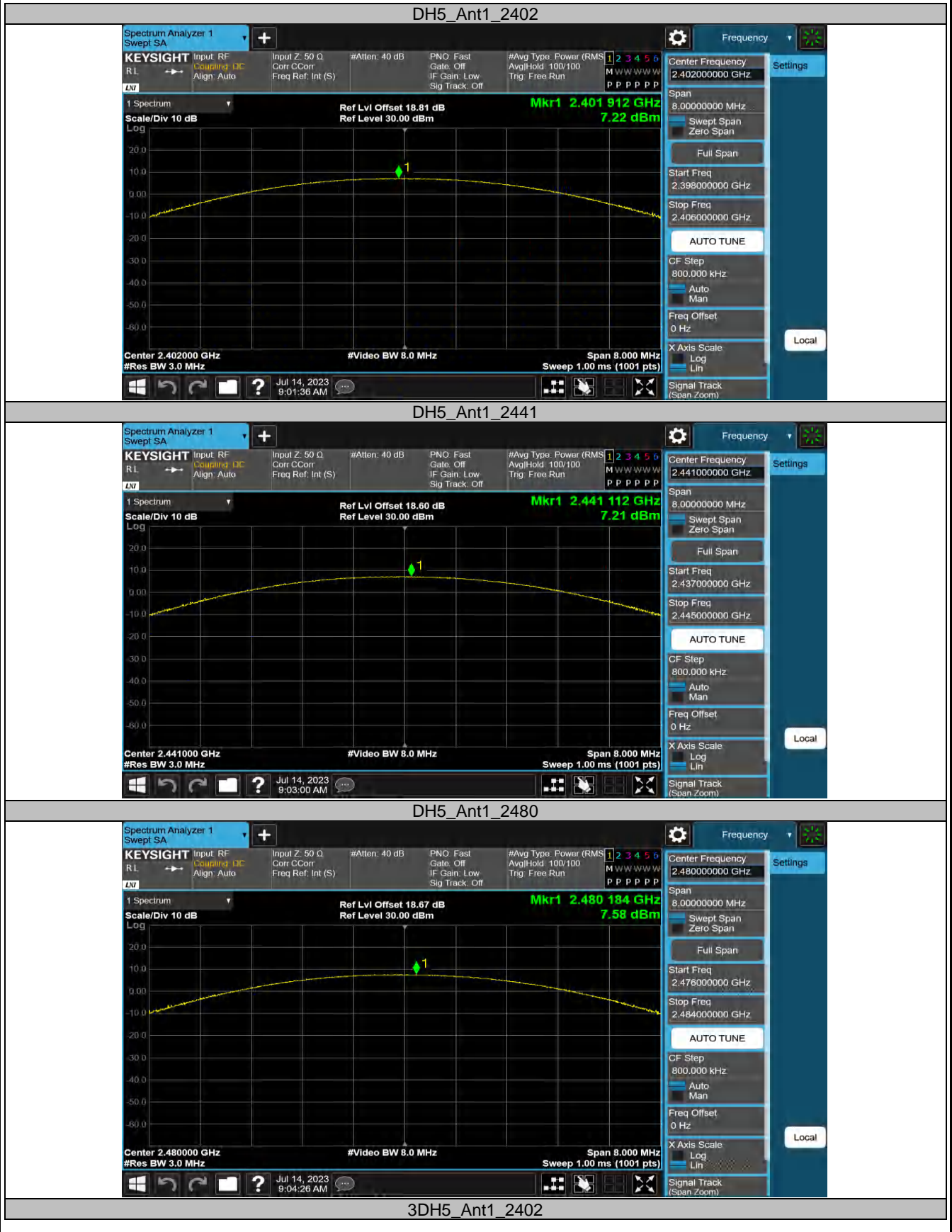


1.3 Appendix C1: Maximum conducted output power P_{Peak}

1.3.1 Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	7.22	≤ 30	PASS
		2441	7.21	≤ 30	PASS
		2480	7.59	≤ 30	PASS
3DH5	Ant1	2402	9.15	≤ 20.97	PASS
		2441	9.25	≤ 20.97	PASS
		2480	10.17	≤ 20.97	PASS

1.3.2 Test Graphs





3DH5 Ant1 2441



3DH5 Ant1 2480



1.4 Appendix C2: Maximum conducted output power Averger

1.4.1 Test Result

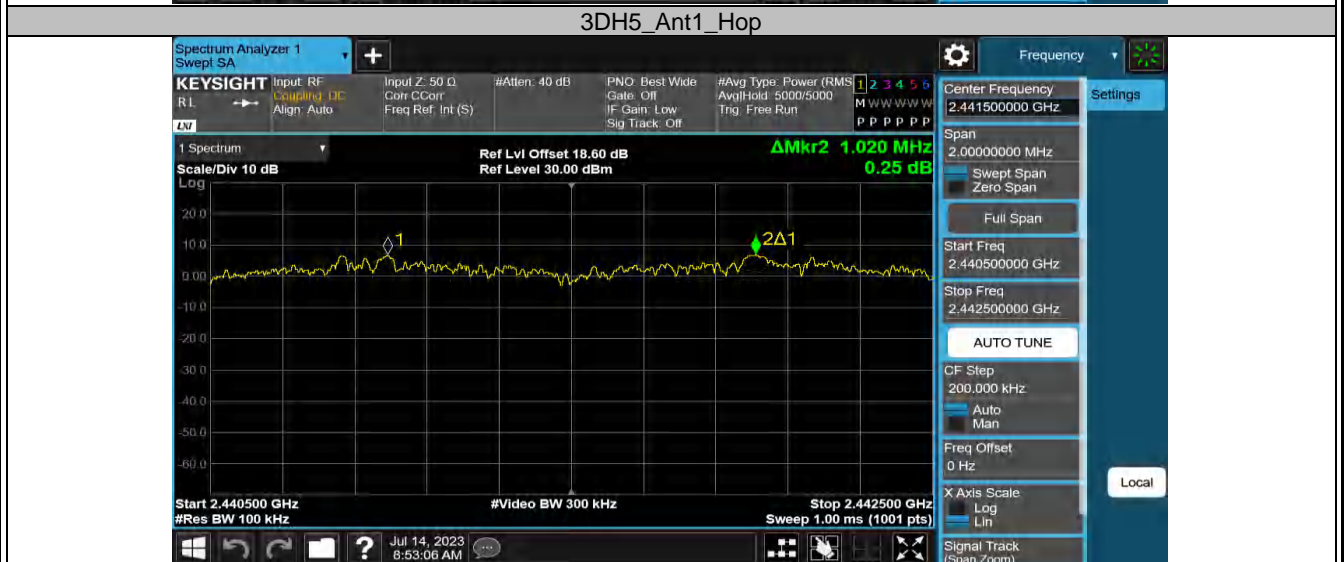
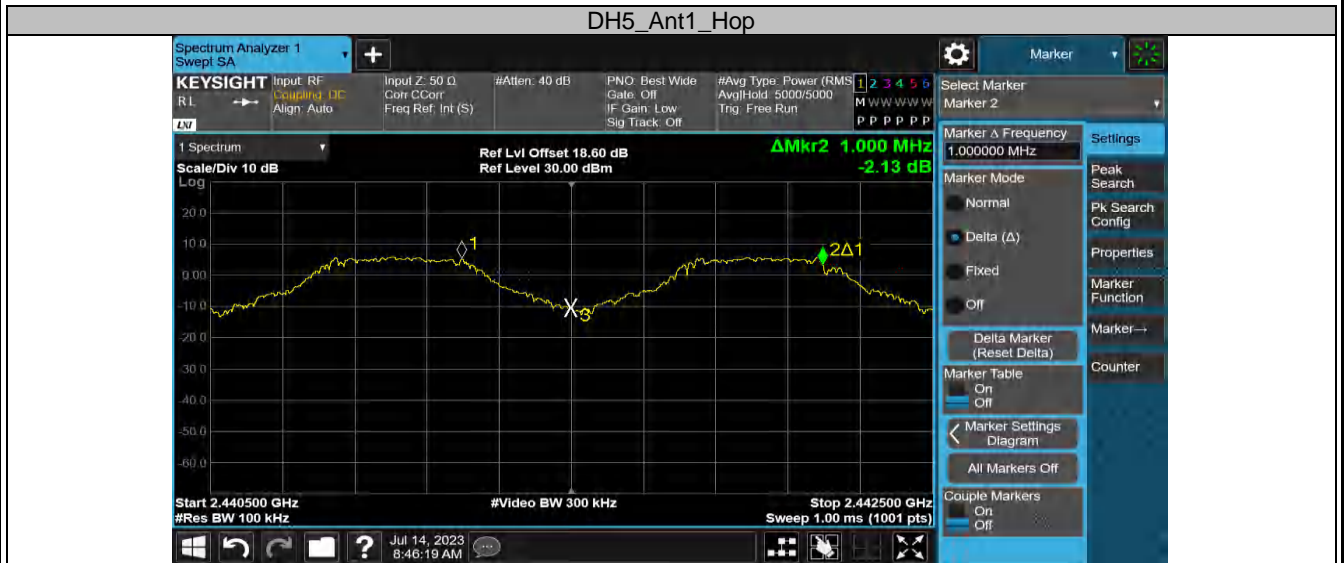
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	6.09	≤30	PASS
		2441	6.23	≤30	PASS
		2480	6.52	≤30	PASS
3DH5	Ant1	2402	5.63	≤20.97	PASS
		2441	5.9	≤20.97	PASS
		2480	6.25	≤20.97	PASS

1.5 Appendix D: Carrier frequency separation

1.5.1 Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.00	≥0.951	PASS
3DH5	Ant1	Hop	1.02	≥0.898	PASS

1.5.2 Test Graphs

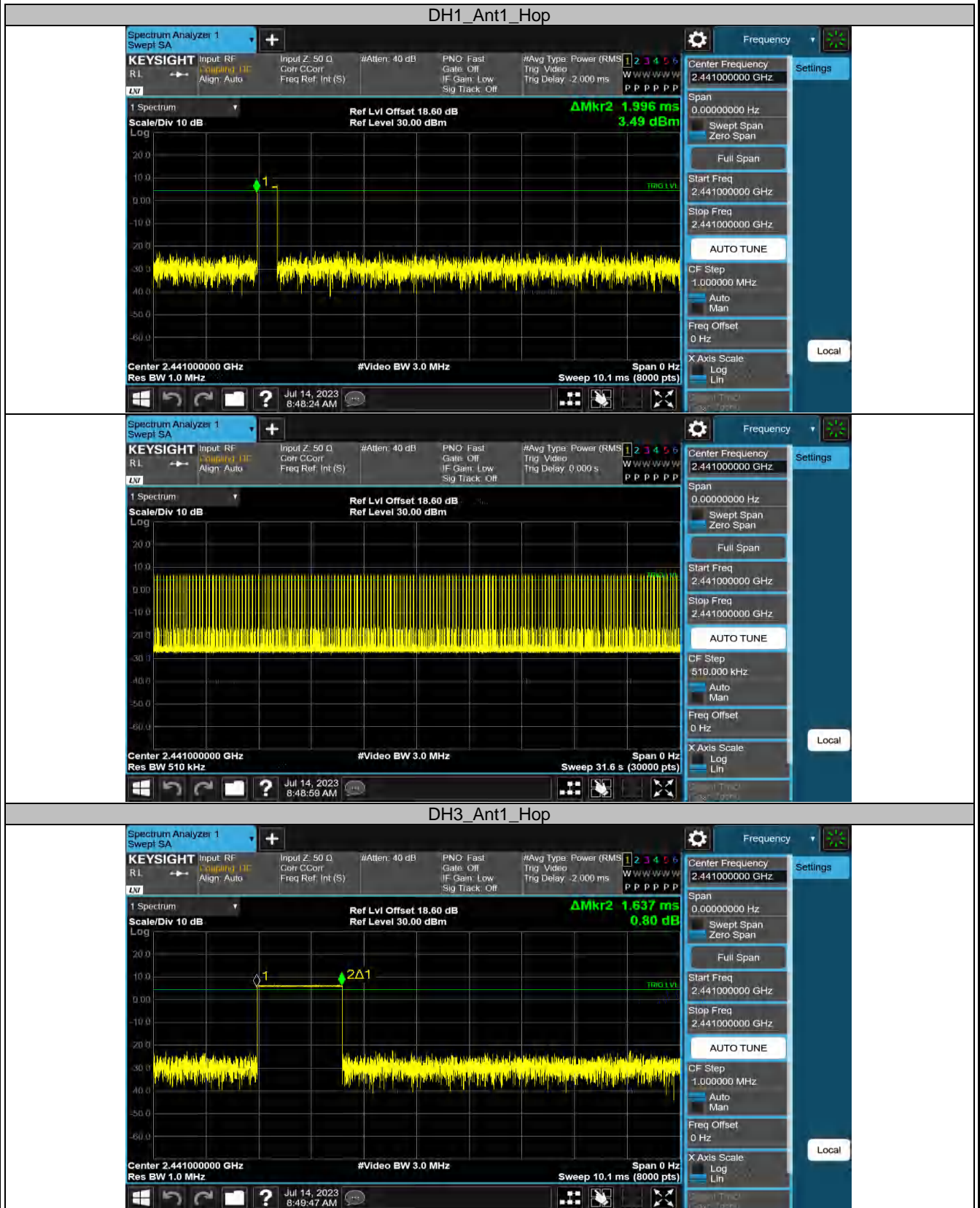


1.6 Appendix E: Time of occupancy

1.6.1 Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.381	316	0.12	≤0.4	PASS
DH3	Ant1	Hop	1.637	154	0.252	≤0.4	PASS
DH5	Ant1	Hop	2.885	95	0.274	≤0.4	PASS
3DH1	Ant1	Hop	0.390	315	0.123	≤0.4	PASS
3DH3	Ant1	Hop	1.640	155	0.254	≤0.4	PASS
3DH5	Ant1	Hop	2.892	109	0.315	≤0.4	PASS

1.6.2 Test Graphs



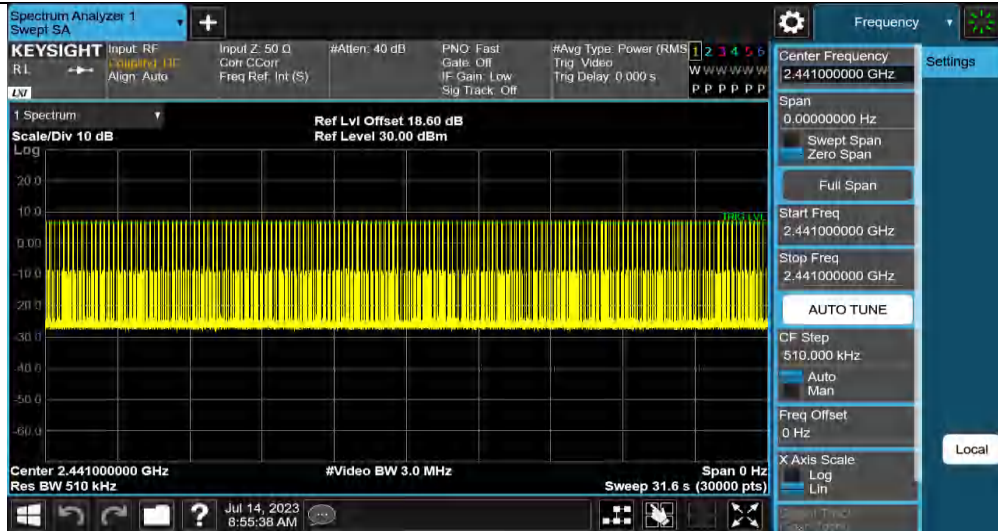
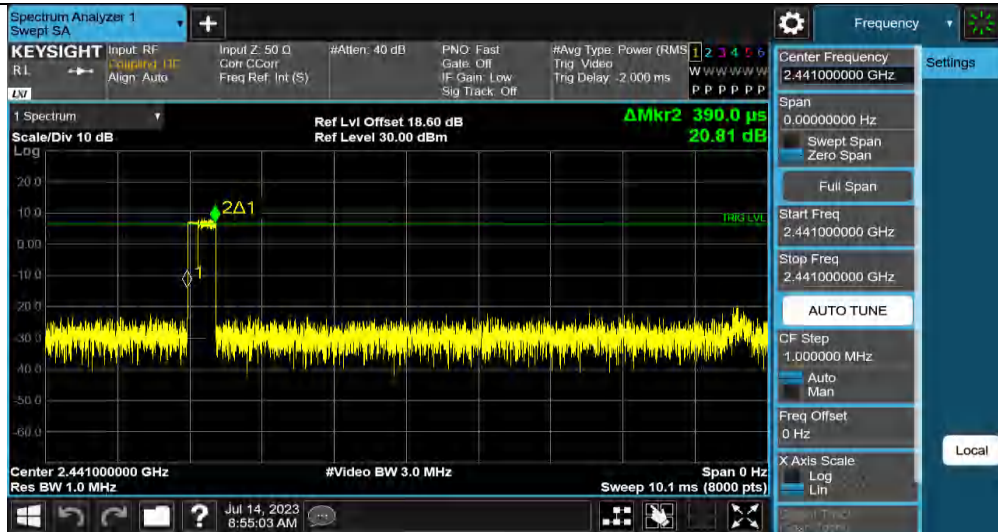


DH5 Ant1_Hop



3DH1_Ant1_Hop



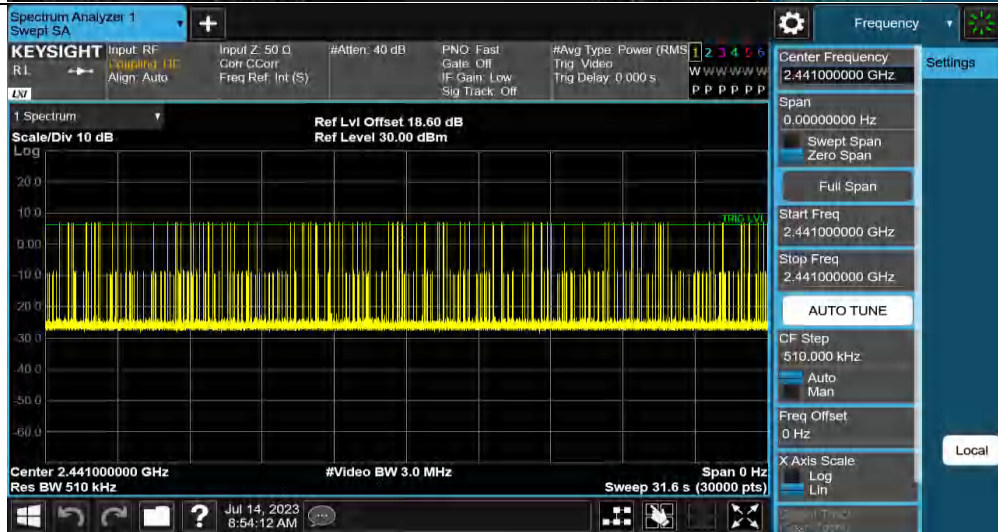


3DH3_Ant1_Hop





3DH5 Ant1 Hop

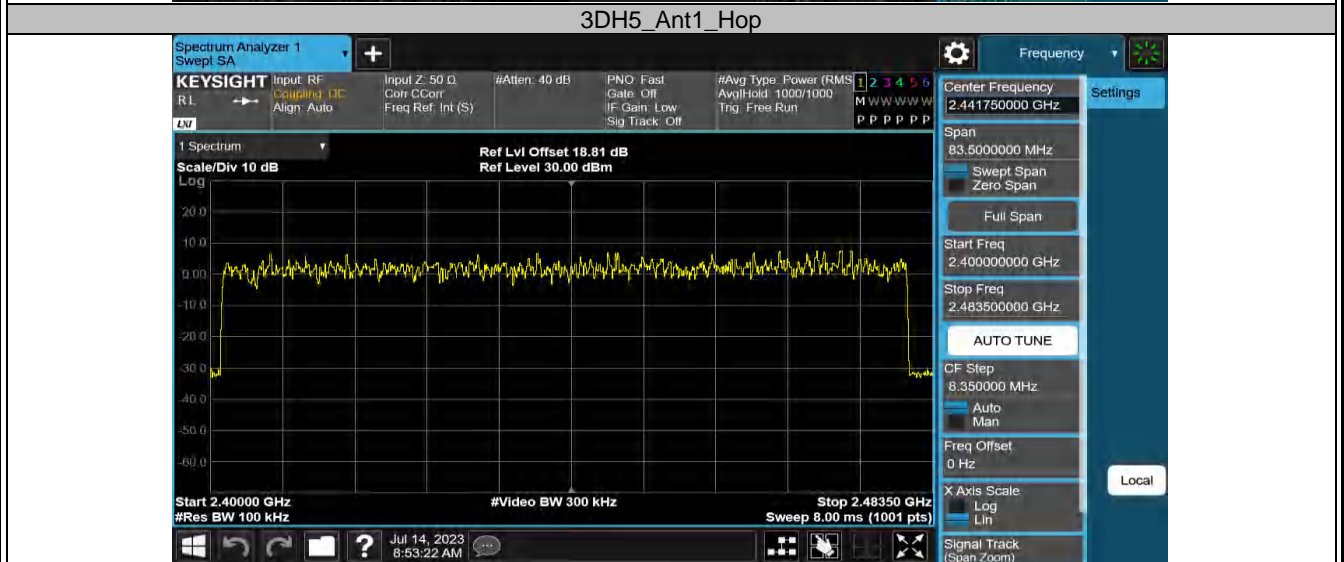
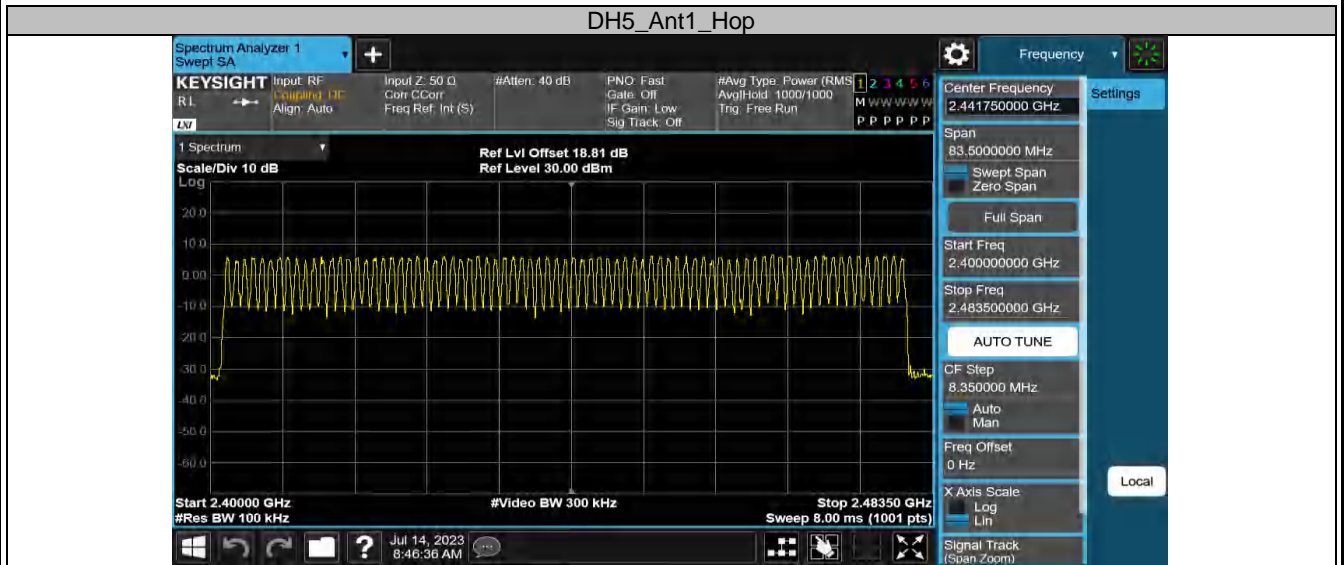


1.7 Appendix F: Number of hopping channels

1.7.1 Test Result

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

1.7.2 Test Graphs

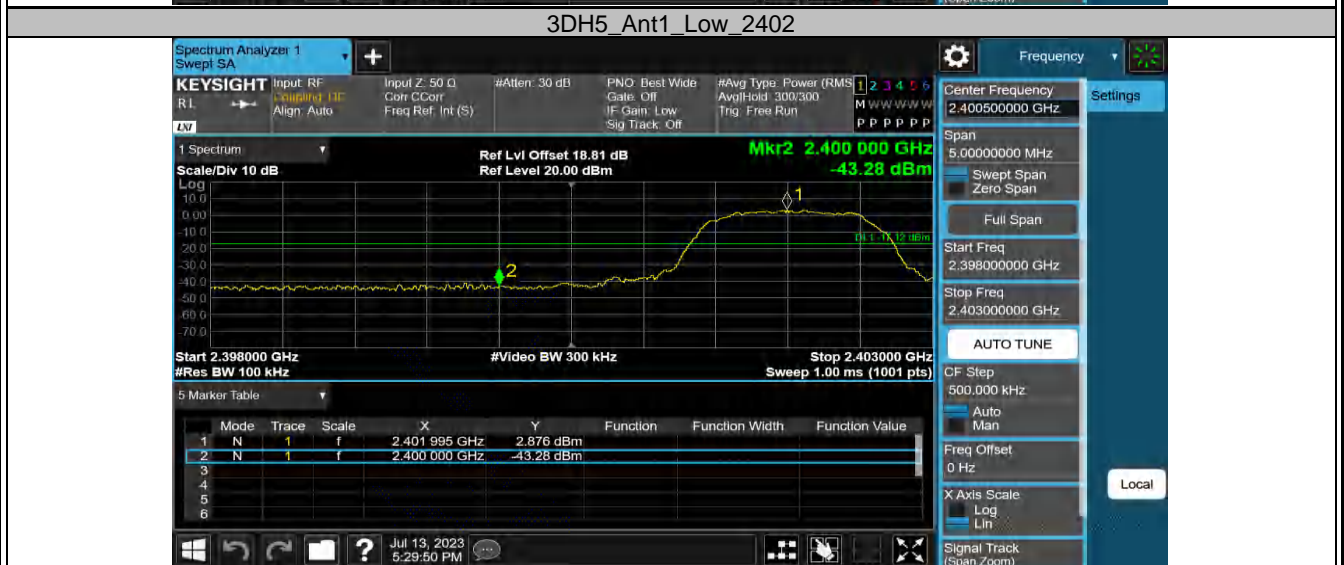
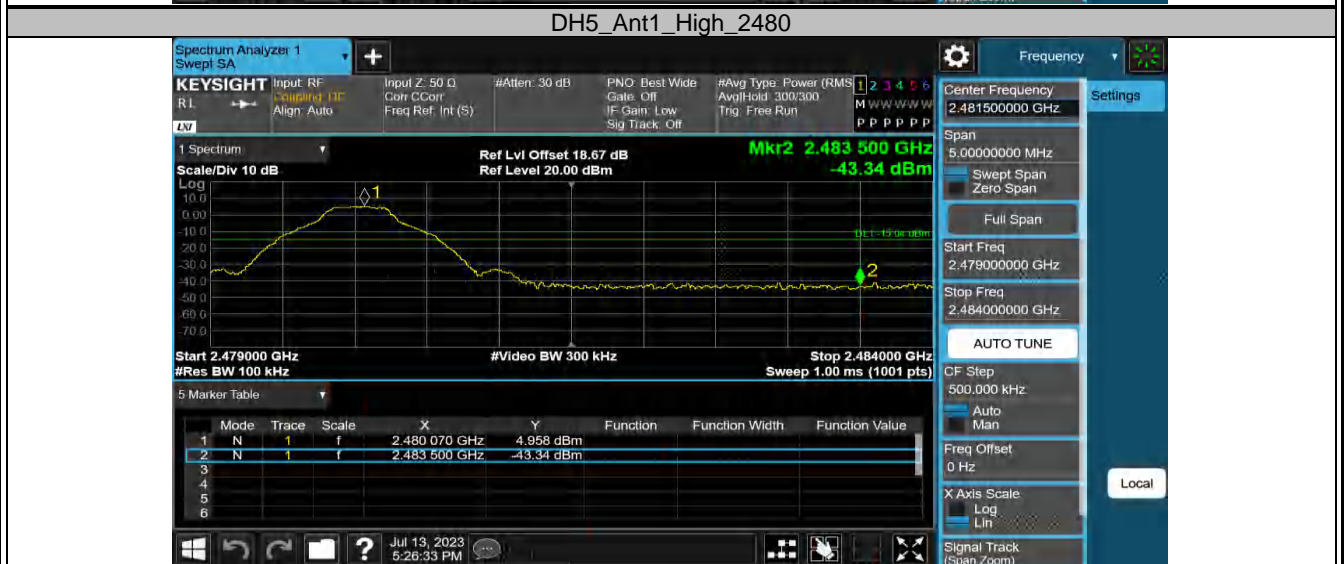
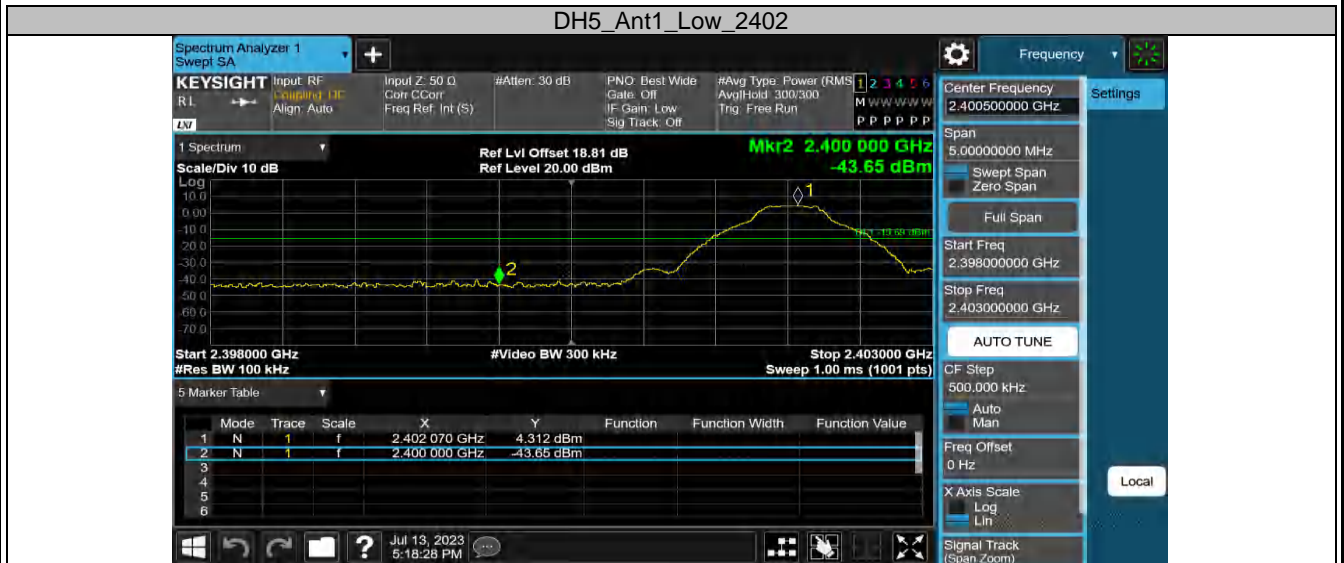


1.8 Appendix G: Band edge measurements

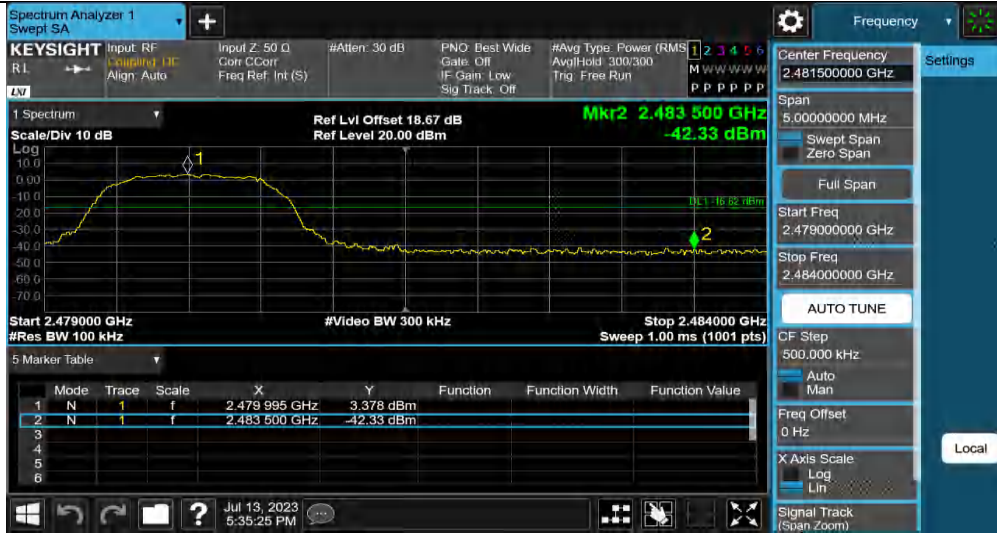
1.8.1 Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	4.312	-43.65	≤-15.69	PASS
DH5	Ant1	High	2480	4.958	-43.34	≤-15.04	PASS
3DH5	Ant1	Low	2402	2.876	-43.28	≤-17.12	PASS
3DH5	Ant1	High	2480	3.378	-42.33	≤-16.62	PASS
DH5	Ant1	Hopping	2402	5.008	-42.25	≤-14.99	PASS
DH5	Ant1	Hopping	2480	5.298	-43.37	≤-14.70	PASS
3DH5	Ant1	Hopping	2402	3.437	-43.35	≤-16.56	PASS
3DH5	Ant1	Hopping	2480	3.764	-43.06	≤-16.24	PASS

1.8.2 Test Graphs



3DH5_Ant1_High_2480



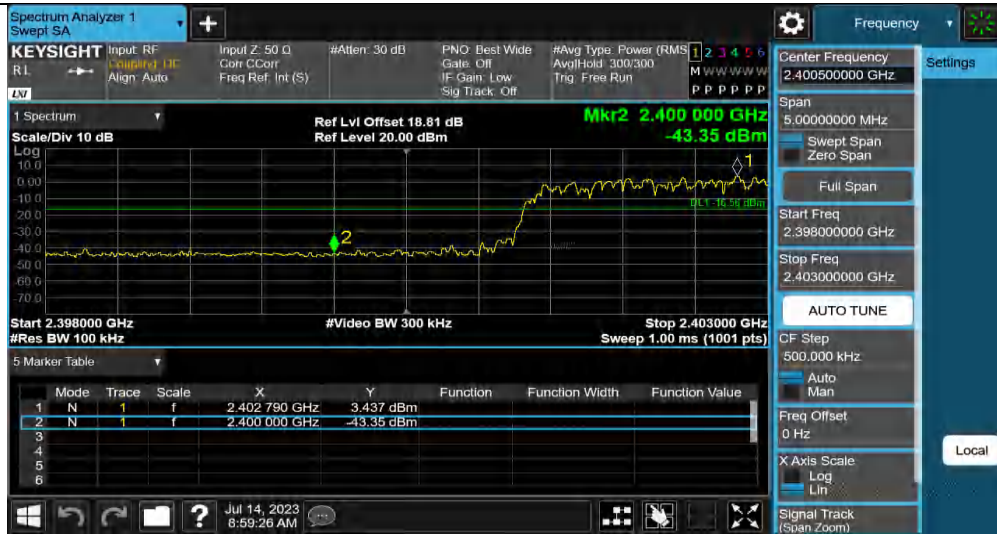
DH5_Ant1_Hopping_2402



DH5_Ant1_Hopping_2480



3DH5_Ant1_Hopping_2402



3DH5_Ant1_Hopping_2480

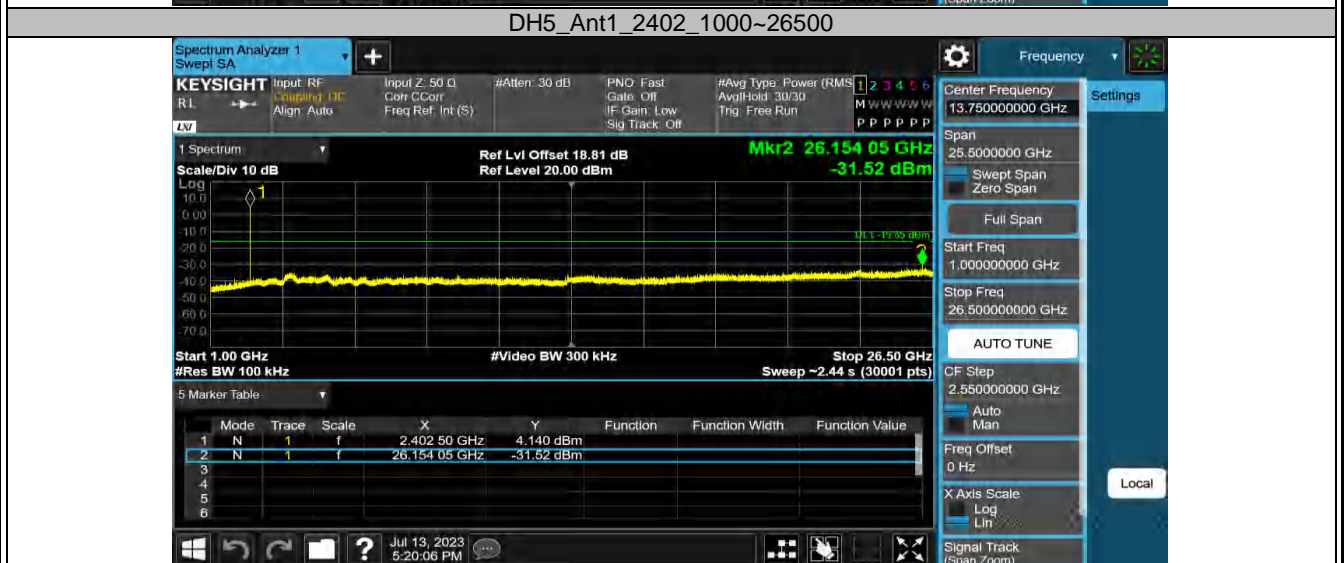
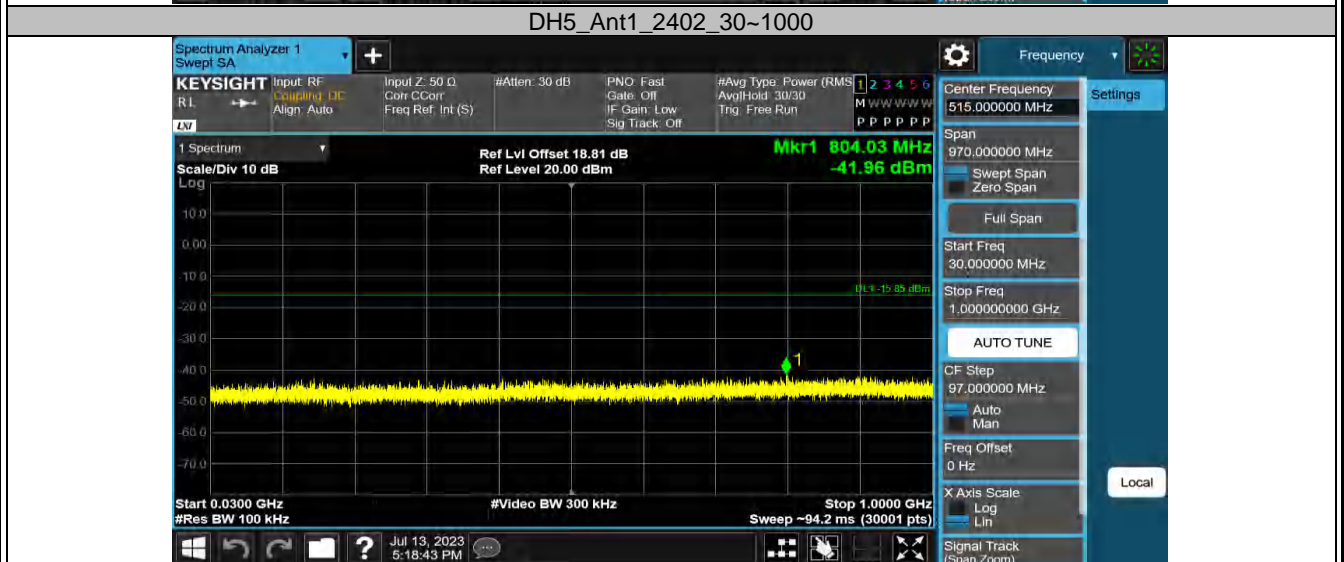


1.9 Appendix H: Conducted Spurious Emission

1.9.1 Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	4.15	4.15	---	PASS
			30~1000	4.15	-41.96	≤-15.85	PASS
			1000~26500	4.15	-31.52	≤-15.85	PASS
		2441	Reference	4.08	4.08	---	PASS
			30~1000	4.08	-41.55	≤-15.92	PASS
			1000~26500	4.08	-32.5	≤-15.92	PASS
		2480	Reference	4.71	4.71	---	PASS
			30~1000	4.71	-41.56	≤-15.29	PASS
			1000~26500	4.71	-31.98	≤-15.29	PASS
3DH5	Ant1	2402	Reference	2.70	2.70	---	PASS
			30~1000	2.70	-41.73	≤-17.3	PASS
			1000~26500	2.70	-32.45	≤-17.3	PASS
		2441	Reference	2.47	2.47	---	PASS
			30~1000	2.47	-42.17	≤-17.53	PASS
			1000~26500	2.47	-31.7	≤-17.53	PASS
		2480	Reference	3.13	3.13	---	PASS
			30~1000	3.13	-41.92	≤-16.87	PASS
			1000~26500	3.13	-31.77	≤-16.87	PASS

1.9.2 Test Graphs



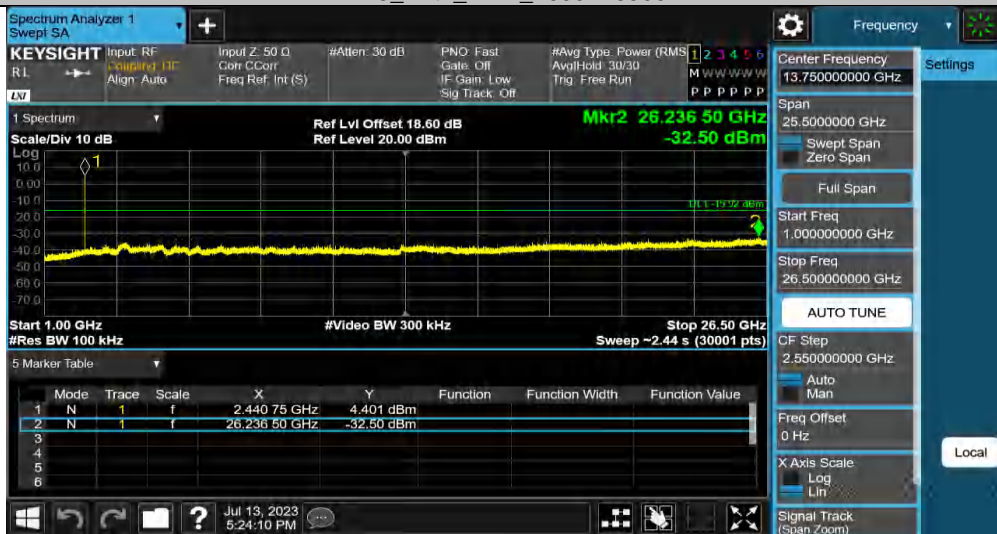
DH5_Ant1_2441_0-Reference



DH5 Ant1 2441 30~1000



DH5 Ant1 2441 1000~26500



DH5 Ant1 2480_0-Reference



DH5_Ant1_2480_30~1000



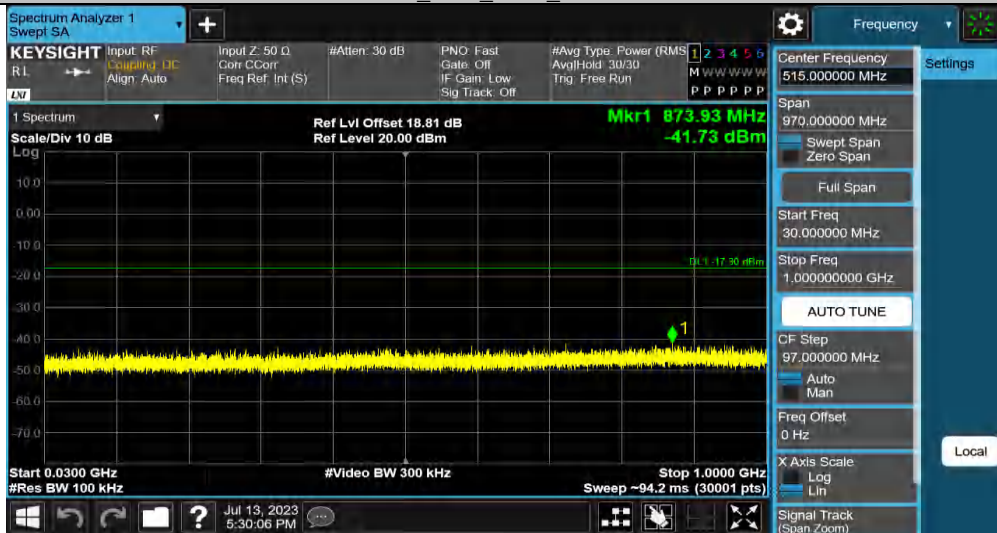
DH5_Ant1_2480_1000~26500



3DH5_Ant1_2402_0~Reference



3DH5_Ant1_2402_30~1000



3DH5_Ant1_2402_1000~26500



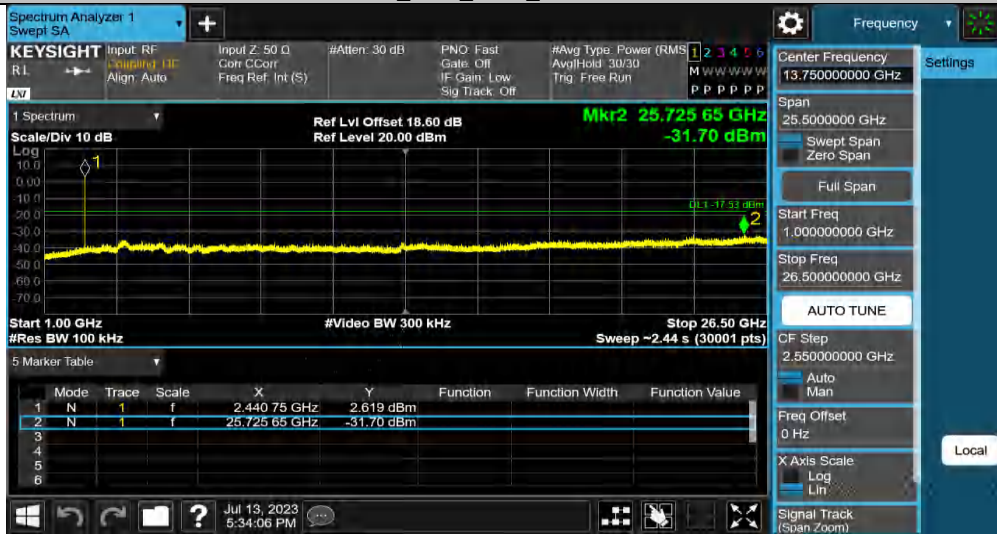
3DH5_Ant1_2441_0~Reference



3DH5_Ant1_2441_30~1000



3DH5_Ant1_2441_1000~26500



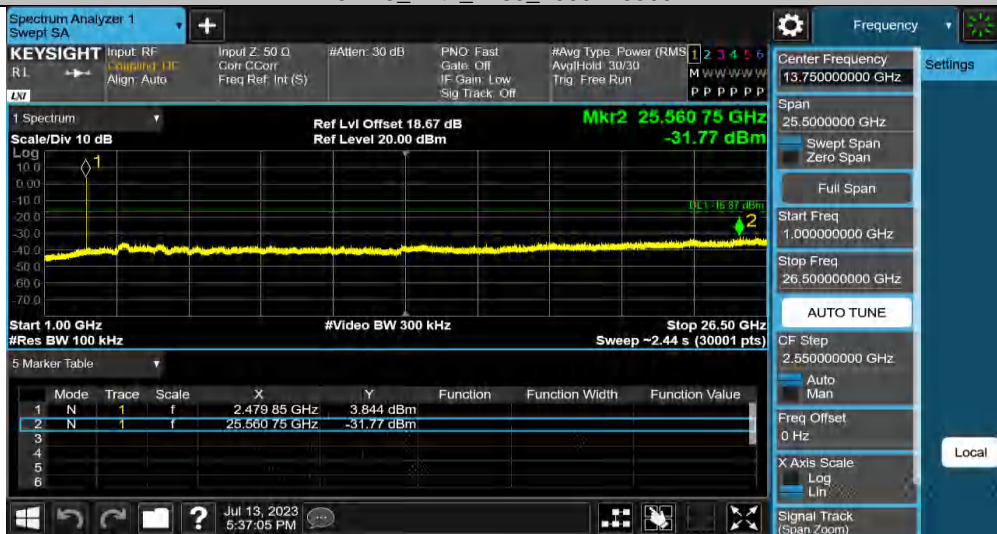
3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500



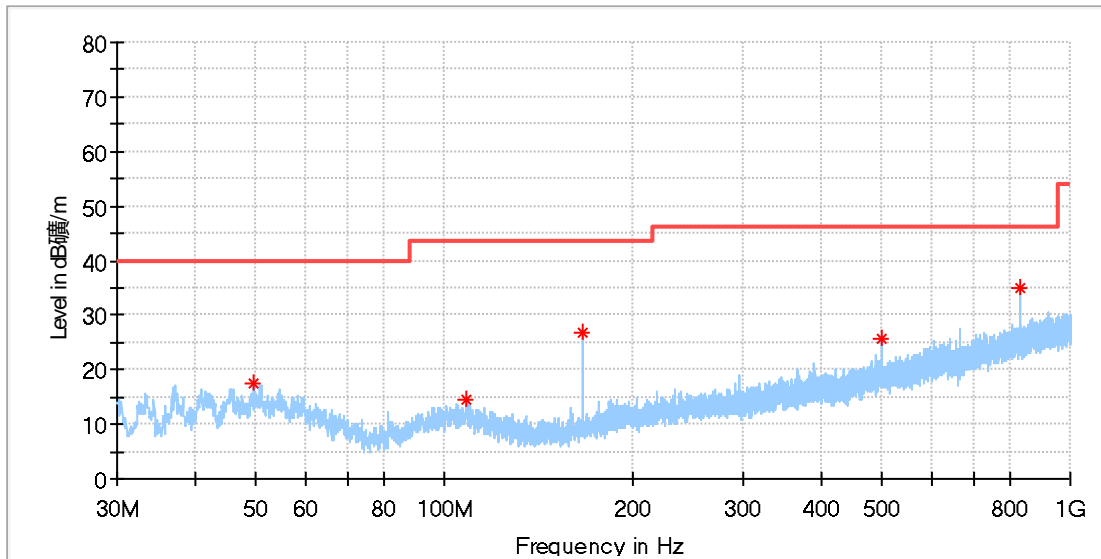
1.10 Appendix H: Radiated Spurious Emission

Note: 1. Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and above 18GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.
 2. This testing was carried out on Low/Middle/High channel, only the worst case was presented in this report.

Test Report

EUT Information

EUT Name:	Rokid Station
Model:	RES102
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168429121/A003488166-001
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.642500	17.52	40.00	22.48	100.0	H	315.0	-18.3
108.327500	14.52	43.50	28.98	100.0	H	171.0	-19.0
166.673000	26.64	43.50	16.86	100.0	H	146.0	-21.4
500.062000	25.54	46.00	20.46	100.0	H	254.0	-11.8
833.402500	34.97	46.00	11.03	100.0	H	301.0	-5.8

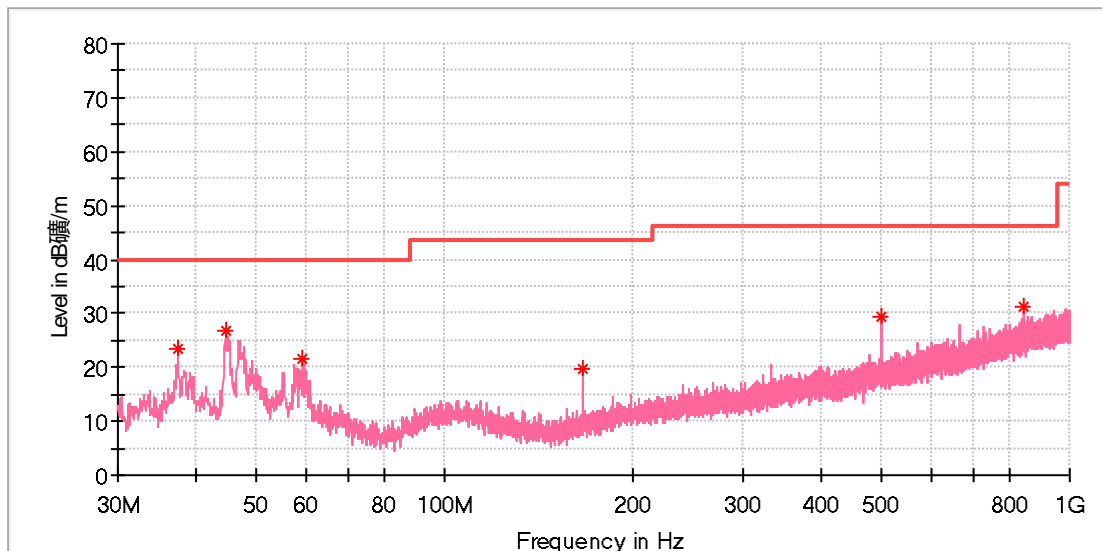
Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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Test Report

EUT Information

EUT Name:	Rokid Station
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Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168429121/A003488166-001
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
37.517500	23.27	40.00	16.73	100.0	V	335.0	-21.0
44.598500	26.66	40.00	13.34	100.0	V	322.0	-18.9
59.342500	21.59	40.00	18.41	100.0	V	87.0	-18.9
166.673000	19.86	43.50	23.64	100.0	V	214.0	-21.4
500.062000	29.51	46.00	16.49	100.0	V	38.0	-11.8
845.867000	31.25	46.00	14.75	100.0	V	286.0	-5.6

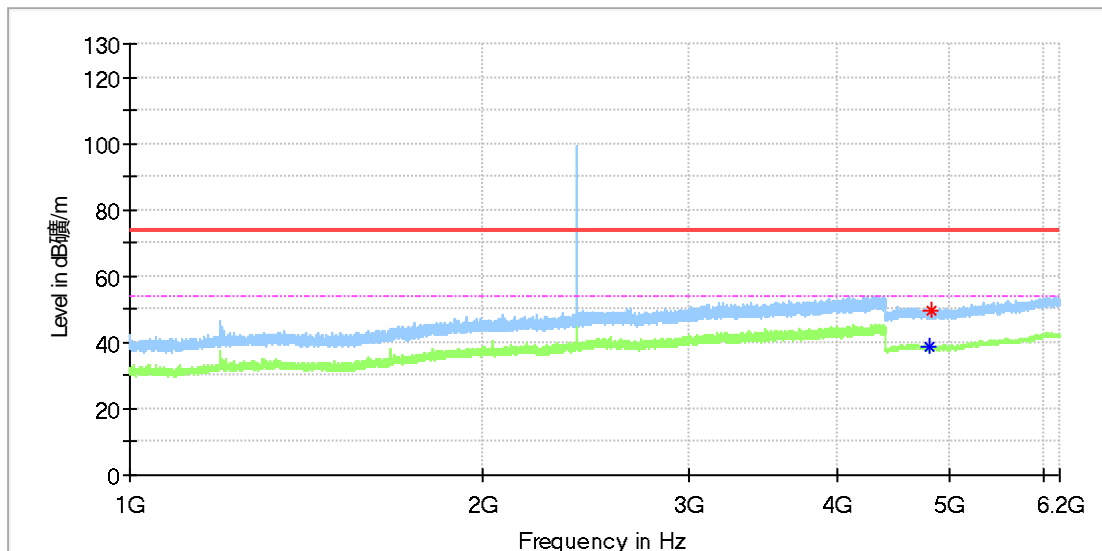
Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Test Report

EUT Information

EUT Name:	Rokid Station
Model:	RES102
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168429121/A003488166-001
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4806.500000	---	38.91	54.00	15.09	150.0	H	107.0	11.8
4827.000000	49.78	---	74.00	24.22	150.0	H	196.0	11.8

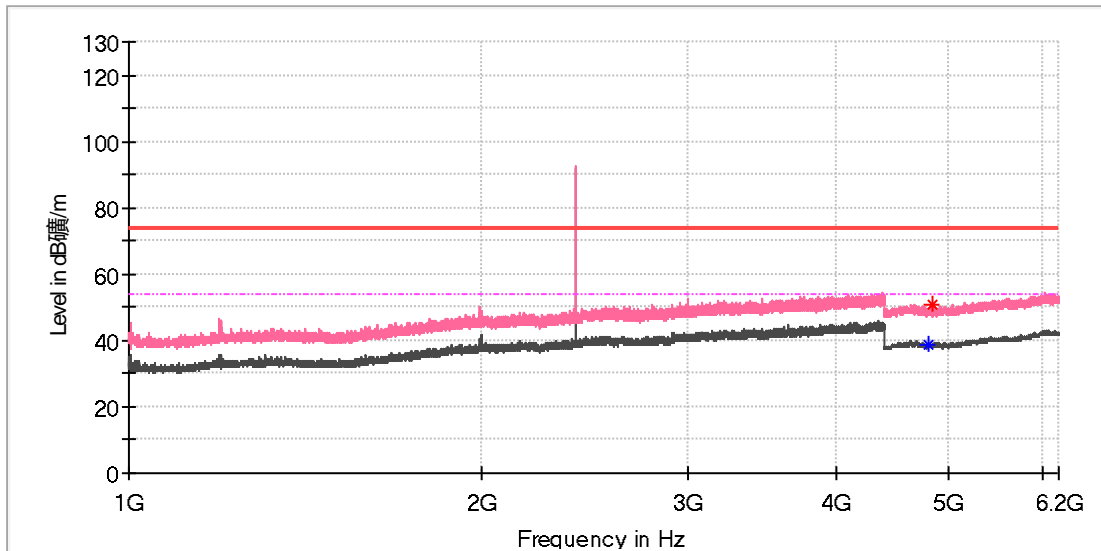
Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Test Report

EUT Information

EUT Name:	Rokid Station
Model:	RES102
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168429121/A003488166-001
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4808.500000	---	38.99	54.00	15.01	150.0	V	192.0	11.8
4843.500000	50.97	---	74.00	23.03	150.0	V	359.0	11.8

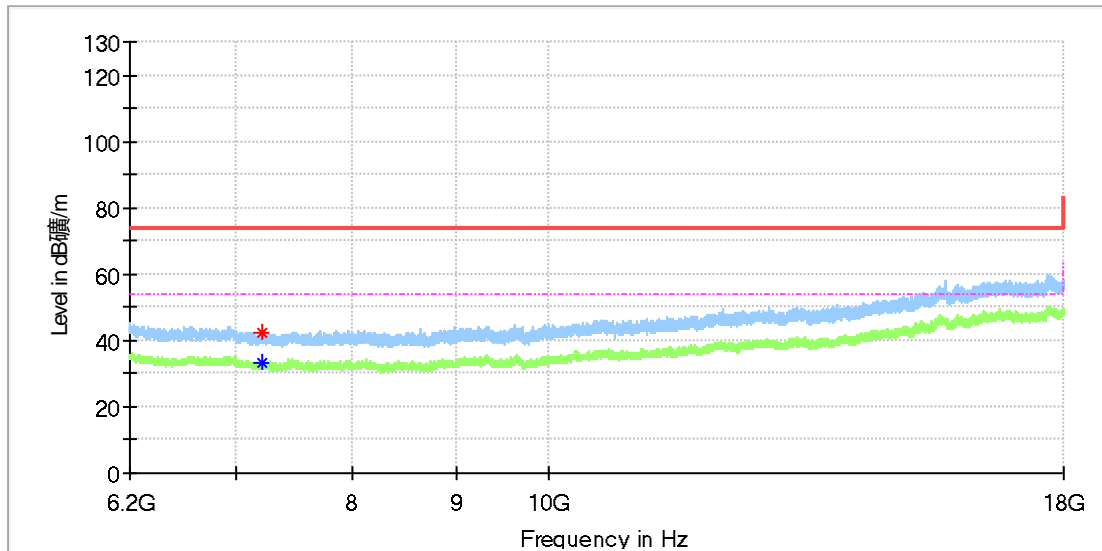
Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Test Report

EUT Information

EUT Name:	Rokid Station
Model:	RES102
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168429121/A003488166-001
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7209.883333	---	33.38	54.00	20.62	150.0	H	147.0	8.7
7217.750000	42.24	---	74.00	31.76	150.0	H	219.0	8.7

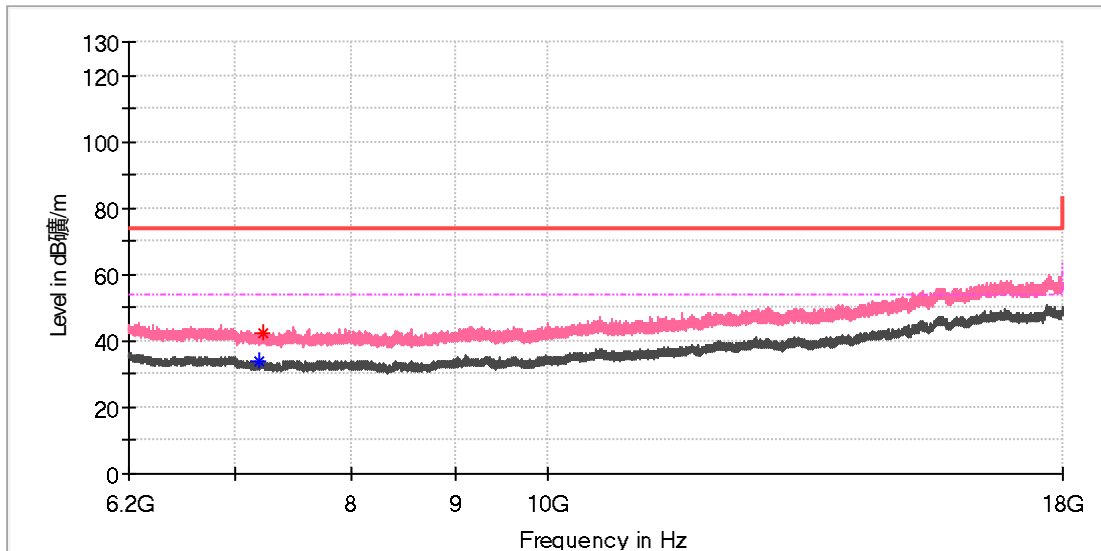
Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Test Report

EUT Information

EUT Name:	Rokid Station
Model:	RES102
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168429121/A003488166-001
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7200.541667	---	33.65	54.00	20.35	150.0	V	166.0	8.8
7219.225000	42.55	---	74.00	31.45	150.0	V	58.0	8.7

Final Result

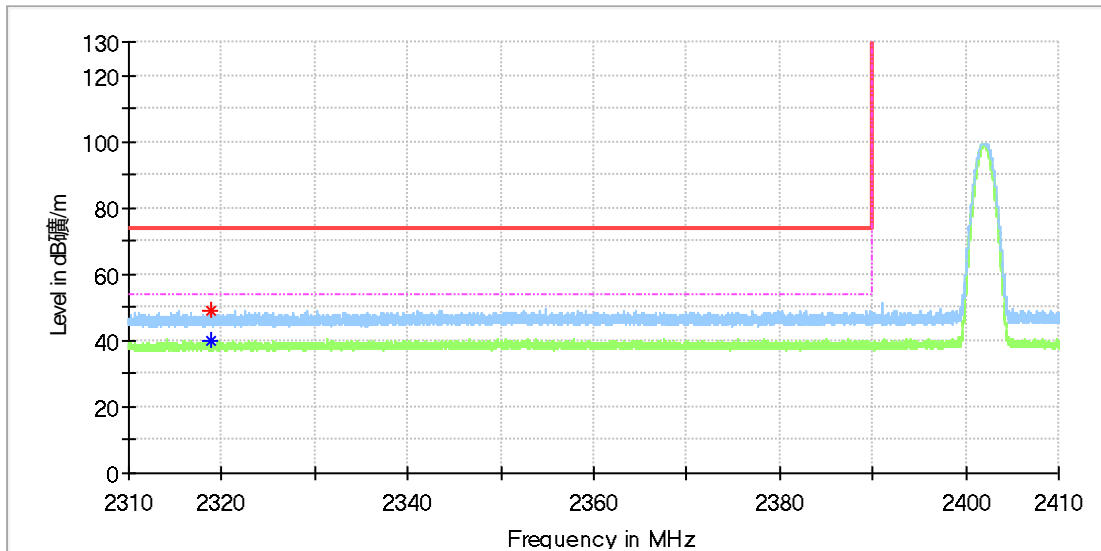
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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1.11 Appendix J: Radiated Emissions in Restricted Bands

Test Report

EUT Information

EUT Name:	Rokid Station
Model:	RES102
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168429121/A003488166-001
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2318.790000	---	39.87	54.00	14.13	150.0	H	280.0	6.6
2318.930000	48.75	---	74.00	25.25	150.0	H	172.0	6.6

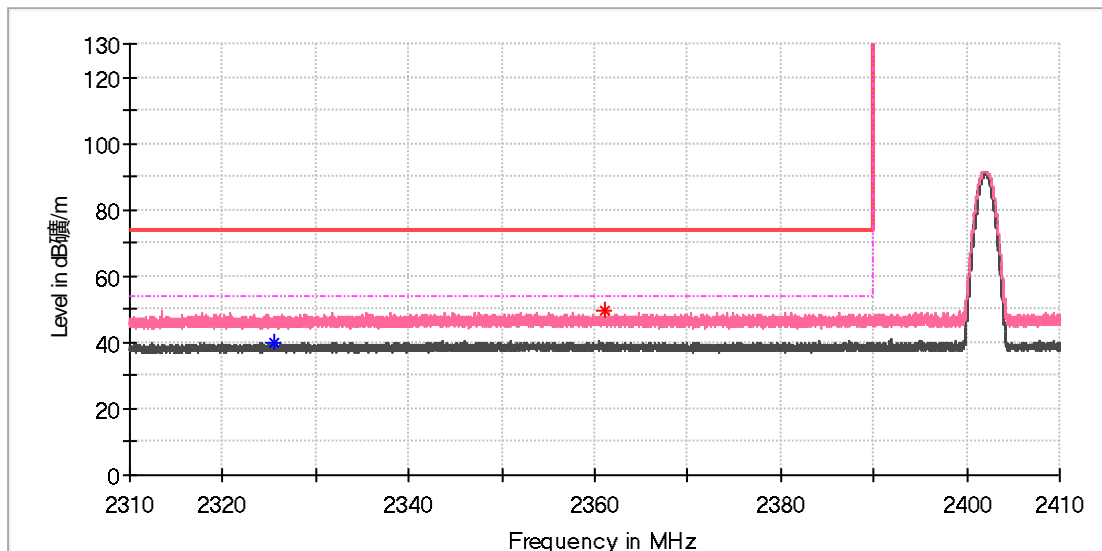
Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Test Report

EUT Information

EUT Name:	Rokid Station
Model:	RES102
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168429121/A003488166-001
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2325.615000	---	40.00	54.00	14.00	150.0	V	295.0	6.7
2361.085000	49.52	---	74.00	24.48	150.0	V	288.0	6.9

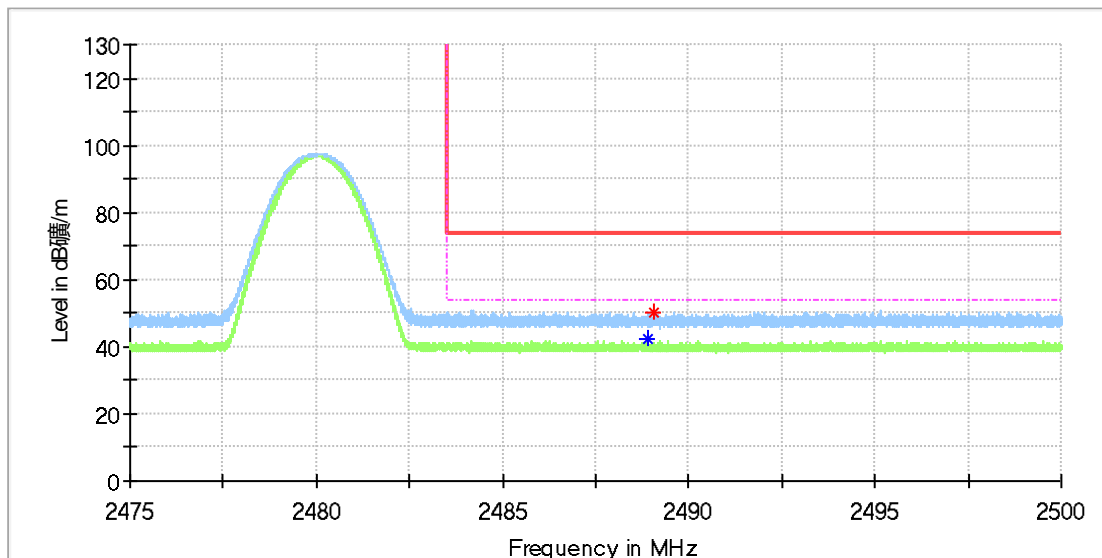
Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Test Report

EUT Information

EUT Name:	Rokid Station
Model:	RES102
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168429121/A003488166-001
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2488.880000	---	42.23	54.00	11.77	150.0	H	343.0	7.4
2489.040000	50.01	---	74.00	23.99	150.0	H	249.0	7.4

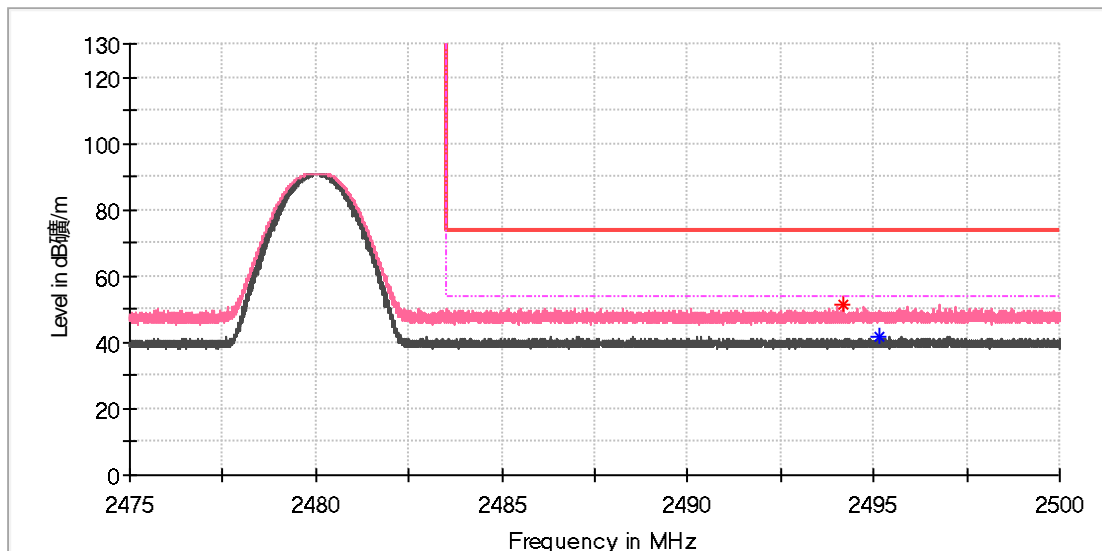
Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Test Report

EUT Information

EUT Name:	Rokid Station
Model:	RES102
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168429121/A003488166-001
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2494.156250	51.33	---	74.00	22.67	150.0	V	61.0	7.4
2495.170000	---	41.85	54.00	12.15	150.0	V	187.0	7.4

Final Result

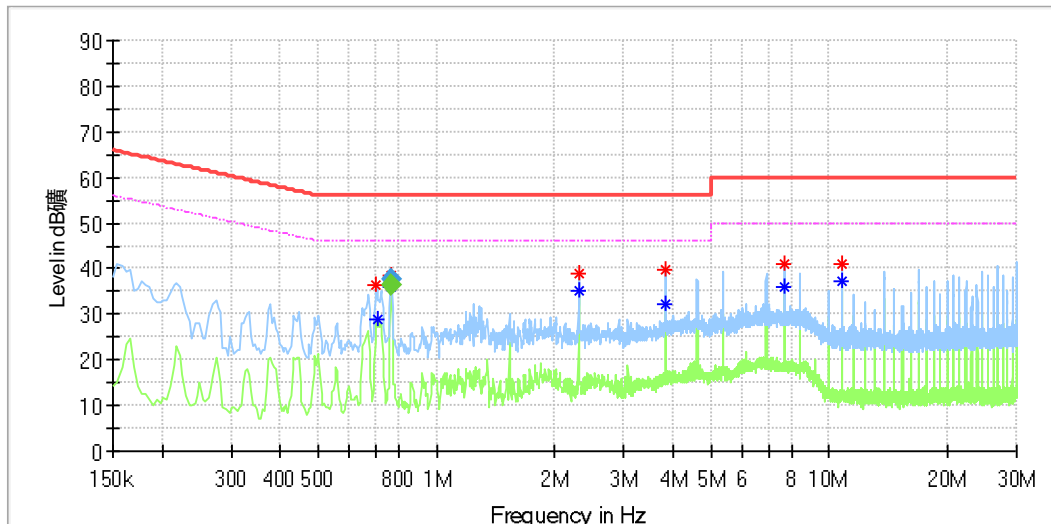
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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1.12 Appendix K: Conducted Emissions

Test Report

EUT Information

EUT Name:	Rokid Staion
Order Number:	168429121
Model:	RES102
Test Mode:	Operating mode(Bluetooth)
Test Voltage	AC 120V/60Hz
Test Standard:	FCC Part 15.207
Test By:/Review By:	Charlie Zha / Gary Chen
Tem./Hum./Pressure:	24.3°C/51.6%/101kPa
Remark:	SR2



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.702000	36.29	---	56.00	19.71	L1	10.0
0.706000	---	28.94	46.00	17.06	L1	10.0
0.769500	---	36.08	46.00	9.92	L1	10.0
0.769500	38.56	---	56.00	17.44	L1	10.0
2.306000	---	35.02	46.00	10.98	L1	10.2
2.306000	38.86	---	56.00	17.14	L1	10.2
3.842000	39.67	---	56.00	16.33	L1	10.2
3.842000	---	32.41	46.00	13.59	L1	10.2
7.678000	---	36.15	50.00	13.85	L1	10.3
7.678000	41.17	---	60.00	18.83	L1	10.3
10.754000	---	37.26	50.00	12.74	L1	10.3
10.754000	41.18	---	60.00	18.82	L1	10.3

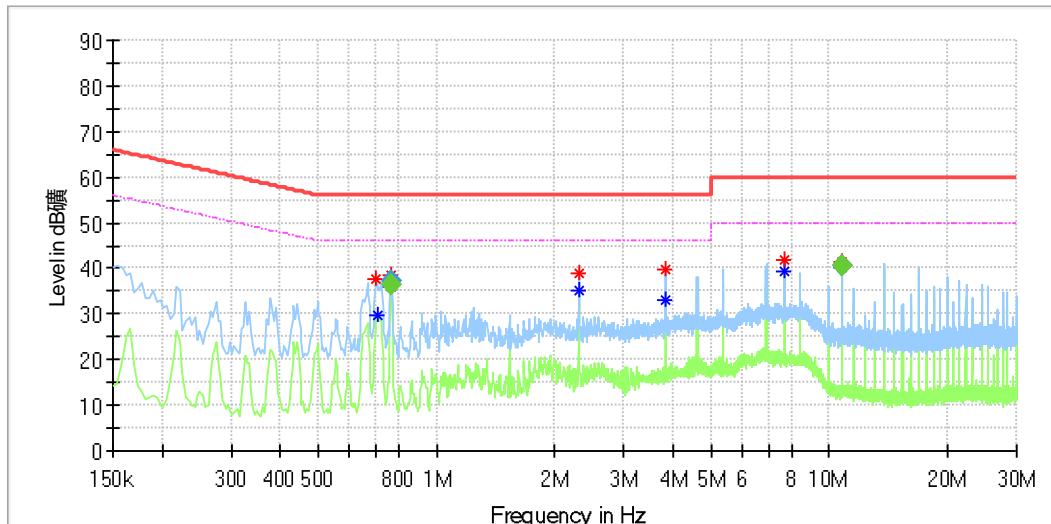
Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.769500	---	36.53	46.00	9.47	1000.0	9.000	L1	10.0
0.769500	37.50	---	56.00	18.50	1000.0	9.000	L1	10.0

Test Report

EUT Information

EUT Name: Rokid Staion
 Order Number: 168429121
 Model: RES102
 Test Mode: Operating mode(Bluetooth)
 Test Voltage: AC 120V/60Hz
 Test Standard: FCC Part 15.207
 Test By:/Review By: Charlie Zha / Gary Chen
 Tem./Hum./Pressure: 24.3°C/51.6%/101kPa
 Remark: SR2



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.702000	37.51	---	56.00	18.49	N	9.8
0.706000	---	29.54	46.00	16.46	N	9.8
0.769500	---	35.81	46.00	10.19	N	9.8
0.769500	38.47	---	56.00	17.53	N	9.8
2.306000	39.04	---	56.00	16.96	N	9.9
2.306000	---	35.10	46.00	10.90	N	9.9
3.842000	---	32.96	46.00	13.04	N	9.9
3.842000	39.93	---	56.00	16.07	N	9.9
7.678000	41.69	---	60.00	18.31	N	10.0
7.682000	---	39.38	50.00	10.62	N	10.0
10.753500	41.36	---	60.00	18.64	N	10.0
10.753500	---	40.27	50.00	9.73	N	10.0

Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.769500	---	36.55	46.00	9.45	1000.0	9.000	N	9.8
0.769500	37.44	---	56.00	18.56	1000.0	9.000	N	9.8
10.753500	---	40.66	50.00	9.34	1000.0	9.000	N	10.0
10.753500	40.77	---	60.00	19.23	1000.0	9.000	N	10.0