



### CONDUCTED SPURIOUS EMISSION

### TEST RESULT

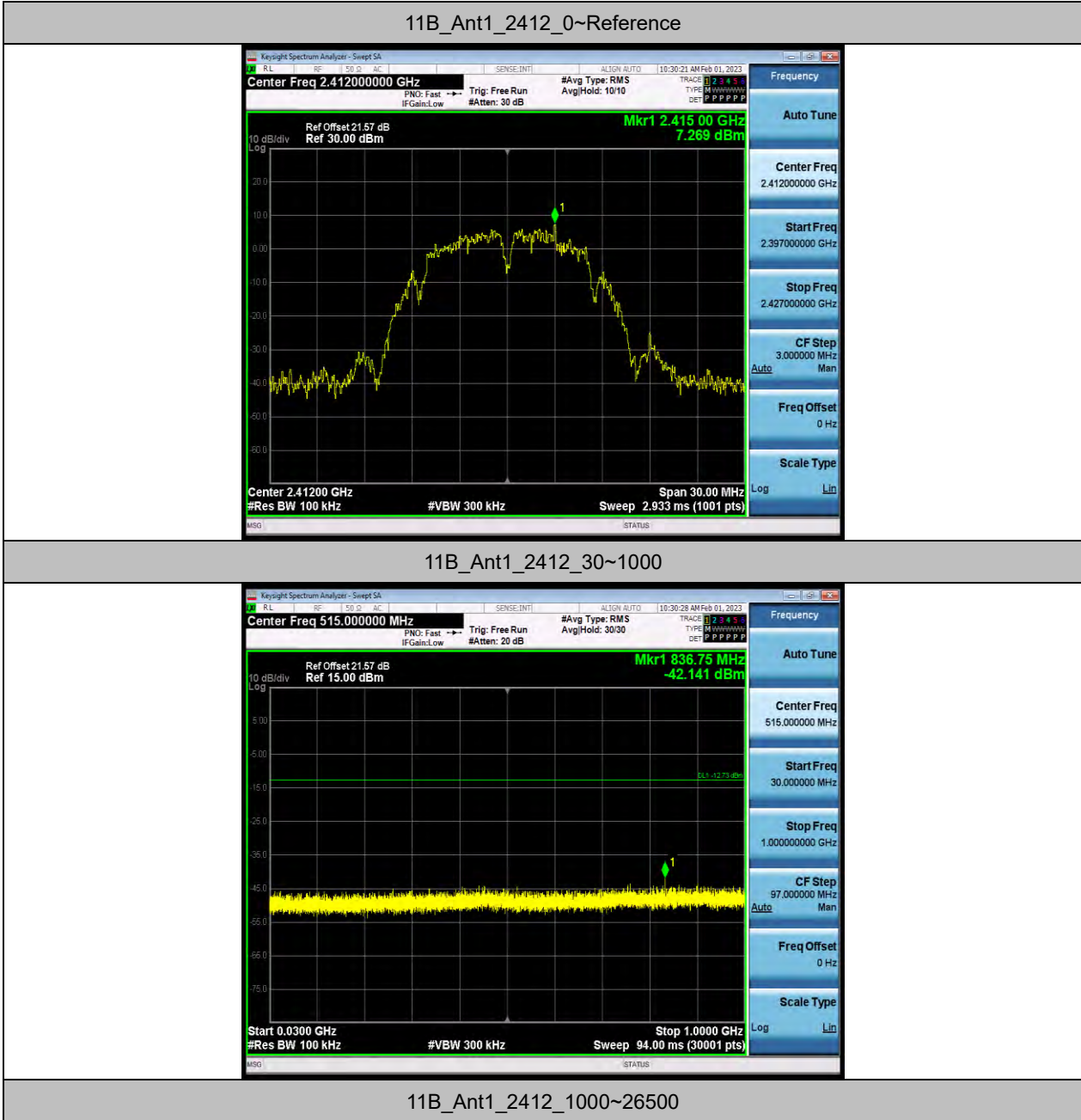
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	7.27	7.27	---	PASS
			30~1000	7.27	-42.14	≤-12.73	PASS
			1000~26500	7.27	-23.55	≤-12.73	PASS
		2437	Reference	9.57	9.57	---	PASS
			30~1000	9.57	-43.25	≤-10.43	PASS
			1000~26500	9.57	-24.95	≤-10.43	PASS
		2462	Reference	6.52	6.52	---	PASS
			30~1000	6.52	-43.65	≤-13.48	PASS
			1000~26500	6.52	-23.69	≤-13.48	PASS
11G	Ant1	2412	Reference	1.30	1.30	---	PASS
			30~1000	1.30	-42.91	≤-18.7	PASS
			1000~26500	1.30	-23.76	≤-18.7	PASS
		2437	Reference	2.43	2.43	---	PASS
			30~1000	2.43	-43.53	≤-17.57	PASS
			1000~26500	2.43	-24.57	≤-17.57	PASS
		2462	Reference	0.34	0.34	---	PASS
			30~1000	0.34	-43.42	≤-19.66	PASS
			1000~26500	0.34	-24.55	≤-19.66	PASS
11N20SISO	Ant1	2412	Reference	3.09	3.09	---	PASS
			30~1000	3.09	-43.27	≤-16.91	PASS
			1000~26500	3.09	-23.75	≤-16.91	PASS
		2437	Reference	1.83	1.83	---	PASS
			30~1000	1.83	-43.85	≤-18.17	PASS
			1000~26500	1.83	-23.98	≤-18.17	PASS
		2462	Reference	2.14	2.14	---	PASS
			30~1000	2.14	-43.44	≤-17.86	PASS
			1000~26500	2.14	-24.53	≤-17.86	PASS



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Test Report No.: W7L-P23010024RF02

### TEST GRAPHS





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11B\_Ant1\_2437\_0~Reference

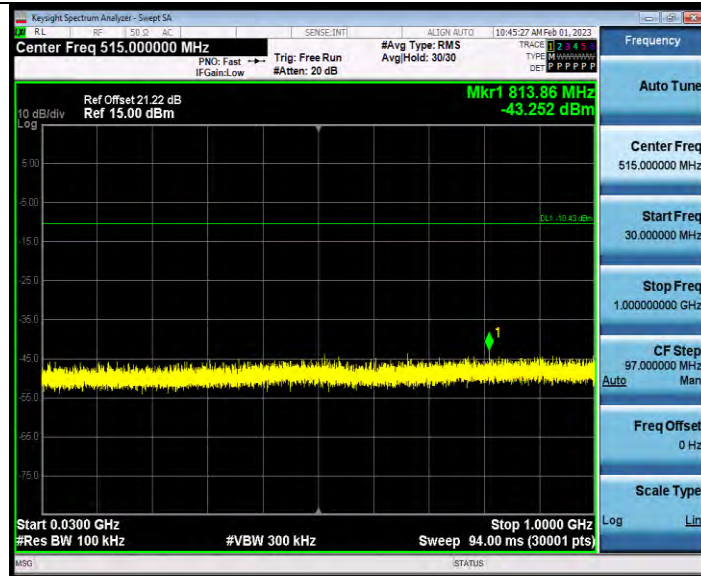


11B\_Ant1\_2437\_30~1000



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11B\_Ant1\_2437\_1000~26500



11B\_Ant1\_2462\_0~Reference



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VERITAS**

### Test Report No.: W7L-P23010024RF02



11B\_Ant1\_2462\_30~1000

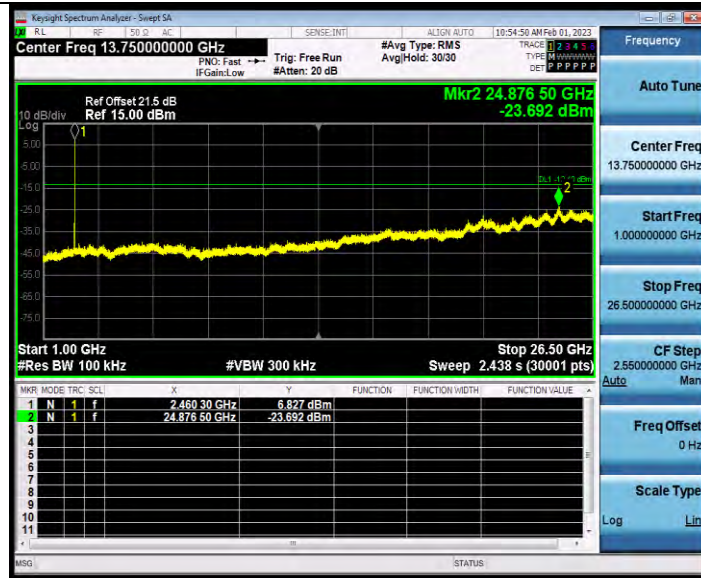


11B\_Ant1\_2462\_1000~26500



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11G\_Ant1\_2412\_0~Reference



11G\_Ant1\_2412\_30~100

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11G\_Ant1\_2412\_1000~26500



11G\_Ant1\_2437\_0~Reference

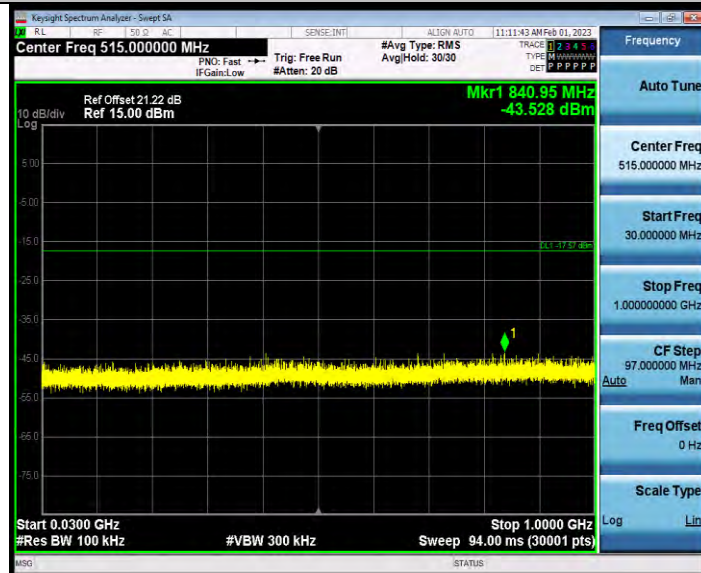


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11G\_Ant1\_2437\_30~1000



11G\_Ant1\_2437\_1000~26500

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11G\_Ant1\_2462\_0~Reference



11G\_Ant1\_2462\_30~1000

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11G\_Ant1\_2462\_1000~26500



11N20SISO\_Ant1\_2412\_0~Reference



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**Test Report No.: W7L-P23010024RF02**



11N20SISO\_Ant1\_2412\_30~1000



11N20SISO\_Ant1\_2412\_1000~26500

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11N20SISO\_Ant1\_2437\_0~Reference



11N20SISO\_Ant1\_2437\_30~1000

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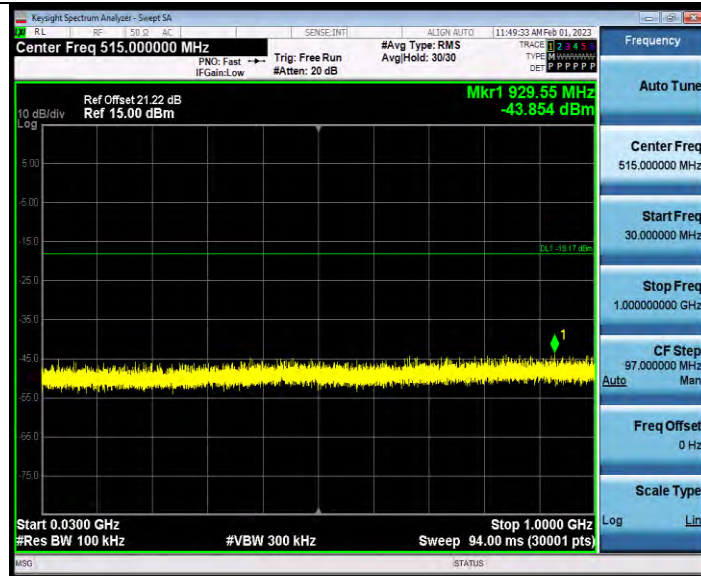
No.B102, Dazu Chuangxin Mansion, North of Beihuan Avenue, North Area, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, China

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11N20SISO\_Ant1\_2437\_1000~26500



11N20SISO\_Ant1\_2462\_0~Reference



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**Test Report No.: W7L-P23010024RF02**



11N20SISO\_Ant1\_2462\_30~1000



11N20SISO\_Ant1\_2462\_1000~26500



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## DUTY CYCLE TEST RESULT

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	8.42	8.46	99.53	0.02
		2437	8.42	8.47	99.41	0.03
		2462	8.41	8.46	99.41	0.03
11G	Ant1	2412	1.40	1.45	96.55	0.15
		2437	1.40	1.45	96.55	0.15
		2462	1.39	1.45	95.86	0.18
11N20SISO	Ant1	2412	1.30	1.36	95.59	0.20
		2437	1.31	1.36	96.32	0.16
		2462	1.31	1.37	95.62	0.19



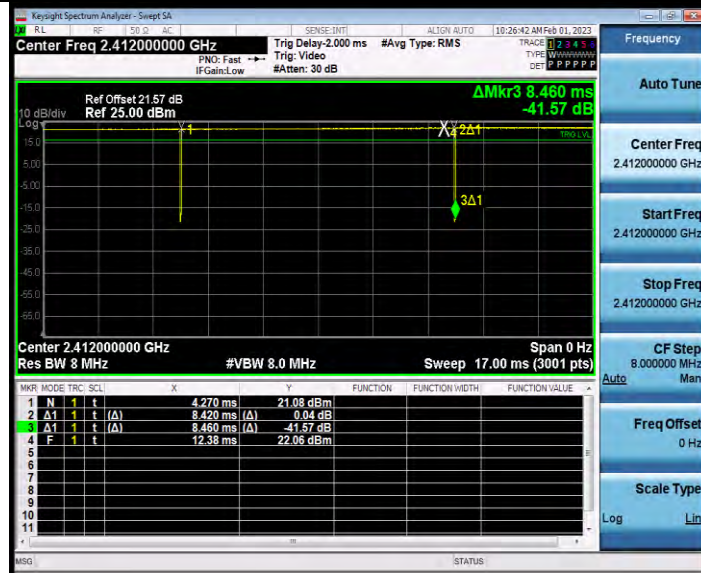


BUREAU VERITAS

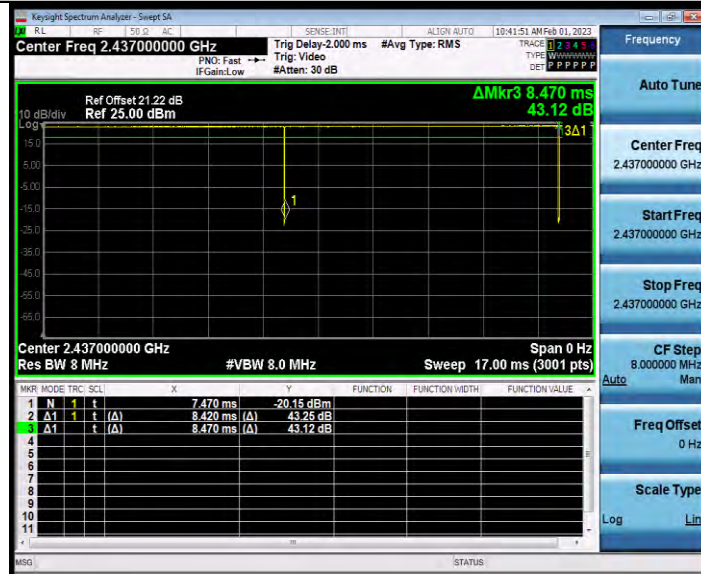
Test Report No.: W7L-P23010024RF02

### TEST GRAPHS

11B\_Ant1\_2412



11B\_Ant1\_2437

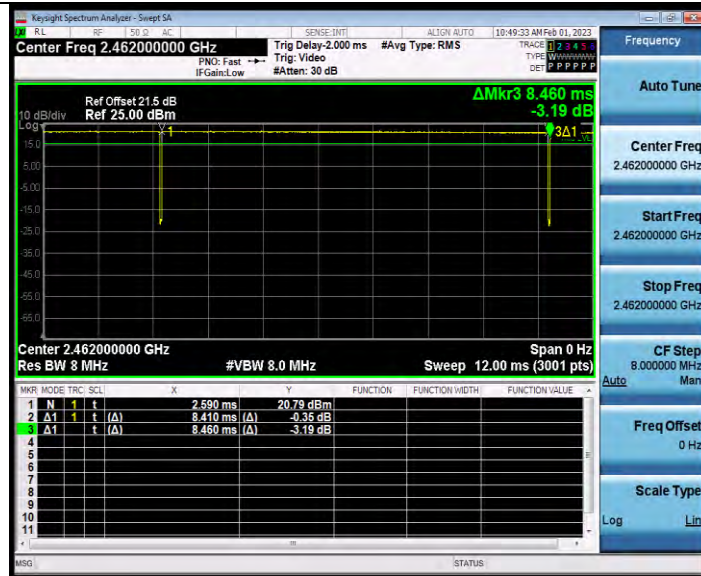


11B\_Ant1\_2462



BUREAU VERITAS

Test Report No.: W7L-P23010024RF02



11G\_Ant1\_2412



11G\_Ant1\_2437

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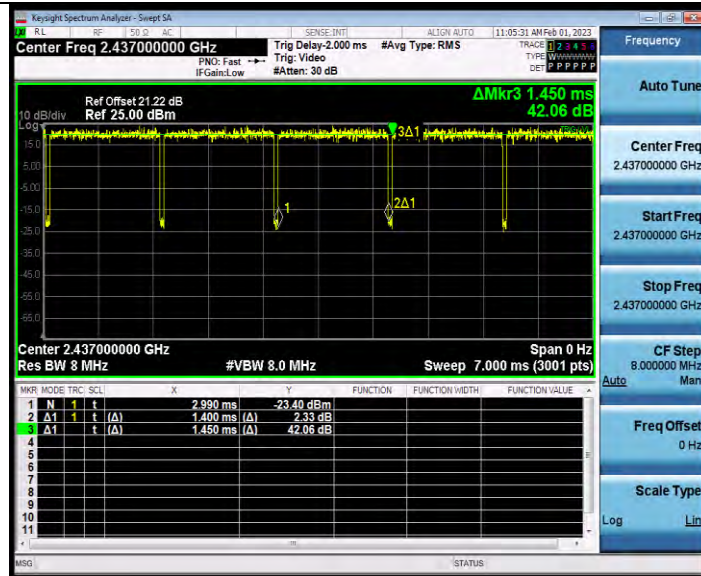
No.B102, Dazu Chuangxin Mansion, North of Beihuan Avenue, North Area, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, China

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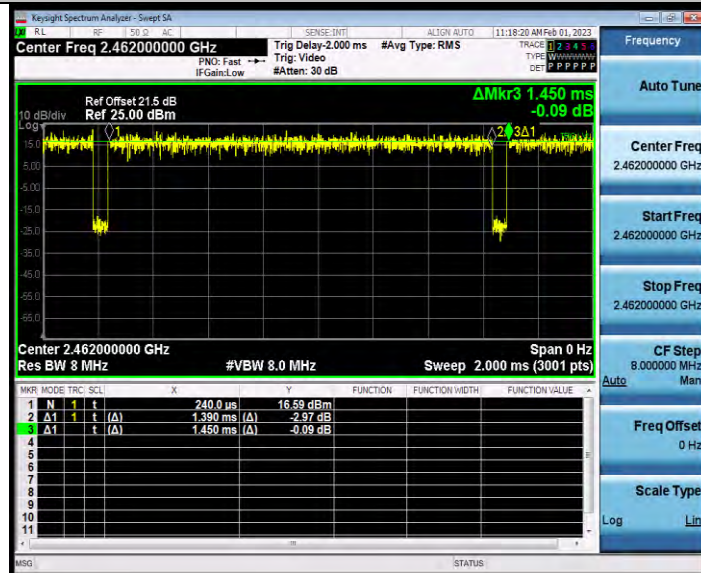


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Test Report No.: W7L-P23010024RF02



11G\_Ant1\_2462

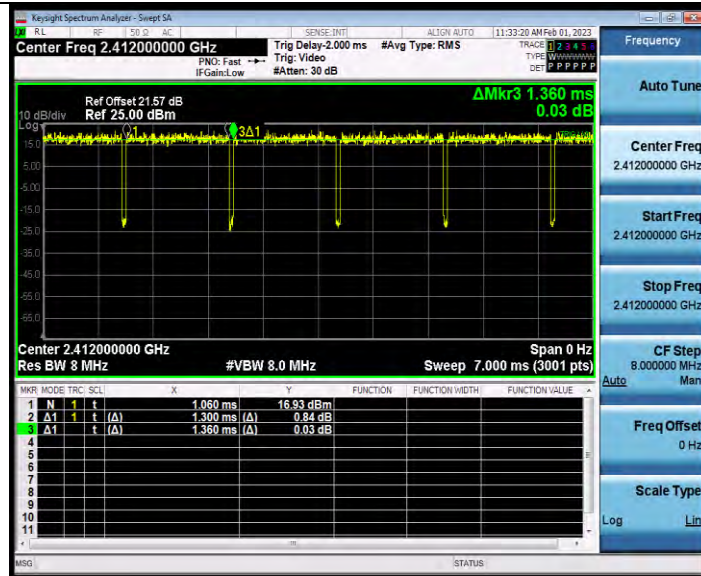


11N20SISO\_Ant1\_2412

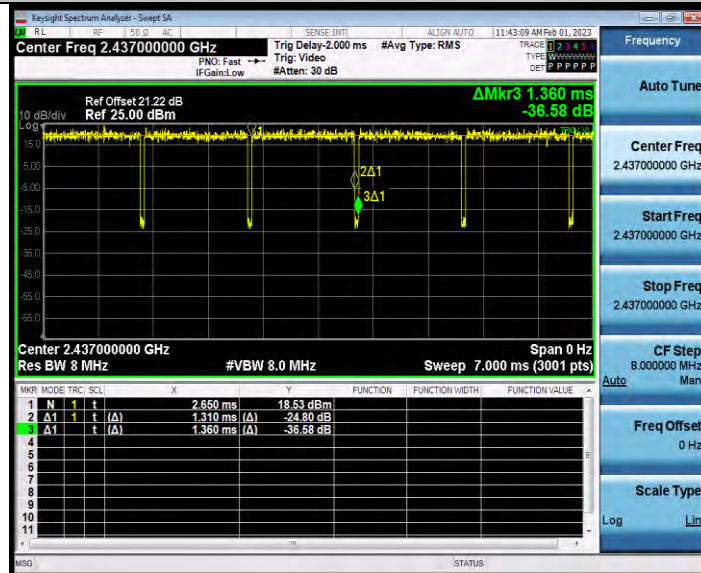


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**Test Report No.: W7L-P2310024RF02**



11N20SISO\_Ant1\_2437

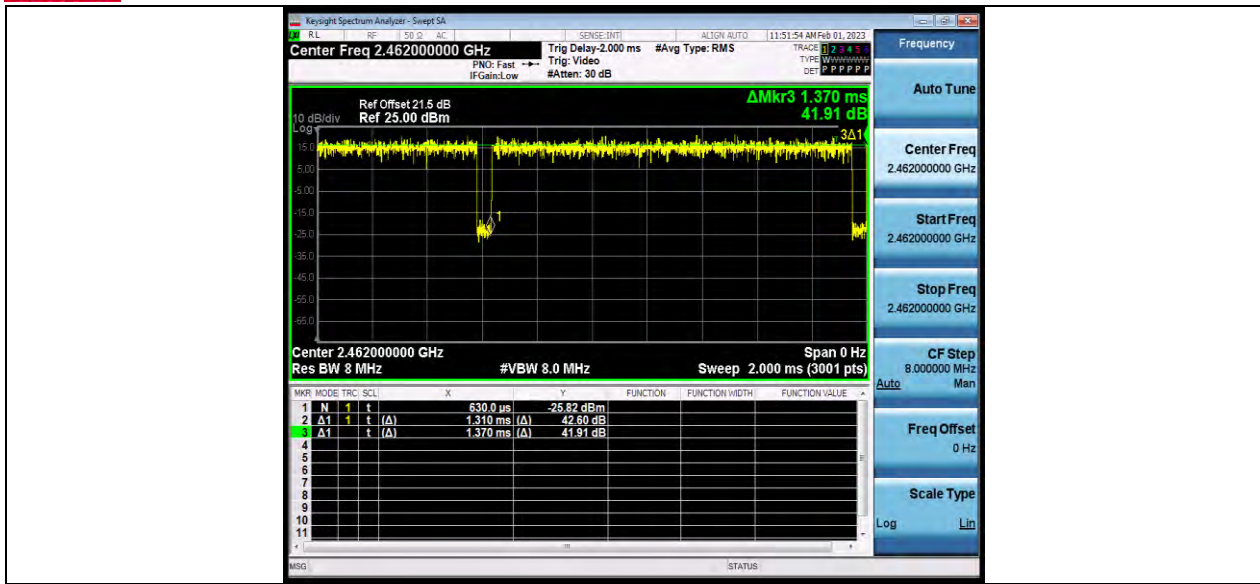


11N20SISO\_Ant1\_2462



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## 7 Appendix 2 BLE

### DTS BANDWIDTH

#### TEST RESULT

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.660	2401.672	2402.332	0.5	PASS
		2440	0.648	2439.680	2440.328	0.5	PASS
		2480	0.624	2479.684	2480.308	0.5	PASS



### TEST GRAPHS

BLE\_1M\_Ant1\_2402



BLE\_1M\_Ant1\_2440



BLE\_1M\_Ant1\_2480



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## OCCUPIED CHANNEL BANDWIDTH TEST RESULT

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0302	2401.5012	2402.5314	---	---
		2440	1.0341	2439.4927	2440.5268	---	---
		2480	1.0418	2479.4857	2480.5275	---	---



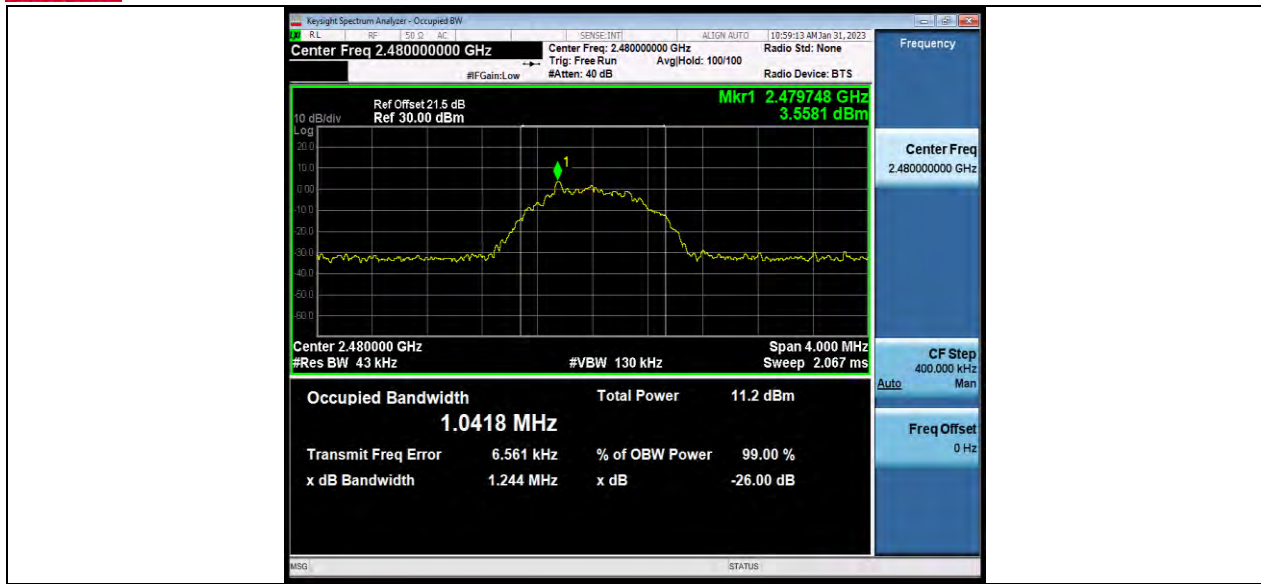
### TEST GRAPHS





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**Test Report No.: W7L-P23010024RF02**





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Test Report No.: W7L-P23010024RF02

## MAXIMUM CONDUCTED OUTPUT POWER

### TEST RESULT

TestMode	Antenna	Channel	Average power [dBm]	Peak power [dBm]	Peak power [mw]	Conducted Limit [dBm]	EIRP [dBm]	EIRP [mw]	EIRP Limit [dBm]	Verdict	Power Setting
BLE_1M	Ant1	2402	5.78	6.90	4.90	≤30	9.05	8.04	≤36	PASS	Default
		2440	5.81	6.63	4.60	≤30	8.78	7.55	≤36	PASS	Default
		2480	3.32	4.12	2.58	≤30	6.27	4.24	≤36	PASS	Default



## MAXIMUM POWER SPECTRAL DENSITY

### TEST RESULT

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-7.08	≤8.00	PASS
		2440	-8.37	≤8.00	PASS
		2480	-10.34	≤8.00	PASS

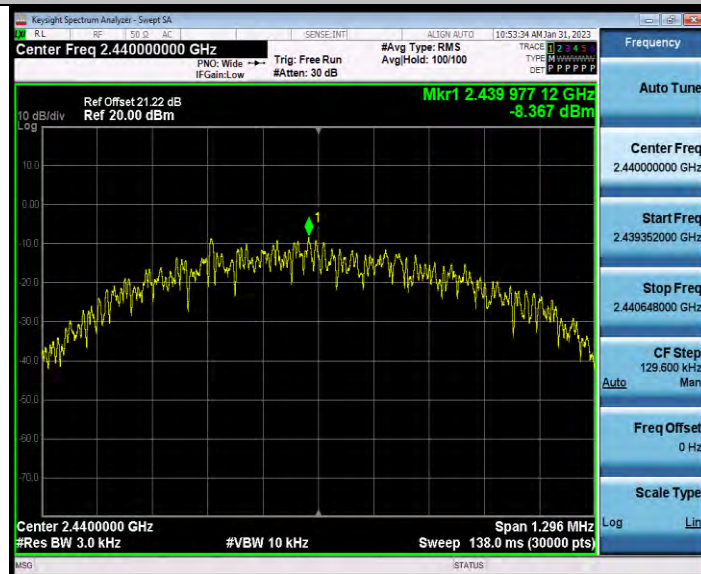


### TEST GRAPHS

BLE\_1M\_Ant1\_2402



BLE\_1M\_Ant1\_2440

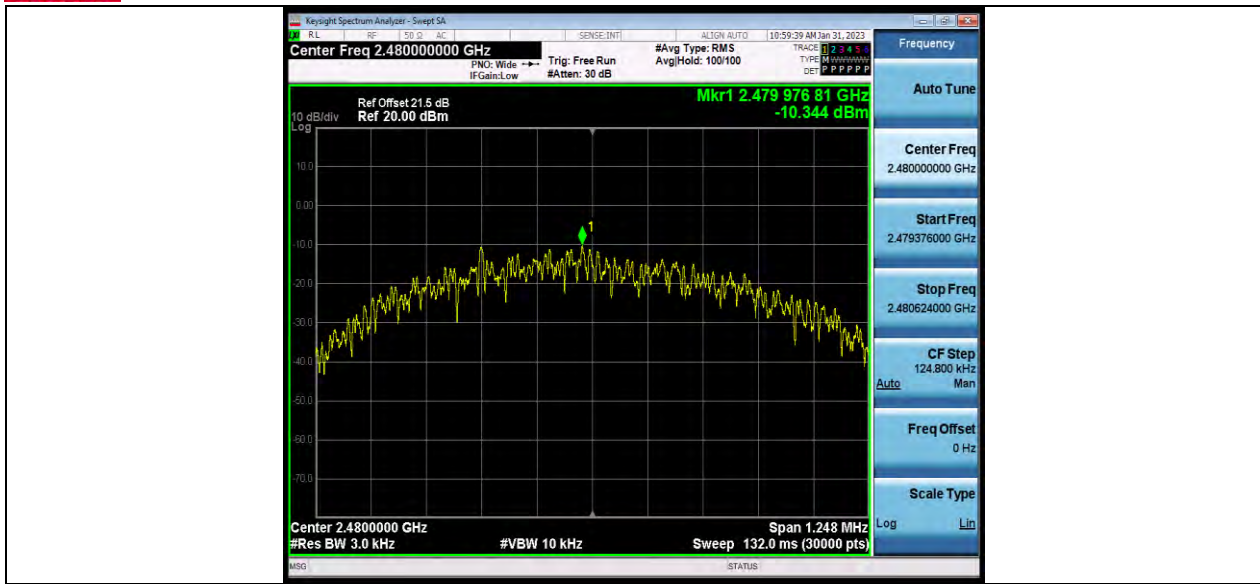


BLE\_1M\_Ant1\_2480



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**Test Report No.: W7L-P23010024RF02**



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## BAND EDGE MEASUREMENTS

### TEST RESULT

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	7.56	-34.46	≤-12.44	PASS
		High	2480	4.46	-33.86	≤-15.54	PASS



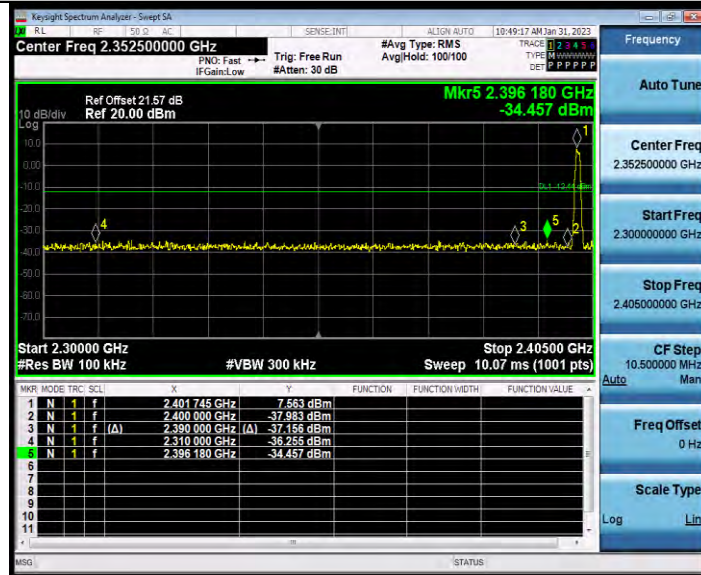


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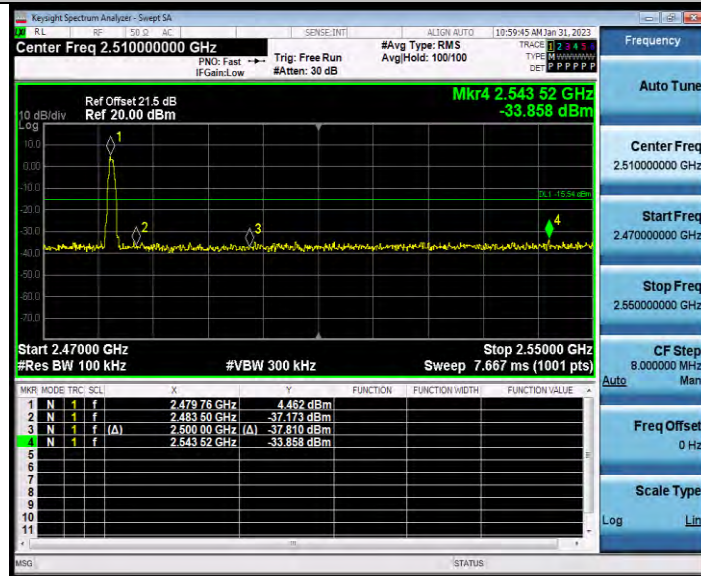
Test Report No.: W7L-P23010024RF02

### TEST GRAPHS

BLE\_1M\_Ant1\_Low\_2402



BLE\_1M\_Ant1\_High\_2480





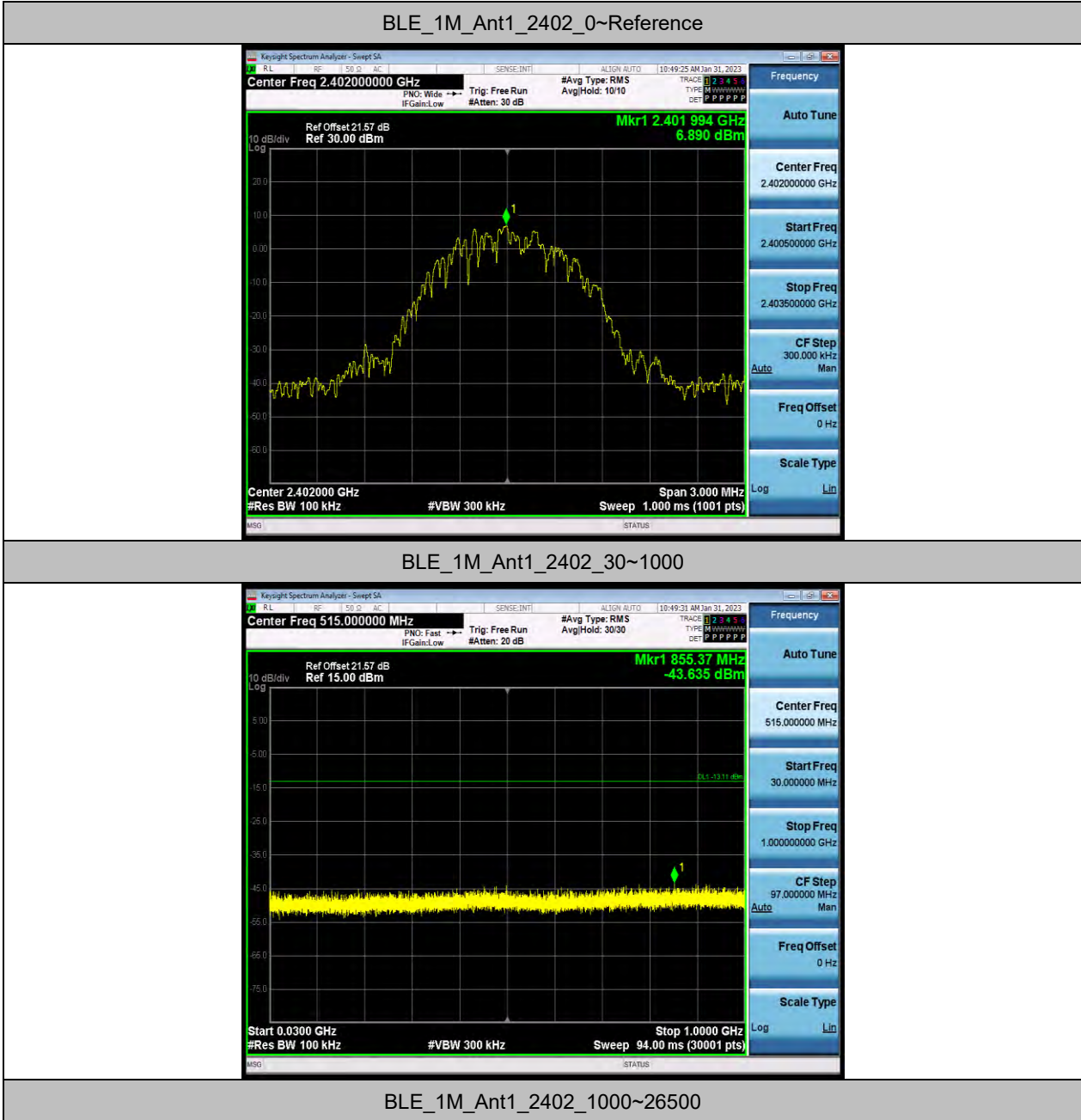
## CONDUCTED SPURIOUS EMISSION

### TEST RESULT

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	6.89	6.89	---	PASS
			30~1000	6.89	-43.64	≤-13.11	PASS
			1000~26500	6.89	-23.8	≤-13.11	PASS
		2440	Reference	5.24	5.24	---	PASS
			30~1000	5.24	-43.75	≤-14.76	PASS
			1000~26500	5.24	-24.31	≤-14.76	PASS
		2480	Reference	3.46	3.46	---	PASS
			30~1000	3.46	-43.76	≤-16.54	PASS
			1000~26500	3.46	-24.27	≤-16.54	PASS



### TEST GRAPHS





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**Test Report No.: W7L-P23010024RF02**



BLE\_1M\_Ant1\_2440\_0~Reference

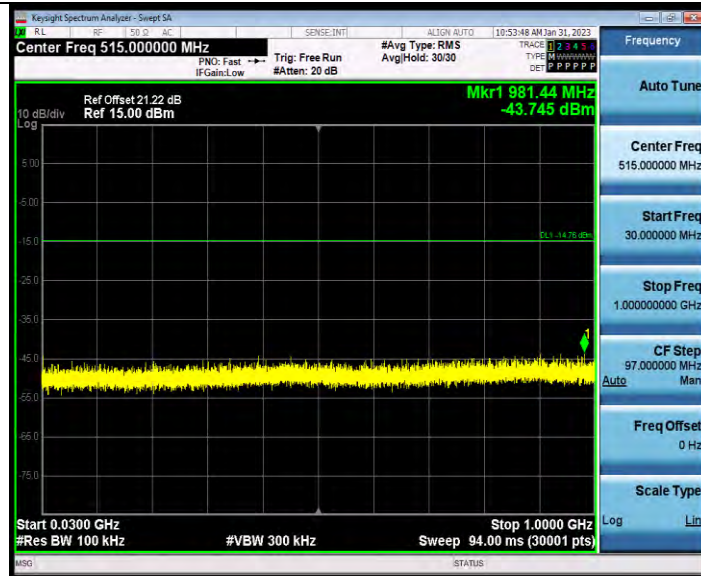


BLE\_1M\_Ant1\_2440\_30~1000



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**Test Report No.: W7L-P23010024RF02**



BLE\_1M\_Ant1\_2440\_1000~26500



BLE\_1M\_Ant1\_2480\_0~Reference

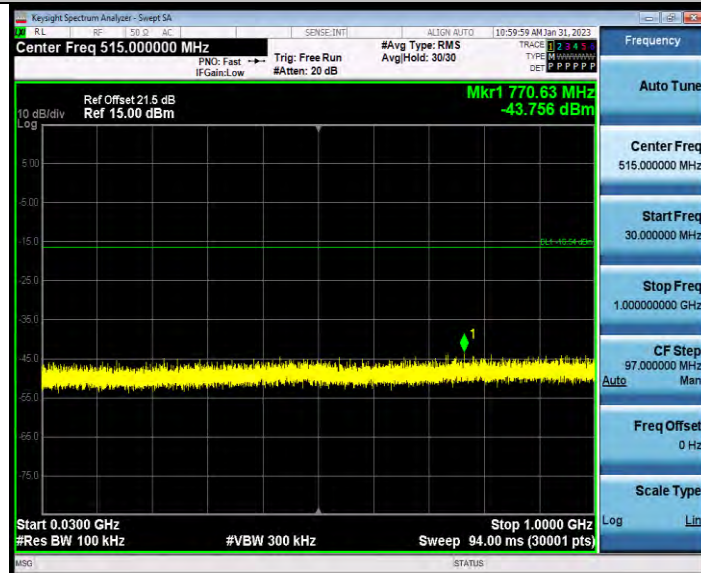


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**Test Report No.: W7L-P23010024RF02**



BLE\_1M\_Ant1\_2480\_30~1000



BLE\_1M\_Ant1\_2480\_1000~26500



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## DUTY CYCLE TEST RESULT

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.469	1.25	37.5	4.26
		2440	0.473	1.26	37.5	4.26
		2480	0.469	1.25	37.5	4.26