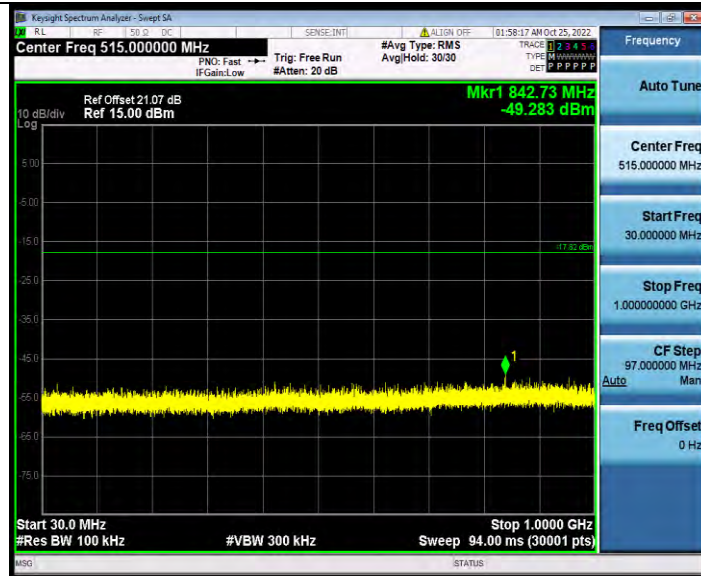


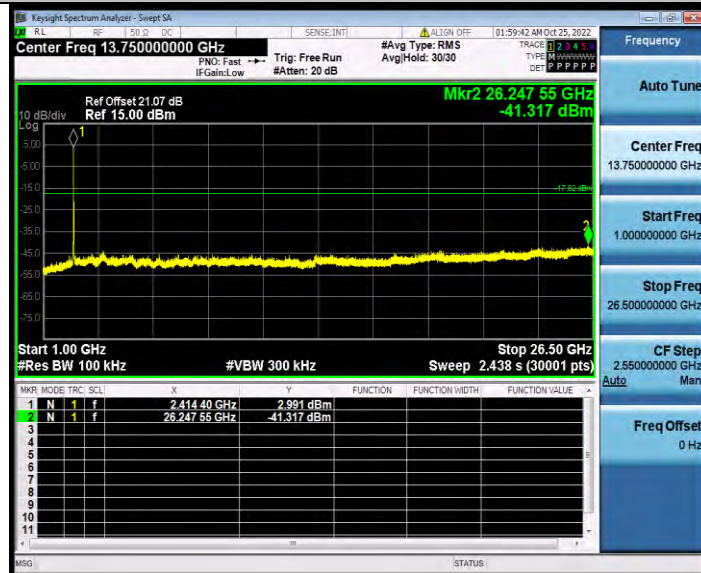


**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



11G_Ant1_2437_30~1000

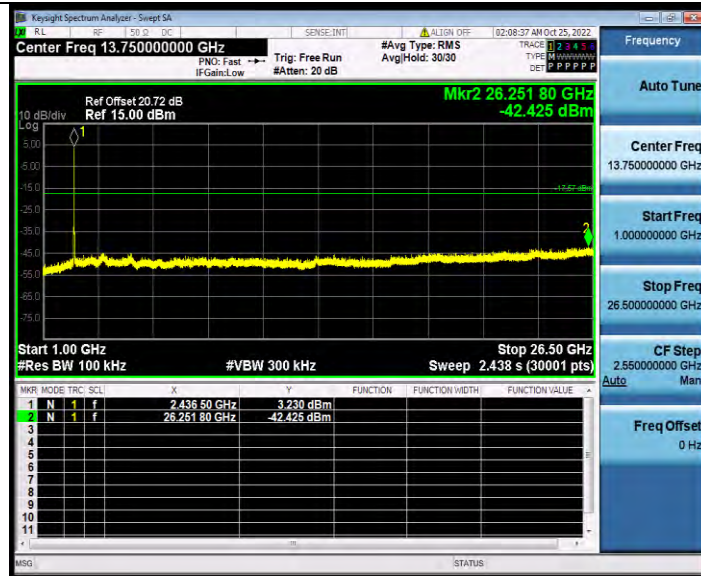


11G_Ant1_2437_1000~26500



BUREAU VERITAS

Test Report No.: W7L-P22090035RF02



11G_Ant1_2462_0~Reference

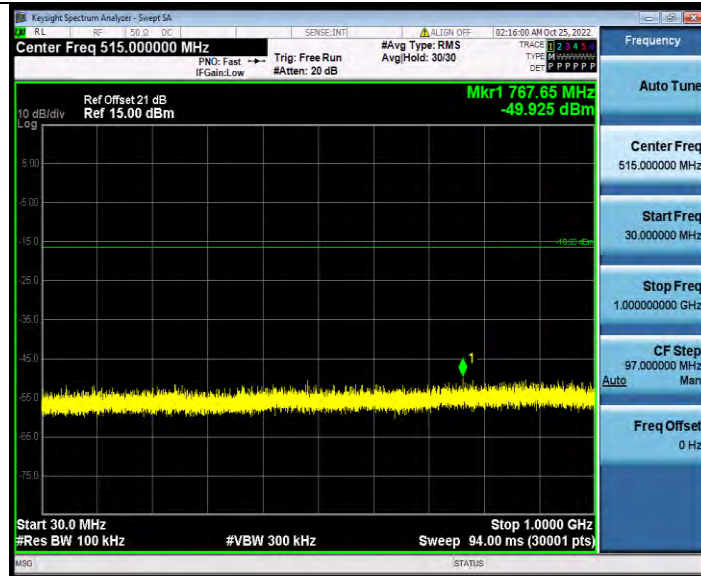


11G_Ant1_2462_30~1000

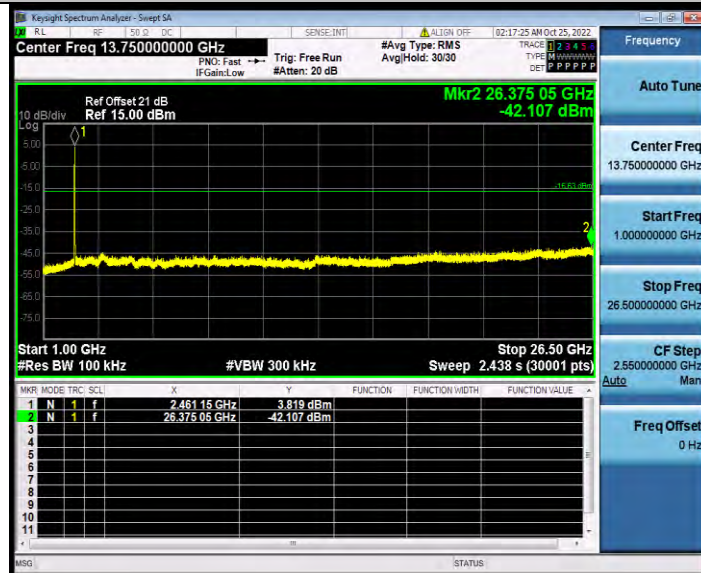


**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



11N20SISO_Ant1_2412_30~1000

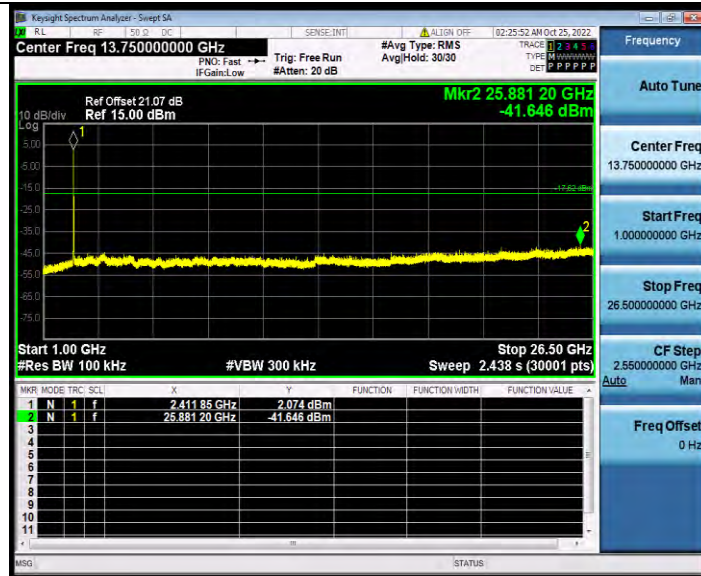


11N20SISO_Ant1_2412_1000~26500



**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



11N20SISO_Ant1_2437_0~Reference

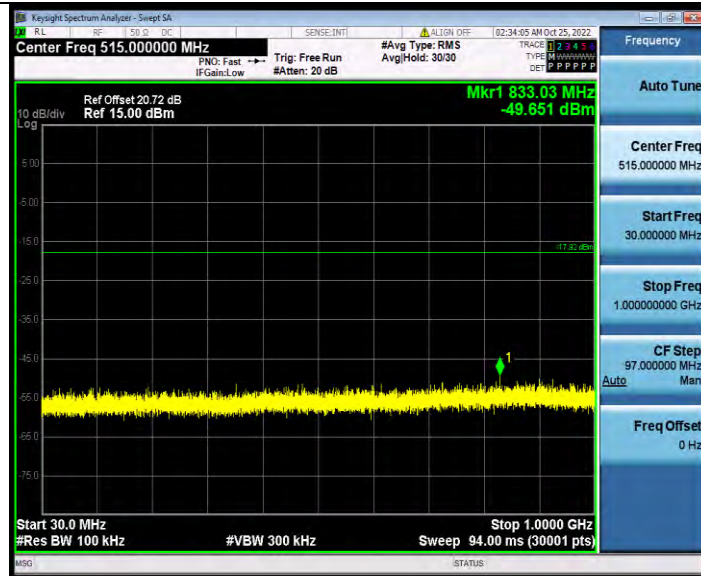


11N20SISO_Ant1_2437_30~1000

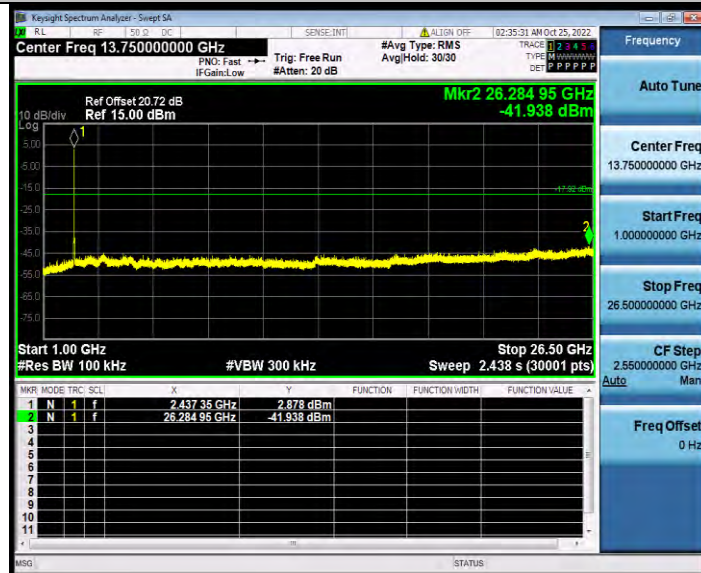


**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference

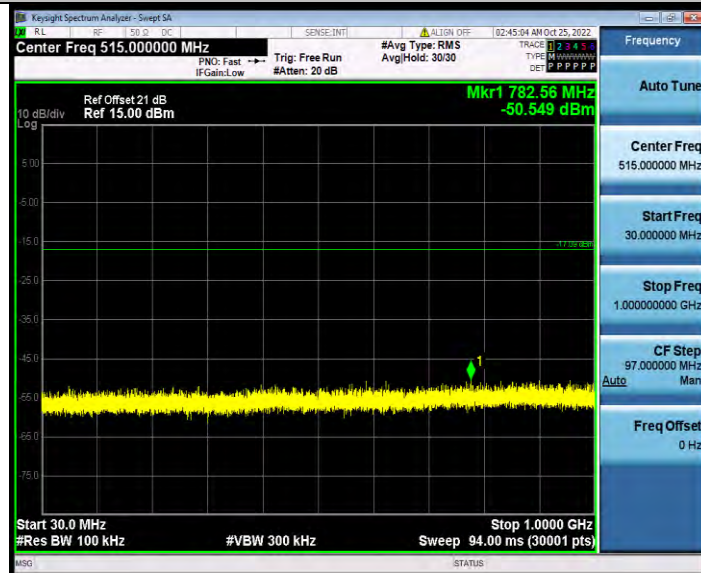


**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



11N20SISO_Ant1_2462_30~1000

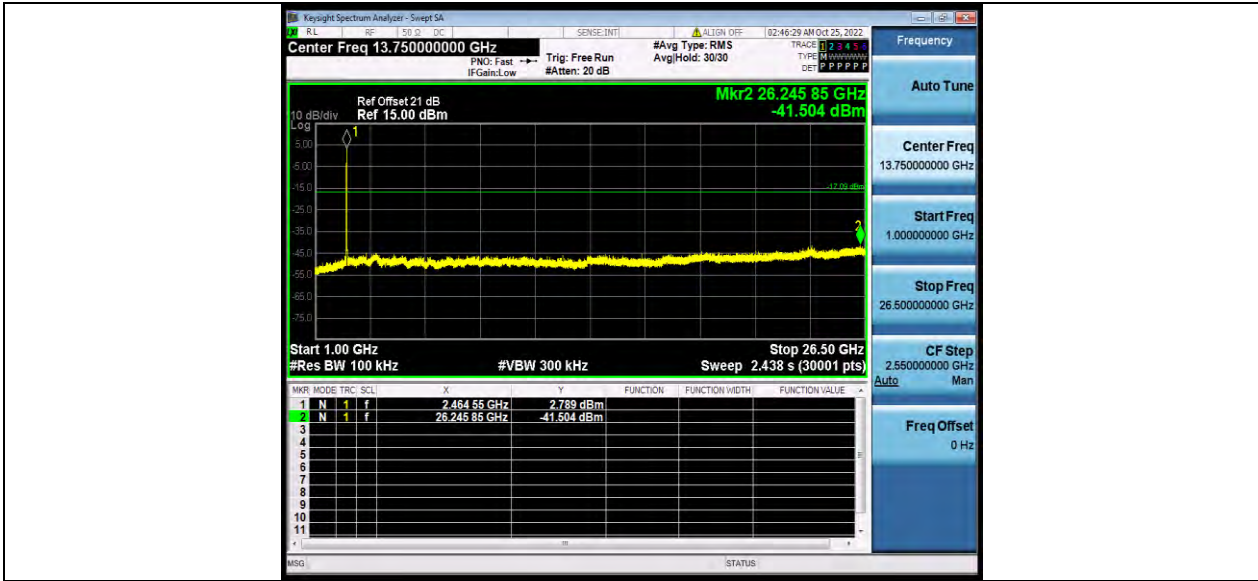


11N20SISO_Ant1_2462_1000~26500



**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

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

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



DUTY CYCLE TEST RESULT

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	8.42	8.52	98.83	0.05
		2437	8.41	8.51	98.82	0.05
		2462	8.42	8.51	98.94	0.05
11G	Ant1	2412	1.40	1.50	93.33	0.30
		2437	1.39	1.49	93.29	0.30
		2462	1.40	1.50	93.33	0.30
11N20SISO	Ant1	2412	0.16	0.27	59.26	2.27
		2437	0.16	0.27	59.26	2.27
		2462	0.17	0.27	62.96	2.01

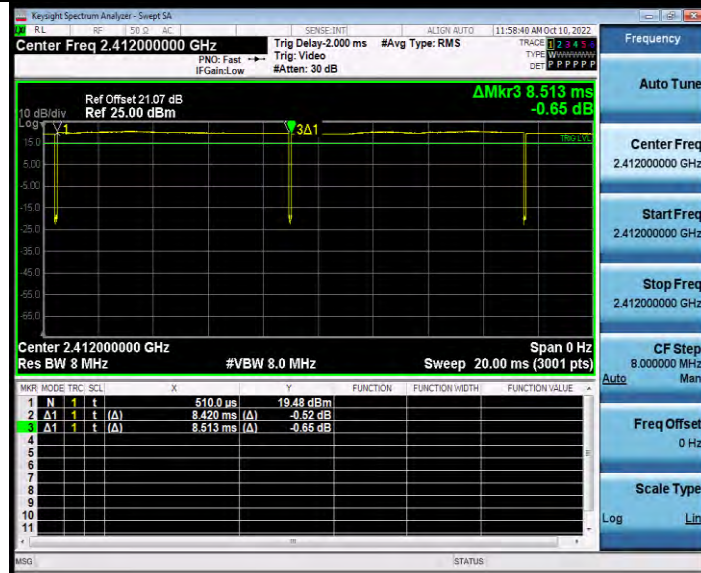


BUREAU VERITAS

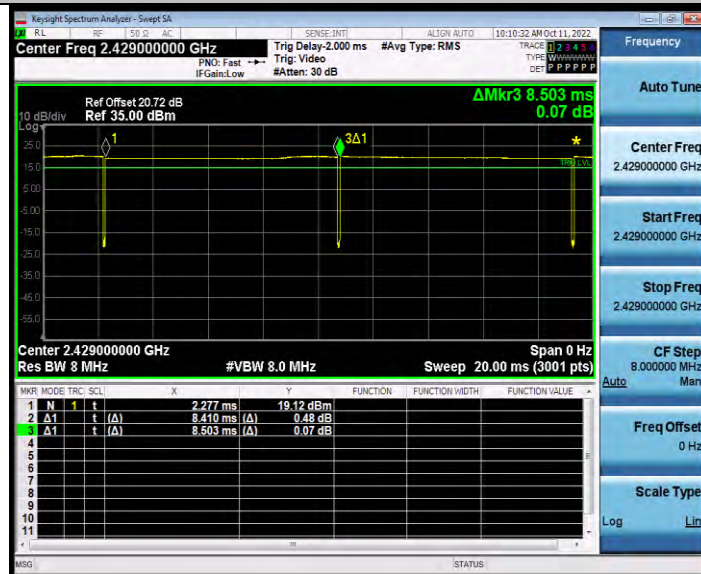
Test Report No.: W7L-P22090035RF02

TEST GRAPHS

11B_Ant1_2412



11B_Ant1_2437

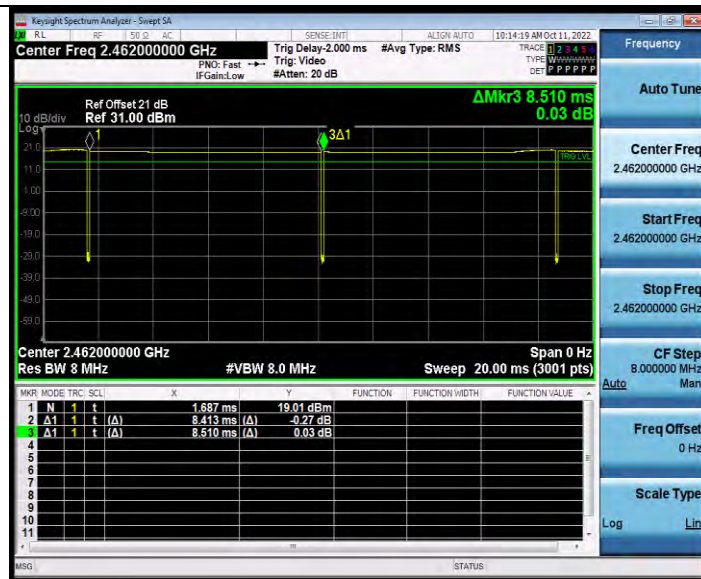


11B_Ant1_2462

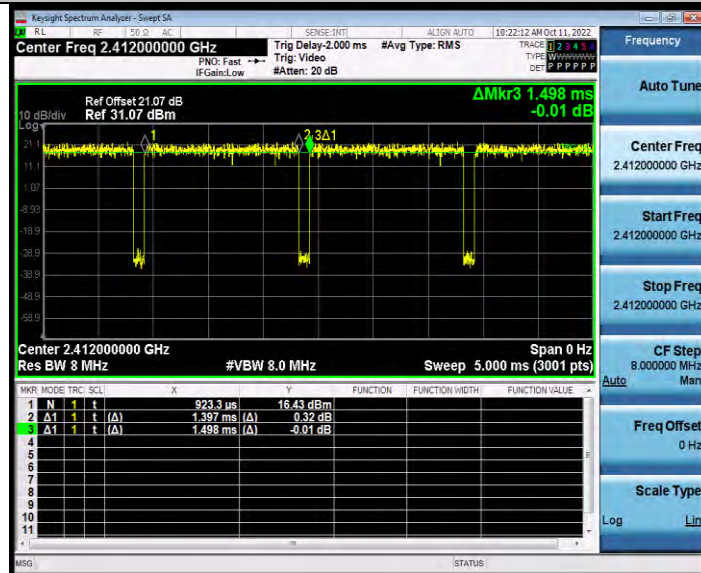


BUREAU VERITAS

Test Report No.: W7L-P22090035RF02



11G_Ant1_2412

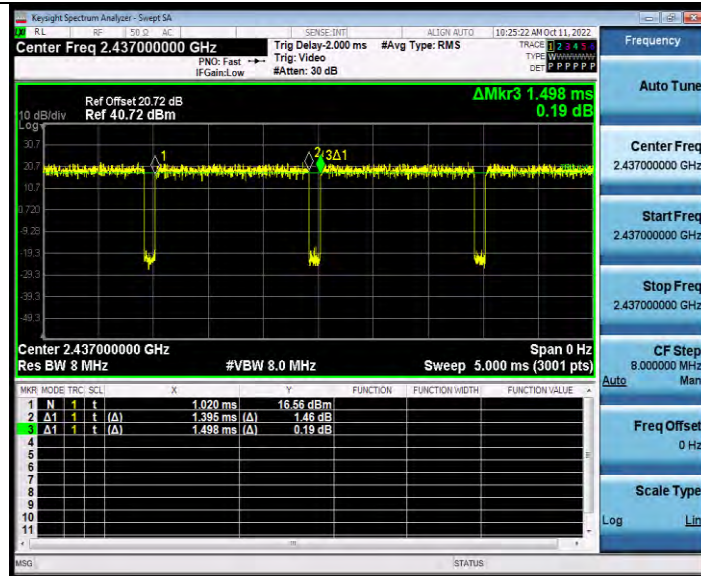


11G_Ant1_2437

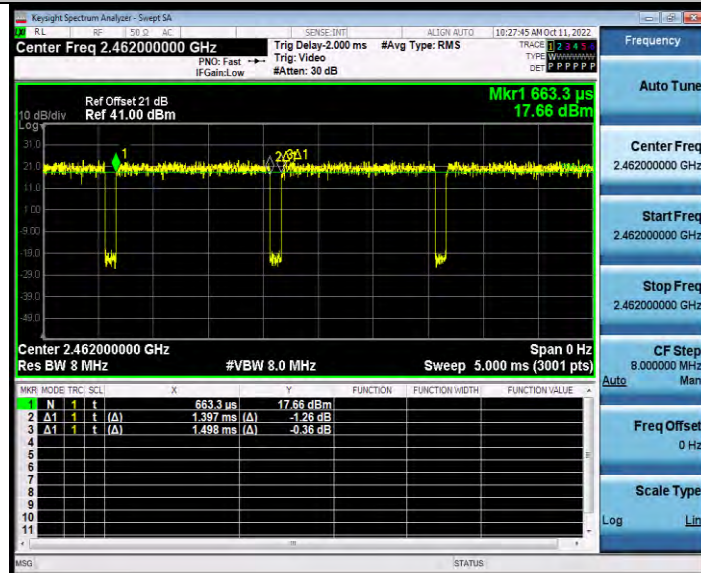


BUREAU VERITAS

Test Report No.: W7L-P22090035RF02



11G_Ant1_2462

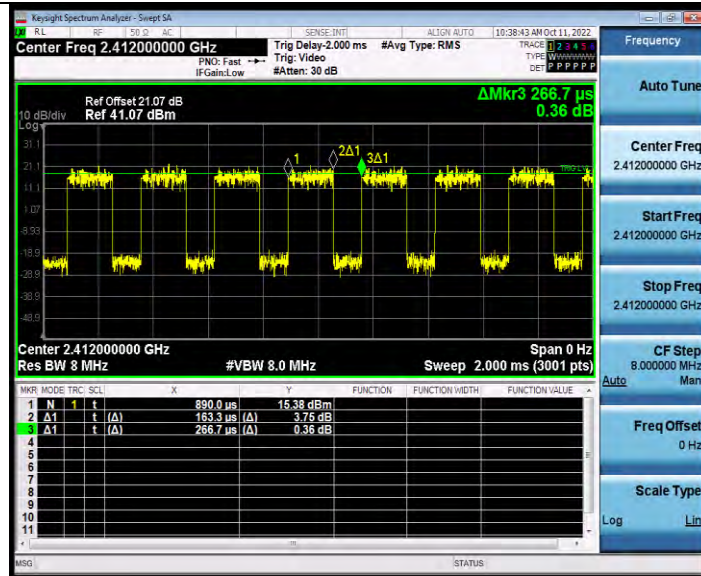


11N20SISO_Ant1_2412

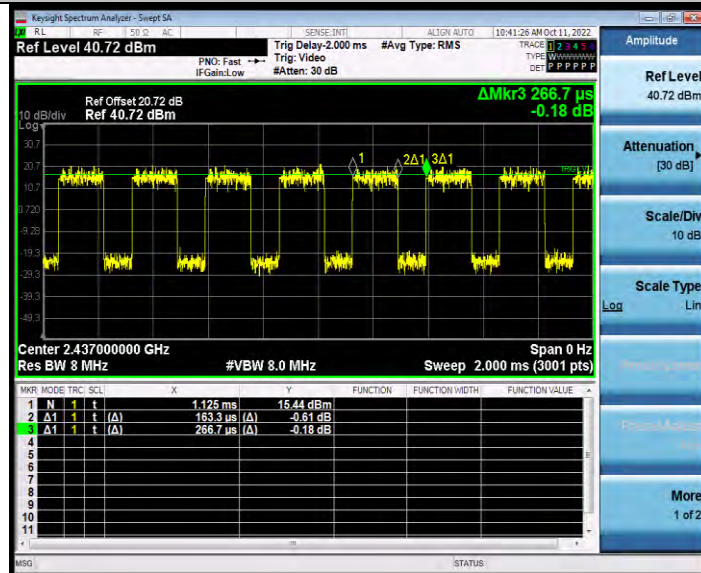


**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



11N20SISO_Ant1_2437

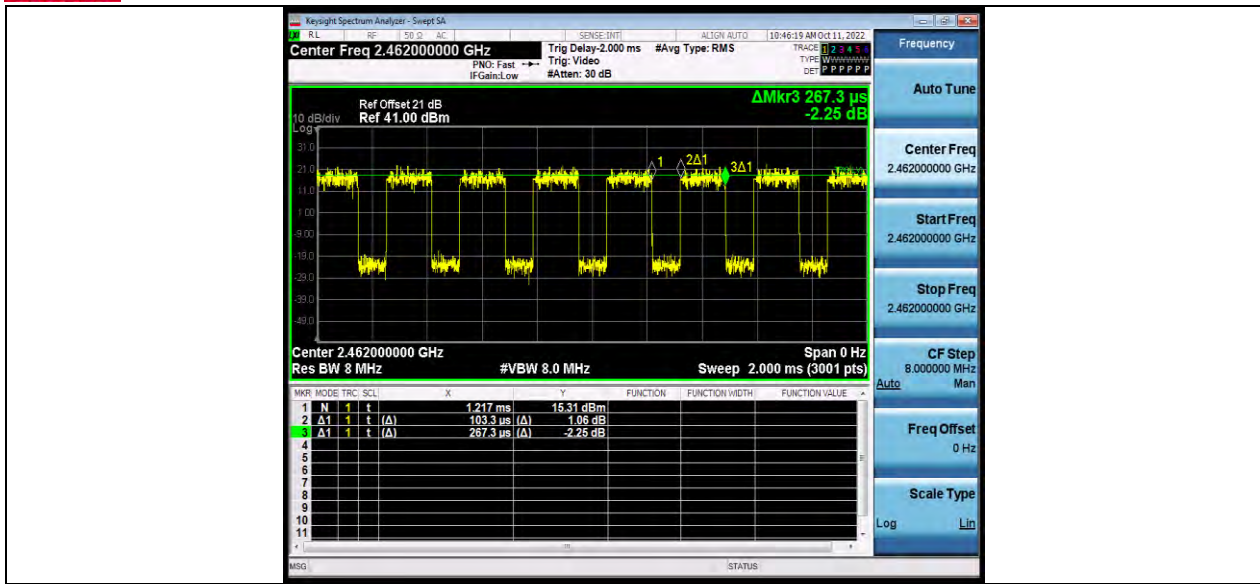


11N20SISO_Ant1_2462



**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

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

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



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	0.680	2401.692	2402.372	0.5	PASS
		2440	0.708	2439.680	2440.388	0.5	PASS
		2480	0.688	2479.696	2480.384	0.5	PASS
BLE_2M	Ant1	2402	1.480	2401.276	2402.756	0.5	PASS
		2440	1.464	2439.284	2440.748	0.5	PASS
		2480	1.472	2479.280	2480.752	0.5	PASS



BUREAU VERITAS

Test Report No.: W7L-P22090035RF02

TEST GRAPHS

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440

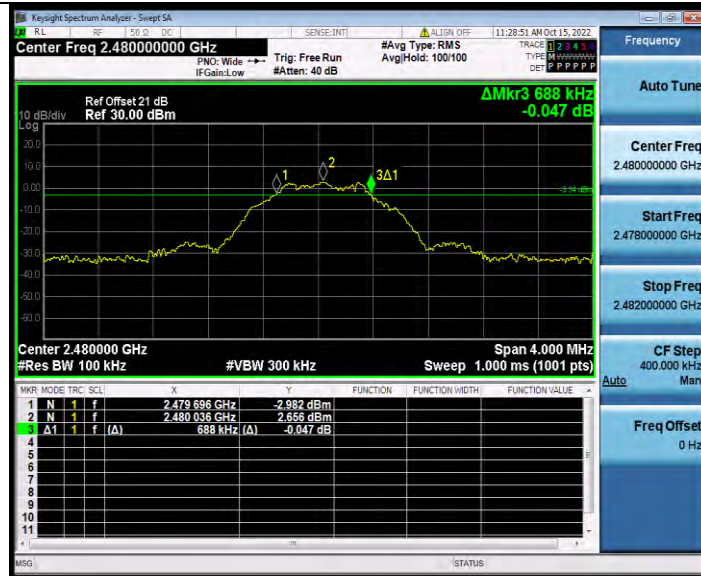


BLE_1M_Ant1_2480



**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BUREAU VERITAS

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_2480





OCCUPIED CHANNEL BANDWIDTH TEST RESULT

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0871	2401.4910	2402.5781	---	---
		2440	1.0785	2439.5017	2440.5802	---	---
		2480	1.0787	2479.5069	2480.5856	---	---
BLE_2M	Ant1	2402	2.1730	2400.9493	2403.1223	---	---
		2440	2.1523	2438.9666	2441.1189	---	---
		2480	2.1532	2478.9706	2481.1238	---	---



TEST GRAPHS





**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_2480





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	-2.42	3.25	2.11	≤30	5.25	3.35	≤36	PASS	Default
		2440	-2.38	4.19	2.62	≤30	6.19	4.16	≤36	PASS	Default
		2480	-2.37	4.75	2.99	≤30	6.75	4.73	≤36	PASS	Default
BLE_2M	Ant1	2402	-4.46	2.68	1.85	≤30	4.68	2.94	≤36	PASS	Default
		2440	-3.76	3.80	2.40	≤30	5.80	3.80	≤36	PASS	Default
		2480	-3.73	4.11	2.58	≤30	6.11	4.08	≤36	PASS	Default

Note:EIRP=Peak Power+Gain



MAXIMUM POWER SPECTRAL DENSITY TEST RESULT

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-12.12	≤8.00	PASS
		2440	-11.03	≤8.00	PASS
		2480	-10.34	≤8.00	PASS
BLE_2M	Ant1	2402	-14	≤8.00	PASS
		2440	-12.91	≤8.00	PASS
		2480	-12.2	≤8.00	PASS



**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02

TEST GRAPHS

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



BUREAU
VERITAS

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440

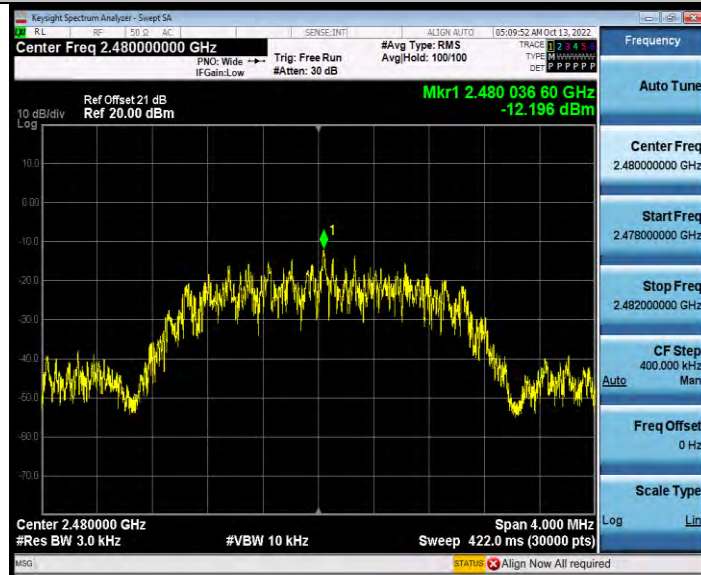


**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_2480





BAND EDGE MEASUREMENTS

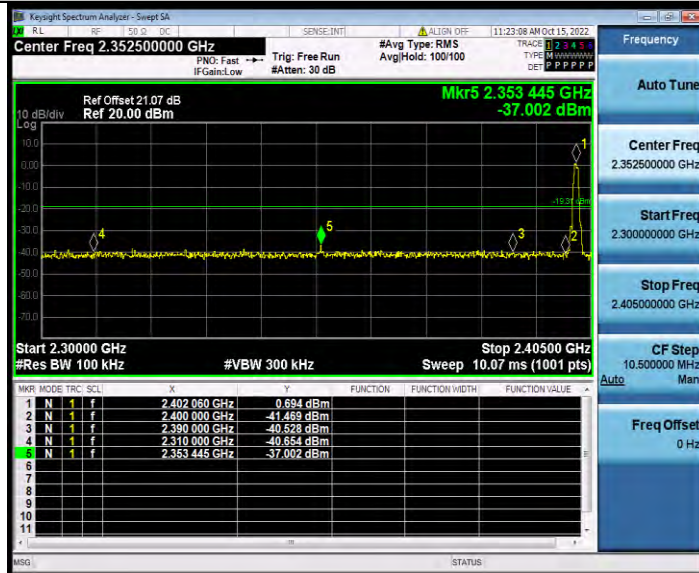
TEST RESULT

TestMode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	0.69	-37	≤-19.31	PASS
		High	2480	2.82	-38.34	≤-17.18	PASS
BLE_2M	Ant1	Low	2402	0.48	-27.3	≤-19.52	PASS
		High	2480	2.59	-38.04	≤-17.41	PASS

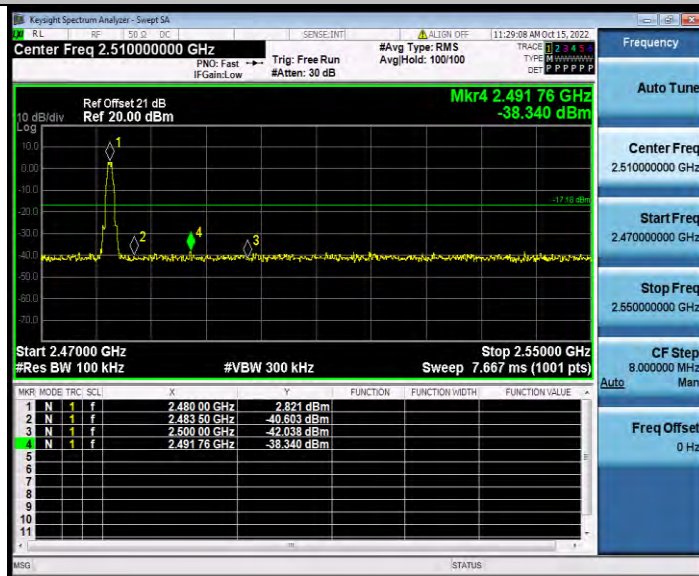


TEST GRAPHS

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480

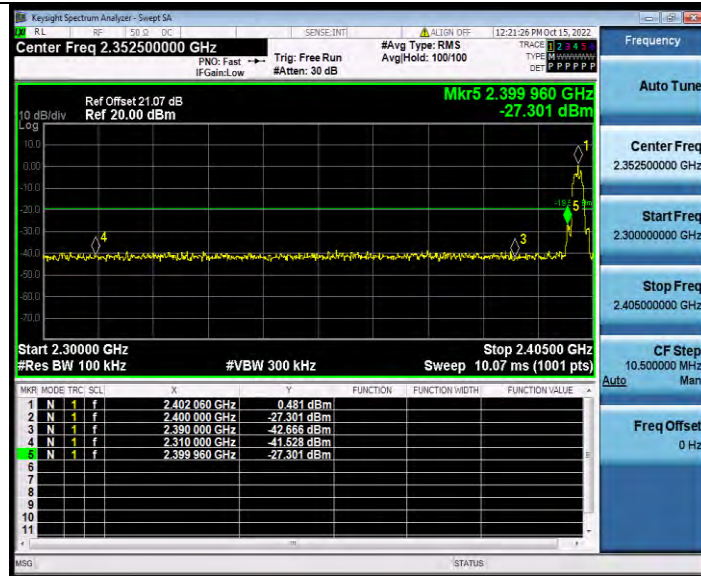


BLE_2M_Ant1_Low_2402

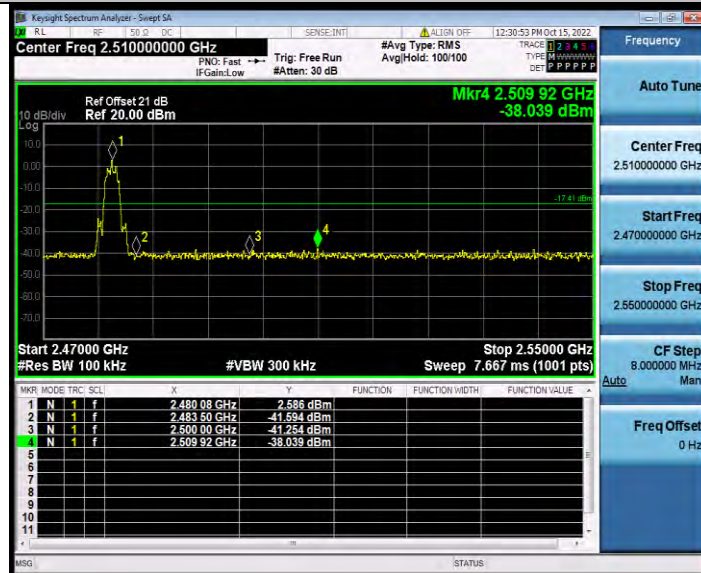


BUREAU VERITAS

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_High_2480





CONDUCTED SPURIOUS EMISSION TEST RESULT

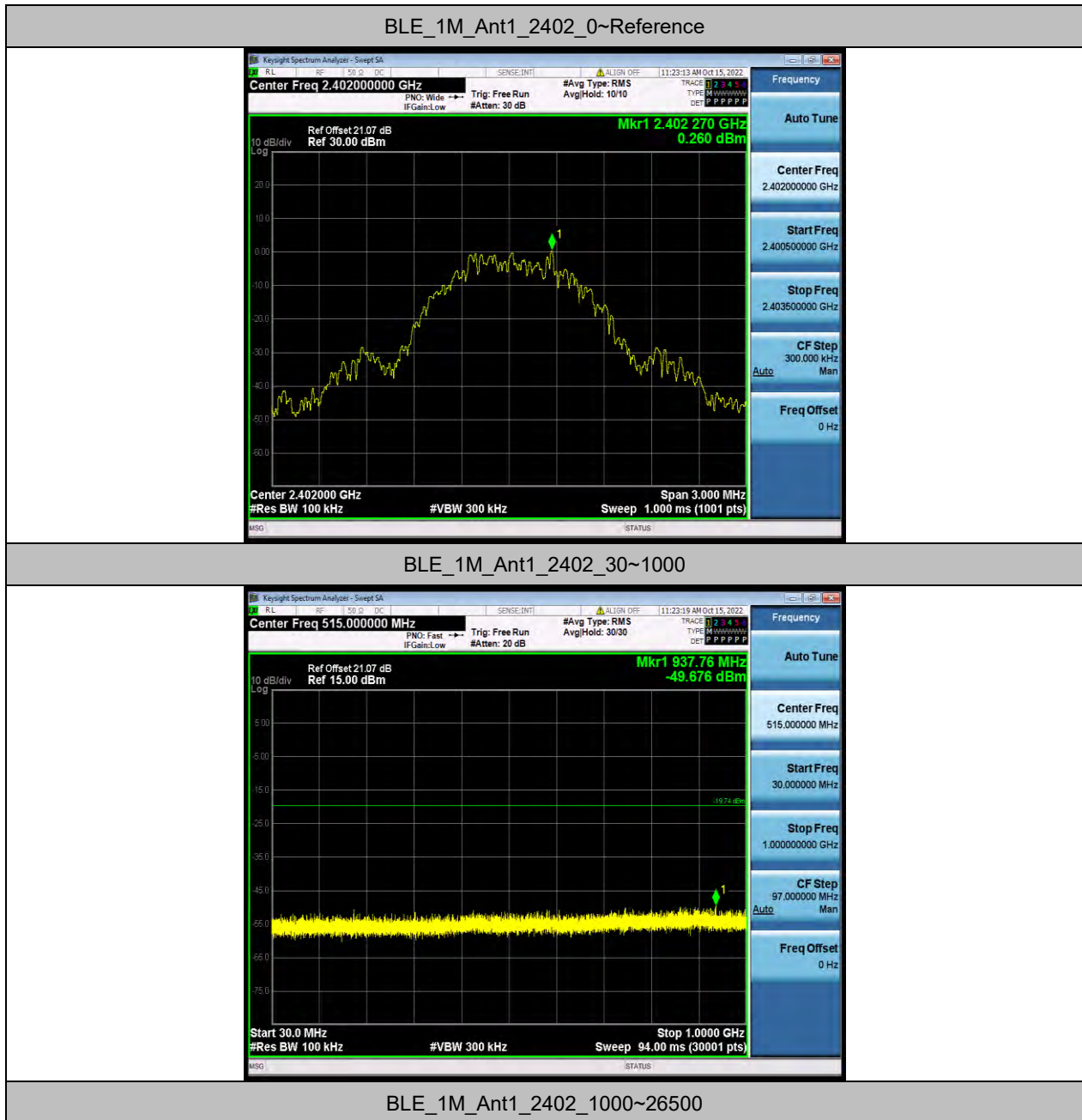
TestMode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	0.26	0.26	---	PASS
			30~1000	0.26	-49.68	≤-19.74	PASS
			1000~26500	0.26	-41	≤-19.74	PASS
		2440	Reference	2.14	2.14	---	PASS
			30~1000	2.14	-49.89	≤-17.86	PASS
			1000~26500	2.14	-41.22	≤-17.86	PASS
		2480	Reference	2.64	2.64	---	PASS
			30~1000	2.64	-49.59	≤-17.36	PASS
			1000~26500	2.64	-41.33	≤-17.36	PASS
BLE_2M	Ant1	2402	Reference	-1.06	-1.06	---	PASS
			30~1000	-1.06	-48.92	≤-21.06	PASS
			1000~26500	-1.06	-41.02	≤-21.06	PASS
		2440	Reference	-1.62	-1.62	---	PASS
			30~1000	-1.62	-49.93	≤-21.62	PASS
			1000~26500	-1.62	-41.31	≤-21.62	PASS
		2480	Reference	2.17	2.17	---	PASS
			30~1000	2.17	-49.66	≤-17.83	PASS
			1000~26500	2.17	-40.81	≤-17.83	PASS



**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02

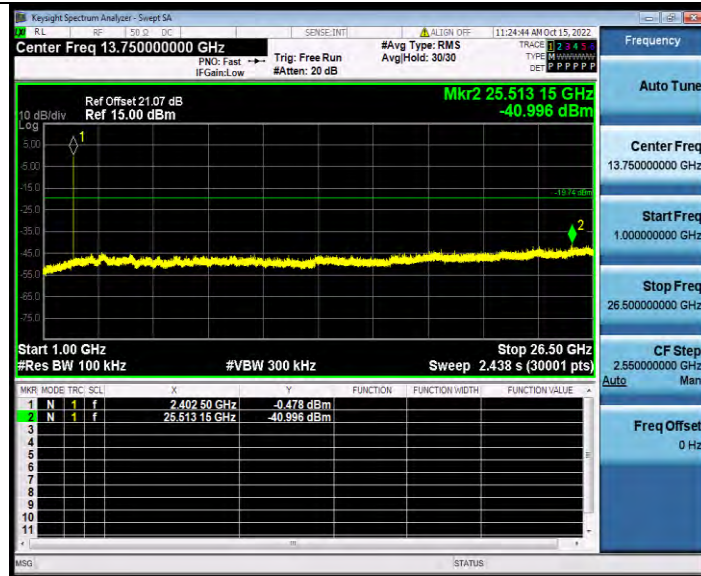
TEST GRAPHS





**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



BLE_1M_Ant1_2440_0~Reference

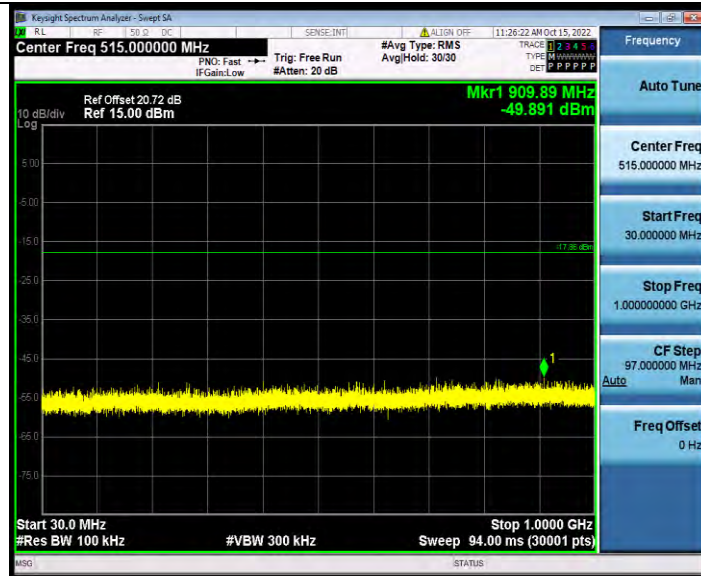


BLE_1M_Ant1_2440_30~1000

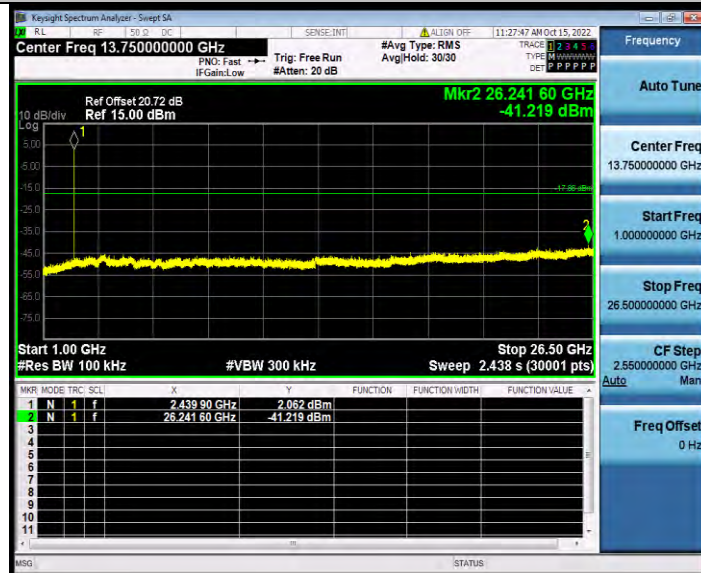


**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference

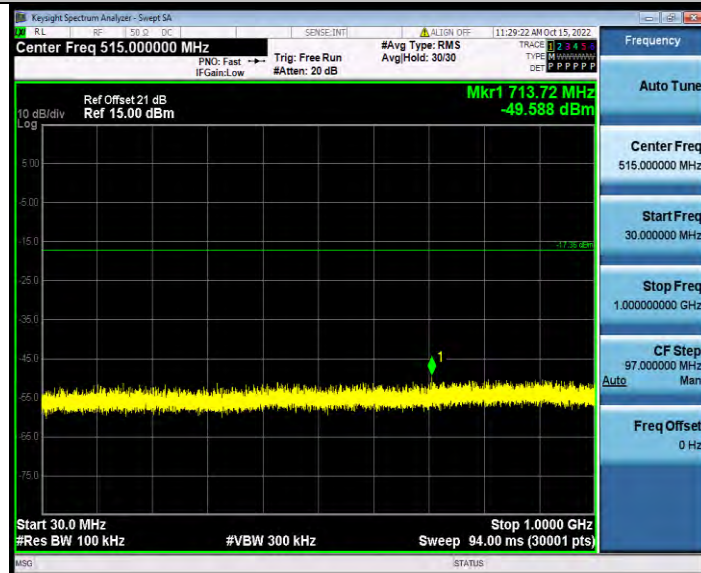


**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



BLE_1M_Ant1_2480_30~1000

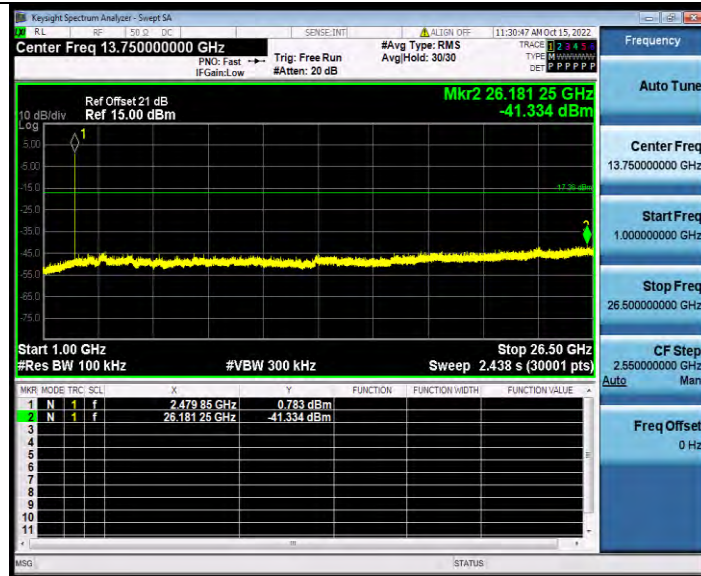


BLE_1M_Ant1_2480_1000~26500



**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_2402_0~Reference

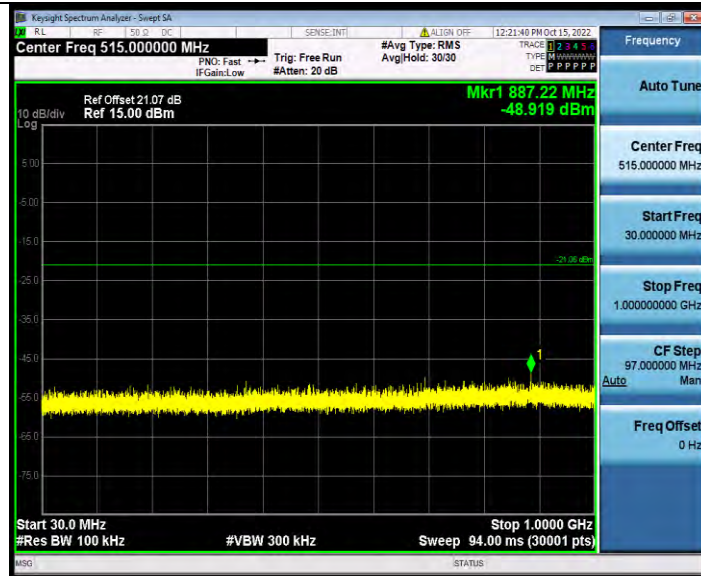


BLE_2M_Ant1_2402_30~1000



**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_2402_1000~26500



BLE_2M_Ant1_2440_0~Reference



**BUREAU
VERITAS**

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_2440_30~1000

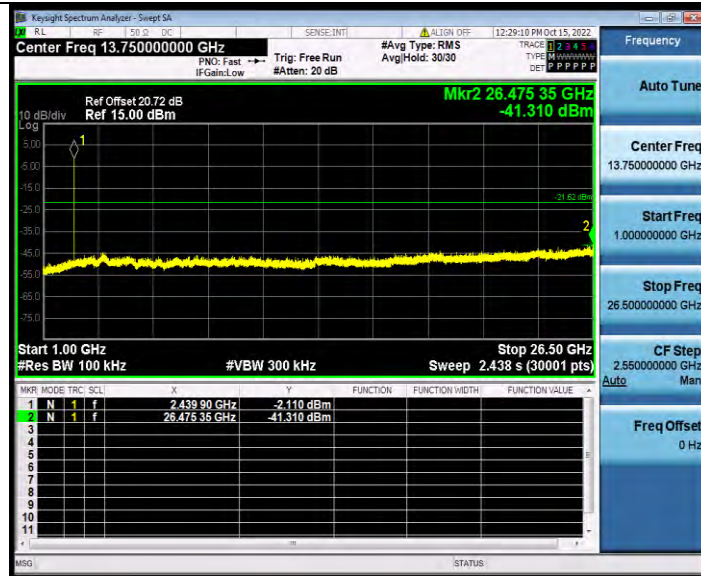


BLE_2M_Ant1_2440_1000~26500



BUREAU VERITAS

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000

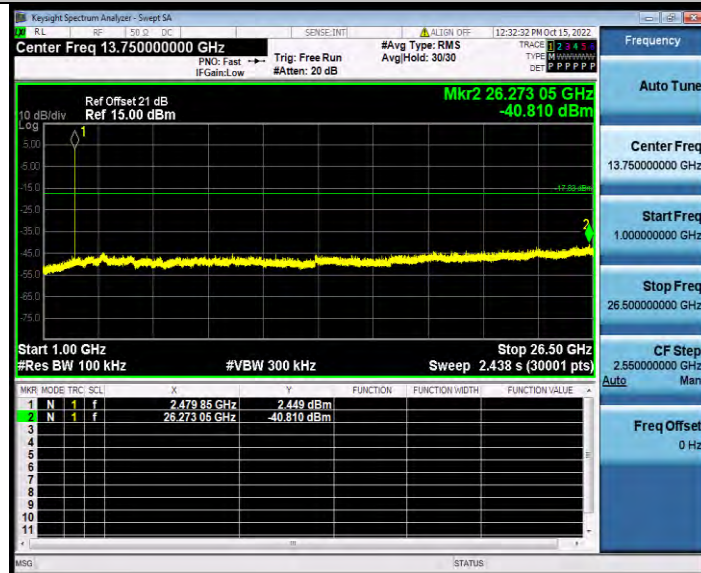


BUREAU VERITAS

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_2480_1000~26500





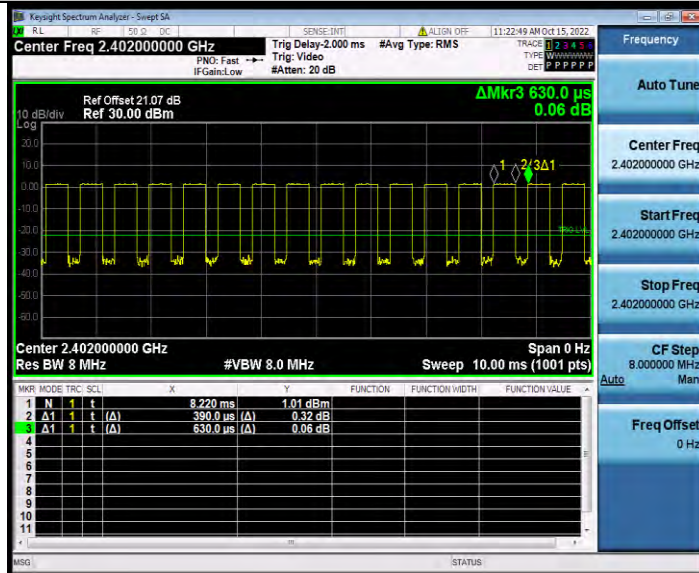
DUTY CYCLE TEST RESULT

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.39	0.63	61.90	2.08
		2440	0.39	0.63	61.90	2.08
		2480	0.39	0.63	61.90	2.08
BLE_2M	Ant1	2402	0.22	0.62	35.48	4.50
		2440	0.22	0.62	35.48	4.50
		2480	0.22	0.62	35.48	4.50

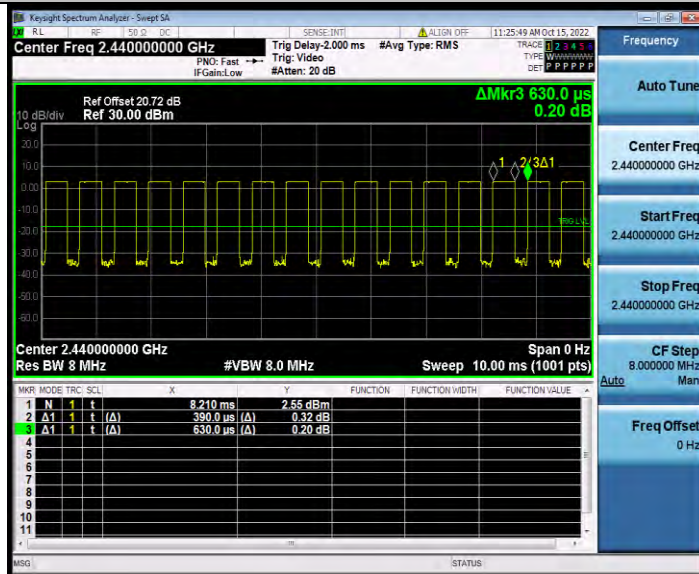


TEST GRAPHS

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440

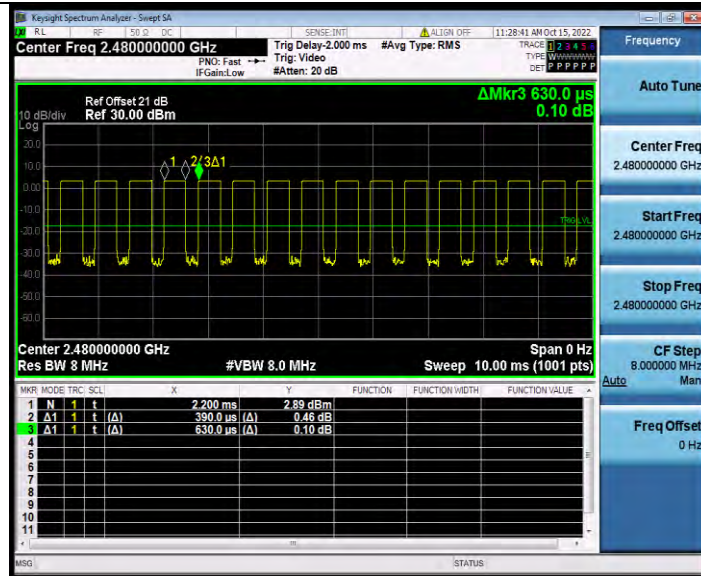


BLE_1M_Ant1_2480

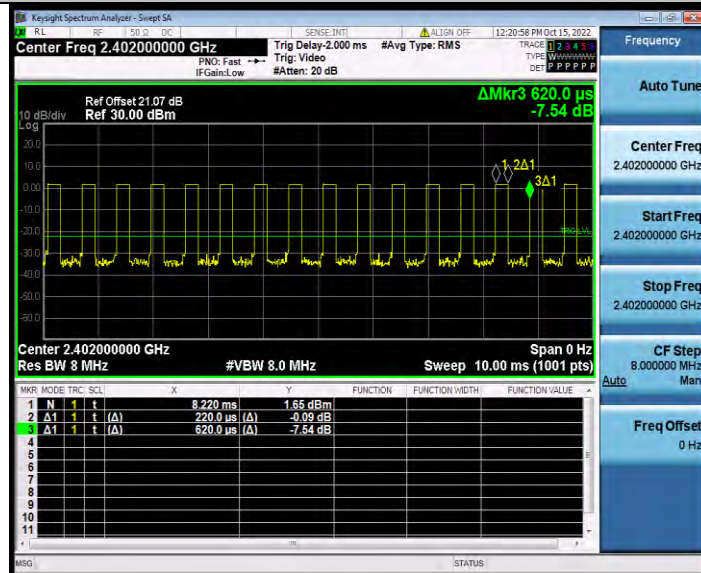


BUREAU VERITAS

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_2402

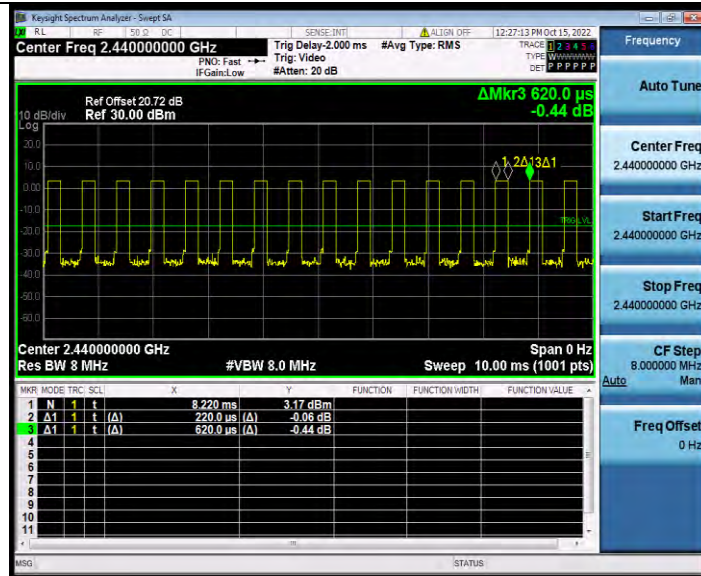


BLE_2M_Ant1_2440

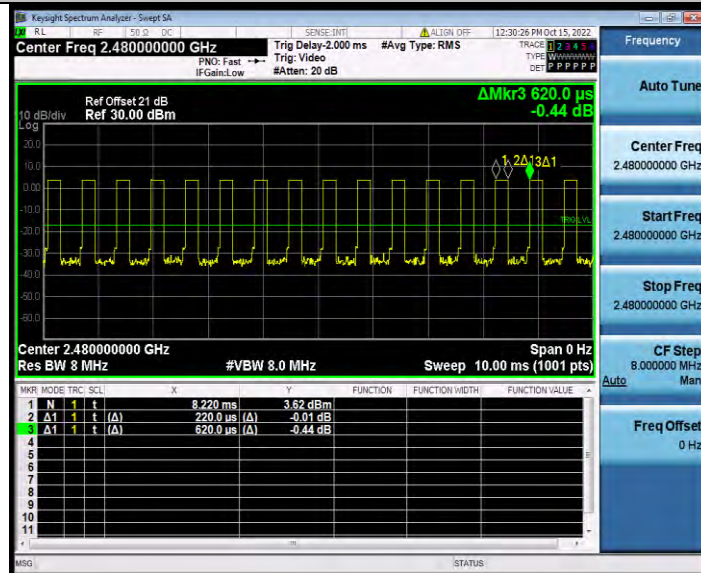


BUREAU VERITAS

Test Report No.: W7L-P22090035RF02



BLE_2M_Ant1_2480



---END---