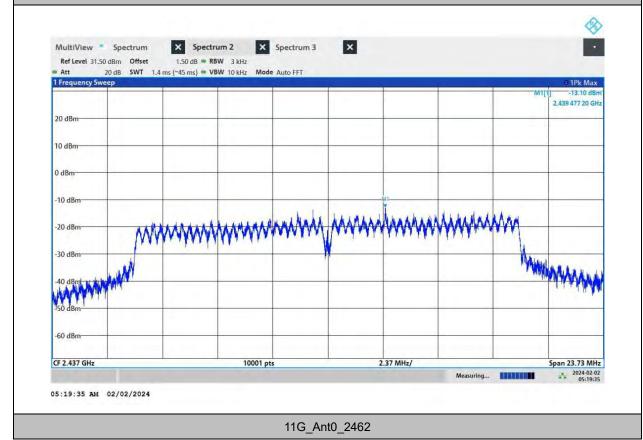


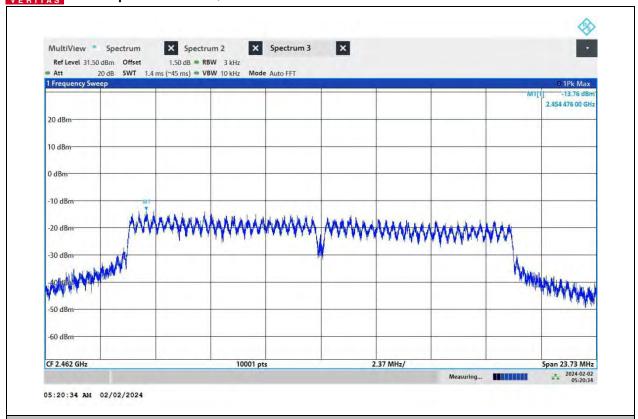
#### 11G\_Ant0\_2437



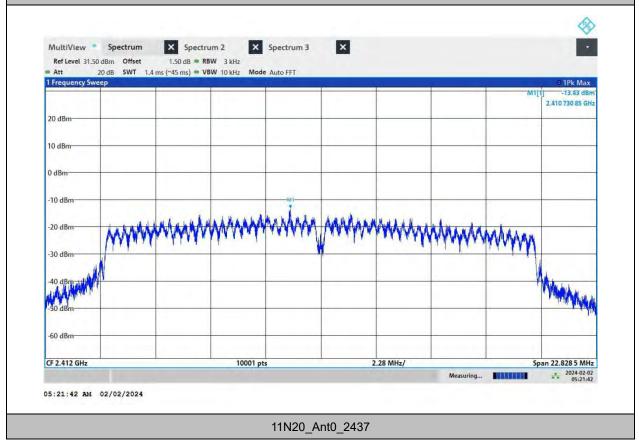
Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province





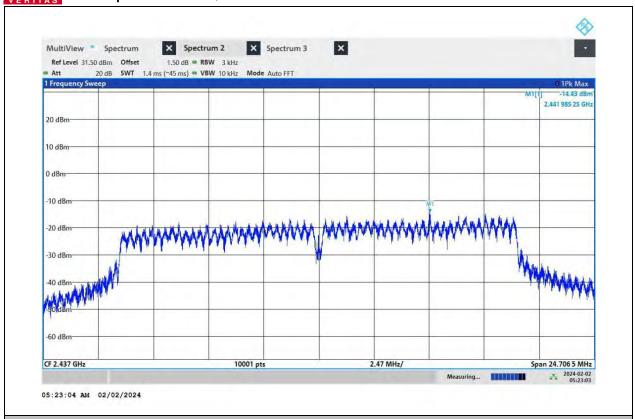
### 11N20\_Ant0\_2412



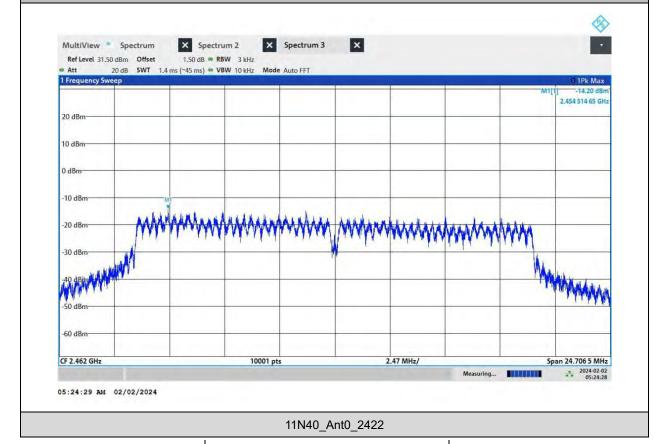
Huarui 7layers High Technology (Suzhou) Co., Ltd.

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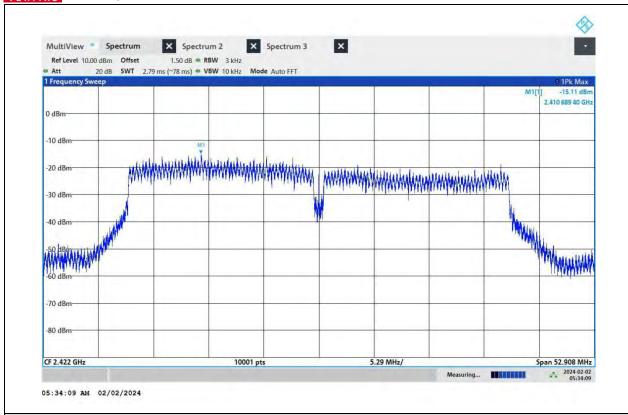
### 11N20\_Ant0\_2462



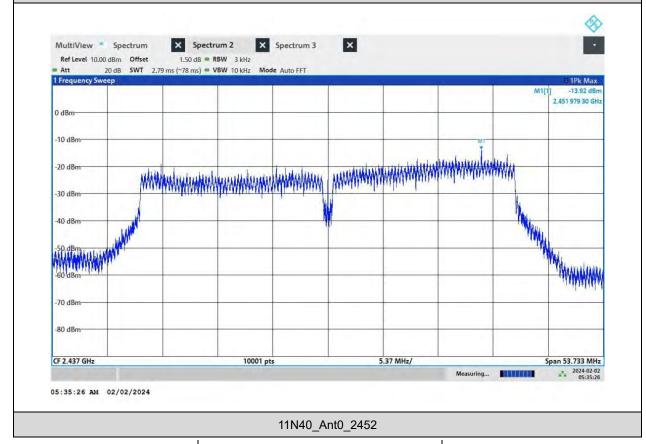
Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province





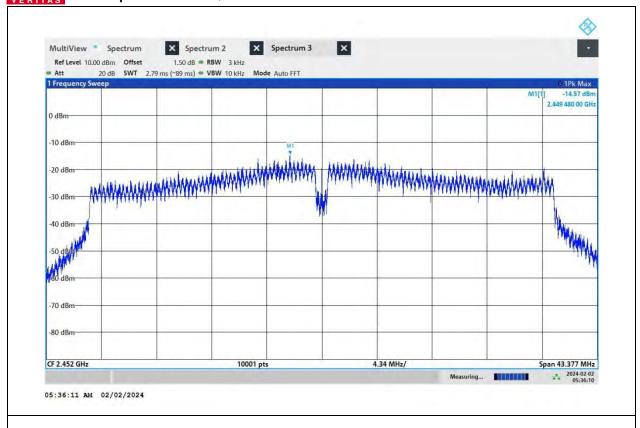
### 11N40\_Ant0\_2437



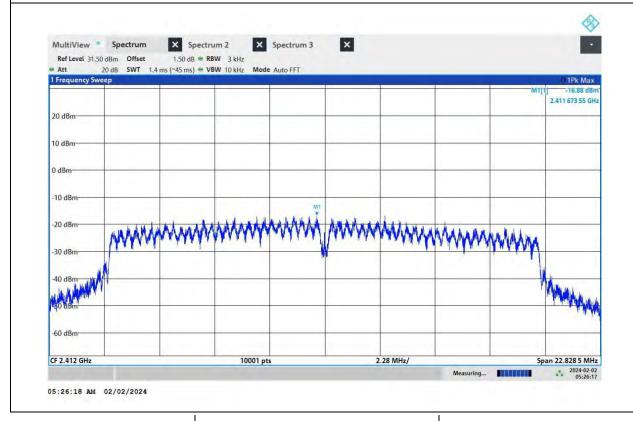
Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province





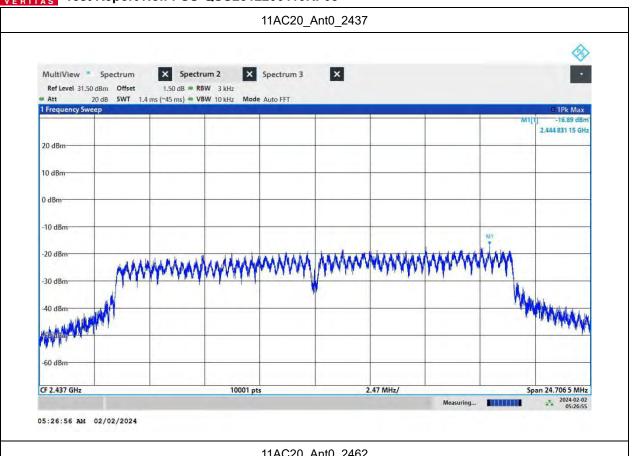
#### 11AC20\_Ant0\_2412



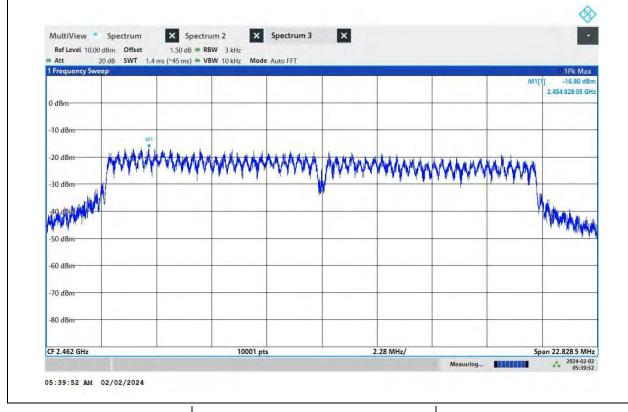
Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province





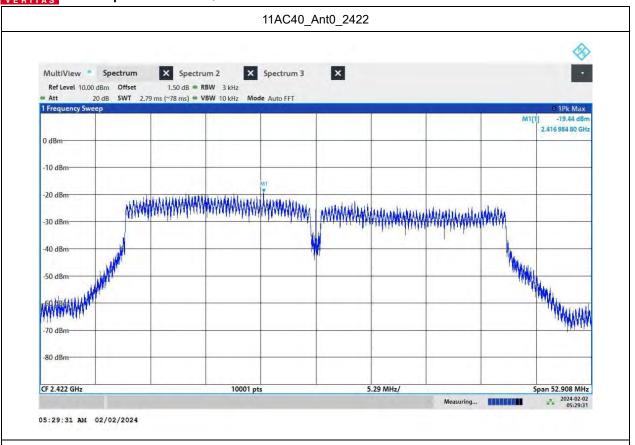




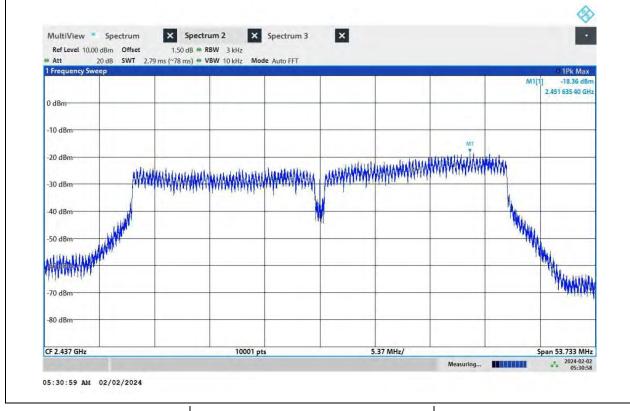
Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province





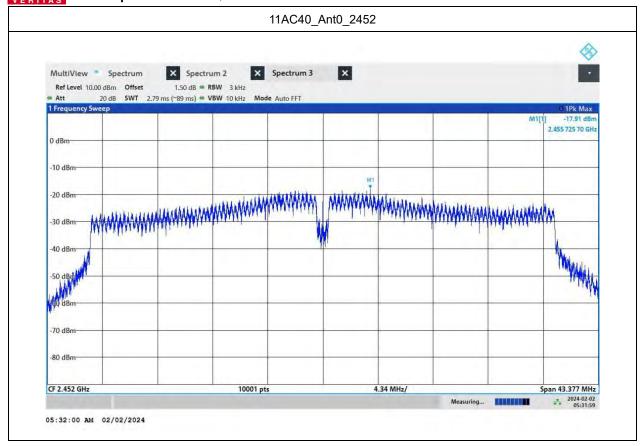
#### 11AC40\_Ant0\_2437



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VERITAS Test Report No.: PSU-QSU2312200110RF08

### **BAND EDGE MEASUREMENTS**

### **TEST RESULT**

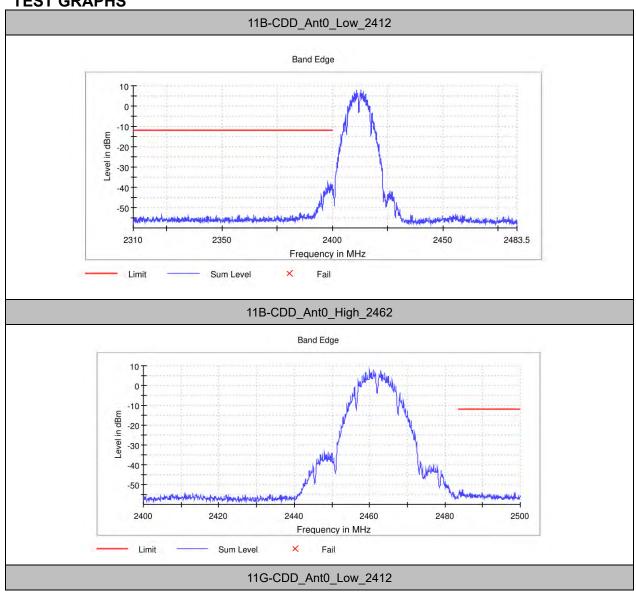
1E31 RE3ULI								
TestMode	A 4	ChName	Frequency	Result	Limit	Vardiat		
Testivioue	Antenna		[MHz]	[dBm]	[dBm]	Verdict		
	A == 40	Low	0.110	See test	See test	DACC		
	Ant0		2412	graph	graph	PASS		
11B	A == 40	High	2462	See test	See test	DACC		
	Ant0			graph	graph	PASS		
	Ant0	Low	0440	See test	See test	PASS		
11G	Anto	LOW	2412	graph	graph	PASS		
IIG	AntO		0.400	See test	See test	PASS		
	Ant0	High	2462	graph	graph	PASS		
	A mtO	Low	2412	See test	See test	DACC		
11N20	Ant0			graph	graph	PASS		
TTNZU	Ant0	High	2462	See test	See test	PASS		
	Anto			graph	graph			
	Ant0	Low	2422	See test	See test	PASS		
111110				graph	graph	PASS		
11N40	Ant0	Lliah	2452	See test	See test	PASS		
	Anto	High	2452	graph	graph			
11AC20	Ant0	Low	2412	See test	See test	PASS		
	Anto			graph	graph	PASS		
	Ant0	A10	2462	See test	See test	PASS		
	Anto	High	2402	graph	graph	PASS		
	Ant0	Low	2422	See test	See test	PASS		
11AC40	AIIU	LOW		graph	graph	FASS		
11/10/40	Ant0	High	2452	See test	See test	PASS		
	AIIU	, Tilgii 2402		graph	graph	FASS		
RBW 100.000 kHz								

RBW 100.000 kHz

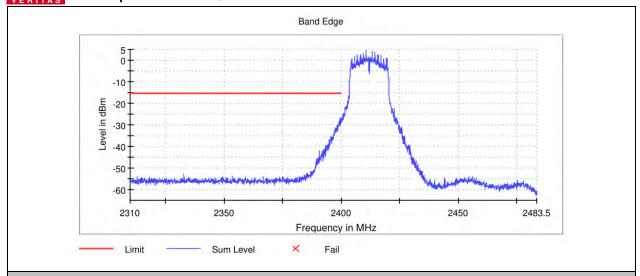
VBW 300.000 kHz



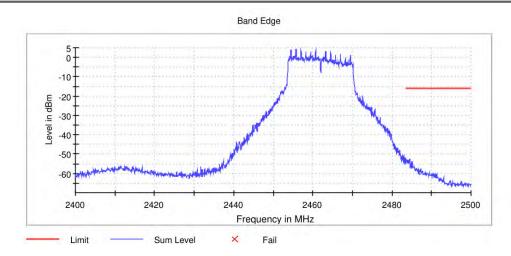
### **TEST GRAPHS**



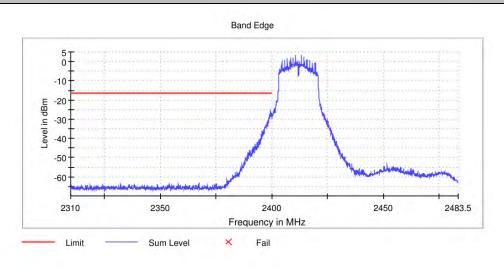




### 11G-CDD\_Ant0\_High\_2462



### 11N20SISO\_Ant0\_Low\_2412



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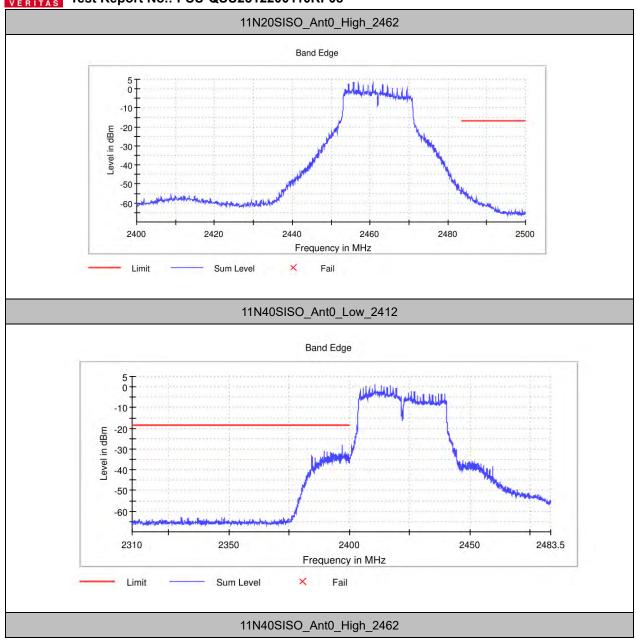
Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province

Tel: +86 (0557) 368 1008

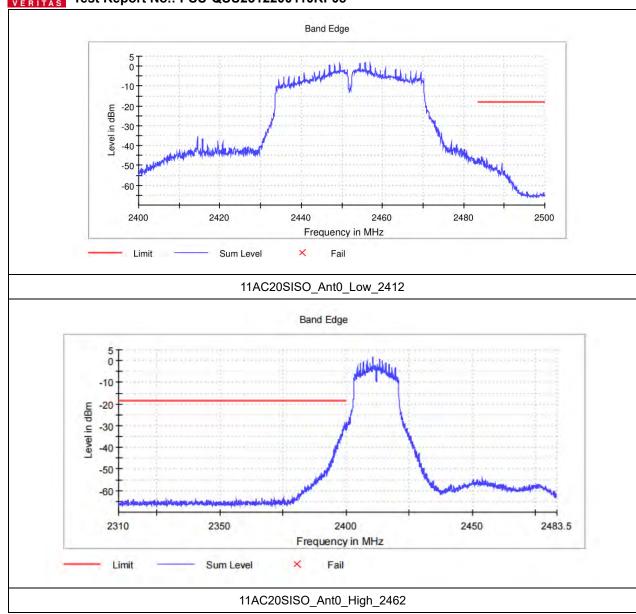
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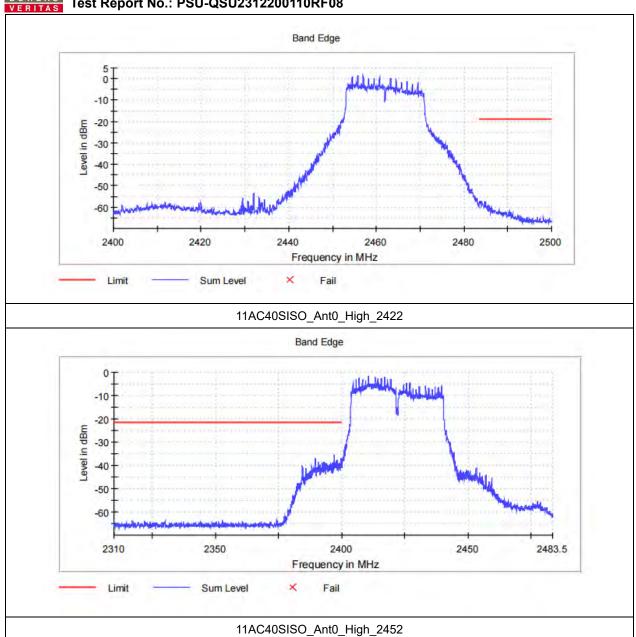




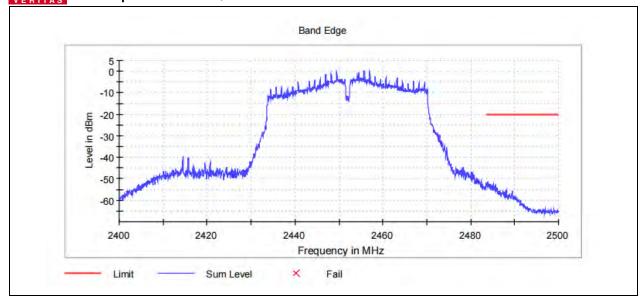














VERITAS Test Report No.: PSU-QSU2312200110RF08

## **CONDUCTED SPURIOUS EMISSION**

### **TEST RESULT**

TootMode	Antenna	Fragues cufMU-1	FreqRange	Result	Limit	Verdict
TestMode		Frequency[MHz]	[Mhz]	[dBm]	[dBm]	verdict
	Ant0	2412	30~265000	See test	See test	PASS
	Anto			graph	graph	PASS
11B	Ant0	2437	30~265000	See test	See test	PASS
TID	Anto			graph	graph	
	Ant0	2462	30~265000	See test	See test	PASS
	Anto	2402	30 203000	graph	graph	1700
	Ant0	2412	30~265000	See test	See test	PASS
	Anto	2412	30~203000	graph	graph	1 700
11G	Ant0	2437	30~265000	See test	See test	PASS
110	Anto	2437	30 200000	graph	graph	
	Ant0	2462	30~265000	See test	See test	PASS
	Anto		30 200000	graph	graph	
	Ant0	2412	30~265000	See test	See test	PASS
11N20	7 1110			graph	graph	
	Ant0	2437	30~265000	See test	See test	PASS
111420				graph	graph	
	Ant0	2462	30~265000	See test	See test	
	74110		30 203000	graph	graph	
11N40	Ant0	2422	30~265000	See test	See test	PASS
				graph	graph	
	Ant0	2437	30~265000	See test	See test	PASS
	74110			graph	graph	17.00
	Ant0	2452	30~265000	See test	See test	PASS
	Anto			graph	graph	
11AC20	Ant0	2412	30~265000	See test	See test	PASS
	, 1110			graph	graph	1,7,00
	Ant0	2437	30~265000	See test	See test	PASS
	,		30 20000	graph graph	graph	
	Ant0	2462	30~265000	See test	See test	PASS

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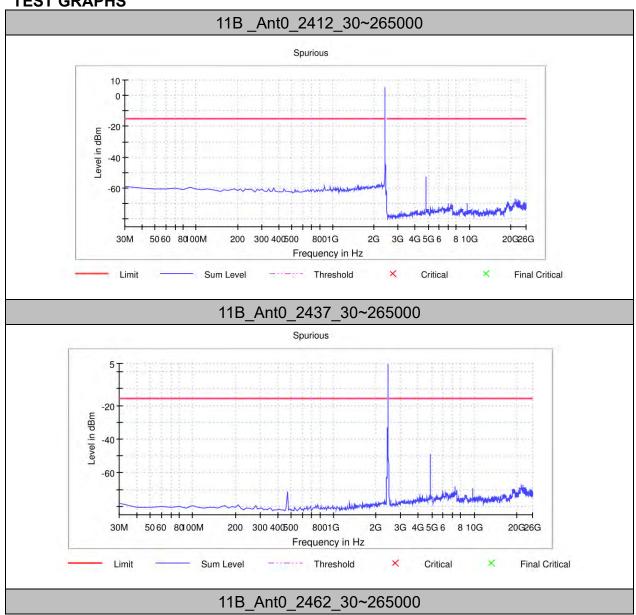
Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province



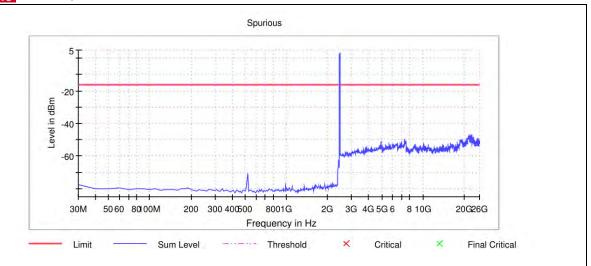
				graph	graph	
11AC40	Ant0	2422	30~265000	See test	See test	PASS
				graph	graph	
	Ant0	2437	30~265000	See test	See test	PASS
				graph	graph	
	Ant0 2452	30~265000	See test	See test	PASS	
		2402	30~203000	graph	graph	1 700



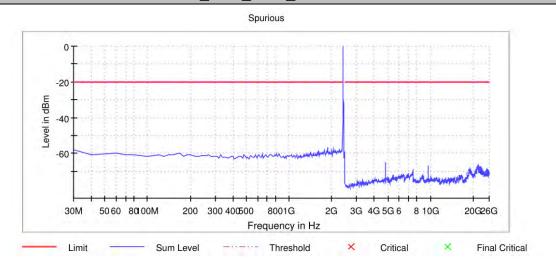
### **TEST GRAPHS**



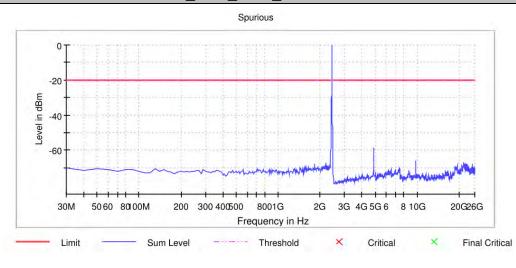




### 11G\_Ant0\_2412\_30~265000



### 11G\_Ant0\_2437\_30~265000



11G Ant0 2462 30~265000

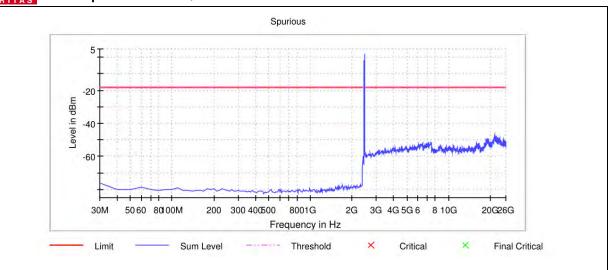
Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province

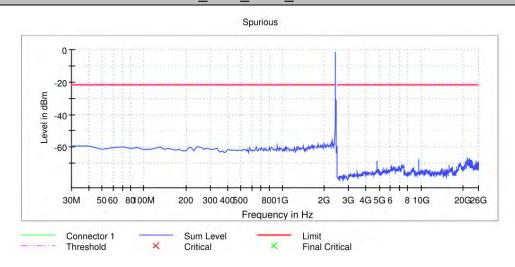
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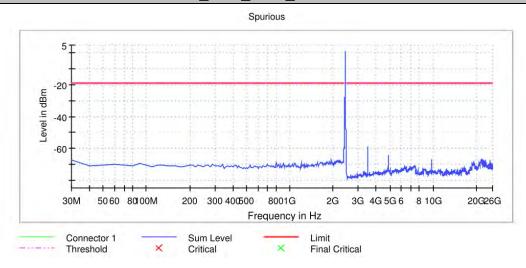




### 11N20 Ant0 2412 30~265000



### 11N20\_Ant0\_2437\_30~265000



11N20 Ant0 2462 30~265000

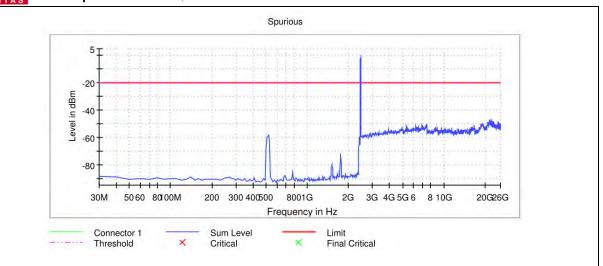
Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province

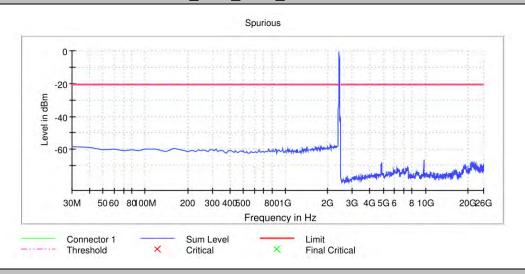
Tel: +86 (0557) 368 1008

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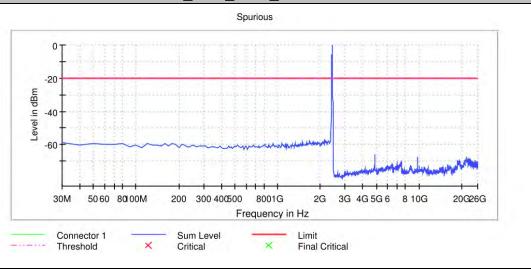




### 11N40\_Ant0\_2422\_30~265000



### 11N40 Ant0 2437 30~265000



11N40 Ant0 2452 30~265000

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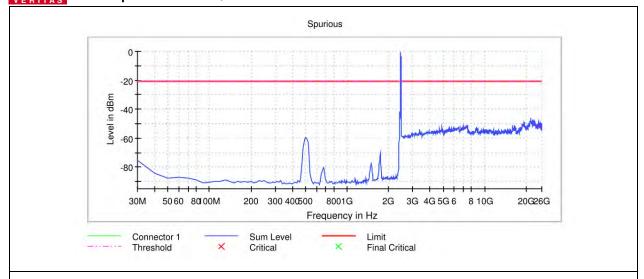
Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province

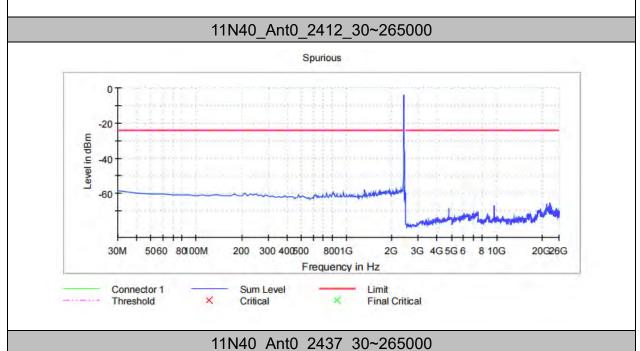
Tel: +86 (0557) 368 1008

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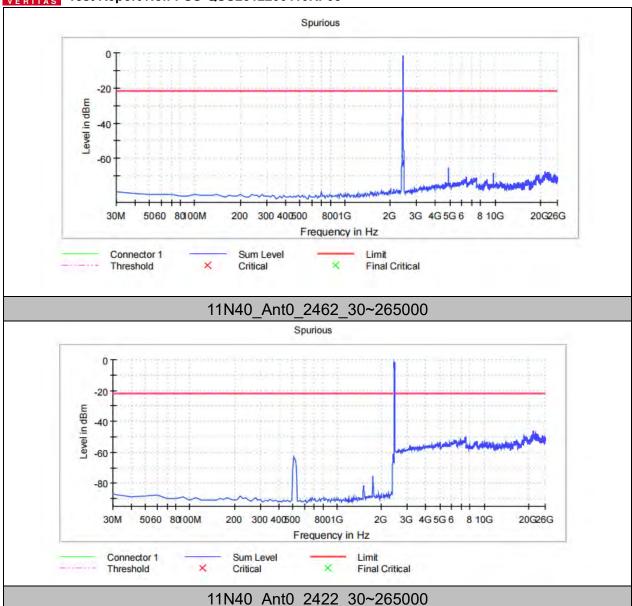
Report Version



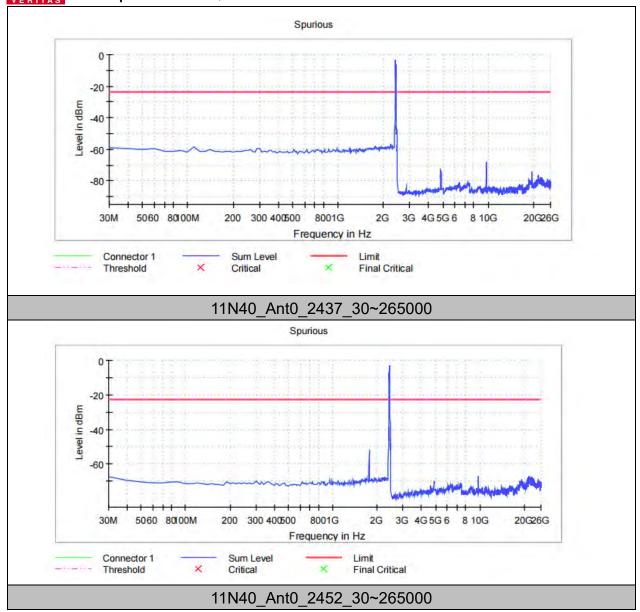




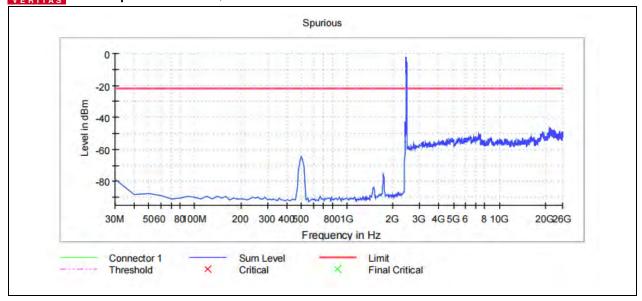














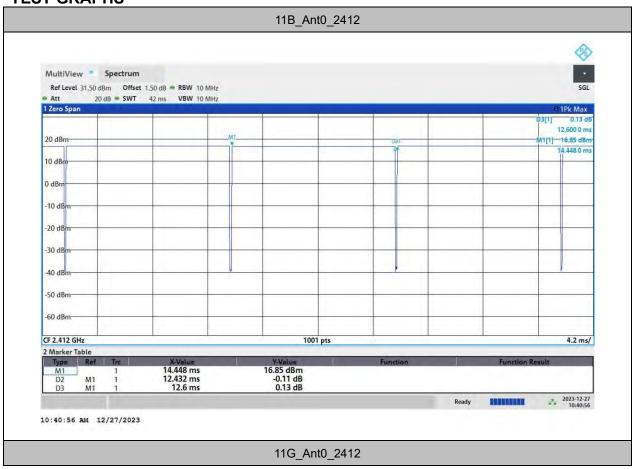
### **DUTY CYCLE**

### **TEST RESULT**

12011120021							
TestMode	Antenna	Frequency[MHz]	Transmission	Transmission	Duty Cycle		
			Duration [ms]	Period [ms]	[%]		
11B	Ant0	2412	12.4725	12.6029	98.96		
11G	Ant0	2412	2.0597	2.1015	97.93		
11AC20	Ant0	2412	1.9203	1.9638	97.79		
11AC40	Ant0	2422	0.9391	1.0044	93.51		
11N20	Ant0	2412	1.9203	1.9638	97.79		
11N40	Ant0	2422	0.9391	1.0044	93.51		



### **TEST GRAPHS**







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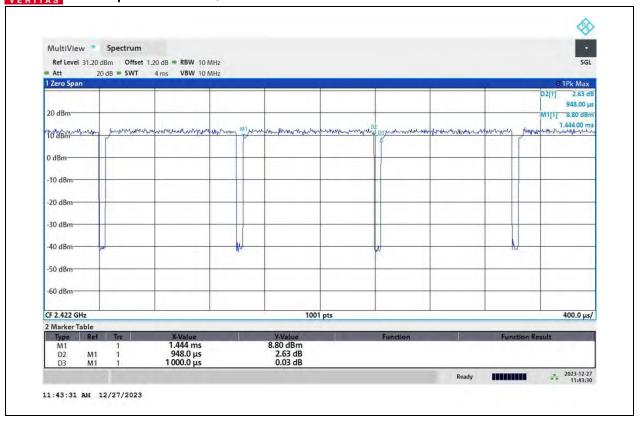
Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province

11N40\_Ant0\_2422

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# 7 APPENDIX 2:BLE DTS BANDWIDTH

### **TEST RESULT**

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
		2402	0.6693	2401.6643	2402.3336	0.5	PASS
BLE_1M	Ant1	2440	0.6713	2439.6643	2440.3356	0.5	PASS
		2480	0.6673	2479.6623	2480.3296	0.5	PASS
		2404	1.1748	2403.4126	2404.5874	0.5	PASS
BLE_2M	Ant1	2440	1.1748	2439.4126	2440.5874	0.5	PASS
		2478	1.1748	2477.4086	2478.5834	0.5	PASS
BLE_S2	Ant1	2402	0.6693	2401.6703	2402.3396	0.5	PASS
		2440	0.6713	2439.6703	2440.3416	0.5	PASS
		2480	0.6653	2479.6703	2480.3356	0.5	PASS
BLE_S8	Ant1	2402	0.6074	2401.6963	2402.3037	0.5	PASS
		2440	0.6114	2439.6943	2440.3057	0.5	PASS
		2480	0.6074	2479.6943	2480.3017	0.5	PASS



### **TEST GRAPHS**



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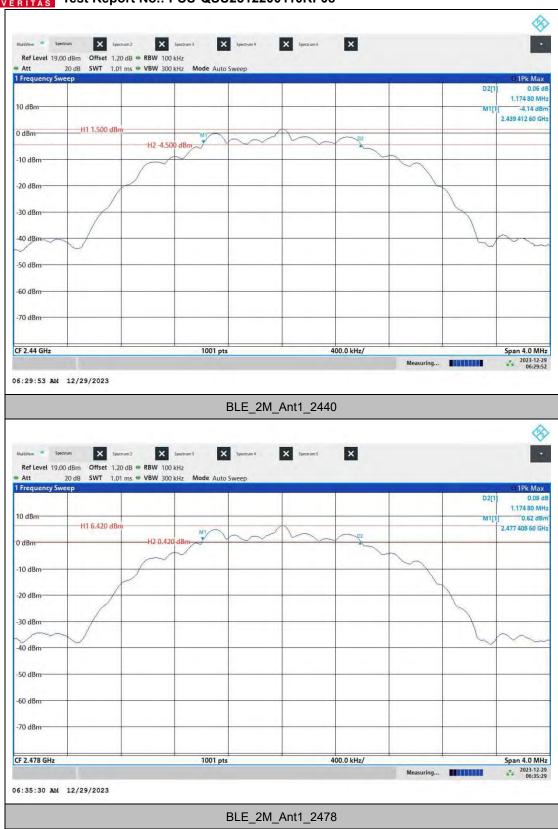




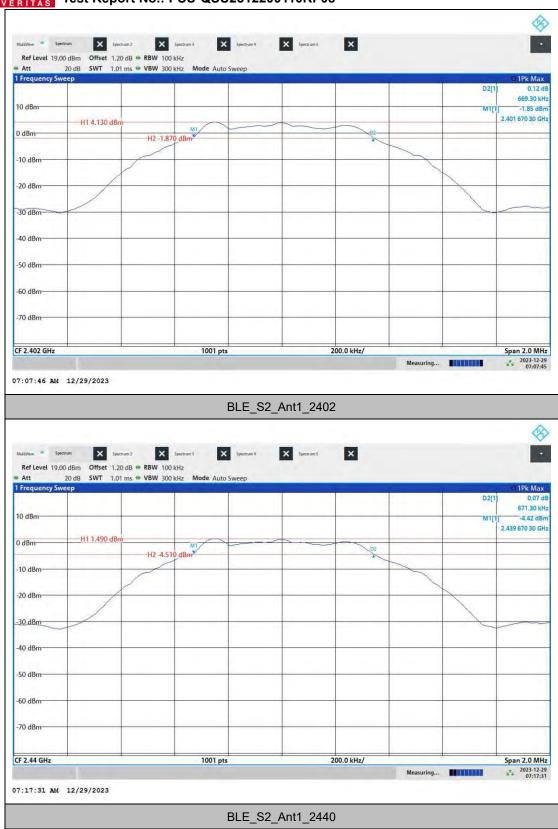
Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province

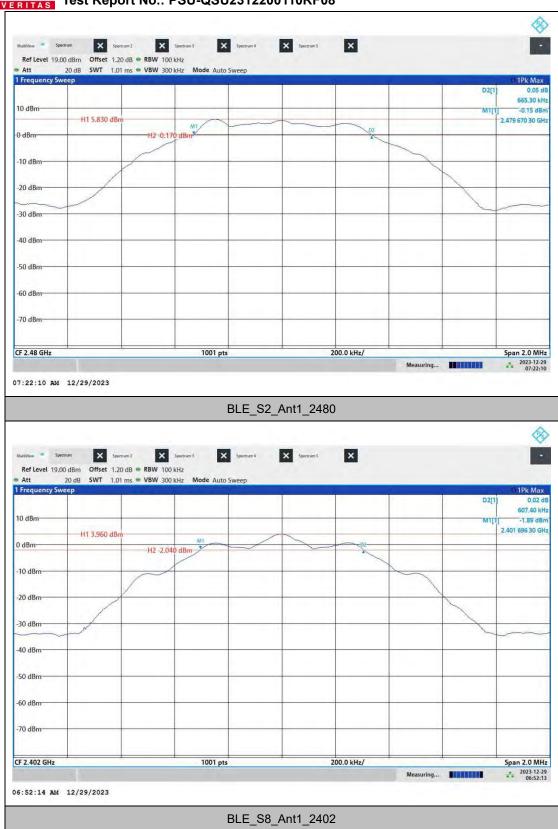




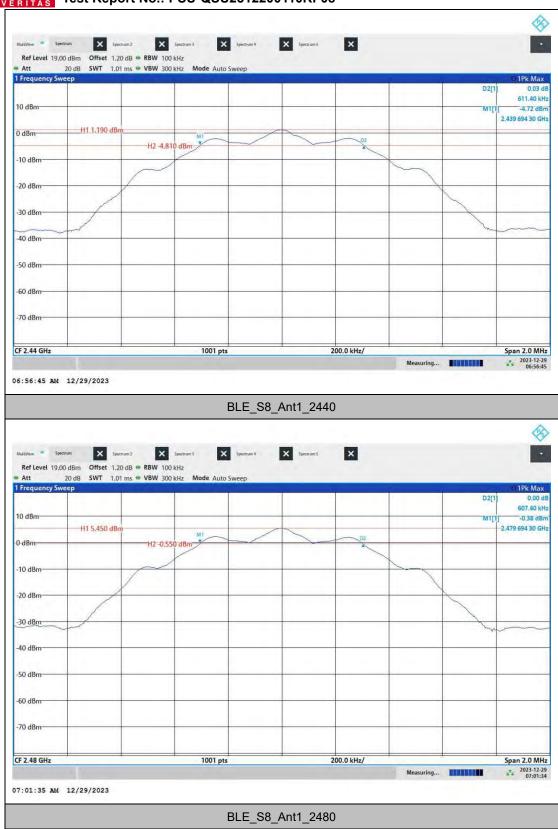














# OCCUPIED CHANNEL BANDWIDTH TEST RESULT

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MH	Verdict
		2402	1.0296	2401.4951	2402.5247		PASS
BLE_1M	Ant1	2440	1.0268	2439.4973	2440.5241		PASS
		2480	1.0311	2479.4895	2480.5206		PASS
	Ant1	2404	2.0312	2403.0088	2405.0400		PASS
BLE_2M		2440	2.0335	2439.0082	2441.0417		PASS
		2478	2.0312	2477.0005	2479.0317		PASS
	Ant1	2402	1.0236	2401.4907	2402.5143		PASS
BLE_S2		2440	1.0213	2439.4919	2440.5132		PASS
		2480	1.0236	2479.4878	2480.5114		PASS
BLE_S8	Ant1	2402	1.0542	2401.4744	2402.5286		PASS
		2440	1.0559	2439.4742	2440.5301		PASS
		2480	1.0566	2479.4690	2480.5256		PASS



### **TEST GRAPHS**



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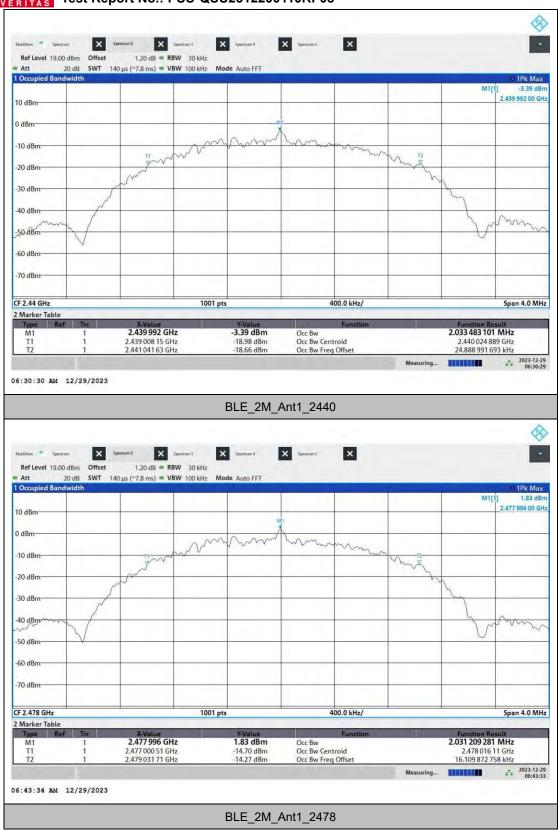




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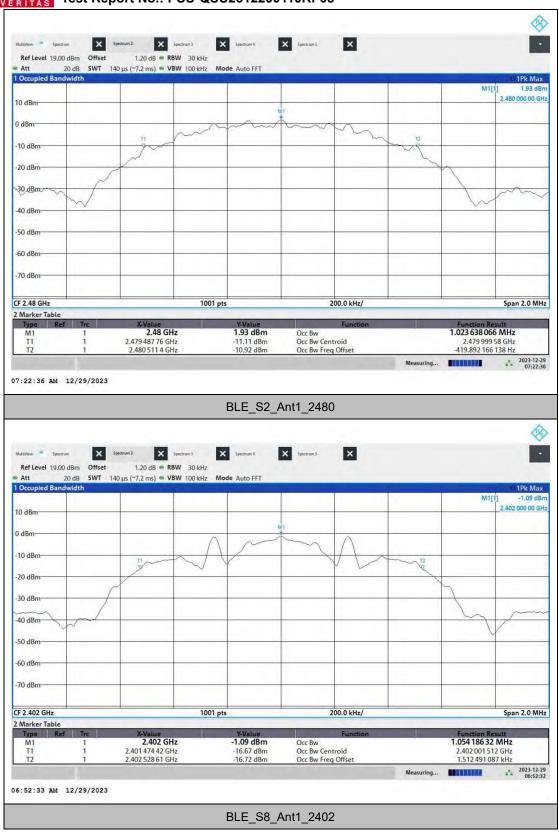




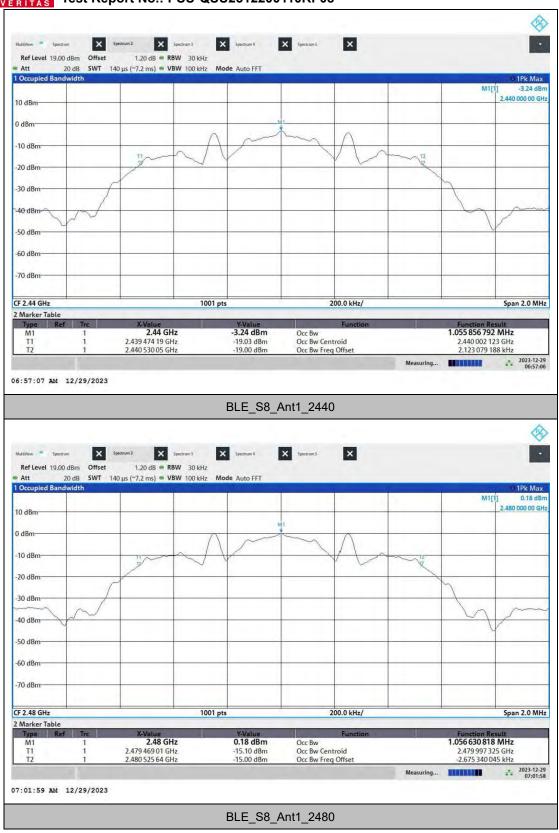














VERITAS Test Report No.: PSU-QSU2312200110RF08

# MAXIMUM CONDUCTED OUTPUT POWER TEST RESULT PEAK

TestMod	Antenna	Channel	Peak	Peak	Conducted	Verdict	Power
е	Antenna	Channel	Power[dBm]	Power[mw]	Limit[dBm]	verdict	setting
		2402	6.18	4.15	≤30	PASS	Defult
BLE_1M	Ant1	2440	4.05	2.54	≤30	PASS	Defult
		2480	8.24	6.67	≤30	PASS	Defult
		2404	6.76	4.74	≤30	PASS	Defult
BLE_2M	Ant1	2440	4.19	2.62	≤30	PASS	Defult
		2478	8.80	7.59	≤30	PASS	Defult
		2402	6.22	4.19	≤30	PASS	Defult
BLE_S2	Ant1	2440	4.13	2.59	≤30	PASS	Defult
		2480	8.35	6.84	≤30	PASS	Defult
BLE_S8		2402	6.19	4.16	≤30	PASS	Defult
	Ant1	2440	4.11	2.58	≤30	PASS	Defult
		2480	8.29	6.75	≤30	PASS	Defult

### **TEST RESULT AVERAGE**

TestMode	Antenna	Channel	Average Power[dBm]	Conducted Limit[dBm]	Verdict	Power setting
		2402	5.28	1	PASS	Defult
BLE_1M	Ant1	2440	3.05	1	PASS	Defult
		2480	7.23	1	PASS	Defult
	Ant1	2404	6.35	1	PASS	Defult
BLE_2M		2440	3.88	1	PASS	Defult
		2478	7.81	1	PASS	Defult
		2402	5.53	1	PASS	Defult
DIE 63	Ant1	2440	3.36	1	PASS	Defult
BLE_S2		2480	7.63	1	PASS	Defult
		2402	4.82	1	PASS	Defult
BLE_S8	Ant1	2440	2.70	1	PASS	Defult
		2480	6.83	1	PASS	Defult

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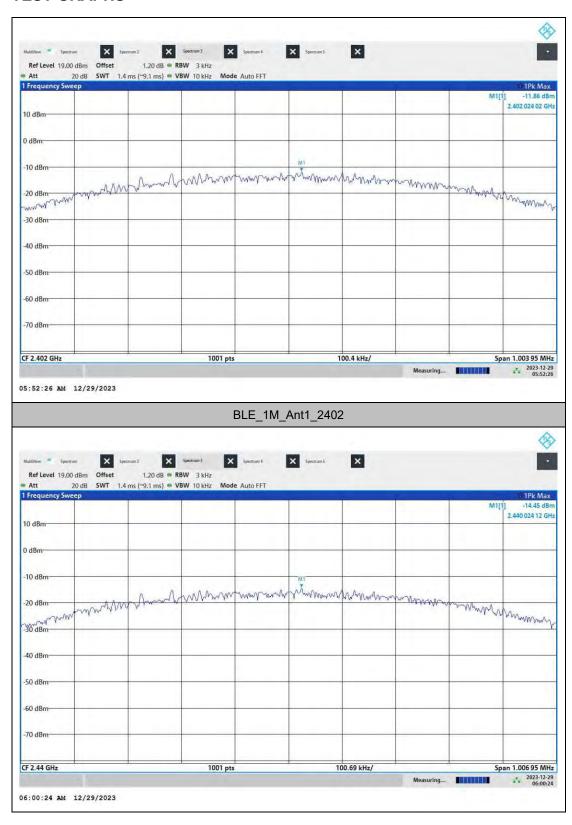


# MAXIMUM POWER SPECTRAL DENSITY TEST RESULT

TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
		2402	-11.86	≤8	PASS
BLE_1M	Ant1	2440	-14.45	≤8	PASS
		2480	-10.18	≤8	PASS
	Ant1	2404	-13.63	≤8	PASS
BLE_2M		2440	-16.84	≤8	PASS
		2478	-12.04	≤8	PASS
	Ant1	2402	-4.15	≤8	PASS
BLE_S2		2440	-6.73	≤8	PASS
		2480	-2.41	≤8	PASS
BLE_S8		2402	-1.90	≤8	PASS
	Ant1	2440	-4.54	≤8	PASS
		2480	-0.31	≤8	PASS



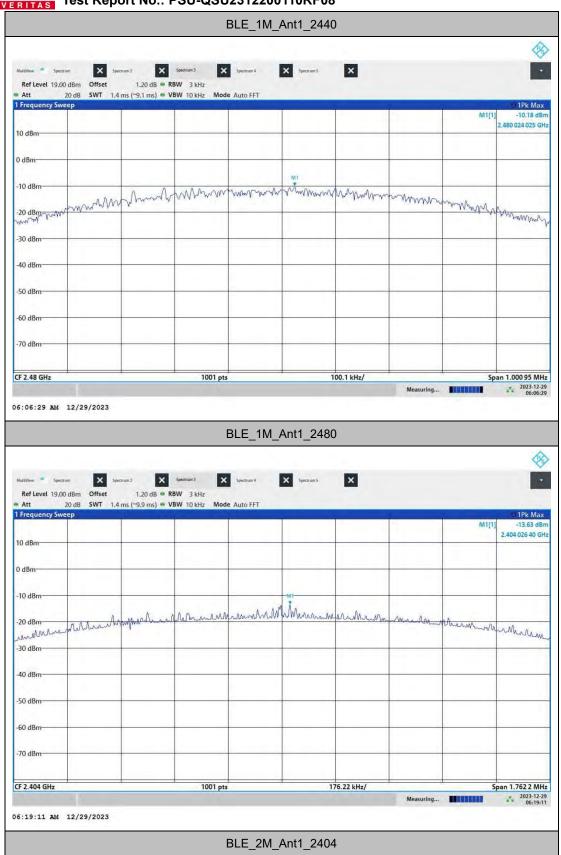
### **TEST GRAPHS**



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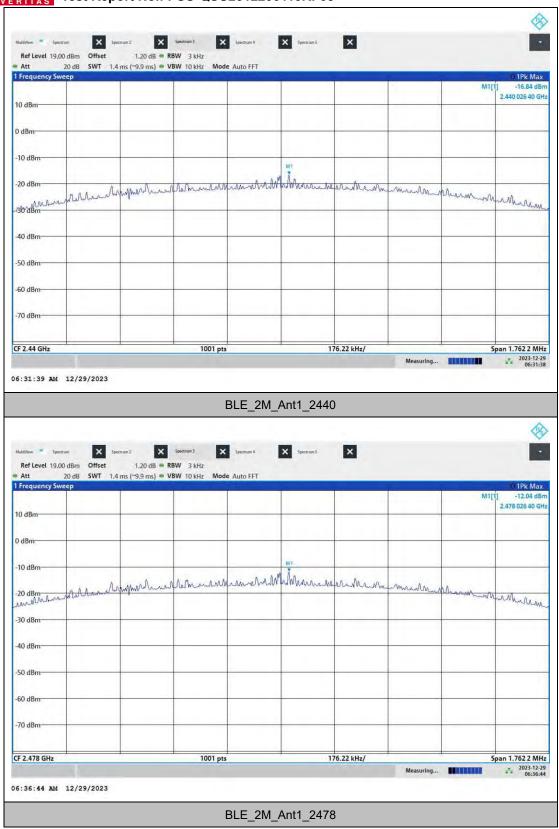




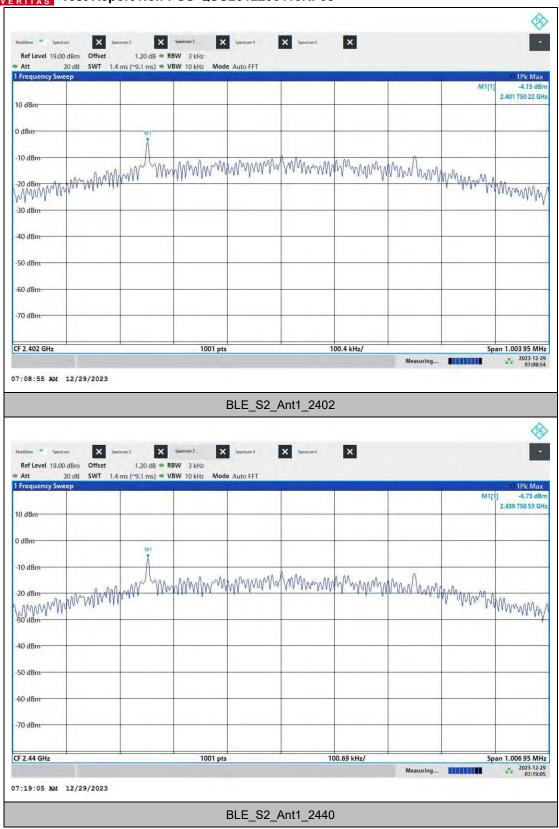
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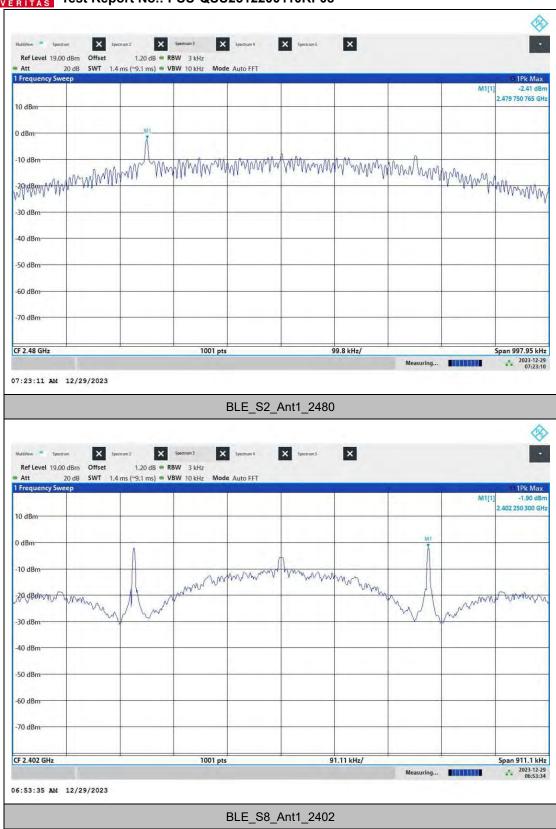




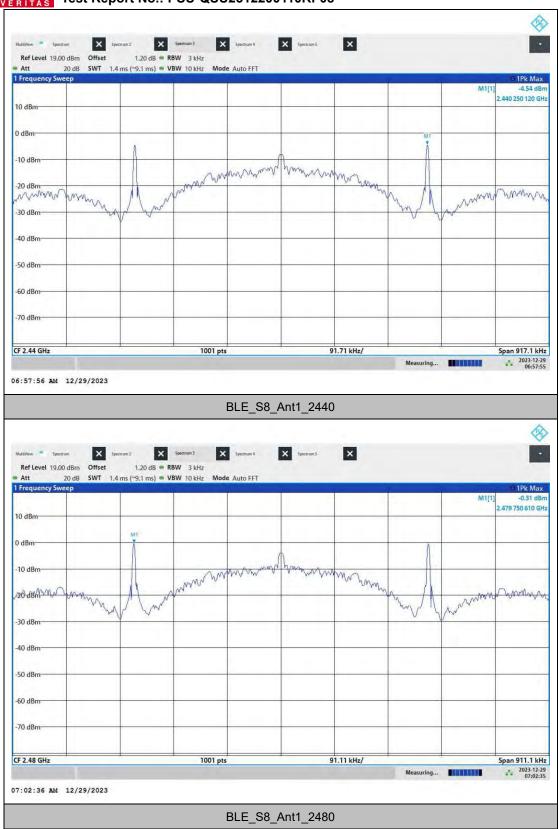














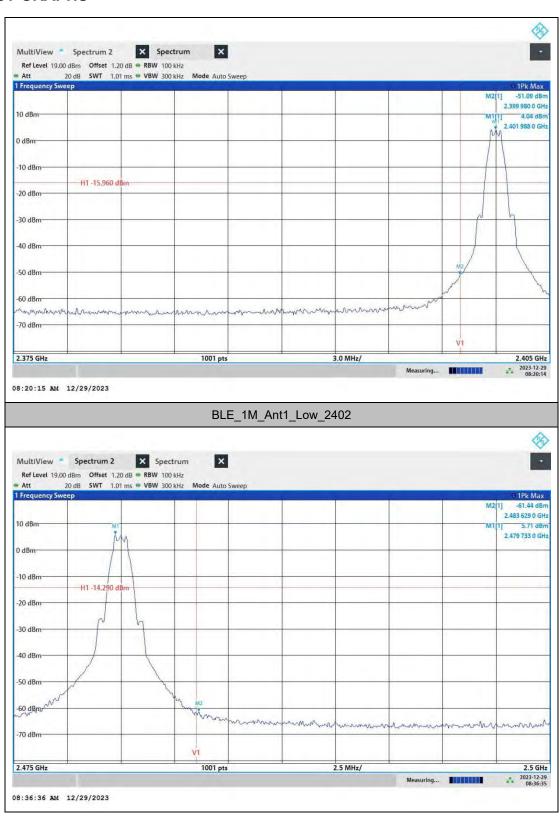
VERITAS Test Report No.: PSU-QSU2312200110RF08

# BAND EDGE MEASUREMENTS TEST RESULT

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
		Low 2402	2402	Soo toot graph	See test	See test	PASS
BLE_1M	Ant1	LOW	2402	See test graph	graph	graph	FAGG
DEE_TIVI	Allti	High	2480	See test graph	See test	See test	PASS
		riigii	2400	See test graph	graph	graph	1 700
		Low	2402	See test graph	See test	See test	PASS
BLE_2M	Ant1	LOW	2402	See test graph	graph	graph	
DLE_ZIVI		High	2480	See test graph	See test See test	See test	PASS
				occ test graph	graph	graph	
	Ant1	Ant1 High	2402	See test graph	See test	See test	PASS
BLE_S2			2402	See lest graph	graph	graph	
DLL_02			2480	See test graph	See test	See test	PASS
				occ test graph	graph	graph	1-A33
BLE_S8		Ant1 Low 2402 See test gra  High 2480 See test gra	2402	Soo tost graph	See test	See test	PASS
	Δnt1		oee lest graph	graph	graph	17.00	
	AIICI		2480	See test graph	See test	See test	PASS
			occ tost graph	graph	graph	1 700	



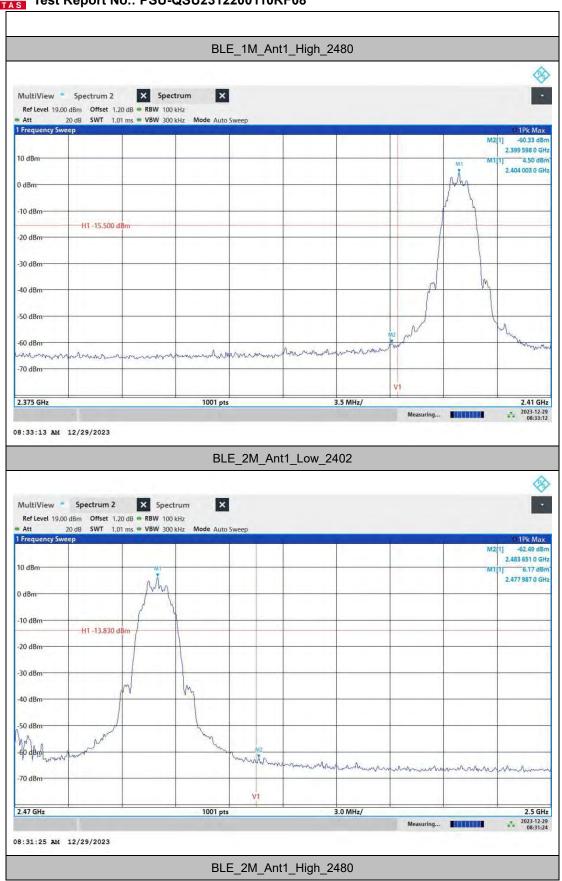
### **TEST GRAPHS**



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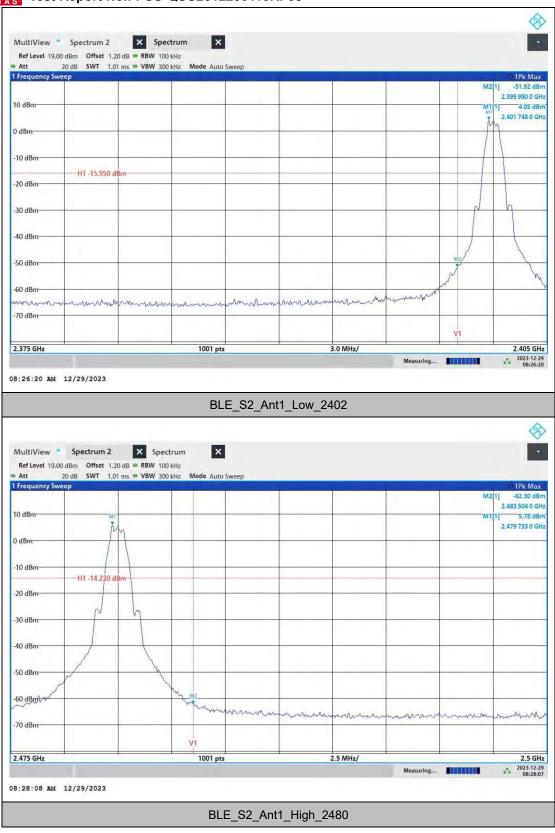




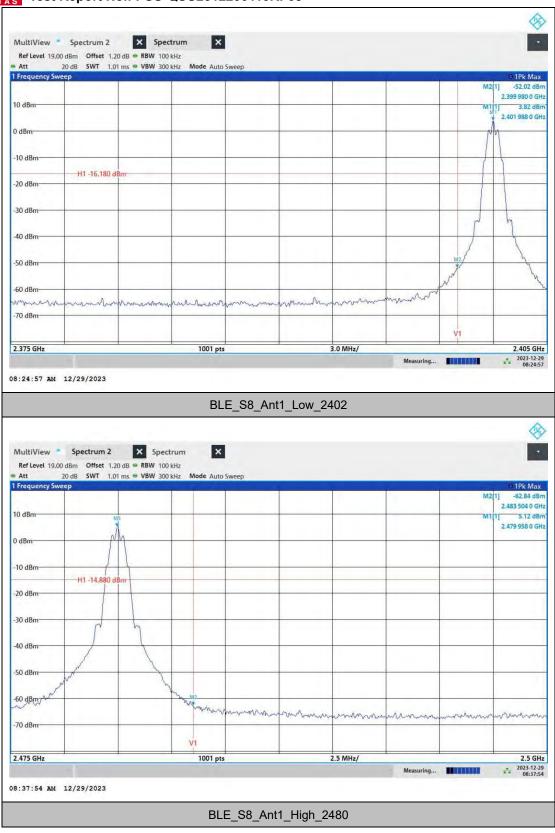
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# CONDUCTED SPURIOUS EMISSION TEST RESULT

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
			30~3000	See test	See test	See test	PASS
		0.400	30~3000	graph	graph	graph	
		2402	2000~26500	See test	See test	See test	PASS
			2000~20300	graph	graph	graph	PASS
			30~3000	See test	See test	See test	PASS
BLE 1M	Ant1	2440	30~3000	graph	graph	graph	PASS
DLE_TIVI	Anti	2440	2000~26500	See test	See test	See test	PASS
			2000-20300	graph	graph	graph	FAGG
			30~3000	See test	See test	See test	PASS
		2480	30~3000	graph	graph	graph	PASS
		2400	0000 00500	See test	See test	See test	PASS
			2000~26500	graph	graph	graph	FAGG
	Ant1	2402 Ant1 2440	30~3000	See test	See test	See test	PASS
				graph	graph	graph	1 700
				See test	See test	See test	PASS
				graph	graph	graph	1,400
			30~3000	See test	See test	See test	PASS
BLE 2M				graph	graph	graph	1,400
DLL_ZIVI	Aiti	2440	2000~26500	See test	See test	See test	PASS
			2000 20300	graph	graph	graph	1 700
			30~3000	See test	See test	See test	PASS
		2480	30 3000	graph	graph	graph	1,400
		2400	2000~26500	See test	See test	See test	PASS
			2000 20000	graph	graph	graph	1,400
BLE_S2		2402 Ant1	2402 2000~26500	See test	See test	See test	PASS
				graph	graph	graph	17.00
	Ant1			See test	See test	See test	PASS
				graph	graph	graph	17.00
		2440	30~3000	See test	See test	See test	PASS

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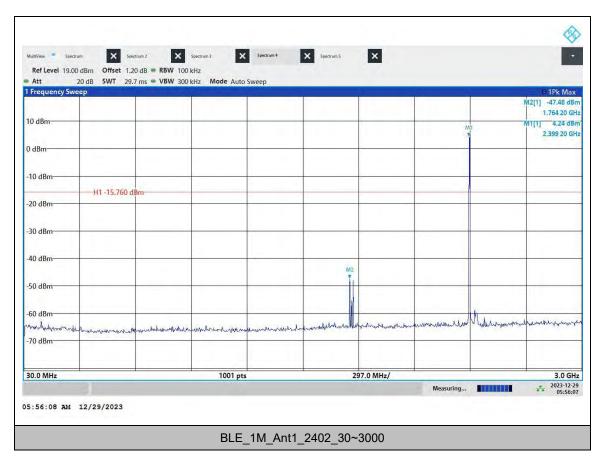
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VENTING							
				graph	graph	graph	
			2000~26500	See test	See test	See test	PASS
			2000~20500	graph	graph	graph	PASS
			30~3000	See test	See test	See test	PASS
		2480	30~3000	graph	graph	graph	FASS
		2400	2000~26500	See test	See test	See test	PASS
			2000~20500	graph	graph	graph	FASS
		2402 Ant1 2440	30~3000	See test	See test	See test	PASS
			30~3000	graph	graph	graph	FAGG
			2000~26500	See test	See test	See test	PASS
				graph	graph	graph	1 700
			30~3000	See test	See test	See test	PASS
BLE S8	Ant1			graph	graph	graph	1 700
BLL_50	Allti	2440	2000~26500	See test	See test	See test	PASS
			2000~20500	graph	graph	graph	1 700
		2480	30~3000	See test	See test	See test	PASS
				graph	graph	graph	1 700
			2000~26500	See test	See test	See test	PASS
			2000~20500	graph	graph	graph	1 700



### **TEST GRAPHS**



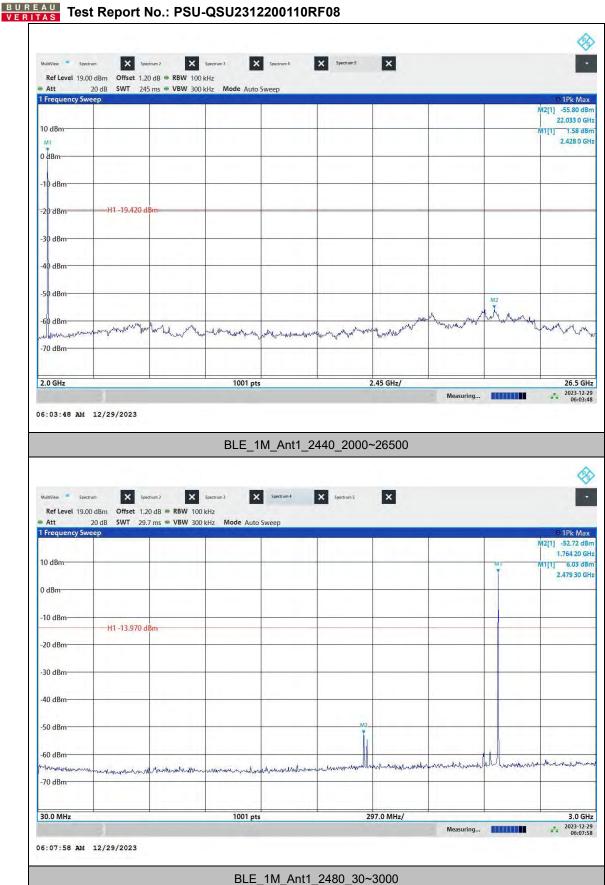




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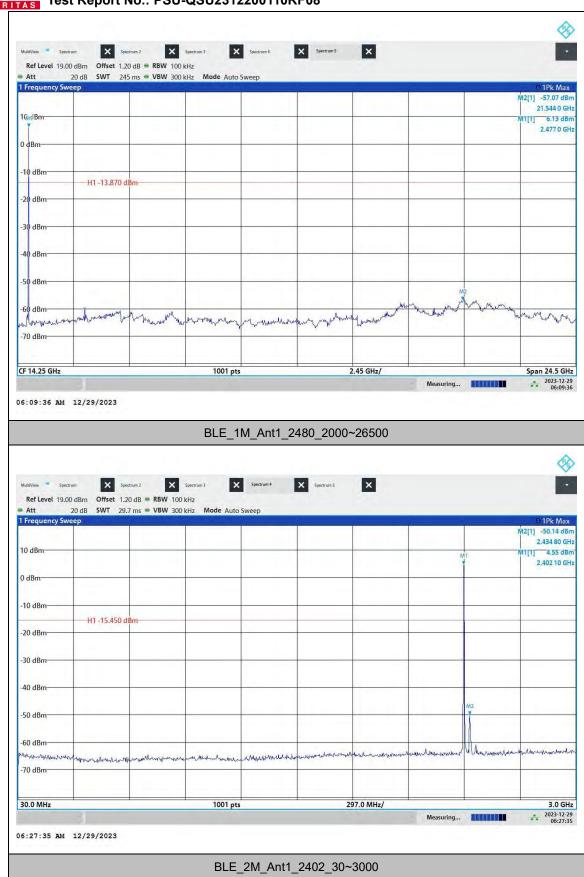
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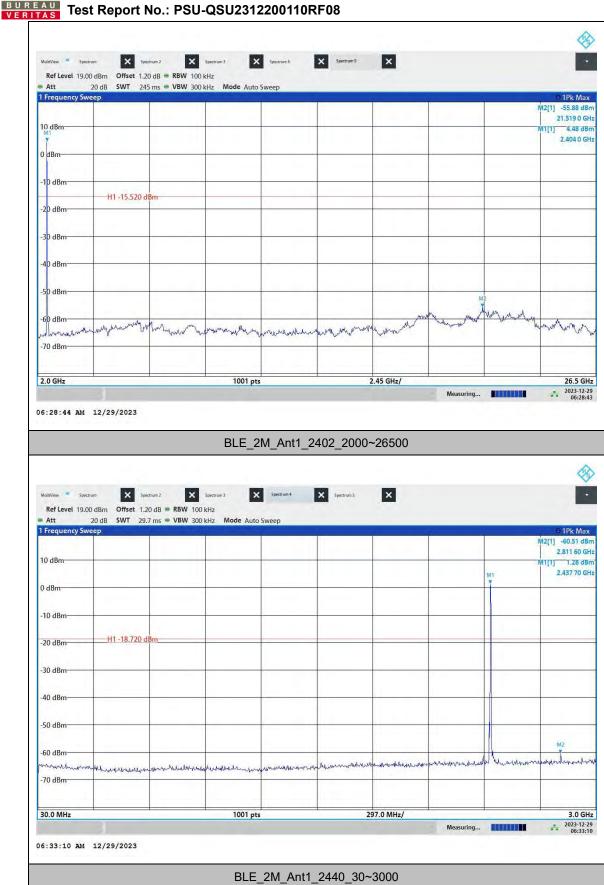




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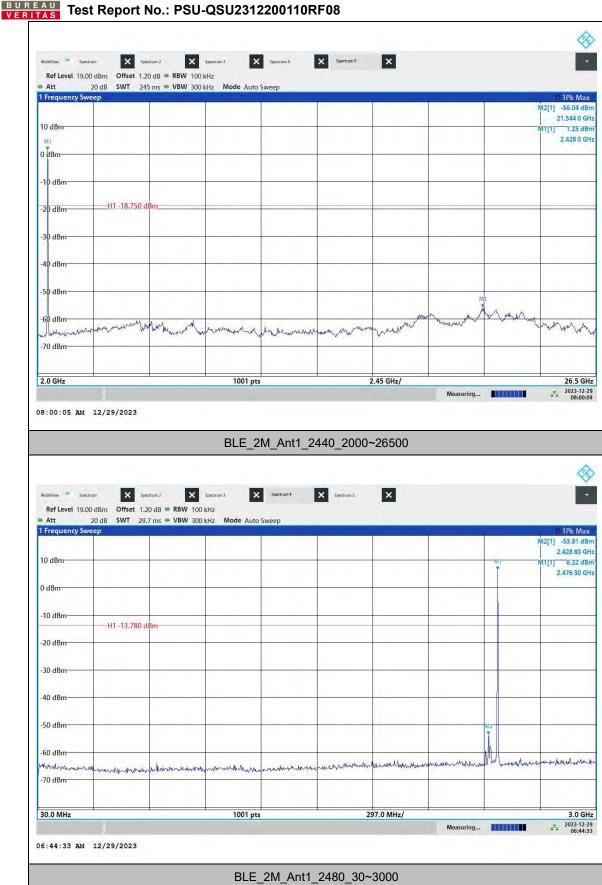




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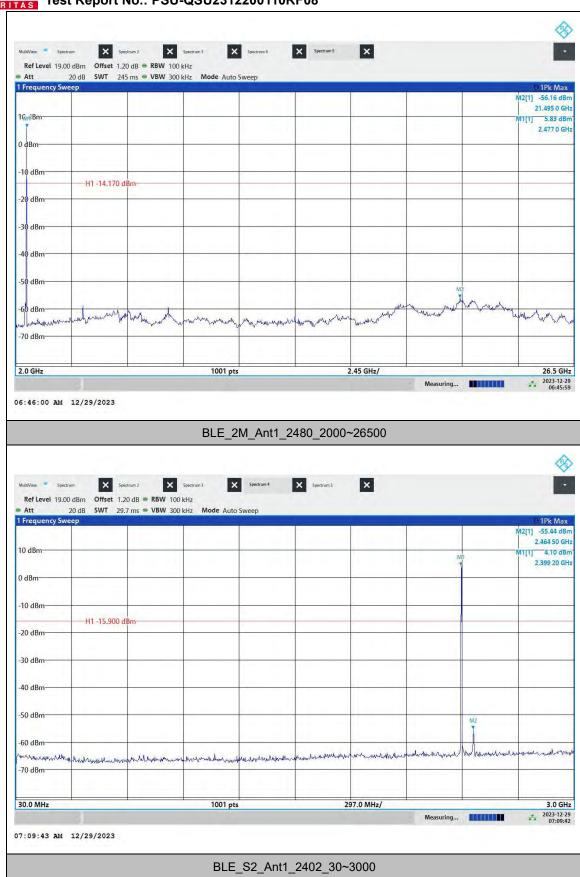
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