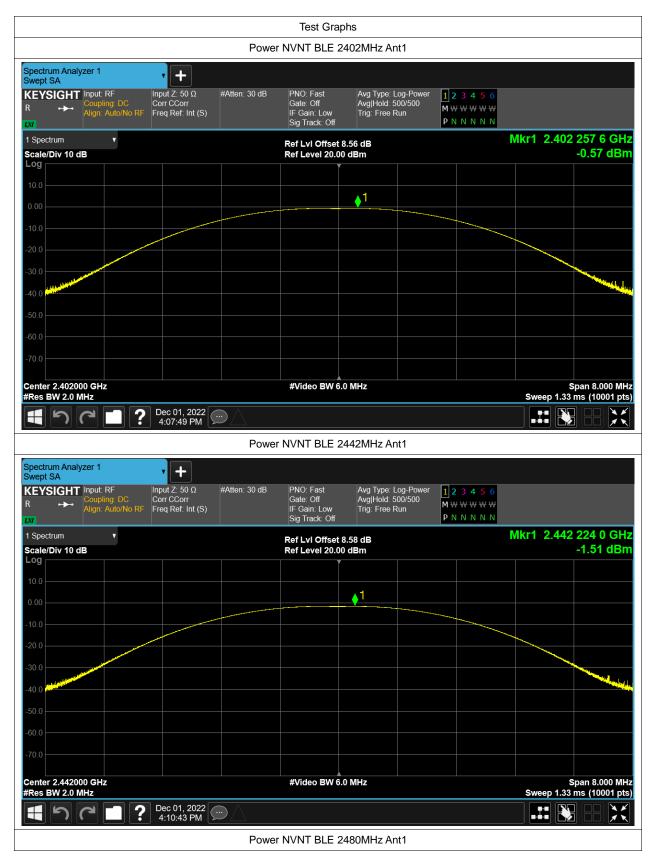


#### **Test Data**

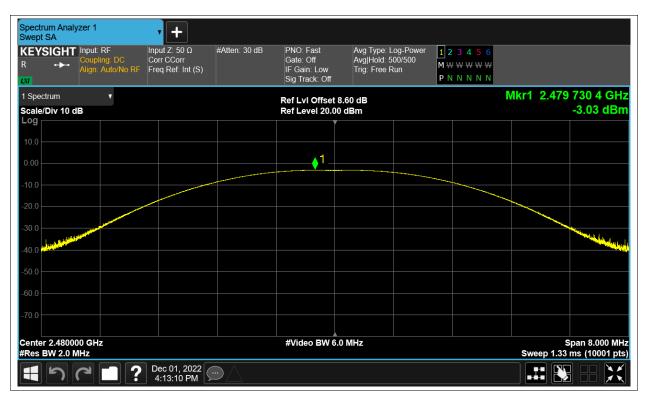
## **Maximum Conducted Output Power**

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	-0.571	30	Pass
NVNT	BLE	2442	Ant1	-1.514	30	Pass
NVNT	BLE	2480	Ant1	-3.028	30	Pass







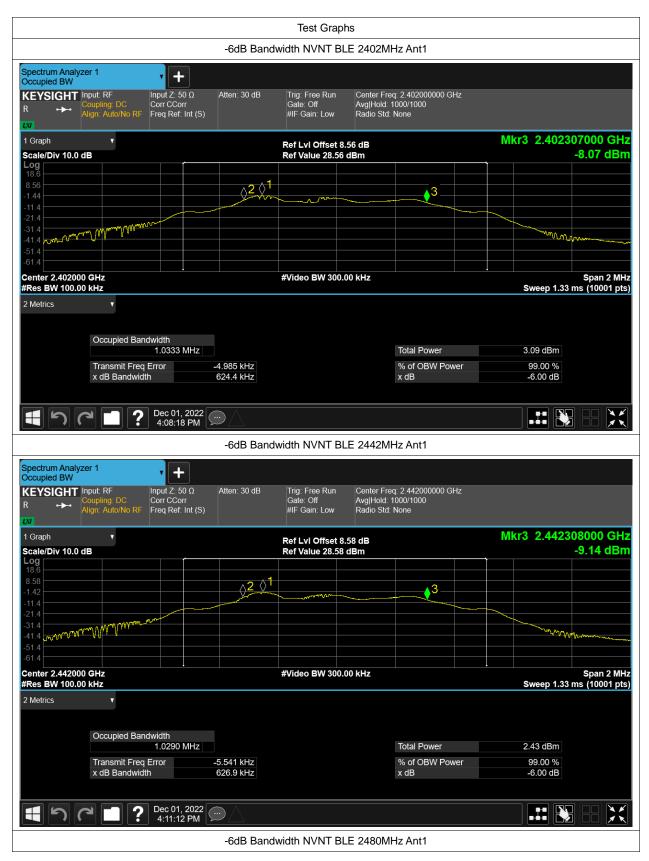




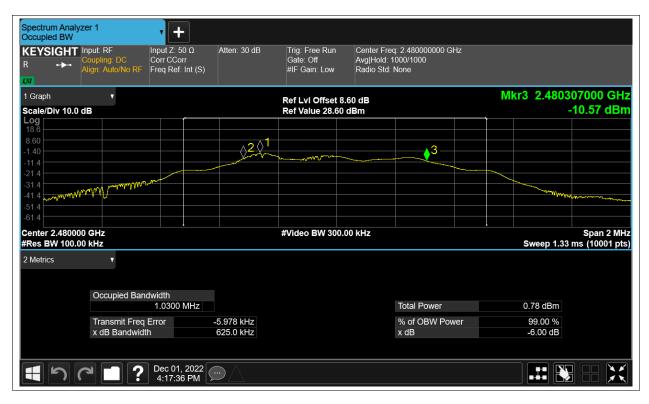
## -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	limit	Verdic
NVNT	BLE	2402	Ant1	0.624	0.5	Pass
NVNT	BLE	2442	Ant1	0.627	0.5	Pass
NVNT	BLE	2480	Ant1	0.625	0.5	Pass











# **Occupied Channel Bandwidth**

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE	2402	Ant1	1.033
NVNT	BLE	2442	Ant1	1.034
NVNT	BLE	2480	Ant1	1.031







Spect Occup	rum Analy bied BW	zer 1		•											
R R	SIGHT .≁	Coupling	F g: DC uto/No RF	Input Z: Corr CCo Freq Ref	orr	Atten	: 30 dB	Trig: Free Run Gate: Off #IF Gain: Low		Center Freq Avg Hold: 10 Radio Std: N	000/1000	00 GH	Ηz		
1 Gra			v					Ref Lvl Offset							
	/Div 10.0	dB						Ref Value 28.	60 dE	3m					
Log 18.6															
8.60															
-1.40															
-11.4								$\wedge \sim$		$\gamma \gamma$					
-21.4							~~~~~/	$\checkmark$		$\sim$	$\sim$				
-31.4															
-41.4				~~~											
-51.4	mm m	$\sim$											$\sim$		
-61.4															
Cente	er 2.48000	0 GHz						#Video BW 10	00.00	kHz					Span 3 MHz
#Res	BW 30.00	00 kHz												Sweep 3.33	ms (10001 pts)
2 Met	rics		•												
		Occ	upied Ban	dwidth											
				1.0314	MHz						Total Powe	er		1.96 dBm	
		Tran	nsmit Freq	Error		4.343	s kHz				% of OBW	Pow	/er	99.00 %	
		x dB	Bandwidt	h	ĺ	1.217	MHz				x dB			-26.00 dB	
	5		■?	Dec 01 4:13:2	, 2022 5 PM	D/									



# **Maximum Power Spectral Density Level**

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	-7.257	8	Pass
NVNT	BLE	2442	Ant1	-8.161	8	Pass
NVNT	BLE	2480	Ant1	-9.738	8	Pass











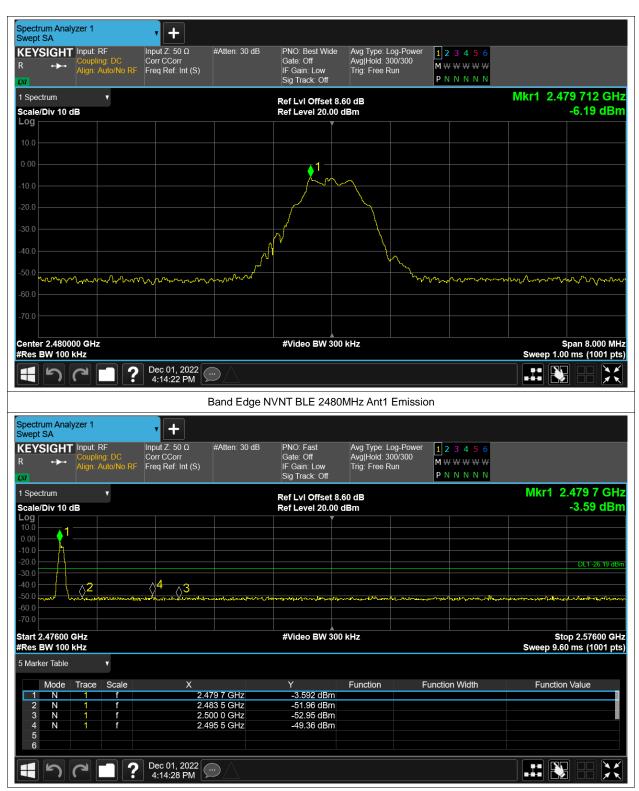
## **Band Edge**

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-46.77	-20	Pass
NVNT	BLE	2480	Ant1	-43.17	-20	Pass



				Test Graph	าร		
			Band Edge	NVNT BLE 24	102MHz Ant1 Re	ef	
Spectrum Analyzer 1 Swept SA		• <b>+</b>					
	ling: DC	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S)	#Atten: 30 dB	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	Avg Type: Log-Pow Avg Hold: 300/300 Trig: Free Run		
1 Spectrum Scale/Div 10 dB	•			Ref LvI Offset 8.			Mkr1 2.401 712 GHz -3.52 dBm
Log				Ref Level 20.00	авт		-3.32 dBii
10.0							
0.00					~		
-10.0							
-20.0							
-30.0			ſ		<u> </u>		
-40.0			لم ر				
-50.0 -60.0	Mrmm	man man	www			mmmm	man man man
-00.0							
Center 2.402000 GH #Res BW 100 kHz	Z			#Video BW 300	) kHz		Span 8.000 MHz Sweep 1.00 ms (1001 pts)
<b>1</b> C	2	Dec 01, 2022 4:09:01 PM					
		E	Band Edge N	VNT BLE 2402	MHz Ant1 Emis	sion	
Spectrum Analyzer 1		•	Band Edge N	VNT BLE 2402	MHz Ant1 Emis	sion	
Swept SA KEYSIGHT Input:	RF ling: DC	<b>Γ</b> Input Z: 50 Ω	Band Edge N #Atten: 30 dB	PNO: Fast	Avg Type: Log-Pow	ver 123456	
Swept SA KEYSIGHT Input: R	ling: DC	• +				ver 123456	
Swept SA   KEYSIGHT   R   LNI   1 Spectrum	ling: DC	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 8.	Avg Type: Log-Pow Avg]Hold: 300/300 Trig: Free Run 56 dB	ver <u>1</u> 23456 M₩₩₩₩₩₩	Mkr1 2.401 9 GHz
Swept SA KEYSIGHT R VV 1 Spectrum Scale/Div 10 dB Log	ling: DC Auto/No RF	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	Avg Type: Log-Pow Avg]Hold: 300/300 Trig: Free Run 56 dB	ver <u>1</u> 23456 M₩₩₩₩₩₩	Mkr1 2.401 9 GHz -3.91 dBm
Swept SA KEYSIGHT Input: R   Coup Align: VV 1 Spectrum Scale/Div 10 dB Log 10.0 0.00	ling: DC Auto/No RF	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 8.	Avg Type: Log-Pow Avg]Hold: 300/300 Trig: Free Run 56 dB	ver <u>1</u> 23456 M₩₩₩₩₩₩	
Swept SA       KEYSIGHT     Input:       R     →     Coup Align:       J     Spectrum     Scale/Div 10 dB       Log     10.0	ling: DC Auto/No RF	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 8.	Avg Type: Log-Pow Avg]Hold: 300/300 Trig: Free Run 56 dB	ver <u>1</u> 23456 M₩₩₩₩₩₩	
Swept SA     Input:       KEYSIGHT     Input:       R     →     Coup Align:       I Spectrum     Scale/Div 10 dB       Log     0.0     0.0       10.0     -     -       -20.0     -     -       -30.0     -     -	ling: DC Auto/No RF	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 8.	Avg Type: Log-Pow Avg Hold: 300/300 Trig: Free Run 56 dB dBm	/er 1 2 3 4 5 6 M W W W W W P N N N N N	-3.91 dBm
Swept SA       KEYSIGHT       R       J Spectrum       Scale/Div 10 dB       Log       10.0	ling: DC Auto/No RF	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 8.	Avg Type: Log-Pow Avg Hold: 300/300 Trig: Free Run 56 dB dBm	ver <u>1</u> 23456 M₩₩₩₩₩₩	-3.91 dBm
Swept SA       KEYSIGHT     Input:       R     Coup       1 Spectrum     Scale/Div 10 dB       Log     0.00       10.0     0.00       -20.0	ling: DC Auto/No RF	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 8.	Avg Type: Log-Pow Avg Hold: 300/300 Trig: Free Run 56 dB dBm	/er 1 2 3 4 5 6 M W W W W W P N N N N N	-3.91 dBm
Swept SA       KEYSIGHT       R     Coup Align:       I Spectrum       Scale/Div 10 dB       Log 10.0     Out       20.0     Out       -30.0     Out       -	Ing: DC Auto/No RF	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 8. Ref Level 20.00	Avg Type: Log-Pow Avg Hold: 300/300 Trig: Free Run 56 dB dBm	/er 1 2 3 4 5 6 M W W W W W P N N N N N	-3.91 dBm
Swept SA       KEYSIGHT     Input:       R     Coup       1 Spectrum     Scale/Div 10 dB       Log     0.00       10.0     0.00       -20.0	Ing DC Auto/No RF	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 8. Ref Level 20.00	Avg Type: Log-Pow Avg Hold: 300/300 Trig: Free Run 56 dB dBm	/er 1 2 3 4 5 6 M W W W W W P N N N N N	-3.91 dBm
Swept SA       KEYSIGHT     Input:       R     Coup Align:       V/     1 Spectrum       Scale/Div 10 dB     Output       Log 10.0     Output       0.00     Output       20.0     Output       30.0     Output       -0.0     Output       Start 2.30600 GHz     Frace       #Res BW 100 kHz     5 Marker Table       Mode     Trace       1     N     1       2     N     1	Scale f	Lipput Z: 50 Ω Corr CCorr Freq Ref: Int (S)	#Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 8. Ref Level 20.00 #Video BW 300 #Video BW 300	Avg Type: Log-Pow Avg Hold: 300/300 Trig: Free Run 56 dB dBm 4 4 4 4 5 6 kHz	/er 1 2 3 4 5 6 M W W W W W P N N N N N A W W W W W P N N N N N A W W W W W W P N N N N N A W W W W W W P N N N N N N	-3.91 dBm
Swept SA     Input: R     Input: Coup Align:       N     1 Spectrum     Scale/Div 10 dB       Scale/Div 10 dB     0     0       10.0     0     0       -200     0     0       -30.0     0     0       -30.0     0     0       -60.0     0     0       -70.0     -     -       Start 2.30600 GHz     #Res BW 100 kHz       5 Marker Table     Mode     Trace       1     N     1       3     N     1       4     N     1	Scale	Lipput Z: 50 Ω Corr CCorr Freq Ref: Int (S)	#Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 8. Ref Level 20.00 #Video BW 300 #Video BW 300	Avg Type: Log-Pow Avg Hold: 300/300 Trig: Free Run 56 dB dBm 4 4 4 4 5 6 kHz	/er 1 2 3 4 5 6 M W W W W W P N N N N N A W W W W W P N N N N N A W W W W W W P N N N N N A W W W W W W P N N N N N N	-3.91 dBm
Swept SA       KEYSIGHT R     Input: Coup Align:       N/     1 Spectrum       Scale/Div 10 dB     0       Log     0       10.0     0       -20.0     0       -30.0     0       -40.0     0       -50.0     0       -60.0     0       -70.0     0       Start 2.306600 GHz     #Res BW 100 kHz       5 Marker Table     Mode     Trace       1     N     1       3     N     1	scale f f	Lipput Z: 50 Ω Corr CCorr Freq Ref: Int (S)	#Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 8. Ref Level 20.00 #Video BW 300 #Video BW 300	Avg Type: Log-Pow Avg Hold: 300/300 Trig: Free Run 56 dB dBm 4 4 4 4 5 6 kHz	/er 1 2 3 4 5 6 M W W W W W P N N N N N A W W W W W P N N N N N A W W W W W W P N N N N N A W W W W W W P N N N N N N	-3.91 dBm
Swept SA       KEYSIGHT R     Input Coup Align:       1 Spectrum     Scale/Div 10 dB       Scale/Div 10 dB     0.00       10.0     0.00       -20.0     0.00       -30.0     0.00       -40.0     0.00       -50.0     0.00       -70.0     Start 2.30600 GHz       #Res BW 100 kHz     5 Marker Table       1 N     1       2 N     1       3 N     1       5     1	scale f f		#Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 8. Ref Level 20.00 #Video BW 300 #Video BW 300	Avg Type: Log-Pow Avg Hold: 300/300 Trig: Free Run 56 dB dBm 4 4 4 4 5 6 kHz	/er 1 2 3 4 5 6 M W W W W W P N N N N N A W W W W W P N N N N N A W W W W W W P N N N N N A W W W W W W P N N N N N N	-3.91 dBm







# **Conducted RF Spurious Emission**

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-42.43	-20	Pass
NVNT	BLE	2442	Ant1	-41.16	-20	Pass
NVNT	BLE	2480	Ant1	-39.41	-20	Pass











