

#### Test Data

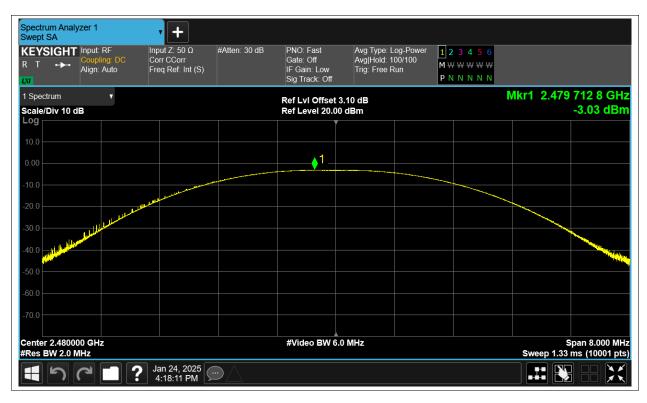
### **Maximum Conducted Output Power**

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	-3.43	30	Pass
NVNT	BLE	2442	Ant1	-2.286	30	Pass
NVNT	BLE	2480	Ant1	-3.031	30	Pass



				Test Gra	aphs				
			Power	NVNT BLE	2402MHz A	nt1			
Spectrum Analyzer 1 Swept SA		• +							
KEYSIGHT Input:	ling: DC	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S)	#Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	Avg Type: Avg Hold: Trig: Free	100/100 Run	1 2 3 4 5 6 M ₩ ₩ ₩ ₩ ₩ P N N N N N		
1 Spectrum	V			Ref LvI Offse				Mkr1 2.402	2 198 4 GHz
Scale/Div 10 dB				Ref Level 20.	00 dBm				-3.43 dBm
10.0									
0.00					_ <b>↓</b> 1				
-10.0									
-20.0	المستقلمان المستقلمان	Line and the second							
-30.0	Hamelin								
-40.0									
-50.0									
-60.0									
-70.0									
Center 2.402000 GH	Z			#Video BW	6.0 MHz				Span 8.000 MHz
#Res BW 2.0 MHz	<b>_</b> ?	Jan 24, 2025 📿							
		3:40:50 PM							
			_						
			Power	NVNT BLE	2442MHz A	nt1			
Spectrum Analyzer 1 Swept SA		<b>' +</b>							
Swept SA KEYSIGHT Input:	ling: DC	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	Power #Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off		Log-Power 100/100 Run	1 2 3 4 5 6 M ₩ ₩ ₩ ₩ ₩ P N N N N N		
Swept SA KEYSIGHT Input: R T ↔ Coupl Align: 1 Spectrum Scale/Div 10 dB	ling: DC	Input Ζ: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low	Avg Type: Avg Hold: Trig: Free t 3.08 dB	Log-Power 100/100 Run	M₩₩₩₩₩₩	Mkr1 2.442	2 192 0 GHz -2.29 dBm
Swept SA KEYSIGHT Input: R T $\rightarrow$ Coupl Align: 1 Spectrum Scale/Div 10 dB Log	ling: DC Auto	Input Ζ: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offse	Avg Type: Avg Hold: Trig: Free t 3.08 dB	Log-Power 100/100 Run	M₩₩₩₩₩₩	Mkr1 2.442	
Swept SA KEYSIGHT Input: R T ↔ Coupl Align: 1 Spectrum Scale/Div 10 dB	ling: DC Auto	Input Ζ: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offse	Avg Type: Avg Hold: Trig: Free t 3.08 dB	Log-Power 100/100 Run	M₩₩₩₩₩₩	Mkr1 2.442	
Swept SA KEYSIGHT Input: R T $\rightarrow$ Coupl Align: TW 1 Spectrum Scale/Div 10 dB Log 10.0	ling: DC Auto	Input Ζ: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offse	Avg Type: Avg Hold: Trig: Free t 3.08 dB 00 dBm	Log-Power 100/100 Run	M₩₩₩₩₩₩	Mkr1 2.442	
Swept SA           KEYSIGHT         Input:           R         T         →→         Cotupi           1         Spectrum         Scale/Div 10 dB         Log           10.0	Auto	Input Ζ: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offse	Avg Type: Avg Hold: Trig: Free t 3.08 dB 00 dBm	Log-Power 100/100 Run	M₩₩₩₩₩₩	Mkr1 2.442	
Swept SA           KEYSIGHT         Input:           R         T         →         Couple           1         Spectrum         Scale/Div 10 dB         Div           10.0	ling: DC Auto	Input Ζ: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offse	Avg Type: Avg Hold: Trig: Free t 3.08 dB 00 dBm	Log-Power 100/100 Run	M₩₩₩₩₩₩	Mkr1 2.442	
Swept SA           KEYSIGHT         Input:           R         T         →         Aiign:           I/I         Spectrum         Scale/Div 10 dB         Input:         Input: <thi< td=""><td>Auto</td><td>Input Ζ: 50 Ω Corr CCorr</td><td></td><td>PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offse</td><td>Avg Type: Avg Hold: Trig: Free t 3.08 dB 00 dBm</td><td>Log-Power 100/100 Run</td><td>M₩₩₩₩₩₩</td><td>Mkr1 2.442</td><td></td></thi<>	Auto	Input Ζ: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offse	Avg Type: Avg Hold: Trig: Free t 3.08 dB 00 dBm	Log-Power 100/100 Run	M₩₩₩₩₩₩	Mkr1 2.442	
Swept SA           KEYSIGHT         Input:           R         T         →           I Spectrum         Scale/Div 10 dB           Log	Auto	Input Ζ: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offse	Avg Type: Avg Hold: Trig: Free t 3.08 dB 00 dBm	Log-Power 100/100 Run	M₩₩₩₩₩₩	Mkr1 2.442	
Swept SA           KEYSIGHT         Input:           R         T         →         Coupl           1         Spectrum         Scale/Div 10 dB         0           10.0         -         -         -           -10.0         -         -         -           -30.0         -         -         -           -40.0         -         -         -	Auto	Input Ζ: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offse	Avg Type: Avg Hold: Trig: Free t 3.08 dB 00 dBm	Log-Power 100/100 Run	M₩₩₩₩₩₩	Mkr1 2.442	
Swept SA           KEYSIGHT         Input:           R         T         →         Couple           1 Spectrum         Scale/Div 10 dB         Log         Input:         Input:           10.0	Auto	Input Ζ: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offse	Avg Type: Avg Hold: Trig: Free t 3.08 dB 00 dBm	Log-Power 100/100 Run	M₩₩₩₩₩₩	Mkr1 2.442	
Swept SA           KEYSIGHT         Input: Coupl Align:           R         T         →         Coupl Align:           1         Spectrum         Scale/Div 10 dB         B           Log         0         0         0         0           -10.0         -         0         0         0           -30.0         -         -         0         0           -50.0         -         -         0         0           -70.0         -         -         -         0	Auto	Input Ζ: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offse Ref Level 20.0	Avg Type: Avg Hold Trig: Free t 3.08 dB 00 dBm	Log-Power 100/100 Run	M₩₩₩₩₩₩		-2.29 dBm
Swept SA           KEYSIGHT         Input: Coupl Align:           R         T         →         Coupl Align:           1         Spectrum         Scale/Div 10 dB         B           Log         0         0         0           10.0         0         0         0           -20.0         0         0         0           -30.0         0         0         0           -50.0         0         0         0	Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offse	Avg Type: Avg Hold Trig: Free t 3.08 dB 00 dBm	Log-Power 100/100 Run	M₩₩₩₩₩₩	Sweep 1.33	
Swept SA           KEYSIGHT         Input:           R         T         →         Coupl           1         Spectrum         Scale/Div 10 dB         Input:           10.0         -         -         -           -10.0         -         -         -           -20.0         -         -         -           -30.0         -         -         -           -50.0         -         -         -           -60.0         -         -         -           -70.0         -         Center 2.442000 GH;         -	Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	#Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offse Ref Level 20.0	Avg Type: Avg Hold: Trig: Free 00 dBm	Log-Power 100/100 Run	M₩₩₩₩₩₩		-2.29 dBm



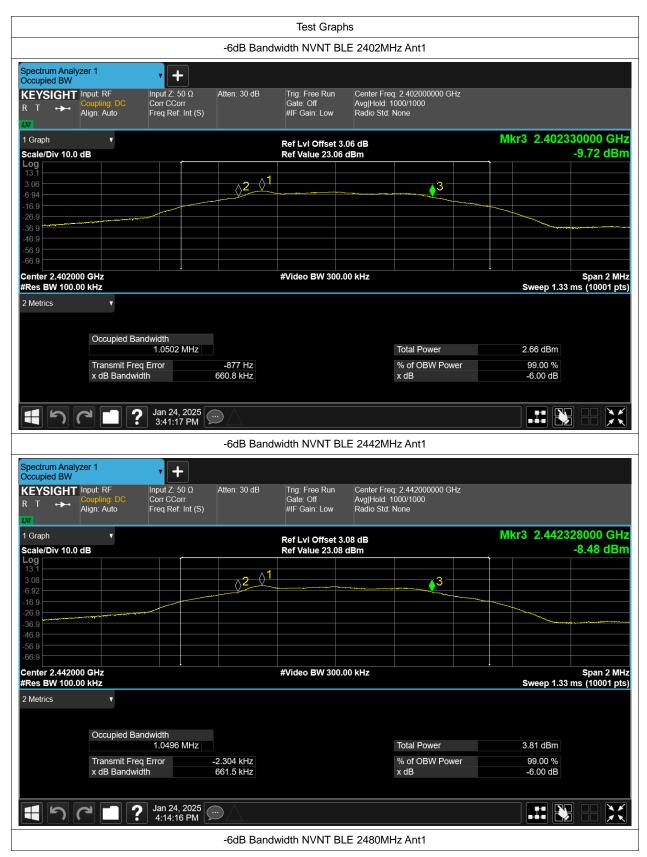




## -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	limit	Verdic
NVNT	BLE	2402	Ant1	0.661	0.5	Pass
NVNT	BLE	2442	Ant1	0.661	0.5	Pass
NVNT	BLE	2480	Ant1	0.663	0.5	Pass







Spectr Occup	um Analy ied BW	zer 1		•	-							
R T	SIGHT	Input: F Couplir Align: A	ng: DC	Input Z: 5 Corr CCc Freq Ref	orr	Atten: 30 dB	Trig: Free Run Gate: Off #IF Gain: Low		eq: 2.480000000 GHz 1000/1000 None			
1 Grap	h		•				Ref LvI Offset 3	.10 dB		Mk	r3 2.4803	28000 GHz
	Div 10.0	dB					Ref Value 23.10					-9.24 dBm
Log 13.1												
3.10						$2^{2}$			3			
-6.90												
-16.9 -26.9 -												
-36.9												
-46.9 -56.9												
-56.9												
Center	2.48000	0 GHz			•		#Video BW 300.	00 kHz		•		Span 2 MHz
#Res E	3W 100.0	)0 kHz									Sweep 1.33	ns (10001 pts)
2 Metri	cs		•									
		00	cupied Ban	dwidth								
		-00	Supieu Dani	1.0498	MHz				Total Power		3.02 dBm	
		Tra	nsmit Freq	Error		-3.449 kHz			% of OBW Power		99.00 %	
		x d	B Bandwidt	h		663.1 kHz			x dB		-6.00 dB	
	5	2	<b>?</b>	Jan 24 4:18:4	2025 1 PM	$\square \triangle$						



## **Occupied Channel Bandwidth**

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE	2402	Ant1	1.03
NVNT	BLE	2442	Ant1	1.029
NVNT	BLE	2480	Ant1	1.03







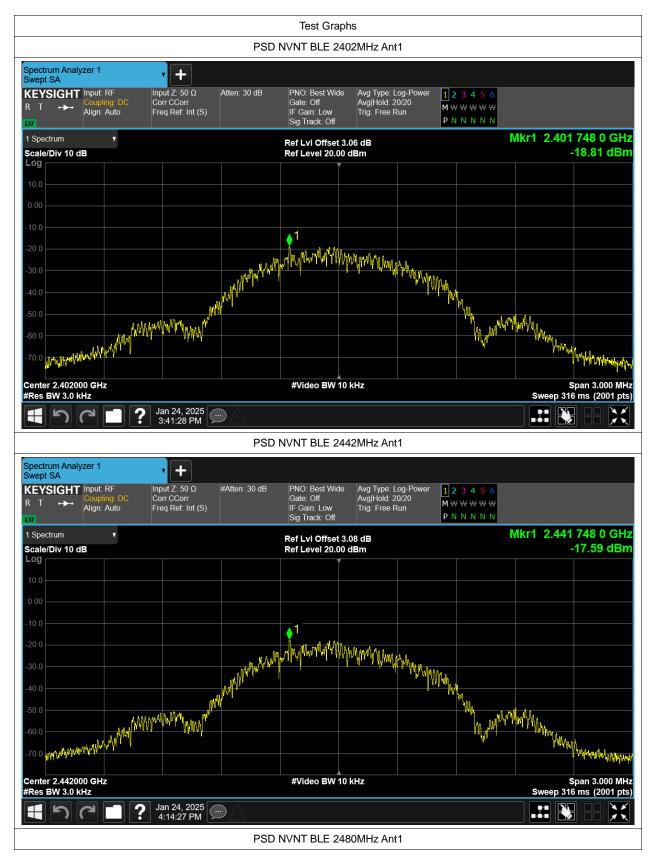
Sp Oc	ectri ccupi	um Analy ed BW	zer 1		• +								
	Т	SIGHT •►•	Input: I Couplii Align: /	ng: DC	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S)	Atter	n: 30 dB	Trig: Free Run Gate: Off #IF Gain: Low		eq: 2.480000000 1000/1000 I: None	GHz		
1 (	Grapl	h		T				Ref LvI Offset	3.10 dB				
		Div 10.0	dB					Ref Value 23.1	) dBm				
	og 3.1 -												
	.10												
	.90 -							$\sim$					
-10	6.9 -						$\sim$						
-2	6.9						[				<u> </u>		
	6.9			<u></u>	man and the second s	/						~~~~	
	6.9	~~~~~		and the second second									
	6.9												
	6.9												
		2.48000						#Video BW 91.	000 kHz				Span 3 MHz
#R	les E	3W 30.00	10 kHz									Sweep 3.33	ms (10001 pts)
21	Metri	cs		•									
			Oc	cupied Ban									
					1.0299 MHz					Total Power		3.31 dBm	
				insmit Freq			∕ kHz			% of OBW Po	ower	99.00 %	
			x d	B Bandwidt	h	1.249	MHz			x dB		-26.00 dB	
E	Ð	5		2?	Jan 24, 2025 4:18:28 PM	$\mathbb{D}$							



#### **Maximum Power Spectral Density Level**

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	-18.808	8	Pass
NVNT	BLE	2442	Ant1	-17.592	8	Pass
NVNT	BLE	2480	Ant1	-18.396	8	Pass











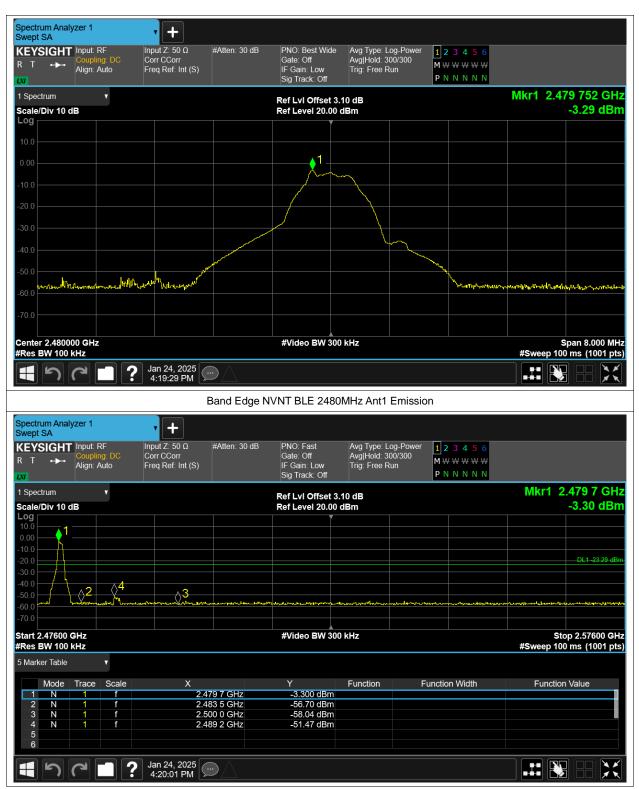
# **Band Edge**

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-53.11	-20	Pass
NVNT	BLE	2480	Ant1	-48.18	-20	Pass



		Test Grap	ohs		
	Ва	and Edge NVNT BLE 2	2402MHz Ant1	Ref	
Spectrum Analyzer 1	• +				
Swept SA       KEYSIGHT       Input: RF       Coupling: DC       Output: RF	Input Z: 50 Ω #Atte Corr CCorr	en: 30 dB PNO: Best Wide Gate: Off	Avg Hold: 300/30		
Align: Auto	Freq Ref: Int (S)	IF Gain: Low Sig Track: Off	Trig: Free Run	PNNNN	
1 Spectrum V		Ref Lvi Offset			Mkr1 2.401 752 GHz
Scale/Div 10 dB Log		Ref Level 20.00	0 dBm		-3.72 dBm
10.0					
0.00					
-10.0			~		
-20.0					
-30.0					
-40.0					
		and the second se		and the second s	
-50.0	an abilit alman and and and and			Mr. Hendry Mark	mandermanterationalistic
-60.0					
-70.0					
Center 2.402000 GHz		#Video BW 30	00 kHz		Span 8.000 MHz
#Res BW 100 kHz	Jan 24, 2025	$\setminus$			#Sweep 50.0 ms (1001 pts)
1 7 7 1 ?	Jan 24, 2025 /				
	Banc	Edge NVNT BLE 240	2MHz Ant1 Em	ission	
Spectrum Analyzer 1 Swept SA	Banc	I Edge NVNT BLE 240	2MHz Ant1 Em	ission	
Swept SA	<b>ν</b> Input Z: 50 Ω #Atte	n: 30 dB PNO: Fast	Avg Type: Log-Pe		
Swept SA       KEYSIGHT       Input: RF       Coupling: DC       Align: Auto	• +	n: 30 dB PNO: Fast Gate: Off IF Gain: Low		ower $123456$ $M \otimes W \otimes W \otimes W$	
Swept SA KEYSIGHT Input: RF R T Coupling: DC	Input Z: 50 Ω #Atte Corr CCorr	in: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	Avg Type: Log-P Avg Hold: 20/20 Trig: Free Run	ower 123456	Mkr1 2.401 7 GHz
Swept SA KEYSIGHT R T  Coupling. DC Align: Auto Scale/Div 10 dB	Input Z: 50 Ω #Atte Corr CCorr	n: 30 dB PNO: Fast Gate: Off IF Gain: Low	Avg Type: Log-P Avg]Hold: 20/20 Trig: Free Run 3.06 dB	ower $123456$ $M \otimes W \otimes W \otimes W$	
Swept SA KEYSIGHT Input: RF Coupling: DC Align: Auto Scale/Div 10 dB Log 10.0	Input Z: 50 Ω #Atte Corr CCorr	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset :	Avg Type: Log-P Avg]Hold: 20/20 Trig: Free Run 3.06 dB	ower $123456$ $M \otimes W \otimes W \otimes W$	Mkr1 2.401 7 GHz
Swept SA           KEYSIGHT         Input: RF           R         T         T           I Spectrum         Scale/Div 10 dB           Log         10.0           10.0         0.00	Input Z: 50 Ω #Atte Corr CCorr	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset :	Avg Type: Log-P Avg]Hold: 20/20 Trig: Free Run 3.06 dB	ower $123456$ $M \otimes W \otimes W \otimes W$	Mkr1 2.401 7 GHz -3.75 dBm
Swept SA       KEYSIGHT       Input: RF       R T       I Spectrum       Scale/Div 10 dB       Log       0.00	Input Z: 50 Ω #Atte Corr CCorr	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset :	Avg Type: Log-P Avg]Hold: 20/20 Trig: Free Run 3.06 dB	ower $123456$ $M \otimes W \otimes W \otimes W$	Mkr1 2.401 7 GHz
Swept SA           KEYSIGHT         Input: RF           R         T         T           1 Spectrum         V           Scale/Div 10 dB         10.0           0.00	Input Z: 50 Ω #Atte Corr CCorr	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset :	Avg Type: Log-P Avg Hold: 20/20 Trig: Free Run 3.06 dB 0 dBm	ower $123456$ $M \otimes W \otimes W \otimes W$	Mkr1 2.401 7 GHz -3.75 dBm
Swept SA           KEYSIGHT         Input: RF           R         T         →         Coupling. DC           I Spectrum         ▼         Scale/Div 10 dB         ■           Log         10.0         ■         ■           1.00         ■         ■         ■           -20.0         ■         ■         ■           -30.0         ■         ■         ■           -60.0         ■         ■         ■	Input Z: 50 Ω #Atte Corr CCorr	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset :	Avg Type: Log-P Avg]Hold: 20/20 Trig: Free Run 3.06 dB	ower $123456$ $M \otimes W \otimes W \otimes W$	Mkr1 2.401 7 GHz -3.75 dBm
Swept SA           KEYSIGHT         Input: RF           R         T         →           1 Spectrum         ✓           Scale/Div 10 dB         ✓           10.0         ✓           -10.0         ✓           -20.0         ✓           -30.0         ✓           -40.0         ✓	Input Z: 50 Ω #Atte Corr CCorr	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset Ref Level 20.00	Avg Type: Log-P Avg Hold: 20/20 Trig: Free Run 3.06 dB 0 dBm	ower $123456$ $M \otimes W \otimes W \otimes W$	Mkr1 2.401 7 GHz -3.75 dBm
Swept SA           KEYSIGHT         Input: RF           R         T         Coupling. DC           J Spectrum         V           Scale/Div 10 dB         V           Log         0         0           10.0         0         0         0           -10.0         0         0         0         0           -20.0         -30.0         -40.0 <td>Input Z: 50 Ω #Atte Corr CCorr</td> <td>n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset :</td> <td>Avg Type: Log-P Avg Hold: 20/20 Trig: Free Run 3.06 dB 0 dBm</td> <td>ower <math>123456</math> <math>M \otimes W \otimes W \otimes W</math></td> <td>Mkr1 2.401 7 GHz -3.75 dBm</td>	Input Z: 50 Ω #Atte Corr CCorr	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset :	Avg Type: Log-P Avg Hold: 20/20 Trig: Free Run 3.06 dB 0 dBm	ower $123456$ $M \otimes W \otimes W \otimes W$	Mkr1 2.401 7 GHz -3.75 dBm
Swept SA           KEYSIGHT         Input: RF           R         T         T           I Spectrum         Coupling. DC           Scale/Div 10 dB         O           Log         I         I           0.00         I         I           20.0         I         I         I	Input Z: 50 Ω Corr Corr Freq Ref: Int (S)	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00	Avg Type: Log-P Avg Hold: 20/20 Trig: Free Run 3.06 dB 0 dBm	ower 1 2 3 4 5 6 M W W W W W P N N N N N 	Mkr1 2.401 7 GHz -3.75 dBm 011 2 48m 011 2 48m 5top 2.40600 GHz #Sweep 50.0 ms (1001 pts)
Swept SA           KEYSIGHT         Input: RF           R         T         Coupling. DC           I Spectrum         V           Scale/Div 10 dB         V           Log         0         0           10.0         0         0         0           20.0         0         0         0         0           20.0         0 <th< td=""><td>Atter Corr Corr Freq Ref: Int (S) (Δ) (Δ) (Δ) (Δ) (Δ) (Δ) (Δ) (Δ) (Δ) (</td><td>n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 United States of the second second</td><td>Avg Type: Log-P Avg Hold: 20/20 Trig: Free Run 3.06 dB 0 dBm</td><td>ower <math>123456</math> <math>M \otimes W \otimes W \otimes W</math></td><td>Mkr1 2.401 7 GHz -3.75 dBm</td></th<>	Atter Corr Corr Freq Ref: Int (S) (Δ) (Δ) (Δ) (Δ) (Δ) (Δ) (Δ) (Δ) (Δ) (	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 United States of the second	Avg Type: Log-P Avg Hold: 20/20 Trig: Free Run 3.06 dB 0 dBm	ower $123456$ $M \otimes W \otimes W \otimes W$	Mkr1 2.401 7 GHz -3.75 dBm
Swept SA           KEYSIGHT         Input: RF           R         T         Coupling. DC           Align: Auto         Align: Auto           I Spectrum         V           Scale/Div 10 dB         O           Log         1           10.0         0           -0.0         -           Start 2.30600 GHz         -           #Res BW 100 kHz         -           5 Marker Table         -           N	Υ         #Atte           Input Z: 50 Ω         #Atte           Corr CCorr         Freq Ref: Int (S)	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3 Ref Level 20.00 #Video BW 30 #Video BW 30 PHz -3.752 dBm SHz -59.64 dBm	Avg Type: Log-P Avg Hold: 20/20 Trig: Free Run 3.06 dB 0 dBm	ower 1 2 3 4 5 6 M W W W W W P N N N N N 	Mkr1 2.401 7 GHz -3.75 dBm 011 2 48m 011 2 48m 5top 2.40600 GHz #Sweep 50.0 ms (1001 pts)
Swept SA           KEYSIGHT         Input: RF           R         T         Coupling. DC           I Spectrum         V           Scale/Div 10 dB         V           Log         0         0           10.0         0         0           20.0         0         0           20.0         0         0           20.0         0         0           20.0         0         0           20.0         0         0           20.0         0         0           20.0         0         0           20.0         0         0           30.0         0         0           40.0         0         0         0           50.0         0         0         0         0           70.0         0         0         0         0           5000         0         0         0         0           70.0         0         0         0         0           5         0         0         0         0           5         0         0         0         0           6         1	Input Z: 50 Ω       #Atte         Corr CCorr       Freq Ref: Int (S)         Freq Ref: Int (S)       #         Input Z: 50 Ω       Input Z: 50 Ω         Freq Ref: Int (S)       Input Z: 50 Ω         Input Z: 50 Ω       Input Z: 50 Ω         Freq Ref: Int (S)       Input Z: 50 Ω         Input Z: 50 Ω       Input Z: 50 Ω         X       Input Z: 50 Ω         Input Z: 50 Ω       Input Z: 50 Ω	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3 Ref Level 20.00 #Video BW 30 #Video BW 30 SHz -3.752 dBm SHz -59.64 dBm	Avg Type: Log-P Avg Hold: 20/20 Trig: Free Run 3.06 dB 0 dBm	ower 1 2 3 4 5 6 M W W W W W P N N N N N 	Mkr1 2.401 7 GHz -3.75 dBm 011 2 4 dBm 011 2 4 dBm 011 2 4 dBm 5top 2.40600 GHz #Sweep 50.0 ms (1001 pts)
Swept SA           KEYSIGHT         Input: RF           R         T         Coupling. DC Align: Auto           I Spectrum         V           Scale/Div 10 dB         Out           Log         I         I           10.0         I         I           20.0         I         I           30.0         I         I           Start 2.30600 GHz         I         I           Frees BW 100 kHz         V         I           Mode         Trace         Scale           1         1         f           3         1         1           4         1         1         1           5         6         6         6	Input Z: 50 Ω Corr Corr Freq Ref: Int (S)         #Atter           Input Z: 50 Ω Corr Corr Freq Ref: Int (S)         #Atter           Input Z: 50 Ω Corr Corr Freq Ref: Int (S)         #Atter           Input Z: 50 Ω Corr Corr Input Co	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3 Ref Level 20.00 #Video BW 30 #Video BW 30 PHz -3.752 dBm SHz -59.64 dBm	Avg Type: Log-P Avg Hold: 20/20 Trig: Free Run 3.06 dB 0 dBm	ower 1 2 3 4 5 6 M W W W W W P N N N N N 	Mkr1 2.401 7 GHz -3.75 dBm 01 2 4 dBm 01 2 4 dBm Stop 2.40600 GHz #Sweep 50.0 ms (1001 pts)
Swept SA           KEYSIGHT         Input: RF           R         T         Coupling. DC           I Spectrum         V           Scale/Div 10 dB         V           Log         0         0           10.0         0         0           20.0         0         0           20.0         0         0           20.0         0         0           20.0         0         0           20.0         0         0           20.0         0         0           20.0         0         0           20.0         0         0           30.0         0         0           40.0         0         0         0           50.0         0         0         0         0           70.0         0         0         0         0           5000         0         0         0         0           70.0         0         0         0         0           5         0         0         0         0           5         0         0         0         0           6         1	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)         #Atter	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3 Ref Level 20.00 #Video BW 30 #Video BW 30 PHz -3.752 dBm SHz -59.64 dBm	Avg Type: Log-P Avg Hold: 20/20 Trig: Free Run 3.06 dB 0 dBm	ower 1 2 3 4 5 6 M W W W W W P N N N N N 	Mkr1 2.401 7 GHz -3.75 dBm 01 2 4 dBm 01 2 4 dBm 01 2 4 dBm 5 top 2.40600 GHz #Sweep 50.0 ms (1001 pts)







## **Conducted RF Spurious Emission**

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-45.57	-20	Pass
NVNT	BLE	2442	Ant1	-46.88	-20	Pass
NVNT	BLE	2480	Ant1	-46.73	-20	Pass



			Test Graph				
		Tx. Spuriou	IS NVNT BLE 24	402MHz Ant1 Ref			
Spectrum Analyzer 1 Swept SA	• +						
	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-Power Avg Hold: 300/300 Trig: Free Run	1 2 3 4 5 6 M₩₩₩₩₩₩ P N N N N N		
1 Spectrum			Ref LvI Offset 3.	06 dB		Mkr1 2.401	748 0 GHz
Scale/Div 10 dB Log			Ref Level 20.00				-3.71 dBm
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10.0							
0.00				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~		
-10.0					- I and the second s		
-20.0							
-30.0 -30.0							
-40.0							
-50.0							
-60.0							
-70.0							
Center 2.4020000 GHz #Res BW 100 kHz			#Video BW 300	kHz		Swoon 1 0	pan 1.500 MH ms (1001 pts
		~ ^					
	Jan 24, 2025 🖉						
	Jan 24, 2025 3:41:57 PM	$\mathcal{O}$					
	3:41:57 PM 📐		IVNT BLE 2402	2MHz Ant1 Emiss	ion		
Spectrum Analyzer 1	3:41:57 PM		IVNT BLE 2402	2MHz Ant1 Emiss	ion		
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF	3:41:57 PM T T Input Ζ: 50 Ω		PNO: Fast	Avg Type: Log-Power			
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF R T ↔ Coupling: DC Align: Auto	3:41:57 PM	x. Spurious N	PNO: Fast Gate: Off IF Gain: Low		<b>1</b> 23456 M₩₩₩₩₩₩		
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF R T + Coupling: DC Align: Auto	3:41:57 PM T T Input Z: 50 Ω Corr CCorr	x. Spurious N	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	Avg Type: Log-Power Avg]Hold: 5/5 Trig: Free Run	123456		
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF R T ↔ Coupling: DC Align: Auto	3:41:57 PM T T Input Z: 50 Ω Corr CCorr	x. Spurious N	PNO: Fast Gate: Off IF Gain: Low	Avg Type: Log-Power Avg[Hold: 5/5 Trig: Free Run 06 dB	<b>1</b> 23456 M₩₩₩₩₩₩		2.402 GH
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF Coupling: DC Align: Auto VV 1 Spectrum Scale/Div 10 dB Log	3:41:57 PM T T Input Z: 50 Ω Corr CCorr	x. Spurious N	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset 3.	Avg Type: Log-Power Avg[Hold: 5/5 Trig: Free Run 06 dB	<b>1</b> 23456 M₩₩₩₩₩₩		2.402 GH
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF Coupling: DC Align: Auto VI 1 Spectrum Scale/Div 10 dB Log 10.0 0.00 ↓1	3:41:57 PM T T Input Z: 50 Ω Corr CCorr	x. Spurious N	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset 3.	Avg Type: Log-Power Avg[Hold: 5/5 Trig: Free Run 06 dB	<b>1</b> 23456 M₩₩₩₩₩₩		2.402 GH
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF Coupling: DC Align: Auto Log 1 Spectrum ▼ Scale/Div 10 dB Log 10.00 -10.0 -20.0	3:41:57 PM T T Input Z: 50 Ω Corr CCorr	x. Spurious N	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset 3.	Avg Type: Log-Power Avg[Hold: 5/5 Trig: Free Run 06 dB	<b>1</b> 23456 M₩₩₩₩₩₩		2.402 GH; -6.29 dBn
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF Coupling: DC Align: Auto VV 1 Spectrum Scale/Div 10 dB Log 10.0 -20.0 -30.0	3:41:57 PM T T Input 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 3. Ref Level 20.00 o	Avg Type: Log-Power Avg[Hold: 5/5 Trig: Free Run 06 dB	<b>1</b> 23456 M₩₩₩₩₩₩	Mkr1	2.402 GH: -6.29 dBn
Spectrum Analyzer 1 Swept SA           KEYSIGHT         Input: RF Coupling: DC Align: Auto           I Spectrum         ✓           Scale/Div 10 dB         ✓           100         ✓           -20.0         ✓           -30.0         ✓           -40.0         ✓	3:41:57 PM T T Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	x. Spurious N	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3. Ref Level 20.00 o	Avg Type: Log-Power Avg[Hold: 5/5 Trig: Free Run 06 dB	<b>1</b> 23456 M₩₩₩₩₩₩	Mkr1	2.402 GH; -6.29 dBn
Spectrum Analyzer 1           Swept SA           KEYSIGHT           Input: RF           Coupling: DC           Align: Auto           Log           1 Spectrum           Scale/Div 10 dB           Log           -10.0           -20.0           -30.0           -40.0           -50.0	3:41:57 PM T T Input 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 3. Ref Level 20.00 o	Avg Type: Log-Power Avg[Hold: 5/5 Trig: Free Run 06 dB	<b>1</b> 23456 M₩₩₩₩₩₩	Mkr1	2.402 GHz -6.29 dBm
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF Coupling: DC Align: Auto VV 1 Spectrum Scale/Div 10 dB Log 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -70.0 Start 30 MHz	3:41:57 PM T T Input 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 3. Ref Level 20.00 o	Avg Type: Log-Power Avg Hold: 5/5 Trig: Free Run 06 dB JBm	<b>1</b> 23456 M₩₩₩₩₩₩	Mkr1	2.402 GH; -6.29 dBn DL1 23 71 dBn 5 5 5top 25.00 GH
Spectrum Analyzer 1 Swept SA           KEYSIGHT         Input: RF Coupling: DC Align: Auto           I Spectrum         ✓           Scale/Div 10 dB         ✓           200         ✓           -300         ✓           -300         ✓           -700         ✓	3:41:57 PM T T Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 of A	Avg Type: Log-Power Avg Hold: 5/5 Trig: Free Run 06 dB JBm	<b>1</b> 23456 M₩₩₩₩₩₩	Mkr1	2.402 GHz -6.29 dBm DL1 23 71 dBm 5 5 Stop 25.00 GH2
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF Coupling: DC Align: Auto 200 -200 -200 -300 -400 -500 -500 -500 -500 -700 Start 30 MHz #Res BW 100 kHz 5 Marker Table	3:41:57 PM	Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 of Ref Level 20.00 of #Video BW 300	Avg Type: Log-Power Avg Hold: 5/5 Trig: Free Run 06 dB 18m		Mkr1	2.402 GH2 -6.29 dBm DL1 23 71 dBm 25 5top 25.00 GH 49 s (1001 pts
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF Coupling: DC Align: Auto 1 Spectrum Scale/Div 10 dB Log 100 -00 -100 -200 -300 -40.0 -5	3:41:57 PM	*X. Spurious N #Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 of A #Video BW 300 Y -6.287 dBm	Avg Type: Log-Power Avg Hold: 5/5 Trig: Free Run 06 dB 18m	<b>1</b> 23456 M₩₩₩₩₩₩	Mkr1	2.402 GH2 -6.29 dBm DL1 23 71 dBm 25 5top 25.00 GH 49 s (1001 pts
Spectrum Analyzer 1         Swept SA         KEYSIGHT       Input: RF         Coupling: DC         Align: Auto         Scale/Div 10 dB         Log       1         1 Spectrum       v         Scale/Div 10 dB       0         -20:0       -30:0       -40:0         -30:0       -40:0       -40:0         -70:0       -50:0       -60:0       -70:0         Start 30 MHz       #Res BW 100 kHz       5         5 Marker Table       v         Mode       Trace       Scale         1       1       f         3       1       f	3:41:57 PM	#Atten: 30 dB           3           402 GHz           699 GHz           196 GHz	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 d #Video BW 300 Y -6.287 dBm -52.72 dBm -53.92 dBm	Avg Type: Log-Power Avg Hold: 5/5 Trig: Free Run 06 dB 18m		Mkr1	2.402 GHz -6.29 dBm DL1 23.71 dBm ∑5 5top 25.00 GHz 49 s (1001 pts
Spectrum Analyzer 1         Swept SA         KEYSIGHT       Input: RF         Coupling: DC         Align: Auto         VI       Spectrum         Scale/Div 10 dB         Log       1         100       1         000       1         -100       -1         -200       -1         -30.0       -1         -40.0       -50.0         -60.0	3:41:57 PM	Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 of 4 #Video BW 300 Y -6.287 dBm -52.72 dBm	Avg Type: Log-Power Avg Hold: 5/5 Trig: Free Run 06 dB 18m		Mkr1	2.402 GHz -6.29 dBm DL1 23.71 dBm ∑5 5top 25.00 GH 49 s (1001 pts
Spectrum Analyzer 1         Swept SA         KEYSIGHT       Input: RF         Coupling: DC         Align: Auto         Scale/Div 10 dB         Log       1         0.00       1         -10       -1         -20.0       -30.0         -30.0       -40.0         -70.0       -50.0         Start 30 MHz       -7         #Res BW 100 kHz       -7         5 Marker Table       -7         Mode       Trace       Scale         1       1       1         4       1       1       1	3:41:57 PM	Atten: 30 dB #Atten: 30 dB 3 402 GHz 699 GHz 196 GHz 793 GHz 578 GHz	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 0 #Video BW 300 #Video BW 300 Y -6.287 dBm -53.92 dBm -53.92 dBm	Avg Type: Log-Power Avg Hold: 5/5 Trig: Free Run 06 dB 18m		Mkr1	2.402 GHz -6.29 dBm DL1 23.71 dBm 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Spectrum Analyzer 1         Swept SA         KEYSIGHT       Input: RF         Coupling: DC         Align: Auto         VI       Spectrum         Scale/Div 10 dB         Log       1         100       1         000       1         -100       -1         -200       -1         -30.0       -1         -40.0       -50.0         -60.0	3:41:57 PM	x. Spurious N #Atten: 30 dB 3 402 GHz 699 GHz .196 GHz .793 GHz	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 0 #Video BW 300 #Video BW 300 Y -6.287 dBm -53.92 dBm -53.92 dBm	Avg Type: Log-Power Avg Hold: 5/5 Trig: Free Run 06 dB 18m		Mkr1	2.402 GHz -6.29 dBm DL1 23.71 dBm 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5







