

Test Data

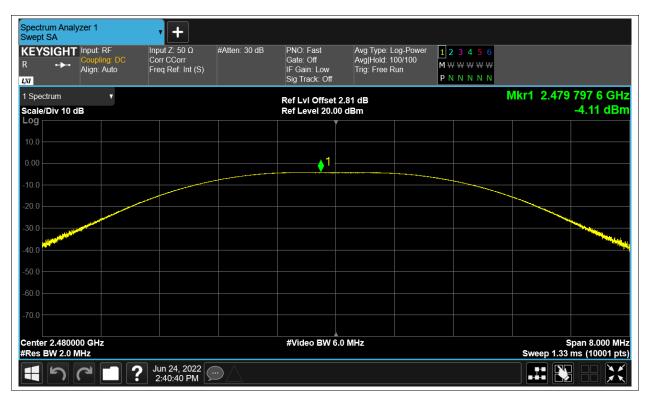
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	-6.67	30	Pass
NVNT	BLE	2442	Ant1	-5.135	30	Pass
NVNT	BLE	2480	Ant1	-4.108	30	Pass











-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	limit	Verdic
NVNT	BLE	2402	Ant1	1.427	0.5	Pass
NVNT	BLE	2442	Ant1	1.356	0.5	Pass
NVNT	BLE	2480	Ant1	1.175	0.5	Pass











Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE	2402	Ant1	2.09207898
NVNT	BLE	2442	Ant1	2.094788897
NVNT	BLE	2480	Ant1	2.085299524







Spectru Occupi	um Analy ed BW	zer 1		• +							
R R	SIGHT •►•	Input: F Couplir Align: A	ng: DC	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S)	Atten: 30 dB	Trig: Free Run Gate: Off #IF Gain: Low	Center Free Avg Hold: 1 Radio Std:				
1 Grapi			•			Ref LvI Offset 2					
	Div 10.0	dB				Ref Value 22.81	dBm				
Log 12.8											
2.81											
-7.19											
-17.2						m	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	m.			
-27.2					- Norman -			- man man	N -		
-37.2									www		
-47.2		Jon Mr		m for						_~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
-57.2	-man -			- ` ~~					V		- www.w
-67.2											
Center	2.48000	0 GHz			•	#Video BW 100.	00 kHz	+			Span 5 MHz
	3W 30.00									Sweep 5.33	ms (10001 pts)
2 Metri	CS		V								
		Oco	cupied Ban					T () D		4.07.10	
				2.0853 MHz				Total Power		1.97 dBm	
			nsmit Freq		4.052 kHz			% of OBW Power	-	99.00 %	
		x d	B Bandwidt	h	2.512 MHz			x dB		-26.00 dB	
	5		2	Jun 24, 2022 2:40:47 PM	\odot						



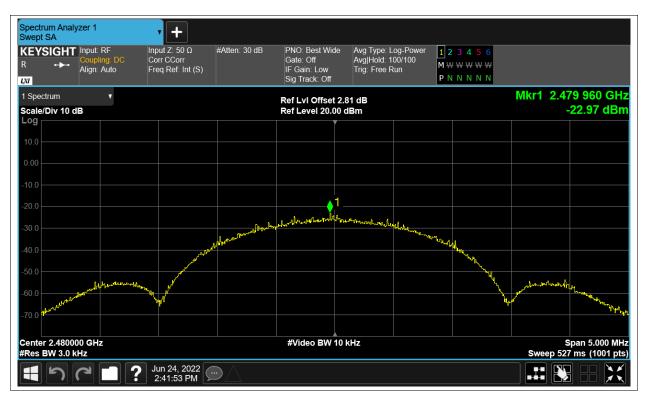
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	-25.426	8	Pass
NVNT	BLE	2442	Ant1	-23.827	8	Pass
NVNT	BLE	2480	Ant1	-22.967	8	Pass







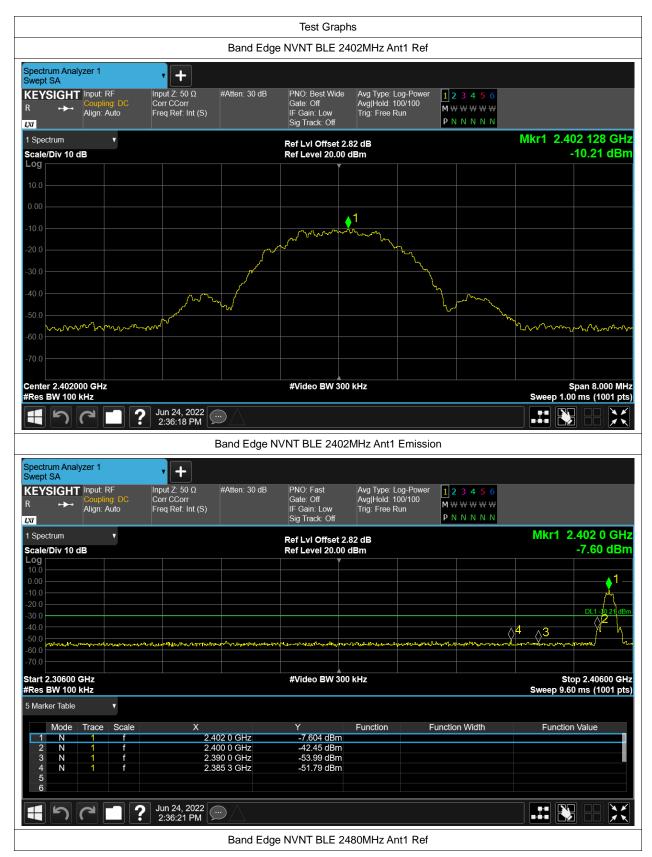




Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-41.58	-20	Pass
NVNT	BLE	2480	Ant1	-45.61	-20	Pass











Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-39.06	-20	Pass
NVNT	BLE	2442	Ant1	-40.11	-20	Pass
NVNT	BLE	2480	Ant1	-41.25	-20	Pass



		Test Graph	S			
	Tx. Spurious	s NVNT BLE 24	402MHz Ant1 Ref			
Spectrum Analyzer 1 Swept SA	+					
KEYSIGHT Input: RF Input R Coupling: DC Corr	Z: 50 Ω #Atten: 30 dB CCorr Ref: Int (S)	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	Avg Type: Log-Power Avg Hold: 100/100 Trig: Free Run	1 2 3 4 5 6 M \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
1 Spectrum		Ref LvI Offset 2.8			Mkr1 2.402 003 0 GF -7.71 dB	
Scale/Div 10 dB		Ref Level 20.00 c	IBM			-
10.0						-
0.00		1				
-10.0	hand the second	mont	han a start and the start and	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Mr. Margan	-
-20.0						~~
-30.0						
-40.0						
-50.0						
-60.0						
-70.0						
Center 2.4020000 GHz #Res BW 100 kHz		#Video BW 300	KHZ		Span 1.500 MI Sweep 1.00 ms (1001 pt	
	24, 2022 36:26 PM					X
	Tx. Spurious N	IVNT BLE 2402	MHz Ant1 Emissi	on		
Spectrum Analyzer 1		IVNT BLE 2402	2MHz Ant1 Emissi	on		
Swept SA	+	IVNT BLE 2402				
Swept SA KEYSIGHT Input: RF Input R Coupling: DC Corr	+	PNO: Fast Gate: Off IF Gain: Low	MHz Ant1 Emission Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run	123456 M₩₩₩₩₩₩		
Swept SA KEYSIGHT Input: RF R Align: Auto		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run	1 2 3 4 5 6	Mkr1 2 412 GL	
Swept SA KEYSIGHT R → Align: Auto T Spectrum Scale/Div 10 dB		PNO: Fast Gate: Off IF Gain: Low	Avg Type: Log-Power Avg[Hold: 10/10 Trig: Free Run 32 dB	123456 M₩₩₩₩₩₩	Mkr1 2.412 GF -10.82 dB	
Swept SA KEYSIGHT Input: RF R Align: Auto 1 Spectrum Scale/Div 10 dB Log 10.0		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.8	Avg Type: Log-Power Avg[Hold: 10/10 Trig: Free Run 32 dB	123456 M₩₩₩₩₩₩		
Swept SA KEYSIGHT R Spectrum Scale/Div 10 dB Log		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.8	Avg Type: Log-Power Avg[Hold: 10/10 Trig: Free Run 32 dB	123456 M₩₩₩₩₩₩		
Swept SA KEYSIGHT Input: RF R Align: Auto Scale/Div 10 dB O O O O O O O O O O O O O O O O O O O		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.8	Avg Type: Log-Power Avg[Hold: 10/10 Trig: Free Run 32 dB	123456 M₩₩₩₩₩₩		m
Swept SA KEYSIGHT Input: RF R Align: Auto Scale/Div 10 dB Cog 1.0 0.00 -1.0 0.00 -0.0 0.0 0.0 0 0 0 0 0 0 0 0 0 0	E: 50 Ω Atten: 30 dB Corr Ref: Int (S)	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.8	Avg Type: Log-Power Avg[Hold: 10/10 Trig: Free Run 32 dB	123456 M₩₩₩₩₩₩	-10.82 dB	m
Swept SA Input: RF Input: RF Input: RF R → Align: Auto Corr 1 Spectrum Scale/Div 10 dB Log 1 1 1 10.0 0 0 0 0 -10.0 -5 -60.0 22	E: 50 Ω #Atten: 30 dB Ccorr Ref: Int (S)	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.8	Avg Type: Log-Power Avg[Hold: 10/10 Trig: Free Run 32 dB	123456 M₩₩₩₩₩₩	-10.82 dB	m
Swept SA KEYSIGHT Input: RF R A Align: Auto Corr Scale/Div 10 dB Log 10.0 0.00 -10.0 -20.0 -30.0 -5 -50.0 -20	E: 50 Ω Atten: 30 dB Corr Ref: Int (S)	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.8	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 32 dB IBm	123456 M₩₩₩₩₩₩	-10.82 dBi	m Bm
Swept SA KEYSIGHT R P Coupling: DC Align: Auto Scale/Div 10 dB Log 100 -200	E: 50 Ω Atten: 30 dB Corr Ref: Int (S)	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 c	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 32 dB IBm	123456 M₩₩₩₩₩₩	-10.82 dB	m Bm Hz
Swept SA KEYSIGHT R Align: Auto Scale/Div 10 dB Log 10 0 -0	E : 50 Ω Corr Ref: Int (S) #Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 c 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 32 dB IBm	1 2 3 4 5 6 M W W W W W P N N N N N 	-10.82 dBi	m Bm Hz
Swept SA KEYSIGHT R → Align: Auto 1 Spectrum Scale/Div 10 dB Log 100 -00 -00 -00 -00 -00 -00 -00	+ .Z: 50 Ω CCorr Ref: Int (S) #Atten: 30 dB #Atten: 30 dB 4 4 4 2.412 GHz	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 c #Video BW 300 Y -10.82 dBm	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 32 dB IBm	123456 M₩₩₩₩₩₩	-10.82 dBi	m Bm Hz
Swept SA Input: RF Input: RF R	± #Atten: 30 dB Ccorr #Atten: 30 dB Ccorr	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 c #Video BW 300 Y -10.82 dBm -53.77 dBm -53.77 dBm	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 32 dB IBm	1 2 3 4 5 6 M W W W W W P N N N N N 	-10.82 dBi	m Bm Hz
Swept SA Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF Input: RF <th< td=""><td>x 2.412 GHz 4.927 GHz</td><td>PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 c #Video BW 300 #Video BW 300</td><td>Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 32 dB IBm</td><td>1 2 3 4 5 6 M W W W W W P N N N N N </td><td>-10.82 dBi</td><td>m Bm Hz</td></th<>	x 2.412 GHz 4.927 GHz	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 c #Video BW 300 #Video BW 300	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 32 dB IBm	1 2 3 4 5 6 M W W W W W P N N N N N 	-10.82 dBi	m Bm Hz
Swept SA Input: RF Input: RF Input: Corr R Align: Auto Freq 1 Spectrum Scale/Div 10 dB 100 100 100 100 100 100	★ #Atten: 30 dB Ccorr Ref: Int (S) #Atten: 30 dB 3 4 4 4 7 203 GHz 7 203 GHz 9.744 GHz 295 MHz 24, 2022 4	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 c 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 32 dB IBm	1 2 3 4 5 6 M W W W W W P N N N N N 	-10.82 dBi	m Bm Hz
Swept SA Input: RF Input: RF Input: Corr R Align: Auto Freq 1 Spectrum Scale/Div 10 dB 100 100 100 100 100 100	•	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00 c #Video BW 300 *Video BW 300 Y -10.82 dBm -53.77 dBm -54.68 dBm -54.68 dBm -54.68 dBm	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 32 dB IBm	1 2 3 4 5 6 M W W W W W P N N N N N 	-10.82 dBi	m Bm Hz







