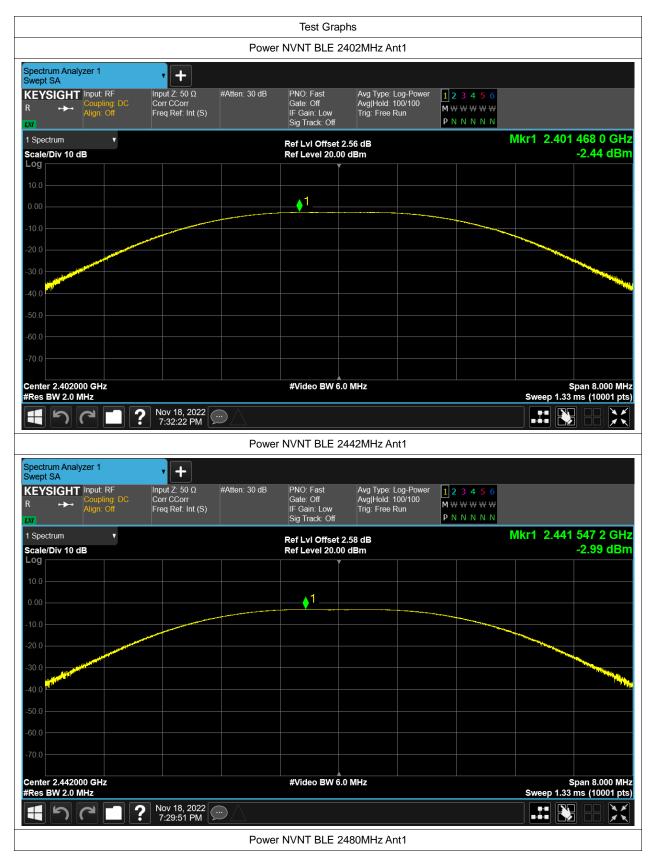


Test Data

Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	-2.442	30	Pass
NVNT	BLE	2442	Ant1	-2.995	30	Pass
NVNT	BLE	2480	Ant1	-3.401	30	Pass











-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	limit	Verdic
NVNT	BLE	2402	Ant1	1.163	0.5	Pass
NVNT	BLE	2442	Ant1	1.141	0.5	Pass
NVNT	BLE	2480	Ant1	1.104	0.5	Pass







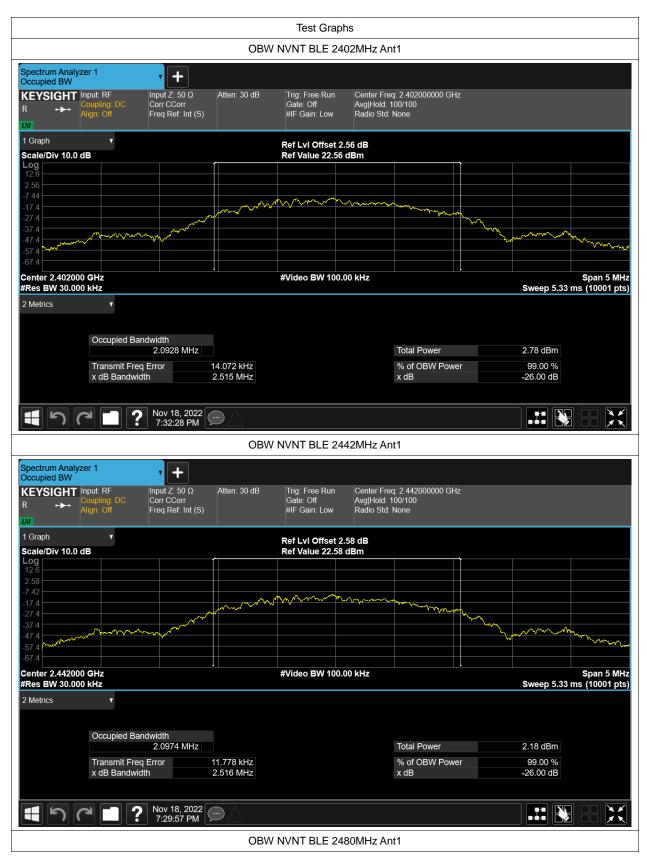
Spectri Occupi	um Analy ied BW	zer 1		• +							
R R	SIGHT • → •	Input: F Couplir Align: C	ng: DC	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S)	Atten: 30 dB	Trig: Free Run Gate: Off #IF Gain: Low	Center Fre Avg Hold: Radio Std:				
1 Grap	h		v			Ref LvI Offset 2	2.60 dB		Mkr	r3 2.4805	61000 GHz
	Div 10.0	dB				Ref Value 22.60	dBm			-	11.50 dBm
Log 12.6											
2.60					<u>ه</u>	2		3			
-7.40					mannak	Mundan	℠୰୳ଽ୶୶୶୷୰୵୶ୣ୵୶ୄ୲୲ᢞ	white and the second			
-27.4									mon when		
-37.4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		man.					Marin	· ····································	mon
-57.4 -	1.04100.										
-67.4											
	2.48000 3W 100.0					#Video BW 300	.00 kHz			Sweep 1.33 (Span 5 MHz ns (10001 pts)
2 Metri			•								
		000	cupied Ban	dwidth							
				2.0630 MHz				Total Power		2.47 dBm	
			nsmit Freq		9.152 kHz			% of OBW Power		99.00 %	
		x di	B Bandwidi	th	1.104 MHz			x dB		-6.00 dB	
	5		2	Nov 18, 2022 7:27:21 PM							



Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE	2402	Ant1	2.093
NVNT	BLE	2442	Ant1	2.097
NVNT	BLE	2480	Ant1	2.111







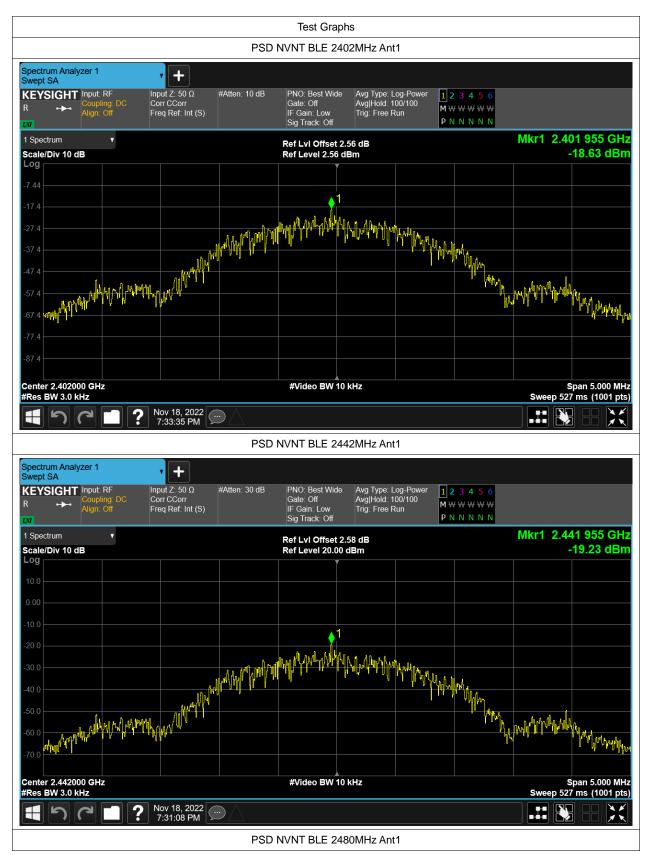
Spectru Occupi	ım Analy ed BW	zer 1		• +								
REYS	SIGHT -≁-	Input: R Couplin Align: C	g: DC	Input Z: 50 9 Corr CCorr Freq Ref: In		IB Trig: Free Gate: Off #IF Gain:	Av	enter Freq: 2.48000 /g Hold: 100/100 adio Std: None	00000 GHz			
1 Grapt	ı	·	•			Pef I vi O	fset 2.60 d	•				
	Div 10.0	dB					22.60 dBm					
Log 12.6												
2.60												
-7.40						mm	- man	~~~~				
-17.4					m				more	~		
-37.4		1	~~~~	- America						m / mm	mm	hallow ha
-47.4 -57.4	-	~~~~	- v	and the second s							4	who who have
-67.4												
	2.48000					#Video BV	V 100.00 kH	lz				Span 5 MHz
	W 30.00	00 kHz									Sweep 5.33	ns (10001 pts)
2 Metric	s		T									
		Occ	upied Ban									
				2.1110 M	Hz			Total Po	ower		1.72 dBm	
			nsmit Freq 3 Bandwidt		11.182 kHz 2.520 MHz			% of OE x dB	BW Power		99.00 % -26.00 dB	
		-X UE	Danuwiui	.11	2.520 MHZ			X UD			-20.00 GB	
	5		2	Nov 18, 2 7:27:14 F	022 PM							



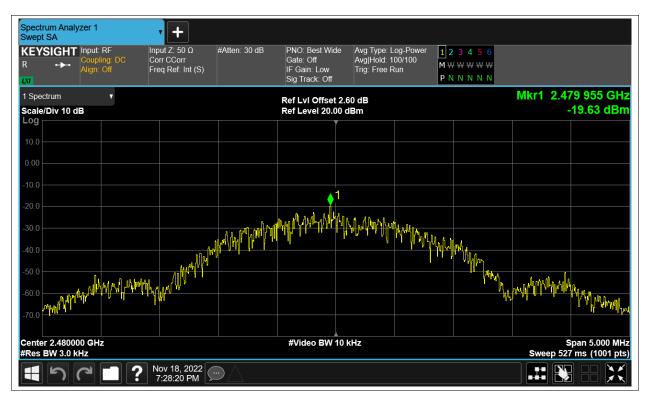
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	-18.629	8	Pass
NVNT	BLE	2442	Ant1	-19.226	8	Pass
NVNT	BLE	2480	Ant1	-19.63	8	Pass











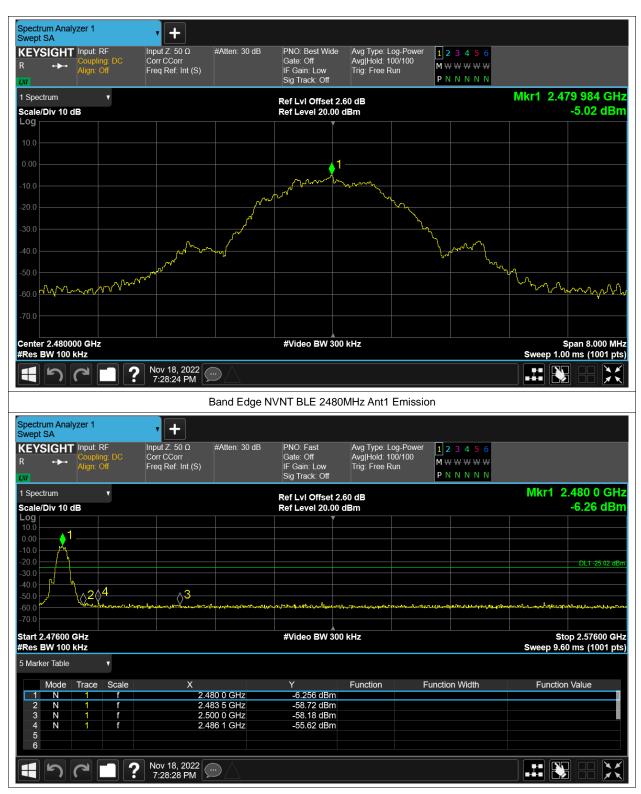
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-51.45	-20	Pass
NVNT	BLE	2480	Ant1	-50.6	-20	Pass











Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-44.06	-20	Pass
NVNT	BLE	2442	Ant1	-44.02	-20	Pass
NVNT	BLE	2480	Ant1	-42.95	-20	Pass



			Test Graph	าร		
		Tx. Spuriou	IS NVNT BLE 2	402MHz Ant1 Ref	f	
Spectrum Analyzer 1 Swept SA	• +					
KEYSIGHT Input: RF R ↔ Coupling: DC Align: Off	Input Z: 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: 100/100 Trig: Free Run	1 2 3 4 5 6 M₩₩₩₩₩₩ P N N N N N	
1 Spectrum v			Ref LvI Offset 2.			Mkr1 2.401 997 0 GHz
Scale/Div 10 dB			Ref Level 20.00	dBm		-3.45 dBm
0.00			1			
-10.0 -20.0	huhvum	p_{max}	VVV	And and a grant of a g		et where we wanted
-30.0						
-50.0						
-70.0 Center 2.4020000 GHz			#Video BW 300) kHz		Span 1.500 MHz
#Res BW 100 kHz						Sweep 1.00 ms (1001 pts
	Nov 18, 2022 7:33:49 PM					
	T	x. Spurious N	NVNT BLE 2402	2MHz Ant1 Emiss	ion	
Spectrum Analyzer 1 Swept SA	T:	x. Spurious N	NVNT BLE 2402	2MHz Ant1 Emiss	ion	
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF R +++ Coupling: DC Align: Off	• +	x. Spurious № #Atten: 30 dB	NVNT BLE 2402 PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	2MHz Ant1 Emiss Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run		
Swept SA KEYSIGHT R Input: RF Coupling: DC Align: Off 1 Spectrum	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset 2.	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB	123456 M₩₩₩₩₩₩	Mkr1 2.412 GHz
Swept SA KEYSIGHT R Coupling: DC Align: Off VV Scale/Div 10 dB Log	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB	123456 M₩₩₩₩₩₩	Mkr1 2.412 GHz -7.69 dBm
Swept SA KEYSIGHT R Coupling: DC Align: Off Scale/Div 10 dB Log 0.00 -10.0	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset 2.	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB	123456 M₩₩₩₩₩₩	-7.69 dBm
Swept SA Input: RF R Input: RF N Align: Off 1 Spectrum V Scale/Div 10 dB 1 Log 1 10.0 1 -200 1	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset 2.	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB	123456 M₩₩₩₩₩₩	-7.69 dBm
Swept SA KEYSIGHT R HIPUT: RF Coupling: DC Align: Off V Scale/Div 10 dB Log 0.00 -10.0 -20.0	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset 2.	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB	123456 M₩₩₩₩₩₩	-7.69 dBm
Swept SA Input: RF R Input: RF Q Algn: Off I Spectrum V Scale/Div 10 dB V 10.0 1 -0.0 1 -0.0 -0	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	#Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset 2.	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB dBm	123456 M₩₩₩₩₩₩	-7.69 dBm
Swept SA Input: RF R +- Coupling: DC I Spectrum V 1 Spectrum V Scale/Div 10 dB Log 10.0 -20.0 -30.0 -50.0 -70.0	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 2. Ref Level 20.00	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB dBm	123456 M₩₩₩₩₩₩	-7.69 dBm
Swept SA KEYSIGHT R Scale/Div 10 dB Log 10.0 .200 .30.0 .400 .500 .500 .500 .60.0 .700 .5tart 30 MHz #Res BW 100 kHz 5 Marker Table Mode Trace Scale	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 20.000	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB dBm	123456 M₩₩₩₩₩₩	-7.69 dBm
Swept SA Input: RF R + Augn: Off I Spectrum V 1 Spectrum V Scale/Div 10 dB V Log	Linput 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 2. Ref Level 20.00 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 56 dB dBm	1 2 3 4 5 6 M W W W W P N N N N N 	-7.69 dBm
Swept SA KEYSIGHT R Input: RF Coupling: DC Aign: Off INPUT: RF Coupling: DC Aign: Off INPUT: RF Coupling: DC Aign: Off Scale/Div 10 dB Input: RF Start 30 MHz Input: RF Mode Trace Scale Mode Trace Scale Mode Trace Scale Mode Trace Scale Mode To To Start 30 MI To To Mode To To M	Linput 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 2. Ref Level 20.00 #Video BW 300 #Video BW 300 Y -7.688 dBm -53.24 dBm -48.29 dBm -54.66 dBm	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB dBm	1 2 3 4 5 6 M W W W W P N N N N N 	-7.69 dBm







