

#### Test Data

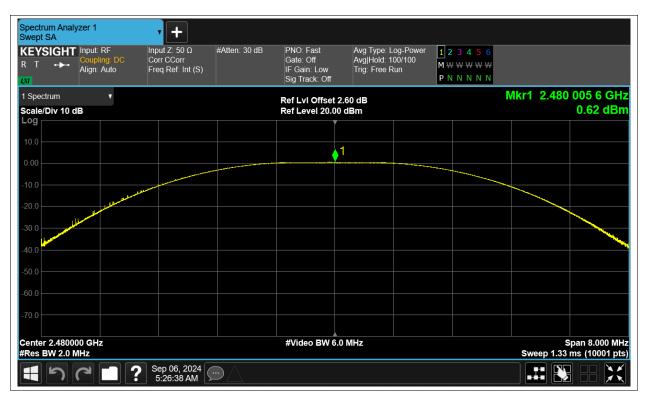
# **Maximum Conducted Output Power**

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	0.177	30	Pass
NVNT	BLE	2442	Ant1	-0.353	30	Pass
NVNT	BLE	2480	Ant1	0.619	30	Pass



			Test Gra	phs				
		Power	NVNT BLE 2	2402MHz An	nt1			
Spectrum Analyzer 1 Swept SA	• +							
KEYSIGHT     Input: RF       R     T     Coupling: DC       Align: Auto     Align: Auto	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: L Avg Hold: 1 Trig: Free R	00/100 Run	23456 ₩₩₩₩₩₩ NNNNN		
1 Spectrum 🔹			Ref LvI Offset				Mkr1 2.402	
Scale/Div 10 dB			Ref Level 20.0	0 dBm				0.18 dBm
10.0				<u>1</u>				
-10.0				M				
-20.0								
-30.0 -40.0								
-50.0								
-60.0								
Center 2.402000 GHz			#Video BW 6	.0 MHz				pan 8.000 MHz
#Res BW 2.0 MHz	Sep 06, 2024 5:21:34 AM	<u> </u>					Sweep 1.33	ms (10001 pts)
Spectrum Analyzer 1	• • • • • • • • • • • • • • • • • • •	Power	NVNT BLE 2	2442MHz An	ıt1			
Swept SA KEYSIGHT Input: RF R T HARD Coupling: DC Align: Auto		#Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	Avg Type: L Avg Hold: 1 Trig: Free R	00/100 Run	23456 ₩₩₩₩₩ NNNNN		
1 Spectrum v Scale/Div 10 dB			Ref LvI Offset Ref Level 20.0				Mkr1 2.441	963 2 GHz -0.35 dBm
Log 10.0								
0.00			<b></b>	1				
-20.0								
-30.0								
-40.0								
-60.0								
-70.0 Center 2.442000 GHz			#Video BW 6	0 MHz				pan 8.000 MHz
	Sep 06, 2024						Sweep 1.33	ms (10001 pts)
		Power	NVNT BLE 2	2480MHz An	nt1			







#### -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	limit	Verdic
NVNT	BLE	2402	Ant1	1.161	0.5	Pass
NVNT	BLE	2442	Ant1	1.166	0.5	Pass
NVNT	BLE	2480	Ant1	1.11	0.5	Pass







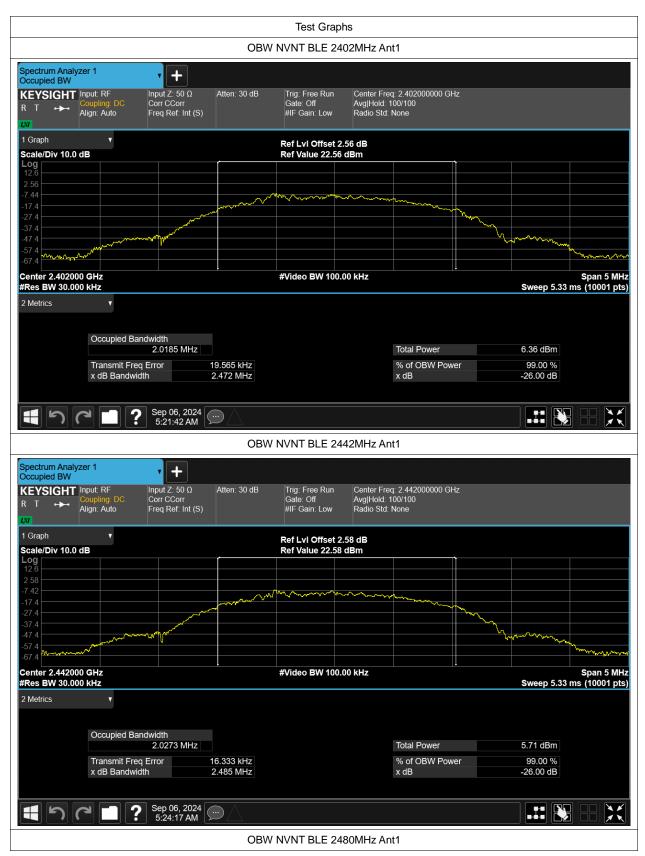
Spectr	um Analy ied BW	zer 1		• +							
KEY R T	SIGHT .≁	Input: Coupli Align: J	ng: DC	Input Ζ: 50 Ω Corr CCorr Freq Ref: Int (S)	Atten: 30 dB	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq Avg Hold: 10 Radio Std: N				
1 Grap	h		•			Ref LvI Offset 2.6	0 dB		M	kr3 2.4805	53000 GHz
	/Div 10.0	dB				Ref Value 22.60 c	IBm				-5.05 dBm
Log 12.6						,1		▲3			
-7.40						· ····································	L <sub>UUU</sub> UUU	Server and a server and a			
-17.4									Marken Marken		
-37.4			mm	mm					4	mining	
-47.4 -57.4	and the second s	and the second								, n V	man
-67.4											
	r 2.48000 BW 100.0					#Video BW 300.0	0 kHz			Sween 1 33	Span 5 MHz ms (10001 pts)
2 Metr			•							3weep 1.001	
2 Micu											
		Oc	cupied Band	dwidth 2.0054 MHz				Total Power		6.92 dBm	
		Tra	ansmit Freq	Error	-1.640 kHz			% of OBW Power		99.00 %	
			B Bandwidt		1.110 MHz			x dB		-6.00 dB	
	5	2	2	Sep 06, 2024 5:26:52 AM							



# **Occupied Channel Bandwidth**

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE	2402	Ant1	2.019
NVNT	BLE	2442	Ant1	2.027
NVNT	BLE	2480	Ant1	2.027







	rum Analy bied BW	zer 1	• +							
KEY R T	SIGHT ⊶	Input: RF Coupling: DC Align: Auto	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:		z		
1 Grap		•			Ref LvI Offset 2.6					
	/Div 10.0	dB			Ref Value 22.60 c	IBm				
Log 12.6										
2.60				_						
-7.40				A A A A A A A A A A A A A A A A A A A	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	M.~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	h.			
-17.4								<u></u>		
-27.4 -37.4			ممر ا							
-37.4 -47.4			with more thanks					h	n.~~~	
		And married war		_					man and a	A
-67.4	hunn									home have have a horizon of the second secon
Cente	er 2.48000	00 GHz			#Video BW 100.0	0 kHz	I			Span 5 MHz
#Res	BW 30.00	00 kHz							Sweep 5.33 I	ns (10001 pts)
2 Metr	rics	•								
		Occupied Ba								
			2.0273 MHz				Total Power		6.74 dBm	
		Transmit Fre		18.161 kHz			% of OBW Powe	er	99.00 %	
		x dB Bandwi	dth	2.477 MHz			x dB		-26.00 dB	
	5		Sep 06, 2024 5:26:44 AM							



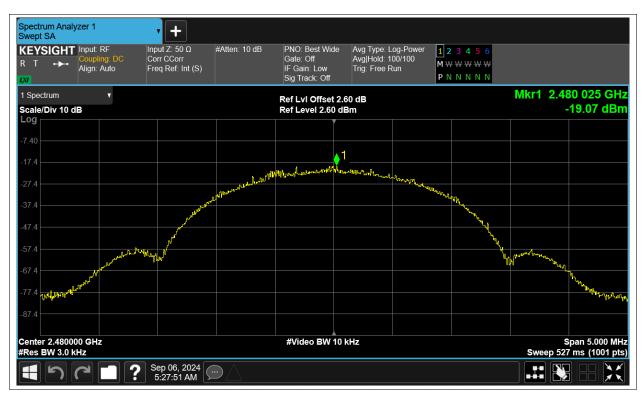
### **Maximum Power Spectral Density Level**

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	-19.601	8	Pass
NVNT	BLE	2442	Ant1	-20.176	8	Pass
NVNT	BLE	2480	Ant1	-19.069	8	Pass



		Test	Graphs		
		PSD NVNT B	LE 2402MHz Ant	1	
Spectrum Analyzer 1 Swept SA	• +				
KEYSIGHT Input: RF	Input Z: 50 Ω #At Corr CCorr	ten: 10 dB PNO: Be Gate: Of			
R T +>+ Align: Auto	Freq Ref: Int (S)	IF Gain: Sig Traci	Low Trig: Free R		
1 Spectrum v			Offset 2.56 dB		Mkr1 2.402 025 GHz
Scale/Div 10 dB Log		Ref Leve	el 2.56 dBm		-19.60 dBm
-7.44					
-17.4			1		
-27.4		our hall Million Lever	and the second with the world	Janon Marine Lillanny to a	
-37.4	and a second sec			and a fail	
-47.4	متم مسلم				••••
-57.4	WM Jul				"le land have been and here an
-67.4					
-77.4 Manufactor					Unter State of the
-87.4					
Center 2.402000 GHz #Res BW 3.0 kHz		#Video	BW 10 kHz		Span 5.000 MHz Sweep 527 ms (1001 pts)
	Sep 06, 2024 5:23:02 AM	$\wedge$			
	5 5.23.02 AIVI				
		PSD NVNT B	E 2442MHz Ant	1	
Spectrum Analyzer 1		PSD NVNT B	LE 2442MHz Ant	1	
Spectrum Analyzer 1 Swept SA	• + Input 7: 50.0 #At	-			5.6
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF R T ++ Coupling: DC Align: Auto		ten: 10 dB PNO: Be Gate: Of IF Gain:	st Wide Avg Type: Lu f Avg Hold: 10 Low Trig: Free R	og-Power 1234 00/100 M₩₩₩₩	<del>~ ~</del>
Swept SA KEYSIGHT Input: RF R T ++ Coupling: DC Align: Auto	Input Z: 50 Ω #At Corr CCorr	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci	st Wide Avg Type: Lo f Avg[Hold: 1 Low Trig: Free R c Off	og-Power <b>1234</b> 00/100 <b>M</b> W/W/W/W	₩₩ N N
Swept SA KEYSIGHT Input: RF Coupling: DC Align: Auto 1 Spectrum V Scale/Div 10 dB	Input Z: 50 Ω #At Corr CCorr	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci <b>Ref Lvi C</b>	st Wide Avg Type: Lu f Avg Hold: 10 Low Trig: Free R	og-Power 1234 00/100 M₩₩₩₩	<del>N W</del>
Swept SA KEYSIGHT Input: RF Coupling: DC Align: Auto 1 Spectrum v Scale/Div 10 dB Log	Input Z: 50 Ω #At Corr CCorr	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci <b>Ref Lvi C</b>	st Wide Avg Type: Li f Avg Hold: 1 Low Trig: Free R c Off Dffset 2.58 dB	og-Power 1234 00/100 M₩₩₩₩	₩₩ N N Mkr1 2.441 965 GHz
Swept SA KEYSIGHT Input: RF R T Align: Auto I Spectrum Scale/Div 10 dB Log -7.42	Input Z: 50 Ω #At Corr CCorr	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci Ref Lvi C Ref Leve	st Wide Avg Type: Le f Avg Hold: 1 Low Trig: Free R c Off Off Dffset 2.58 dB H 2.58 dBm	og-Power 1234 00/100 M₩₩₩₩	₩₩ N N Mkr1 2.441 965 GHz
Swept SA       KEYSIGHT     Input: RF       R     T       J     Spectrum       I     Spectrum       V     Scale/Div 10 dB       Log	Input Z: 50 Ω #At Corr CCorr	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci Ref Lvi C Ref Leve	st Wide Avg Type: Le f Avg Hold: 1 Low Trig: Free R c Off Off Dffset 2.58 dB H 2.58 dBm	og-Power 1234 00/100 M₩₩₩₩	₩₩ N N Mkr1 2.441 965 GHz
Swept SA KEYSIGHT Input: RF R T Align: Auto I Spectrum Scale/Div 10 dB Log -7.42	Input Z: 50 Ω #At Corr CCorr	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci <b>Ref Lvi C</b>	st Wide Avg Type: Le f Avg Hold: 1 Low Trig: Free R c Off Off Dffset 2.58 dB H 2.58 dBm	og-Power 1234 00/100 M₩₩₩₩	₩₩ N N Mkr1 2.441 965 GHz
Swept SA KEYSIGHT Input: RF R T	Input Z: 50 Ω #At Corr CCorr	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci Ref Lvi C Ref Leve	st Wide Avg Type: Le f Avg Hold: 1 Low Trig: Free R c Off Off Dffset 2.58 dB H 2.58 dBm	og-Power 1234 00/100 M₩₩₩₩	₩₩ N N Mkr1 2.441 965 GHz
Swept SA           KEYSIGHT         Input: RF           R         T         ↔           I Spectrum         v           Scale/Div 10 dB         v           -7.42         -           -17.4         -           -37.4         -           -47.4         -	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci Ref Lvi C Ref Leve	st Wide Avg Type: Le f Avg Hold: 1 Low Trig: Free R c Off Off Dffset 2.58 dB H 2.58 dBm	og-Power 1234 00/100 M₩₩₩₩	₩₩ N N Mkr1 2.441 965 GHz
Swept SA           KEYSIGHT         Input: RF           R         T         ↔           I Spectrum         v           Scale/Div 10 dB         v           -7.42         -           -17.4         -           -37.4         -           -47.4         -	Input Z: 50 Ω #At Corr CCorr	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci Ref Lvi C Ref Leve	st Wide Avg Type: Le f Avg Hold: 1 Low Trig: Free R c Off Off Dffset 2.58 dB H 2.58 dBm	og-Power 1234 00/100 M₩₩₩₩	₩₩ N N Mkr1 2.441 965 GHz
Swept SA           KEYSIGHT         Input: RF           R         T         ••••           1 Spectrum         •           Scale/Div 10 dB         •           -7.42         •           -17.4         •           -27.4         •           -37.4         •           -47.4         •           -57.4         •	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci Ref Lvi C Ref Leve	st Wide Avg Type: Le f Avg Hold: 1 Low Trig: Free R c Off Off Dffset 2.58 dB H 2.58 dBm	og-Power 1234 00/100 M₩₩₩₩	Mkr1 2.441 965 GHz -20.18 dBm -20.18 dBm -20
Swept SA           KEYSIGHT         Input: RF           R         T         →→         Coupling: DC           1 Spectrum         ▼         Align: Auto         ▼           1 Spectrum         ▼         Scale/Div 10 dB         ■           Log         ■         ■         ■           -7.42         ■         ■         ■           -7.42         ■         ■         ■           -7.42         ■         ■         ■           -7.42         ■         ■         ■           -7.42         ■         ■         ■           -7.42         ■         ■         ■           -7.42         ■         ■         ■           -7.42         ■         ■         ■           -7.4         ■         ■         ■           -7.4         ■         ■         ■           -7.4         ■         ■         ■         ■           -7.4         ■         ■         ■         ■           -7.4         ■         ■         ■         ■           -7.4         ■         ■         ■         ■         ■	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci Ref Lvi C Ref Leve	st Wide Avg Type: Le f Avg Hold: 1 Low Trig: Free R c Off Off Dffset 2.58 dB H 2.58 dBm	og-Power 1234 00/100 M₩₩₩₩	₩₩ N N Mkr1 2.441 965 GHz
Swept SA       KEYSIGHT     Input: RF       R     T       1 Spectrum         1 Spectrum         -7:42         -7:42         -7:42         -7:4       -7:4         -7:4    -7:4	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci Ref Lvi C Ref Leve	st Wide Avg Type: Li f Avg Hold 1 Low Trig: Free R c Off Conf Dffset 2.58 dB 1 2.58 dBm	og-Power 1234 00/100 M₩₩₩₩	Mkr1 2.441 965 GHz -20.18 dBm 2 20.18 dBm
Swept SA           KEYSIGHT         Input: RF           R         T         Coupling: DC           Ispectrum         V           Scale/Div 10 dB         V           Log         V           -7.42         V           -7.42         V           -7.42         V           -7.42         V           -7.42         V           -7.42         V           -7.4           -7.4	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci Ref Lvi C Ref Leve	st Wide Avg Type: Le f Avg Hold: 1 Low Trig: Free R c Off Off Dffset 2.58 dB H 2.58 dBm	og-Power 1234 00/100 M₩₩₩₩	Mkr1 2.441 965 GHz -20.18 dBm -20.18 dBm -20
Swept SA           KEYSIGHT         Input: RF           R         T         ↔         Coupling: DC Align: Auto           I Spectrum         v           Scale/Div 10 dB            Log             -7.42             -7.42             -7.42             -7.42             -7.43             -7.44             -7.4             -7.4             -7.4             -7.4             -7.4             -7.4             -7.4             -7.4              -7.4              -7.4              -7.4              -7.4              -7.4	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	ten: 10 dB PNO: Be Gate: Of IF Gain: Sig Traci Ref Lvi C Ref Leve	st Wide Avg Type: Li f Avg Hold 1 Low Trig: Free R c Off Conf Dffset 2.58 dB 1 2.58 dBm	og-Power 1234 00/100 M₩₩₩₩	Mkr1 2.441 965 GHz -20.18 dBm







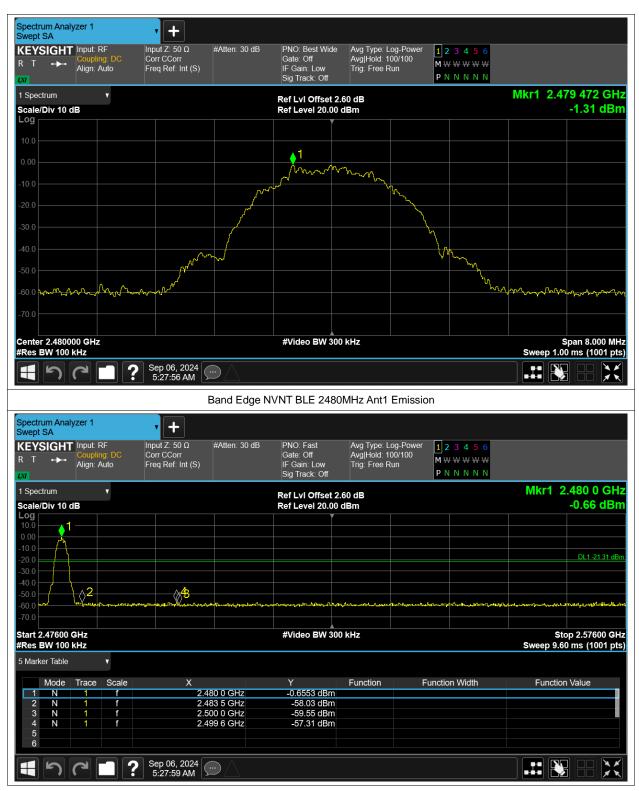
# **Band Edge**

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-56.42	-20	Pass
NVNT	BLE	2480	Ant1	-56	-20	Pass



		Test Gra	aphs		
	Ва	and Edge NVNT BLE	2402MHz Ant1 Re	ef	
Spectrum Analyzer 1 Swept SA	<b>•</b> +				
KEYSIGHT Input: RF	Input Z: 50 Ω #Atte Corr CCorr	n: 30 dB PNO: Best Wid Gate: Off	de Avg Type: Log-Pow Avg Hold: 100/100		
R T +>+ Align: Auto	Freq Ref: Int (S)	IF Gain: Low Sig Track: Off	Trig: Free Run	M ₩ ₩ ₩ ₩ ₩ P N N N N N	
1 Spectrum v		Ref LvI Offset			Mkr1 2.401 504 GHz -0.40 dBm
Scale/Div 10 dB		Ref Level 20.0	JU dBM		-0.40 dBiii
10.0		<b></b> 1			
0.00		- Ann	mar and a second		
-10.0		and a design of the second sec	- When		
-20.0		, and the second s	<u> </u>	h .	
-30.0				-\ <u>\</u>	
-40.0	how have			many	
-50.0					
-60.0 A margary hyper					man alter part to the
-70.0					
Center 2.402000 GHz #Res BW 100 kHz		#Video BW 3	300 kHz		Span 8.000 MHz Sweep 1.00 ms (1001 pts)
	Sep 06, 2024	$\backslash$			
		Edge NVNT BLE 24	02MHz Ant1 Emiss	sion	
Spectrum Analyzer 1	Banc	Edge NVNT BLE 24	02MHz Ant1 Emiss	sion	
Swept SA	Banc	n: 30 dB PNO: Fast	Avg Type: Log-Pow		
Swept SA KEYSIGHT R T  T  Coupling: DC Align: Auto	Banc	n: 30 dB PNO: Fast Gate: Off IF Gain: Low		er 123456 M₩₩₩₩₩₩	
Swept SA KEYSIGHT Input: RF R T Coupling: DC	Banc	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	Avg Type: Log-Pow Avg Hold: 100/100 Trig: Free Run	er 123456	Mkr1 2.402 0 GHz
Swept SA KEYSIGHT R T  Coupling: DC Align: Auto UN 1 Spectrum Scale/Div 10 dB	Banc	n: 30 dB PNO: Fast Gate: Off IF Gain: Low	Avg Type: Log-Pow Avg]Hold: 100/100 Trig: Free Run t 2.56 dB	er 123456 M₩₩₩₩₩₩	
Swept SA KEYSIGHT Input: RF R T ++ Coupling: DC Align: Auto 1 Spectrum •	Banc	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offsel	Avg Type: Log-Pow Avg]Hold: 100/100 Trig: Free Run t 2.56 dB	er 123456 M₩₩₩₩₩₩	Mkr1 2.402 0 GHz
Swept SA KEYSIGHT Input: RF R T  Align: Auto Scale/Div 10 dB Log 10.0	Banc	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offsel	Avg Type: Log-Pow Avg]Hold: 100/100 Trig: Free Run t 2.56 dB	er 123456 M₩₩₩₩₩₩	Mkr1 2.402 0 GHz
Swept SA KEYSIGHT Input: RF R T  Ispectrum Scale/Div 10 dB Cog 10.0 0.00 -10.0	Banc	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset Ref Level 20.0	Avg Type: Log-Pow Avg]Hold: 100/100 Trig: Free Run t 2.56 dB	er 123456 M₩₩₩₩₩₩	Mkr1 2.402 0 GHz -1.61 dBm
Swept SA           KEYSIGHT         Input: RF           R         T         →         Align: Auto           I         Spectrum         ▼           Scale/Div 10 dB         ■           Log         ■         ■           10.0         ■         ■           -10.0         ■         ■         ■           -20.0         ■         ■         ■	Banc	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offsel	Avg Type: Log-Pow Avg]Hold: 100/100 Trig: Free Run t 2.56 dB	er 123456 M₩₩₩₩₩₩	Mkr1 2.402 0 GHz -1.61 dBm
Swept SA           KEYSIGHT         Input: RF           R         T         →         Coupling: DC Align: Auto           I         Spectrum         v           Scale/Div 10 dB         0         0           10.0         0         0           -10.0         0         0           -30.0         0         0           -40.0         0         0           -70.0         0         0	Banc	In: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset Ref Level 20.0	Avg Type: Log-Pow Avg Hold: 100/100 Trig: Free Run 2.56 dB 00 dBm	er 123456 M₩₩₩₩₩₩	Mkr1 2.402 0 GHz -1.61 dBm
Swept SA           KEYSIGHT         Input: RF           R         T         →         Coupling: DC Align: Auto           I Spectrum         v           Scale/Div 10 dB         0         0           100         0         0         0           100         0         0         0         0           100         0	Banc	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset Ref Level 20.0	Avg Type: Log-Pow Avg Hold: 100/100 Trig: Free Run 2.56 dB 00 dBm	er 123456 M₩₩₩₩₩₩	Mkr1 2.402 0 GHz -1.61 dBm
Swept SA           KEYSIGHT         Input: RF           R         T         Coupling: DC           Align: Auto         V           Scale/Div 10 dB         V           Log         1         0           10.0         0         0	Banc	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.0	Avg Type: Log-Pow Avg]Hold: 100/100 Trig: Free Run 2 2.56 dB 00 dBm	er 1 2 3 4 5 6 M W W W W W P N N N N N N	Mkr1 2.402 0 GHz -1.61 dBm DL1 0 40 dBm 2 3 5top 2.40600 GHz Sweep 9.60 ms (1001 pts)
Swept SA           KEYSIGHT         Input: RF           R         T         →         Coupling: DC Align: Auto           I Spectrum         v           Scale/Div 10 dB         0         0           Log         1         0         0           10.0         0         0         0           -10.0	Banc Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.0 #Video BW 3 #Video BW 3	Avg Type: Log-Pow Avg Hold: 100/100 Trig: Free Run t 2.56 dB 00 dBm 300 dBm 300 kHz Function	er 123456 M₩₩₩₩₩₩	Mkr1 2.402 0 GHz -1.61 dBm DL1-040 dBm
Swept SA           KEYSIGHT         Input: RF           R         T         Coupling: DC           Align: Auto         V           Scale/Div 10 dB         V           Log         Imput: RF           1 Spectrum         V           Scale/Div 10 dB         Imput: RF           Log         Imput: RF           100         V           Scale/Div 10 dB         Imput: RF           Log         Imput: RF           Scale/Div 10 dB         Imput: RF           Social         Imput: RF           Scale/Div 10 dB         Imput: RF           Social         Imput: RF           Start 2:30600 GHz         Imput: RF           Imput: RF         Imput: RF           Mode         Trace         Scale           Imput: RF         Imput: RF           Mode         Trace         Scale           Imput: RF         Imput: RF         Imput: RF	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)         #Atternal           0         0         0           1         0         0           2         0         0           2         0         0           2         0         0           2         0         0           2         0         0           2         0         0           2         2.400 0         0           2.390 0         0         0	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset Ref Level 20.0 #Video BW 3 #Video BW 3	Avg Type: Log-Pow Avg]Hold: 100/100 Trig: Free Run 22.56 dB 00 dBm 300 kHz Function	er 1 2 3 4 5 6 M W W W W W P N N N N N N	Mkr1 2.402 0 GHz -1.61 dBm DL1 0 40 dBm 2 3 5top 2.40600 GHz Sweep 9.60 ms (1001 pts)
Swept SA           KEYSIGHT         Input: RF           R         T         →         Coupling: DC Align: Auto           I         Spectrum         ▼           Scale/Div 10 dB         ✓           Log         □         □           10.0         □         □           -20.0         □         □           -30.0         □         □           -40.0         □         □           -70.0         □         □           Start 2.30600 GHz         #Res BW 100 kHz         ▼           5 Marker Table         ▼           Mode         Trace         Scale           1         1         f	Banc	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset Ref Level 20.0 #Video BW 3 #Video BW 3	Avg Type: Log-Pow Avg]Hold: 100/100 Trig: Free Run 22.56 dB 00 dBm 300 kHz Function	er 1 2 3 4 5 6 M W W W W W P N N N N N N	Mkr1 2.402 0 GHz -1.61 dBm D1 10 40 dBm 2 3 5top 2.40600 GHz Sweep 9.60 ms (1001 pts)
Swept SA           KEYSIGHT         Input: RF           R         T         →         Coupling: DC Align: Auto           I Spectrum         v           Scale/Div 10 dB         0         0           Log         1         0         0           10.0         0         0         0           -10.0	Banc Input Z: 50 Ω Corr Corr Freq Ref: Int (S) #Atte 2 402 0 0 2.353 2 0 2.353 2 0	n: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset Ref Level 20.0 #Video BW 3 #Video BW 3	Avg Type: Log-Pow Avg]Hold: 100/100 Trig: Free Run 22.56 dB 00 dBm 300 kHz Function	er 1 2 3 4 5 6 M W W W W W P N N N N N N	Mkr1 2.402 0 GHz -1.61 dBm DL1 0 40 dBm 2 3 5top 2.40600 GHz Sweep 9.60 ms (1001 pts)







# **Conducted RF Spurious Emission**

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-47.97	-20	Pass
NVNT	BLE	2442	Ant1	-48.05	-20	Pass
NVNT	BLE	2480	Ant1	-48.58	-20	Pass



			Test Grapl	hs		
		Tx. Spuriou	s NVNT BLE 2	402MHz Ant1	Ref	
Spectrum Analyzer 1 Swept SA	• +					
	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-Pc Avg Hold: 100/10 Trig: Free Run		
1 Spectrum V			Ref LvI Offset 2.	.56 dB		Mkr1 2.401 511 GH
Scale/Div 10 dB			Ref Level 20.00	dBm		-0.36 dBr
10.0		<b>∳</b> 1				
-10.0		, vunn	y	mar M. Marganer	www.	
-20.0	Change and a grade a					have been and the second secon
-30.0						
-40.0						
-50.0						
-60.0						
-70.0						
Center 2.402000 GHz			#Video BW 300	) kHz		Span 3.000 MH
	Sep 10, 2024					Sweep 1.00 ms (1001 pt
	2:22:21 AM	//				
		Creations				
Sportrum Apolution 1	Tx	. Spurious N	IVNT BLE 240	2MHz Ant1 Em	iission	
Spectrum Analyzer 1 Swept SA	Tx	·				
Swept SA KEYSIGHT Input: RF R T Coupling: DC	Tx	. Spurious N #Atten: 30 dB	IVNT BLE 240 PNO: Fast Gate Off IF Gain: Low Sig Track: Off	2MHz Ant1 Em Avg Type: Log-Po Avg Hold: 10/10 Trig: Free Run		
Swept SA KEYSIGHT R T ++ A Coupling: DC Align: Auto  1 Spectrum Scale/Div 10 dB	Tx Tx Input Z: 50 Ω # Corr CCorr	·	PNO: Fast Gate: Off IF Gain: Low	Avg Type: Log-Pc Avg Hold: 10/10 Trig: Free Run 56 d <b>B</b>	wer 123456 M w w w w	Mkr1 2.412 GH -1.98 dBr
Swept SA       KEYSIGHT       R T       Align: Auto       LVT       1 Spectrum	Tx Tx Input Z: 50 Ω # Corr CCorr	·	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.	Avg Type: Log-Pc Avg Hold: 10/10 Trig: Free Run 56 d <b>B</b>	wer 123456 M w w w w	Mkr1 2.412 GH
Swept SA           KEYSIGHT         Input: RF           R         T         →           Align: Auto         Input: RF           Log         T           Scale/Div 10 dB         Input: RF           Log         T           100         T           -100         T	Tx Tx Input Z: 50 Ω # Corr CCorr	·	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.	Avg Type: Log-Pc Avg Hold: 10/10 Trig: Free Run 56 d <b>B</b>	wer 123456 M w w w w	Mkr1 2.412 GH
Swept SA         Input: RF           R         T         →         Auto           1         Spectrum         v           Scale/Div 10 dB         10.0         10.0           -20.0         -20.0         -40.0	Tx Input Z: 50 Ω # Corr CCorr Freq Ref: Int (S)	έAtten: 30 dΒ	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.	Avg Type: Log-Pc Avg Hold: 10/10 Trig: Free Run 56 d <b>B</b>	wer 123456 M w w w w	Mkr1 2.412 GH -1.98 dBr
Swept SA         Input: RF           R         T         →         Auto           UV         1         Spectrum         ✓           Scale/Div 10 dB         ✓         ✓           10.0         ✓         ✓           -30.0         ✓         ✓           -30.0         ✓         ✓           -60.0         ✓         ✓	Tx Tx Input Z: 50 Ω # Corr CCorr	·	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.	Avg Type: Log-Pc Avg Hold: 10/10 Trig: Free Run 56 d <b>B</b>	wer 123456 M w w w w	Mkr1 2.412 GH -1.98 dBr
Swept SA         Input: RF           R         T         →         Auto           1         Spectrum         v           Scale/Div 10 dB         0         0           10.0         0         0           -10.0         -1         -1           -30.0         -1         -1	Tx Input Z: 50 Ω # Corr CCorr Freq Ref: Int (S)	έAtten: 30 dΒ	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.	Avg Type: Log-Pc Avg Hold 10/10 Trig: Free Run 56 dB dBm	wer 123456 M w w w w	Mkr1 2.412 GH -1.98 dBr
Swept SA         Input: RF           R         T          Auto           1         Spectrum         v         Scale/Div 10 dB           Log         1         1             10.0              -200              -300              -50.0	Tx Input Z: 50 Ω # Corr CCorr Freq Ref: Int (S)	έAtten: 30 dΒ	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2. Ref Level 20.00	Avg Type: Log-Pc Avg Hold 10/10 Trig: Free Run 56 dB dBm	wer 123456 M w w w w	Mkr1 2.412 GH -1.98 dBr DL1-20 36 dB
Swept SA KEYSIGHT R T  Align: Auto CV 1 Spectrum Scale/Div 10 dB Log 10.0 0.00 -30.0 -40.0 -50.0 -50.0 -50.0 Start 30 MHz #Res BW 110 kHz 5 Marker Table	Tx Input Z: 50 Ω # Corr CCorr Freq Ref: Int (S)	έAtten: 30 dΒ	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2. Ref Level 20.00	Avg Type: Log-Pc Avg Hold 10/10 Trig: Free Run 56 dB dBm 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Image: New of the second se	Mkr1 2.412 GH -1.98 dBr DL1-20 36 dB DL1-20 36 dB Stop 26.50 GH Sweep ~2.14 s (1001 pt
Swept SA         Input: RF           R         T          Align: Auto           1         Spectrum         •         Scale/Div 10 dB           100              100              100              200	Tx 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 ¥ #Video BW 300 Y -1.977 dBm -53.58 dBm	Avg Type: Log-Pc Avg Hold 10/10 Trig: Free Run 56 dB dBm	wer 123456 M w w w w	Mkr1 2.412 GH -1.98 dBr DL1-20 36 dB
Swept SA         Input: RF           R         T          Auto           1         Spectrum         v         Scale/Div 10 dB         0           100               200	Tx         Input Z: 50 Ω         Corr CCorr         Freq Ref: Int (S)	tAtten: 30 dB ↓ 4 ↓ 4 12 GHz	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2. Ref Level 20.00 #Video BW 300 #Video BW 300 - 1.977 dBm	Avg Type: Log-Pc Avg Hold 10/10 Trig: Free Run 56 dB dBm 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Image: New of the second se	Mkr1 2.412 GH -1.98 dBr DL1-20 36 dB DL1-20 36 dB Stop 26.50 GH Sweep ~2.14 s (1001 pt
Swept SA         Input: RF           R         T          Align: Auto           1         Spectrum         V           1         Spectrum         V           Scale/Div 10 dB             Log             100             -200             -30.0             -40.0	Tx         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 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Avg Type: Log-Pc Avg Hold 10/10 Trig: Free Run 56 dB dBm 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Image: New of the second se	Mkr1 2.412 GH -1.98 dBr DL1-20 36 dB DL1-20 36 dB Stop 26.50 GH Sweep ~2.14 s (1001 pt







