

Test Data

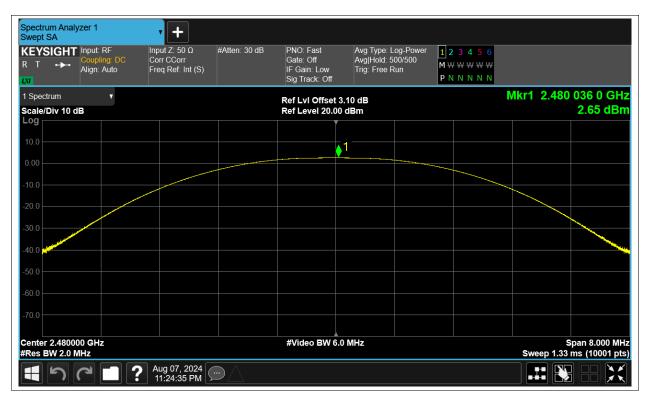
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	1.942	30	Pass
NVNT	BLE	2442	Ant1	3.181	30	Pass
NVNT	BLE	2480	Ant1	2.652	30	Pass



			Test Gra	phs				
		Power	NVNT BLE 2	2402MHz Ant	1			
Spectrum Analyzer 1 Swept SA	• +							
KEYSIGHT Input: RF R T ↔ Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	#Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	Avg Type: Lo Avg Hold: 10 Trig: Free Ru	00/100 M.₩	: 3 4 5 6 ₩₩₩₩₩ INNNN		
1 Spectrum			Ref LvI Offset				Mkr1 2.402	
Scale/Div 10 dB Log			Ref Level 20.0	0 dBm				1.94 dBm
10.0				↓ 1				
-10.0				· · · · · · · · · · · · · · · · · · ·				
-20.0								
-30.0								
-40.0								and an and a second
-50.0								
-60.0								
Center 2.402000 GHz			#Video BW 6					Span 8.000 MHz
#Res BW 2.0 MHz	Aur 07, 0004	~ ^	#video Bw d	5.0 WHZ			Sweep 1.33	ms (10001 pts)
	Aug 07, 2024 11:54:49 PM							
		Power	NVNT BLE 2	2442MHz Ant	:1			
Spectrum Analyzer 1 Swept SA								
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF R T + Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	Power #Atten: 30 dB	NVNT BLE 2 PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	2442MHz Ant Avg Type: La Avg Hold: 50 Trig: Free Ru	og-Power <u>1</u> 2 00/500 M.₩	: 3 4 5 6 /₩₩₩₩ I N N N N		
Swept SA KEYSIGHT Input: RF R T Coupling: DC Align: Auto 1 Spectrum Scale/Div 10 dB	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low	Avg Type: Lo Avg Hold: 50 Trig: Free Ru 3.08 dB	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩	Mkr1 2.442	2 054 4 GHz 3.18 dBm
Swept SA KEYSIGHT Input: RF R T ++ Coupling: DC Align: Auto 1 Spectrum •	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Lo Avg Hold: 50 Trig: Free Ru 3.08 dB	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩		
Swept SA KEYSIGHT Input: RF R T \rightarrow Coupling: DC Align: Auto 1 Spectrum Scale/Div 10 dB Log	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Ld Avg Hold: 50 Trig: Free Rt 3.08 dB 0 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩		
Swept SA KEYSIGHT Input: RF R T ISpectrum Scale/Div 10 dB O	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Ld Avg Hold: 50 Trig: Free Rt 3.08 dB 0 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩		
Swept SA KEYSIGHT Input: RF R T ↔ Coupling: DC Align: Auto VV 1 Spectrum ▼ Scale/Div 10 dB Log 10.0 0.00	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Ld Avg Hold: 50 Trig: Free Rt 3.08 dB 0 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩		
Swept SA KEYSIGHT Input: RF R T → 1 Spectrum ▼ Scale/Div 10 dB ■ Log ■ 10.0 ■ -10.0 ■ -20.0 ■	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Ld Avg Hold: 50 Trig: Free Rt 3.08 dB 0 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩		
Swept SA KEYSIGHT Input: RF R T → Coupling: DC Align: Auto IV Ispectrum ✓ Scale/Div 10 dB ✓ ✓ Log ✓ ✓ 10.0 ✓ ✓ -20.0 ✓ ✓	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Ld Avg Hold: 50 Trig: Free Rt 3.08 dB 0 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩		
Swept SA KEYSIGHT Input: RF R T → Coupling: DC I Spectrum ▼ Scale/Div 10 dB ■ Log ■ ■ ■ ■ 10.0 ■ <td>Input Z: 50 Ω Corr CCorr</td> <td></td> <td>PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset</td> <td>Avg Type: Ld Avg Hold: 50 Trig: Free Rt 3.08 dB 0 dBm</td> <td>og-Power <u>1</u>2 00/500 M.₩</td> <td>/₩₩₩₩</td> <td></td> <td></td>	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Ld Avg Hold: 50 Trig: Free Rt 3.08 dB 0 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩		
Swept SA KEYSIGHT Input: RF R T Coupling: DC I Spectrum V Scale/Div 10 dB 0 Log 1 10.0 0 -10.0 0 -30.0 0 -60.0 0 -70.0 0	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.0	Avg Type: Lo Avg Hold: 50 Trig: Free Rt 3.08 dB 00 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩	Mkr1 2.442	3.18 dBm
Swept SA KEYSIGHT Input: RF R T → Coupling: DC I Spectrum ▼ Scale/Div 10 dB ■ Log ■ ■ ■ ■ 10.0 ■ <td>Input Z: 50 Ω Corr CCorr</td> <td></td> <td>PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset</td> <td>Avg Type: Lo Avg Hold: 50 Trig: Free Rt 3.08 dB 00 dBm</td> <td>og-Power <u>1</u>2 00/500 M.₩</td> <td>/₩₩₩₩</td> <td>Mkr1 2.442</td> <td></td>	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Lo Avg Hold: 50 Trig: Free Rt 3.08 dB 00 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩	Mkr1 2.442	
Swept SA KEYSIGHT Input: RF R T → Coupling: DC I Spectrum ▼ Scale/Div 10 dB □ Log □ □ □ 10.0 □ □ □ -10.0 □ □ □ -20.0 □ □ □ -30.0 □ □ □ -60.0 □ □ □ -70.0 □ □ □ Center 2.442000 GHz #Res BW 2.0 MHz □	Input Z 50 Ω Corr CCorr Freq Ref: Int (S)		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.0	Avg Type: Lo Avg Hold: 50 Trig: Free Rt 3.08 dB 00 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩	Mkr1 2.442	3.18 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	0.662	0.5	Pass
NVNT	BLE	2480	Ant1	0.664	0.5	Pass







Spectru Occupi	ım Analı ed BW	yzer 1		• +							
KEYS R T	SIGHT •►•	Input: R Couplin Align: A	ig: DC	Input Z: 50 Corr CCorr Freq Ref: I		dB Trig: Free Gate: Off #IF Gain:	Avg Hol	Freq: 2.480000000 GHz d: 1000/1000 td: None			
1 Graph	ı		•			Ref LvI O	ffset 3.10 dB		Mk	r3 2.48033	
	Div 10.0) dB					23.10 dBm				-3.72 dBm
Log 13.1 - 3.10 -											
-6.90											
-16.9 -26.9			_								
-26.9	¥										
-46.9											
-56.9 -66.9											
	0.4000					40 (1					0
	2.4800 W 100.	00 GHz 00 kHz				#video Bv	W 300.00 kHz			Sweep 1.33 n	Span 2 MHz ns (10001 pts)
2 Metric	s		•								(
		_									
		Occ	upied Ba	andwidth 1.0536 N	ИНZ			Total Power		9.12 dBm	
		Trar	nsmit Fre		2.915 kH:	7		% of OBW Power	r	99.00 %	
			3 Bandwi		664.2 kH			x dB		-6.00 dB	
	5			Aug 07, 11:25:02	2024 2 PM						



Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE	2402	Ant1	1.04
NVNT	BLE	2442	Ant1	1.042
NVNT	BLE	2480	Ant1	1.041







Spec	trum A pied B	nalyz 3W	zer 1		• +											
KE ' R 1 <i>L</i> M	YSIG ∫ →		Input: F Couplir Align: <i>F</i>	ng: DC	Input Z: 50 0 Corr CCorr Freq Ref: In		en: 30 df	В	Trig: Free Run Gate: Off #IF Gain: Low		Center Freq Avg Hold: 10 Radio Std: N)0 GI	Hz		
1 Gr				•					Ref LvI Offset							
	e/Div ′	10.0 0	dB						Ref Value 23.1	10 dE	3m					
Log 13.1																
3.10																
-6.90								\sim	<u>^~~~</u>	~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
-16.9) ——						\sim	~					~~~			
-26.9)													m		
-36.9				~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~										~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
-46.9		~~	ممرسه													······································
-56.9		<u> </u>	~													
-66.9																
	ter 2.4								#Video BW 91	.000	kHz					Span 3 MHz
#Res	s BW 3	30.00	0 kHz												Sweep 3.33	ms (10001 pts)
2 Me	trics			•												
			Oc	cupied Ban												
					1.0410 M	Hz						Total Powe	r		9.58 dBm	
			Tra	nsmit Freq	Error	8.4	51 kHz					% of OBW	Pow	ver	99.00 %	
			x d	B Bandwidt	h	1.26	68 MHz					x dB			-26.00 dB	
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Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	-14.293	8	Pass
NVNT	BLE	2442	Ant1	-13.044	8	Pass
NVNT	BLE	2480	Ant1	-13.598	8	Pass



				Test Grap	ohs				
			PSD	NVNT BLE 24	02MHz Ant1	1			
Spectrum Analyzer Swept SA	1	• +							
	pling: DC C	nput Z: 50 Ω corr CCorr req Ref: Int (S)	Atten: 30 dB	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	e Avg Type: Lo Avg Hold: 10 Trig: Free Ru	00/100 M	23456 ₩₩₩₩₩ NNNNN		
1 Spectrum	•			Ref LvI Offset					2 022 5 GHz
Scale/Div 10 dB				Ref Level 20.00) dBm				-14.29 dBm
10.0									
0.00									
-10.0					1				
-20.0				and the growthat	han the stand of t				
-30.0						WWWWWWWWWWWW			
		1	phillippine and a second se			ואנא	hyper we		
-40.0	* 11 ¹ 11**	www.in					Wu wh	warmen war	
-50.0	A Part of the second second							- WT WHEND	
-60.0	A MAR	V					V'	V	her a number of
-70.0	, 								- all when a constrained by
Center 2.402000 G	Hz			#Video BW 1	0 kHz				Span 3.000 MHz
#Res BW 3.0 kHz		Aug 07, 000 4 (~ ^						16 ms (2001 pts)
ר ד ר	· · · · · · · · · · · · · · · · · · ·	Aug 07, 2024 11:20:21 PM							
			PSD	NVNT BLE 24	42MHz Ant1	1			
Spectrum Analyzer	1		PSD	NVNT BLE 24	42MHz Ant1	1			
Swept SA		• +	_				2 2 4 5 6		
Swept SA	ıt: RF Ir	put Z: 50 Ω corr CCorr	PSD #Atten: 30 dB	PNO: Best Wide Gate: Off	e Avg Type: Lo Avg[Hold: 10	og-Power 1 00/100 M	2 3 4 5 6 ₩₩₩₩₩		
Swept SA KEYSIGHT Inpu R T ↔ Alig U	it: RF Ir pling: DC C n: Auto F	nput Ζ: 50 Ω	_	PNO: Best Wide	e Avg Type: Lo	og-Power <u>1</u> 00/100 M un M			
Swept SA KEYSIGHT R T LVT 1 Spectrum	ıt: RF Ir	put Z: 50 Ω corr CCorr	_	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3	Avg Type: Lo Avg Hold: 10 Trig: Free Ru 3.08 dB	og-Power <u>1</u> 00/100 M un M	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	2 022 5 GHz -13 04 dBm
Swept SA KEYSIGHT Inpu R T ↔ Alig U	it: RF Ir pling: DC C n: Auto F	put Z: 50 Ω corr CCorr		PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	Avg Type: Lo Avg Hold: 10 Trig: Free Ru 3.08 dB	og-Power <u>1</u> 00/100 M un M	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	2 022 5 GHz -13.04 dBm
Swept SA KEYSIGHT Inpu R T ↔ Aig UN 1 Spectrum Scale/Div 10 dB	it: RF Ir pling: DC C n: Auto F	put Z: 50 Ω corr CCorr		PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3	Avg Type: Lo Avg Hold: 10 Trig: Free Ru 3.08 dB	og-Power <u>1</u> 00/100 M un M	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	
Swept SA KEYSIGHT R T → Arig 1 Spectrum Scale/Div 10 dB	it: RF Ir pling: DC C n: Auto F	put Z: 50 Ω corr CCorr		PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3	Avg Type: Lo Avg Hold: 10 Trig: Free Ru 3.08 dB	og-Power <u>1</u> 00/100 M un M	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	
Swept SA KEYSIGHT Inpu R T →→ Aig Low 1 Spectrum Scale/Div 10 dB Log 10.0	it: RF Ir pling: DC C n: Auto F	put Z: 50 Ω corr CCorr		PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3	Avg Type: Lo Avg Hold: 10 Trig: Free Ru 3.08 dB	og-Power <u>1</u> 00/100 M un M	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	
Swept SA KEYSIGHT Inpu R T ↔ Cou Alig LV7 1 Spectrum Scale/Div 10 dB Log 10.0 0.00	it: RF Ir pling: DC C n: Auto F	put Z: 50 Ω corr CCorr	#Atten: 30 dB	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3 Ref Level 20.00	Avg Type: Lc Avg Hold 10 Trig: Free Ru 3.08 dB dBm 1	og-Power [1)0/100 M un P	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	
Swept SA KEYSIGHT Inpu R T → Arig I Spectrum Scale/Div 10 dB Div Log	it: RF Ir pling: DC C n: Auto F	put Z: 50 Ω corr CCorr	#Atten: 30 dB	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3	Avg Type: Lc Avg Hold 10 Trig: Free Ru 3.08 dB dBm 1	og-Power 1 00/100 M un P	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	
Swept SA KEYSIGHT Input R T → Cou 1 Spectrum Scale/Div 10 dB Div 10.0	it: RF Ir pling: DC C n: Auto F	put Z: 50 Ω corr CCorr	#Atten: 30 dB	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3 Ref Level 20.00	Avg Type: Lc Avg Hold 10 Trig: Free Ru 3.08 dB dBm 1	og-Power [1)0/100 M un P	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	
Swept SA KEYSIGHT Inpu R T →→ Aig I Spectrum Scale/Div 10 dB Log 10.0 0.00 10.0	it: RF Ir pling: DC C n: Auto F	put Z: 50 Ω corr CCorr	#Atten: 30 dB	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3 Ref Level 20.00	Avg Type: Lc Avg Hold 10 Trig: Free Ru 3.08 dB dBm 1	og-Power [1)0/100 M un P	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	
Swept SA KEYSIGHT Inpu R T Cou 1 Spectrum Scale/Div 10 dB Out 10.0 10.0 -20.0 -40.0	it: RF Ir pling: DC C n: Auto F	put Z: 50 Ω corr CCorr	#Atten: 30 dB	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3 Ref Level 20.00	Avg Type: Lc Avg Hold 10 Trig: Free Ru 3.08 dB dBm 1	og-Power [1)0/100 M un P	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	
Swept SA KEYSIGHT Inpu R	it: RF Ir pling: DC C n: Auto F	put Z: 50 Ω corr CCorr	#Atten: 30 dB	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3 Ref Level 20.00	Avg Type: Lc Avg Hold 10 Trig: Free Ru 3.08 dB dBm 1	og-Power [1)0/100 M un P	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	-13.04 dBm
Swept SA KEYSIGHT Inpu R T I Spectrum Scale/Div 10 dB Log 10.0 -20.0 -30.0 -40.0	it: RF Ir pling: DC C n: Auto F	put Z: 50 Ω corr CCorr	#Atten: 30 dB	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3 Ref Level 20.00	Avg Type: Lc Avg Hold 10 Trig: Free Ru 3.08 dB dBm 1	og-Power [1)0/100 M un P	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	
Swept SA KEYSIGHT Inpu R T → Cou 1 Spectrum Scale/Div 10 dB Out Out	it: RF ir pling: DC C r: Auto F	put Z: 50 Ω corr CCorr	#Atten: 30 dB	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 3 Ref Level 20.00	Avg Type: Lc Avg Hold: 10 Trig: Free Ru 3.08 dB 0 dBm	og-Power [1)0/100 M un P	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	-13.04 dBm
Swept SA KEYSIGHT Inpu R T → Alig I Spectrum Scale/Div 10 dB Og Out Out	it: RF ir pling: DC C r: Auto F V V Hz	aput Z: 50 Ω orr CCorr req Ref: Int (S)	#Atten: 30 dB	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00	Avg Type: Lc Avg Hold: 10 Trig: Free Ru 3.08 dB 0 dBm	og-Power 1 00/100 M un P	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	-13.04 dBm
Swept SA KEYSIGHT Inpu R T → Cou 1 Spectrum Scale/Div 10 dB Out Out	it: RF ir pling: DC C r: Auto F V V Hz	aput Z: 50 Ω iorr CCorr req Ref: Int (S)	#Atten: 30 dB	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.00	Avg Type: Lc Avg Hold: 10 Trig: Free Ru 3.08 dB 0 dBm	og-Power 1 00/100 M un P	₩ ₩ ₩ ₩ ₩	Mkr1 2.44	-13.04 dBm







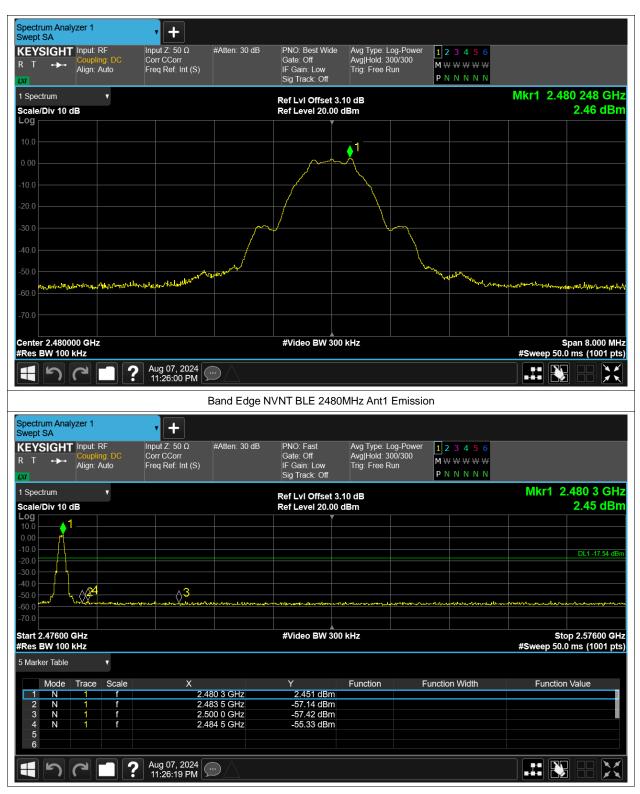
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-57.09	-20	Pass
NVNT	BLE	2480	Ant1	-57.79	-20	Pass



			Test Gra	phs				
		Band Edge	e NVNT BLE 2	2402MHz An	t1 Ref			
Spectrum Analyzer 1 Swept SA	• +							
KEYSIGHT Input: RF R T ↔ Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	#Atten: 30 dB	PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off	e Avg Type: Lo Avg Hold: 30 Trig: Free Ri	00/300 M	2 3 4 5 6 ₩₩₩₩₩ N N N N N		
1 Spectrum v			Ref LvI Offset				Mkr1 2.4	02 248 GHz
Scale/Div 10 dB Log			Ref Level 20.0	0 dBm				1.75 dBm
10.0				1				
0.00				~~~~				
-10.0								
-20.0			/					
-30.0			/					
-40.0		/						
-50.0		1 draf manager			- Lawrow	M Lalaman.		
-60.0	All working war all	4 .			<u>ن</u> ا	and and a second and	when the second s	http://www.commenters/htm
-70.0								
Center 2.402000 GHz #Res BW 100 kHz			#Video BW 3	00 kHz				Span 8.000 MHz .0 ms (1001 pts)
	Aug 07, 2024 11:20:41 PM	\mathbf{O}						3 🔀
	В	and Edge N	VNT BLE 240)2MHz Ant1	Emission			
Spectrum Analyzer 1 Swept SA	в • +	and Edge N	VNT BLE 240	02MHz Ant1	Emission			
Swept SA KEYSIGHT Input: RF Coupling: DC Align: Auto	• +	and Edge N #Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low	O2MHz Ant1 Avg Type: La Avg[Hold: 30 Trig: Free R	og-Power <u>1</u> 00/300 M [±] un M [±]	23456 ₩₩₩₩₩ NNNNN		
Swept SA KEYSIGHT Input: RF R T Coupling: DC	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off	Avg Type: Lo Avg Hold: 30 Trig: Free Ri 3.06 dB	og-Power <u>1</u> 00/300 M [±] un M [±]		Mkr1 2	2.402 3 GHz 1.71 dBm
Swept SA KEYSIGHT R T Align: Auto I Spectrum Scale/Div 10 dB Log 10.0	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Lo Avg Hold: 30 Trig: Free Ri 3.06 dB	og-Power <u>1</u> 00/300 M [±] un M [±]	₩₩₩₩₩	Mkr1 2	
Swept SA KEYSIGHT R T → Align: Auto 1 Spectrum Scale/Div 10 dB	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Lo Avg Hold: 30 Trig: Free Ri 3.06 dB	og-Power <u>1</u> 00/300 M [±] un M [±]	₩₩₩₩₩	Mkr1 2	1.71 dBm
Sivept SA KEYSIGHT Input: RF Coupling: DC. Align: Auto I Spectrum ▼ Scale/Div 10 dB Log 10.0 -20.0	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Lo Avg Hold: 30 Trig: Free Ri 3.06 dB	og-Power <u>1</u> 00/300 M [±] un M [±]	₩₩₩₩₩	Mkr1 2	
Sivept SA Input: RF R T → Auto 1 Spectrum ▼ Scale/Div 10 dB 0.00 0.00 -10.0 - - -20.0 - - -40.0 - -	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Lo Avg Hold: 30 Trig: Free Ri 3.06 dB	og-Power 1 10/300 M un P	₩₩₩₩₩		1.71 dBm
Sivept SA Input: RF R T → Auto I Spectrum ▼ Scale/Div 10 dB ▼ 10.0 − − − -20.0 − − − -30.0 − − − -60.0 − − −	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Lo Avg Hold: 30 Trig: Free Ri 3.06 dB	og-Power <u>1</u> 00/300 M [±] un M [±]	₩₩₩₩₩	Mkr1 2	1.71 dBm
Sivept SA Input: RF R T → Auto 1 Spectrum ▼ Scale/Div 10 dB 0 0 10.0 0 0 -20.0 0 0 -30.0 0 0	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Lo Avg Hold: 30 Trig: Free Ra 3.06 dB 0 dBm	og-Power 1 10/300 M un P	₩₩₩₩₩	, <u>}3</u>	1.71 dBm
Swept SA Input: RF R T	Input Z: 50 Ω Corr CCorr		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset Ref Level 20.0	Avg Type: Lo Avg Hold: 30 Trig: Free Ra 3.06 dB 0 dBm	og-Power 1 10/300 M un P	₩₩₩₩₩	, <u>}3</u>	1.71 dBm
Sivept SA KEYSIGHT Input: RF R T → Align: Auto I Spectrum ▼ Scale/Div 10 dB ■ Log ■ ■ 100 ■ ■ -20.0 ■ ■ -30.0 ■ ■ -40.0 ■ ■ -50.0 ■ ■ ■ Start 2.30600 GHz #Res BW 100 kHz ▼ 5 Marker Table ▼	The second secon	#Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.0	Avg Type: Lo Avg Hold: 30 Trig: Free Ri 3.06 dB 0 dBm 0 dBm 00 kHz	20g-Power 1 10/300 M un P	₩₩₩₩₩	,3	1.71 dBm
Sivept SA KEYSIGHT Input: RF R T → Coupling: DC I Spectrum ▼ Scale/Div 10 dB Log 0 0 0 10.0 0 0 0 -20.0 0 0 0 -30.0 -40.0 -40.0 -40.0 -70.0	Liput 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 Ref Level 20.0 #Video BW 3 #Video BW 3	Avg Type: Lo Avg Hold: 30 Trig: Free Ri 3.06 dB 0 dBm 0 dBm 0 dBm	20g-Power 1 10/300 M un P	W W W W W N N N N N N 	,3	1.71 dBm
Sivept SA KEYSIGHT Input: RF R T → Auto 1 Spectrum ▼ Scale/Div 10 dB Output: RF Log ✓ Scale/Div 10 dB ✓ Scale/Div 10 dB 20.0 ✓ ✓ Scale/Div 10 dB ✓ 30.0 ✓ ✓ Scale/Div 10 dB ✓ 50.0 ✓ ✓ ✓ ✓ Start 2.30600 GHz #Res BW 100 kHz ✓ ✓ Mode Trace Scale ✓ Mode Trace Scale ✓	X 2.400 2.300 Corr CCorr Freq Ref: Int (S)	#Atten: 30 dB	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.0 #Video BW 3 #Video BW 3	Avg Type: La AvgHold: 30 Trig: Free Ra 3.06 dB 0 dBm 0 dBm 0 kHz	20g-Power 1 10/300 M un P	W W W W W N N N N N N 	,3	1.71 dBm
Sivept SA Input: RF R T → Input: RF Quart Quart Quart Quart 1 Spectrum v Scale/Div 10 dB Quart Quart <th< td=""><td>X 2.400 2.300 Corr CCorr Freq Ref: Int (S)</td><td>#Atten: 30 dB</td><td>PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset Ref Level 20.0 #Video BW 3 #Video BW 3</td><td>Avg Type: La AvgHold: 30 Trig: Free Ra 3.06 dB 0 dBm 0 dBm 0 kHz</td><td>20g-Power 1 10/300 M un P</td><td>W W W W W N N N N N N </td><td>,3</td><td>1.71 dBm</td></th<>	X 2.400 2.300 Corr CCorr Freq Ref: Int (S)	#Atten: 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: La AvgHold: 30 Trig: Free Ra 3.06 dB 0 dBm 0 dBm 0 kHz	20g-Power 1 10/300 M un P	W W W W W N N N N N N 	,3	1.71 dBm







Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-50.39	-20	Pass
NVNT	BLE	2442	Ant1	-52.8	-20	Pass
NVNT	BLE	2480	Ant1	-51.35	-20	Pass



				Test Graph	IS				
			Tx. Spuriou	s NVNT BLE 2	402MHz Ant1	Ref			
Spectrum Analyzer 1 Swept SA		• +							
	: RF ling: DC : Auto	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-Pe Avg Hold: 300/30 Trig: Free Run	00 M	2 3 4 5 6 ₩₩₩₩₩ N N N N N		
1 Spectrum	•			Ref LvI Offset 3.				Mkr1 2.40	2 249 0 GHz 1.71 dBm
Scale/Div 10 dB				Ref Level 20.00	JBM				
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-10.0								- manual	
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-40.0									
-50.0									
-60.0									
-70.0									
Center 2.4020000 G	47			#Video BW 300	kU7				Span 1.500 MHz
#Res BW 100 kHz								Sweep 1.0	00 ms (1001 pts)
ک ل	2	Aug 07, 2024 11:21:06 PM	\square						
		-	Tx. Spurious N	IVNT BLE 2402	2MHz Ant1 En	nission			
Spectrum Analyzer 1 Swept SA		• +							
KEYSIGHT Input	RF	Input Z: 50 Ω	#Atten: 30 dB	PNO: Fast Gate: Off	Avg Type: Log-P	ower <mark>1</mark>	23456		
R T ↔ Align:	ling: DC : Auto	Corr CCorr Freq Ref: Int (S)		IF Gain: Low Sig Track: Off	Avg Hold: 10/10 Trig: Free Run		₩₩₩₩₩ N N N N N		
1 Spectrum	•			Ref LvI Offset 3.	06 dB			Mkr1	2.402 GHz
Scale/Div 10 dB Log				Ref Level 20.00					-0.83 dBm
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-10.0									DL1 -18.29 dBm
-30.0									5
-40.0		2	} <mark>3 </mark>	and an advertise of the second states	A some for sorts a shorts		terner helenomenter	مى مەرمىيە مەرمىيە مەرمىيە مەرمى	mannanterheader
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-50.0 -60.0 rollor manufacture -70.0	An sere of the series			#Video BW 300	kHz	₩ ₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩ ₩₩₩₩₩₩		Sweep ~	Stop 25.00 GHz 2.49 s (1001 pts)
-50.0 -60.0 -70.0 Start 30 MHz #Res BW 100 kHz 5 Marker Table Mode Trace		X		Y	kHz	Func	tion Width		
-50 0 -60 0 -70 0 Start 30 MHz #Res BW 100 kHz 5 Marker Table Mode Trace 1 N 1 2 N 1	e Scale f f	X	2.402 GHz 1.824 GHz 1.824 GHz 1.711 GHz	Y -0.8334 dBm -53.69 dBm		Func	tion Width		2.49 s (1001 pts)
-500 -600	e Scale f f f f f	X	1.824 GHz 7.171 GHz 9.469 GHz	Y -0.8334 dBm -53.69 dBm -54.40 dBm -55.05 dBm		Func	ion Width		2.49 s (1001 pts)
-50.0 -60.0 -70.0 Start 30 MHz #Res BW 100 kHz 5 Marker Table Mode Trace 1 N 1 2 N 1 3 N 1	e Scale f f f	X	1.824 GHz 7.171 GHz	Y -0.8334 dBm -53.69 dBm -54.40 dBm		Func	ion Width		2.49 s (1001 pts)
-50.0 -60.0 -70.0 Start 30 MHz #Res BW 100 kHz 5 Marker Table Mode Trace 1 N 1 2 N 1 3 N 1 4 N 1 5 N 1	e Scale f f f f f	X 22	1.824 GHz 7.171 GHz 9.469 GHz	Y -0.8334 dBm -53.69 dBm -54.40 dBm -55.05 dBm		Func	ion Width		2.49 s (1001 pts) on Value







