

Test Data

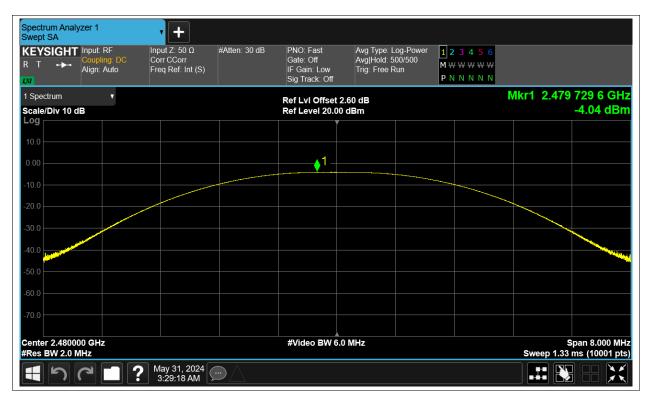
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	-4.542	30	Pass
NVNT	BLE	2442	Ant1	-3.316	30	Pass
NVNT	BLE	2480	Ant1	-4.038	30	Pass



			Test Gra					
		Power	r NVNT BLE 2	2402MHz Ant	t1			
Spectrum Analyzer 1 Swept SA	• +							
KEYSIGHT Input: RF R T ↔ 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: Lo Avg Hold: 50 Trig: Free Ri	00/500 M ₩	2 3 4 <mark>5 6</mark> / \v \v \v \v I N N N N		
1 Spectrum V			Ref LvI Offset				Mkr1 2.402	263 2 GHz -4.54 dBm
Scale/Div 10 dB			Ref Level 20.0	JU ABM				-4.34 UDIII
10.0								
0.00				↓ 1				
-10.0								
-20.0								
-30.0								
-40.0								
-50.0								
-60.0								
-70.0								
Center 2.402000 GHz #Res BW 2.0 MHz			#Video BW 6	5.0 MHz				Span 8.000 MHz ms (10001 pts)
	May 31, 2024 3:24:10 AM)						
		Power	r NVNT BI E :	2442MHz Ant	t1			
Spectrum Analyzer 1		Power	r NVNT BLE 2	2442MHz Ant	t1			
Swept SA	τ + Input Z: 50 Ω	Power #Atten: 30 dB	r NVNT BLE 2	Avg Type: Lo	og-Power 12	3456		
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF R T	, +				og-Power <u>1</u> 2 00/500 M.₩	2 3 4 5 6 7₩₩₩₩ I N N N N		
Swept SA KEYSIGHT 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 Ri 2.58 dB	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩ I N N N N	Mkr1 2.442	
Swept SA KEYSIGHT 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 Ri 2.58 dB	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩ I N N N N		287 2 GHz
Swept SA KEYSIGHT R T Align: Auto VV 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: Lo Avg Hold: 50 Trig: Free Ri 2.58 dB	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩ I N N N N		287 2 GHz
Swept SA KEYSIGHT Input: RF R T Align: Auto 1 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: 50 Trig: Free Ri 2.58 dB 00 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩ I N N N N		287 2 GHz
Swept SA KEYSIGHT Input: RF Coupling: DC Align: Auto VV I 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: Lo Avg Hold: 50 Trig: Free Ri 2.58 dB 00 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩ I N N N N		287 2 GHz
Swept SA KEYSIGHT Input: RF R T Ispectrum Scale/Div 10 dB Cog 10.0 0.00 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: 50 Trig: Free Ri 2.58 dB 00 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩ I N N N N		287 2 GHz
Swept SA KEYSIGHT Input: RF R T → Align: Auto V/r Scale/Div 10 dB V Scale/Div 10 dB 0.00 0.00 0.00 10.0 0.00 0.00 0.00 0.00 20.0 0.00 0.00 0.00 0.00 0.00	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 Ri 2.58 dB 00 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩ I N N N N		287 2 GHz
Swept SA KEYSIGHT Input: RF R T Coupling: DC I Spectrum Y Scale/Div 10 dB O Log I I 10.0 I I -20.0 I I I	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 Ri 2.58 dB 00 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩ I N N N N		287 2 GHz
Swept SA KEYSIGHT Input: RF R T T I Spectrum V Scale/Div 10 dB O 10.0 O O -10.0 O O -30.0 O O	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 Ri 2.58 dB 00 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩ I N N N N		287 2 GHz
Swept SA KEYSIGHT Input: RF: R T T I Spectrum Y Scale/Div 10 dB Imput: RF: Log Imput: RF: 10.0 Imput: RF: 20.0 Imput: RF: 30.0 Imput: RF: 40.0 Imput: RF: State Imput: RF: I Spectrum Y Scale Imput: RF: Scale Imput: RF: I Spectrum Y Scale Imput: RF: I Spectrum Y I Spectrum Y I Spectrum Imput: RF: I Spectrum Y I Spectrum Imput: RF: I Spectrum Imput:	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 Ri 2.58 dB 00 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩ I N N N N		287 2 GHz
Swept SA KEYSIGHT Input: RF R T T I Spectrum V Scale/Div 10 dB O 10.0 O O -10.0 O O -30.0 O O O -60.0 O O O	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 Ri 2.558 dB 00 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩ I N N N N	Mkr1 2.442	2 287 2 GHz -3.32 dBm
Swept SA KEYSIGHT Input: RF R T T I Spectrum V Scale/Div 10 dB O Log Imput: RF 10.0 Imput: RF Scale/Div 10 dB Imput: RF Log Imput: RF Imput: RF Imput: RF Scale/Div 10 dB Imput: RF Log Imput: RF Imput: RF Imput: RF Scale/Div 10 dB Imput: RF Log Imput: RF Imput: RF Scale/Div 10 dB Imput: RF Imput: RF Imput: RF Scale/Div 10 dB Imput: RF Imput: RF Imput: RF <tr< td=""><td>Input Z: 50 Q Corr CCorr Freq Ref: Int (S)</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 Ri 2.558 dB 00 dBm</td><td>og-Power <u>1</u>2 00/500 M.₩</td><td>/₩₩₩₩ I N N N N</td><td>Mkr1 2.442</td><td>287 2 GHz</td></tr<>	Input Z: 50 Q Corr CCorr Freq Ref: Int (S)		PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset	Avg Type: Lo Avg Hold: 50 Trig: Free Ri 2.558 dB 00 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩ I N N N N	Mkr1 2.442	287 2 GHz
Swept SA KEYSIGHT Input: RF R T T I Spectrum V Scale/Div 10 dB O Log Imput: RF 10.0 Imput: RF Scale/Div 10 dB Imput: RF Log Imput: RF Imput: RF Imput: RF Scale/Div 10 dB Imput: RF Log Imput: RF Imput: RF Imput: RF Scale/Div 10 dB Imput: RF Log Imput: RF Imput: RF Scale/Div 10 dB Imput: RF Imput: RF Imput: RF Scale/Div 10 dB Imput: RF Imput: RF Imput: RF <tr< td=""><td>Input Z 50 Ω Corr CCorr Freq Ref. Int (S)</td><td></td><td>PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref Level 20.0</td><td>Avg Type: Lo Avg Hold: 50 Trig: Free Ri 2.558 dB 00 dBm</td><td>og-Power <u>1</u>2 00/500 M.₩</td><td>/₩₩₩₩ I N N N N</td><td>Mkr1 2.442</td><td>287 2 GHz -3.32 dBm</td></tr<>	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 Ri 2.558 dB 00 dBm	og-Power <u>1</u> 2 00/500 M.₩	/₩₩₩₩ I N N N N	Mkr1 2.442	287 2 GHz -3.32 dBm







-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	limit	Verdic
NVNT	BLE	2402	Ant1	0.682	0.5	Pass
NVNT	BLE	2442	Ant1	0.681	0.5	Pass
NVNT	BLE	2480	Ant1	0.681	0.5	Pass







Spectrum Ana Occupied BW		• +					
KEYSIGH [™] R T +→-•	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 Freq: 2.48000000 GHz Avg Hold: 1000/1000 Radio Std: None		
1 Graph	•			Ref LvI Offset 2.0	60 dB	Mkr3 2.48034	
Scale/Div 10.	0 dB			Ref Value 22.60 (dBm	-1	3.60 dBm
Log 12.6							
2.60				<u>├</u> \1	3		
-7.40			2		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
-17.4			and the second se				
-37.4							
-47.4							
-57.4							
-67.4							
Center 2.4800 #Res BW 100				#Video BW 300.0	0 KHZ	Sweep 1.33 m	Span 2 MHz Is (10001 pts)
2 Metrics	•						
	Occupied Ba	andwidth					
		1.0585 MHz			Total Power	-1.10 dBm	
	Transmit Fre		4.418 kHz		% of OBW Power	99.00 %	
	x dB Bandwi	idth	681.1 kHz		x dB	-6.00 dB	
<u>+</u> 5		May 31, 2024 3:29:45 AM					



Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE	2402	Ant1	1.056
NVNT	BLE	2442	Ant1	1.056
NVNT	BLE	2480	Ant1	1.056











Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	-10.863	8	Pass
NVNT	BLE	2442	Ant1	-9.618	8	Pass
NVNT	BLE	2480	Ant1	-10.349	8	Pass



	Test Graphs	
	PSD NVNT BLE 2402MHz Ant1	
Spectrum Analyzer 1	+	
KEYSIGHT Input: RF Input Z R T Coupling: DC Corr CO		「 <u>1</u> 23456 M₩₩₩₩₩ PNNNNN
1 Spectrum 🔻	Ref LvI Offset 2.56 dB	Mkr1 2.402 253 5 GHz
Scale/Div 10 dB	Ref Level 20.00 dBm	-10.86 dBm
-10.0		
-30.0 -40.0 -50.0	where the second s	MAP CONTRACT
-60.0	#Video BW 10 kHz	Span 3.000 MHz
#Res BW 3.0 kHz	31 2024	Sweep 316 ms (2001 pts)
	31, 2024 :15 AM	
	PSD NVNT BLE 2442MHz Ant1	
Construm Anglungs (
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF Input Z Coupling: DC Corr CC	PSD NVNT BLE 2442MHz Ant1 + . 50 Ω #Atten: 30 dB PNO: Best Wide Avg Type: Log-Powe	ſ <u>1</u> 23456 M₩₩₩₩₩ P N N N N N
Spectrum Analyzer 1 Swept SA KEYSIGHT R T + Auto I Spectrum I Spectrum	PSD NVNT BLE 2442MHz Ant1 SO Ω FAtten: 30 dB PNO: Best Wide Gate: Off Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset 2.58 dB	r 123456 M₩₩₩₩₩ PNNNNN Mkr1 2.442 253 5 GHz
Spectrum Analyzer 1 Swept SA KEYSIGHT R T → Aign: Auto I Spectrum Scale/Div 10 dB	PSD NVNT BLE 2442MHz Ant1 • • • • • • • • •	ſ <u>1</u> 23456 M₩₩₩₩₩ P N N N N N
Spectrum Analyzer 1 Swept SA KEYSIGHT Input: RF R T ↔ Align: Auto 1 Spectrum Scale/Div 10 dB	PSD NVNT BLE 2442MHz Ant1 SO Ω FAtten: 30 dB PNO: Best Wide Gate: Off Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset 2.58 dB	r 123456 MWWWWW PNNNNN Mkr1 2.442 253 5 GHz
Spectrum Analyzer 1 Swept SA KEYSIGHT R T ↔ Align: Auto I Spectrum Scale/Div 10 dB Log 10.0 0.00	PSD NVNT BLE 2442MHz Ant1 SO Ω FAtten: 30 dB PNO: Best Wide Gate: Off Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset 2.58 dB	r 123456 M₩₩₩₩₩ PNNNNN Mkr1 2.442 253 5 GHz
Spectrum Analyzer 1 ✓ Swept SA Input: RF R T → Coupling: DC Align: Auto Freq R VV Scale/Div 10 dB Log — 10.0 — -20.0 — -30.0 — -40.0 — -50.0 — -70.0 ✓	PSD NVNT BLE 2442MHz Ant1 So Ω Corr Corr ef: Int (S) #Atten: 30 dB PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset 2.58 dB Ref Level 20.00 dBm	r 1 2 3 4 5 6 M W W W W W P N N N N N Mkr1 2.442 253 5 GHz -9.62 dBm
Spectrum Analyzer 1 Swept SA KEYSIGHT Input Z R T → Coupling: DC Align: Auto I Spectrum Scale/Div 10 dB Log 10.0 -20.0 -30.0 -40.0 -50.0 -60.0 -70.0	PSD NVNT BLE 2442MHz Ant1 So Ω Corr ef: Int (S) #Atten: 30 dB PNO: Best Wide Gate: Off Gate: Off Sig Track: Off Ref Lvl Offset 2.58 dB Ref Level 20.00 dBm	r <u>1</u> 2 3 4 5 6 M W W W W W P N N N N N Mkr1 2.442 253 5 GHz -9.62 dBm
Spectrum Analyzer 1 Input: RF Swept SA Input: RF R T → August Auto 1 Spectrum Input: RF Scale/Div 10 dB Input: RF Log Input: RF 10.0 Input: RF 10.0 Input: RF 20.0 Input: RF -30.0 Input: RF -40.0 Input: RF -70.0 Input: RF Center 2.442000 GHz #Res BW 3.0 kHz	PSD NVNT BLE 2442MHz Ant1 So Ω Corr Corr ef: Int (S) #Atten: 30 dB PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off Ref Lvl Offset 2.58 dB Ref Level 20.00 dBm	r 1 2 3 4 5 6 M + + + + + + + P N N N N N Mkr1 2.442 253 5 GHz -9.62 dBm







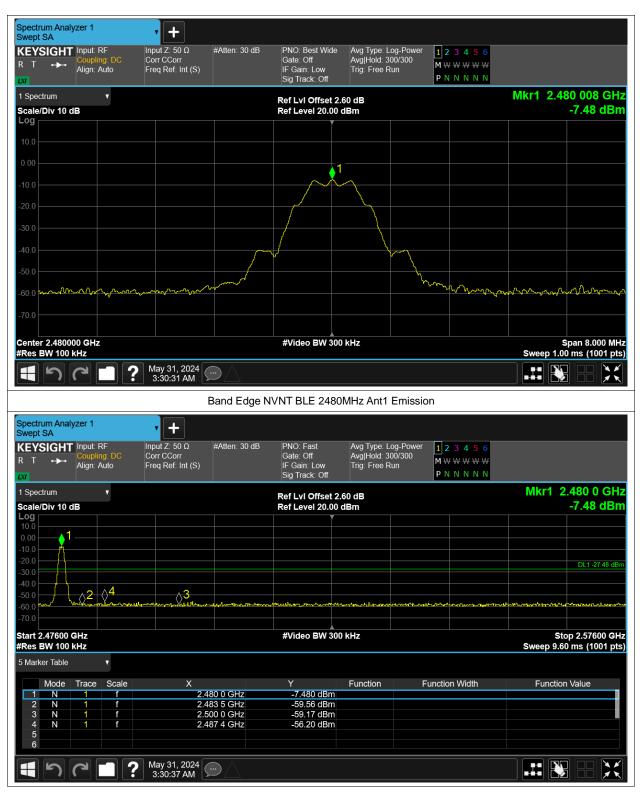
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-48.03	-20	Pass
NVNT	BLE	2480	Ant1	-48.72	-20	Pass



		Test Graphs	
	Band	d Edge NVNT BLE 2402MHz Ant1 Re	ef
Spectrum Analyzer 1 Swept SA	• +		
KEYSIGHT Input: RF R T ↔ Coupling. DC Align: Auto	Input Z: 50 Ω #Atten: 3 Corr CCorr Freq Ref: Int (S)	30 dB PNO: Best Wide Avg Type: Log-Pow Gate: Off Avg Hold: 300/300 IF Gain: Low Trig: Free Run Sig Track: Off	er 123456 M
1 Spectrum 🔹		Ref LvI Offset 2.56 dB	Mkr1 2.402 008 GHz
Scale/Div 10 dB Log		Ref Level 20.00 dBm	-8.03 dBm
10.0			
0.00		1	
-10.0			
-20.0			
-30.0			
-40.0		\sim	
-50.0			
-60.0 managenet	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		M. M
-70.0			
Center 2.402000 GHz		#Video BW 300 kHz	Span 8.000 MHz
#Res BW 100 kHz	May 31, 2024		Sweep 1.00 ms (1001 pts)
	May 31, 2024 AM		
	Band E	dge NVNT BLE 2402MHz Ant1 Emis	sion
Spectrum Analyzer 1 Swept SA	Band E	dge NVNT BLE 2402MHz Ant1 Emis	sion
Swept SA KEYSIGHT Input: RF R T Coupling: DC	Input Z: 50 Ω #Atten: S Corr CCorr	30 dB PNO: Fast Avg Type: Log-Pow Gate: Off Avg Hold: 300/300	er 123456
Swept SA		30 dB PNO: Fast Avg Type: Log-Pow	
Swept SA KEYSIGHT R T → Coupling: DC Align: Auto 1 Spectrum	Input Z: 50 Ω #Atten: S Corr CCorr	30 dB PNO: Fast Avg Type: Log-Pow Gate: Off Avg Hold: 300/300 IF Gain: Low Trig: Free Run Sig Track: Off Ref Lvl Offset 2.56 dB	er 123456 MWWWWW PNNNNN Mkr1 2.4020 GHz
Swept SA KEYSIGHT R T Align: Auto I Spectrum Scale/Div 10 dB Log	Input Z: 50 Ω #Atten: S Corr CCorr	30 dB PNO: Fast Avg Type: Log-Pow Gate: Off Avg Hold: 300/300 IF Gain: Low Trig: Free Run Sig Track: Off	er 123456 MWWWWW PNNNNN
Swept SA KEYSIGHT R T Input: RF Coupling: DC Align: Auto Scale/Div 10 dB Log 1.0.0	Input Z: 50 Ω #Atten: S Corr CCorr	30 dB PNO: Fast Avg Type: Log-Pow Gate: Off Avg Hold: 300/300 IF Gain: Low Trig: Free Run Sig Track: Off Ref Lvl Offset 2.56 dB	er 123456 MWWWWW PNNNNN Mkr1 2.4020 GHz
Swept SA KEYSIGHT Input: RF R T → Auto I Spectrum ▼ Scale/Div 10 dB ▼ Log 10.0 0 0 0 10.0 0 0 0 0 0 0	Input Z: 50 Ω #Atten: S Corr CCorr	30 dB PNO: Fast Avg Type: Log-Pow Gate: Off Avg Hold: 300/300 IF Gain: Low Trig: Free Run Sig Track: Off Ref Lvl Offset 2.56 dB	er 123456 MWWWWW PNNNNN Mkr1 2.4020 GHz
Swept SA KEYSIGHT Input: RF R T	Input Z: 50 Ω #Atten: S Corr CCorr	30 dB PNO: Fast Avg Type: Log-Pow Gate: Off Avg Hold: 300/300 IF Gain: Low Trig: Free Run Sig Track: Off Ref Level 20.00 dBm	er 1 2 3 4 5 6 M W W W W W P N N N N N Mkr1 2.402 0 GHz -8.01 dBm 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
Swept SA KEYSIGHT Input: RF R T Coupling: DC Align: Auto Align: Auto I Spectrum V Scale/Div 10 dB 0 10.0 0 -20.0 0 -30.0 0 -30.0 0 -60.0 0	Input Z: 50 Ω #Atten: S Corr CCorr	30 dB PNO: Fast Avg Type: Log-Pow Gate: Off Avg Hold: 300/300 IF Gain: Low Trig: Free Run Sig Track: Off Ref Lvl Offset 2.56 dB	er 123456 MWWWWW PNNNN Mkr1 2.4020GHz -8.01dBm
Swept SA KEYSIGHT Input: RF R T Coupling: DC I Spectrum V Scale/Div 10 dB V Scale/Div 10 dB Output 10.0 Output -20.0 Output -30.0 Output -40.0 Output	Input Z: 50 Ω #Atten: S Corr CCorr	30 dB PNO: Fast Avg Type: Log-Pow Gate: Off Avg Hold: 300/300 IF Gain: Low Trig: Free Run Sig Track: Off Ref Level 20.00 dBm	er 1 2 3 4 5 6 M W W W W W P N N N N N Mkr1 2.402 0 GHz -8.01 dBm 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
Swept SA KEYSIGHT Input: RF R T Coupling: DC Align: Auto I Spectrum V Scale/Div 10 dB Out Out Log I Out Out 10.0 Out Out Out -10.0 Out Out Out -20.0 Out Out Out -30.0 Out Out Out Out -70.0 Out Out Out Out Out Start 2.30600 GHz #Res BW 100 kHz Out Out Out Out	Input Z: 50 Ω #Atten: S Corr CCorr	30 dB PNO: Fast Avg Type: Log-Pow Gate: Off Avg Hold: 300/300 IF Gain: Low Trig: Free Run Sig Track: Off Ref LvI Offset 2.56 dB Ref Level 20.00 dBm	er [] 2 3 4 5 6 M W W W W W P N N N N N Mkr1 2.402 0 GHz -8.01 dBm 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
Swept SA KEYSIGHT Input: RF R T Input: RF Output: RF Output: RF Scale/Div 10 dB V Scale/Div 10 dB V I Spectrum V Scale/Div 10 dB V 20.0 Imput: RF 30.0 Imput: RF Start 2.30600 GHz Frees BW 100 kHz 5 Marker Table V	Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	30 dB PNO: Fast Avg Type: Log-Pow Gate: Off Avg Hold: 300/300 IF Gain: Low Trig: Free Run Sig Track: Off Ref Level 20.00 dBm Ref Level 20.00 dBm	er 1 2 3 4 5 6 M W W W W W P N N N N N Mkr1 2.402 0 GHz -8.01 dBm 0 1 0 1 0 1 0 1 2 0 dBm 4 5 top 2.40600 GHz Sweep 9.60 ms (1001 pts)
Swept SA KEYSIGHT Input: RF R T Coupling: DC Jign: Auto V Scale/Div 10 dB V Log 0 0 100 0 0 0 -10.0	X Linput Z: 50 Ω Corr CCorr Freq Ref: Int (S) #Atten: 3 #Atten: 3 #Atten: 4 #Atten: 4 #Att	30 dB PNO: Fast Gate: Off Avg Type: Log-Pow Avg Hold: 300/300 IF Gain: Low Trig: Free Run Sig Track: Off Ref Level 20.00 dBm Free Ref Level 20.00 dBm Free Run State Sta	er 1 2 3 4 5 6 M W W W W W P N N N N N Mkr1 2.402 0 GHz -8.01 dBm 0L1 -200 dBm 4 0L1 -200 dBm 4 Stop 2.40600 GHz
Swept SA KEYSIGHT Input: RF R T Coupling: DC Jign: Auto V Scale/Div 10 dB V Log 0 0 100 0 0 0 -10.0	X Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)	30 dB PNO: Fast Gate: Off Avg Type: Log-Pow Avg Hold: 300/300 IF Gain: Low Sig Track: Off Trig: Free Run Ref Lvl Offset 2.56 dB Ref Level 20.00 dBm #Video BW 300 kHz #Video BW 300 kHz Y Function 2 Y Function 2 -8.014 dBm 2 2 Y Function 2 -8.014 dBm	er 1 2 3 4 5 6 M W W W W W P N N N N N Mkr1 2.402 0 GHz -8.01 dBm 0 1 0 1 0 1 0 1 2 0 dBm 4 5 top 2.40600 GHz Sweep 9.60 ms (1001 pts)
Swept SA KEYSIGHT Input: RF R T → Auto 1 Spectrum ▼ Scale/Div 10 dB ■ Log 1 0 0 0 0.00 0 0 0 0 0.00 0 0 0 0 -0.00 0 0 0 0 -0.00 0 0 0 0 -0.00 0 0 0 0 -0.00 0 0 0 0 -0.00 0 0 0 0 -0.00 0 0 0 0 -0.00 0 0 0 0 -0.00 0 0 0 0 -0.00 0 0 0 0 -0.00 0 0 0 0 Start 2.30600 GHz # 0 0 1 1 Mode	X X 2.402 0 GHz 2.390 0 GHz	30 dB PNO: Fast Gate: Off Avg Type: Log-Pow Avg Hold: 300/300 IF Gain: Low Sig Track: Off Trig: Free Run Sig Track: Off Ref Level 20.00 dBm Ref Le	er 1 2 3 4 5 6 M W W W W W P N N N N N Mkr1 2.402 0 GHz -8.01 dBm 0 1 - 2 0 dBm 4 - 2 0 dBm 4 - 5 top 2.40600 GHz Stop 2.40600 GHz Stop 2.40600 GHz
Swept SA KEYSIGHT Input: RF R T → Auto 1 Spectrum ▼ Scale/Div 10 dB ■ Log 1 0 0 0 0.00 0 0 0 0 0	X X 2.402 0 GHz 2.390 0 GHz	30 dB PNO: Fast Gate: Off Avg Type: Log-Pow Avg Hold: 300/300 IF Gain: Low Sig Track: Off Trig: Free Run Sig Track: Off Ref Level 20.00 dBm Ref Le	er 1 2 3 4 5 6 M W W W W W P N N N N N Mkr1 2.402 0 GHz -8.01 dBm 0 1 - 2 0 dBm 4 - 2 0 dBm 4 - 5 top 2.40600 GHz Stop 2.40600 GHz Stop 2.40600 GHz







Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant1	-35.39	-20	Pass
NVNT	BLE	2442	Ant1	-43.14	-20	Pass
NVNT	BLE	2480	Ant1	-38.29	-20	Pass



			Test Graph			
-		Tx. Spuriou	s NVNT BLE 24	402MHz Ant1 Ref		
Spectrum Analyzer 1 Swept SA	• +					
KEYSIGHT Input: RF R T Align: Auto	Input Ζ: 50 Ω C 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 W W W W P N N N N N	
1 Spectrum v			Ref LvI Offset 2.	56 dB		Mkr1 2.402 003 0 GHz
Scale/Div 10 dB			Ref Level 20.00 o	dBm		-8.02 dBm
10.0						
0.00						
			↓ 1			
-10.0						
-20.0						
-30.0						
-40.0						
-50.0						
-60.0						
-70.0						
-10.0						
Center 2.4020000 GHz #Res BW 100 kHz			#Video BW 300	kHz		Span 1.500 MHz Sweep 1.00 ms (1001 pts)
1 500	May 31, 2024 3:25:33 AM	\odot				
	-	- O				
		Tx. Spurious N	IVNT BLE 2402	2MHz Ant1 Emissi	ion	
Spectrum Analyzer 1 Swept SA	• +	Γx. Spurious Ν	IVNT BLE 2402	2MHz Ant1 Emissi	ion	
Swept SA KEYSIGHT Input: RF Coupling: D	τ Input Z: 50 Ω	Fx. Spurious N #Atten: 30 dB	PNO: Fast	Avg Type: Log-Power	123456	
Swept SA KEYSIGHT R T Align: Auto	τ Input Z: 50 Ω	·	PNO: Fast Gate: Off IF Gain: Low		1 2 3 4 5 6 M ₩ ₩ ₩ ₩ ₩	
Swept SA KEYSIGHT Input: RF D T Coupling: D	Luput Z: 50 Ω C Corr CCorr	·	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run	123456	Mkr1 2.402 GHz
Swept SA KEYSIGHT R T ↔ I Spectrum Scale/Div 10 dB	Luput Z: 50 Ω C Corr CCorr	·	PNO: Fast Gate: Off IF Gain: Low	Avg Type: Log-Power Avg[Hold: 10/10 Trig: Free Run 56 dB	1 2 3 4 5 6 M ₩ ₩ ₩ ₩ ₩	Mkr1 2.402 GHz -8.01 dBm
Swept SA KEYSIGHT Input: RF R T ↔ Coupling D Align: Auto W 1 Spectrum ▼ Scale/Div 10 dB Log 10.0	Luput Z: 50 Ω C Corr CCorr	·	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.:	Avg Type: Log-Power Avg[Hold: 10/10 Trig: Free Run 56 dB	1 2 3 4 5 6 M ₩ ₩ ₩ ₩ ₩	
Swept SA KEYSIGHT R T J Pectrum V Scale/Div 10 dB	Luput Z: 50 Ω C Corr CCorr	·	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.:	Avg Type: Log-Power Avg[Hold: 10/10 Trig: Free Run 56 dB	1 2 3 4 5 6 M ₩ ₩ ₩ ₩ ₩	
Swept SA KEYSIGHT Input: RF R T ↔ Coupling D Align: Auto VV 1 Spectrum ▼ Scale/Div 10 dB Log 10.0 0.00 -10.0 -20.0	Luput Z: 50 Ω C Corr CCorr	·	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2.:	Avg Type: Log-Power Avg[Hold: 10/10 Trig: Free Run 56 dB	1 2 3 4 5 6 M ₩ ₩ ₩ ₩ ₩	
Swept SA Input: RF R T → Align: Auto INV Ispectrum V Scale/Div 10 dB 0 1 -200 -300 5	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 o	Avg Type: Log-Power Avg[Hold: 10/10 Trig: Free Run 56 dB	1 2 3 4 5 6 M ₩ ₩ ₩ ₩ ₩	
Swept SA Input: RF R T → I Spectrum V Scale/Div 10 dB Log 100 -10.0 -200 -30.0	Corr CCorr Freq Ref: Int (S)	·	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Ref LvI Offset 2. Ref Level 20.00 o	Avg Type: Log-Power Avg[Hold: 10/10 Trig: Free Run 56 dB	1 2 3 4 5 6 M ₩ ₩ ₩ ₩ ₩	
Swept SA Input: RF R T → Aign: Auto INV Ispectrum V Scale/Div 10 dB 0 0 100 -1 -1 -200 -5 -5 -300 -5 -5 -600 -700 -700	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 JBm	1 2 3 4 5 6 M ₩ ₩ ₩ ₩ ₩	-8.01 dBm
Swept SA KEYSIGHT Input: RF R T → Coupling: D I Spectrum ✓ Scale/Div 10 dB ✓ Scale/Div 10 dB ✓ ✓ ✓ 10.0 ✓ ✓ ✓	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 o	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB JBm	1 2 3 4 5 6 M ₩ ₩ ₩ ₩ ₩	
Swept SA KEYSIGHT Input: RF R T T I Spectrum V Scale/Div 10 dB 0 100 1 1 100 1 1 100 1 1 100 1 1 1 100 1 1 1 100 1 1 1 1 100 1	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 JBm	1 2 3 4 5 6 M ₩ ₩ ₩ ₩ ₩	-8.01 dBm
Swept SA KEYSIGHT R T Input: RF Coupling: D Align: Auto I Spectrum V Scale/Div 10 dB Log 100 -00 -00 -00 -00 -00 -00 -00	C 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 A Ref Level 20.000 A Wideo BW 300 Y	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB 1Bm	1 2 3 4 5 6 M ₩ ₩ ₩ ₩ ₩	-8.01 dBm
Swept SA KEYSIGHT Input: RF R T T I Spectrum V Align: Auto Scale/Div 10 dB Out I Log 1 I I 10.0 I I I Scale/Div 10 dB I I I 20.0 I I I I 20.0 I I I I I Scale/Div 10 dB I I I I I 20.0 I <thi< th=""> I I <thi< th=""></thi<></thi<>	e 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 #Video BW 300 #Video BW 300	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB 1Bm		-8.01 dBm
Swept SA KEYSIGHT Input: RF R T → Augn: Auto I Spectrum ▼ Scale/Div 10 dB ↓ Log ↓ ↓ 100 ↓ ↓ -00 ↓ ↓ ↓ -00 ↓ ↓ ↓ -00 ↓ ↓ ↓ -00 ↓ ↓ ↓ -00 ↓ ↓ ↓ -00 ↓ ↓ ↓ -00 ↓ ↓ ↓ -00 ↓ ↓ ↓ -00 ↓ ↓ ↓ -00 ↓ ↓ ↓ -00 ↓ ↓ ↓ -00 ↓ ↓ ↓ -00 ↓ ↓ ↓ Start 30 MHz ↓ ↓ ↓ Mode Trace Sc 1 ↓ ↓	e 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 0 #Video BW 300 #Video BW 300	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB 1Bm		-8.01 dBm
Swept SA KEYSIGHT R T Date of the second sec	e 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 #Video BW 300 #Video BW 300	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB 1Bm		-8.01 dBm
Swept SA KEYSIGHT Input: RF R T I Spectrum V Align: Auto I Spectrum V Scale/Div 10 dB Log 1 100 1 -200 1 -30.0 5 -40.0 5 -70.0 Start 30 MHz #Res BW 100 kHz Mode Trace Sc 1 1 A N 1	C 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 # #Video BW 300 #Video BW 300 Y -8.012 dBm -54.13 dBm -55.22 dBm	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB 1Bm		-8.01 dBm
Swept SA KEYSIGHT R T Date of the second sec	e 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 0 #Video BW 300 *Video BW 300 Y -54.13 dBm -54.13 dBm -55.12 dBm -55.22 dBm	Avg Type: Log-Power Avg Hold: 10/10 Trig: Free Run 56 dB 1Bm	1 2 3 4 5 6 M W W W W W W P N N N N N Image: Imag	-8.01 dBm







