

Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: Smart watch

Test Model: L8

Environmental Conditions

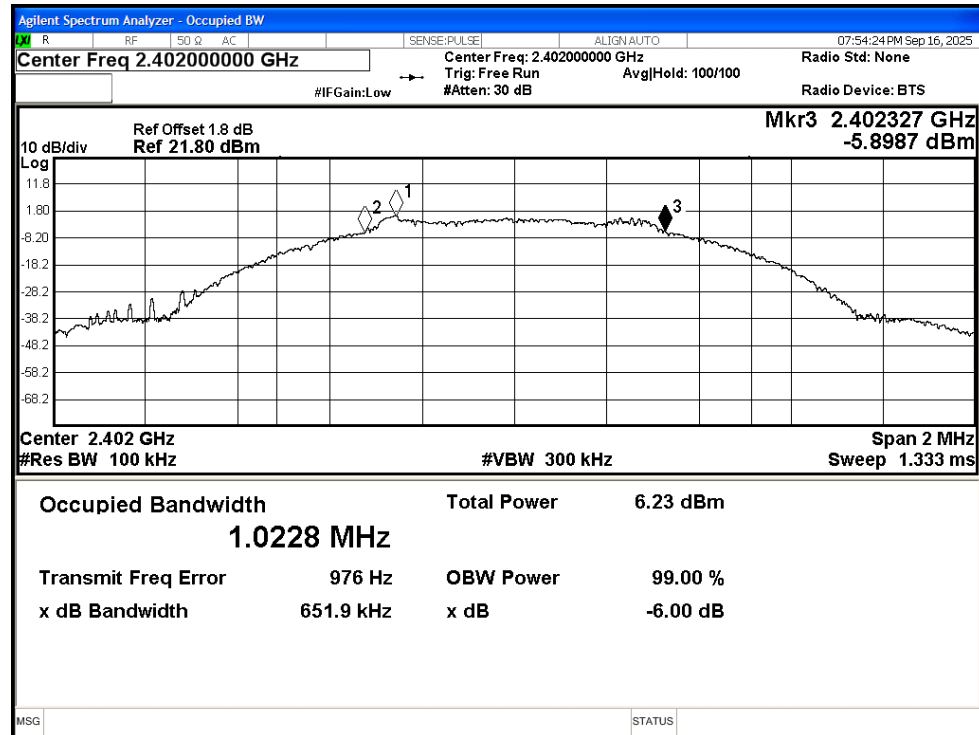
Temperature:	23.8°C
Relative Humidity:	52.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Suichao Lai
Supervised by:	Yan Chen

B.1 -6dB Bandwidth

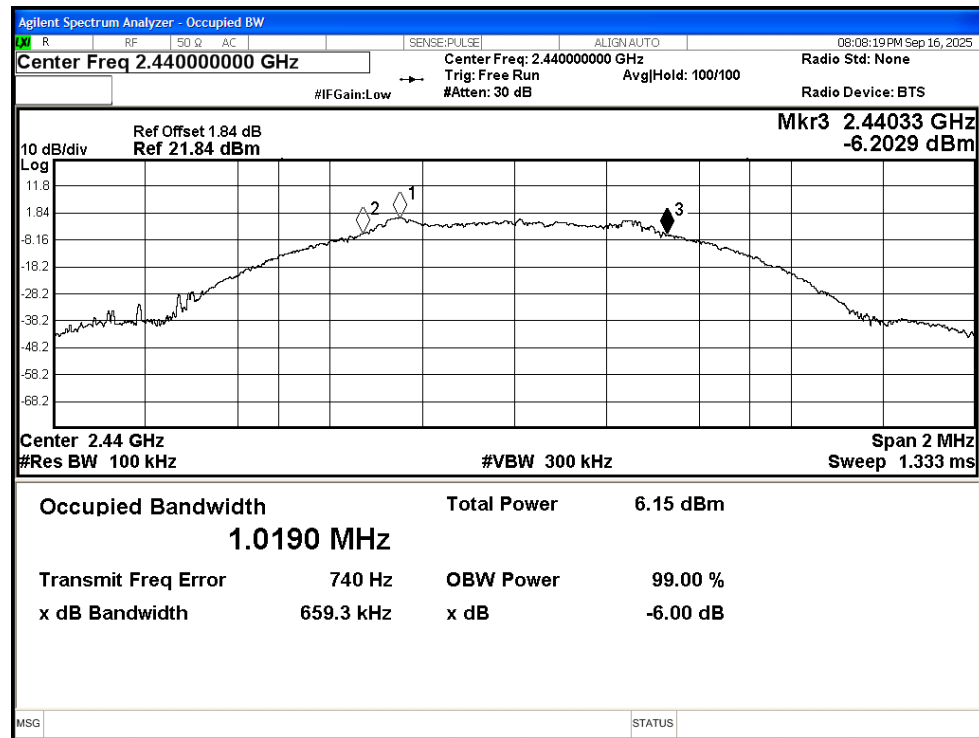
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant	0.652	≥ 0.5	Pass
NVNT	BLE 1M	2440	Ant	0.659	≥ 0.5	Pass
NVNT	BLE 1M	2480	Ant	0.654	≥ 0.5	Pass
NVNT	BLE 2M	2402	Ant	1.17	≥ 0.5	Pass
NVNT	BLE 2M	2440	Ant	1.134	≥ 0.5	Pass
NVNT	BLE 2M	2480	Ant	1.164	≥ 0.5	Pass

Test Graphs

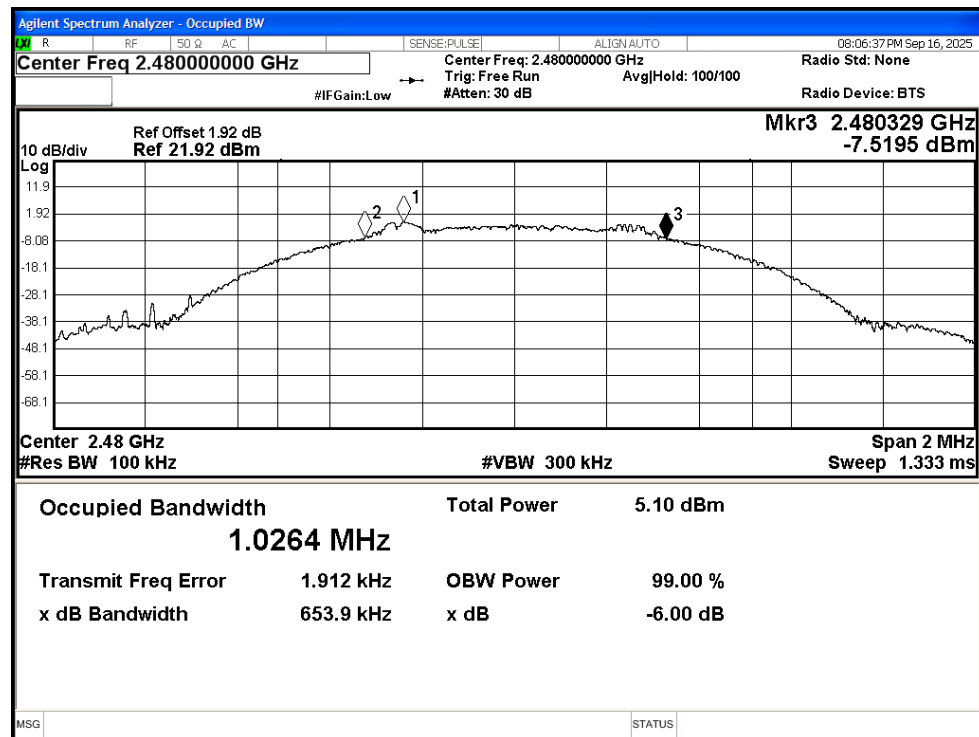
-6dB Bandwidth NVNT BLE 1M 2402MHz Ant



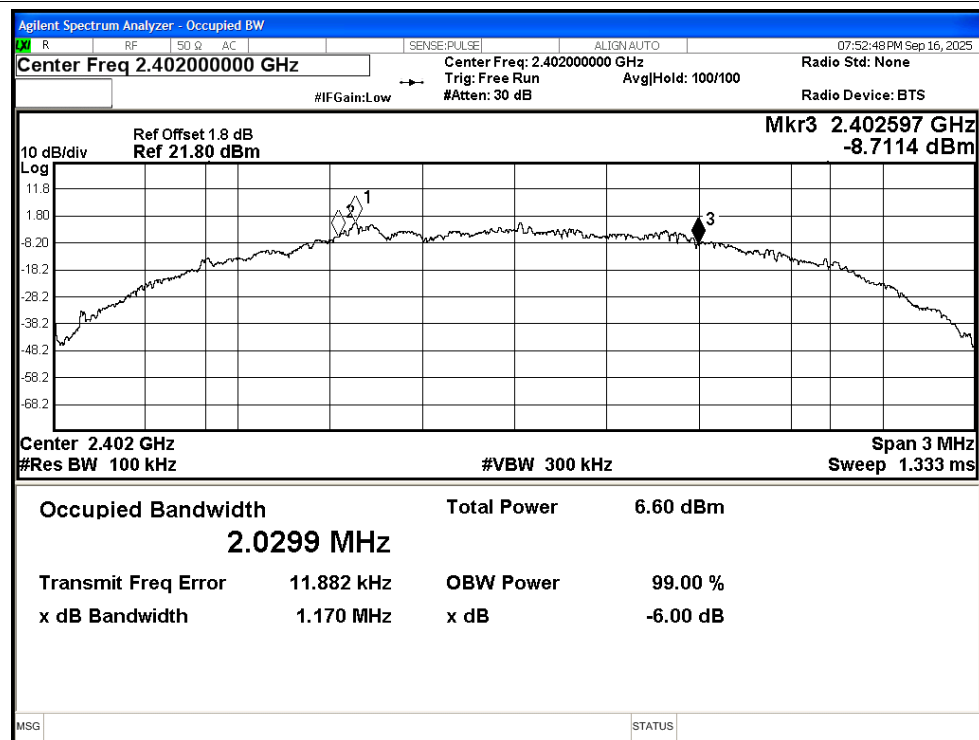
-6dB Bandwidth NVNT BLE 1M 2440MHz Ant



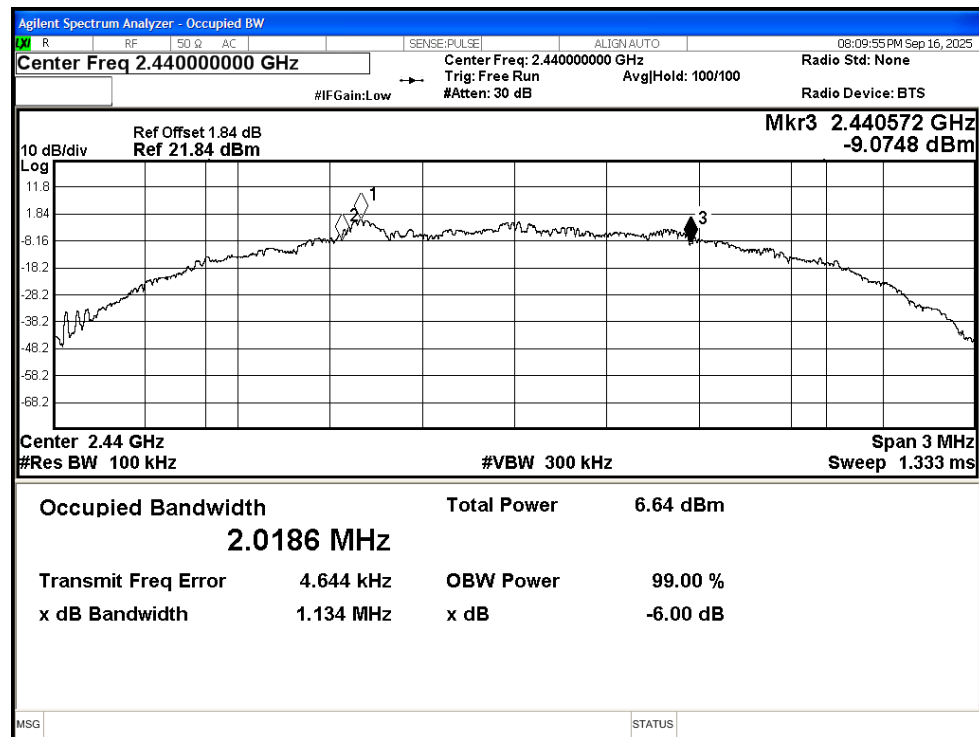
-6dB Bandwidth NVNT BLE 1M 2480MHz Ant



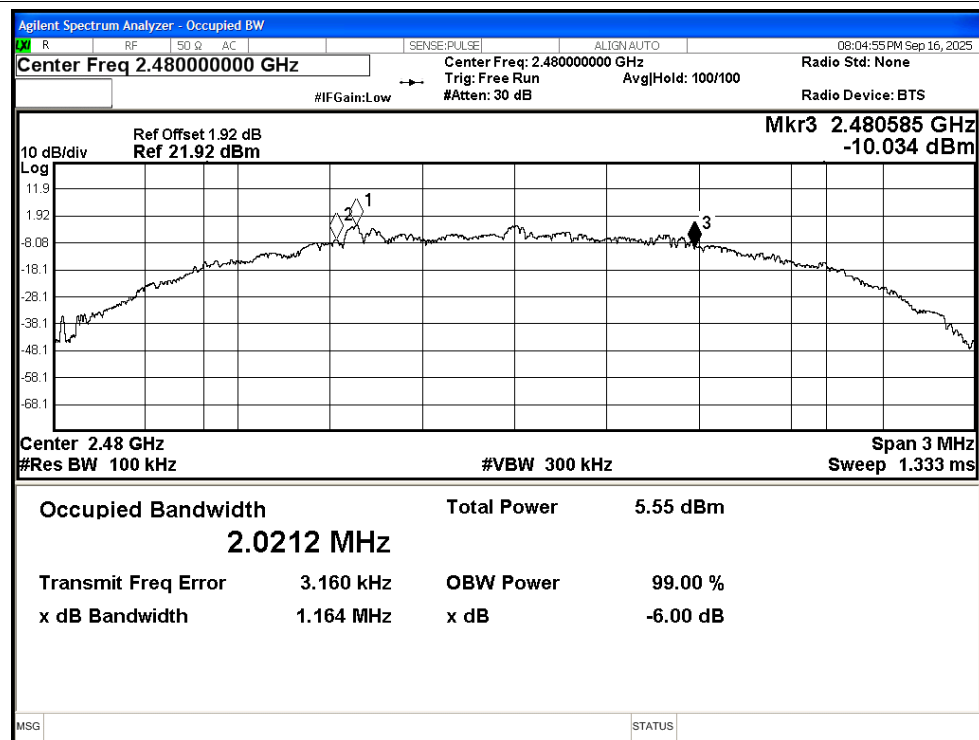
-6dB Bandwidth NVNT BLE 2M 2402MHz Ant



-6dB Bandwidth NVNT BLE 2M 2440MHz Ant



-6dB Bandwidth NVNT BLE 2M 2480MHz Ant

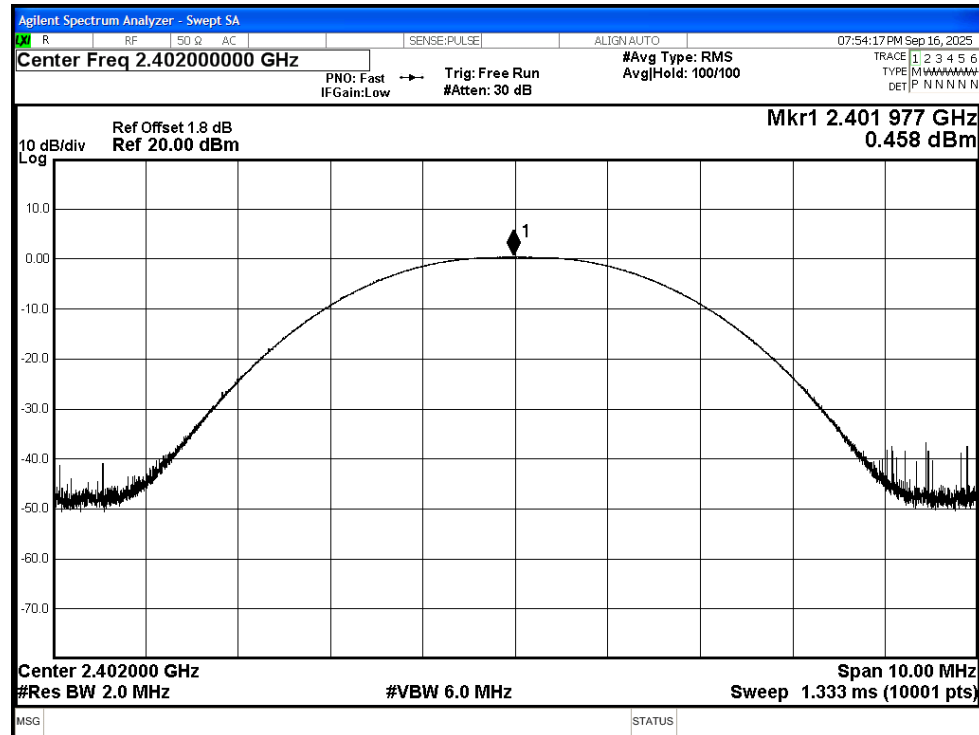


B.2 Maximum Peak Conducted Output Power

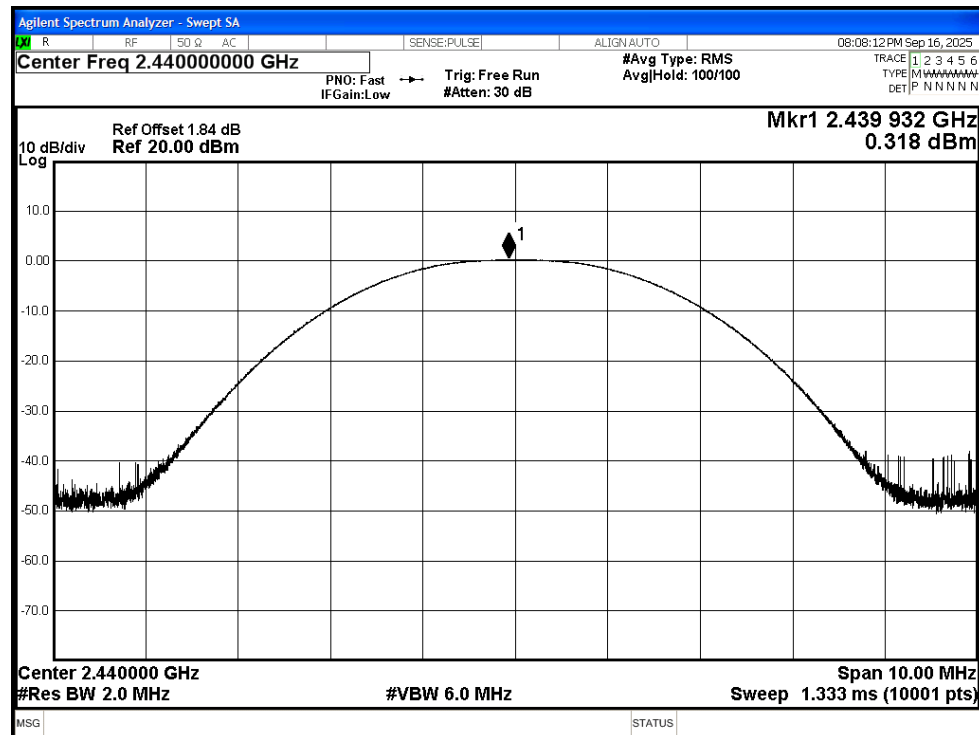
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant	0.46	30	Pass
NVNT	BLE 1M	2440	Ant	0.32	30	Pass
NVNT	BLE 1M	2480	Ant	-0.58	30	Pass
NVNT	BLE 2M	2402	Ant	0.28	30	Pass
NVNT	BLE 2M	2440	Ant	0.15	30	Pass
NVNT	BLE 2M	2480	Ant	-0.76	30	Pass

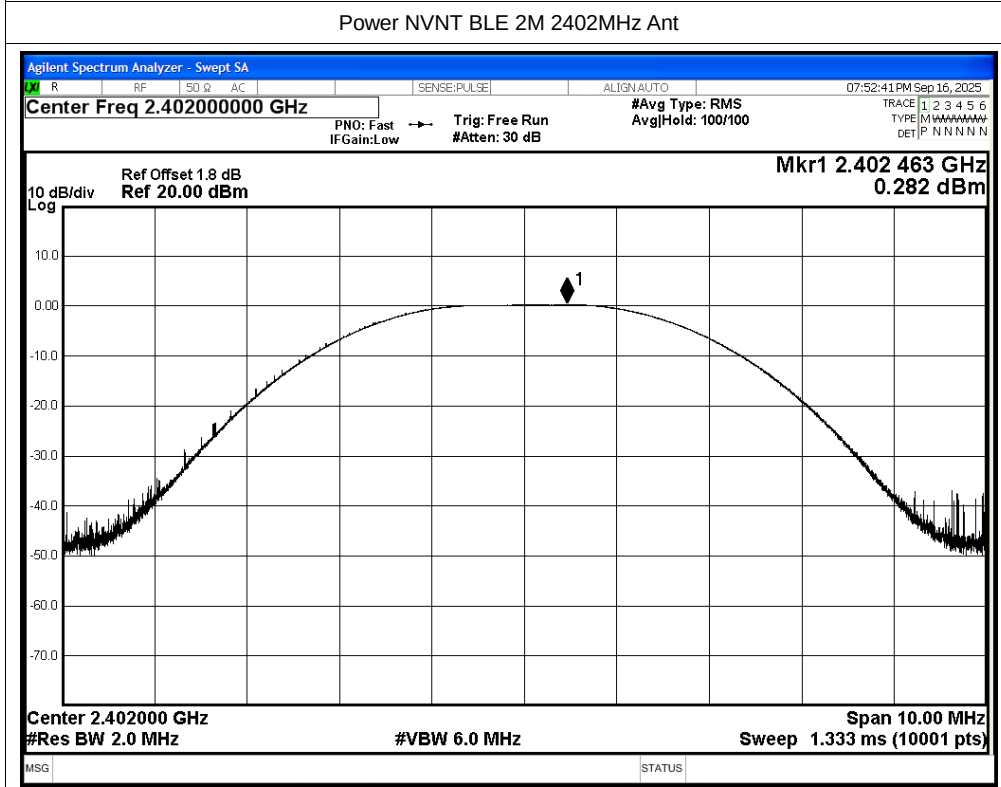
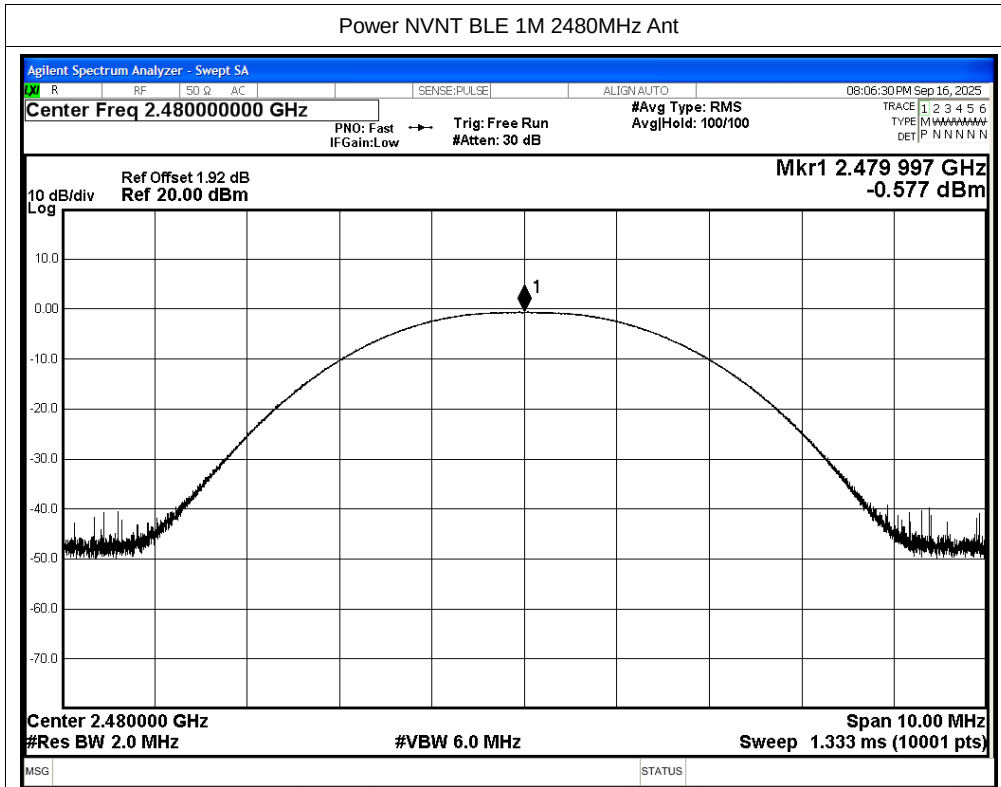
Test Graphs

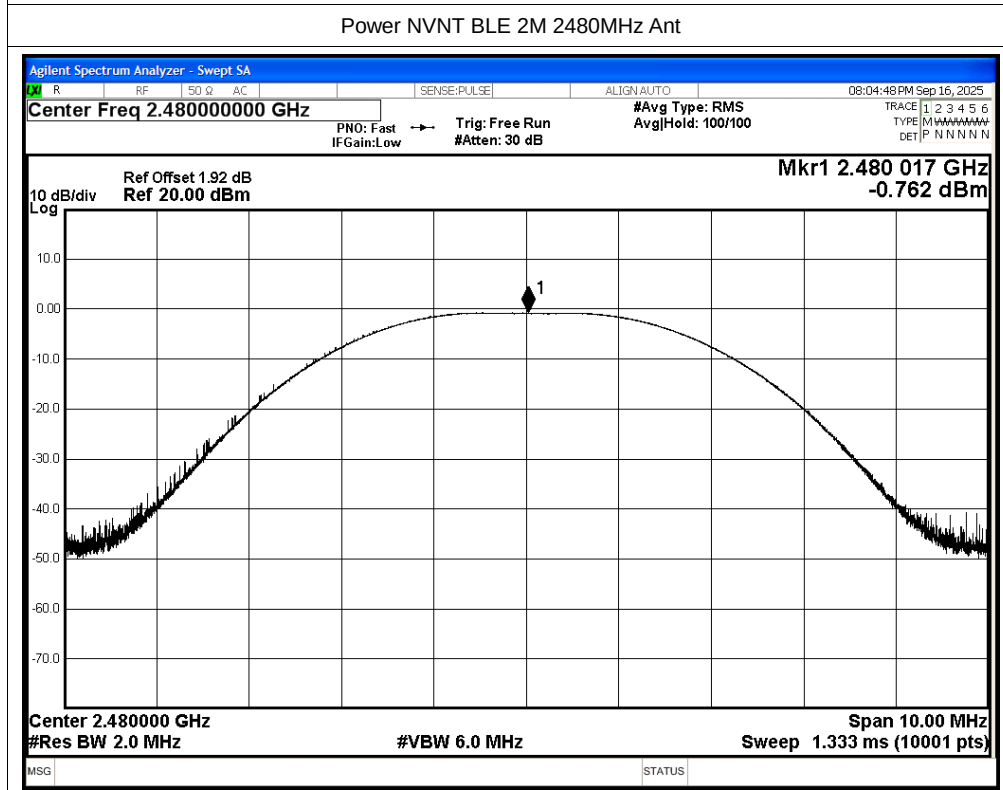
Power NVNT BLE 1M 2402MHz Ant



Power NVNT BLE 1M 2440MHz Ant





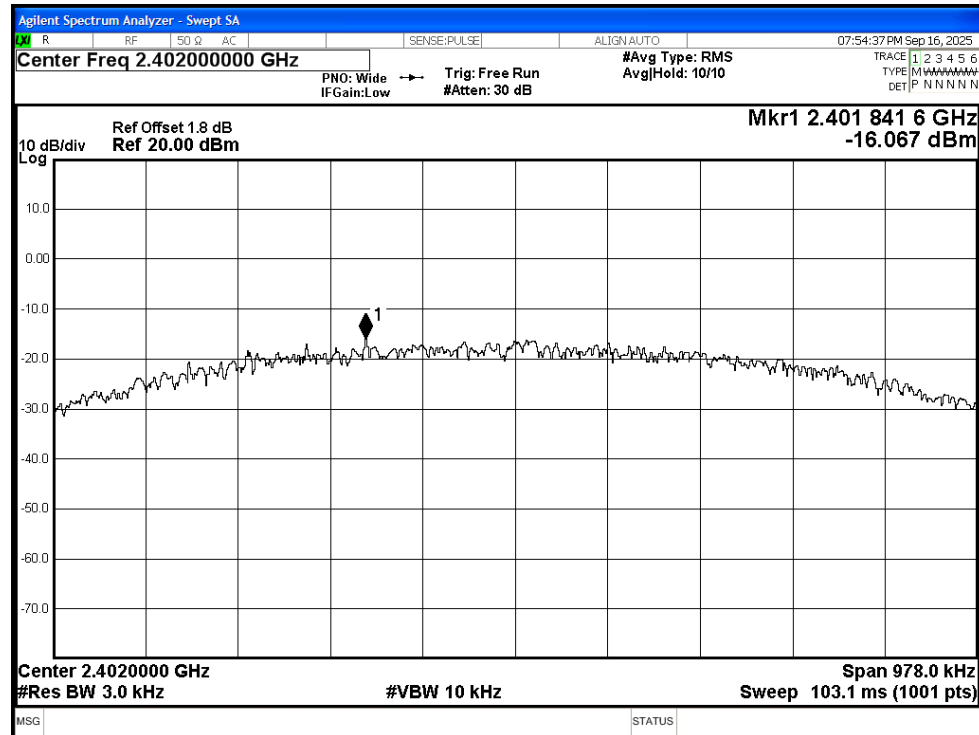


B.3 Maximum Power Spectral Density Level

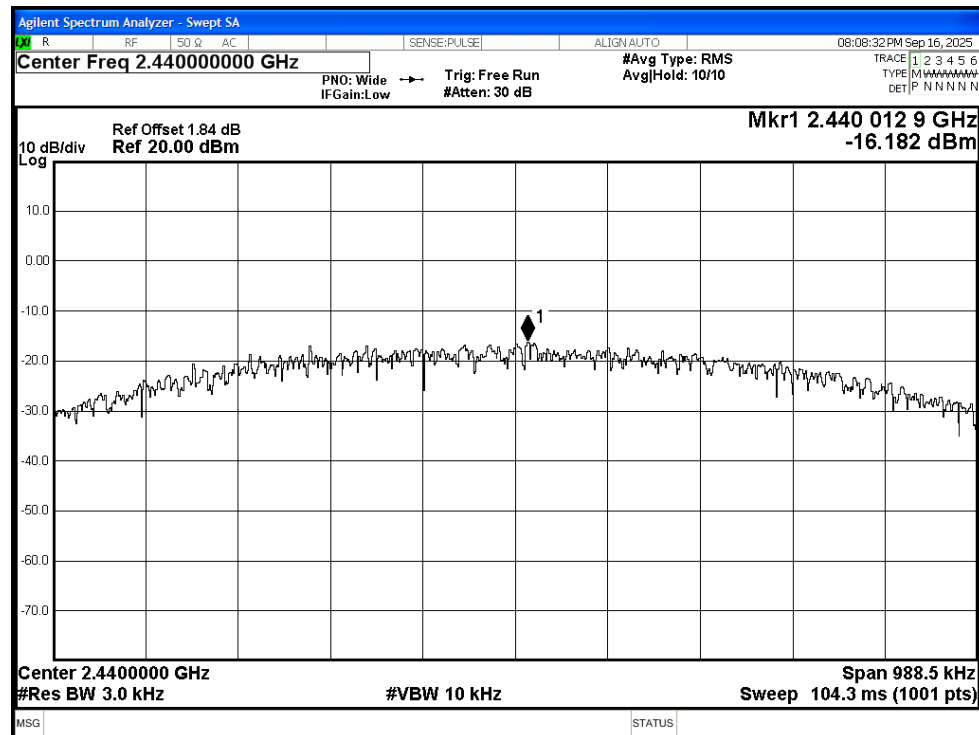
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant	-16.07	8	Pass
NVNT	BLE 1M	2440	Ant	-16.18	8	Pass
NVNT	BLE 1M	2480	Ant	-17.46	8	Pass
NVNT	BLE 2M	2402	Ant	-19.69	8	Pass
NVNT	BLE 2M	2440	Ant	-19.87	8	Pass
NVNT	BLE 2M	2480	Ant	-20.5	8	Pass

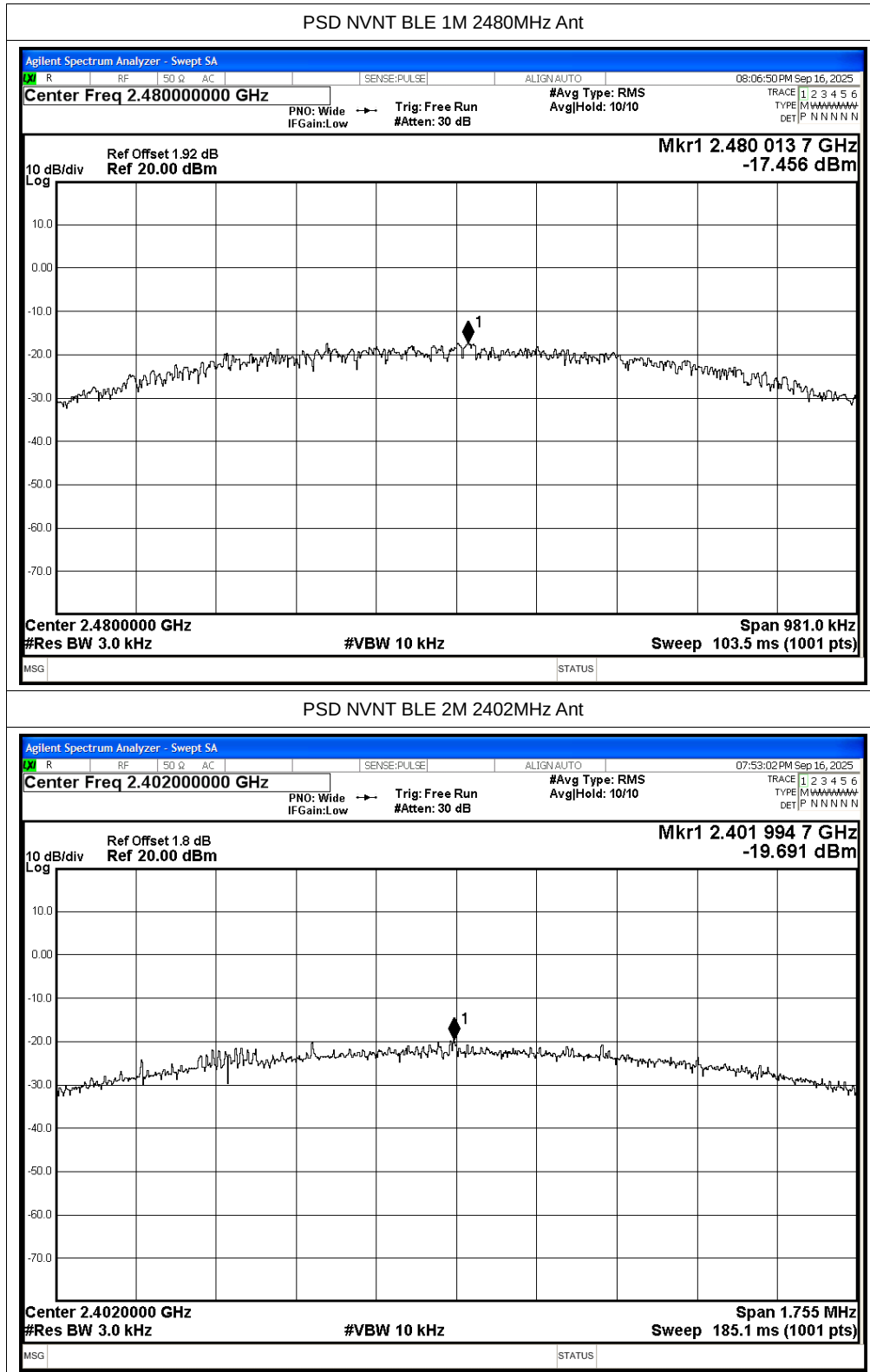
Test Graphs

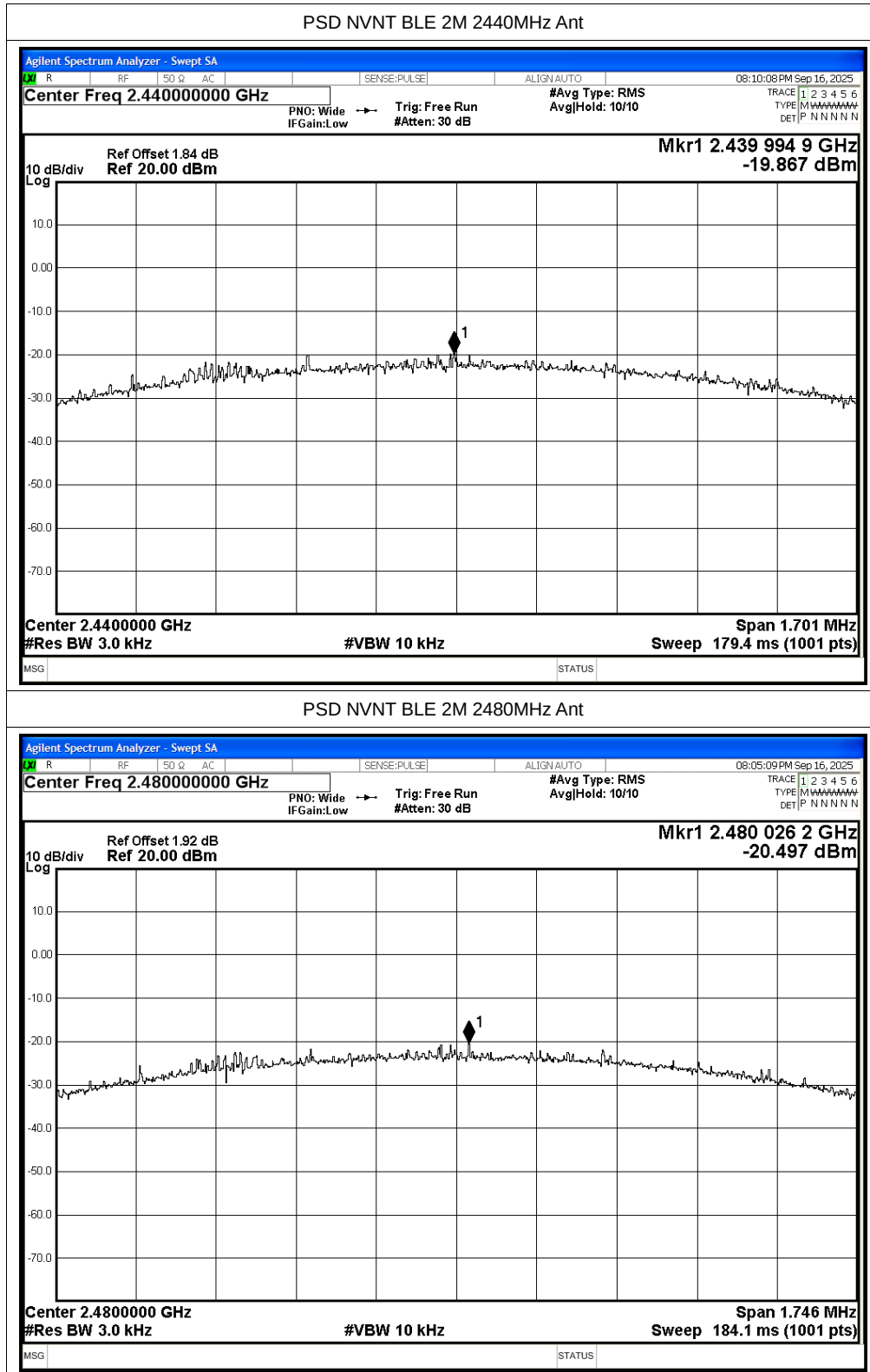
PSD NVNT BLE 1M 2402MHz Ant



PSD NVNT BLE 1M 2440MHz Ant

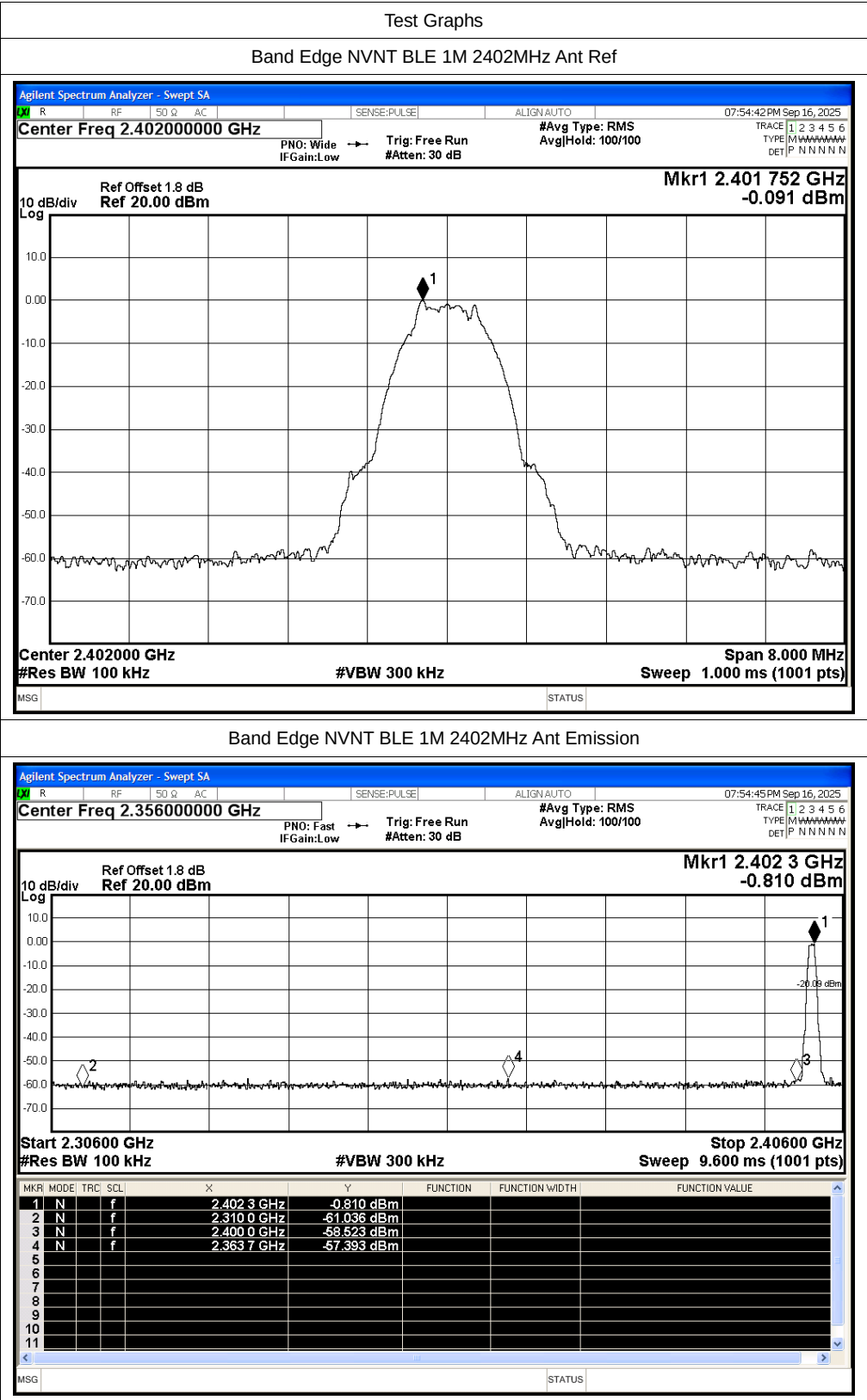


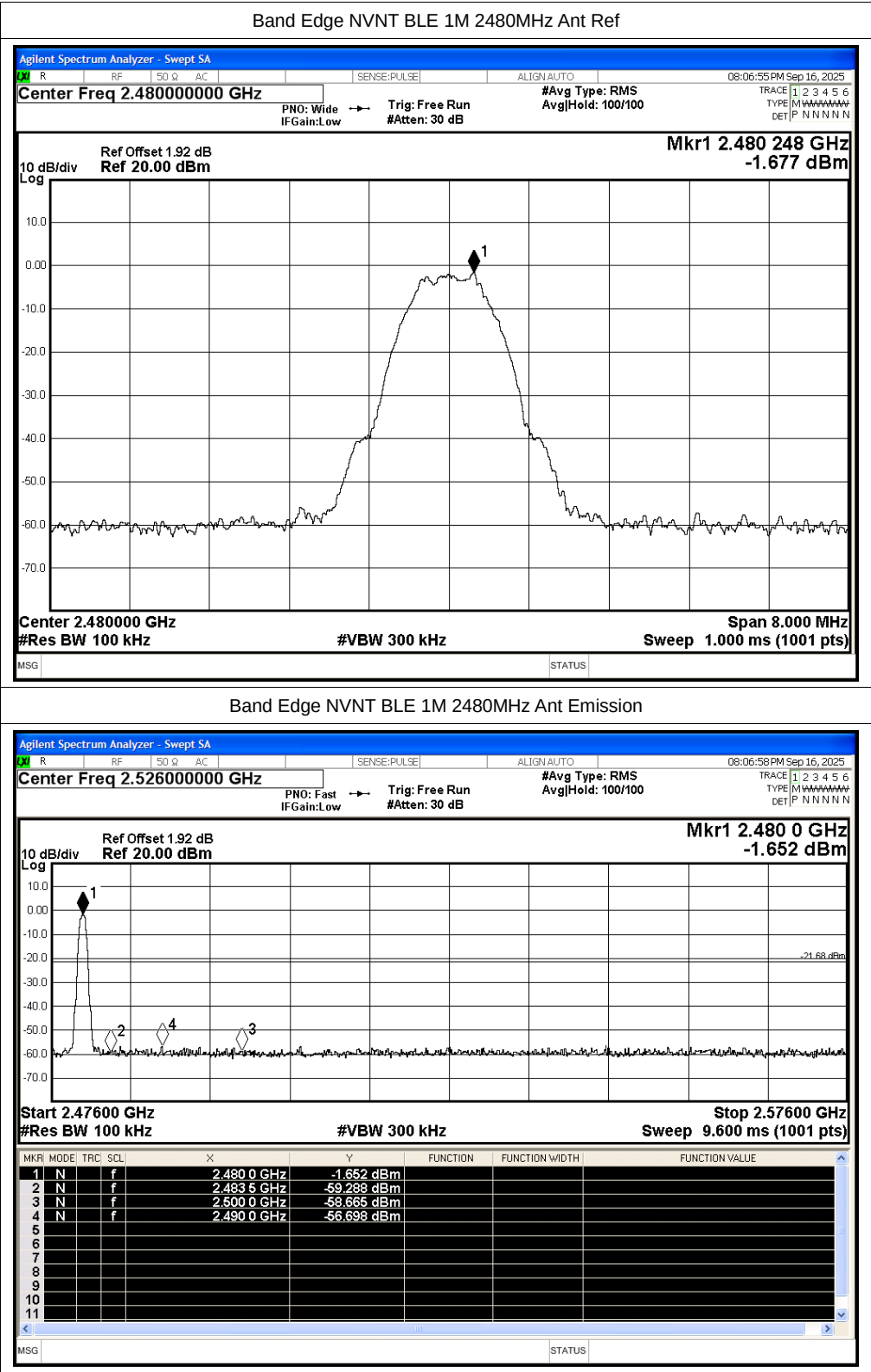


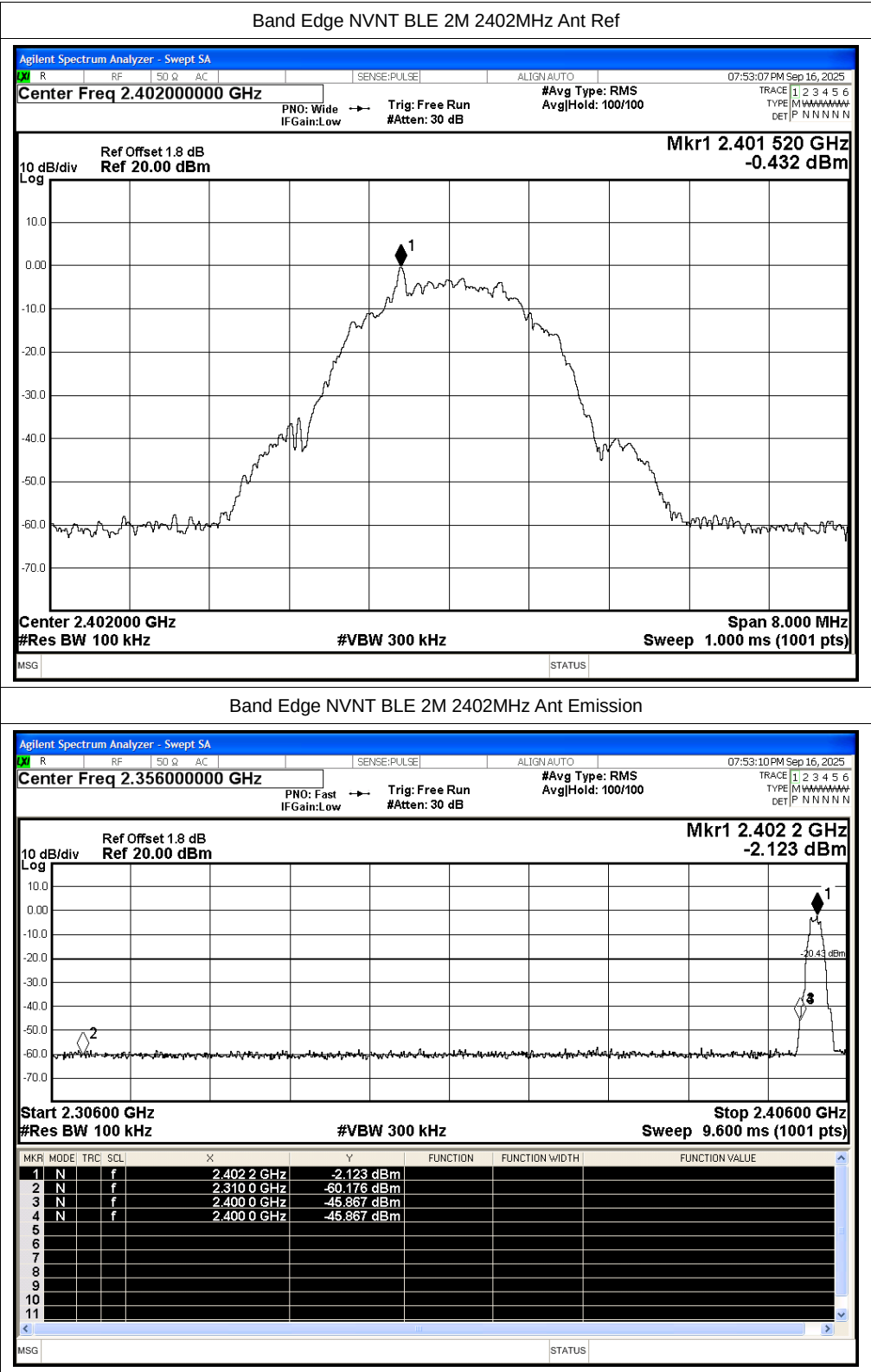


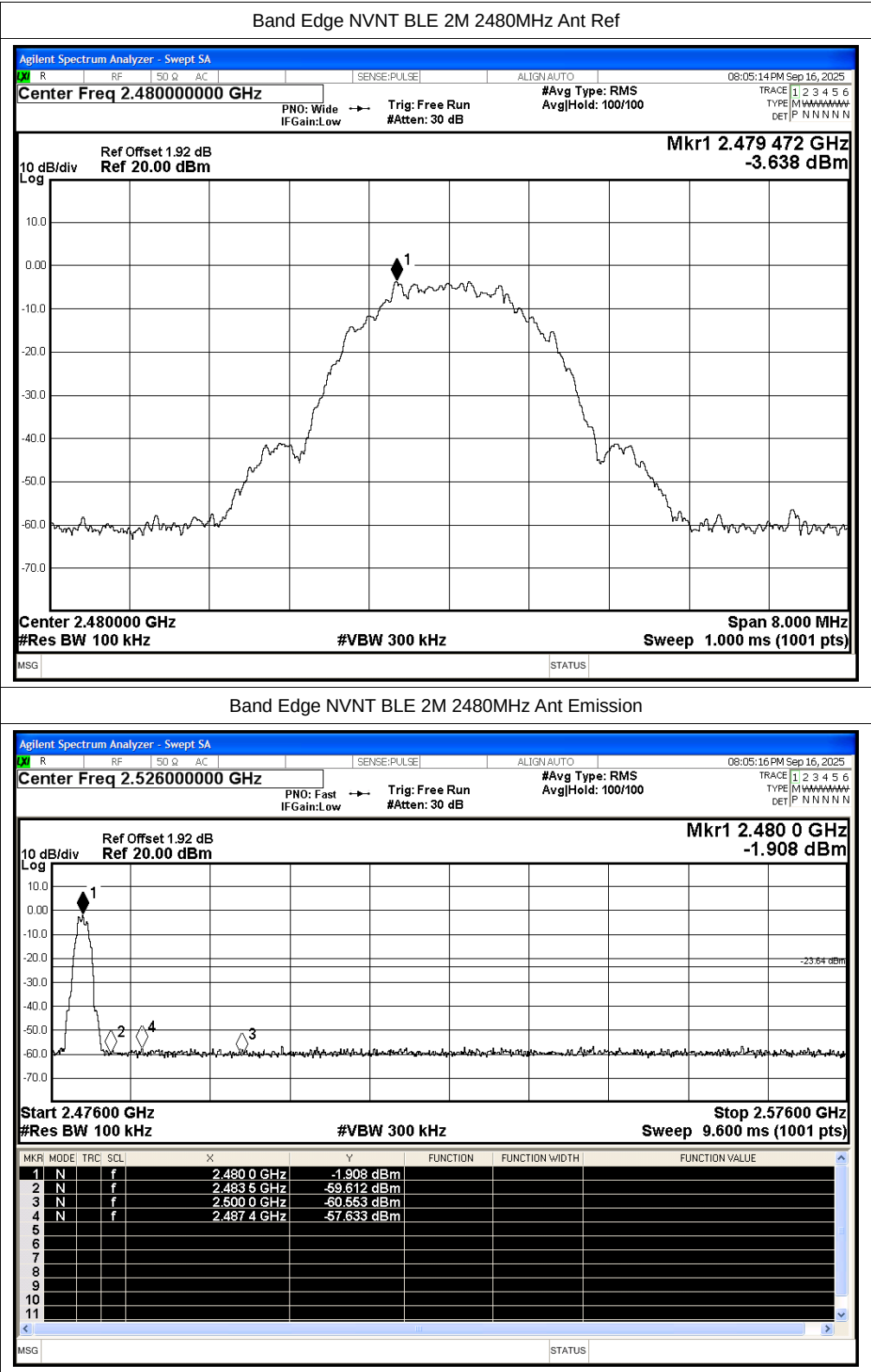
B.4 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant	-57.3	-20	Pass
NVNT	BLE 1M	2480	Ant	-55.02	-20	Pass
NVNT	BLE 2M	2402	Ant	-45.43	-20	Pass
NVNT	BLE 2M	2480	Ant	-54	-20	Pass



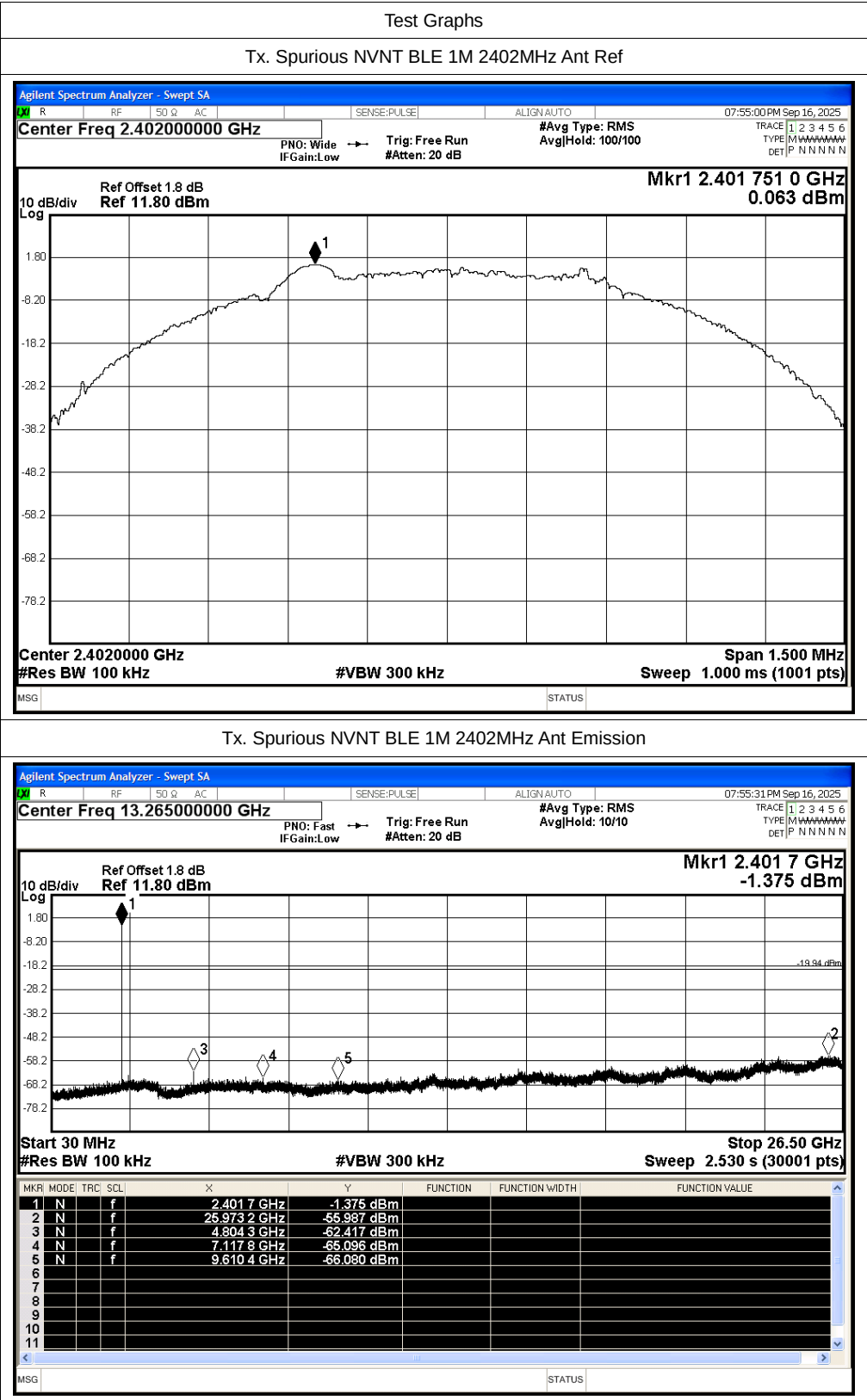


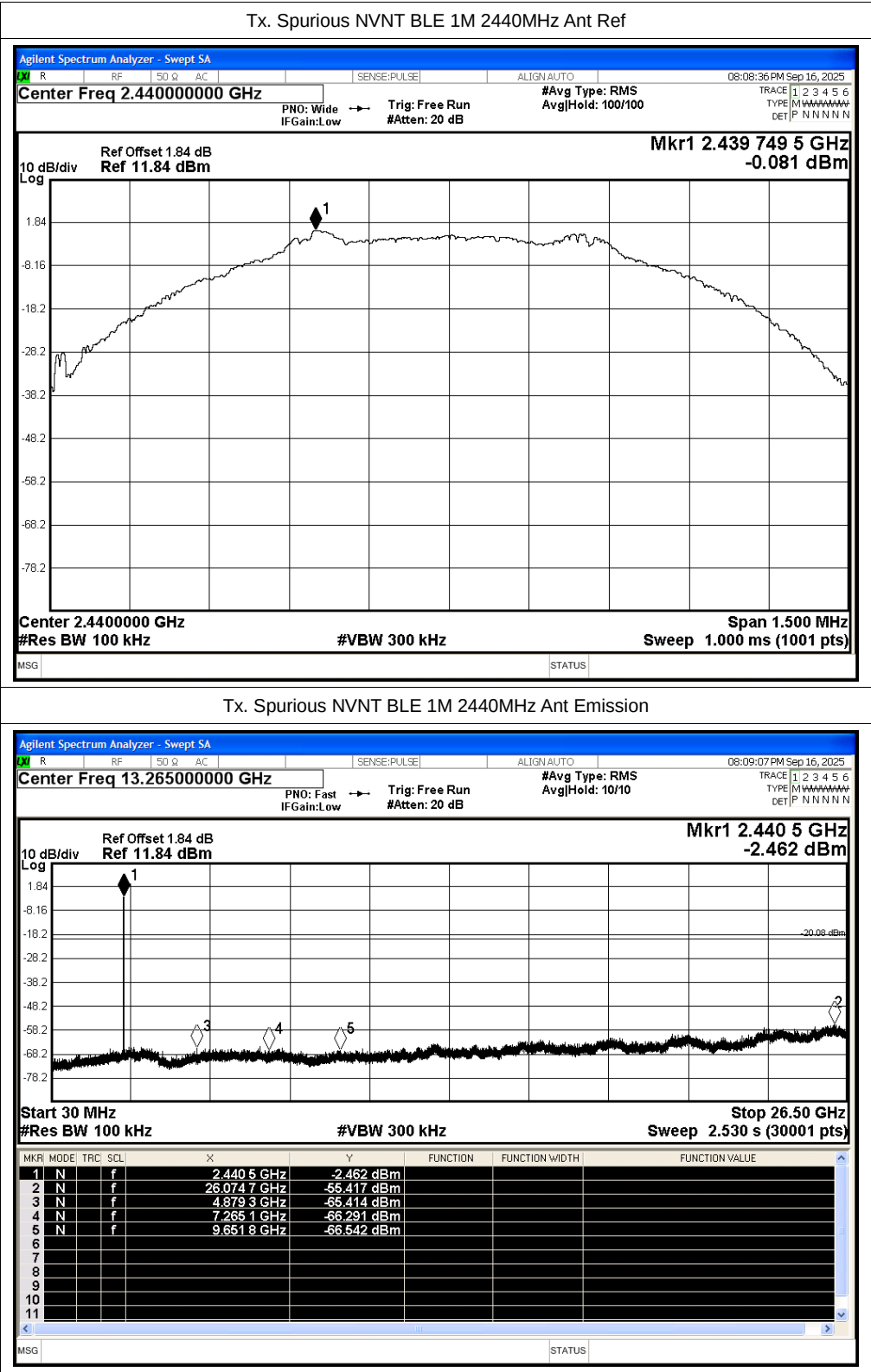


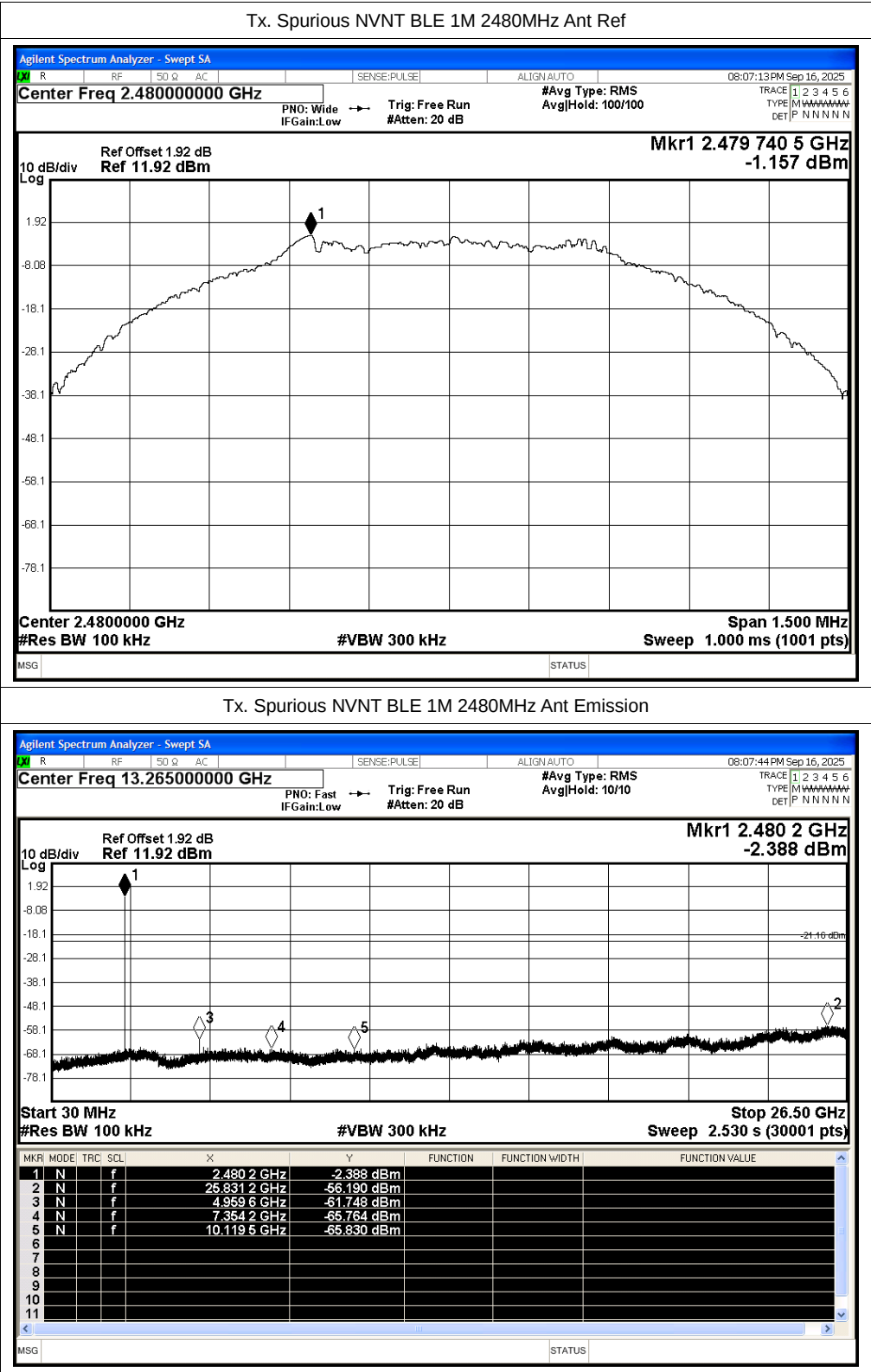


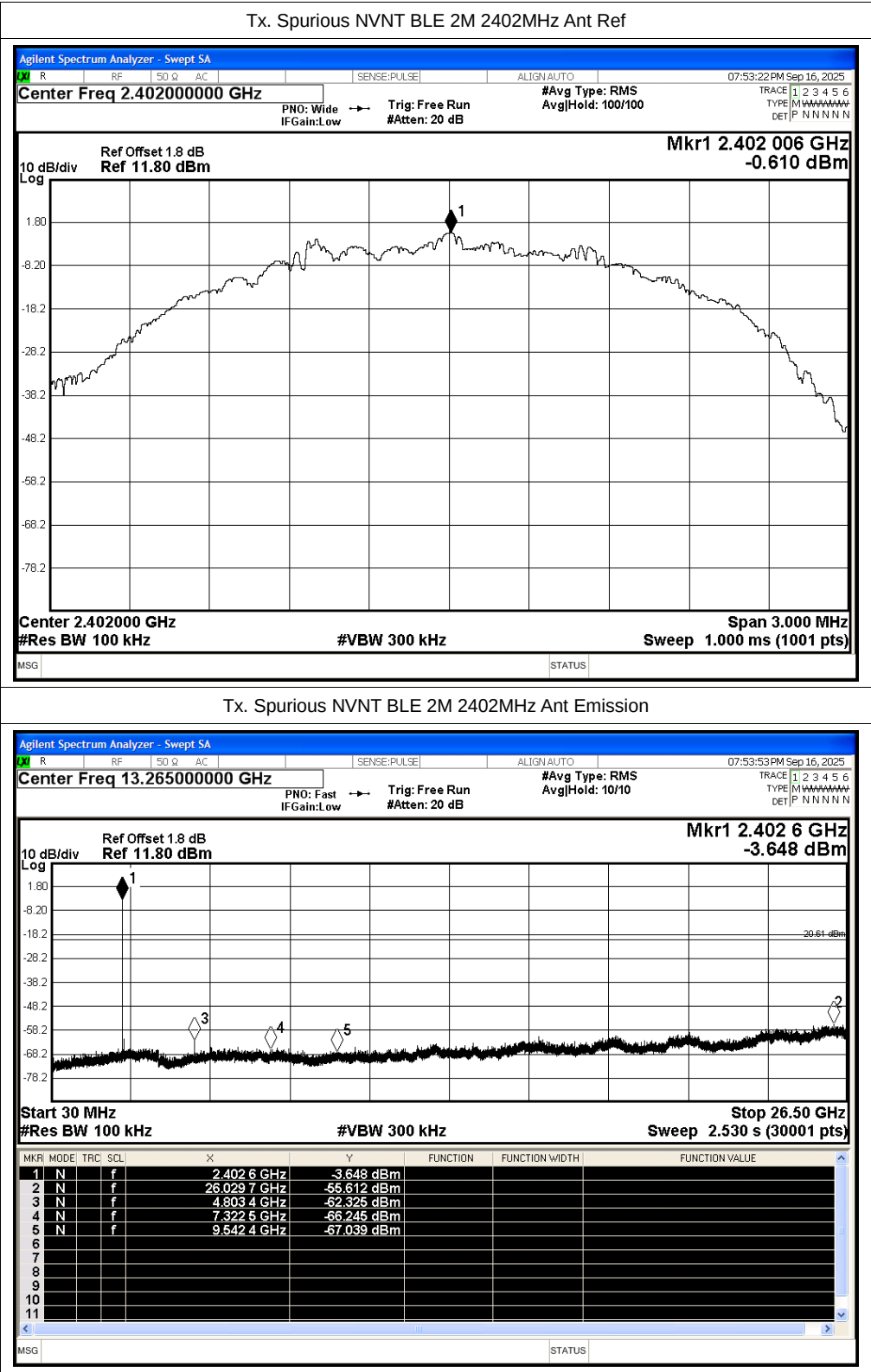
B.5 Conducted RF Spurious Emission

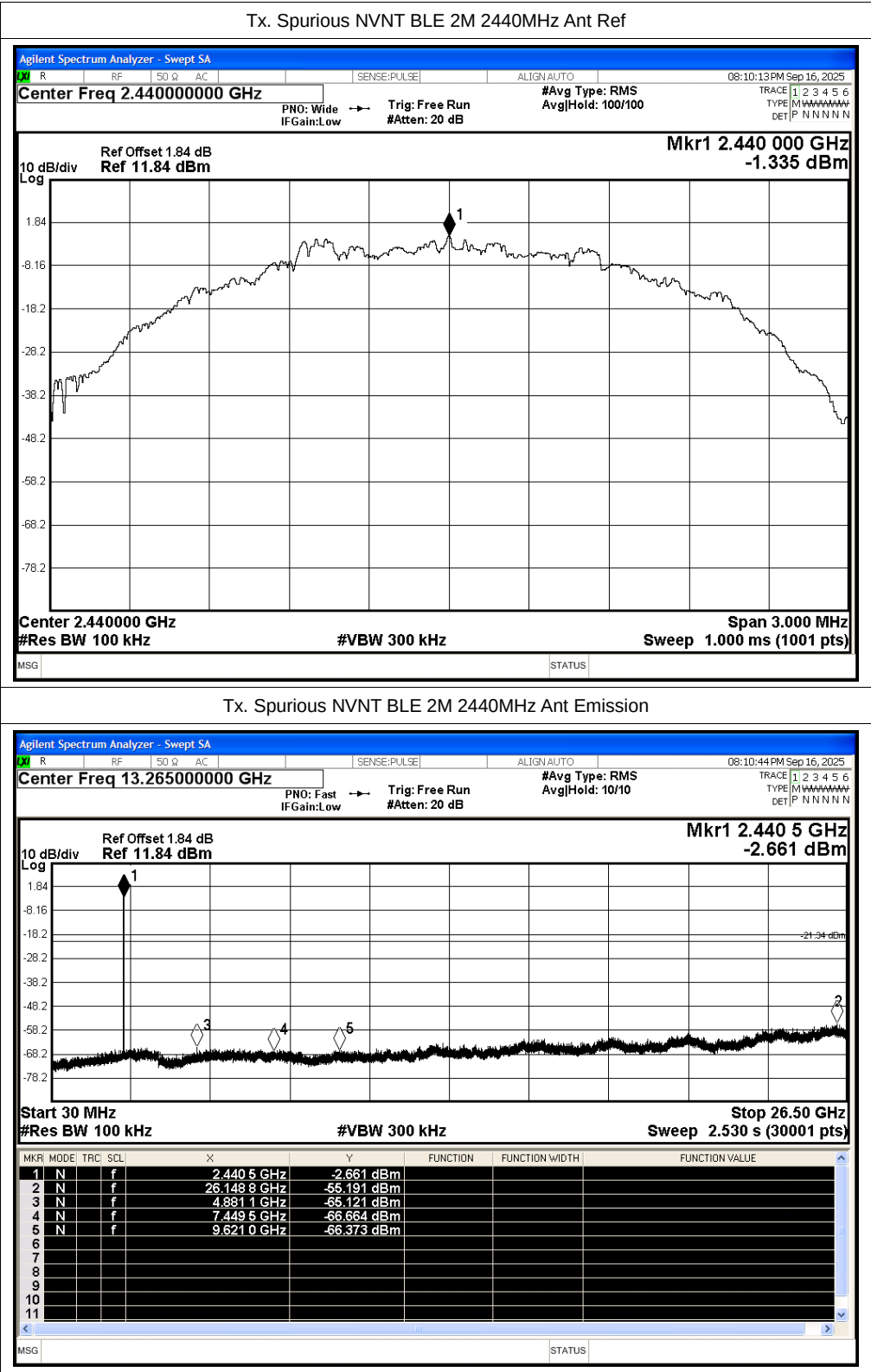
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant	-56.05	-20	Pass
NVNT	BLE 1M	2440	Ant	-55.34	-20	Pass
NVNT	BLE 1M	2480	Ant	-55.03	-20	Pass
NVNT	BLE 2M	2402	Ant	-55	-20	Pass
NVNT	BLE 2M	2440	Ant	-53.86	-20	Pass
NVNT	BLE 2M	2480	Ant	-54.63	-20	Pass

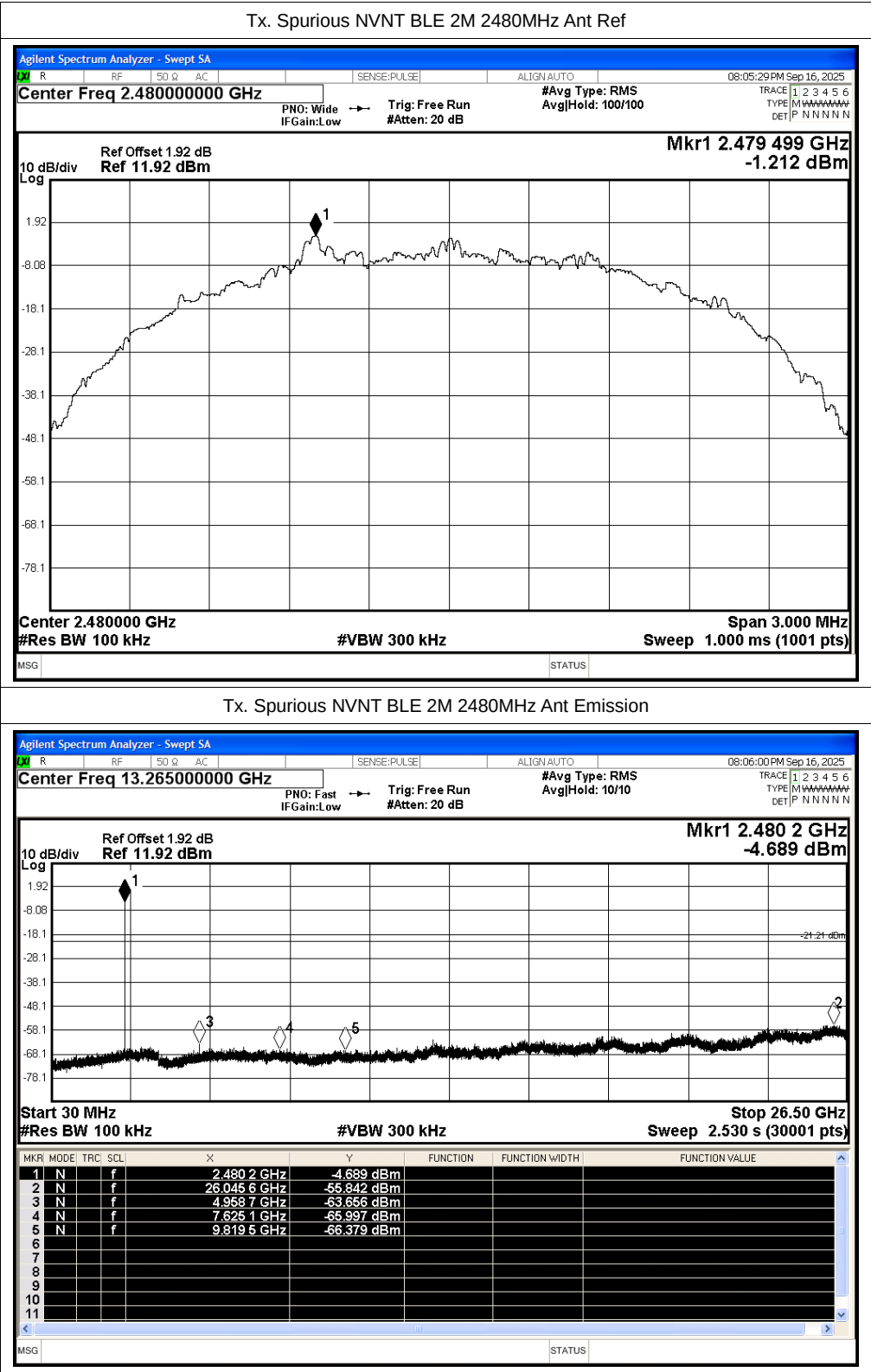






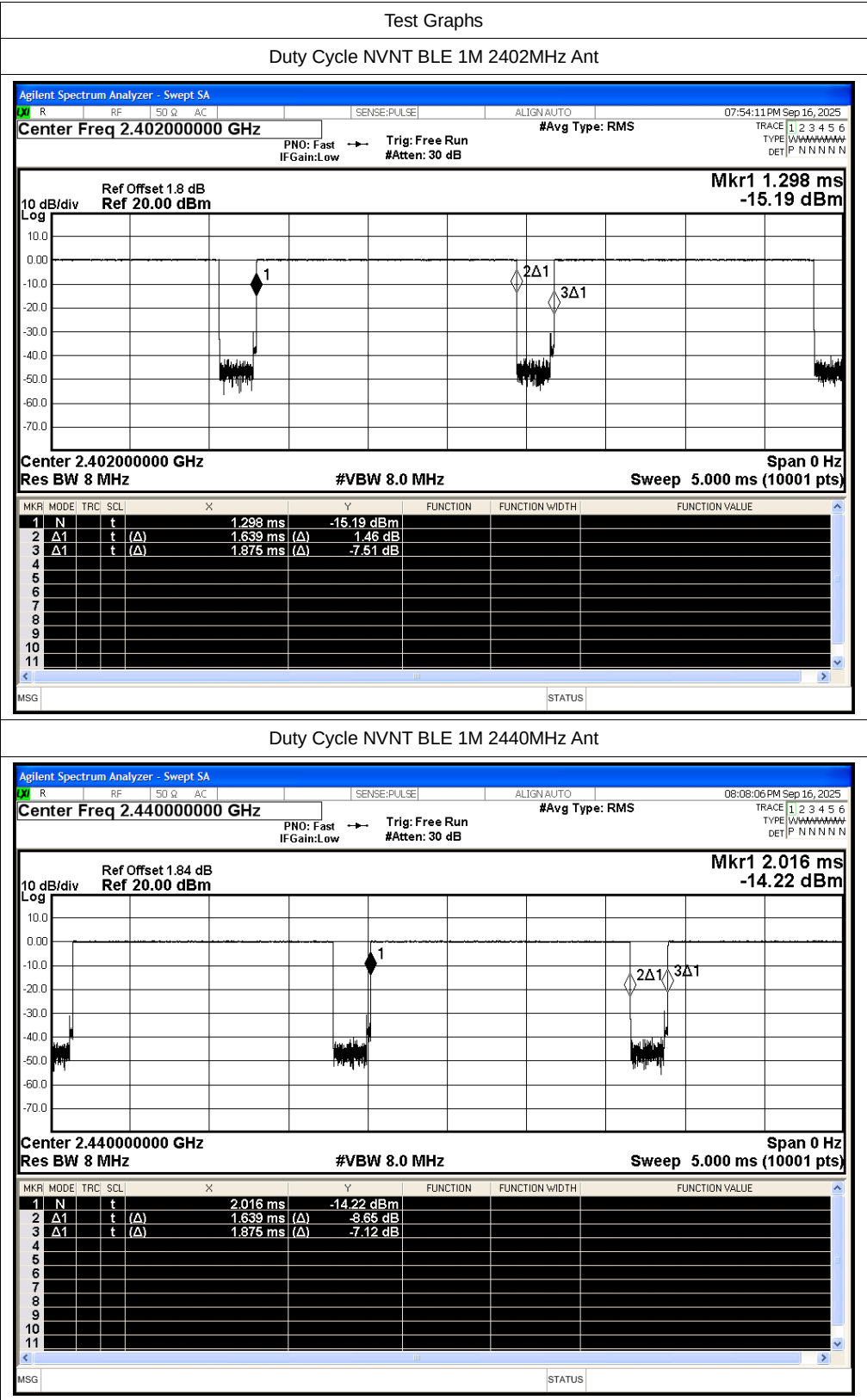


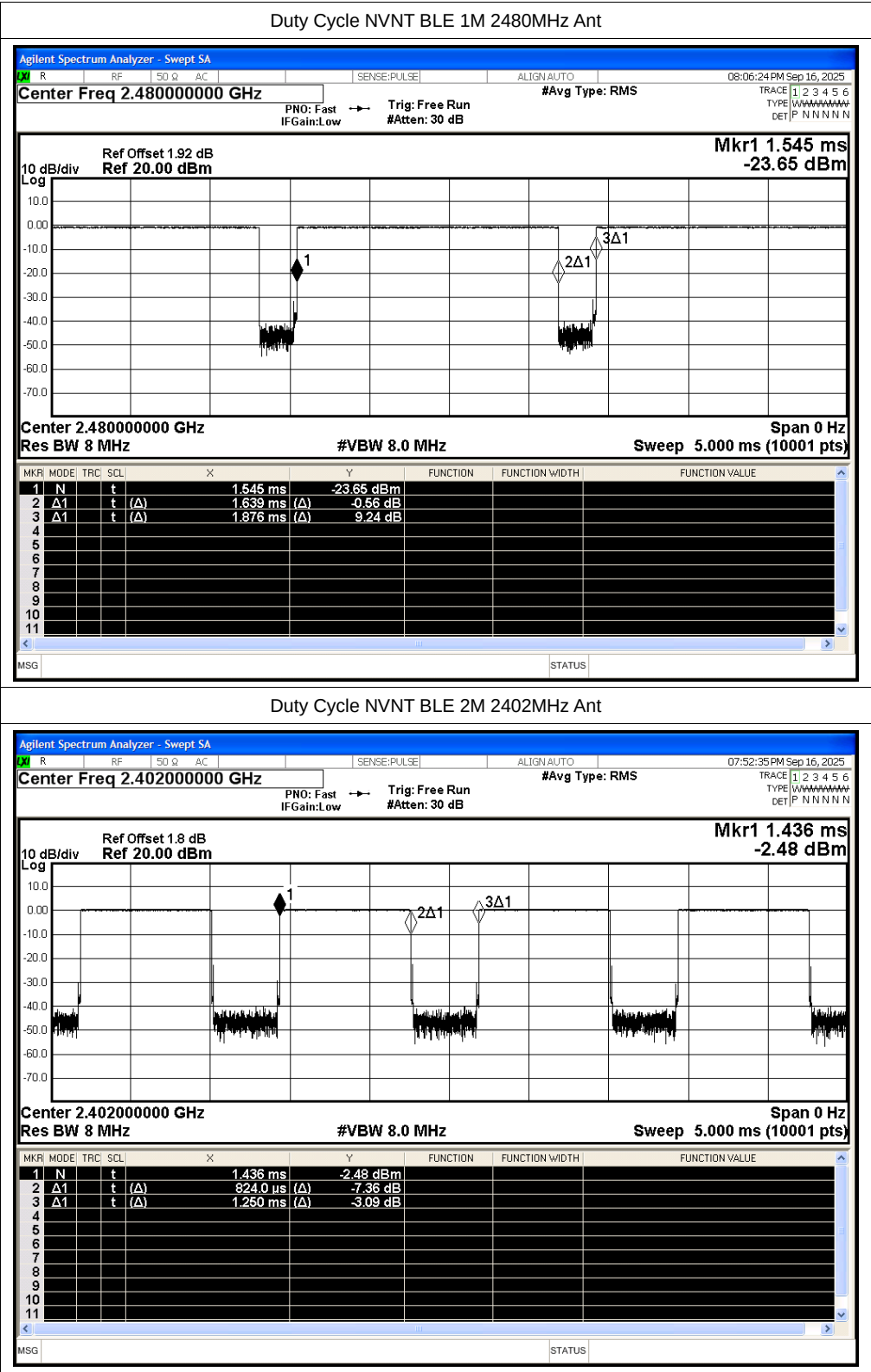


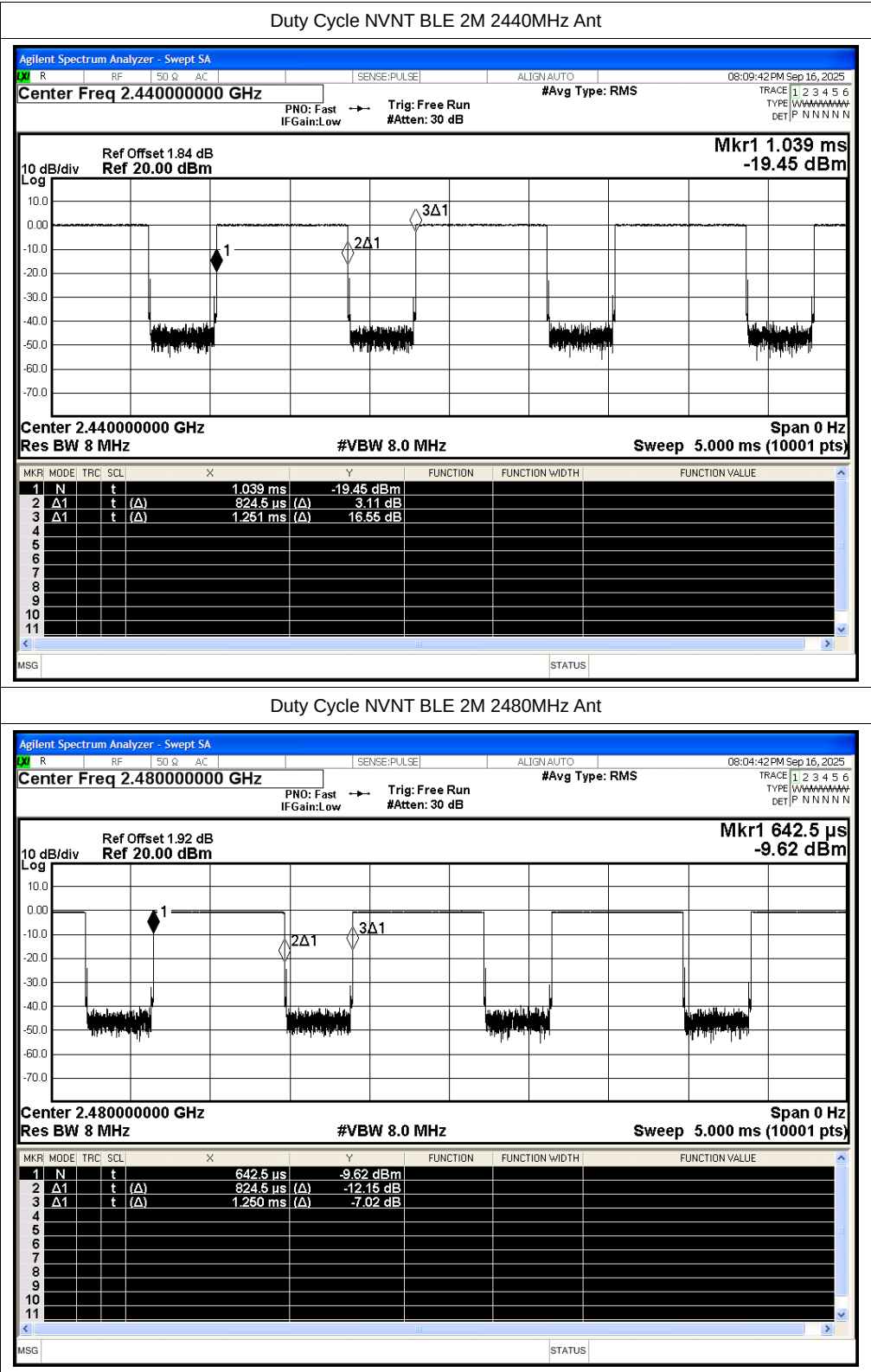


B.6 Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant	87.39	0.59	0.61
NVNT	BLE 1M	2440	Ant	87.39	0.59	0.61
NVNT	BLE 1M	2480	Ant	87.39	0.59	0.61
NVNT	BLE 2M	2402	Ant	65.92	1.81	1.21
NVNT	BLE 2M	2440	Ant	65.93	1.81	1.21
NVNT	BLE 2M	2480	Ant	65.96	1.81	1.21

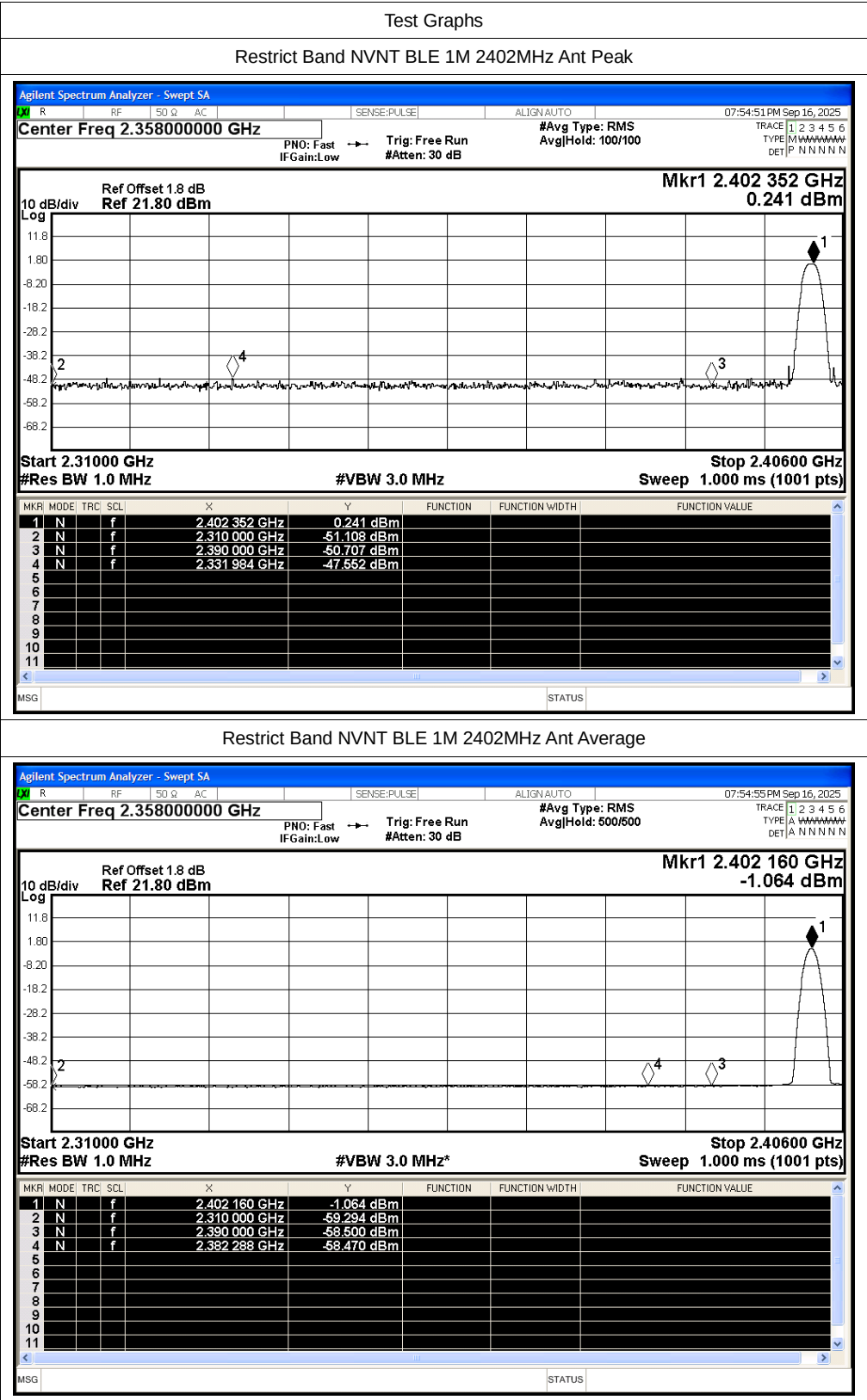






B.7 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	BLE 1M	2402	Ant	2310	-51.11	2	-	46.15	Peak	74	Pass
NVNT	BLE 1M	2402	Ant	2310	-59.29	2	0.59	38.56	Average	54	Pass
NVNT	BLE 1M	2402	Ant	2331.984	-47.55	2	-	49.71	Peak	74	Pass
NVNT	BLE 1M	2402	Ant	2382.288	-58.47	2	0.59	39.38	Average	54	Pass
NVNT	BLE 1M	2402	Ant	2390	-50.71	2	-	46.55	Peak	74	Pass
NVNT	BLE 1M	2402	Ant	2390	-58.5	2	0.59	39.35	Average	54	Pass
NVNT	BLE 1M	2480	Ant	2483.5	-51.16	2	-	46.1	Peak	74	Pass
NVNT	BLE 1M	2480	Ant	2483.5	-57.74	2	0.59	40.11	Average	54	Pass
NVNT	BLE 1M	2480	Ant	2483.728	-45.49	2	-	51.77	Peak	74	Pass
NVNT	BLE 1M	2480	Ant	2484.544	-57.71	2	0.59	40.14	Average	54	Pass
NVNT	BLE 1M	2480	Ant	2500	-50.23	2	-	47.03	Peak	74	Pass
NVNT	BLE 1M	2480	Ant	2500	-58.09	2	0.59	39.76	Average	54	Pass
NVNT	BLE 2M	2402	Ant	2310	-50.91	2	-	46.35	Peak	74	Pass
NVNT	BLE 2M	2402	Ant	2310	-58.72	2	1.81	40.35	Average	54	Pass
NVNT	BLE 2M	2402	Ant	2337.744	-47.83	2	-	49.43	Peak	74	Pass
NVNT	BLE 2M	2402	Ant	2385.456	-58.13	2	1.81	40.94	Average	54	Pass
NVNT	BLE 2M	2402	Ant	2390	-50.62	2	-	46.64	Peak	74	Pass
NVNT	BLE 2M	2402	Ant	2390	-59.04	2	1.81	40.03	Average	54	Pass
NVNT	BLE 2M	2480	Ant	2483.5	-48.87	2	-	48.39	Peak	74	Pass
NVNT	BLE 2M	2480	Ant	2483.5	-57.95	2	1.81	41.12	Average	54	Pass
NVNT	BLE 2M	2480	Ant	2488.24	-45.8	2	-	51.46	Peak	74	Pass
NVNT	BLE 2M	2480	Ant	2484.352	-57.28	2	1.81	41.79	Average	54	Pass
NVNT	BLE 2M	2480	Ant	2500	-50.61	2	-	46.65	Peak	74	Pass
NVNT	BLE 2M	2480	Ant	2500	-58.3	2	1.81	40.77	Average	54	Pass



Restrict Band NVNT BLE 1M 2402MHz Ant Average

Agilent Spectrum Analyzer - Swept SA

R

RF

50 Ω

AC

SENSE:PULSE

ALIGN:AUTO

07:54:55 PM Sep 16, 2025

Center Freq 2.358000000 GHz

PN0: Fast
IF Gain: Low

Trig: Free Run
#Atten: 30 dB

#Avg Type: RMS
Avg/Hold: 500/500

TRACE 1 2 3 4 5 6
TYPE A M M M M M M
DET A N N N N N N

Ref Offset 1.8 dB
Ref 21.80 dBm

Mkr1 2.402 160 GHz
-1.064 dBm

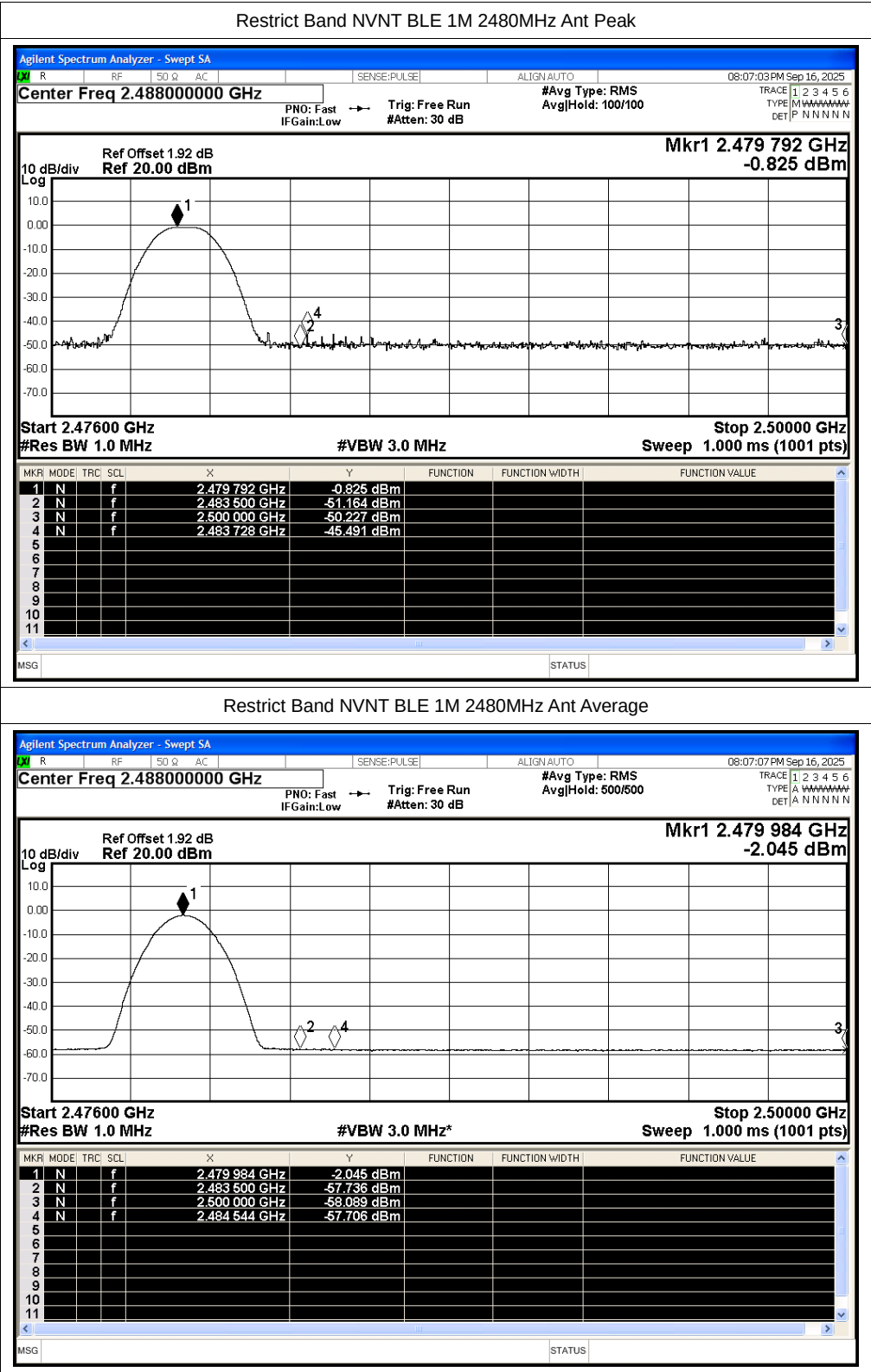
10 dB/div
Log

Start 2.31000 GHz
#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 2.40600 GHz
Sweep 1.000 ms (1001 pts)

MSG STATUS



Restrict Band NVNT BLE 1M 2480MHz Ant Average

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.488000000 GHz

PN0: Fast
IF Gain: Low

Trig: Free Run
#Atten: 30 dB

#Avg Type: RMS
Avg/Hold: 500/500

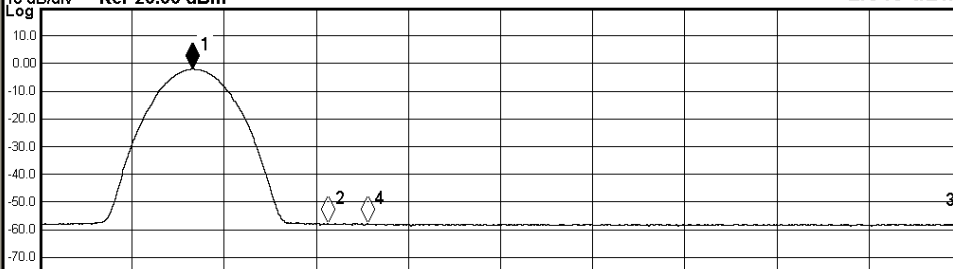
08:07:07 PM Sep 16, 2025

TRACE 1 2 3 4 5 6
TYPE A M M M M M M M M
DET A N N N N N N

10 dB/div
Log

Ref Offset 1.92 dB
Ref 20.00 dBm

Mkr1 2.479 984 GHz
-2.045 dBm

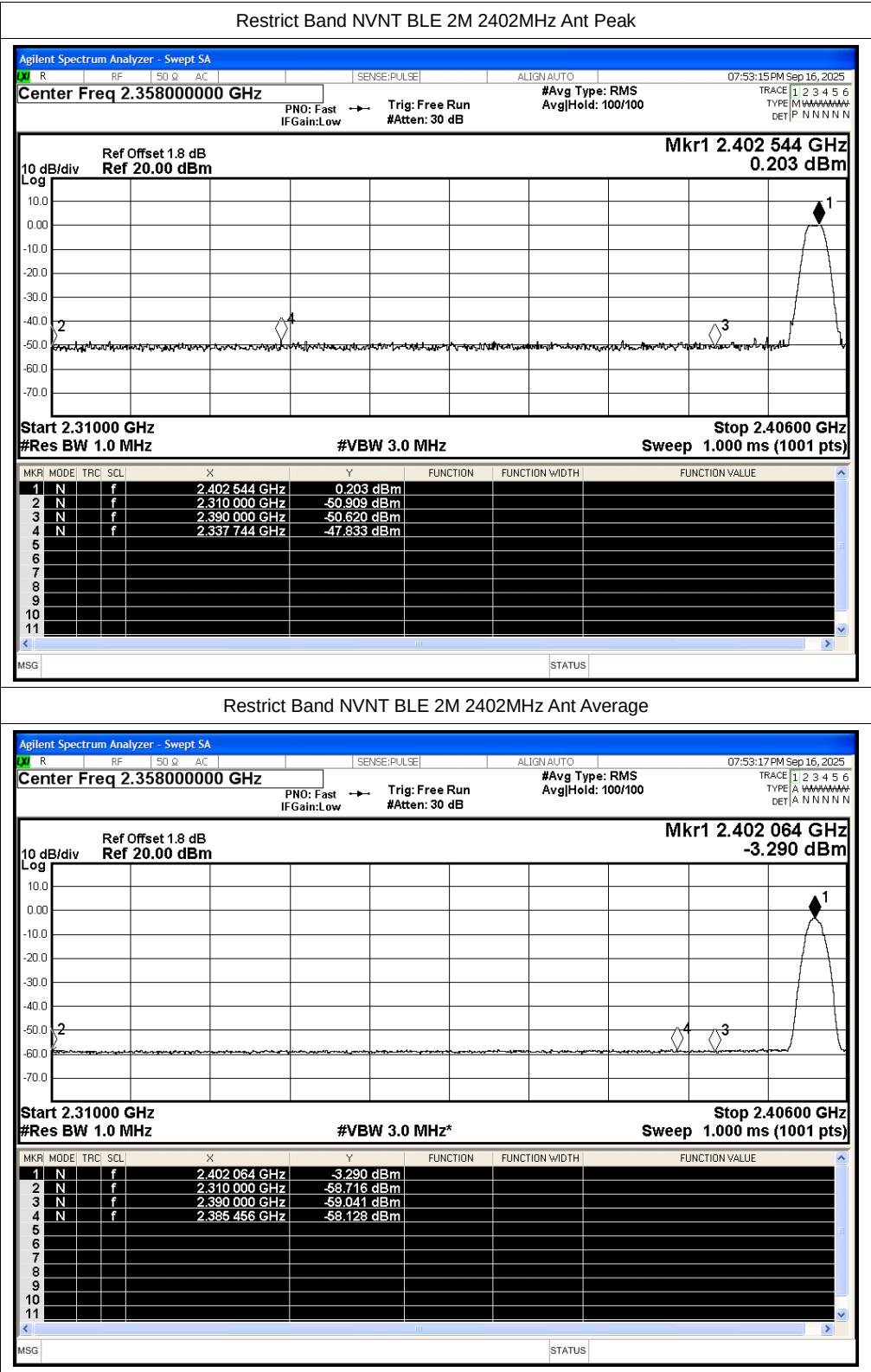


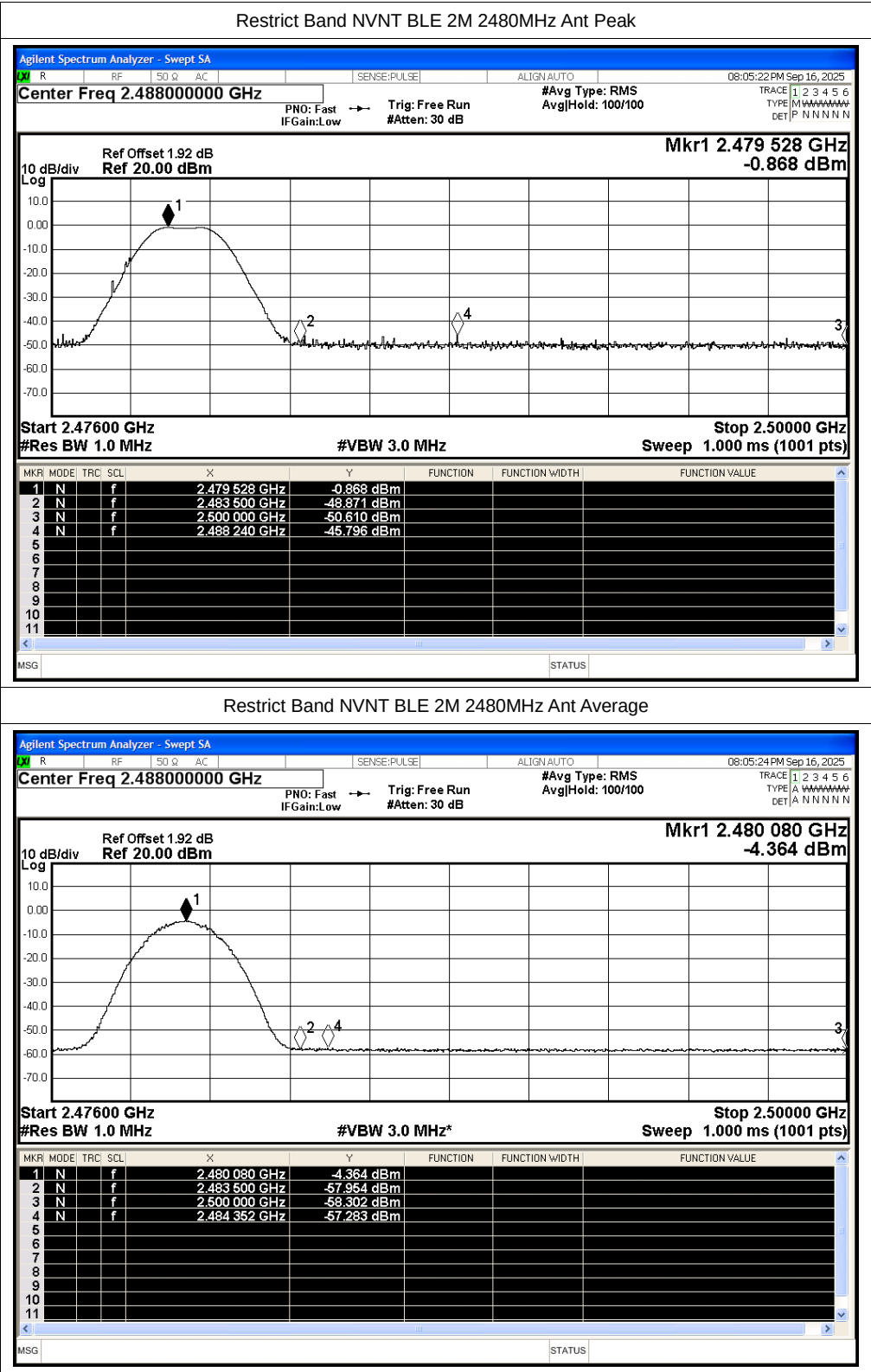
Start 2.47600 GHz
#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 2.50000 GHz
Sweep 1.000 ms (1001 pts)

MSG STATUS





Restrict Band NVNT BLE 2M 2480MHz Ant Average

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.488000000 GHz

PN0: Fast
IF Gain: Low

Trig: Free Run
#Atten: 30 dB

#Avg Type: RMS
Avg/Hold: 100/100

08:05:24 PM Sep 16, 2025

TRACE 1 2 3 4 5 6
TYPE A A A A A A A A
DET A N N N N N N

10 dB/div
Log

Ref Offset 1.92 dB
Ref 20.00 dBm

Mkr1 2.480 080 GHz
-4.364 dBm

Start 2.47600 GHz
#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 2.50000 GHz
Sweep 1.000 ms (1001 pts)

MSG STATUS