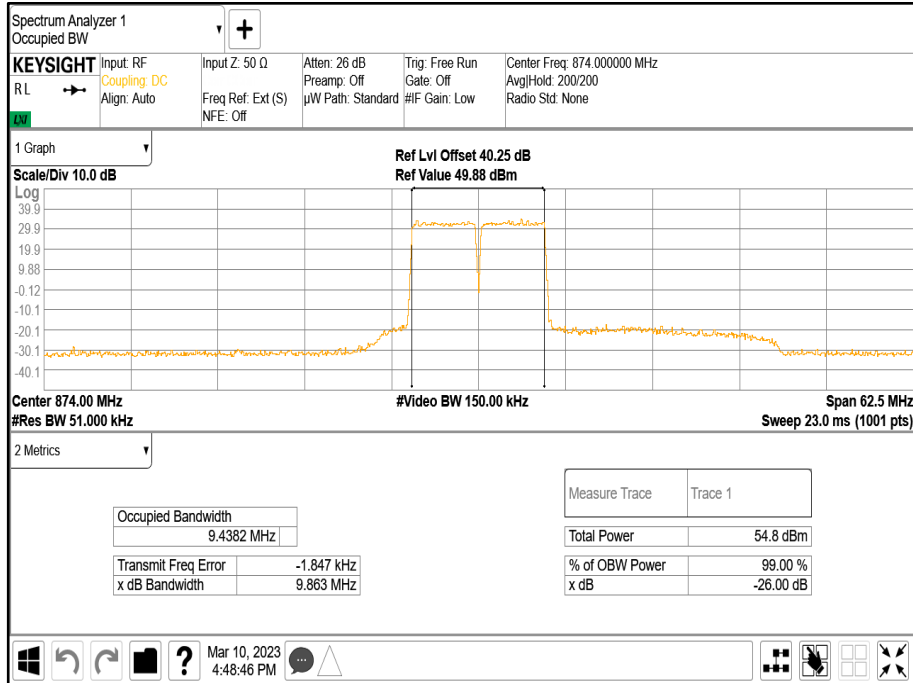
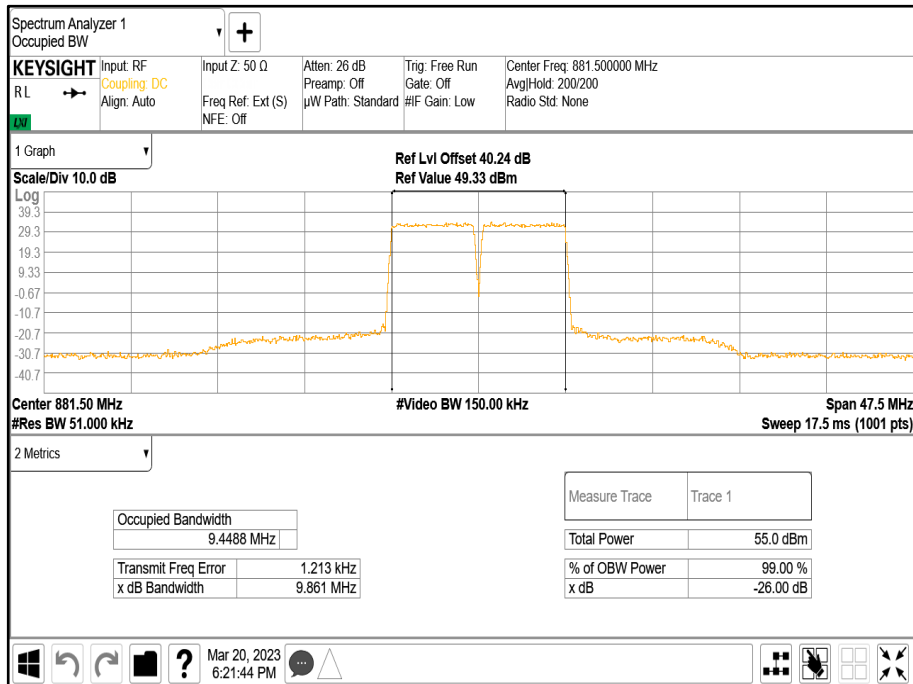




**Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position B**

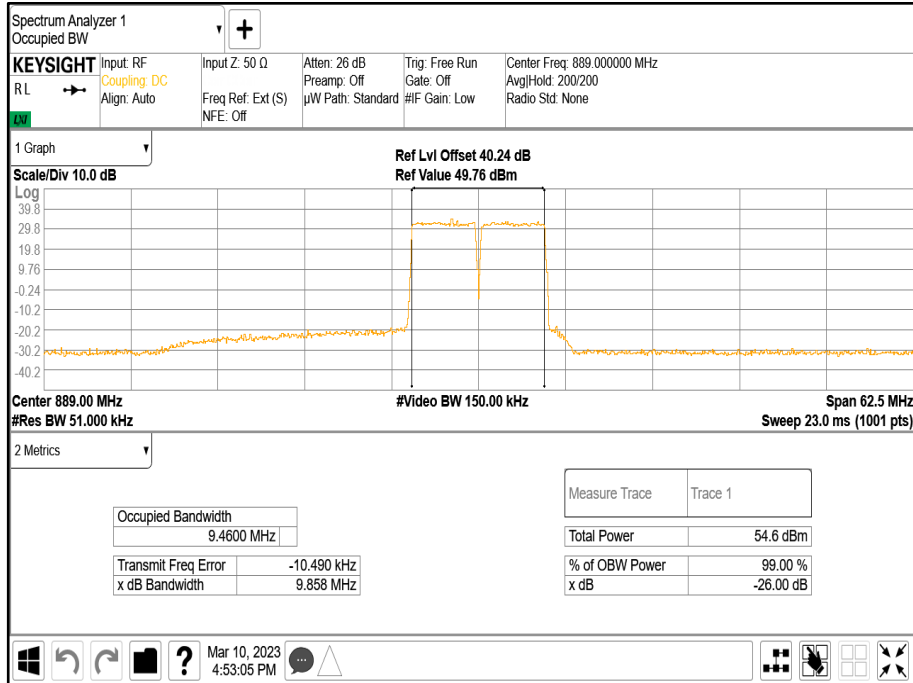


**Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position M**

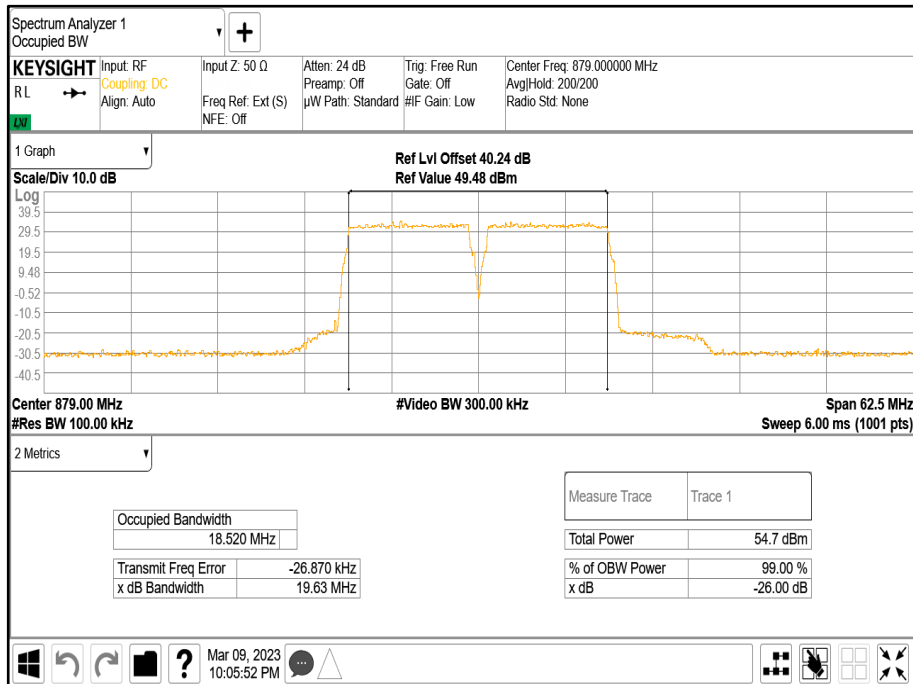




**Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position T**

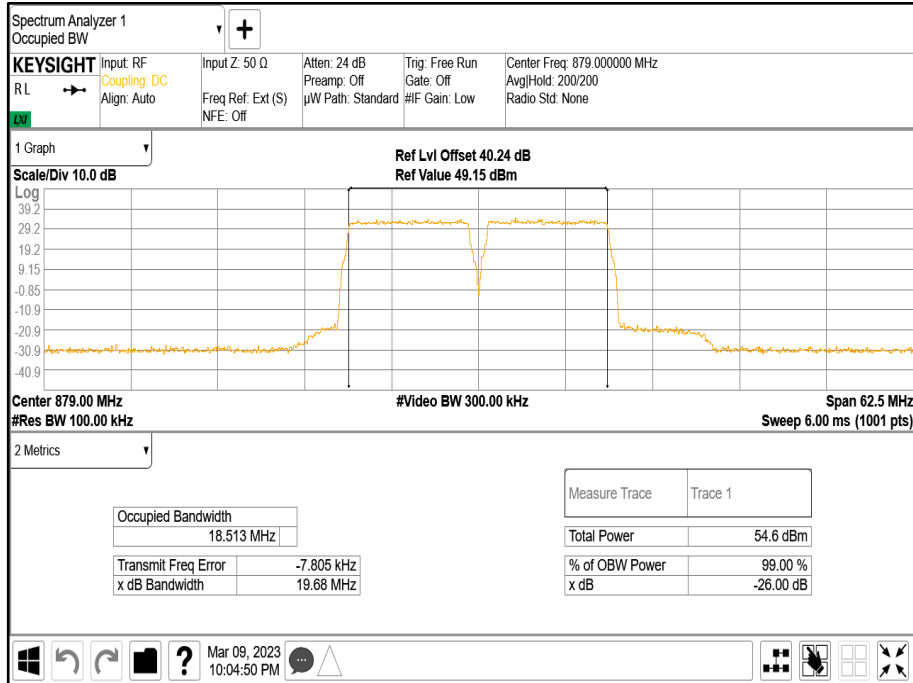


**Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position B**

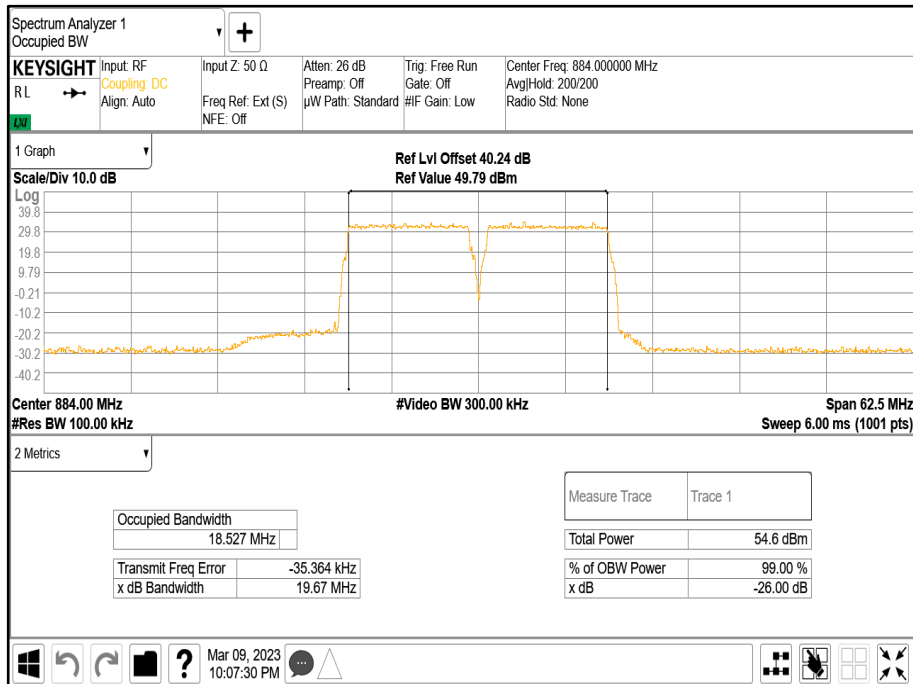




**Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position M**



**Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position T**



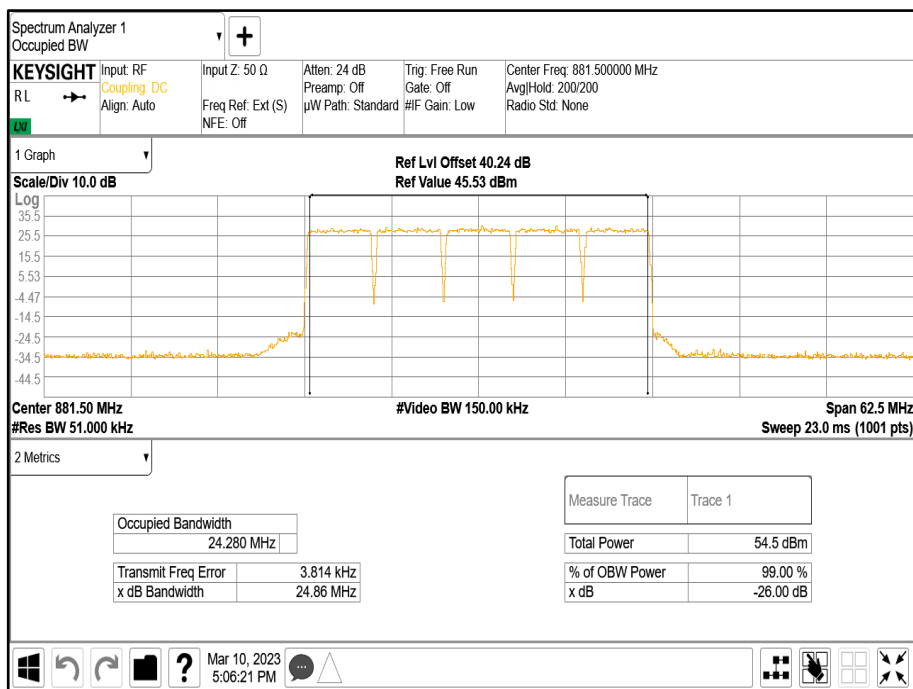


Configuration 6

Maximum Output Power 47.80 dBm

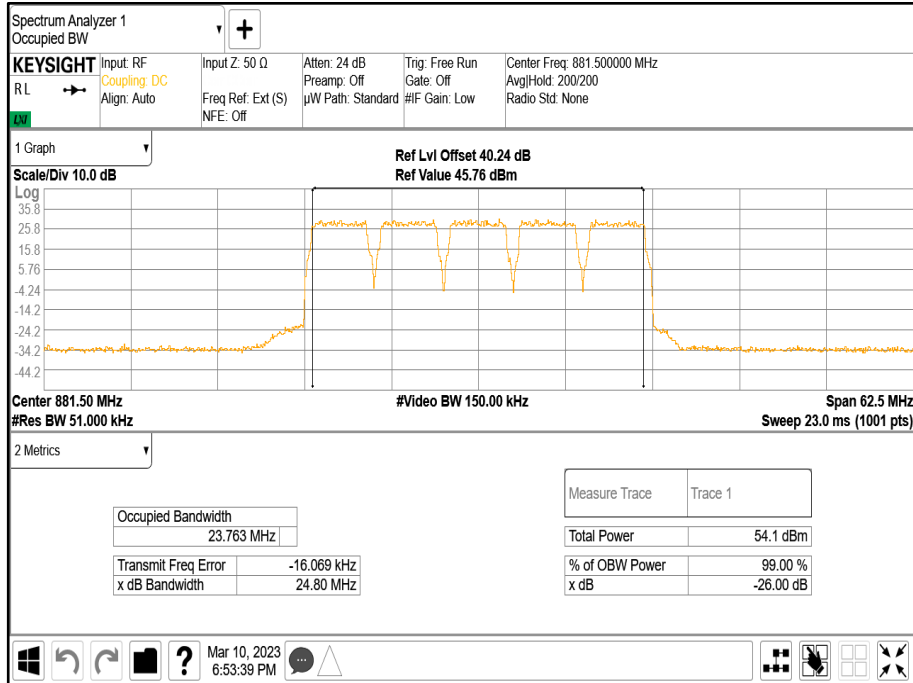
Antenna	NR Modulation	NR Carrier Bandwidth	Result (kHz)					
			Channel Position B		Channel Position M		Channel Position T	
			Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth
2	QPSK	5.0 MHz 15 kHz SCS	24279.53	24856.85	23762.93	24800.88	24272.26	24863.63

Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position B

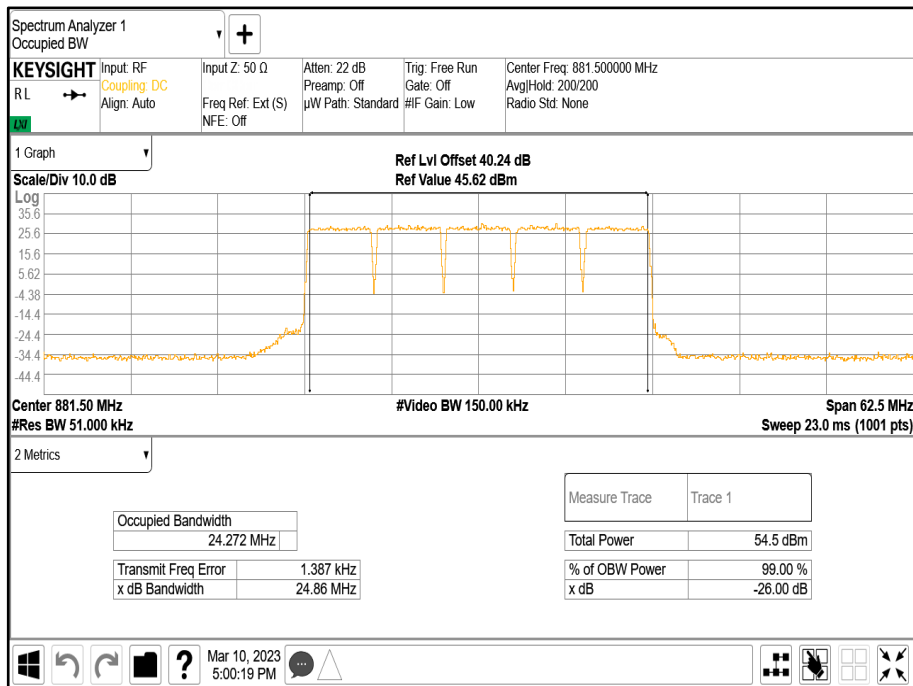




**Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position M**



**Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position T**



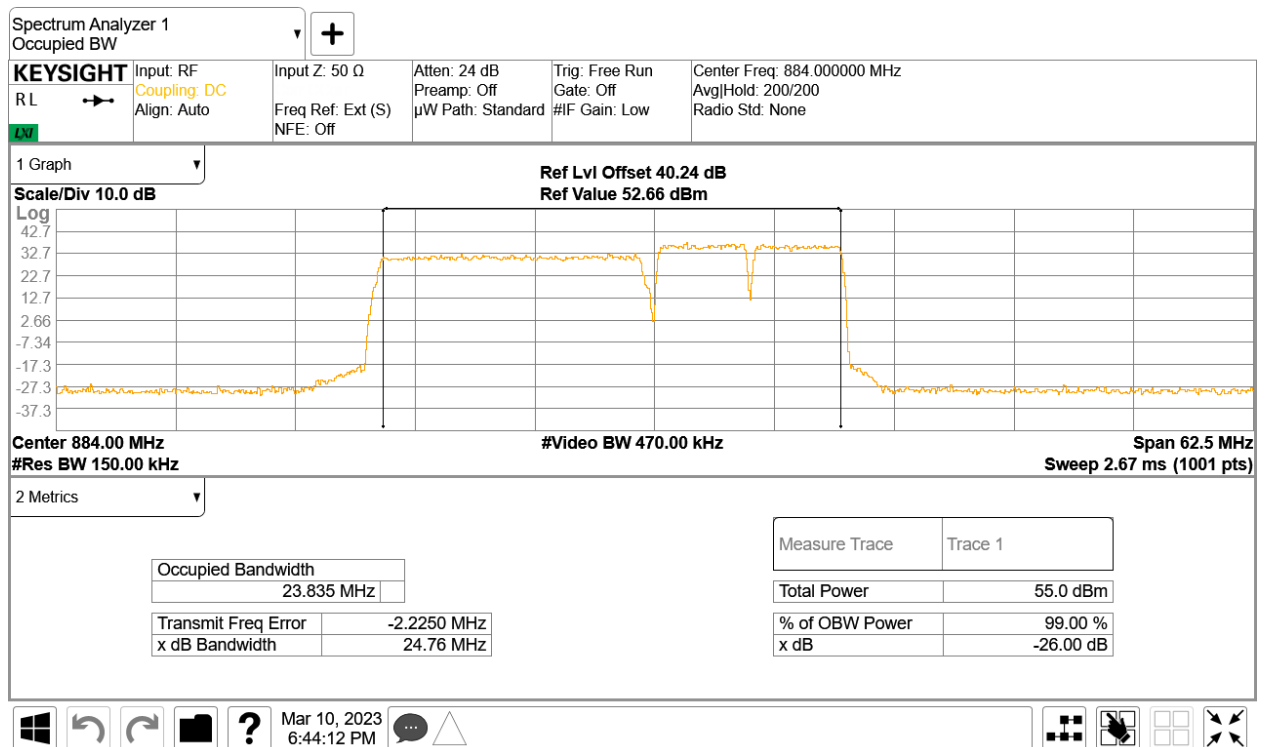


Configuration 8

Maximum Output Power 47.80 dBm

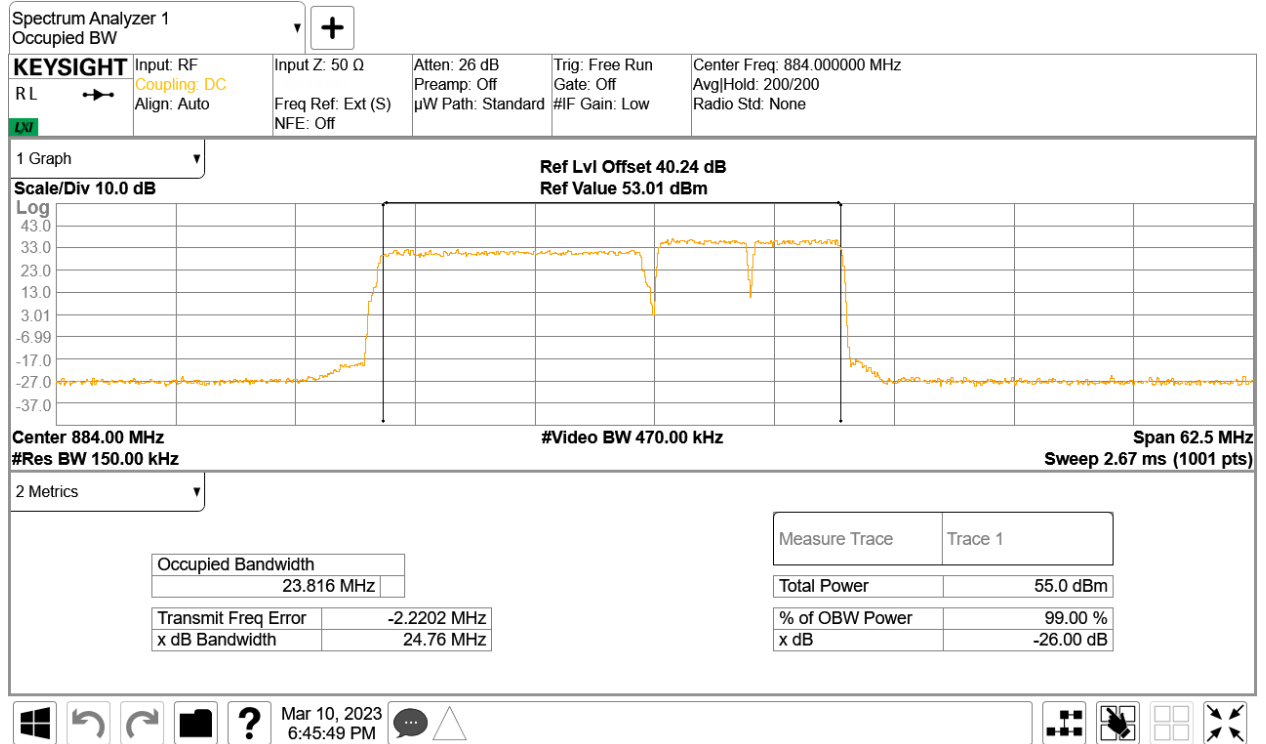
Antenna	LTE / NR Modulation	LTE / NR Carrier Bandwidth	Result (kHz)					
			Channel Position B		Channel Position M		Channel Position T	
			Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth
2	QPSK / QPSK	15.0 MHz / 5.0 MHz / 5.0 MHz	23834.72	24763.17	-	-	23816.35	24756.22

Antenna 2 - LTE / NR Modulation QPSK / QPSK - LTE / NR Carrier Bandwidth 15.0 MHz / 5.0 MHz / 5.0 MHz - Channel Position B





Antenna 2 - LTE / NR Modulation QPSK / QPSK - LTE / NR Carrier Bandwidth 15.0 MHz / 5.0 MHz / 5.0 MHz - Channel Position T



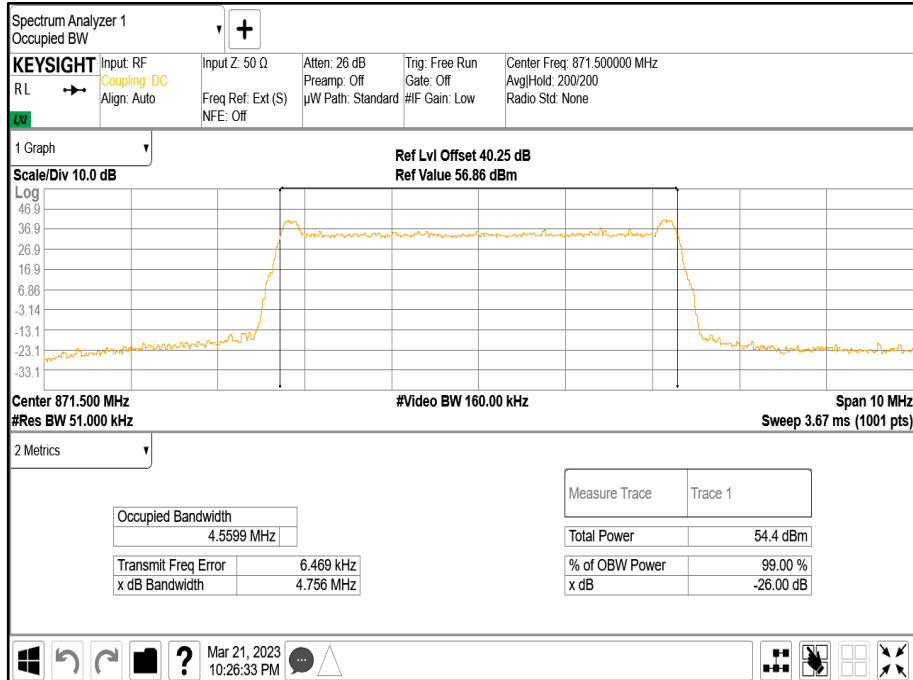
Configuration 9

Maximum Output Power 47.80 dBm

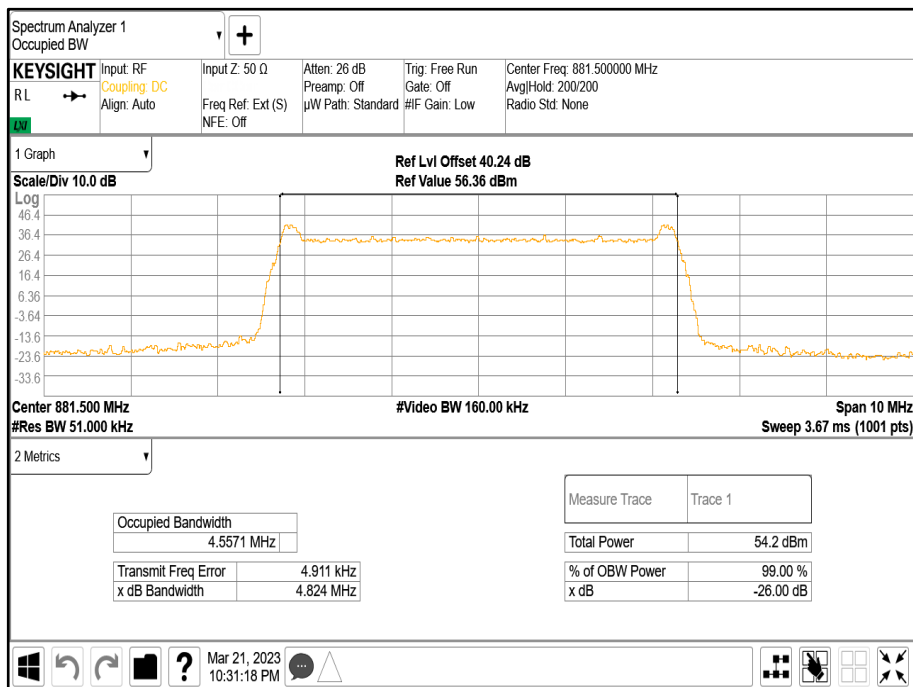
Antenna	NB-IoT IB / NR Modulation	NB-IoT IB / NR Carrier Bandwidth	Result (kHz)					
			Channel Position B		Channel Position M		Channel Position T	
			Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth
2	QPSK	5.0 MHz	4559.93	4755.71	4557.14	4824.08	4553.59	4791.46
2	QPSK	10.0 MHz	9401.45	9738.71	9403.61	9761.31	9397.27	9709.71
2	QPSK	15.0 MHz	14374.21	14755.87	14377.65	14723.20	14367.02	14770.26
2	QPSK	20.0 MHz	19202.71	19814.52	19227.21	19761.82	19180.46	19736.16
2	QPSK	25.0 MHz	23864.58	24783.77	23884.85	24687.35	23830.70	24624.22



Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 5.0 MHz - Channel Position B



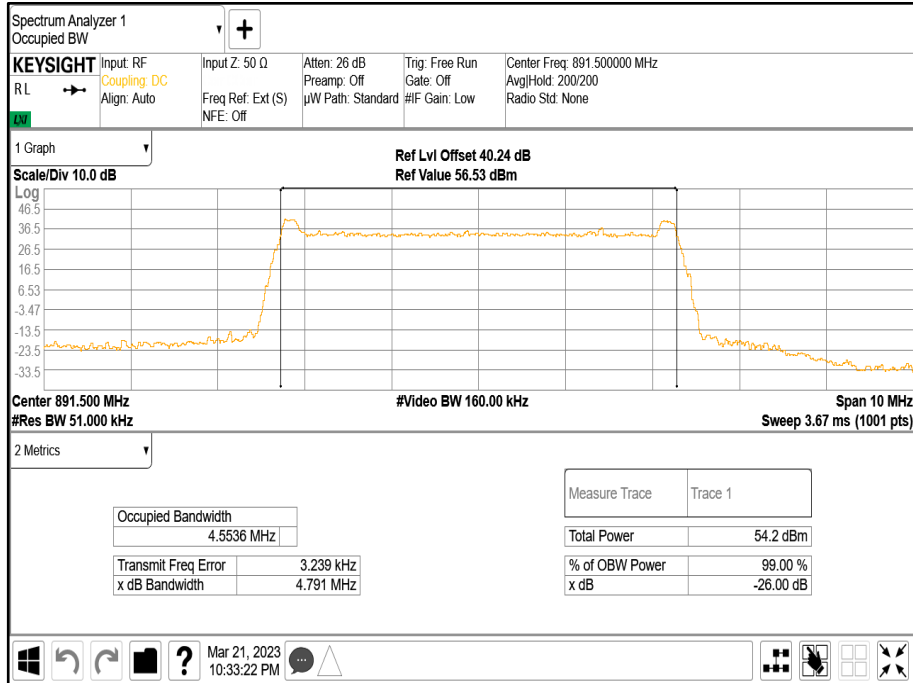
Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 5.0 MHz - Channel Position M



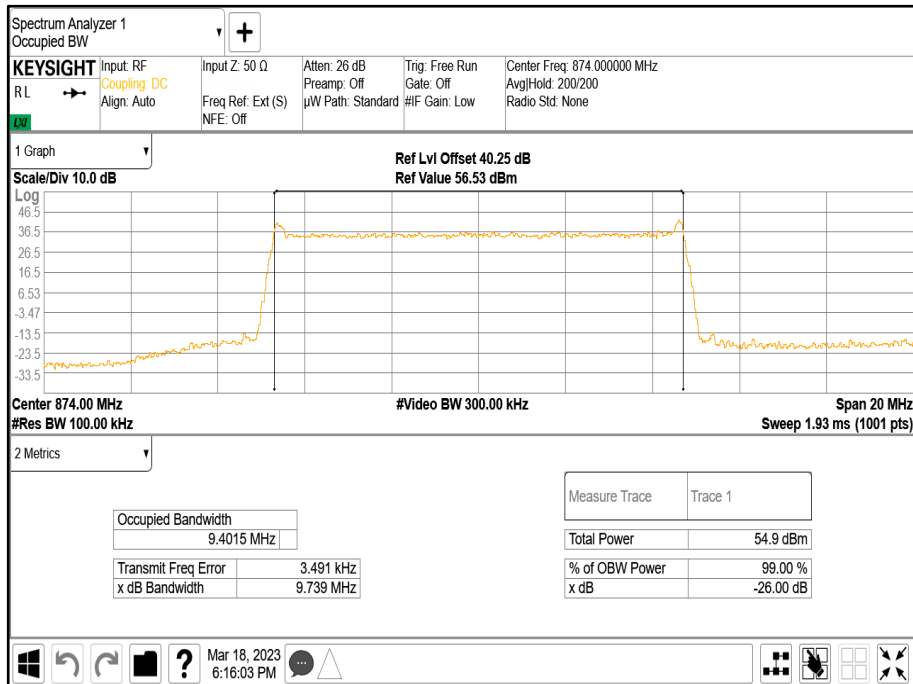




Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 5.0 MHz - Channel Position T

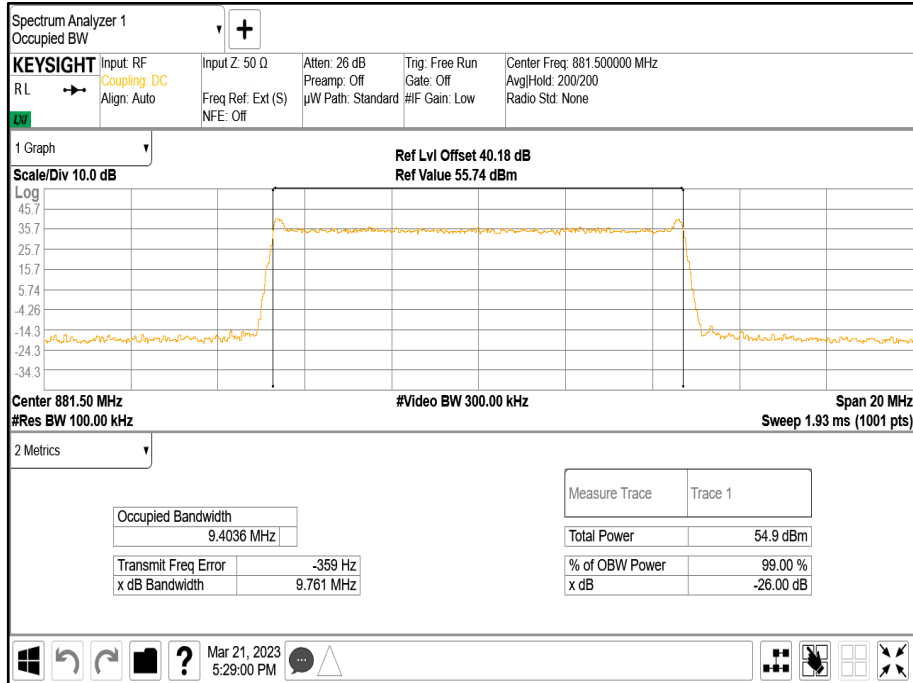


Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 10.0 MHz - Channel Position B

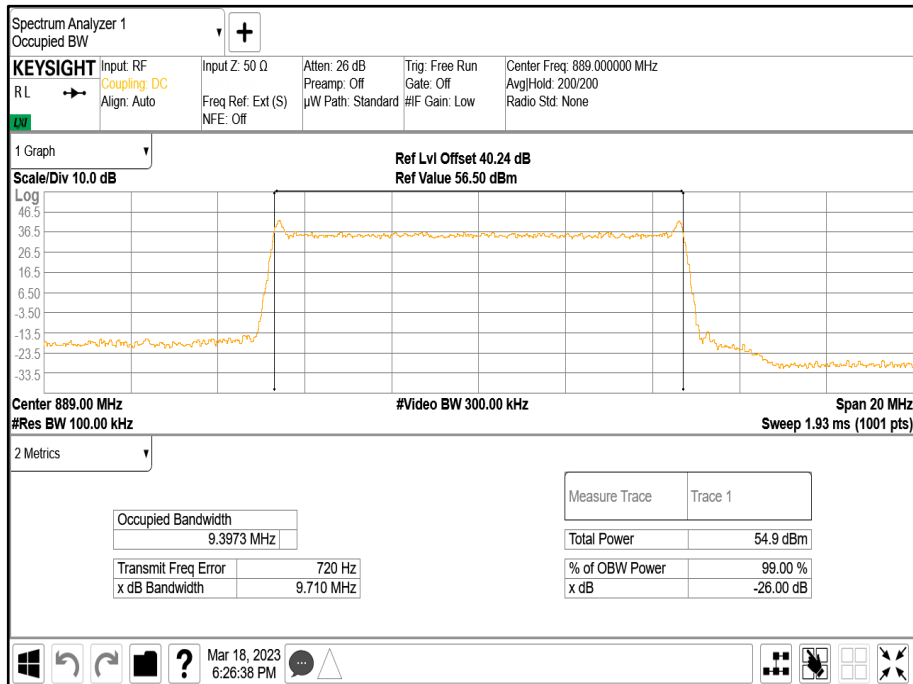




**Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 10.0 MHz - Channel Position M**

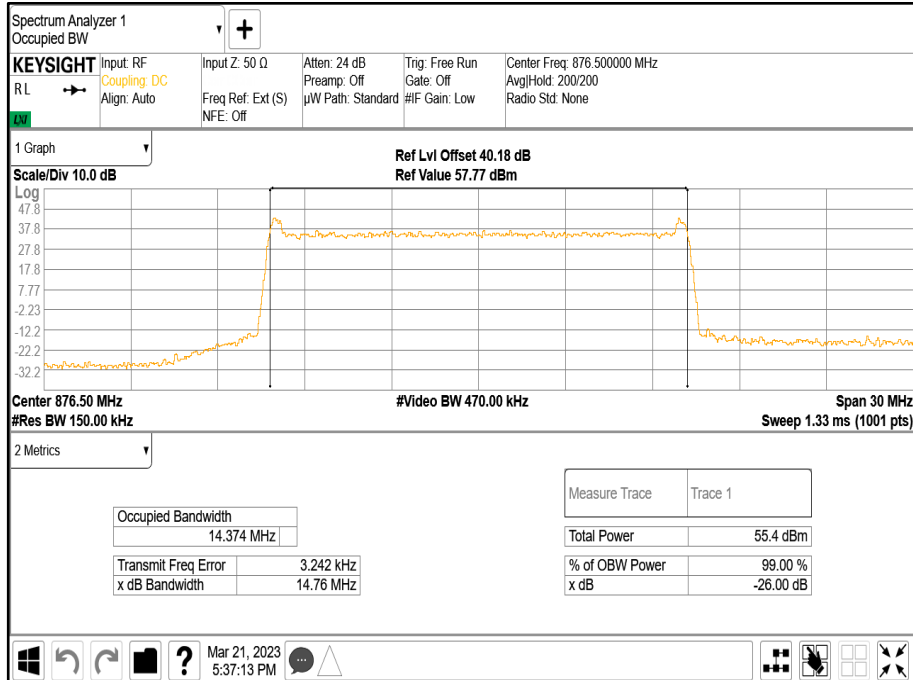


**Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 10.0 MHz - Channel Position T**

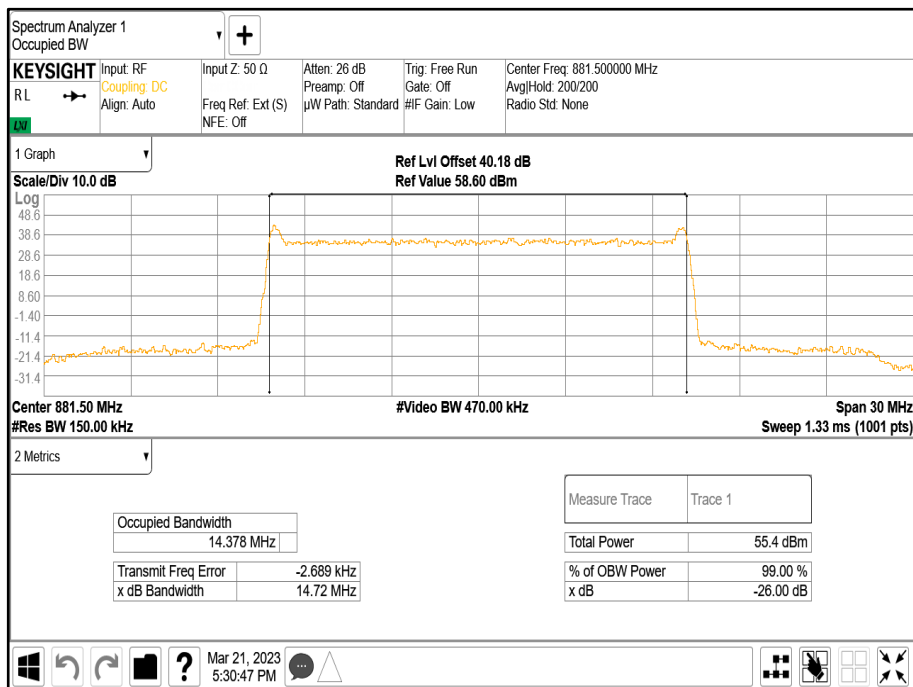




**Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 15.0 MHz - Channel Position B**

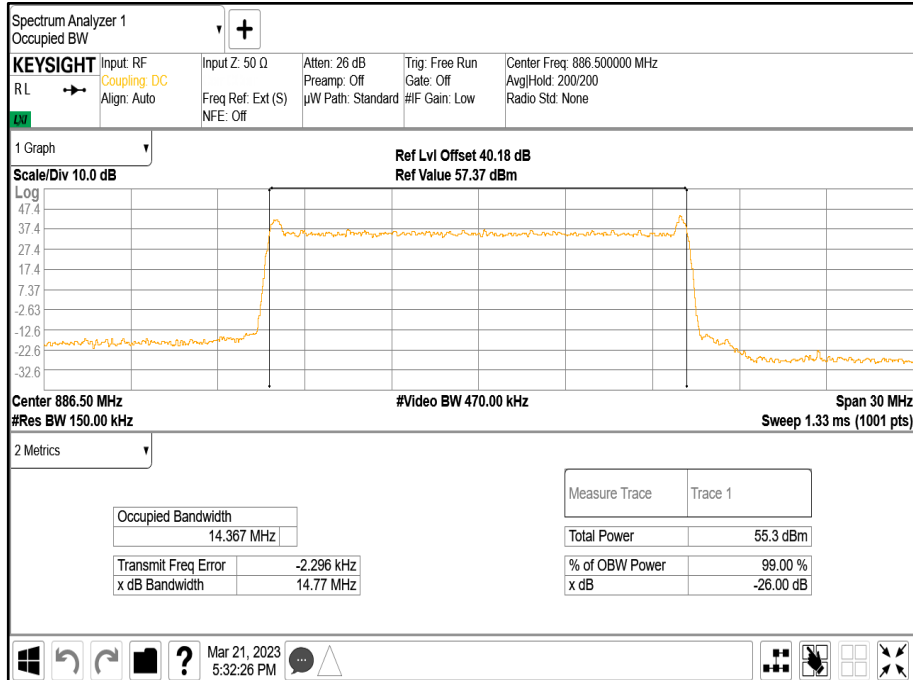


**Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 15.0 MHz - Channel Position M**

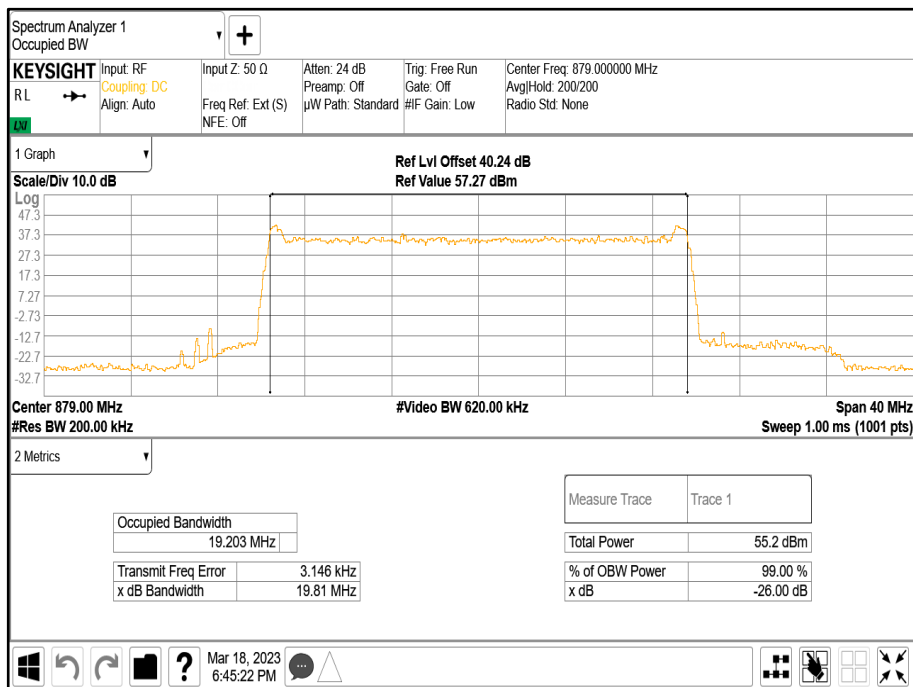




**Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 15.0 MHz - Channel Position T**

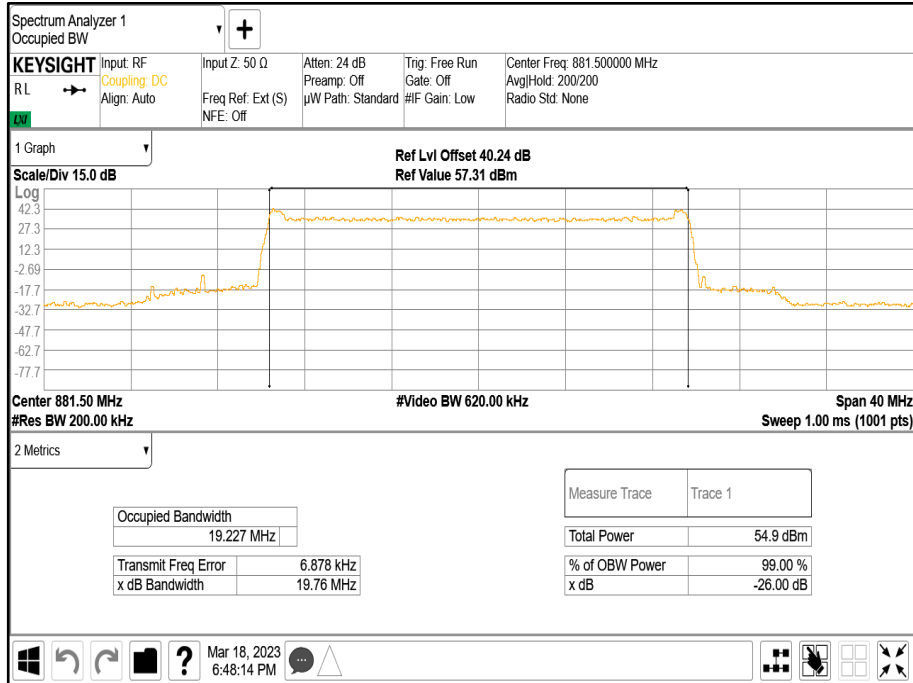


**Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 20.0 MHz - Channel Position B**

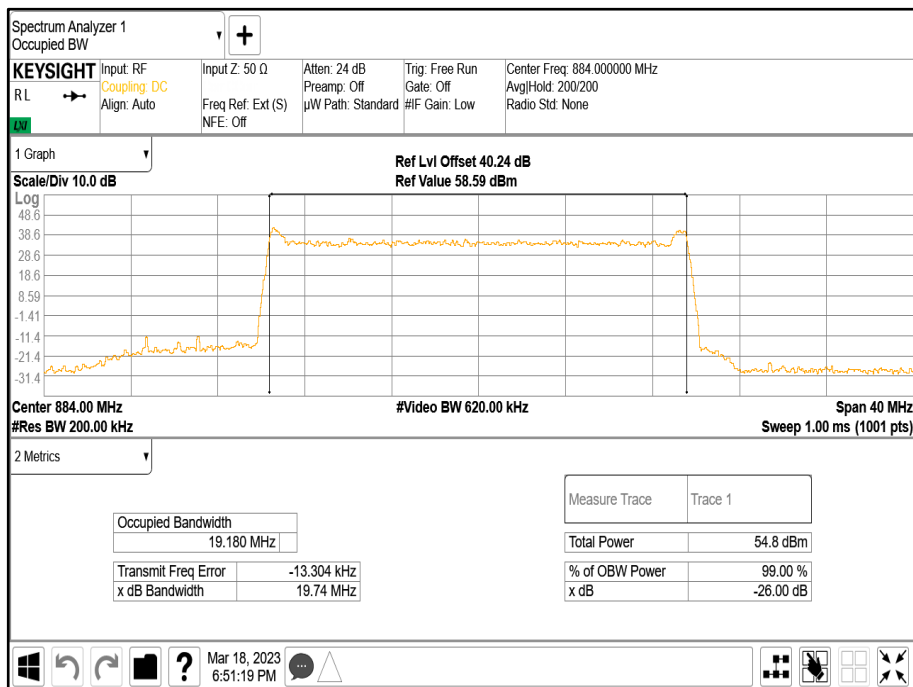




**Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 20.0 MHz - Channel Position M**

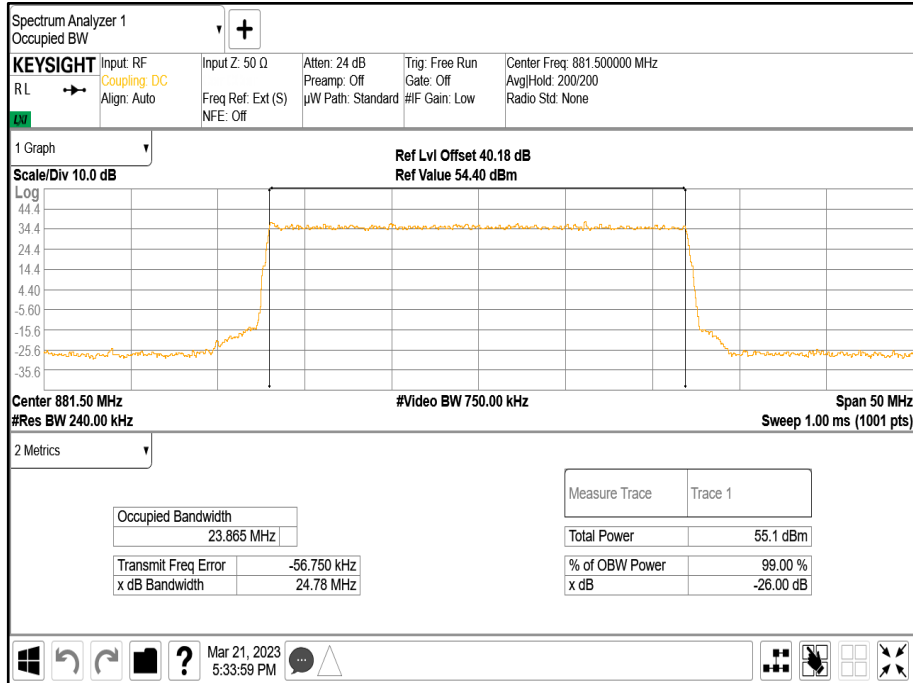


**Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 20.0 MHz - Channel Position T**

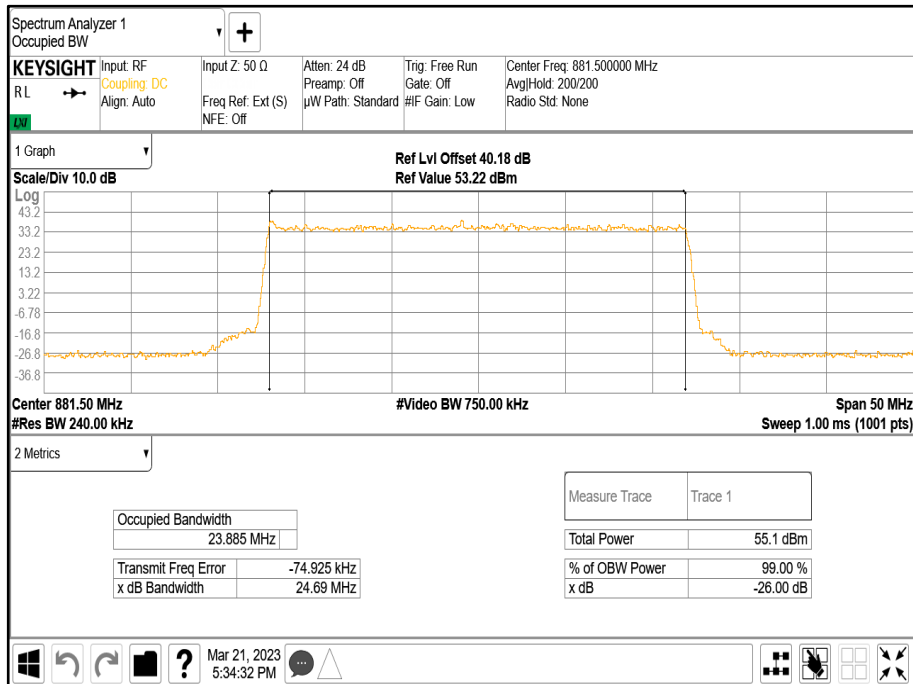




**Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 25.0 MHz - Channel Position B**

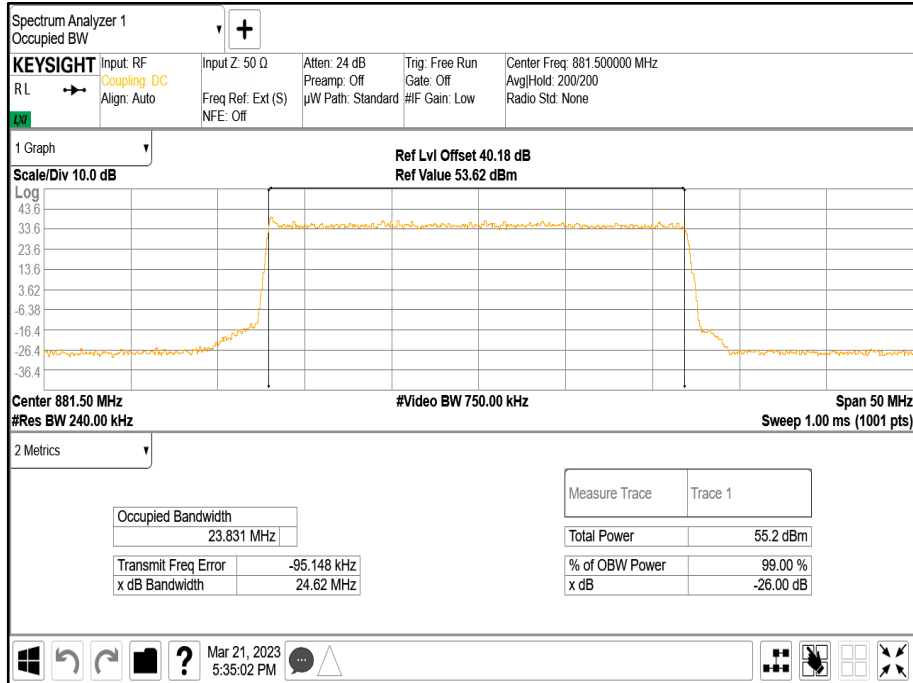


**Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 25.0 MHz - Channel Position M**





Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 25.0 MHz - Channel Position T



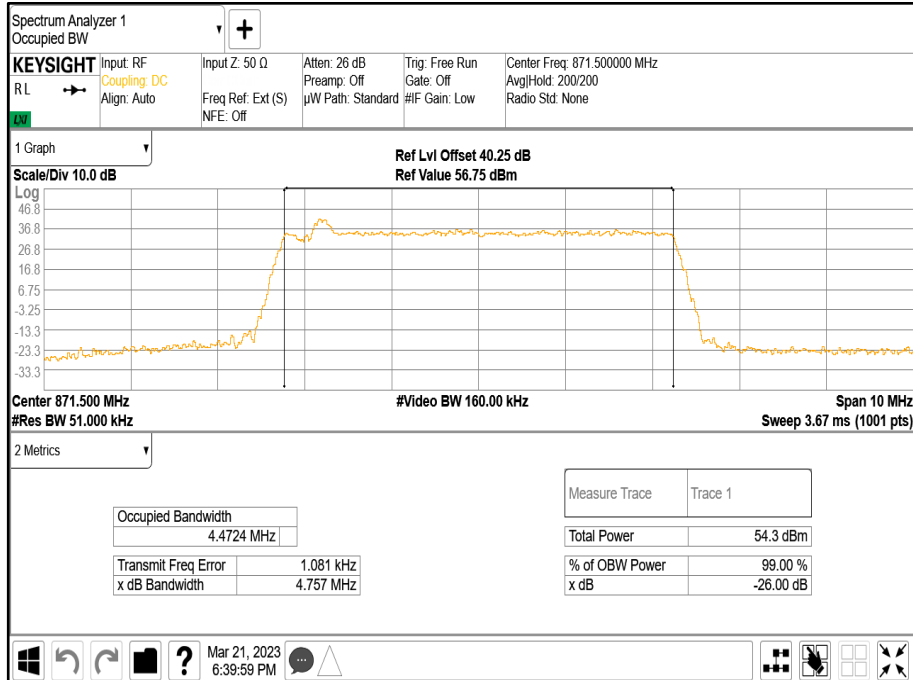
Configuration 10

Maximum Output Power 47.80 dBm

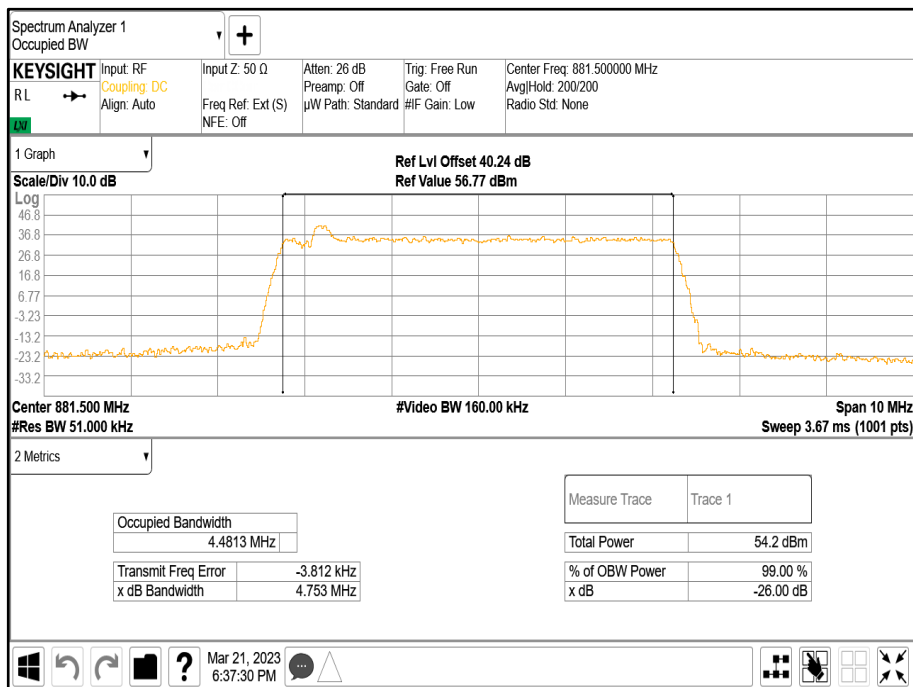
Antenna	LTE / NB-IoT IB Modulation	LTE / NB-IoT IB Carrier Bandwidth	Result (kHz)					
			Channel Position B		Channel Position M		Channel Position T	
			Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth
2	QPSK	5.00 MHz	4472.44	4757.10	4481.27	4752.93	4470.62	4711.75



Antenna 2 - LTE / NB-IoT IB Modulation QPSK - LTE / NB-IoT IB Carrier Bandwidth 5.00 MHz - Channel Position B



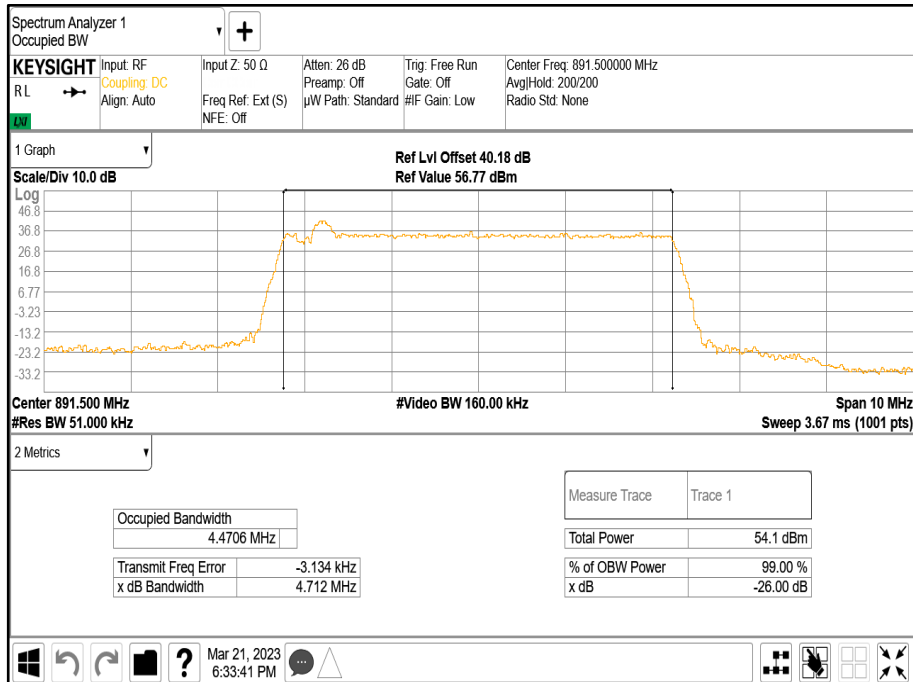
Antenna 2 - LTE / NB-IoT IB Modulation QPSK - LTE / NB-IoT IB Carrier Bandwidth 5.00 MHz - Channel Position M







Antenna 2 - LTE / NB-IoT IB Modulation QPSK - LTE / NB-IoT IB Carrier Bandwidth 5.00 MHz - Channel Position T



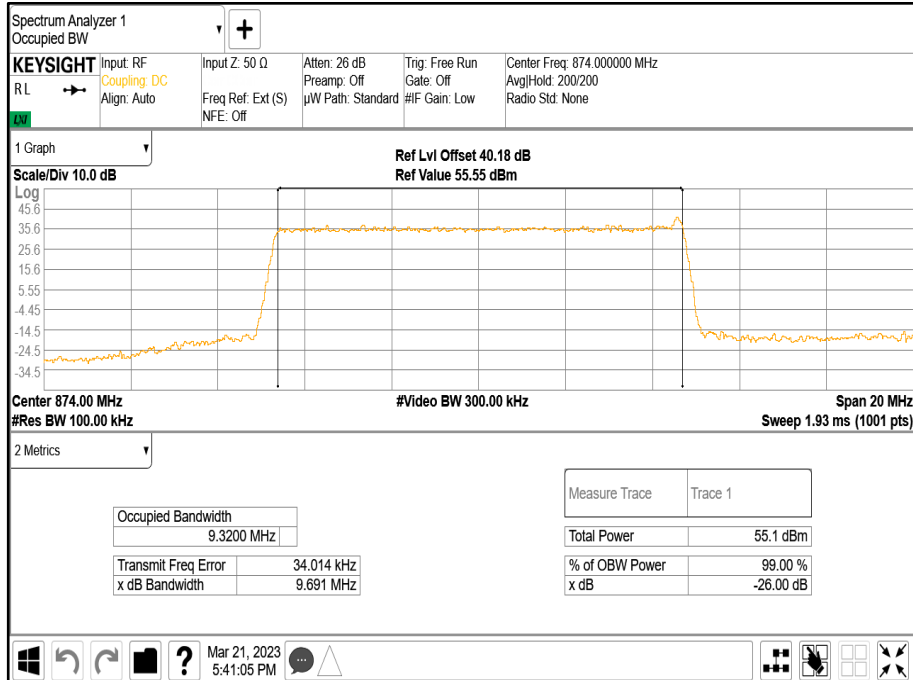
Configuration 11

Maximum Output Power 47.80 dBm

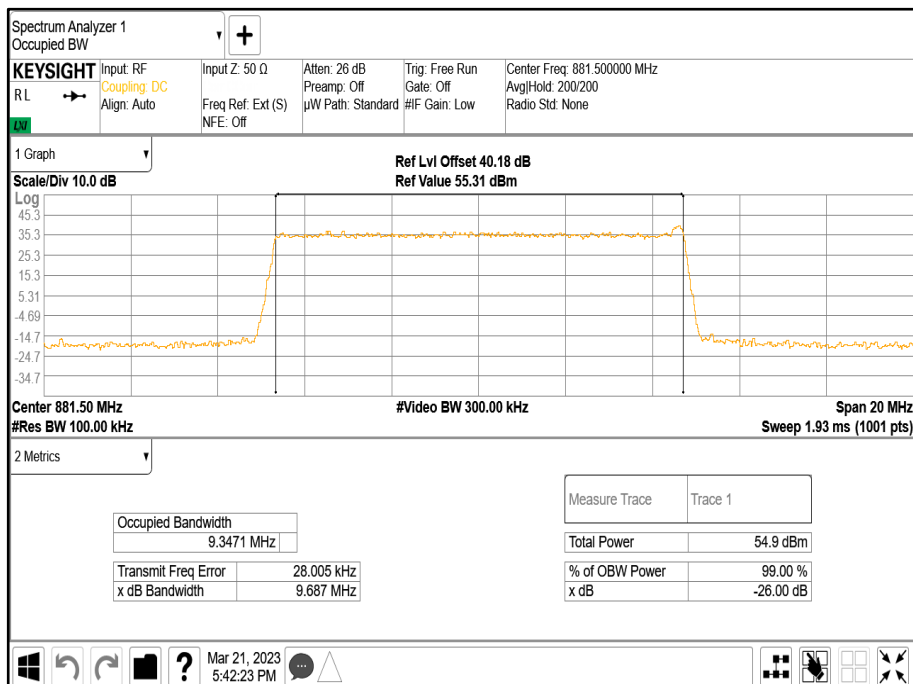
Antenna	LTE / NB-IOT GB Modulation	LTE / NB-IOT GB Carrier Bandwidth	Result (kHz)					
			Channel Position B		Channel Position M		Channel Position T	
			Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth
2	QPSK	10.00 MHz	9320.02	9691.43	9347.15	9686.55	9322.38	9703.39



**Antenna 2 - LTE / NB-IOT GB Modulation QPSK - LTE / NB-IOT GB Carrier Bandwidth 10.00 MHz - Channel Position B**

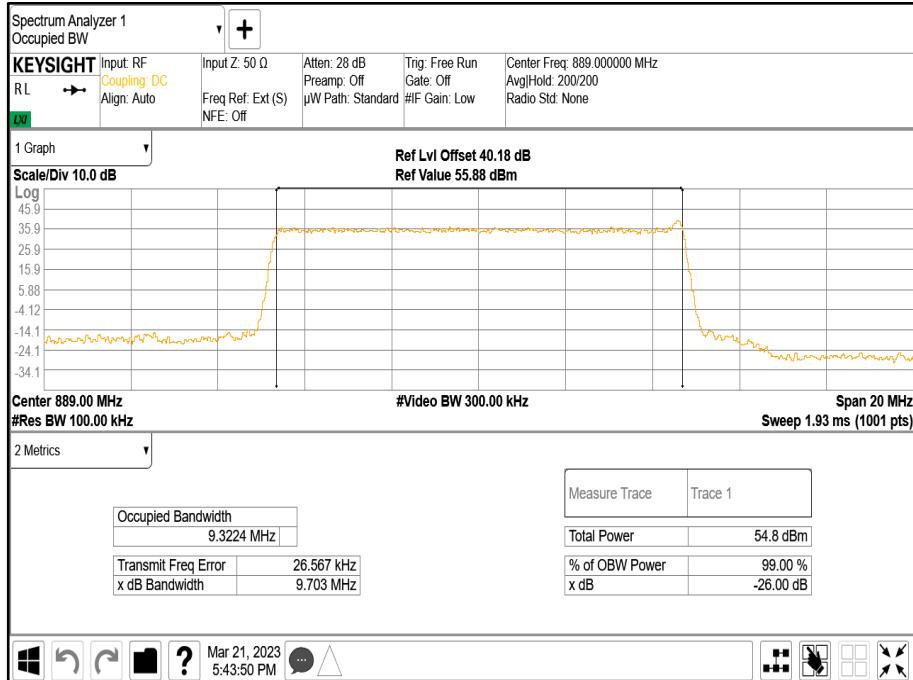


**Antenna 2 - LTE / NB-IOT GB Modulation QPSK - LTE / NB-IOT GB Carrier Bandwidth 10.00 MHz - Channel Position M**





Antenna 2 - LTE / NB-IOT GB Modulation QPSK - LTE / NB-IOT GB Carrier Bandwidth 10.00 MHz - Channel Position T





**2.3 BAND EDGE**

**2.3.1 Specification Reference**

FCC CFR 47 Part 22, Clause 22.917(b)  
ISED RSS-132, Clause 5.5  
FCC CFR 47 Part 2, Clause 2.1051

**2.3.2 Date of Test and Modification State**

08, 09, 10, 13, 15, 20, 21 March -2023 - Modification State 0

**2.3.3 Test Equipment Used**

The major items of test equipment used for the above tests are identified in Section 3.1.

**2.3.4 Environmental Conditions**

Ambient Temperature 22.0 - 22.8°C  
Relative Humidity 37.8 - 39.8%

**2.3.5 Test Method**

All measurements were made in accordance with FCC KDB 971168 D01, Clause 6.0.

Band Edge measurements were used an Integration Bandwidth of at least 1% of the measured 26dB Bandwidth.

Each antenna port has been declared as being equivalent, therefore measurements were made on one antenna port only. To account for this, the limit was tightened by  $10 * \text{Log}(N)$ , where N is equal to the number of MIMO antenna ports.

For single port, the limit was calculated as being  $-13 \text{ dBm} - 10 * \text{Log}(4) = -19 \text{ dBm}$ .

**2.3.6 Test Results**

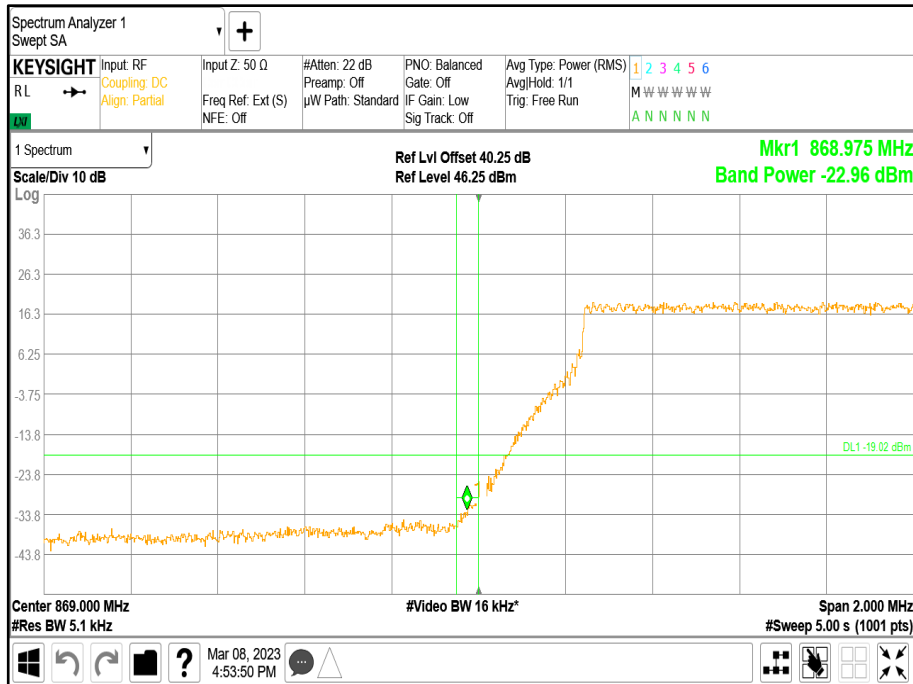
Configuration 1

Maximum Output Power 47.80 dBm

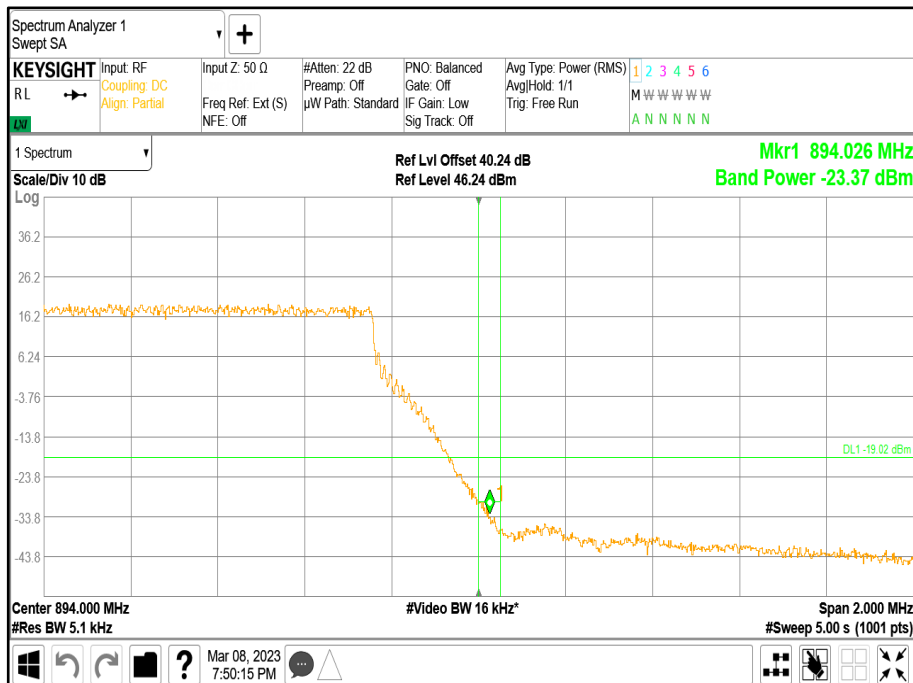
Antenna	LTE Modulation	LTE Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
2	QPSK	5.0 MHz	871.5	891.5
2	QPSK	10.0 MHz	874.0	889.0



Antenna 2 - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position B



Antenna 2 - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position T

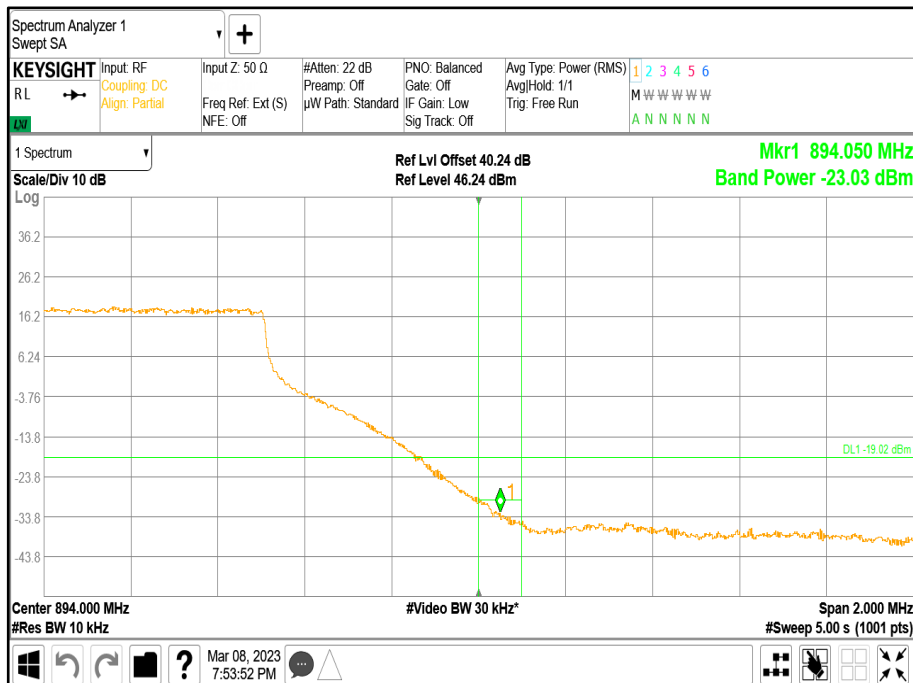




Antenna 2 - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position B



Antenna 2 - LTE Modulation QPSK - LTE Carrier Bandwidth 10.0 MHz - Channel Position T



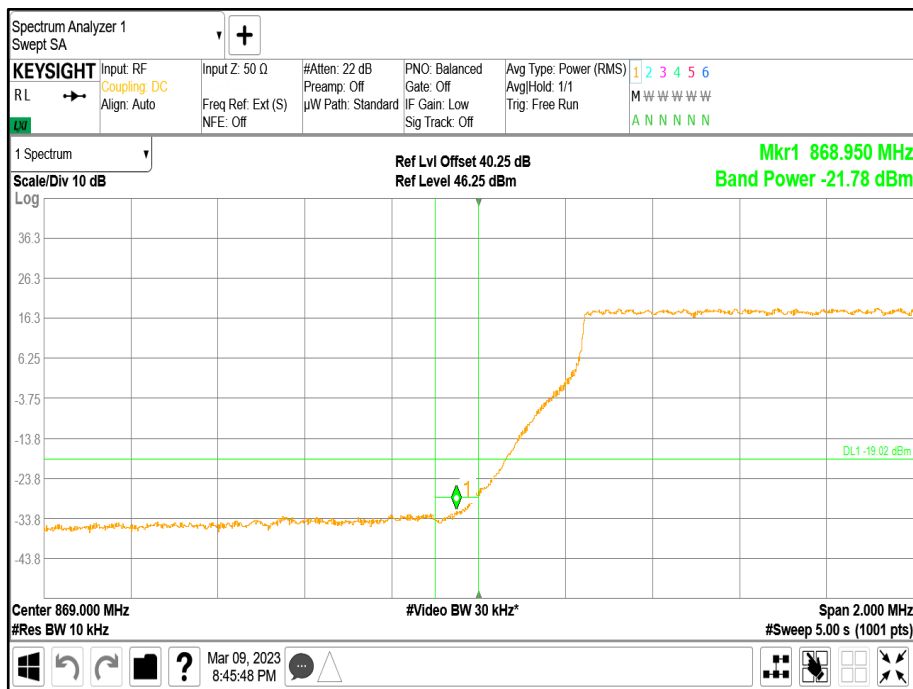


Configuration 2

Maximum Output Power 47.80 dBm

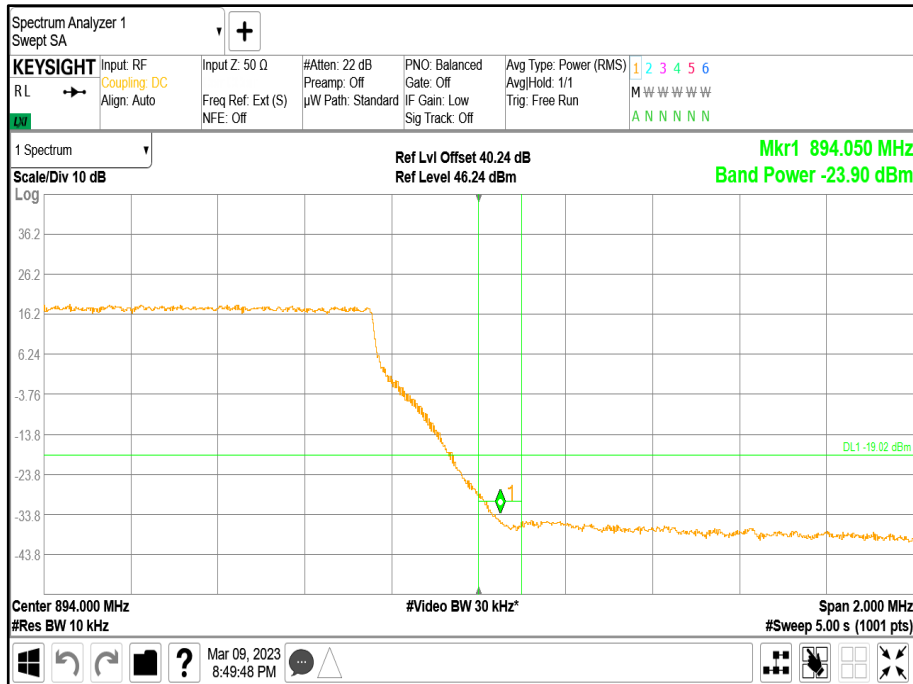
Antenna	LTE Modulation	LTE Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
2	QPSK	5.0 MHz	871.5+876.5	891.5+886.5

Antenna 2 - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position B





Antenna 2 - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position T



Configuration 3

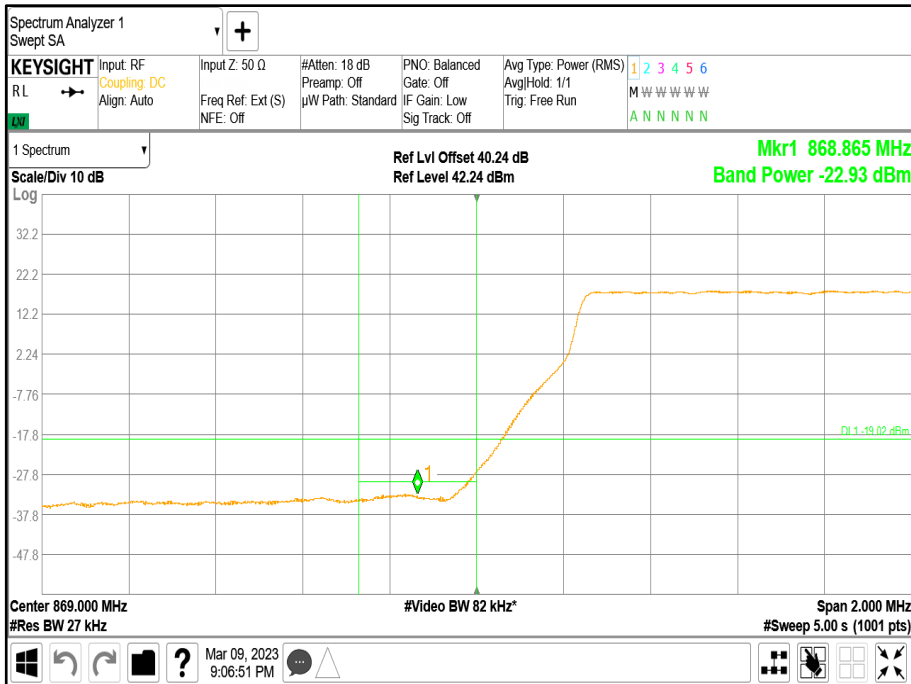
Maximum Output Power 47.80 dBm

Antenna	LTE Modulation	LTE Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
2	QPSK	5.0 MHz	871.5+876.5+881.5+886.5+891.5	871.5+876.5+881.5+886.5+891.5

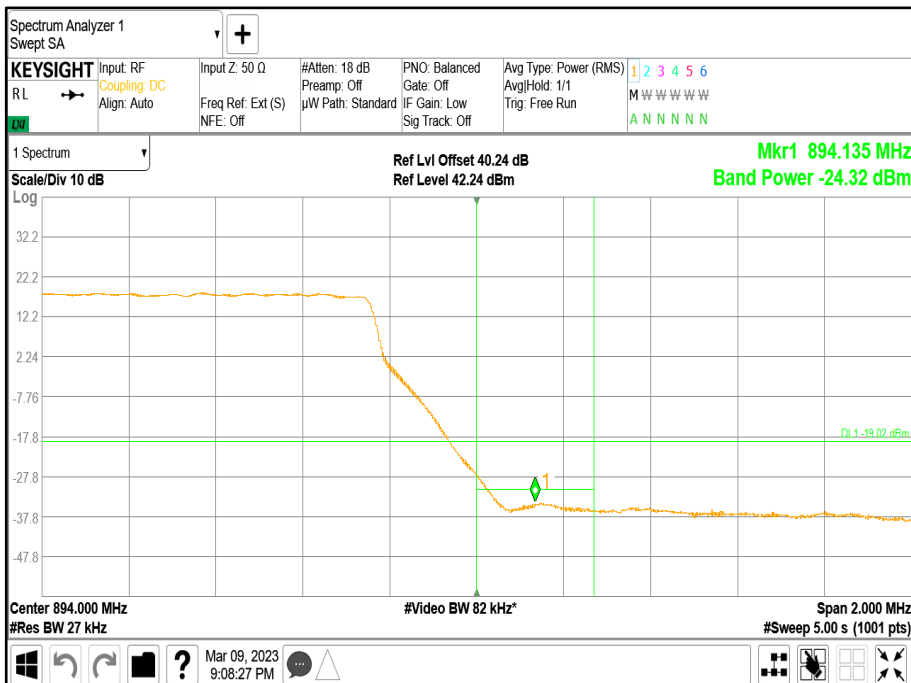




Antenna 2 - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position B



Antenna 2 - LTE Modulation QPSK - LTE Carrier Bandwidth 5.0 MHz - Channel Position T



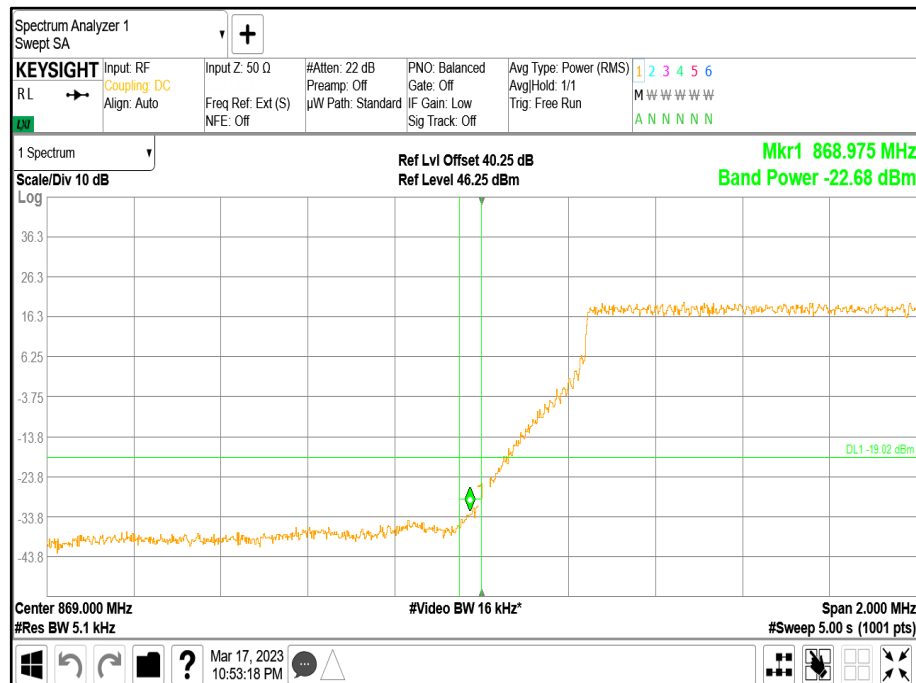


Configuration 4

Maximum Output Power 47.80 dBm

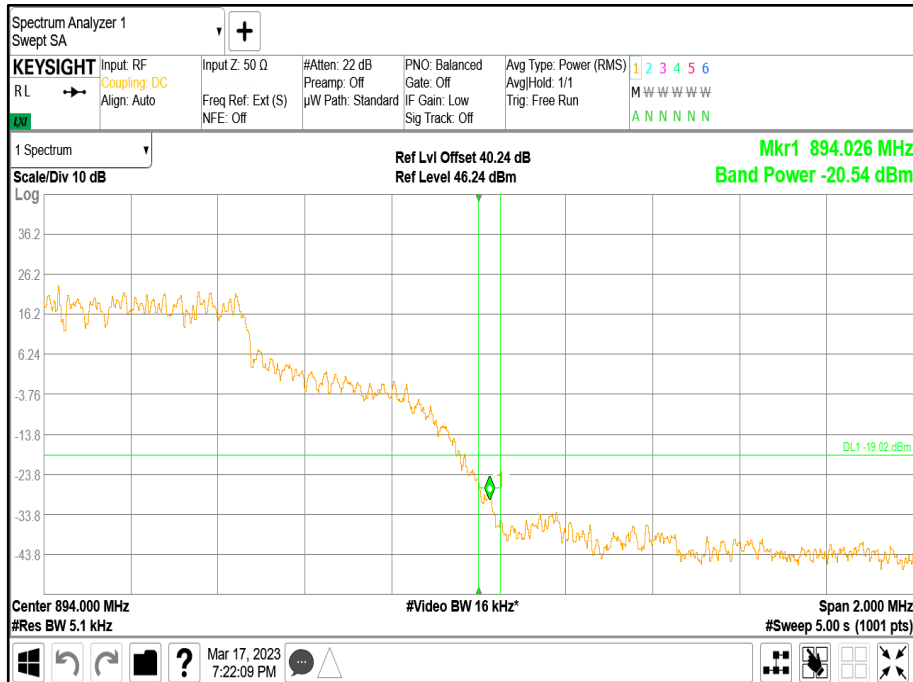
Antenna	NR Modulation	NR Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
2	QPSK	5.0 MHz 15 kHz SCS	871.5	891.5
2	QPSK	10.0 MHz 30 kHz SCS	874.0	889.0
2	QPSK	15.0 MHz 30 kHz SCS	876.5	886.5
2	QPSK	20.0 MHz 30 kHz SCS	879.0	884.0
2	QPSK	25.0 MHz 30 kHz SCS	881.5	881.5

Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position B

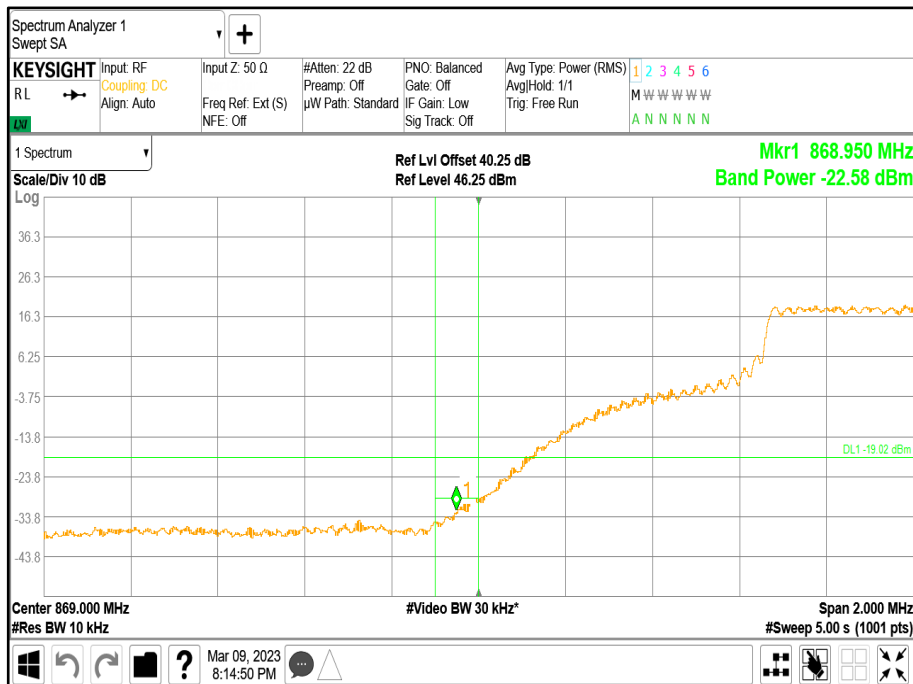




Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position T

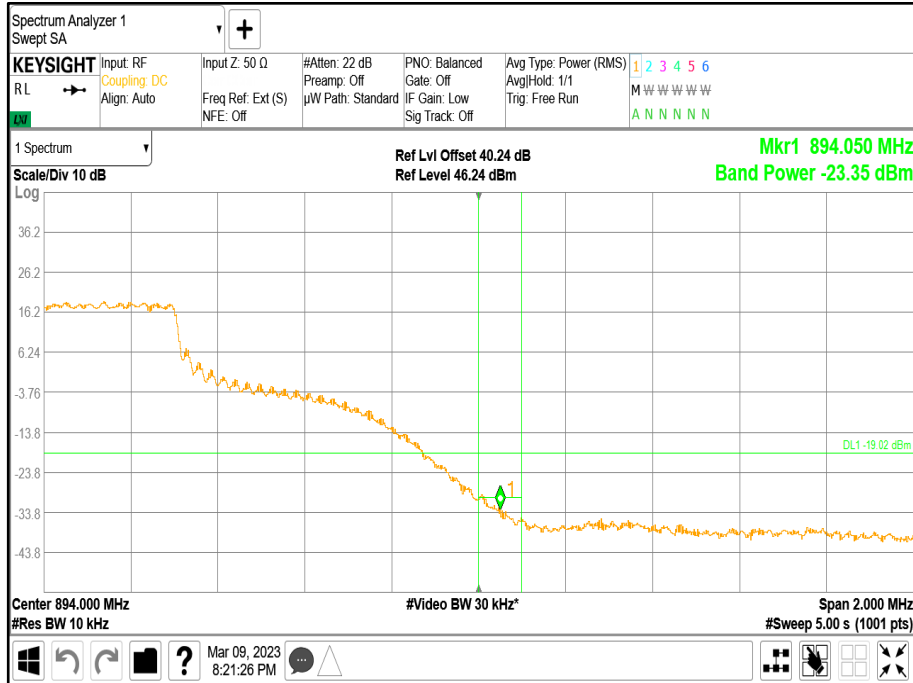


Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position B

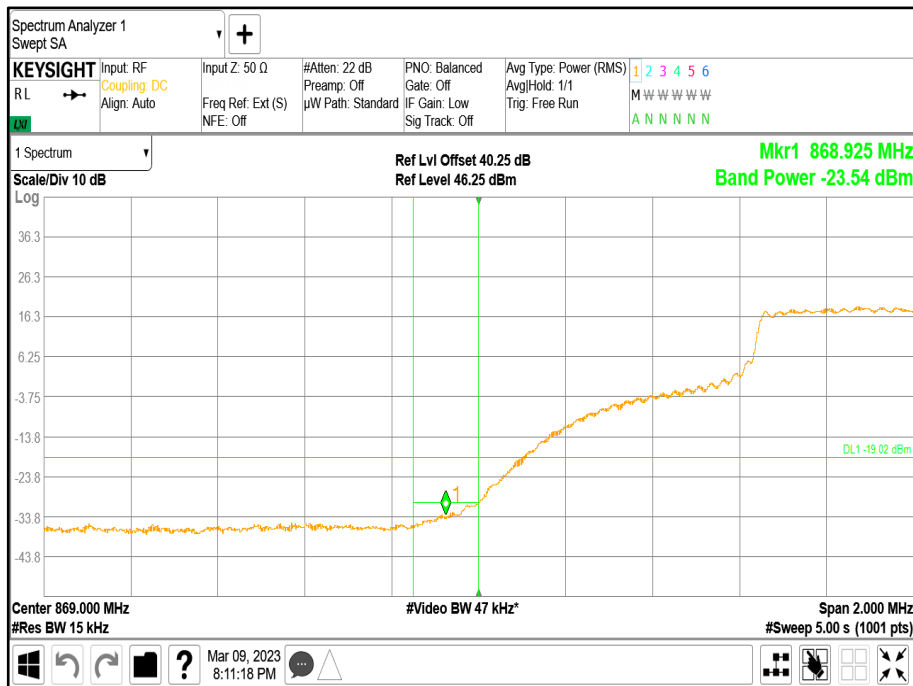




Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position T

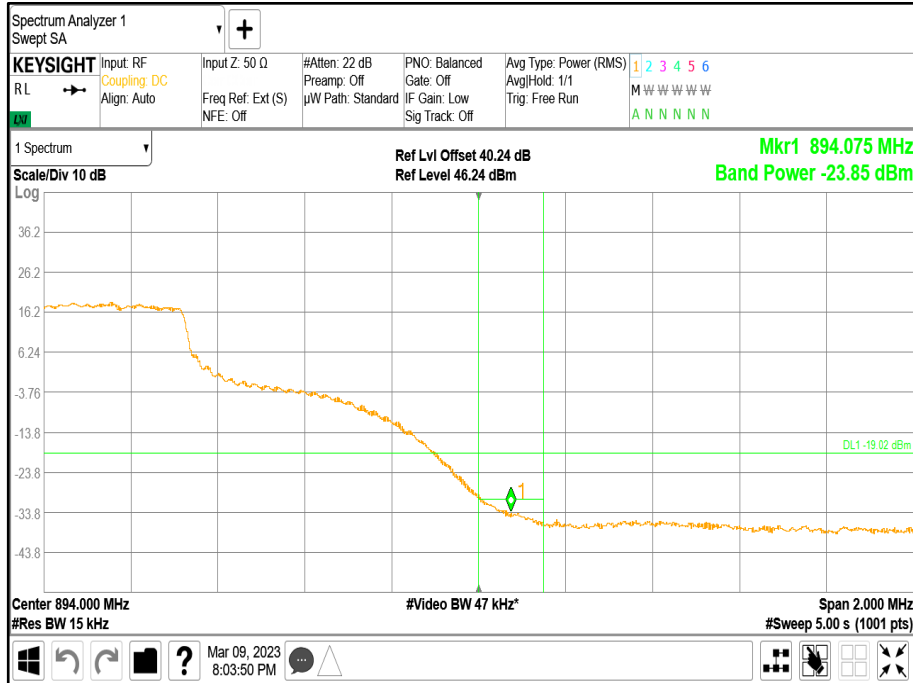


Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 30 kHz SCS - Channel Position B

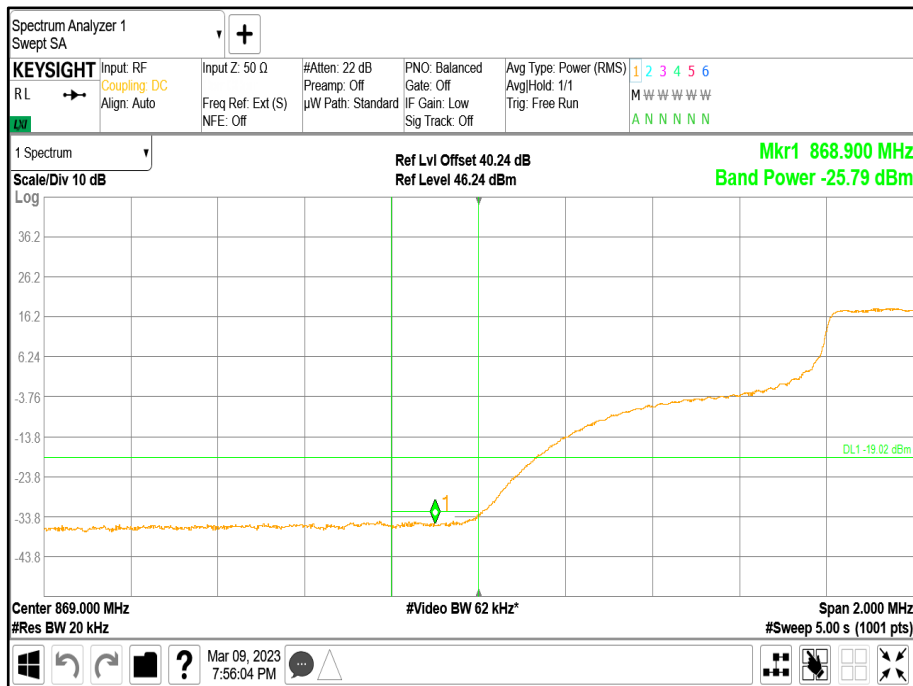




Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 15.0 MHz 30 kHz SCS - Channel Position T

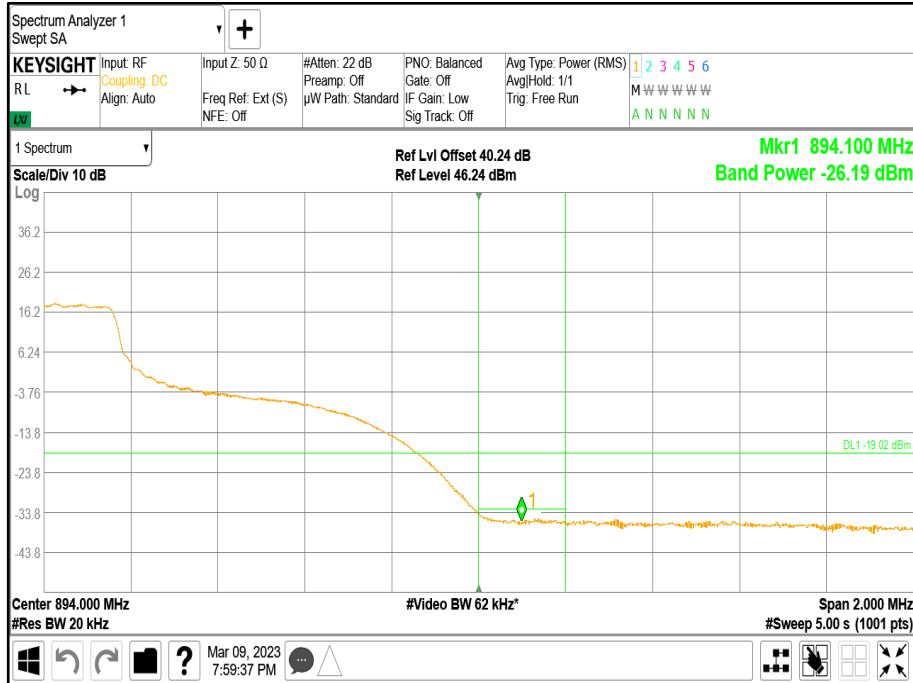


Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position B

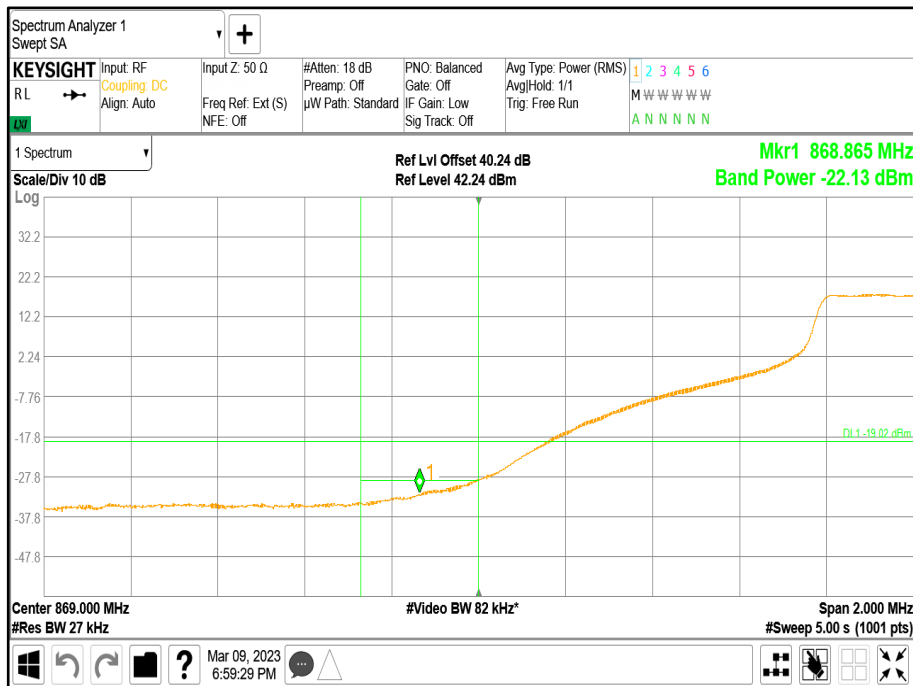




Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position T



Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz 30 kHz SCS - Channel Position B





Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz 30 kHz SCS - Channel Position T



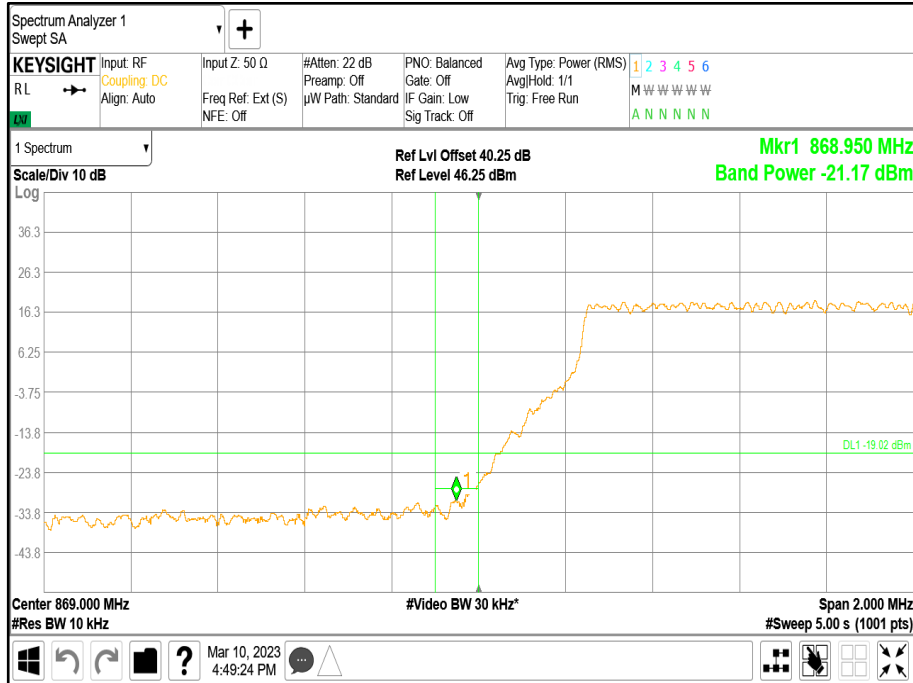
Configuration 5

Maximum Output Power 47.80 dBm

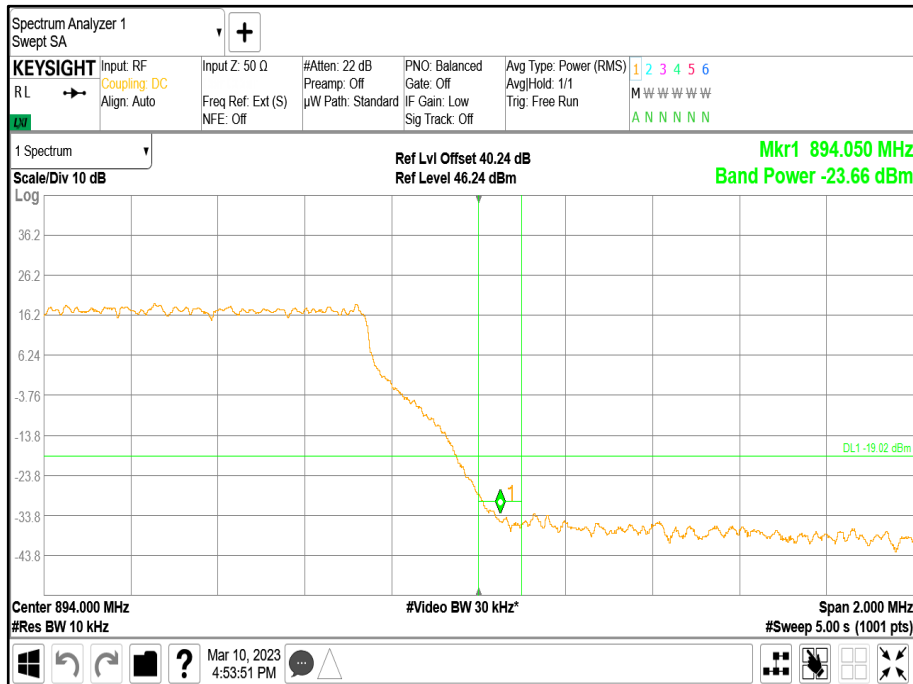
Antenna	NR Modulation	NR Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
2	QPSK	5.0 MHz 15 kHz SCS	871.5+876.5	891.5+886.5



Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position B



Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position T





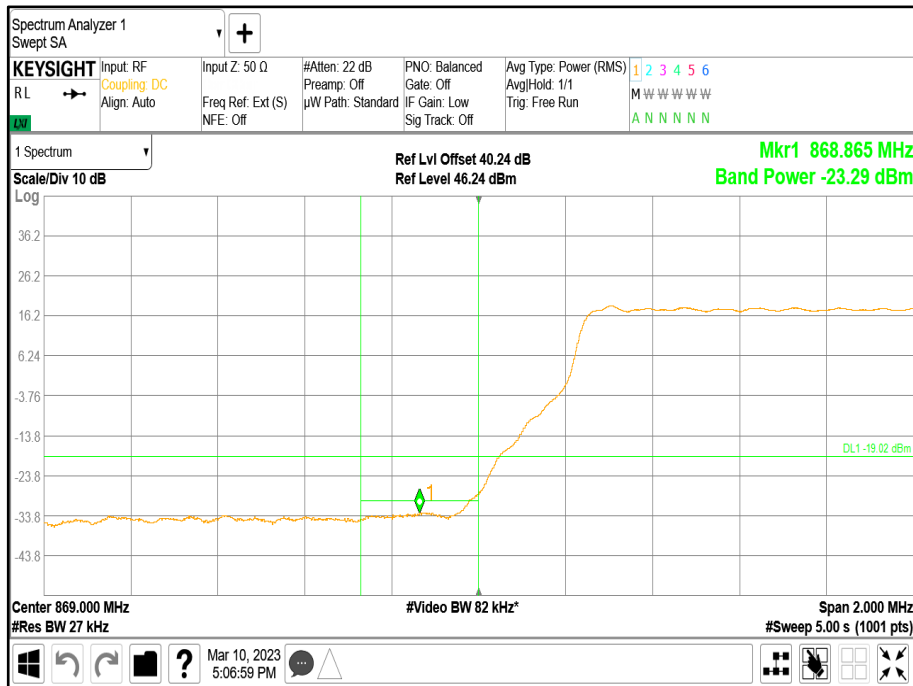


Configuration 6

Maximum Output Power 47.80 dBm

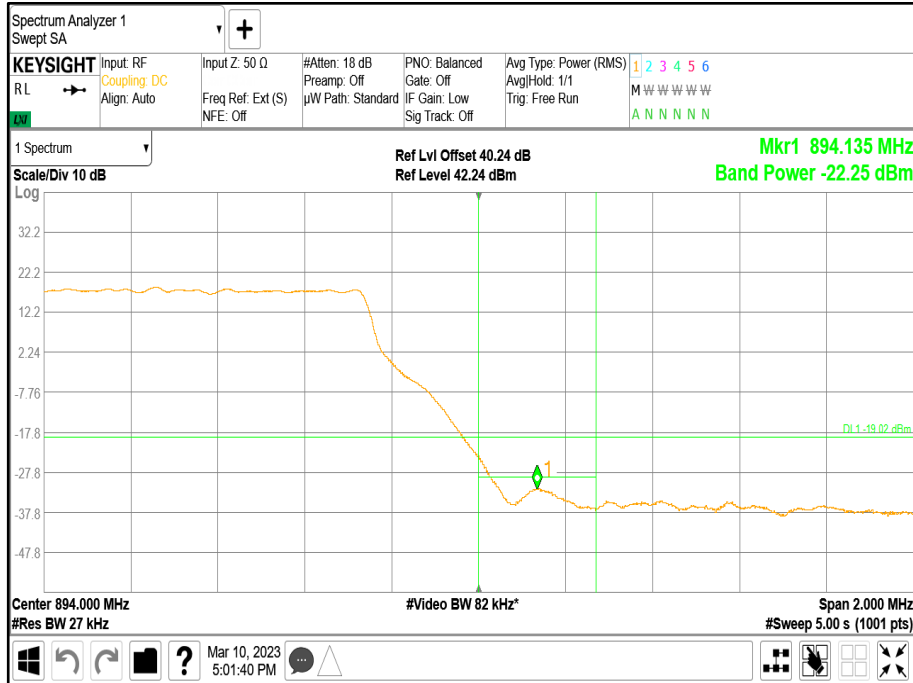
Antenna	NR Modulation	NR Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
2	QPSK	5.0 MHz 15 kHz SCS	891.5+886.5+871.5+876.5+881.5	891.5+886.5+871.5+876.5+881.5

Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position B





**Antenna 2 - NR Modulation QPSK - NR Carrier Bandwidth 5.0 MHz 15 kHz SCS - Channel Position T**

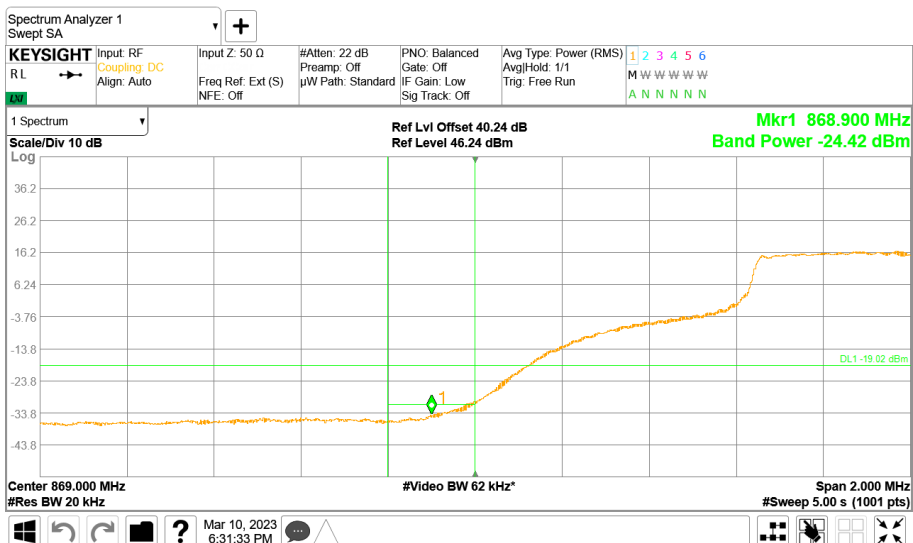


**Configuration 7**

Maximum Output Power 47.80 dBm

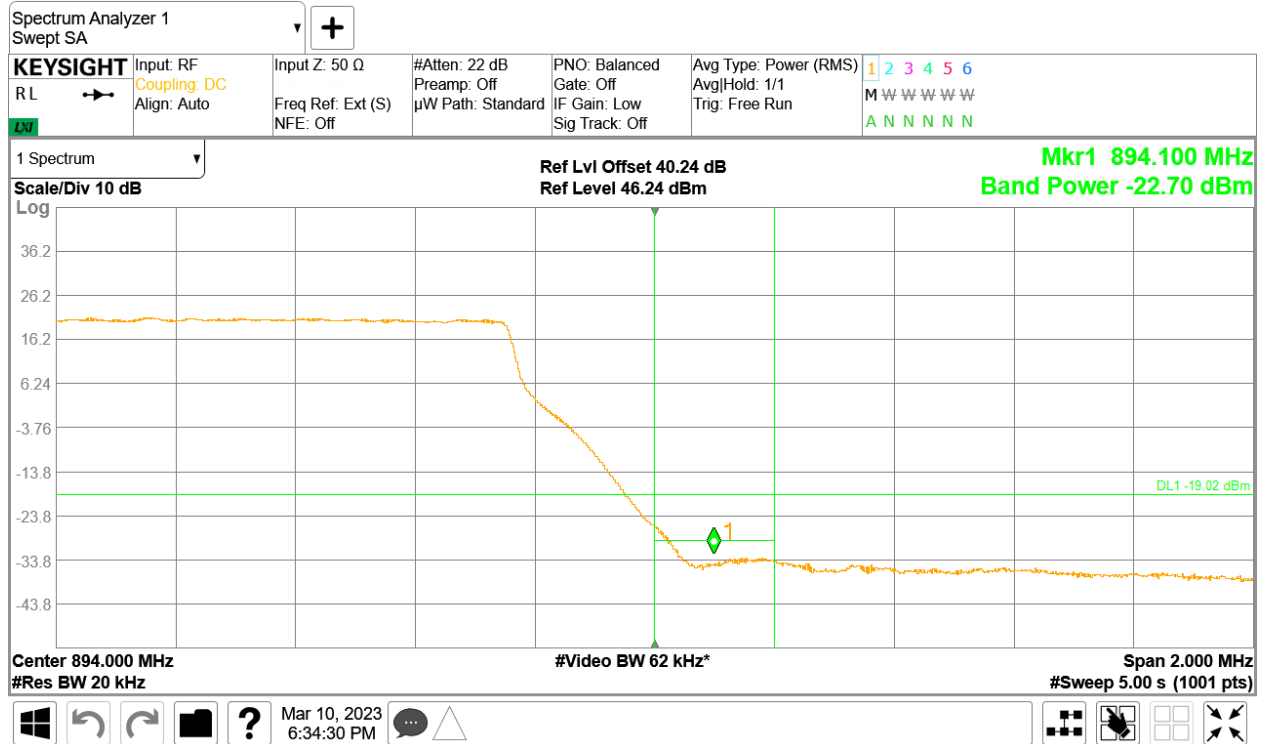
Antenna	LTE / NR Modulation	LTE / NR Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
2	QPSK / QPSK	15.0 MHz / 5.0 MHz	876.5+886.5	881.5+891.5

**Antenna 2 - LTE / NR Modulation QPSK / QPSK - LTE / NR Carrier Bandwidth 15.0 MHz / 5.0 MHz - Channel Position B**





Antenna 2 - LTE / NR Modulation QPSK / QPSK - LTE / NR Carrier Bandwidth 15.0 MHz / 5.0 MHz - Channel Position T



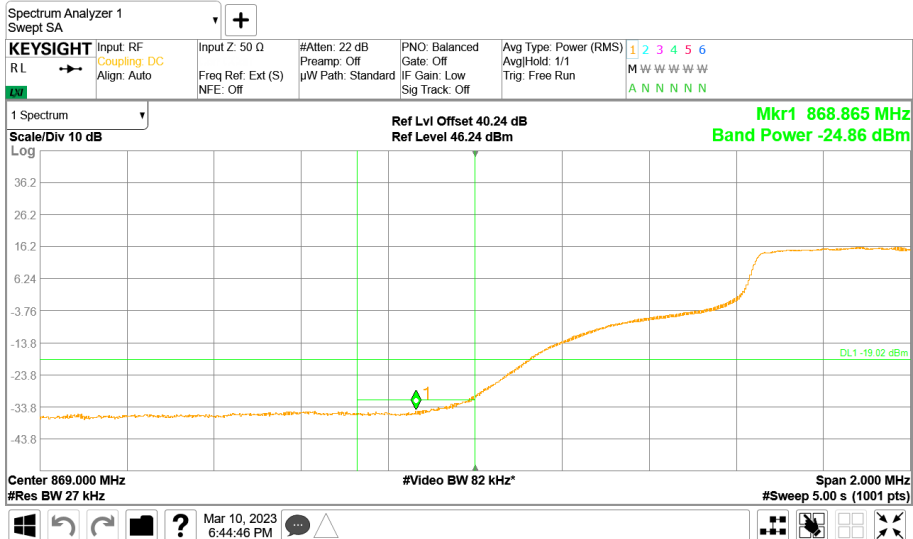
Configuration 8

Maximum Output Power 47.80 dBm

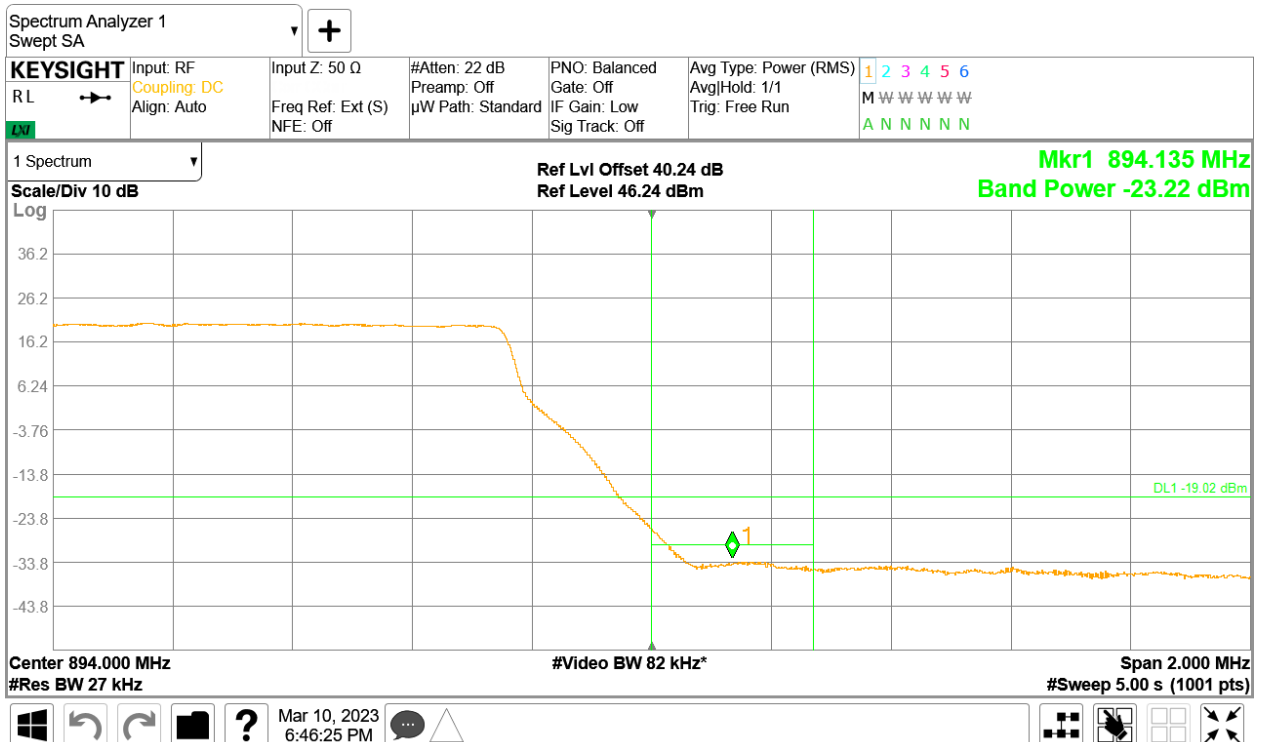
Antenna	LTE / NR Modulation	LTE / NR Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
2	QPSK / QPSK	15.0 MHz / 5.0 MHz	876.5+891.5+886.5	876.5+891.5+886.5



Antenna 2 - LTE / NR Modulation QPSK / QPSK - LTE / NR Carrier Bandwidth 15.0 MHz / 5.0 MHz - Channel Position B



Antenna 2 - LTE / NR Modulation QPSK / QPSK - LTE / NR Carrier Bandwidth 15.0 MHz / 5.0 MHz - Channel Position T



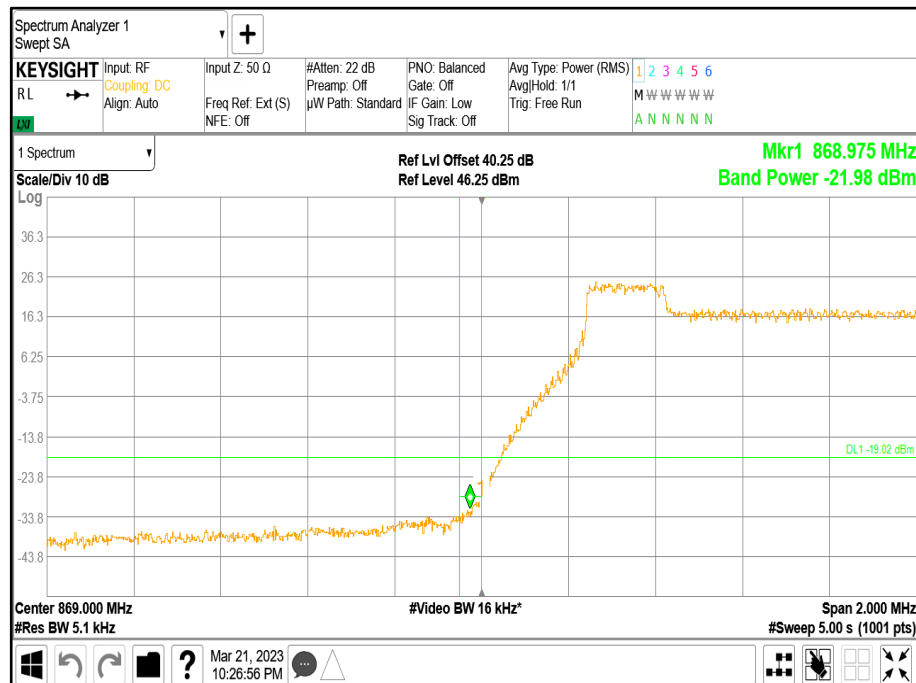


Configuration 9

Maximum Output Power 47.80 dBm

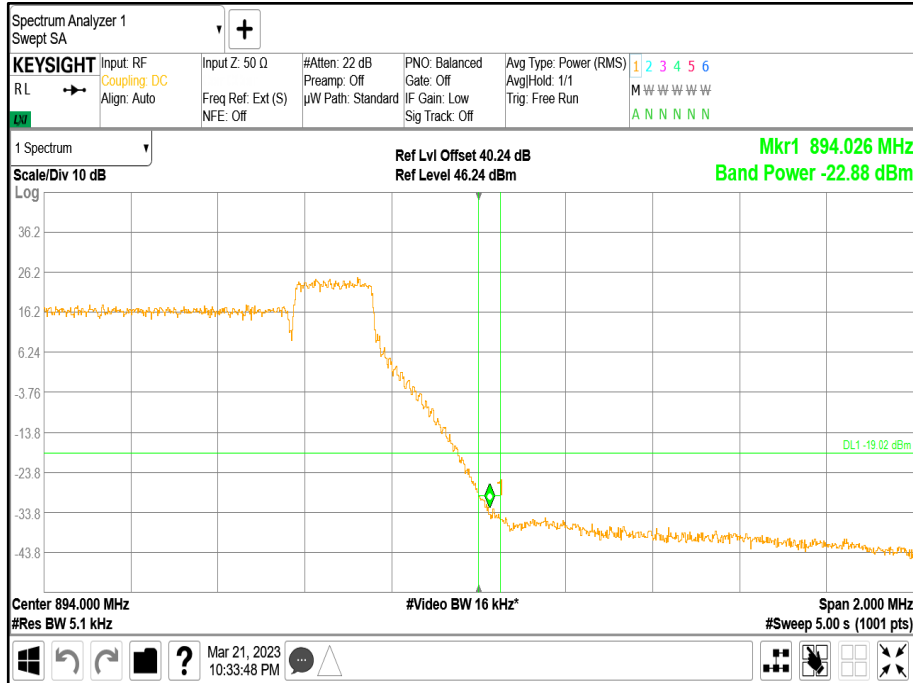
Antenna	NB-IoT IB / NR Modulation	NB-IoT IB / NR Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
2	QPSK	5.0 MHz	871.5	891.5
2	QPSK	10.0 MHz	874.0	889.0
2	QPSK	15.0 MHz	876.5	886.5
2	QPSK	20.0 MHz	879.0	884.0
2	QPSK	25.0 MHz	881.5	881.5

Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 5.0 MHz - Channel Position B

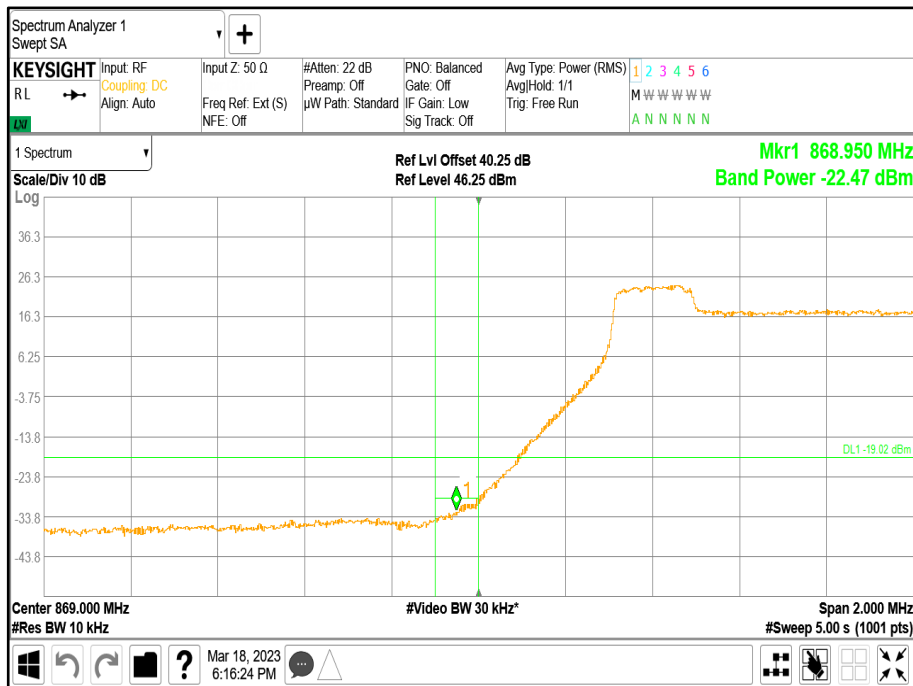




Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 5.0 MHz - Channel Position T

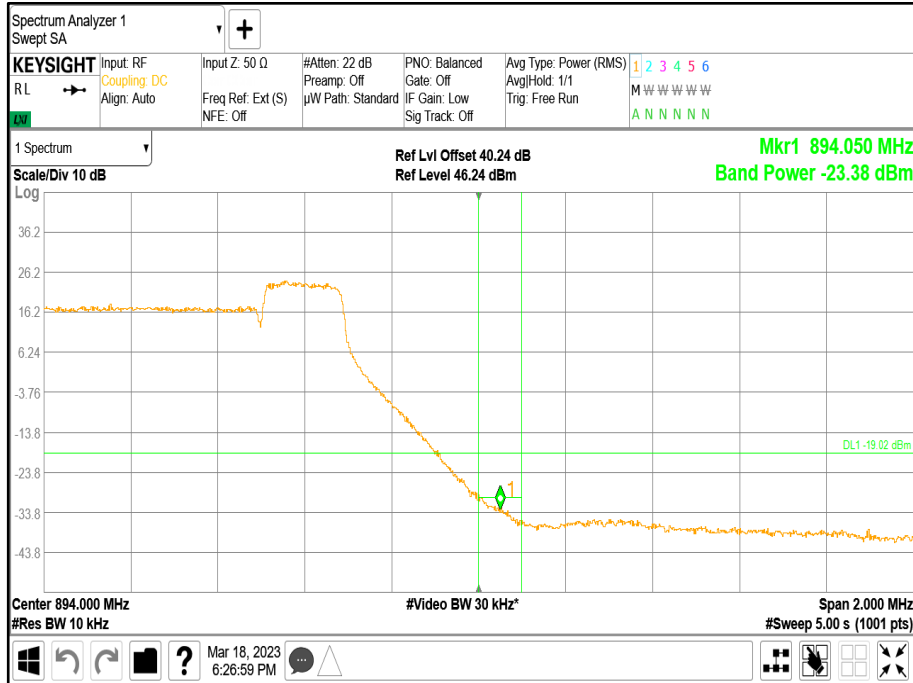


Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 10.0 MHz - Channel Position B

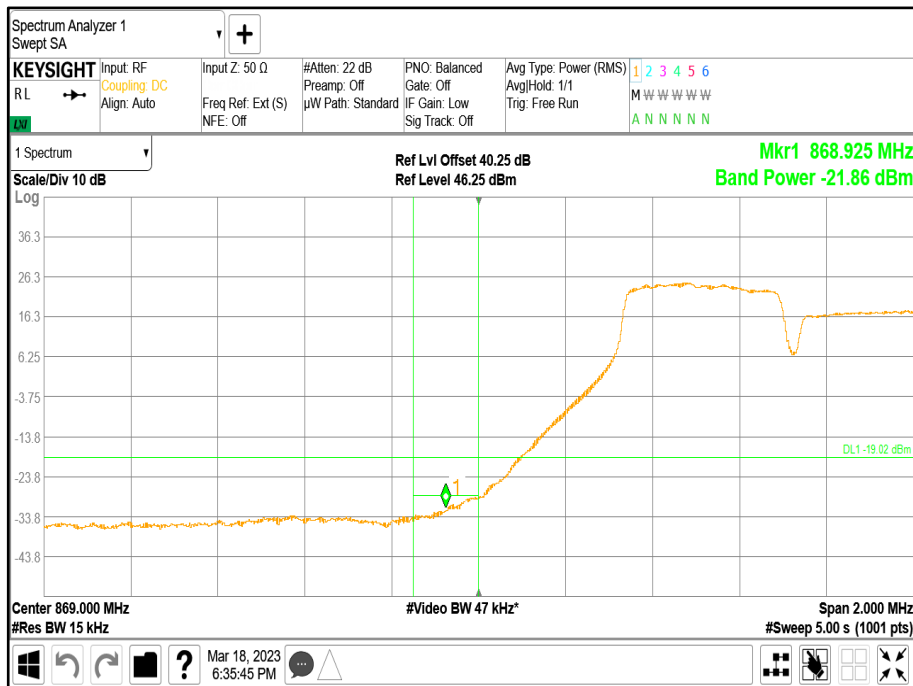




Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 10.0 MHz - Channel Position T

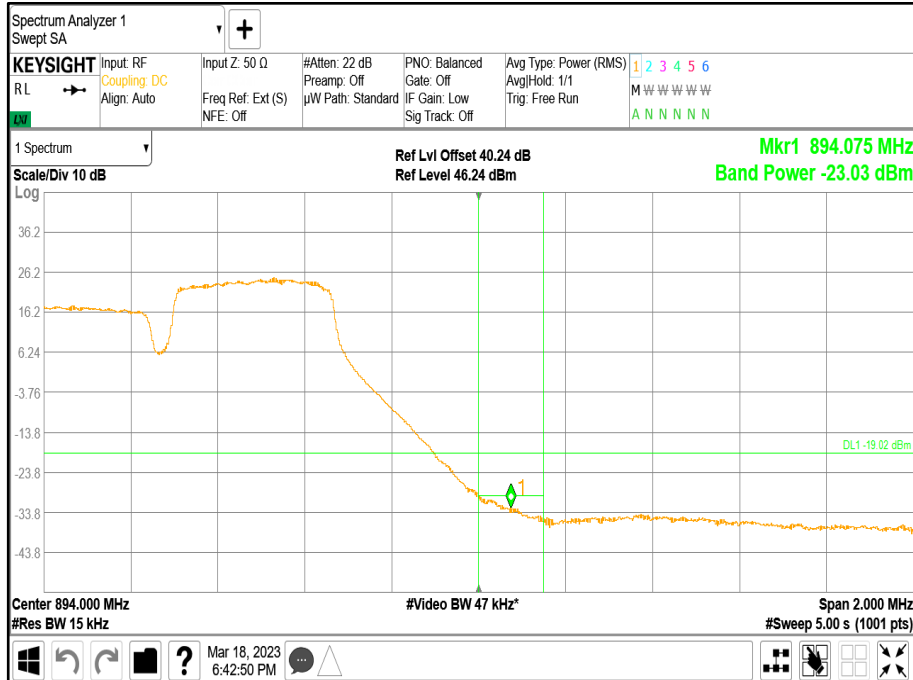


Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 15.0 MHz - Channel Position B





**Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 15.0 MHz - Channel Position T**



**Antenna 2 - NB-IoT IB / NR Modulation QPSK - NB-IoT IB / NR Carrier Bandwidth 20.0 MHz - Channel Position B**

