

LTE B48

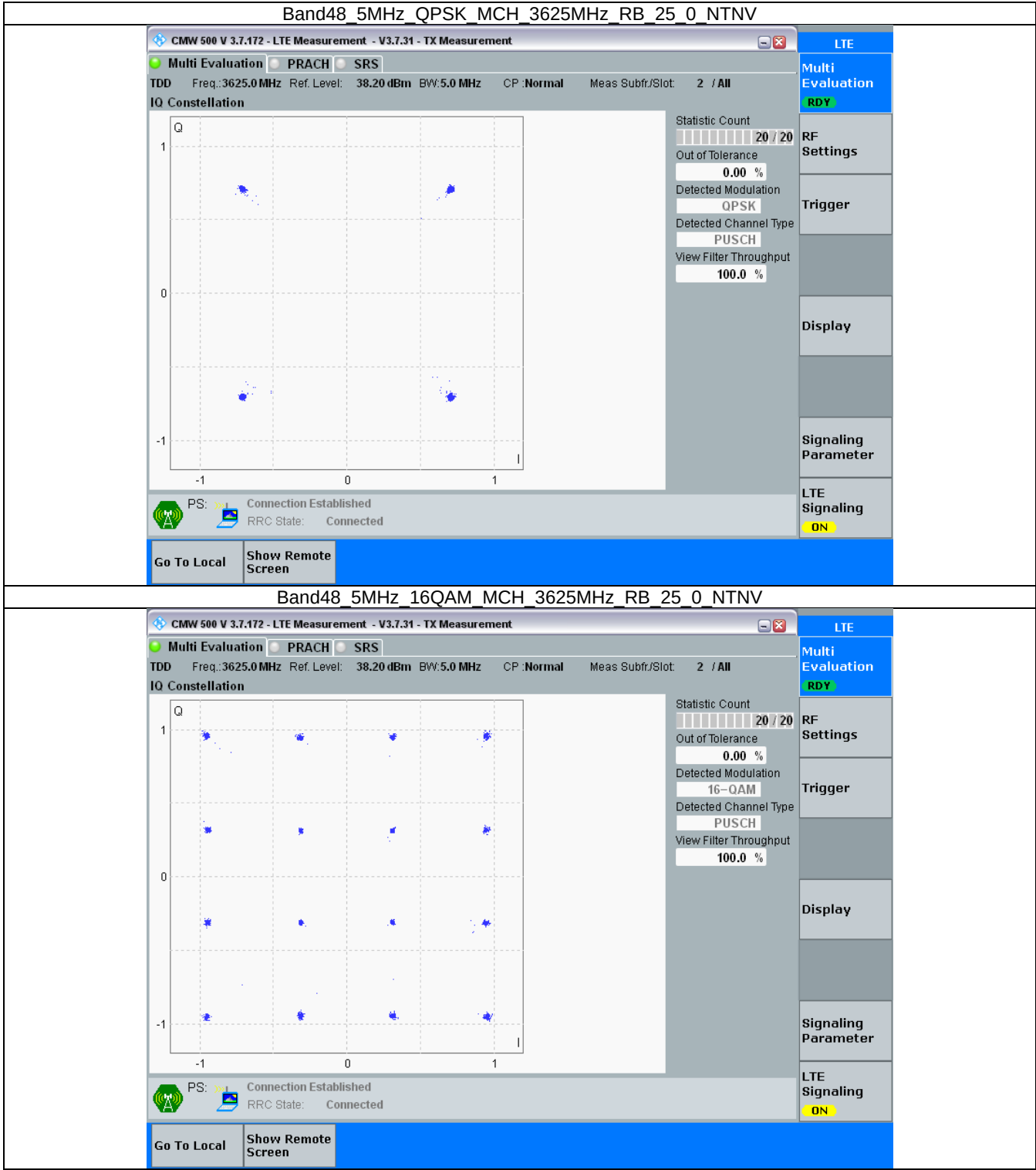
1. Modulation Characteristics

1.1 B48_5MHz

1.1.1 Test Result

Band: 48 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	3625	25	0	Refer To Test Graph		Pass
16QAM	3625	25	0	Refer To Test Graph		Pass

1.1.2 Test Graph

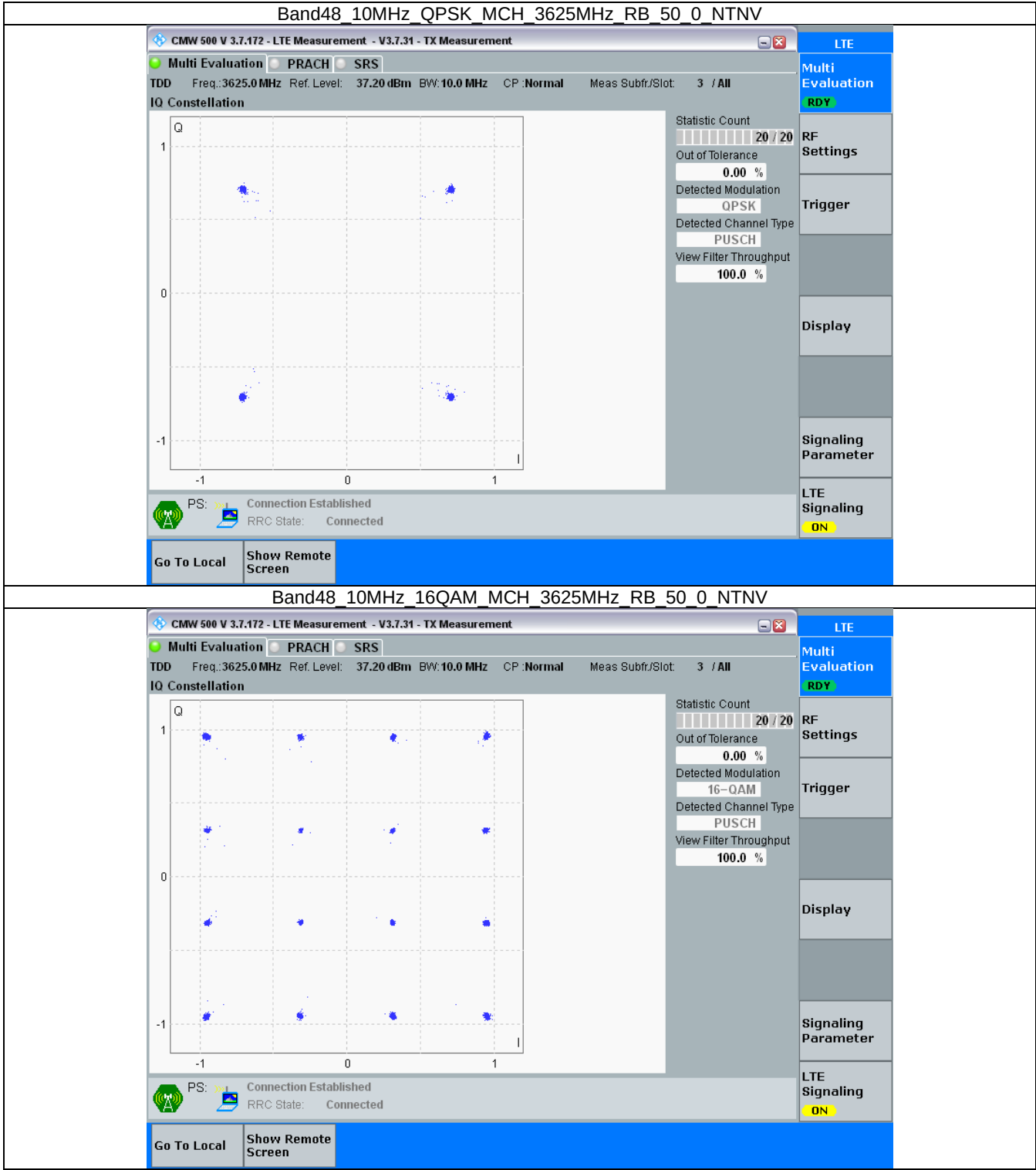


1.2 B48_10MHz

1.2.1 Test Result

Band: 48 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	3625	50	0	Refer To Test Graph		Pass
16QAM	3625	50	0	Refer To Test Graph		Pass

1.2.2 Test Graph

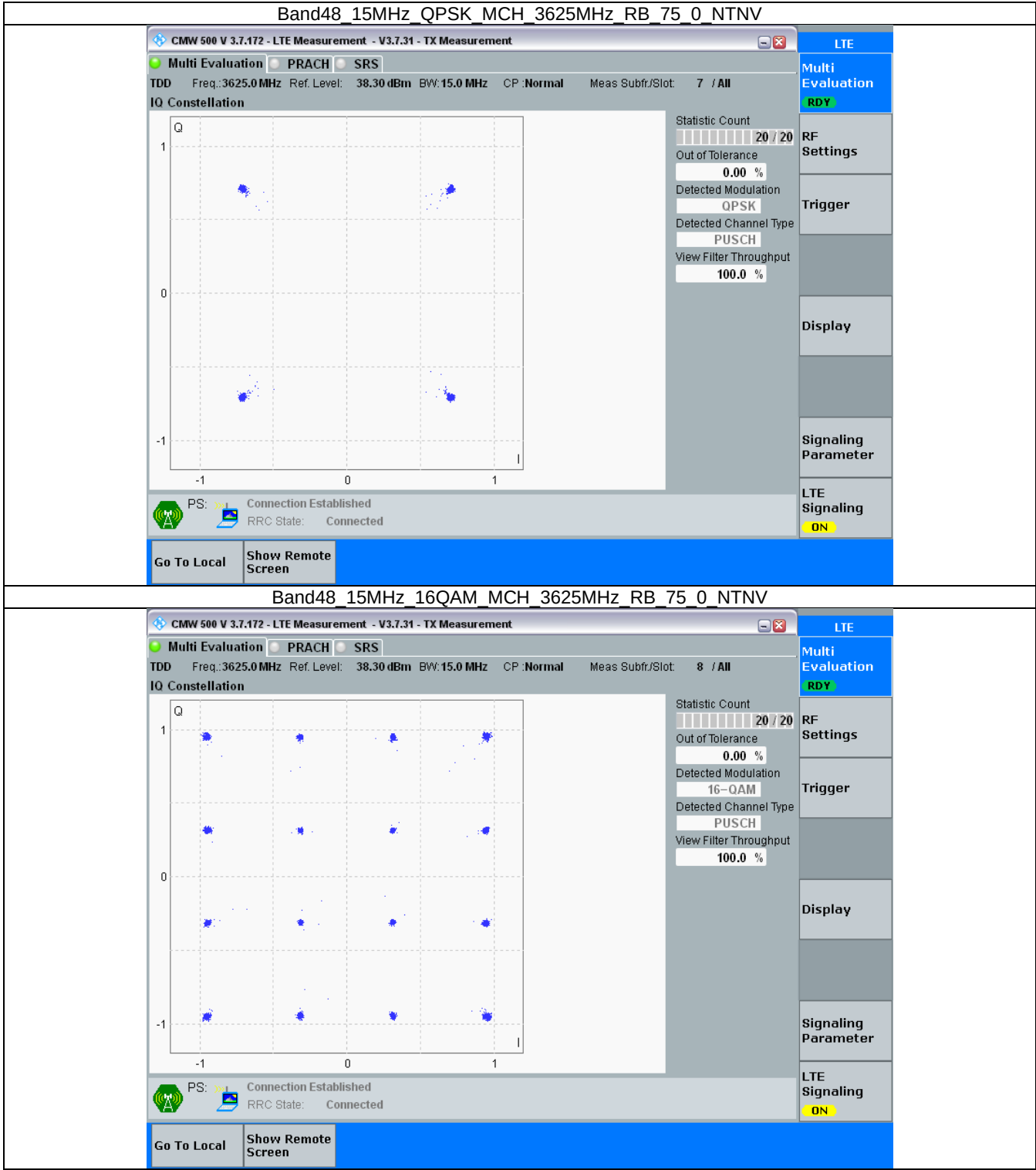


1.3 B48_15MHz

1.3.1 Test Result

Band: 48 / Bandwidth: 15MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	3625	75	0	Refer To Test Graph		Pass
16QAM	3625	75	0	Refer To Test Graph		Pass

1.3.2 Test Graph

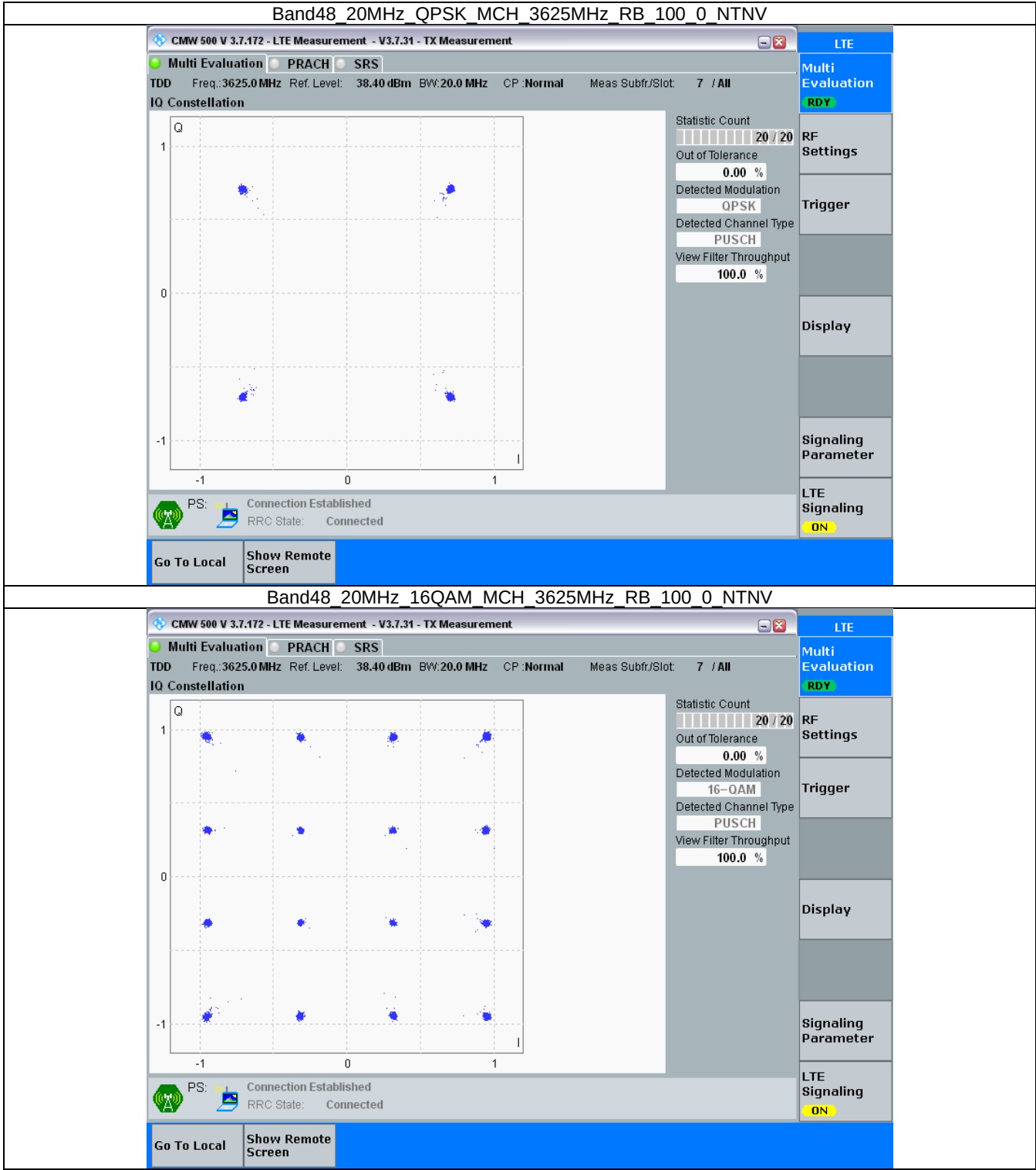


1.4 B48_20MHz

1.4.1 Test Result

Band: 48 / Bandwidth: 20MHz / NTVV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	3625	100	0	Refer To Test Graph		Pass
16QAM	3625	100	0	Refer To Test Graph		Pass

1.4.2 Test Graph



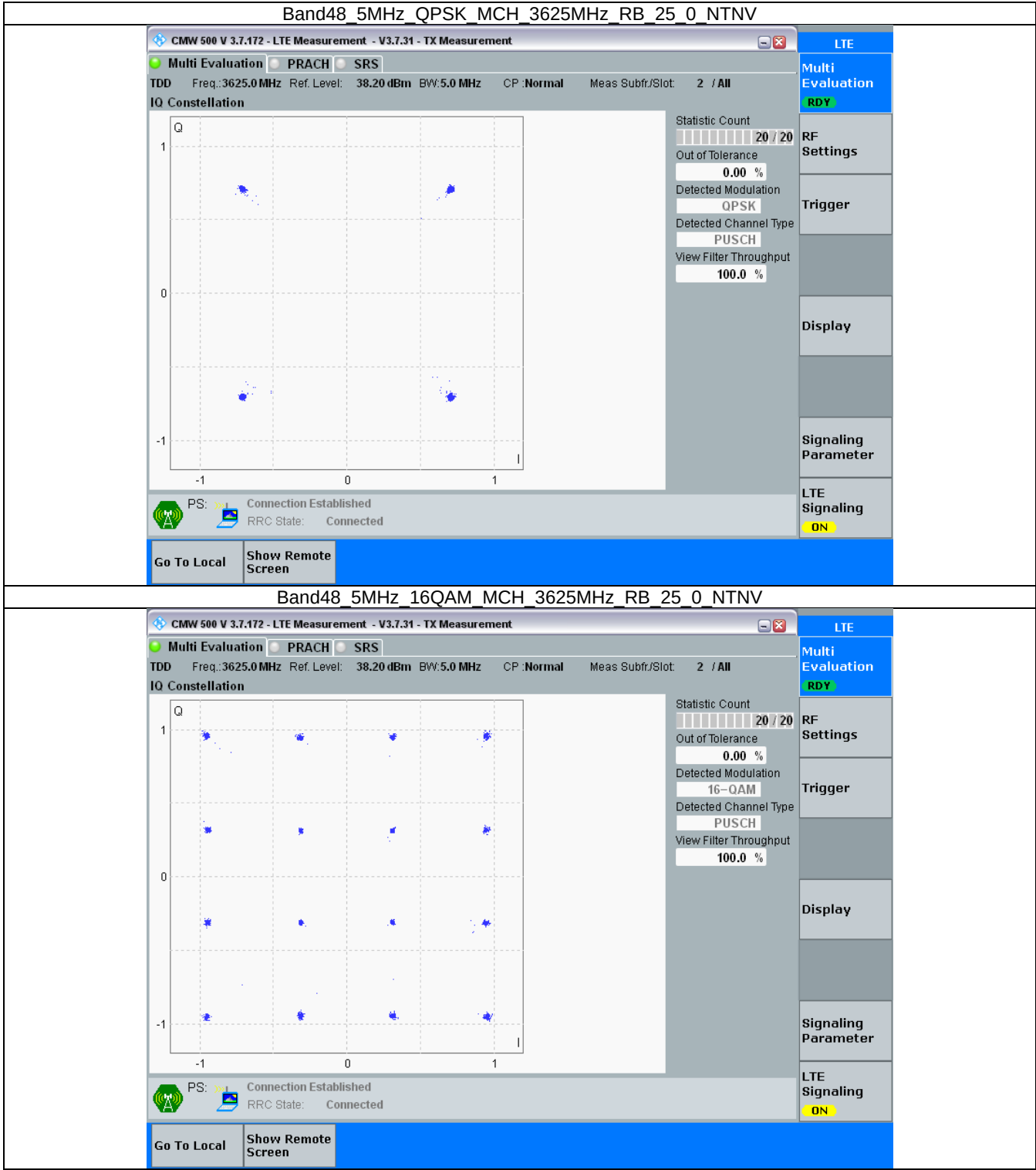
3. Modulation Characteristics

3.1 B48_5MHz

3.1.1 Test Result

Band: 48 / Bandwidth: 5MHz / NTNv					
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics	Verdict
		Size	Offset	Result	Limit
QPSK	3625	100	0	Refer To Test Graph	
16QAM	3625	100	0	Refer To Test Graph	

3.1.2 Test Graph

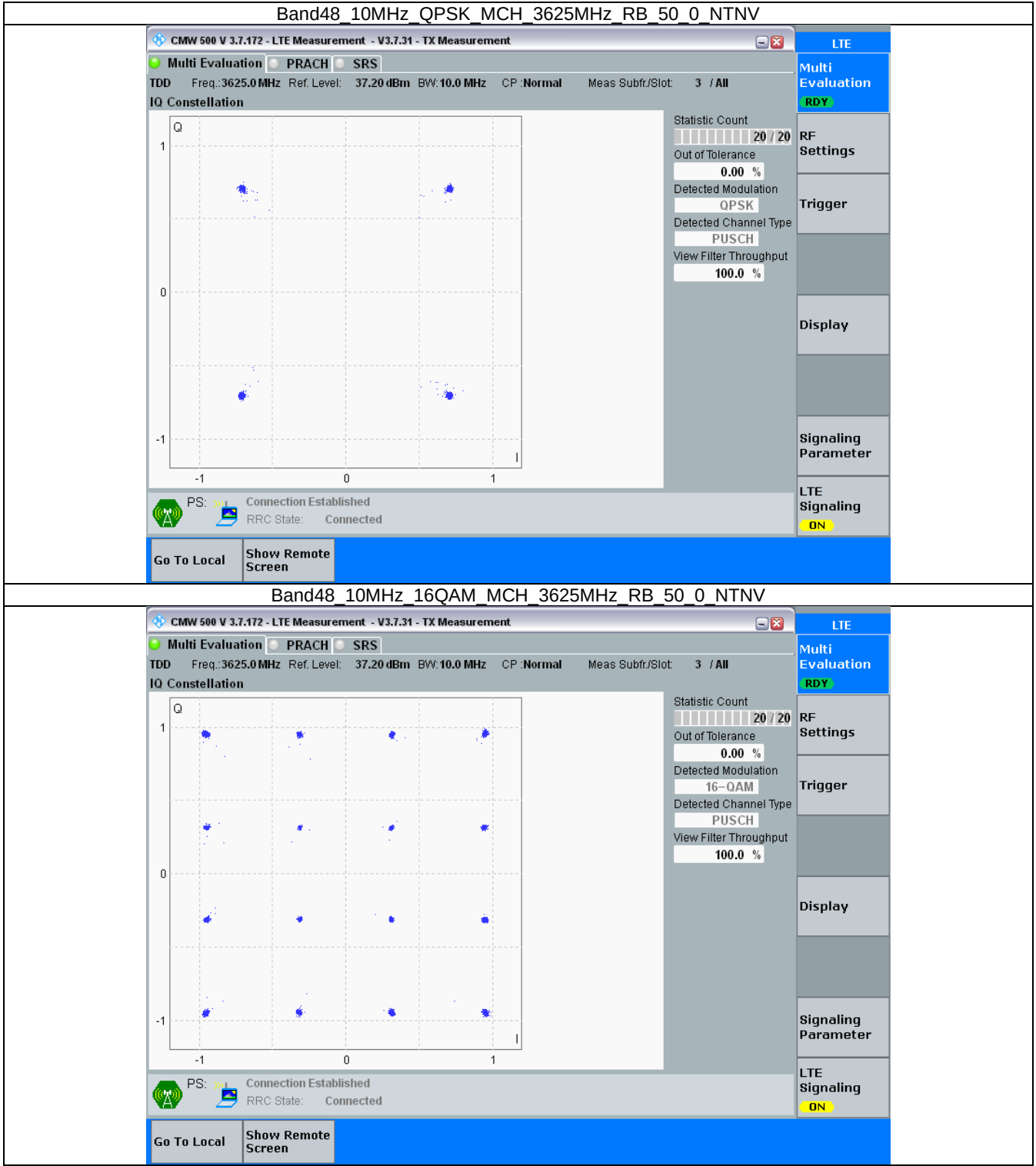


3.2 B48_10MHz

3.2.1 Test Result

Band: 48 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	3625	100	0	Refer To Test Graph		Pass
16QAM	3625	100	0	Refer To Test Graph		Pass

3.2.2 Test Graph

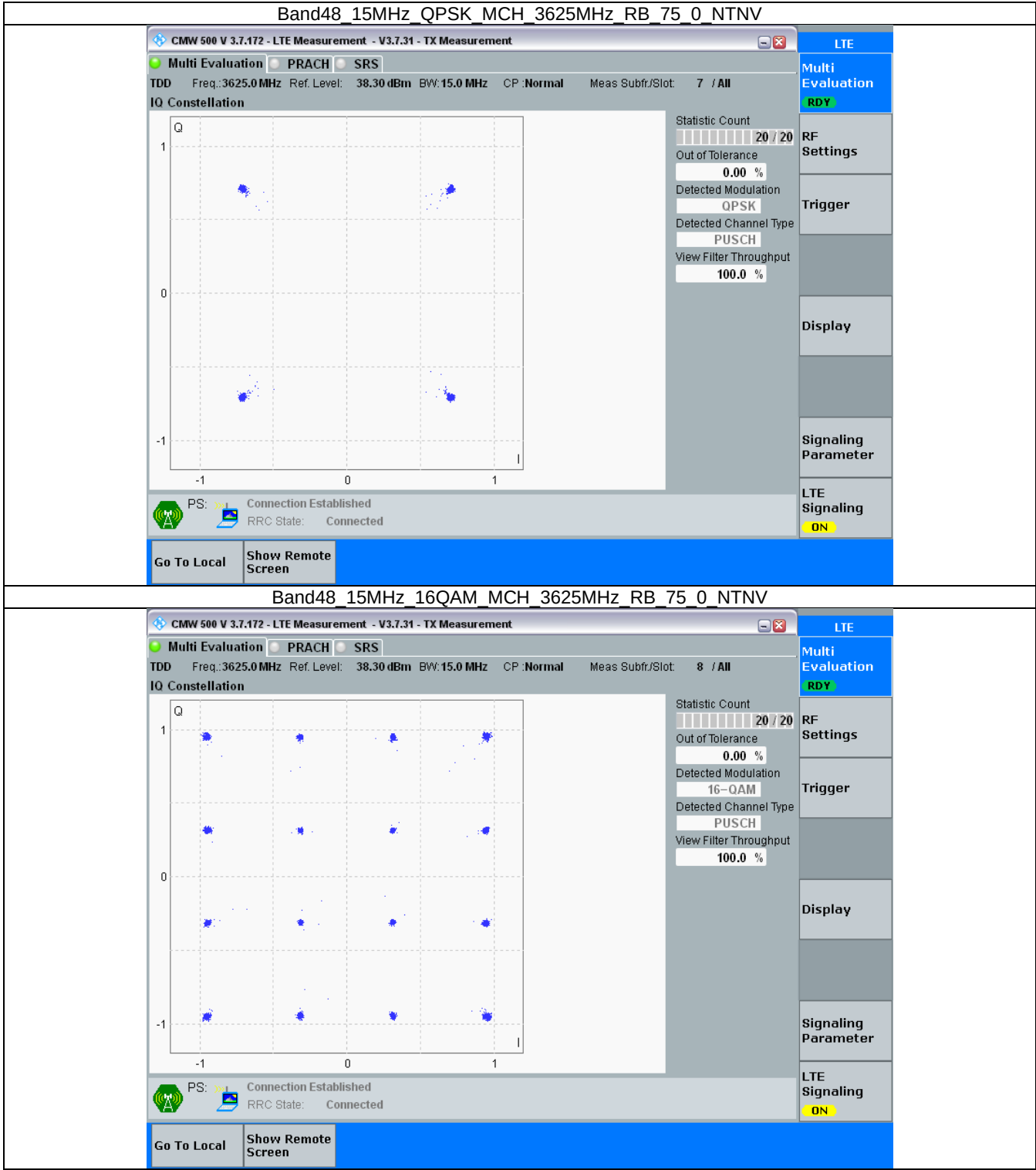


3.3 B48_15MHz

3.3.1 Test Result

Band: 48 / Bandwidth: 15MHz / NTNV					
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics	Verdict
		Size	Offset	Result	Limit
QPSK	3625	100	0	Refer To Test Graph	Pass
16QAM	3625	100	0	Refer To Test Graph	Pass

3.3.2 Test Graph

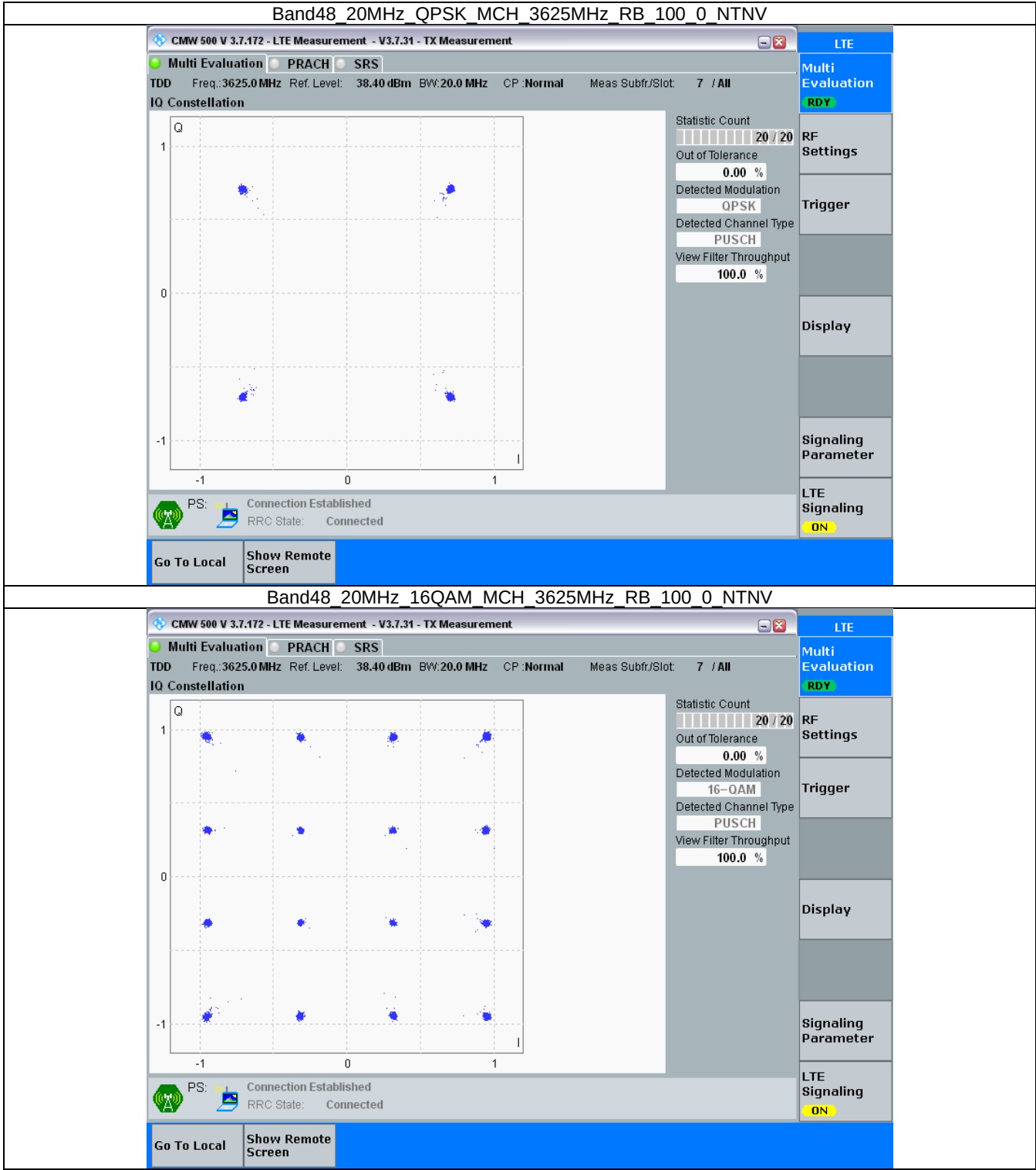


3.4 B48_20MHz

3.4.1 Test Result

Band: 48 / Bandwidth: 20MHz / NTVV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	3625	100	0	Refer To Test Graph		Pass
16QAM	3625	100	0	Refer To Test Graph		Pass

3.4.2 Test Graph



5G NR N48

1. Modulation Characteristics

1.1 30k_SISO_40MHz_NTNV

1.1.1 Test Result

5G NR n48 SCS=30kHz SISO 40MHz NTNv							
Modulation	Frequency (MHz)	RB Allocation	Modulation Characteristics				Verdict
			Ant1	Ant2	Sum	Limit	
DFT-s-OFDM QPSK	3624.99	Outer_Full	Refer To Test Graph				Pass
DFT-s-OFDM 16 QAM	3624.99	Outer_Full	Refer To Test Graph				Pass
DFT-s-OFDM 64 QAM	3624.99	Outer_Full	Refer To Test Graph				Pass
DFT-s-OFDM 256 QAM	3624.99	Outer_Full	Refer To Test Graph				Pass
CP-OFDM QPSK	3624.99	Outer_Full	Refer To Test Graph				Pass
CP-OFDM 16 QAM	3624.99	Outer_Full	Refer To Test Graph				Pass
CP-OFDM 64 QAM	3624.99	Outer_Full	Refer To Test Graph				Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	Refer To Test Graph				Pass

1.1.2 Test Graph

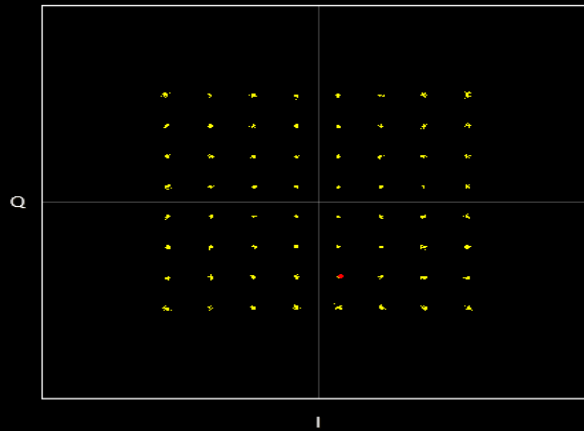


n48 30kHz SISO NTN 40MHz DFT-s-OFDM 64 QAM 3624.99MHz Outer Full

Fundamental > Constellation

0 subcarrier
I 0.1668 Q -0.7582

Meas. Count : 3/ 3



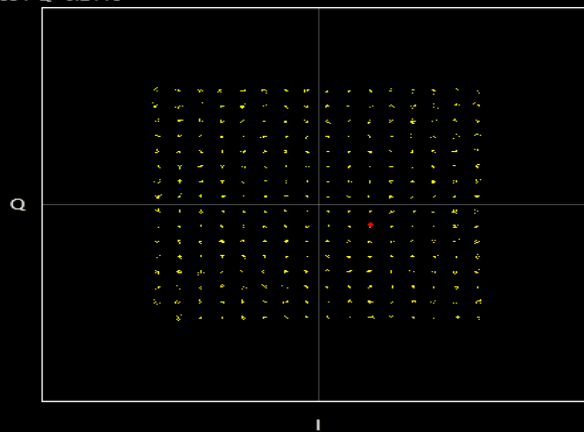
	Avg.	Max.	Min.
EVM	1.51	1.52	1.50 %(rms)
Peak Vector Error	18.58	19.74	17.74 %
Carrier Leakage	-51.63	-51.38	-51.92 dBc
IQ Imbalance	100.00	100.01	99.98 %(I/Q)

n48 30kHz SISO NTN 40MHz DFT-s-OFDM 256 QAM 3624.99MHz Outer Full

Fundamental > Constellation

0 subcarrier
I 0.3851 Q -0.2118

Meas. Count : 3/ 3



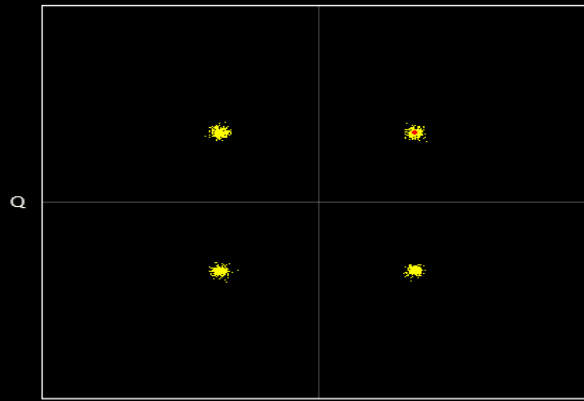
	Avg.	Max.	Min.
EVM	1.36	1.39	1.33 %(rms)
Peak Vector Error	5.72	5.88	5.49 %
Carrier Leakage	-50.23	-49.57	-51.46 dBc
IQ Imbalance	99.96	99.98	99.94 %(I/Q)

n48 30kHz SISO NTN 40MHz CP-OFDM QPSK 3624.99MHz Outer Full

Fundamental > Constellation

0 subcarrier
I 0.7090 Q 0.7113

Meas. Count : 3/ 3



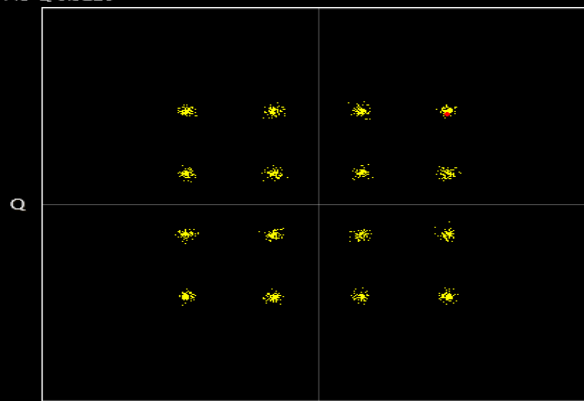
	Avg.	Max.	Min.
EVM	3.85	3.92	3.70 %(rms)
Peak Vector Error	15.59	15.86	15.12 %
Carrier Leakage	-51.56	-51.51	-51.61 dBc
IQ Imbalance	99.98	100.00	99.95 %(I/Q)

n48 30kHz SISO NTN 40MHz CP-OFDM 16 QAM 3624.99MHz Outer Full

Fundamental > Constellation

0 subcarrier
I 0.9443 Q 0.9220

Meas. Count : 3/ 3



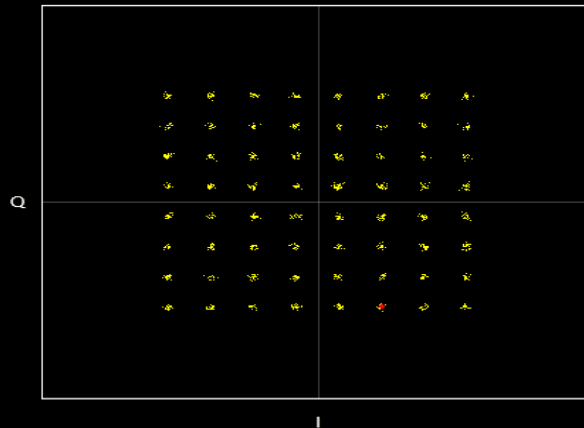
	Avg.	Max.	Min.
EVM	3.20	3.43	3.07 %(rms)
Peak Vector Error	13.37	14.34	12.44 %
Carrier Leakage	-50.58	-50.30	-50.83 dBc
IQ Imbalance	100.11	100.12	100.09 %(I/Q)

n48 30kHz SISO NTN 40MHz CP-OFDM 64 QAM 3624.99MHz Outer Full

Fundamental > Constellation

0 subcarrier
I 0.4633 Q -1.0665

Meas. Count : 3/ 3



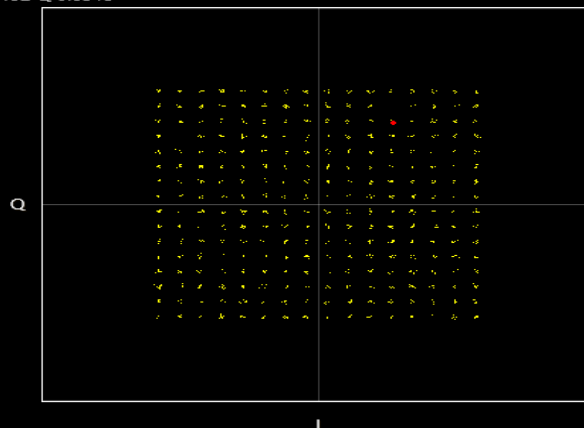
	Avg.	Max.	Min.
EVM	2.66	2.75	2.61 %(rms)
Peak Vector Error	9.25	9.42	9.10 %
Carrier Leakage	-51.77	-51.48	-52.17 dBc
IQ Imbalance	100.06	100.07	100.05 %(I/Q)

n48 30kHz SISO NTN 40MHz CP-OFDM 256 QAM 3624.99MHz Outer Full

Fundamental > Constellation

0 subcarrier
I 0.5482 Q 0.8313

Meas. Count : 3/ 3



	Avg.	Max.	Min.
EVM	1.43	1.44	1.42 %(rms)
Peak Vector Error	4.91	5.74	4.42 %
Carrier Leakage	-49.32	-48.96	-49.58 dBc
IQ Imbalance	99.99	100.01	99.97 %(I/Q)