

Test data

Output Power(E.I.R.P)

Modulation	Frequency (MHz)	ANT. Port	Output Power (dBm/10MHz)	Total Power (dBm/10MHz)	Directional gain (dBi)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)
QPSK (10MHz)	3555.00	ANT 1	14.14	17.19	5.5	22.69	23
		ANT 3	14.21				
	3625.00	ANT 1	12.26	15.12			
		ANT 3	11.96				
	3695.00	ANT 1	13.43	16.31			
		ANT 3	13.16				
64QAM (10MHz)	3555.00	ANT 1	14.21	17.30	5.5	22.80	
		ANT 3	14.36				
	3625.00	ANT 1	12.52	15.27			
		ANT 3	11.98				
	3695.00	ANT 1	13.46	16.55			
		ANT 3	13.61				
QPSK (20MHz)	3560.00	ANT 1	14.25	17.20	5.5	22.70	23
		ANT 3	14.12				
	3625.00	ANT 1	12.17	14.98			
		ANT 3	11.75				
	3690.00	ANT 1	12.90	15.43			
		ANT 3	11.89				
64QAM (20MHz)	3560.00	ANT 1	14.19	17.21	5.5	22.71	
		ANT 3	14.21				
	3625.00	ANT 1	12.07	15.10			
		ANT 3	12.11				
	3690.00	ANT 1	12.64	15.74			
		ANT 3	12.81				
Remark:	1. ANT 1 and ANT 3 is 2*2MIMO 2. All transmit signals are completely uncorrelated with each other, Directional gain = GANT =5.5dBi						

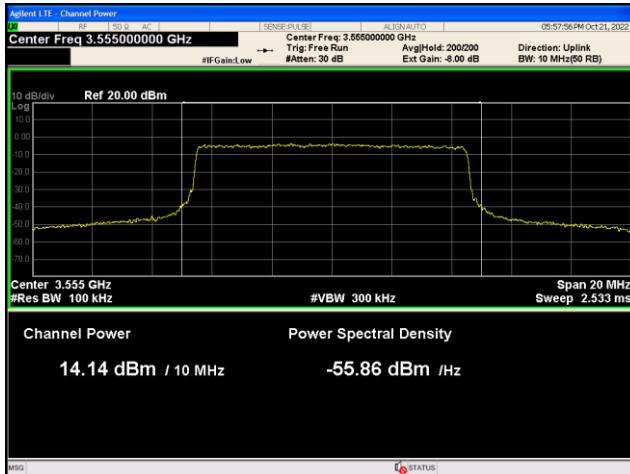
Full Transmit Output Power							
Modulation	Frequency (MHz)	ANT. Port	Output Power (dBm/20MHz)	Total Power (dBm/20MHz)	Directional gain (dBi)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)
QPSK (20MHz)	3560.00	ANT 1	16.68	19.79	5.5	25.29	N/A
		ANT 3	16.88				
	3625.00	ANT 1	15.69	18.56			
		ANT 3	15.40				
	3690.00	ANT 1	15.62	18.54			
		ANT 3	15.43				
64QAM (20MHz)	3560.00	ANT 1	16.16	19.39	5.5	24.89	
		ANT 3	16.59				
	3625.00	ANT 1	15.22	18.03			
		ANT 3	14.81				
	3690.00	ANT 1	15.96	18.76			
		ANT 3	15.52				
Remark:	1. ANT 1 and ANT 3 is 2*2MIMO 2. All transmit signals are completely uncorrelated with each other, Directional gain = GANT =5.5dBi						

Test plot as below:

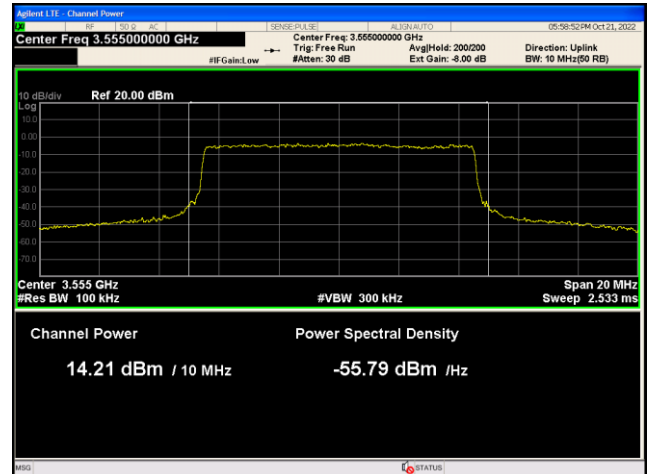
Bandwidth=10MHz – QPSK

ANT 1

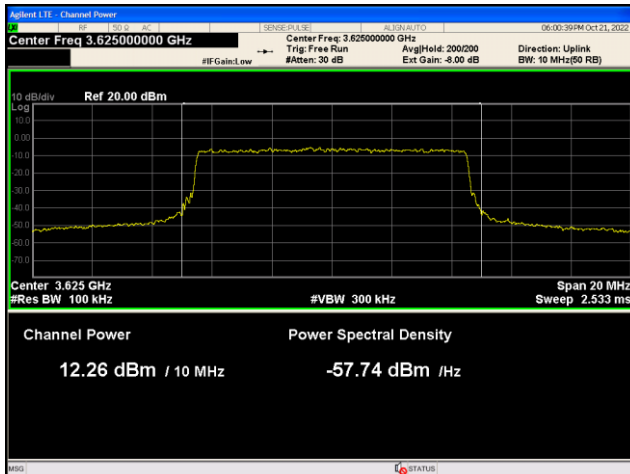
ANT 3



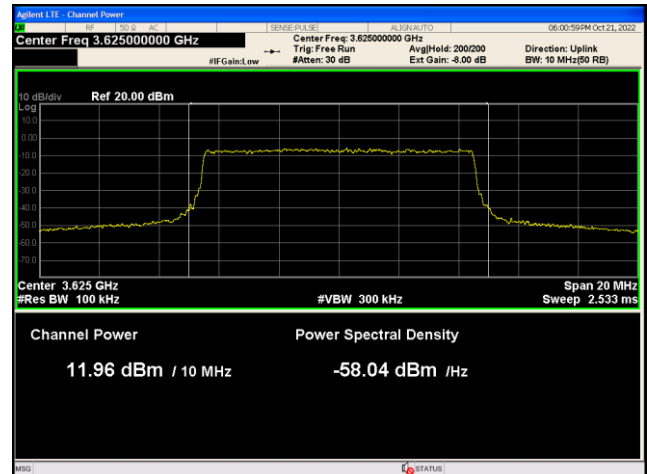
Lowest channel



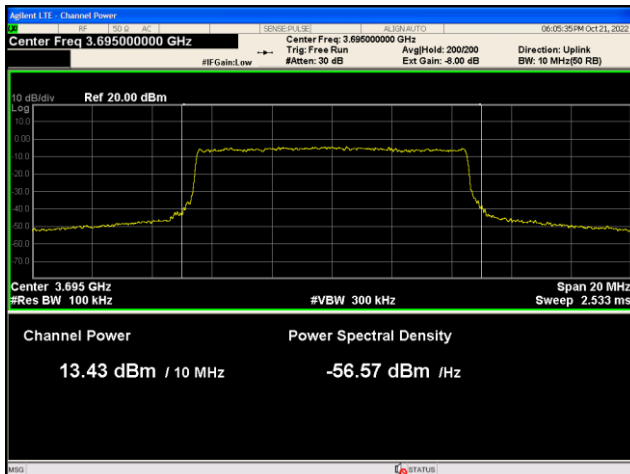
Lowest channel



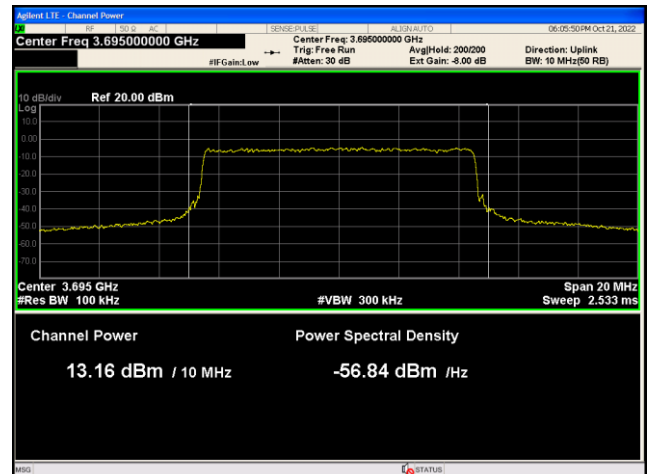
Middle channel



Middle channel



Highest channel

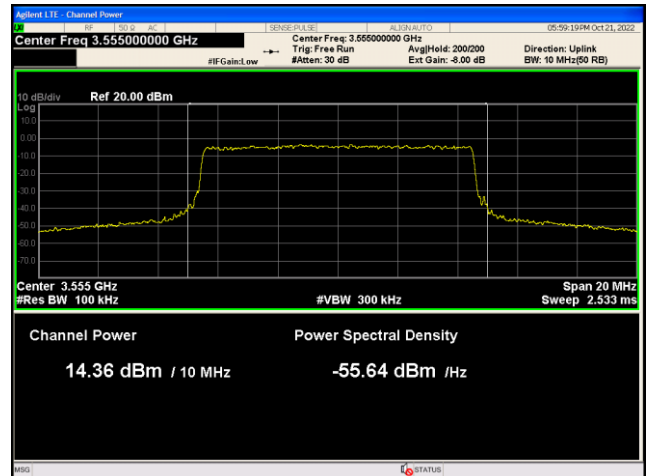
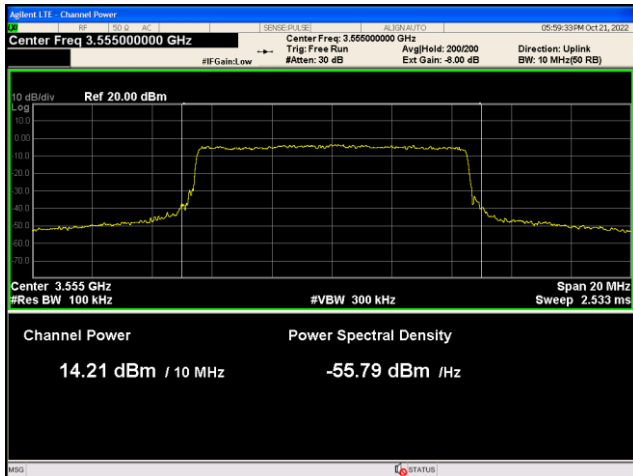


Highest channel

Bandwidth=10MHz – 64QAM

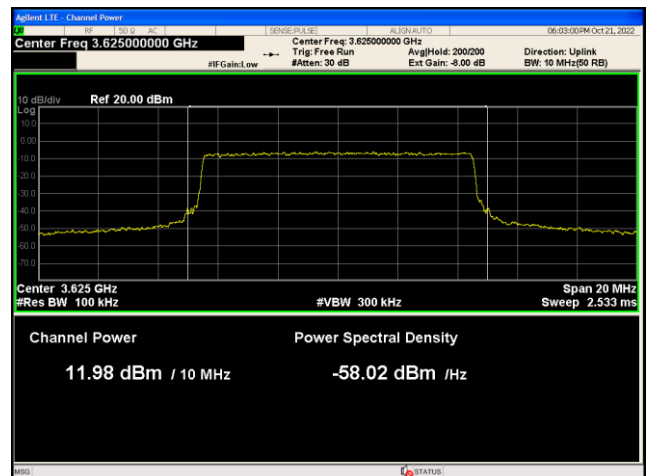
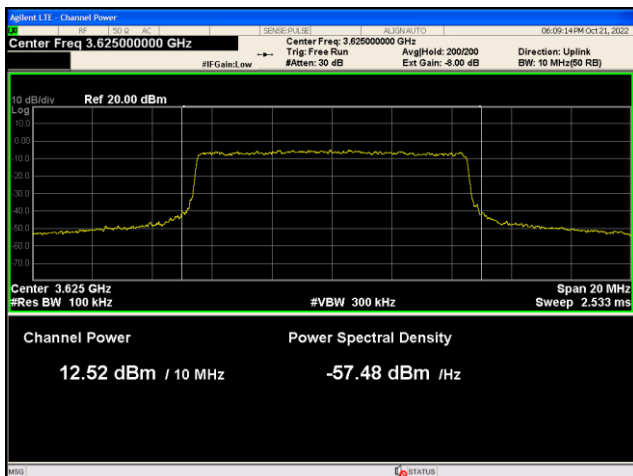
ANT 1

ANT 3



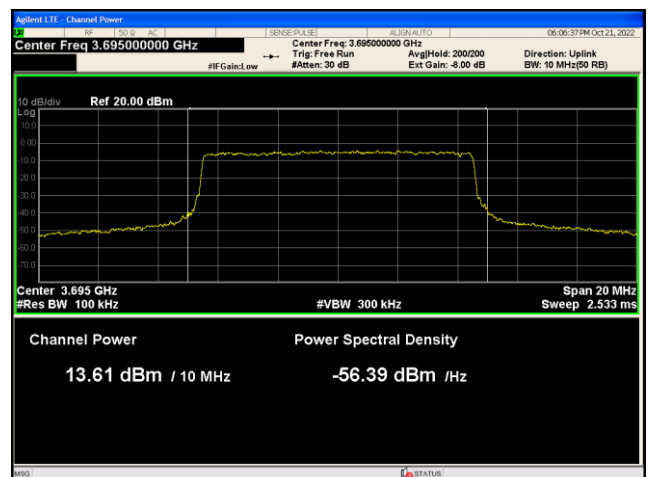
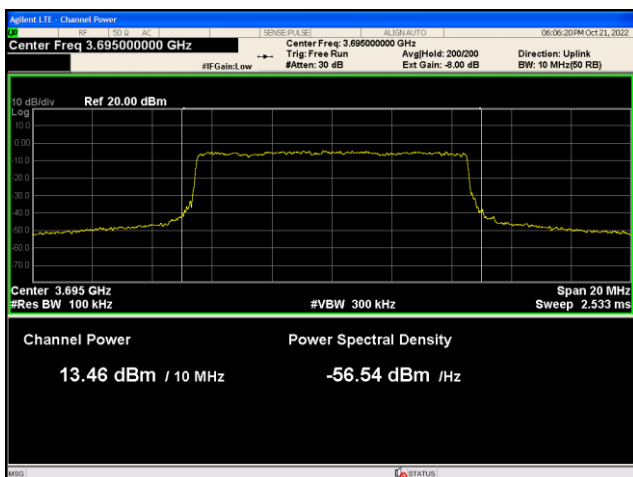
Lowest channel

Lowest channel



Middle channel

Middle channel



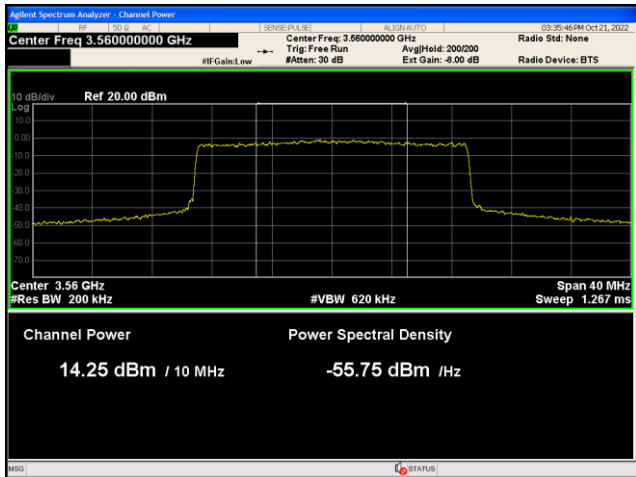
Highest channel

Highest channel

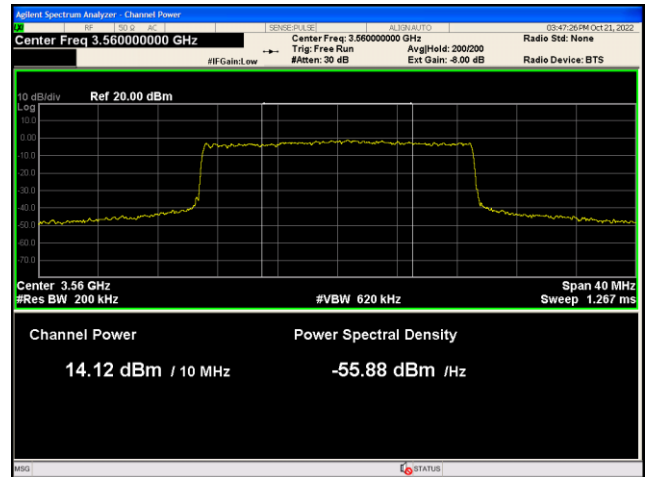
Bandwidth=20MHz – QPSK

ANT 1

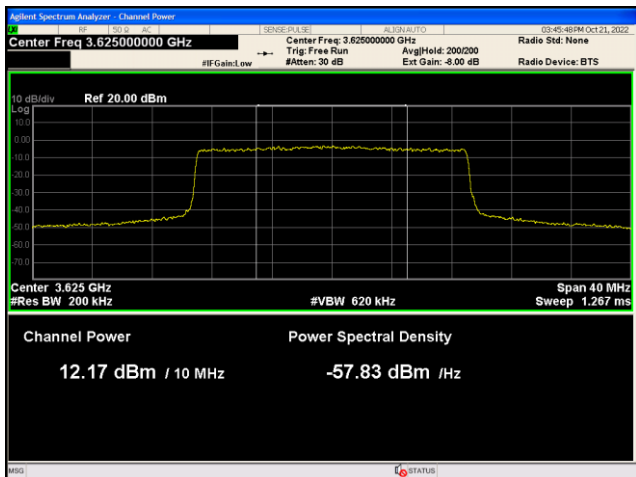
ANT 3



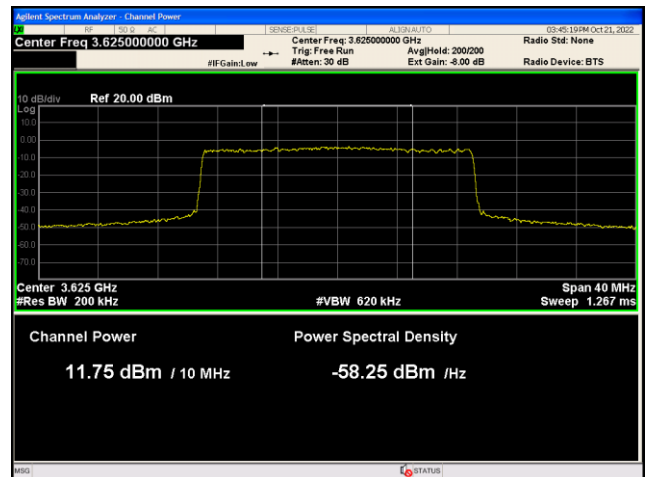
Lowest channel



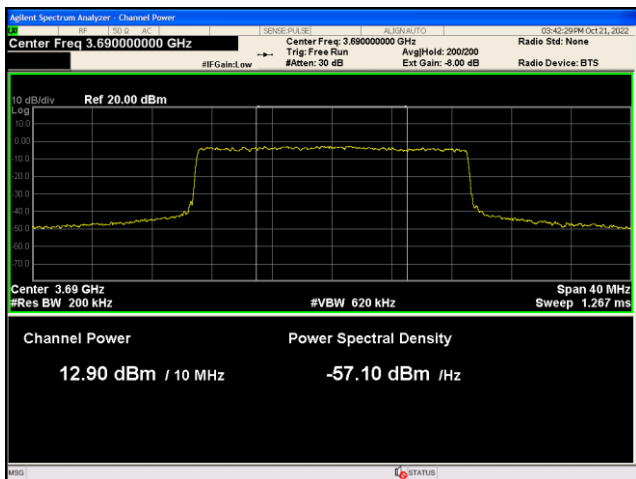
Lowest channel



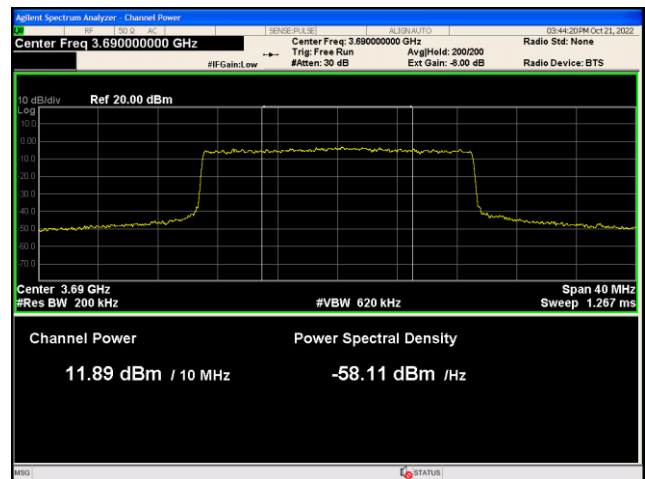
Middle channel



Middle channel



Highest channel

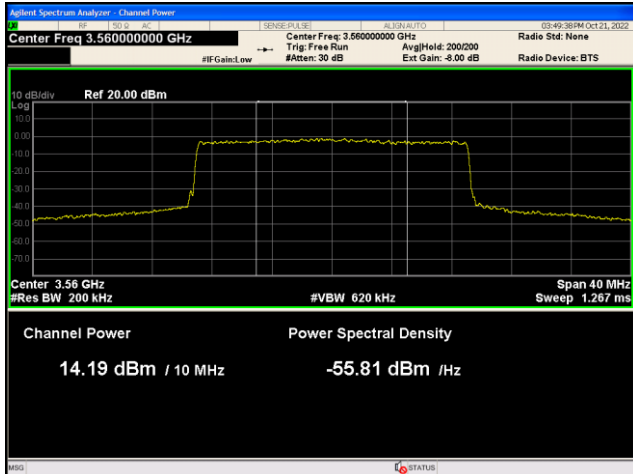


Highest channel

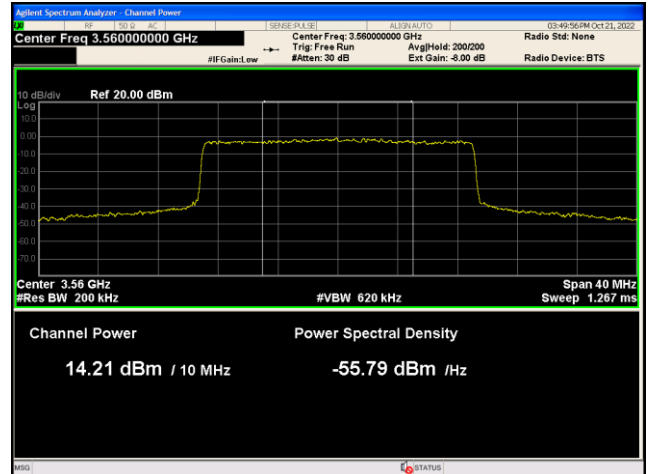
Bandwidth=20MHz – 64QAM

ANT 1

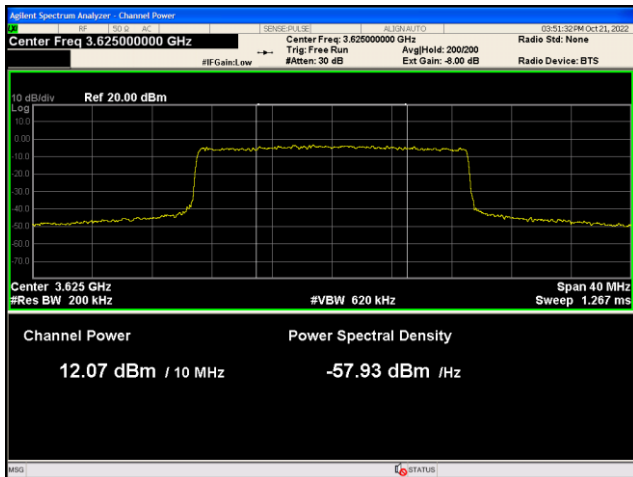
ANT 3



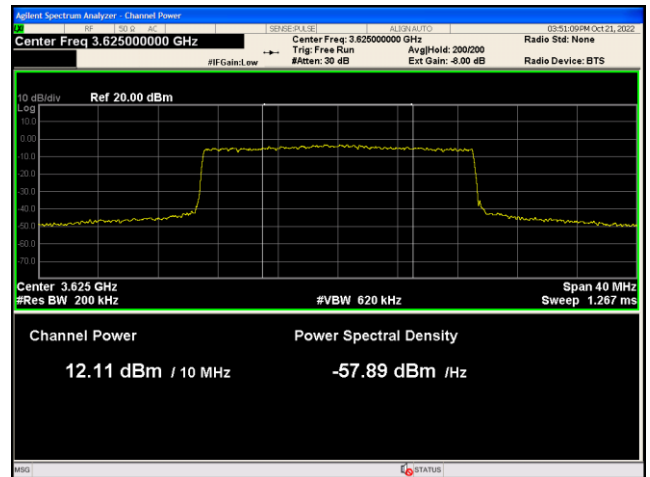
Lowest channel



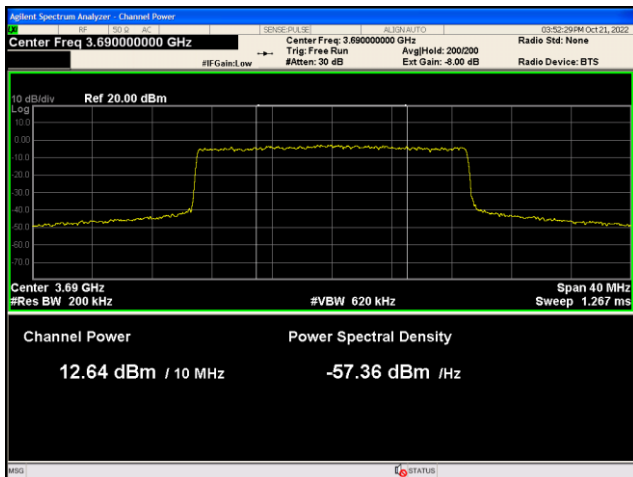
Lowest channel



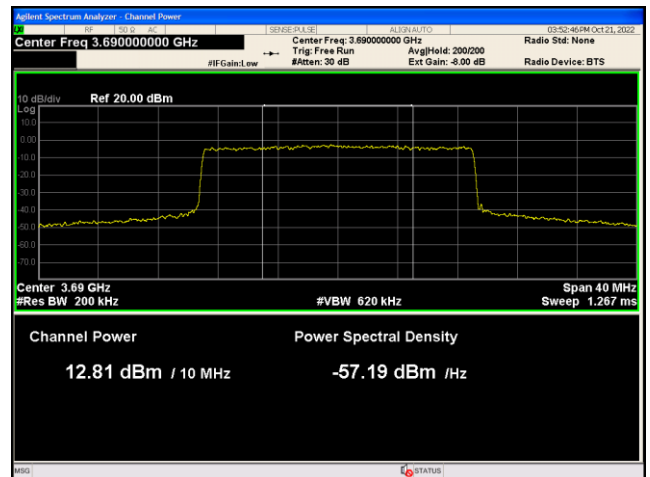
Middle channel



Middle channel



Highest channel



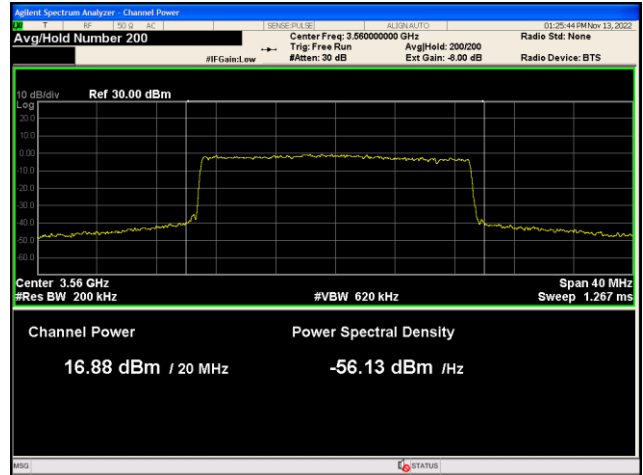
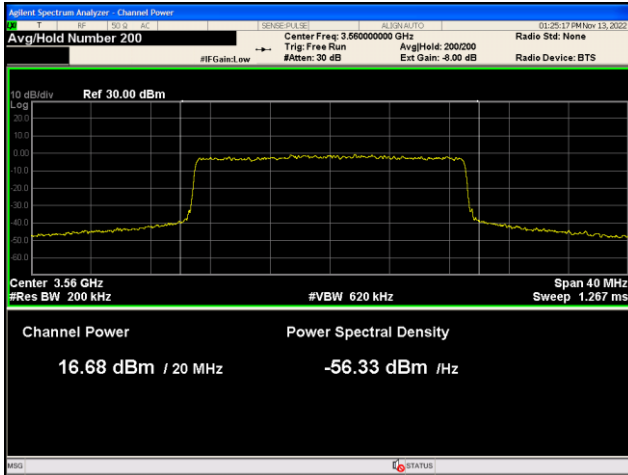
Highest channel

Full Transmit Output Power:

Bandwidth=20MHz – QPSK

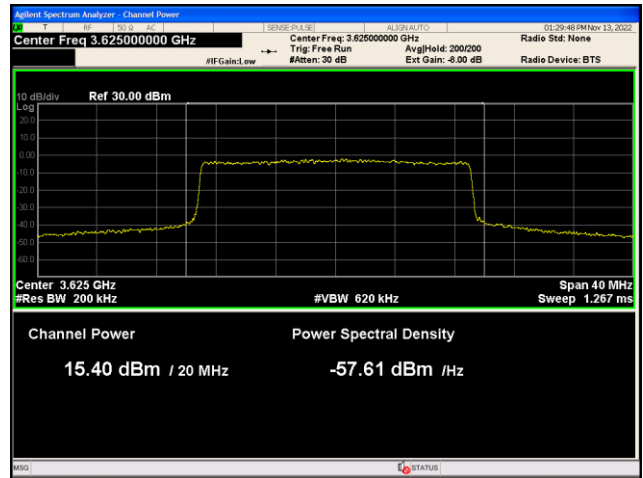
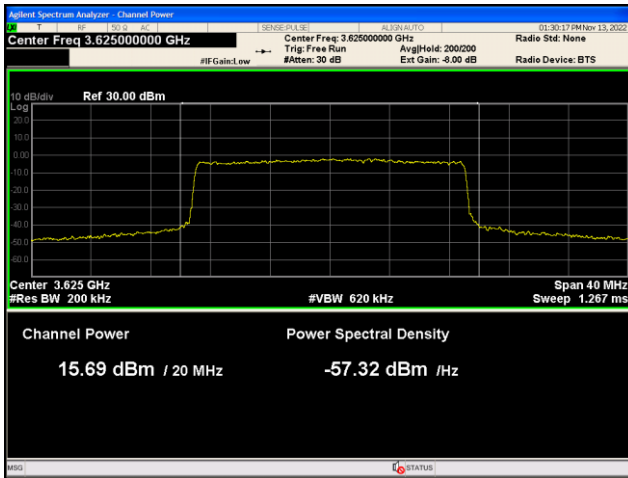
ANT 1

ANT 3



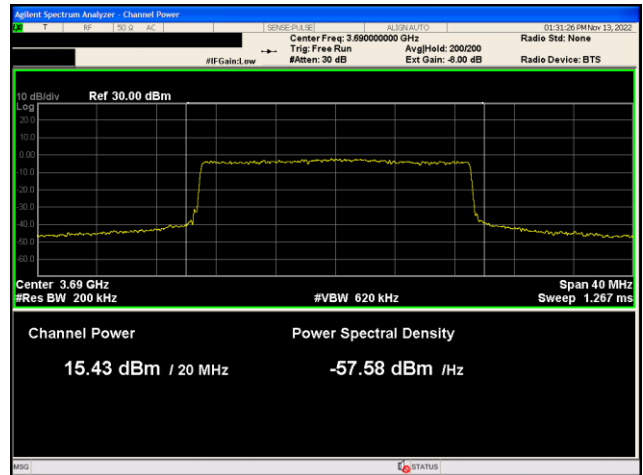
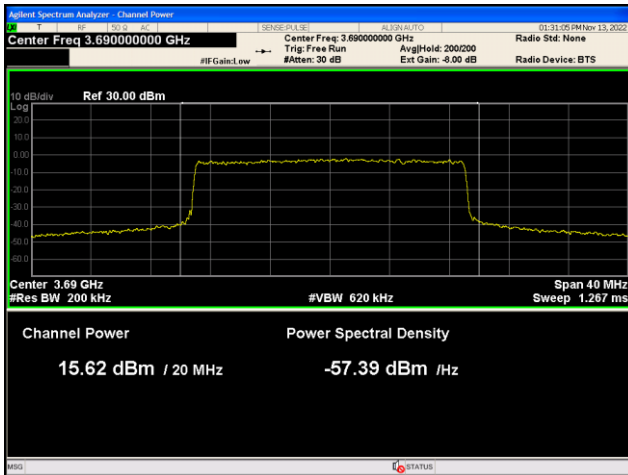
Lowest channel

Lowest channel



Middle channel

Middle channel



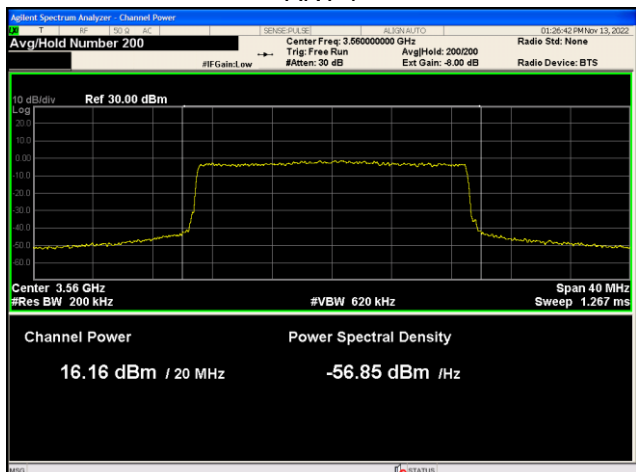
Highest channel

Highest channel

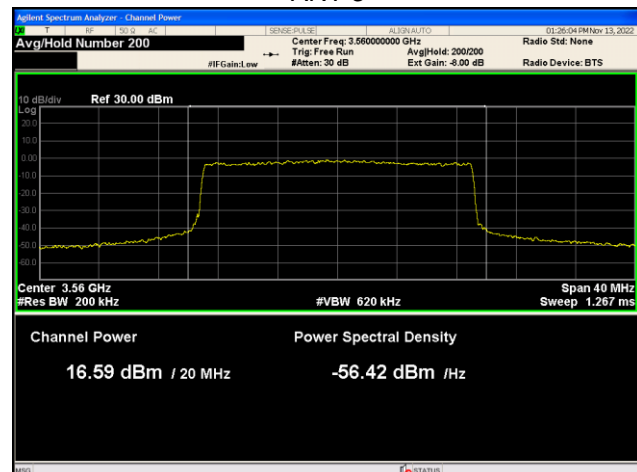
Bandwidth=20MHz – 64QAM

ANT 1

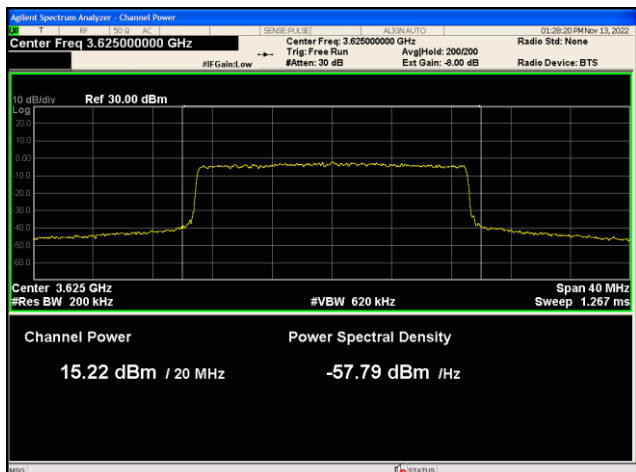
ANT 3



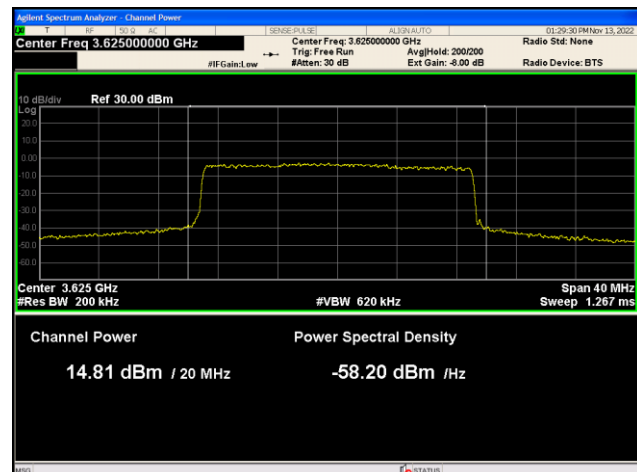
Lowest channel



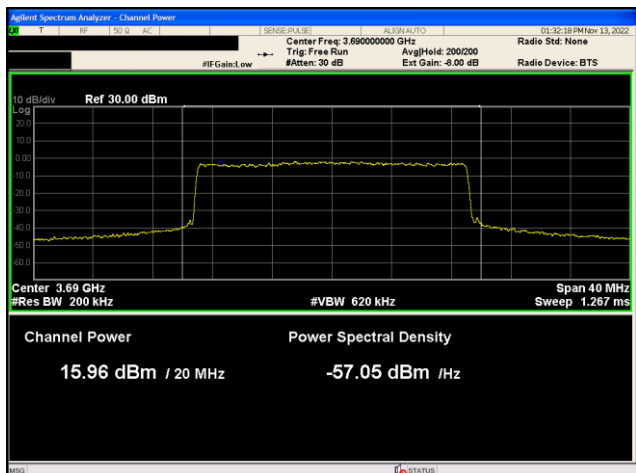
Lowest channel



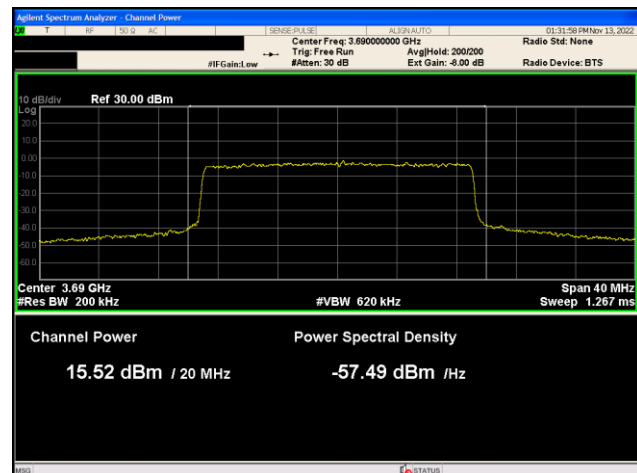
Middle channel



Middle channel



Highest channel



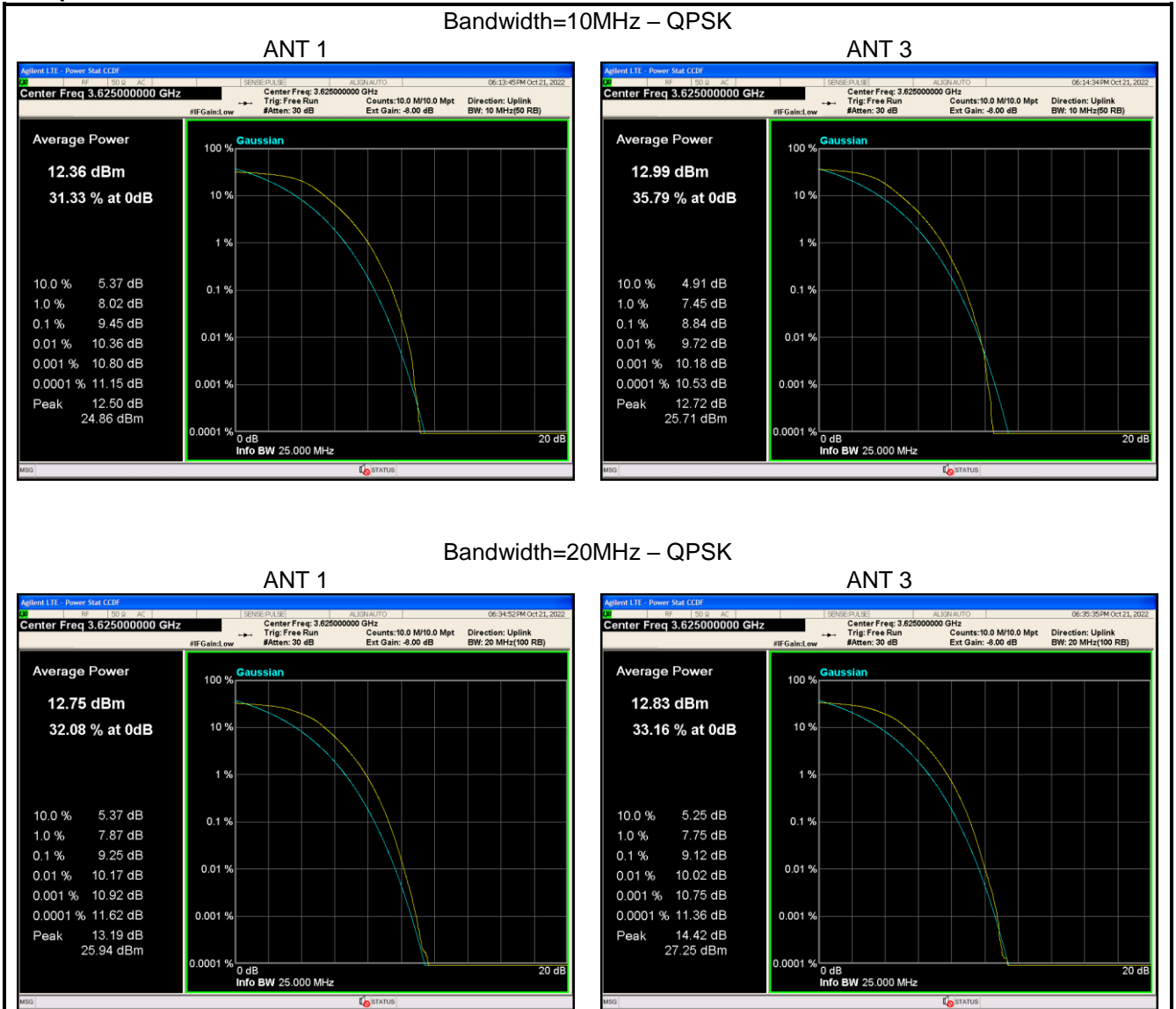
Highest channel

Peak-to-average power ratio (PAPR)

Measurement Data:

Modulation	Frequency (MHz)	ANT. Port	PAPR(dB)	Limit(dB)	Result
10MHz – QPSK	3625.00	ANT 1	9.45	13.00	PASS
	3625.00	ANT 3	8.84		PASS
20MHz – QPSK	3625.00	ANT 1	9.25		PASS
	3625.00	ANT 3	9.12		PASS

Test plot as follows:



Occupied Bandwidth

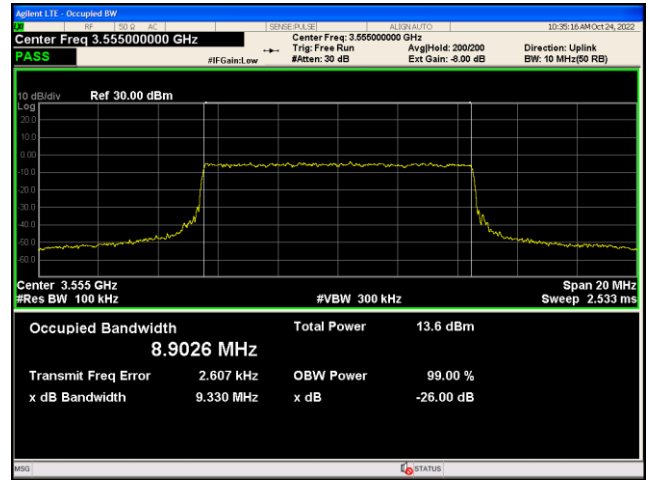
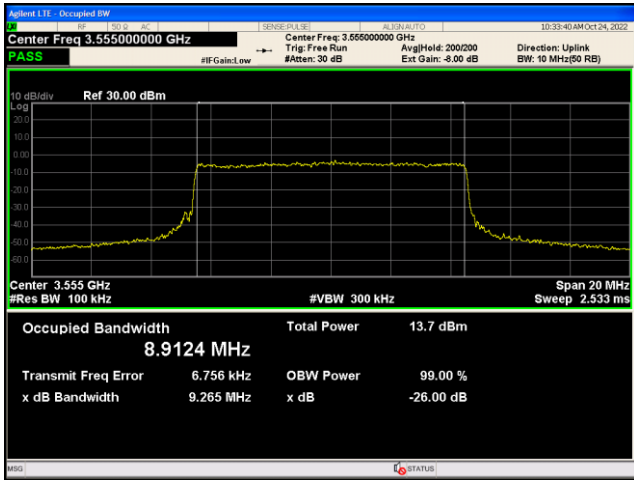
Test Channel	Bandwidth (MHz)	Modulation	Ant. Port	26dB Occupy bandwidth (MHz)	99% Occupy bandwidth (MHz)
Lowest	10	QPSK	ANT 1	9.265	8.9124
			ANT 3	9.330	8.9026
		64QAM	ANT 1	9.324	8.9163
			ANT 3	9.333	8.9043
Middle	10	QPSK	ANT 1	9.292	8.8950
			ANT 3	9.403	8.9225
		64QAM	ANT 1	9.349	8.9145
			ANT 3	9.406	8.9011
Highest	10	QPSK	ANT 1	9.270	8.9245
			ANT 3	9.321	8.8929
		64QAM	ANT 1	9.278	8.9144
			ANT 3	9.305	8.9162
Lowest	20	QPSK	ANT 1	18.50	17.824
			ANT 3	18.57	17.847
		64QAM	ANT 1	18.53	17.798
			ANT 3	18.51	17.820
Middle	20	QPSK	ANT 1	18.49	17.830
			ANT 3	18.48	17.805
		64QAM	ANT 1	18.51	17.841
			ANT 3	18.48	17.823
Highest	20	QPSK	ANT 1	18.54	17.797
			ANT 3	18.48	17.807
		64QAM	ANT 1	18.48	17.813
			ANT 3	18.51	17.843

Test plot as follows:

LTE Band 48
BW: 10MHz, QPSK

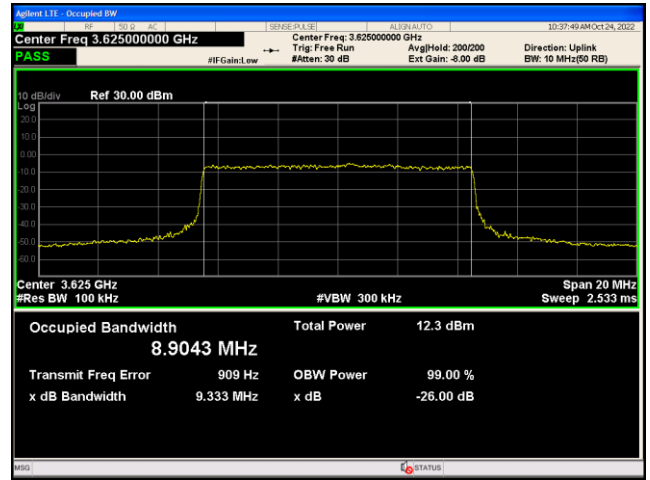
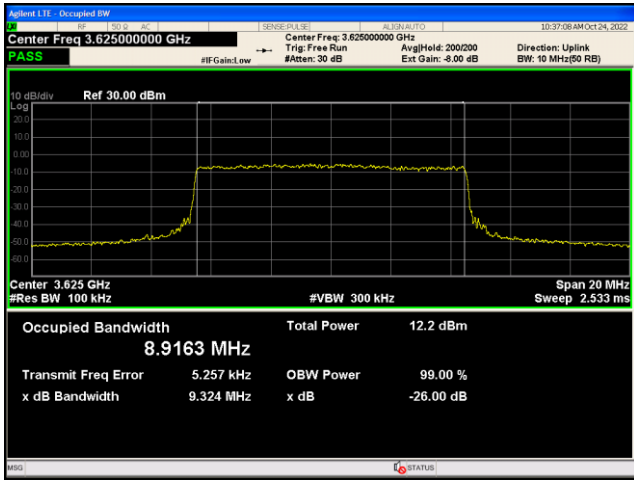
ANT 1

ANT 3



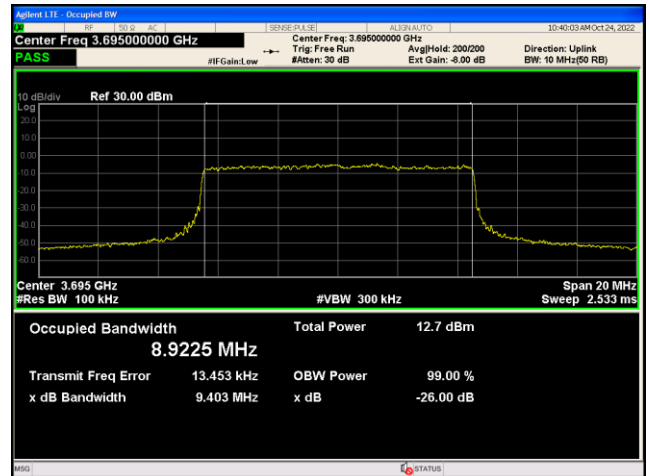
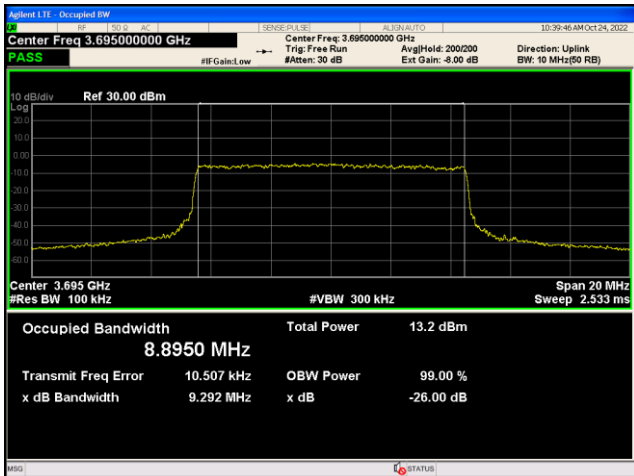
Lowest channel

Lowest channel



Middle channel

Middle channel



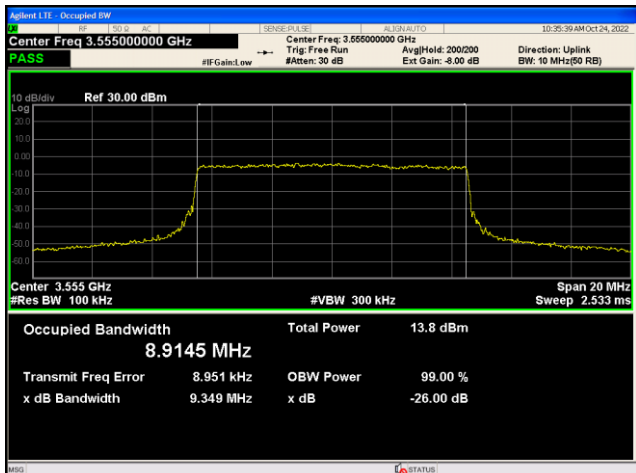
Highest channel

Highest channel

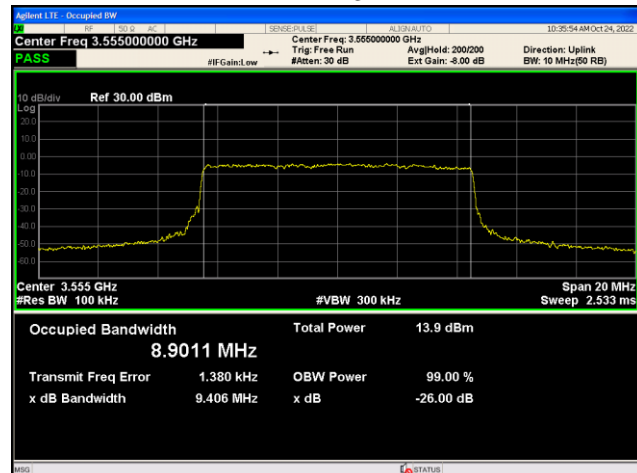
LTE Band 48
BW: 10MHz, 64QAM

ANT 1

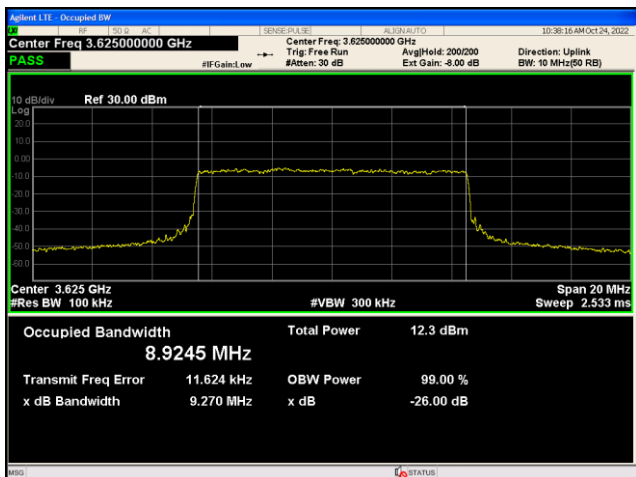
ANT 3



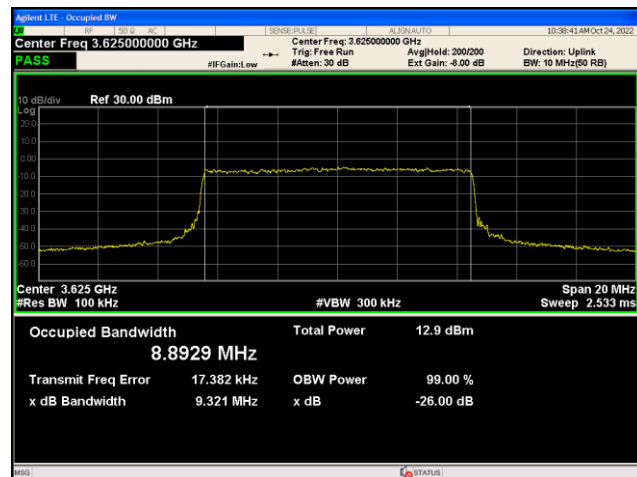
Lowest channel



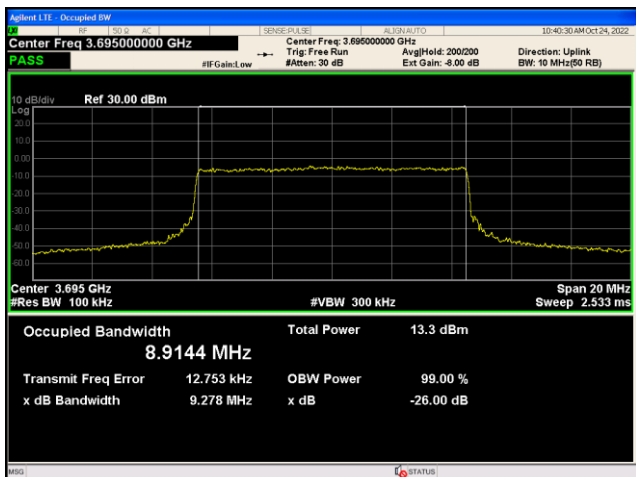
Lowest channel



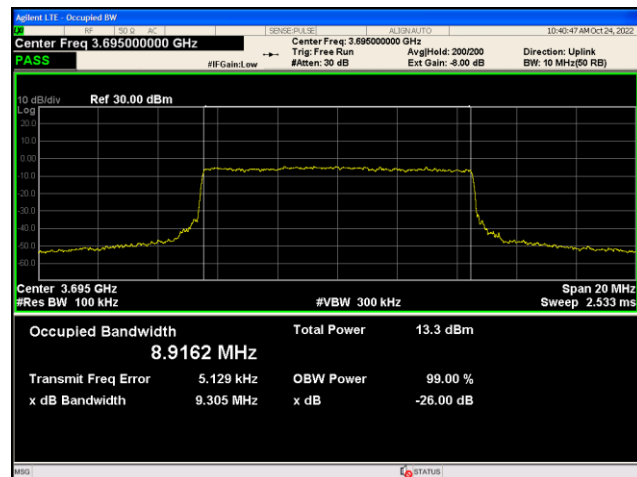
Middle channel



Middle channel



Highest channel



Highest channel