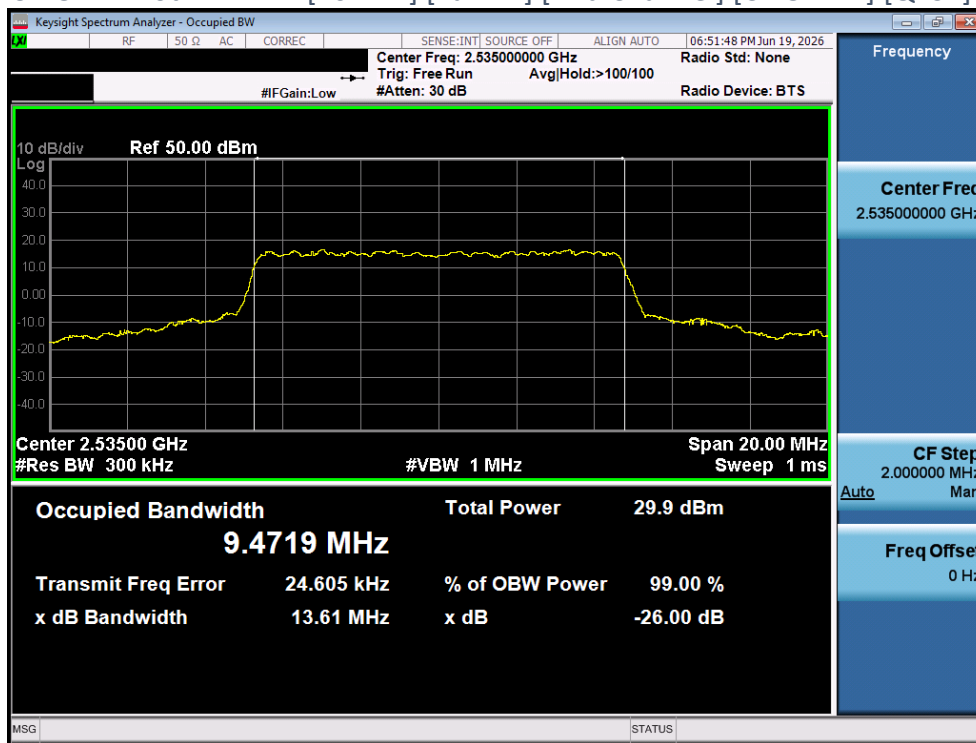
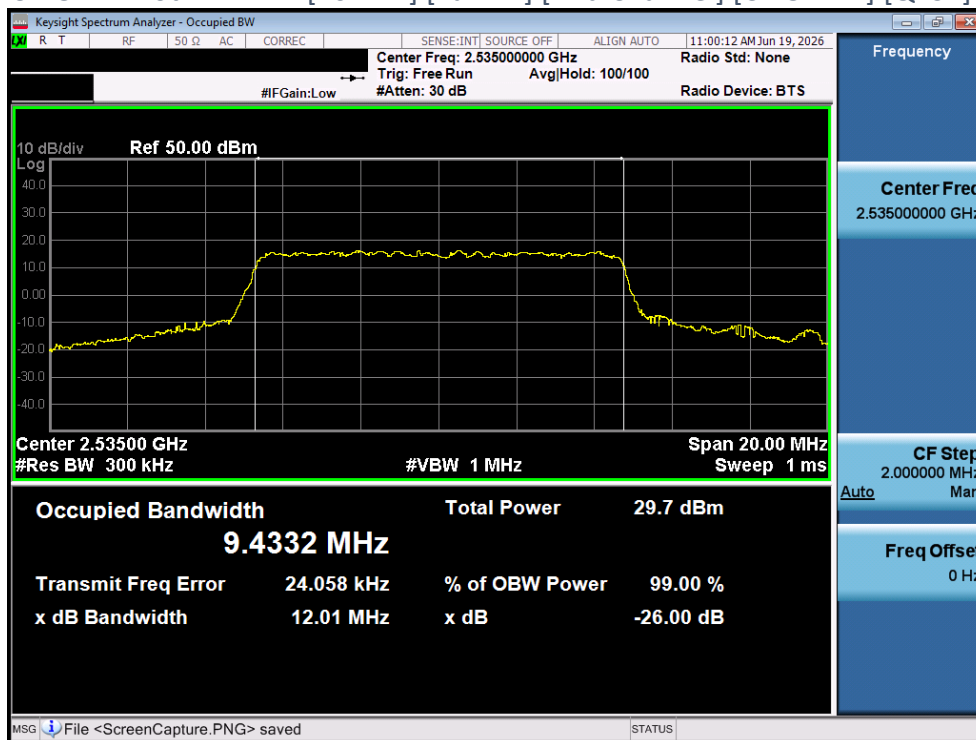


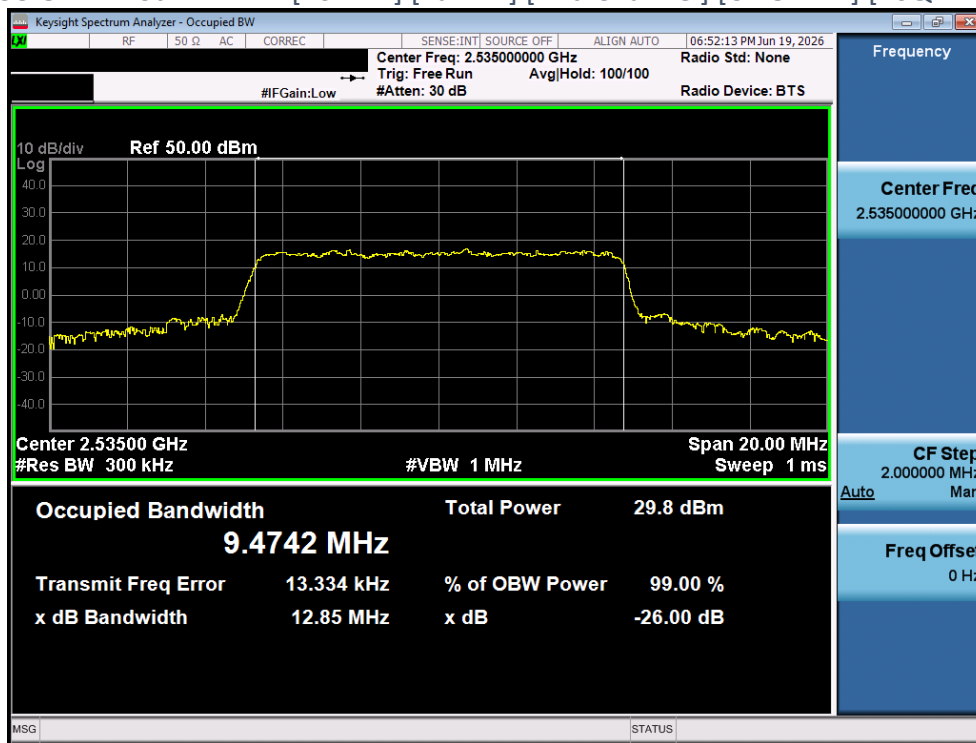
Plot 4-91 OBW Plot - NR n7 - [10MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



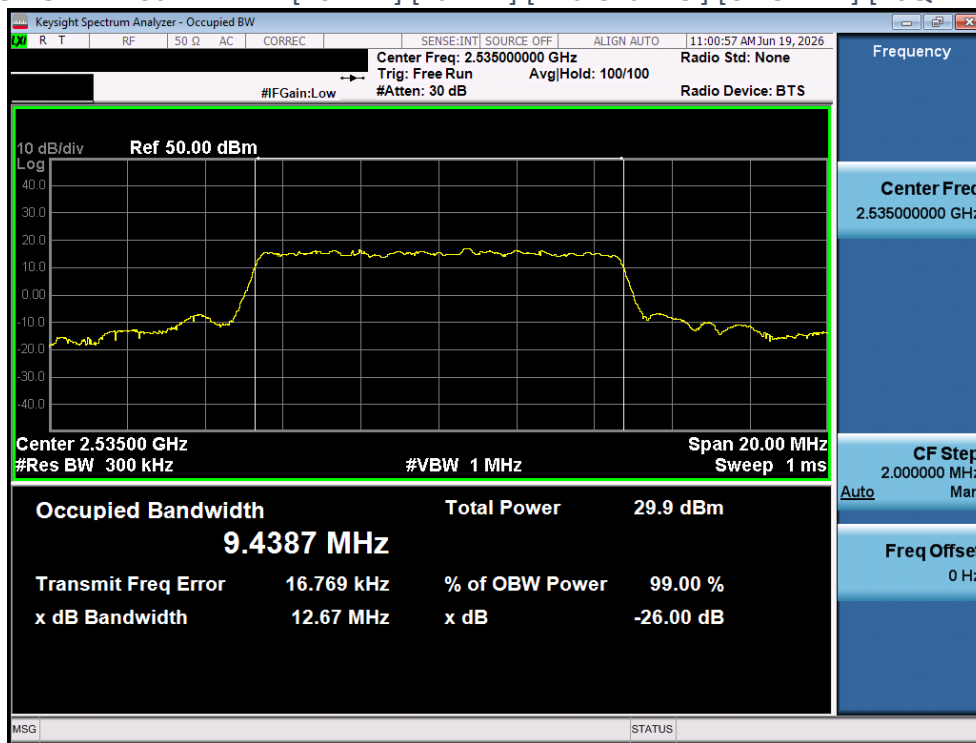
Plot 4-92 OBW Plot - NR n7 - [10MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



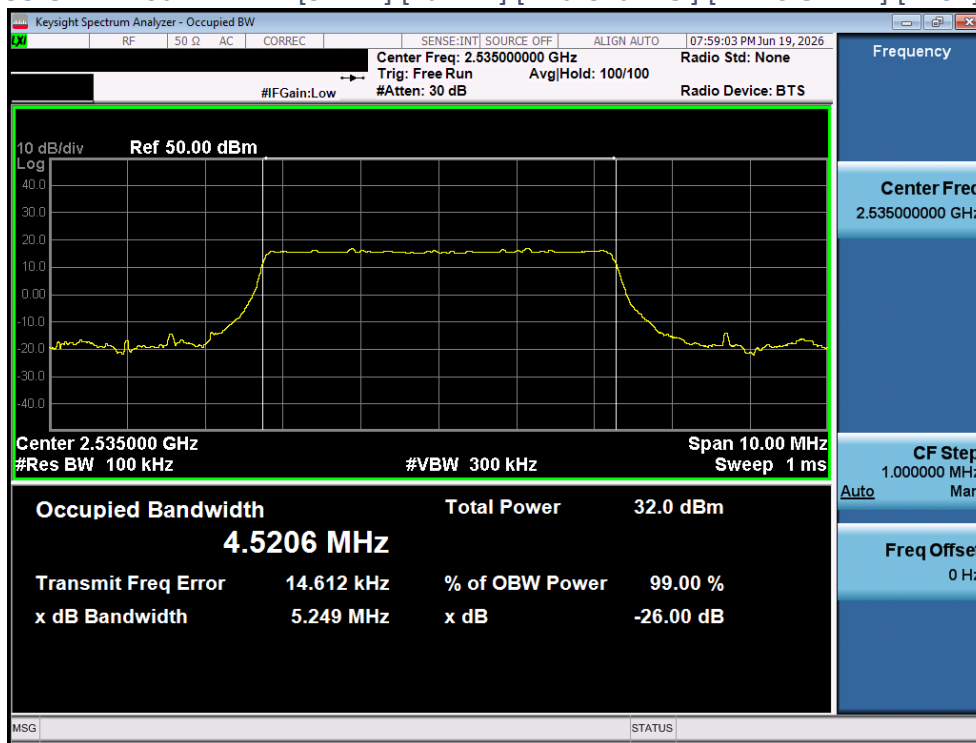
Plot 4-93 OBW Plot - NR n7 - [10MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



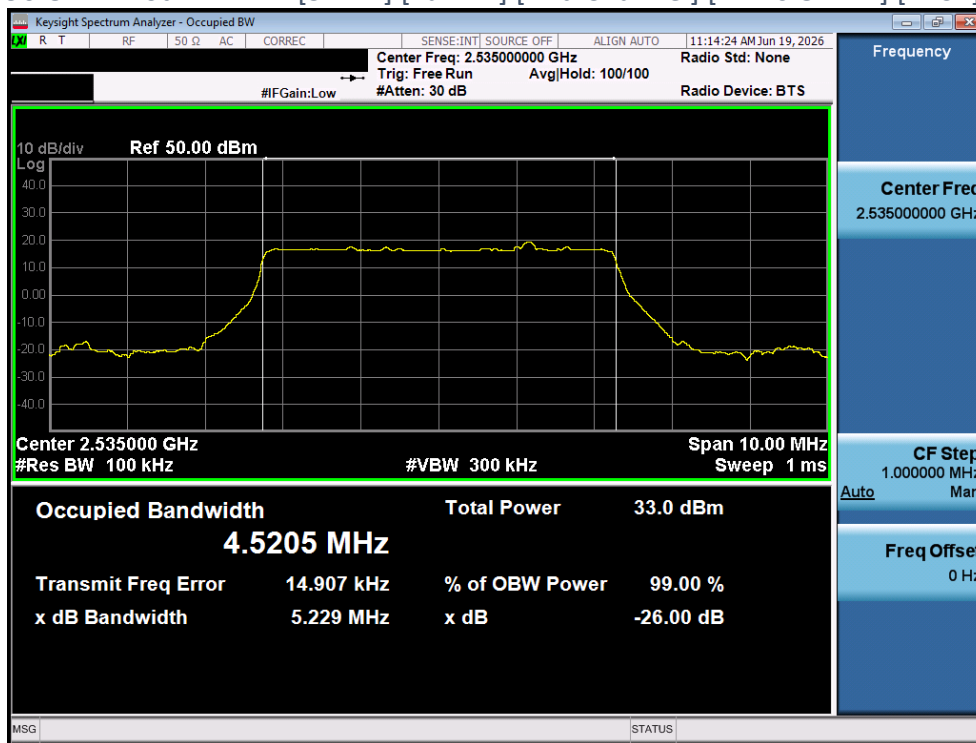
Plot 4-94 OBW Plot - NR n7 - [10MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]



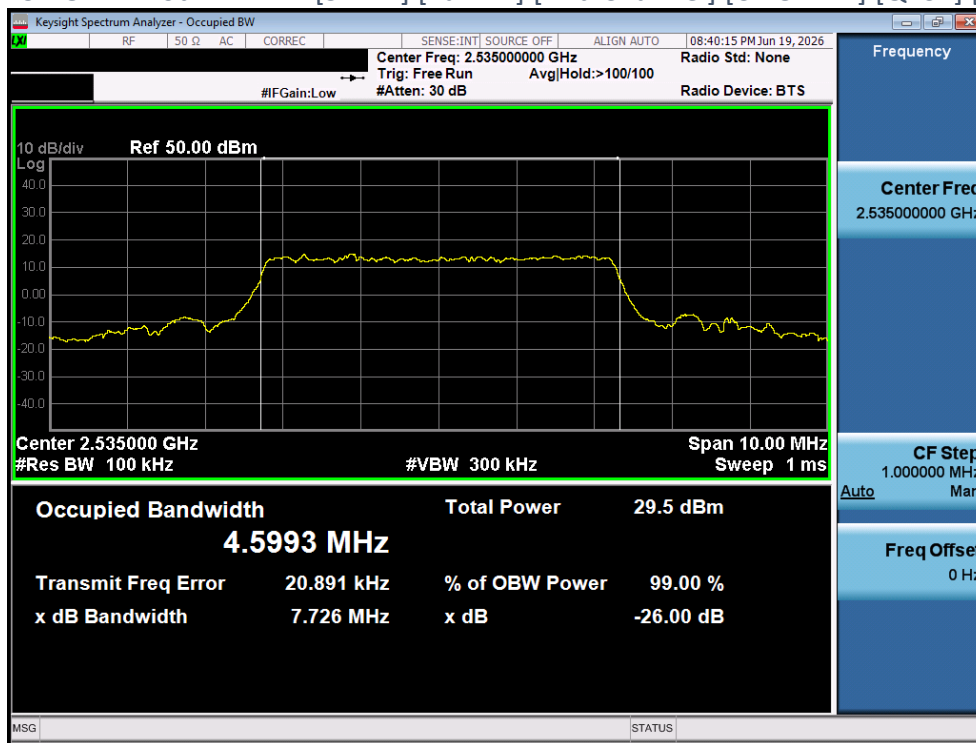
Plot 4-95 OBW Plot - NR n7 - [5MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



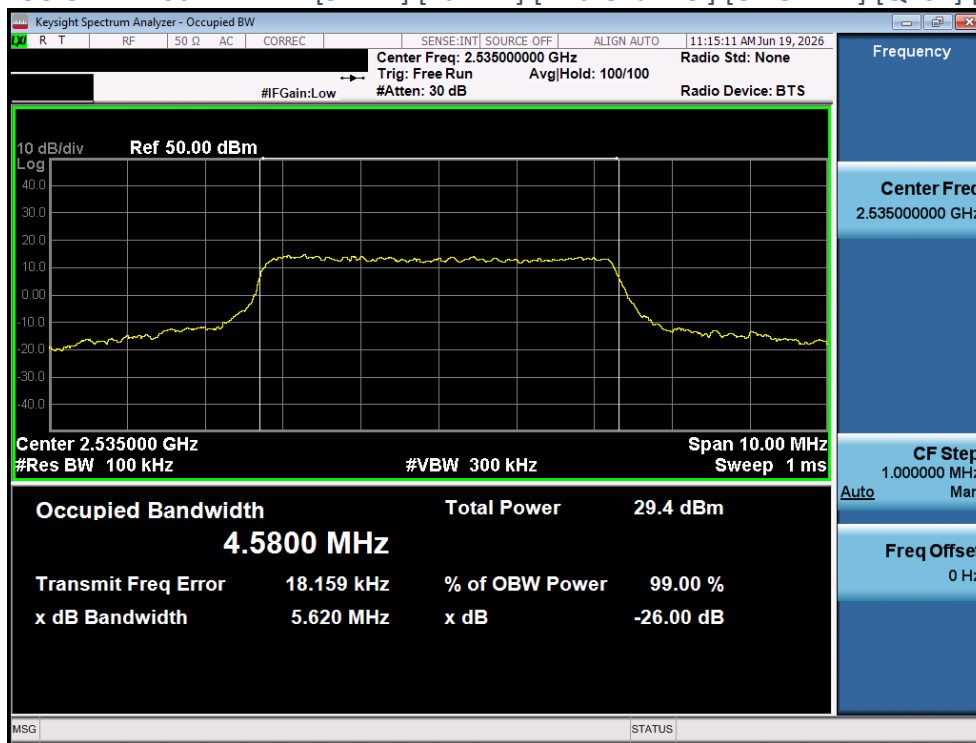
Plot 4-96 OBW Plot - NR n7 - [5MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 2]



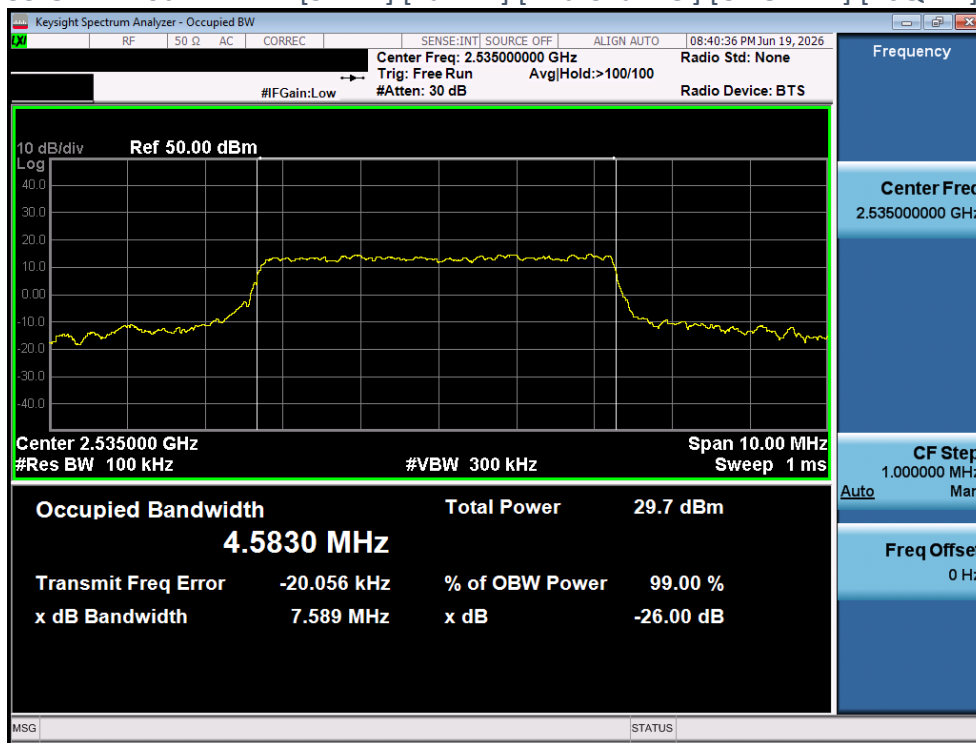
Plot 4-97 OBW Plot - NR n7 - [5MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



Plot 4-98 OBW Plot - NR n7 - [5MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



Plot 4-99 OBW Plot - NR n7 - [5MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



Plot 4-100 OBW Plot - NR n7 - [5MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]

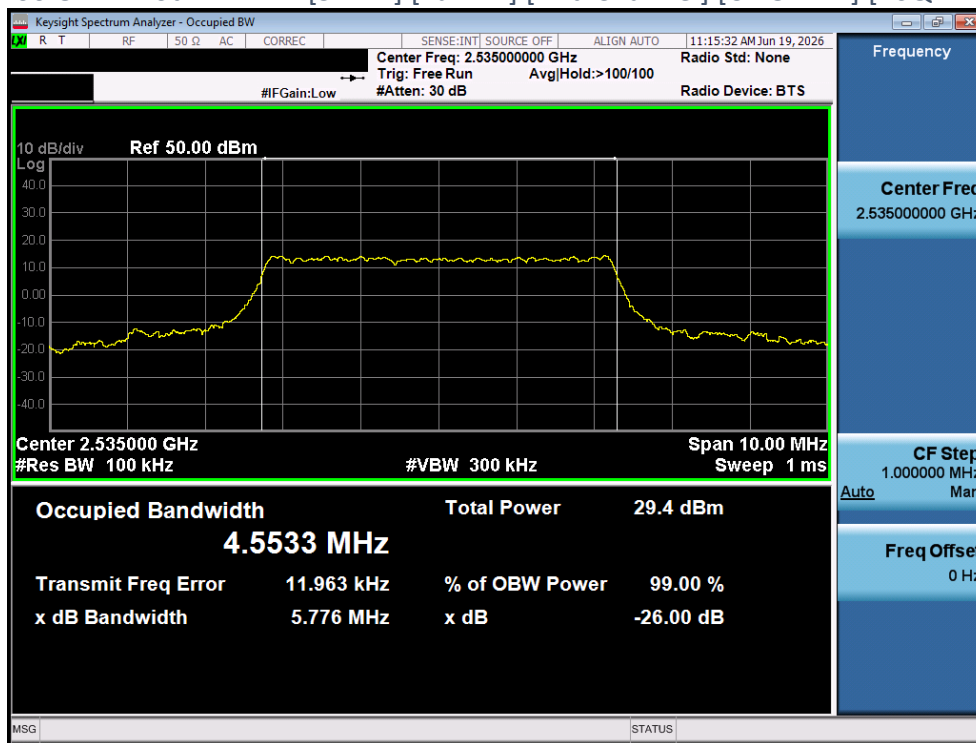


Table 4-6 OBW and 26dB Bandwidth Data NR n41/38 Ant 1

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Waveform	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
							Ant1	Ant1
NR n41/38	100	2592.99	518598	270/0	DFT-s-OFDM	BPSK	97.15	105.60
				273/0	CP-OFDM	QPSK	98.17	107.70
				273/0	CP-OFDM	16QAM	98.14	107.20
	90	2592.99	518598	243/0	DFT-s-OFDM	BPSK	87.10	95.13
				245/0	CP-OFDM	QPSK	87.81	95.28
				245/0	CP-OFDM	16QAM	88.10	95.83
	80	2592.99	518598	216/0	DFT-s-OFDM	BPSK	77.80	85.54
				217/0	CP-OFDM	QPSK	77.77	86.05
				217/0	CP-OFDM	16QAM	77.70	86.15
	70	2592.99	518598	180/0	DFT-s-OFDM	BPSK	64.80	73.21
				189/0	CP-OFDM	QPSK	68.01	76.51
				189/0	CP-OFDM	16QAM	68.03	75.73
	60	2592.99	518598	162/0	DFT-s-OFDM	BPSK	58.51	66.37
				162/0	CP-OFDM	QPSK	58.51	66.69
				162/0	CP-OFDM	16QAM	58.52	67.06
	50	2592.99	518598	128/0	DFT-s-OFDM	BPSK	46.18	50.59
				133/0	CP-OFDM	QPSK	47.83	53.03
				133/0	CP-OFDM	16QAM	47.80	52.36
	40	2592.99	518598	100/0	DFT-s-OFDM	BPSK	36.07	38.94
				106/0	CP-OFDM	QPSK	38.16	42.67
				106/0	CP-OFDM	16QAM	38.19	42.17
	30	2592.99	518598	75/0	DFT-s-OFDM	BPSK	27.02	29.45
				78/0	CP-OFDM	QPSK	28.05	30.70
				78/0	CP-OFDM	16QAM	28.14	30.70
	25	2592.99	518598	64/0	DFT-s-OFDM	BPSK	23.03	25.45
				65/0	CP-OFDM	QPSK	23.38	25.93
				65/0	CP-OFDM	16QAM	23.37	25.89
	20	2592.99	518598	50/0	DFT-s-OFDM	BPSK	18.02	20.16
				51/0	CP-OFDM	QPSK	18.35	20.65
				51/0	CP-OFDM	16QAM	18.33	20.31
	15	2592.99	518598	36/0	DFT-s-OFDM	BPSK	13.14	15.24
				38/0	CP-OFDM	QPSK	13.75	15.90
				38/0	CP-OFDM	16QAM	13.70	15.65
	10	2592.99	518598	24/0	DFT-s-OFDM	BPSK	8.77	10.35
				24/0	CP-OFDM	QPSK	8.83	10.77
				24/0	CP-OFDM	16QAM	8.75	10.51

Table 4-7 OBW and 26dB Bandwidth Data NR n41/38 Ant 2

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Waveform	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
							Ant2	Ant2
NR n41/38	100	2592.99	518598	270/0	DFT-s-OFDM	BPSK	97.45	106.20
				273/0	CP-OFDM	QPSK	98.46	107.30
				273/0	CP-OFDM	16QAM	98.25	107.60
	90	2592.99	518598	243/0	DFT-s-OFDM	BPSK	87.72	97.27
				245/0	CP-OFDM	QPSK	88.56	99.33
				245/0	CP-OFDM	16QAM	88.44	97.64
	80	2592.99	518598	216/0	DFT-s-OFDM	BPSK	78.23	86.28
				217/0	CP-OFDM	QPSK	78.59	86.86
				217/0	CP-OFDM	16QAM	78.44	88.23
	70	2592.99	518598	180/0	DFT-s-OFDM	BPSK	65.44	73.67
				189/0	CP-OFDM	QPSK	68.72	78.41
				189/0	CP-OFDM	16QAM	68.47	83.94
	60	2592.99	518598	162/0	DFT-s-OFDM	BPSK	58.90	66.94
				162/0	CP-OFDM	QPSK	59.27	75.46
				162/0	CP-OFDM	16QAM	58.95	68.28
	50	2592.99	518598	128/0	DFT-s-OFDM	BPSK	46.32	50.85
				133/0	CP-OFDM	QPSK	48.07	53.07
				133/0	CP-OFDM	16QAM	48.11	52.50
	40	2592.99	518598	100/0	DFT-s-OFDM	BPSK	36.04	39.38
				106/0	CP-OFDM	QPSK	38.49	50.11
				106/0	CP-OFDM	16QAM	38.68	68.57
	30	2592.99	518598	75/0	DFT-s-OFDM	BPSK	26.99	29.64
				78/0	CP-OFDM	QPSK	28.32	37.35
				78/0	CP-OFDM	16QAM	28.21	31.89
	25	2592.99	518598	64/0	DFT-s-OFDM	BPSK	23.14	25.64
				65/0	CP-OFDM	QPSK	23.51	30.20
				65/0	CP-OFDM	16QAM	23.54	31.62
	20	2592.99	518598	50/0	DFT-s-OFDM	BPSK	18.08	20.35
				51/0	CP-OFDM	QPSK	18.46	22.77
				51/0	CP-OFDM	16QAM	18.45	23.59
	15	2592.99	518598	36/0	DFT-s-OFDM	BPSK	13.08	15.32
				38/0	CP-OFDM	QPSK	13.79	19.10
				38/0	CP-OFDM	16QAM	13.86	19.95
	10	2592.99	518598	24/0	DFT-s-OFDM	BPSK	8.72	10.34
				24/0	CP-OFDM	QPSK	9.06	13.14
				24/0	CP-OFDM	16QAM	9.01	14.37

Table 4-8 OBW and 26dB Bandwidth Data NR n41/38 SRS D1

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Waveform	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
							Ant2	Ant2
NR n41/38	100	2592.99	518598	270/0	DFT-s-OFDM	BPSK	97.36	107.10
				273/0	CP-OFDM	QPSK	98.04	107.50
				273/0	CP-OFDM	16QAM	98.02	105.70

Table 4-9 OBW and 26dB Bandwidth Data NR n41/38 SRS D2

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Waveform	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
							Ant3	Ant3
NR n41/38	100	2592.99	518598	270/0	DFT-s-OFDM	BPSK	97.07	105.50
				273/0	CP-OFDM	QPSK	97.95	108.10
				273/0	CP-OFDM	16QAM	97.90	108.40

Table 4-10 OBW and 26dB Bandwidth Data NR n41/38 SRS D3

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Waveform	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
							Ant4	Ant4
NR n41/38	100	2592.99	518598	270/0	DFT-s-OFDM	BPSK	97.02	106.20
				273/0	CP-OFDM	QPSK	98.02	106.90
				273/0	CP-OFDM	16QAM	98.17	106.80

Table 4-11 OBW and 26dB Bandwidth Data NR n41/38 SRS S1

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Waveform	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
							Ant2	Ant2
NR n41/38	100	2592.99	518598	270/0	DFT-s-OFDM	BPSK	97.53	106.80
				273/0	CP-OFDM	QPSK	98.32	107.40
				273/0	CP-OFDM	16QAM	98.16	106.00

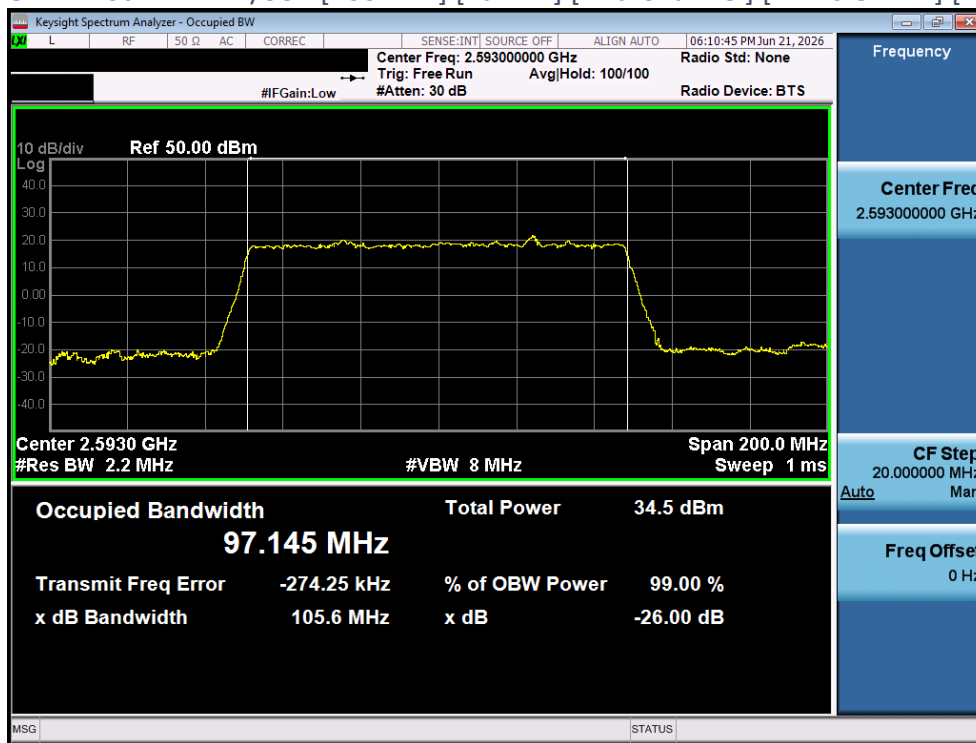
Table 4-12 OBW and 26dB Bandwidth Data NR n41/38 SRS S2

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Waveform	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
							Ant3	Ant3
NR n41/38	100	2592.99	518598	270/0	DFT-s-OFDM	BPSK	97.34	105.30
				273/0	CP-OFDM	QPSK	97.98	108.10
				273/0	CP-OFDM	16QAM	98.30	108.50

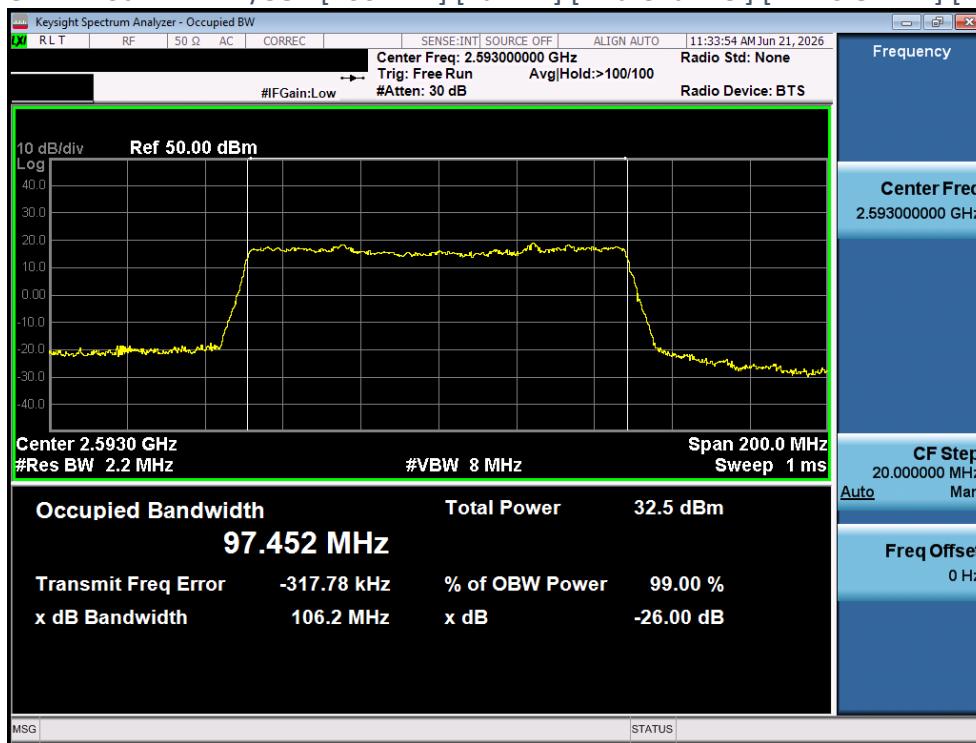
Table 4-13 OBW and 26dB Bandwidth Data NR n41/38 SRS S3

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Waveform	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
							Ant4	Ant4
NR n41/38	100	2592.99	518598	270/0	DFT-s-OFDM	BPSK	97.24	105.70
				273/0	CP-OFDM	QPSK	98.16	110.10
				273/0	CP-OFDM	16QAM	98.25	110.10

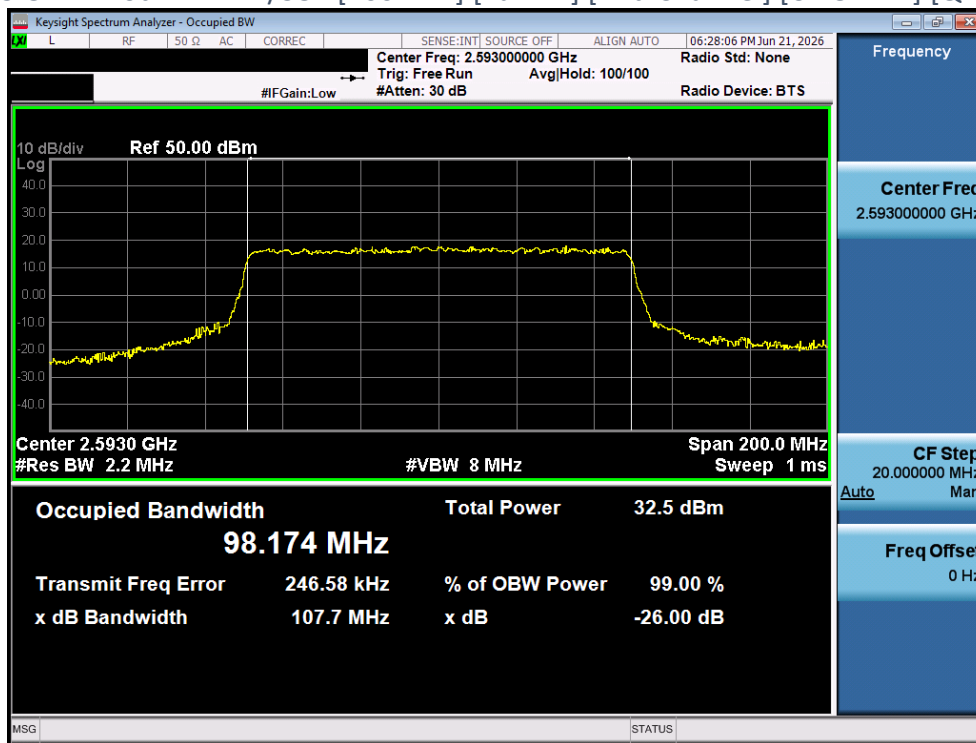
Plot 4-101 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



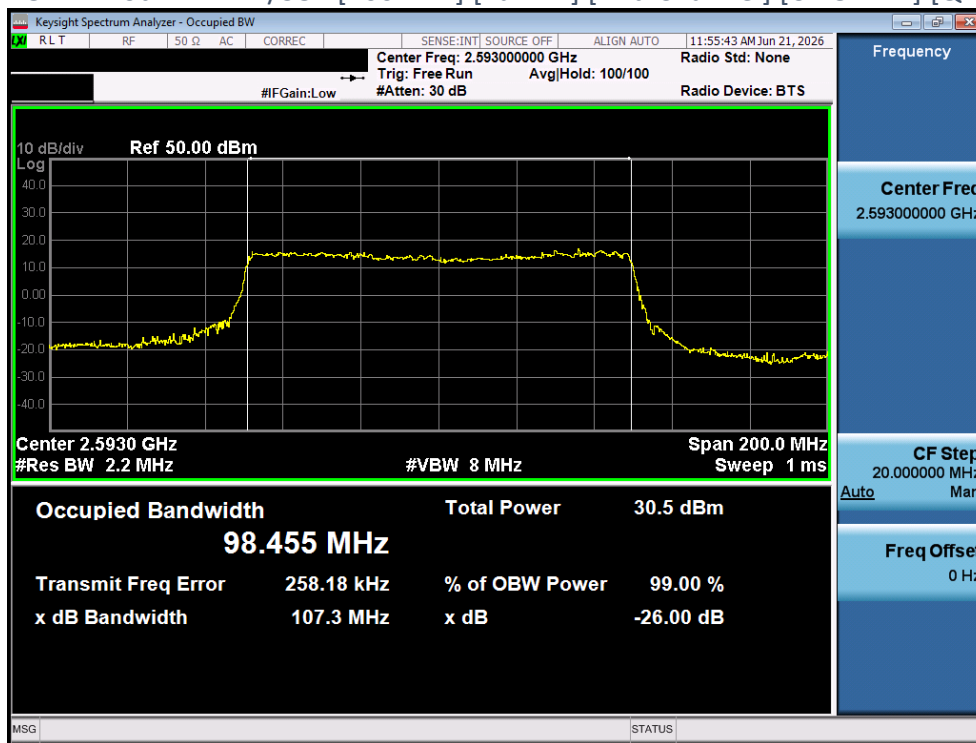
Plot 4-102 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 2]



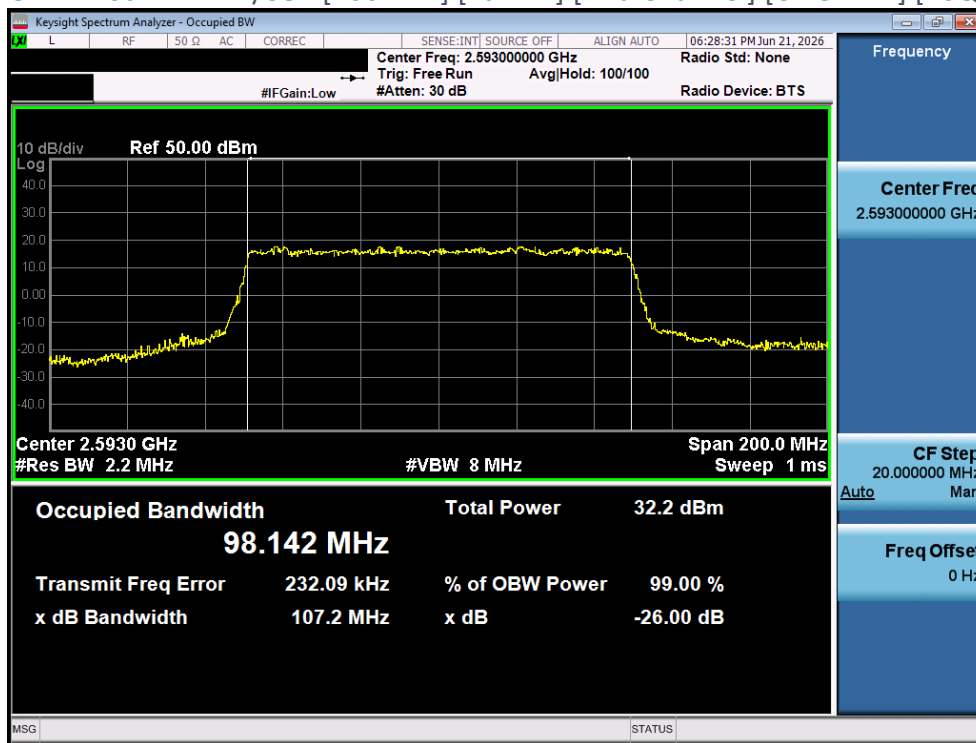
Plot 4-103 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



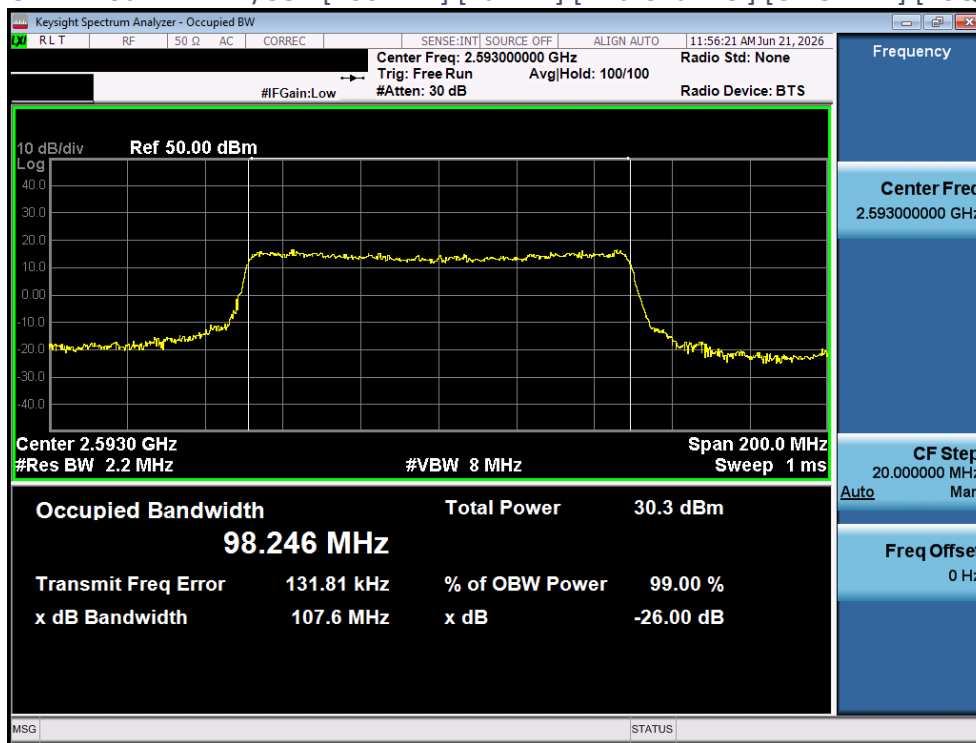
Plot 4-104 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



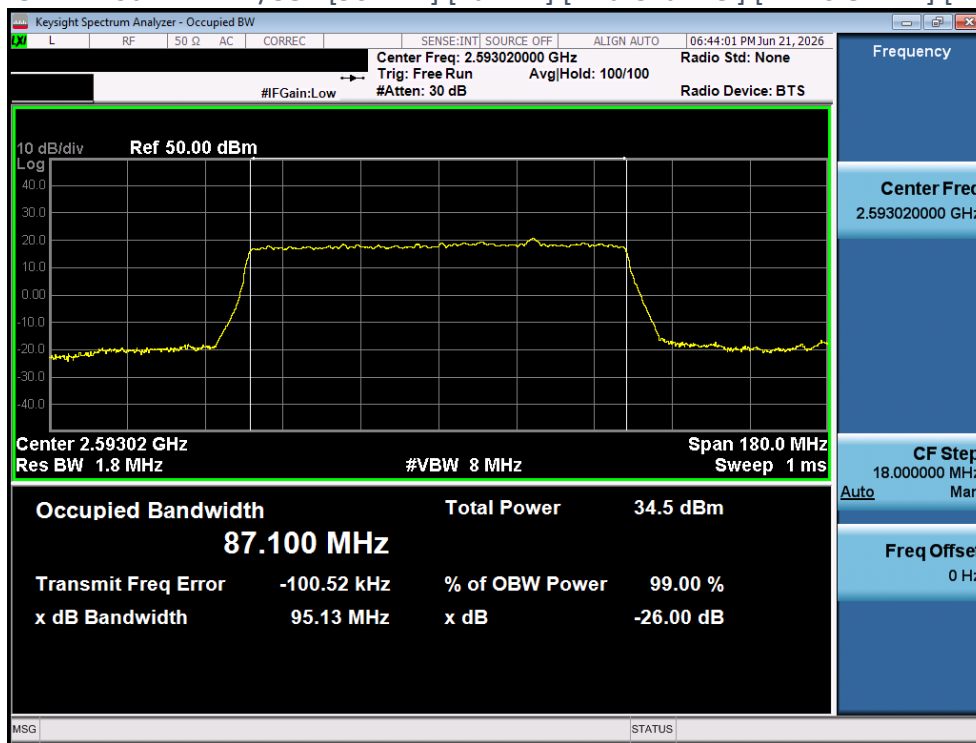
Plot 4-105 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



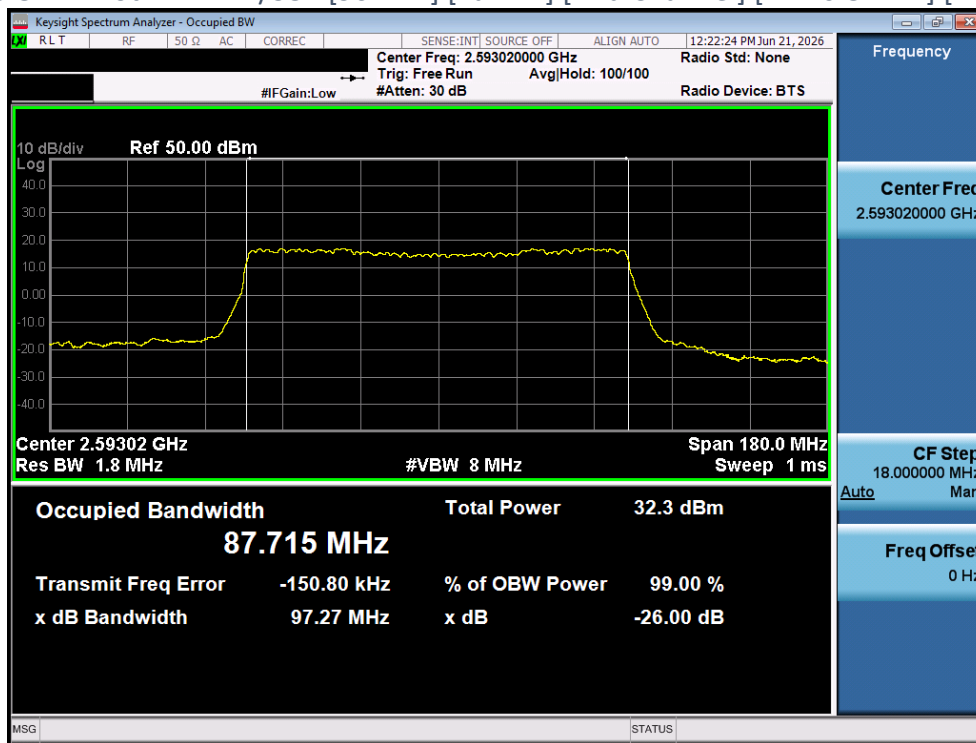
Plot 4-106 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]



Plot 4-107 OBW Plot - NR n41/38 - [90MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



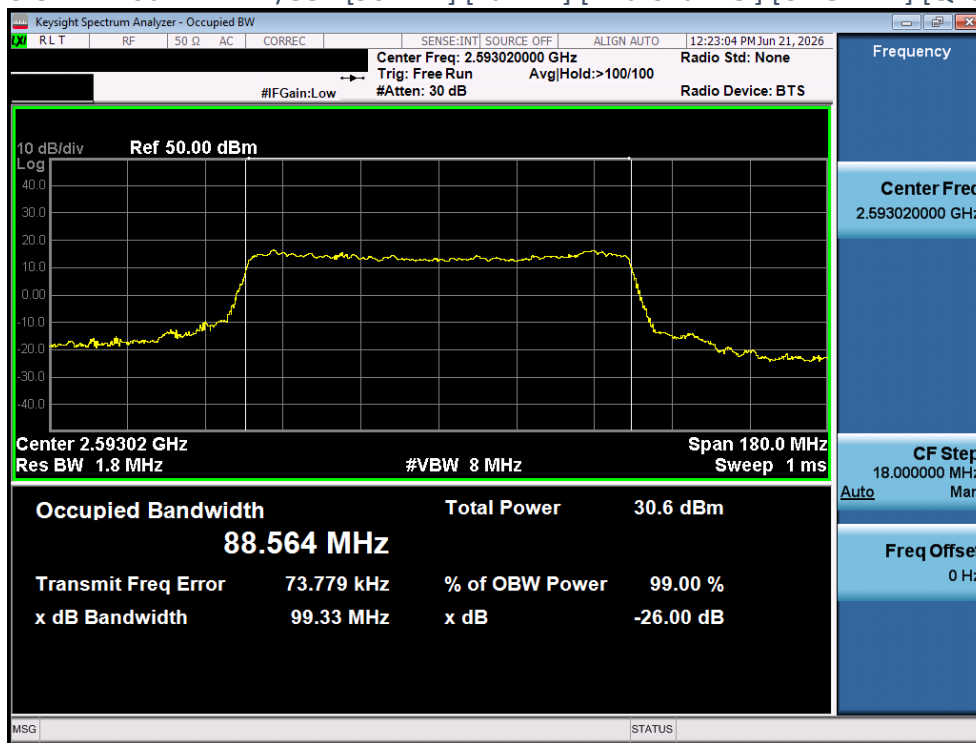
Plot 4-108 OBW Plot - NR n41/38 - [90MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 2]



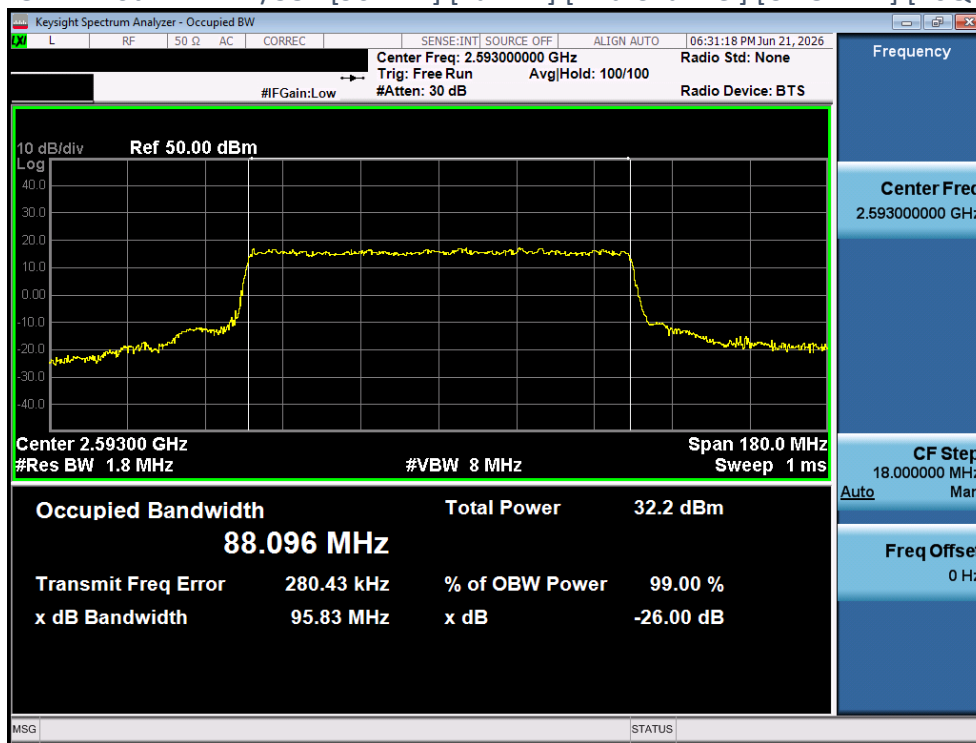
Plot 4-109 OBW Plot - NR n41/38 - [90MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



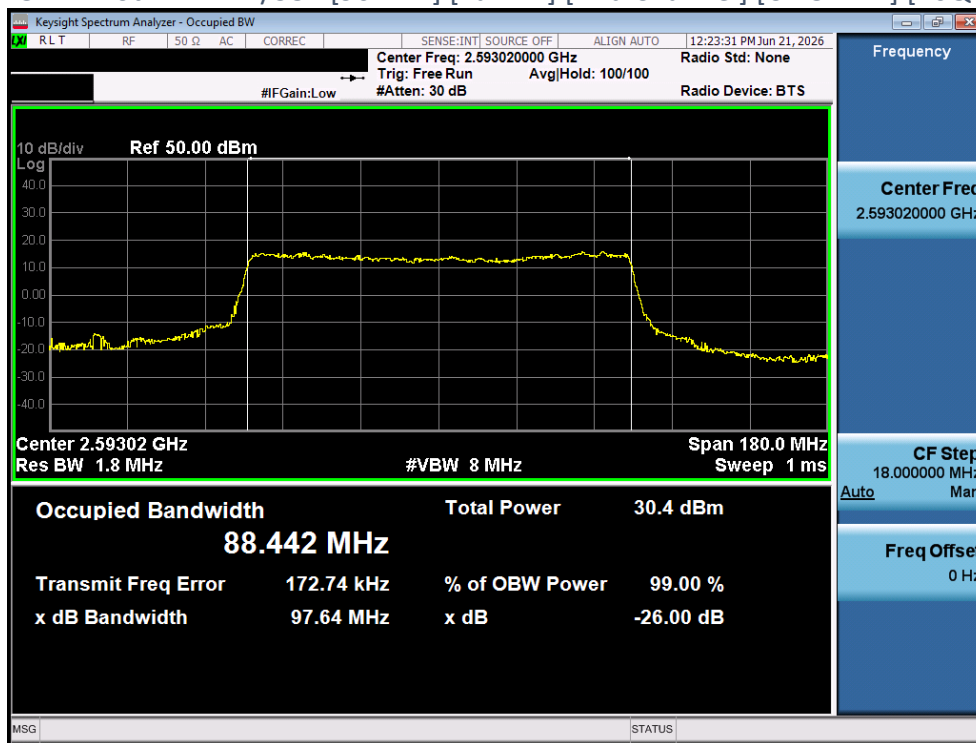
Plot 4-110 OBW Plot - NR n41/38 - [90MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



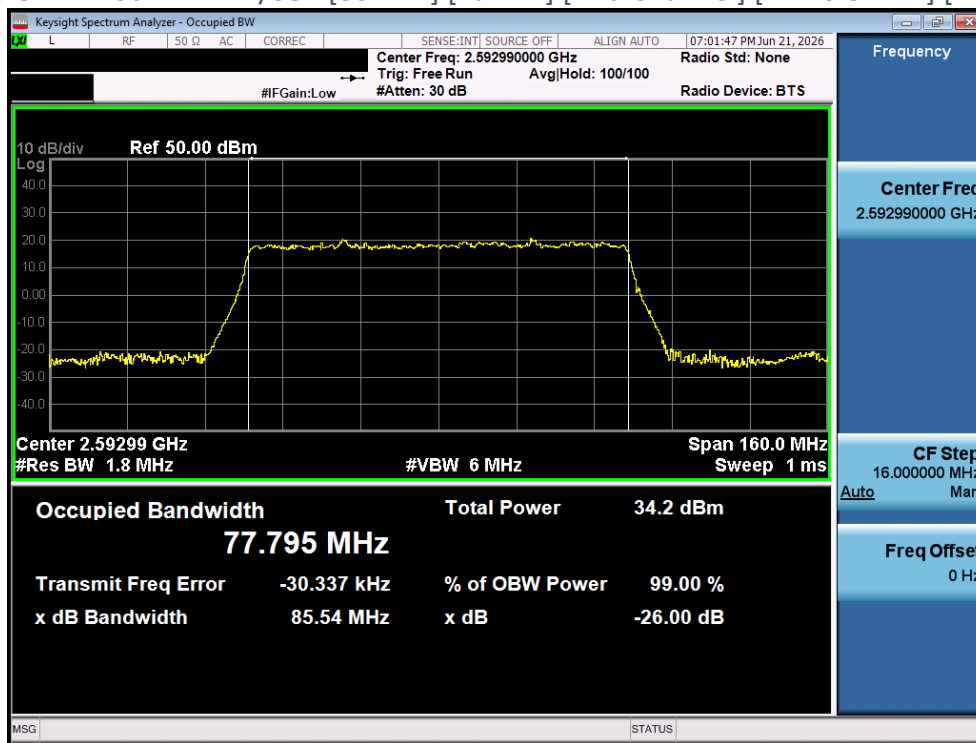
Plot 4-111 OBW Plot - NR n41/38 - [90MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



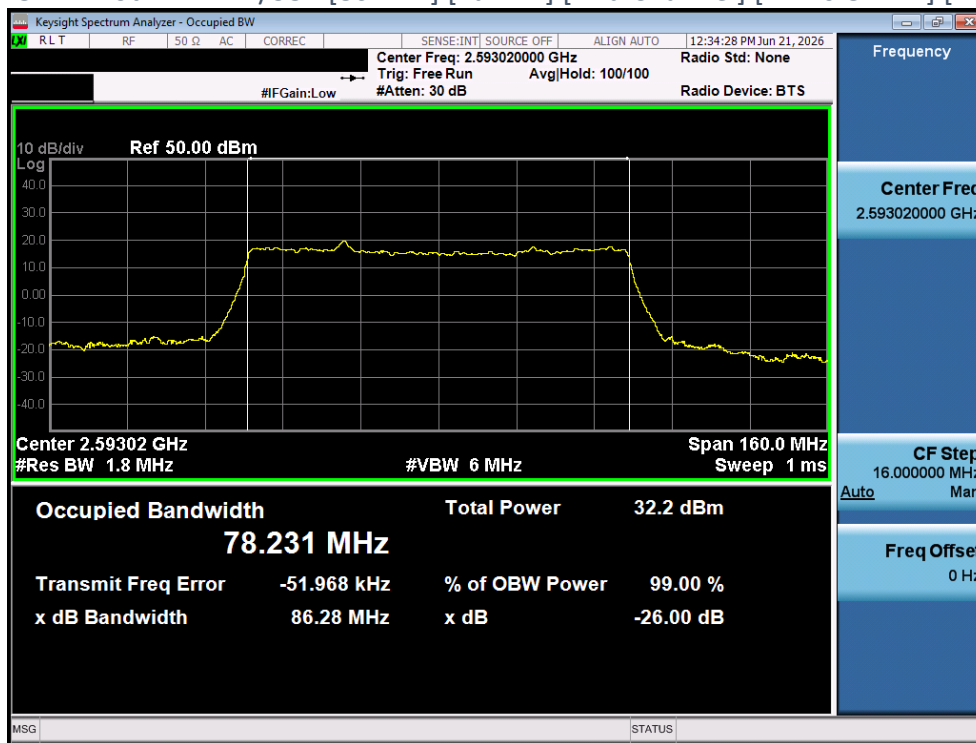
Plot 4-112 OBW Plot - NR n41/38 - [90MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]



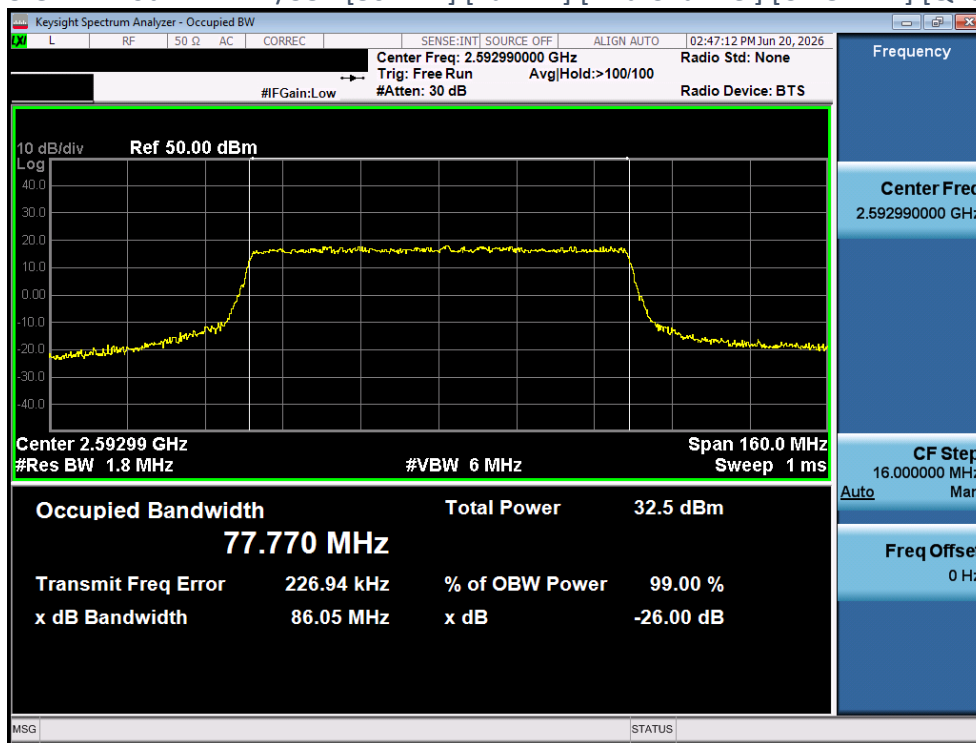
Plot 4-113 OBW Plot - NR n41/38 - [80MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



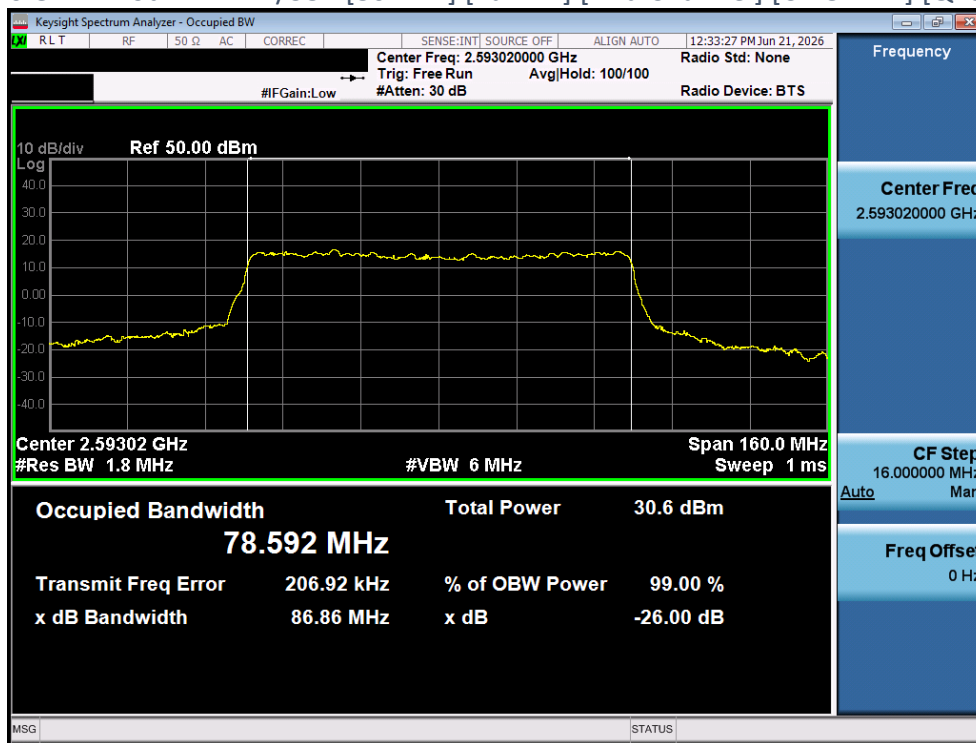
Plot 4-114 OBW Plot - NR n41/38 - [80MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 2]



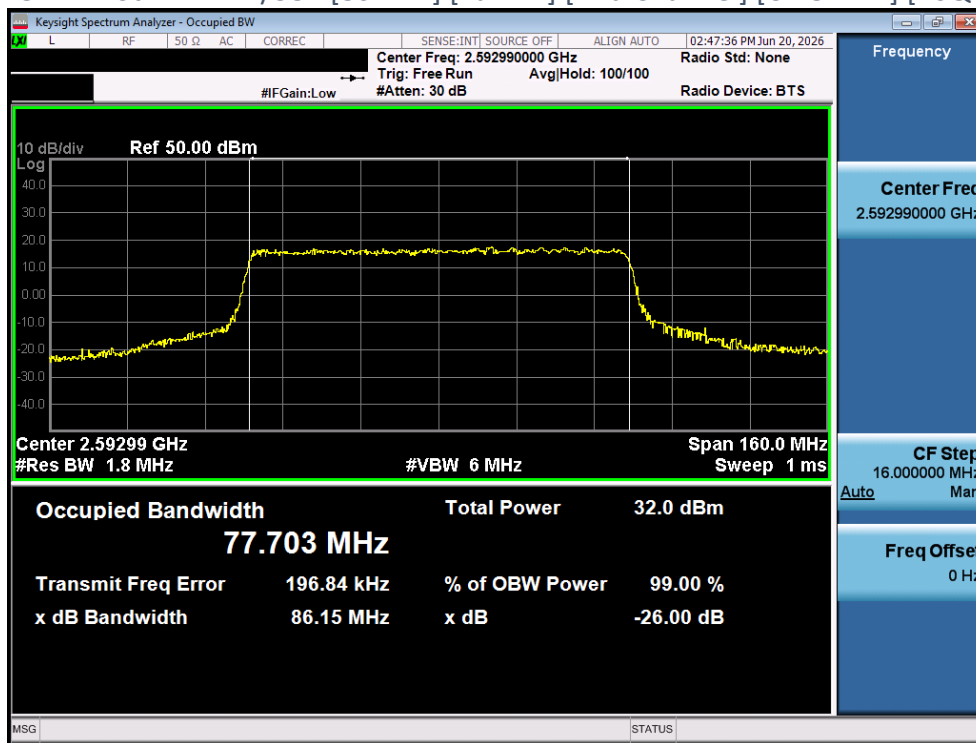
Plot 4-115 OBW Plot - NR n41/38 - [80MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



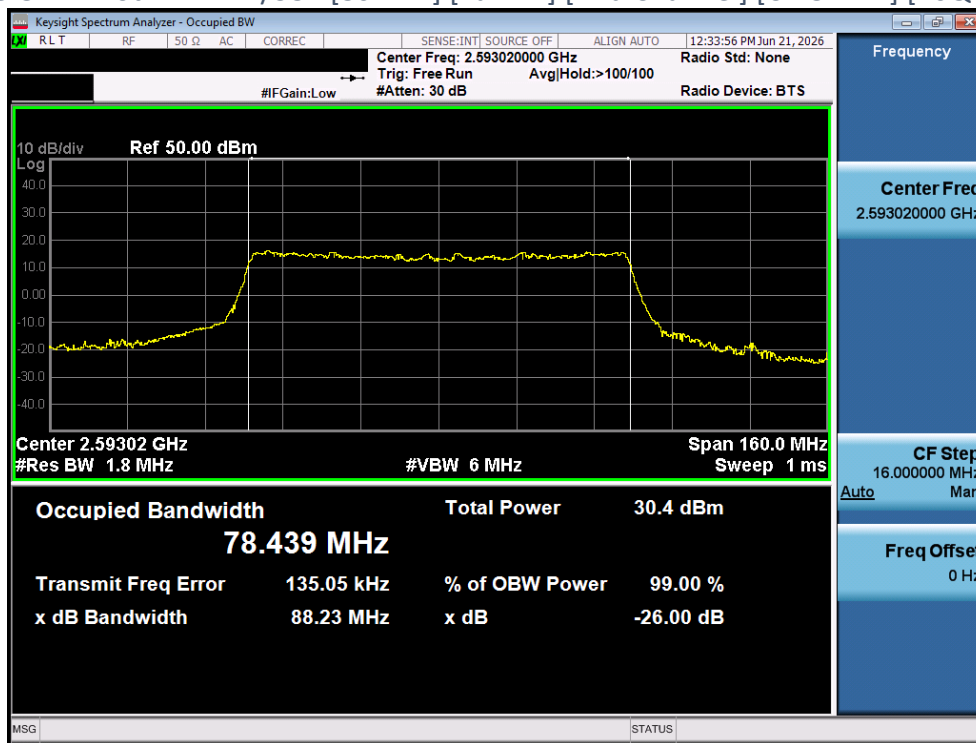
Plot 4-116 OBW Plot - NR n41/38 - [80MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



Plot 4-117 OBW Plot - NR n41/38 - [80MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



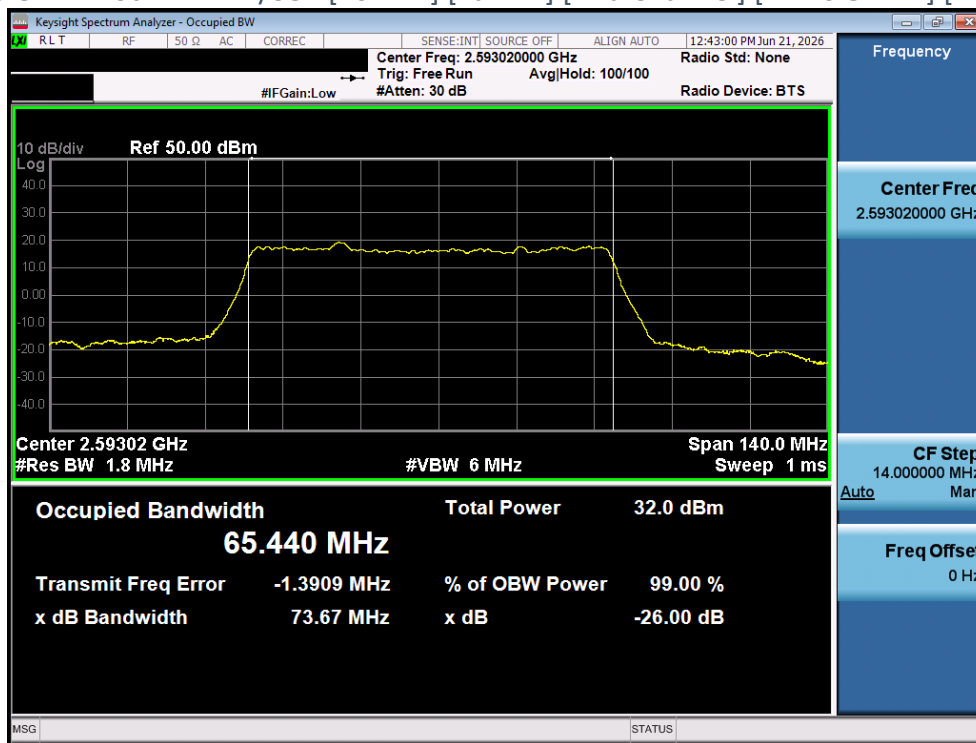
Plot 4-118 OBW Plot - NR n41/38 - [80MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]



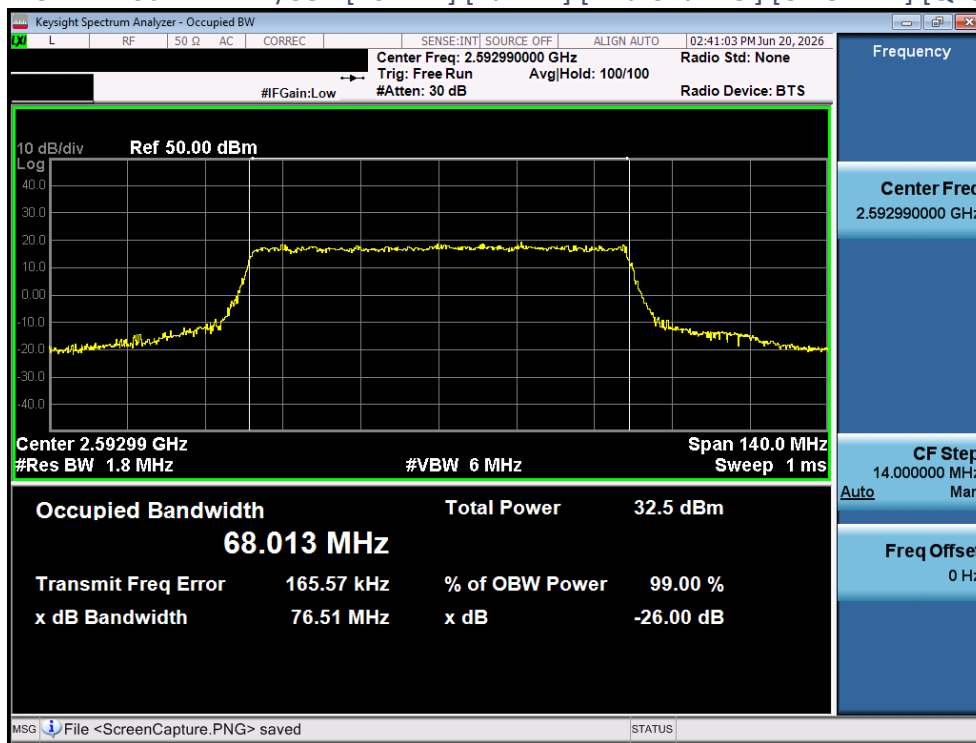
Plot 4-119 OBW Plot - NR n41/38 - [70MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



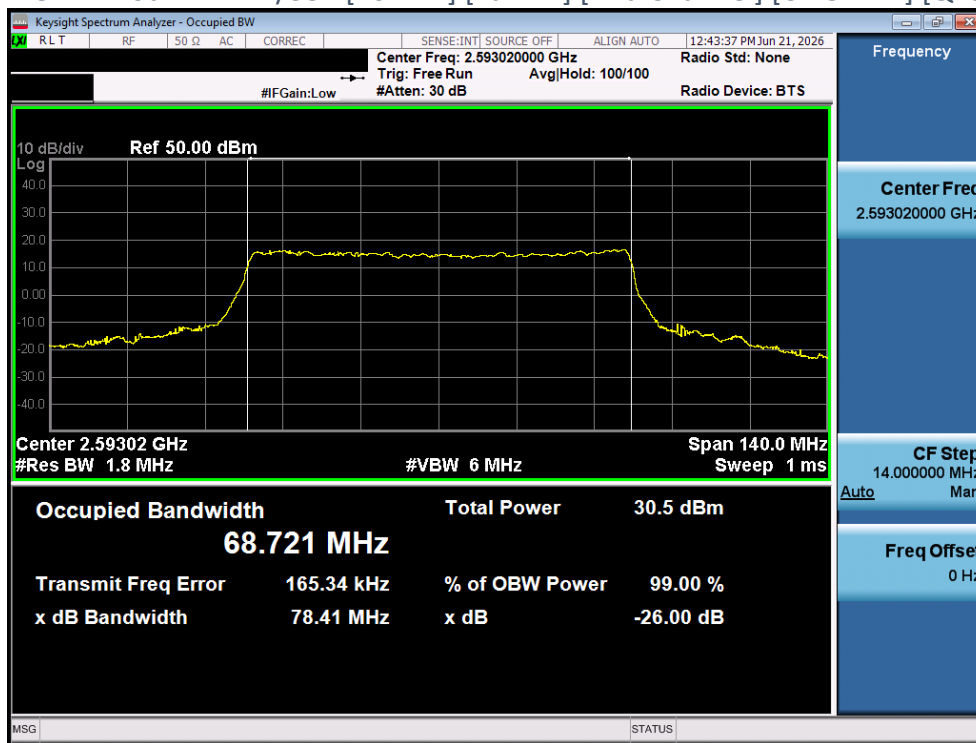
Plot 4-120 OBW Plot - NR n41/38 - [70MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 2]



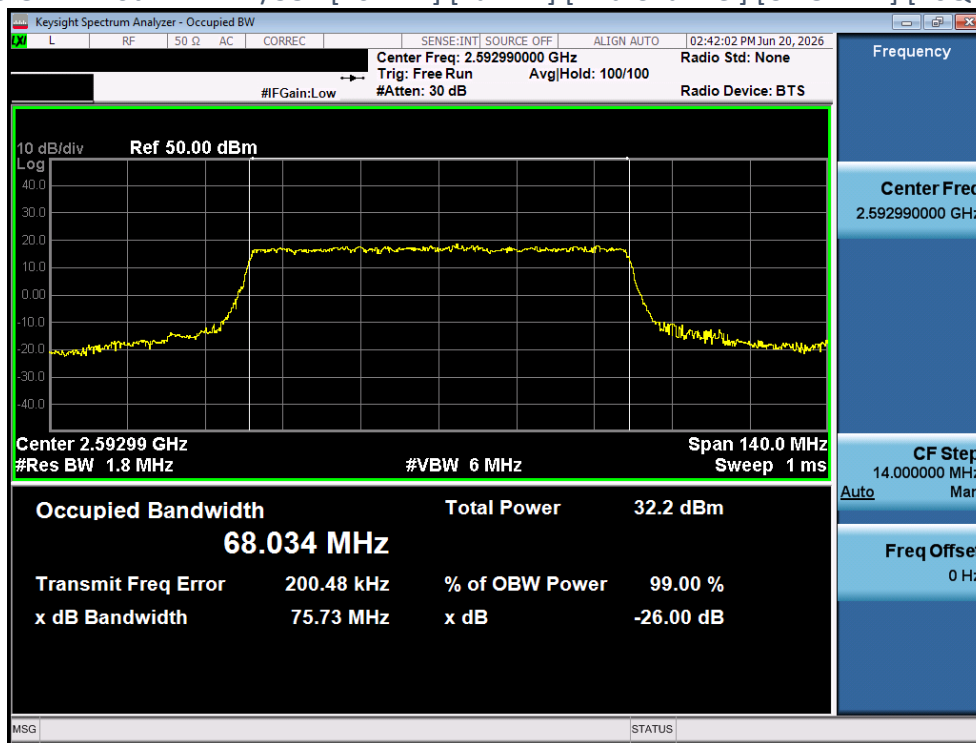
Plot 4-121 OBW Plot - NR n41/38 - [70MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



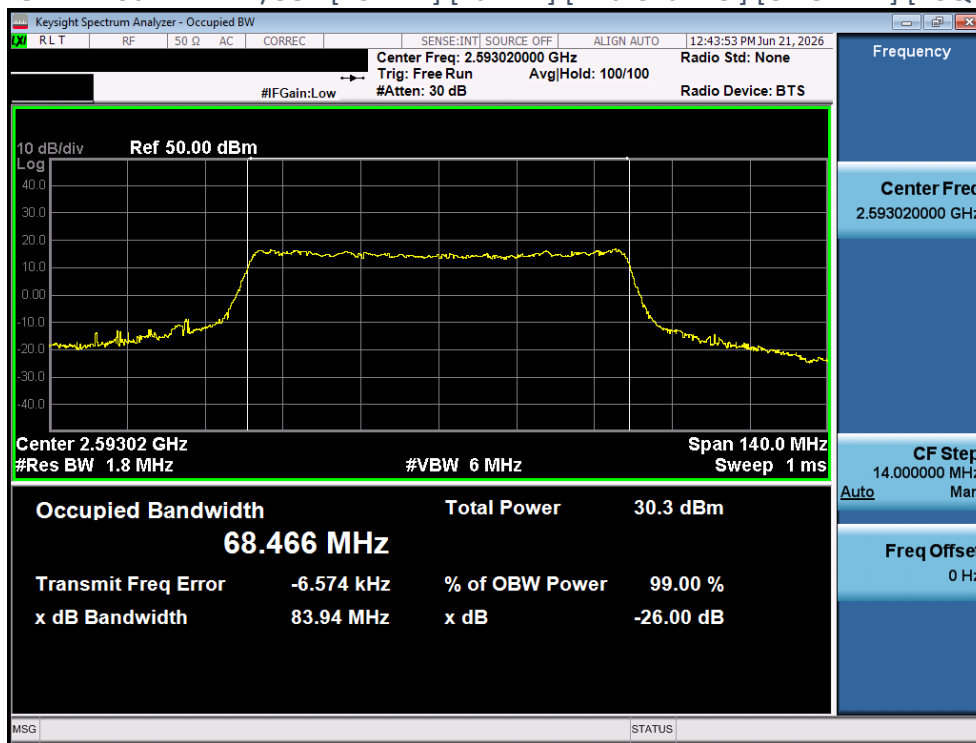
Plot 4-122 OBW Plot - NR n41/38 - [70MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



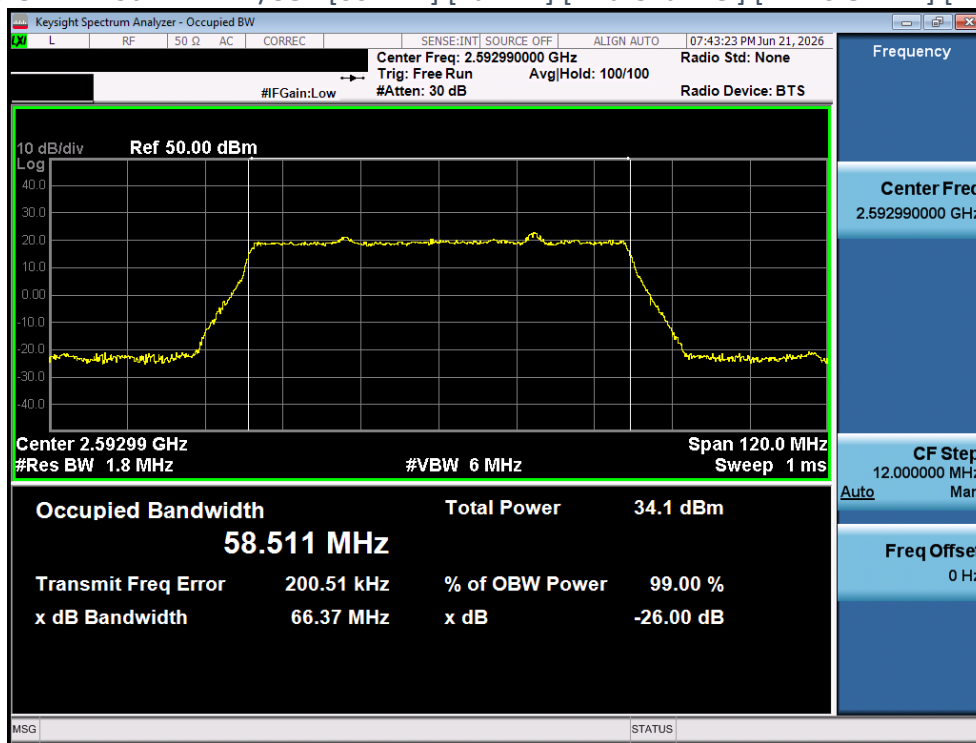
Plot 4-123 OBW Plot - NR n41/38 - [70MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



Plot 4-124 OBW Plot - NR n41/38 - [70MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]



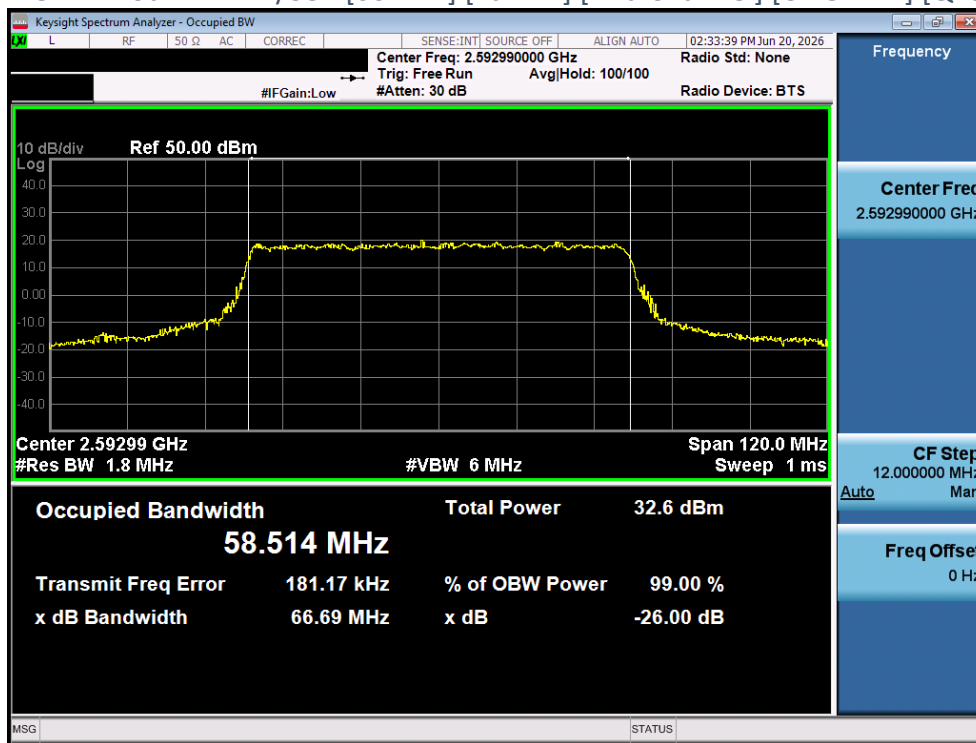
Plot 4-125 OBW Plot - NR n41/38 - [60MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



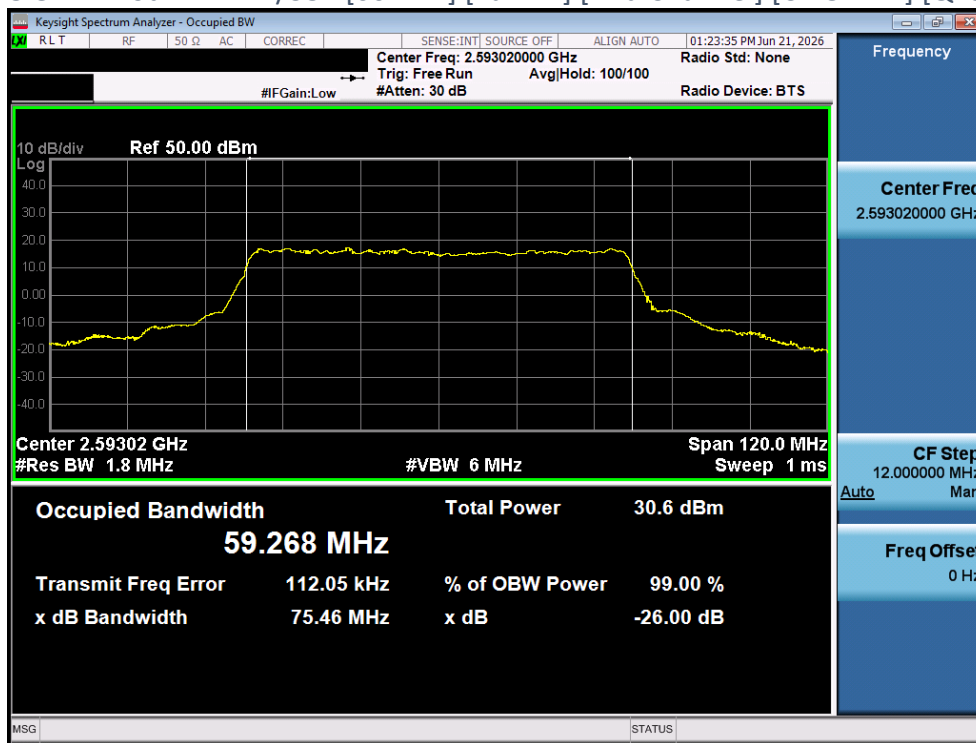
Plot 4-126 OBW Plot - NR n41/38 - [60MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 2]



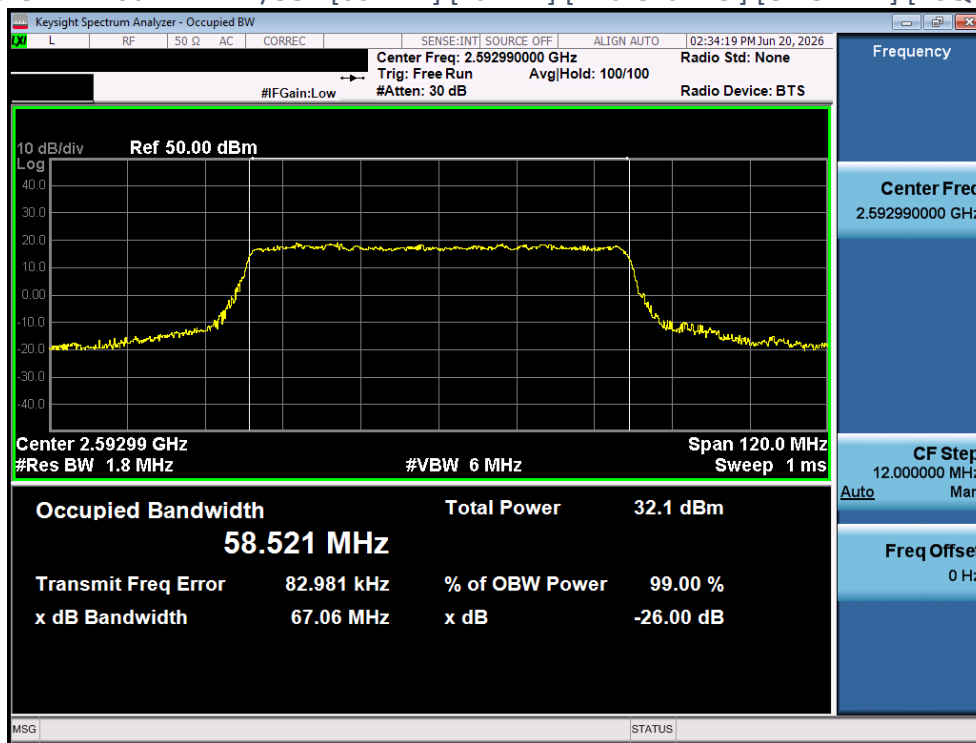
Plot 4-127 OBW Plot - NR n41/38 - [60MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



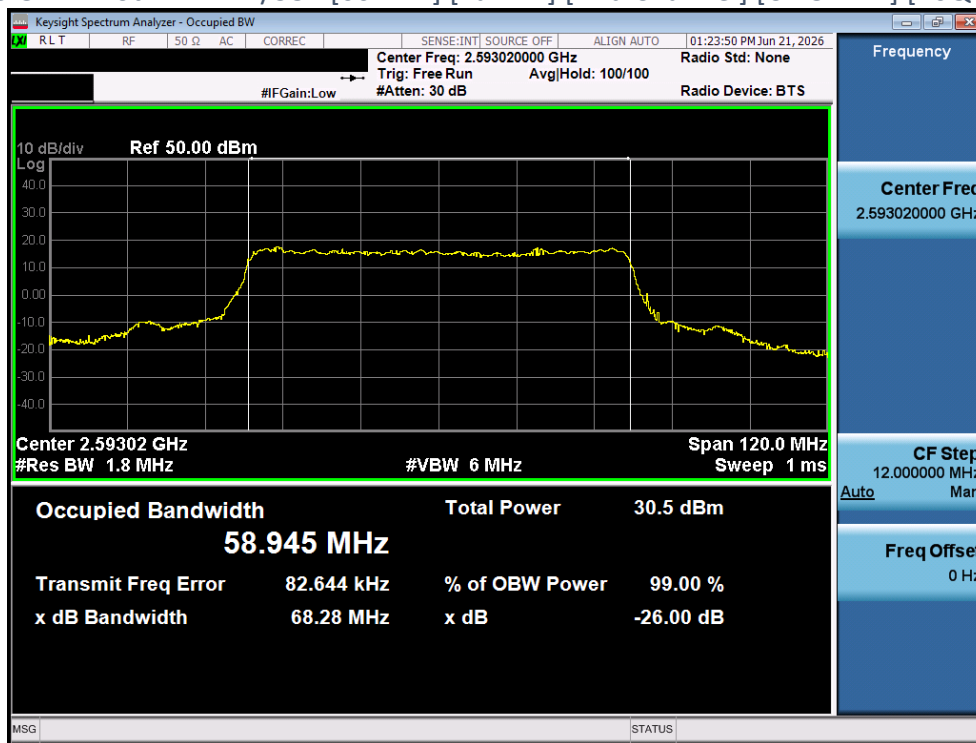
Plot 4-128 OBW Plot - NR n41/38 - [60MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



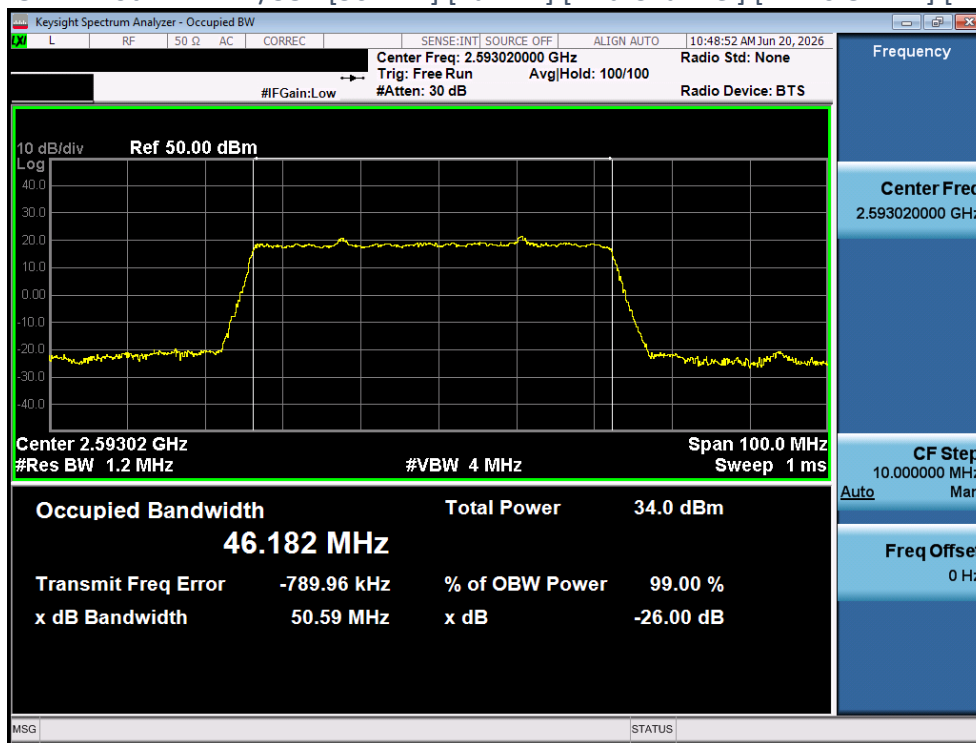
Plot 4-129 OBW Plot - NR n41/38 - [60MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



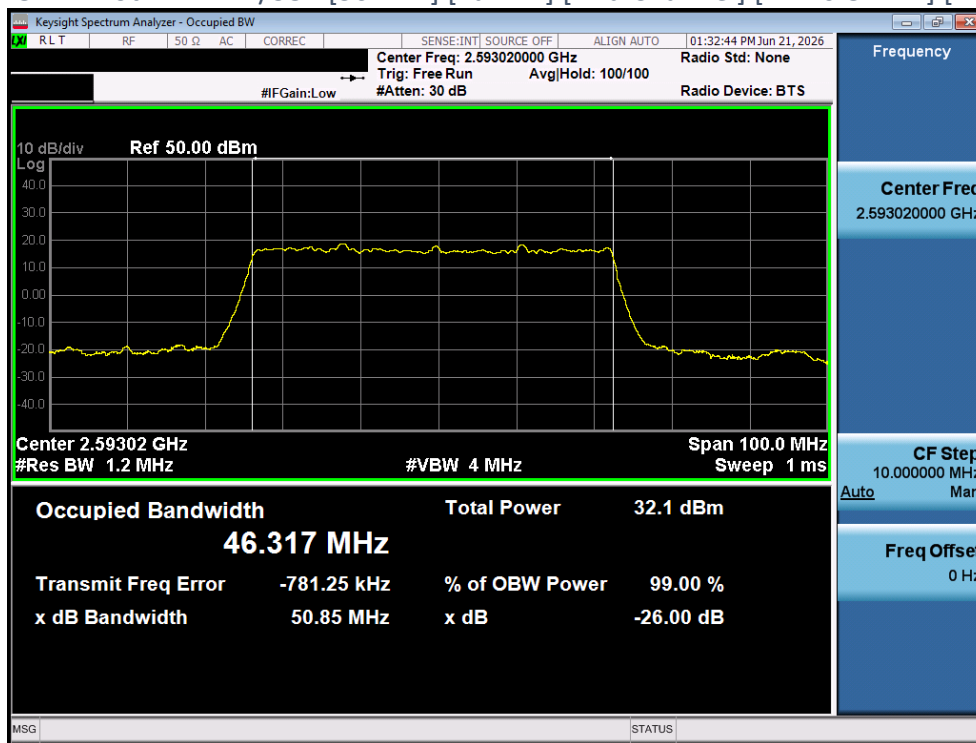
Plot 4-130 OBW Plot - NR n41/38 - [60MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]



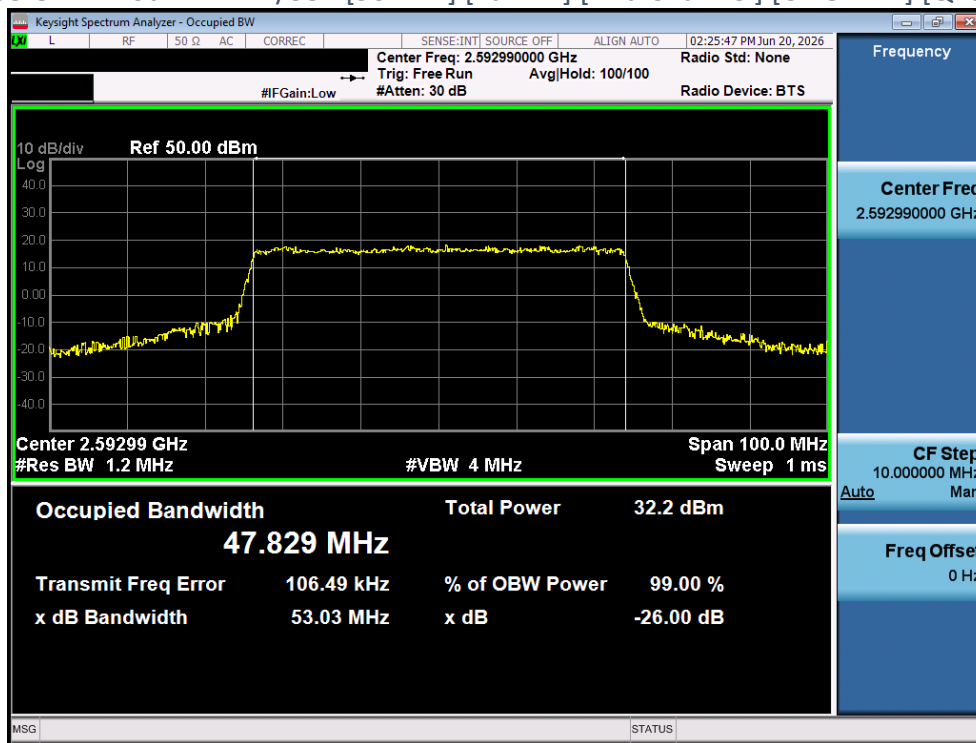
Plot 4-131 OBW Plot - NR n41/38 - [50MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



Plot 4-132 OBW Plot - NR n41/38 - [50MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 2]



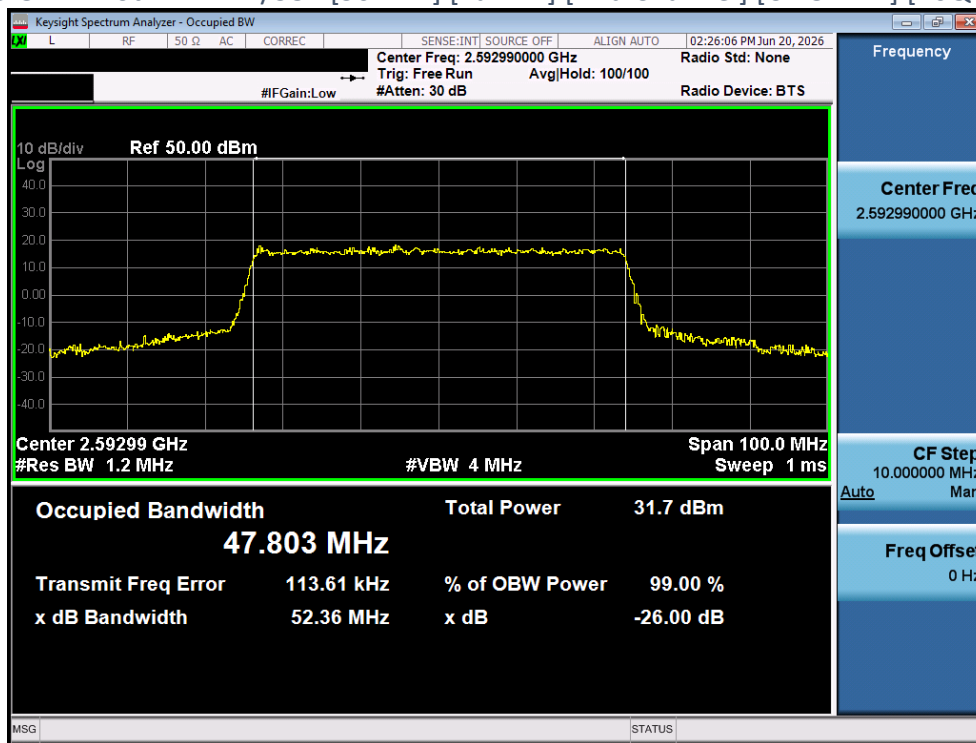
Plot 4-133 OBW Plot - NR n41/38 - [50MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



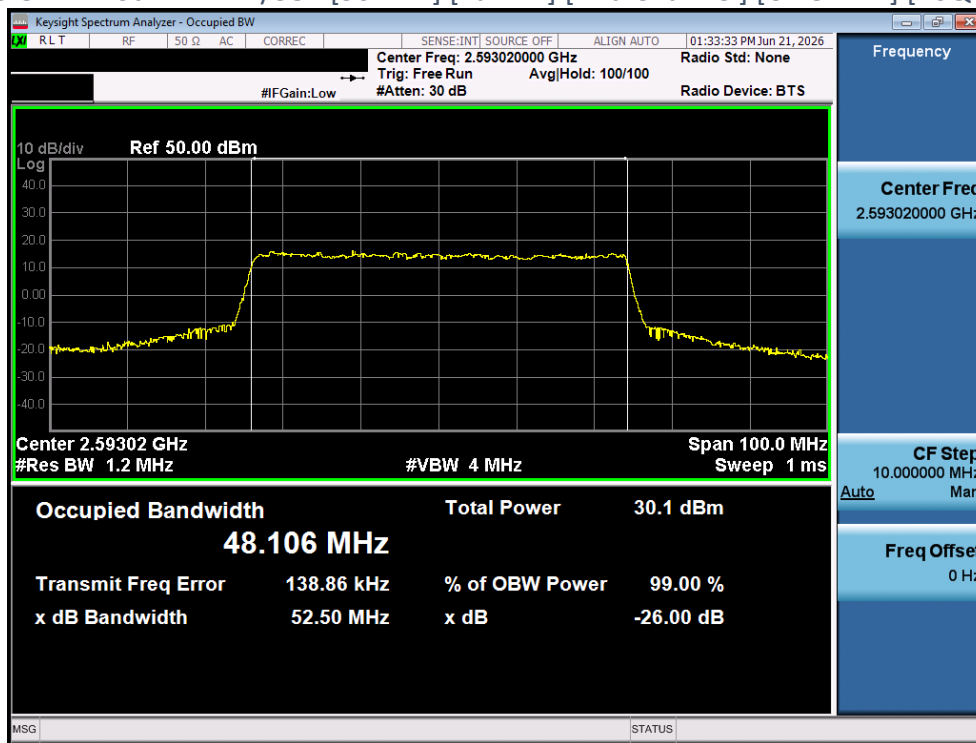
Plot 4-134 OBW Plot - NR n41/38 - [50MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



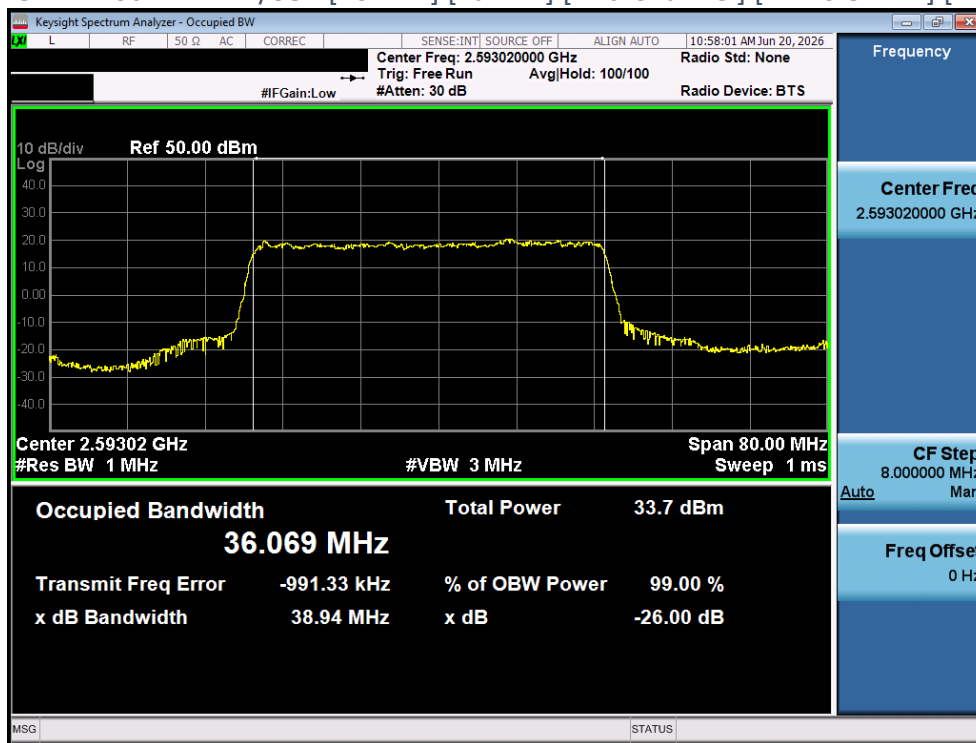
Plot 4-135 OBW Plot - NR n41/38 - [50MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



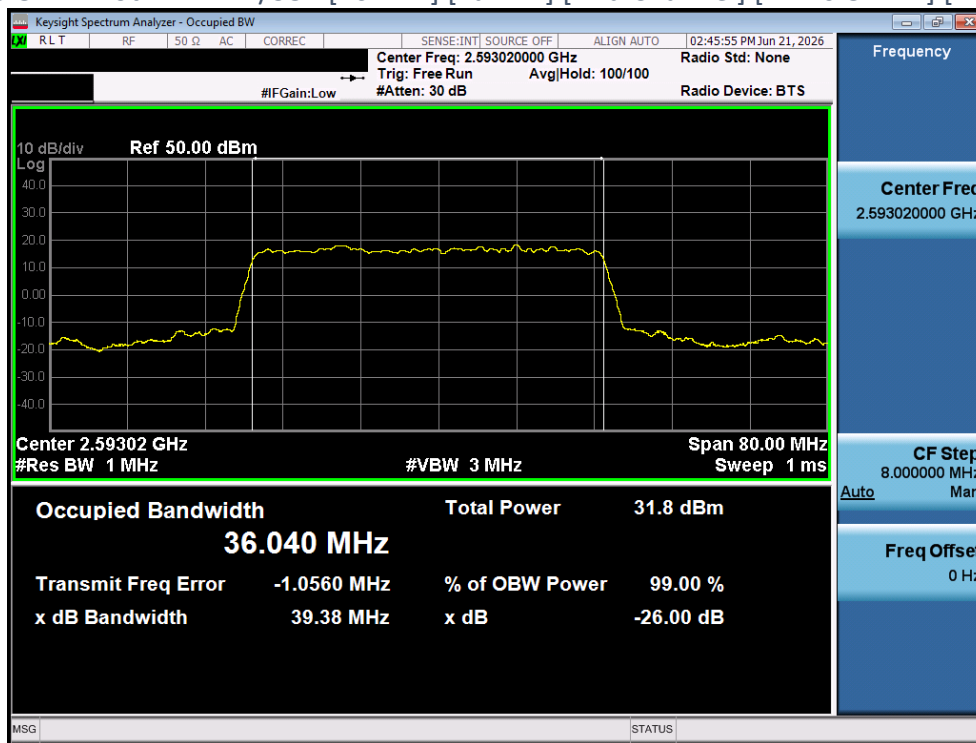
Plot 4-136 OBW Plot - NR n41/38 - [50MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]



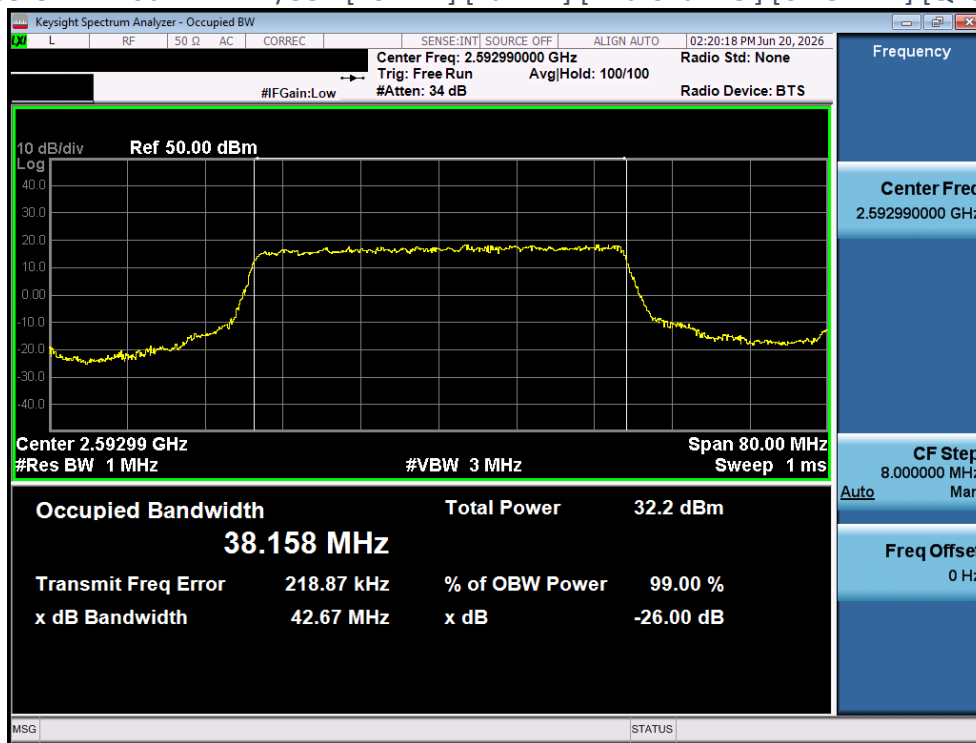
Plot 4-137 OBW Plot - NR n41/38 - [40MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



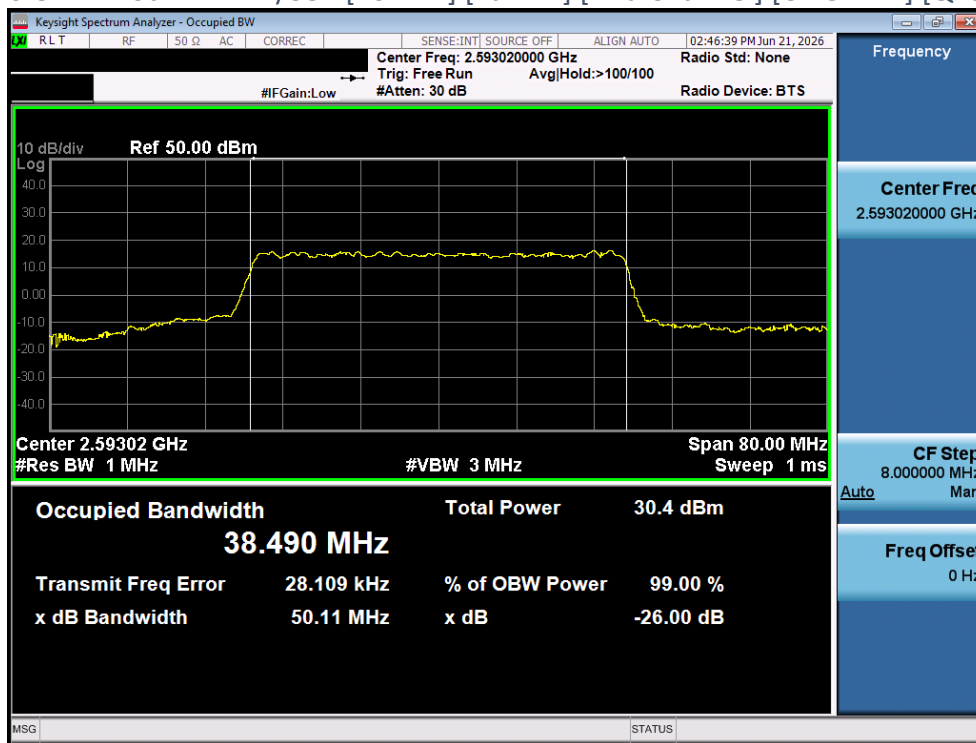
Plot 4-138 OBW Plot - NR n41/38 - [40MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 2]



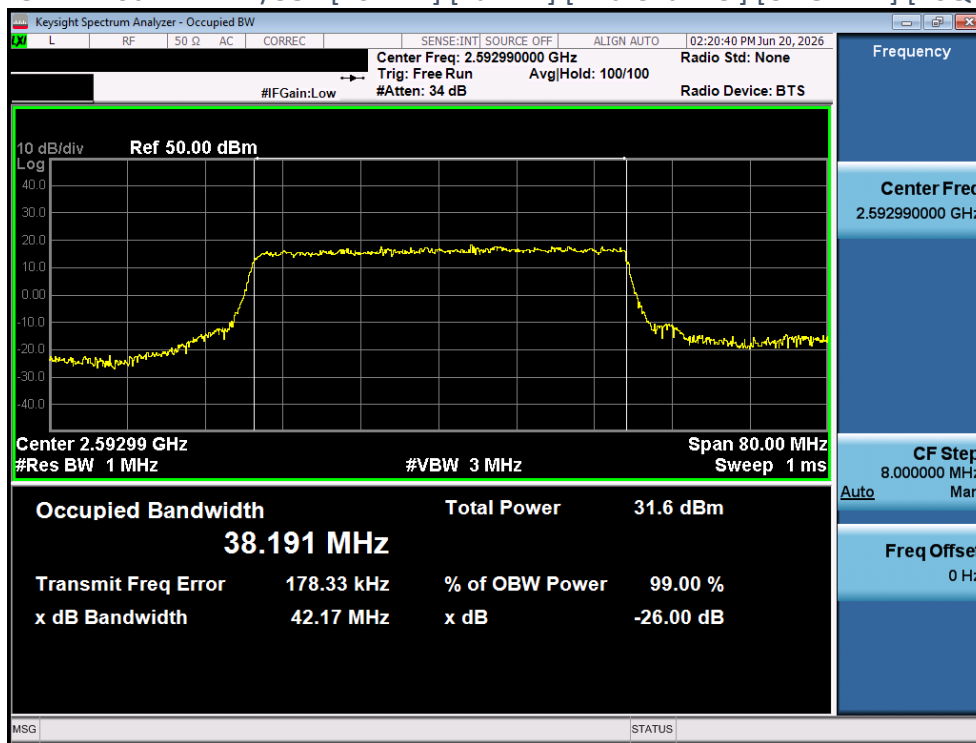
Plot 4-139 OBW Plot - NR n41/38 - [40MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



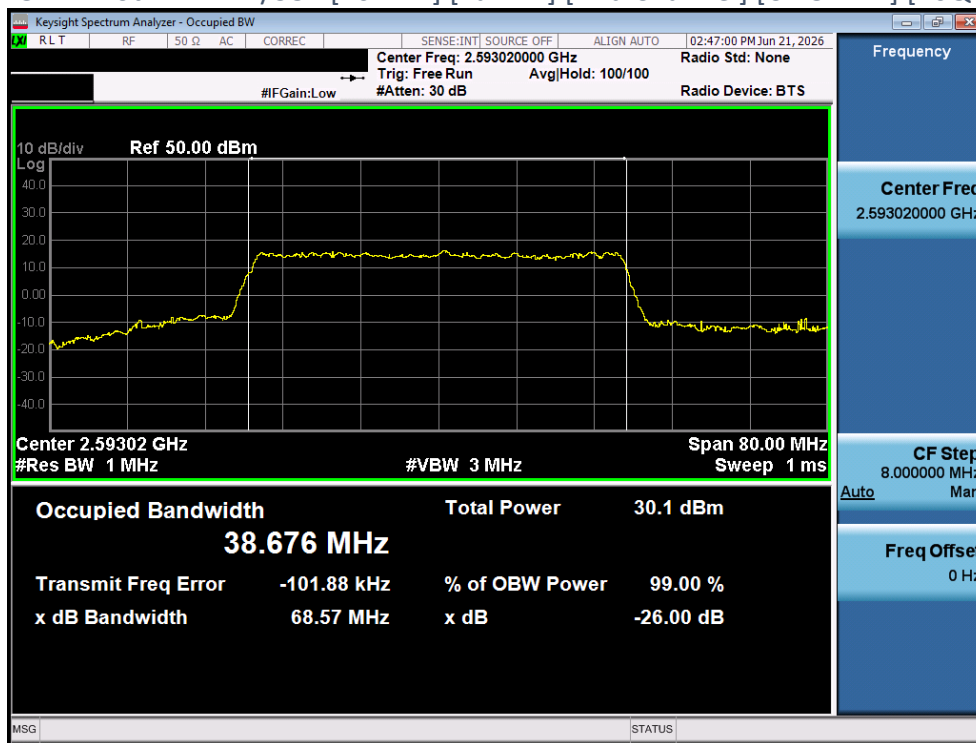
Plot 4-140 OBW Plot - NR n41/38 - [40MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



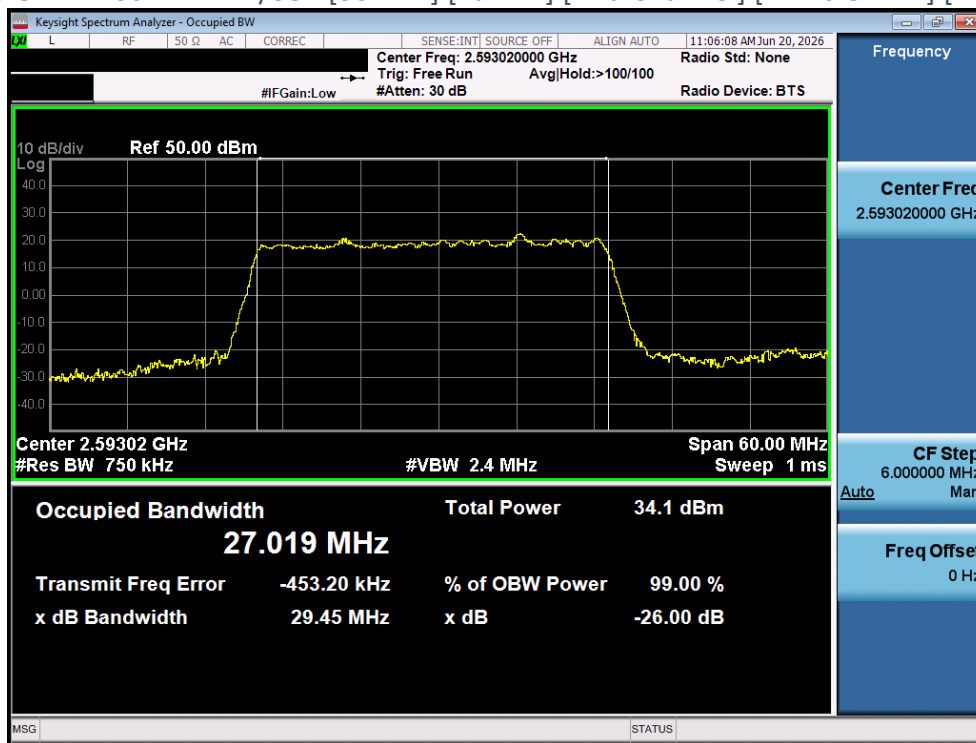
Plot 4-141 OBW Plot - NR n41/38 - [40MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



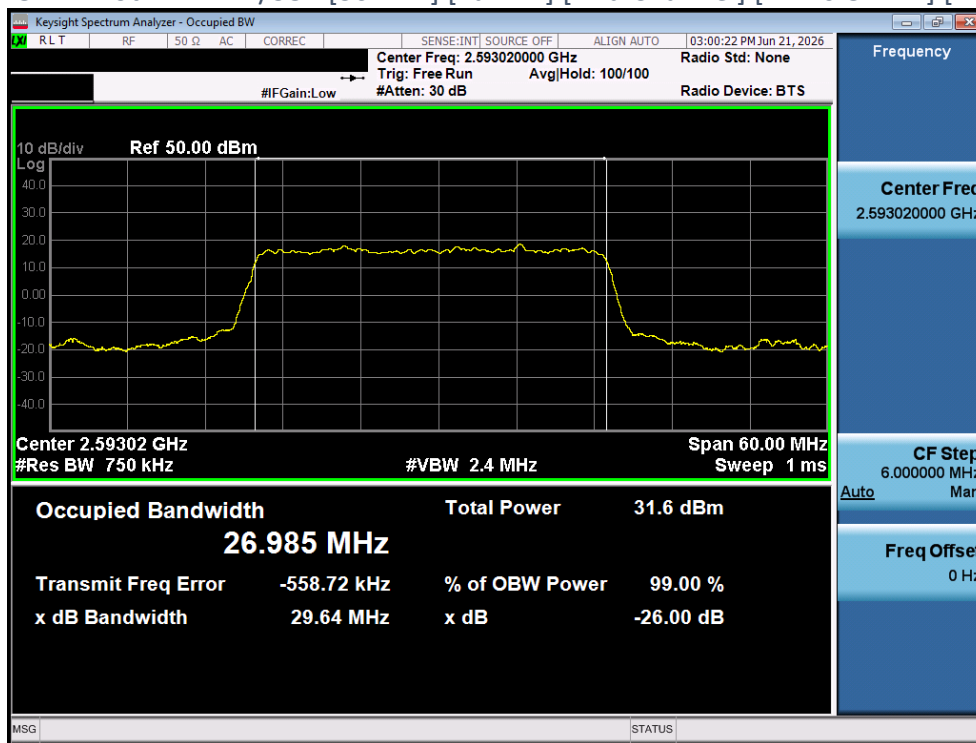
Plot 4-142 OBW Plot - NR n41/38 - [40MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]



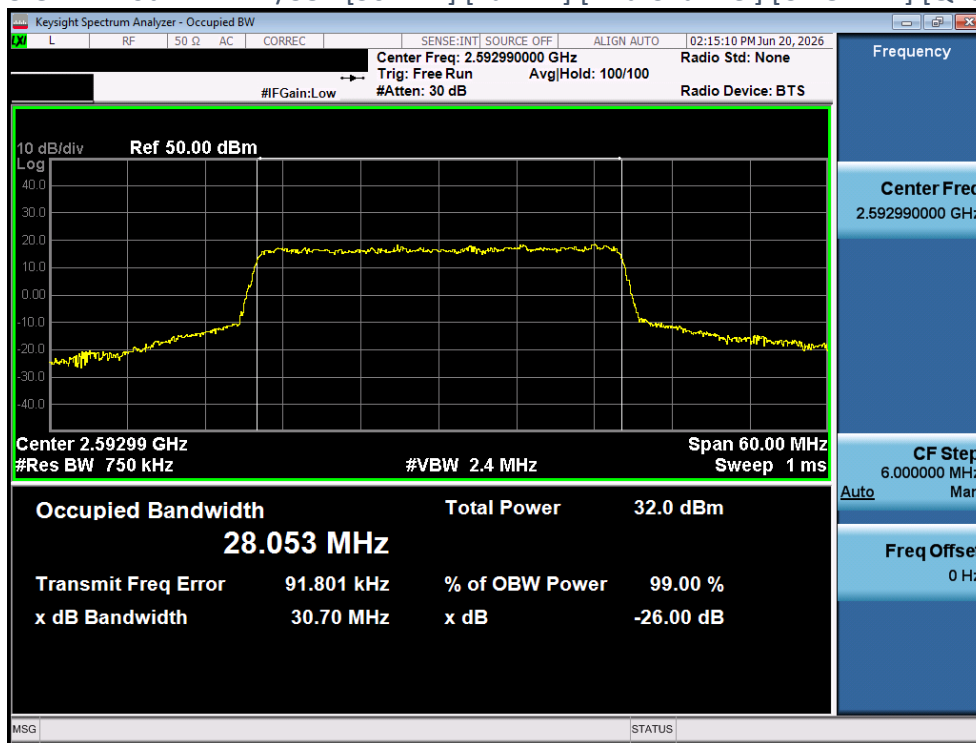
Plot 4-143 OBW Plot - NR n41/38 - [30MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



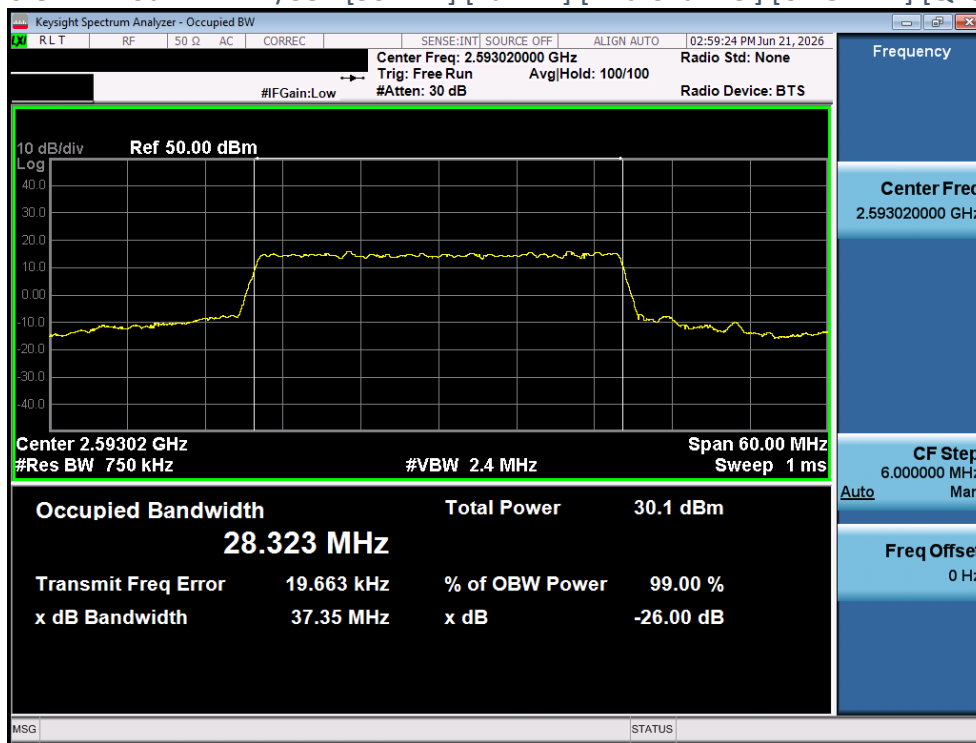
Plot 4-144 OBW Plot - NR n41/38 - [30MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 2]



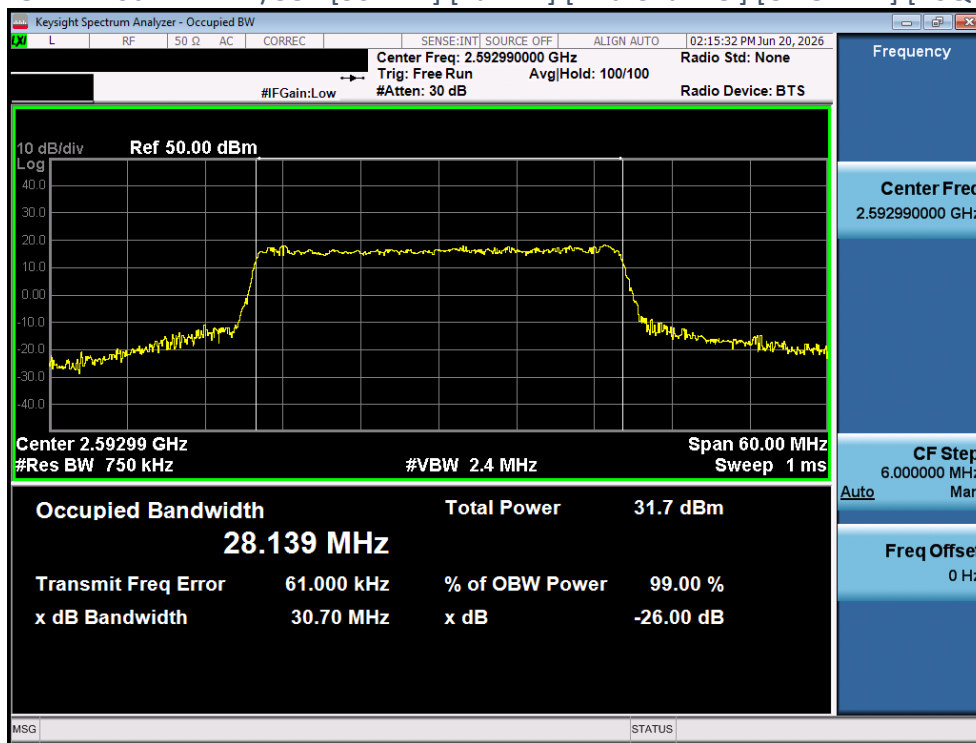
Plot 4-145 OBW Plot - NR n41/38 - [30MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



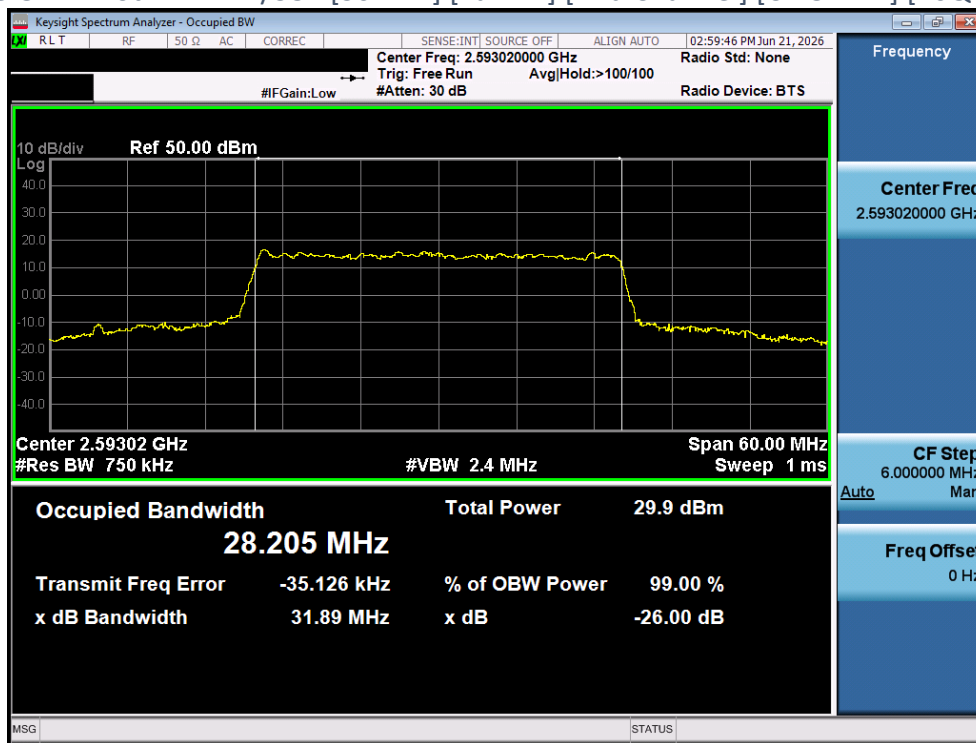
Plot 4-146 OBW Plot - NR n41/38 - [30MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



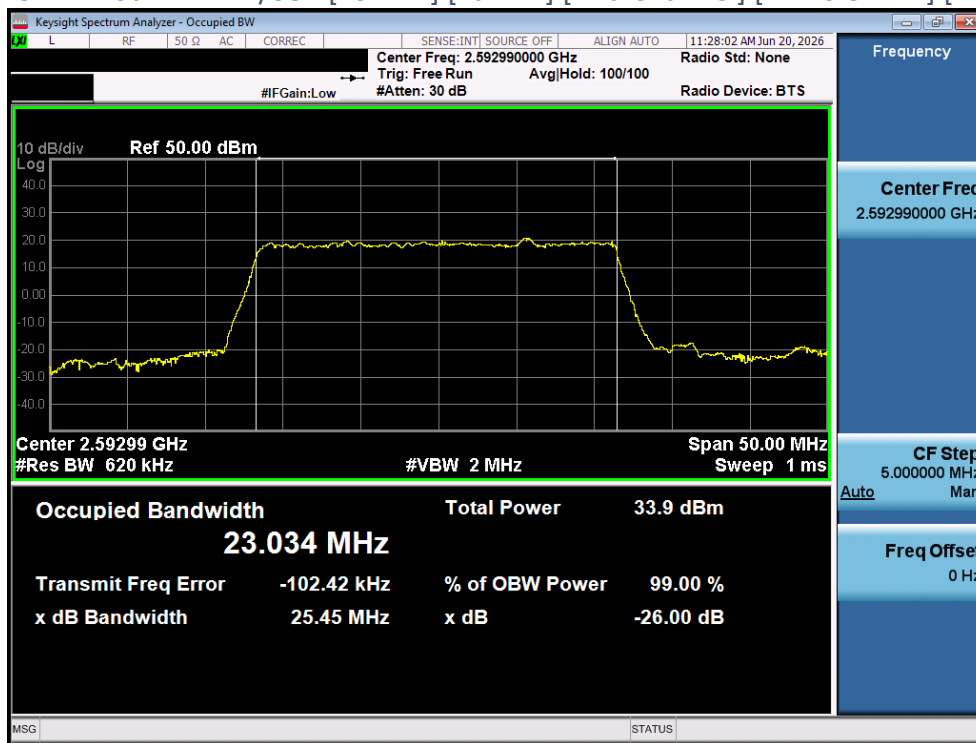
Plot 4-147 OBW Plot - NR n41/38 - [30MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



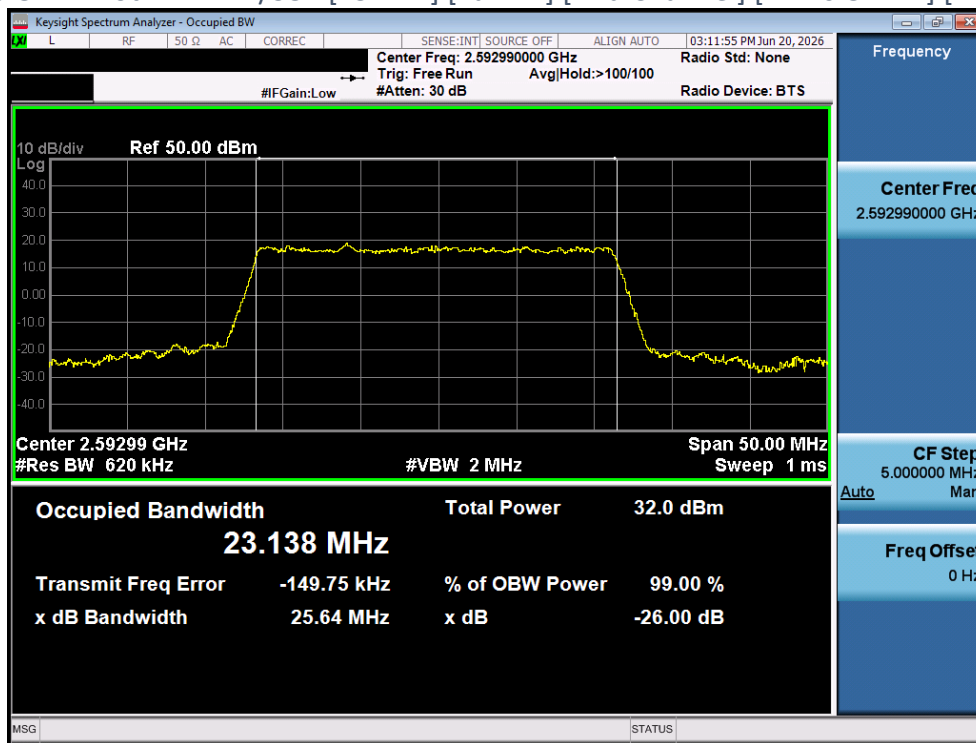
Plot 4-148 OBW Plot - NR n41/38 - [30MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]



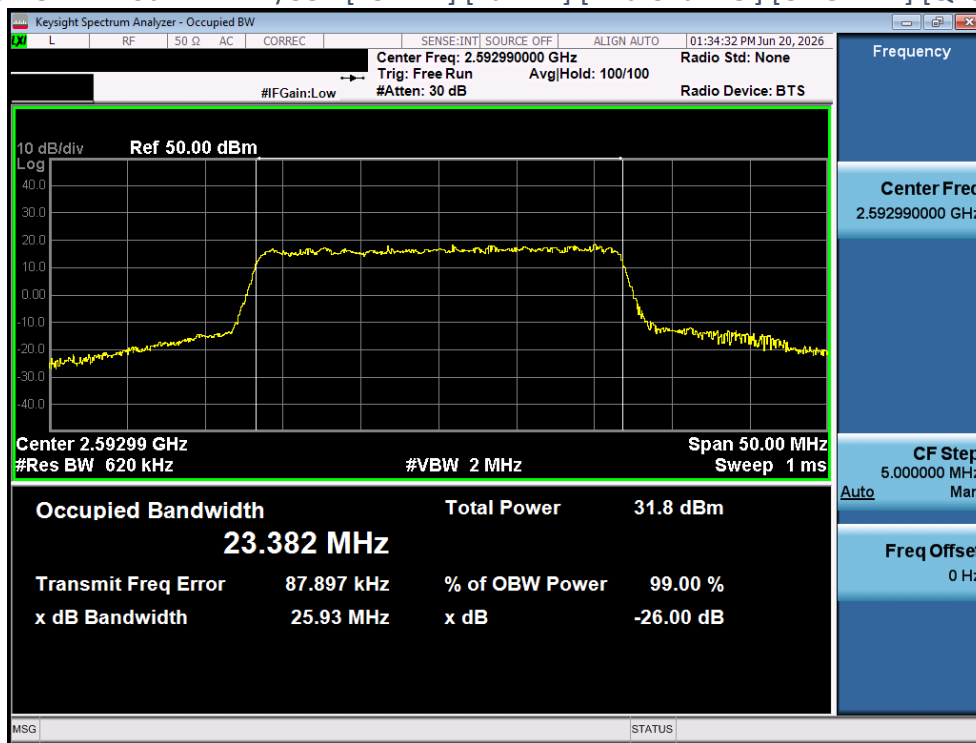
Plot 4-149 OBW Plot - NR n41/38 - [25MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



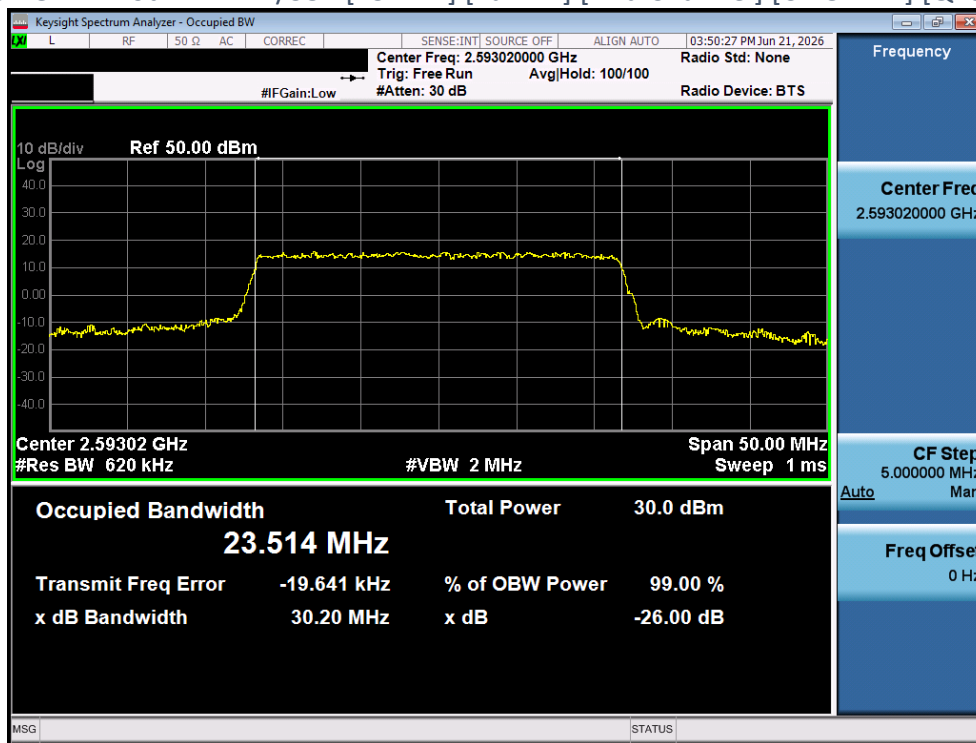
Plot 4-150 OBW Plot - NR n41/38 - [25MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 2]



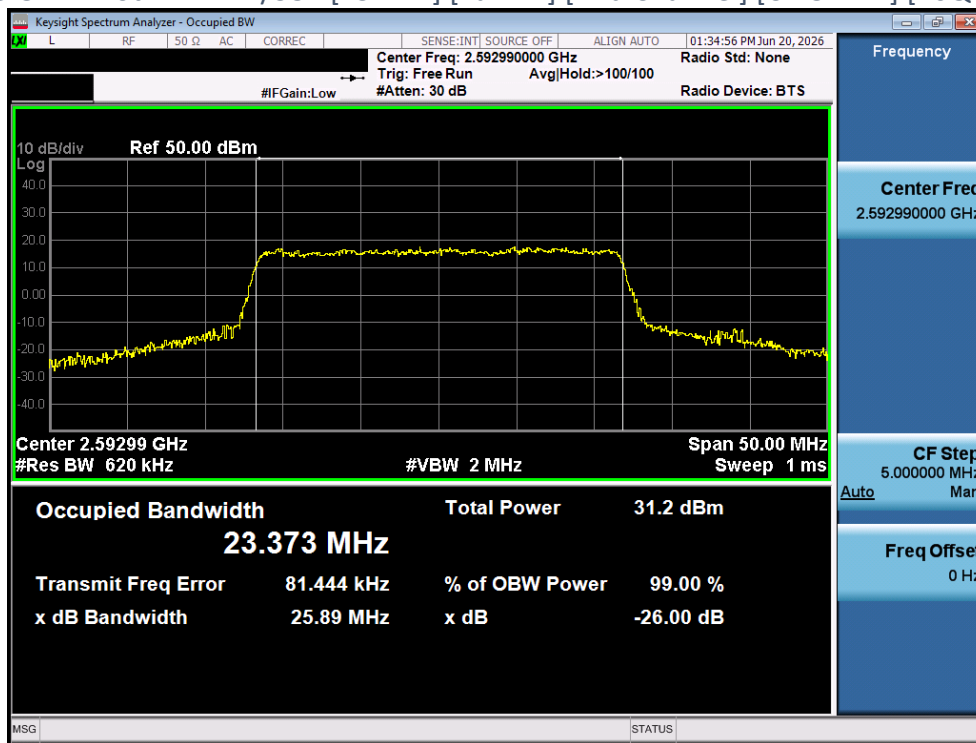
Plot 4-151 OBW Plot - NR n41/38 - [25MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



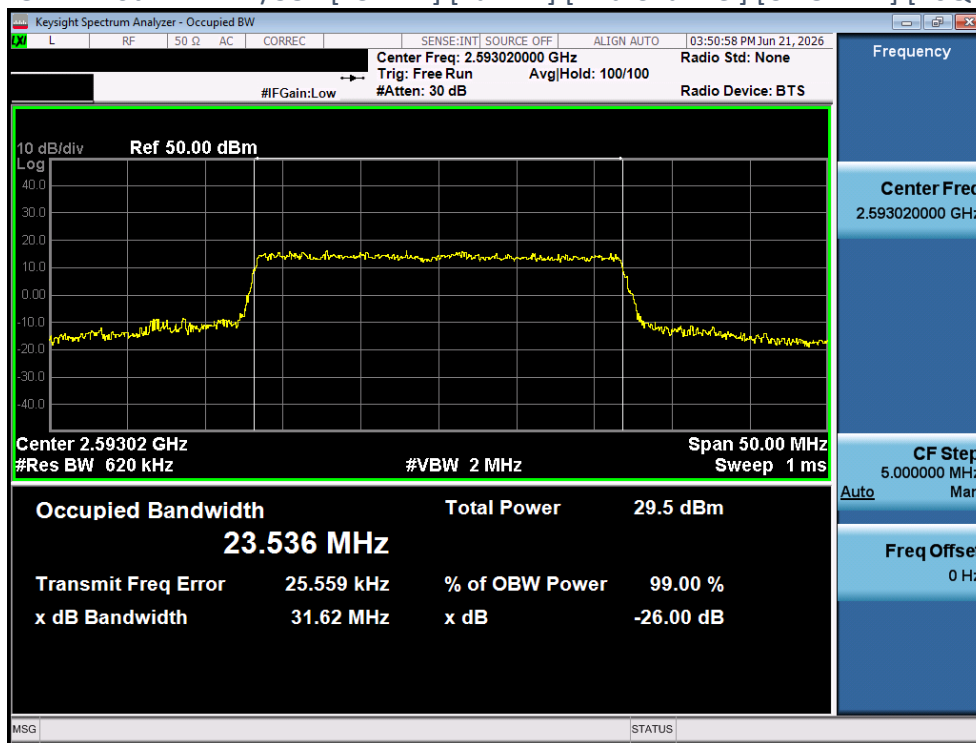
Plot 4-152 OBW Plot - NR n41/38 - [25MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



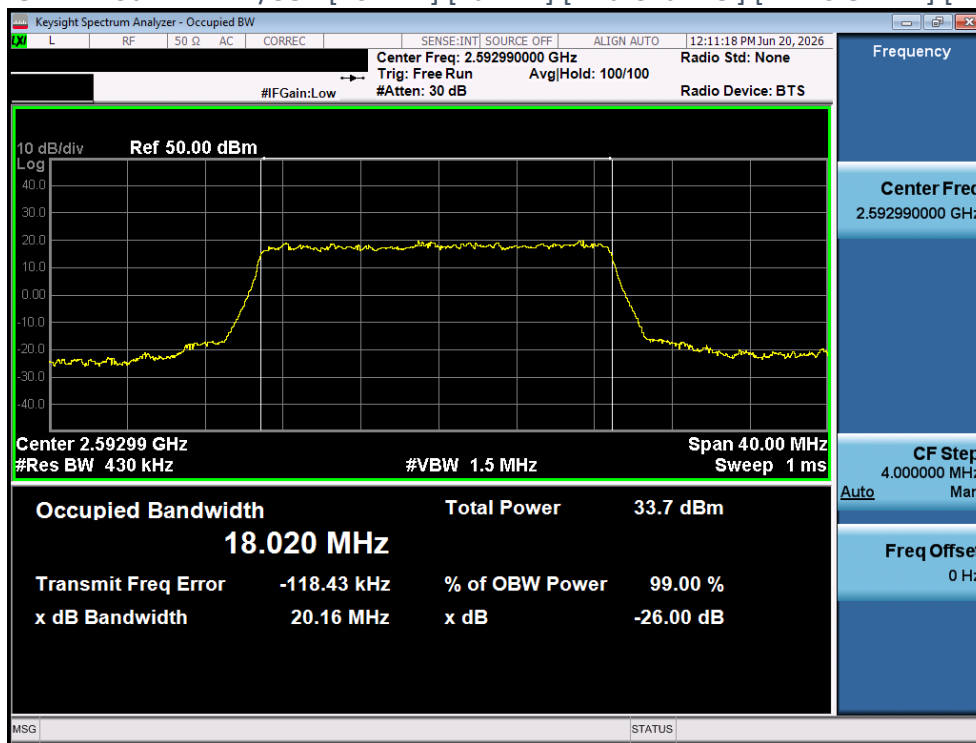
Plot 4-153 OBW Plot - NR n41/38 - [25MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



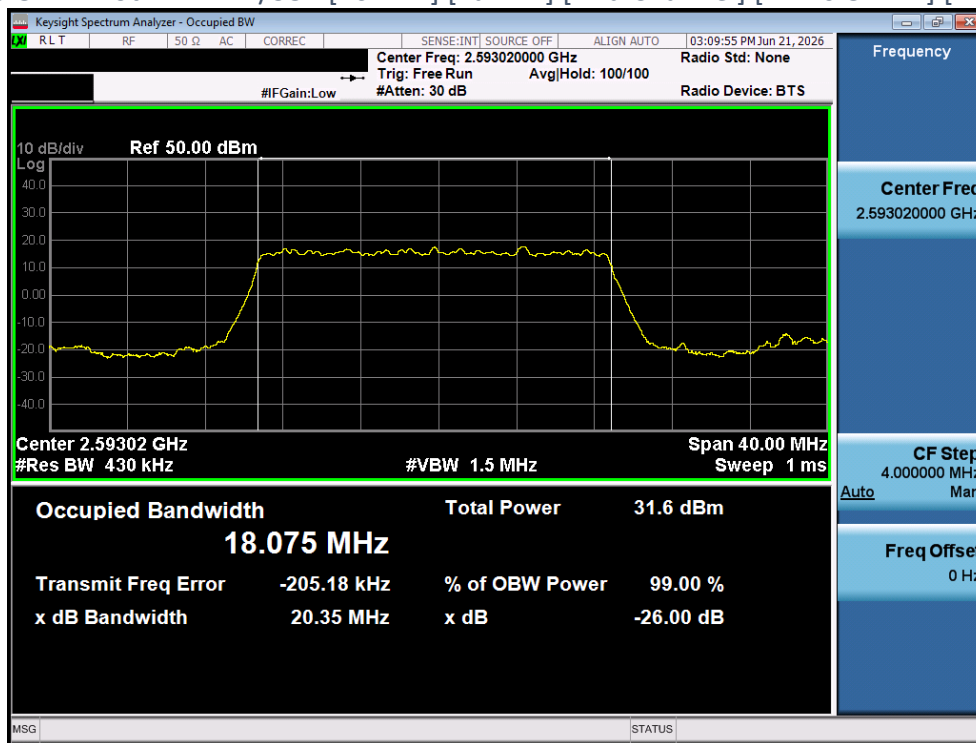
Plot 4-154 OBW Plot - NR n41/38 - [25MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]



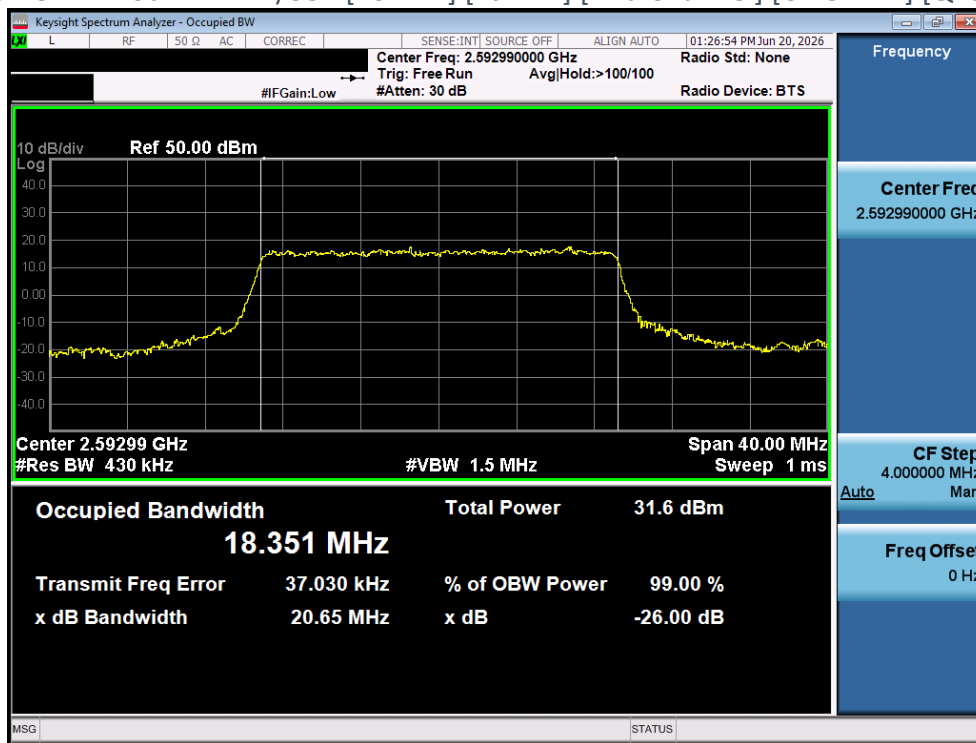
Plot 4-155 OBW Plot - NR n41/38 - [20MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



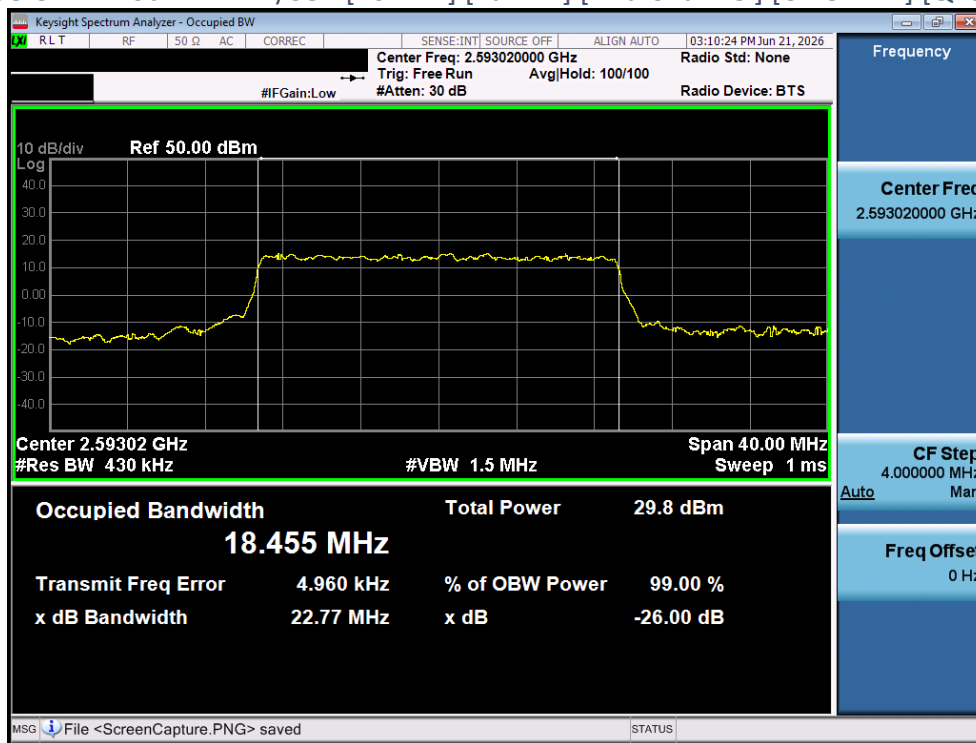
Plot 4-156 OBW Plot - NR n41/38 - [20MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 2]



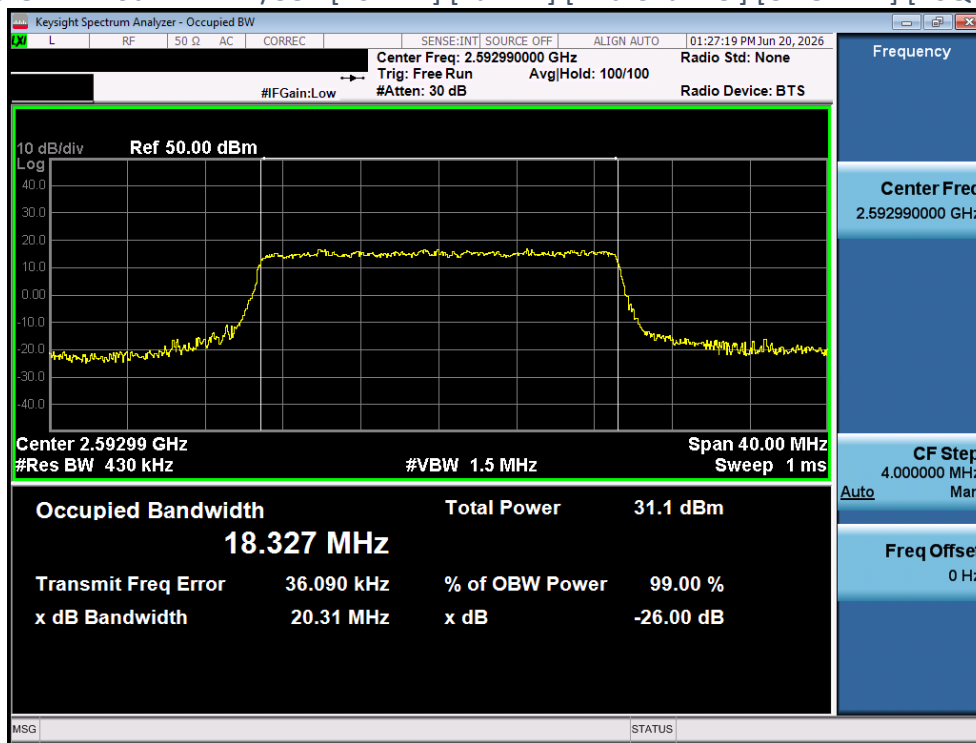
Plot 4-157 OBW Plot - NR n41/38 - [20MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



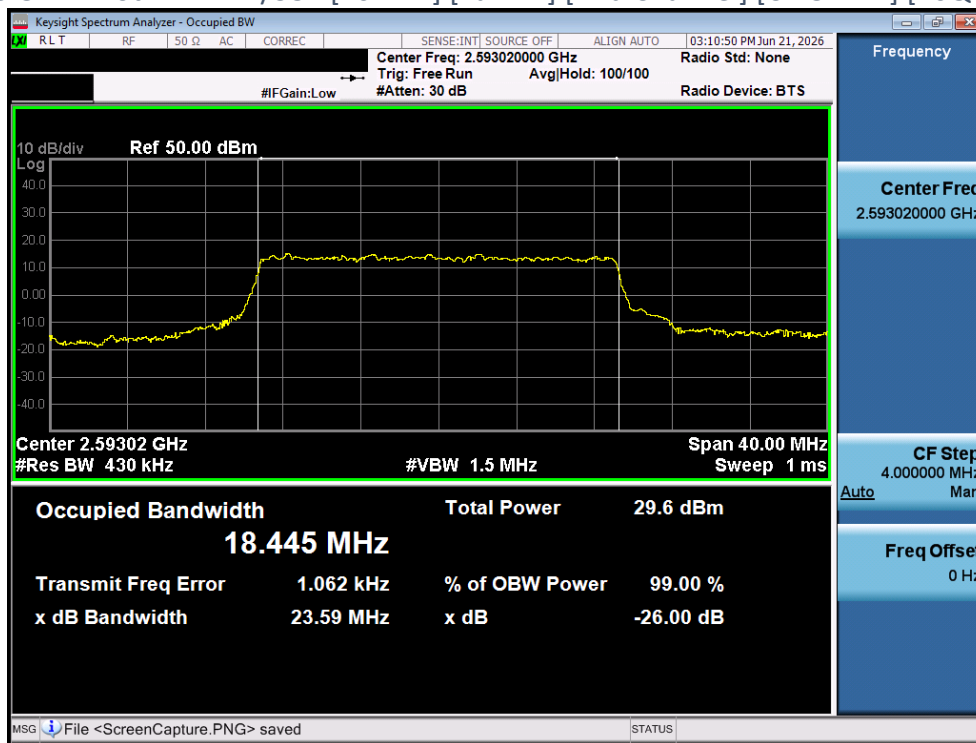
Plot 4-158 OBW Plot - NR n41/38 - [20MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



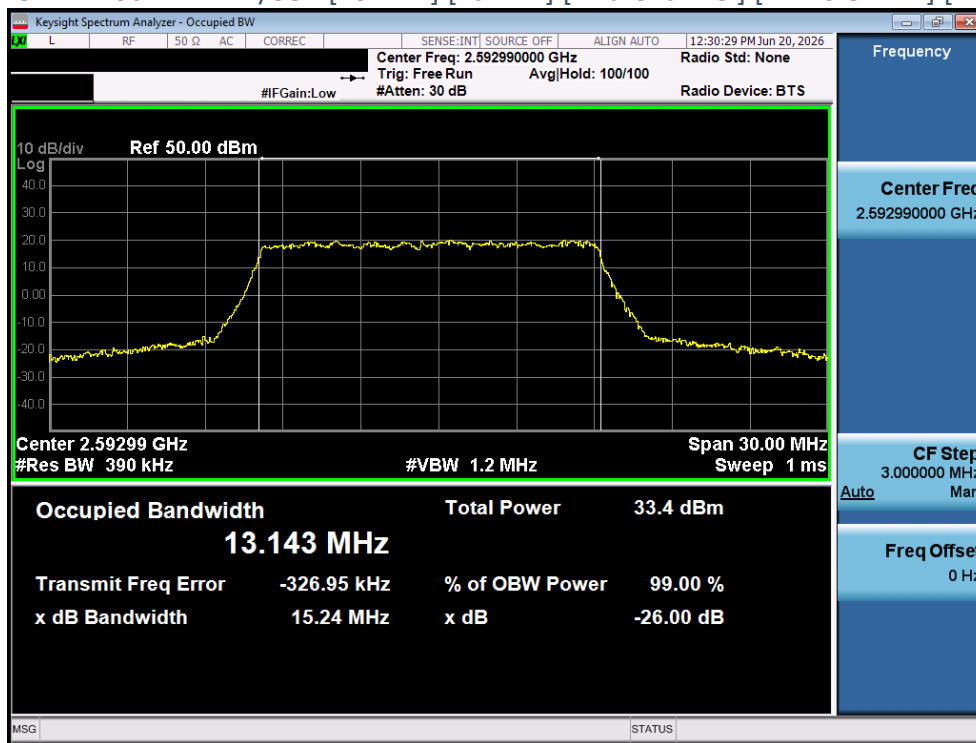
Plot 4-159 OBW Plot - NR n41/38 - [20MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



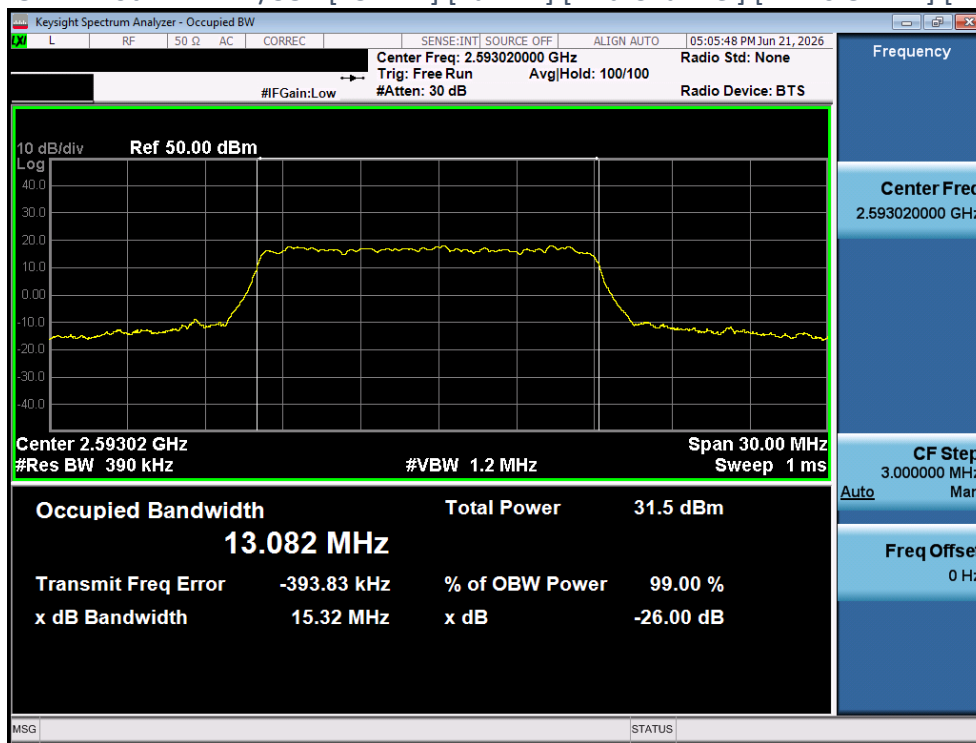
Plot 4-160 OBW Plot - NR n41/38 - [20MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]



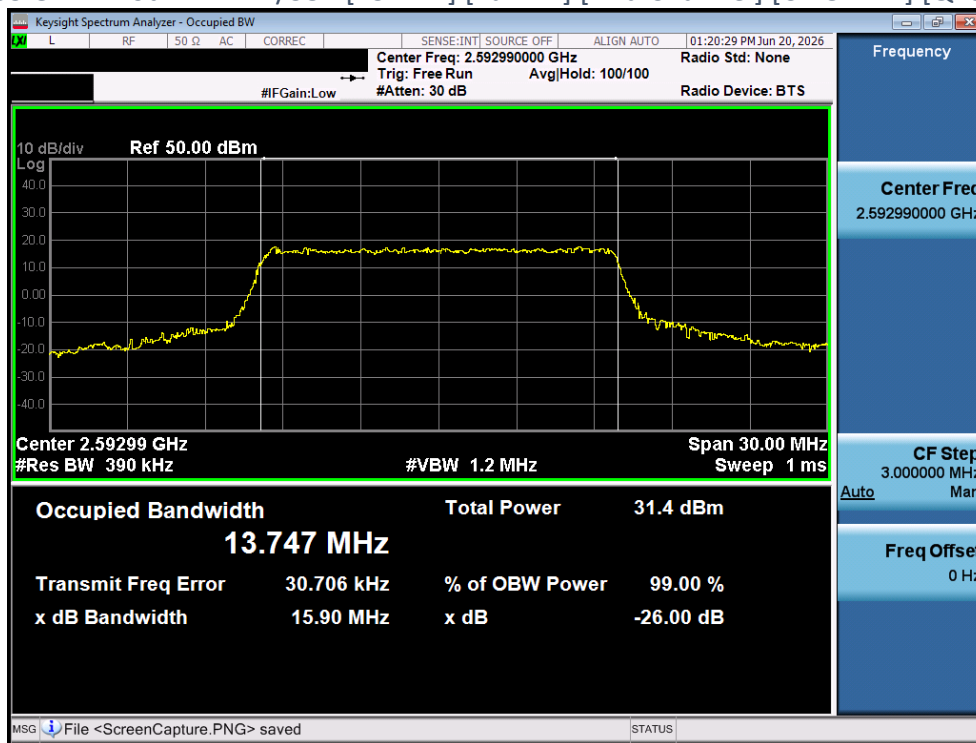
Plot 4-161 OBW Plot - NR n41/38 - [15MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



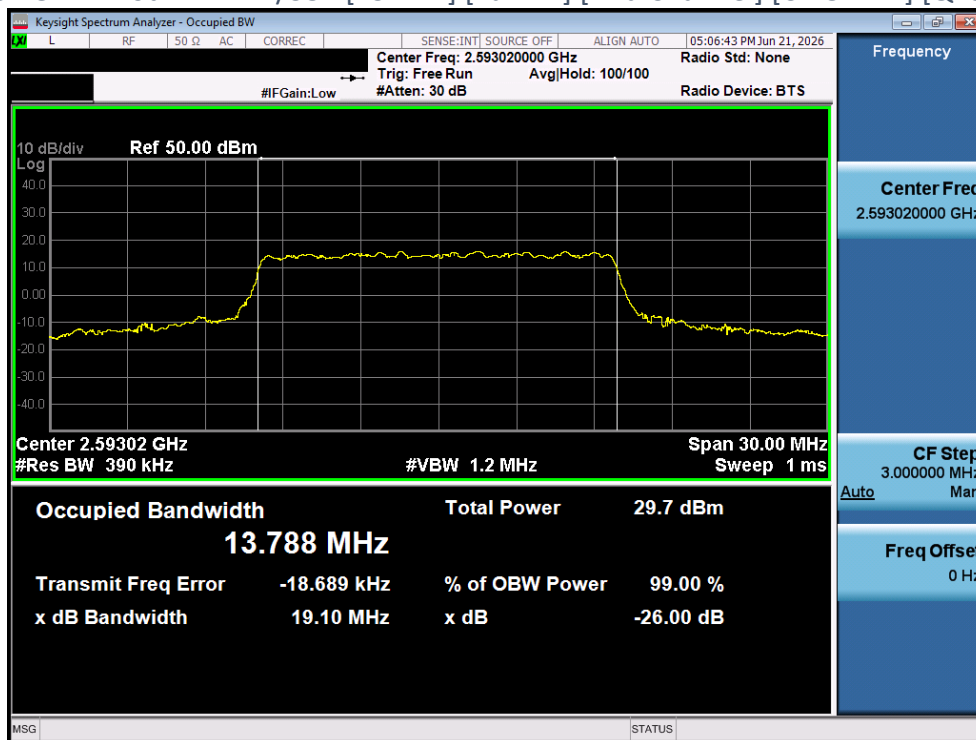
Plot 4-162 OBW Plot - NR n41/38 - [15MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 2]



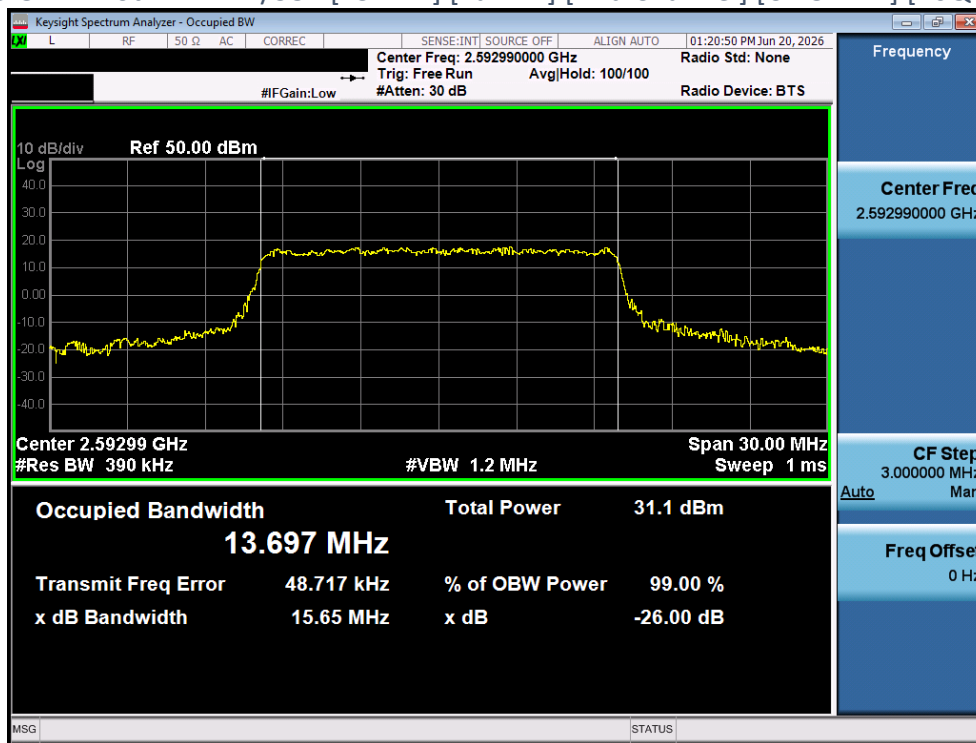
Plot 4-163 OBW Plot - NR n41/38 - [15MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



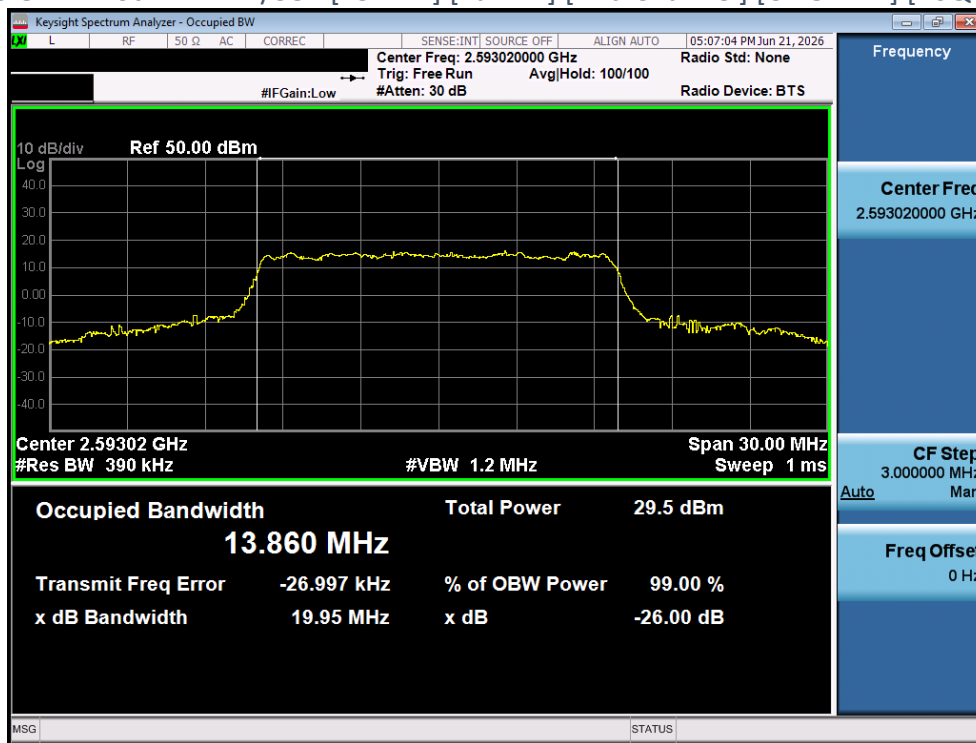
Plot 4-164 OBW Plot - NR n41/38 - [15MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



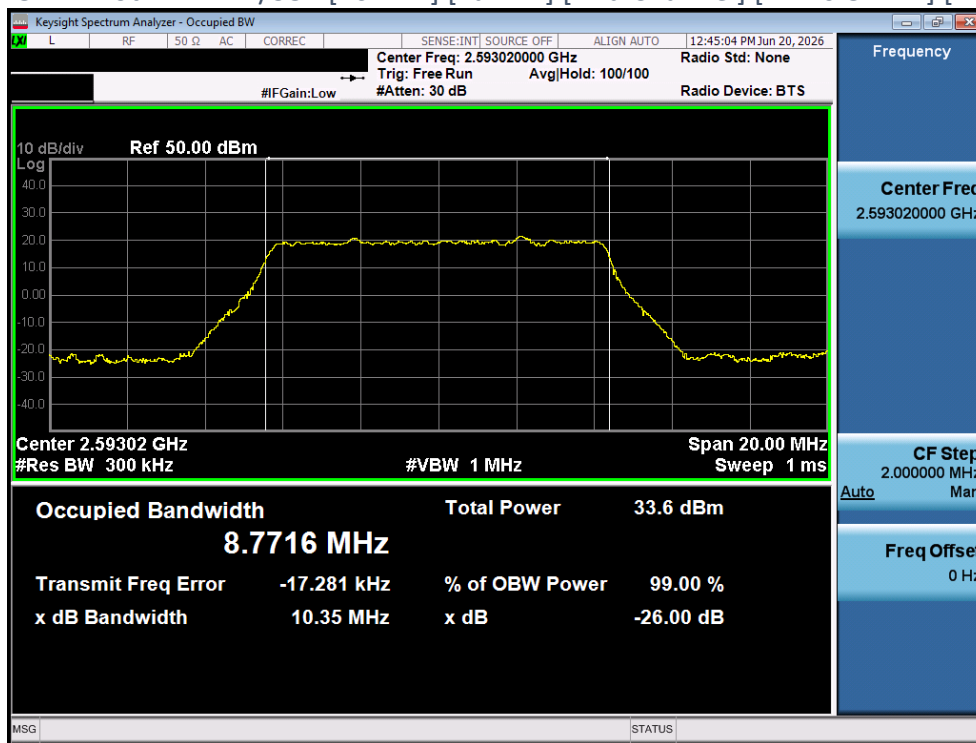
Plot 4-165 OBW Plot - NR n41/38 - [15MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



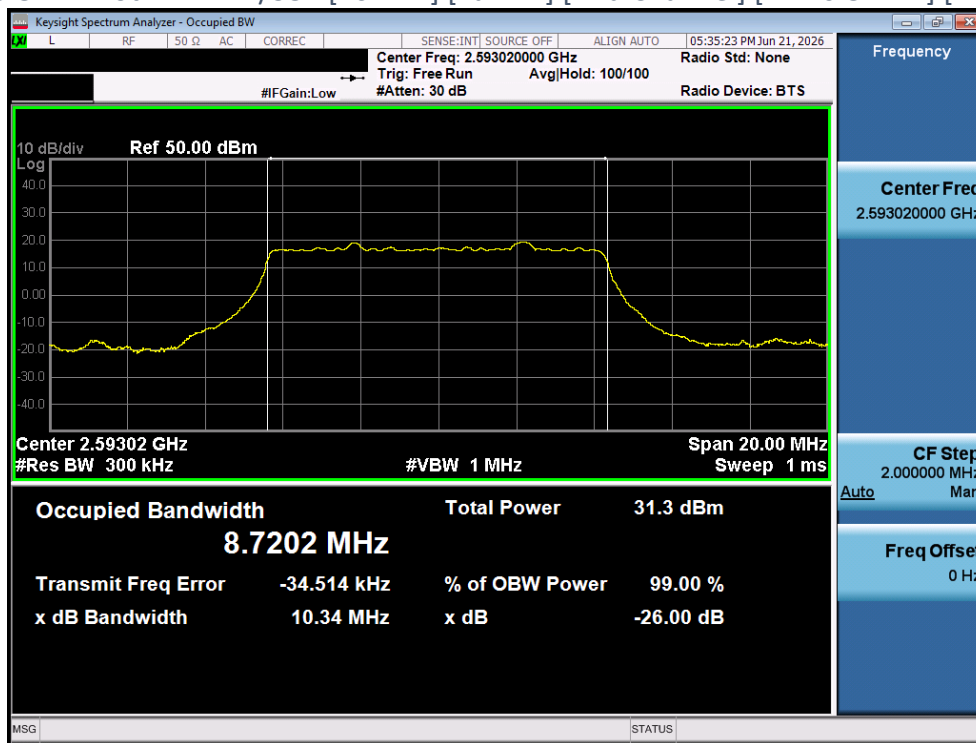
Plot 4-166 OBW Plot - NR n41/38 - [15MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]



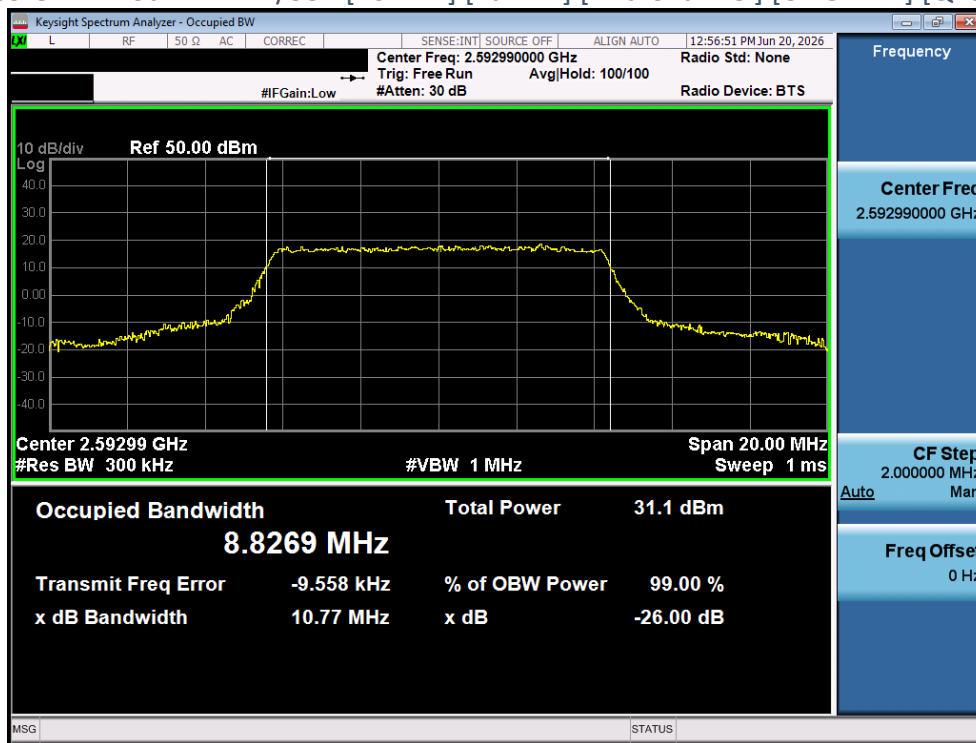
Plot 4-167 OBW Plot - NR n41/38 - [10MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



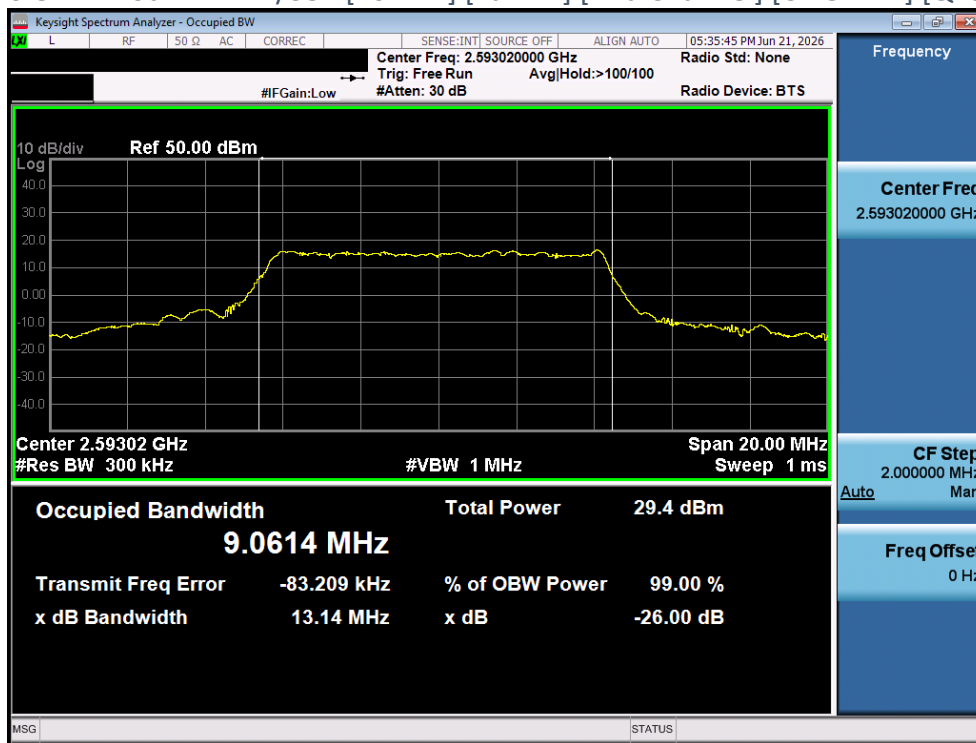
Plot 4-168 OBW Plot - NR n41/38 - [10MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 2]



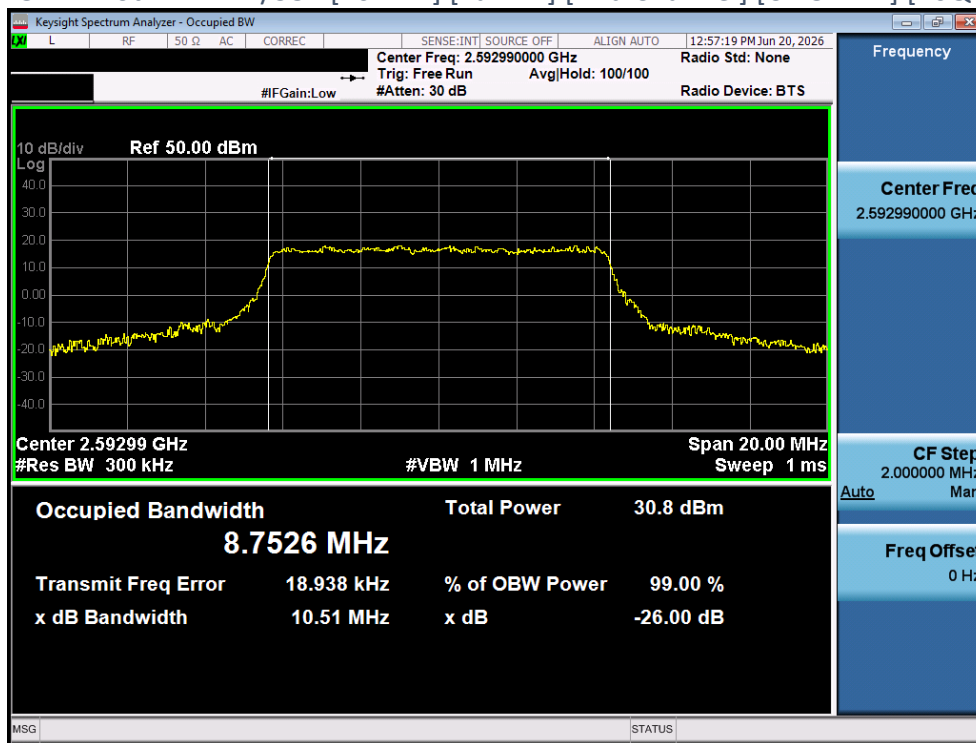
Plot 4-169 OBW Plot - NR n41/38 - [10MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



Plot 4-170 OBW Plot - NR n41/38 - [10MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 2]



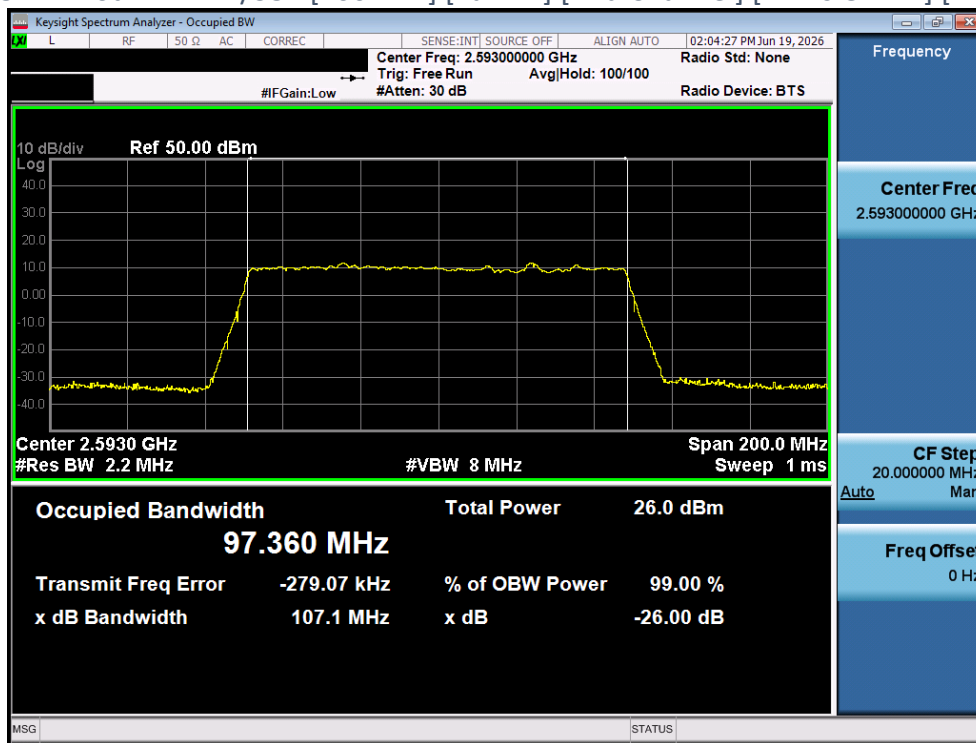
Plot 4-171 OBW Plot - NR n41/38 - [10MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



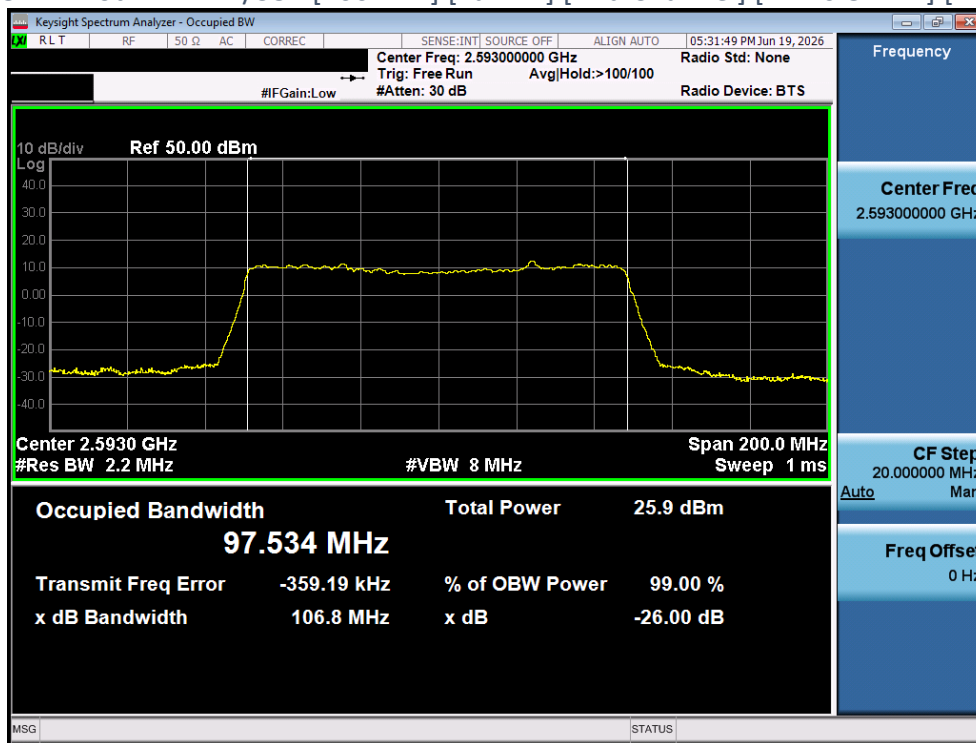
Plot 4-172 OBW Plot - NR n41/38 - [10MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 2]



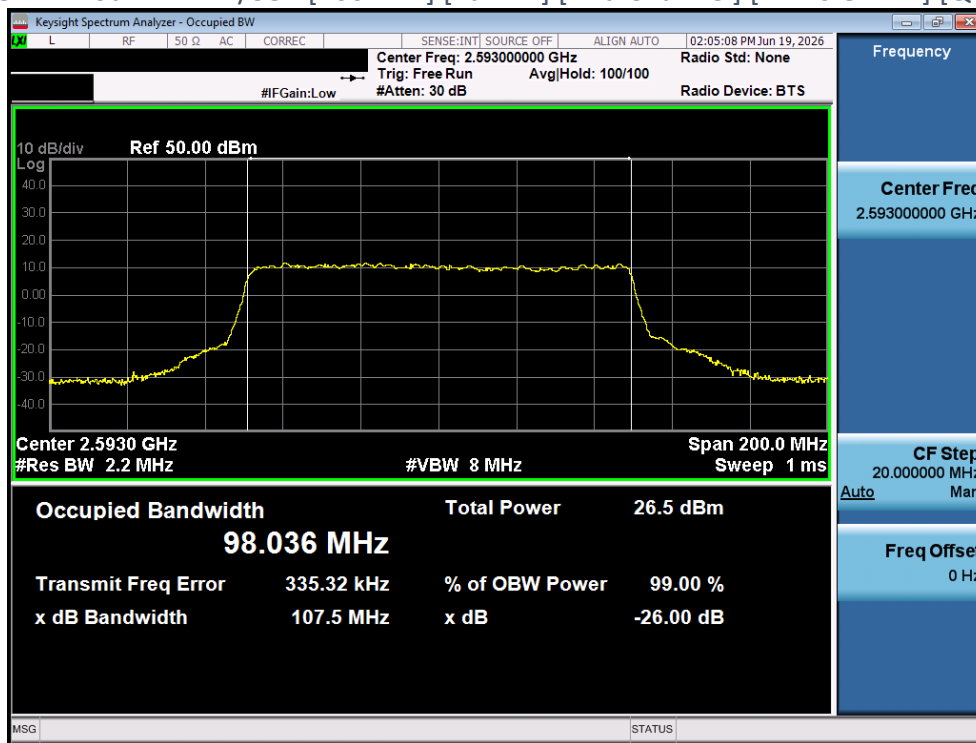
Plot 4-173 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [SRS D1]



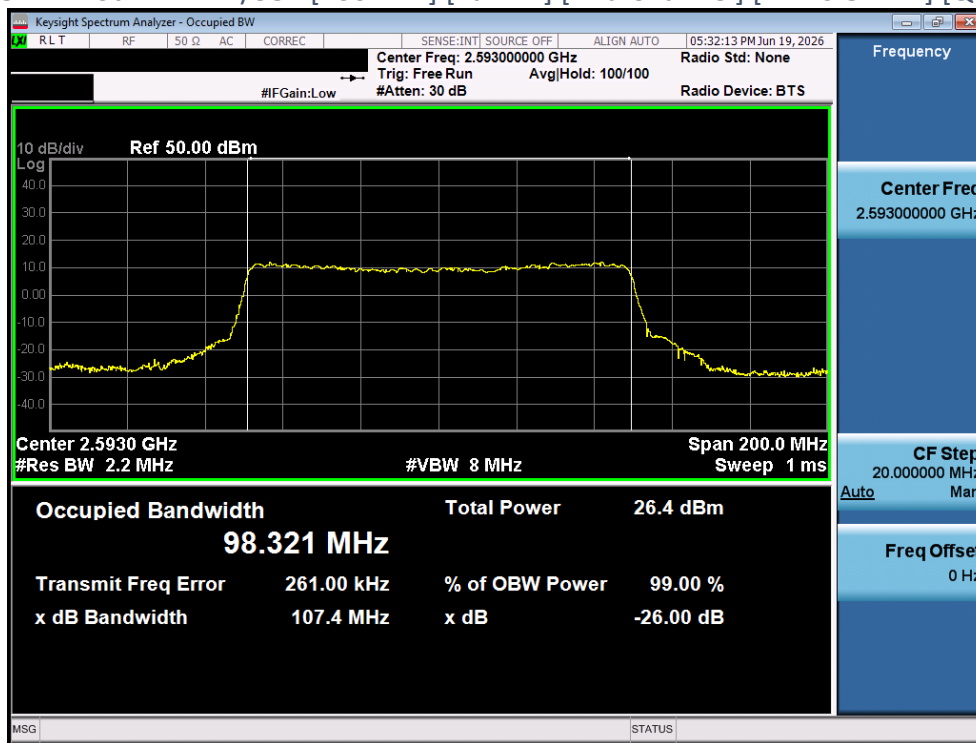
Plot 4-174 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [SRS S1]



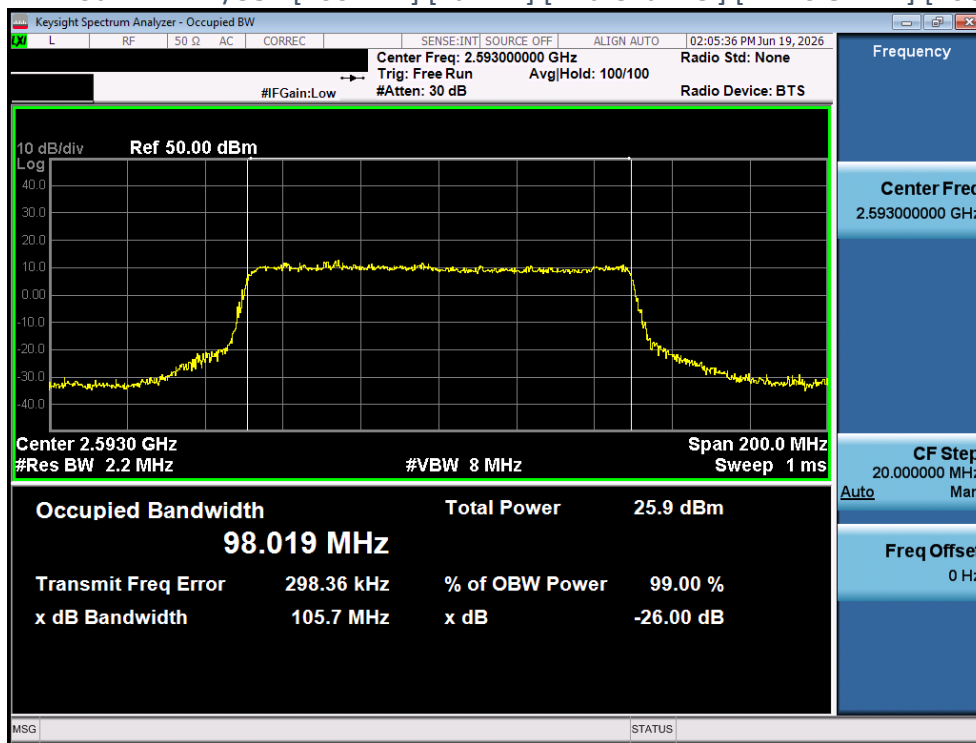
Plot 4-175 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [QPSK] [SRS D1]



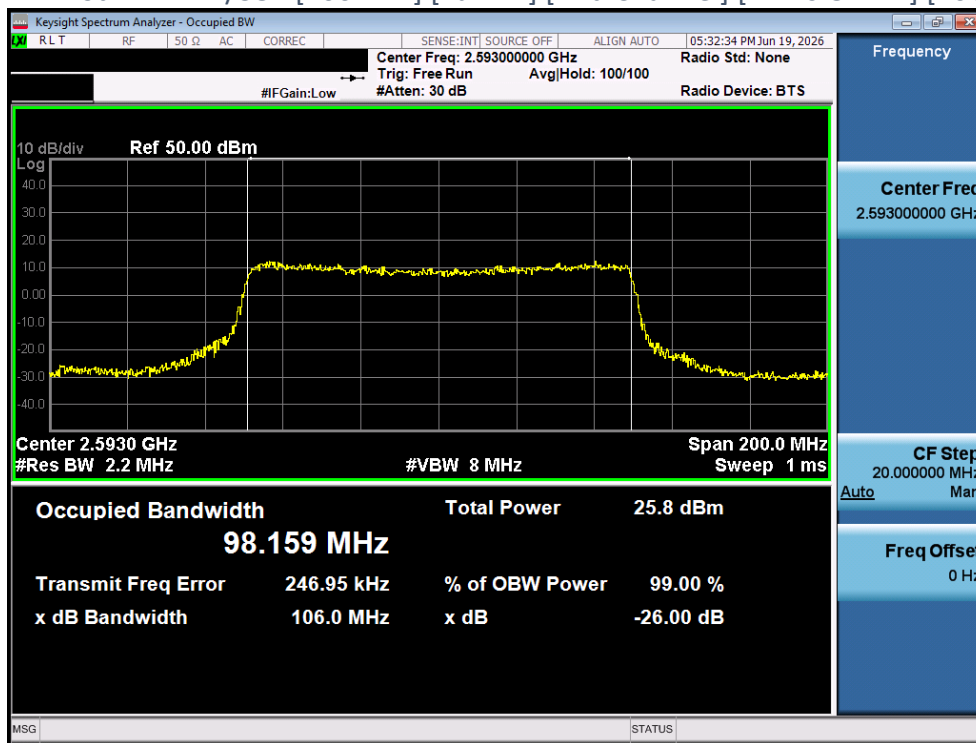
Plot 4-176 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [QPSK] [SRS S1]



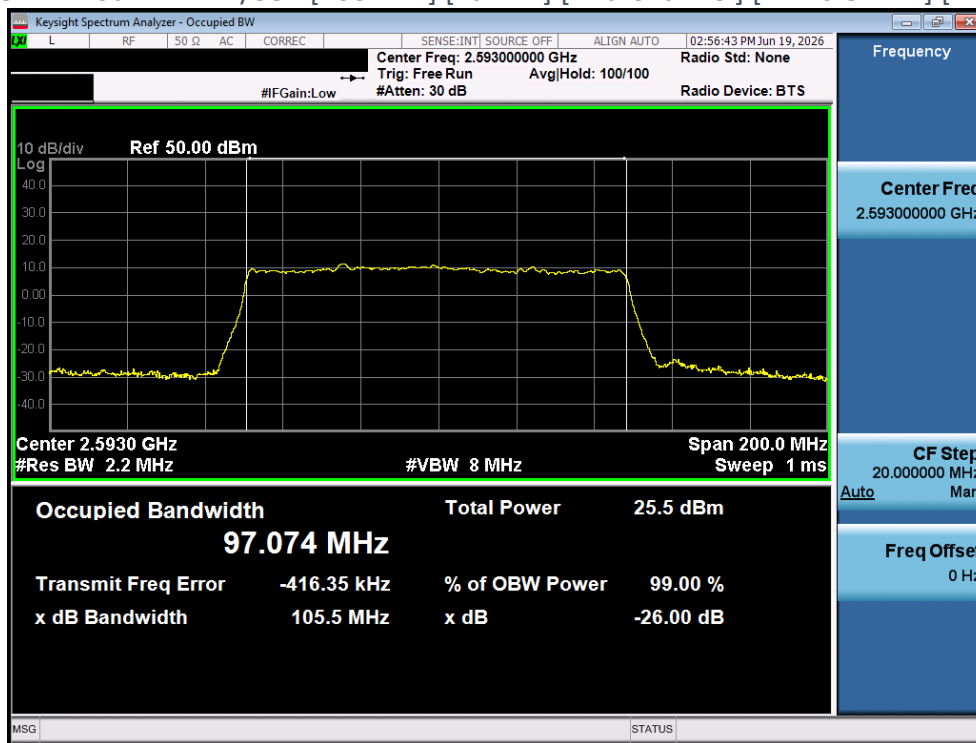
Plot 4-177 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [16QAM] [SRS D1]



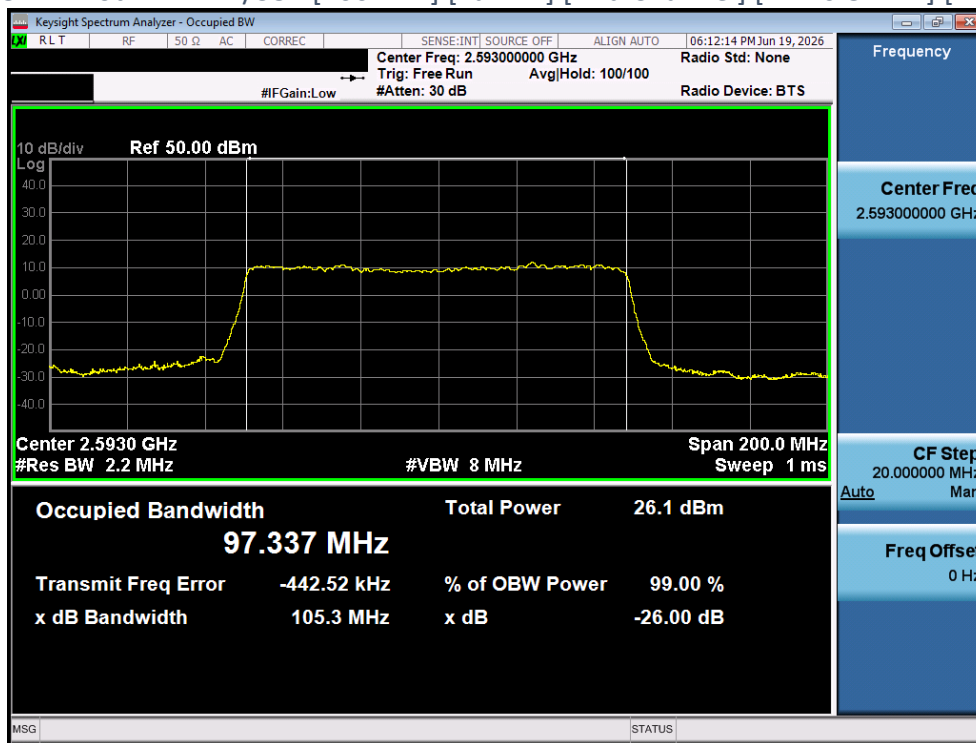
Plot 4-178 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [16QAM] [SRS S1]



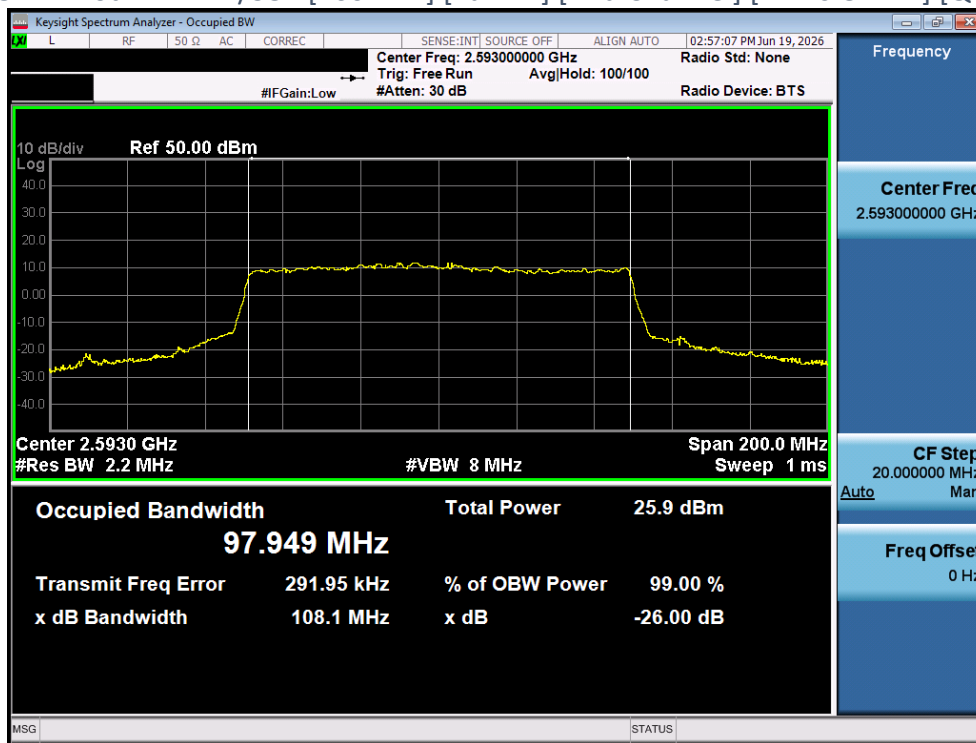
Plot 4-179 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [SRS D2]



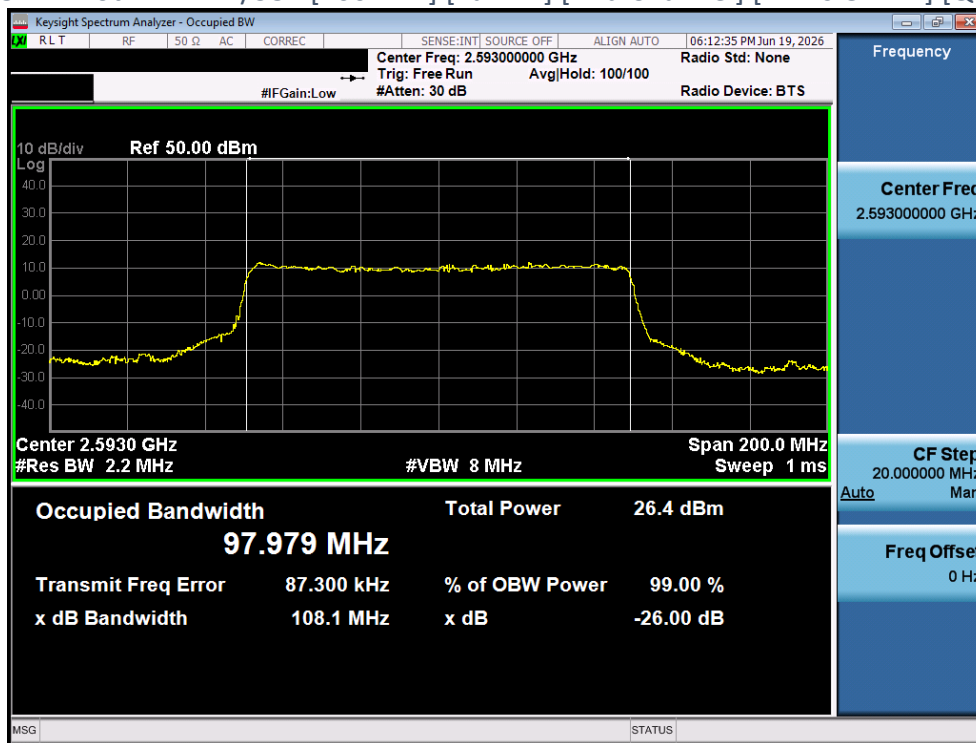
Plot 4-180 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [SRS S2]



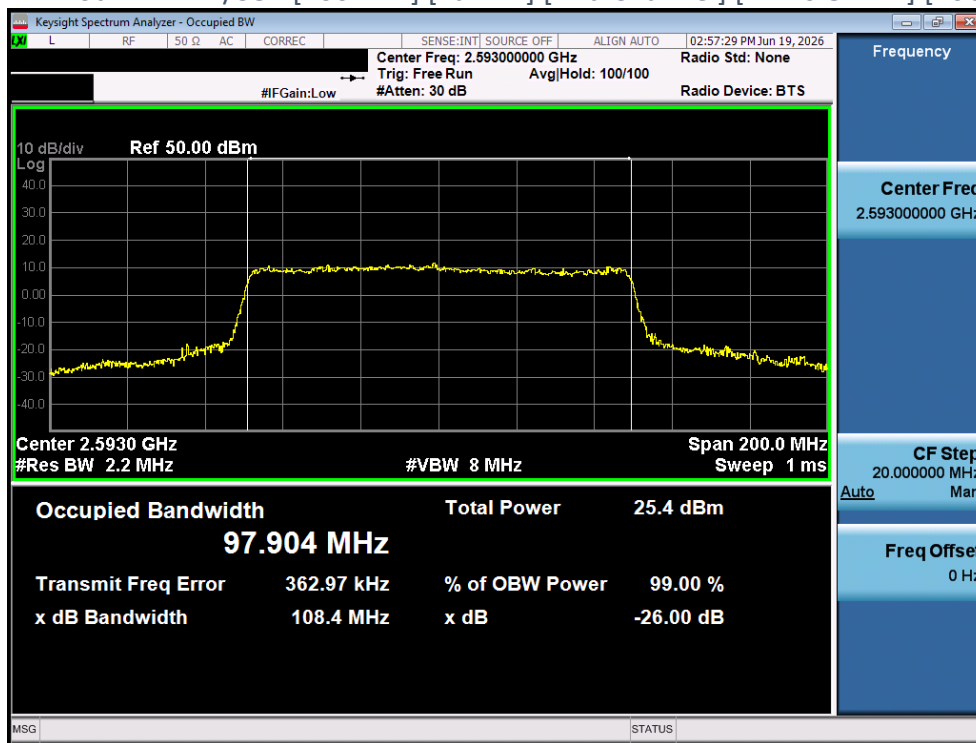
Plot 4-181 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [QPSK] [SRS D2]



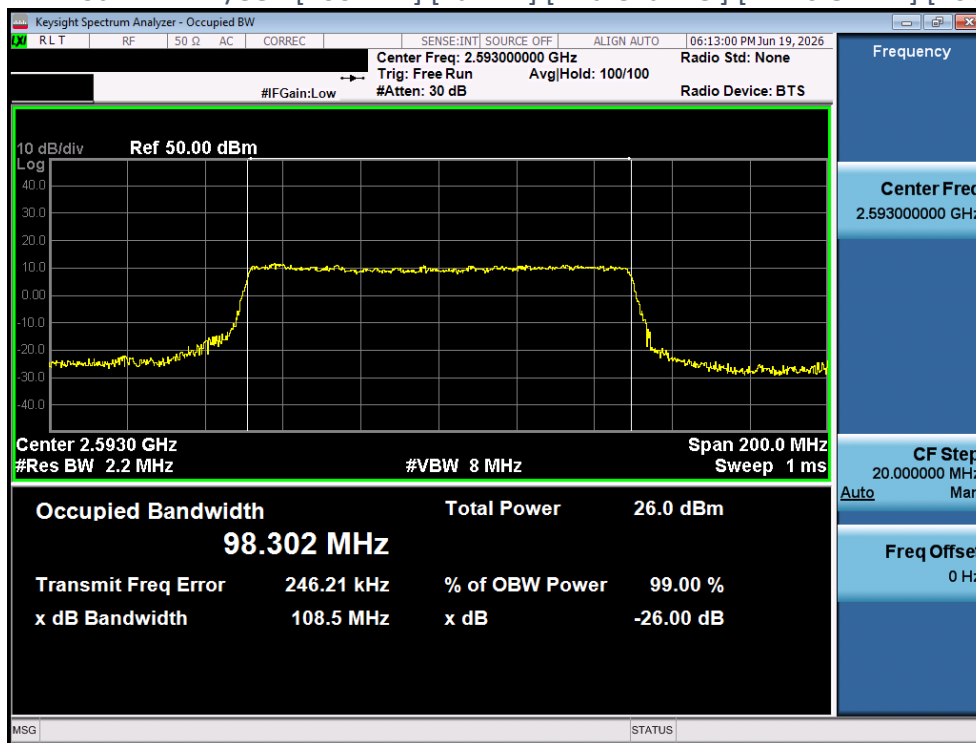
Plot 4-182 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [QPSK] [SRS S2]



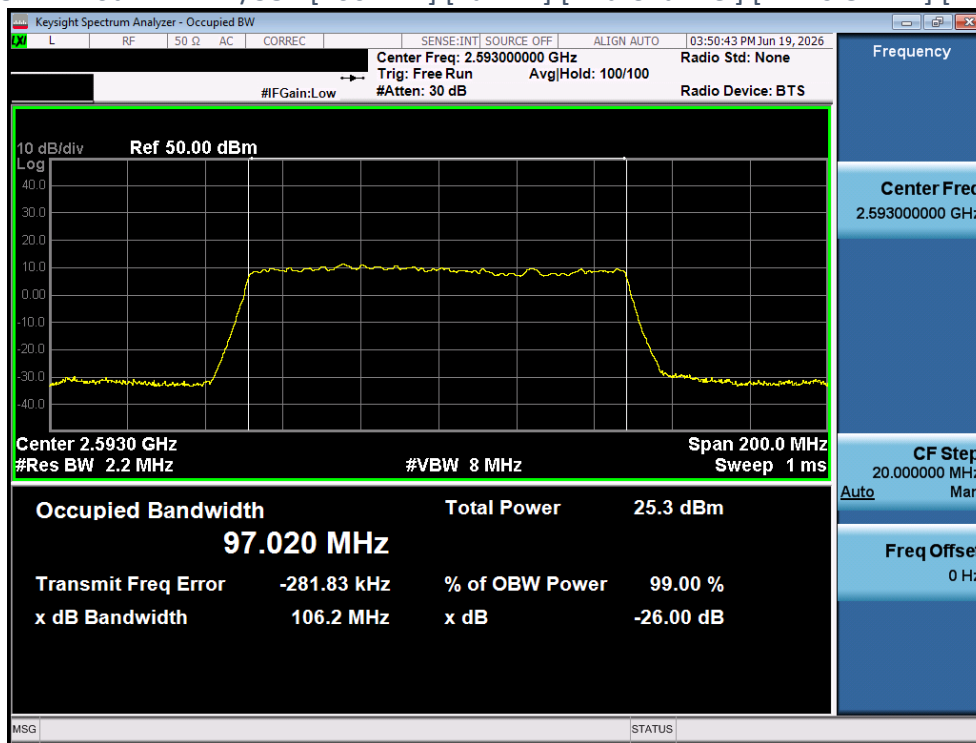
Plot 4-183 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [16QAM] [SRS D2]



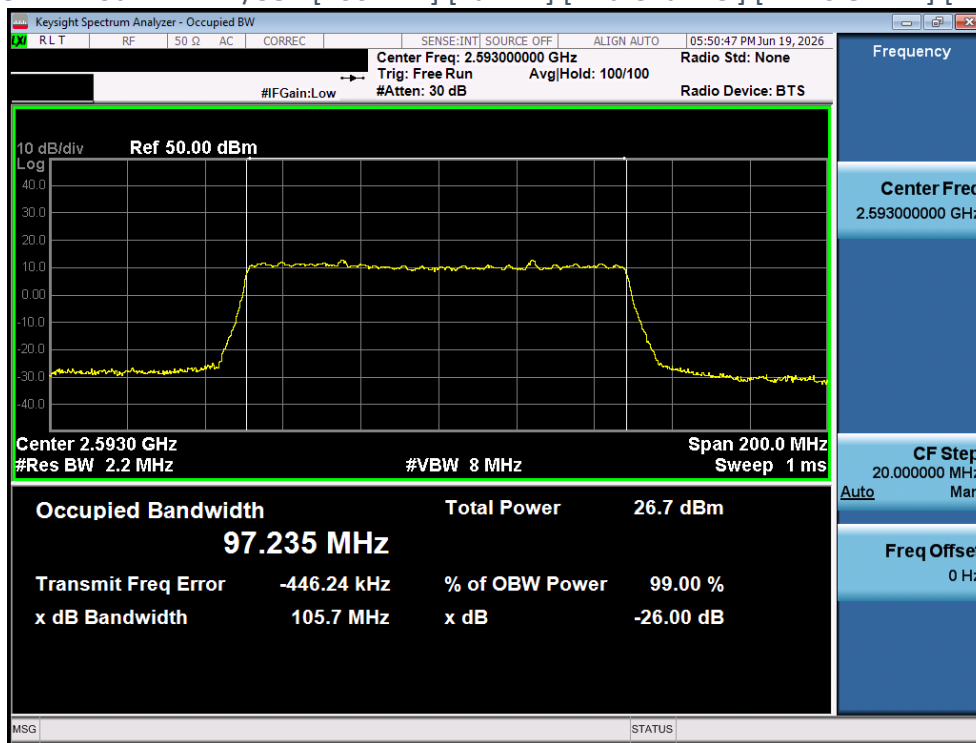
Plot 4-184 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [16QAM] [SRS S2]



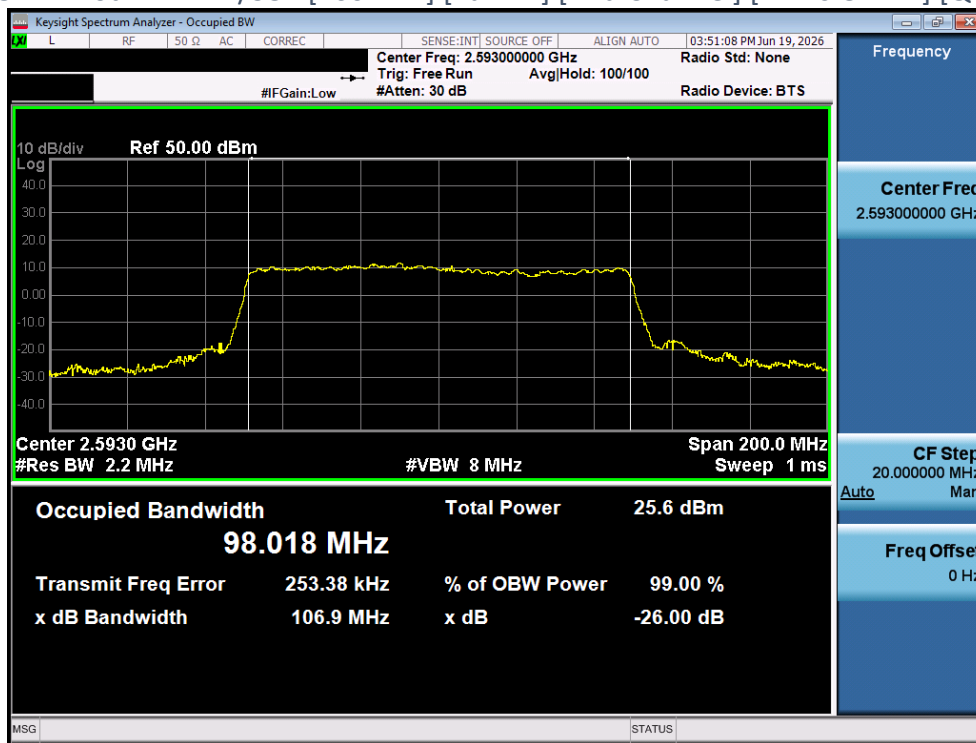
Plot 4-185 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [SRS D3]



Plot 4-186 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [SRS S3]



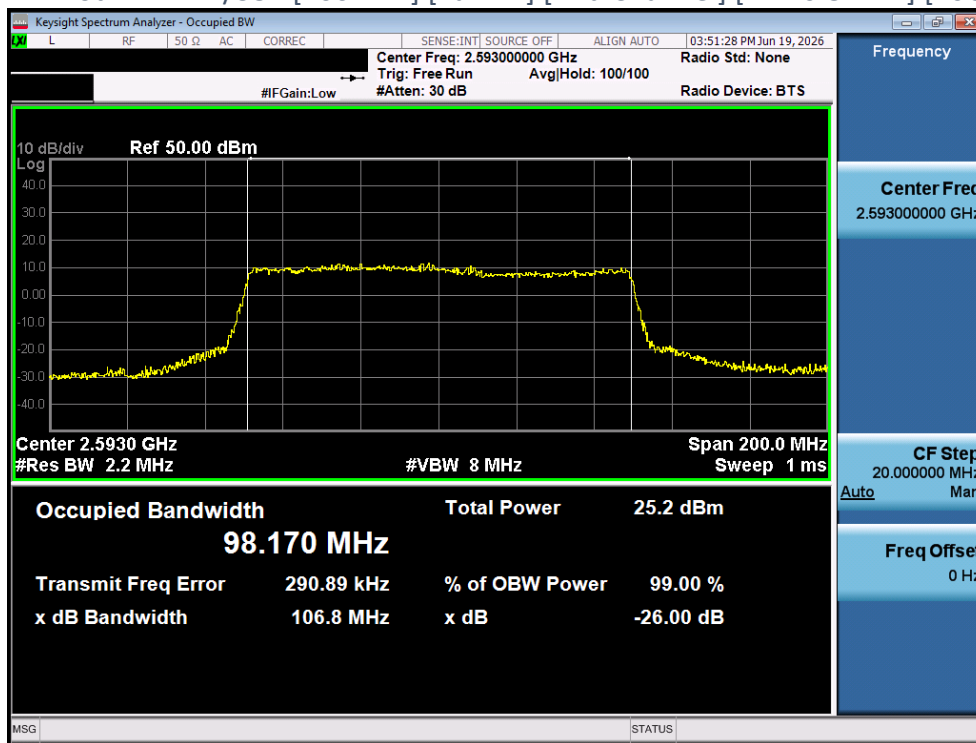
Plot 4-187 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [QPSK] [SRS D3]



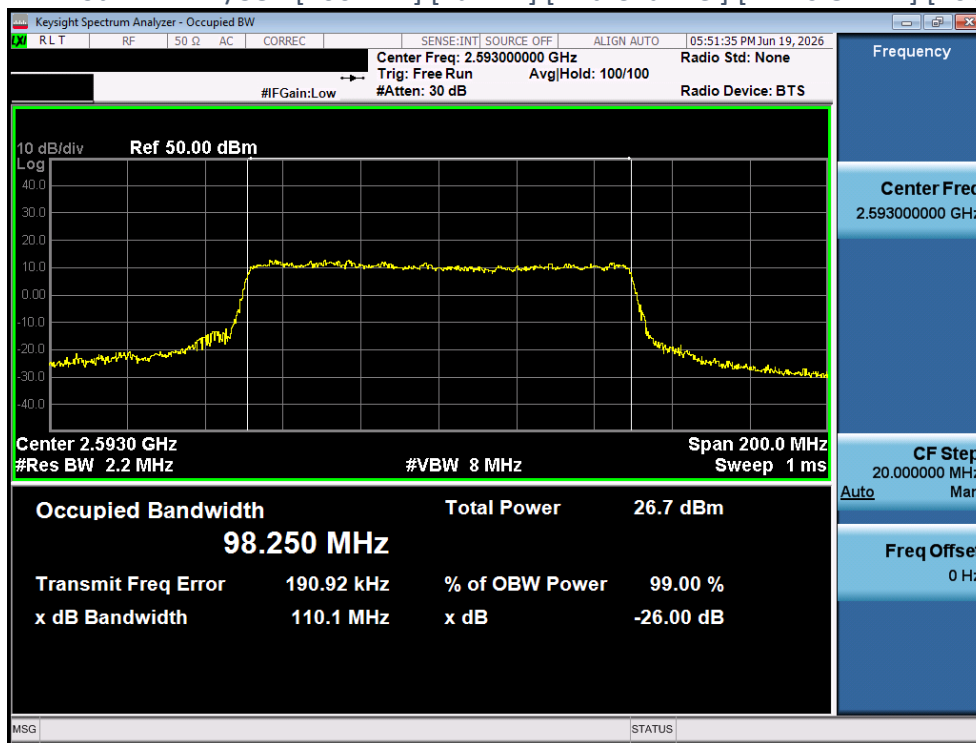
Plot 4-188 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [QPSK] [SRS S3]



Plot 4-189 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [16QAM] [SRS D3]



Plot 4-190 OBW Plot - NR n41/38 - [100MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [16QAM] [SRS S3]



4.5. Peak to Average Ratio

4.5.1. Regulatory Limit

RSS-195(5.6) & RSS-199(5.5)

The peak to average power ratio (PAPR) of the equipment shall not exceed 13 dB for more than 0.1% of the time, using a signal that corresponds to the highest PAPR during periods of continuous transmission.

4.5.2. Test Method

ANSI C63.26-2015, clause 5.2.3.4

4.5.3. Test Procedure

The CCDF measurement function of the spectrum analyzer was used.

The procedure for this method is follows:

- a) Set center frequency to the nominal EUT channel center frequency.
- b) Set analysis Bandwidth $\geq$ OBW or specified reference bandwidth.
- c) Number of Count = stabilizes the measured CCDF curve.
- d) Set the measurement interval as follows:
For continuous transmissions, set to the greater of $[10 \times (\text{number of points in sweep}) \times (\text{transmission symbol period})]$ or 1 ms.
For burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize. Set the measurement interval to a time that is less than or equal to the burst duration.
- e) Record the maximum PAPR level associated with a probability of 0.1%.

Test Note

- ✓ All modulation were evaluated, and only the worst-case results are reported herein.

4.5.4. Test Results

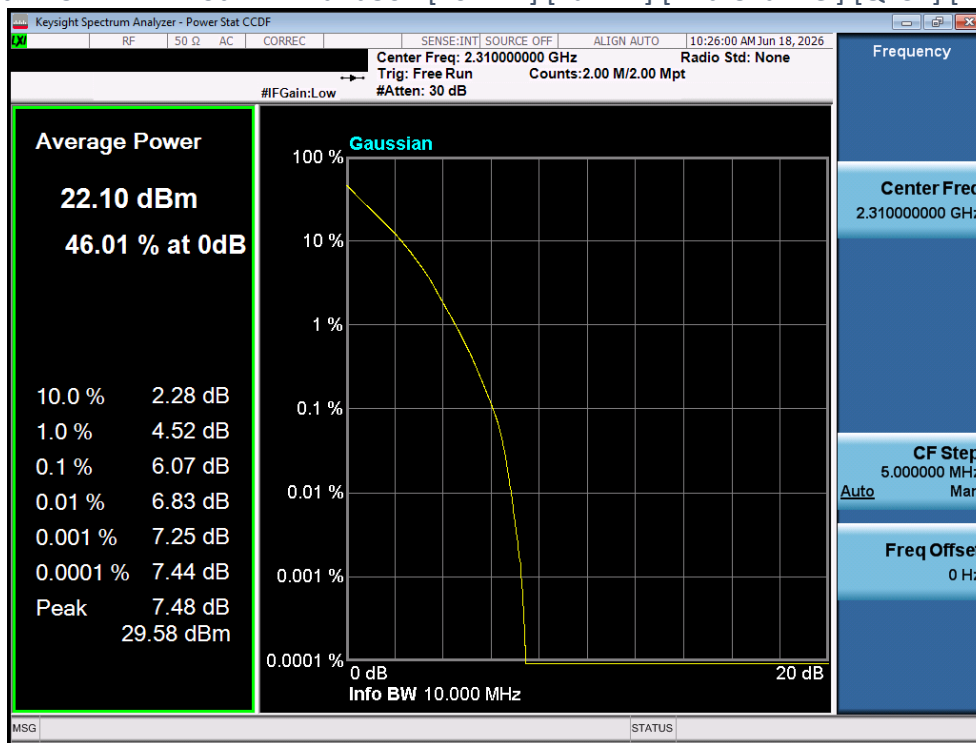
Table 4-14 PAPR Test Data LTE Band 30 Ant1

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Modulation	PAR 0.1 % [dB]	Limit [dB]	Margin [dB]
LTE Band 30	10	2310	27710	50/0	QPSK	6.07	13	-6.93
					16QAM	6.66	13	-6.34
					64QAM	6.81	13	-6.19
					256QAM	6.62	13	-6.38
	5	2310	27710	25/0	QPSK	6.12	13	-6.88
					16QAM	6.68	13	-6.32
					64QAM	6.75	13	-6.25
					256QAM	6.59	13	-6.41

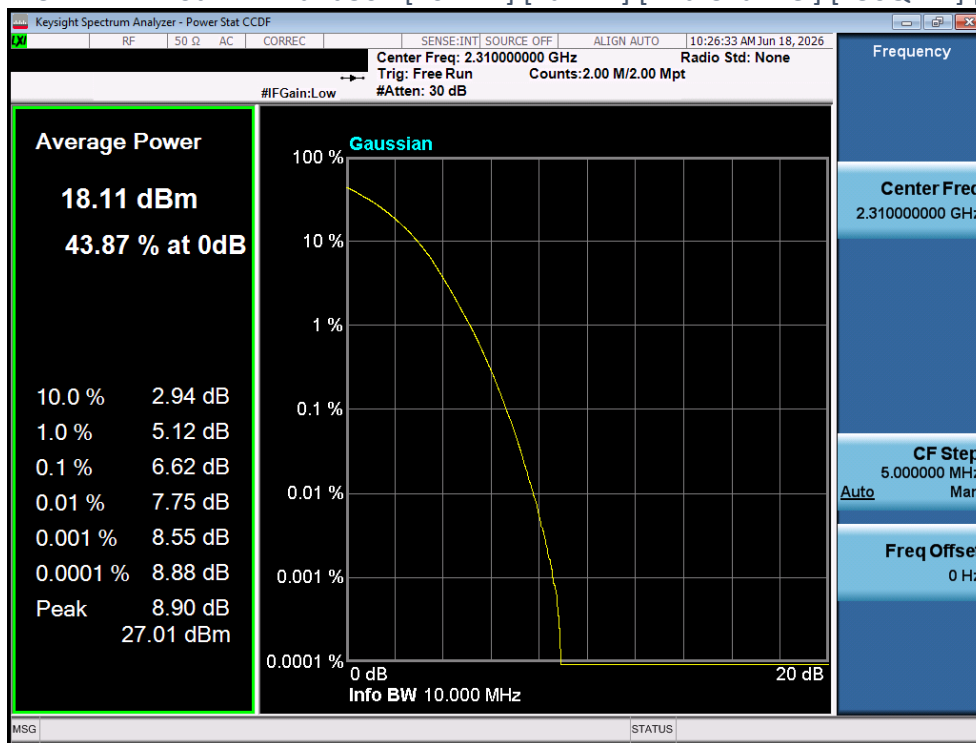
Table 4-15 PAPR Test Data LTE Band 30 Ant2

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Modulation	PAR 0.1 % [dB]	Limit [dB]	Margin [dB]
LTE Band 30	10	2310	27710	50/0	QPSK	5.70	13	-7.30
					16QAM	6.42	13	-6.58
					64QAM	6.66	13	-6.34
					256QAM	6.59	13	-6.41
	5	2310	27710	25/0	QPSK	5.66	13	-7.34
					16QAM	6.28	13	-6.72
					64QAM	6.59	13	-6.41
					256QAM	6.55	13	-6.45

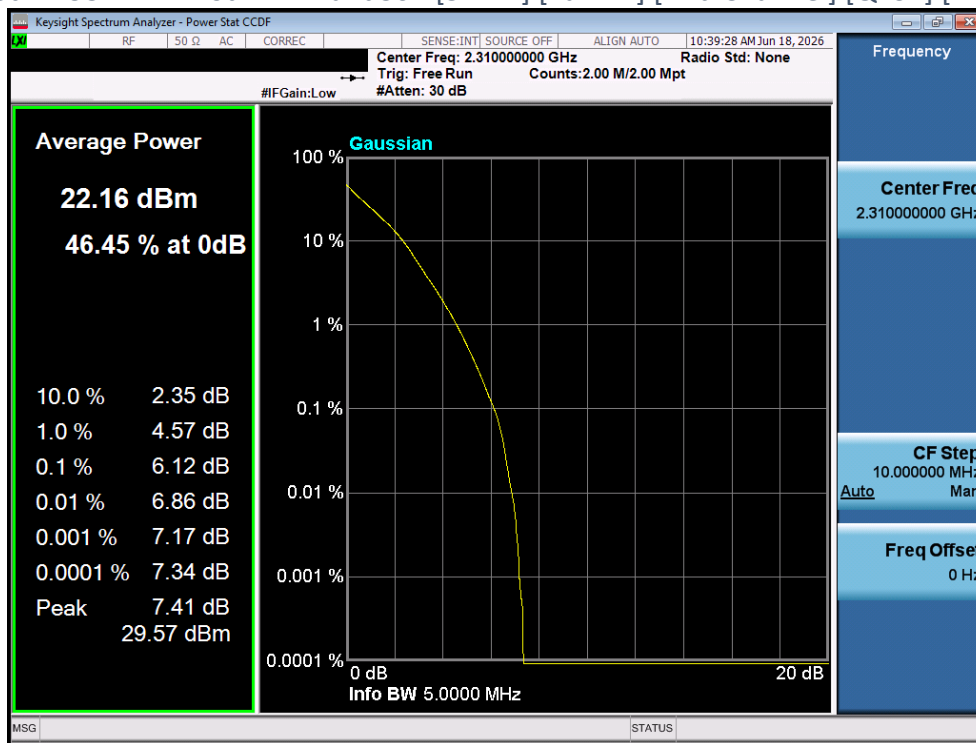
Plot 4-191 PAPR Plot - LTE Band30 - [10MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



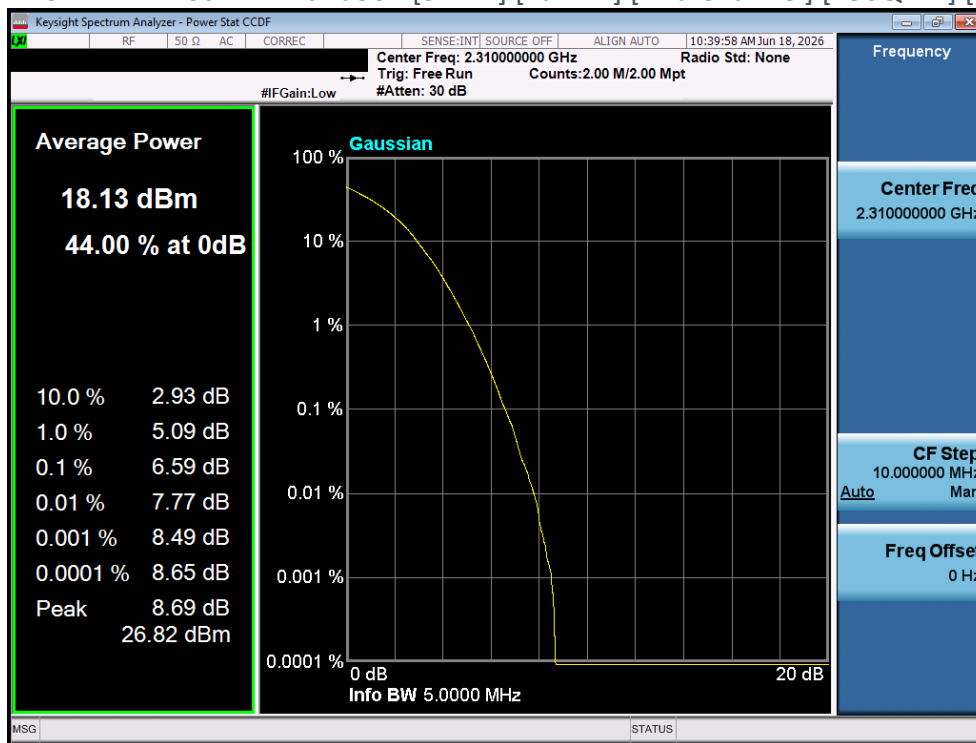
Plot 4-192 PAPR Plot - LTE Band30 - [10MHz] [Full RB] [Mid Channel] [256QAM] [Ant 1]



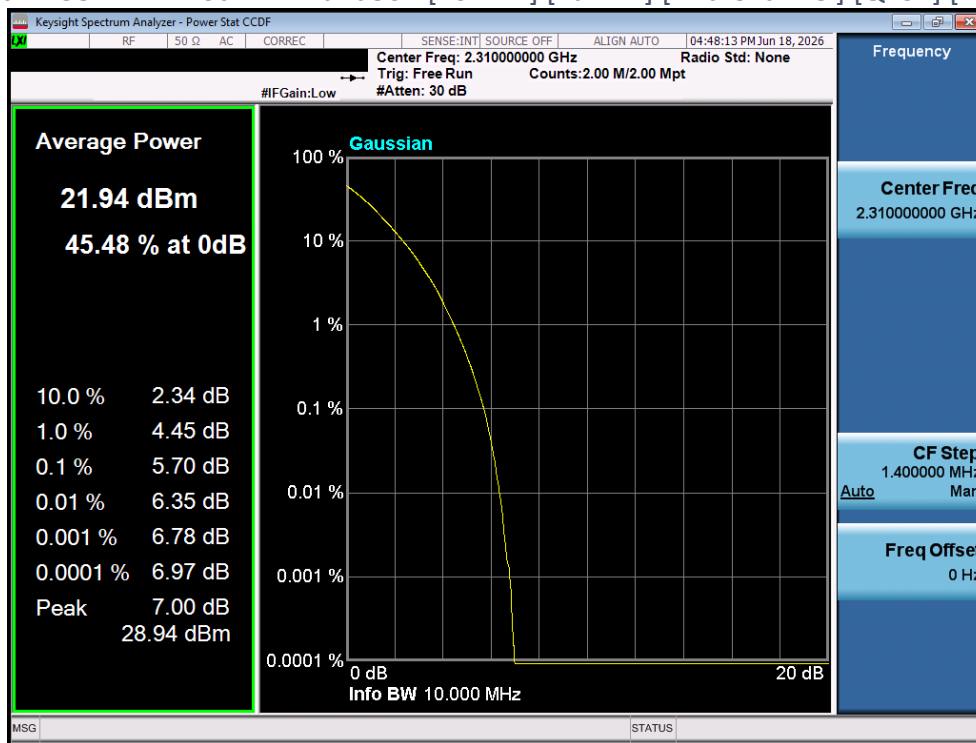
Plot 4-193 PAPR Plot - LTE Band30 - [5MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



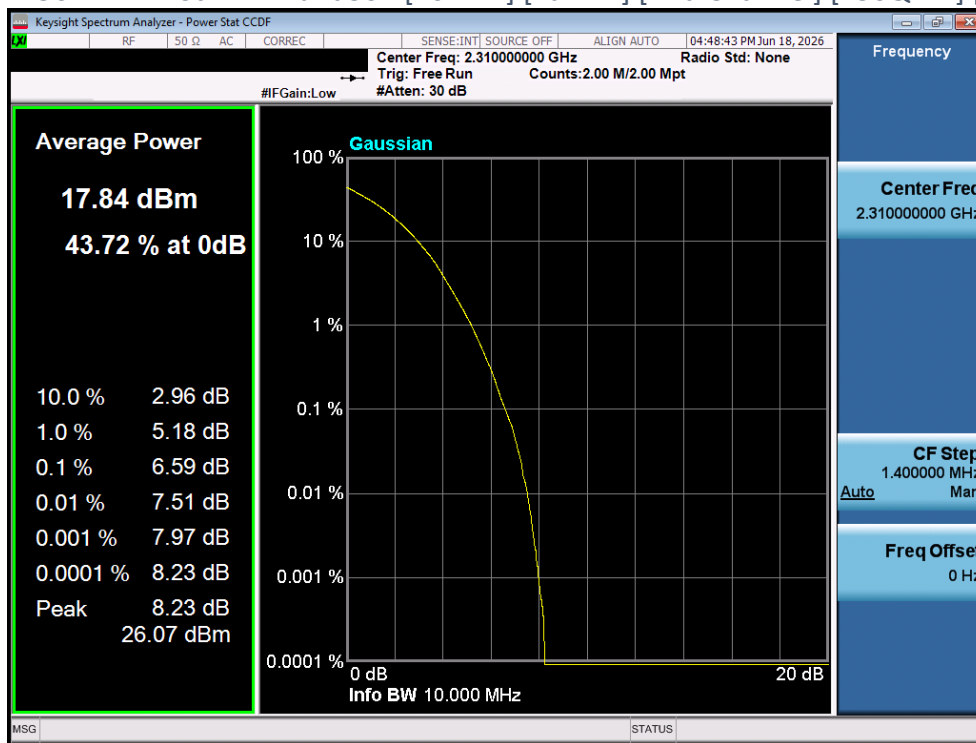
Plot 4-194 PAPR Plot - LTE Band30 - [5MHz] [Full RB] [Mid Channel] [256QAM] [Ant 1]



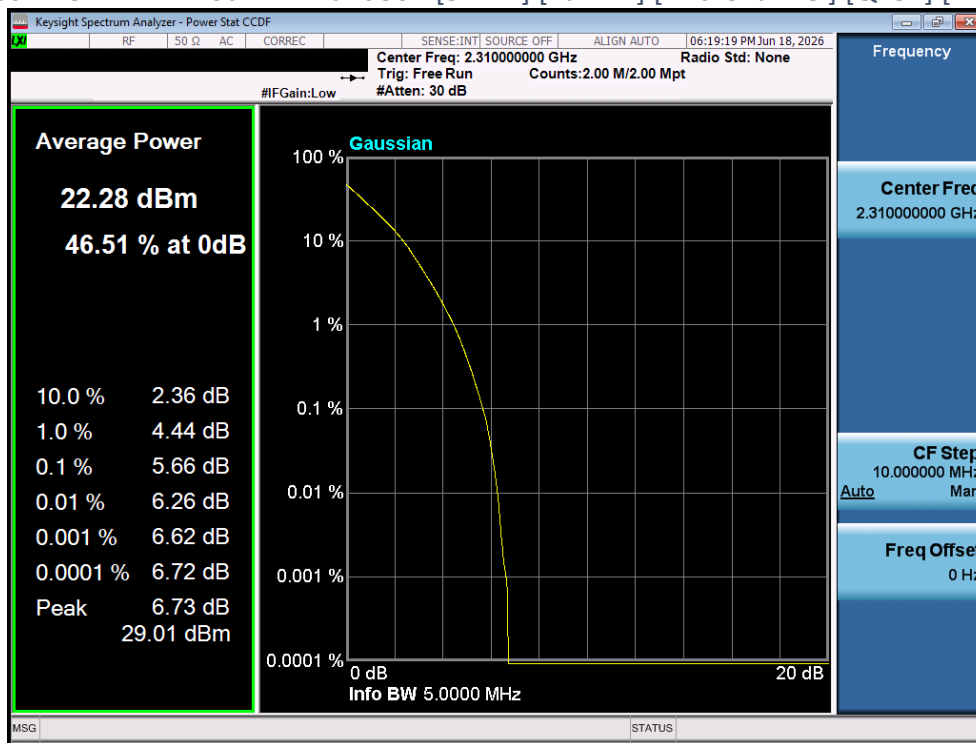
Plot 4-195 PAPR Plot - LTE Band30 - [10MHz] [Full RB] [Mid Channel] [QPSK] [Ant 2]



Plot 4-196 PAPR Plot - LTE Band30 - [10MHz] [Full RB] [Mid Channel] [256QAM] [Ant 2]



Plot 4-197 PAPR Plot - LTE Band30 - [5MHz] [Full RB] [Mid Channel] [QPSK] [Ant 2]



Plot 4-198 PAPR Plot - LTE Band30 - [5MHz] [Full RB] [Mid Channel] [256QAM] [Ant 2]

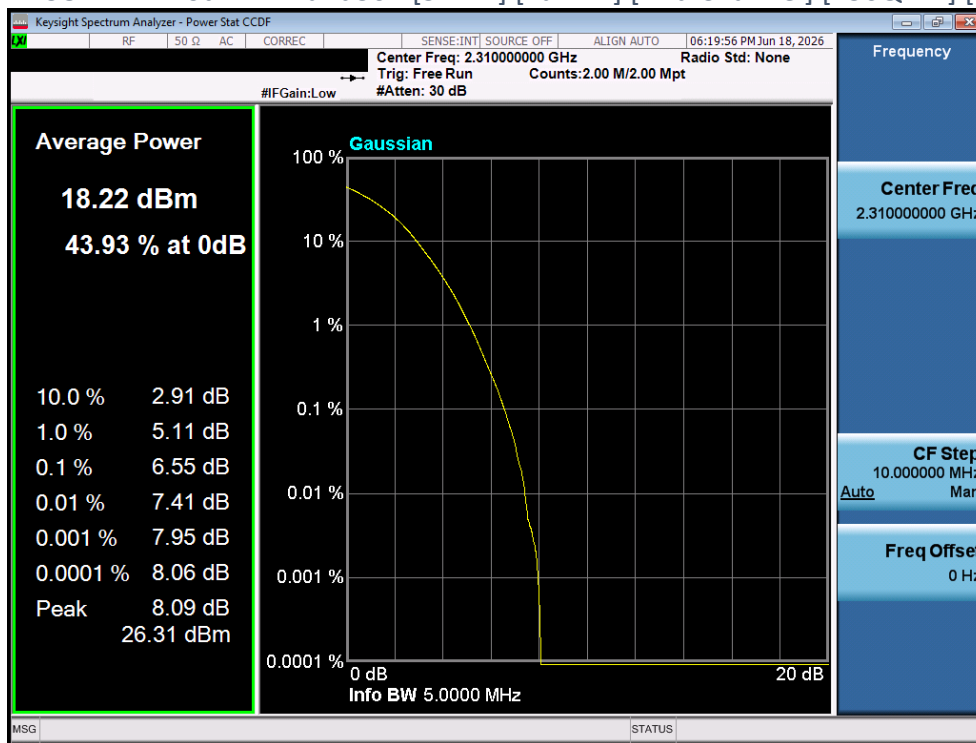


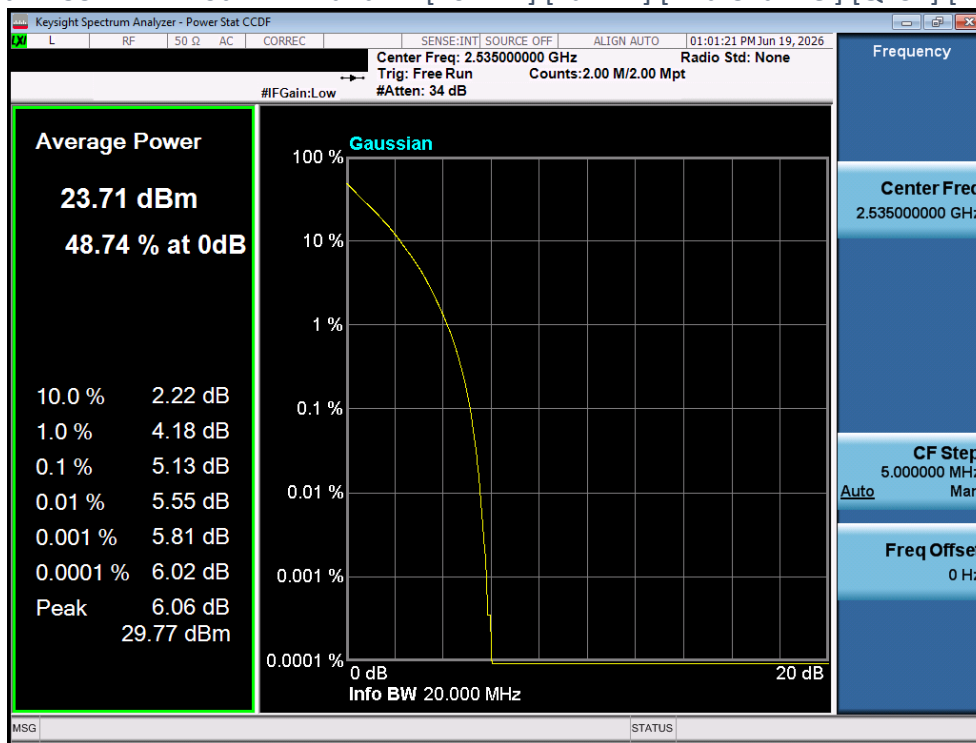
Table 4-16 PAPR Test Data LTE Band 7 Ant1

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Modulation	PAR 0.1 % [dB]	Limit [dB]	Margin [dB]
LTE Band 7	20	2535	21100	100/0	QPSK	5.13	13	-7.87
					16QAM	5.80	13	-7.20
					64QAM	6.09	13	-6.91
					256QAM	6.45	13	-6.55
	15	2535	21100	75/0	QPSK	5.13	13	-7.87
					16QAM	5.82	13	-7.18
					64QAM	6.06	13	-6.94
					256QAM	6.17	13	-6.83
	10	2535	21100	50/0	QPSK	5.00	13	-8.00
					16QAM	5.74	13	-7.26
					64QAM	6.00	13	-7.00
					256QAM	6.20	13	-6.80
	5	2535	21100	25/0	QPSK	4.85	13	-8.15
					16QAM	5.59	13	-7.41
					64QAM	5.91	13	-7.09
					256QAM	6.10	13	-6.90

Table 4-17 PAPR Test Data LTE Band 7 Ant2

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Modulation	PAR 0.1 % [dB]	Limit [dB]	Margin [dB]
LTE Band 7	20	2535	21100	100/0	QPSK	5.27	13	-7.73
					16QAM	6.02	13	-6.98
					64QAM	6.14	13	-6.86
					256QAM	6.44	13	-6.56
	15	2535	21100	75/0	QPSK	5.35	13	-7.65
					16QAM	6.06	13	-6.94
					64QAM	6.17	13	-6.83
					256QAM	6.41	13	-6.59
	10	2535	21100	50/0	QPSK	5.24	13	-7.76
					16QAM	5.93	13	-7.07
					64QAM	6.01	13	-6.99
					256QAM	6.38	13	-6.62
	5	2535	21100	25/0	QPSK	5.00	13	-8.00
					16QAM	5.74	13	-7.26
					64QAM	5.96	13	-7.04
					256QAM	6.29	13	-6.71

Plot 4-199 PAPR Plot – LTE Band7 – [20MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



Plot 4-200 PAPR Plot – LTE Band7 – [20MHz] [Full RB] [Mid Channel] [256QAM] [Ant 1]

