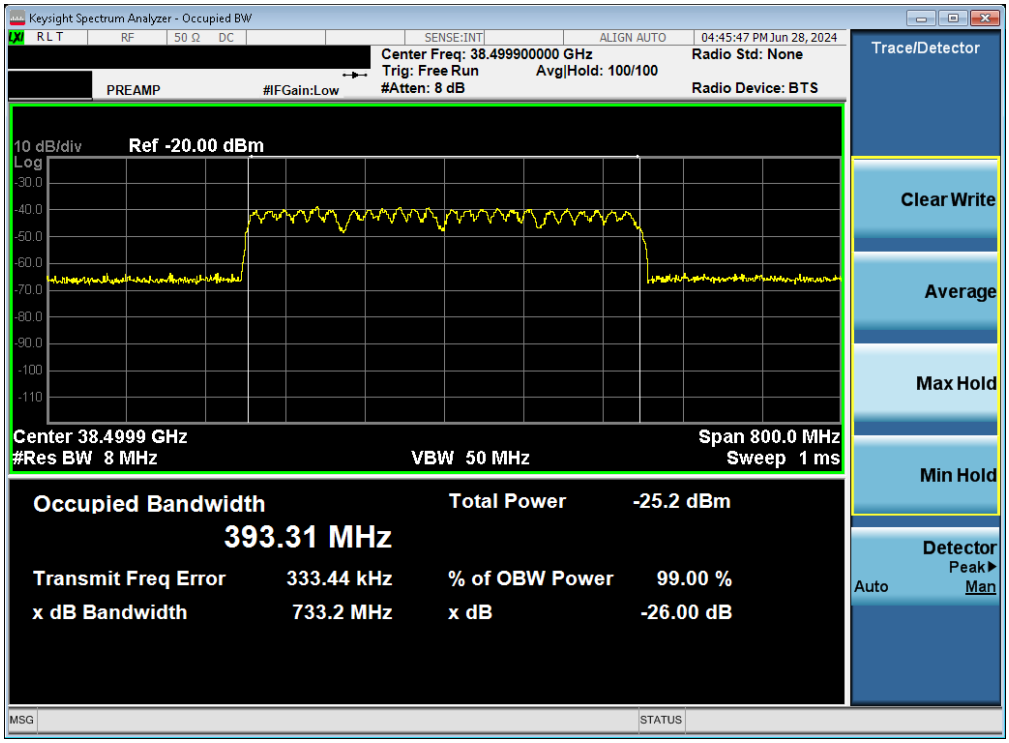
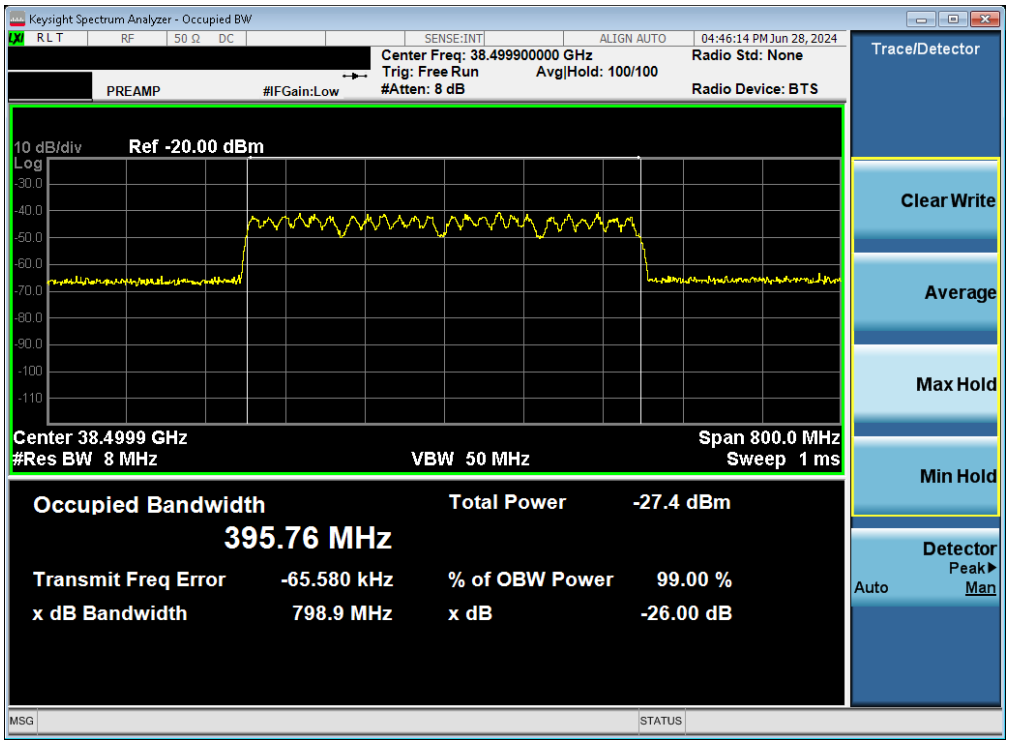


Plot 7-119. Occupied Bandwidth Plot (100MHz-4CC – CP-OFDM 16QAM – Mid Channel)



Plot 7-120. Occupied Bandwidth Plot (100MHz-4CC – CP-OFDM 64QAM – Mid Channel)

7.3 Equivalent Isotropic Radiated Power

§2.1046, §30.202

Test Overview

Equivalent Isotropic Radiated Power (EIRP) measurements are performed using broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

The average power of the sum of all antenna elements is limited to a maximum EIRP of +43 dBm.

Test Procedures Used

ANSI C63.26-2015 Section 5.2.4.4.1
KDB 842590 D01 v01r02 Section 4.2

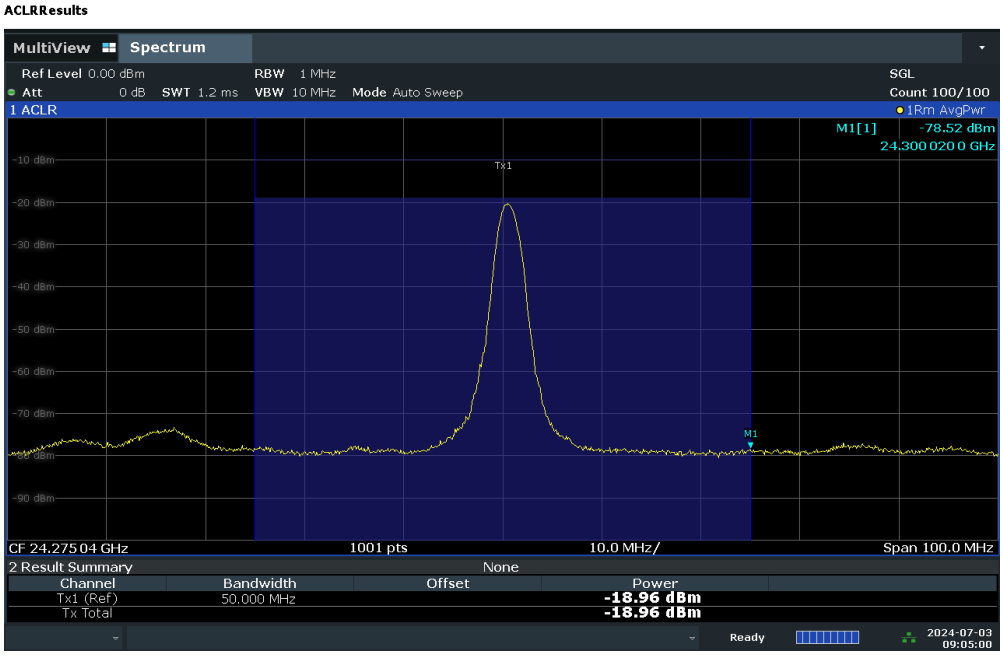
Test Settings

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.
2. RBW = 1 – 5% of the expected OBW, not to exceed 1MHz
3. VBW ≥ 3 x RBW
4. Span = 2x to 3x the OBW
5. No. of sweep points ≥ 2 x span / RBW
6. Detector = RMS
7. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation.
8. Trace mode = trace averaging (RMS) over 100 sweeps
9. The trace was allowed to stabilize

Band n258-R1

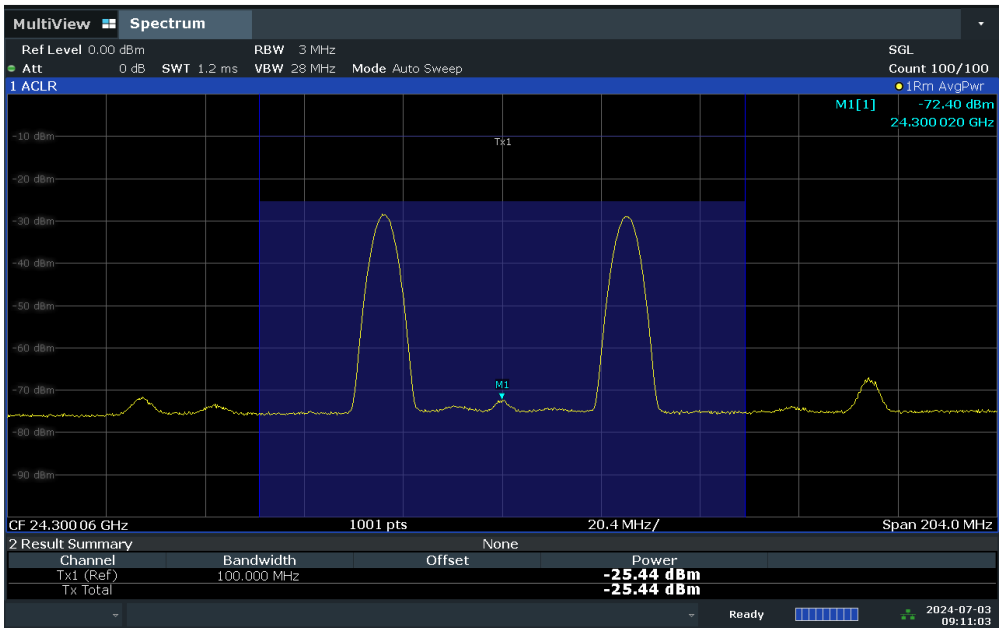
Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
50	1	Low	24275.04	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	87	70	1 / 16	**33.49**
				DFT-s-OFDM	QPSK	20	H	SISO	H	92	79	1 / 19	27.55
				CP-OFDM	QPSK	36	H + V	MIMO	H	87	70	1 / 16	28.68
				CP-OFDM	QPSK	20	H	SISO	H	92	79	1 / 19	22.89
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	87	70	1 / 16	**33.63**
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	87	70	1 / 16	27.08
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	87	70	1 / 16	24.93
		Mid	24350.04	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	83	68	1 / 12	**32.59**
		High	24424.92	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	92	69	1 / 16	**32.83**
				DFT-s-OFDM	QPSK	4	V	SISO	V	243	85	1 / 19	26.92
				CP-OFDM	QPSK	4	V	SISO	V	243	85	1 / 19	22.30
50+50	2	Low	24300.00	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	85	72	1 / 16	**27.15**
				CP-OFDM	QPSK	36	H + V	MIMO	H	85	72	1 / 16	27.07
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	85	72	1 / 16	27.14
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	85	72	1 / 16	27.00
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	85	72	1 / 16	22.60
		Mid	24350.04	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	82	74	1 / 12	**25.65**
		High	24399.96	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	91	69	1 / 16	**26.22**
50+50+50	3	Low	24324.96	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	73	73	1 / 16	26.91
				CP-OFDM	QPSK	36	H + V	MIMO	H	73	73	1 / 16	27.10
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	73	73	1 / 16	**27.30**
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	73	73	1 / 16	26.90
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	73	73	1 / 16	23.15
		High	24375.00	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	87	72	1 / 16	**26.38**
50+50+50+50	4	Mid	24350.04	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	84	73	1 / 16	**27.52**
				CP-OFDM	QPSK	36	H + V	MIMO	H	84	73	1 / 16	26.97
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	84	73	1 / 16	27.17
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	84	73	1 / 16	27.07
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	84	73	1 / 16	24.01

Table 7-6. Ant 1 EIRP Data (Band n258-R1 - 50MHz)



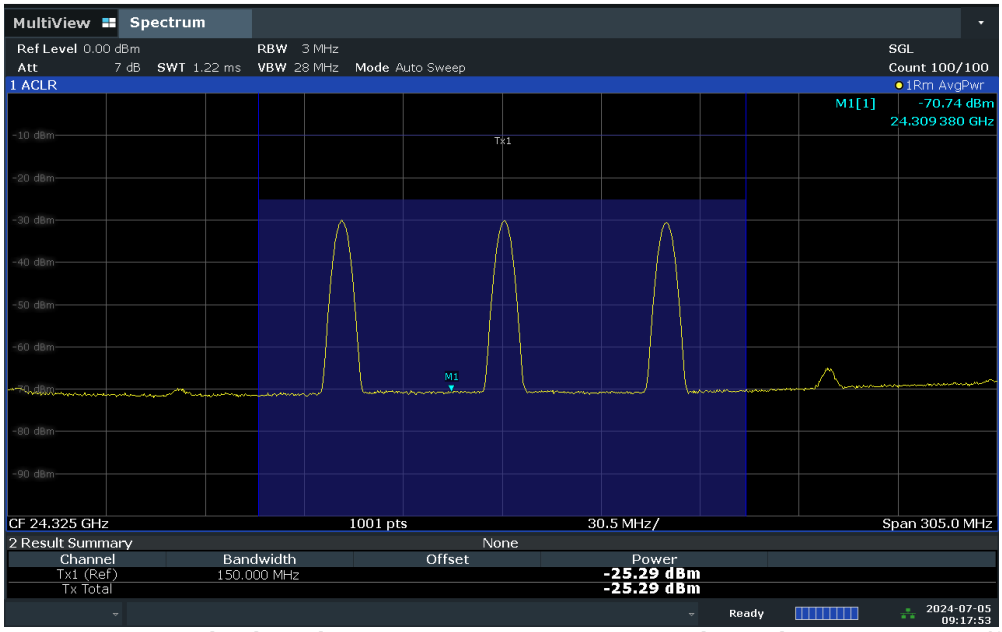
Plot 7-121. Ant 1 EIRP Plot (Band n258-R1 − 50MHz-1CC Low Channel DFT-s-OFDM π/2 BPSK)

ACLRResults



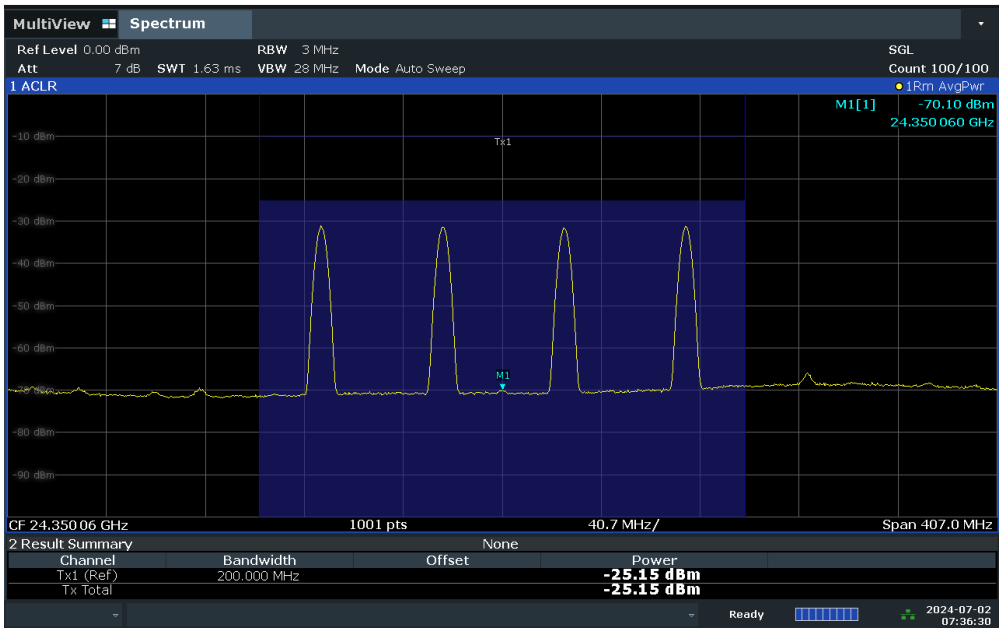
Plot 7-122. Ant 1 EIRP Plot (Band n258-R1 − 50MHz-2CC Low Channel DFT-s-OFDM QPSK)

ACLRResults



Plot 7-123. Ant 1 EIRP Plot (Band n258-R1 − 50MHz-3CC Low Channel DFT-s-OFDM π/2 BPSK)

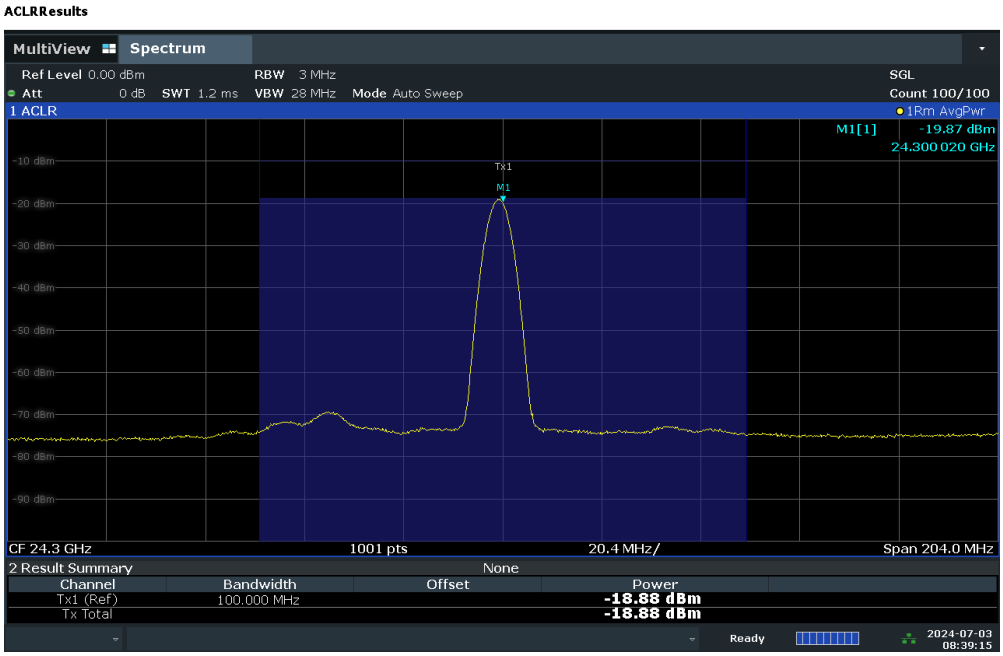
ACLRResults



Plot 7-124. Ant 1 EIRP Plot (Band n258-R1 − 50MHz-4CC Mid Channel DFT-s-OFDM QPSK)

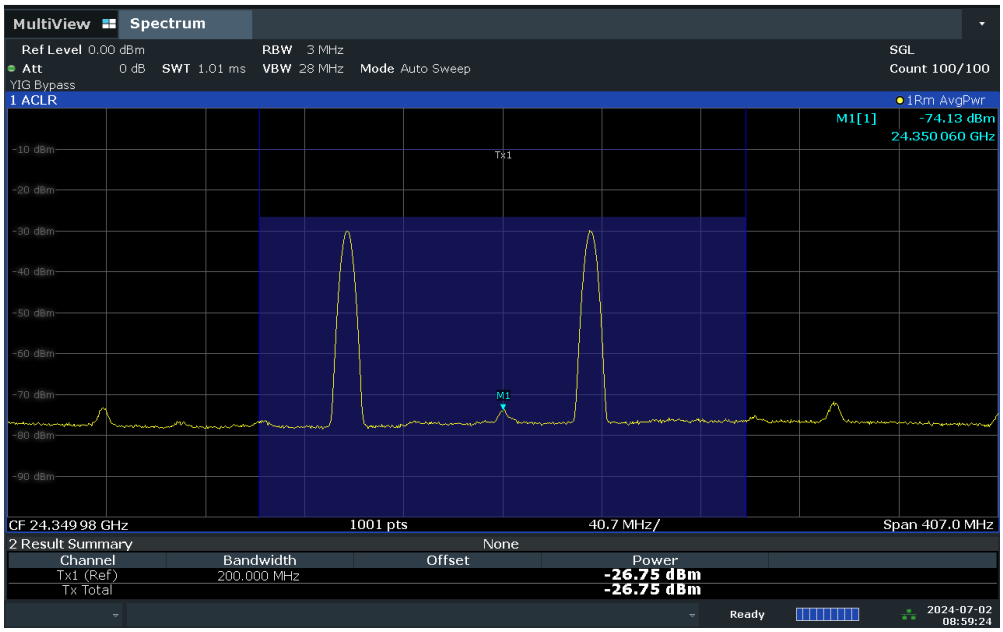
Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
100	1	Low	24300.00	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	85	70	1 / 33	**33.66**
				DFT-s-OFDM	QPSK	20	H	SISO	H	92	79	1 / 33	27.27
				CP-OFDM	QPSK	36	H + V	MIMO	H	85	70	1 / 33	30.12
				CP-OFDM	QPSK	20	H	SISO	H	92	79	1 / 23	23.93
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	85	70	1 / 33	**33.71**
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	85	70	1 / 33	30.66
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	85	70	1 / 33	26.05
		Mid	24350.04	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	85	71	1 / 33	**32.66**
		High	24399.96	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	90	72	1 / 33	**33.33**
				DFT-s-OFDM	QPSK	4	V	SISO	V	243	85	1 / 42	26.83
				CP-OFDM	QPSK	36	H + V	MIMO	H	90	72	1 / 33	29.59
				CP-OFDM	QPSK	4	V	SISO	V	243	85	1 / 42	23.45
100+100	2	Mid	24349.98	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	90	76	1 / 23	**26.13**
				CP-OFDM	QPSK	36	H + V	MIMO	H	90	76	1 / 23	26.05
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	90	76	1 / 23	26.08
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	90	76	1 / 23	23.89
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	90	76	1 / 23	22.76

Table 7-7. Ant 1 EIRP Data (Band n258-R1 - 100MHz)



Plot 7-125. Ant 1 EIRP Plot (Band n258-R1 − 100MHz-1CC Low Channel DFT-s-OFDM π/2 BPSK)

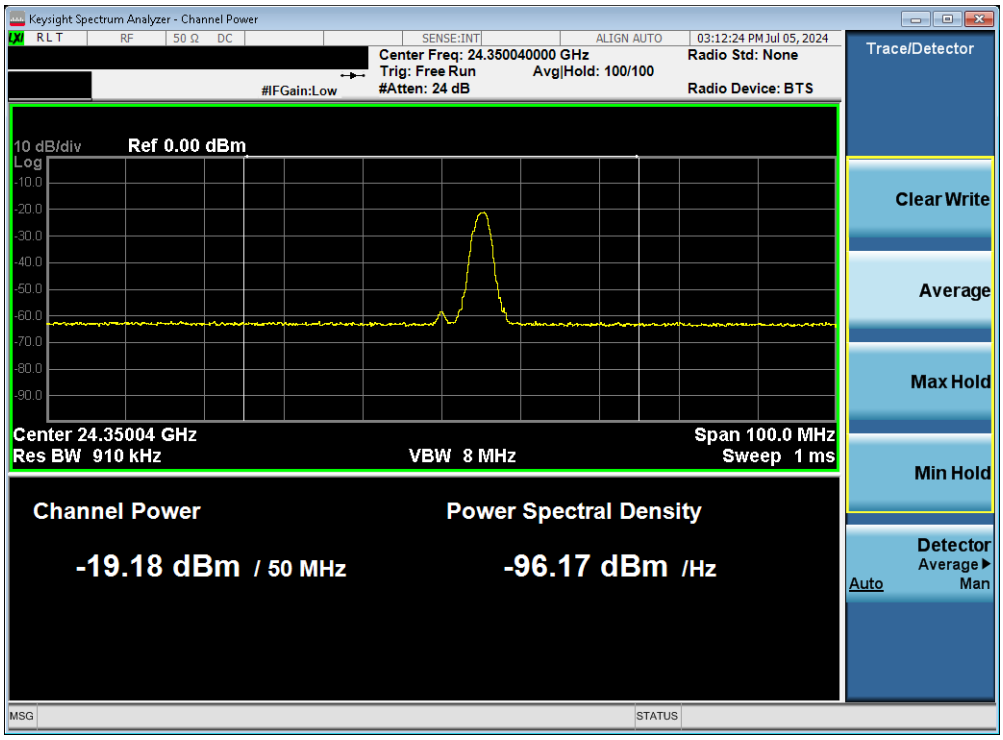
ACLRResults



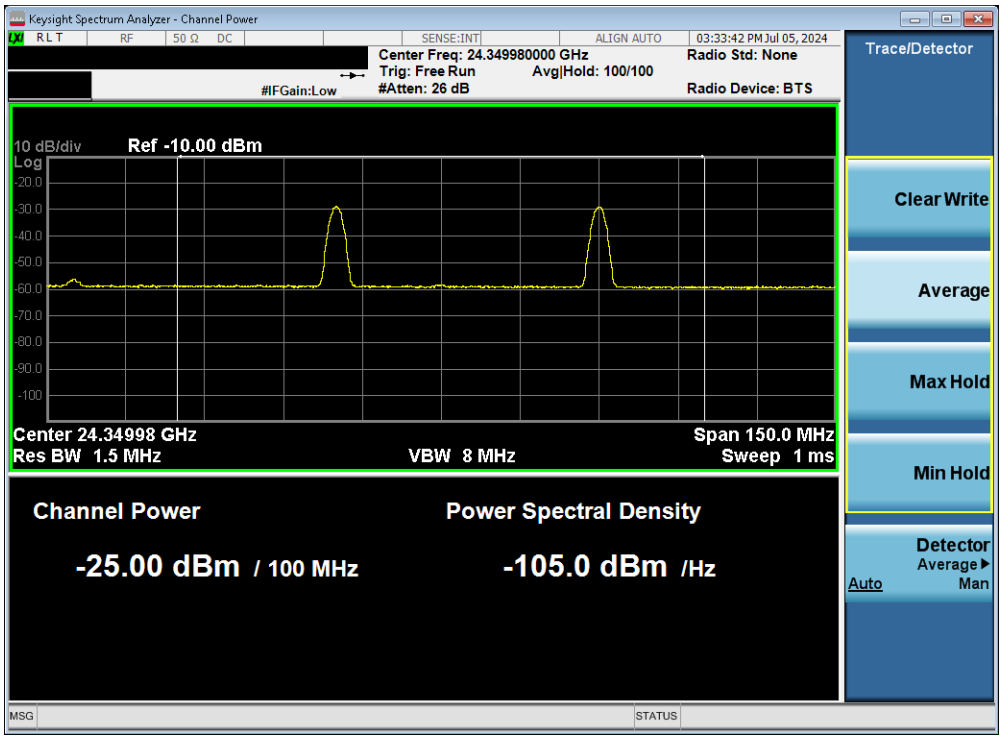
Plot 7-126. Ant 1 EIRP Plot (Band n258-R1 − 100MHz-2CC Mid Channel DFT-s-OFDM QPSK)

Bandwidth [MHz]	:Cs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
50	1	Low	24275.04	DFT-s-OFDM	QPSK	38	H + V	2Tx	H	96	246	1 / 19	**31.70**
		Mid	24350.04	DFT-s-OFDM	QPSK	38	H + V	2Tx	H	96	248	1 / 19	31.80
				CP-OFDM	QPSK	38	H + V	MIMO	H	96	248	1 / 19	27.36
				DFT-s-OFDM	π/2 BPSK	38	H + V	2Tx	H	96	248	1 / 19	**32.37**
				DFT-s-OFDM	16QAM	38	H + V	2Tx	H	96	248	1 / 19	26.30
				DFT-s-OFDM	64QAM	38	H + V	2Tx	H	96	248	1 / 19	23.75
		High	24424.92	DFT-s-OFDM	QPSK	24	H	SISO	H	110	247	1 / 12	27.96
				DFT-s-OFDM	QPSK	6	V	SISO	H	311	74	1 / 19	27.03
				CP-OFDM	QPSK	24	H	SISO	H	110	247	1 / 19	23.04
				CP-OFDM	QPSK	6	V	SISO	H	311	74	1 / 16	22.25
				DFT-s-OFDM	π/2 BPSK	38	H + V	2Tx	H	96	247	1 / 19	**32.11**
50+50	2	Low	24300.00	DFT-s-OFDM	QPSK	38	H + V	2Tx	H	95	246	1 / 19	**25.95**
		Mid	24350.04	DFT-s-OFDM	QPSK	38	H + V	2Tx	H	96	248	1 / 19	26.53
				CP-OFDM	QPSK	38	H + V	MIMO	H	96	248	1 / 19	26.30
				DFT-s-OFDM	π/2 BPSK	38	H + V	2Tx	H	96	248	1 / 19	**26.55**
				DFT-s-OFDM	16QAM	38	H + V	2Tx	H	96	248	1 / 19	26.33
				DFT-s-OFDM	64QAM	38	H + V	2Tx	H	96	248	1 / 19	24.32
		High	24399.96	DFT-s-OFDM	QPSK	38	H + V	2Tx	H	96	247	1 / 19	**25.84**
50+50+50	3	Low	24324.96	DFT-s-OFDM	QPSK	38	H + V	2Tx	H	95	246	1 / 19	**25.90**
				CP-OFDM	QPSK	38	H + V	MIMO	H	95	246	1 / 19	25.75
				DFT-s-OFDM	π/2 BPSK	38	H + V	2Tx	H	95	246	1 / 19	25.82
				DFT-s-OFDM	16QAM	38	H + V	2Tx	H	95	246	1 / 19	25.79
				DFT-s-OFDM	64QAM	38	H + V	2Tx	H	95	246	1 / 19	23.46
		High	24375.00	DFT-s-OFDM	QPSK	38	H + V	2Tx	H	95	246	1 / 19	**25.75**
50+50+50+50	4	Mid	24350.04	DFT-s-OFDM	QPSK	38	H + V	2Tx	H	96	248	1 / 19	26.62
				CP-OFDM	QPSK	38	H + V	MIMO	H	96	248	1 / 19	26.49
				DFT-s-OFDM	π/2 BPSK	38	H + V	2Tx	H	96	248	1 / 19	**26.63**
				DFT-s-OFDM	16QAM	38	H + V	2Tx	H	96	248	1 / 19	18.09
				DFT-s-OFDM	64QAM	38	H + V	2Tx	H	96	248	1 / 19	15.49

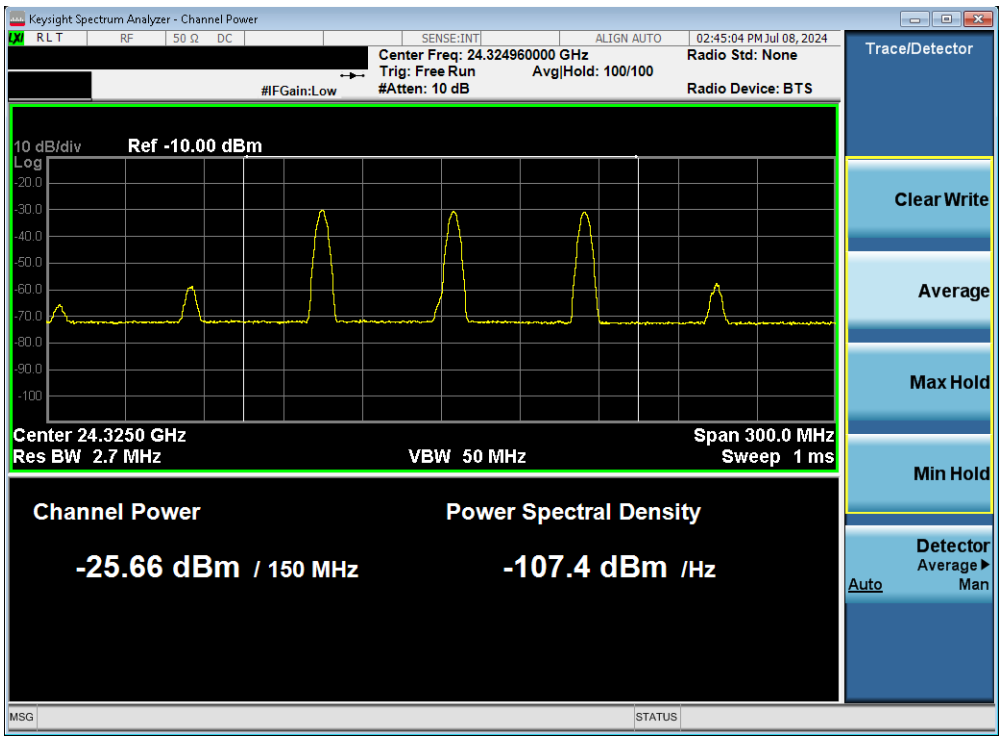
Table 7-8. Ant 2 EIRP Data (Band n258-R1 - 50MHz)



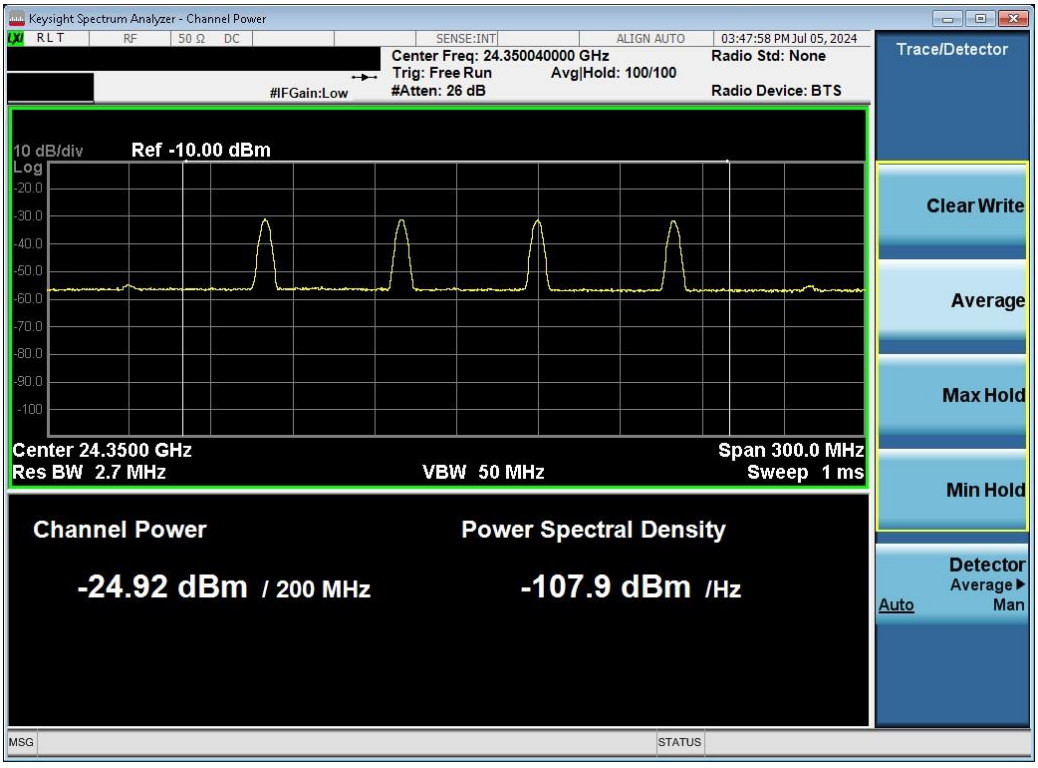
Plot 7-127. Ant 2 EIRP Plot (Band n258-R1 − 50MHz-1CC Mid Channel DFT-s-OFDM π/2 BPSK)



Plot 7-128. Ant 2 EIRP Plot (Band n258-R1 − 50MHz-2CC Mid Channel DFT-s-OFDM QPSK)



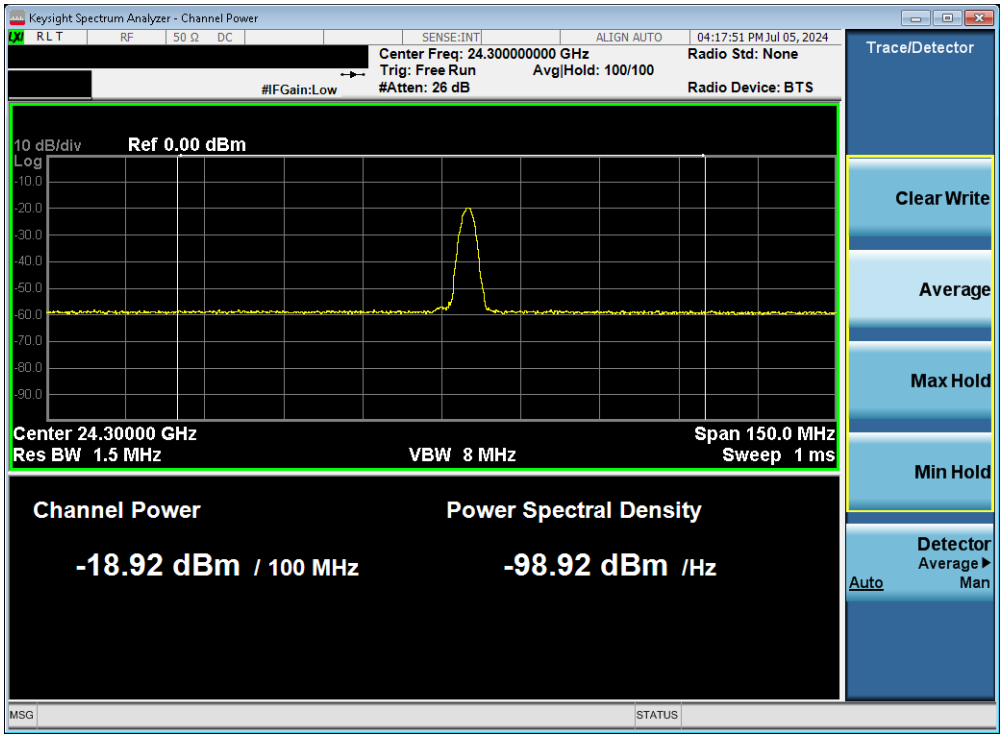
Plot 7-129. Ant 2 EIRP Plot (Band n258-R1 − 50MHz-3CC Low Channel DFT-s-OFDM QPSK)



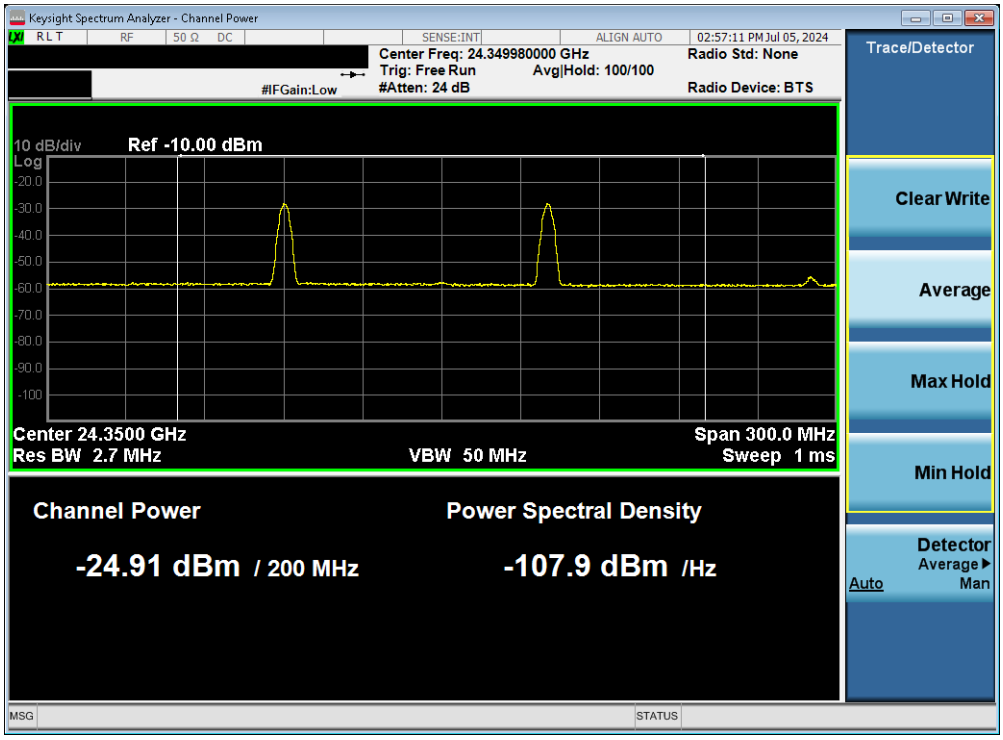
Plot 7-130. Ant 2 EIRP Plot (Band n258-R1 − 50MHz-4CC Mid Channel DFT-s-OFDM QPSK)

Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
100	1	Low	24300.00	DFT-s-OFDM	QPSK	38	H + V	2Tx	H	94	246	1 / 36	**32.32**
				CP-OFDM	QPSK	38	H + V	MIMO	H	94	246	1 / 36	29.09
				DFT-s-OFDM	π/2 BPSK	38	H + V	2Tx	H	94	246	1 / 36	**32.60**
				DFT-s-OFDM	16QAM	38	H + V	2Tx	H	94	246	1 / 36	29.77
				DFT-s-OFDM	64QAM	38	H + V	2Tx	H	94	246	1 / 36	25.94
		Mid	24350.04	DFT-s-OFDM	π/2 BPSK	38	H + V	2Tx	H	96	248	1 / 26	**32.15**
		High	24399.96	DFT-s-OFDM	QPSK	38	H + V	2Tx	H	94	246	1 / 26	**32.42**
				DFT-s-OFDM	QPSK	24	H	SISO	H	110	247	1 / 36	27.83
				DFT-s-OFDM	QPSK	6	V	SISO	H	311	74	1 / 36	27.10
				CP-OFDM	QPSK	24	H	SISO	H	110	247	1 / 36	24.74
				CP-OFDM	QPSK	6	V	SISO	H	311	74	1 / 36	23.74
100+100	2	Mid	24349.98	DFT-s-OFDM	QPSK	38	H + V	2Tx	H	96	348	1 / 26	**26.64**
				CP-OFDM	QPSK	38	H + V	MIMO	H	96	348	1 / 26	26.37
				DFT-s-OFDM	π/2 BPSK	38	H + V	2Tx	H	96	348	1 / 26	26.53
				DFT-s-OFDM	16QAM	38	H + V	2Tx	H	96	348	1 / 26	26.57
				DFT-s-OFDM	64QAM	38	H + V	2Tx	H	96	348	1 / 26	24.62

Table 7-9. Ant 2 EIRP Data (Band n258-R1 - 100MHz)



Plot 7-131. Ant 2 EIRP Plot (Band n258-R1 − 100MHz-1CC Low Channel DFT-s-OFDM QPSK)

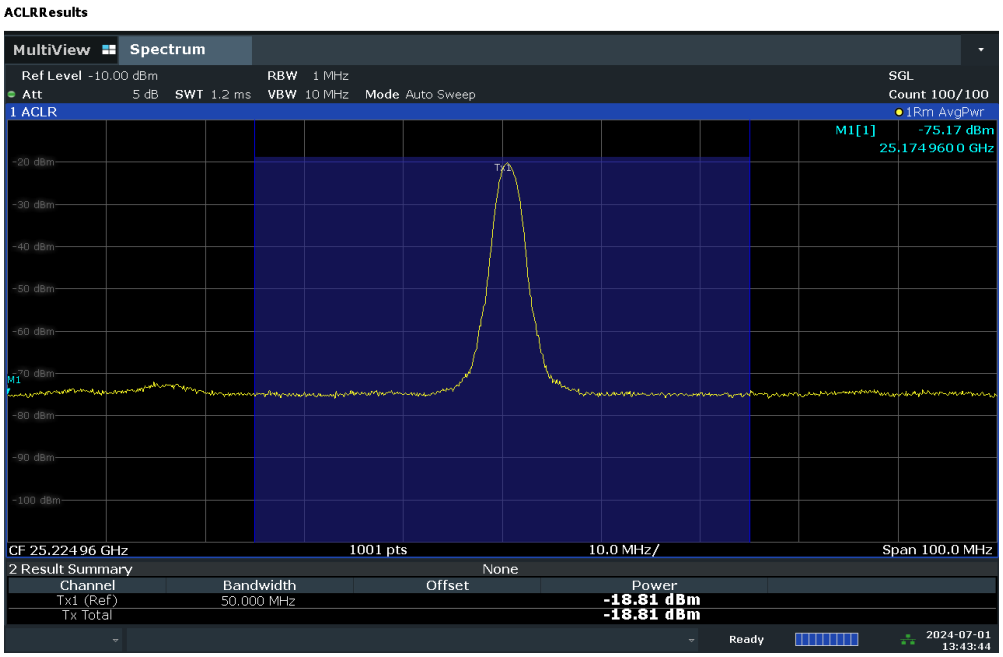


Plot 7-132. Ant 2 EIRP Plot (Band n258-R1 − 100MHz-2CC Mid Channel DFT-s-OFDM π/2 BPSK)

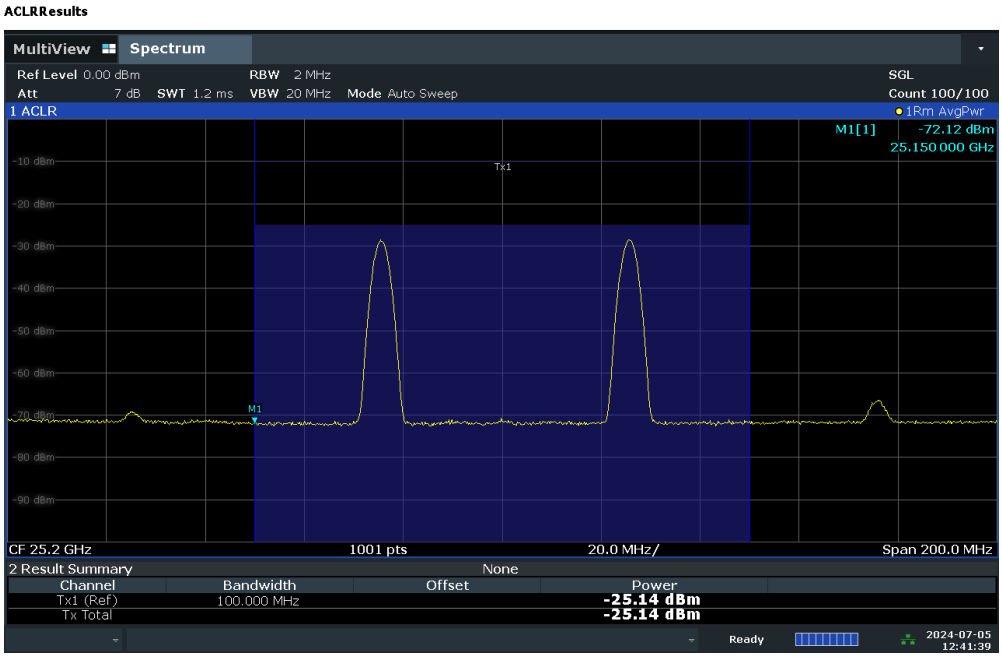
Band n258-R2

Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
50	1	Low	24775.08	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	106	257	1 / 12	**30.79**
		Mid	24999.96	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	112	258	1 / 16	**29.60**
				DFT-s-OFDM	QPSK	20	H	SISO	H	84	80	1 / 16	24.80
				CP-OFDM	QPSK	20	H	SISO	H	84	80	1 / 19	19.99
		High	25224.96	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	111	260	1 / 16	31.85
				DFT-s-OFDM	QPSK	4	V	SISO	H	87	74	1 / 16	23.66
				CP-OFDM	QPSK	36	H + V	MIMO	H	111	260	1 / 16	27.68
				CP-OFDM	QPSK	4	V	SISO	H	87	74	1 / 19	18.91
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	111	260	1 / 16	**31.93**
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	111	260	1 / 16	26.37
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	111	260	1 / 16	22.95
50+50	2	Low	24800.04	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	117	261	1 / 12	**24.68**
		Mid	24999.96	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	111	260	1 / 16	**23.65**
		High	25200.00	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	117	259	1 / 16	25.55
				CP-OFDM	QPSK	36	H + V	MIMO	H	117	259	1 / 16	25.53
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	117	259	1 / 16	**25.59**
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	117	259	1 / 16	25.54
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	117	259	1 / 16	23.53
50+50+50	3	Low	24825.00	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	102	246	1 / 19	**23.62**
		Mid	24999.96	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	112	258	1 / 12	**24.47**
		High	25175.04	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	117	260	1 / 16	24.66
				CP-OFDM	QPSK	36	H + V	MIMO	H	117	260	1 / 16	24.65
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	117	260	1 / 16	**24.85**
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	117	260	1 / 16	24.76
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	117	260	1 / 16	22.66
50+50+50+50	4	Low	24849.96	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	112	249	1 / 19	**21.47**
		Mid	24999.96	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	112	259	1 / 12	**24.69**
				CP-OFDM	QPSK	36	H + V	MIMO	H	112	259	1 / 12	24.40
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	112	259	1 / 12	24.59
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	112	259	1 / 12	24.54
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	112	259	1 / 12	22.29
		High	25150.08	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	97	264	1 / 16	**23.06**

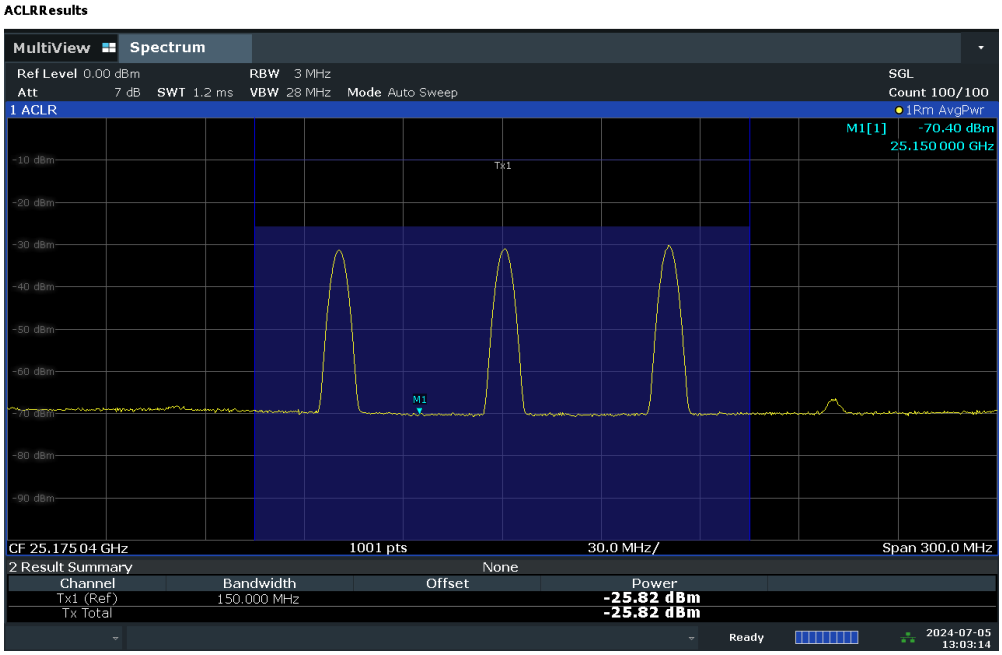
Table 7-10. Ant 1 EIRP Data (Band n258-R2 - 50MHz)



Plot 7-133. Ant 1 EIRP Plot (Band n258-R2 − 50MHz-1CC High Channel DFT-s-OFDM π/2 BPSK)

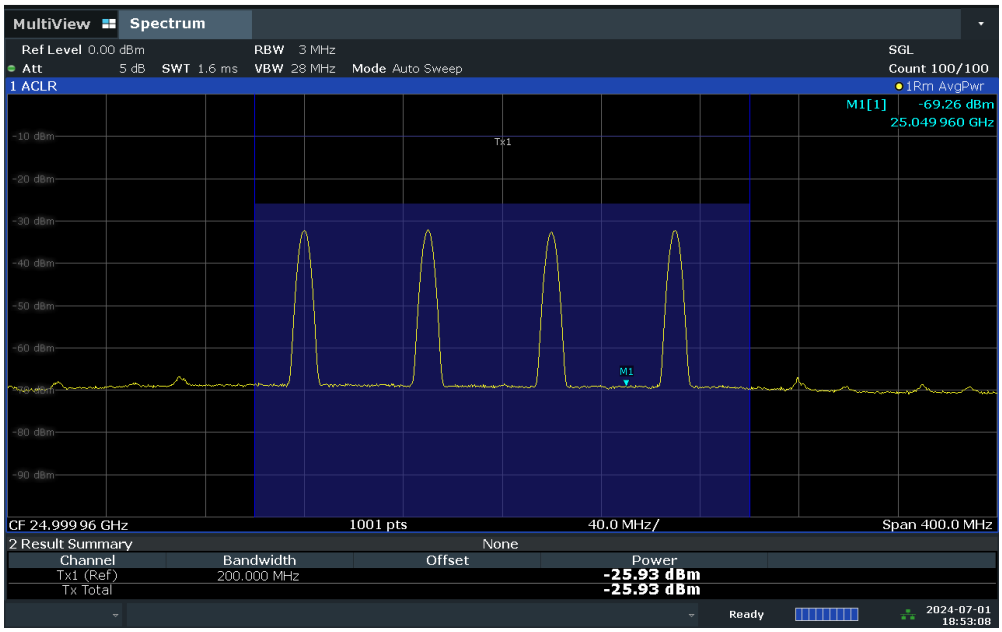


Plot 7-134. Ant 1 EIRP Plot (Band n258-R2 − 50MHz-2CC High Channel DFT-s-OFDM π/2 BPSK)



Plot 7-135. Ant 1 EIRP Plot (Band n258-R2 − 50MHz-3CC High Channel DFT-s-OFDM π/2 BPSK)

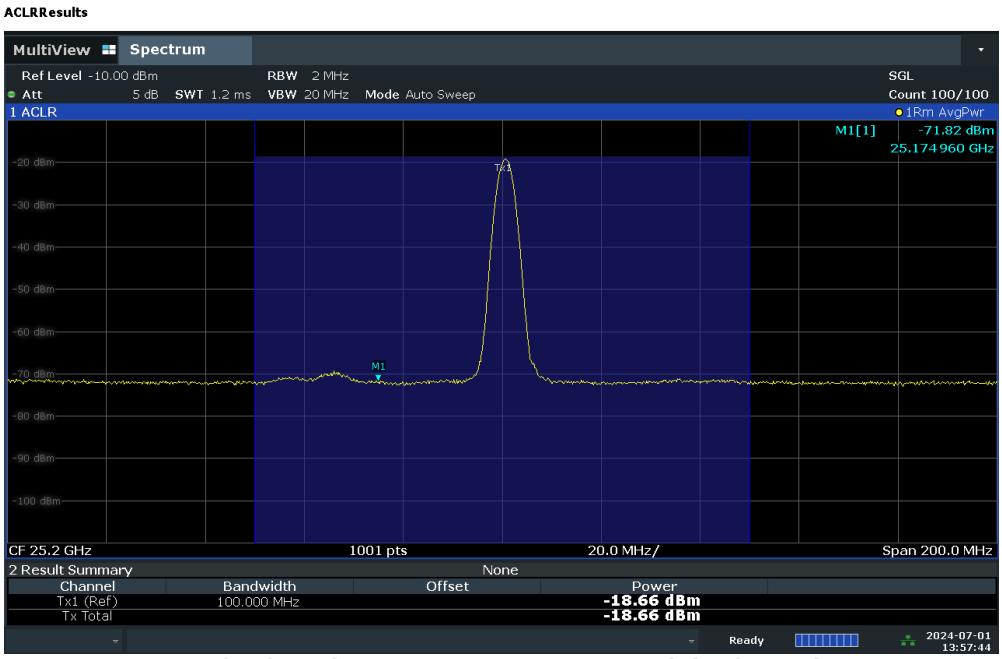
ACLRResults



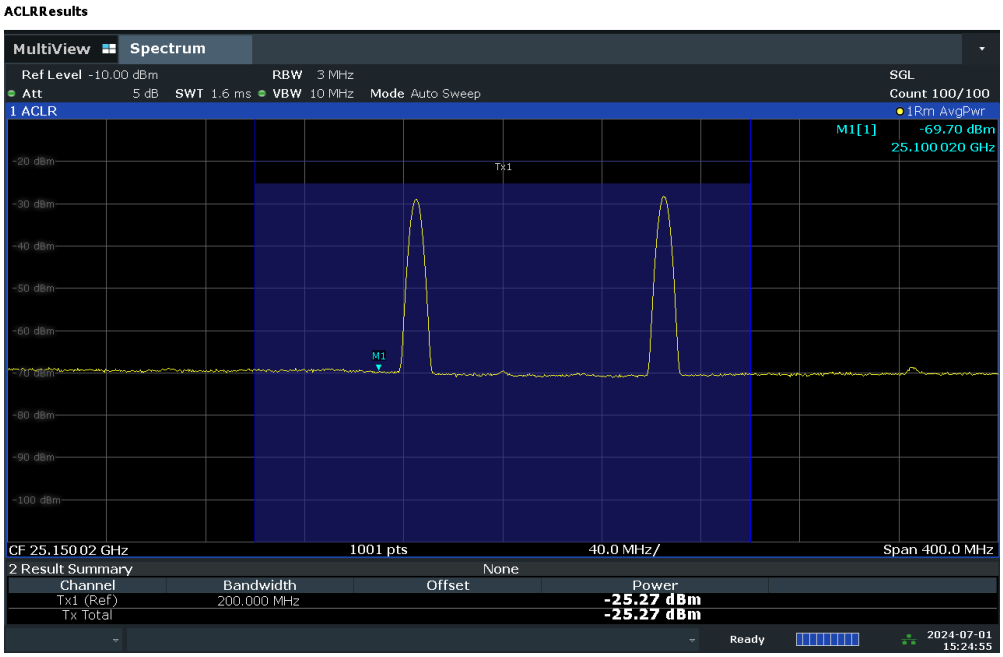
Plot 7-136. Ant 1 EIRP Plot (Band n258-R2 − 50MHz-4CC Mid Channel DFT-s-OFDM QPSK)

Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
100	1	Low	24800.04	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	113	259	1 / 42	**28.94**
		Mid	24999.96	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	112	258	1 / 42	**30.76**
		High	25200.00	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	112	260	1 / 33	**32.07**
				DFT-s-OFDM	QPSK	20	H	SISO	H	84	80	1 / 23	24.54
				DFT-s-OFDM	QPSK	4	V	SISO	H	87	74	1 / 33	23.56
				CP-OFDM	QPSK	36	H + V	MIMO	H	112	260	1 / 33	28.72
				CP-OFDM	QPSK	20	H	SISO	H	84	80	1 / 33	21.18
				CP-OFDM	QPSK	4	V	SISO	H	87	74	1 / 33	20.05
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	112	260	1 / 33	32.03
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	112	260	1 / 33	28.95
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	112	260	1 / 33	27.31
100+100	2	Low	24850.02	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	112	259	64 / 0	**24.33**
		Mid	25000.02	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	111	260	64 / 0	**23.11**
		High	25150.02	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	112	260	1 / 42	**25.40**
				CP-OFDM	QPSK	36	H + V	MIMO	H	112	260	1 / 42	25.34
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	112	260	1 / 42	25.35
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	112	260	1 / 42	25.11
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	112	260	1 / 42	19.36
100+100+100	3	Low	24900.00	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	111	260	64 / 0	**23.47**
		High	25100.04	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	111	259	1 / 42	**24.91**
				CP-OFDM	QPSK	36	H + V	MIMO	H	111	259	1 / 42	24.88
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	111	259	1 / 42	24.87
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	111	259	1 / 42	24.35
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	111	259	1 / 42	22.72
100+100+100+100	4	Low	24949.98	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	111	260	64 / 0	23.84
				CP-OFDM	QPSK	36	H + V	MIMO	H	111	260	66 / 0	23.67
				DFT-s-OFDM	π/2 BPSK	36	H + V	2Tx	H	111	260	64 / 0	**23.94**
				DFT-s-OFDM	16QAM	36	H + V	2Tx	H	111	260	64 / 0	22.56
				DFT-s-OFDM	64QAM	36	H + V	2Tx	H	111	260	64 / 0	20.07
		High	25050.06	DFT-s-OFDM	QPSK	36	H + V	2Tx	H	111	260	64 / 0	**23.79**

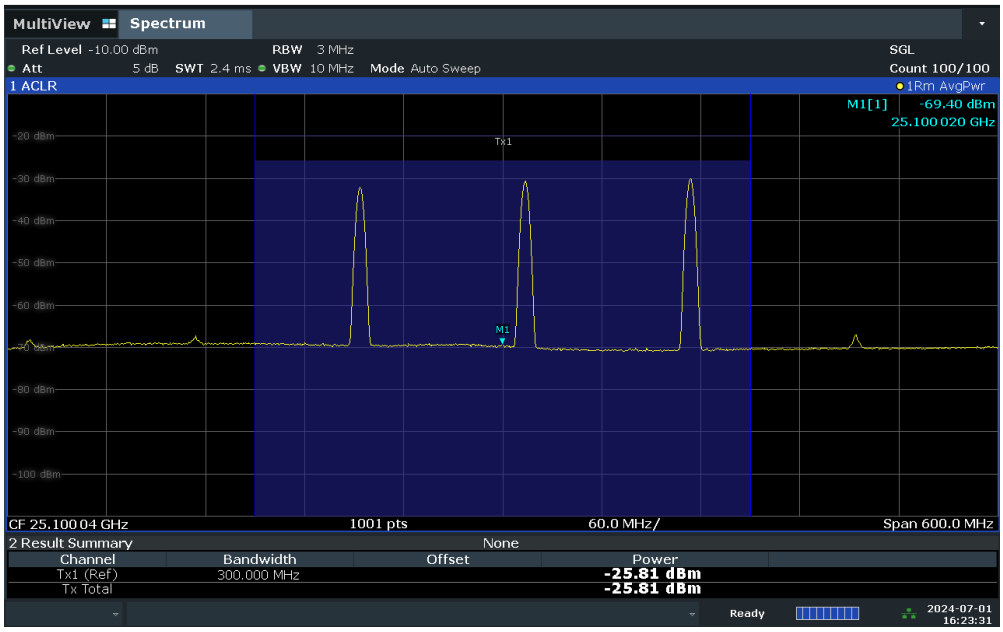
Table 7-11. Ant 1 EIRP Data (Band n258-R2 - 100MHz)



Plot 7-137. Ant 1 EIRP Plot (Band n258-R2 − 100MHz-1CC High Channel DFT-s-OFDM QPSK)

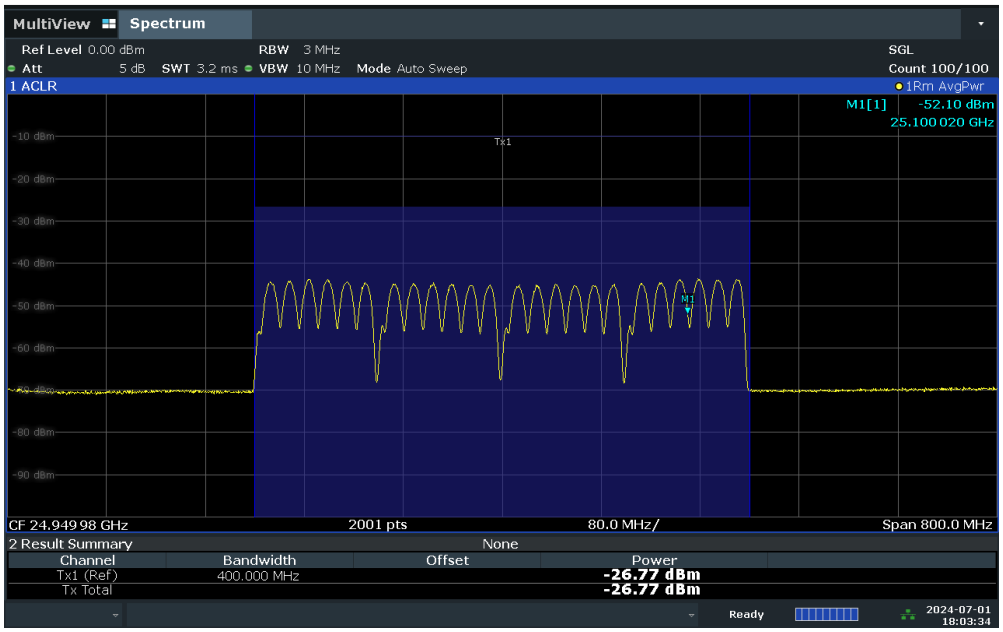


Plot 7-138.Ant 1 EIRP Plot (Band n258-R2 − 100MHz-2CC High Channel DFT-s-OFDM QPSK)



Plot 7-139. Ant 1 EIRP Plot (Band n258-R2 − 100MHz-3CC High Channel DFT-s-OFDM QPSK)

ACLRResults

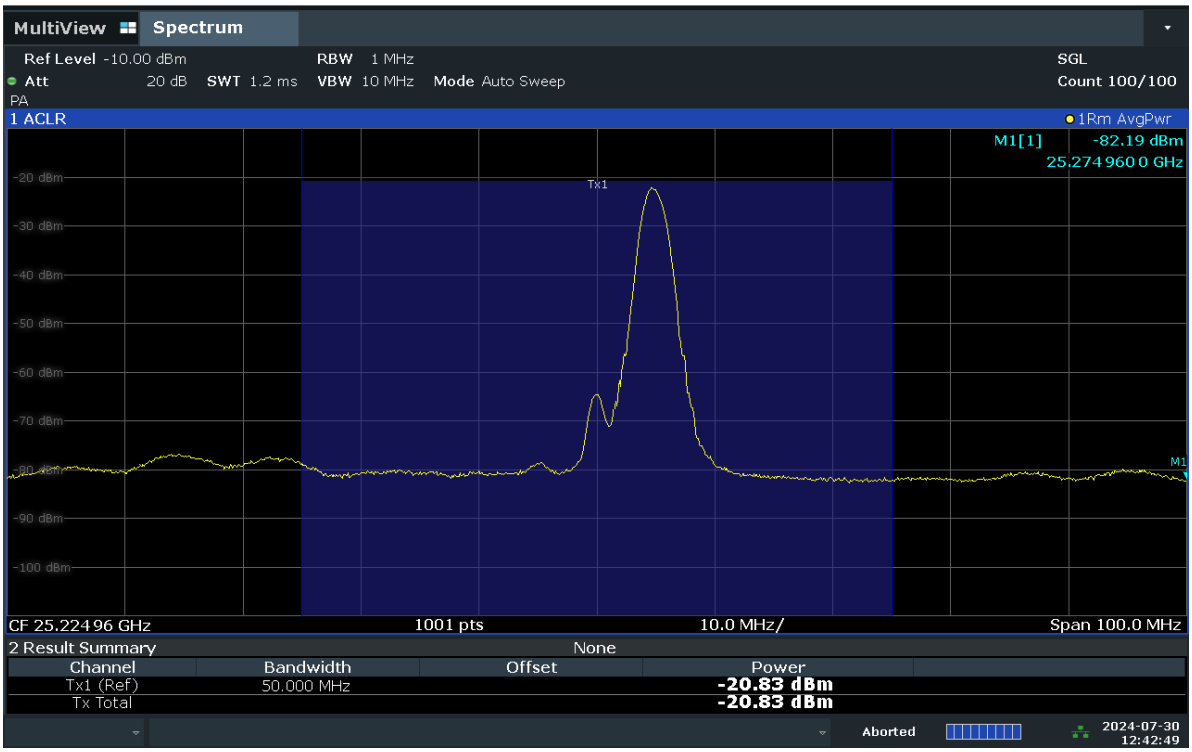


Plot 7-140. Ant 1 EIRP Plot (Band n258-R2 − 100MHz-4CC Low Channel DFT-s-OFDM π/2 BPSK)

Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
50	1	Low	24775.08	DFT-s-OFDM	QPSK	38	H + V	2Tx	V	244	68	1 / 16	**25.26**
				DFT-s-OFDM	QPSK	1	V	SISO	V	291	105	1 / 16	**22.69**
		Mid	24999.96	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	267	264	1 / 16	**27.56**
				DFT-s-OFDM	QPSK	24	H	SISO	H	295	113	1 / 16	24.52
		High	25224.96	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	261	253	1 / 19	29.68
				DFT-s-OFDM	QPSK	1	V	SISO	V	292	100	1 / 19	23.96
				CP-OFDM	QPSK	33	H + V	MIMO	H	261	253	1 / 19	26.54
				DFT-s-OFDM	π/2 BPSK	33	H + V	2Tx	H	261	253	1 / 19	**29.91**
				DFT-s-OFDM	16QAM	33	H + V	2Tx	H	261	253	1 / 19	24.01
				DFT-s-OFDM	64QAM	33	H + V	2Tx	H	261	253	1 / 19	24.12
50+50	2	Low	24800.04	DFT-s-OFDM	QPSK	38	H + V	2Tx	V	246	73	1 / 16	**19.40**
		Mid	24999.96	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	261	254	1 / 12	**18.79**
		High	25200.00	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	88	105	1 / 19	**25.08**
				CP-OFDM	QPSK	33	H + V	MIMO	H	88	105	1 / 19	17.74
				DFT-s-OFDM	π/2 BPSK	33	H + V	2Tx	H	88	105	1 / 19	18.22
				DFT-s-OFDM	16QAM	33	H + V	2Tx	H	88	105	1 / 19	17.77
				DFT-s-OFDM	64QAM	33	H + V	2Tx	H	88	105	1 / 19	17.50
50+50+50	3	Low	24825.00	DFT-s-OFDM	QPSK	38	H + V	2Tx	V	251	70	1 / 16	**18.70**
		Mid	24999.96	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	260	255	1 / 12	**18.22**
		High	25175.04	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	84	103	1 / 19	**25.03**
				CP-OFDM	QPSK	33	H + V	MIMO	H	84	103	1 / 19	17.13
				DFT-s-OFDM	π/2 BPSK	33	H + V	2Tx	H	84	103	1 / 19	17.10
				DFT-s-OFDM	16QAM	33	H + V	2Tx	H	84	103	1 / 19	17.17
				DFT-s-OFDM	64QAM	33	H + V	2Tx	H	84	103	1 / 19	14.71
50+50+50+50	4	Low	24849.96	DFT-s-OFDM	QPSK	38	H + V	2Tx	V	244	68	1 / 16	**18.73**
		Mid	24999.96	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	259	256	1 / 12	**18.27**
		High	25150.08	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	88	106	1 / 19	**24.90**
				CP-OFDM	QPSK	33	H + V	MIMO	H	88	106	1 / 19	17.00
				DFT-s-OFDM	π/2 BPSK	33	H + V	2Tx	H	88	106	1 / 19	17.03
				DFT-s-OFDM	16QAM	33	H + V	2Tx	H	88	106	1 / 19	17.18
				DFT-s-OFDM	64QAM	33	H + V	2Tx	H	88	106	1 / 19	14.62

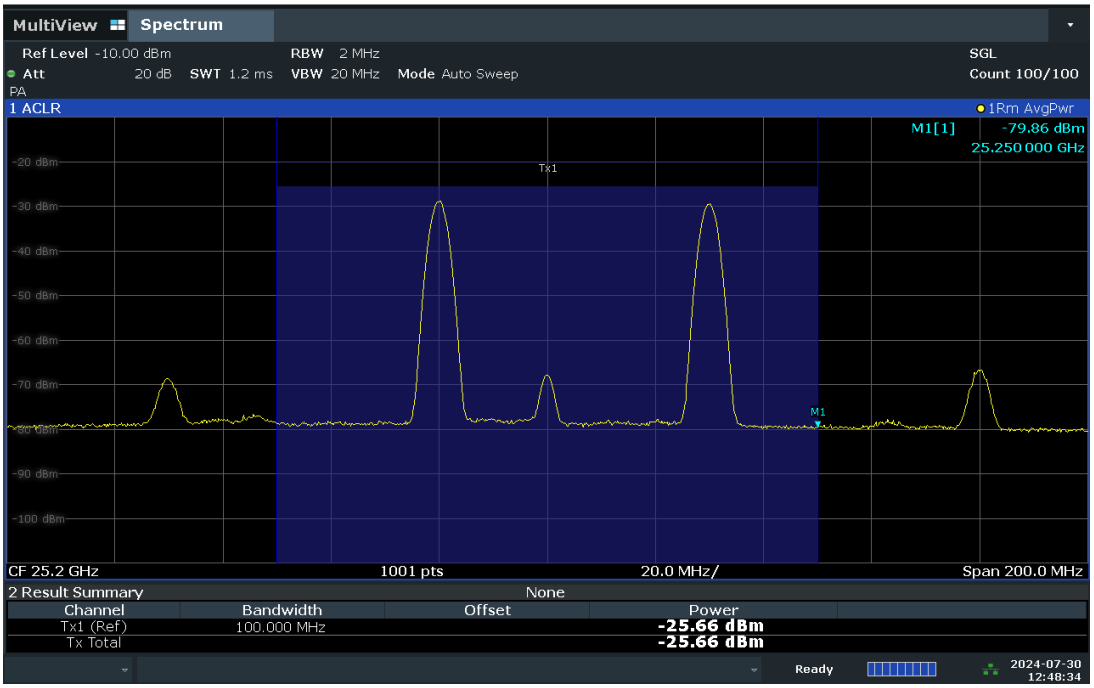
Table 7-12. Ant 2 EIRP Data (Band n258-R2 - 50MHz)

ACLR Results



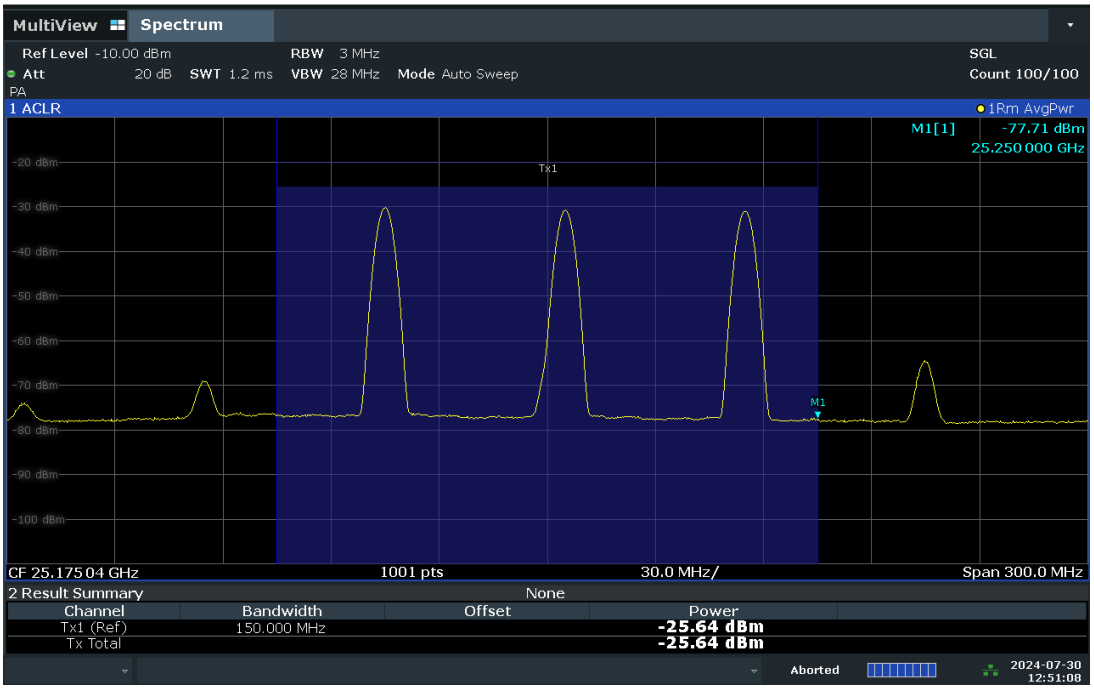
Plot 7-141. Ant 2 EIRP Plot (Band n258-R2 − 50MHz-1CC High Channel DFT-s-OFDM π/2 BPSK)

ACLRResults



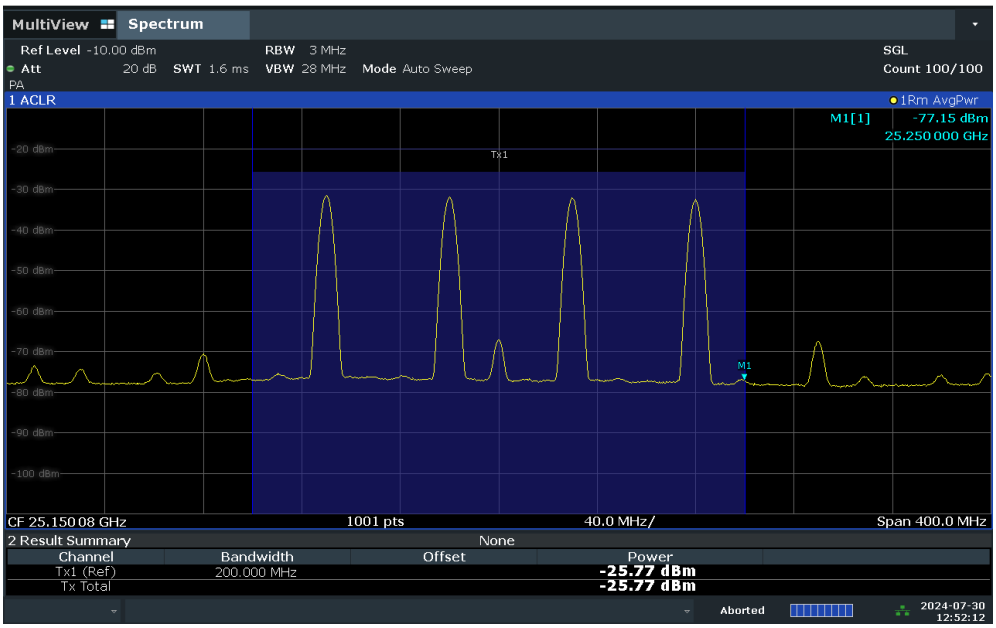
Plot 7-142. Ant 2 EIRP Plot (Band n258-R2 − 50MHz-2CC High Channel DFT-s-OFDM QPSK)

ACLRResults



Plot 7-143. Ant 2 EIRP Plot (Band n258-R2 − 50MHz-3CC High Channel DFT-s-OFDM QPSK)

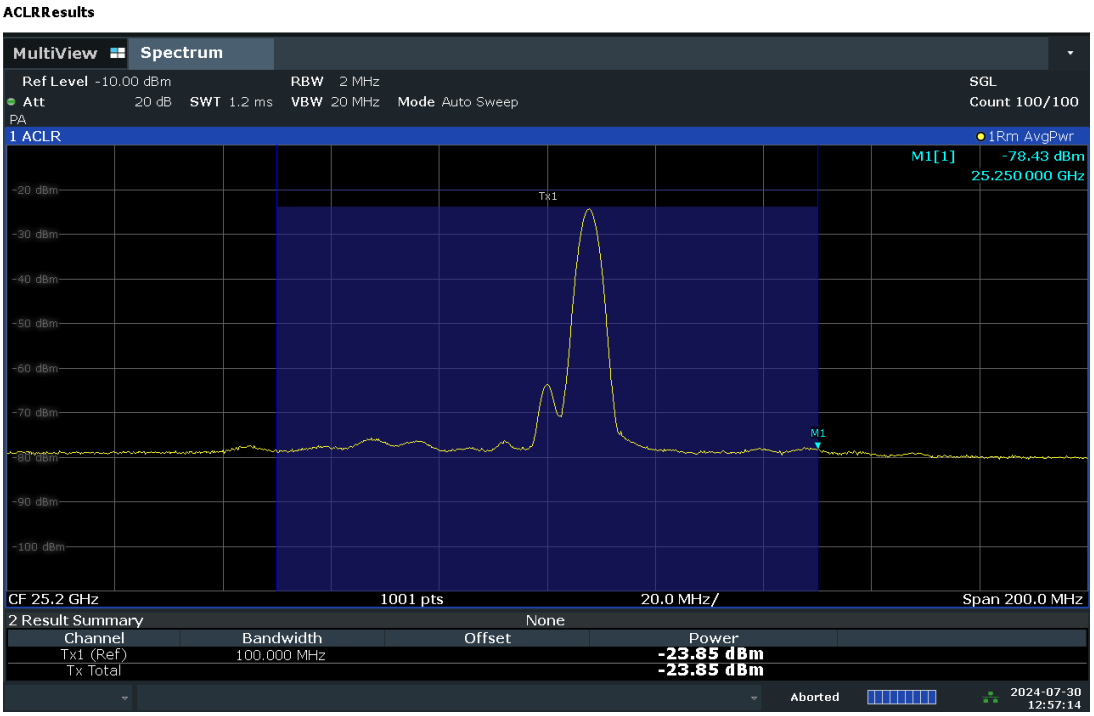
ACLRResults



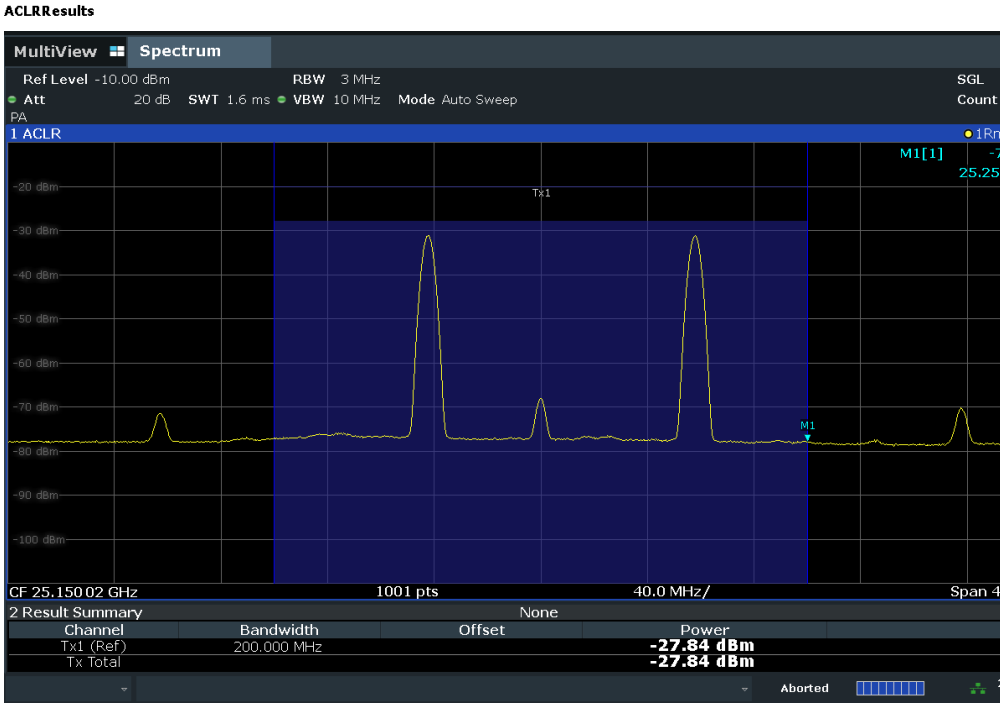
Plot 7-144. Ant 2 EIRP Plot (Band n258-R2 − 50MHz-4CC High Channel DFT-s-OFDM QPSK)

Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
100	1	Low	24800.04	DFT-s-OFDM	QPSK	38	H + V	2Tx	V	249	70	1 / 33	**24.47**
		Mid	24999.96	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	265	263	1 / 42	**26.70**
		High	25200.00	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	87	102	1 / 38	**26.89**
				DFT-s-OFDM	QPSK	24	H	SISO	H	256	243	1 / 38	25.03
				DFT-s-OFDM	QPSK	1	V	SISO	V	256	243	1 / 38	24.33
				CP-OFDM	QPSK	33	H + V	MIMO	H	87	102	1 / 26	20.68
				CP-OFDM	QPSK	24	H	SISO	H	256	243	1 / 38	21.92
				CP-OFDM	QPSK	1	V	SISO	V	256	243	1 / 38	21.57
				DFT-s-OFDM	π/2 BPSK	33	H + V	2Tx	H	87	102	1 / 26	23.90
				DFT-s-OFDM	16QAM	33	H + V	2Tx	H	87	102	1 / 26	21.09
				DFT-s-OFDM	64QAM	33	H + V	2Tx	H	87	102	1 / 26	17.75
100+100	2	Low	24850.02	DFT-s-OFDM	QPSK	33	H + V	2Tx	V	247	70	1 / 33	**17.92**
		Mid	25000.02	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	265	262	1 / 42	**19.42**
		High	25150.02	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	86	105	1 / 38	**22.83**
				CP-OFDM	QPSK	33	H + V	MIMO	H	86	105	1 / 26	17.34
				DFT-s-OFDM	π/2 BPSK	33	H + V	2Tx	H	86	105	1 / 26	17.37
				DFT-s-OFDM	16QAM	33	H + V	2Tx	H	86	105	1 / 38	17.41
				DFT-s-OFDM	64QAM	33	H + V	2Tx	H	86	105	1 / 38	15.45
100+100+100	3	Low	24900.00	DFT-s-OFDM	QPSK	33	H + V	2Tx	V	249	73	1 / 33	**17.63**
		High	25100.04	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	86	105	1 / 38	**24.01**
				CP-OFDM	QPSK	33	H + V	MIMO	H	86	105	1 / 38	17.02
				DFT-s-OFDM	π/2 BPSK	33	H + V	2Tx	H	86	105	1 / 38	17.03
				DFT-s-OFDM	16QAM	33	H + V	2Tx	H	86	105	1 / 38	17.12
				DFT-s-OFDM	64QAM	33	H + V	2Tx	H	86	105	1 / 38	14.91
100+100+100+100	4	Low	24949.98	DFT-s-OFDM	QPSK	33	H + V	2Tx	V	253	76	1 / 33	**17.81**
		High	25050.06	DFT-s-OFDM	QPSK	33	H + V	2Tx	H	86	105	1 / 38	**24.20**
				CP-OFDM	QPSK	33	H + V	MIMO	H	86	105	1 / 38	16.83
				DFT-s-OFDM	π/2 BPSK	33	H + V	2Tx	H	86	105	1 / 38	16.96
				DFT-s-OFDM	16QAM	33	H + V	2Tx	H	86	105	1 / 38	17.07
				DFT-s-OFDM	64QAM	33	H + V	2Tx	H	86	105	1 / 38	14.93

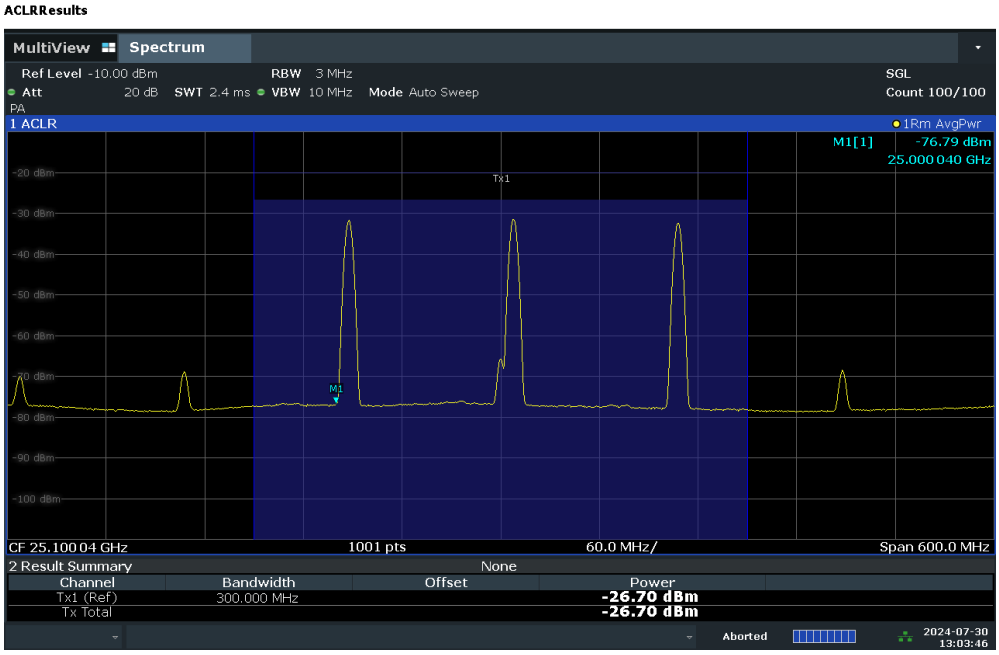
Table 7-13. Ant 2 EIRP Data (Band n258-R2 - 100MHz)



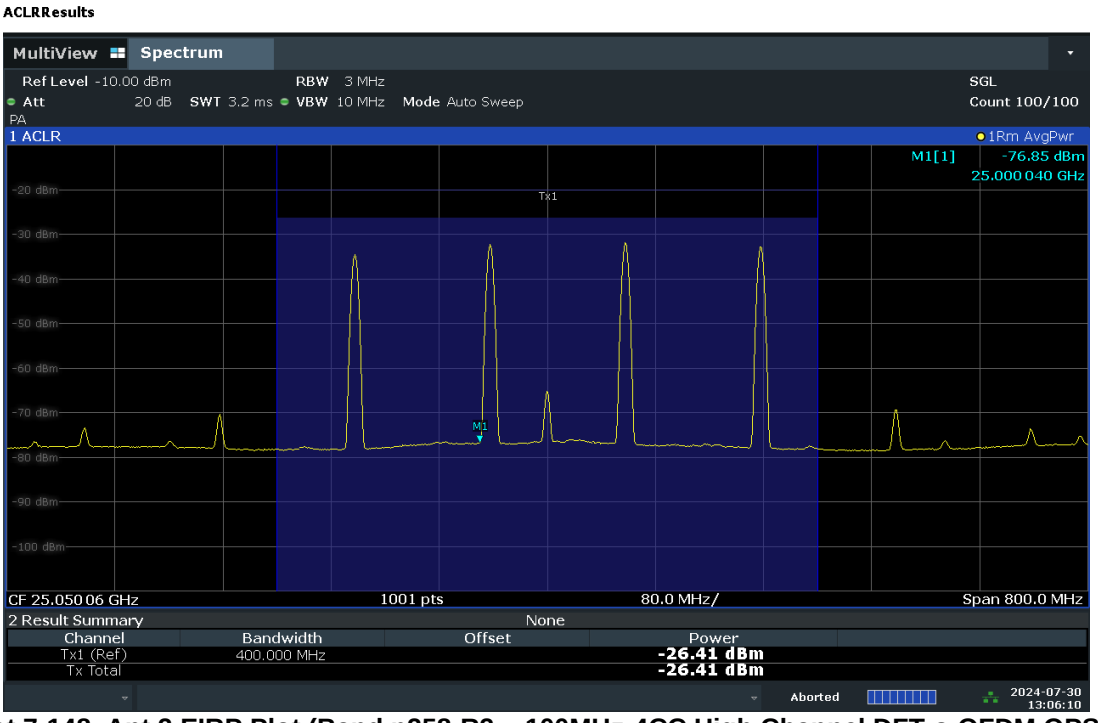
Plot 7-145. Ant 2 EIRP Plot (Band n258-R2 − 100MHz-1CC High Channel DFT-s-OFDM QPSK)



Plot 7-146.Ant 2 EIRP Plot (Band n258-R2 − 100MHz-2CC High Channel DFT-s-OFDM QPSK)



Plot 7-147. Ant 2 EIRP Plot (Band n258-R2 − 100MHz-3CC High Channel DFT-s-OFDM QPSK)

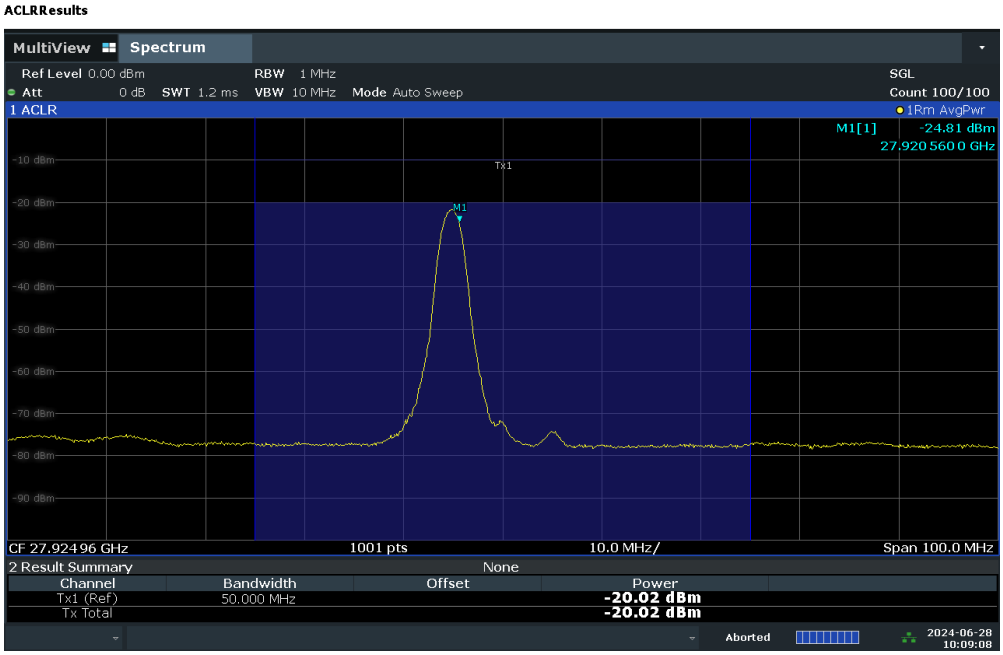


Plot 7-148. Ant 2 EIRP Plot (Band n258-R2 − 100MHz-4CC High Channel DFT-s-OFDM QPSK)

Band n261

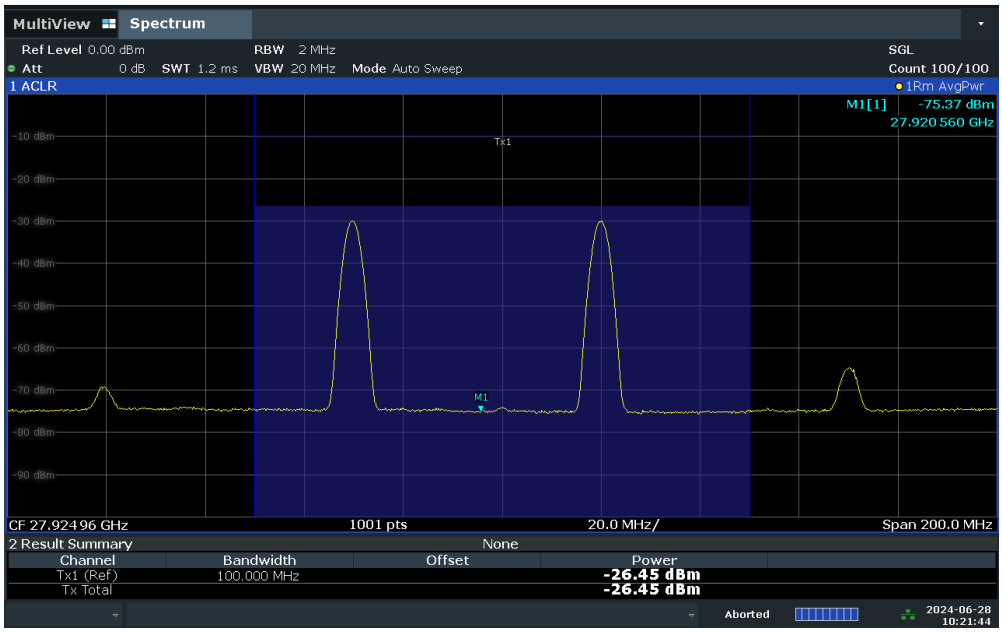
Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
50	1	Low	27525.00	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	86	73	1 / 19	**30.23**
				DFT-s-OFDM	QPSK	18	H	SISO	H	71	281	1 / 19	**25.84**
				DFT-s-OFDM	QPSK	2	V	SISO	H	90	78	1 / 19	25.77
				CP-OFDM	QPSK	18	H	SISO	H	71	281	1 / 19	23.27
				CP-OFDM	QPSK	2	V	SISO	H	90	78	1 / 19	22.31
		Mid	27924.96	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	86	73	1 / 12	**31.53**
				CP-OFDM	QPSK	34	H + V	MIMO	H	86	73	1 / 12	31.23
				DFT-s-OFDM	π/2 BPSK	34	H + V	2Tx	H	86	73	1 / 12	31.45
				DFT-s-OFDM	16QAM	34	H + V	2Tx	H	86	73	1 / 12	26.34
				DFT-s-OFDM	64QAM	34	H + V	2Tx	H	86	73	1 / 12	24.57
		High	28324.92	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	82	73	1 / 12	**31.08**
50+50	2	Low	27549.96	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	90	77	1 / 19	**23.67**
		Mid	27924.96	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	86	73	1 / 12	25.05
				CP-OFDM	QPSK	34	H + V	MIMO	H	86	73	1 / 12	25.00
				DFT-s-OFDM	π/2 BPSK	34	H + V	2Tx	H	86	73	1 / 12	**25.10**
				DFT-s-OFDM	16QAM	34	H + V	2Tx	H	86	73	1 / 12	24.54
				DFT-s-OFDM	64QAM	34	H + V	2Tx	H	86	73	1 / 12	22.00
		High	28299.96	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	86	74	1 / 12	**24.67**
50+50+50	3	Low	27574.92	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	84	75	1 / 19	**24.23**
		Mid	27924.96	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	90	74	1 / 12	**24.29**
		High	28275.00	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	76	75	1 / 12	**25.06**
				DFT-s-OFDM	π/2 BPSK	34	H + V	2Tx	H	76	75	1 / 12	25.02
				DFT-s-OFDM	16QAM	34	H + V	2Tx	H	76	75	1 / 12	24.99
				DFT-s-OFDM	64QAM	34	H + V	2Tx	H	76	75	1 / 12	23.08
50+50+50+50	4	Low	27599.88	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	83	73	1 / 19	**24.04**
		Mid	27924.96	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	86	72	1 / 12	**24.15**
		High	28250.04	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	83	74	1 / 12	**25.29**
				CP-OFDM	QPSK	34	H + V	MIMO	H	83	74	1 / 12	25.19
				DFT-s-OFDM	π/2 BPSK	34	H + V	2Tx	H	83	74	1 / 12	25.26
				DFT-s-OFDM	16QAM	34	H + V	2Tx	H	83	74	1 / 12	25.05
				DFT-s-OFDM	64QAM	34	H + V	2Tx	H	83	74	1 / 12	22.92

Table 7-14. Ant-1 EIRP Data (Band n261 - 50MHz)



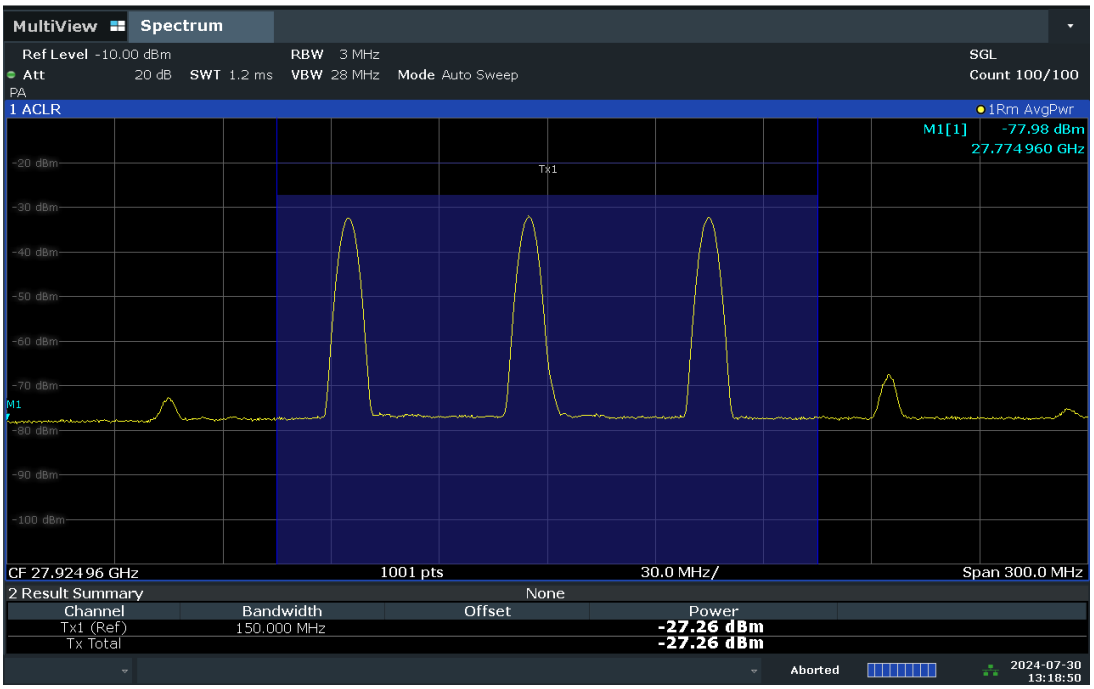
Plot 7-149.Ant 1 EIRP Plot (Band n261 − 50MHz-1CC Mid Channel DFT-s-OFDM QPSK)

ACLRResults



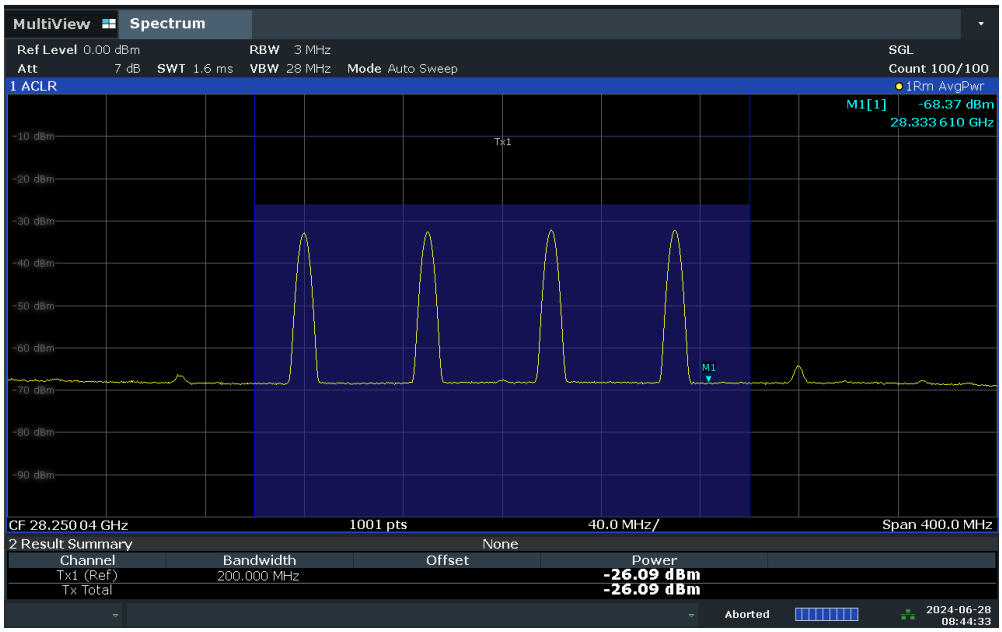
Plot 7-150.Ant 1 EIRP Plot (Band n261 − 50MHz-2CC Mid Channel DFT-s-OFDM π/2 BPSK)

ACLRResults



Plot 7-151.Ant 1 EIRP Plot (Band n261 − 50MHz-3CC Mid Channel DFT-s-OFDM π/2 BPSK)

ACLR Results

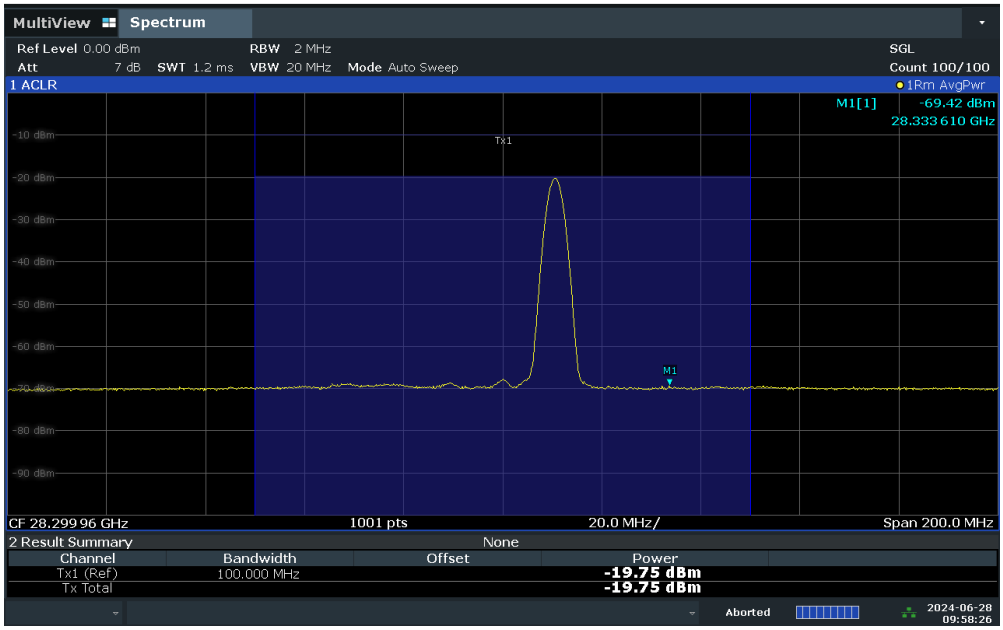


Plot 7-152.Ant 1 EIRP Plot (Band n261 − 50MHz-1CC High Channel DFT-s-OFDM QPSK)

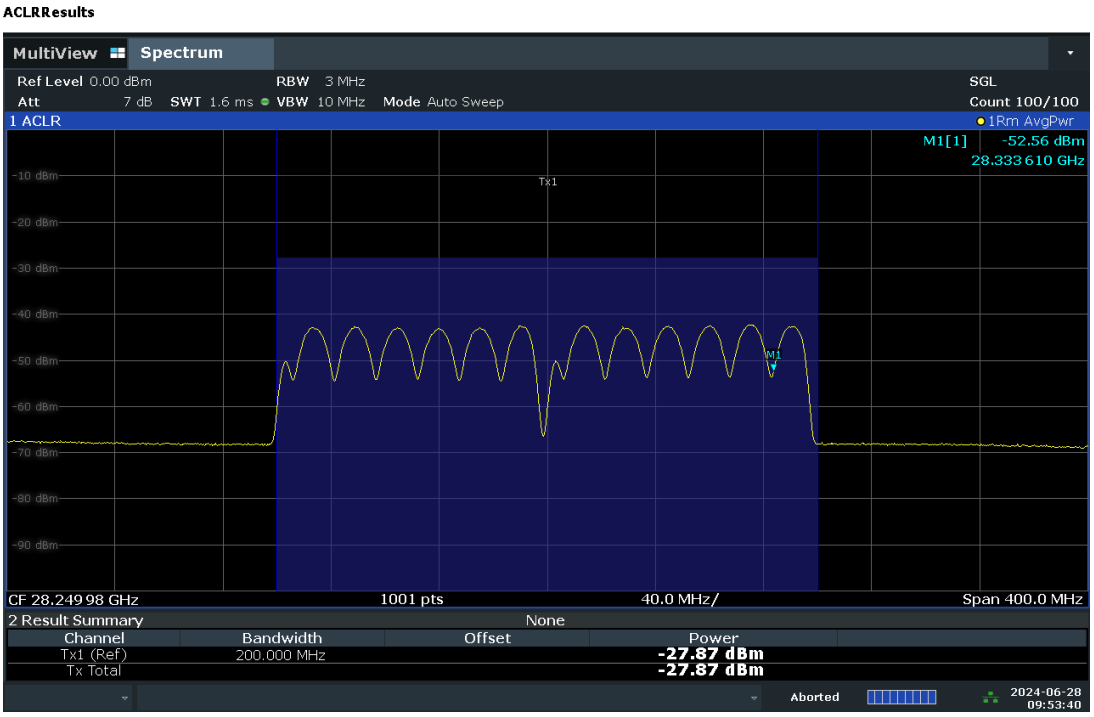
Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
100	1	Low	27550.08	DFT-s-OFDM	QPSK	18	H	SISO	H	71	281	1 / 25	25.87
				DFT-s-OFDM	QPSK	2	V	SISO	H	90	78	1 / 25	25.45
				CP-OFDM	QPSK	34	H + V	MIMO	H	82	73	66 / 0	24.30
				CP-OFDM	QPSK	18	H	SISO	H	71	281	1 / 25	22.44
				CP-OFDM	QPSK	2	V	SISO	H	90	78	1 / 25	22.77
				DFT-s-OFDM	π/2 BPSK	34	H + V	2Tx	H	82	73	1 / 25	**30.19**
		Mid	27924.96	DFT-s-OFDM	π/2 BPSK	34	H + V	2Tx	H	81	74	1 / 42	**29.32**
		High	28299.96	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	86	73	1 / 42	**31.85**
				CP-OFDM	QPSK	34	H + V	MIMO	H	86	73	1 / 42	31.51
				DFT-s-OFDM	π/2 BPSK	34	H + V	2Tx	H	86	73	1 / 42	31.81
				DFT-s-OFDM	16QAM	34	H + V	2Tx	H	86	73	1 / 42	28.49
				DFT-s-OFDM	64QAM	34	H + V	2Tx	H	86	73	1 / 42	25.91
100+100	2	Low	27600.06	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	85	74	64 / 0	**24.19**
				CP-OFDM	QPSK	34	H + V	MIMO	H	85	74	66 / 0	23.54
				DFT-s-OFDM	π/2 BPSK	34	H + V	2Tx	H	85	74	64 / 0	24.18
				DFT-s-OFDM	16QAM	34	H + V	2Tx	H	85	74	64 / 0	22.24
				DFT-s-OFDM	64QAM	34	H + V	2Tx	H	85	74	64 / 0	19.46
		Mid	27925.02	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	87	74	64 / 0	**23.90**
		High	28249.98	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	86	73	64 / 0	23.69
				DFT-s-OFDM	π/2 BPSK	34	H + V	2Tx	H	86	73	64 / 0	**23.71**
100+100+100	3	Low	27650.04	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	81	75	64 / 0	**22.95**
		Mid	27924.96	DFT-s-OFDM	π/2 BPSK	34	H + V	2Tx	H	82	73	64 / 0	**23.41**
				DFT-s-OFDM	16QAM	34	H + V	2Tx	H	82	73	64 / 0	22.10
				DFT-s-OFDM	64QAM	34	H + V	2Tx	H	82	73	64 / 0	19.61
		High	28200.00	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	80	74	64 / 0	**23.44**
				CP-OFDM	QPSK	34	H + V	MIMO	H	80	74	66 / 0	23.26
				DFT-s-OFDM	π/2 BPSK	34	H + V	2Tx	H	80	74	64 / 0	23.39
				DFT-s-OFDM	16QAM	34	H + V	2Tx	H	80	74	64 / 0	21.95
				DFT-s-OFDM	64QAM	34	H + V	2Tx	H	80	74	64 / 0	19.54
100+100+100+100	4	Low	27700.02	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	78	74	64 / 0	**23.24**
		Mid	27925.02	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	78	74	64 / 0	**23.50**
		High	28150.02	DFT-s-OFDM	QPSK	34	H + V	2Tx	H	78	75	64 / 0	23.48
				CP-OFDM	QPSK	34	H + V	MIMO	H	78	75	66 / 0	23.62
				DFT-s-OFDM	π/2 BPSK	34	H + V	2Tx	H	78	75	64 / 0	**23.66**
				DFT-s-OFDM	16QAM	34	H + V	2Tx	H	78	75	64 / 0	22.09
				DFT-s-OFDM	64QAM	34	H + V	2Tx	H	78	75	64 / 0	19.52

Table 7-15. Ant 1 EIRP Data (Band n261 - 100MHz)

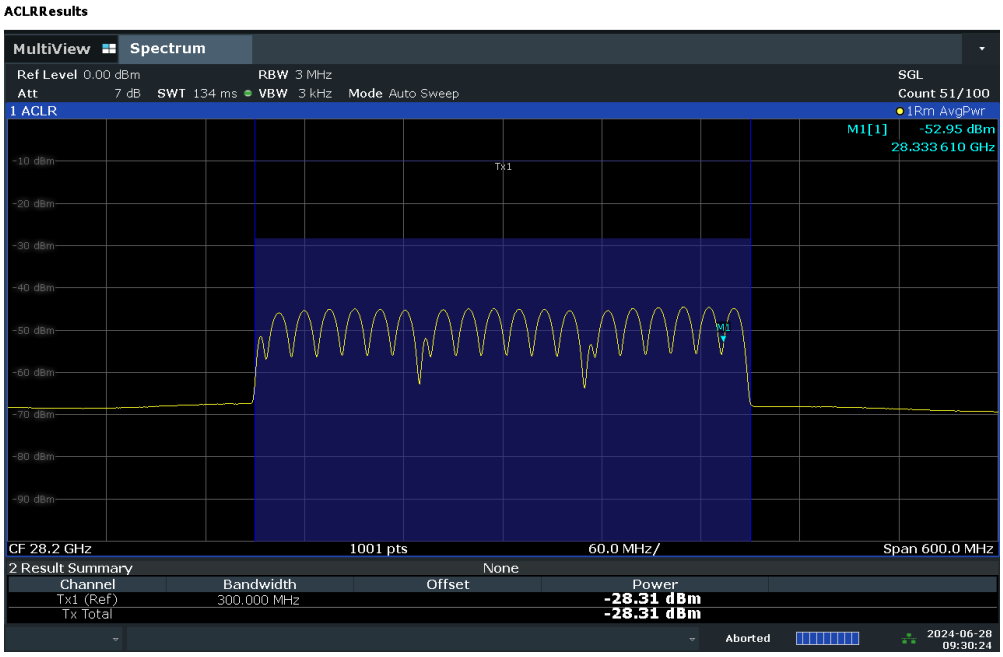
ACLRResults



Plot 7-153. Ant 1 EIRP Plot (Band n261 − 100MHz-1CC High Channel DFT-s-OFDM QPSK)

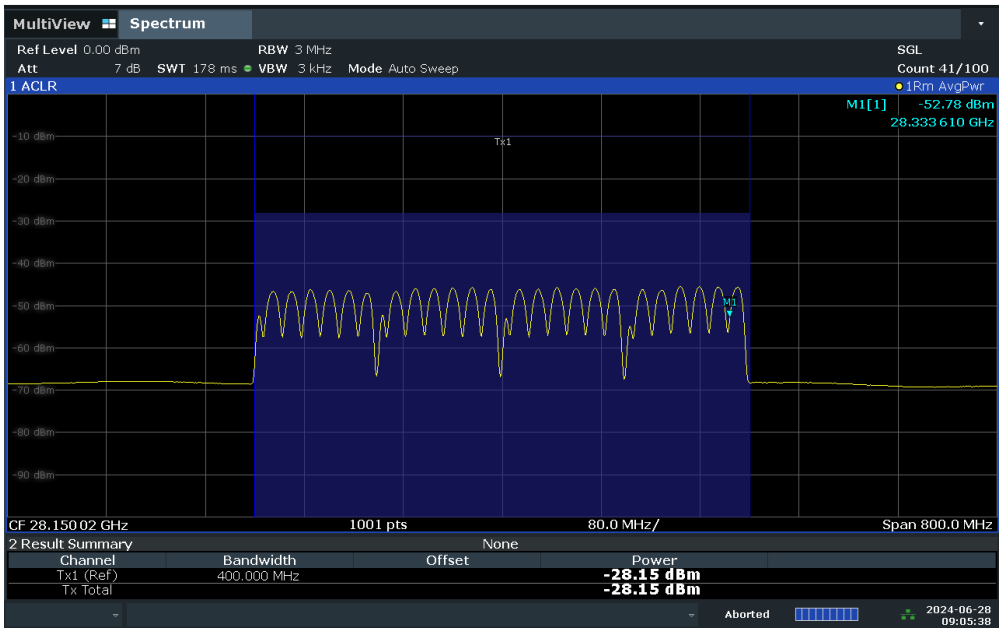


Plot 7-154.Ant 1 EIRP Plot (Band n261 − 100MHz-2CC High Channel DFT-s-OFDM QPSK)



Plot 7-155. Ant 1 EIRP Plot (Band n261 − 100MHz-3CC High Channel DFT-s-OFDM QPSK)

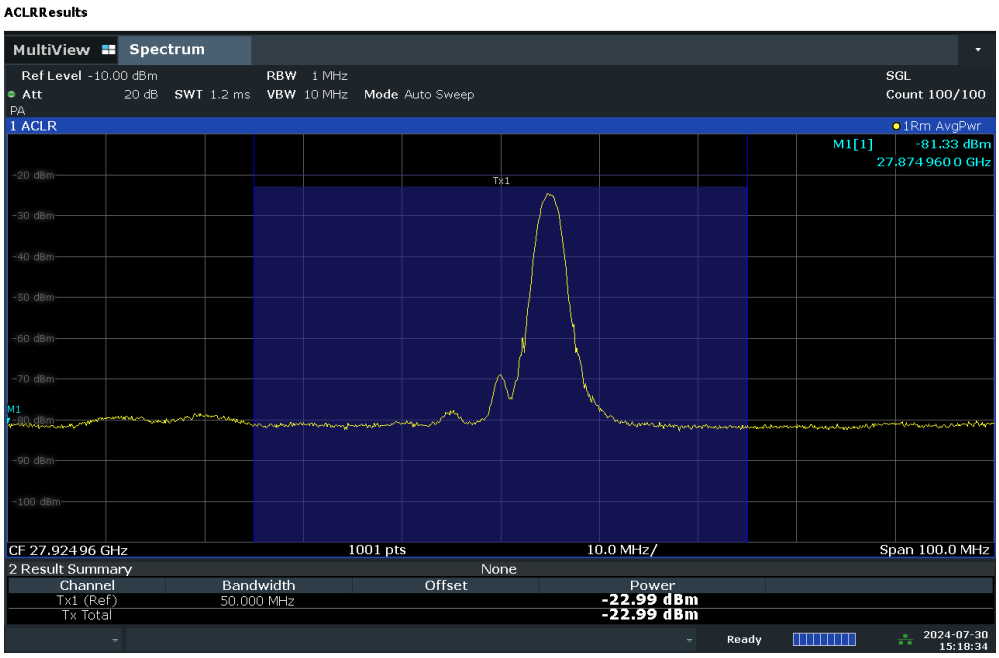
ACLRResults



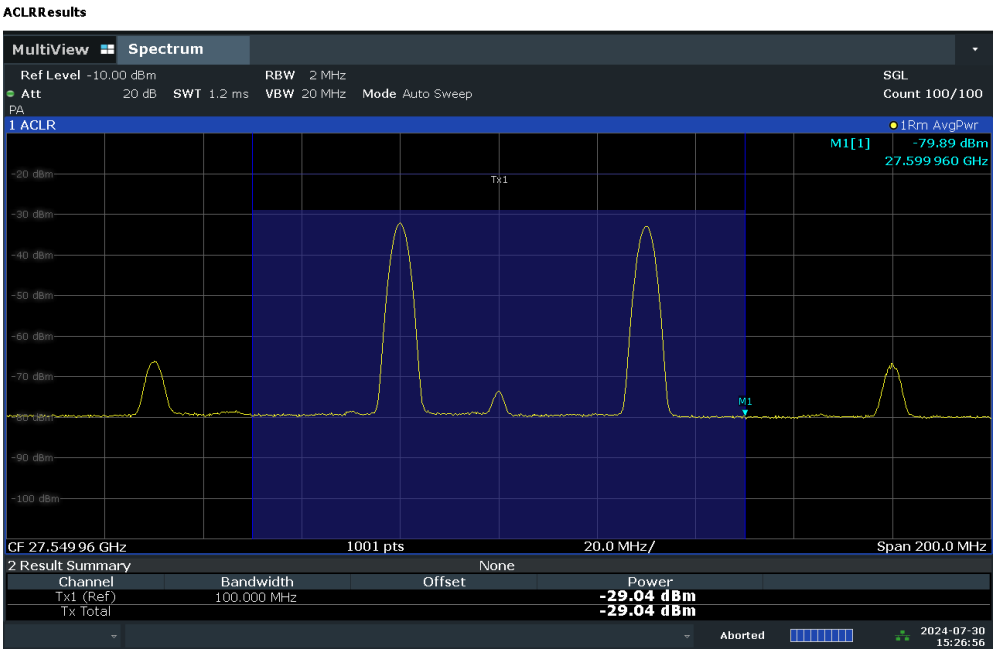
Plot 7-156.Ant 1 EIRP Plot (Band n261 − 100MHz-4CC High Channel DFT-s-OFDM π/2 BPSK)

Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
50	1	Low	27525.00	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	279	89	1 / 17	**28.16**
		Mid	27924.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	277	88	1 / 19	**28.56**
				DFT-s-OFDM	QPSK	16	H	SISO	V	287	81	1 / 19	22.31
				DFT-s-OFDM	QPSK	1	V	SISO	V	285	95	1 / 19	25.45
				CP-OFDM	QPSK	32	H + V	MIMO	V	277	88	1 / 19	25.77
				CP-OFDM	QPSK	16	H	SISO	V	287	81	1 / 19	21.44
				CP-OFDM	QPSK	1	V	SISO	V	285	95	1 / 19	24.33
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	V	277	88	1 / 19	28.44
				DFT-s-OFDM	16QAM	32	H + V	2Tx	V	277	88	1 / 19	24.45
				DFT-s-OFDM	64QAM	32	H + V	2Tx	V	277	88	1 / 19	21.94
		High	28324.92	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	278	86	1 / 19	**30.22**
50+50	2	Low	27549.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	283	91	1 / 17	22.32
				CP-OFDM	QPSK	32	H + V	MIMO	V	283	91	32 / 0	**23.04**
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	V	283	91	1 / 17	22.04
				DFT-s-OFDM	16QAM	32	H + V	2Tx	V	283	91	1 / 17	20.25
				DFT-s-OFDM	64QAM	32	H + V	2Tx	V	283	91	1 / 17	16.71
		Mid	27924.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	276	87	1 / 19	**22.64**
		High	28299.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	277	86	1 / 19	**22.41**
50+50+50	3	Low	27574.92	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	283	91	1 / 17	**22.05**
				CP-OFDM	QPSK	32	H + V	MIMO	V	283	91	1 / 16	19.02
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	V	283	91	1 / 16	18.88
				DFT-s-OFDM	16QAM	32	H + V	2Tx	V	283	91	1 / 16	19.02
				DFT-s-OFDM	64QAM	32	H + V	2Tx	V	283	91	1 / 16	16.55
		Mid	27924.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	276	86	1 / 19	**19.46**
		High	28275.00	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	277	86	1 / 19	**22.01**
50+50+50+50	4	Low	27599.88	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	282	90	32 /0	**22.81**
				CP-OFDM	QPSK	32	H + V	MIMO	V	282	90	1 / 17	20.87
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	V	282	90	1 / 17	21.84
				DFT-s-OFDM	16QAM	32	H + V	2Tx	V	282	90	1 / 17	21.74
				DFT-s-OFDM	64QAM	32	H + V	2Tx	V	282	90	1 / 17	19.80
		Mid	27924.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	277	87	1 / 19	**20.45**
		High	28250.04	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	278	86	1 / 19	**20.89**

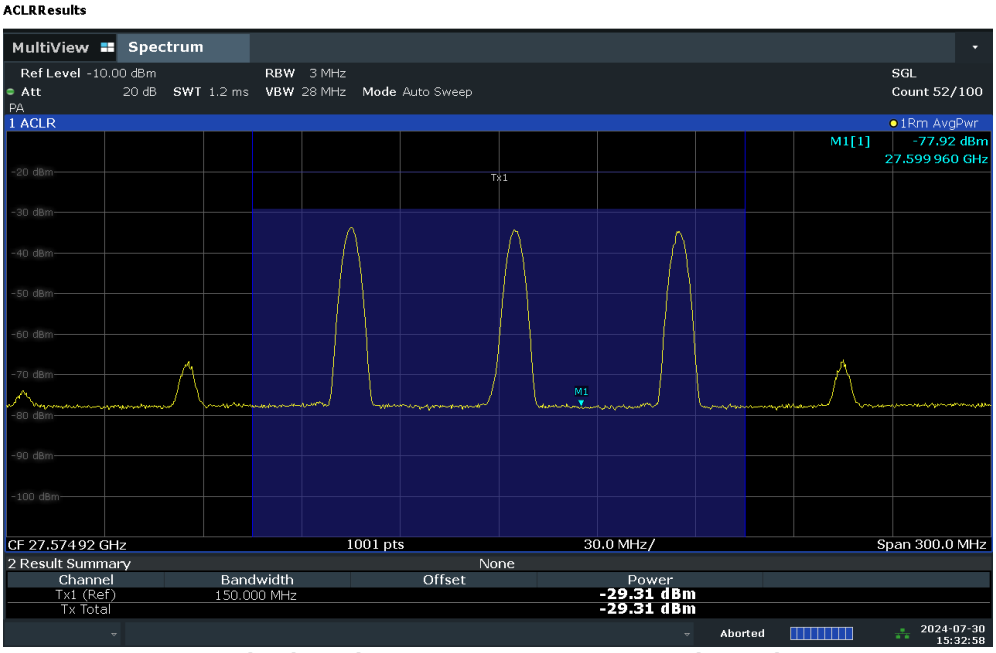
Table 7-16. Ant 2 EIRP Data (Band n261 - 50MHz)



Plot 7-157.Ant 2 EIRP Plot (Band n261 − 50MHz-1CC Mid Channel DFT-s-OFDM QPSK)

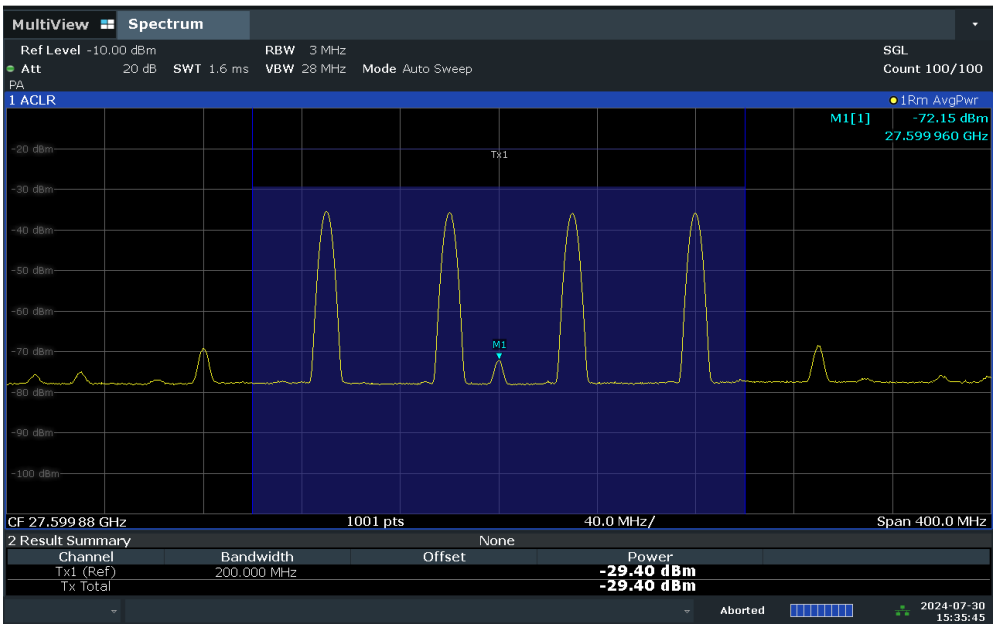


Plot 7-158.Ant 2 EIRP Plot (Band n261 − 50MHz-2CC Low Channel DFT-s-OFDM QPSK)



Plot 7-159.Ant 2 EIRP Plot (Band n261 − 50MHz-3CC Low Channel DFT-s-OFDM QPSK)

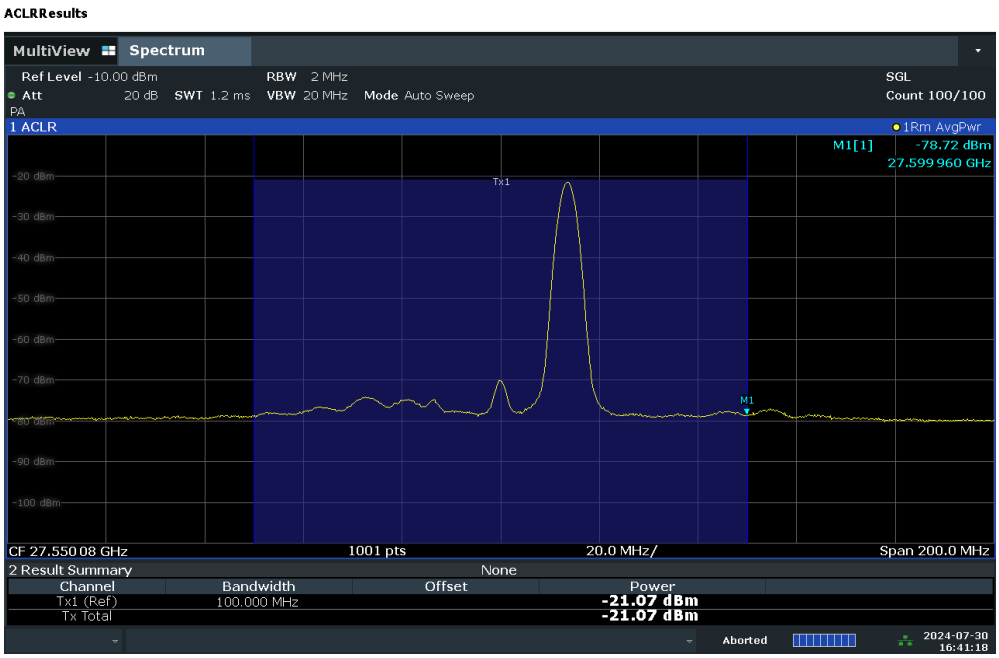
ACLRResults



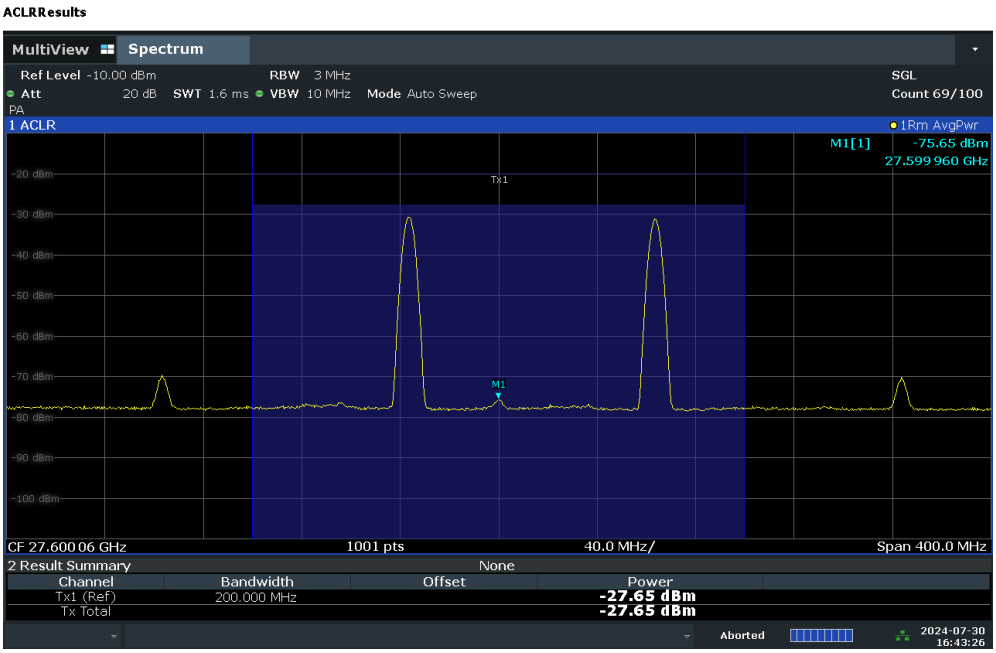
Plot 7-160.Ant 2 EIRP Plot (Band n261 − 50MHz-1CC Low Channel DFT-s-OFDM QPSK)

Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
100	1	Low	27550.08	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	283	92	1 / 42	**29.92**
				DFT-s-OFDM	QPSK	16	H	SISO	V	281	81	1 / 42	22.56
				DFT-s-OFDM	QPSK	1	V	SISO	V	287	93	1 / 42	24.86
				CP-OFDM	QPSK	32	H + V	MIMO	V	283	92	1 / 42	27.83
				CP-OFDM	QPSK	16	H	SISO	V	281	81	1 / 42	22.24
				CP-OFDM	QPSK	1	V	SISO	V	287	93	1 / 42	23.22
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	V	283	92	1 / 42	**30.28**
				DFT-s-OFDM	16QAM	32	H + V	2Tx	V	283	92	1 / 42	28.15
				DFT-s-OFDM	64QAM	32	H + V	2Tx	V	283	92	1 / 42	26.01
		Mid	27924.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	285	89	1 / 23	**27.53**
		High	28299.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	284	90	1 / 23	**27.56**
100+100	2	Low	27600.06	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	279	90	1 / 42	**23.66**
				CP-OFDM	QPSK	32	H + V	MIMO	V	279	90	1 / 33	23.15
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	V	279	90	1 / 42	23.15
				DFT-s-OFDM	16QAM	32	H + V	2Tx	V	279	90	1 / 42	23.38
				DFT-s-OFDM	64QAM	32	H + V	2Tx	V	279	90	1 / 33	21.78
		Mid	27925.02	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	276	90	64 / 0	**22.18**
		High	28249.98	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	276	85	64 / 0	**21.83**
100+100+100	3	Low	27650.04	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	277	87	1 / 42	**24.00**
				CP-OFDM	QPSK	32	H + V	MIMO	V	277	87	1 / 42	22.52
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	V	277	87	1 / 42	23.48
				DFT-s-OFDM	16QAM	32	H + V	2Tx	V	277	87	1 / 42	23.64
				DFT-s-OFDM	64QAM	32	H + V	2Tx	V	277	87	1 / 42	21.41
		Mid	27924.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	277	89	64 / 0	**21.75**
		High	28200.00	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	278	91	64 / 0	**21.62**
100+100+100+100	4	Low	27700.02	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	281	88	64 / 0	**21.84**
		Mid	27925.02	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	278	89	1 / 42	**22.91**
		High	28150.02	DFT-s-OFDM	QPSK	32	H + V	2Tx	V	277	89	1 / 23	**24.41**
				CP-OFDM	QPSK	32	H + V	MIMO	V	277	89	1 / 33	23.14
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	V	277	89	1 / 33	23.30
				DFT-s-OFDM	16QAM	32	H + V	2Tx	V	277	89	1 / 33	23.44
				DFT-s-OFDM	64QAM	32	H + V	2Tx	V	277	89	1 / 33	21.14

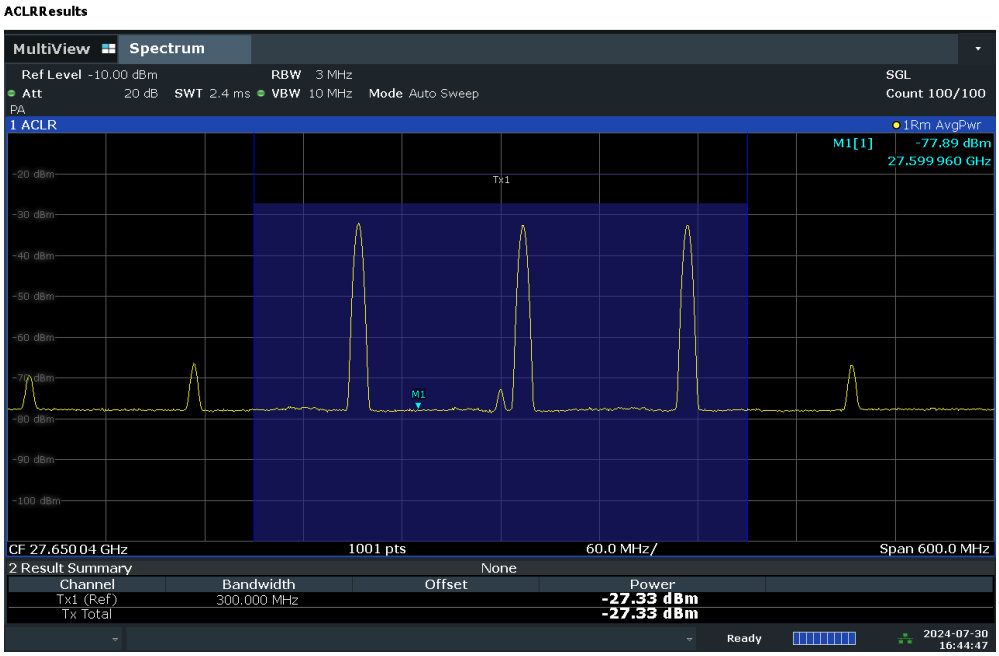
Table 7-17. Ant 2 EIRP Data (Band n261 - 100MHz)



Plot 7-161. Ant 2 EIRP Plot (Band n261 − 100MHz-1CC Low Channel DFT-s-OFDM QPSK)

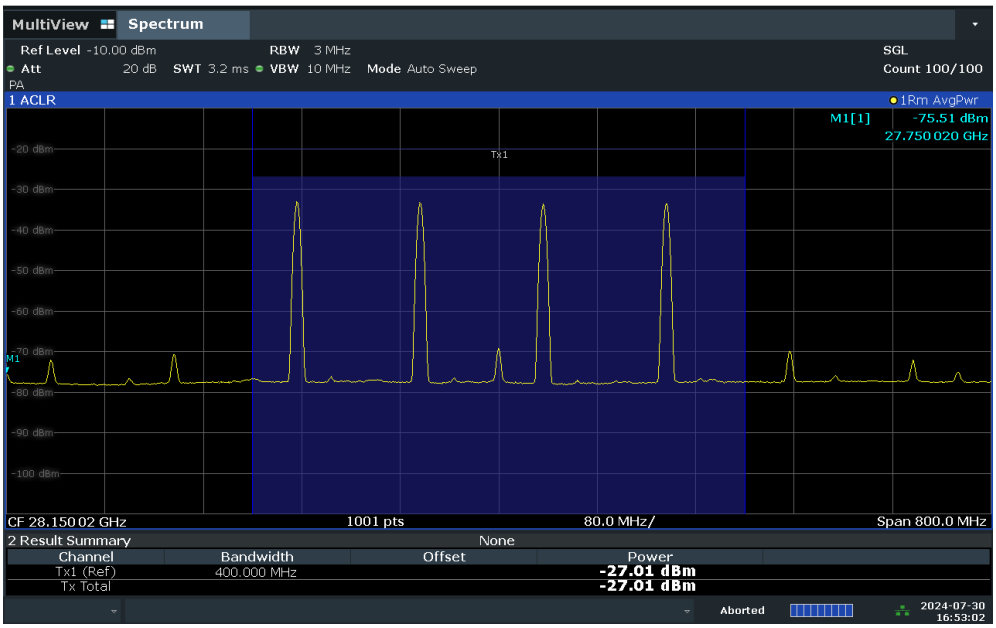


Plot 7-162.Ant 2 EIRP Plot (Band n261 − 100MHz-2CC Low Channel DFT-s-OFDM QPSK)



Plot 7-163. Ant 2 EIRP Plot (Band n261 − 100MHz-3CC Low Channel DFT-s-OFDM QPSK)

ACLRResults

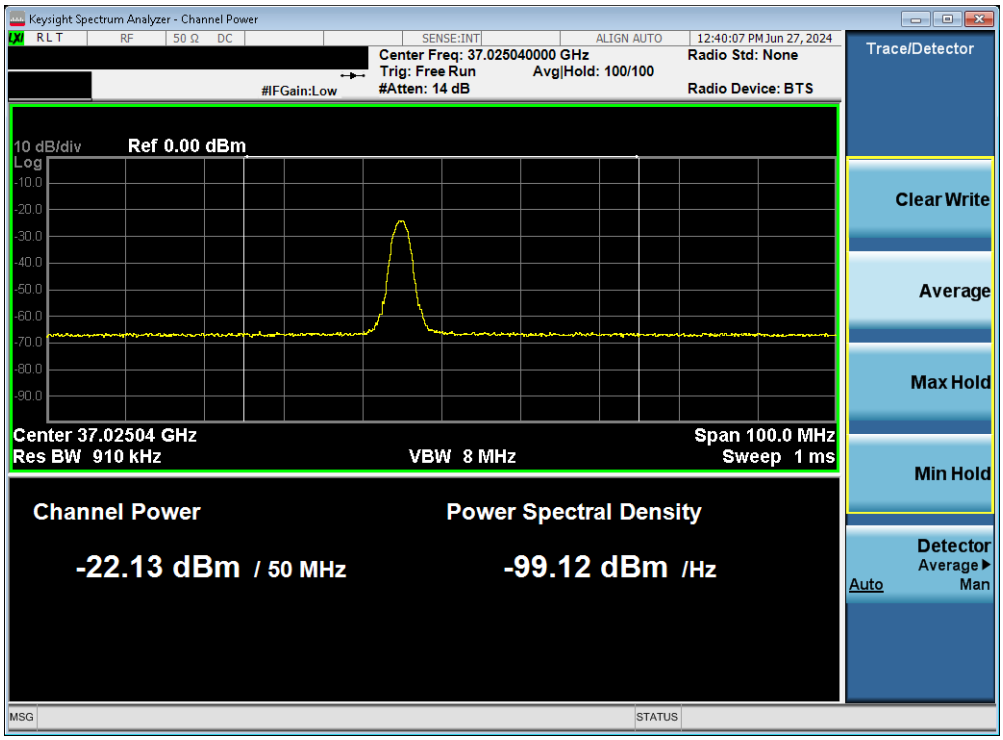


Plot 7-164.Ant 2 EIRP Plot (Band n261 − 100MHz-4CC High Channel DFT-s-OFDM QPSK)

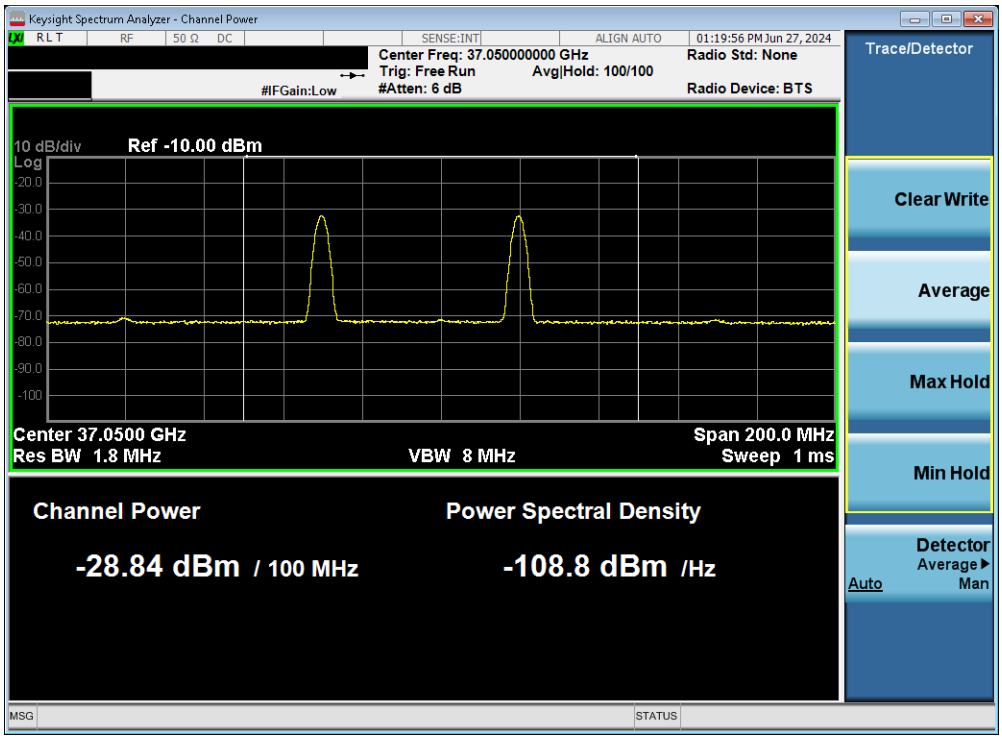
Band n260

Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
50	1	Low	37025.04	DFT-s-OFDM	QPSK	32	H + V	2Tx	H	84	95	1 / 12	**32.34**
				CP-OFDM	QPSK	32	H + V	MIMO	H	84	95	1 / 12	27.43
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	84	95	1 / 12	**32.21**
				DFT-s-OFDM	16QAM	32	H + V	2Tx	H	84	95	1 / 12	25.92
				DFT-s-OFDM	64QAM	32	H + V	2Tx	H	84	95	1 / 12	23.28
		Mid	38499.96	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	327	292	1 / 12	**30.07**
				DFT-s-OFDM	QPSK	23	H	SISO	V	329	292	1 / 12	28.46
				DFT-s-OFDM	QPSK	5	V	SISO	V	329	292	1 / 12	26.34
				CP-OFDM	QPSK	5	V	SISO	V	329	292	1 / 16	21.40
		High	39975.00	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	329	294	1 / 16	**28.55**
50+50	2	Low	37050.00	DFT-s-OFDM	QPSK	32	H + V	2Tx	H	84	95	1 / 12	25.66
				CP-OFDM	QPSK	32	H + V	MIMO	H	84	95	1 / 12	25.68
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	84	95	1 / 12	**26.00**
				DFT-s-OFDM	16QAM	32	H + V	2Tx	H	84	95	1 / 12	25.79
				DFT-s-OFDM	64QAM	32	H + V	2Tx	H	84	95	1 / 12	23.49
		Mid	38499.96	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	328	294	1 / 16	**24.37**
		High	39950.04	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	329	293	1 / 16	**22.92**
50+50+50	3	Low	37074.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	H	84	95	1 / 12	25.64
				CP-OFDM	QPSK	32	H + V	MIMO	H	84	95	1 / 12	25.60
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	84	95	1 / 12	25.68
				DFT-s-OFDM	16QAM	32	H + V	2Tx	H	84	95	1 / 12	**25.75**
				DFT-s-OFDM	64QAM	32	H + V	2Tx	H	84	95	1 / 12	23.23
		Mid	38499.96	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	328	293	1 / 16	**24.17**
		High	39925.08	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	329	292	1 / 16	**22.71**
50+50+50+50	4	Low	37099.92	DFT-s-OFDM	QPSK	32	H + V	2Tx	H	87	94	1 / 12	25.71
				CP-OFDM	QPSK	32	H + V	MIMO	H	87	94	1 / 12	**25.97**
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	87	94	1 / 12	25.61
				DFT-s-OFDM	16QAM	32	H + V	2Tx	H	87	94	1 / 12	25.79
				DFT-s-OFDM	64QAM	32	H + V	2Tx	H	87	94	1 / 12	23.61
		Mid	38499.96	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	328	293	1 / 19	**24.59**
		High	39900.12	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	328	293	1 / 16	**22.58**

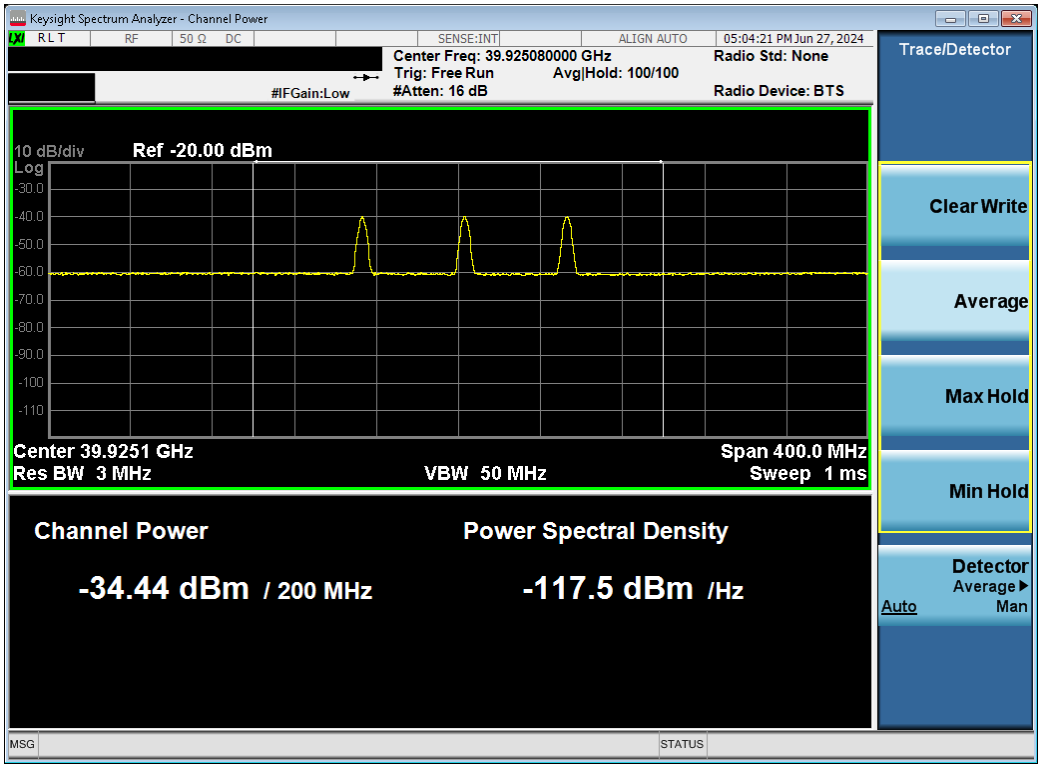
Table 7-18. Ant 1 EIRP Data (Band n260 - 50MHz)



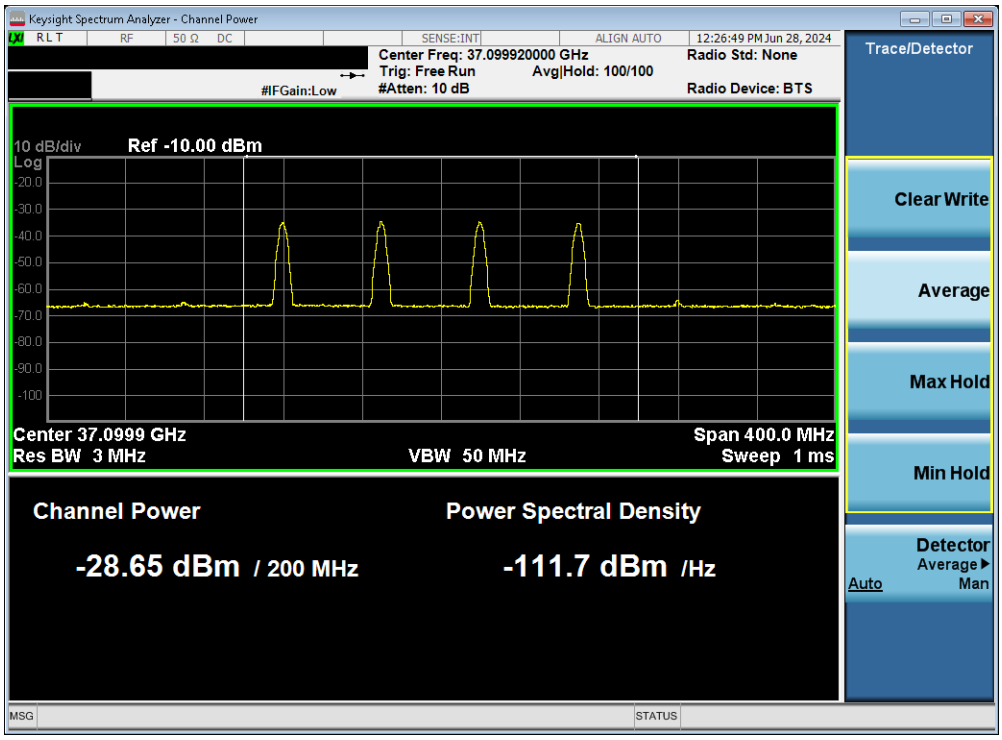
Plot 7-165.Ant 1 EIRP Plot (Band n260 − 50MHz-1CC Low Channel DFT-s-OFDM QPSK)



Plot 7-166.Ant 1 EIRP Plot (Band n260 − 50MHz-2CC Low Channel DFT-s-OFDM QPSK)



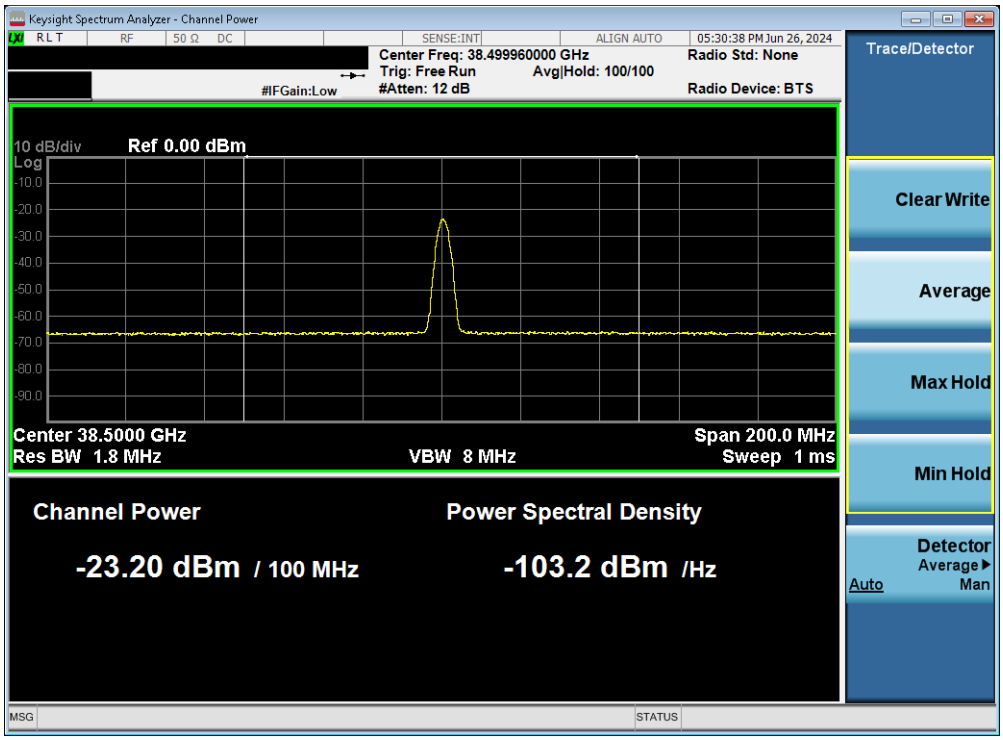
Plot 7-167.Ant 1 EIRP Plot (Band n260 − 50MHz-3CC High Channel DFT-s-OFDM QPSK)



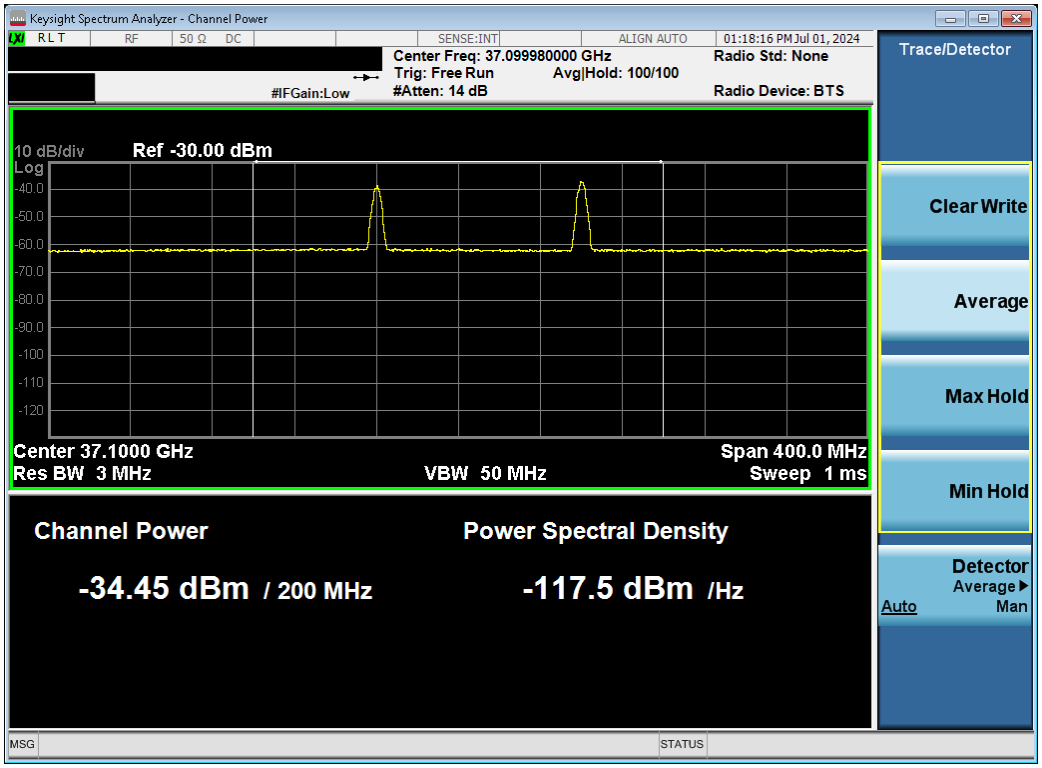
Plot 7-168.Ant 1 EIRP Plot (Band n260 − 50MHz-4CC Low Channel DFT-s-OFDM QPSK)

Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
100	1	Low	37050.00	DFT-s-OFDM	QPSK	32	H + V	2Tx	H	91	96	1 / 42	**31.67**
		Mid	38499.96	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	329	295	1 / 42	30.89
				DFT-s-OFDM	QPSK	23	H	SISO	V	329	292	1 / 33	28.51
				DFT-s-OFDM	QPSK	5	V	SISO	V	358	276	1 / 23	26.32
				CP-OFDM	QPSK	39	H + V	MIMO	V	329	295	1 / 33	27.57
				CP-OFDM	QPSK	23	H	SISO	V	329	292	66 / 0	24.25
				CP-OFDM	QPSK	5	V	SISO	V	358	276	1 / 33	22.25
				DFT-s-OFDM	π/2 BPSK	39	H + V	2Tx	V	329	295	1 / 33	**31.73**
				DFT-s-OFDM	16QAM	39	H + V	2Tx	V	329	295	1 / 33	28.30
				DFT-s-OFDM	64QAM	39	H + V	2Tx	V	329	295	1 / 42	26.36
		High	39949.92	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	329	294	1 / 33	**29.37**
100+100	2	Low	37099.98	DFT-s-OFDM	QPSK	32	H + V	2Tx	H	91	96	1 / 42	25.55
				CP-OFDM	QPSK	32	H + V	MIMO	H	91	96	1 / 23	25.41
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	91	96	1 / 23	**25.56**
				DFT-s-OFDM	16QAM	32	H + V	2Tx	H	91	96	1 / 23	24.42
				DFT-s-OFDM	64QAM	32	H + V	2Tx	H	91	96	1 / 33	22.43
		Mid	38500.02	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	328	295	1 / 23	**24.11**
		High	39899.94	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	329	294	1 / 23	**24.32**
100+100+100	3	Low	37149.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	H	91	96	1 / 33	**26.06**
				CP-OFDM	QPSK	32	H + V	MIMO	H	91	96	1 / 23	25.50
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	91	96	1 / 23	25.59
				DFT-s-OFDM	16QAM	32	H + V	2Tx	H	91	96	1 / 33	24.69
				DFT-s-OFDM	64QAM	32	H + V	2Tx	H	91	96	1 / 23	23.41
		Mid	38499.96	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	328	295	1 / 23	**24.16**
		High	39849.96	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	329	294	1 / 23	**24.25**
100+100+100+100	4	Low	37199.94	DFT-s-OFDM	QPSK	32	H + V	2Tx	H	91	96	1 / 23	**26.21**
				CP-OFDM	QPSK	32	H + V	MIMO	H	91	96	1 / 23	25.69
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	91	96	1 / 23	25.41
				DFT-s-OFDM	16QAM	32	H + V	2Tx	H	91	96	1 / 23	25.62
				DFT-s-OFDM	64QAM	32	H + V	2Tx	H	91	96	1 / 33	23.43
		Mid	38500.02	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	328	295	1 / 23	**23.98**
		High	39799.98	DFT-s-OFDM	QPSK	39	H + V	2Tx	V	329	294	1 / 23	**23.04**

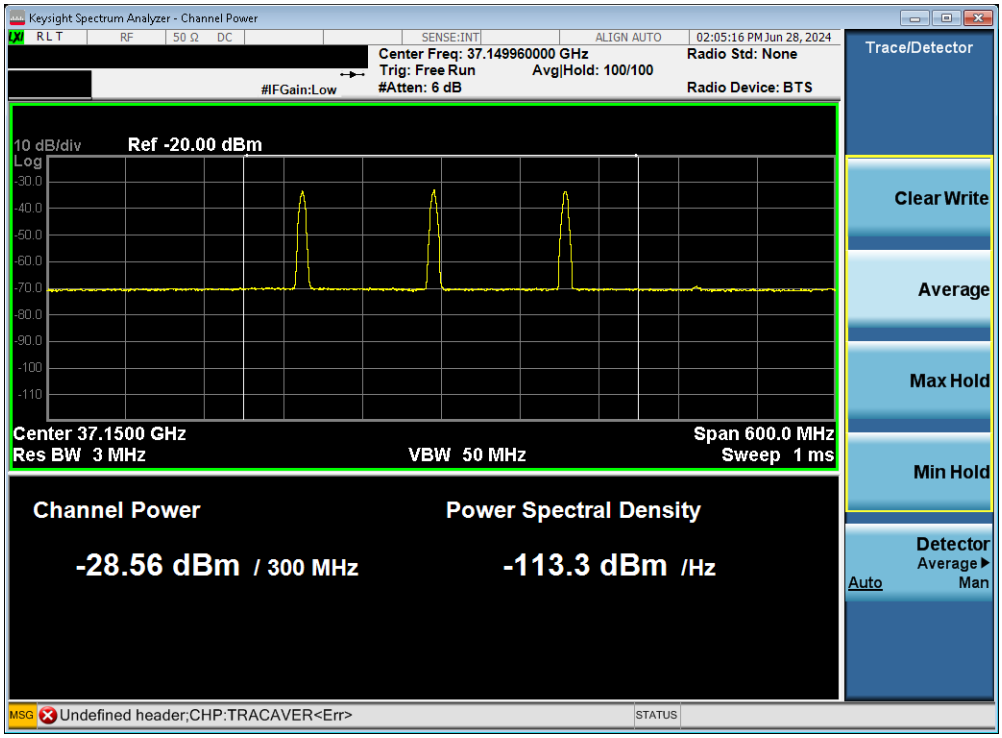
Table 7-19.Ant 1 EIRP Data (Band n260 - 100MHz)



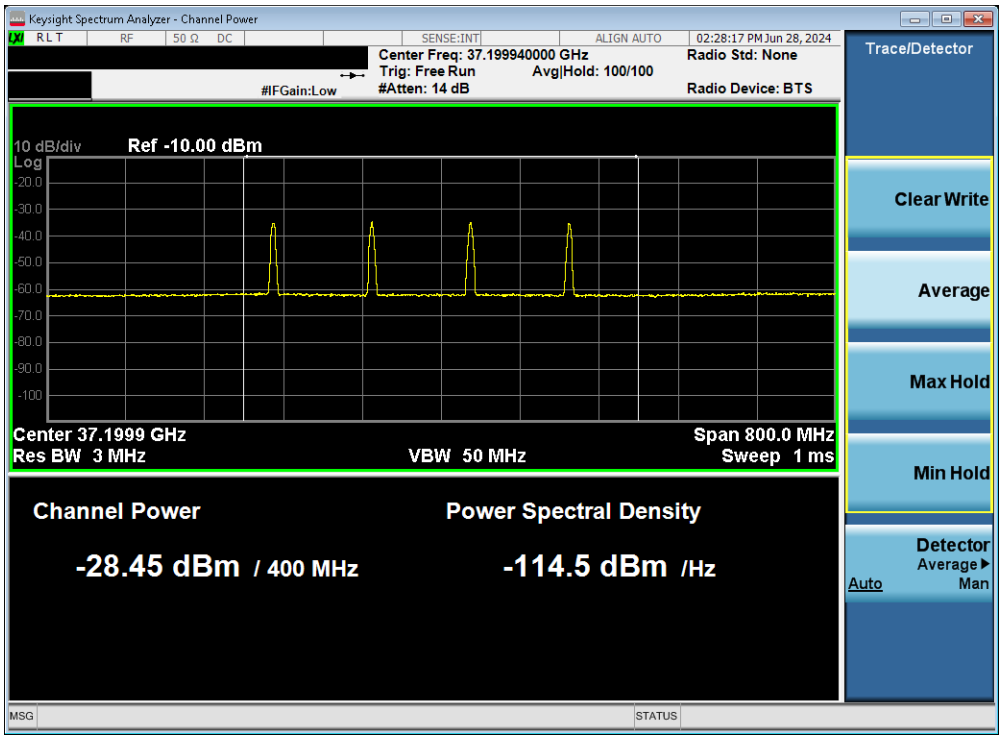
Plot 7-169.Ant 1 EIRP Plot (Band n260 − 100MHz-1CC Mid Channel DFT-s-OFDM π/2 BPSK)



Plot 7-170.Ant 1 EIRP Plot (Band n260 − 100MHz-2CC Low Channel DFT-s-OFDM π/2 BPSK)



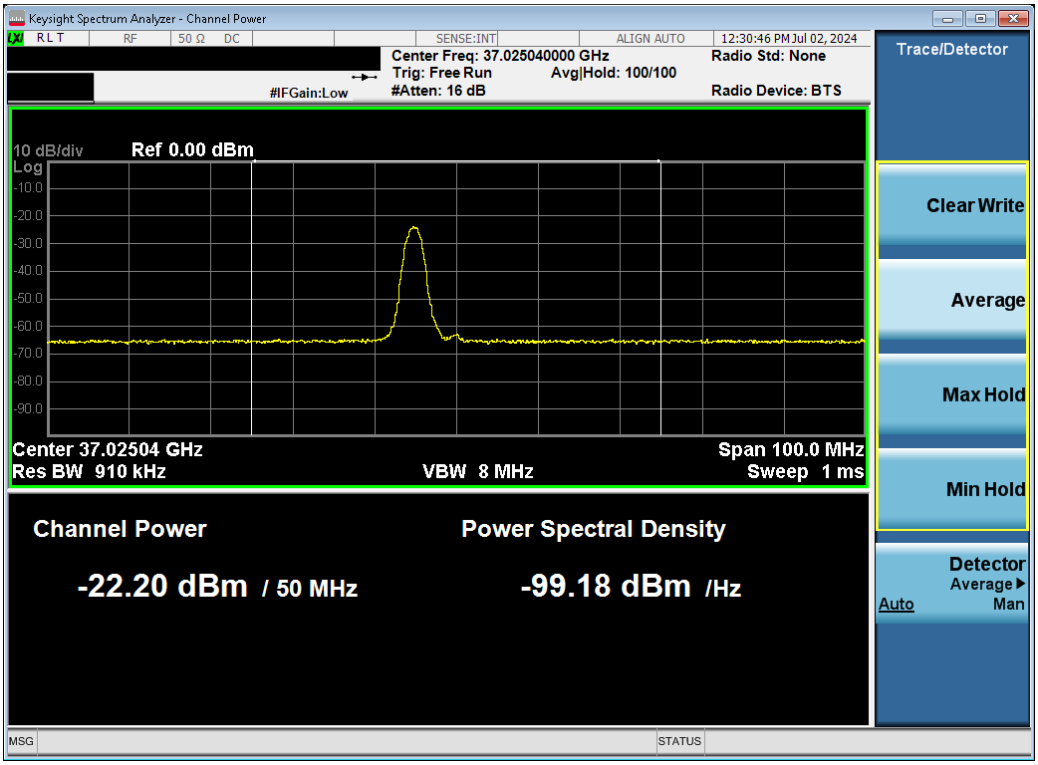
Plot 7-171.Ant 1 EIRP Plot (Band n260 − 100MHz-3CC Low Channel DFT-s-OFDM QPSK)



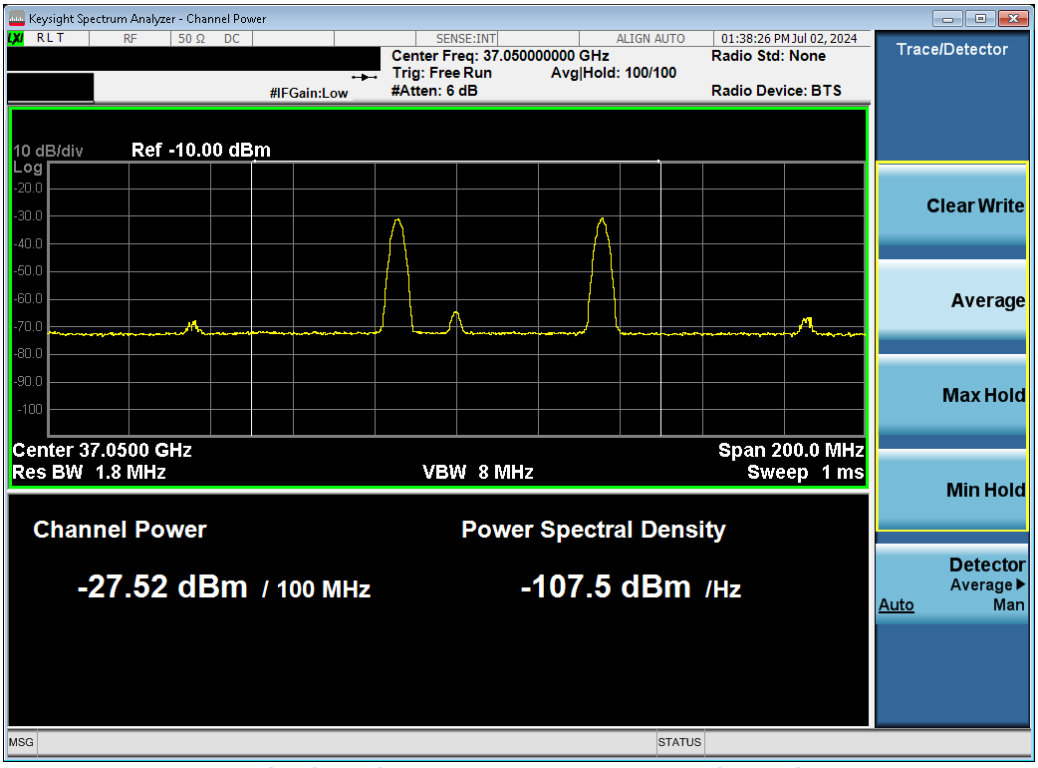
Plot 7-172.Ant 1 EIRP Plot (Band n260 − 100MHz-4CC Low Channel DFT-s-OFDM QPSK)

Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
50	1	Low	37025.04	DFT-s-OFDM	QPSK	35	H + V	2Tx	H	295	84	1 / 12	**32.27**
				CP-OFDM	QPSK	35	H + V	MIMO	H	295	84	1 / 12	27.92
				DFT-s-OFDM	π/2 BPSK	35	H + V	2Tx	H	295	84	1 / 12	**32.12**
				DFT-s-OFDM	16QAM	35	H + V	2Tx	H	295	84	1 / 12	26.80
				DFT-s-OFDM	64QAM	35	H + V	2Tx	H	295	84	1 / 23	24.29
		Mid	38499.96	DFT-s-OFDM	QPSK	28	H	SISO	H	267	258	1 / 18	27.23
				DFT-s-OFDM	QPSK	0	V	SISO	V	283	277	1 / 7	26.75
				CP-OFDM	QPSK	28	H	SISO	H	267	258	1 / 15	22.02
				CP-OFDM	QPSK	0	V	SISO	V	283	277	1 / 18	21.23
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	286	88	1 / 7	**31.73**
		High	39975.00	DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	284	86	1 / 14	**30.48**
50+50	2	Low	37050.00	DFT-s-OFDM	QPSK	35	H + V	2Tx	H	295	84	1 / 23	26.96
				CP-OFDM	QPSK	35	H + V	MIMO	H	295	84	1 / 23	**26.98**
				DFT-s-OFDM	π/2 BPSK	35	H + V	2Tx	H	295	84	1 / 23	26.90
				DFT-s-OFDM	16QAM	35	H + V	2Tx	H	295	84	1 / 23	26.63
				DFT-s-OFDM	64QAM	35	H + V	2Tx	H	295	84	1 / 12	24.37
		Mid	38499.96	DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	386	88	1 / 7	**25.21**
		High	39950.04	DFT-s-OFDM	QPSK	32	H + V	2Tx	H	284	86	1 / 14	**24.92**
50+50+50	3	Low	37074.96	DFT-s-OFDM	QPSK	35	H + V	2Tx	H	295	84	1 / 23	26.52
				CP-OFDM	QPSK	35	H + V	MIMO	H	295	84	1 / 12	26.51
				DFT-s-OFDM	π/2 BPSK	35	H + V	2Tx	H	295	84	1 / 23	**26.56**
				DFT-s-OFDM	16QAM	35	H + V	2Tx	H	295	84	1 / 23	26.38
				DFT-s-OFDM	64QAM	35	H + V	2Tx	H	295	84	1 / 23	24.26
		Mid	38499.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	H	386	88	1 / 18	**24.95**
		High	39925.08	DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	386	88	1 / 14	**24.99**
50+50+50+50	4	Low	37099.92	DFT-s-OFDM	QPSK	35	H + V	2Tx	H	295	84	1 / 23	**26.45**
				CP-OFDM	QPSK	35	H + V	MIMO	H	295	84	1 / 12	26.44
				DFT-s-OFDM	π/2 BPSK	35	H + V	2Tx	H	295	84	1 / 23	26.35
				DFT-s-OFDM	16QAM	35	H + V	2Tx	H	295	84	1 / 12	26.30
				DFT-s-OFDM	64QAM	35	H + V	2Tx	H	295	84	1 / 12	24.05
		Mid	38499.96	DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	286	88	1 / 15	**24.52**
		High	39900.12	DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	284	86	1 / 14	**25.01**

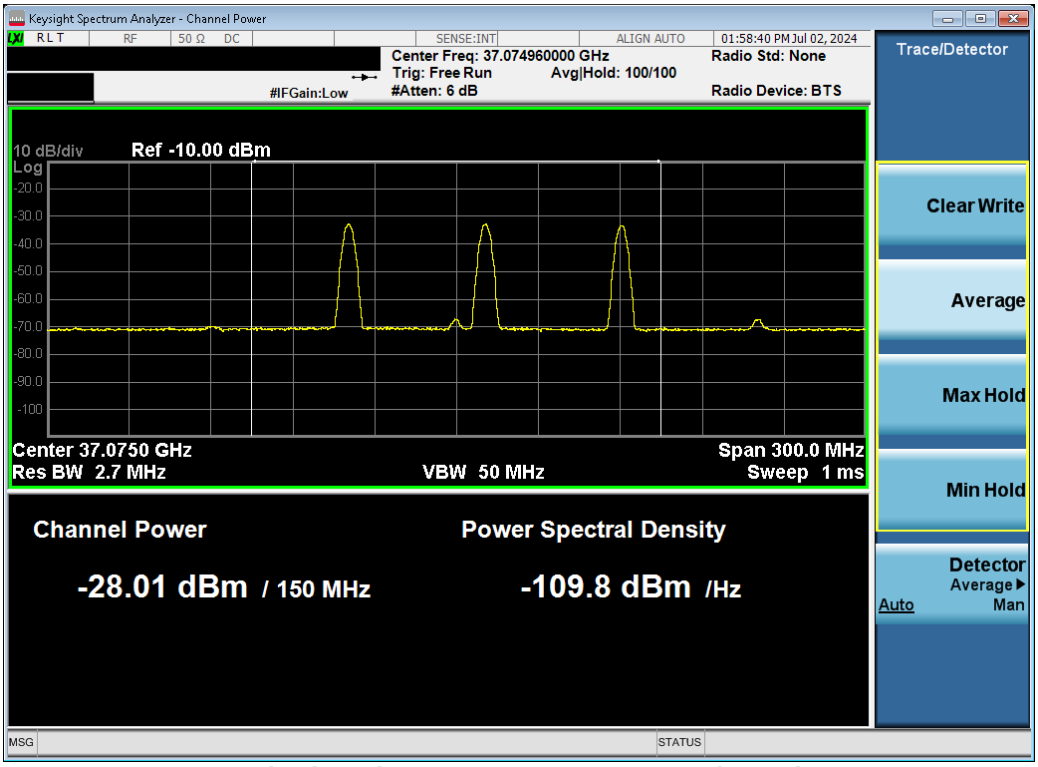
Table 7-20. Ant 2 EIRP Data (Band n260 - 50MHz)



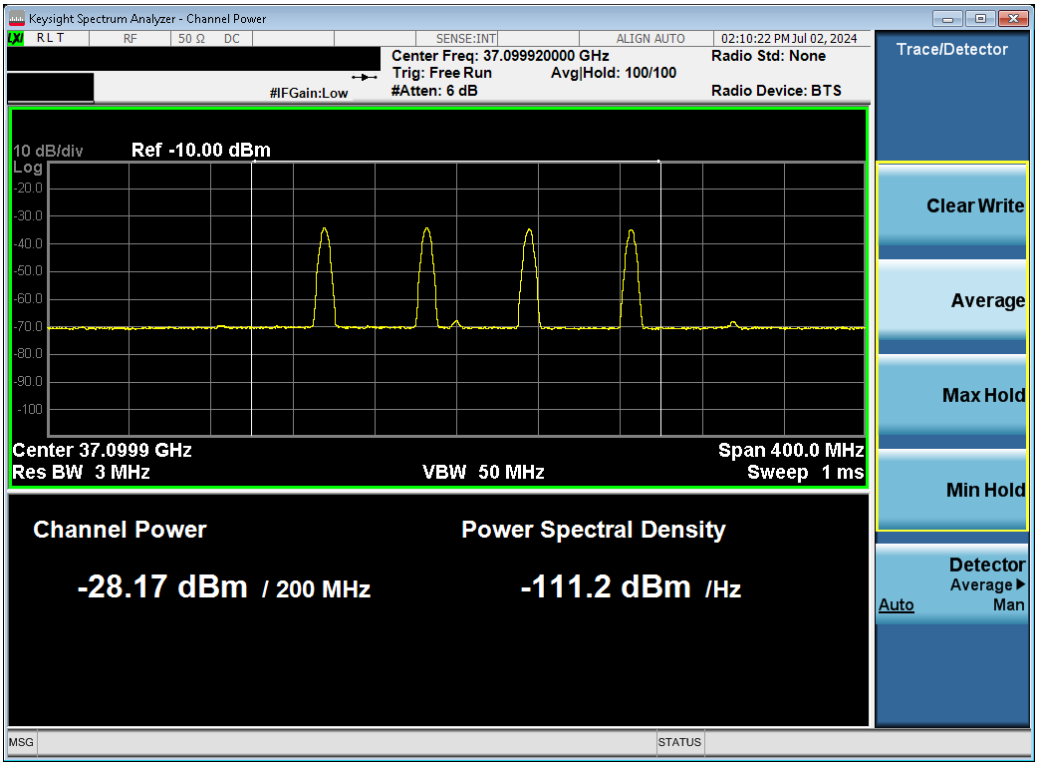
Plot 7-173.Ant 2 EIRP Plot (Band n260 − 50MHz-1CC Low Channel DFT-s-OFDM QPSK)



Plot 7-174.Ant 2 EIRP Plot (Band n260 − 50MHz-2CC Low Channel DFT-s-OFDM QPSK)



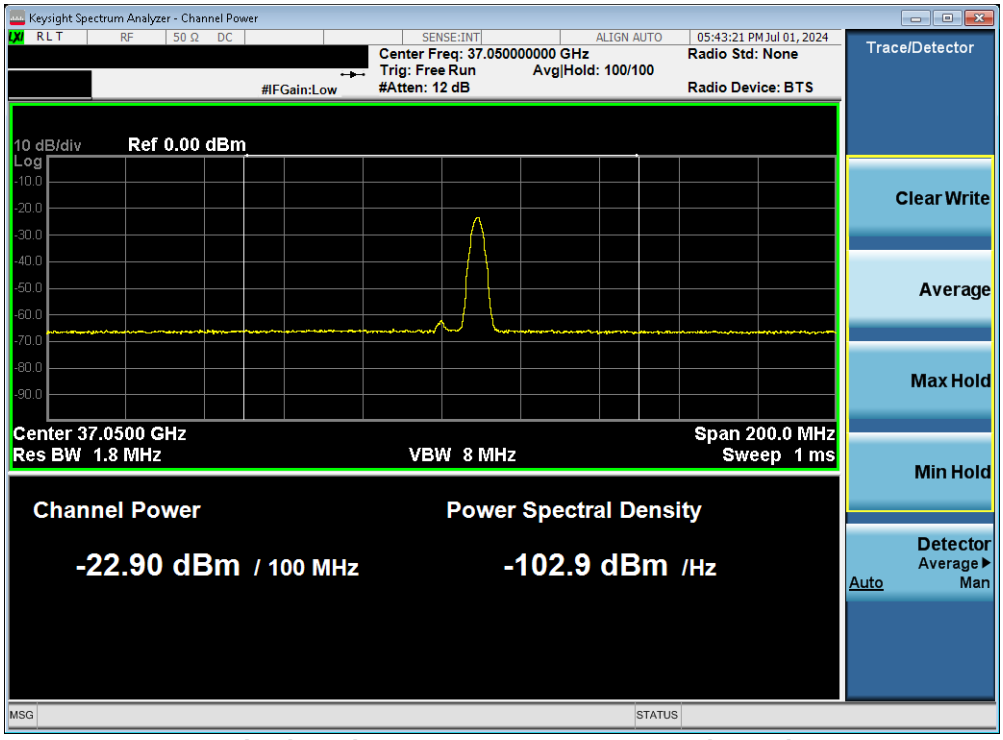
Plot 7-175.Ant 2 EIRP Plot (Band n260 − 50MHz-3CC Low Channel DFT-s-OFDM QPSK)



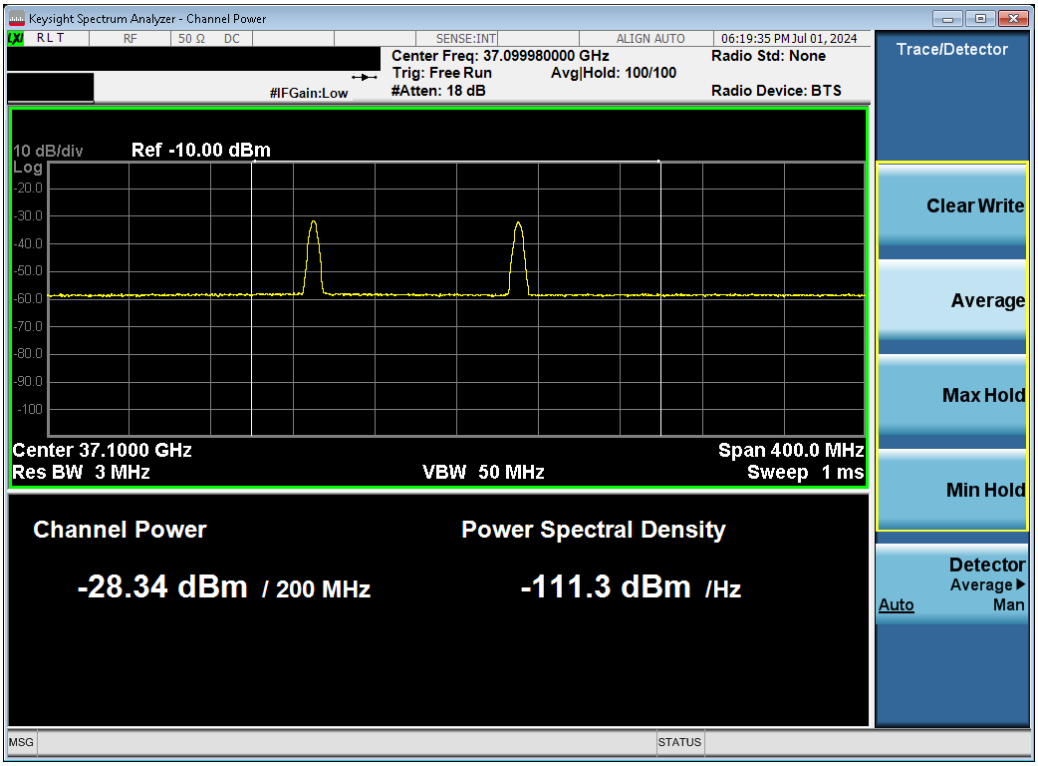
Plot 7-176.Ant 2 EIRP Plot (Band n260 − 50MHz-4CC Low Channel DFT-s-OFDM QPSK)

Bandwidth [MHz]	CCs Active	Channel	Frequency [MHz]	Transmission Scheme	Modulation	Beam ID	Beam Pol.	Ant. Div.	Ant. Pol. [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	RB Size/Offsets	EIRP [dBm]
100	1	Low	37050.00	DFT-s-OFDM	QPSK	35	H + V	2Tx	H	294	79	1 / 29	**31.58**
				CP-OFDM	QPSK	35	H + V	MIMO	H	294	79	1 / 19	28.58
				DFT-s-OFDM	π/2 BPSK	35	H + V	2Tx	H	294	79	1 / 39	**31.60**
				DFT-s-OFDM	16QAM	35	H + V	2Tx	H	294	79	1 / 29	29.48
				DFT-s-OFDM	64QAM	35	H + V	2Tx	H	294	79	1 / 29	27.47
		Mid	38499.96	DFT-s-OFDM	QPSK	28	H	SISO	H	267	258	1 / 24	27.24
				DFT-s-OFDM	QPSK	0	V	SISO	V	283	277	1 / 43	26.71
				CP-OFDM	QPSK	28	H	SISO	H	267	258	1 / 43	23.40
				CP-OFDM	QPSK	0	V	SISO	V	283	277	1 / 43	22.67
				DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	286	88	1 / 24	**31.55**
		High	39949.92	DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	284	86	1 / 32	**30.14**
100+100	2	Low	37099.98	DFT-s-OFDM	QPSK	35	H + V	2Tx	H	294	79	1 / 29	25.74
				CP-OFDM	QPSK	35	H + V	MIMO	H	294	79	1 / 39	25.91
				DFT-s-OFDM	π/2 BPSK	35	H + V	2Tx	H	294	79	1 / 19	**26.28**
				DFT-s-OFDM	16QAM	35	H + V	2Tx	H	294	79	1 / 19	26.02
				DFT-s-OFDM	64QAM	35	H + V	2Tx	H	294	79	1 / 19	24.18
		Mid	38500.02	DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	384	86	1 / 24	**24.87**
		High	39899.94	DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	384	86	1 / 22	**25.06**
100+100+100	3	Low	37149.96	DFT-s-OFDM	QPSK	35	H + V	2Tx	H	295	84	1 / 29	**26.62**
				CP-OFDM	QPSK	35	H + V	MIMO	H	295	84	1 / 29	26.43
				DFT-s-OFDM	π/2 BPSK	35	H + V	2Tx	H	295	84	1 / 19	26.24
				DFT-s-OFDM	16QAM	35	H + V	2Tx	H	295	84	1 / 29	26.37
				DFT-s-OFDM	64QAM	35	H + V	2Tx	H	295	84	1 / 19	24.30
		Mid	38499.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	H	286	88	1 / 24	**25.03**
		High	39849.96	DFT-s-OFDM	QPSK	32	H + V	2Tx	H	284	86	1 / 32	**25.02**
100+100+100+100	4	Low	37199.94	DFT-s-OFDM	QPSK	35	H + V	2Tx	X	295	84	1 / 19	**26.64**
				CP-OFDM	QPSK	35	H + V	MIMO	X	295	84	1 / 19	26.48
				DFT-s-OFDM	π/2 BPSK	35	H + V	2Tx	X	295	84	1 / 29	26.56
				DFT-s-OFDM	16QAM	35	H + V	2Tx	X	295	84	1 / 29	26.54
				DFT-s-OFDM	64QAM	35	H + V	2Tx	X	295	84	1 / 29	24.59
		Mid	38500.02	DFT-s-OFDM	QPSK	32	H + V	2Tx	H	286	88	1 / 34	**24.63**
		High	39799.98	DFT-s-OFDM	π/2 BPSK	32	H + V	2Tx	H	284	86	1 / 22	**25.33**

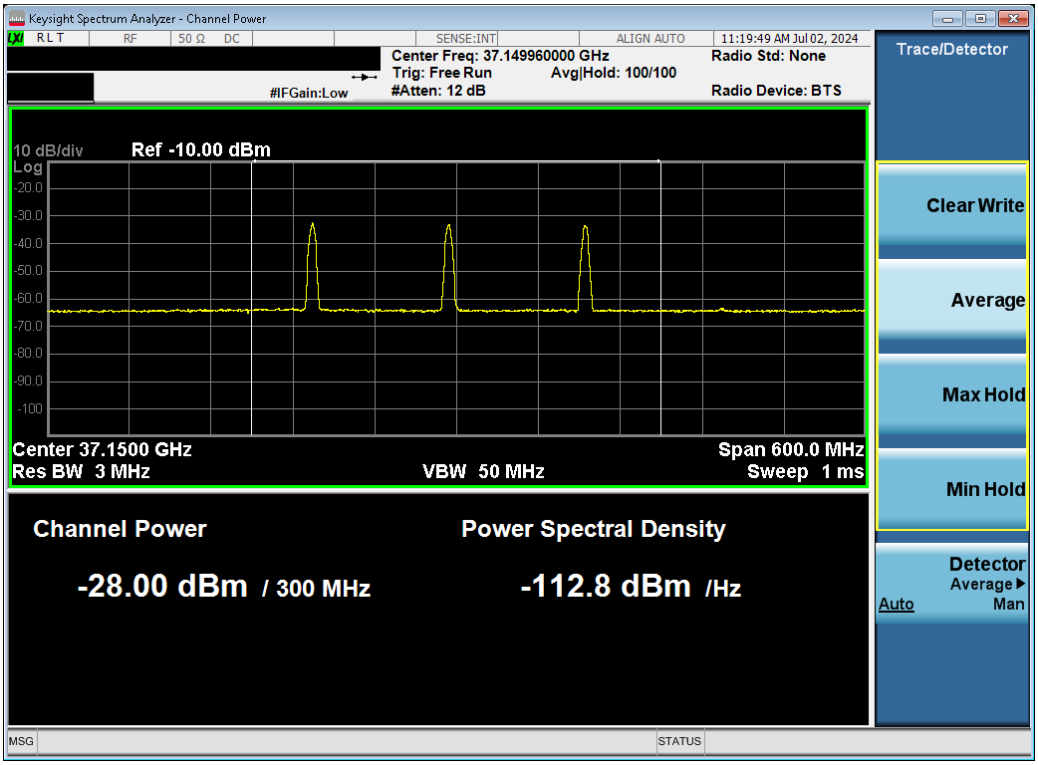
Table 7-21.Ant 2 EIRP Data (Band n260 - 100MHz)



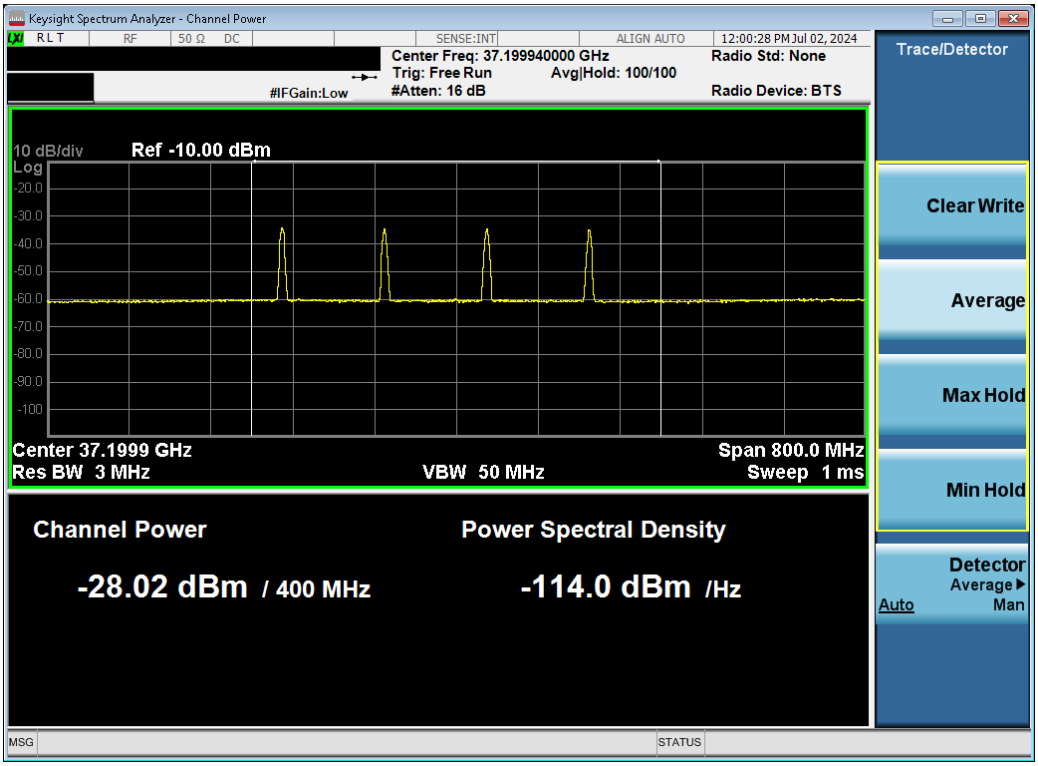
Plot 7-177.Ant 2 EIRP Plot (Band n260 − 100MHz-1CC Low Channel DFT-s-OFDM QPSK)



Plot 7-178.Ant 2 EIRP Plot (Band n260 − 100MHz-2CC Low Channel DFT-s-OFDM π/2 BPSK)



Plot 7-179.Ant 2 EIRP Plot (Band n260 − 100MHz-3CC Low Channel DFT-s-OFDM π/2 BPSK)



Plot 7-180.Ant 2 EIRP Plot (Band n260 − 100MHz-4CC Low Channel DFT-s-OFDM QPSK)

Test Notes

1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below. Both H-Beam and V-Beam were investigated and the worst-case measurements were reported below.

2) Elements within the same antenna array are correlated to produce beamforming array gain. Antenna arrays cannot be correlated with another antenna array. During testing, only one antenna array was active.

3) EIRP measurements for all bands were taken at 1m test distance as was required for far-field conditions (see Table 3-1).

4) The average EIRP reported below is calculated per section 5.2.7 of ANSI C63.26-2015 which states: EIRP (dBm) = E (dBµV/m) + 20log(D) − 104.8; where D is the measurement distance (in the far field region) in m. The field strength at the antenna terminals E is calculated as: E (dBµV/m) = Spectrum Analyzer Channel Power Level (dBm) + Antenna Factor (dB/m) + Cable Loss (dB) + 107.

5) All EIRP measurements were made with the appropriate offset levels loaded into the spectrum analyzer as determined from the measurement distance, antenna factor, cable loss, and the equations in Note 4 above.

6) Radiated power levels are investigated while the receive antenna was rotated through all angles to determine the worst case polarization/positioning.

7) This device supports transmission of H-polarized and V-polarized beams from the antenna array in both CP-OFDM and DFT-s-OFDM transmission schemes. SISO and MIMO operation is also supported for some configurations. As part of the testing, all modes are investigated fully on the channel showing the highest simulated EIRP using QPSK modulation. The configuration that shows the highest measured EIRP was then used to determine the EIRP for the low and high channels and for the additional modulations.

8) Several BeamID's are investigated based on the provided simulated data to determine the worst-case BeamID.
9) Plots shown are the raw channel power level measured and EIRP reported In the table are calculated with the offset level calculated below.

Sample Calculation

The offset level loaded into the spectrum analyzer allows for a direct conversion of the raw channel power level measured by the analyzer into an EIRP. This offset level is frequency dependent and is calculated as follows:

Offset Level [dB] = Antenna Factor [dB/m] + Cable Loss [dB] + 20 Log(Distance [m]) + 107 - 104.8 .

For example, to measure an EIRP at a frequency of 24400MHz with an antenna factor of 45.49dB/m, a cable loss of 8.53dB, and a measurement distance of 1 meter, an offset level of:

Offset Level = 45.49dB/m + 8.53dB + 20 Log(1 meter) + 107 - 104.8 = 56.22 dB

shall be loaded into the spectrum analyzer.

7.4 Radiated Spurious and Harmonic Emissions

§2.1051, §30.203

Test Overview

The spectrum is scanned from 30MHz to 100GHz for n258-R1, n258-R2, and n261. For n260, the spectrum is scanned from 30MHz to 200GHz. All out of band emissions are measured in a radiated test setup while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All modulations were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

The conductive power or total radiated power of any emissions outside a licensee's frequency block shall be -13dBm/1MHz.

Test Procedure Used

ANSI C63.26-2015 Section 5.7.4
KDB 842590 D01 v01r02 Section 4.4.3

Test Settings

1. Start frequency was set to 30MHz and stop frequency was set to 100 GHz for n258/n261 and 200GHz for n260. Several plots are used to show investigations in this entire span.
2. Detector = RMS
3. Trace mode = trace average
4. Sweep time = auto couple
5. Number of sweep points ≥ 2 x Span/RBW
6. The trace was allowed to stabilize
7. RBW = 1MHz, VBW = 3MHz

Test Notes

1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.

2) The plots in this section were taken with the analyzer set to max hold. All final measurements shown in the tables that accompany the plots were taken with trace averaging performed over 100 sweeps while the analyzer was triggering on a specific emission of interest.

3) Elements within the same antenna array are correlated to produce beamforming array gain. Antenna arrays cannot be correlated with another antenna array. During testing, only one antenna array was active.

4) The plots from 1-200GHz show corrected average EIRP levels. The average EIRP reported below is calculated per section 5.2.7 of ANSI C63.26-2015 which states: EIRP (dBm) = E (dBµV/m) + 20log(D) − 104.8; where D is the measurement distance (in the far field region) in m. The field strength E is calculated E (dBµV/m) = Spectrum Analyzer Level (dBm) + Antenna Factor (dB/m) + Cable Loss (dB) + Harmonic Mixer Conversion Loss (dB) + 107. All appropriate Antenna Factor and Cable Loss have been applied in the spectrum analyzer for each measurement. For measurements > 40GHz, Harmonic Mixer Conversion Loss was also applied to the spectrum analyzer.

5) Emissions below 18GHz were measured at a 3 meter test distance, while emissions above 18GHz were measured at the appropriate far field distance. The far field of the mmWave signal is based on formula: R > 2D^2/wavelength, where D is the larger between the dimension of the measurement antenna and the transmitting antenna of the EUT. In this case, D is the largest dimension of the measurement antenna.

Frequency Range (GHz)	Wavelength(cm)	Far Field Distance (m)	Measurement Distance (m)
18-40	0.749	0.54	1.00
40-60	0.500	1.39	1.50
60-90	0.333	0.91	1.00
90-140	0.214	0.58	1.00
140-200	0.150	0.39	1.00

Table 7-22. Far-Field Distance & Measurement Distance per Frequency Range

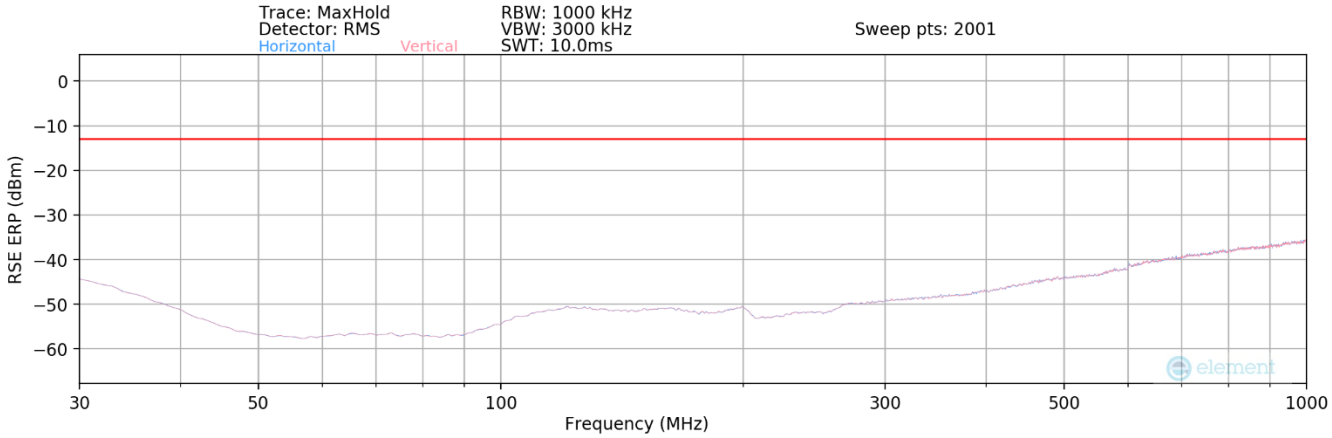
6) All emissions from 30MHz - 40GHz were measured using a spectrum analyzer with an internal preamplifier. Emissions >40GHz were measured using a harmonic mixer with the spectrum analyzer.

7) All RSE's were measured with 1CC. It was determined that adding more CC's causes the overall amplitude of just 1CC to decrease, therefore, 1CC is the worst case for the purposes of spurious emissions measurements.

8) The "-" shown in the following RSE tables are used to denote a noise floor measurement.

Band n258-R1 – Ant 1

30MHz - 1GHz



Plot 7-181.n258-R1 Radiated Spurious Plot

Spurious Emissions ERP Sample Calculation (n258-R1)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE ERP level is calculated by applying the additional factors shown below for a test distance of 3 meter.

RSE ERP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 – 2.15 (dB)

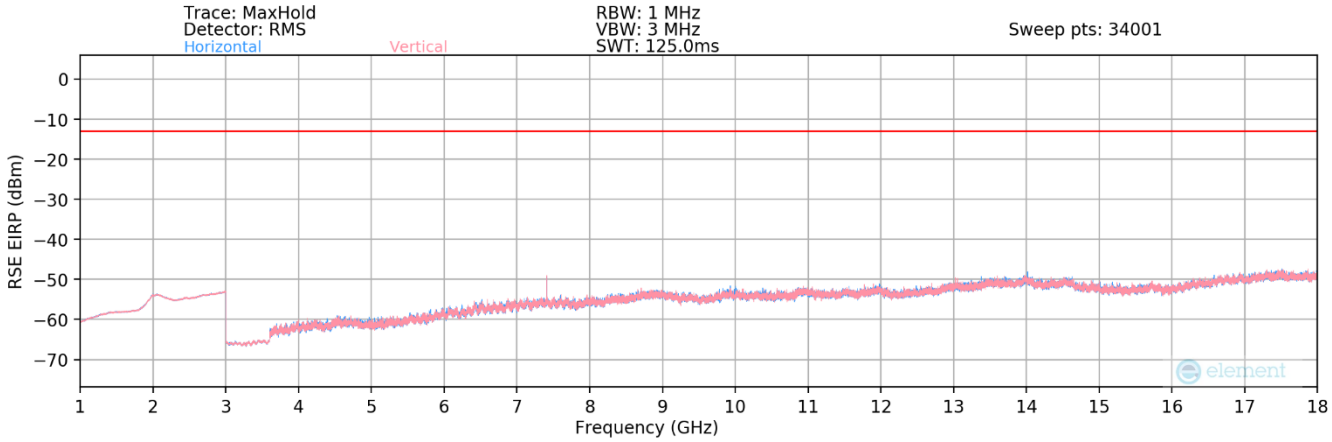
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
98.00	Low	50	2Tx	QPSK	V	-	-	-62.18	-13.00	-49.18
75.00	Mid	50	2Tx	QPSK	V	-	-	-64.55	-13.00	-51.55
102.00	High	50	2Tx	QPSK	V	-	-	-61.22	-13.00	-48.22

Table 7-23.n258-R1 Radiated Spurious Emissions Table (30MHz - 1GHz)

Notes

The RSE ERP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, and cable losses. Measurements were performed at a distance of 3 meter.

1GHz - 18GHz



Plot 7-182.n258-R1 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R1)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 3 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8

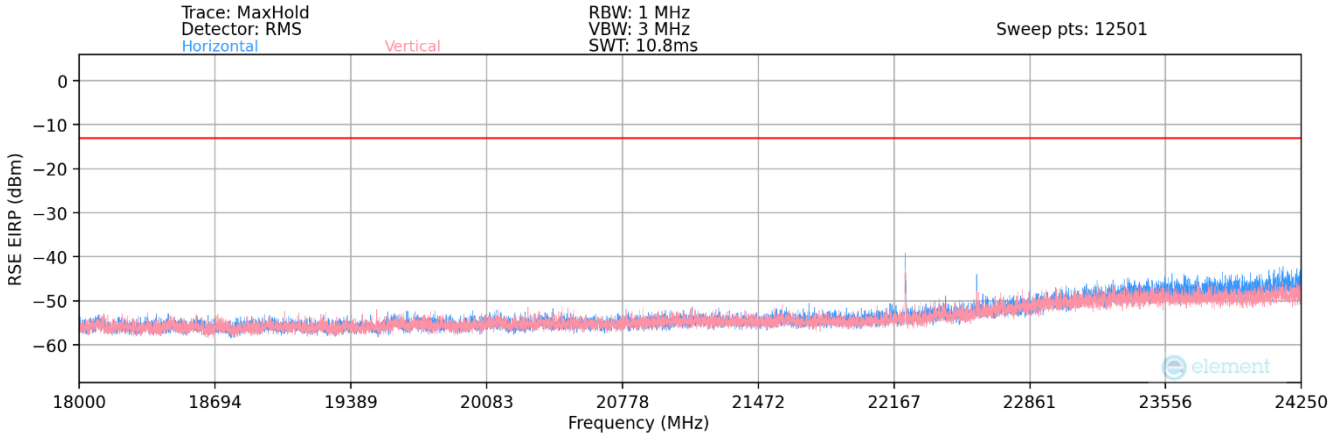
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7333.20	Low	50	2Tx	QPSK	V	119	184	-44.75	-13.00	-31.75
7408.50	Mid	50	2Tx	QPSK	V	154	173	-47.87	-13.00	-34.87
7483.50	High	50	2Tx	QPSK	V	258	174	-50.01	-13.00	-37.01

Table 7-24.n258-R1 Radiated Spurious Emissions Table (1GHz - 18GHz)

Notes

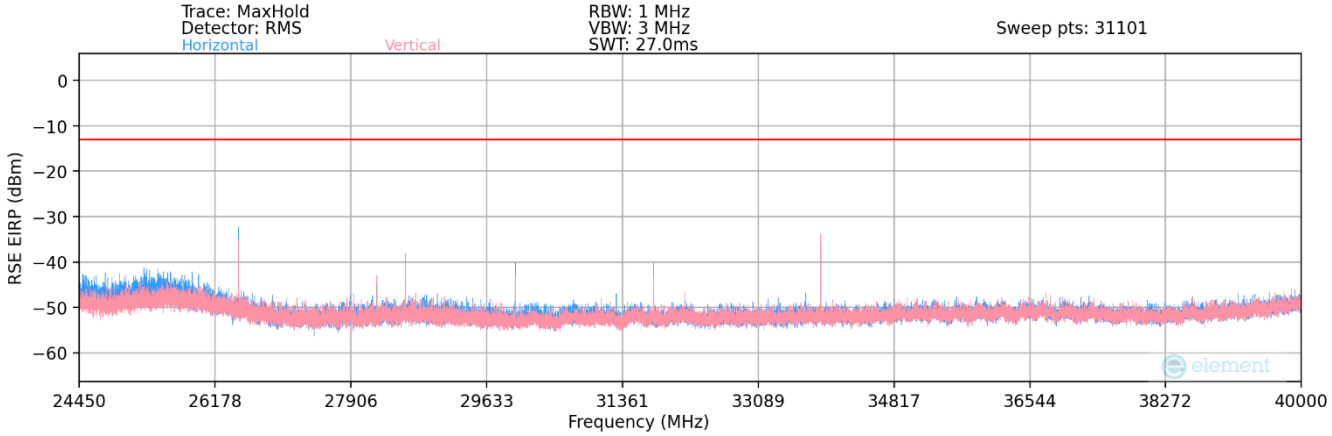
The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, and cable losses. Measurements were performed at a test distance of 3 meter.

18GHz-24.25GHz



Plot 7-183. n258-R1 Radiated Spurious Plot

24.45GHz-40GHz



Plot 7-184.n258-R1 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R1)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8

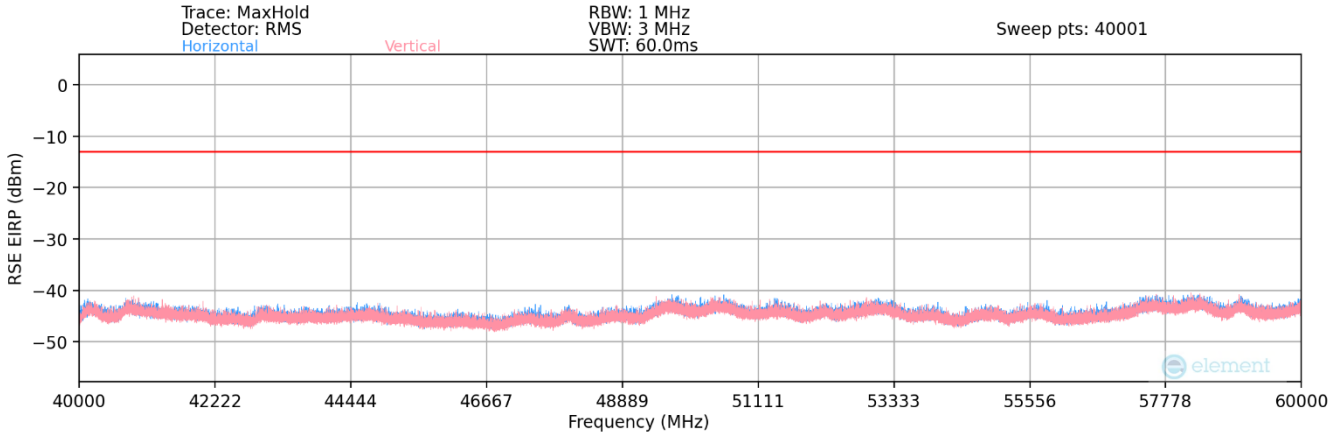
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
26551.00	Low	50	2Tx	QPSK	H	150	325	-33.09	-13.00	-20.09
31609.00	Low	50	2Tx	QPSK	H	150	319	-46.08	-13.00	-33.08
22224.00	Mid	50	2Tx	QPSK	H	150	321	-45.87	-13.00	-32.87
26476.00	Mid	50	2Tx	QPSK	H	150	317	-32.80	-13.00	-19.80
33884.50	Mid	50	2Tx	QPSK	V	150	308	-36.98	-13.00	-23.98
26400.00	High	50	2Tx	QPSK	H	150	320	-33.19	-13.00	-20.19
33886.00	High	50	2Tx	QPSK	H	150	0	-37.83	-13.00	-24.83

Table 7-25.n258-R1 Radiated Spurious Emissions Table (18GHz - 40GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, and cable losses. Measurements were performed at a test distance of 1 meter.

40GHz - 60GHz



Plot 7-185.n258-R1 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R1)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1.5 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 + Harmonic Mixer Conversion Loss [dB]

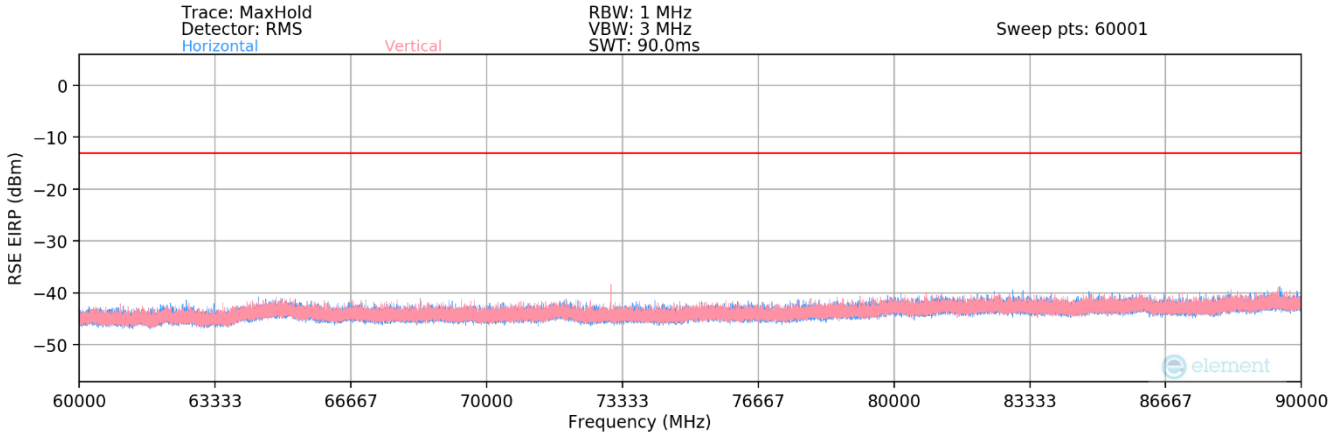
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
48550.08	Low	50	2Tx	QPSK	H	150	271	-43.59	-13.00	-30.59
48700.08	Mid	50	2Tx	QPSK	H	-	-	-43.81	-13.00	-30.81
48849.84	High	50	2Tx	QPSK	H	-	-	-43.83	-13.00	-30.83

Table 7-26.n258-R1 Radiated Spurious Emissions Table (40GHz - 60GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, cable losses, and harmonic mixer conversion losses. Measurements were performed at a distance of 1.5 meter.

60GHz - 90GHz



Plot 7-186.n258-R1 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R1)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 + Harmonic Mixer Conversion Loss [dB]

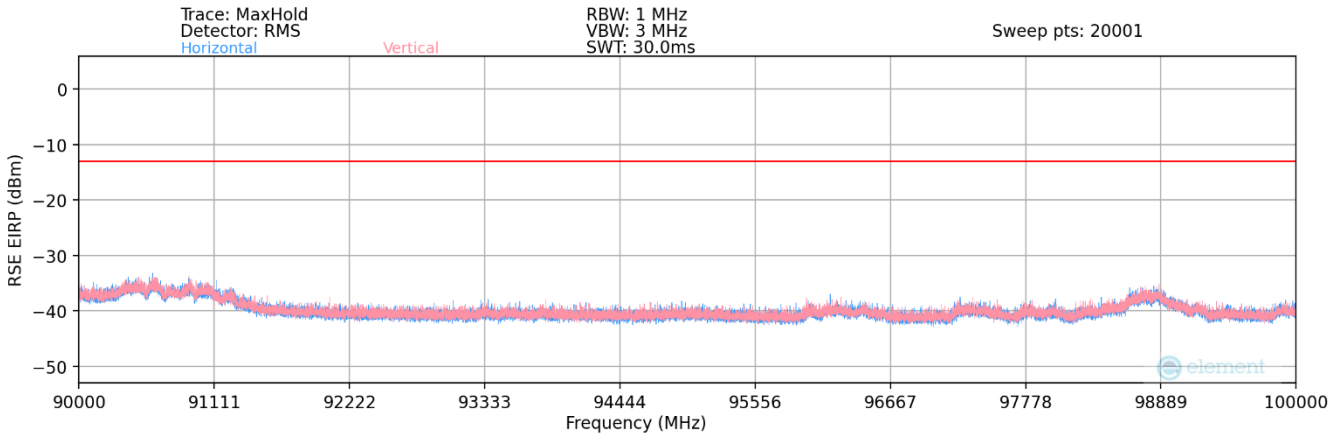
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
72825.12	Low	50	2Tx	QPSK	H	149	23	-43.29	-13.00	-30.29
73049.76	Mid	50	2Tx	QPSK	H	80	74	-39.33	-13.00	-26.33
73274.76	High	50	2Tx	QPSK	H	16	75	-41.80	-13.00	-28.80

Table 7-27.n258-R1 Radiated Spurious Emissions Table (60GHz - 90GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, cable losses, and harmonic mixer conversion losses. Measurements were performed at a distance of 1 meter.

90GHz - 100GHz



Plot 7-187.n258-R1 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R1)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 **+** Harmonic Mixer Conversion Loss [dB]

Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
97100.16	Low	50	2Tx	QPSK	H	-	-	-45.94	-13.00	-32.94
97400.16	Mid	50	2Tx	QPSK	H	-	-	-45.24	-13.00	-32.24
97699.68	High	50	2Tx	QPSK	H	-	-	-46.15	-13.00	-33.15

Table 7-28.n258-R1 Radiated Spurious Emissions table (90GHz-100GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, cable losses, and harmonic mixer conversion losses. Measurements were performed at a distance of 1 meter.

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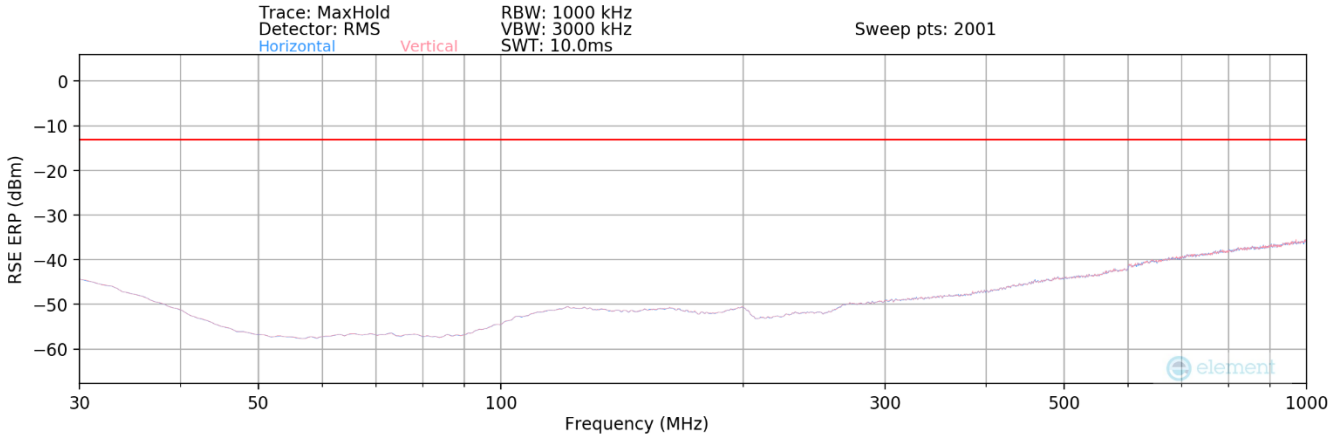
30MHz - 1GHz



Plot 7-188.n258-R1 Radiated Spurious Plot

Spurious Emissions ERP Sample Calculation (n258-R1)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE ERP level is calculated by applying the additional factors shown below for a test distance of 3 meter.

RSE ERP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 – 2.15 (dB)

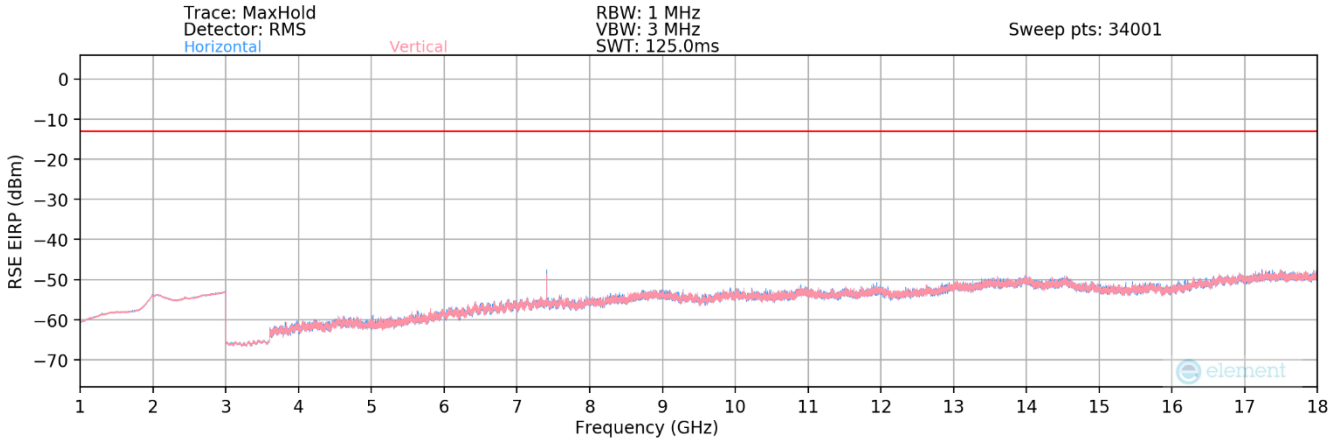
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
66.00	Low	50	2Tx	QPSK	H	-	-	-64.03	-13.00	-51.03
302.00	Mid	50	2Tx	QPSK	H	-	-	-57.19	-13.00	-44.19
91.00	High	50	2Tx	QPSK	H	-	-	-63.85	-13.00	-50.85

Table 7-29.n258-R1 Radiated Spurious Emissions Table (30MHz - 1GHz)

Notes

The RSE ERP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, and cable losses. Measurements were performed at a distance of 3 meter.

1GHz - 18GHz



Plot 7-189.n258-R1 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R1)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 3 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8

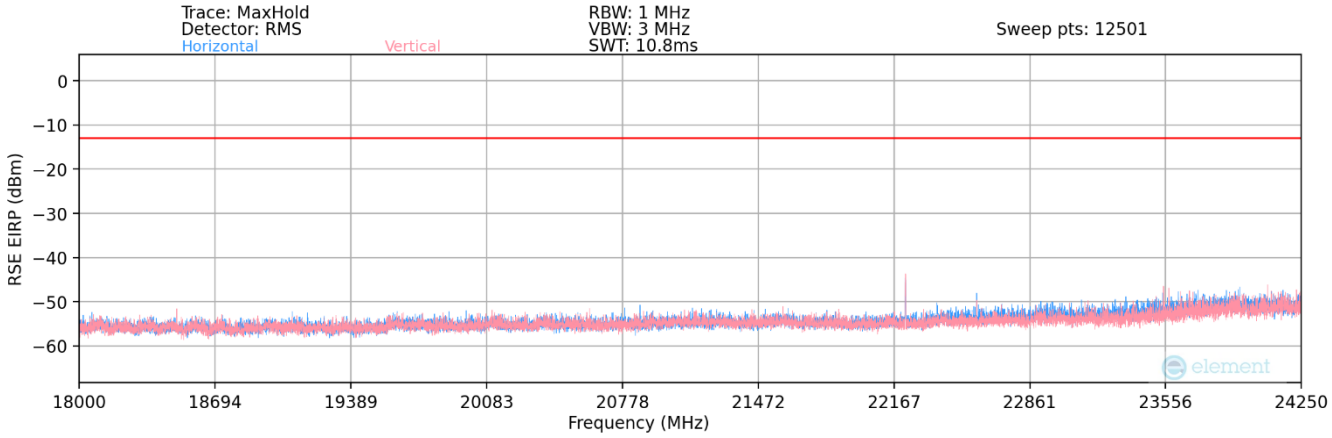
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7333.50	Low	50	2Tx	QPSK	H	195	150	-49.40	-13.00	-36.40
7408.00	Mid	50	2Tx	QPSK	H	255	104	-47.13	-13.00	-34.13
7483.00	High	50	2Tx	QPSK	H	335	162	-56.29	-13.00	-43.29

Table 7-30.n258-R1 Radiated Spurious Emissions Table (1GHz - 18GHz)

Notes

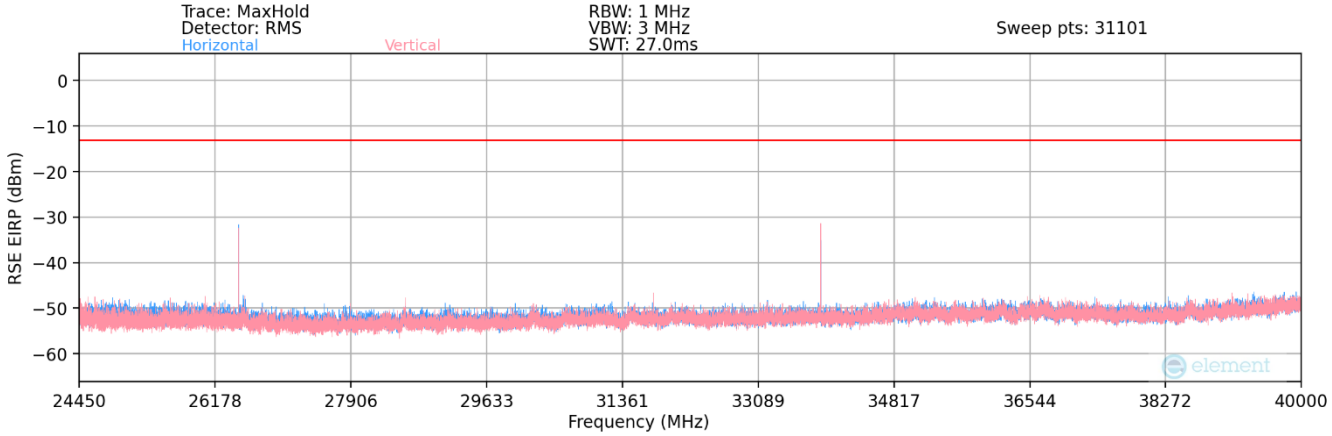
The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, and cable losses. Measurements were performed at a test distance of 3 meter.

18GHz-24.25GHz



Plot 7-190. n258-R1 Radiated Spurious Plot

24.45GHz-40GHz



Plot 7-191.n258-R1 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R1)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8

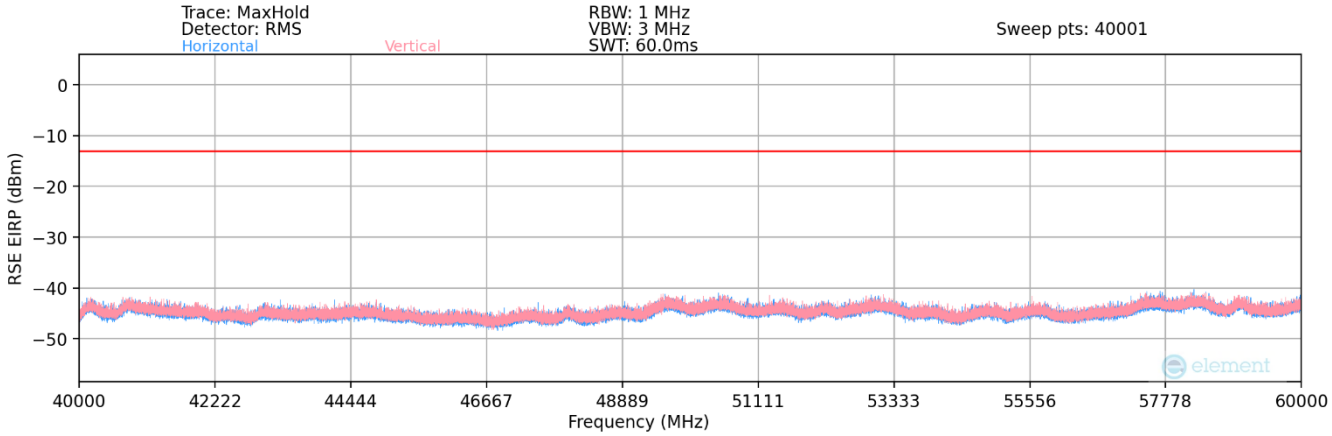
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
26550.00	Low	50	2Tx	QPSK	V	150	202	-33.97	-13.00	-20.97
33884.00	Low	50	2Tx	QPSK	V	150	218	-32.26	-13.00	-19.26
22226.00	Mid	50	2Tx	QPSK	V	150	181	-49.30	-13.00	-36.30
26476.00	Mid	50	2Tx	QPSK	H	150	213	-34.74	-13.00	-21.74
33885.00	Mid	50	2Tx	QPSK	V	150	222	-30.64	-13.00	-17.64
26400.00	High	50	2Tx	QPSK	V	150	156	-34.96	-13.00	-21.96
33883.00	High	50	2Tx	QPSK	V	150	155	-32.21	-13.00	-19.21

Table 7-31.n258-R1 Radiated Spurious Emissions Table (18GHz - 40GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, and cable losses. Measurements were performed at a test distance of 1 meter.

40GHz - 60GHz



Plot 7-192.n258-R1 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R1)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1.5 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 + Harmonic Mixer Conversion Loss [dB]

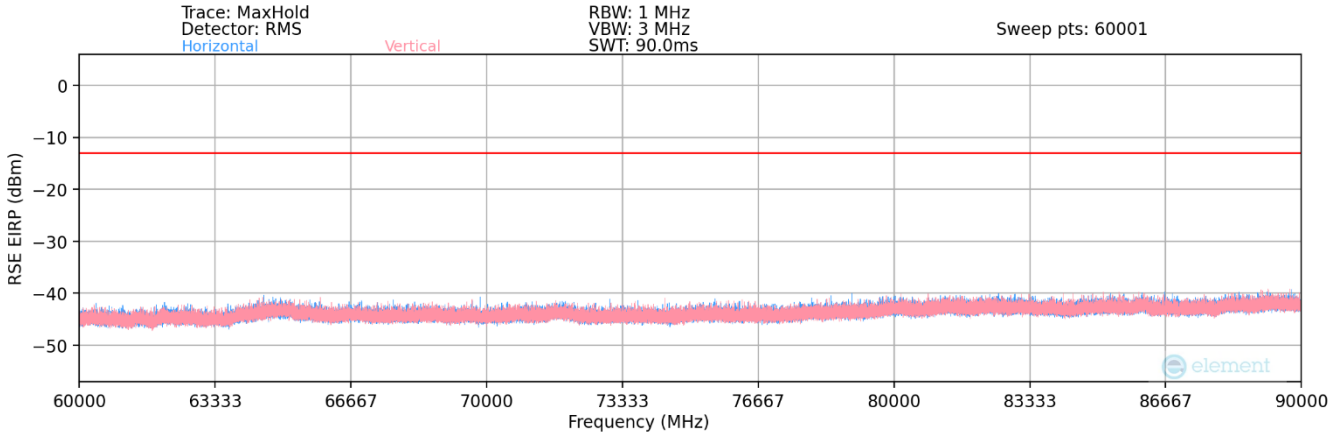
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
48550.08	Low	50	2Tx	QPSK	H	-	-	-43.89	-13.00	-30.89
48700.08	Mid	50	2Tx	QPSK	H	-	-	-43.87	-13.00	-30.87
48849.84	High	50	2Tx	QPSK	H	-	-	-43.88	-13.00	-30.88

Table 7-32.n258-R1 Radiated Spurious Emissions Table (40GHz - 60GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, cable losses, and harmonic mixer conversion losses. Measurements were performed at a distance of 1.5 meter.

60GHz - 90GHz



Plot 7-193.n258-R1 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R1)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 + Harmonic Mixer Conversion Loss [dB]

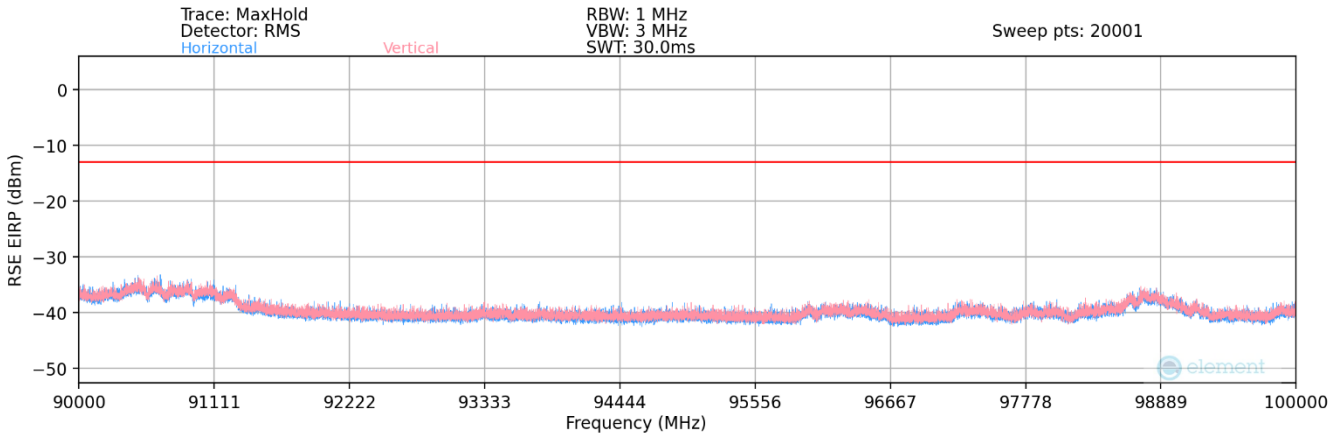
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
72825.12	Low	50	2Tx	QPSK	H	-	-	-48.20	-13.00	-35.20
73049.76	Mid	50	2Tx	QPSK	H	324	164	-47.51	-13.00	-34.51
73274.76	High	50	2Tx	QPSK	H	278	133	-46.93	-13.00	-33.93

Table 7-33.n258-R1 Radiated Spurious Emissions Table (60GHz - 90GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, cable losses, and harmonic mixer conversion losses. Measurements were performed at a distance of 1 meter.

90GHz - 100GHz



Plot 7-194.n258-R1 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R1)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 **+** Harmonic Mixer Conversion Loss [dB]

Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
97100.16	Low	50	2Tx	QPSK	H	-	-	-46.01	-13.00	-33.01
97400.16	Mid	50	2Tx	QPSK	H	-	-	-45.19	-13.00	-32.19
97699.68	High	50	2Tx	QPSK	H	-	-	-44.55	-13.00	-31.55

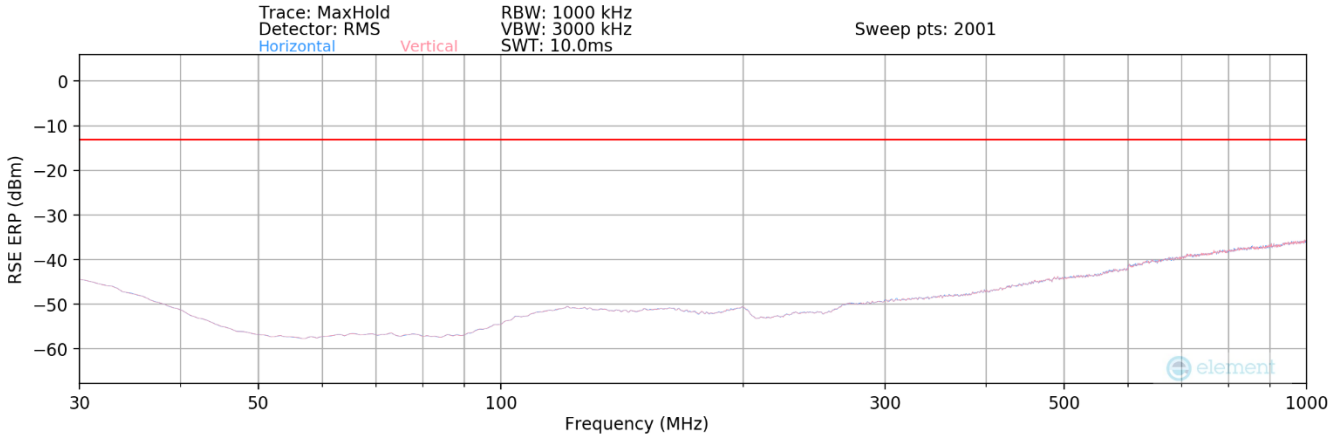
Table 7-34.n258-R1 Radiated Spurious Emissions table (90GHz-100GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, cable losses, and harmonic mixer conversion losses. Measurements were performed at a distance of 1 meter.

Band n258-R2- Ant 1

30MHz - 1GHz



Plot 7-195.n258-R2 Radiated Spurious Plot

Spurious Emissions ERP Sample Calculation (n258-R2)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE ERP level is calculated by applying the additional factors shown below for a test distance of 3 meter.

RSE ERP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 – 2.15 (dB)

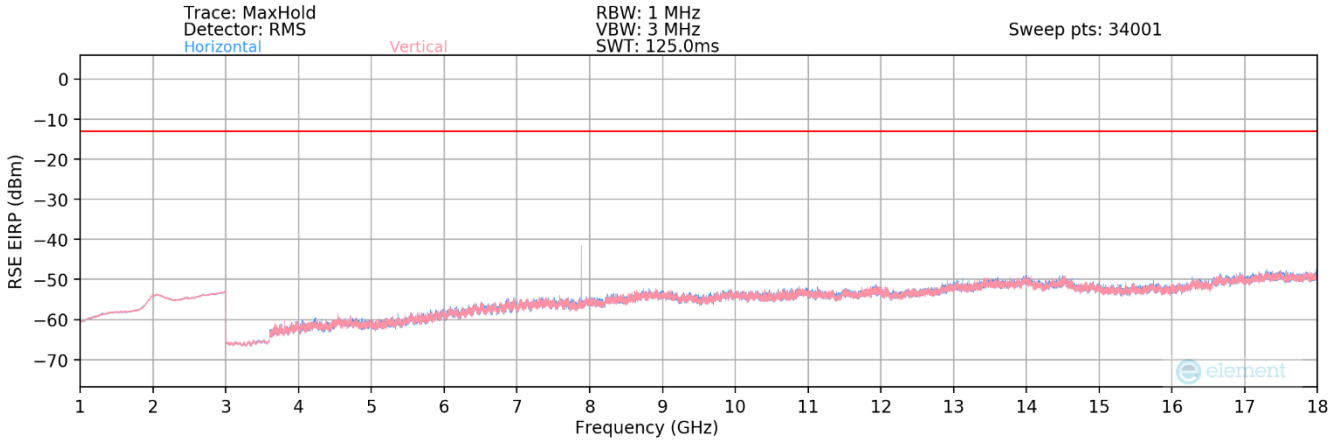
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
554.00	Low	50	2Tx	QPSK	V	-	-	-51.30	-13.00	-38.30
629.00	Mid	50	2Tx	QPSK	V	-	-	-50.45	-13.00	-37.45
601.00	High	50	2Tx	QPSK	V	-	-	-50.98	-13.00	-37.98

Table 7-35.n258-R2 Radiated Spurious Emissions Table (30MHz - 1GHz)

Notes

The RSE ERP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, and cable losses. Measurements were performed at a distance of 3 meter.

1GHz - 18GHz



Plot 7-196.n258-R2 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R2)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 3 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8

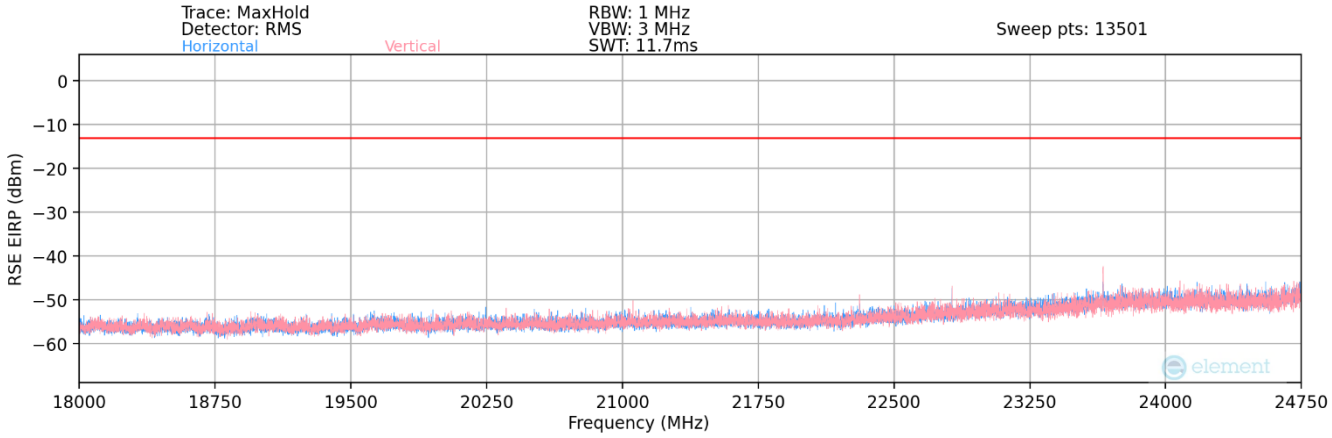
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7833.50	Low	50	2Tx	QPSK	V	243	166	-35.74	-13.00	-22.74
7885.00	Mid	50	2Tx	QPSK	V	204	169	-38.40	-13.00	-25.40
7885.80	High	50	2Tx	QPSK	V	287	204	-37.65	-13.00	-24.65

Table 7-36.n258-R2 Radiated Spurious Emissions Table (1GHz - 18GHz)

Notes

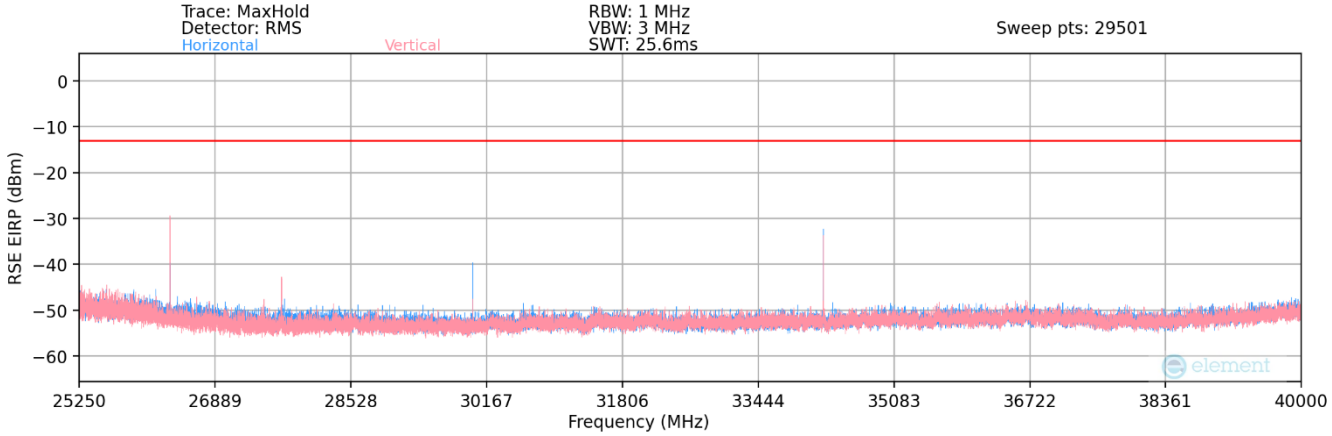
The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, and cable losses. Measurements were performed at a distance of 3 meter.

18GHz-24.75GHz



Plot 7-197.n258-R2 Radiated Spurious Plot

25.25GHz-40GHz



Plot 7-198.n258-R2 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R2)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8

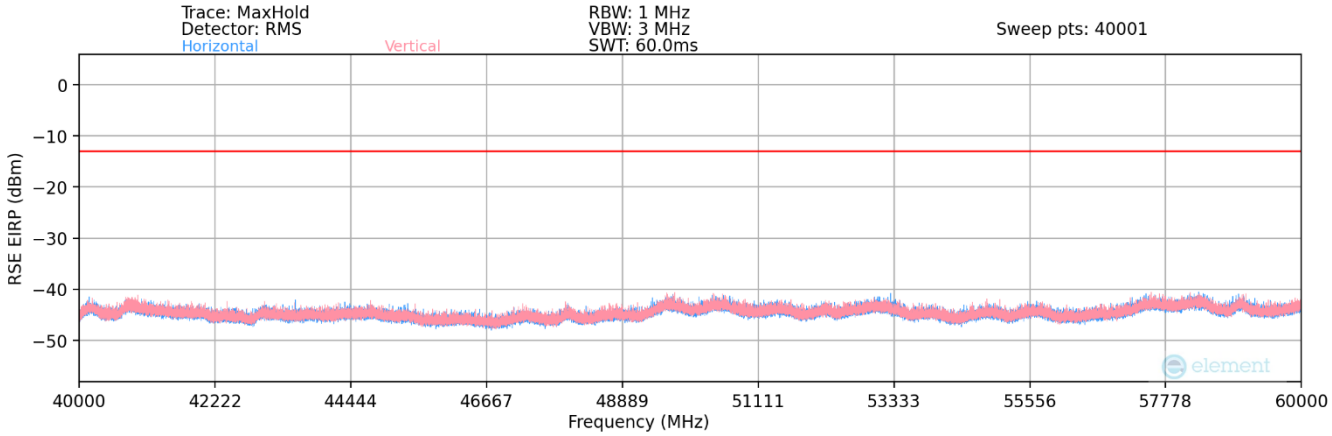
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
26052.00	Low	50	2Tx	QPSK	V	150	308	-34.45	-13.00	-21.45
28237.00	Low	50	2Tx	QPSK	V	150	22	-52.74	-13.00	-39.74
33884.00	Low	50	2Tx	QPSK	V	150	9	-34.63	-13.00	-21.63
26346.00	Mid	50	2Tx	QPSK	V	150	313	-30.59	-13.00	-17.59
27690.00	Mid	50	2Tx	QPSK	V	150	42	-47.30	-13.00	-34.30
34230.00	Mid	50	2Tx	QPSK	H	150	294	-32.38	-13.00	-19.38
26795.00	High	50	2Tx	QPSK	V	150	314	-34.64	-13.00	-21.64
34680.00	High	50	2Tx	QPSK	V	150	10	-36.18	-13.00	-23.18

Table 7-37.n258-R2 Radiated Spurious Emissions Table (18GHz - 40GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, and cable losses. Measurements were performed at a test distance of 1 meter.

40GHz - 60GHz



Plot 7-199.n258-R2 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R2)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1.5 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 + Harmonic Mixer Conversion Loss [dB]

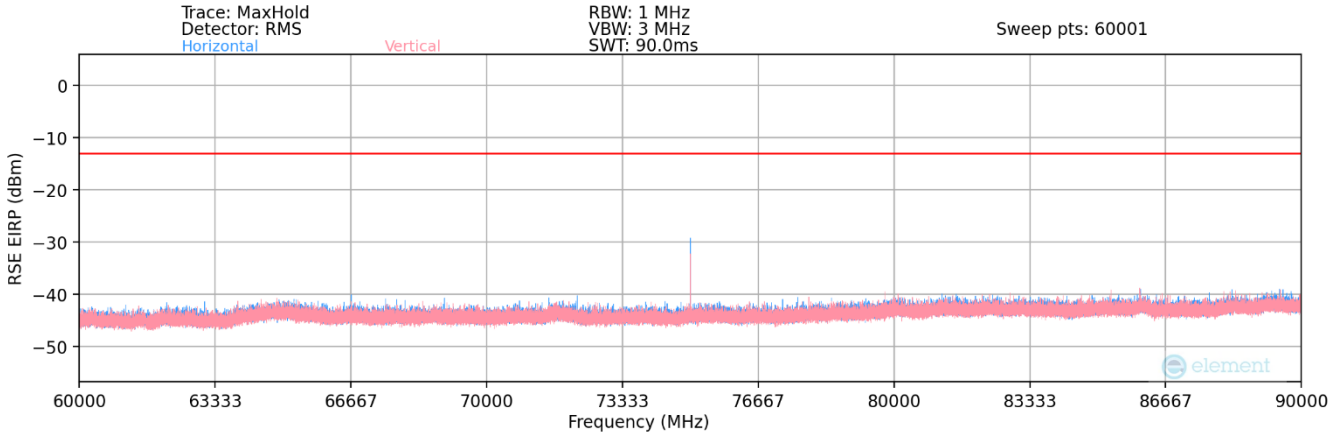
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
49550.16	Low	50	2Tx	QPSK	H	-	-	-43.99	-13.00	-30.99
49999.92	Mid	50	2Tx	QPSK	H	-	-	-43.94	-13.00	-30.94
50449.92	High	50	2Tx	QPSK	H	-	-	-43.93	-13.00	-30.93

Table 7-38.n258-R2 Radiated Spurious Emissions Table (40GHz - 60GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, cable losses, and harmonic mixer conversion losses. Measurements were performed at a distance of 1.5 meter.

60GHz - 90GHz



Plot 7-200.n258-R2 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R2)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 + Harmonic Mixer Conversion Loss [dB]

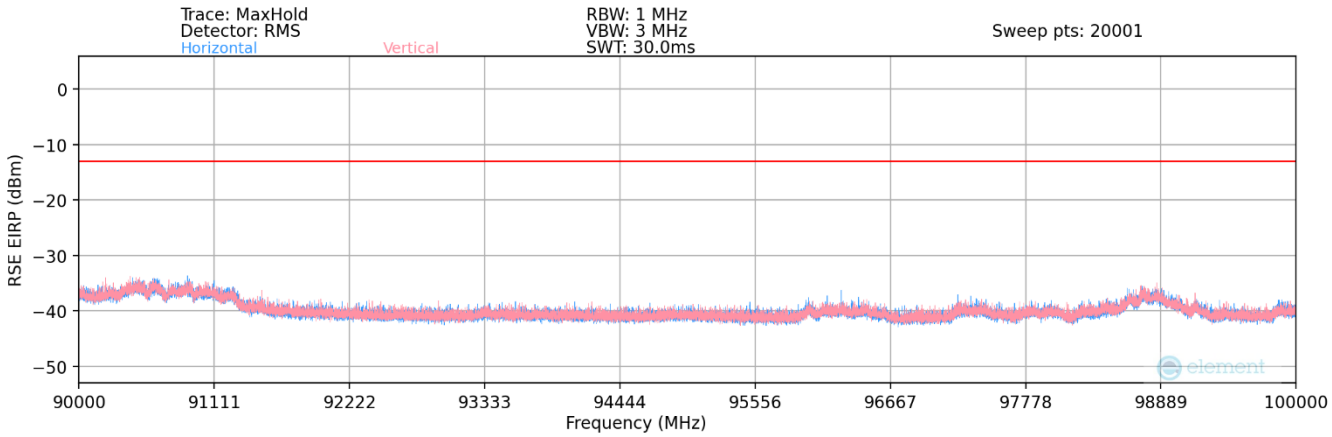
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
74325.24	Low	50	2Tx	QPSK	H	80	73	-37.64	-13.00	-24.64
74999.88	Mid	50	2Tx	QPSK	H	86	59	-33.30	-13.00	-20.30
75674.88	High	50	2Tx	QPSK	H	78	74	-30.38	-13.00	-17.38

Table 7-39.n258-R2 Radiated Spurious Emissions Table (60GHz - 90GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, cable losses, and harmonic mixer conversion losses. Measurements were performed at a test distance of 1 meter.

90GHz - 100GHz



Plot 7-201.n258-R2 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R2)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 **+** Harmonic Mixer Conversion Loss [dB]

Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Positioner Roll [degrees]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
99100.32	Low	50	2Tx	QPSK	H	-	-	-42.43	-13.00	-29.43
99999.84	Mid	50	2Tx	QPSK	H	-	-	-41.56	-13.00	-28.56
100899.84	High	50	2Tx	QPSK	H	-	-	-40.72	-13.00	-27.72

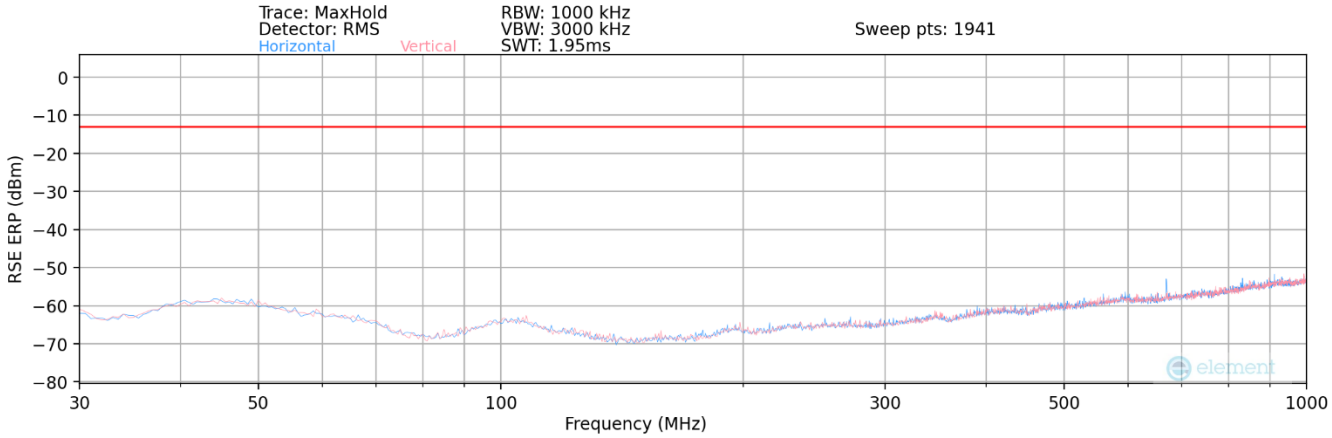
Table 7-40.n258-R2 Radiated Spurious Emissions Table (90GHz - 100GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, cable losses, and harmonic mixer conversion losses. Measurements were performed at a test distance of 1 meter.

Band n258-R2- Ant 2

30MHz - 1GHz



Plot 7-202.n258-R2 Radiated Spurious Plot

Spurious Emissions ERP Sample Calculation (n258-R2)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE ERP level is calculated by applying the additional factors shown below for a test distance of 3 meter.

RSE ERP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 – 2.15 (dB)

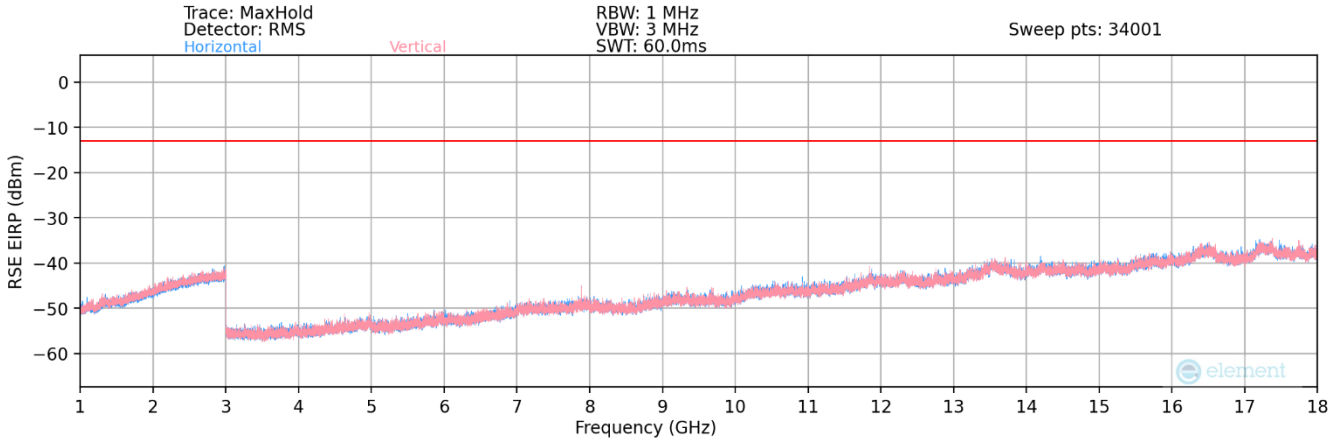
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
634.00	Low	50	2Tx	QPSK	H	-	-	-69.19	-13.00	-56.19
688.00	Mid	50	2Tx	QPSK	H	-	-	-68.87	-13.00	-55.87
732.00	High	50	2Tx	QPSK	H	-	-	-68.13	-13.00	-55.13

Table 7-41.n258-R2 Radiated Spurious Emissions Table (30MHz - 1GHz)

Notes

The RSE ERP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, and cable losses. Measurements were performed at a distance of 3 meter.

1GHz - 18GHz



Plot 7-203.n258-R2 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R2)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 3 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8

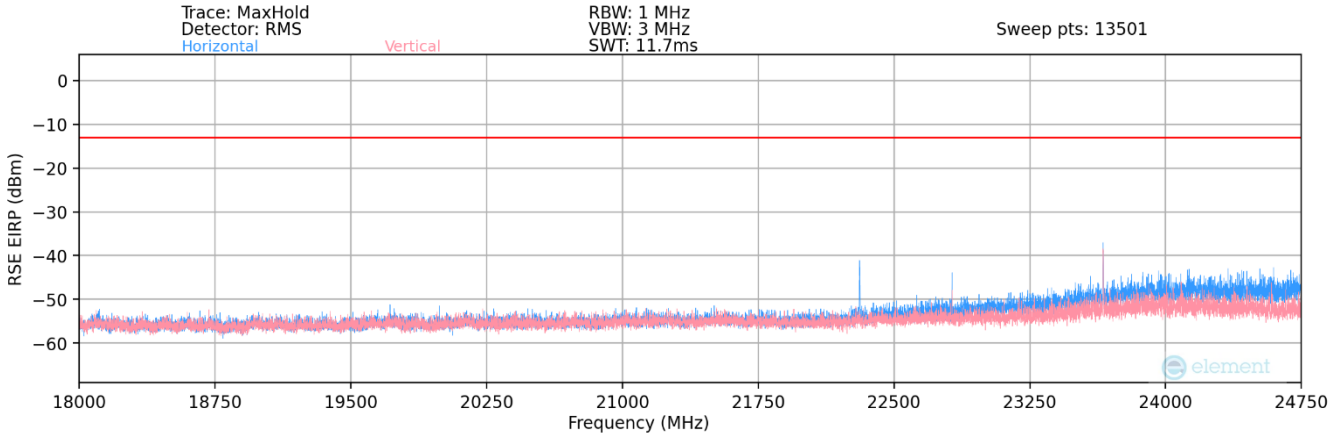
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
11000.00	Low	50	2Tx	QPSK	V	-	-	-51.16	-13.00	-38.16
11885.00	Mid	50	2Tx	QPSK	V	-	-	-49.61	-13.00	-36.61
12220.00	High	50	2Tx	QPSK	V	-	-	-49.93	-13.00	-36.93

Table 7-42.n258-R2 Radiated Spurious Emissions Table (1GHz - 18GHz)

Notes

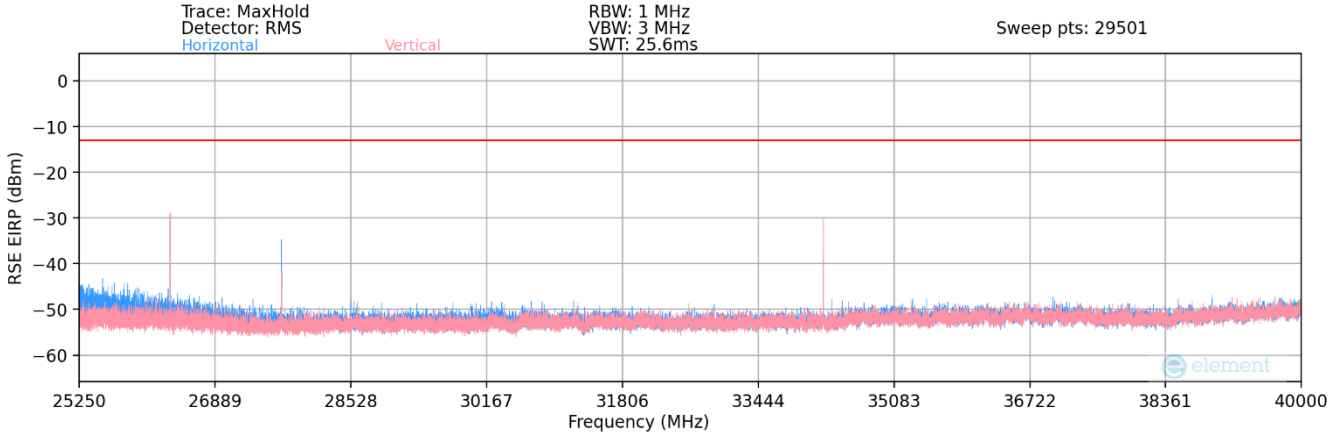
The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, and cable losses. Measurements were performed at a distance of 3 meter.

18GHz-24.75GHz



Plot 7-204.n258-R2 Radiated Spurious Plot

25.25GHz-40GHz



Plot 7-205.n258-R2 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R2)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8

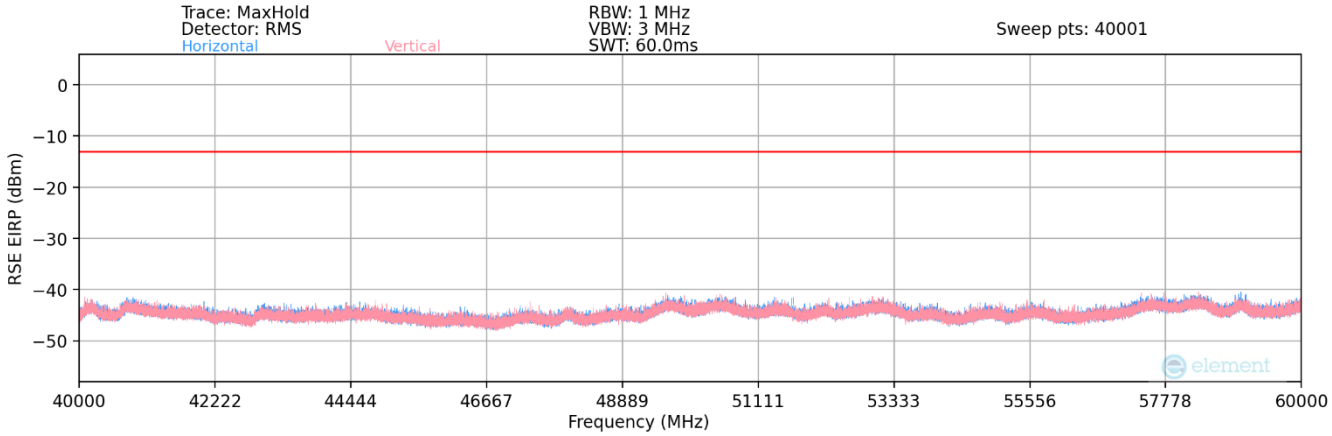
Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
26051.00	Low	50	2Tx	QPSK	V	150	172	-30.90	-13.00	-17.90
33885.00	Low	50	2Tx	QPSK	V	150	174	-29.13	-13.00	-16.13
26346.00	Mid	50	2Tx	QPSK	V	150	161	-28.96	-13.00	-15.96
27690.60	Mid	50	2Tx	QPSK	H	150	218	-41.97	-13.00	-28.97
34231.00	Mid	50	2Tx	QPSK	V	150	125	-31.49	-13.00	-18.49
26796.00	High	50	2Tx	QPSK	V	150	165	-30.66	-13.00	-17.66
34681.00	High	50	2Tx	QPSK	V	150	217	-30.63	-13.00	-17.63

Table 7-43.n258-R2 Radiated Spurious Emissions Table (18GHz - 40GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, and cable losses. Measurements were performed at a test distance of 1 meter.

40GHz - 60GHz



Plot 7-206.n258-R2 Radiated Spurious Plot

Spurious Emissions EIRP Sample Calculation (n258-R2)

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the RSE EIRP level is calculated by applying the additional factors shown below for a test distance of 1.5 meter.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8 + Harmonic Mixer Conversion Loss [dB]

Frequency [MHz]	Channnel	Bandwidth (MHz)	EUT Beam Pol.	Modulation	Antenna Polarization [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
49550.16	Low	50	2Tx	QPSK	H	-	-	-43.98	-13.00	-30.98
49999.92	Mid	50	2Tx	QPSK	H	-	-	-44.00	-13.00	-31.00
50449.92	High	50	2Tx	QPSK	H	-	-	-43.95	-13.00	-30.95

Table 7-44.n258-R2 Radiated Spurious Emissions Table (40GHz - 60GHz)

Notes

The RSE EIRP level is taken directly from the spectrum analyzer which includes the appropriate antenna factors, cable losses, and harmonic mixer conversion losses. Measurements were performed at a distance of 1.5 meter.