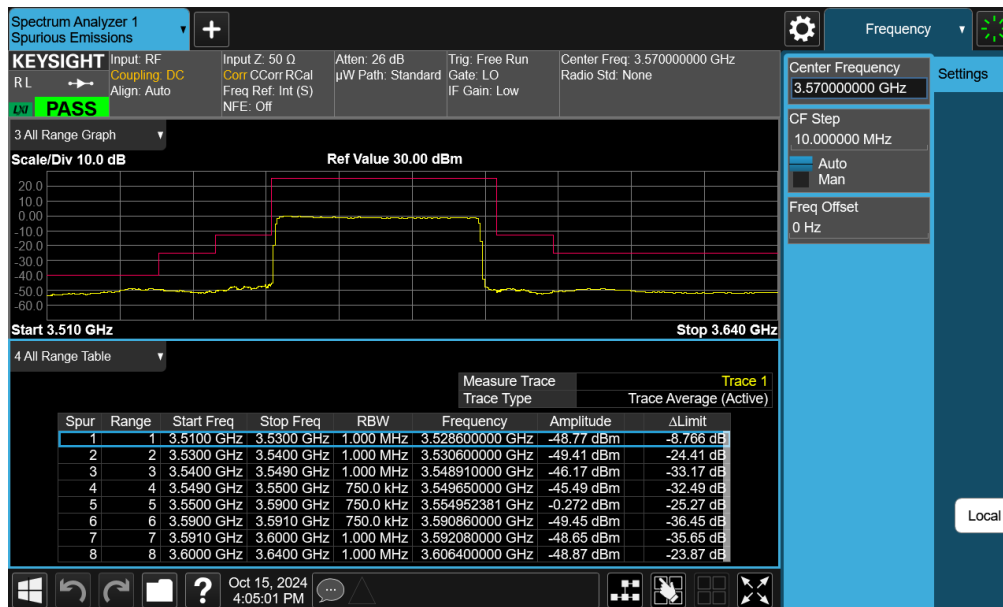
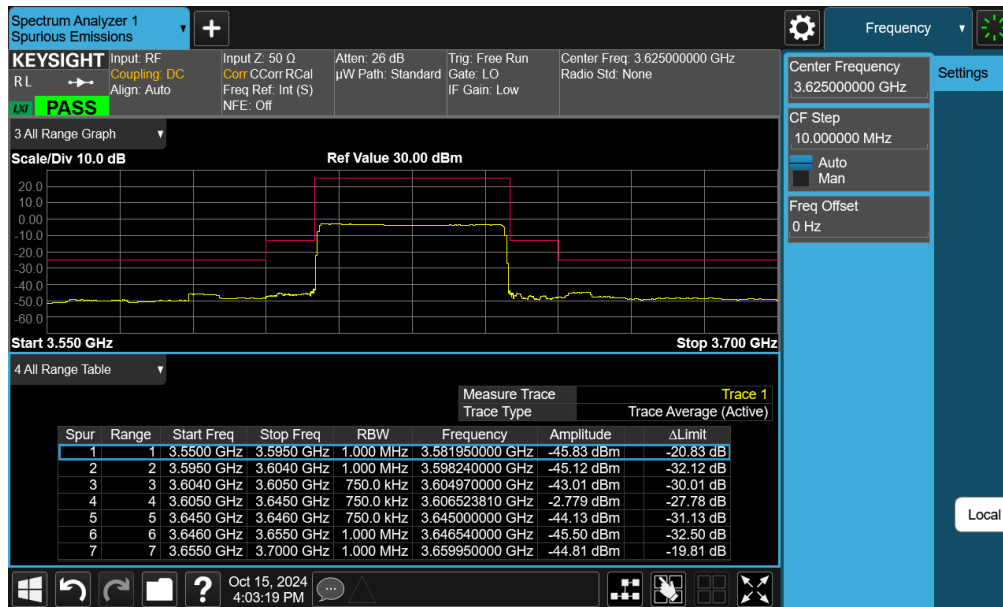


NR Band n48 – Ant C

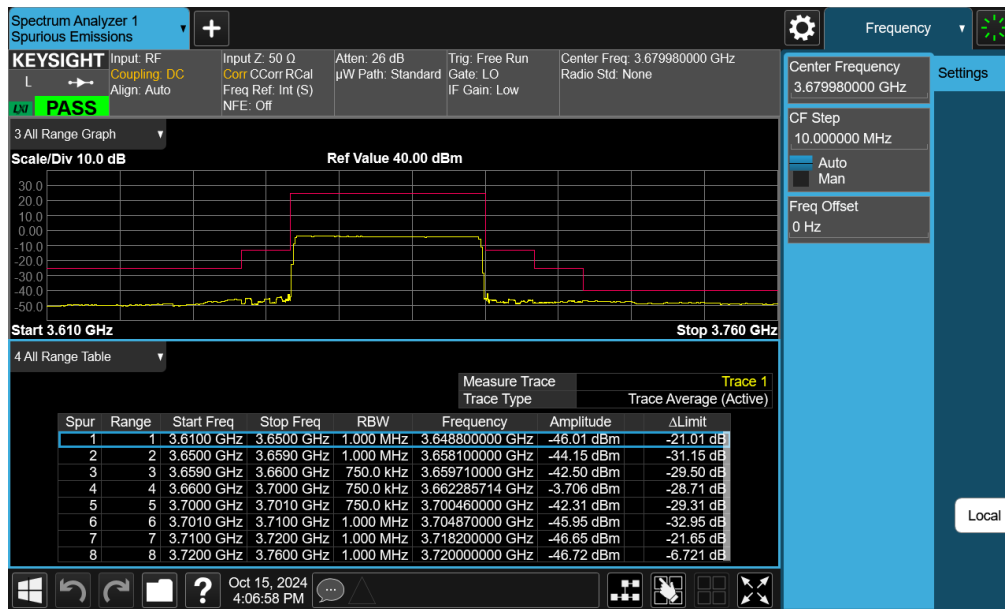


Plot 7-75. Channel Edge Plot (NR Band n48 - 40MHz DFT-s-OFDM-QPSK - Low Channel - Ant C)



Plot 7-76. Channel Edge Plot (NR Band n48 - 40MHz CP-OFDM-QPSK - Mid Channel - Ant C)

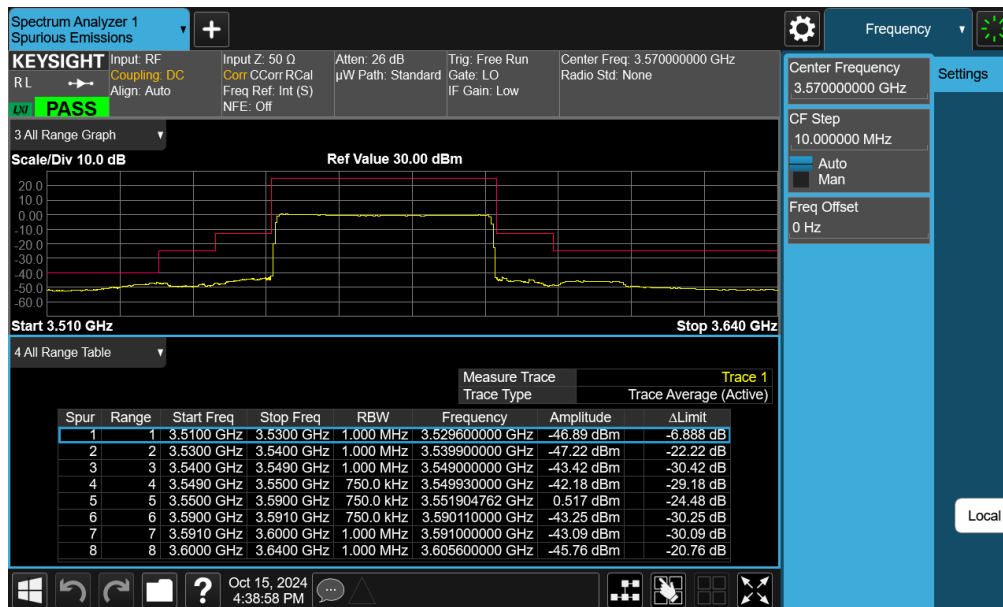
FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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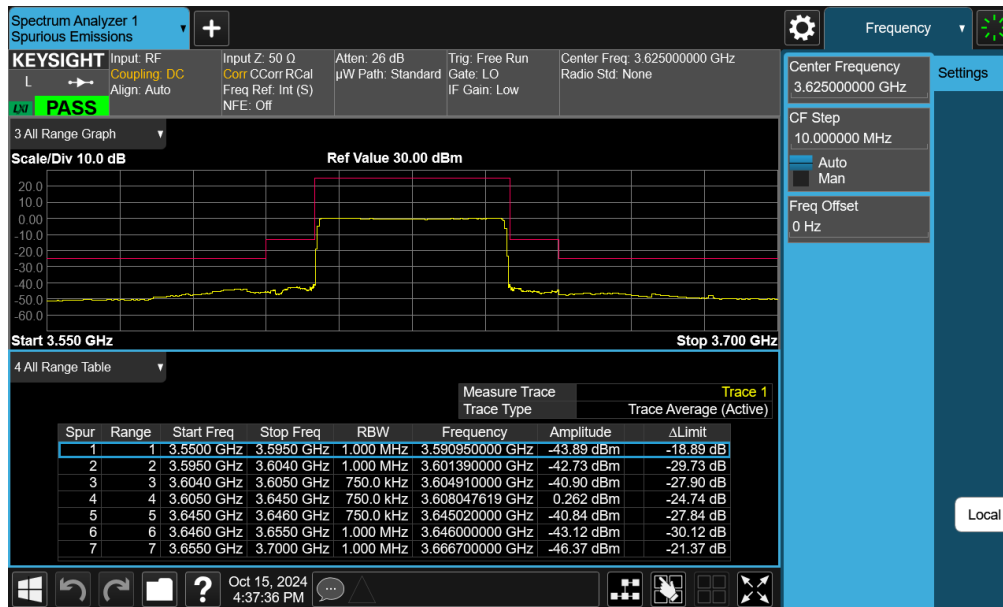
Plot 7-77. Channel Edge Plot (NR Band n48 - 40MHz CP-OFDM-QPSK - High Channel - Ant C)

FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n48 – Ant I

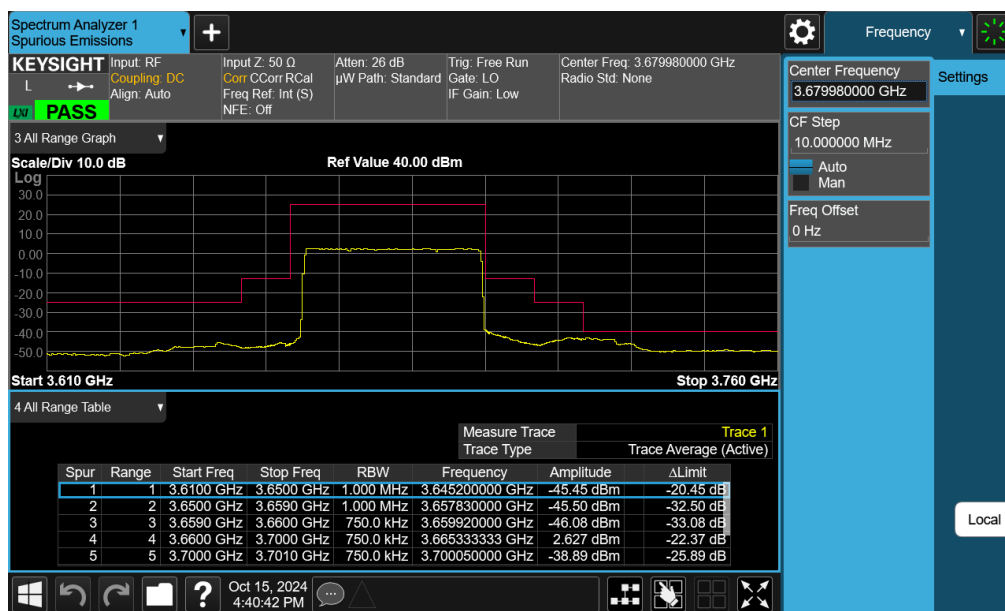


Plot 7-78. Channel Edge Plot (NR Band n48 - 40MHz DFT-s-OFDM-QPSK - Low Channel - Ant I)



Plot 7-79. Channel Edge Plot (NR Band n48 - 40MHz CP-OFDM-QPSK - Mid Channel - Ant I)

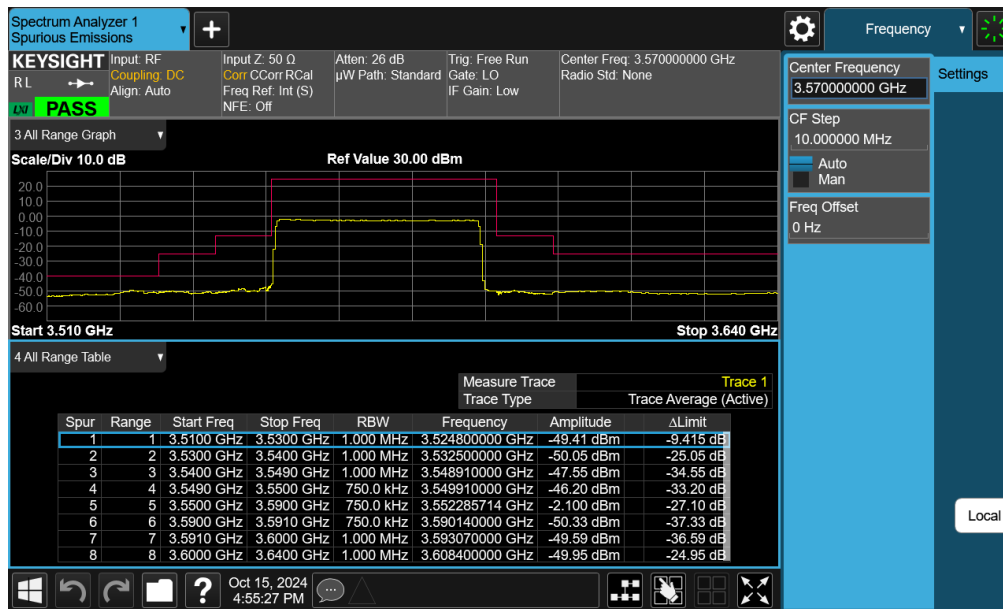
FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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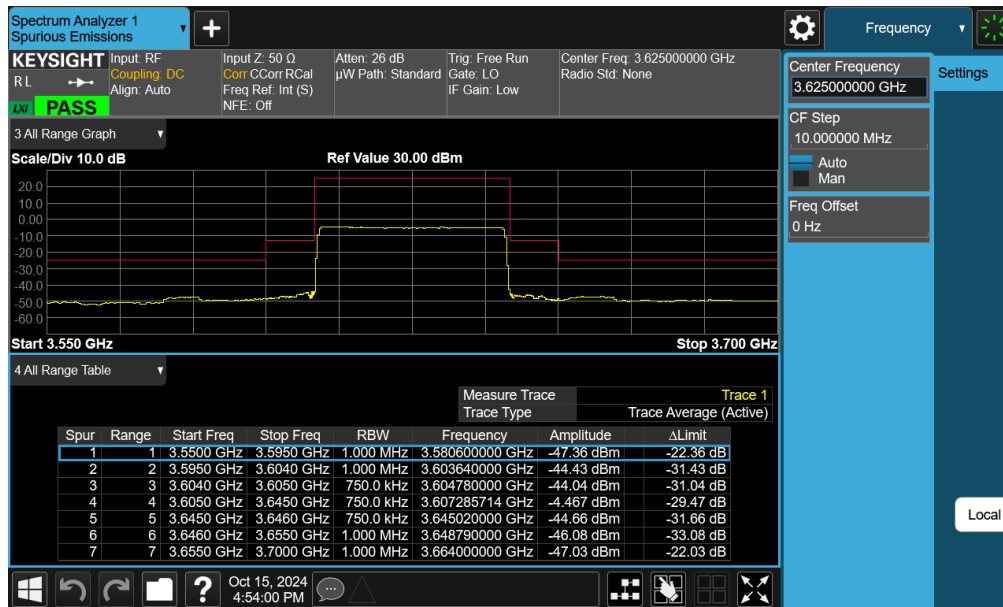
Plot 7-80. Channel Edge Plot (NR Band n48 - 40MHz CP-OFDM-QPSK - High Channel - Ant I)

FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n48 – Ant D

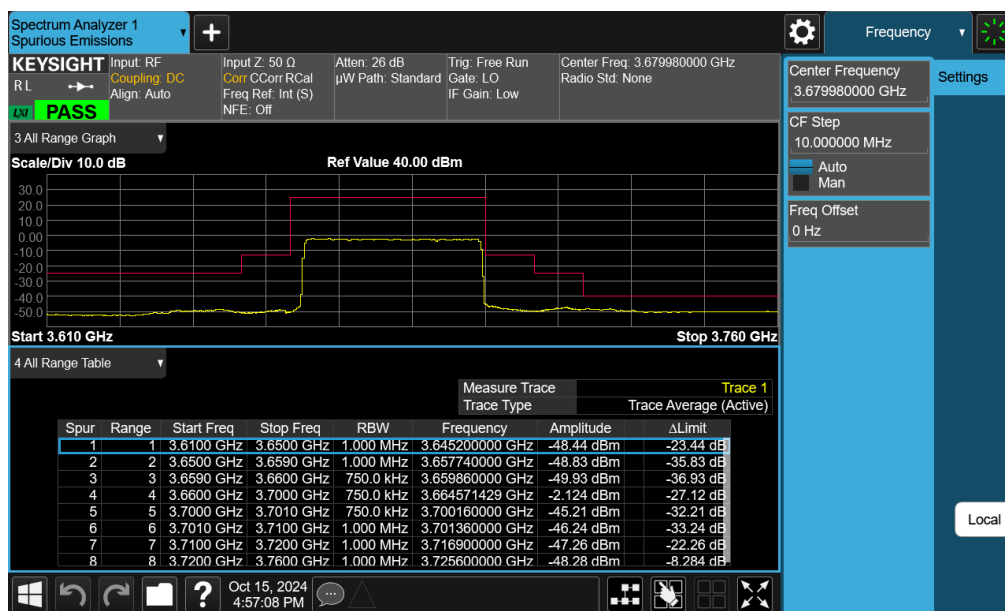


Plot 7-81. Channel Edge Plot (NR Band n48 - 40MHz DFT-s-OFDM-QPSK - Low Channel - Ant D)



Plot 7-82. Channel Edge Plot (NR Band n48 - 40MHz CP-OFDM-QPSK - Mid Channel - Ant D)

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Plot 7-83. Channel Edge Plot (NR Band n48 - 40MHz DFT-s-OFDM-BPSK - High Channel - Ant D)

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7.6 Radiated Power (EIRP)

Test Overview

Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

ANSI C63.26-2015 – Section 5.2.4.4

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
3. VBW $\geq 3 \times$ RBW
4. Span = 1.5 times the OBW
5. No. of sweep points $\geq 2 \times$ span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto". Trigger is set to enable triggering only on full power bursts with the sweep time set less than or equal to the transmission burst duration.
8. The integration bandwidth was set equal to 10MHz. For signals with burst transmission, the "gating" function was enabled to ensure that measurements are performed during times in which the transmitter is operating at its maximum power.
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize.

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Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

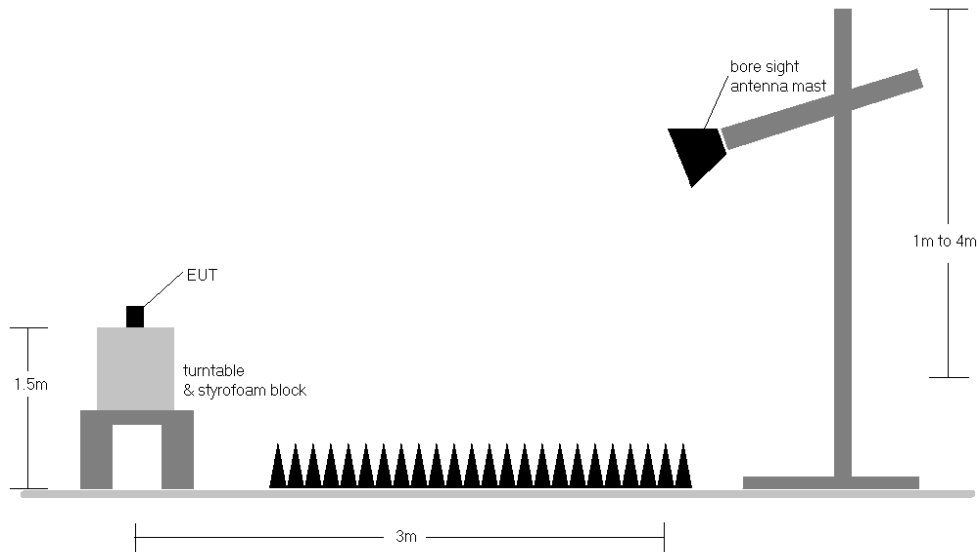


Figure 7-5. Radiated Test Setup >1GHz

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) This unit was tested with its standard battery.
- 3) For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) 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.
- 4) The worst case EIRP shown in this section is found with LTE operating only using 1RB. As such, the EIRP/10MHz and full channel EIRP values will be identical since 1RB is fully contained within all available channel bandwidths for LTE Band 48 (i.e. 5, 10, 15, 20MHz).

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Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm/10MHz]	EIRP [Watts/10MHz]	EIRP Limit [dBm/10MHz]	Margin [dB]
20 MHz	QPSK	3560.00	H	192	339	9.69	1 / 0	12.10	21.79	0.151	23.00	-1.21
	QPSK	3625.00	H	202	338	9.67	1 / 0	11.33	21.00	0.126	23.00	-2.00
	QPSK	3690.00	H	191	330	9.66	1 / 99	11.85	21.51	0.141	23.00	-1.49
	16-QAM	3560.00	H	192	339	9.69	1 / 0	11.18	20.87	0.122	23.00	-2.13
15 MHz	QPSK	3557.50	H	192	339	9.69	1 / 1	11.69	21.38	0.137	23.00	-1.62
	QPSK	3625.00	H	202	338	9.67	1 / 1	11.16	20.84	0.121	23.00	-2.16
	QPSK	3692.50	H	191	330	9.65	1 / 19	11.73	21.39	0.138	23.00	-1.61
	16-QAM	3557.50	H	192	339	9.69	1 / 1	11.40	21.10	0.129	23.00	-1.90
10 MHz	QPSK	3555.00	H	192	339	9.69	1 / 22	12.21	21.91	0.155	23.00	-1.09
	QPSK	3625.00	H	202	338	9.67	1 / 1	10.97	20.64	0.116	23.00	-2.36
	QPSK	3695.00	H	191	330	9.65	1 / 1	11.80	21.45	0.140	23.00	-1.55
	16-QAM	3555.00	H	192	339	9.69	1 / 22	11.29	20.98	0.125	23.00	-2.02
5 MHz	QPSK	3552.50	H	192	339	9.70	1 / 1	12.25	21.95	0.157	23.00	-1.05
	QPSK	3625.00	H	202	338	9.67	1 / 9	11.04	20.71	0.118	23.00	-2.29
	QPSK	3697.50	H	191	330	9.65	1 / 1	11.73	21.38	0.137	23.00	-1.62
	16-QAM	3552.50	H	192	339	9.70	1 / 1	11.57	21.27	0.134	23.00	-1.73
20 MHz	QPSK (Opposite Pol.)	3560.00	V	320	41	9.66	1 / 12	11.39	21.05	0.127	23.00	-1.95
	QPSK (WCP)	3560.00	H	195	339	9.66	1 / 12	12.21	21.87	0.154	23.00	-1.13

Table 7-25. EIRP Data (LTE Band 48 – Ant F)

Bandwidth	Modulation	PCC			SCC			Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Ant. Gain [dBi]	Substitute Level [dBm]	EIRP [dBm/10MHz]	EIRP [Watts/10MHz]	EIRP Limit [dBm/10MHz]	Margin [dB]
		Bandwidth [MHz]	Frequency [MHz]	RB / Offset	Bandwidth [MHz]	Frequency [MHz]	RB / Offset									
40 MHz	QPSK	20	3560.0	1 / 99	20	3579.8	1 / 0	H	168	342	9.69	10.97	20.66	0.116	23.00	-2.34
		20	3625.0	1 / 99	20	3644.8	1 / 0	H	154	339	9.67	11.70	21.37	0.137	23.00	-1.63
		20	3690.0	1 / 0	20	3670.2	1 / 99	H	164	334	9.66	10.63	20.29	0.107	23.00	-2.71
	16-QAM	20	3560.0	1 / 99	20	3579.8	1 / 0	H	168	342	9.69	9.83	19.52	0.090	23.00	-3.48
		20	3625.0	1 / 99	20	3644.8	1 / 0	H	154	339	9.67	10.66	20.33	0.108	23.00	-2.67
		20	3690.0	1 / 0	20	3670.2	1 / 99	H	164	334	9.66	9.39	19.05	0.080	23.00	-3.95
35 MHz	QPSK	20	3557.5	1 / 99	15	3577.1	1 / 0	H	168	342	9.69	12.17	21.86	0.154	23.00	-1.14
		20	3625.0	1 / 99	15	3642.1	1 / 0	H	154	339	9.67	11.86	21.53	0.142	23.00	-1.47
		20	3692.5	1 / 0	15	3672.9	1 / 74	H	164	334	9.65	12.34	21.99	0.158	23.00	-1.01
	16-QAM	20	3692.5	1 / 0	15	3672.9	1 / 74	H	164	334	9.65	11.37	21.02	0.127	23.00	-1.98
30 MHz	QPSK	20	3555.0	1 / 99	10	3574.4	1 / 0	H	168	342	9.69	12.12	21.81	0.152	23.00	-1.19
		20	3625.0	1 / 99	10	3639.4	1 / 0	H	154	339	9.67	11.74	21.41	0.138	23.00	-1.59
		20	3695.0	1 / 0	10	3678.3	1 / 49	H	164	334	9.65	12.28	21.94	0.156	23.00	-1.06
	16-QAM	20	3695.0	1 / 0	10	3678.3	1 / 49	H	164	334	9.65	11.72	21.38	0.137	23.00	-1.62
25 MHz	QPSK	20	3552.5	1 / 99	5	3571.7	1 / 0	H	168	342	9.70	11.11	20.81	0.120	23.00	-2.19
		20	3625.0	1 / 99	5	3636.7	1 / 0	H	154	339	9.67	11.59	21.26	0.134	23.00	-1.74
		20	3697.5	1 / 0	5	3678.3	1 / 24	H	164	334	9.65	12.17	21.83	0.152	23.00	-1.17
	16-QAM	20	3697.5	1 / 0	5	3678.3	1 / 24	H	164	334	9.65	10.93	20.58	0.114	23.00	-2.42

Table 7-26. EIRP Data (ULCA LTE Band 48 – Ant F)

FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm/10MHz]	EIRP [Watts/10MHz]	EIRP Limit [dBm/10MHz]	Margin [dB]
40 MHz	$\pi/2$ BPSK	3570.00	H	204	347	9.69	1 / 1	11.09	20.78	0.120	23.00	-2.22
	$\pi/2$ BPSK	3625.00	H	204	338	9.67	1 / 1	11.77	21.44	0.139	23.00	-1.56
	$\pi/2$ BPSK	3680.00	H	194	334	9.66	1 / 53	11.75	21.41	0.138	23.00	-1.59
	QPSK	3570.00	H	204	347	9.69	1 / 1	11.07	20.76	0.119	23.00	-2.24
	QPSK	3625.00	H	204	338	9.67	1 / 1	11.78	21.45	0.140	23.00	-1.55
	QPSK	3680.00	H	194	334	9.66	1 / 53	11.72	21.38	0.137	23.00	-1.62
30 MHz	16-QAM	3625.00	H	204	338	9.67	1 / 1	10.83	20.50	0.112	23.00	-2.50
	$\pi/2$ BPSK	3565.00	H	204	347	9.69	1 / 76	11.95	21.64	0.146	23.00	-1.36
	$\pi/2$ BPSK	3625.00	H	204	338	9.67	1 / 39	11.75	21.43	0.139	23.00	-1.57
	$\pi/2$ BPSK	3685.00	H	194	334	9.66	1 / 39	12.02	21.68	0.147	23.00	-1.32
	QPSK	3565.00	H	204	347	9.69	1 / 76	11.91	21.60	0.145	23.00	-1.40
	QPSK	3625.00	H	204	338	9.67	1 / 1	11.55	21.22	0.132	23.00	-1.78
20 MHz	QPSK	3685.00	H	194	334	9.66	1 / 39	11.62	21.28	0.134	23.00	-1.72
	16-QAM	3685.00	H	204	338	9.66	1 / 39	11.73	21.39	0.138	23.00	-1.61
	$\pi/2$ BPSK	3560.00	H	204	347	9.69	1 / 1	10.72	20.42	0.110	23.00	-2.58
	$\pi/2$ BPSK	3625.00	H	204	338	9.67	1 / 49	11.71	21.39	0.138	23.00	-1.61
	$\pi/2$ BPSK	3680.00	H	194	334	9.66	1 / 1	11.99	21.64	0.146	23.00	-1.36
	QPSK	3560.00	H	204	347	9.69	1 / 1	10.66	20.35	0.108	23.00	-2.65
15 MHz	QPSK	3625.00	H	204	338	9.67	1 / 25	11.55	21.22	0.133	23.00	-1.78
	QPSK	3680.00	H	194	334	9.66	1 / 1	11.48	21.13	0.130	23.00	-1.87
	16-QAM	3680.00	H	204	338	9.66	1 / 1	11.68	21.33	0.136	23.00	-1.67
	$\pi/2$ BPSK	3567.50	H	204	347	9.69	1 / 1	10.73	20.43	0.110	23.00	-2.57
	$\pi/2$ BPSK	3625.00	H	204	338	9.67	1 / 1	11.54	21.21	0.132	23.00	-1.79
	$\pi/2$ BPSK	3682.50	H	194	334	9.65	1 / 19	11.85	21.50	0.141	23.00	-1.50
10 MHz	QPSK	3567.50	H	204	347	9.69	1 / 1	10.53	20.23	0.105	23.00	-2.77
	QPSK	3625.00	H	204	338	9.67	1 / 36	11.31	20.98	0.125	23.00	-2.02
	QPSK	3682.50	H	194	334	9.65	1 / 36	11.50	21.15	0.130	23.00	-1.85
	16-QAM	3682.50	H	204	338	9.65	1 / 36	11.23	20.89	0.123	23.00	-2.11
	$\pi/2$ BPSK	3565.00	H	204	347	9.69	1 / 1	10.86	20.56	0.114	23.00	-2.44
	$\pi/2$ BPSK	3625.00	H	204	338	9.67	1 / 12	11.29	20.97	0.125	23.00	-2.03
40 MHz	$\pi/2$ BPSK	3685.00	H	194	334	9.65	1 / 12	11.57	21.23	0.133	23.00	-1.77
	QPSK	3565.00	H	204	347	9.69	1 / 1	10.71	20.40	0.110	23.00	-2.60
	QPSK	3625.00	H	204	338	9.67	1 / 1	11.04	20.72	0.118	23.00	-2.28
	QPSK	3685.00	H	194	334	9.65	1 / 12	11.03	20.69	0.117	23.00	-2.31
	16-QAM	3685.00	H	204	338	9.65	1 / 12	10.76	20.42	0.110	23.00	-2.58
	QPSK (CP-OFDM)	3625.00	H	202	333	9.66	1 / 1	10.64	20.30	0.107	23.00	-2.70
40 MHz	QPSK (Opposite Pol.)	3625.00	V	280	5	9.66	1 / 1	10.97	20.63	0.116	23.00	-2.37
	QPSK (WCP)	3625.00	H	199	332	9.66	1 / 1	11.43	21.09	0.128	23.00	-1.91

Table 7-27. EIRP Data (NR Band n48 – Ant F)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm/10MHz]	EIRP [Watts/10MHz]	EIRP Limit [dBm/10MHz]	Margin [dB]
40 MHz	$\pi/2$ BPSK	3570.00	H	100	35	9.69	1 / 1	11.27	20.96	0.125	23.00	-2.04
	$\pi/2$ BPSK	3625.00	H	100	41	9.67	1 / 1	10.54	20.21	0.105	23.00	-2.79
	$\pi/2$ BPSK	3680.00	H	101	43	9.66	1 / 1	10.87	20.53	0.113	23.00	-2.47
	QPSK	3570.00	H	100	35	9.69	1 / 1	11.32	21.01	0.126	23.00	-1.99
	QPSK	3625.00	H	100	41	9.67	1 / 1	10.51	20.18	0.104	23.00	-2.82
	QPSK	3680.00	H	101	43	9.66	1 / 1	10.80	20.46	0.111	23.00	-2.54
40 MHz	16-QAM	3570.00	H	100	35	9.69	1 / 1	10.28	19.97	0.099	23.00	-3.03
	QPSK (CP-OFDM)	3570.00	H	101	40	9.69	1 / 1	8.56	18.25	0.067	23.00	-4.75
40 MHz	QPSK (Opposite Pol.)	3570.00	V	107	66	9.69	1 / 53	10.16	19.85	0.097	23.00	-3.15

Table 7-28. EIRP Data (NR Band n48 – Ant C)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm/10MHz]	EIRP [Watts/10MHz]	EIRP Limit [dBm/10MHz]	Margin [dB]
40 MHz	$\pi/2$ BPSK	3570.00	H	196	321	9.69	1 / 1	10.07	19.76	0.095	23.00	-3.24
	$\pi/2$ BPSK	3625.00	H	196	326	9.67	1 / 1	10.94	20.61	0.115	23.00	-2.39
	$\pi/2$ BPSK	3680.00	H	210	325	9.66	1 / 53	10.23	19.89	0.097	23.00	-3.11
	QPSK	3570.00	H	196	321	9.69	1 / 1	10.06	19.75	0.094	23.00	-3.25
	QPSK	3625.00	H	196	326	9.67	1 / 1	10.89	20.56	0.114	23.00	-2.44
	QPSK	3680.00	H	210	325	9.66	1 / 53	10.20	19.86	0.097	23.00	-3.14
40 MHz	16-QAM	3625.00	H	196	326	9.67	1 / 1	9.88	19.55	0.090	23.00	-3.45
	QPSK (CP-OFDM)	3625.00	H	206	319	9.67	1 / 1	8.40	18.07	0.064	23.00	-4.93
40 MHz	QPSK (Opposite Pol.)	3625.00	V	399	4	9.67	1 / 1	7.78	17.45	0.056	23.00	-5.55

Table 7-29. EIRP Data (NR Band n48 – Ant I)

FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT									Approved by: Technical Manager		
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Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm/10MHz]	EIRP [Watts/10MHz]	EIRP Limit [dBm/10MHz]	Margin [dB]
40 MHz	$\pi/2$ BPSK	3570.00	V	101	344	9.69	1 / 1	4.82	14.51	0.028	23.00	-8.49
	$\pi/2$ BPSK	3625.00	V	101	331	9.67	1 / 104	3.26	12.93	0.020	23.00	-10.07
	$\pi/2$ BPSK	3680.00	V	108	349	9.66	1 / 1	4.62	14.28	0.027	23.00	-8.72
	QPSK	3570.00	V	101	344	9.69	1 / 1	4.79	14.48	0.028	23.00	-8.52
	QPSK	3625.00	V	101	331	9.67	1 / 104	3.17	12.84	0.019	23.00	-10.16
	QPSK	3680.00	V	108	349	9.66	1 / 1	4.61	14.27	0.027	23.00	-8.73
40 MHz	16-QAM	3570.00	V	101	344	9.69	1 / 1	3.79	13.48	0.022	23.00	-9.52
	QPSK (CP-OFDM)	3570.00	V	101	344	9.69	1 / 1	3.31	13.00	0.020	23.00	-10.00
	QPSK (Opposite Pol.)	3570.00	H	117	34	9.69	1 / 1	2.75	12.44	0.018	23.00	-10.56

Table 7-30. EIRP Data (NR Band n48 – Ant D)

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7.7 Radiated Spurious Emissions Measurements

Test Overview

Radiated spurious emissions measurements are performed using the field strength conversion method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using hybrid (biconical/log) antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

ANSI C63.26-2015 – Section 5.5.4

Test Settings

1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
2. VBW $\geq 3 \times$ RBW
3. Span = 1.5 times the OBW
4. No. of sweep points $\geq 2 \times$ span / RBW
5. Detector = RMS
6. Trace mode = Max Hold (In cases where the level is within 2dB of the limit, the final measurement is taken using triggering/gating and trace averaging.)
7. The trace was allowed to stabilize

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Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

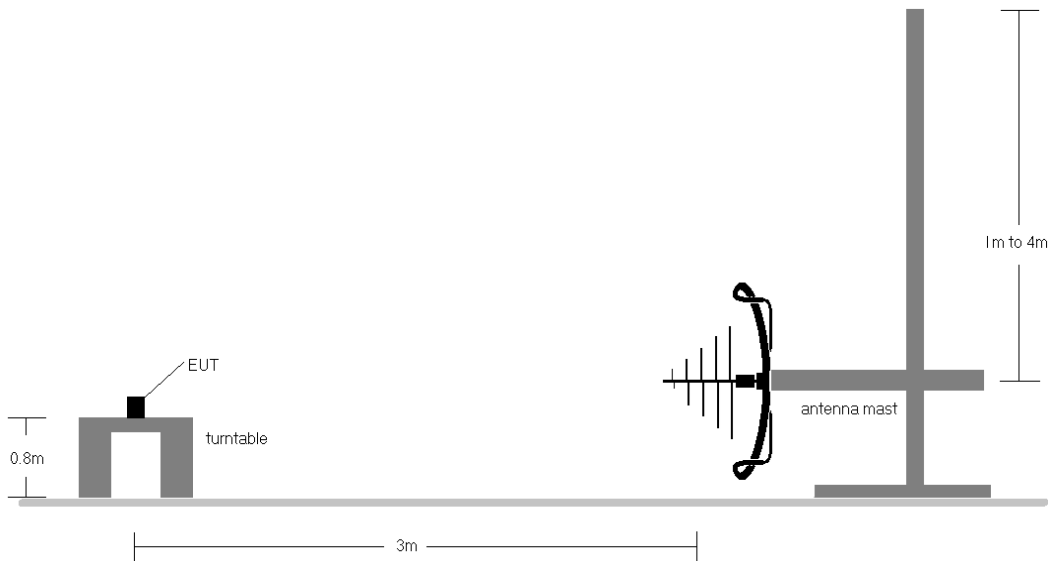


Figure 7-6. Test Instrument & Measurement Setup < 1GHz

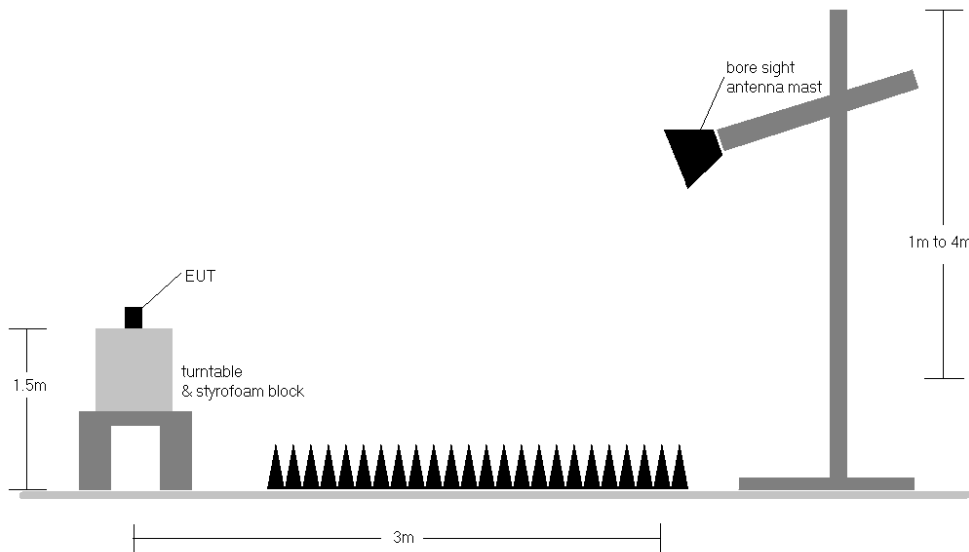


Figure 7-7. Test Instrument & Measurement Setup >1 GHz

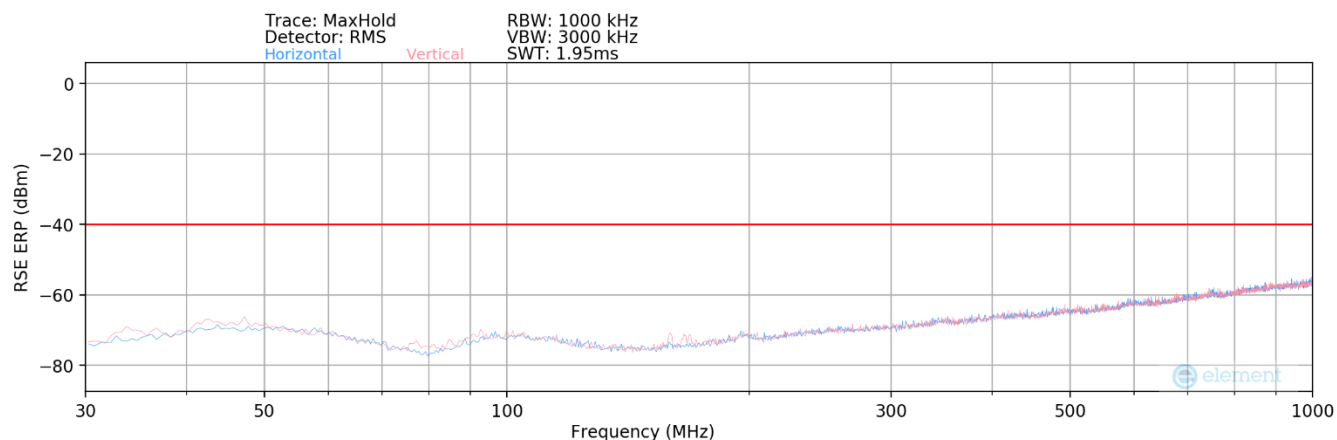
FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Test Notes

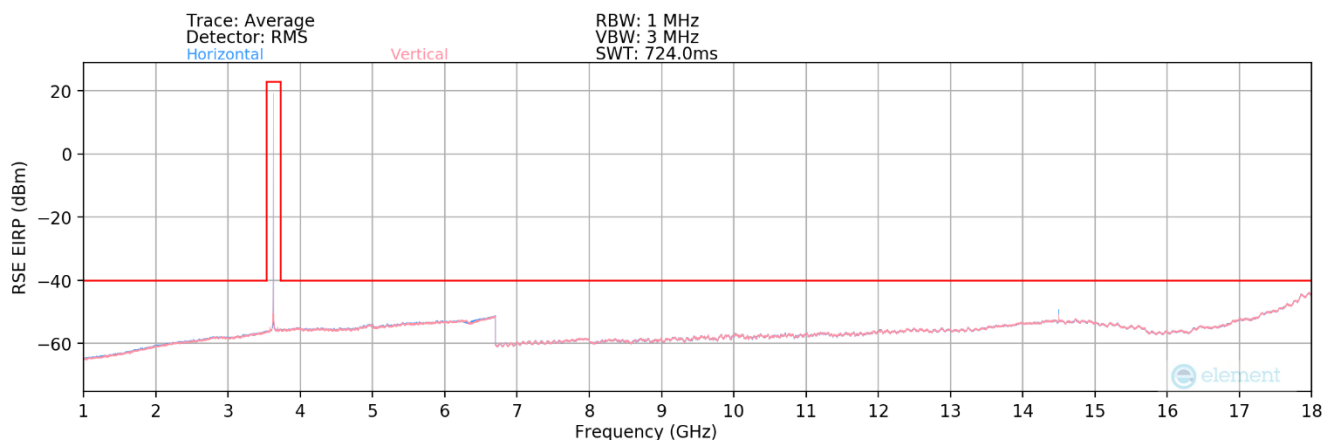
- 1) Field strengths are calculated using the Measurement quantity conversions in ANSI C63.26-2015 Section 5.2.7:
 - a) $E(\text{dB}\mu\text{V/m}) = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$
 - b) $\text{EIRP (dBm)} = E(\text{dB}\mu\text{V/m}) + 20\log D - 104.8$; where D is the measurement distance in meters.
- 2) 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.
- 3) This unit was tested with its standard battery.
- 4) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.
- 5) Emissions below 18GHz were measured at a 3-meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
- 6) The "-" shown in the following RSE tables are used to denote a noise floor measurement.
- 7) For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) 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.
- 8) Spurious emissions shown in this section are measured while operating in EN-DC mode with Sub 6GHz NR carrier as well as an LTE carrier (anchor). Spurious emissions from the NR carrier device are subject to the rules under which the NR carrier operates. Spurious emissions caused by the LTE carrier must meet the requirements of the rules under which the LTE carrier operates.
- 9) ULCA spurious emissions measurements were evaluated for the two contiguous channels using various combinations of RB size, RB offset, modulation, and channel bandwidth. Channel bandwidth data is shown in the tables below based only on the channel bandwidths that were supported in this device.

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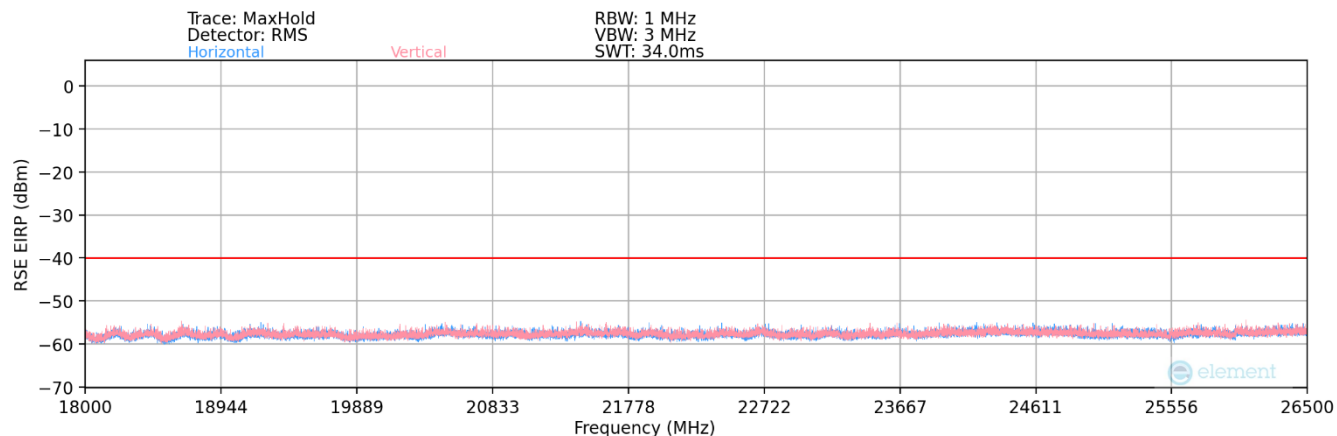
LTE Band 48 – Ant F



Plot 7-84. Radiated Spurious Plot (LTE Band 48 – Ant F)

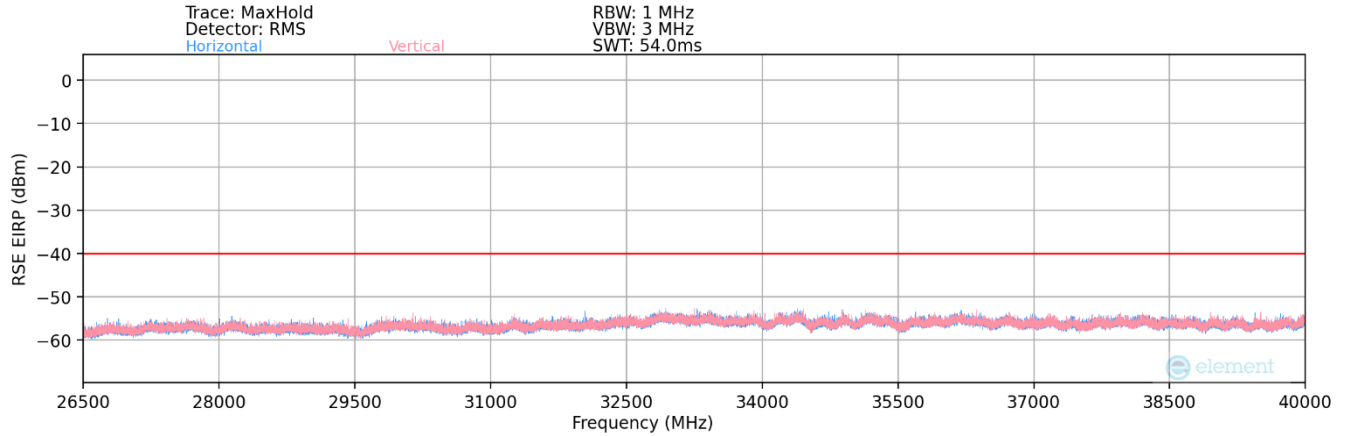


Plot 7-85. Radiated Spurious Plot (LTE Band 48 – Ant F)



Plot 7-86. Radiated Spurious Plot (LTE Band 48 – Ant F)

FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-87. Radiated Spurious Plot (LTE Band 48 – Ant F)

Bandwidth (MHz):	20
Frequency (MHz):	3560.0
RB Config (Size / Offset):	1 / 50

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7120.00	H	-	-	-76.07	6.61	37.54	-57.72	-40.00	-17.72
10680.00	H	-	-	-79.04	11.16	39.12	-56.14	-40.00	-16.14
14240.00	H	137	24	-80.77	16.34	42.57	-52.69	-40.00	-12.69
17800.00	H	-	-	-81.02	23.80	49.78	-45.48	-40.00	-5.48
21360.00	H	-	-	-54.56	-3.25	49.19	-55.61	-40.00	-15.61
24920.00	H	-	-	-51.74	-3.32	51.94	-52.86	-40.00	-12.86
28480.00	H	-	-	-54.29	-1.13	51.58	-53.22	-40.00	-13.22
32040.00	H	-	-	-54.58	0.30	52.72	-52.08	-40.00	-12.08

Table 7-31. Radiated Spurious Data (LTE Band 48 – Low Channel - Ant F)

Bandwidth (MHz):	20
Frequency (MHz):	3625.0
RB Config (Size / Offset):	1 / 50

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7250.00	H	-	-	-75.91	6.97	38.06	-57.20	-40.00	-17.20
10875.00	H	-	-	-78.91	10.92	39.01	-56.24	-40.00	-16.24
14500.00	H	140	21	-78.45	16.89	45.44	-49.82	-40.00	-9.82
18125.00	H	-	-	-53.28	-3.22	50.50	-54.30	-40.00	-14.30
21750.00	H	-	-	-51.96	-3.58	51.46	-53.34	-40.00	-13.34
25375.00	H	-	-	-52.47	-3.04	51.49	-53.31	-40.00	-13.31
29000.00	H	-	-	-53.49	-1.03	52.48	-52.32	-40.00	-12.32
32625.00	H	-	-	-53.61	0.53	53.92	-50.88	-40.00	-10.88

Table 7-32. Radiated Spurious Data (LTE Band 48 – Mid Channel - Ant F)

FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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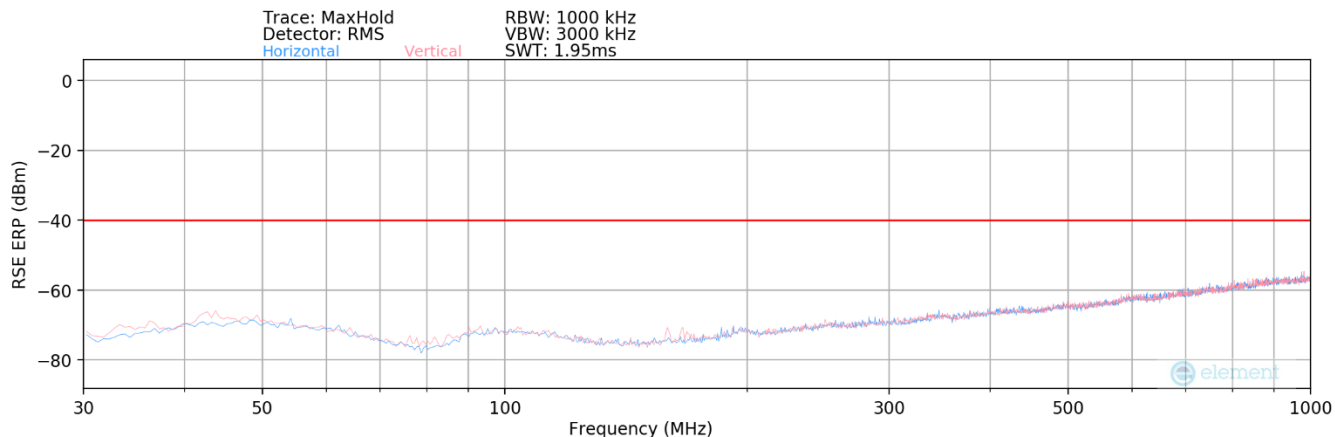
Bandwidth (MHz):	20
Frequency (MHz):	3690.0
RB Config (Size / Offset):	1 / 50

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7380.00	H	-	-	-76.79	6.96	37.17	-58.09	-40.00	-18.09
11070.00	H	-	-	-79.67	11.83	39.16	-56.10	-40.00	-16.10
14760.00	H	128	125	-81.55	17.73	43.18	-52.08	-40.00	-12.08
18450.00	H	-	-	-53.12	-3.35	50.53	-54.27	-40.00	-14.27
22140.00	H	-	-	-53.24	-3.71	50.05	-54.75	-40.00	-14.75
25830.00	H	-	-	-52.97	-2.55	51.48	-53.32	-40.00	-13.32
29520.00	H	-	-	-54.81	-0.64	51.55	-53.25	-40.00	-13.25
33210.00	H	-	-	-53.06	0.21	54.15	-50.65	-40.00	-10.65

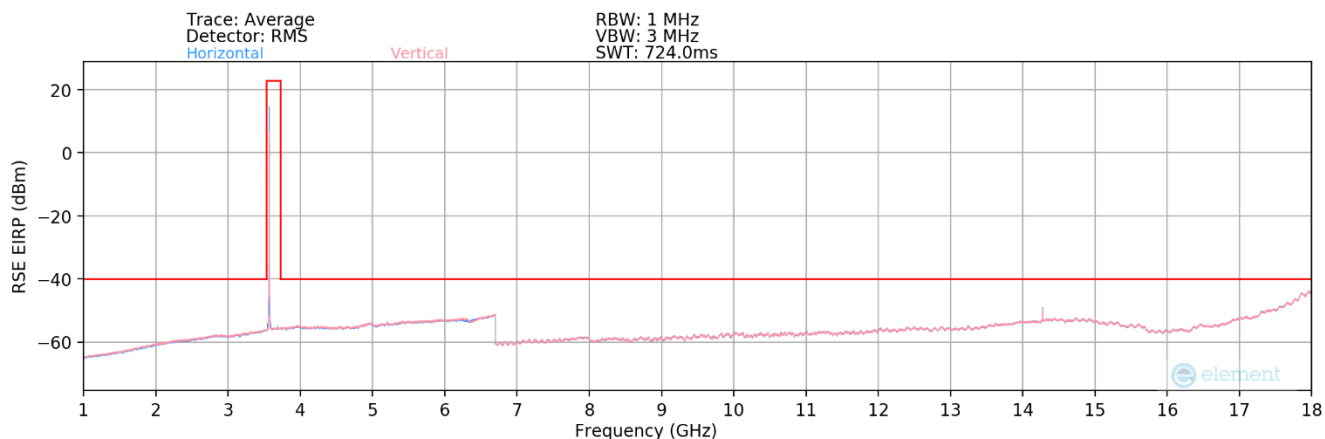
Table 7-33. Radiated Spurious Data (LTE Band 48 – High Channel - Ant F)

FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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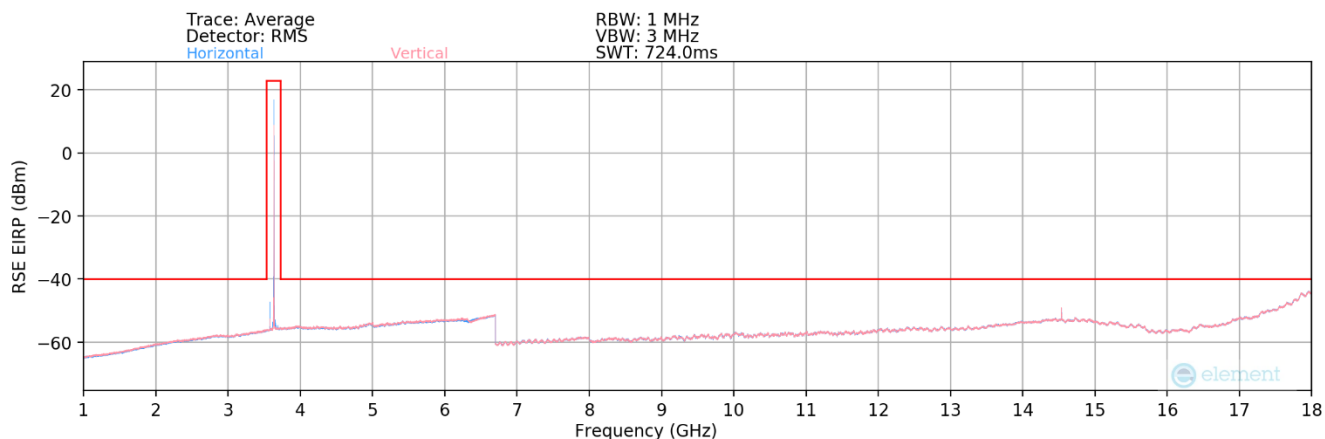
ULCA LB48 – Ant F



Plot 7-88. Radiated Spurious Plot (ULCA LB48 – Ant F – Mid Channel)

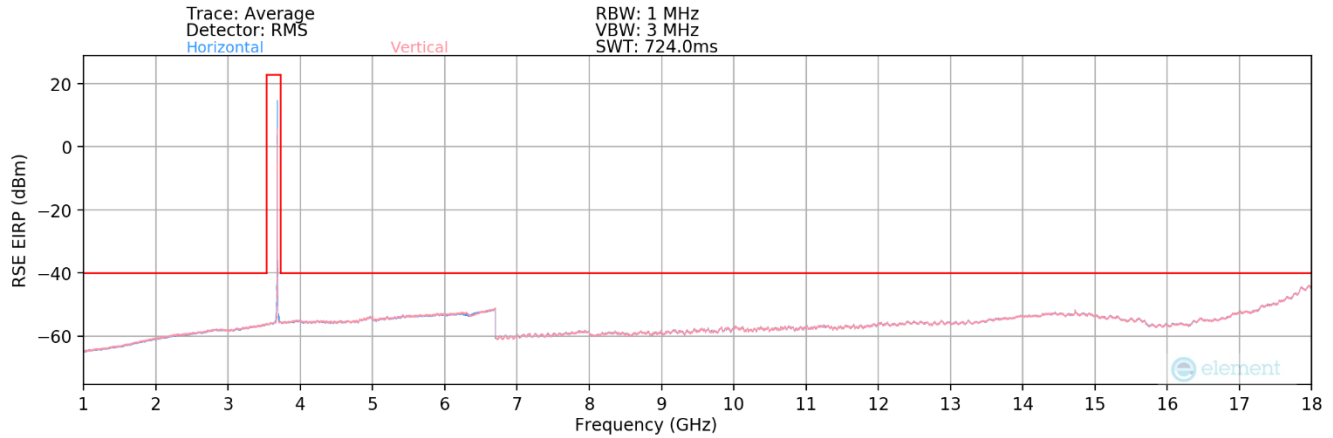


Plot 7-89. Radiated Spurious Plot (ULCA LB48 – Ant F – Low Channel)

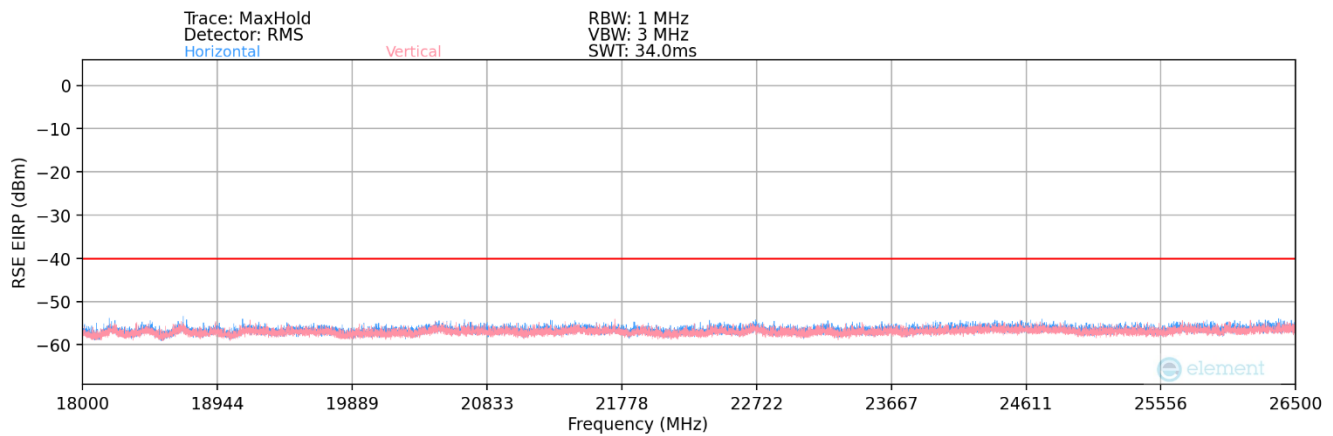


Plot 7-90. Radiated Spurious Plot (ULCA LB48 – Ant F – Mid Channel)

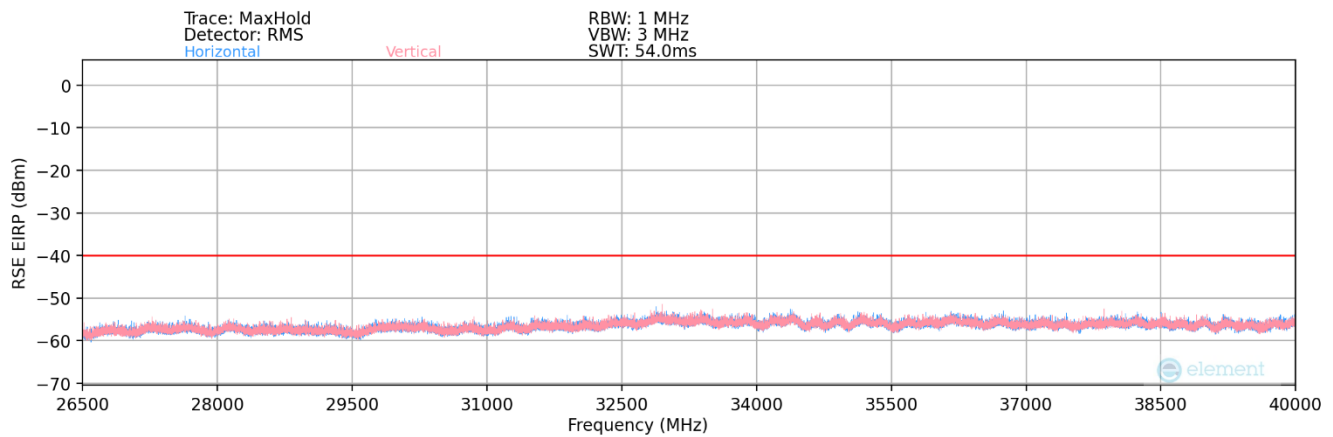
FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-91. Radiated Spurious Plot (ULCA LB48 – Ant F – High Channel)



Plot 7-92. Radiated Spurious Plot (ULCA LB48 – Ant F – Mid Channel)



Plot 7-93. Radiated Spurious Plot (ULCA LB48 – Ant F – Mid Channel)

FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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PCC Bandwidth (MHz):	20
PCC Frequency (MHz):	3560.0
PCC RB / Offset:	1 / 99
SCC Bandwidth (MHz):	20
SCC Frequency (MHz):	3579.8
SCC RB / Offset:	1 / 0

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7120.00	H	182	326	-75.97	6.61	37.64	-57.62	-40.00	-17.62
10680.00	H	-	-	-79.37	11.16	38.79	-56.47	-40.00	-16.47
14240.00	H	181	310	-77.81	16.34	45.53	-49.73	-40.00	-9.73
17800.00	H	-	-	-80.41	23.80	50.39	-44.87	-40.00	-4.87
21360.00	H	-	-	-53.24	-3.25	50.51	-54.29	-40.00	-14.29
24920.00	H	-	-	-52.09	-3.32	51.59	-53.21	-40.00	-13.21
28480.00	H	-	-	-53.64	-1.13	52.23	-52.57	-40.00	-12.57
32040.00	H	-	-	-54.48	0.30	52.82	-51.98	-40.00	-11.98

Table 7-34. Radiated Spurious Data (ULCA LB48 – Low Channel - Ant F)

PCC Bandwidth (MHz):	20
PCC Frequency (MHz):	3625.0
PCC RB / Offset:	1 / 99
SCC Bandwidth (MHz):	20
SCC Frequency (MHz):	3644.8
SCC RB / Offset:	1 / 0

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7250.00	H	181	324	-76.31	6.97	37.66	-57.60	-40.00	-17.60
10875.00	H	-	-	-79.80	10.92	38.12	-57.13	-40.00	-17.13
14500.00	H	167	316	-78.08	16.89	45.81	-49.45	-40.00	-9.45
18125.00	H	-	-	-52.16	-3.22	51.62	-53.18	-40.00	-13.18
21750.00	H	-	-	-52.39	-3.58	51.03	-53.77	-40.00	-13.77
25375.00	H	-	-	-52.71	-3.04	51.25	-53.55	-40.00	-13.55
29000.00	H	-	-	-54.18	-1.03	51.79	-53.01	-40.00	-13.01
32625.00	H	-	-	-53.44	0.53	54.09	-50.71	-40.00	-10.71

Table 7-35. Radiated Spurious Data (ULCA LB48 – Mid Channel - Ant F)

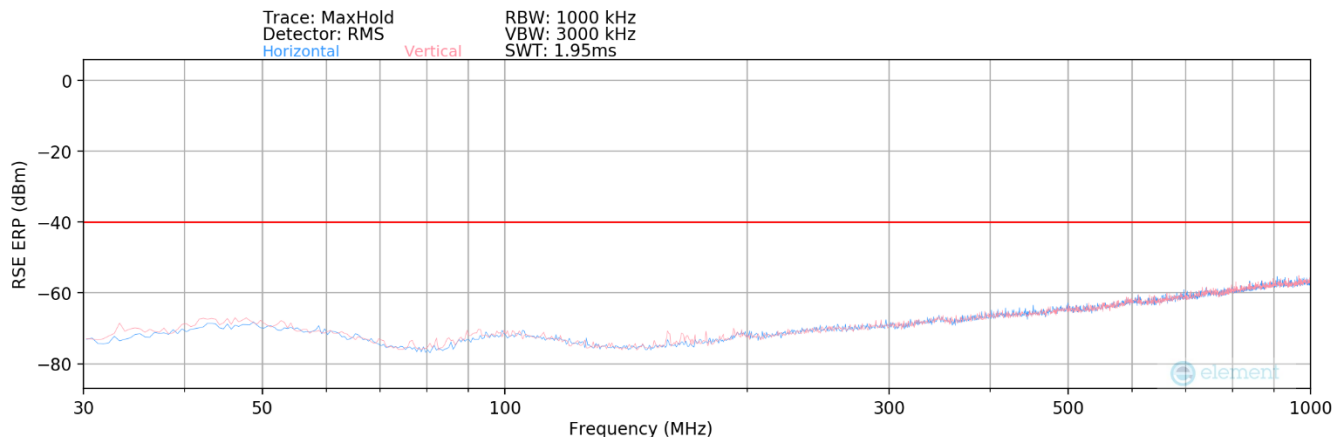
PCC Bandwidth (MHz):	20
PCC Frequency (MHz):	3690.0
PCC RB / Offset:	1 / 99
SCC Bandwidth (MHz):	20
SCC Frequency (MHz):	3670.2
SCC RB / Offset:	1 / 0

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7380.00	H	-	-	-76.82	6.96	37.14	-58.12	-40.00	-18.12
11070.00	H	-	-	-78.99	11.83	39.84	-55.42	-40.00	-15.42
14760.00	H	155	312	-79.50	17.73	45.23	-50.03	-40.00	-10.03
18450.00	H	-	-	-51.94	-3.35	51.71	-53.09	-40.00	-13.09
22140.00	H	-	-	-51.60	-3.71	51.69	-53.11	-40.00	-13.11
25830.00	H	-	-	-52.57	-2.55	51.88	-52.92	-40.00	-12.92
29520.00	H	-	-	-54.29	-0.64	52.07	-52.73	-40.00	-12.73
33210.00	H	-	-	-53.68	0.21	53.53	-51.27	-40.00	-11.27

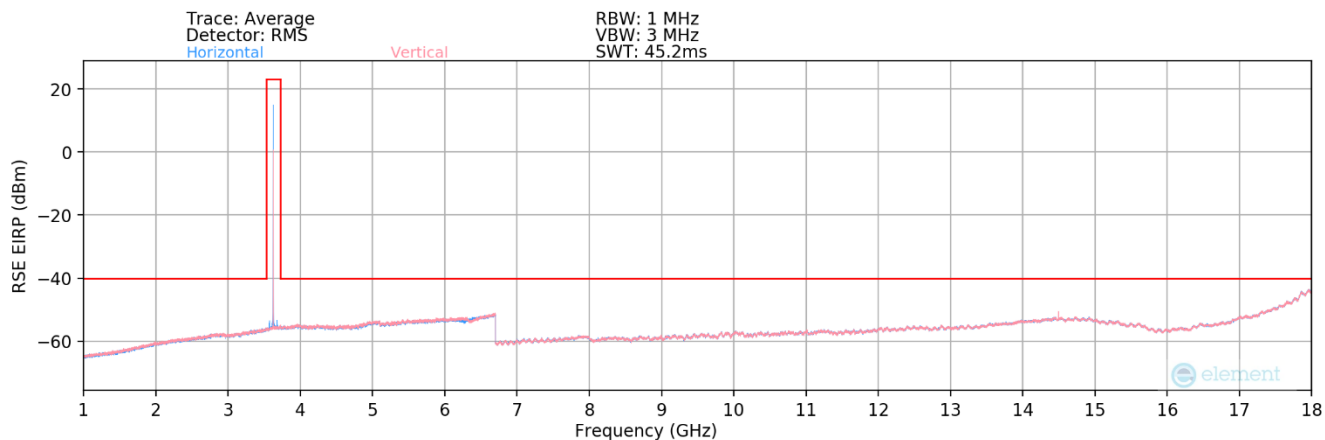
Table 7-36. Radiated Spurious Data (ULCA LB48 – High Channel - Ant F)

FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT			Approved by: Technical Manager
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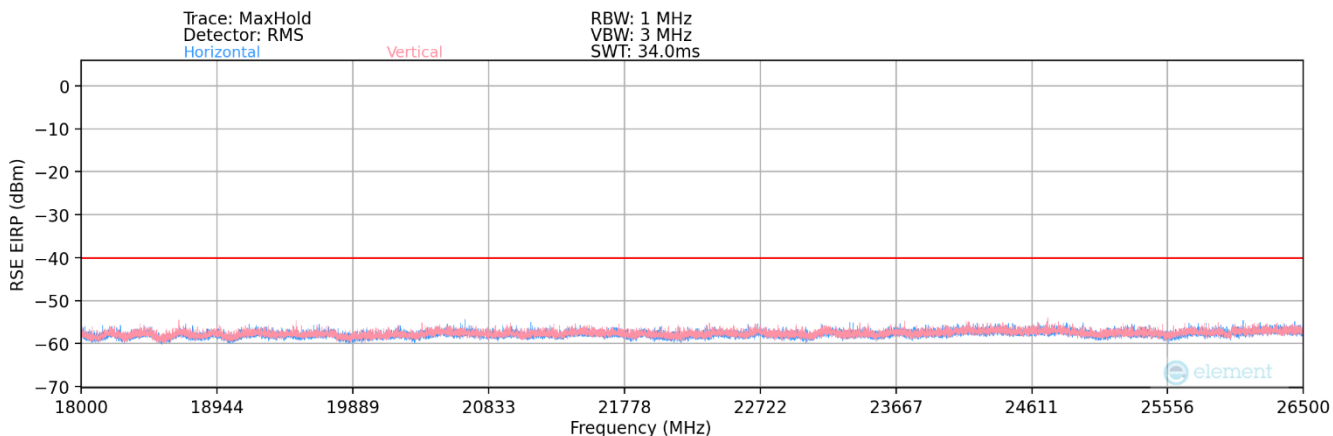
NR Band n48 – Ant F



Plot 7-94. Radiated Spurious Plot (NR Band n48 – Ant F)

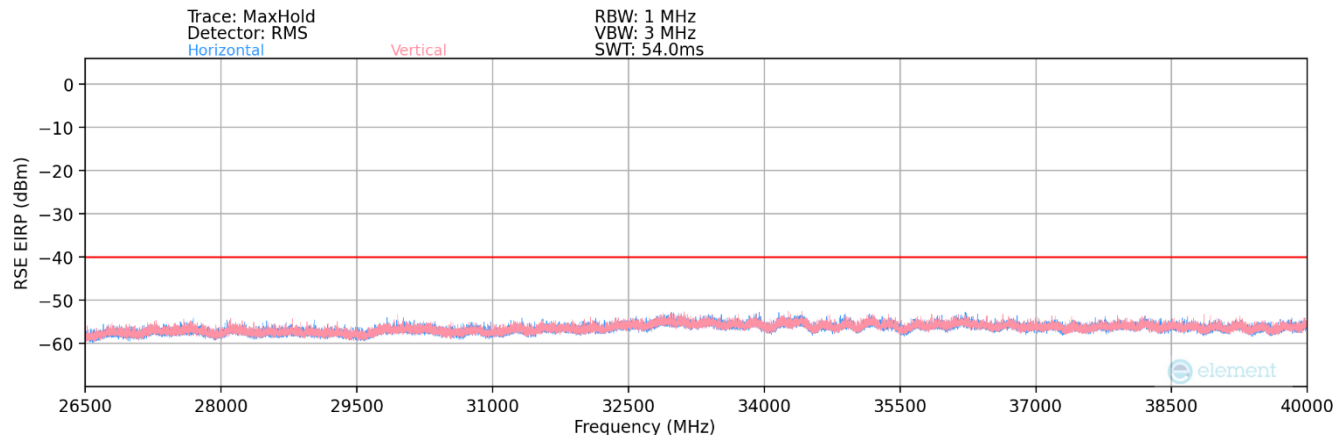


Plot 7-95. Radiated Spurious Plot (NR Band n48 – Ant F)



Plot 7-96. Radiated Spurious Plot (NR Band n48 – Ant F)

FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-97. Radiated Spurious Plot (NR Band n48 – Ant F)

Bandwidth (MHz):	40
Frequency (MHz):	3570.0
RB Config (Size / Offset):	1 / 53

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7140.00	H	-	-	-77.99	6.77	35.78	-59.48	-40.00	-19.48
10710.00	H	-	-	-81.02	10.93	36.91	-58.34	-40.00	-18.34
14280.00	H	129	18	-80.12	16.90	43.78	-51.48	-40.00	-11.48
17850.00	H	-	-	-81.05	23.80	49.75	-45.51	-40.00	-5.51
21420.00	H	-	-	-54.61	-3.25	49.14	-55.66	-40.00	-15.66
24990.00	H	-	-	-52.29	-3.32	51.39	-53.41	-40.00	-13.41
28560.00	H	-	-	-54.18	-1.13	51.69	-53.11	-40.00	-13.11
32130.00	H	-	-	-54.05	0.30	53.25	-51.55	-40.00	-11.55

Table 7-37. Radiated Spurious Data (NR Band n48 – Low Channel - Ant F)

Bandwidth (MHz):	40
Frequency (MHz):	3625.0
RB Config (Size / Offset):	1 / 53

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7250.00	H	-	-	-77.87	6.97	36.10	-59.16	-40.00	-19.16
10875.00	H	-	-	-80.56	10.92	37.36	-57.89	-40.00	-17.89
14500.00	H	144	18	-79.52	16.89	44.37	-50.89	-40.00	-10.89
18125.00	H	-	-	-53.21	-3.22	50.57	-54.23	-40.00	-14.23
21750.00	H	-	-	-52.19	-3.58	51.23	-53.57	-40.00	-13.57
25375.00	H	-	-	-52.34	-3.04	51.62	-53.18	-40.00	-13.18
29000.00	H	-	-	-53.27	-1.03	52.70	-52.10	-40.00	-12.10
32625.00	H	-	-	-53.23	0.53	54.30	-50.50	-40.00	-10.50

Table 7-38. Radiated Spurious Data (NR Band n48 – Mid Channel - Ant F)

FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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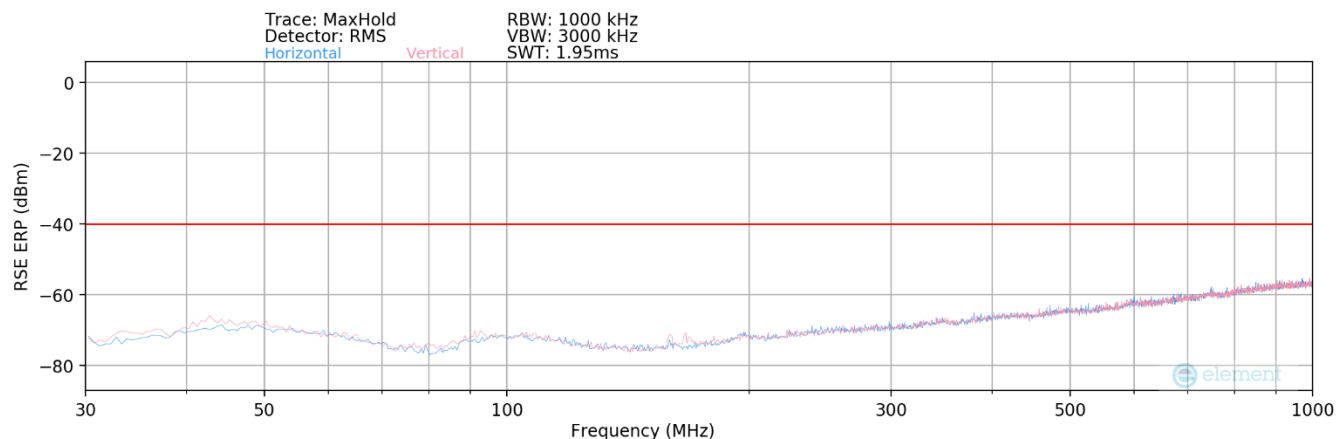
Bandwidth (MHz):	40
Frequency (MHz):	3680.0
RB Config (Size / Offset):	1 / 53

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7360.00	H	-	-	-78.23	6.74	35.51	-59.74	-40.00	-19.74
11040.00	H	-	-	-80.67	11.42	37.75	-57.51	-40.00	-17.51
14720.00	H	135	19	-79.42	16.66	44.24	-51.02	-40.00	-11.02
18400.00	H	-	-	-53.03	-3.35	50.62	-54.18	-40.00	-14.18
22080.00	H	-	-	-53.19	-3.71	50.10	-54.70	-40.00	-14.70
25760.00	H	-	-	-52.96	-2.55	51.49	-53.31	-40.00	-13.31
29440.00	H	-	-	-54.37	-0.64	51.99	-52.81	-40.00	-12.81
33120.00	H	-	-	-53.49	0.21	53.72	-51.08	-40.00	-11.08

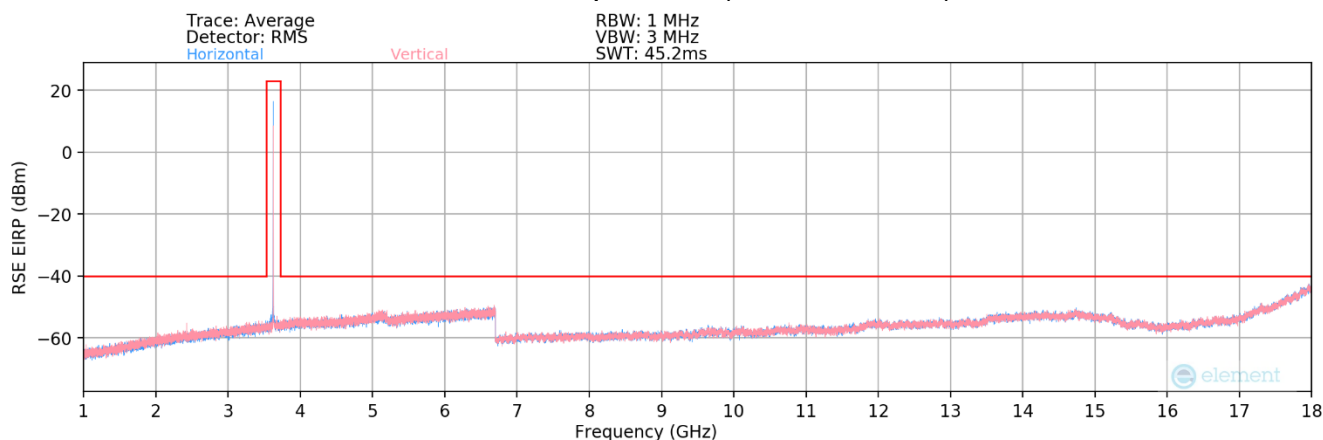
Table 7-39. Radiated Spurious Data (NR Band n48 – High Channel - Ant F)

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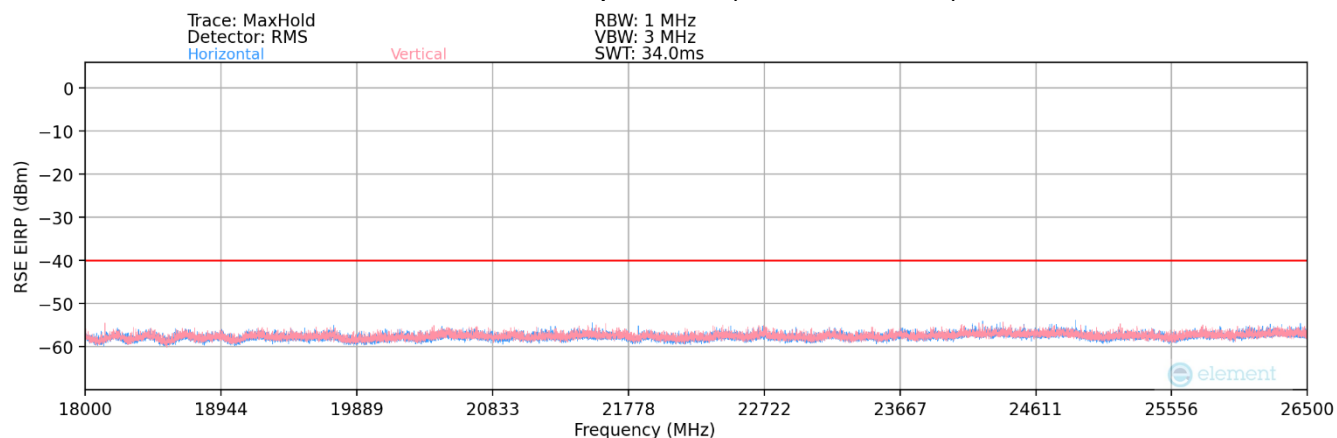
NR Band n48 – Ant C



Plot 7-98. Radiated Spurious Plot (NR Band n48 – Ant C)

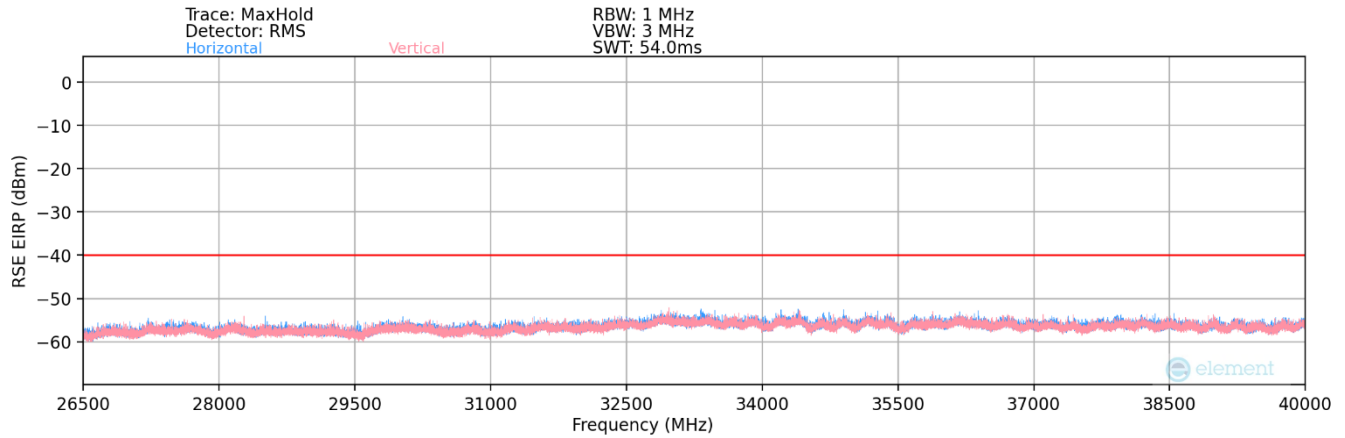


Plot 7-99. Radiated Spurious Plot (NR Band n48 – Ant C)



Plot 7-100. Radiated Spurious Plot (NR Band n48 – Ant C)

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Plot 7-101. Radiated Spurious Plot (NR Band n48 – Ant C)

Bandwidth (MHz):	40
Frequency (MHz):	3570.0
RB Config (Size / Offset):	1 / 53

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7140.00	H	-	-	-76.83	6.77	36.94	-58.32	-40.00	-18.32
10710.00	H	-	-	-79.19	10.93	38.74	-56.51	-40.00	-16.51
14280.00	H	-	-	-79.88	16.90	44.02	-51.24	-40.00	-11.24
17850.00	H	-	-	-81.34	23.80	49.46	-45.80	-40.00	-5.80
21420.00	H	-	-	-54.57	-3.25	49.18	-55.62	-40.00	-15.62
24990.00	H	-	-	-52.29	-3.32	51.39	-53.41	-40.00	-13.41
28560.00	H	-	-	-54.27	-1.13	51.60	-53.20	-40.00	-13.20
32130.00	H	-	-	-54.41	0.30	52.89	-51.91	-40.00	-11.91

Table 7-40. Radiated Spurious Data (NR Band n48 – Low Channel - Ant C)

Bandwidth (MHz):	40
Frequency (MHz):	3625.0
RB Config (Size / Offset):	1 / 53

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7250.00	H	-	-	-76.49	6.97	37.48	-57.78	-40.00	-17.78
10875.00	H	-	-	-78.96	10.92	38.96	-56.29	-40.00	-16.29
14500.00	H	-	-	-80.16	16.89	43.73	-51.53	-40.00	-11.53
18125.00	H	-	-	-53.27	-3.22	50.51	-54.29	-40.00	-14.29
21750.00	H	-	-	-52.34	-3.58	51.08	-53.72	-40.00	-13.72
25375.00	H	-	-	-52.67	-3.04	51.29	-53.51	-40.00	-13.51
29000.00	H	-	-	-53.17	-1.03	52.80	-52.00	-40.00	-12.00
32625.00	H	-	-	-53.42	0.53	54.11	-50.69	-40.00	-10.69

Table 7-41. Radiated Spurious Data (NR Band n48 – Mid Channel - Ant C)

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Bandwidth (MHz):	40
Frequency (MHz):	3680.0
RB Config (Size / Offset):	1 / 53

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7360.00	H	-	-	-76.80	6.74	36.94	-58.31	-40.00	-18.31
11040.00	H	-	-	-79.05	11.42	39.37	-55.89	-40.00	-15.89
14720.00	H	-	-	-80.41	16.66	43.25	-52.01	-40.00	-12.01
18400.00	H	-	-	-53.09	-3.35	50.56	-54.24	-40.00	-14.24
22080.00	H	-	-	-53.21	-3.71	50.08	-54.72	-40.00	-14.72
25760.00	H	-	-	-52.66	-2.55	51.79	-53.01	-40.00	-13.01
29440.00	H	-	-	-54.80	-0.64	51.56	-53.24	-40.00	-13.24
33120.00	H	-	-	-53.63	0.21	53.58	-51.22	-40.00	-11.22

Table 7-42. Radiated Spurious Data (NR Band n48 – High Channel - Ant C)

FCC ID: A3LSMS936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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