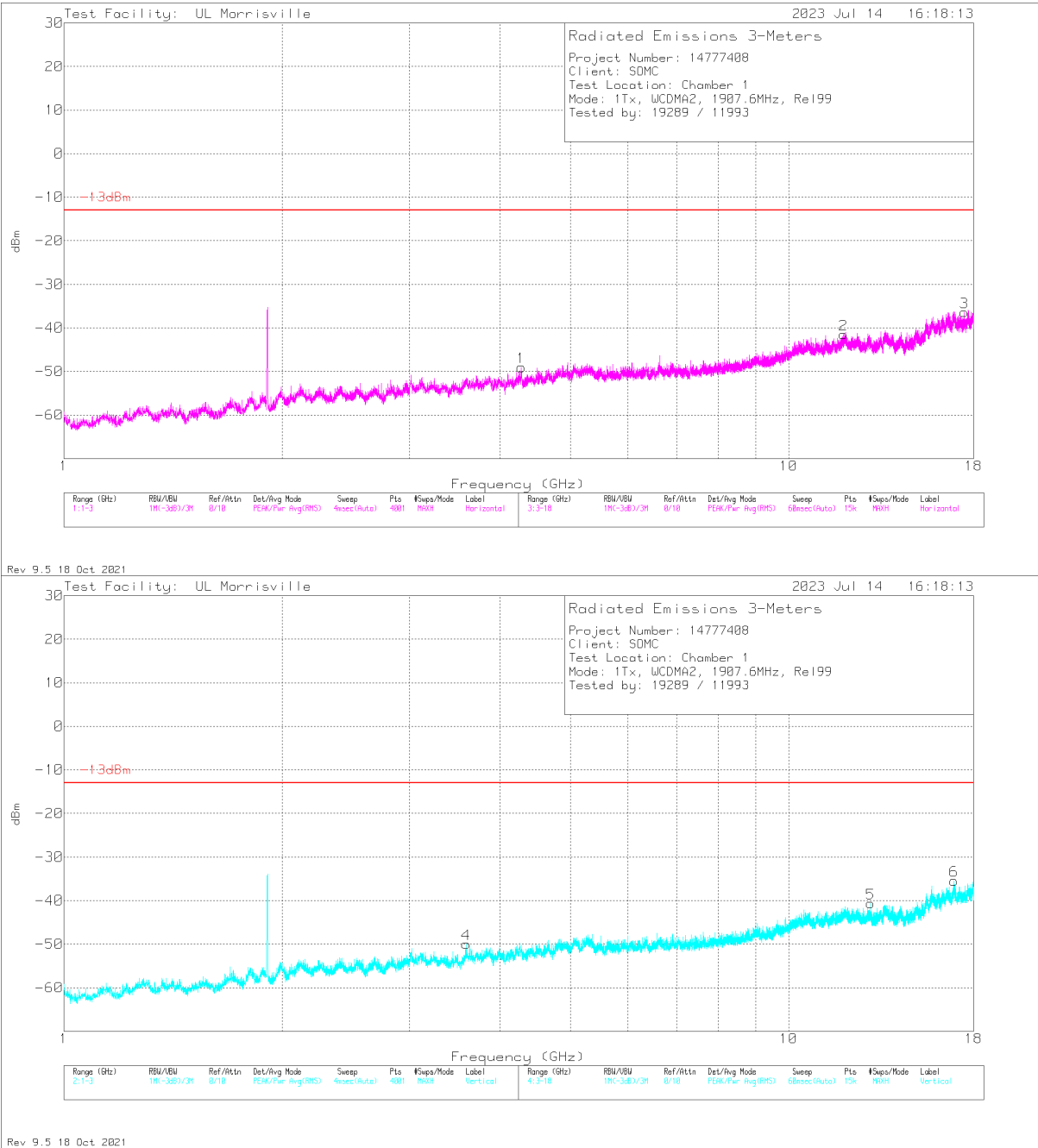


REL 99 High Channel



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	206211 (dB/m)	Gain/Loss (dB)	CF (dB)	Filter (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	3.59	-63.76	Pk	32.8	-30.8	11.8	0	-49.96	-13	-36.96	0-360	300	V
1	4.278	-64.22	Pk	33.5	-30.1	11.8	0	-49.02	-13	-36.02	0-360	101	H
2	11.904	-65.62	Pk	38.5	-26.2	11.8	0	-41.52	-13	-28.52	0-360	200	H
5	12.972	-65.32	Pk	39	-26.1	11.8	0	-40.62	-13	-27.62	0-360	300	V
6	16.923	-66.15	Pk	41.7	-22.8	11.8	0	-35.45	-13	-22.45	0-360	300	V
3	17.479	-65.79	Pk	41.5	-23.9	11.8	0	-36.39	-13	-23.39	0-360	200	H

Pk - Peak detector

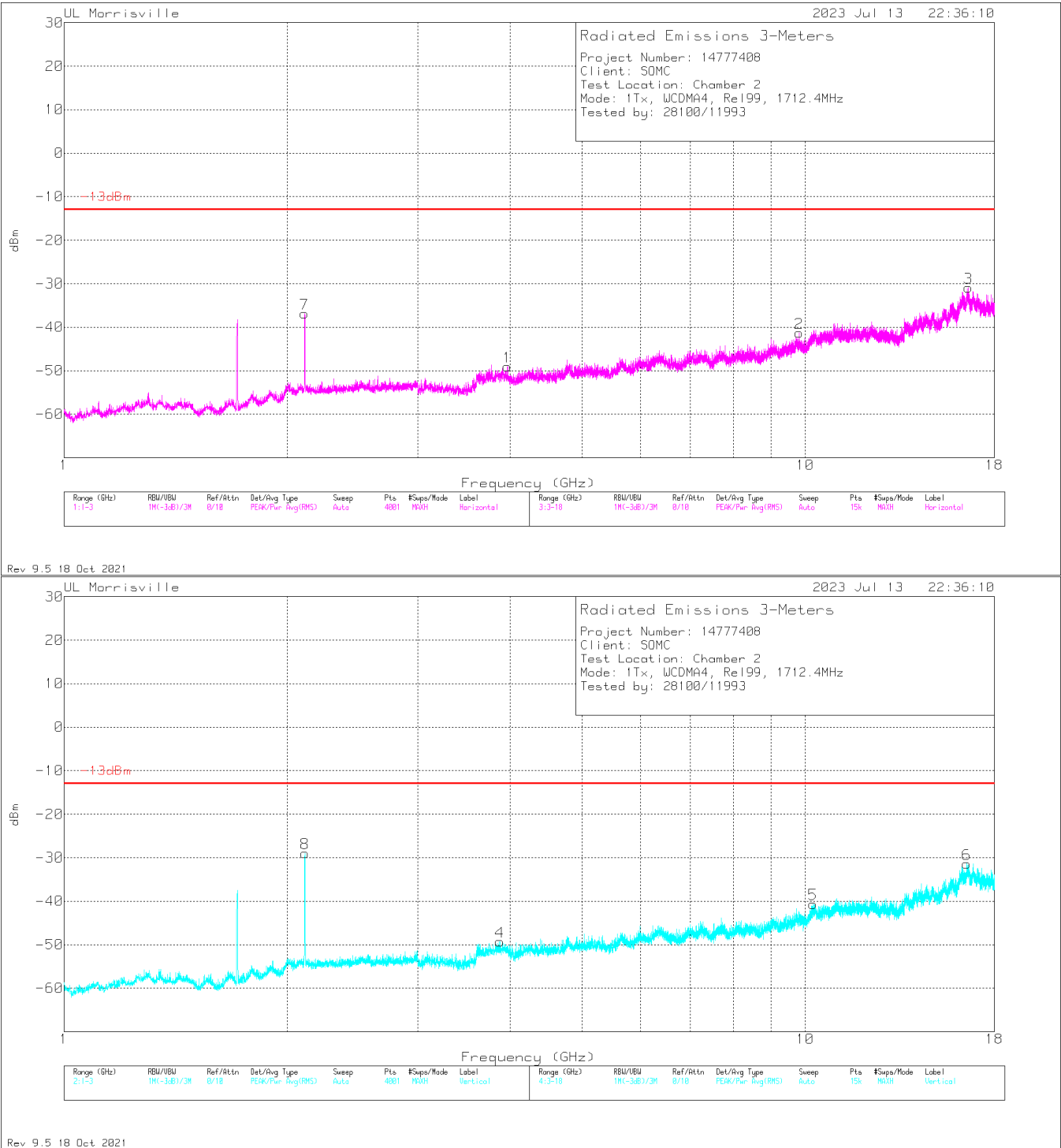
11.1.4. WCDMA4**LIMITS**

FCC: §27.53(h)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

EUT Serial Number: QV7700GUHT

REL 99 Low Channel

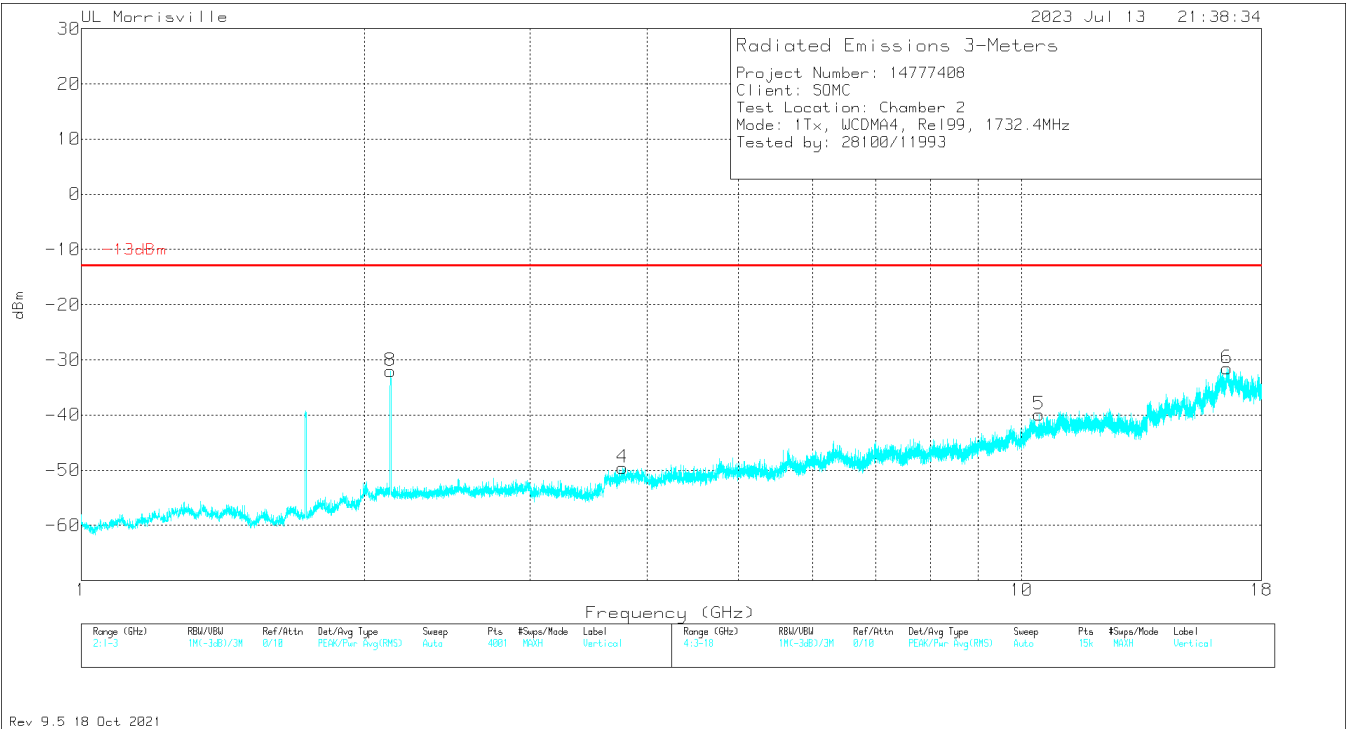
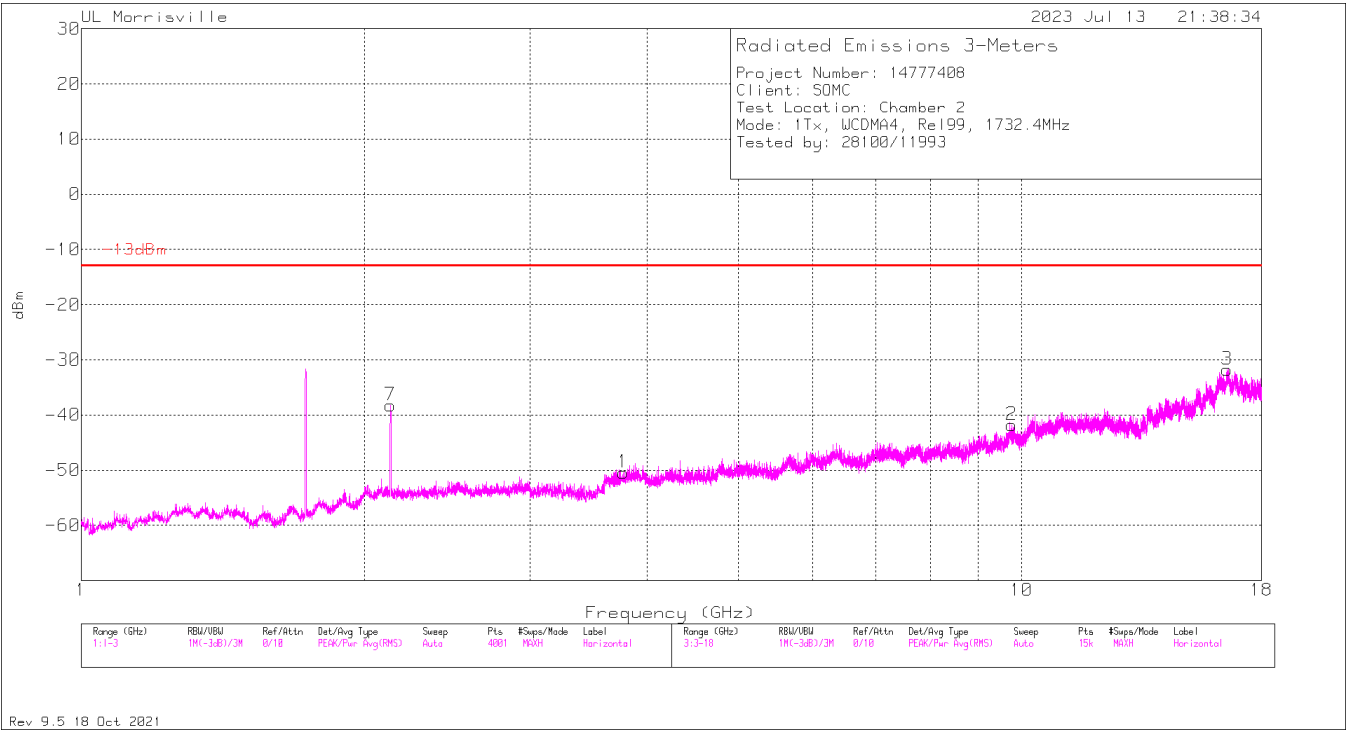


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	88761 (dB/m)	Gain/Loss (dB)	CF (dB)	Filter (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	3.873	-62.92	Pk	33.4	-31.6	11.8	0	-49.32	-13	-36.32	0-360	200	V
1	3.967	-63.24	Pk	33.3	-30.9	11.8	0	-49.04	-13	-36.04	0-360	300	H
2	9.818	-65	Pk	36.9	-25	11.8	0	-41.3	-13	-28.3	0-360	199	H
5	10.253	-66.21	Pk	37.4	-23.6	11.8	0	-40.61	-13	-27.61	0-360	300	V
6	16.511	-65.5	Pk	41.2	-18.9	11.8	0	-31.4	-13	-18.4	0-360	101	V
3	16.598	-66.12	Pk	41.4	-18	11.8	0	-30.92	-13	-17.92	0-360	199	H
7 (DL)	2.111	-47.23	Pk	31.6	-34.2	11.8	1.2	-36.83	-	-	0-360	299	H
8 (DL)	2.1135	-39.33	Pk	31.6	-34.2	11.8	1.2	-28.93	-	-	0-360	299	V

Pk - Peak detector

DL - Downlink

REL 99 Mid Channel

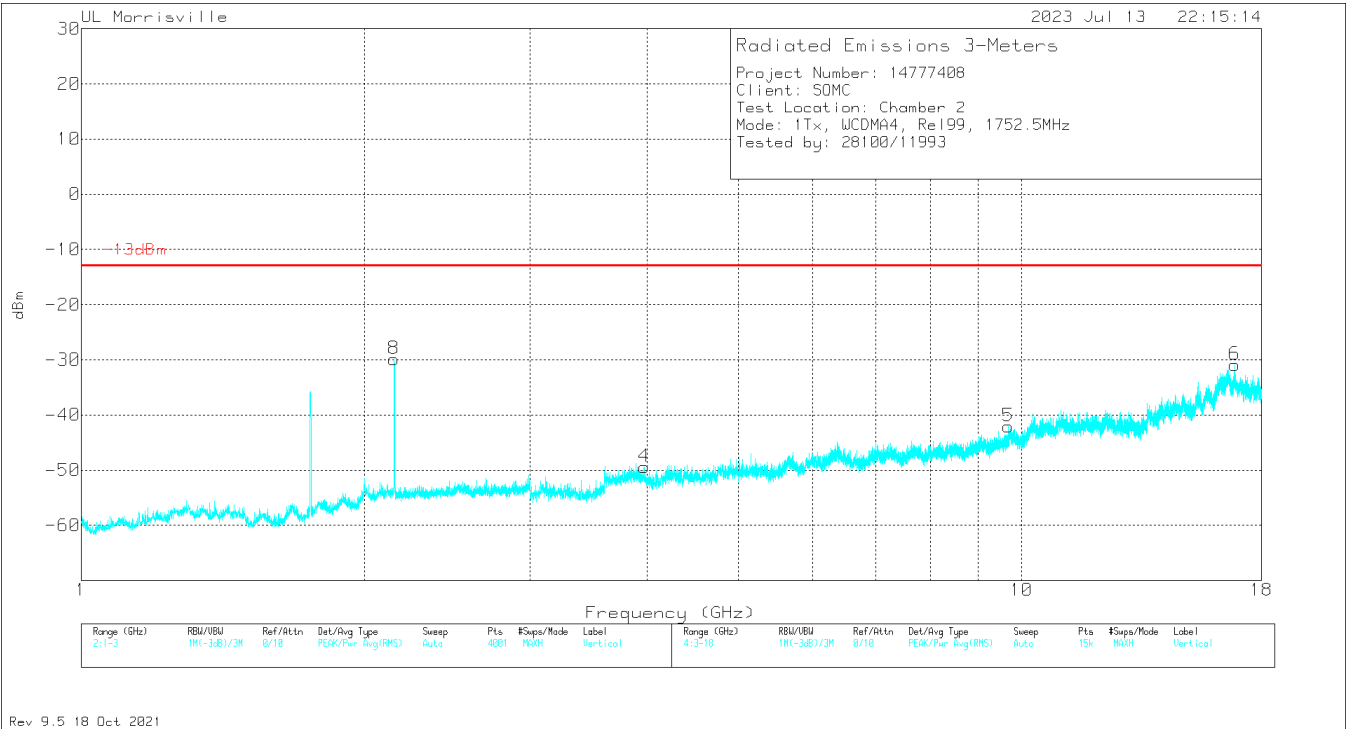
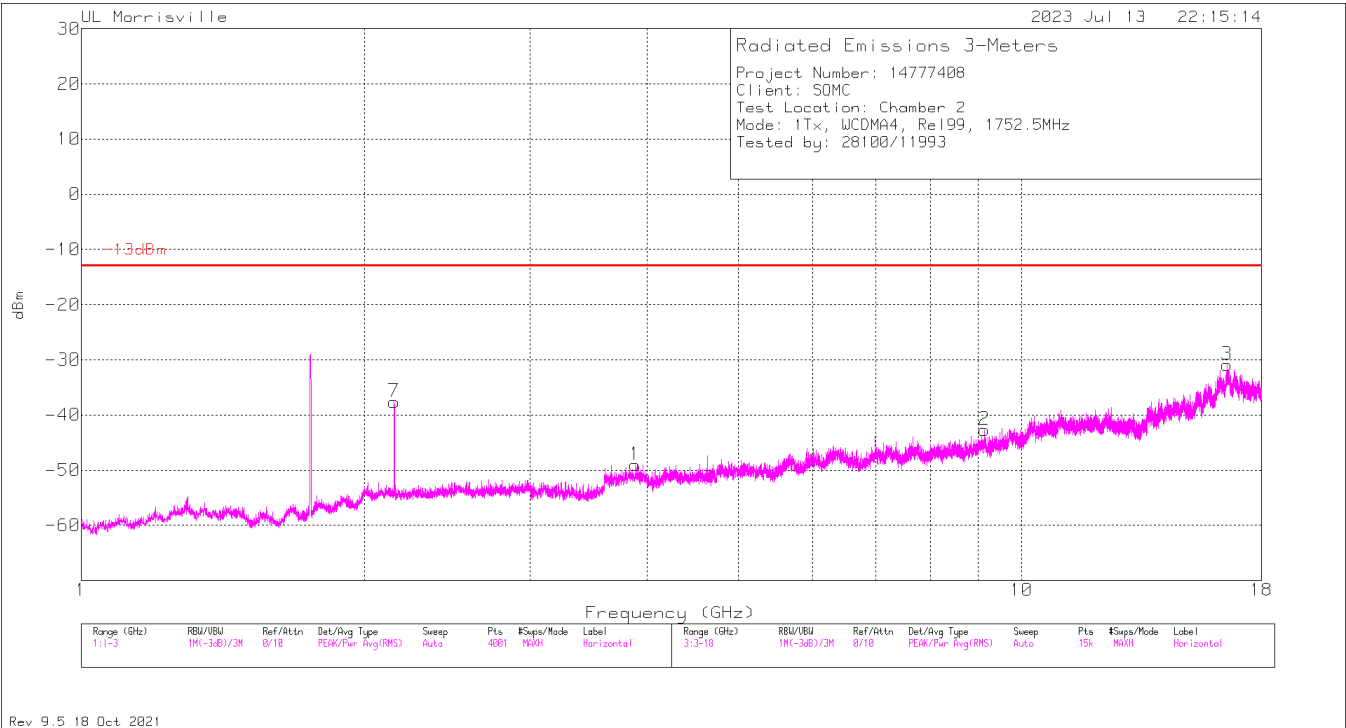


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	88761 (dB/m)	Gain/Loss (dB)	CF (dB)	Filter (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	3.766	-62.37	Pk	33.2	-32.2	11.8	0	-49.57	-13	-36.57	0-360	300	V
1	3.772	-63.14	Pk	33.2	-32.3	11.8	0	-50.44	-13	-37.44	0-360	199	H
2	9.763	-65.41	Pk	36.9	-25.1	11.8	0	-41.81	-13	-28.81	0-360	300	H
5	10.45	-65.41	Pk	37.5	-23.8	11.8	0	-39.91	-13	-26.91	0-360	200	V
3	16.556	-66.74	Pk	41.3	-18.2	11.8	0	-31.84	-13	-18.84	0-360	101	H
6	16.556	-66.47	Pk	41.3	-18.2	11.8	0	-31.57	-13	-18.57	0-360	200	V
8 (DL)	2.1325	-42.33	Pk	31.5	-34.2	11.8	1.2	-32.03	-13	-19.03	0-360	200	V
7 (DL)	2.1335	-48.61	Pk	31.5	-34.2	11.8	1.2	-38.31	-13	-25.31	0-360	299	H

Pk - Peak detector

DL – Downlink from Callbox

REL 99 High Channel



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	88761 (dB/m)	Gain/Loss (dB)	CF (dB)	Filter (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.885	-62.65	Pk	33.4	-31.6	11.8	0	-49.05	-13	-36.05	0-360	300	H
4	3.972	-63.48	Pk	33.3	-31.1	11.8	0	-49.48	-13	-36.48	0-360	201	V
2	9.137	-65.99	Pk	36.3	-24.8	11.8	0	-42.69	-13	-29.69	0-360	199	H
5	9.687	-65.52	Pk	36.8	-25.2	11.8	0	-42.12	-13	-29.12	0-360	201	V
3	16.536	-65.96	Pk	41.3	-18	11.8	0	-30.86	-13	-17.86	0-360	101	H
6	16.849	-66.13	Pk	41.6	-18.2	11.8	0	-30.93	-13	-17.93	0-360	300	V
8 (DL)	2.1515	-40.18	Pk	31.6	-34.2	11.8	1.1	-29.88	-13	-16.88	0-360	300	V
7 (DL)	2.1525	-47.97	Pk	31.6	-34.2	11.8	1.1	-37.67	-13	-24.67	0-360	200	H

Pk - Peak detector

DL – Downlink from Callbox

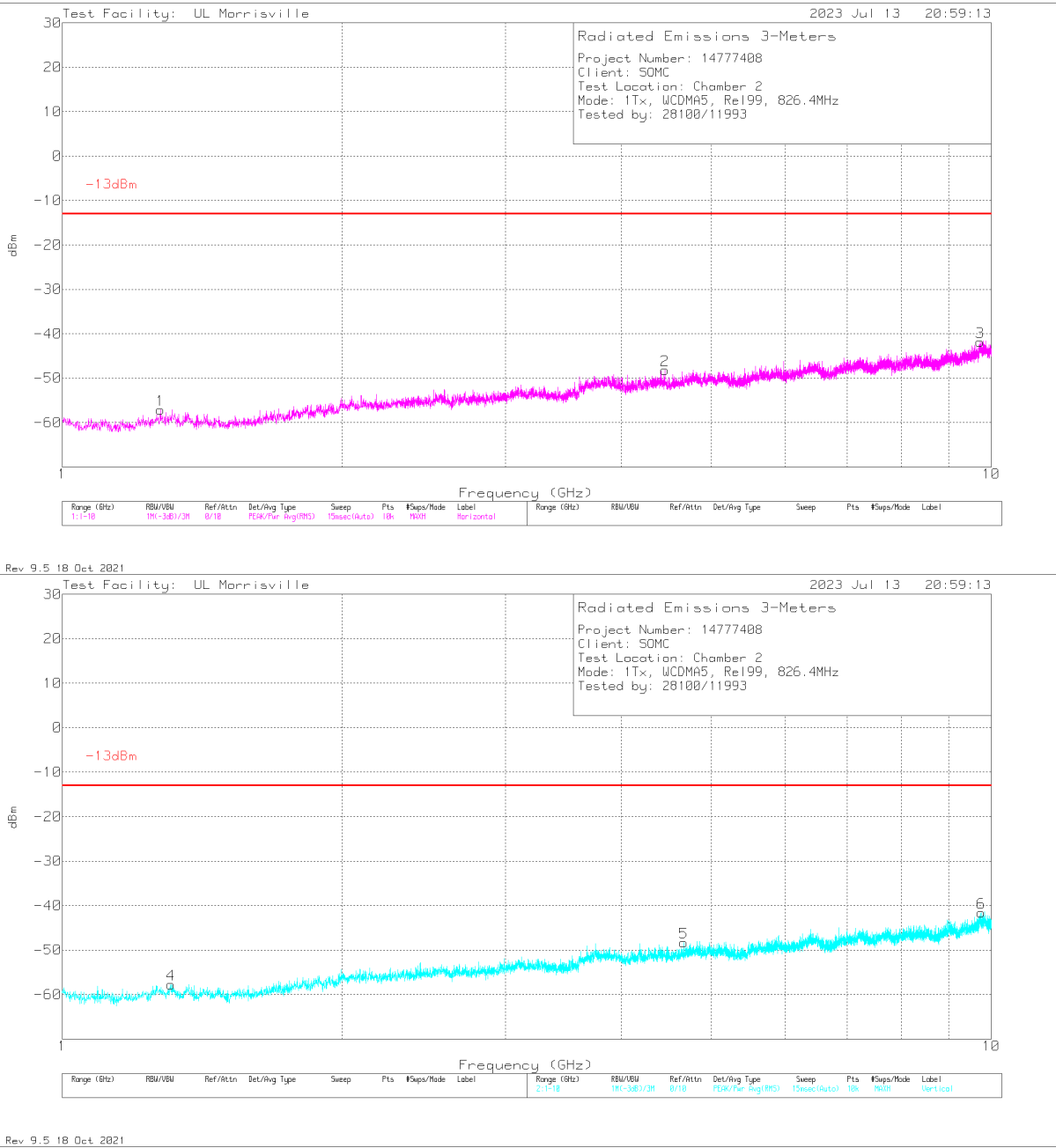
11.1.5. WCDMA5**LIMITS**

FCC: §22.917 (a)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

EUT Serial Number: QV7700GUHT

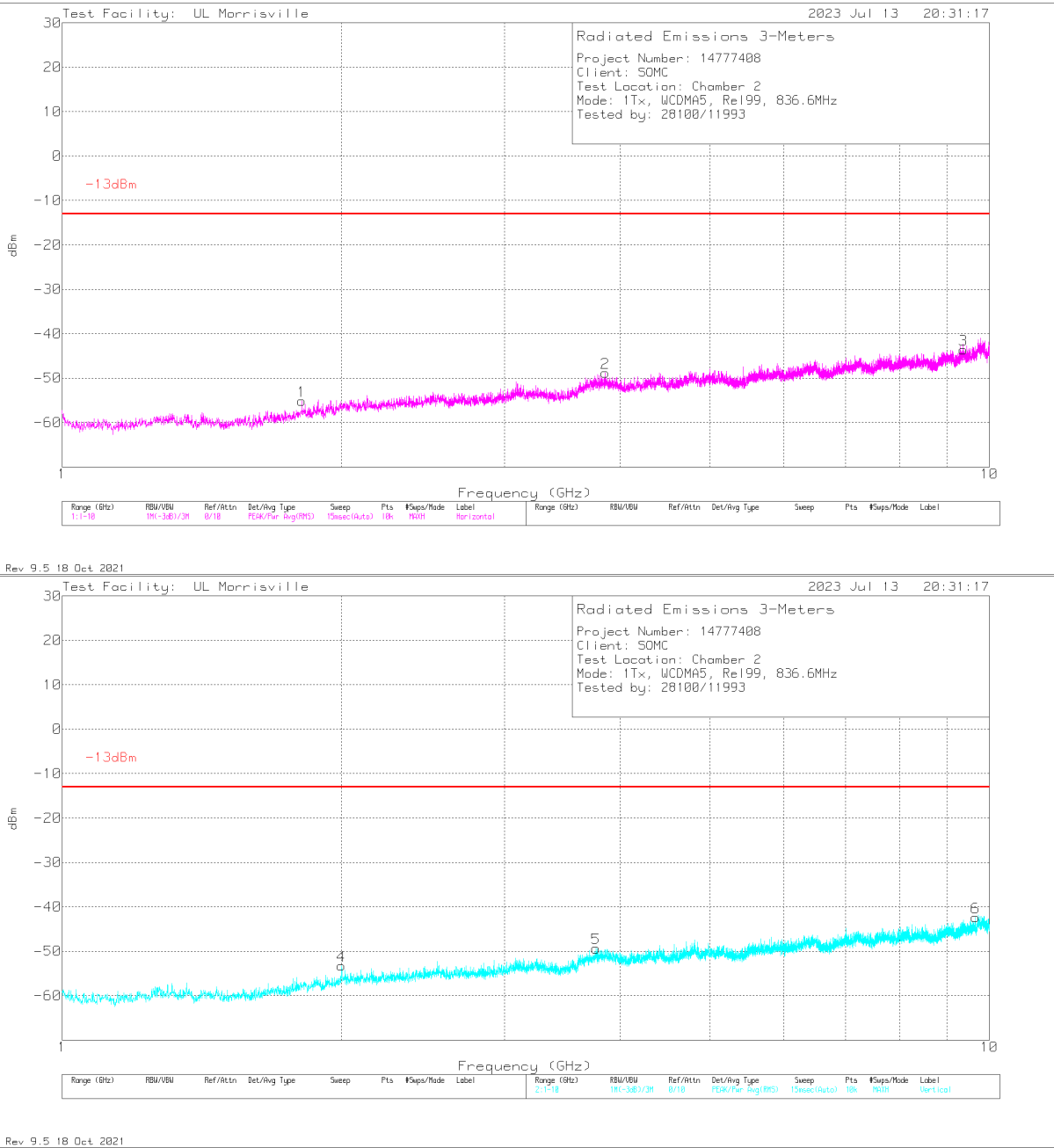
REL 99 Low Channel



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	88761 (dB/m)	Gain/Loss (dB)	Filter (dB)	CF (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.2763	-63.64	Pk	29.1	-34.9	.5	11.8	-57.14	-13	-44.14	0-360	299	H
4	1.3087	-64.1	Pk	28.9	-34.8	.4	11.8	-57.8	-13	-44.8	0-360	200	V
2	4.4524	-62.65	Pk	33.7	-31.5	.5	11.8	-48.15	-13	-35.15	0-360	299	H
5	4.6657	-63.24	Pk	34.1	-31.4	.4	11.8	-48.34	-13	-35.34	0-360	200	V
3	9.7255	-66.41	Pk	36.9	-25	.9	11.8	-41.81	-13	-28.81	0-360	101	H
6	9.7507	-65.85	Pk	36.9	-25.4	.9	11.8	-41.65	-13	-28.65	0-360	300	V

Pk - Peak detector

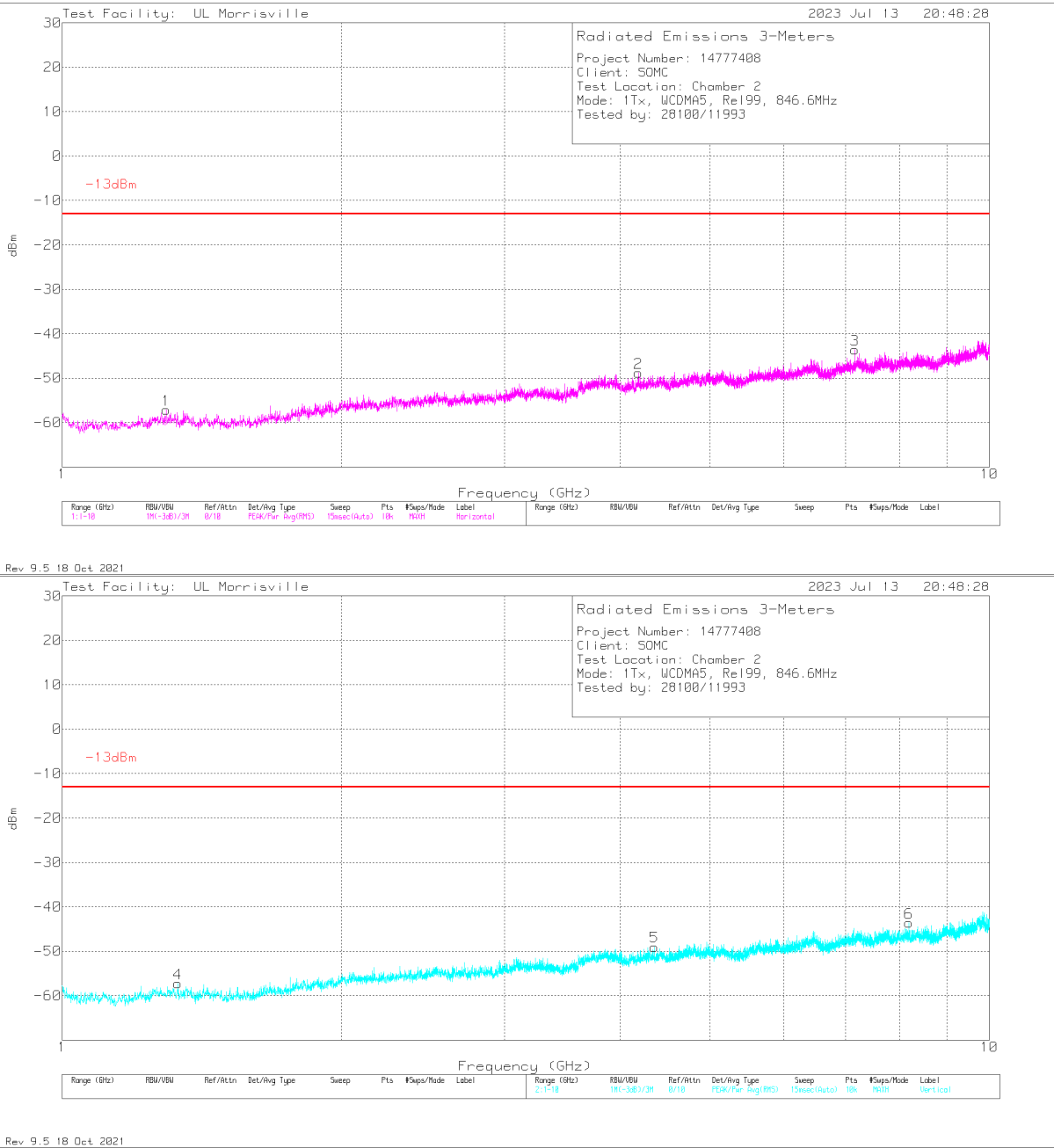
REL 99 Mid Channel



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	88761 (dB/m)	Gain/Loss (dB)	Filter (dB)	CF (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.8127	-63.04	Pk	30.1	-34.3	.3	11.8	-55.14	-13	-42.14	0-360	300	H
4	2.0017	-62.73	Pk	31.4	-34.1	.4	11.8	-53.23	-13	-40.23	0-360	101	V
5	3.7621	-62.36	Pk	33.2	-32.4	.4	11.8	-49.36	-13	-36.36	0-360	300	V
2	3.8539	-62.12	Pk	33.4	-32.6	.7	11.8	-48.82	-13	-35.82	0-360	200	H
3	9.3826	-66.47	Pk	36.6	-26	.5	11.8	-43.57	-13	-30.57	0-360	200	H
6	9.658	-65.79	Pk	36.8	-25.6	.4	11.8	-42.39	-13	-29.39	0-360	101	V

Pk - Peak detector

REL 99 High Channel



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	88761 (dB/m)	Gain/Loss (dB)	Filter (dB)	CF (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.2952	-63.64	Pk	29	-34.8	.5	11.8	-57.14	-13	-44.14	0-360	200	H
4	1.333	-63.26	Pk	28.8	-35	.4	11.8	-57.26	-13	-44.26	0-360	200	V
2	4.1851	-62.8	Pk	33.3	-31.5	.4	11.8	-48.8	-13	-35.8	0-360	101	H
5	4.3498	-62.89	Pk	33.5	-31.5	.1	11.8	-48.99	-13	-35.99	0-360	101	V
3	7.1587	-63.58	Pk	35.5	-27.7	.4	11.8	-43.58	-13	-30.58	0-360	299	H
6	8.1937	-64.63	Pk	35.7	-26.9	.4	11.8	-43.63	-13	-30.63	0-360	200	V

Pk - Peak detector

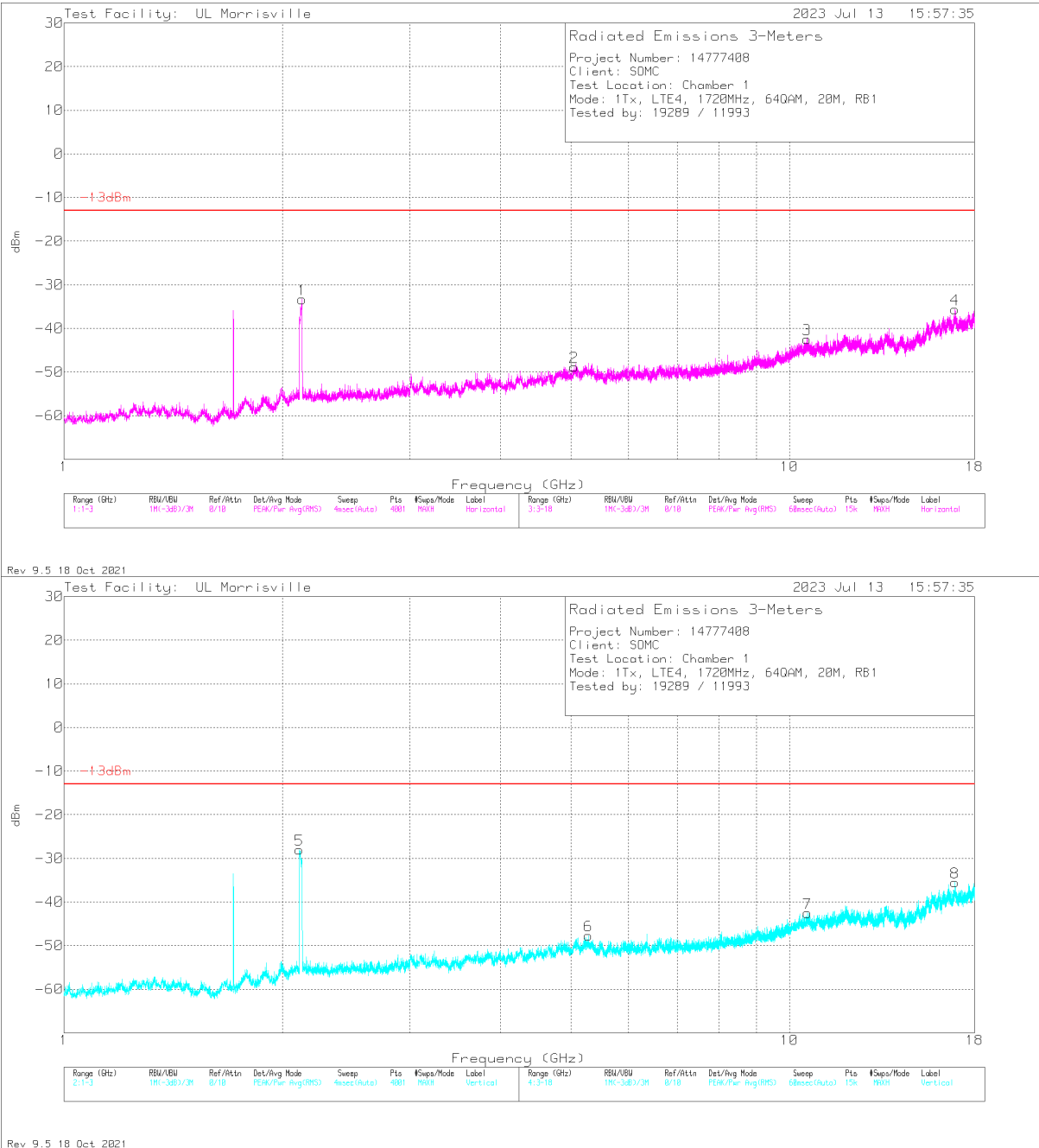
11.1.6. LTE BAND 4**LIMITS**

FCC: §27.53(h)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

EUT Serial Number: QV7700BTHT

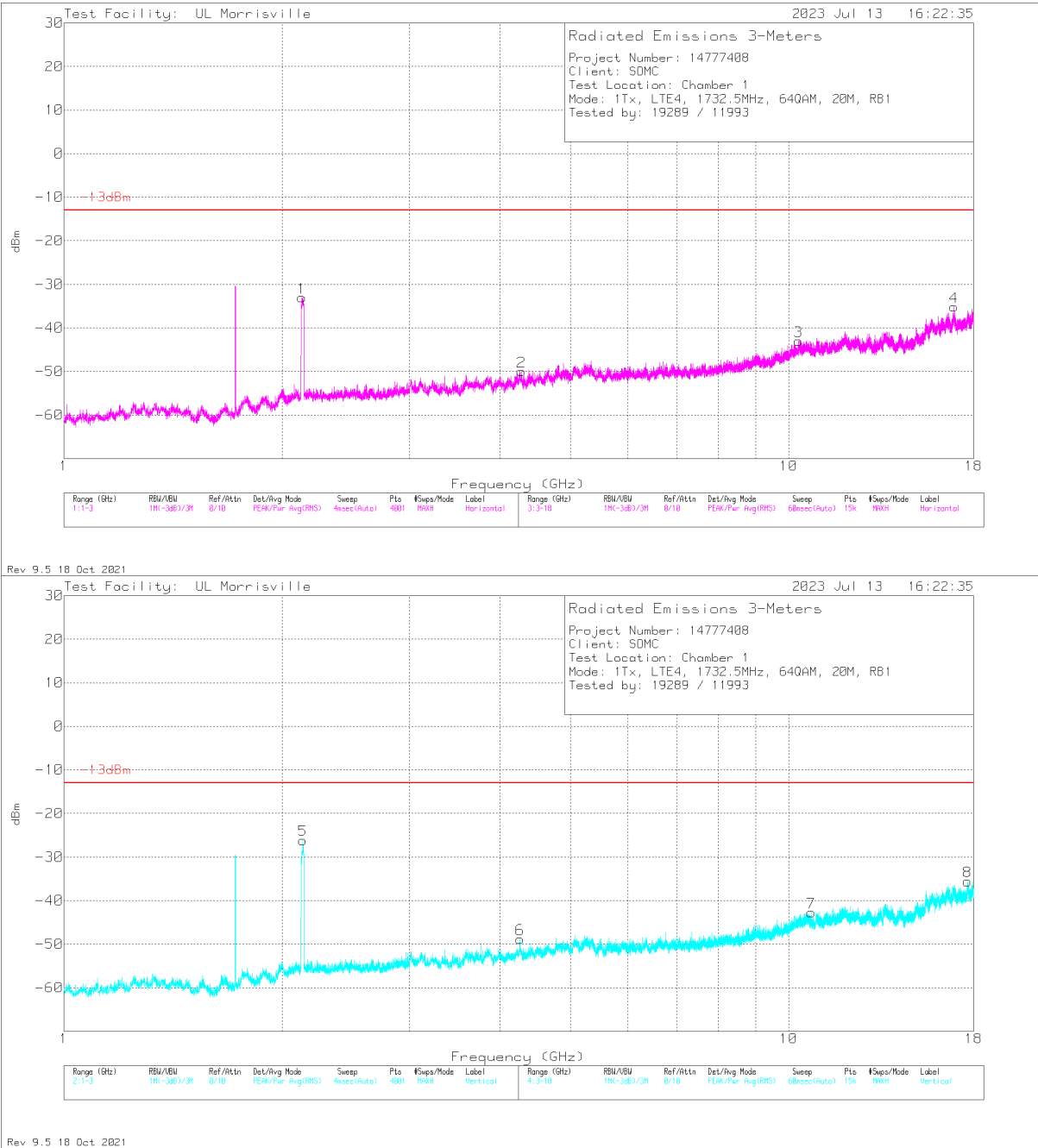
64QAM LTE4 (20MHz, Low Channel)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	206211 (dB/m)	Gain/Loss (dB)	CF (dB)	Filter (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5DL	2.1115	-37.43	Pk	31.6	-35.2	11.8	1.2	-28.03	-	-	0-360	200	V
1DL	2.1275	-42.82	Pk	31.6	-35.1	11.8	1.2	-33.32	-	-	0-360	200	H
2	5.048	-64.91	Pk	34.1	-29.8	11.8	0	-48.81	-13	-35.81	0-360	300	H
6	5.28	-65.16	Pk	34.4	-28.7	11.8	0	-47.66	-13	-34.66	0-360	101	V
3	10.573	-66.26	Pk	37.8	-25.8	11.8	0	-42.46	-13	-29.46	0-360	300	H
7	10.588	-67.13	Pk	37.8	-25	11.8	0	-42.53	-13	-29.53	0-360	101	V
4	16.91	-66.5	Pk	41.8	-22.7	11.8	0	-35.6	-13	-22.6	0-360	101	H
8	16.918	-66.01	Pk	41.7	-23	11.8	0	-35.51	-13	-22.51	0-360	300	V

Pk - Peak detector DL - Downlink

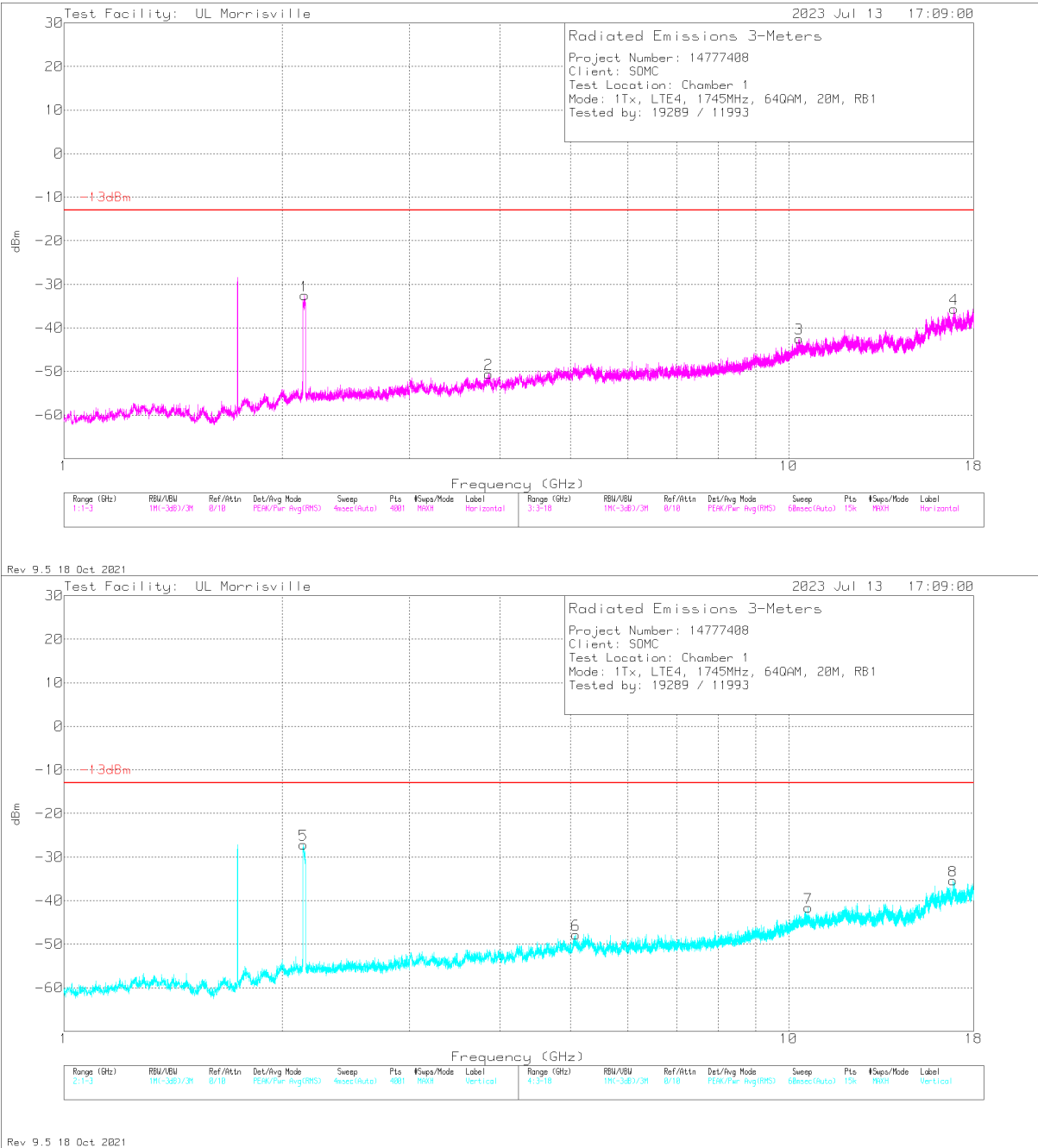
64QAM LTE4 (20MHz, Mid Channel)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	206211 (dB/m)	Gain/Loss (dB)	CF (dB)	Filter (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1DL	2.13	-42.54	Pk	31.6	-35.1	11.8	1.2	-33.04	-	-	0-360	200	H
5DL	2.1355	-35.92	Pk	31.6	-34.8	11.8	1.2	-26.12	-	-	0-360	201	V
6	4.259	-64.12	Pk	33.4	-29.9	11.8	0	-48.82	-13	-35.82	0-360	201	V
2	4.279	-65.17	Pk	33.5	-30.1	11.8	0	-49.97	-13	-36.97	0-360	300	H
3	10.323	-66.7	Pk	37.7	-25.8	11.8	0	-43	-13	-30	0-360	300	H
7	10.746	-65.94	Pk	37.9	-26.5	11.8	0	-42.74	-13	-29.74	0-360	101	V
4	16.922	-65.96	Pk	41.7	-22.7	11.8	0	-35.16	-13	-22.16	0-360	101	H
8	17.662	-66.16	Pk	41.6	-22.8	11.8	0	-35.56	-13	-22.56	0-360	101	V

Pk - Peak detector DL – Downlink from Callbox

64QAM LTE4 (20MHz, High Channel)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	206211 (dB/m)	Gain/Loss (dB)	CF (dB)	Filter (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5DL	2.141	-36.95	Pk	31.7	-34.9	11.8	1.2	-27.15	-	-	0-360	201	V
1DL	2.1485	-42.33	Pk	31.6	-34.7	11.8	1.1	-32.53	-	-	0-360	101	H
2	3.856	-64.74	Pk	33.4	-31	11.8	0	-50.54	-13	-37.54	0-360	101	H
6	5.087	-64.24	Pk	34.2	-29.6	11.8	0	-47.84	-13	-34.84	0-360	300	V
3	10.335	-66.53	Pk	37.7	-25.4	11.8	0	-42.43	-13	-29.43	0-360	200	H
7	10.644	-66.04	Pk	37.9	-25.3	11.8	0	-41.64	-13	-28.64	0-360	300	V
8	16.865	-65.4	Pk	41.7	-23.5	11.8	0	-35.4	-13	-22.4	0-360	101	V
4	16.911	-66.31	Pk	41.8	-22.9	11.8	0	-35.61	-13	-22.61	0-360	300	H

Pk - Peak detector; DL - Downlink

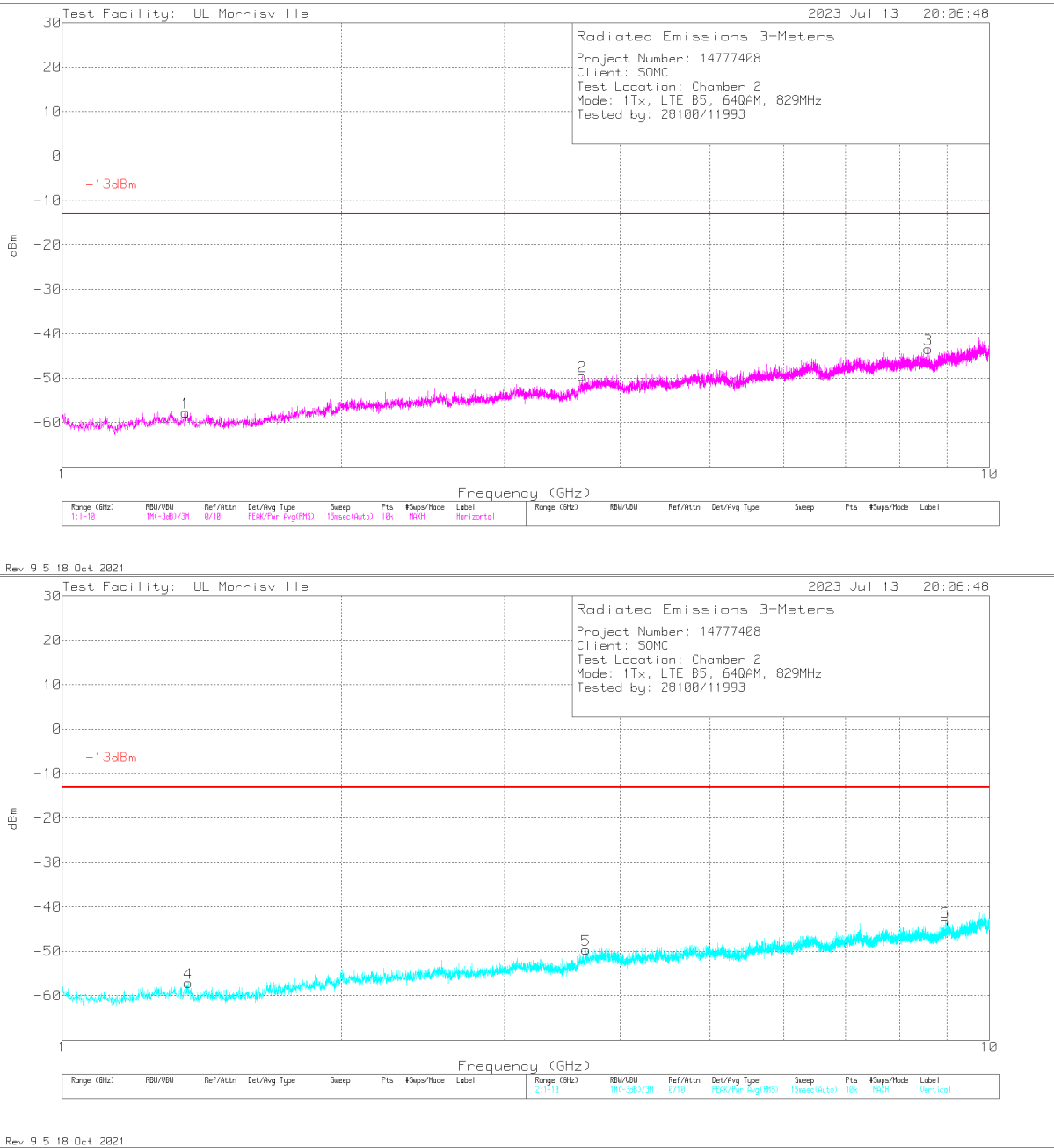
11.1.7. LTE BAND 5**LIMITS**

FCC: §22.917 (a)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

EUT Serial Number: QV7700GUHT

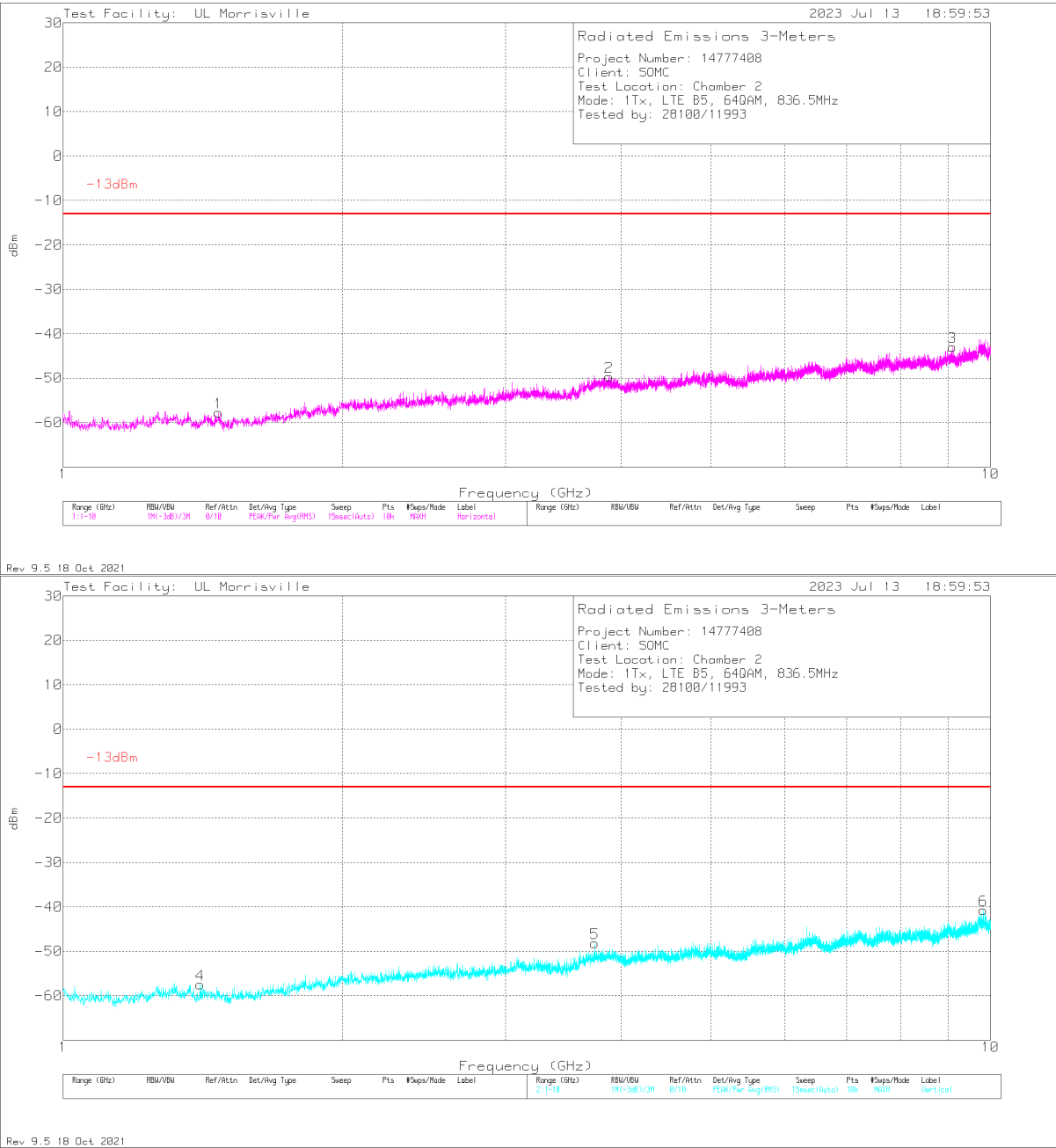
64QAM LTE5 (10MHz, Low Channel)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	88761 (dB/m)	Gain/Loss (dB)	Filter (dB)	CF (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.3582	-63.93	Pk	28.8	-34.8	.4	11.8	-57.73	-13	-44.73	0-360	200	H
4	1.3672	-63.27	Pk	28.6	-34.8	.5	11.8	-57.17	-13	-44.17	0-360	101	V
2	3.637	-62	Pk	32.9	-32.6	.3	11.8	-49.6	-13	-36.6	0-360	101	H
5	3.6748	-62.32	Pk	32.9	-32.4	.3	11.8	-49.72	-13	-36.72	0-360	200	V
3	8.5951	-65.04	Pk	35.8	-26.4	.4	11.8	-43.44	-13	-30.44	0-360	101	H
6	8.9596	-65.09	Pk	36.2	-26.8	.5	11.8	-43.39	-13	-30.39	0-360	101	V

Pk - Peak detector

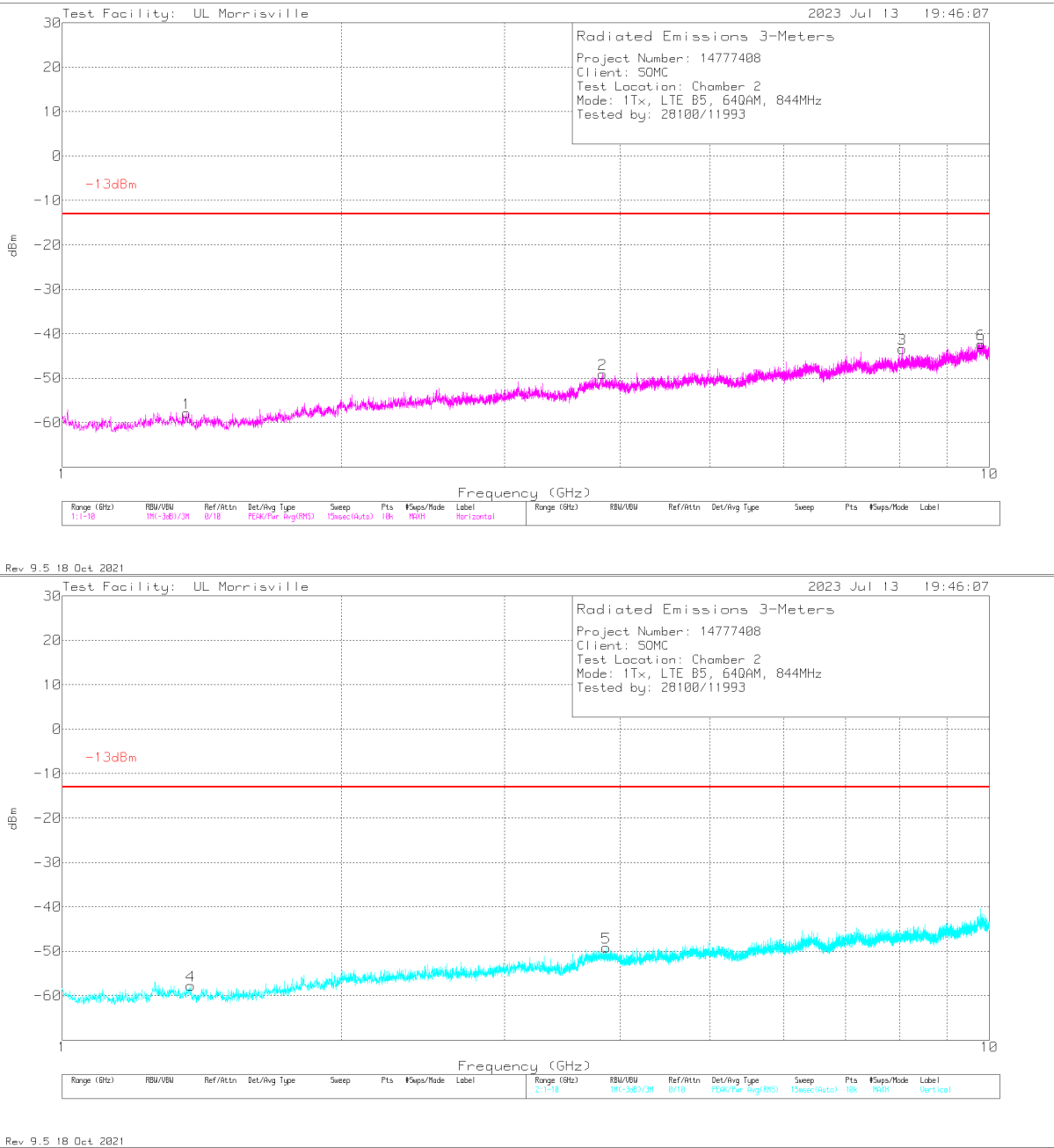
64QAM LTE5 (10MHz, Mid Channel)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	88761 (dB/m)	Gain/Loss (dB)	Filter (dB)	CF (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	1.4059	-63.19	Pk	28.3	-34.8	.4	11.8	-57.49	-13	-44.49	0-360	101	V
1	1.4707	-63.69	Pk	28.2	-34.6	.5	11.8	-57.79	-13	-44.79	0-360	101	H
5	3.7441	-61.29	Pk	33.2	-32.5	.6	11.8	-48.19	-13	-35.19	0-360	101	V
2	3.8782	-63.02	Pk	33.4	-32.6	.7	11.8	-49.72	-13	-36.72	0-360	299	H
3	9.0955	-65.3	Pk	36.2	-26.2	.5	11.8	-43	-13	-30	0-360	101	H
6	9.8263	-65.08	Pk	36.9	-24.9	.6	11.8	-40.68	-13	-27.68	0-360	200	V

Pk - Peak detector

64QAM LTE5 (10MHz, High Channel)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	88761 (dB/m)	Gain/Loss (dB)	Filter (dB)	CF (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.3618	-64.03	Pk	28.7	-34.8	.5	11.8	-57.83	-13	-44.83	0-360	299	H
4	1.3762	-63.6	Pk	28.4	-34.8	.5	11.8	-57.7	-13	-44.7	0-360	200	V
2	3.8287	-62.31	Pk	33.4	-32.5	.5	11.8	-49.11	-13	-36.11	0-360	299	H
5	3.8611	-62.62	Pk	33.4	-32.5	.7	11.8	-49.22	-13	-36.22	0-360	299	V
3	8.0506	-64.5	Pk	35.8	-26.9	.4	11.8	-43.4	-13	-30.4	0-360	199	H
6	9.7903	-66.48	Pk	36.9	-25.1	.5	11.8	-42.38	-13	-29.38	0-360	299	H

Pk- Peak Detector

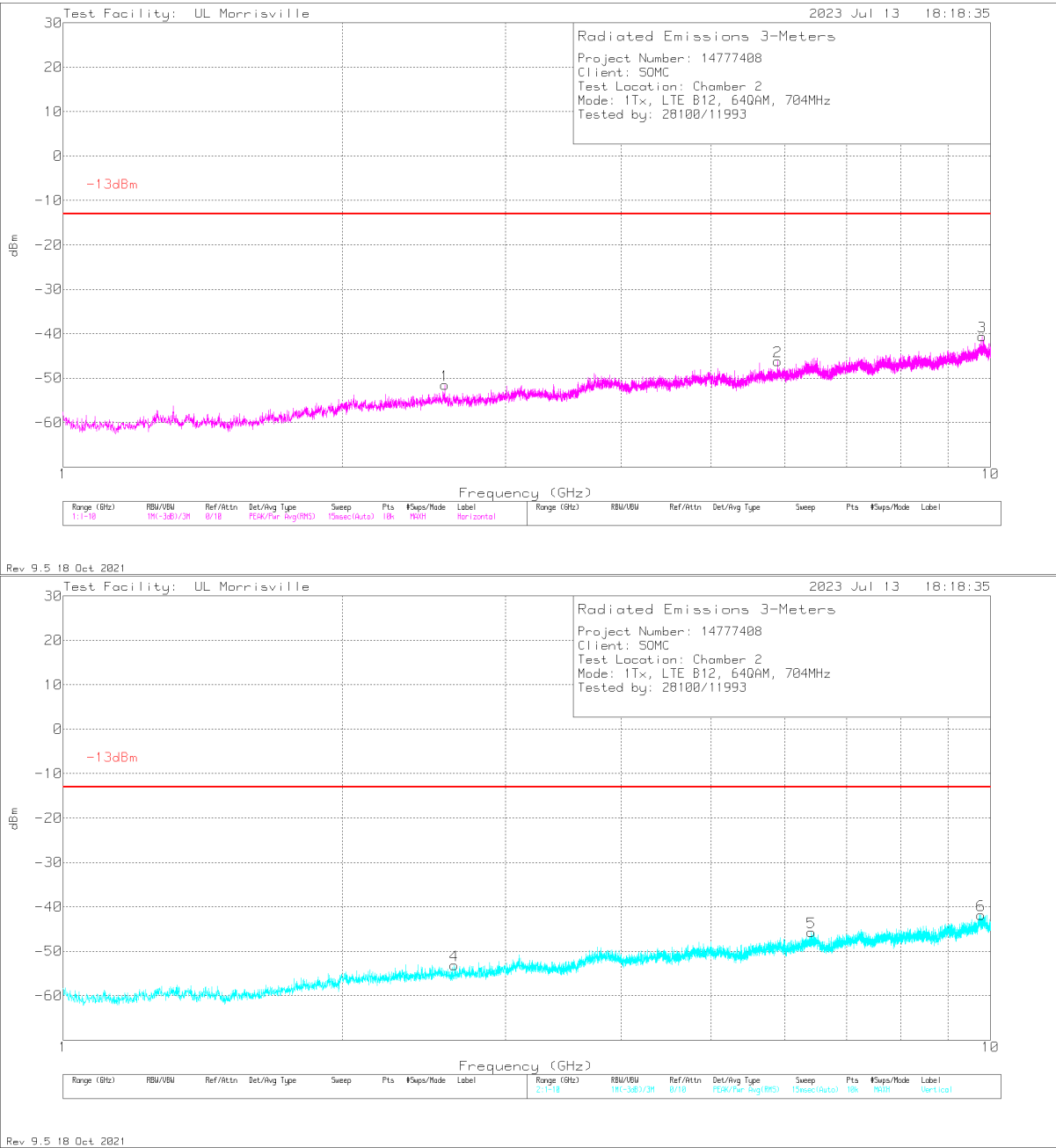
11.1.8. LTE BAND 12**LIMITS**

FCC: §27.53 (g)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

EUT Serial Number: QV7700GUHT

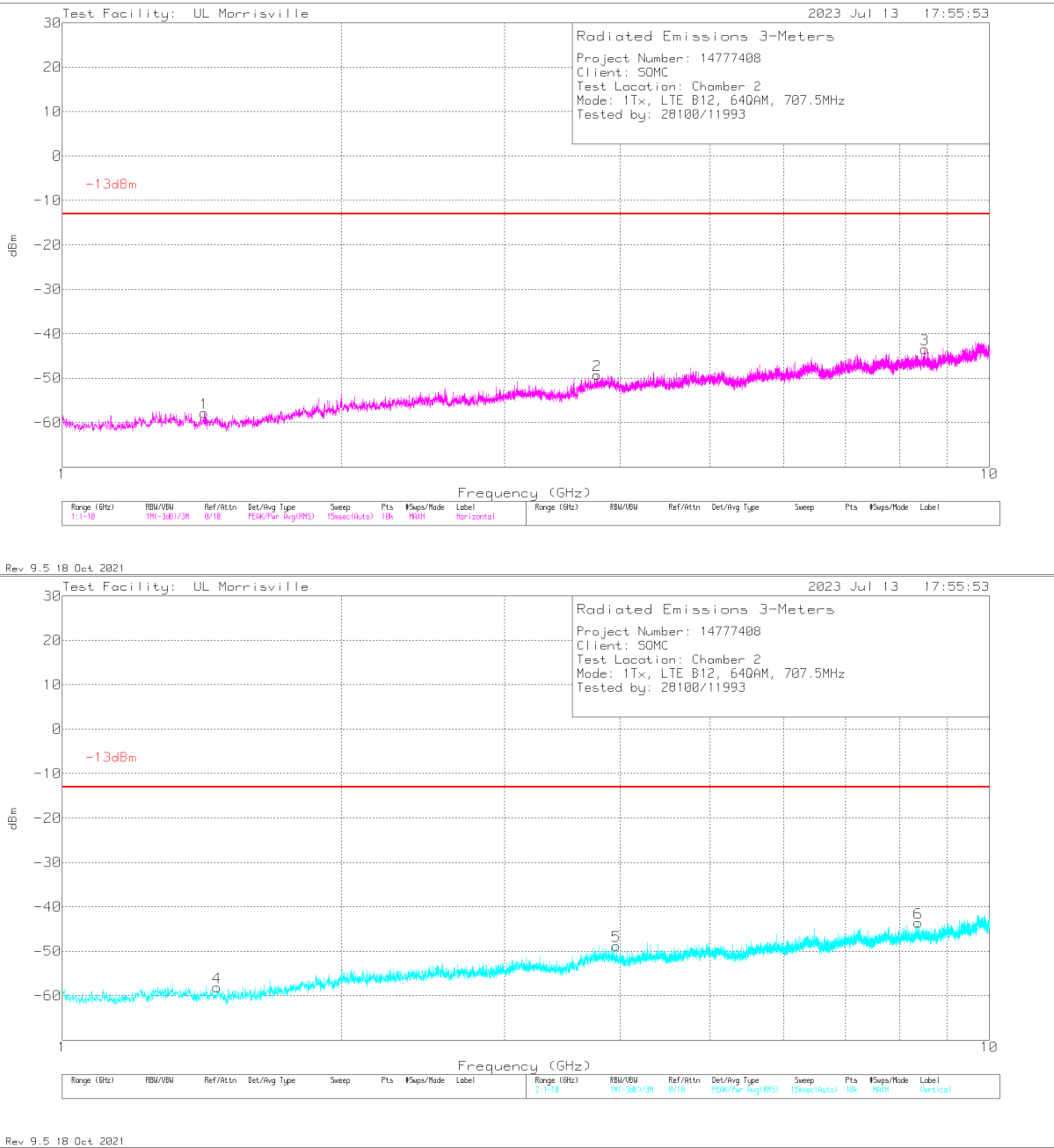
64QAM LTE12 (10MHz, Low Channel)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	88761 (dB/m)	Gain/Loss (dB)	Filter (dB)	CF (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.5804	-62.03	Pk	32.2	-33.8	.3	11.8	-51.53	-13	-38.53	0-360	101	H
4	2.6416	-63.64	Pk	32.1	-33.8	.4	11.8	-53.14	-13	-40.14	0-360	299	V
2	5.8933	-63.79	Pk	34.9	-29.6	.5	11.8	-46.19	-13	-33.19	0-360	101	H
5	6.4099	-64.3	Pk	35.5	-29	.3	11.8	-45.7	-13	-32.7	0-360	200	V
6	9.7678	-65.8	Pk	36.9	-25.5	.7	11.8	-41.9	-13	-28.9	0-360	200	V
3	9.7912	-64.67	Pk	36.9	-25.1	.5	11.8	-40.57	-13	-27.57	0-360	101	H

Pk - Peak detector

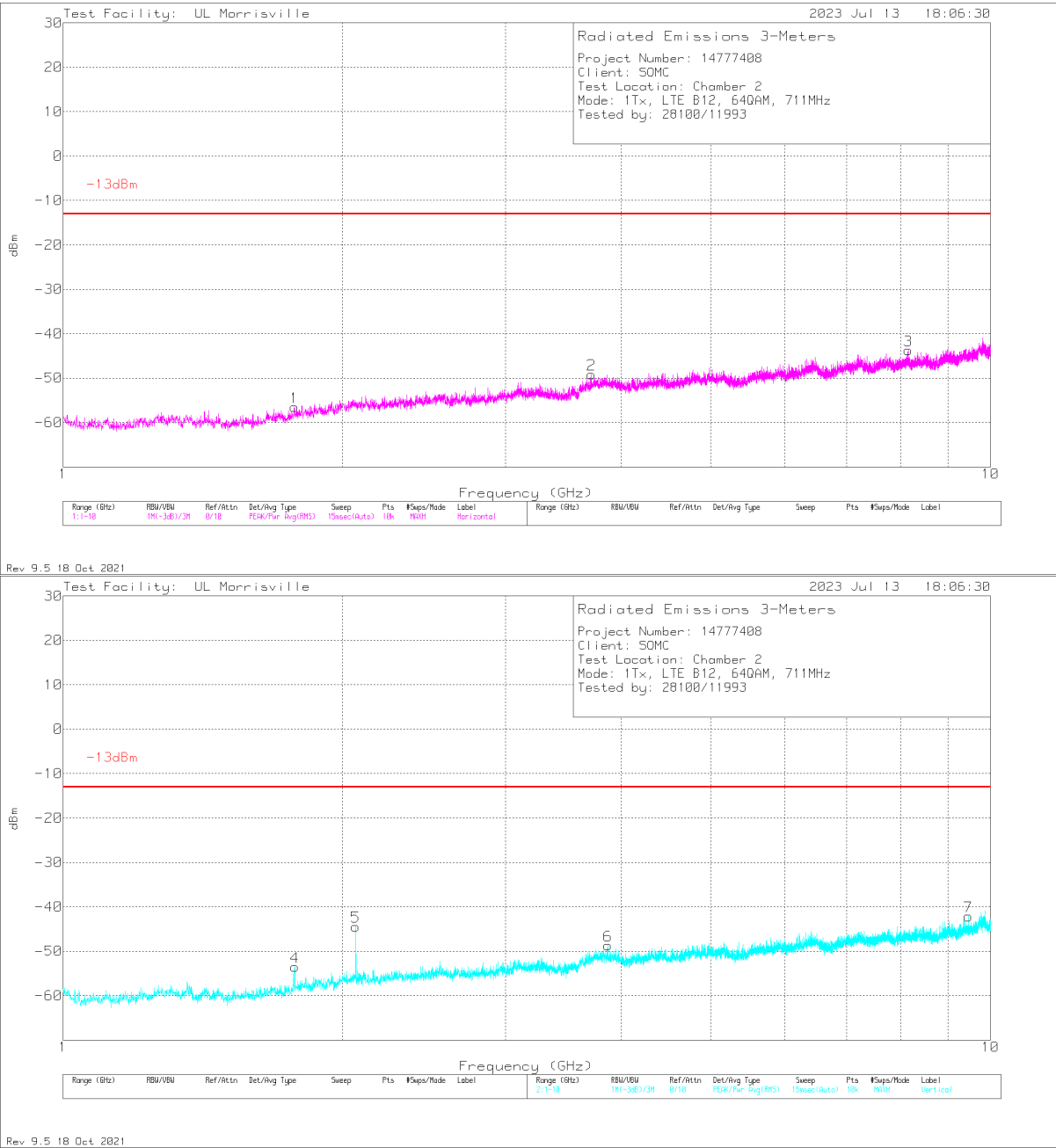
64QAM LTE12 (10MHz, Mid Channel)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	88761 (dB/m)	Gain/Loss (dB)	Filter (dB)	CF (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.4239	-63.77	Pk	28.5	-34.8	.4	11.8	-57.87	-13	-44.87	0-360	299	H
4	1.4689	-63.94	Pk	28.2	-34.7	.5	11.8	-58.14	-13	-45.14	0-360	299	V
2	3.7729	-62.07	Pk	33.2	-32.5	.3	11.8	-49.27	-13	-36.27	0-360	200	H
5	3.961	-62.74	Pk	33.4	-31.7	.4	11.8	-48.84	-13	-35.84	0-360	101	V
6	8.3809	-65.13	Pk	35.8	-26.6	.5	11.8	-43.63	-13	-30.63	0-360	101	V
3	8.524	-64.97	Pk	35.8	-26.5	.4	11.8	-43.47	-13	-30.47	0-360	200	H

Pk - Peak detector

64QAM LTE12 (10MHz, High Channel)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	88761 (dB/m)	Gain/Loss (dB)	Filter (dB)	CF (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.7758	-63.66	Pk	29.6	-34.7	.4	11.8	-56.56	-13	-43.56	0-360	101	H
4	1.7785	-60.71	Pk	29.7	-34.7	.4	11.8	-53.51	-13	-40.51	0-360	300	V
5	2.0683	-53.9	Pk	31.7	-34.3	.3	11.8	-44.4	-13	-31.4	0-360	200	V
2	3.7144	-62.02	Pk	33.1	-32.7	.7	11.8	-49.12	-13	-36.12	0-360	101	H
6	3.8692	-62.03	Pk	33.4	-32.6	.7	11.8	-48.73	-13	-35.73	0-360	101	V
3	8.1568	-64.85	Pk	35.8	-27	.5	11.8	-43.75	-13	-30.75	0-360	101	H
7	9.4717	-65.06	Pk	36.6	-26.2	.7	11.8	-42.16	-13	-29.16	0-360	200	V

Pk - Peak detector

11.1.9. LTE BAND 13**LIMITS**

FCC: §27.53

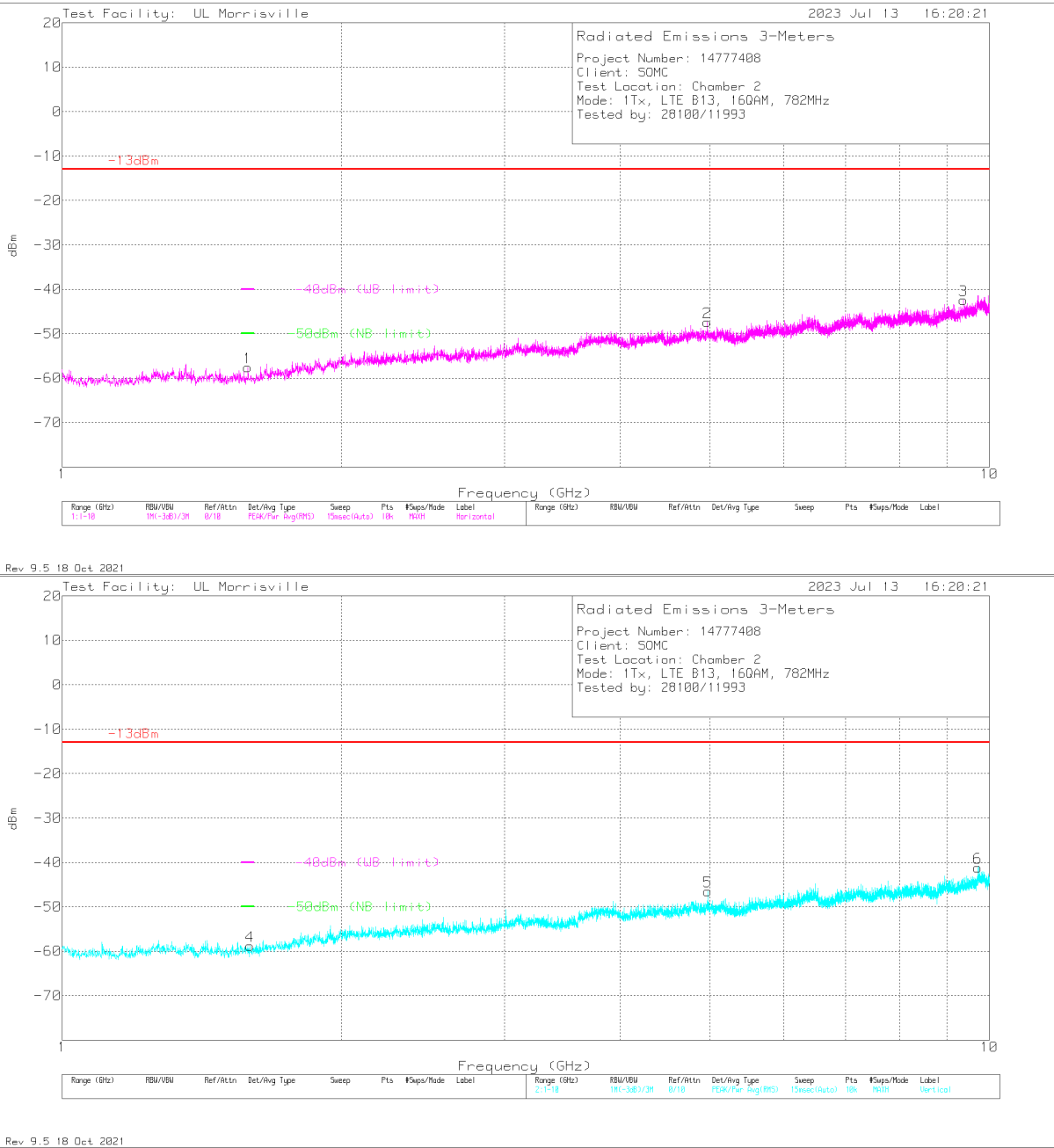
(c) The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

(f) Emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

Note: Emissions in the GPS band were wideband emissions therefore the -40 dBm/MHz limit was used.

EUT Serial Number: QV7700GUHT

16QAM LTE13 (10MHz, Mid Channel)



Test Facility: UL Morrisville

2023 Jul 13 16:20:21

Radiated Emissions 3-Meters

Project Number: 14777408

Client: SOMC

Test Location: Chamber 2

Mode: 1Tx, LTE B13, 16QAM, 782MHz

Tested by: 28100/11993

Rev 9.5 18 Oct 2021

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	88761 (dB/m)	Gain/Loss (dB)	Filter (dB)	CF (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	40dBm (WB limit)	Margin (dB)	50dBm (NB limit)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.5859	-63.32	Pk	28.3	-34.7	.4	11.8	-57.52	-13	-44.52	-40	-17.52	-50	-7.52	0-360	200	H
4	1.594	-64.7	Pk	28.3	-34.7	.5	11.8	-58.8	-13	-45.8	-40	-18.8	-50	-8.8	0-360	200	V
2	4.9654	-62.79	Pk	33.9	-30.7	.4	11.8	-47.39	-13	-34.39	-	-	-	-	0-360	299	H
5	4.9708	-62.04	Pk	33.9	-30.6	.4	11.8	-46.54	-13	-33.54	-	-	-	-	0-360	200	V
3	9.3754	-65.59	Pk	36.6	-25.7	.5	11.8	-42.39	-13	-29.39	-	-	-	-	0-360	299	H
6	9.7174	-65.49	Pk	36.8	-25.1	.8	11.8	-41.19	-13	-28.19	-	-	-	-	0-360	299	V

Pk - Peak detector

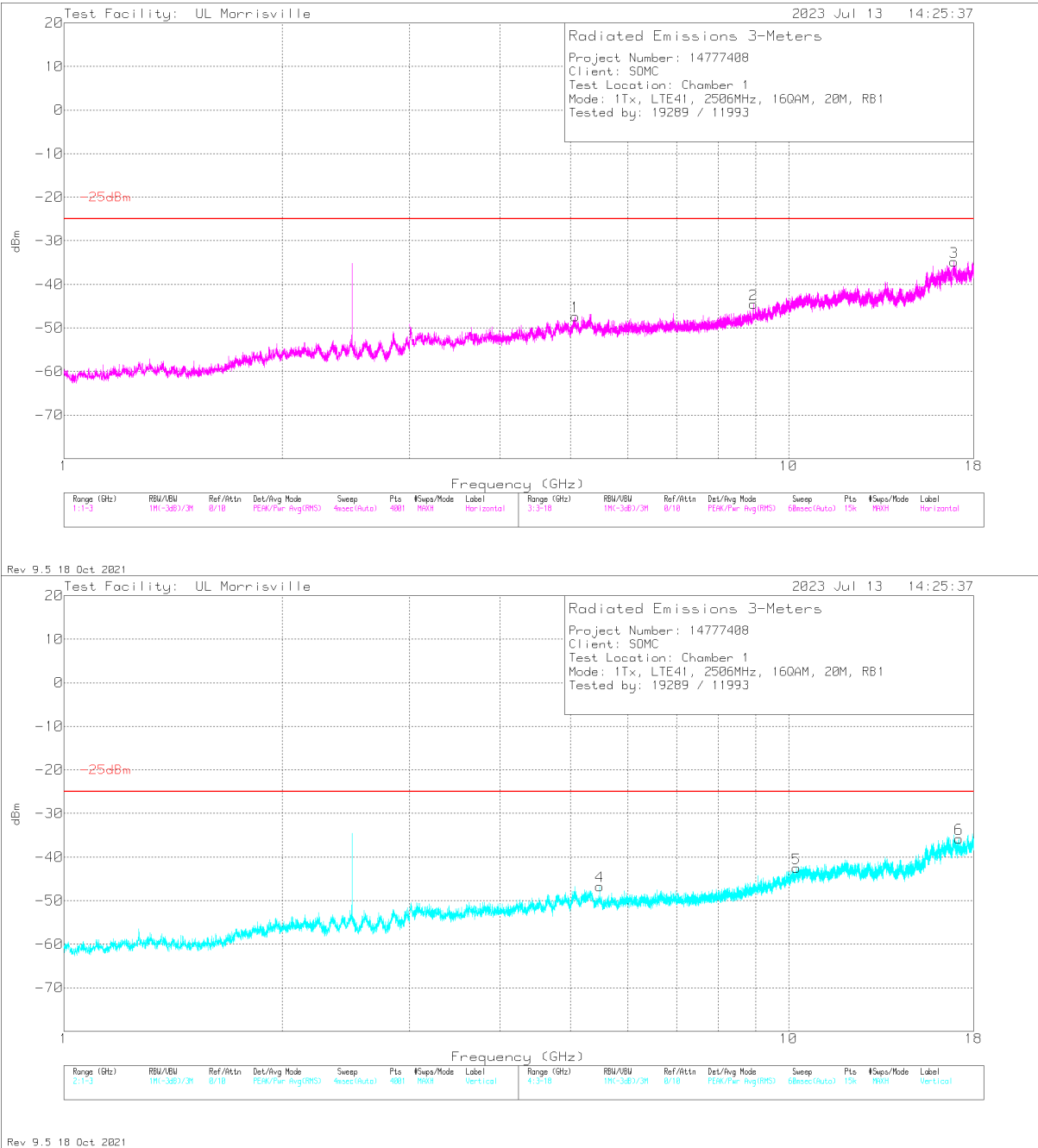
11.1.10. LTE BAND 41

FCC: §27.53 (m)

At least $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section.

EUT Serial Number: QV7700BTHT

16QAM LTE41(20MHz, Low Channel)



Test Facility: UL Morrisville

2023 Jul 13 14:25:37

Radiated Emissions 3-Meters

Project Number: 14777408

Client: SOMC

Test Location: Chamber 1

Mode: 1Tx, LTE41, 2506MHz, 16QAM, 20M, RB1

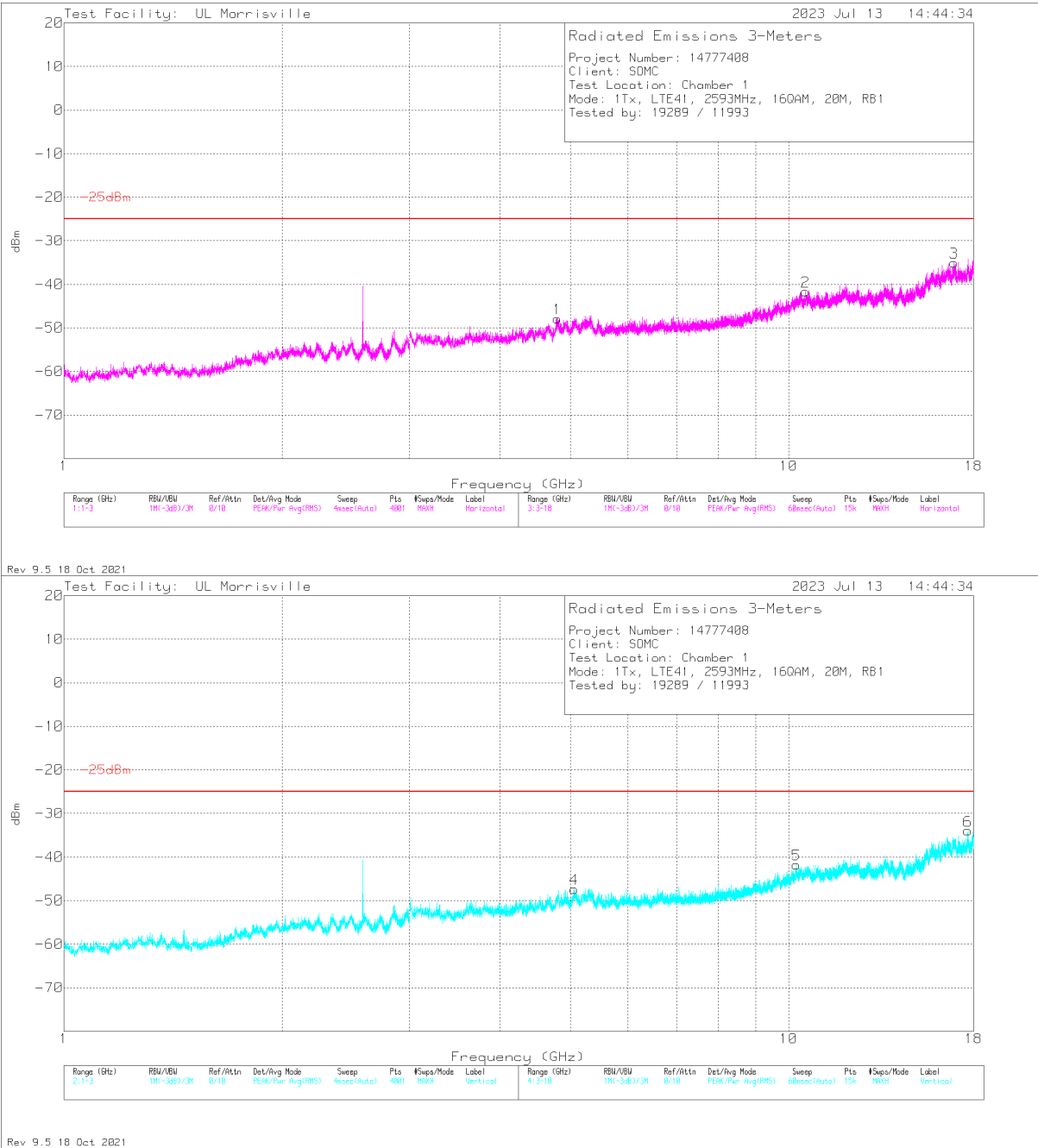
Tested by: 19289 / 11993

Rev 9.5 18 Oct 2021

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	206211 (dB/m)	Gain/Loss (dB)	CF (dB)	Filter (dB)	Corrected Reading dBm	-25dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.075	-64.95	Pk	34.2	-29.4	11.8	1	-47.35	-25	-22.35	0-360	300	H
4	5.486	-63	Pk	34.4	-30.6	11.8	.7	-46.7	-25	-21.7	0-360	300	V
2	8.951	-64.13	Pk	35.9	-28.6	11.8	.5	-44.53	-25	-19.53	0-360	101	H
5	10.245	-66.46	Pk	37.6	-26.8	11.8	1.3	-42.56	-25	-17.56	0-360	101	V
3	16.917	-66.12	Pk	41.7	-23.1	11.8	.9	-34.82	-25	-9.82	0-360	300	H
6	17.17	-65.57	Pk	41.4	-24.5	11.8	1.1	-35.77	-25	-10.77	0-360	300	V

Pk - Peak detector

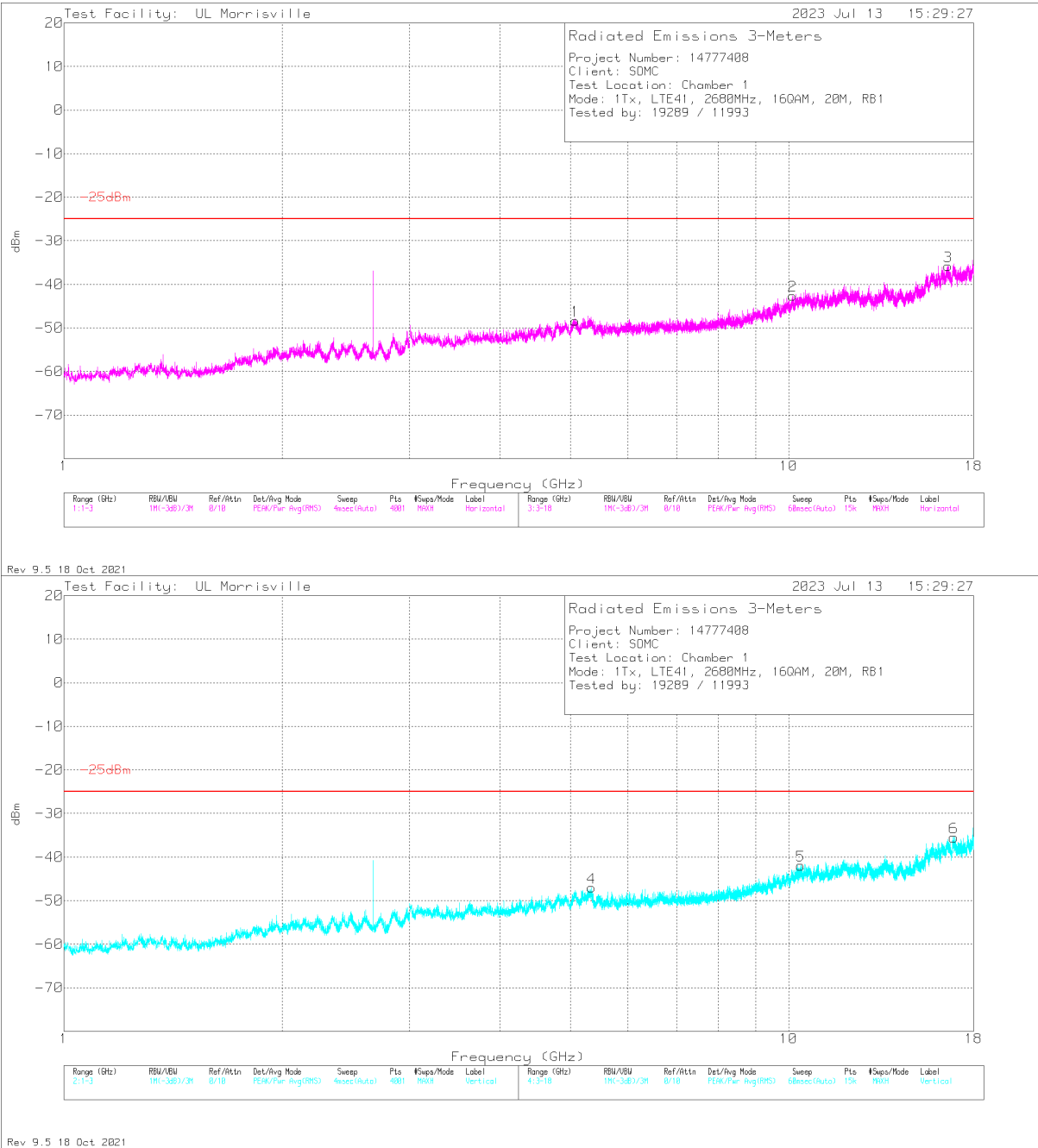
16QAM LTE41(20MHz, Mid Channel)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	206211 (dB/m)	Gain/Loss (dB)	CF (dB)	Filter (dB)	Corrected Reading dBm	-25dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	4.798	-64.33	Pk	34.1	-30.4	11.8	1	-47.83	-25	-22.83	0-360	101	H
4	5.059	-64.42	Pk	34.1	-29.7	11.8	.9	-47.32	-25	-22.32	0-360	300	V
5	10.248	-65.52	Pk	37.6	-26.9	11.8	1.3	-41.72	-25	-16.72	0-360	300	V
2	10.551	-66.72	Pk	37.8	-26.1	11.8	1.6	-41.62	-25	-16.62	0-360	200	H
3	16.923	-66.61	Pk	41.7	-22.8	11.8	.9	-35.01	-25	-10.01	0-360	299	H
6	17.674	-65.04	Pk	41.6	-23.3	11.8	1	-33.94	-25	-8.94	0-360	300	V

Pk - Peak detector

16QAM LTE41(20MHz, High Channel)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	206211 (dB/m)	Gain/Loss (dB)	CF (dB)	Filter (dB)	Corrected Reading dBm	-25dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.08	-65.56	Pk	34.2	-29.7	11.8	.9	-48.36	-25	-23.36	0-360	101	H
4	5.346	-64.84	Pk	34.5	-29.4	11.8	.9	-47.04	-25	-22.04	0-360	101	V
2	10.123	-65.99	Pk	37.6	-27.5	11.8	1.5	-42.59	-25	-17.59	0-360	101	H
5	10.388	-66.86	Pk	37.7	-25.8	11.8	1.2	-41.96	-25	-16.96	0-360	300	V
3	16.588	-65.7	Pk	41.2	-24.3	11.8	1.2	-35.8	-25	-10.8	0-360	300	H
6	16.903	-66.37	Pk	41.8	-23.6	11.8	.9	-35.47	-25	-10.47	0-360	300	V

Pk - Peak detector

11.2. WORST CASE EMISSIONS

RULE PART(S)

FCC: §2.1053, §22.917, §27.53.

LIMITS

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

TEST PROCEDURE

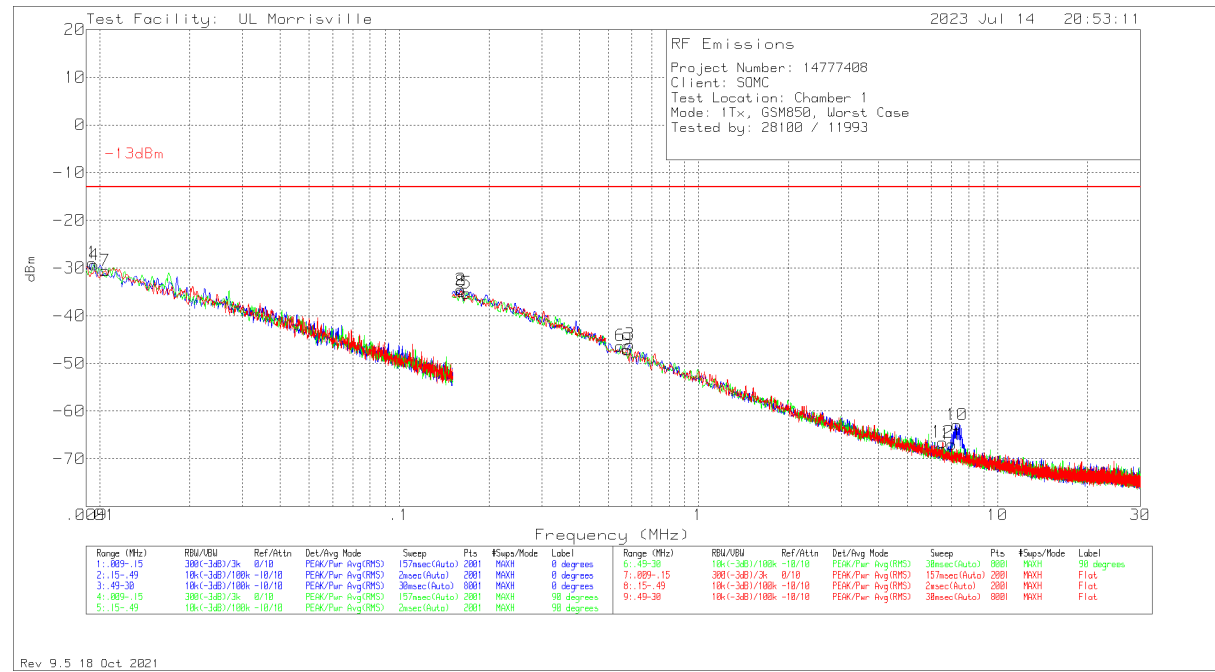
KDB 971168 D01 v02r02/D02 v01

RESULTS

Note: EUT Serial Number: QV7700GUHT

Note2: Only Test data with emissions <20dB from the limit are reported.

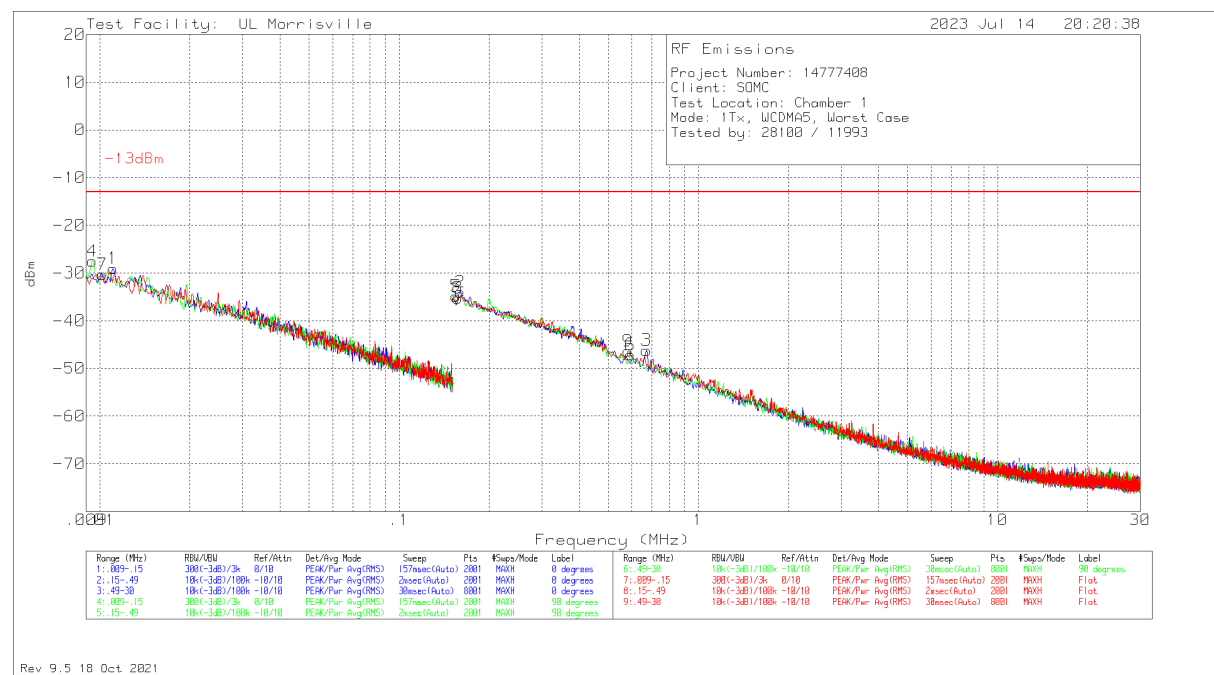
11.2.1. GSM Worst Case



Marker	Frequency (MHz)	Meter Reading (dBm)	Det	135144 (dB/m)	Gain/Loss (dB)	Conversion Factor (dB)	Corrected Reading dBm	-13dBm	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Loop Angle
1	.00943	-60.5	Pk	19.7	.1	11.8	-28.9	-13	-15.9	0-360	404	0 degs
4	.00957	-60.85	Pk	19.6	.1	11.8	-29.35	-13	-16.35	0-360	404	90 degs
7	.01042	-61.53	Pk	19.1	.1	11.8	-30.53	-13	-17.53	0-360	404	Flat
2	.16063	-58.62	Pk	12.2	.1	11.8	-34.52	-13	-21.52	0-360	404	0 degs
8	.16156	-58.99	Pk	12.2	.1	11.8	-34.89	-13	-21.89	0-360	404	Flat
5	.16811	-59.34	Pk	12.2	.1	11.8	-35.24	-13	-22.24	0-360	404	90 degs
6	.54902	-70.5	Pk	12.2	.2	11.8	-46.3	-13	-33.3	0-360	404	90 degs
9	.57854	-71.33	Pk	12.2	.2	11.8	-47.13	-13	-34.13	0-360	404	Flat
3	.5896	-70.24	Pk	12.2	.2	11.8	-46.04	-13	-33.04	0-360	404	0 degs
12	6.55841	-90.42	Pk	11.6	.5	11.8	-66.52	-13	-53.52	0-360	404	Flat
11	7.02691	-90.85	Pk	11.5	.6	11.8	-66.95	-13	-53.95	0-360	404	90 degs
10	7.31834	-86.65	Pk	11.4	.6	11.8	-62.85	-13	-49.85	0-360	404	0 degs

Pk - Peak detector

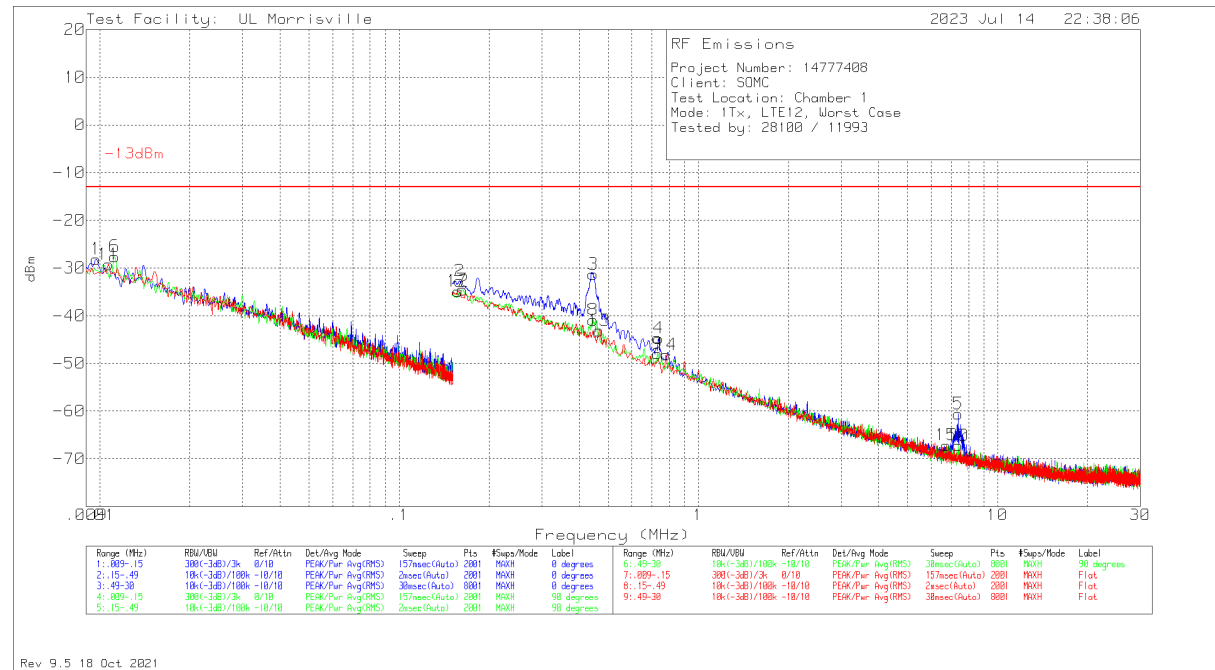
11.2.2. WCDMA Worst Case



Marker	Frequency (MHz)	Meter Reading (dBm)	Det	135144 (dB/m)	Gain/Loss (dB)	Conversion Factor (dB)	Corrected Reading dBm	-13dBm	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Loop Angle
4	.00943	-59.11	Pk	19.7	.1	11.8	-27.51	-13	-14.51	0-360	404	90 degs
7	.01021	-61.37	Pk	19.2	.1	11.8	-30.27	-13	-17.27	0-360	404	Flat
1	.01106	-59.74	Pk	18.8	.1	11.8	-29.04	-13	-16.04	0-360	101	0 degs
5	.15502	-58.94	Pk	12.2	.1	11.8	-34.84	-13	-21.84	0-360	404	90 degs
8	.15714	-59.34	Pk	12.2	.1	11.8	-35.24	-13	-22.24	0-360	404	Flat
2	.16003	-58.09	Pk	12.2	.1	11.8	-33.99	-13	-20.99	0-360	101	0 degs
9	.58223	-70.59	Pk	12.2	.2	11.8	-46.39	-13	-33.39	0-360	404	Flat
6	.59329	-71.33	Pk	12.2	.2	11.8	-47.13	-13	-34.13	0-360	404	90 degs
3	.67076	-70.38	Pk	12.2	.2	11.8	-46.18	-13	-33.18	0-360	101	0 degs

Pk - Peak detector

11.2.3. LTE Worst Case

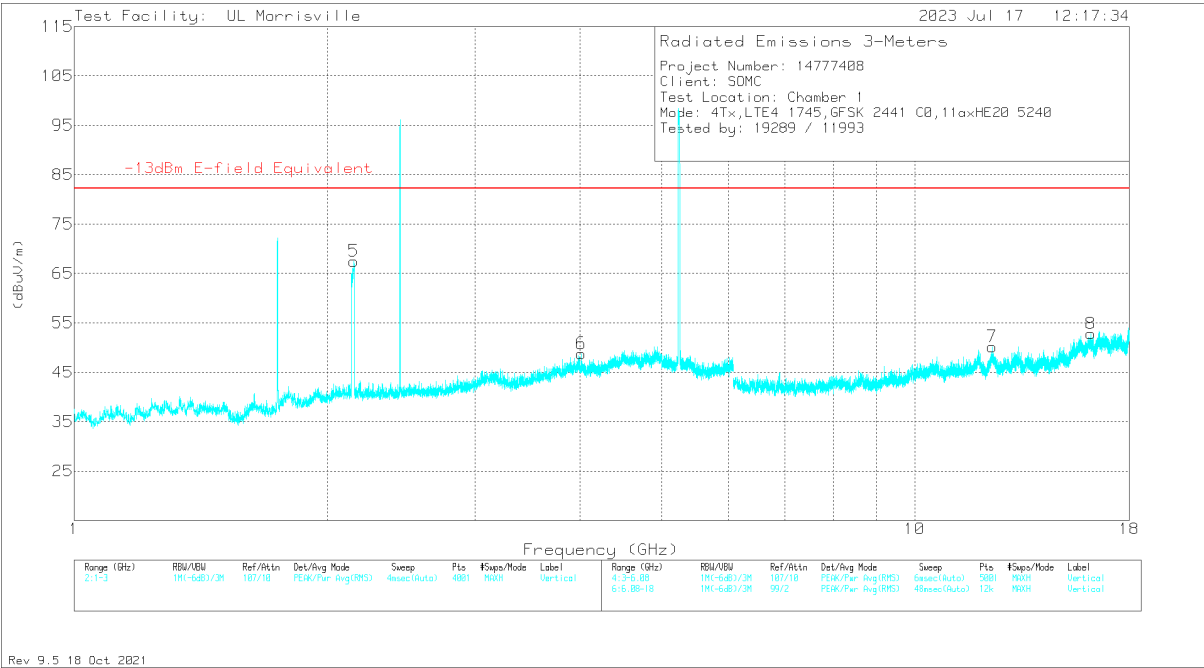
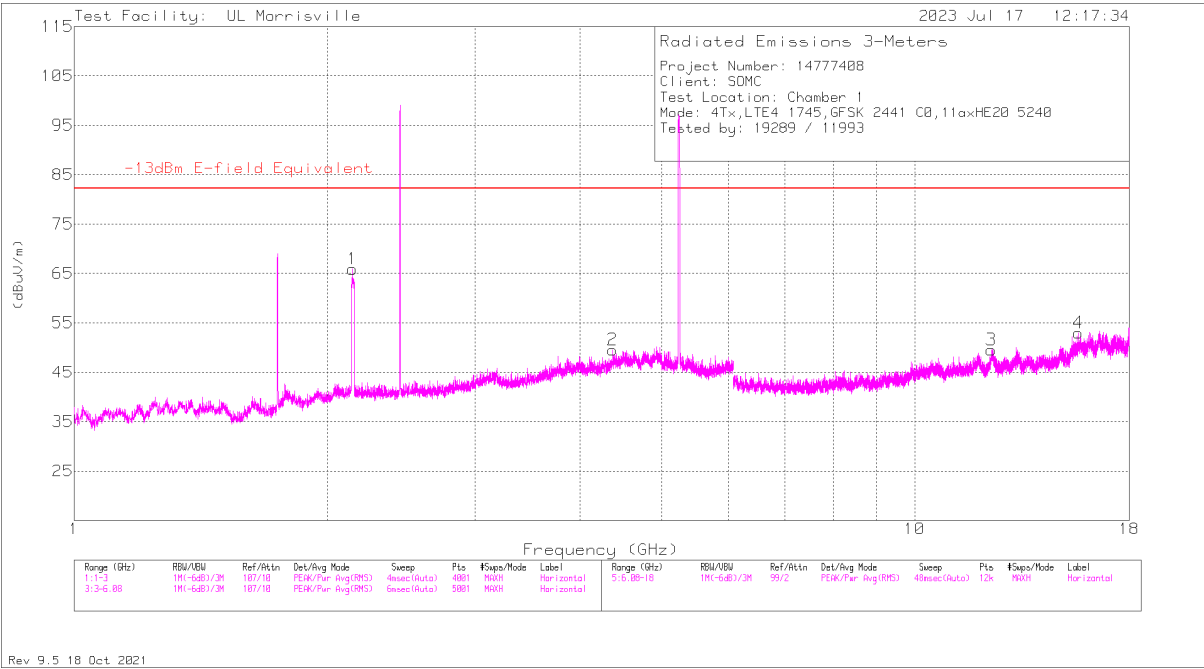


Marker	Frequency (MHz)	Meter Reading (dBm)	Det	135144 (dB/m)	Gain/Loss (dB)	Conversion Factor (dB)	Corrected Reading dBm	-13dBm	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Loop Angle
1	.00971	-59.51	Pk	19.5	.1	11.8	-28.11	-13	-15.11	0-360	404	0 degs
11	.0107	-60.15	Pk	19	.1	11.8	-29.25	-13	-16.25	0-360	404	Flat
6	.0112	-58.29	Pk	18.8	.1	11.8	-27.59	-13	-14.59	0-360	404	90 degs
12	.1574	-58.96	Pk	12.2	.1	11.8	-34.86	-13	-21.86	0-360	404	Flat
2	.15927	-56.78	Pk	12.2	.1	11.8	-32.68	-13	-19.68	0-360	404	0 degs
7	.16284	-58.65	Pk	12.2	.1	11.8	-34.55	-13	-21.55	0-360	404	90 degs
3	.44512	-55.5	Pk	12.2	.2	11.8	-31.3	-13	-18.3	0-360	404	0 degs
8	.44512	-65.08	Pk	12.2	.2	11.8	-40.88	-13	-27.88	0-360	404	90 degs
13	.46654	-67.31	Pk	12.2	.2	11.8	-43.11	-13	-30.11	0-360	404	Flat
9	.72979	-72.1	Pk	12.2	.2	11.8	-47.9	-13	-34.9	0-360	404	90 degs
4	.73716	-68.91	Pk	12.2	.2	11.8	-44.71	-13	-31.71	0-360	404	0 degs
14	.78143	-72.38	Pk	12.2	.2	11.8	-48.18	-13	-35.18	0-360	404	Flat
15	6.73548	-90.94	Pk	11.5	.5	11.8	-67.14	-13	-54.14	0-360	404	Flat
5	7.38843	-84.36	Pk	11.4	.6	11.8	-60.56	-13	-47.56	0-360	404	0 degs
10	7.38843	-91.03	Pk	11.4	.6	11.8	-67.23	-13	-54.23	0-360	404	90 degs

Pk - Peak detector

11.3. Simultaneous Transmission

11.3.1. Scan 1 - LTE B4 1745MHz 20MHz RB1-49 + 2441MHz BT GFSK C0 + 5240MHz 11ax HE20 SU MIMO



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Filter (dB)	Corrected Reading (dBuV/m)	-13dBm E-field Equivalent	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1 ^{DL}	** 2.1425	56.1	Pk	31.7	-23.1	1.2	65.9	-	-	0-360	101	H
5 ^{DL}	** 2.1495	57.81	Pk	31.6	-23	1.1	67.51	-	-	0-360	101	V
2	* ** 4.37306	34.15	Pk	33.6	-19.1	.9	49.55	82.2	-32.65	0-360	101	H
6	* ** 4.0127	33.48	Pk	33.4	-19.1	1	48.78	82.2	-33.42	0-360	101	V
3	* ** 12.33502	35.34	Pk	38.6	-24.4	0	49.54	82.2	-32.66	0-360	101	H
7	* ** 12.36283	35.47	Pk	38.6	-23.9	0	50.17	82.2	-32.03	0-360	200	V
4	* ** 15.66368	37.76	Pk	40.6	-25.4	0	52.96	82.2	-29.24	0-360	200	H
8	16.20902	37.12	Pk	40.6	-24.9	0	52.82	82.2	-29.38	0-360	101	V

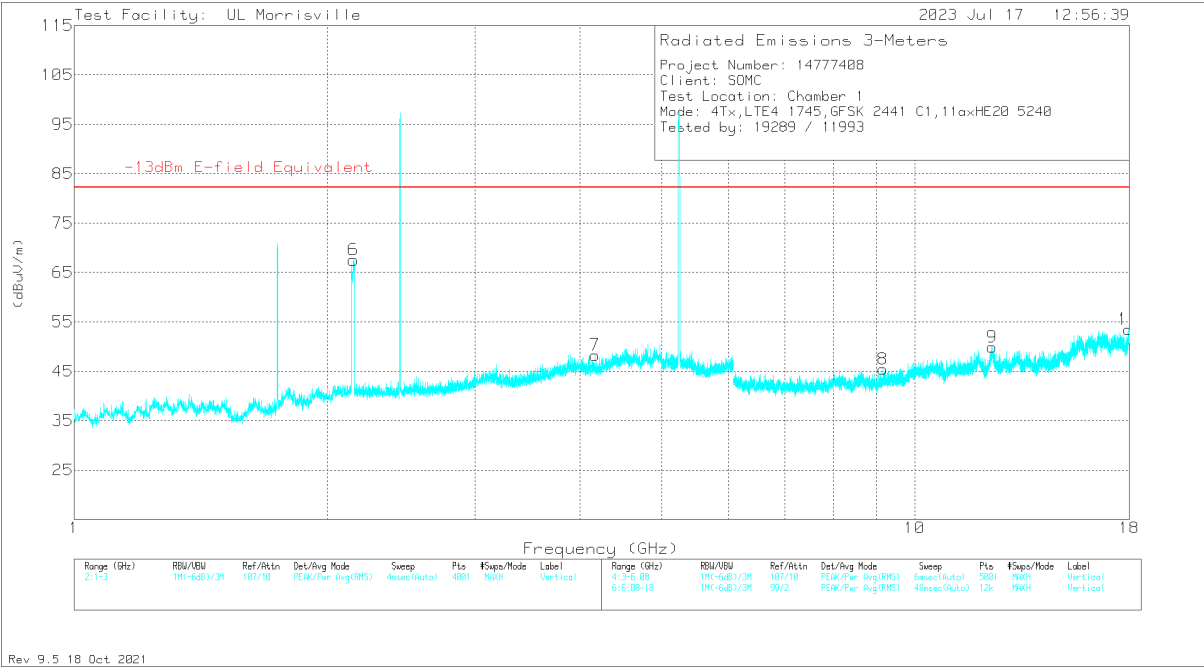
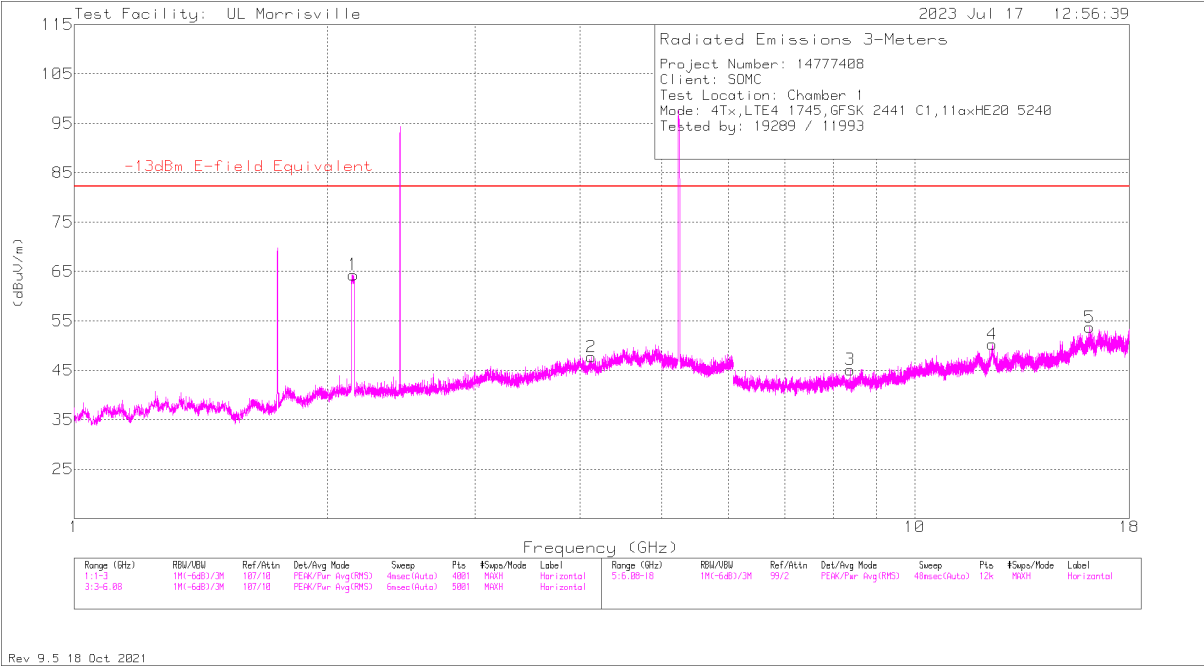
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

DL - Downlink

11.3.2. Scan 2 - LTE B4 1745MHz 20MHz RB1-49 + 2441MHz BT GFSK C1 + 5240MHz 11ax HE20 SU MIMO



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Filter (dB)	Corrected Reading (dBuV/m)	-13dBm E-field Equivalent	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1 ^{DL}	** 2.1485	54.62	Pk	31.6	-23	1.1	64.32	-	-	0-360	199	H
6 ^{DL}	** 2.149	57.85	Pk	31.6	-23	1.1	67.55	-	-	0-360	101	V
2	*** 4.12543	32.22	Pk	33.3	-18.8	1	47.72	82.2	-34.48	0-360	101	H
7	*** 4.1667	33.45	Pk	33.3	-19.3	.8	48.25	82.2	-33.95	0-360	200	V
4	*** 12.35985	35.75	Pk	38.6	-24.1	0	50.25	82.2	-31.95	0-360	101	H
9	*** 12.36283	35.17	Pk	38.6	-23.9	0	49.87	82.2	-32.33	0-360	200	V
5	*** 16.15538	37.31	Pk	40.6	-24.2	0	53.71	82.2	-28.49	0-360	101	H
10	*** 17.97715	34.17	Pk	41.4	-22.1	0	53.47	82.2	-28.73	0-360	101	V
3	*** 8.38354	38.72	Pk	35.9	-29.5	0	45.12	82.2	-37.08	0-360	101	H
8	*** 9.15933	37.44	Pk	36	-28	0	45.44	82.2	-36.76	0-360	200	V

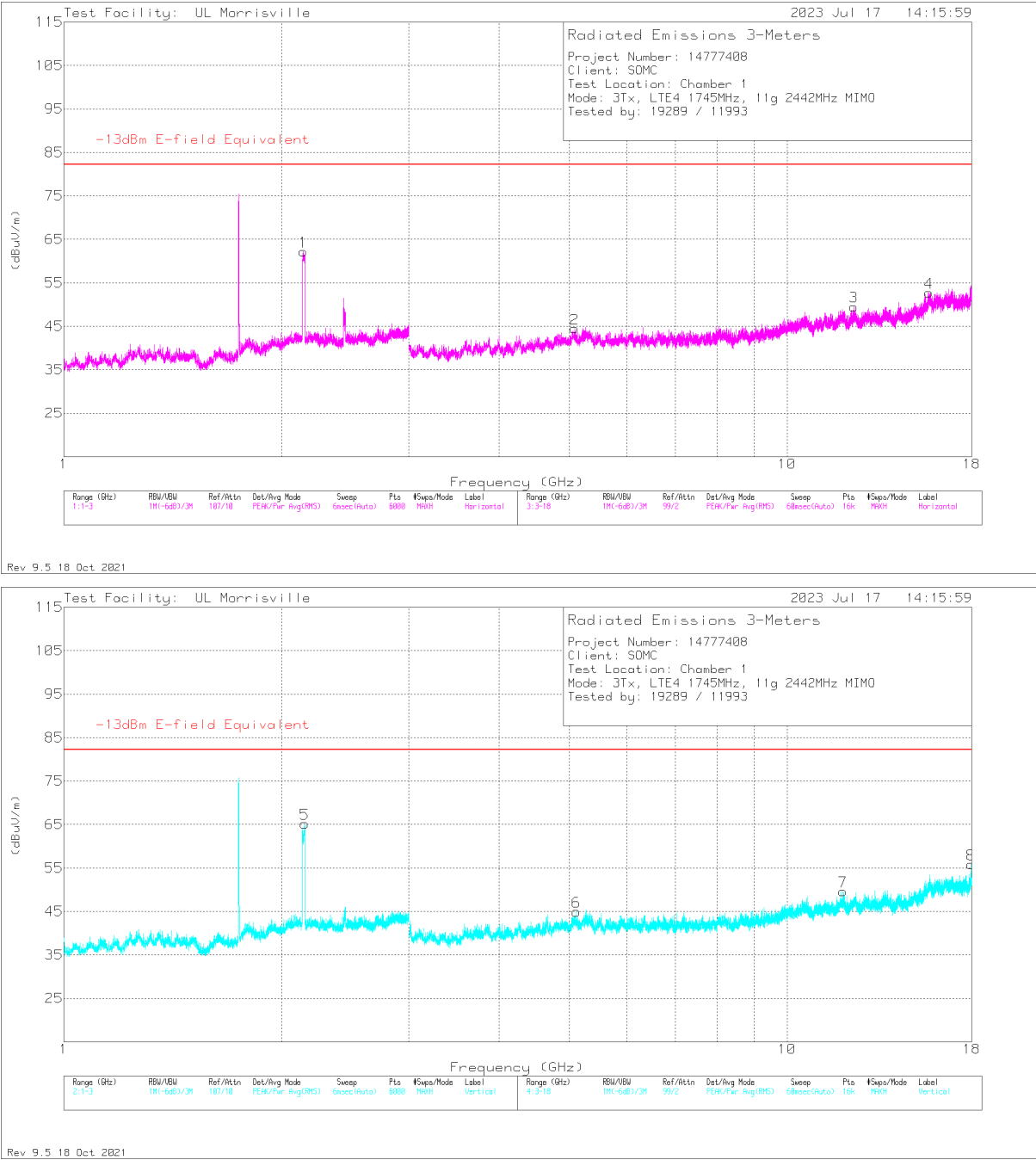
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

DL - Downlink

11.3.3. Scan 3 - LTE B4 1745MHz 20MHz RB1-49 + 2442MHz 11g 6Mbps MIMO



Test Facility: UL Morrisville

2023 Jul 17 14:15:59

Radiated Emissions 3-Meters

Project Number: 14777408

Client: SOMC

Test Location: Chamber 1

Mode: 3Tx, LTE4 1745MHz, 11g 2442MHz MIMO

Tested by: 19289 / 11993

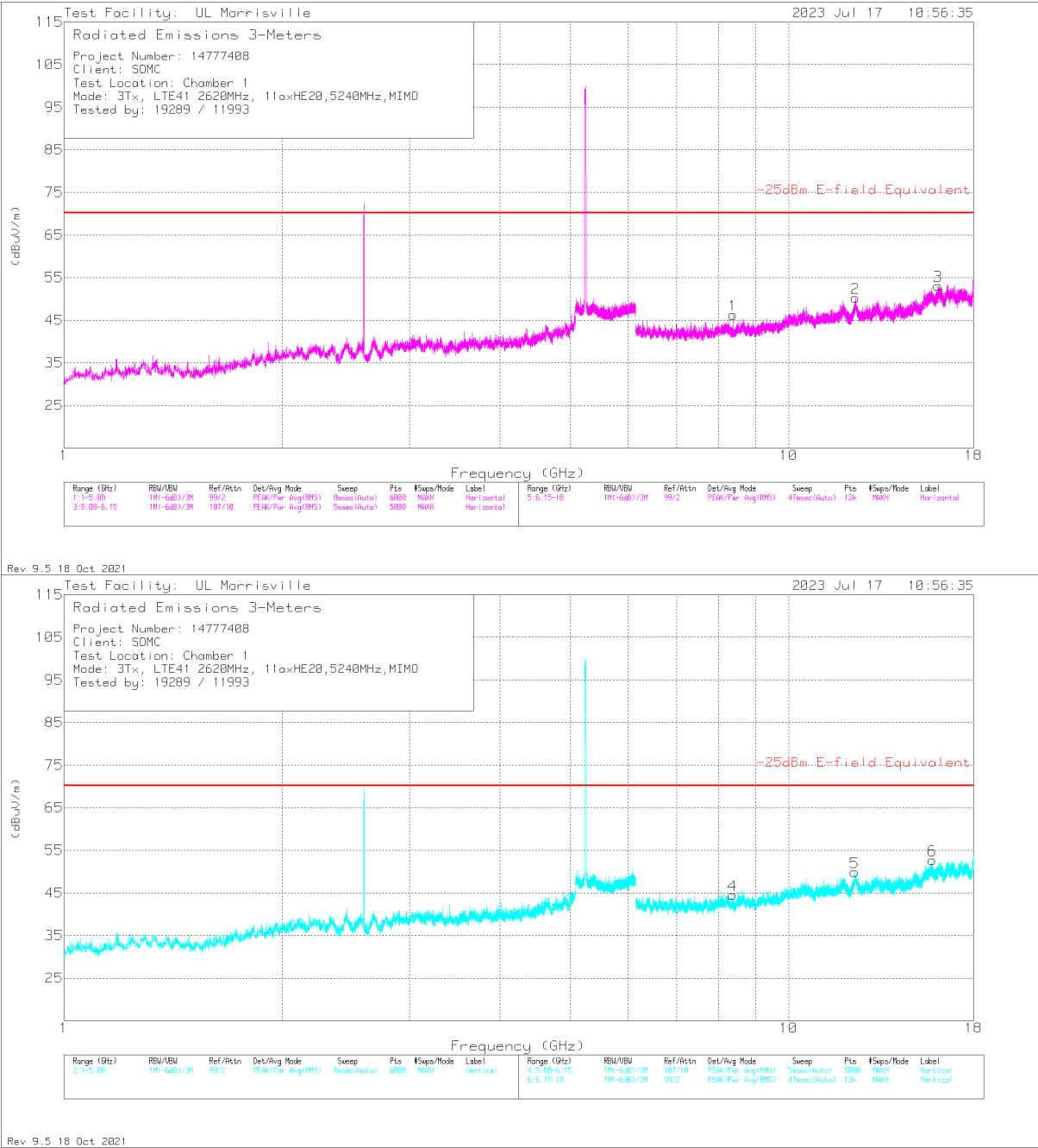
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Filter (dB)	Filter (dB)	Corrected Reading (dBuV/m)	-13dBm E-field Equivalent	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1 ^{DL}	** 2.14252	51.22	Pk	31.7	-23.1	1.2	1.2	62.22	-	-	0-360	101	H
5 ^{DL}	** 2.15253	54.4	Pk	31.7	-23.2	1.2	1.1	65.2	-	-	0-360	101	V
7	* ** 11.9475	36.73	Pk	38.6	-25.7	0	0	49.63	82.2	-32.57	0-360	101	V
3	* ** 12.37031	37.34	Pk	38.6	-26.4	0	0	49.54	82.2	-32.66	0-360	200	H
4	* ** 15.71438	36.35	Pk	40.7	-24.3	0	0	52.75	82.2	-29.45	0-360	200	H
8	* ** 17.95875	36.65	Pk	41.4	-22.2	0	0	55.85	82.2	-26.35	0-360	101	V
2	* ** 5.08219	40	Pk	34.2	-29.7	0	0	44.5	82.2	-37.7	0-360	200	H
6	* ** 5.11313	40.35	Pk	34.2	-29.6	0	0	44.95	82.2	-37.25	0-360	101	V

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

DL - Downlink

11.3.4. Scan 4 - LTE B41 2620MHz 20MHz RB1-49 + 5240MHz 11ax HE20 SU MIMO



Test Facility: UL Morrisville

2023 Jul 17 10:56:35

Radiated Emissions 3-Meters

Project Number: 14777408

Client: SDMC

Test Location: Chamber 1

Mode: 3Tx, LTE41 2620MHz, 11axHE20, 5240MHz, MIMO

Tested by: 19289 / 11993

Rev 9.5 18 Oct 2021

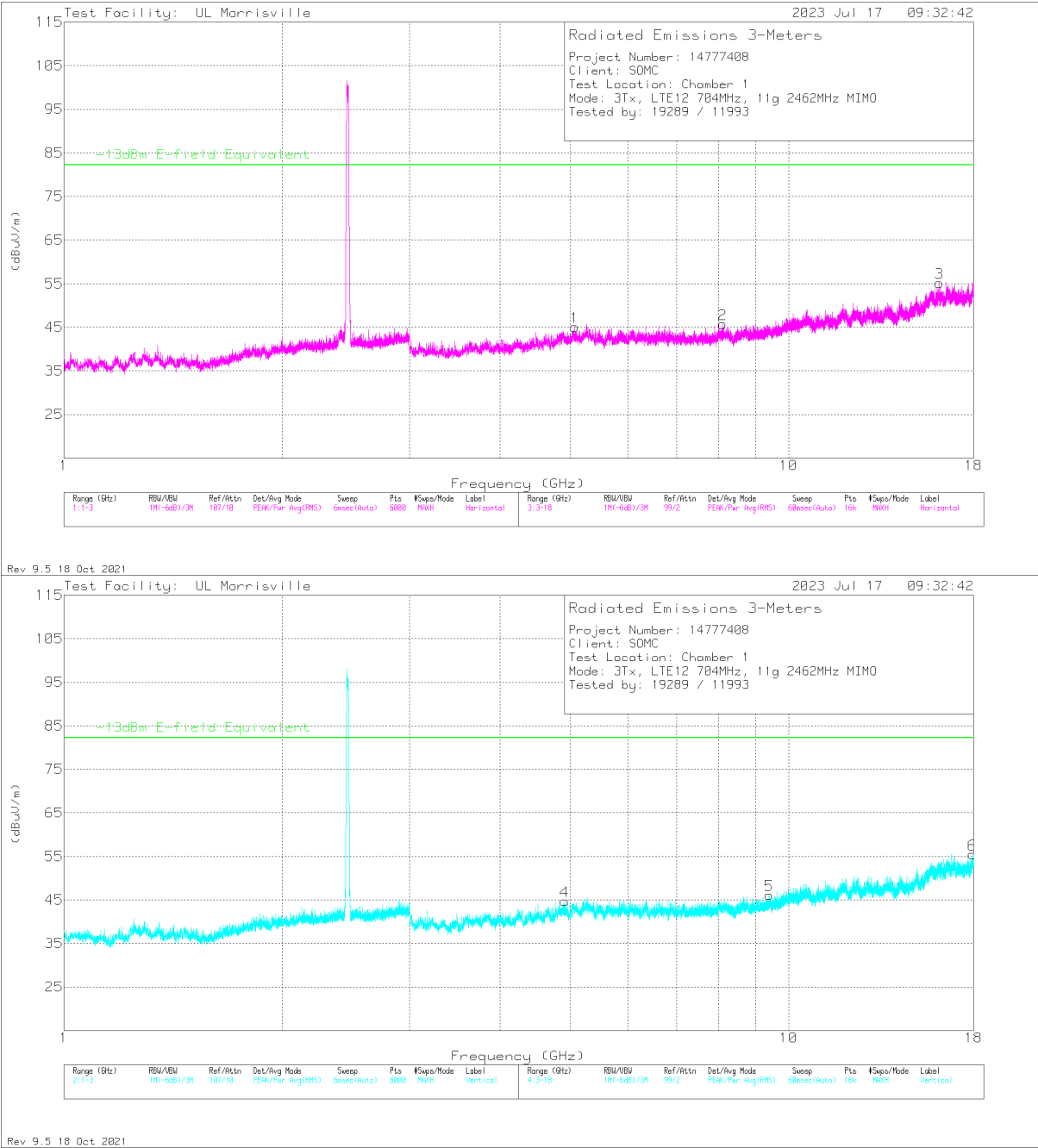
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Filter (dB)	Corrected Reading (dBuV/m)	-25dBm E-field Equivalent	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 8.38373	39.99	Pk	35.9	-29.6	0	46.29	70.2	-23.91	0-360	101	H
2	* ** 12.36039	35.76	Pk	38.6	-24.1	0	50.26	70.2	-19.94	0-360	200	H
3	* ** 16.07635	36.83	Pk	40.7	-24.4	0	53.13	70.2	-17.07	0-360	101	H
4	* ** 8.37286	37.35	Pk	35.9	-28.7	0	44.55	70.2	-25.65	0-360	200	V
5	* ** 12.33373	35.78	Pk	38.6	-24.5	0	49.88	70.2	-20.32	0-360	101	V
6	* ** 15.79886	36.23	Pk	40.7	-24.2	0	52.73	70.2	-17.47	0-360	200	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

11.3.5. Scan 5 - LTE B12 704MHz 10MHz RB1-24 + 2462MHz 11g 6Mbps MIMO



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Filter (dB)	Corrected Reading (dBuV/m)	-13dBm E-field Equivalent	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 5.06719	39.78	Pk	34.2	-29.5	.6	45.08	82.2	-37.12	0-360	200	H
2	* ** 8.10844	37.9	Pk	35.8	-28.6	.6	45.7	82.2	-36.5	0-360	101	H
3	* ** 16.15219	38.26	Pk	40.6	-24.9	1.2	55.16	82.2	-27.04	0-360	200	H
4	* ** 4.91063	40.75	Pk	34	-30.6	.6	44.75	82.2	-37.45	0-360	200	V
5	* ** 9.40594	37.84	Pk	36.4	-28.7	.6	46.14	82.2	-36.06	0-360	101	V
6	* ** 17.95313	34.38	Pk	41.4	-21.7	1.4	55.48	82.2	-26.72	0-360	200	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

12. SETUP PHOTOS

Please see R1477408-EP4 for Setup Photos and Setup Diagrams.

END OF REPORT