

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F, Block A, Building 6, Baoneng Science and Technology Park, Qingxiang Road No.1, Longhua New District, Shenzhen, China

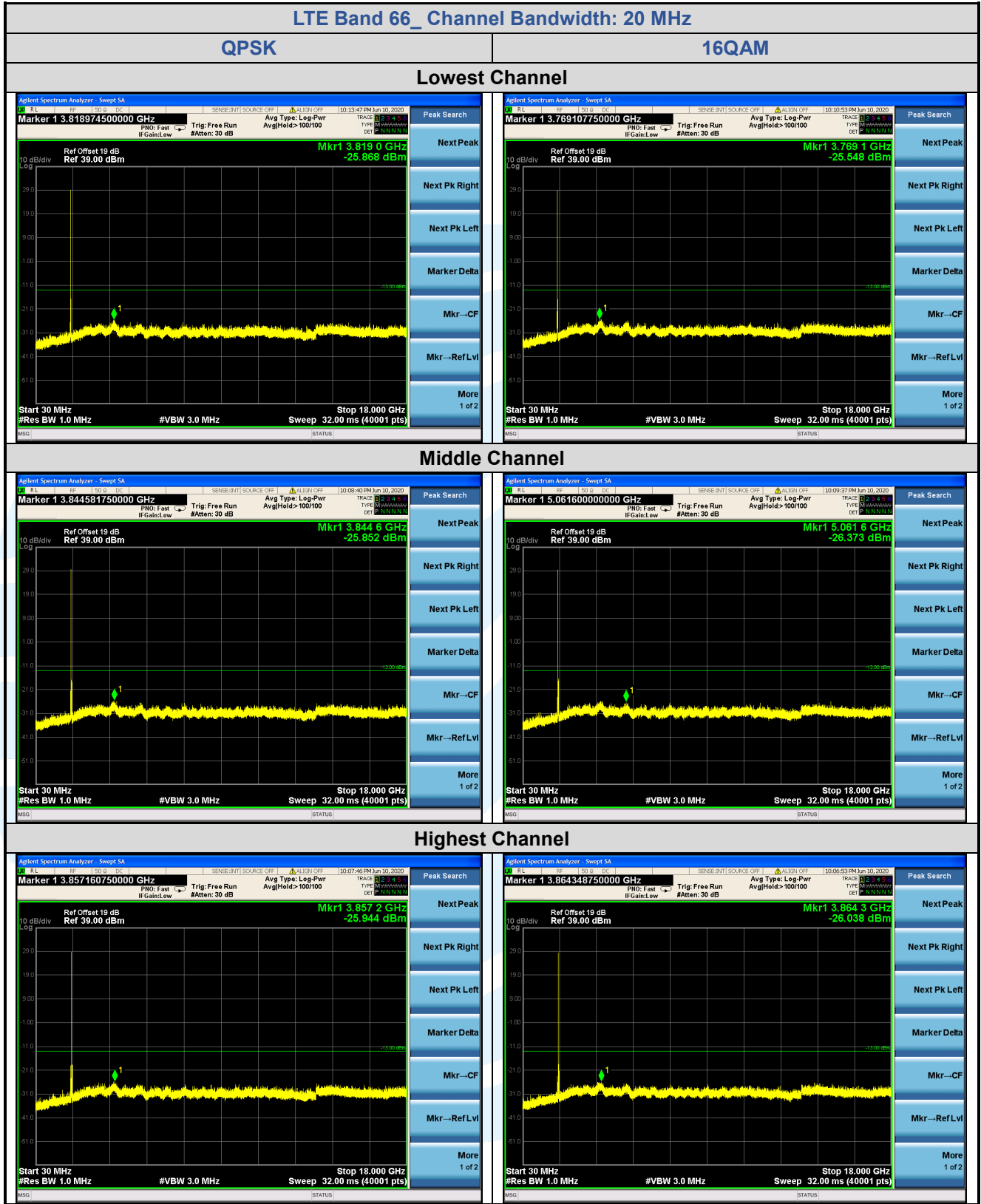
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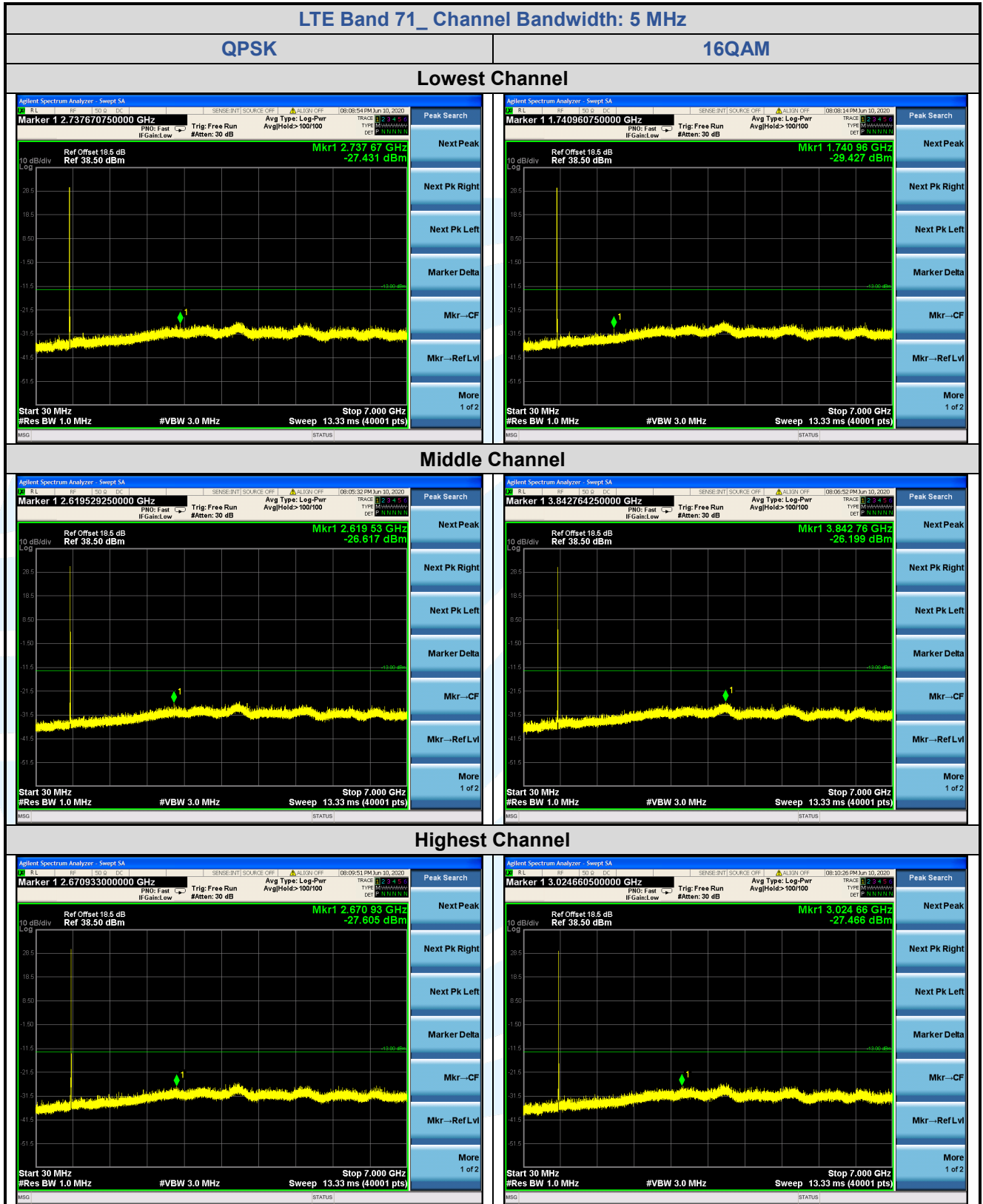
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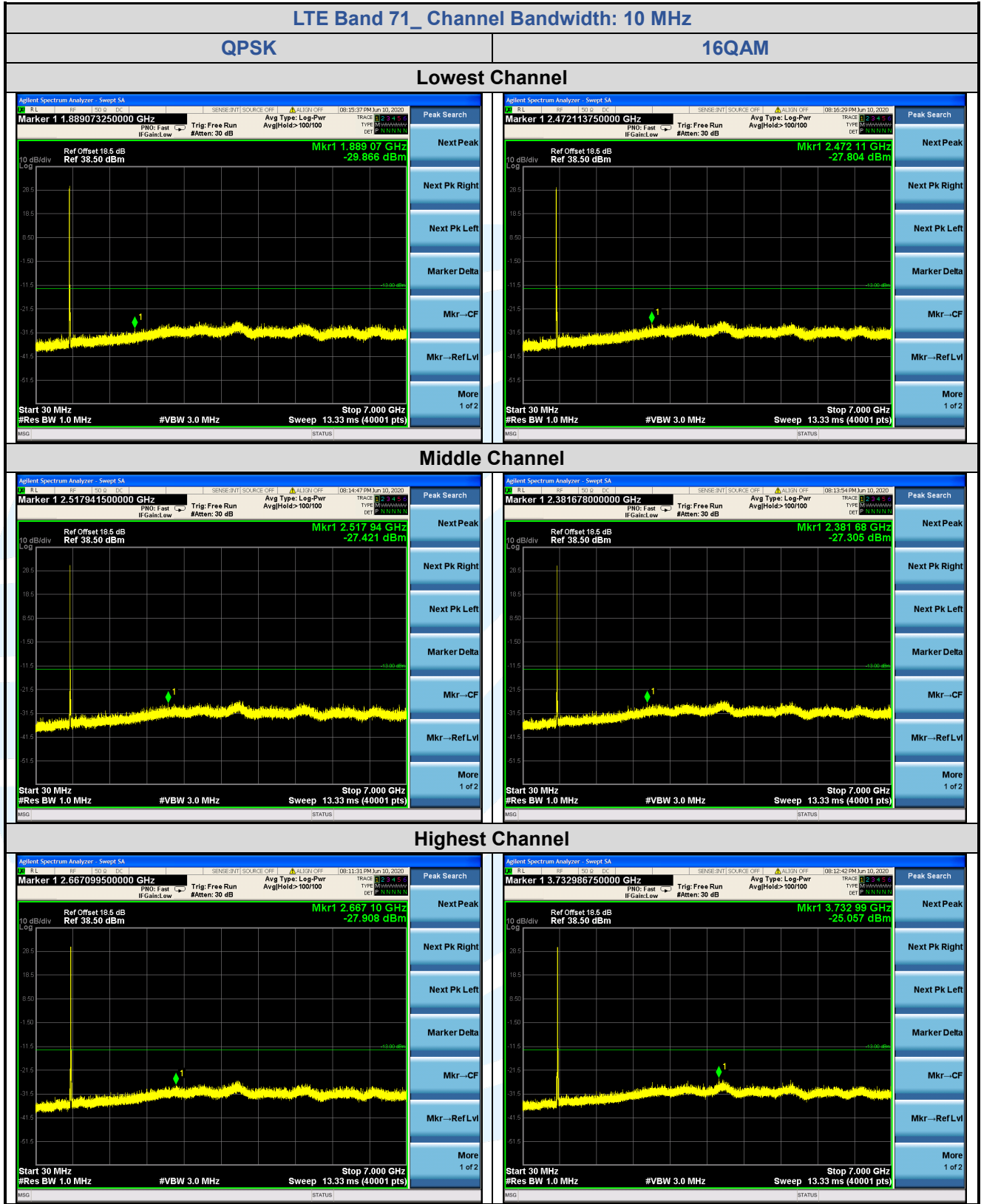
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5.7.13 LTE Band 71





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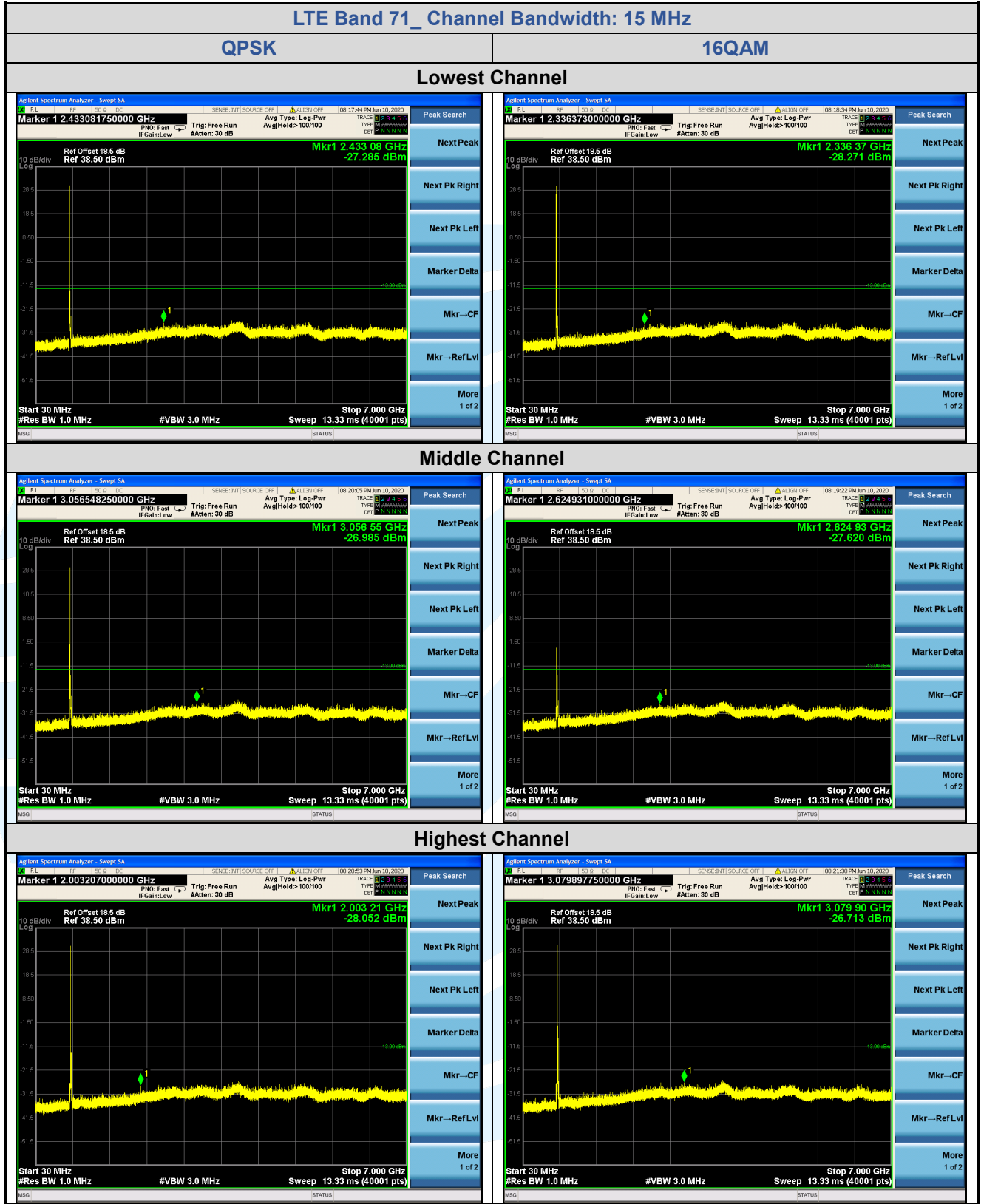
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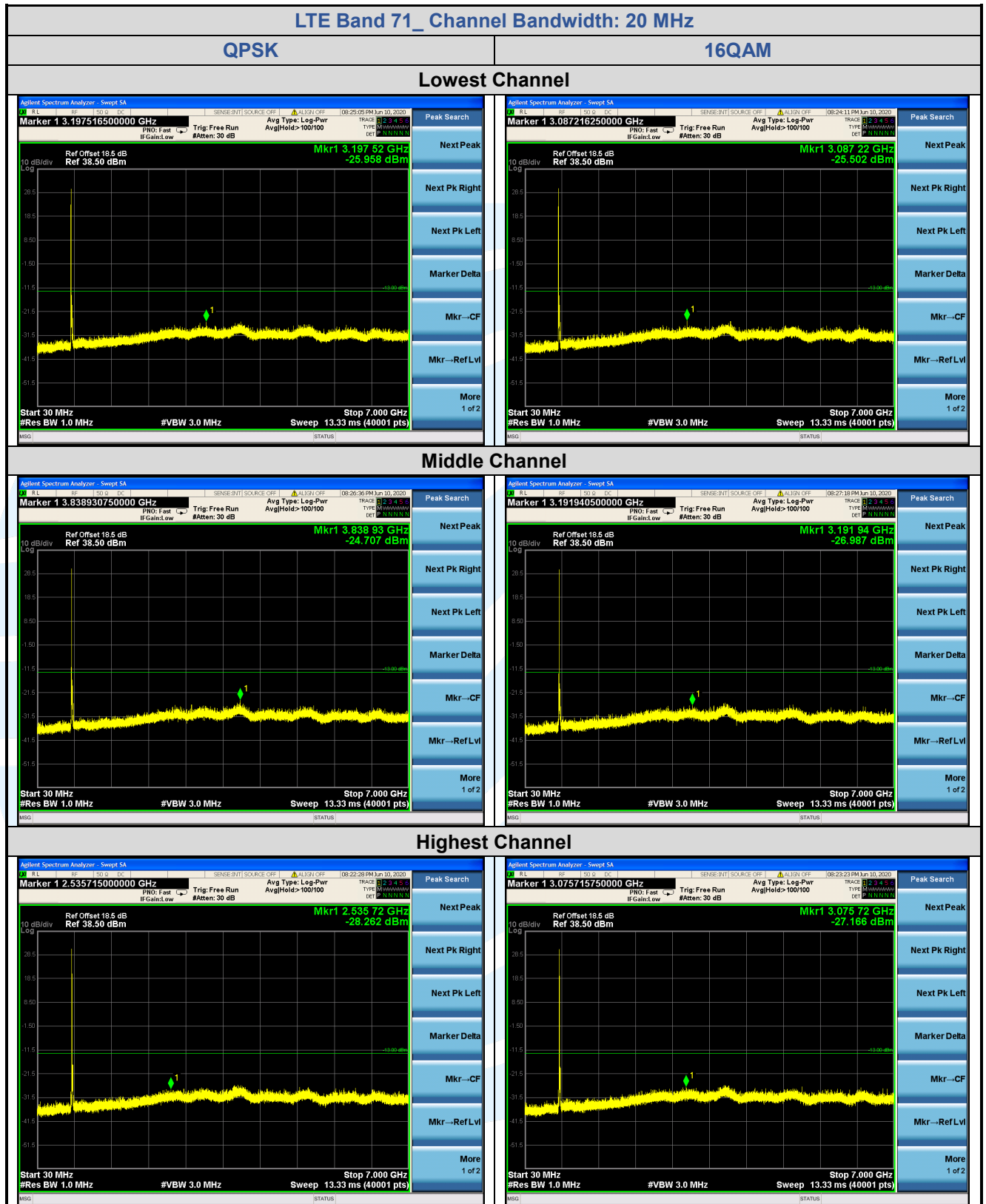
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5.8 FIELD STRENGTH OF SPURIOUS RADIATION

Test Requirement: LTE Band 2 & LTE Band 25: FCC 47 CFR Part 24.238(a)
 LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.53(h)
 LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.917(a)
 LTE Band 7 & Band 41: FCC 47 CFR Part 27.53(m)(4)
 LTE Band 12 & Band 17& Band 71: FCC 47 CFR Part 27.53(g)
 LTE Band 30: FCC 47 CFR Part 27.53(a)(4)
 LTE Band 26: FCC 47 CFR Part 90.691

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
0.009 MHz-30 MHz	Peak	10 kHz	30 KHz	Peak
30 MHz-1 GHz	Quasi-peak	100 kHz	300 KHz	Peak
Above 1 GHz	Peak	1 MHz	3 MHz	Peak

Limits:

FCC 47 CFR Part 24.238(a), 27.53(h)(1), 22.917(a), 27.53(g), 90.691:

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. The emission limit equal to -13 dBm.

FCC 47 CFR Part 27.53(m)(4):

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 $55 + 10 \log(P)$ dB. The emission limit equal to -25 dBm.

FCC 47 CFR Part 27.53(a)(4): For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

(i) By a factor of not less than: $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log(P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log(P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log(P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log(P)$ dB below 2288 MHz;

(iii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log(P)$ dB above 2365 MHz.

FCC 47 CFR Part 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. (-70 dBW/MHz = -40dBm/MHz).

Test Setup: Refer to section 4.2.1 for details.

Test Procedures: KDB 971168 D01v03r01 Section 7

Equipment Used: Refer to section 3 for details.

Test Result: Pass

The measurement data as follows:

5.8.1 LTE Band 2

LTE Band 2_20 MHz_QPSK_Below 1G							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	32.184	-84.60	31.38	-53.22	-13.00	-40.22	Horizontal
2	468.165	-88.80	35.44	-53.36	-13.00	-40.36	Horizontal
3	992.997	-86.79	44.13	-42.66	-13.00	-29.66	Horizontal
4	31.292	-90.28	31.99	-58.29	-13.00	-45.29	Vertical
5	261.273	-88.65	29.73	-58.92	-13.00	-45.92	Vertical
6	972.283	-87.16	42.40	-44.76	-13.00	-31.76	Vertical
Middle Channel							
1	32.640	-83.81	31.14	-52.67	-13.00	-39.67	Horizontal
2	409.651	-88.83	34.57	-54.26	-13.00	-41.26	Horizontal
3	938.714	-86.38	42.67	-43.71	-13.00	-30.71	Horizontal
4	32.640	-89.97	31.10	-58.87	-13.00	-45.87	Vertical
5	516.565	-88.97	36.79	-52.18	-13.00	-39.18	Vertical
6	938.714	-86.48	41.58	-44.90	-13.00	-31.90	Vertical
Highest Channel							
1	34.285	-88.46	30.26	-58.20	-13.00	-45.20	Horizontal
2	228.617	-89.01	28.30	-60.71	-13.00	-47.71	Horizontal
3	979.139	-87.68	43.58	-44.10	-13.00	-31.10	Horizontal
4	31.073	-92.28	32.13	-60.15	-13.00	-47.15	Vertical
5	266.839	-89.84	29.85	-59.99	-13.00	-46.99	Vertical
6	979.139	-86.90	42.70	-44.20	-13.00	-31.20	Vertical

LTE Band 2_ 20 MHz_ QPSK_ Above 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	5580.000	-42.03	17.03	-25.00	-13.00	-12.00	Horizontal
2	7440.000	-48.69	18.64	-30.05	-13.00	-17.05	Horizontal
3	5580.000	-33.73	16.83	-16.90	-13.00	-3.90	Vertical
4	7440.000	-44.42	18.34	-26.08	-13.00	-13.08	Vertical
Middle Channel							
1	3760.000	-44.46	15.54	-28.92	-13.00	-15.92	Horizontal
2	5640.000	-38.70	17.18	-21.52	-13.00	-8.52	Horizontal
3	3760.000	-42.74	15.29	-27.45	-13.00	-14.45	Vertical
4	5640.000	-36.16	16.98	-19.18	-13.00	-6.18	Vertical
Highest Channel							
1	3800.000	-45.60	15.67	-29.93	-13.00	-16.93	Horizontal
2	5700.000	-41.97	17.40	-24.57	-13.00	-11.57	Horizontal
3	3800.000	-42.27	15.43	-26.84	-13.00	-13.84	Vertical
4	5700.000	-38.02	17.20	-20.82	-13.00	-7.82	Vertical

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5.8.2 LTE Band 4

LTE Band 4_ 20 MHz_ QPSK _ Below 1G							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	30.425	-90.84	32.31	-58.53	-13.00	-45.53	Horizontal
2	166.639	-86.81	26.37	-60.44	-13.00	-47.44	Horizontal
3	979.139	-85.50	43.58	-41.92	-13.00	-28.92	Horizontal
4	31.959	-91.58	31.55	-60.03	-13.00	-47.03	Vertical
5	266.839	-90.44	29.85	-60.59	-13.00	-47.59	Vertical
6	979.139	-87.31	42.70	-44.61	-13.00	-31.61	Vertical
Middle Channel							
1	30.855	-92.83	32.09	-60.74	-13.00	-47.74	Horizontal
2	245.261	-89.93	29.21	-60.72	-13.00	-47.72	Horizontal
3	986.044	-87.89	43.86	-44.03	-13.00	-31.03	Horizontal
4	30.000	-91.94	32.83	-59.11	-13.00	-46.11	Vertical
5	235.135	-89.74	28.66	-61.08	-13.00	-48.08	Vertical
6	1000.000	-88.20	43.61	-44.59	-13.00	-31.59	Vertical
Highest Channel							
1	33.101	-91.75	30.90	-60.85	-13.00	-47.85	Horizontal
2	336.482	-89.81	32.04	-57.77	-13.00	-44.77	Horizontal
3	965.474	-88.27	43.26	-45.01	-13.00	-32.01	Horizontal
4	31.073	-92.93	32.13	-60.80	-13.00	-47.80	Vertical
5	290.317	-90.37	30.39	-59.98	-13.00	-46.98	Vertical
6	992.997	-88.83	43.30	-45.53	-13.00	-32.53	Vertical

LTE Band 4_ 20 MHz_ QPSK _ Above 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	5160.000	-35.48	16.46	-19.02	-13.00	-6.02	Horizontal
2	6880.000	-41.86	18.48	-23.38	-13.00	-10.38	Horizontal
3	5160.000	-41.90	16.13	-25.77	-13.00	-12.77	Vertical
4	6880.000	-44.84	18.23	-26.61	-13.00	-13.61	Vertical
Middle Channel							
1	5197.500	-38.69	16.61	-22.08	-13.00	-9.08	Horizontal
2	6930.000	-48.12	18.40	-29.72	-13.00	-16.72	Horizontal
3	5197.500	-36.95	16.29	-20.66	-13.00	-7.66	Vertical
4	6930.000	-41.46	18.13	-23.33	-13.00	-10.33	Vertical
Highest Channel							
1	5235.000	-42.57	16.67	-25.90	-13.00	-12.90	Horizontal
2	6980.000	-42.36	18.31	-24.05	-13.00	-11.05	Horizontal
3	5235.000	-43.59	16.37	-27.22	-13.00	-14.22	Vertical
4	6980.000	-44.24	18.02	-26.22	-13.00	-13.22	Vertical

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5.8.3 LTE Band 5

LTE Band 5_ 10 MHz_ QPSK_ Below 1G							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	34.045	-90.79	30.39	-60.40	-13.00	-47.40	Horizontal
2	412.539	-87.42	34.56	-52.86	-13.00	-39.86	Horizontal
3	881.184	-79.34	41.31	-38.03	-13.00	-25.03	Horizontal
4	30.212	-91.42	32.70	-58.72	-13.00	-45.72	Vertical
5	516.565	-87.81	36.79	-51.02	-13.00	-38.02	Vertical
6	881.184	-83.43	41.09	-42.34	-13.00	-29.34	Vertical
Middle Channel							
1	30.212	-91.40	32.43	-58.97	-13.00	-45.97	Horizontal
2	105.537	-87.25	25.06	-62.19	-13.00	-49.19	Horizontal
3	887.398	-81.45	41.49	-39.96	-13.00	-26.96	Horizontal
4	34.527	-88.79	29.84	-58.95	-13.00	-45.95	Vertical
5	481.511	-87.03	35.96	-51.07	-13.00	-38.07	Vertical
6	887.398	-83.13	41.24	-41.89	-13.00	-28.89	Vertical
Highest Channel							
1	30.855	-92.06	32.09	-59.97	-13.00	-46.97	Horizontal
2	442.572	-88.85	34.73	-54.12	-13.00	-41.12	Horizontal
3	893.656	-80.87	41.66	-39.21	-13.00	-26.21	Horizontal
4	35.263	-87.39	29.36	-58.03	-13.00	-45.03	Vertical
5	468.165	-88.07	35.46	-52.61	-13.00	-39.61	Vertical
6	893.656	-84.51	41.39	-43.12	-13.00	-30.12	Vertical

LTE Band 5_ 20 MHz_ QPSK _ Above 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	1658.000	-53.63	3.28	-50.35	-13.00	-37.35	Horizontal
2	2487.000	-39.10	11.46	-27.64	-13.00	-14.64	Horizontal
3	1658.000	-46.99	3.35	-43.64	-13.00	-30.64	Vertical
4	2487.000	-47.85	11.26	-36.59	-13.00	-23.59	Vertical
Middle Channel							
1	1673.000	-53.03	3.44	-49.59	-13.00	-36.59	Horizontal
2	2509.500	-44.24	11.46	-32.78	-13.00	-19.78	Horizontal
3	1673.000	-43.71	3.50	-40.21	-13.00	-27.21	Vertical
4	2509.500	-41.96	11.26	-30.70	-13.00	-17.70	Vertical
Highest Channel							
1	1688.000	-56.45	3.60	-52.85	-13.00	-39.85	Horizontal
2	2532.000	-47.32	11.47	-35.85	-13.00	-22.85	Horizontal
3	1688.000	-55.90	3.65	-52.25	-13.00	-39.25	Vertical
4	2532.000	-46.53	11.26	-35.27	-13.00	-22.27	Vertical

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5.8.4 LTE Band 7

LTE Band 7_ 20 MHz_ QPSK_ Below 1G							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	30.000	-91.95	32.53	-59.42	-25.00	-34.42	Horizontal
2	235.135	-89.48	28.66	-60.82	-25.00	-35.82	Horizontal
3	992.997	-87.80	44.13	-43.67	-25.00	-18.67	Horizontal
4	30.855	-92.41	32.28	-60.13	-25.00	-35.13	Vertical
5	159.759	-89.10	26.18	-62.92	-25.00	-37.92	Vertical
6	1000.000	-88.42	43.61	-44.81	-25.00	-19.81	Vertical
Middle Channel							
1	30.212	-92.39	32.43	-59.96	-25.00	-34.96	Horizontal
2	284.261	-89.15	30.26	-58.89	-25.00	-33.89	Horizontal
3	952.000	-85.81	43.04	-42.77	-25.00	-17.77	Horizontal
4	33.807	-89.35	30.32	-59.03	-25.00	-34.03	Vertical
5	107.031	-89.19	25.04	-64.15	-25.00	-39.15	Vertical
6	1000.000	-88.10	43.61	-44.49	-25.00	-19.49	Vertical
Highest Channel							
1	34.527	-89.30	30.13	-59.17	-25.00	-34.17	Horizontal
2	158.640	-89.72	26.76	-62.96	-25.00	-37.96	Horizontal
3	965.474	-87.52	43.26	-44.26	-25.00	-19.26	Horizontal
4	32.640	-92.18	31.10	-61.08	-25.00	-36.08	Vertical
5	307.105	-89.98	30.74	-59.24	-25.00	-34.24	Vertical
6	925.613	-87.28	41.68	-45.60	-25.00	-20.60	Vertical

LTE Band 7_ 20 MHz_ QPSK _ Above 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	7500.725	-52.31	18.68	-33.63	-25.00	-8.63	Horizontal
2	10040.000	-50.77	20.83	-29.94	-25.00	-4.94	Horizontal
3	7530.000	-44.48	18.44	-26.04	-25.00	-1.04	Vertical
4	10040.000	-46.73	20.72	-26.01	-25.00	-1.01	Vertical
Middle Channel							
1	5070.000	-47.62	16.12	-31.50	-25.00	-6.50	Horizontal
2	7605.000	-47.53	18.78	-28.75	-25.00	-3.75	Horizontal
3	5070.000	-42.88	15.75	-27.13	-25.00	-2.13	Vertical
4	7605.000	-46.78	18.56	-28.22	-25.00	-3.22	Vertical
Highest Channel							
1	5120.000	-42.31	16.31	-26.00	-25.00	-1.00	Horizontal
2	7680.000	-51.23	18.85	-32.38	-25.00	-7.38	Horizontal
3	5120.000	-46.40	15.96	-30.44	-25.00	-5.44	Vertical
4	7680.000	-49.02	18.70	-30.32	-25.00	-5.32	Vertical

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5.8.5 LTE Band 12

LTE Band 12_ 10 MHz_ QPSK_ Below 1G							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	30.425	-91.37	32.31	-59.06	-13.00	-46.06	Horizontal
2	248.732	-89.18	29.39	-59.79	-13.00	-46.79	Horizontal
3	739.214	-79.20	39.90	-39.30	-13.00	-26.30	Horizontal
4	30.855	-91.36	32.28	-59.08	-13.00	-46.08	Vertical
5	282.270	-88.71	30.21	-58.50	-13.00	-45.50	Vertical
6	965.474	-86.59	42.13	-44.46	-13.00	-31.46	Vertical
Middle Channel							
1	32.411	-86.63	31.26	-55.37	-13.00	-42.37	Horizontal
2	276.382	-89.13	30.07	-59.06	-13.00	-46.06	Horizontal
3	992.997	-87.26	44.13	-43.13	-13.00	-30.13	Horizontal
4	34.285	-89.23	30.00	-59.23	-13.00	-46.23	Vertical
5	298.593	-89.34	30.58	-58.76	-13.00	-45.76	Vertical
6	979.139	-86.99	42.70	-44.29	-13.00	-31.29	Vertical
Highest Channel							
1	32.184	-90.73	31.38	-59.35	-13.00	-46.35	Horizontal
2	255.823	-89.20	29.60	-59.60	-13.00	-46.60	Horizontal
3	965.474	-85.79	43.26	-42.53	-13.00	-29.53	Horizontal
4	32.184	-90.86	31.40	-59.46	-13.00	-46.46	Vertical
5	309.271	-89.07	30.78	-58.29	-13.00	-45.29	Vertical
6	945.334	-86.15	41.54	-44.61	-13.00	-31.61	Vertical

LTE Band 12_ 20 MHz_ QPSK _ Above 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	1408.000	-44.35	1.27	-43.08	-13.00	-30.08	Horizontal
2	2112.000	-41.46	7.77	-33.69	-13.00	-20.69	Horizontal
3	1408.000	-44.66	1.45	-43.21	-13.00	-30.21	Vertical
4	2112.000	-48.66	7.57	-41.09	-13.00	-28.09	Vertical
Middle Channel							
1	1415.000	-38.79	1.30	-37.49	-13.00	-24.49	Horizontal
2	2122.500	-38.09	7.83	-30.26	-13.00	-17.26	Horizontal
3	1415.000	-48.86	1.48	-47.38	-13.00	-34.38	Vertical
4	2122.500	-48.03	7.63	-40.40	-13.00	-27.40	Vertical
Highest Channel							
1	1422.000	-39.93	1.32	-38.61	-13.00	-25.61	Horizontal
2	2133.000	-39.07	7.90	-31.17	-13.00	-18.17	Horizontal
3	1422.000	-42.40	1.50	-40.90	-13.00	-27.90	Vertical
4	2133.000	-48.34	7.70	-40.64	-13.00	-27.64	Vertical

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5.8.6 LTE Band 17

LTE Band 17_ 10 MHz_ QPSK_ Below 1G							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	31.513	-91.51	31.74	-59.77	-13.00	-46.77	Horizontal
2	329.462	-89.77	31.69	-58.08	-13.00	-45.08	Horizontal
3	972.283	-86.52	43.37	-43.15	-13.00	-30.15	Horizontal
4	34.285	-88.68	30.00	-58.68	-13.00	-45.68	Vertical
5	502.247	-87.64	36.48	-51.16	-13.00	-38.16	Vertical
6	979.139	-86.74	42.70	-44.04	-13.00	-31.04	Vertical
Middle Channel							
1	31.735	-90.83	31.62	-59.21	-13.00	-46.21	Horizontal
2	139.791	-87.88	25.02	-62.86	-13.00	-49.86	Horizontal
3	972.283	-86.37	43.37	-43.00	-13.00	-30.00	Horizontal
4	33.101	-89.15	30.79	-58.36	-13.00	-45.36	Vertical
5	341.244	-89.12	32.14	-56.98	-13.00	-43.98	Vertical
6	1000.000	-86.96	43.61	-43.35	-13.00	-30.35	Vertical
Highest Channel							
1	30.425	-91.97	32.31	-59.66	-13.00	-46.66	Horizontal
2	280.294	-89.26	30.16	-59.10	-13.00	-46.10	Horizontal
3	739.214	-78.50	39.90	-38.60	-13.00	-25.60	Horizontal
4	30.212	-91.79	32.70	-59.09	-13.00	-46.09	Vertical
5	343.651	-88.96	32.30	-56.66	-13.00	-43.66	Vertical
6	972.283	-86.25	42.40	-43.85	-13.00	-30.85	Vertical

LTE Band 17_ 10 MHz_ QPSK _ Above 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	1418.000	-40.00	1.31	-38.69	-13.00	-25.69	Horizontal
2	2127.000	-35.89	7.85	-28.04	-13.00	-15.04	Horizontal
3	1418.000	-43.65	1.49	-42.16	-13.00	-29.16	Vertical
4	2127.000	-44.23	7.65	-36.58	-13.00	-23.58	Vertical
Middle Channel							
1	1420.000	-44.98	1.31	-43.67	-13.00	-30.67	Horizontal
2	2130.000	-41.33	7.87	-33.46	-13.00	-20.46	Horizontal
3	1420.000	-45.98	1.49	-44.49	-13.00	-31.49	Vertical
4	2130.000	-48.33	7.67	-40.66	-13.00	-27.66	Vertical
Highest Channel							
1	1422.000	-42.52	1.32	-41.20	-13.00	-28.20	Horizontal
2	2133.000	-35.32	7.90	-27.42	-13.00	-14.42	Horizontal
3	3810.000	-41.46	15.46	-26.00	-13.00	-13.00	Vertical
4	5715.000	-38.16	17.25	-20.91	-13.00	-7.91	Vertical

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5.8.7 LTE Band 25

LTE Band 25_ 20 MHz_ QPSK_ Below 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	31.292	-92.73	31.86	-60.87	-13.00	-47.87	Horizontal
2	245.261	-89.80	29.21	-60.59	-13.00	-47.59	Horizontal
3	958.714	-87.57	43.16	-44.41	-13.00	-31.41	Horizontal
4	34.045	-91.02	30.16	-60.86	-13.00	-47.86	Vertical
5	343.651	-88.98	32.30	-56.68	-13.00	-43.68	Vertical
6	899.958	-87.31	41.55	-45.76	-13.00	-32.76	Vertical
Middle Channel							
1	30.639	-91.27	32.20	-59.07	-13.00	-46.07	Horizontal
2	288.284	-89.76	30.35	-59.41	-13.00	-46.41	Horizontal
3	986.044	-86.70	43.86	-42.84	-13.00	-29.84	Horizontal
4	30.425	-92.81	32.56	-60.25	-13.00	-47.25	Vertical
5	210.129	-89.10	27.46	-61.64	-13.00	-48.64	Vertical
6	986.044	-87.64	43.00	-44.64	-13.00	-31.64	Vertical
Highest Channel							
1	30.855	-90.70	32.09	-58.61	-13.00	-45.61	Horizontal
2	263.115	-88.94	29.76	-59.18	-13.00	-46.18	Horizontal
3	1000.000	-86.69	44.41	-42.28	-13.00	-29.28	Horizontal
4	30.855	-91.74	32.28	-59.46	-13.00	-46.46	Vertical
5	427.292	-88.51	35.04	-53.47	-13.00	-40.47	Vertical
6	979.139	-86.73	42.70	-44.03	-13.00	-31.03	Vertical

LTE Band 25_ 20 MHz_ QPSK _ Above 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	5580.000	-40.98	17.03	-23.95	-13.00	-10.95	Horizontal
2	7440.000	-48.91	18.64	-30.27	-13.00	-17.27	Horizontal
3	5580.000	-36.67	16.83	-19.84	-13.00	-6.84	Vertical
4	7440.000	-46.33	18.34	-27.99	-13.00	-14.99	Vertical
Middle Channel							
1	3760.000	-45.13	15.54	-29.59	-13.00	-16.59	Horizontal
2	5640.000	-39.60	17.18	-22.42	-13.00	-9.42	Horizontal
3	3760.000	-43.85	15.29	-28.56	-13.00	-15.56	Vertical
4	5640.000	-37.34	16.98	-20.36	-13.00	-7.36	Vertical
Highest Channel							
1	3810.000	-45.11	15.70	-29.41	-13.00	-16.41	Horizontal
2	5715.000	-39.97	17.45	-22.52	-13.00	-9.52	Horizontal
3	3810.000	-41.46	15.46	-26.00	-13.00	-13.00	Vertical
4	5715.000	-38.16	17.25	-20.91	-13.00	-7.91	Vertical

5.8.8 LTE Band 26

LTE Band 26_ 15 MHz_ QPSK Below 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	32.184	-92.74	37.52	-55.22	-13.00	-42.22	Horizontal
2	245.261	-89.18	35.89	-53.29	-13.00	-40.29	Horizontal
3	674.677	-88.94	47.00	-41.94	-13.00	-28.94	Horizontal
4	110.858	-88.50	31.61	-56.89	-13.00	-43.89	Vertical
5	350.972	-88.51	39.41	-49.10	-13.00	-36.10	Vertical
6	713.692	-87.53	46.32	-41.21	-13.00	-28.21	Vertical
Middle Channel							
1	136.875	-88.61	31.60	-57.01	-13.00	-44.01	Horizontal
2	448.836	-88.15	41.61	-46.54	-13.00	-33.54	Horizontal
3	684.226	-87.68	47.22	-40.46	-13.00	-27.46	Horizontal
4	30.425	-91.45	38.68	-52.77	-13.00	-39.77	Vertical
5	243.543	-86.85	35.79	-51.06	-13.00	-38.06	Vertical
6	698.804	-88.37	46.41	-41.96	-13.00	-28.96	Vertical
Highest Channel							
1	134.965	-87.39	31.55	-55.84	-13.00	-42.84	Horizontal
2	698.804	-87.83	47.55	-40.28	-13.00	-27.28	Horizontal
3	986.044	-88.68	51.94	-36.74	-13.00	-23.74	Horizontal
4	162.020	-87.48	32.84	-54.64	-13.00	-41.64	Vertical
5	512.948	-87.37	43.60	-43.77	-13.00	-30.77	Vertical
6	893.656	-84.43	48.51	-35.92	-13.00	-22.92	Vertical

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LTE Band 26_ 15 MHz_ QPSK_ Above 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	1663.000	-46.06	3.33	-42.73	-13.00	-29.73	Horizontal
2	2494.500	-40.78	11.46	-29.32	-13.00	-16.32	Horizontal
3	1645.658	-50.97	3.22	-47.75	-13.00	-34.75	Vertical
4	2468.481	-49.09	11.23	-37.86	-13.00	-24.86	Vertical
Middle Channel							
1	1673.000	-59.64	3.44	-56.20	-13.00	-43.20	Horizontal
2	2509.500	-47.26	11.46	-35.80	-13.00	-22.80	Horizontal
3	1673.000	-50.13	3.50	-46.63	-13.00	-33.63	Vertical
4	2509.500	-45.97	11.26	-34.71	-13.00	-21.71	Vertical
Highest Channel							
1	1683.000	-59.20	3.55	-55.65	-13.00	-42.65	Horizontal
2	2524.500	-52.02	11.46	-40.56	-13.00	-27.56	Horizontal
3	1683.000	-49.95	3.61	-46.34	-13.00	-33.34	Vertical
4	2524.500	-47.75	11.25	-36.50	-13.00	-23.50	Vertical

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5.8.9 LTE Band 26 (Part 90S)

LTE Band 26_ 10 MHz_QPSK_Below 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	31.735	-91.24	37.75	-53.49	-13.00	-40.49	Horizontal
2	264.971	-88.40	36.47	-51.93	-13.00	-38.93	Horizontal
3	642.292	-87.62	46.05	-41.57	-13.00	-28.57	Horizontal
4	68.264	-88.29	29.70	-58.59	-13.00	-45.59	Vertical
5	418.378	-87.82	41.50	-46.32	-13.00	-33.32	Vertical
6	554.171	-87.85	44.51	-43.34	-13.00	-30.34	Vertical
Middle Channel							
1	36.524	-90.68	35.26	-55.42	-13.00	-42.42	Horizontal
2	309.271	-87.16	37.58	-49.58	-13.00	-36.58	Horizontal
3	598.707	-86.76	45.48	-41.28	-13.00	-28.28	Horizontal
4	32.411	-90.82	37.39	-53.43	-13.00	-40.43	Vertical
5	516.565	-87.46	43.69	-43.77	-13.00	-30.77	Vertical
6	958.714	-87.82	50.32	-37.50	-13.00	-24.50	Vertical
Highest Channel							
1	35.263	-91.10	35.92	-55.18	-13.00	-42.18	Horizontal
2	165.472	-88.17	33.14	-55.03	-13.00	-42.03	Horizontal
3	674.677	-88.20	47.00	-41.20	-13.00	-28.20	Horizontal
4	33.101	-91.31	36.94	-54.37	-13.00	-41.37	Vertical
5	128.486	-88.44	31.43	-57.01	-13.00	-44.01	Vertical
6	660.602	-86.66	44.73	-41.93	-13.00	-28.93	Vertical

LTE Band 26_ 10 MHz_QPSK_Above 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	1629.400	-47.19	2.97	-44.22	-13.00	-31.22	Horizontal
2	2444.100	-43.70	11.40	-32.30	-13.00	-19.30	Horizontal
3	1629.400	-55.98	3.06	-52.92	-13.00	-39.92	Vertical
4	2444.100	-44.05	11.20	-32.85	-13.00	-19.85	Vertical
Middle Channel							
1	1638.000	-48.80	3.05	-45.75	-13.00	-32.75	Horizontal
2	2457.000	-47.01	11.42	-35.59	-13.00	-22.59	Horizontal
3	1638.000	-45.76	3.14	-42.62	-13.00	-29.62	Vertical
4	2457.000	-40.70	11.22	-29.48	-13.00	-16.48	Vertical
Highest Channel							
1	1643.000	-49.39	3.11	-46.28	-13.00	-33.28	Horizontal
2	2464.500	-43.20	11.43	-31.77	-13.00	-18.77	Horizontal
3	1643.000	-45.81	3.19	-42.62	-13.00	-29.62	Vertical
4	2464.500	-44.07	11.23	-32.84	-13.00	-19.84	Vertical

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5.8.10 LTE Band 30

LTE Band 30_ 10 MHz_ QPSK_ Below 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Middle Channel							
1	47.703	-71.88	1.57	-70.31	-40.00	-30.31	Horizontal
2	458.399	-79.48	12.71	-66.77	-40.00	-26.77	Horizontal
3	965.474	-81.51	22.62	-58.89	-40.00	-18.89	Horizontal
4	43.845	-76.79	2.27	-74.52	-40.00	-34.52	Vertical
5	474.791	-79.53	13.27	-66.26	-40.00	-26.26	Vertical
6	912.695	-79.80	19.98	-59.82	-40.00	-19.82	Vertical

LTE Band 30_ 10 MHz_ QPSK_ Above 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Middle Channel							
1	4620.000	-66.89	15.75	-51.14	-40.00	-11.14	Horizontal
2	6930.000	-62.58	18.40	-44.18	-40.00	-4.18	Horizontal
3	4620.000	-68.02	15.43	-52.59	-40.00	-12.59	Vertical
4	6930.000	-65.45	18.13	-47.32	-40.00	-7.32	Vertical

5.8.11 LTE Band 41

LTE Band 41_ 20 MHz_ QPSK_ Below 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	53.379	-71.14	0.45	-70.69	-25.00	-45.69	Horizontal
2	250.486	-78.41	7.89	-70.52	-25.00	-45.52	Horizontal
3	986.044	-80.94	23.01	-57.93	-25.00	-32.93	Horizontal
4	33.101	-78.30	7.91	-70.39	-25.00	-45.39	Vertical
5	360.977	-78.56	10.84	-67.72	-25.00	-42.72	Vertical
6	992.997	-81.96	22.35	-59.61	-25.00	-34.61	Vertical
Middle Channel							
1	47.703	-71.04	1.57	-69.47	-25.00	-44.47	Horizontal
2	468.165	-79.52	12.98	-66.54	-25.00	-41.54	Horizontal
3	938.714	-81.20	21.86	-59.34	-25.00	-34.34	Horizontal
4	45.095	-76.01	1.87	-74.14	-25.00	-49.14	Vertical
5	418.378	-78.84	12.57	-66.27	-25.00	-41.27	Vertical
6	906.304	-79.52	19.77	-59.75	-25.00	-34.75	Vertical
Highest Channel							
1	47.703	-71.38	1.57	-69.81	-25.00	-44.81	Horizontal
2	615.774	-78.24	16.38	-61.86	-25.00	-36.86	Horizontal
3	952.000	-81.03	22.57	-58.46	-25.00	-33.46	Horizontal
4	35.511	-76.79	6.36	-70.43	-25.00	-45.43	Vertical
5	582.112	-77.34	15.37	-61.97	-25.00	-36.97	Vertical
6	979.139	-80.94	21.92	-59.02	-25.00	-34.02	Vertical

LTE Band 41_ 20 MHz_ QPSK_ Above 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	5012.000	-44.55	15.90	-28.65	-25.00	-3.65	Horizontal
2	10024.000	-47.69	20.81	-26.88	-25.00	-1.88	Horizontal
3	5012.000	-42.33	15.51	-26.82	-25.00	-1.82	Vertical
4	10024.000	-47.15	20.70	-26.45	-25.00	-1.45	Vertical
Middle Channel							
1	5186.000	-42.22	16.55	-25.67	-25.00	-0.67	Horizontal
2	7779.000	-53.28	18.93	-34.35	-25.00	-9.35	Horizontal
3	5186.000	-53.88	16.23	-37.65	-25.00	-12.65	Vertical
4	7779.000	-52.34	18.86	-33.48	-25.00	-8.48	Vertical
Highest Channel							
1	5360.000	-42.45	16.90	-25.55	-25.00	-0.55	Horizontal
2	8040.000	-49.97	19.02	-30.95	-25.00	-5.95	Horizontal
3	5360.000	-44.51	16.65	-27.86	-25.00	-2.86	Vertical
4	8040.000	-47.00	19.11	-27.89	-25.00	-2.89	Vertical

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5.8.12 LTE Band 66

LTE Band 66_ 20 MHz_ QPSK_ Below 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	47.703	-71.17	1.57	-69.60	-13.00	-56.60	Horizontal
2	101.893	-74.10	2.97	-71.13	-13.00	-58.13	Horizontal
3	965.474	-79.89	22.62	-57.27	-13.00	-44.27	Horizontal
4	53.756	-74.02	0.36	-73.66	-13.00	-60.66	Vertical
5	350.972	-78.81	10.95	-67.86	-13.00	-54.86	Vertical
6	925.613	-79.51	20.46	-59.05	-13.00	-46.05	Vertical
Middle Channel							
1	47.703	-70.06	1.57	-68.49	-13.00	-55.49	Horizontal
2	255.823	-77.01	8.03	-68.98	-13.00	-55.98	Horizontal
3	821.387	-78.47	18.64	-59.83	-13.00	-46.83	Horizontal
4	43.845	-71.97	2.27	-69.70	-13.00	-56.70	Vertical
5	105.537	-74.87	2.92	-71.95	-13.00	-58.95	Vertical
6	718.725	-76.77	16.83	-59.94	-13.00	-46.94	Vertical
Highest Channel							
1	43.845	-71.73	3.04	-68.69	-13.00	-55.69	Horizontal
2	439.473	-76.19	12.38	-63.81	-13.00	-50.81	Horizontal
3	972.283	-80.08	22.66	-57.42	-13.00	-44.42	Horizontal
4	43.845	-74.57	2.27	-72.30	-13.00	-59.30	Vertical
5	468.165	-77.94	13.00	-64.94	-13.00	-51.94	Vertical
6	809.924	-77.33	18.17	-59.16	-13.00	-46.16	Vertical

LTE Band 66_ 20 MHz_ QPSK_ Above 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	5160.000	-39.84	16.46	-23.38	-13.00	-10.38	Horizontal
2	6880.000	-43.25	18.48	-24.77	-13.00	-11.77	Horizontal
3	5160.000	-34.25	16.13	-18.12	-13.00	-5.12	Vertical
4	6880.000	-37.27	18.23	-19.04	-13.00	-6.04	Vertical
Middle Channel							
1	5235.000	-51.02	16.67	-34.35	-13.00	-21.35	Horizontal
2	6980.000	-45.60	18.31	-27.29	-13.00	-14.29	Horizontal
3	5235.000	-47.71	16.37	-31.34	-13.00	-18.34	Vertical
4	6980.000	-42.62	18.02	-24.60	-13.00	-11.60	Vertical
Highest Channel							
1	5310.000	-43.14	16.81	-26.33	-13.00	-13.33	Horizontal
2	7080.000	-41.95	18.34	-23.61	-13.00	-10.61	Horizontal
3	5310.000	-37.85	16.54	-21.31	-13.00	-8.31	Vertical
4	7080.000	-37.86	18.04	-19.82	-13.00	-6.82	Vertical

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5.8.13 LTE Band 71

LTE Band 71_ 20 MHz_ QPSK_ Below 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	33.570	-91.73	36.80	-54.93	-13.00	-41.93	Horizontal
2	406.782	-89.53	41.33	-48.20	-13.00	-35.20	Horizontal
3	919.132	-87.12	49.86	-37.26	-13.00	-24.26	Horizontal
4	116.448	-89.08	31.47	-57.61	-13.00	-44.61	Vertical
5	562.014	-88.55	44.71	-43.84	-13.00	-30.84	Vertical
6	945.334	-86.29	49.98	-36.31	-13.00	-23.31	Vertical
Middle Channel							
1	30.000	-92.71	38.63	-54.08	-13.00	-41.08	Horizontal
2	198.642	-89.24	33.68	-55.56	-13.00	-42.56	Horizontal
3	986.044	-87.59	51.94	-35.65	-13.00	-22.65	Horizontal
4	91.700	-87.67	30.85	-56.82	-13.00	-43.82	Vertical
5	401.105	-90.62	40.62	-50.00	-13.00	-37.00	Vertical
6	992.997	-87.92	51.27	-36.65	-13.00	-23.65	Vertical
Highest Channel							
1	34.527	-91.26	36.30	-54.96	-13.00	-41.96	Horizontal
2	250.486	-87.70	36.16	-51.54	-13.00	-38.54	Horizontal
3	979.139	-87.34	51.75	-35.59	-13.00	-22.59	Horizontal
4	38.908	-91.43	33.17	-58.26	-13.00	-45.26	Vertical
5	142.769	-87.12	31.93	-55.19	-13.00	-42.19	Vertical
6	952.000	-86.78	50.14	-36.64	-13.00	-23.64	Vertical

LTE Band 71_ 20 MHz_ QPSK_ Above 1G							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	1346.000	-48.59	1.12	-47.47	-13.00	-34.47	Horizontal
2	2019.000	-49.56	7.22	-42.34	-13.00	-29.34	Horizontal
3	1346.000	-44.42	1.29	-43.13	-13.00	-30.13	Vertical
4	2019.000	-44.17	7.02	-37.15	-13.00	-24.15	Vertical
Middle Channel							
1	1361.000	-40.48	1.15	-39.33	-13.00	-26.33	Horizontal
2	2041.500	-45.60	7.35	-38.25	-13.00	-25.25	Horizontal
3	1361.000	-43.42	1.33	-42.09	-13.00	-29.09	Vertical
4	2041.500	-47.06	7.15	-39.91	-13.00	-26.91	Vertical
Highest Channel							
1	1381.000	-36.37	1.21	-35.16	-13.00	-22.16	Horizontal
2	2071.500	-38.91	7.53	-31.38	-13.00	-18.38	Horizontal
3	1381.000	-40.13	1.39	-38.74	-13.00	-25.74	Vertical
4	2071.500	-53.64	7.33	-46.31	-13.00	-33.31	Vertical

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Remark:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result - Limit



5.9 FREQUENCY STABILITY

Test Requirement: FCC 47 CFR Part 2.1055 &
 FCC 47 CFR Part 22.355 &
 FCC 47 CFR Part 24.235 &
 FCC 47 CFR Part 27.54,

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Limits:

FCC 47 CFR Part 22.355, FCC 47 CFR Par 90.213

The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations.

FCC 47 CFR Part 24.235, FCC 47 CFR Part 27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Setup: Refer to section 4.2.2 for details.

Test Procedures:

- 1) Use CMW 500 or CMU 200 with Frequency Error measurement capability.
 - a) Temp. = -30° to $+50^{\circ}\text{C}$
 - b) Voltage = low voltage, 3.5 Vdc, Normal, 3.8 Vdc and High voltage, 4.2 Vdc.
- 2) Frequency Stability vs Temperature:

The EUT is place inside a temperature chamber. The temperature is set to 20°C and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until $+50^{\circ}\text{C}$ is reached.

- 3) Frequency Stability vs Voltage:

The peak frequency error is recorded (worst-case).

Equipment Used: Refer to section 3 for details.

Test Result: Pass

5.9.1 LTE Band 2

Modulation	Channel/ Frequency (MHz)	Voltage	Temperature	Deviation	Deviation	Limit	Pass/ Fail
		(Vdc)	($^{\circ}\text{C}$)	(Hz)	(ppm)	(ppm)	
LTE Band 2 / 20MHz / Full RB							
QPSK	18900 / 1880.0	VL	TN	31	0.0165	N/A	Pass
		VN		26	0.0138		Pass
		VH		29	0.0154		Pass
		VN	50	32	0.0170		Pass
			40	30	0.0160		Pass
			30	31	0.0165		Pass
			20	29	0.0154		Pass
			10	32	0.0170		Pass
			0	30	0.0160		Pass
			-10	31	0.0165		Pass
			-20	27	0.0144		Pass
			-30	26	0.0138		Pass

5.9.2 LTE Band 4

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Pass/ Fail
LTE Band 4 / 20MHz / Full RB							
QPSK	20175 / 1732.5	VL	TN	25	0.0144	N/A	Pass
		VN		18	0.0104		Pass
		VH		22	0.0127		Pass
		VN	50	26	0.0150		Pass
			40	21	0.0121		Pass
			30	25	0.0144		Pass
			20	31	0.0179		Pass
			10	25	0.0144		Pass
			0	18	0.0104		Pass
			-10	22	0.0127		Pass
			-20	18	0.0104		Pass
			-30	25	0.0144		Pass

5.9.3 LTE Band 5

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 5 / 10MHz / Full RB							
QPSK	20525 / 836.5	VL	TN	25	0.0299	± 2.5	Pass
		VN		24	0.0287	± 2.5	Pass
		VH		18	0.0215	± 2.5	Pass
		VN	50	17	0.0203	± 2.5	Pass
			40	18	0.0215	± 2.5	Pass
			30	19	0.0227	± 2.5	Pass
			20	27	0.0323	± 2.5	Pass
			10	24	0.0287	± 2.5	Pass
			0	17	0.0203	± 2.5	Pass
			-10	23	0.0275	± 2.5	Pass
			-20	22	0.0263	± 2.5	Pass
			-30	26	0.0311	± 2.5	Pass

5.9.4 LTE Band 7

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
QPSK	21100 / 2535	VL	TN	-25	-0.0099	N/A	Pass
		VN		-31	-0.0122		Pass
		VH		-27	-0.0107		Pass
		VN	50	-38	-0.0150		Pass
			40	-33	-0.0130		Pass
			30	-33	-0.0130		Pass
			20	-38	-0.0150		Pass
			10	-33	-0.0130		Pass
			0	-25	-0.0099		Pass
			-10	-38	-0.0150		Pass
			-20	-33	-0.0130		Pass
			-30	-28	-0.0110		Pass

5.9.5 LTE Band 12

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
QPSK	23095 / 707.5	VL	TN	23	0.0325	N/A	Pass
		VN		25	0.0353		Pass
		VH		23	0.0325		Pass
		VN	50	31	0.0438		Pass
			40	27	0.0382		Pass
			30	29	0.0410		Pass
			20	25	0.0353		Pass
			10	23	0.0325		Pass
			0	18	0.0254		Pass
			-10	24	0.0339		Pass
			-20	27	0.0382		Pass
			-30	23	0.0325		Pass

5.9.6 LTE Band 17

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 17 / 10MHz / Full RB							
QPSK	23790 / 710	VL	TN	29	0.0371	N/A	Pass
		VN		33	0.0422		Pass
		VH		24	0.0307		Pass
		VN	50	24	0.0307		Pass
			40	28	0.0358		Pass
			30	27	0.0345		Pass
			20	29	0.0371		Pass
			10	25	0.0320		Pass
			0	27	0.0345		Pass
			-10	29	0.0371		Pass
			-20	34	0.0435		Pass
			-30	26	0.0332		Pass

5.9.7 LTE Band 25

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 25 / 20MHz / Full RB							
QPSK	26340 / 1880.0	VL	TN	-29	-0.0154	N/A	Pass
		VN		-33	-0.0176		Pass
		VH		-29	-0.0154		Pass
		VN	50	-24	-0.0128		Pass
			40	-28	-0.0149		Pass
			30	-27	-0.0144		Pass
			20	-29	-0.0154		Pass
			10	-31	-0.0165		Pass
			0	-27	-0.0144		Pass
			-10	-29	-0.0154		Pass
			-20	-31	-0.0165		Pass
			-30	-26	-0.0138		Pass

5.9.8 LTE Band 26

Modulation	Channel/ Frequency (MHz)	Voltage	Temperature	Deviation	Deviation	Limit	Result
		(Vdc)	(°C)	(Hz)	(ppm)	(ppm)	
LTE Band 26 / 15MHz / Full RB							
QPSK	26915 / 836.5	VL	TN	26	0.0311	± 2.5	Pass
		VN		25	0.0299	± 2.5	Pass
		VH		23	0.0275	± 2.5	Pass
		VN	50	31	0.0371	± 2.5	Pass
			40	32	0.0383	± 2.5	Pass
			30	21	0.0251	± 2.5	Pass
			20	32	0.0383	± 2.5	Pass
			10	28	0.0335	± 2.5	Pass
			0	26	0.0311	± 2.5	Pass
			-10	29	0.0347	± 2.5	Pass
			-20	27	0.0323	± 2.5	Pass
			-30	25	0.0299	± 2.5	Pass

5.9.9 LTE Band 26 (Part 90S)

Modulation	Channel/ Frequency (MHz)	Voltage	Temperature	Deviation	Deviation	Limit	Result
		(Vdc)	(°C)	(Hz)	(ppm)	(ppm)	
LTE Band 26 / 10MHz / Full RB							
QPSK	26740 / 819	VL	TN	-29	-0.0354	± 2.5	Pass
		VN		-25	-0.0305	± 2.5	Pass
		VH		-23	-0.0281	± 2.5	Pass
		VN	50	-27	-0.0330	± 2.5	Pass
			40	-24	-0.0293	± 2.5	Pass
			30	-21	-0.0256	± 2.5	Pass
			20	-18	-0.0220	± 2.5	Pass
			10	-24	-0.0293	± 2.5	Pass
			0	-25	-0.0305	± 2.5	Pass
			-10	-17	-0.0208	± 2.5	Pass
			-20	-22	-0.0269	± 2.5	Pass
			-30	-26	-0.0317	± 2.5	Pass

5.9.10 LTE Band 30

Modulation	Channel/ Frequency (MHz)	Voltage	Temperature	Deviation	Deviation	Limit	Result
		(Vdc)	(°C)	(Hz)	(ppm)	(ppm)	
LTE Band 30 / 20MHz / Full RB							
QPSK	38000 /2595	VL	TN	28	0.0108	N/A	Pass
		VN		25	0.0096		Pass
		VH		23	0.0089		Pass
		VN	50	26	0.0100		Pass
			40	26	0.0100		Pass
			30	25	0.0096		Pass
			20	21	0.0081		Pass
			10	25	0.0096		Pass
			0	28	0.0108		Pass
			-10	22	0.0085		Pass
			-20	27	0.0104		Pass
			-30	19	0.0073		Pass

5.9.11 LTE Band 41

Modulation	Channel/ Frequency (MHz)	Voltage	Temperature	Deviation	Deviation	Limit	Result
		(Vdc)	(°C)	(Hz)	(ppm)	(ppm)	
LTE Band 41 / 20MHz / Full RB							
QPSK	40620 / 2593	VL	TN	32	0.0123	N/A	Pass
		VN		26	0.0100		Pass
		VH		29	0.0112		Pass
		VN	50	32	0.0123		Pass
			40	25	0.0096		Pass
			30	31	0.0120		Pass
			20	27	0.0104		Pass
			10	26	0.0100		Pass
			0	26	0.0100		Pass
			-10	33	0.0127		Pass
			-20	27	0.0104		Pass
			-30	24	0.0093		Pass

5.9.12 LTE Band 66

Modulation	Channel/ Frequency (MHz)	Voltage	Temperature	Deviation	Deviation	Limit	Result
		(Vdc)	(°C)	(Hz)	(ppm)	(ppm)	
LTE Band 66 / 20MHz / Full RB							
QPSK	132322 / 1745	VL	TN	-25	-0.0143	N/A	Pass
		VN		-33	-0.0189		Pass
		VH		-33	-0.0189		Pass
		VN	50	-25	-0.0143		Pass
			40	-31	-0.0178		Pass
			30	-33	-0.0189		Pass
			20	-33	-0.0189		Pass
			10	-31	-0.0178		Pass
			0	-31	-0.0178		Pass
			-10	-26	-0.0149		Pass
			-20	-25	-0.0143		Pass
			-30	-33	-0.0189		Pass

5.9.13 LTE Band 71

Modulation	Channel/ Frequency (MHz)	Voltage	Temperature	Deviation	Deviation	Limit	Result
		(Vdc)	(°C)	(Hz)	(ppm)	(ppm)	
LTE Band 71 / 20MHz / Full RB							
QPSK	133322 / 683	VL	TN	-28	-0.0410	N/A	Pass
		VN		-26	-0.0381		Pass
		VH		-23	-0.0337		Pass
		VN	50	-31	-0.0454		Pass
			40	-26	-0.0381		Pass
			30	-25	-0.0366		Pass
			20	-33	-0.0483		Pass
			10	-31	-0.0454		Pass
			0	-31	-0.0454		Pass
			-10	-26	-0.0381		Pass
			-20	-33	-0.0483		Pass
			-30	-36	-0.0527		Pass

APPENDIX 1 PHOTOS OF TEST SETUP

See test photos attached in Appendix 1 for the actual connections between Product and support equipment.

APPENDIX 2 PHOTOS OF EUT CONSTRUCTIONAL DETAILS

Refer to Appendix 2 for EUT external and internal photos.

*** End of Report ***

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