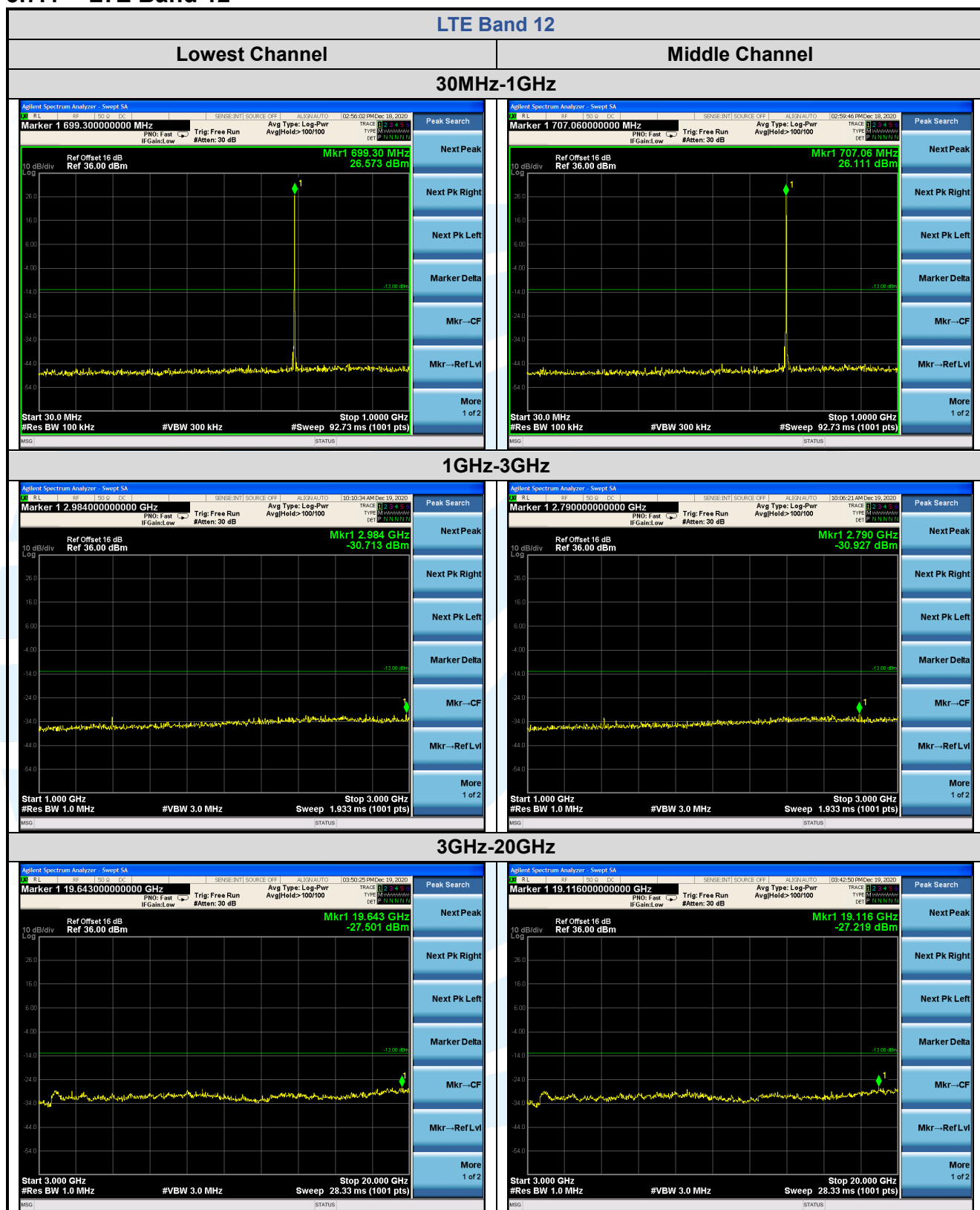
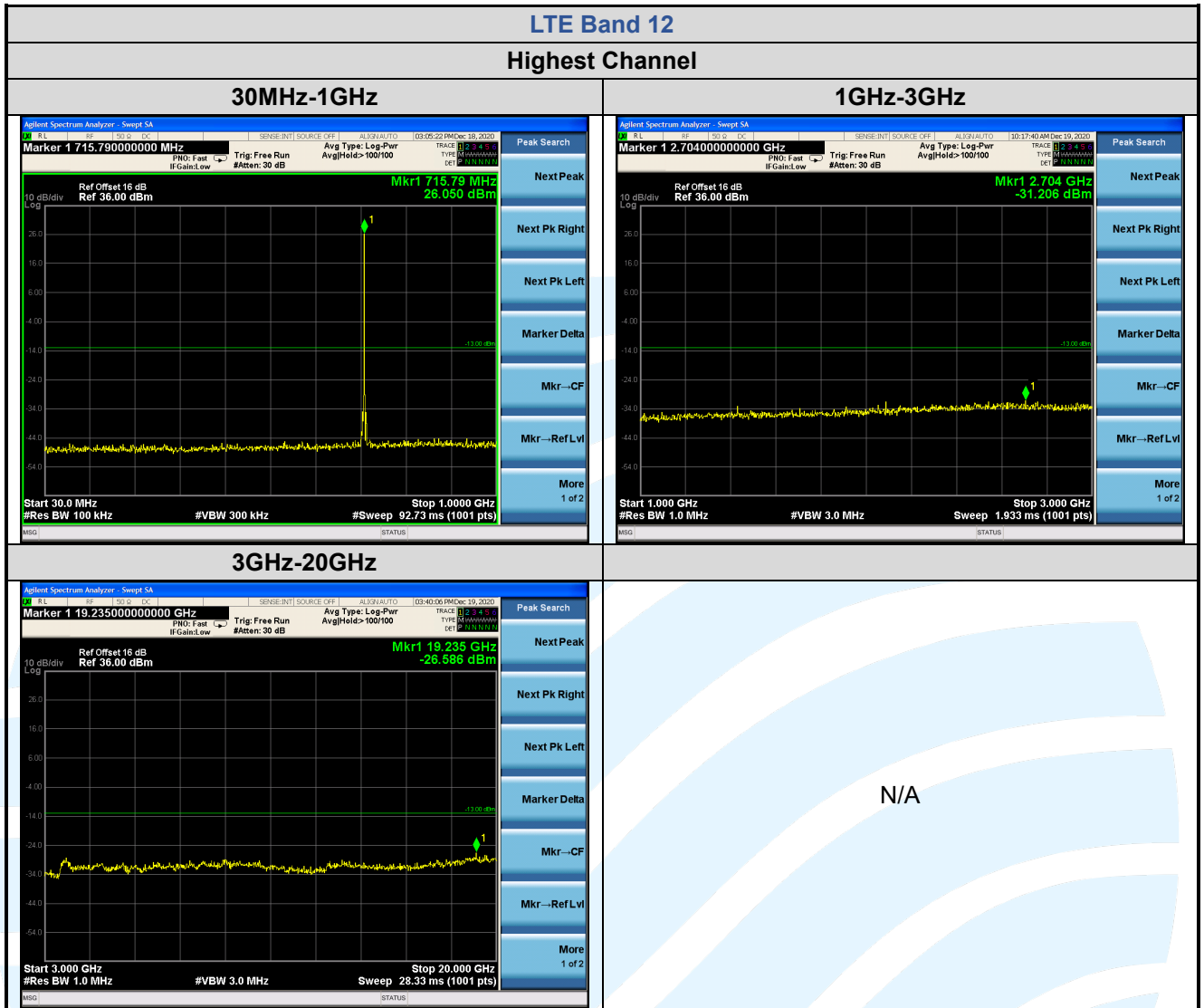
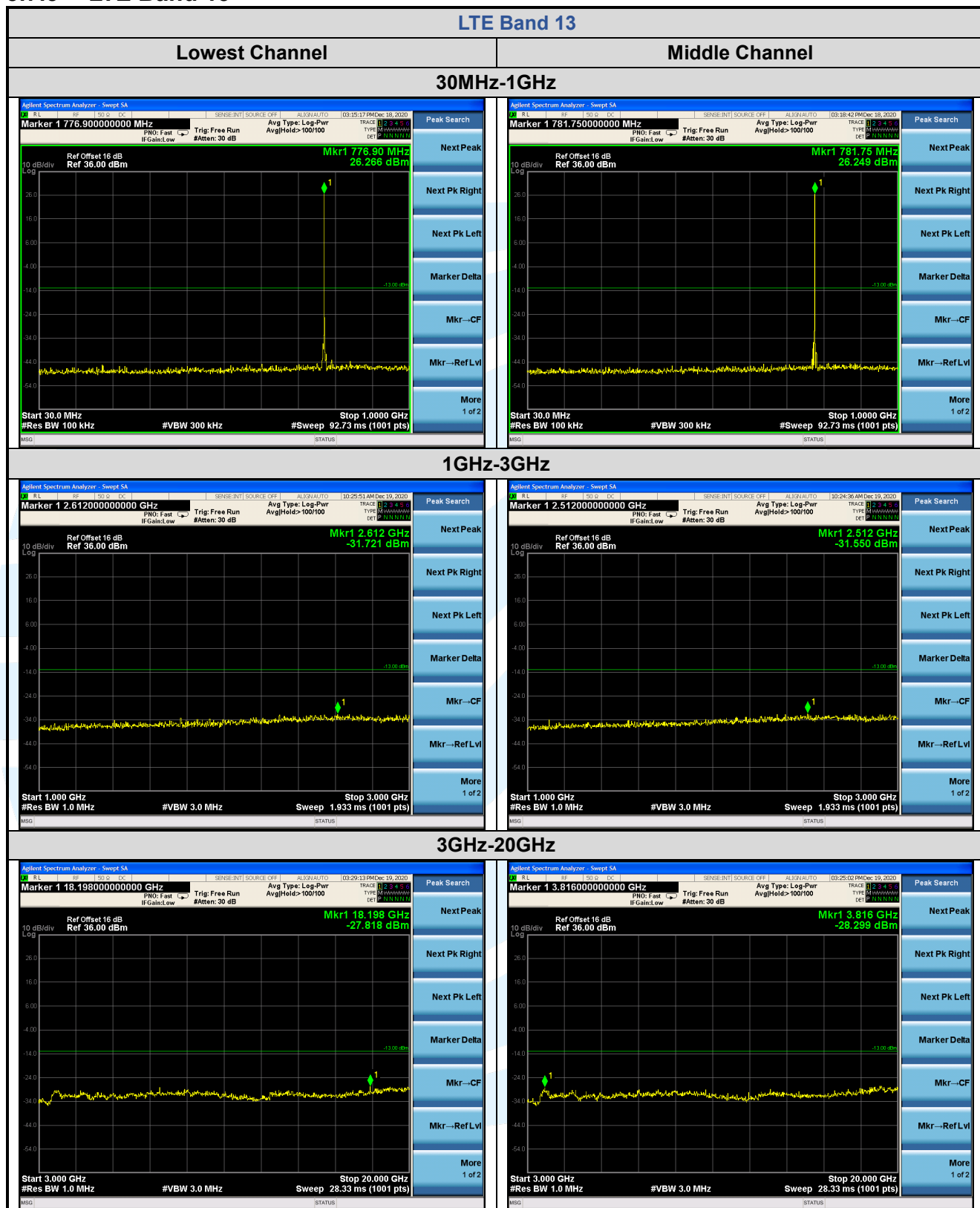


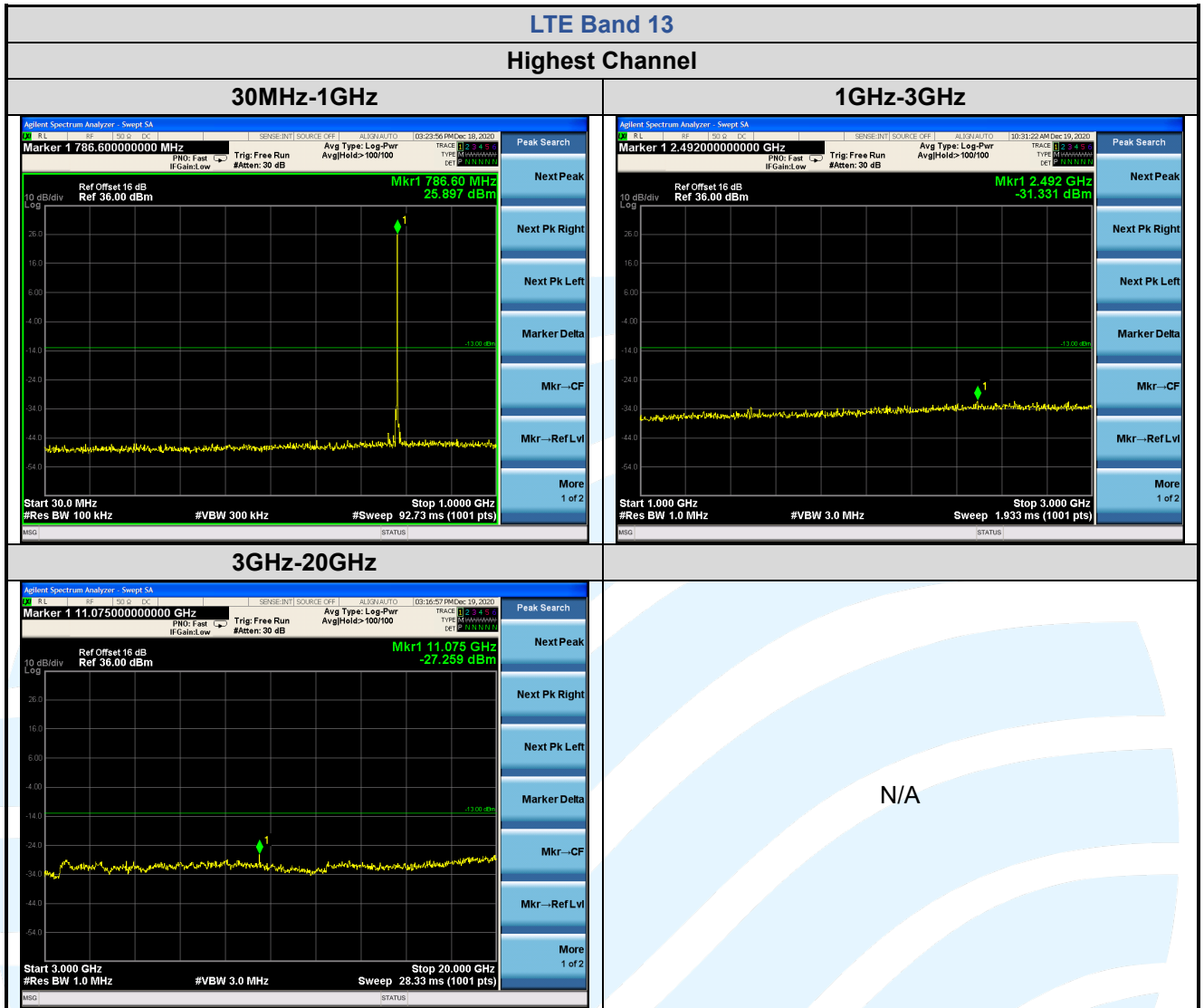
5.7.4 LTE Band 12



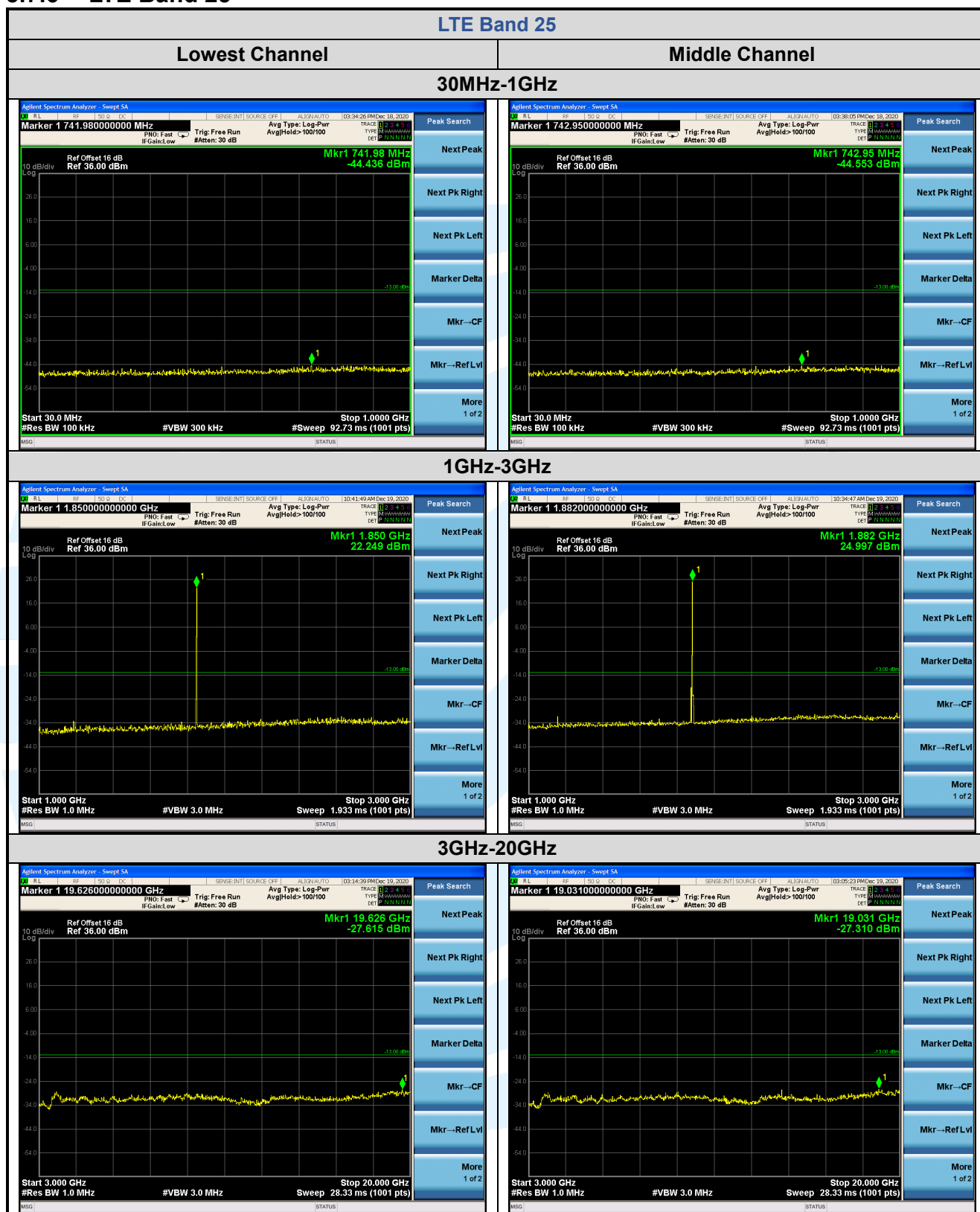


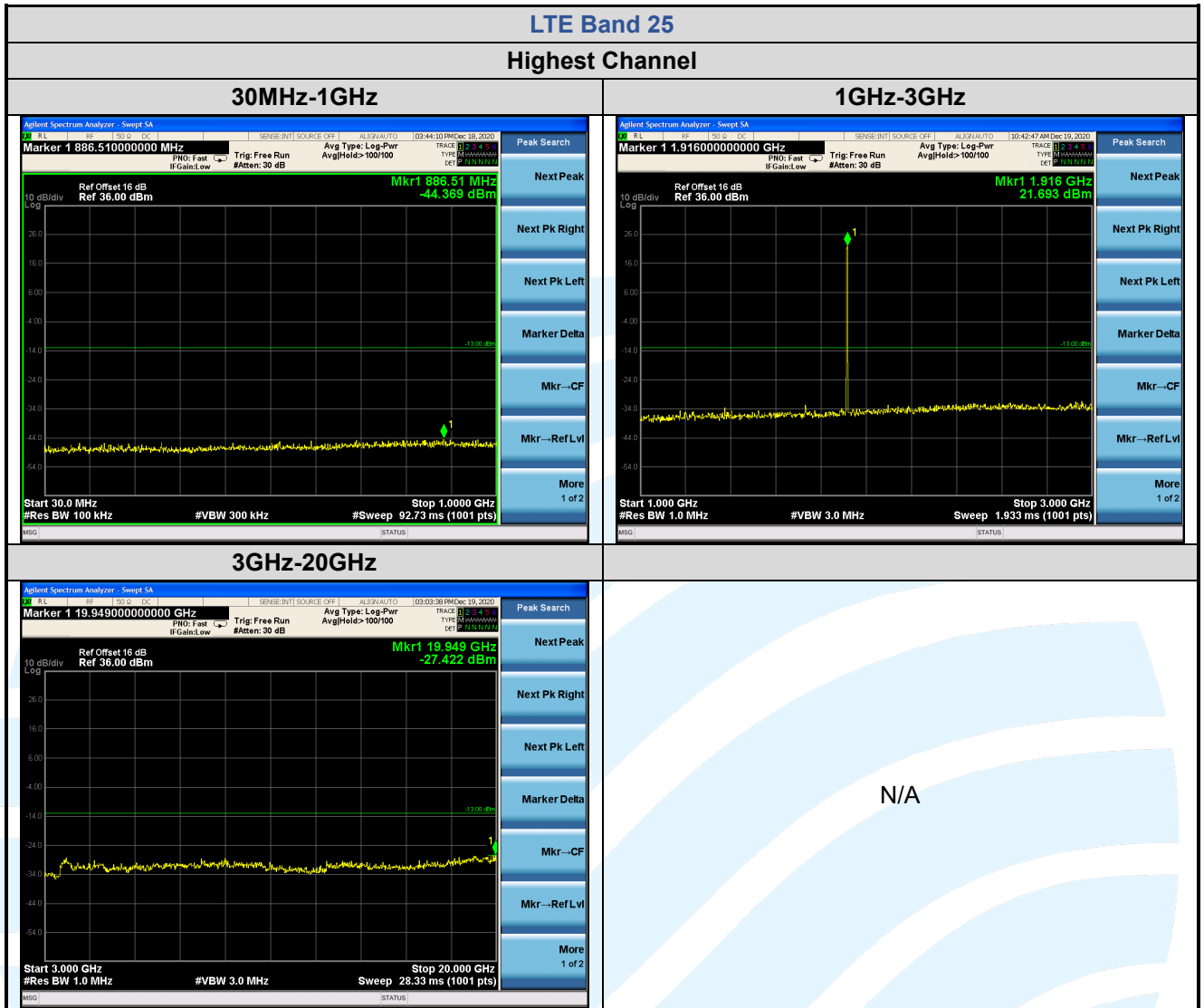
5.7.5 LTE Band 13



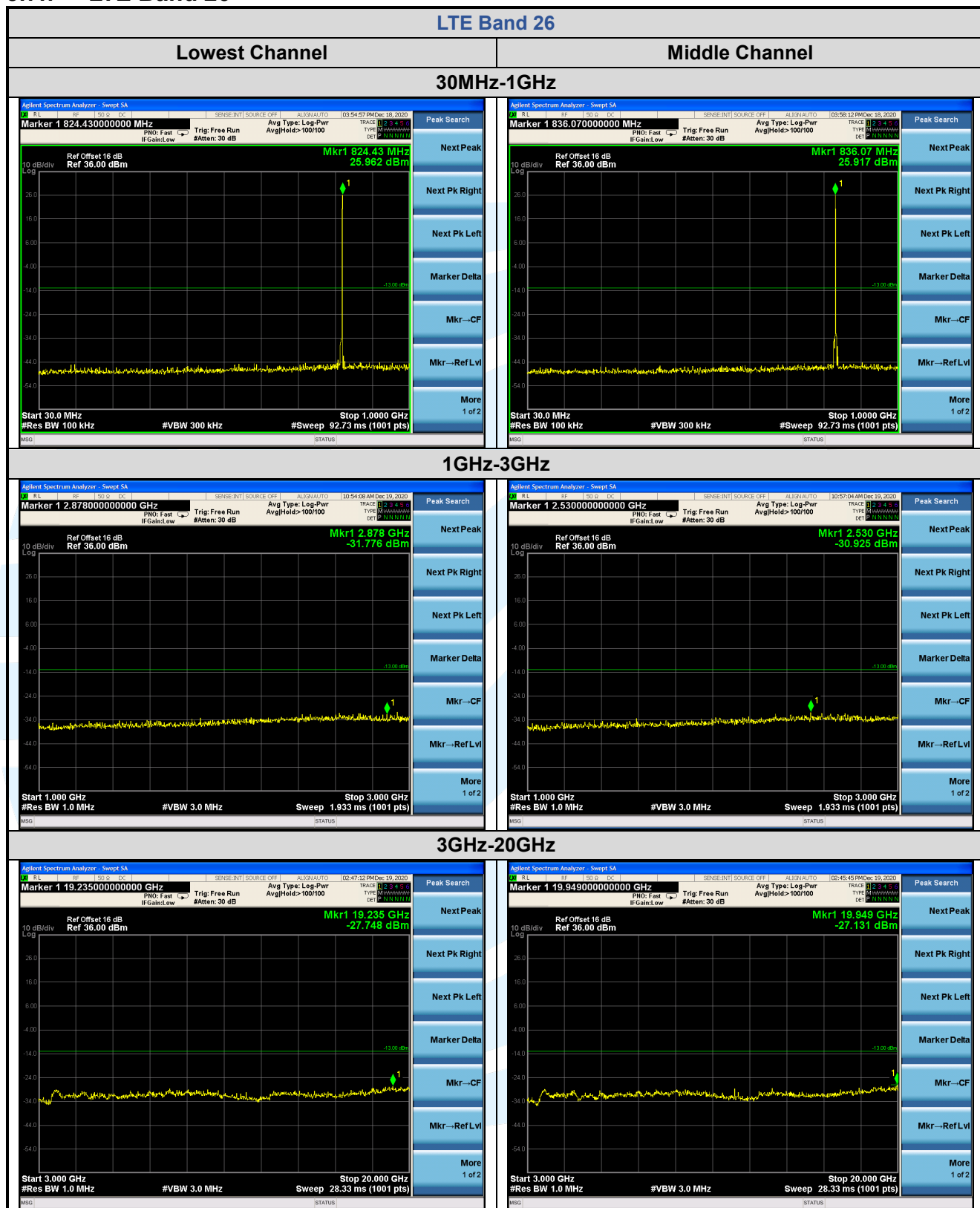


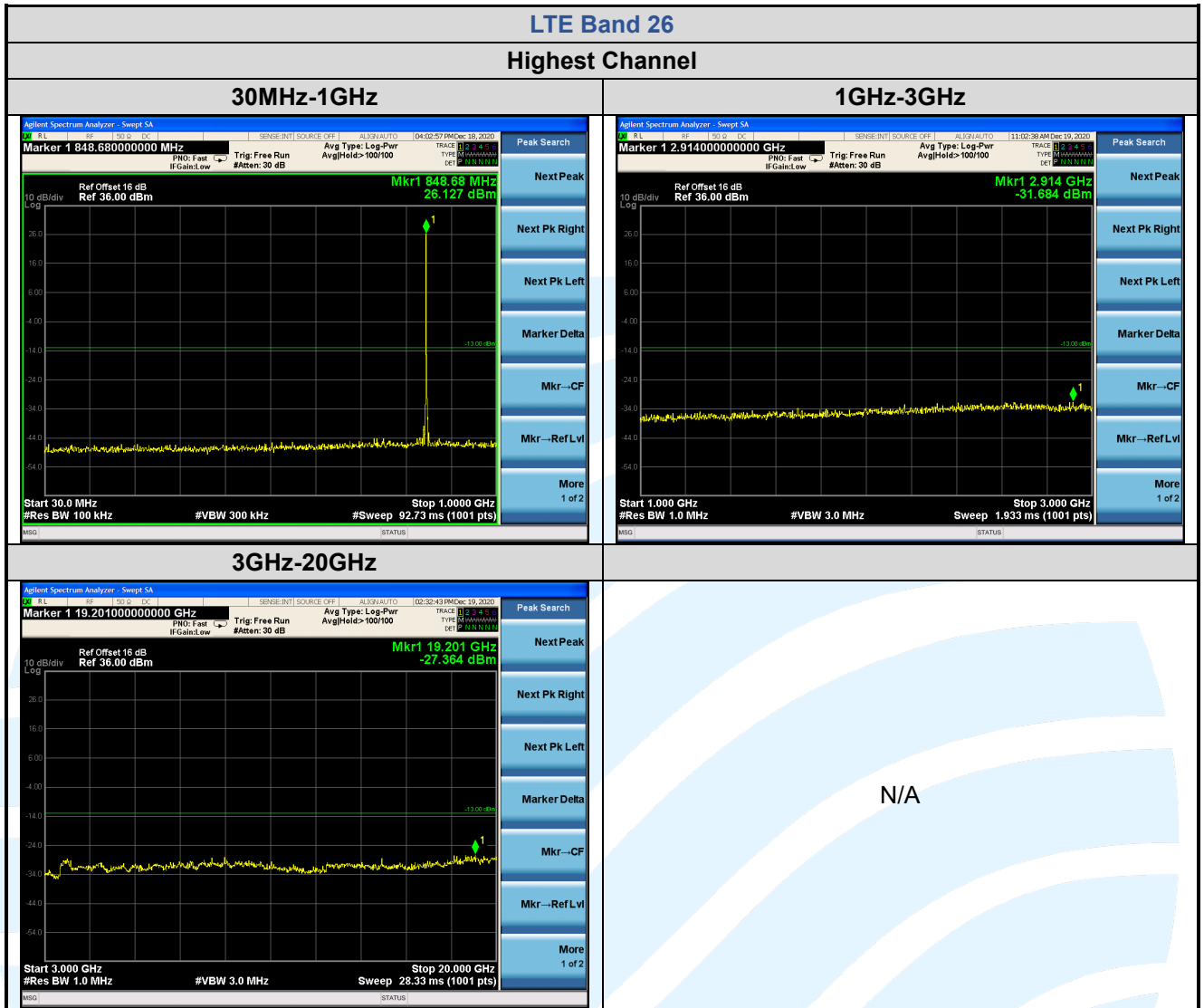
5.7.6 LTE Band 25



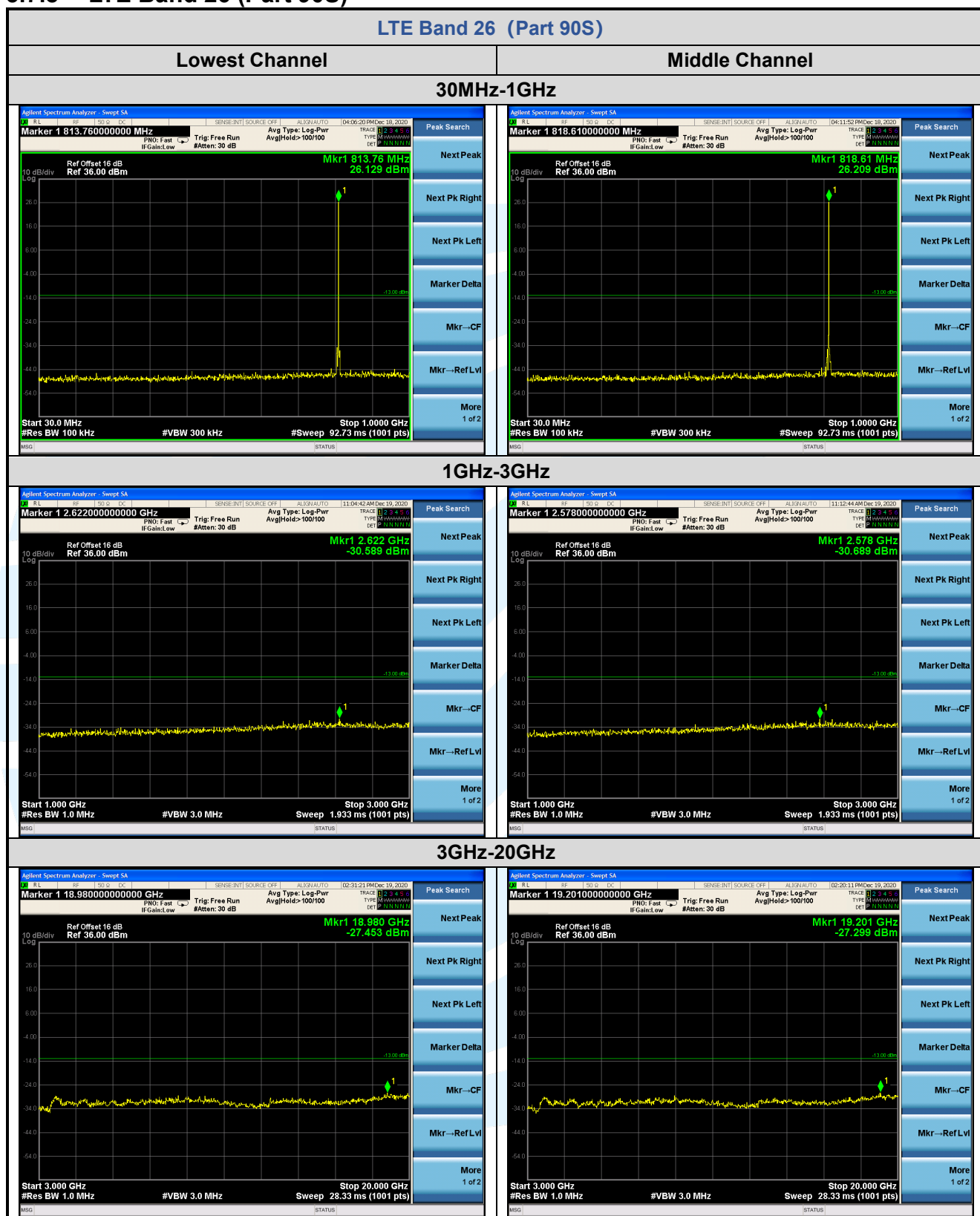


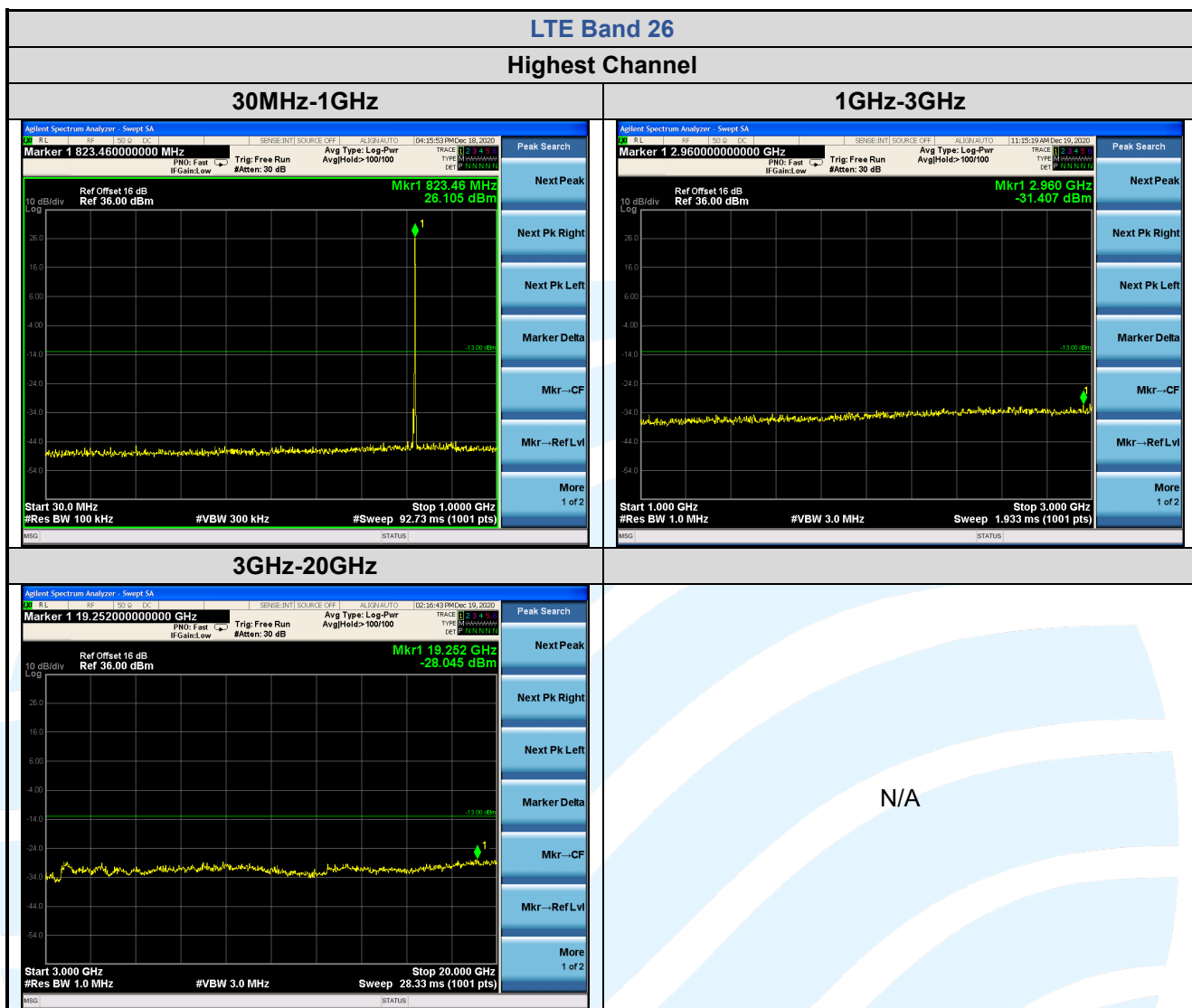
5.7.7 LTE Band 26



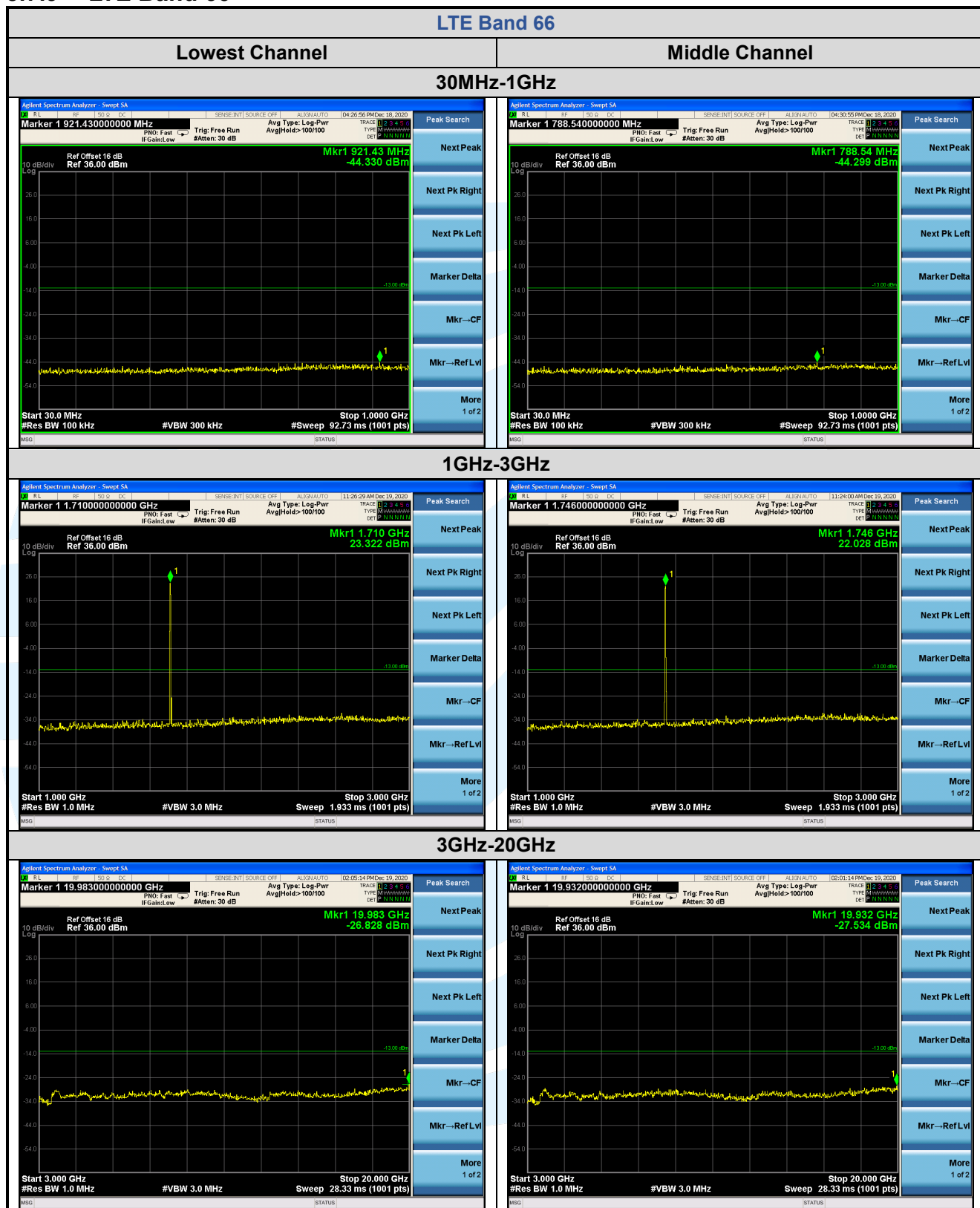


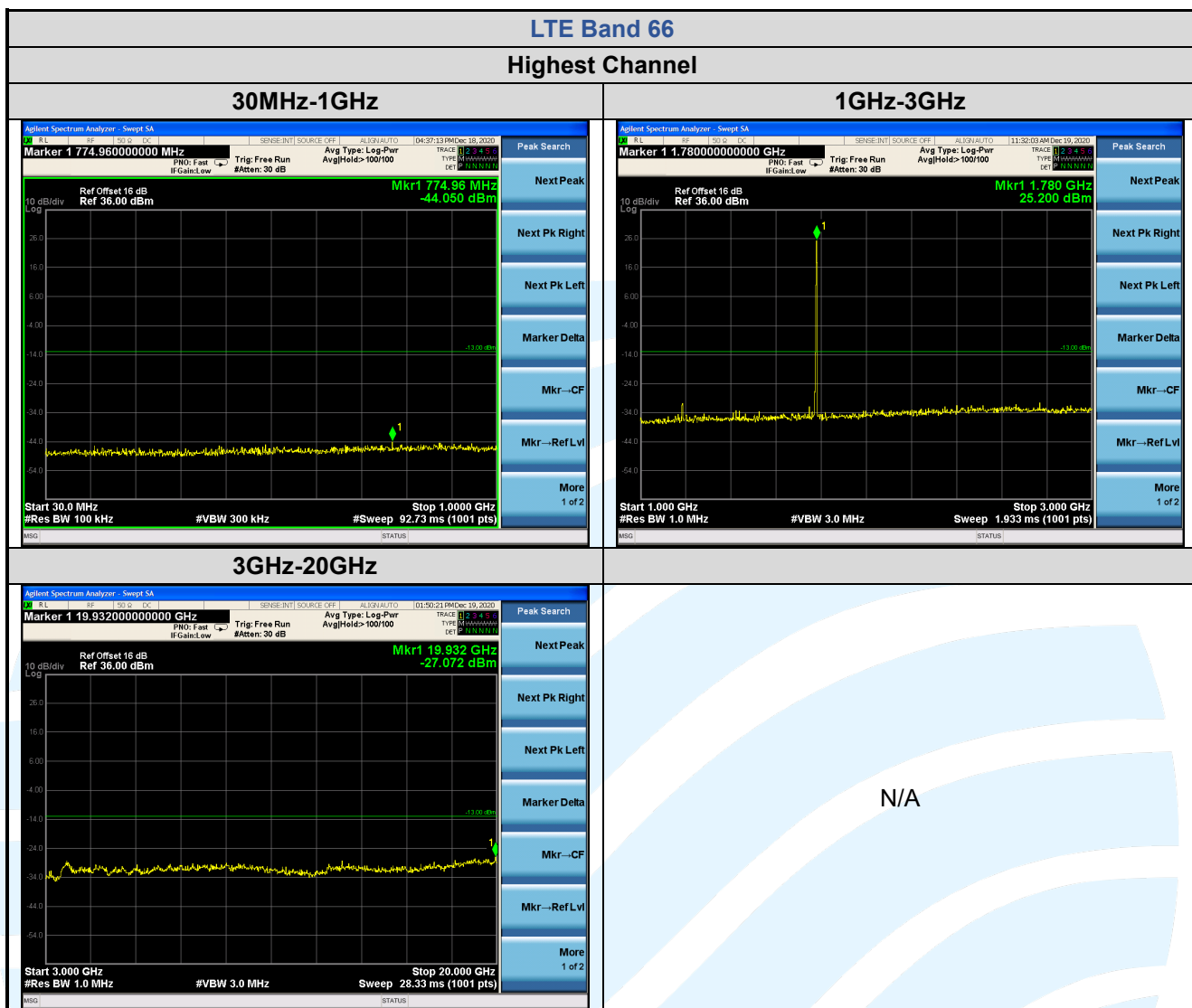
5.7.8 LTE Band 26 (Part 90S)



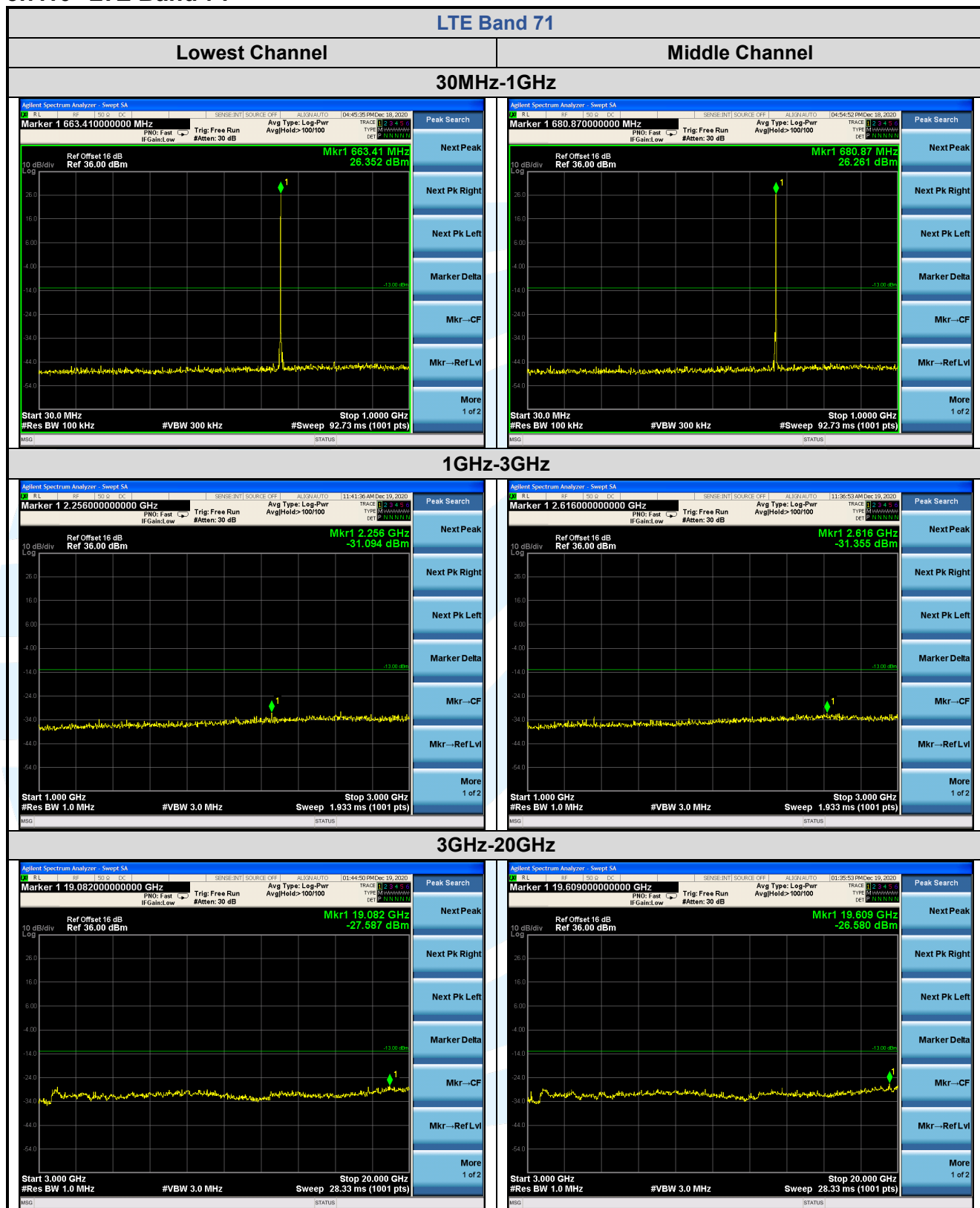


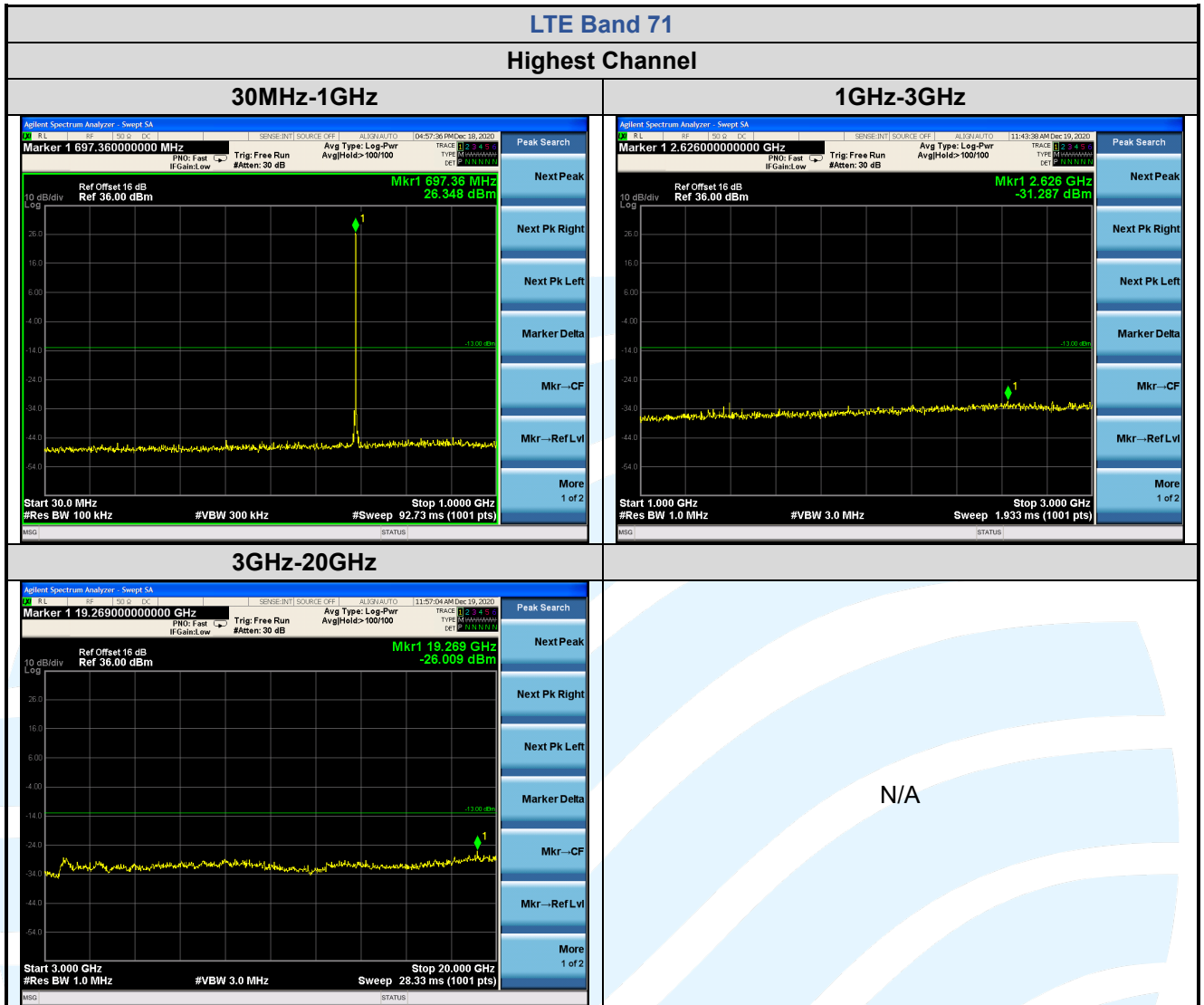
5.7.9 LTE Band 66





5.7.10 LTE Band 71





Remark:

1) All the above data, the fundamental frequency is not marked, it may exceed the limit, please ignore it.

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 12 & Band 71: FCC 47 CFR Part 27.53(g)
LTE Band 13: FCC 47 CFR Part 27.53
LTE Band 26: FCC 47 CFR Part 90.691
LTE Band 2 & LTE Band 25: RSS-133 Issue 6, Section 6.5
LTE Band 4 & LTE Band 66: RSS-139 Issue 3, Section 6.6
LTE Band 5: RSS-132 Issue 3, Section 5.5
LTE Band 12 & LTE Band 13 & Band 71: RSS-130 Issue 2, Section 4.7

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), 27.53(c)(2), 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:

(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).

RSS-132 Issue 3, Section 5.5, RSS-133 Issue 6, Section 6.6, RSS-139 Issue 3, Section 6.5, RSS-130 Issue 2, Section 4.7:

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.

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_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	68.745	-65.39	-4.84	-70.23	-13.00	-57.23	Horizontal
2	96.323	-68.47	-3.30	-71.77	-13.00	-58.77	Horizontal
3	124.925	-67.67	-3.31	-70.98	-13.00	-57.98	Horizontal
4	3700.200	-60.59	7.14	-53.45	-13.00	-40.45	Horizontal
5	5550.300	-63.69	11.16	-52.53	-13.00	-39.53	Horizontal
6	54.135	-59.48	-5.21	-64.69	-13.00	-51.69	Vertical
7	68.745	-55.00	-4.78	-59.78	-13.00	-46.78	Vertical
8	97.002	-64.50	-3.25	-67.75	-13.00	-54.75	Vertical
9	3700.200	-60.86	7.12	-53.74	-13.00	-40.74	Vertical
10	5550.300	-63.74	11.65	-52.09	-13.00	-39.09	Vertical
Middle Channel							
1	69.230	-64.94	-4.79	-69.73	-13.00	-56.73	Horizontal
2	97.002	-68.66	-3.25	-71.91	-13.00	-58.91	Horizontal
3	125.806	-67.54	-3.30	-70.84	-13.00	-57.84	Horizontal
4	3760.000	-62.04	7.28	-54.76	-13.00	-41.76	Horizontal
5	5640.000	-62.86	11.11	-51.75	-13.00	-38.75	Horizontal
6	53.756	-59.27	-5.21	-64.48	-13.00	-51.48	Vertical
7	69.718	-55.40	-4.74	-60.14	-13.00	-47.14	Vertical
8	96.323	-65.53	-3.30	-68.83	-13.00	-55.83	Vertical
9	3760.000	-61.76	7.28	-54.48	-13.00	-41.48	Vertical
10	5640.000	-64.06	11.59	-52.47	-13.00	-39.47	Vertical
Highest Channel							
1	67.311	-65.09	-4.97	-70.06	-13.00	-57.06	Horizontal
2	94.979	-67.60	-3.40	-71.00	-13.00	-58.00	Horizontal
3	124.925	-67.13	-3.31	-70.44	-13.00	-57.44	Horizontal
4	3819.800	-62.18	7.42	-54.76	-13.00	-41.76	Horizontal
5	5729.700	-64.59	11.08	-53.51	-13.00	-40.51	Horizontal
6	54.517	-58.11	-5.20	-63.31	-13.00	-50.31	Vertical
7	68.264	-54.48	-4.80	-59.28	-13.00	-46.28	Vertical
8	94.314	-65.28	-3.45	-68.73	-13.00	-55.73	Vertical
9	3819.800	-62.27	7.45	-54.82	-13.00	-41.82	Vertical
10	5729.700	-62.23	11.53	-50.70	-13.00	-37.70	Vertical

5.8.2 LTE Band 4

LTE Band 4_QPSK							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	68.264	-65.53	-4.89	-70.42	-13.00	-57.42	Horizontal
2	96.323	-67.85	-3.30	-71.15	-13.00	-58.15	Horizontal
3	125.806	-67.55	-3.30	-70.85	-13.00	-57.85	Horizontal
4	3420.200	-61.34	6.29	-55.05	-13.00	-42.05	Horizontal
5	5130.300	-63.48	9.43	-54.05	-13.00	-41.05	Horizontal
6	55.288	-59.62	-5.19	-64.81	-13.00	-51.81	Vertical
7	68.745	-55.62	-4.78	-60.40	-13.00	-47.40	Vertical
8	97.002	-63.99	-3.25	-67.24	-13.00	-54.24	Vertical
9	3420.200	-61.25	6.08	-55.17	-13.00	-42.17	Vertical
10	5130.300	-63.84	9.79	-54.05	-13.00	-41.05	Vertical
Middle Channel							
1	68.745	-65.92	-4.84	-70.76	-13.00	-57.76	Horizontal
2	125.806	-67.70	-3.30	-71.00	-13.00	-58.00	Horizontal
3	156.426	-70.24	-1.37	-71.61	-13.00	-58.61	Horizontal
4	3465.000	-61.63	6.43	-55.20	-13.00	-42.20	Horizontal
5	5197.500	-64.06	9.67	-54.39	-13.00	-41.39	Horizontal
6	54.135	-59.04	-5.21	-64.25	-13.00	-51.25	Vertical
7	69.718	-55.65	-4.74	-60.39	-13.00	-47.39	Vertical
8	95.649	-63.89	-3.34	-67.23	-13.00	-54.23	Vertical
9	3465.000	-62.50	6.28	-56.22	-13.00	-43.22	Vertical
10	5197.500	-62.18	10.05	-52.13	-13.00	-39.13	Vertical
Highest Channel							
1	68.264	-65.21	-4.89	-70.10	-13.00	-57.10	Horizontal
2	125.806	-67.58	-3.30	-70.88	-13.00	-57.88	Horizontal
3	159.759	-72.20	-1.04	-73.24	-13.00	-60.24	Horizontal
4	3509.800	-62.17	6.57	-55.60	-13.00	-42.60	Horizontal
5	5264.700	-62.25	10.00	-52.25	-13.00	-39.25	Horizontal
6	55.288	-59.55	-5.19	-64.74	-13.00	-51.74	Vertical
7	65.907	-55.05	-4.88	-59.93	-13.00	-46.93	Vertical
8	97.686	-63.86	-3.19	-67.05	-13.00	-54.05	Vertical
9	3509.800	-60.85	6.47	-54.38	-13.00	-41.38	Vertical
10	5264.700	-62.68	10.41	-52.27	-13.00	-39.27	Vertical

5.8.3 LTE Band 5

LTE Band 5_QPSK							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	151.025	-87.29	26.53	-60.76	-13.00	-47.76	Horizontal
2	255.823	-87.21	30.06	-57.15	-13.00	-44.15	Horizontal
3	703.731	-87.59	40.67	-46.92	-13.00	-33.92	Horizontal
4	1648.200	-62.62	0.40	-62.22	-13.00	-49.22	Horizontal
5	2472.300	-63.84	3.13	-60.71	-13.00	-47.71	Horizontal
6	442.572	-87.10	35.20	-51.90	-13.00	-38.90	Vertical
7	546.437	-87.76	37.78	-49.98	-13.00	-36.98	Vertical
8	713.692	-87.59	39.52	-48.07	-13.00	-35.07	Vertical
9	1648.200	-61.70	-0.38	-62.08	-13.00	-49.08	Vertical
10	2472.300	-64.15	2.73	-61.42	-13.00	-48.42	Vertical
Middle Channel							
1	406.782	-88.10	35.04	-53.06	-13.00	-40.06	Horizontal
2	509.356	-87.55	36.71	-50.84	-13.00	-37.84	Horizontal
3	693.910	-87.30	40.62	-46.68	-13.00	-33.68	Horizontal
4	1673.000	-64.00	0.56	-63.44	-13.00	-50.44	Horizontal
5	2509.500	-65.46	3.22	-62.24	-13.00	-49.24	Horizontal
6	418.378	-87.74	35.19	-52.55	-13.00	-39.55	Vertical
7	527.571	-87.45	37.44	-50.01	-13.00	-37.01	Vertical
8	703.731	-88.00	39.62	-48.38	-13.00	-35.38	Vertical
9	1673.000	-63.19	-0.20	-63.39	-13.00	-50.39	Vertical
10	2509.500	-63.53	2.81	-60.72	-13.00	-47.72	Vertical
Highest Channel							
1	387.257	-87.16	34.04	-53.12	-13.00	-40.12	Horizontal
2	535.038	-88.03	37.47	-50.56	-13.00	-37.56	Horizontal
3	703.731	-87.60	40.67	-46.93	-13.00	-33.93	Horizontal
4	1697.800	-62.55	0.72	-61.83	-13.00	-48.83	Horizontal
5	2546.700	-66.00	3.34	-62.66	-13.00	-49.66	Horizontal
6	270.616	-88.21	30.39	-57.82	-13.00	-44.82	Vertical
7	505.789	-87.11	36.97	-50.14	-13.00	-37.14	Vertical
8	703.731	-87.07	39.62	-47.45	-13.00	-34.45	Vertical
9	1697.800	-63.44	-0.02	-63.46	-13.00	-50.46	Vertical
10	2546.700	-65.86	2.91	-62.95	-13.00	-49.95	Vertical

5.8.4 LTE Band 12

LTE Band 12_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	329.462	-87.09	32.12	-54.97	-13.00	-41.97	Horizontal
2	478.139	-87.38	36.12	-51.26	-13.00	-38.26	Horizontal
3	538.811	-87.01	37.46	-49.55	-13.00	-36.55	Horizontal
4	1398.200	-62.28	-0.08	-62.36	-13.00	-49.36	Horizontal
5	2097.300	-65.60	2.46	-63.14	-13.00	-50.14	Horizontal
6	220.724	-86.79	28.40	-58.39	-13.00	-45.39	Vertical
7	430.305	-86.90	35.42	-51.48	-13.00	-38.48	Vertical
8	578.036	-87.31	38.30	-49.01	-13.00	-36.01	Vertical
9	1398.200	-61.79	-0.83	-62.62	-13.00	-49.62	Vertical
10	2097.300	-66.31	1.98	-64.33	-13.00	-51.33	Vertical
Middle Channel							
1	225.427	-86.93	28.60	-58.33	-13.00	-45.33	Horizontal
2	455.189	-87.26	35.44	-51.82	-13.00	-38.82	Horizontal
3	531.291	-87.25	37.48	-49.77	-13.00	-36.77	Horizontal
4	1415.000	-63.32	-0.12	-63.44	-13.00	-50.44	Horizontal
5	2122.500	-65.89	2.48	-63.41	-13.00	-50.41	Horizontal
6	259.443	-87.86	30.14	-57.72	-13.00	-44.72	Vertical
7	363.523	-88.20	33.09	-55.11	-13.00	-42.11	Vertical
8	550.290	-87.47	37.86	-49.61	-13.00	-36.61	Vertical
9	1415.000	-64.15	-0.90	-65.05	-13.00	-52.05	Vertical
10	2122.500	-65.48	2.01	-63.47	-13.00	-50.47	Vertical
Highest Channel							
1	263.115	-87.31	30.22	-57.09	-13.00	-44.09	Horizontal
2	406.782	-88.03	35.04	-52.99	-13.00	-39.99	Horizontal
3	542.610	-87.74	37.46	-50.28	-13.00	-37.28	Horizontal
4	1431.800	-62.28	-0.17	-62.45	-13.00	-49.45	Horizontal
5	2147.700	-63.91	2.49	-61.42	-13.00	-48.42	Horizontal
6	211.611	-87.23	28.01	-59.22	-13.00	-46.22	Vertical
7	298.593	-87.66	31.01	-56.65	-13.00	-43.65	Vertical
8	633.328	-87.40	37.81	-49.59	-13.00	-36.59	Vertical
9	1431.800	-63.27	-0.98	-64.25	-13.00	-51.25	Vertical
10	2147.700	-65.91	2.02	-63.89	-13.00	-50.89	Vertical

5.8.5 LTE Band 13

LTE Band 13_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	254.031	-87.47	30.02	-57.45	-13.00	-44.45	Horizontal
2	381.852	-87.74	33.59	-54.15	-13.00	-41.15	Horizontal
3	655.977	-87.04	39.53	-47.51	-13.00	-34.51	Horizontal
4	1554.200	-62.97	-0.12	-63.09	-13.00	-50.09	Horizontal
5	2331.300	-65.44	2.81	-62.63	-13.00	-49.63	Horizontal
6	358.450	-87.83	33.12	-54.71	-13.00	-41.71	Vertical
7	546.437	-87.89	37.78	-50.11	-13.00	-37.11	Vertical
8	689.051	-87.39	39.07	-48.32	-13.00	-35.32	Vertical
9	1554.200	-62.19	-0.98	-63.17	-13.00	-50.17	Vertical
10	2331.300	-64.27	2.38	-61.89	-13.00	-48.89	Vertical
Middle Channel							
1	264.971	-87.03	30.26	-56.77	-13.00	-43.77	Horizontal
2	348.514	-87.67	33.09	-54.58	-13.00	-41.58	Horizontal
3	628.894	-86.90	39.28	-47.62	-13.00	-34.62	Horizontal
4	1564.000	-63.97	-0.08	-64.05	-13.00	-51.05	Horizontal
5	2346.000	-64.47	2.84	-61.63	-13.00	-48.63	Horizontal
6	231.853	-87.15	28.95	-58.20	-13.00	-45.20	Vertical
7	461.631	-86.86	35.59	-51.27	-13.00	-38.27	Vertical
8	554.171	-86.43	37.93	-48.50	-13.00	-35.50	Vertical
9	1564.000	-63.49	-0.93	-64.42	-13.00	-51.42	Vertical
10	2346.000	-64.51	2.41	-62.10	-13.00	-49.10	Vertical
Highest Channel							
1	284.261	-88.36	30.70	-57.66	-13.00	-44.66	Horizontal
2	523.876	-87.96	37.44	-50.52	-13.00	-37.52	Horizontal
3	679.435	-87.07	40.32	-46.75	-13.00	-33.75	Horizontal
4	1573.800	-62.99	-0.03	-63.02	-13.00	-50.02	Horizontal
5	2360.700	-62.17	2.87	-59.30	-13.00	-46.30	Horizontal
6	207.197	-87.75	27.83	-59.92	-13.00	-46.92	Vertical
7	376.523	-88.22	33.10	-55.12	-13.00	-42.12	Vertical
8	527.571	-86.76	37.44	-49.32	-13.00	-36.32	Vertical
9	1573.800	-61.70	-0.88	-62.58	-13.00	-49.58	Vertical
10	2360.700	-64.29	2.45	-61.84	-13.00	-48.84	Vertical

5.8.6 LTE Band 25

LTE Band 25_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	69.230	-65.27	-4.79	-70.06	-13.00	-57.06	Horizontal
2	125.806	-67.32	-3.30	-70.62	-13.00	-57.62	Horizontal
3	159.759	-71.70	-1.04	-72.74	-13.00	-59.74	Horizontal
4	3700.200	-63.71	7.14	-56.57	-13.00	-43.57	Horizontal
5	5550.300	-64.78	11.16	-53.62	-13.00	-40.62	Horizontal
6	54.135	-58.76	-5.21	-63.97	-13.00	-50.97	Vertical
7	68.264	-54.08	-4.80	-58.88	-13.00	-45.88	Vertical
8	94.979	-64.99	-3.40	-68.39	-13.00	-55.39	Vertical
9	3700.200	-63.01	7.12	-55.89	-13.00	-42.89	Vertical
10	5550.300	-64.24	11.65	-52.59	-13.00	-39.59	Vertical
Middle Channel							
1	69.230	-65.31	-4.79	-70.10	-13.00	-57.10	Horizontal
2	124.925	-67.66	-3.31	-70.97	-13.00	-57.97	Horizontal
3	152.090	-69.98	-1.79	-71.77	-13.00	-58.77	Horizontal
4	3765.000	-62.52	7.29	-55.23	-13.00	-42.23	Horizontal
5	5647.500	-65.77	11.12	-54.65	-13.00	-41.65	Horizontal
6	54.901	-58.15	-5.19	-63.34	-13.00	-50.34	Vertical
7	67.786	-54.64	-4.82	-59.46	-13.00	-46.46	Vertical
8	96.323	-63.49	-3.30	-66.79	-13.00	-53.79	Vertical
9	3765.000	-61.93	7.29	-54.64	-13.00	-41.64	Vertical
10	5647.500	-65.02	11.59	-53.43	-13.00	-40.43	Vertical
Highest Channel							
1	65.445	-64.84	-5.12	-69.96	-13.00	-56.96	Horizontal
2	97.002	-67.77	-3.25	-71.02	-13.00	-58.02	Horizontal
3	124.925	-67.76	-3.31	-71.07	-13.00	-58.07	Horizontal
4	3829.800	-64.34	7.45	-56.89	-13.00	-43.89	Horizontal
5	5744.700	-65.28	11.07	-54.21	-13.00	-41.21	Horizontal
6	58.076	-59.08	-5.14	-64.22	-13.00	-51.22	Vertical
7	69.718	-55.38	-4.74	-60.12	-13.00	-47.12	Vertical
8	96.323	-64.42	-3.30	-67.72	-13.00	-54.72	Vertical
9	3829.800	-62.81	7.48	-55.33	-13.00	-42.33	Vertical
10	5744.700	-64.52	11.52	-53.00	-13.00	-40.00	Vertical

5.8.7 LTE Band 26

LTE Band 26_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	318.088	-87.55	31.67	-55.88	-13.00	-42.88	Horizontal
2	430.305	-87.47	34.99	-52.48	-13.00	-39.48	Horizontal
3	703.731	-87.22	40.67	-46.55	-13.00	-33.55	Horizontal
4	1648.200	-65.09	0.40	-64.69	-13.00	-51.69	Horizontal
5	2472.300	-64.91	3.13	-61.78	-13.00	-48.78	Horizontal
6	250.486	-88.06	29.94	-58.12	-13.00	-45.12	Vertical
7	424.300	-87.60	35.49	-52.11	-13.00	-39.11	Vertical
8	708.694	-87.07	39.57	-47.50	-13.00	-34.50	Vertical
9	1648.200	-64.04	-0.38	-64.42	-13.00	-51.42	Vertical
10	2472.300	-63.66	2.73	-60.93	-13.00	-47.93	Vertical
Middle Channel							
1	300.699	-88.06	31.06	-57.00	-13.00	-44.00	Horizontal
2	409.651	-88.23	35.02	-53.21	-13.00	-40.21	Horizontal
3	679.435	-87.47	40.32	-47.15	-13.00	-34.15	Horizontal
4	1673.000	-63.19	0.56	-62.63	-13.00	-49.63	Horizontal
5	2509.500	-64.72	3.22	-61.50	-13.00	-48.50	Horizontal
6	282.270	-88.15	30.65	-57.50	-13.00	-44.50	Vertical
7	436.396	-87.29	35.31	-51.98	-13.00	-38.98	Vertical
8	703.731	-86.26	39.62	-46.64	-13.00	-33.64	Vertical
9	1673.000	-62.64	-0.20	-62.84	-13.00	-49.84	Vertical
10	2509.500	-62.90	2.81	-60.09	-13.00	-47.09	Vertical
Highest Channel							
1	343.651	-87.44	32.85	-54.59	-13.00	-41.59	Horizontal
2	527.571	-87.60	37.49	-50.11	-13.00	-37.11	Horizontal
3	693.910	-87.46	40.62	-46.84	-13.00	-33.84	Horizontal
4	1697.800	-61.93	0.72	-61.21	-13.00	-48.21	Horizontal
5	2546.700	-63.29	3.34	-59.95	-13.00	-46.95	Horizontal
6	302.819	-87.79	31.10	-56.69	-13.00	-43.69	Vertical
7	474.791	-87.30	36.19	-51.11	-13.00	-38.11	Vertical
8	708.694	-87.11	39.57	-47.54	-13.00	-34.54	Vertical
9	1697.800	-63.18	-0.02	-63.20	-13.00	-50.20	Vertical
10	2471.700	-65.07	2.72	-62.35	-13.00	-49.35	Vertical

5.8.8 LTE Band 26 (Part 90S)

LTE Band 26(Part 90S)_ QPSK							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	159.759	-88.16	27.36	-60.80	-13.00	-47.80	Horizontal
2	403.934	-87.82	35.06	-52.76	-13.00	-39.76	Horizontal
3	679.435	-87.00	40.32	-46.68	-13.00	-33.68	Horizontal
4	1628.200	-64.87	0.27	-64.60	-13.00	-51.60	Horizontal
5	2442.300	-63.08	3.06	-60.02	-13.00	-47.02	Horizontal
6	163.162	-86.88	26.66	-60.22	-13.00	-47.22	Vertical
7	246.990	-87.89	29.76	-58.13	-13.00	-45.13	Vertical
8	728.897	-87.33	39.32	-48.01	-13.00	-35.01	Vertical
9	1628.200	-63.93	-0.53	-64.46	-13.00	-51.46	Vertical
10	2442.300	-65.62	2.65	-62.97	-13.00	-49.97	Vertical
Middle Channel							
1	250.486	-87.36	29.94	-57.42	-13.00	-44.42	Horizontal
2	353.447	-87.89	33.14	-54.75	-13.00	-41.75	Horizontal
3	665.261	-87.52	39.87	-47.65	-13.00	-34.65	Horizontal
4	1638.000	-62.89	0.34	-62.55	-13.00	-49.55	Horizontal
5	2457.000	-63.15	3.10	-60.05	-13.00	-47.05	Horizontal
6	266.839	-87.72	30.31	-57.41	-13.00	-44.41	Vertical
7	311.452	-87.38	31.25	-56.13	-13.00	-43.13	Vertical
8	562.014	-87.83	38.11	-49.72	-13.00	-36.72	Vertical
9	1638.000	-63.73	-0.45	-64.18	-13.00	-51.18	Vertical
10	2457.000	-65.64	2.69	-62.95	-13.00	-49.95	Vertical
Highest Channel							
1	395.507	-87.47	34.72	-52.75	-13.00	-39.75	Horizontal
2	542.610	-87.73	37.46	-50.27	-13.00	-37.27	Horizontal
3	642.292	-86.68	39.29	-47.39	-13.00	-34.39	Horizontal
4	1647.800	-63.72	0.40	-63.32	-13.00	-50.32	Horizontal
5	2471.700	-65.43	3.13	-62.30	-13.00	-49.30	Horizontal
6	286.265	-87.80	30.74	-57.06	-13.00	-44.06	Vertical
7	418.378	-87.22	35.19	-52.03	-13.00	-39.03	Vertical
8	718.725	-87.78	39.47	-48.31	-13.00	-35.31	Vertical
9	1647.800	-64.87	-0.38	-65.25	-13.00	-52.25	Vertical
10	2471.700	-66.31	2.72	-63.59	-13.00	-50.59	Vertical

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5.8.9 LTE Band 66

LTE Band 66_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	67.786	-65.62	-4.93	-70.55	-13.00	-57.55	Horizontal
2	95.649	-66.92	-3.34	-70.26	-13.00	-57.26	Horizontal
3	125.806	-67.59	-3.30	-70.89	-13.00	-57.89	Horizontal
4	3420.200	-61.09	6.29	-54.80	-13.00	-41.80	Horizontal
5	5130.300	-63.51	9.43	-54.08	-13.00	-41.08	Horizontal
6	54.517	-58.70	-5.20	-63.90	-13.00	-50.90	Vertical
7	68.264	-54.88	-4.80	-59.68	-13.00	-46.68	Vertical
8	96.323	-63.59	-3.30	-66.89	-13.00	-53.89	Vertical
9	3420.200	-63.04	6.08	-56.96	-13.00	-43.96	Vertical
10	5130.300	-63.62	9.79	-53.83	-13.00	-40.83	Vertical
Middle Channel							
1	67.786	-65.70	-4.93	-70.63	-13.00	-57.63	Horizontal
2	94.314	-67.79	-3.45	-71.24	-13.00	-58.24	Horizontal
3	125.806	-67.62	-3.30	-70.92	-13.00	-57.92	Horizontal
4	3490.000	-64.06	6.52	-57.54	-13.00	-44.54	Horizontal
5	5235.000	-64.98	9.85	-55.13	-13.00	-42.13	Horizontal
6	53.379	-59.32	-5.22	-64.54	-13.00	-51.54	Vertical
7	68.264	-55.35	-4.80	-60.15	-13.00	-47.15	Vertical
8	94.979	-64.79	-3.40	-68.19	-13.00	-55.19	Vertical
9	3490.000	-61.86	6.40	-55.46	-13.00	-42.46	Vertical
10	5235.000	-63.91	10.24	-53.67	-13.00	-40.67	Vertical
Highest Channel							
1	66.371	-65.62	-5.04	-70.66	-13.00	-57.66	Horizontal
2	94.979	-68.07	-3.40	-71.47	-13.00	-58.47	Horizontal
3	124.925	-67.48	-3.31	-70.79	-13.00	-57.79	Horizontal
4	3559.800	-63.68	6.72	-56.96	-13.00	-43.96	Horizontal
5	5339.700	-65.30	10.37	-54.93	-13.00	-41.93	Horizontal
6	54.517	-58.36	-5.20	-63.56	-13.00	-50.56	Vertical
7	67.311	-54.75	-4.83	-59.58	-13.00	-46.58	Vertical
8	96.323	-66.20	-3.30	-69.50	-13.00	-56.50	Vertical
9	3559.800	-64.54	6.64	-57.90	-13.00	-44.90	Vertical
10	5339.700	-64.95	10.81	-54.14	-13.00	-41.14	Vertical

5.8.10 LTE Band 71

LTE Band 71_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	282.270	-87.25	30.65	-56.60	-13.00	-43.60	Horizontal
2	481.511	-87.32	36.14	-51.18	-13.00	-38.18	Horizontal
3	615.774	-86.92	39.12	-47.80	-13.00	-34.80	Horizontal
4	1326.200	-60.38	0.15	-60.23	-13.00	-47.23	Horizontal
5	1989.300	-65.81	2.34	-63.47	-13.00	-50.47	Horizontal
6	240.144	-88.18	29.40	-58.78	-13.00	-45.78	Vertical
7	424.300	-88.36	35.49	-52.87	-13.00	-39.87	Vertical
8	550.290	-87.50	37.86	-49.64	-13.00	-36.64	Vertical
9	1326.200	-61.62	-0.51	-62.13	-13.00	-49.13	Vertical
10	1989.300	-63.70	1.83	-61.87	-13.00	-48.87	Vertical
Middle Channel							
1	298.593	-88.71	31.01	-57.70	-13.00	-44.70	Horizontal
2	412.539	-87.29	35.00	-52.29	-13.00	-39.29	Horizontal
3	624.490	-87.56	39.26	-48.30	-13.00	-35.30	Horizontal
4	1361.000	-62.45	0.05	-62.40	-13.00	-49.40	Horizontal
5	2041.500	-65.50	2.42	-63.08	-13.00	-50.08	Horizontal
6	360.977	-88.24	33.10	-55.14	-13.00	-42.14	Vertical
7	461.631	-87.60	35.59	-52.01	-13.00	-39.01	Vertical
8	578.036	-87.88	38.30	-49.58	-13.00	-36.58	Vertical
9	1361.000	-61.54	-0.66	-62.20	-13.00	-49.20	Vertical
10	2041.500	-65.94	1.93	-64.01	-13.00	-51.01	Vertical
Highest Channel							
1	324.864	-88.09	31.90	-56.19	-13.00	-43.19	Horizontal
2	395.507	-87.82	34.72	-53.10	-13.00	-40.10	Horizontal
3	516.565	-87.35	37.07	-50.28	-13.00	-37.28	Horizontal
4	1395.800	-62.87	-0.06	-62.93	-13.00	-49.93	Horizontal
5	2093.700	-66.05	2.45	-63.60	-13.00	-50.60	Horizontal
6	338.855	-87.97	32.43	-55.54	-13.00	-42.54	Vertical
7	427.292	-88.39	35.47	-52.92	-13.00	-39.92	Vertical
8	546.437	-87.09	37.78	-49.31	-13.00	-36.31	Vertical
9	1395.800	-64.43	-0.82	-65.25	-13.00	-52.25	Vertical
10	2093.700	-65.73	1.97	-63.76	-13.00	-50.76	Vertical

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,
LTE Band 2 & LTE Band 25: RSS-133 Issue 6, Section 6.3
LTE Band 4 & LTE Band 66: RSS-139 Issue 3, Section 6.4
LTE Band 5: RSS-132 Issue 3, Section 5.3
LTE Band 12 & LTE Band 13 & Band 71: RSS-130 Issue 2, Section 4.5

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

Limits:

FCC 47 CFR Part 22.355, FCC 47 CFR Part 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.

RSS-132 Issue 3, Section 5.3:

The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations and ± 1.5 ppm for base stations

RSS-133 Issue 6, Section 6.3:

The carrier frequency shall not depart from the reference frequency, in excess of ± 2.5 ppm for mobile stations and ± 1.0 ppm for base stations.

RSS-139 Issue 3, Section 6.4, RSS-130 Issue 2, Section 4.5:

The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block when tested to the temperature and supply voltage variations specified in RSS-Gen.

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, 2.5 Vdc, Normal, 3.8 Vdc and High voltage, 4.5 Vdc.

- 2) Frequency Stability vs Temperature:

The EUT is placed 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	Voltage	Temperature	Deviation	Deviation	Limit	Pass/ Fail
	(MHz)	(Vdc)	(℃)	(Hz)	(ppm)	(ppm)	
LTE Band 2							
QPSK	18900 / 1880.0	VL	TN	6.78	0.0039	N/A	Pass
		VN		4.77	0.0028		Pass
		VH		5.57	0.0032		Pass
		VN	50	9.15	0.0053		Pass
			40	10.11	0.0058		Pass
			30	6.51	0.0038		Pass
			20	6.37	0.0037		Pass
			10	7.37	0.0043		Pass
			0	-7.07	-0.0041		Pass
			-10	-6.38	-0.0037		Pass
			-20	-6.33	-0.0037		Pass
			-30	-5.79	-0.0033		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							
QPSK	20175 / 1732.5	VL	TN	7.43	0.0043	N/A	Pass
		VN		4.43	0.0026		Pass
		VH		6.32	0.0036		Pass
		VN	50	11.42	0.0066		Pass
			40	10.54	0.0061		Pass
			30	7.01	0.0040		Pass
			20	5.32	0.0031		Pass
			10	5.62	0.0032		Pass
			0	7.11	0.0041		Pass
			-10	-5.42	-0.0031		Pass
			-20	-6.37	-0.0037		Pass
			-30	-4.35	-0.0025		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							
QPSK	20525 / 836.5	VL	TN	-5.42	-0.0065	± 2.5	Pass
		VN		-5.83	-0.0070	± 2.5	Pass
		VH		-3.47	-0.0041	± 2.5	Pass
		VN	50	-8.72	-0.0104	± 2.5	Pass
			40	-9.31	-0.0111	± 2.5	Pass
			30	-6.67	-0.0080	± 2.5	Pass
			20	-4.32	-0.0052	± 2.5	Pass
			10	-5.25	-0.0063	± 2.5	Pass
			0	-4.43	-0.0053	± 2.5	Pass
			-10	-5.27	-0.0063	± 2.5	Pass
			-20	-3.73	-0.0045	± 2.5	Pass
			-30	3.15	0.0038	± 2.5	Pass

5.9.4 LTE Band 12

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 12							
QPSK	23095 / 707.5	VL	TN	-8.33	-0.0118	N/A	Pass
		VN		-5.45	-0.0077		Pass
		VH		-6.35	-0.0090		Pass
		VN	50	-4.47	-0.0063		Pass
			40	-5.38	-0.0076		Pass
			30	-6.63	-0.0094		Pass
			20	-5.56	-0.0079		Pass
			10	-3.24	-0.0046		Pass
			0	-6.23	-0.0088		Pass
			-10	5.12	0.0072		Pass
			-20	-2.37	-0.0033		Pass
			-30	-5.33	-0.0075		Pass

5.9.5 LTE Band 13

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 13							
QPSK	23230 / 782	VL	TN	3.32	0.0042	N/A	Pass
		VN		1.45	0.0019		Pass
		VH		3.23	0.0041		Pass
		VN	50	-3.41	-0.0044		Pass
			40	-3.01	-0.0038		Pass
			30	-3.74	-0.0048		Pass
			20	3.14	0.0040		Pass
			10	-5.13	-0.0066		Pass
			0	-3.22	-0.0041		Pass
			-10	-3.39	-0.0043		Pass
			-20	-3.14	-0.0040		Pass
			-30	-5.23	-0.0067		Pass

5.9.6 LTE Band 25

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 25							
QPSK	26365 / 1882.5	VL	TN	5.32	0.0028	N/A	Pass
		VN		4.32	0.0023		Pass
		VH		4.52	0.0024		Pass
		VN	50	-3.79	-0.0020		Pass
			40	-1.34	-0.0007		Pass
			30	-4.12	-0.0022		Pass
			20	-2.74	-0.0015		Pass
			10	-3.06	-0.0016		Pass
			0	-2.42	-0.0013		Pass
			-10	3.08	0.0016		Pass
			-20	4.11	0.0022		Pass
			-30	3.06	0.0016		Pass

5.9.7 LTE Band 26

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 26							
QPSK	26915 / 836.5	VL	TN	4.37	0.0052	± 2.5	Pass
		VN		4.42	0.0053	± 2.5	Pass
		VH		6.83	0.0082	± 2.5	Pass
		VN	50	7.15	0.0085	± 2.5	Pass
			40	8.36	0.0100	± 2.5	Pass
			30	7.33	0.0088	± 2.5	Pass
			20	6.37	0.0076	± 2.5	Pass
			10	9.13	0.0109	± 2.5	Pass
			0	9.24	0.0110	± 2.5	Pass
			-10	8.45	0.0101	± 2.5	Pass
			-20	11.32	0.0135	± 2.5	Pass
			-30	8.88	0.0106	± 2.5	Pass

5.9.8 LTE Band 26 (Part 90S)

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 26							
QPSK	26740 / 819	VL	TN	6.25	0.0076	± 2.5	Pass
		VN		6.33	0.0077	± 2.5	Pass
		VH		6.43	0.0079	± 2.5	Pass
		VN	50	8.11	0.0099	± 2.5	Pass
			40	8.36	0.0102	± 2.5	Pass
			30	7.48	0.0091	± 2.5	Pass
			20	5.68	0.0069	± 2.5	Pass
			10	6.64	0.0081	± 2.5	Pass
			0	6.33	0.0077	± 2.5	Pass
			-10	9.72	0.0119	± 2.5	Pass
			-20	4.38	0.0053	± 2.5	Pass
			-30	5.39	0.0066	± 2.5	Pass

5.9.9 LTE Band 66

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 66							
QPSK	132322 / 1745	VL	TN	8.63	0.0049	N/A	Pass
		VN		8.17	0.0047		Pass
		VH		8.34	0.0048		Pass
		VN	50	-4.59	-0.0026		Pass
			40	-5.83	-0.0033		Pass
			30	-8.34	-0.0048		Pass
			20	-7.34	-0.0042		Pass
			10	-6.33	-0.0036		Pass
			0	5.06	0.0029		Pass
			-10	4.33	0.0025		Pass
			-20	4.23	0.0024		Pass
			-30	5.16	0.0030		Pass

5.9.10 LTE Band 71

Modulation	Channel/ Frequency	Voltage	Temperature	Deviation	Deviation	Limit	Result
	(MHz)	(Vdc)	(°C)	(Hz)	(ppm)	(ppm)	
LTE Band 71							
QPSK	133297 / 680.5	VL	TN	8.14	0.0119	N/A	Pass
		VN		9.36	0.0137		Pass
		VH		9.34	0.0137		Pass
		VN	50	8.33	0.0122		Pass
			40	7.67	0.0112		Pass
			30	5.35	0.0078		Pass
			20	6.45	0.0094		Pass
			10	-5.66	-0.0083		Pass
			0	-4.37	-0.0064		Pass
			-10	-6.27	-0.0092		Pass
			-20	-8.33	-0.0122		Pass
			-30	-9.11	-0.0133		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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