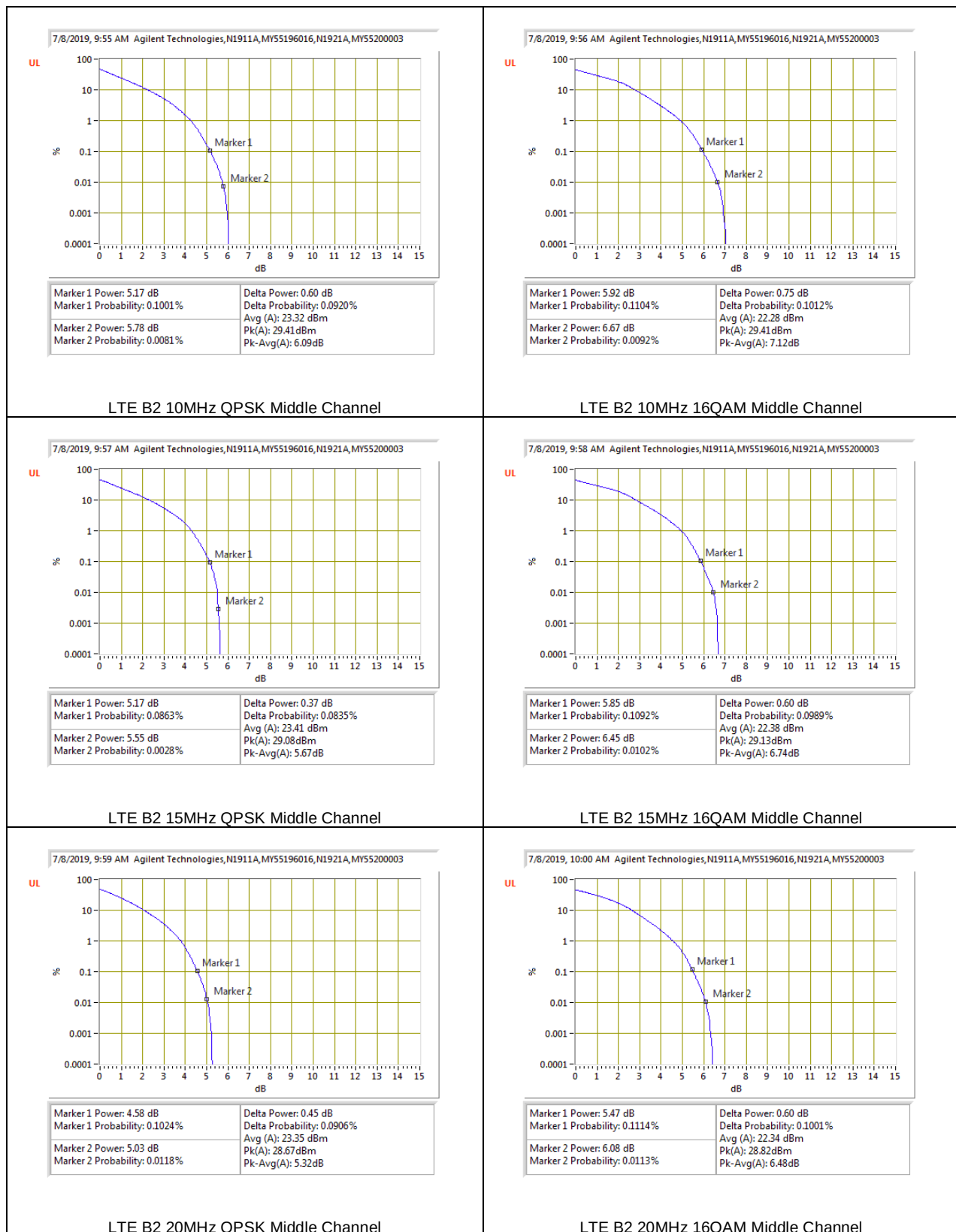


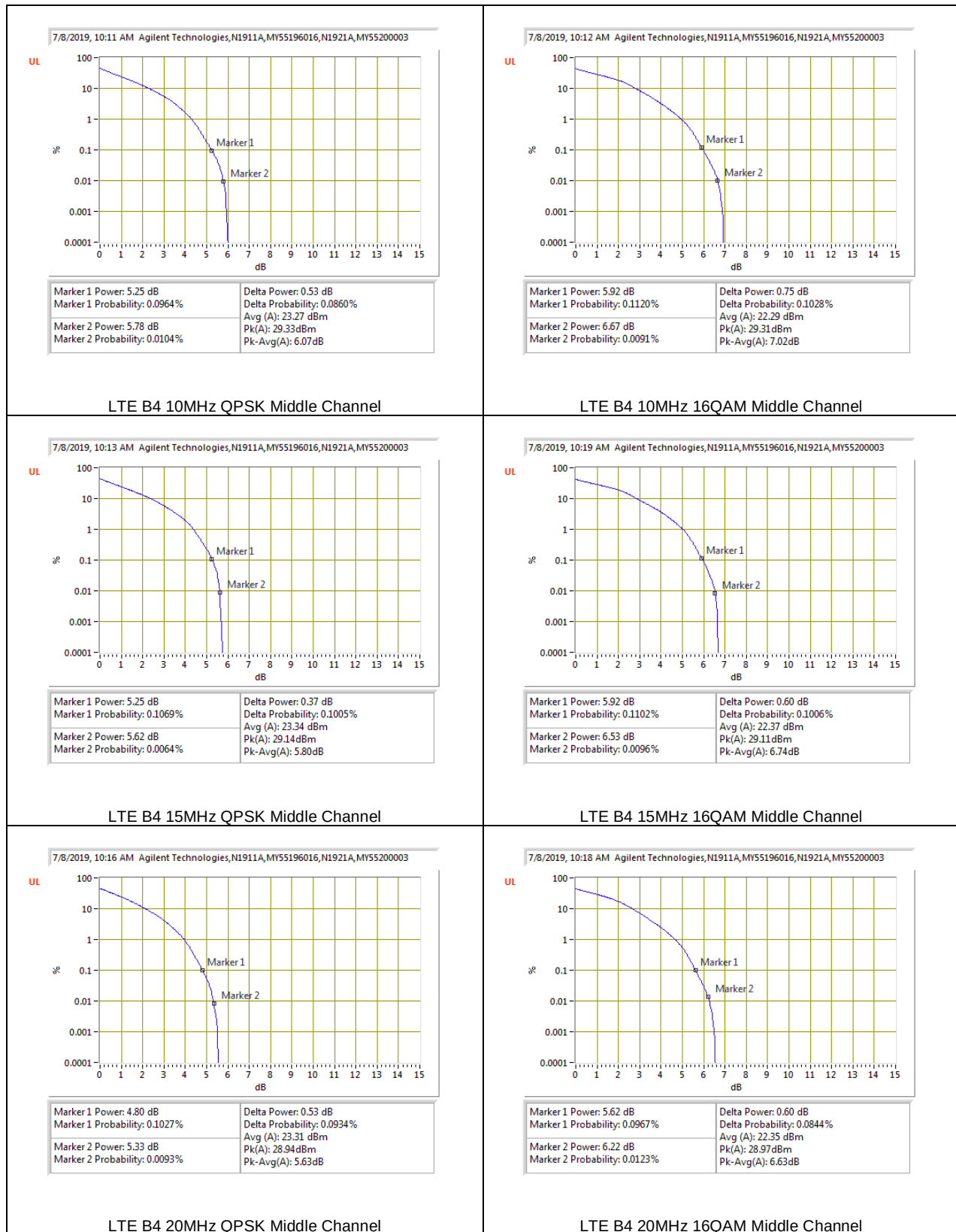
8.5.1. LTE BAND 2





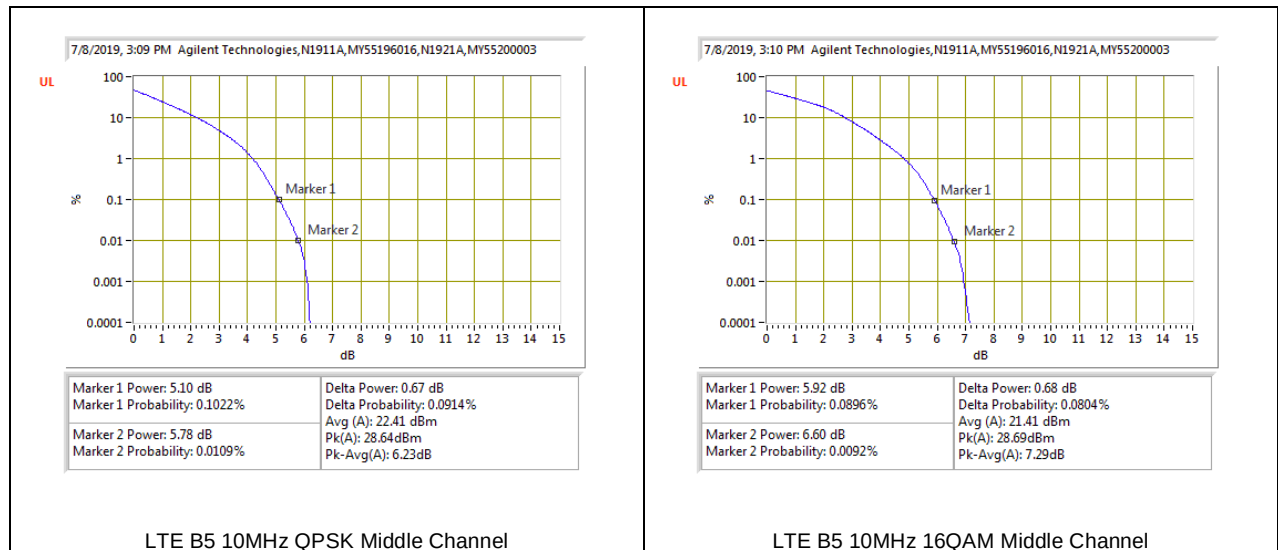
8.5.2. LTE BAND 4





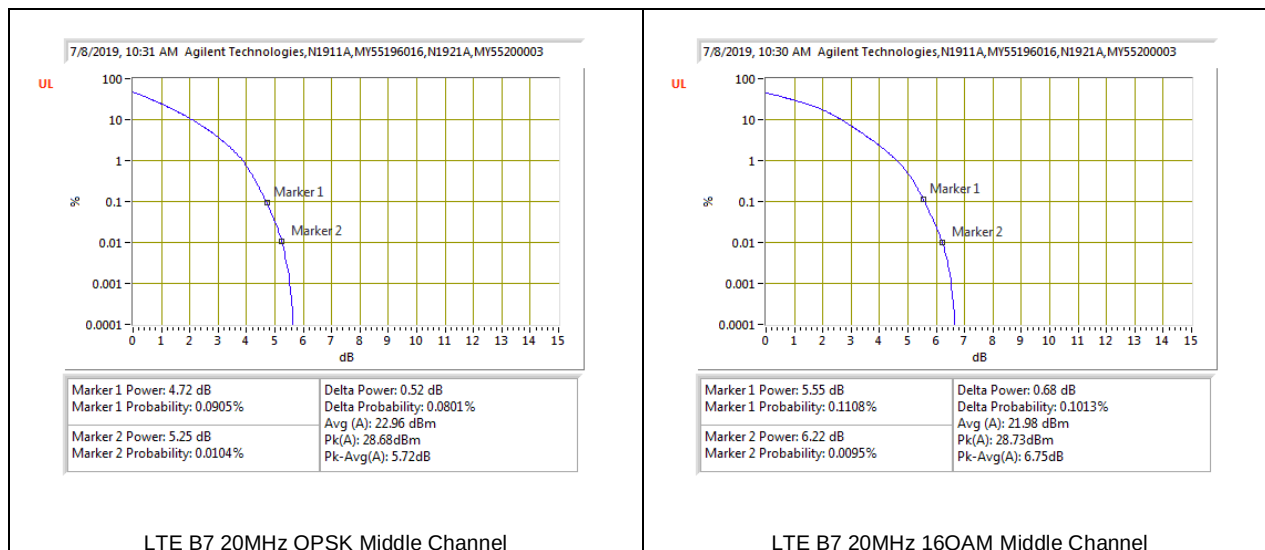
8.5.3. LTE BAND 5





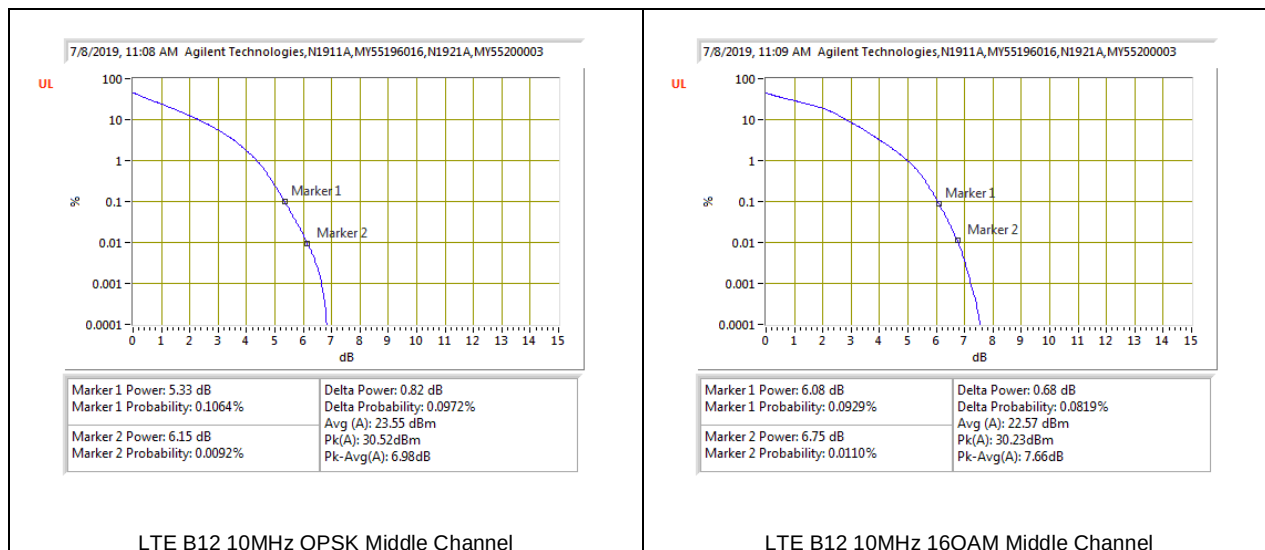
8.5.4. LTE BAND 7



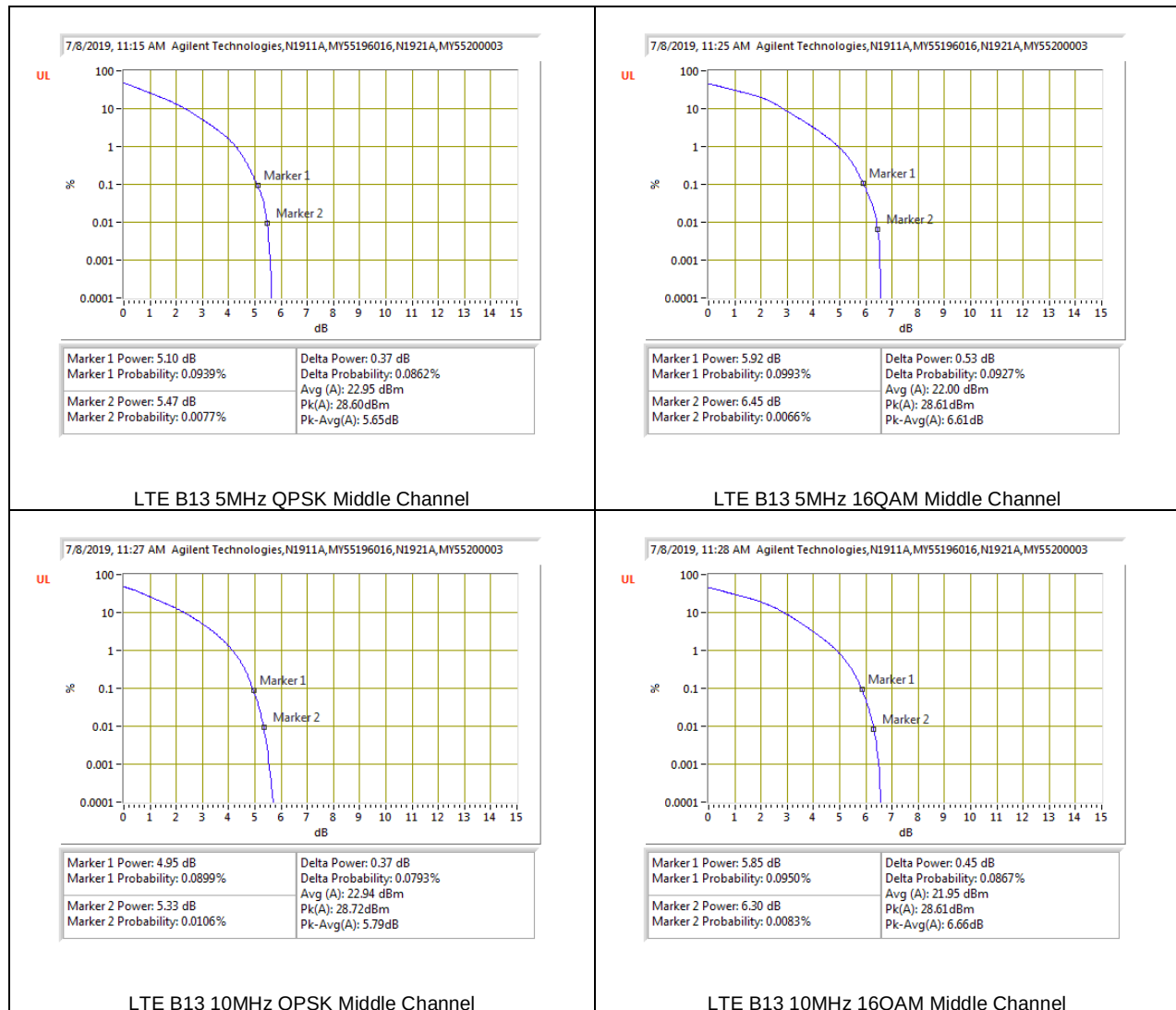


8.5.5. LTE BAND 12

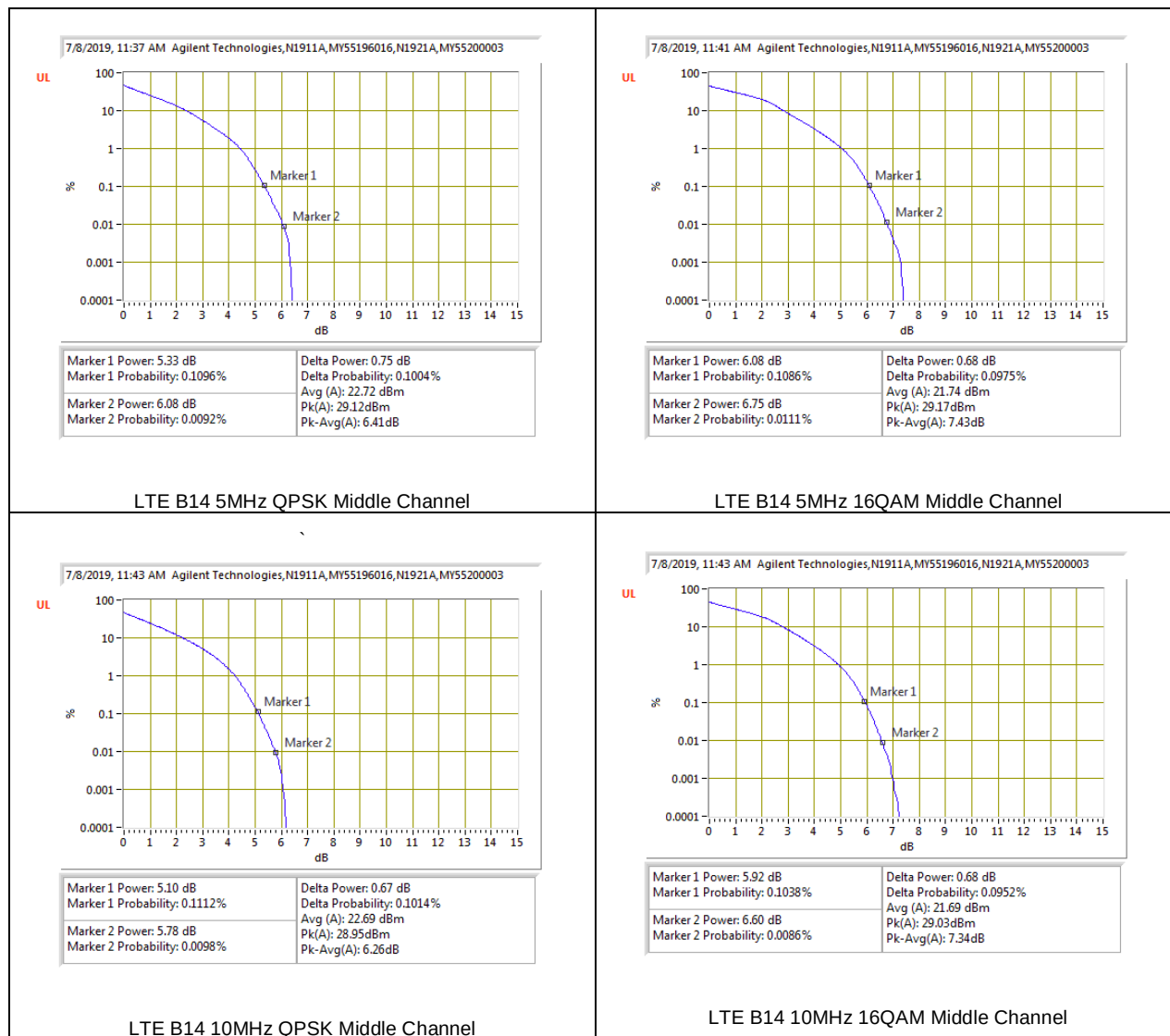




8.5.6. LTE BAND 13

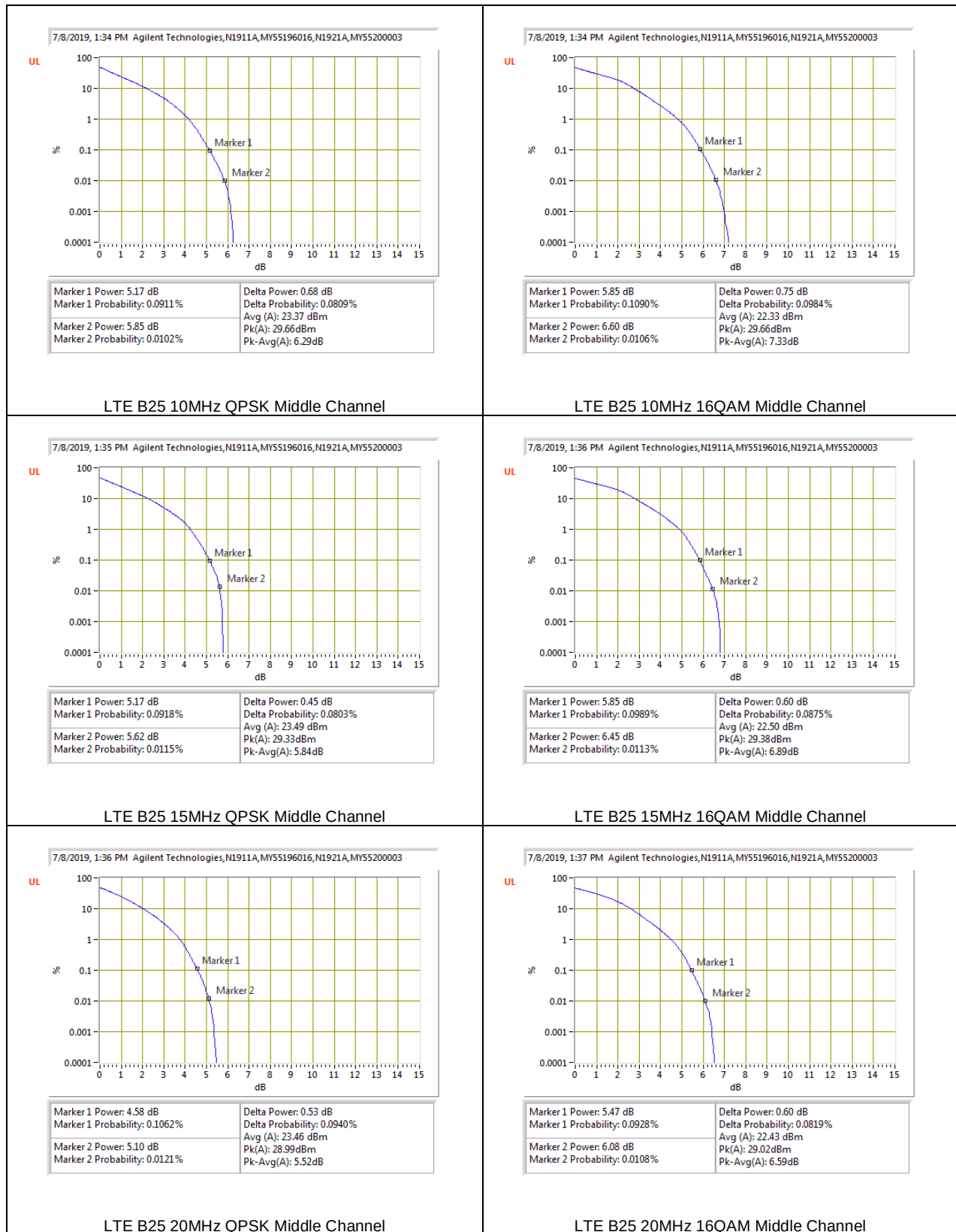


8.5.7. LTE BAND 14



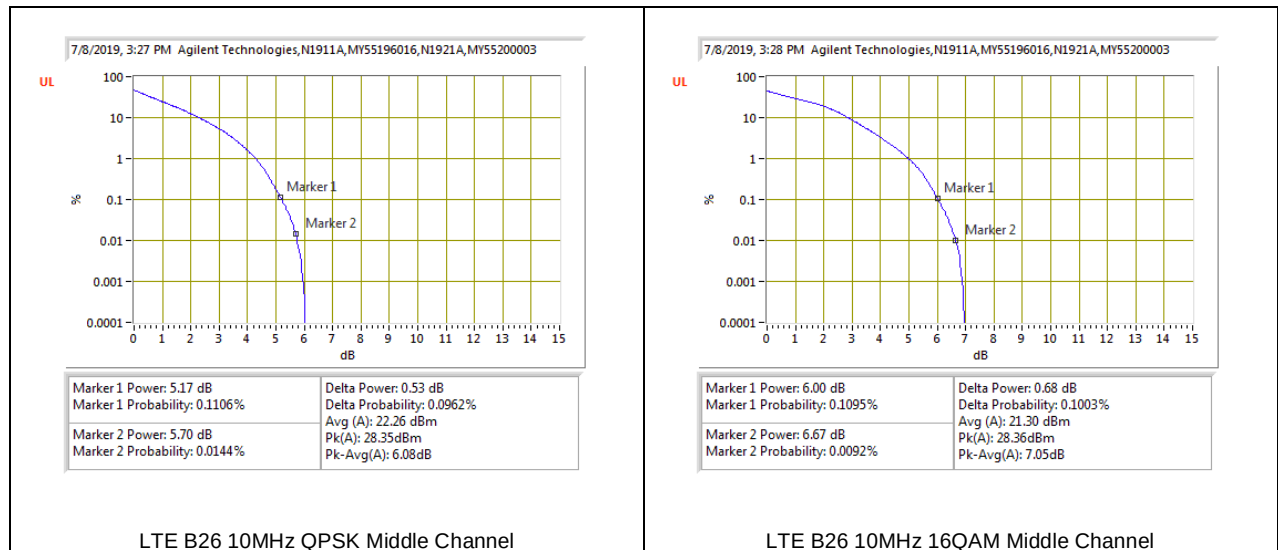
8.5.8. LTE BAND 25





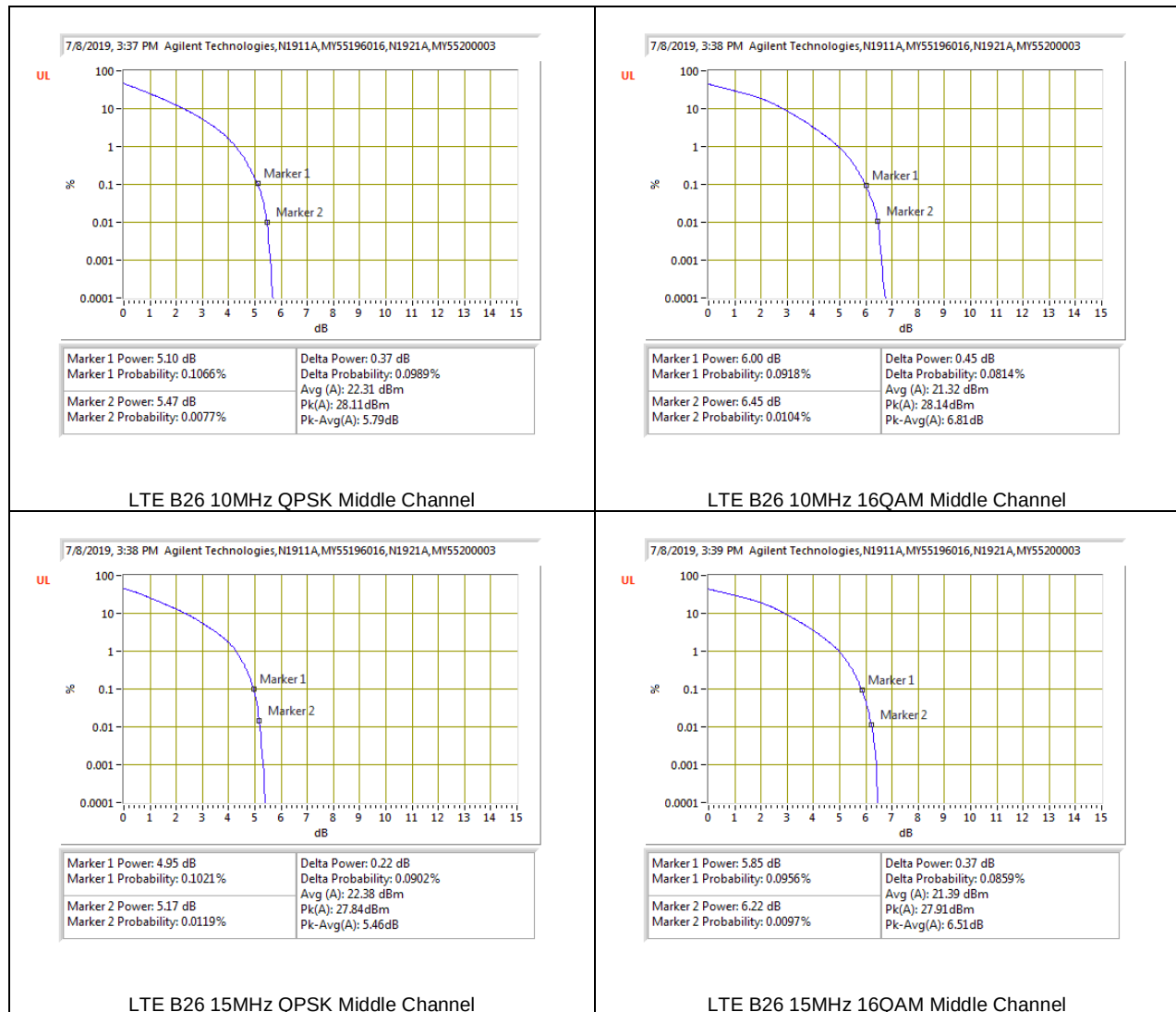
8.5.9. LTE BAND 26 (FCC PART 90S)



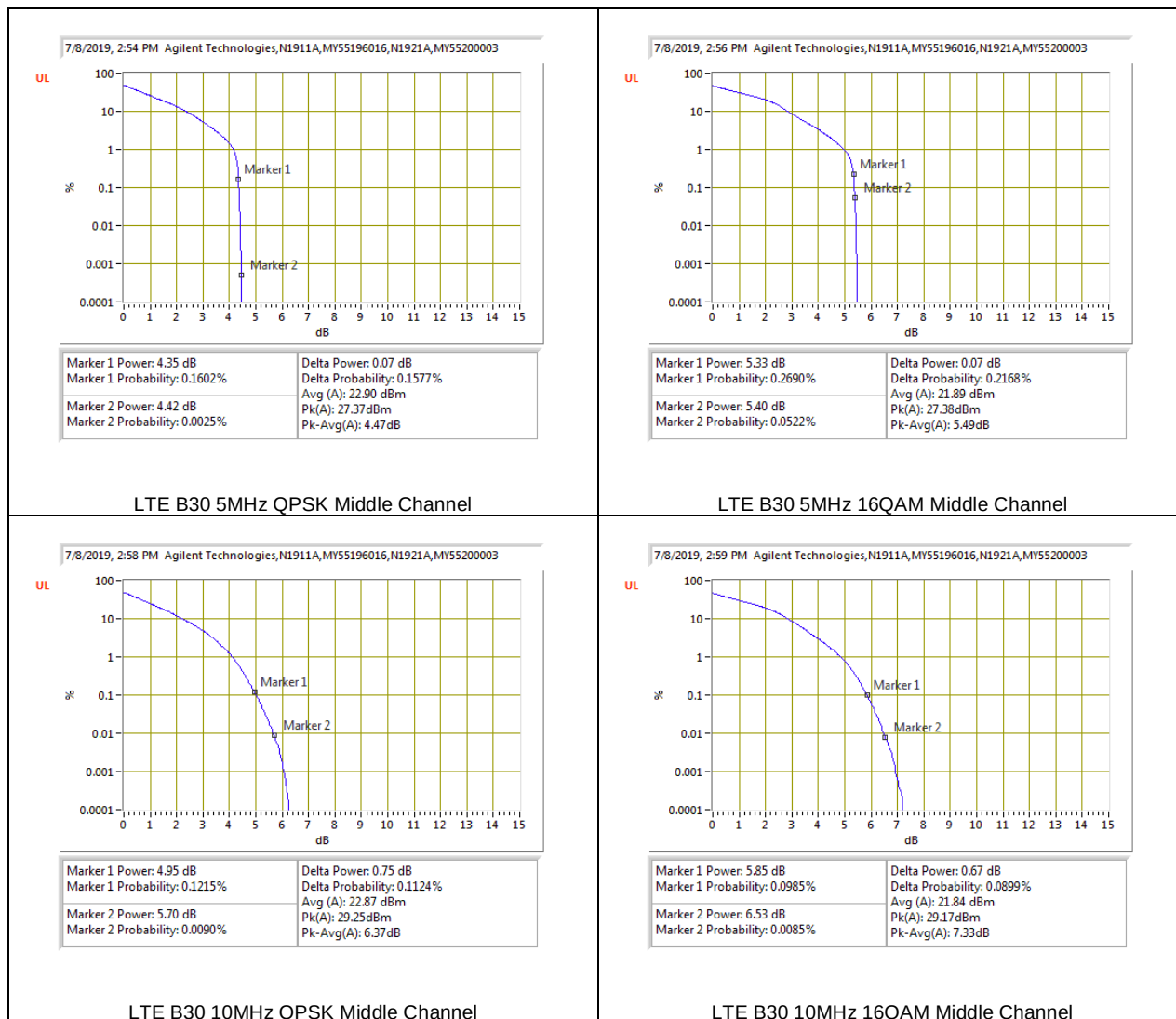


8.5.10. LTE BAND 26 (FCC PART 22)





8.5.11. LTE BAND 30



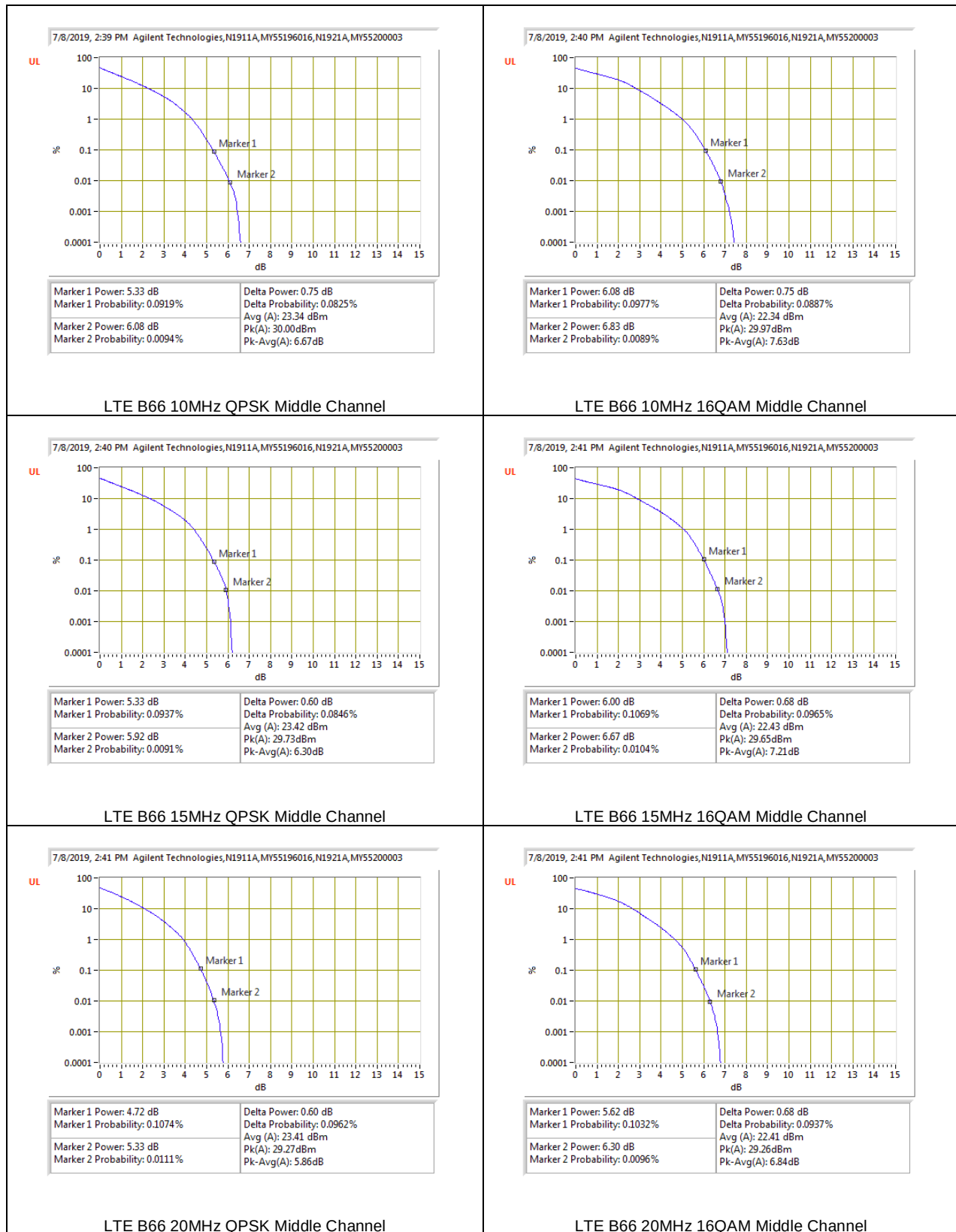
8.5.12. LTE BAND 41 (FCC)

ID:	19498 ER	Date:	7/8/19
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Band	Bandwidth (MHz)	Frequency (MHz)	RB Allocation	RB OffSet	Modulation	Conducted Power (dBm)		Peak-to-Average Power Ratio (dB)
						Peak	Average	
Band 41	5MHz	2593.0	25	0	QPSK	28.36	21.40	4.71
					16QAM	28.39	20.4	5.74
	10MHz		50	0	QPSK	28.34	21.4	4.69
					16QAM	28.36	20.36	5.75
	15MHz		75	0	QPSK	28.25	21.51	4.49
					16QAM	28.26	20.46	5.55
	20MHz		100	0	QPSK	28.02	21.38	4.39
					16QAM	28.14	20.4	5.49
Duty Cycle Correction Factor (dB) =			2.25					
Peak-to-Average Power Ratio= Peak Reading - Average Reading - Duty Cycle Correction Factor								

8.5.13. LTE BAND 66





9. RADIATED TEST RESULTS

9.1. FIELD STRENGTH OF SPURIOUS RADIATION

RULE PART(S)

FCC: §2.1053, §22.917, §24.238, §27.53, §90.691, §90.543

LIMIT

FCC: §22.917(a), §24.238(a), §27.53 (g), (h), §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.

FCC: §27.53 (Band 13)

(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.

FCC: §90.543 Emission Limitations. (Band 14)

(e) For operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least $43 + 10 \log (P)$ dB.

(f) For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics 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. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC: §27.53 (a) (Band 30)

For mobile and portable stations operating in the 2305-2315 MHz: 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: §27.53 (m) (Band 7, 41)

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.

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r01

All tests above 1GHz were done with a Resolution Bandwidth of 1MHz, and a Video Bandwidth of 3MHz.

MODES TESTED

- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 13
- LTE Band 14
- LTE Band 25
- LTE Band 26
- LTE Band 30
- LTE Band 41
- LTE Band 66

RESULTS

9.1.1. LTE BAND 2

QPSK LTE BAND 2 (20.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	19480 BS
Configuration:	EUT + Support Equipment
Mode	LTE 2 QPSK 20MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1860MHz												
1	1.85053	-54.98	Pk	26.5	-35.8	14	-50.28	-13	-37.28	0-360	148	H
2	3.70831	-66.64	Pk	30.5	-33.4	12.1	-57.44	-13	-44.44	0-360	148	H
3	5.54059	-69.65	Pk	34.1	-30.3	12.3	-53.55	-13	-40.55	0-360	148	H
4	7.39944	-71.07	Pk	37.8	-27.9	12.3	-48.87	-13	-35.87	0-360	148	H
5	1.85053	-53.05	Pk	26.5	-35.8	11.7	-50.65	-13	-37.65	0-360	148	V
6	3.69981	-67.07	Pk	30.5	-33.5	11.8	-58.27	-13	-45.27	0-360	148	V
7	5.54431	-69.18	Pk	34.1	-30.4	12	-53.48	-13	-40.48	0-360	148	V
8	7.39359	-71.74	Pk	37.8	-27.9	12.2	-49.64	-13	-36.64	0-360	148	V
1880MHz												
1	1.87072	-56.19	Pk	26.6	-35.8	12.4	-52.99	-13	-39.99	0-360	148	H
2	3.7455	-66.2	Pk	30.7	-33.4	11.8	-57.1	-13	-44.1	0-360	148	H
3	5.60063	-70.35	Pk	34	-30.5	11.8	-55.05	-13	-42.05	0-360	148	H
4	7.50409	-72.19	Pk	37.5	-27.9	12.1	-50.49	-13	-37.49	0-360	148	H
5	1.87072	-55.83	Pk	26.6	-35.8	12.7	-52.33	-13	-39.33	0-360	148	V
6	3.74019	-67.96	Pk	30.6	-33.4	11.8	-58.96	-13	-45.96	0-360	148	V
7	5.61922	-68.78	Pk	34	-30.6	12	-53.38	-13	-40.38	0-360	148	V
8	7.47381	-72.49	Pk	37.5	-27.8	11.7	-51.09	-13	-38.09	0-360	148	V
1900MHz												
1	1.89038	-57.02	Pk	26.6	-35.8	13.2	-53.02	-13	-40.02	0-360	148	H
2	3.788	-67.51	Pk	30.9	-33.1	11.4	-58.31	-13	-45.31	0-360	148	H
3	5.67341	-68.78	Pk	34	-30.4	12	-53.18	-13	-40.18	0-360	148	H
4	7.56094	-71.85	Pk	37.4	-27.9	12.2	-50.15	-13	-37.15	0-360	148	H
5	1.89091	-60.03	Pk	26.6	-35.7	12.5	-56.63	-13	-43.63	0-360	148	V
6	3.77684	-68.24	Pk	30.8	-33.2	11.5	-59.14	-13	-46.14	0-360	148	V
7	5.67659	-69.69	Pk	34	-30.4	12.1	-53.99	-13	-40.99	0-360	148	V
8	7.56944	-71.68	Pk	37.4	-27.8	11.9	-50.18	-13	-37.18	0-360	148	V

16QAM LTE BAND 2 (20.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	19480 BS
Configuration:	EUT + Support Equipment
Mode	LTE 2 16QAM 20MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1860MHz												
1	1.85106	-55.5	Pk	26.5	-35.8	14.1	-50.7	-13	-37.7	0-360	148	H
2	3.70619	-67.02	Pk	30.5	-33.4	12.1	-57.82	-13	-44.82	0-360	148	H
3	5.53847	-69.62	Pk	34.1	-30.3	12.4	-53.42	-13	-40.42	0-360	148	H
4	7.39094	-71.56	Pk	37.8	-27.9	12.3	-49.36	-13	-36.36	0-360	148	H
5	1.85053	-52.31	Pk	26.5	-35.8	11.7	-49.91	-13	-36.91	0-360	148	V
6	3.70566	-67.41	Pk	30.5	-33.5	11.8	-58.61	-13	-45.61	0-360	148	V
7	5.55919	-69.1	Pk	34.1	-30.5	11.9	-53.6	-13	-40.6	0-360	148	V
8	7.41113	-71.81	Pk	37.7	-27.8	12	-49.91	-13	-36.91	0-360	148	V
1880MHz												
1	1.87072	-55.63	Pk	26.6	-35.8	12.4	-52.43	-13	-39.43	0-360	148	H
2	3.75028	-67.68	Pk	30.7	-33.3	11.9	-58.38	-13	-45.38	0-360	148	H
3	5.60116	-70.18	Pk	34	-30.5	11.8	-54.88	-13	-41.88	0-360	148	H
4	7.48284	-71.3	Pk	37.5	-27.8	11.9	-49.7	-13	-36.7	0-360	148	H
5	1.87072	-56.69	Pk	26.6	-35.8	12.7	-53.19	-13	-40.19	0-360	148	V
6	3.74019	-67.51	Pk	30.6	-33.4	11.8	-58.51	-13	-45.51	0-360	148	V
7	5.62028	-69.38	Pk	34	-30.6	12	-53.98	-13	-40.98	0-360	148	V
8	7.47913	-72.47	Pk	37.5	-27.8	11.7	-51.07	-13	-38.07	0-360	148	V
1900MHz												
1	1.89091	-56.37	Pk	26.6	-35.7	13.2	-52.27	-13	-39.27	0-360	148	H
2	3.78056	-67.67	Pk	30.8	-33.2	11.4	-58.67	-13	-45.67	0-360	148	H
3	5.68191	-68.49	Pk	34	-30.4	12.2	-52.69	-13	-39.69	0-360	148	H
4	7.57156	-70.59	Pk	37.4	-27.8	12.2	-48.79	-13	-35.79	0-360	148	H
5	1.89091	-60.53	Pk	26.6	-35.7	12.5	-57.13	-13	-44.13	0-360	148	V
6	3.77684	-66.89	Pk	30.8	-33.2	11.5	-57.79	-13	-44.79	0-360	148	V
7	5.66491	-69.88	Pk	34	-30.4	12	-54.28	-13	-41.28	0-360	148	V
8	7.56891	-71.55	Pk	37.4	-27.8	11.9	-50.05	-13	-37.05	0-360	148	V

9.1.2. LTE BAND 4

QPSK LTE BAND 4 (20.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	19480 BS
Configuration:	EUT + Support Equipment
Mode	LTE 4 QPSK 20MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1720MHz												
1	1.71081	-59.1	Pk	26	-35.8	11.6	-57.3	-13	-44.3	0-360	148	H
2	3.42197	-66.04	Pk	30.7	-34.4	11.9	-57.84	-13	-44.84	0-360	148	H
3	5.14747	-68.29	Pk	35.7	-31.2	11.9	-51.89	-13	-38.89	0-360	148	H
4	6.85756	-71.38	Pk	37.1	-28.1	12.4	-49.98	-13	-36.98	0-360	148	H
5	1.71081	-58.03	Pk	26	-35.8	12	-55.83	-13	-42.83	0-360	148	V
6	3.41188	-66.86	Pk	30.8	-34.4	12	-58.46	-13	-45.46	0-360	148	V
7	5.14056	-67.54	Pk	35.7	-31.3	12	-51.14	-13	-38.14	0-360	148	V
8	6.85809	-70.95	Pk	37.1	-28.1	12.4	-49.55	-13	-36.55	0-360	148	V
9	8.55544	-56.96	Pk	38	-26.3	12.1	-33.16	-13	-20.16	0-360	148	V
1732.5MHz												
1	1.72303	-59.1	Pk	26	-35.8	11.3	-57.6	-13	-44.6	0-360	148	H
2	3.44694	-64.3	Pk	30.6	-34.3	11.9	-56.1	-13	-43.1	0-360	148	H
3	5.17297	-69.3	Pk	35.6	-31	12.2	-52.5	-13	-39.5	0-360	148	H
4	6.88572	-70.28	Pk	37.1	-28.2	12.2	-49.18	-13	-36.18	0-360	148	H
5	8.61759	-65.86	Pk	38.1	-26.1	12.4	-41.46	-13	-28.46	0-360	148	H
6	1.72356	-59.2	Pk	26	-35.8	12.4	-56.6	-13	-43.6	0-360	148	V
7	3.44375	-65.66	Pk	30.6	-34.3	12	-57.36	-13	-44.36	0-360	148	V
8	5.17031	-68.87	Pk	35.6	-31	12.1	-52.17	-13	-39.17	0-360	148	V
9	6.89103	-71.27	Pk	37.2	-28.3	12	-50.37	-13	-37.37	0-360	148	V
10	8.61759	-54.23	Pk	38.1	-26.1	12.1	-30.13	-13	-17.13	0-360	148	V
1745MHz												
1	1.73578	-62.08	Pk	26.1	-35.7	11.6	-60.08	-13	-47.08	0-360	148	H
2	3.47191	-63.61	Pk	30.5	-34.1	12	-55.21	-13	-42.21	0-360	148	H
3	5.21122	-69.27	Pk	35.5	-31	12.2	-52.57	-13	-39.57	0-360	148	H
4	6.93778	-69.98	Pk	37.2	-28.2	12	-48.98	-13	-35.98	0-360	148	H
5	1.73578	-59.97	Pk	26.1	-35.7	12.5	-57.07	-13	-44.07	0-360	148	V
6	3.47669	-66.31	Pk	30.5	-34.1	11.9	-58.01	-13	-45.01	0-360	148	V
7	5.20431	-68.93	Pk	35.5	-31.1	11.7	-52.83	-13	-39.83	0-360	148	V
8	6.95106	-72.11	Pk	37.2	-28.2	11.8	-51.31	-13	-38.31	0-360	148	V
9	8.68028	-56.08	Pk	38.2	-26.1	12.1	-31.88	-13	-18.88	0-360	148	V

16QAM LTE BAND 4 (20.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	19480 BS
Configuration:	EUT + Support Equipment
Mode	LTE 4 16QAM 20MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1720MHz												
1	1.71081	-60.92	Pk	26	-35.8	11.6	-59.12	-13	-46.12	0-360	148	H
2	3.42197	-66.16	Pk	30.7	-34.4	11.9	-57.96	-13	-44.96	0-360	148	H
3	5.131	-68.98	Pk	35.7	-31.2	11.9	-52.58	-13	-39.58	0-360	148	H
4	6.82197	-70.55	Pk	37	-28.2	12.2	-49.55	-13	-36.55	0-360	148	H
5	8.55491	-66.58	Pk	38	-26.3	12.3	-42.58	-13	-29.58	0-360	148	H
6	1.71081	-57.45	Pk	26	-35.8	12	-55.25	-13	-42.25	0-360	148	V
7	3.42675	-66.67	Pk	30.7	-34.4	11.8	-58.57	-13	-45.57	0-360	148	V
8	5.13206	-68.79	Pk	35.7	-31.2	11.9	-52.39	-13	-39.39	0-360	148	V
9	6.84534	-70.94	Pk	37.1	-28.2	12.3	-49.74	-13	-36.74	0-360	148	V
10	8.55544	-56.27	Pk	38	-26.3	12.1	-32.47	-13	-19.47	0-360	148	V
1732.5MHz												
1	1.72356	-58.81	Pk	26	-35.8	11.3	-57.31	-13	-44.31	0-360	148	H
2	3.44694	-64.86	Pk	30.6	-34.3	11.9	-56.66	-13	-43.66	0-360	148	H
3	5.16659	-69.54	Pk	35.6	-31	12.2	-52.74	-13	-39.74	0-360	148	H
4	6.91334	-71.47	Pk	37.2	-28.2	12.4	-50.07	-13	-37.07	0-360	148	H
5	8.61759	-66.94	Pk	38.1	-26.1	12.4	-42.54	-13	-29.54	0-360	148	H
6	1.72303	-58.48	Pk	26	-35.8	12.3	-55.98	-13	-42.98	0-360	148	V
7	3.44269	-66.4	Pk	30.6	-34.3	11.9	-58.2	-13	-45.2	0-360	148	V
8	5.17563	-68.67	Pk	35.6	-31	12.1	-51.97	-13	-38.97	0-360	148	V
9	6.88784	-70.93	Pk	37.1	-28.2	12.1	-49.93	-13	-36.93	0-360	148	V
10	8.61759	-54.41	Pk	38.1	-26.1	12.1	-30.31	-13	-17.31	0-360	148	V
1745MHz												
1	1.73578	-59.7	Pk	26.1	-35.7	11.6	-57.7	-13	-44.7	0-360	148	H
2	3.47191	-63.51	Pk	30.5	-34.1	12	-55.11	-13	-42.11	0-360	148	H
3	5.20033	-68.5	Pk	35.5	-31.1	12	-52.1	-13	-39.1	0-360	148	H
4	6.94602	-72	Pk	37.2	-28.2	12.1	-50.9	-13	-37.9	0-360	148	H
5	1.73578	-60.07	Pk	26.1	-35.7	12.5	-57.17	-13	-44.17	0-360	148	V
6	3.46659	-66.44	Pk	30.5	-34.1	12.1	-57.94	-13	-44.94	0-360	148	V
7	5.20006	-69.37	Pk	35.5	-31.1	11.5	-53.47	-13	-40.47	0-360	148	V
8	6.933	-72.1	Pk	37.2	-28.2	11.9	-51.2	-13	-38.2	0-360	148	V
9	8.68028	-57.09	Pk	38.2	-26.1	12.1	-32.89	-13	-19.89	0-360	148	V

9.1.3. LTE BAND 5

QPSK LTE BAND 5 (10.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 5 QPSK 10MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	LTE LIMIT	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
829MHz												
1	1.64919	-55.28	Pk	25.7	-35.8	12.4	-52.98	-13	-39.98	0-360	148	H
2	2.47316	-62	Pk	29.9	-35.5	11.5	-56.1	-13	-43.1	0-360	148	H
3	3.21213	-64.74	Pk	31.7	-34.7	11.7	-56.04	-13	-43.04	0-360	148	H
4	1.64866	-63.65	Pk	25.7	-35.8	11.2	-62.55	-13	-49.55	0-360	148	V
5	2.46944	-65.27	Pk	29.9	-35.5	11.7	-59.17	-13	-46.17	0-360	148	V
6	3.21584	-66.65	Pk	31.7	-34.7	11.4	-58.25	-13	-45.25	0-360	148	V
836.5MHz												
1	1.66353	-57.74	Pk	25.8	-35.8	12.1	-55.64	-13	-42.64	0-360	149	H
2	2.40197	-61.05	Pk	29.6	-35.5	11.6	-55.35	-13	-42.35	0-360	149	H
3	3.43366	-64.63	Pk	30.7	-34.3	11.9	-56.33	-13	-43.33	0-360	149	H
4	1.66353	-60.73	Pk	25.8	-35.8	11.2	-59.53	-13	-46.53	0-360	149	V
5	2.51247	-60.95	Pk	30	-35.5	11.7	-54.75	-13	-41.75	0-360	149	V
6	3.34175	-65.69	Pk	31.3	-34.5	11.8	-57.09	-13	-44.09	0-360	149	V
844MHz												
1	1.67894	-60.57	Pk	25.8	-35.8	11.9	-58.67	-13	-45.67	0-360	148	H
2	2.52097	-65.09	Pk	30.1	-35.4	12.3	-58.09	-13	-45.09	0-360	148	H
3	3.34706	-65.56	Pk	31.2	-34.4	11.8	-56.96	-13	-43.96	0-360	148	H
4	1.67894	-63.82	Pk	25.8	-35.8	11.7	-62.12	-13	-49.12	0-360	148	V
5	1.87869	-60.59	Pk	26.6	-35.8	12.2	-57.59	-13	-44.59	0-360	148	V
6	2.40144	-62.33	Pk	29.6	-35.5	12.3	-55.93	-13	-42.93	0-360	148	V
7	2.51513	-65.03	Pk	30.1	-35.4	11.8	-58.53	-13	-45.53	0-360	148	V
8	3.33431	-65.77	Pk	31.3	-34.5	11.9	-57.07	-13	-44.07	0-360	148	V

16QAM LTE BAND 5 (10.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 5 16QAM 10MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	LTE LIMIT	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
829MHz												
1	1.64919	-55.74	Pk	25.7	-35.8	12.4	-53.44	-13	-40.44	0-360	148	H
2	2.47369	-61.88	Pk	29.9	-35.5	11.5	-55.98	-13	-42.98	0-360	148	H
3	3.41878	-65.79	Pk	30.8	-34.4	11.9	-57.49	-13	-44.49	0-360	148	H
4	1.64919	-62.64	Pk	25.7	-35.8	11.2	-61.54	-13	-48.54	0-360	148	V
5	2.35575	-63.8	Pk	29.2	-35.6	12.2	-58	-13	-45	0-360	148	V
6	3.28969	-65.79	Pk	31.5	-34.5	11.9	-56.89	-13	-43.89	0-360	148	V
836.5MHz												
1	1.66406	-58.77	Pk	25.8	-35.8	12.1	-56.67	-13	-43.67	0-360	148	H
2	2.496	-62.27	Pk	30	-35.5	11.6	-56.17	-13	-43.17	0-360	148	H
3	3.31838	-66.96	Pk	31.4	-34.5	11.6	-58.46	-13	-45.46	0-360	148	H
4	1.66406	-61.56	Pk	25.8	-35.8	11.2	-60.36	-13	-47.36	0-360	148	V
5	2.47953	-56.18	Pk	29.9	-35.5	11.2	-50.58	-13	-37.58	0-360	148	V
6	3.30881	-66.85	Pk	31.4	-34.5	11.4	-58.55	-13	-45.55	0-360	148	V
844MHz												
1	1.67894	-60.25	Pk	25.8	-35.8	11.9	-58.35	-13	-45.35	0-360	148	H
2	2.39081	-65.31	Pk	29.5	-35.5	12	-59.31	-13	-46.31	0-360	148	H
3	3.28172	-65.1	Pk	31.5	-34.5	12.2	-55.9	-13	-42.9	0-360	148	H
4	1.69913	-65.15	Pk	25.9	-35.8	12.2	-62.85	-13	-49.85	0-360	148	V
5	2.51034	-63.82	Pk	30	-35.5	11.7	-57.62	-13	-44.62	0-360	148	V
6	3.33059	-64.72	Pk	31.3	-34.5	11.8	-56.12	-13	-43.12	0-360	148	V

9.1.4. LTE BAND 7

QPSK LTE BAND 7 (20.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/17/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 7 QPSK 20MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	LTE Limit	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2510MHz												
1	* 5.00563	-68.45	Pk	35.1	-31.4	12	-52.75	-25	-27.75	0-360	148	H
3	* 7.50728	-73.24	Pk	37.5	-27.9	12.1	-51.54	-25	-26.54	0-360	148	H
5	10.01106	-73.23	Pk	38	-25.1	12.4	-47.93	-25	-22.93	0-360	148	H
2	* 5.00881	-69.55	Pk	35.2	-31.3	11.7	-53.95	-25	-28.95	0-360	148	V
4	* 7.50834	-71.01	Pk	37.5	-27.9	12	-49.41	-25	-24.41	0-360	148	V
6	10.01106	-73.63	Pk	38	-25.1	12.3	-48.43	-25	-23.43	0-360	148	V
2535MHz												
1	* 5.06088	-69.57	Pk	35.5	-31.1	11.9	-53.27	-25	-28.27	0-360	148	H
3	* 7.59069	-72.07	Pk	37.3	-27.7	12	-50.47	-25	-25.47	0-360	148	H
5	10.10881	-73.38	Pk	38	-25.4	12.3	-48.48	-25	-23.48	0-360	148	H
2	* 5.06088	-69.75	Pk	35.5	-31.1	11.8	-53.55	-25	-28.55	0-360	148	V
4	* 7.58963	-72.41	Pk	37.3	-27.7	11.8	-51.01	-25	-26.01	0-360	148	V
6	10.11147	-74.79	Pk	37.9	-25.4	12.2	-50.09	-25	-25.09	0-360	148	V
2560MHz												
1	* 5.11241	-69.52	Pk	35.7	-31	12.3	-52.52	-25	-27.52	0-360	148	H
3	* 7.66134	-72.79	Pk	37.4	-27.6	12	-50.99	-25	-25.99	0-360	148	H
4	* 7.66134	-72.79	Pk	37.4	-27.6	12	-50.99	-25	-25.99	0-360	148	H
5	10.21294	-74.56	Pk	38	-25.1	12.3	-49.36	-25	-24.36	0-360	148	H
2	* 5.10922	-69.11	Pk	35.7	-31	12.3	-52.11	-25	-27.11	0-360	148	V
6	10.21081	-75.2	Pk	38	-25.1	12.2	-50.1	-25	-25.1	0-360	148	V

16QAM LTE BAND 7 (20.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/17/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 7 16QAM 20MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	LTE Limit	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2510MHz												
1	* 5.00669	-68.51	Pk	35.1	-31.4	12	-52.81	-25	-27.81	0-360	148	H
3	* 7.51419	-72.69	Pk	37.5	-27.9	12	-51.09	-25	-26.09	0-360	148	H
5	10.01372	-73.36	Pk	38	-25	12.5	-47.86	-25	-22.86	0-360	148	H
2	* 5.01147	-69.42	Pk	35.2	-31.4	11.6	-54.02	-25	-29.02	0-360	148	V
4	* 7.51578	-73.25	Pk	37.5	-27.9	11.9	-51.75	-25	-26.75	0-360	148	V
6	10.01106	-71.96	Pk	38	-25.1	12.3	-46.76	-25	-21.76	0-360	148	V
2535MHz												
1	* 5.06619	-69.89	Pk	35.6	-31.2	12	-53.49	-25	-28.49	0-360	148	H
3	* 7.68366	-72.97	Pk	37.5	-27.6	12.3	-50.77	-25	-25.77	0-360	148	H
5	10.13272	-74.09	Pk	37.9	-25.4	12.4	-49.19	-25	-24.19	0-360	148	H
2	* 5.06459	-70.4	Pk	35.6	-31.2	11.9	-54.1	-25	-29.1	0-360	148	V
4	* 7.67941	-71.7	Pk	37.5	-27.6	12.3	-49.5	-25	-24.5	0-360	148	V
6	10.12953	-74.48	Pk	37.9	-25.4	12.3	-49.68	-25	-24.68	0-360	148	V
2560MHz												
1	* 5.10763	-68.94	Pk	35.7	-31	12.2	-52.04	-25	-27.04	0-360	148	H
3	* 7.65816	-71.64	Pk	37.4	-27.6	12	-49.84	-25	-24.84	0-360	148	H
5	10.20869	-73.53	Pk	37.9	-25.1	12.3	-48.43	-25	-23.43	0-360	148	H
2	* 5.11028	-69.64	Pk	35.7	-31	12.2	-52.74	-25	-27.74	0-360	148	V
4	* 7.65975	-72.89	Pk	37.4	-27.6	11.9	-51.19	-25	-26.19	0-360	148	V
6	10.20816	-74.56	Pk	37.9	-25.1	12.2	-49.56	-25	-24.56	0-360	148	V

9.1.5. LTE BAND 12

QPSK LTE BAND 12 (10.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 12 QPSK 10MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	LTE Limit	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
704MHz												
1	1.39844	-58.68	Pk	25.2	-35.9	12.5	-56.88	-13	-43.88	0-360	148	H
2	2.09863	-60.14	Pk	28.2	-35.6	12.3	-55.24	-13	-42.24	0-360	148	H
3	2.80944	-66.02	Pk	29.3	-35.2	12.3	-59.62	-13	-46.62	0-360	148	H
4	1.39897	-60.62	Pk	25.2	-35.9	10.7	-60.62	-13	-47.62	0-360	148	V
5	2.09863	-61	Pk	28.2	-35.6	11	-57.4	-13	-44.4	0-360	148	V
6	2.81475	-65.97	Pk	29.3	-35.2	11.7	-60.17	-13	-47.17	0-360	148	V
707.5MHz												
1	1.40588	-52.03	Pk	25.2	-35.9	12.5	-50.23	-13	-37.23	0-360	149	H
3	2.10925	-63.27	Pk	28.2	-35.6	12.2	-58.47	-13	-45.47	0-360	149	H
5	2.82272	-67.42	Pk	29.3	-35.2	11.9	-61.42	-13	-48.42	0-360	149	H
2	1.40588	-51.65	Pk	25.2	-35.9	11.2	-51.15	-13	-38.15	0-360	149	V
4	2.10872	-61.76	Pk	28.2	-35.6	11.1	-58.06	-13	-45.06	0-360	149	V
6	2.82166	-66.39	Pk	29.3	-35.2	12	-60.29	-13	-47.29	0-360	149	V
711MHz												
1	1.38409	-63.53	Pk	25.1	-35.8	11.7	-62.53	-13	-49.53	0-360	148	H
3	2.13475	-65.51	Pk	28.2	-35.6	12	-60.91	-13	-47.91	0-360	148	H
5	2.86097	-65.69	Pk	29.4	-35.1	12.2	-59.19	-13	-46.19	0-360	148	H
2	1.38356	-64.52	Pk	25.1	-35.8	10.6	-64.62	-13	-51.62	0-360	148	V
4	2.13369	-65.83	Pk	28.2	-35.6	12.2	-61.03	-13	-48.03	0-360	148	V
6	2.86203	-66.58	Pk	29.4	-35.1	11.8	-60.48	-13	-47.48	0-360	148	V

16QAM LTE BAND 12 (10.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 12 16QAM 10MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	LTE Limit	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
704MHz												
1	1.39897	-59.06	Pk	25.2	-35.9	12.5	-57.26	-13	-44.26	0-360	148	H
3	2.09863	-59.63	Pk	28.2	-35.6	12.3	-54.73	-13	-41.73	0-360	148	H
5	2.81953	-66.14	Pk	29.3	-35.3	12	-60.14	-13	-47.14	0-360	148	H
2	1.39897	-61.35	Pk	25.2	-35.9	10.7	-61.35	-13	-48.35	0-360	148	V
4	2.09916	-62.87	Pk	28.2	-35.6	11	-59.27	-13	-46.27	0-360	148	V
6	2.81581	-66.62	Pk	29.3	-35.2	11.8	-60.72	-13	-47.72	0-360	148	V
707.5MHz												
1	1.40588	-50.11	Pk	25.2	-35.9	12.5	-48.31	-13	-35.31	0-360	149	H
2	2.10978	-63.63	Pk	28.2	-35.6	12.1	-58.93	-13	-45.93	0-360	149	H
3	2.79244	-64.68	Pk	29.3	-35.2	11.6	-58.98	-13	-45.98	0-360	149	H
4	1.40641	-52.05	Pk	25.2	-35.9	11.2	-51.55	-13	-38.55	0-360	149	V
5	2.10925	-61.95	Pk	28.2	-35.6	11.1	-58.25	-13	-45.25	0-360	149	V
6	2.79244	-65.13	Pk	29.3	-35.2	11.8	-59.23	-13	-46.23	0-360	149	V
711MHz												
1	1.40747	-65.06	Pk	25.2	-35.9	12.5	-63.26	-13	-50.26	0-360	149	H
2	2.12678	-65.36	Pk	28.2	-35.6	11.8	-60.96	-13	-47.96	0-360	149	H
3	2.84291	-64.74	Pk	29.3	-35.2	12.2	-58.44	-13	-45.44	0-360	149	H
4	1.40588	-65.07	Pk	25.2	-35.9	11.2	-64.57	-13	-51.57	0-360	149	V
5	2.12838	-65.44	Pk	28.2	-35.6	11.9	-60.94	-13	-47.94	0-360	149	V
6	2.84397	-65.87	Pk	29.3	-35.2	11.7	-60.07	-13	-47.07	0-360	149	V

9.1.6. LTE BAND 13

QPSK LTE BAND 13 (10.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 13 QPSK 10MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	LTE Limit	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
782MHz												
1	1.56463	-50.98	Pk	25.5	-35.8	10.9	-50.38	-40	-10.38	0-360	149	H
3	2.34991	-65.79	Pk	29.1	-35.5	13	-59.19	-13	-46.19	0-360	149	H
5	3.11916	-65.21	Pk	31.3	-34.8	11.3	-57.41	-13	-44.41	0-360	149	H
2	1.56516	-62.61	Pk	25.5	-35.8	12.4	-60.51	-40	-20.51	0-360	149	V
4	2.34725	-65.61	Pk	29.1	-35.5	12.1	-59.91	-13	-46.91	0-360	149	V
6	3.108	-64.83	Pk	31.2	-34.8	11.8	-56.63	-13	-43.63	0-360	149	V

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

16QAM LTE BAND 13 (10.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 13 16QAM 10MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	LTE Limit	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
782MHz												
1	1.56464	-51.64	Pk	25.5	-35.8	10.9	-51.04	-40	-11.04	0-360	148	H
2	2.33238	-66.02	Pk	28.9	-35.6	12.5	-60.22	-13	-47.22	0-360	148	H
3	3.13084	-66.55	Pk	31.4	-34.8	11.4	-58.55	-13	-45.55	0-360	148	H
4	1.56463	-63.72	Pk	25.5	-35.8	12.4	-61.62	-40	-21.62	0-360	148	V
5	2.33238	-64	Pk	28.9	-35.6	12.3	-58.4	-13	-45.4	0-360	148	V
6	3.12925	-65.71	Pk	31.3	-34.8	11.3	-57.91	-13	-44.91	0-360	148	V

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

9.1.7. LTE BAND 14

QPSK LTE BAND 14 (10.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 14 QPSK 10MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	LTE Limit	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
793MHz												
1	1.57694	-52.93	Pk	25.5	-35.8	11.2	-52.03	-40	-12.03	0-360	148	H
3	2.36584	-64.27	Pk	29.3	-35.5	12.5	-57.97	-13	-44.97	0-360	148	H
5	3.17441	-65.88	Pk	31.6	-34.7	11.8	-57.18	-13	-44.18	0-360	148	H
2	1.57694	-60.8	Pk	25.5	-35.8	11.8	-59.3	-40	-19.3	0-360	148	V
4	2.36531	-64.79	Pk	29.3	-35.5	12.8	-58.19	-13	-45.19	0-360	148	V
6	3.176	-65.15	Pk	31.6	-34.7	11.7	-56.55	-13	-43.55	0-360	148	V

16QAM LTE BAND 14 (10.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 14 16QAM 10MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	LTE Limit	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
793MHz												
1	1.57694	-52.6	Pk	25.5	-35.8	11.2	-51.7	-40	-11.7	0-360	148	H
2	2.35469	-64.22	Pk	29.2	-35.6	12.7	-57.92	-13	-44.92	0-360	148	H
3	3.1675	-64.69	Pk	31.5	-34.7	12	-55.89	-13	-42.89	0-360	148	H
4	1.57694	-61.73	Pk	25.5	-35.8	11.8	-60.23	-40	-20.23	0-360	148	V
5	2.36053	-64.51	Pk	29.2	-35.5	12.5	-58.31	-13	-45.31	0-360	148	V
6	3.16272	-64.45	Pk	31.5	-34.6	11.9	-55.65	-13	-42.65	0-360	148	V

9.1.8. LTE BAND 25

QPSK LTE BAND 25 (20.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	19480 BS
Configuration:	EUT + Support Equipment
Mode	LTE 25 QPSK 20MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1860MHz												
1	1.85106	-54.55	Pk	26.5	-35.8	14.1	-49.75	-13	-36.75	0-360	148	H
2	3.69981	-66.67	Pk	30.5	-33.5	11.9	-57.77	-13	-44.77	0-360	148	H
3	5.54006	-68.93	Pk	34.1	-30.3	12.4	-52.73	-13	-39.73	0-360	148	H
4	7.41431	-70.95	Pk	37.7	-27.8	11.9	-49.15	-13	-36.15	0-360	148	H
5	1.85106	-54.08	Pk	26.5	-35.8	11.8	-51.58	-13	-38.58	0-360	148	V
6	3.70619	-66.87	Pk	30.5	-33.4	11.8	-57.97	-13	-44.97	0-360	148	V
7	5.55866	-68.62	Pk	34.1	-30.5	11.8	-53.22	-13	-40.22	0-360	148	V
8	7.41272	-71.97	Pk	37.7	-27.8	12	-50.07	-13	-37.07	0-360	148	V
1882.5MHz												
1	1.87338	-56.08	Pk	26.6	-35.8	12.2	-53.08	-13	-40.08	0-360	148	H
2	3.75188	-66.9	Pk	30.7	-33.3	11.8	-57.7	-13	-44.7	0-360	148	H
3	5.62719	-68.84	Pk	34	-30.6	12.3	-53.14	-13	-40.14	0-360	148	H
4	7.51472	-71.41	Pk	37.5	-27.9	12	-49.81	-13	-36.81	0-360	148	H
5	1.87338	-57.7	Pk	26.6	-35.8	12.6	-54.3	-13	-41.3	0-360	148	V
6	3.74709	-66.92	Pk	30.7	-33.4	11.9	-57.72	-13	-44.72	0-360	148	V
7	5.6155	-70.11	Pk	34	-30.5	11.8	-54.81	-13	-41.81	0-360	148	V
8	7.49241	-72.41	Pk	37.5	-27.9	11.9	-50.91	-13	-37.91	0-360	148	V
1905MHz												
1	1.89569	-55.63	Pk	26.6	-35.8	13.4	-51.43	-13	-38.43	0-360	148	H
2	3.79969	-67.32	Pk	31	-33.2	11.4	-58.12	-13	-45.12	0-360	148	H
3	5.69731	-70.25	Pk	34.1	-30.4	12.5	-54.05	-13	-41.05	0-360	148	H
4	7.56625	-71.5	Pk	37.4	-27.8	12.2	-49.7	-13	-36.7	0-360	148	H
5	1.89569	-58.98	Pk	26.6	-35.8	12.4	-55.78	-13	-42.78	0-360	148	V
6	3.78694	-67.5	Pk	30.9	-33.1	11.4	-58.3	-13	-45.3	0-360	148	V
7	5.68456	-69.06	Pk	34	-30.4	12.2	-53.26	-13	-40.26	0-360	148	V
8	7.58272	-72.25	Pk	37.3	-27.8	11.8	-50.95	-13	-37.95	0-360	148	V

16QAM LTE BAND 25 (20.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	19480 BS
Configuration:	EUT + Support Equipment
Mode	LTE 25 16QAM 20MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1860MHz												
1	1.85106	-55.24	Pk	26.5	-35.8	14.1	-50.44	-13	-37.44	0-360	148	H
2	3.70991	-67.88	Pk	30.5	-33.4	12.1	-58.68	-13	-45.68	0-360	148	H
3	5.53953	-68.82	Pk	34.1	-30.3	12.4	-52.62	-13	-39.62	0-360	148	H
4	7.39625	-72.18	Pk	37.8	-27.8	12.3	-49.88	-13	-36.88	0-360	148	H
5	1.85053	-53.1	Pk	26.5	-35.8	11.7	-50.7	-13	-37.7	0-360	148	V
6	3.69981	-66.65	Pk	30.5	-33.5	11.8	-57.85	-13	-44.85	0-360	148	V
7	5.54431	-68.03	Pk	34.1	-30.4	12	-52.33	-13	-39.33	0-360	148	V
8	7.40688	-72.29	Pk	37.7	-27.8	12	-50.39	-13	-37.39	0-360	148	V
1882.5MHz												
1	1.87284	-55.48	Pk	26.6	-35.8	12.2	-52.48	-13	-39.48	0-360	148	H
2	3.74816	-67.32	Pk	30.7	-33.3	11.9	-58.02	-13	-45.02	0-360	148	H
3	5.62134	-68.81	Pk	34	-30.6	11.9	-53.51	-13	-40.51	0-360	148	H
4	7.49984	-72.34	Pk	37.5	-27.9	12	-50.74	-13	-37.74	0-360	148	H
5	1.87284	-58.4	Pk	26.6	-35.8	12.6	-55	-13	-42	0-360	148	V
6	3.74816	-67.03	Pk	30.7	-33.3	11.8	-57.83	-13	-44.83	0-360	148	V
7	5.61072	-69.39	Pk	34	-30.5	11.7	-54.19	-13	-41.19	0-360	148	V
8	7.49825	-71.7	Pk	37.5	-27.9	11.8	-50.3	-13	-37.3	0-360	148	V
1905MHz												
1	1.89622	-55.52	Pk	26.6	-35.8	13.4	-51.32	-13	-38.32	0-360	148	H
2	3.80234	-68.01	Pk	31	-33.1	11.3	-58.81	-13	-45.81	0-360	148	H
3	5.6835	-69.2	Pk	34	-30.4	12.3	-53.3	-13	-40.3	0-360	148	H
4	7.56784	-71.9	Pk	37.4	-27.8	12.2	-50.1	-13	-37.1	0-360	148	H
5	1.89569	-60.08	Pk	26.6	-35.8	12.4	-56.88	-13	-43.88	0-360	148	V
6	3.79119	-67.68	Pk	30.9	-33.1	11.3	-58.58	-13	-45.58	0-360	148	V
7	5.69519	-68.94	Pk	34	-30.4	12.4	-52.94	-13	-39.94	0-360	148	V
8	7.57794	-72.23	Pk	37.3	-27.8	11.9	-50.83	-13	-37.83	0-360	148	V

9.1.9. LTE BAND 26 (FCC PART 90S)

QPSK LTE BAND 26 (10.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 26 QPSK 10MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
819MHz												
1	1.629	-57	Pk	25.6	-35.8	12.9	-54.3	-13	-41.3	0-360	148	H
2	2.53266	-64.96	Pk	30.2	-35.4	12.4	-57.76	-13	-44.76	0-360	148	H
3	3.26073	-67.04	Pk	31.6	-34.6	12	-58.04	-13	-45.04	0-360	148	H
4	1.629	-60.13	Pk	25.6	-35.8	10.7	-59.63	-13	-46.63	0-360	148	V
5	2.53213	-62.58	Pk	30.2	-35.4	11.7	-56.08	-13	-43.08	0-360	148	V
6	3.25888	-66.72	Pk	31.6	-34.6	11.6	-58.12	-13	-45.12	0-360	148	V

16QAM LTE BAND 26 (10.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 26 16QAM 10MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
819MHz												
1	1.629	-57.07	Pk	25.6	-35.8	12.9	-54.37	-13	-41.37	0-360	148	H
2	2.44341	-63.76	Pk	29.8	-35.5	11.2	-58.26	-13	-45.26	0-360	148	H
3	3.26631	-66.7	Pk	31.6	-34.6	12.1	-57.6	-13	-44.6	0-360	148	H
4	1.629	-63.09	Pk	25.6	-35.8	10.7	-62.59	-13	-49.59	0-360	148	V
5	2.44447	-55.89	Pk	29.9	-35.5	11	-50.49	-13	-37.49	0-360	148	V
6	3.26153	-66.3	Pk	31.6	-34.6	11.7	-57.6	-13	-44.6	0-360	148	V

9.1.10. LTE BAND 26 (FCC PART 22)

QPSK LTE BAND 26 (15.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	19480 BS
Configuration:	EUT + Support Equipment
Mode	LTE 26 QPSK 15MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
831.5MHz												
1	1.64919	-57.68	Pk	25.7	-35.8	12.4	-55.38	-13	-42.38	0-360	148	H
2	2.47209	-65.49	Pk	29.9	-35.5	11.5	-59.59	-13	-46.59	0-360	148	H
3	3.29234	-65.07	Pk	31.5	-34.5	12	-56.07	-13	-43.07	0-360	148	H
4	4.12375	-63.25	Pk	32.2	-32.1	11.6	-51.55	-13	-38.55	0-360	148	H
5	1.64919	-63.85	Pk	25.7	-35.8	11.2	-62.75	-13	-49.75	0-360	148	V
6	2.46784	-64.89	Pk	29.9	-35.5	11.7	-58.79	-13	-45.79	0-360	148	V
7	3.28969	-66.27	Pk	31.5	-34.5	11.9	-57.37	-13	-44.37	0-360	148	V
8	4.12375	-64.24	Pk	32.2	-32.1	11.3	-52.84	-13	-39.84	0-360	148	V
836.5MHz												
1	1.65928	-53.99	Pk	25.7	-35.8	12.2	-51.89	-13	-38.89	0-360	148	H
2	2.48963	-65.04	Pk	29.9	-35.4	11.6	-58.94	-13	-45.94	0-360	148	H
3	3.32103	-65.95	Pk	31.4	-34.5	11.6	-57.45	-13	-44.45	0-360	148	H
4	1.65928	-61.12	Pk	25.7	-35.8	11.3	-59.92	-13	-46.92	0-360	148	V
5	2.48697	-65.61	Pk	29.9	-35.4	11	-60.11	-13	-47.11	0-360	148	V
6	3.31041	-66.16	Pk	31.4	-34.5	11.4	-57.86	-13	-44.86	0-360	148	V
841.5MHz												
1	1.66938	-53.08	Pk	25.8	-35.8	12.2	-50.88	-13	-37.88	0-360	149	H
2	2.5045	-64.11	Pk	30	-35.5	12	-57.61	-13	-44.61	0-360	149	H
3	3.33856	-65.35	Pk	31.3	-34.5	11.7	-56.85	-13	-43.85	0-360	149	H
4	1.66938	-61.63	Pk	25.8	-35.8	11.6	-60.03	-13	-47.03	0-360	149	V
5	2.50663	-64.86	Pk	30	-35.5	11.6	-58.76	-13	-45.76	0-360	149	V
6	3.33538	-65.88	Pk	31.3	-34.5	11.9	-57.18	-13	-44.18	0-360	149	V

16QAM LTE BAND 26 (15.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	19480 BS
Configuration:	EUT + Support Equipment
Mode	LTE 26 16QAM 15MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
831.5MHz												
1	1.64919	-58.58	Pk	25.7	-35.8	12.4	-56.28	-13	-43.28	0-360	148	H
2	2.47369	-64.98	Pk	29.9	-35.5	11.5	-59.08	-13	-46.08	0-360	148	H
3	3.29075	-66.18	Pk	31.5	-34.5	12.1	-57.08	-13	-44.08	0-360	148	H
4	1.64919	-61.64	Pk	25.7	-35.8	11.2	-60.54	-13	-47.54	0-360	148	V
5	2.46997	-65.37	Pk	29.9	-35.5	11.8	-59.17	-13	-46.17	0-360	148	V
6	3.28809	-66.1	Pk	31.5	-34.5	12	-57.1	-13	-44.1	0-360	148	V
836.5MHz												
1	1.65928	-53.86	Pk	25.7	-35.8	12.2	-51.76	-13	-38.76	0-360	149	H
2	2.48963	-65.04	Pk	29.9	-35.4	11.6	-58.94	-13	-45.94	0-360	149	H
3	3.31891	-66.66	Pk	31.4	-34.5	11.6	-58.16	-13	-45.16	0-360	149	H
4	1.65928	-59.83	Pk	25.7	-35.8	11.3	-58.63	-13	-45.63	0-360	149	V
5	2.49175	-66.2	Pk	29.9	-35.5	11	-60.8	-13	-47.8	0-360	149	V
6	3.31519	-65.68	Pk	31.4	-34.5	11.3	-57.48	-13	-44.48	0-360	149	V
841.5MHz												
1	1.66938	-53.79	Pk	25.8	-35.8	12.2	-51.59	-13	-38.59	0-360	148	H
2	2.5045	-64.13	Pk	30	-35.5	12	-57.63	-13	-44.63	0-360	148	H
3	3.33963	-65.93	Pk	31.3	-34.5	11.7	-57.43	-13	-44.43	0-360	148	H
4	1.66938	-62.55	Pk	25.8	-35.8	11.6	-60.95	-13	-47.95	0-360	148	V
5	2.50344	-66.06	Pk	30	-35.5	11.4	-60.16	-13	-47.16	0-360	148	V
6	3.33006	-66.37	Pk	31.3	-34.5	11.8	-57.77	-13	-44.77	0-360	148	V

9.1.11. LTE BAND 30

QPSK LTE BAND 30 (10.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/17/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 30 QPSK 10MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	LTE Limit	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2310MHz												
1	* 4.61091	-68.34	Pk	32.9	-31.8	11.7	-55.54	-40	-15.54	0-360	148	H
3	6.91919	-71.96	Pk	37.2	-28.2	12.4	-50.56	-40	-10.56	0-360	148	H
5	9.22216	-70.42	Pk	39.7	-25.2	12.2	-43.72	-40	-3.72	0-360	148	H
2	* 4.61091	-68.63	Pk	32.9	-31.8	11.3	-56.23	-40	-16.23	0-360	148	V
4	6.91919	-72.77	Pk	37.2	-28.2	12.2	-51.57	-40	-11.57	0-360	148	V
6	9.22216	-69.36	Pk	39.7	-25.2	12	-42.86	-40	-2.86	0-360	148	V

16QAM LTE BAND 30 (10.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/17/19
Test Engineer:	10649
Configuration:	EUT + Support Equipment
Mode	LTE 30 16QAM 10MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	LTE Limit	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2310MHz												
1	* 4.61356	-68.76	Pk	32.9	-31.7	11.7	-55.86	-40	-15.86	0-360	148	H
3	6.92078	-72.13	Pk	37.2	-28.2	12.3	-50.83	-40	-10.83	0-360	148	H
5	9.22242	-71.4	Pk	39.7	-25.2	12.3	-44.6	-40	-4.6	0-360	148	H
2	* 4.61675	-68.97	Pk	33	-31.7	11.3	-56.37	-40	-16.37	0-360	148	V
4	6.92184	-71.2	Pk	37.2	-28.2	12.2	-50	-40	-10	0-360	148	V
6	9.22216	-69	Pk	39.7	-25.2	12	-42.5	-40	-2.5	0-360	148	V

9.1.12. LTE BAND 41 (FCC)

QPSK LTE BAND 41 (20.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/17/19
Test Engineer:	19480 BS
Configuration:	EUT + Support Equipment
Mode	LTE 41 QPSK 20MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2506MHz												
1	2.49653	-53.7	Pk	30	-35.5	11.6	-47.6	-25	-22.6	0-360	148	H
2	4.99394	-66.93	Pk	35	-31.2	12.3	-50.83	-25	-25.83	0-360	148	H
3	7.49134	-68.46	Pk	37.5	-27.9	12	-46.86	-25	-21.86	0-360	148	H
4	9.98822	-72.72	Pk	38.1	-25.3	12.2	-47.72	-25	-22.72	0-360	148	H
5	2.49653	-56.27	Pk	30	-35.5	11.1	-50.67	-25	-25.67	0-360	148	V
6	4.99234	-68.28	Pk	35	-31.2	11.8	-52.68	-25	-27.68	0-360	148	V
7	7.49081	-71.85	Pk	37.5	-27.9	11.8	-50.45	-25	-25.45	0-360	148	V
8	9.99406	-73.23	Pk	38	-25.2	12	-48.43	-25	-23.43	0-360	148	V
2593MHz												
1	2.58366	-55.34	Pk	30.2	-35.3	12.8	-47.64	-25	-22.64	0-360	148	H
2	5.16606	-69.11	Pk	35.6	-31	12.2	-52.31	-25	-27.31	0-360	148	H
3	7.75219	-60.81	Pk	37.5	-27.6	12.2	-38.71	-25	-13.71	0-360	148	H
4	10.31919	-73.46	Pk	38.1	-25.3	12.6	-48.06	-25	-23.06	0-360	148	H
5	2.58419	-58.91	Pk	30.2	-35.3	12.2	-51.81	-25	-26.81	0-360	148	V
6	5.16819	-65.99	Pk	35.6	-31	12	-49.39	-25	-24.39	0-360	148	V
7	7.75538	-71.78	Pk	37.5	-27.6	12	-49.88	-25	-24.88	0-360	148	V
8	10.33619	-73.45	Pk	38.1	-25.4	12.2	-48.55	-25	-23.55	0-360	148	V
2680MHz												
1	2.67078	-45.12	Pk	29.8	-35.2	11.3	-39.22	-25	-14.22	0-360	148	H
2	5.33447	-68.26	Pk	34.7	-31.1	12.2	-52.46	-25	-27.46	0-360	148	H
3	8.01303	-69.07	Pk	37.7	-27.4	12	-46.77	-25	-21.77	0-360	148	H
4	10.68416	-71.88	Pk	38.6	-24.8	12.4	-45.68	-25	-20.68	0-360	148	H
5	2.67078	-52.65	Pk	29.8	-35.2	11.5	-46.55	-25	-21.55	0-360	148	V
6	5.33713	-69.58	Pk	34.7	-31	12	-53.88	-25	-28.88	0-360	148	V
7	8.01356	-65.25	Pk	37.7	-27.4	11.9	-43.05	-25	-18.05	0-360	148	V
8	10.68416	-73.57	Pk	38.6	-24.8	12.4	-47.37	-25	-22.37	0-360	148	V

16QAM LTE BAND 41 (20.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/17/19
Test Engineer:	19480 BS
Configuration:	EUT + Support Equipment
Mode	LTE 41 16QAM 20MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2506MHz												
1	2.49706	-54.89	Pk	30	-35.5	11.6	-48.79	-25	-23.79	0-360	149	H
2	4.99394	-54.54	Pk	35	-31.2	12.3	-38.44	-25	-13.44	0-360	149	H
3	7.49134	-71.67	Pk	37.5	-27.9	12	-50.07	-25	-25.07	0-360	149	H
4	10.00947	-72.27	Pk	38	-25.1	12.4	-46.97	-25	-21.97	0-360	149	H
5	2.49706	-57.83	Pk	30	-35.5	11.1	-52.23	-25	-27.23	0-360	148	V
6	4.99394	-67.54	Pk	35	-31.2	11.7	-52.04	-25	-27.04	0-360	148	V
7	7.49294	-72.13	Pk	37.5	-27.9	11.9	-50.63	-25	-25.63	0-360	148	V
8	9.98556	-72.13	Pk	38.1	-25.3	12.1	-47.23	-25	-22.23	0-360	148	V
2593MHz												
1	2.58366	-56.76	Pk	30.2	-35.3	12.8	-49.06	-25	-24.06	0-360	148	H
2	5.16766	-60.47	Pk	35.6	-31	12.2	-43.67	-25	-18.67	0-360	148	H
3	7.75219	-69.89	Pk	37.5	-27.6	12.2	-47.79	-25	-22.79	0-360	148	H
4	10.31759	-73.53	Pk	38.1	-25.3	12.6	-48.13	-25	-23.13	0-360	148	H
5	2.58366	-58.12	Pk	30.2	-35.3	12.2	-51.02	-25	-26.02	0-360	148	V
6	5.16872	-68.82	Pk	35.6	-31	12.1	-52.12	-25	-27.12	0-360	148	V
7	7.75697	-72.38	Pk	37.5	-27.6	12	-50.48	-25	-25.48	0-360	148	V
8	10.33619	-74.1	Pk	38.1	-25.4	12.2	-49.2	-25	-24.2	0-360	148	V
2680MHz												
1	2.67078	-47.25	Pk	29.8	-35.2	11.3	-41.35	-25	-16.35	0-360	148	H
2	5.34563	-68.98	Pk	34.6	-31	12.3	-53.08	-25	-28.08	0-360	148	H
3	8.01516	-71.06	Pk	37.7	-27.4	12	-48.76	-25	-23.76	0-360	148	H
4	10.67566	-73.28	Pk	38.6	-24.7	12.5	-46.88	-25	-21.88	0-360	148	H
5	2.67078	-53.17	Pk	29.8	-35.2	11.5	-47.07	-25	-22.07	0-360	148	V
6	5.34669	-69.7	Pk	34.6	-30.9	12.2	-53.8	-25	-28.8	0-360	148	V
7	8.01303	-69.83	Pk	37.7	-27.4	11.9	-47.63	-25	-22.63	0-360	148	V
8	10.68416	-72.52	Pk	38.6	-24.8	12.4	-46.32	-25	-21.32	0-360	148	V

9.1.13. LTE BAND 66

QPSK LTE BAND 66 (20.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	19480 BS
Configuration:	EUT + Support Equipment
Mode	LTE 66 QPSK 20MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1720MHz												
1	1.71081	-60.17	Pk	26	-35.8	11.6	-58.37	-13	-45.37	0-360	148	H
2	3.4225	-63.33	Pk	30.7	-34.4	11.9	-55.13	-13	-42.13	0-360	148	H
3	5.12994	-68.89	Pk	35.7	-31.2	11.9	-52.49	-13	-39.49	0-360	148	H
4	6.86022	-71.13	Pk	37.1	-28.1	12.4	-49.73	-13	-36.73	0-360	148	H
5	1.71081	-59.86	Pk	26	-35.8	12	-57.66	-13	-44.66	0-360	148	V
6	3.42144	-67.2	Pk	30.7	-34.4	11.9	-59	-13	-46	0-360	148	V
7	5.13472	-69.35	Pk	35.7	-31.3	11.9	-53.05	-13	-40.05	0-360	148	V
8	6.848	-71.24	Pk	37.1	-28.1	12.3	-49.94	-13	-36.94	0-360	148	V
9	8.55544	-55.64	Pk	38	-26.3	12.1	-31.84	-13	-18.84	0-360	148	V
1745MHz												
1	1.73578	-61.67	Pk	26.1	-35.7	11.6	-59.67	-13	-46.67	0-360	148	H
2	3.47138	-64.16	Pk	30.5	-34.1	12	-55.76	-13	-42.76	0-360	148	H
3	5.19422	-68.94	Pk	35.5	-31.2	12	-52.64	-13	-39.64	0-360	148	H
4	6.96275	-70.32	Pk	37.2	-28.1	12	-49.22	-13	-36.22	0-360	148	H
5	8.68028	-65.47	Pk	38.2	-26.1	12.4	-40.97	-13	-27.97	0-360	148	H
6	1.73578	-58.81	Pk	26.1	-35.7	12.5	-55.91	-13	-42.91	0-360	148	V
7	3.47031	-66.93	Pk	30.5	-34.1	11.9	-58.63	-13	-45.63	0-360	148	V
8	5.20166	-69.95	Pk	35.5	-31.1	11.6	-53.95	-13	-40.95	0-360	148	V
9	6.94628	-70.67	Pk	37.2	-28.2	11.8	-49.87	-13	-36.87	0-360	148	V
10	8.68028	-54.45	Pk	38.2	-26.1	12.1	-30.25	-13	-17.25	0-360	148	V
1770MHz												
1	1.76075	-60.21	Pk	26.2	-35.8	12	-57.81	-13	-44.81	0-360	148	H
2	3.51148	-66.97	Pk	30.4	-33.9	12	-58.47	-13	-45.47	0-360	148	H
3	5.29197	-69.44	Pk	35	-30.9	12.3	-53.04	-13	-40.04	0-360	148	H
4	7.05147	-71.17	Pk	37.7	-27.7	12.2	-48.97	-13	-35.97	0-360	148	H
5	1.76075	-58.46	Pk	26.2	-35.8	11.9	-56.16	-13	-43.16	0-360	148	V
6	3.52078	-67.36	Pk	30.4	-33.9	11.9	-58.96	-13	-45.96	0-360	148	V
7	5.28666	-69.67	Pk	35	-30.9	12	-53.57	-13	-40.57	0-360	148	V
8	7.04563	-71.78	Pk	37.6	-27.7	12.2	-49.68	-13	-36.68	0-360	148	V
9	8.80513	-60.75	Pk	38.4	-25.7	12	-36.05	-13	-23.05	0-360	148	V

16QAM LTE BAND 66 (20.0MHZ BANDWIDTH)

Company:	Microsoft
Project #:	12802195
Date:	7/16/19
Test Engineer:	19480 BS
Configuration:	EUT + Support Equipment
Mode	LTE 66 16QAM 20MHz
Chamber #:	Chamber J

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF PRE0189055 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1720MHz												
1	1.71081	-60.84	Pk	26	-35.8	11.6	-59.04	-13	-46.04	0-360	148	H
2	3.4225	-64.96	Pk	30.7	-34.4	11.9	-56.76	-13	-43.76	0-360	148	H
3	5.11719	-69.78	Pk	35.7	-31	12.2	-52.88	-13	-39.88	0-360	148	H
4	6.8565	-71.43	Pk	37.1	-28.1	12.4	-50.03	-13	-37.03	0-360	148	H
5	1.71081	-58.32	Pk	26	-35.8	12	-56.12	-13	-43.12	0-360	148	V
6	3.41719	-67.37	Pk	30.8	-34.4	11.9	-59.07	-13	-46.07	0-360	148	V
7	5.13684	-68.99	Pk	35.7	-31.3	11.9	-52.69	-13	-39.69	0-360	148	V
8	6.85225	-71.15	Pk	37.1	-28.1	12.3	-49.85	-13	-36.85	0-360	148	V
9	8.55544	-56.27	Pk	38	-26.3	12.1	-32.47	-13	-19.47	0-360	148	V
1745MHz												
1	1.73578	-61.13	Pk	26.1	-35.7	11.6	-59.13	-13	-46.13	0-360	148	H
2	3.47191	-65.33	Pk	30.5	-34.1	12	-56.93	-13	-43.93	0-360	148	H
3	5.19794	-68.78	Pk	35.5	-31.2	12	-52.48	-13	-39.48	0-360	148	H
4	6.94788	-71.23	Pk	37.2	-28.2	12.1	-50.13	-13	-37.13	0-360	148	H
5	1.73578	-59.46	Pk	26.1	-35.7	12.5	-56.56	-13	-43.56	0-360	148	V
6	3.46606	-66.64	Pk	30.5	-34.1	12.1	-58.14	-13	-45.14	0-360	148	V
7	5.21494	-69.52	Pk	35.4	-31	11.9	-53.22	-13	-40.22	0-360	148	V
8	6.95372	-71.45	Pk	37.2	-28.1	11.9	-50.45	-13	-37.45	0-360	148	V
9	8.68028	-55	Pk	38.2	-26.1	12.1	-30.8	-13	-17.8	0-360	148	V
1770MHz												
1	1.76075	-60.95	Pk	26.2	-35.8	12	-58.55	-13	-45.55	0-360	148	H
2	3.51122	-66.76	Pk	30.4	-33.9	12	-58.26	-13	-45.26	0-360	148	H
3	5.28613	-69.64	Pk	35	-30.9	12.5	-53.04	-13	-40.04	0-360	148	H
4	7.02544	-70.99	Pk	37.5	-27.8	12.3	-48.99	-13	-35.99	0-360	148	H
5	1.76075	-59.21	Pk	26.2	-35.8	11.9	-56.91	-13	-43.91	0-360	148	V
6	3.52397	-66.87	Pk	30.4	-33.9	11.9	-58.47	-13	-45.47	0-360	148	V
7	5.27869	-69.89	Pk	35.1	-31	12	-53.79	-13	-40.79	0-360	148	V
8	7.05359	-71.6	Pk	37.7	-27.8	12	-49.7	-13	-36.7	0-360	148	V
9	8.80566	-60.23	Pk	38.4	-25.7	12	-35.53	-13	-22.53	0-360	148	V