

### 9.1.8. LTE BAND 41

#### LAT QPSK EIRP POWER FOR LTE BAND 41 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/09/14						
<b>Test Engineer:</b>		M. Hua						
<b>Configuration:</b>		EUT Only						
<b>Mode:</b>		LTE Band 41 QPSK 5MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T344, and Chamber D SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.499	17.2	V	1.15	9.47	25.50	33.0	-7.5	
2.499	23.1	H	1.15	9.47	31.44	33.0	-1.6	
Mid Ch								
2.593	20.1	V	1.16	9.51	28.48	33.0	-4.5	
2.593	22.7	H	1.16	9.51	31.01	33.0	-2.0	
High Ch								
2.688	18.8	V	1.17	9.54	27.18	33.0	-5.8	
2.688	20.7	H	1.17	9.54	29.07	33.0	-3.9	
Rev. 10.24.13								

**LAT 16QAM EIRP POWER FOR LTE BAND 41 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/09/14						
<b>Test Engineer:</b>		M. Hua						
<b>Configuration:</b>		EUT Only						
<b>Mode:</b>		LTE Band 41 16QAM 5MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T344, and Chamber D SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.499	16.3	V	1.15	9.47	24.60	33.0	-8.4	
2.499	22.2	H	1.15	9.47	30.54	33.0	-2.5	
Mid Ch								
2.593	19.2	V	1.16	9.51	27.58	33.0	-5.4	
2.593	21.8	H	1.16	9.51	30.11	33.0	-2.9	
High Ch								
2.688	17.9	V	1.17	9.54	26.28	33.0	-6.7	
2.688	19.8	H	1.17	9.54	28.17	33.0	-4.8	
Rev. 10.24.13								

**LAT QPSK EIRP POWER FOR LTE BAND 41 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/09/14						
<b>Test Engineer:</b>		M. Hua						
<b>Configuration:</b>		EUT Only						
<b>Mode:</b>		LTE Band 41 QPSK 10MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T344, and Chamber D SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.501	15.8	V	1.15	9.47	24.08	33.0	-8.9	
2.501	22.7	H	1.15	9.47	31.01	33.0	-2.0	
Mid Ch								
2.593	16.1	V	1.16	9.51	24.48	33.0	-8.5	
2.593	22.4	H	1.16	9.51	30.79	33.0	-2.2	
High Ch								
2.685	14.8	V	1.17	9.54	23.18	33.0	-9.8	
2.685	20.5	H	1.17	9.54	28.87	33.0	-4.1	
Rev. 10.24.13								

**LAT 16QAM EIRP POWER FOR LTE BAND 41 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/09/14						
<b>Test Engineer:</b>		M. Hua						
<b>Configuration:</b>		EUT Only						
<b>Mode:</b>		LTE Band 41 16QAM 10MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T344, and Chamber D SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.501	14.9	V	1.15	9.47	23.18	33.0	-9.8	
2.501	21.8	H	1.15	9.47	30.11	33.0	-2.9	
Mid Ch								
2.593	15.2	V	1.16	9.51	23.58	33.0	-9.4	
2.593	21.5	H	1.16	9.51	29.89	33.0	-3.1	
High Ch								
2.685	13.9	V	1.17	9.54	22.28	33.0	-10.7	
2.685	19.5	H	1.17	9.54	27.87	33.0	-5.1	
Rev. 10.24.13								

**LAT QPSK EIRP POWER FOR LTE BAND 41 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/09/14						
<b>Test Engineer:</b>		M. Hua						
<b>Configuration:</b>		EUT Only						
<b>Mode:</b>		LTE Band 41 QPSK 15MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T344, and Chamber D SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.504	16.3	V	1.15	9.47	24.65	33.0	-8.4	
2.504	22.8	H	1.15	9.47	31.17	33.0	-1.8	
Mid Ch								
2.593	16.1	V	1.16	9.51	24.48	33.0	-8.5	
2.593	22.4	H	1.16	9.51	30.70	33.0	-2.3	
High Ch								
2.683	15.8	V	1.17	9.54	24.18	33.0	-8.8	
2.683	20.4	H	1.17	9.54	28.77	33.0	-4.2	
Rev. 10.24.13								

**LAT 16QAM EIRP POWER FOR LTE BAND 41 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/09/14						
<b>Test Engineer:</b>		M. Hua						
<b>Configuration:</b>		EUT Only						
<b>Mode:</b>		LTE Band 41 16QAM 15MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T344, and Chamber D SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.504	15.3	V	1.15	9.47	23.65	33.0	-9.4	
2.504	21.8	H	1.15	9.47	30.17	33.0	-2.8	
Mid Ch								
2.593	15.1	V	1.16	9.51	23.48	33.0	-9.5	
2.593	21.4	H	1.16	9.51	29.70	33.0	-3.3	
High Ch								
2.683	14.8	V	1.17	9.54	23.18	33.0	-9.8	
2.683	19.4	H	1.17	9.54	27.77	33.0	-5.2	
Rev. 10.24.13								

**LAT QPSK EIRP POWER FOR LTE BAND 41 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/09/14						
<b>Test Engineer:</b>		M. Hua						
<b>Configuration:</b>		EUT Only						
<b>Mode:</b>		LTE Band 41 QPSK 20MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T344, and Chamber D SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.506	17.0	V	1.15	9.47	25.30	33.0	-7.7	
2.506	22.9	H	1.15	9.47	31.27	33.0	-1.7	
Mid Ch								
2.593	16.9	V	1.16	9.51	25.28	33.0	-7.7	
2.593	22.8	H	1.16	9.51	31.13	33.0	-1.9	
High Ch								
2.680	15.8	V	1.17	9.54	24.18	33.0	-8.8	
2.680	20.6	H	1.17	9.54	28.97	33.0	-4.0	
Rev. 10.24.13								

**LAT 16QAM EIRP POWER FOR LTE BAND 41 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/09/14						
<b>Test Engineer:</b>		M. Hua						
<b>Configuration:</b>		EUT Only						
<b>Mode:</b>		LTE Band 41 16QAM 20MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T344, and Chamber D SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.506	16.0	V	1.15	9.47	24.30	33.0	-8.7	
2.506	21.9	H	1.15	9.47	30.27	33.0	-2.7	
Mid Ch								
2.593	15.9	V	1.16	9.51	24.28	33.0	-8.7	
2.593	21.8	H	1.16	9.51	30.13	33.0	-2.9	
High Ch								
2.680	14.8	V	1.17	9.54	23.18	33.0	-9.8	
2.680	19.6	H	1.17	9.54	27.97	33.0	-5.0	
Rev. 10.24.13								



**UAT QPSK EIRP POWER FOR LTE BAND 41 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/12/14						
<b>Test Engineer:</b>		R.ZHENG						
<b>Configuration:</b>		EUT only						
<b>Mode:</b>		LTE Band 41 QPSK 5MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T120 and Chamber F SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.499	12.4	V	1.15	9.42	20.67	33.0	-12.3	
2.499	18.3	H	1.15	9.55	26.65	33.0	-6.3	
Mid Ch								
2.593	12.3	V	1.16	9.63	20.77	33.0	-12.2	
2.593	17.7	H	1.16	9.69	26.23	33.0	-6.8	
High Ch								
2.688	12.1	V	1.17	9.76	20.69	33.0	-12.3	
2.688	16.6	H	1.17	9.77	25.24	33.0	-7.8	
Rev. 10.24.13								

**UAT 16QAM EIRP POWER FOR LTE BAND 41 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/12/14						
<b>Test Engineer:</b>		R. ZHENG						
<b>Configuration:</b>		EUT only						
<b>Mode:</b>		LTE Band 41 16QAM 5MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T120 and Chamber F SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.499	11.6	V	1.15	9.42	19.87	33.0	-13.1	
2.499	17.5	H	1.15	9.55	25.85	33.0	-7.1	
Mid Ch								
2.593	11.5	V	1.16	9.63	19.97	33.0	-13.0	
2.593	16.9	H	1.16	9.69	25.43	33.0	-7.6	
High Ch								
2.688	11.4	V	1.17	9.76	19.99	33.0	-13.0	
2.688	15.6	H	1.17	9.77	24.24	33.0	-8.8	
Rev. 10.24.13								

**UAT QPSK EIRP POWER FOR LTE BAND 41 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/12/14						
<b>Test Engineer:</b>		R.ZHENG						
<b>Configuration:</b>		EUT only						
<b>Mode:</b>		LTE Band 41 QPSK 10MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T120 and Chamber F SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.501	13.7	V	1.15	9.42	21.97	33.0	-11.0	
2.501	18.3	H	1.15	9.55	26.65	33.0	-6.3	
Mid Ch								
2.593	10.0	V	1.16	9.63	18.47	33.0	-14.5	
2.593	17.9	H	1.16	9.69	26.43	33.0	-6.6	
High Ch								
2.685	13.3	V	1.17	9.76	21.89	33.0	-11.1	
2.685	17.6	H	1.17	9.77	26.15	33.0	-6.8	
Rev. 10.24.13								

**UAT 16QAM EIRP POWER FOR LTE BAND 41 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/12/14						
<b>Test Engineer:</b>		R.ZHENG						
<b>Configuration:</b>		EUT only						
<b>Mode:</b>		LTE Band 41 16QAM 10MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T120 and Chamber F SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.501	12.8	V	1.15	9.42	21.07	33.0	-11.9	
2.501	17.4	H	1.15	9.55	25.75	33.0	-7.2	
Mid Ch								
2.593	9.1	V	1.16	9.63	17.57	33.0	-15.4	
2.593	17.0	H	1.16	9.69	25.53	33.0	-7.5	
High Ch								
2.685	12.4	V	1.17	9.76	20.99	33.0	-12.0	
2.685	16.7	H	1.17	9.77	25.25	33.0	-7.7	
Rev. 10.24.13								

**UAT QPSK EIRP POWER FOR LTE BAND 41 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/12/14						
<b>Test Engineer:</b>		R.ZHENG						
<b>Configuration:</b>		EUT only						
<b>Mode:</b>		LTE Band 41 QPSK 15MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T120 and Chamber F SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.504	13.6	V	1.15	9.42	21.87	33.0	-11.1	
2.504	18.1	H	1.15	9.55	26.45	33.0	-6.5	
Mid Ch								
2.593	9.1	V	1.16	9.63	17.57	33.0	-15.4	
2.593	18.1	H	1.16	9.69	26.58	33.0	-6.4	
High Ch								
2.683	13.0	V	1.17	9.76	21.59	33.0	-11.4	
2.683	17.5	H	1.17	9.77	26.14	33.0	-6.9	
Rev. 10.24.13								

**UAT 16QAM EIRP POWER FOR LTE BAND 41 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/12/14						
<b>Test Engineer:</b>		R.ZHENG						
<b>Configuration:</b>		EUT only						
<b>Mode:</b>		LTE Band 41 16QAM 15MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T120 and Chamber F SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.504	12.8	V	1.15	9.42	21.02	33.0	-12.0	
2.504	17.2	H	1.15	9.55	25.60	33.0	-7.4	
Mid Ch								
2.593	8.2	V	1.16	9.63	16.72	33.0	-16.3	
2.593	17.2	H	1.16	9.69	25.73	33.0	-7.3	
High Ch								
2.683	12.2	V	1.17	9.76	20.74	33.0	-12.3	
2.683	16.7	H	1.17	9.77	25.29	33.0	-7.7	
Rev. 10.24.13								

**UAT QPSK EIRP POWER FOR LTE BAND 41 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/12/14						
<b>Test Engineer:</b>		R.ZHENG						
<b>Configuration:</b>		EUT only						
<b>Mode:</b>		LTE Band 41 QPSK 20MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T120 and Chamber F SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.506	12.4	V	1.15	9.42	20.70	33.0	-12.3	
2.506	17.9	H	1.15	9.55	26.29	33.0	-6.7	
Mid Ch								
2.593	8.6	V	1.16	9.63	17.10	33.0	-15.9	
2.593	17.9	H	1.16	9.69	26.39	33.0	-6.6	
High Ch								
2.680	11.2	V	1.17	9.76	19.80	33.0	-13.2	
2.680	17.1	H	1.17	9.77	25.74	33.0	-7.3	
Rev. 10.24.13								

**UAT 16QAM EIRP POWER FOR LTE BAND 41 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b>		Apple						
<b>Project #:</b>		14U17673						
<b>Date:</b>		06/12/14						
<b>Test Engineer:</b>		R.ZHENG						
<b>Configuration:</b>		EUT only						
<b>Mode:</b>		LTE Band 41 16QAM 20MHz BW						
<b>Test Equipment:</b>								
Receiving: Horn T120 and Chamber F SMA Cables								
Substitution: Horn T60 Substitution, and 8ft SMA Cable								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
2.506	11.5	V	1.15	9.42	19.80	33.0	-13.2	
2.506	17.0	H	1.15	9.55	25.39	33.0	-7.6	
Mid Ch								
2.593	7.7	V	1.16	9.63	16.20	33.0	-16.8	
2.593	17.0	H	1.16	9.69	25.49	33.0	-7.5	
High Ch								
2.680	10.3	V	1.17	9.76	18.90	33.0	-14.1	
2.680	16.2	H	1.17	9.77	24.84	33.0	-8.2	
Rev. 10.24.13								



## 9.2. PEAK-TO-AVERAGE RATIO

In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13 dB

### 9.2.1. LTE BAND 2

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	1.4	RB1-0	1880	27.53	23.21	4.32
*Peak Reading = Average Reading + Peak-to-Average Ratio						

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	1.4	RB1-0	1880	27.55	22.36	5.19

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	3.0	RB1-0	1880	27.62	23.26	4.36
*Peak Reading = Average Reading + Peak-to-Average Ratio						

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	3.0	RB1-0	1880	27.63	22.33	5.3

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	5.0	RB1-0	1880	27.53	23.11	4.42
*Peak Reading = Average Reading + Peak-to-Average Ratio						

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	5.0	RB1-0	1880	27.54	22.14	5.40

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	10.0	RB1-0	1880	27.41	23.24	4.17
Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	10.0	RB1-0	1880	27.42	22.27	5.15
*Peak Reading = Average Reading + Peak-to-Average Ratio						

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	15.0	RB1-0	1880	27.14	23.26	3.88
Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	15.0	RB1-0	1880	27.18	22.36	4.82
*Peak Reading = Average Reading + Peak-to-Average Ratio						

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	20.0	RB1-0	1880	27.02	23.08	3.94
Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	20.0	RB1-0	1880	27.02	22.04	4.98
*Peak Reading = Average Reading + Peak-to-Average Ratio						

**9.2.2. LTE BAND 4**

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	1.4	RB1-0	1732.5	29.21	24.20	5.01
*Peak Reading = Average Reading + Peak-to-Average Ratio						

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	1.4	RB1-0	1732.5	29.34	23.31	6.03

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	3.0	RB1-0	1732.5	29.49	24.3	5.19
*Peak Reading = Average Reading + Peak-to-Average Ratio						

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	3.0	RB1-0	1732.5	29.13	23.34	5.79

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	5.0	RB1-0	1732.5	29.19	24.2	4.99
*Peak Reading = Average Reading + Peak-to-Average Ratio						

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	5.0	RB1-0	1732.5	29.00	23.14	5.86

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	10.0	RB1-0	1732.5	29.17	24.26	4.91

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	10.0	RB1-0	1732.5	28.99	23.31	5.68

\*Peak Reading = Average Reading + Peak-to-Average Ratio

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	15.0	RB1-0	1732.5	29.11	24.25	4.86

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	15.0	RB1-0	1732.5	28.99	23.28	5.71

\*Peak Reading = Average Reading + Peak-to-Average Ratio

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	20.0	RB1-0	1732.5	29.01	24.02	4.99

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	20.0	RB1-0	1732.5	28.75	23.06	5.69

\*Peak Reading = Average Reading + Peak-to-Average Ratio

**9.2.3. LTE BAND 5**

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	1.4	RB1-0	836.5	28.57	23.73	4.84
Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
16QAM	1.4	RB1-0	836.5	*Peak	Average	5.86
*Peak Reading = Average Reading + Peak-to-Average Ratio						

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	3.0	RB1-0	836.5	28.75	23.85	4.90
Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
16QAM	3.0	RB1-0	836.5	*Peak	Average	5.58
*Peak Reading = Average Reading + Peak-to-Average Ratio						

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	5.0	RB1-0	836.5	28.55	23.74	4.81
Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
16QAM	5.0	RB1-0	836.5	*Peak	Average	5.68
*Peak Reading = Average Reading + Peak-to-Average Ratio						

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	10.0	RB1-0	836.5	28.38	23.84	4.54
Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
16QAM	10.0	RB1-0	836.5	*Peak	Average	PAR
				28.17	22.88	5.29
*Peak Reading = Average Reading + Peak-to-Average Ratio						

**9.2.4. LTE BAND 13**

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	5.0	RB1-0	782	29.00	24.08	4.92
Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
16QAM	5.0	RB1-0	782	*Peak	Average	PAR
				29.01	22.99	6.02
*Peak Reading = Average Reading + Peak-to-Average Ratio						

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	10.0	RB1-0	782	28.44	24.16	4.28
Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
16QAM	10.0	RB1-0	782	*Peak	Average	PAR
				28.68	23.15	5.53
*Peak Reading = Average Reading + Peak-to-Average Ratio						

**9.2.5. LTE BAND 17**

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	5.0	RB1-0	710.0	28.85	23.87	4.98

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	5.0	RB1-0	710.0	28.85	22.88	5.97

\*Peak Reading = Average Reading + Peak-to-Average Ratio

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	10.0	RB1-0	710.0	28.81	23.96	4.85

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	10.0	RB1-0	710.0	28.62	23.00	5.62

\*Peak Reading = Average Reading + Peak-to-Average Ratio

**9.2.6. LTE BAND 25**

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	1.4	RB1-0	1880	28.07	23.87	4.20

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	1.4	RB1-0	1880	28.12	23.05	5.07

\*Peak Reading = Average Reading + Peak-to-Average Ratio

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	3.0	RB1-0	1880	28.08	24.00	4.08

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	3.0	RB1-0	1880	28.10	23.06	5.04

\*Peak Reading = Average Reading + Peak-to-Average Ratio

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	5.0	RB1-0	1880	28.02	23.88	4.14

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	5.0	RB1-0	1880	28.04	22.82	5.22

\*Peak Reading = Average Reading + Peak-to-Average Ratio

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	10.0	RB1-0	1880	27.86	23.93	3.93

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	10.0	RB1-0	1880	27.90	23.04	4.86

\*Peak Reading = Average Reading + Peak-to-Average Ratio



Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	15.0	RB1-0	1880	27.68	23.78	3.90

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	15.0	RB1-0	1880	27.73	22.91	4.82

\*Peak Reading = Average Reading + Peak-to-Average Ratio

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	20.0	RB1-0	1880	27.36	23.65	3.71

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	20.0	RB1-0	1880	27.37	22.72	4.65

\*Peak Reading = Average Reading + Peak-to-Average Ratio

**9.2.7. LTE BAND 26**

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	3.0	RB1-0	821.3	29.15	24.19	4.96

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	3.0	RB1-0	821.3	29.05	23.27	5.78

\*Peak Reading = Average Reading + Peak-to-Average Ratio

Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	5.0	RB1-0	821.3	29.12	24.11	5.01

Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	5.0	RB1-0	821.3	28.92	23.02	5.90

\*Peak Reading = Average Reading + Peak-to-Average Ratio

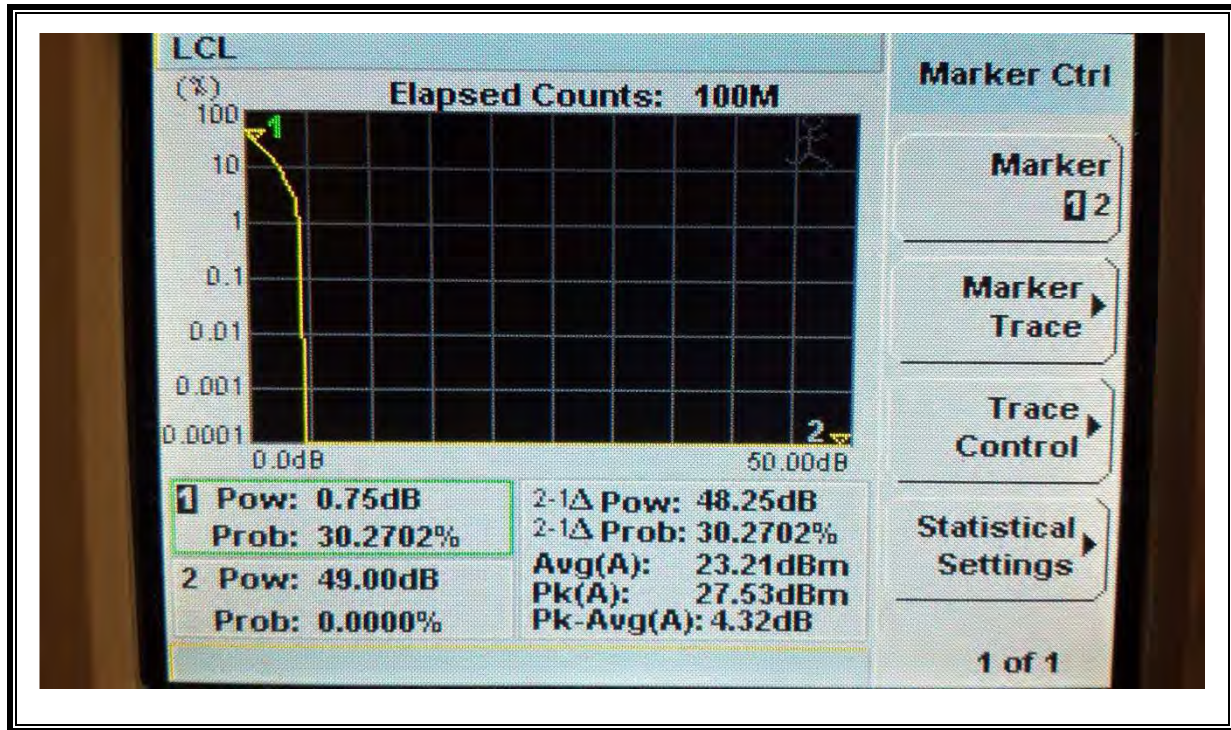
Mode	Channel Band-width (MHZ)	Modulation	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
				*Peak	Average	
QPSK	10.0	RB1-0	819.0	27.56	22.95	4.61

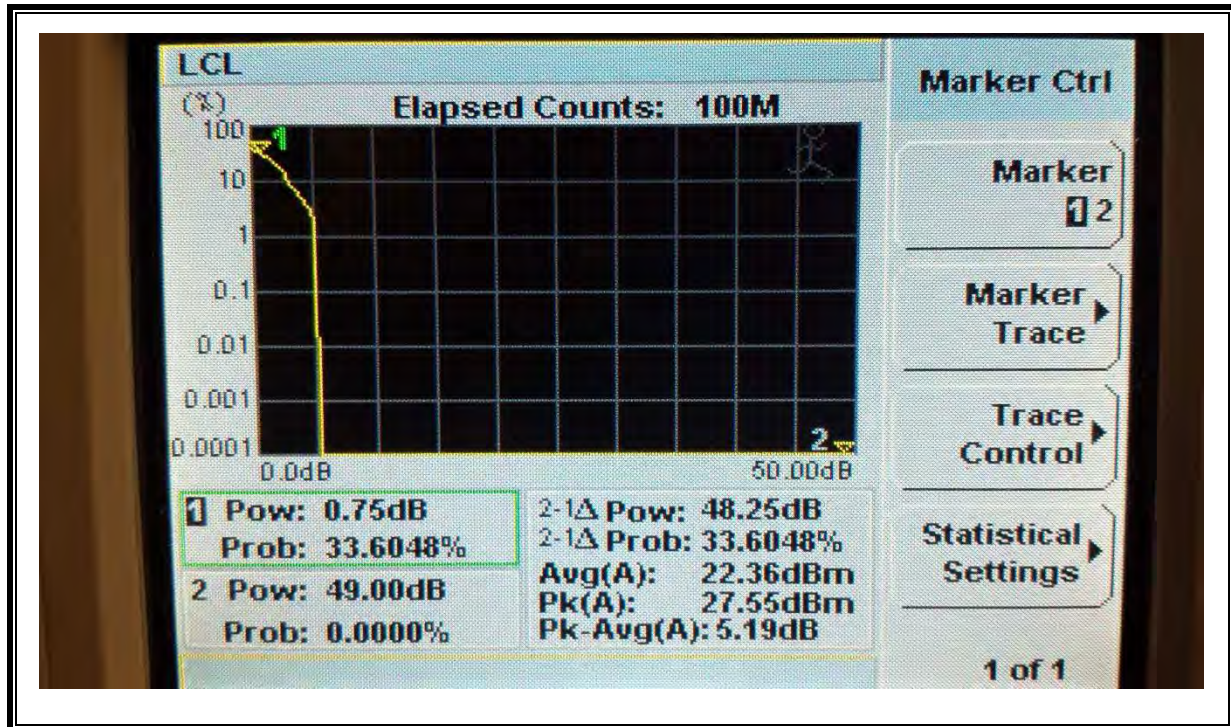
Mode	Channel Band-width	Ch. No.	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
				*Peak	Average	
16QAM	10.0	RB1-0	819.0	27.45	22.08	5.37

\*Peak Reading = Average Reading + Peak-to-Average Ratio

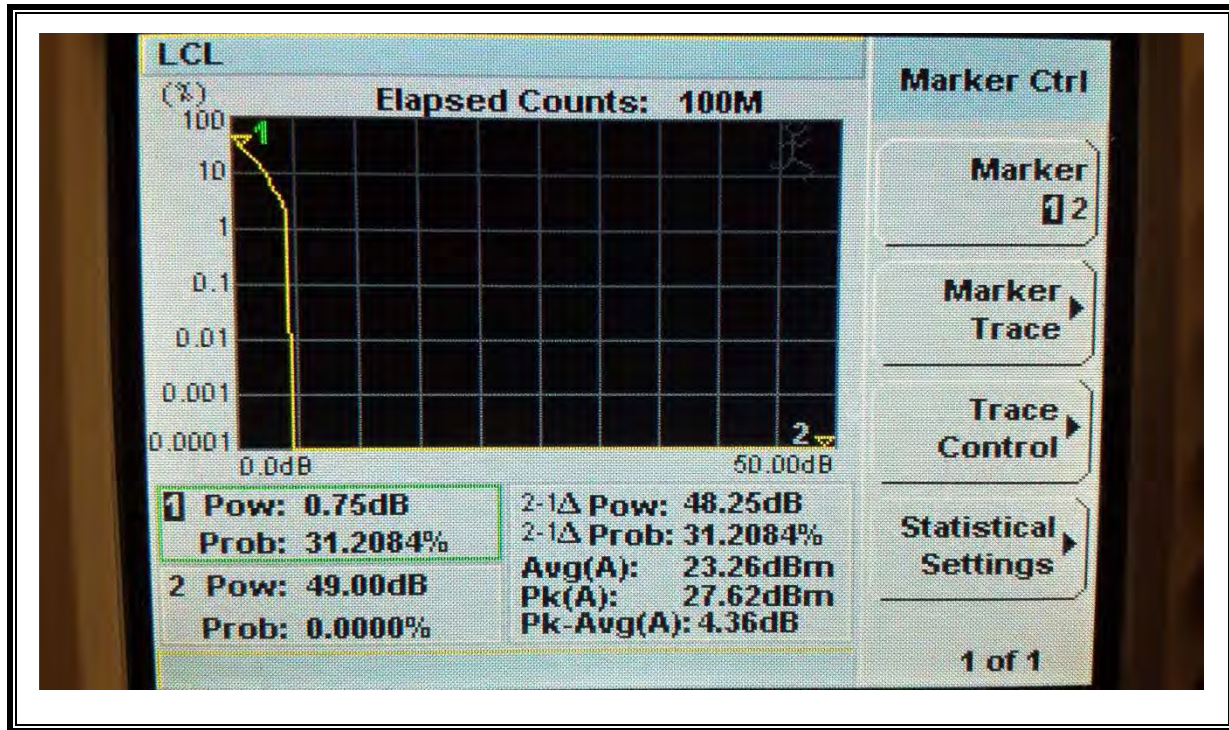
**QPSK Band 2 (1.4 MHz BAND WIDTH)**



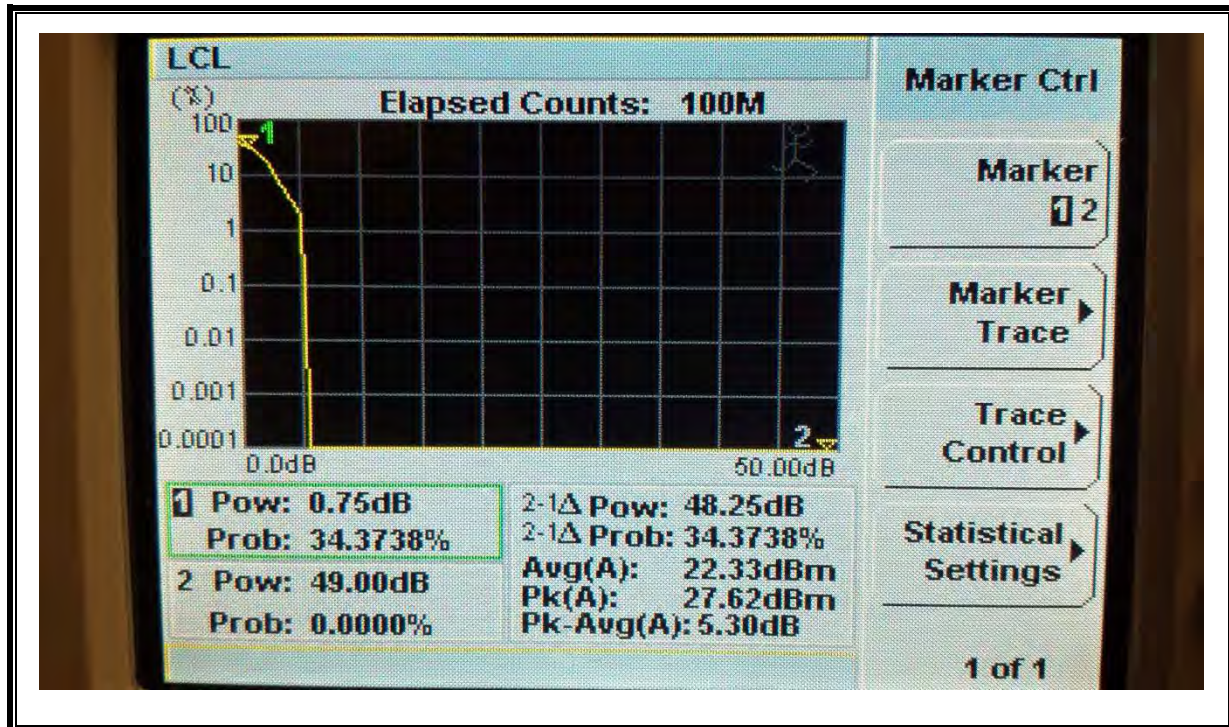
**16QAM Band 2 (1.4 MHz BAND WIDTH)**



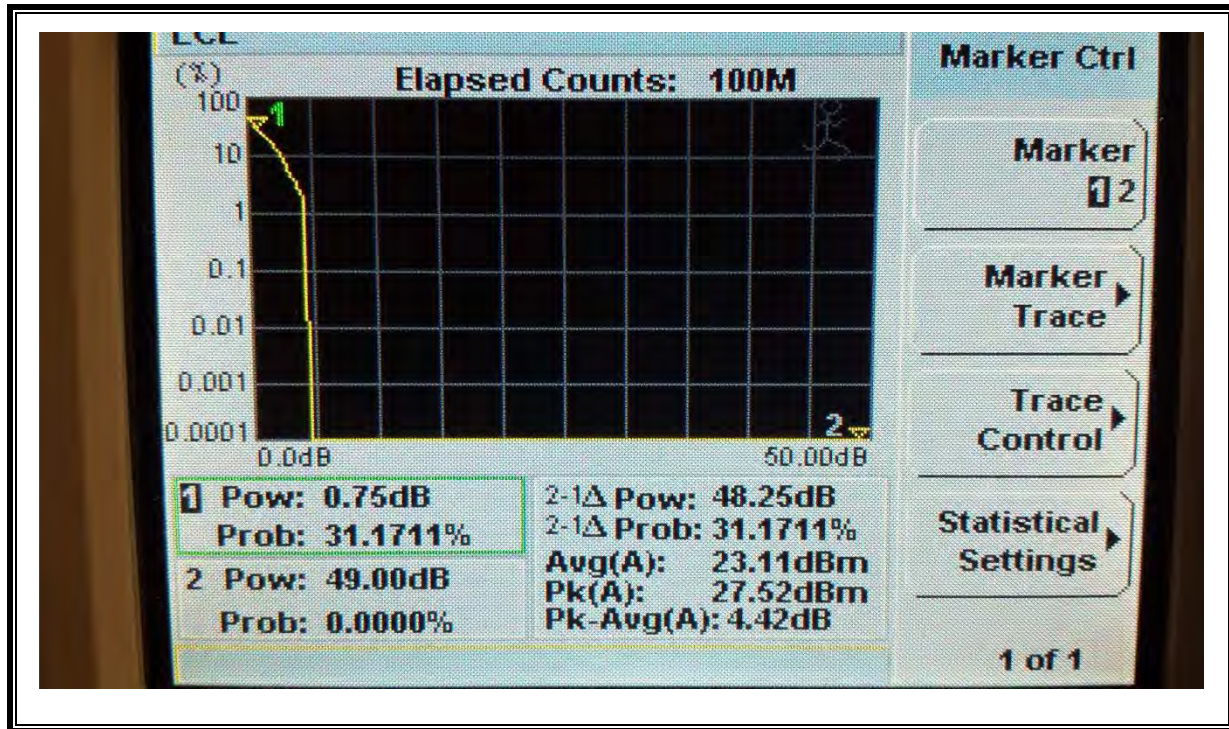
**LTE QPSK Band 2 (3.0 MHz BAND WIDTH)**



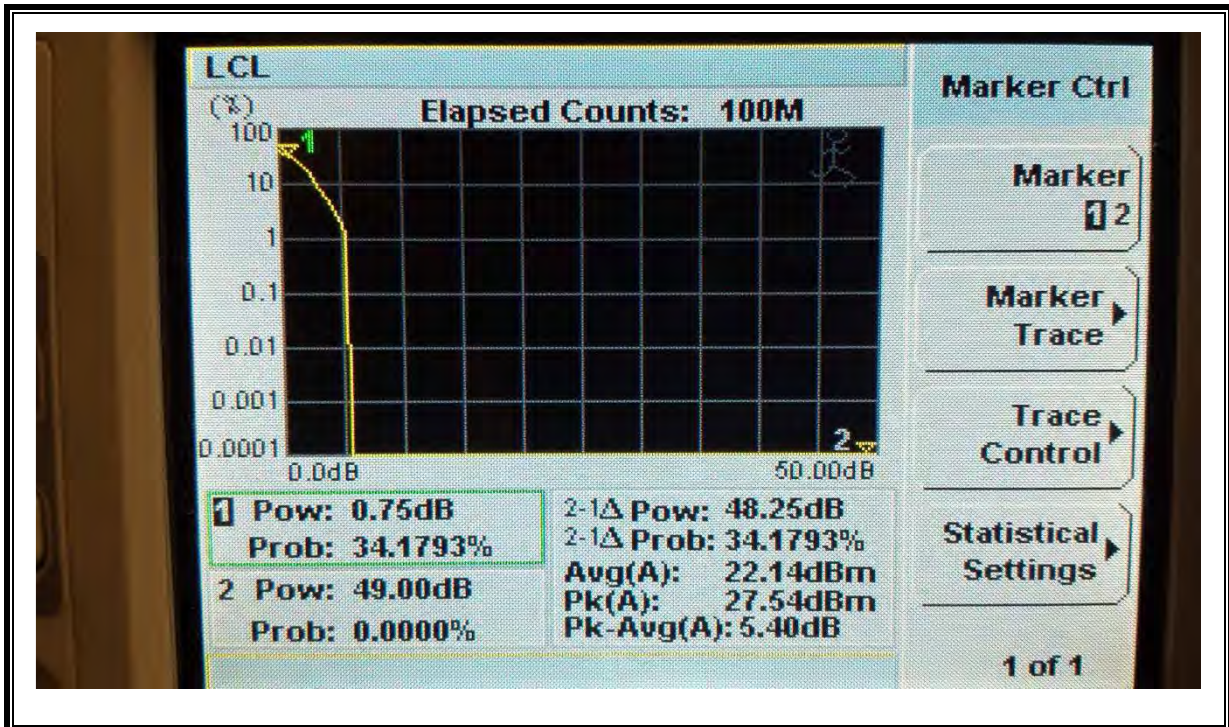
**LTE 16QAM Band 2 (3.0 MHz BAND WIDTH)**



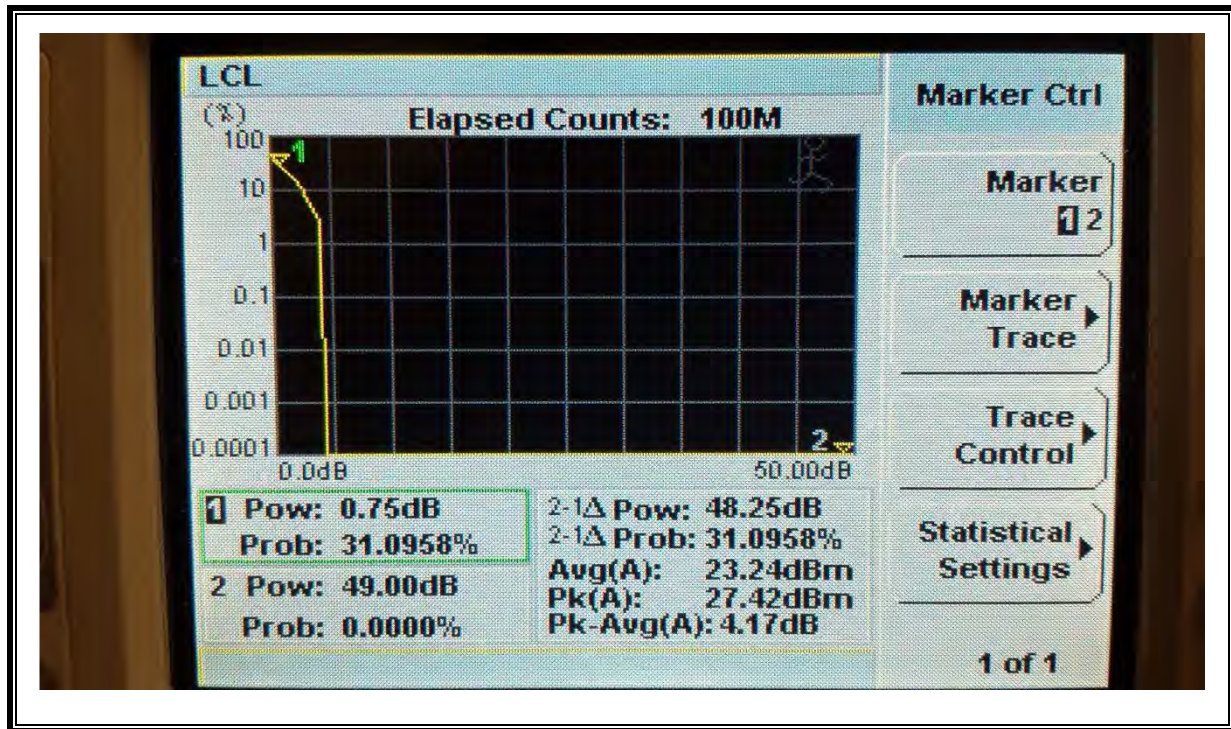
**LTE QPSK Band 2 (5.0 MHz BAND WIDTH)**



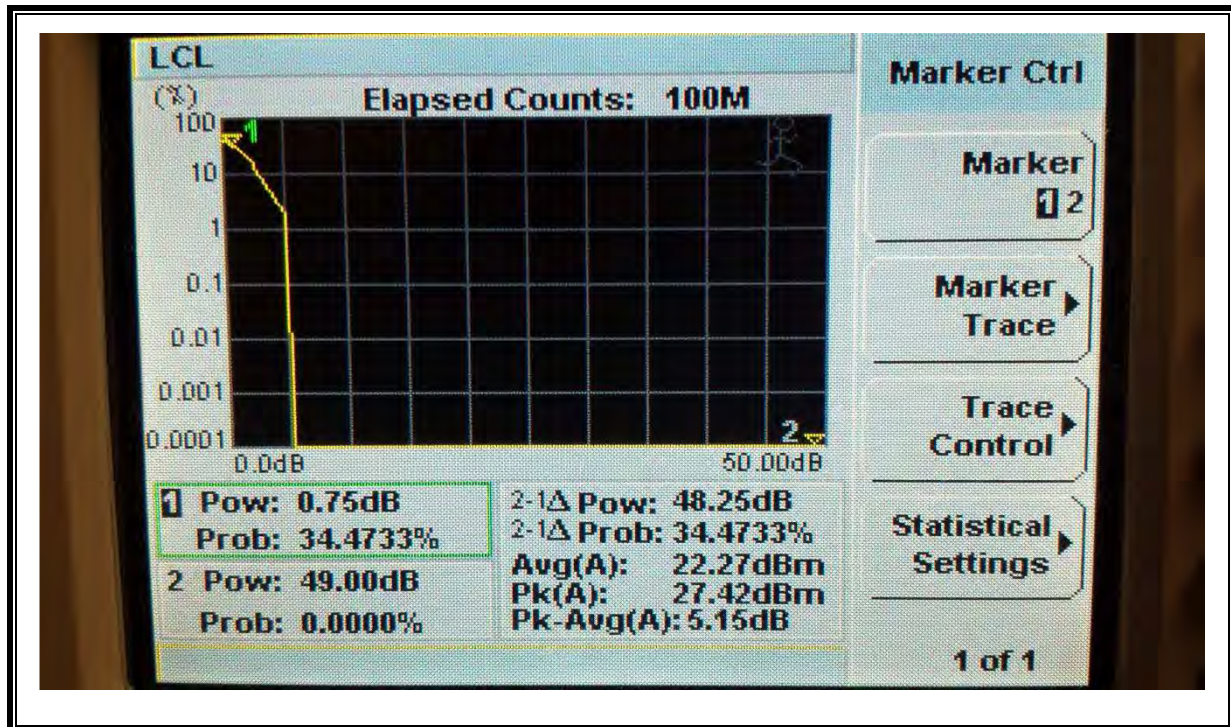
**LTE 16QAM Band 2 (5.0 MHz BAND WIDTH)**



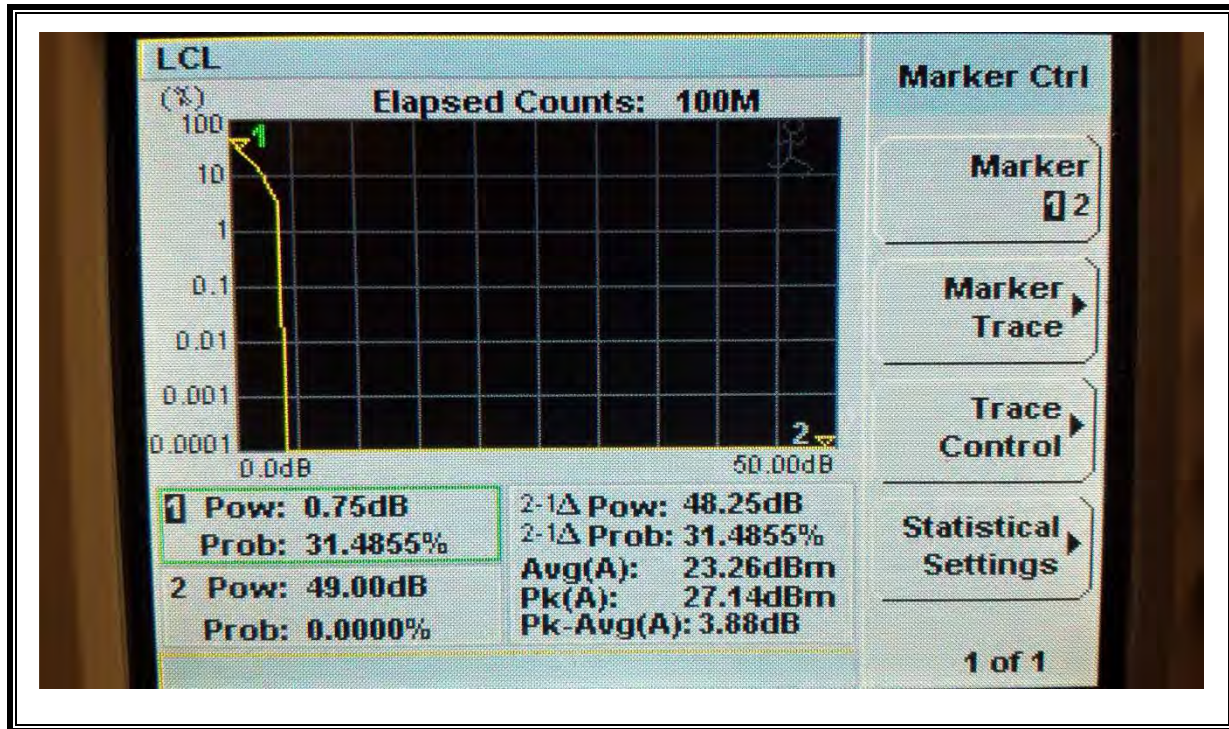
**LTE QPSK Band 2 (10.0 MHz BAND WIDTH)**



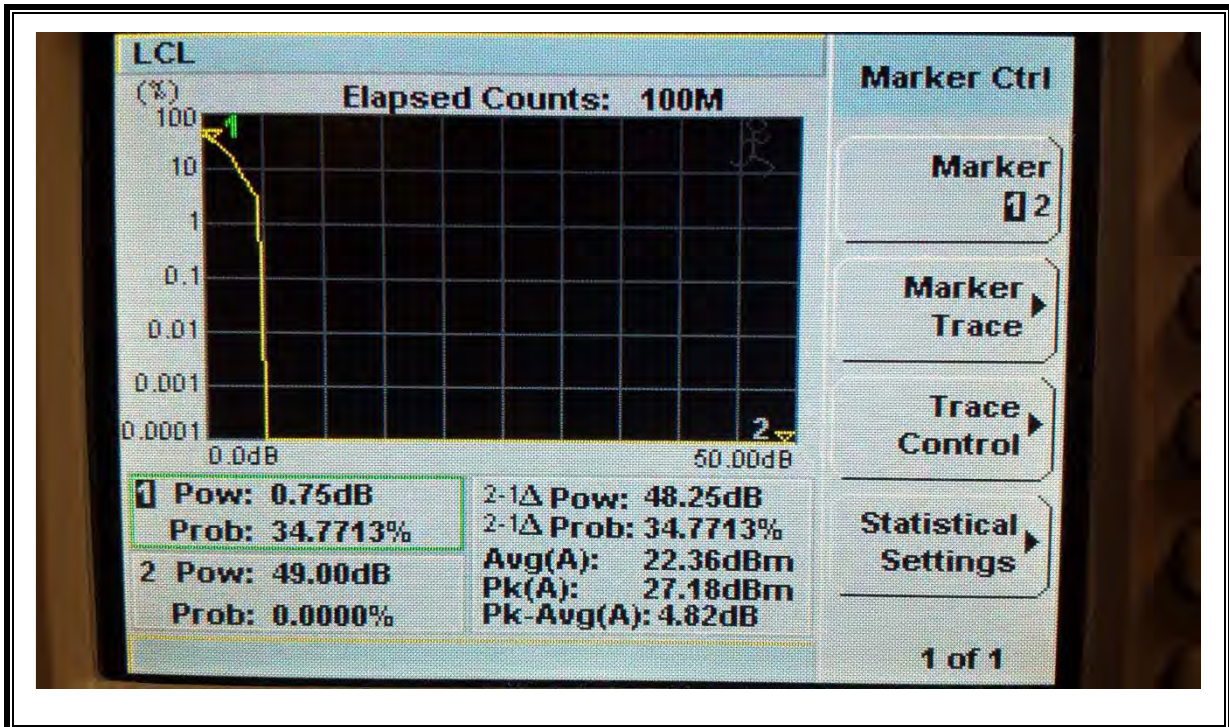
**LTE 16QAM Band 2 (10.0 MHz BAND WIDTH)**



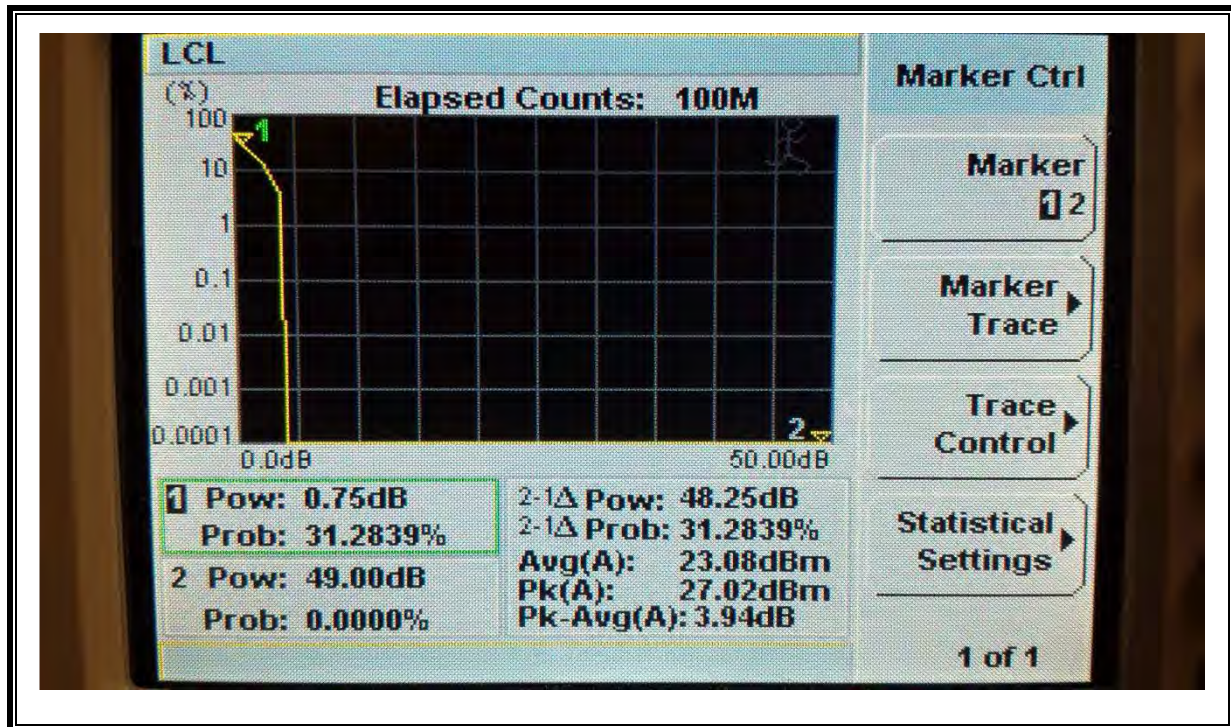
**LTE QPSK Band 2 (15.0 MHz BAND WIDTH)**



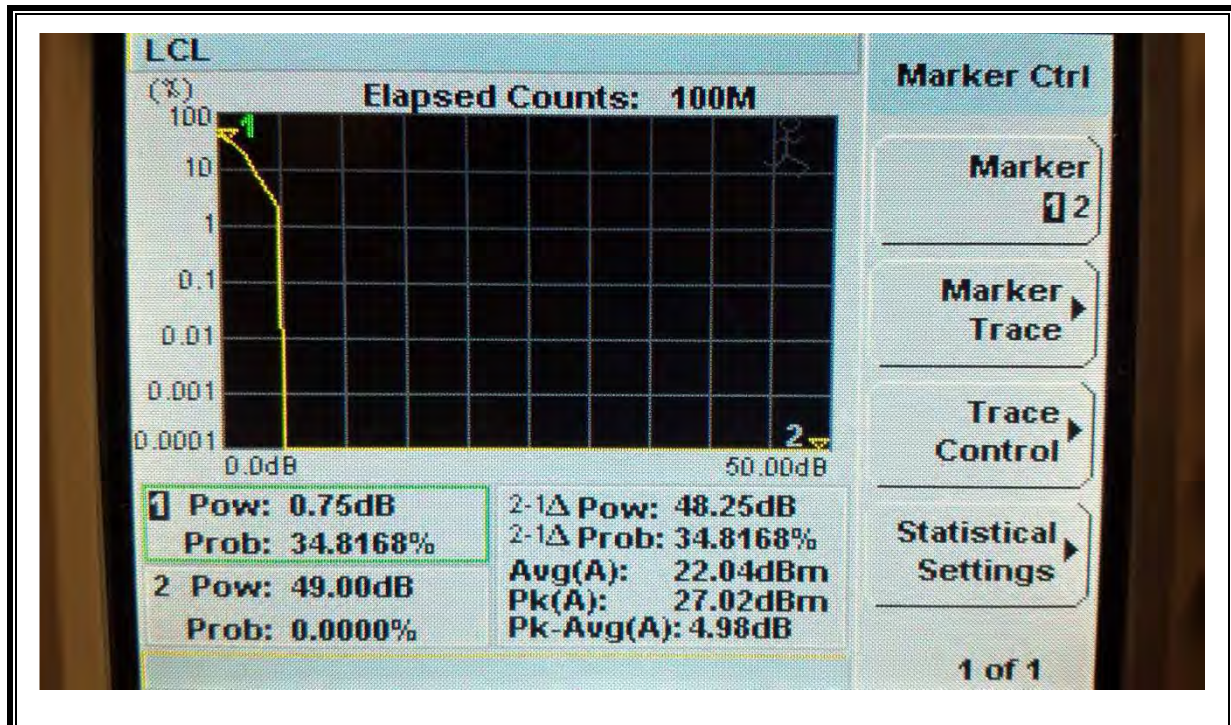
**LTE 16QAM Band 2 (15.0 MHz BAND WIDTH)**



**LTE QPSK Band 2 (20.0 MHz BAND WIDTH)**

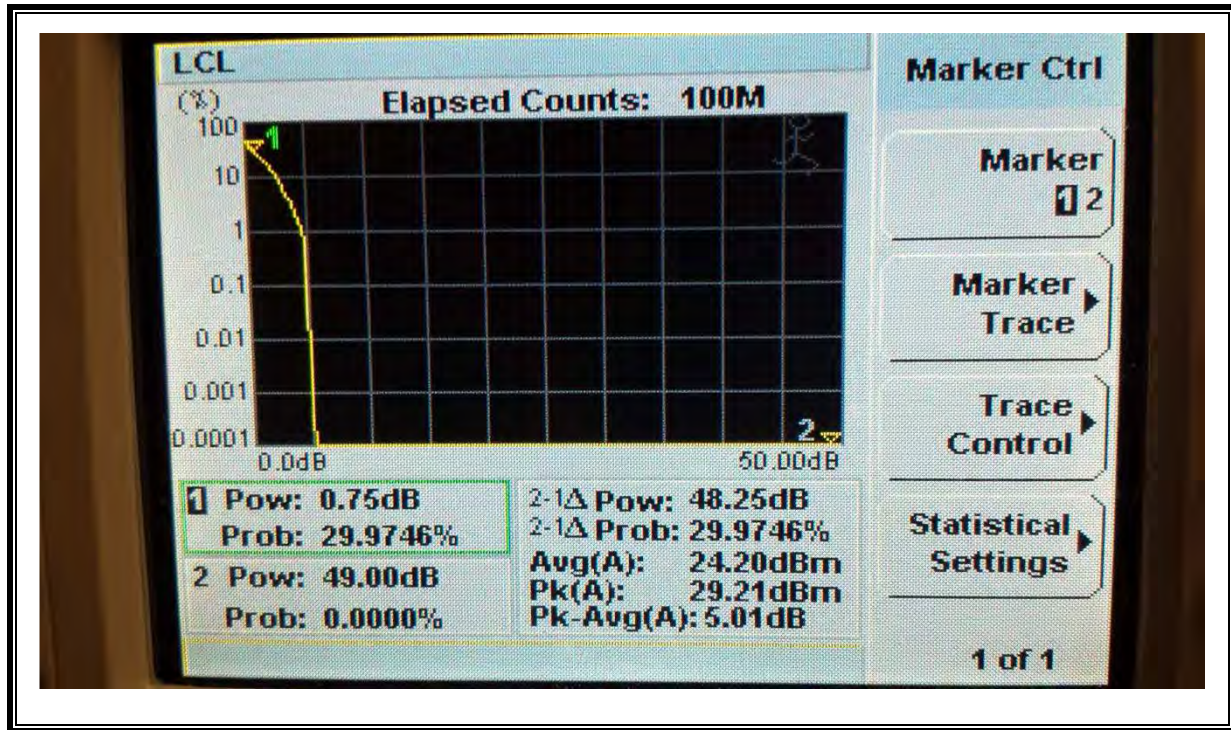


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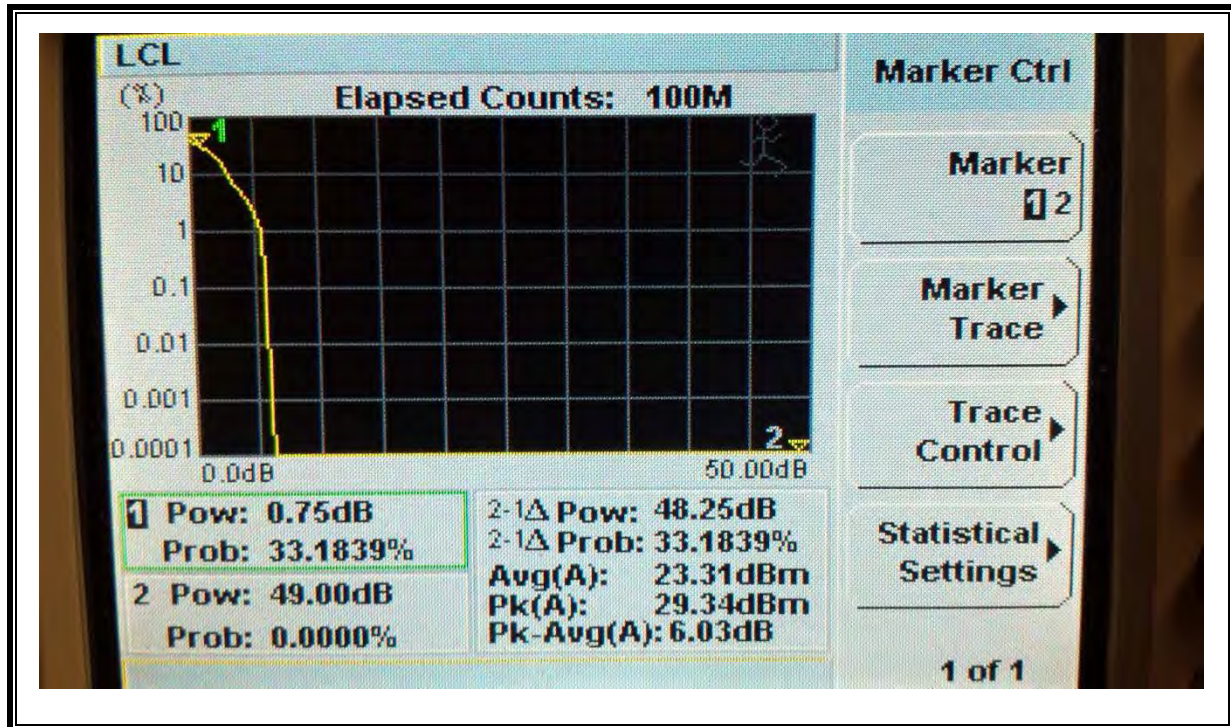




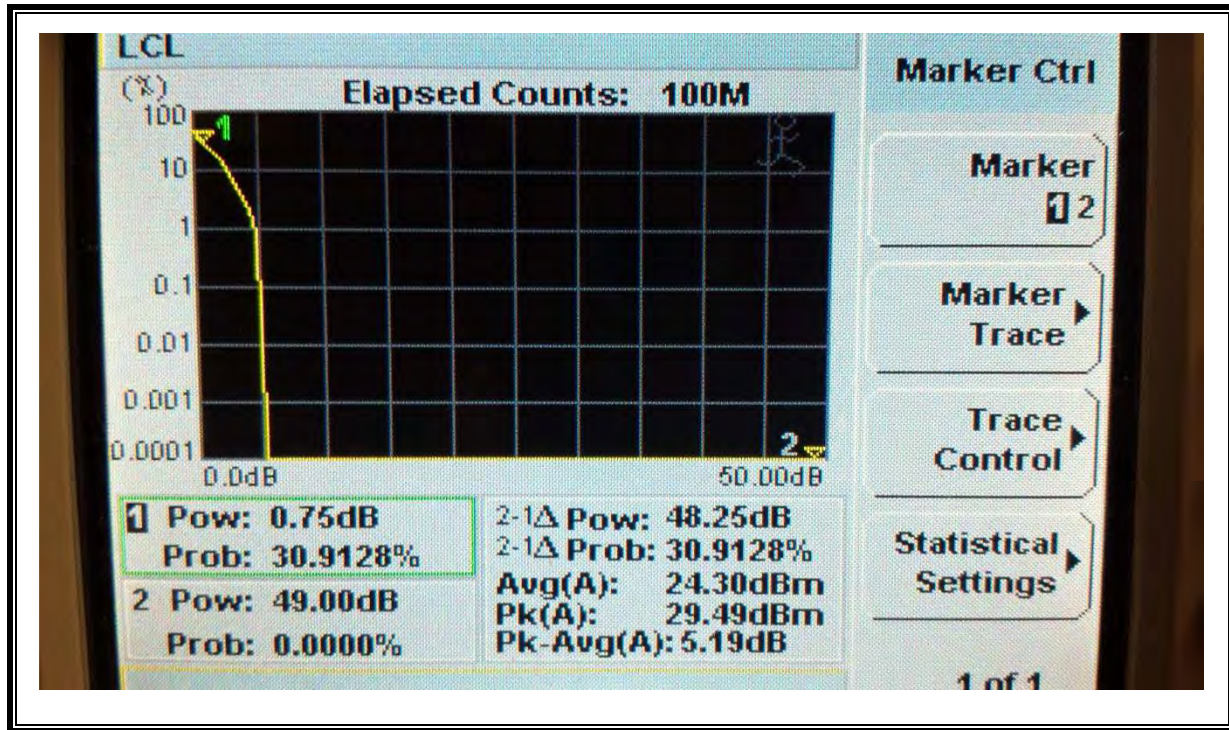
**QPSK Band 4 (1.4 MHz BAND WIDTH)**



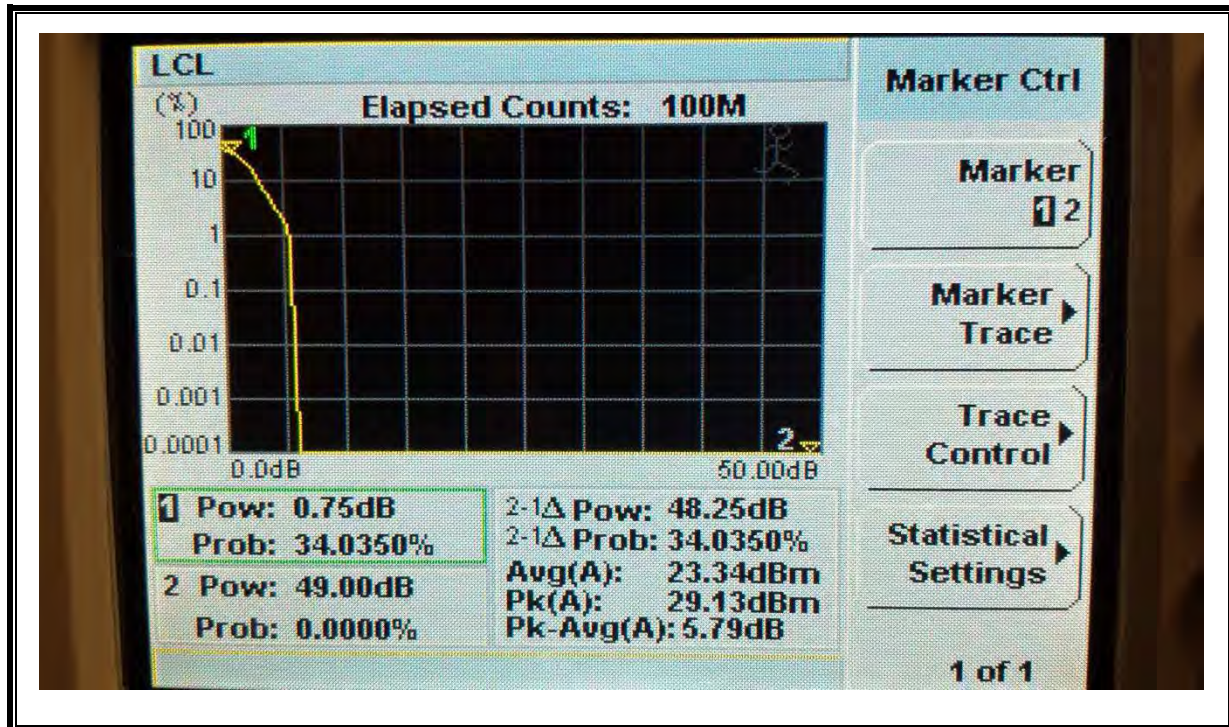
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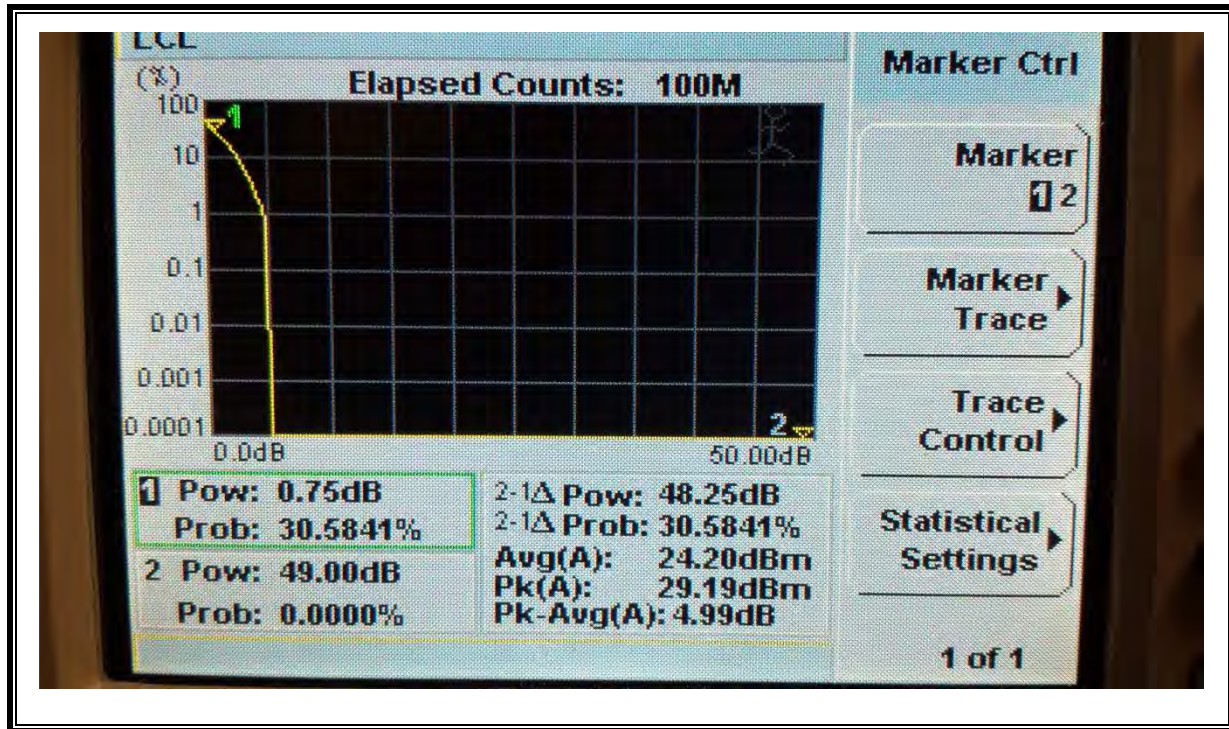
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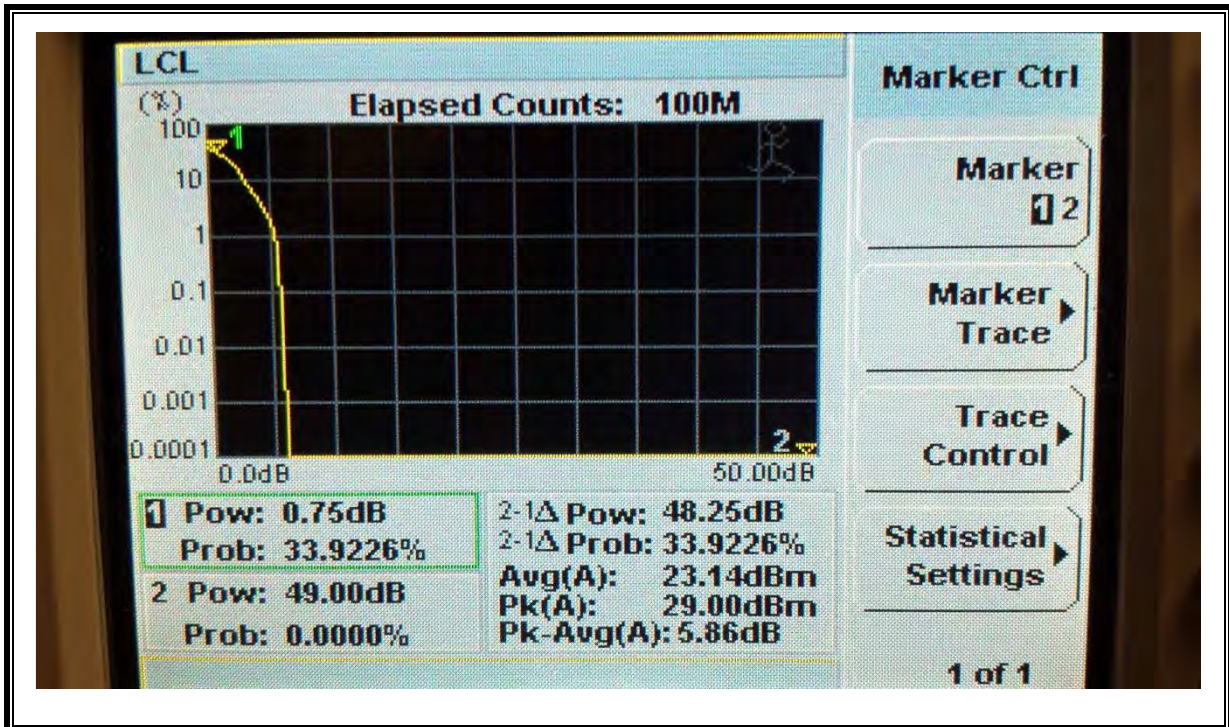
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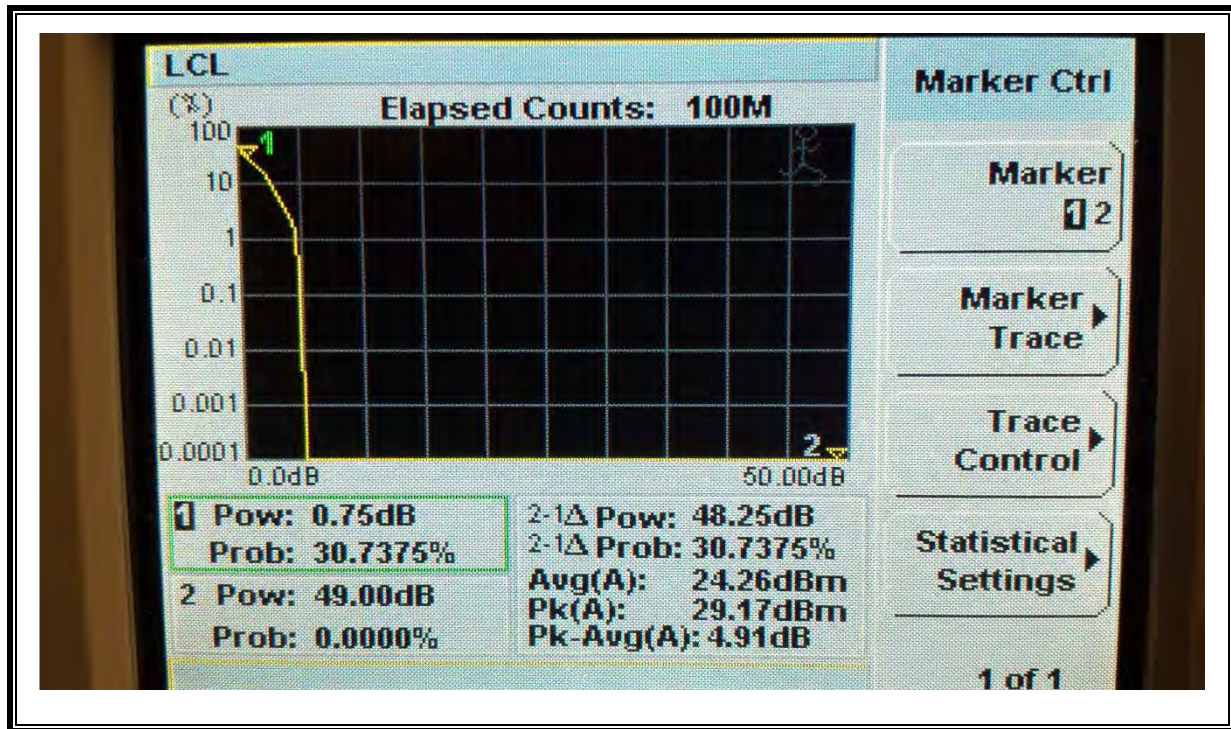
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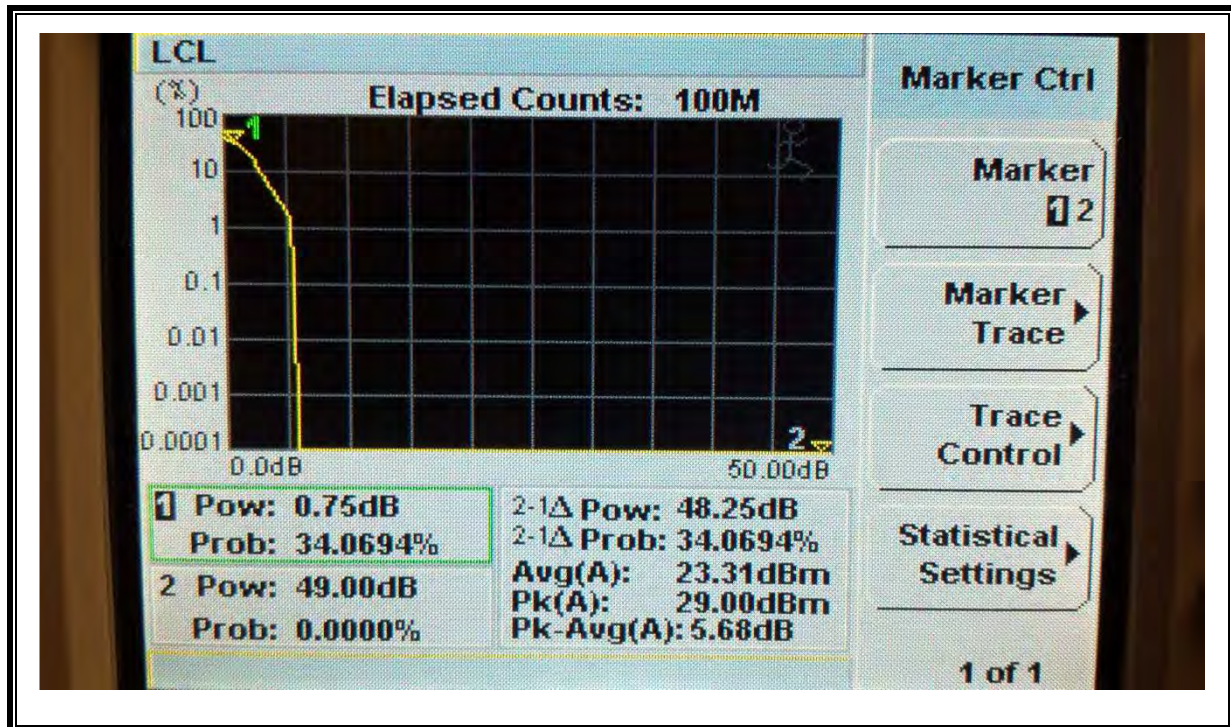
**LTE 16QAM Band 4 (5.0 MHz BAND WIDTH)**



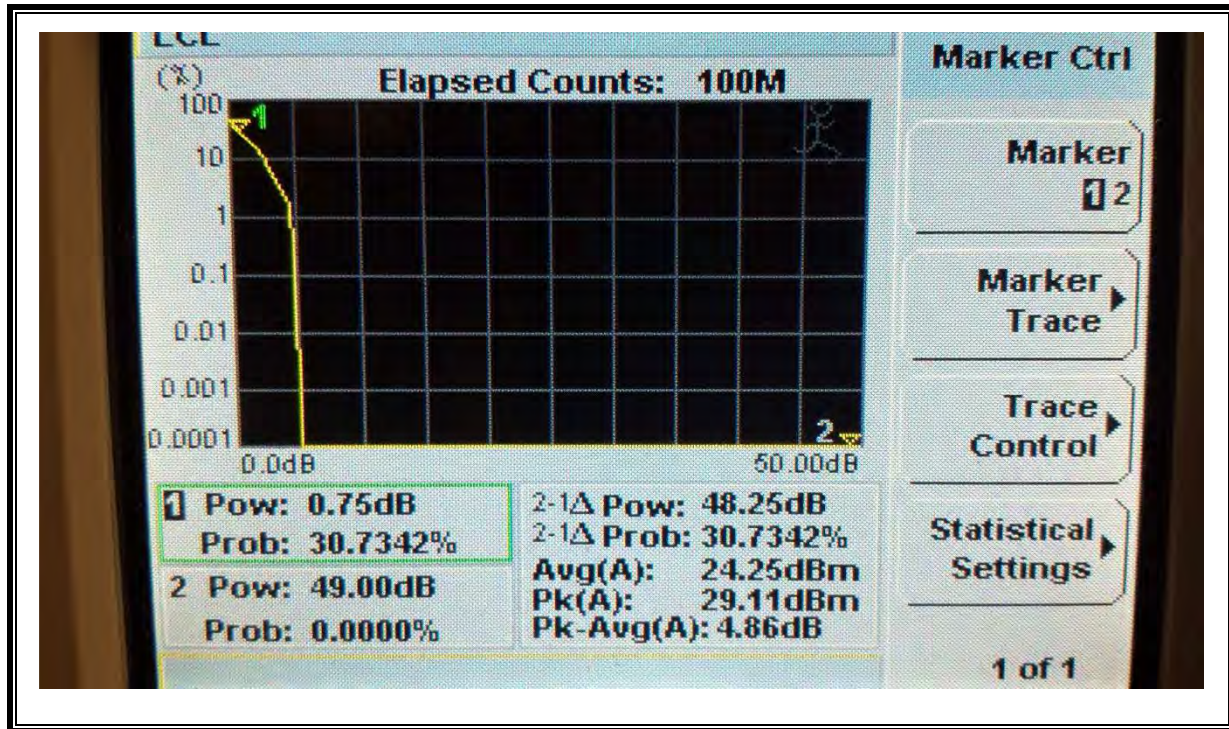
**LTE QPSK Band 4 (10.0 MHz BAND WIDTH)**



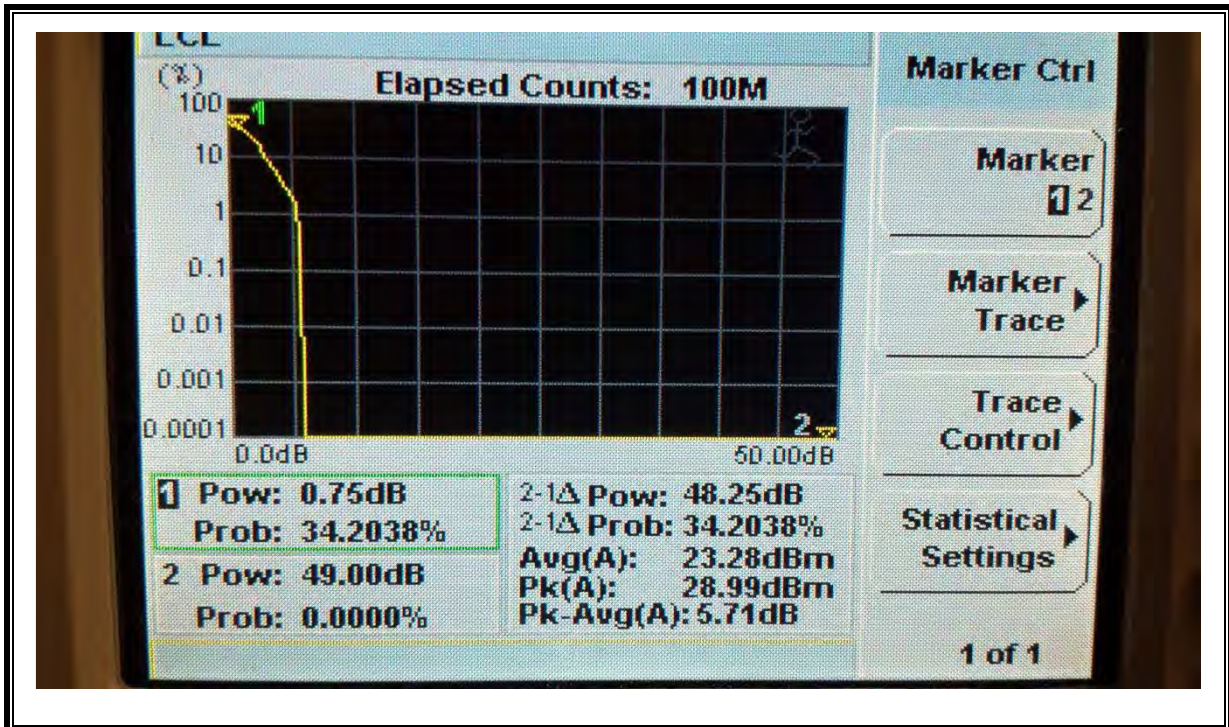
**LTE 16QAM Band 4 (10.0 MHz BAND WIDTH)**



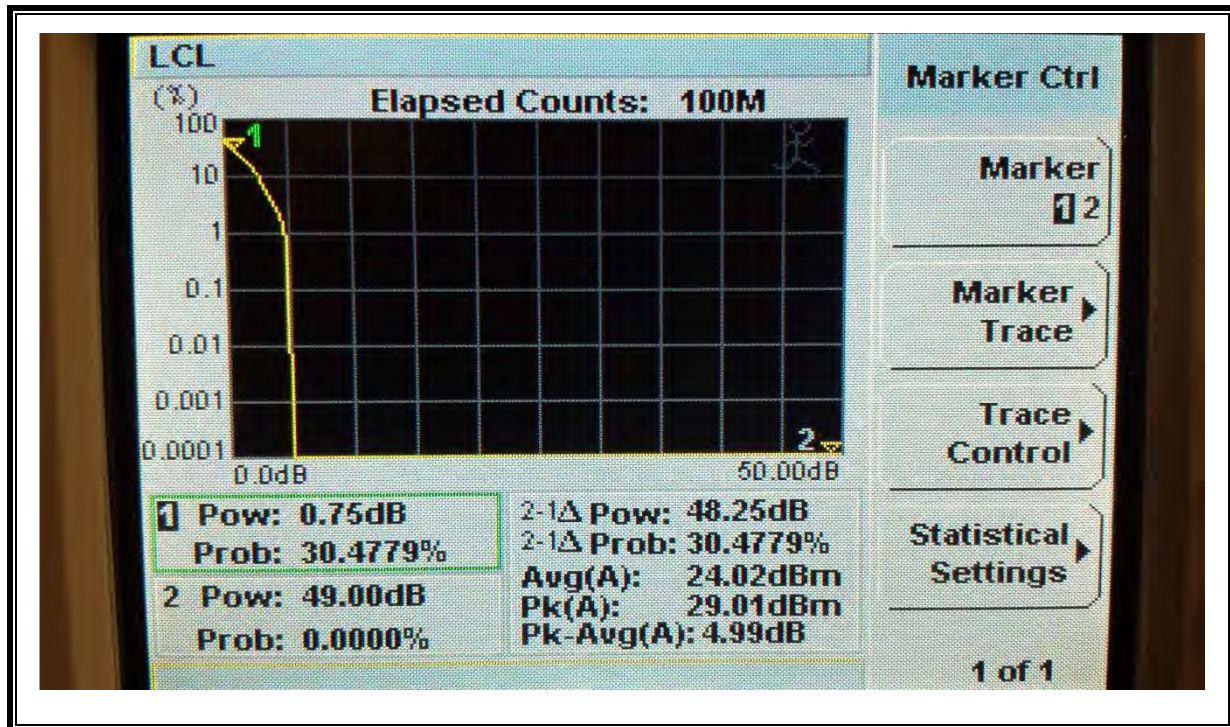
**LTE QPSK Band 4 (15.0 MHz BAND WIDTH)**



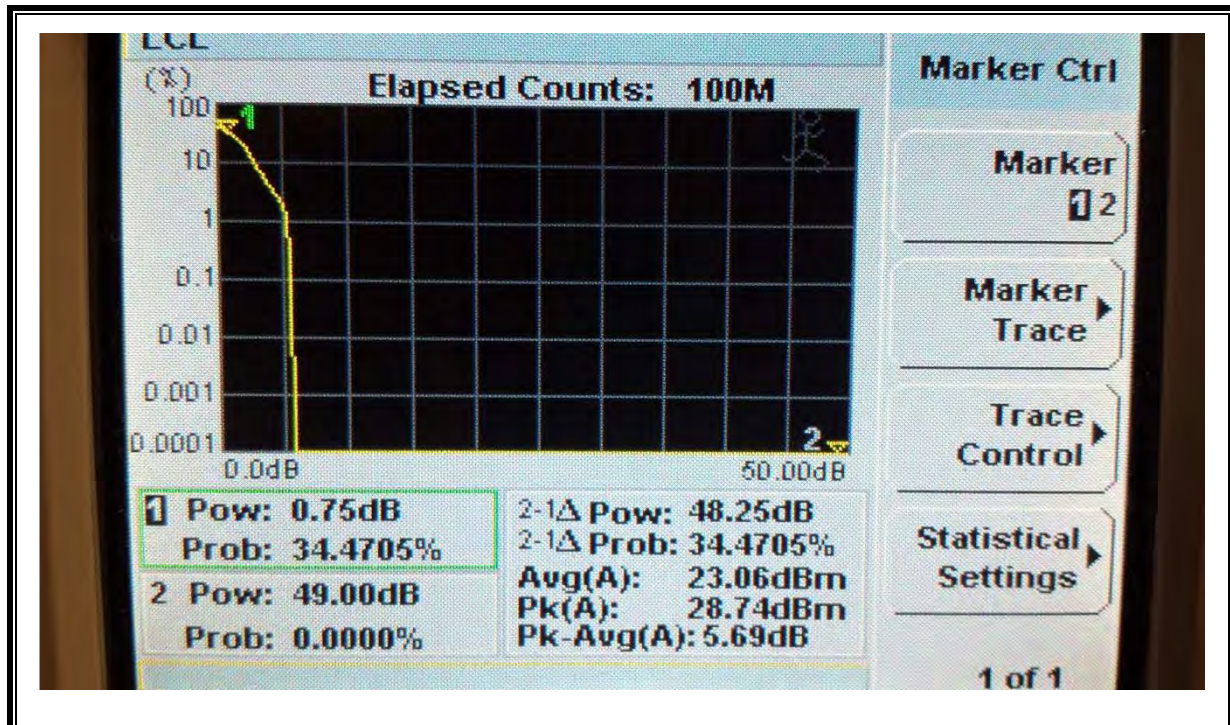
**LTE 16QAM Band 4 (15.0 MHz BAND WIDTH)**



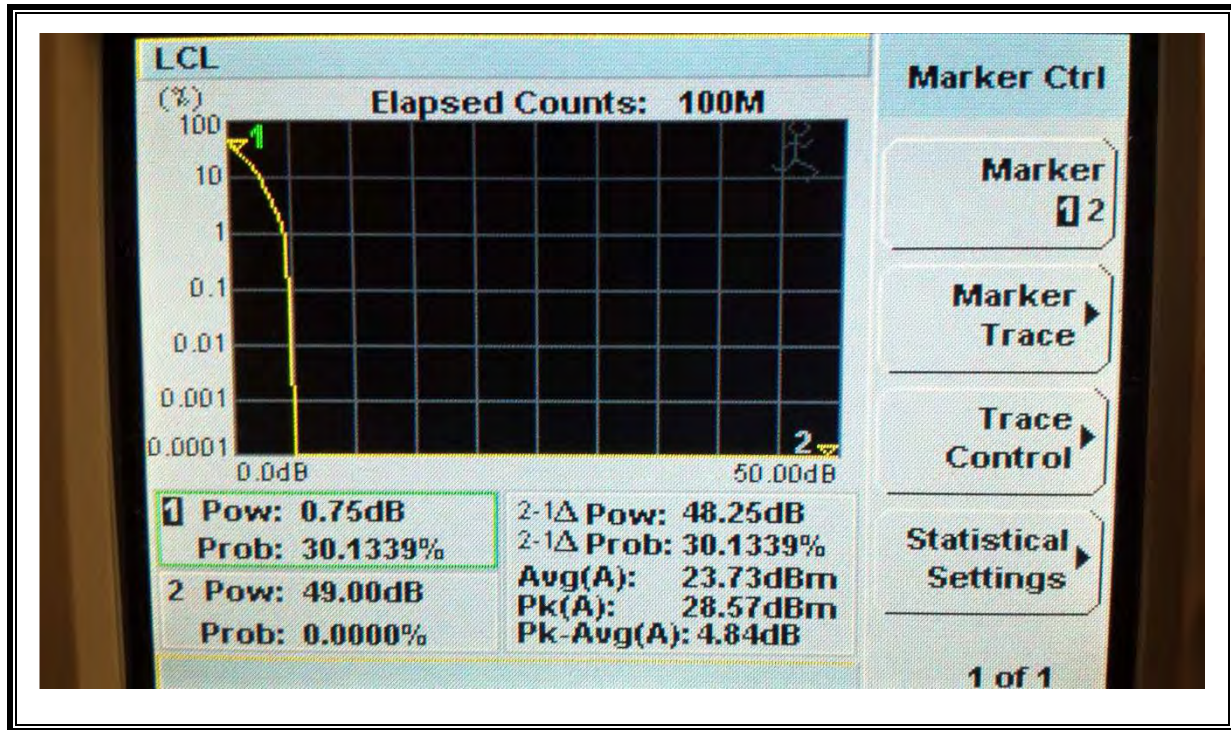
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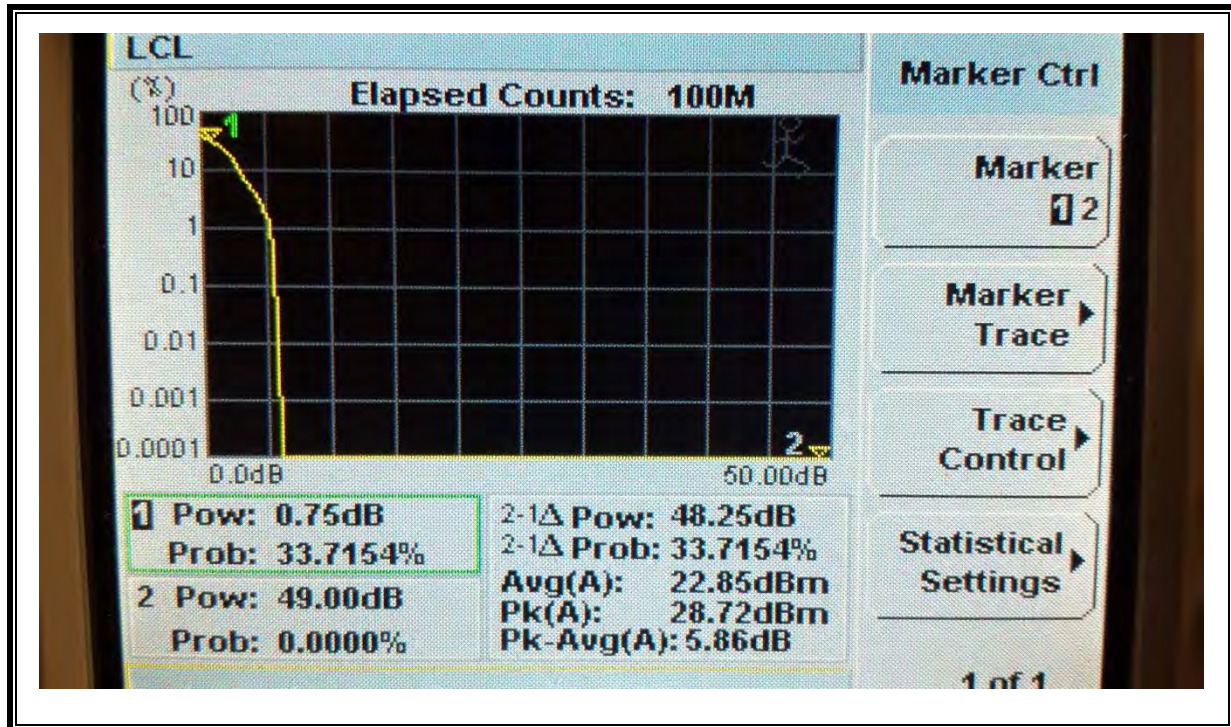
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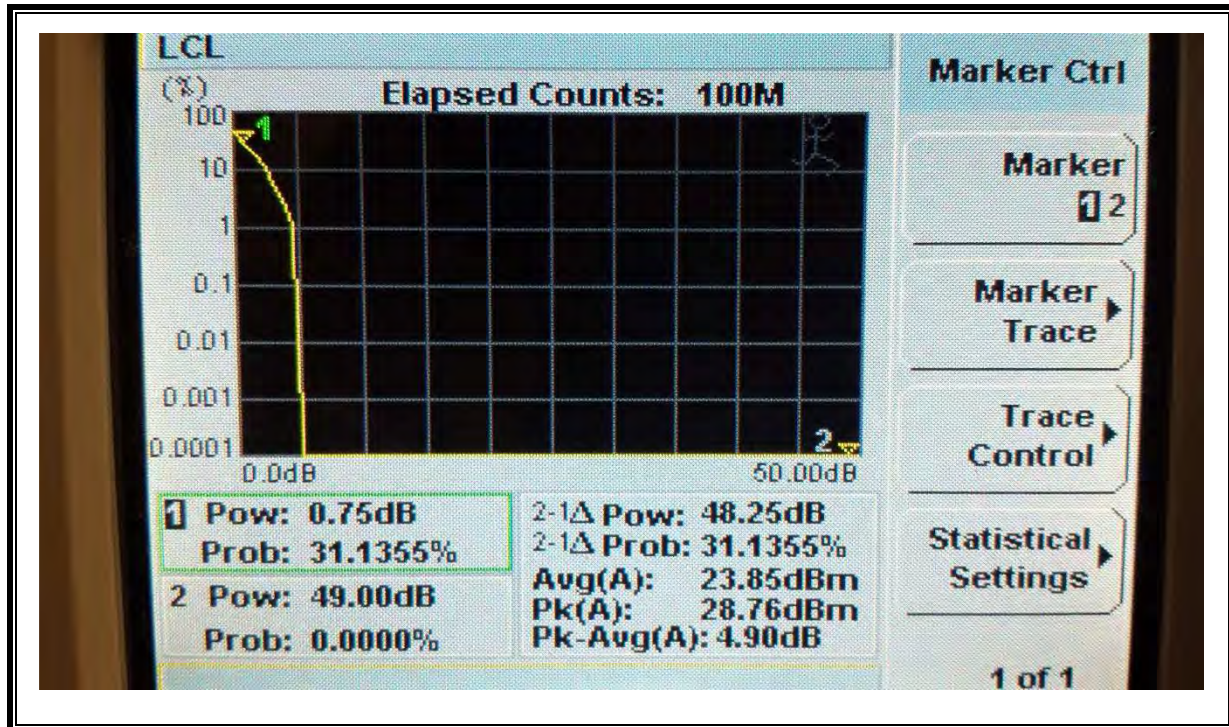
**QPSK Band 5 (1.4 MHz BAND WIDTH)**



**16QAM Band 5 (1.4 MHz BAND WIDTH)**



**LTE QPSK Band 5 (3.0 MHz BAND WIDTH)**



**LTE 16QAM Band 5 (3.0 MHz BAND WIDTH)**

