QPSK EIRP POWER FOR LTE BAND 13 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 2/26/2015

 Test Engineer:
 F. Guarnero

 Configuration:
 EUT Only

Mode: LTE Band 13 QPSK 10MHz BW

Test Equipment:

Receiving: Sunol T122, and Chamber F Cable

Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	EIRP	ERP Limit	EIRP Limit	Margin	Notes
MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
782.00	20.47	V	0.55	0.0	19.92	22.07	34.77	36.99	-14.9	
782.00	21.05	Н	0.55	0.0	20.50	22.65	34.77	36.99	-14.3	

16QAM EIRP POWER FOR LTE BAND 13 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 2/26/2015

 Test Engineer:
 F. Guarnero

 Configuration:
 EUT Only

Mode: LTE Band 13 16QAM 10MHz BW

Test Equipment:

Receiving: Sunol T122, and Chamber F Cable

Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	EIRP	ERP Limit	EIRP Limit	Margin	Notes
MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
782.00	19.76	V	0.55	0.0	19.21	21.36	34.77	36.99	-15.6	
782.00	20.28	Н	0.55	0.0	19.73	21.88	34.77	36.99	-15.1	

9.1.5. LTE BAND 17

QPSK EIRP POWER FOR LTE BAND 17 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement

UL Fremont Radiated Chamber F

Company:

Project #: 14U19187 2/26/2015 Date: Test Engineer: F. Guarnero Configuration: **EUT Only**

Mode: LTE Band 17 QPSK 5MHz BW

Test Equipment:

Receiving: Sunol T122, and Chamber F Cable

Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	EIRP	ERP Limit	EIRP Limit	Margin	Notes
MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
Low Ch										
706.50	19.63	V	0.55	0.0	19.08	21.23	34.77	36.99	-15.8	
706.50	19.49	Н	0.55	0.0	18.94	21.09	34.77	36.99	-15.9	
Mid Ch										
710.00	19.58	V	0.55	0.0	19.03	21.18	34.77	36.99	-15.8	
710.00	19.48	Н	0.55	0.0	18.93	21.08	34.77	36.99	-15.9	
High Ch										
713.50	19.61	V	0.55	0.0	19.06	21.21	34.77	36.99	-15.8	
713.50	19.80	Н	0.55	0.0	19.25	21.40	34.77	36.99	-15.6	

16QAM EIRP POWER FOR LTE BAND 17 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

Project #: 14U19187 2/26/2015 Date: Test Engineer: F. Guarnero Configuration: **EUT Only**

Mode: LTE Band 17 16QAM 5MHz BW

Test Equipment:
Receiving: Sunol T122, and Chamber F Cable

Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	EIRP	ERP Limit	EIRP Limit	Margin	Notes
MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
Low Ch										
706.50	18.75	V	0.55	0.0	18.20	20.35	34.77	36.99	-16.6	
706.50	18.42	Н	0.55	0.0	17.87	20.02	34.77	36.99	-17.0	
Mid Ch										
710.00	18.47	V	0.55	0.0	17.92	20.07	34.77	36.99	-16.9	
710.00	19.14	Н	0.55	0.0	18.59	20.74	34.77	36.99	-16.3	
High Ch										
713.50	18.49	V	0.55	0.0	17.94	20.09	34.77	36.99	-16.9	
713.50	18.80	Н	0.55	0.0	18.25	20.40	34.77	36.99	-16.6	

QPSK EIRP POWER FOR LTE BAND 17 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 2/26/2015

 Test Engineer:
 F. Guarnero

 Configuration:
 EUT Only

Mode: LTE Band 17 QPSK 10MHz BW

Test Equipment:

Receiving: Sunol T122, and Chamber F Cable

Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

Ī	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	EIRP	ERP Limit	EIRP Limit	Margin	Notes
ı	MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
Ī											
	710.00	19.47	V	0.55	0.0	18.92	21.07	34.77	36.99	-15.9	
ĺ	710.00	19.14	Н	0.55	0.0	18.59	20.74	34.77	36.99	-16.3	

16QAM EIRP POWER FOR LTE BAND 17 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

Project #: 14U19187 Date: 2/26/2015 Test Engineer: F. Guarnero Configuration: EUT Only

LTE Band 17 16QAM 10MHz BW Mode:

Test Equipment:

Receiving: Sunol T122, and Chamber F Cable

Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	EIRP	ERP Limit	EIRP Limit	Margin	Notes
MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
710.00	18.80	V	0.55	0.0	18.25	20.40	34.77	36.99	-16.6	
710.00	18.41	Н	0.55	0.0	17.86	20.01	34.77	36.99	-17.0	

9.1.6. LTE BAND 25

QPSK EIRP POWER FOR LTE BAND 25 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement

UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 2/25/2015

 Test Engineer:
 T Wang

 Configuration:
 EUT only

Mode: LTE Band 25 QPSK 1.4MHz BW

Test Equipment:

Receiving: Horn T120, and Chamber F SMA Cables

Substitution: Horn T59 Substitution, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
1.851	17.7	V	0.98	8.61	25.31	33.0	-7.7	
1.851	12.0	Н	0.98	8.81	19.84	33.0	-13.2	
Mid Ch								
1.883	17.0	V	0.98	8.53	24.51	33.0	-8.5	
1.883	11.6	Н	0.98	8.68	19.28	33.0	-13.7	
High Ch								
1.914	16.5	V	0.98	8.45	23.94	33.0	-9.1	
1.914	11.7	Н	0.98	8.55	19.27	33.0	-13.7	

REPORT NO: 14U19187-E9C DATE: JULY 10, 2015 FCC ID: BCGA1550 **EUT MODEL: A1550**

16QAM EIRP POWER FOR LTE BAND 25 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

14U19187 Project #: Date: 2/25/2015 T Wang Test Engineer: Configuration: EUT only

Mode: LTE Band 25 16QAM 1.4MHz BW

Test Equipment:

Receiving: Horn T120, and Chamber F SMA Cables

Substitution: Horn T59 Substitution, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
1.851	16.7	V	0.98	8.61	24.31	33.0	-8.7	
1.851	11.0	Н	0.98	8.81	18.84	33.0	-14.2	
Mid Ch								
1.883	16.0	V	0.98	8.53	23.51	33.0	-9.5	
1.883	10.6	Н	0.98	8.68	18.28	33.0	-14.7	
High Ch								
1.914	15.6	V	0.98	8.45	23.04	33.0	-10.0	
1.914	10.7	Н	0.98	8.55	18.27	33.0	-14.7	

QPSK EIRP POWER FOR LTE BAND 25 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 2/25/2015

 Test Engineer:
 T Wang

 Configuration:
 EUT only

Mode: LTE Band 25 QPSK 3MHz BW

Test Equipment:

Receiving: Horn T120, and Chamber F SMA Cables

Substitution: Horn T59 Substitution, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
1.852	17.4	V	0.98	8.61	25.01	33.0	-8.0	
1.852	11.6	Н	0.98	8.81	19.44	33.0	-13.6	
Mid Ch								
1.883	17.0	V	0.98	8.53	24.51	33.0	-8.5	
1.883	10.8	Н	0.98	8.68	18.48	33.0	-14.5	
High Ch								
1.914	16.2	V	0.98	8.45	23.64	33.0	-9.4	
1.914	11.8	Н	0.98	8.55	19.37	33.0	-13.6	

16QAM EIRP POWER FOR LTE BAND 25 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 2/25/2015

 Test Engineer:
 T Wang

 Configuration:
 EUT only

Mode: LTE Band 25 16QAM 3MHz BW

Test Equipment:

Receiving: Horn T120, and Chamber F SMA Cables

Substitution: Horn T59 Substitution, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
1.852	16.3	V	0.98	8.61	23.91	33.0	-9.1	
1.852	10.6	Н	0.98	8.81	18.44	33.0	-14.6	
Mid Ch								
1.883	16.0	V	0.98	8.53	23.51	33.0	-9.5	
1.883	9.8	Н	0.98	8.68	17.48	33.0	-15.5	
High Ch								
1.914	15.4	V	0.98	8.45	22.84	33.0	-10.2	
1.914	10.8	Н	0.98	8.55	18.37	33.0	-14.6	

QPSK EIRP POWER FOR LTE BAND 25 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

14U19187 Project #: Date: 2/25/2015 Test Engineer: T Wang Configuration: EUT only

Mode: LTE Band 25 QPSK 5MHz BW

Test Equipment:

Receiving: Horn T120, and Chamber F SMA Cables

Substitution: Horn T59 Substitution, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
1.853	16.4	V	0.98	8.61	24.01	33.0	-9.0	
1.853	10.1	Н	0.98	8.81	17.94	33.0	-15.1	
Mid Ch								
1.883	17.1	V	0.98	8.53	24.61	33.0	-8.4	
1.883	7.7	Н	0.98	8.68	15.38	33.0	-17.6	
High Ch								
1.913	16.4	V	0.98	8.45	23.84	33.0	-9.2	
1.913	9.9	Н	0.98	8.55	17.47	33.0	-15.5	

16QAM EIRP POWER FOR LTE BAND 25 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 2/25/2015

 Test Engineer:
 T Wang

 Configuration:
 EUT only

Mode: LTE Band 25 16QAM 5MHz BW

Test Equipment:

Receiving: Horn T120, and Chamber F SMA Cables

Substitution: Horn T59 Substitution, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
1.853	15.5	V	0.98	8.61	23.11	33.0	-9.9	
1.853	9.2	Н	0.98	8.81	17.04	33.0	-16.0	
Mid Ch								
1.883	16.2	V	0.98	8.53	23.71	33.0	-9.3	
1.883	7.0	Н	0.98	8.68	14.68	33.0	-18.3	
High Ch								
1.913	15.5	V	0.98	8.45	22.94	33.0	-10.1	
1.913	9.0	Н	0.98	8.55	16.57	33.0	-16.4	

QPSK EIRP POWER FOR LTE BAND 25 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 2/25/2015

 Test Engineer:
 T Wang

 Configuration:
 EUT only

Mode: LTE Band 25 QPSK 10MHz BW

Test Equipment:

Receiving: Horn T120, and Chamber F SMA Cables

Substitution: Horn T59 Substitution, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
1.855	17.7	V	0.98	8.61	25.31	33.0	-7.7	
1.855	11.5	Н	0.98	8.81	19.34	33.0	-13.7	
Mid Ch								
1.883	17.5	V	0.98	8.53	25.01	33.0	-8.0	
1.883	11.9	Н	0.98	8.68	19.58	33.0	-13.4	
High Ch								
1.910	15.9	V	0.98	8.45	23.34	33.0	-9.7	
1.910	12.1	Н	0.98	8.55	19.67	33.0	-13.3	

16QAM EIRP POWER FOR LTE BAND 25 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 2/25/2015

 Test Engineer:
 T Wang

 Configuration:
 EUT only

Mode: LTE Band 25 16QAM 10MHz BW

Test Equipment:

Receiving: Horn T120, and Chamber F SMA Cables

Substitution: Horn T59 Substitution, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
1.855	16.6	V	0.98	8.61	24.21	33.0	-8.8	
1.855	10.5	Н	0.98	8.81	18.34	33.0	-14.7	
Mid Ch								
1.883	16.5	V	0.98	8.53	24.01	33.0	-9.0	
1.883	11.0	Н	0.98	8.68	18.68	33.0	-14.3	
High Ch								
1.910	15.0	V	0.98	8.45	22.44	33.0	-10.6	
1.910	11.2	Н	0.98	8.55	18.77	33.0	-14.2	

QPSK EIRP POWER FOR LTE BAND 25 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 2/25/2015

 Test Engineer:
 T Wang

 Configuration:
 EUT only

Mode: LTE Band 25 QPSK 15MHz BW

Test Equipment:

Receiving: Horn T120, and Chamber F SMA Cables

Substitution: Horn T59 Substitution, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
1.858	17.3	V	0.98	8.61	24.91	33.0	-8.1	
1.858	12.2	Н	0.98	8.81	20.04	33.0	-13.0	
Mid Ch								
1.883	18.0	V	0.98	8.53	25.51	33.0	-7.5	
1.883	12.3	Н	0.98	8.68	19.98	33.0	-13.0	
High Ch								
1.908	16.3	V	0.98	8.45	23.74	33.0	-9.3	
1.908	11.7	Н	0.98	8.55	19.27	33.0	-13.7	

16QAM EIRP POWER FOR LTE BAND 25 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 2/25/2015

 Test Engineer:
 T Wang

 Configuration:
 EUT only

Mode: LTE Band 25 16QAM 15MHz BW

Test Equipment:

Receiving: Horn T120, and Chamber F SMA Cables

Substitution: Horn T59 Substitution, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
1.858	16.3	V	0.98	8.61	23.91	33.0	-9.1	
1.858	11.2	Н	0.98	8.81	19.04	33.0	-14.0	
Mid Ch								
1.883	16.9	V	0.98	8.53	24.41	33.0	-8.6	
1.883	11.3	Н	0.98	8.68	18.98	33.0	-14.0	
High Ch								
1.908	15.4	V	0.98	8.45	22.84	33.0	-10.2	
1.908	10.7	Н	0.98	8.55	18.27	33.0	-14.7	

QPSK EIRP POWER FOR LTE BAND 25 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

Project #: 14U19187 Date: 2/25/2015 Test Engineer: T Wang Configuration: EUT only

Mode: LTE Band 25 QPSK 20MHz BW

Test Equipment:

Receiving: Horn T120, and Chamber F SMA Cables

Substitution: Horn T59 Substitution, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
1.860	17.7	V	0.98	8.61	25.31	33.0	-7.7	
1.860	11.4	Н	0.98	8.81	19.24	33.0	-13.8	
Mid Ch								
1.883	17.9	V	0.98	8.53	25.41	33.0	-7.6	
1.883	11.8	Н	0.98	8.68	19.48	33.0	-13.5	
High Ch								
1.905	16.5	V	0.98	8.45	23.94	33.0	-9.1	
1.905	10.9	Н	0.98	8.55	18.47	33.0	-14.5	

16QAM EIRP POWER FOR LTE BAND 25 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 2/25/2015

 Test Engineer:
 T Wang

 Configuration:
 EUT only

Mode: LTE Band 25 16QAM 20MHz BW

Test Equipment:

Receiving: Horn T120, and Chamber F SMA Cables

Substitution: Horn T59 Substitution, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
1.860	16.7	V	0.98	8.61	24.31	33.0	-8.7	
1.860	10.4	Н	0.98	8.81	18.24	33.0	-14.8	
Mid Ch								
1.883	16.9	V	0.98	8.53	24.41	33.0	-8.6	
1.883	10.8	Н	0.98	8.68	18.48	33.0	-14.5	
High Ch								
1.905	15.6	V	0.98	8.45	23.04	33.0	-10.0	
1.905	10.1	Н	0.98	8.55	17.67	33.0	-15.3	

9.1.7. LTE BAND 26

QPSK EIRP POWER FOR LTE BAND 26 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 3/20/2015

 Test Engineer:
 T Wang

 Configuration:
 EUT Only

Mode: LTE Band 26 QPSK 1.4MHz BW

Test Equipment:

Receiving: Sunol T122, and Chamber F Cable

Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	EIRP	ERP Limit	EIRP Limit	Margin	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
Low Ch										
814.70	20.89	V	0.62	0.0	20.27	22.42	38.45	40.60	-18.2	
814.70	20.74	Н	0.62	0.0	20.12	22.27	38.45	40.60	-18.3	
Mid Ch 819.00	20.08	V	0.62	0.0	19.46	21.61	38.45	40.60	-19.0	
819.00	20.60	Н	0.62	0.0	19.98	22.13	38.45	40.60	-18.5	
High Ch										
823.30	20.29	V	0.62	0.0	19.67	21.82	38.45	40.60	-18.8	
823.30	21.22	Н	0.62	0.0	20.60	22.75	38.45	40.60	-17.9	

16QAM EIRP POWER FOR LTE BAND 26 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

 Project #:
 14U19187

 Date:
 3/20/2015

 Test Engineer:
 T Wang

 Configuration:
 EUT Only

Mode: LTE Band 26 16QAM 1.4MHz BW

Test Equipment:

Receiving: Sunol T122, and Chamber F Cable

Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

(dB) 0.62 0.62	(dBi) 0.0	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
	0.0	19 37					
	0.0	19 37					
0.62		10.01	21.52	38.45	40.60	-19.1	
0.02	0.0	19.12	21.27	38.45	40.60	-19.3	
0.62	0.0	18.56	20.71	38.45	40.60	-19.9	
0.62	0.0	18.98	21.13	38.45	40.60	-19.5	
0.62	0.0	18.77	20.92	38.45	40.60	-19.7	
0.62	0.0	19.70	21.85	38.45	40.60	-18.8	
	0.62	0.62 0.0	0.62 0.0 18.98 0.62 0.0 18.77	0.62 0.0 18.98 21.13 0.62 0.0 18.77 20.92	0.62 0.0 18.98 21.13 38.45 0.62 0.0 18.77 20.92 38.45	0.62 0.0 18.98 21.13 38.45 40.60 0.62 0.0 18.77 20.92 38.45 40.60	0.62 0.0 18.98 21.13 38.45 40.60 -19.5 0.62 0.0 18.77 20.92 38.45 40.60 -19.7

QPSK EIRP POWER FOR LTE BAND 26 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company: Project #: Date:

14U19187 2/27/2015

Test Engineer: EUT Only Configuration:

LTE Band 26 QPSK 3MHz BW Mode:

Test Equipment:

Receiving: Sunol T122, and Chamber F Cable
Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	EIRP	ERP Limit	EIRP Limit	Margin	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
Low Ch										
815.50	19.86	V	0.62	0.0	19.24	21.39	38.45	40.60	-19.2	
815.50	21.31	Н	0.62	0.0	20.69	22.84	38.45	40.60	-17.8	
Mid Ch										
819.00	19.33	V	0.62	0.0	18.71	20.86	38.45	40.60	-19.7	
819.00	21.16	Н	0.62	0.0	20.54	22.69	38.45	40.60	-17.9	
High Ch										
822.50	19.85	V	0.62	0.0	19.23	21.38	38.45	40.60	-19.2	
822.50	21.98	Н	0.62	0.0	21.36	23.51	38.45	40.60	-17.1	

16QAM EIRP POWER FOR LTE BAND 26 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

Project #: Date: 2/27/2015 Test Engineer: Configuration: **EUT Only**

LTE Band 26 16QAM 3MHz BW Mode:

Test Equipment:

Receiving: Sunol T122, and Chamber F Cable
Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	EIRP	ERP Limit	EIRP Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
Low Ch										
815.50	18.75	V	0.62	0.0	18.13	20.28	38.45	40.60	-20.3	
815.50	20.44	Н	0.62	0.0	19.82	21.97	38.45	40.60	-18.6	
Mid Ch										
819.00	18.24	V	0.62	0.0	17.62	19.77	38.45	40.60	-20.8	
819.00	20.30	Н	0.62	0.0	19.68	21.83	38.45	40.60	-18.8	
High Ch										
822.50	18.81	V	0.62	0.0	18.19	20.34	38.45	40.60	-20.3	
822.50	20.95	Н	0.62	0.0	20.33	22.48	38.45	40.60	-18.1	

QPSK EIRP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

Project #: 3/20/2015 Test Engineer: T Wang Configuration: **EUT Only**

LTE Band 26 QPSK 5MHz BW Mode:

Test Equipment:
Receiving: Sunol T122, and Chamber F Cable

Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	EIRP	ERP Limit	EIRP Limit	Margin	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
Low Ch										
816.50	20.58	V	0.62	0.0	19.96	22.11	38.45	40.60	-18.5	
816.50	21.20	Н	0.62	0.0	20.58	22.73	38.45	40.60	-17.9	
Mid Ch										
819.00	20.49	V	0.62	0.0	19.87	22.02	38.45	40.60	-18.6	
819.00	21.82	Н	0.62	0.0	21.20	23.35	38.45	40.60	-17.3	
High Ch										
821.50	19.88	V	0.62	0.0	19.26	21.41	38.45	40.60	-19.2	
821.50	20.90	Н	0.62	0.0	20.28	22.43	38.45	40.60	-18.2	

16QAM EIRP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F

Company:

Project #: 14U19187 3/20/2015 Test Engineer: T Wang Configuration: EUT Only

LTE Band 26 16QAM 5MHz BW Mode:

Test Equipment:

Receiving: Sunol T122, and Chamber F Cable

Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	EIRP	ERP Limit	EIRP Limit	Margin	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
Low Ch										
816.50	19.68	V	0.62	0.0	19.06	21.21	38.45	40.60	-19.4	
816.50	19.80	Н	0.62	0.0	19.18	21.33	38.45	40.60	-19.3	
Mid Ch										
819.00	19.59	V	0.62	0.0	18.97	21.12	38.45	40.60	-19.5	
819.00	20.62	Н	0.62	0.0	20.00	22.15	38.45	40.60	-18.5	
High Ch										
821.50	18.98	V	0.62	0.0	18.36	20.51	38.45	40.60	-20.1	
821.50	19.80	Н	0.62	0.0	19.18	21.33	38.45	40.60	-19.3	

QPSK EIRP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement

UL Fremont Radiated Chamber H

Company:

 Project #:
 14U19187

 Date:
 2/27/2015

 Test Engineer:
 R.Z

 Configuration:
 EUT Only

Mode: LTE Band 26 QPSK 10MHz BW

Test Equipment:

Receiving: Sunol T900, and Chamber H Cable

Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	EIRP	ERP Limit	EIRP Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
Mid Ch										
819.00	19.26	V	0.62	0.0	18.64	20.79	38.45	40.60	-19.8	
819.00	21.08	Н	0.62	0.0	20.46	22.61	38.45	40.60	-18.0	

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16QAM EIRP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber H

Company:

 Project #:
 14U19187

 Date:
 2/27/2015

 Test Engineer:
 R.Z

 Configuration:
 EUT Only

Mode: LTE Band 26 16QAM 10MHz BW

Test Equipment:

Receiving: Sunol T900, and Chamber H Cable

Substitution: Dipole S/N: 00022117, 8ft SMA Cable (s/n 228076-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	EIRP	ERP Limit	EIRP Limit	Margin	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	
Mid Ch										
819.00	18.34	V	0.62	0.0	17.72	19.87	38.45	40.60	-20.7	
819.00	20.20	Н	0.62	0.0	19.58	21.73	38.45	40.60	-18.9	

9.1.8. LTE BAND 41

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

High Frequency Substitution Measurement UL Fremont Radiated Chamber G

Company:

 Project #:
 14U19187

 Date:
 7/2/2015

 Test Engineer:
 F. Guarnero

 Configuration:
 EUT only

Mode: LTE Band 41 QPSK 5MHz BW

Test Equipment:

Receiving: Horn T862, and Chamber G SMA Cables

Substitution: Horn T60 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
2.499	22.6	V	1.15	9.33	30.79	33.0	-2.2	
2.499	23.3	Н	1.15	9.33	31.46	33.0	-1.5	
Mid Ch								
2.593	22.8	V	1.16	9.47	31.08	33.0	-1.9	
2.593	22.3	Н	1.16	9.47	30.57	33.0	-2.4	
High Ch								
2.688	22.9	V	1.17	9.78	31.46	33.0	-1.5	
2.688	22.1	Н	1.17	9.78	30.76	33.0	-2.2	

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

High Frequency Substitution Measurement UL Fremont Radiated Chamber G

Company:

 Project #:
 14U19187

 Date:
 7/2/2015

 Test Engineer:
 F. Guarnero

 Configuration:
 EUT only

Mode: LTE Band 41 16QAM 5MHz BW

Test Equipment:

Receiving: Horn T862, and Chamber G SMA Cables

Substitution: Horn T60 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
2.499	21.3	V	1.15	9.33	29.43	33.0	-3.6	
2.499	21.1	Н	1.15	9.33	29.29	33.0	-3.7	
Mid Ch								
2.593	22.0	V	1.16	9.47	30.31	33.0	-2.7	
2.593	20.7	Н	1.16	9.47	29.02	33.0	-4.0	
High Ch								
2.688	21.4	V	1.17	9.78	30.01	33.0	-3.0	
2.688	20.4	Н	1.17	9.78	29.05	33.0	-3.9	

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

High Frequency Substitution Measurement UL Fremont Radiated Chamber G

Company:

 Project #:
 14U19187

 Date:
 7/2/2015

 Test Engineer:
 F. Guarnero

 Configuration:
 EUT only

Mode: LTE Band 41 QPSK 10MHz BW

Test Equipment:

Receiving: Horn T862, and Chamber G SMA Cables

Substitution: Horn T60 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.501	22.8	V	1.15	9.34	31.03	33.0	-2.0	
2.501	23.8	Н	1.15	9.34	31.99	33.0	-1.0	
Mid Ch								
2.593	22.9	V	1.16	9.47	31.25	33.0	-1.7	
2.593	22.5	Н	1.16	9.47	30.78	33.0	-2.2	
High Ch								
2.685	23.2	V	1.17	9.77	31.78	33.0	-1.2	
2.685	22.6	Н	1.17	9.77	31.19	33.0	-1.8	

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

High Frequency Substitution Measurement UL Fremont Radiated Chamber G

Company:

Project #: 14U19187 Date: 7/2/2015 Test Engineer: F. Guarnero Configuration: EUT only

Mode: LTE Band 41 16QAM 10MHz BW

Test Equipment:

Receiving: Horn T862, and Chamber G SMA Cables

Substitution: Horn T60 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.501	21.6	V	1.15	9.34	29.75	33.0	-3.3	
2.501	22.3	Н	1.15	9.34	30.50	33.0	-2.5	
Mid Ch								
2.593	21.5	V	1.16	9.47	29.81	33.0	-3.2	
2.593	21.2	Н	1.16	9.47	29.46	33.0	-3.5	
High Ch								
2.685	21.6	V	1.17	9.77	30.24	33.0	-2.8	
2.685	20.7	Н	1.17	9.77	29.29	33.0	-3.7	

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

High Frequency Substitution Measurement UL Fremont Radiated Chamber G

Company:

 Project #:
 14U19187

 Date:
 7/2/2015

 Test Engineer:
 F. Guarnero

 Configuration:
 EUT only

Mode: LTE Band 41 QPSK 15MHz BW

Test Equipment:

Receiving: Horn T862, and Chamber G SMA Cables

Substitution: Horn T60 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
2.504	23.0	V	1.15	9.34	31.16	33.0	-1.8	
2.504	23.8	Н	1.15	9.34	31.96	33.0	-1.0	
Mid Ch								
2.593	23.1	V	1.16	9.47	31.42	33.0	-1.6	
2.593	22.7	Н	1.16	9.47	30.97	33.0	-2.0	
High Ch								
2.683	23.3	V	1.17	9.76	31.87	33.0	-1.1	
2.683	22.7	Н	1.17	9.76	31.28	33.0	-1.7	

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

High Frequency Substitution Measurement UL Fremont Radiated Chamber G

Company:

 Project #:
 14U19187

 Date:
 7/2/2015

 Test Engineer:
 F. Guarnero

 Configuration:
 EUT only

Mode: LTE Band 41 16QAM 15MHz BW

Test Equipment:

Receiving: Horn T862, and Chamber G SMA Cables

Substitution: Horn T60 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
2.504	21.7	V	1.15	9.34	29.93	33.0	-3.1	
2.504	22.5	Н	1.15	9.34	30.64	33.0	-2.4	
Mid Ch								
2.593	21.8	V	1.16	9.47	30.10	33.0	-2.9	
2.593	20.9	Н	1.16	9.47	29.17	33.0	-3.8	
High Ch								
2.683	21.8	V	1.17	9.76	30.42	33.0	-2.6	
2.683	21.3	Н	1.17	9.76	29.88	33.0	-3.1	

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

High Frequency Substitution Measurement UL Fremont Radiated Chamber G

Company:

 Project #:
 14U19187

 Date:
 7/2/2015

 Test Engineer:
 F. Guarnero

 Configuration:
 EUT only

Mode: LTE Band 41 QPSK 20MHz BW

Test Equipment:

Receiving: Horn T862, and Chamber G SMA Cables

Substitution: Horn T60 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
2.506	23.0	V	1.15	9.34	31.23	33.0	-1.8	
2.506	24.0	Н	1.15	9.34	32.20	33.0	-0.8	
Mid Ch								
2.593	23.3	V	1.16	9.47	31.62	33.0	-1.4	
2.593	22.7	Н	1.16	9.47	30.98	33.0	-2.0	
High Ch								
2.680	23.3	V	1.17	9.76	31.87	33.0	-1.1	
2.680	23.1	Н	1.17	9.76	31.67	33.0	-1.3	

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

High Frequency Substitution Measurement UL Fremont Radiated Chamber G

Company:

 Project #:
 14U19187

 Date:
 7/2/2015

 Test Engineer:
 F. Guarnero

 Configuration:
 EUT only

Mode: LTE Band 41 16QAM 20MHz BW

Test Equipment:

Receiving: Horn T862, and Chamber G SMA Cables

Substitution: Horn T60 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin EIRP	Notes
GHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
Low Ch								
2.506	21.6	V	1.15	9.34	29.83	33.0	-3.2	
2.506	22.9	Н	1.15	9.34	31.10	33.0	-1.9	
Mid Ch								
2.593	21.9	V	1.16	9.47	30.22	33.0	-2.8	
2.593	21.6	Н	1.16	9.47	29.89	33.0	-3.1	
High Ch								
2.680	21.7	V	1.17	9.76	30.27	33.0	-2.7	
2.680	21.8	Н	1.17	9.76	30.37	33.0	-2.6	

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)	f (MHz)	Modulation	Conducted *Peak	Power (dBm) Average	Peak-to- Average Ratio (PAR)
LTE Band 2 RB1-0	1.4	1880.0	QPSK	28.97	23.97	5.00
	1.4	1880.0	16QAM	28.78	23.03	5.75

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

Mode	Channel Band-width (MHZ)	f (MHz)	Modulation	Conducted *Peak	Power (dBm) Average	Peak-to- Average Ratio (PAR)
LTE Band 2	3.0	1880.0	QPSK	28.85	23.85	5.00
RB1-0		1880.0	16QAM	28.62	22.87	5.75

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

	Channel Band-width	6 (B.41.1.)			Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 2	5.0	1880.0	QPSK	28.73	23.98	4.75
RB1-0	5.0	1880.0	16QAM	28.71	22.96	5.75

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

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 2	10.0	4000.0	QPSK	28.75	24	4.75
RB1-0	10.0	1880.0	16QAM	27.71	22.96	4.75

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

	Channel Band-width			Conducted Power (dBm)		Peak-to- Average Ratio	
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)	
LTE Band 2	45.0	1000.0	QPSK	28.69	23.94	4.75	
RB1-0	15.0	1880.0	16QAM	28.49	22.99	5.50	
*Peak Reading = Average Reading + Peak-to-Average Ratio							

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio	
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)	
LTE Band 2	20.0	1880.0	QPSK	28.54	23.79	4.75	
RB1-0	20.0	1880.0	16QAM	28.37	22.87	5.50	
*Peak Reading = Average Reading + Peak-to-Average Ratio							

9.2.2. LTE BAND 4

	Channel Band-width			Conducted Power (dBm)		Peak-to- Average Ratio	
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)	
LTE Band 4	4.4	4700 5	QPSK	28.72	23.97	4.75	
RB1-0	1.4	1732.5	16QAM	28.82	23.07	5.75	
*Peak Reading = Average Reading + Peak-to-Average Ratio							

	Channel Band-width			Conducted Power (dBm)		Peak-to- Average Ratio	
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)	
LTE Band 4 RB1-0	3.0	1732.5	QPSK	28.72	23.97	4.75	
			16QAM	28.68	22.93	5.75	
*Peak Reading = Average Reading + Peak-to-Average Ratio							

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 4	1732.5	QPSK	28.61	23.86	4.75	
RB1-0	5.0	1732.5	16QAM	28.57	22.82	5.75

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

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 4	10.0		QPSK	28.68	23.93	4.75
RB1-0	10.0	1732.5	16QAM	28.47	22.97	5.50
	•					•

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

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 4	45.0	1=00=	QPSK	28.66	23.91	4.75
RB1-0	15.0	1732.5	16QAM	28.42	22.92	5.50

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

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 4	20.0	1732.5	QPSK	28.46	23.71	4.75
RB1-0	20.0	1732.5	16QAM	28.27	22.77	5.50

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

9.2.3. LTE BAND 5

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio		
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)		
LTE Band 5 RB1-0	836.5	QPSK	29.19	24.44	4.75			
	1.4	636.5	16QAM	28.64	23.39	5.25		
*Peak Reading = Average Reading + Peak-to-Average Ratio								

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio			
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)			
LTE Band 5	2.0	93C F	QPSK	29.17	24.42	4.75			
RB1-0	3.0	836.5	16QAM	28.69	23.44	5.25			
*Peak Reading	*Peak Reading = Average Reading + Peak-to-Average Ratio								

Mode	Channel Band-width (MHZ)	f (MHz)	Modulation	Conducted *Peak	Power (dBm) Average	Peak-to- Average Ratio (PAR)
LTE Band 5 RB1-0	5.0	836.5	QPSK	28.99	24.49	4.5
			16QAM	28.79	23.29	5.5
						0.0

^{*}Peak Reading = Average Reading + Peak-to-Average Ratio

Mode	Channel Band-width (MHZ)	f (MHz)	Modulation	Conducted *Peak	Power (dBm) Average	Peak-to- Average Ratio (PAR)
LTE Band 5	10.0	836.5	QPSK	28.89	24.39	4.50
RB1-0	10.0	830.5	16QAM	28.36	23.36	5.00

^{*}Peak Reading = Average Reading + Peak-to-Average Ratio

9.2.4. LTE BAND 13

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 13 RB1-0 5.0	700.0	QPSK	28.71	23.96	4.75	
	5.0	5.0 782.0	16QAM	28.66	22.91	5.75
*Peak Reading	r = Average Re	ading + Pe	eak-to-Average	Ratio		

	Channel Band-width				Conducted Power (dBm)	
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	Average Ratio (PAR)
LTE Band 13 RB1-0	10.0	782.0	QPSK	28.74	23.99	4.75
			16QAM	28.76	23.01	5.75
*Dook Dooding			ale to Assamana	D ()		

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

9.2.5. LTE BAND 17

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 17 RB1-0	5.0	710.0	QPSK	28.16	23.91	4.25
	5.0		16QAM	28.14	22.89	5.25

^{*}Peak Reading = Average Reading + Peak-to-Average Ratio

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 17	10.0	710.0	QPSK	28.48	23.98	4.50
RB1-0	10.0	7 10.0	16QAM	28.27	23.02	5.25

^{*}Peak Reading = Average Reading + Peak-to-Average Ratio

9.2.6. LTE BAND 25

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 25 RB1-0	1.4	1880.0	QPSK	28.94	23.94	5.00
			16QAM	28.79	23.04	5.75

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

	Channel Band-width			Conducted Power (dBm)		Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 25 RB1-0	3.0	1880.0	QPSK	28.99	23.99	5.00
			16QAM	28.73	22.98	5.75

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

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 25 RB1-0	5.0	1880.0	QPSK	28.71	23.96	4.75
			16QAM	28.59	22.84	5.75

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

	Channel Band-width				Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 25 RB1-0	10.0	1880.0	QPSK	28.73	23.98	4.75
	10.0	1000.0	16QAM	28.49	22.99	5.50

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

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 25 RB1-0	15.0	1880.0	QPSK	28.72	23.97	4.75
			16QAM	28.49	22.99	5.50
		L				

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

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio			
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)			
LTE Band 25 RB1-0	20.0 18		QPSK	28.67	23.92	4.75			
		1880.0	16QAM	28.49	22.99	5.50			
	*Deal Dealine Average Dealine & Dealine Average Detic								

^{*}Peak Reading = Average Reading + Peak-to-Average Ratio

9.2.7. LTE BAND 26

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 26 RB1-0	4.4	819.0	QPSK	27.99	23.49	4.50
	1.4		16QAM	28.4	22.65	5.75

^{*}Peak Reading = Average Reading + Peak-to-Average Ratio

	Channel Band-width			Conducted	Power (dBm)	Peak-to- Average Ratio
Mode	(MHZ)	f (MHz)	Modulation	*Peak	Average	(PAR)
LTE Band 26 RB1-0	0.0	040.0	QPSK	28.19	23.44	4.75
	3.0	819.0	16QAM	27.74	22.49	5.25

^{*}Peak Reading = Average Reading + Peak-to-Average Ratio

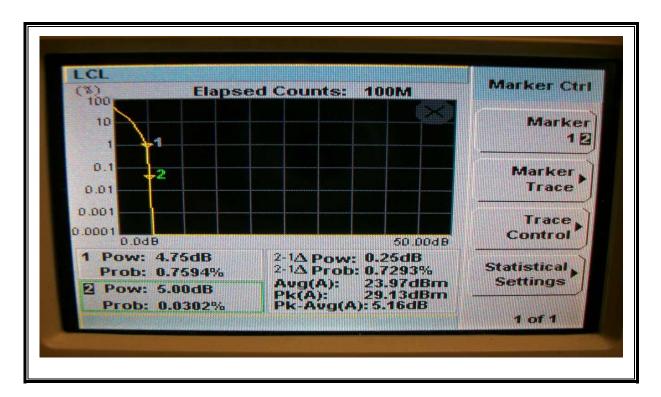
Mode	Channel Band-width (MHZ)	f (MHz)	Modulation	Conducted *Peak	Power (dBm) Average	Peak-to- Average Ratio (PAR)
LTE Band 26 RB1-0	,	040.0	QPSK	28.19	23.44	4.75
	5.0	819.0	16QAM	27.61	22.36	5.25

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

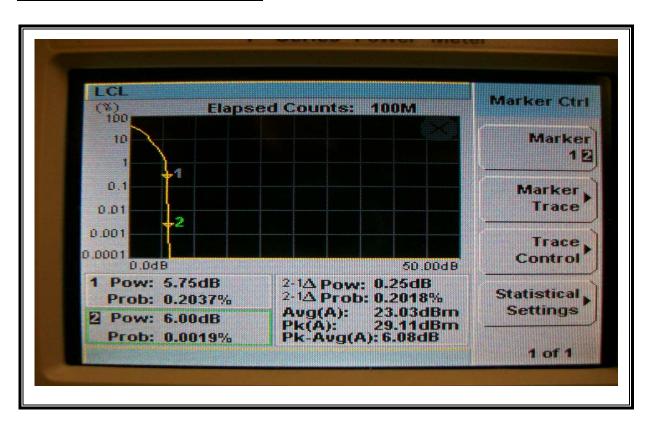
Mode	Channel Band-width (MHZ)	f (MHz)	Modulation	Conducted *Peak	Power (dBm) Average	Peak-to- Average Ratio (PAR)
LTE Band 26 RB1-0	40.0	040.0	QPSK	28.24	23.49	4.75
	10.0	819.0	16QAM	28.05	22.55	5.50

^{*}Peak Reading = Average Reading + Peak-to-Average Ratio

QPSK Band 2 (1.4 MHz BAND WIDTH)

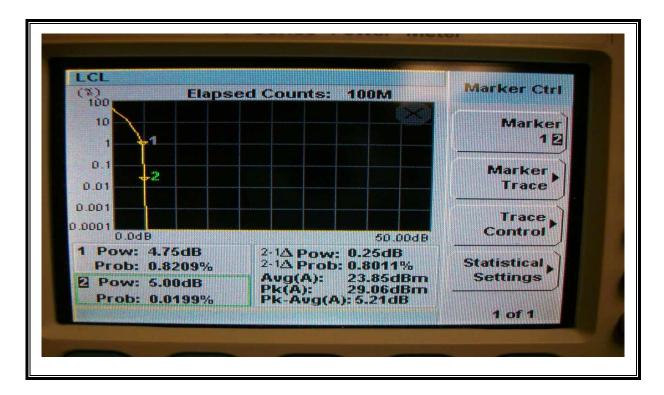


16QAM Band 2 (1.4 MHz BAND WIDTH)

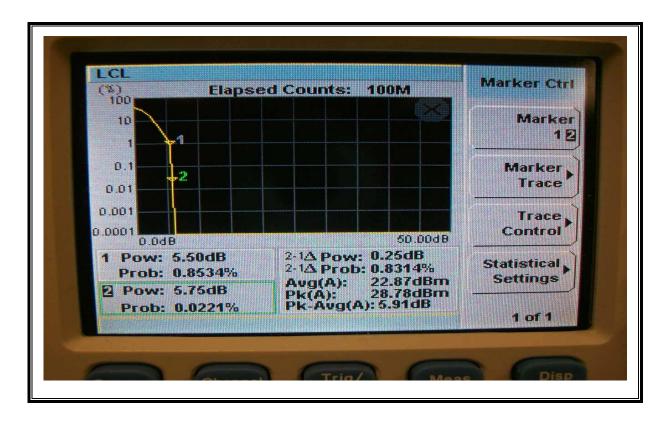


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LTE QPSK Band 2 (3.0 MHz BAND WIDTH)



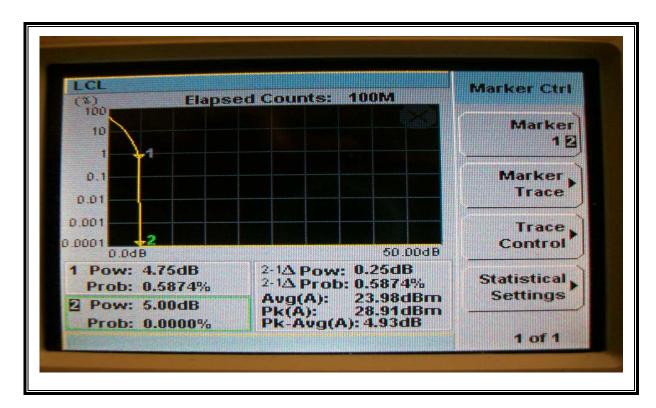
LTE 16QAM Band 2 (3.0 MHz BAND WIDTH)



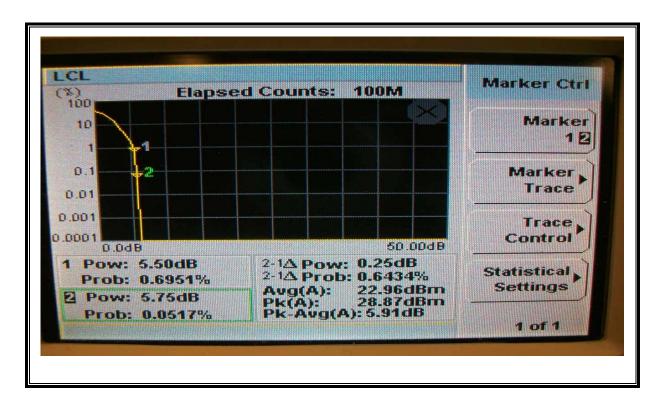
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FORM NO: CCSUP4031B FAX: (510) 661-0888

LTE QPSK Band 2 (5.0 MHz BAND WIDTH)

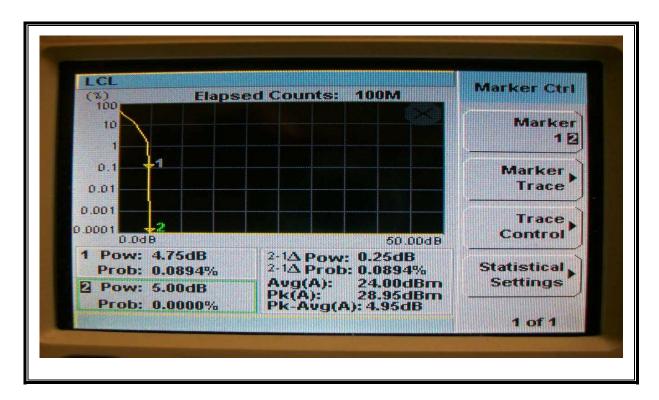


LTE 16QAM Band 2 (5.0 MHz BAND WIDTH)

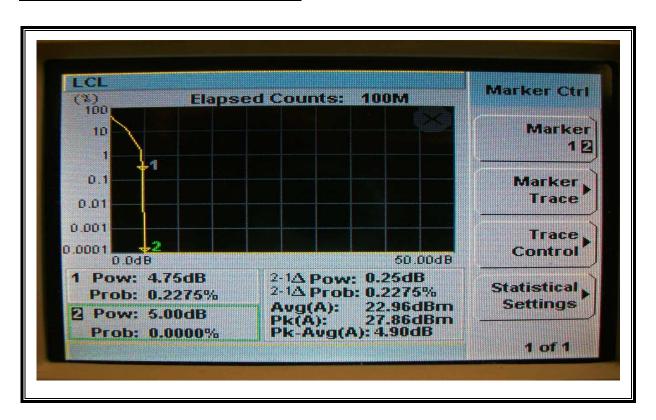


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LTE QPSK Band 2 (10.0 MHz BAND WIDTH)

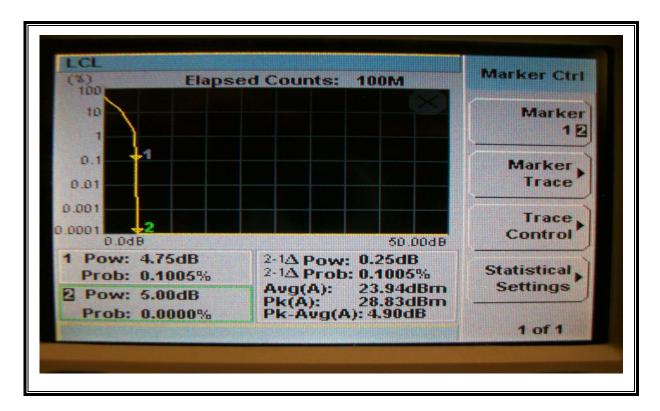


LTE 16QAM Band 2 (10.0 MHz BAND WIDTH)

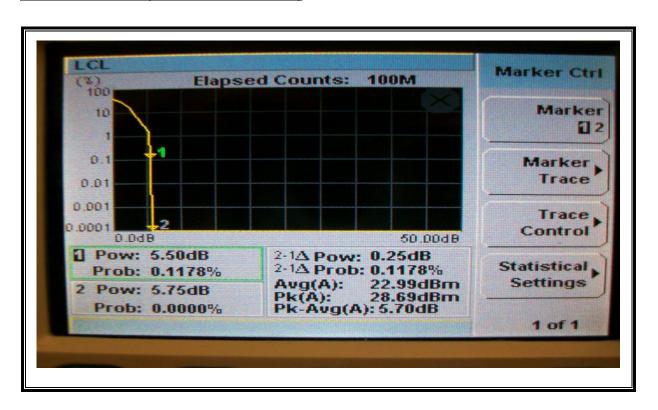


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LTE QPSK Band 2 (15.0 MHz BAND WIDTH)

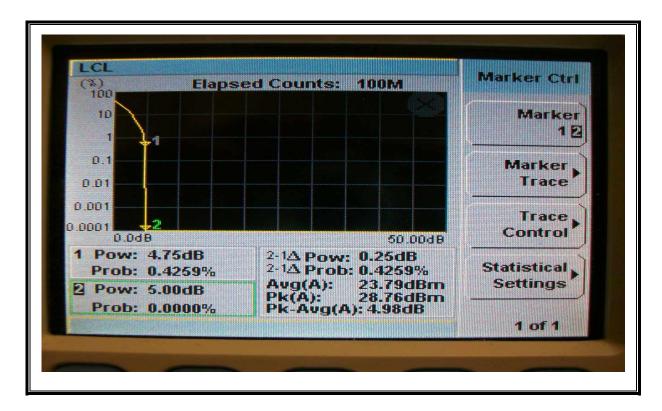


LTE 16QAM Band 2 (15.0 MHz BAND WIDTH)

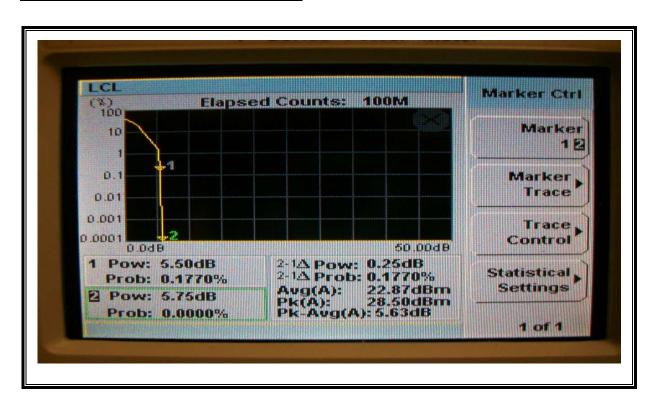


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LTE QPSK Band 2 (20.0 MHz BAND WIDTH)

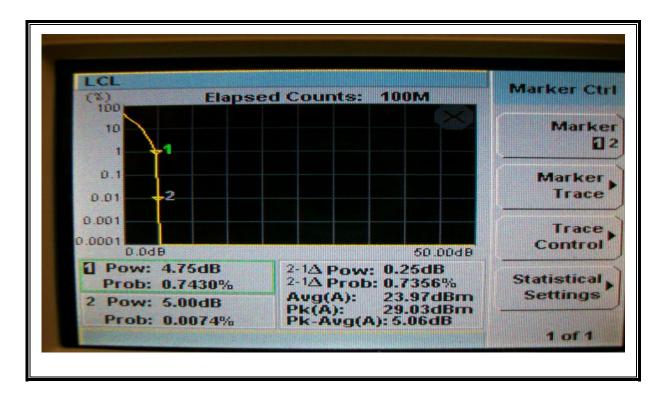


LTE 16QAM Band 2 (20.0 MHz BAND WIDTH)

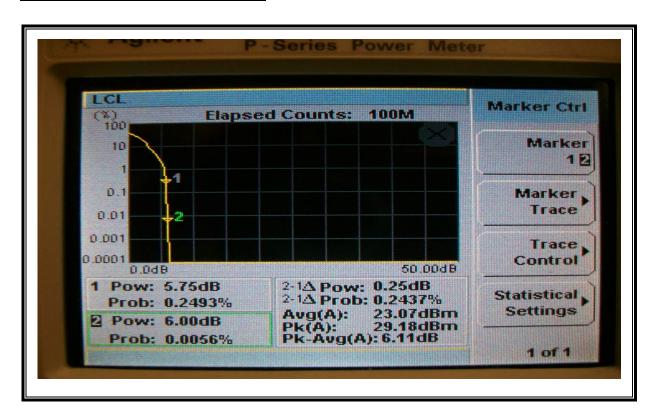


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QPSK Band 4 (1.4 MHz BAND WIDTH)

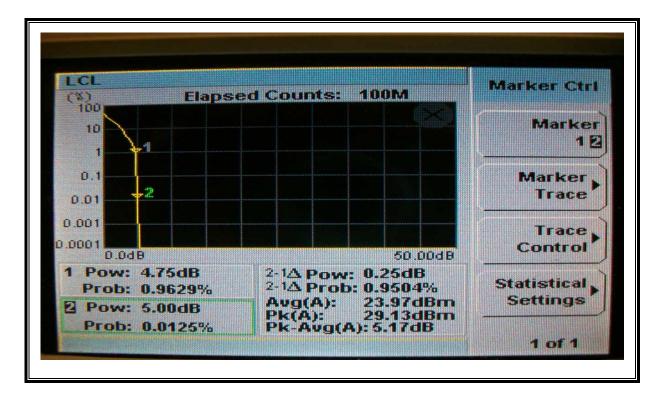


16QAM Band 4 (1.4 MHz BAND WIDTH)

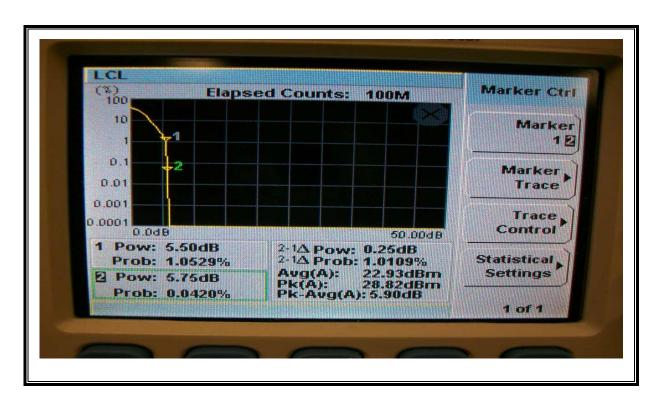


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LTE QPSK Band 4 (3.0 MHz BAND WIDTH)



LTE 16QAM Band 4 (3.0 MHz BAND WIDTH)



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