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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/19/2015
Test Engineer: T Wang
Configuration: EUT only
Mode: LTE Band 25 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.860	10.1	V	0.98	8.04	17.17	33.0	-15.8	
1.860	10.7	H	0.98	8.04	17.79	33.0	-15.2	
Mid Ch								
1.883	10.7	V	0.98	8.03	17.72	33.0	-15.3	
1.883	10.8	H	0.98	8.03	17.85	33.0	-15.2	
High Ch								
1.905	10.1	V	0.98	8.04	17.16	33.0	-15.8	
1.905	10.8	H	0.98	8.04	17.85	33.0	-15.2	

Rev. 10.24.13

10.2.9. LTE BAND 26

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 QPSK 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
814.70	14.28	V	0.62	0.0	13.66	15.81	38.45	40.60	-24.8	
814.70	-4.42	H	0.62	0.0	-5.04	-2.89	38.45	40.60	-43.5	
Mid Ch										
819.00	14.41	V	0.62	0.0	13.79	15.94	38.45	40.60	-24.7	
819.00	-4.52	H	0.62	0.0	-5.14	-2.99	38.45	40.60	-43.6	
High Ch										
823.30	14.49	V	0.62	0.0	13.87	16.02	38.45	40.60	-24.6	
823.30	-3.67	H	0.62	0.0	-4.29	-2.14	38.45	40.60	-42.7	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 16QAM 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch										
814.70	13.28	V	0.62	0.0	12.66	14.81	38.45	40.60	-25.8	
814.70	-4.92	H	0.62	0.0	-5.54	-3.39	38.45	40.60	-44.0	
Mid Ch										
819.00	13.01	V	0.62	0.0	12.39	14.54	38.45	40.60	-26.1	
819.00	-5.62	H	0.62	0.0	-6.24	-4.09	38.45	40.60	-44.7	
High Ch										
823.30	13.89	V	0.62	0.0	13.27	15.42	38.45	40.60	-25.2	
823.30	-4.37	H	0.62	0.0	-4.99	-2.84	38.45	40.60	-43.4	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 QPSK 3MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
815.50	14.38	V	0.62	0.0	13.76	15.91	38.45	40.60	-24.7	
815.50	-4.52	H	0.62	0.0	-5.14	-2.99	38.45	40.60	-43.6	
Mid Ch										
819.00	13.81	V	0.62	0.0	13.19	15.34	38.45	40.60	-25.3	
819.00	-4.42	H	0.62	0.0	-5.04	-2.89	38.45	40.60	-43.5	
High Ch										
822.50	14.39	V	0.62	0.0	13.77	15.92	38.45	40.60	-24.7	
822.50	-3.87	H	0.62	0.0	-4.49	-2.34	38.45	40.60	-42.9	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 16QAM 3MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limi (dBm)	Margin (dB)	Notes
Low Ch										
815.50	13.38	V	0.62	0.0	12.76	14.91	38.45	40.60	-25.7	
815.50	-4.92	H	0.62	0.0	-5.54	-3.39	38.45	40.60	-44.0	
Mid Ch										
819.00	12.81	V	0.62	0.0	12.19	14.34	38.45	40.60	-26.3	
819.00	-5.12	H	0.62	0.0	-5.74	-3.59	38.45	40.60	-44.2	
High Ch										
822.50	13.39	V	0.62	0.0	12.77	14.92	38.45	40.60	-25.7	
822.50	-4.47	H	0.62	0.0	-5.09	-2.94	38.45	40.60	-43.5	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 QPSK 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
816.50	14.21	V	0.62	0.0	13.59	15.74	38.45	40.60	-24.9	
816.50	-4.52	H	0.62	0.0	-5.14	-2.99	38.45	40.60	-43.6	
Mid Ch										
819.00	13.81	V	0.62	0.0	13.19	15.34	38.45	40.60	-25.3	
819.00	-4.72	H	0.62	0.0	-5.34	-3.19	38.45	40.60	-43.8	
High Ch										
821.50	14.32	V	0.62	0.0	13.70	15.85	38.45	40.60	-24.7	
821.50	-3.97	H	0.62	0.0	-4.59	-2.44	38.45	40.60	-43.0	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 16QAM 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
816.50	13.22	V	0.62	0.0	12.60	14.75	38.45	40.60	-25.8	
816.50	-4.92	H	0.62	0.0	-5.54	-3.39	38.45	40.60	-44.0	
Mid Ch										
819.00	12.81	V	0.62	0.0	12.19	14.34	38.45	40.60	-26.3	
819.00	-5.22	H	0.62	0.0	-5.84	-3.69	38.45	40.60	-44.3	
High Ch										
821.50	13.33	V	0.62	0.0	12.71	14.86	38.45	40.60	-25.7	
821.50	-4.57	H	0.62	0.0	-5.19	-3.04	38.45	40.60	-43.6	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 QPSK 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin EIRP (dB)	Notes
Mid Ch										
819.00	14.51	V	0.62	0.0	13.89	16.04	38.45	40.60	-24.6	
819.00	-4.92	H	0.62	0.0	-5.54	-3.39	38.45	40.60	-44.0	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 16QAM 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Mid Ch										
819.00	13.61	V	0.62	0.0	12.99	15.14	38.45	40.60	-25.5	
819.00	-5.42	H	0.62	0.0	-6.04	-3.89	38.45	40.60	-44.5	

Rev. 10.24.13

10.2.10. LTE BAND 30

QPSK EIRP POWER FOR LTE BAND 30 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/17/2015
Test Engineer: T Wang
Configuration: EUT only
Mode: LTE Band 30 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.308	12.9	V	1.15	9.37	21.14	24.0	-2.9	
2.308	10.0	H	1.15	9.37	18.26	24.0	-5.7	
Mid Ch								
2.310	12.7	V	1.16	9.37	20.87	24.0	-3.1	
2.310	10.1	H	1.16	9.37	18.27	24.0	-5.7	
High Ch								
2.313	12.8	V	1.17	9.37	21.00	24.0	-3.0	
2.313	10.0	H	1.17	9.37	18.17	24.0	-5.8	

Rev. 04.24.15

16QAM EIRP POWER FOR LTE BAND 30 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/17/2015
Test Engineer: T Wang
Configuration: EUT only
Mode: LTE Band 30 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.308	11.9	V	1.15	9.37	20.14	24.0	-3.9	
2.308	9.0	H	1.15	9.37	17.26	24.0	-6.7	
Mid Ch								
2.310	11.7	V	1.16	9.37	19.90	24.0	-4.1	
2.310	9.0	H	1.16	9.37	17.17	24.0	-6.8	
High Ch								
2.313	11.9	V	1.17	9.37	20.10	24.0	-3.9	
2.313	9.0	H	1.17	9.37	17.17	24.0	-6.8	

Rev. 04.24.15

QPSK EIRP POWER FOR LTE BAND 30 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/17/2015
Test Engineer: T Wang
Configuration: EUT only
Mode: LTE Band 30 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
2.310	12.9	V	1.15	9.37	21.12	24.0	-2.9	
2.310	10.3	H	1.15	9.37	18.48	24.0	-5.5	

Rev. 04.24.15

16QAM EIRP POWER FOR LTE BAND 30 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/17/2015
Test Engineer: T Wang
Configuration: EUT only
Mode: LTE Band 30 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
2.310	12.0	V	1.15	9.37	20.18	24.0	-3.8	
2.310	9.3	H	1.15	9.37	17.48	24.0	-6.5	

Rev. 04.24.15

10.2.11. LTE BAND 41

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/19/2015
Test Engineer: T Wang
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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.499	10.15	V	1.15	9.33	18.33	33.0	-14.7	
2.499	8.91	H	1.15	9.33	17.09	33.0	-15.9	
Mid Ch								
2.593	9.90	V	1.16	9.47	18.21	33.0	-14.8	
2.593	7.81	H	1.16	9.47	16.12	33.0	-16.9	
High Ch								
2.688	8.40	V	1.17	9.78	17.01	33.0	-16.0	
2.688	7.44	H	1.17	9.78	16.05	33.0	-16.9	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/19/2015
Test Engineer: T Wang
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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.499	8.85	V	1.15	9.33	17.03	33.0	-16.0	
2.499	6.91	H	1.15	9.33	15.09	33.0	-17.9	
Mid Ch								
2.593	8.80	V	1.16	9.47	17.11	33.0	-15.9	
2.593	5.91	H	1.16	9.47	14.22	33.0	-18.8	
High Ch								
2.688	7.30	V	1.17	9.78	15.91	33.0	-17.1	
2.688	5.54	H	1.17	9.78	14.15	33.0	-18.8	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/19/2015
Test Engineer: T Wang
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	10.05	V	1.15	9.33	18.23	33.0	-14.8	
2.501	9.81	H	1.15	9.33	17.99	33.0	-15.0	
Mid Ch								
2.593	9.80	V	1.16	9.47	18.11	33.0	-14.9	
2.593	9.61	H	1.16	9.47	17.92	33.0	-15.1	
High Ch								
2.685	9.00	V	1.17	9.77	17.60	33.0	-15.4	
2.685	7.54	H	1.17	9.77	16.14	33.0	-16.9	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/19/2015
Test Engineer: T Wang
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	8.95	V	1.15	9.33	17.13	33.0	-15.9	
2.501	8.81	H	1.15	9.33	16.99	33.0	-16.0	
Mid Ch								
2.593	8.70	V	1.16	9.47	17.01	33.0	-16.0	
2.593	8.61	H	1.16	9.47	16.92	33.0	-16.1	
High Ch								
2.685	8.30	V	1.17	9.77	16.90	33.0	-16.1	
2.685	6.64	H	1.17	9.77	15.24	33.0	-17.8	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/19/2015
Test Engineer: T Wang
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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.504	10.18	V	1.15	9.34	18.37	33.0	-14.6	
2.504	8.81	H	1.15	9.34	17.00	33.0	-16.0	
Mid Ch								
2.593	9.90	V	1.16	9.47	18.21	33.0	-14.8	
2.593	9.21	H	1.16	9.47	17.52	33.0	-15.5	
High Ch								
2.683	9.80	V	1.17	9.76	18.39	33.0	-14.6	
2.683	8.84	H	1.17	9.76	17.43	33.0	-15.6	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/19/2015
Test Engineer: T Wang
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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.504	9.05	V	1.15	9.34	17.24	33.0	-15.8	
2.504	7.81	H	1.15	9.34	16.00	33.0	-17.0	
Mid Ch								
2.593	8.90	V	1.16	9.47	17.21	33.0	-15.8	
2.593	8.31	H	1.16	9.47	16.62	33.0	-16.4	
High Ch								
2.683	8.90	V	1.17	9.76	17.49	33.0	-15.5	
2.683	7.94	H	1.17	9.76	16.53	33.0	-16.5	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/19/2015
Test Engineer: T Wang
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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.506	10.28	V	1.15	9.34	18.47	33.0	-14.5	
2.506	9.41	H	1.15	9.34	17.60	33.0	-15.4	
Mid Ch								
2.593	10.10	V	1.16	9.47	18.41	33.0	-14.6	
2.593	9.31	H	1.16	9.47	17.62	33.0	-15.4	
High Ch								
2.680	9.55	V	1.17	9.76	18.14	33.0	-14.9	
2.680	8.84	H	1.17	9.76	17.43	33.0	-15.6	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20162
Date: 6/19/2015
Test Engineer: T Wang
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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.506	9.05	V	1.15	9.34	17.24	33.0	-15.8	
2.506	8.41	H	1.15	9.34	16.60	33.0	-16.4	
Mid Ch								
2.593	9.30	V	1.16	9.47	17.61	33.0	-15.4	
2.593	8.21	H	1.16	9.47	16.52	33.0	-16.5	
High Ch								
2.680	8.80	V	1.17	9.76	17.39	33.0	-15.6	
2.680	7.94	H	1.17	9.76	16.53	33.0	-16.5	

Rev. 10.24.13

10.3. RADIATED POWER (ERP & EIRP), MODEL: A1687 (LAT)

EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
1.4MHz Band QPSK	1/0	1850.7	24.29	268.53
		1880.0	24.14	259.42
		1909.3	**24.34**	271.64
1.4MHz Band 16QAM	1/0	1850.7	22.81	190.99
		1880.0	22.83	191.87
		1909.3	**23.20**	208.93

EIRP POWER FOR LTE BAND 2 (3.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
3.0MHz Band QPSK	1/0	1851.5	24.25	266.07
		1880.0	24.20	263.03
		1908.5	**24.40**	275.42
3.0MHz Band 16QAM	1/0	1851.5	23.25	211.35
		1880.0	23.21	209.41
		1908.5	**23.39**	218.27

EIRP POWER FOR LTE BAND 2 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
5.0MHz Band QPSK	1/0	1852.5	**24.38**	274.16
		1880.0	24.21	263.63
		1907.5	24.31	269.77
5.0MHz Band 16QAM	1/0	1852.5	**23.38**	217.77
		1880.0	23.21	209.41
		1907.5	23.31	214.29

EIRP POWER FOR LTE BAND 2 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
10.0MHz Band QPSK	1/0	1855.0	**24.44**	277.97
		1880.0	24.32	270.40
		1905.0	24.31	269.77
10.0MHz Band 16QAM	1/0	1855.0	**23.45**	221.31
		1880.0	23.31	214.29
		1905.0	23.29	213.30

EIRP POWER FOR LTE BAND 2 (15.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
15MHz Band QPSK	1/0	1857.5	24.17	261.22
		1880.0	24.34	271.64
		1902.5	**24.37**	273.53
15MHz Band 16QAM	1/0	1857.5	23.16	207.01
		1880.0	23.32	214.78
		1902.5	**23.37**	217.27

EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
20.0MHz Band QPSK	1/0	1860.0	24.11	257.63
		1880.0	**24.45**	278.61
		1900.0	24.25	266.07
20MHz Band 16QAM	1/0	1860.0	23.12	205.12
		1880.0	**23.45**	221.31
		1900.0	23.25	211.35

EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
1.4 MHZ BAND QPSK	1/0	1710.7	**21.40**	138.04
		1732.5	21.34	136.14
		1754.3	21.22	132.43
1.4 MHZ BAND 16QAM	1/0	1710.7	20.34	108.14
		1732.5	**20.37**	108.89
		1754.3	20.24	105.68

EIRP POWER FOR LTE BAND 4 (3.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	1711.5	**21.40**	138.04
		1732.5	21.33	135.83
		1753.5	21.19	131.52
3.0 MHZ BAND 16QAM	1/0	1711.5	20.34	108.14
		1732.5	**20.37**	108.89
		1753.5	20.20	104.71

EIRP POWER FOR LTE BAND 4 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	1712.5	**21.41**	138.36
		1732.5	21.34	136.14
		1752.5	21.25	133.35
5.0 MHZ BAND 16QAM	1/0	1712.5	**20.43**	110.41
		1732.5	20.34	108.14
		1752.5	20.25	105.93

EIRP POWER FOR LTE BAND 4 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	1715.0	21.38	137.40
		1732.5	**21.42**	138.68
		1750.0	21.16	130.62
10.0 MHZ BAND 16QAM	1/0	1715.0	**20.39**	109.40
		1732.5	19.45	88.10
		1750.0	20.15	103.51

EIRP POWER FOR LTE BAND 4 (15.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
15.0 MHZ BAND QPSK	1/0	1717.5	**21.39**	137.72
		1732.5	21.33	135.83
		1747.5	21.20	131.83
15.0 MHZ BAND 16QAM	1/0	1717.5	**20.39**	109.40
		1732.5	20.33	107.89
		1747.5	20.20	104.71

EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
20.0 MHZ BAND QPSK	1/0	1720.0	**21.48**	140.60
		1732.5	21.33	135.83
		1745.0	21.25	133.35
20.0 MHZ BAND 16QAM	1/0	1720.0	**20.48**	111.69
		1732.5	20.34	108.14
		1745.0	20.25	105.93

ERP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
1.4MHz Band QPSK	1/0	824.7	18.40	69.18
		836.5	18.74	74.82
		848.3	**19.05**	80.35
1.4MHz Band 16QAM	1/0	824.7	17.39	54.83
		836.5	17.57	57.15
		848.3	**18.04**	63.68

ERP POWER FOR LTE BAND 5 (3.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	825.5	18.11	64.71
		836.5	18.81	76.03
		847.5	**19.00**	79.43
3.0 MHZ BAND 16QAM	1/0	825.5	17.14	51.76
		836.5	17.73	59.29
		847.5	**17.95**	62.37

ERP POWER FOR LTE BAND 5 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
5MHz Band QPSK	1/0	826.5	18.13	65.01
		836.5	18.67	73.62
		846.5	**19.01**	79.62
5MHz Band 16QAM	1/0	826.5	**18.02**	63.39
		836.5	17.73	59.29
		846.5	17.96	62.52

ERP POWER FOR LTE BAND 5 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	829.0	18.23	66.53
		836.5	**18.96**	78.70
		844.0	18.66	73.45
10.0 MHZ BAND 16QAM	1/0	829.0	17.23	52.84
		836.5	**17.93**	62.09
		844.0	17.65	58.21

EIRP POWER FOR LTE BAND 7 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
5.0 MHZ BAND QPSK	25/0	2502.5	28.46	701.46
		2535.0	29.37	864.97
		2567.5	**29.43**	877.00
5.0 MHZ BAND 16QAM	25/0	2502.5	27.52	564.94
		2535.0	**28.59**	722.77
		2567.5	28.40	691.83

EIRP POWER FOR LTE BAND 7 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
10.0 MHZ BAND QPSK	50/0	2505.0	29.27	845.28
		2535.0	30.32	1076.47
		2565.0	**30.45**	1109.17
10.0 MHZ BAND 16QAM	50/0	2505.0	28.52	711.21
		2535.0	28.92	779.83
		2565.0	**29.63**	918.33

EIRP POWER FOR LTE BAND 7 (15.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
15.0 MHZ BAND QPSK	75/0	2507.5	28.26	669.88
		2535.0	28.99	792.50
		2562.5	**29.96**	990.83
15.0 MHZ BAND 16QAM	75/0	2507.5	27.23	528.45
		2535.0	27.93	620.87
		2562.5	**29.05**	803.53

EIRP POWER FOR LTE BAND 7 (20.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
20.0 MHZ BAND QPSK	100/0	2510.0	29.25	841.40
		2535.0	29.11	814.70
		2560.0	**30.06**	1013.91
20.0 MHZ BAND 16QAM	100/0	2510.0	28.25	668.34
		2535.0	28.06	639.73
		2560.0	**29.08**	809.10

ERP POWER FOR LTE BAND 12 (1.4MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
1.4MHz Band QPSK	1/0	699.7	18.67	73.62
		707.5	18.77	75.34
		715.3	**19.38**	86.70
1.4MHz Band 16QAM	1/0	699.7	17.66	58.34
		707.5	17.79	60.12
		715.3	**18.03**	63.53

ERP POWER FOR LTE BAND 12 (3.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	700.5	18.62	72.78
		707.5	19.16	82.41
		714.5	**19.38**	86.70
3.0 MHZ BAND 16QAM	1/0	700.5	17.60	57.54
		707.5	18.16	65.46
		714.5	**18.38**	68.87

ERP POWER FOR LTE BAND 12 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
5MHz Band QPSK	1/0	701.5	18.71	74.30
		707.5	19.25	84.14
		713.5	**19.41**	87.30
5MHz Band 16QAM	1/0	701.5	17.70	58.88
		707.5	18.24	66.68
		713.5	**18.40**	69.18

ERP POWER FOR LTE BAND 12 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	704.0	**19.37**	86.50
		707.5	18.92	77.98
		711.0	19.27	84.53
10.0 MHZ BAND 16QAM	1/0	704.0	**18.38**	68.87
		707.5	17.91	61.80
		711.0	18.25	66.83

ERP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	779.5	18.98	79.07
		782.0	18.83	76.38
		784.5	**19.20**	83.18
5.0 MHZ BAND 16QAM	1/0	779.5	17.99	62.95
		782.0	17.81	60.39
		784.5	**18.21**	66.22

ERP POWER FOR LTE BAND 13 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
10 MHZ BAND QPSK	1/0	782.0	**19.18**	82.79
10 MHz BAND 16QAM	1/0		**18.20**	66.07

ERP POWER FOR LTE BAND 17 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
5MHz Band QPSK	1/0	706.5	18.76	75.16
		710.0	19.24	83.95
		713.5	**19.38**	86.70
5MHz Band 16QAM	1/0	706.5	17.76	59.70
		710.0	18.25	66.83
		713.5	**18.39**	69.02

ERP POWER FOR LTE BAND 17 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	710.0	**19.29**	84.92
10.0 MHZ BAND 16QAM		710.0	**18.29**	67.45

EIRP POWER FOR LTE BAND 25 (1.4MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
1.4 MHZ BAND QPSK	1/0	1850.7	**24.45**	278.61
		1880.0	24.34	271.64
		1914.3	24.05	254.10
1.4 MHZ BAND 16QAM	1/0	1850.7	**23.24**	210.86
		1880.0	23.07	202.77
		1914.3	22.93	196.34

EIRP POWER FOR LTE BAND 25 (3.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	1851.5	24.04	253.51
		1880.0	24.25	266.07
		1913.5	**24.42**	276.69
3.0 MHZ BAND 16QAM	1/0	1851.5	23.05	201.84
		1880.0	23.26	211.84
		1913.5	**23.41**	219.28

EIRP POWER FOR LTE BAND 25 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	1852.5	24.15	260.02
		1880.0	**24.40**	275.42
		1912.5	24.25	266.07
5.0 MHZ BAND 16QAM	1/0	1852.5	23.14	206.06
		1880.0	**23.39**	218.27
		1912.5	23.25	211.35

EIRP POWER FOR LTE BAND 25 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	1855.0	24.01	251.77
		1880.0	**24.39**	274.79
		1910.0	24.33	271.02
10.0 MHZ BAND 16QAM	1/0	1855.0	23.02	200.45
		1880.0	**23.40**	218.78
		1910.0	23.34	215.77

EIRP POWER FOR LTE BAND 25 (15.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
15.0 MHZ BAND QPSK	1/0	1857.5	24.19	262.42
		1880.0	24.28	267.92
		1907.5	**24.38**	274.16
15.0 MHZ BAND 16QAM	1/0	1857.5	23.20	208.93
		1880.0	23.29	213.30
		1907.5	**23.38**	217.77

EIRP POWER FOR LTE BAND 25 (20.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
20.0 MHZ BAND QPSK	1/0	1860.0	24.24	265.46
		1880.0	24.35	272.27
		1905.0	**24.39**	274.79
20.0 MHZ BAND 16QAM	1/0	1860.0	23.25	211.35
		1880.0	23.35	216.27
		1905.0	**23.38**	217.77

ERP POWER FOR LTE BAND 26 (1.4MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
1.4 MHZ BAND QPSK	1/0	814.7	18.93	78.16
		819.0	18.87	77.09
		823.3	**18.99**	79.25
1.4 MHZ BAND 16QAM	1/0	814.7	17.93	62.09
		819.0	17.94	62.23
		823.3	**17.98**	62.81

ERP POWER FOR LTE BAND 26 (3.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	815.5	18.85	76.74
		819.0	18.70	74.13
		822.5	**18.97**	78.89
3.0 MHZ BAND 16QAM	1/0	815.5	17.81	60.39
		819.0	17.54	56.75
		822.5	**17.98**	62.81

ERP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	816.5	18.83	76.38
		819.0	18.71	74.30
		821.5	**18.98**	79.07
5.0 MHZ BAND 16QAM	1/0	816.5	17.86	61.09
		819.0	17.72	59.16
		821.5	**17.99**	62.95

ERP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	819.0	**18.94**	78.34
10.0 MHZ BAND 16QAM	1/0	819.0	**17.94**	62.23

EIRP POWER FOR LTE BAND 41 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
5.0 MHZ BAND QPSK	25/0	2498.5	28.30	676.08
		2593.0	**29.19**	829.85
		2687.5	29.08	809.10
5.0 MHZ BAND 16QAM	25/0	24.98.5	27.28	534.56
		2593.0	**28.24**	666.81
		2687.5	27.95	623.73

EIRP POWER FOR LTE BAND 41 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
10.0 MHZ BAND QPSK	50/0	2501.0	28.96	787.05
		2593.0	**29.82**	959.40
		2685.0	29.45	881.05
10.0 MHZ BAND 16QAM	50/0	2501.0	27.98	628.06
		2593.0	**28.74**	748.17
		2685.0	28.44	698.23

EIRP POWER FOR LTE BAND 41(15.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
15.0 MHZ BAND QPSK	75/0	2503.5	30.34	1081.43
		2593.0	30.93	1238.80
		2682.5	**31.46**	1399.59
15.0 MHZ BAND 16QAM	75/0	2503.5	29.48	887.16
		2593.0	29.94	986.28
		2682.5	**30.33**	1078.95

EIRP POWER FOR LTE BAND 41 (20.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
20.0 MHZ BAND QPSK	100/0	2506.0	30.99	1256.03
		2593.0	32.04	1599.56
		2680.0	**32.21**	1663.41
20.0 MHZ BAND 16QAM	100/0	2506.0	29.97	993.12
		2593.0	31.14	1300.17
		2680.0	**31.23**	1327.39

10.3.1. LTE BAND 2

QPSK EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)

High Frequency Fundamental Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 QPSK 1.4MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.851	16.7	V	0.98	8.05	23.74	33.0	-9.3	
1.851	17.2	H	0.98	8.05	24.29	33.0	-8.7	
Mid Ch								
1.880	16.2	V	0.98	8.03	23.26	33.0	-9.7	
1.880	17.1	H	0.98	8.03	24.14	33.0	-8.9	
High Ch								
1.909	16.6	V	0.98	8.05	23.67	33.0	-9.3	
1.909	17.3	H	0.98	8.05	24.34	33.0	-8.7	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 16QAM 1.4MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.851	15.4	V	0.98	8.05	22.44	33.0	-10.6	
1.851	15.7	H	0.98	8.05	22.81	33.0	-10.2	
Mid Ch								
1.880	15.2	V	0.98	8.03	22.29	33.0	-10.7	
1.880	15.8	H	0.98	8.03	22.83	33.0	-10.2	
High Ch								
1.909	15.6	V	0.98	8.05	22.68	33.0	-10.3	
1.909	16.1	H	0.98	8.05	23.20	33.0	-9.8	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 2 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 QPSK 3MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.852	16.4	V	0.98	8.05	23.45	33.0	-9.6	
1.852	17.2	H	0.98	8.05	24.25	33.0	-8.8	
Mid Ch								
1.880	16.4	V	0.98	8.03	23.45	33.0	-9.6	
1.880	17.1	H	0.98	8.03	24.20	33.0	-8.8	
High Ch								
1.909	17.0	V	0.98	8.05	24.11	33.0	-8.9	
1.909	17.3	H	0.98	8.05	24.40	33.0	-8.6	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 2 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 16QAM 3MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.852	15.4	V	0.98	8.05	22.46	33.0	-10.5	
1.852	16.2	H	0.98	8.05	23.25	33.0	-9.8	
Mid Ch								
1.880	15.4	V	0.98	8.03	22.45	33.0	-10.6	
1.880	16.2	H	0.98	8.03	23.21	33.0	-9.8	
High Ch								
1.909	15.8	V	0.98	8.05	22.91	33.0	-10.1	
1.909	16.3	H	0.98	8.05	23.39	33.0	-9.6	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 2 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 QPSK 5MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.853	16.7	V	0.98	8.05	23.74	33.0	-9.3	
1.853	17.3	H	0.98	8.05	24.38	33.0	-8.6	
Mid Ch								
1.880	16.6	V	0.98	8.03	23.67	33.0	-9.3	
1.880	17.2	H	0.98	8.03	24.21	33.0	-8.8	
High Ch								
1.908	16.6	V	0.98	8.04	23.69	33.0	-9.3	
1.908	17.2	H	0.98	8.04	24.31	33.0	-8.7	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 2 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 16QAM 5MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.853	15.6	V	0.98	8.05	22.69	33.0	-10.3	
1.853	16.3	H	0.98	8.05	23.38	33.0	-9.6	
Mid Ch								
1.880	15.6	V	0.98	8.03	22.66	33.0	-10.3	
1.880	16.2	H	0.98	8.03	23.21	33.0	-9.8	
High Ch								
1.908	15.6	V	0.98	8.05	22.69	33.0	-10.3	
1.908	16.2	H	0.98	8.04	23.31	33.0	-9.7	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 2 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 QPSK 10MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.855	16.3	V	0.98	8.05	23.40	33.0	-9.6	
1.855	17.4	H	0.98	8.05	24.44	33.0	-8.6	
Mid Ch								
1.880	16.0	V	0.98	8.03	23.06	33.0	-9.9	
1.880	17.3	H	0.98	8.03	24.32	33.0	-8.7	
High Ch								
1.905	16.5	V	0.98	8.04	23.59	33.0	-9.4	
1.905	17.3	H	0.98	8.04	24.31	33.0	-8.7	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 2 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 16QAM 10MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.855	15.3	V	0.98	8.05	22.40	33.0	-10.6	
1.855	16.4	H	0.98	8.05	23.45	33.0	-9.5	
Mid Ch								
1.880	15.0	V	0.98	8.03	22.05	33.0	-11.0	
1.880	16.3	H	0.98	8.03	23.31	33.0	-9.7	
High Ch								
1.905	15.5	V	0.98	8.04	22.58	33.0	-10.4	
1.905	16.2	H	0.98	8.04	23.29	33.0	-9.7	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 2 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 QPSK 15MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.858	16.0	V	0.98	8.04	23.02	33.0	-10.0	
1.858	17.1	H	0.98	8.04	24.17	33.0	-8.8	
Mid Ch								
1.880	16.1	V	0.98	8.03	23.16	33.0	-9.8	
1.880	17.3	H	0.98	8.03	24.34	33.0	-8.7	
High Ch								
1.903	16.5	V	0.98	8.03	23.55	33.0	-9.5	
1.903	17.3	H	0.98	8.03	24.37	33.0	-8.6	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 2 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 16QAM 15MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.858	15.0	V	0.98	8.04	22.02	33.0	-11.0	
1.858	16.1	H	0.98	8.04	23.16	33.0	-9.8	
Mid Ch								
1.880	15.1	V	0.98	8.03	22.15	33.0	-10.9	
1.880	16.3	H	0.98	8.03	23.32	33.0	-9.7	
High Ch								
1.903	15.5	V	0.98	8.03	22.53	33.0	-10.5	
1.903	16.3	H	0.98	8.03	23.37	33.0	-9.6	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 QPSK 20MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.860	16.5	V	0.98	8.04	23.55	33.0	-9.4	
1.860	17.0	H	0.98	8.04	24.11	33.0	-8.9	
Mid Ch								
1.880	16.3	V	0.98	8.03	23.36	33.0	-9.6	
1.880	17.4	H	0.98	8.03	24.45	33.0	-8.6	
High Ch								
1.900	16.5	V	0.98	8.02	23.54	33.0	-9.5	
1.900	17.2	H	0.98	8.02	24.25	33.0	-8.7	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 16QAM 20MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.860	15.5	V	0.98	8.04	22.53	33.0	-10.5	
1.860	16.1	H	0.98	8.04	23.12	33.0	-9.9	
Mid Ch								
1.880	15.3	V	0.98	8.03	22.36	33.0	-10.6	
1.880	16.4	H	0.98	8.03	23.45	33.0	-9.6	
High Ch								
1.900	15.5	V	0.98	8.02	22.53	33.0	-10.5	
1.900	16.2	H	0.98	8.02	23.25	33.0	-9.7	

Rev. 10.24.13

10.3.2. LTE BAND 4

QPSK EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 4 QPSK 1.4MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.7107	12.9	V	0.95	8.27	20.18	30.0	-9.8	
1.7107	14.1	H	0.95	8.27	21.40	30.0	-8.6	
Mid Ch								
1.7325	13.1	V	0.95	8.23	20.42	30.0	-9.6	
1.7325	14.1	H	0.95	8.23	21.34	30.0	-8.7	
High Ch								
1.7543	13.0	V	0.95	8.18	20.24	30.0	-9.8	
1.7543	14.0	H	0.95	8.18	21.22	30.0	-8.8	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 4 16QAM 1.4MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.711	11.8	V	0.95	8.27	19.16	30.0	-10.8	
1.711	13.0	H	0.95	8.27	20.34	30.0	-9.7	
Mid Ch								
1.733	12.2	V	0.95	8.23	19.45	30.0	-10.6	
1.733	13.1	H	0.95	8.23	20.37	30.0	-9.6	
High Ch								
1.754	12.0	V	0.95	8.18	19.28	30.0	-10.7	
1.754	13.0	H	0.95	8.18	20.24	30.0	-9.8	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 4 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 4 QPSK 3MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.7115	12.8	V	0.95	8.27	20.09	30.0	-9.9	
1.7115	14.1	H	0.95	8.27	21.40	30.0	-8.6	
Mid Ch								
1.7325	13.0	V	0.95	8.23	20.29	30.0	-9.7	
1.7325	14.1	H	0.95	8.23	21.33	30.0	-8.7	
High Ch								
1.7535	13.3	V	0.95	8.18	20.56	30.0	-9.4	
1.7535	14.0	H	0.95	8.18	21.19	30.0	-8.8	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 4 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 4 16QAM 3MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.712	11.7	V	0.95	8.27	19.06	30.0	-10.9	
1.712	13.0	H	0.95	8.27	20.34	30.0	-9.7	
Mid Ch								
1.733	12.0	V	0.95	8.23	19.25	30.0	-10.8	
1.733	13.1	H	0.95	8.23	20.37	30.0	-9.6	
High Ch								
1.754	12.3	V	0.95	8.18	19.56	30.0	-10.4	
1.754	13.0	H	0.95	8.18	20.20	30.0	-9.8	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 4 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 4 QPSK 5MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.7125	13.0	V	0.95	8.27	20.32	30.0	-9.7	
1.7125	14.1	H	0.95	8.27	21.41	30.0	-8.6	
Mid Ch								
1.7325	13.1	V	0.95	8.23	20.34	30.0	-9.7	
1.7325	14.1	H	0.95	8.23	21.34	30.0	-8.7	
High Ch								
1.7525	13.3	V	0.95	8.18	20.49	30.0	-9.5	
1.7525	14.0	H	0.95	8.18	21.25	30.0	-8.7	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 4 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 4 16QAM 5MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.713	12.0	V	0.95	8.27	19.32	30.0	-10.7	
1.713	13.1	H	0.95	8.27	20.43	30.0	-9.6	
Mid Ch								
1.733	12.1	V	0.95	8.23	19.34	30.0	-10.7	
1.733	13.1	H	0.95	8.23	20.34	30.0	-9.7	
High Ch								
1.753	12.2	V	0.95	8.18	19.48	30.0	-10.5	
1.753	13.0	H	0.95	8.18	20.25	30.0	-9.7	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 4 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 4 QPSK 10MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.715	12.9	V	0.95	8.26	20.20	30.0	-9.8	
1.715	14.1	H	0.95	8.26	21.38	30.0	-8.6	
Mid Ch								
1.7325	13.2	V	0.95	8.23	20.44	30.0	-9.6	
1.7325	14.1	H	0.95	8.23	21.42	30.0	-8.6	
High Ch								
1.750	13.1	V	0.95	8.19	20.38	30.0	-9.6	
1.750	13.9	H	0.95	8.19	21.16	30.0	-8.8	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 4 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 4 16QAM 10MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.715	11.9	V	0.95	8.26	19.20	30.0	-10.8	
1.715	13.1	H	0.95	8.26	20.39	30.0	-9.6	
Mid Ch								
1.733	12.2	V	0.95	8.23	19.45	30.0	-10.6	
1.733	12.1	H	0.95	8.23	19.42	30.0	-10.6	
High Ch								
1.750	12.1	V	0.95	8.19	19.38	30.0	-10.6	
1.750	12.9	H	0.95	8.19	20.15	30.0	-9.9	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 4 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 4 QPSK 15MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.7175	12.8	V	0.95	8.26	20.07	30.0	-9.9	
1.7175	14.1	H	0.95	8.26	21.39	30.0	-8.6	
Mid Ch								
1.7325	13.0	V	0.95	8.23	20.29	30.0	-9.7	
1.7325	14.1	H	0.95	8.23	21.33	30.0	-8.7	
High Ch								
1.7475	13.3	V	0.95	8.19	20.57	30.0	-9.4	
1.7475	14.0	H	0.95	8.19	21.20	30.0	-8.8	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 4 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 4 16QAM 15MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.718	11.8	V	0.95	8.26	19.08	30.0	-10.9	
1.718	13.1	H	0.95	8.26	20.39	30.0	-9.6	
Mid Ch								
1.733	12.0	V	0.95	8.23	19.30	30.0	-10.7	
1.733	13.1	H	0.95	8.23	20.33	30.0	-9.7	
High Ch								
1.748	12.3	V	0.95	8.19	19.57	30.0	-10.4	
1.748	13.0	H	0.95	8.19	20.20	30.0	-9.8	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 4 QPSK 20MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.720	13.0	V	0.95	8.25	20.30	30.0	-9.7	
1.720	14.2	H	0.95	8.25	21.48	30.0	-8.5	
Mid Ch								
1.7325	13.0	V	0.95	8.23	20.25	30.0	-9.8	
1.7325	14.1	H	0.95	8.23	21.33	30.0	-8.7	
High Ch								
1.745	13.2	V	0.95	8.20	20.50	30.0	-9.5	
1.745	14.0	H	0.95	8.20	21.25	30.0	-8.8	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 4 16QAM 20MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.720	12.0	V	0.95	8.25	19.31	30.0	-10.7	
1.720	13.2	H	0.95	8.25	20.48	30.0	-9.5	
Mid Ch								
1.733	12.0	V	0.95	8.23	19.26	30.0	-10.7	
1.733	13.1	H	0.95	8.23	20.34	30.0	-9.7	
High Ch								
1.745	12.2	V	0.95	8.20	19.50	30.0	-10.5	
1.745	13.0	H	0.95	8.20	20.25	30.0	-9.8	

Rev. 10.24.13

10.3.3. LTE BAND 5

QPSK EIRP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/18/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 QPSK 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
824.70	19.02	V	0.6	0.0	18.40	20.55	38.45	40.60	-20.1	
824.70	2.93	H	0.6	0.0	2.31	4.46	38.45	40.60	-36.1	
Mid Ch										
836.50	19.35	V	0.6	0.0	18.74	20.89	38.45	40.60	-19.7	
836.50	3.95	H	0.6	0.0	3.33	5.48	38.45	40.60	-35.1	
High Ch										
848.30	19.67	V	0.6	0.0	19.05	21.20	38.45	40.60	-19.4	
848.30	4.09	H	0.6	0.0	3.47	5.62	38.45	40.60	-35.0	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/18/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 16QAM 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
824.70	18.01	V	0.6	0.0	17.39	19.54	38.45	40.60	-21.1	
824.70	2.04	H	0.6	0.0	1.42	3.57	38.45	40.60	-37.0	
Mid Ch										
836.50	18.18	V	0.6	0.0	17.57	19.72	38.45	40.60	-20.9	
836.50	2.98	H	0.6	0.0	2.36	4.51	38.45	40.60	-36.1	
High Ch										
848.30	18.66	V	0.6	0.0	18.04	20.19	38.45	40.60	-20.4	
848.30	3.06	H	0.6	0.0	2.44	4.59	38.45	40.60	-36.0	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 5 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/18/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 QPSK 3MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
825.50	18.73	V	0.6	0.0	18.11	20.26	38.45	40.60	-20.3	
825.50	1.52	H	0.6	0.0	0.90	3.05	38.45	40.60	-37.5	
Mid Ch										
836.50	19.42	V	0.6	0.0	18.81	20.96	38.45	40.60	-19.6	
836.50	3.24	H	0.6	0.0	2.62	4.77	38.45	40.60	-35.8	
High Ch										
847.50	19.62	V	0.6	0.0	19.00	21.15	38.45	40.60	-19.4	
847.50	3.39	H	0.6	0.0	2.77	4.92	38.45	40.60	-35.7	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 5 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/18/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 16QAM 3MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
825.50	17.76	V	0.6	0.0	17.14	19.29	38.45	40.60	-21.3	
825.50	0.47	H	0.6	0.0	-0.15	2.00	38.45	40.60	-38.6	
Mid Ch										
836.50	18.34	V	0.6	0.0	17.73	19.88	38.45	40.60	-20.7	
836.50	1.21	H	0.6	0.0	0.59	2.74	38.45	40.60	-37.9	
High Ch										
847.50	18.57	V	0.6	0.0	17.95	20.10	38.45	40.60	-20.5	
847.50	2.35	H	0.6	0.0	1.73	3.88	38.45	40.60	-36.7	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 5 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/18/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 QPSK 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
826.50	18.75	V	0.6	0.0	18.13	20.28	38.45	40.60	-20.3	
826.50	1.37	H	0.6	0.0	0.75	2.90	38.45	40.60	-37.7	
Mid Ch										
836.50	19.28	V	0.6	0.0	18.67	20.82	38.45	40.60	-19.8	
836.50	2.18	H	0.6	0.0	1.56	3.71	38.45	40.60	-36.9	
High Ch										
846.50	19.63	V	0.6	0.0	19.01	21.16	38.45	40.60	-19.4	
846.50	3.10	H	0.6	0.0	2.48	4.63	38.45	40.60	-36.0	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 5 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/18/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 16QAM 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole T416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
826.50	18.64	V	0.6	0.0	18.02	20.17	38.45	40.60	-20.4	
826.50	0.45	H	0.6	0.0	-0.17	1.98	38.45	40.60	-38.6	
Mid Ch										
836.50	18.34	V	0.6	0.0	17.73	19.88	38.45	40.60	-20.7	
836.50	1.24	H	0.6	0.0	0.62	2.77	38.45	40.60	-37.8	
High Ch										
846.50	18.58	V	0.6	0.0	17.96	20.11	38.45	40.60	-20.5	
846.50	2.08	H	0.6	0.0	1.46	3.61	38.45	40.60	-37.0	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 5 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/18/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 QPSK 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
829.00	18.85	V	0.6	0.0	18.23	20.38	38.45	40.60	-20.2	
829.00	2.21	H	0.6	0.0	1.59	3.74	38.45	40.60	-36.9	
Mid Ch										
836.50	19.57	V	0.6	0.0	18.96	21.11	38.45	40.60	-19.5	
836.50	2.76	H	0.6	0.0	2.14	4.29	38.45	40.60	-36.3	
High Ch										
844.00	19.28	V	0.6	0.0	18.66	20.81	38.45	40.60	-19.8	
844.00	3.46	H	0.6	0.0	2.84	4.99	38.45	40.60	-35.6	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 5 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/18/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 16QAM 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole T416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
829.00	17.85	V	0.6	0.0	17.23	19.38	38.45	40.60	-21.2	
829.00	1.20	H	0.6	0.0	0.58	2.73	38.45	40.60	-37.9	
Mid Ch										
836.50	18.54	V	0.6	0.0	17.93	20.08	38.45	40.60	-20.5	
836.50	1.76	H	0.6	0.0	1.14	3.29	38.45	40.60	-37.3	
High Ch										
844.00	18.27	V	0.6	0.0	17.65	19.80	38.45	40.60	-20.8	
844.00	2.44	H	0.6	0.0	1.82	3.97	38.45	40.60	-36.6	

Rev. 10.24.13

10.3.4. LTE BAND 7

QPSK EIRP POWER FOR LTE BAND 7 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber F

Company:
Project #: 15U20163
Date: 6/27/2015
Test Engineer: G. Chan
Configuration: EUT Only
Mode: LTE Band 7 QPSK 5MHz BW

Test Equipment:
Receiving: Horn T346, and Chamber F SMA Cables
Substitution: Horn T59 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								
2.503	17.1	V	1.15	9.34	25.29	33.0	-7.7	
2.503	20.3	H	1.15	9.34	28.46	33.0	-4.5	
Mid Ch								
2.535	17.3	V	1.16	9.38	25.51	33.0	-7.5	
2.535	21.1	H	1.16	9.38	29.37	33.0	-3.6	
High Ch								
2.568	16.3	V	1.17	9.43	24.56	33.0	-8.4	
2.568	21.2	H	1.17	9.43	29.43	33.0	-3.6	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 7 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber F

Company:
Project #: 15U20163
Date: 6/27/2015
Test Engineer: G. Chan
Configuration: EUT Only
Mode: LTE Band 7 16QAM 5MHz BW

Test Equipment:
Receiving: Horn T346, and Chamber F SMA Cables
Substitution: Horn T59 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								
2.503	16.2	V	1.15	9.34	24.35	33.0	-8.6	
2.503	19.3	H	1.15	9.34	27.52	33.0	-5.5	
Mid Ch								
2.535	16.3	V	1.16	9.38	24.48	33.0	-8.5	
2.535	20.4	H	1.16	9.38	28.59	33.0	-4.4	
High Ch								
2.568	15.3	V	1.17	9.43	23.59	33.0	-9.4	
2.568	20.1	H	1.17	9.43	28.40	33.0	-4.6	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 7 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber F

Company:
Project #: 15U20163
Date: 6/27/2015
Test Engineer: K. Huynh
Configuration: EUT Only
Mode: LTE Band 7 QPSK 10MHz BW

Test Equipment:
Receiving: Horn T346, and Chamber F SMA Cables
Substitution: Horn T59 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								
2.505	20.9	V	1.15	9.34	29.04	33.0	-4.0	
2.505	21.1	H	1.15	9.34	29.27	33.0	-3.7	
Mid Ch								
2.535	21.4	V	1.16	9.38	29.66	33.0	-3.3	
2.535	22.1	H	1.16	9.38	30.32	33.0	-2.7	
High Ch								
2.565	20.9	V	1.17	9.43	29.19	33.0	-3.8	
2.565	22.2	H	1.17	9.43	30.45	33.0	-2.5	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 7 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber F

Company:
Project #: 15U20163
Date: 6/27/2015
Test Engineer: K. Huynh
Configuration: EUT Only
Mode: LTE Band 7 16QAM 10MHz BW

Test Equipment:
Receiving: Horn T346, and Chamber F SMA Cables
Substitution: Horn T59 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								
2.505	15.2	V	1.15	9.34	23.37	33.0	-9.6	
2.505	20.3	H	1.15	9.34	28.52	33.0	-4.5	
Mid Ch								
2.535	20.6	V	1.16	9.38	28.87	33.0	-4.1	
2.535	20.7	H	1.16	9.38	28.92	33.0	-4.1	
High Ch								
2.565	20.2	V	1.17	9.43	28.50	33.0	-4.5	
2.565	21.4	H	1.17	9.43	29.63	33.0	-3.4	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 7 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber F

Company:
Project #: 15U20163
Date: 6/27/2015
Test Engineer: K. Huynh
Configuration: EUT Only
Mode: LTE Band 7 QPSK 15MHz BW

Test Equipment:
Receiving: Horn T346, and Chamber F SMA Cables
Substitution: Horn T59 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								
2.508	17.1	V	1.15	9.34	25.32	33.0	-7.7	
2.508	20.1	H	1.15	9.34	28.26	33.0	-4.7	
Mid Ch								
2.535	17.9	V	1.16	9.38	26.14	33.0	-6.9	
2.535	20.8	H	1.16	9.38	28.99	33.0	-4.0	
High Ch								
2.563	17.2	V	1.17	9.42	25.49	33.0	-7.5	
2.563	21.7	H	1.17	9.42	29.96	33.0	-3.0	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 7 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber F

Company:
Project #: 15U20163
Date: 6/27/2015
Test Engineer: K. Huynh
Configuration: EUT Only
Mode: LTE Band 7 16QAM 15MHz BW

Test Equipment:
Receiving: Horn T346, and Chamber F SMA Cables
Substitution: Horn T59 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								
2.508	16.2	V	1.15	9.34	24.41	33.0	-8.6	
2.508	19.0	H	1.15	9.34	27.23	33.0	-5.8	
Mid Ch								
2.535	16.8	V	1.16	9.38	25.03	33.0	-8.0	
2.535	19.7	H	1.16	9.38	27.93	33.0	-5.1	
High Ch								
2.563	16.3	V	1.17	9.42	24.56	33.0	-8.4	
2.563	20.8	H	1.17	9.42	29.05	33.0	-4.0	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 7 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber F

Company:
Project #: 15U20163
Date: 6/27/2015
Test Engineer: K. Huynh
Configuration: EUT Only
Mode: LTE Band 7 QPSK 20MHz BW

Test Equipment:
Receiving: Horn T346, and Chamber F SMA Cables
Substitution: Horn T59 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								
2.510	20.8	V	1.15	9.35	28.98	33.0	-4.0	
2.510	21.1	H	1.15	9.35	29.25	33.0	-3.8	
Mid Ch								
2.535	20.9	V	1.16	9.38	29.10	33.0	-3.9	
2.535	20.9	H	1.16	9.38	29.11	33.0	-3.9	
High Ch								
2.560	21.0	V	1.17	9.42	29.22	33.0	-3.8	
2.560	21.8	H	1.17	9.42	30.06	33.0	-2.9	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 7 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber F

Company:
Project #: 15U20163
Date: 6/27/2015
Test Engineer: K. Huynh
Configuration: EUT Only
Mode: LTE Band 7 16QAM 20MHz BW

Test Equipment:
Receiving: Horn T346, and Chamber F SMA Cables
Substitution: Horn T59 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								
2.510	19.8	V	1.15	9.35	28.01	33.0	-5.0	
2.510	20.1	H	1.15	9.35	28.25	33.0	-4.8	
Mid Ch								
2.535	19.8	V	1.16	9.38	28.00	33.0	-5.0	
2.535	19.8	H	1.16	9.38	28.06	33.0	-4.9	
High Ch								
2.560	19.9	V	1.17	9.42	28.18	33.0	-4.8	
2.560	20.8	H	1.17	9.42	29.08	33.0	-3.9	

Rev. 10.24.13

10.3.5. LTE BAND 12

QPSK EIRP POWER FOR LTE BAND 12 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/19/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 QPSK 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
699.70	19.22	V	0.55	0.0	18.67	20.82	34.77	36.99	-16.2	
699.70	0.84	H	0.55	0.0	0.29	2.44	34.77	36.99	-34.5	
Mid Ch										
707.50	19.32	V	0.55	0.0	18.77	20.92	34.77	36.99	-16.1	
707.50	1.33	H	0.55	0.0	0.78	2.93	34.77	36.99	-34.1	
High Ch										
715.30	19.93	V	0.55	0.0	19.38	21.53	34.77	36.99	-15.5	
715.30	1.20	H	0.55	0.0	0.65	2.80	34.77	36.99	-34.2	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 12 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/19/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 16QAM 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limi (dBm)	EIRP Limi (dBm)	Margin EIRP (dB)	Notes
Low Ch										
699.70	18.2	V	0.55	0.0	17.66	19.81	34.77	36.99	-17.2	
699.70	0.9	H	0.55	0.0	0.31	2.46	34.77	36.99	-34.5	
Mid Ch										
707.50	18.3	V	0.55	0.0	17.79	19.94	34.77	36.99	-17.1	
707.50	1.3	H	0.55	0.0	0.78	2.93	34.77	36.99	-34.1	
High Ch										
715.30	18.6	V	0.55	0.0	18.03	20.18	34.77	36.99	-16.8	
715.30	0.2	H	0.55	0.0	-0.36	1.79	34.77	36.99	-35.2	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 12 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/19/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 QPSK 3MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
700.50	19.17	V	0.55	0.0	18.62	20.77	34.77	36.99	-16.2	
700.50	1.35	H	0.55	0.0	0.80	2.95	34.77	36.99	-34.0	
Mid Ch										
707.50	19.71	V	0.55	0.0	19.16	21.31	34.77	36.99	-15.7	
707.50	1.12	H	0.55	0.0	0.57	2.72	34.77	36.99	-34.3	
High Ch										
714.50	19.93	V	0.55	0.0	19.38	21.53	34.77	36.99	-15.5	
714.50	0.83	H	0.55	0.0	0.28	2.43	34.77	36.99	-34.6	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 12 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/19/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 16QAM 3MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
700.50	18.15	V	0.55	0.0	17.60	19.75	34.77	36.99	-17.2	
700.50	0.38	H	0.55	0.0	-0.17	1.98	34.77	36.99	-35.0	
Mid Ch										
707.50	18.71	V	0.55	0.0	18.16	20.31	34.77	36.99	-16.7	
707.50	0.11	H	0.55	0.0	-0.44	1.71	34.77	36.99	-35.3	
High Ch										
714.50	18.93	V	0.55	0.0	18.38	20.53	34.77	36.99	-16.5	
714.50	-0.16	H	0.55	0.0	-0.71	1.44	34.77	36.99	-35.6	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 12 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/19/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 QPSK 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
701.50	19.26	V	0.55	0.0	18.71	20.86	34.77	36.99	-16.1	
701.50	2.18	H	0.55	0.0	1.63	3.78	34.77	36.99	-33.2	
Mid Ch										
707.50	19.80	V	0.55	0.0	19.25	21.40	34.77	36.99	-15.6	
707.50	1.70	H	0.55	0.0	1.15	3.30	34.77	36.99	-33.7	
High Ch										
713.50	19.96	V	0.55	0.0	19.41	21.56	34.77	36.99	-15.4	
713.50	0.44	H	0.55	0.0	-0.11	2.04	34.77	36.99	-35.0	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 12 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/19/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 16QAM 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
701.50	18.25	V	0.55	0.0	17.70	19.85	34.77	36.99	-17.1	
701.50	1.16	H	0.55	0.0	0.61	2.76	34.77	36.99	-34.2	
Mid Ch										
707.50	18.79	V	0.55	0.0	18.24	20.39	34.77	36.99	-16.6	
707.50	0.70	H	0.55	0.0	0.15	2.30	34.77	36.99	-34.7	
High Ch										
713.50	18.95	V	0.55	0.0	18.40	20.55	34.77	36.99	-16.4	
713.50	-0.46	H	0.55	0.0	-1.01	1.14	34.77	36.99	-35.9	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 12 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/19/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 QPSK 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
704.00	19.92	V	0.55	0.0	19.37	21.52	34.77	36.99	-15.5	
704.00	2.00	H	0.55	0.0	1.45	3.60	34.77	36.99	-33.4	
Mid Ch										
707.50	19.47	V	0.55	0.0	18.92	21.07	34.77	36.99	-15.9	
707.50	2.01	H	0.55	0.0	1.46	3.61	34.77	36.99	-33.4	
High Ch										
711.00	19.82	V	0.55	0.0	19.27	21.42	34.77	36.99	-15.6	
711.00	1.74	H	0.55	0.0	1.19	3.34	34.77	36.99	-33.7	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 12 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/19/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 16QAM 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole T416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
704.00	18.93	V	0.55	0.0	18.38	20.53	34.77	36.99	-16.5	
704.00	1.01	H	0.55	0.0	0.46	2.61	34.77	36.99	-34.4	
Mid Ch										
707.50	18.46	V	0.55	0.0	17.91	20.06	34.77	36.99	-16.9	
707.50	1.00	H	0.55	0.0	0.45	2.60	34.77	36.99	-34.4	
High Ch										
711.00	18.80	V	0.55	0.0	18.25	20.40	34.77	36.99	-16.6	
711.00	0.77	H	0.55	0.0	0.22	2.37	34.77	36.99	-34.6	

Rev. 10.24.13

10.3.6. LTE BAND 13

QPSK EIRP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 13 QPSK 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
779.50	19.53	V	0.55	0.0	18.98	21.13	34.77	36.99	-15.9	
779.50	4.26	H	0.55	0.0	3.71	5.86	34.77	36.99	-31.1	
Mid Ch										
782.00	19.38	V	0.55	0.0	18.83	20.98	34.77	36.99	-16.0	
782.00	4.40	H	0.55	0.0	3.85	6.00	34.77	36.99	-31.0	
High Ch										
784.50	19.75	V	0.55	0.0	19.20	21.35	34.77	36.99	-15.6	
784.50	5.75	H	0.55	0.0	5.20	7.35	34.77	36.99	-29.6	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 13 16QAM5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
779.50	18.54	V	0.55	0.0	17.99	20.14	34.77	36.99	-16.9	
779.50	3.30	H	0.55	0.0	2.75	4.90	34.77	36.99	-32.1	
Mid Ch										
782.00	18.36	V	0.55	0.0	17.81	19.96	34.77	36.99	-17.0	
782.00	3.38	H	0.55	0.0	2.83	4.98	34.77	36.99	-32.0	
High Ch										
784.50	18.76	V	0.55	0.0	18.21	20.36	34.77	36.99	-16.6	
784.50	4.77	H	0.55	0.0	4.22	6.37	34.77	36.99	-30.6	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 13 QPSK 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
782.00	19.73	V	0.55	0.0	19.18	21.33	34.77	36.99	-15.7	
782.00	3.94	H	0.55	0.0	3.39	5.54	34.77	36.99	-31.4	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 13 16QAM 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
782.00	18.75	V	0.55	0.0	18.20	20.35	34.77	36.99	-16.6	
782.00	2.96	H	0.55	0.0	2.41	4.56	34.77	36.99	-32.4	

Rev. 10.24.13

10.3.7. LTE BAND 17

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 17 QPSK 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
706.50	19.31	V	0.55	0.0	18.76	20.91	34.77	36.99	-16.1	
706.50	-1.77	H	0.55	0.0	-2.32	-0.17	34.77	36.99	-37.2	
Mid Ch										
710.00	19.79	V	0.55	0.0	19.24	21.39	34.77	36.99	-15.6	
710.00	-1.85	H	0.55	0.0	-2.40	-0.25	34.77	36.99	-37.2	
High Ch										
713.50	19.93	V	0.55	0.0	19.38	21.53	34.77	36.99	-15.5	
713.50	-1.94	H	0.55	0.0	-2.49	-0.34	34.77	36.99	-37.3	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 17 16QAM 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
706.50	18.31	V	0.55	0.0	17.76	19.91	34.77	36.99	-17.1	
706.50	-2.69	H	0.55	0.0	-3.24	-1.09	34.77	36.99	-38.1	
Mid Ch										
710.00	18.80	V	0.55	0.0	18.25	20.40	34.77	36.99	-16.6	
710.00	-2.83	H	0.55	0.0	-3.38	-1.23	34.77	36.99	-38.2	
High Ch										
713.50	18.94	V	0.55	0.0	18.39	20.54	34.77	36.99	-16.5	
713.50	-2.92	H	0.55	0.0	-3.47	-1.32	34.77	36.99	-38.3	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 17 QPSK 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
710.00	19.84	V	0.55	0.0	19.29	21.44	34.77	36.99	-15.6	
710.00	-1.72	H	0.55	0.0	-2.27	-0.12	34.77	36.99	-37.1	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/20/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 17 16QAM 10MHz BW

Test Equipment:
Receiving: Sunol T408, and Chamber E Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
710.00	18.84	V	0.55	0.0	18.29	20.44	34.77	36.99	-16.6	
710.00	-2.74	H	0.55	0.0	-3.29	-1.14	34.77	36.99	-38.1	

Rev. 10.24.13

10.3.8. LTE BAND 25

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/22/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 QPSK 1.4MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.851	17.4	V	0.98	8.05	24.45	33.0	-8.6	
1.851	15.5	H	0.98	8.05	22.60	33.0	-10.4	
Mid Ch								
1.883	17.3	V	0.98	8.03	24.34	33.0	-8.7	
1.883	15.5	H	0.98	8.03	22.50	33.0	-10.5	
High Ch								
1.914	17.0	V	0.98	8.07	24.05	33.0	-9.0	
1.914	15.2	H	0.98	8.07	22.30	33.0	-10.7	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/22/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 16QAM 1.4MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.851	16.2	V	0.98	8.05	23.24	33.0	-9.8	
1.851	12.9	H	0.98	8.05	19.98	33.0	-13.0	
Mid Ch								
1.883	16.0	V	0.98	8.03	23.07	33.0	-9.9	
1.883	12.9	H	0.98	8.03	19.91	33.0	-13.1	
High Ch								
1.914	15.8	V	0.98	8.07	22.93	33.0	-10.1	
1.914	13.1	H	0.98	8.07	20.18	33.0	-12.8	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/22/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 QPSK 3MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.852	16.7	V	0.98	8.05	23.72	33.0	-9.3	
1.852	17.0	H	0.98	8.05	24.04	33.0	-9.0	
Mid Ch								
1.883	16.6	V	0.98	8.03	23.61	33.0	-9.4	
1.883	17.2	H	0.98	8.03	24.25	33.0	-8.7	
High Ch								
1.914	16.8	V	0.98	8.07	23.85	33.0	-9.2	
1.914	17.3	H	0.98	8.07	24.42	33.0	-8.6	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/22/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 16QAM 3MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.852	15.7	V	0.98	8.05	22.73	33.0	-10.3	
1.852	16.0	H	0.98	8.05	23.05	33.0	-10.0	
Mid Ch								
1.883	15.6	V	0.98	8.03	22.62	33.0	-10.4	
1.883	16.2	H	0.98	8.03	23.26	33.0	-9.7	
High Ch								
1.914	15.8	V	0.98	8.07	22.86	33.0	-10.1	
1.914	16.3	H	0.98	8.07	23.41	33.0	-9.6	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/22/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 QPSK 5MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.853	16.0	V	0.98	8.05	23.11	33.0	-9.9	
1.853	17.1	H	0.98	8.05	24.15	33.0	-8.9	
Mid Ch								
1.883	15.4	V	0.98	8.03	22.43	33.0	-10.6	
1.883	17.4	H	0.98	8.03	24.40	33.0	-8.6	
High Ch								
1.913	16.1	V	0.98	8.06	23.13	33.0	-9.9	
1.913	17.2	H	0.98	8.06	24.25	33.0	-8.8	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/22/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 16QAM 5MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.853	15.0	V	0.98	8.05	22.11	33.0	-10.9	
1.853	16.1	H	0.98	8.05	23.14	33.0	-9.9	
Mid Ch								
1.883	14.4	V	0.98	8.03	21.43	33.0	-11.6	
1.883	16.3	H	0.98	8.03	23.39	33.0	-9.6	
High Ch								
1.913	15.1	V	0.98	8.06	22.14	33.0	-10.9	
1.913	16.2	H	0.98	8.06	23.25	33.0	-9.8	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/22/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 QPSK 10MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.855	16.1	V	0.98	8.05	23.12	33.0	-9.9	
1.855	16.9	H	0.98	8.05	24.01	33.0	-9.0	
Mid Ch								
1.883	15.6	V	0.98	8.03	22.64	33.0	-10.4	
1.883	17.3	H	0.98	8.03	24.39	33.0	-8.6	
High Ch								
1.910	16.1	V	0.98	8.05	23.18	33.0	-9.8	
1.910	17.3	H	0.98	8.05	24.33	33.0	-8.7	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/22/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 16QAM 10MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.855	15.1	V	0.98	8.05	22.12	33.0	-10.9	
1.855	16.0	H	0.98	8.05	23.02	33.0	-10.0	
Mid Ch								
1.883	14.6	V	0.98	8.03	21.65	33.0	-11.4	
1.883	16.4	H	0.98	8.03	23.40	33.0	-9.6	
High Ch								
1.910	15.1	V	0.98	8.05	22.20	33.0	-10.8	
1.910	16.3	H	0.98	8.05	23.34	33.0	-9.7	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/22/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 QPSK 15MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.858	16.0	V	0.98	8.04	23.05	33.0	-9.9	
1.858	17.1	H	0.98	8.04	24.19	33.0	-8.8	
Mid Ch								
1.883	16.0	V	0.98	8.03	23.07	33.0	-9.9	
1.883	17.2	H	0.98	8.03	24.28	33.0	-8.7	
High Ch								
1.908	16.3	V	0.98	8.04	23.32	33.0	-9.7	
1.908	17.3	H	0.98	8.04	24.38	33.0	-8.6	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/22/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 16QAM 15MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.858	15.0	V	0.98	8.04	22.05	33.0	-10.9	
1.858	16.1	H	0.98	8.04	23.20	33.0	-9.8	
Mid Ch								
1.883	15.0	V	0.98	8.03	22.08	33.0	-10.9	
1.883	16.2	H	0.98	8.03	23.29	33.0	-9.7	
High Ch								
1.908	15.3	V	0.98	8.04	22.33	33.0	-10.7	
1.908	16.3	H	0.98	8.04	23.38	33.0	-9.6	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/22/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 QPSK 20MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.860	16.2	V	0.98	8.04	23.27	33.0	-9.7	
1.860	17.2	H	0.98	8.04	24.24	33.0	-8.8	
Mid Ch								
1.883	16.3	V	0.98	8.03	23.39	33.0	-9.6	
1.883	17.3	H	0.98	8.03	24.35	33.0	-8.6	
High Ch								
1.905	16.4	V	0.98	8.04	23.42	33.0	-9.6	
1.905	17.3	H	0.98	8.04	24.39	33.0	-8.6	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/22/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 16QAM 20MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
1.860	15.2	V	0.98	8.04	22.28	33.0	-10.7	
1.860	16.2	H	0.98	8.04	23.25	33.0	-9.7	
Mid Ch								
1.883	15.4	V	0.98	8.03	22.40	33.0	-10.6	
1.883	16.3	H	0.98	8.03	23.35	33.0	-9.6	
High Ch								
1.905	15.4	V	0.98	8.04	22.42	33.0	-10.6	
1.905	16.3	H	0.98	8.04	23.38	33.0	-9.6	

Rev. 10.24.13

10.3.9. LTE BAND 26

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 QPSK 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
814.70	19.55	V	0.62	0.0	18.93	21.08	38.45	40.60	-19.5	
814.70	-0.61	H	0.62	0.0	-1.23	0.92	38.45	40.60	-39.7	
Mid Ch										
819.00	19.49	V	0.62	0.0	18.87	21.02	38.45	40.60	-19.6	
819.00	-0.42	H	0.62	0.0	-1.04	1.11	38.45	40.60	-39.5	
High Ch										
823.30	19.61	V	0.62	0.0	18.99	21.14	38.45	40.60	-19.5	
823.30	-0.40	H	0.62	0.0	-1.02	1.13	38.45	40.60	-39.5	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 16QAM 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limi (dBm)	Margin (dB)	Notes
Low Ch										
814.70	18.55	V	0.62	0.0	17.93	20.08	38.45	40.60	-20.5	
814.70	-1.59	H	0.62	0.0	-2.21	-0.06	38.45	40.60	-40.7	
Mid Ch										
819.00	18.56	V	0.62	0.0	17.94	20.09	38.45	40.60	-20.5	
819.00	-1.42	H	0.62	0.0	-2.04	0.11	38.45	40.60	-40.5	
High Ch										
823.30	18.60	V	0.62	0.0	17.98	20.13	38.45	40.60	-20.5	
823.30	-0.41	H	0.62	0.0	-1.03	1.12	38.45	40.60	-39.5	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 QPSK 3MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
815.50	19.47	V	0.62	0.0	18.85	21.00	38.45	40.60	-19.6	
815.50	-0.47	H	0.62	0.0	-1.09	1.06	38.45	40.60	-39.5	
Mid Ch										
819.00	19.32	V	0.62	0.0	18.70	20.85	38.45	40.60	-19.8	
819.00	-0.24	H	0.62	0.0	-0.86	1.29	38.45	40.60	-39.3	
High Ch										
822.50	19.59	V	0.62	0.0	18.97	21.12	38.45	40.60	-19.5	
822.50	-0.02	H	0.62	0.0	-0.64	1.51	38.45	40.60	-39.1	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 16QAM 3MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limi (dBm)	Margin (dB)	Notes
Low Ch										
815.50	18.43	V	0.62	0.0	17.81	19.96	38.45	40.60	-20.6	
815.50	-1.57	H	0.62	0.0	-2.19	-0.04	38.45	40.60	-40.6	
Mid Ch										
819.00	18.16	V	0.62	0.0	17.54	19.69	38.45	40.60	-20.9	
819.00	-0.22	H	0.62	0.0	-0.84	1.31	38.45	40.60	-39.3	
High Ch										
822.50	18.60	V	0.62	0.0	17.98	20.13	38.45	40.60	-20.5	
822.50	-0.02	H	0.62	0.0	-0.64	1.51	38.45	40.60	-39.1	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 QPSK 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
816.50	19.45	V	0.62	0.0	18.83	20.98	38.45	40.60	-19.6	
816.50	-0.42	H	0.62	0.0	-1.04	1.11	38.45	40.60	-39.5	
Mid Ch										
819.00	19.33	V	0.62	0.0	18.71	20.86	38.45	40.60	-19.7	
819.00	-0.44	H	0.62	0.0	-1.06	1.09	38.45	40.60	-39.5	
High Ch										
821.50	19.60	V	0.62	0.0	18.98	21.13	38.45	40.60	-19.5	
821.50	0.12	H	0.62	0.0	-0.50	1.65	38.45	40.60	-39.0	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 16QAM 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
816.50	18.48	V	0.62	0.0	17.86	20.01	38.45	40.60	-20.6	
816.50	-1.43	H	0.62	0.0	-2.05	0.10	38.45	40.60	-40.5	
Mid Ch										
819.00	18.34	V	0.62	0.0	17.72	19.87	38.45	40.60	-20.7	
819.00	-1.41	H	0.62	0.0	-2.03	0.12	38.45	40.60	-40.5	
High Ch										
821.50	18.61	V	0.62	0.0	17.99	20.14	38.45	40.60	-20.5	
821.50	0.08	H	0.62	0.0	-0.54	1.61	38.45	40.60	-39.0	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 QPSK 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin EIRP (dB)	Notes
Mid Ch										
819.00	19.56	V	0.62	0.0	18.94	21.09	38.45	40.60	-19.5	
819.00	-0.95	H	0.62	0.0	-1.57	0.58	38.45	40.60	-40.0	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/23/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 16QAM 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Mid Ch										
819.00	18.56	V	0.62	0.0	17.94	20.09	38.45	40.60	-20.5	
819.00	-1.97	H	0.62	0.0	-2.59	-0.44	38.45	40.60	-41.0	

Rev. 10.24.13

10.3.10. LTE BAND 41

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/17/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 41 QPSK 5MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
2.499	20.1	V	1.15	9.33	28.30	33.0	-4.7	
2.499	19.2	H	1.15	9.33	27.40	33.0	-5.6	
Mid Ch								
2.593	20.7	V	1.16	9.47	28.98	33.0	-4.0	
2.593	20.9	H	1.16	9.47	29.19	33.0	-3.8	
High Ch								
2.688	19.2	V	1.17	9.78	27.79	33.0	-5.2	
2.688	20.5	H	1.17	9.78	29.08	33.0	-3.9	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/17/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 41 16QAM 5MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
2.499	19.1	V	1.15	9.33	27.28	33.0	-5.7	
2.499	18.8	H	1.15	9.33	26.96	33.0	-6.0	
Mid Ch								
2.593	19.7	V	1.16	9.47	28.01	33.0	-5.0	
2.593	19.9	H	1.16	9.47	28.24	33.0	-4.8	
High Ch								
2.688	18.3	V	1.17	9.78	26.93	33.0	-6.1	
2.688	19.3	H	1.17	9.78	27.95	33.0	-5.0	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/17/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 41 QPSK 10MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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	20.8	V	1.15	9.33	28.96	33.0	-4.0	
2.501	20.3	H	1.15	9.33	28.46	33.0	-4.5	
Mid Ch								
2.593	21.0	V	1.16	9.47	29.31	33.0	-3.7	
2.593	21.5	H	1.16	9.47	29.82	33.0	-3.2	
High Ch								
2.685	19.8	V	1.17	9.77	28.39	33.0	-4.6	
2.685	20.9	H	1.17	9.77	29.45	33.0	-3.5	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/17/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 41 16QAM 10MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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	19.8	V	1.15	9.33	27.98	33.0	-5.0	
2.501	19.4	H	1.15	9.33	27.57	33.0	-5.4	
Mid Ch								
2.593	20.2	V	1.16	9.47	28.51	33.0	-4.5	
2.593	20.4	H	1.16	9.47	28.74	33.0	-4.3	
High Ch								
2.685	18.8	V	1.17	9.77	27.42	33.0	-5.6	
2.685	19.8	H	1.17	9.77	28.44	33.0	-4.6	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/17/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 41 QPSK 15MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
2.504	22.2	V	1.15	9.34	30.34	33.0	-2.7	
2.504	22.0	H	1.15	9.34	30.16	33.0	-2.8	
Mid Ch								
2.593	22.6	V	1.16	9.47	30.93	33.0	-2.1	
2.593	22.6	H	1.16	9.47	30.93	33.0	-2.1	
High Ch								
2.683	21.3	V	1.17	9.76	29.86	33.0	-3.1	
2.683	22.9	H	1.17	9.76	31.46	33.0	-1.5	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/17/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 41 16QAM 15MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
2.504	21.3	V	1.15	9.34	29.48	33.0	-3.5	
2.504	21.0	H	1.15	9.34	29.17	33.0	-3.8	
Mid Ch								
2.593	21.5	V	1.16	9.47	29.81	33.0	-3.2	
2.593	21.6	H	1.16	9.47	29.94	33.0	-3.1	
High Ch								
2.683	20.3	V	1.17	9.76	28.91	33.0	-4.1	
2.683	21.7	H	1.17	9.76	30.33	33.0	-2.7	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/17/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 41 QPSK 20MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
2.506	21.9	V	1.15	9.34	30.12	33.0	-2.9	
2.506	22.8	H	1.15	9.34	30.99	33.0	-2.0	
Mid Ch								
2.593	20.4	V	1.16	9.47	28.72	33.0	-4.3	
2.593	23.7	H	1.16	9.47	32.04	33.0	-1.0	
High Ch								
2.680	20.9	V	1.17	9.76	29.45	33.0	-3.6	
2.680	23.6	H	1.17	9.76	32.21	33.0	-0.8	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber H

Company:
Project #: 15U20163
Date: 6/17/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 41 16QAM 20MHz BW

Test Equipment:
Receiving: Horn T863, and Chamber H 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								
2.506	20.9	V	1.15	9.34	29.09	33.0	-3.9	
2.506	21.8	H	1.15	9.34	29.97	33.0	-3.0	
Mid Ch								
2.593	19.7	V	1.16	9.47	28.01	33.0	-5.0	
2.593	22.8	H	1.16	9.47	31.14	33.0	-1.9	
High Ch								
2.680	19.8	V	1.17	9.76	28.41	33.0	-4.6	
2.680	22.6	H	1.17	9.76	31.23	33.0	-1.8	

Rev. 10.24.13

10.4. RADIATED POWER (ERP & EIRP), MODEL: A1687 (UAT)

EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
1.4MHz Band QPSK	1/0	1850.7	**18.44**	69.82
		1880.0	17.89	61.52
		1909.3	17.24	52.97
1.4MHz Band 16QAM	1/0	1850.7	**17.73**	59.29
		1880.0	17.39	54.83
		1909.3	16.74	47.21

EIRP POWER FOR LTE BAND 2 (3.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
3.0MHz Band QPSK	1/0	1851.5	**18.26**	66.99
		1880.0	17.73	59.29
		1908.5	17.44	55.46
3.0MHz Band 16QAM	1/0	1851.5	**17.66**	58.34
		1880.0	16.89	48.87
		1908.5	16.64	46.13

EIRP POWER FOR LTE BAND 2 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
5.0MHz Band QPSK	1/0	1852.5	**18.36**	68.55
		1880.0	17.43	55.34
		1907.5	17.23	52.84
5.0MHz Band 16QAM	1/0	1852.5	**17.56**	57.02
		1880.0	16.79	47.75
		1907.5	16.33	42.95

EIRP POWER FOR LTE BAND 2 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
10.0MHz Band QPSK	1/0	1855.0	**18.36**	68.55
		1880.0	17.29	53.58
		1905.0	17.43	55.34
10.0MHz Band 16QAM	1/0	1855.0	**17.76**	59.70
		1880.0	16.69	46.67
		1905.0	16.83	48.19

EIRP POWER FOR LTE BAND 2 (15.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
15MHz Band QPSK	1/0	1857.5	**18.45**	69.98
		1880.0	18.44	69.82
		1902.5	18.37	68.71
15MHz Band 16QAM	1/0	1857.5	17.85	60.95
		1880.0	**17.89**	61.52
		1902.5	17.82	60.53

EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
20.0MHz Band QPSK	1/0	1860.0	18.42	69.50
		1880.0	**18.45**	69.98
		1900.0	18.44	69.82
20MHz Band 16QAM	1/0	1860.0	17.75	59.57
		1880.0	17.79	60.12
		1900.0	**18.14**	65.16

EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
1.4 MHZ BAND QPSK	1/0	1710.7	**20.41**	109.90
		1732.5	19.73	93.97
		1754.3	20.35	108.39
1.4 MHZ BAND 16QAM	1/0	1710.7	**19.41**	87.30
		1732.5	18.83	76.38
		1754.3	19.35	86.10

EIRP POWER FOR LTE BAND 4 (3.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	1711.5	20.01	100.23
		1732.5	19.83	96.16
		1753.5	**20.05**	101.16
3.0 MHZ BAND 16QAM	1/0	1711.5	19.11	81.47
		1732.5	18.73	74.64
		1753.5	**19.45**	88.10

EIRP POWER FOR LTE BAND 4 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	1712.5	**20.31**	107.40
		1732.5	19.43	87.70
		1752.5	20.15	103.51
5.0 MHZ BAND 16QAM	1/0	1712.5	**19.31**	85.31
		1732.5	18.53	71.29
		1752.5	19.05	80.35

EIRP POWER FOR LTE BAND 4 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	1715.0	19.98	99.54
		1732.5	19.89	97.50
		1750.0	**20.53**	112.98
10.0 MHZ BAND 16QAM	1/0	1715.0	18.88	77.27
		1732.5	18.99	79.25
		1750.0	**19.53**	89.74

EIRP POWER FOR LTE BAND 4 (15.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
15.0 MHZ BAND QPSK	1/0	1717.5	**20.58**	114.29
		1732.5	20.29	106.91
		1747.5	20.33	107.89
15.0 MHZ BAND 16QAM	1/0	1717.5	**19.58**	90.78
		1732.5	19.19	82.99
		1747.5	19.33	85.70

EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
20.0 MHZ BAND QPSK	1/0	1720.0	**20.67**	116.68
		1732.5	20.19	104.47
		1745.0	20.64	115.88
20.0 MHZ BAND 16QAM	1/0	1720.0	**19.93**	98.40
		1732.5	19.20	83.18
		1745.0	19.75	94.41

ERP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
1.4MHz Band QPSK	1/0	824.7	13.43	22.03
		836.5	14.07	25.53
		848.3	**14.35**	27.23
1.4MHz Band 16QAM	1/0	824.7	12.53	17.91
		836.5	13.07	20.28
		848.3	**13.85**	24.27

ERP POWER FOR LTE BAND 5 (3.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	825.5	13.23	21.04
		836.5	14.33	27.10
		847.5	**14.35**	27.23
3.0 MHZ BAND 16QAM	1/0	825.5	12.33	17.10
		836.5	13.57	22.75
		847.5	**13.65**	23.17

ERP POWER FOR LTE BAND 5 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
5MHz Band QPSK	1/0	826.5	13.83	24.15
		836.5	**14.17**	26.12
		846.5	14.15	26.00
5MHz Band 16QAM	1/0	826.5	12.93	19.63
		836.5	**13.37**	21.73
		846.5	13.35	21.63

ERP POWER FOR LTE BAND 5 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	829.0	13.63	23.07
		836.5	14.07	25.53
		844.0	**14.35**	27.23
10.0 MHZ BAND 16QAM	1/0	829.0	13.83	24.15
		836.5	13.82	24.10
		844.0	**13.95**	24.83

EIRP POWER FOR LTE BAND 7 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
5.0 MHZ BAND QPSK	25/0	2502.5	21.15	130.32
		2535.0	**21.18**	131.22
		2567.5	20.92	123.59
5.0 MHZ BAND 16QAM	25/0	2502.5	20.25	105.93
		2535.0	**20.68**	116.95
		2567.5	19.92	98.17

EIRP POWER FOR LTE BAND 7 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
10.0 MHZ BAND QPSK	50/0	2505.0	21.25	133.35
		2535.0	**21.48**	140.60
		2565.0	20.72	118.03
10.0 MHZ BAND 16QAM	50/0	2505.0	20.55	113.50
		2535.0	**20.88**	122.46
		2565.0	19.82	95.94

EIRP POWER FOR LTE BAND 7 (15.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
15.0 MHZ BAND QPSK	75/0	2507.5	21.35	136.46
		2535.0	**21.48**	140.60
		2562.5	20.61	115.08
15.0 MHZ BAND 16QAM	75/0	2507.5	20.35	108.39
		2535.0	**20.48**	111.69
		2562.5	19.61	91.41

EIRP POWER FOR LTE BAND 7 (20.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
20.0 MHZ BAND QPSK	100/0	2510.0	21.26	133.66
		2535.0	**21.28**	134.28
		2560.0	20.71	117.76
20.0 MHZ BAND 16QAM	100/0	2510.0	20.76	119.12
		2535.0	**20.88**	122.46
		2560.0	20.01	100.23

ERP POWER FOR LTE BAND 12 (1.4MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
1.4MHz Band QPSK	1/0	699.7	**14.67**	29.31
		707.5	14.22	26.42
		715.3	14.11	25.76
1.4MHz Band 16QAM	1/0	699.7	**13.87**	24.38
		707.5	13.82	24.10
		715.3	13.41	21.93

ERP POWER FOR LTE BAND 12 (3.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	700.5	**14.57**	28.64
		707.5	14.41	27.61
		714.5	14.48	28.05
3.0 MHZ BAND 16QAM	1/0	700.5	**13.87**	24.38
		707.5	13.68	23.33
		714.5	13.68	23.33

ERP POWER FOR LTE BAND 12 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
5MHz Band QPSK	1/0	701.5	13.97	24.95
		707.5	**14.10**	25.70
		713.5	13.58	22.80
5MHz Band 16QAM	1/0	701.5	12.97	19.82
		707.5	**13.40**	21.88
		713.5	12.78	18.97

ERP POWER FOR LTE BAND 12 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	704.0	**14.63**	29.04
		707.5	14.35	27.23
		711.0	14.49	28.12
10.0 MHZ BAND 16QAM	1/0	704.0	**14.34**	27.16
		707.5	13.82	24.10
		711.0	13.79	23.93

ERP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	779.5	14.41	27.61
		782.0	14.42	27.67
		784.5	**14.53**	28.38
5.0 MHZ BAND 16QAM	1/0	779.5	13.43	22.03
		782.0	13.45	22.13
		784.5	**13.57**	22.75

ERP POWER FOR LTE BAND 13 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
10 MHZ BAND QPSK	1/0	782.0	**14.32**	27.04
10 MHz BAND 16QAM	1/0		**13.35**	21.63

ERP POWER FOR LTE BAND 17 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
5MHz Band QPSK	1/0	706.5	14.87	30.69
		710.0	14.89	30.83
		713.5	**15.26**	33.57
5MHz Band 16QAM	1/0	706.5	13.91	24.60
		710.0	13.92	24.66
		713.5	**14.35**	27.23

ERP POWER FOR LTE BAND 17 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	710.0	**15.07**	32.14
10.0 MHZ BAND 16QAM		710.0	**14.12**	25.82

EIRP POWER FOR LTE BAND 25 (1.4MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
1.4 MHZ BAND QPSK	1/0	1850.7	**18.30**	67.61
		1880.0	17.86	61.09
		1914.3	17.78	59.98
1.4 MHZ BAND 16QAM	1/0	1850.7	**17.60**	57.54
		1880.0	17.36	54.45
		1914.3	17.08	51.05

EIRP POWER FOR LTE BAND 25 (3.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	1851.5	**18.20**	66.07
		1880.0	17.56	57.02
		1913.5	17.68	58.61
3.0 MHZ BAND 16QAM	1/0	1851.5	**17.40**	54.95
		1880.0	16.86	48.53
		1913.5	17.08	51.05

EIRP POWER FOR LTE BAND 25 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	1852.5	**18.10**	64.57
		1880.0	17.56	57.02
		1912.5	18.07	64.12
5.0 MHZ BAND 16QAM	1/0	1852.5	17.30	53.70
		1880.0	16.86	48.53
		1912.5	**17.87**	61.24

EIRP POWER FOR LTE BAND 25 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	1855.0	**17.96**	62.52
		1880.0	16.76	47.42
		1910.0	17.56	57.02
10.0 MHZ BAND 16QAM	1/0	1855.0	**17.36**	54.45
		1880.0	16.06	40.36
		1910.0	16.96	49.66

EIRP POWER FOR LTE BAND 25 (15.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
15.0 MHZ BAND QPSK	1/0	1857.5	18.19	65.92
		1880.0	18.06	63.97
		1907.5	**18.45**	69.98
15.0 MHZ BAND 16QAM	1/0	1857.5	17.39	54.83
		1880.0	17.36	54.45
		1907.5	**17.70**	58.88

EIRP POWER FOR LTE BAND 25 (20.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
20.0 MHZ BAND QPSK	1/0	1860.0	**18.39**	69.02
		1880.0	18.38	68.87
		1905.0	18.35	68.39
20.0 MHZ BAND 16QAM	1/0	1860.0	17.69	58.75
		1880.0	**17.76**	59.70
		1905.0	17.75	59.57

ERP POWER FOR LTE BAND 26 (1.4MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
1.4 MHZ BAND QPSK	1/0	814.7	13.56	22.70
		819.0	13.73	23.60
		823.3	**13.77**	23.82
1.4 MHZ BAND 16QAM	1/0	814.7	12.56	18.03
		819.0	12.79	19.01
		823.3	**13.01**	20.00

ERP POWER FOR LTE BAND 26 (3.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	815.5	**13.66**	23.23
		819.0	13.10	20.42
		822.5	13.65	23.17
3.0 MHZ BAND 16QAM	1/0	815.5	12.62	18.28
		819.0	12.19	16.56
		822.5	**12.67**	18.49

ERP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	816.5	13.50	22.39
		819.0	13.06	20.23
		821.5	**13.59**	22.86
5.0 MHZ BAND 16QAM	1/0	816.5	12.56	18.03
		819.0	12.09	16.18
		821.5	**12.67**	18.49

ERP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	819.0	**13.73**	23.60
10.0 MHZ BAND 16QAM	1/0	819.0	**12.79**	19.01

EIRP POWER FOR LTE BAND 41 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
5.0 MHZ BAND QPSK	25/0	2498.5	**18.20**	66.07
		2593.0	18.18	65.77
		2687.5	17.02	50.35
5.0 MHZ BAND 16QAM	25/0	24.98.5	17.08	51.05
		2593.0	**17.10**	51.29
		2687.5	15.94	39.26

EIRP POWER FOR LTE BAND 41 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
10.0 MHZ BAND QPSK	50/0	2501.0	**18.11**	64.71
		2593.0	17.95	62.37
		2685.0	17.56	57.02
10.0 MHZ BAND 16QAM	50/0	2501.0	**17.11**	51.40
		2593.0	17.06	50.82
		2685.0	16.70	46.77

EIRP POWER FOR LTE BAND 41(15.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
15.0 MHZ BAND QPSK	75/0	2503.5	18.30	67.61
		2593.0	18.15	65.31
		2682.5	**18.34**	68.23
15.0 MHZ BAND 16QAM	75/0	2503.5	**17.48**	55.98
		2593.0	17.31	53.83
		2682.5	17.46	55.72

EIRP POWER FOR LTE BAND 41 (20.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
20.0 MHZ BAND QPSK	100/0	2506.0	**18.39**	69.02
		2593.0	18.35	68.39
		2680.0	18.07	64.12
20.0 MHZ BAND 16QAM	100/0	2506.0	**17.54**	56.75
		2593.0	17.51	56.36
		2680.0	17.19	52.36

10.4.1. LTE BAND 2

QPSK EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)

High Frequency Fundamental Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 QPSK 1.4MHz 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								
1.851	10.8	V	0.98	8.05	17.85	33.0	-15.2	
1.851	11.4	H	0.98	8.05	18.44	33.0	-14.6	
Mid Ch								
1.880	8.4	V	0.98	8.03	15.40	33.0	-17.6	
1.880	10.8	H	0.98	8.03	17.89	33.0	-15.1	
High Ch								
1.909	8.7	V	0.98	8.05	15.77	33.0	-17.2	
1.909	10.2	H	0.98	8.05	17.24	33.0	-15.8	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 16QAM 1.4MHz 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								
1.851	10.2	V	0.98	8.05	17.31	33.0	-15.7	
1.851	10.7	H	0.98	8.05	17.73	33.0	-15.3	
Mid Ch								
1.880	7.9	V	0.98	8.03	14.93	33.0	-18.1	
1.880	10.3	H	0.98	8.03	17.39	33.0	-15.6	
High Ch								
1.909	8.2	V	0.98	8.05	15.27	33.0	-17.7	
1.909	9.7	H	0.98	8.05	16.74	33.0	-16.3	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 2 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 QPSK 3MHz 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								
1.852	10.5	V	0.98	8.05	17.61	33.0	-15.4	
1.852	11.2	H	0.98	8.05	18.26	33.0	-14.7	
Mid Ch								
1.880	8.8	V	0.98	8.03	15.83	33.0	-17.2	
1.880	10.7	H	0.98	8.03	17.73	33.0	-15.3	
High Ch								
1.909	9.7	V	0.98	8.05	16.77	33.0	-16.2	
1.909	10.4	H	0.98	8.05	17.44	33.0	-15.6	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 2 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 16QAM 3MHz 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								
1.852	9.8	V	0.98	8.05	16.91	33.0	-16.1	
1.852	10.6	H	0.98	8.05	17.66	33.0	-15.3	
Mid Ch								
1.880	8.2	V	0.98	8.03	15.27	33.0	-17.7	
1.880	9.8	H	0.98	8.03	16.89	33.0	-16.1	
High Ch								
1.909	9.0	V	0.98	8.05	16.07	33.0	-16.9	
1.909	9.6	H	0.98	8.05	16.64	33.0	-16.4	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 2 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.853	10.5	V	0.98	8.05	17.61	33.0	-15.4	
1.853	11.3	H	0.98	8.05	18.36	33.0	-14.6	
Mid Ch								
1.880	8.7	V	0.98	8.03	15.77	33.0	-17.2	
1.880	10.4	H	0.98	8.03	17.43	33.0	-15.6	
High Ch								
1.908	9.6	V	0.98	8.04	16.66	33.0	-16.3	
1.908	10.2	H	0.98	8.04	17.23	33.0	-15.8	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 2 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.853	9.8	V	0.98	8.05	16.91	33.0	-16.1	
1.853	10.5	H	0.98	8.05	17.56	33.0	-15.4	
Mid Ch								
1.880	8.0	V	0.98	8.03	15.07	33.0	-17.9	
1.880	9.7	H	0.98	8.03	16.79	33.0	-16.2	
High Ch								
1.908	9.0	V	0.98	8.04	16.06	33.0	-16.9	
1.908	9.3	H	0.98	8.04	16.33	33.0	-16.7	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 2 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 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								
1.855	10.6	V	0.98	8.05	17.71	33.0	-15.3	
1.855	11.3	H	0.98	8.05	18.36	33.0	-14.6	
Mid Ch								
1.880	8.9	V	0.98	8.03	15.97	33.0	-17.0	
1.880	10.2	H	0.98	8.03	17.29	33.0	-15.7	
High Ch								
1.905	9.7	V	0.98	8.04	16.76	33.0	-16.2	
1.905	10.4	H	0.98	8.04	17.43	33.0	-15.6	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 2 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 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								
1.855	9.8	V	0.98	8.05	16.91	33.0	-16.1	
1.855	10.7	H	0.98	8.05	17.76	33.0	-15.2	
Mid Ch								
1.880	8.0	V	0.98	8.03	15.07	33.0	-17.9	
1.880	9.6	H	0.98	8.03	16.69	33.0	-16.3	
High Ch								
1.905	9.2	V	0.98	8.04	16.26	33.0	-16.7	
1.905	9.8	H	0.98	8.04	16.83	33.0	-16.2	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 2 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.858	10.9	V	0.98	8.04	18.00	33.0	-15.0	
1.858	11.4	H	0.98	8.04	18.45	33.0	-14.5	
Mid Ch								
1.880	10.6	V	0.98	8.03	17.67	33.0	-15.3	
1.880	11.4	H	0.98	8.03	18.44	33.0	-14.6	
High Ch								
1.903	11.3	V	0.98	8.03	18.35	33.0	-14.7	
1.903	11.3	H	0.98	8.03	18.37	33.0	-14.6	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 2 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.858	10.0	V	0.98	8.04	17.10	33.0	-15.9	
1.858	10.8	H	0.98	8.04	17.85	33.0	-15.1	
Mid Ch								
1.880	10.0	V	0.98	8.03	17.07	33.0	-15.9	
1.880	10.8	H	0.98	8.03	17.89	33.0	-15.1	
High Ch								
1.903	10.6	V	0.98	8.03	17.65	33.0	-15.4	
1.903	10.8	H	0.98	8.03	17.82	33.0	-15.2	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.860	10.7	V	0.98	8.04	17.80	33.0	-15.2	
1.860	11.4	H	0.98	8.04	18.42	33.0	-14.6	
Mid Ch								
1.880	10.9	V	0.98	8.03	17.97	33.0	-15.0	
1.880	11.4	H	0.98	8.03	18.45	33.0	-14.6	
High Ch								
1.900	11.4	V	0.98	8.02	18.44	33.0	-14.6	
1.900	11.3	H	0.98	8.02	18.31	33.0	-14.7	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 2 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.860	10.0	V	0.98	8.04	17.10	33.0	-15.9	
1.860	10.7	H	0.98	8.04	17.75	33.0	-15.2	
Mid Ch								
1.880	10.1	V	0.98	8.03	17.17	33.0	-15.8	
1.880	10.7	H	0.98	8.03	17.79	33.0	-15.2	
High Ch								
1.900	11.1	V	0.98	8.02	18.14	33.0	-14.9	
1.900	10.7	H	0.98	8.02	17.69	33.0	-15.3	

Rev. 10.24.13

10.4.2. LTE BAND 4

QPSK EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)

UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/9/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 4 QPSK 1.4MHz 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								
1.7107	10.4	V	0.95	8.27	17.72	30.0	-12.3	
1.7107	13.1	H	0.95	8.27	20.41	30.0	-9.6	
Mid Ch								
1.7325	9.9	V	0.95	8.23	17.20	30.0	-12.8	
1.7325	12.5	H	0.95	8.23	19.73	30.0	-10.3	
High Ch								
1.7543	10.1	V	0.95	8.18	17.29	30.0	-12.7	
1.7543	13.1	H	0.95	8.18	20.35	30.0	-9.7	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/9/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 4 16QAM 1.4MHz 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								
1.711	9.5	V	0.95	8.27	16.82	30.0	-13.2	
1.711	12.1	H	0.95	8.27	19.41	30.0	-10.6	
Mid Ch								
1.733	9.0	V	0.95	8.23	16.30	30.0	-13.7	
1.733	11.6	H	0.95	8.23	18.83	30.0	-11.2	
High Ch								
1.754	9.2	V	0.95	8.18	16.39	30.0	-13.6	
1.754	12.1	H	0.95	8.18	19.35	30.0	-10.7	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 4 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/9/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 4 QPSK 3MHz 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								
1.7115	10.3	V	0.95	8.27	17.62	30.0	-12.4	
1.7115	12.7	H	0.95	8.27	20.01	30.0	-10.0	
Mid Ch								
1.7325	9.5	V	0.95	8.23	16.80	30.0	-13.2	
1.7325	12.6	H	0.95	8.23	19.83	30.0	-10.2	
High Ch								
1.7535	9.3	V	0.95	8.18	16.49	30.0	-13.5	
1.7535	12.8	H	0.95	8.18	20.05	30.0	-9.9	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 4 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/9/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 4 16QAM 3MHz 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								
1.712	9.4	V	0.95	8.27	16.72	30.0	-13.3	
1.712	11.8	H	0.95	8.27	19.11	30.0	-10.9	
Mid Ch								
1.733	8.4	V	0.95	8.23	15.70	30.0	-14.3	
1.733	11.5	H	0.95	8.23	18.73	30.0	-11.3	
High Ch								
1.754	8.4	V	0.95	8.18	15.59	30.0	-14.4	
1.754	12.2	H	0.95	8.18	19.45	30.0	-10.5	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 4 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/9/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 4 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.7125	10.8	V	0.95	8.27	18.12	30.0	-11.9	
1.7125	13.0	H	0.95	8.27	20.31	30.0	-9.7	
Mid Ch								
1.7325	9.6	V	0.95	8.23	16.90	30.0	-13.1	
1.7325	12.2	H	0.95	8.23	19.43	30.0	-10.6	
High Ch								
1.7525	9.6	V	0.95	8.18	16.79	30.0	-13.2	
1.7525	12.9	H	0.95	8.18	20.15	30.0	-9.8	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 4 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/9/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 4 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.713	9.9	V	0.95	8.27	17.22	30.0	-12.8	
1.713	12.0	H	0.95	8.27	19.31	30.0	-10.7	
Mid Ch								
1.733	8.8	V	0.95	8.23	16.10	30.0	-13.9	
1.733	11.3	H	0.95	8.23	18.53	30.0	-11.5	
High Ch								
1.753	8.7	V	0.95	8.18	15.89	30.0	-14.1	
1.753	11.8	H	0.95	8.18	19.05	30.0	-10.9	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 4 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/9/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 4 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								
1.715	10.4	V	0.95	8.26	17.71	30.0	-12.3	
1.715	12.7	H	0.95	8.26	19.98	30.0	-10.0	
Mid Ch								
1.7325	10.0	V	0.95	8.23	17.30	30.0	-12.7	
1.7325	12.6	H	0.95	8.23	19.89	30.0	-10.1	
High Ch								
1.750	10.8	V	0.95	8.19	17.99	30.0	-12.0	
1.750	13.3	H	0.95	8.19	20.53	30.0	-9.5	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 4 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/9/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 4 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								
1.715	9.8	V	0.95	8.26	17.11	30.0	-12.9	
1.715	11.6	H	0.95	8.26	18.88	30.0	-11.1	
Mid Ch								
1.733	9.3	V	0.95	8.23	16.60	30.0	-13.4	
1.733	11.7	H	0.95	8.23	18.99	30.0	-11.0	
High Ch								
1.750	9.9	V	0.95	8.19	17.09	30.0	-12.9	
1.750	12.3	H	0.95	8.19	19.53	30.0	-10.5	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 4 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/9/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 4 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.7175	12.0	V	0.95	8.26	19.31	30.0	-10.7	
1.7175	13.3	H	0.95	8.26	20.58	30.0	-9.4	
Mid Ch								
1.7325	11.8	V	0.95	8.23	19.10	30.0	-10.9	
1.7325	13.0	H	0.95	8.23	20.29	30.0	-9.7	
High Ch								
1.7475	11.8	V	0.95	8.19	18.99	30.0	-11.0	
1.7475	13.1	H	0.95	8.19	20.33	30.0	-9.7	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 4 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/9/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 4 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.718	11.0	V	0.95	8.26	18.31	30.0	-11.7	
1.718	12.3	H	0.95	8.26	19.58	30.0	-10.4	
Mid Ch								
1.733	10.7	V	0.95	8.23	18.00	30.0	-12.0	
1.733	11.9	H	0.95	8.23	19.19	30.0	-10.8	
High Ch								
1.748	10.7	V	0.95	8.19	17.89	30.0	-12.1	
1.748	12.1	H	0.95	8.19	19.33	30.0	-10.7	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/9/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 4 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.720	11.8	V	0.95	8.25	19.10	30.0	-10.9	
1.720	13.4	H	0.95	8.25	20.67	30.0	-9.3	
Mid Ch								
1.7325	11.5	V	0.95	8.23	18.80	30.0	-11.2	
1.7325	12.9	H	0.95	8.23	20.19	30.0	-9.8	
High Ch								
1.745	11.5	V	0.95	8.20	18.70	30.0	-11.3	
1.745	13.4	H	0.95	8.20	20.64	30.0	-9.4	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/9/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 4 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.720	11.3	V	0.95	8.25	18.60	30.0	-11.4	
1.720	12.6	H	0.95	8.25	19.93	30.0	-10.1	
Mid Ch								
1.733	11.4	V	0.95	8.23	18.63	30.0	-11.4	
1.733	11.9	H	0.95	8.23	19.20	30.0	-10.8	
High Ch								
1.745	11.4	V	0.95	8.20	18.63	30.0	-11.4	
1.745	12.5	H	0.95	8.20	19.75	30.0	-10.3	

Rev. 10.24.13

10.4.3. LTE BAND 5

QPSK EIRP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 QPSK 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
824.70	14.05	V	0.6	0.0	13.43	15.58	38.45	40.60	-25.0	
824.70	-4.43	H	0.6	0.0	-5.05	-2.90	38.45	40.60	-43.5	
Mid Ch										
836.50	14.68	V	0.6	0.0	14.07	16.22	38.45	40.60	-24.4	
836.50	-4.02	H	0.6	0.0	-4.64	-2.49	38.45	40.60	-43.1	
High Ch										
848.30	14.97	V	0.6	0.0	14.35	16.50	38.45	40.60	-24.1	
848.30	-1.80	H	0.6	0.0	-2.42	-0.27	38.45	40.60	-40.9	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 16QAM 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
824.70	13.15	V	0.6	0.0	12.53	14.68	38.45	40.60	-25.9	
824.70	-5.33	H	0.6	0.0	-5.95	-3.80	38.45	40.60	-44.4	
Mid Ch										
836.50	13.68	V	0.6	0.0	13.07	15.22	38.45	40.60	-25.4	
836.50	-4.92	H	0.6	0.0	-5.54	-3.39	38.45	40.60	-44.0	
High Ch										
848.30	14.47	V	0.6	0.0	13.85	16.00	38.45	40.60	-24.6	
848.30	-2.80	H	0.6	0.0	-3.42	-1.27	38.45	40.60	-41.9	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 5 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 QPSK 3MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
825.50	13.85	V	0.6	0.0	13.23	15.38	38.45	40.60	-25.2	
825.50	-3.93	H	0.6	0.0	-4.55	-2.40	38.45	40.60	-43.0	
Mid Ch										
836.50	14.94	V	0.6	0.0	14.33	16.48	38.45	40.60	-24.1	
836.50	-4.62	H	0.6	0.0	-5.24	-3.09	38.45	40.60	-43.7	
High Ch										
847.50	14.97	V	0.6	0.0	14.35	16.50	38.45	40.60	-24.1	
847.50	-2.10	H	0.6	0.0	-2.72	-0.57	38.45	40.60	-41.2	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 5 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 16QAM 3MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole T416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
825.50	12.95	V	0.6	0.0	12.33	14.48	38.45	40.60	-26.1	
825.50	-4.93	H	0.6	0.0	-5.55	-3.40	38.45	40.60	-44.0	
Mid Ch										
836.50	14.18	V	0.6	0.0	13.57	15.72	38.45	40.60	-24.9	
836.50	-5.52	H	0.6	0.0	-6.14	-3.99	38.45	40.60	-44.6	
High Ch										
847.50	14.27	V	0.6	0.0	13.65	15.80	38.45	40.60	-24.8	
847.50	-3.00	H	0.6	0.0	-3.62	-1.47	38.45	40.60	-42.1	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 5 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 QPSK 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
826.50	14.45	V	0.6	0.0	13.83	15.98	38.45	40.60	-24.6	
826.50	-3.23	H	0.6	0.0	-3.85	-1.70	38.45	40.60	-42.3	
Mid Ch										
836.50	14.78	V	0.6	0.0	14.17	16.32	38.45	40.60	-24.3	
836.50	-4.52	H	0.6	0.0	-5.14	-2.99	38.45	40.60	-43.6	
High Ch										
846.50	14.77	V	0.6	0.0	14.15	16.30	38.45	40.60	-24.3	
846.50	-2.40	H	0.6	0.0	-3.02	-0.87	38.45	40.60	-41.5	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 5 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 16QAM 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole T416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
826.50	13.55	V	0.6	0.0	12.93	15.08	38.45	40.60	-25.5	
826.50	-4.13	H	0.6	0.0	-4.75	-2.60	38.45	40.60	-43.2	
Mid Ch										
836.50	13.98	V	0.6	0.0	13.37	15.52	38.45	40.60	-25.1	
836.50	-5.42	H	0.6	0.0	-6.04	-3.89	38.45	40.60	-44.5	
High Ch										
846.50	13.97	V	0.6	0.0	13.35	15.50	38.45	40.60	-25.1	
846.50	-3.39	H	0.6	0.0	-4.01	-1.86	38.45	40.60	-42.5	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 5 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 QPSK 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
829.00	14.25	V	0.6	0.0	13.63	15.78	38.45	40.60	-24.8	
829.00	-4.93	H	0.6	0.0	-5.55	-3.40	38.45	40.60	-44.0	
Mid Ch										
836.50	14.68	V	0.6	0.0	14.07	16.22	38.45	40.60	-24.4	
836.50	1.08	H	0.6	0.0	0.46	2.61	38.45	40.60	-38.0	
High Ch										
844.00	14.97	V	0.6	0.0	14.35	16.50	38.45	40.60	-24.1	
844.00	-3.40	H	0.6	0.0	-4.02	-1.87	38.45	40.60	-42.5	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 5 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 5 16QAM 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole T416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
829.00	14.45	V	0.6	0.0	13.83	15.98	38.45	40.60	-24.6	
829.00	-4.15	H	0.6	0.0	-4.77	-2.62	38.45	40.60	-43.2	
Mid Ch										
836.50	14.44	V	0.6	0.0	13.82	15.97	38.45	40.60	-24.6	
836.50	-3.96	H	0.6	0.0	-4.58	-2.43	38.45	40.60	-43.0	
High Ch										
844.00	14.57	V	0.6	0.0	13.95	16.10	38.45	40.60	-24.5	
844.00	-2.30	H	0.6	0.0	-2.92	-0.77	38.45	40.60	-41.4	

Rev. 10.24.13

10.4.4. LTE BAND 7

QPSK EIRP POWER FOR LTE BAND 7 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/30/2015
Test Engineer: E. Lee
Configuration: EUT Only
Mode: LTE Band 7 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.5025	13.0	V	1.15	9.34	21.15	33.0	-11.9	
2.5025	11.4	H	1.15	9.34	19.62	33.0	-13.4	
Mid Ch								
2.535	13.0	V	1.16	9.38	21.18	33.0	-11.8	
2.535	12.0	H	1.16	9.38	20.25	33.0	-12.7	
High Ch								
2.5675	12.7	V	1.17	9.43	20.92	33.0	-12.1	
2.5675	11.8	H	1.17	9.43	20.06	33.0	-12.9	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 7 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/30/2015
Test Engineer: E. Lee
Configuration: EUT Only
Mode: LTE Band 7 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.503	12.1	V	1.15	9.34	20.25	33.0	-12.8	
2.503	10.4	H	1.15	9.34	18.62	33.0	-14.4	
Mid Ch								
2.535	12.5	V	1.16	9.38	20.68	33.0	-12.3	
2.535	10.9	H	1.16	9.38	19.15	33.0	-13.8	
High Ch								
2.568	11.7	V	1.17	9.43	19.92	33.0	-13.1	
2.568	10.7	H	1.17	9.43	18.96	33.0	-14.0	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 7 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/30/2015
Test Engineer: E. Lee
Configuration: EUT Only
Mode: LTE Band 7 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								
2.505	13.1	V	1.15	9.34	21.25	33.0	-11.7	
2.505	12.2	H	1.15	9.34	20.42	33.0	-12.6	
Mid Ch								
2.535	13.3	V	1.16	9.38	21.48	33.0	-11.5	
2.535	12.3	H	1.16	9.38	20.55	33.0	-12.4	
High Ch								
2.565	12.5	V	1.17	9.43	20.72	33.0	-12.3	
2.565	11.7	H	1.17	9.43	19.95	33.0	-13.0	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 7 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/30/2015
Test Engineer: E. Lee
Configuration: EUT Only
Mode: LTE Band 7 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								
2.505	12.4	V	1.15	9.34	20.55	33.0	-12.4	
2.505	11.3	H	1.15	9.34	19.52	33.0	-13.5	
Mid Ch								
2.535	12.7	V	1.16	9.38	20.88	33.0	-12.1	
2.535	11.8	H	1.16	9.38	20.05	33.0	-12.9	
High Ch								
2.565	11.6	V	1.17	9.43	19.82	33.0	-13.2	
2.565	10.8	H	1.17	9.43	19.05	33.0	-13.9	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 7 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/30/2015
Test Engineer: E. Lee
Configuration: EUT Only
Mode: LTE Band 7 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.5075	13.2	V	1.15	9.34	21.35	33.0	-11.6	
2.5075	11.6	H	1.15	9.34	19.82	33.0	-13.2	
Mid Ch								
2.535	13.3	V	1.16	9.38	21.48	33.0	-11.5	
2.535	12.3	H	1.16	9.38	20.55	33.0	-12.4	
High Ch								
2.5625	12.4	V	1.17	9.42	20.61	33.0	-12.4	
2.5625	11.8	H	1.17	9.42	20.05	33.0	-12.9	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 7 (15.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/30/2015
Test Engineer: E. Lee
Configuration: EUT Only
Mode: LTE Band 7 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.508	12.2	V	1.15	9.34	20.35	33.0	-12.6	
2.508	10.6	H	1.15	9.34	18.82	33.0	-14.2	
Mid Ch								
2.535	12.3	V	1.16	9.38	20.48	33.0	-12.5	
2.535	11.3	H	1.16	9.38	19.55	33.0	-13.4	
High Ch								
2.563	11.4	V	1.17	9.42	19.61	33.0	-13.4	
2.563	10.8	H	1.17	9.42	19.05	33.0	-13.9	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 7 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/30/2015
Test Engineer: E. Lee
Configuration: EUT Only
Mode: LTE Band 7 QPSK 20MHz BW IC

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								
2.510	13.1	V	1.15	9.35	21.26	33.0	-11.7	
2.510	11.3	H	1.15	9.35	19.53	33.0	-13.5	
Mid Ch								
2.535	13.1	V	1.16	9.38	21.28	33.0	-11.7	
2.535	12.2	H	1.16	9.38	20.45	33.0	-12.5	
High Ch								
2.560	12.5	V	1.17	9.42	20.71	33.0	-12.3	
2.560	11.4	H	1.17	9.42	19.65	33.0	-13.4	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 7 (20.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 6/30/2015
Test Engineer: E. Lee
Configuration: EUT Only
Mode: LTE Band 7 16QAM 20MHz BW IC

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								
2.510	12.6	V	1.15	9.35	20.76	33.0	-12.2	
2.510	10.5	H	1.15	9.35	18.73	33.0	-14.3	
Mid Ch								
2.535	12.7	V	1.16	9.38	20.88	33.0	-12.1	
2.535	11.3	H	1.16	9.38	19.55	33.0	-13.4	
High Ch								
2.560	11.8	V	1.17	9.42	20.01	33.0	-13.0	
2.560	10.5	H	1.17	9.42	18.75	33.0	-14.3	

Rev. 10.24.13

10.4.5. LTE BAND 12

QPSK EIRP POWER FOR LTE BAND 12 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 QPSK 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
699.70	15.22	V	0.55	0.0	14.67	16.82	34.77	36.99	-20.2	
699.70	-2.50	H	0.55	0.0	-3.05	-0.90	34.77	36.99	-37.9	
Mid Ch										
707.50	14.77	V	0.55	0.0	14.22	16.37	34.77	36.99	-20.6	
707.50	-2.53	H	0.55	0.0	-3.08	-0.93	34.77	36.99	-37.9	
High Ch										
715.30	14.66	V	0.55	0.0	14.11	16.26	34.77	36.99	-20.7	
715.30	-2.46	H	0.55	0.0	-3.01	-0.86	34.77	36.99	-37.9	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 12 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 16QAM 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limi (dBm)	EIRP Limi (dBm)	Margin EIRP (dB)	Notes
Low Ch										
699.70	14.4	V	0.55	0.0	13.9	16.02	34.77	36.99	-21.0	
699.70	-3.4	H	0.55	0.0	-3.9	-1.80	34.77	36.99	-38.8	
Mid Ch										
707.50	14.4	V	0.55	0.0	13.8	15.97	34.77	36.99	-21.0	
707.50	-3.4	H	0.55	0.0	-4.0	-1.83	34.77	36.99	-38.8	
High Ch										
715.30	14.0	V	0.55	0.0	13.4	15.56	34.77	36.99	-21.4	
715.30	-3.7	H	0.55	0.0	-4.2	-2.06	34.77	36.99	-39.1	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 12 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 QPSK 3MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
700.50	15.12	V	0.55	0.0	14.57	16.72	34.77	36.99	-20.3	
700.50	-2.00	H	0.55	0.0	-2.55	-0.40	34.77	36.99	-37.4	
Mid Ch										
707.50	14.96	V	0.55	0.0	14.41	16.56	34.77	36.99	-20.4	
707.50	-2.53	H	0.55	0.0	-3.08	-0.93	34.77	36.99	-37.9	
High Ch										
714.50	15.03	V	0.55	0.0	14.48	16.63	34.77	36.99	-20.4	
714.50	-3.26	H	0.55	0.0	-3.81	-1.66	34.77	36.99	-38.7	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 12 (3.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 16QAM 3MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
700.50	14.42	V	0.55	0.0	13.87	16.02	34.77	36.99	-21.0	
700.50	-2.70	H	0.55	0.0	-3.25	-1.10	34.77	36.99	-38.1	
Mid Ch										
707.50	14.23	V	0.55	0.0	13.68	15.83	34.77	36.99	-21.2	
707.50	-3.23	H	0.55	0.0	-3.78	-1.63	34.77	36.99	-38.6	
High Ch										
714.50	14.23	V	0.55	0.0	13.68	15.83	34.77	36.99	-21.2	
714.50	-2.96	H	0.55	0.0	-3.51	-1.36	34.77	36.99	-38.4	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 12 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 QPSK 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
701.50	14.52	V	0.55	0.0	13.97	16.12	34.77	36.99	-20.9	
701.50	-5.60	H	0.55	0.0	-6.15	-4.00	34.77	36.99	-41.0	
Mid Ch										
707.50	14.65	V	0.55	0.0	14.10	16.25	34.77	36.99	-20.7	
707.50	-5.03	H	0.55	0.0	-5.58	-3.43	34.77	36.99	-40.4	
High Ch										
713.50	14.13	V	0.55	0.0	13.58	15.73	34.77	36.99	-21.3	
713.50	-4.95	H	0.55	0.0	-5.50	-3.35	34.77	36.99	-40.3	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 12 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 16QAM 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
701.50	13.52	V	0.55	0.0	12.97	15.12	34.77	36.99	-21.9	
701.50	-6.20	H	0.55	0.0	-6.75	-4.60	34.77	36.99	-41.6	
Mid Ch										
707.50	13.95	V	0.55	0.0	13.40	15.55	34.77	36.99	-21.4	
707.50	-5.73	H	0.55	0.0	-6.28	-4.13	34.77	36.99	-41.1	
High Ch										
713.50	13.33	V	0.55	0.0	12.78	14.93	34.77	36.99	-22.1	
713.50	-5.76	H	0.55	0.0	-6.31	-4.16	34.77	36.99	-41.2	

Rev. 10.24.13

QPSK EIRP POWER FOR LTE BAND 12 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 QPSK 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
704.00	15.18	V	0.55	0.0	14.63	16.78	34.77	36.99	-20.2	
704.00	-1.60	H	0.55	0.0	-2.15	0.00	34.77	36.99	-37.0	
Mid Ch										
707.50	14.90	V	0.55	0.0	14.35	16.50	34.77	36.99	-20.5	
707.50	-1.83	H	0.55	0.0	-2.38	-0.23	34.77	36.99	-37.2	
High Ch										
711.00	15.04	V	0.55	0.0	14.49	16.64	34.77	36.99	-20.3	
711.00	-1.87	H	0.55	0.0	-2.42	-0.27	34.77	36.99	-37.3	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 12 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 12 16QAM 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: DipoleT416, 4ft SMA Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
704.00	14.89	V	0.55	0.0	14.34	16.49	34.77	36.99	-20.5	
704.00	-2.10	H	0.55	0.0	-2.65	-0.50	34.77	36.99	-37.5	
Mid Ch										
707.50	14.37	V	0.55	0.0	13.82	15.97	34.77	36.99	-21.0	
707.50	-2.33	H	0.55	0.0	-2.88	-0.73	34.77	36.99	-37.7	
High Ch										
711.00	14.34	V	0.55	0.0	13.79	15.94	34.77	36.99	-21.0	
711.00	-2.56	H	0.55	0.0	-3.11	-0.96	34.77	36.99	-38.0	

Rev. 10.24.13

10.4.6. LTE BAND 13

QPSK EIRP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 13 QPSK 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
779.50	14.96	V	0.55	0.0	14.41	16.56	34.77	36.99	-20.4	
779.50	-1.48	H	0.55	0.0	-2.03	0.12	34.77	36.99	-36.9	
Mid Ch										
782.00	14.97	V	0.55	0.0	14.42	16.57	34.77	36.99	-20.4	
782.00	-0.70	H	0.55	0.0	-1.25	0.90	34.77	36.99	-36.1	
High Ch										
784.50	15.08	V	0.55	0.0	14.53	16.68	34.77	36.99	-20.3	
784.50	-0.49	H	0.55	0.0	-1.04	1.11	34.77	36.99	-35.9	

Rev. 10.24.13

16QAM EIRP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 13 16QAM5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
779.50	13.98	V	0.55	0.0	13.43	15.58	34.77	36.99	-21.4	
779.50	-2.39	H	0.55	0.0	-2.94	-0.79	34.77	36.99	-37.8	
Mid Ch										
782.00	14.00	V	0.55	0.0	13.45	15.60	34.77	36.99	-21.4	
782.00	-1.68	H	0.55	0.0	-2.23	-0.08	34.77	36.99	-37.1	
High Ch										
784.50	14.12	V	0.55	0.0	13.57	15.72	34.77	36.99	-21.3	
784.50	-1.40	H	0.55	0.0	-1.95	0.20	34.77	36.99	-36.8	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 13 QPSK 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
782.00	14.87	V	0.55	0.0	14.32	16.47	34.77	36.99	-20.5	
782.00	-1.28	H	0.55	0.0	-1.83	0.32	34.77	36.99	-36.7	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 13 16QAM 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
782.00	13.90	V	0.55	0.0	13.35	15.50	34.77	36.99	-21.5	
782.00	-2.23	H	0.55	0.0	-2.78	-0.63	34.77	36.99	-37.6	

Rev. 10.24.13

10.4.7. LTE BAND 17

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/11/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 17 QPSK 5MHz BW

Test Equipment:
Receiving: Sunol T892, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
706.50	15.42	V	0.55	0.0	14.87	17.02	34.77	36.99	-20.0	
706.50	-4.97	H	0.55	0.0	-5.52	-3.37	34.77	36.99	-40.4	
Mid Ch										
710.00	15.44	V	0.55	0.0	14.89	17.04	34.77	36.99	-20.0	
710.00	-5.64	H	0.55	0.0	-6.19	-4.04	34.77	36.99	-41.0	
High Ch										
713.50	15.81	V	0.55	0.0	15.26	17.41	34.77	36.99	-19.6	
713.50	-6.26	H	0.55	0.0	-6.81	-4.66	34.77	36.99	-41.6	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/11/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 17 16QAM 5MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
706.50	14.46	V	0.55	0.0	13.91	16.06	34.77	36.99	-20.9	
706.50	-5.93	H	0.55	0.0	-6.48	-4.33	34.77	36.99	-41.3	
Mid Ch										
710.00	14.47	V	0.55	0.0	13.92	16.07	34.77	36.99	-20.9	
710.00	-6.62	H	0.55	0.0	-7.17	-5.02	34.77	36.99	-42.0	
High Ch										
713.50	14.90	V	0.55	0.0	14.35	16.50	34.77	36.99	-20.5	
713.50	-7.21	H	0.55	0.0	-7.76	-5.61	34.77	36.99	-42.6	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/11/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 17 QPSK 10MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
710.00	15.62	V	0.55	0.0	15.07	17.22	34.77	36.99	-19.8	
710.00	-4.92	H	0.55	0.0	-5.47	-3.32	34.77	36.99	-40.3	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/11/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 17 16QAM 10MHz BW

Test Equipment:
Receiving: Sunol T408, and Chamber E Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
710.00	14.67	V	0.55	0.0	14.12	16.27	34.77	36.99	-20.7	
710.00	-5.92	H	0.55	0.0	-6.47	-4.32	34.77	36.99	-41.3	

Rev. 10.24.13

10.4.8. LTE BAND 25

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 QPSK 1.4MHz 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								
1.851	10.8	V	0.98	8.05	17.86	33.0	-15.1	
1.851	11.2	H	0.98	8.05	18.30	33.0	-14.7	
Mid Ch								
1.883	8.9	V	0.98	8.03	15.92	33.0	-17.1	
1.883	10.8	H	0.98	8.03	17.86	33.0	-15.1	
High Ch								
1.914	9.3	V	0.98	8.07	16.39	33.0	-16.6	
1.914	10.7	H	0.98	8.07	17.78	33.0	-15.2	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 16QAM 1.4MHz 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								
1.851	10.4	V	0.98	8.05	17.46	33.0	-15.5	
1.851	10.5	H	0.98	8.05	17.60	33.0	-15.4	
Mid Ch								
1.883	8.2	V	0.98	8.03	15.22	33.0	-17.8	
1.883	10.3	H	0.98	8.03	17.36	33.0	-15.6	
High Ch								
1.914	8.7	V	0.98	8.07	15.79	33.0	-17.2	
1.914	10.0	H	0.98	8.07	17.08	33.0	-15.9	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 QPSK 3MHz 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								
1.852	10.8	V	0.98	8.05	17.86	33.0	-15.1	
1.852	11.1	H	0.98	8.05	18.20	33.0	-14.8	
Mid Ch								
1.883	8.6	V	0.98	8.03	15.62	33.0	-17.4	
1.883	10.5	H	0.98	8.03	17.56	33.0	-15.4	
High Ch								
1.914	9.2	V	0.98	8.07	16.29	33.0	-16.7	
1.914	10.6	H	0.98	8.07	17.68	33.0	-15.3	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 16QAM 3MHz 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								
1.852	10.3	V	0.98	8.05	17.36	33.0	-15.6	
1.852	10.3	H	0.98	8.05	17.40	33.0	-15.6	
Mid Ch								
1.883	8.0	V	0.98	8.03	15.02	33.0	-18.0	
1.883	9.8	H	0.98	8.03	16.86	33.0	-16.1	
High Ch								
1.914	8.7	V	0.98	8.07	15.79	33.0	-17.2	
1.914	10.0	H	0.98	8.07	17.08	33.0	-15.9	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.853	10.7	V	0.98	8.05	17.76	33.0	-15.2	
1.853	11.0	H	0.98	8.05	18.10	33.0	-14.9	
Mid Ch								
1.883	8.5	V	0.98	8.03	15.52	33.0	-17.5	
1.883	10.5	H	0.98	8.03	17.56	33.0	-15.4	
High Ch								
1.913	9.1	V	0.98	8.06	16.18	33.0	-16.8	
1.913	11.0	H	0.98	8.06	18.07	33.0	-14.9	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.853	10.2	V	0.98	8.05	17.26	33.0	-15.7	
1.853	10.2	H	0.98	8.05	17.30	33.0	-15.7	
Mid Ch								
1.883	8.0	V	0.98	8.03	15.02	33.0	-18.0	
1.883	9.8	H	0.98	8.03	16.86	33.0	-16.1	
High Ch								
1.913	8.7	V	0.98	8.06	15.78	33.0	-17.2	
1.913	10.8	H	0.98	8.06	17.87	33.0	-15.1	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 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								
1.855	10.9	V	0.98	8.05	17.96	33.0	-15.0	
1.855	10.8	H	0.98	8.05	17.90	33.0	-15.1	
Mid Ch								
1.883	8.8	V	0.98	8.03	15.84	33.0	-17.2	
1.883	9.7	H	0.98	8.03	16.76	33.0	-16.2	
High Ch								
1.910	9.5	V	0.98	8.05	16.57	33.0	-16.4	
1.910	10.5	H	0.98	8.05	17.56	33.0	-15.4	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 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								
1.855	10.3	V	0.98	8.05	17.36	33.0	-15.6	
1.855	10.2	H	0.98	8.05	17.30	33.0	-15.7	
Mid Ch								
1.883	8.4	V	0.98	8.03	15.42	33.0	-17.6	
1.883	9.0	H	0.98	8.03	16.06	33.0	-16.9	
High Ch								
1.910	9.2	V	0.98	8.05	16.27	33.0	-16.7	
1.910	9.9	H	0.98	8.05	16.96	33.0	-16.0	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.858	11.1	V	0.98	8.04	18.15	33.0	-14.8	
1.858	11.1	H	0.98	8.04	18.19	33.0	-14.8	
Mid Ch								
1.883	10.6	V	0.98	8.03	17.62	33.0	-15.4	
1.883	11.0	H	0.98	8.03	18.06	33.0	-14.9	
High Ch								
1.908	10.5	V	0.98	8.04	17.56	33.0	-15.4	
1.908	11.4	H	0.98	8.04	18.45	33.0	-14.5	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.858	10.3	V	0.98	8.04	17.35	33.0	-15.6	
1.858	10.3	H	0.98	8.04	17.39	33.0	-15.6	
Mid Ch								
1.883	9.9	V	0.98	8.03	16.92	33.0	-16.1	
1.883	10.3	H	0.98	8.03	17.36	33.0	-15.6	
High Ch								
1.908	9.8	V	0.98	8.04	16.81	33.0	-16.2	
1.908	10.6	H	0.98	8.04	17.70	33.0	-15.3	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.860	10.8	V	0.98	8.04	17.85	33.0	-15.1	
1.860	11.3	H	0.98	8.04	18.39	33.0	-14.6	
Mid Ch								
1.883	11.2	V	0.98	8.03	18.22	33.0	-14.8	
1.883	11.3	H	0.98	8.03	18.38	33.0	-14.6	
High Ch								
1.905	10.6	V	0.98	8.04	17.66	33.0	-15.3	
1.905	11.3	H	0.98	8.04	18.35	33.0	-14.7	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/10/2015
Test Engineer: R.Z
Configuration: EUT only
Mode: LTE Band 25 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 GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.860	10.0	V	0.98	8.04	17.05	33.0	-15.9	
1.860	10.6	H	0.98	8.04	17.69	33.0	-15.3	
Mid Ch								
1.883	10.5	V	0.98	8.03	17.52	33.0	-15.5	
1.883	10.7	H	0.98	8.03	17.76	33.0	-15.2	
High Ch								
1.905	9.8	V	0.98	8.04	16.86	33.0	-16.1	
1.905	10.7	H	0.98	8.04	17.75	33.0	-15.3	

Rev. 10.24.13

10.4.9. LTE BAND 26

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/11/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 QPSK 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
814.70	14.18	V	0.62	0.0	13.56	15.71	38.45	40.60	-24.9	
814.70	-4.32	H	0.62	0.0	-4.94	-2.79	38.45	40.60	-43.4	
Mid Ch										
819.00	14.35	V	0.62	0.0	13.73	15.88	38.45	40.60	-24.7	
819.00	-4.42	H	0.62	0.0	-5.04	-2.89	38.45	40.60	-43.5	
High Ch										
823.30	14.39	V	0.62	0.0	13.77	15.92	38.45	40.60	-24.7	
823.30	-3.74	H	0.62	0.0	-4.36	-2.21	38.45	40.60	-42.8	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/11/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 16QAM 1.4MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limi (dBm)	Margin (dB)	Notes
Low Ch										
814.70	13.18	V	0.62	0.0	12.56	14.71	38.45	40.60	-25.9	
814.70	-5.32	H	0.62	0.0	-5.94	-3.79	38.45	40.60	-44.4	
Mid Ch										
819.00	13.41	V	0.62	0.0	12.79	14.94	38.45	40.60	-25.7	
819.00	-5.42	H	0.62	0.0	-6.04	-3.89	38.45	40.60	-44.5	
High Ch										
823.30	13.63	V	0.62	0.0	13.01	15.16	38.45	40.60	-25.4	
823.30	-4.67	H	0.62	0.0	-5.29	-3.14	38.45	40.60	-43.7	

Rev. 10.24.13

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

High Frequency Substitution Measurement
UL Fremont Radiated Chamber G

Company:
Project #: 15U20163
Date: 7/11/2015
Test Engineer: E. Lee
Configuration: EUT only
Mode: LTE Band 26 QPSK 3MHz BW

Test Equipment:
Receiving: Sunol T899, and Chamber G Cable
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
815.50	14.28	V	0.62	0.0	13.66	15.81	38.45	40.60	-24.8	
815.50	-4.59	H	0.62	0.0	-5.21	-3.06	38.45	40.60	-43.7	
Mid Ch										
819.00	13.72	V	0.62	0.0	13.10	15.25	38.45	40.60	-25.4	
819.00	-4.49	H	0.62	0.0	-5.11	-2.96	38.45	40.60	-43.6	
High Ch										
822.50	14.27	V	0.62	0.0	13.65	15.80	38.45	40.60	-24.8	
822.50	-3.98	H	0.62	0.0	-4.60	-2.45	38.45	40.60	-43.1	

Rev. 10.24.13