WCDMA Band 5

WCDMA

Band 5
REL99

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company: Samsung
Project #: 4788874100
Date: 2019-02-18
Test Engineer: 45585
Configuration: EUT / Z-Position
Location: Chamber 2
Mode: Rel99 Band 5 Fundamentals

Test Equpment:
Receiving: VULB9163-749, and Chamber 2 SMA Cables
Substitution: Dipole 3121_DB4, 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
826.40	20.31	V	3.0	-1.5	15.83	38.5	-22.7	
826.40	2.51	H	3.0	-1.5	-1.97	38.5	-40.5	
Mid Ch								
836.60	21.45	V	3.0	-1.4	16.99	38.5	-21.5	
836.60	3.23	H	3.0	-1.4	-1.23	38.5	-39.7	
High Ch								
846.60	22.08	V	3.1	-1.4	17.64	38.5	-20.9	
846.60	3.94	H	3.1	-1.4	-0.50	38.5	-39.0	

WCDMA

Band 5
HSDPA

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company: Samsung
Project #: 4788874100
Date: 2019-02-18
Test Engineer: 45585
Configuration: EUT / Z-Position
Location: Chamber 2
Mode: HSDPA Band 5 Fundamentals

Test Equpment:
Receiving: VULB9163-749, and Chamber 2 SMA Cables
Substitution: Dipole 3121_DB4, 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
826.40	20.31	V	3.0	-1.5	15.83	38.5	-22.7	
826.40	2.67	H	3.0	-1.5	-1.81	38.5	-40.3	
Mid Ch								
836.60	21.02	V	3.0	-1.4	16.56	38.5	-21.9	
836.60	2.45	H	3.0	-1.4	-2.01	38.5	-40.5	
High Ch								
846.60	20.90	V	3.1	-1.4	16.46	38.5	-22.0	
846.60	1.84	H	3.1	-1.4	-2.60	38.5	-41.1	

WCDMA Band 2

WCDMA

Band 2
REL99

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company: Samsung
Project #: 4788874100
Date: 2019-02-15
Test Engineer: 45585
Configuration: EUT / Y-Position
Location: Chamber 2
Mode: Rel99 Band 2 Fundamentals

Test Equpment:
Receiving: Horn 3117[00168724], and Chamber 2 SMA Cables
Substitution: Horn 3115[00167451], 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1852.40	13.41	V	4.5	9.4	18.31	33.0	-14.7	
1852.40	10.47	H	4.5	9.4	15.37	33.0	-17.6	
Mid Ch								
1880.00	13.76	V	4.5	9.2	18.42	33.0	-14.6	
1880.00	10.76	H	4.5	9.2	15.43	33.0	-17.6	
High Ch								
1907.60	12.13	V	4.6	9.0	16.52	33.0	-16.5	
1907.60	8.83	H	4.6	9.0	13.22	33.0	-19.8	

WCDMA

Band 2
HSDPA

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company: Samsung
Project #: 4788874100
Date: 2019-02-15
Test Engineer: 45585
Configuration: EUT / Y-Position
Location: Chamber 2
Mode: HSDPA Band 2 Fundamentals

Test Equpment:
Receiving: Horn 3117[00168724], and Chamber 2 SMA Cables
Substitution: Horn 3115[00167451], 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1852.40	13.04	V	4.5	9.4	17.94	33.0	-15.1	
1852.40	10.22	H	4.5	9.4	15.12	33.0	-17.9	
Mid Ch								
1880.00	13.42	V	4.5	9.2	18.08	33.0	-14.9	
1880.00	9.90	H	4.5	9.2	14.57	33.0	-18.4	
High Ch								
1907.60	11.67	V	4.6	9.0	16.06	33.0	-16.9	
1907.60	8.46	H	4.6	9.0	12.85	33.0	-20.1	

LTE Band 5

LTE Band 5 10MHz QPSK

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-18
Test Engineer:	45585
Configuration:	EUT / Z-Position
Location:	Chamber 2
Mode:	LTE_QPSK Band 5 Fundamentals, 10MHz Bandwidth

Test Equpment:
Receiving: VULB9163-749, and Chamber 2 SMA Cables
Substitution: Dipole 3121_DB4, 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
829.00	22.27	V	3.0	-1.5	17.79	38.5	-20.7	
829.00	4.63	H	3.0	-1.5	0.15	38.5	-38.3	
Mid Ch								
836.50	22.67	V	3.0	-1.4	18.21	38.5	-20.3	
836.50	4.14	H	3.0	-1.4	-0.33	38.5	-38.8	
High Ch								
844.00	22.71	V	3.1	-1.4	18.26	38.5	-20.2	
844.00	4.46	H	3.1	-1.4	0.01	38.5	-38.5	

LTE Band 5 10MHz 16QAM

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-18
Test Engineer:	45585
Configuration:	EUT / Z-Position
Location:	Chamber 2
Mode:	LTE_16QAM Band 5 Fundamentals, 10MHz Bandwidth

Test Equpment:
Receiving: VULB9163-749, and Chamber 2 SMA Cables
Substitution: Dipole 3121_DB4, 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
829.00	19.96	V	3.0	-1.5	15.48	38.5	-23.0	
829.00	2.16	H	3.0	-1.5	-2.32	38.5	-40.8	
Mid Ch								
836.50	20.24	V	3.0	-1.4	15.78	38.5	-22.7	
836.50	1.75	H	3.0	-1.4	-2.72	38.5	-41.2	
High Ch								
844.00	20.35	V	3.1	-1.4	15.90	38.5	-22.6	
844.00	1.84	H	3.1	-1.4	-2.61	38.5	-41.1	

LTE

Band 5

5MHz

QPSK

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-16
Test Engineer:	47989
Configuration:	EUT / Z-Position
Location:	Chamber 2
Mode:	LTE_QPSK Band 5 Fundamentals, 5MHz Bandwidth

Test Equpment:
Receiving: VULB9163-749, and Chamber 2 SMA Cables
Substitution: Dipole 3121_DB4, 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
826.50	22.04	V	3.0	-1.5	17.55	38.5	-20.9	
826.50	3.97	H	3.0	-1.5	-0.51	38.5	-39.0	
Mid Ch								
836.50	22.33	V	3.0	-1.4	17.87	38.5	-20.6	
836.50	3.63	H	3.0	-1.4	-0.84	38.5	-39.3	
High Ch								
846.50	22.56	V	3.1	-1.4	18.11	38.5	-20.4	
846.50	4.77	H	3.1	-1.4	0.32	38.5	-38.2	

LTE

Band 5

5MHz

16QAM

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-16
Test Engineer:	47989
Configuration:	EUT / Z-Position
Location:	Chamber 2
Mode:	LTE_16QAM Band 5 Fundamentals, 5MHz Bandwidth

Test Equpment:
Receiving: VULB9163-749, and Chamber 2 SMA Cables
Substitution: Dipole 3121_DB4, 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
826.50	19.90	V	3.0	-1.5	15.41	38.5	-23.1	
826.50	1.81	H	3.0	-1.5	-2.67	38.5	-41.2	
Mid Ch								
836.50	20.38	V	3.0	-1.4	15.92	38.5	-22.6	
836.50	1.69	H	3.0	-1.4	-2.78	38.5	-41.3	
High Ch								
846.50	20.30	V	3.1	-1.4	15.85	38.5	-22.6	
846.50	2.42	H	3.1	-1.4	-2.03	38.5	-40.5	

LTE

Band 5

3MHz

QPSK

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-18
Test Engineer:	45585
Configuration:	EUT / Z-Position
Location:	Chamber 2
Mode:	LTE_QPSK Band 5 Fundamentals, 3MHz Bandwidth

Test Equpment:
Receiving: VULB9163-749, and Chamber 2 SMA Cables
Substitution: Dipole 3121_DB4, 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
825.50	22.02	V	3.0	-1.5	17.54	38.5	-21.0	
825.50	3.83	H	3.0	-1.5	-0.66	38.5	-39.2	
Mid Ch								
836.50	22.73	V	3.0	-1.4	18.27	38.5	-20.2	
836.50	3.79	H	3.0	-1.4	-0.68	38.5	-39.2	
High Ch								
847.50	22.46	V	3.1	-1.4	18.02	38.5	-20.5	
847.50	4.92	H	3.1	-1.4	0.48	38.5	-38.0	

LTE

Band 5

3MHz

16QAM

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-18
Test Engineer:	45585
Configuration:	EUT / Z-Position
Location:	Chamber 2
Mode:	LTE_16QAM Band 5 Fundamentals, 3MHz Bandwidth

Test Equpment:
Receiving: VULB9163-749, and Chamber 2 SMA Cables
Substitution: Dipole 3121_DB4, 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
825.50	19.03	V	3.0	-1.5	14.55	38.5	-24.0	
825.50	1.29	H	3.0	-1.5	-3.20	38.5	-41.7	
Mid Ch								
836.50	19.88	V	3.0	-1.4	15.42	38.5	-23.1	
836.50	1.07	H	3.0	-1.4	-3.40	38.5	-41.9	
High Ch								
847.50	20.13	V	3.1	-1.4	15.69	38.5	-22.8	
847.50	2.54	H	3.1	-1.4	-1.90	38.5	-40.4	

LTE

Band 5

1.4MHz

QPSK

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-16
Test Engineer:	47989
Configuration:	EUT / Z-Position
Location:	Chamber 2
Mode:	LTE_QPSK Band 5 Fundamentals, 1.4MHz Bandwidth

Test Equpment:
Receiving: VULB9163-749, and Chamber 2 SMA Cables
Substitution: Dipole 3121_DB4, 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
824.70	21.70	V	3.0	-1.5	17.22	38.5	-21.3	
824.70	4.54	H	3.0	-1.5	0.05	38.5	-38.4	
Mid Ch								
836.50	22.95	V	3.0	-1.4	18.49	38.5	-20.0	
836.50	4.52	H	3.0	-1.4	0.05	38.5	-38.4	
High Ch								
848.30	22.82	V	3.1	-1.4	18.38	38.5	-20.1	
848.30	5.52	H	3.1	-1.4	1.08	38.5	-37.4	

LTE

Band 5

1.4MHz

16QAM

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-16
Test Engineer:	47989
Configuration:	EUT / Z-Position
Location:	Chamber 2
Mode:	LTE_16QAM Band 5 Fundamentals, 1.4MHz Bandwidth

Test Equpment:
Receiving: VULB9163-749, and Chamber 2 SMA Cables
Substitution: Dipole 3121_DB4, 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
824.70	19.74	V	3.0	-1.5	15.26	38.5	-23.2	
824.70	2.68	H	3.0	-1.5	-1.81	38.5	-40.3	
Mid Ch								
836.50	20.70	V	3.0	-1.4	16.24	38.5	-22.3	
836.50	1.89	H	3.0	-1.4	-2.58	38.5	-41.1	
High Ch								
848.30	20.65	V	3.1	-1.4	16.21	38.5	-22.3	
848.30	3.33	H	3.1	-1.4	-1.11	38.5	-39.6	

LTE Band 41

LTE Band 41 20MHz QPSK

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company: Samsung
Project #: 4788874100
Date: 2019-02-15
Test Engineer: 45585
Configuration: EUT / Y-Position
Location: Chamber 2
Mode: LTE_QPSK Band 41 Fundamentals, 20MHz Bandwidth

Test Equpment:
Receiving: Horn 3117[00168724], and Chamber 2 SMA Cables
Substitution: Horn 3115[00167451], 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
2506.00	15.29	V	5.2	10.1	20.12	33.0	-12.9	
2506.00	17.63	H	5.2	10.1	22.46	33.0	-10.5	
Mid Ch								
2593.00	11.53	V	5.3	10.0	16.17	33.0	-16.8	
2593.00	15.59	H	5.3	10.0	20.23	33.0	-12.8	
High Ch								
2680.00	9.96	V	5.4	10.0	14.55	33.0	-18.4	
2680.00	12.45	H	5.4	10.0	17.04	33.0	-16.0	

LTE Band 41 20MHz 16QAM

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company: Samsung
Project #: 4788874100
Date: 2019-02-15
Test Engineer: 45585
Configuration: EUT / Y-Position
Location: Chamber 2
Mode: LTE_16QAM Band 41 Fundamentals, 20MHz Bandwidth

Test Equpment:
Receiving: Horn 3117[00168724], and Chamber 2 SMA Cables
Substitution: Horn 3115[00167451], 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
2506.00	13.64	V	5.2	10.1	18.47	33.0	-14.5	
2506.00	16.31	H	5.2	10.1	21.14	33.0	-11.9	
Mid Ch								
2593.00	11.64	V	5.3	10.0	16.28	33.0	-16.7	
2593.00	14.44	H	5.3	10.0	19.08	33.0	-13.9	
High Ch								
2680.00	8.44	V	5.4	10.0	13.03	33.0	-20.0	
2680.00	10.66	H	5.4	10.0	15.25	33.0	-17.8	

LTE

Band 41

15MHz

QPSK

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-15
Test Engineer:	45585
Configuration:	EUT / Y-Position
Location:	Chamber 2
Mode:	LTE_QPSK Band 41 Fundamentals, 15MHz Bandwidth

Test Equpment:
Receiving: Horn 3117[00168724], and Chamber 2 SMA Cables
Substitution: Horn 3115[00167451], 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
2503.50	14.16	V	5.2	10.1	18.99	33.0	-14.0	
2503.50	17.67	H	5.2	10.1	22.50	33.0	-10.5	
Mid Ch								
2593.00	11.24	V	5.3	10.0	15.88	33.0	-17.1	
2593.00	15.39	H	5.3	10.0	20.03	33.0	-13.0	
High Ch								
2682.50	9.80	V	5.4	10.0	14.40	33.0	-18.6	
2682.50	12.12	H	5.4	10.0	16.72	33.0	-16.3	

LTE

Band 41

15MHz

16QAM

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-15
Test Engineer:	45585
Configuration:	EUT / Y-Position
Location:	Chamber 2
Mode:	LTE_16QAM Band 41 Fundamentals, 15MHz Bandwidth

Test Equpment:
Receiving: Horn 3117[00168724], and Chamber 2 SMA Cables
Substitution: Horn 3115[00167451], 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
2503.50	12.90	V	5.2	10.1	17.73	33.0	-15.3	
2503.50	16.40	H	5.2	10.1	21.23	33.0	-11.8	
Mid Ch								
2593.00	8.84	V	5.3	10.0	13.48	33.0	-19.5	
2593.00	14.53	H	5.3	10.0	19.17	33.0	-13.8	
High Ch								
2682.50	9.16	V	5.4	10.0	13.76	33.0	-19.2	
2682.50	11.53	H	5.4	10.0	16.13	33.0	-16.9	

LTE

Band 41

10MHz

QPSK

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-15
Test Engineer:	45585
Configuration:	EUT / Y-Position
Location:	Chamber 2
Mode:	LTE_QPSK Band 41 Fundamentals, 10MHz Bandwidth

Test Equpment:
Receiving: Horn 3117[00168724], and Chamber 2 SMA Cables
Substitution: Horn 3115[00167451], 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
2501.00	14.53	V	5.2	10.1	19.37	33.0	-13.6	
2501.00	18.04	H	5.2	10.1	22.88	33.0	-10.1	
Mid Ch								
2593.00	10.50	V	5.3	10.0	15.14	33.0	-17.9	
2593.00	15.02	H	5.3	10.0	19.66	33.0	-13.3	
High Ch								
2685.00	9.62	V	5.4	10.0	14.21	33.0	-18.8	
2685.00	12.46	H	5.4	10.0	17.05	33.0	-16.0	

LTE

Band 41

10MHz

16QAM

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-15
Test Engineer:	45585
Configuration:	EUT / Y-Position
Location:	Chamber 2
Mode:	LTE_16QAM Band 41 Fundamentals, 10MHz Bandwidth

Test Equpment:
Receiving: Horn 3117[00168724], and Chamber 2 SMA Cables
Substitution: Horn 3115[00167451], 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
2501.00	12.59	V	5.2	10.1	17.43	33.0	-15.6	
2501.00	15.39	H	5.2	10.1	20.23	33.0	-12.8	
Mid Ch								
2593.00	6.56	V	5.3	10.0	11.20	33.0	-21.8	
2593.00	14.64	H	5.3	10.0	19.28	33.0	-13.7	
High Ch								
2685.00	9.29	V	5.4	10.0	13.88	33.0	-19.1	
2685.00	12.17	H	5.4	10.0	16.76	33.0	-16.2	

LTE

Band 41

5MHz

QPSK

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-15
Test Engineer:	45585
Configuration:	EUT / Y-Position
Location:	Chamber 2
Mode:	LTE_QPSK Band 41 Fundamentals, 5MHz Bandwidth

Test Equpment:
Receiving: Horn 3117[00168724], and Chamber 2 SMA Cables
Substitution: Horn 3115[00167451], 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
2498.50	15.23	V	5.2	10.1	20.07	33.0	-12.9	
2498.50	17.84	H	5.2	10.1	22.68	33.0	-10.3	
Mid Ch								
2593.00	11.20	V	5.3	10.0	15.84	33.0	-17.2	
2593.00	15.17	H	5.3	10.0	19.81	33.0	-13.2	
High Ch								
2687.50	10.10	V	5.4	10.0	14.70	33.0	-18.3	
2687.50	12.58	H	5.4	10.0	17.18	33.0	-15.8	

LTE

Band 41

5MHz

16QAM

UL Verification Services, Inc.
High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-15
Test Engineer:	45585
Configuration:	EUT / Y-Position
Location:	Chamber 2
Mode:	LTE_16QAM Band 41 Fundamentals, 5MHz Bandwidth

Test Equpment:
Receiving: Horn 3117[00168724], and Chamber 2 SMA Cables
Substitution: Horn 3115[00167451], 8.5m SMA-type Cable

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
2498.50	13.72	V	5.2	10.1	18.56	33.0	-14.4	
2498.50	16.42	H	5.2	10.1	21.26	33.0	-11.7	
Mid Ch								
2593.00	10.12	V	5.3	10.0	14.76	33.0	-18.2	
2593.00	13.87	H	5.3	10.0	18.51	33.0	-14.5	
High Ch								
2687.50	8.20	V	5.4	10.0	12.80	33.0	-20.2	
2687.50	10.71	H	5.4	10.0	15.31	33.0	-17.7	

10.2. FIELD STRENGTH OF SPURIOUS RADIATION

RULE PART(S)

FCC: §2.1053, §22.917, §24.238 and §27. 53

LIMIT

Part 22.917(a) & Part 24.238(a) & Part 27.53(h) The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

Part 27.53:
(m) (4) For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

TEST PROCEDURE

ANSI / TIA / EIA 603 E Clause 2.2.12; ESU40 setting reference to 971168 D01 v03r01

For peak power measurement with a ESU40:
a) Set the RBW = 100 KHz for emission below 1GHz and 1MHz for emissions above 1GHz
b) Set VBW ≥ 3 × RBW;
c) Set span ≥ 1.5 times the OBW;
d) Sweep time = auto couple;
e) Detector = rms;
f) Ensure that the number of measurement points ≥ span/RBW;
g) Trace mode = average(WCDMA, LTE), Maxhold(GSM, LTE Band41);;

RESULTS

See the following pages.

NOTE : Please refer to section 5.4 for bandwidth and RB setting about LTE bands.

10.2.1. SPURIOUS RADIATION PLOTS

GSM850

GSM850

GPRS

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-19
Test Engineer:	45585
Configuration:	EUT / AC Adapter / Earphone, Y-Position
Location:	Chamber 2
Mode:	GPRS 850 MHz Harmonics

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 824.2MHz									
1648.40	-7.4	V	3.0	38.2	1.0	-44.6	-13.0	-31.6	
2472.60	-11.2	V	3.0	38.8	1.0	-49.0	-13.0	-36.0	
3296.80	-9.0	V	3.0	39.4	1.0	-47.4	-13.0	-34.4	
1648.40	-11.1	H	3.0	38.2	1.0	-48.3	-13.0	-35.3	
2472.60	-12.2	H	3.0	38.8	1.0	-50.0	-13.0	-37.0	
3296.80	-9.4	H	3.0	39.4	1.0	-47.9	-13.0	-34.9	
Mid Ch, 836.6MHz									
1673.20	-5.3	V	3.0	38.2	1.0	-42.6	-13.0	-29.6	
2509.80	-11.0	V	3.0	38.8	1.0	-48.9	-13.0	-35.9	
3346.40	-8.8	V	3.0	39.5	1.0	-47.3	-13.0	-34.3	
1673.20	-10.2	H	3.0	38.2	1.0	-47.4	-13.0	-34.4	
2509.80	-12.0	H	3.0	38.8	1.0	-49.8	-13.0	-36.8	
3346.40	-8.9	H	3.0	39.5	1.0	-47.3	-13.0	-34.3	
High Ch, 848.8MHz									
1697.60	-6.7	V	3.0	38.2	1.0	-43.9	-13.0	-30.9	
2546.40	-11.4	V	3.0	38.9	1.0	-49.3	-13.0	-36.3	
3395.20	-8.8	V	3.0	39.5	1.0	-47.3	-13.0	-34.3	
1697.60	-9.7	H	3.0	38.2	1.0	-46.9	-13.0	-33.9	
2546.40	-11.7	H	3.0	38.9	1.0	-49.5	-13.0	-36.5	
3395.20	-9.0	H	3.0	39.5	1.0	-47.5	-13.0	-34.5	

GSM850

EGPRS

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-19
Test Engineer:	45585
Configuration:	EUT / AC Adapter / Earphone, -Position
Location:	Chamber 2
Mode:	EGPRS 850 MHz Harmonics

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 824.2MHz									
1648.40	-11.9	V	3.0	38.2	1.0	-49.1	-13.0	-36.1	
2472.60	-11.6	V	3.0	38.8	1.0	-49.4	-13.0	-36.4	
3296.80	-9.0	V	3.0	39.4	1.0	-47.5	-13.0	-34.5	
1648.40	-14.0	H	3.0	38.2	1.0	-51.2	-13.0	-38.2	
2472.60	-12.2	H	3.0	38.8	1.0	-50.0	-13.0	-37.0	
3296.80	-9.3	H	3.0	39.4	1.0	-47.8	-13.0	-34.8	
Mid Ch, 836.6MHz									
1673.20	-9.8	V	3.0	38.2	1.0	-47.1	-13.0	-34.1	
2509.80	-11.6	V	3.0	38.8	1.0	-49.4	-13.0	-36.4	
3346.40	-8.8	V	3.0	39.5	1.0	-47.3	-13.0	-34.3	
1673.20	-13.8	H	3.0	38.2	1.0	-51.1	-13.0	-38.1	
2509.80	-11.6	H	3.0	38.8	1.0	-49.5	-13.0	-36.5	
3346.40	-9.2	H	3.0	39.5	1.0	-47.7	-13.0	-34.7	
High Ch, 848.8MHz									
1697.60	-11.9	V	3.0	38.2	1.0	-49.2	-13.0	-36.2	
2546.40	-11.4	V	3.0	38.9	1.0	-49.3	-13.0	-36.3	
3395.20	-8.6	V	3.0	39.5	1.0	-47.1	-13.0	-34.1	
1697.60	-14.0	H	3.0	38.2	1.0	-51.2	-13.0	-38.2	
2546.40	-11.9	H	3.0	38.9	1.0	-49.8	-13.0	-36.8	
3395.20	-8.9	H	3.0	39.5	1.0	-47.4	-13.0	-34.4	

GSM1900

GSM1900

GPRS

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-19
Test Engineer:	45585
Configuration:	EUT / AC Adapter / Earphone, Y-Position
Location:	Chamber 2
Mode:	GPRS 1900 MHz Harmonics

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1850.2MHz									
3700.40	-4.7	V	3.0	39.7	1.0	-43.4	-13.0	-30.4	
5550.60	-7.0	V	3.0	39.9	1.0	-45.9	-13.0	-32.9	
7400.80	-5.0	V	3.0	39.4	1.0	-43.4	-13.0	-30.4	
3700.40	-5.0	H	3.0	39.7	1.0	-43.6	-13.0	-30.6	
5550.60	-7.4	H	3.0	39.9	1.0	-46.3	-13.0	-33.3	
7400.80	-5.8	H	3.0	39.4	1.0	-44.2	-13.0	-31.2	
Mid Ch, 1880MHz									
3760.00	-4.5	V	3.0	39.7	1.0	-43.2	-13.0	-30.2	
5640.00	-6.6	V	3.0	40.0	1.0	-45.6	-13.0	-32.6	
7520.00	-4.6	V	3.0	39.4	1.0	-43.0	-13.0	-30.0	
3760.00	-4.9	H	3.0	39.7	1.0	-43.6	-13.0	-30.6	
5640.00	-6.9	H	3.0	40.0	1.0	-45.8	-13.0	-32.8	
7520.00	-5.6	H	3.0	39.4	1.0	-44.0	-13.0	-31.0	
High Ch, 1909.8MHz									
3819.60	-6.9	V	3.0	39.7	1.0	-45.6	-13.0	-32.6	
5729.40	-7.1	V	3.0	40.0	1.0	-46.1	-13.0	-33.1	
7639.20	-5.1	V	3.0	39.3	1.0	-43.5	-13.0	-30.5	
3819.60	-6.6	H	3.0	39.7	1.0	-45.3	-13.0	-32.3	
5729.40	-7.3	H	3.0	40.0	1.0	-46.3	-13.0	-33.3	
7639.20	-5.8	H	3.0	39.3	1.0	-44.1	-13.0	-31.1	

GSM1900

EGPRS

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-19
Test Engineer:	45585
Configuration:	EUT / AC Adapter / Earphone, Y-Position
Location:	Chamber 2
Mode:	EGPRS 1900 MHz Harmonics

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1850.2MHz									
3700.40	-7.8	V	3.0	39.7	1.0	-46.5	-13.0	-33.5	
5550.60	-7.2	V	3.0	39.9	1.0	-46.1	-13.0	-33.1	
7400.80	-4.7	V	3.0	39.4	1.0	-43.1	-13.0	-30.1	
3700.40	-8.1	H	3.0	39.7	1.0	-46.8	-13.0	-33.8	
5550.60	-7.4	H	3.0	39.9	1.0	-46.4	-13.0	-33.4	
7400.80	-5.9	H	3.0	39.4	1.0	-44.3	-13.0	-31.3	
Mid Ch, 1880MHz									
3760.00	-7.7	V	3.0	39.7	1.0	-46.4	-13.0	-33.4	
5640.00	-6.7	V	3.0	40.0	1.0	-45.6	-13.0	-32.6	
7520.00	-4.9	V	3.0	39.4	1.0	-43.3	-13.0	-30.3	
3760.00	-8.1	H	3.0	39.7	1.0	-46.8	-13.0	-33.8	
5640.00	-7.1	H	3.0	40.0	1.0	-46.0	-13.0	-33.0	
7520.00	-6.0	H	3.0	39.4	1.0	-44.4	-13.0	-31.4	
High Ch, 1909.8MHz									
3819.60	-8.2	V	3.0	39.7	1.0	-46.9	-13.0	-33.9	
5729.40	-7.1	V	3.0	40.0	1.0	-46.1	-13.0	-33.1	
7639.20	-5.2	V	3.0	39.3	1.0	-43.5	-13.0	-30.5	
3819.60	-9.5	H	3.0	39.7	1.0	-48.2	-13.0	-35.2	
5729.40	-7.4	H	3.0	40.0	1.0	-46.4	-13.0	-33.4	
7639.20	-5.9	H	3.0	39.3	1.0	-44.2	-13.0	-31.2	

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

WCDMA Band 5

WCDMA

Band 5
REL99

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-18
Test Engineer:	45585
Configuration:	EUT / AC Adapter / Earphone, Z-Position
Location:	Chamber 2
Mode:	Rel99 Band 5 Harmonics

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 826.4MHz									
1652.80	-15.2	V	3.0	38.2	1.0	-52.5	-13.0	-39.5	
2479.20	-12.7	V	3.0	38.8	1.0	-50.5	-13.0	-37.5	
3305.60	-10.2	V	3.0	39.4	1.0	-48.6	-13.0	-35.6	
1652.80	-16.4	H	3.0	38.2	1.0	-53.7	-13.0	-40.7	
2479.20	-13.4	H	3.0	38.8	1.0	-51.2	-13.0	-38.2	
3305.60	-10.5	H	3.0	39.4	1.0	-48.9	-13.0	-35.9	
Mid Ch, 836.6MHz									
1673.20	-15.3	V	3.0	38.2	1.0	-52.5	-13.0	-39.5	
2509.80	-12.6	V	3.0	38.8	1.0	-50.4	-13.0	-37.4	
3346.40	-10.2	V	3.0	39.5	1.0	-48.6	-13.0	-35.6	
1673.20	-15.9	H	3.0	38.2	1.0	-53.1	-13.0	-40.1	
2509.80	-13.2	H	3.0	38.8	1.0	-51.0	-13.0	-38.0	
3346.40	-10.5	H	3.0	39.5	1.0	-48.9	-13.0	-35.9	
High Ch, 846.6MHz									
1693.20	-15.3	V	3.0	38.2	1.0	-52.5	-13.0	-39.5	
2539.80	-12.5	V	3.0	38.9	1.0	-50.4	-13.0	-37.4	
3386.40	-10.0	V	3.0	39.5	1.0	-48.4	-13.0	-35.4	
1693.20	-16.3	H	3.0	38.2	1.0	-53.5	-13.0	-40.5	
2539.80	-13.1	H	3.0	38.9	1.0	-51.0	-13.0	-38.0	
3386.40	-10.3	H	3.0	39.5	1.0	-48.8	-13.0	-35.8	

WCDMA

Band 5
HSDPA

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-18
Test Engineer:	45585
Configuration:	EUT / AC Adapter / Earphone, Z-Position
Location:	Chamber 2
Mode:	HSDPA Band 5 Harmonics

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 826.4MHz									
1652.80	-15.2	V	3.0	38.2	1.0	-52.4	-13.0	-39.4	
2479.20	-12.8	V	3.0	38.8	1.0	-50.6	-13.0	-37.6	
3305.60	-10.0	V	3.0	39.4	1.0	-48.4	-13.0	-35.4	
1652.80	-16.4	H	3.0	38.2	1.0	-53.6	-13.0	-40.6	
2479.20	-13.4	H	3.0	38.8	1.0	-51.2	-13.0	-38.2	
3305.60	-10.4	H	3.0	39.4	1.0	-48.9	-13.0	-35.9	
Mid Ch, 836.6MHz									
1673.20	-15.1	V	3.0	38.2	1.0	-52.4	-13.0	-39.4	
2509.80	-12.6	V	3.0	38.8	1.0	-50.4	-13.0	-37.4	
3346.40	-10.2	V	3.0	39.5	1.0	-48.7	-13.0	-35.7	
1673.20	-15.9	H	3.0	38.2	1.0	-53.1	-13.0	-40.1	
2509.80	-13.2	H	3.0	38.8	1.0	-51.0	-13.0	-38.0	
3346.40	-10.4	H	3.0	39.5	1.0	-48.9	-13.0	-35.9	
High Ch, 846.6MHz									
1693.20	-15.2	V	3.0	38.2	1.0	-52.5	-13.0	-39.5	
2539.80	-12.5	V	3.0	38.9	1.0	-50.4	-13.0	-37.4	
3386.40	-9.9	V	3.0	39.5	1.0	-48.3	-13.0	-35.3	
1693.20	-16.3	H	3.0	38.2	1.0	-53.5	-13.0	-40.5	
2539.80	-13.1	H	3.0	38.9	1.0	-51.0	-13.0	-38.0	
3386.40	-10.2	H	3.0	39.5	1.0	-48.7	-13.0	-35.7	

WCDMA Band 2

WCDMA

Band 2
REL99

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788869685
Date:	2019-02-16
Test Engineer:	45585
Configuration:	EUT / AC Adpater / Earphone, Y-Position
Location:	Chamber 2
Mode:	Rel99 Band 2 Harmonics

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1852.4MHz									
3704.80	-11.2	V	3.0	39.7	1.0	-49.9	-13.0	-36.9	
5557.20	-8.3	V	3.0	39.9	1.0	-47.2	-13.0	-34.2	
7409.60	-6.2	V	3.0	39.4	1.0	-44.6	-13.0	-31.6	
3704.80	-11.5	H	3.0	39.7	1.0	-50.2	-13.0	-37.2	
5557.20	-8.6	H	3.0	39.9	1.0	-47.5	-13.0	-34.5	
7409.60	-7.0	H	3.0	39.4	1.0	-45.5	-13.0	-32.5	
Mid Ch, 1880MHz									
3760.00	-11.2	V	3.0	39.7	1.0	-49.9	-13.0	-36.9	
5640.00	-7.9	V	3.0	40.0	1.0	-46.9	-13.0	-33.9	
7520.00	-6.2	V	3.0	39.4	1.0	-44.6	-13.0	-31.6	
3760.00	-11.2	H	3.0	39.7	1.0	-49.9	-13.0	-36.9	
5640.00	-8.3	H	3.0	40.0	1.0	-47.3	-13.0	-34.3	
7520.00	-6.9	H	3.0	39.4	1.0	-45.2	-13.0	-32.2	
High Ch, 1907.6MHz									
3815.20	-11.0	V	3.0	39.7	1.0	-49.7	-13.0	-36.7	
5722.80	-8.2	V	3.0	40.0	1.0	-47.2	-13.0	-34.2	
7630.40	-6.1	V	3.0	39.3	1.0	-44.5	-13.0	-31.5	
3815.20	-11.3	H	3.0	39.7	1.0	-50.0	-13.0	-37.0	
5722.80	-8.4	H	3.0	40.0	1.0	-47.4	-13.0	-34.4	
7630.40	-7.0	H	3.0	39.3	1.0	-45.3	-13.0	-32.3	

WCDMA

Band 2
HSDPA

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-16
Test Engineer:	47989
Configuration:	EUT / AC Adapter / Earphone, Y-Position
Location:	Chamber 2
Mode:	HSDPA Band 2 Harmonics

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1852.4MHz									
3704.80	-11.5	V	3.0	39.7	1.0	-50.1	-13.0	-37.1	
5557.20	-8.4	V	3.0	39.9	1.0	-47.3	-13.0	-34.3	
7409.60	-6.2	V	3.0	39.4	1.0	-44.6	-13.0	-31.6	
3704.80	-11.7	H	3.0	39.7	1.0	-50.4	-13.0	-37.4	
5557.20	-8.7	H	3.0	39.9	1.0	-47.6	-13.0	-34.6	
7409.60	-7.0	H	3.0	39.4	1.0	-45.5	-13.0	-32.5	
Mid Ch, 1880MHz									
3760.00	-11.1	V	3.0	39.7	1.0	-49.8	-13.0	-36.8	
5640.00	-8.0	V	3.0	40.0	1.0	-47.0	-13.0	-34.0	
7520.00	-6.2	V	3.0	39.4	1.0	-44.6	-13.0	-31.6	
3760.00	-11.3	H	3.0	39.7	1.0	-50.0	-13.0	-37.0	
5640.00	-8.3	H	3.0	40.0	1.0	-47.3	-13.0	-34.3	
7520.00	-7.1	H	3.0	39.4	1.0	-45.5	-13.0	-32.5	
High Ch, 1907.6MHz									
3815.20	-11.2	V	3.0	39.7	1.0	-49.9	-13.0	-36.9	
5722.80	-8.2	V	3.0	40.0	1.0	-47.2	-13.0	-34.2	
7630.40	-6.4	V	3.0	39.3	1.0	-44.7	-13.0	-31.7	
3815.20	-11.4	H	3.0	39.7	1.0	-50.1	-13.0	-37.1	
5722.80	-8.4	H	3.0	40.0	1.0	-47.4	-13.0	-34.4	
7630.40	-7.1	H	3.0	39.3	1.0	-45.4	-13.0	-32.4	

LTE Band 5

LTE

Band 5

1.4MHz

QPSK

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-18
Test Engineer:	45585
Configuration:	EUT / AC Adapter / Earphone, Z-Position
Location:	Chamber 2
Mode:	LTE_QPSK Band 5 Harmonics, 1.4MHz Bandwidth

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 824.7MHz									
1649.40	-14.6	V	3.0	38.2	1.0	-51.8	-13.0	-38.8	
2474.10	-12.6	V	3.0	38.8	1.0	-50.4	-13.0	-37.4	
3298.80	-10.1	V	3.0	39.4	1.0	-48.5	-13.0	-35.5	
1649.40	-15.0	H	3.0	38.2	1.0	-52.2	-13.0	-39.2	
2474.10	-13.3	H	3.0	38.8	1.0	-51.1	-13.0	-38.1	
3298.80	-10.3	H	3.0	39.4	1.0	-48.7	-13.0	-35.7	
Mid Ch, 836.5MHz									
1673.00	-14.2	V	3.0	38.2	1.0	-51.4	-13.0	-38.4	
2509.50	-12.5	V	3.0	38.8	1.0	-50.4	-13.0	-37.4	
3346.00	-10.1	V	3.0	39.5	1.0	-48.5	-13.0	-35.5	
1673.00	-14.0	H	3.0	38.2	1.0	-51.2	-13.0	-38.2	
2509.50	-13.0	H	3.0	38.8	1.0	-50.9	-13.0	-37.9	
3346.00	-10.3	H	3.0	39.5	1.0	-48.8	-13.0	-35.8	
High Ch, 848.3MHz									
1696.60	-13.8	V	3.0	38.2	1.0	-51.1	-13.0	-38.1	
2544.90	-12.4	V	3.0	38.9	1.0	-50.2	-13.0	-37.2	
3393.20	-9.7	V	3.0	39.5	1.0	-48.2	-13.0	-35.2	
1696.60	-14.5	H	3.0	38.2	1.0	-51.7	-13.0	-38.7	
2544.90	-12.9	H	3.0	38.9	1.0	-50.8	-13.0	-37.8	
3393.20	-10.0	H	3.0	39.5	1.0	-48.5	-13.0	-35.5	

LTE Band 41

LTE

Band 41

10MHz

QPSK

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	Samsung
Project #:	4788874100
Date:	2019-02-15
Test Engineer:	45585
Configuration:	EUT / AC Adapter / Earphone, Z-Position
Location:	Chamber 2
Mode:	LTE_QPSK Band 41 Harmonics, 10MHz Bandwidth

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2501MHz									
5002.00	-8.7	V	3.0	39.8	1.0	-47.5	-25.0	-22.5	
7503.00	-4.0	V	3.0	39.4	1.0	-42.4	-25.0	-17.4	
10004.00	-18.5	V	3.0	38.6	1.0	-56.1	-25.0	-31.1	
5002.00	-13.7	H	3.0	39.8	1.0	-52.5	-25.0	-27.5	
7503.00	-13.2	H	3.0	39.4	1.0	-51.6	-25.0	-26.6	
10004.00	-18.6	H	3.0	38.6	1.0	-56.2	-25.0	-31.2	
Mid Ch, 2593MHz									
5186.00	-12.4	V	3.0	39.8	1.0	-51.2	-25.0	-26.2	
7779.00	-9.0	V	3.0	39.3	1.0	-47.3	-25.0	-22.3	
10372.00	-7.9	V	3.0	38.6	1.0	-45.4	-25.0	-20.4	
5186.00	-14.2	H	3.0	39.8	1.0	-53.0	-25.0	-28.0	
7779.00	-10.2	H	3.0	39.3	1.0	-48.5	-25.0	-23.5	
10372.00	-9.2	H	3.0	38.6	1.0	-46.8	-25.0	-21.8	
High Ch, 2685MHz									
5370.00	-16.9	V	3.0	39.9	1.0	-55.8	-25.0	-30.8	
8055.00	-3.0	V	3.0	39.2	1.0	-41.1	-25.0	-16.1	
10740.00	-8.9	V	3.0	38.5	1.0	-46.5	-25.0	-21.5	
5370.00	-15.7	H	3.0	39.9	1.0	-54.6	-25.0	-29.6	
8055.00	-8.6	H	3.0	39.2	1.0	-46.7	-25.0	-21.7	
10740.00	-7.9	H	3.0	38.5	1.0	-45.5	-25.0	-20.5	