

Page 1 of 250

ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

PARTIAL REPORT

OF

Applicant: CALAMP WIRELESS NETWORKS CORPORATION

2200 Faraday Ave, Suite 220, Carlsbad, CA 92008

Product Name: LMU5541 Broadband Router/Tracker

Brand Name: CalAmp

Model No.: LMU5541LW

Model Difference: N/A

Report Number: ER/2019/C0117 **FCC ID APV-5541LW** IC: 5843C-5541LW

FCC Rule Part: 2, 22H & 24E & 27C & 90S **ISED Rule:** RSS-130, 132, 133, 139, 199

Issue Date: Feb. 05, 2020

Date of Test: Dec. 13, 2019 ~ Jan. 31, 2020

Date of EUT Received: Dec. 13, 2019

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Electronics & Communication Laboratory The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.26-2015 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits.

The test results of this report relate only to the tested sample identified in this report.

Approved By:

Vito Pei / Asst. Supervisor





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Page 2 of 250

Revision History					
Report Number	Revision	Description	Issue Date	Remark	
ER/2019/C0117	Rev.00	Original.	Feb. 05, 2020	Revised By: Stefanie Yu	

Note:

Test data is referenced from cross authorization(s) Measurement results in the original test report HR/2019/1001601 under FCC ID: XMR201903EG25G / IC: 10224A-201903EG25G are partially leveraged in this test report with Radiated Emission Test to demonstrate compliance.

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Page 3 of 250

Contents

1	GENERAL PRODUCT INFORMATION	4
	SYSTEM TEST CONFIGURATION	
	SUMMARY OF TEST RESULTS	
4	DESCRIPTION OF TEST MODES	12
	MEASUREMENT UNCERTAINTY	
6	MAXMUM OUTPUT POWER	14
-	FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT	

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Page 4 of 250

GENERAL PRODUCT INFORMATION

1.1 **Product Description**

General:

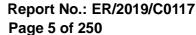
Cilciai.			
Product Name:	LMU5541 Broadband Router/Tracker		
Brand Name:	CalAmp		
Model No.:	LMU5541LW		
Model Difference:	N/A		
Hardware Version:	Rev E		
Software Version:	LMU,166 V4.1a		
Power Supply:	12Vdc from Car Battery & 3.7Vdc from Rechargeable Li-ion Battery		
Fower Suppry.	Battery: Model No.: GSP633248, Supplier: N/A		
IMEI:	2G:867698040302770 3G:867698040302770 4G:867698040302770		

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Operation Frequency Range 1.2

Operating Frequency (MHz)						
GSM/GPRS/EDGE 850	824.2	-	848.8			
GSM/GPRS/EDGE 1900	1850.2	-	1909.8			
WCDMA / HSPA+ Band II	1852.4	-	1907.6			
WCDMA / HSPA+ Band IV	1712.4	-	1752.6			
WCDMA / HSPA+ Band V	826.4	-	846.6			

LTE Band 2				
BW (MHz)		Freque	ency (MHz)	
1.4	1850.7	-	1909.3	
3	1851.5	-	1908.5	
5	1852.5	-	1907.5	
10	1855.0	-	1905.0	
15	1857.5	-	1902.5	
20	1860.0	-	1900.0	
	LTE Bar	nd 4		
BW (MHz)	Operation	Frequ	ency (MHz)	
1.4	1710.7	-	1754.3	
3	1711.5	-	1753.5	
5	1712.5	-	1752.5	
10	1715.0	-	1750.0	
15	1717.5	-	1747.5	
20	1720.0	-	1745.0	
	LTE Bar	nd 5		
BW (MHz)	Operation	Freque	ency (MHz)	
1.4	824.7	-	848.3	
3	825.5	-	847.5	
5	826.5	-	846.5	
10	829.0	-	844.0	
	LTE Bar	nd 7		
BW (MHz)	Operation	Freque	ency (MHz)	
5	2502.5	-	2567.5	
10	2505.0	-	2565.0	
15	2507.5	-	2562.5	
20	2510.0	-	2560.0	

	LTE Ban	d 12	
BW (MHz)	Operation	Freque	ency (MHz)
1.4	699.7	-	715.3
3	700.5	-	714.5
5	701.5	-	713.5
10	704.0	-	711.0
	LTE Ban	d 13	
BW (MHz)	Operation	Freque	ency (MHz)
5	779.5	-	784.5
10		782.0	
	LTE Ban	d 25	
BW (MHz)	Operation	Freque	ency (MHz)
1.4	1850.7	-	1914.3
3	1851.5	-	1913.5
5	1852.5	-	1912.5
10	1855.0	-	1910.0
15	1857.5	-	1907.5
20	1860.0	-	1905.0
	LTE Ban	d 26	
BW (MHz)	Operation	Freque	ency (MHz)
1.4	824.7	-	848.3
3	825.5	-	847.5
5	826.5	-	846.5
10	829.0	-	844.0
15	831.5	-	841.5
	LTE Band 26	Part !	90
BW (MHz)	Operation	Freque	ency (MHz)
1.4	814.7	-	823.3
3	815.5	-	822.5
5	816.5	-	821.5
10		819.0	

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LTE Band 38 BW (MHz) Operation Frequency (MHz) 2572.5 2617.5 5 10 2575.0 2615.0 15 2577.5 2612.5 _ 20 2580.0 2610.0

Report No.: ER/2019/C0117	
Page 6 of 250	

LTE Band 41					
BW (MHz)	Operation	Freque	ency (MHz)		
5	2498.5	-	2687.5		
10	2501.0	-	2685.0		
15	2503.5	-	2682.5		
20	2506.0	-	2680.0		

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Page 7 of 250

Antenna Designation 1.3

						Peak
Туре	Vendor.	Main /	Antenna	Modulation	Frequency	Antenna
Турс	vendor.	Aux	Part No.	Modulation	(MHz)	Gain
						(dBi)
				GSM / GPRS850	824.2 ~ 848.8	2.75
				GSM / GPRS1900	1850.2 ~ 1909.8	3.63
				WCDMA / HSPA Band II	1825.4 ~ 1907.6	3.63
	TAOGLAS Main / Aux MA		WCDMA / HSPA Band IV	1712.4 ~ 1752.6	3.79	
		Main / Aux MA284.LBIC.001	WCDMA / HSPA Band V	826.4 ~ 846.6	2.75	
				LTE Band 2	1850 ~ 1910	3.63
PIFA			MA284.LBIC.001	LTE Band 4	1710 ~ 1755	3.79
				LTE Band 5	824 ~ 849	2.75
				LTE Band 7	2500 ~ 2570	3.22
			LTE Band 12	699 ~ 716	2.38	
				LTE Band 13	777 ~ 787	2.38
				LTE Band 25	1850 ~ 1915	3.63
				LTE Band 26	825 ~ 848	2.75
				LTE Band 26 (Part 90)	814 ~ 824	2.75
				LTE Band 38	2573 ~ 2618	3.22
				LTE Band 41	2496 ~ 2690	3.22

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Page 8 of 250

Test Methodology of Applied Standards

FCC 47 CFR Part 2, 22H, 24E, 27C, 90S

ISED RSS-130 Issue 2 Feb. 2019, ISED RSS-132 Issue 3 Jan. 2013

ISED RSS-133 Issue 6, Amendment 1 Jan. 18, 2018, ISED RSS-139 Issue 3 July 16, 2015

ISED RSS-199 Issue 3 Dec. 2016, ISED RSS-132 Issue 3 Dec. 2016

ANSI C63.26-2015

KDB971168 D01 Power Meas license Digital System v03r01

KDB941225 D01 SAR test for 3G devices v03r01 (SAR Measurement Procedures for 3G Devices, WCDMA / HSPA) was used for EUT and Base station setting.

TS 151 010-1 is used to set, and measure the output power.

1.5 **Test Facility**

SGS Taiwan Ltd. Electronics & Communication Laboratory (TAF code 0513) No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803

FCC Designation number: TW0001

ISED CAB identifier: TW0513

1.6 **Special Accessories**

No special accessories were used during testing.

Equipment Modifications

There was no modifications incorporated into the EUT.

Radiated Emission Test Sites For Measurements From 9 kHz To 30 MHz

Radiated emission below 30MHz is measured in a 9m*9m*6m semi-anechoic chamber. the measurements correspond to those obtained at an open-field test site.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

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Page 9 of 250

SYSTEM TEST CONFIGURATION

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

The EUT (Transmitter) was operated in the continuous transmission mode employed with the simulator of the Base Station that fixates at test default channels to fix the Tx frequency which was for the purpose of the measurements.

2.3 Test Procedure

2.3.1 **Conducted Measurement at Antenna Port**

The EUT is placed on a table which is 0.8 m above ground plane. A low loss of RF cable was used to connect the antenna port of EUT to measurement equipment.

Radiated Emissions (ERP/EIRP) 2.3.2

The EUT is placed on a turn table, for emission measurements below 1 GHz is 0.8 m above ground plane, for emission measurements above 1 GHz, the table height shall be 1.5 m. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both Horizontal and Vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna according to the requirements in Section 8 and 13.

Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuation factor between EUT conducted port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly EUT RF output level.

Note:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor. Following shows an offset computation in physical test.

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Page 10 of 250

Configuration of Tested System 2.5

Fig. 2-1 Configuration of Tested System (Fixed Channel-Conducted)

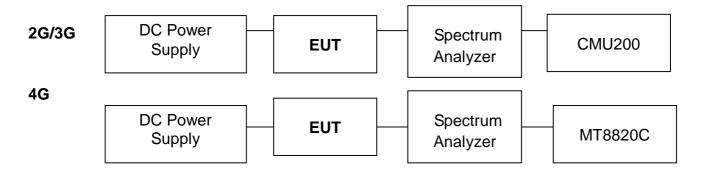


Fig. 2-2 Configuration of Tested System (Fixed Channel-Radiated)

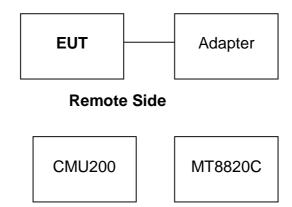


Table 2-1 Equipment Used in

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1.	Radio Communication Analyer	Anritsu	MT8820C	6200995019	04/01/2019	03/31/2020

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Page 11 of 250

SUMMARY OF TEST RESULTS

FCC Rules	IC Rules	Description Of Test	Result
§2.1046(a)	RSS-GEN §6.12	RF Power Output	Compliant
§22.913(a)(5) §24.232(c) §27.50(c)(10) §27.50(d)(4) §27.50(h)(2) §90.635	RSS-130 §4.6 RSS-132 §5.4 RSS-133 §6.4 RSS-139 §6.5 RSS-199 §4.4	ERP/ EIRP measurement	Compliant
\$2.1053 \$22.917(a) \$24.238(a) \$27.53(c)(2),(4) \$27.50(c)(5) \$27.53(g) \$27.53(h) \$27.53(m)(4) \$90.691(a)(1)(2)	RSS-GEN §6.13 RSS-130 §4.7 RSS-132 §5.5 RSS-133 §6.5 RSS-139 §6.6 RSS-199 §4.5	Field Strength of Spurious Radiation	Compliant

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Page 12 of 250

DESCRIPTION OF TEST MODES

4.1 The Worst Test Modes and Channel Details

- 1. The EUT has been tested under operating condition.
- 2. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, X(E1)Y(E2)Z(H) axis and antenna ports. The worst case was found as listed below. Following channel(s) was (were) selected for the final test as listed below:

BAND	H PLAN	E1 PLAN	E2 PLAN
GSM/GPRS/EDGE 850			V
GSM/GPRS/EDGE 1900			V
WCDMA/HSPA Band II			V
WCDMA/HSPA Band IV			V
WCDMA/HSPA Band V			V
LTE Band 2			V
LTE Band 4			V
LTE Band 5			V
LTE Band 7			V
LTE Band 12			V
LTE Band 13			V
LTE Band 25			V
LTE Band 26			V
LTE Band 26 (Part 90)			V
LTE Band 38			V
LTE Band 41			V

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Page 13 of 250

MEASUREMENT UNCERTAINTY

Test Items	Uncertainty
RF Power Output	+/- 1.10 dB
ERP/ EIRP measurement	Vertical Polarization = +/- 4.74dB Horizontal Polarization =+/- 4.62dB
99% Occupied Bandwidth	+/- 5.19 Hz
Out of Band Emissions at Antenna Terminals and Band Edge	+/- 0.70 dB
Peak to Average Ratio	+/- 0.70 dB
Frequency Stability vs. Temperature	+/- 5.19 Hz
Frequency Stability vs. Voltage	+/- 5.19 Hz
Temperature	+/- 0.65 °C
Humidity	+/- 4.6 %
DC / AC Power Source	DC= +/- 0.13%, AC=+/- 0.2%

Radiated Spurious Emission:

	9kHz – 30MHz: +/- 2.87 dB
Ma agura mantun agricintu	30MHz - 180MHz: +/- 3.37dB
Measurement uncertainty (Polarization : Vertical)	180MHz -417MHz: +/- 3.19dB
(Foldinzation : Voltidal)	0.417GHz-1GHz: +/- 3.19dB
	1GHz - 18GHz: +/- 4.04dB
	18GHz - 40GHz: +/- 4.04dB

	9kHz – 30MHz: +/- 2.87 dB
Magaurament uncertainty	30MHz - 167MHz: +/- 4.22dB
Measurement uncertainty (Polarization : Horizontal)	167MHz -500MHz: +/- 3.44dB
(i dianzation : Honzontal)	0.5GHz-1GHz: +/- 3.39dB
	1GHz - 18GHz: +/- 4.08dB
	18GHz - 40GHz: +/- 4.08dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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Page 14 of 250

MAXMUM OUTPUT POWER

6.1 Standard Applicable

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. The measured power in the radio frequency on the transmitter output terminals.

6.1.1 **ERP/EIRP LIMIT**

According to FCC §2.1046

FCC 22.913(a)

(5) mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

FCC 24.232(c)

Mobile and portable stations are limited to 2 W EIRP.

FCC 27.50 (b)

(10) Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

FCC 27.50(c)

(10) Portable stations (hand-held devices) are limited to 3 watts ERP.

FCC 27.50(d)

- (4) Mobile, and portable (hand-held) stations operating in the 1710-1755 MHz, 1695-1710 MHz and 1755-1780 MHz bands are limited to 1W EIRP.
- (7) Mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band are limited to 2 watts EIRP.

FCC 27, 50(h)

(2) Mobile and other user stations transmitting in the BRS and EBS bands are limited to 2 W EIRP.

FCC 90.635(b)

Mobile station is limited to 100W ERP

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Page 15 of 250

RSS-130 §4.6

The e.r.p. shall not exceed 3 watts for mobile equipment, fixed subscriber equipment and portable equipment operating in the Band 617-652 and 663-698MHz.

RSS-132 §5.4

The equivalent isotropically radiated power (e.i.r.p.) for mobile equipment in operating in the Bands 824-849 and 869-894MHz shall not exceed 11.5 watts.

RSS-133 §6.4

The equivalent isotropically radiated power (e.i.r.p.) for transmitters shall not exceed the limits given in SRSP-510.

According to section 5.1.2 of SRSP-510, Mobile stations and hand-held portables are limited to 2 watts maximum e.i.r.p. The equipment shall employ means to limit the power to the minimum necessary for successful communication.

RSS-139 §6.5

The equivalent isotropically radiated power (e.i.r.p.) for mobile and portable transmitters in the Bands 1710-1780MHz shall not exceed one watt.

RSS-130 §4.6

The e.r.p. shall not exceed 3 watts for mobile equipment, fixed subscriber equipment and portable equipment.

RSS-199 §4.4

For mobile subscriber equipment operating in the Band 2500-2690MHz, the e.i.r.p. shall

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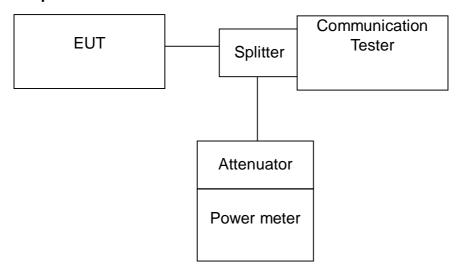
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Page 16 of 250

6.2 **Test Set-up**



Note: Measurement setup for testing on Antenna connector

6.3 **Output Power Measurement Applicable Guideance**

The transmitter output was connected to a calibrated attenuator, the other end of which was connected to a power meter. Transmitter output was read off the power meter in dBm. The power output at the transmitter antenna port was determined by adding the value of the attenuator to the power meter reading. TS 151 010-1 is reference to conduct the test measurement of output power.

The Procedure of KDB941225 (SAR Measurement Procedures for 3G devices, (WCDMA/HSPA) was used for EUT and Base station setting. RMC 12.2kps is used for this testing, and KDB 971168 D01 Power Meas License Digital System as the supplemental test methodology to adjust the proper setting obtaining the measurement results.

All LTE bands conducted average power is obtained from the simulator telecommunication test set.

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Page 17 of 250

6.4 Determining ERP and/or EIRP from conducted RF output power measurements

ERP/EIRP = PMeas + GT-LC

Where:

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the

same units as PMeas, typically dBW or dBm);

PMeas = measured transmitter output power or PSD, in dBm or dBW; = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP) GT

LC = signal attenuation in the connecting cable between the transmitter and

antenna, in dB.2

For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.

6.5 **Measurement Equipment Used**

Conducted Emission (measured at antenna port) Test Site									
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.				
Radio Communica- tion Analyer	Anritsu	MT8820C	6200995019	04/01/2019	03/31/2020				

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Page 18 of 250

Measurement Result: 6.6

EUT Mode	Frequency (MHz)	СН	Average Burst Power (1DN 1UP) Class 8 (dBm)	Average Burst Power (1DN 2UP) Class 10 (dBm)	Average Burst Power (1DN 3UP) Class 12 (dBm)	Average Burst Power (1DN 4UP) Class 12 (dBm)
0.550	824.2	128	31.74	29.92	28.56	27.25
GPRS 850	836.6	190	31.64	29.88	28.49	27.33
	848.8	251	31.75	29.92	28.63	27.30
0.550	1850.2	512	30.46	29.43	27.83	26.49
GPRS 1900	1880.0	661	30.24	29.54	27.58	26.59
	1909.8	810	30.27	29.64	27.92	26.66

EUT Mode	Freq. (MHz)	СН	Conducted Avg. Power (dBm)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
GSM	824.2	128	32.07	2.75	32.67	34.82	38.50	-3.68
850	836.6	190	32.04	2.75	32.64	34.79	38.50	-3.71
030	848.8	251	32.06	2.75	32.66	34.81	38.50	-3.69
CCM	1850.2	512	29.26	3.63	30.74	32.89	33.00	-0.11
GSM 1900	1880.0	661	29.06	3.63	30.54	32.69	33.00	-0.31
1900	1909.8	810	29.13	3.63	30.61	32.76	33.00	-0.24
CDDC	824.2	128	31.74	2.75	32.34	34.49	38.50	-4.01
GPRS 850	836.6	190	31.64	2.75	32.24	34.39	38.50	-4.11
030	848.8	251	31.75	2.75	32.35	34.50	38.50	-4.00
CDDC	1850.2	512	29.11	3.63	30.59	32.74	33.00	-0.26
GPRS 1900	1880.0	661	29.01	3.63	30.49	32.64	33.00	-0.36
1900	1909.8	810	29.00	3.63	30.48	32.63	33.00	-0.37

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Page 19 of 250

6.7 **WCDMA & HSPA Measurement Results:**

The following tests were completed according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 specification. The EUT supports power Class 3, which has a nominal maximum output power of 24 dBm (+1.7/-3.7). RMC 12.2kps is used for this testing.

WCDMA/HSUPA/HSDPA Band II Result:

EUT Mode	Freq. (MHz)	СН	Conducted Avg. Power (dBm)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
MODM	1852.4	9262	22.48	3.63	23.96	26.11	33.00	-6.89
WCDM A	1880.0	9400	22.58	3.63	24.06	26.21	33.00	-6.79
, , , , , , , , , , , , , , , , , , ,	1907.6	9538	22.49	3.63	23.97	26.12	33.00	-6.88
	1852.4	9262	21.45	3.63	22.93	25.08	33.00	-7.92
HSDPA	1880.0	9400	21.59	3.63	23.07	25.22	33.00	-7.78
	1907.6	9538	21.48	3.63	22.96	25.11	33.00	-7.89
	1852.4	9262	20.89	3.63	22.37	24.52	33.00	-8.48
HSUPA	1880.0	9400	20.96	3.63	22.44	24.59	33.00	-8.41
	1907.6	9538	20.98	3.63	22.46	24.61	33.00	-8.39

WCDMA/HSUPA/HSDPA Band IV Result:

EUT Mode	Freq. (MHz)	СН	Conducted Avg. Power (dBm)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
MODM	1712.4	1312	22.70	3.79	24.34	26.49	30.00	-3.51
WCDM A	1732.6	1413	22.77	3.79	24.41	26.56	30.00	-3.44
/\	1752.6	1513	22.65	3.79	24.29	26.44	30.00	-3.56
	1712.4	1312	21.57	3.79	23.21	25.36	30.00	-4.64
HSDPA	1732.6	1413	21.71	3.79	23.35	25.50	30.00	-4.50
	1752.6	1513	22.60	3.79	24.24	26.39	30.00	-3.61
	1712.4	1312	21.05	3.79	22.69	24.84	30.00	-5.16
HSUPA	1732.6	1413	21.16	3.79	22.80	24.95	30.00	-5.05
	1752.6	1513	21.08	3.79	22.72	24.87	30.00	-5.13

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Page 20 of 250

WCDMA/HSUPA/HSDPA Band V Result:

EUT Mode	Freq. (MHz)	СН	Conducted Avg. Power (dBm)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
WODM	826.4	4132	22.42	2.75	23.02	25.17	38.50	-13.33
WCDM A	836.6	4183	22.39	2.75	22.99	25.14	38.50	-13.36
, (846.6	4233	22.51	2.75	23.11	25.26	38.50	-13.24
	826.4	4132	21.25	2.75	21.85	24.00	38.50	-14.50
HSDPA	836.6	4183	21.43	2.75	22.03	24.18	38.50	-14.32
	846.6	4233	21.64	2.75	22.24	24.39	38.50	-14.11
	826.4	4132	20.93	2.75	21.53	23.68	38.50	-14.82
HSUPA	836.6	4183	20.99	2.75	21.59	23.74	38.50	-14.76
	846.6	4233	21.21	2.75	21.81	23.96	38.50	-14.54

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Page 21 of 250

6.7.1 HSPA (HSDPA & HSUPA) Release 6:

The following 4 Sub-Tests were completed according to the test requirements outlined in section 5.2A of the 3GPP TS34.121-1 specification. All TX RMS power requirements for Power Class 3 were met according to table 5.2AA.5 and 5.2B.5 All UE channels and power ratio's are set according to table C10.1.4 & C11.1.3 in the 3GPP TS34.121-1. RMC 12.2kps is used for this testing.

6.7.2 **HSDPA SUB-TEST Setting**

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH(FOR HSDPA)

Sub-test	βς	βa	β _d (SF)	βc/βd	βнs (Note1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)	RMC (Kbps)
1	2/15	15/15	64	2/15	4/15	0.0	0.0	12.2
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0	12.2
3	15/15	8/15	64	15/8	30/15	1.5	0.5	12.2
4	15/15	4/15	64	15/4	30/15	1.5	0.5	12.2

Note: The recommended HSDPA MPRs are implemented as per following sub-tests.

Mode	Sub	Avg.	Power (c	IBm)
Wode	test	9262.00	9400.00	9538.00
	1	21.45	21.59	21.48
LICDDA II	2	21.32	21.48	21.45
HSDPA II	3	21.12	21.29	21.38
	4	21.28	21.37	21.42
	Cub	Avg.	Power (c	IBm)
Mode	Sub	Avg.	Power (d	IBm)
Mode	Sub test	Avg.		1513.00
Mode			Channel	,
	test	1312.00	Channel 1413.00	1513.00
Mode HSDPA IV	test 1	1312.00 21.57	Channel 1413.00 21.71	1513.00 22.60

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Page 22 of 250

Mode	Sub test	Avg.	Power (c	IBm)
	1031	4132.00	4183.00	4233.00
	1	21.25	21.43	21.64
HSDPA V	2	21.38	21.49	21.59
INDUPAV	3	21.41	21.47	21.55
	4	21.38	21.58	21.68

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Page 23 of 250

6.7.3 **HSPA SUB-TEST Setting**

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH(FOR HSUPA)

	2 3011(1 3111130171)													
Sub- test	βς	βa	β _d (SF)	β₀∕βa	βнs	βес	βed	β _{ed} (SF)	β _{ed} (Code s)	CM (dB)	MPR (dB)	AG Index	E-TFCI	RMC (Kbps)
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/22 5	1309/225	4	1	1.0	0.0	20	75	12.2
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67	12.2
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed} 1: 47/15 β_{ed} 2: 47/15		2	2.0	1.0	15	92	12.2
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71	12.2
5	15/15 (Note 4)	15/15 (Note 4)	64	15/15 (Note 4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81	12.2

Note: The recommended HSUPA MPRs are implemented as per following sub-tests.

Mode	Sub test	Avg	. Power (d Channel	Bm)
	1031	9262.00	9400.00	9538.00
	1	20.89	20.96	20.98
	2	21.15	21.03	20.89
HSUPA II	3	21.25	21.21	21.01
	4	21.04	20.99	21.12
	5	20.78	20.88	20.95
	Cub	Avg	. Power (d	Bm)
Mode	Sub	Avg	. Power (d Channel	Bm)
Mode	Sub test	Avg	•	Bm) 1513.00
Mode			Channel	·
Mode	test	1312.00	Channel 1413.00	1513.00
Mode HSUPA IV	test	1312.00 21.05	Channel 1413.00 21.16	1513.00 21.08
	test 1 2	1312.00 21.05 21.22	Channel 1413.00 21.16 21.08	1513.00 21.08 21.14

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Page 24 of 250

Mode	Sub test	Avg. Power (dBm) Channel						
	1031	4132.00	4183.00	4233.00				
	1	20.93	20.99	21.21				
	2	20.85	21.04	21.15				
HSUPA V	3	20.98	21.09	21.23				
	4	20.96	21.11	21.05				
	5	20.89	20.98	20.99				

6.7.4 WCDMA/HSDPA/HSUPA band II, IV, V

The EUT output power was controlled by simulator and enter max rated power 24dBm. The EUT is going to be set to max output power to 24dBm then record the read. The min. power was measures by a function key "minimum power" then record the read. It is -52.3dBm. The power variation can be 0.1dB step by setting.

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Page 25 of 250

LTE Measurement Results: 6.8

3 63 Antenna gain (dRi)

Antenna	Antenna gain (dBi) 3.63 LTE Band 2_Uplink frequency band : 1850 to 1910 MHz													
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)					
				1	0	21.26	24.89	33	-8.11					
	10007	1050.7	ODCK	1	5	21.35	24.98	33	-8.02					
	18607	1850.7	QPSK	3	2	21.55	25.18	33	-7.82					
				6	0	20.34	23.97	33	-9.03					
				1	0	21.63	25.26	33	-7.74					
	18900 1880	1990	QPSK	1	5	21.75	25.38	33	-7.62					
		1000	QFSN	3	2	21.75	25.38	33	-7.62					
				6	0	20.88	24.51	33	-8.49					
	19193	1909.3	QPSK	1	0	21.83	25.46	33	-7.54					
				1	5	21.63	25.26	33	-7.74					
				3	2	21.71	25.34	33	-7.66					
1.4				6	0	20.64	24.27	33	-8.73					
1.4				1	0	20.05	23.68	33	-9.32					
	18607	1850.7	16QAM	1	5	20.37	24.00	33	-9					
	10007	1030.7	IOQAW	3	2	20.28	23.91	33	-9.09					
				6	0	19.32	22.95	33	-10.05					
				1	0	20.52	24.15	33	-8.85					
	18900	1880	16QAM	1	5	20.85	24.48	33	-8.52					
	10300	1000	IOQAW	3	2	20.96	24.59	33	-8.41					
				6	0	20.15	23.78	33	-9.22					
				1	0	20.72	24.35	33	-8.65					
	19193	1909.3	16∩ΔM	1	5	20.32	23.95	33	-9.05					
	טפופו	1303.3	16QAM	3	2	20.35	23.98	33	-9.02					
				6	0	19.56	23.19	33	-9.81					

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Page 26 of 250

Antenna gain (dBi)

3 63

Antenna	gani (abi)	3.03 LTI	Band 2_Upl	ink fred	quency band	: 1850 to 1910	MHz		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.54	25.17	33	-7.83
	18615	1851.5	QPSK	1	14	21.50	25.13	33	-7.87
	10013	1001.0	QI SIX	8	4	20.61	24.24	33	-8.76
				15	0	20.14	23.77	33	-9.23
		1880	QPSK	1	0	21.30	24.93	33	-8.07
	18900			1	14	21.77	25.40	33	-7.6
			QFSN	8	4	20.85	24.48	33	-8.52
				15	0	20.80	24.43	33	-8.57
	19185	1908.5	QPSK	1	0	21.80	25.43	33	-7.57
				1	14	21.60	25.23	33	-7.77
				8	4	20.85	24.48	33	-8.52
3				15	0	20.78	24.41	33	-8.59
				1	0	20.53	24.16	33	-8.84
	18615	1851.5	16QAM	1	14	19.92	23.55	33	-9.45
	10013	1001.0	IOQAW	8	4	19.52	23.15	33	-9.85
				15	0	19.28	22.91	33	-10.09
				1	0	20.57	24.20	33	-8.8
	18900	1880	16QAM	1	14	20.45	24.08	33	-8.92
	10300	1000	IOQAM	8	4	19.89	23.52	33	-9.48
				15	0	19.64	23.27	33	-9.73
				1	0	20.90	24.53	33	-8.47
	19185	1908.5	16∩AM	1	14	20.72	24.35	33	-8.65
	13100	1900.5	16QAM —	8	4	19.72	23.35	33	-9.65
				15	0	19.54	23.17	33	-9.83

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Page 27 of 250

Antenna gain (dBi)

3 63

Antenna	gani (abi)	J.DJ	Band 2_Upl	ink fred	quency band	: 1850 to 1910	MHz		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.45	25.08	33	-7.92
	18625	1852.5	QPSK	1	24	21.58	25.21	33	-7.79
	10025	1002.0	QFSN	12	6	20.51	24.14	33	-8.86
				25	0	20.46	24.09	33	-8.91
		1880	QPSK	1	0	21.65	25.28	33	-7.72
	18900			1	24	21.59	25.22	33	-7.78
	10900			12	6	20.81	24.44	33	-8.56
				25	0	20.72	24.35	33	-8.65
	19175	1907.5	QPSK	1	0	21.66	25.29	33	-7.71
				1	24	21.70	25.33	33	-7.67
				12	6	20.92	24.55	33	-8.45
5				25	0	20.74	24.37	33	-8.63
				1	0	20.20	23.83	33	-9.17
	18625	1852.5	16QAM	1	24	19.83	23.46	33	-9.54
	10023	1002.0	IOQAW	12	6	19.26	22.89	33	-10.11
				25	0	19.26	22.89	33	-10.11
				1	0	19.93	23.56	33	-9.44
	18900	1880	16QAM	1	24	20.71	24.34	33	-8.66
	10300	1000	IOQAW	12	6	19.68	23.31	33	-9.69
				25	0	19.72	23.35	33	-9.65
				1	0	20.68	24.31	33	-8.69
	19175	1907.5	16∩AM	1	24	19.77	23.40	33	-9.6
	19110	1301.3	16QAM	12	6	19.62	23.25	33	-9.75
				25	0	19.28	22.91	33	-10.09

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Page 28 of 250

Antenna gain (dBi)

3 63

Antenna	gani (abi)	3.03 LTI	Band 2_Upl	ink fred	quency band	: 1850 to 1910	MHz		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.49	25.12	33	-7.88
	18650	1855	QPSK	1	49	21.89	25.52	33	-7.48
	10030	1000	QI SIN	25	12	20.73	24.36	33	-8.64
				50	0	20.57	24.20	33	-8.8
			QPSK	1	0	21.91	25.54	33	-7.46
	18900 188	1000		1	49	21.89	25.52	33	-7.48
		1000	QF3N	25	12	20.79	24.42	33	-8.58
				50	0	20.65	24.28	33	-8.72
	19150	1905	QPSK	1	0	21.94	25.57	33	-7.43
				1	49	21.78	25.41	33	-7.59
				25	12	20.96	24.59	33	-8.41
10				50	0	20.72	24.35	33	-8.65
10				1	0	20.21	23.84	33	-9.16
	18650	1855	16QAM	1	49	20.48	24.11	33	-8.89
	10000	1000	IOQAW	25	12	19.57	23.20	33	-9.8
				50	0	19.68	23.31	33	-9.69
				1	0	20.66	24.29	33	-8.71
	18900	1880	16QAM	1	49	20.57	24.20	33	-8.8
	10900	1000	IOQAW	25	12	19.87	23.50	33	-9.5
				50	0	19.65	23.28	33	-9.72
				1	0	20.51	24.14	33	-8.86
	19150	1905	160AM	1	49	20.31	23.94	33	-9.06
	19100	1905	16QAM	25	12	19.95	23.58	33	-9.42
				50	0	18.85	22.48	33	-10.52

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Page 29 of 250

Antenna gain (dBi)

3.63

Antenna	LTE Band 2_Uplink frequency band : 1850 to 1910 MHz													
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)					
				1	0	21.64	25.27	33	-7.73					
	18675	1857.5	QPSK	1	74	21.91	25.54	33	-7.46					
	10075	1007.0	QF3N	36	18	20.93	24.56	33	-8.44					
-				75	0	20.45	24.08	33	-8.92					
				1	0	21.64	25.27	33	-7.73					
	18900	1880	QPSK	1	74	21.88	25.51	33	-7.49					
	18900	1000	QP3N	36	18	20.85	24.48	33	-8.52					
				75	0	20.71	24.34	33	-8.66					
	19125	1902.5	QPSK	1	0	21.75	25.38	33	-7.62					
				1	74	21.73	25.36	33	-7.64					
				36	18	20.81	24.44	33	-8.56					
15				75	0	20.64	24.27	33	-8.73					
13				1	0	20.55	24.18	33	-8.82					
	18675	1857.5	16QAM	1	74	20.18	23.81	33	-9.19					
	10073	1007.0	IOQAW	36	18	19.82	23.45	33	-9.55					
				75	0	19.70	23.33	33	-9.67					
				1	0	20.55	24.18	33	-8.82					
	18900	1880	16QAM	1	74	20.32	23.95	33	-9.05					
	10900	1000	IOQAW	36	18	19.94	23.57	33	-9.43					
				75	0	19.73	23.36	33	-9.64					
				1	0	20.26	23.89	33	-9.11					
	19125	1002 5	160414	1	74	20.70	24.33	33	-8.67					
	19125	1902.5	16QAM	36	18	19.82	23.45	33	-9.55					
				75	0	19.73	23.36	33	-9.64					

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Page 30 of 250

Antenna gain (dBi)

3 63

Antenna	ya (a.z.)	3.03	Band 2_Upl	ink fred	quency band	: 1850 to 1910	MHz		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.37	25.00	33	-8
	18700	1860	QPSK	1	99	21.35	24.98	33	-8.02
	10700	1000	QI SIK	50	25	20.97	24.60	33	-8.4
				100	0	20.80	24.43	33	-8.57
		1880	QPSK	1	0	21.33	24.96	33	-8.04
	18900			1	99	21.81	25.44	33	-7.56
	10900	1000	QFSN	50	25	20.93	24.56	33	-8.44
				100	0	20.82	24.45	33	-8.55
	19100	1900	QPSK	1	0	21.83	25.46	33	-7.54
				1	99	21.81	25.44	33	-7.56
				50	25	20.76	24.39	33	-8.61
20				100	0	20.91	24.54	33	-8.46
20				1	0	20.15	23.78	33	-9.22
	18700	1860	16QAM	1	99	20.64	24.27	33	-8.73
	10700	1000	IOQAW	50	25	19.97	23.60	33	-9.4
				100	0	19.90	23.53	33	-9.47
				1	0	20.93	24.56	33	-8.44
	18900	1880	16QAM	1	99	20.59	24.22	33	-8.78
	10900	1000	IOQAW	50	25	19.90	23.53	33	-9.47
				100	0	19.75	23.38	33	-9.62
				1	0	20.46	24.09	33	-8.91
	19100	1900	160AM	1	99	20.71	24.34	33	-8.66
	19100	1900	16QAM	50	25	19.82	23.45	33	-9.55
				100	0	19.72	23.35	33	-9.65

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Page 31 of 250

Antenna gain (dBi)

intornia	gain (dBi)	3.79 L	TE Band 4_U	plink f	requenc	y band : 1710	to 1755 MHz		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.78	25.57	30	-4.43
	19957	1710.7	QPSK	1	5	21.87	25.66	30	-4.34
	19931	17 10.7	QF3N	3	2	21.92	25.71	30	-4.29
				6	0	20.84	24.63	30	-5.37
				1	0	21.93	25.72	30	-4.28
20175	1732.5	QPSK	1	5	22.10	25.89	30	-4.11	
	20173	1732.3	QI OIX	3	2	22.07	25.86	30	-4.14
				6	0	21.04	24.83	30	-5.17
		1754.3	QPSK	1	0	21.41	25.20	30	-4.8
	20393			1	5	21.92	25.71	30	-4.29
	20393			3	2	21.89	25.68	30	-4.32
1.4				6	0	20.86	24.65	30	-5.35
1.4				1	0	20.19	23.98	30	-6.02
	19957	1710.7	16QAM	1	5	20.49	24.28	30	-5.72
	19901	17 10.7	TOQAW	3	2	20.14	23.93	30	-6.07
				6	0	19.73	23.52	30	-6.48
				1	0	20.65	24.44	30	-5.56
	20175	1732.5	16QAM	1	5	20.49	24.28	30	-5.72
	20173	1732.3	TOQAW	3	2	20.80	24.59	30	-5.41
				6	0	19.85	23.64	30	-6.36
				1	0	20.42	24.21	30	-5.79
	20393	1754.3	160 4 14	1	5	20.22	24.01	30	-5.99
	20393	1704.0	16QAM	3	2	20.56	24.35	30	-5.65
				6	0	19.84	23.63	30	-6.37

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Page 32 of 250

Antenna gain (dBi) 3 79

Antenna	Antenna gain (dBi) 3.79 LTE Band 4_Uplink frequency band : 1710 to 1755 MHz												
BW	UL	Frequency		RB	RB	Conducted	EIRP	EIRP	Margin				
(MHz)	Channel	(MHz)	Modulation	Size	Offset	Average (dBm)	Average (dBm)	Limit (dBm)	(dB)				
				1	0	21.78	25.57	30	-4.43				
	10065	1711 E	QPSK	1	14	21.60	25.39	30	-4.61				
	19965	1711.5	QPSK	8	4	20.96	24.75	30	-5.25				
				15	0	20.92	24.71	30	-5.29				
				1	0	21.57	25.36	30	-4.64				
	20175	1732.5	QPSK	1	14	22.02	25.81	30	-4.19				
	201/5	1732.3	QI OIL	8	4	21.13	24.92	30	-5.08				
				15	0	21.07	24.86	30	-5.14				
			QPSK	1	0	21.59	25.38	30	-4.62				
	20385	1753.5		1	14	21.74	25.53	30	-4.47				
	20303	1755.5		8	4	20.75	24.54	30	-5.46				
3				15	0	20.73	24.52	30	-5.48				
3				1	0	20.99	24.78	30	-5.22				
	19965	1711.5	16QAM	1	14	20.43	24.22	30	-5.78				
	19900	1711.5	IOQAIVI	8	4	19.89	23.68	30	-6.32				
				15	0	19.15	22.94	30	-7.06				
				1	0	20.51	24.30	30	-5.7				
	20175	1732.5	16QAM	1	14	19.54	23.33	30	-6.67				
	20170	1702.0	TOQAW	8	4	19.88	23.67	30	-6.33				
				15	0	19.73	23.52	30	-6.48				
				1	0	20.28	24.07	30	-5.93				
	20385	1753.5	16OAM	1	14	20.44	24.23	30	-5.77				
	20000	1/53.5	16QAM —	8	4	19.81	23.60	30	-6.4				
				15	0	19.63	23.42	30	-6.58				

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Page 33 of 250

Antenna gain (dBi)

3 79

Antenna	Antenna gain (dBi) 3.79 LTE Band 4_Uplink frequency band : 1710 to 1755 MHz												
		L	IE Dano 4_U	piink t	requenc			FIDD					
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)				
				1	0	21.81	25.60	30	-4.4				
	40075	4740 5	ODOK	1	24	21.97	25.76	30	-4.24				
	19975	1712.5	QPSK	12	6	20.99	24.78	30	-5.22				
				25	0	20.94	24.73	30	-5.27				
	20175 1732.5			1	0	22.02	25.81	30	-4.19				
		1720 E	QPSK	1	24	21.09	24.88	30	-5.12				
		1732.3		12	6	21.03	24.82	30	-5.18				
				25	0	21.00	24.79	30	-5.21				
		375 1752.5	QPSK	1	0	21.67	25.46	30	-4.54				
	20275			1	24	21.92	25.71	30	-4.29				
	20373			12	6	20.76	24.55	30	-5.45				
5				25	0	20.72	24.51	30	-5.49				
3				1	0	20.15	23.94	30	-6.06				
	19975	1712.5	16QAM	1	24	20.73	24.52	30	-5.48				
	19913	17 12.5	IOQAIVI	12	6	19.10	22.89	30	-7.11				
				25	0	19.81	23.60	30	-6.4				
				1	0	20.30	24.09	30	-5.91				
	20175	1732.5	16QAM	1	24	20.91	24.70	30	-5.3				
	20173	1732.3	IOQAIVI	12	6	19.71	23.50	30	-6.5				
				25	0	18.99	22.78	30	-7.22				
				1	0	20.53	24.32	30	-5.68				
	20375	1752.5	16OAM	1	24	20.32	24.11	30	-5.89				
	20010	1/52.5	16QAM	12	6	18.84	22.63	30	-7.37				
				25	0	19.69	23.48	30	-6.52				

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Page 34 of 250

Antenna gain (dRi)

2 70

Antenna	gain (dBi)	3.79	TE D 4 '	1. 1. 4		1 1 4740	4755 8811		
		L	TE Band 4_U	plink f	requenc	y band : 1710			•
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
	20000	1715	QPSK	1	0	21.90	25.69	30	-4.31
				1	49	21.58	25.37	30	-4.63
				25	12	20.97	24.76	30	-5.24
				50	0	20.86	24.65	30	-5.35
10	20175	1732.5	QPSK	1	0	21.97	25.76	30	-4.24
				1	49	22.02	25.81	30	-4.19
				25	12	21.03	24.82	30	-5.18
				50	0	20.98	24.77	30	-5.23
	20375	1750	QPSK	1	0	21.94	25.73	30	-4.27
				1	49	22.12	25.91	30	-4.09
				25	12	20.87	24.66	30	-5.34
				50	0	20.83	24.62	30	-5.38
10	20000	1715	16QAM	1	0	20.82	24.61	30	-5.39
				1	49	20.76	24.55	30	-5.45
				25	12	19.93	23.72	30	-6.28
				50	0	19.85	23.64	30	-6.36
	20175	1732.5	16QAM	1	0	21.04	24.83	30	-5.17
				1	49	20.60	24.39	30	-5.61
				25	12	19.75	23.54	30	-6.46
				50	0	19.83	23.62	30	-6.38
	20375	1750	16QAM	1	0	20.75	24.54	30	-5.46
				1	49	20.61	24.40	30	-5.6
				25	12	19.93	23.72	30	-6.28
				50	0	19.74	23.53	30	-6.47

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Page 35 of 250

Antenna gain (dBi)

3 79

Antenna gain (dBi) 3.79 LTE Band 4_Uplink frequency band : 1710 to 1755 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)	
	20025	1717.5	QPSK	1	0	21.96	25.75	30	-4.25	
				1	74	21.93	25.72	30	-4.28	
				36	18	21.07	24.86	30	-5.14	
				75	0	21.01	24.80	30	-5.2	
	20175	1732.5	QPSK	1	0	21.97	25.76	30	-4.24	
				1	74	21.89	25.68	30	-4.32	
				36	18	21.05	24.84	30	-5.16	
				75	0	20.94	24.73	30	-5.27	
	20325	1747.5	QPSK	1	0	22.21	26.00	30	-4	
				1	74	21.97	25.76	30	-4.24	
				36	18	20.95	24.74	30	-5.26	
15				75	0	20.83	24.62	30	-5.38	
15	20025	1717.5	16QAM	1	0	20.67	24.46	30	-5.54	
				1	74	21.01	24.80	30	-5.2	
				36	18	20.03	23.82	30	-6.18	
				75	0	19.95	23.74	30	-6.26	
	20175	1732.5	16QAM	1	0	20.70	24.49	30	-5.51	
				1	74	20.89	24.68	30	-5.32	
				36	18	19.94	23.73	30	-6.27	
				75	0	19.89	23.68	30	-6.32	
	20325	1747.5	16QAM	1	0	21.13	24.92	30	-5.08	
				1	74	20.37	24.16	30	-5.84	
				36	18	19.89	23.68	30	-6.32	
				75	0	19.87	23.66	30	-6.34	

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Page 36 of 250

Antenna gain (dBi)

3 79

Antenna gain (dBi) 3.79 LTE Band 4_Uplink frequency band : 1710 to 1755 MHz										
Conducted FIRP FIRP										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Average (dBm)	Average (dBm)	Limit (dBm)	Margin (dB)	
	20050	1720	QPSK	1	0	21.75	25.54	30	-4.46	
				1	99	22.18	25.97	30	-4.03	
				50	25	21.14	24.93	30	-5.07	
				100	0	20.99	24.78	30	-5.22	
	20175	1732.5	QPSK	1	0	21.83	25.62	30	-4.38	
				1	99	22.08	25.87	30	-4.13	
				50	25	21.04	24.83	30	-5.17	
				100	0	20.95	24.74	30	-5.26	
	20300	1745	QPSK	1	0	22.33	26.12	30	-3.88	
				1	99	21.89	25.68	30	-4.32	
				50	25	21.08	24.87	30	-5.13	
20				100	0	20.99	24.78	30	-5.22	
20	20050	1720	16QAM	1	0	19.84	23.63	30	-6.37	
				1	99	20.78	24.57	30	-5.43	
				50	25	20.11	23.90	30	-6.1	
				100	0	19.83	23.62	30	-6.38	
	20175	1732.5	16QAM	1	0	21.01	24.80	30	-5.2	
				1	99	20.92	24.71	30	-5.29	
				50	25	19.99	23.78	30	-6.22	
				100	0	19.85	23.64	30	-6.36	
	20300	1745	16QAM	1	0	20.75	24.54	30	-5.46	
				1	99	20.74	24.53	30	-5.47	
				50	25	20.06	23.85	30	-6.15	
				100	0	19.92	23.71	30	-6.29	

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Page 37 of 250

Antonno goin	(4D:/	2.75
Antenna gain	(abi)	2.75

Antenna	ya (a.z.)	2.75	LTE Band	5_Uplir	nk frequency	band : 824 to	849 MHz			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.77	22.37	24.52	38.45	-13.93
	20407	824.7	QPSK	1	5	21.73	22.33	24.48	38.45	-13.97
	20407	024.7	QFSN	3	2	21.90	22.50	24.65	38.45	-13.8
				6	0	20.86	21.46	23.61	38.45	-14.84
				1	0	21.51	22.11	24.26	38.45	-14.19
	20525	836.5	QPSK	1	5	22.06	22.66	24.81	38.45	-13.64
	20020	030.3	QFSN	3	2	21.91	22.51	24.66	38.45	-13.79
				6	0	20.94	21.54	23.69	38.45	-14.76
				1	0	21.92	22.52	24.67	38.45	-13.78
	20643	040.2	848.3 QPSK	1	5	22.03	22.63	24.78	38.45	-13.67
	20043	040.3 QPSK	3	2	21.95	22.55	24.70	38.45	-13.75	
1.4				6	0	21.02	21.62	23.77	38.45	-14.68
1.4				1	0	19.94	20.54	22.69	38.45	-15.76
	20407	824.7	16QAM	1	5	20.28	20.88	23.03	38.45	-15.42
	20407	024.7	IOQAW	3	2	20.80	21.40	23.55	38.45	-14.9
				6	0	19.94	20.54	22.69	38.45	-15.76
				1	0	20.56	21.16	23.31	38.45	-15.14
	20525	836.5	16QAM	1	5	20.24	20.84	22.99	38.45	-15.46
	20020	030.3	IOQAW	3	2	20.91	21.51	23.66	38.45	-14.79
				6	0	19.86	20.46	22.61	38.45	-15.84
				1	0	20.46	21.06	23.21	38.45	-15.24
	20643	848.3 16QAM	1	5	20.57	21.17	23.32	38.45	-15.13	
	20043		16QAM	3	2	21.08	21.68	23.83	38.45	-14.62
				6	0	19.96	20.56	22.71	38.45	-15.74

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t (886-2) 2299-3279



Page 38 of 250

2.75 Antenna gain (dBi)

Antenna	ga (421)	2.75	LTE Band	5_Uplir	nk frequency	band : 824 to	849 MHz			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.83	22.43	24.58	38.45	-13.87
	20415	825.5	QPSK	1	14	21.92	22.52	24.67	38.45	-13.78
	20413	020.0	QFSN	8	4	20.97	21.57	23.72	38.45	-14.73
				15	0	20.73	21.33	23.48	38.45	-14.97
				1	0	21.79	22.39	24.54	38.45	-13.91
	20525	836.5	QPSK	1	14	21.96	22.56	24.71	38.45	-13.74
	20020	030.5	QF3N	8	4	21.04	21.64	23.79	38.45	-14.66
				15	0	20.86	21.46	23.61	38.45	-14.84
				1	0	21.14	21.74	23.89	38.45	-14.56
	20635	947.5	847.5 QPSK	1	14	22.00	22.60	24.75	38.45	-13.7
	20033	047.3		8	4	20.98	21.58	23.73	38.45	-14.72
3				15	0	20.94	21.54	23.69	38.45	-14.76
3				1	0	20.85	21.45	23.60	38.45	-14.85
	20415	825.5	16QAM	1	14	20.37	20.97	23.12	38.45	-15.33
	20413	023.3	IOQAW	8	4	19.65	20.25	22.40	38.45	-16.05
				15	0	19.70	20.30	22.45	38.45	-16
				1	0	19.52	20.12	22.27	38.45	-16.18
	20525	836.5	16QAM	1	14	20.28	20.88	23.03	38.45	-15.42
	20020	030.3	IOQAW	8	4	19.82	20.42	22.57	38.45	-15.88
				15	0	19.59	20.19	22.34	38.45	-16.11
				1	0	20.28	20.88	23.03	38.45	-15.42
	20635	847.5 16QAM	1	14	20.58	21.18	23.33	38.45	-15.12	
	20000		16QAM	8	4	19.66	20.26	22.41	38.45	-16.04
				15	0	19.74	20.34	22.49	38.45	-15.96

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t (886-2) 2299-3279



Page 39 of 250

2 75 Antenna gain (dBi)

Antenna	gairi (abi)	2.75	LTE Band	5_Uplir	nk frequency	band : 824 to	849 MHz			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.83	22.43	24.58	38.45	-13.87
	20425	826.5	QPSK	1	24	21.78	22.38	24.53	38.45	-13.92
	20423	020.3	QFOR	12	6	20.86	21.46	23.61	38.45	-14.84
				25	0	20.86	21.46	23.61	38.45	-14.84
				1	0	21.68	22.28	24.43	38.45	-14.02
	20525	836.5	QPSK	1	24	21.60	22.20	24.35	38.45	-14.1
	20020	030.3	QI OIX	12	6	20.90	21.50	23.65	38.45	-14.8
				25	0	20.84	21.44	23.59	38.45	-14.86
				1	0	21.52	22.12	24.27	38.45	-14.18
	20625	846.5	5 QPSK	1	24	21.94	22.54	24.69	38.45	-13.76
	20023	040.5		12	6	20.91	21.51	23.66	38.45	-14.79
5				25	0	20.86	21.46	23.61	38.45	-14.84
3				1	0	20.34	20.94	23.09	38.45	-15.36
	20425	826.5	16QAM	1	24	20.68	21.28	23.43	38.45	-15.02
	20423	020.0	IOQAW	12	6	19.68	20.28	22.43	38.45	-16.02
				25	0	19.68	20.28	22.43	38.45	-16.02
				1	0	20.27	20.87	23.02	38.45	-15.43
	20525	836.5	16QAM	1	24	20.70	21.30	23.45	38.45	-15
	20020	000.0	TOQAWI	12	6	19.65	20.25	22.40	38.45	-16.05
				25	0	19.79	20.39	22.54	38.45	-15.91
				1	0	20.53	21.13	23.28	38.45	-15.17
	20625	846.5	16001	1	24	20.46	21.06	23.21	38.45	-15.24
	20023	846.5 16QAM	12	6	19.64	20.24	22.39	38.45	-16.06	
				25	0	19.64	20.24	22.39	38.45	-16.06

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Page 40 of 250

Antenna	gain (dBi)	2.75		Antenna gain (dBi) 2.75 LTE Band 5_Uplink frequency band : 824 to 849 MHz										
			LTE Band	5_Uplir	nk frequency									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)				
				1	0	21.90	22.50	24.65	38.45	-13.8				
	20450	829	QPSK	1	49	21.83	22.43	24.58	38.45	-13.87				
	20430	029	QPSK	25	12	20.93	21.53	23.68	38.45	-14.77				
				50	0	20.80	21.40	23.55	38.45	-14.9				
				1	0	21.58	22.18	24.33	38.45	-14.12				
	20525	836.5	QPSK	1	49	21.75	22.35	24.50	38.45	-13.95				
	20020	030.5	QFSN	25	12	20.86	21.46	23.61	38.45	-14.84				
				50	0	20.82	21.42	23.57	38.45	-14.88				
			844 QPSK	1	0	21.73	22.33	24.48	38.45	-13.97				
	20600	844		1	49	21.87	22.47	24.62	38.45	-13.83				
	20000	044		25	12	20.90	21.50	23.65	38.45	-14.8				
10				50	0	20.79	21.39	23.54	38.45	-14.91				
10				1	0	20.80	21.40	23.55	38.45	-14.9				
	20450	829	16QAM	1	49	20.17	20.77	22.92	38.45	-15.53				
	20430	023	IOQAIVI	25	12	20.00	20.60	22.75	38.45	-15.7				
				50	0	19.84	20.44	22.59	38.45	-15.86				
				1	0	20.73	21.33	23.48	38.45	-14.97				
	20525	836.5	16QAM	1	49	20.56	21.16	23.31	38.45	-15.14				
	20020	000.0	IOQAIVI	25	12	19.98	20.58	22.73	38.45	-15.72				
				50	0	19.84	20.44	22.59	38.45	-15.86				
				1	0	20.42	21.02	23.17	38.45	-15.28				
	20600	844 16QAM -	1	49	20.59	21.19	23.34	38.45	-15.11					
	20000		IUQAIVI	25	12	19.74	20.34	22.49	38.45	-15.96				
			50	0	19.82	20.42	22.57	38.45	-15.88					

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Page 41 of 250

Antenna g	ain (dBi)	3.22							
			LTE Band 7_	Uplink	frequenc	y band : 2500 to	o 2570 MHz		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.86	25.08	33	-7.92
	20775	2502.5	QPSK	1	24	22.07	25.29	33	-7.71
	20775	2302.3	QPSK	12	6	21.27	24.49	33	-8.51
				25	0	21.19	24.41	33	-8.59
				1	0	21.95	25.17	33	-7.83
	21100	2535	QPSK	1	24	22.14	25.36	33	-7.64
	21100	2000	QF SIN	12	6	21.28	24.50	33	-8.5
				25	0	21.20	24.42	33	-8.58
				1	0	22.26	25.48	33	-7.52
	21375	2567.5	QPSK	1	24	22.32	25.54	33	-7.46
	21070	2007.0	QI OIX	12	6	21.50	24.72	33	-8.28
5				25	0	21.40	24.62	33	-8.38
				1	0	20.66	23.88	33	-9.12
	20775	2502.5	16QAM	1	24	20.46	23.68	33	-9.32
	20110	2002.0	100/10	12	6	19.93	23.15	33	-9.85
				25	0	20.22	23.44	33	-9.56
				1	0	21.00	24.22	33	-8.78
	21100	2535	16QAM	1	24	20.98	24.20	33	-8.8
	21100	2000	100/11	12	6	20.35	23.57	33	-9.43
				25	0	20.24	23.46	33	-9.54
				1	0	20.99	24.21	33	-8.79
	21375	2567.5	567.5 16QAM _	1	24	20.34	23.56	33	-9.44
	21010	2007.0		12	6	20.43	23.65	33	-9.35
				25	0	20.38	23.60	33	-9.4

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Page 42 of 250

Antenna gain (dBi)

Antenna	LTE Band 7_Uplink frequency band : 2500 to 2570 MHz										
		L	IE Band /_U	plink t	requenc	·		FIDD			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)		
				1	0	22.14	25.36	33	-7.64		
	00000	0505	ODOK	1	49	22.14	25.36	33	-7.64		
	20800	2505	QPSK	25	12	21.28	24.50	33	-8.5		
				50	0	21.11	24.33	33	-8.67		
				1	0	21.96	25.18	33	-7.82		
	21100	2535	QPSK	1	49	22.23	25.45	33	-7.55		
	21100	2000	QPSK	25	12	21.25	24.47	33	-8.53		
				50	0	21.18	24.40	33	-8.6		
			QPSK	1	0	22.31	25.53	33	-7.47		
	21350	2565 QPS		1	49	22.54	25.76	33	-7.24		
	21330		QFSN	25	12	21.50	24.72	33	-8.28		
10				50	0	21.41	24.63	33	-8.37		
10				1	0	21.05	24.27	33	-8.73		
	20800	2505	16QAM	1	49	20.97	24.19	33	-8.81		
	20000	2303	IOQAIVI	25	12	20.29	23.51	33	-9.49		
				50	0	20.11	23.33	33	-9.67		
				1	0	20.50	23.72	33	-9.28		
	21100	2535	16QAM	1	49	21.15	24.37	33	-8.63		
	21100	2000	IOQAIVI	25	12	20.32	23.54	33	-9.46		
				50	0	20.08	23.30	33	-9.7		
				1	0	20.85	24.07	33	-8.93		
	21350	21350 2565 16QAM	16 ∩ ΔM	1	49	21.20	24.42	33	-8.58		
	21000		16QAM	25	12	20.16	23.38	33	-9.62		
				50	0	20.44	23.66	33	-9.34		

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Page 43 of 250

Antenna gain (dBi)

Antenna	gain (dBi)	3.22	TE Rand 7 II	nlink f	reguese	y band : 2500	to 2570 M⊔-		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average	EIRP Limit (dBm)	Margin (dB)
				1	0	21.38	(dBm) 24.60	33	-8.4
				1	74	21.97	25.19	33	-7.81
	20825	2507.5	QPSK	36	18	21.07	24.29	33	-8.71
				75	0	20.95	24.17	33	-8.83
				1	0	21.47	24.69	33	-8.31
				1	74	22.02	25.24	33	-7.76
	21100	2535	QPSK	36	18	21.14	24.36	33	-8.64
				75	0	21.07	24.29	33	-8.71
			562.5 QPSK	1	0	21.85	25.07	33	-7.93
	04075	0500 5		1	74	22.29	25.51	33	-7.49
	21375	2562.5		36	18	21.25	24.47	33	-8.53
45				75	0	21.29	24.51	33	-8.49
15				1	0	20.47	23.69	33	-9.31
	20825	2507.5	16QAM	1	74	20.56	23.78	33	-9.22
	20023	2307.3	TOQAW	36	18	20.03	23.25	33	-9.75
				75	0	19.90	23.12	33	-9.88
				1	0	20.55	23.77	33	-9.23
	21100	2535	16QAM	1	74	20.61	23.83	33	-9.17
	21100	2000	IOQAIVI	36	18	20.09	23.31	33	-9.69
				75	0	20.13	23.35	33	-9.65
				1	0	20.97	24.19	33	-8.81
	21375	21375 2562.5 16QAN	160AM	1	74	21.41	24.63	33	-8.37
	21010		I	36	18	20.18	23.40	33	-9.6
				75	0	20.44	23.66	33	-9.34

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Page 44 of 250

Antenna gain (dBi)

Antenna	gairi (ubi)	3.22	TF Rand 7 II	nlink f	reguenc	y band : 2500	to 2570 MHz		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.53	24.75	33	-8.25
	22252	0740	0.0017	1	99	21.76	24.98	33	-8.02
	20850	2510	QPSK	50	25	20.88	24.10	33	-8.9
				100	0	20.61	23.83	33	-9.17
				1	0	21.71	24.93	33	-8.07
	04400	0505	ODOK	1	99	21.70	24.92	33	-8.08
	21100	2535	QPSK	50	25	20.89	24.11	33	-8.89
				100	0	20.76	23.98	33	-9.02
			60 QPSK	1	0	21.93	25.15	33	-7.85
	04250	2560		1	99	22.23	25.45	33	-7.55
	21350	2500	QP5K	50	25	21.02	24.24	33	-8.76
20				100	0	20.97	24.19	33	-8.81
20				1	0	19.96	23.18	33	-9.82
	20850	2510	16QAM	1	99	20.52	23.74	33	-9.26
	20000	2010	IOQAIVI	50	25	19.92	23.14	33	-9.86
				100	0	19.64	22.86	33	-10.14
				1	0	20.49	23.71	33	-9.29
	21100	2535	16QAM	1	99	20.43	23.65	33	-9.35
	21100	2000	IOQAW	50	25	20.00	23.22	33	-9.78
			_	100	0	19.89	23.11	33	-9.89
				1	0	20.31	23.53	33	-9.47
	21350	2560	16∩AM	1	99	20.77	23.99	33	-9.01
	21350 2560	16QAM	50	25	20.01	23.23	33	-9.77	
				100	0	20.00	23.22	33	-9.78

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t (886-2) 2299-3279



Page 45 of 250

7 titorina gani (abi) 2.0	Antenna gair	n (dBi)	2.38
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Antenna	ga (a.2.)	2.30	LTE Band	12_Upli	nk frequency	/ band : 699 to	716 MHz			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.82	22.05	24.20	34.77	-10.57
	23017	699.7	QPSK	1	5	21.89	22.12	24.27	34.77	-10.5
	23017	099.7	QPSK	3	2	21.96	22.19	24.34	34.77	-10.43
				6	0	20.83	21.06	23.21	34.77	-11.56
				1	0	22.39	22.62	24.77	34.77	-10
	23095	707.5	QPSK	1	5	22.11	22.34	24.49	34.77	-10.28
	23093	707.3	QFSN	3	2	22.35	22.58	24.73	34.77	-10.04
				6	0	21.24	21.47	23.62	34.77	-11.15
				1	0	21.89	22.12	24.27	34.77	-10.5
	23173	715.5	5.5 QPSK	1	5	21.96	22.19	24.34	34.77	-10.43
	23173	7 10.0		3	2	21.95	22.18	24.33	34.77	-10.44
1.4				6	0	20.92	21.15	23.30	34.77	-11.47
1.4				1	0	20.37	20.60	22.75	34.77	-12.02
	23017	699.7	16QAM	1	5	20.46	20.69	22.84	34.77	-11.93
	23017	099.7	IOQAIVI	3	2	20.67	20.90	23.05	34.77	-11.72
				6	0	19.88	20.11	22.26	34.77	-12.51
				1	0	20.67	20.90	23.05	34.77	-11.72
	23095	707.5	16QAM	1	5	19.88	20.11	22.26	34.77	-12.51
	23093	707.5	IOQAIVI	3	2	21.27	21.50	23.65	34.77	-11.12
				6	0	20.15	20.38	22.53	34.77	-12.24
				1	0	20.87	21.10	23.25	34.77	-11.52
	23173	715 5	715 5 160 0 14	1	5	19.47	19.70	21.85	34.77	-12.92
	20110	715.5 16QAM	3	2	21.03	21.26	23.41	34.77	-11.36	
				6	0	20.06	20.29	22.44	34.77	-12.33

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Page 46 of 250

Antenna gain	(4Bi	2.38
Antenna gain	(UDI) 2.30

Antenna	gair (ubi)	2.38	LTE Band	12 Upli	nk frequency	/ band : 699 to	716 MHz			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.90	22.13	24.28	34.77	-10.49
	02005	700.5	ODCK	1	14	22.06	22.29	24.44	34.77	-10.33
	23025	700.5	QPSK	8	4	21.04	21.27	23.42	34.77	-11.35
				15	0	20.99	21.22	23.37	34.77	-11.4
				1	0	21.79	22.02	24.17	34.77	-10.6
	23095 707.5	QPSK	1	14	22.27	22.50	24.65	34.77	-10.12	
		QFSN	8	4	21.32	21.55	23.70	34.77	-11.07	
				15	0	21.26	21.49	23.64	34.77	-11.13
		714.5	.5 QPSK	1	0	22.11	22.34	24.49	34.77	-10.28
	23165			1	14	22.02	22.25	24.40	34.77	-10.37
	23103	7 14.5		8	4	20.99	21.22	23.37	34.77	-11.4
3				15	0	20.93	21.16	23.31	34.77	-11.46
3				1	0	20.09	20.32	22.47	34.77	-12.3
	23025	700.5	16QAM	1	14	21.11	21.34	23.49	34.77	-11.28
	23023	700.5	IOQAIVI	8	4	20.12	20.35	22.50	34.77	-12.27
				15	0	19.79	20.02	22.17	34.77	-12.6
				1	0	20.96	21.19	23.34	34.77	-11.43
	23095	707.5	16QAM	1	14	21.46	21.69	23.84	34.77	-10.93
	23093	101.5	IOQAIVI	8	4	20.21	20.44	22.59	34.77	-12.18
				15	0	20.25	20.48	22.63	34.77	-12.14
				1	0	20.95	21.18	23.33	34.77	-11.44
	23165	714 5	16∩AM	1	14	21.00	21.23	23.38	34.77	-11.39
	20100	714.5	5 16QAM -	8	4	19.72	19.95	22.10	34.77	-12.67
				15	0	19.80	20.03	22.18	34.77	-12.59

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Page 47 of 250

Antonna gain	(dRi)	2.38
Antenna gain	(UDI)	2.30

Antenna (gair (abi)	2.38	LTE Band	12_Upli	nk frequency	band : 699 to	716 MHz			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.77	22.00	24.15	34.77	-10.62
	23035	701.5	QPSK	1	24	22.18	22.41	24.56	34.77	-10.21
	23033	701.5	QPSN	12	6	21.18	21.41	23.56	34.77	-11.21
				25	0	21.06	21.29	23.44	34.77	-11.33
				1	0	22.15	22.38	24.53	34.77	-10.24
	23095 707.5	707.5	QPSK	1	24	22.35	22.58	24.73	34.77	-10.04
		707.5	QFSN	12	6	21.38	21.61	23.76	34.77	-11.01
				25	0	21.25	21.48	23.63	34.77	-11.14
	23155	713.5	QPSK	1	0	21.89	22.12	24.27	34.77	-10.5
				1	24	20.86	21.09	23.24	34.77	-11.53
				12	6	21.11	21.34	23.49	34.77	-11.28
5				25	0	20.96	21.19	23.34	34.77	-11.43
3				1	0	20.41	20.64	22.79	34.77	-11.98
	23035	701.5	16QAM	1	24	20.89	21.12	23.27	34.77	-11.5
	23033	701.5	IOQAIVI	12	6	19.96	20.19	22.34	34.77	-12.43
				25	0	19.97	20.20	22.35	34.77	-12.42
				1	0	20.58	20.81	22.96	34.77	-11.81
	23095	707.5	16QAM	1	24	20.73	20.96	23.11	34.77	-11.66
	23033	101.5	IOQAIVI	12	6	20.20	20.43	22.58	34.77	-12.19
				25	0	20.23	20.46	22.61	34.77	-12.16
				1	0	20.89	21.12	23.27	34.77	-11.5
	23155	713 5	16∩AM	1	24	20.53	20.76	22.91	34.77	-11.86
	20100	713.5	16QAM —	12	6	20.10	20.33	22.48	34.77	-12.29
				25	0	19.94	20.17	22.32	34.77	-12.45

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Page 48 of 250

238 Antenna gain (dBi)

Antenna	gairi (abi)	2.38	LTE Band	12 Upli	nk frequency	/ band : 699 to	716 MHz			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.91	22.14	24.29	34.77	-10.48
	23060	704	QPSK	1	49	22.39	22.62	24.77	34.77	-10
	23000	704	QPSK	25	12	21.34	21.57	23.72	34.77	-11.05
				50	0	21.15	21.38	23.53	34.77	-11.24
				1	0	21.33	21.56	23.71	34.77	-11.06
	23095	707.5	QPSK	1	49	22.21	22.44	24.59	34.77	-10.18
		707.5	QFSN	25	12	21.37	21.60	23.75	34.77	-11.02
				50	0	21.28	21.51	23.66	34.77	-11.11
	23130	711	QPSK	1	0	22.44	22.67	24.82	34.77	-9.95
				1	49	22.08	22.31	24.46	34.77	-10.31
	23130			25	12	21.09	21.32	23.47	34.77	-11.3
10				50	0	21.20	21.43	23.58	34.77	-11.19
10				1	0	20.48	20.71	22.86	34.77	-11.91
	23060	704	16QAM	1	49	21.23	21.46	23.61	34.77	-11.16
	23000	704	TOQAIVI	25	12	20.16	20.39	22.54	34.77	-12.23
				50	0	20.16	20.39	22.54	34.77	-12.23
				1	0	20.70	20.93	23.08	34.77	-11.69
	23095	707.5	16QAM	1	49	19.73	19.96	22.11	34.77	-12.66
	23093	101.5	IOQAIVI	25	12	20.32	20.55	22.70	34.77	-12.07
				50	0	20.12	20.35	22.50	34.77	-12.27
				1	0	20.80	21.03	23.18	34.77	-11.59
	23130	711	16OAM	1	49	20.32	20.55	22.70	34.77	-12.07
	20100	7 11	16QAM —	25	12	19.94	20.17	22.32	34.77	-12.45
				50	0	20.06	20.29	22.44	34.77	-12.33

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Page 49 of 250

Antonno main	(4D:)	2 20
Antenna gain	(abi)	2.38

7 tintorina	gain (dBi)	2.38	LTE Band	d 13_U	plink fre	equency band	: 777 to 787 Mi	łz		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.95	22.18	24.33	34.77	-10.44
	23205	779.5	QPSK	1	24	22.03	22.26	24.41	34.77	-10.36
	23203	119.5	QFSN	12	6	20.93	21.16	23.31	34.77	-11.46
				25	0	20.85	21.08	23.23	34.77	-11.54
				1	0	21.88	22.11	24.26	34.77	-10.51
	23230	782	QPSK	1	24	21.96	22.19	24.34	34.77	-10.43
	23230	102	QFSN	12	6	20.93	21.16	23.31	34.77	-11.46
				25	0	20.83	21.06	23.21	34.77	-11.56
		3255 784.5	.5 QPSK	1	0	21.87	22.10	24.25	34.77	-10.52
	23255			1	24	22.04	22.27	24.42	34.77	-10.35
	20200			12	6	20.85	21.08	23.23	34.77	-11.54
5				25	0	20.91	21.14	23.29	34.77	-11.48
"				1	0	20.46	20.69	22.84	34.77	-11.93
	23205	779.5	16QAM	1	24	20.73	20.96	23.11	34.77	-11.66
	20200	773.5	TOQAWI	12	6	19.91	20.14	22.29	34.77	-12.48
				25	0	19.78	20.01	22.16	34.77	-12.61
				1	0	20.19	20.42	22.57	34.77	-12.2
	23230	782	16QAM	1	24	20.62	20.85	23.00	34.77	-11.77
	20200	702	IOQAW	12	6	19.68	19.91	22.06	34.77	-12.71
				25	0	19.76	19.99	22.14	34.77	-12.63
				1	0	21.06	21.29	23.44	34.77	-11.33
	23255	784.5	16∩ΔM	1	24	19.86	20.09	22.24	34.77	-12.53
	20200	7 04.5	16QAM	12	6	19.59	19.82	21.97	34.77	-12.8
				25	0	19.82	20.05	22.20	34.77	-12.57

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Page 50 of 250

Antenna gain (dBi) 2.38

7 tittorina ;	<u> </u>	2.00	LTE Band	d 13_U	plink fre	equency band	: 777 to 787 MF	Нz		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
		782		1	0	21.89	22.12	24.27	34.77	-10.5
22220	23230		32 QPSK	1	49	21.88	22.11	24.26	34.77	-10.51
	23230			25	12	20.90	21.13	23.28	34.77	-11.49
10				50	0	20.77	21.00	23.15	34.77	-11.62
10				1	0	20.40	20.63	22.78	34.77	-11.99
	23230	782	160 AM	1	49	20.32	20.55	22.70	34.77	-12.07
	23230	102	16QAM -	25	12	19.85	20.08	22.23	34.77	-12.54
				50	0	19.85	20.08	22.23	34.77	-12.54

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Page 51 of 250

Antenna gain (dBi) 363

Antenna	gain (dBi)	3.63	TE Rand 25 I	Inlink	fraguas	cy band : 1850	to 1015 MU-		
		L	E Dallu 23_C	Julik	rrequen			FIDD	
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	22.21	25.84	33	-7.16
	00055	4054.5	ODOK	1	14	22.19	25.82	33	-7.18
	26055	1851.5	QPSK	8	4	21.36	24.99	33	-8.01
				15	0	21.32	24.95	33	-8.05
				1	0	22.59	26.22	33	-6.78
	26365 1882.5	1000 5	QPSK	1	14	22.53	26.16	33	-6.84
		1002.3	QPSK	8	4	21.57	25.20	33	-7.8
				15	0	21.61	25.24	33	-7.76
		6675 1913.5	QPSK	1	0	22.51	26.14	33	-6.86
	26675			1	14	20.85	24.48	33	-8.52
	20073			8	4	21.46	25.09	33	-7.91
3				15	0	21.40	25.03	33	-7.97
3				1	0	20.92	24.55	33	-8.45
	26055	1851.5	16QAM	1	14	20.91	24.54	33	-8.46
	20033	1001.0	IOQAIVI	8	4	20.57	24.20	33	-8.8
				15	0	20.46	24.09	33	-8.91
				1	0	21.48	25.11	33	-7.89
	26365	1882.5	16QAM	1	14	21.31	24.94	33	-8.06
	20303	1002.5	IOQAIVI	8	4	20.37	24.00	33	-9
				15	0	20.57	24.20	33	-8.8
				1	0	21.23	24.86	33	-8.14
	26675	1913.5	16QAM	1	14	20.33	23.96	33	-9.04
	20013	1313.3	16QAM	8	4	20.57	24.20	33	-8.8
				15	0	20.06	23.69	33	-9.31

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Page 52 of 250

Antenna gain (dBi)

3 63

Antenna gain (dBi) 3.63 LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
		L	E Dalla 25_C	plink	rrequen			FIDD			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)		
				1	0	22.52	26.15	33	-6.85		
	26065	1852.5	QPSK	1	24	22.41	26.04	33	-6.96		
	20000	1002.0	QPSK	12	6	21.52	25.15	33	-7.85		
				25	0	21.41	25.04	33	-7.96		
				1	0	22.66	26.29	33	-6.71		
	26365 1882.5	1000 E	QPSK	1	24	22.55	26.18	33	-6.82		
		QPSN	12	6	21.72	25.35	33	-7.65			
				25	0	21.70	25.33	33	-7.67		
		1912.5	QPSK	1	0	22.51	26.14	33	-6.86		
	26665			1	24	19.62	23.25	33	-9.75		
	20000			12	6	21.58	25.21	33	-7.79		
5				25	0	21.53	25.16	33	-7.84		
3				1	0	21.45	25.08	33	-7.92		
	26065	1852.5	16QAM	1	24	21.34	24.97	33	-8.03		
	20003	1032.3	IOQAIVI	12	6	20.45	24.08	33	-8.92		
				25	0	20.58	24.21	33	-8.79		
				1	0	21.31	24.94	33	-8.06		
	26365	1882.5	16QAM	1	24	21.35	24.98	33	-8.02		
	20303	1002.5	IOQAIVI	12	6	20.53	24.16	33	-8.84		
				25	0	20.51	24.14	33	-8.86		
				1	0	21.00	24.63	33	-8.37		
	26665	1912.5	16∩AM	1	24	19.72	23.35	33	-9.65		
	20003	1312.3	16QAM	12	6	20.63	24.26	33	-8.74		
				25	0	20.53	24.16	33	-8.84		

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Page 53 of 250

Antenna gain (dBi)

3 63

Antenna gain (dBi) 3.63 LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
			E Ballu 23_C			Conducted	EIRP	EIRP			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Average (dBm)	Average (dBm)	Limit (dBm)	Margin (dB)		
				1	0	22.59	26.22	33	-6.78		
	26000	1855	QPSK	1	49	22.49	26.12	33	-6.88		
	26090	1000	QPSK	25	12	21.43	25.06	33	-7.94		
				50	0	21.39	25.02	33	-7.98		
				1	0	22.58	26.21	33	-6.79		
	26365 1882.5	1000 E	QPSK	1	49	22.73	26.36	33	-6.64		
		1002.3	QPSN	25	12	21.81	25.44	33	-7.56		
				50	0	21.38	25.01	33	-7.99		
	26640	1910	QPSK	1	0	22.46	26.09	33	-6.91		
				1	49	17.90	21.53	33	-11.47		
	20040			25	12	21.55	25.18	33	-7.82		
10				50	0	21.47	25.10	33	-7.9		
10				1	0	21.51	25.14	33	-7.86		
	26090	1855	16QAM	1	49	21.12	24.75	33	-8.25		
	20090	1000	IOQAIVI	25	12	20.36	23.99	33	-9.01		
				50	0	20.50	24.13	33	-8.87		
				1	0	21.30	24.93	33	-8.07		
	26365	1882.5	16QAM	1	49	21.37	25.00	33	-8		
	20303	1002.5	IOQAIVI	25	12	20.74	24.37	33	-8.63		
				50	0	20.55	24.18	33	-8.82		
				1	0	21.44	25.07	33	-7.93		
	26640	1910	16∩ΔM	1	49	19.57	23.20	33	-9.8		
	20040	1310	16QAM -	25	12	20.55	24.18	33	-8.82		
				50	0	20.43	24.06	33	-8.94		

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Page 54 of 250

Antenna gain (dBi) 3 63

7 tintorina y	gain (dBi)	3.03 L 1	TE Band 25_U	Jplink	frequen	cy band : 1850	to 1915 MHz		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	22.63	26.26	33	-6.74
	26115	1857.5	QPSK	1	74	22.27	25.90	33	-7.1
	20113	1037.3	QPSN	36	18	21.45	25.08	33	-7.92
				75	0	21.20	24.83	33	-8.17
				1	0	22.00	25.63	33	-7.37
	26365 1882.5	1000 5	QPSK	1	74	22.61	26.24	33	-6.76
	20303	20300 1882.0	QFSN	36	18	21.68	25.31	33	-7.69
				75	0	21.71	25.34	33	-7.66
			QPSK	1	0	21.79	25.42	33	-7.58
	26615	1907.5		1	74	20.28	23.91	33	-9.09
	20013			36	18	21.58	25.21	33	-7.79
15				75	0	21.48	25.11	33	-7.89
15				1	0	21.41	25.04	33	-7.96
	26115	1857.5	16QAM	1	74	21.48	25.11	33	-7.89
	20113	1037.3	IOQAIVI	36	18	20.34	23.97	33	-9.03
				75	0	20.12	23.75	33	-9.25
				1	0	21.44	25.07	33	-7.93
	26365	1882.5	16QAM	1	74	21.18	24.81	33	-8.19
	20303	1002.3	IOQAIVI	36	18	20.49	24.12	33	-8.88
				75	0	20.54	24.17	33	-8.83
				1	0	21.22	24.85	33	-8.15
	26615	1907 5	16 ∩ ΔM	1	74	18.56	22.19	33	-10.81
	20013	1907.5	16QAM	36	18	20.49	24.12	33	-8.88
				75	0	20.42	24.05	33	-8.95

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Page 55 of 250

Antenna gain (dBi)

3 63

, untornia	gain (dBi)	3.03 L 1	E Band 25_L	Jplink	frequen	cy band : 1850	to 1915 MHz		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	22.61	26.24	33	-6.76
	26140	1860	QPSK	1	99	21.68	25.31	33	-7.69
	20140	1000	QPSN	50	25	21.60	25.23	33	-7.77
				100	0	21.50	25.13	33	-7.87
	26365 1882.5			1	0	21.61	25.24	33	-7.76
		QPSK	1	99	22.58	26.21	33	-6.79	
		QPSN	50	25	21.71	25.34	33	-7.66	
				100	0	21.70	25.33	33	-7.67
		6590 1905	QPSK	1	0	22.42	26.05	33	-6.95
	26500			1	99	20.31	23.94	33	-9.06
	20590			50	25	21.50	25.13	33	-7.87
20				100	0	21.46	25.09	33	-7.91
20				1	0	21.03	24.66	33	-8.34
	26140	1860	16QAM	1	99	20.85	24.48	33	-8.52
	20140	1000	IOQAIVI	50	25	20.48	24.11	33	-8.89
				100	0	20.31	23.94	33	-9.06
				1	0	20.84	24.47	33	-8.53
	26365	1882.5	16QAM	1	99	20.79	24.42	33	-8.58
	20303	1002.5	IOQAW	50	25	20.72	24.35	33	-8.65
				100	0	20.55	24.18	33	-8.82
				1	0	20.39	24.02	33	-8.98
	26590	1905	16QAM	1	99	19.61	23.24	33	-9.76
	20000	1905	16QAM	50	25	20.45	24.08	33	-8.92
				100	0	20.47	24.10	33	-8.9

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26797

26915

27033

824.7

836.5

848.3

Antenna gain (dBi)

2.75

Report No.: ER/2019/C0117

Page 56 of 250

			LTE Band 2	26_Upli	nk frequency	/ band : 824 to	849 MHz			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	22.25	22.85	25.00	38.45	-13.45
	26797	824.7	QPSK	1	5	22.39	22.99	25.14	38.45	-13.31
	20191	024.7	QPSK	3	2	22.39	22.99	25.14	38.45	-13.31
				6	0	21.32	21.92	24.07	38.45	-14.38
				1	0	22.37	22.97	25.12	38.45	-13.33
	26915	836.5	QPSK	1	5	22.43	23.03	25.18	38.45	-13.27
	20913	030.3	QF3N	3	2	22.30	22.90	25.05	38.45	-13.4
				6	0	21.24	21.84	23.99	38.45	-14.46
				1	0	21.82	22.42	24.57	38.45	-13.88
	27022	040.2	ODGK	1	5	22.01	22.61	24.76	38.45	-13.69
	27033 848.3	QPSK	3	2	22.05	22.65	24.80	38.45	-13.65	
1.4				6	0	20.96	21.56	23.71	38.45	-14.74
1.4				1	0	20.91	21.51	23.66	38.45	-14.79

5

2

0

0

5

2

0

0

5

2

0

20.99

21.37

20.41

20.65

20.60

21.11

20.17

20.90

20.41

21.04

20.18

21.59

21.97

21.01

21.25

21.20

21.71

20.77

21.50

21.01

21.64

20.78

23.74

24.12

23.16

23.40

23.35

23.86

22.92

23.65

23.16

23.79

22.93

38.45

38.45

38.45

38.45

38.45

38.45

38.45

38.45

38.45

38.45

38.45

-14.71

-14.33

-15.29

-15.05

-15.1

-14.59

-15.53

-14.8

-15.29

-14.66

-15.52

1

3

6

1

1

3

6

1

1

3

6

16QAM

16QAM

16QAM

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Page 57 of 250

Antenna	gain	(dBi)	2.75
Antenna	yanı	(ubi)	2.10

Antenna	ya (a.z.)	2.75	LTE Band 2	26_Upli	nk frequency	/ band : 824 to	849 MHz			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	22.28	22.88	25.03	38.45	-13.42
	26805	825.5	QPSK	1	14	22.29	22.89	25.04	38.45	-13.41
	20000	020.0	QPSK	8	4	21.47	22.07	24.22	38.45	-14.23
				15	0	21.39	21.99	24.14	38.45	-14.31
				1	0	22.05	22.65	24.80	38.45	-13.65
	26915	836.5	QPSK	1	14	22.25	22.85	25.00	38.45	-13.45
	20915	030.3	QFSN	8	4	21.27	21.87	24.02	38.45	-14.43
	27025 847.5			15	0	21.08	21.68	23.83	38.45	-14.62
			1	0	21.77	22.37	24.52	38.45	-13.93	
		Q.1.7. 5	5 QPSK	1	14	22.00	22.60	24.75	38.45	-13.7
		047.3		8	4	21.10	21.70	23.85	38.45	-14.6
3				15	0	21.05	21.65	23.80	38.45	-14.65
3				1	0	20.73	21.33	23.48	38.45	-14.97
	26805	825.5	16QAM	1	14	21.21	21.81	23.96	38.45	-14.49
	20003	023.3	IOQAW	8	4	20.51	21.11	23.26	38.45	-15.19
				15	0	20.35	20.95	23.10	38.45	-15.35
				1	0	21.14	21.74	23.89	38.45	-14.56
	26915	836.5	16QAM	1	14	20.94	21.54	23.69	38.45	-14.76
	20313	030.3	IOQAW	8	4	19.86	20.46	22.61	38.45	-15.84
				15	0	20.30	20.90	23.05	38.45	-15.4
				1	0	20.83	21.43	23.58	38.45	-14.87
	27025 8	847.5	160AM	1	14	21.04	21.64	23.79	38.45	-14.66
		047.0	16QAM	8	4	20.15	20.75	22.90	38.45	-15.55
				15	0	20.11	20.71	22.86	38.45	-15.59

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Page 58 of 250

Antenna gain (dBi) 2.75

Antenna	gaiii (abi)	2.75	LTE Band 2	26_Upli	nk frequency	/ band : 824 to	849 MHz			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	22.42	23.02	25.17	38.45	-13.28
	26815	826.5	QPSK	1	24	22.23	22.83	24.98	38.45	-13.47
	20013	020.3	QPSN	12	6	21.40	22.00	24.15	38.45	-14.3
				25	0	21.43	22.03	24.18	38.45	-14.27
				1	0	22.16	22.76	24.91	38.45	-13.54
	26915	836.5	QPSK	1	24	22.18	22.78	24.93	38.45	-13.52
	20915	030.3	QFSN	12	6	21.12	21.72	23.87	38.45	-14.58
				25	0	21.13	21.73	23.88	38.45	-14.57
	27015 846.5		1	0	22.07	22.67	24.82	38.45	-13.63	
		016 E	5 QPSK	1	24	21.88	22.48	24.63	38.45	-13.82
		040.5		12	6	21.12	21.72	23.87	38.45	-14.58
5				25	0	21.12	21.72	23.87	38.45	-14.58
3				1	0	20.82	21.42	23.57	38.45	-14.88
	26815	826.5	16QAM	1	24	20.85	21.45	23.60	38.45	-14.85
	20013	020.5	IOQAW	12	6	20.23	20.83	22.98	38.45	-15.47
				25	0	20.38	20.98	23.13	38.45	-15.32
				1	0	20.59	21.19	23.34	38.45	-15.11
	26915	836.5	16QAM	1	24	20.48	21.08	23.23	38.45	-15.22
	20913	030.3	IOQAIVI	12	6	19.99	20.59	22.74	38.45	-15.71
				25	0	20.06	20.66	22.81	38.45	-15.64
				1	0	20.56	21.16	23.31	38.45	-15.14
	27015	846 5	16QAM	1	24	20.33	20.93	23.08	38.45	-15.37
	27015	846.5		12	6	20.09	20.69	22.84	38.45	-15.61
				25	0	19.96	20.56	22.71	38.45	-15.74

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26840

26915

26990

829

836.5

844

16QAM

16QAM

16QAM

25

50

1

1

25

50

1

25

50

Antenna gain (dBi)

2.75

Report No.: ER/2019/C0117

38.45

38.45

38.45

38.45

38.45

38.45

38.45

38.45

38.45

38.45

-15.43

-15.56

-14.81

-14.64

-15.6

-15.68

-14.72

-14.75

-15.67

-15.66

23.02

22.89

23.64

23.81

22.85

22.77

23.73

23.70

22.78

22.79

Page 59 of 250

BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	22.46	23.06	25.21	38.45	-13.24
	26840	829	QPSK	1	49	22.22	22.82	24.97	38.45	-13.48
	20040	029		25	12	21.34	21.94	24.09	38.45	-14.36
		S915 836.5 G		50	0	21.30	21.90	24.05	38.45	-14.4
			QPSK	1	0	22.27	22.87	25.02	38.45	-13.43
	26915			1	49	22.18	22.78	24.93	38.45	-13.52
	20915	030.3		25	12	21.17	21.77	23.92	38.45	-14.53
				50	0	21.13	21.73	23.88	38.45	-14.57
				1	0	22.10	22.70	24.85	38.45	-13.6
	26000	844	QPSK	1	49	22.12	22.72	24.87	38.45	-13.58
	26990 84	044	QF3N	25	12	21.15	21.75	23.90	38.45	-14.55
10		l F	50	0	21.09	21.69	23.84	38.45	-14.61	
10				1	0	21.04	21.64	23.79	38.45	-14.66
				1	49	20.98	21.58	23.73	38.45	-14.72

12

0

0

49

12

0

0

49

12

0

20.27

20.14

20.89

21.06

20.10

20.02

20.98

20.95

20.03

20.04

LTE Band 26 Uplink frequency band: 824 to 849 MHz

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20.87

20.74

21.49

21.66

20.70

20.62

21.58

21.55

20.63

20.64



Page 60 of 250

Antenna	gain (dBi)	2.75								
			LTE Band 2	26_Upli	nk frequency	/ band : 824 to	849 MHz			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	22.42	23.02	25.17	38.45	-13.28
	26865	831.5	QPSK	1	74	22.30	22.90	25.05	38.45	-13.4
	20000	031.3	QF3N	36	18	21.35	21.95	24.10	38.45	-14.35
				75	0	21.20	21.80	23.95	38.45	-14.5
				1	0	22.05	22.65	24.80	38.45	-13.65
	26915	836.5	QPSK	1	74	22.03	22.63	24.78	38.45	-13.67
	20913	030.3	Qron	36	18	21.26	21.86	24.01	38.45	-14.44
				75	0	21.15	21.75	23.90	38.45	-14.55
				1	0	22.23	22.83	24.98	38.45	-13.47
	26965	841.5	QPSK	1	74	22.15	22.75	24.90	38.45	-13.55
	20303	041.0	QI OIX	36	18	21.13	21.73	23.88	38.45	-14.57
15				75	0	21.07	21.67	23.82	38.45	-14.63
10				1	0	21.22	21.82	23.97	38.45	-14.48
	26865	831.5	16QAM	1	74	20.86	21.46	23.61	38.45	-14.84
	20000	001.0	10007 (111	36	18	20.23	20.83	22.98	38.45	-15.47
				75	0	20.14	20.74	22.89	38.45	-15.56
				1	0	20.84	21.44	23.59	38.45	-14.86
	26915	836.5	16QAM	1	74	20.79	21.39	23.54	38.45	-14.91
	20010	000.0	10007 (111	36	18	20.15	20.75	22.90	38.45	-15.55
				75	0	20.07	20.67	22.82	38.45	-15.63
				1	0	20.57	21.17	23.32	38.45	-15.13
	26965	841.5	16QAM	1	74	20.68	21.28	23.43	38.45	-15.02
	20000	011.0		36	18	20.08	20.68	22.83	38.45	-15.62
				75	0	20.11	20.71	22.86	38.45	-15.59

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Page 61 of 250

Antenna gain	(dBi)	2.75

Antenna	gain (dBi)	2.75 F	Part 90S_LTE	Band	26_Uplir	nk frequency b	and : 814 to 82	24 MHz		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.89	22.49	24.64	50	-25.36
	26697	814.7	QPSK	1	5	21.97	22.57	24.72	50	-25.28
	20091	014.7	QFSN	3	2	22.17	22.77	24.92	50	-25.08
				6	0	21.04	21.64	23.79	50	-26.21
				1	0	22.16	22.76	24.91	50	-25.09
	26740	819	QPSK	1	5	22.34	22.94	25.09	50	-24.91
	20740	019	QFSN	3	2	22.31	22.91	25.06	50	-24.94
				6	0	21.34	21.94	24.09	50	-25.91
		823.3	QPSK	1	0	21.47	22.07	24.22	50	-25.78
	26783			1	5	22.23	22.83	24.98	50	-25.02
	20703			3	2	22.34	22.94	25.09	50	-24.91
1.4				6	0	21.36	21.96	24.11	50	-25.89
1.4				1	0	20.35	20.95	23.10	50	-26.9
	26697	814.7	16QAM	1	5	20.30	20.90	23.05	50	-26.95
	20091	014.7	IOQAW	3	2	21.04	21.64	23.79	50	-26.21
				6	0	20.02	20.62	22.77	50	-27.23
				1	0	20.16	20.76	22.91	50	-27.09
	26740	819	16QAM	1	5	21.03	21.63	23.78	50	-26.22
	20740	019	IOQAW	3	2	21.03	21.63	23.78	50	-26.22
				6	0	19.96	20.56	22.71	50	-27.29
				1	0	20.33	20.93	23.08	50	-26.92
	26783	823.3	16QAM	1	5	20.88	21.48	23.63	50	-26.37
	20703	023.3	IUQAWI	3	2	21.13	21.73	23.88	50	-26.12
			<u> </u>	6	0	20.19	20.79	22.94	50	-27.06

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Page 62 of 250

2 75 Antenna gain (dBi)

Antenna	Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz												
			art 905_LTE	Band	Z6_Upiir				FIDD				
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)			
				1	0	21.99	22.59	24.74	50	-25.26			
	26705	815.5	QPSK	1	14	22.33	22.93	25.08	50	-24.92			
	20705	015.5	Uron	8	4	21.37	21.97	24.12	50	-25.88			
		<u> </u>	<u> </u>	15	0	21.38	21.98	24.13	50	-25.87			
				1	0	22.12	22.72	24.87	50	-25.13			
	26740	819	QPSK	1	14	22.40	23.00	25.15	50	-24.85			
	20140	019	U F 3N	8	4	21.44	22.04	24.19	50	-25.81			
			<u> </u>	15	0	21.41	22.01	24.16	50	-25.84			
		822.5	322.5 QPSK	1	0	22.37	22.97	25.12	50	-24.88			
	26775			1	14	22.39	22.99	25.14	50	-24.86			
	20113			8	4	21.34	21.94	24.09	50	-25.91			
3				15	0	21.27	21.87	24.02	50	-25.98			
3				1	0	20.58	21.18	23.33	50	-26.67			
	26705	815.5	16QAM	1	14	20.90	21.50	23.65	50	-26.35			
	20703	013.3	IUQAWI	8	4	20.18	20.78	22.93	50	-27.07			
		<u> </u>	<u> </u>	15	0	20.28	20.88	23.03	50	-26.97			
				1	0	20.89	21.49	23.64	50	-26.36			
	26740	819	16QAM	1	14	21.12	21.72	23.87	50	-26.13			
	201 4 0	019	IUQAW	8	4	20.19	20.79	22.94	50	-27.06			
		<u> </u>	<u> </u>	15	0	20.30	20.90	23.05	50	-26.95			
				1	0	21.28	21.88	24.03	50	-25.97			
	26775	822.5	16OAM	1	14	21.17	21.77	23.92	50	-26.08			
	20113	822.5	16QAM	8	4	20.14	20.74	22.89	50	-27.11			
				15	0	20.11	20.71	22.86	50	-27.14			

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Page 63 of 250

Antenna gain (dBi) 2.75

7 ti teorina ș	gairi (ubi)	2.75	art 90S_LTE	Band	26_Upli	nk frequency b	oand : 814 to 82	24 MHz		
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	21.78	22.38	24.53	50	-25.47
	26715	816.5	QPSK	1	24	22.11	22.71	24.86	50	-25.14
	20/15	010.5	Wron.	12	6	21.42	22.02	24.17	50	-25.83
				25	0	21.28	21.88	24.03	50	-25.97
				1	0	22.09	22.69	24.84	50	-25.16
	26740	819	QPSK	1	24	22.22	22.82	24.97	50	-25.03
	20140	019	Wron.	12	6	21.42	22.02	24.17	50	-25.83
		<u> </u>		25	0	21.36	21.96	24.11	50	-25.89
		821.5	QPSK	1	0	22.13	22.73	24.88	50	-25.12
	26765			1	24	22.39	22.99	25.14	50	-24.86
	20705			12	6	21.36	21.96	24.11	50	-25.89
5				25	0	21.31	21.91	24.06	50	-25.94
5				1	0	20.71	21.31	23.46	50	-26.54
	26715	816.5	16QAM	1	24	21.11	21.71	23.86	50	-26.14
	207 10	010.5	IOQAIVI	12	6	20.17	20.77	22.92	50	-27.08
				25	0	20.33	20.93	23.08	50	-26.92
				1	0	21.22	21.82	23.97	50	-26.03
	26740	819	16QAM	1	24	20.90	21.50	23.65	50	-26.35
	20140	019	IUQAW	12	6	20.46	21.06	23.21	50	-26.79
				25	0	20.42	21.02	23.17	50	-26.83
				1	0	20.99	21.59	23.74	50	-26.26
	26765	821.5	16OAM	1	24	20.61	21.21	23.36	50	-26.64
	20705	021.3	16QAM	12	6	20.33	20.93	23.08	50	-26.92
				25	0	20.21	20.81	22.96	50	-27.04

2.75 Antenna gain (dBi)

	Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz													
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)				
				1	0	21.86	22.46	24.61	50	-25.39				
26740	26740	819	QPSK	1	49	22.36	22.96	25.11	50	-24.89				
	20740			25	12	21.35	21.95	24.10	50	-25.9				
10				50	0	21.31	21.91	24.06	50	-25.94				
10				1	0	20.36	20.96	23.11	50	-26.89				
	26740	910	160 4 14	1	49	20.76	21.36	23.51	50	-26.49				
	20740	819	19 16QAM -	25	12	20.16	20.76	22.91	50	-27.09				
				50	0	20.17	20.77	22.92	50	-27.08				

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Page 64 of 250

Antenna gain (dRi)

Antenna	gain (dBi)	3.22			_				
		Lī	E Band 38_L	Jplink	frequen	cy band : 2570			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
				1	0	22.63	25.85	33	-7.15
	2777	0570 5	QPSK	1	24	22.52	25.74	33	-7.26
	37775	2572.5	QPSK	12	6	21.73	24.95	33	-8.05
				25	0	21.68	24.90	33	-8.1
				1	0	22.86	26.08	33	-6.92
	38000	2595	QPSK	1	24	22.84	26.06	33	-6.94
	30000	2595	QFSN	12	6	21.91	25.13	33	-7.87
				25	0	21.84	25.06	33	-7.94
		2617.5	QPSK	1	0	22.99	26.21	33	-6.79
	38225			1	24	22.94	26.16	33	-6.84
	30223			12	6	22.05	25.27	33	-7.73
5				25	0	21.99	25.21	33	-7.79
				1	0	21.22	24.44	33	-8.56
	37775	2572.5	16QAM	1	24	21.19	24.41	33	-8.59
	0/1/0	2012.0	1007 (17)	12	6	20.28	23.50	33	-9.5
				25	0	20.85	24.07	33	-8.93
				1	0	21.26	24.48	33	-8.52
	38000	2595	16QAM	1	24	21.37	24.59	33	-8.41
	00000	2000	1007 (17)	12	6	20.47	23.69	33	-9.31
				25	0	20.38	23.60	33	-9.4
				1	0	21.46	24.68	33	-8.32
	38225	2617.5	16QAM	1	24	21.25	24.47	33	-8.53
	38225	2617.5	16QAM	12	6	20.51	23.73	33	-9.27
				25	0	20.43	23.65	33	-9.35

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Page 65 of 250

Antenna gain (dBi)

Antenna gain (dBi) 3.22 LTE Band 38_Uplink frequency band : 2570 to 2620 MHz											
		L	E Band 38_l	piink	rrequen			FIDD			
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)		
				1	0	22.62	25.84	33	-7.16		
	27000	0575	QPSK	1	49	22.39	25.61	33	-7.39		
	37800	2575	QPSK	25	12	21.77	24.99	33	-8.01		
				50	0	21.61	24.83	33	-8.17		
				1	0	22.86	26.08	33	-6.92		
	38000	2595	QPSK	1	49	23.03	26.25	33	-6.75		
	30000	2595	QP5K	25	12	21.90	25.12	33	-7.88		
				50	0	21.83	25.05	33	-7.95		
	38200	2615	QPSK	1	0	22.93	26.15	33	-6.85		
				1	49	22.97	26.19	33	-6.81		
				25	12	22.08	25.30	33	-7.7		
10				50	0	21.92	25.14	33	-7.86		
10		2575	16QAM	1	0	21.32	24.54	33	-8.46		
	37800			1	49	21.11	24.33	33	-8.67		
	37000			25	12	20.73	23.95	33	-9.05		
				50	0	20.71	23.93	33	-9.07		
				1	0	21.35	24.57	33	-8.43		
	38000	2595	16QAM	1	49	21.55	24.77	33	-8.23		
	30000	2000	TOQAW	25	12	21.16	24.38	33	-8.62		
				50	0	20.75	23.97	33	-9.03		
				1	0	21.79	25.01	33	-7.99		
	38200	2615	16QAM	1	49	21.48	24.70	33	-8.3		
	00200	2010	IOQAIVI	25	12	21.26	24.48	33	-8.52		
				50	0	20.94	24.16	33	-8.84		

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Page 66 of 250

Antenna gain (dBi)

3 22

, and ma	LTE Band 38_Uplink frequency band : 2570 to 2620 MHz												
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)				
				1	0	22.65	25.87	33	-7.13				
	37825	2577.5	QPSK	1	74	22.49	25.71	33	-7.29				
	3/023	2011.0	QPSN	36	19	21.57	24.79	33	-8.21				
				75	0	21.53	24.75	33	-8.25				
				1	0	22.65	25.87	33	-7.13				
	20000	2595	QPSK	1	74	23.11	26.33	33	-6.67				
	38000	2595	QP5K	36	19	21.87	25.09	33	-7.91				
				75	0	21.90	25.12	33	-7.88				
	38175	2612.5	QPSK	1	0	22.99	26.21	33	-6.79				
				1	74	23.09	26.31	33	-6.69				
				36	19	22.12	25.34	33	-7.66				
15				75	0	21.98	25.20	33	-7.8				
15		2577.5	16QAM	1	0	21.23	24.45	33	-8.55				
	37825			1	74	21.11	24.33	33	-8.67				
	3/023			36	19	20.50	23.72	33	-9.28				
				75	0	20.60	23.82	33	-9.18				
				1	0	21.34	24.56	33	-8.44				
	38000	2595	16QAM	1	74	21.50	24.72	33	-8.28				
	30000	2555	IOQAIVI	36	19	20.77	23.99	33	-9.01				
				75	0	20.89	24.11	33	-8.89				
				1	0	21.75	24.97	33	-8.03				
	38175	2612.5	16QAM	1	74	21.56	24.78	33	-8.22				
	30175	2012.5	IVIADOI	36	19	20.94	24.16	33	-8.84				
				75	0	20.95	24.17	33	-8.83				

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Page 67 of 250

Antenna gain (dBi)

3 22

, and ma	LTE Band 38_Uplink frequency band : 2570 to 2620 MHz											
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)			
				1	0	22.45	25.67	33	-7.33			
	27050	0500	ODCK	1	99	22.59	25.81	33	-7.19			
	37850	2580	QPSK	50	25	21.61	24.83	33	-8.17			
				100	0	21.51	24.73	33	-8.27			
				1	0	22.64	25.86	33	-7.14			
	38000	2595	QPSK	1	99	22.92	26.14	33	-6.86			
	30000	2595	QP5K	50	25	21.87	25.09	33	-7.91			
				100	0	21.95	25.17	33	-7.83			
	38150	2610	QPSK	1	0	23.01	26.23	33	-6.77			
				1	99	22.94	26.16	33	-6.84			
				50	25	22.07	25.29	33	-7.71			
20				100	0	21.99	25.21	33	-7.79			
20		2580	16QAM	1	0	20.82	24.04	33	-8.96			
	37850			1	99	20.66	23.88	33	-9.12			
	37030			50	25	20.69	23.91	33	-9.09			
				100	0	20.49	23.71	33	-9.29			
				1	0	21.16	24.38	33	-8.62			
	38000	2595	16QAM	1	99	21.46	24.68	33	-8.32			
	30000	2000	IOQAIVI	50	25	20.82	24.04	33	-8.96			
				100	0	20.82	24.04	33	-8.96			
				1	0	21.61	24.83	33	-8.17			
	38150	2610	16QAM	1	99	21.38	24.60	33	-8.4			
	00100	2010	100/1111	50	25	21.05	24.27	33	-8.73			
				100	0	20.85	24.07	33	-8.93			

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Page 68 of 250

Antenna gain (dBi) 3 22

Antenna	LTE Band 41_Uplink frequency band : 2496 to 2690 MHz											
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)			
				1	0	22.45	25.67	33	-7.33			
	39675	2498.5	QPSK	1	24	22.42	25.64	33	-7.36			
	39073	2490.0	QF3N	12	6	21.52	24.74	33	-8.26			
				25	0	21.44	24.66	33	-8.34			
				1	0	22.83	26.05	33	-6.95			
	40620	2593	QPSK	1	24	22.89	26.11	33	-6.89			
	40020	2595	QP3N	12	6	21.84	25.06	33	-7.94			
				25	0	21.77	24.99	33	-8.01			
	41565	2687.5	QPSK	1	0	22.68	25.90	33	-7.1			
				1	24	22.49	25.71	33	-7.29			
				12	6	21.76	24.98	33	-8.02			
5				25	0	21.69	24.91	33	-8.09			
3		2498.5	16QAM	1	0	21.13	24.35	33	-8.65			
	39675			1	24	21.10	24.32	33	-8.68			
	39073			12	6	20.60	23.82	33	-9.18			
				25	0	20.52	23.74	33	-9.26			
				1	0	21.19	24.41	33	-8.59			
	40620	2593	16QAM	1	24	21.26	24.48	33	-8.52			
	40020	2595	IOQAW	12	6	20.26	23.48	33	-9.52			
				25	0	20.85	24.07	33	-8.93			
				1	0	20.89	24.11	33	-8.89			
	41565	2687.5	16QAM	1	24	21.26	24.48	33	-8.52			
	41000	2087.5	TOQAM	12	6	20.70	23.92	33	-9.08			
				25	0	20.86	24.08	33	-8.92			

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Page 69 of 250

Antenna gain (dBi)

3 22

7 tireorina ș	LTE Band 41_Uplink frequency band : 2496 to 2690 MHz											
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)			
				1	0	22.37	25.59	33	-7.41			
	39700	2501	QPSK	1	49	22.66	25.88	33	-7.12			
	39700	2501	QF SIX	25	12	21.64	24.86	33	-8.14			
				50	0	21.42	24.64	33	-8.36			
				1	0	22.64	25.86	33	-7.14			
	40620	2593	QPSK	1	49	22.80	26.02	33	-6.98			
	40020	2090	QF3N	25	12	21.89	25.11	33	-7.89			
				50	0	21.75	24.97	33	-8.03			
	41540	2685	QPSK	1	0	22.89	26.11	33	-6.89			
				1	49	22.76	25.98	33	-7.02			
	41040			25	12	21.87	25.09	33	-7.91			
10				50	0	21.74	24.96	33	-8.04			
10		2501	16QAM	1	0	21.06	24.28	33	-8.72			
	39700			1	49	21.35	24.57	33	-8.43			
	39700			25	12	20.71	23.93	33	-9.07			
				50	0	20.19	23.41	33	-9.59			
				1	0	21.38	24.60	33	-8.4			
	40620	2593	16QAM	1	49	21.57	24.79	33	-8.21			
	40020	2333	IOQAW	25	12	20.79	24.01	33	-8.99			
				50	0	20.77	23.99	33	-9.01			
				1	0	21.54	24.76	33	-8.24			
	41540	2685	16QAM	1	49	21.32	24.54	33	-8.46			
	41040	∠085	IUQAW	25	12	20.99	24.21	33	-8.79			
				50	0	20.78	24.00	33	-9			

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f (886-2) 2298-0488 www.tw.sgs.com



Page 70 of 250

Antenna gain (dBi) 3 22

7 tireorina ș	LTE Band 41_Uplink frequency band : 2496 to 2690 MHz											
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)			
				1	0	22.36	25.58	33	-7.42			
	39725	2503.5	QPSK	1	74	22.57	25.79	33	-7.21			
	39723	2505.5	QF3N	36	18	21.53	24.75	33	-8.25			
				75	0	21.50	24.72	33	-8.28			
				1	0	22.57	25.79	33	-7.21			
	40620	2593	QPSK	1	74	22.86	26.08	33	-6.92			
	40020	2593	QP3K	36	18	21.90	25.12	33	-7.88			
				75	0	21.74	24.96	33	-8.04			
	41515	2682.5	QPSK	1	0	23.02	26.24	33	-6.76			
				1	74	22.73	25.95	33	-7.05			
				36	18	21.87	25.09	33	-7.91			
15				75	0	21.73	24.95	33	-8.05			
15		2503.5	16QAM	1	0	20.84	24.06	33	-8.94			
	39725			1	74	21.25	24.47	33	-8.53			
	33123			36	18	20.55	23.77	33	-9.23			
				75	0	20.57	23.79	33	-9.21			
				1	0	21.32	24.54	33	-8.46			
	40620	2593	16QAM	1	74	21.43	24.65	33	-8.35			
	40020	2333	IOQAW	36	18	20.94	24.16	33	-8.84			
				75	0	20.84	24.06	33	-8.94			
				1	0	21.60	24.82	33	-8.18			
	41515	2682.5	16QAM	1	74	21.23	24.45	33	-8.55			
	71010	2002.5	IUQAW	36	18	20.86	24.08	33	-8.92			
				75	0	20.75	23.97	33	-9.03			

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Page 71 of 250

Antenna gain (dBi)

3.22

	LTE Band 41_Uplink frequency band : 2496 to 2690 MHz											
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)			
				1	0	22.20	25.42	33	-7.58			
	39750	2506	QPSK	1	99	22.66	25.88	33	-7.12			
	39730	2300	QFSN	50	25	21.70	24.92	33	-8.08			
				100	0	21.52	24.74	33	-8.26			
				1	0	22.62	25.84	33	-7.16			
	40620	2593	QPSK	1	99	22.86	26.08	33	-6.92			
	40020	2593	QP3K	50	25	21.86	25.08	33	-7.92			
				100	0	21.75	24.97	33	-8.03			
	41490	2680	QPSK	1	0	23.05	26.27	33	-6.73			
				1	99	22.71	25.93	33	-7.07			
	41430			50	25	21.91	25.13	33	-7.87			
20				100	0	21.82	25.04	33	-7.96			
20		2506	16QAM	1	0	20.97	24.19	33	-8.81			
	39750			1	99	21.20	24.42	33	-8.58			
	39730			50	25	20.58	23.80	33	-9.2			
				100	0	20.59	23.81	33	-9.19			
				1	0	21.19	24.41	33	-8.59			
	40620	2593	16QAM	1	99	21.32	24.54	33	-8.46			
	40020	2333	IOQAW	50	25	20.96	24.18	33	-8.82			
				100	0	20.74	23.96	33	-9.04			
				1	0	21.41	24.63	33	-8.37			
	41490	2680	16QAM	1	99	20.99	24.21	33	-8.79			
	41430	2080	IOQAM	50	25	21.04	24.26	33	-8.74			
				100	0	20.84	24.06	33	-8.94			

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Page 72 of 250

FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

7.1 Standard Applicable

According to FCC §2.1053, FCC §22.917(a), §24.238(a), §27.53(h)

RSS-130 §4.7, RSS-132 §5.5, RSS-139 §6.5, RSS-130 §6.6,

Out of band emissions. 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)

FCC §27.53(c) for LTE B13

For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

- (2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB (-13dBm)
- (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

FCC §27.53 (f) for LTE B13

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC §27.53(c) (5) & FCC §27.53(g) for LTE B12, 13, 71, 85

Compliance for operations in the 600 MHz, 698-746 MHz, 746-758 MHz and the 776-788 MHz band with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

RSS-130 §4.7.1 for LTE B12, 13, 71, 85

Compliance for operations in the 617-652 MHz, 663-698 MHz, 698-756 MHz and the 777-787 MHz band, the unwanted emissions in any 100 kHz bandwidth on any frequency outside the low frequency edge and the high frequency edge of each frequency block range(s), shall be attenuated below the transmitter power, P (dBW), by at least 43 + 10 log10 p (watts), dB. However, in the 100 kHz band immediately outside of the equipment's frequency block range, a resolution bandwidth of 30 kHz may be employed.

RSS-130 §4.7.2 for LTE B13

In addition to the limit outlined in section 4.7.1 above, equipment operating in the frequency bands 746-756 MHz and 777-787 MHz shall also comply with the following restrictions: the power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least:

76 + 10 log10 p (watts), dB, for base and fixed equipment and 65 + 10 log10 p (watts), dB, for mobile and portable equipment

the e.i.r.p. in the band 1559-1610 MHz shall not exceed -70 dBW/MHz for wideband signal and -80 dBW for discrete emission with bandwidth less than 700 Hz.

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Page 73 of 250

FCC §27.53(h)(3) for LTE B4, 10, 23, 66, 70

Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency, and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

RSS-139 §6.6 for LTE B4, 10, 66

In the first 1.0 MHz bands immediately outside and adjacent to the equipment's smallest operating frequency block, Footnote 2 which can contain the equipment's occupied bandwidth, the emission power per any 1% of the emission bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least 43 + 10 log10 p (watts) dB.

After the first 1.0 MHz outside the equipment's smallest operating frequency block, which can contain the equipment's occupied bandwidth, the emission power in any 1 MHz bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least 43 + 10 log10 p (watts) dB.

RSS-199 §4.5 for LTE B4, 10, 66

In the 1 MHz band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment, and 2% for mobile subscriber equipment. Beyond the 1 MHz band, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% or 2% of the occupied bandwidth, as applicable.

Equipment shall comply with the following unwanted emission limits:

for base station and fixed subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least 43 + 10 log10 p for mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least:

- 40 + 10 log10 p from the channel edges to 5 MHz away
- 43 + 10 log10 p between 5 MHz and X MHz from the channel edges, and
- 55 + 10 log10 p at X MHz and beyond from the channel edges

In addition, the attenuation shall not be less than 43 + 10 log10 p on all frequencies between 2490.5 MHz and 2496 MHz, and 55 + 10 log10 p at or below 2490.5 MHz.

In (a) and (b), p is the transmitter power measured in watts and X is 6 MHz or the equipment occupied bandwidth, whichever is greater.

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Page 74 of 250

Table 2 — Unwanted Emissions for Mobile, Portable and Low-Power Fixed Subscriber **Equipment**

Frequency (MHz)	Attenuation (dB)
<2200	$43 + 10 \log_{10}(p)$
2200 - 2288	$70 + 10 \log_{10}(p)$
2288 - 2292	$67 + 10 \log_{10}(p)$
2292 - 2296	$61 + 10 \log_{10}(p)$
2296 - 2300	$55 + 10 \log_{10}(p)$
2300 - 2305	$43 + 10 \log_{10}(p)$
2305 - 2320	$43 + 10 \log_{10}(p)^{\text{Note}}$
2320 - 2324	$55 + 10 \log_{10}(p)$
2324 - 2328	$61 + 10 \log_{10}(p)$
2328 - 2337	$67 + 10 \log_{10}(p)$
2337 - 2341	$61 + 10 \log_{10}(p)$
2341 - 2345	$55 + 10 \log_{10}(p)$
2345 - 2360	$43 + 10 \log_{10}(p)^{\text{Note}}$
2360 - 2365	$43 + 10 \log_{10}(p)$
2365 - 2395	$70 + 10 \log_{10}(p)$
>2395	$43 + 10 \log_{10}(p)$

Note: Measured at the edges of the highest and lowest frequency range(s) in which the equipment is designed to operate. See Section 1.2 for the permitted frequency ranges for various equipment types.

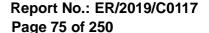
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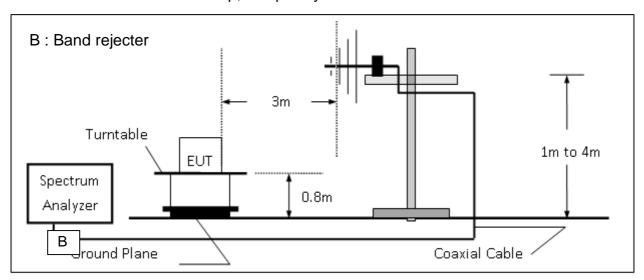
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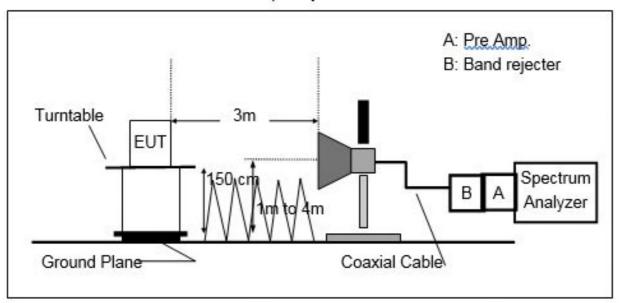


7.2 **EUT Setup**

Radiated Emission Test Set-Up, Frequency Below 1000MHz



Radiated Emission Test Set-UP Frequency Over 1 GHz



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Page 76 of 250

Measurement Procedure: 7.3

The EUT was placed on a non-conductive; the measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The frequency range up to tenth harmonic was investigated for each of three fundamental frequencies (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method.

The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.

ERP (dBm) = SG Level(dBm) + Antenna Gain(dBd) + Cable Loss(dB)

EIRP (dBm) = SG Level(dBm) + Antenna Gain(dBi) + Cable Loss(dB)

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Page 77 of 250

7.4 **Measurement Equipment Used:**

EDD FIDD MEASUREMENT FOURDMENT List 066 Chamber								
E	ERP, EIRP MEASUREMENT EQUIPMENT List 966 Chamber							
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.			
Bi-log Antenna	SCHWAZBECK	VULB9168	378	01/03/2020	01/02/2021			
Horn Antenna	Schwarzbeck	BBHA9120D	1441	08/20/2019	08/19/2020			
Horn Antenna	Schwarzbeck	BBHA9170	184	12/25/2019	12/24/2020			
Horn Antenna	Schwarzbeck	BBHA9170	185	08/07/2019	08/06/2020			
Horn Antenna	Schwarzbeck	BBHA9120D	D803	12/20/2019	12/19/2020			
Bi-log Antenna	TESEO	CBL 6112D	35242 & AT-N0555	01/13/2020	01/12/2021			
Spectrum Analyzer	Agilent	E4446A	MY51100003	10/23/2019	10/22/2020			
Radio Communi- cation Analyer	Anritsu	MT8820C	6200995019	04/01/2019	03/31/2020			
Radio Communi- cation Analyer	Anritsu	MT8815B	6200711454	04/01/2019	03/31/2020			
Pre-Amplifier	EMC Instru- ments	EMC184045B	980135	01/02/2020	01/01/2021			
Pre-Amplifier	EMC Instru- ments	EMC051825	980152	01/02/2020	01/01/2021			
Pre-Amplifier	HP	8447D	2944A09469	01/02/2020	01/01/2021			
Filter 800-1000	Micro-Tronics	EWT	M1	01/02/2020	01/01/2021			
Filter 1700-2000	Micro-Tronics	EWT	M3	01/02/2020	01/01/2021			
Filter 2240-2700	Micro-Tronics	WI	2	01/02/2020	01/01/2021			
1GHz High Pass Filter	Micro-Tronics	HPM50108	32	01/02/2020	01/01/2021			
2GHz High Pass Filter	Micro-Tronics	HPM50110	36	01/02/2020	01/01/2021			
High Pass Filter	WI	WHKX7.0/18G-8 SS	45	01/02/2020	01/01/2021			
High Pass Filter	WI	WHKX4.0/18G-10 SS	22	01/02/2020	01/01/2021			
Coaxial Cable	Huber Suhner	succoflex 102	MY2622/2	01/02/2020	01/01/2021			
Coaxial Cable	Huber Suhner	succoflex 104A	800086/4a	01/02/2020	01/01/2021			
Coaxial Cable	Huber Suhner	EMC 104-SM-SM-2000	160123	01/02/2020	01/01/2021			
Coaxial Cable	Huber Suhner	succoflex 104	808760/4	01/02/2020	01/01/2021			

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Page 78 of 250

ERP, EIRP MEASUREMENT EQUIPMENT List 966 Chamber								
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.			
Bi-log Antenna	SCHWAZBECK	VULB9168	378	01/03/2020	01/02/2021			
Bi-log Antenna	SCHWAZBECK	VULB9168	443	01/13/2020	01/12/2021			
Horn Antenna	Schwarzbeck	BBHA9120D	603	04/24/2019	04/23/2020			
Horn Antenna	Schwarzbeck	BBHA9120D	1441	08/20/2019	08/19/2020			
Horn Antenna	Schwarzbeck	BBHA9170	184	12/25/2019	12/24/2020			
Horn Antenna	Schwarzbeck	BBHA9170	185	08/07/2019	08/06/2020			
PXA Spectrum An- alyzer	Agilent	N9030A	MY53120760	04/22/2019	04/21/2020			
Pre-Amplifier	HP	8449B	3008A00578	01/02/2020	01/01/2021			
Pre-Amplifier	HP	8447D	2944A07676	01/02/2020	01/01/2021			
Pre-Amplifier	EMC Instru- ments	EMC184045B	980135	01/02/2020	01/01/2021			
Filter 800-1000	Micro-Tronics	EWT	M1	01/02/2020	01/01/2021			
Filter 1700-2000	Micro-Tronics	EWT	M3	01/02/2020	01/01/2021			
1GHz High Pass Filter	Micro-Tronics	HPM50108	32	01/02/2020	01/01/2021			
2GHz High Pass Filter	Micro-Tronics	HPM50110	36	01/02/2020	01/01/2021			
Low Loss Cable	Huber Suhner	966_RX	9	01/02/2020	01/01/2021			
Low Loss Cable	Huber Suhner	966 TX	1	01/02/2020	01/01/2021			
3m Site NSA	SGS	966 chamber	N/A	01/02/2020	01/01/2021			

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Page 79 of 250

7.5 **Measurement Result:**

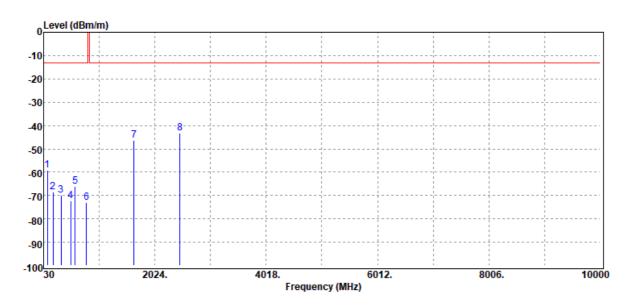
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :GSM 850 Temp./Humi. :18.5/55

Test Mode :Tx CH Low :VERTICAL Antenna Pol.

EUT Pol :E2 Plane Engineer :Thomas

Test Channel :824.2 MHz



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-59.17	-52.53	-5.69	-0.95	-13.00	-46.17
197.81	-68.58	-64.86	-2.34	-1.38	-13.00	-55.58
343.31	-70.00	-66.52	-1.59	-1.89	-13.00	-57.00
516.94	-72.31	-68.28	-1.45	-2.58	-13.00	-59.31
594.54	-65.99	-62.14	-1.75	-2.10	-13.00	-52.99
799.21	-72.94	-68.21	-1.59	-3.14	-13.00	-59.94
1648.40	-46.40	-51.69	9.30	-4.01	-13.00	-33.40
2472.60	-43.33	-48.81	10.39	-4.91	-13.00	-30.33

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Page 80 of 250

Report Number :ER/2019/C0117

Operation Mode :GSM 850

Test Mode :Tx CH Low

EUT Pol :E2 Plane

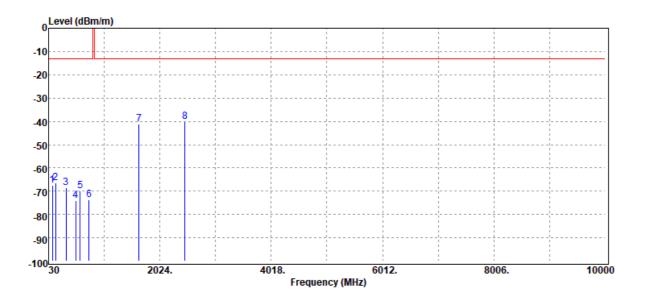
Test Channel :824.2 MHz



Temp./Humi. :18.5/55

Antenna Pol. :HORIZONTAL

Engineer :Thomas



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-67.59	-60.95	-5.69	-0.95	-13.00	-54.59
156.10	-66.60	-58.03	-7.26	-1.31	-13.00	-53.60
343.31	-68.57	-65.09	-1.59	-1.89	-13.00	-55.57
516.94	-74.01	-69.98	-1.45	-2.58	-13.00	-61.01
594.54	-69.92	-66.07	-1.75	-2.10	-13.00	-56.92
757.50	-73.75	-69.35	-1.80	-2.60	-13.00	-60.75
1648.40	-41.04	-46.33	9.30	-4.01	-13.00	-28.04
2472.60	-40.28	-45.76	10.39	-4.91	-13.00	-27.28



Page 81 of 250

Report Number :ER/2019/C0117

Operation Mode :GSM 850

Test Mode :Tx CH Mid

EUT Pol :E2 Plane

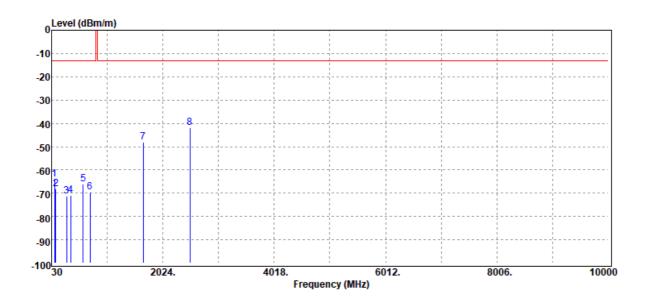
Test Channel :836.6 MHz



Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
86.26	-64.16	-56.50	-6.77	-0.89	-13.00	-51.16
103.72	-68.10	-60.54	-6.57	-0.99	-13.00	-55.10
299.66	-71.44	-68.05	-1.70	-1.69	-13.00	-58.44
372.41	-70.95	-67.42	-1.62	-1.91	-13.00	-57.95
594.54	-66.13	-62.28	-1.75	-2.10	-13.00	-53.13
721.61	-69.59	-65.83	-1.37	-2.39	-13.00	-56.59
1673.20	-47.93	-53.39	9.49	-4.03	-13.00	-34.93
2509.80	-42.02	-47.62	10.54	-4.94	-13.00	-29.02



Page 82 of 250

Report Number :ER/2019/C0117

Operation Mode :GSM 850

Test Mode :Tx CH Mid

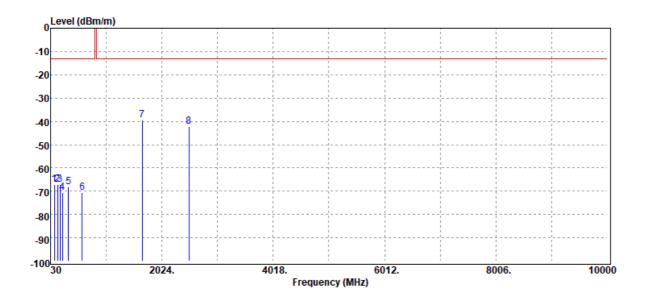
EUT Pol :E2 Plane

Test Channel :836.6 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :HORIZONTAL

Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
N 41 1-	dD.m	Output Level	Gain	Loss	dD.m	٩D
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-67.20	-60.56	-5.69	-0.95	-13.00	-54.20
156.10	-67.18	-58.61	-7.26	-1.31	-13.00	-54.18
197.81	-67.29	-63.57	-2.34	-1.38	-13.00	-54.29
240.49	-70.75	-67.59	-1.73	-1.43	-13.00	-57.75
350.10	-68.18	-64.82	-1.46	-1.90	-13.00	-55.18
594.54	-70.64	-66.79	-1.75	-2.10	-13.00	-57.64
1673.20	-39.35	-44.81	9.49	-4.03	-13.00	-26.35
2509.80	-42.06	-47.66	10.54	-4.94	-13.00	-29.06

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Page 83 of 250

:2020-01-31

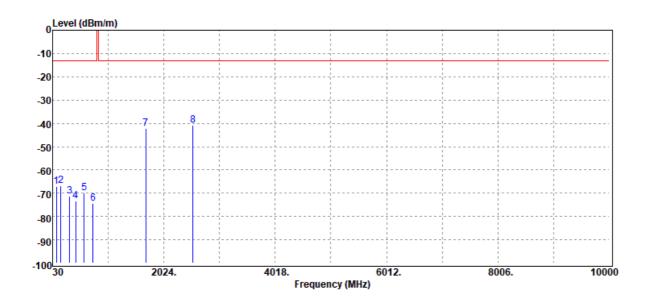
Report Number :ER/2019/C0117 **Test Date**

Operation Mode :GSM 850 Temp./Humi. :18.5/55

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas

Test Channel :848.8 MHz



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-67.12	-60.48	-5.69	-0.95	-13.00	-54.12
180.35	-66.78	-61.38	-4.15	-1.25	-13.00	-53.78
333.61	-71.18	-67.59	-1.68	-1.91	-13.00	-58.18
445.16	-73.38	-69.79	-1.67	-1.92	-13.00	-60.38
594.54	-70.07	-66.22	-1.75	-2.10	-13.00	-57.07
757.50	-74.27	-69.87	-1.80	-2.60	-13.00	-61.27
1697.60	-42.24	-47.87	9.68	-4.05	-13.00	-29.24
2546.40	-40.93	-46.64	10.69	-4.98	-13.00	-27.93



Test Channel

Report No.: ER/2019/C0117

Page 84 of 250

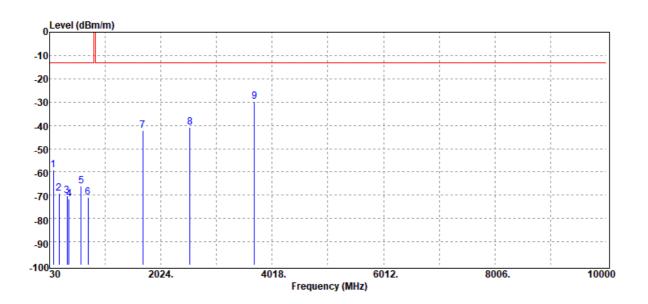
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

:848.8 MHz

Operation Mode :GSM 850 Temp./Humi. :18.5/55

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
95.96	-59.08	-52.44	-5.69	-0.95	-13.00	-46.08
197.81	-69.29	-65.57	-2.34	-1.38	-13.00	-56.29
343.31	-70.21	-66.73	-1.59	-1.89	-13.00	-57.21
379.20	-71.66	-68.10	-1.64	-1.92	-13.00	-58.66
594.54	-65.96	-62.11	-1.75	-2.10	-13.00	-52.96
721.61	-71.05	-67.29	-1.37	-2.39	-13.00	-58.05
1697.60	-42.24	-47.87	9.68	-4.05	-13.00	-29.24
2546.40	-40.93	-46.64	10.69	-4.98	-13.00	-27.93
3700.40	-29.88	-36.35	12.40	-5.93	-13.00	-16.88

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Page 85 of 250

Report Number :ER/2019/C0117

Operation Mode :GSM 1900

Test Mode :Tx CH Low

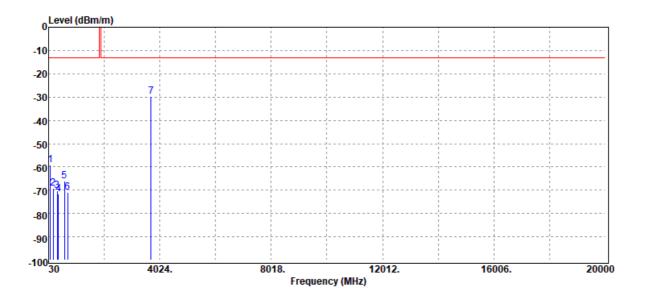
EUT Pol :E2 Plane

Test Channel :1850.2 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
95.96	-59.08	-52.44	-5.69	-0.95	-13.00	-46.08
197.81	-69.29	-65.57	-2.34	-1.38	-13.00	-56.29
343.31	-70.21	-66.73	-1.59	-1.89	-13.00	-57.21
379.20	-71.66	-68.10	-1.64	-1.92	-13.00	-58.66
594.54	-65.96	-62.11	-1.75	-2.10	-13.00	-52.96
721.61	-71.05	-67.29	-1.37	-2.39	-13.00	-58.05
3700.40	-29.88	-36.35	12.40	-5.93	-13.00	-16.88



Page 86 of 250

Report Number :ER/2019/C0117

Operation Mode :GSM 1900

Test Mode :Tx CH Low

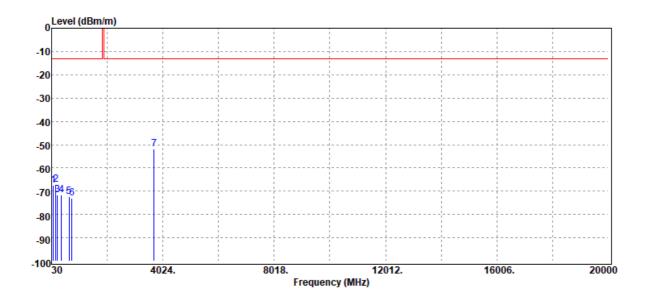
EUT Pol :E2 Plane

Test Channel :1850.2 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :HORIZONTAL

Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-67.37	-60.73	-5.69	-0.95	-13.00	-54.37
180.35	-67.10	-61.70	-4.15	-1.25	-13.00	-54.10
240.49	-71.48	-68.32	-1.73	-1.43	-13.00	-58.48
385.99	-71.73	-68.14	-1.63	-1.96	-13.00	-58.73
662.44	-72.17	-67.65	-1.37	-3.15	-13.00	-59.17
757.50	-72.90	-68.50	-1.80	-2.60	-13.00	-59.90
3700.40	-51.78	-58.25	12.40	-5.93	-13.00	-38.78



Page 87 of 250

Report Number :ER/2019/C0117

Operation Mode :GSM 1900

Test Mode :Tx CH Mid

EUT Pol :E2 Plane

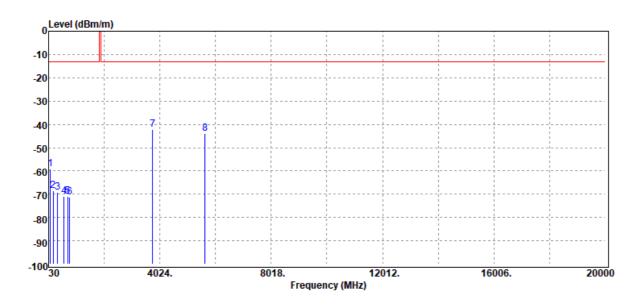
Test Channel :1880 MHz



Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
95.96	-59.26	-52.62	-5.69	-0.95	-13.00	-46.26
197.81	-68.65	-64.93	-2.34	-1.38	-13.00	-55.65
350.10	-69.25	-65.89	-1.46	-1.90	-13.00	-56.25
589.69	-71.07	-67.42	-1.71	-1.94	-13.00	-58.07
721.61	-70.86	-67.10	-1.37	-2.39	-13.00	-57.86
781.75	-71.20	-66.79	-1.68	-2.73	-13.00	-58.20
3760.00	-42.38	-48.66	12.30	-6.02	-13.00	-29.38
5640.00	-43.87	-49.65	13.26	-7.48	-13.00	-30.87

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Page 88 of 250

Report Number :ER/2019/C0117

Operation Mode :GSM 1900

Test Mode :Tx CH Mid

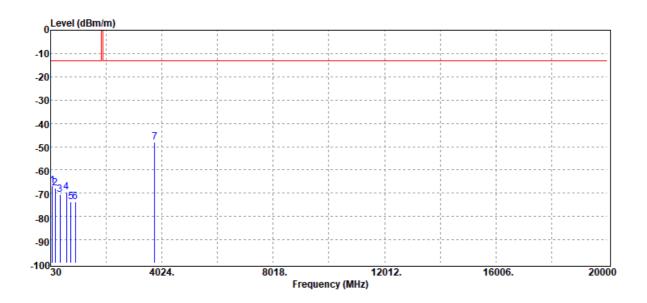
EUT Pol :E2 Plane

Test Channel :1880 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :HORIZONTAL

Engineer :Thomas



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	dBm	dBi/dBd	dB	dBm	dB
-66.61	-59.97	-5.69	-0.95	-13.00	-53.61
-67.87	-64.15	-2.34	-1.38	-13.00	-54.87
-70.44	-66.95	-1.58	-1.91	-13.00	-57.44
-69.44	-65.59	-1.75	-2.10	-13.00	-56.44
-73.65	-69.25	-1.80	-2.60	-13.00	-60.65
-73.78	-69.05	-1.89	-2.84	-13.00	-60.78
-48.15	-54.43	12.30	-6.02	-13.00	-35.15
	-66.61 -67.87 -70.44 -69.44 -73.65 -73.78	Output Level dBm -66.61 -59.97 -67.87 -64.15 -70.44 -66.95 -69.44 -65.59 -73.65 -69.25 -73.78 -69.05	Output Level Gain dBm dBi/dBd -66.61 -59.97 -5.69 -67.87 -64.15 -2.34 -70.44 -66.95 -1.58 -69.44 -65.59 -1.75 -73.65 -69.25 -1.80 -73.78 -69.05 -1.89	dBm Output Level dBm Gain dBi/dBd Loss dB -66.61 -59.97 -5.69 -0.95 -67.87 -64.15 -2.34 -1.38 -70.44 -66.95 -1.58 -1.91 -69.44 -65.59 -1.75 -2.10 -73.65 -69.25 -1.80 -2.60 -73.78 -69.05 -1.89 -2.84	dBm Output Level dBm Gain dBi/dBd Loss dB dBm -66.61 -59.97 -5.69 -0.95 -13.00 -67.87 -64.15 -2.34 -1.38 -13.00 -70.44 -66.95 -1.58 -1.91 -13.00 -69.44 -65.59 -1.75 -2.10 -13.00 -73.65 -69.25 -1.80 -2.60 -13.00 -73.78 -69.05 -1.89 -2.84 -13.00



Page 89 of 250

Report Number :ER/2019/C0117

Operation Mode :GSM 1900

Test Mode :Tx CH High

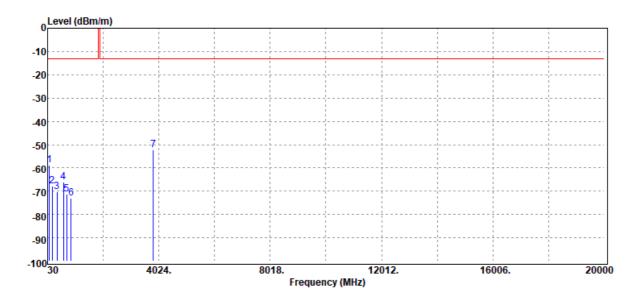
EUT Pol :E2 Plane

Test Channel :1909.8 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.96	-52.32	-5.69	-0.95	-13.00	-45.96
197.81	-67.83	-64.11	-2.34	-1.38	-13.00	-54.83
372.41	-70.09	-66.56	-1.62	-1.91	-13.00	-57.09
594.54	-66.21	-62.36	-1.75	-2.10	-13.00	-53.21
721.61	-71.14	-67.38	-1.37	-2.39	-13.00	-58.14
871.96	-72.86	-68.68	-1.67	-2.51	-13.00	-59.86
3819.60	-52.27	-58.42	12.26	-6.11	-13.00	-39.27



Page 90 of 250

:2020-01-31

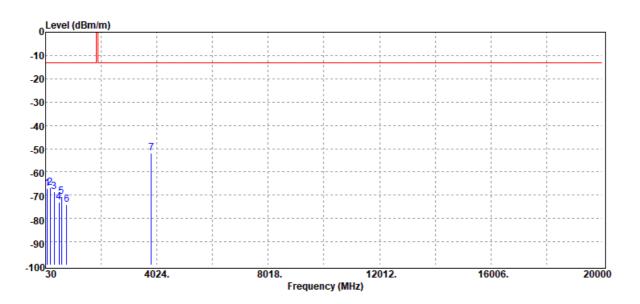
Report Number :ER/2019/C0117 **Test Date**

Operation Mode :GSM 1900 Temp./Humi. :18.5/55

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

EUT Pol Engineer :Thomas :E2 Plane

Test Channel :1909.8 MHz



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-67.16	-60.52	-5.69	-0.95	-13.00	-54.16
197.81	-66.81	-63.09	-2.34	-1.38	-13.00	-53.81
337.49	-68.50	-64.98	-1.63	-1.89	-13.00	-55.50
516.94	-72.86	-68.83	-1.45	-2.58	-13.00	-59.86
594.54	-70.44	-66.59	-1.75	-2.10	-13.00	-57.44
794.36	-74.07	-69.37	-1.64	-3.06	-13.00	-61.07
3819.60	-51.86	-58.01	12.26	-6.11	-13.00	-38.86

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Page 91 of 250

Report Number :ER/2019/C0117

Operation Mode :WCDMA B2

Test Mode :Tx CH Low

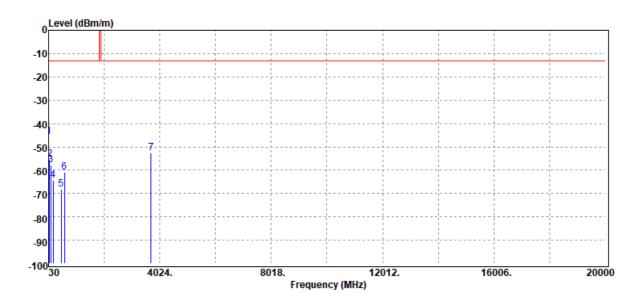
EUT Pol :E2 Plane

Test Channel :1852.4 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

Engineer :Kane



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
8.41.1	ID.	Output Level	Gain	Loss	ID.	ID.
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.54	-29.93	-14.62	-0.99	-13.00	-32.54
71.71	-55.33	-47.47	-6.72	-1.14	-13.00	-42.33
105.66	-57.69	-54.86	-1.57	-1.26	-13.00	-44.69
197.81	-64.41	-65.52	2.79	-1.68	-13.00	-51.41
479.11	-68.18	-69.67	3.81	-2.32	-13.00	-55.18
594.54	-60.74	-61.15	3.26	-2.85	-13.00	-47.74
3704.80	-52.77	-58.09	12.59	-7.27	-13.00	-39.77

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Page 92 of 250

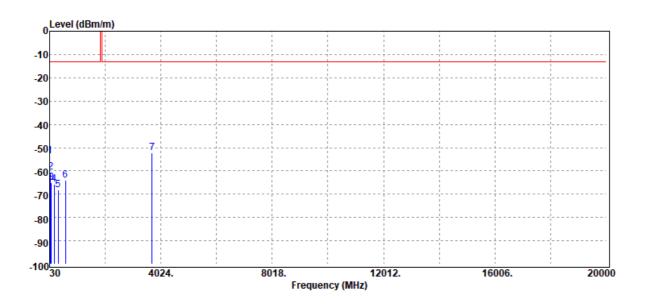
Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :WCDMA B2 Temp./Humi. :23.7/56

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane :Kane Engineer Test Channel

:1852.4 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		J
MHz	dBm	['] dBm	dBi/dBd	dB	dBm	dB
36.79	-53.63	-38.02	-14.62	-0.99	-13.00	-40.63
71.71	-60.67	-52.81	-6.72	-1.14	-13.00	-47.67
95.96	-65.04	-62.83	-0.98	-1.23	-13.00	-52.04
197.81	-65.60	-66.71	2.79	-1.68	-13.00	-52.60
342.34	-68.22	-69.88	3.71	-2.05	-13.00	-55.22
594.54	-64.15	-64.56	3.26	-2.85	-13.00	-51.15
3704.80	-52.22	-57.54	12.59	-7.27	-13.00	-39.22



Page 93 of 250

Report Number :ER/2019/C0117

Operation Mode :WCDMA B2

Test Mode :Tx CH Mid

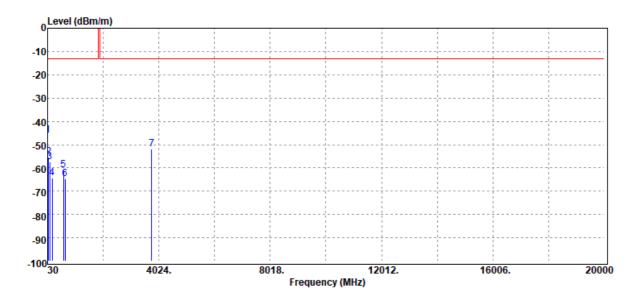
EUT Pol :E2 Plane

Test Channel :1880 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

:Kane Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.89	-30.28	-14.62	-0.99	-13.00	-32.89
71.71	-55.25	-47.39	-6.72	-1.14	-13.00	-42.25
105.66	-57.59	-54.76	-1.57	-1.26	-13.00	-44.59
197.81	-64.38	-65.49	2.79	-1.68	-13.00	-51.38
594.54	-60.89	-61.30	3.26	-2.85	-13.00	-47.89
652.74	-64.66	-65.64	3.74	-2.76	-13.00	-51.66
3760.00	-51.78	-56.99	12.61	-7.40	-13.00	-38.78



Test Channel

Report No.: ER/2019/C0117

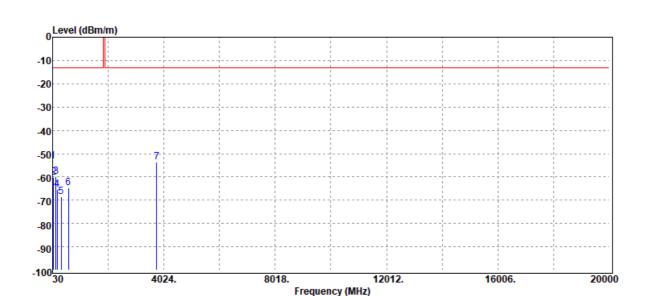
Page 94 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :WCDMA B2 Temp./Humi. :23.7/56 Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane :Kane Engineer

:1880 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		· ·
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-53.32	-37.71	-14.62	-0.99	-13.00	-40.32
71.71	-60.16	-52.30	-6.72	-1.14	-13.00	-47.16
146.40	-59.99	-56.26	-2.25	-1.48	-13.00	-46.99
197.81	-65.43	-66.54	2.79	-1.68	-13.00	-52.43
342.34	-68.39	-70.05	3.71	-2.05	-13.00	-55.39
594.54	-64.77	-65.18	3.26	-2.85	-13.00	-51.77
3760.00	-53.54	-58.75	12.61	-7.40	-13.00	-40.54



Page 95 of 250

Report Number :ER/2019/C0117

Operation Mode :WCDMA B2

Test Mode :Tx CH High

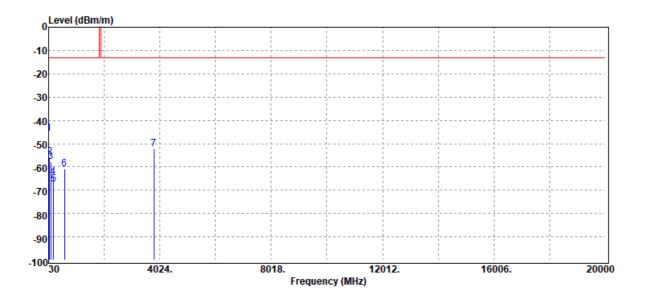
EUT Pol :E2 Plane

Test Channel :1907.6 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

:Kane Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.81	-30.20	-14.62	-0.99	-13.00	-32.81
71.71	-55.57	-47.71	-6.72	-1.14	-13.00	-42.57
105.66	-57.94	-55.11	-1.57	-1.26	-13.00	-44.94
197.81	-64.28	-65.39	2.79	-1.68	-13.00	-51.28
217.21	-67.52	-69.18	3.37	-1.71	-13.00	-54.52
594.54	-61.03	-61.44	3.26	-2.85	-13.00	-48.03
3815.20	-52.22	-57.45	12.63	-7.40	-13.00	-39.22



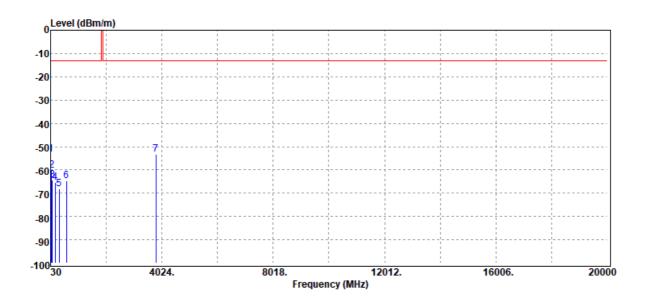
Page 96 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :WCDMA B2 Temp./Humi. :23.7/56

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane :Kane Engineer Test Channel :1907.6 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-53.23	-37.62	-14.62	-0.99	-13.00	-40.23
71.71	-60.23	-52.37	-6.72	-1.14	-13.00	-47.23
95.96	-64.29	-62.08	-0.98	-1.23	-13.00	-51.29
197.81	-65.48	-66.59	2.79	-1.68	-13.00	-52.48
342.34	-68.25	-69.91	3.71	-2.05	-13.00	-55.25
594.54	-64.65	-65.06	3.26	-2.85	-13.00	-51.65
3815.20	-53.29	-58.52	12.63	-7.40	-13.00	-40.29



Page 97 of 250

Report Number :ER/2019/C0117

Operation Mode :WCDMA B4

Test Mode :Tx CH Low

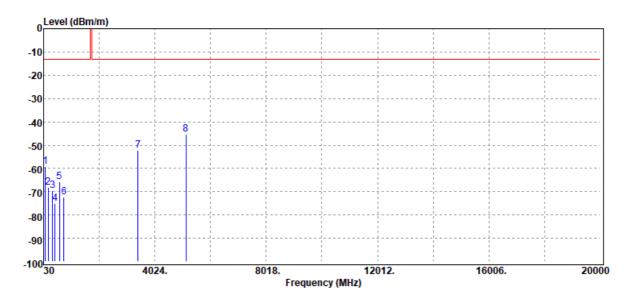
EUT Pol :E2 Plane

Test Channel :1712.4 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

Engineer :Thomas



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	<i>-</i> 59.07	-52.43	-5.69	-0.95	-13.00	-46.07
197.81	-68.28	-64.56	-2.34	-1.38	-13.00	-55.28
350.10	-69.69	-66.33	-1.46	-1.90	-13.00	-56.69
439.34	-75.13	-71.54	-1.76	-1.83	-13.00	-62.13
594.54	-65.79	-61.94	-1.75	-2.10	-13.00	-52.79
757.50	-72.28	-67.88	-1.80	-2.60	-13.00	-59.28
3424.80	-52.35	-58.95	12.40	-5.80	-13.00	-39.35
5137.20	-45.33	-50.37	12.10	-7.06	-13.00	-32.33

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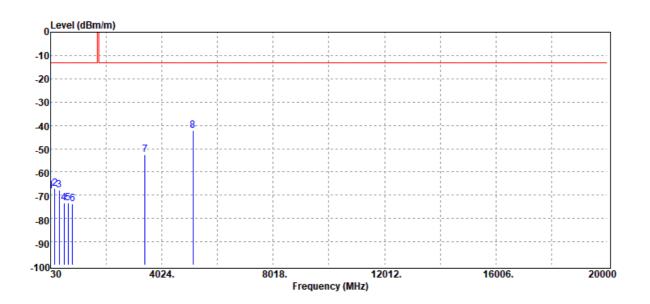
Page 98 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :WCDMA B4 Temp./Humi. :18.5/55

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

EUT Pol Engineer :E2 Plane :Thomas Test Channel :1712.4 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		J
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
30.00	-68.18	-46.46	-21.20	-0.52	-13.00	-55.18
180.35	-67.21	-61.81	-4.15	-1.25	-13.00	-54.21
337.49	-67.78	-64.26	-1.63	-1.89	-13.00	-54.78
516.94	-73.49	-69.46	-1.45	-2.58	-13.00	-60.49
662.44	-73.21	-68.69	-1.37	-3.15	-13.00	-60.21
812.79	-73.63	-68.88	-1.60	-3.15	-13.00	-60.63
3424.80	-52.73	-59.33	12.40	-5.80	-13.00	-39.73
5137.20	-42.11	-47.15	12.10	-7.06	-13.00	-29.11



Page 99 of 250

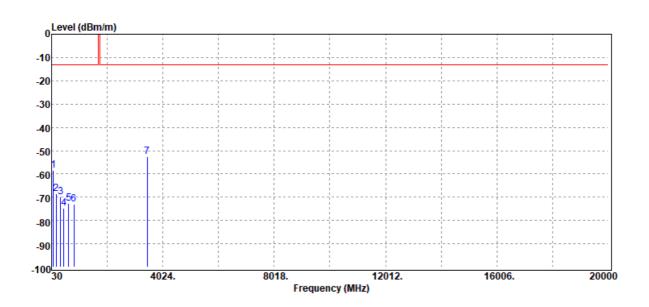
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :WCDMA B4 Temp./Humi. :18.5/55

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :1732.4 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.36	-51.72	-5.69	-0.95	-13.00	-45.36
197.81	-68.67	-64.95	-2.34	-1.38	-13.00	-55.67
350.10	-70.05	-66.69	-1.46	-1.90	-13.00	-57.05
469.41	-74.73	-70.97	-1.50	-2.26	-13.00	-61.73
638.19	-72.71	-68.68	-1.54	-2.49	-13.00	-59.71
837.04	-72.84	-68.04	-1.79	-3.01	-13.00	-59.84
3464.80	-52.72	-59.34	12.37	-5.75	-13.00	-39.72



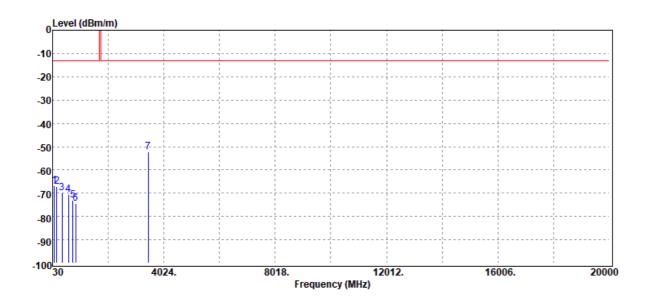
Page 100 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :WCDMA B4 Temp./Humi. :18.5/55

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol Engineer :E2 Plane :Thomas Test Channel :1732.4 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		J
MHz	dBm	['] dBm	dBi/dBd	dB	dBm	dB
95.96	-66.91	-60.27	-5.69	-0.95	-13.00	-53.91
180.35	-67.05	-61.65	-4.15	-1.25	-13.00	-54.05
372.41	-70.04	-66.51	-1.62	-1.91	-13.00	-57.04
594.54	-70.51	-66.66	-1.75	-2.10	-13.00	-57.51
757.50	-73.00	-68.60	-1.80	-2.60	-13.00	-60.00
866.14	-74.57	-70.30	-1.61	-2.66	-13.00	-61.57
3464.80	-52.32	-58.94	12.37	-5.75	-13.00	-39.32

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Page 101 of 250

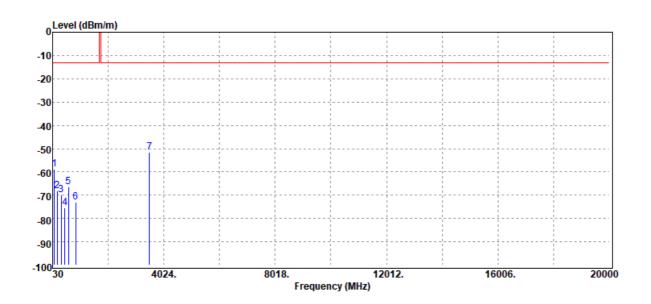
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :WCDMA B4 Temp./Humi. :18.5/55

Test Mode :Tx CH High Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :1752.6 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.69	-52.05	-5.69	-0.95	-13.00	-45.69
197.81	-68.14	-64.42	-2.34	-1.38	-13.00	-55.14
343.31	-69.97	-66.49	-1.59	-1.89	-13.00	-56.97
469.41	-75.43	-71.67	-1.50	-2.26	-13.00	-62.43
594.54	-66.44	-62.59	-1.75	-2.10	-13.00	-53.44
854.50	-73.12	-68.49	-1.60	-3.03	-13.00	-60.12
3505.20	-51.52	-58.08	12.28	-5.72	-13.00	-38.52



Page 102 of 250

:Thomas

Report Number :ER/2019/C0117 **Test Date** :2020-01-31

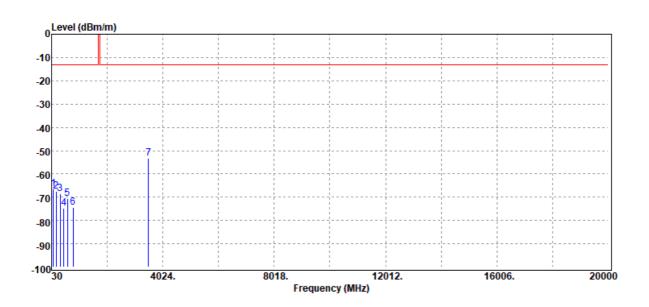
Operation Mode :WCDMA B4 Temp./Humi. :18.5/55

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL **EUT Pol**

Engineer

Test Channel :1752.6 MHz

:E2 Plane



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-66.30	-59.66	-5.69	-0.95	-13.00	-53.30
197.81	-67.40	-63.68	-2.34	-1.38	-13.00	-54.40
337.49	-68.62	-65.10	-1.63	-1.89	-13.00	-55.62
469.41	-74.57	-70.81	-1.50	-2.26	-13.00	-61.57
594.54	-70.58	-66.73	-1.75	-2.10	-13.00	-57.58
799.21	-74.50	-69.77	-1.59	-3.14	-13.00	-61.50
3505.20	-53.41	-59.97	12.28	-5.72	-13.00	-40.41



Page 103 of 250

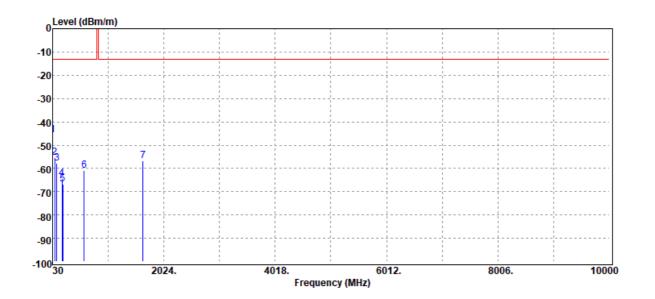
Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :WCDMA B5 Temp./Humi. :23.7/56

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

EUT Pol :E2 Plane Engineer :Kane

Test Channel :826.4 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.60	-29.99	-14.62	-0.99	-13.00	-32.60
71.71	-55.35	-47.49	-6.72	-1.14	-13.00	-42.35
105.66	-57.68	-54.85	-1.57	-1.26	-13.00	-44.68
197.81	-64.44	-65.55	2.79	-1.68	-13.00	-51.44
217.21	-66.71	-68.37	3.37	-1.71	-13.00	-53.71
594.54	-60.96	-61.37	3.26	-2.85	-13.00	-47.96
1652.80	-56.89	-61.57	9.34	-4.66	-13.00	-43.89

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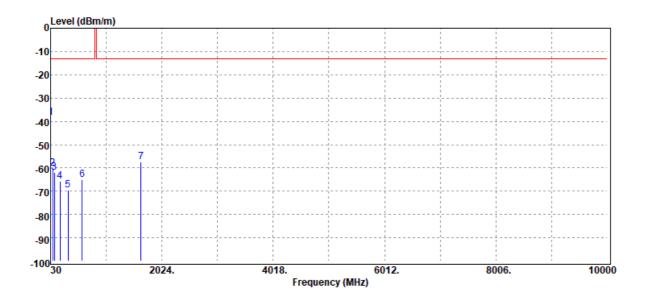
Page 104 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :WCDMA B5 Temp./Humi. :23.7/56

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Kane Test Channel :826.4 MHz



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	['] dBm	dBi/dBd	dB	dBm	dB
-38.35	-22.74	-14.62	-0.99	-13.00	-25.35
-60.36	-52.50	-6.72	-1.14	-13.00	-47.36
-61.97	-59.76	-0.98	-1.23	-13.00	-48.97
-65.58	-66.69	2.79	-1.68	-13.00	-52.58
-69.53	-71.19	3.71	-2.05	-13.00	-56.53
-65.10	-65.51	3.26	-2.85	-13.00	-52.10
-57.43	-62.11	9.34	-4.66	-13.00	-44.43
	-38.35 -60.36 -61.97 -65.58 -69.53 -65.10	Output Level dBm -38.35 -22.74 -60.36 -52.50 -61.97 -59.76 -65.58 -66.69 -69.53 -71.19 -65.10 -65.51	Output Level Gain dBi/dBd -38.35	dBm Output Level dBm Gain dBi/dBd Loss dB -38.35 -22.74 -14.62 -0.99 -60.36 -52.50 -6.72 -1.14 -61.97 -59.76 -0.98 -1.23 -65.58 -66.69 2.79 -1.68 -69.53 -71.19 3.71 -2.05 -65.10 -65.51 3.26 -2.85	dBm Output Level dBm Gain dBi/dBd Loss dBm -38.35 -22.74 -14.62 -0.99 -13.00 -60.36 -52.50 -6.72 -1.14 -13.00 -61.97 -59.76 -0.98 -1.23 -13.00 -65.58 -66.69 2.79 -1.68 -13.00 -69.53 -71.19 3.71 -2.05 -13.00 -65.10 -65.51 3.26 -2.85 -13.00

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Page 105 of 250

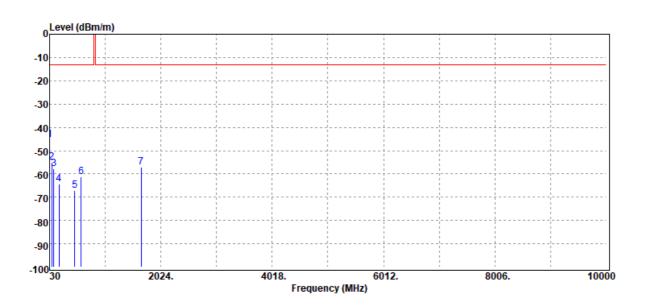
Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :WCDMA B5 Temp./Humi. :23.7/56

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane :Kane Engineer

Test Channel :836.6 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
36.79	-45.43	-29.82	-14.62	-0.99	-13.00	-32.43
71.71	-54.95	-47.09	-6.72	-1.14	-13.00	-41.95
105.66	-57.78	-54.95	-1.57	-1.26	-13.00	-44.78
197.81	-64.27	-65.38	2.79	-1.68	-13.00	-51.27
479.11	-67.04	-68.53	3.81	-2.32	-13.00	-54.04
594.54	-61.07	-61.48	3.26	-2.85	-13.00	-48.07
1673.20	-57.24	-61.93	9.41	-4.72	-13.00	-44.24

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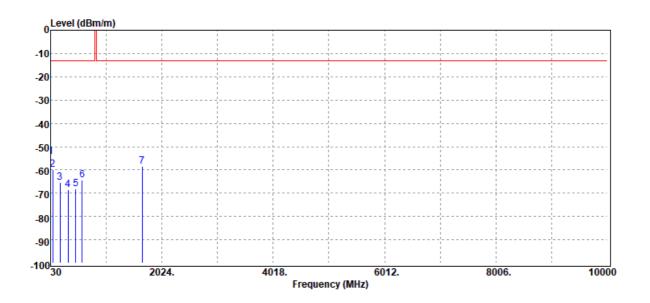
Page 106 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :WCDMA B5 Temp./Humi. :23.7/56

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Kane **Test Channel** :836.6 MHz



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	dBm	dBi/dBd	dB	dBm	dB
-54.45	-38.84	-14.62	-0.99	-13.00	-41.45
-59.90	-52.04	-6.72	-1.14	-13.00	-46.90
-65.33	-66.44	2.79	-1.68	-13.00	-52.33
-68.53	-70.19	3.71	-2.05	-13.00	-55.53
-68.18	-69.67	3.81	-2.32	-13.00	-55.18
-64.25	-64.66	3.26	-2.85	-13.00	-51.25
-58.52	-63.21	9.41	-4.72	-13.00	-45.52
	-54.45 -59.90 -65.33 -68.53 -68.18 -64.25	Output Level dBm -54.45	Output Level Gain dBi/dBd -54.45	dBm Output Level dBm Gain dBi/dBd Loss dB -54.45 -38.84 -14.62 -0.99 -59.90 -52.04 -6.72 -1.14 -65.33 -66.44 2.79 -1.68 -68.53 -70.19 3.71 -2.05 -68.18 -69.67 3.81 -2.32 -64.25 -64.66 3.26 -2.85	dBm Output Level dBm Gain dBi/dBd Loss dB dBm -54.45 -38.84 -14.62 -0.99 -13.00 -59.90 -52.04 -6.72 -1.14 -13.00 -65.33 -66.44 2.79 -1.68 -13.00 -68.53 -70.19 3.71 -2.05 -13.00 -68.18 -69.67 3.81 -2.32 -13.00 -64.25 -64.66 3.26 -2.85 -13.00

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Page 107 of 250

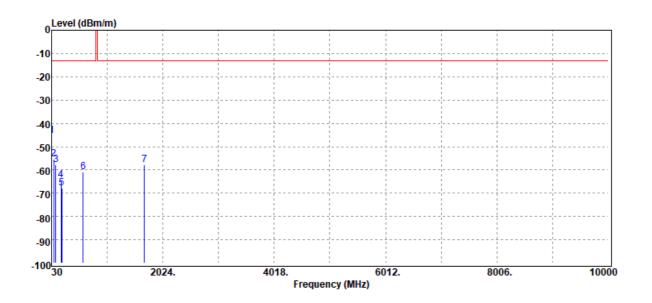
Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :WCDMA B5 Temp./Humi. :23.7/56

Test Mode :Tx CH High Antenna Pol. :VERTICAL

EUT Pol :E2 Plane :Kane Engineer





Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.25	-29.64	-14.62	-0.99	-13.00	-32.25
71.71	-55.42	-47.56	-6.72	-1.14	-13.00	-42.42
105.66	-57.61	-54.78	-1.57	-1.26	-13.00	-44.61
197.81	-64.24	-65.35	2.79	-1.68	-13.00	-51.24
217.21	-67.83	-69.49	3.37	-1.71	-13.00	-54.83
594.54	-60.99	-61.40	3.26	-2.85	-13.00	-47.99
1693.20	-57.81	-62.51	9.47	-4.77	-13.00	-44.81



Page 108 of 250

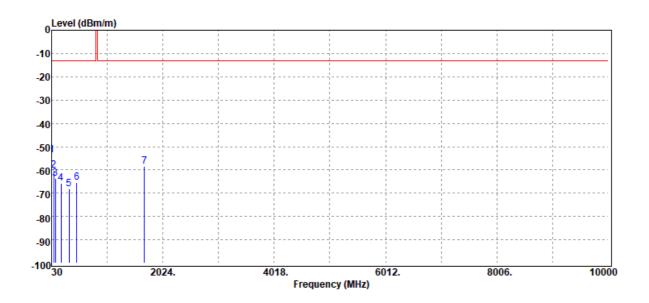
Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :WCDMA B5 Temp./Humi. :23.7/56

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Kane **Test Channel**

:846.6 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		· ·
MHz	dBm	['] dBm	dBi/dBd	dB	dBm	dB
36.79	-53.77	-38.16	-14.62	-0.99	-13.00	-40.77
71.71	-60.29	-52.43	-6.72	-1.14	-13.00	-47.29
95.96	-63.54	-61.33	-0.98	-1.23	-13.00	-50.54
197.81	-65.90	-67.01	2.79	-1.68	-13.00	-52.90
342.34	-68.26	-69.92	3.71	-2.05	-13.00	-55.26
483.96	-65.53	-67.03	3.82	-2.32	-13.00	-52.53
1693.20	-58.44	-63.14	9.47	-4.77	-13.00	-45.44

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Page 109 of 250

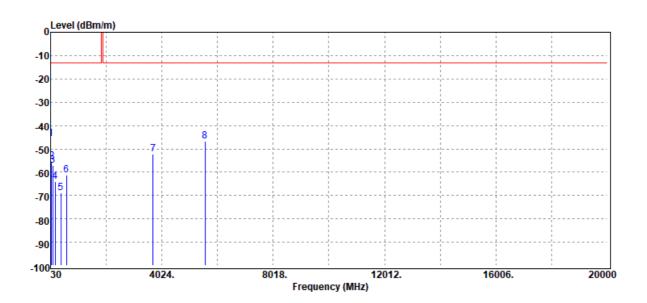
Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :LTE B2 Temp./Humi. :23.7/56

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

EUT Pol :E2 Plane Engineer :Kane

Test Channel :1855.0 MHz



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.57	-29.96	-14.62	-0.99	-13.00	-32.57
71.71	-55.40	-47.54	-6.72	-1.14	-13.00	-42.40
105.66	-57.25	-54.42	-1.57	-1.26	-13.00	-44.25
197.81	-63.86	-64.97	2.79	-1.68	-13.00	-50.86
395.69	-68.93	-70.33	3.72	-2.32	-13.00	-55.93
594.54	-61.12	-61.53	3.26	-2.85	-13.00	-48.12
3710.00	-52.15	-57.45	12.59	-7.29	-13.00	-39.15
5565.00	-46.63	-50.37	12.93	-9.19	-13.00	-33.63

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Page 110 of 250

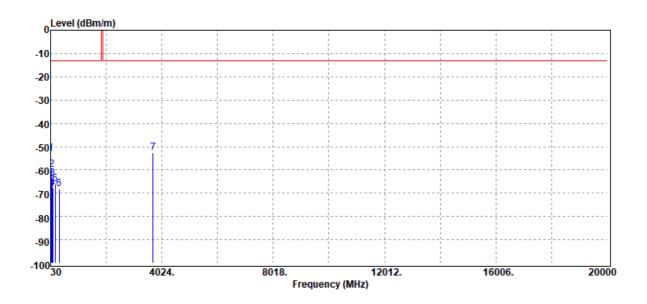
Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :LTE B2 Temp./Humi. :23.7/56

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane :Kane Engineer Test Channel

:1855.0 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-52.96	-37.35	-14.62	-0.99	-13.00	-39.96
71.71	-59.71	-51.85	-6.72	-1.14	-13.00	-46.71
95.96	-63.84	-61.63	-0.98	-1.23	-13.00	-50.84
114.39	-67.66	-64.45	-1.92	-1.29	-13.00	-54.66
197.81	-65.92	-67.03	2.79	-1.68	-13.00	-52.92
342.34	-68.04	-69.70	3.71	-2.05	-13.00	-55.04
3710.00	-52.49	-57.79	12.59	-7.29	-13.00	-39.49

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Page 111 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B2

Test Mode :Tx CH Mid

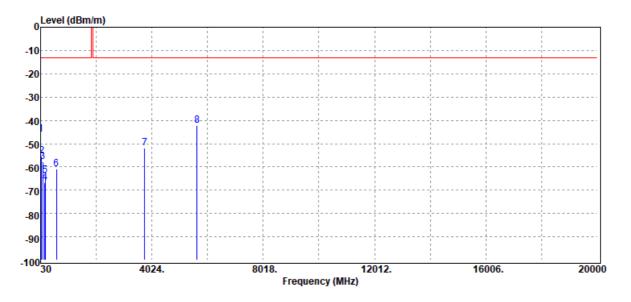
EUT Pol :E2 Plane

Test Channel :1880.0 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

:Kane Engineer



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.91	-30.30	-14.62	-0.99	-13.00	-32.91
71.71	-55.37	-47.51	-6.72	-1.14	-13.00	-42.37
105.66	-57.93	-55.10	-1.57	-1.26	-13.00	-44.93
180.35	-66.62	-65.58	0.63	-1.67	-13.00	-53.62
197.81	-63.65	-64.76	2.79	-1.68	-13.00	-50.65
594.54	-60.86	-61.27	3.26	-2.85	-13.00	-47.86
3760.00	-51.96	-57.17	12.61	-7.40	-13.00	-38.96
5640.00	-42.08	-45.82	12.96	-9.22	-13.00	-29.08



Test Channel

Report No.: ER/2019/C0117

Page 112 of 250

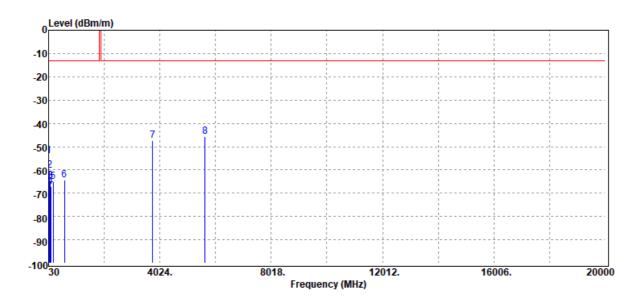
Report Number :ER/2019/C0117 **Test Date** :2020-01-22

:1880.0 MHz

Operation Mode :LTE B2 Temp./Humi. :23.7/56

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane :Kane Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-54.03	-38.42	-14.62	-0.99	-13.00	-41.03
71.71	-60.12	-52.26	-6.72	-1.14	-13.00	-47.12
95.96	-64.59	-62.38	-0.98	-1.23	-13.00	-51.59
114.39	-67.04	-63.83	-1.92	-1.29	-13.00	-54.04
197.81	-65.10	-66.21	2.79	-1.68	-13.00	-52.10
594.54	-64.47	-64.88	3.26	-2.85	-13.00	-51.47
3760.00	-47.52	-52.73	12.61	-7.40	-13.00	-34.52
5640.00	-45.77	-49.51	12.96	-9.22	-13.00	-32.77



Page 113 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B2

Test Mode :Tx CH High

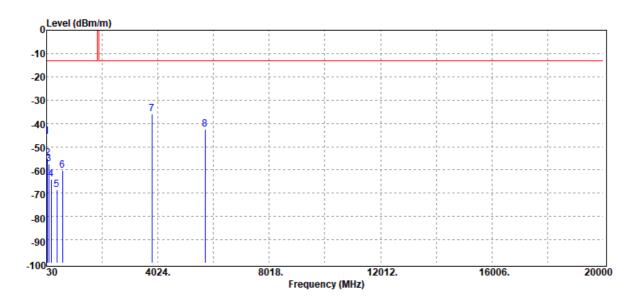
EUT Pol :E2 Plane

Test Channel :1905.0 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

:Kane Engineer



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.62	-30.01	-14.62	-0.99	-13.00	-32.62
71.71	-54.87	-47.01	-6.72	-1.14	-13.00	-41.87
105.66	-57.48	-54.65	-1.57	-1.26	-13.00	-44.48
197.81	-63.90	-65.01	2.79	-1.68	-13.00	-50.90
395.69	-68.40	-69.80	3.72	-2.32	-13.00	-55.40
594.54	-60.18	-60.59	3.26	-2.85	-13.00	-47.18
3810.00	-36.04	-41.27	12.63	-7.40	-13.00	-23.04
5715.00	-42.47	-46.14	12.99	-9.32	-13.00	-29.47



Page 114 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B2

Test Mode :Tx CH High

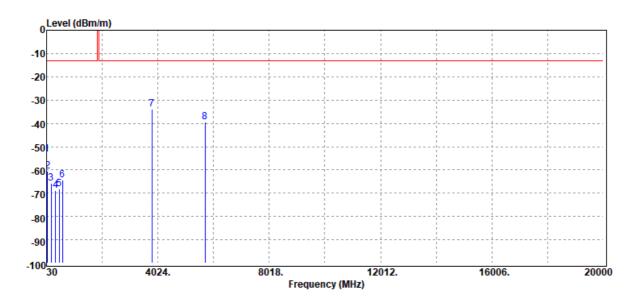
EUT Pol :E2 Plane

Test Channel :1905.0 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :HORIZONTAL

:Kane Engineer



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	['] dBm	dBi/dBd	dB	dBm	dB
36.79	-53.11	-37.50	-14.62	-0.99	-13.00	-40.11
71.71	-60.41	-52.55	-6.72	-1.14	-13.00	-47.41
197.81	-65.61	-66.72	2.79	-1.68	-13.00	-52.61
359.80	-68.94	-70.57	3.75	-2.12	-13.00	-55.94
479.11	-68.10	-69.59	3.81	-2.32	-13.00	-55.10
594.54	-64.45	-64.86	3.26	-2.85	-13.00	-51.45
3810.00	-33.82	-39.05	12.63	-7.40	-13.00	-20.82
5715.00	-39.37	-43.04	12.99	-9.32	-13.00	-26.37

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Page 115 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B4

Test Mode :Tx CH Low

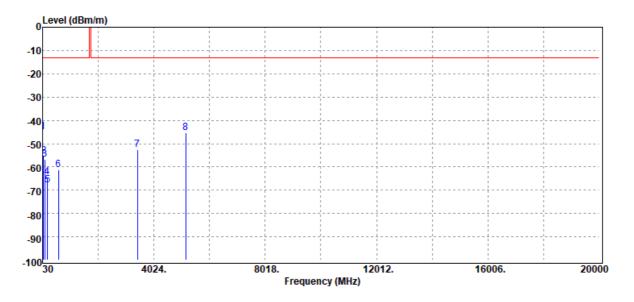
EUT Pol :E2 Plane

Test Channel :1720.0 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

:Kane Engineer



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	['] dBm	dBi/dBd	dB	dBm	dB
36.79	-45.07	-29.46	-14.62	-0.99	-13.00	-32.07
71.71	-55.53	-47.67	-6.72	-1.14	-13.00	-42.53
105.66	-56.86	-54.03	-1.57	-1.26	-13.00	-43.86
197.81	-64.46	-65.57	2.79	-1.68	-13.00	-51.46
217.21	-67.87	-69.53	3.37	-1.71	-13.00	-54.87
594.54	-61.09	-61.50	3.26	-2.85	-13.00	-48.09
3440.00	-52.57	-57.94	12.38	-7.01	-13.00	-39.57
5160.00	-45.22	-49.21	12.70	-8.71	-13.00	-32.22



Page 116 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B4

Test Mode :Tx CH Low

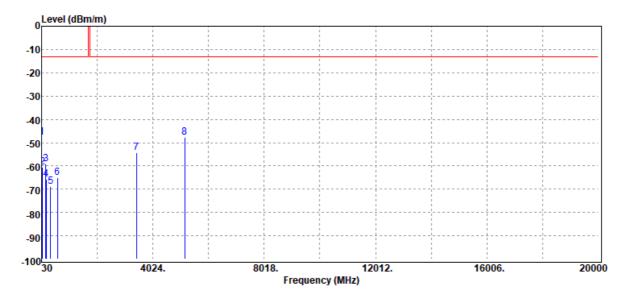
EUT Pol :E2 Plane

Test Channel :1720.0 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :HORIZONTAL

:Kane Engineer



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-47.74	-32.13	-14.62	-0.99	-13.00	-34.74
71.71	-60.58	-52.72	-6.72	-1.14	-13.00	-47.58
183.26	-59.15	-58.55	1.07	-1.67	-13.00	-46.15
197.81	-65.75	-66.86	2.79	-1.68	-13.00	-52.75
353.01	-68.79	-70.45	3.75	-2.09	-13.00	-55.79
594.54	-65.09	-65.50	3.26	-2.85	-13.00	-52.09
3440.00	-54.20	-59.57	12.38	-7.01	-13.00	-41.20
5160.00	-47.72	-51.71	12.70	-8.71	-13.00	-34.72



Page 117 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B4

Test Mode :Tx CH Mid

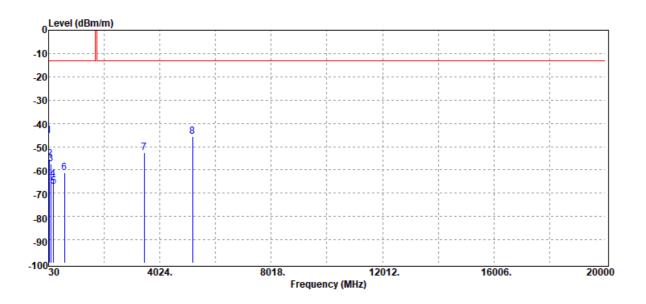
EUT Pol :E2 Plane

Test Channel :1732.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

:Kane Engineer



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.40	-29.79	-14.62	-0.99	-13.00	-32.40
71.71	-55.52	-47.66	-6.72	-1.14	-13.00	-42.52
105.66	-57.48	-54.65	-1.57	-1.26	-13.00	-44.48
197.81	-63.86	-64.97	2.79	-1.68	-13.00	-50.86
217.21	-67.20	-68.86	3.37	-1.71	-13.00	-54.20
594.54	-61.33	-61.74	3.26	-2.85	-13.00	-48.33
3465.00	-52.45	-57.86	12.43	-7.02	-13.00	-39.45
5197.50	-45.57	-49.57	12.72	-8.72	-13.00	-32.57



Page 118 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B4

Test Mode :Tx CH Mid

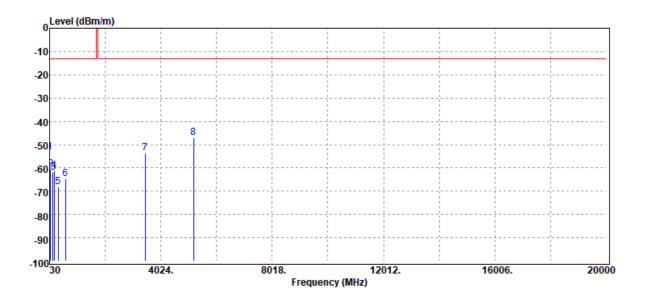
EUT Pol :E2 Plane

Test Channel :1732.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :HORIZONTAL

Engineer :Kane



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	dBm	dBi/dBd	dB	dBm	dB
-53.16	-37.55	-14.62	-0.99	-13.00	-40.16
-60.54	-52.68	-6.72	-1.14	-13.00	-47.54
-61.86	-58.41	-1.87	-1.58	-13.00	-48.86
-61.19	-62.54	3.03	-1.68	-13.00	-48.19
-68.21	-69.87	3.71	-2.05	-13.00	-55.21
-64.61	-65.02	3.26	-2.85	-13.00	-51.61
-53.53	-58.94	12.43	-7.02	-13.00	-40.53
-46.95	-50.95	12.72	-8.72	-13.00	-33.95
	-53.16 -60.54 -61.86 -61.19 -68.21 -64.61 -53.53	Output Level dBm -53.16	Output Level Gain dBm dBi/dBd -53.16 -37.55 -14.62 -60.54 -52.68 -6.72 -61.86 -58.41 -1.87 -61.19 -62.54 3.03 -68.21 -69.87 3.71 -64.61 -65.02 3.26 -53.53 -58.94 12.43	dBm Output Level dBm Gain dBi/dBd Loss dB -53.16 -37.55 -14.62 -0.99 -60.54 -52.68 -6.72 -1.14 -61.86 -58.41 -1.87 -1.58 -61.19 -62.54 3.03 -1.68 -68.21 -69.87 3.71 -2.05 -64.61 -65.02 3.26 -2.85 -53.53 -58.94 12.43 -7.02	dBm Output Level dBm Gain dBi/dBd Loss dB dBm -53.16 -37.55 -14.62 -0.99 -13.00 -60.54 -52.68 -6.72 -1.14 -13.00 -61.86 -58.41 -1.87 -1.58 -13.00 -61.19 -62.54 3.03 -1.68 -13.00 -68.21 -69.87 3.71 -2.05 -13.00 -64.61 -65.02 3.26 -2.85 -13.00 -53.53 -58.94 12.43 -7.02 -13.00

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Page 119 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B4

Test Mode :Tx CH High

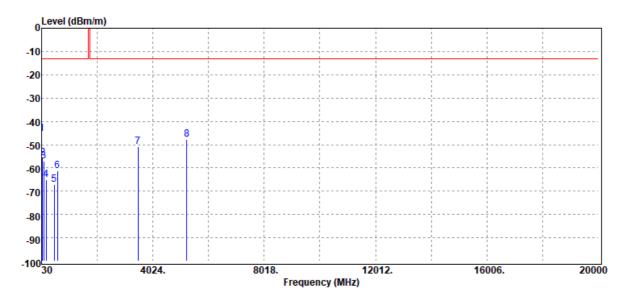
EUT Pol :E2 Plane

Test Channel :1745 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

:Kane Engineer



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	['] dBm	dBi/dBd	dB	dBm	dB
36.79	-45.47	-29.86	-14.62	-0.99	-13.00	-32.47
71.71	-55.73	-47.87	-6.72	-1.14	-13.00	-42.73
105.66	-57.09	-54.26	-1.57	-1.26	-13.00	-44.09
197.81	-65.02	-66.13	2.79	-1.68	-13.00	-52.02
479.11	-67.16	-68.65	3.81	-2.32	-13.00	-54.16
594.54	-61.37	-61.78	3.26	-2.85	-13.00	-48.37
3490.00	-50.91	-56.31	12.48	-7.08	-13.00	-37.91
5235.00	-47.91	-51.88	12.74	-8.77	-13.00	-34.91



Page 120 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B4

Test Mode :Tx CH High

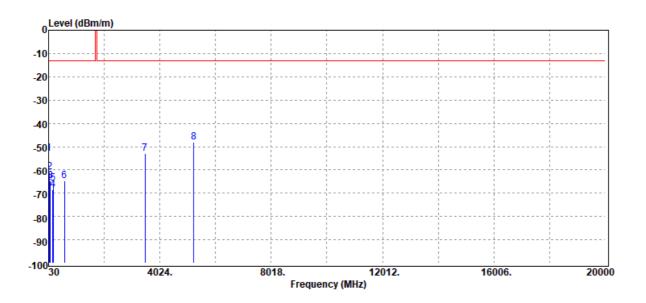
EUT Pol :E2 Plane

Test Channel :1745 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :HORIZONTAL

Engineer :Kane



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		· ·
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-53.05	-37.44	-14.62	-0.99	-13.00	-40.05
71.71	-60.83	-52.97	-6.72	-1.14	-13.00	-47.83
95.96	-64.62	-62.41	-0.98	-1.23	-13.00	-51.62
180.35	-68.62	-67.58	0.63	-1.67	-13.00	-55.62
197.81	-65.66	-66.77	2.79	-1.68	-13.00	-52.66
594.54	-64.64	-65.05	3.26	-2.85	-13.00	-51.64
3490.00	-52.79	-58.19	12.48	-7.08	-13.00	-39.79
5235.00	-48.20	-52.17	12.74	-8.77	-13.00	-35.20

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Page 121 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B5

Test Mode :Tx CH Low

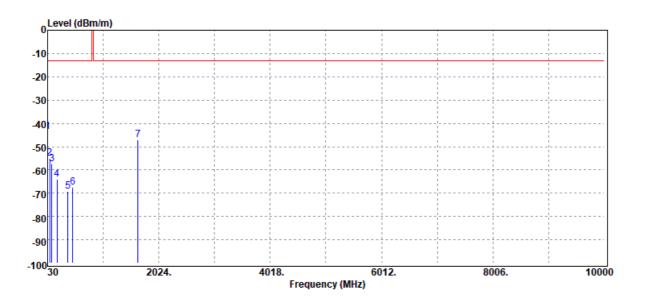
EUT Pol :E2 Plane

Test Channel :829.0 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

:Kane Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-43.58	-27.97	-14.62	-0.99	-13.00	-30.58
71.71	-55.17	-47.31	-6.72	-1.14	-13.00	-42.17
105.66	-57.46	-54.63	-1.57	-1.26	-13.00	-44.46
197.81	-63.90	-65.01	2.79	-1.68	-13.00	-50.90
395.69	-69.12	-70.52	3.72	-2.32	-13.00	-56.12
479.11	-67.61	-69.10	3.81	-2.32	-13.00	-54.61
1649.40	-46.93	-51.61	9.33	-4.65	-13.00	-33.93



Test Channel

Report No.: ER/2019/C0117

Page 122 of 250

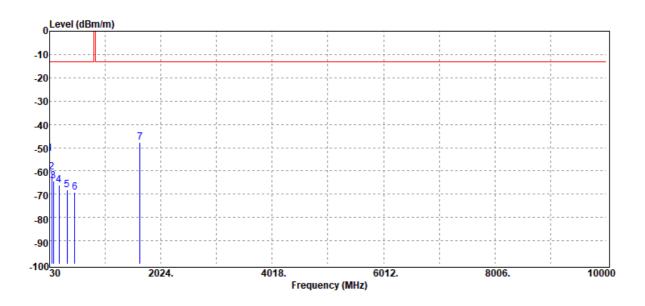
Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :LTE B5 Temp./Humi. :23.7/56

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane :Kane Engineer

:829.0 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		J
MHz	dBm	['] dBm	dBi/dBd	dB	dBm	dB
36.79	-52.62	-37.01	-14.62	-0.99	-13.00	-39.62
71.71	-60.57	-52.71	-6.72	-1.14	-13.00	-47.57
95.96	-64.41	-62.20	-0.98	-1.23	-13.00	-51.41
197.81	-65.98	-67.09	2.79	-1.68	-13.00	-52.98
342.34	-68.27	-69.93	3.71	-2.05	-13.00	-55.27
479.11	-69.08	-70.57	3.81	-2.32	-13.00	-56.08
1649.40	-47.84	-52.52	9.33	-4.65	-13.00	-34.84



Page 123 of 250

:2020-01-22

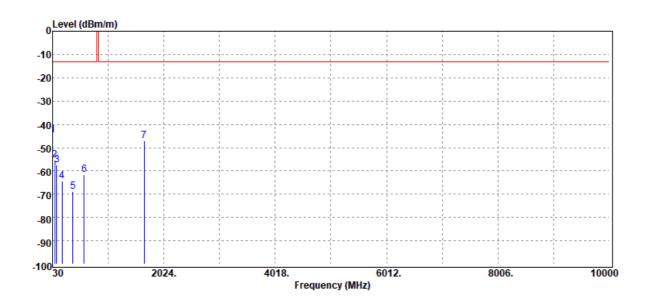
Report Number :ER/2019/C0117 **Test Date**

Operation Mode :LTE B5 Temp./Humi. :23.7/56

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane :Kane Engineer

Test Channel :836.5 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
						_
36.79	-44.60	-28.99	-14.62	-0.99	-13.00	-31.60
71.71	-55.50	-47.64	-6.72	-1.14	-13.00	-42.50
105.66	-57.53	-54.70	-1.57	-1.26	-13.00	-44.53
197.81	-64.25	-65.36	2.79	-1.68	-13.00	-51.25
395.69	-68.82	-70.22	3.72	-2.32	-13.00	-55.82
594.54	-61.46	-61.87	3.26	-2.85	-13.00	-48.46
1673.00	-46.96	-51.65	9.41	-4.72	-13.00	-33.96



Page 124 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B5

Test Mode :Tx CH Mid

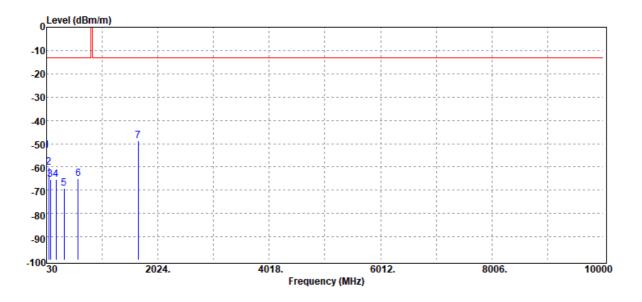
EUT Pol :E2 Plane

Test Channel :836.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :HORIZONTAL

:Kane Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
36.79	-52.95	-37.34	-14.62	-0.99	-13.00	-39.95
71.71	-60.27	-52.41	-6.72	-1.14	-13.00	-47.27
95.96	-65.36	-63.15	-0.98	-1.23	-13.00	-52.36
197.81	-65.33	-66.44	2.79	-1.68	-13.00	-52.33
342.34	-69.17	-70.83	3.71	-2.05	-13.00	-56.17
594.54	-65.05	-65.46	3.26	-2.85	-13.00	-52.05
1673.00	-48.79	-53.48	9.41	-4.72	-13.00	-35.79

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Page 125 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B5

Test Mode :Tx CH High

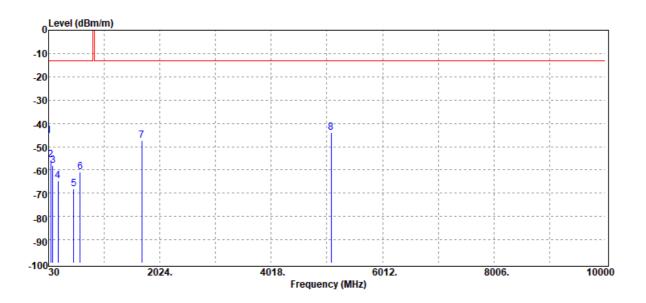
EUT Pol :E2 Plane

Test Channel :848.3 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

:Kane Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.20	-29.59	-14.62	-0.99	-13.00	-32.20
71.71	-55.68	-47.82	-6.72	-1.14	-13.00	-42.68
105.66	-58.15	-55.32	-1.57	-1.26	-13.00	-45.15
197.81	-64.80	-65.91	2.79	-1.68	-13.00	-51.80
479.11	-68.07	-69.56	3.81	-2.32	-13.00	-55.07
594.54	-60.82	-61.23	3.26	-2.85	-13.00	-47.82
1696.60	-47.38	-52.09	9.48	-4.77	-13.00	-34.38
5089.80	-44.06	-48.08	12.66	-8.64	-13.00	-31.06

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Page 126 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B5

Test Mode :Tx CH High

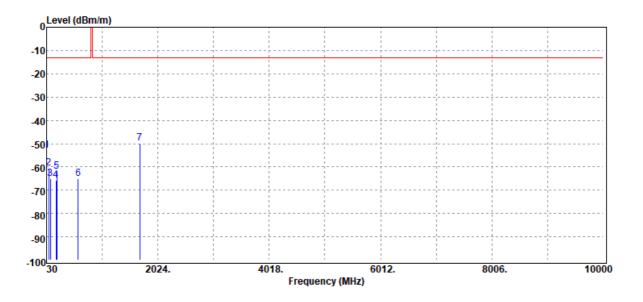
EUT Pol :E2 Plane

Test Channel :848.3 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :HORIZONTAL

:Kane Engineer



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	dBm	dBi/dBd	dB	dBm	dB
-52.89	-37.28	-14.62	-0.99	-13.00	-39.89
-60.58	-52.72	-6.72	-1.14	-13.00	-47.58
-64.89	-62.68	-0.98	-1.23	-13.00	-51.89
-65.84	-66.95	2.79	-1.68	-13.00	-52.84
-62.03	-63.68	3.35	-1.70	-13.00	-49.03
-64.95	-65.36	3.26	-2.85	-13.00	-51.95
-49.82	-54.53	9.48	-4.77	-13.00	-36.82
	-52.89 -60.58 -64.89 -65.84 -62.03 -64.95	Output Level dBm -52.89	Output Level Gain dBi/dBd -52.89 -37.28 -14.62 -60.58 -52.72 -6.72 -64.89 -62.68 -0.98 -65.84 -66.95 2.79 -62.03 -63.68 3.35 -64.95 -65.36 3.26	dBm Output Level dBm Gain dBi/dBd Loss dB -52.89 -37.28 -14.62 -0.99 -60.58 -52.72 -6.72 -1.14 -64.89 -62.68 -0.98 -1.23 -65.84 -66.95 2.79 -1.68 -62.03 -63.68 3.35 -1.70 -64.95 -65.36 3.26 -2.85	dBm Output Level dBm Gain dBi/dBd Loss dB -52.89 -37.28 -14.62 -0.99 -13.00 -60.58 -52.72 -6.72 -1.14 -13.00 -64.89 -62.68 -0.98 -1.23 -13.00 -65.84 -66.95 2.79 -1.68 -13.00 -62.03 -63.68 3.35 -1.70 -13.00 -64.95 -65.36 3.26 -2.85 -13.00



Page 127 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B7

Test Mode :Tx CH Low

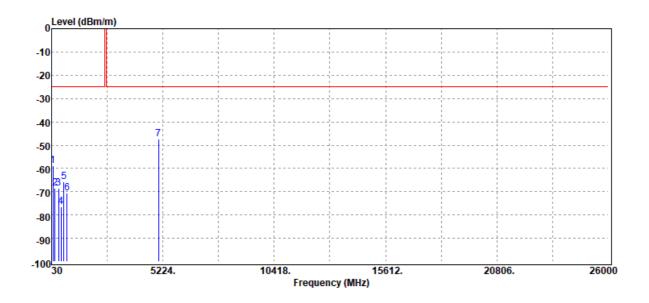
EUT Pol :E2 Plane

Test Channel :2505 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

Engineer :Thomas



	Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
	MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
_							
	95.96	-58.81	-52.17	-5.69	-0.95	-25.00	-33.81
	197.81	-68.64	-64.92	-2.34	-1.38	-25.00	-43.64
	350.10	-68.46	-65.10	-1.46	-1.90	-25.00	-43.46
	469.41	-76.32	-72.56	-1.50	-2.26	-25.00	-51.32
	594.54	-65.81	-61.96	-1.75	-2.10	-25.00	-40.81
	745.86	-70.70	-66.49	-1.81	-2.40	-25.00	-45.70
	5010.00	-47.52	-52.86	12.36	-7.02	-25.00	-22.52

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Page 128 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B7

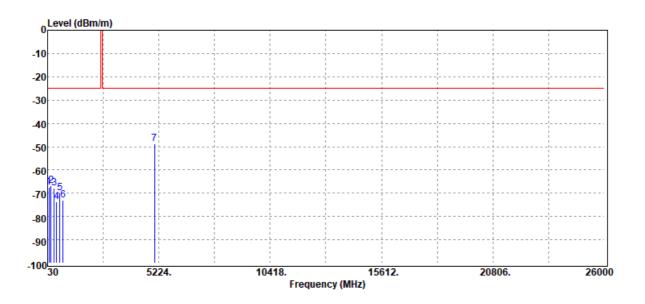
Test Mode :Tx CH Low

EUT Pol :E2 Plane Test Channel :2505 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :HORIZONTAL

Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
95.96	-67.57	-60.93	-5.69	-0.95	-25.00	-42.57
180.35	-66.61	-61.21	-4.15	-1.25	-25.00	-41.61
337.49	-67.75	-64.23	-1.63	-1.89	-25.00	-42.75
456.80	-73.66	-69.96	-1.58	-2.12	-25.00	-48.66
594.54	-70.04	-66.19	-1.75	-2.10	-25.00	-45.04
757.50	-72.94	-68.54	-1.80	-2.60	-25.00	-47.94
5010.00	-48.63	-53.97	12.36	-7.02	-25.00	-23.63



Page 129 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B7

Test Mode :Tx CH Mid

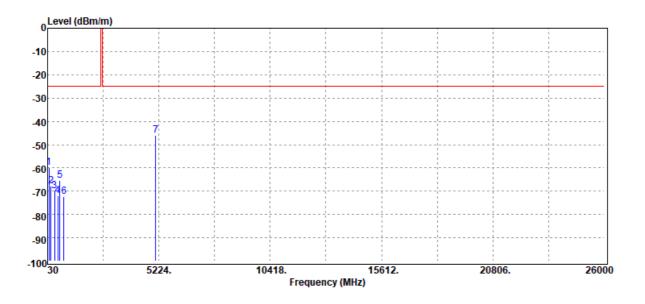
EUT Pol :E2 Plane

Test Channel :2535 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-59.73	-53.09	-5.69	-0.95	-25.00	-34.73
197.81	-67.93	-64.21	-2.34	-1.38	-25.00	-42.93
350.10	-70.00	-66.64	-1.46	-1.90	-25.00	-45.00
516.94	-71.94	-67.91	-1.45	-2.58	-25.00	-46.94
594.54	-65.38	-61.53	-1.75	-2.10	-25.00	-40.38
781.75	-72.46	-68.05	-1.68	-2.73	-25.00	-47.46
5070.00	-46.14	-51.30	12.16	-7.00	-25.00	-21.14



Page 130 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B7

Test Mode :Tx CH Mid

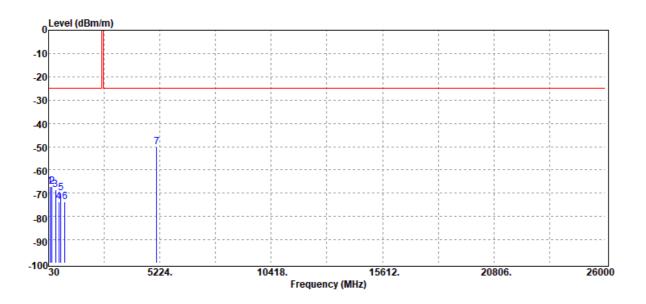
EUT Pol :E2 Plane

Test Channel :2535 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :HORIZONTAL

Engineer :Thomas



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-66.96	-60.32	-5.69	-0.95	-25.00	-41.96
180.35	-67.00	-61.60	-4.15	-1.25	-25.00	-42.00
350.10	-68.52	-65.16	-1.46	-1.90	-25.00	-43.52
516.94	-73.85	-69.82	-1.45	-2.58	-25.00	-48.85
594.54	-70.07	-66.22	-1.75	-2.10	-25.00	-45.07
781.75	-73.64	-69.23	-1.68	-2.73	-25.00	-48.64
5070.00	-50.22	-55.38	12.16	-7.00	-25.00	-25.22



Page 131 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B7

Test Mode :Tx CH High

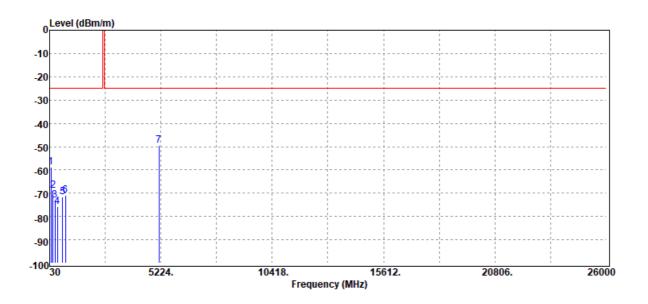
EUT Pol :E2 Plane

Test Channel :2565 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.78	-52.14	-5.69	-0.95	-25.00	-33.78
197.81	-68.83	-65.11	-2.34	-1.38	-25.00	-43.83
288.99	-72.89	-69.41	-1.80	-1.68	-25.00	-47.89
403.45	-75.91	-72.39	-1.59	-1.93	-25.00	-50.91
638.19	-71.78	-67.75	-1.54	-2.49	-25.00	-46.78
770.11	-71.01	-66.72	-1.71	-2.58	-25.00	-46.01
5130.00	-49.53	-54.58	12.10	-7.05	-25.00	-24.53

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Page 132 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B7

Test Mode :Tx CH High

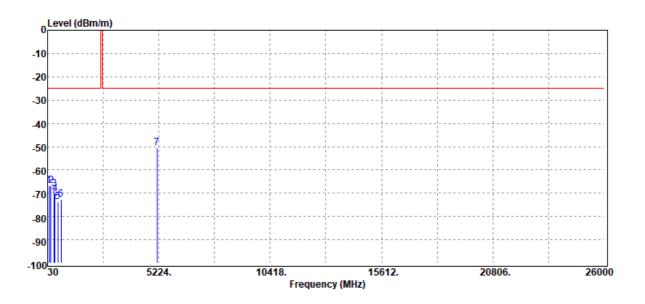
EUT Pol :E2 Plane

Test Channel :2565 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :HORIZONTAL

Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
-		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
95.96	-66.94	-60.30	-5.69	-0.95	-25.00	-41.94
197.81	-66.77	-63.05	-2.34	-1.38	-25.00	-41.77
337.49	-68.02	-64.50	-1.63	-1.89	-25.00	-43.02
379.20	-70.27	-66.71	-1.64	-1.92	-25.00	-45.27
516.94	-73.65	-69.62	-1.45	-2.58	-25.00	-48.65
662.44	-72.66	-68.14	-1.37	-3.15	-25.00	-47.66
5130.00	-50.36	-55.41	12.10	-7.05	-25.00	-25.36

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www.tw.sgs.com



Page 133 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B12

Test Mode :Tx CH Low

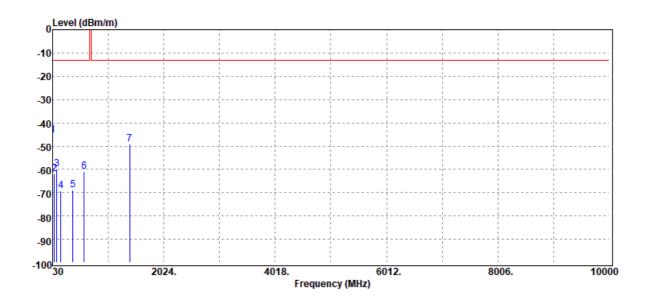
EUT Pol :E2 Plane

Test Channel :704.0 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

Engineer :Kane



	Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
	MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
_							
	36.79	-45.18	-29.57	-14.62	-0.99	-13.00	-32.18
	61.04	-61.83	-50.83	-9.91	-1.09	-13.00	-48.83
	105.66	-59.94	-57.11	-1.57	-1.26	-13.00	-46.94
	180.35	-69.18	-68.14	0.63	-1.67	-13.00	-56.18
	395.69	-68.76	-70.16	3.72	-2.32	-13.00	-55.76
	594.54	-60.96	-61.37	3.26	-2.85	-13.00	-47.96
	1408.00	-49.01	-53.14	8.43	-4.30	-13.00	-36.01

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Test Channel

Report No.: ER/2019/C0117

Page 134 of 250

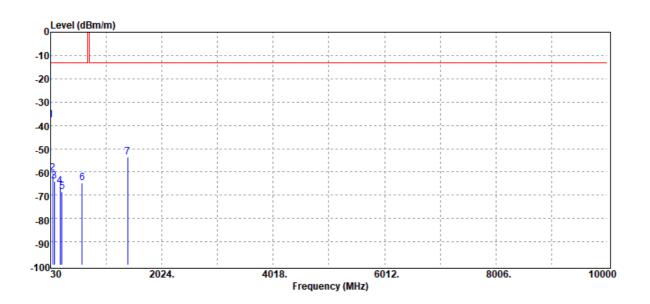
Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :LTE B12 Temp./Humi. :23.7/56

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane :Kane Engineer

:704.0 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-37.87	-22.26	-14.62	-0.99	-13.00	-24.87
71.71	-60.43	-52.57	-6.72	-1.14	-13.00	-47.43
95.96	-64.11	-61.90	-0.98	-1.23	-13.00	-51.11
197.81	-66.06	-67.17	2.79	-1.68	-13.00	-53.06
235.64	-68.41	-69.84	3.19	-1.76	-13.00	-55.41
594.54	-64.67	-65.08	3.26	-2.85	-13.00	-51.67
1408.00	-53.55	-57.68	8.43	-4.30	-13.00	-40.55

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Page 135 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B12

Test Mode :Tx CH Mid

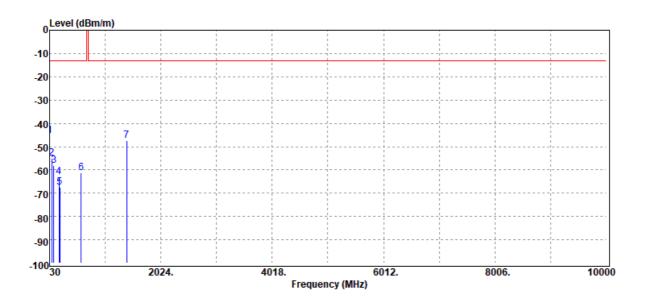
EUT Pol :E2 Plane

Test Channel :707.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

:Kane Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
N 41 1-	-ID	Output Level	Gain	Loss	alD	-ID
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.46	-29.85	-14.62	-0.99	-13.00	-32.46
			_			
71.71	-54.88	-47.02	-6.72	-1.14	-13.00	-41.88
105.66	-58.03	-55.20	-1.57	-1.26	-13.00	-45.03
197.81	-63.12	-64.23	2.79	-1.68	-13.00	-50.12
217.21	-67.61	-69.27	3.37	-1.71	-13.00	-54.61
594.54	-61.09	-61.50	3.26	-2.85	-13.00	-48.09
1415.00	-47.33	-51.46	8.45	-4.32	-13.00	-34.33



Page 136 of 250

Report Number :ER/2019/C0117

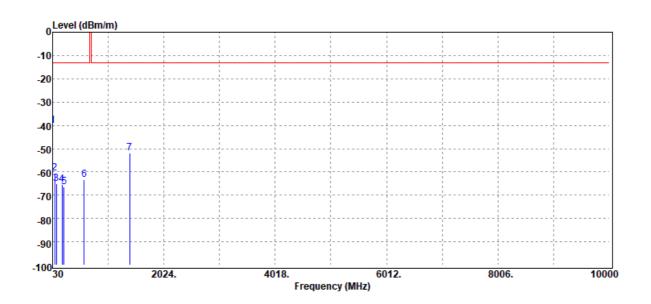
Operation Mode :LTE B12

Test Mode :Tx CH Mid

EUT Pol :E2 Plane Test Channel :707.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56 Antenna Pol. :HORIZONTAL

:Kane Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-40.03	-24.42	-14.62	-0.99	-13.00	-27.03
71.71	-60.40	-52.54	-6.72	-1.14	-13.00	-47.40
95.96	-64.91	-62.70	-0.98	-1.23	-13.00	-51.91
197.81	-65.37	-66.48	2.79	-1.68	-13.00	-52.37
235.64	-66.58	-68.01	3.19	-1.76	-13.00	-53.58
594.54	-63.22	-63.63	3.26	-2.85	-13.00	-50.22
1415.00	-51.80	-55.93	8.45	-4.32	-13.00	-38.80



Page 137 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B12

Test Mode :Tx CH High

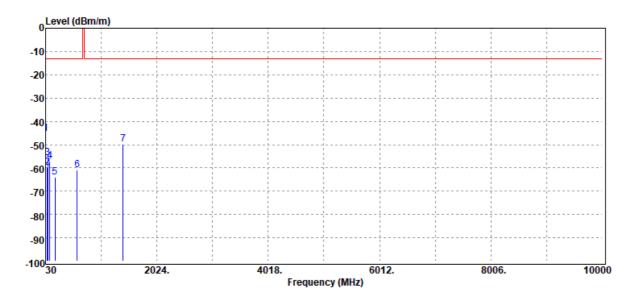
EUT Pol :E2 Plane

Test Channel :711.0 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

:Kane Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.43	-29.82	-14.62	-0.99	-13.00	-32.43
61.04	-59.99	-48.99	-9.91	-1.09	-13.00	-46.99
71.71	-55.66	-47.80	-6.72	-1.14	-13.00	-42.66
105.66	-56.97	-54.14	-1.57	-1.26	-13.00	-43.97
197.81	-64.06	-65.17	2.79	-1.68	-13.00	-51.06
594.54	-60.81	-61.22	3.26	-2.85	-13.00	-47.81
1422.00	-49.85	-54.00	8.48	-4.33	-13.00	-36.85



Page 138 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B12

Test Mode :Tx CH High

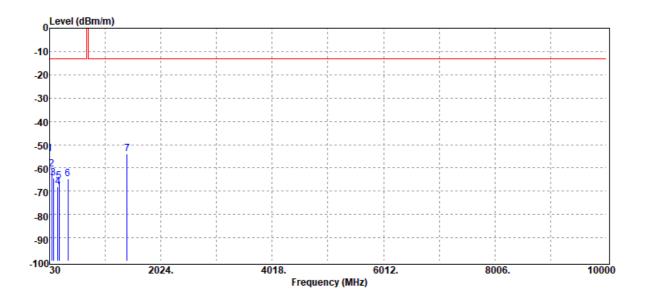
EUT Pol :E2 Plane

Test Channel :711.0 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :HORIZONTAL

:Kane Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
36.79	-54.01	-38.40	-14.62	-0.99	-13.00	-41.01
71.71	-60.47	-52.61	-6.72	-1.14	-13.00	-47.47
95.96	-64.40	-62.19	-0.98	-1.23	-13.00	-51.40
180.35	-68.06	-67.02	0.63	-1.67	-13.00	-55.06
197.81	-65.57	-66.68	2.79	-1.68	-13.00	-52.57
354.95	-64.63	-66.28	3.75	-2.10	-13.00	-51.63
1422.00	-53.97	-58.12	8.48	-4.33	-13.00	-40.97

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Page 139 of 250

:2020-01-22

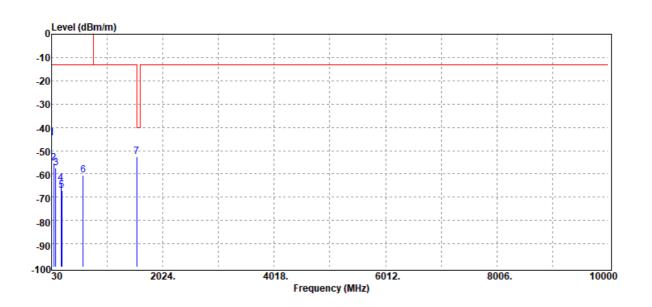
Report Number :ER/2019/C0117 **Test Date**

Operation Mode :LTE B13 Temp./Humi. :23.7/56

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

EUT Pol :E2 Plane :Kane Engineer

Test Channel :779.5 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-44.75	-29.14	-14.62	-0.99	-13.00	-31.75
71.71	-55.45	-47.59	-6.72	-1.14	-13.00	-42.45
105.66	-57.40	-54.57	-1.57	-1.26	-13.00	-44.40
197.81	-64.00	-65.11	2.79	-1.68	-13.00	-51.00
217.21	-67.16	-68.82	3.37	-1.71	-13.00	-54.16
594.54	-60.61	-61.02	3.26	-2.85	-13.00	-47.61
1559.00	-52.46	-56.92	9.01	-4.55	-40.00	-12.46



Page 140 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B13

Test Mode :Tx CH Low

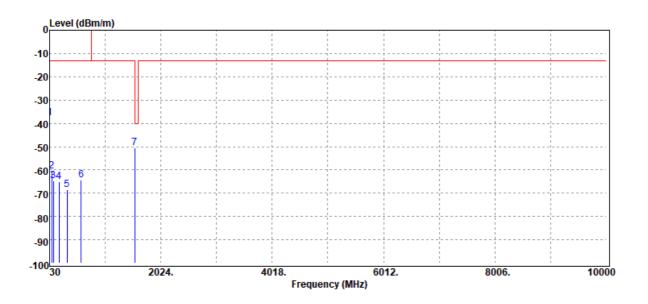
EUT Pol :E2 Plane

Test Channel :779.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :HORIZONTAL

Engineer :Kane



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
36.79	-37.56	-21.95	-14.62	-0.99	-13.00	-24.56
71.71	-60.39	-52.53	-6.72	-1.14	-13.00	-47.39
95.96	-64.63	-62.42	-0.98	-1.23	-13.00	-51.63
197.81	-65.21	-66.32	2.79	-1.68	-13.00	-52.21
342.34	-68.40	-70.06	3.71	-2.05	-13.00	-55.40
594.54	-64.39	-64.80	3.26	-2.85	-13.00	-51.39
1559.00	-50.45	-54.91	9.01	-4.55	-40.00	-10.45



Page 141 of 250

:2020-01-22

:23.7/56

Report Number :ER/2019/C0117

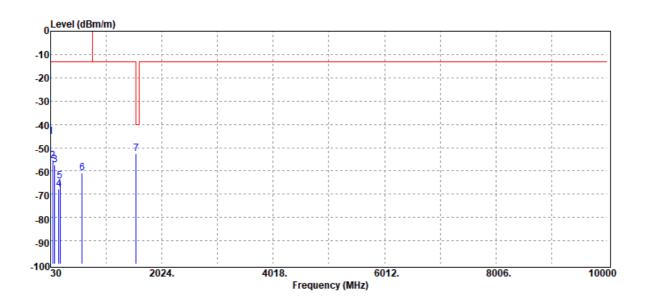
Operation Mode :LTE B13

Test Mode :Tx CH Mid

EUT Pol :E2 Plane Test Channel :782 MHz Antenna Pol. :VERTICAL Engineer :Kane

Test Date

Temp./Humi.



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.29	-29.68	-14.62	-0.99	-13.00	-32.29
71.71	-55.55	-47.69	-6.72	-1.14	-13.00	-42.55
105.66	-57.52	-54.69	-1.57	-1.26	-13.00	-44.52
180.35	-67.87	-66.83	0.63	-1.67	-13.00	-54.87
197.81	-64.32	-65.43	2.79	-1.68	-13.00	-51.32
594.54	-60.93	-61.34	3.26	-2.85	-13.00	-47.93
1564.00	-52.64	-57.12	9.03	-4.55	-40.00	-12.64



Page 142 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B13

Test Mode :Tx CH Mid

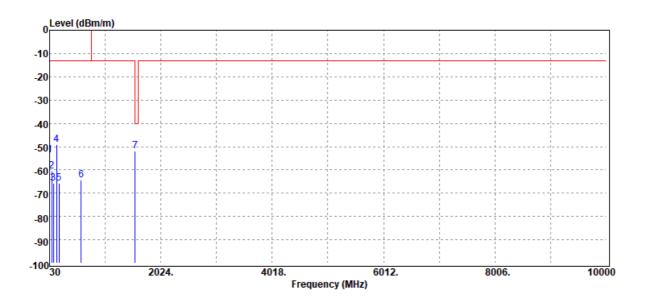
EUT Pol :E2 Plane

Test Channel :782 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :HORIZONTAL

Engineer :Kane



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	dBm	dBi/dBd	dB	dBm	dB
-53.68	-38.07	-14.62	-0.99	-13.00	-40.68
-60.71	-52.85	-6.72	-1.14	-13.00	-47.71
-65.89	-63.68	-0.98	-1.23	-13.00	-52.89
-49.10	-45.65	-1.87	-1.58	-13.00	-36.10
-65.73	-66.84	2.79	-1.68	-13.00	-52.73
-64.31	-64.72	3.26	-2.85	-13.00	-51.31
-51.87	-56.35	9.03	-4.55	-40.00	-11.87
	-53.68 -60.71 -65.89 -49.10 -65.73 -64.31	Output Level dBm -53.68	Output Level Gain dBi/dBd -53.68 -38.07 -14.62 -60.71 -52.85 -6.72 -65.89 -63.68 -0.98 -49.10 -45.65 -1.87 -65.73 -66.84 2.79 -64.31 -64.72 3.26	dBm Output Level dBm Gain dBi/dBd Loss dB -53.68 -38.07 -14.62 -0.99 -60.71 -52.85 -6.72 -1.14 -65.89 -63.68 -0.98 -1.23 -49.10 -45.65 -1.87 -1.58 -65.73 -66.84 2.79 -1.68 -64.31 -64.72 3.26 -2.85	dBm Output Level dBm Gain dBi/dBd Loss dB dBm -53.68 -38.07 -14.62 -0.99 -13.00 -60.71 -52.85 -6.72 -1.14 -13.00 -65.89 -63.68 -0.98 -1.23 -13.00 -49.10 -45.65 -1.87 -1.58 -13.00 -65.73 -66.84 2.79 -1.68 -13.00 -64.31 -64.72 3.26 -2.85 -13.00



Page 143 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B13

Test Mode :Tx CH High

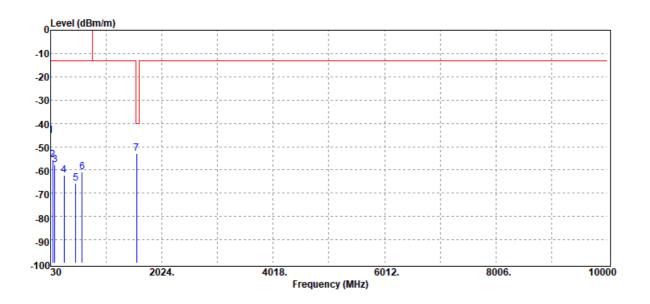
EUT Pol :E2 Plane

Test Channel :784.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

Engineer :Kane



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-45.30	-29.69	-14.62	-0.99	-13.00	-32.30
71.71	-55.54	-47.68	-6.72	-1.14	-13.00	-42.54
105.66	-57.68	-54.85	-1.57	-1.26	-13.00	-44.68
270.56	-62.20	-63.63	3.30	-1.87	-13.00	-49.20
479.11	-65.91	-67.40	3.81	-2.32	-13.00	-52.91
594.54	-60.84	-61.25	3.26	-2.85	-13.00	-47.84
1569.00	-53.03	<i>-</i> 57.52	9.05	-4.56	-40.00	-13.03



Test Channel

Report No.: ER/2019/C0117

Page 144 of 250

:2020-01-22

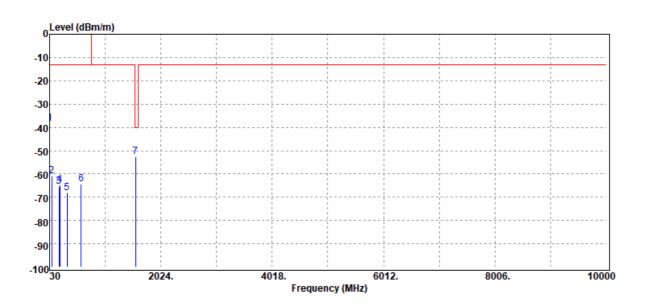
Report Number :ER/2019/C0117 **Test Date**

:784.5 MHz

Operation Mode :LTE B13 Temp./Humi. :23.7/56

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Kane



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-38.28	-22.67	-14.62	-0.99	-13.00	-25.28
71.71	-60.76	-52.90	-6.72	-1.14	-13.00	-47.76
197.81	-65.49	-66.60	2.79	-1.68	-13.00	-52.49
214.30	-64.78	-66.39	3.31	-1.70	-13.00	-51.78
342.34	-68.30	-69.96	3.71	-2.05	-13.00	-55.30
594.54	-64.46	-64.87	3.26	-2.85	-13.00	-51.46
1569.00	-52.72	-57.21	9.05	-4.56	-40.00	-12.72



Page 145 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B13

Test Mode :Tx CH Low

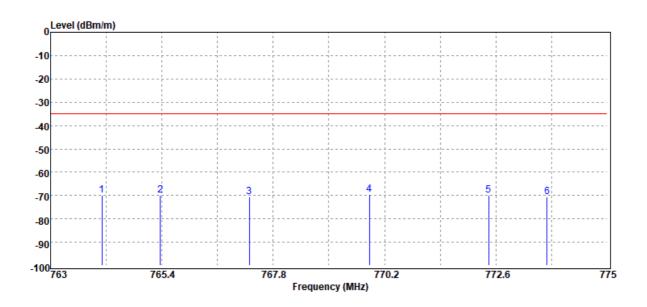
EUT Pol :E2 Plane

Test Channel :779.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

Engineer :Kane



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
764.10	-69.86	-70.11	3.45	-3.20	-35.00	-34.86
765.36	-69.87	-70.12	3.46	-3.21	-35.00	-34.87
767.28	-70.63	-70.88	3.47	-3.22	-35.00	-35.63
769.88	-69.60	-69.84	3.48	-3.24	-35.00	-34.60
772.44	-69.93	-70.17	3.49	-3.25	-35.00	-34.93
773.70	-70.46	-70.71	3.50	-3.25	-35.00	-35.46

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Page 146 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B13

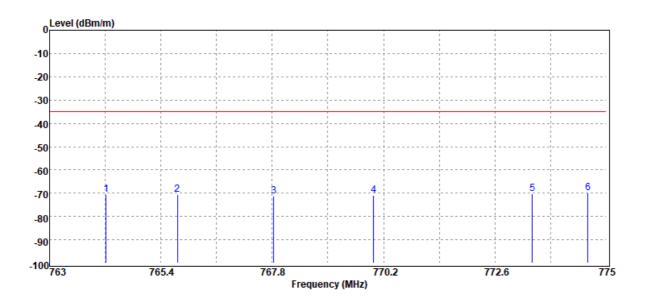
Test Mode :Tx CH Low

EUT Pol :E2 Plane Test Channel :779.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :HORIZONTAL

Engineer :Kane



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
764.22	-70.48	-70.73	3.45	-3.20	-35.00	-35.48
765.76	-70.76	-71.01	3.46	-3.21	-35.00	-35.76
767.84	-71.11	-71.35	3.47	-3.23	-35.00	-36.11
769.98	-70.78	-71.02	3.48	-3.24	-35.00	-35.78
773.40	-70.24	-70.49	3.50	-3.25	-35.00	-35.24
774.60	-69.91	-70.16	3.50	-3.25	-35.00	-34.91



Page 147 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B13

Test Mode :Tx CH Mid

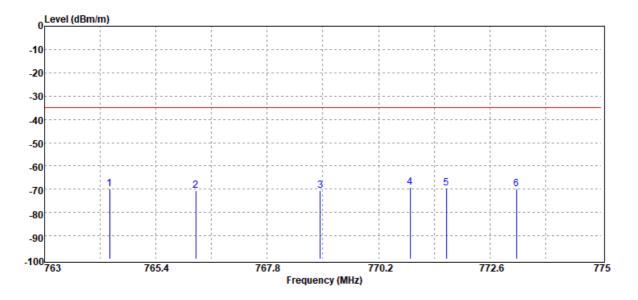
EUT Pol :E2 Plane

Test Channel :782 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

Engineer :Kane



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
764.40	-69.74	-69.98	3.45	-3.21	-35.00	-34.74
766.26	-70.73	-70.97	3.46	-3.22	-35.00	-35.73
768.94	-70.68	-70.93	3.48	-3.23	-35.00	-35.68
770.88	-69.20	-69.45	3.49	-3.24	-35.00	-34.20
771.66	-69.64	-69.89	3.49	-3.24	-35.00	-34.64
773.18	-69.93	-70.18	3.50	-3.25	-35.00	-34.93



:782 MHz

Test Channel

Report No.: ER/2019/C0117

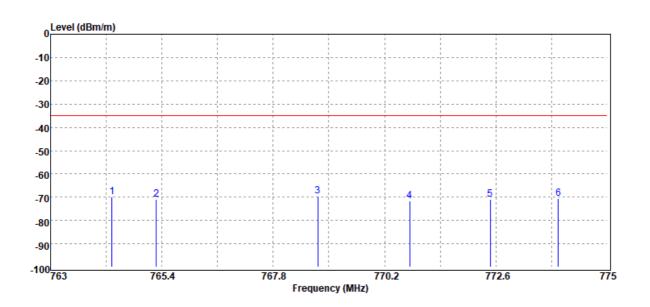
Page 148 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-22

Operation Mode :LTE B13 Temp./Humi. :23.7/56

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Kane



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
764.32	-69.81	-70.06	3.45	-3.20	-35.00	-34.81
765.28	-71.00	-71.25	3.46	-3.21	-35.00	-36.00
768.76	-69.67	-69.91	3.47	-3.23	-35.00	-34.67
770.74	-71.68	-71.92	3.48	-3.24	-35.00	-36.68
772.48	-70.96	-71.20	3.49	-3.25	-35.00	-35.96
773.94	-70.60	-70.85	3.50	-3.25	-35.00	-35.60

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Page 149 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B13

Test Mode :Tx CH High

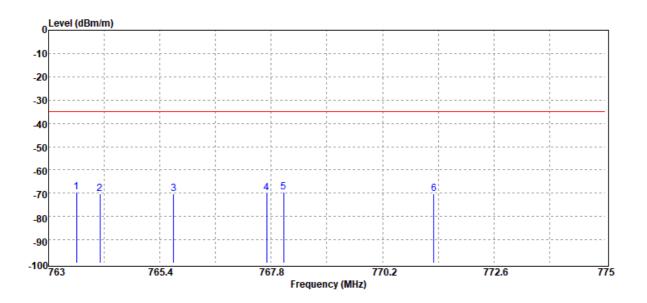
EUT Pol :E2 Plane

Test Channel :784.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

Engineer :Kane



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
763.60	-69.72	-69.97	3.45	-3.20	-35.00	-34.72
764.10	-70.26	-70.51	3.45	-3.20	-35.00	-35.26
765.70	-70.14	-70.39	3.46	-3.21	-35.00	-35.14
767.70	-69.93	-70.17	3.47	-3.23	-35.00	-34.93
768.06	-69.68	-69.92	3.47	-3.23	-35.00	-34.68
771.30	-70.34	-70.59	3.49	-3.24	-35.00	-35.34



Page 150 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B13

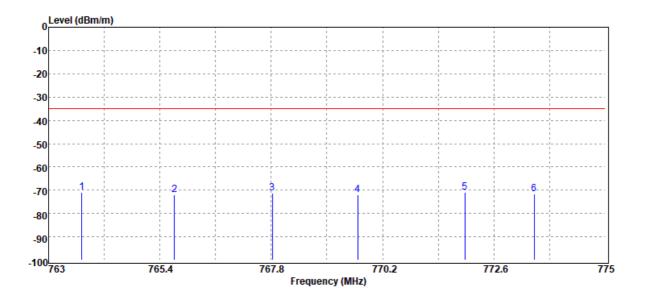
Test Mode :Tx CH High

EUT Pol :E2 Plane Test Channel :784.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :HORIZONTAL

Engineer :Kane



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
763.72	-70.96	-71.21	3.45	-3.20	-35.00	-35.96
765.71	-71.87	-72.12	3.46	-3.21	-35.00	-36.87
767.82	-71.43	-71.67	3.47	-3.23	-35.00	-36.43
769.66	-72.12	-72.36	3.48	-3.24	-35.00	-37.12
771.98	-70.86	-71.10	3.49	-3.25	-35.00	-35.86
773.46	-71.60	-71.85	3.50	-3.25	-35.00	-36.60



Page 151 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B13

Test Mode :Tx CH Low

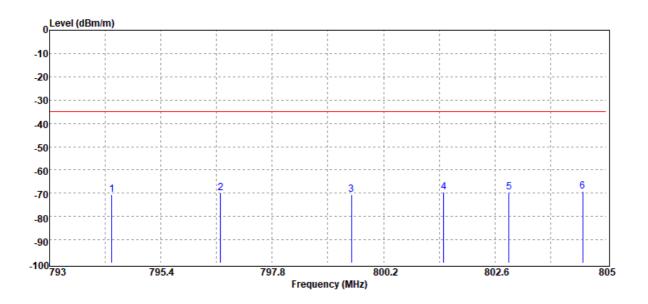
EUT Pol :E2 Plane

Test Channel :779.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

Engineer :Kane



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
794.34	-70.76	-71.05	3.61	-3.32	-35.00	-35.76
796.68	-69.89	-70.18	3.62	-3.33	-35.00	-34.89
799.50	-70.54	-70.83	3.63	-3.34	-35.00	-35.54
801.50	-69.46	-69.75	3.63	-3.34	-35.00	-34.46
802.90	-69.61	-69.89	3.63	-3.35	-35.00	-34.61
804.50	-69.08	-69.36	3.63	-3.35	-35.00	-34.08



Report No.: ER/2019/C0117

Page 152 of 250

:2020-01-22

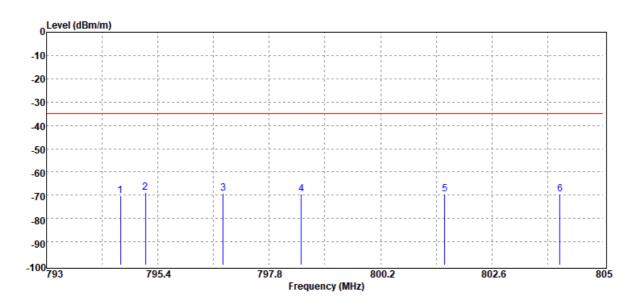
Report Number :ER/2019/C0117 **Test Date**

:779.5 MHz

Operation Mode :LTE B13 Temp./Humi. :23.7/56

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Kane



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
794.60	-70.24	-70.53	3.61	-3.32	-35.00	-35.24
795.14	-68.84	-69.13	3.61	-3.32	-35.00	-33.84
796.80	-69.21	-69.50	3.62	-3.33	-35.00	-34.21
798.50	-69.38	-69.68	3.63	-3.33	-35.00	-34.38
801.58	-69.67	-69.96	3.63	-3.34	-35.00	-34.67
804.06	-69.64	-69.92	3.63	-3.35	-35.00	-34.64



Page 153 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B13

Test Mode :Tx CH Mid

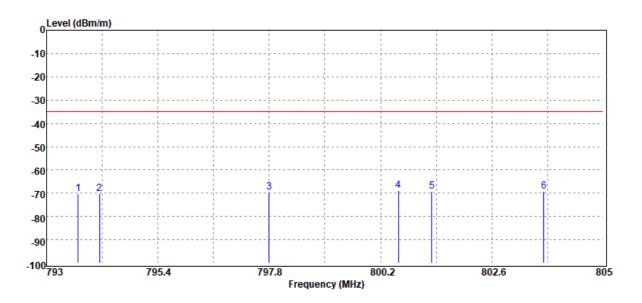
EUT Pol :E2 Plane

Test Channel :782.0 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

Engineer :Kane



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
793.68	-70.22	-70.50	3.60	-3.32	-35.00	-35.22
794.14	-70.19	-70.48	3.61	-3.32	-35.00	-35.19
797.80	-69.53	-69.82	3.62	-3.33	-35.00	-34.53
800.58	-68.83	-69.12	3.63	-3.34	-35.00	-33.83
801.30	-69.31	-69.60	3.63	-3.34	-35.00	-34.31
803.72	-69.34	-69.62	3.63	-3.35	-35.00	-34.34



Report No.: ER/2019/C0117

Page 154 of 250

:2020-01-22

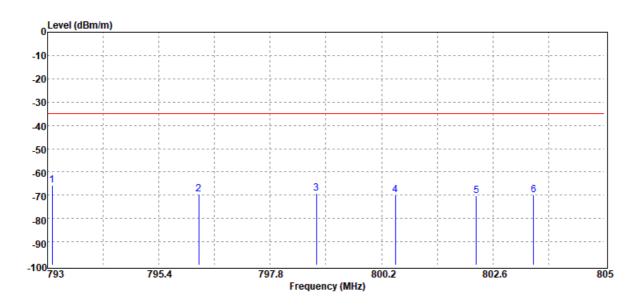
Report Number :ER/2019/C0117 **Test Date**

:782.0 MHz

Operation Mode :LTE B13 Temp./Humi. :23.7/56

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Kane



imit Margin
lBm dB
35.00 -30.84
35.00 -34.68
35.00 -34.05
35.00 -34.90
35.00 -35.39
35.00 -34.82



Page 155 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B13

Test Mode :Tx CH High

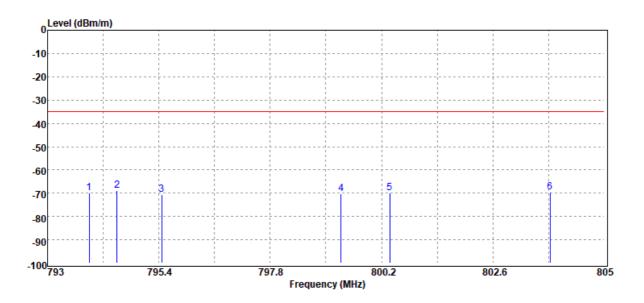
EUT Pol :E2 Plane

Test Channel :784.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :VERTICAL

Engineer :Kane



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
793.90	-69.86	-70.14	3.60	-3.32	-35.00	-34.86
794.50	-68.86	-69.15	3.61	-3.32	-35.00	-33.86
795.46	-70.43	-70.72	3.61	-3.32	-35.00	-35.43
799.32	-70.41	-70.71	3.63	-3.33	-35.00	-35.41
800.38	-69.79	-70.08	3.63	-3.34	-35.00	-34.79
803.84	-69.55	-69.83	3.63	-3.35	-35.00	-34.55



Page 156 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B13

Test Mode :Tx CH High

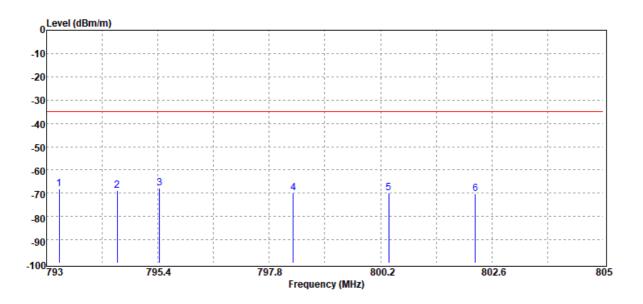
EUT Pol :E2 Plane

Test Channel :784.5 MHz **Test Date** :2020-01-22

Temp./Humi. :23.7/56

Antenna Pol. :HORIZONTAL

Engineer :Kane



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
793.28	-68.04	-68.32	3.60	-3.32	-35.00	-33.04
794.52	-68.91	-69.20	3.61	-3.32	-35.00	-33.91
795.44	-67.96	-68.25	3.61	-3.32	-35.00	-32.96
798.32	-69.89	-70.19	3.63	-3.33	-35.00	-34.89
800.38	-69.98	-70.27	3.63	-3.34	-35.00	-34.98
802.24	-70.32	-70.61	3.63	-3.34	-35.00	-35.32



Page 157 of 250

:2020-01-31

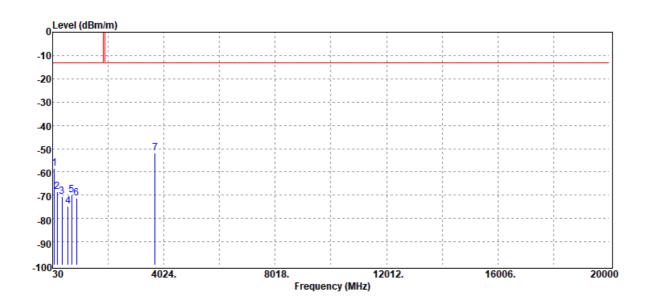
Report Number :ER/2019/C0117 **Test Date**

Operation Mode :LTE B25 Temp./Humi. :18.5/55

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :1855 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
-		Output Level	Gain	Loss		_
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
95.96	-58.48	-51.84	-5.69	-0.95	-13.00	-45.48
197.81	-68.58	-64.86	-2.34	-1.38	-13.00	-55.58
372.41	-70.70	-67.17	-1.62	-1.91	-13.00	-57.70
581.93	-74.79	-71.25	-1.58	-1.96	-13.00	-61.79
721.61	-69.73	-65.97	-1.37	-2.39	-13.00	-56.73
896.21	-71.32	-66.84	-1.71	-2.77	-13.00	-58.32
3710.00	-51.94	-58.37	12.38	-5.95	-13.00	-38.94



Report No.: ER/2019/C0117

Page 158 of 250

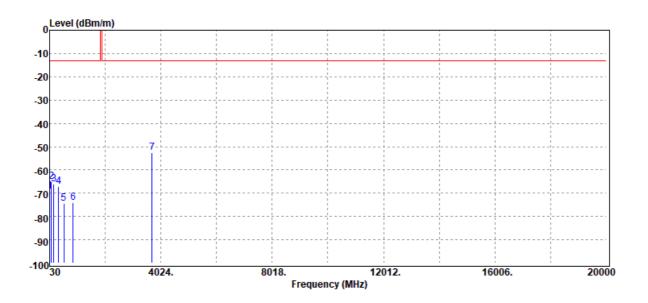
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

:1855 MHz

Operation Mode :LTE B25 Temp./Humi. :18.5/55

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		J
MHz	dBm	['] dBm	dBi/dBd	dB	dBm	dB
32.91	-69.16	-48.10	-20.49	-0.57	-13.00	-56.16
95.96	-64.89	-58.25	-5.69	-0.95	-13.00	-51.89
180.35	-66.09	-60.69	-4.15	-1.25	-13.00	-53.09
350.10	-67.27	-63.91	-1.46	-1.90	-13.00	-54.27
541.19	-74.36	-70.81	-1.39	-2.16	-13.00	-61.36
880.69	-74.00	-69.75	-1.74	-2.51	-13.00	-61.00
3710.00	-52.47	-58.90	12.38	-5.95	-13.00	-39.47

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Page 159 of 250

:2020-01-31

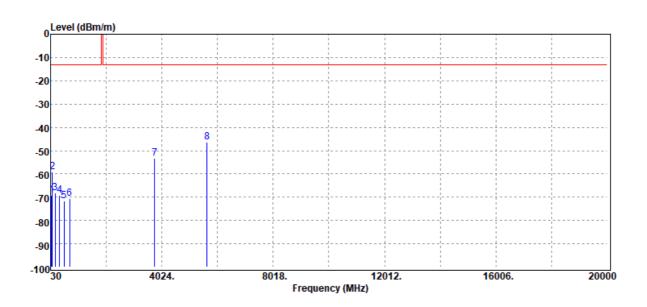
Report Number :ER/2019/C0117 **Test Date**

Operation Mode :LTE B25 Temp./Humi. :18.5/55

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :1882.5 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
63.95	-69.06	-54.27	-14.03	-0.76	-13.00	-56.06
95.96	-59.06	-52.42	-5.69	-0.95	-13.00	-46.06
197.81	-68.15	-64.43	-2.34	-1.38	-13.00	-55.15
350.10	-69.19	-65.83	-1.46	-1.90	-13.00	-56.19
516.94	-71.78	-67.75	-1.45	-2.58	-13.00	-58.78
721.61	-70.62	-66.86	-1.37	-2.39	-13.00	-57.62
3765.00	-53.12	-59.40	12.30	-6.02	-13.00	-40.12
5647.50	-46.53	-52.33	13.29	-7.49	-13.00	-33.53

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Report No.: ER/2019/C0117

Page 160 of 250

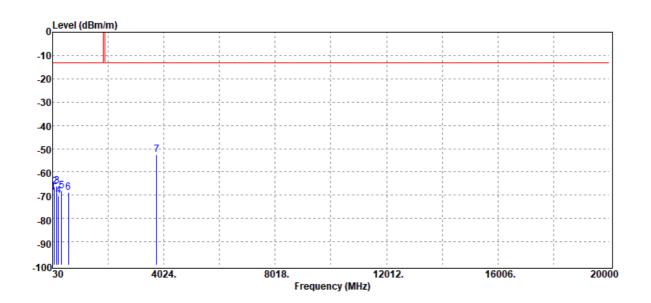
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :LTE B25 Temp./Humi. :18.5/55

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas

:1882.5 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
31.94	-68.88	-47.57	-20.76	-0.55	-13.00	-55.88
95.96	-66.36	-59.72	-5.69	-0.95	-13.00	-53.36
180.35	-65.92	-60.52	-4.15	-1.25	-13.00	-52.92
240.49	-70.15	-66.99	-1.73	-1.43	-13.00	-57.15
350.10	-68.30	-64.94	-1.46	-1.90	-13.00	-55.30
594.54	-69.01	-65.16	-1.75	-2.10	-13.00	-56.01
3765.00	-52.46	-58.74	12.30	-6.02	-13.00	-39.46

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t (886-2) 2299-3279



Page 161 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B25

Test Mode :Tx CH High

EUT Pol :E2 Plane

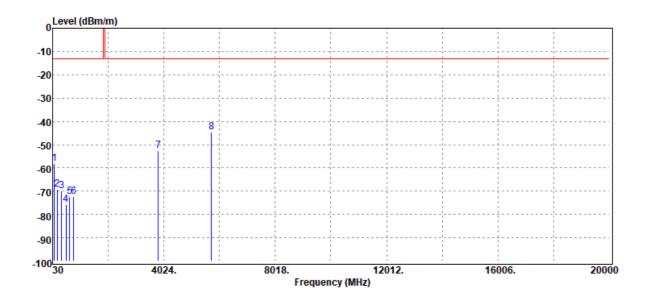
Test Channel :1910 MHz



Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.09	-51.45	-5.69	-0.95	-13.00	-45.09
197.81	-69.16	-65.44	-2.34	-1.38	-13.00	-56.16
350.10	-70.06	-66.70	-1.46	-1.90	-13.00	-57.06
510.15	-75.92	-71.85	-1.49	-2.58	-13.00	-62.92
648.86	-72.26	-67.92	-1.50	-2.84	-13.00	-59.26
781.75	-72.28	-67.87	-1.68	-2.73	-13.00	-59.28
3820.00	-52.56	-58.71	12.26	-6.11	-13.00	-39.56
5730.00	-44.79	-50.15	12.94	-7.58	-13.00	-31.79



Report No.: ER/2019/C0117

Page 162 of 250

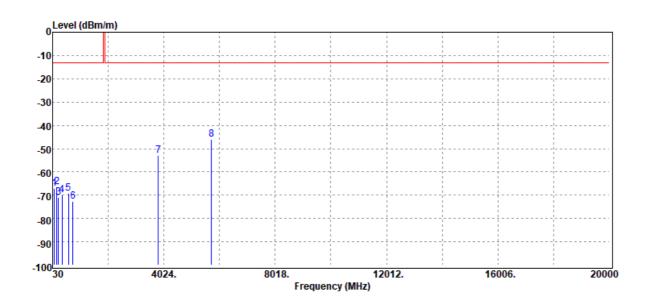
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

:1910 MHz

Operation Mode :LTE B25 Temp./Humi. :18.5/55

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		J
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
95.96	-67.18	-60.54	-5.69	-0.95	-13.00	-54.18
180.35	-66.56	-61.16	-4.15	-1.25	-13.00	-53.56
240.49	-70.92	-67.76	-1.73	-1.43	-13.00	-57.92
372.41	-70.05	-66.52	-1.62	-1.91	-13.00	-57.05
594.54	-69.30	-65.45	-1.75	-2.10	-13.00	-56.30
757.50	-72.74	-68.34	-1.80	-2.60	-13.00	-59.74
3820.00	-52.96	-59.11	12.26	-6.11	-13.00	-39.96
5730.00	-45.92	-51.28	12.94	-7.58	-13.00	-32.92

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t (886-2) 2299-3279



Page 163 of 250

:2020-01-31

:18.5/55

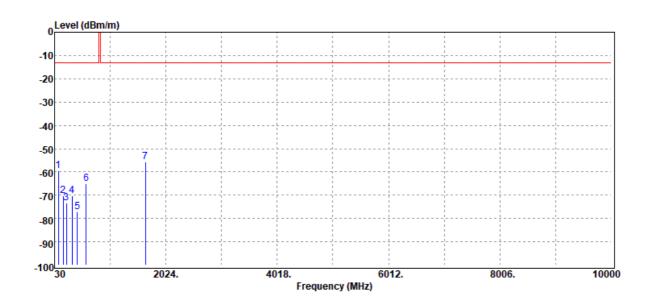
Report Number :ER/2019/C0117 **Test Date**

Operation Mode :LTE B26 Temp./Humi.

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :829 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-59.42	-52.78	-5.69	-0.95	-13.00	-46.42
183.26	-70.20	-65.27	-3.65	-1.28	-13.00	-57.20
240.49	-73.18	-70.02	-1.73	-1.43	-13.00	-60.18
343.31	-70.40	-66.92	-1.59	-1.89	-13.00	-57.40
440.31	-77.04	-73.45	-1.76	-1.83	-13.00	-64.04
594.54	-65.19	-61.34	-1.75	-2.10	-13.00	-52.19
1658.00	-55.81	-61.15	9.36	-4.02	-13.00	-42.81



:829 MHz

Test Channel

Report No.: ER/2019/C0117

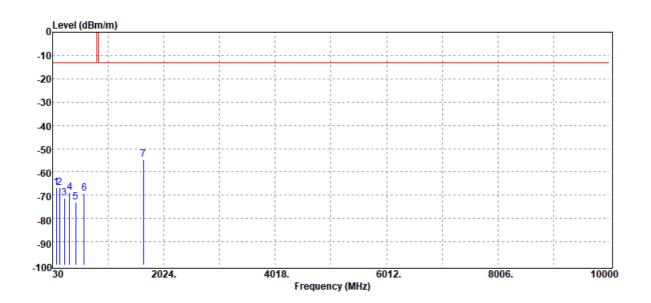
Page 164 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :LTE B26 Temp./Humi. :18.5/55

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	dBm	dBi/dBd	dB	dBm	dB
-66.71	-60.07	-5.69	-0.95	-13.00	-53.71
-66.83	-58.46	-7.01	-1.36	-13.00	-53.83
-71.22	-68.06	-1.73	-1.43	-13.00	-58.22
-68.87	-65.35	-1.63	-1.89	-13.00	-55.87
-73.15	-69.56	-1.67	-1.92	-13.00	-60.15
-69.30	-65.45	-1.75	-2.10	-13.00	-56.30
-54.76	-60.10	9.36	-4.02	-13.00	-41.76
	-66.71 -66.83 -71.22 -68.87 -73.15 -69.30	Output Level dBm -66.71	Output Level Gain dBi/dBd -66.71 -60.07 -5.69 -66.83 -58.46 -7.01 -71.22 -68.06 -1.73 -68.87 -65.35 -1.63 -73.15 -69.56 -1.67 -69.30 -65.45 -1.75	dBm Output Level dBm Gain dBi/dBd Loss dB -66.71 -60.07 -5.69 -0.95 -66.83 -58.46 -7.01 -1.36 -71.22 -68.06 -1.73 -1.43 -68.87 -65.35 -1.63 -1.89 -73.15 -69.56 -1.67 -1.92 -69.30 -65.45 -1.75 -2.10	dBm Output Level dBm Gain dBi/dBd Loss dB dBm -66.71 -60.07 -5.69 -0.95 -13.00 -66.83 -58.46 -7.01 -1.36 -13.00 -71.22 -68.06 -1.73 -1.43 -13.00 -68.87 -65.35 -1.63 -1.89 -13.00 -73.15 -69.56 -1.67 -1.92 -13.00 -69.30 -65.45 -1.75 -2.10 -13.00

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Page 165 of 250

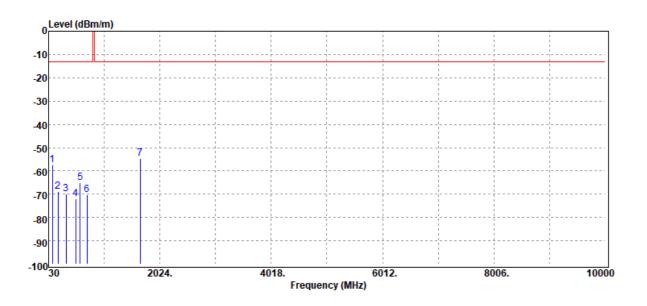
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :LTE B26 Temp./Humi. :18.5/55

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :836.5 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
						_
95.96	-57.28	-50.64	-5.69	-0.95	-13.00	-44.28
197.81	-68.69	-64.97	-2.34	-1.38	-13.00	-55.69
343.31	-69.87	-66.39	-1.59	-1.89	-13.00	-56.87
516.94	-71.81	-67.78	-1.45	-2.58	-13.00	-58.81
594.54	-64.90	-61.05	-1.75	-2.10	-13.00	-51.90
721.61	-70.39	-66.63	-1.37	-2.39	-13.00	-57.39
1673.00	-54.66	-60.12	9.49	-4.03	-13.00	-41.66



Report No.: ER/2019/C0117

Page 166 of 250

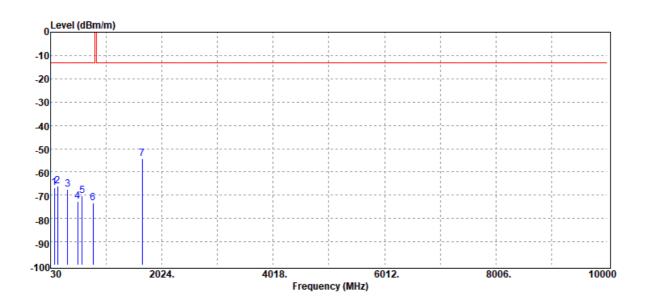
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :LTE B26 Temp./Humi. :18.5/55

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas

:836.5 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-66.93	-60.29	-5.69	-0.95	-13.00	-53.93
156.10	-66.23	-57.66	-7.26	-1.31	-13.00	-53.23
337.49	-67.60	-64.08	-1.63	-1.89	-13.00	-54.60
516.94	-72.50	-68.47	-1.45	-2.58	-13.00	-59.50
594.54	-70.22	-66.37	-1.75	-2.10	-13.00	-57.22
794.36	-73.42	-68.72	-1.64	-3.06	-13.00	-60.42
1673.00	-54.26	-59.72	9.49	-4.03	-13.00	-41.26

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Page 167 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B26

Test Mode :Tx CH High

EUT Pol :E2 Plane

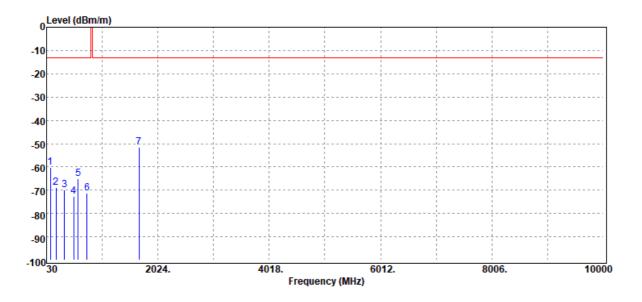
Test Channel :844 MHz



Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-60.14	-53.50	-5.69	-0.95	-13.00	-47.14
197.81	-68.91	-65.19	-2.34	-1.38	-13.00	-55.91
350.10	-69.84	-66.48	-1.46	-1.90	-13.00	-56.84
516.94	-72.56	-68.53	-1.45	-2.58	-13.00	-59.56
594.54	-65.01	-61.16	-1.75	-2.10	-13.00	-52.01
757.50	-71.22	-66.82	-1.80	-2.60	-13.00	-58.22
1688.00	-51.39	-56.95	9.61	-4.05	-13.00	-38.39

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:844 MHz

Test Channel

Report No.: ER/2019/C0117

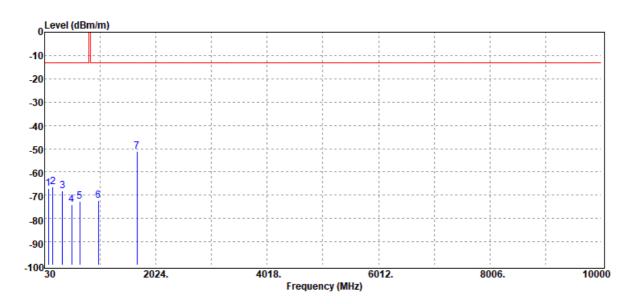
Page 168 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :LTE B26 Temp./Humi. :18.5/55

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

EUT Pol :Thomas :E2 Plane Engineer



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-66.99	-60.35	<i>-</i> 5.69	-0.95	-13.00	-53.99
180.35	-66.31	-60.91	-4.15	-1.25	-13.00	-53.31
350.10	-68.13	-64.77	-1.46	-1.90	-13.00	-55.13
516.94	-74.07	-70.04	-1.45	-2.58	-13.00	-61.07
662.44	-72.75	-68.23	-1.37	-3.15	-13.00	-59.75
990.30	-72.31	-67.40	-1.63	-3.28	-13.00	-59.31
1688.00	-51.19	-56.75	9.61	-4.05	-13.00	-38.19

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Page 169 of 250

:2020-01-31

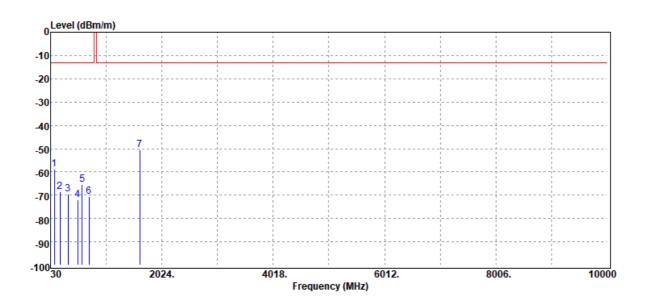
Report Number :ER/2019/C0117 **Test Date**

Operation Mode :LTE B26 Temp./Humi. :18.5/55

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :815.5 MHz



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.94	-52.30	-5.69	-0.95	-13.00	-45.94
197.81	-68.57	-64.85	-2.34	-1.38	-13.00	-55.57
343.31	-69.49	-66.01	-1.59	-1.89	-13.00	-56.49
516.94	-72.09	-68.06	-1.45	-2.58	-13.00	-59.09
594.54	-65.35	-61.50	-1.75	-2.10	-13.00	-52.35
721.61	-70.57	-66.81	-1.37	-2.39	-13.00	-57.57
1631.00	-50.63	-55.90	9.26	-3.99	-13.00	-37.63



Report No.: ER/2019/C0117

Page 170 of 250

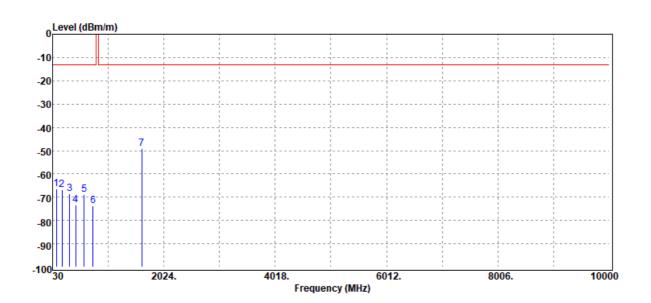
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :LTE B26 Temp./Humi. :18.5/55

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas

:815.5 MHz



Margin
Ū
dB
-53.54
-53.85
-55.34
-60.27
-55.98
-60.81
-36.09



Page 171 of 250

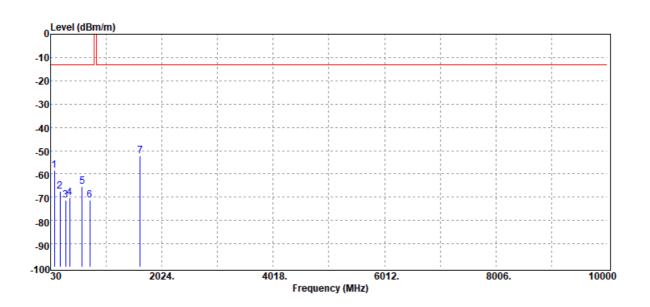
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :LTE B26 Temp./Humi. :18.5/55

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :819 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.50	-51.86	-5.69	-0.95	-13.00	-45.50
197.81	-67.41	-63.69	-2.34	-1.38	-13.00	-54.41
299.66	-71.20	-67.81	-1.70	-1.69	-13.00	-58.20
372.41	-70.12	-66.59	-1.62	-1.91	-13.00	-57.12
594.54	-65.50	-61.65	-1.75	-2.10	-13.00	-52.50
733.25	-71.12	-67.41	-1.50	-2.21	-13.00	-58.12
1638.00	-52.36	-57.64	9.28	-4.00	-13.00	-39.36



Report No.: ER/2019/C0117

Page 172 of 250

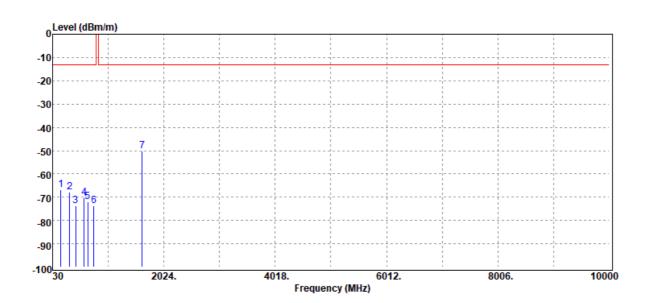
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

:819 MHz

Operation Mode :LTE B26 Temp./Humi. :18.5/55

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
180.35	-66.87	-61.47	-4.15	-1.25	-13.00	-53.87
337.49	-67.82	-64.30	-1.63	-1.89	-13.00	-54.82
445.16	-73.53	-69.94	-1.67	-1.92	-13.00	-60.53
594.54	-70.40	-66.55	-1.75	-2.10	-13.00	-57.40
662.44	-71.86	-67.34	-1.37	-3.15	-13.00	-58.86
770.11	-73.75	-69.46	-1.71	-2.58	-13.00	-60.75
1638.00	-50.18	-55.46	9.28	-4.00	-13.00	-37.18

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Page 173 of 250

:2020-01-31

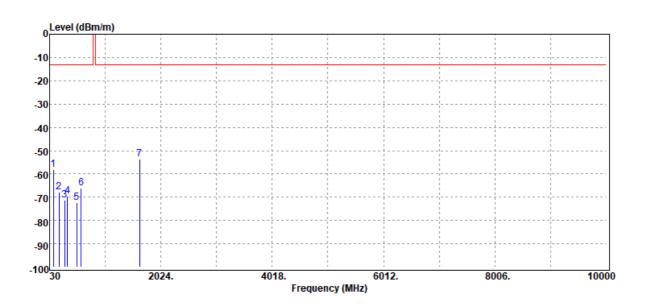
Report Number :ER/2019/C0117 **Test Date**

Operation Mode :LTE B26 Temp./Humi. :18.5/55

Test Mode :Tx CH High Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :822.5 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
						_
95.96	-58.18	-51.54	-5.69	-0.95	-13.00	-45.18
197.81	-67.99	-64.27	-2.34	-1.38	-13.00	-54.99
299.66	-71.34	-67.95	-1.70	-1.69	-13.00	-58.34
350.10	-69.44	-66.08	-1.46	-1.90	-13.00	-56.44
516.94	-72.40	-68.37	-1.45	-2.58	-13.00	-59.40
594.54	-65.94	-62.09	-1.75	-2.10	-13.00	-52.94
1645.00	-53.72	-59.01	9.29	-4.00	-13.00	-40.72

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Page 174 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B26

Test Mode :Tx CH High

EUT Pol :E2 Plane

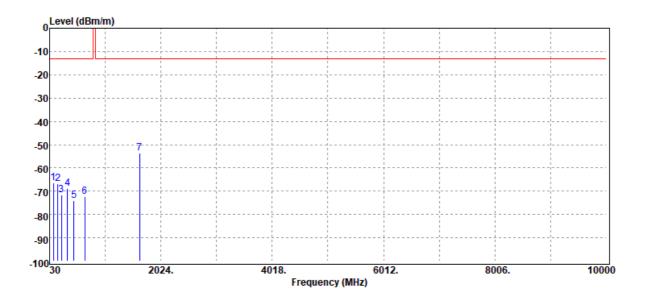
Test Channel :822.5 MHz



Temp./Humi. :18.5/55

Antenna Pol. :HORIZONTAL

Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-66.40	-59.76	-5.69	-0.95	-13.00	-53.40
180.35	-66.92	-61.52	-4.15	-1.25	-13.00	-53.92
240.49	-71.51	-68.35	-1.73	-1.43	-13.00	-58.51
350.10	-68.81	-65.45	-1.46	-1.90	-13.00	-55.81
469.41	-74.03	-70.27	-1.50	-2.26	-13.00	-61.03
662.44	-72.36	-67.84	-1.37	-3.15	-13.00	-59.36
1645.00	-53.47	-58.76	9.29	-4.00	-13.00	-40.47



Page 175 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B38

Test Mode :Tx CH Low

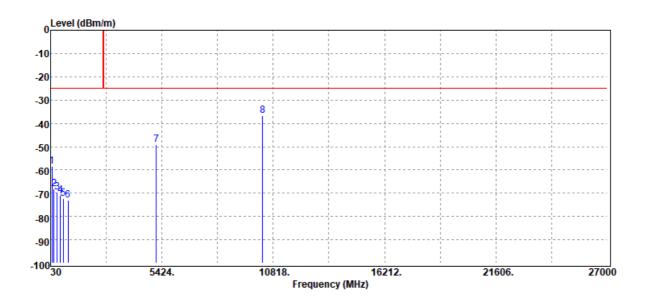
EUT Pol :E2 Plane

Test Channel :2577.5 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.61	-51.97	-5.69	-0.95	-25.00	-33.61
197.81	-68.31	-64.59	-2.34	-1.38	-25.00	-43.31
343.31	-69.71	-66.23	-1.59	-1.89	-25.00	-44.71
516.94	-70.99	-66.96	-1.45	-2.58	-25.00	-45.99
638.19	-72.20	-68.17	-1.54	-2.49	-25.00	-47.20
886.51	-72.97	-68.64	-1.72	-2.61	-25.00	-47.97
5155.00	-49.28	-54.30	12.12	-7.10	-25.00	-24.28
10310.00	-36.60	-37.58	11.18	-10.20	-25.00	-11.60



Report No.: ER/2019/C0117

Page 176 of 250

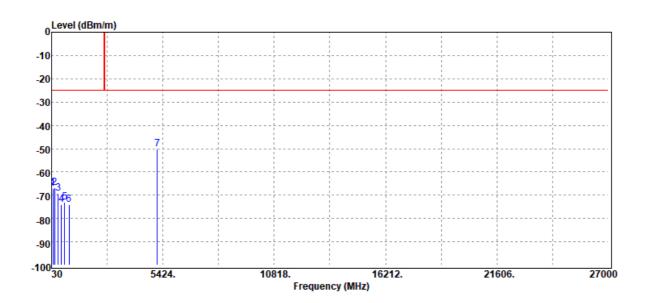
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

:2577.5 MHz

Operation Mode :LTE B38 Temp./Humi. :18.5/55

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas



t Margin
J
dB
0 -42.25
0 -41.61
0 -44.23
0 -48.91
0 -48.01
0 -48.90
0 -25.23
0 0 0

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Page 177 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B38

Test Mode :Tx CH Mid

EUT Pol :E2 Plane

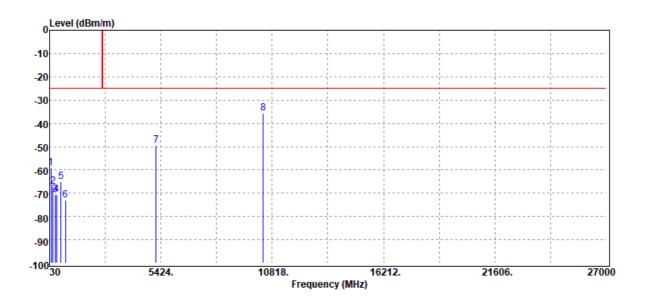
Test Channel :2595 MHz



Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
95.96	-59.25	-52.61	-5.69	-0.95	-25.00	-34.25
197.81	-66.99	-63.27	-2.34	-1.38	-25.00	-41.99
299.66	-70.45	-67.06	-1.70	-1.69	-25.00	-45.45
372.41	-70.55	-67.02	-1.62	-1.91	-25.00	-45.55
594.54	-65.13	-61.28	-1.75	-2.10	-25.00	-40.13
794.36	-73.07	-68.37	-1.64	-3.06	-25.00	-48.07
5190.00	-49.37	-54.46	12.26	-7.17	-25.00	-24.37
10380.00	-35.67	-36.77	11.04	-9.94	-25.00	-10.67



Page 178 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B38

Test Mode :Tx CH Mid

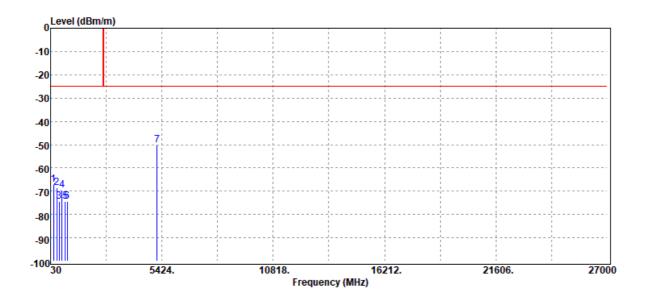
EUT Pol :E2 Plane

Test Channel :2595 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :HORIZONTAL

Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
180.35	-67.12	-61.72	-4.15	-1.25	-25.00	-42.12
337.49	-68.53	-65.01	-1.63	-1.89	-25.00	-43.53
445.16	-74.49	-70.90	-1.67	-1.92	-25.00	-49.49
594.54	-69.58	-65.73	-1.75	-2.10	-25.00	-44.58
745.86	-74.48	-70.27	-1.81	-2.40	-25.00	-49.48
841.89	-74.36	-69.57	-1.73	-3.06	-25.00	-49.36
5190.00	-50.23	-55.32	12.26	-7.17	-25.00	-25.23



Page 179 of 250

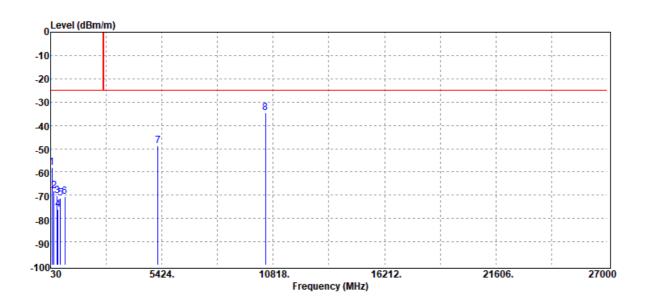
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :LTE B38 Temp./Humi. :18.5/55

Test Mode :Tx CH High Antenna Pol. :VERTICAL

EUT Pol :E2 Plane Engineer :Thomas

Test Channel :2612.5 MHz



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.20	-51.56	-5.69	-0.95	-25.00	-33.20
197.81	-68.12	-64.40	-2.34	-1.38	-25.00	-43.12
343.31	-70.25	-66.77	-1.59	-1.89	-25.00	-45.25
395.69	-76.02	-72.46	-1.61	-1.95	-25.00	-51.02
516.94	-71.38	-67.35	-1.45	-2.58	-25.00	-46.38
721.61	-70.69	-66.93	-1.37	-2.39	-25.00	-45.69
5225.00	-48.62	-53.93	12.50	-7.19	-25.00	-23.62
10448.00	-34.43	-35.16	11.05	-10.32	-25.00	-9.43



Page 180 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B38

Test Mode :Tx CH High

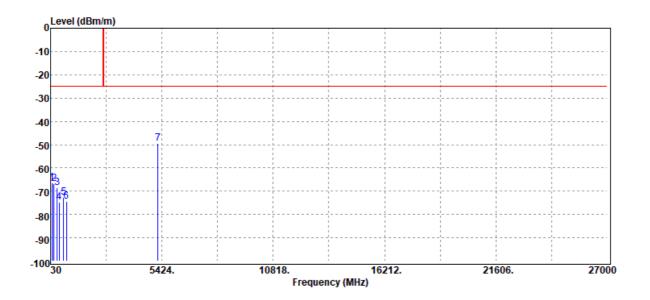
EUT Pol :E2 Plane

Test Channel :2612.5 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :HORIZONTAL

Engineer :Thomas



ırgin
J
dB
1.47
1.62
3.66
9.61
7.70
9.27
4.41
113979



Page 181 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B41

Test Mode :Tx CH Low

EUT Pol :E2 Plane

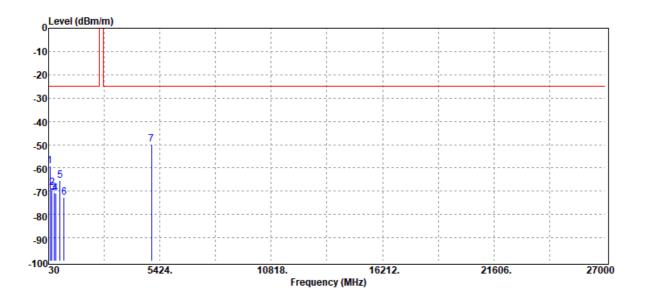
Test Channel :2506 MHz



Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-59.23	-52.59	-5.69	-0.95	-25.00	-34.23
197.81	-68.39	-64.67	-2.34	-1.38	-25.00	-43.39
299.66	-70.74	-67.35	-1.70	-1.69	-25.00	-45.74
372.41	-70.82	-67.29	-1.62	-1.91	-25.00	-45.82
594.54	-65.52	-61.67	-1.75	-2.10	-25.00	-40.52
781.75	-72.62	-68.21	-1.68	-2.73	-25.00	-47.62
5012.00	-49.97	-55.30	12.35	-7.02	-25.00	-24.97



Test Channel

Report No.: ER/2019/C0117

Page 182 of 250

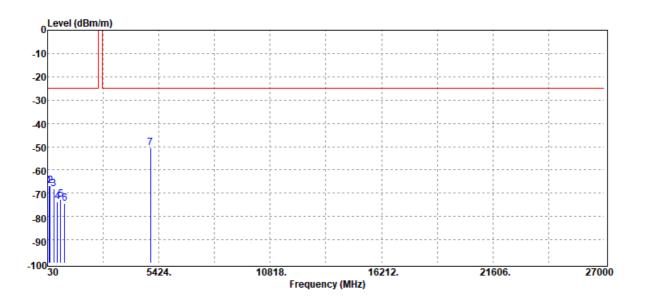
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

:2506 MHz

Operation Mode :LTE B41 Temp./Humi. :18.5/55

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
95.96	-66.73	-60.09	-5.69	-0.95	-25.00	-41.73
159.01	-66.72	-58.35	-7.01	-1.36	-25.00	-41.72
337.49	-68.01	-64.49	-1.63	-1.89	-25.00	-43.01
516.94	-73.64	-69.61	-1.45	-2.58	-25.00	-48.64
662.44	-72.58	-68.06	-1.37	-3.15	-25.00	-47.58
854.50	-74.30	-69.67	-1.60	-3.03	-25.00	-49.30
5012.00	-50.47	-55.80	12.35	-7.02	-25.00	-25.47

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Page 183 of 250

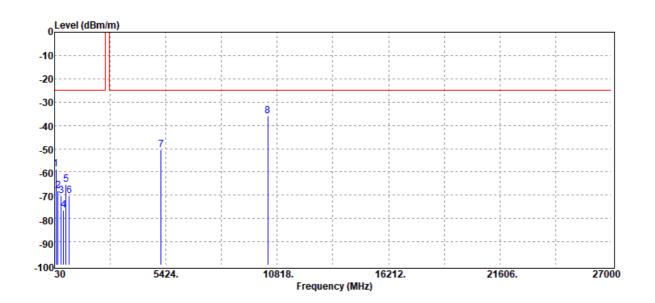
Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :LTE B41 Temp./Humi. :18.5/55

Test Mode :Tx CH mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :2593 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.76	-52.12	-5.69	-0.95	-25.00	-33.76
197.81	-68.28	-64.56	-2.34	-1.38	-25.00	-43.28
350.10	-70.34	-66.98	-1.46	-1.90	-25.00	-45.34
469.41	-76.42	-72.66	-1.50	-2.26	-25.00	-51.42
594.54	-65.31	-61.46	-1.75	-2.10	-25.00	-40.31
733.25	-70.31	-66.60	-1.50	-2.21	-25.00	-45.31
5186.00	-50.67	-55.75	12.24	-7.16	-25.00	-25.67
10372.00	-35.99	-37.08	11.06	-9.97	-25.00	-10.99

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:2593 MHz

Test Channel

Report No.: ER/2019/C0117

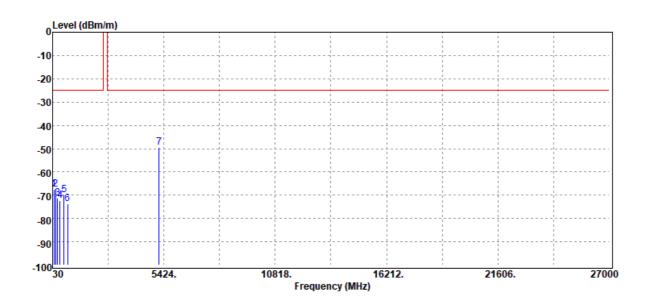
Page 184 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-31

Operation Mode :LTE B41 Temp./Humi. :18.5/55

Test Mode :Tx CH mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-67.57	-60.93	-5.69	-0.95	-25.00	-42.57
180.35	-67.32	-61.92	-4.15	-1.25	-25.00	-42.32
277.35	-71.35	-67.78	-1.93	-1.64	-25.00	-46.35
395.69	-72.30	-68.74	-1.61	-1.95	-25.00	-47.30
594.54	-70.04	-66.19	-1.75	-2.10	-25.00	-45.04
757.50	-73.59	-69.19	-1.80	-2.60	-25.00	-48.59
5186.00	-49.59	-54.67	12.24	-7.16	-25.00	-24.59

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t (886-2) 2299-3279

台灣檢驗科技股份有限公司

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Page 185 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B41

Test Mode :Tx CH High

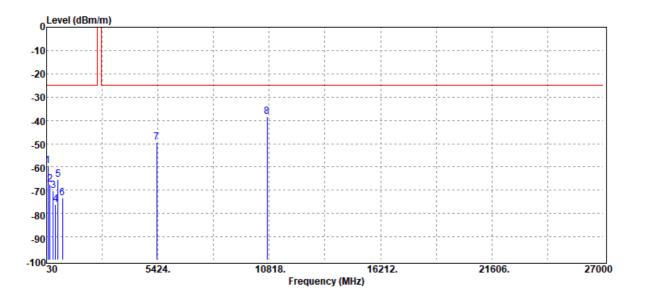
EUT Pol :E2 Plane

Test Channel :2680 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
95.96	-59.52	-52.88	-5.69	-0.95	-25.00	-34.52
197.81	-67.52	-63.80	-2.34	-1.38	-25.00	-42.52
350.10	-70.20	-66.84	-1.46	-1.90	-25.00	-45.20
469.41	-76.17	-72.41	-1.50	-2.26	-25.00	-51.17
594.54	-65.25	-61.40	-1.75	-2.10	-25.00	-40.25
799.21	-73.34	-68.61	-1.59	-3.14	-25.00	-48.34
5360.00	-49.51	-55.11	12.90	-7.30	-25.00	-24.51
10720.00	-38.36	-39.14	11.16	-10.38	-25.00	-13.36



Page 186 of 250

Report Number :ER/2019/C0117

Operation Mode :LTE B41

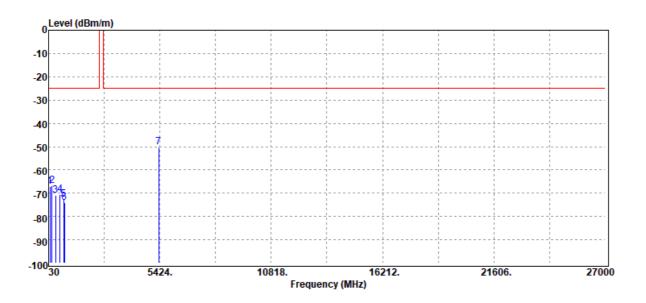
Test Mode :Tx CH High

EUT Pol :E2 Plane Test Channel :2680 MHz **Test Date** :2020-01-31

Temp./Humi. :18.5/55

Antenna Pol. :HORIZONTAL

Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-67.16	-60.52	-5.69	-0.95	-25.00	-42.16
197.81	-66.93	-63.21	-2.34	-1.38	-25.00	-41.93
379.20	-70.90	-67.34	-1.64	-1.92	-25.00	-45.90
594.54	-70.47	-66.62	-1.75	-2.10	-25.00	-45.47
757.50	-72.55	-68.15	-1.80	-2.60	-25.00	-47.55
796.30	-74.09	-69.38	-1.62	-3.09	-25.00	-49.09
5360.00	-50.32	-55.92	12.90	-7.30	-25.00	-25.32



Page 187 of 250

Co-location (WWAN+2.4G)

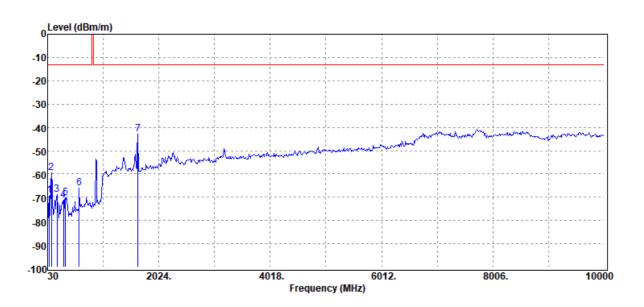
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :GSM 850/802.11b Temp./Humi. :18.1/57

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :824.2 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
-		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
63.95	-69.09	-54.30	-14.03	-0.76	-13.00	-56.09
95.96	-59.52	-52.88	-5.69	-0.95	-13.00	-46.52
197.81	-68.71	-64.99	-2.34	-1.38	-13.00	-55.71
313.24	-71.15	-67.88	-1.62	-1.65	-13.00	-58.15
350.10	-70.19	-66.83	-1.46	-1.90	-13.00	-57.19
594.54	-66.13	-62.28	-1.75	-2.10	-13.00	-53.13
1648.40	-42.92	-48.21	9.30	-4.01	-13.00	-29.92

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Page 188 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :GSM 850/802.11b

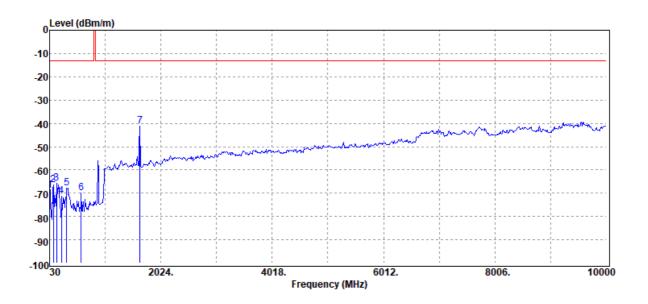
Test Mode :Tx CH Low/Tx CH Mid

EUT Pol :E2 Plane

Test Channel :824.2 MHz/2437 MHz Temp./Humi. :18.1/57

Antenna Pol. :HORIZONTAL

Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	15	Output Level	Gain	Loss	I.D.	15
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
00.07	00.05	47.00	04.00	0.54	40.00	55.05
30.97	-68.85	-47.29	-21.02	-0.54	-13.00	-55.85
95.96	-66.51	-59.87	-5.69	-0.95	-13.00	-53.51
156.10	-65.66	- 57.09	-7.26	-1.31	-13.00	-52.66
240.49	-71.31	-68.15	-1.73	-1.43	-13.00	-58.31
337.49	-67.82	-64.30	-1.63	-1.89	-13.00	-54.82
594.54	-69.90	-66.05	-1.75	-2.10	-13.00	-56.90
1648.40	-41.26	-46.55	9.30	-4.01	-13.00	-28.26

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Page 189 of 250

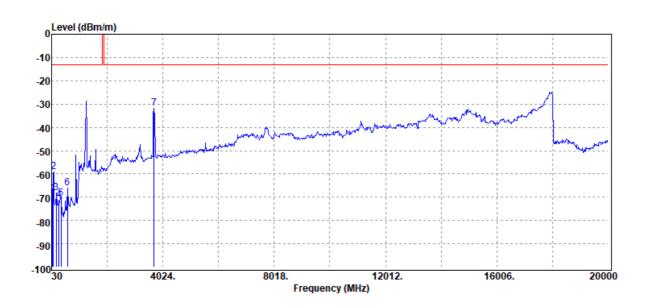
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :GSM 1900/802.11b Temp./Humi. :18.1/57

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :1850.2 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
63.95	-68.34	-53.55	-14.03	-0.76	-13.00	-55.34
95.96	-59.26	-52.62	-5.69	-0.95	-13.00	-46.26
197.81	-68.32	-64.60	-2.34	-1.38	-13.00	-55.32
299.66	-71.37	-67.98	-1.70	-1.69	-13.00	-58.37
367.56	-70.64	-67.15	-1.58	-1.91	-13.00	-57.64
594.54	-66.06	-62.21	-1.75	-2.10	-13.00	-53.06
3700.40	-31.86	-38.33	12.40	-5.93	-13.00	-18.86



Page 190 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :GSM 1900/802.11b

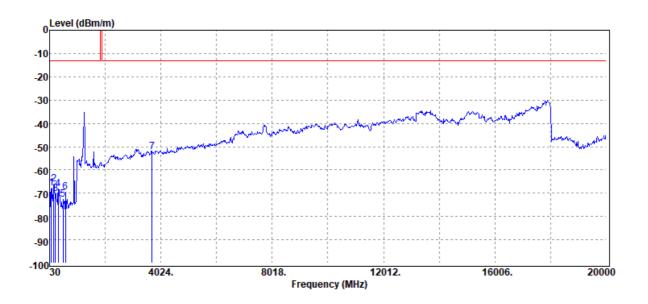
Test Mode :Tx CH Low/Tx CH Mid

EUT Pol :E2 Plane

Test Channel :1850.2 MHz/2437 MHz Temp./Humi. :18.1/57

Antenna Pol. :HORIZONTAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-67.89	-61.25	-5.69	-0.95	-13.00	-54.89
180.35	-66.23	-60.83	-4.15	-1.25	-13.00	-53.23
240.49	-70.16	-67.00	-1.73	-1.43	-13.00	-57.16
337.49	-68.05	-64.53	-1.63	-1.89	-13.00	-55.05
516.94	-72.68	-68.65	-1.45	-2.58	-13.00	-59.68
594.54	-69.59	-65.74	-1.75	-2.10	-13.00	-56.59
3700.40	-52.26	-58.73	12.40	-5.93	-13.00	-39.26



Page 191 of 250

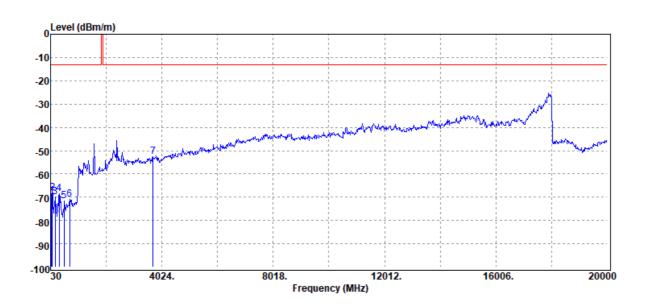
Report Number :ER/2019/C0117 **Test Date** :2020-01-07

Operation Mode :WCDMA B2/802.11b Temp./Humi. :21.8/61

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :1852.4 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
60.07	-69.62	-53.63	-15.26	-0.73	-13.00	-56.62
95.96	-68.13	-61.49	-5.69	-0.95	-13.00	-55.13
197.81	-69.79	-66.07	-2.34	-1.38	-13.00	-56.79
337.49	-68.62	-65.10	-1.63	-1.89	-13.00	-55.62
516.94	-71.79	-67.76	-1.45	-2.58	-13.00	-58.79
721.61	-70.85	-67.09	-1.37	-2.39	-13.00	-57.85
3704.80	-52.72	-59.17	12.39	-5.94	-13.00	-39.72



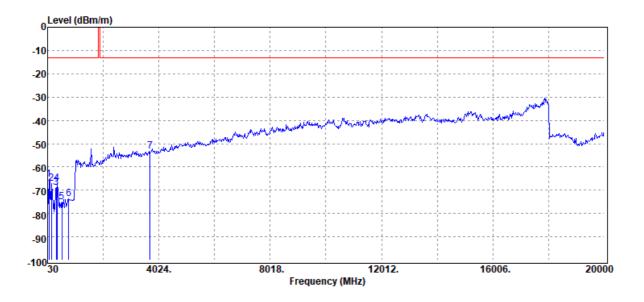
Page 192 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-07 **Operation Mode** :WCDMA B2/802.11b Temp./Humi. :21.8/61

Test Mode :Tx CH Low/Tx CH Mid :HORIZONTAL

EUT Pol :E2 Plane

Test Channel :1852.4 MHz/2437 MHz Antenna Pol. :Thomas Engineer



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	['] dBm	dBi/dBd	dB	dBm	dB
-65.31	-57.91	-6.50	-0.90	-13.00	-52.31
-67.21	-59.82	-6.09	-1.30	-13.00	-54.21
-68.79	-65.27	-1.63	-1.89	-13.00	-55.79
-67.18	-63.64	-1.63	-1.91	-13.00	-54.18
-75.24	-71.69	-1.39	-2.16	-13.00	-62.24
-73.66	-69.25	-1.68	-2.73	-13.00	-60.66
-53.15	-59.60	12.39	-5.94	-13.00	-40.15
	dBm -65.31 -67.21 -68.79 -67.18 -75.24 -73.66	Output Level dBm -65.31 -57.91 -67.21 -59.82 -68.79 -65.27 -67.18 -63.64 -75.24 -71.69 -73.66 -69.25	Output Level Gain dBm dBi/dBd -65.31 -57.91 -6.50 -67.21 -59.82 -6.09 -68.79 -65.27 -1.63 -67.18 -63.64 -1.63 -75.24 -71.69 -1.39 -73.66 -69.25 -1.68	dBm Output Level dBm Gain dBi/dBd Loss dB -65.31 -57.91 -6.50 -0.90 -67.21 -59.82 -6.09 -1.30 -68.79 -65.27 -1.63 -1.89 -67.18 -63.64 -1.63 -1.91 -75.24 -71.69 -1.39 -2.16 -73.66 -69.25 -1.68 -2.73	dBm Output Level dBm Gain dBi/dBd Loss dB -65.31 -57.91 -6.50 -0.90 -13.00 -67.21 -59.82 -6.09 -1.30 -13.00 -68.79 -65.27 -1.63 -1.89 -13.00 -67.18 -63.64 -1.63 -1.91 -13.00 -75.24 -71.69 -1.39 -2.16 -13.00 -73.66 -69.25 -1.68 -2.73 -13.00



Page 193 of 250

:Thomas

Engineer

Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :WCDMA B4/802.11b Temp./Humi. :18.1/57

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane

Test Channel :1732.4 MHz/2437 MHz



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.44	-51.80	-5.69	-0.95	-13.00	-45.44
197.81	-68.09	-64.37	-2.34	-1.38	-13.00	-55.09
343.31	-68.98	-65.50	-1.59	-1.89	-13.00	-55.98
516.94	-71.75	-67.72	-1.45	-2.58	-13.00	-58.75
594.54	-66.11	-62.26	-1.75	-2.10	-13.00	-53.11
733.25	-70.26	-66.55	-1.50	-2.21	-13.00	-57.26
3464.80	-52.59	-59.21	12.37	-5.75	-13.00	-39.59

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Page 194 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :WCDMA B4/802.11b

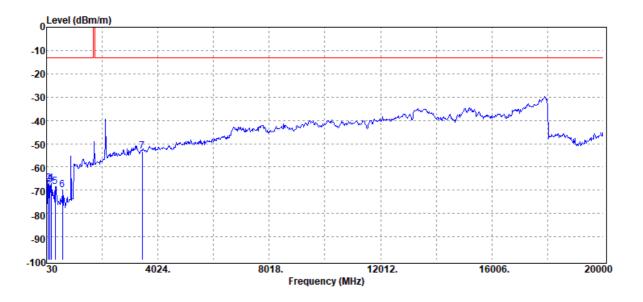
Test Mode :Tx CH Mid/Tx CH Mid

EUT Pol :E2 Plane

Test Channel :1732.4 MHz/2437 MHz Temp./Humi. :18.1/57

Antenna Pol. :HORIZONTAL

:Thomas Engineer



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	dBm	dBi/dBd	dB	dBm	dB
-70.28	-49.22	-20.49	-0.57	-13.00	-57.28
-67.10	-60.46	-5.69	-0.95	-13.00	-54.10
-67.82	-59.45	-7.01	-1.36	-13.00	-54.82
-67.01	-63.29	-2.34	-1.38	-13.00	-54.01
-68.52	-65.00	-1.63	-1.89	-13.00	-55.52
-69.97	-66.12	-1.75	-2.10	-13.00	-56.97
-53.34	-59.96	12.37	-5.75	-13.00	-40.34
	-70.28 -67.10 -67.82 -67.01 -68.52 -69.97	Output Level dBm -70.28 -49.22 -67.10 -60.46 -67.82 -59.45 -67.01 -63.29 -68.52 -65.00 -69.97 -66.12	Output Level Gain dBi/dBd -70.28 -49.22 -20.49 -67.10 -60.46 -5.69 -67.82 -59.45 -7.01 -67.01 -63.29 -2.34 -68.52 -65.00 -1.63 -69.97 -66.12 -1.75	dBm Output Level dBm Gain dBi/dBd Loss dB -70.28 -49.22 -20.49 -0.57 -67.10 -60.46 -5.69 -0.95 -67.82 -59.45 -7.01 -1.36 -67.01 -63.29 -2.34 -1.38 -68.52 -65.00 -1.63 -1.89 -69.97 -66.12 -1.75 -2.10	dBm Output Level dBm Gain dBi/dBd Loss dB dBm -70.28 -49.22 -20.49 -0.57 -13.00 -67.10 -60.46 -5.69 -0.95 -13.00 -67.82 -59.45 -7.01 -1.36 -13.00 -67.01 -63.29 -2.34 -1.38 -13.00 -68.52 -65.00 -1.63 -1.89 -13.00 -69.97 -66.12 -1.75 -2.10 -13.00



Page 195 of 250

:Thomas

Engineer

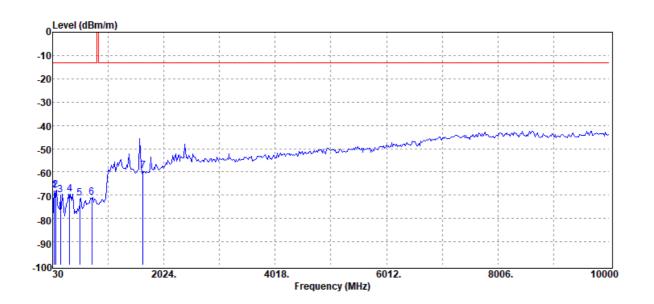
Report Number :ER/2019/C0117 **Test Date** :2020-01-07

Operation Mode :WCDMA B5/802.11b Temp./Humi. :21.8/61

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane

Test Channel :826.4 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
65.89	-68.28	-54.10	-13.40	-0.78	-13.00	-55.28
87.23	-67.77	-60.37	-6.50	-0.90	-13.00	-54.77
168.71	-69.76	-62.37	-6.09	-1.30	-13.00	-56.76
337.49	-69.43	-65.91	-1.63	-1.89	-13.00	-56.43
516.94	-71.39	-67.36	-1.45	-2.58	-13.00	-58.39
734.22	-71.03	-67.31	-1.50	-2.22	-13.00	-58.03
1652.80	-59.54	-64.85	9.32	-4.01	-13.00	-46.54

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Page 196 of 250

:Thomas

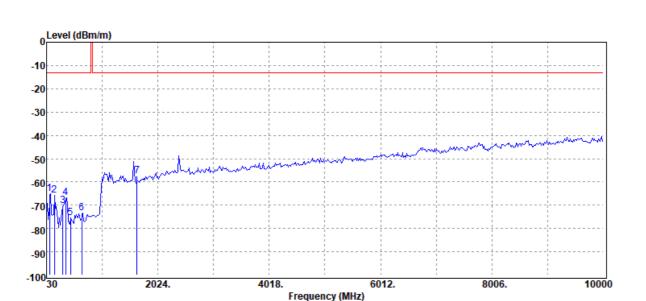
Report Number :ER/2019/C0117 **Test Date** :2020-01-07 **Operation Mode** :WCDMA B5/802.11b Temp./Humi. :21.8/61

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :HORIZONTAL

Engineer

EUT Pol :E2 Plane

Test Channel :826.4 MHz/2437 MHz



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	dBm	dBi/dBd	dB	dBm	dB
-64.94	-57.54	-6.50	-0.90	-13.00	-51.94
-65.90	-58.51	-6.09	-1.30	-13.00	-52.90
-70.35	-66.90	-1.71	-1.74	-13.00	-57.35
-66.74	-63.20	-1.63	-1.91	-13.00	-53.74
-75.54	-71.84	-1.58	-2.12	-13.00	-62.54
-73.52	-68.94	-1.40	-3.18	-13.00	-60.52
-57.39	-62.70	9.32	-4.01	-13.00	-44.39
	dBm -64.94 -65.90 -70.35 -66.74 -75.54 -73.52	Output Level dBm -64.94 -65.90 -58.51 -70.35 -66.90 -66.74 -75.54 -71.84 -73.52 -68.94	Output Level Gain dBm dBi/dBd -64.94 -57.54 -6.50 -65.90 -58.51 -6.09 -70.35 -66.90 -1.71 -66.74 -63.20 -1.63 -75.54 -71.84 -1.58 -73.52 -68.94 -1.40	dBm Output Level dBm Gain dBi/dBd Loss dB -64.94 -57.54 -6.50 -0.90 -65.90 -58.51 -6.09 -1.30 -70.35 -66.90 -1.71 -1.74 -66.74 -63.20 -1.63 -1.91 -75.54 -71.84 -1.58 -2.12 -73.52 -68.94 -1.40 -3.18	dBm Output Level dBm Gain dBi/dBd Loss dB -64.94 -57.54 -6.50 -0.90 -13.00 -65.90 -58.51 -6.09 -1.30 -13.00 -70.35 -66.90 -1.71 -1.74 -13.00 -66.74 -63.20 -1.63 -1.91 -13.00 -75.54 -71.84 -1.58 -2.12 -13.00 -73.52 -68.94 -1.40 -3.18 -13.00

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Page 197 of 250

:Thomas

Engineer

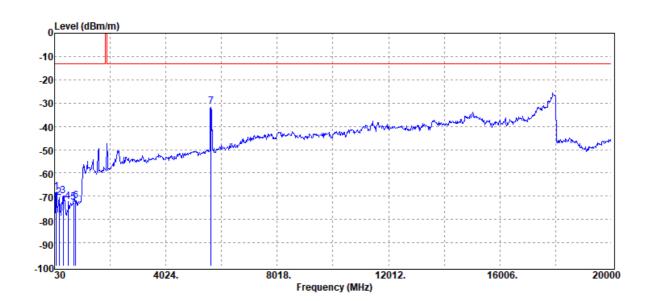
Report Number :ER/2019/C0117 **Test Date** :2020-01-07

Operation Mode :LTE B2/802.11b Temp./Humi. :21.8/61

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane

Test Channel :1880 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
93.05	-68.33	-61.73	-5.67	-0.93	-13.00	-55.33
197.81	-70.51	-66.79	-2.34	-1.38	-13.00	-57.51
343.31	-69.77	-66.29	-1.59	-1.89	-13.00	-56.77
516.94	-72.32	-68.29	-1.45	-2.58	-13.00	-59.32
709.97	-72.56	-68.61	-1.31	-2.64	-13.00	-59.56
792.42	-71.99	-67.31	-1.66	-3.02	-13.00	-58.99
5640.00	-31.55	-37.33	13.26	-7.48	-13.00	-18.55



Page 198 of 250

:Thomas

Engineer

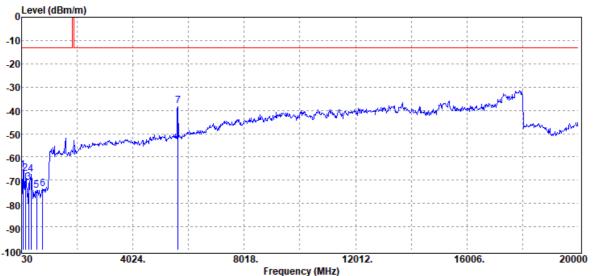
Report Number :ER/2019/C0117 **Test Date** :2020-01-07 **Operation Mode** :LTE B2/802.11b Temp./Humi. :21.8/61

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

Test Channel





Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
87.23	-65.65	-58.25	-6.50	-0.90	-13.00	-52.65
168.71	-66.98	-59.59	-6.09	-1.30	-13.00	-53.98
288.02	-70.98	-67.49	-1.81	-1.68	-13.00	-57.98
373.38	-67.52	-63.98	-1.63	-1.91	-13.00	-54.52
565.44	-74.27	-70.61	-1.40	-2.26	-13.00	-61.27
781.75	-73.59	-69.18	-1.68	-2.73	-13.00	-60.59
5640.00	-38.16	-43.94	13.26	-7.48	-13.00	-25.16



Page 199 of 250

:Thomas

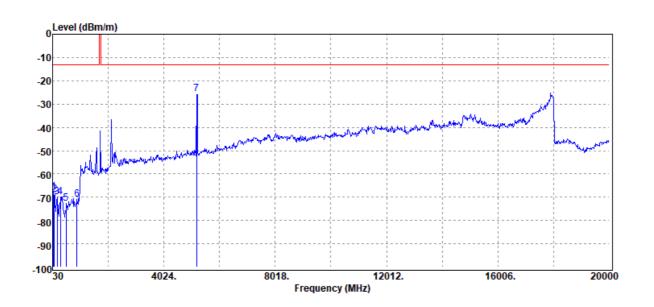
Report Number :ER/2019/C0117 **Test Date** :2020-01-07

Operation Mode :LTE B4/802.11b Temp./Humi. :21.8/61

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane Engineer

Test Channel :1732.5 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
65.89	-67.79	-53.61	-13.40	-0.78	-13.00	-54.79
95.96	-68.81	-62.17	-5.69	-0.95	-13.00	-55.81
197.81	-69.88	-66.16	-2.34	-1.38	-13.00	-56.88
313.24	-69.72	-66.45	-1.62	-1.65	-13.00	-56.72
516.94	-72.55	-68.52	-1.45	-2.58	-13.00	-59.55
907.85	-71.00	-66.34	-1.84	-2.82	-13.00	-58.00
5197.50	-25.51	-30.62	12.29	-7.18	-13.00	-12.51



Page 200 of 250

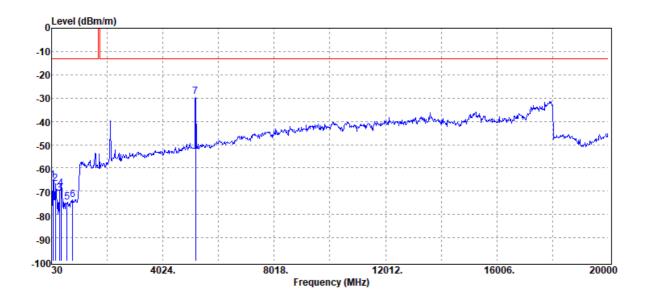
Report Number :ER/2019/C0117 **Test Date** :2020-01-07 **Operation Mode** :LTE B4/802.11b

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

Test Channel :1732.5 MHz/2437 MHz Temp./Humi. :21.8/61

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
87.23	-65.33	-57.93	-6.50	-0.90	-13.00	-52.33
168.71	-66.71	-59.32	-6.09	-1.30	-13.00	-53.71
313.24	-71.10	-67.83	-1.62	-1.65	-13.00	-58.10
367.56	-68.72	-65.23	-1.58	-1.91	-13.00	-55.72
589.69	-74.77	-71.12	-1.71	-1.94	-13.00	-61.77
781.75	-73.64	-69.23	-1.68	-2.73	-13.00	-60.64
5197.50	-29.45	-34.56	12.29	-7.18	-13.00	-16.45



Page 201 of 250

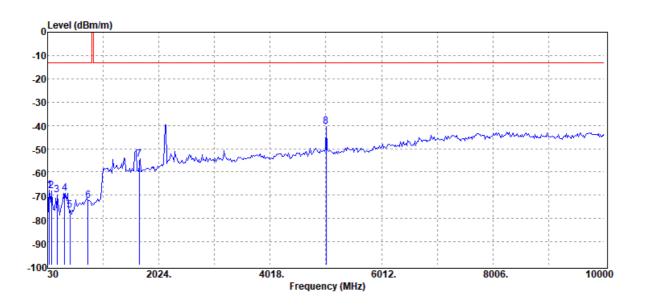
Report Number :ER/2019/C0117 **Test Date** :2020-01-07

Operation Mode :LTE B5/802.11b Temp./Humi. :21.8/61

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :836.5 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
65.89	-67.91	-53.73	-13.40	-0.78	-13.00	-54.91
95.96	-68.25	-61.61	-5.69	-0.95	-13.00	-55.25
197.81	-69.86	-66.14	-2.34	-1.38	-13.00	-56.86
337.49	-69.15	-65.63	-1.63	-1.89	-13.00	-56.15
433.52	-76.59	-73.09	-1.67	-1.83	-13.00	-63.59
751.68	-72.26	-67.92	-1.82	-2.52	-13.00	-59.26
1673.00	-54.50	-59.96	9.49	-4.03	-13.00	-41.50
5019.00	-40.40	-45.70	12.32	-7.02	-13.00	-27.40

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Page 202 of 250

:Thomas

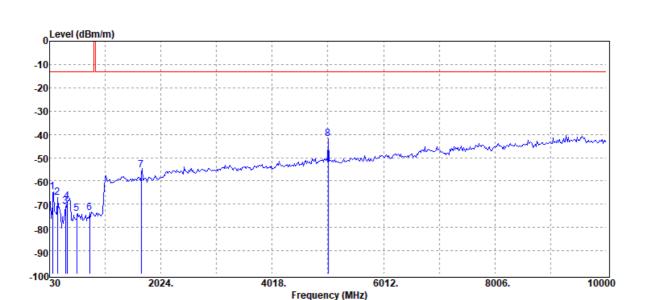
Report Number :ER/2019/C0117 **Test Date** :2020-01-07 **Operation Mode** :LTE B5/802.11b Temp./Humi. :21.8/61

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :HORIZONTAL

Engineer

EUT Pol :E2 Plane

Test Channel :836.5 MHz/2437 MHz



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		<u> </u>
dBm	dBm	dBi/dBd	dB	dBm	dB
-64.59	-57.19	-6.50	-0.90	-13.00	-51.59
-67.27	-59.88	-6.09	-1.30	-13.00	-54.27
-70.77	-67.50	-1.62	-1.65	-13.00	-57.77
-68.69	-65.21	-1.59	-1.89	-13.00	-55.69
-74.05	-70.02	-1.45	-2.58	-13.00	-61.05
-73.74	-69.53	-1.81	-2.40	-13.00	-60.74
-55.29	-60.75	9.49	-4.03	-13.00	-42.29
-41.81	-47.11	12.32	-7.02	-13.00	-28.81
	dBm -64.59 -67.27 -70.77 -68.69 -74.05 -73.74 -55.29	Output Level dBm -64.59	Output Level Gain dBm dBi/dBd -64.59 -57.19 -6.50 -67.27 -59.88 -6.09 -70.77 -67.50 -1.62 -68.69 -65.21 -1.59 -74.05 -70.02 -1.45 -73.74 -69.53 -1.81 -55.29 -60.75 9.49	dBm Output Level dBm Gain dBi/dBd Loss dB -64.59 -57.19 -6.50 -0.90 -67.27 -59.88 -6.09 -1.30 -70.77 -67.50 -1.62 -1.65 -68.69 -65.21 -1.59 -1.89 -74.05 -70.02 -1.45 -2.58 -73.74 -69.53 -1.81 -2.40 -55.29 -60.75 9.49 -4.03	dBm Output Level dBm Gain dBi/dBd Loss dB -64.59 -57.19 -6.50 -0.90 -13.00 -67.27 -59.88 -6.09 -1.30 -13.00 -70.77 -67.50 -1.62 -1.65 -13.00 -68.69 -65.21 -1.59 -1.89 -13.00 -74.05 -70.02 -1.45 -2.58 -13.00 -73.74 -69.53 -1.81 -2.40 -13.00 -55.29 -60.75 9.49 -4.03 -13.00

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Page 203 of 250

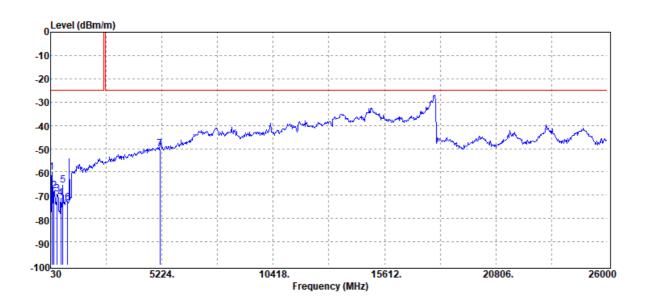
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :LTE B7/802.11b Temp./Humi. :18.1/57

Test Mode :Tx CH High/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane Engineer :Thomas

Test Channel :2565 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-60.14	-53.50	-5.69	-0.95	-25.00	-35.14
197.81	-68.07	-64.35	-2.34	-1.38	-25.00	-43.07
343.31	-69.68	-66.20	-1.59	-1.89	-25.00	-44.68
516.94	-71.35	-67.32	-1.45	-2.58	-25.00	-46.35
594.54	-65.79	-61.94	-1.75	-2.10	-25.00	-40.79
837.04	-73.24	-68.44	-1.79	-3.01	-25.00	-48.24
5130.00	-50.14	-55.19	12.10	-7.05	-25.00	-25.14



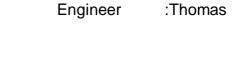
Page 204 of 250

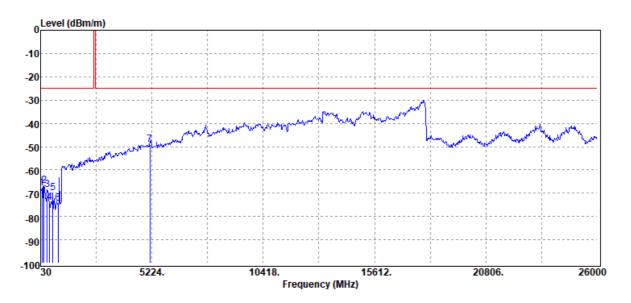
Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :LTE B7/802.11b Temp./Humi. :18.1/57

Test Mode :Tx CH High/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

Test Channel :2565 MHz/2437 MHz





Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-67.91	-61.27	-5.69	-0.95	-25.00	-42.91
180.35	-66.81	-61.41	-4.15	-1.25	-25.00	-41.81
337.49	-68.36	-64.84	-1.63	-1.89	-25.00	-43.36
445.16	-74.15	-70.56	-1.67	-1.92	-25.00	-49.15
594.54	-70.05	-66.20	-1.75	-2.10	-25.00	-45.05
847.71	-74.29	-69.50	-1.67	-3.12	-25.00	-49.29
5130.00	-49.20	-54.25	12.10	-7.05	-25.00	-24.20



Page 205 of 250

:Thomas

Engineer

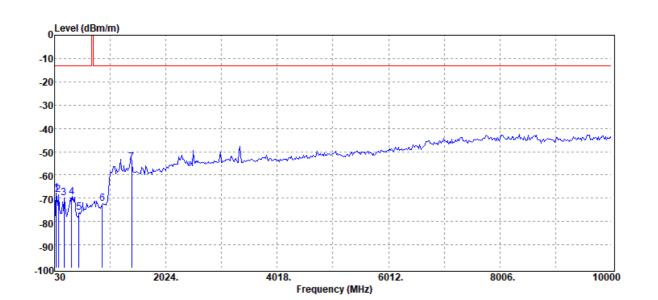
Report Number :ER/2019/C0117 **Test Date** :2020-01-07

Operation Mode :LTE B12/802.11b Temp./Humi. :21.8/61

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane

Test Channel :707.5 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
65.89	-67.94	-53.76	-13.40	-0.78	-13.00	-54.94
95.96	-68.44	-61.80	-5.69	-0.95	-13.00	-55.44
197.81	-69.82	-66.10	-2.34	-1.38	-13.00	-56.82
337.49	-69.57	-66.05	-1.63	-1.89	-13.00	-56.57
469.41	-76.22	-72.46	-1.50	-2.26	-13.00	-63.22
884.57	-72.48	-68.20	-1.70	-2.58	-13.00	-59.48
1415.00	-54.74	-58.97	7.93	-3.70	-13.00	-41.74



Page 206 of 250

:Thomas

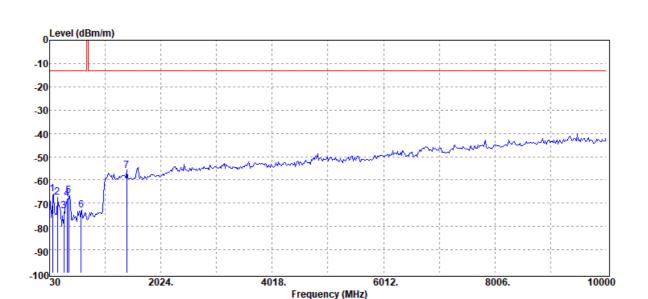
Report Number :ER/2019/C0117 **Test Date** :2020-01-07 **Operation Mode** :LTE B12/802.11b Temp./Humi. :21.8/61

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :HORIZONTAL

Engineer

EUT Pol :E2 Plane

Test Channel :707.5 MHz/2437 MHz



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
87.23	-66.13	<i>-</i> 58.73	-6.50	-0.90	-13.00	-53.13
168.71	-67.31	-59.92	-6.09	-1.30	-13.00	-54.31
288.99	-73.35	-69.87	-1.80	-1.68	-13.00	-60.35
347.19	-68.24	-64.82	-1.53	-1.89	-13.00	-55.24
373.38	-66.73	-63.19	-1.63	-1.91	-13.00	-53.73
593.57	-72.89	-69.09	-1.74	-2.06	-13.00	-59.89
1415.00	-56.03	-60.26	7.93	-3.70	-13.00	-43.03

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Page 207 of 250

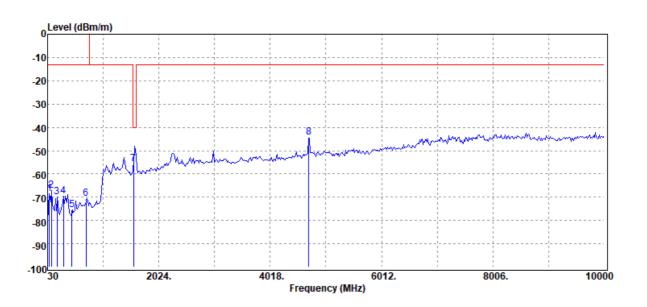
Report Number :ER/2019/C0117 **Test Date** :2020-01-07

Operation Mode :LTE B13/802.11b Temp./Humi. :21.8/61

Test Mode :Tx CH High/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane Engineer :Thomas

Test Channel :784.5 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
65.89	-68.34	-54.16	-13.40	-0.78	-13.00	-55.34
95.96	-67.23	-60.59	-5.69	-0.95	-13.00	-54.23
197.81	-69.99	-66.27	-2.34	-1.38	-13.00	-56.99
313.24	-69.39	-66.12	-1.62	-1.65	-13.00	-56.39
469.41	-75.28	-71.52	-1.50	-2.26	-13.00	-62.28
721.61	-70.55	-66.79	-1.37	-2.39	-13.00	-57.55
1569.00	-55.66	-60.90	9.14	-3.90	-40.00	-15.66
4707.00	-44.18	-49.43	12.03	-6.78	-13.00	-31.18



Page 208 of 250

:Thomas

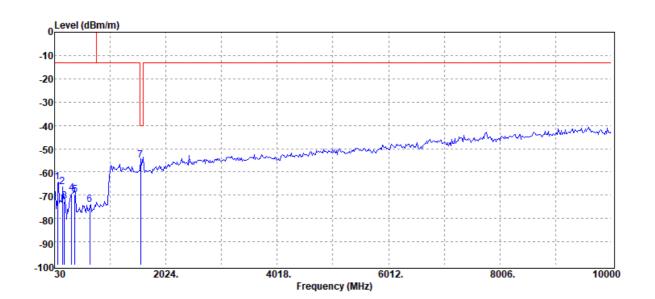
Engineer

Report Number :ER/2019/C0117 **Test Date** :2020-01-07 **Operation Mode** :LTE B13/802.11b Temp./Humi. :21.8/61

Test Mode :Tx CH High/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

Test Channel :784.5 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
87.23	-64.24	-56.84	-6.50	-0.90	-13.00	-51.24
168.71	-66.52	-59.13	-6.09	-1.30	-13.00	-53.52
206.54	-72.62	-69.40	-1.81	-1.41	-13.00	-59.62
337.49	-69.14	-65.62	-1.63	-1.89	-13.00	-56.14
395.69	-69.77	-66.21	-1.61	-1.95	-13.00	-56.77
661.47	-74.00	-69.42	-1.40	-3.18	-13.00	-61.00
1569.00	-54.85	-60.09	9.14	-3.90	-40.00	-14.85

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Page 209 of 250

:Thomas

Engineer

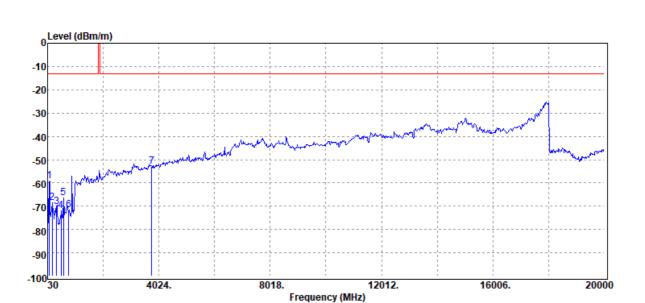
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :LTE B25/802.11b Temp./Humi. :18.1/57

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane

Test Channel :1882.5 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-59.10	-52.46	-5.69	-0.95	-13.00	-46.10
197.81	-68.63	-64.91	-2.34	-1.38	-13.00	-55.63
348.16	-70.33	-66.94	-1.50	-1.89	-13.00	-57.33
516.94	-72.05	-68.02	-1.45	-2.58	-13.00	-59.05
594.54	-66.34	-62.49	-1.75	-2.10	-13.00	-53.34
794.36	-71.50	-66.80	-1.64	-3.06	-13.00	-58.50
3765.00	-52.77	-59.05	12.30	-6.02	-13.00	-39.77

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Page 210 of 250

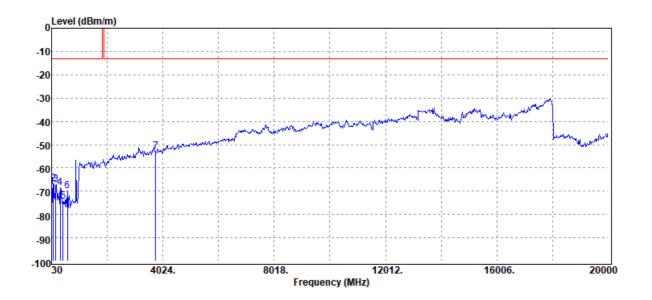
Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :LTE B25/802.11b

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

Test Channel :1882.5 MHz/2437 MHz Temp./Humi. :18.1/57

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
30.00	-68.02	-46.30	-21.20	-0.52	-13.00	-55.02
95.96	-66.94	-60.30	-5.69	-0.95	-13.00	-53.94
180.35	-67.11	-61.71	-4.15	-1.25	-13.00	-54.11
337.49	-68.41	-64.89	-1.63	-1.89	-13.00	-55.41
445.16	-74.43	-70.84	-1.67	-1.92	-13.00	-61.43
594.54	-69.84	-65.99	-1.75	-2.10	-13.00	-56.84
3765.00	-53.10	-59.38	12.30	-6.02	-13.00	-40.10

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
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Page 211 of 250

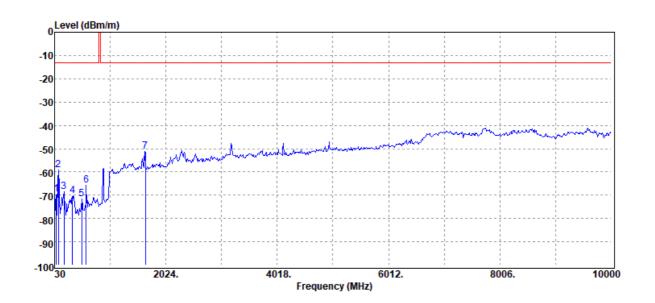
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :LTE B26/802.11b Temp./Humi. :18.1/57

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :829 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
63.95	-69.44	-54.65	-14.03	-0.76	-13.00	-56.44
95.96	-59.33	-52.69	-5.69	-0.95	-13.00	-46.33
197.81	-68.48	-64.76	-2.34	-1.38	-13.00	-55.48
350.10	-70.35	-66.99	-1.46	-1.90	-13.00	-57.35
516.94	-71.49	-67.46	-1.45	-2.58	-13.00	-58.49
594.54	-65.73	-61.88	-1.75	-2.10	-13.00	-52.73
1658.00	-51.05	-56.39	9.36	-4.02	-13.00	-38.05



Page 212 of 250

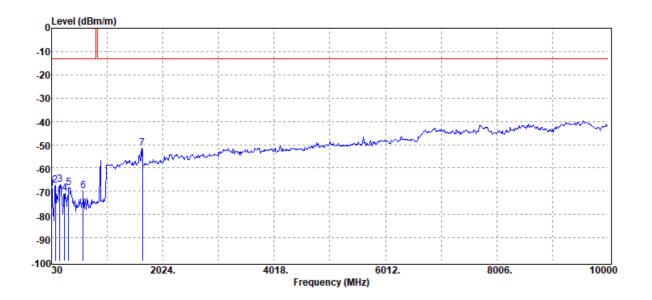
Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :LTE B26/802.11b

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

Test Channel :829 MHz/2437 MHz Temp./Humi. :18.1/57

Engineer :Thomas



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	dBm	dBi/dBd	dB	dBm	dB
-68.70	-47.64	-20.49	-0.57	-13.00	-55.70
-67.34	-60.70	-5.69	-0.95	-13.00	-54.34
-67.12	-61.72	-4.15	-1.25	-13.00	-54.12
-70.94	-67.55	-1.77	-1.62	-13.00	-57.94
-68.57	-65.05	-1.63	-1.89	-13.00	-55.57
-69.80	-65.95	-1.75	-2.10	-13.00	-56.80
-51.48	-56.82	9.36	-4.02	-13.00	-38.48
	-68.70 -67.34 -67.12 -70.94 -68.57 -69.80	Output Level dBm -68.70 -47.64 -67.34 -60.70 -67.12 -61.72 -70.94 -67.55 -68.57 -65.05 -69.80 -65.95	Output Level Gain dBm dBi/dBd -68.70 -47.64 -20.49 -67.34 -60.70 -5.69 -67.12 -61.72 -4.15 -70.94 -67.55 -1.77 -68.57 -65.05 -1.63 -69.80 -65.95 -1.75	dBm Output Level dBm Gain dBi/dBd Loss dB -68.70 -47.64 -20.49 -0.57 -67.34 -60.70 -5.69 -0.95 -67.12 -61.72 -4.15 -1.25 -70.94 -67.55 -1.77 -1.62 -68.57 -65.05 -1.63 -1.89 -69.80 -65.95 -1.75 -2.10	dBm Output Level dBm Gain dBi/dBd Loss dB dBm -68.70 -47.64 -20.49 -0.57 -13.00 -67.34 -60.70 -5.69 -0.95 -13.00 -67.12 -61.72 -4.15 -1.25 -13.00 -70.94 -67.55 -1.77 -1.62 -13.00 -68.57 -65.05 -1.63 -1.89 -13.00 -69.80 -65.95 -1.75 -2.10 -13.00



Page 213 of 250

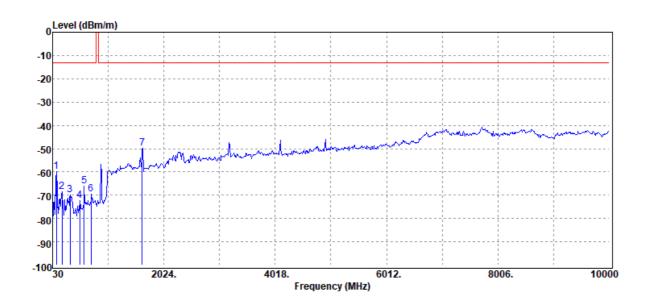
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :LTE B26/802.11b Temp./Humi. :18.1/57

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :819 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
95.96	-59.71	-53.07	-5.69	-0.95	-13.00	-46.71
197.81	-68.35	-64.63	-2.34	-1.38	-13.00	-55.35
343.31	-70.05	-66.57	-1.59	-1.89	-13.00	-57.05
516.94	-72.36	-68.33	-1.45	-2.58	-13.00	-59.36
594.54	-66.13	-62.28	-1.75	-2.10	-13.00	-53.13
721.61	-69.44	-65.68	-1.37	-2.39	-13.00	-56.44
1638.00	-49.81	-55.09	9.28	-4.00	-13.00	-36.81



Page 214 of 250

:Thomas

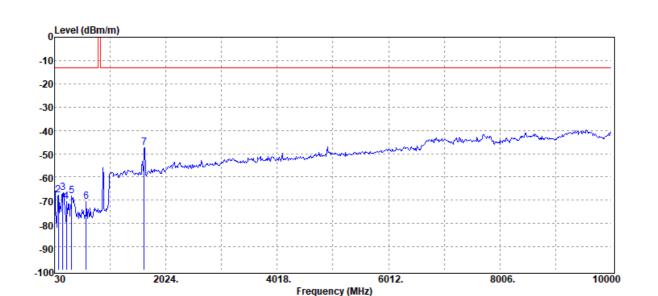
Engineer

Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :LTE B26/802.11b Temp./Humi. :18.1/57

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

Test Channel :819 MHz/2437 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
32.91	-70.27	-49.21	-20.49	-0.57	-13.00	-57.27
95.96	-67.75	-61.11	-5.69	-0.95	-13.00	-54.75
180.35	-66.89	-61.49	-4.15	-1.25	-13.00	-53.89
240.49	-70.70	-67.54	-1.73	-1.43	-13.00	-57.70
337.49	-68.01	-64.49	-1.63	-1.89	-13.00	-55.01
594.54	-70.44	-66.59	-1.75	-2.10	-13.00	-57.44
1638.00	-47.56	-52.84	9.28	-4.00	-13.00	-34.56



Page 215 of 250

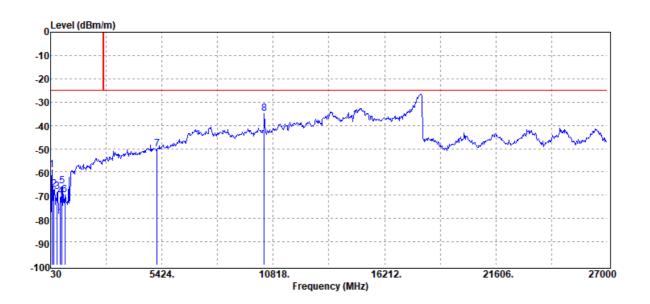
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :LTE B38/802.11b Temp./Humi. :18.1/57

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :2595 MHz/2437 MHz



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-59.22	-52.58	-5.69	-0.95	-25.00	-34.22
197.81	-67.47	-63.75	-2.34	-1.38	-25.00	-42.47
350.10	-68.66	-65.30	-1.46	-1.90	-25.00	-43.66
516.94	-70.63	-66.60	-1.45	-2.58	-25.00	-45.63
594.54	-66.22	-62.37	-1.75	-2.10	-25.00	-41.22
721.61	-69.92	-66.16	-1.37	-2.39	-25.00	-44.92
5190.00	-50.00	-55.09	12.26	-7.17	-25.00	-25.00
10380.00	-34.91	-36.01	11.04	-9.94	-25.00	-9.91



Page 216 of 250

:Thomas

Engineer

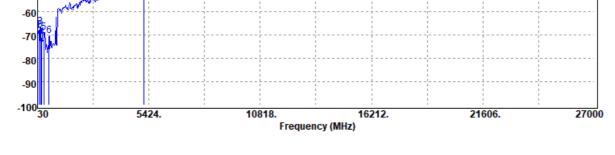
Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :LTE B38/802.11b Temp./Humi. :18.1/57

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

Test Channel :2595 MHz/2437 MHz





Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
30.00	-68.22	-46.50	-21.20	-0.52	-25.00	-43.22
95.96	-67.73	-61.09	-5.69	-0.95	-25.00	-42.73
180.35	-66.57	-61.17	-4.15	-1.25	-25.00	-41.57
240.49	-70.88	-67.72	-1.73	-1.43	-25.00	-45.88
337.49	-68.95	-65.43	-1.63	-1.89	-25.00	-43.95
594.54	-70.27	-66.42	-1.75	-2.10	-25.00	-45.27
5190.00	-50.41	-55.50	12.26	-7.17	-25.00	-25.41



Page 217 of 250

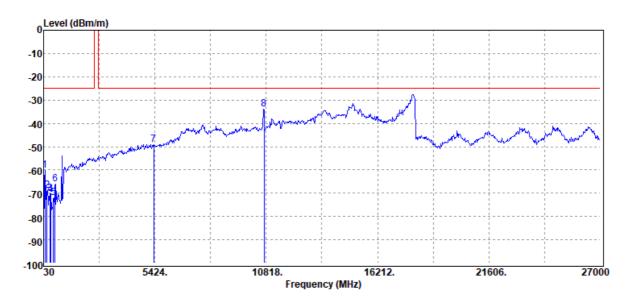
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :LTE B41/802.11b Temp./Humi. :18.1/57

Test Mode :Tx CH High/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane Engineer :Thomas

Test Channel :2680 MHz/2437 MHz



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-60.04	-53.40	-5.69	-0.95	-25.00	-35.04
197.81	-68.90	-65.18	-2.34	-1.38	-25.00	-43.90
343.31	-70.07	-66.59	-1.59	-1.89	-25.00	-45.07
372.41	-70.57	-67.04	-1.62	-1.91	-25.00	-45.57
516.94	-72.08	-68.05	-1.45	-2.58	-25.00	-47.08
594.54	-66.26	-62.41	-1.75	-2.10	-25.00	-41.26
5360.00	-48.98	-54.58	12.90	-7.30	-25.00	-23.98
10720.00	-33.78	-34.56	11.16	-10.38	-25.00	-8.78

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Page 218 of 250

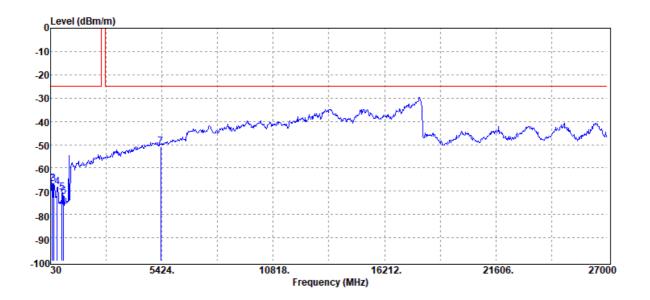
Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :LTE B41/802.11b

Test Mode :Tx CH High/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

Test Channel :2680 MHz/2437 MHz Temp./Humi. :18.1/57

:Thomas Engineer



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	dBm	dBi/dBd	dB	dBm	dB
-69.38	-47.82	-21.02	-0.54	-25.00	-44.38
-66.68	-60.04	-5.69	-0.95	-25.00	-41.68
-66.84	-61.44	-4.15	-1.25	-25.00	-41.84
-68.26	-64.90	-1.46	-1.90	-25.00	-43.26
-70.62	-66.77	-1.75	-2.10	-25.00	-45.62
-72.47	-67.95	-1.37	-3.15	-25.00	-47.47
-50.72	-56.32	12.90	-7.30	-25.00	-25.72
	-69.38 -66.68 -66.84 -68.26 -70.62 -72.47	Output Level dBm -69.38 -47.82 -66.68 -60.04 -66.84 -61.44 -68.26 -64.90 -70.62 -66.77 -72.47 -67.95	Output Level Gain dBi/dBd -69.38 -47.82 -21.02 -66.68 -60.04 -5.69 -66.84 -61.44 -4.15 -68.26 -64.90 -1.46 -70.62 -66.77 -1.75 -72.47 -67.95 -1.37	dBm Output Level dBm Gain dBi/dBd Loss dB -69.38 -47.82 -21.02 -0.54 -66.68 -60.04 -5.69 -0.95 -66.84 -61.44 -4.15 -1.25 -68.26 -64.90 -1.46 -1.90 -70.62 -66.77 -1.75 -2.10 -72.47 -67.95 -1.37 -3.15	dBm Output Level dBm Gain dBi/dBd Loss dB dBm -69.38 -47.82 -21.02 -0.54 -25.00 -66.68 -60.04 -5.69 -0.95 -25.00 -66.84 -61.44 -4.15 -1.25 -25.00 -68.26 -64.90 -1.46 -1.90 -25.00 -70.62 -66.77 -1.75 -2.10 -25.00 -72.47 -67.95 -1.37 -3.15 -25.00

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Page 219 of 250

:Thomas

Co-location (WWAN+5G)

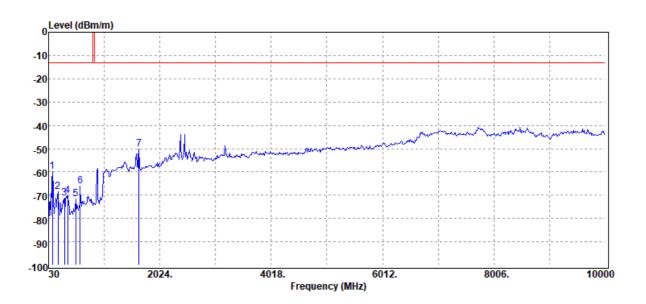
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :GSM 850/802.11aB4 Temp./Humi. :18.1/57

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane Engineer

Test Channel :824.2 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
-		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
95.96	-59.97	-53.33	-5.69	-0.95	-13.00	-46.97
197.81	-68.49	-64.77	-2.34	-1.38	-13.00	-55.49
313.24	-71.32	-68.05	-1.62	-1.65	-13.00	-58.32
372.41	-70.20	-66.67	-1.62	-1.91	-13.00	-57.20
516.94	-71.55	-67.52	-1.45	-2.58	-13.00	-58.55
594.54	-65.96	-62.11	-1.75	-2.10	-13.00	-52.96
1648.40	-50.28	-55.57	9.30	-4.01	-13.00	-37.28

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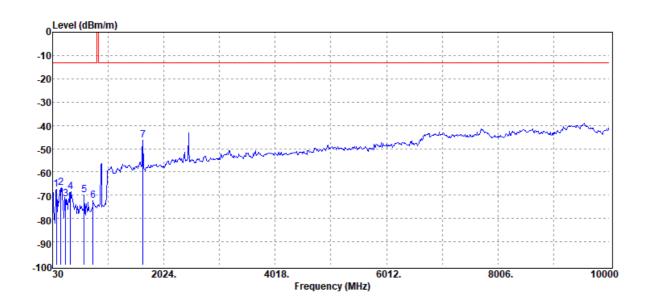
Page 220 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :GSM 850/802.11aB4 Temp./Humi. :18.1/57

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :HORIZONTAL **EUT Pol** :E2 Plane Engineer :Thomas

Test Channel :824.2 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
95.96	-67.50	-60.86	-5.69	-0.95	-13.00	-54.50
180.35	-66.65	-61.25	-4.15	-1.25	-13.00	-53.65
264.74	-71.70	-68.31	-1.77	-1.62	-13.00	-58.70
350.10	-68.43	-65.07	-1.46	-1.90	-13.00	-55.43
594.54	-69.98	-66.13	-1.75	-2.10	-13.00	-56.98
757.50	-72.48	-68.08	-1.80	-2.60	-13.00	-59.48
1648.40	-46.42	-51.71	9.30	-4.01	-13.00	-33.42

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Page 221 of 250

Report Number :ER/2019/C0117

Operation Mode :GSM 1900/802.11aB4

Test Mode :Tx CH Low/Tx CH Mid

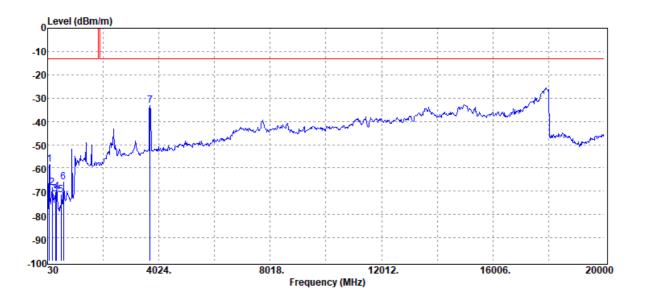
EUT Pol :E2 Plane

Test Channel :1850.2 MHz/5785 MHz **Test Date** :2020-01-30

Temp./Humi. :18.1/57

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.63	-51.99	-5.69	-0.95	-13.00	-45.63
197.81	-68.53	-64.81	-2.34	-1.38	-13.00	-55.53
313.24	-71.19	-67.92	-1.62	-1.65	-13.00	-58.19
350.10	-70.17	-66.81	-1.46	-1.90	-13.00	-57.17
516.94	-71.55	-67.52	-1.45	-2.58	-13.00	-58.55
594.54	-66.04	-62.19	-1.75	-2.10	-13.00	-53.04
3700.40	-33.31	-39.78	12.40	-5.93	-13.00	-20.31

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Page 222 of 250

:2020-01-30

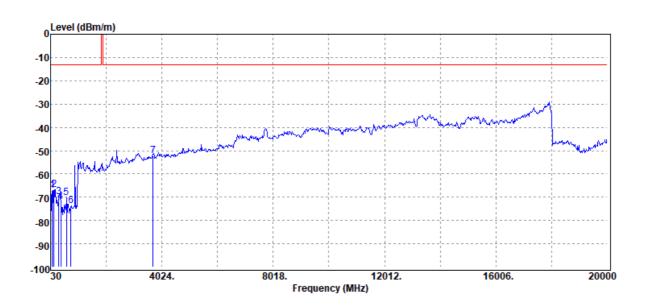
Report Number :ER/2019/C0117 **Test Date**

Operation Mode :GSM 1900/802.11aB4 Temp./Humi. :18.1/57

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :1850.2 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-67.09	-60.45	-5.69	-0.95	-13.00	-54.09
159.01	-66.67	-58.30	-7.01	-1.36	-13.00	-53.67
319.06	-69.74	-66.29	-1.71	-1.74	-13.00	-56.74
395.69	-71.86	-68.30	-1.61	-1.95	-13.00	-58.86
594.54	-70.10	-66.25	-1.75	-2.10	-13.00	-57.10
757.50	-73.75	-69.35	-1.80	-2.60	-13.00	-60.75
3700.40	-52.27	-58.74	12.40	-5.93	-13.00	-39.27

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Page 223 of 250

Report Number :ER/2019/C0117

Operation Mode :WCDMA B2/802.11aB4

Test Mode :Tx CH Low/Tx CH Mid

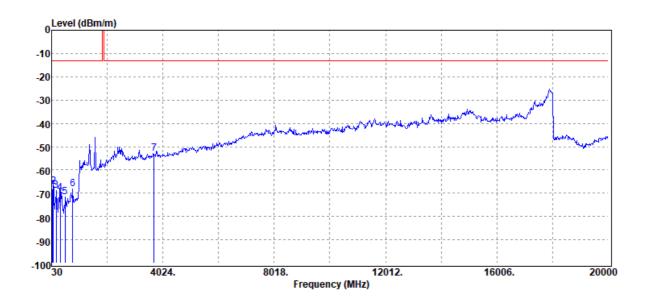
EUT Pol :E2 Plane

Test Channel :1852.4 MHz/5785 MHz **Test Date** :2020-01-08

Temp./Humi. :21.8/61

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		J
MHz	dBm	['] dBm	dBi/dBd	dB	dBm	dB
60.07	-68.62	-52.63	-15.26	-0.73	-13.00	-55.62
95.96	-67.13	-60.49	-5.69	-0.95	-13.00	-54.13
197.81	-68.79	-65.07	-2.34	-1.38	-13.00	-55.79
343.31	-69.73	-66.25	-1.59	-1.89	-13.00	-56.73
516.94	-71.79	-67.76	-1.45	-2.58	-13.00	-58.79
781.75	-68.24	-63.83	-1.68	-2.73	-13.00	-55.24
3704.80	-52.99	-59.44	12.39	-5.94	-13.00	-39.99

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Test Channel

Report No.: ER/2019/C0117

20000

16006.

Page 224 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-08

Operation Mode :WCDMA B2/802.11aB4 Temp./Humi. :21.8/61

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :Thomas :E2 Plane Engineer

:1852.4 MHz/5785 MHz



Frequency (MHz)

8018

	Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
_	MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
	86.26	-64.06	- 56.40	-6.77	-0.89	-13.00	-51.06
	165.80	-66.30	-58.52	-6.45	-1.33	-13.00	-53.30
	333.61	-69.65	-66.06	-1.68	-1.91	-13.00	-56.65
	367.56	-65.76	-62.27	-1.58	-1.91	-13.00	-52.76
	613.94	-77.50	-73.09	-1.87	-2.54	-13.00	-64.50
	880.69	-74.31	-70.06	-1.74	-2.51	-13.00	-61.31
	3704.80	-53.02	-59.47	12.39	-5.94	-13.00	-40.02

12012.

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4024



Page 225 of 250

Report Number :ER/2019/C0117

Operation Mode :WCDMA B4/802.11aB4

Test Mode :Tx CH Mid/Tx CH Mid

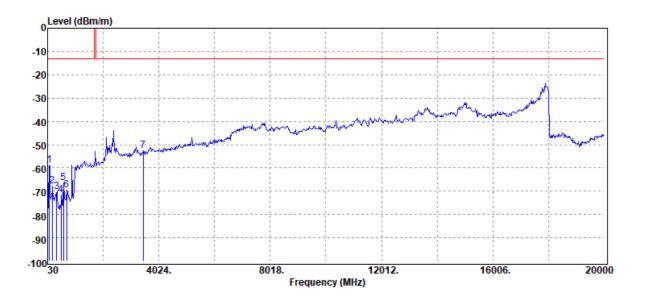
EUT Pol :E2 Plane

Test Channel :1732.4 MHz/5785 MHz **Test Date** :2020-01-30

Temp./Humi. :18.1/57

Antenna Pol. :VERTICAL

:Thomas Engineer



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.74	-52.10	-5.69	-0.95	-13.00	-45.74
197.81	-67.65	-63.93	-2.34	-1.38	-13.00	-54.65
350.10	-70.18	-66.82	-1.46	-1.90	-13.00	-57.18
516.94	-71.68	-67.65	-1.45	-2.58	-13.00	-58.68
594.54	-66.28	-62.43	-1.75	-2.10	-13.00	-53.28
721.61	-69.48	-65.72	-1.37	-2.39	-13.00	-56.48
3464.80	-52.71	-59.33	12.37	-5.75	-13.00	-39.71

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Page 226 of 250

Report Number :ER/2019/C0117

Operation Mode :WCDMA B4/802.11aB4

Test Mode :Tx CH Mid/Tx CH Mid

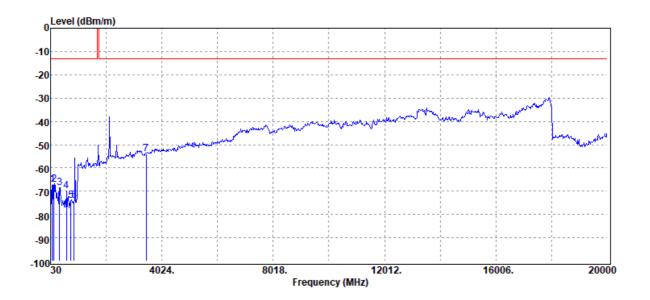
EUT Pol :E2 Plane

Test Channel :1732.4 MHz/5785 MHz **Test Date** :2020-01-30

Temp./Humi. :18.1/57

Antenna Pol. :HORIZONTAL

Engineer :Thomas



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	dBm	dBi/dBd	dB	dBm	dB
-67.28	-60.64	-5.69	-0.95	-13.00	-54.28
-67.15	-58.78	-7.01	-1.36	-13.00	-54.15
-68.47	-65.11	-1.46	-1.90	-13.00	-55.47
-69.98	-66.13	-1.75	-2.10	-13.00	-56.98
-73.90	-69.50	-1.80	-2.60	-13.00	-60.90
-74.10	-69.92	-1.67	-2.51	-13.00	-61.10
-53.81	-60.43	12.37	-5.75	-13.00	-40.81
	-67.28 -67.15 -68.47 -69.98 -73.90 -74.10	Output Level dBm -67.28	Output Level Gain dBi/dBd -67.28	dBm Output Level dBm Gain dBi/dBd Loss dB -67.28 -60.64 -5.69 -0.95 -67.15 -58.78 -7.01 -1.36 -68.47 -65.11 -1.46 -1.90 -69.98 -66.13 -1.75 -2.10 -73.90 -69.50 -1.80 -2.60 -74.10 -69.92 -1.67 -2.51	dBm Output Level dBm Gain dBi/dBd Loss dB dBm -67.28 -60.64 -5.69 -0.95 -13.00 -67.15 -58.78 -7.01 -1.36 -13.00 -68.47 -65.11 -1.46 -1.90 -13.00 -69.98 -66.13 -1.75 -2.10 -13.00 -73.90 -69.50 -1.80 -2.60 -13.00 -74.10 -69.92 -1.67 -2.51 -13.00

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Page 227 of 250

:Thomas

Engineer

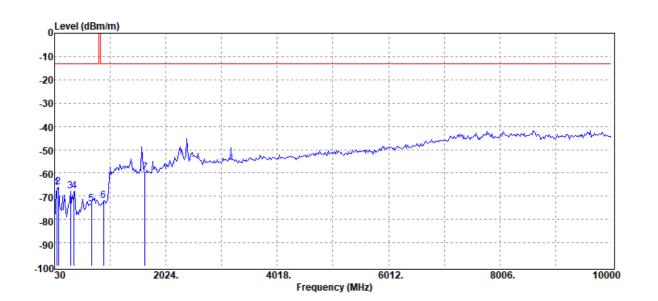
Report Number :ER/2019/C0117 **Test Date** :2020-01-08

Operation Mode :WCDMA B5/802.11aB4 Temp./Humi. :21.8/61

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane

Test Channel :826.4 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
66.86	-66.51	-52.57	-13.15	-0.79	-13.00	-53.51
98.87	-66.10	-59.11	-6.02	-0.97	-13.00	-53.10
312.27	-67.90	-64.61	-1.65	-1.64	-13.00	-54.90
379.20	-67.88	-64.32	-1.64	-1.92	-13.00	-54.88
687.66	-73.23	-69.45	-1.29	-2.49	-13.00	-60.23
907.85	-71.85	-67.19	-1.84	-2.82	-13.00	-58.85
1652.80	-59.74	-65.05	9.32	-4.01	-13.00	-46.74

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Test Channel

Report No.: ER/2019/C0117

Page 228 of 250

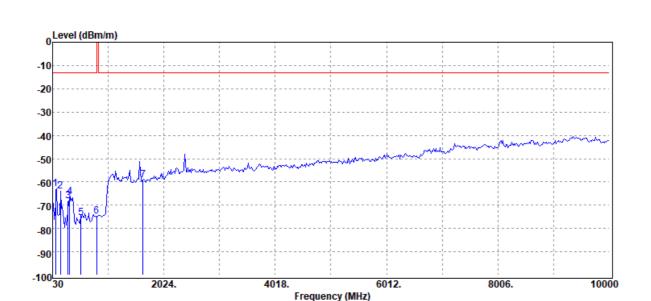
Report Number :ER/2019/C0117 **Test Date** :2020-01-08

:826.4 MHz/5785 MHz

Operation Mode :WCDMA B5/802.11aB4 Temp./Humi. :21.8/61

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	dBm	dBi/dBd	dB	dBm	dB
-63.15	-55.49	-6.77	-0.89	-13.00	-50.15
-63.96	-56.84	-5.83	-1.29	-13.00	-50.96
-68.06	-64.77	-1.67	-1.62	-13.00	-55.06
-66.60	-63.09	-1.62	-1.89	-13.00	-53.60
-75.43	-71.88	-1.39	-2.16	-13.00	-62.43
-74.57	-69.77	-1.72	-3.08	-13.00	-61.57
-59.12	-64.43	9.32	-4.01	-13.00	-46.12
	-63.15 -63.96 -68.06 -66.60 -75.43 -74.57	Output Level dBm -63.15	Output Level Gain dBm dBi/dBd -63.15 -55.49 -6.77 -63.96 -56.84 -5.83 -68.06 -64.77 -1.67 -66.60 -63.09 -1.62 -75.43 -71.88 -1.39 -74.57 -69.77 -1.72	dBm Output Level dBm Gain dBi/dBd Loss dB -63.15 -55.49 -6.77 -0.89 -63.96 -56.84 -5.83 -1.29 -68.06 -64.77 -1.67 -1.62 -66.60 -63.09 -1.62 -1.89 -75.43 -71.88 -1.39 -2.16 -74.57 -69.77 -1.72 -3.08	dBm Output Level dBm Gain dBi/dBd Loss dB -63.15 -55.49 -6.77 -0.89 -13.00 -63.96 -56.84 -5.83 -1.29 -13.00 -68.06 -64.77 -1.67 -1.62 -13.00 -66.60 -63.09 -1.62 -1.89 -13.00 -75.43 -71.88 -1.39 -2.16 -13.00 -74.57 -69.77 -1.72 -3.08 -13.00

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Page 229 of 250

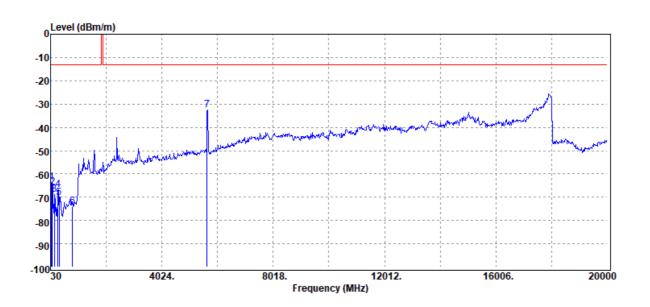
Report Number :ER/2019/C0117 **Test Date** :2020-01-08

Operation Mode :LTE B2/802.11aB4 Temp./Humi. :21.8/61

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :1880 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
67.83	-63.51	-49.87	-12.85	-0.79	-13.00	-50.51
90.14	-65.79	-58.95	-5.93	-0.91	-13.00	-52.79
169.68	-68.69	-61.41	-5.98	-1.30	-13.00	-55.69
290.93	-66.71	-63.24	-1.78	-1.69	-13.00	-53.71
337.49	-70.11	-66.59	-1.63	-1.89	-13.00	-57.11
811.82	-74.18	-69.43	-1.59	-3.16	-13.00	-61.18
5640.00	-32.54	-38.32	13.26	-7.48	-13.00	-19.54

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Page 230 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-08 **Operation Mode** :LTE B2/802.11aB4

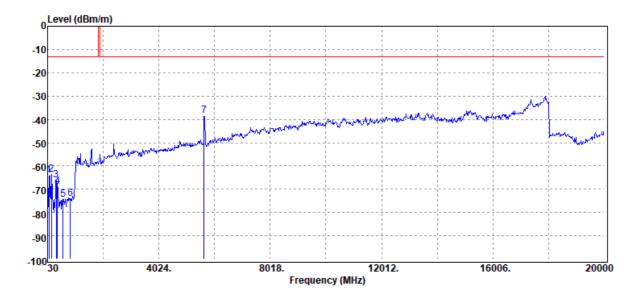
Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

Test Channel :1880 MHz/5785 MHz

Temp./Humi. :21.8/61

Engineer :Thomas



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
-		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
87.23	-63.85	-56.45	-6.50	-0.90	-13.00	-50.85
171.62	-63.81	-56.90	-5.62	-1.29	-13.00	-50.81
333.61	-66.22	-62.63	-1.68	-1.91	-13.00	-53.22
379.20	-68.96	-65.40	-1.64	-1.92	-13.00	-55.96
589.69	-74.50	-70.85	-1.71	-1.94	-13.00	-61.50
846.74	-73.98	-69.19	-1.68	-3.11	-13.00	-60.98
5640.00	-38.50	-44.28	13.26	-7.48	-13.00	-25.50

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Page 231 of 250

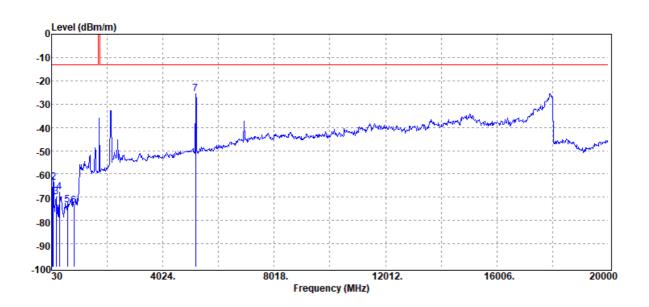
Report Number :ER/2019/C0117 **Test Date** :2020-01-08

Operation Mode :LTE B4/802.11aB4 Temp./Humi. :21.8/61

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :1732.5 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
60.07	-65.59	-49.60	-15.26	-0.73	-13.00	-52.59
91.11	-63.59	-56.92	-5.75	-0.92	-13.00	-50.59
197.81	-69.88	-66.16	-2.34	-1.38	-13.00	-56.88
306.45	-67.73	-64.43	-1.67	-1.63	-13.00	-54.73
601.33	-73.44	-69.21	-1.91	-2.32	-13.00	-60.44
832.19	-73.73	-68.98	-1.78	-2.97	-13.00	-60.73
5197.50	-25.66	-30.77	12.29	-7.18	-13.00	-12.66

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Test Channel

Report No.: ER/2019/C0117

Page 232 of 250

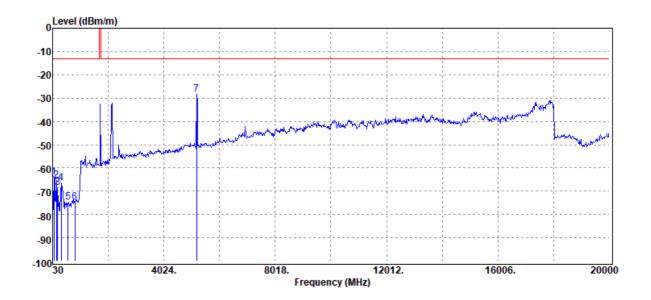
Report Number :ER/2019/C0117 **Test Date** :2020-01-08

Operation Mode :LTE B4/802.11aB4 Temp./Humi. :21.8/61

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :Thomas :E2 Plane Engineer

:1732.5 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
86.26	-63.98	-56.32	-6.77	-0.89	-13.00	-50.98
169.68	-65.34	-58.06	-5.98	-1.30	-13.00	-52.34
207.51	-68.59	-65.43	-1.75	-1.41	-13.00	-55.59
343.31	-66.44	-62.96	-1.59	-1.89	-13.00	-53.44
589.69	-74.77	-71.12	-1.71	-1.94	-13.00	-61.77
829.28	-74.77	-70.06	-1.75	-2.96	-13.00	-61.77
5197.50	-28.52	-33.63	12.29	-7.18	-13.00	-15.52

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Page 233 of 250

:Thomas

Engineer

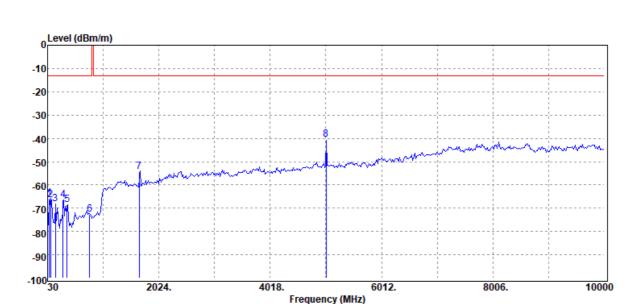
Report Number :ER/2019/C0117 **Test Date** :2020-01-08

Operation Mode :LTE B5/802.11aB4 Temp./Humi. :21.8/61

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane

Test Channel :836.5 MHz/5785 MHz



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
65.89	-65.91	-51.73	-13.40	-0.78	-13.00	-52.91
87.23	-66.27	-58.87	-6.50	-0.90	-13.00	-53.27
169.68	-68.26	-60.98	-5.98	-1.30	-13.00	-55.26
311.30	-66.58	-63.29	-1.67	-1.62	-13.00	-53.58
378.23	-68.46	-64.89	-1.65	-1.92	-13.00	-55.46
781.75	-72.82	-68.41	-1.68	-2.73	-13.00	-59.82
1673.00	-54.47	-59.93	9.49	-4.03	-13.00	-41.47
5019.00	-40.39	-45.69	12.32	-7.02	-13.00	-27.39

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Page 234 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-08 **Operation Mode** :LTE B5/802.11aB4

Test Mode :Tx CH Mid/Tx CH Mid

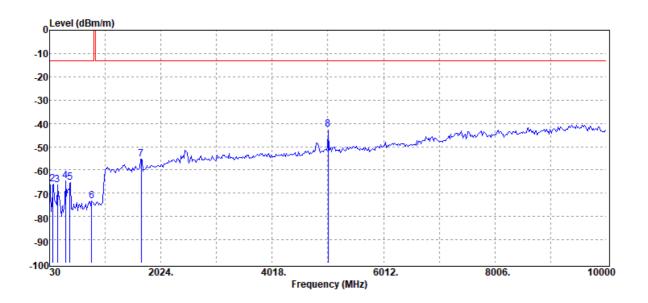
EUT Pol :E2 Plane

Test Channel :836.5 MHz/5785 MHz

Temp./Humi. :21.8/61

Antenna Pol. :HORIZONTAL

Engineer :Thomas



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		<u> </u>
dBm	['] dBm	dBi/dBd	dB	dBm	dB
-70.48	-49.42	-20.49	-0.57	-13.00	-57.48
-66.16	-58.76	-6.50	-0.90	-13.00	-53.16
-66.53	-59.62	-5.62	-1.29	-13.00	-53.53
-64.77	-61.50	-1.62	-1.65	-13.00	-51.77
-65.24	-61.68	-1.61	-1.95	-13.00	-52.24
-73.28	-68.87	-1.68	-2.73	-13.00	-60.28
-55.27	-60.73	9.49	-4.03	-13.00	-42.27
-42.56	-47.86	12.32	-7.02	-13.00	-29.56
	-70.48 -66.16 -66.53 -64.77 -65.24 -73.28 -55.27	Output Level dBm -70.48 -49.42 -66.16 -58.76 -66.53 -59.62 -64.77 -61.50 -65.24 -61.68 -73.28 -68.87 -55.27 -60.73	Output Level Gain dBm dBi/dBd -70.48 -49.42 -20.49 -66.16 -58.76 -6.50 -66.53 -59.62 -5.62 -64.77 -61.50 -1.62 -65.24 -61.68 -1.61 -73.28 -68.87 -1.68 -55.27 -60.73 9.49	dBm Output Level dBm Gain dBi/dBd Loss dB -70.48 -49.42 -20.49 -0.57 -66.16 -58.76 -6.50 -0.90 -66.53 -59.62 -5.62 -1.29 -64.77 -61.50 -1.62 -1.65 -65.24 -61.68 -1.61 -1.95 -73.28 -68.87 -1.68 -2.73 -55.27 -60.73 9.49 -4.03	dBm Output Level dBm Gain dBi/dBd Loss dB -70.48 -49.42 -20.49 -0.57 -13.00 -66.16 -58.76 -6.50 -0.90 -13.00 -66.53 -59.62 -5.62 -1.29 -13.00 -64.77 -61.50 -1.62 -1.65 -13.00 -65.24 -61.68 -1.61 -1.95 -13.00 -73.28 -68.87 -1.68 -2.73 -13.00 -55.27 -60.73 9.49 -4.03 -13.00

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Page 235 of 250

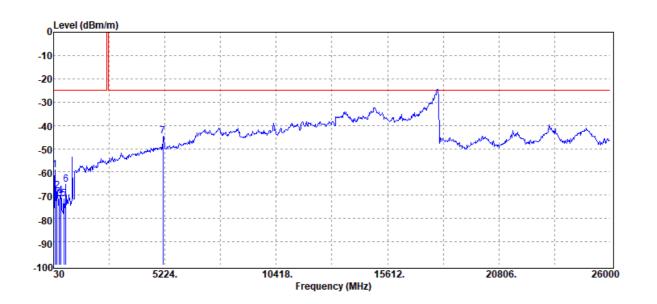
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :LTE B7/802.11aB4 Temp./Humi. :18.1/57

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :2565 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-59.13	-52.49	-5.69	-0.95	-25.00	-34.13
197.81	-68.33	-64.61	-2.34	-1.38	-25.00	-43.33
299.66	-71.53	-68.14	-1.70	-1.69	-25.00	-46.53
350.10	-70.08	-66.72	-1.46	-1.90	-25.00	-45.08
516.94	-71.66	-67.63	-1.45	-2.58	-25.00	-46.66
594.54	-65.41	-61.56	-1.75	-2.10	-25.00	-40.41
5130.00	-44.61	-49.66	12.10	-7.05	-25.00	-19.61

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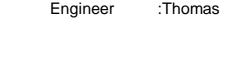
Page 236 of 250

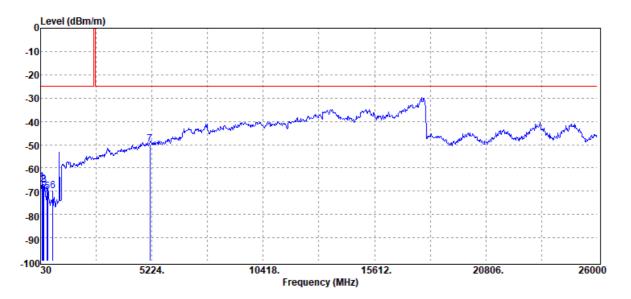
Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :LTE B7/802.11aB4 Temp./Humi. :18.1/57

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

Test Channel :2565 MHz/5785 MHz





Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
95.96	-66.01	-59.37	-5.69	-0.95	-25.00	-41.01
159.01	-67.19	-58.82	-7.01	-1.36	-25.00	-42.19
197.81	-67.62	-63.90	-2.34	-1.38	-25.00	-42.62
319.06	-71.94	-68.49	-1.71	-1.74	-25.00	-46.94
367.56	-70.16	-66.67	-1.58	-1.91	-25.00	-45.16
594.54	-69.81	-65.96	-1.75	-2.10	-25.00	-44.81
5130.00	-49.70	-54.75	12.10	-7.05	-25.00	-24.70

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Page 237 of 250

:Thomas

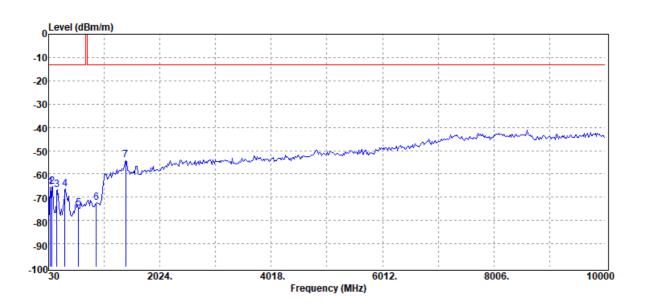
Report Number :ER/2019/C0117 **Test Date** :2020-01-08

Operation Mode :LTE B12/802.11aB4 Temp./Humi. :21.8/61

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane Engineer

Test Channel :707.5 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
59.10	-65.79	-49.56	-15.50	-0.73	-13.00	-52.79
90.14	-65.53	-58.69	-5.93	-0.91	-13.00	-52.53
180.35	-66.80	-61.40	-4.15	-1.25	-13.00	-53.80
324.88	-66.42	-62.98	-1.60	-1.84	-13.00	-53.42
565.44	-74.68	-71.02	-1.40	-2.26	-13.00	-61.68
884.57	-72.48	-68.20	-1.70	-2.58	-13.00	-59.48
1415.00	-54.14	-58.37	7.93	-3.70	-13.00	-41.14

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Test Channel

Report No.: ER/2019/C0117

Page 238 of 250

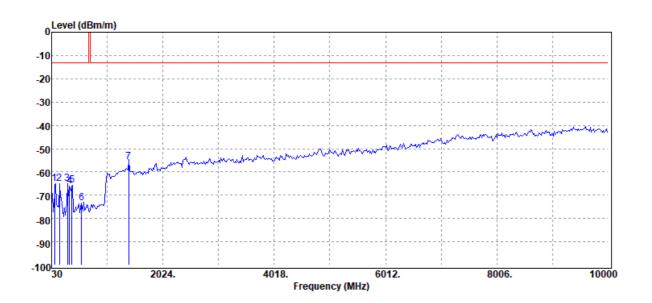
Report Number :ER/2019/C0117 **Test Date** :2020-01-08

Operation Mode :LTE B12/802.11aB4 Temp./Humi. :21.8/61

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Thomas

:707.5 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		J
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
87.23	-64.91	-57.51	-6.50	-0.90	-13.00	-51.91
167.74	-64.97	-57.49	-6.17	-1.31	-13.00	-51.97
312.27	-65.12	-61.83	-1.65	-1.64	-13.00	-52.12
348.16	-66.09	-62.70	-1.50	-1.89	-13.00	-53.09
395.69	-65.61	-62.05	-1.61	-1.95	-13.00	-52.61
565.44	-73.38	-69.72	-1.40	-2.26	-13.00	-60.38
1415.00	-55.67	-59.90	7.93	-3.70	-13.00	-42.67

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Page 239 of 250

:Thomas

Engineer

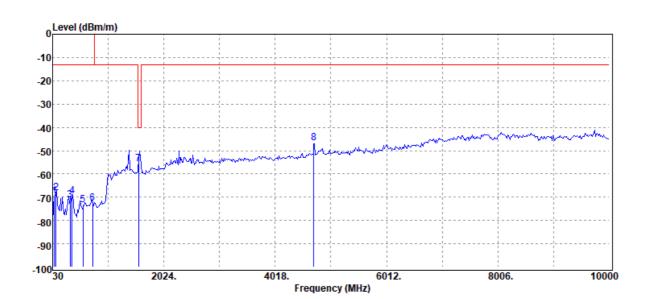
Report Number :ER/2019/C0117 **Test Date** :2020-01-08

Operation Mode :LTE B13/802.11aB4 Temp./Humi. :21.8/61

Test Mode :Tx CH High/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :E2 Plane

Test Channel :784.5 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
•		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
60.07	-69.58	-53.59	-15.26	-0.73	-13.00	-56.58
93.05	-68.15	-61.55	-5.67	-0.93	-13.00	-55.15
347.19	-71.29	-67.87	-1.53	-1.89	-13.00	-58.29
379.20	-69.69	-66.13	-1.64	-1.92	-13.00	-56.69
577.08	-73.52	-69.92	-1.56	-2.04	-13.00	-60.52
745.86	-72.68	-68.47	-1.81	-2.40	-13.00	-59.68
1569.00	-55.84	-61.08	9.14	-3.90	-40.00	-15.84
4707.00	-46.57	-51.82	12.03	-6.78	-13.00	-33.57

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Page 240 of 250

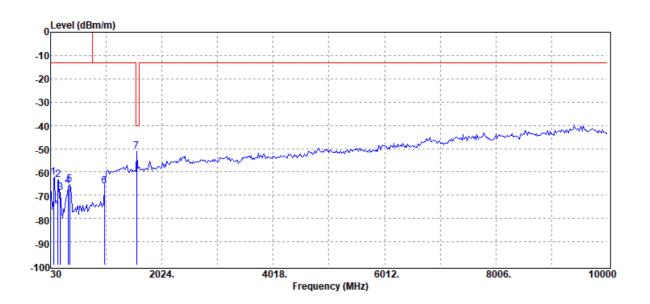
Report Number :ER/2019/C0117 **Test Date** :2020-01-08

Operation Mode :LTE B13/802.11aB4 Temp./Humi. :21.8/61

Test Mode :Tx CH High/Tx CH Mid Antenna Pol. :HORIZONTAL **EUT Pol** :Thomas

Engineer Test Channel :784.5 MHz/5785 MHz

:E2 Plane



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
87.23	-62.20	-54.80	-6.50	-0.90	-13.00	-49.20
166.77	-63.34	-55.70	-6.32	-1.32	-13.00	-50.34
209.45	-68.77	-65.73	-1.63	-1.41	-13.00	-55.77
343.31	-66.17	-62.69	-1.59	-1.89	-13.00	-53.17
371.44	-65.25	-61.74	-1.60	-1.91	-13.00	-52.25
990.30	-66.07	-61.16	-1.63	-3.28	-13.00	-53.07
1569.00	-51.28	-56.52	9.14	-3.90	-40.00	-11.28

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Page 241 of 250

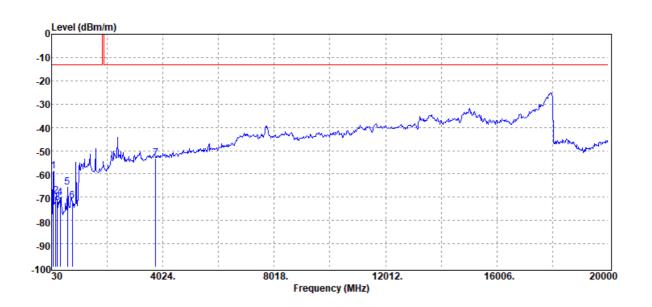
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :LTE B25/802.11aB4 Temp./Humi. :18.1/57

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :1882.5 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.80	-52.16	-5.69	-0.95	-13.00	-45.80
180.35	-69.48	-64.08	-4.15	-1.25	-13.00	-56.48
240.49	-72.43	-69.27	-1.73	-1.43	-13.00	-59.43
343.31	-70.11	-66.63	-1.59	-1.89	-13.00	-57.11
594.54	-65.67	-61.82	-1.75	-2.10	-13.00	-52.67
774.96	-71.59	-67.21	-1.75	-2.63	-13.00	-58.59
3765.00	-53.33	-59.61	12.30	-6.02	-13.00	-40.33

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Page 242 of 250

Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :LTE B25/802.11aB4

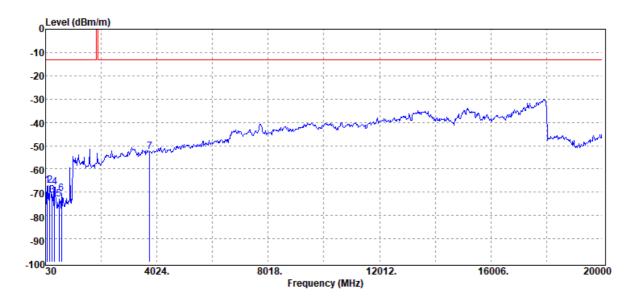
Test Mode :Tx CH Mid/Tx CH Mid

EUT Pol :E2 Plane

Test Channel :1882.5 MHz/5785 MHz Temp./Humi. :18.1/57

Antenna Pol. :HORIZONTAL

:Thomas Engineer



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	['] dBm	dBi/dBd	dB	dBm	dB
-67.21	-60.57	-5.69	-0.95	-13.00	-54.21
-67.05	-61.65	-4.15	-1.25	-13.00	-54.05
-71.44	-68.05	-1.77	-1.62	-13.00	-58.44
-67.67	-64.31	-1.46	-1.90	-13.00	-54.67
-73.00	-68.97	-1.45	-2.58	-13.00	-60.00
-70.47	-66.62	-1.75	-2.10	-13.00	-57.47
-52.57	-58.85	12.30	-6.02	-13.00	-39.57
	-67.21 -67.05 -71.44 -67.67 -73.00 -70.47	Output Level dBm -67.21	Output Level Gain dBi/dBd -67.21 -60.57 -5.69 -67.05 -61.65 -4.15 -71.44 -68.05 -1.77 -67.67 -64.31 -1.46 -73.00 -68.97 -1.45 -70.47 -66.62 -1.75	dBm Output Level dBm Gain dBi/dBd Loss dB -67.21 -60.57 -5.69 -0.95 -67.05 -61.65 -4.15 -1.25 -71.44 -68.05 -1.77 -1.62 -67.67 -64.31 -1.46 -1.90 -73.00 -68.97 -1.45 -2.58 -70.47 -66.62 -1.75 -2.10	dBm Output Level dBm Gain dBi/dBd Loss dB dBm -67.21 -60.57 -5.69 -0.95 -13.00 -67.05 -61.65 -4.15 -1.25 -13.00 -71.44 -68.05 -1.77 -1.62 -13.00 -67.67 -64.31 -1.46 -1.90 -13.00 -73.00 -68.97 -1.45 -2.58 -13.00 -70.47 -66.62 -1.75 -2.10 -13.00

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Page 243 of 250

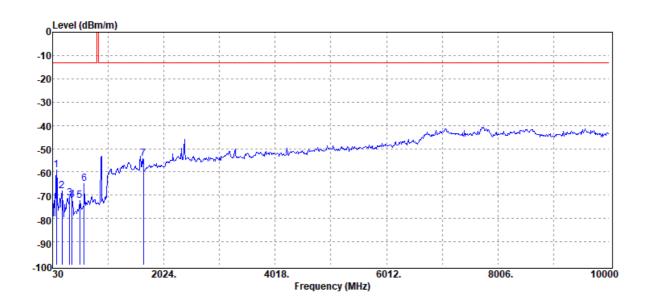
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :LTE B26/802.11aB4 Temp./Humi. :18.1/57

Test Mode :Tx CH Low/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :829 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	[.] dBm	dBi/dBd	dB	dBm	dB
						_
95.96	-59.23	-52.59	-5.69	-0.95	-13.00	-46.23
197.81	-68.17	-64.45	-2.34	-1.38	-13.00	-55.17
337.49	-71.14	-67.62	-1.63	-1.89	-13.00	-58.14
379.20	-72.10	-68.54	-1.64	-1.92	-13.00	-59.10
516.94	-72.18	-68.15	-1.45	-2.58	-13.00	-59.18
594.54	-65.06	-61.21	-1.75	-2.10	-13.00	-52.06
1658.00	-54.18	-59.52	9.36	-4.02	-13.00	-41.18

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Page 244 of 250

:Thomas

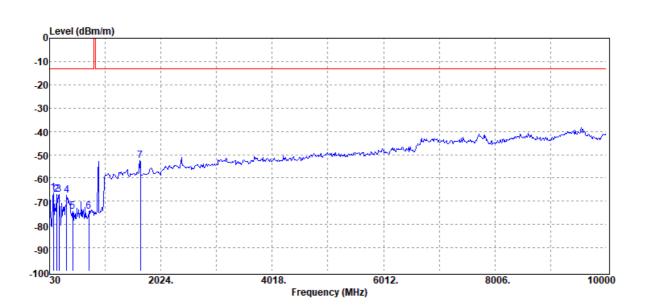
Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :LTE B26/802.11aB4

Test Mode :Tx CH Low/Tx CH Mid

EUT Pol :E2 Plane

Test Channel :829 MHz/5785 MHz Temp./Humi. :18.1/57 Antenna Pol. :HORIZONTAL

Engineer



	Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	·		Output Level	Gain	Loss		<u> </u>
_	MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
	95.96	-66.40	-59.76	-5.69	-0.95	-13.00	-53.40
	156.10	-67.25	-58.68	-7.26	-1.31	-13.00	-54.25
	197.81	-67.00	-63.28	-2.34	-1.38	-13.00	-54.00
	337.49	-67.38	-63.86	-1.63	-1.89	-13.00	-54.38
	445.16	-74.52	-70.93	-1.67	-1.92	-13.00	-61.52
	733.25	-74.51	-70.80	-1.50	-2.21	-13.00	-61.51
	1658.00	-52.43	-57.77	9.36	-4.02	-13.00	-39.43

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Page 245 of 250

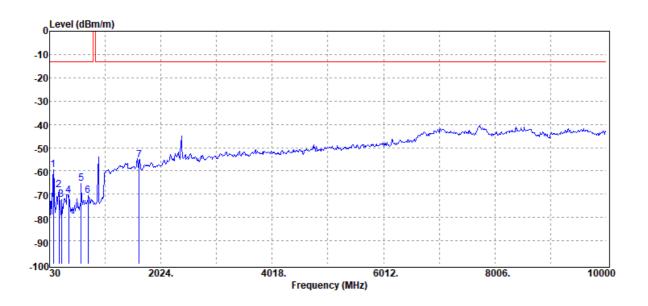
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :LTE B26/802.11aB4 Temp./Humi. :18.1/57

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :819 MHz/5785 MHz



Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
·		Output Level	Gain	Loss		_
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-59.39	-52.75	-5.69	-0.95	-13.00	-46.39
197.81	-68.19	-64.47	-2.34	-1.38	-13.00	-55.19
240.49	-72.18	-69.02	-1.73	-1.43	-13.00	-59.18
372.41	-70.56	-67.03	-1.62	-1.91	-13.00	-57.56
594.54	-65.39	-61.54	-1.75	-2.10	-13.00	-52.39
721.61	-70.62	-66.86	-1.37	-2.39	-13.00	-57.62
1638.00	-55.43	-60.71	9.28	-4.00	-13.00	-42.43

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10000

8006

Page 246 of 250

:Thomas

Engineer

Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :LTE B26/802.11aB4 Temp./Humi. :18.1/57

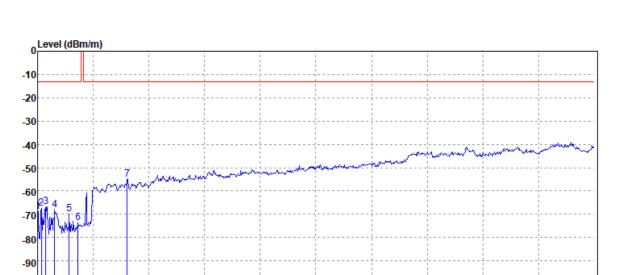
Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

-100<mark>-30</mark>

Test Channel :819 MHz/5785 MHz

2024



Frequency (MHz)

4018.

Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
32.91	-68.84	-47.78	-20.49	-0.57	-13.00	-55.84
95.96	-67.62	-60.98	-5.69	-0.95	-13.00	-54.62
180.35	-66.76	-61.36	-4.15	-1.25	-13.00	-53.76
337.49	-68.14	-64.62	-1.63	-1.89	-13.00	-55.14
594.54	-69.93	-66.08	-1.75	-2.10	-13.00	-56.93
757.50	-73.81	-69.41	-1.80	-2.60	-13.00	-60.81
1638.00	-55.13	-60.41	9.28	-4.00	-13.00	-42.13

6012.

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Page 247 of 250

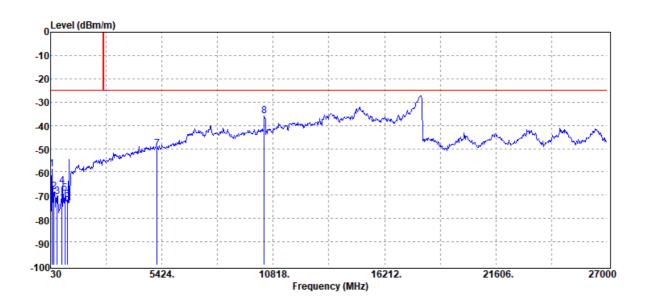
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :LTE B38/802.11aB4 Temp./Humi. :18.1/57

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :2595 MHz/5785 MHz



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-58.77	-52.13	-5.69	-0.95	-25.00	-33.77
197.81	-68.38	-64.66	-3.09 -2.34	-0.93 -1.38	-25.00 -25.00	-33.77 -43.38
343.31	-70.51	-67.03	-1.59	-1.89	-25.00	-45.51
594.54	-66.20	-62.35	-1.75	-2.10	-25.00	-41.20
721.61	-69.36	-65.60	-1.37	-2.39	-25.00	-44.36
841.89	-72.09	-67.30	-1.73	-3.06	-25.00	-47.09
5190.00	-50.06	-55.15	12.26	-7.17	-25.00	-25.06
10380.00	-36.07	-37.17	11.04	-9.94	-25.00	-11.07

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Page 248 of 250

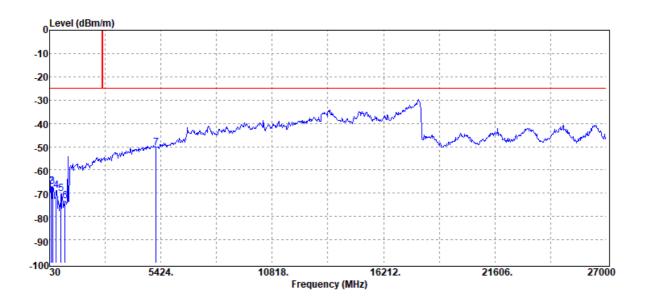
Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :LTE B38/802.11aB4

Test Mode :Tx CH Mid/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

Test Channel :2595 MHz/5785 MHz Temp./Humi. :18.1/57

:Thomas Engineer



EIRP/ERP	SG	Antenna	Cable	Limit	Margin
	Output Level	Gain	Loss		J
dBm	dBm	dBi/dBd	dB	dBm	dB
-69.24	-47.52	-21.20	-0.52	-25.00	-44.24
-67.06	-60.42	-5.69	-0.95	-25.00	-42.06
-67.11	-61.71	-4.15	-1.25	-25.00	-42.11
-68.69	-65.33	-1.46	-1.90	-25.00	-43.69
-70.35	-66.50	-1.75	-2.10	-25.00	-45.35
-73.53	-69.16	-1.71	-2.66	-25.00	-48.53
-50.54	-55.63	12.26	-7.17	-25.00	-25.54
	-69.24 -67.06 -67.11 -68.69 -70.35 -73.53	Output Level dBm -69.24 -47.52 -67.06 -60.42 -67.11 -61.71 -68.69 -65.33 -70.35 -66.50 -73.53 -69.16	Output Level Gain dBi/dBd -69.24 -47.52 -21.20 -67.06 -60.42 -5.69 -67.11 -61.71 -4.15 -68.69 -65.33 -1.46 -70.35 -66.50 -1.75 -73.53 -69.16 -1.71	dBm Output Level dBm Gain dBi/dBd Loss dB -69.24 -47.52 -21.20 -0.52 -67.06 -60.42 -5.69 -0.95 -67.11 -61.71 -4.15 -1.25 -68.69 -65.33 -1.46 -1.90 -70.35 -66.50 -1.75 -2.10 -73.53 -69.16 -1.71 -2.66	dBm Output Level dBm Gain dBi/dBd Loss dB dBm -69.24 -47.52 -21.20 -0.52 -25.00 -67.06 -60.42 -5.69 -0.95 -25.00 -67.11 -61.71 -4.15 -1.25 -25.00 -68.69 -65.33 -1.46 -1.90 -25.00 -70.35 -66.50 -1.75 -2.10 -25.00 -73.53 -69.16 -1.71 -2.66 -25.00

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Page 249 of 250

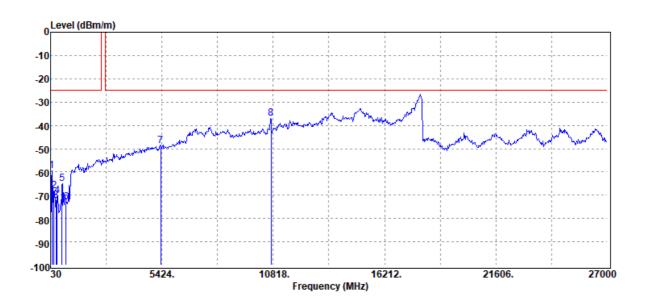
Report Number :ER/2019/C0117 **Test Date** :2020-01-30

Operation Mode :LTE B41/802.11aB4 Temp./Humi. :18.1/57

Test Mode :Tx CH High/Tx CH Mid Antenna Pol. :VERTICAL

EUT Pol :Thomas :E2 Plane Engineer

Test Channel :2680 MHz/5785 MHz



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
95.96	-59.61	-52.97	-5.69	-0.95	-25.00	-34.61
197.81	-68.23	-64.51	-2.34	-1.38	-25.00	-43.23
299.66	-72.33	-68.94	-1.70	-1.69	-25.00	-47.33
350.10	-70.07	-66.71	-1.46	-1.90	-25.00	-45.07
594.54	-65.03	-61.18	-1.75	-2.10	-25.00	-40.03
774.96	-72.88	-68.50	-1.75	-2.63	-25.00	-47.88
5360.00	-48.81	-54.41	12.90	-7.30	-25.00	-23.81
10720.00	-36.89	-37.67	11.16	-10.38	-25.00	-11.89

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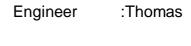
Page 250 of 250

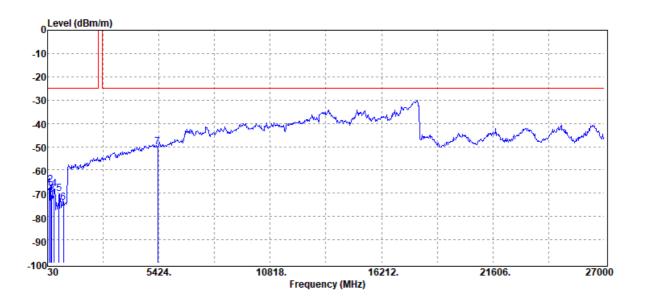
Report Number :ER/2019/C0117 **Test Date** :2020-01-30 **Operation Mode** :LTE B41/802.11aB4 Temp./Humi. :18.1/57

Test Mode :Tx CH High/Tx CH Mid Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane

Test Channel :2680 MHz/5785 MHz





Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin
		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
						_
95.96	-67.83	-61.19	-5.69	-0.95	-25.00	-42.83
180.35	-66.60	-61.20	-4.15	-1.25	-25.00	-41.60
240.49	-70.59	-67.43	-1.73	-1.43	-25.00	-45.59
350.10	-68.01	-64.65	-1.46	-1.90	-25.00	-43.01
594.54	-70.09	-66.24	-1.75	-2.10	-25.00	-45.09
796.30	-74.05	-69.34	-1.62	-3.09	-25.00	-49.05
5360.00	-50.24	-55.84	12.90	-7.30	-25.00	-25.24

~ End of Report ~

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SGS Taiwan Ltd. No.134,WukungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com