

SUPPLEMENTAL "CA MODE" TEST REPORT

OF

Applicant: Askey Computer Corporation
10F, No 119, JianKang Rd., Zhonghe Dist., New Taipei
City, Taiwan 23585

Product Name: Cat 12 Indoor CPE

Brand Name: Verizon

Model No.: ASK-RTL108

Model Difference: N/A

Report Number: E2/2020/10031

FCC ID H8N-ASK-RTL108

FCC Rule Part: 2, 22H & 24E & 27C

Issue Date: Mar. 04, 2020

Date of Test: Nov. 26, 2019 ~ Jan. 22, 2020

Date of EUT Received: Nov. 26, 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:

CHUN-CHIEH, CHEN

Chun Chieh Chen / Supervisor



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Revision History

Report Number	Revision	Description	Issue Date	Remark
E2/2020/10031	Rev.00	Original.	Mar. 04, 2020	Revised By: Yuri Tsai

Note:

A second source of the Printed Circuit Board (PCB) of the WWAN RF section is used, the main source and the second source PCBs are identical but manufactured by different suppliers. RSE spot check has been provided in section 7 of this report to demonstrate compliance in RF characteristics.

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1 GENERAL PRODUCT INFORMATION

1.1 Product Description

General:

Product Name:	Cat 12 Indoor CPE	
Brand Name:	Verizon	
Model No.:	ASK-RTL108	
Model Difference:	N/A	
Hardware Version:	REV 3.0	
Software Version:	N/A	
Power Supply:	12V from AC/DC Adapter	
	Adapter:	1. Model No.: PS24L120K2000UD, Supplier: FLYPOWER 2. Model No.: WB-24J12FU, Supplier: Asian Power Devices Inc.
IMEI:	359403109903190	

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1.2 Operation Frequency Range

LTE Band	BW (MHz)	Operation Frequency (MHz)		
2	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
4	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
5	1.4	824.7	-	848.3
	3	825.5	-	847.5
	5	826.5	-	846.5
	10	829.0	-	844.0
13	5	779.5	-	784.5
	10	782		
66	1.4	1710.7	-	1779.3
	3	1711.5	-	1778.5
	5	1712.5	-	1777.5
	10	1715.0	-	1775.0
	15	1717.5	-	1772.5
	20	1720.0	-	1770.0

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1.3 Antenna Designation

Internal

Vendor	Type	Model Name	Modulation	Frequency (MHz)			Peak Antenna Gain (dBi)
N/A	PIFA	Main	LTE Band 2	1850	~	1910	3.61
			LTE Band 4	1710	~	1755	3.27
			LTE Band 5	824	~	849	1.42
			LTE Band 13	777	~	787	0.01
			LTE Band 66	1710	~	1780	3.27

External

Vendor	Type	Model Name	Modulation	Frequency (MHz)			Peak Antenna Gain (dBi)
Master Wave Technology Co., Ltd.	Monopole	98619ZSAX031	LTE Band 2	1850	~	1910	2.82
			LTE Band 4	1710	~	1755	2.93
			LTE Band 5	824	~	849	2.41
			LTE Band 13	777	~	787	N/A
			LTE Band 66	1710	~	1780	2.93

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1.4 Test Methodology of Applied Standards

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

ANSI C63.26-2015

KDB971168 D01 Power Meas license Digital System v03r01

1.5 Test Facility

SGS Taiwan Ltd. Electronics & Communication Laboratory (TAF code 0513)
No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333

FCC Designation number: TW0002

1.6 Special Accessories

No special accessories were used during testing.

1.7 Equipment Modifications

There was no modifications incorporated into the EUT.

1.8 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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2 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.

2.3.2 Radiated Emissions (ERP/EIRP)

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.

2.4 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.

	RF cable loss (dB)	Attenuation factor(dB)	offset(dB)
Low Band (Below 1GHz)	3.6	10	13.6
High Band (Above 1 GHz)	3.8	10	13.8

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2.5 Configuration of Tested System

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

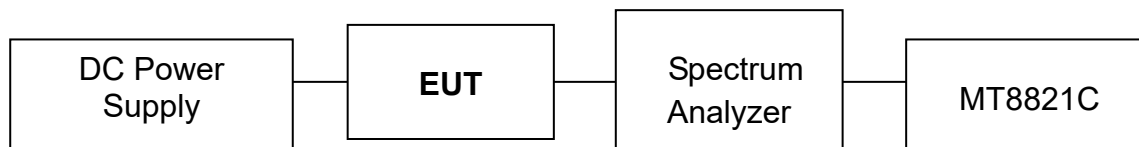


Fig. 2-2 Configuration of Tested System (Fixed Channel-Radiated)

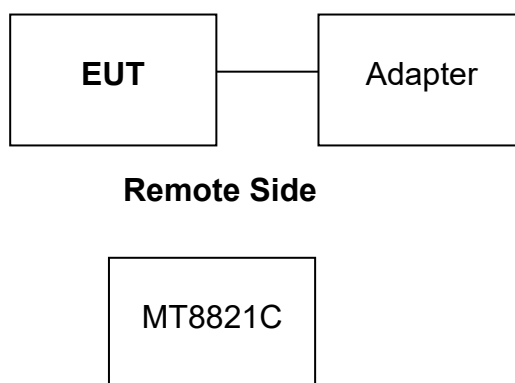


Table 2-1 Equipment Used in

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1.	Radio Communication Analyzer	Anritsu	MT8821C	6261786084	shielded	Un-shielded
2.	Radio Communication Analyzer	Anritsu	MT8821C	6262044739	shielded	Un-shielded

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3 SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§2.1046(a)	RF Power Output	Compliant
§22.913(a)(5) §24.232(c) §27.50(d)(4) §27.50(b)(10)	ERP/ EIRP measurement	Compliant
§2.1053 §22.917(a) §24.238(a) §27.53(c)(2) §27.53(f) §27.53(h)	Field Strength of Spurious Radiation	Compliant

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4 DESCRIPTION OF TEST MODES

4.1 The Test Modes and Details

1. This device is UE LTE 4G 1Tx/1Rx device for single carrier within ANT0 can support uplink Band 2/4/5/13/66 and device support Intra-Band carrier aggregation (two carriers) uplink. For device operation on uplink CA mode, change the transmitter mode by 1Tx within ANT0.
2. The device uplink Intra-Band CA maximum conFollowing channel(s) was (were) selected for the final test as listed below.

4.2 The Test Channel Details

This device is Cat 12 Indoor CPE that can support carrier aggregation (two carrier) uplink Intra-Band contiguous specification following as below:

Intra band

E-UTRA CA configuration / Bandwidth combination set					
E-UTRA CA configuration	Uplink CA configurations	Component carriers in order of increasing carrier frequency		Maximum aggregated bandwidth [MHz]	Bandwidth combination set
		Channel bandwidth for carrier [MHz]	Channel bandwidth for carrier [MHz]		
CA_5B	CA_5B	5,10	10	20	0
		10	5		

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Inter band

E-UTRA CA configuration / Bandwidth combination set							
Uplink CA configurations (NOTE 4)	E-UTRA Bands	5 MHz	10 MHz	15 MHz	20 MHz	Maximum aggregated bandwidth [MHz]	Bandwidth combination set
CA_2A-5A	2	Yes	Yes	Yes	Yes	30	0
	5	Yes	Yes				
	2	Yes	Yes			20	1
	5	Yes	Yes				
CA_2A-13A	2	Yes	Yes	Yes	Yes	30	0
	13		Yes				
	2	Yes	Yes			20	1
	13		Yes				
CA_4A-5A	4	Yes	Yes			20	0
	5	Yes	Yes				
	4	Yes	Yes	Yes	Yes	30	1
	5	Yes	Yes				
CA_4A-13A	4	Yes	Yes	Yes	Yes	30	0
	13		Yes				
	4	Yes	Yes			20	1
	13		Yes				
CA_5A-66A	5	Yes	Yes			30	0
	66	Yes	Yes	Yes	Yes		
CA_13A-66A	13	Yes	Yes			30	0
	66	Yes	Yes	Yes	Yes		

Mode	Description
1	CA_PCC Ant0 Band 2_SCC Ant 0 Band 5
2	CA_PCC Ant0 Band 2_SCC Ant 0 Band 13
3	CA_PCC Ant0 Band 4_SCC Ant 0 Band 5
4	CA_PCC Ant0 Band 4_SCC Ant 0 Band 13
5	CA_PCC Ant0 Band 5_SCC Ant 0 Band 66
6	CA_PCC Ant0 Band 5_SCC Ant 0 Band 5
7	CA_PCC Ant0 Band 13_SCC Ant 0 Band 66

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4.3 Measurement Configuration

Test Mode	Test Item	Modulation	PCC			SCC		
			Band width	Channel	RB Mode	Band width	Channel	RB Mode
1	EIRP & Radiated Emission	QPSK	5 MHz	18625	1 RB / 0 RB	5 MHz	20425	1 RB / 0 RB
			5 MHz	18900	1 RB / 0 RB	5 MHz	20525	1 RB / 0 RB
			5 MHz	19175	1 RB / 0 RB	5 MHz	20625	1 RB / 0 RB
2	EIRP & Radiated Emission	QPSK	20 MHz	18700	1 RB / 0 RB	10 MHz	23230	1 RB / 0 RB
			20 MHz	18900	1 RB / 0 RB	10 MHz	23230	1 RB / 0 RB
			20 MHz	19100	1 RB / 0 RB	10 MHz	23230	1 RB / 0 RB
3	EIRP & Radiated Emission	QPSK	5 MHz	19975	1 RB / 0 RB	10 MHz	20450	1 RB / 0 RB
			5 MHz	20175	1 RB / 0 RB	10 MHz	20525	1 RB / 0 RB
			5 MHz	20375	1 RB / 0 RB	10 MHz	20600	1 RB / 0 RB
4	EIRP & Radiated Emission	QPSK	5 MHz	19975	1 RB / 0 RB	10 MHz	23230	1 RB / 0 RB
			5 MHz	20175	1 RB / 0 RB	10 MHz	23230	1 RB / 0 RB
			5 MHz	20375	1 RB / 0 RB	10 MHz	23230	1 RB / 0 RB
5	EIRP & Radiated Emission	QPSK	10 MHz	20450	1 RB / 0 RB	5 MHz	131997	1 RB / 0 RB
			10 MHz	20525	1 RB / 0 RB	5 MHz	132322	2 RB / 0 RB
			10 MHz	20600	1 RB / 0 RB	5 MHz	132647	3 RB / 0 RB
6	EIRP & Radiated Emission	QPSK	10 MHz	20450	1 RB / 0 RB	10 MHz	20549	4 RB / 0 RB
			10 MHz	20476	1 RB / 0 RB	10 MHz	20575	5 RB / 0 RB
			10 MHz	20501	1 RB / 0 RB	10 MHz	20600	6 RB / 0 RB
7	EIRP & Radiated Emission	QPSK	5 MHz	23205	1 RB / 0 RB	5 MHz	131997	7 RB / 0 RB
			5 MHz	23230	1 RB / 0 RB	5 MHz	132322	8 RB / 0 RB
			5 MHz	23255	1 RB / 0 RB	5 MHz	132647	9 RB / 0 RB

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5 MEASUREMENT UNCERTAINTY

Test Items	Uncertainty
RF Power Output	+/- 1.10 dB
ERP/ EIRP measurement	Vertical Polarization = +/- 4.74dB Horizontal Polarization = +/- 4.62dB
Temperature	+/- 0.65 °C
Humidity	+/- 4.6 %
DC / AC Power Source	DC= +/- 0.13%, AC= +/- 0.2%

Radiated Spurious Emission:

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

Measurement uncertainty (Polarization : Horizontal)	9kHz – 30MHz: +/- 2.87 dB
	30MHz - 167MHz: +/- 4.22dB
	167MHz -500MHz: +/- 3.44dB
	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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6 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.

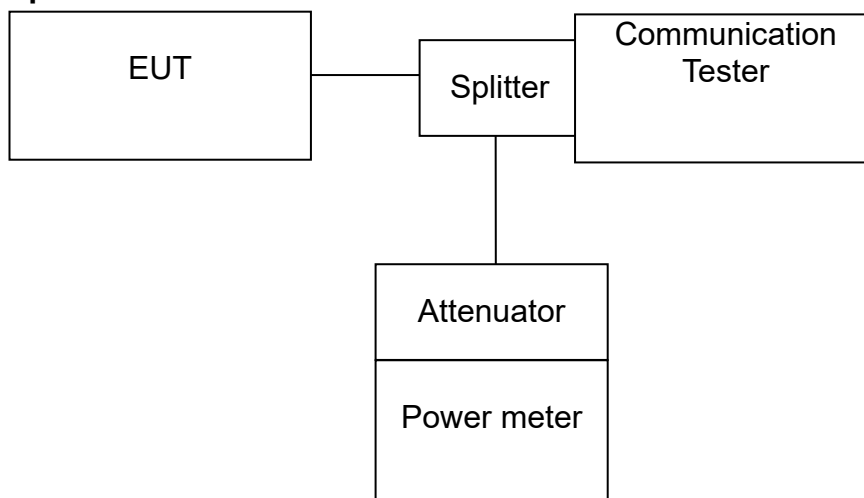
FCC 27.50 (b)

(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(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.

6.2 Test Set-up



Note: Measurement setup for testing on Antenna connector

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6.3 Output Power Measurement Applicable Guidance

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, (WCD-MA/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.

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

$$ERP/EIRP = P_{Meas} + GT - LC$$

Where:

ERP/EIRP	= effective or equivalent radiated power, respectively (expressed in the same units as P _{Meas} , typically dBW or dBm);
P _{Meas}	= measured transmitter output power or PSD, in dBm or dBW;
GT	= gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)
LC	= signal attenuation in the connecting cable between the transmitter and antenna, in dB.

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.

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6.5 Measurement Equipment Used

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	KEYSIGHT	N9010A	MY57120200	03/06/2019	03/05/2020
DC Power Supply	Agilent	E3640A	MY53140006	05/31/2019	05/30/2020
Radio Communication Analyzer	Anritsu	MT8820C	6201107337	07/17/2019	07/16/2020
Radio Communication Analyzer	Anritsu	MT8821C	6261786084	01/09/2019	01/08/2020
Radio Communication Analyzer	Anritsu	MT8821C	6262044739	12/06/2019	12/05/2020
Splitter	Marvelous	MVE8586	RF265	11/20/2019	11/19/2020
DC Block	PASTERNAK	PE8210	RF256	11/20/2019	11/19/2020
Attenuator	Marvelous	WATT-218FS-10	RF268	11/20/2019	11/19/2020
Coaxial Cables	Woken	00100A1F1A185C	RF219	11/20/2019	11/19/2020
Coaxial Cables	Woken	00100A1F1A185C	RF207	11/20/2019	11/19/2020

6.6 LTE Measurement Results:

Antenna gain (dBi) 3.61							Antenna gain (dBi) 1.42											
First Band							Second Band							Power(dBm)			EIRP(dBm)	
Band	Range	Modulation	Band width	Channel	Frequency	RB	Band	Range	Modulation	Band width	Channel	Frequency	RB	PCC	SCC	Total	PCC	SCC
2A	Low	QPSK	5 MHz	18625	1852.5	1	5A	Low	QPSK	5 MHz	20425	826.5	1	20.74	18.95	22.95	24.35	20.37
		QPSK	5 MHz	18900	1880	1			19.58	19.02	22.32	23.19	20.44					
	Mid	QPSK	5 MHz	18900	1880	1		Mid	QPSK	10 MHz	20525	836.5	1	19.57	18.92	22.27	23.18	20.34
		QPSK	20 MHz	18900	1880	1			QPSK	5 MHz	20525	836.5	1	19.15	19.06	22.12	22.76	20.48
		QPSK	20 MHz	18900	1880	1			QPSK	5 MHz	20525	836.5	1	19.23	18.97	22.11	22.84	20.39
		QPSK	5 MHz	19175	1907.5	1			High	QPSK	10 MHz	20625	846.5	1	19.2	18.99	22.11	22.81
Antenna gain (dBi) 3.61							Antenna gain (dBi) 0.01											
First Band							Second Band							Power(dBm)			EIRP(dBm)	
Band	Range	Modulation	Band width	Channel	Frequency	RB	Band	Range	Modulation	Band width	Channel	Frequency	RB	PCC	SCC	Total	PCC	SCC
2A	Low	QPSK	20 MHz	18700	1860	1	13A	Low	QPSK	10 MHz	23230	782	1	20.79	21.21	24.01	24.40	21.22
		QPSK	5 MHz	18900	1880	1			Mid	QPSK	10 MHz	23230	782	1	19.27	18.46	21.9	22.88
	Mid	QPSK	20 MHz	18900	1880	1		Mid	QPSK	10 MHz	23230	782	1	19.3	20.3	22.79	22.80	20.31
		High	QPSK	20 MHz	19100	1900		1	High	QPSK	10 MHz	23230	782	1	19.88	18.91	22.43	23.49
Antenna gain (dBi) 3.27							Antenna gain (dBi) 1.42											
First Band							Second Band							Power(dBm)			EIRP(dBm)	
Band	Range	Modulation	Band width	Channel	Frequency	RB	Band	Range	Modulation	Band width	Channel	Frequency	RB	PCC	SCC	Total	PCC	SCC
4A	Low	QPSK	5 MHz	19975	1712.5	1	5A	Low	QPSK	10 MHz	20450	829	1	21.07	19.29	23.28	24.34	20.71
		QPSK	5 MHz	20175	1732.5	1			Mid	QPSK	5 MHz	20525	836.5	1	22.01	21.38	24.72	25.28
	Mid	QPSK	5 MHz	20175	1732.5	1		Mid	QPSK	10 MHz	20525	836.5	1	22.06	21.52	24.81	25.33	22.94
		QPSK	20 MHz	20175	1732.5	1		Mid	QPSK	5 MHz	20525	836.5	1	21.85	21.38	24.67	25.22	22.78
		QPSK	5 MHz	20175	1732.5	1		Mid	QPSK	10 MHz	20525	836.5	1	22	21.39	24.71	25.27	22.81
		High	QPSK	20 MHz	20375	1752.5		1	High	QPSK	10 MHz	20600	844	1	21.86	21.74	23.58	25.13
Antenna gain (dBi) 3.27							Antenna gain (dBi) 0.01											
First Band							Second Band							Power(dBm)			EIRP(dBm)	
Band	Range	Modulation	Band width	Channel	Frequency	RB	Band	Range	Modulation	Band width	Channel	Frequency	RB	PCC	SCC	Total	PCC	SCC
4A	Low	QPSK	5 MHz	19975	1712.5	1	13A	Low	QPSK	10 MHz	23230	782	1	20.9	22.49	24.78	24.17	22.50
		QPSK	5 MHz	20175	1732.5	1			Mid	QPSK	10 MHz	23230	782	1	21.7	21.19	24.47	24.97
	Mid	QPSK	20 MHz	20175	1732.5	1		Mid	QPSK	10 MHz	23230	782	1	23.06	18.52	24.37	26.33	18.53
		High	QPSK	5 MHz	20375	1752.5		1	High	QPSK	10 MHz	23230	782	1	21.78	18.89	23.58	25.05
Antenna gain (dBi) 1.42							Antenna gain (dBi) 3.27											
First Band							Second Band							Power(dBm)			EIRP(dBm)	
Band	Range	Modulation	Band width	Channel	Frequency	RB	Band	Range	Modulation	Band width	Channel	Frequency	RB	PCC	SCC	Total	PCC	SCC
5A	Low	QPSK	10 MHz	20450	829	1	66A	Low	QPSK	5 MHz	131997	1712.5	1	24.05	19.17	25.27	25.47	22.44
		QPSK	5 MHz	20525	836.5	1			Mid	QPSK	5 MHz	132322	1745	1	23.39	20.33	25.13	24.81
	Mid	QPSK	5 MHz	20525	836.5	1		Mid	QPSK	20 MHz	132322	1745	1	23.44	20.42	25.2	24.86	23.69
		QPSK	10 MHz	20525	836.5	1		Mid	QPSK	5 MHz	132322	1745	1	23.93	19.33	25.22	25.35	22.60
		QPSK	10 MHz	20525	836.5	1		Mid	QPSK	20 MHz	132322	1745	1	23.38	20.32	25.15	24.80	23.59
		High	QPSK	10 MHz	20600	844		1	High	QPSK	5 MHz	132647	1777.5	1	23.31	20.26	25.05	24.73
Antenna gain (dBi) 1.42							Antenna gain (dBi) 1.42											
First Band							Second Band							Power(dBm)			EIRP(dBm)	
Band	Range	Modulation	Band width	Channel	Frequency	RB	Band	Range	Modulation	Band width	Channel	Frequency	RB	PCC	SCC	Total	PCC	SCC
5B	Low	QPSK	10 MHz	20450	829	1	5B	Low	QPSK	10 MHz	20549	838.9	1	22.17	15.52	23.02	24.44	
		QPSK	5 MHz	20478	831.8	1			Mid	QPSK	10 MHz	20550	839	1	22.07	15.82	22.95	24.37
	Mid	QPSK	10 MHz	20500	834	1		Mid	QPSK	5 MHz	20572	841.2	1	22.18	15.63	23.04	24.46	
		QPSK	10 MHz	20476	831.6	1		Mid	QPSK	10 MHz	20575	841.5	1	22.21	15.62	23.07	24.49	
		High	QPSK	10 MHz	20501	834.1		1	High	QPSK	10 MHz	20600	844	1	22.17	15.57	23.03	24.45
Antenna gain (dBi) 0.012221							Antenna gain (dBi) 3.27052											
First Band							Second Band							Power(dBm)			EIRP(dBm)	
Band	Range	Modulation	Band width	Channel	Frequency	RB	Band	Range	Modulation	Band width	Channel	Frequency	RB	PCC	SCC	Total	PCC	SCC
13A	Low	QPSK	5 MHz	23205	779.5	1	66A	Low	QPSK	5 MHz	131997	1712.5	1	24.24	17.46	25.07	24.25	20.73
		QPSK	5 MHz	23230	782	1			Mid	QPSK	5 MHz	132322	1745	1	23.01	20.69	25.01	23.02
	Mid	QPSK	5 MHz	23230	782	1		Mid	QPSK	20 MHz	132322	1745	1	22.97	20.38	24.87	22.98	23.65
		QPSK	10 MHz	23230	782	1		Mid	QPSK	5 MHz	132322	1745	1	24.01	17.76	24.93	24.02	21.03
		QPSK	10 MHz	23230	782	1		Mid	QPSK	20 MHz	132322	1745	1	22.31	20.39	24.47	22.32	23.66
		High	QPSK	5 MHz	23255	784.5		1	High	QPSK	5 MHz	132647	1777.5	1	23.4	17.66	24.43	23.41

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7 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)

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 $43 + 10 \log(P)$ dB.

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)

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(h)(3) for LTE B4, 66

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.

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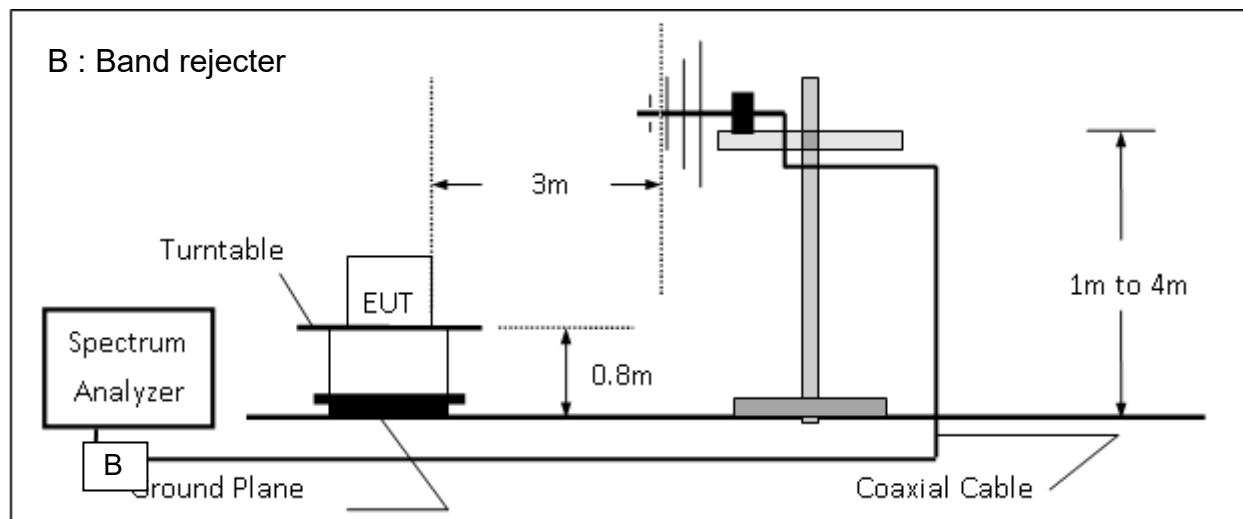
Table 2 — Unwanted Emissions for Mobile, Portable and Low-Power Fixed Subscriber Equipment

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	$43 + 10 \log_{10}(p)$ ^{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	$43 + 10 \log_{10}(p)$ ^{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.

7.2 EUT Setup

Radiated Emission Test Set-Up, Frequency Below 1000MHz



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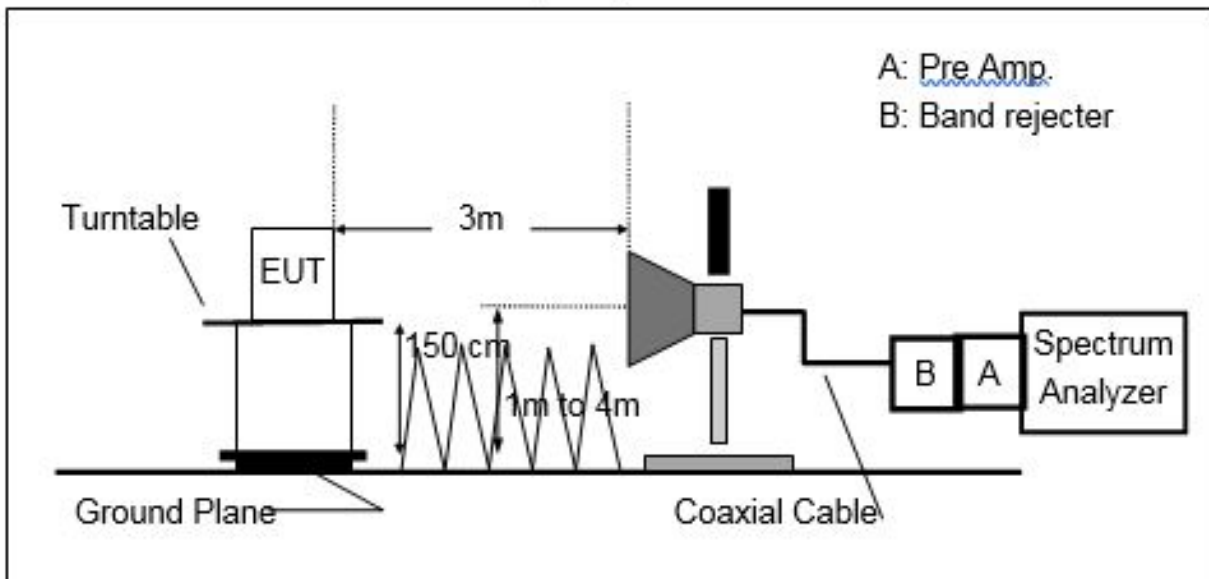
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Radiated Emission Test Set-UP Frequency Over 1 GHz



7.3 Measurement Procedure:

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.

$$\text{ERP (dBm)} = \text{SG Level(dBm)} + \text{Antenna Gain(dBd)} + \text{Cable Loss(dB)}$$

$$\text{EIRP (dBm)} = \text{SG Level(dBm)} + \text{Antenna Gain(dBi)} + \text{Cable Loss(dB)}$$

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7.4 Measurement Equipment Used:

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Broadband Antenna	SCHWAZBECK	VULB 9168	9168-617	11/04/2019	11/03/2020
Broadband Antenna	TESEQ	CBL 6112D	35240	09/09/2019	09/08/2020
Horn Antenna	Schwarzbeck	BBHA9120D	1187	01/09/2019	01/08/2020
Horn Antenna	Schwarzbeck	BBHA9170	185	08/07/2019	08/06/2020
Horn Antenna	Schwarzbeck	BBHA9120D	1341	06/12/2019	06/11/2020
3m Site NSA	SGS	966 chamber D	N/A	07/12/2019	07/11/2020
Spectrum Analyzer	KEYSIGHT	N9010A	MY54510568	06/10/2019	06/09/2020
Pre-Amplifier	EMC Instruments	EMC330	980096	11/20/2019	11/19/2020
Pre-Amplifier	EMC Instruments	EMC0011830	980199	11/20/2019	11/19/2020
Pre-Amplifier	EMC Instruments	EMC184045B	980135	11/20/2019	11/19/2020
Pre-Amplifier	EMC Instruments	EMC9135	980234	11/20/2019	11/19/2020
Pre-Amplifier	EMC Instruments	EMC12630SE	980271	11/20/2019	11/19/2020
Highpass Filter	Micro Tronics	BRM50701-01	G008	11/20/2019	11/19/2020
High Pass Filter	Micro-Tronics	G003	RF99	11/20/2019	11/19/2020
Notch Filter	Woken	EWT-54-0037	RF54	11/20/2019	11/19/2020
Notch Filter	Woken	EWT-54-0038	RF55	11/20/2019	11/19/2020
Lowpass Filter	Woken	EWT-56-0019	RF46	11/20/2019	11/19/2020
Coaxial Cable	Huber Suhner	SUCOFLEX 104	MY17388/4	11/20/2019	11/19/2020
Coaxial Cable	Huber Suhner	RG 214/U	W22.03	11/20/2019	11/19/2020
Coaxial Cable	Huber Suhner	SUCOFLEX 104	MY17413/4	11/20/2019	11/19/2020

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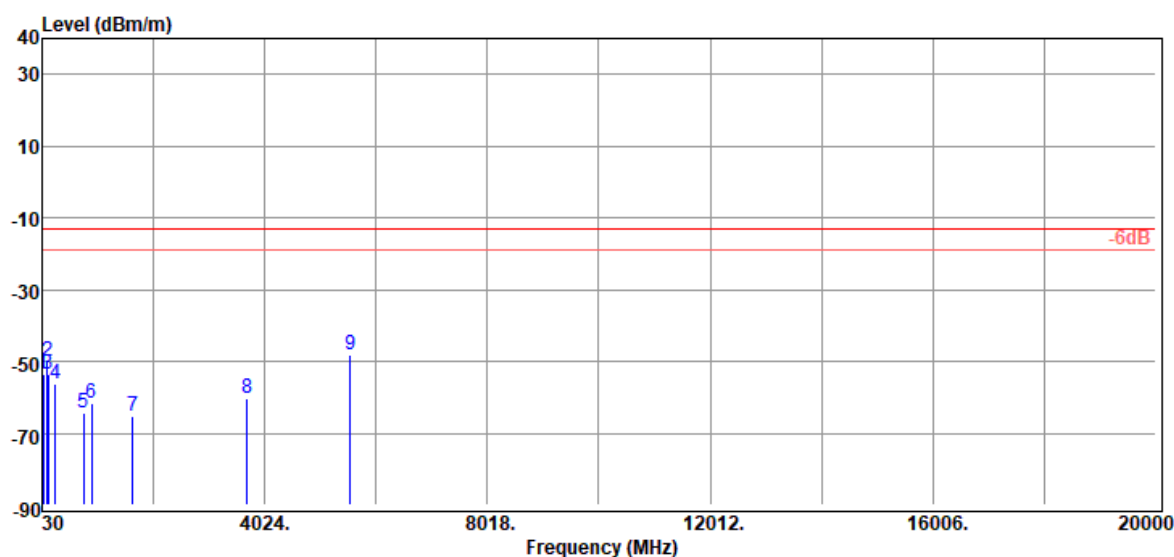
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7.5 Measurement Result:

Internal PIFA Antenna

Radiated Spurious Emission Measurement Result: LTE Band 2 + LTE Band 5 Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B2+B5	Temp./Humi.	:21.8/55
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1852.5 MHz +826.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-53.38	-39.05	-13.59	-0.74	-13.00	-40.38
125.06	-50.05	-40.91	-7.70	-1.44	-13.00	-37.05
144.46	-53.52	-46.32	-5.65	-1.55	-13.00	-40.52
270.56	-56.14	-52.71	-1.39	-2.04	-13.00	-43.14
770.11	-64.46	-62.56	0.79	-2.69	-13.00	-51.46
912.70	-61.82	-60.23	1.57	-3.16	-13.00	-48.82
1653.00	-65.44	-71.38	9.41	-3.47	-13.00	-52.44
3705.00	-60.26	-66.43	12.11	-5.94	-13.00	-47.26
5557.50	-48.21	-54.63	13.30	-6.88	-13.00	-35.21

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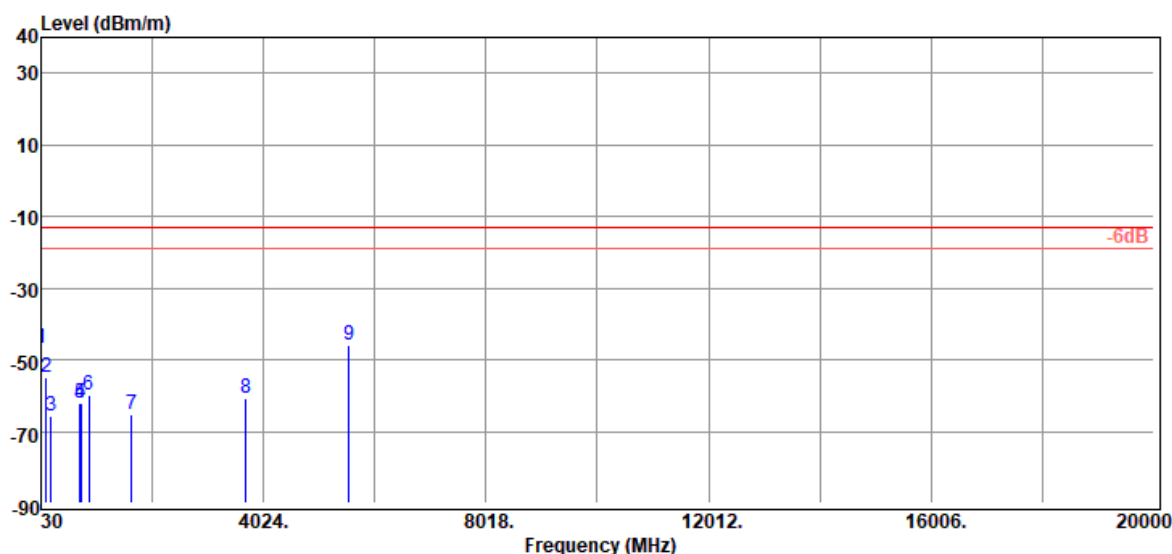
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Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B2+B5	Temp./Humi.	:21.8/55
Test Mode	:TX CH LOW	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1852.5 MHz +826.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
43.58	-46.67	-26.60	-19.33	-0.74	-13.00	-33.67
124.09	-54.89	-45.71	-7.76	-1.42	-13.00	-41.89
216.24	-65.54	-63.94	0.31	-1.91	-13.00	-52.54
730.34	-62.17	-60.17	0.73	-2.73	-13.00	-49.17
750.71	-62.16	-60.29	0.75	-2.62	-13.00	-49.16
885.54	-59.65	-57.87	1.39	-3.17	-13.00	-46.65
1653.00	-65.35	-71.29	9.41	-3.47	-13.00	-52.35
3705.00	-60.73	-66.90	12.11	-5.94	-13.00	-47.73
5557.50	-45.88	-52.30	13.30	-6.88	-13.00	-32.88

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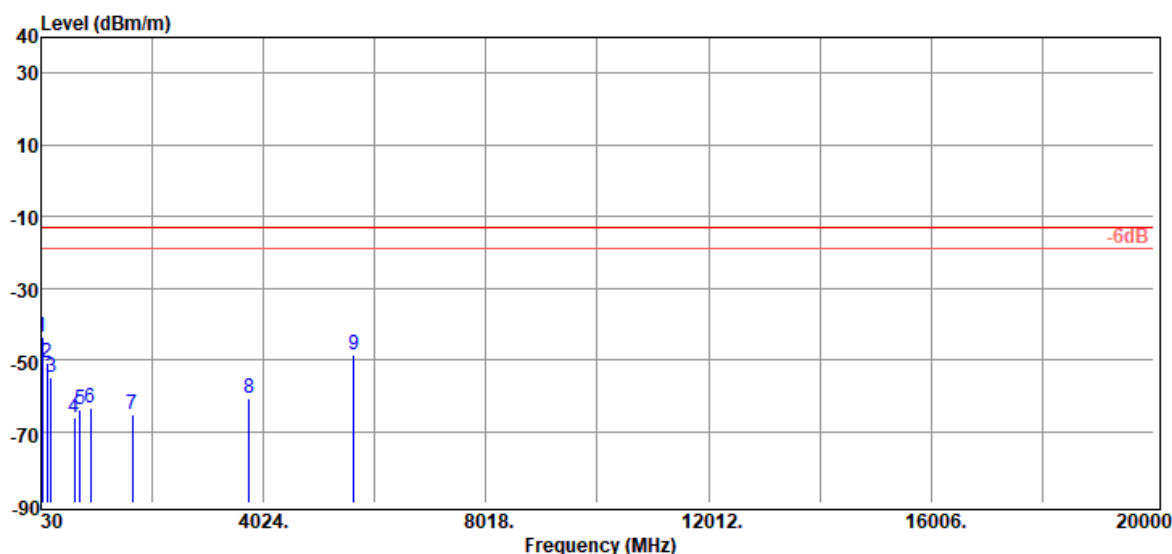
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Report Number :E2/2020/10031
Operation Mode :LTE B2+B5
Test Mode :TX CH MID
EUT Pol :E2 Plan
Test Channel :1880 MHz +836.5 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
44.55	-43.49	-24.42	-18.33	-0.74	-13.00	-30.49
144.46	-51.03	-43.83	-5.65	-1.55	-13.00	-38.03
206.54	-54.99	-52.71	-0.44	-1.84	-13.00	-41.99
636.25	-66.11	-63.26	-0.24	-2.61	-13.00	-53.11
728.40	-64.02	-62.10	0.74	-2.66	-13.00	-51.02
915.61	-63.40	-61.78	1.60	-3.22	-13.00	-50.40
1673.00	-65.23	-71.23	9.49	-3.49	-13.00	-52.23
3760.00	-60.56	-66.43	12.20	-6.33	-13.00	-47.56
5640.00	-48.53	-54.82	13.46	-7.17	-13.00	-35.53

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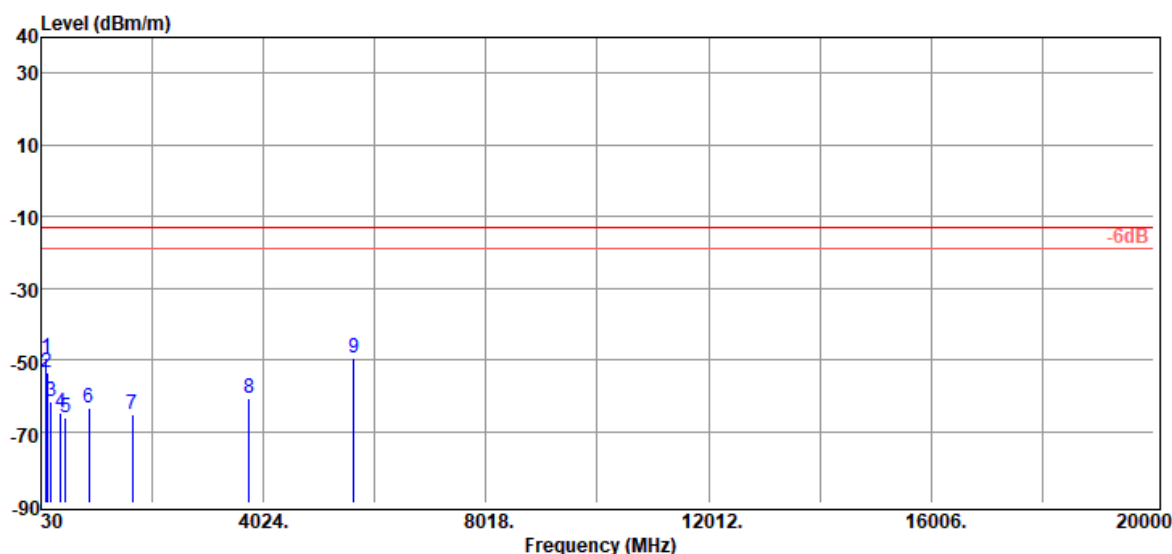
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Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B2+B5	Temp./Humi.	:21.8/55
Test Mode	:TX CH MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1880 MHz +836.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
125.06	-49.39	-40.25	-7.70	-1.44	-13.00	-36.39
143.49	-53.48	-46.13	-5.80	-1.55	-13.00	-40.48
216.24	-61.54	-59.94	0.31	-1.91	-13.00	-48.54
388.90	-64.84	-61.64	-0.60	-2.60	-13.00	-51.84
464.56	-65.96	-62.24	-0.69	-3.03	-13.00	-52.96
885.54	-63.65	-61.87	1.39	-3.17	-13.00	-50.65
1673.00	-65.30	-71.30	9.49	-3.49	-13.00	-52.30
3760.00	-60.77	-66.64	12.20	-6.33	-13.00	-47.77
5640.00	-49.47	-55.76	13.46	-7.17	-13.00	-36.47

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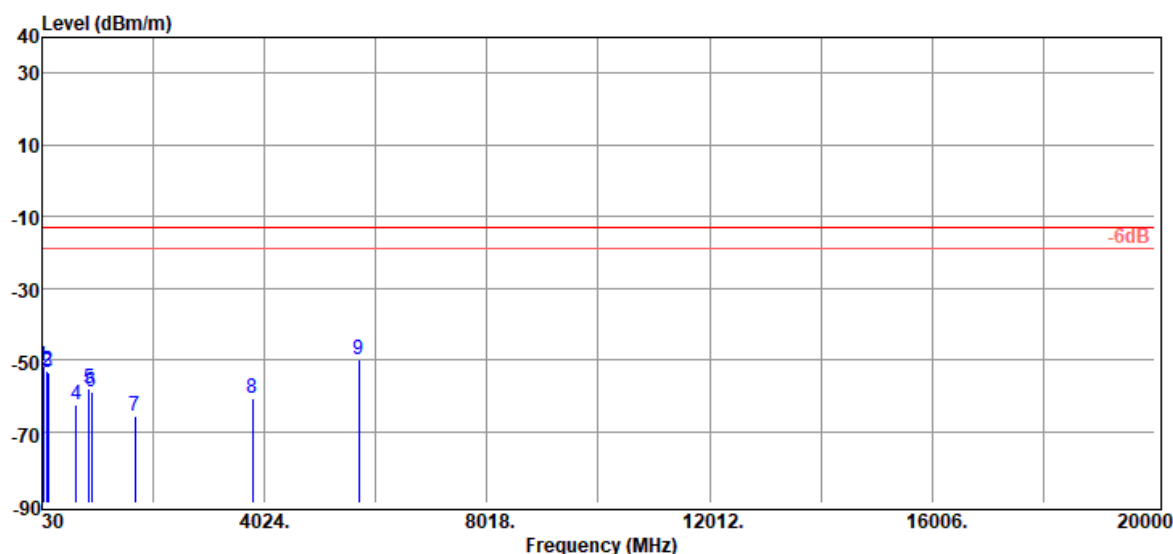
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Operation Mode :LTE B2+B5
Test Mode :TX CH HIGH
EUT Pol :E2 Plan
Test Channel :1907.5 MHz +846.5 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
52.31	-51.73	-40.18	-10.78	-0.77	-13.00	-38.73
125.06	-53.02	-43.88	-7.70	-1.44	-13.00	-40.02
144.46	-53.35	-46.15	-5.65	-1.55	-13.00	-40.35
645.95	-62.66	-60.28	-0.04	-2.34	-13.00	-49.66
874.87	-58.14	-56.09	1.30	-3.35	-13.00	-45.14
917.55	-58.98	-57.34	1.62	-3.26	-13.00	-45.98
1693.00	-65.64	-71.69	9.57	-3.52	-13.00	-52.64
3815.00	-60.65	-66.28	12.20	-6.57	-13.00	-47.65
5722.50	-50.17	-55.74	13.30	-7.73	-13.00	-37.17

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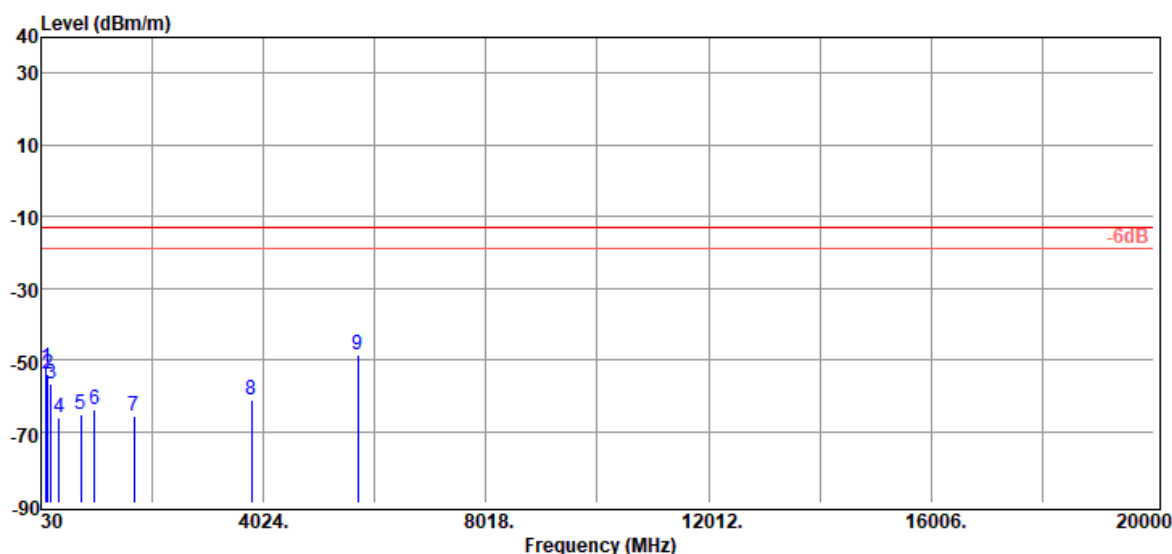
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Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B2+B5	Temp./Humi.	:21.8/55
Test Mode	:TX CH HIGH	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1907.5 MHz +846.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
125.06	-52.39	-43.25	-7.70	-1.44	-13.00	-39.39
158.04	-53.91	-48.89	-3.46	-1.56	-13.00	-40.91
216.24	-56.54	-54.94	0.31	-1.91	-13.00	-43.54
357.86	-66.28	-63.27	-0.67	-2.34	-13.00	-53.28
750.71	-65.16	-63.29	0.75	-2.62	-13.00	-52.16
993.21	-63.83	-62.09	1.63	-3.37	-13.00	-50.83
1693.00	-65.78	-71.83	9.57	-3.52	-13.00	-52.78
3815.00	-61.09	-66.72	12.20	-6.57	-13.00	-48.09
5722.50	-48.56	-54.13	13.30	-7.73	-13.00	-35.56

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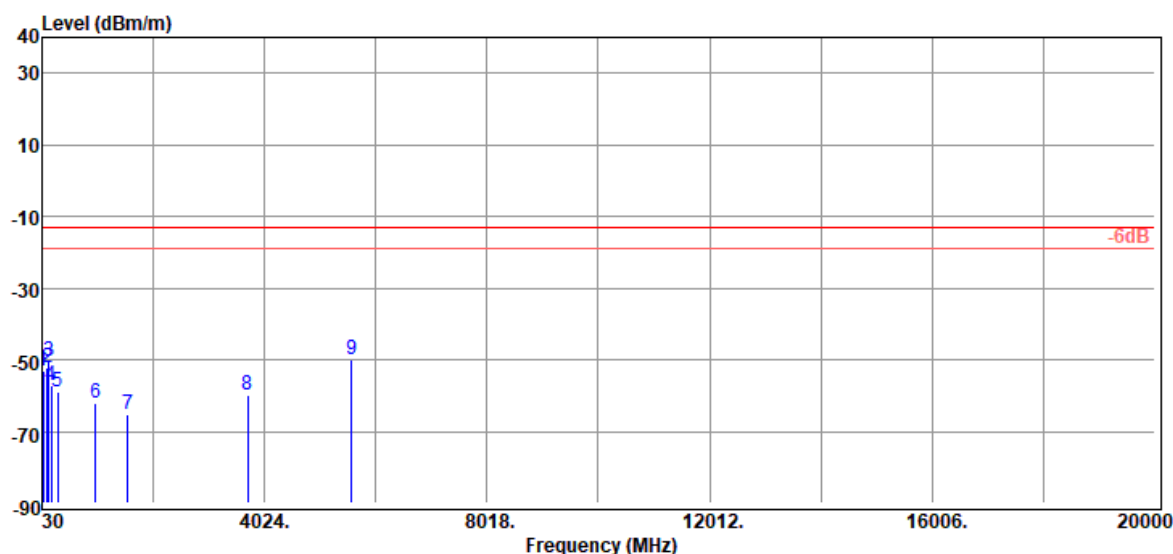
f (886-2) 2298-0488

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Radiated Spurious Emission Measurement Result: LTE Band 2 + LTE Band 13 Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B2+B13	Temp./Humi.	:21.8/55
Test Mode	:TX CH LOW + MID	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1860 MHz +782 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
54.25	-53.01	-43.01	-9.20	-0.80	-13.00	-40.01
125.06	-52.13	-42.99	-7.70	-1.44	-13.00	-39.13
158.04	-50.36	-45.34	-3.46	-1.56	-13.00	-37.36
199.75	-57.01	-54.67	-0.50	-1.84	-13.00	-44.01
309.36	-58.91	-55.70	-0.72	-2.49	-13.00	-45.91
997.09	-62.16	-60.43	1.69	-3.42	-13.00	-49.16
1564.00	-65.36	-70.46	8.84	-3.74	-13.00	-52.36
3720.00	-59.98	-66.07	12.14	-6.05	-13.00	-46.98
5580.00	-50.08	-56.46	13.30	-6.92	-13.00	-37.08

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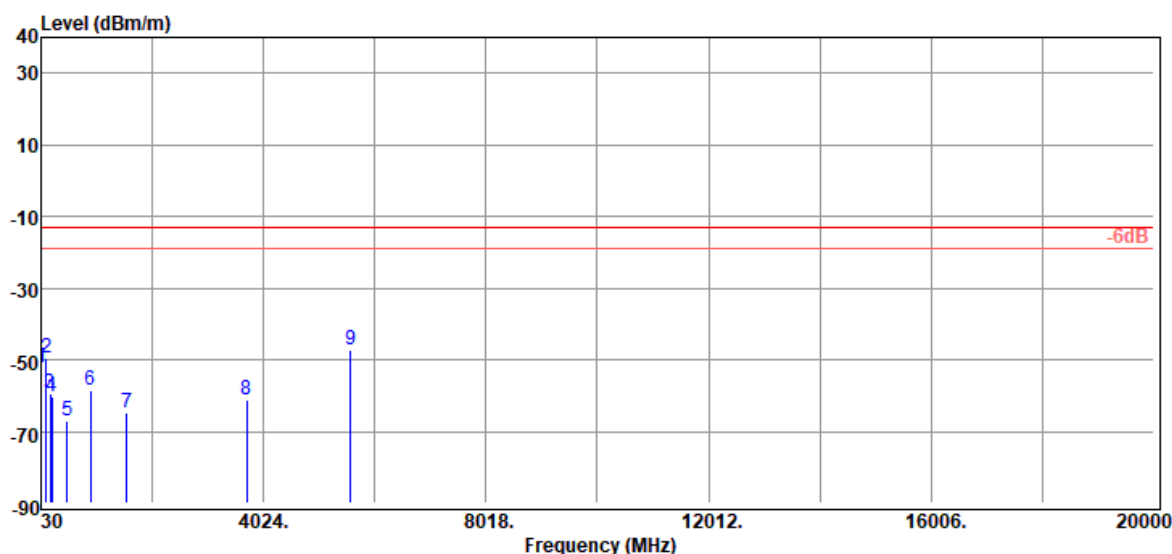
f (886-2) 2298-0488

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Report Number :E2/2020/10031
Operation Mode :LTE B2+B13
Test Mode :TX CH LOW + MID
EUT Pol :E2 Plan
Test Channel :1860 MHz +782 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :HORIZONTAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
42.61	-52.21	-31.11	-20.36	-0.74	-13.00	-39.21
125.06	-49.31	-40.17	-7.70	-1.44	-13.00	-36.31
202.66	-59.51	-57.16	-0.51	-1.84	-13.00	-46.51
219.15	-60.40	-58.77	0.31	-1.94	-13.00	-47.40
493.66	-66.94	-63.67	-0.75	-2.52	-13.00	-53.94
912.70	-58.44	-56.85	1.57	-3.16	-13.00	-45.44
1564.00	-64.71	-69.81	8.84	-3.74	-13.00	-51.71
3720.00	-61.16	-67.25	12.14	-6.05	-13.00	-48.16
5580.00	-47.44	-53.82	13.30	-6.92	-13.00	-34.44

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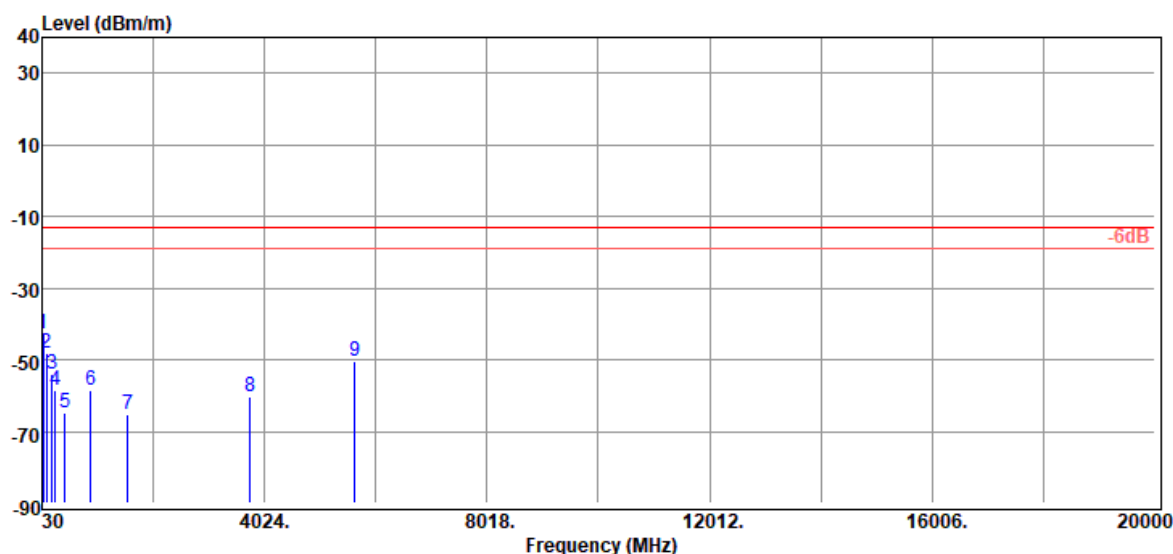
f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

Report Number :E2/2020/10031
Operation Mode :LTE B2+B13
Test Mode :TX CH MID + MID
EUT Pol :E2 Plan
Test Channel :1880 MHz +782 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
58.13	-42.96	-34.75	-7.35	-0.86	-13.00	-29.96
110.51	-48.15	-39.05	-7.77	-1.33	-13.00	-35.15
212.36	-54.11	-52.23	-0.01	-1.87	-13.00	-41.11
262.80	-58.29	-54.03	-2.23	-2.03	-13.00	-45.29
436.43	-64.64	-61.05	-0.84	-2.75	-13.00	-51.64
901.06	-58.44	-56.85	1.45	-3.04	-13.00	-45.44
1564.00	-65.16	-70.26	8.84	-3.74	-13.00	-52.16
3760.00	-60.19	-66.06	12.20	-6.33	-13.00	-47.19
5640.00	-50.42	-56.71	13.46	-7.17	-13.00	-37.42

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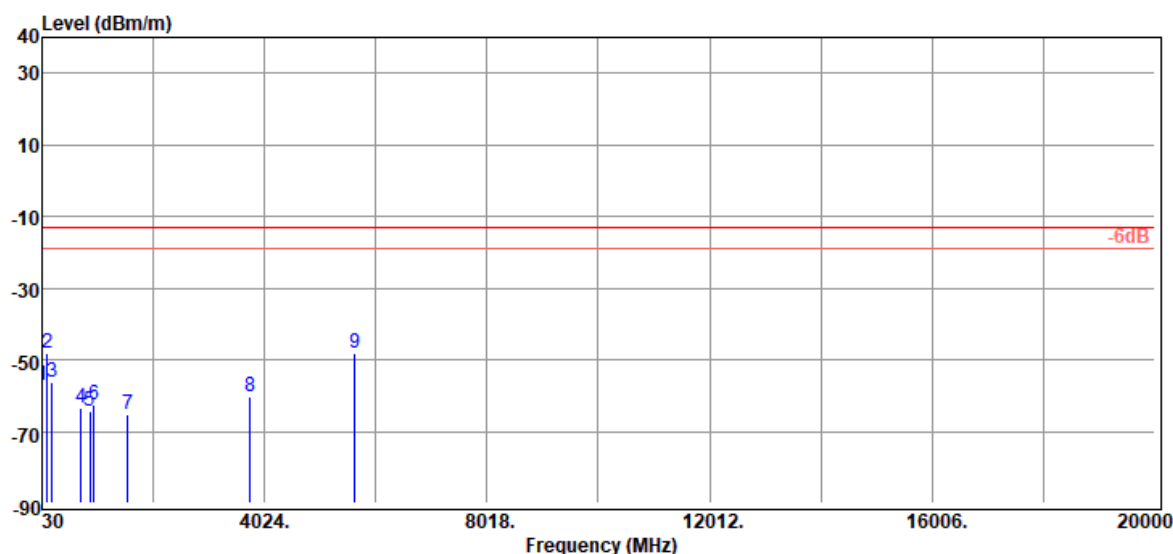
f (886-2) 2298-0488

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Report Number :E2/2020/10031
Operation Mode :LTE B2+B13
Test Mode :TX CH MID + MID
EUT Pol :E2 Plan
Test Channel :1880 MHz +782 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :HORIZONTAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
42.61	-57.21	-36.11	-20.36	-0.74	-13.00	-44.21
124.09	-48.24	-39.06	-7.76	-1.42	-13.00	-35.24
217.21	-56.39	-54.78	0.31	-1.92	-13.00	-43.39
728.40	-63.44	-61.52	0.74	-2.66	-13.00	-50.44
888.45	-64.26	-62.55	1.37	-3.08	-13.00	-51.26
963.14	-62.65	-60.68	1.70	-3.67	-13.00	-49.65
1564.00	-65.47	-70.57	8.84	-3.74	-13.00	-52.47
3760.00	-60.42	-66.29	12.20	-6.33	-13.00	-47.42
5640.00	-48.23	-54.52	13.46	-7.17	-13.00	-35.23

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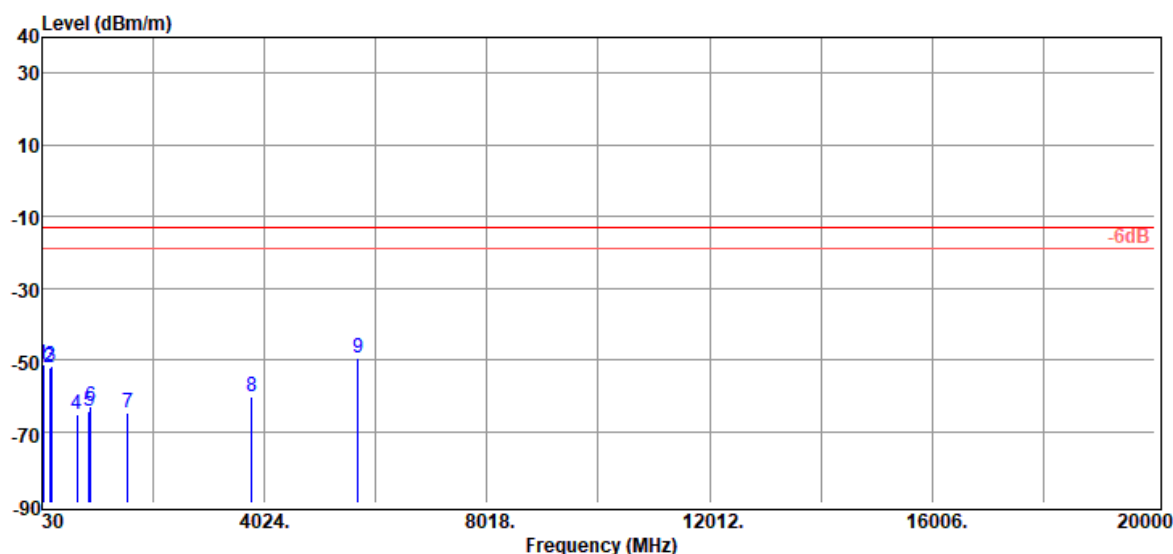
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Report Number :E2/2020/10031
Operation Mode :LTE B2+B13
Test Mode :TX CH HIGH + MID
EUT Pol :E2 Plan
Test Channel :1900 MHz +782 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-51.42	-37.09	-13.59	-0.74	-13.00	-38.42
161.92	-52.38	-47.95	-2.86	-1.57	-13.00	-39.38
202.66	-51.54	-49.19	-0.51	-1.84	-13.00	-38.54
663.41	-65.12	-63.08	0.23	-2.27	-13.00	-52.12
870.99	-64.17	-62.16	1.34	-3.35	-13.00	-51.17
907.85	-63.15	-61.58	1.52	-3.09	-13.00	-50.15
1564.00	-64.67	-69.77	8.84	-3.74	-13.00	-51.67
3800.00	-60.16	-65.76	12.20	-6.60	-13.00	-47.16
5700.00	-49.63	-55.43	13.30	-7.50	-13.00	-36.63

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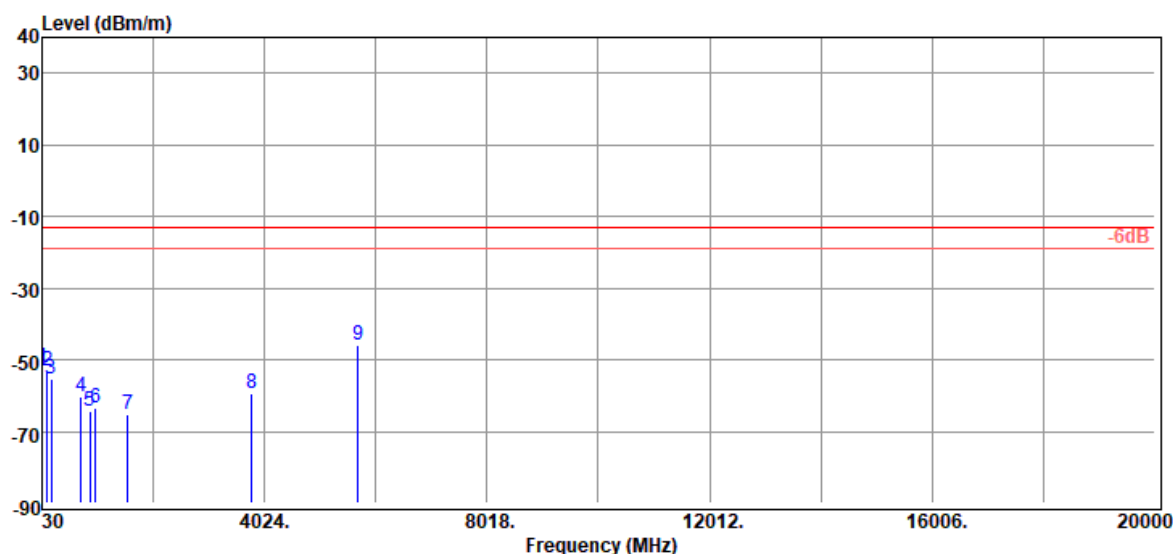
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Report Number :E2/2020/10031
Operation Mode :LTE B2+B13
Test Mode :TX CH HIGH + MID
EUT Pol :E2 Plan
Test Channel :1900 MHz +782 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :HORIZONTAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
42.61	-52.21	-31.11	-20.36	-0.74	-13.00	-39.21
124.09	-53.24	-44.06	-7.76	-1.42	-13.00	-40.24
202.66	-55.51	-53.16	-0.51	-1.84	-13.00	-42.51
728.40	-60.44	-58.52	0.74	-2.66	-13.00	-47.44
888.45	-64.26	-62.55	1.37	-3.08	-13.00	-51.26
995.15	-63.39	-61.71	1.72	-3.40	-13.00	-50.39
1564.00	-65.48	-70.58	8.84	-3.74	-13.00	-52.48
3800.00	-59.30	-64.90	12.20	-6.60	-13.00	-46.30
5700.00	-45.86	-51.66	13.30	-7.50	-13.00	-32.86

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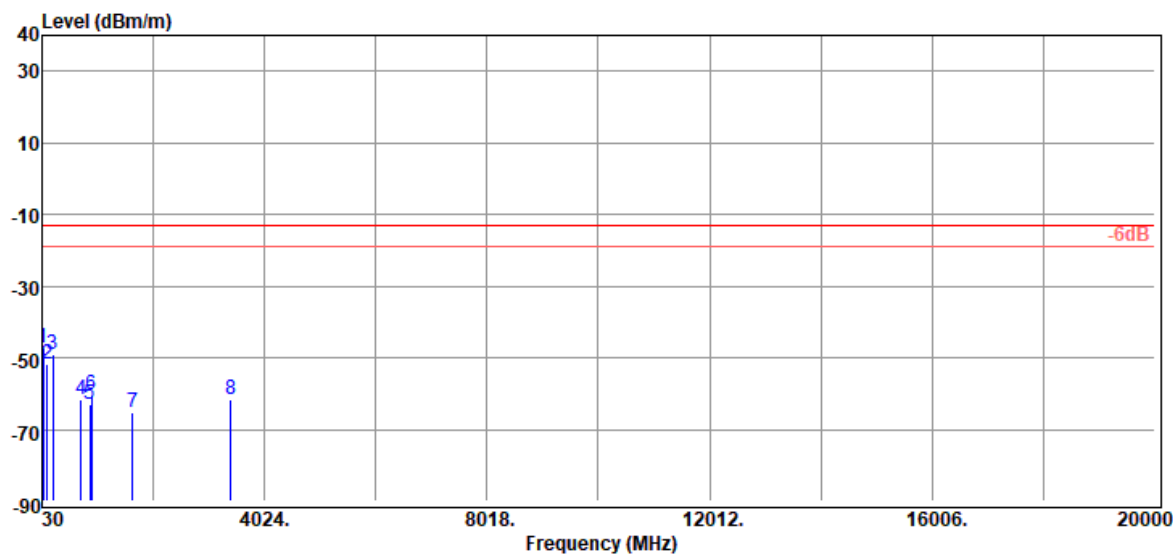
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Radiated Spurious Emission Measurement Result: LTE Band 4 + LTE Band 5 Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B4+B5	Temp./Humi.	:21.8/55
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1712.5 MHz +829 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
52.31	-47.12	-35.57	-10.78	-0.77	-13.00	-34.12
128.94	-51.63	-42.67	-7.44	-1.52	-13.00	-38.63
221.09	-49.25	-47.56	0.26	-1.95	-13.00	-36.25
728.40	-61.65	-59.73	0.74	-2.66	-13.00	-48.65
890.39	-63.19	-61.51	1.35	-3.03	-13.00	-50.19
924.34	-60.10	-58.46	1.67	-3.31	-13.00	-47.10
1658.00	-65.11	-71.07	9.43	-3.47	-13.00	-52.11
3425.00	-61.62	-68.92	12.50	-5.20	-13.00	-48.62

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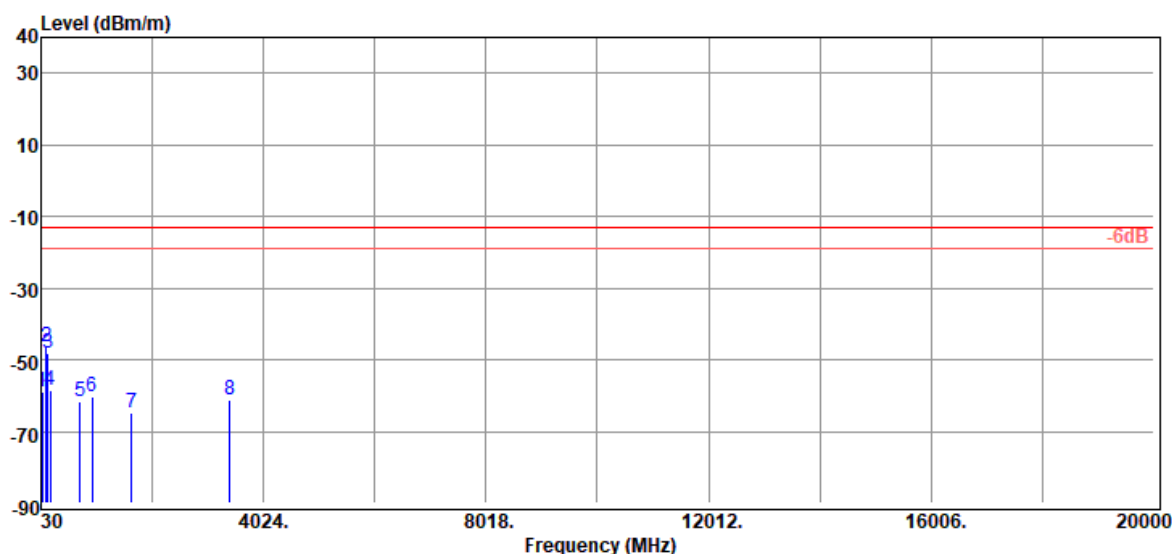
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Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B4+B5	Temp./Humi.	:21.8/55
Test Mode	:TX CH LOW	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1712.5 MHz +829 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-58.74	-44.41	-13.59	-0.74	-13.00	-45.74
124.09	-46.24	-37.06	-7.76	-1.42	-13.00	-33.24
159.01	-48.29	-43.42	-3.31	-1.56	-13.00	-35.29
202.66	-58.51	-56.16	-0.51	-1.84	-13.00	-45.51
730.34	-61.68	-59.68	0.73	-2.73	-13.00	-48.68
946.65	-60.44	-59.04	1.82	-3.22	-13.00	-47.44
1658.00	-65.02	-70.98	9.43	-3.47	-13.00	-52.02
3425.00	-61.28	-68.58	12.50	-5.20	-13.00	-48.28

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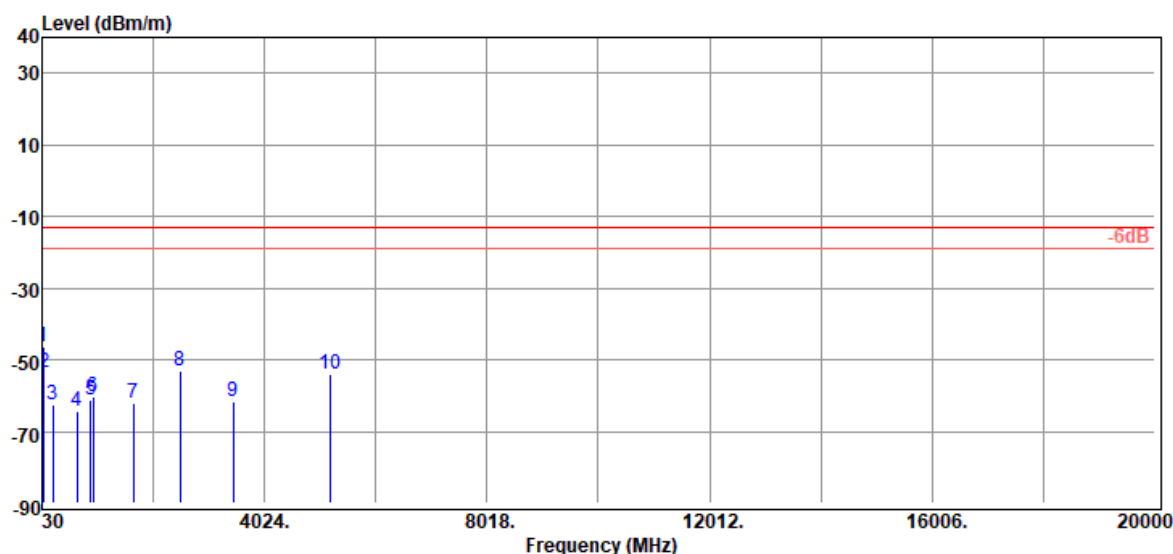
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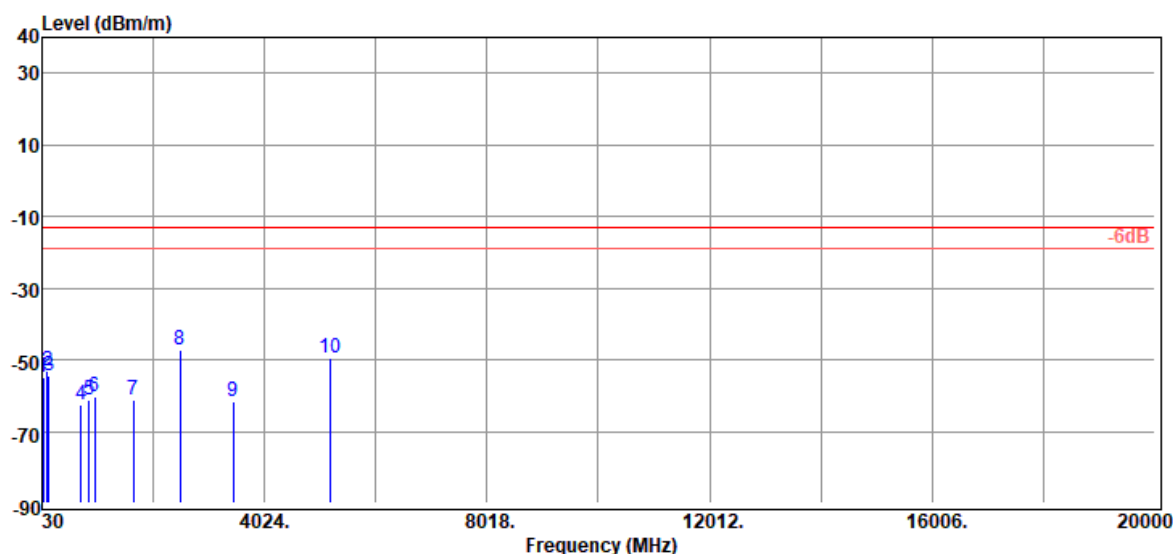
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Report Number :E2/2020/10031
Operation Mode :LTE B4+B5
Test Mode :TX CH MID
EUT Pol :E2 Plan
Test Channel :1732.5 MHz +836.5 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B4+B5	Temp./Humi.	:21.8/55
Test Mode	:TX CH MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1732.5 MHz +836.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-54.74	-40.41	-13.59	-0.74	-13.00	-41.74
125.06	-53.31	-44.17	-7.70	-1.44	-13.00	-40.31
154.16	-54.63	-49.01	-4.06	-1.56	-13.00	-41.63
728.40	-62.44	-60.52	0.74	-2.66	-13.00	-49.44
874.87	-61.41	-59.36	1.30	-3.35	-13.00	-48.41
969.93	-60.34	-58.27	1.60	-3.67	-13.00	-47.34
1673.00	-61.12	-67.12	9.49	-3.49	-13.00	-48.12
2509.50	-47.19	-54.22	10.76	-3.73	-13.00	-34.19
3465.00	-61.79	-68.93	12.44	-5.30	-13.00	-48.79
5197.50	-49.65	-55.86	12.88	-6.67	-13.00	-36.65

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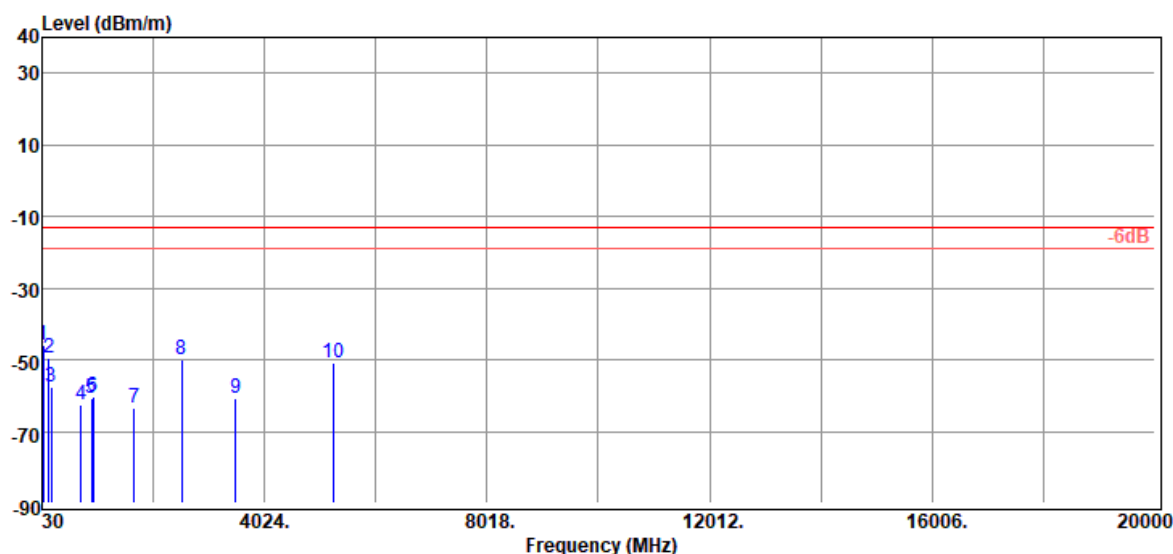
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Report Number :E2/2020/10031
Operation Mode :LTE B4+B5
Test Mode :TX CH HIGH
EUT Pol :E2 Plan
Test Channel :1752.5 MHz +844 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
47.46	-45.86	-29.52	-15.60	-0.74	-13.00	-32.86
158.04	-49.73	-44.71	-3.46	-1.56	-13.00	-36.73
200.72	-57.61	-55.25	-0.52	-1.84	-13.00	-44.61
730.34	-62.78	-60.78	0.73	-2.73	-13.00	-49.78
920.46	-60.71	-59.04	1.64	-3.31	-13.00	-47.71
946.65	-60.20	-58.80	1.82	-3.22	-13.00	-47.20
1688.00	-63.68	-69.72	9.55	-3.51	-13.00	-50.68
2532.00	-50.03	-57.17	10.89	-3.75	-13.00	-37.03
3505.00	-60.74	-67.61	12.28	-5.41	-13.00	-47.74
5257.50	-50.64	-57.44	13.32	-6.52	-13.00	-37.64

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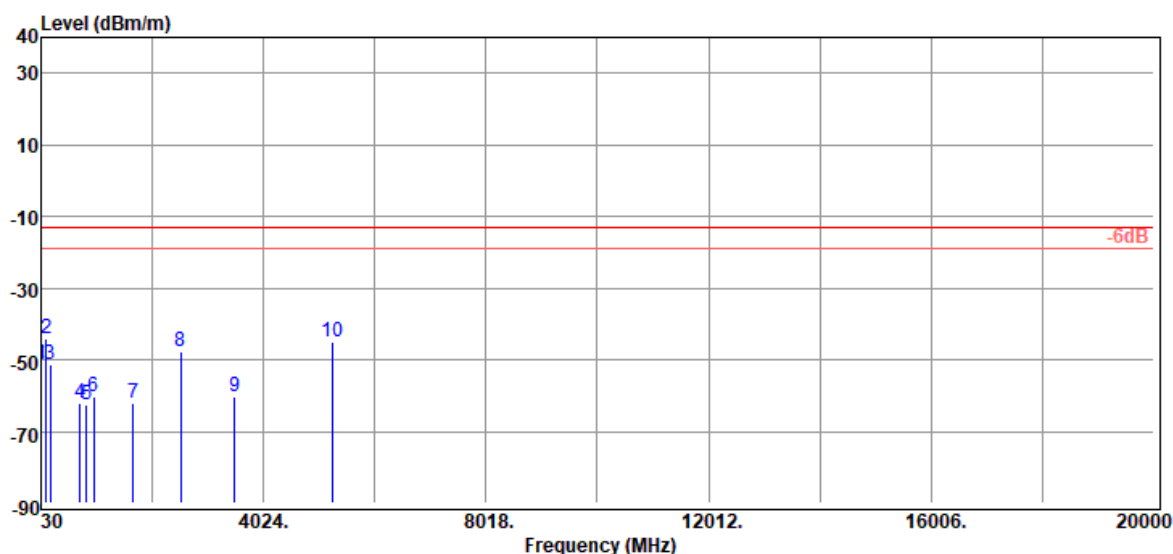
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Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B4+B5	Temp./Humi.	:21.8/55
Test Mode	:TX CH HIGH	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1752.5 MHz +844 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
42.61	-51.21	-30.11	-20.36	-0.74	-13.00	-38.21
124.09	-44.24	-35.06	-7.76	-1.42	-13.00	-31.24
202.66	-51.51	-49.16	-0.51	-1.84	-13.00	-38.51
727.43	-62.14	-60.26	0.75	-2.63	-13.00	-49.14
848.68	-62.40	-60.63	1.16	-2.93	-13.00	-49.40
972.84	-60.37	-58.37	1.57	-3.57	-13.00	-47.37
1688.00	-62.18	-68.22	9.55	-3.51	-13.00	-49.18
2532.00	-47.75	-54.89	10.89	-3.75	-13.00	-34.75
3505.00	-60.11	-66.98	12.28	-5.41	-13.00	-47.11
5257.50	-45.03	-51.83	13.32	-6.52	-13.00	-32.03

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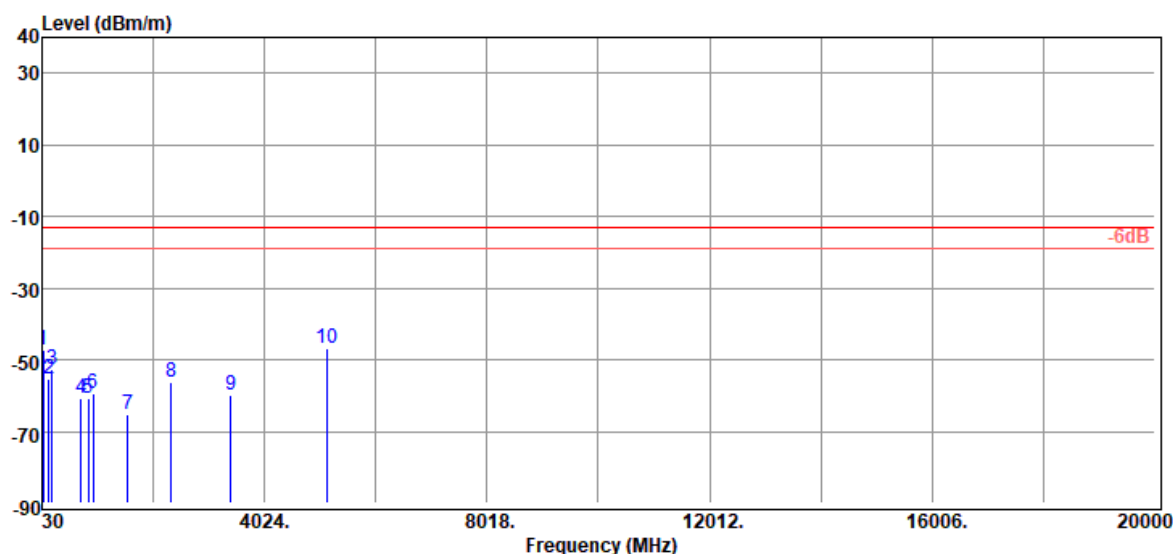
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Radiated Spurious Emission Measurement Result: LTE Band 4 + LTE Band 13 Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B4+B13	Temp./Humi.	:21.8/55
Test Mode	:TX CH LOW + MID	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1712.5 MHz +782 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
44.55	-47.27	-28.20	-18.33	-0.74	-13.00	-34.27
146.40	-55.49	-48.61	-5.33	-1.55	-13.00	-42.49
216.24	-52.54	-50.94	0.31	-1.91	-13.00	-39.54
728.40	-60.64	-58.72	0.74	-2.66	-13.00	-47.64
868.08	-60.58	-58.64	1.33	-3.27	-13.00	-47.58
941.80	-59.36	-58.01	1.87	-3.22	-13.00	-46.36
1564.00	-65.33	-70.43	8.84	-3.74	-13.00	-52.33
2346.00	-56.41	-61.54	9.67	-4.54	-13.00	-43.41
3425.00	-59.99	-67.29	12.50	-5.20	-13.00	-46.99
5137.50	-46.66	-52.76	12.58	-6.48	-13.00	-33.66

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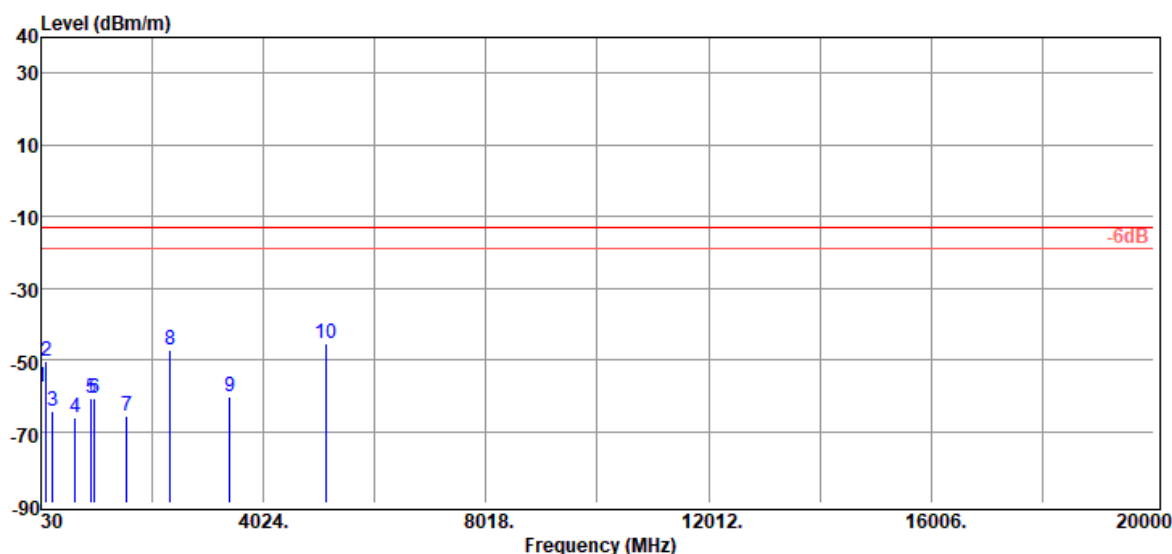
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Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B4+B13	Temp./Humi.	:21.8/55
Test Mode	:TX CH LOW + MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1712.5 MHz +782 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
42.61	-57.52	-36.42	-20.36	-0.74	-13.00	-44.52
124.09	-50.50	-41.32	-7.76	-1.42	-13.00	-37.50
237.58	-64.37	-61.65	-0.74	-1.98	-13.00	-51.37
645.95	-66.21	-63.83	-0.04	-2.34	-13.00	-53.21
928.22	-60.58	-59.05	1.78	-3.31	-13.00	-47.58
991.27	-60.66	-58.84	1.53	-3.35	-13.00	-47.66
1564.00	-65.57	-70.67	8.84	-3.74	-13.00	-52.57
2346.00	-47.40	-52.53	9.67	-4.54	-13.00	-34.40
3425.00	-60.48	-67.78	12.50	-5.20	-13.00	-47.48
5137.50	-45.64	-51.74	12.58	-6.48	-13.00	-32.64

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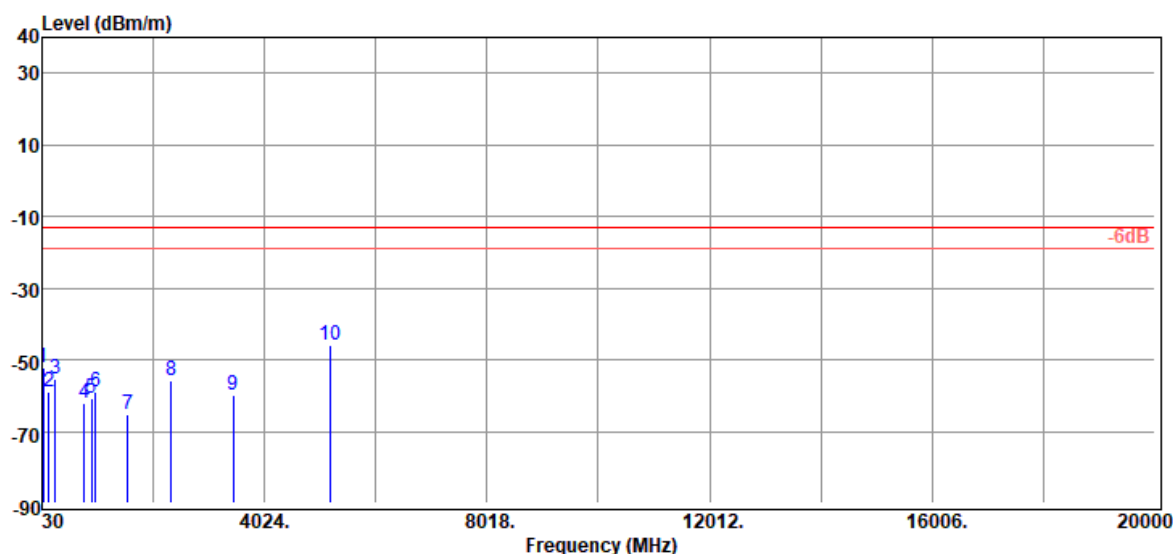
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Report Number :E2/2020/10031
Operation Mode :LTE B4+B13
Test Mode :TX CH MID + MID
EUT Pol :E2 Plan
Test Channel :1732.5 MHz +782 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
54.25	-52.08	-42.08	-9.20	-0.80	-13.00	-39.08
151.25	-58.84	-52.76	-4.52	-1.56	-13.00	-45.84
267.65	-55.14	-51.43	-1.68	-2.03	-13.00	-42.14
790.48	-62.10	-59.97	0.91	-3.04	-13.00	-49.10
916.58	-60.82	-59.19	1.61	-3.24	-13.00	-47.82
996.12	-58.75	-57.05	1.71	-3.41	-13.00	-45.75
1564.00	-65.45	-70.55	8.84	-3.74	-13.00	-52.45
2346.00	-55.69	-60.82	9.67	-4.54	-13.00	-42.69
3465.00	-59.95	-67.09	12.44	-5.30	-13.00	-46.95
5197.50	-45.93	-52.14	12.88	-6.67	-13.00	-32.93

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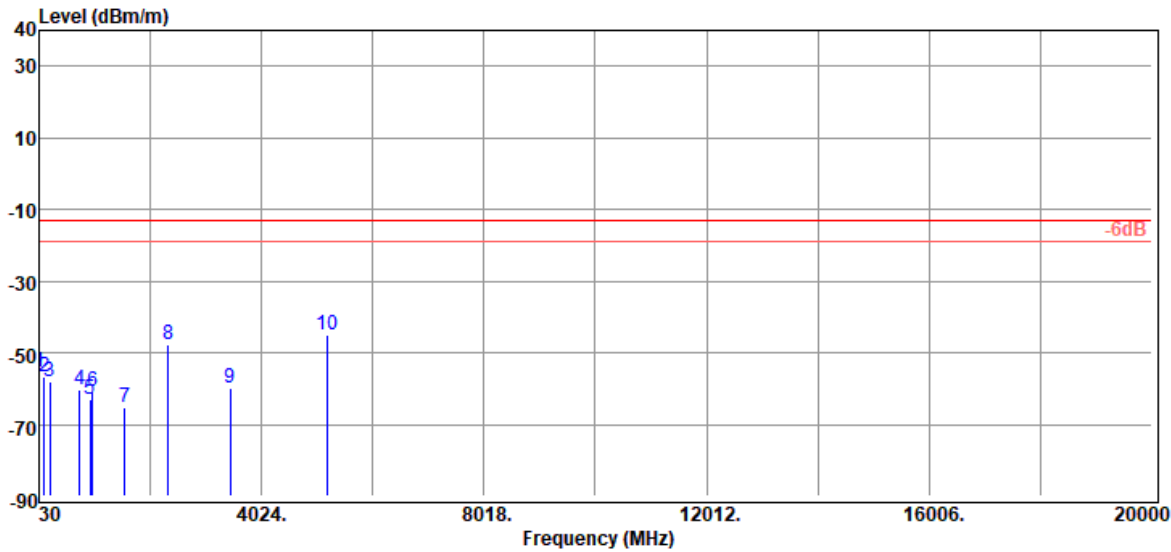
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Report Number :E2/2020/10031
Operation Mode :LTE B4+B13
Test Mode :TX CH MID + MID
EUT Pol :E2 Plan
Test Channel :1732.5 MHz +782 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :HORIZONTAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
43.58	-55.29	-35.22	-19.33	-0.74	-13.00	-42.29
125.06	-56.65	-47.51	-7.70	-1.44	-13.00	-43.65
222.06	-57.98	-56.25	0.22	-1.95	-13.00	-44.98
761.38	-60.30	-58.40	0.79	-2.69	-13.00	-47.30
947.62	-62.89	-61.51	1.84	-3.22	-13.00	-49.89
988.36	-60.87	-59.03	1.49	-3.33	-13.00	-47.87
1564.00	-65.48	-70.58	8.84	-3.74	-13.00	-52.48
2346.00	-47.92	-53.05	9.67	-4.54	-13.00	-34.92
3465.00	-59.96	-67.10	12.44	-5.30	-13.00	-46.96
5197.50	-45.10	-51.31	12.88	-6.67	-13.00	-32.10

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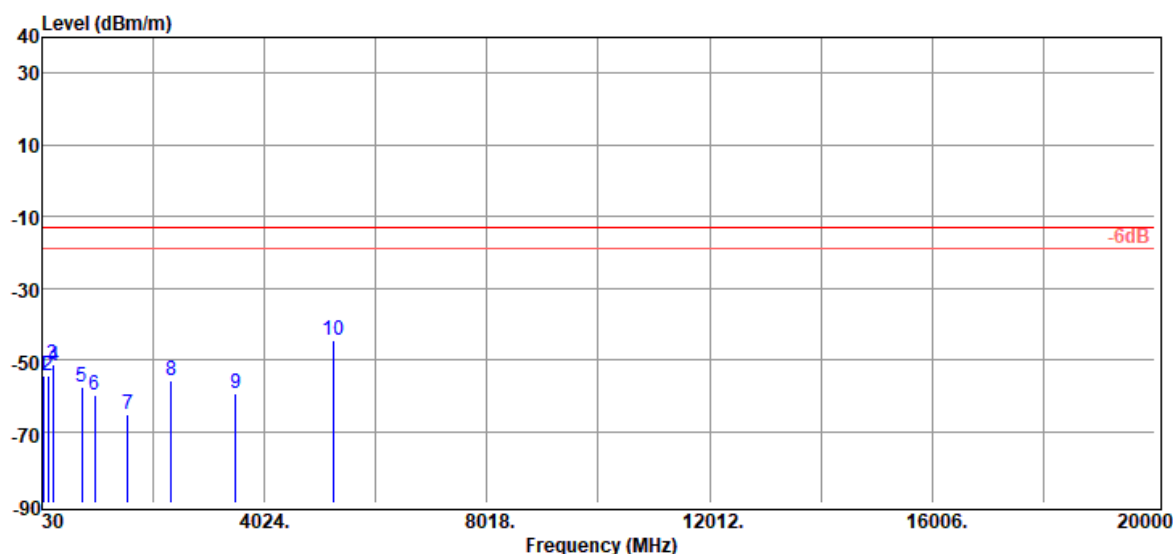
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Report Number :E2/2020/10031
Operation Mode :LTE B4+B13
Test Mode :TX CH HIGH + MID
EUT Pol :E2 Plan
Test Channel :1752.5 MHz +782 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
51.34	-54.42	-42.00	-11.66	-0.76	-13.00	-41.42
144.46	-54.40	-47.20	-5.65	-1.55	-13.00	-41.40
221.09	-51.46	-49.77	0.26	-1.95	-13.00	-38.46
236.61	-51.89	-49.25	-0.66	-1.98	-13.00	-38.89
746.83	-57.53	-55.58	0.66	-2.61	-13.00	-44.53
981.57	-59.76	-57.93	1.50	-3.33	-13.00	-46.76
1564.00	-65.42	-70.52	8.84	-3.74	-13.00	-52.42
2346.00	-55.82	-60.95	9.67	-4.54	-13.00	-42.82
3505.00	-59.51	-66.38	12.28	-5.41	-13.00	-46.51
5257.50	-44.57	-51.37	13.32	-6.52	-13.00	-31.57

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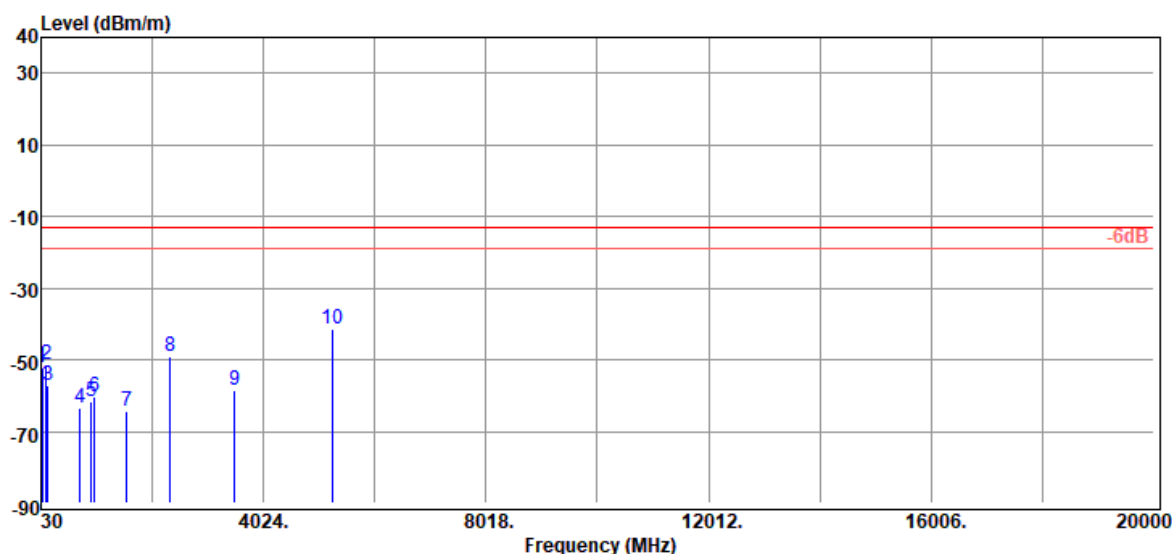
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Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B4+B13	Temp./Humi.	:21.8/55
Test Mode	:TX CH HIGH + MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1752.5 MHz +782 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-52.06	-37.73	-13.59	-0.74	-13.00	-39.06
125.06	-51.44	-42.30	-7.70	-1.44	-13.00	-38.44
158.04	-57.32	-52.30	-3.46	-1.56	-13.00	-44.32
730.34	-63.34	-61.34	0.73	-2.73	-13.00	-50.34
929.19	-61.44	-59.94	1.81	-3.31	-13.00	-48.44
998.06	-60.28	-58.53	1.68	-3.43	-13.00	-47.28
1564.00	-64.54	-69.64	8.84	-3.74	-13.00	-51.54
2346.00	-49.03	-54.16	9.67	-4.54	-13.00	-36.03
3505.00	-58.71	-65.58	12.28	-5.41	-13.00	-45.71
5257.50	-41.38	-48.18	13.32	-6.52	-13.00	-28.38

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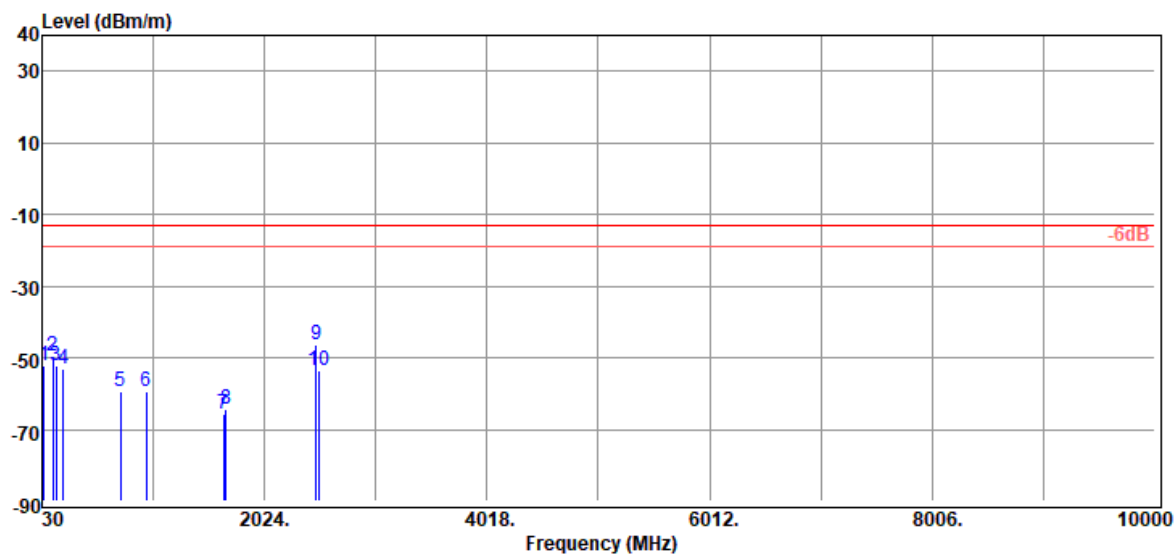
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Radiated Spurious Emission Measurement Result: LTE Band 5 B + LTE Band 5 B Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B5+B5	Temp./Humi.	:21.8/55
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:829 MHz +838.9 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
47.46	-52.26	-35.92	-15.60	-0.74	-13.00	-39.26
124.09	-49.39	-40.21	-7.76	-1.42	-13.00	-36.39
153.19	-52.33	-46.63	-4.14	-1.56	-13.00	-39.33
219.15	-53.25	-51.62	0.31	-1.94	-13.00	-40.25
730.34	-59.32	-57.32	0.73	-2.73	-13.00	-46.32
966.05	-59.31	-57.36	1.72	-3.67	-13.00	-46.31
1658.00	-65.51	-71.47	9.43	-3.47	-13.00	-52.51
1677.80	-64.23	-70.24	9.51	-3.50	-13.00	-51.23
2487.00	-46.51	-53.30	10.62	-3.83	-13.00	-33.51
2516.70	-53.44	-60.50	10.80	-3.74	-13.00	-40.44

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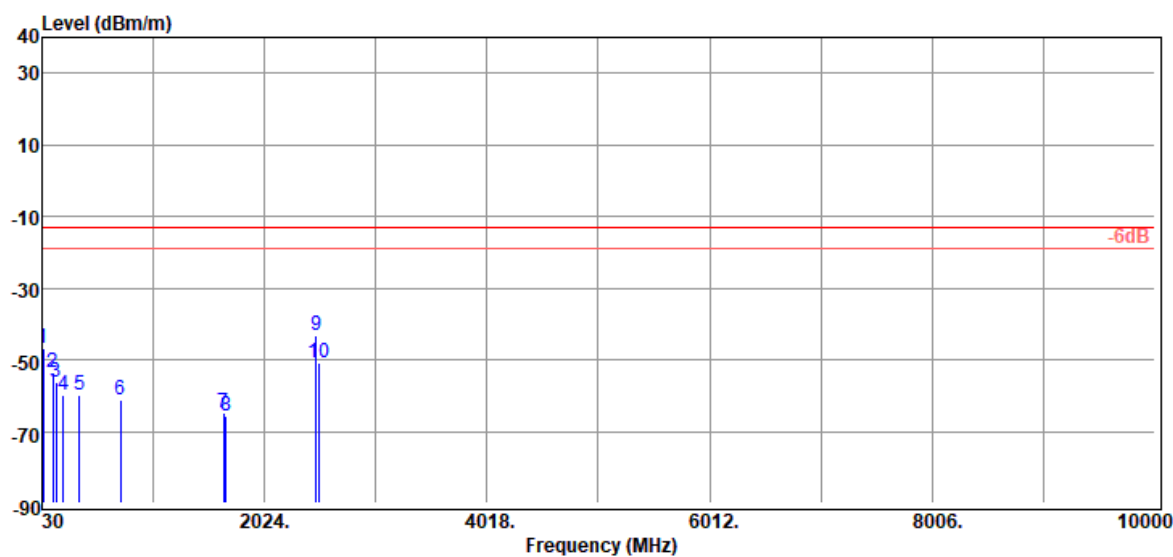
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Member of SGS Group

Report Number :E2/2020/10031
 Operation Mode :LTE B5+B5
 Test Mode :TX CH LOW
 EUT Pol :E2 Plan
 Test Channel :829 MHz +838.9 MHz

Test Date :2020-01-02
 Temp./Humi. :21.8/55
 Antenna Pol. :HORIZONTAL
 Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
41.64	-46.80	-24.86	-21.20	-0.74	-13.00	-33.80
124.09	-53.46	-44.28	-7.76	-1.42	-13.00	-40.46
158.04	-56.38	-51.36	-3.46	-1.56	-13.00	-43.38
219.15	-59.68	-58.05	0.31	-1.94	-13.00	-46.68
366.59	-59.94	-56.86	-0.52	-2.56	-13.00	-46.94
730.34	-61.32	-59.32	0.73	-2.73	-13.00	-48.32
1658.00	-64.66	-70.62	9.43	-3.47	-13.00	-51.66
1677.80	-65.62	-71.63	9.51	-3.50	-13.00	-52.62
2487.00	-43.24	-50.03	10.62	-3.83	-13.00	-30.24
2516.70	-50.68	-57.74	10.80	-3.74	-13.00	-37.68

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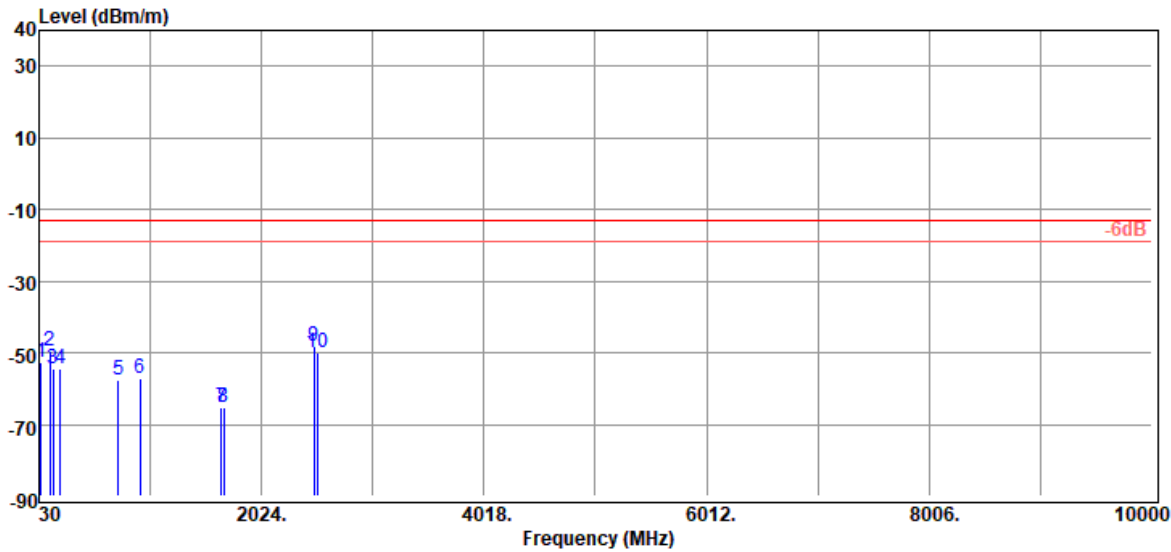
f (886-2) 2298-0488

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Member of SGS Group

Report Number :E2/2020/10031
Operation Mode :LTE B5+B5
Test Mode :TX CH MID
EUT Pol :E2 Plan
Test Channel :831.6 MHz +841.5 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
46.49	-52.62	-35.28	-16.60	-0.74	-13.00	-39.62
124.09	-49.39	-40.21	-7.76	-1.42	-13.00	-36.39
153.19	-54.33	-48.63	-4.14	-1.56	-13.00	-41.33
219.15	-54.25	-52.62	0.31	-1.94	-13.00	-41.25
739.07	-57.48	-55.51	0.65	-2.62	-13.00	-44.48
934.04	-57.22	-55.74	1.79	-3.27	-13.00	-44.22
1663.20	-65.32	-71.29	9.45	-3.48	-13.00	-52.32
1683.00	-65.44	-71.46	9.53	-3.51	-13.00	-52.44
2494.80	-48.14	-55.05	10.67	-3.76	-13.00	-35.14
2524.50	-50.00	-57.11	10.85	-3.74	-13.00	-37.00

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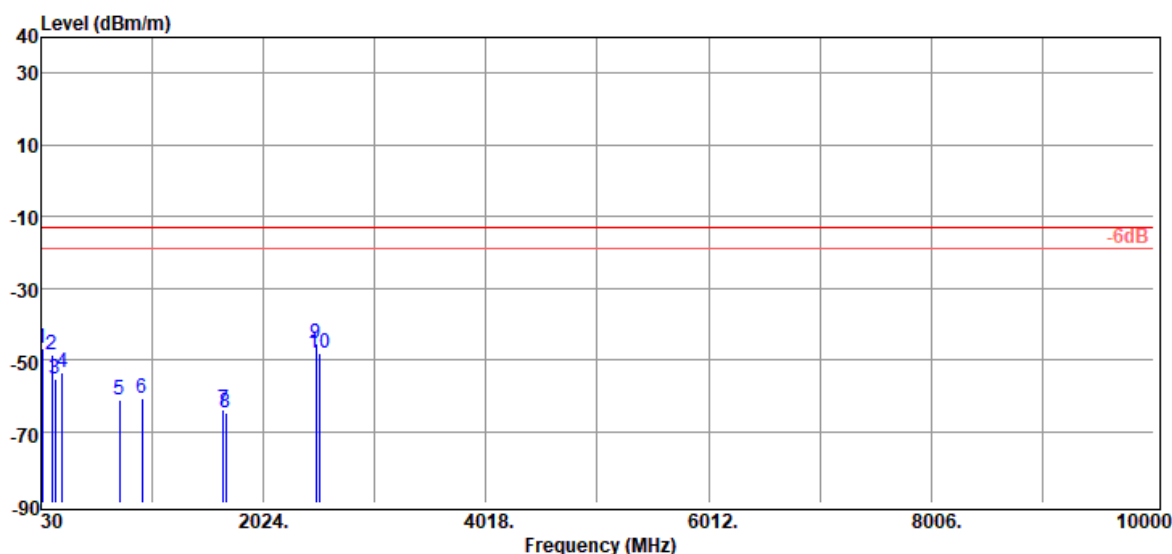
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Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B5+B5	Temp./Humi.	:21.8/55
Test Mode	:TX CH MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:831.6 MHz +841.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
40.67	-46.91	-24.25	-21.92	-0.74	-13.00	-33.91
125.06	-48.61	-39.47	-7.70	-1.44	-13.00	-35.61
158.04	-55.38	-50.36	-3.46	-1.56	-13.00	-42.38
219.15	-53.68	-52.05	0.31	-1.94	-13.00	-40.68
734.22	-61.13	-59.15	0.70	-2.68	-13.00	-48.13
932.10	-60.79	-59.31	1.81	-3.29	-13.00	-47.79
1663.20	-64.11	-70.08	9.45	-3.48	-13.00	-51.11
1683.00	-64.87	-70.89	9.53	-3.51	-13.00	-51.87
2494.80	-45.53	-52.44	10.67	-3.76	-13.00	-32.53
2524.50	-48.28	-55.39	10.85	-3.74	-13.00	-35.28

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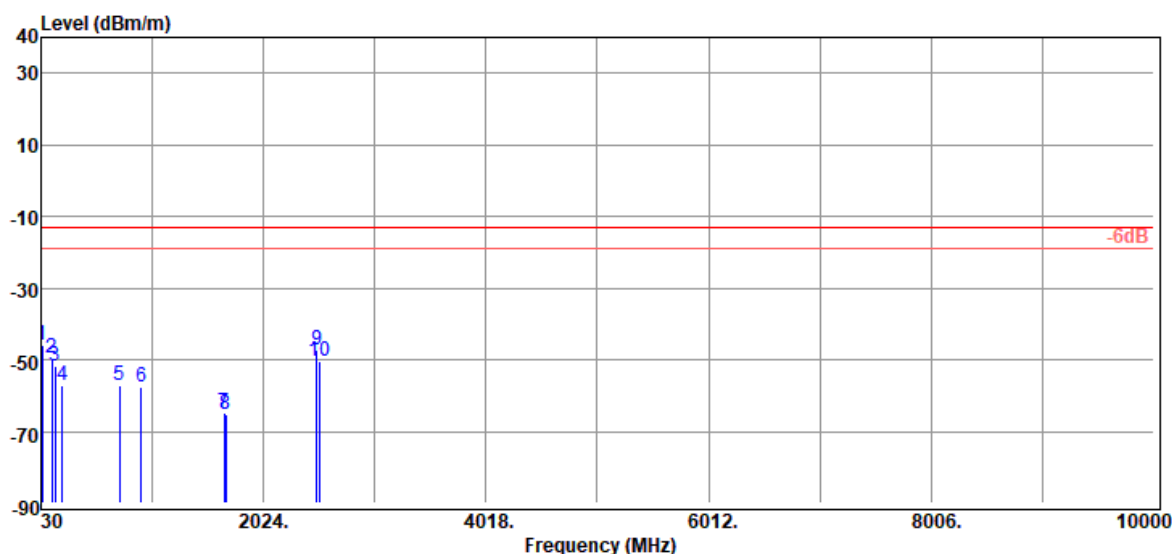
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Report Number :E2/2020/10031
Operation Mode :LTE B5+B5
Test Mode :TX CH HIGH
EUT Pol :E2 Plan
Test Channel :834.1 MHz +844 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
43.58	-46.04	-25.97	-19.33	-0.74	-13.00	-33.04
124.09	-49.39	-40.21	-7.76	-1.42	-13.00	-36.39
158.04	-51.56	-46.54	-3.46	-1.56	-13.00	-38.56
219.15	-57.25	-55.62	0.31	-1.94	-13.00	-44.25
730.34	-57.32	-55.32	0.73	-2.73	-13.00	-44.32
925.31	-57.80	-56.18	1.69	-3.31	-13.00	-44.80
1668.20	-64.96	-70.94	9.47	-3.49	-13.00	-51.96
1688.00	-65.18	-71.22	9.55	-3.51	-13.00	-52.18
2502.30	-47.47	-54.46	10.71	-3.72	-13.00	-34.47
2532.00	-50.22	-57.36	10.89	-3.75	-13.00	-37.22

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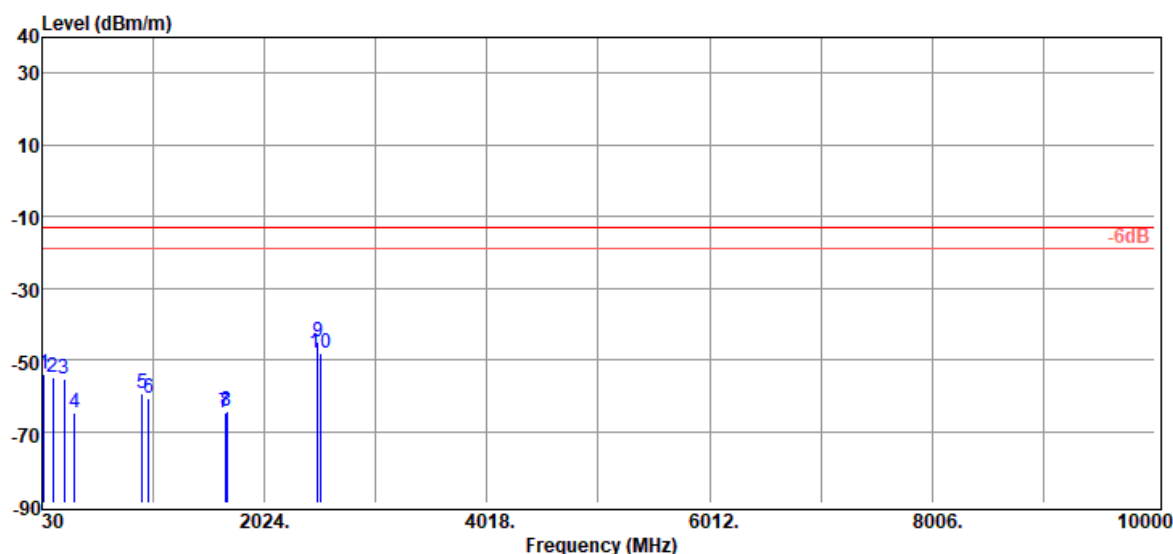
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Report Number :E2/2020/10031
Operation Mode :LTE B5+B5
Test Mode :TX CH HIGH
EUT Pol :E2 Plan
Test Channel :834.1 MHz +844 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :HORIZONTAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
44.55	-53.88	-34.81	-18.33	-0.74	-13.00	-40.88
124.09	-54.86	-45.68	-7.76	-1.42	-13.00	-41.86
231.76	-55.41	-53.13	-0.32	-1.96	-13.00	-42.41
319.06	-64.64	-61.40	-0.73	-2.51	-13.00	-51.64
928.22	-59.56	-58.03	1.78	-3.31	-13.00	-46.56
989.33	-60.87	-59.02	1.48	-3.33	-13.00	-47.87
1668.20	-64.84	-70.82	9.47	-3.49	-13.00	-51.84
1688.00	-64.51	-70.55	9.55	-3.51	-13.00	-51.51
2502.30	-44.81	-51.80	10.71	-3.72	-13.00	-31.81
2532.00	-48.08	-55.22	10.89	-3.75	-13.00	-35.08

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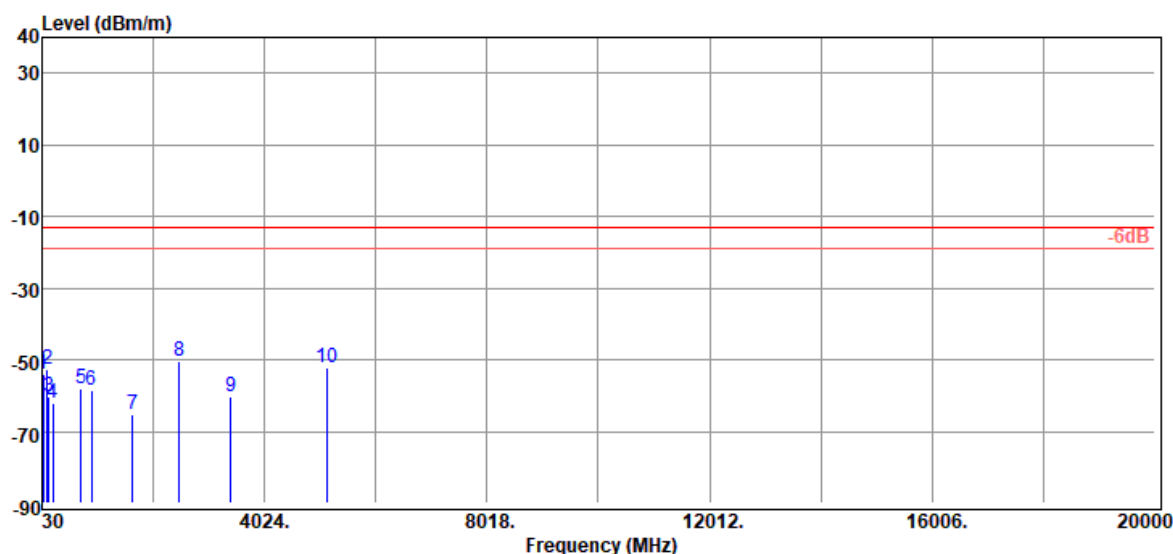
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Radiated Spurious Emission Measurement Result: LTE Band 5 + LTE Band 66 Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B5+B66	Temp./Humi.	:21.8/55
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:829 MHz +1712.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
54.25	-54.07	-44.07	-9.20	-0.80	-13.00	-41.07
125.06	-52.67	-43.53	-7.70	-1.44	-13.00	-39.67
154.16	-60.52	-54.90	-4.06	-1.56	-13.00	-47.52
228.85	-62.01	-59.92	-0.14	-1.95	-13.00	-49.01
730.34	-57.88	-55.88	0.73	-2.73	-13.00	-44.88
924.34	-58.45	-56.81	1.67	-3.31	-13.00	-45.45
1658.00	-65.37	-71.33	9.43	-3.47	-13.00	-52.37
2487.00	-50.46	-57.25	10.62	-3.83	-13.00	-37.46
3425.00	-60.32	-67.62	12.50	-5.20	-13.00	-47.32
5137.50	-52.17	-58.27	12.58	-6.48	-13.00	-39.17

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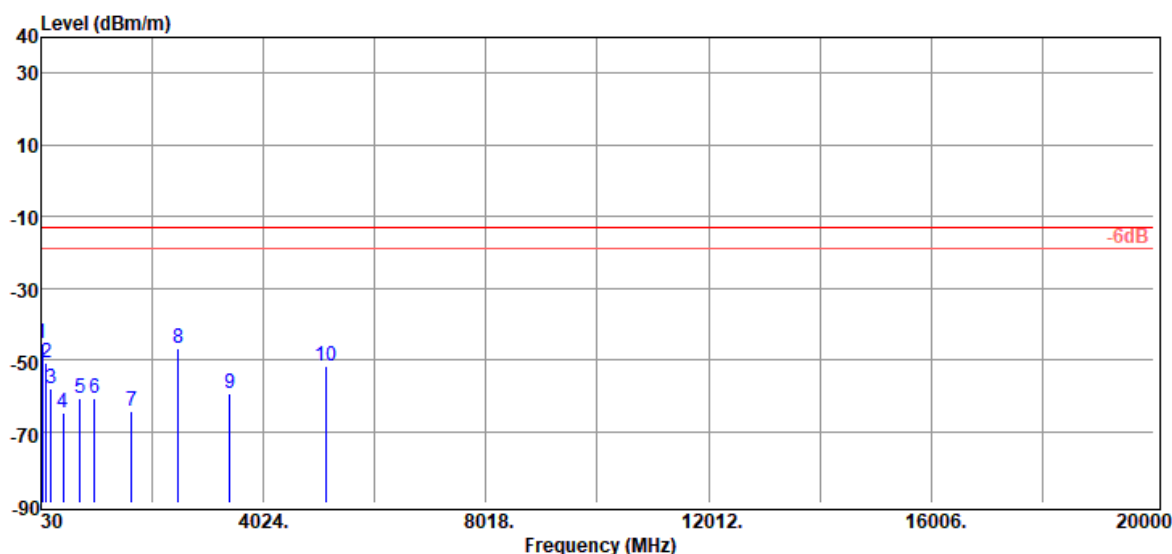
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Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B5+B66	Temp./Humi.	:21.8/55
Test Mode	:TX CH LOW	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:829 MHz +1712.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
47.46	-45.59	-29.25	-15.60	-0.74	-13.00	-32.59
125.06	-50.69	-41.55	-7.70	-1.44	-13.00	-37.69
216.24	-57.87	-56.27	0.31	-1.91	-13.00	-44.87
432.55	-64.88	-61.12	-0.92	-2.84	-13.00	-51.88
730.34	-60.88	-58.88	0.73	-2.73	-13.00	-47.88
992.24	-60.60	-58.82	1.58	-3.36	-13.00	-47.60
1658.00	-64.48	-70.44	9.43	-3.47	-13.00	-51.48
2487.00	-47.04	-53.83	10.62	-3.83	-13.00	-34.04
3425.00	-59.33	-66.63	12.50	-5.20	-13.00	-46.33
5137.50	-51.69	-57.79	12.58	-6.48	-13.00	-38.69

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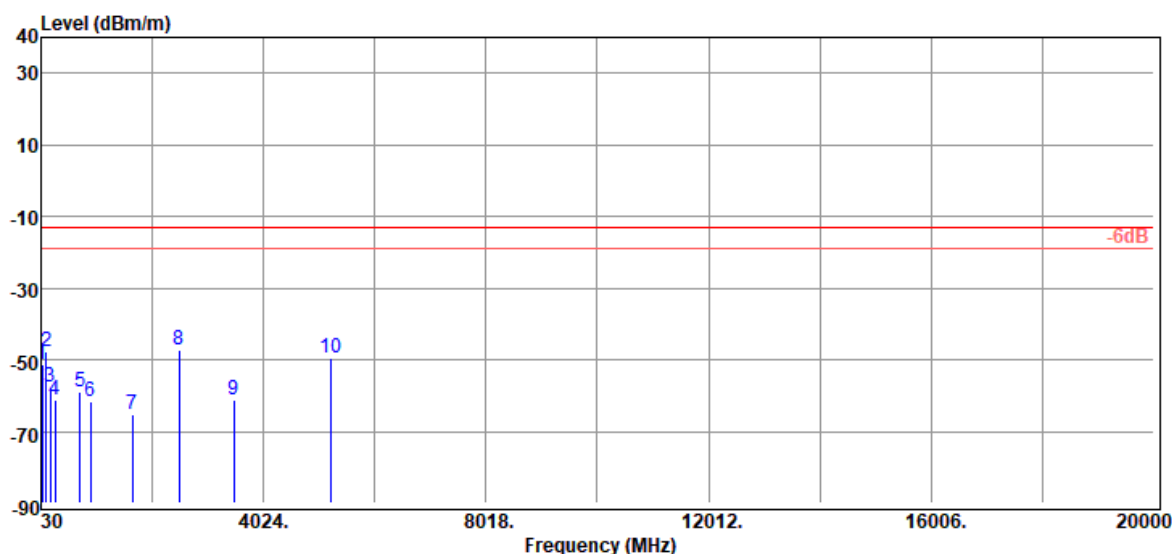
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Report Number :E2/2020/10031
Operation Mode :LTE B5+B66
Test Mode :TX CH MID
EUT Pol :E2 Plan
Test Channel :836.5 MHz +1745 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
58.13	-51.50	-43.29	-7.35	-0.86	-13.00	-38.50
125.06	-47.67	-38.53	-7.70	-1.44	-13.00	-34.67
201.69	-57.40	-55.05	-0.51	-1.84	-13.00	-44.40
284.14	-61.04	-57.66	-1.17	-2.21	-13.00	-48.04
732.28	-58.95	-56.96	0.71	-2.70	-13.00	-45.95
914.64	-61.81	-60.20	1.59	-3.20	-13.00	-48.81
1673.00	-65.13	-71.13	9.49	-3.49	-13.00	-52.13
2509.50	-47.29	-54.32	10.76	-3.73	-13.00	-34.29
3490.00	-61.16	-68.14	12.34	-5.36	-13.00	-48.16
5235.00	-49.42	-56.02	13.18	-6.58	-13.00	-36.42

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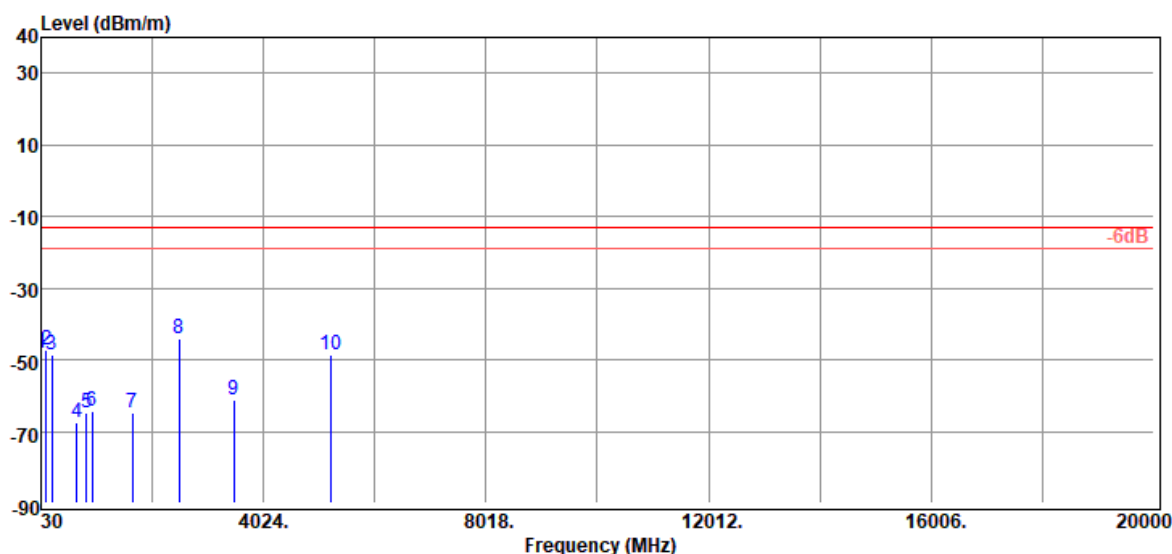
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Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B5+B66	Temp./Humi.	:21.8/55
Test Mode	:TX CH MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:836.5 MHz +1745 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
42.61	-48.20	-27.10	-20.36	-0.74	-13.00	-35.20
124.09	-47.46	-38.28	-7.76	-1.42	-13.00	-34.46
219.15	-48.68	-47.05	0.31	-1.94	-13.00	-35.68
675.05	-67.73	-66.20	0.85	-2.38	-13.00	-54.73
851.59	-64.75	-63.02	1.20	-2.93	-13.00	-51.75
954.41	-64.16	-62.43	1.69	-3.42	-13.00	-51.16
1673.00	-64.82	-70.82	9.49	-3.49	-13.00	-51.82
2509.50	-43.93	-50.96	10.76	-3.73	-13.00	-30.93
3490.00	-61.24	-68.22	12.34	-5.36	-13.00	-48.24
5235.00	-48.58	-55.18	13.18	-6.58	-13.00	-35.58

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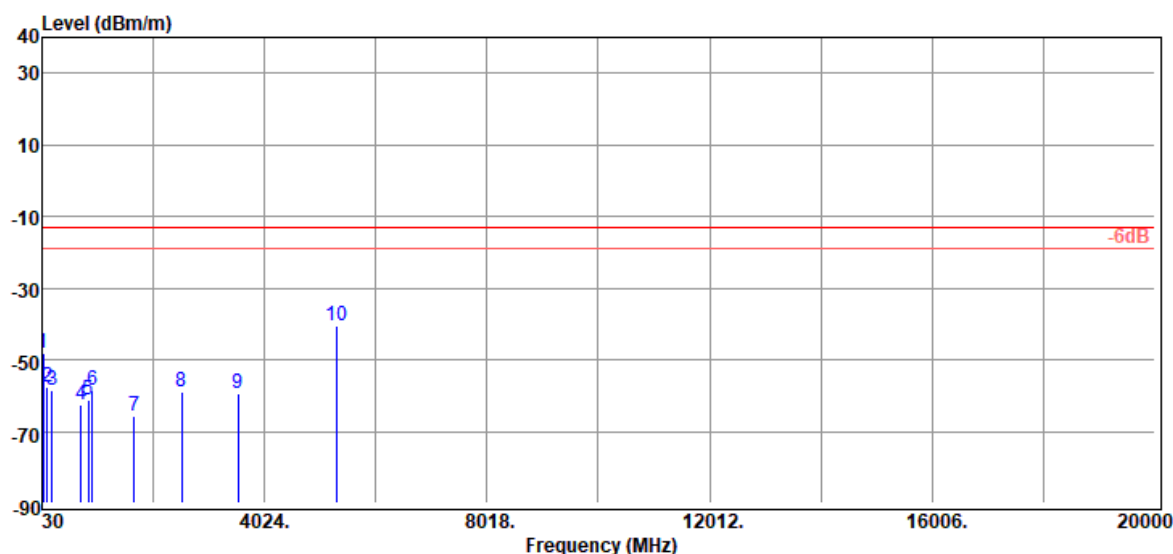
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Report Number :E2/2020/10031
Operation Mode :LTE B5+B66
Test Mode :TX CH HIGH
EUT Pol :E2 Plan
Test Channel :844 MHz +1777.5 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
57.16	-48.18	-39.59	-7.75	-0.84	-13.00	-35.18
124.09	-57.39	-48.21	-7.76	-1.42	-13.00	-44.39
216.24	-58.40	-56.80	0.31	-1.91	-13.00	-45.40
731.31	-62.45	-60.46	0.72	-2.71	-13.00	-49.45
855.47	-61.16	-59.53	1.30	-2.93	-13.00	-48.16
938.89	-58.59	-57.25	1.89	-3.23	-13.00	-45.59
1688.00	-65.50	-71.54	9.55	-3.51	-13.00	-52.50
2532.00	-59.11	-66.25	10.89	-3.75	-13.00	-46.11
3555.00	-59.28	-65.75	12.10	-5.63	-13.00	-46.28
5332.50	-40.53	-47.40	13.40	-6.53	-13.00	-27.53

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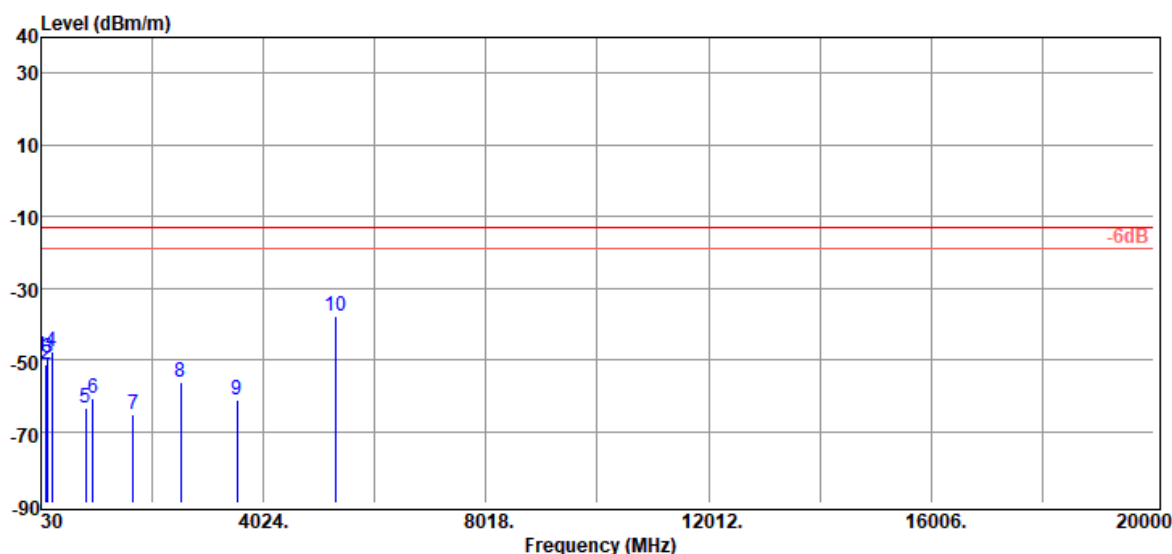
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Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B5+B66	Temp./Humi.	:21.8/55
Test Mode	:TX CH HIGH	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:844 MHz +1777.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
42.61	-49.20	-28.10	-20.36	-0.74	-13.00	-36.20
124.09	-51.46	-42.28	-7.76	-1.42	-13.00	-38.46
158.04	-49.38	-44.36	-3.46	-1.56	-13.00	-36.38
219.15	-47.68	-46.05	0.31	-1.94	-13.00	-34.68
825.40	-63.32	-61.65	1.29	-2.96	-13.00	-50.32
957.32	-60.93	-59.02	1.64	-3.55	-13.00	-47.93
1688.00	-65.15	-71.19	9.55	-3.51	-13.00	-52.15
2532.00	-56.41	-63.55	10.89	-3.75	-13.00	-43.41
3555.00	-61.05	-67.52	12.10	-5.63	-13.00	-48.05
5332.50	-37.76	-44.63	13.40	-6.53	-13.00	-24.76

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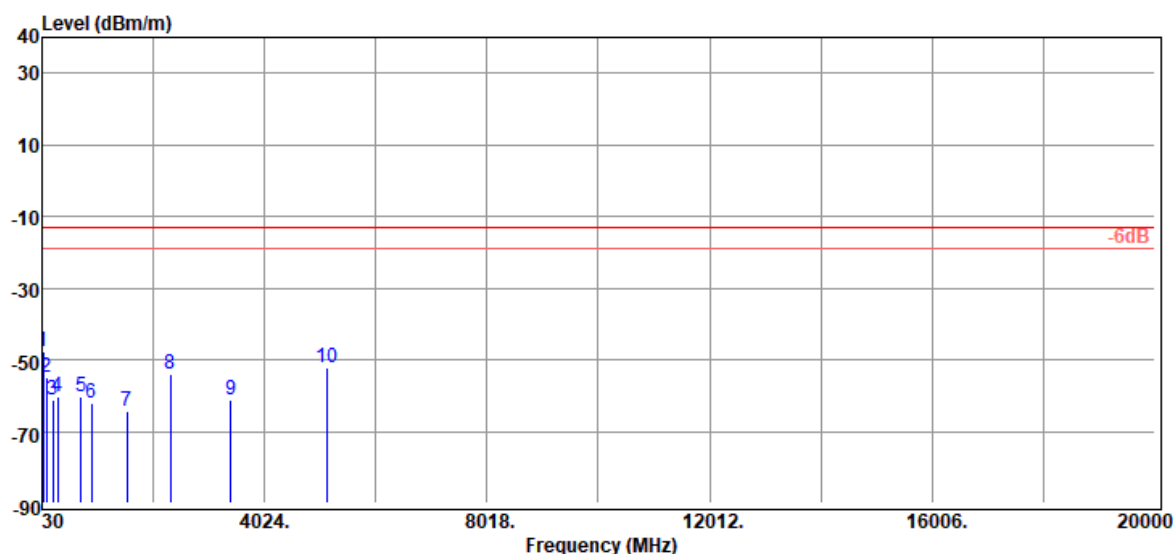
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Radiated Spurious Emission Measurement Result: LTE Band 13 + LTE Band 66 Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B13+B66	Temp./Humi.	:21.8/55
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:779.5 MHz +1712.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
44.55	-47.90	-28.83	-18.33	-0.74	-13.00	-34.90
115.36	-54.99	-45.76	-7.90	-1.33	-13.00	-41.99
222.06	-61.26	-59.53	0.22	-1.95	-13.00	-48.26
313.24	-60.23	-57.04	-0.68	-2.51	-13.00	-47.23
728.40	-60.42	-58.50	0.74	-2.66	-13.00	-47.42
919.49	-62.24	-60.57	1.63	-3.30	-13.00	-49.24
1559.00	-64.32	-69.32	8.79	-3.79	-13.00	-51.32
2338.50	-53.80	-58.88	9.61	-4.53	-13.00	-40.80
3425.00	-61.08	-68.38	12.50	-5.20	-13.00	-48.08
5137.50	-52.35	-58.45	12.58	-6.48	-13.00	-39.35

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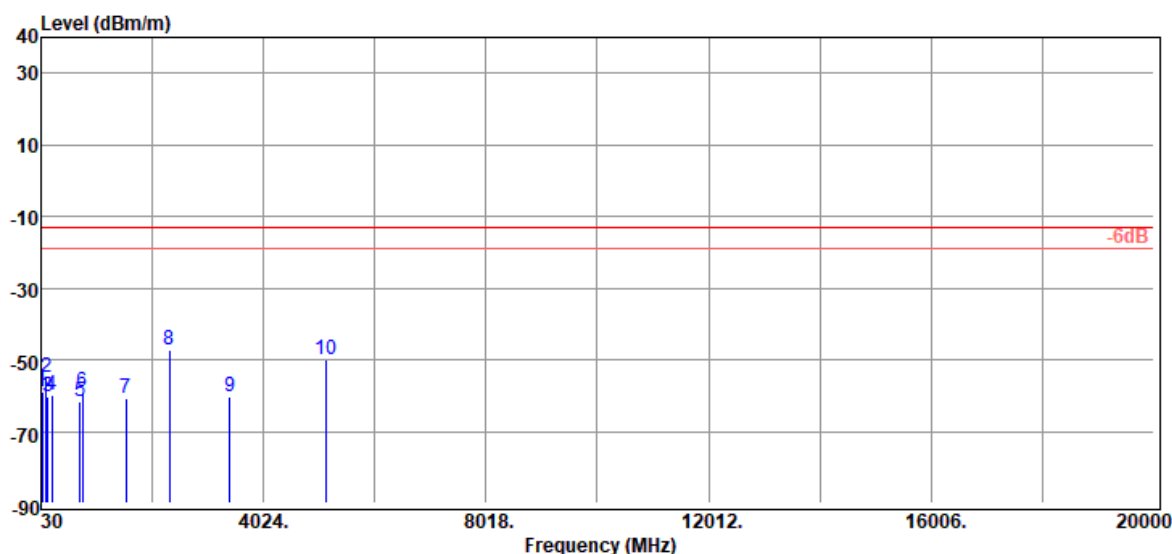
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Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B13+B66	Temp./Humi.	:21.8/55
Test Mode	:TX CH LOW	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:779.5 MHz +1712.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
44.55	-58.88	-39.81	-18.33	-0.74	-13.00	-45.88
124.09	-54.86	-45.68	-7.76	-1.42	-13.00	-41.86
157.07	-60.11	-54.94	-3.61	-1.56	-13.00	-47.11
224.00	-59.91	-58.10	0.14	-1.95	-13.00	-46.91
728.40	-61.53	-59.61	0.74	-2.66	-13.00	-48.53
776.90	-58.83	-56.55	0.67	-2.95	-13.00	-45.83
1559.00	-60.56	-65.56	8.79	-3.79	-13.00	-47.56
2338.50	-47.11	-52.19	9.61	-4.53	-13.00	-34.11
3425.00	-60.24	-67.54	12.50	-5.20	-13.00	-47.24
5137.50	-49.83	-55.93	12.58	-6.48	-13.00	-36.83

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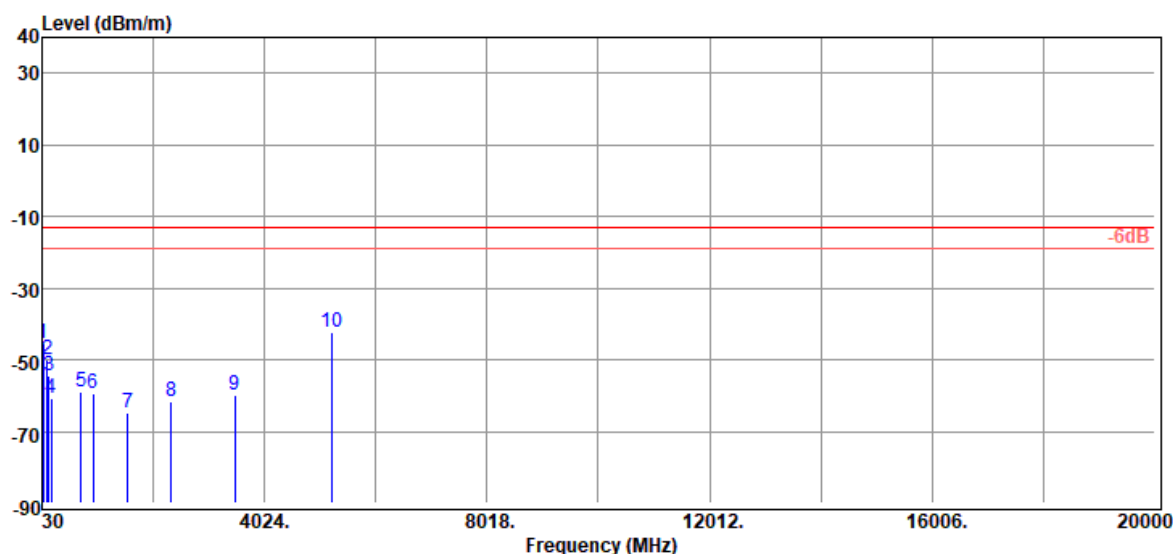
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Report Number :E2/2020/10031
Operation Mode :LTE B13+B66
Test Mode :TX CH MID
EUT Pol :E2 Plan
Test Channel :782 MHz +1745 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
51.34	-45.61	-33.19	-11.66	-0.76	-13.00	-32.61
124.09	-49.79	-40.61	-7.76	-1.42	-13.00	-36.79
148.34	-54.41	-47.90	-4.95	-1.56	-13.00	-41.41
199.75	-60.91	-58.57	-0.50	-1.84	-13.00	-47.91
731.31	-58.84	-56.85	0.72	-2.71	-13.00	-45.84
946.65	-59.23	-57.83	1.82	-3.22	-13.00	-46.23
1564.00	-64.61	-69.71	8.84	-3.74	-13.00	-51.61
2346.00	-61.48	-66.61	9.67	-4.54	-13.00	-48.48
3490.00	-59.77	-66.75	12.34	-5.36	-13.00	-46.77
5235.00	-42.13	-48.73	13.18	-6.58	-13.00	-29.13

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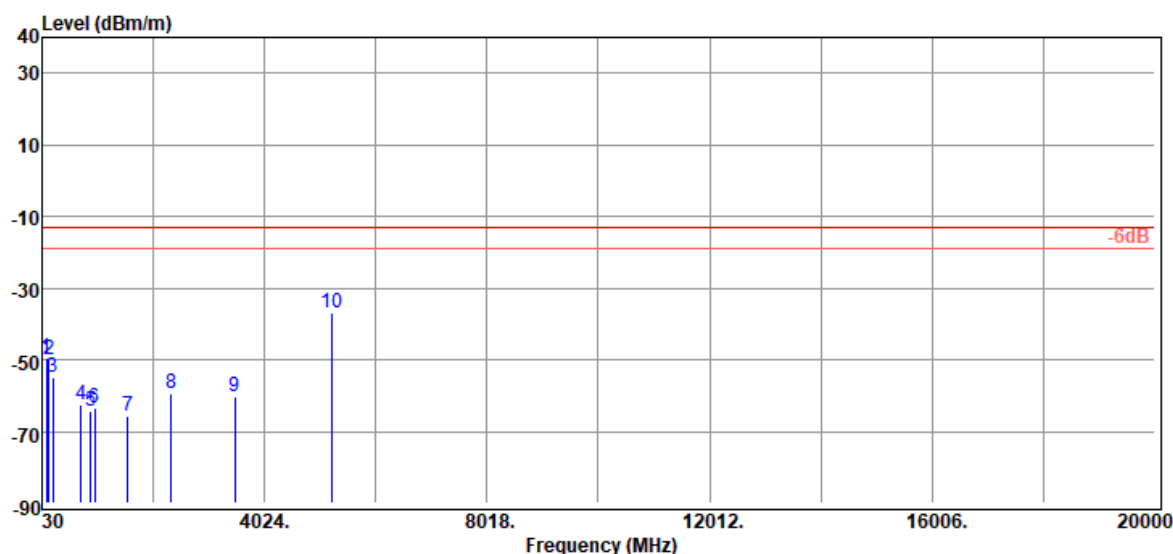
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Report Number :E2/2020/10031
Operation Mode :LTE B13+B66
Test Mode :TX CH MID
EUT Pol :E2 Plan
Test Channel :782 MHz +1745 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :HORIZONTAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
114.39	-49.62	-40.32	-7.97	-1.33	-13.00	-36.62
158.04	-50.05	-45.03	-3.46	-1.56	-13.00	-37.05
222.06	-54.87	-53.14	0.22	-1.95	-13.00	-41.87
728.40	-62.53	-60.61	0.74	-2.66	-13.00	-49.53
905.91	-64.51	-62.93	1.50	-3.08	-13.00	-51.51
983.51	-63.59	-61.78	1.52	-3.33	-13.00	-50.59
1564.00	-65.57	-70.67	8.84	-3.74	-13.00	-52.57
2346.00	-59.46	-64.59	9.67	-4.54	-13.00	-46.46
3490.00	-60.36	-67.34	12.34	-5.36	-13.00	-47.36
5235.00	-37.07	-43.67	13.18	-6.58	-13.00	-24.07

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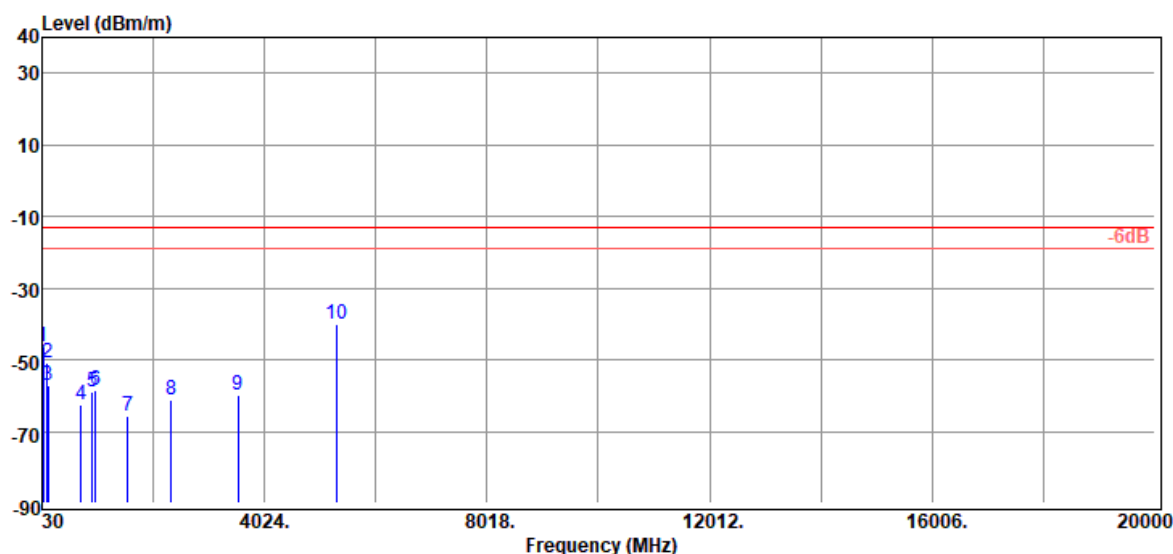
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Report Number :E2/2020/10031
Operation Mode :LTE B13+B66
Test Mode :TX CH HIGH
EUT Pol :E2 Plan
Test Channel :784.5 MHz +1777.5 MHz

Test Date :2020-01-02
Temp./Humi. :21.8/55
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
47.46	-46.24	-29.90	-15.60	-0.74	-13.00	-33.24
124.09	-50.79	-41.61	-7.76	-1.42	-13.00	-37.79
143.49	-57.35	-50.00	-5.80	-1.55	-13.00	-44.35
730.34	-62.75	-60.75	0.73	-2.73	-13.00	-49.75
928.22	-59.04	-57.51	1.78	-3.31	-13.00	-46.04
990.30	-58.65	-56.81	1.49	-3.33	-13.00	-45.65
1569.00	-65.50	-70.70	8.89	-3.69	-13.00	-52.50
2353.50	-61.29	-66.48	9.73	-4.54	-13.00	-48.29
3555.00	-59.71	-66.18	12.10	-5.63	-13.00	-46.71
5332.50	-40.03	-46.90	13.40	-6.53	-13.00	-27.03

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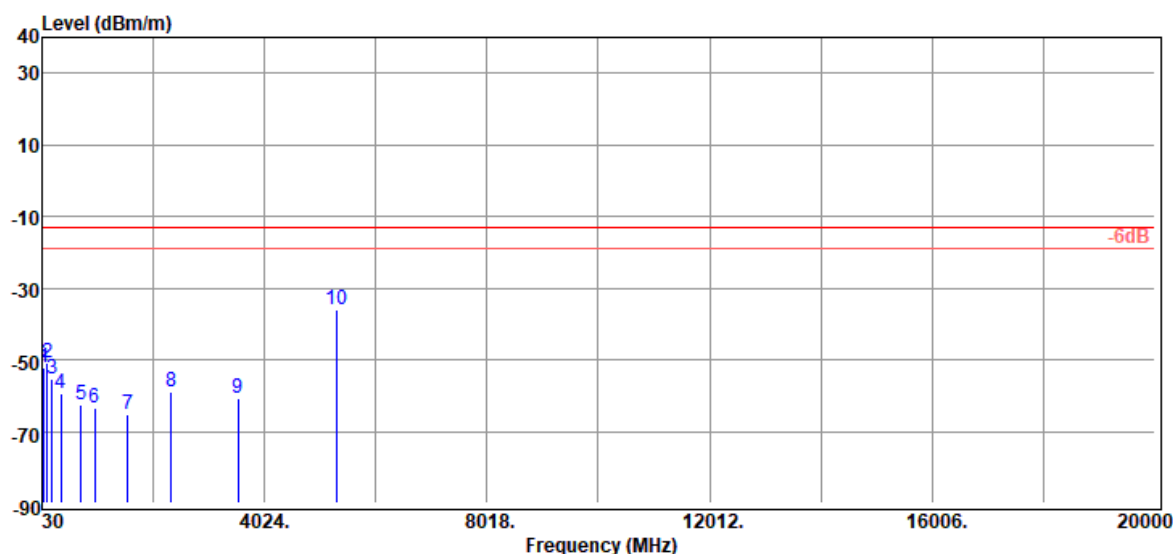
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Report Number	:E2/2020/10031	Test Date	:2020-01-02
Operation Mode	:LTE B13+B66	Temp./Humi.	:21.8/55
Test Mode	:TX CH HIGH	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:784.5 MHz +1777.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
59.10	-52.22	-44.12	-7.23	-0.87	-13.00	-39.22
124.09	-50.86	-41.68	-7.76	-1.42	-13.00	-37.86
216.24	-55.38	-53.78	0.31	-1.91	-13.00	-42.38
362.71	-59.20	-56.23	-0.54	-2.43	-13.00	-46.20
728.40	-62.53	-60.61	0.74	-2.66	-13.00	-49.53
983.51	-63.59	-61.78	1.52	-3.33	-13.00	-50.59
1569.00	-65.33	-70.53	8.89	-3.69	-13.00	-52.33
2353.50	-58.78	-63.97	9.73	-4.54	-13.00	-45.78
3555.00	-60.76	-67.23	12.10	-5.63	-13.00	-47.76
5332.50	-35.81	-42.68	13.40	-6.53	-13.00	-22.81

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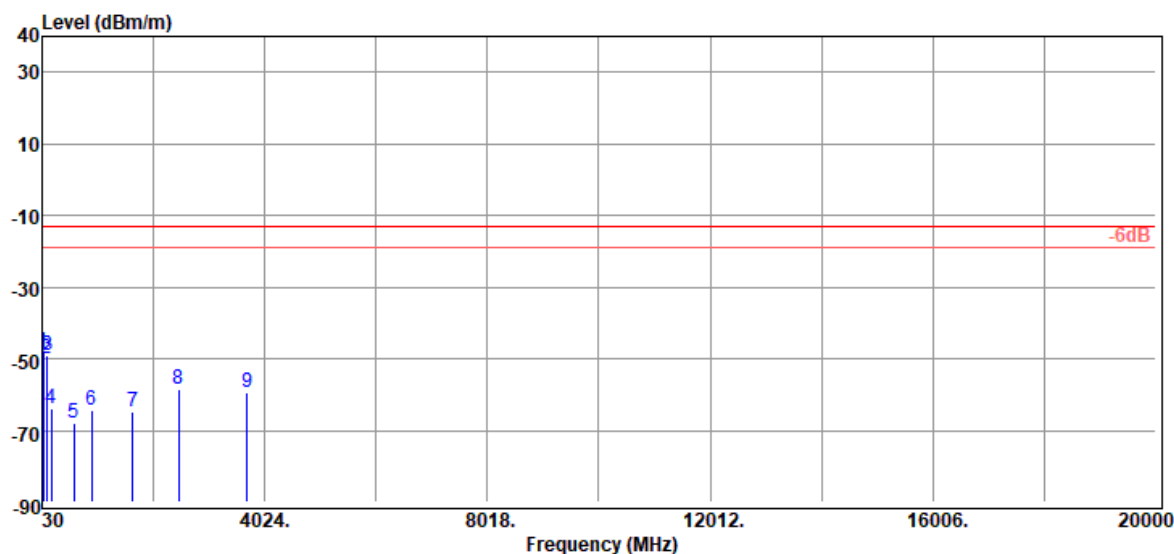
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External Monopole Antenna

Radiated Spurious Emission Measurement Result: LTE Band 2 + LTE Band 5 Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B2+B5	Temp./Humi.	:21.6/54
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1852.5 MHz +826.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-48.38	-34.05	-13.59	-0.74	-13.00	-35.38
109.54	-50.16	-41.09	-7.75	-1.32	-13.00	-37.16
128.94	-48.98	-40.02	-7.44	-1.52	-13.00	-35.98
197.81	-63.70	-61.38	-0.50	-1.82	-13.00	-50.70
604.24	-67.79	-64.53	-0.13	-3.13	-13.00	-54.79
914.64	-64.16	-62.55	1.59	-3.20	-13.00	-51.16
1653.00	-64.84	-70.78	9.41	-3.47	-13.00	-51.84
2479.50	-58.65	-65.34	10.58	-3.89	-13.00	-45.65
3705.00	-59.42	-65.59	12.11	-5.94	-13.00	-46.42

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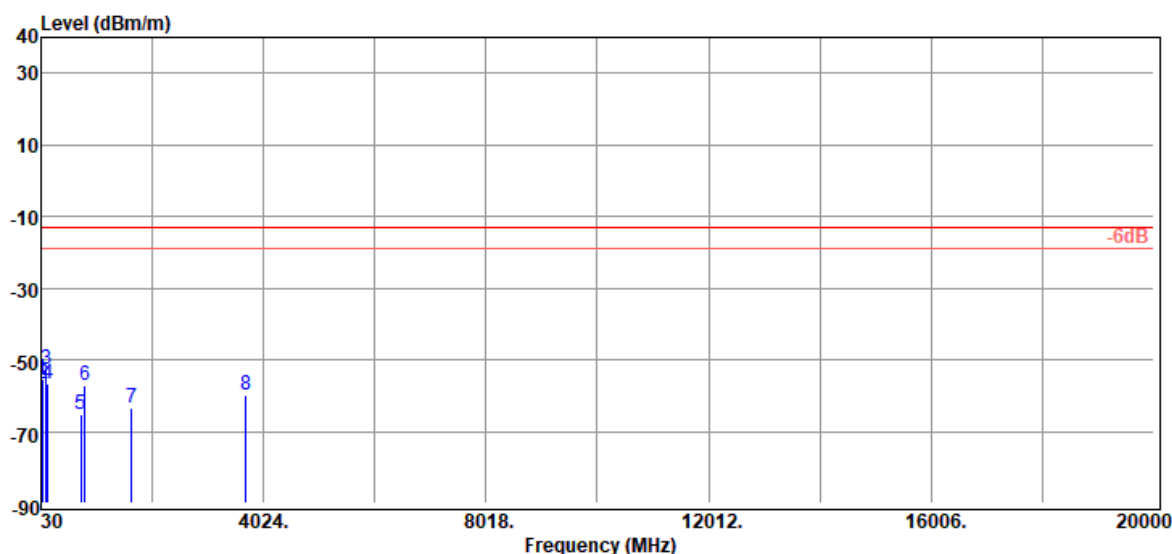
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B2+B5	Temp./Humi.	:21.6/54
Test Mode	:TX CH LOW	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1852.5 MHz +826.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-55.49	-41.16	-13.59	-0.74	-13.00	-42.49
70.74	-56.74	-48.46	-7.39	-0.89	-13.00	-43.74
124.09	-52.63	-43.45	-7.76	-1.42	-13.00	-39.63
151.25	-56.75	-50.67	-4.52	-1.56	-13.00	-43.75
747.80	-65.08	-63.16	0.69	-2.61	-13.00	-52.08
824.43	-56.98	-55.34	1.31	-2.95	-13.00	-43.98
1653.00	-63.60	-69.54	9.41	-3.47	-13.00	-50.60
3705.00	-59.89	-66.06	12.11	-5.94	-13.00	-46.89

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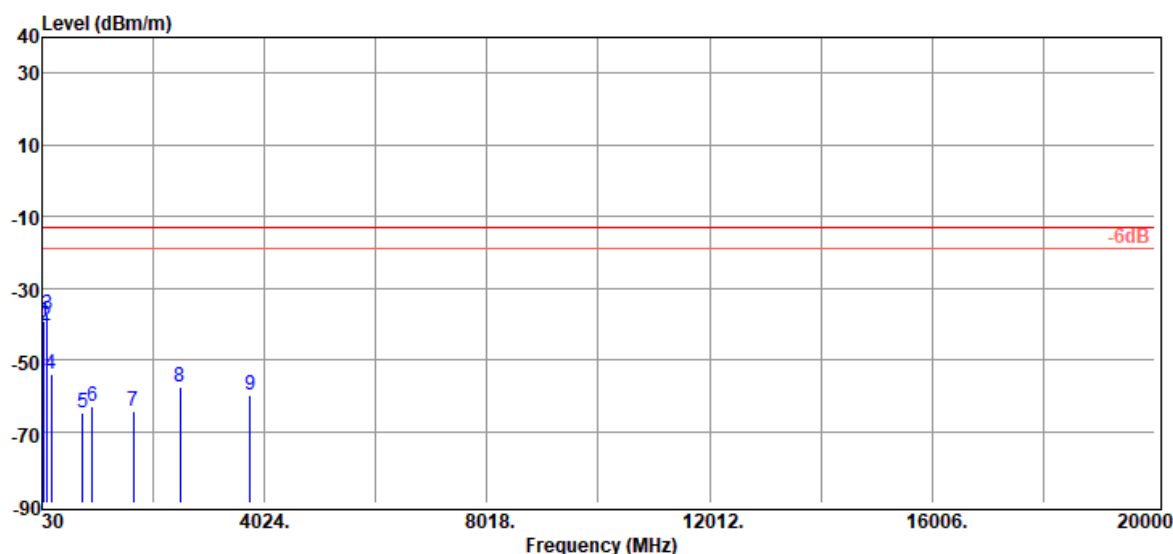
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Report Number :E2/2020/10031
Operation Mode :LTE B2+B5
Test Mode :TX CH MID
EUT Pol :E2 Plan
Test Channel :1880 MHz +836.5 MHz

Test Date :2020-01-03
Temp./Humi. :21.6/54
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
68.80	-39.37	-31.08	-7.41	-0.88	-13.00	-26.37
107.60	-40.57	-31.67	-7.60	-1.30	-13.00	-27.57
124.09	-37.22	-28.04	-7.76	-1.42	-13.00	-24.22
191.99	-53.98	-51.74	-0.47	-1.77	-13.00	-40.98
754.59	-64.92	-62.99	0.72	-2.65	-13.00	-51.92
938.89	-63.14	-61.80	1.89	-3.23	-13.00	-50.14
1673.00	-64.29	-70.29	9.49	-3.49	-13.00	-51.29
2509.50	-57.72	-64.75	10.76	-3.73	-13.00	-44.72
3760.00	-59.90	-65.77	12.20	-6.33	-13.00	-46.90

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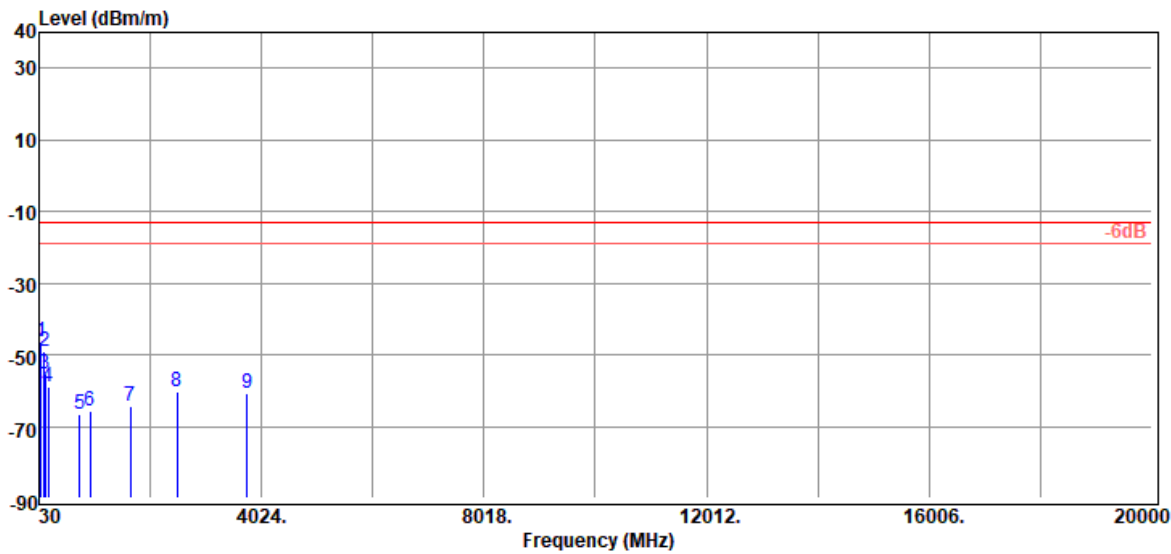
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B2+B5	Temp./Humi.	:21.6/54
Test Mode	:TX CH MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1880 MHz +836.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
70.74	-46.39	-38.11	-7.39	-0.89	-13.00	-33.39
124.09	-49.02	-39.84	-7.76	-1.42	-13.00	-36.02
139.61	-55.25	-47.43	-6.28	-1.54	-13.00	-42.25
191.99	-59.00	-56.76	-0.47	-1.77	-13.00	-46.00
752.65	-66.45	-64.56	0.74	-2.63	-13.00	-53.45
949.56	-65.92	-64.60	1.90	-3.22	-13.00	-52.92
1673.00	-64.54	-70.54	9.49	-3.49	-13.00	-51.54
2509.50	-60.42	-67.45	10.76	-3.73	-13.00	-47.42
3760.00	-60.82	-66.69	12.20	-6.33	-13.00	-47.82

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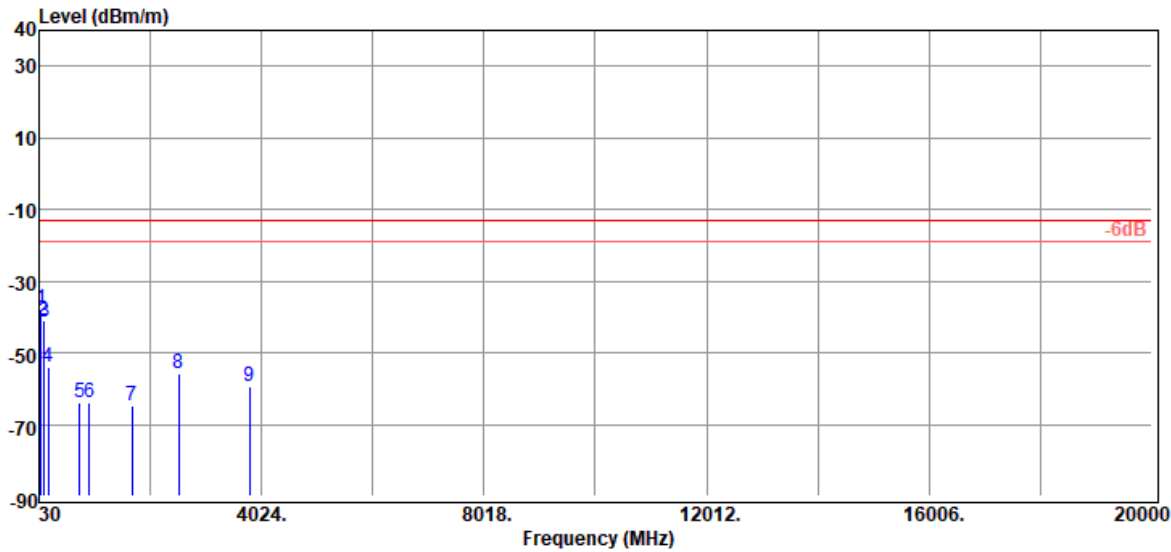
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Report Number :E2/2020/10031
Operation Mode :LTE B2+B5
Test Mode :TX CH HIGH
EUT Pol :E2 Plan
Test Channel :1907.5 MHz +846.5 MHz

Test Date :2020-01-03
Temp./Humi. :21.6/54
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
68.80	-37.96	-29.67	-7.41	-0.88	-13.00	-24.96
109.54	-41.18	-32.11	-7.75	-1.32	-13.00	-28.18
124.09	-41.32	-32.14	-7.76	-1.42	-13.00	-28.32
192.96	-54.13	-51.92	-0.43	-1.78	-13.00	-41.13
754.59	-63.78	-61.85	0.72	-2.65	-13.00	-50.78
932.10	-63.80	-62.32	1.81	-3.29	-13.00	-50.80
1693.00	-65.01	-71.06	9.57	-3.52	-13.00	-52.01
2539.50	-55.79	-62.97	10.94	-3.76	-13.00	-42.79
3815.00	-59.60	-65.23	12.20	-6.57	-13.00	-46.60

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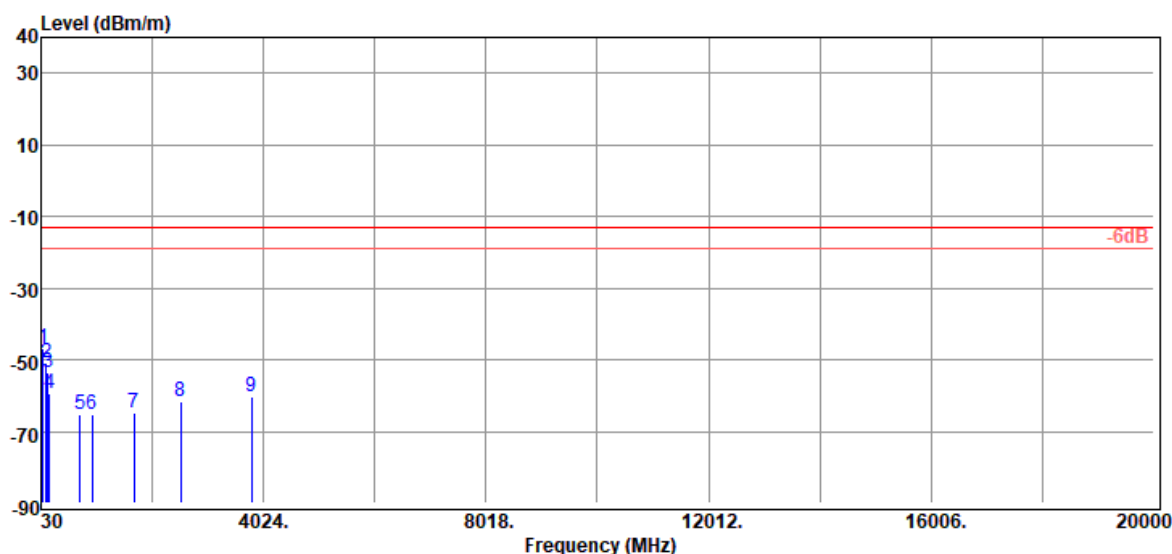
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B2+B5	Temp./Humi.	:21.6/54
Test Mode	:TX CH HIGH	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1907.5 MHz +846.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
70.74	-46.85	-38.57	-7.39	-0.89	-13.00	-33.85
125.06	-50.70	-41.56	-7.70	-1.44	-13.00	-37.70
153.19	-53.39	-47.69	-4.14	-1.56	-13.00	-40.39
187.14	-59.45	-57.15	-0.59	-1.71	-13.00	-46.45
735.19	-65.05	-63.07	0.69	-2.67	-13.00	-52.05
944.71	-65.28	-63.84	1.78	-3.22	-13.00	-52.28
1693.00	-64.60	-70.65	9.57	-3.52	-13.00	-51.60
2539.50	-61.87	-69.05	10.94	-3.76	-13.00	-48.87
3815.00	-60.12	-65.75	12.20	-6.57	-13.00	-47.12

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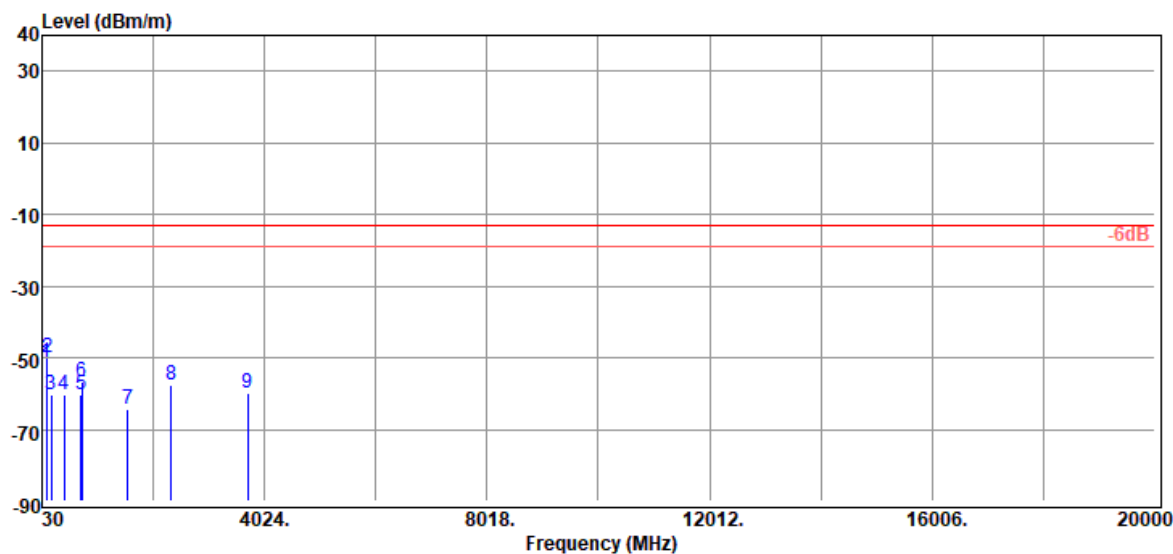
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Radiated Spurious Emission Measurement Result: LTE Band 2 + LTE Band 13 Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B2+B13	Temp./Humi.	:21.6/54
Test Mode	:TX CH LOW + MID	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1860 MHz +782 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
110.51	-51.29	-42.19	-7.77	-1.33	-13.00	-38.29
125.06	-50.16	-41.02	-7.70	-1.44	-13.00	-37.16
190.05	-60.42	-58.21	-0.46	-1.75	-13.00	-47.42
420.91	-60.14	-56.19	-1.06	-2.89	-13.00	-47.14
730.34	-60.19	-58.19	0.73	-2.73	-13.00	-47.19
745.86	-56.53	-54.55	0.63	-2.61	-13.00	-43.53
1564.00	-64.52	-69.62	8.84	-3.74	-13.00	-51.52
2346.00	-57.81	-62.94	9.67	-4.54	-13.00	-44.81
3720.00	-59.84	-65.93	12.14	-6.05	-13.00	-46.84

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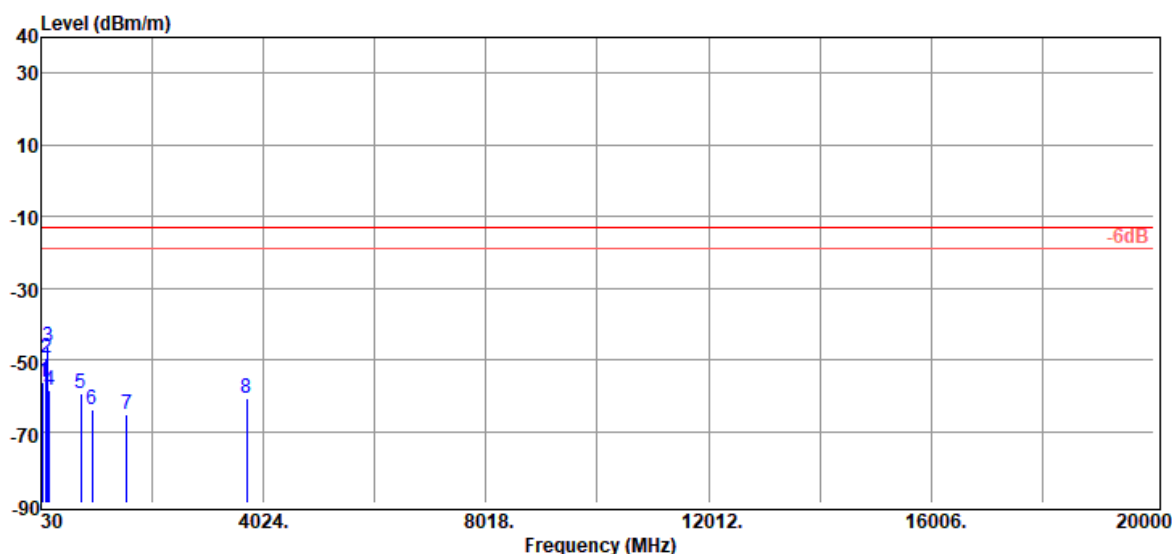
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B2+B13	Temp./Humi.	:21.6/54
Test Mode	:TX CH LOW + MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1860 MHz +782 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
71.71	-56.15	-47.77	-7.47	-0.91	-13.00	-43.15
124.09	-49.39	-40.21	-7.76	-1.42	-13.00	-36.39
156.10	-46.51	-41.19	-3.76	-1.56	-13.00	-33.51
180.35	-58.64	-55.94	-1.08	-1.62	-13.00	-45.64
740.04	-59.54	-57.57	0.64	-2.61	-13.00	-46.54
948.59	-63.85	-62.50	1.87	-3.22	-13.00	-50.85
1564.00	-65.42	-70.52	8.84	-3.74	-13.00	-52.42
3720.00	-60.66	-66.75	12.14	-6.05	-13.00	-47.66

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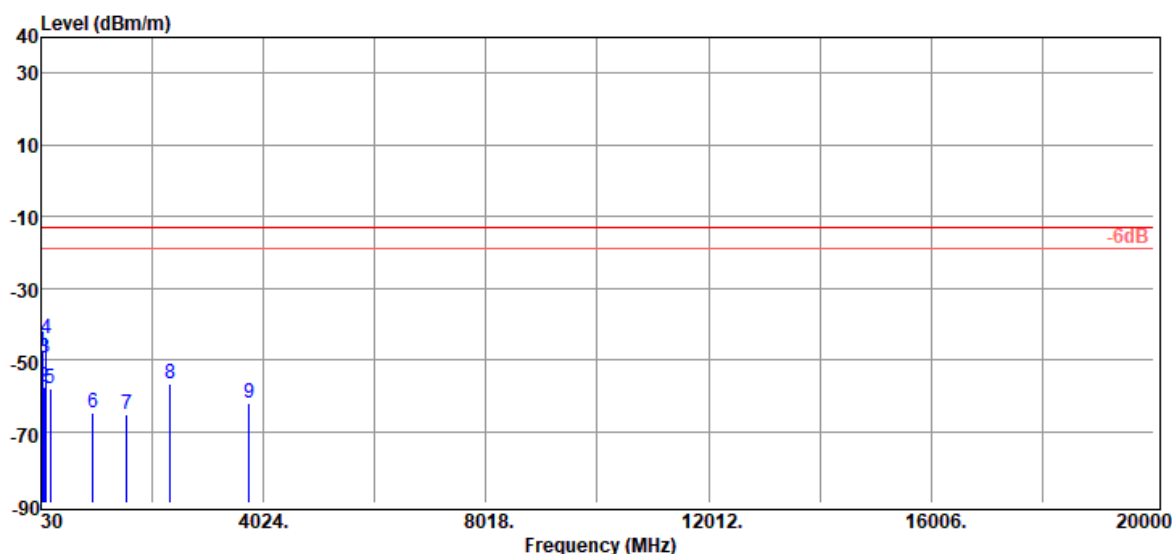
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Report Number :E2/2020/10031
Operation Mode :LTE B2+B13
Test Mode :TX CH MID + MID
EUT Pol :E2 Plan
Test Channel :1880 MHz +782 MHz

Test Date :2020-01-03
Temp./Humi. :21.6/54
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-47.73	-33.40	-13.59	-0.74	-13.00	-34.73
78.50	-57.84	-49.77	-7.05	-1.02	-13.00	-44.84
109.54	-49.35	-40.28	-7.75	-1.32	-13.00	-36.35
127.00	-44.33	-35.19	-7.66	-1.48	-13.00	-31.33
202.66	-58.09	-55.74	-0.51	-1.84	-13.00	-45.09
956.35	-64.79	-62.93	1.65	-3.51	-13.00	-51.79
1564.00	-65.34	-70.44	8.84	-3.74	-13.00	-52.34
2346.00	-56.57	-61.70	9.67	-4.54	-13.00	-43.57
3760.00	-62.00	-67.87	12.20	-6.33	-13.00	-49.00

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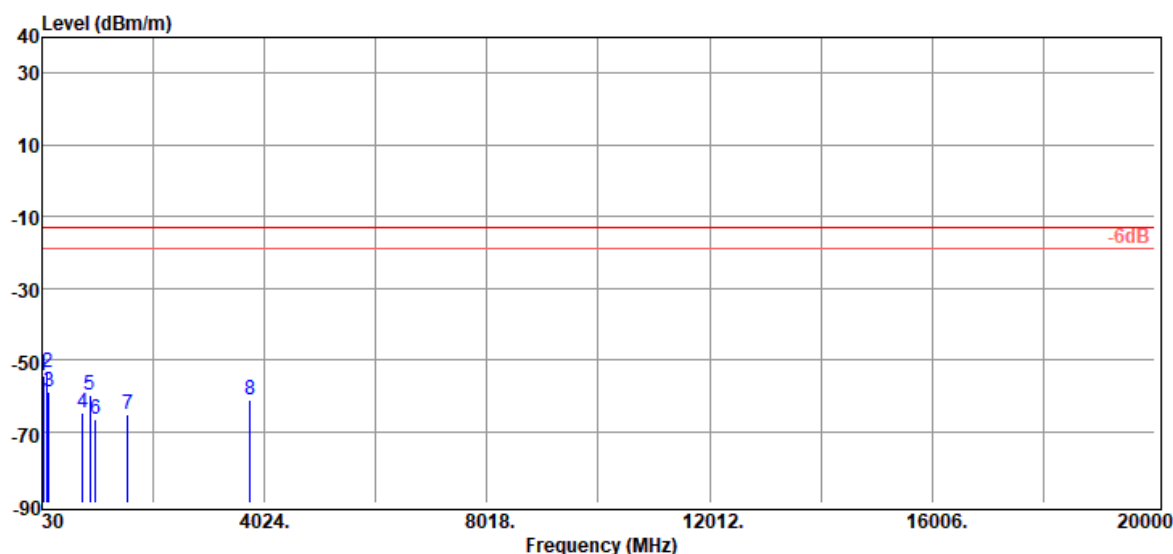
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B2+B13	Temp./Humi.	:21.6/54
Test Mode	:TX CH MID + MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1880 MHz +782 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
47.46	-54.68	-38.34	-15.60	-0.74	-13.00	-41.68
126.03	-53.35	-44.26	-7.63	-1.46	-13.00	-40.35
151.25	-59.12	-53.04	-4.52	-1.56	-13.00	-46.12
752.65	-64.66	-62.77	0.74	-2.63	-13.00	-51.66
888.45	-59.90	-58.19	1.37	-3.08	-13.00	-46.90
992.24	-66.42	-64.64	1.58	-3.36	-13.00	-53.42
1564.00	-65.13	-70.23	8.84	-3.74	-13.00	-52.13
3760.00	-61.20	-67.07	12.20	-6.33	-13.00	-48.20

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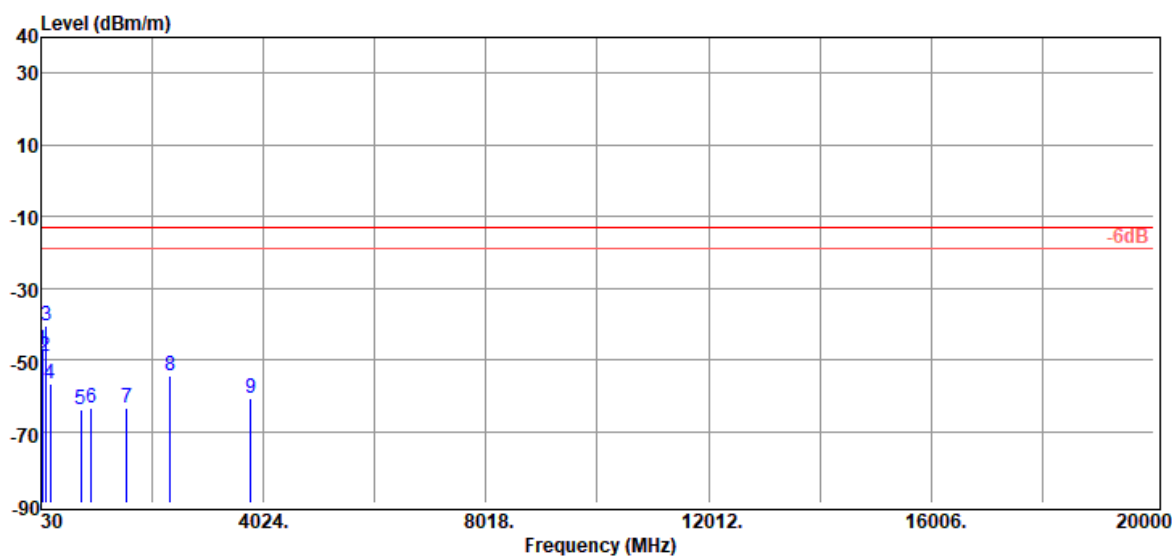
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Report Number :E2/2020/10031
Operation Mode :LTE B2+B13
Test Mode :TX CH HIGH + MID
EUT Pol :E2 Plan
Test Channel :1900 MHz +782 MHz

Test Date :2020-01-03
Temp./Humi. :21.6/54
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-47.39	-33.06	-13.59	-0.74	-13.00	-34.39
109.54	-49.19	-40.12	-7.75	-1.32	-13.00	-36.19
125.06	-40.33	-31.19	-7.70	-1.44	-13.00	-27.33
201.69	-56.86	-54.51	-0.51	-1.84	-13.00	-43.86
750.71	-63.77	-61.90	0.75	-2.62	-13.00	-50.77
927.25	-63.47	-61.91	1.75	-3.31	-13.00	-50.47
1564.00	-63.39	-68.49	8.84	-3.74	-13.00	-50.39
2346.00	-54.25	-59.38	9.67	-4.54	-13.00	-41.25
3800.00	-60.89	-66.49	12.20	-6.60	-13.00	-47.89

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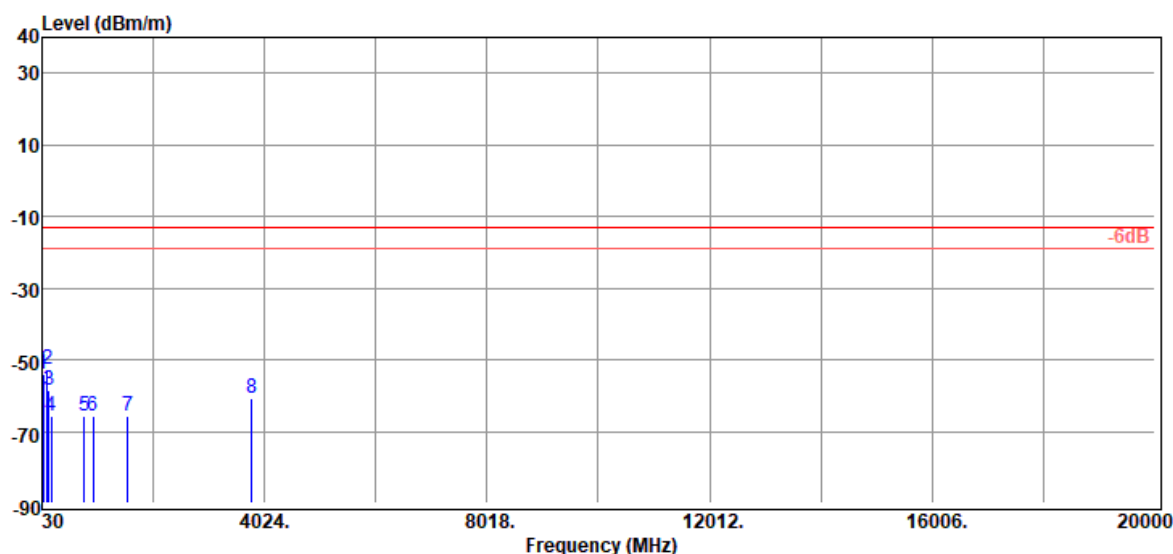
f (886-2) 2298-0488

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Report Number :E2/2020/10031
Operation Mode :LTE B2+B13
Test Mode :TX CH HIGH + MID
EUT Pol :E2 Plan
Test Channel :1900 MHz +782 MHz

Test Date :2020-01-03
Temp./Humi. :21.6/54
Antenna Pol. :HORIZONTAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-54.01	-39.68	-13.59	-0.74	-13.00	-41.01
125.06	-52.52	-43.38	-7.70	-1.44	-13.00	-39.52
151.25	-58.62	-52.54	-4.52	-1.56	-13.00	-45.62
196.84	-65.84	-63.59	-0.44	-1.81	-13.00	-52.84
783.69	-65.52	-63.20	0.74	-3.06	-13.00	-52.52
949.56	-65.54	-64.22	1.90	-3.22	-13.00	-52.54
1564.00	-65.56	-70.66	8.84	-3.74	-13.00	-52.56
3800.00	-60.98	-66.58	12.20	-6.60	-13.00	-47.98

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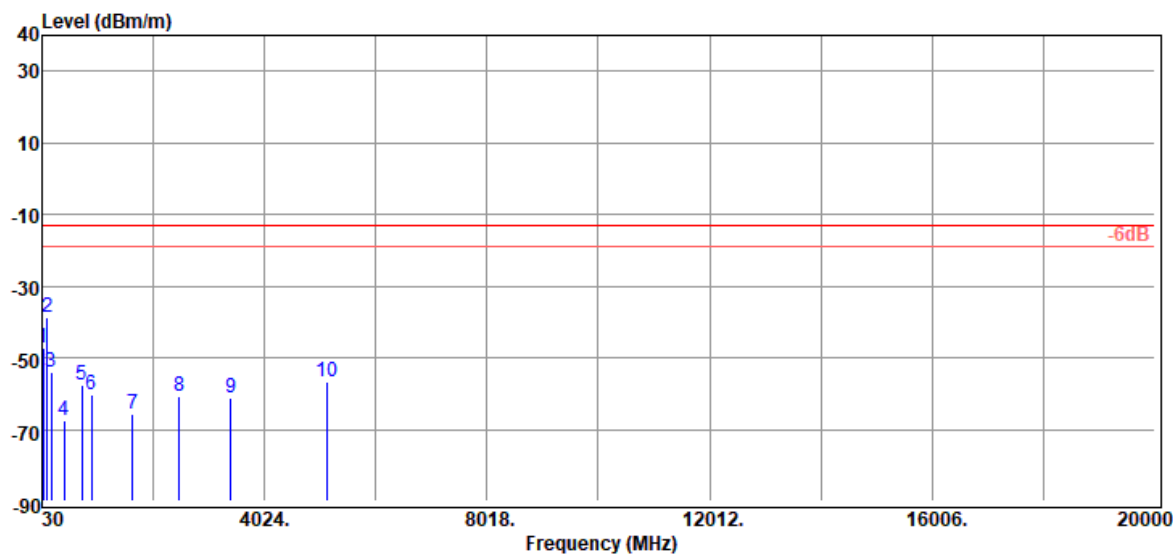
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Radiated Spurious Emission Measurement Result: LTE Band 4 + LTE Band 5 Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B4+B5	Temp./Humi.	:21.6/54
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1712.5 MHz +829 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-47.34	-33.01	-13.59	-0.74	-13.00	-34.34
125.06	-38.86	-29.72	-7.70	-1.44	-13.00	-25.86
200.72	-53.91	-51.55	-0.52	-1.84	-13.00	-40.91
420.91	-67.46	-63.51	-1.06	-2.89	-13.00	-54.46
745.86	-57.79	-55.81	0.63	-2.61	-13.00	-44.79
922.40	-60.15	-58.50	1.66	-3.31	-13.00	-47.15
1658.00	-65.77	-71.73	9.43	-3.47	-13.00	-52.77
2487.00	-60.83	-67.62	10.62	-3.83	-13.00	-47.83
3425.00	-61.22	-68.52	12.50	-5.20	-13.00	-48.22
5137.50	-56.92	-63.02	12.58	-6.48	-13.00	-43.92

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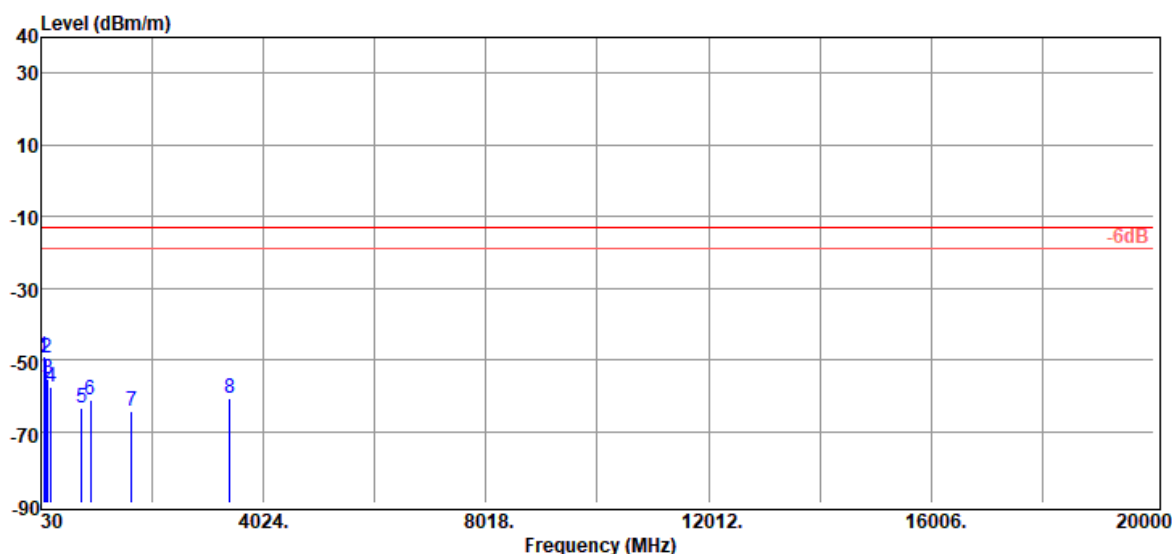
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B4+B5	Temp./Humi.	:21.6/54
Test Mode	:TX CH LOW	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1712.5 MHz +829 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
75.59	-49.12	-40.82	-7.33	-0.97	-13.00	-36.12
126.03	-49.74	-40.65	-7.63	-1.46	-13.00	-36.74
151.25	-55.28	-49.20	-4.52	-1.56	-13.00	-42.28
211.39	-57.79	-55.80	-0.13	-1.86	-13.00	-44.79
754.59	-63.47	-61.54	0.72	-2.65	-13.00	-50.47
914.64	-61.29	-59.68	1.59	-3.20	-13.00	-48.29
1658.00	-64.16	-70.12	9.43	-3.47	-13.00	-51.16
3425.00	-60.98	-68.28	12.50	-5.20	-13.00	-47.98

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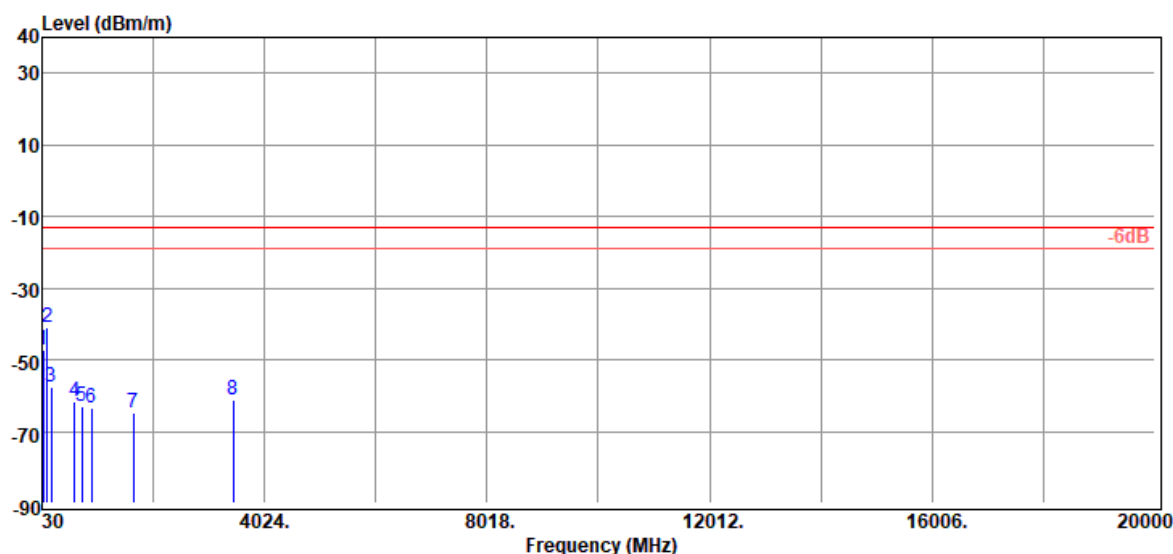
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Report Number :E2/2020/10031
Operation Mode :LTE B4+B5
Test Mode :TX CH MID
EUT Pol :E2 Plan
Test Channel :1732.5 MHz +836.5 MHz

Test Date :2020-01-03
Temp./Humi. :21.2/52
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-47.07	-32.74	-13.59	-0.74	-13.00	-34.07
125.06	-40.93	-31.79	-7.70	-1.44	-13.00	-27.93
202.66	-57.69	-55.34	-0.51	-1.84	-13.00	-44.69
616.85	-61.56	-58.60	-0.11	-2.85	-13.00	-48.56
747.80	-63.22	-61.30	0.69	-2.61	-13.00	-50.22
917.55	-63.47	-61.83	1.62	-3.26	-13.00	-50.47
1673.00	-64.73	-70.73	9.49	-3.49	-13.00	-51.73
3465.00	-61.41	-68.55	12.44	-5.30	-13.00	-48.41

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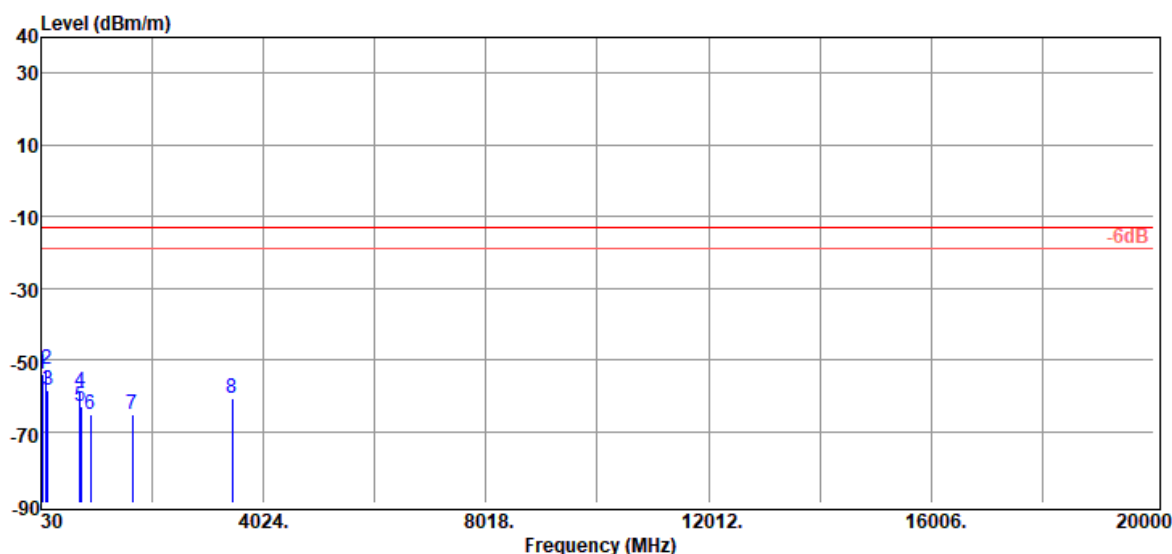
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B4+B5	Temp./Humi.	:21.2/52
Test Mode	:TX CH MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1732.5 MHz +836.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-53.88	-39.55	-13.59	-0.74	-13.00	-40.88
125.06	-52.70	-43.56	-7.70	-1.44	-13.00	-39.70
149.31	-58.31	-52.02	-4.73	-1.56	-13.00	-45.31
735.19	-59.17	-57.19	0.69	-2.67	-13.00	-46.17
745.86	-63.06	-61.08	0.63	-2.61	-13.00	-50.06
914.64	-65.47	-63.86	1.59	-3.20	-13.00	-52.47
1673.00	-65.14	-71.14	9.49	-3.49	-13.00	-52.14
3465.00	-60.94	-68.08	12.44	-5.30	-13.00	-47.94

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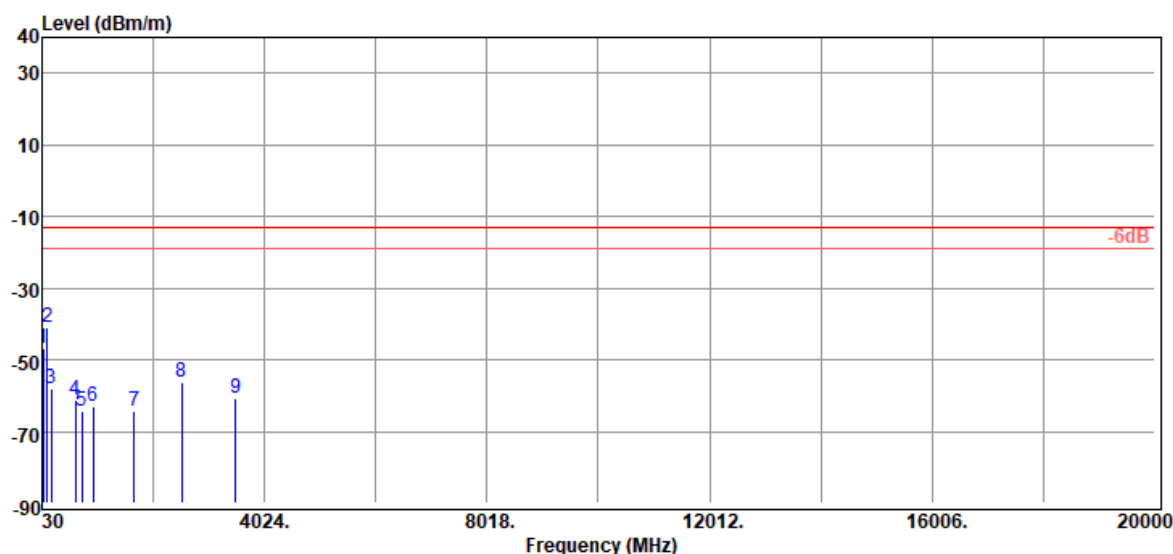
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Report Number :E2/2020/10031
Operation Mode :LTE B4+B5
Test Mode :TX CH HIGH
EUT Pol :E2 Plan
Test Channel :1752.5 MHz +844 MHz

Test Date :2020-01-03
Temp./Humi. :21.2/52
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-46.92	-32.59	-13.59	-0.74	-13.00	-33.92
125.06	-41.00	-31.86	-7.70	-1.44	-13.00	-28.00
202.66	-58.00	-55.65	-0.51	-1.84	-13.00	-45.00
636.25	-61.28	-58.43	-0.24	-2.61	-13.00	-48.28
750.71	-64.52	-62.65	0.75	-2.62	-13.00	-51.52
949.56	-63.19	-61.87	1.90	-3.22	-13.00	-50.19
1688.00	-64.52	-70.56	9.55	-3.51	-13.00	-51.52
2532.00	-56.40	-63.54	10.89	-3.75	-13.00	-43.40
3505.00	-60.96	-67.83	12.28	-5.41	-13.00	-47.96

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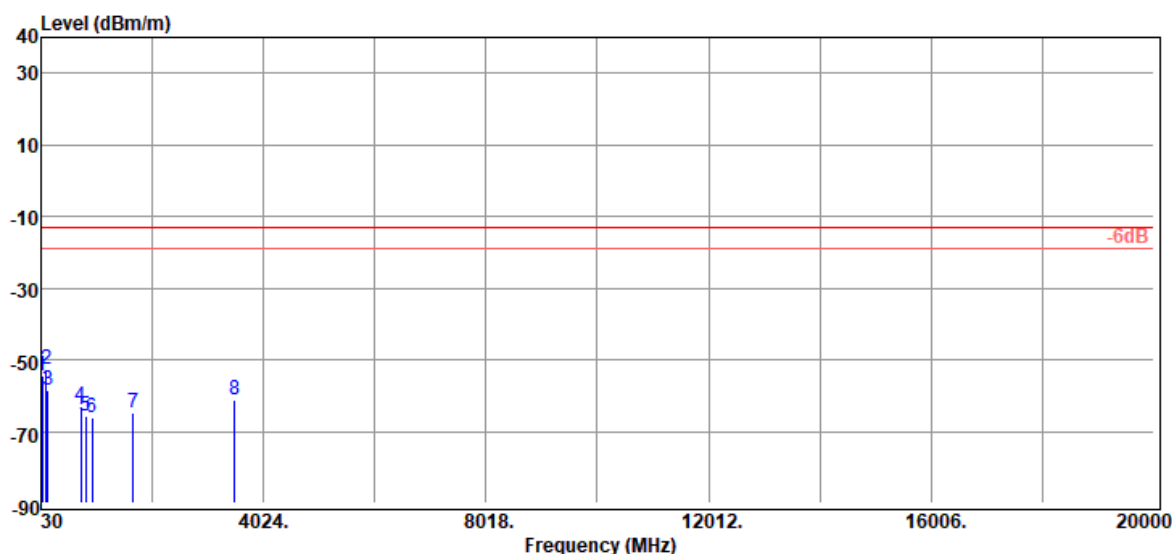
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B4+B5	Temp./Humi.	:21.2/52
Test Mode	:TX CH HIGH	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1752.5 MHz +844 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-54.33	-40.00	-13.59	-0.74	-13.00	-41.33
125.06	-52.86	-43.72	-7.70	-1.44	-13.00	-39.86
151.25	-58.50	-52.42	-4.52	-1.56	-13.00	-45.50
745.86	-62.95	-60.97	0.63	-2.61	-13.00	-49.95
832.19	-65.79	-64.05	1.22	-2.96	-13.00	-52.79
951.50	-66.06	-64.60	1.83	-3.29	-13.00	-53.06
1688.00	-64.91	-70.95	9.55	-3.51	-13.00	-51.91
3505.00	-61.00	-67.87	12.28	-5.41	-13.00	-48.00

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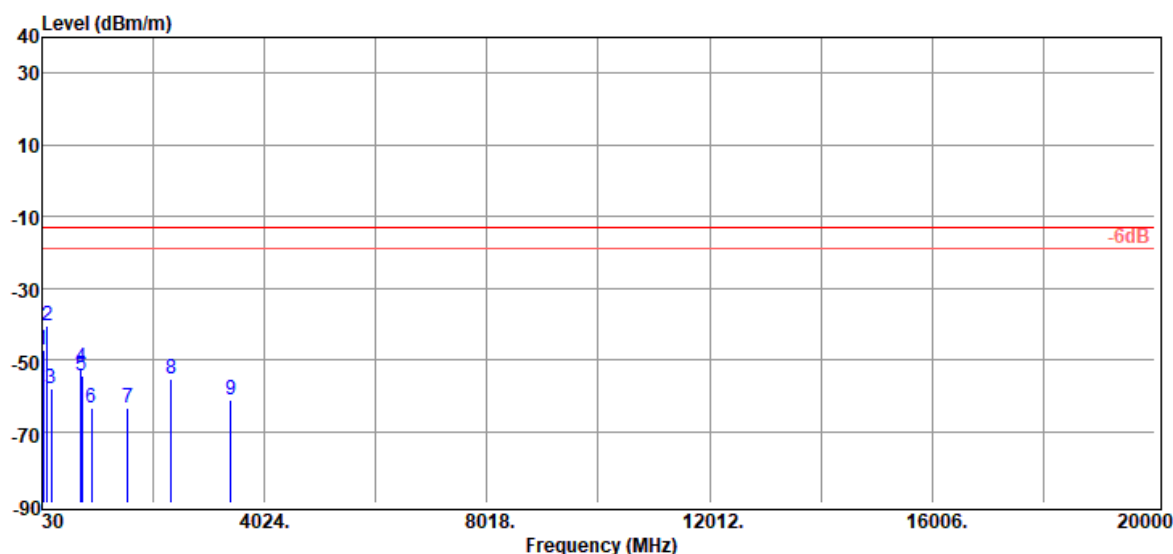
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Radiated Spurious Emission Measurement Result: LTE Band 4 + LTE Band 13 Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B4+B13	Temp./Humi.	:21.2/52
Test Mode	:TX CH LOW + MID	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1712.5 MHz +782 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-47.10	-32.77	-13.59	-0.74	-13.00	-34.10
125.06	-40.54	-31.40	-7.70	-1.44	-13.00	-27.54
201.69	-57.91	-55.56	-0.51	-1.84	-13.00	-44.91
733.25	-52.39	-50.40	0.70	-2.69	-13.00	-39.39
745.86	-54.50	-52.52	0.63	-2.61	-13.00	-41.50
915.61	-63.50	-61.88	1.60	-3.22	-13.00	-50.50
1564.00	-63.46	-68.56	8.84	-3.74	-13.00	-50.46
2346.00	-55.37	-60.50	9.67	-4.54	-13.00	-42.37
3425.00	-61.12	-68.42	12.50	-5.20	-13.00	-48.12

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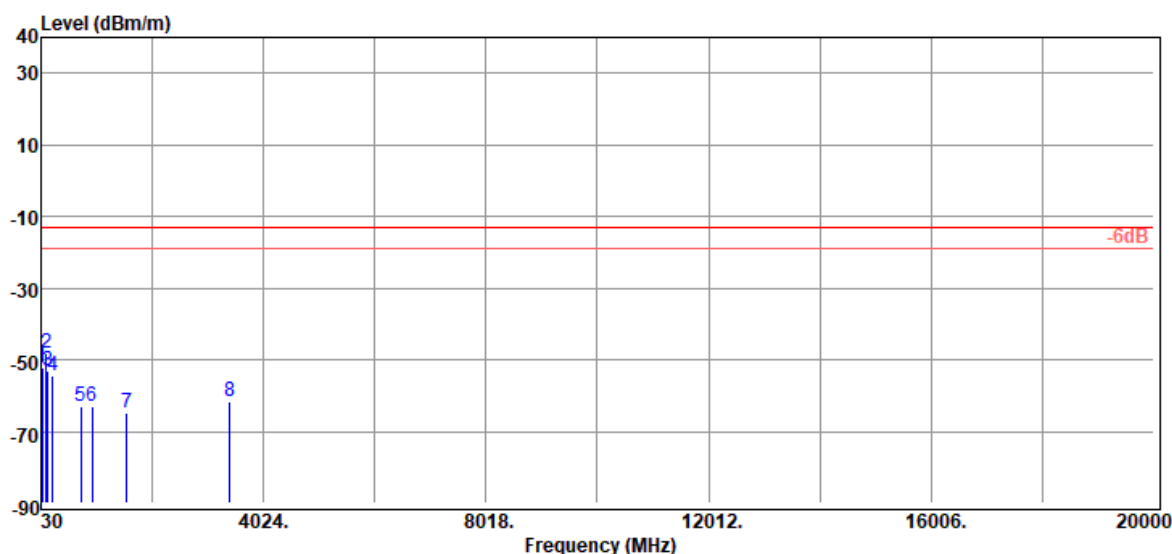
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B4+B13	Temp./Humi.	:21.2/52
Test Mode	:TX CH LOW + MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1712.5 MHz +782 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-52.26	-37.93	-13.59	-0.74	-13.00	-39.26
125.06	-47.98	-38.84	-7.70	-1.44	-13.00	-34.98
151.25	-53.19	-47.11	-4.52	-1.56	-13.00	-40.19
240.49	-54.30	-51.33	-0.98	-1.99	-13.00	-41.30
745.86	-63.03	-61.05	0.63	-2.61	-13.00	-50.03
949.56	-63.21	-61.89	1.90	-3.22	-13.00	-50.21
1564.00	-64.86	-69.96	8.84	-3.74	-13.00	-51.86
3425.00	-61.45	-68.75	12.50	-5.20	-13.00	-48.45

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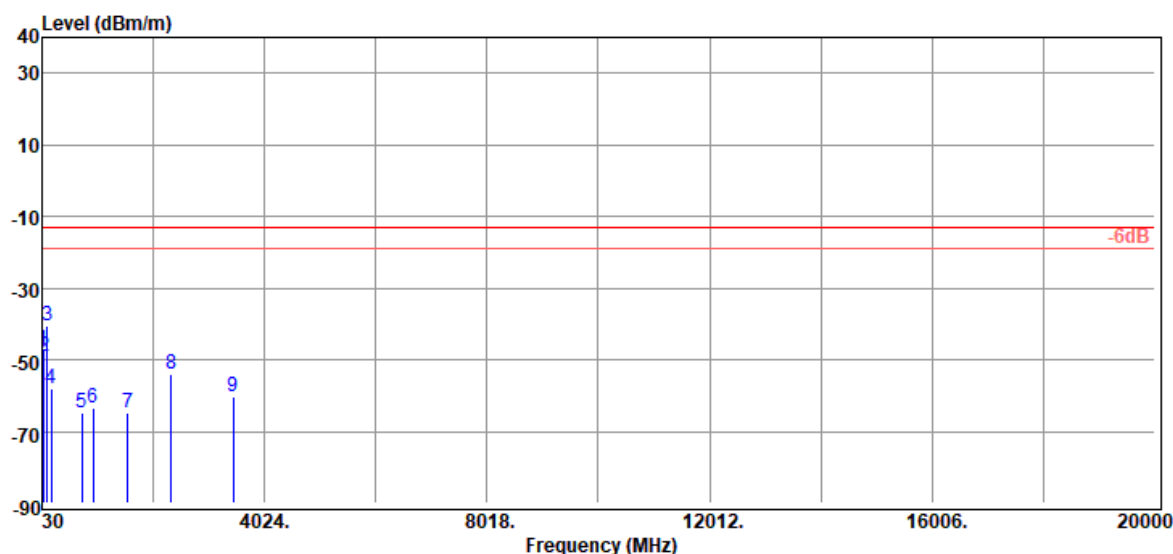
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Report Number :E2/2020/10031
Operation Mode :LTE B4+B13
Test Mode :TX CH MID + MID
EUT Pol :E2 Plan
Test Channel :1732.5 MHz +782 MHz

Test Date :2020-01-03
Temp./Humi. :21.2/52
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-47.34	-33.01	-13.59	-0.74	-13.00	-34.34
71.71	-49.05	-40.67	-7.47	-0.91	-13.00	-36.05
125.06	-40.50	-31.36	-7.70	-1.44	-13.00	-27.50
202.66	-58.16	-55.81	-0.51	-1.84	-13.00	-45.16
750.71	-64.63	-62.76	0.75	-2.62	-13.00	-51.63
949.56	-63.68	-62.36	1.90	-3.22	-13.00	-50.68
1564.00	-64.62	-69.72	8.84	-3.74	-13.00	-51.62
2346.00	-53.92	-59.05	9.67	-4.54	-13.00	-40.92
3465.00	-60.50	-67.64	12.44	-5.30	-13.00	-47.50

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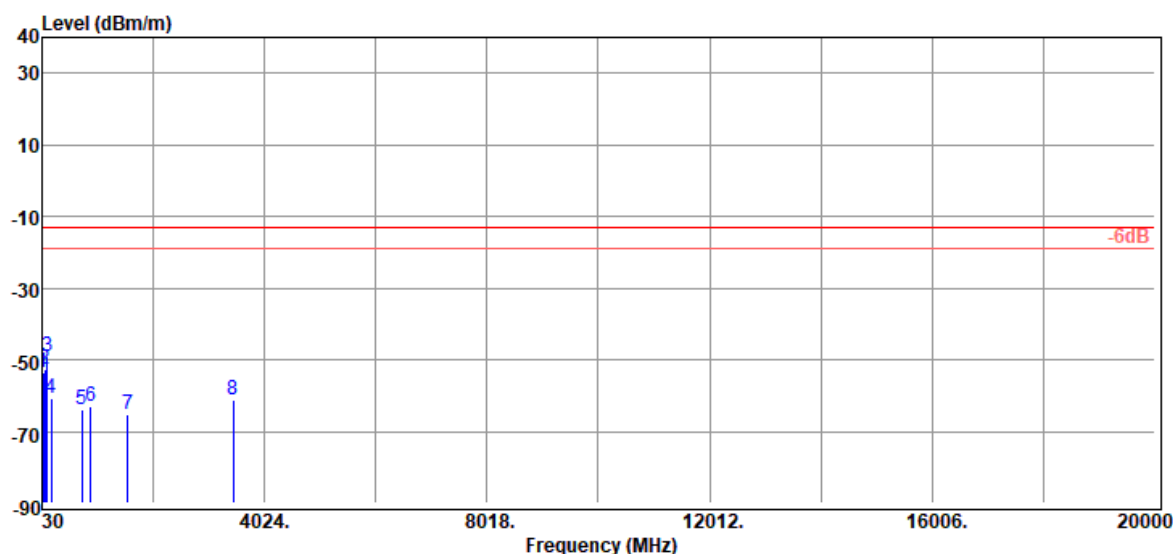
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B4+B13	Temp./Humi.	:21.2/52
Test Mode	:TX CH MID + MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1732.5 MHz +782 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-53.56	-39.23	-13.59	-0.74	-13.00	-40.56
76.56	-52.80	-44.55	-7.26	-0.99	-13.00	-39.80
124.09	-49.25	-40.07	-7.76	-1.42	-13.00	-36.25
197.81	-60.68	-58.36	-0.50	-1.82	-13.00	-47.68
742.95	-63.86	-61.87	0.62	-2.61	-13.00	-50.86
910.76	-63.10	-61.52	1.55	-3.13	-13.00	-50.10
1564.00	-65.27	-70.37	8.84	-3.74	-13.00	-52.27
3465.00	-61.20	-68.34	12.44	-5.30	-13.00	-48.20

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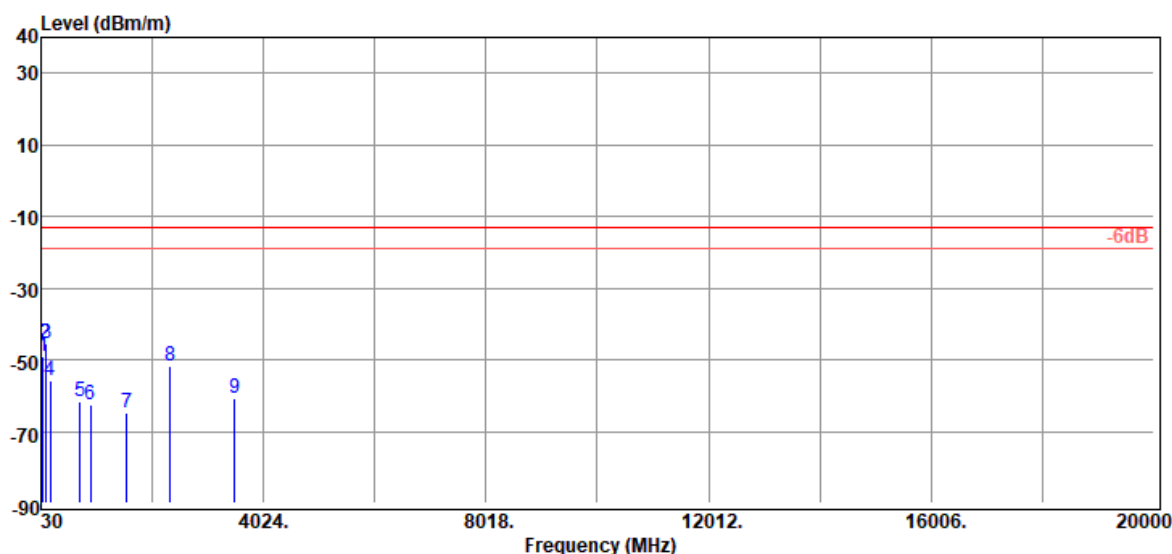
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Report Number :E2/2020/10031
Operation Mode :LTE B4+B13
Test Mode :TX CH HIGH + MID
EUT Pol :E2 Plan
Test Channel :1752.5 MHz +782 MHz

Test Date :2020-01-03
Temp./Humi. :21.2/52
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
71.71	-49.21	-40.83	-7.47	-0.91	-13.00	-36.21
107.60	-45.58	-36.68	-7.60	-1.30	-13.00	-32.58
125.06	-45.43	-36.29	-7.70	-1.44	-13.00	-32.43
191.99	-55.98	-53.74	-0.47	-1.77	-13.00	-42.98
733.25	-61.85	-59.86	0.70	-2.69	-13.00	-48.85
919.49	-62.78	-61.11	1.63	-3.30	-13.00	-49.78
1564.00	-64.97	-70.07	8.84	-3.74	-13.00	-51.97
2346.00	-51.69	-56.82	9.67	-4.54	-13.00	-38.69
3505.00	-60.66	-67.53	12.28	-5.41	-13.00	-47.66

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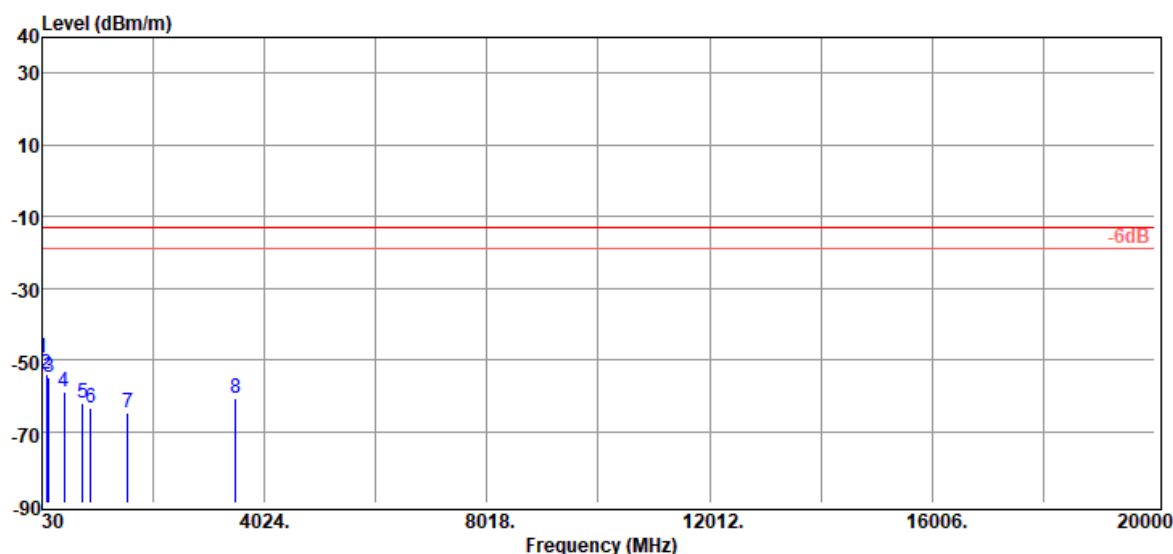
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B4+B13	Temp./Humi.	:21.2/52
Test Mode	:TX CH HIGH + MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:1752.5 MHz +782 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
31.94	-49.56	-19.74	-29.28	-0.54	-13.00	-36.56
107.60	-54.18	-45.28	-7.60	-1.30	-13.00	-41.18
154.16	-55.04	-49.42	-4.06	-1.56	-13.00	-42.04
432.55	-58.98	-55.22	-0.92	-2.84	-13.00	-45.98
762.35	-62.25	-60.36	0.80	-2.69	-13.00	-49.25
910.76	-63.62	-62.04	1.55	-3.13	-13.00	-50.62
1564.00	-65.03	-70.13	8.84	-3.74	-13.00	-52.03
3505.00	-60.98	-67.85	12.28	-5.41	-13.00	-47.98

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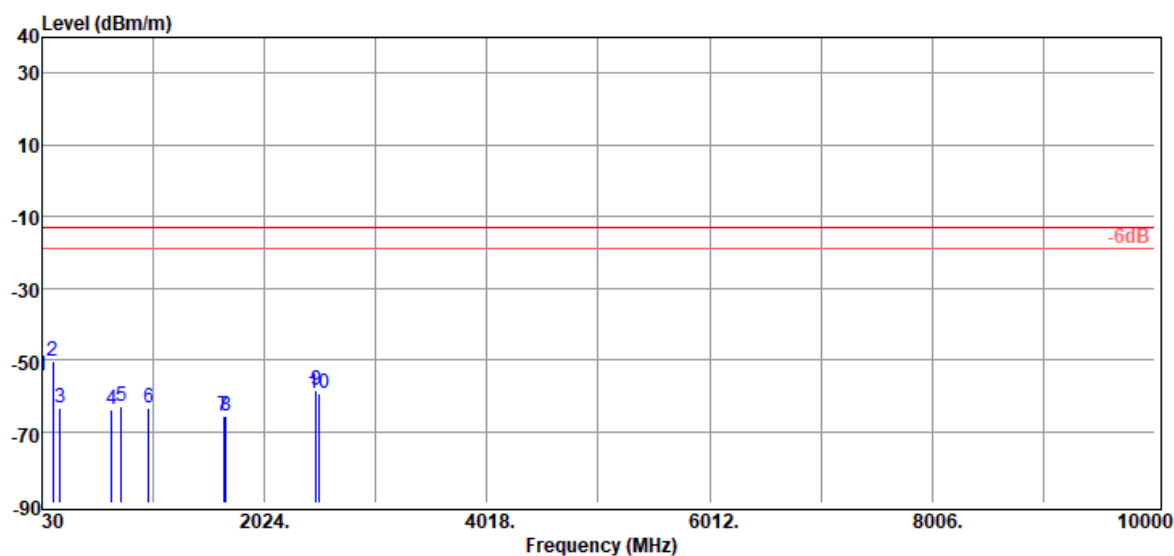
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Radiated Spurious Emission Measurement Result: LTE Band 5 B + LTE Band 5 B Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B5+B5	Temp./Humi.	:21.6/54
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:829 MHz +838.9 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
32.91	-54.27	-25.43	-28.27	-0.57	-13.00	-41.27
125.06	-50.53	-41.39	-7.70	-1.44	-13.00	-37.53
192.96	-63.37	-61.16	-0.43	-1.78	-13.00	-50.37
655.65	-64.11	-61.98	0.08	-2.21	-13.00	-51.11
741.01	-62.93	-60.95	0.63	-2.61	-13.00	-49.93
982.54	-63.59	-61.77	1.51	-3.33	-13.00	-50.59
1658.00	-65.91	-71.87	9.43	-3.47	-13.00	-52.91
1677.80	-65.56	-71.57	9.51	-3.50	-13.00	-52.56
2487.00	-58.36	-65.15	10.62	-3.83	-13.00	-45.36
2516.70	-59.27	-66.33	10.80	-3.74	-13.00	-46.27

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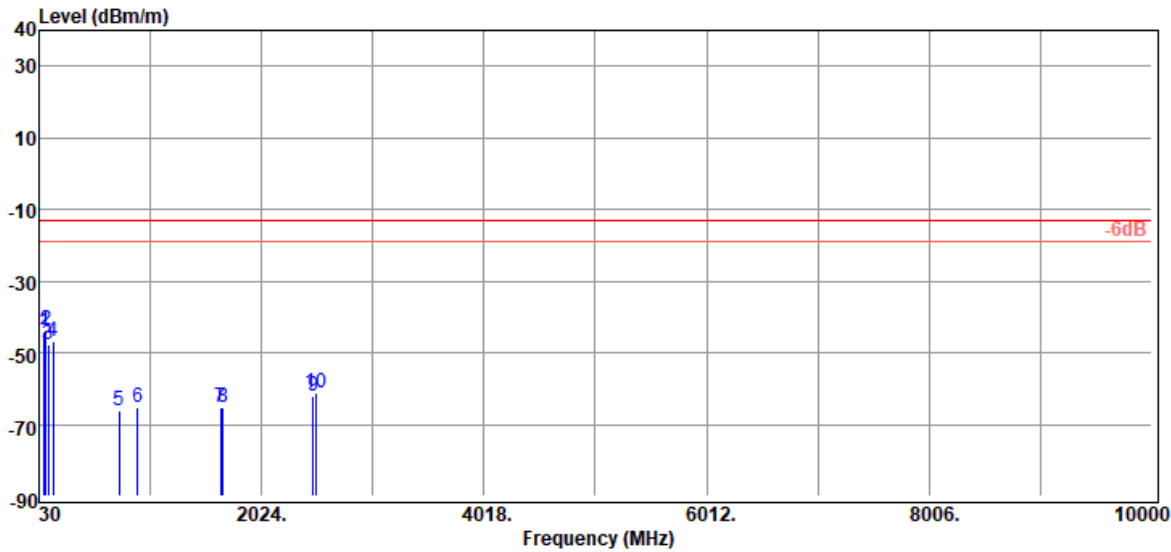
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Report Number :E2/2020/10031
Operation Mode :LTE B5+B5
Test Mode :TX CH LOW
EUT Pol :E2 Plan
Test Channel :829 MHz +838.9 MHz

Test Date :2020-01-03
Temp./Humi. :21.6/54
Antenna Pol. :HORIZONTAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
75.59	-44.22	-35.92	-7.33	-0.97	-13.00	-31.22
88.20	-43.52	-35.93	-6.55	-1.04	-13.00	-30.52
110.51	-47.71	-38.61	-7.77	-1.33	-13.00	-34.71
154.16	-46.72	-41.10	-4.06	-1.56	-13.00	-33.72
750.71	-66.30	-64.43	0.75	-2.62	-13.00	-53.30
915.61	-65.43	-63.81	1.60	-3.22	-13.00	-52.43
1658.00	-65.18	-71.14	9.43	-3.47	-13.00	-52.18
1677.80	-65.31	-71.32	9.51	-3.50	-13.00	-52.31
2487.00	-61.93	-68.72	10.62	-3.83	-13.00	-48.93
2516.73	-61.21	-68.27	10.80	-3.74	-13.00	-48.21

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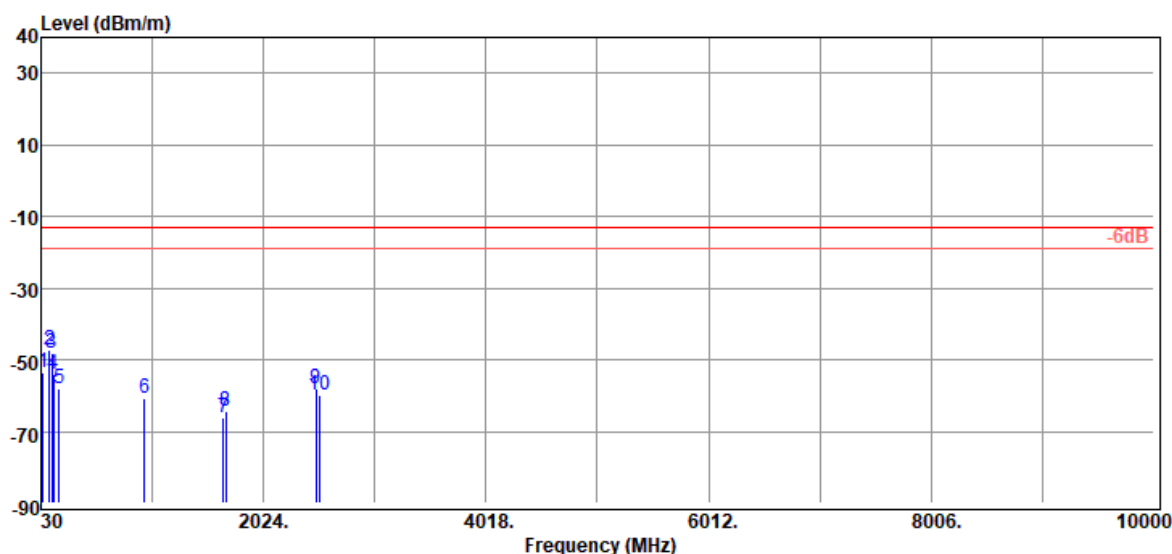
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Report Number :E2/2020/10031
Operation Mode :LTE B5+B5
Test Mode :TX CH MID
EUT Pol :E2 Plan
Test Channel :831.6 MHz +841.5 MHz

Test Date :2020-01-03
Temp./Humi. :21.6/54
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
49.40	-53.53	-39.20	-13.59	-0.74	-13.00	-40.53
107.60	-47.20	-38.30	-7.60	-1.30	-13.00	-34.20
125.06	-48.38	-39.24	-7.70	-1.44	-13.00	-35.38
138.64	-54.02	-46.08	-6.40	-1.54	-13.00	-41.02
191.02	-57.86	-55.68	-0.42	-1.76	-13.00	-44.86
954.41	-60.91	-59.18	1.69	-3.42	-13.00	-47.91
1663.20	-66.26	-72.23	9.45	-3.48	-13.00	-53.26
1683.00	-64.36	-70.38	9.53	-3.51	-13.00	-51.36
2494.80	-57.97	-64.88	10.67	-3.76	-13.00	-44.97
2524.50	-59.85	-66.96	10.85	-3.74	-13.00	-46.85

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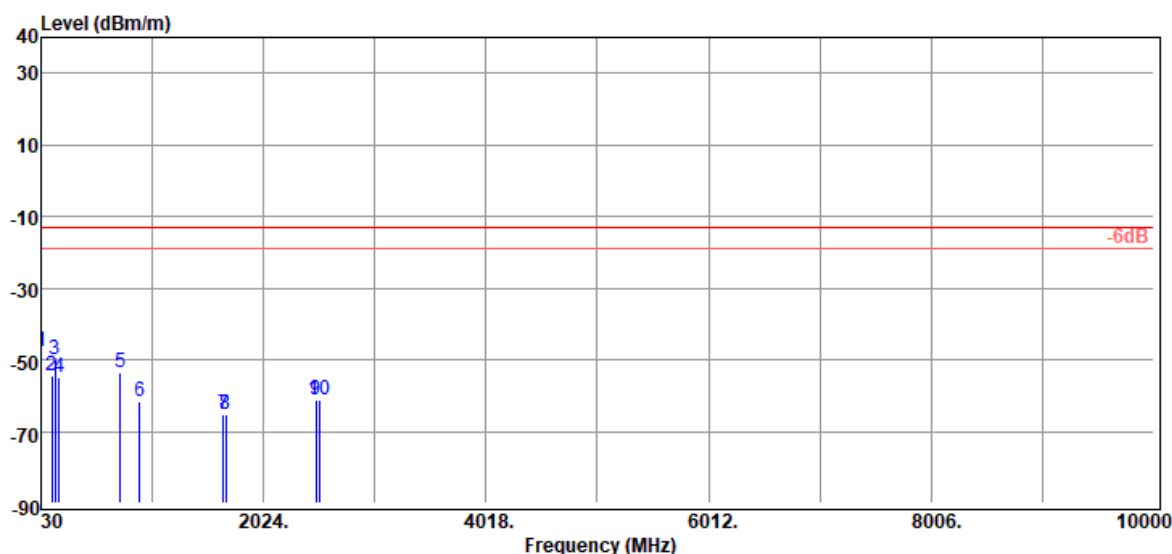
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B5+B5	Temp./Humi.	:21.6/54
Test Mode	:TX CH MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:831.6 MHz +841.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
31.94	-47.50	-17.68	-29.28	-0.54	-13.00	-34.50
125.06	-54.34	-45.20	-7.70	-1.44	-13.00	-41.34
154.16	-50.15	-44.53	-4.06	-1.56	-13.00	-37.15
190.05	-54.75	-52.54	-0.46	-1.75	-13.00	-41.75
740.04	-53.62	-51.65	0.64	-2.61	-13.00	-40.62
915.61	-61.83	-60.21	1.60	-3.22	-13.00	-48.83
1663.20	-65.48	-71.45	9.45	-3.48	-13.00	-52.48
1683.00	-65.31	-71.33	9.53	-3.51	-13.00	-52.31
2494.80	-61.30	-68.21	10.67	-3.76	-13.00	-48.30
2524.50	-61.41	-68.52	10.85	-3.74	-13.00	-48.41

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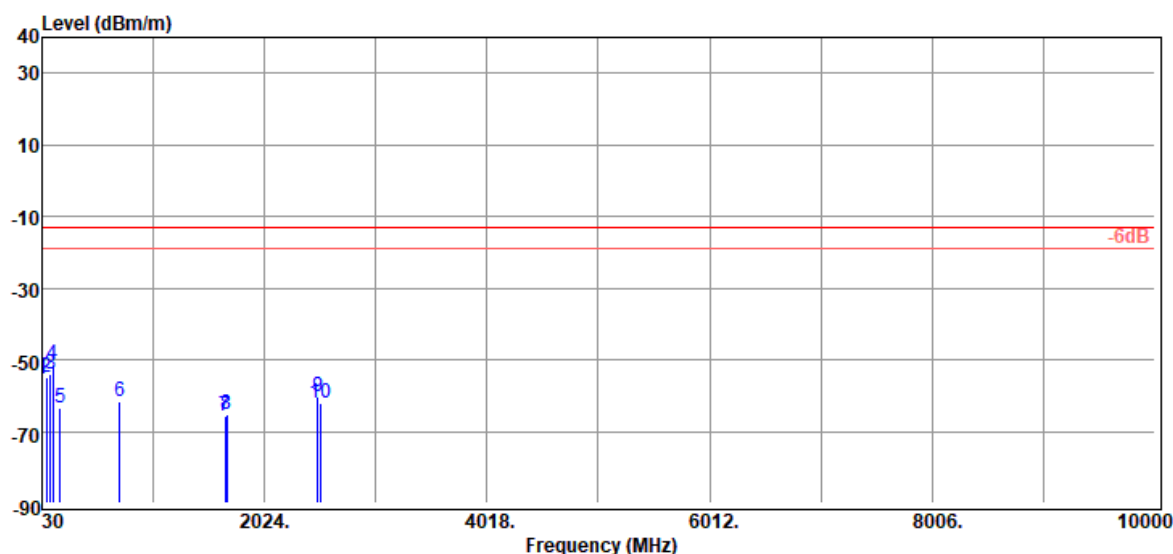
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Report Number :E2/2020/10031
Operation Mode :LTE B5+B5
Test Mode :TX CH HIGH
EUT Pol :E2 Plan
Test Channel :834.1 MHz +844 MHz

Test Date :2020-01-03
Temp./Humi. :21.4/53
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
31.94	-55.17	-25.35	-29.28	-0.54	-13.00	-42.17
70.74	-54.99	-46.71	-7.39	-0.89	-13.00	-41.99
105.66	-53.89	-45.02	-7.59	-1.28	-13.00	-40.89
125.06	-51.16	-42.02	-7.70	-1.44	-13.00	-38.16
191.99	-63.31	-61.07	-0.47	-1.77	-13.00	-50.31
728.40	-61.76	-59.84	0.74	-2.66	-13.00	-48.76
1668.20	-65.70	-71.68	9.47	-3.49	-13.00	-52.70
1688.00	-65.45	-71.49	9.55	-3.51	-13.00	-52.45
2502.30	-60.30	-67.29	10.71	-3.72	-13.00	-47.30
2532.00	-62.06	-69.20	10.89	-3.75	-13.00	-49.06

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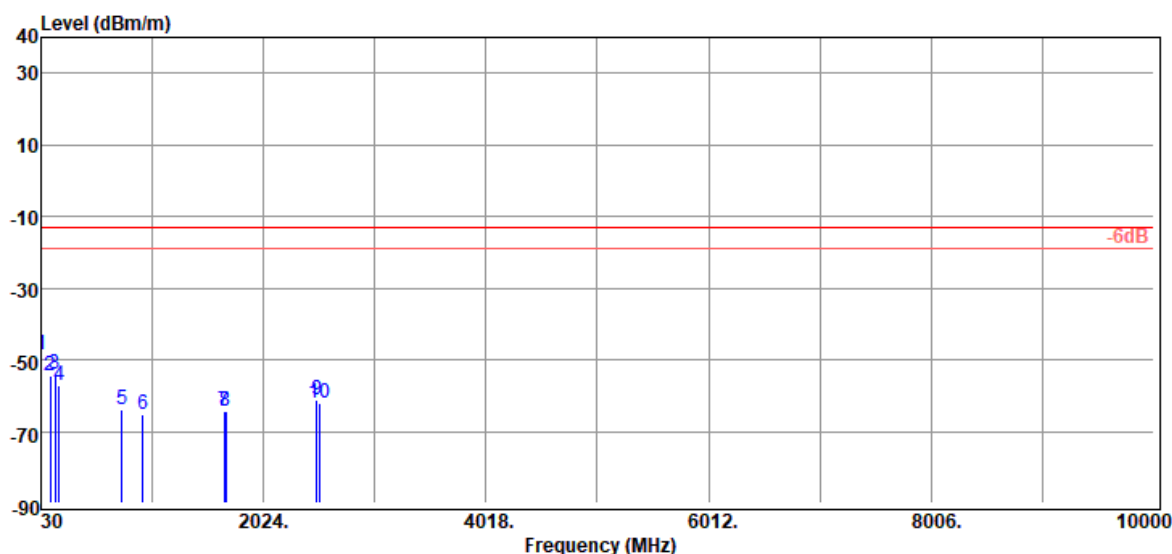
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Report Number :E2/2020/10031
Operation Mode :LTE B5+B5
Test Mode :TX CH HIGH
EUT Pol :E2 Plan
Test Channel :834.1 MHz +844 MHz

Test Date :2020-01-03
Temp./Humi. :21.4/53
Antenna Pol. :HORIZONTAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
31.94	-48.55	-18.73	-29.28	-0.54	-13.00	-35.55
110.51	-54.67	-45.57	-7.77	-1.33	-13.00	-41.67
153.19	-54.18	-48.48	-4.14	-1.56	-13.00	-41.18
192.96	-57.22	-55.01	-0.43	-1.78	-13.00	-44.22
755.56	-63.86	-61.94	0.73	-2.65	-13.00	-50.86
939.86	-65.09	-63.79	1.92	-3.22	-13.00	-52.09
1668.20	-64.17	-70.15	9.47	-3.49	-13.00	-51.17
1688.00	-64.57	-70.61	9.55	-3.51	-13.00	-51.57
2502.30	-61.31	-68.30	10.71	-3.72	-13.00	-48.31
2532.00	-61.95	-69.09	10.89	-3.75	-13.00	-48.95

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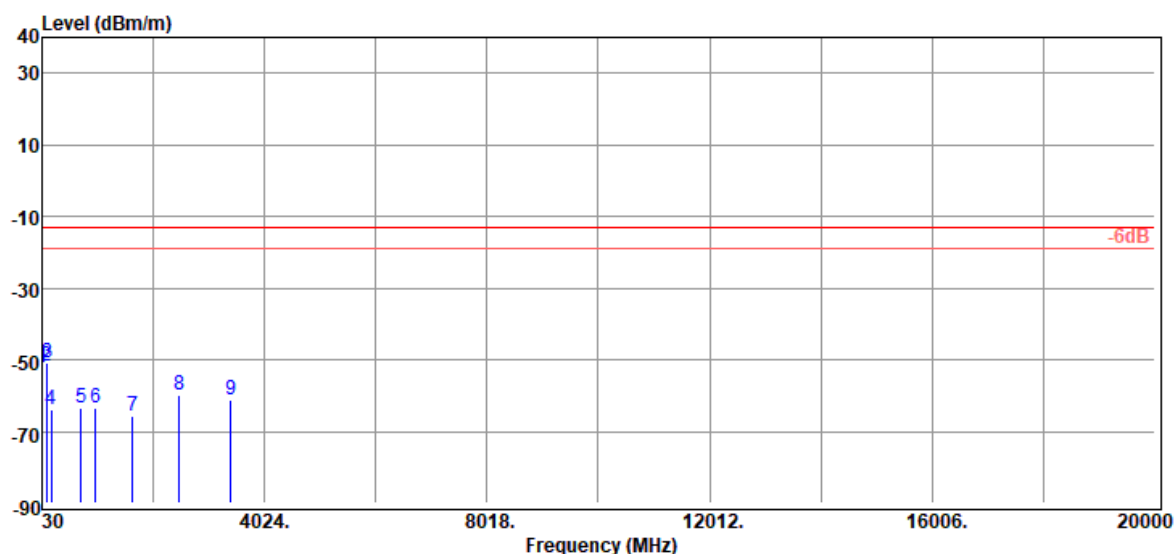
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Radiated Spurious Emission Measurement Result: LTE Band 5 + LTE Band 66 Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B5+B66	Temp./Humi.	:21.2/52
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:829 MHz +1712.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
31.94	-52.11	-22.29	-29.28	-0.54	-13.00	-39.11
107.60	-51.69	-42.79	-7.60	-1.30	-13.00	-38.69
125.06	-50.77	-41.63	-7.70	-1.44	-13.00	-37.77
192.96	-64.13	-61.92	-0.43	-1.78	-13.00	-51.13
728.40	-63.43	-61.51	0.74	-2.66	-13.00	-50.43
987.39	-63.65	-61.82	1.50	-3.33	-13.00	-50.65
1658.00	-65.50	-71.46	9.43	-3.47	-13.00	-52.50
2487.00	-60.02	-66.81	10.62	-3.83	-13.00	-47.02
3425.00	-61.13	-68.43	12.50	-5.20	-13.00	-48.13

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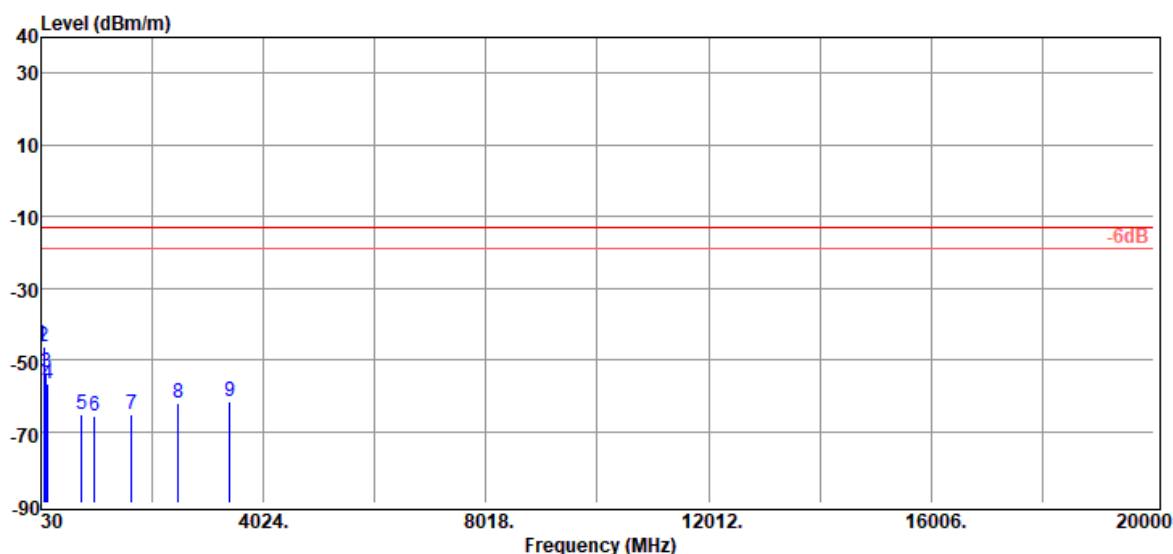
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B5+B66	Temp./Humi.	:21.2/52
Test Mode	:TX CH LOW	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:829 MHz +1712.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
31.94	-45.85	-16.03	-29.28	-0.54	-13.00	-32.85
80.44	-46.20	-38.23	-6.93	-1.04	-13.00	-33.20
125.06	-53.49	-44.35	-7.70	-1.44	-13.00	-40.49
156.10	-56.58	-51.26	-3.76	-1.56	-13.00	-43.58
755.56	-65.16	-63.24	0.73	-2.65	-13.00	-52.16
993.21	-65.55	-63.81	1.63	-3.37	-13.00	-52.55
1658.00	-65.08	-71.04	9.43	-3.47	-13.00	-52.08
2487.00	-62.24	-69.03	10.62	-3.83	-13.00	-49.24
3425.00	-61.50	-68.80	12.50	-5.20	-13.00	-48.50

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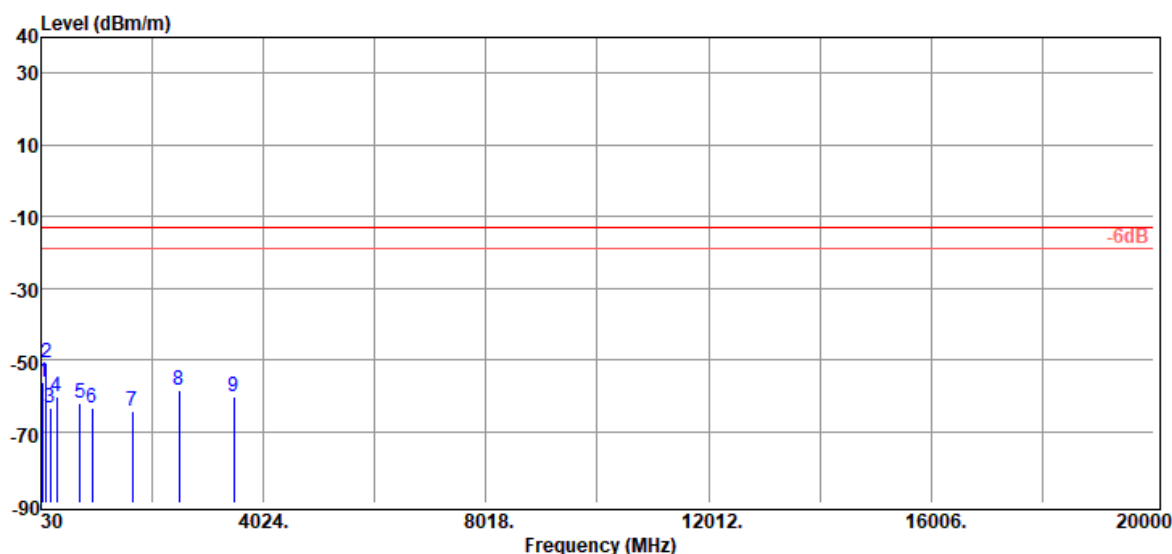
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Report Number :E2/2020/10031
Operation Mode :LTE B5+B66
Test Mode :TX CH MID
EUT Pol :E2 Plan
Test Channel :836.5 MHz +1745 MHz

Test Date :2020-01-03
Temp./Humi. :21.2/52
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
71.71	-56.34	-47.96	-7.47	-0.91	-13.00	-43.34
125.06	-51.08	-41.94	-7.70	-1.44	-13.00	-38.08
192.96	-63.59	-61.38	-0.43	-1.78	-13.00	-50.59
314.21	-60.30	-57.11	-0.68	-2.51	-13.00	-47.30
735.19	-62.14	-60.16	0.69	-2.67	-13.00	-49.14
946.65	-63.58	-62.18	1.82	-3.22	-13.00	-50.58
1673.00	-64.49	-70.49	9.49	-3.49	-13.00	-51.49
2509.50	-58.44	-65.47	10.76	-3.73	-13.00	-45.44
3490.00	-60.20	-67.18	12.34	-5.36	-13.00	-47.20

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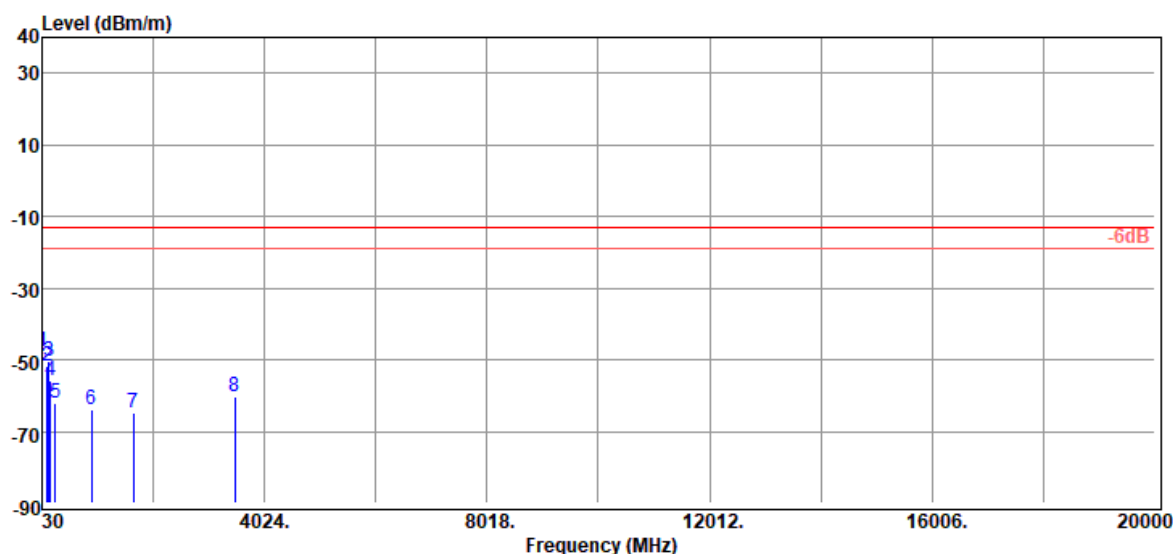
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B5+B66	Temp./Humi.	:21.2/52
Test Mode	:TX CH MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:836.5 MHz +1745 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
31.94	-47.82	-18.00	-29.28	-0.54	-13.00	-34.82
124.09	-51.76	-42.58	-7.76	-1.42	-13.00	-38.76
156.10	-50.60	-45.28	-3.76	-1.56	-13.00	-37.60
183.26	-55.86	-53.32	-0.88	-1.66	-13.00	-42.86
272.50	-61.89	-58.49	-1.33	-2.07	-13.00	-48.89
919.49	-63.90	-62.23	1.63	-3.30	-13.00	-50.90
1673.00	-64.84	-70.84	9.49	-3.49	-13.00	-51.84
3490.00	-60.37	-67.35	12.34	-5.36	-13.00	-47.37

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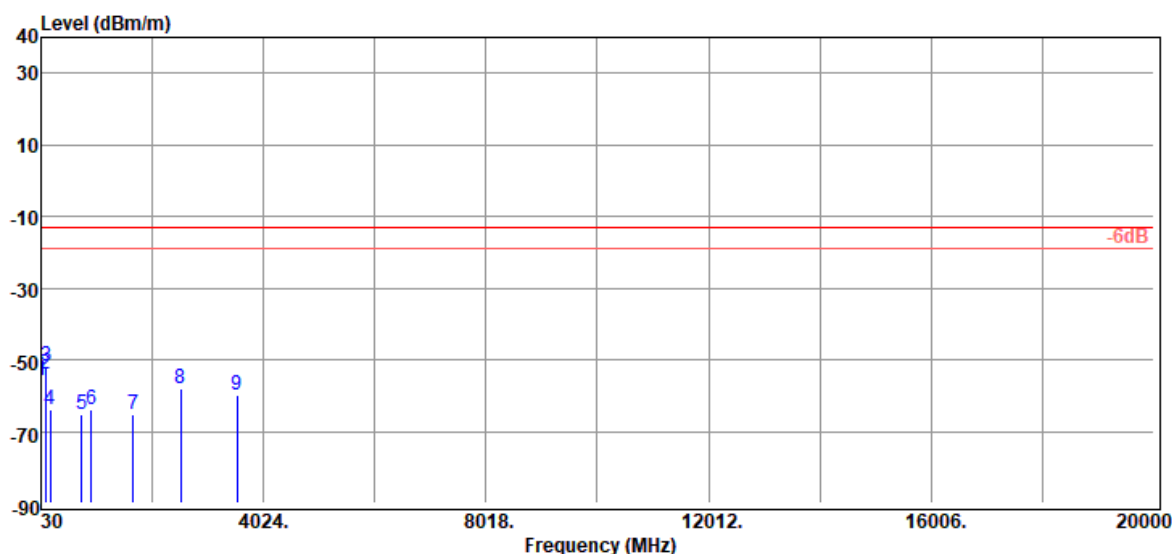
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Report Number :E2/2020/10031
Operation Mode :LTE B5+B66
Test Mode :TX CH HIGH
EUT Pol :E2 Plan
Test Channel :844 MHz +1777.5 MHz

Test Date :2020-01-03
Temp./Humi. :21.2/52
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
31.94	-55.95	-26.13	-29.28	-0.54	-13.00	-42.95
102.75	-54.05	-45.51	-7.30	-1.24	-13.00	-41.05
125.06	-51.62	-42.48	-7.70	-1.44	-13.00	-38.62
192.96	-63.81	-61.60	-0.43	-1.78	-13.00	-50.81
754.59	-65.06	-63.13	0.72	-2.65	-13.00	-52.06
936.95	-63.73	-62.31	1.83	-3.25	-13.00	-50.73
1688.00	-65.23	-71.27	9.55	-3.51	-13.00	-52.23
2532.00	-58.03	-65.17	10.89	-3.75	-13.00	-45.03
3555.00	-59.91	-66.38	12.10	-5.63	-13.00	-46.91

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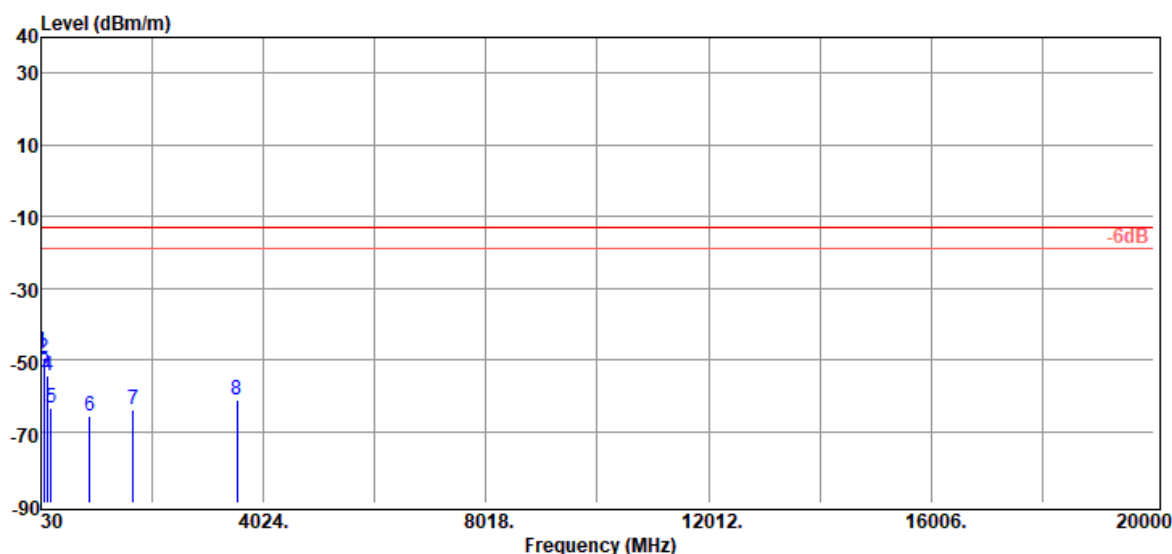
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B5+B66	Temp./Humi.	:21.2/52
Test Mode	:TX CH HIGH	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:844 MHz +1777.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
31.94	-47.61	-17.79	-29.28	-0.54	-13.00	-34.61
81.41	-49.30	-41.39	-6.87	-1.04	-13.00	-36.30
97.90	-53.59	-45.49	-6.92	-1.18	-13.00	-40.59
153.19	-54.50	-48.80	-4.14	-1.56	-13.00	-41.50
212.36	-63.28	-61.40	-0.01	-1.87	-13.00	-50.28
910.76	-65.51	-63.93	1.55	-3.13	-13.00	-52.51
1688.00	-63.71	-69.75	9.55	-3.51	-13.00	-50.71
3555.00	-61.17	-67.64	12.10	-5.63	-13.00	-48.17

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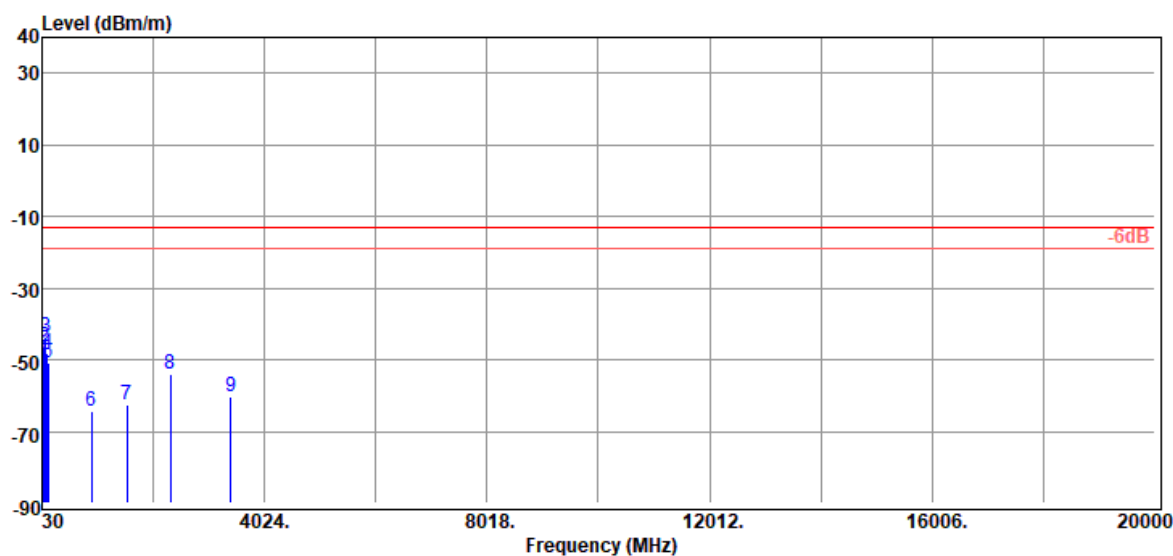
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Radiated Spurious Emission Measurement Result: LTE Band 13 + LTE Band 66 Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B13+B66	Temp./Humi.	:21.4/53
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:779.5 MHz +1712.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
51.34	-52.84	-40.42	-11.66	-0.76	-13.00	-39.84
72.68	-46.28	-37.94	-7.41	-0.93	-13.00	-33.28
100.81	-43.67	-35.32	-7.13	-1.22	-13.00	-30.67
125.06	-48.32	-39.18	-7.70	-1.44	-13.00	-35.32
138.64	-50.97	-43.03	-6.40	-1.54	-13.00	-37.97
924.34	-64.20	-62.56	1.67	-3.31	-13.00	-51.20
1559.00	-62.34	-67.34	8.79	-3.79	-13.00	-49.34
2338.50	-53.89	-58.97	9.61	-4.53	-13.00	-40.89
3425.00	-60.37	-67.67	12.50	-5.20	-13.00	-47.37

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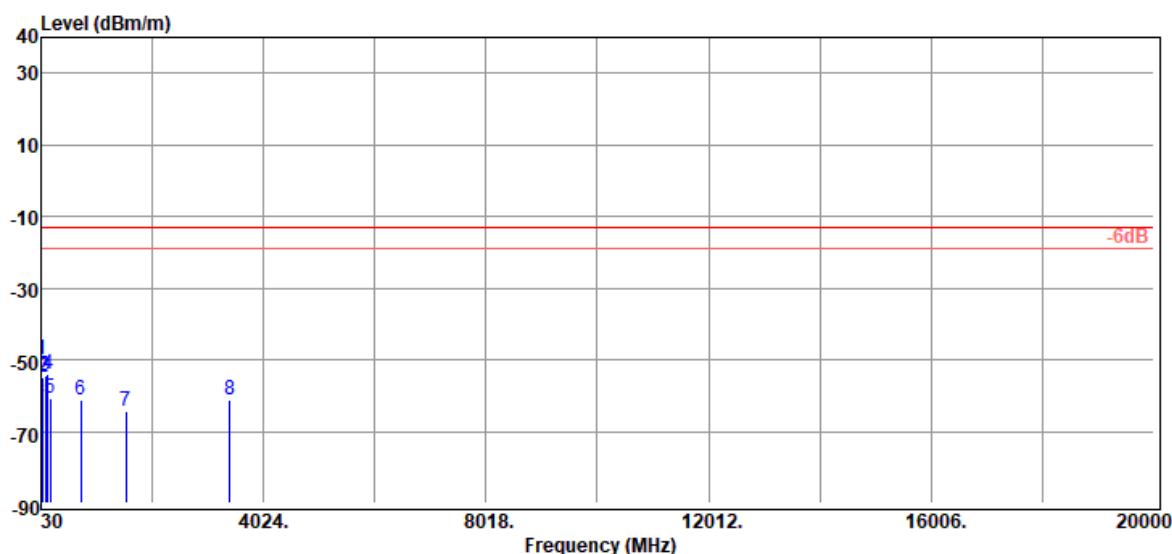
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B13+B66	Temp./Humi.	:21.4/53
Test Mode	:TX CH LOW	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:779.5 MHz +1712.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
31.94	-49.85	-20.03	-29.28	-0.54	-13.00	-36.85
71.71	-55.04	-46.66	-7.47	-0.91	-13.00	-42.04
105.66	-54.53	-45.66	-7.59	-1.28	-13.00	-41.53
153.19	-54.09	-48.39	-4.14	-1.56	-13.00	-41.09
192.96	-60.97	-58.76	-0.43	-1.78	-13.00	-47.97
750.71	-61.07	-59.20	0.75	-2.62	-13.00	-48.07
1559.00	-64.33	-69.33	8.79	-3.79	-13.00	-51.33
3425.00	-61.15	-68.45	12.50	-5.20	-13.00	-48.15

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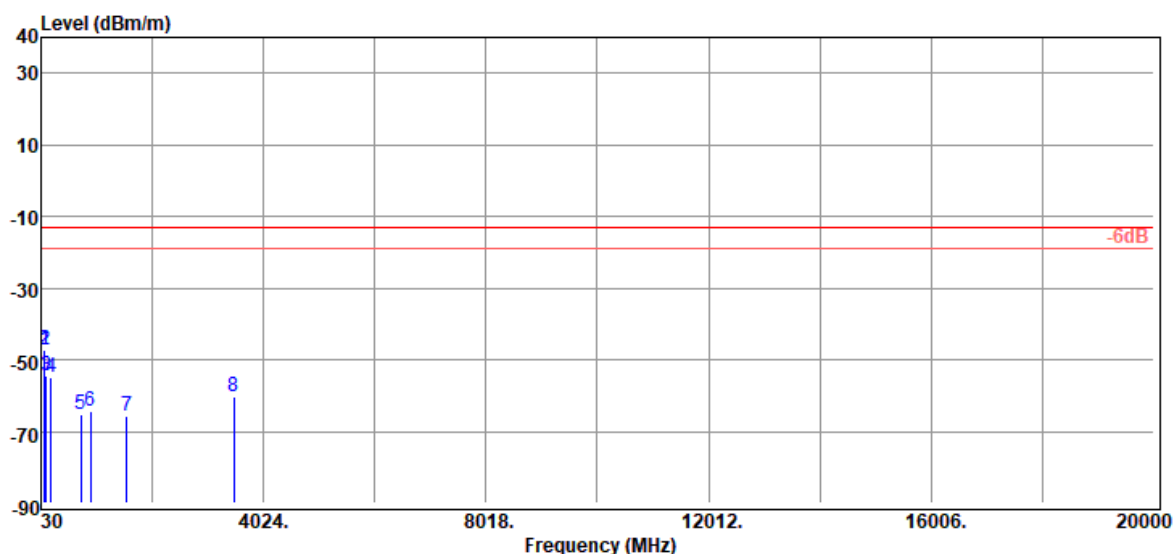
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Report Number :E2/2020/10031
Operation Mode :LTE B13+B66
Test Mode :TX CH MID
EUT Pol :E2 Plan
Test Channel :782 MHz +1745 MHz

Test Date :2020-01-03
Temp./Humi. :21.4/53
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
94.99	-47.28	-39.56	-6.59	-1.13	-13.00	-34.28
100.81	-47.17	-38.82	-7.13	-1.22	-13.00	-34.17
128.94	-54.35	-45.39	-7.44	-1.52	-13.00	-41.35
209.45	-54.83	-52.67	-0.32	-1.84	-13.00	-41.83
749.74	-65.10	-63.24	0.75	-2.61	-13.00	-52.10
914.64	-64.15	-62.54	1.59	-3.20	-13.00	-51.15
1564.00	-65.65	-70.75	8.84	-3.74	-13.00	-52.65
3490.00	-60.24	-67.22	12.34	-5.36	-13.00	-47.24

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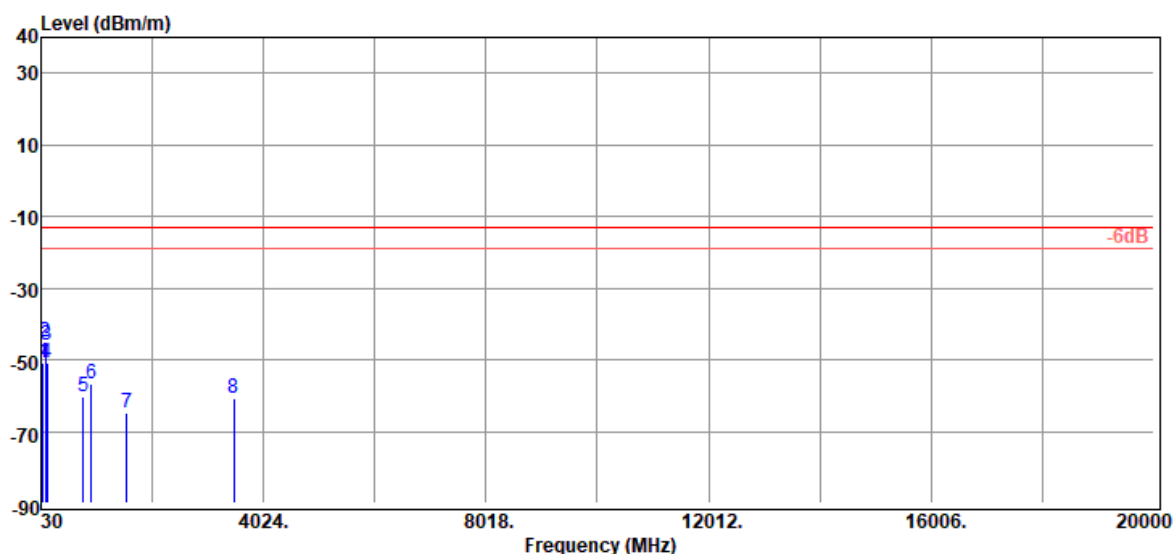
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Report Number :E2/2020/10031
Operation Mode :LTE B13+B66
Test Mode :TX CH MID
EUT Pol :E2 Plan
Test Channel :782 MHz +1745 MHz

Test Date :2020-01-03
Temp./Humi. :21.4/53
Antenna Pol. :HORIZONTAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
70.74	-50.96	-42.68	-7.39	-0.89	-13.00	-37.96
104.69	-45.11	-36.36	-7.48	-1.27	-13.00	-32.11
127.97	-46.11	-37.01	-7.60	-1.50	-13.00	-33.11
138.64	-50.73	-42.79	-6.40	-1.54	-13.00	-37.73
788.54	-60.40	-58.21	0.87	-3.06	-13.00	-47.40
936.95	-56.51	-55.09	1.83	-3.25	-13.00	-43.51
1564.00	-64.98	-70.08	8.84	-3.74	-13.00	-51.98
3490.00	-60.76	-67.74	12.34	-5.36	-13.00	-47.76

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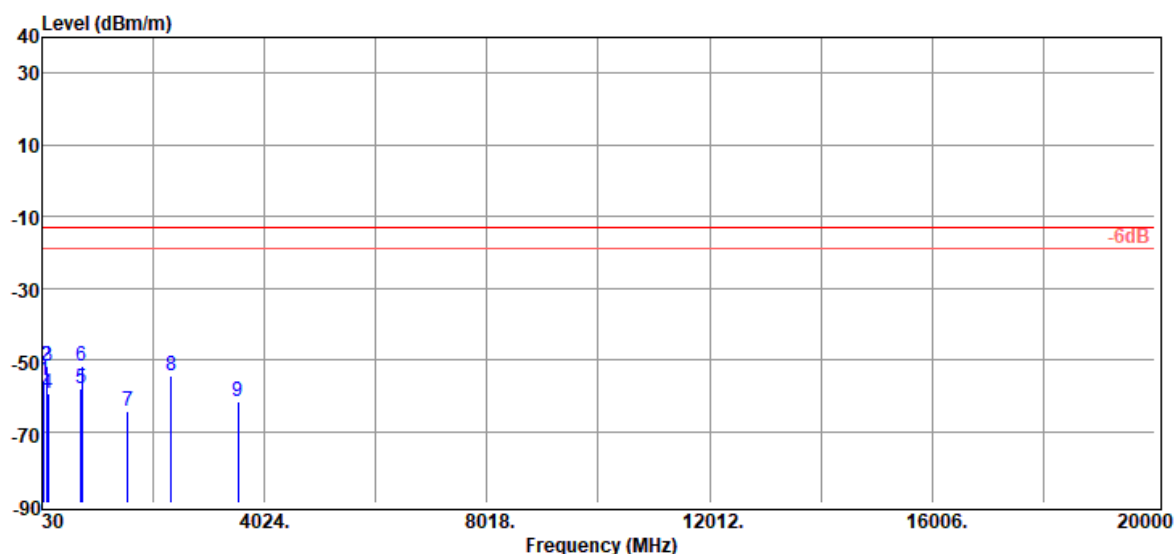
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Report Number :E2/2020/10031
Operation Mode :LTE B13+B66
Test Mode :TX CH HIGH
EUT Pol :E2 Plan
Test Channel :784.5 MHz +1777.5 MHz

Test Date :2020-01-03
Temp./Humi. :21.4/53
Antenna Pol. :VERTICAL
Engineer :Kailin



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
71.71	-55.82	-47.44	-7.47	-0.91	-13.00	-42.82
107.60	-51.87	-42.97	-7.60	-1.30	-13.00	-38.87
125.06	-51.88	-42.74	-7.70	-1.44	-13.00	-38.88
138.64	-59.51	-51.57	-6.40	-1.54	-13.00	-46.51
730.34	-57.96	-55.96	0.73	-2.73	-13.00	-44.96
745.86	-51.96	-49.98	0.63	-2.61	-13.00	-38.96
1569.00	-64.41	-69.61	8.89	-3.69	-13.00	-51.41
2353.50	-54.52	-59.71	9.73	-4.54	-13.00	-41.52
3555.00	-61.47	-67.94	12.10	-5.63	-13.00	-48.47

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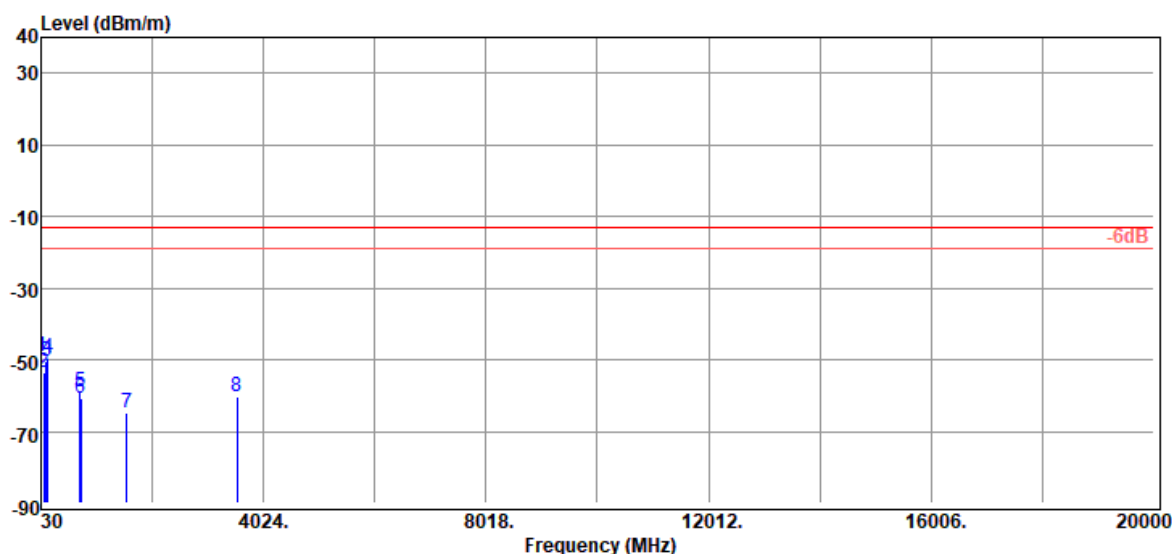
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Report Number	:E2/2020/10031	Test Date	:2020-01-03
Operation Mode	:LTE B13+B66	Temp./Humi.	:21.4/53
Test Mode	:TX CH HIGH	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:784.5 MHz +1777.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
31.94	-49.04	-19.22	-29.28	-0.54	-13.00	-36.04
80.44	-53.75	-45.78	-6.93	-1.04	-13.00	-40.75
125.06	-50.23	-41.09	-7.70	-1.44	-13.00	-37.23
156.10	-49.47	-44.15	-3.76	-1.56	-13.00	-36.47
728.40	-59.13	-57.21	0.74	-2.66	-13.00	-46.13
745.86	-60.71	-58.73	0.63	-2.61	-13.00	-47.71
1569.00	-64.79	-69.99	8.89	-3.69	-13.00	-51.79
3555.00	-60.51	-66.98	12.10	-5.63	-13.00	-47.51

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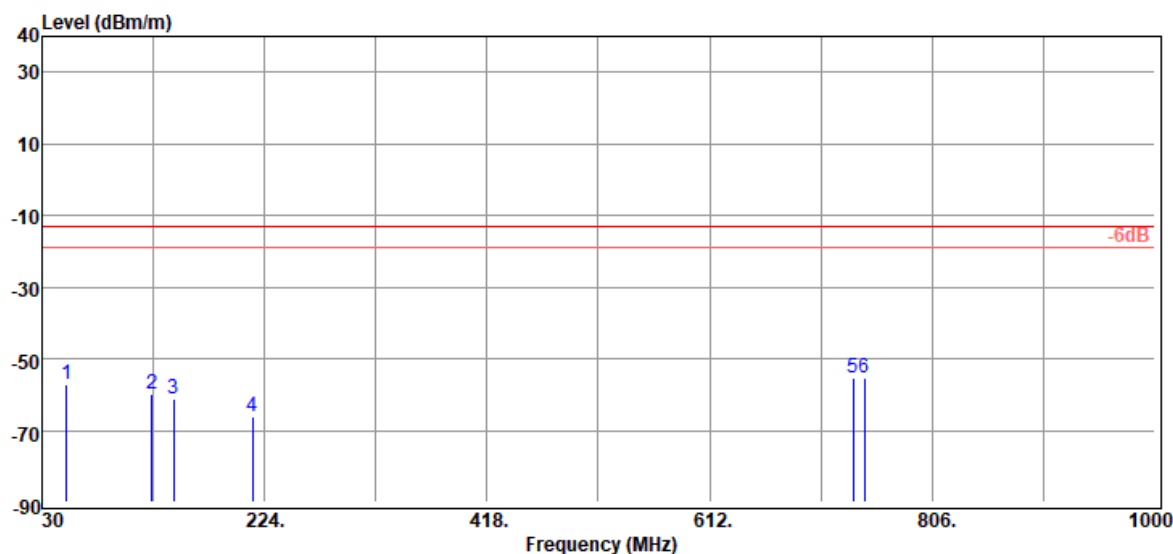
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PCB 2nd Source Spot Check

Radiated Spurious Emission Measurement Result: LTE Band 5 + LTE Band 66 Mode

Report Number	:E2/2020/10031	Test Date	:2020-01-17
Operation Mode	:LTE B5+B66	Temp./Humi.	:21.7/54
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:829 MHz +1712.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
51.34	-57.12	-44.70	-11.66	-0.76	-13.00	-44.12
126.03	-59.91	-50.82	-7.63	-1.46	-13.00	-46.91
144.46	-61.42	-54.22	-5.65	-1.55	-13.00	-48.42
213.33	-66.17	-64.40	0.11	-1.88	-13.00	-53.17
737.13	-55.23	-53.26	0.67	-2.64	-13.00	-42.23
746.83	-55.33	-53.38	0.66	-2.61	-13.00	-42.33

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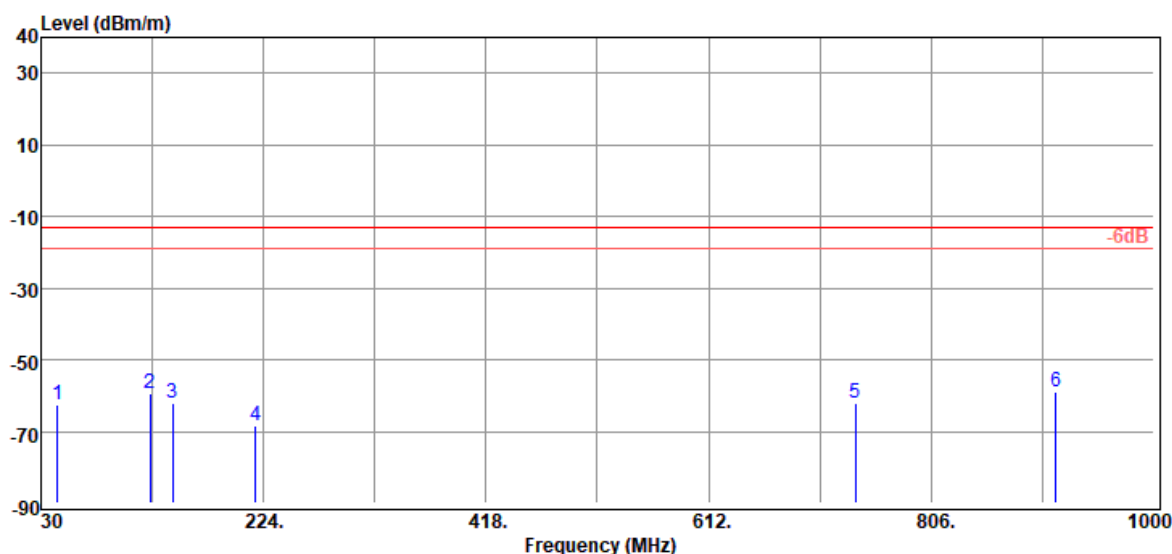
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Report Number	:E2/2020/10031	Test Date	:2020-01-17
Operation Mode	:LTE B5+B66	Temp./Humi.	:21.7/54
Test Mode	:TX CH LOW	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Kailin
Test Channel	:829 MHz +1712.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
44.55	-62.47	-43.40	-18.33	-0.74	-13.00	-49.47
125.06	-59.49	-50.35	-7.70	-1.44	-13.00	-46.49
144.46	-62.14	-54.94	-5.65	-1.55	-13.00	-49.14
217.21	-68.59	-66.98	0.31	-1.92	-13.00	-55.59
740.04	-62.00	-60.03	0.64	-2.61	-13.00	-49.00
914.64	-58.89	-57.28	1.59	-3.20	-13.00	-45.89

~ End of Report ~

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