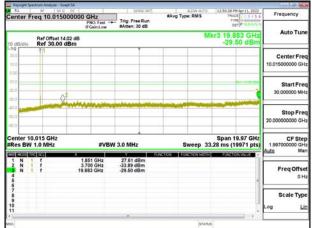
Report No.: ER/2022/30082 Page: 94 of 133

Band2_20MHz_QPSK_RB1_0_CH18700





Band2 20MHz QPSK RB1 0 CH19100

Keysight Spectrum Analyzer - Swept SA		THE PERSONNERS	a state and state and state	-o-l-9 😖
Center Freq 10.015000000 GH	East Trig: Free Run	#Avg Type: RMS	12:51:16 PH Apr 11, 2022 TRACE 2: 2:3 4:5 6 TVPE 14 WWWWWW DET P 14 Min 14 Min	Frequency
Ref Offset 14.02 dB	in:Low #Atten: 30 dB	м	kr3 19.783 GHz -30.43 dBm	Auto Tun
Leg X1 200				Center Fre 10.015000000 GH
100 200 200				Start Fre 30.000000 MH
-010 -510 -600	nya yina ina kana kana kana kana kana kana ka			Stop Fre 20.000000000 GH
Center 10.015 GHz #Res BW 1.0 MHz	#VBW 3.0 MHz	Sweep 33	Span 19.97 GHz .28 ms (19971 pts)	CF Ste 1.997000000 GF Auto Ma
1 N 1 f 1.891 2 N 1 f 3.765 3 N 1 f 19.783 6	GHz 25.96 dBm GHz -34.05 dBm	FUNCTION FUNCTION WOTH	TOXATES VICUT	Freq Offse 0 H
6 7 8 9 10 11				Scale Typ
eta		STATU	- 1. I	

Band5_10MHz_QPSK_RB1_0_CH20450

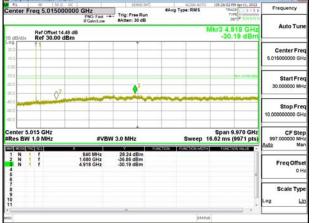


Band5_10MHz_QPSK_RB1_0_CH20525



Band5_10MHz_QPSK_RB1 0 CH20600

Frequency



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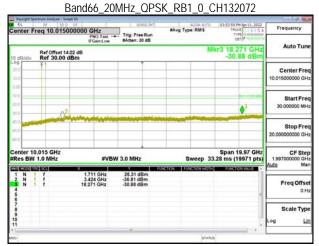
Np.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號 www.sgs.com.tw



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Band13_10MHz_QPSK_RB1_0_CH23230





Band66_20MHz_QPSK_RB1_0_CH132322

Keysight Spectrum Analyzer - Swept					-0-1-9 -
Center Freq 10.01500		Trig: Free Run	#Avg Type: RMS	03:54-23 PH Apr 11, 2022 THACE 2: 3:4:5:6 TYPE H WWWWWW DET P N M I I I II	Frequency
Ref Offset 14.0	IFGain:Low 2 dB	#Atten: 30 dB	м	kr3 19.319 GHz -29.74 dBm	Auto Tur
0 dB/div Ref 30.00 dE	sm			-20.14 0011	Center Fre 10.015000000 GF
100 100 201 201				∳ ³	Start Fre 30.000000 Mi
80.0 50.0 50.0	1000, 200, 200, 200, 200, 200, 200, 200,	u de la d La de la d			Stop Fre 20.00000000 Gi
Center 10.015 GHz Res BW 1.0 MHz	#VBI	W 3.0 MHz	Sweep 33	Span 19.97 GHz 1.28 ms (19971 pts)	CF Sto 1.997000000 G Auto M
1 N 1 f 2 N 1 f N 1 f 4 5	1.736 GHz 3.467 GHz 19.319 GHz	26.36 dBm -36.63 dBm -29.74 dBm			Freq Offs
6 7 8 9					Scale Typ
11			STATU		

Band66_20MHz_QPSK_RB1_0_CH132572

Frequency	02:54:48 PH Apr 11, 2022 TRACE 2:3:4:5:6 TYPE21 WWWWWW	ALIEN AUTO pe: RMS		Trig: Free Run	00000 GHz	10.01500	Freq		Cer
Auto Tun	Rr3 18.352 GHz	M		#Atten: 30 dB	IFGein:Low		_	_	-
	-30.47 dBm	- 1.72				of Offset 14.0 of 30.00 dl		Bidi	10 d
Center Fre 10.015000000 GH							×	-	20.0
StartFre	Der at beralte								10.0
30.000000 MH	3		-			Q ²		L	-30.0
Stop Fre 20.000000000 GH								F	-40.0
CF Ste 1.997000000 GH Auto Ma	Span 19.97 GHz .28 ms (19971 pts)	Sweep 33.		V 3.0 MHz	#VB	5 GHz MHz	10.01 W 1.0		
Freq Offse	FUNCTION VALUE	NCTION WOTH	FUNCTION	26.31 dBm -35.56 dBm	1.761 GHz 3.523 GHz	3		NN	1 2
OH				-30,47 dBm	18.352 GHz		1	N	4 5 6
Scale Typ									789
Log Li									10
		STATUS							655

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10 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

10.1 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(h)(1)

(h) *AWS emission limits*—(1) *General protection levels*. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log₁₀ (P) dB.

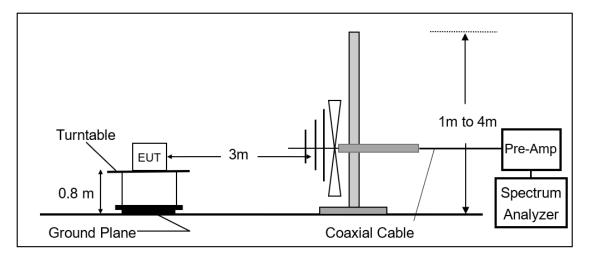
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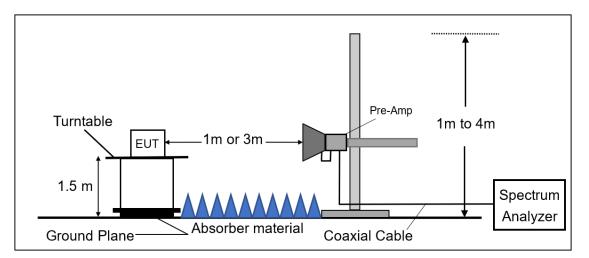


10.2 EUT Setup

Radiated Emission Test Set-Up, Frequency From 30MHz to 1000MHz.



Radiated Emission Test Set-Up, Frequency Above 1GHz.



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10.3 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.

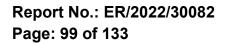
The frequency range up to tenth harmonic was investigated for each of three fundamental frequencies (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method.

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

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

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

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193.93

255.04

396.66

601.33

3720.00

5580.00

-75.07

-73.78

-70.62

-68.70

-71.75

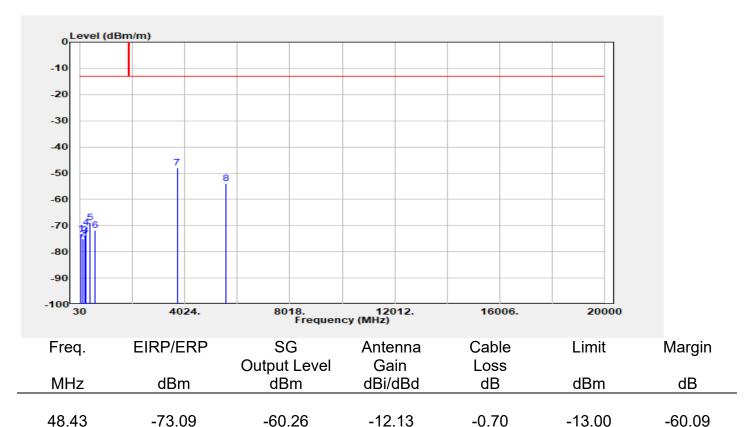
-47.85

-53.91

10.4 Measurement Result:

Report Number	:ER/2022/30082		
Operation Mode	:LTE B2		
Test Mode	:Tx CH Low		
EUT Pol	:H Plane		
Test Frequency	:1860 MHz		

Test Site:SAC 1Test Date:2022-05-09Temp./Humi.:22.7/70Antenna Pol.:VerticalEngineer:GN Lin



-2.04

3.83

4.31

4.32

3.64

12.56

13.00

-1.16

-1.43

-1.62

-2.10

-2.63

-6.45

-8.42

Liplace attention stated the regulte shown in this test report refer on	v to the sample(s) tested and such sample(s) are retained for 90 days only.
Unless otherwise stated the results shown in this test report refer on	y to the sample(s) tested and such sample(s) are retained for 90 days only.

-71.87

-76.18

-73.32

-70.91

-72.76

-53.96

-58.49

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(株計方分気切) し根容弱素(度力列気(人体の) 良い) (可可し(後の) 度に前面の人) 今年報告末途本をかりき面子 1 小う (可) (後表) (This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>http://www.sgs.com.tw/Terms-and-Conditions</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>http://www.sgs.com.tw/Terms-and-Conditions</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. SCS Taiwan Ltd. Net 124 W/wrong Read Neur Taivs inductrial Deat (Wurk) Diracing City to private (K + ± ± 50.5 K + ± ± 50.5 K

-13.00

-13.00

-13.00

-13.00

-13.00

-13.00

-13.00

-62.07

-60.78

-57.62

-55.70

-58.75

-34.85

-40.91



3720.00

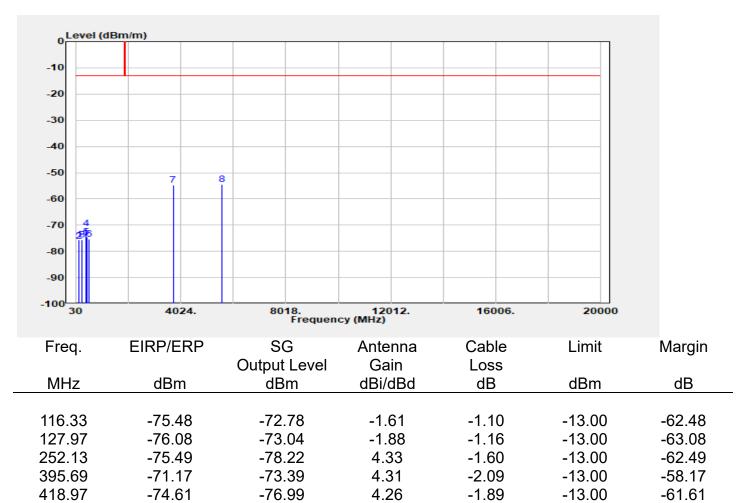
5580.00

-75.40

-54.71

-54.48

Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B2	Test Date	:2022-05-09
Test Mode	:Tx CH Low	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Horizontal
Test Frequency	:1860 MHz	Engineer	:GN Lin



4.18

12.34

12.96

-2.07

-7.56

-9.42

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-77.51

-59.49

-58.02

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-13.00

-13.00

-13.00

-62.40 -41.71

-41.48



3760.00

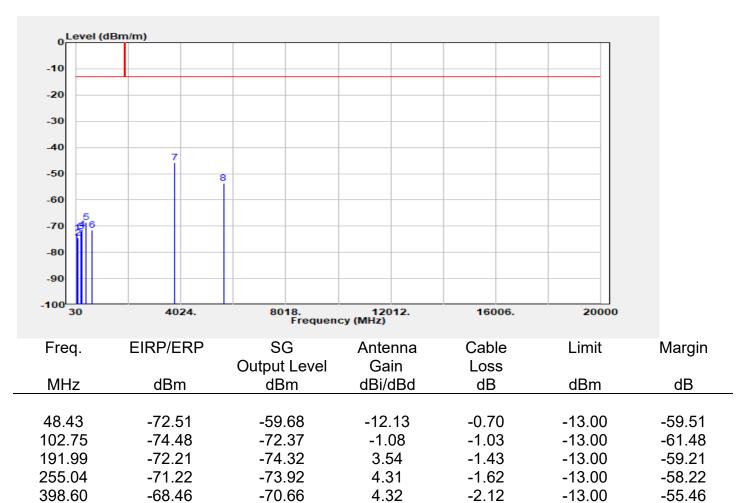
5640.00

-71.54

-45.80

-53.76

Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B2	Test Date	:2022-05-09
Test Mode	:Tx CH Mid	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Vertical
Test Frequency	:1880 MHz	Engineer	:GN Lin



3.47

12.40

13.00

-2.44

-7.63

-9.23

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-72.57

-50.57

-57.54

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-13.00

-13.00

-13.00

-58.54

-32.80

-40.76

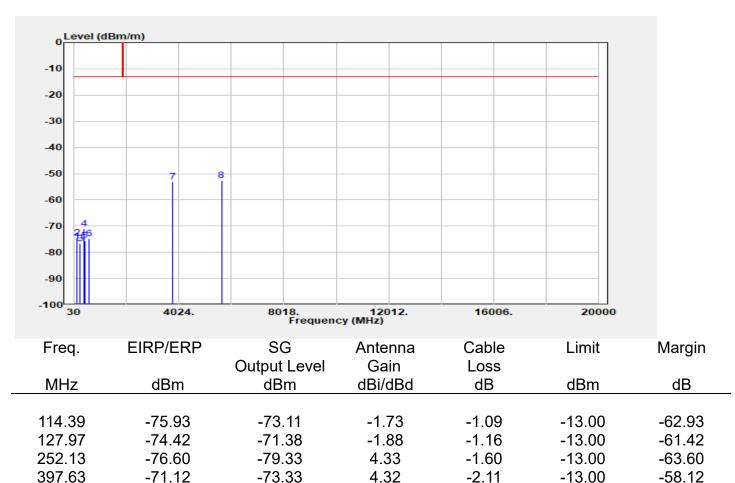


600.36

3760.00

5640.00

:ER/2022/30082	Test Site	:SAC 1
:LTE B2	Test Date	:2022-05-09
:Tx CH Mid	Temp./Humi.	:22.7/70
:H Plane	Antenna Pol.	:Horizontal
:1880 MHz	Engineer	:GN Lin
	:Tx CH Mid :H Plane	:LTE B2Test Date:Tx CH MidTemp./Humi.:H PlaneAntenna Pol.



4.26

3.64

12.40

13.00

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-77.98

-75.84

-57.94

-56.36

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-75.60

-74.84

-53.18

-52.58

-1.89

-2.64

-7.63

-9.23

-13.00

-13.00

-13.00

-13.00

-62.60

-61.84

-40.18

-39.58



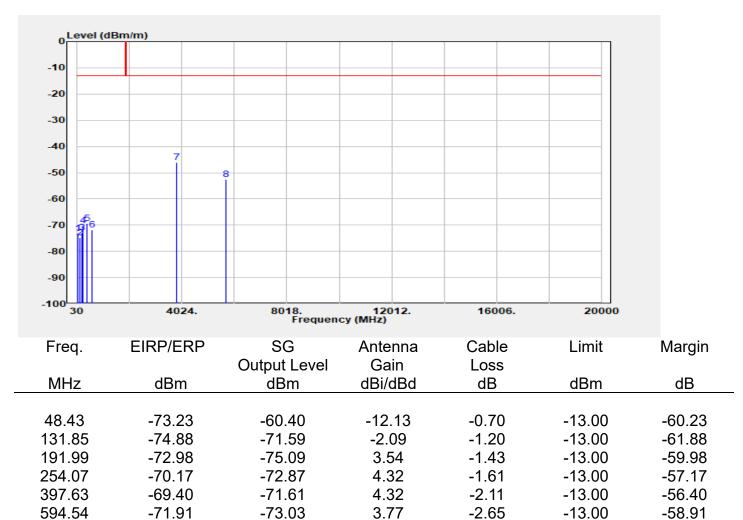
5700.00

-45.97

-52.68

Taiwan I td

Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B2	Test Date	:2022-05-09
Test Mode	:Tx CH High	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Vertical
Test Frequency	:1900 MHz	Engineer	:GN Lin



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-50.66

-56.37

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12.40

12.80

-7.70

-9.10

-13.00

-13.00

-32.97

-39.68



450.01

688.63

3800.00

5700.00

-70.71

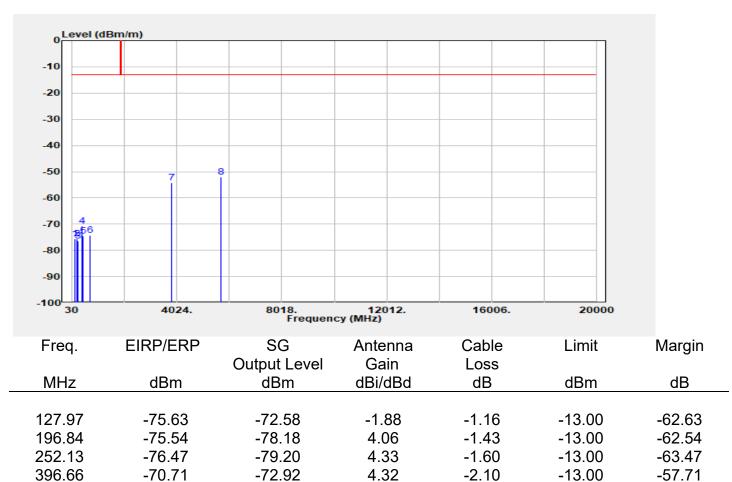
-74.64

-74.31

-54.08

-52.14

Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B2	Test Date	:2022-05-09
Test Mode	:Tx CH High	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Horizontal
Test Frequency	:1900 MHz	Engineer	:GN Lin



4.32

4.14

3.77

12.40

12.80

-2.10

-2.19

-3.01

-7.70

-9.10

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-76.60

-75.07

-58.78

-55.84

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-13.00

-13.00

-13.00

-13.00

-13.00

-57.71

-61.64

-61.31

-41.08

-39.14



1658.00

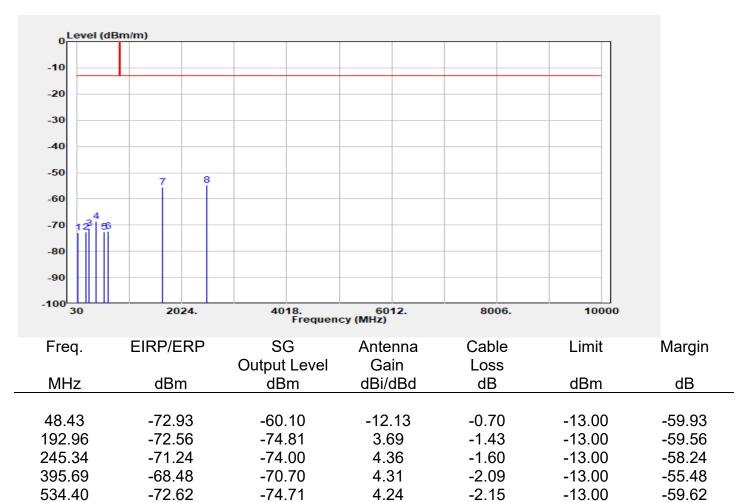
2487.00

-72.29

-55.63

-54.64

:ER/2022/30082	Test Site	:SAC 1
:LTE B5	Test Date	:2022-05-09
:Tx CH Low	Temp./Humi.	:22.7/70
:H Plane	Antenna Pol.	:Vertical
:829 MHz	Engineer	:GN Lin
	:LTE B5 :Tx CH Low :H Plane	:LTE B5Test Date:Tx CH LowTemp./Humi.:H PlaneAntenna Pol.



3.49

9.52

10.57

-2.50

-4.27

-5.18

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-73.27

-60.88

-60.04

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-13.00

-13.00

-13.00

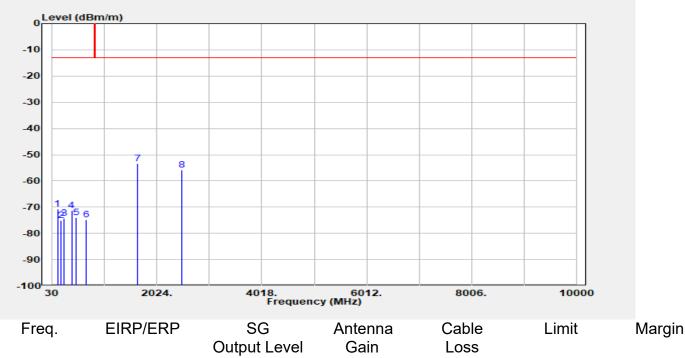
-59.29

-42.63

-41.64



Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B5	Test Date	:2022-05-09
Test Mode	:Tx CH Low	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Horizontal
Test Frequency	:829 MHz	Engineer	:GN Lin



		Output Level	Gain	Loss		
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
127.97	-70.78	-67.73	-1.88	-1.16	-13.00	-57.78
192.96	-75.12	-77.37	3.69	-1.43	-13.00	-62.12
255.04	-74.24	-76.93	4.31	-1.62	-13.00	-61.24
396.66	-71.28	-73.49	4.32	-2.10	-13.00	-58.28
480.08	-73.98	-75.75	4.21	-2.44	-13.00	-60.98
672.14	-74.77	-75.43	3.77	-3.12	-13.00	-61.77
1658.00	-53.41	-58.66	9.52	-4.27	-13.00	-40.41
2487.00	-55.79	-61.18	10.57	-5.18	-13.00	-42.79

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255.04

395.69

606.18

1673.00

2509.50

-73.12

-72.36

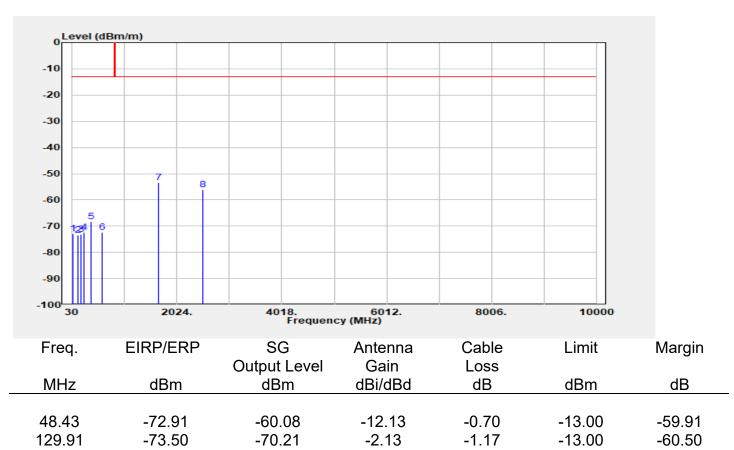
-68.34

-72.38

-53.31

-56.22

Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B5	Test Date	:2022-05-09
Test Mode	:Tx CH Mid	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Vertical
Test Frequency	:836.5 MHz	Engineer	:GN Lin



4.01

4.31

4.31

3.58

9.55

10.62

-1.43

-1.62

-2.09

-2.56

-4.29

-5.20

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-75.70

-75.05

-70.56

-73.40

-58.57

-61.64

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-13.00

-13.00

-13.00

-13.00

-13.00

-13.00

-60.12

-59.36

-55.34

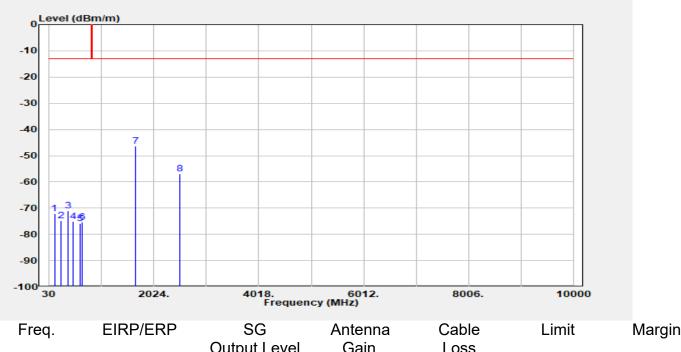
-59.38

-40.31

-43.22



Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B5	Test Date	:2022-05-09
Test Mode	:Tx CH Mid	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Horizontal
Test Frequency	:836.5 MHz	Engineer	:GN Lin



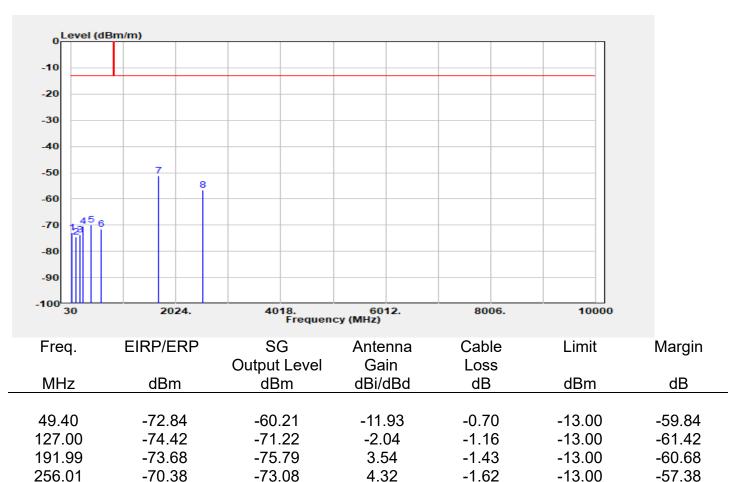
	Freq.	EIRP/ERP	SG Output Level	Gain	Loss	Limit	Margin	
_	MHz	dBm	dBm	dBi/dBd	dB	dBm	dB	
	127.97	-72.01	-68.96	-1.88	-1.16	-13.00	-59.01	
	256.01	-74.67	-77.37	4.32	-1.62	-13.00	-61.67	
	395.69	-71.00	-73.22	4.31	-2.09	-13.00	-58.00	
	480.08	-74.93	-76.70	4.21	-2.44	-13.00	-61.93	
	615.88	-75.80	-76.88	3.45	-2.38	-13.00	-62.80	
	657.59	-75.45	-76.70	3.64	-2.39	-13.00	-62.45	
	1673.00	-46.44	-51.70	9.55	-4.29	-13.00	-33.44	
	2509.50	-56.87	-62.30	10.62	-5.20	-13.00	-43.87	

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Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B5	Test Date	:2022-05-09
Test Mode	:Tx CH High	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Vertical
Test Frequency	:844 MHz	Engineer	:GN Lin



3.71

9.58

10.66

-2.11

-2.65

-4.31

-5.22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

-72.19

-72.58

-56.53

-62.19

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-69.99

-71.51

-51.27

-56.74

Taiwan I td

397.63 597.45

1688.00

2532.00

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-13.00

-13.00

-13.00

-13.00

-56.99

-58.51

-38.27

-43.74



131.85

252.13

391.81

441.28

617.82

1688.00

2532.00

-73.88

-76.39

-73.41

-71.70

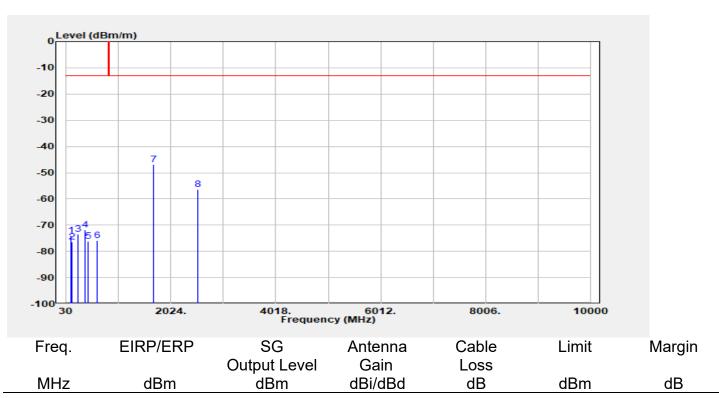
-76.17

-75.75

-46.75

-56.27

Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B5	Test Date	:2022-05-09
Test Mode	:Tx CH High	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Horizontal
Test Frequency	:844 MHz	Engineer	:GN Lin



-1.72

-2.09

4.33

4.37

4.07

3.44

9.58

10.66

-1.12

-1.20

-1.60

-2.06

-2.21

-2.33

-4.31

-5.22

-13.00

-13.00

-13.00

-13.00

-13.00

-13.00

-13.00

-13.00

-60.88

-63.39

-60.41

-58.70

-63.17

-62.75

-33.75

-43.27

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-71.05

-73.10

-76.14

-74.01

-78.03

-76.85

-52.02

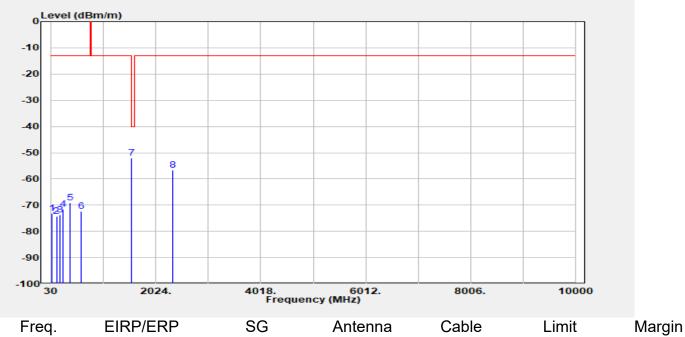
-61.72

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Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B13	Test Date	:2022-05-09
Test Mode	:Tx CH Mid	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Vertical
Test Frequency	:782 MHz	Engineer	:GN Lin



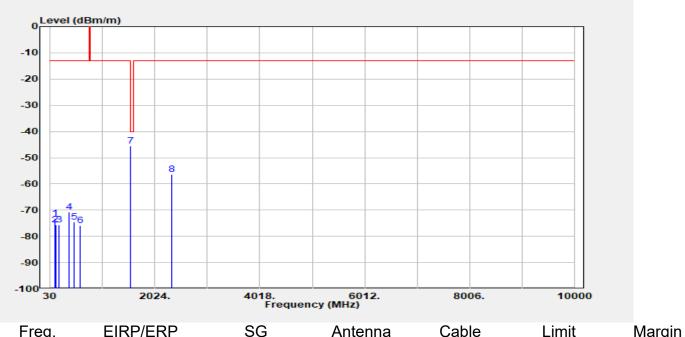
Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin	
 MHz	dBm	dBm	dBi/dBd	dB	dBm	dB	_
48.43	-73.11	-60.28	-12.13	-0.70	-13.00	-60.11	
127.97	-74.34	-71.30	-1.88	-1.16	-13.00	-61.34	
193.93	-73.71	-76.11	3.83	-1.43	-13.00	-60.71	
244.37	-71.68	-74.44	4.37	-1.60	-13.00	-58.68	
395.69	-69.13	-71.35	4.31	-2.09	-13.00	-56.13	
600.36	-72.33	-73.33	3.64	-2.64	-13.00	-59.33	
1564.00	-52.00	-56.94	9.18	-4.25	-40.00	-12.00	
2346.00	-56.69	-61.29	9.78	-5.18	-13.00	-43.69	

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Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B13	Test Date	:2022-05-09
Test Mode	:Tx CH Mid	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Horizontal
Test Frequency	:782 MHz	Engineer	:GN Lin



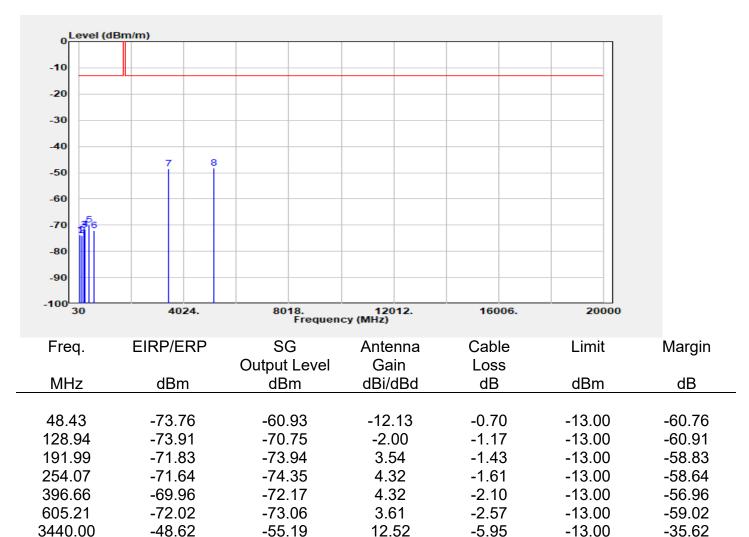
	Freq.	EIRP/ERP	SG	Antenna	Cable	Limit	Margin	
			Output Level	Gain	Loss			
	MHz	dBm	dBm	dBi/dBd	dB	dBm	dB	
-								
	116.33	-73.20	-70.49	-1.61	-1.10	-13.00	-60.20	
	127.97	-75.60	-72.56	-1.88	-1.16	-13.00	-62.60	
	196.84	-75.58	-78.21	4.06	-1.43	-13.00	-62.58	
	394.72	-70.80	-73.03	4.32	-2.08	-13.00	-57.80	
	480.08	-74.47	-76.23	4.21	-2.44	-13.00	-61.47	
	603.27	-75.77	-76.79	3.62	-2.60	-13.00	-62.77	
	1564.00	-45.48	-50.42	9.18	-4.25	-40.00	-5.48	
	2346.00	-56.32	-60.92	9.78	-5.18	-13.00	-43.32	

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Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B66	Test Date	:2022-05-09
Test Mode	:Tx CH Low	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Vertical
Test Frequency	:1720 MHz	Engineer	:GN Lin



-52.50

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-48.26

5160.00

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12.16

-7.93

-13.00

-35.26



132.82

251.16

395.69

440.31

662.44

3440.00

5160.00

-75.93

-74.85

-74.42

-72.70

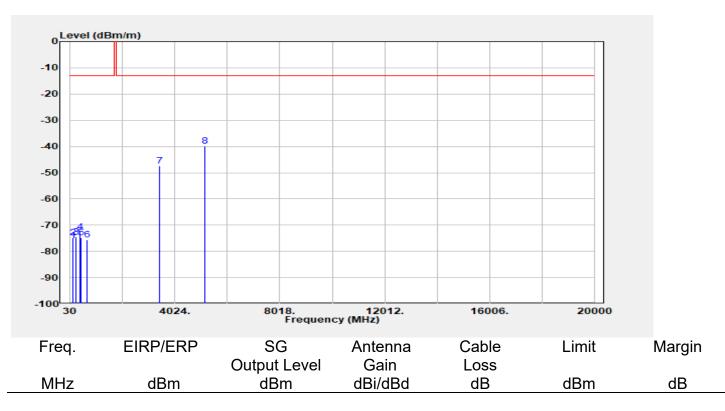
-74.67

-75.56

-47.52

-39.85

Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B66	Test Date	:2022-05-09
Test Mode	:Tx CH Low	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Horizontal
Test Frequency	:1720 MHz	Engineer	:GN Lin



-1.73

-1.97

4.33

4.31

4.06

3.70

12.52

12.16

-1.11

-1.21

-1.59

-2.09

-2.22

-2.57

-5.95

-7.93

-13.00

-13.00

-13.00

-13.00

-13.00

-13.00

-13.00

-13.00

-62.93

-61.85

-61.42

-59.70

-61.67

-62.56

-34.52

-26.85

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-73.08

-71.67

-77.16

-74.92

-76.51

-76.69

-54.09

-44.08

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3490.00

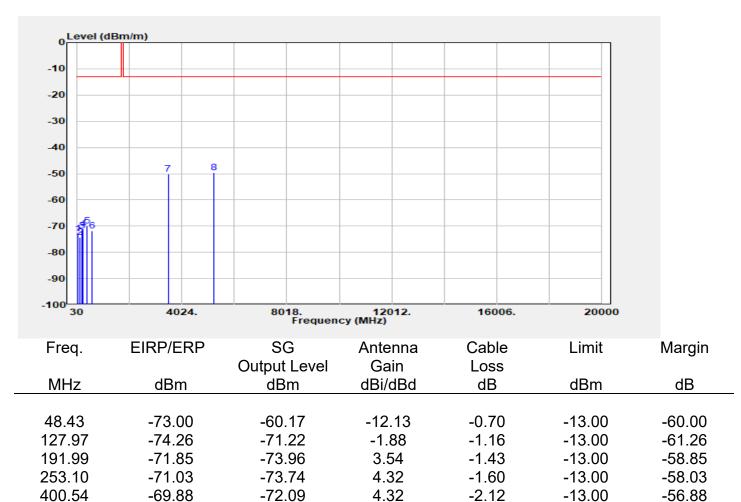
5235.00

-71.87

-50.25

-49.56

:ER/2022/30082	Test Site	:SAC 1
:LTE B66	Test Date	:2022-05-09
:Tx CH Mid	Temp./Humi.	:22.7/70
:H Plane	Antenna Pol.	:Vertical
:1745 MHz	Engineer	:GN Lin
	:Tx CH Mid :H Plane	:LTE B66Test Date:Tx CH MidTemp./Humi.:H PlaneAntenna Pol.



3.51

12.42

12.68

-2.52

-6.26

-7.99

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-72.87

-56.41

-54.25

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-13.00

-13.00

-13.00

-58.87

-37.25

-36.56



394.72

420.91

3490.00

5235.00

-73.17

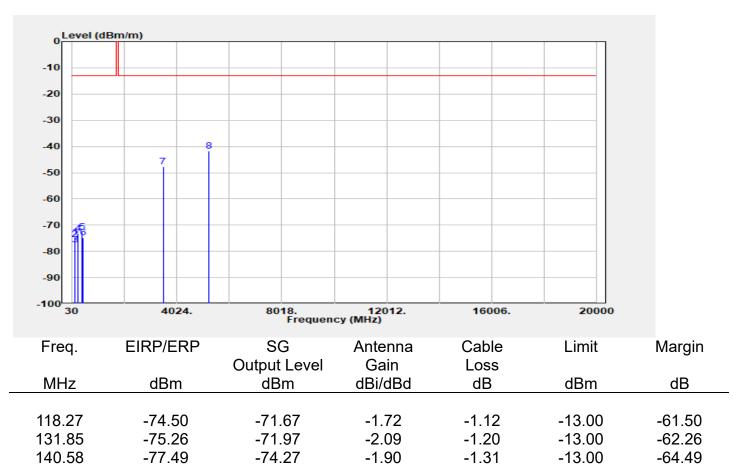
-72.54

-74.92

-47.65

-41.79

Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B66	Test Date	:2022-05-09
Test Mode	:Tx CH Mid	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Horizontal
Test Frequency	:1745 MHz	Engineer	:GN Lin
EUT Pol	:H Plane	Antenna Pol.	:Horizontal



4.33

4.32

4.21

12.42

12.68

-1.60

-2.08

-1.90

-6.26

-7.99

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

-75.90

-74.77

-77.22

-53.81

-46.48

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-13.00

-13.00

-13.00

-13.00

-13.00

-60.17

-59.54

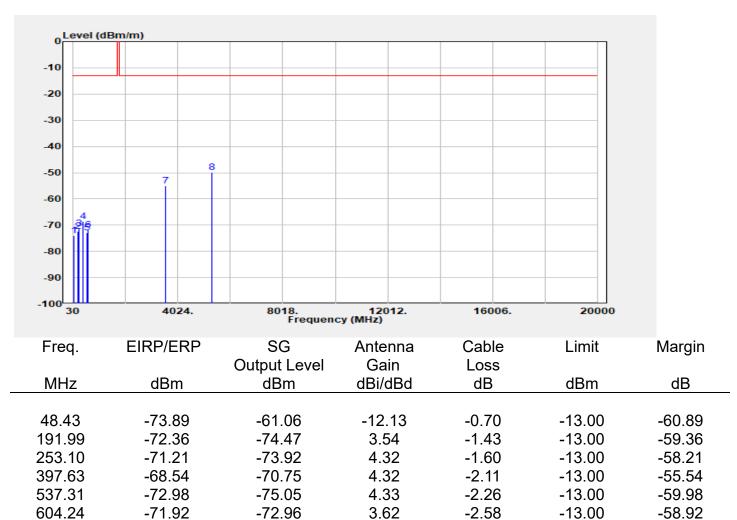
-61.92

-34.65

-28.79



Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B66	Test Date	:2022-05-09
Test Mode	:Tx CH High	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Vertical
Test Frequency	:1770 MHz	Engineer	:GN Lin



13.00

-6.48

-8.30

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

-61.00

-54.65

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-55.08

-49.95

3540.00

5310.00

-13.00

-13.00

-42.08

-36.95



3540.00

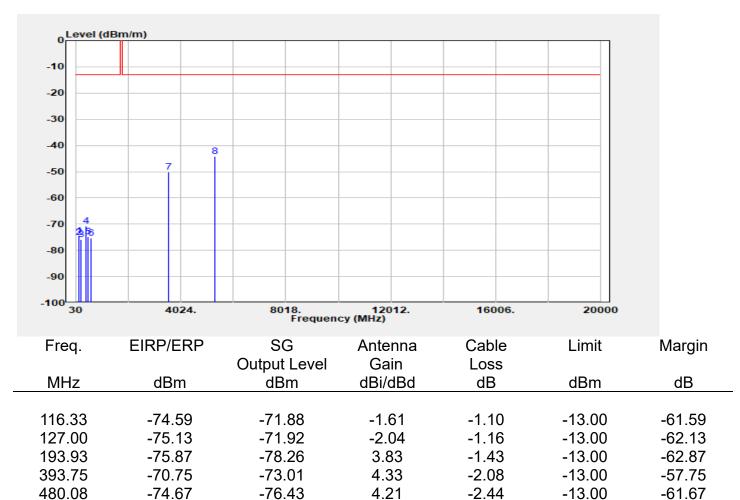
5310.00

-75.39

-50.19

-44.19

Report Number	:ER/2022/30082	Test Site	:SAC 1
Operation Mode	:LTE B66	Test Date	:2022-05-09
Test Mode	:Tx CH High	Temp./Humi.	:22.7/70
EUT Pol	:H Plane	Antenna Pol.	:Horizontal
Test Frequency	:1770 MHz	Engineer	:GN Lin



3.58

12.40

13.00

-2.56

-6.48

-8.30

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-76.42

-56.11

-48.89

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-13.00

-13.00

-13.00

-62.39

-37.19

-31.19

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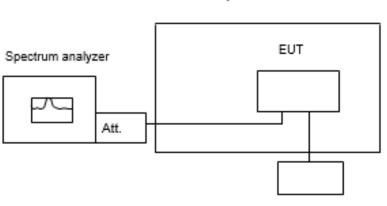
11 FREQUENCY STABILITY MEASUREMENT

11.1 Standard Applicabl

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Temperature Chamber

11.2 Test Set-up



Variable DC Power Supply

Note: Measurement setup for testing on Antenna connector

11.3 Measurement Procedure

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

Set chamber temperature to 25° C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint as declared by the manufacturer, record the maximum frequency change.

11.4 Measurement Result

Note: The power is rated 120V.

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Reference Freq.:	LTE B2 Mid Channel		1880.0000	MHz 10M QPSK CH 18900						
Power Supply Vdc	Temp. (℃)	Freq. (MHz)	(ppm)	Limit						
Freq. ERROR vs. VOLTAGE 138 25 1879.999998 -0.0011										
138	25	-0.0011								
120	25	1880.000016	0.0084							
102	25	1880.000005	0.0026	+/- 2.5 ppm						
62 (End Point)	25	1879.999993	-0.0036							
		Freq. ERROR vs.	Temp.							
120	-30	1879.999984	-0.0087							
120	-20	1879.999993	-0.0035							
120	-10	1879.999986	-0.0074							
120	0	1880.000017	0.0093							
120	10	1880.000009	0.0048	+/- 2.5 ppm						
120	20	1880.000011	0.0056							
120	30	1880.000016	0.0085							
120	40	1880.000007	0.0036							
120	50	1879.999998	-0.0010							
Deference Fred	Reference Freq · LTE B5 Mid		02/ 5000							
Reference Freq.:	C	hannel	836.5000	MHz 10M QPSK CH 20525						
Power Supply Vdc	C Temp. (℃)	hannel Freq. (MHz)	(ppm)	Limit						
· · · · · ·	Temp. (°C)		(ppm)							
· · · · · ·	Temp. (°C)	Freq. (MHz)	(ppm)							
Power Supply Vdc	Temp. (°C) Fre	Freq. (MHz) eq. ERROR vs. V(836.500007 836.499987	(ppm) DLTAGE	Limit						
Power Supply Vdc 138 120 102	Temp. (℃) Fro 25	Freq. (MHz) e q. ERROR vs. V(836.500007	(ppm) DLTAGE 0.0089							
Power Supply Vdc 138 120	Temp. (℃) Frequencies 25 25 25 25 25 25 25	Freq. (MHz) eq. ERROR vs. V(836.500007 836.499987 836.499991 836.500009	(ppm) DLTAGE 0.0089 -0.0155 -0.0111 0.0104	Limit						
Power Supply Vdc 138 120 102 62	Temp. (℃) Fr 25 25 25 25 25	Freq. (MHz) eq. ERROR vs. V(836.500007 836.499987 836.499991 836.500009 Freq. ERROR vs.	(ppm) DLTAGE 0.0089 -0.0155 -0.0111 0.0104 Temp.	Limit						
Power Supply Vdc 138 120 102 62 (End Point) 120	Temp. (°C) Fro 25 25 25 25 25 25 -30	Freq. (MHz) eq. ERROR vs. V(836.500007 836.499987 836.499991 836.500009 Freq. ERROR vs. 836.500007	(ppm) DLTAGE 0.0089 -0.0155 -0.0111 0.0104 Temp. 0.0089	Limit						
Power Supply Vdc	Temp. (°C) Fro 25 25 25 25 25 25 -30 -30 -20	Freq. (MHz) eq. ERROR vs. V(836.500007 836.499987 836.499991 836.500009 Freq. ERROR vs. 836.500007 836.499980	(ppm) DLTAGE 0.0089 -0.0155 -0.0111 0.0104 Temp. 0.0089 -0.0235	Limit						
Power Supply Vdc 138 120 102 62 (End Point) 120 120 120 120 120 120	Temp. (°C) 25 20 -10	Freq. (MHz) eq. ERROR vs. V(836.500007 836.499987 836.499991 836.500009 Freq. ERROR vs. 836.500007 836.499980 836.500002	(ppm) DLTAGE 0.0089 -0.0155 -0.0111 0.0104 Temp. 0.0089 -0.0235 0.0021	Limit						
Power Supply Vdc	Temp. (°C) 25 25 25 25 25 25 25 25 25 25 25 25 25 25 25 -30 -20 -10 0	Freq. (MHz) eq. ERROR vs. V(836.500007 836.499987 836.499991 836.500009 Freq. ERROR vs. 836.500007 836.499980 836.500002 836.499989	(ppm) DLTAGE 0.0089 -0.0155 -0.0111 0.0104 Temp. 0.0089 -0.0235 0.0021 -0.0129	Limit +/- 2.5 ppm						
Power Supply Vdc	Temp. (°C) Fro 25 25 25 25 25 25 -30 -30 -20 -10 0 10	Freq. (MHz) eq. ERROR vs. V(836.500007 836.499987 836.499991 836.500009 Freq. ERROR vs. 836.500007 836.499980 836.500002 836.499989 836.500004	(ppm) DLTAGE 0.0089 -0.0155 -0.0111 0.0104 Temp. 0.0089 -0.0235 0.0021 -0.0129 0.0051	Limit						
Power Supply Vdc	Temp. (°C) 25 25 25 25 25 25 25 25 25 25 25 25 25 25 10 20 10 20	Freq. (MHz) eq. ERROR vs. V(836.500007 836.499987 836.499991 836.500009 Freq. ERROR vs. 836.500007 836.499980 836.500002 836.499989 836.500004 836.500004	(ppm) DLTAGE 0.0089 -0.0155 -0.0111 0.0104 Temp. 0.0089 -0.0235 0.0021 -0.0129 0.0051 0.0100	Limit +/- 2.5 ppm						
Power Supply Vdc	Temp. (°C) 25 25 25 25 25 25 25 25 25 25 25 25 25 25 20 10 20 30	Freq. (MHz) eq. ERROR vs. V(836.500007 836.499987 836.499991 836.500009 Freq. ERROR vs. 836.500007 836.499980 836.500002 836.499989 836.500004 836.500008 836.500008	(ppm) DLTAGE 0.0089 -0.0155 -0.0111 0.0104 Temp. 0.0089 -0.0235 0.0021 -0.0129 0.0051 0.00100 0.0146	Limit +/- 2.5 ppm						
Power Supply Vdc	Temp. (°C) 25 25 25 25 25 25 25 25 25 25 25 25 25 25 10 20 10 20	Freq. (MHz) eq. ERROR vs. V(836.500007 836.499987 836.499991 836.500009 Freq. ERROR vs. 836.500007 836.499980 836.500002 836.499989 836.500004 836.500004	(ppm) DLTAGE 0.0089 -0.0155 -0.0111 0.0104 Temp. 0.0089 -0.0235 0.0021 -0.0129 0.0051 0.0100	Limit +/- 2.5 ppm						

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Reference Freq.: LTE B13 Mid Channel			782.0000	MHz 10M QPSK CH 23230					
Power Supply Vdc	Temp. (℃)	Freq. (MHz)	(ppm)	Limit					
Freq. ERROR vs. VOLTAGE									
138	-0.0098								
120	25	0.0158							
102	25	782.000003	0.0038	+/- 2.5 ppm					
62 (End Point)	25	781.999995	-0.0066						
	F	req. ERROR vs.	Temp.						
120	-30	781.999989	-0.0147						
120	-20	781.999982	-0.0224						
120	-10	781.999983	-0.0219						
120	0	781.999985	-0.0191						
120	10	781.999985	-0.0188	+/- 2.5 ppm					
120	20	782.000012	0.0147						
120	30	782.000006	0.0077						
120	40	782.000005	0.0067						
120	50	781.999995	-0.0063						
	00	701.77775	0.0005						
Reference Freq.:	LTE	B66 Mid nannel	1745.0000	MHz 10M QPSK CH 132322					
	LTE	B66 Mid		MHz 10M QPSK CH 132322 Limit					
Reference Freq.:	LTE Cł Temp. (°C)	B66 Mid nannel	1745.0000 (ppm)						
Reference Freq.:	LTE Cł Temp. (°C)	B66 Mid nannel Freq. (MHz)	1745.0000 (ppm)						
Reference Freq.: Power Supply Vdc	LTE Cł Temp. (°C) Fre	B66 Mid nannel Freq. (MHz) e q. ERROR vs. V 0	1745.0000 (ppm) DLTAGE						
Reference Freq.: Power Supply Vdc 138	LTE Cł Temp. (℃) Fre 25	B66 Mid nannel Freq. (MHz) e q. ERROR vs. V (1744.999995	1745.0000 (ppm) DLTAGE -0.0026						
Reference Freq.: Power Supply Vdc 138 120	LTE Cł Temp. (°C) Fre 25 25	B66 Mid nannel Freq. (MHz) eq. ERROR vs. V(1744.9999994	1745.0000 (ppm) DLTAGE -0.0026 -0.0036	Limit					
Reference Freq.: Power Supply Vdc 138 120 102 62	LTE Cr Temp. (°C) Fre 25 25 25 25 25	B66 Mid nannel Freq. (MHz) eq. ERROR vs. V(1744.999995 1744.999994 1744.999989	1745.0000 (ppm) DLTAGE -0.0026 -0.0036 -0.0061 0.0080	Limit					
Reference Freq.: Power Supply Vdc 138 120 102 62	LTE Cr Temp. (°C) Fre 25 25 25 25 25	B66 Mid hannel Freq. (MHz) eq. ERROR vs. V 1744.999995 1744.999994 1744.999989 1745.000014	1745.0000 (ppm) DLTAGE -0.0026 -0.0036 -0.0061 0.0080	Limit					
Reference Freq.: Power Supply Vdc 138 120 102 62 (End Point)	LTE Ch Temp. (℃) Fre 25 25 25 25 25	B66 Mid hannel Freq. (MHz) eq. ERROR vs. V(1744.999995 1744.999994 1744.999989 1745.000014 Freq. ERROR vs.	1745.0000 (ppm) DLTAGE -0.0026 -0.0036 -0.0061 0.0080 Temp.	Limit					
Reference Freq.: Power Supply Vdc 138 120 102 62 (End Point) 120	LTE Ch Temp. (°C) Fre 25 25 25 25 25 25 25	B66 Mid nannel Freq. (MHz) eq. ERROR vs. V(1744.999995 1744.999994 1745.000014 Treq. ERROR vs. 1744.999984	1745.0000 (ppm) DLTAGE -0.0026 -0.0036 -0.0061 0.0080 Temp. -0.0094	Limit					
Reference Freq.: Power Supply Vdc 138 120 102 62 (End Point) 120 120 120	LTE Ch Temp. (°C) Fre 25 25 25 25 25 25 25 -30 -30 -20	B66 Mid hannel Freq. (MHz) eq. ERROR vs. V(1744.999995 1744.9999989 1745.000014 Freq. ERROR vs. 1744.999984 1745.000003	1745.0000 (ppm) DLTAGE -0.0026 -0.0036 -0.0061 0.0080 Temp. -0.0094 0.0016	Limit					
Reference Freq.: Power Supply Vdc 138 120 102 62 (End Point) 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120	LTE Ch Temp. (°C) Fre 25 25 25 25 25 25 25 -30 -30 -20 -10	B66 Mid hannel Freq. (MHz) eq. ERROR vs. V(1744.999995 1744.999994 1745.000014 Freq. ERROR vs. 1744.999984 1745.000003 1744.999988	1745.0000 (ppm) DLTAGE -0.0026 -0.0036 -0.0061 0.0080 Temp. -0.0094 0.0016 -0.0070	Limit					
Reference Freq.: Power Supply Vdc 138 120 102 62 (End Point) 120 120 120 121 122 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120	LTE Ch Temp. (°C) Fre 25 25 25 25 25 25 25 7 25 7 25 7 25 7	B66 Mid hannel Freq. (MHz) eq. ERROR vs. V 1744.999995 1744.9999989 1745.000014 Freq. ERROR vs. 1744.999984 1745.000003 1744.999988 1745.000013	1745.0000 (ppm) DLTAGE -0.0026 -0.0036 -0.0061 0.0080 Temp. -0.0094 0.0016 -0.0070 0.0074	Limit +/- 2.5 ppm					
Reference Freq.: Power Supply Vdc 138 120 102 62 (End Point) 120 120 120 121 122 120	LTE Ch Temp. (°C) Fre 25 25 25 25 25 25 25 -30 -30 -20 -10 0 10	B66 Mid hannel Freq. (MHz) eq. ERROR vs. V(1744.999995 1744.9999984 1745.000014 Freq. ERROR vs. 1744.999984 1745.000003 1744.999988 1745.000013 1744.999990	1745.0000 (ppm) DLTAGE -0.0026 -0.0036 -0.0061 0.0080 Temp. -0.0094 0.0016 -0.0070 0.0074 -0.0060	Limit +/- 2.5 ppm					
Reference Freq.: Power Supply Vdc 138 120 102 62 (End Point) 120	LTE Ch Temp. (°C) Fre 25 25 25 25 25 25 25 25 25 25 25 25 25	B66 Mid hannel Freq. (MHz) eq. ERROR vs. V(1744.999995 1744.999994 1745.000014 Freq. ERROR vs. 1744.999984 1745.000003 1744.999988 1745.000013 1744.999990 1744.999990	1745.0000 (ppm) DLTAGE -0.0026 -0.0036 -0.0061 0.0080 Temp. -0.0094 0.0016 -0.0070 0.0074 -0.0060 -0.0043	Limit +/- 2.5 ppm					

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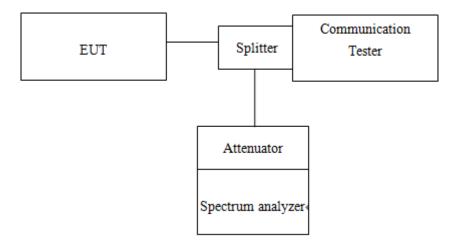


12 PEAK TO AVERAGE RATIO

12.1 Standard Applicable

The peak-to-average ratio (PAR) of the transmission may not exceed 13dB.

12.2 Test SET-UP



12.3 Measurement Procedure

- 1. KDB 971168 D01 is employed as the following procedure is proper adjusted accordingly:
- 2. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth; & internal =1ms
- 3. Set the number of counts to a value that stabilizes the measured CCDF curve.

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12.4 **Measurement Result**

LTE BAND 2										
Channel bandwidth: 1.4MHz				Cha	annel band	width: 3MF	lz			
Freq.	СН	PAPR	(dB)	Freq.	СН	PAPR (dB)				
(MHz)	Сп	256QAM	Limit	(MHz)	СП	256QAM	Limit			
1850.7	18607	6.72	13	1851.5	18615	6.98	13			
1880.0	18900	6.78	13	1880.0	18900	6.85	13			
1909.3	19193	7.01	13	1908.5	19185	6.62	13			

LTE BAND 2										
Channel bandwidth: 5MHz				Channel bandwidth: 10MHz						
Freq.	СН	CH PAPR (dB) Freq. CH		PAPR	PAPR (dB)					
(MHz)	СП	256QAM	Limit	(MHz)	СП	256QAM	Limit			
1852.5	18625	7.15	13	1855.0	18650	6.71	13			
1880.0	18900	6.57	13	1880.0	18900	6.47	13			
1907.5	19175	6.91	13	1905.0	19150	7.04	13			

	LTE BAND 2											
Cha	nnel band	width: 15M	Hz	Cha	nnel band	width: 20M	Hz					
Freq.	СН	PAPR	(dB)	Freq.	СН	PAPR	(dB)					
(MHz)	СП	256QAM	Limit	(MHz)	СП	256QAM	Limit					
1857.5	18675	6.82	13	1860.0	18700	6.87	13					
1880.0	18900	6.59	13	1880.0	18900	6.66	13					
1902.5	19125	6.77	13	1900.0	19100	6.56	13					
			LTE B	AND 5								
Char	nnel bandv	width: 1.4M	Hz	Cha	annel band	width: 3MF	łz					
Freq.	СН	PAPR	(dB)	Freq.	СН	PAPR	(dB)					
(MHz)	CIT	256QAM	Limit	(MHz)	CIT	256QAM	Limit					
824.7	20407	6.79	13	825.5	20415	7.01	13					
836.5	20525	6.64	13	836.5	20525	6.54	13					
848.3	20643	6.68	13	847.5	20635	6.67	13					

	LTE BAND 5										
Cha	Channel bandwidth: 5MHz				Channel bandwidth: 10MHz						
Freq.	СН	PAPR	(dB)	Freq.	СН	PAPR	(dB)				
(MHz)	СП	256QAM	Limit	(MHz)	СП	256QAM	Limit				
826.5	20425	6.38	13	829.0	20450	6.44	13				
836.5	20525	6.74	13	836.5	20525	6.68	13				
846.5	20625	6.59	13	844.0	20600	6.57	13				

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	LTE BAND 13										
Cha	annel band	width: 5MF	Ηz	Cha	nnel band	width: 10M	Hz				
Freq.	СН	PAPR	(dB)	Freq.	СН	PAPR	(dB)				
(MHz)	CIT	256QAM	Limit	(MHz)	CIT	256QAM	Limit				
779.5	23205	6.43	13								
782.0	23230	6.81	13	782.0	23230	6.62	13				
784.5	23255	6.50	13								
			LTE B	and 66							
Char	nnel bandv	width: 1.4M	Hz	Cha	annel band	lwidth: 3MF	łz				
Freq.	СН	PAPR	(dB)	Freq.	СН	PAPR	(dB)				
(MHz)	GI	256QAM	Limit	(MHz)	CIT	256QAM	Limit				
1710.7	131979	6.90	13	1711.5	131987	6.93	13				
1745.0	132322	6.81	13	1745.0	132322	6.82	13				
1779.3	132665	6.93	13	1778.5	132657	7.02	13				

LTE BAND 66							
Channel bandwidth: 5MHz				Channel bandwidth: 10MHz			
Freq.	CH PAPR		(dB)	Freq.	СН	PAPR	(dB)
(MHz)	Сп	256QAM	Limit	(MHz)	СП	256QAM	Limit
1712.5	131997	6.87	13	1715.0	132022	6.80	13
1745.0	132322	6.68	13	1745.0	132322	6.45	13
1777.5	132647	6.84	13	1775.0	132622	6.73	13

LTE BAND 66							
Channel bandwidth: 15MHz			Channel bandwidth: 20MHz				
Freq. (MHz)	CH PAPR (dl		(dB)	Freq.	СН	PAPR	(dB)
(MHz)	Сп	256QAM	Limit	(MHz)	СП	256QAM	Limit
1717.5	132047	6.83	13	1720.0	132072	6.91	13
1745.0	132322	6.69	13	1745.0	132322	6.53	13
1772.5	132597	6.75	13	1770.0	132572	6.79	13

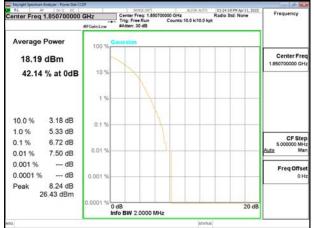
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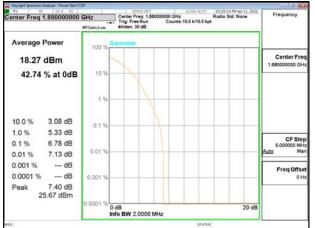
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Band2_1.4MHz_256QAM_RB6_0_CH18607



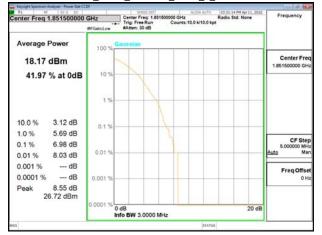
Band2 1.4MHz 256QAM RB6 0 CH18900



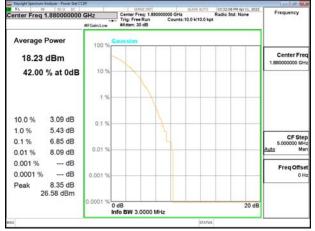
Band2_1.4MHz_256QAM_RB6_0_CH19193

Keysight Spectrum Analyser - Power Stat CCDF AL Nº 190 DC enter Freq 1.909300000 GHz #FGain:Lo	SHOE SHIT SUBJECT STATUS AUTO (0):26:28 PM Apr 11, 202 Center Freg: 1: 505300000 GHz Radio Std: None Trig: Free Run Counts: 10.0 k/10.0 kpt w #Atten: 30 dB	Frequency
Average Power 100 18.12 dBm 43.33 % at 0dB 10	% Gaussian	Center Fred 1.909300000 GH
1 10.0 % 3.07 dB 0.1	%	-
1.0% 5.31 dB 0.1% 7.01 dB 0.01% 7.59 dB 0.01 0.001% dB	56	CF Ster 5.000000 MH Auto Ma
0.0001 % dB 0.001 Peak 7.77 dB 25.89 dBm		Freq Offse 0 H
0.0001	% 0 dB 20 dB 20 dB	3

Band2_3MHz_256QAM_RB15_0_CH18615



Band2 3MHz 256QAM RB15 0 CH18900



Band2_3MHz_256QAM_RB15_0_CH19185



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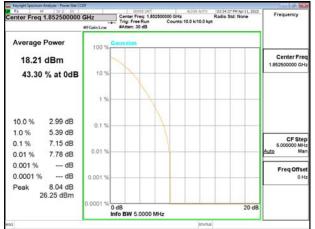
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Band2_5MHz_256QAM_RB25_0_CH18625



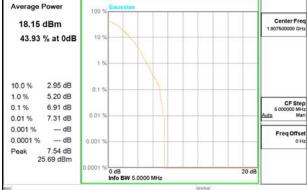
Band2 5MHz 256QAM RB25 0 CH18900 enter Freq 1.880000000 GHz Center Freq: 1.880000000 GHz Trig: Free Run Counts: 10.0 k/10.0 kp Frequenc Average Power 100 Center Fre 18.29 dBm 10 42.54 % at 0dB 1 10.0 % 3.10 dB 0.1 1.0 % 5.31 dB CF Step 6.57 dB 0.1 % 0.01 0.01 % 7.92 dB 0.001 % --- dB Freq Offse

Peak 8.03 dB 26.32 dBm 0 dB Info BW 5.0000 MHz Band2_5MHz_256QAM_RB25_0_CH19175 03:36:29 PH Apr 1 Radio Std: None Center Freq: 1.907500000 GHz Trig: Free Run Counts: 10.0 k/10.0 kpt enter Freg 1.907500000 GHz

0.0001 %

---- dB

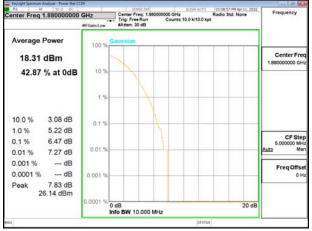
0.001



Band2_10MHz_256QAM_RB50_0_CH18650



Band2 10MHz 256QAM RB50 0 CH18900



Band2_10MHz_256QAM_RB50_0_CH19150



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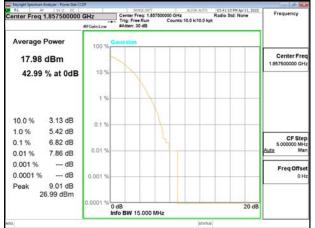
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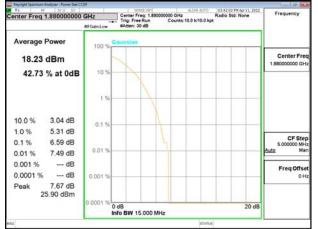
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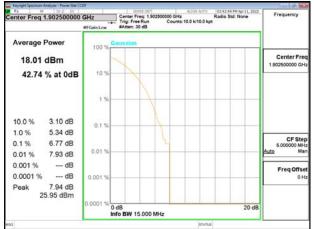
Band2_15MHz_256QAM_RB75_0_CH18675



Band2 15MHz 256QAM RB75 0 CH18900

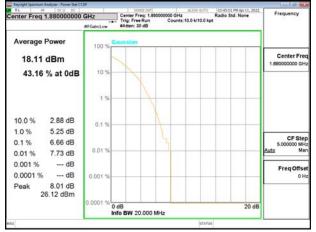


Band2_15MHz_256QAM_RB75_0_CH19125

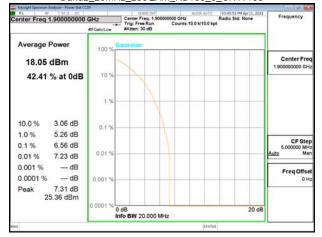


Band2_20MHz_256QAM_RB100_0_CH18700 Center Freq: 1.86000000 GHz Radio Std: Non-Trig: Free Run Counts: 10.0 k/10.0 kpt ter Freg 1.86000000 GHz Frequency Average Power 100 1 Center Fred 18.10 dBm 10 41.10 % at 0dB 10.0 % 3 17 dB 0.1 9 10% 5 53 dB CF Step 5.000000 MHz 01% 6.87 dB 0.01 M 0.01 % 7.85 dB 0.001 % --- dB Freq Offse 0.0001 % ---- dB 0.001 0H 8.48 dB Peak 26.58 dBm 0 dB Info BW 20.000 MHz 20 dF

Band2 20MHz 256QAM RB100 0 CH18900







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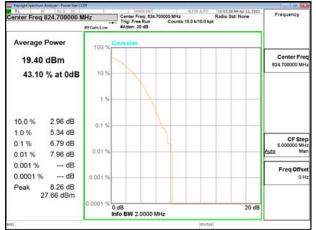
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Band5_1.4MHz_256QAM_RB6_0_CH20407



Band5 1.4MHz 256QAM RB6 0 CH20525 enter Freq 836.500000 MHz Center Freq: 836.500000 MHz Trig: Free Run Counts: 10.0 k/10.0 kp Frequenc Average Power 100 Center Fre 19.35 dBm 10 43.26 % at 0dB 1 10.0 % 2.99 dB 0.1 1.0 % 5.30 dB CF Step 6.64 dB 0.1 % 0.01 0.01 % 8.05 dB 0.001 % --- dB Freq Offse 0.0001 % ---- dB 0.001 Peak 8.09 dB 27.44 dBm 0 dB Info BW 2.0000 MHz

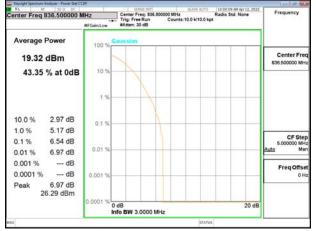
Band5_1.4MHz_256QAM_RB6_0_CH20643

AL NF SUD DC Center Freq 848.300000 MHz #FGeincLow	Center Free; 848.300000 MHz Ratio Auto 116:05:08 MA 4cr12, 2022 Trig: Free Sub Counts: 10.0 k/10.0 kpt #Atten: 30 dB	Frequency
Average Power 100 %		Center Free 848.300000 MHz
42.94 % at 0dB 10 %		
10.0 % 3.02 dB 0.1 %		
0.1 % 6.68 dB 0.01 % 7.64 dB 0.01 %		CF Step 5.000000 MH: Auto Mar
0.001 % dB 0.0001 % dB 0.001 % Peak 7.80 dB		Freq Offset 0 Ha
27.05 dBm 0.0001 %	0 dB 20 dB 20 dB	

Band5_3MHz_256QAM_RB15_0_CH20415



Band5 3MHz 256QAM RB15 0 CH20525







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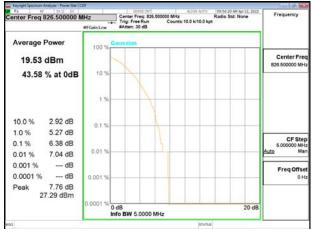
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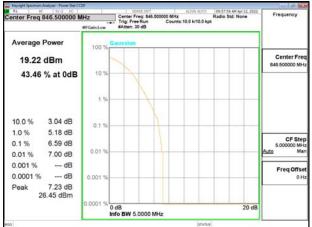
Band5_5MHz_256QAM_RB25_0_CH20425



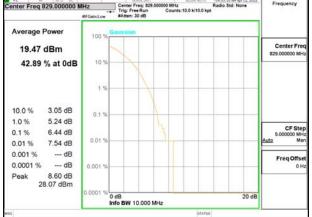
enter Freq 836.500000 MHz Center Freq: 836.500000 MHz Trig: Free Run Counts: 10.0 k/10.0 kp Frequenc Average Power 100 Center Fre 19.44 dBm 10 43.25 % at 0dB 1 10.0 % 3.02 dB 0.1 1.0 % 5.19 dB CF Step 6.74 dB 0.1 % 0.01 0.01 % 7.31 dB 0.001 % --- dB Freq Offse 0.0001 % ---- dB 0.001 Peak 7.55 dB 26.99 dBm 0 dB Info BW 5.0000 MHz

Band5 5MHz 256QAM RB25 0 CH20525

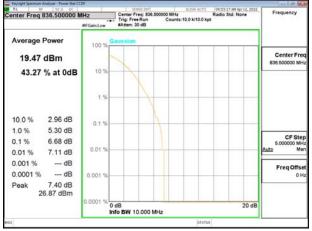
Band5_5MHz_256QAM_RB25_0_CH20625



Band5_10MHz_256QAM_RB50_0_CH20450 Center Freq: 829,000000 MHz Radio Std: None Trig: Free Run Counts: 10.0 k/10.0 kpt



Band5 10MHz 256QAM RB50 0 CH20525



Band5_10MHz_256QAM_RB50_0_CH20600



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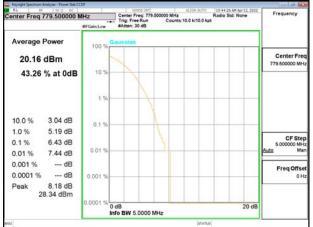
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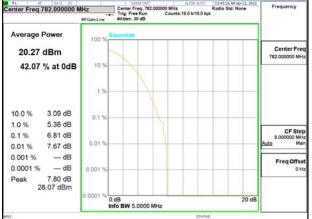
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Band13_5MHz_256QAM_RB25_0_CH23205



Band13 5MHz 256QAM RB25 0 CH23230

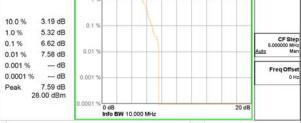


Band13_5MHz_256QAM_RB25_0_CH23255

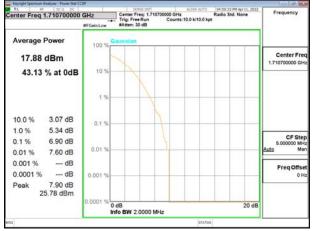
RL RF 38 9 DC Center Freq 784.500000 MHz #FGein.Low	Strice and Center Freq: 784,500000 MHz Radio Std: None Trig: Free Run Counts: 10.0 k/10.0 kpt #Atten: 30 dB	Frequency
Average Power 100 9 20.16 dBm 43.50 % at 0dB 10 9		Center Free 784.500000 MHz
10.0 % 2.99 dB		
0.1 % 5.23 dB 0.1 % 6.50 dB 0.01 % 7.75 dB 0.01 %		CF Step 5.000000 MH Auto Mar
0.001 % dB 0.0001 % dB 0.001 % Peak 7.95 dB 28.11 dBm	No	Freq Offse 0 H
0.0001 *	0 dB 20 dB 20 dB	

Center Freq: 782.000000 MHz Radio Std: None Trig: Free Run Counts: 10.0 k/10.0 kpt ter Freq 782.000000 MHz Frequency Average Power 100 1 Center Fred 20.41 dBm 782.000000 10 41.78 % at 0dB 3 19 dB

Band13_10MHz_256QAM_RB50_0_CH23230



Band66 1.4MHz 256QAM RB6 0 CH131979







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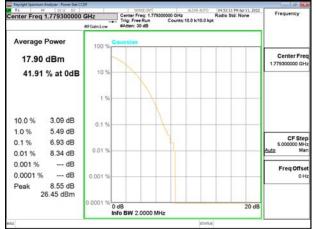
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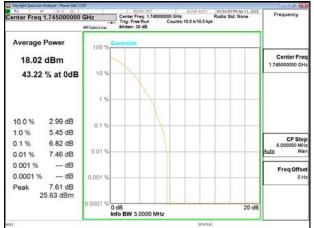
Band66_1.4MHz_256QAM_RB6_0_CH132665



Band66 3MHz 256QAM RB15 0 CH131987

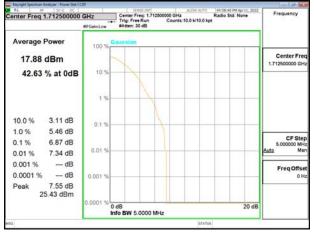
enter Freq 1.711500000 GHz Center Freq: 1.711500000 GHz Trig: Free Run Counts: 10.0 k/10.0 kp Frequenc Average Power 100 Center Fre 1.711500000 GH 17.92 dBm 10 42.76 % at 0dB 1 10.0 % 2.99 dB 0.1 1.0 % 5.49 dB CF Step 6.93 dB 0.1 % 0.01 0.01 % 7.68 dB 0.001 % --- dB Freq Offse 0.0001 % ---- dB 0.001 Peak 7.88 dB 25.80 dBm 0 dB Info BW 3.0000 MHz

Band66_3MHz_256QAM_RB15_0_CH132322

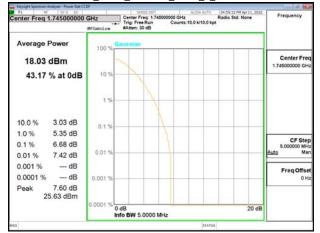


Band66_3MHz_256QAM_RB15_0_CH132657 Center Freq: 1.778500000 GHz Radio Std: Non-Trig: Free Run Counts: 10.0 k/10.0 kpt ter Freg 1.778500000 GHz Frequency Average Power 100 1 Center Fred 17.98 dBm 1.778500000 G 10 43.15 % at 0dB 10.0 % 2 97 dB 0.1 9 10% 5.32 dB CF Step 5.000000 MHz 01% 7.02 dB M 0.01 0.01 % 7.61 dB 0.001 % --- dB Freq Offse 0.0001 % ---- dB 0.001 0H 7.74 dB Peak 25.72 dBm 0 dB Info BW 3.0000 MHz 20 dF

Band66 5MHz 256QAM RB25 0 CH131997



Band66_5MHz_256QAM_RB25_0_CH132322



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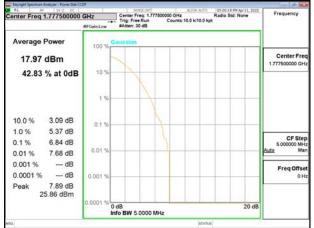
t (886-2) 2299-3279

f (886-2) 2298-0488

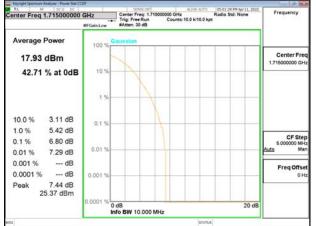
Report No.: ER/2022/30082 Page: 132 of 133



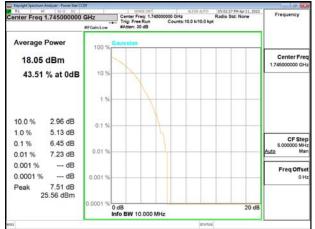
Band66_5MHz_256QAM_RB25_0_CH132647



Band66 10MHz 256QAM RB50 0 CH132022

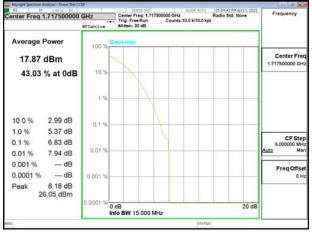


Band66_10MHz_256QAM_RB50_0_CH132322



Band66_10MHz_256QAM_RB50_0_CH132622 Center Freq: 1.775000000 GHz Radio Std: Non-Trig: Free Run Counts: 10.0 k/10.0 kpt ter Freg 1.775000000 GHz Frequency Average Power 100 1 Center Fred 17.99 dBm 1.775000000 G 10 42.24 % at 0dB 10.0 % 3 13 dB 0.1 9 10% 5 39 dB CF Step 5.000000 MHz 01% 6.73 dB M 0.01 0.01 % 7.63 dB 0.001 % --- dB Freq Offse 0.0001 % ---- dB 0.001 0H 7.70 dB Peak 25.69 dBm 0 dB Info BW 10.000 MHz 20 dF

Band66 15MHz 256QAM RB75 0 CH132047







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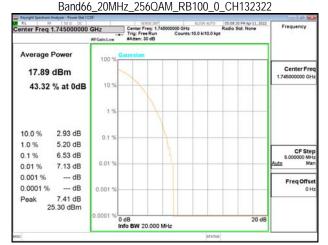


Band66_15MHz_256QAM_RB75_0_CH132597

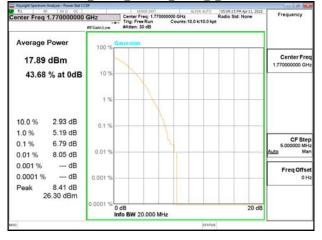


Band66_20MHz_256QAM_RB100_0_CH132072





Band66_20MHz_256QAM_RB100_0_CH132572



~ End of Report ~

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