





TEST REPORT No. I20Z60764-WMD04

for

TCL Communication Ltd.

5G NR/ LTE/WCDMA/GSM Mobile Phone

Model Name: T790W,T790Z

FCC ID: 2ACCJN039

with

Hardware Version: 05

Software Version: 6BSEE000

Issued Date: 2020-07-03

Note:

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Test Laboratory:

CTTL-Telecommunication Technology Labs, CAICT

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I20Z60764-WMD04	Rev.0	1st edition	2020-07-03

Note: the latest revision of the test report supersedes all previous version.





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1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2005 accredited test laboratory under NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0, and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (CN0066). The detail accreditation scope can be found on NVLAP website.

1.2. Testing Location

Location 1: CTTL(huayuan North Road)

Address:

No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191





1.3. Testing Environment

Normal Temperature:	15-35°C
Relative Humidity:	20-80%

1.4. Project data

Testing Start Date:	2020-05-12
Testing End Date:	2020-06-30

1.5. Signature

Dong Yuan (Prepared this test report)

教主反

Zhang Yufeng (Reviewed this test report)

《装融

Zhao Hui Lin Deputy Director of the laboratory (Approved this test report)





2. Client Information

2.1. Applicant Information

Company Name:	TCL Communication Ltd.	
Address /Post:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science	
	Park, Shatin, NT, Hong Kong	
Contact:	Gong Zhizhou	
Email:	zhizhou.gong@tcl.com	
Telephone:	0086-755-36611722	
Fax:	0086-755-36612000-81722	

2.2. Manufacturer Information

Company Name:	TCL Communication Ltd.	
Address /Post:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science	
Audress / Fusi.	Park, Shatin, NT, Hong Kong	
Contact:	Gong Zhizhou	
Email:	zhizhou.gong@tcl.com	
Telephone:	0086-755-36611722	
Fax:	0086-755-36612000-81722	





3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	5G NR/ LTE/WCDMA/GSM Mobile Phone
Model	T790W,T790Z
FCC ID	2ACCJN039
Frequency	CDMA800MHz(BC0);CDMA1900MHz(BC1)
Antenna	Embedded
Extreme vol. Limits	3.5VDC to 4.4VDC (nominal: 3.85VDC)
Extreme temp. Tolerance	-10°C to +55°C

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of CTTL.

3.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version	Date of receipt
UT27a	015710000200300	05	6BSEE000	2020-05-12
*EUT ID:	is used to identify the	test sample in th	ne lab internally.	

3.3. Internal Identification of AE used during the test

AE ID*	Description	
AE1	Battery	
AE1		
Model		TLp043E1
Manufac	turer	BYD
Capacita	nce	4360mAh
A*AE ID: is	used to identify the t	est sample in the lab internally.





4. <u>Reference Documents</u>

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 24	PERSONAL COMMUNICATIONS SERVICES	10-1-19
		Edition
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-19
		Edition
ANSI/TIA-603-E	Land Mobile FM or PM Communications Equipment	2016
	Measurement and Performance Standards	
ANSI C63.26	American National Standard for Compliance Testing of	2015
	Transmitters Used in Licensed Radio Services	
KDB 971168 D01	Measurement Guidance for Certification of Licensed Digital	v03r01
	Transmitters	





5. Laboratory Environment

Shielding chamber did not exceed following limits along the RF testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. =20 %, Max. = 80 %





6. Summary Of Test Result

ltems	List	Clause in FCC rules	Verdict
1	Output Power	22.913(a)/24.232(c)	Р
2	Frequency Stability	2.1055/22.355/24.235	Р
3	Occupied Bandwidth	2.1049(h)(i)	Р
4	Emission Bandwidth	22.917(b)/24.238(b)	Р
5	Band Edge Compliance	22.917(b)/24.238(b)	Р
6	Conducted Spurious Emission	2.1057/22.917/24.238	Р
7	Peak to Average Power Ratio	24.232(d)	Р

Terms used in Verdict column

Р	Pass. The EUT complies with the essential requirements in the standard.
NP	Not Performed. The test was not performed by CTTL.
NA	Not Applicable. The test was not applicable.
BR	Re-use test data from basic model report.
F	Fail. The EUT does not comply with the essential requirements in the
	standard.

Explanation of worst-case configuration

The worst-case scenario for all measurements is based on the conducted output power measurement investigation results unless otherwise stated. The test results shown in the following sections represent the worst case emission.





7. Test Equipments Utilized

NO.	NAME	TYPE	SERIES	PRODUCE	CALIBRATIO	CAL DUE
NO.	NAME	TTPE	NUMBER	R	N INTERVAL	DATE
1	Spectrum Analyzer	FSV30	101576	R&S	1 Year	2021-05-07
2	Wireless Communications Test	8960(E5515C)	MY4836095	Agilent	2 Years	2020-08-29
	Set	6900(E5515C)	0	Aglient	2 fears	2020-00-29
3	Climatic chamber	SH-242	93008556	ESPEC	3 Years	2020-12-21





Annex A: Measurement Results

A.1 Output Power

A.1.1 Summary

During the process of testing, the EUT was controlled via Agilent Wireless Communications Test Set (8960(E5515C)) to ensure max power transmission and proper modulation.

This result is max output power conducted measurements for the EUT.

In all cases, output power is within the specified limits.

A.1.2 Method of Measurements

The EUT was set up for the max output power with pseudo random data modulation.

The power was measured with Rhode & Schwarz Spectrum Analyzer FSV30 (average).

These measurements were done at 3 frequencies, 1851.25 MHz, 1880.0 MHz and 1908.75 MHz for PCS CDMA band, 824.7MHz, 836.52MHz and 848.31MHz for CDMA 800 band (bottom, middle and top of operational frequency range) for 1x RTT and 1xEVDO.

a) Set span to at least 1.5 times the OBW.

b) Set RBW = 1-5% of the OBW, not to exceed 1 MHz.

c) Set VBW \geq 3 × RBW.

- d) Set number of points in sweep \geq 2 × span / RBW.
- e) Sweep time = auto-couple.
- f) Detector = RMS (power averaging).

g) If the EUT can be configured to transmit continuously (i.e., burst duty cycle \geq 98%), then set the trigger to free run.

h) If the EUT cannot be configured to transmit continuously (i.e., burst duty cycle < 98 %), then use a sweep trigger with the level set to enable triggering only on full power bursts and configure the EUT to transmit at full power for the entire duration of each sweep. Ensure that the sweep time is less than or equal to the transmission burst duration.

i) Trace average at least 100 traces in power averaging (i.e., RMS) mode.

j) Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function, with the band limits set equal to the OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.





A1.3 Measurement results CDMA 800 Measurement result

		Channel power(dBm)			
Channel	Frequency(MHz)	1x RTT	1xEVDO		
			Rel0	RevA	
1013	824.70	24.67	24.80	24.95	
384	836.52	24.70	24.81	24.79	
777	848.31	24.66	24.78	24.82	

CDMA 1900

Measurement result

		Channel power(dBm)			
Channel	Frequency(MHz)	1x RTT	1xEVDO		
			Rel0	RevA	
25	1851.25	24.68	23.83	23.97	
600	1880.00	24.74	23.89	24.01	
1175	1908.75	24.71	23.93	24.05	





A.2 Frequency Stability

A.2.1 Method of Measurement

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a "call mode". This is accomplished with the use of Agilent 8960(E5515C) Wireless Communications Test Set.

- 1. Measure the carrier frequency at room temperature.
- 2. Subject the EUT to overnight soak at -30 $^\circ$ C.
- 3. With the EUT, powered via nominal voltage, connected to the 8960(E5515C) and in a simulated call on channel 384 for CDMA 800 and channel 600 for 1900 measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
- 4. Repeat the above measurements at 10[°]C increments from -30[°]C to +50[°]C. Allow at least 1 1/2 hours at each temperature, unpowered, before making measurements.
- 5. Remeasure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments remeasuring carrier frequency at each voltage. Pause at nominal voltage for 1 1/2 hours unpowered, to allow any self-heating to stabilize, before continuing.
- 6. Subject the EUT to overnight soak at +50 $^{\circ}$ C.
- With the EUT, powered via nominal voltage, connected to the 8960(E5515C) and in a simulated call on the centre channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
- 8. Repeat the above measurements at 10°C decrements from +50°C to -30°C. Allow at least 1 1/2 hours at each temperature, unpowered, before making measurements.
- 9. At all temperature levels hold the temperature to +/- 0.5° during the measurement procedure.

A.2.2 Measurement Limit

A.2.2.1 For Hand carried battery powered equipment

According to the JTC standard the frequency stability of the carrier shall be accurate to within 0.1 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 24.235, Frequency Stability. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. As this transceiver is considered "Hand carried, battery powered equipment" Section 2.1055(d)(2) applies. This requires that the lower voltage for frequency stability testing be specified by the manufacturer. This transceiver is specified to operate with an input voltage of between 3.5VDC and 4.4VDC, with a nominal voltage of 3.85VDC. Operation above or below these voltage limits is prohibited by transceiver software in order to prevent improper operation as well as to protect components from overstress.

For CDMA800, according to section. 22.355, frequency tolerance cab be maintained within 2.5ppm.





A.2.2.2 For equipment powered by primary supply voltage

According to the JTC standard the frequency stability of the carrier shall be accurate to within 0.1 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 24.235, Frequency Stability. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. For this EUT section 2.1055(d)(1) applies. This requires varying primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

For CDMA800, according to section. 22.355, frequency tolerance cab be maintained within 2.5ppm.





A.2.3 Measurement results

CDMA 800

Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F∟(MHz)	Fн(MHz)	Offset(Hz)	Fraguanay arrar(ppm)
20				Unset(HZ)	Frequency error(ppm)
50				-6.31	0.0075
40				-8.13	0.0097
30				-4.52	0.0054
10	3.85	824.003	848.999	-8.45	0.0101
0				-4.41	0.0053
-10				-10.77	0.0129
-20				-7.47	0.0089
-30				-7.36	0.0088

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F∟(MHz)	Fн(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	004 000	040.000	-9.96	0.0119
4.4	20	824.003	848.999	-8.33	0.0100

CDMA 1900

Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F∟(MHz)	Fн(MHz)	Offect/Uz)	Fraguanov arrar(nom)
20				Offset(Hz)	Frequency error(ppm)
50				21.51	0.0114
40				21.96	0.0117
30				20.66	0.0110
10	3.85	1850.559	1909.447	18.22	0.0097
0				20.23	0.0108
-10				20.38	0.0108
-20				20.11	0.0107
-30				22.20	0.0118

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	F∟(MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	1950 550	1000 447	22.91	0.0122
4.4	20	1850.559	1909.447	18.58	0.0099





A.3 Occupied Bandwidth

A.3.1 Occupied Bandwidth Results

Occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies of the US Cellular/PCS frequency bands. The table below lists the measured 99% BW. Spectrum analyzer plots are included on the following pages.

The measurement method is from ANSI C63.26:

a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts.

b) The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set \ge 3 × RBW.

c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation.

d) Set the detection mode to peak, and the trace mode to max-hold.

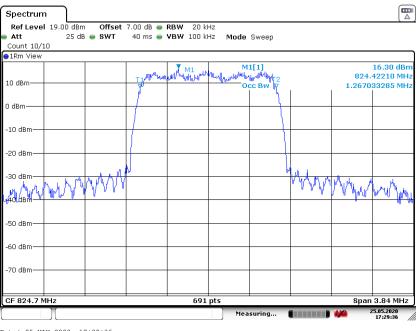
CDMA	800	(99%	BW)

Channel	Occupied Bandwidth (99% BW)(MHz)
1013	1.267
384	1.267
777	1.267



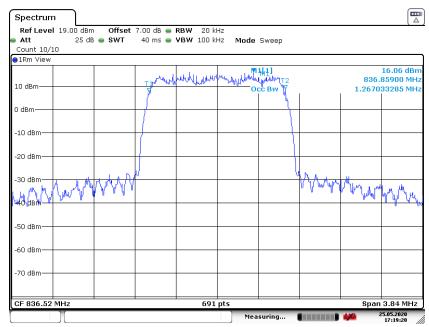


CDMA 800 Channel 1013-Occupied Bandwidth (99% BW)



Date: 25.MAY.2020 17:29:36

Channel 384-Occupied Bandwidth (99% BW)

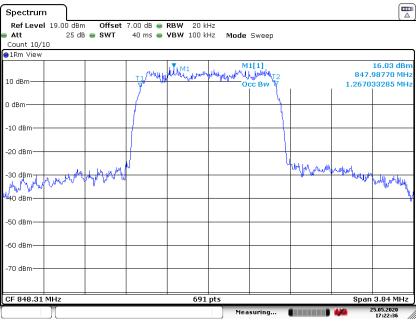


Date: 25.MAY.2020 17:19:20





Channel 777-Occupied Bandwidth (99% BW)



Date: 25.MAY.2020 17:22:36



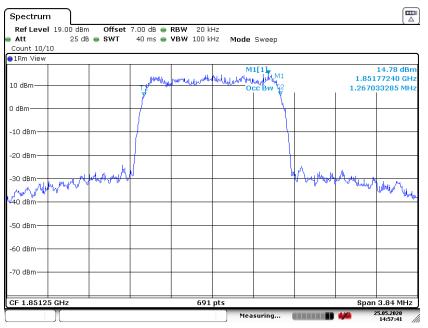


CDMA 1900 (99% BW)

Channel	Occupied Bandwidth (99% BW)(MHz)
25	1.267
600	1.273
1175	1.273

CDMA 1900

Channel 25-Occupied Bandwidth (99% BW)

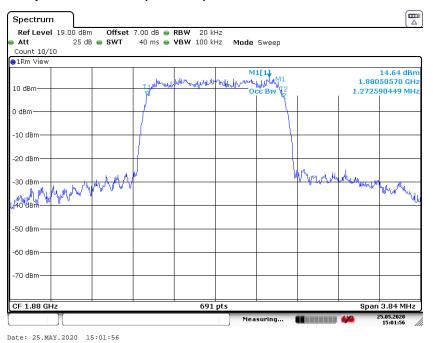


Date: 25.MAY.2020 14:57:41

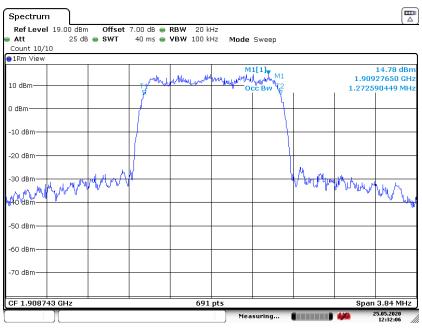




Channel 600-Occupied Bandwidth (99% BW)



Channel 1175-Occupied Bandwidth (99% BW)



Date: 25.MAY.2020 12:32:06





A.4 Emission Bandwidth

A.4.1Emission Bandwidth Results

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.

The measurement method is from ANSI C63.26:

a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts.

b) The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set \ge 3 × RBW.

c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation.

d) Set the detection mode to peak, and the trace mode to max-hold.



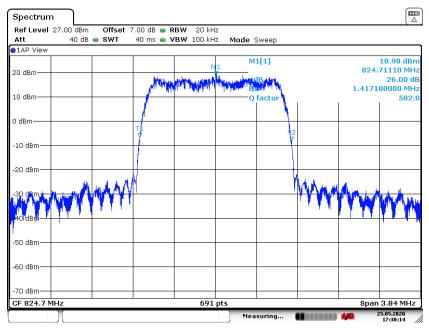


CDMA 800 (100% BW)

Channel	Emission Bandwidth (-26dBc BW)(MHz)
1013	1.417
384	1.417
777	1.423

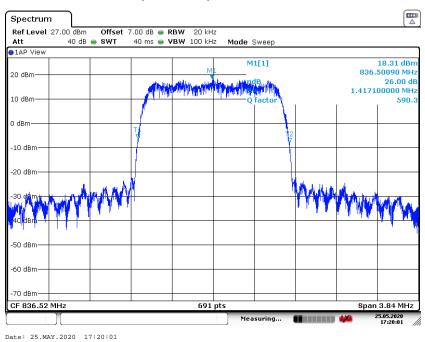
CDMA 800

Channel 1013-Emission Bandwidth (100% BW)



Date: 25.MAY.2020 17:30:14

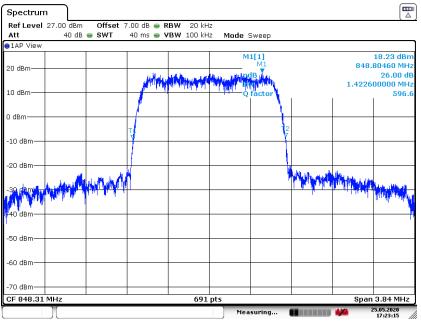
Channel 384-Emission Bandwidth (100% BW)







Channel 777-Emission Bandwidth (100% BW)



Date: 25.MAY.2020 17:23:15



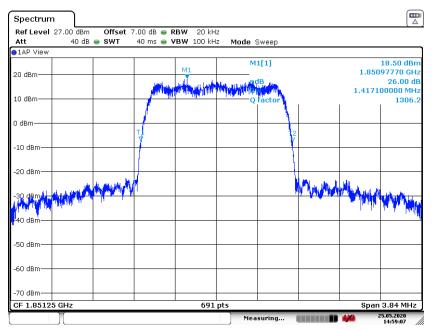


CDMA 1900 (100% BW)

Channel	Emission Bandwidth (-26dBc BW)(MHz)
25	1.417
600	1.417
1175	1.417

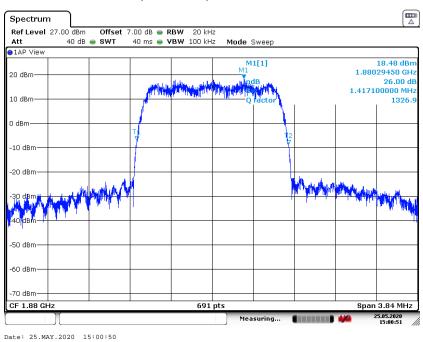
CDMA 1900

Channel 25-Emission Bandwidth (100% BW)



Date: 25.MAY.2020 14:59:07

Channel 600-Emission Bandwidth (100% BW)

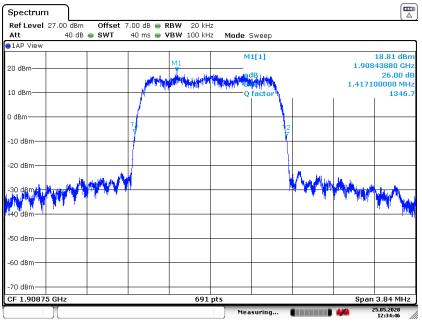


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Channel 1175-Emission Bandwidth (100% BW)



Date: 25.MAY.2020 12:34:46





A.5 Band Edge Compliance

A.5.1 Measurement limit

On any frequency outside frequency band of the US Cellular/PCS spectrum, the power of any emission shall be attenuated below the transmitter power (P, in Watts) by at least 43+10Log (P) dB. For all power levels +30 dBm to 0 dBm, this becomes a constant specification limit of -13 dBm. According to KDB 971168, a relaxation of the reference bandwidth is often provided for measurements within a specified frequency range at the edge of the authorized frequency block/band. This is often implemented by permitting the use of a narrower RBW (typically limited to a minimum RBW of 1% of the OBW) for measuring the out-of-band emissions without a requirement to integrate the result over the full reference bandwidth.

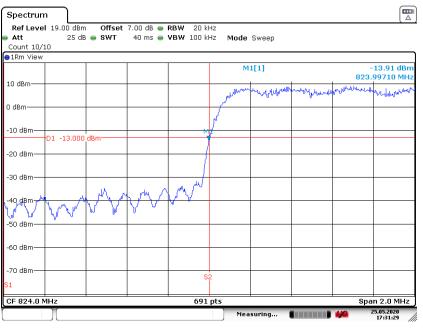




A.5.2 Measurement result

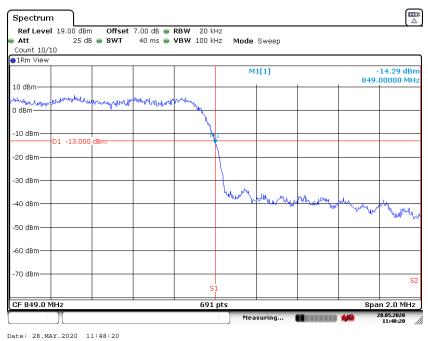
CDMA 800

BAND EDGE BLOCK-Channel 1013



Date: 25.MAY.2020 17:31:29

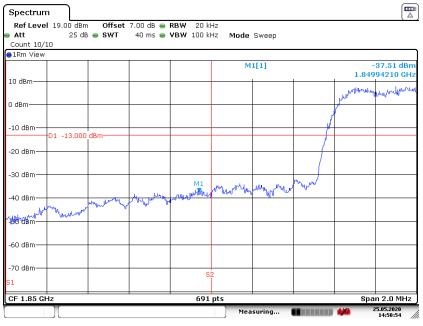
HIGH BAND EDGE BLOCK-Channel 777





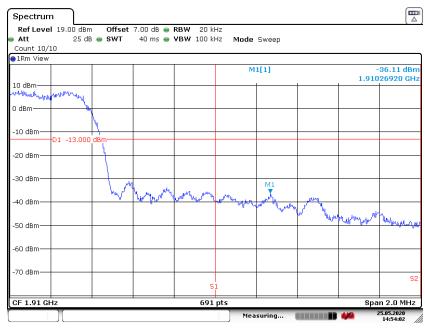


CDMA 1900 BAND EDGE BLOCK-Channel 25



Date: 25.MAY.2020 14:50:55

HIGH BAND EDGE BLOCK-Channel 1175



Date: 25.MAY.2020 14:54:02





A.6 Conducted Spurious Emission

A.6.1 Measurement Method

The following steps outline the procedure used to measure the conducted emissions from the EUT.

- Determine frequency range for measurements: From CFR 2.1057 the spectrum should be investigated from the lowest radio frequency generated in the equipment up to at least the 10th harmonic of the carrier frequency. For the mobile station equipment tested, this equates to a frequency range of 13 MHz to 9 GHz, data taken from 10 MHz to 25 GHz.
- 2. Determine EUT transmit frequencies: below outlines the band edge frequencies pertinent to conducted emissions testing.
- 3. According to KDB 971168 v02r01 6.0, the applicable rule part specifies the reference bandwidth for measuring unwanted emission levels (typically, 100 kHz if the authorized frequency band/block is at or below 1 GHz and 1 MHz if the authorized frequency band/block is above 1 GHz)

Channel	Frequency (MHz)
1013	824.70
384	836.52
777	848.31

CDMA 800 Transmitter

CDMA 1900 Transmitter

Channel	Frequency (MHz)
25	1851.25
600	1880.00
1175	1908.75

A.6.2 Measurement Limit

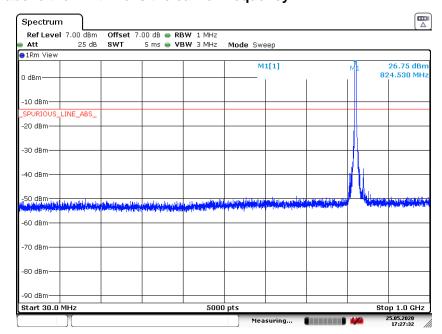
Part 24.238 and Part 22.917 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

The specification that emissions shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm. At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.





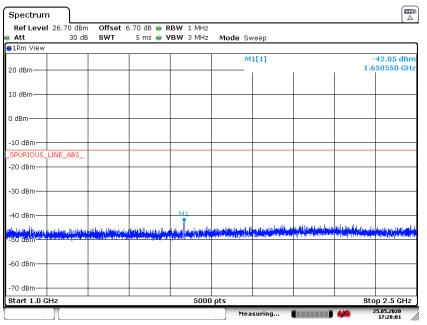
A.6.3 Measurement result CDMA 800 Channel 1013: 30MHz –1GHz Spurious emission limit –13dBm. NOTE: peak above the limit line is the carrier frequency.



Date: 25.MAY.2020 17:27:32

Channel 1013: 1GHz – 2.5GHz

Spurious emission limit –13dBm.



Date: 25.MAY.2020 17:28:01





Channel 1013: 2.5GHz -7.5GHz

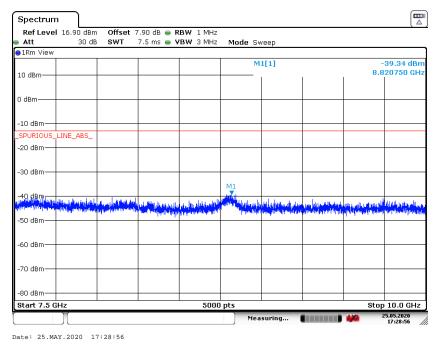
Spurious emission limit –13dBm.

Spectrum Offset 6.70 dB ● RBW 1 MHz SWT 15 ms ● VBW 3 MHz Ref Level 15.70 dBm Mode Sweep 30 dB Att ●1Rm View M1[1] -41.76 dBm 6.621500 GHz 10 dBm dBm 10 dBm-PURIOUS LINE ABS -20 dBm-30 dBm 40 dBm وسأليه L. والطي -60 dBm 70 dBm -80 dBm Stop 7.5 GHz Start 2.5 GHz 5000 pts Measuring... 25.05.2020 17:28:36

NOTE: peak above the limit line is the carrier frequency.

Date: 25.MAY.2020 17:28:36

Channel 1013: 7.5GHz – 10GHz

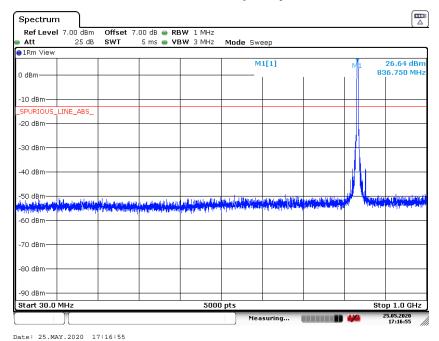






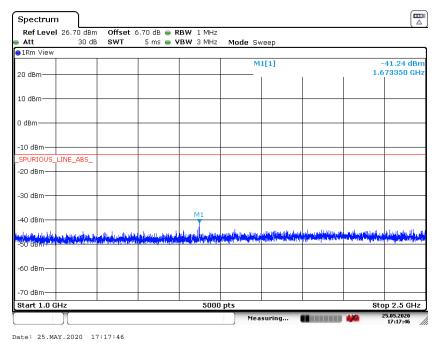
Channel 384: 30MHz –1GHz

Spurious emission limit –13dBm.



NOTE: peak above the limit line is the carrier frequency.

Channel 384: 1GHz – 2.5GHz







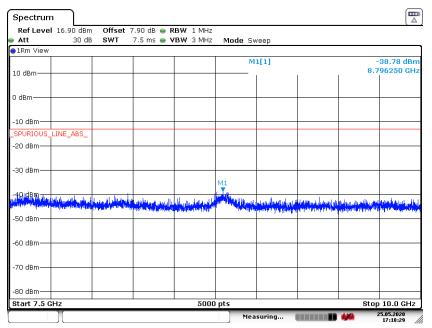
Channel 384: 2.5GHz -7.5GHz

Spurious emission limit –13dBm.

Ref Level Att	15.70 dBm 30 dB		6.70 dB 👄 F	BW 1 MHz	Mode Sv	veen			
1Rm View	00 40		10 110 0	BIT OTHER	Houe of	,b			
10 dBm					M	1[1]	1		41.97 dBn 53500 GH:
0 dBm									
-10 dBm									
SPURIOUS_	LINE_ABS_								
-20 dBm									
-30 dBm									
-40 dBm								M1	
والمتعدة والمقاسما	والمحد أستحدد	والمعروفة المتعالم والمعالم						Ale talle as diffe	
a of a Diffirm	and the state of the								
-60 dBm									
-70 dBm									
-80 dBm									
Start 2.5 G				5000					p 7.5 GHz

Date: 25.MAY.2020 17:18:05

Channel 384: 7.5GHz – 10GHz



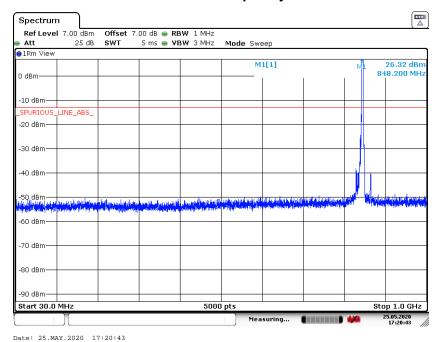
Date: 25.MAY.2020 17:18:29





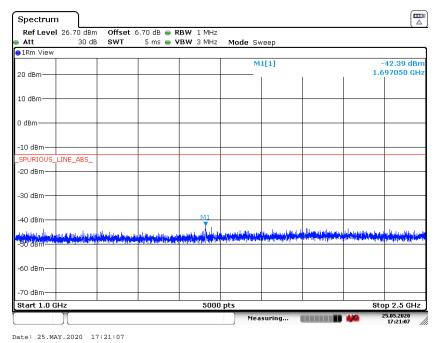
Channel 777: 30MHz –1GHz

Spurious emission limit –13dBm.



NOTE: peak above the limit line is the carrier frequency.

Channel 777: 1GHz – 2.5GHz







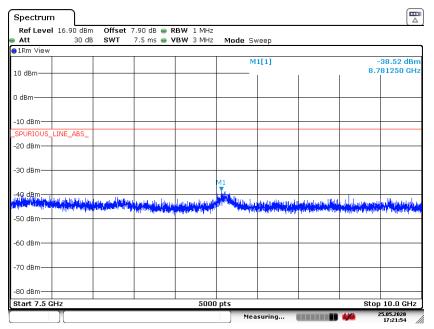
Channel 777: 2.5GHz -7.5GHz

Spurious emission limit -13dBm.

Ref Level Att	15.70 dBm 30 dB		6.70 dB 👄 R	BW 1 MHz	Mode Sv	veen			
1Rm View	50 at	3	13 113 🚽 🕯	DW 3 MHz	Houe SV	499h			
10 dBm					M	1[1]	I		41.73 dBn 81500 GH:
0 dBm									
-10 dBm									
SPURIOUS_	LINE_ABS_								
-20 dBm									
-30 dBm									
-40 dBm								M1	
يوابية التجيير المالية.	in har and the little	- In a disconstruction				the state of the s	heles and the state	-	
100 DBM									
-60 dBm									
-70 dBm									
-80 dBm									
Start 2.5 G				5000	Inte			Pt-	p 7.5 GHz

Date: 25.MAY.2020 17:21:31

Channel 777: 7.5GHz – 10GHz



Date: 25.MAY.2020 17:21:54





CDMA 1900 Channel 25: 30MHz –1GHz

Spurious emission limit –13dBm.

	Offset 7.00 dB RBV SWT 5 ms VBV		veep	
1Rm View				
0 dBm		1	M1[1]	-48.41 dBm 872.250 MH
-10 dBm				
SPURIOUS_LINE_ABS_				
-20 dBm				
-30 dBm				
-40 dBm				
-50 dBm		Tara and the state of the state		M1
-50 dBm	a bilina a fan angele ange Angele angele		and the second	a fan spenne fer ser gegen fan ferste sterne ferste ferste ster
-60 dBm				
-70 dBm				
-80 dBm				
-90 dBm				
Start 30.0 MHz		5000 pts		Stop 1.0 GHz

Channel 25: 1GHz –2.5GHz

Spurious emission limit –13dBm.

NOTE: peak above the limit line is the carrier frequency.

Att	26.70 dBm 30 dB	SWT	6.70 dB 👄 R			_				
1Rm View	30 dB	SWI	5 ms 🖮 V	BW 3 MHz	Mode	57	veep			
20 dBm						м	1[1]			25.42 dBn 51850 GH
10 dBm										
0 dBm										
-10 dBm										
SPURIOUS_LI	INE_ABS_									
-30 dBm										
-40 dBm										
-40 uBm				and for a second second second second second s		N	al ang		i in the integration of the second	
-60 dBm										
-70 dBm										





Channel 25: 2.5GHz –7.5GHz

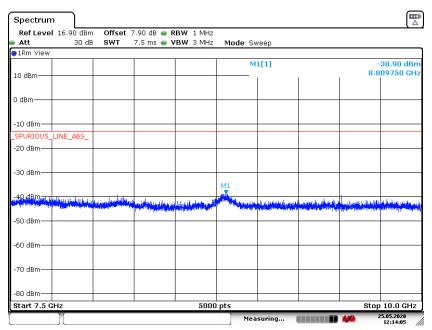
Spurious emission limit –13dBm.

Ref Level			6.70 dB 👄 R						•
Att 1Rm View	30 dB	SWT	15 ms 🛑 V	BW 3 MHz	Mode Sv	veep			
					M	1[1]	1		38.39 dBn 02500 GH
) dBm									
10 dBm-									
	INE_ABS_								
-30 dBm		M1							
40 dBm				. Martin Martine and Martine	المطالبين .		والمراجعة والمراجعة والمراجعة	and the stand of the state of the	and anticker as
S0 dBm			gang der bereiten state der state				en a livelt a repair para para ter		
60 dBm									
70 dBm									
30 dBm									
tart 2.5 GI	Hz	1		5000	pts			Sto	p 7.5 GHz

Date: 25.MAY.2020 12:14:55

Channel 25: 7.5GHz –10GHz

Spurious emission limit –13dBm.



Date: 25.MAY.2020 12:14:05





Channel 25: 10GHz –15GHz

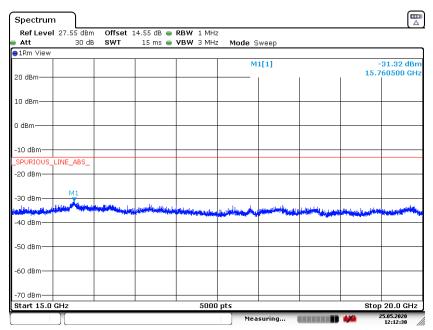
Spurious emission limit -13dBm.

Ref Level 16.90		7.90 dB 👄 RBW					
	BO dB SWT	15 ms 👄 VBW	3 MHz Mod	e Sweep			
1Rm View		1					
				M1[1]			.43 dBn 500 GH:
10 dBm				_			
D dBm							
10 10							
-10 dBm							
SPURIOUS_LINE_A	.BS_						
-20 dBm							
-30 dBm							
M1							
-40 dem	الادار والمالية المتألفان والمرجوع ومراجع		والمتأسط والمعاد ورزار والأقاس	والمنافعين والمتعمينا والمراجع	وسأستر الإسلاميل سروي	and and the second second	ينين مليك
-50 dBm	and the second	and the second	and the local distance of the local distance	and an	Strate in the second	Bredender Matters	I dividual of
-50 UBIII							
-60 dBm							
-00 0811							
-70 dBm							
-yo ubin-							
-80 dBm							
Start 10.0 GHz			5000 pts			Stop 15	0.04-

Date: 25.MAY.2020 12:13:25

Channel 25: 15GHz –20GHz

Spurious emission limit –13dBm.



Date: 25.MAY.2020 12:12:31





Channel 600: 30MHz –1GHz

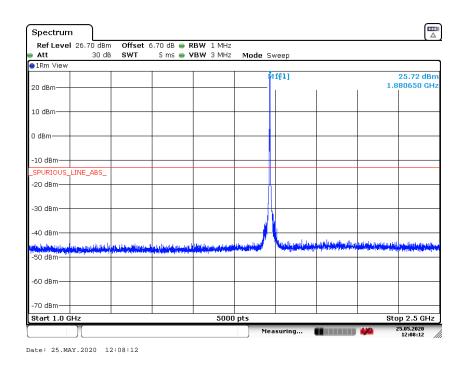
Spurious emission limit -13dBm.

Ref Level 7.00 Att 25		B 👄 RBW 1 MHz is 👄 VBW 3 MHz	Mode Sweep			
1Rm View						
0 dBm			M1[1]	 -47.73 dBm 977.210 MHz		
-10 dBm						
SPURIOUS LINE A	BC					
-20 dBm						
-30 dBm						
-40 dBm						
-50,d8m	Mahadro dallatation or units in territori	h dina mana ka da si na kasaka inda		M1		
and the state of the		he for the second participation of the second se				
-60 dBm						
-70 dBm						
-80 dBm						
-90 dBm						
Start 30.0 MHz		5000	pts	Stop 1.0 GHz		

Channel 600: 1GHz –2.5GHz

Spurious emission limit –13dBm.

NOTE: peak above the limit line is the carrier frequency.







Channel 600: 2.5GHz -7.5GHz

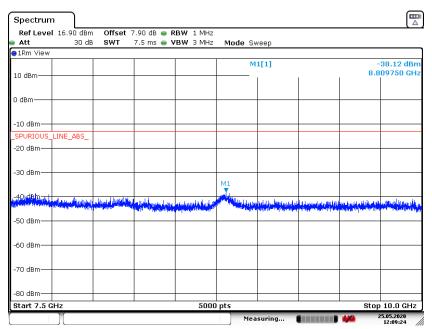
Spurious emission limit –13dBm.

Ref Level Att	15.70 dBn 30 dB				BW 1 MHz					
1Rm View	30 GE	SW		15 ms 📟 🛚	BW 3 MHZ	Mode Sv	veep			
10 dBm						M	1[1]	1		37.67 dBn 60500 GH
0 dBm										
-10 dBm										
SPURIOUS	LINE_ABS_									
-20 UBIII-										
-30 dBm		M1								
-40 dBm		T T								
-Su dBm		A y Man have	, MAR		and the second second		ais and plant the second	ends folgen hand		internation in the state
SO GDIII										
-60 dBm										
-70 dBm										
-80 dBm										
Start 2.5 G	U 2				5000	nte			Sto	p 7.5 GHz

Date: 25.MAY.2020 12:08:48

Channel 600: 7.5GHz –10GHz

Spurious emission limit –13dBm.



Date: 25.MAY.2020 12:09:24





Channel 600: 10GHz –15GHz

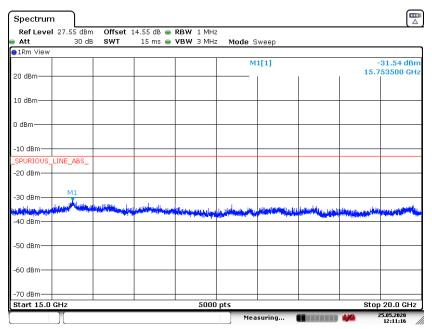
Spurious emission limit –13dBm.

Ref Level 16.90		: 7.90 dB 👄 I								
Att 3 1Rm View	0 dB SWT	15 ms 🥃 '	VBW 3 MHz	Mode Sv	veep					
JIKW VIEW	-			м	1[1]			20.40 dBp		
10 dBm					1[1]			-39.40 dBn).277500 GH;		
10 0000										
0 dBm										
-10 dBm										
SPURIOUS_LINE_A	35_									
-20 dBm										
-30 dBm										
M1										
-40 dBm	. الأليب بينايا .	and a first of the Robert of	ورجاها العرار		a na da sina kana ka kata		فالمتر أتعريبة انتحر الحلن حي	بالطور المرسطين		
trank and the second				A DESCRIPTION OF THE OWNER OF		a provide the later of the second	strategic and second second free	and an and a part of the second		
-50 dBm										
-60 dBm										
-70 dBm										
-80 dBm										
Start 10.0 GHz			5000	l pts			Stop	15.0 GHz		

Date: 25.MAY.2020 12:10:39

Channel 600: 15GHz –20GHz

Spurious emission limit –13dBm.



Date: 25.MAY.2020 12:11:16





Channel 1175: 30MHz –1GHz

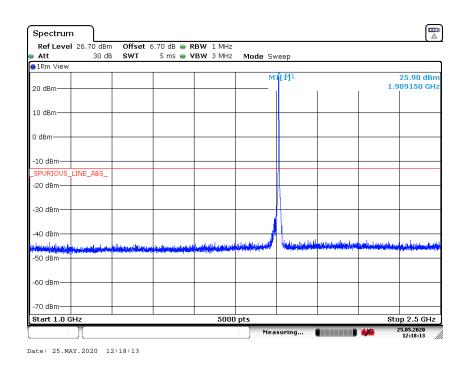
Spurious emission limit –13dBm.

Att 25 dB	Offset 7.00 dB ● SWT 5 ms ●		de Sweep		
1Rm View					
D dBm			M1[1]	I	-48.60 dBn 992.730 MH
-10 dBm					
SPURIOUS_LINE_ABS_ 20 dBm					
-30 dBm					
.40 dBm					
S0 dBm	dahar undahar tudahan dadar ini mu			the terror and a live second	edulu modeli de la dela
60 dBm		and the state of the second	and a shere with a state that a south the s		
70 dBm					
80 dBm					
90 dBm					
Start 30.0 MHz		5000 pts	5		Stop 1.0 GHz 25.05.2020

Channel 1175: 1GHz –2.5GHz

Spurious emission limit –13dBm.

NOTE: peak above the limit line is the carrier frequency.







Channel 1175: 2.5GHz –7.5GHz

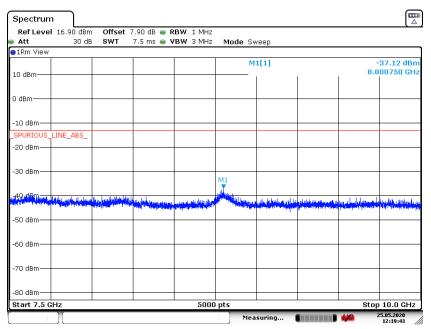
Spurious emission limit -13dBm.

Ref Level				RBW 1 MHz				
Att 1Rm View	30 dE	SWT	15 ms 🍬	• VBW 3 MH2	Mode Sv	weep		
JIRM VIEW					M	1[1]		37.77 dBm
10 dBm			_					18500 GH
0 dBm								
-10 dBm			_					
SPURIOUS_LI	INE_ABS_							
-20 dBm			_					
-30 dBm			_					
		M1						
-40 dBm								
a concernation in a state of the state	and the state of the		A MARCHARD	and the state of the	a state water and the	And Andrew Standing Street		فريانها الدوائل
-50 dBm	an an filmeriant							
-60 dBm								
-70 dBm			_					
-80 dBm								
Start 2.5 GH	lz			500	0 pts		 Sto	p 7.5 GHz

Date: 25.MAY.2020 12:19:11

Channel 1175: 7.5GHz –10GHz

Spurious emission limit –13dBm.



Date: 25.MAY.2020 12:19:44





Channel 1175: 10GHz –15GHz

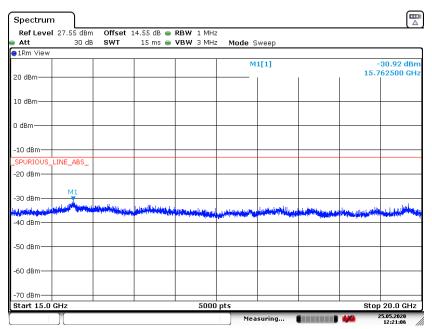
Spurious emission limit –13dBm.

RefLevel 16.90 dBm Att 30 dB	Offset 7.90 dB	Mode Sweep	
1Rm View	3WI 13 115 - 4BW 3 MH2	Mode Sweep	
0 dBm		M1[1]	-39.80 dBn 10.268500 GH:
dBm			
10 dBm			
SPURIOUS_LINE_ABS_ 20 dBm			
30 dBm			
M1 40 dBm War - Jacob Marata Marata	and the second	del averages in the state of the	n e e induis en alle in little e institut
50 dBm	A lenger filling processing specific and a second specific and a second s		
60 dBm			
70 dBm			
80 dBm	5000		Stop 15.0 GHz

Date: 25.MAY.2020 12:20:21

Channel 1175: 15GHz –20GHz

Spurious emission limit –13dBm.



Date: 25.MAY.2020 12:21:07





A.7 Peak-to-Average Power Ratio

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB a)Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;

b) Set resolution/measurement bandwidth \geq signal's occupied bandwidth;

c) Set the number of counts to a value that stabilizes the measured CCDF curve;

d)Record the maximum PAPR level associated with a probability of 0.1%

Measurement results

CDMA 1900

Measurement result

Channel		PAPR(dB)			
	Frequency(MHz)		1xEVDO		
		1x RTT	Rel0	RevA	
600	1880.00	3.77	4.03	4.06	





ANNEX B: Accreditation Certificate



END OF REPORT