



TEST REPORT

Report Number : 13571607-E7V4

Applicant : APPLE, INC.
1 APPLE PARK WAY
CUPERTINO, CA 95014, U.S.A.

Model : A2482

Brand : APPLE

FCC ID : BCG-E3997A

IC : 579C-E3997A

EUT Description : SMARTPHONE

Test Standard(s) : FCC CFR47 PART 22H, 24E, 27L, AND 90S
ISED RSS-GEN ISSUE 5, RSS-132 ISSUE 3, RSS-133 ISSUE
6, AND RSS-139 ISSUE 3

Date Of Issue:
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Revision History

Rev.	Issue Date	Revisions	Revised By
V1	7/1/2021	Initial Review	Mengistu Mekuria
V2	7/14/2021	Addressed TCB Questions	Mengistu Mekuria
V3	7/26/2021	Addressed TCB Feedback	John Thompson
V4	8/04/2021	Addressed TCB feedback for sections 6.1, and 6.5. Updated 6.5 to clarify that conducted tests were selected based on worst case conducted power.	John Thompson

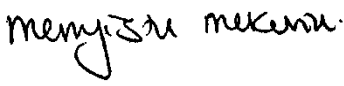
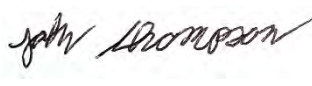
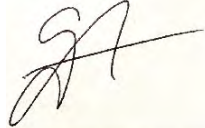
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1. ATTESTATION OF TEST RESULTS

Applicant Name and Address	APPLE, INC. 1 APPLE PARK WAY CUPERTINO, CA 95014, U.S.A.	
Model	A2482	
Brand	APPLE	
FCC ID	BCG-E3997A	
IC	579C-E3997A	
EUT Description	SMARTPHONE	
Serial Number	MODEL (A2482): C070512002T0G513 (CONDUCTED) AND K16LWML91 (RADIATED)	
Sample Receipt Date	FEBRUARY 19, 2021	
Date Tested	FEBRUARY 19, 2021 to JUNE 10, 2021	
Applicable Standards	FCC CFR 47 Part 2, Part 22, Part 24, Part 27 and Part 90 ISED RSS-GEN ISSUE 5, RSS-132 Issue 3, RSS-133 Issue 6, RSS-139 Issue 3.	
Test Results	COMPLIES	
<p>UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.</p> <p>The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.</p> <p>This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, any agency of the Federal Government, or any agency of the U.S. government.</p>		
Approved & Released By:	Reviewed By:	Prepared By:
		
Mengistu Mekuria Lead Test Engineer UL Verification Services Inc.	John Thompson Laboratory Engineer UL Verification Services Inc.	Sintia Andrian Laboratory Engineer UL Verification Services Inc.

2. SUMMARY OF TEST RESULTS

This report contains data provided by the customer which can impact the validity of results. UL Verification Services Inc. is only responsible for the validity of results after the integration of the data provided by the customer.

Requirement Description	Requirement Clause Number (FCC)	Requirement Clause Number (ISED)	Result	Remarks
RF Conducted Output Power	2.1046, 90.635 (b)	-	Complies	
Effective Radiated Power	22.913 (a)(5)	-	Complies	
Equivalent Isotropic Radiated power	24.232 (c), 27.50 (d) (4)	RSS132§5.4 RSS133§6.4 & SRSP-510, 5.1.2 RSS139§6.5	Complies	
Occupied Bandwidth	2.1049	RSS132 RSS133§2.3 RSS139 RSS-GEN§6.7	Complies	
Band Edge and Emission Mask	2.1051, 22.917 (a), 24.238 (a), 27.53 (h), 90.691(a)	RSS132§5.5 RSS133§6.5 RSS139§6.6	Complies	
Out of Band Emissions	2.1051, 22.917 (a), 24.238 (a), 27.53 (h), 90.691 (a)	RSS132§5.5 RSS133§6.5 RSS139§6.6	Complies	
Frequency Stability	2.1055, 22.355, 24.235, 27.54, 90.213	RSS132§5.3 RSS133§6.3 RSS139§6.4	Complies	
Peak-to-Average Ratio	22.913 (d), 24.232 (d), 27.50 (d) (5)	RSS132§5.4 RSS133§6.4 RSS139§6.5	Complies	
Field Strength of Spurious Radiation	2.1053, 22.917 (a), 24.238 (a), 27.53 (h), 90.691 (a)	RSS132§5.5 RSS133§6.5 RSS139§6.6	Complies	

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with the following:

- ANSI C63.26:2015
- FCC CFR 47 Part 2, Part 22, Part 24, Part 27 and Part 90
- [FCC KDB 971168 D01 v03r01](#): Power Meas License Digital Systems
- [FCC KDB 971168 D02 v02r01](#): Misc Rev Approv License Devices
- [FCC KDB 412172 D01 v01r01](#): Determining ERP and EIRP
- ISED RSS-GEN Issue 5, RSS-132 Issue 3, RSS-133 Issue 6, RSS-139 Issue 3.

4. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, certification #0751.05, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
<input checked="" type="checkbox"/>	Building 1: 47173 Benicia Street, Fremont, CA 94538, USA	US0104	2324A	208313
<input checked="" type="checkbox"/>	Building 2: 47266 Benicia Street, Fremont, CA 94538, USA	US0104	22541	208313
<input type="checkbox"/>	Building 4: 47658 Kato Rd, Fremont, CA 94538, USA	US0104	2324B	208313

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

5.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	U _{Lab}
Worst Case Radiated Disturbance, 9KHz to 30 MHz	2.84 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.73 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.51 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.29 dB
Occupied Channel Bandwidth	±1.22 %
Temperature	±2.26%
Supply voltages	±0.57 %
Time	±3.39 %

Uncertainty figures are valid to a confidence level of 95%.

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

$$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$$

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.

$$36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$$

6. EQUIPMENT UNDER TEST

6.1. DESCRIPTION OF EUT

The Apple iPhone is a smartphone with multimedia functions (music, application support, and video), cellular GSM, GPRS, EGPRS, UMTS, LTE, 5G, CDMA, IEEE 802.11a/b/g/n/ac/ax, Bluetooth, Ultra-Wideband, GPS, NFC and WPT. All models support at least one UICC based SIM. The second SIM is either an UICC based p-SIM (physical SIM) or e-SIM (electronic SIM). The device supports a built-in inductive charging transmitter and receiver. The rechargeable battery is not user accessible.

Testing was performed on the parent model and is used to support the application for the parent and variants identified in this report based on the test plan submitted and approved via KDB inquiry by the FCC and by ISED-Canada.

CDMA BC10 band is supported in USA only.

6.2. MAXIMUM OUTPUT POWER

EIRP/ERP TEST PROCEDURE

ANSI C63.26:2015
KDB 971168 D01 Section 5.6

$$\text{ERP/EIRP} = \text{PMeas} + \text{GT} - \text{LC}$$

where: ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm);

PMeas = measured transmitter output power or PSD, in dBm or dBW;

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.

EUT includes different power levels for head use configuration and body use configuration and the below tables contain the highest of all configurations average conducted and ERP/EIRP output powers as follows:

GSM MODES

RSS 132 850MHz (Ant 1)								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	Limit (W)	EIRP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
824.2-848.8	GPRS	33.49	-4.50	11.5	28.99	0.793	244.94	245KGXW
	EGPRS	28.00			23.50	0.224	241.05	241KG7W
Part 22 850MHz (Ant 1)								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	Limit (W)	ERP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
824.2-848.8	GPRS	33.49	-4.50	7.0	26.84	0.483	244.94	245KGXW
	EGPRS	28.00			21.35	0.136	241.05	241KG7W
Part 24 / RSS 133 1900MHz (Ant 3)								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	Limit (W)	EIRP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
1850.2-1909.8	GPRS	31.00	-0.80	2.0	30.20	1.047	242.91	243KGXW
	EGPRS	26.50			25.70	0.372	237.73	238KG7W

CDMA MODES

Part 90 BC10 (Ant 1)								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	Conducted Limit (W)	ERP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
817.25-822.75	1xRTT	25.42	-4.50	100.0	18.77	0.075	1282.4	1M28F9W
	1xEV-DO Rev A	25.70			19.05	0.080	1275.9	1M28F9W
RSS 132 BC0 (Ant 1)								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	EIRP Limit (W)	EIRP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
824.7-848.31	1xRTT	23.45	-4.50	11.5	18.95	0.079	1279.3	1M28F9W
	1xEV-DO Rev A	23.50			19.00	0.079	1282.6	1M28F9W
Part 22 BC0 (Ant 1)								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	EIRP Limit (W)	ERP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
824.7-848.31	1xRTT	23.45	-4.50	7.0	16.80	0.048	1279.3	1M28F9W
	1xEV-DO Rev A	23.50			16.85	0.048	1282.6	1M28F9W
Part 24 / RSS 133 BC1 (Ant 1)								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	EIRP Limit (W)	EIRP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
1851.25-1908.75	1xRTT	25.57	-3.80	2.0	21.77	0.150	1275.5	1M28F9W
	1xEV-DO Rev A	25.70			21.90	0.155	1282.7	1M28F9W

WCDMA MODE

RSS 132 Band 5 (Ant 1)								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	Limit (W)	EIRP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
826.4-846.6	REL 99	25.70	-4.50	11.5	21.20	0.132	4156.6	4M16F9W
	HSDPA	24.69			20.19	0.104	4163.5	4M16F9W
Part 22 Band 5 (Ant 1)								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	Limit (W)	ERP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
826.4-846.6	REL 99	25.70	-4.50	7.0	19.05	0.080	4156.6	4M16F9W
	HSDPA	24.69			18.04	0.064	4163.5	4M16F9W
Part 24 / RSS 133 Band 2 (Ant 3)								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	Limit (W)	EIRP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
1852.4-1907.6	REL 99	25.20	-0.80	2.0	24.40	0.275	4143.0	4M14F9W
	HSDPA	24.25			23.45	0.221	4141.2	4M14F9W
Part 27 / RSS 139 Band 4 (Ant 3)								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	Limit (W)	EIRP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
1712.4-1752.6	REL 99	25.20	-1.90	1.0	23.30	0.214	4155.9	4M16F9W
	HSDPA	24.28			22.38	0.173	4125.0	4M13F9W

6.3. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was version: 0.21.02-1.

6.4. MAXIMUM ANTENNA GAIN

The antenna(s) gain and type, as provided by the manufacturer' are as follows:

Frequency Band	ANT 1 Antenna Gain (dBi)	ANT 2 Antenna Gain (dBi)	ANT 3 Antenna Gain (dBi)	ANT 4 Antenna Gain (dBi)
BC10 816 – 824MHz	-4.5	-5.7		
GSM850, BC0, WCDMA 5 824 – 849MHz	-4.5	-5.7		
GSM1900, BC1, WCDMA 2 1850 – 1910 MHz	-3.8	-2.4	-0.8	-2.5
WCDMA 4 1710 – 1755 MHz	-3.7	-4.0	-1.9	-3.4

6.5. WORST-CASE CONFIGURATION AND MODE

The EUT was investigated in three orthogonal orientations X/Y/Z on all ANT 1, ANT2, ANT3, and ANT 4 antennas to determine the worst case orientation. The following table exhibits the worst case orientation for different frequency bands. The full tests of the EUT have made upon the orientations that shown in the table below.

Frequency Bands	ANT1	ANT2	ANT3	ANT4
663 – 849 MHz	Y	X	N/A	N/A
1710 – 1915 MHz	X	Y	X	Z

Based on average conducted output power measurement investigations. The worst-case antenna port is Ant1 with the highest power. Therefore, Ant 1 was used to perform all conducted tests.

The worst-case scenario for all measurements as followed:

- GSM GPRS
- GSM EGPRS
- CDMA 2000 1xRTT
- CDMA 2000 1xEV-DO REV. A
- WCDMA REL 99
- WCDMA HSDPA

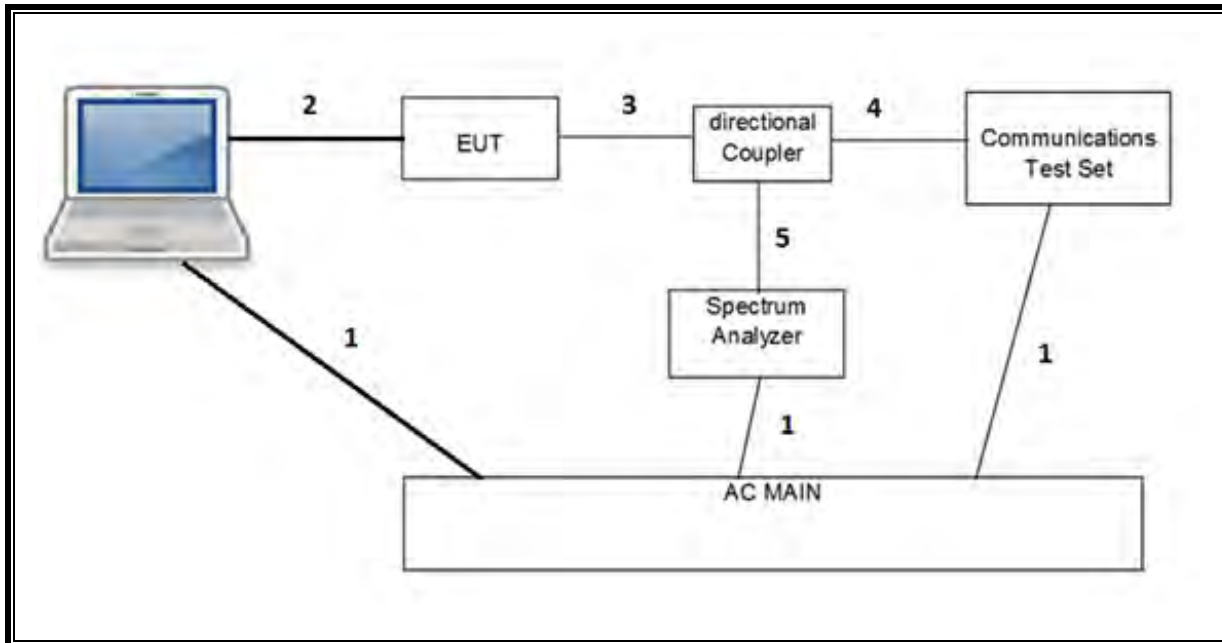
Radiated spurious emissions were investigated from 9kHz to 30MHz, 30MHz-1GHz and above 1GHz. There were no emissions found with less than 20dB of margin from 9kHz to 1GHz.

For simultaneous transmission of multiple channels in the 2.4GHz/5GH WLAN, UWB, and Cellular bands, tests were conducted for various configurations having the highest power, least separation in frequencies and widest operation bandwidths. No noticeable new emission was found.

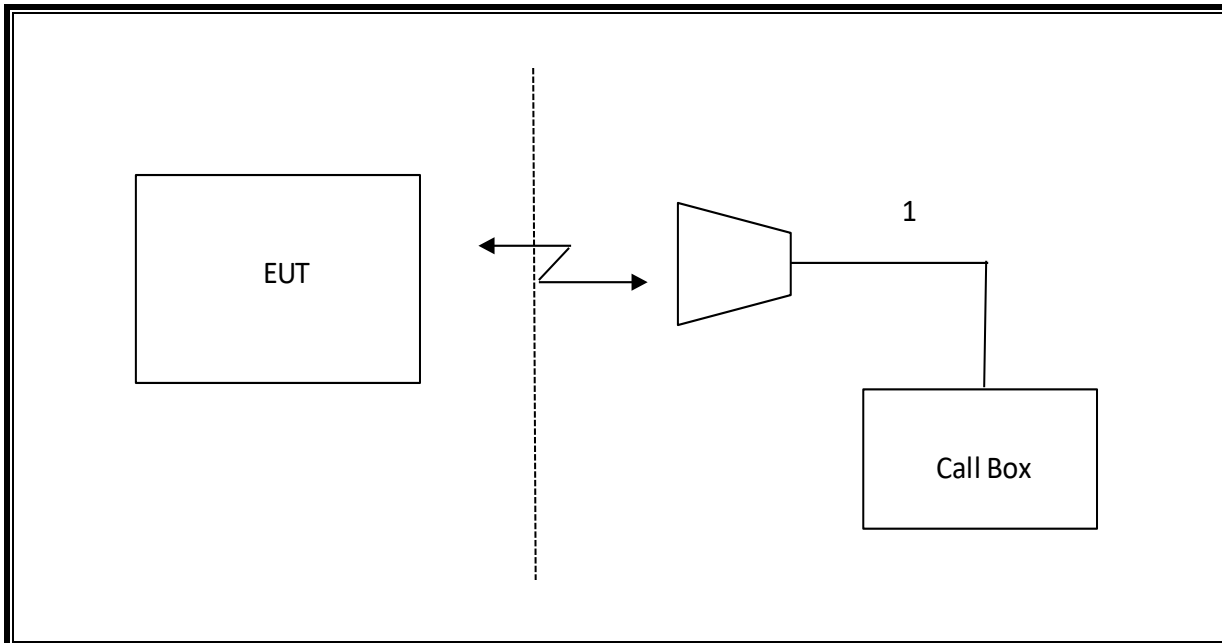
6.6. DESCRIPTION OF TEST SETUP

SUPPORT TEST EQUIPMENT						
Description	Manufacturer	Model	Serial Number	FCC ID/ DoC		
Laptop	Apple	MacBook Pro	C02VD7SAH22	BCGA1708		
AC/DC adapter	Apple	A1718	C4H714302LCGN8RA5	-		
I/O CABLES (RF CONDUCTED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC	3	US 115V	Un-shielded	2.0	N/A
2	USB	1	DC	Un-shielded	1.0	N/A
3	RF In/Out	1	EUT	Un-shielded	0.6	N/A
4	RF In/Out	1	Communication Test Set	Un-shielded	1.2	N/A
5	RF In/Out	1	Barrel	N/A	N/A	N/A
I/O CABLES (RF RADIATED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	RF In/Out	1	Antenna	Un-shielded	5.0	N/A

CONDUCTED SETUP



RADIATED SETUP



7. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	Asset	Cal Due
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T345	05/26/2022
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T136	07/07/2022
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	T900	02/24/2022
Amplifier, 1 to 18GHz	Miteq	AFS42-00101800-25-S-42	T1165	06/12/2022
Spectrum Analyzer, PXA 3Hz to 44GHz	Keysight	N9030A	T907	07/22/2022
Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	T285	07/22/2021
Spectrum Analyzer, PXA 3Hz to 50GHz	Keysight	N9030B	207995	05/27/2022
Spectrum Analyzer, PXA, 3Hz to 50GHz w/Ext. Mixer	Keysight	N9030A	T342	01/25/2022
Spectrum Analyzer, PSA 3Hz to 44GHz	Keysight	E4446A	T123	01/22/2022
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	AE0038201512	connection purpose only
Wireless Communication Test Set, Call Box	Agilent	E5515C	T211	4/3/2022
Directional Coupler	KRYTAR	152610	T1161	09/16/2021
Directional Coupler	KRYTAR	152610	T1536	09/16/2021
Directional Coupler	KRYTAR	152610	T1537	09/16/2021
Power Meter, P-series single channel	Keysight	N1912A	T1272	01/21/2022
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight	N1921A	T1224	01/28/2022
Filter, HPF 3.0GHz	Micro-Tronics	HPM17543	T487	04/27/2022
Filter, HPF 1.2GHz	Micro-Tronics	WHKX1.2/15G-6ST	T1737	6/23/2021
Filter, BRF 1850 – 1910 MHz	Micro-Tronics	BRM50714-02	T1796	06/10/2022
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight	N9030A	T1210	01/22/2022
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	T979	02/22/2022
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	T754	06/21/2021
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	T1154	06/21/2021
Amplifier, 26.5GHz to 40GHz	Miteq	NSP 4000 SP2	T88	04/22/2022
Amplifier, 1 to 26.5GHz, 23.5dB Gain minimum	Keysight	8449B	T404	04/19/2022
Antenna, Horn 18 to 26.5GHz	ARA	MWH-1826/B	T447	04/22/2022
Antenna, Horn 26.5GHz to 40GHz	ARA	MWH-2640	T1864	04/19/2022
Spectrum Analyzer	Keysight	8564E	T106	01/27/2022
Antenna, Active Loop 9KHz to 30MHz	EMCO	6502	T1616	12/02/2021
UL AUTOMATION SOFTWARE				
CLT Software	UL	UL RF	Ver 3.4, June 08 2021	
Power Measurement Software	UL	UL RF	Ver 3.1.4, May 20, 2021	
Radiated test software	UL	UL RF	Ver 9.5 July 7, 2020	

NOTES:

* Testing is completed before equipment expiration date.

8. RF OUTPUT POWER VERIFICATION

EUT includes different power levels for head use configuration and body use configuration and the below tables contain the highest of all configurations average conducted output powers as follows:

8.1. GSM

Using CMW500 Communication Test Set

Function: Menu select > GSM Mobile Station > GSM 850/900/1800/1900

Press **Connection control** to choose the different menus

Press **RESET** > choose all to reset all settings

Connection	Press Signal Off to turn off the signal and change settings Network Support > GSM+GPRS or GSM+EGPRS Main Service > Packet Data Service selection > Test Mode A – Auto Slot Config. off
MS Signal	Press Slot Config bottom on the right twice to select and change the number of time slots and power setting > Slot configuration > Uplink/Gamma > 33 dBm for GPRS 850/900 > 27 dBm for EGPRS 850/900 > 30 dBm for GPRS1800/1900 > 26 dBm for EGPRS1800/1900
BS Signal	Enter the same channel number for TCH channel (test channel) and BCCH channel Frequency Offset > + 0 Hz Mode > BCCH and TCH BCCH Level > -85 dBm (May need to adjust if link is not stable) BCCH Channel > choose desire test channel [Enter the same channel number for TCH channel (test channel) and BCCH channel] Channel Type > Off P0> 4 dB Slot Config > Unchanged (if already set under MS Signal) TCH > choose desired test channel Hopping > Off Main Timeslot > 3 (Default)
Network	Coding Scheme > CS 1 (GPRS) and MCS5 (EGPRS) Bit Stream > 2E9-1PSR Bit Pattern
AF/RF	Enter appropriate offsets for Ext. Att. Output and Ext. Att. Input
Connection	Press Signal On to turn on the signal and change settings

RESULT

8.1.1. GSM 850

Test Engineer ID:	10646	Test Date:	3/25/2021
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Mode	Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Conducted Average Power (dBm)	
					ANT 1	ANT 2
GPRS (GMSK)	CS1	1	128	824.2	33.18	31.82
			190	836.6	33.42	32.00
			251	848.8	33.49	31.96
		2	128	824.2	32.47	30.78
			190	836.6	32.50	31.00
			251	848.8	32.41	30.65
EGPRS (8PSK)	MCS5	1	128	824.2	27.73	26.31
			190	836.6	28.00	26.50
			251	848.8	27.85	26.40
		2	128	824.2	26.86	25.30
			190	836.6	27.00	25.50
			251	848.8	26.86	25.40

8.1.2. GSM 1900

Test Engineer ID:	10646	Test Date:	5/16/2021
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Mode	Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Conducted Average Power (dBm)			
					ANT 1	ANT 2	ANT 3	ANT 4
GPRS (GMSK)	CS1	1	512	1850.2	31.91	29.50	31.00	28.99
			661	1880	32.00	29.42	30.91	28.79
			810	1909.8	31.98	29.07	30.62	28.47
		2	512	1850.2	30.77	28.50	30.00	28.00
			661	1880	30.90	28.42	29.88	27.79
			810	1909.8	30.86	28.08	29.57	27.46
EGPRS (8PSK)	MCS5	1	512	1850.2	26.87	24.41	26.50	24.00
			661	1880	26.79	24.50	26.47	23.86
			810	1909.8	27.00	24.27	26.48	23.89
		2	512	1850.2	25.85	23.40	25.50	23.00
			661	1880	25.92	23.50	25.47	22.87
			810	1909.8	26.00	23.36	25.36	22.94

8.2. CDMA

Maximum output power is verified on the Low, Middle and High channels according to procedures in section 4.4.5.2 of 3GPP2 C.S0011/TIA-98-E for 1xRTT, section 3.1.2.3.4 of 3GPP2 C.S0033-0/TIA-866 for Rel. 0 and section 4.3.4 of 3GPP2 C.S0033-A for Rev. A

1xRTT/ 1xAdvanced

This procedure assumes the Agilent 8960 Test Set has the following applications installed and with valid license.

<u>Application</u>	<u>Rev, License</u>
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CDMA2000 Mobile Test	B.15.18, L
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- Protocol Rev > 6 (IS-2000-0)
- System ID: 18; NID: 65535, Reg. Ch. #: 610 for Cell, 600 for PCS & 450 for AWS
- Radio Config (RC) > RC1 or RC3
- Service Option (SO) Setup > SO55 or SO32
- Traffic Data Rate > Full
- Rvs Power Ctrl > All Up bits (Maximum TxPout)

1xEV-DO - Release 0 (REL 0)

This procedure assumes the Agilent 8960 Test Set has the following applications installed and with valid license.

EVDO Release 0 - RTAP

- Call Setup > Shift & Preset
- Call Control:
 - Access Network Info > Cell Parameters > Sector ID > 00000000 : 00000000 : 00000000 : 00000000 > Subnet Mask > 0
 - Generator Info > Termination Parameters > Max Forward Packet Duration > 16 Slots
- Call Parm:
 - Cell Power > -105.5 dBm/1.23 MHz
 - Channel > (Enter channel number)
 - Application Config > Enhanced Test Application Protocol > RTAP
 - RTAP Rate > 153.6 kbps
 - Rvs Power Ctrl > Active bits
 - Protocol Rel > 0 (1xEV-DO)
- Press "Start Data Connection" when "Session Open" appear in "Active Cell"
- Rvs Power Ctrl > All Up bits (Maximum TxPout)

EVDO Release 0 - FTAP

- Call Setup > Shift & Preset
- Call Control:
 - Access Network Info > Cell Parameters > Sector ID > 00000000 : 00000000 : 00000000 : 00000000 > Subnet Mask > 0
 - Generator Info > Termination Parameters > Max Forward Packet Duration > 16 Slots
- Call Parm:
 - Cell Power > -105.5 dBm/1.23 MHz
 - Cell Band > (Select US Cellular or US PCS)
 - Channel > (Enter channel number)
 - Application Config > Enhanced Test Application Protocol > FTAP (default)
 - FTAP Rate > 307.2 kbps (2 Slot, QPSK)
 - Rvs Power Ctrl > Active bits
 - Protocol Rel > 0 (1xEV-DO)
- Press "Start Data Connection" when "Session Open" appear in "Active Cell"
- Rvs Power Ctrl > All Up bits (Maximum TxPout)

1xEV-DO - Revision A (REV A)

This procedure assumes the Agilent 8960 Test Set has the following applications installed and with valid license.

<u>Application</u>	<u>Rev, License</u>
1xEV-DO Terminal Test	A.09.13

EVDO Rev. A – RETAP

- Call Setup > Shift & Preset
- Cell Power > -60 dBm/1.23 MHz
- Protocol Rev > A (1xEV-DO-A)
- Application Config > Enhanced Test Application Protocol > RETAP
- R-Data Pkt Size > 4096
- Protocol Subtype Config > Release A Physical Layer Subtype > Subtype 2
 - PL Subtype 2 Access Channel MAC Subtype > Default (Subtype 0)
- Access Network Info > Cell Parameters
 - Sector ID > 00000000: 00000000: 00000000: 00000000
 - Subnet Mask > 0
- Generator Info > Termination Parameters > Max Forward Packet Duration >16 Slots
 - ACK R-Data After > Subpacket 0 (All ACK)
- Rvs Power Ctrl > All Up bits (to get the maximum power)

EVDO Rev. A - FETAP

- Call Setup > Shift & Preset
- Cell Power > -60 dBm/1.23 MHz
- Protocol Rev > A (1xEV-DO-A)
- Application Config > Enhanced Test Application Protocol > FETAP
- F-Traffic Format > 4 (1024, 2,128) Canonical (307.2k, QPSK)
- Protocol Subtype Config > Release A Physical Layer Subtype > Subtype 2
 - PL Subtype 2 Access Channel MAC Subtype > Default (Subtype 0)
- Access Network Info > Cell Parameters > Sector ID > 00000000: 00000000: 00000000: 00000000
 - Subnet Mask > 0
- Generator Info > Termination Parameters > Max Forward Packet Duration >16 Slots
 - ACK R-Data After > Subpacket 0 (All ACK)
- Rvs Power Ctrl > All Up bits (to get the maximum power)

1x Advanced Setup Procedures used to establish the test signals

Call box setup procedure

- Protocol Rev > 6 (IS-2000-0)
- System ID: 331; NID: 65535, Reg. Ch. #.:
- Radio Config (RC) > Fwd11,Rvs8
- Service Option (SO) Setup > SO75 (Loopback)
- Traffic Data Rate > Full
- Rvs Power Ctrl > All Up bits (Maximum TxPout)
- Reverse Power Control Mode: 00-200 to 400 bps
- Smart blanking was disabled.

1xEV-DO Rev. B Setup Procedures used to establish the test signals

Call box setup procedure

- CMW 500 Signal Generator > 1xEV-DO Taskbar Enable
- CMW 500 1xEV-DO Signaling Configuration Window >
- 1xEV-DO Signaling On Window:
Under Access Network Control:
Band Class: BC0: US Cellular
RF Channel: 31
1xEV-DO Power: -70 dBm
Release B
- 1xEV-DO Signaling Configuration Window

Under RF Frequency Band / Channel: Enter Ch. Frequency

➤ Under Carrier Configuration: RF Frequency
For Two Carriers: Low Channel (1013)

	<u>RF Channel</u>	<u>RF Channel Offset</u>
Carrier [0]	31	0
Carrier [1]	1013	982

➤ Under Carrier Configuration: RF Pilot

	<u>Carrier Sector</u>	<u>Active on AN</u>	<u>Assigned to AT</u>
Pilot [0]	C0/S0	✓	✓
	CA/S1	✓	✓

For Three Carriers: Low Channel (1013)

	<u>RF Channel</u>	<u>RF Channel Offset</u>
Carrier [0]	72	0
Carrier [1]	31	-41
Carrier [2]	1013	941

➤ Under Carrier Configuration: RF Pilot

	<u>Carrier Sector</u>	<u>Active on AN</u>	<u>Assigned to AT</u>
Pilot [0]	C0/S0	✓	✓
Pilot [1]	C1/S1	✓	✓
Pilot [2]	C2/S2	✓	✓

- Rvs Power Ctrl > All Up bits (to get the maximum power)

RESULT

8.2.1. CDMA BC10

Test Engineer ID:	19186	Test Date:	5/11/2021
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Band	Mode	Radio Configuration (RC)	Service Option (SO)	Ch No.	Freq. (MHz)	Conducted Average Power (dBm)	
						ANT 1	ANT 2
BC10 (800MHz)	1xRTT	RC1	2 (Loopback)	450	817.25	25.30	24.29
				560	820.00	25.32	24.27
				670	822.75	25.33	24.29
			55 (Loopback)	450	817.25	25.30	24.29
				560	820.00	25.30	24.30
				670	822.75	25.33	24.30
		RC2	9 (Loopback)	450	817.25	25.30	24.30
				560	820.00	25.31	24.29
				670	822.75	25.29	24.32
			55 (Loopback)	450	817.25	25.29	24.31
				560	820.00	25.34	24.29
				670	822.75	25.32	24.30
		RC3	2 (Loopback)	450	817.25	25.30	24.37
				560	820.00	25.31	24.29
				670	822.75	25.32	24.30
			55 (Loopback)	450	817.25	25.30	24.24
				560	820.00	25.30	24.22
				670	822.75	25.32	24.24
			32 (+ F-SCH)	450	817.25	25.33	24.32
				560	820.00	25.33	24.25
				670	822.75	25.32	24.27
			32 (+ SCH)	450	817.25	25.31	24.27
				560	820.00	25.32	24.23
				670	822.75	25.32	24.26
		RC4	2 (Loopback)	450	817.25	25.32	24.29
				560	820.00	25.33	24.23
				670	822.75	25.31	24.28
			55 (Loopback)	450	817.25	25.29	24.26
				560	820.00	25.31	24.25
				670	822.75	25.31	24.28
			32 (+ F-SCH)	450	817.25	25.34	24.32
				560	820.00	25.32	24.28
				670	822.75	25.33	24.31
			32 (+ SCH)	450	817.25	25.32	24.34
				560	820.00	25.32	24.29
				670	822.75	25.32	24.32
		RC5	9 (Loopback)	450	817.25	25.31	24.36
				560	820.00	25.31	24.32
				670	822.75	25.33	24.31
			55 (Loopback)	450	817.25	25.30	24.32
	560			820.00	25.29	24.29	
	670			822.75	25.32	24.32	
	1xAdvanced	RC11	2 (Loopback)	450	817.25	25.42	24.41
				560	820.00	25.39	24.37
				670	822.75	25.40	24.37
			75 (Loopback)	450	817.25	25.37	24.36
				560	820.00	25.39	24.36
				670	822.75	25.39	24.37
		32 (+ F-SCH)	450	817.25	25.37	24.44	
			560	820.00	25.38	24.36	
			670	822.75	25.40	24.38	
		32 (+ SCH)	450	817.25	25.37	24.43	
			560	820.00	25.39	24.39	
			670	822.75	25.39	24.39	
	1xEVDO Rel. 0	FTAP Rate: 307.2 kbps(2 slot, QPSK)	RTAP Rate: 153.6 kbps	450	817.25	25.61	24.64
				560	820.00	25.65	24.63
				670	822.75	25.70	24.47
	1xEVDO Rev. A	FETAP: 307.2k, QPSK/ ACK	RETAP: 4096	450	817.25	25.56	24.69
				560	820.00	25.64	24.68
				670	822.75	25.61	24.70

8.2.2. CDMA BC0

Test Engineer ID:	39006	Test Date:	6/6/2021
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Band	Mode	Radio Configuration (RC)	Service Option (SO)	Ch No.	Freq. (MHz)	Conducted Average Power (dBm)		
						ANT 1	ANT 2	
BC0 (850MHz)	1xRTT	RC1	2 (Loopback)	1013	824.70	23.22	22.63	
				384	836.52	23.24	22.62	
				777	848.31	23.32	22.68	
			55 (Loopback)	1013	824.70	23.09	22.60	
				384	836.52	23.21	22.57	
				777	848.31	23.31	22.69	
		RC2	9 (Loopback)	1013	824.70	23.20	22.50	
				384	836.52	23.22	22.61	
				777	848.31	23.30	22.67	
			55 (Loopback)	1013	824.70	23.18	22.60	
				384	836.52	23.19	22.59	
				777	848.31	23.29	22.64	
		RC3	2 (Loopback)	1013	824.70	23.15	22.60	
				384	836.52	23.22	22.62	
				777	848.31	23.28	22.67	
			55 (Loopback)	1013	824.70	23.17	22.61	
				384	836.52	23.19	22.60	
				777	848.31	23.30	22.68	
			32 (+ F-SCH)	1013	824.70	23.21	22.63	
				384	836.52	23.17	22.60	
				777	848.31	23.32	22.69	
				32 (+ SCH)	1013	824.70	23.14	22.67
					384	836.52	23.18	22.64
					777	848.31	23.28	22.71
		RC4	2 (Loopback)	1013	824.70	23.22	22.67	
				384	836.52	23.30	22.63	
				777	848.31	23.33	22.72	
			55 (Loopback)	1013	824.70	23.24	22.62	
				384	836.52	23.27	22.61	
				777	848.31	23.36	22.67	
			32 (+ F-SCH)	1013	824.70	23.24	22.68	
				384	836.52	23.30	22.63	
				777	848.31	23.37	22.71	
			32 (+ SCH)	1013	824.70	23.22	22.68	
				384	836.52	23.30	22.63	
				777	848.31	23.36	22.71	
		RC5	9 (Loopback)	1013	824.70	23.20	22.64	
				384	836.52	23.15	22.61	
				777	848.31	23.37	22.70	
			55 (Loopback)	1013	824.70	23.25	22.61	
				384	836.52	23.31	22.60	
				777	848.31	23.37	22.69	
		1xAdvanced	RC11	2 (Loopback)	1013	824.70	23.31	22.68
					384	836.52	23.35	22.64
					777	848.31	23.41	22.74
				75 (Loopback)	1013	824.70	23.33	22.65
					384	836.52	23.34	22.65
					777	848.31	23.43	22.74
	32 (+ F-SCH)			1013	824.70	23.35	22.69	
				384	836.52	23.38	22.67	
				777	848.31	23.45	22.75	
	32 (+ SCH)			1013	824.70	23.33	22.72	
				384	836.52	23.35	22.70	
				777	848.31	23.42	22.76	
	1xEVDO Rel. 0		FTAP Rate: 307.2 kbps(2 slot, QPSK)	RTAP Rate: 153.6 kbps	1013	824.70	23.25	23.00
					384	836.52	23.36	23.00
					777	848.31	23.43	22.97
	1xEVDO Rev. A		FETAP: 307.2k, QPSK/ ACK	RETAP: 4096	1013	824.70	23.39	22.94
					384	836.52	23.50	22.95
					777	848.31	23.50	22.93

8.2.3. CDMA BC1

Test Engineer ID:	19186	Test Date:	5/11/2021
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Band	Mode	Radio Configuration (RC)	Service Option (SO)	Ch No.	Freq. (MHz)	Conducted Average Power (dBm)		
						ANT 1	ANT 2	
BC1 (1900MHz)	1xRTT	RC1	2 (Loopback)	25	1851.25	25.35	23.53	
				600	1880.00	25.36	23.51	
				1175	1908.75	25.44	23.48	
			55 (Loopback)	25	1851.25	25.30	23.54	
				600	1880.00	25.34	23.47	
				1175	1908.75	25.43	23.47	
		RC2	9 (Loopback)	25	1851.25	25.33	23.57	
				600	1880.00	25.38	23.48	
				1175	1908.75	25.46	23.49	
			55 (Loopback)	25	1851.25	25.38	23.53	
				600	1880.00	25.41	23.49	
				1175	1908.75	25.48	23.49	
		RC3	2 (Loopback)	25	1851.25	25.41	23.55	
				600	1880.00	25.42	23.46	
				1175	1908.75	25.50	23.47	
			55 (Loopback)	25	1851.25	25.45	23.54	
				600	1880.00	25.45	23.49	
				1175	1908.75	25.56	23.48	
			32 (+ F-SCH)	25	1851.25	25.35	23.59	
				600	1880.00	25.44	23.49	
				1175	1908.75	25.51	23.47	
			32 (+ SCH)	25	1851.25	25.38	23.59	
				600	1880.00	25.44	23.55	
				1175	1908.75	25.55	23.48	
		RC4	2 (Loopback)	25	1851.25	25.36	23.59	
				600	1880.00	25.39	23.47	
				1175	1908.75	25.44	23.50	
			55 (Loopback)	25	1851.25	25.42	23.51	
				600	1880.00	25.45	23.47	
				1175	1908.75	25.52	23.46	
			32 (+ F-SCH)	25	1851.25	25.35	23.59	
				600	1880.00	25.39	23.51	
				1175	1908.75	25.46	23.49	
			32 (+ SCH)	25	1851.25	25.36	23.63	
				600	1880.00	25.37	23.54	
				1175	1908.75	25.42	23.48	
		RC5	9 (Loopback)	25	1851.25	25.35	23.55	
				600	1880.00	25.37	23.47	
				1175	1908.75	25.49	23.46	
			55 (Loopback)	25	1851.25	25.44	23.54	
				600	1880.00	25.48	23.49	
				1175	1908.75	25.57	23.47	
		1xAdvanced	RC11	2 (Loopback)	25	1851.25	25.41	23.59
					600	1880.00	25.44	23.55
					1175	1908.75	25.49	23.56
				75 (Loopback)	25	1851.25	25.38	23.61
					600	1880.00	25.40	23.56
					1175	1908.75	25.52	23.54
			32 (+ F-SCH)	25	1851.25	25.43	23.65	
				600	1880.00	25.48	23.59	
				1175	1908.75	25.51	23.55	
			32 (+ SCH)	25	1851.25	25.46	23.62	
				600	1880.00	25.50	23.61	
				1175	1908.75	25.52	23.58	
		1xEVDO Rel. 0	FTAP Rate: 307.2 kbps(2 slot, QPSK)	RTAP Rate: 153.6 kbps	25	1851.25	25.41	23.70
					600	1880	25.21	23.56
					1175	1908.75	25.64	23.52
		1xEVDO Rev. A	FETAP: 307.2k, QPSK/ ACK	RETAP: 4096	25	1851.25	25.39	23.20
					600	1880	25.41	23.54
					1175	1908.75	25.70	23.64

8.3. WCDMA

TEST PROCEDURE

The transmitter output was connected to the input terminal of Directional Coupler via calibrated coaxial cable. The output coupling terminal of the Directional Coupler was directly connected to a spectrum analyzer while the output through terminal connected to the communication test set via calibrated coaxial cable.

The output power was measured with the spectrum analyzer at the low, middle and high channel in each band.

- Set the spectrum analyzer span wide enough or greater than the modulated signal BW.
- Set a spectrum analyzer at peak detection mode with $VBW \geq RBW \geq 26dB$ BW, typically 5MHz.
- Set a marker to point the corresponding peak value.

REL 99

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

Mode	Subtest	Rel99
WCDMA General Settings	Loopback Mode	Test Mode 2
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	β_c/β_d	8/15

HSDPA REL 5

The following 4 Sub-tests were completed according to Release 5 procedures in table C.10.1.4 of 3GPP TS 34.121-1 A summary of these settings are illustrated below:

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note 1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$.

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$, and $\Delta_{CQI} = 24/15$ with $\beta_{HS} = 24/15 * \beta_c$.

Note 3: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{HS}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.

HSPA REL 6 (HSDPA & HSUPA)

The following 5 Sub-tests were completed according to Release 6 procedures in table C.11.1.3 of 3GPP TS 34.121-1. A summary of these settings are illustrated below:

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

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note 1)	β_{ec}	β_{ed} (Note 4) (Note 5)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/25	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1} : 47/15 β_{ed2} : 47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$. For sub-test 5, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 5/15$ with $\beta_{hs} = 5/15 * \beta_c$.

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$.

Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.

Note 5: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

DUAL CARRIER HSDPA (DC-HSDPA (REL 8, CAT 24))

The following 4 Sub-tests for DC-HSDPA were completed according to Release 8 procedures in table C08.1.12 of 3GPP TS 34.121-1. A summary of subtest settings are illustrated below:

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Processes	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
<p>Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.</p> <p>Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.</p>		

HSPA+ REL 7

The following 1 Sub-test was completed according to Release 7 procedures in table C.11.1.4 of 3GPP TS34.121. A summary of these settings are illustrated below:

Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM

Sub-test	β_c (Note 3)	β_d	β_{HS} (Note 1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed1} : 30/15 β_{ed2} : 30/15	β_{ed3} : 24/15 β_{ed4} : 24/15	3.5	2.5	14	105	105

Note 1: $\Delta_{ACK}, \Delta_{NACK}$ and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$.

Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).

Note 3: DPDCH is not configured, therefore the β_c is set to 1 and $\beta_d = 0$ by default.

Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.

RESULT

8.3.1. WCDMA BAND 5

Test Engineer ID:	10646	Test Date:	3/8/2021
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Band	Mode		UL Ch No.	Freq. (MHz)	MPR (dB)	Conducted Average Power (dBm)		
						ANT 1	ANT 2	
W-CDMA Band 5 (850MHz)	Rel 99	RMC, 12.2 kbps	4132	826.4	N/A	25.70	24.70	
			4183	836.6	N/A	25.64	24.68	
			4233	846.6	N/A	25.64	24.63	
	HSDPA	Subtest 1	4132	826.4	0	24.64	23.73	
			4183	836.6	0	24.58	23.67	
			4233	846.6	0	24.57	23.63	
		Subtest 2	4132	826.4	0	24.69	23.68	
			4183	836.6	0	24.59	23.64	
			4233	846.6	0	24.54	23.59	
		Subtest 3	4132	826.4	0.5	24.15	23.19	
			4183	836.6	0.5	24.08	23.14	
			4233	846.6	0.5	24.03	23.09	
		Subtest 4	4132	826.4	0.5	24.16	23.19	
			4183	836.6	0.5	24.09	23.15	
			4233	846.6	0.5	24.06	23.10	
		HSPA (HSDPA & HSUPA)	Subtest 1	4132	826.4	0	24.66	23.63
				4183	836.6	0	24.60	23.65
				4233	846.6	0	24.58	23.64
	Subtest 2		4132	826.4	2	22.71	21.71	
			4183	836.6	2	22.66	21.66	
			4233	846.6	2	22.64	21.64	
	Subtest 3		4132	826.4	1	23.72	11.77	
			4183	836.6	1	23.65	22.69	
			4233	846.6	1	23.42	22.64	
	Subtest 4		4132	826.4	2	22.67	21.71	
			4183	836.6	2	22.58	21.66	
			4233	846.6	2	22.58	21.66	
	Subtest 5		4132	826.4	0	24.19	23.26	
			4183	836.6	0	24.14	23.25	
			4233	846.6	0	24.14	23.22	
	DC-HSDPA	Subtest 1	4132	826.4	0	24.62	23.71	
			4183	836.6	0	24.56	23.68	
			4233	846.6	0	24.55	23.63	
		Subtest 2	4132	826.4	0	24.66	23.66	
			4183	836.6	0	24.58	23.66	
			4233	846.6	0	24.57	23.62	
		Subtest 3	4132	826.4	0.5	24.17	23.22	
			4183	836.6	0.5	24.11	23.14	
			4233	846.6	0.5	24.09	23.11	
		Subtest 4	4132	826.4	0.5	24.18	23.22	
			4183	836.6	0.5	24.11	23.15	
			4233	846.6	0.5	24.09	23.07	

8.3.2. WCDMA BAND 2

Test Engineer ID:	10646	Test Date:	3/8/2021
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Band	Mode		UL Ch No.	Freq. (MHz)	MPR (dB)	Conducted Average Power (dBm)				
						ANT 1	ANT 2	ANT 3	ANT 4	
W-CDMA Band 2 (1900MHz)	Rel 99	RMC, 12.2 kbps	9262	1852.4	N/A	25.62	23.67	25.20	23.70	
			9400	1880.0	N/A	25.53	23.56	25.13	23.63	
			9538	1907.6	N/A	25.60	23.58	25.15	23.65	
	HSDPA	Subtest 1	9262	1852.4	0	25.67	23.69	24.20	22.75	
			9400	1880.0	0	25.55	23.55	24.07	22.62	
			9538	1907.6	0	25.60	23.57	24.09	22.64	
		Subtest 2	9262	1852.4	0	25.70	23.66	24.23	22.77	
			9400	1880.0	0	25.58	23.56	24.12	22.62	
			9538	1907.6	0	25.62	23.55	24.13	22.66	
		Subtest 3	9262	1852.4	0.5	25.69	23.70	23.70	22.25	
			9400	1880.0	0.5	25.60	23.56	23.55	22.10	
			9538	1907.6	0.5	25.61	23.56	23.59	22.09	
		Subtest 4	9262	1852.4	0.5	24.70	22.66	23.75	22.23	
			9400	1880.0	0.5	24.56	22.57	23.61	22.11	
			9538	1907.6	0.5	24.63	22.57	23.63	22.11	
		HSPA (HSDPA & HSUPA)	Subtest 1	9262	1852.4	0	24.70	22.68	24.25	22.72
				9400	1880.0	0	24.62	22.54	24.13	22.61
				9538	1907.6	0	24.64	22.57	24.13	22.67
	Subtest 2		9262	1852.4	2	24.21	22.18	22.21	20.71	
			9400	1880.0	2	24.11	22.08	22.07	20.63	
			9538	1907.6	2	24.15	22.05	22.05	20.62	
	Subtest 3		9262	1852.4	1	24.23	22.16	23.18	21.72	
			9400	1880.0	1	24.13	22.07	23.10	21.63	
			9538	1907.6	1	24.17	22.10	23.11	21.66	
	Subtest 4		9262	1852.4	2	24.70	22.66	22.29	20.79	
			9400	1880.0	2	24.62	22.60	22.16	20.69	
			9538	1907.6	2	24.67	22.65	22.13	20.68	
	Subtest 5		9262	1852.4	0	22.71	20.65	23.85	22.36	
			9400	1880.0	0	22.60	20.58	23.73	22.17	
			9538	1907.6	0	22.63	20.59	23.70	22.27	
	DC-HSDPA	Subtest 1	9262	1852.4	0	23.67	21.63	24.21	22.80	
			9400	1880.0	0	23.65	21.57	24.09	22.66	
			9538	1907.6	0	23.64	21.60	24.09	22.45	
		Subtest 2	9262	1852.4	0	22.75	20.71	24.24	22.63	
			9400	1880.0	0	22.67	20.63	24.11	22.49	
			9538	1907.6	0	22.67	20.64	24.11	22.52	
Subtest 3		9262	1852.4	0.5	24.32	22.26	23.72	22.18		
		9400	1880.0	0.5	24.22	22.19	23.60	22.02		
		9538	1907.6	0.5	24.23	22.09	23.62	22.06		
Subtest 4		9262	1852.4	0.5	24.78	22.68	23.78	22.18		
		9400	1880.0	0.5	24.63	22.58	23.66	22.10		
		9538	1907.6	0.5	24.66	22.58	23.64	22.08		

8.3.3. WCDMA BAND 4

Test Engineer ID:	10646	Test Date:	3/8/2021
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Band	Mode		UL Ch No.	Freq. (MHz)	MPR (dB)	Conducted Average Power (dBm)			
						ANT 1	ANT 2	ANT 3	ANT 4
W-CDMA Band 4 (1700MHz)	Rel 99	RMC, 12.2 kbps	1312	1712.4	N/A	25.69	23.70	25.10	23.69
			1413	1732.6	N/A	25.70	23.70	25.20	23.70
			1513	1752.6	N/A	25.58	22.75	25.10	23.68
	HSDPA	Subtest 1	1312	1712.4	0	24.75	22.82	24.16	22.74
			1413	1732.6	0	24.72	22.72	24.21	22.73
			1513	1752.6	0	24.60	22.70	24.14	22.71
		Subtest 2	1312	1712.4	0	24.74	22.80	24.16	22.69
			1413	1732.6	0	24.70	22.71	24.21	22.72
			1513	1752.6	0	24.59	22.22	24.13	22.69
		Subtest 3	1312	1712.4	0.5	24.19	22.29	23.66	22.19
			1413	1732.6	0.5	24.23	22.22	23.73	22.23
			1513	1752.6	0.5	24.12	22.23	23.64	22.20
		Subtest 4	1312	1712.4	0.5	24.21	22.30	23.61	22.26
			1413	1732.6	0.5	24.27	22.21	23.71	22.25
			1513	1752.6	0.5	24.11	22.75	23.64	22.20
	HSPA (HSDPA & HSUPA)	Subtest 1	1312	1712.4	0	24.74	22.81	24.20	22.75
			1413	1732.6	0	24.71	22.76	24.28	22.75
			1513	1752.6	0	24.60	20.77	24.17	22.76
		Subtest 2	1312	1712.4	2	22.75	20.86	22.23	20.75
			1413	1732.6	2	22.74	20.77	22.28	20.78
			1513	1752.6	2	22.63	21.71	22.22	20.77
		Subtest 3	1312	1712.4	1	12.43	21.80	23.25	21.76
			1413	1732.6	1	23.76	21.76	23.28	21.76
			1513	1752.6	1	23.69	20.78	23.21	21.76
		Subtest 4	1312	1712.4	2	22.77	20.81	22.26	20.80
			1413	1732.6	2	22.80	20.77	22.28	20.77
			1513	1752.6	2	22.68	22.31	22.24	20.78
	Subtest 5	1312	1712.4	0	24.35	22.39	23.79	22.32	
		1413	1732.6	0	24.34	22.31	23.85	22.33	
		1513	1752.6	0	24.25	22.76	23.79	22.33	
	DC-HSDPA	Subtest 1	1312	1712.4	0	24.81	22.81	24.23	22.79
			1413	1732.6	0	24.81	22.73	24.28	22.78
			1513	1752.6	0	24.71	22.72	24.20	22.74
		Subtest 2	1312	1712.4	0	24.51	22.81	24.20	22.76
			1413	1732.6	0	24.57	22.72	24.25	22.74
			1513	1752.6	0	24.48	22.24	23.99	22.72
Subtest 3		1312	1712.4	0.5	24.12	22.30	23.56	22.29	
		1413	1732.6	0.5	24.12	22.20	23.65	22.27	
		1513	1752.6	0.5	24.00	22.24	23.56	22.23	
Subtest 4		1312	1712.4	0.5	24.13	22.31	23.57	22.27	
		1413	1732.6	0.5	24.13	22.23	23.67	22.26	
		1513	1752.6	0.5	24.01	-0.37	23.58	22.24	

9. CONDUCTED TEST RESULTS

9.1. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049
ISED: RSS132; RSS133§2.3; RSS139

LIMITS

For reporting purposes only.

TEST PROCEDURE

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the middle channel in each band. The 99% and -26dB bandwidths was also measured and recorded.

RESULTS

There is no limit required and power is the same for low, middle and high channel; therefore, only middle channel was tested.

GSM

Band	Modulation	Channel	f(MHz)	99% BW (KHz)	-26dB BW (KHz)
850	GPRS	190	836.6	244.9429	310.423
	EGPRS			241.0507	301.369
1900	GPRS	661	1880.0	242.9088	318.039
	EGPRS			237.7307	296.477

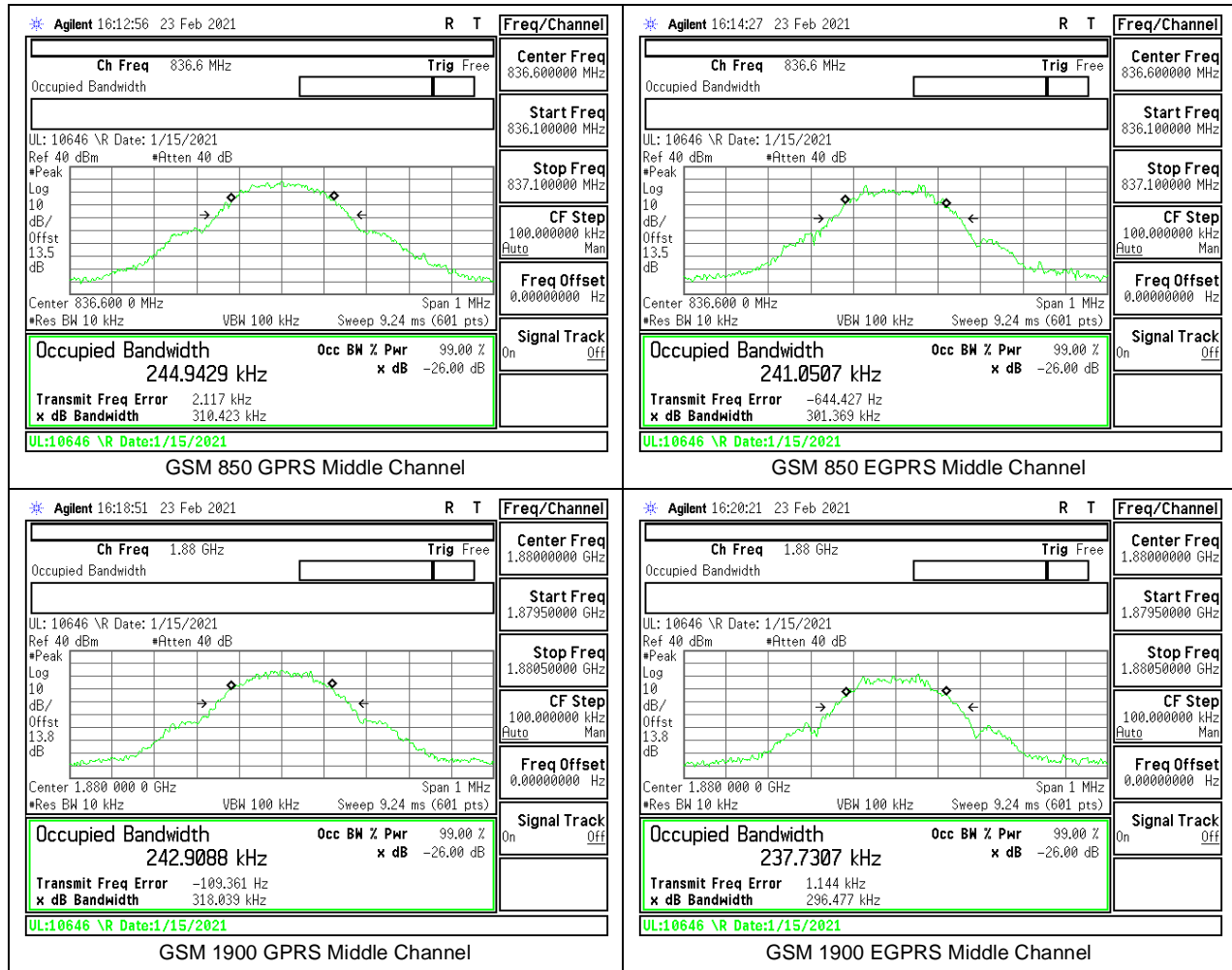
CDMA

Band	Modulation	Channel	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
BC10	1xRTT	560	820.0	1.2824	1.443
	1xEV-DO Rev A			1.2759	1.436
BC0	1xRTT	384	836.5	1.2793	1.433
	1xEV-DO Rev A			1.2826	1.440
BC1	1xRTT	600	1880.0	1.2755	1.430
	1xEV-DO Rev A			1.2827	1.429

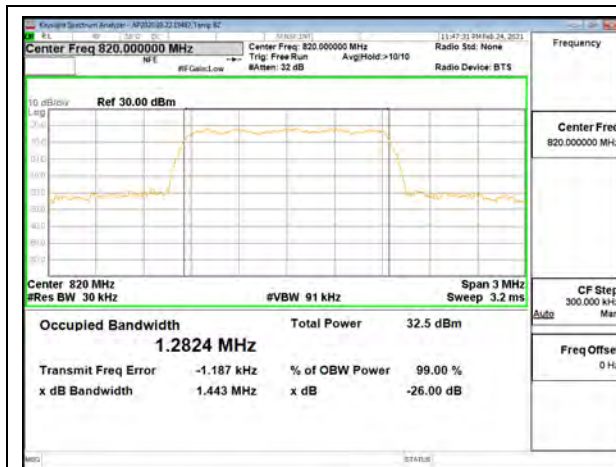
WCDMA

Band	Modulation	Channel	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
BAND 5	REL 99	4408	836.6	4.1566	4.702
	HSDPA			4.1635	4.700
BAND 2	REL 99	9800	1880.0	4.1430	4.717
	HSDPA			4.1412	4.713
BAND 4	REL 99	1638	1732.6	4.1559	4.716
	HSDPA			4.1250	4.696

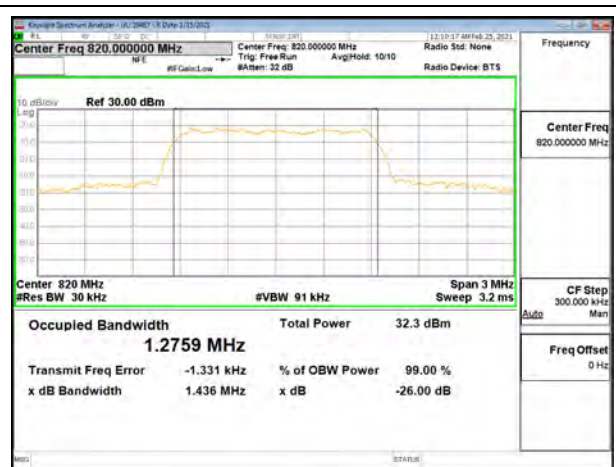
9.1.1. GSM



9.1.2. CDMA



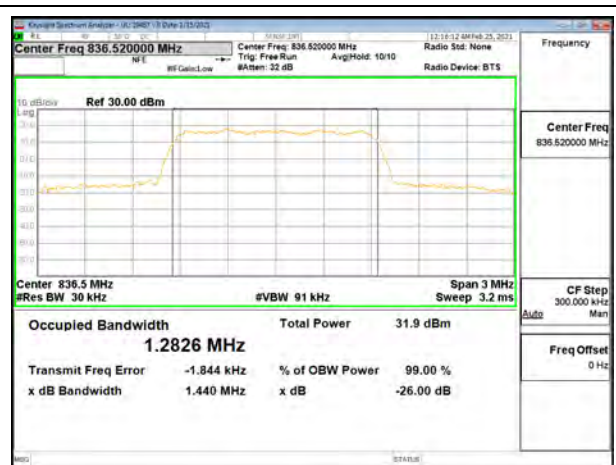
CDMA BC10 1xRTT Middle Channel



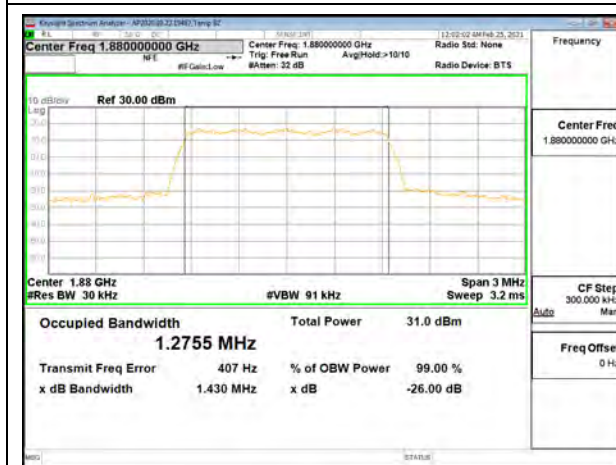
CDMA BC10 1xEV-DO Rev A Middle Channel



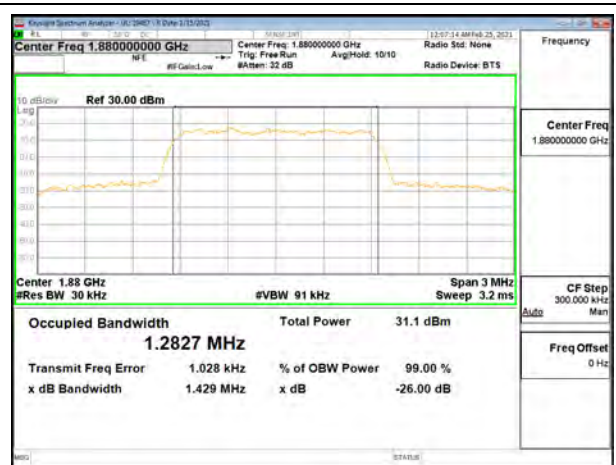
CDMA BC0 1xRTT Middle Channel



CDMA BC0 1xEV-DO Rev A Middle Channel

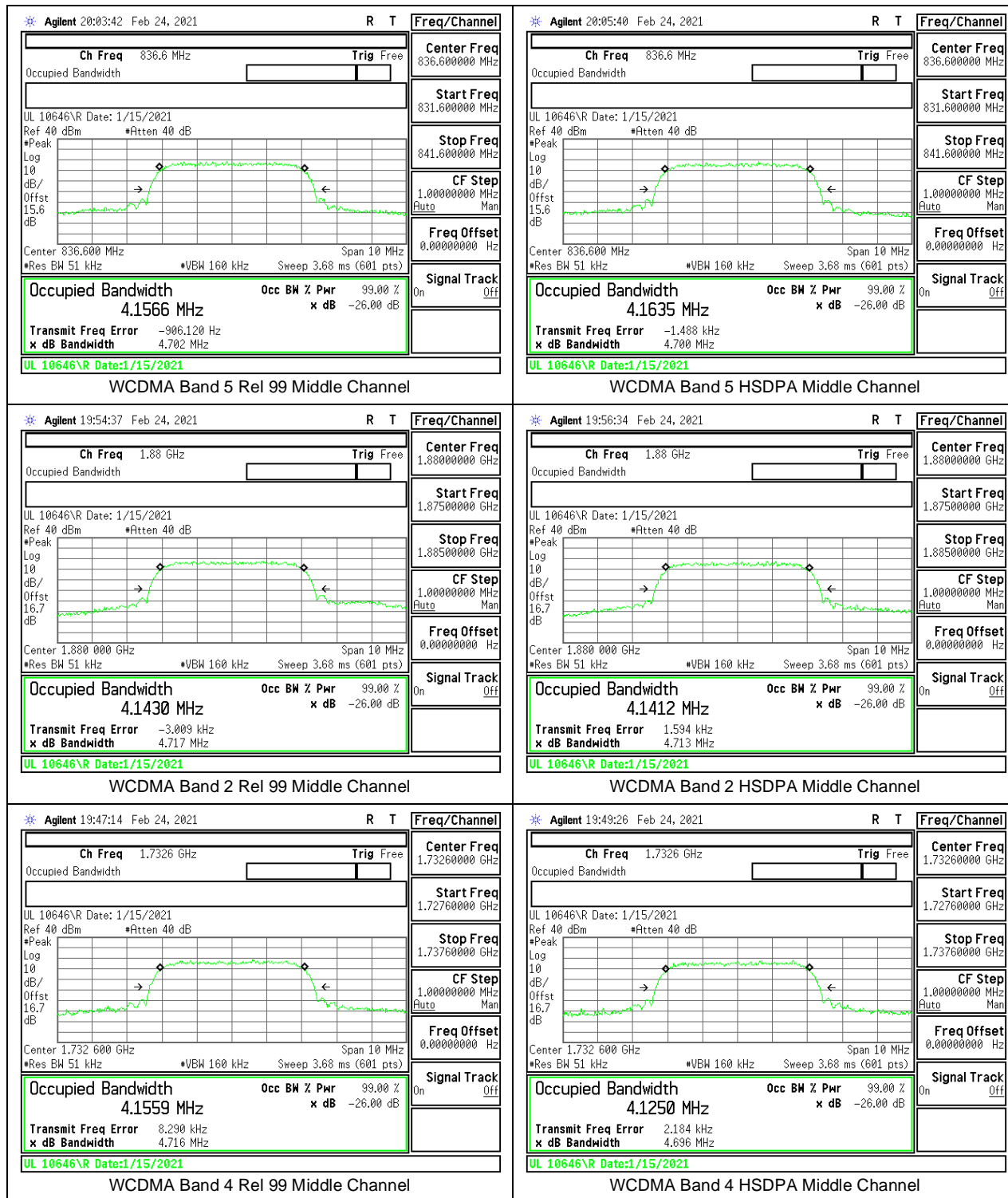


CDMA BC1 1xRTT Middle Channel



CDMA BC1 1xEV-DO Rev A Middle Channel

9.1.3. WCDMA



9.2. BAND EDGE AND EMISSION MASK

LIMITS

FCC: §22.917(a), §24.238, §27.53 (h)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

FCC: §90.691 Emission mask requirements for EA-based systems.

(a) Out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

RSS132§5.5

Mobile and base station equipment shall comply with the limits in (i) and (ii) below.

- (i) In the first 1.0 MHz band immediately outside and adjacent to each of the sub-bands specified in Section 5.1, the power of emissions per any 1% of the occupied bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts).
- (ii) After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts). If the measurement is performed using 1% of the occupied bandwidth, power integration over 100 kHz is required.

RSS133§6.5.1

Equipment shall comply with the limits in (i) and (ii) below.

- (i) In the 1.0 MHz bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1% of the emission bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts).
- (ii) After the first 1.0 MHz, the emission power in any 1 MHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts). If the measurement is performed using 1% of the emission bandwidth, power integration over 1.0 MHz is required.

RSS139§6.6

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

TEST PROCEDURE

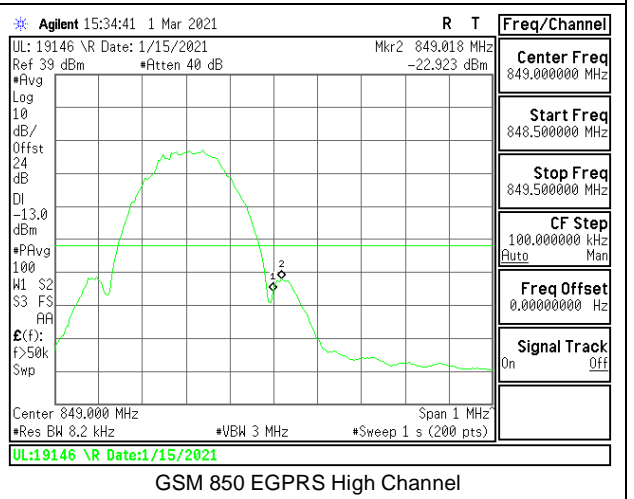
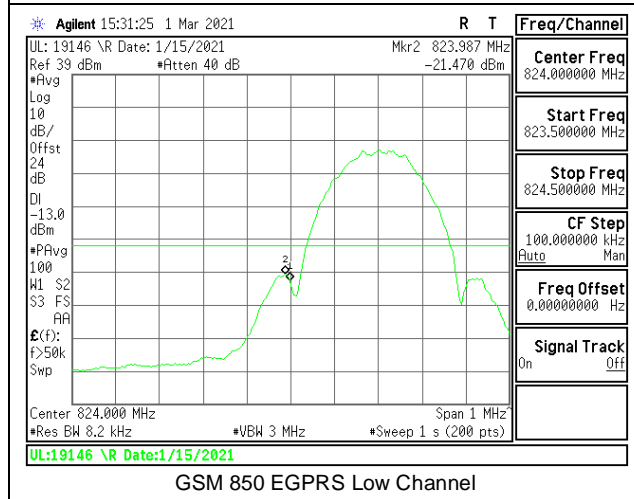
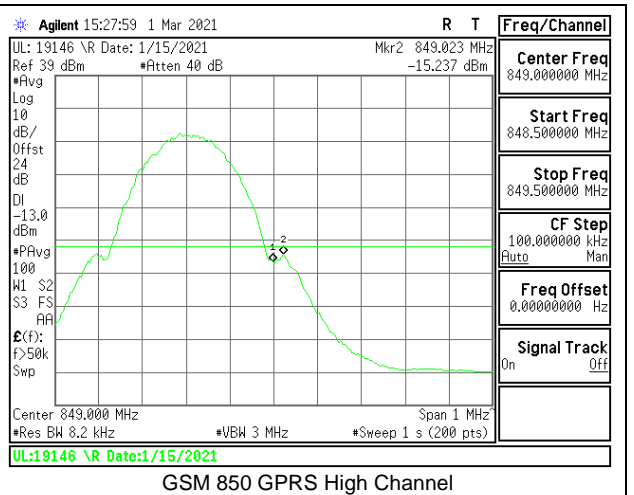
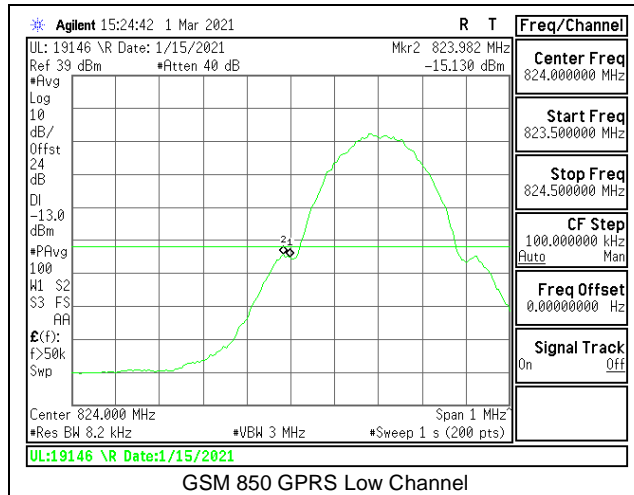
The transmitter output was connected to a R&S CMW500 Test Set and configured to operate at maximum power. The band edge emissions were measured at the required operating frequencies in each band on the Spectrum Analyzer.

For each band edge measurement:

- Set the spectrum analyzer span to include the block edge frequency.
- Set a marker to point the corresponding band edge frequency in each test case.
- Set display line at -13 dBm
- Set resolution bandwidth to at least 1% of emission bandwidth.

RESULTS

9.2.1. GSM 850



9.2.2. GSM 1900



GSM 1900 GPRS Low Channel



GSM 1900 GPRS High Channel



GSM 1900 EGPRS Low Channel



GSM 1900 EGPRS High Channel

9.2.3. CDMA BC10

Test Engineer ID:	10646	Test Date:	5/17/2021
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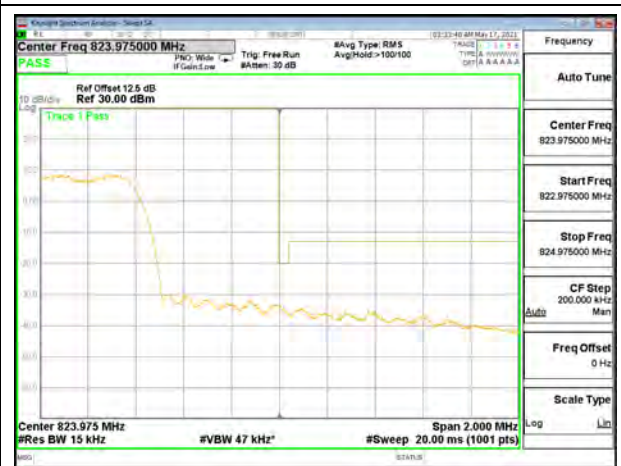
CDMA BC10 1xRTT Low Channel, RBW=1% of EBW



CDMA BC10 1xRTT High Channel, RBW=1% of EBW



CDMA BC10 1xEV-DO Rev A Low Channel, RBW=1% of EBW



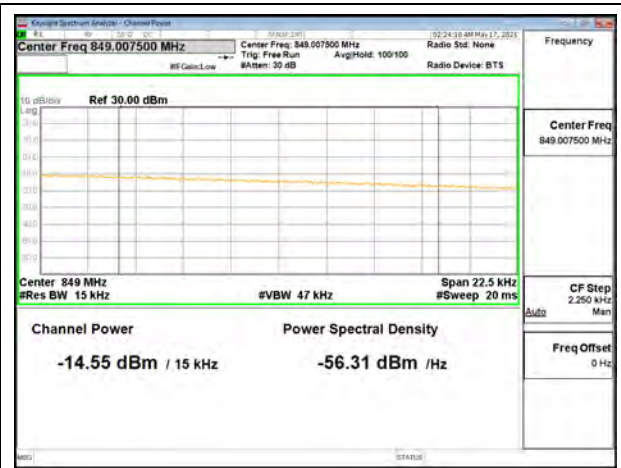
CDMA BC10 1xEV-DO Rev A High Channel, RBW=1% of EBW

9.2.4. CDMA BC0

Test Engineer ID:	10646	Test Date:	5/17/2021
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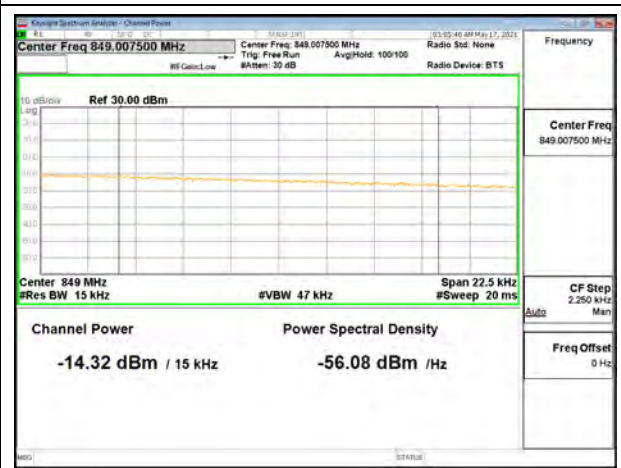
CDMA BC0 1xRTT Low Channel



CDMA BC0 1xRTT High Channel



CDMA BC0 1xEV-DO Rev A Low Channel



CDMA BC0 1xEV-DO Rev A High Channel

9.2.5. CDMA BC1



CDMA BC1 1xRTT Low Channel



CDMA BC1 1xRTT High Channel

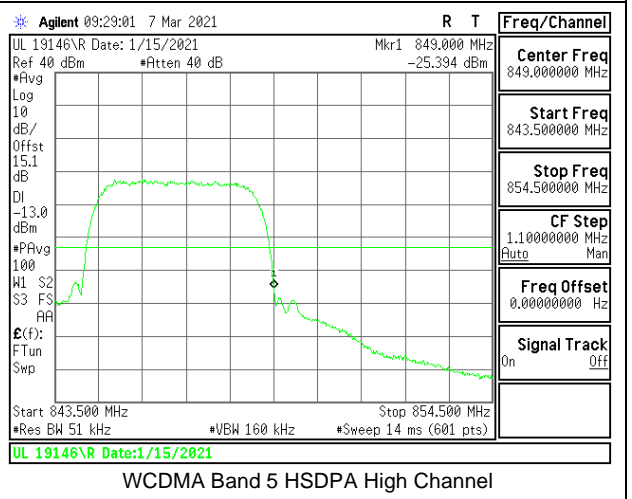
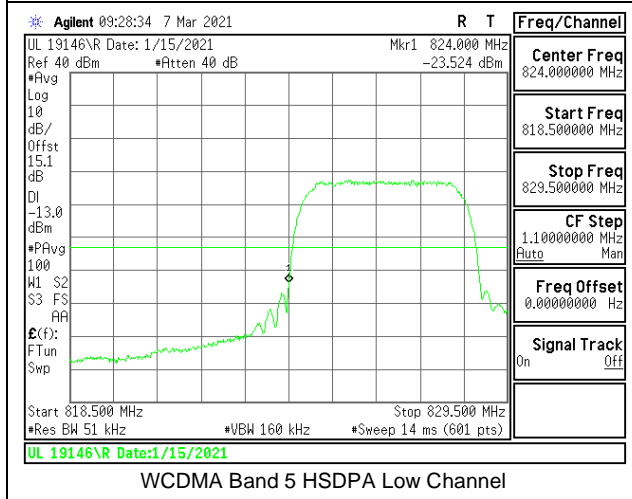
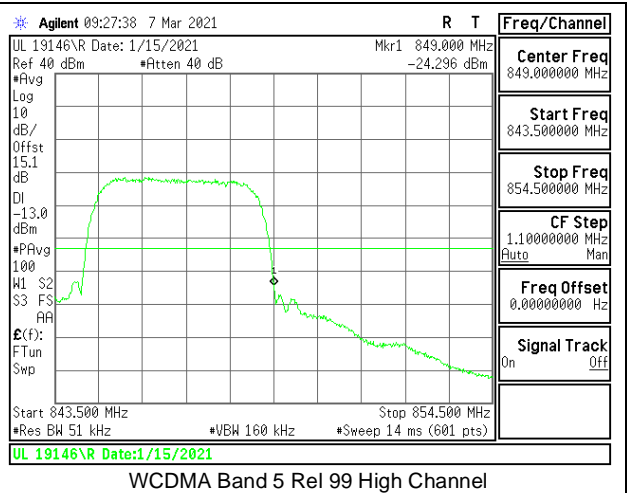
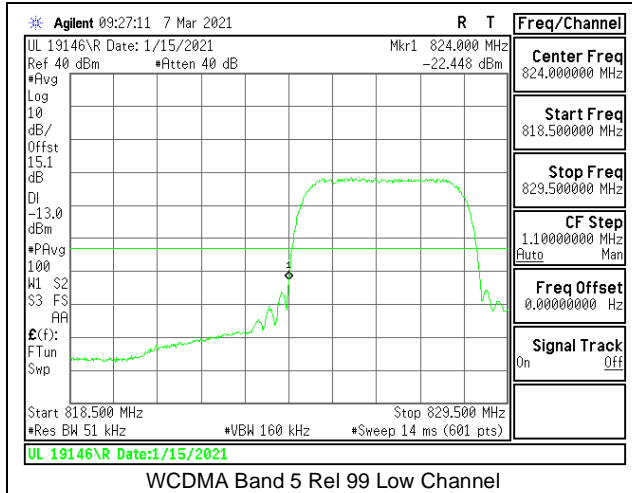


CDMA BC1 1xEV-DO Rev A Low Channel



CDMA BC1 1xEV-DO Rev A High Channel

9.2.6. WCDMA BAND 5



9.2.7. WCDMA BAND 2



WCDMA Band 2 Rel 99 Low Channel



WCDMA Band 2 Rel 99 High Channel

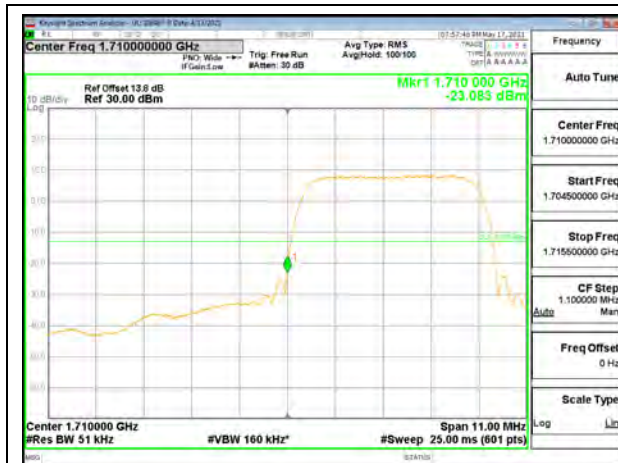


WCDMA Band 2 HSDPA Low Channel



WCDMA Band 2 HSDPA High Channel

9.2.8. WCDMA BAND 4



WCDMA Band 4 Rel 99 Low Channel



WCDMA Band 4 Rel 99 High Channel



WCDMA Band 4 HSDPA Low Channel



WCDMA Band 4 HSDPA High Channel

9.3. OUT OF BAND EMISSIONS

RULE PART(S)

FCC: §2.1051, §22.917, §24.238, §27.53 and §90.691
ISED: RSS132§5.5; RSS133§6.5 and RSS139§6.6

LIMITS

FCC: §22.917(a), §24.238, §27.53 (h), §90.691

The minimum permissible attenuation level of any spurious emissions is $43 + 10 \log (P)$ dB where transmitting power (P) in Watts.

RSS132§5.5, RSS133§6.5.1, RSS139§6.6

The minimum permissible attenuation level of any spurious emissions is $43 + 10 \log (P)$ dB where transmitting power (P) in Watts.

TEST PROCEDURE

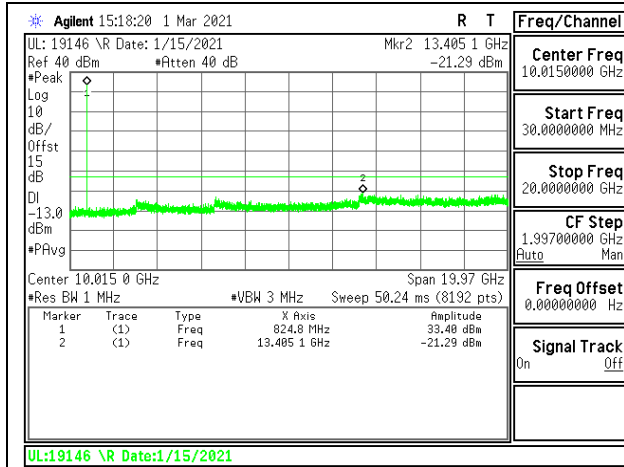
The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

For each out of band emissions measurement:

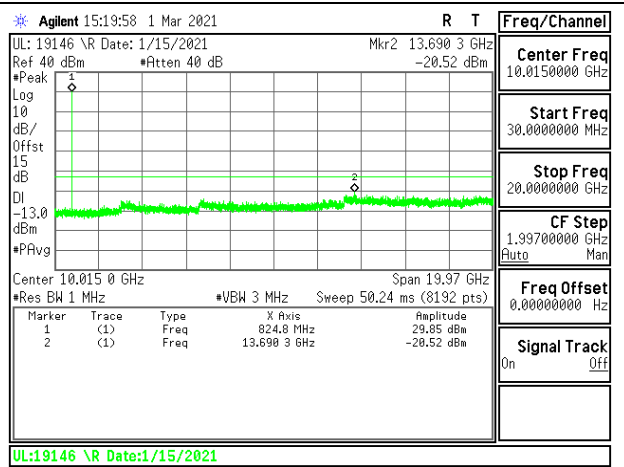
- Set display line at -13 dBm
- Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz.
(NOTE: Worst case set RBW/VBW to 1MHz/3MHz)

RESULTS

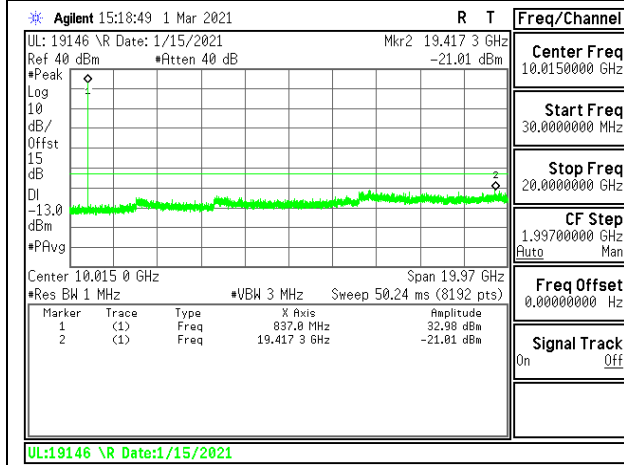
9.3.1. GSM 850



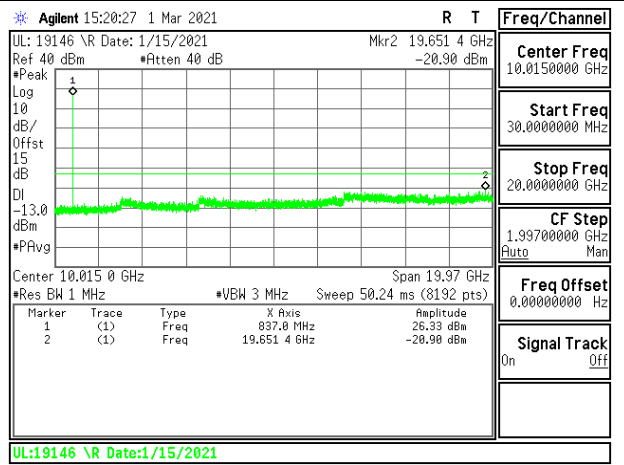
GSM 850 GPRS Low Channel



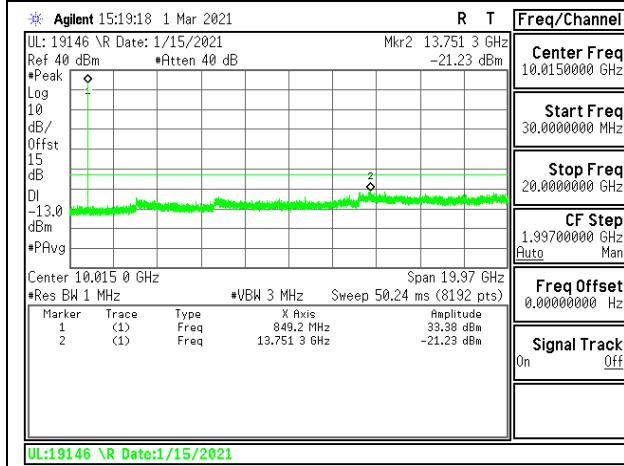
GSM 850 EGPRS Low Channel



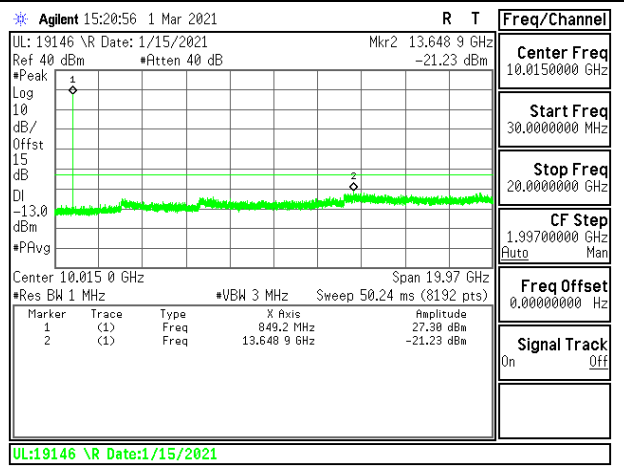
GSM 850 GPRS Middle Channel



GSM 850 EGPRS Middle Channel

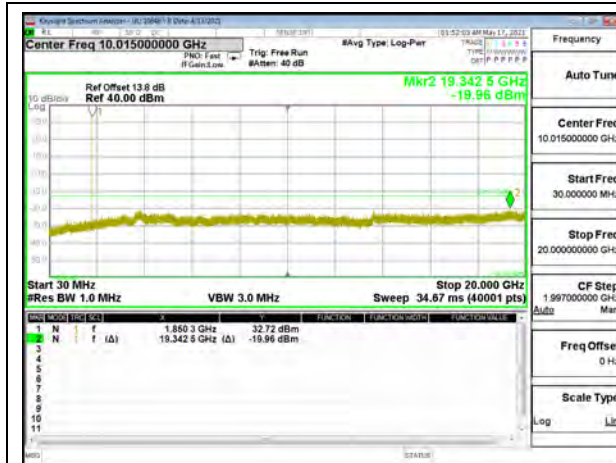


GSM 850 GPRS High Channel

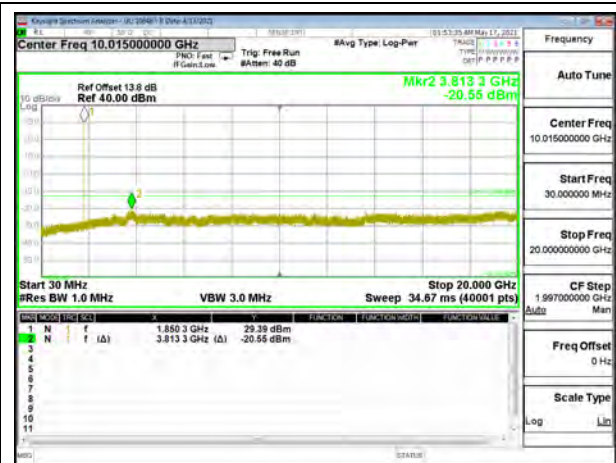


GSM 850 EGPRS High Channel

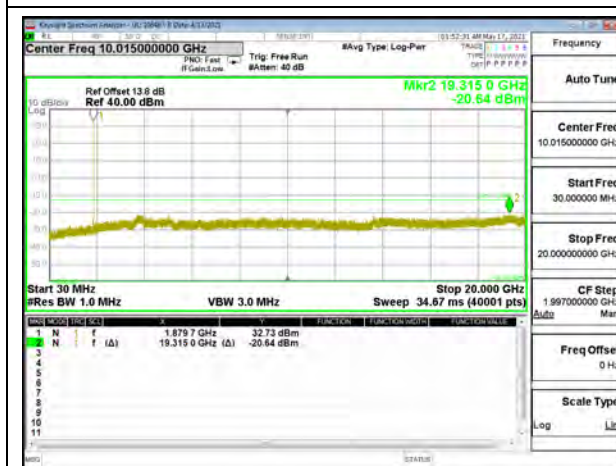
9.3.2. GSM 1900



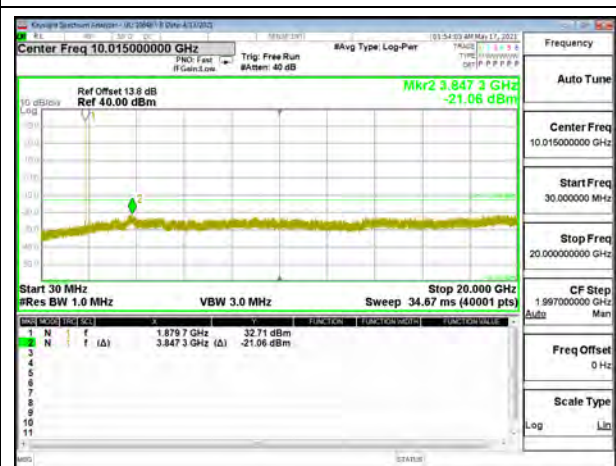
GSM 1900 GPRS Low Channel



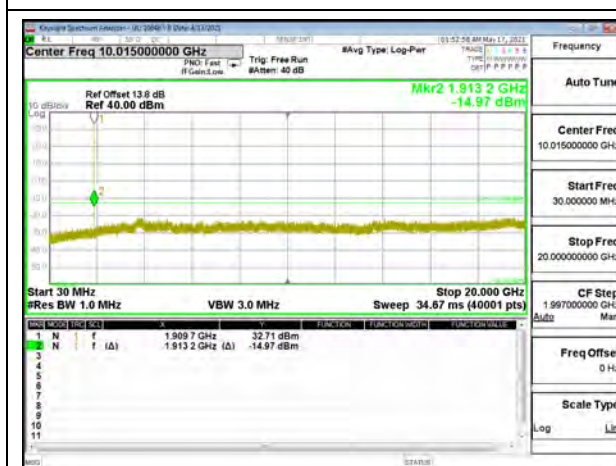
GSM 1900 EGPRS Low Channel



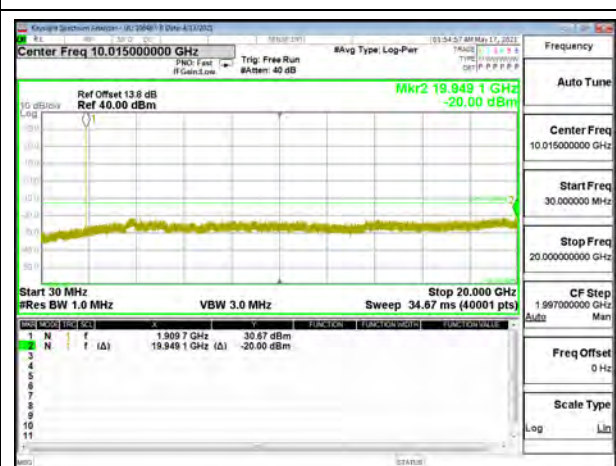
GSM 1900 GPRS Middle Channel



GSM 1900 EGPRS Middle Channel

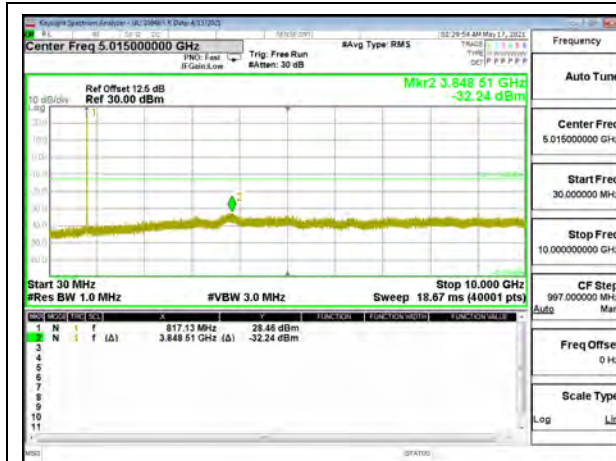


GSM 1900 GPRS High Channel

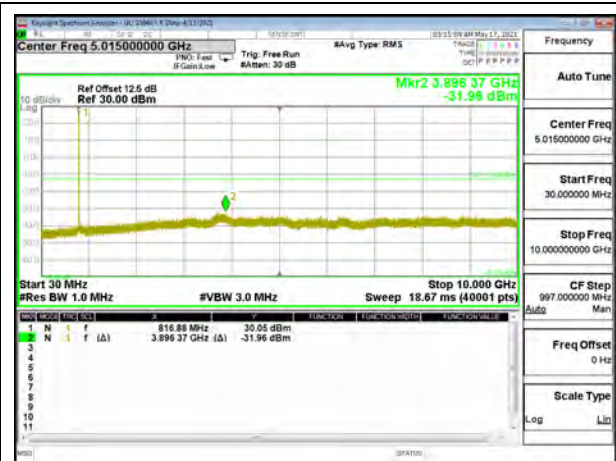


GSM 1900 EGPRS High Channel

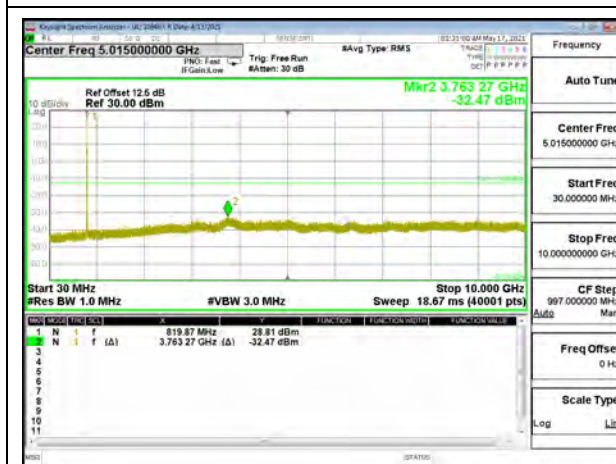
9.3.3. CDMA BC10



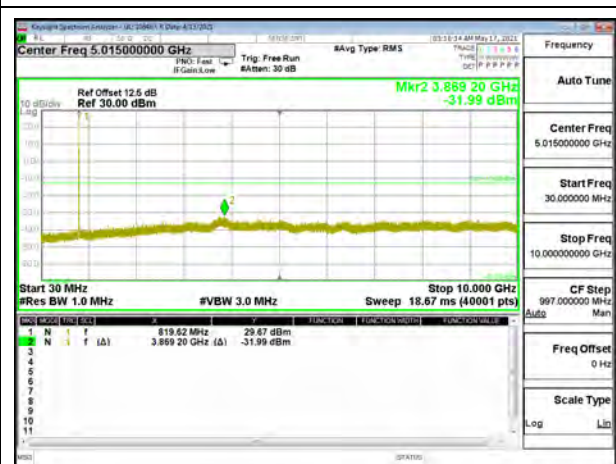
CDMA BC10 1xRTT Low Channel



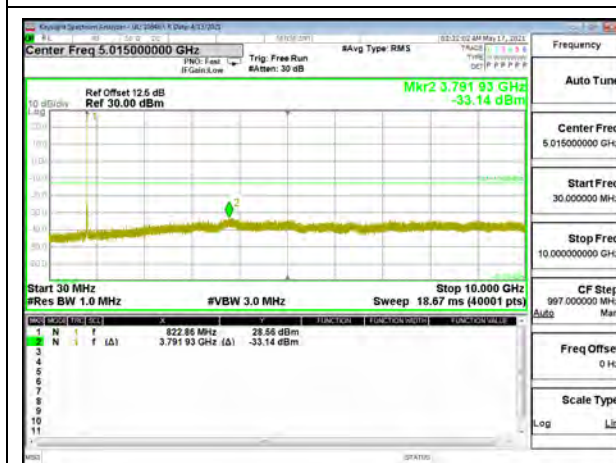
CDMA BC10 1xEV-DO Rev A Low Channel



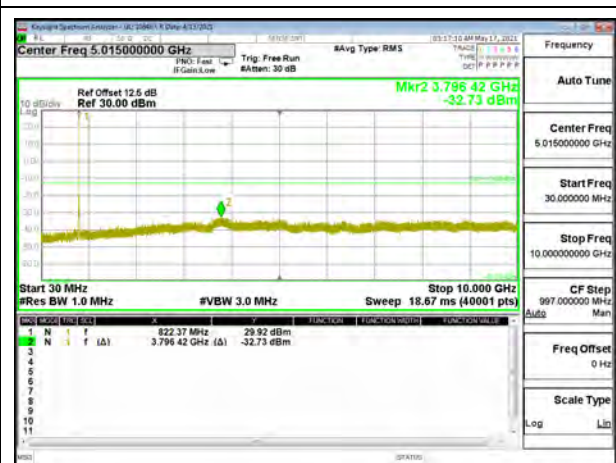
CDMA BC10 1xRTT Middle Channel



CDMA BC10 1xEV-DO Rev A Middle Channel

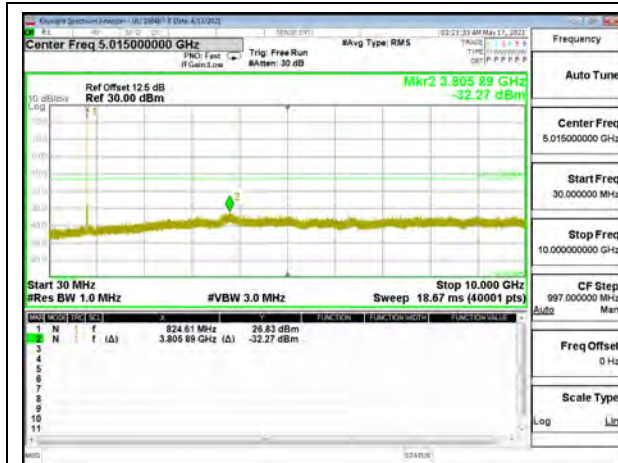


CDMA BC10 1xRTT High Channel

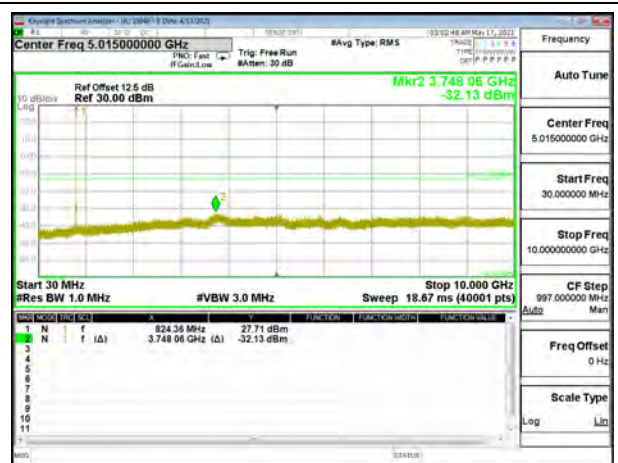


CDMA BC10 1xEV-DO Rev A High Channel

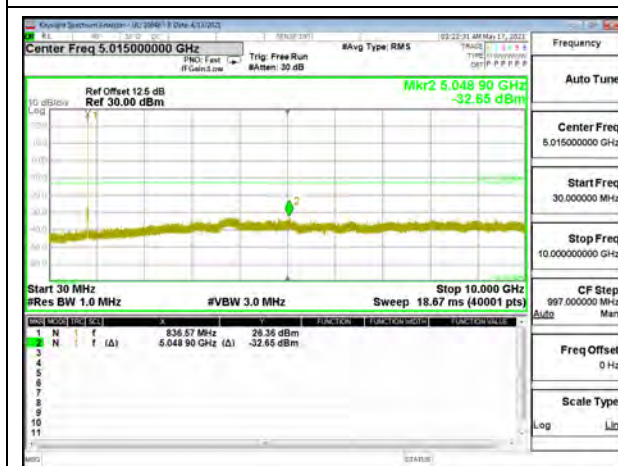
9.3.4. CDMA BC0



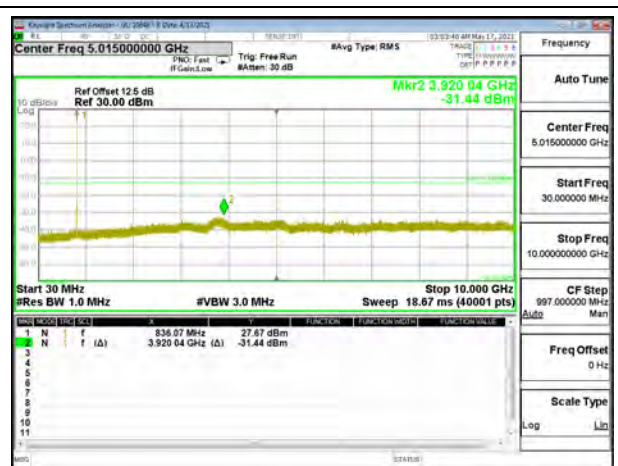
CDMA BC0 1xRTT Low Channel



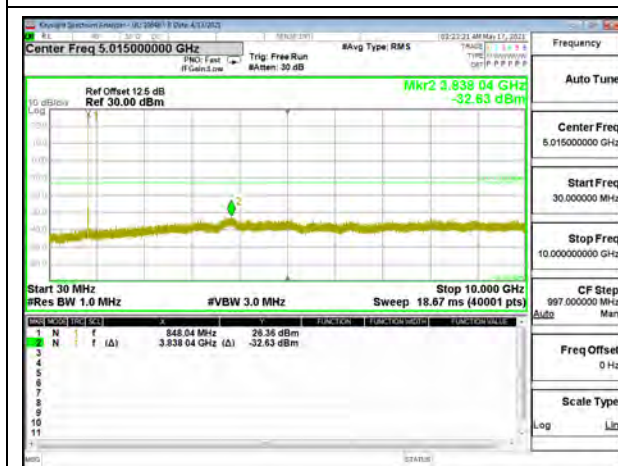
CDMA BC0 1xEV-DO Rev A Low Channel



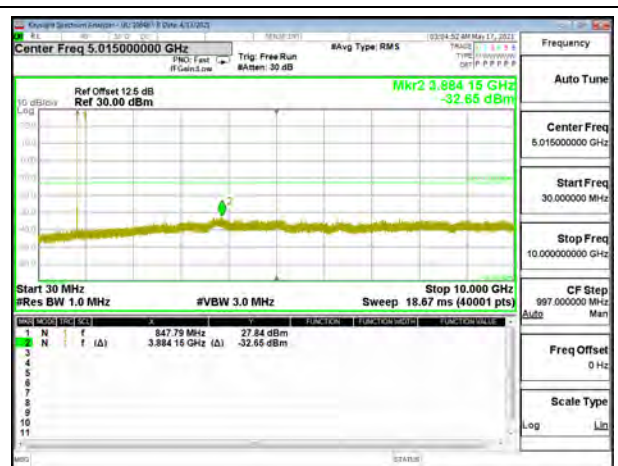
CDMA BC0 1xRTT Middle Channel



CDMA BC0 1xEV-DO Rev A Middle Channel

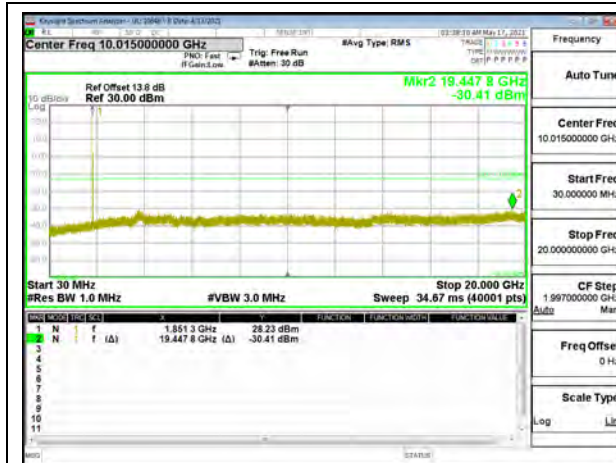


CDMA BC0 1xRTT High Channel

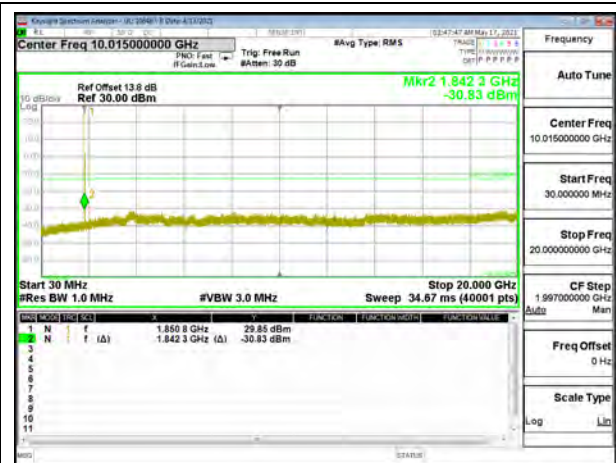


CDMA BC0 1xEV-DO Rev A High Channel

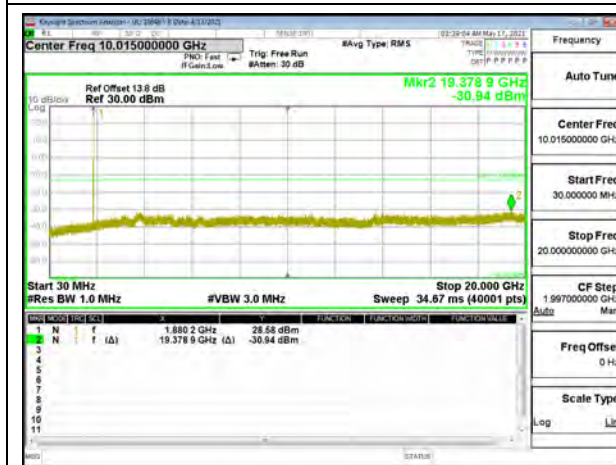
9.3.5. CDMA BC1



CDMA BC1 1xRTT Low Channel



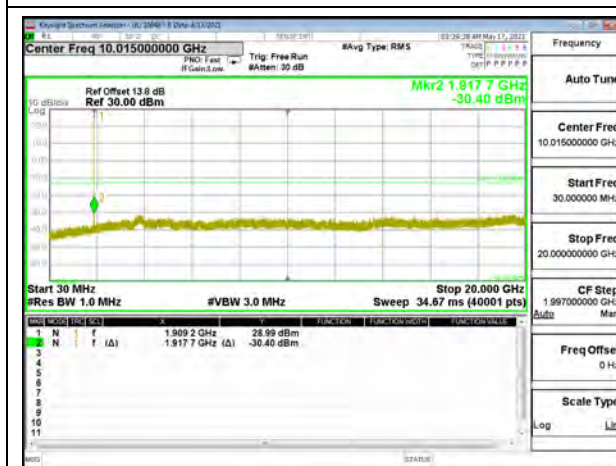
CDMA BC1 1xEV-DO Rev A Low Channel



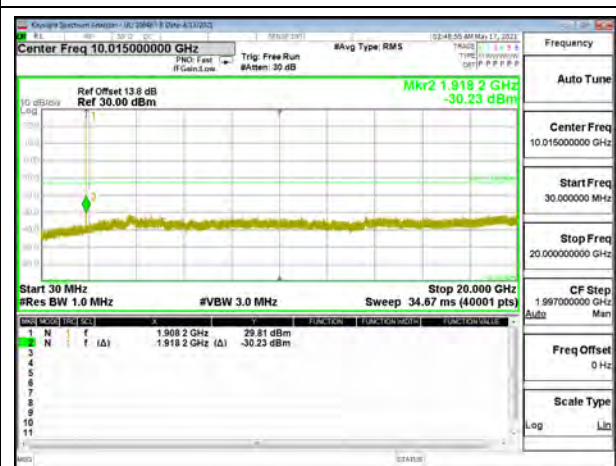
CDMA BC1 1xRTT Middle Channel



CDMA BC1 1xEV-DO Rev A Middle Channel

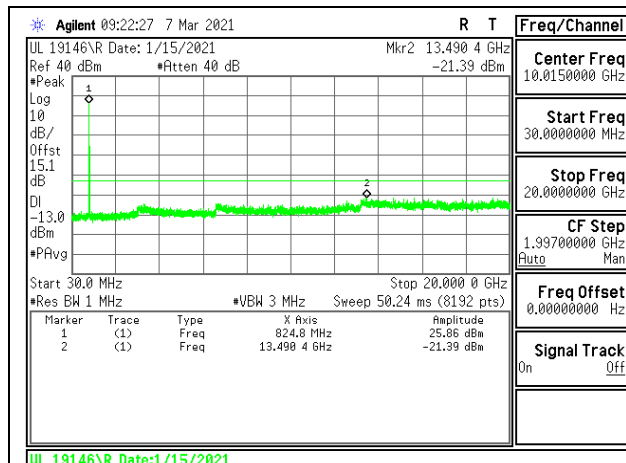


CDMA BC1 1xRTT High Channel

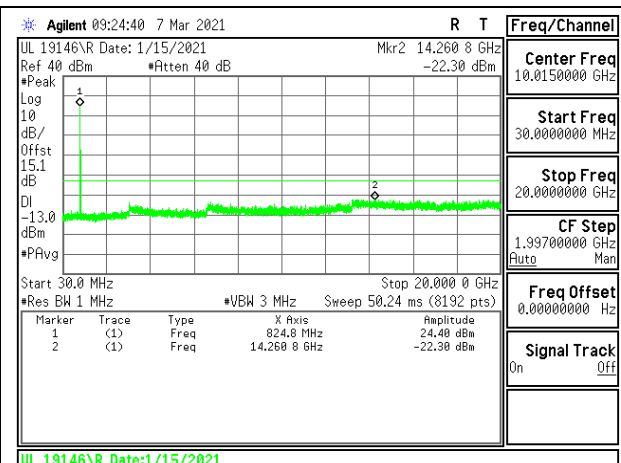


CDMA BC1 1xEV-DO Rev A High Channel

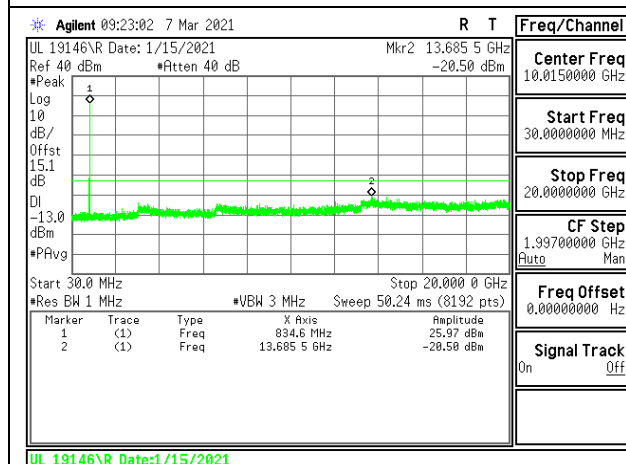
9.3.6. WCDMA BAND 5



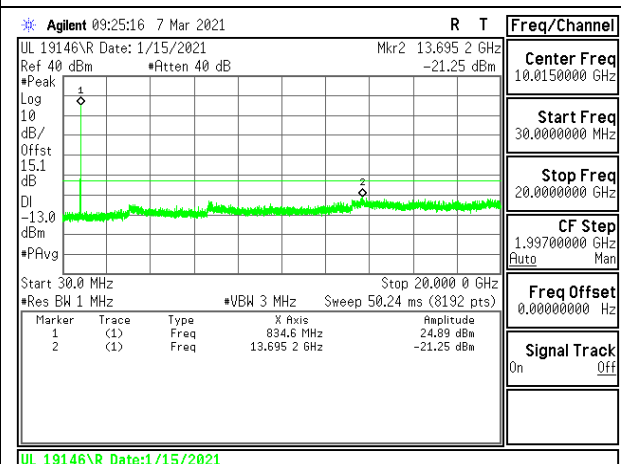
WCDMA Band 5 Rel 99 Low Channel



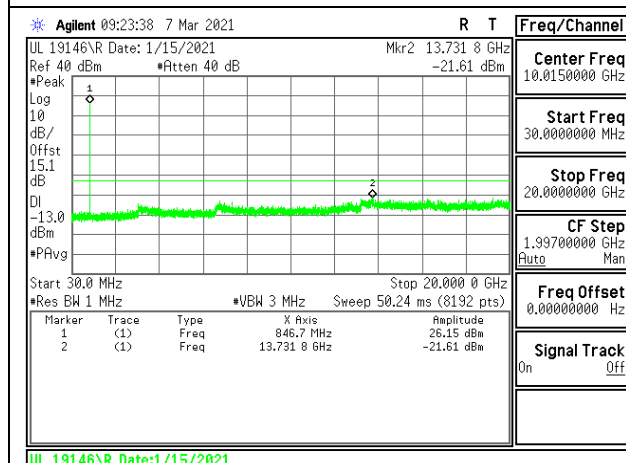
WCDMA Band 5 HSDPA Low Channel



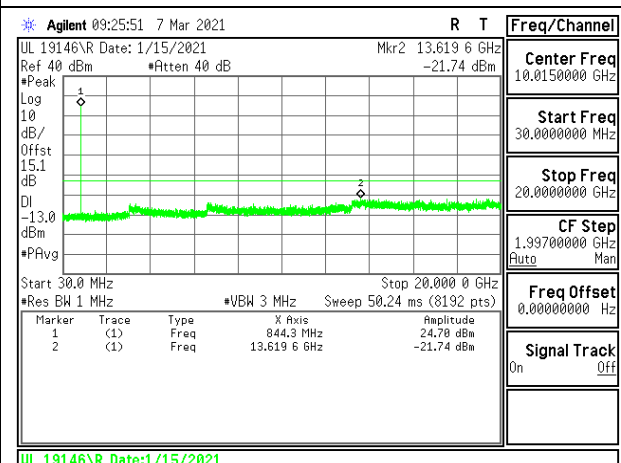
WCDMA Band 5 Rel 99 Middle Channel



WCDMA Band 5 HSDPA Middle Channel

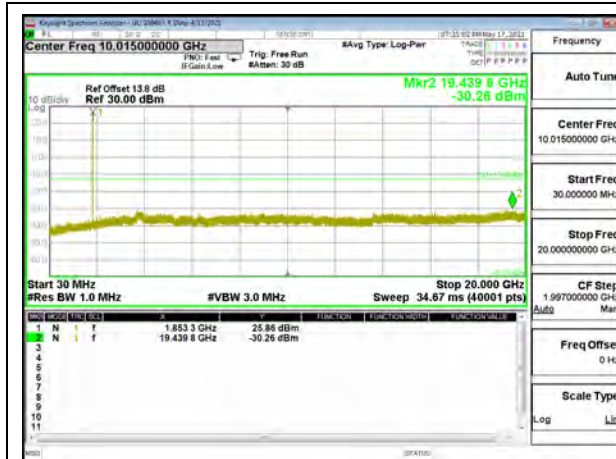


WCDMA Band 5 Rel 99 High Channel

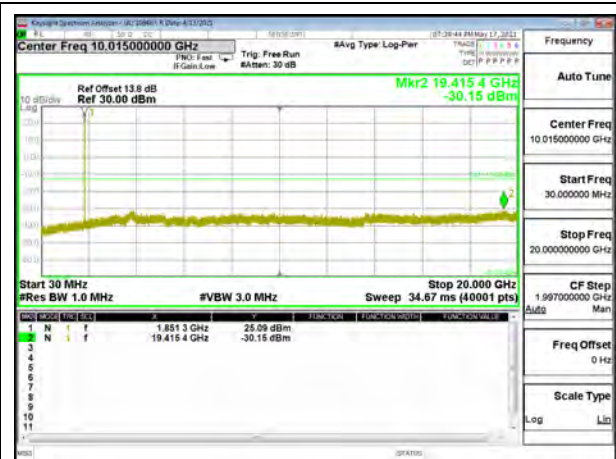


WCDMA Band 5 HSDPA High Channel

9.3.7. WCDMA BAND 2



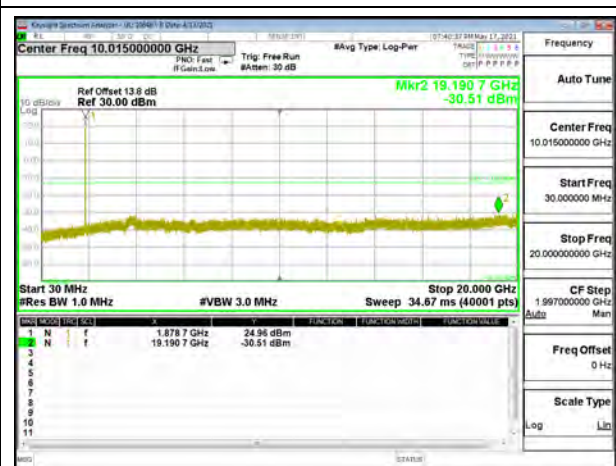
WCDMA Band 2 Rel 99 Low Channel



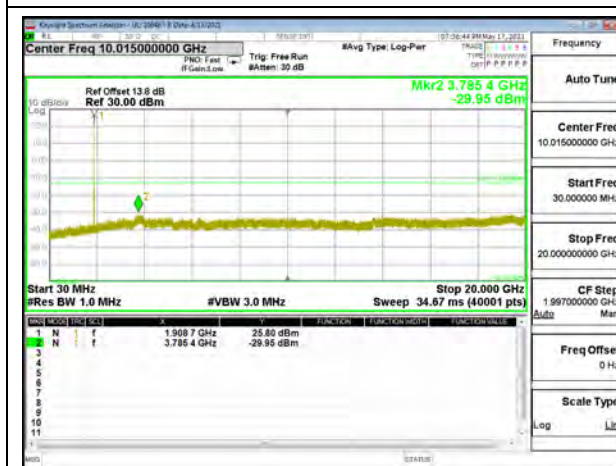
WCDMA Band 2 HSDPA Low Channel



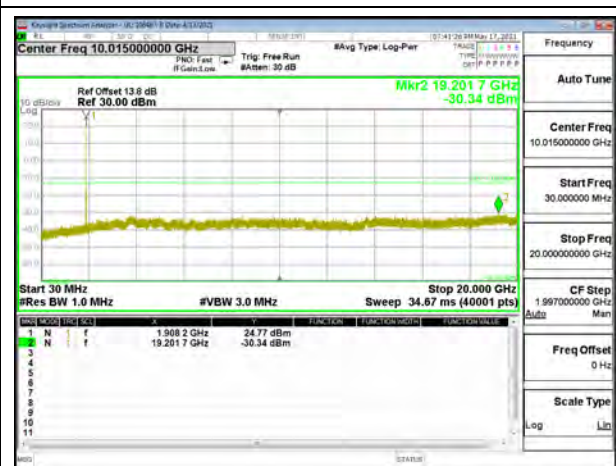
WCDMA Band 2 Rel 99 Middle Channel



WCDMA Band 2 HSDPA Middle Channel

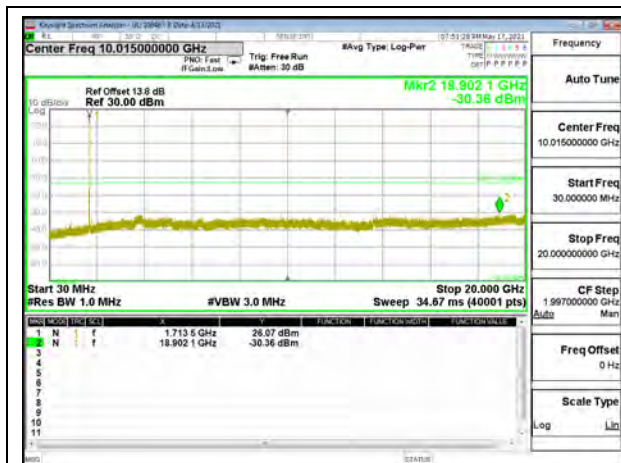


WCDMA Band 2 Rel 99 High Channel

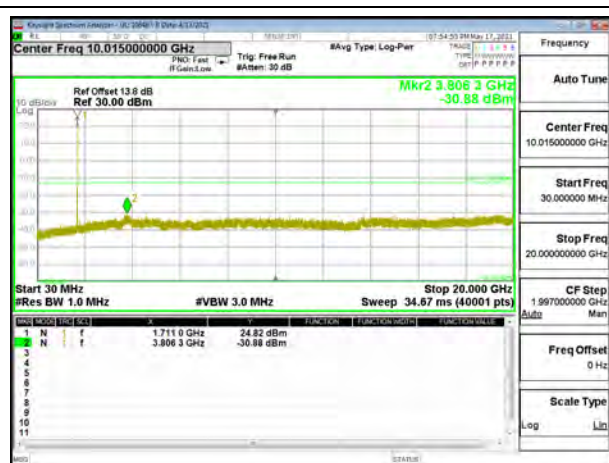


WCDMA Band 2 HSDPA High Channel

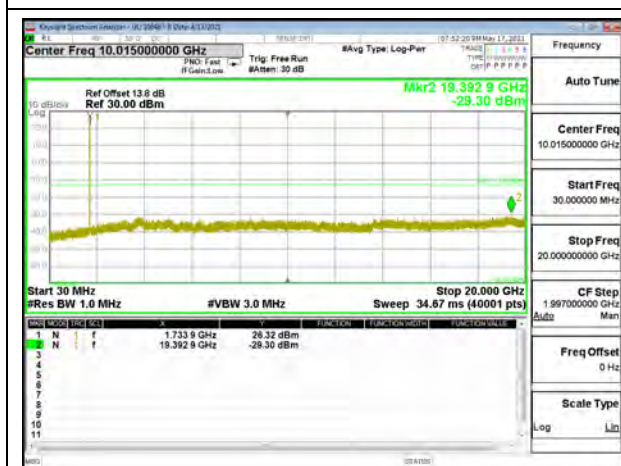
9.3.8. WCDMA BAND 4



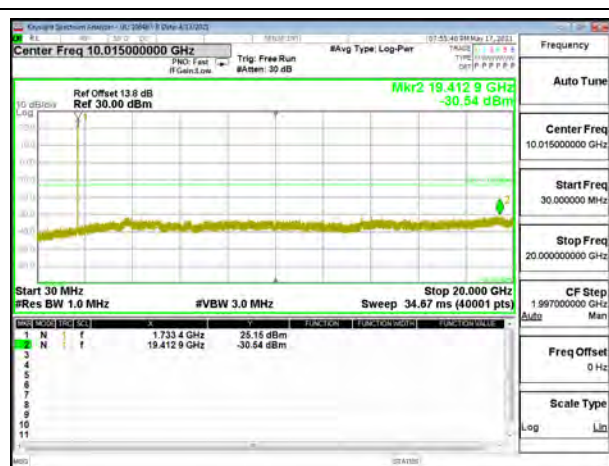
WCDMA Band 4 Rel 99 Low Channel



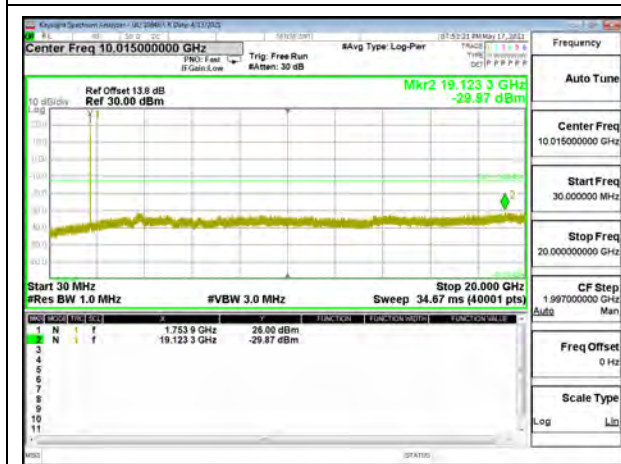
WCDMA Band 4 HSDPA Low Channel



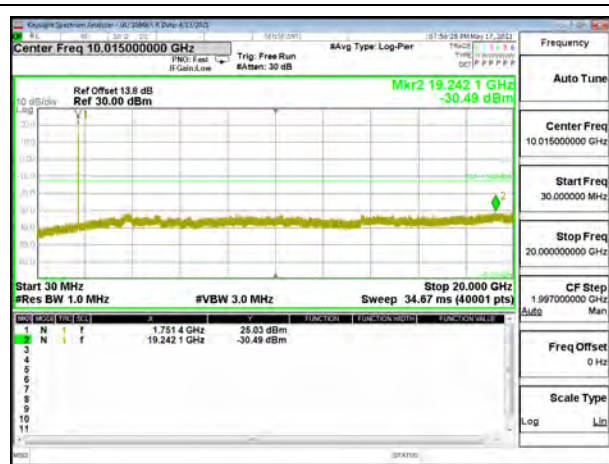
WCDMA Band 4 Rel 99 Middle Channel



WCDMA Band 4 HSDPA Middle Channel



WCDMA Band 4 Rel 99 High Channel



WCDMA Band 4 HSDPA High Channel

9.4. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055, §22.355, §24.235, §27.54 and §90.213
ISED: RSS132§5.3; RSS133§6.3 and RSS139§6.4

LIMITS

FCC §22.355, §90.213

The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations.

FCC §24.235 & §27.54

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

RSS132§5.3

The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 SRSP for mobile stations and ± 1.5 ppm for base stations.

In lieu of meeting the above stability values, the test report may show that the frequency stability is sufficient to ensure that the occupied bandwidth stays within each of the sub-bands (see Section 5.1) when tested to the temperature and supply voltage variations specified in RSS-Gen.

RSS133§6.3

The carrier frequency shall not depart from the reference frequency, in excess of ± 2.5 ppm for mobile stations and ± 1.0 ppm for base stations.

In lieu of meeting the above stability values, the test report may show that the frequency stability is sufficient to ensure that the emission bandwidth stays within the operating frequency block when tested to the temperature and supply voltage variations specified in RSS-Gen.

RSS139§6.4

The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block when tested to the temperature and supply voltage variations specified in RSS-Gen.

TEST PROCEDURE

Use CMW 500 with Frequency Error measurement capability.

- Temp. = -30°C to $+50^{\circ}\text{C}$
- Voltage = (85% - 115%)

Low voltage, 3.23VDC, Normal, 3.80VDC and High voltage, 4.37VDC.
End Voltage, 3.00VDC.

Frequency Stability vs Temperature:

The EUT is placed inside a temperature chamber. The temperature is set to 20°C and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until $+50^{\circ}\text{C}$ is reached.

Frequency Stability vs Voltage:

The peak frequency error is recorded (worst-case).

RESULTS

See the following pages.

9.4.1. GSM

Test Engineer ID:	19171	Test Date:	5/14/2021
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GPRS 850

Limit		824	849	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	824.0285	848.9693		
Extreme (50C)		824.0285	848.9693	31.0	0.037
Extreme (40C)		824.0285	848.9693	31.0	0.037
Extreme (30C)		824.0285	848.9693	28.9	0.035
Extreme (10C)		824.0285	848.9693	26.5	0.032
Extreme (0C)		824.0285	848.9693	28.5	0.034
Extreme (-10C)		824.0285	848.9693	29.3	0.035
Extreme (-20C)		824.0285	848.9693	34.6	0.041
Extreme (-30C)		824.0285	848.9693	33.7	0.040
20C	15%	824.0285	848.9693	25.9	0.031
	-15%	824.0285	848.9693	27.3	0.033
	End Point	824.0285	848.9693	32.9	0.039

GPRS 1900

Limit		1850	1910	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	1850.0314	1909.9881		
Extreme (50C)		1850.0314	1909.9881	32.5	0.017
Extreme (40C)		1850.0314	1909.9881	32.7	0.017
Extreme (30C)		1850.0314	1909.9881	37.9	0.020
Extreme (10C)		1850.0314	1909.9881	27.6	0.015
Extreme (0C)		1850.0314	1909.9881	40.2	0.021
Extreme (-10C)		1850.0314	1909.9881	39.4	0.021
Extreme (-20C)		1850.0314	1909.9881	43.7	0.023
Extreme (-30C)		1850.0314	1909.9881	46.6	0.025
20C	15%	1850.0314	1909.9881	31.8	0.017
	-15%	1850.0314	1909.9881	28.7	0.015
	End Point	1850.0314	1909.9881	26.7	0.014

9.4.2. CDMA

Test Engineer ID:	10646	Test Date:	5/16/2021
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CDMA 1xRTT BC10

Limit		816	824	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	816.5590	823.4436		
Extreme (50C)		816.5590	823.4436	23.9	0.029
Extreme (40C)		816.5590	823.4436	-20.3	-0.025
Extreme (30C)		816.5589	823.4436	-21.8	-0.027
Extreme (10C)		816.5590	823.4436	-15.8	-0.019
Extreme (0C)		816.5590	823.4436	-18.9	-0.023
Extreme (-10C)		816.5590	823.4436	-20.2	-0.025
Extreme (-20C)		816.5590	823.4436	17.1	0.021
Extreme (-30C)		816.5590	823.4436	24.3	0.030
20C	15%	816.5590	823.4436	20.3	0.025
	-15%	816.5589	823.4436	-22.6	-0.028
	End Point	816.5590	823.4436	-17.7	-0.022

CDMA 1xRTT BC0

Limit		824	849	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	824.0245	848.9828		
Extreme (50C)		824.0245	848.9828	22.5	0.027
Extreme (40C)		824.0245	848.9828	-21.2	-0.025
Extreme (30C)		824.0245	848.9828	-17.2	-0.021
Extreme (10C)		824.0245	848.9828	-13.8	-0.017
Extreme (0C)		824.0245	848.9828	17.1	0.020
Extreme (-10C)		824.0245	848.9828	21.2	0.025
Extreme (-20C)		824.0245	848.9828	-18.0	-0.022
Extreme (-30C)		824.0245	848.9828	-16.4	-0.020
20C	15%	824.0245	848.9828	-18.7	-0.022
	-15%	824.0245	848.9828	19.7	0.024
	End Point	824.0245	848.9828	-18.8	-0.022

CDMA 1xRTT BC1

Limit		1850	1910	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	1850.5537	1909.4445		
Extreme (50C)		1850.5537	1909.4445	34.9	0.019
Extreme (40C)		1850.5537	1909.4445	19.4	0.010
Extreme (30C)		1850.5537	1909.4445	21.8	0.012
Extreme (10C)		1850.5537	1909.4445	26.2	0.014
Extreme (0C)		1850.5537	1909.4445	26.3	0.014
Extreme (-10C)		1850.5537	1909.4445	31.4	0.017
Extreme (-20C)		1850.5537	1909.4445	19.9	0.011
Extreme (-30C)		1850.5537	1909.4445	38.5	0.020
20C	15%	1850.5537	1909.4445	26.2	0.014
	-15%	1850.5537	1909.4445	27.6	0.015
	End Point	1850.5537	1909.4445	20.4	0.011

9.4.3. WCDMA

Test Engineer ID:	10646	Test Date:	5/16/2021
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WCDMA REL 99 BAND 5

Limit		824	849	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	824.1060	848.8663		
Extreme (50C)		824.1060	848.8663	-2.1	-0.002
Extreme (40C)		824.1060	848.8663	2.1	0.003
Extreme (30C)		824.1060	848.8663	-2.7	-0.003
Extreme (10C)		824.1060	848.8663	2.3	0.003
Extreme (0C)		824.1060	848.8663	-2.3	-0.003
Extreme (-10C)		824.1060	848.8663	2.6	0.003
Extreme (-20C)		824.1060	848.8663	2.4	0.003
Extreme (-30C)		824.1060	848.8663	2.5	0.003
20C	15%	824.1060	848.8663	-2.7	-0.003
	-15%	824.1060	848.8663	-2.3	-0.003
	End Point	824.1060	848.8663	-3.7	-0.004

WCDMA REL 99 BAND 2

Limit		1850	1910	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	1850.0907	1909.8665		
Extreme (50C)		1850.0907	1909.8665	15.4	0.008
Extreme (40C)		1850.0907	1909.8665	15.7	0.008
Extreme (30C)		1850.0907	1909.8665	11.6	0.006
Extreme (10C)		1850.0907	1909.8665	12.5	0.007
Extreme (0C)		1850.0907	1909.8665	13.5	0.007
Extreme (-10C)		1850.0907	1909.8665	16.0	0.009
Extreme (-20C)		1850.0907	1909.8665	17.7	0.009
Extreme (-30C)		1850.0907	1909.8665	18.8	0.010
20C	15%	1850.0907	1909.8665	12.2	0.006
	-15%	1850.0907	1909.8665	13.9	0.007
	End Point	1850.0907	1909.8665	14.0	0.007

WCDMA REL 99 BAND 4

Limit		1710	1755	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm	F high @ -13dBm		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	1710.1224	1754.8720		
Extreme (50C)		1710.1223	1754.8720	-15.0	-0.009
Extreme (40C)		1710.1223	1754.8720	-15.5	-0.009
Extreme (30C)		1710.1223	1754.8720	-19.1	-0.011
Extreme (10C)		1710.1223	1754.8720	-17.9	-0.010
Extreme (0C)		1710.1223	1754.8720	-16.4	-0.009
Extreme (-10C)		1710.1223	1754.8720	-13.8	-0.008
Extreme (-20C)		1710.1223	1754.8720	-12.8	-0.007
Extreme (-30C)		1710.1223	1754.8720	-11.2	-0.006
20C	15%	1710.1223	1754.8720	-17.9	-0.010
	-15%	1710.1223	1754.8720	-17.6	-0.010
	End Point	1710.1223	1754.8720	-16.4	-0.009

9.5. PEAK-TO-AVERAGE POWER RATIO

LIMIT

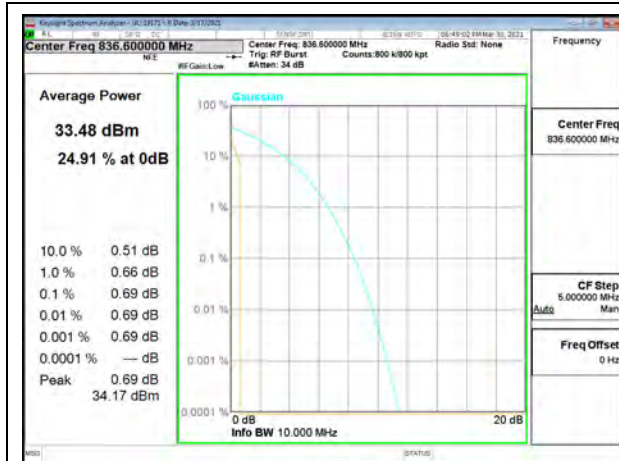
In addition, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the highest PAPR during periods of continuous transmission.

RESULT

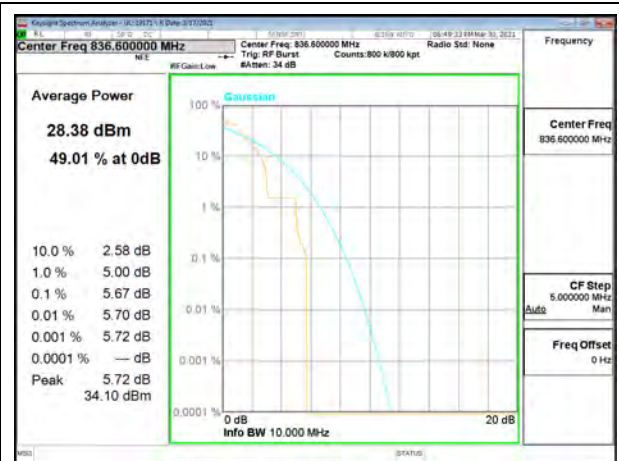
Ant 1 was used to measure as the worst case. The results from all CCDF plots are passed with 13dB peak-to-average power ratio criteria.

Test Engineer ID:	10646	Test Date:	5/16/2021
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9.5.1. GSM



GSM 850 GPRS Middle Channel



GSM 850 EGPRS Middle Channel



GSM 1900 GPRS Middle Channel

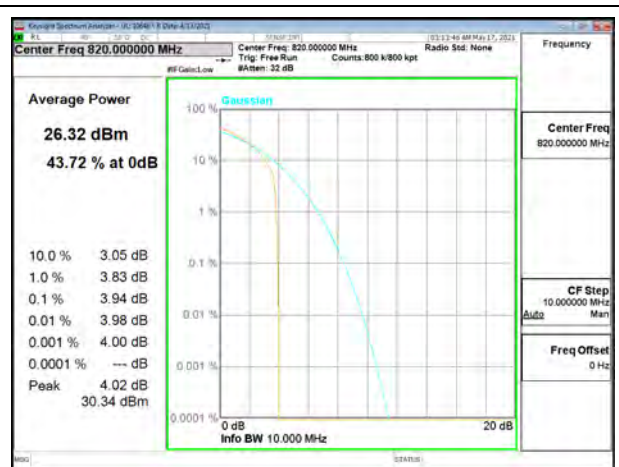


GSM 1900 EGPRS Middle Channel

9.5.2. CDMA



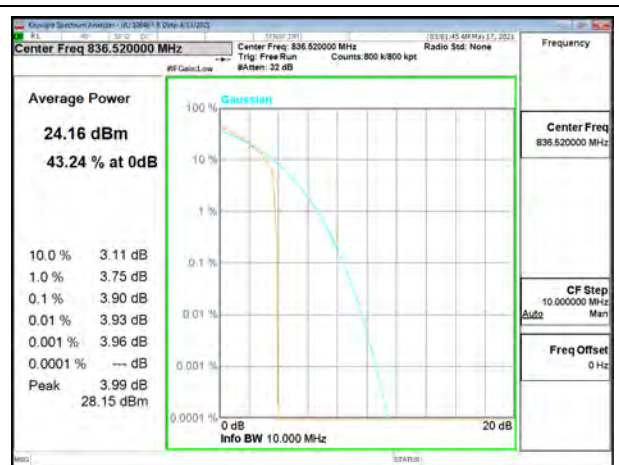
CDMA BC10 1xRTT Middle Channel



CDMA BC10 1xEV-DO Rev A Middle Channel



CDMA BC0 1xRTT Middle Channel



CDMA BC0 1xEV-DO Rev A Middle Channel

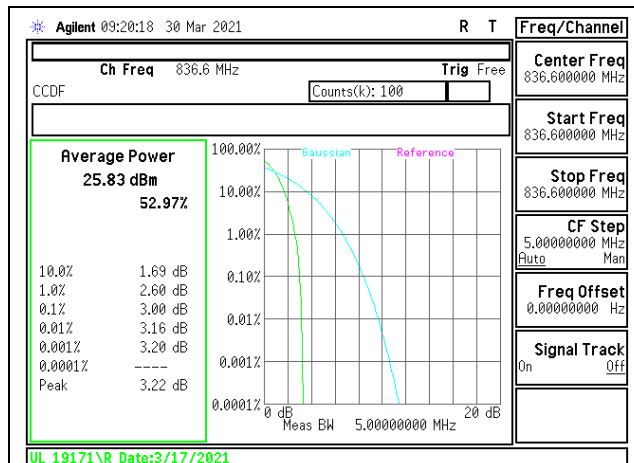


CDMA BC1 1xRTT Middle Channel

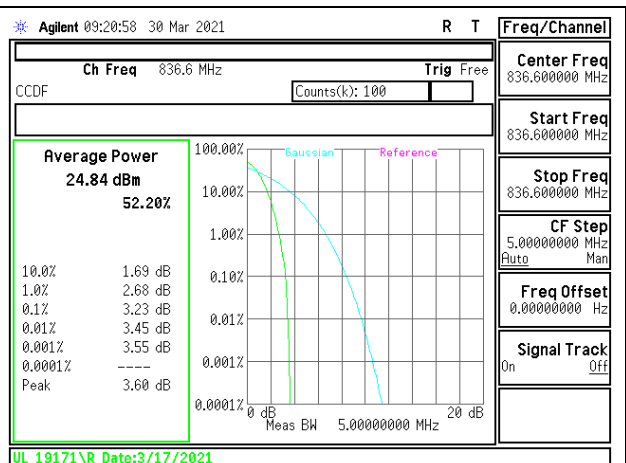


CDMA BC1 1xEV-DO Rev A Middle Channel

9.5.3. WCDMA



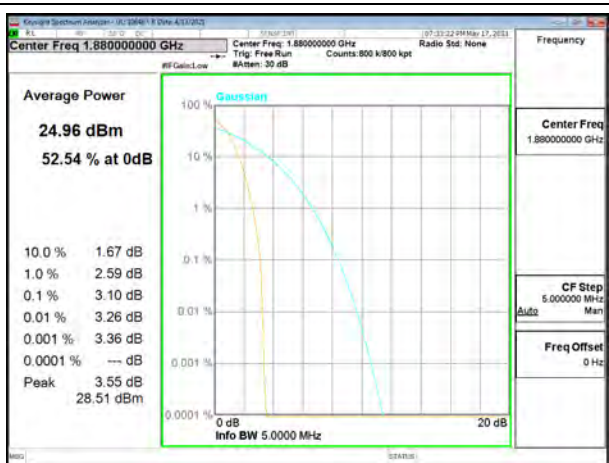
WCDMA Band 5 Rel 99 Middle Channel



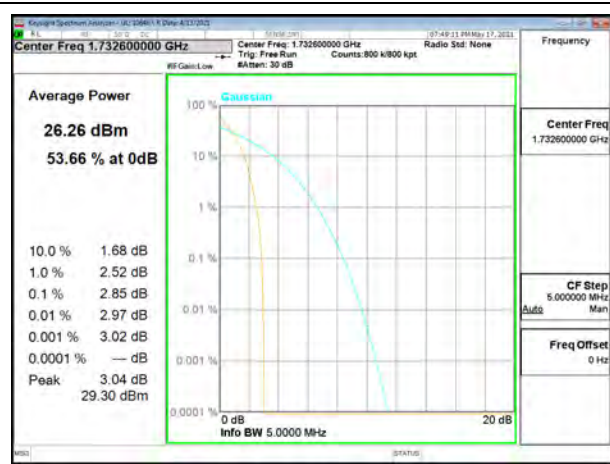
WCDMA Band 5 HSDPA Middle Channel



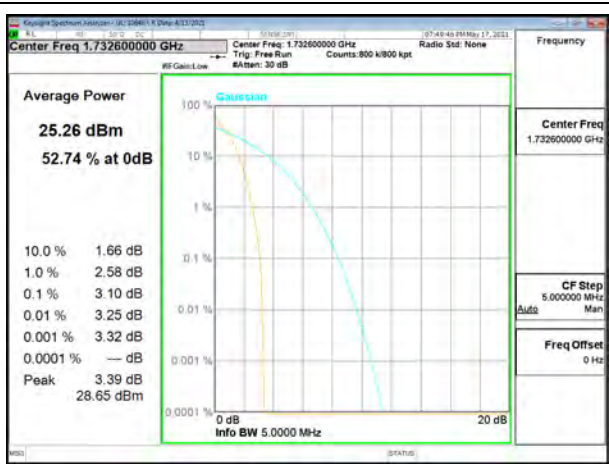
WCDMA Band 2 Rel 99 Middle Channel



WCDMA Band 2 HSDPA Middle Channel



WCDMA Band 4 Rel 99 Middle Channel



WCDMA Band 4 HSDPA Middle Channel

10. RADIATED TEST RESULTS

Radiated measurement using the Field Strength Method

Using the test configuration shown in Figure 6 below, We measure the radiated emissions directly from the EUT and convert the measured field strength or received power to ERP or EIRP, as required, for comparison to the applicable limits. As stated in 5.5.1 of ANSI C63.26-2015, the field strength measurement method using a test site validated to the requirements of ANSI C63.4 is an alternative to the substitution measurement method.

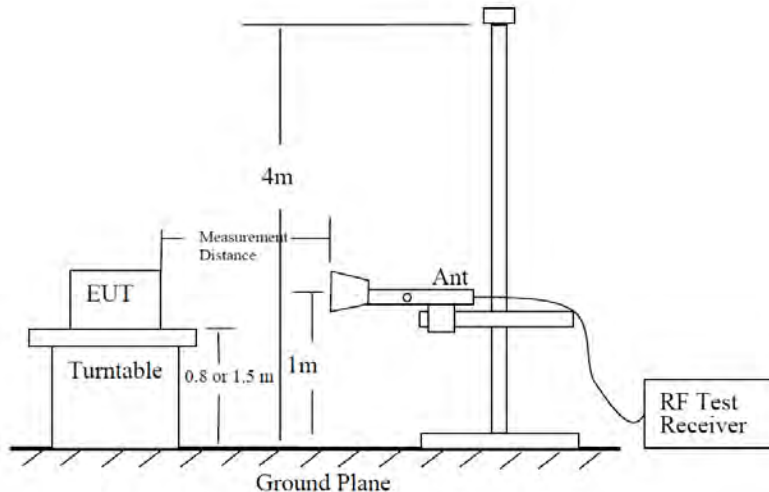


Figure 6—Test site-up for radiated ERP and/or EIRP measurements

Radiated Power Measurement Calculation According to ANSI C63.26-2015

- a) $E \text{ (dB}\mu\text{V/m)} = \text{Measured amplitude level (dB}\mu\text{V)} + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$.
- b) $E \text{ (dB}\mu\text{V/m)} = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$.
- c) $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20\log(D) + 104.8$; where D is the measurement distance (in the far field region) in m.
- d) $\text{EIRP (dBm)} = E \text{ (dB}\mu\text{V/m)} + 20\log(D) - 104.8$; where D is the measurement distance (in the far field region) in m.

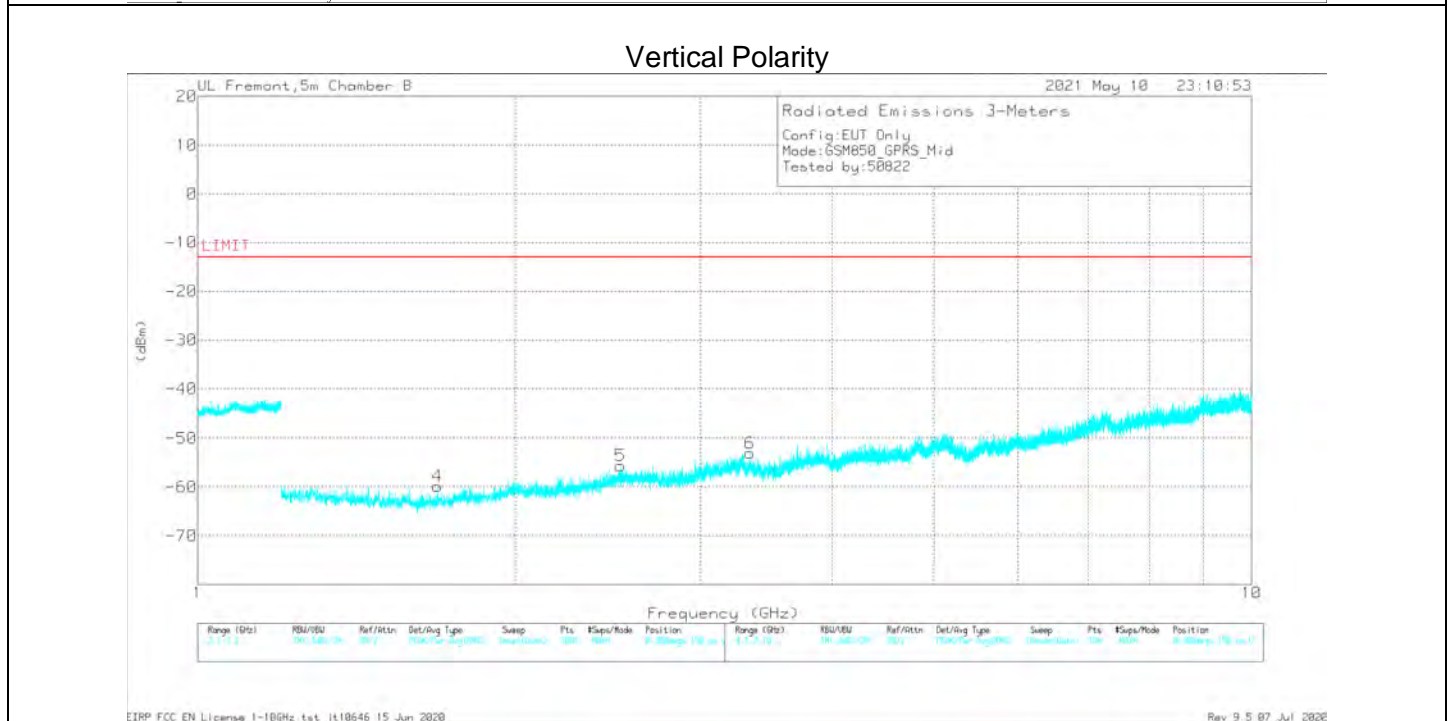
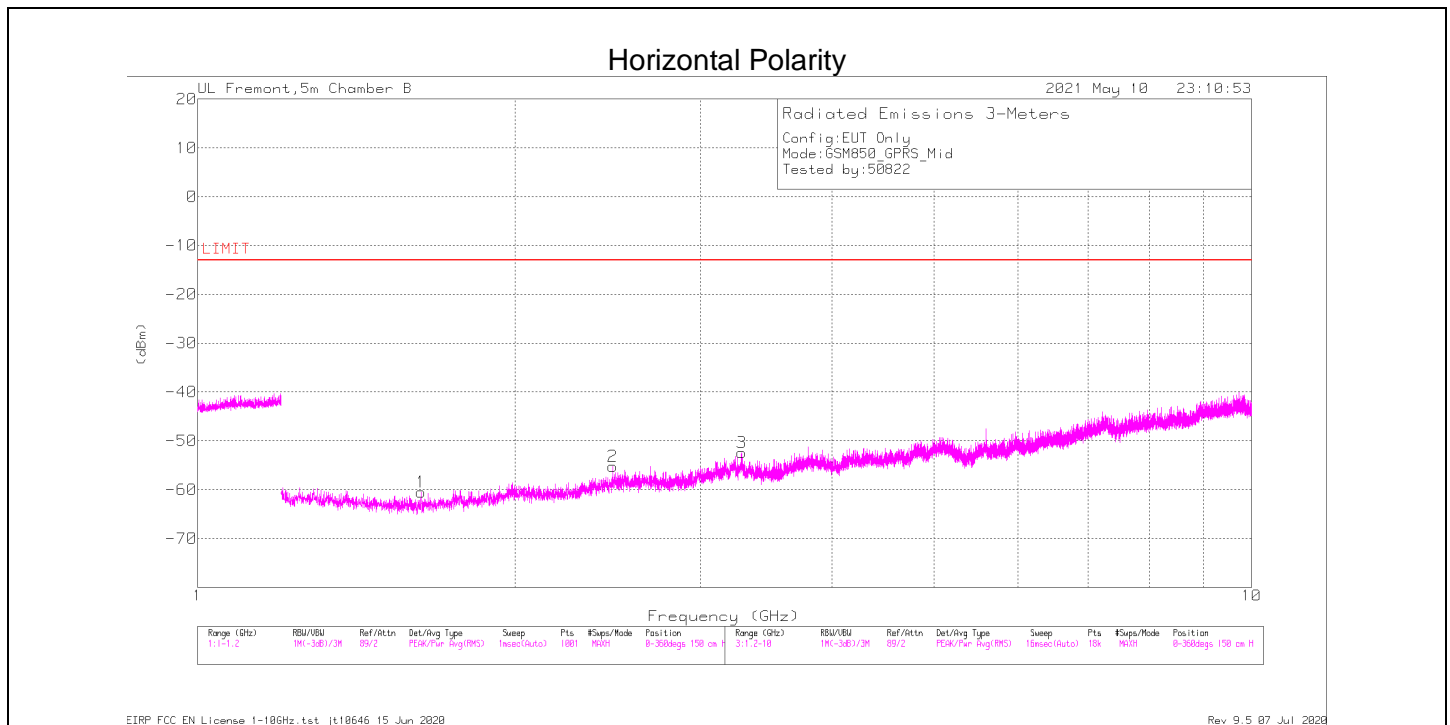
So, from d)

The measuring distance is usually at 3m, then $20 \cdot \log(3) = 9.5424$

Then, $\text{EIRP (dBm)} = E \text{ (dB}\mu\text{V/m)} + 9.5424 - 104.8 = E \text{ (dB}\mu\text{V/m)} - 95.2576$

Note that: we do confidence check to our chambers every day to see if any degradation from expected/normal reading reference data. Also we do ambient check to all our chambers every month.

10.1. Example Plot



Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
1.62876	36.85	Pk	25	-27.9	.7	-95.2	-60.55	-13	-47.55	H
1.68938	37.39	Pk	25	-27.7	.7	-95.2	-59.81	-13	-46.81	V
2.47796	37.02	Pk	29	-26.6	.5	-95.2	-55.28	-13	-42.28	H
2.51951	36.18	Pk	29.2	-26.6	.8	-95.2	-55.62	-13	-42.62	V
3.2812	35.96	Pk	31.4	-25.4	.8	-95.2	-52.44	-13	-39.44	H
3.34329	36.07	Pk	31	-25.5	.6	-95.2	-53.03	-13	-40.03	V

Pk - Peak detector

EIRP FCC_EN License 1-18GHz.tst jt10646 15 Jun 2020
 Rev 9.5 06 Mar 2020

10.2. FIELD STRENGTH OF SPURIOUS RADIATION, Ant 1

RULE PART(S)

FCC: §2.1053, §22.917, §24.238, §27.53 and §90.691.
ISED: RSS132§5.5; RSS133§6.5 and RSS139§6.6

LIMIT

FCC: §22.917(a), §24.238(a), §27.53 (h), §90.691

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.

RSS132§5.5

Mobile and base station equipment shall comply with the limits in (i) and (ii) below.

- (i) In the first 1.0 MHz band immediately outside and adjacent to each of the sub-bands specified in Section 5.1, the power of emissions per any 1% of the occupied bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts).
- (ii) After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts). If the measurement is performed using 1% of the occupied bandwidth, power integration over 100 kHz is required.

RSS133§6.5.1

Equipment shall comply with the limits in (i) and (ii) below.

- (i) In the 1.0 MHz bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1% of the emission bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts).
- (ii) After the first 1.0 MHz, the emission power in any 1 MHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts). If the measurement is performed using 1% of the emission bandwidth, power integration over 1.0 MHz is required.

RSS139§6.6

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

TEST PROCEDURE

KDB 971168 D01

RESULTS

10.2.1. GSM 850

GPRS MODE

Project #:	13571607
Date:	05/10/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	GSM850 GPRS
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 824.2 MHz										
1.56618	36.68	Pk	24.9	-27.9	.9	-95.2	-60.62	-13	-47.62	H
1.58769	35.16	Pk	24.9	-27.9	.8	-95.2	-62.24	-13	-49.24	V
2.60507	36.26	Pk	29.2	-26.5	.5	-95.2	-55.74	-13	-42.74	H
2.65836	35.37	Pk	29.3	-26.1	.5	-95.2	-56.13	-13	-43.13	V
3.80676	36.64	Pk	30.9	-25.3	.8	-95.2	-52.16	-13	-39.16	V
3.90845	36.97	Pk	31.4	-24.9	.6	-95.2	-51.13	-13	-38.13	H
Mid Channel, 836.6 MHz										
1.62876	36.85	Pk	25	-27.9	.7	-95.2	-60.55	-13	-47.55	H
1.68938	37.39	Pk	25	-27.7	.7	-95.2	-59.81	-13	-46.81	V
2.47796	37.02	Pk	29	-26.6	.5	-95.2	-55.28	-13	-42.28	H
2.51951	36.18	Pk	29.2	-26.6	.8	-95.2	-55.62	-13	-42.62	V
3.2812	35.96	Pk	31.4	-25.4	.8	-95.2	-52.44	-13	-39.44	H
3.34329	36.07	Pk	31	-25.5	.6	-95.2	-53.03	-13	-40.03	V
High Channel, 848.8 MHz										
1.56373	37.74	Pk	24.9	-27.9	.9	-95.2	-59.56	-13	-46.56	H
1.62778	37.69	Pk	25	-27.9	.7	-95.2	-59.71	-13	-46.71	V
2.81236	35.76	Pk	28.8	-26	.6	-95.2	-56.04	-13	-43.04	V
2.82604	36.99	Pk	28.8	-25.9	.7	-95.2	-54.61	-13	-41.61	H
3.65716	37.06	Pk	30.1	-25.1	.6	-95.2	-52.54	-13	-39.54	V
3.75200	37.16	Pk	30.6	-25.3	.4	-95.2	-52.34	-13	-39.34	H

EGPRS MODE

Project #:	13571607
Date:	05/18/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	GSM850 EGPRS
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 824.2 MHz										
1.74022	37.59	Pk	25.4	-27.7	.7	-95.2	-59.21	-13	-46.21	H
1.74902	35.97	Pk	25.6	-27.6	.7	-95.2	-60.53	-13	-47.53	V
2.72436	36.14	Pk	29	-26.2	.5	-95.2	-55.76	-13	-42.76	H
2.75173	35.93	Pk	29	-26.2	.6	-95.2	-55.87	-13	-42.87	V
3.82093	37.15	Pk	30.9	-25.2	.5	-95.2	-51.85	-13	-38.85	V
3.84880	37.03	Pk	31.1	-24.9	.4	-95.2	-51.57	-13	-38.57	H
Mid Channel, 836.6 MHz										
1.70404	37.14	Pk	25.2	-27.6	.6	-95.2	-59.86	-13	-46.86	H
1.7236	35.52	Pk	25.2	-27.6	.7	-95.2	-61.38	-13	-48.38	V
2.61924	35.11	Pk	29.2	-26.4	.6	-95.2	-56.69	-13	-43.69	V
2.6564	36.21	Pk	29.3	-26.1	.5	-95.2	-55.29	-13	-42.29	H
3.22644	35.46	Pk	31.3	-25.6	.4	-95.2	-53.64	-13	-40.64	V
3.23329	37.01	Pk	31.4	-25.6	.4	-95.2	-51.99	-13	-38.99	H
High Channel, 848.8 MHz										
1.54027	38.36	Pk	24.9	-27.8	.8	-95.2	-58.94	-13	-45.94	V
1.83653	36.72	Pk	26	-27.3	.5	-95.2	-59.28	-13	-46.28	H
2.48578	35.25	Pk	29	-26.6	.5	-95.2	-57.05	-13	-44.05	V
2.48822	37.1	Pk	29	-26.6	.5	-95.2	-55.2	-13	-42.2	H
3.22351	36.31	Pk	31.3	-25.5	.4	-95.2	-52.69	-13	-39.69	V
3.29000	35.84	Pk	31.2	-25.4	.8	-95.2	-52.76	-13	-39.76	H

10.2.2. GSM 1900

GPRS MODE

Project #:	13571607
Date:	05/18/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	GPRS1900 GPRS
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1850.2MHz									
3.79838	38.93	Pk	30.9	-24.7	-95.2	-50.07	-13	-37.07	H
3.91176	38.4	Pk	31.4	-24	-95.2	-49.4	-13	-36.4	V
5.10301	36.84	Pk	34	-21.8	-95.2	-46.16	-13	-33.16	V
5.1108	37.53	Pk	33.9	-22	-95.2	-45.77	-13	-32.77	H
7.05924	36.92	Pk	36.5	-21.2	-95.2	-42.98	-13	-29.98	V
7.22689	34.99	Pk	37.1	-19.9	-95.2	-43.01	-13	-30.01	H
Mid Channel, 1880MHz									
3.76125	38.78	Pk	30.7	-24.9	-95.2	-50.62	-13	-37.62	H
3.77203	38.56	Pk	30.7	-24.9	-95.2	-50.84	-13	-37.84	V
4.76387	37.79	Pk	32.8	-22.5	-95.2	-47.11	-13	-34.11	V
4.80868	37.5	Pk	33	-22.5	-95.2	-47.2	-13	-34.2	H
8.03083	36.29	Pk	37.1	-19.6	-95.2	-41.41	-13	-28.41	V
8.07803	35.16	Pk	37.1	-19.3	-95.2	-42.24	-13	-29.24	H
High Channel, 1909.8MHz									
3.82537	39.82	Pk	31	-24.6	-95.2	-48.98	-13	-35.98	H
3.91169	38.37	Pk	31.4	-24	-95.2	-49.43	-13	-36.43	V
4.63758	38.36	Pk	32.3	-24.6	-95.2	-49.14	-13	-36.14	V
5.14948	36.86	Pk	33.8	-22.4	-95.2	-46.94	-13	-33.94	H
7.18561	35.77	Pk	36.9	-20.3	-95.2	-42.83	-13	-29.83	H
7.28517	35.59	Pk	37.1	-20.4	-95.2	-42.91	-13	-29.91	V

EGPRS MODE

Project #:	13571607
Date:	05/18/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	GSM1900 EGPRS
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1850.2MHz									
3.70013	37.96	Pk	30.3	-24.6	-95.2	-51.54	-13	-38.54	H
3.70178	37.75	Pk	30.3	-24.6	-95.2	-51.75	-13	-38.75	V
5.55044	39.71	Pk	33.3	-23.4	-95.2	-45.59	-13	-32.59	H
5.55056	45.7	Pk	33.3	-23.4	-95.2	-39.6	-13	-26.6	V
7.40141	35.12	Pk	36.9	-21	-95.2	-44.18	-13	-31.18	V
7.40149	35.11	Pk	36.9	-21	-95.2	-44.19	-13	-31.19	H
Mid Channel, 1880MHz									
3.75858	37.83	Pk	30.6	-24.8	-95.2	-51.57	-13	-38.57	H
3.7609	38.41	Pk	30.7	-24.9	-95.2	-50.99	-13	-37.99	V
5.63892	35.85	Pk	33.1	-22.3	-95.2	-48.55	-13	-35.55	H
5.63996	45.43	Pk	33.1	-22.2	-95.2	-38.87	-13	-25.87	V
7.51914	35.71	Pk	36.7	-20.4	-95.2	-43.19	-13	-30.19	V
7.52088	34.8	Pk	36.7	-20.4	-95.2	-44.1	-13	-31.1	H
High Channel, 1909.8MHz									
3.81986	38.6	Pk	30.9	-24.7	-95.2	-50.4	-13	-37.4	H
3.82048	37.98	Pk	30.9	-24.7	-95.2	-51.02	-13	-38.02	V
5.7303	36.15	Pk	33.1	-21.8	-95.2	-47.75	-13	-34.75	V
5.7305	35.88	Pk	33.1	-21.8	-95.2	-48.02	-13	-35.02	H
7.53907	35.6	Pk	36.8	-20.8	-95.2	-43.6	-13	-30.6	H
7.53949	35.83	Pk	36.8	-20.8	-95.2	-43.37	-13	-30.37	V

10.2.3. CDMA BC10

1xRTT MODE

Project #:	13571607
Date:	04/15/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	1xRTT BC10
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl (dB)	HPF 2.7GHz T772 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 817.25MHz										
1.65809	37.22	Pk	25	-27.9	.8	-95.2	-60.08	-13	-47.08	V
1.66836	37.28	Pk	25	-27.8	.7	-95.2	-60.02	-13	-47.02	H
2.35378	37.35	Pk	28.1	-26.9	.6	-95.2	-56.05	-13	-43.05	V
2.38751	37.47	Pk	28.4	-26.8	.6	-95.2	-55.53	-13	-42.53	H
3.24453	36.01	Pk	31.3	-25.8	.4	-95.2	-53.29	-13	-40.29	H
3.2636	36.93	Pk	31.4	-25.7	.5	-95.2	-52.07	-13	-39.07	V
Mid Channel, 820.00MHz										
1.65369	37.86	Pk	24.9	-27.8	.8	-95.2	-59.44	-13	-46.44	H
1.65858	37.41	Pk	25	-27.9	.8	-95.2	-59.89	-13	-46.89	V
2.28436	37.32	Pk	27.5	-26.8	.5	-95.2	-56.68	-13	-43.68	H
2.28436	36.26	Pk	27.5	-26.8	.5	-95.2	-57.74	-13	-44.74	V
3.22498	36.53	Pk	31.3	-25.6	.4	-95.2	-52.57	-13	-39.57	H
3.26751	36.59	Pk	31.4	-25.5	.6	-95.2	-52.11	-13	-39.11	V
High Channel, 822.75MHz										
1.6444	37.28	Pk	25	-27.8	.7	-95.2	-60.02	-13	-47.02	H
1.65271	37.34	Pk	24.9	-27.8	.8	-95.2	-59.96	-13	-46.96	V
2.43836	37.1	Pk	28.8	-26.8	.5	-95.2	-55.6	-13	-42.6	V
2.46818	37.65	Pk	28.9	-26.7	.5	-95.2	-54.85	-13	-41.85	H
3.1624	37.53	Pk	31	-25.8	.5	-95.2	-51.97	-13	-38.97	V
3.18978	36.87	Pk	31.2	-26	.6	-95.2	-52.53	-13	-39.53	H

1xEV-DO REV A MODE

Project #:	13571607
Date:	04/19/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	1xEV-DO REV A BC10
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T962 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 817.25MHz										
1.63364	39.68	Pk	25	-27.9	.7	-95.2	-57.72	-13	-44.72	H
1.63511	38.18	Pk	25	-27.8	.7	-95.2	-59.12	-13	-46.12	V
2.45265	47.5	Pk	28.8	-26.7	.5	-95.2	-45.1	-13	-32.1	H
2.51804	37.12	Pk	29.2	-26.5	.8	-95.2	-54.58	-13	-41.58	V
3.21764	35.95	Pk	31.3	-25.5	.5	-95.2	-52.95	-13	-39.95	V
3.21862	36.59	Pk	31.3	-25.5	.5	-95.2	-52.31	-13	-39.31	H
Mid Channel, 820MHz										
1.64684	38	Pk	24.9	-27.8	.7	-95.2	-59.4	-13	-46.4	H
1.66982	37.3	Pk	25	-27.8	.7	-95.2	-60	-13	-47	V
2.44764	36.86	Pk	28.8	-26.7	.5	-95.2	-55.74	-13	-42.74	V
2.46084	51.85	Pk	28.9	-26.6	.5	-95.2	-40.55	-13	-27.55	H
3.61071	37.84	Pk	30	-25.2	.6	-95.2	-51.96	-13	-38.96	H
3.71876	37.56	Pk	30.4	-25.1	.6	-95.2	-51.74	-13	-38.74	V
High Channel, 822.75MHz										
1.64495	42.95	Pk	25	-27.8	.7	-95.2	-54.35	-13	-41.35	H
1.66347	37.27	Pk	25	-27.8	.8	-95.2	-59.93	-13	-46.93	V
2.46671	38.56	Pk	28.9	-26.7	.5	-95.2	-53.94	-13	-40.94	V
2.46734	48.9	Pk	28.9	-26.7	.5	-95.2	-43.6	-13	-30.6	H
3.21129	37.15	Pk	31.3	-25.6	.5	-95.2	-51.85	-13	-38.85	H
3.268	35.63	Pk	31.4	-25.5	.6	-95.2	-53.07	-13	-40.07	V

10.2.4. CDMA BC0

1xRTT MODE

Project #:	13571607
Date:	04/9/2021
Test Engineer:	43575
Configuration:	EUT Only
Mode:	1xRTT BC0
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 824.7MHz										
1.64293	42.25	Pk	29.1	-30.8	.7	-95.2	-53.95	-13	-40.95	V
1.65839	42.1	Pk	29	-30.7	.8	-95.2	-54	-13	-41	H
2.47842	40.67	Pk	33.3	-29.6	.5	-95.2	-50.33	-13	-37.33	V
2.48912	40.81	Pk	33.4	-29.8	.6	-95.2	-50.19	-13	-37.19	H
3.28984	39.25	Pk	33.1	-28.2	.8	-95.2	-50.25	-13	-37.25	H
3.29576	39.85	Pk	33	-28.3	.8	-95.2	-49.85	-13	-36.85	V
Mid Channel, 836.52MHz										
1.66595	42.05	Pk	28.9	-30.6	.7	-95.2	-54.15	-13	-41.15	V
1.66794	42.13	Pk	28.9	-30.6	.7	-95.2	-54.07	-13	-41.07	H
2.50708	40.6	Pk	33.5	-29.6	.7	-95.2	-50	-13	-37	H
2.51522	40.2	Pk	33.5	-29.6	.7	-95.2	-50.4	-13	-37.4	V
3.33577	39.81	Pk	33	-28.6	.5	-95.2	-50.49	-13	-37.49	H
3.34571	39.24	Pk	33	-28.5	.5	-95.2	-50.96	-13	-37.96	V
High Channel, 848.31MHz										
1.69072	41.98	Pk	29.1	-30.5	.7	-95.2	-53.92	-13	-40.92	H
1.70247	41.67	Pk	29.4	-30.5	.6	-95.2	-54.03	-13	-41.03	V
2.54108	39.56	Pk	33.4	-29.4	.7	-95.2	-50.94	-13	-37.94	V
2.54911	40.58	Pk	33.2	-29.5	.6	-95.2	-50.32	-13	-37.32	H
3.38184	39.9	Pk	33	-28.6	.6	-95.2	-50.3	-13	-37.3	H
3.39486	38.83	Pk	33	-28.4	.6	-95.2	-51.17	-13	-38.17	V

1xEV-DO REV A MODE

Project #:	13571607
Date:	04/16/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	1xEV-DO REV A BC0
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T962 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 824.7MHz										
1.65027	37.54	Pk	24.9	-27.8	.8	-95.2	-59.76	-13	-46.76	H
1.66004	37.15	Pk	25	-27.8	.8	-95.2	-60.05	-13	-47.05	V
2.63196	36.61	Pk	29.1	-26.1	.6	-95.2	-54.99	-13	-41.99	V
2.63978	37.01	Pk	29.2	-26	.6	-95.2	-54.39	-13	-41.39	H
3.54031	36.56	Pk	30.2	-25.1	.5	-95.2	-53.04	-13	-40.04	V
3.60093	37.14	Pk	30.1	-25	.7	-95.2	-52.26	-13	-39.26	H
Mid Channel, 836.52MHz										
1.58036	37.35	Pk	24.9	-27.9	.9	-95.2	-59.95	-13	-46.95	H
1.59356	37.15	Pk	24.9	-27.9	.8	-95.2	-60.25	-13	-47.25	V
2.50973	37.39	Pk	29.1	-26.6	.7	-95.2	-54.61	-13	-41.61	V
2.60947	36.95	Pk	29.2	-26.5	.5	-95.2	-55.05	-13	-42.05	H
3.84636	36.11	Pk	31.2	-24.8	.4	-95.2	-52.29	-13	-39.29	H
3.89818	36.62	Pk	31.4	-24.8	.6	-95.2	-51.38	-13	-38.38	V
High Channel, 848.31MHz										
1.64196	36.68	Pk	25	-27.8	.7	-95.2	-60.62	-13	-47.62	V
1.64636	37.29	Pk	24.9	-27.8	.7	-95.2	-60.11	-13	-47.11	H
2.54347	36.59	Pk	29.2	-26.6	.7	-95.2	-55.31	-13	-42.31	H
2.55178	36.26	Pk	29.3	-26.7	.6	-95.2	-55.74	-13	-42.74	V
3.73049	37.87	Pk	30.5	-25.2	.5	-95.2	-51.53	-13	-38.53	V
3.73196	38.61	Pk	30.5	-25.2	.5	-95.2	-50.79	-13	-37.79	H

10.2.5. CDMA BC1

1xRTT MODE

Project #:	13571607
Date:	04/15/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	1xRTT BC1
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1851.25MHz									
3.89391	35.74	Pk	31.4	-24.3	-95.2	-52.36	-13	-39.36	V
3.89672	35.75	Pk	31.4	-24.2	-95.2	-52.25	-13	-39.25	H
5.91	34.57	Pk	34.1	-22.5	-95.2	-49.03	-13	-36.03	V
5.97891	34.49	Pk	34.5	-22	-95.2	-48.21	-13	-35.21	H
7.80047	33.59	Pk	37.2	-19.1	-95.2	-43.51	-13	-30.51	V
7.80234	34.26	Pk	37.2	-19.1	-95.2	-42.84	-13	-29.84	H
Mid Channel, 1880MHz									
3.91594	36.96	Pk	31.5	-23.9	-95.2	-50.64	-13	-37.64	H
3.92813	35.03	Pk	31.5	-23.7	-95.2	-52.37	-13	-39.37	V
5.10094	35.66	Pk	33.9	-21.8	-95.2	-47.44	-13	-34.44	V
5.13844	35.55	Pk	33.9	-22.4	-95.2	-48.15	-13	-35.15	H
7.66313	35.44	Pk	37	-20.9	-95.2	-43.66	-13	-30.66	V
7.7025	35.18	Pk	37	-20.4	-95.2	-43.42	-13	-30.42	H
High Channel, 1908.75MHz									
3.68766	37.38	Pk	30.2	-24.5	-95.2	-52.12	-13	-39.12	H
3.79266	36.73	Pk	30.8	-24.8	-95.2	-52.47	-13	-39.47	V
5.02688	35.95	Pk	33.7	-22.4	-95.2	-47.95	-13	-34.95	V
5.13281	34.99	Pk	33.8	-22.3	-95.2	-48.71	-13	-35.71	H
7.1775	35.22	Pk	37	-20.4	-95.2	-43.38	-13	-30.38	H
7.39359	34.56	Pk	36.8	-20.8	-95.2	-44.64	-13	-31.64	V

1xEV-DO REV A MODE

Project #:	13571607
Date:	04/15/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	1xEV-DO REV A BC1
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1851.25MHz									
3.77578	37.03	Pk	30.7	-25	-95.2	-52.47	-13	-39.47	H
3.78328	37.02	Pk	30.8	-24.9	-95.2	-52.28	-13	-39.28	V
5.55469	39.21	Pk	33.3	-23.3	-95.2	-45.99	-13	-32.99	V
5.57719	37.39	Pk	33.2	-23.4	-95.2	-48.01	-13	-35.01	H
7.18453	34.65	Pk	36.9	-20.3	-95.2	-43.95	-13	-30.95	V
7.19859	34.37	Pk	37.1	-19.8	-95.2	-43.53	-13	-30.53	H
Mid Channel, 1880MHz									
3.86109	36.6	Pk	31.3	-24.2	-95.2	-51.5	-13	-38.5	H
3.90188	35.55	Pk	31.4	-24.1	-95.2	-52.35	-13	-39.35	V
5.67328	34.66	Pk	33	-21.3	-95.2	-48.84	-13	-35.84	H
5.82094	36.53	Pk	33.5	-23.1	-95.2	-48.27	-13	-35.27	V
7.21172	34.46	Pk	37.1	-19.6	-95.2	-43.24	-13	-30.24	H
7.28859	34.19	Pk	37.2	-20.6	-95.2	-44.41	-13	-31.41	V
High Channel, 1908.75MHz									
3.87281	35.36	Pk	31.3	-24.2	-95.2	-52.74	-13	-39.74	H
3.88641	36.38	Pk	31.3	-24.3	-95.2	-51.82	-13	-38.82	V
5.34656	36.03	Pk	33.1	-22.7	-95.2	-48.77	-13	-35.77	V
5.38453	35.4	Pk	32.9	-22.4	-95.2	-49.3	-13	-36.3	H
7.72875	34.07	Pk	37.1	-19.5	-95.2	-43.53	-13	-30.53	H
7.81406	32.98	Pk	37.3	-19.5	-95.2	-44.42	-13	-31.42	V

10.2.6. WCDMA BAND 5

REL 99 MODE

Project #:	13571607
Date:	05/18/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	REL 99 Band 5
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 826.4MHz										
1.64957	39.39	Pk	24.9	-27.8	.8	-95.2	-57.91	-13	-44.91	V
1.65038	40.19	Pk	24.9	-27.8	.8	-95.2	-57.11	-13	-44.11	H
2.48008	39.72	Pk	29	-26.6	.5	-95.2	-52.58	-13	-39.58	V
2.48215	41.26	Pk	29	-26.7	.5	-95.2	-51.14	-13	-38.14	H
3.30343	36.69	Pk	31.1	-25.6	.7	-95.2	-52.31	-13	-39.31	H
3.30508	36.79	Pk	31.1	-25.6	.7	-95.2	-52.21	-13	-39.21	V
Mid Channel, 836.6MHz										
1.67171	39.08	Pk	25	-27.8	.7	-95.2	-58.22	-13	-45.22	V
1.6749	39.35	Pk	25	-27.8	.7	-95.2	-57.95	-13	-44.95	H
2.50967	37.62	Pk	29.1	-26.6	.7	-95.2	-54.38	-13	-41.38	V
2.51201	42.36	Pk	29.1	-26.6	.7	-95.2	-49.64	-13	-36.64	H
3.34628	37.91	Pk	30.9	-25.6	.6	-95.2	-51.39	-13	-38.39	H
3.34715	37.95	Pk	31	-25.6	.6	-95.2	-51.25	-13	-38.25	V
High Channel, 846.6MHz										
1.69418	40.07	Pk	25	-27.6	.7	-95.2	-57.03	-13	-44.03	H
1.69527	40.28	Pk	25	-27.6	.7	-95.2	-56.82	-13	-43.82	V
2.53764	38.67	Pk	29.3	-26.7	.8	-95.2	-53.13	-13	-40.13	V
2.54302	45.43	Pk	29.2	-26.6	.7	-95.2	-46.47	-13	-33.47	H
3.38679	38.1	Pk	30.8	-25.7	.6	-95.2	-51.4	-13	-38.4	H
3.38743	37.19	Pk	30.8	-25.7	.6	-95.2	-52.31	-13	-39.31	V

HSDPA MODE

Project #:	13571607
Date:	05/2/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	HSDPA Band 5
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 826.4MHz										
1.74285	43.87	Pk	25.5	-27.7	.7	-95.2	-52.83	-13	-39.83	H
1.74292	42.21	Pk	25.5	-27.7	.7	-95.2	-54.49	-13	-41.49	V
2.48153	39.26	Pk	29	-26.7	.5	-95.2	-53.14	-13	-40.14	V
2.48212	42.8	Pk	29	-26.7	.5	-95.2	-49.6	-13	-36.6	H
3.30564	36.89	Pk	31.1	-25.7	.7	-95.2	-52.21	-13	-39.21	H
3.30754	37.32	Pk	31.1	-25.7	.7	-95.2	-51.78	-13	-38.78	V
Mid Channel, 836.6MHz										
1.76288	42.61	Pk	25.7	-27.6	.7	-95.2	-53.79	-13	-40.79	V
1.763	45.79	Pk	25.7	-27.6	.7	-95.2	-50.61	-13	-37.61	H
2.5065	37.87	Pk	29	-26.5	.7	-95.2	-54.13	-13	-41.13	V
2.50776	39.99	Pk	29.1	-26.5	.7	-95.2	-51.91	-13	-38.91	H
3.34454	37.94	Pk	31	-25.6	.6	-95.2	-51.26	-13	-38.26	H
3.34515	37.67	Pk	30.9	-25.6	.6	-95.2	-51.63	-13	-38.63	V
High Channel, 846.6MHz										
1.78542	44.23	Pk	25.9	-27.6	.6	-95.2	-52.07	-13	-39.07	H
1.78563	41.71	Pk	25.9	-27.6	.6	-95.2	-54.59	-13	-41.59	V
2.54225	42.95	Pk	29.2	-26.6	.7	-95.2	-48.95	-13	-35.95	H
2.54347	39.95	Pk	29.2	-26.6	.7	-95.2	-51.95	-13	-38.95	V
3.38527	37.24	Pk	30.8	-25.7	.6	-95.2	-52.26	-13	-39.26	V
3.38529	37.65	Pk	30.8	-25.7	.6	-95.2	-51.85	-13	-38.85	H

10.2.7. WCDMA BAND 2

REL 99 MODE

Project #:	13571607
Date:	04/5/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	REL 99 Band 2
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1852.4MHz									
3.7049	38.6	Pk	30.3	-24.7	-95.2	-51.00	-13	-38.00	H
3.70654	38.61	Pk	30.3	-24.7	-95.2	-50.99	-13	-37.99	V
5.55624	37.55	Pk	33.2	-23.3	-95.2	-47.75	-13	-34.75	H
5.55691	37.44	Pk	33.2	-23.3	-95.2	-47.86	-13	-34.86	V
7.40792	35.19	Pk	36.8	-21.1	-95.2	-44.31	-13	-31.31	V
7.4101	34.94	Pk	36.8	-21.1	-95.2	-44.56	-13	-31.56	H
Mid Channel, 1880MHz									
3.75881	38.74	Pk	30.6	-24.8	-95.2	-50.66	-13	-37.66	H
3.75928	38.21	Pk	30.6	-24.9	-95.2	-51.29	-13	-38.29	V
5.64002	36.4	Pk	33.1	-22.2	-95.2	-47.9	-13	-34.9	V
5.64027	35.71	Pk	33.1	-22.2	-95.2	-48.59	-13	-35.59	H
7.52091	35.12	Pk	36.7	-20.4	-95.2	-43.78	-13	-30.78	H
7.52161	35.54	Pk	36.7	-20.4	-95.2	-43.36	-13	-30.36	V
High Channel, 1907.6MHz									
3.81379	39.2	Pk	31	-24.7	-95.2	-49.7	-13	-36.7	H
3.81636	38.47	Pk	31	-24.6	-95.2	-50.33	-13	-37.33	V
5.72286	36.21	Pk	33	-21.7	-95.2	-47.69	-13	-34.69	H
5.72493	36.5	Pk	33	-21.7	-95.2	-47.4	-13	-34.4	V
7.631	35.41	Pk	36.9	-21.1	-95.2	-43.99	-13	-30.99	V
7.63142	36.39	Pk	36.9	-21.1	-95.2	-43.01	-13	-30.01	H

HSDPA MODE

Project #:	13571607
Date:	04/5/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	HSDPA Band 2
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1852.4MHz									
3.70567	38.42	Pk	30.3	-24.7	-95.2	-51.18	-13	-38.18	H
3.70675	38.2	Pk	30.3	-24.7	-95.2	-51.4	-13	-38.4	V
5.57159	36.95	Pk	33.2	-23.5	-95.2	-48.55	-13	-35.55	V
5.57248	37.51	Pk	33.2	-23.4	-95.2	-47.89	-13	-34.89	H
7.40772	35.16	Pk	36.8	-21.1	-95.2	-44.34	-13	-31.34	V
7.40804	35.01	Pk	36.8	-21.1	-95.2	-44.49	-13	-31.49	H
Mid Channel, 1880MHz									
3.76082	38.19	Pk	30.7	-24.9	-95.2	-51.21	-13	-38.21	H
3.76165	38.17	Pk	30.7	-24.9	-95.2	-51.23	-13	-38.23	V
5.63882	36.82	Pk	33.1	-22.3	-95.2	-47.58	-13	-34.58	V
5.63899	36.49	Pk	33.1	-22.3	-95.2	-47.91	-13	-34.91	H
7.521	35.2	Pk	36.7	-20.4	-95.2	-43.7	-13	-30.7	H
7.52253	35.51	Pk	36.7	-20.5	-95.2	-43.49	-13	-30.49	V
High Channel, 1907.6MHz									
3.81504	38.2	Pk	31	-24.7	-95.2	-50.7	-13	-37.7	H
3.81762	38.28	Pk	30.9	-24.6	-95.2	-50.62	-13	-37.62	V
5.72209	35.42	Pk	33	-21.7	-95.2	-48.48	-13	-35.48	V
5.72463	35.66	Pk	33	-21.7	-95.2	-48.24	-13	-35.24	H
7.63102	35.33	Pk	36.9	-21.1	-95.2	-44.07	-13	-31.07	V
7.63229	35.4	Pk	36.9	-21.1	-95.2	-44.00	-13	-31.00	H

10.2.8. WCDMA BAND 4

REL 99 MODE

Project #:	13571607
Date:	04/2/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	REL 99 Band 4
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1712.4MHz									
3.27375	42.66	Pk	31.3	-33.3	-95.2	-54.54	-13	-41.54	H
3.32203	41.63	Pk	31.2	-33.2	-95.2	-55.57	-13	-42.57	V
4.57406	41.31	Pk	32	-29.8	-95.2	-51.69	-13	-38.69	H
4.78172	40.54	Pk	32.9	-30.1	-95.2	-51.86	-13	-38.86	V
6.88125	37.05	Pk	36.3	-26.6	-95.2	-48.45	-13	-35.45	V
7.01906	37.16	Pk	36.5	-26.6	-95.2	-48.14	-13	-35.14	H
Mid Channel, 1732.6MHz									
3.46429	36.92	Pk	30.3	-24.5	-95.2	-52.48	-13	-39.48	V
3.46735	37.48	Pk	30.3	-24.4	-95.2	-51.82	-13	-38.82	H
5.1976	37.59	Pk	33.7	-23.6	-95.2	-47.51	-13	-34.51	H
5.19992	37.3	Pk	33.7	-23.6	-95.2	-47.8	-13	-34.8	V
6.92928	35.43	Pk	36.3	-20.9	-95.2	-44.37	-13	-31.37	V
6.93282	35.85	Pk	36.4	-20.9	-95.2	-43.85	-13	-30.85	H
High Channel, 1752.61MHz									
3.50445	36.52	Pk	30.2	-24.7	-95.2	-53.18	-13	-40.18	H
3.50541	37.25	Pk	30.2	-24.8	-95.2	-52.55	-13	-39.55	V
5.25668	37.7	Pk	33.5	-23.9	-95.2	-47.9	-13	-34.9	H
5.25861	37.36	Pk	33.4	-23.9	-95.2	-48.34	-13	-35.34	V
7.01096	36.24	Pk	36.5	-22	-95.2	-44.46	-13	-31.46	H
7.01105	36.15	Pk	36.5	-22	-95.2	-44.55	-13	-31.55	V

HSDPA MODE

Project #:	13571607
Date:	04/2/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	REL 99 Band 4
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1712MHz									
3.42461	38.27	Pk	30.5	-24.7	-95.2	-51.13	-13	-38.13	H
3.42587	36.74	Pk	30.5	-24.7	-95.2	-52.66	-13	-39.66	V
5.13553	36.62	Pk	33.8	-22.3	-95.2	-47.08	-13	-34.08	V
5.13893	37.37	Pk	33.8	-22.4	-95.2	-46.43	-13	-33.43	H
6.84859	36.23	Pk	36.1	-21.1	-95.2	-43.97	-13	-30.97	V
6.85029	35.44	Pk	36.1	-21	-95.2	-44.66	-13	-31.66	H
Mid Channel, 1732.6MHz									
3.46547	36.66	Pk	30.3	-24.5	-95.2	-52.74	-13	-39.74	V
3.46671	36.87	Pk	30.3	-24.4	-95.2	-52.43	-13	-39.43	H
5.19883	36.89	Pk	33.7	-23.6	-95.2	-48.21	-13	-35.21	V
5.19958	37.36	Pk	33.7	-23.6	-95.2	-47.74	-13	-34.74	H
6.92951	35.81	Pk	36.3	-20.9	-95.2	-43.99	-13	-30.99	V
6.93166	35.74	Pk	36.3	-20.9	-95.2	-44.06	-13	-31.06	H
High Channel, 1752.6MHz									
3.50534	37.14	Pk	30.2	-24.8	-95.2	-52.66	-13	-39.66	V
3.50653	37.32	Pk	30.3	-24.9	-95.2	-52.48	-13	-39.48	H
5.25836	37.96	Pk	33.4	-23.9	-95.2	-47.74	-13	-34.74	H
5.25873	37.29	Pk	33.4	-23.9	-95.2	-48.41	-13	-35.41	V
7.0101	36.42	Pk	36.6	-22	-95.2	-44.18	-13	-31.18	V
7.01061	36.66	Pk	36.6	-22	-95.2	-43.94	-13	-30.94	H

10.3. FIELD STRENGTH OF SPURIOUS RADIATION, Ant 2

10.3.1. GSM 850

GPRS MODE

Project #:	13571607
Date:	04/29/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	GSM850 GPRS
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 824.2 MHz										
1.64845	44.69	Pk	24.9	-27.8	.8	-95.2	-52.61	-13	-39.61	H
1.65881	39.96	Pk	25	-27.9	.8	-95.2	-57.34	-13	-44.34	V
2.23126	39.17	Pk	27.3	-26.9	.5	-95.2	-55.13	-13	-42.13	H
2.3441	38.8	Pk	28	-26.8	.6	-95.2	-54.60	-13	-41.60	V
3.23647	38.11	Pk	31.4	-25.7	.4	-95.2	-50.99	-13	-37.99	V
3.31235	38.19	Pk	31.1	-25.7	.6	-95.2	-51.01	-13	-38.01	H
Mid Channel, 836.6 MHz										
1.66616	39.66	Pk	25	-27.9	.8	-95.2	-57.64	-13	-44.64	V
1.67295	41.22	Pk	25	-27.8	.7	-95.2	-56.08	-13	-43.08	H
2.30365	39.78	Pk	27.5	-26.8	.6	-95.2	-54.12	-13	-41.12	V
2.34465	39.59	Pk	28	-26.8	.6	-95.2	-53.81	-13	-40.81	H
3.09589	38.23	Pk	30.4	-25.8	.6	-95.2	-51.77	-13	-38.77	V
3.26137	38.26	Pk	31.3	-25.7	.5	-95.2	-50.84	-13	-37.84	H
High Channel, 848.8 MHz										
1.61936	39.79	Pk	24.9	-27.9	.7	-95.2	-57.71	-13	-44.71	H
1.62919	39.32	Pk	25	-27.9	.7	-95.2	-58.08	-13	-45.08	V
2.53622	38.78	Pk	29.2	-26.7	.8	-95.2	-53.12	-13	-40.12	H
2.54678	40.15	Pk	29.3	-26.6	.7	-95.2	-51.65	-13	-38.65	V
3.16316	38.56	Pk	31	-25.8	.5	-95.2	-50.94	-13	-37.94	H
3.16647	39.51	Pk	31	-25.8	.5	-95.2	-49.99	-13	-36.99	V

EGPRS MODE

Project #:	13571607
Date:	05/18/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	GSM850 EGPRS
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 824.2 MHz										
1.64823	47.79	Pk	24.9	-27.8	.8	-95.2	-49.51	-13	-36.51	H
1.66152	39.36	Pk	25	-27.8	.8	-95.2	-57.84	-13	-44.84	V
2.47275	39.69	Pk	29	-26.6	.5	-95.2	-52.61	-13	-39.61	V
2.5989	39.29	Pk	29.2	-26.5	.5	-95.2	-52.71	-13	-39.71	H
3.85136	38.67	Pk	31.1	-24.9	.5	-95.2	-49.83	-13	-36.83	H
3.93003	38.28	Pk	31.5	-25.1	.6	-95.2	-49.92	-13	-36.92	V
Mid Channel, 836.6 MHz										
1.67481	39.62	Pk	25	-27.8	.7	-95.2	-57.68	-13	-44.68	H
1.70987	39.8	Pk	25.1	-27.6	.6	-95.2	-57.30	-13	-44.30	V
1.97509	37.14	Pk	27.2	-27.3	.6	-95.2	-57.56	-13	-44.56	V
2.6595	38.43	Pk	29.3	-26.1	.5	-95.2	-53.07	-13	-40.07	H
3.77379	38.89	Pk	30.7	-25.1	.5	-95.2	-50.21	-13	-37.21	V
3.84465	39.07	Pk	31.2	-24.8	.4	-95.2	-49.33	-13	-36.33	H
High Channel, 848.8 MHz										
1.69754	42.1	Pk	25	-27.6	.7	-95.2	-55.00	-13	-42.00	H
1.75565	39.82	Pk	25.6	-27.6	.7	-95.2	-56.68	-13	-43.68	V
2.54106	39.37	Pk	29.3	-26.6	.7	-95.2	-52.43	-13	-39.43	H
2.6046	38.59	Pk	29.2	-26.4	.5	-95.2	-53.31	-13	-40.31	V
3.71721	38.42	Pk	30.4	-25.1	.6	-95.2	-50.88	-13	-37.88	H
3.72231	38.85	Pk	30.4	-25.1	.6	-95.2	-50.45	-13	-37.45	V

10.3.2. GSM 1900

GPRS MODE

Project #:	13571607
Date:	04/29/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	GSM1900 GPRS
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1850.2MHz									
3.77462	39.42	Pk	30.7	-25	-95.2	-50.08	-13	-37.08	V
3.78622	38.54	Pk	30.8	-24.9	-95.2	-50.76	-13	-37.76	H
5.10219	36.51	Pk	34	-21.8	-95.2	-46.49	-13	-33.49	V
5.13012	37.05	Pk	33.8	-22.3	-95.2	-46.65	-13	-33.65	H
7.22904	35.52	Pk	37.2	-20	-95.2	-42.48	-13	-29.48	V
7.2682	35.12	Pk	37.2	-20.4	-95.2	-43.28	-13	-30.28	H
Mid Channel, 1880MHz									
3.87386	38.2	Pk	31.3	-24.2	-95.2	-49.9	-13	-36.9	H
3.91814	38.25	Pk	31.5	-23.9	-95.2	-49.35	-13	-36.35	V
5.08721	37.16	Pk	33.8	-21.7	-95.2	-45.94	-13	-32.94	H
5.13386	37.67	Pk	33.8	-22.3	-95.2	-46.03	-13	-33.03	V
7.21541	35.56	Pk	37.2	-19.6	-95.2	-42.04	-13	-29.04	H
7.26013	36.56	Pk	37.2	-20.6	-95.2	-42.04	-13	-29.04	V
High Channel, 1909.8MHz									
3.77218	38.17	Pk	30.7	-24.9	-95.2	-51.23	-13	-38.23	H
3.79686	40.01	Pk	30.9	-24.7	-95.2	-48.99	-13	-35.99	V
5.49118	36.74	Pk	33	-23.7	-95.2	-49.16	-13	-36.16	V
5.72918	41.05	Pk	33	-21.8	-95.2	-42.95	-13	-29.95	H
7.22554	35.92	Pk	37.1	-19.8	-95.2	-41.98	-13	-28.98	V
7.85588	35.17	Pk	37.3	-19.6	-95.2	-42.33	-13	-29.33	H

EGPRS MODE

Project #:	13571607
Date:	04/29/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	GSM1900 EGPRS
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1850.2MHz									
3.84856	38.57	Pk	31.1	-24.4	-95.2	-49.93	-13	-36.93	V
3.86495	38.35	Pk	31.2	-24.2	-95.2	-49.85	-13	-36.85	H
5.55066	40.71	Pk	33.3	-23.4	-95.2	-44.59	-13	-31.59	H
5.55402	37.15	Pk	33.3	-23.3	-95.2	-48.05	-13	-35.05	V
7.55077	35.32	Pk	36.9	-20.7	-95.2	-43.68	-13	-30.68	V
7.55844	35.77	Pk	36.8	-20.6	-95.2	-43.23	-13	-30.23	H
Mid Channel, 1880MHz									
3.649	37.98	Pk	30.1	-24.4	-95.2	-51.52	-13	-38.52	V
3.66695	38.3	Pk	30.1	-24.7	-95.2	-51.5	-13	-38.5	H
5.62529	36.35	Pk	33.2	-22.4	-95.2	-48.05	-13	-35.05	H
5.67505	36.24	Pk	33	-21.4	-95.2	-47.36	-13	-34.36	V
8.14749	35.77	Pk	37.3	-19.6	-95.2	-41.73	-13	-28.73	H
8.18402	35.08	Pk	37.3	-20.3	-95.2	-43.12	-13	-30.12	V
High Channel, 1909.8MHz									
3.81421	39.46	Pk	31	-24.7	-95.2	-49.44	-13	-36.44	H
3.90542	38.6	Pk	31.4	-24	-95.2	-49.2	-13	-36.2	V
5.61207	36.84	Pk	33.2	-22.4	-95.2	-47.56	-13	-34.56	V
5.62522	36.94	Pk	33.2	-22.4	-95.2	-47.46	-13	-34.46	H
8.36688	34.74	Pk	37.6	-18.8	-95.2	-41.66	-13	-28.66	H
8.37606	35.02	Pk	37.5	-18.7	-95.2	-41.38	-13	-28.38	V

10.3.3. CDMA BC10

1xRTT MODE

Project #:	13571607
Date:	04/15/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	1xRTT BC10
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl (dB)	HPF 2.7GHz T772 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 817.25MHz										
1.58818	38.25	Pk	24.9	-27.8	.8	-95.2	-59.05	-13	-46.05	V
1.63511	39.26	Pk	25	-27.8	.7	-95.2	-58.04	-13	-45.04	H
2.45156	38.08	Pk	28.8	-26.7	.5	-95.2	-54.52	-13	-41.52	H
2.45253	37.37	Pk	28.8	-26.7	.5	-95.2	-55.23	-13	-42.23	V
3.85369	36.54	Pk	31.1	-24.9	.5	-95.2	-51.96	-13	-38.96	V
3.8752	37.56	Pk	31.3	-25.2	.6	-95.2	-50.94	-13	-37.94	H
Mid Channel, 820MHz										
1.77933	36.75	Pk	25.9	-27.5	.6	-95.2	-59.45	-13	-46.45	V
1.78422	37.58	Pk	25.9	-27.6	.6	-95.2	-58.72	-13	-45.72	H
2.44911	36.91	Pk	28.8	-26.7	.5	-95.2	-55.69	-13	-42.69	V
2.46036	38.22	Pk	28.9	-26.6	.5	-95.2	-54.18	-13	-41.18	H
3.71582	37.89	Pk	30.4	-25.2	.6	-95.2	-51.51	-13	-38.51	V
3.79307	37.83	Pk	30.8	-25.1	.7	-95.2	-50.97	-13	-37.97	H
High Channel, 822.75MHz										
1.64244	37.79	Pk	25	-27.8	.7	-95.2	-59.51	-13	-46.51	H
1.65907	37.65	Pk	25	-27.9	.8	-95.2	-59.65	-13	-46.65	V
2.51853	37.62	Pk	29.2	-26.5	.8	-95.2	-54.08	-13	-41.08	V
2.55422	37.37	Pk	29.3	-26.6	.6	-95.2	-54.53	-13	-41.53	H
3.90258	37.37	Pk	31.4	-24.9	.6	-95.2	-50.73	-13	-37.73	V
3.90502	37.19	Pk	31.4	-24.9	.6	-95.2	-50.91	-13	-37.91	H

1xEV-DO REV A MODE

Project #:	13571607
Date:	04/19/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	1xEV-DO REV A BC10
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T962 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 817.25MHz										
1.53244	43.56	Pk	24.8	-34.9	.8	-95.2	-60.94	-13	-47.94	V
1.56227	43.58	Pk	24.9	-34.9	.9	-95.2	-60.72	-13	-47.72	H
2.26871	44.26	Pk	27.4	-34.9	.5	-95.2	-57.94	-13	-44.94	V
2.45107	48.56	Pk	28.8	-34.8	.5	-95.2	-52.14	-13	-39.14	H
3.29929	42.3	Pk	31.1	-33.8	.8	-95.2	-54.80	-13	-41.80	V
1.53244	43.56	Pk	24.8	-34.9	.8	-95.2	-60.94	-13	-47.94	V
Mid Channel, 820MHz										
1.73187	44.3	Pk	25.4	-27.6	.7	-95.2	-52.40	-13	-39.40	V
1.73224	46.62	Pk	25.4	-27.6	.7	-95.2	-50.08	-13	-37.08	H
2.4636	37.57	Pk	28.9	-26.6	.5	-95.2	-54.83	-13	-41.83	H
2.46372	36.79	Pk	28.9	-26.6	.5	-95.2	-55.61	-13	-42.61	V
3.27953	36.6	Pk	31.4	-25.3	.8	-95.2	-51.70	-13	-38.70	H
3.28014	36.59	Pk	31.4	-25.3	.8	-95.2	-51.71	-13	-38.71	V
High Channel, 822.75MHz										
1.76076	42.68	Pk	25.7	-34.9	.7	-95.2	-61.02	-13	-48.02	V
1.80329	43.42	Pk	25.9	-34.8	.6	-95.2	-60.08	-13	-47.08	H
2.46818	44.4	Pk	28.9	-34.8	.5	-95.2	-56.20	-13	-43.20	H
2.57769	42.83	Pk	29.3	-34.6	.5	-95.2	-57.17	-13	-44.17	V
3.30076	42.12	Pk	31.1	-33.8	.8	-95.2	-54.98	-13	-41.98	V
3.3912	42.09	Pk	30.7	-33.5	.6	-95.2	-55.31	-13	-42.31	H

10.3.4. CDMA BC0

1xRTT MODE

Project #:	13571607
Date:	04/19/2021
Test Engineer:	43575
Configuration:	EUT Only
Mode:	1xRTT BC0
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 824.7MHz										
1.63462	38.81	Pk	25	-27.8	.7	-95.2	-58.49	-13	-45.49	H
1.662	38.48	Pk	25	-27.8	.8	-95.2	-58.72	-13	-45.72	V
2.47478	41.2	Pk	29	-26.6	.5	-95.2	-51.1	-13	-38.1	H
2.47453	38.27	Pk	29	-26.6	.5	-95.2	-54.03	-13	-41.03	V
3.66107	37.76	Pk	30.1	-25.2	.6	-95.2	-51.94	-13	-38.94	H
3.73342	37.64	Pk	30.5	-25.2	.5	-95.2	-51.76	-13	-38.76	V
Mid Channel, 836.52MHz										
1.6444	38.12	Pk	25	-27.8	.7	-95.2	-59.18	-13	-46.18	V
1.662	38.4	Pk	25	-27.8	.8	-95.2	-58.8	-13	-45.8	H
2.47502	36.81	Pk	29	-26.6	.5	-95.2	-55.49	-13	-42.49	V
2.50924	38.18	Pk	29.1	-26.6	.7	-95.2	-53.82	-13	-40.82	H
3.83462	36.92	Pk	31	-24.9	.3	-95.2	-51.88	-13	-38.88	V
3.90258	38.2	Pk	31.4	-24.9	.6	-95.2	-49.9	-13	-36.9	H
High Channel, 848.31MHz										
1.64684	37.82	Pk	24.9	-27.8	.7	-95.2	-59.58	-13	-46.58	V
1.66298	37.55	Pk	25	-27.8	.8	-95.2	-59.65	-13	-46.65	H
2.49018	37	Pk	29	-26.6	.6	-95.2	-55.2	-13	-42.2	V
2.54396	38.73	Pk	29.2	-26.6	.7	-95.2	-53.17	-13	-40.17	H
3.7476	38.33	Pk	30.6	-25.3	.4	-95.2	-51.17	-13	-38.17	H
3.79893	37.73	Pk	30.9	-25.2	.8	-95.2	-50.97	-13	-37.97	V

1xEV-DO REV A MODE

Project #:	13571607
Date:	06/04/2021
Test Engineer:	24989
Configuration:	EUT Only
Mode:	1xEV-DO REV A BC0
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T962 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 824.7MHz										
1.71676	41.6	Pk	25.2	-34.9	.6	-95.2	-62.7	-13	-49.7	H
1.82187	42.38	Pk	25.9	-34.8	.6	-95.2	-61.12	-13	-48.12	V
2.41196	41.24	Pk	28.6	-34.8	.5	-95.2	-59.66	-13	-46.66	H
2.44129	41.85	Pk	28.8	-34.8	.5	-95.2	-58.85	-13	-45.85	V
3.23182	42.5	Pk	31.4	-33.8	.4	-95.2	-54.7	-13	-41.7	V
3.3032	42.15	Pk	31.1	-33.9	.7	-95.2	-55.15	-13	-42.15	H
Mid Channel, 836.52MHz										
1.63902	41.45	Pk	25	-34.9	.7	-95.2	-62.95	-13	-49.95	V
1.68498	40.91	Pk	25	-34.9	.7	-95.2	-63.49	-13	-50.49	H
2.4012	43.18	Pk	28.5	-34.8	.5	-95.2	-57.82	-13	-44.82	V
2.51022	44.03	Pk	29.1	-34.7	.7	-95.2	-56.07	-13	-43.07	H
3.15996	41.93	Pk	31	-34	.5	-95.2	-55.77	-13	-42.77	V
3.21129	41.98	Pk	31.3	-33.8	.5	-95.2	-55.22	-13	-42.22	H
High Channel, 848.31MHz										
1.69329	40.83	Pk	25	-34.9	.7	-95.2	-63.57	-13	-50.57	V
1.6972	42.64	Pk	25	-34.9	.7	-95.2	-61.76	-13	-48.76	H
2.36111	42.26	Pk	28.2	-34.8	.6	-95.2	-58.94	-13	-45.94	V
2.53564	41.84	Pk	29.2	-34.7	.8	-95.2	-58.06	-13	-45.06	H
3.53738	41.26	Pk	30.2	-33.3	.5	-95.2	-56.54	-13	-43.54	V
3.60093	42.19	Pk	30.1	-33.1	.7	-95.2	-55.31	-13	-42.31	H

10.3.5. CDMA BC1

1xRTT MODE

Project #:	13571607
Date:	04/16/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	1xRTT BC1
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1851.25MHz									
3.88781	35.55	Pk	31.3	-24.3	-95.2	-52.65	-13	-39.65	H
3.93516	35.35	Pk	31.6	-23.9	-95.2	-52.15	-13	-39.15	V
5.06531	34.89	Pk	33.8	-22.1	-95.2	-48.61	-13	-35.61	V
5.13891	34.59	Pk	33.8	-22.4	-95.2	-49.21	-13	-36.21	H
7.72453	35.27	Pk	37.1	-19.7	-95.2	-42.53	-13	-29.53	V
8.02828	34.38	Pk	37.1	-19.6	-95.2	-43.32	-13	-30.32	H
Mid Channel, 1880MHz									
3.85453	37	Pk	31.1	-24.2	-95.2	-51.3	-13	-38.3	V
3.86906	36.27	Pk	31.2	-24.2	-95.2	-51.93	-13	-38.93	H
5.11688	35.47	Pk	33.9	-22.1	-95.2	-47.93	-13	-34.93	V
5.14828	33.89	Pk	33.8	-22.4	-95.2	-49.91	-13	-36.91	H
7.19109	34.57	Pk	37	-20.1	-95.2	-43.73	-13	-30.73	H
7.20047	33.27	Pk	37.1	-19.8	-95.2	-44.63	-13	-31.63	V
High Channel, 1908.75MHz									
3.91219	35.84	Pk	31.4	-24	-95.2	-51.96	-13	-38.96	H
3.93094	34.95	Pk	31.6	-23.8	-95.2	-52.45	-13	-39.45	V
5.59828	35.88	Pk	33.3	-22.8	-95.2	-48.82	-13	-35.82	H
5.63625	34.77	Pk	33.1	-22.3	-95.2	-49.63	-13	-36.63	V
7.98	34.36	Pk	37.1	-20.4	-95.2	-44.14	-13	-31.14	V
8.0925	34.23	Pk	37.2	-19.1	-95.2	-42.87	-13	-29.87	H

1xEV-DO REV A MODE

Project #:	13571607
Date:	04/19/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	1xEV-DO REV A BC1
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1851.25MHz									
3.85547	36.27	Pk	31.2	-24.2	-95.2	-51.93	-13	-38.93	H
3.88078	36.86	Pk	31.3	-24.3	-95.2	-51.34	-13	-38.34	V
5.60906	35.32	Pk	33.2	-22.4	-95.2	-49.08	-13	-36.08	V
5.63578	36	Pk	33.1	-22.3	-95.2	-48.4	-13	-35.4	H
7.755	33.6	Pk	37.1	-19.6	-95.2	-44.1	-13	-31.1	H
7.78594	33.22	Pk	37.2	-19.2	-95.2	-43.98	-13	-30.98	V
Mid Channel, 1880MHz									
3.75956	37.61	Pk	30.6	-24.9	-95.2	-51.89	-13	-38.89	H
3.76047	37.65	Pk	30.7	-24.9	-95.2	-51.75	-13	-38.75	V
5.63969	35.88	Pk	33.1	-22.3	-95.2	-48.52	-13	-35.52	H
5.6411	35.86	Pk	33.1	-22.2	-95.2	-48.44	-13	-35.44	V
7.52057	35.28	Pk	36.7	-20.4	-95.2	-43.62	-13	-30.62	H
7.52214	35.53	Pk	36.7	-20.5	-95.2	-43.47	-13	-30.47	V
High Channel, 1908.75MHz									
3.92719	36.16	Pk	31.4	-23.7	-95.2	-51.34	-13	-38.34	H
3.97969	36.28	Pk	31.6	-24.3	-95.2	-51.62	-13	-38.62	V
5.95359	34.67	Pk	34.3	-22.2	-95.2	-48.43	-13	-35.43	V
5.99766	35.23	Pk	34.4	-21.9	-95.2	-47.47	-13	-34.47	H
8.085	34.64	Pk	37.2	-19.2	-95.2	-42.56	-13	-29.56	V
8.36859	34.79	Pk	37.6	-18.7	-95.2	-41.51	-13	-28.51	H

10.3.6. WCDMA BAND 5

REL 99 MODE

Project #:	13571607
Date:	05/18/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	REL 99 Band 5
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 826.4MHz										
1.64782	38.31	Pk	24.9	-27.8	.8	-95.2	-58.99	-13	-45.99	H
1.662	36.73	Pk	25	-27.8	.8	-95.2	-60.47	-13	-47.47	V
2.63978	36.56	Pk	29.2	-26	.6	-95.2	-54.84	-13	-41.84	V
2.65591	36.67	Pk	29.3	-26.1	.5	-95.2	-54.83	-13	-41.83	H
3.78525	37.85	Pk	30.8	-25.1	.6	-95.2	-51.05	-13	-38.05	H
3.81751	38.19	Pk	30.9	-25.2	.6	-95.2	-50.71	-13	-37.71	V
Mid Channel, 836.6MHz										
1.66689	39.33	Pk	25	-27.9	.7	-95.2	-58.07	-13	-45.07	V
1.68253	37.69	Pk	25	-27.8	.7	-95.2	-59.61	-13	-46.61	H
2.65102	37.28	Pk	29.2	-26.1	.5	-95.2	-54.32	-13	-41.32	H
2.66031	37.26	Pk	29.2	-26.1	.5	-95.2	-54.34	-13	-41.34	V
3.22596	37.11	Pk	31.3	-25.6	.4	-95.2	-51.99	-13	-38.99	H
3.23182	37.57	Pk	31.4	-25.6	.4	-95.2	-51.43	-13	-38.43	V
High Channel, 846.6MHz										
1.71676	37.86	Pk	25.2	-27.6	.6	-95.2	-59.14	-13	-46.14	H
1.73973	37.57	Pk	25.4	-27.7	.7	-95.2	-59.23	-13	-46.23	V
2.44716	37.98	Pk	28.8	-26.7	.5	-95.2	-54.62	-13	-41.62	H
2.49947	38.25	Pk	29	-26.5	.6	-95.2	-53.85	-13	-40.85	V
3.39853	36.66	Pk	30.8	-25.5	.6	-95.2	-52.64	-13	-39.64	H
3.48507	36.81	Pk	30.2	-25.4	.8	-95.2	-52.79	-13	-39.79	V

HSDPA MODE

Project #:	13571607
Date:	05/5/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	HSDPA Band 5
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Limit	Margin (dB)	Polarity
Low Channel, 826.4MHz										
1.74316	39.77	Pk	25.5	-27.7	.7	-95.2	-56.93	-13	-43.93	H
1.75342	39.88	Pk	25.6	-27.6	.7	-95.2	-56.62	-13	-43.62	V
2.67547	37.02	Pk	29.2	-26.3	.6	-95.2	-54.68	-13	-41.68	V
2.76493	37.95	Pk	28.9	-26.1	.5	-95.2	-53.95	-13	-40.95	H
3.85076	38.04	Pk	31.1	-24.9	.5	-95.2	-50.46	-13	-37.46	H
3.97591	38.18	Pk	31.5	-25	.6	-95.2	-49.92	-13	-36.92	V
Mid Channel, 836.6MHz										
1.76173	38	Pk	25.7	-27.5	.7	-95.2	-58.3	-13	-45.3	V
1.76431	43.73	Pk	25.7	-27.6	.6	-95.2	-52.77	-13	-39.77	H
2.74782	37.29	Pk	29	-26.3	.6	-95.2	-54.61	-13	-41.61	V
2.78644	37.67	Pk	28.9	-26.1	.5	-95.2	-54.23	-13	-41.23	H
3.71436	39.08	Pk	30.4	-25.2	.7	-95.2	-50.22	-13	-37.22	H
3.73538	37.76	Pk	30.5	-25.2	.5	-95.2	-51.64	-13	-38.64	V
High Channel, 846.6MHz										
1.78227	40.16	Pk	25.9	-27.5	.6	-95.2	-56.04	-13	-43.04	H
1.93333	38.4	Pk	26.5	-27.2	.5	-95.2	-57	-13	-44	V
2.60409	37.82	Pk	29.2	-26.4	.5	-95.2	-54.08	-13	-41.08	H
2.70822	37.03	Pk	29.1	-26.1	.5	-95.2	-54.67	-13	-41.67	V
3.28413	36.65	Pk	31.3	-25.4	.8	-95.2	-51.85	-13	-38.85	H
3.32813	36.6	Pk	31	-25.8	.6	-95.2	-52.8	-13	-39.8	V

10.3.7. WCDMA BAND 2

REL 99 MODE

Project #:	13571607
Date:	04/8/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	REL 99 Band 2
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1852.4MHz									
3.70445	38.19	Pk	30.3	-24.7	-95.2	-51.41	-13	-38.41	H
3.70522	38.36	Pk	30.3	-24.7	-95.2	-51.24	-13	-38.24	V
5.55832	36.82	Pk	33.2	-23.4	-95.2	-48.58	-13	-35.58	V
5.55917	37.37	Pk	33.2	-23.4	-95.2	-48.03	-13	-35.03	H
7.41195	35.86	Pk	36.8	-21.1	-95.2	-43.64	-13	-30.64	H
7.4123	34.88	Pk	36.8	-21.1	-95.2	-44.62	-13	-31.62	V
Mid Channel, 1880MHz									
3.75989	38.26	Pk	30.6	-24.9	-95.2	-51.24	-13	-38.24	H
3.7617	38.58	Pk	30.7	-24.9	-95.2	-50.82	-13	-37.82	V
5.63906	35.91	Pk	33.1	-22.3	-95.2	-48.49	-13	-35.49	H
5.64065	36.14	Pk	33.1	-22.2	-95.2	-48.16	-13	-35.16	V
7.51832	36.1	Pk	36.7	-20.4	-95.2	-42.8	-13	-29.8	V
7.51848	35.41	Pk	36.7	-20.4	-95.2	-43.49	-13	-30.49	H
High Channel, 1907.6MHz									
3.81286	38.3	Pk	31	-24.7	-95.2	-50.6	-13	-37.6	V
3.81414	39.64	Pk	31	-24.7	-95.2	-49.26	-13	-36.26	H
5.72236	36.23	Pk	33	-21.7	-95.2	-47.67	-13	-34.67	H
5.72281	35.38	Pk	33	-21.7	-95.2	-48.52	-13	-35.52	V
7.63007	35.14	Pk	36.9	-21.1	-95.2	-44.26	-13	-31.26	H
7.63114	35.37	Pk	36.9	-21.1	-95.2	-44.03	-13	-31.03	V

HSDPA MODE

Project #:	13571607
Date:	04/9/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	HSDPA Band 2
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1852.4MHz									
3.7042	37.73	Pk	30.3	-24.6	-95.2	-51.77	-13	-38.77	H
3.70721	38.63	Pk	30.3	-24.7	-95.2	-50.97	-13	-37.97	V
5.55596	36.57	Pk	33.2	-23.3	-95.2	-48.73	-13	-35.73	H
5.55901	37.11	Pk	33.2	-23.4	-95.2	-48.29	-13	-35.29	V
7.41184	35.27	Pk	36.8	-21.1	-95.2	-44.23	-13	-31.23	H
7.4123	35.34	Pk	36.8	-21.1	-95.2	-44.16	-13	-31.16	V
Mid Channel, 1880MHz									
3.76009	37.72	Pk	30.6	-24.9	-95.2	-51.78	-13	-38.78	V
3.76109	38.28	Pk	30.7	-24.9	-95.2	-51.12	-13	-38.12	H
5.63893	36.85	Pk	33.1	-22.3	-95.2	-47.55	-13	-34.55	H
5.63917	36.07	Pk	33.1	-22.3	-95.2	-48.33	-13	-35.33	V
7.52006	35.01	Pk	36.7	-20.4	-95.2	-43.89	-13	-30.89	H
7.52052	35.58	Pk	36.7	-20.4	-95.2	-43.32	-13	-30.32	V
High Channel, 1907.6MHz									
3.81477	38.21	Pk	31	-24.7	-95.2	-50.69	-13	-37.69	V
3.81594	38.38	Pk	31	-24.6	-95.2	-50.42	-13	-37.42	H
5.72099	35.62	Pk	33	-21.7	-95.2	-48.28	-13	-35.28	V
5.72142	36.35	Pk	33	-21.7	-95.2	-47.55	-13	-34.55	H
7.62973	35.87	Pk	36.9	-21.1	-95.2	-43.53	-13	-30.53	H
7.63189	35.57	Pk	36.9	-21.1	-95.2	-43.83	-13	-30.83	V

10.3.8. WCDMA BAND 4

REL 99 MODE

Project #:	13571607
Date:	04/8/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	REL 99 Band 4
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1712.4MHz									
3.42486	36.63	Pk	30.5	-24.7	-95.2	-52.77	-13	-39.77	V
3.42498	37.03	Pk	30.5	-24.7	-95.2	-52.37	-13	-39.37	H
5.13573	36.17	Pk	33.9	-22.3	-95.2	-47.43	-13	-34.43	H
5.13658	36.29	Pk	33.9	-22.3	-95.2	-47.31	-13	-34.31	V
6.84951	35.67	Pk	36.1	-21	-95.2	-44.43	-13	-31.43	V
6.84967	35.13	Pk	36.1	-21	-95.2	-44.97	-13	-31.97	H
Mid Channel, 1732.6MHz									
3.46324	36.55	Pk	30.3	-24.6	-95.2	-52.95	-13	-39.95	H
3.46345	36.31	Pk	30.3	-24.6	-95.2	-53.19	-13	-40.19	V
5.19932	36.86	Pk	33.7	-23.6	-95.2	-48.24	-13	-35.24	V
5.20041	40.08	Pk	33.7	-23.6	-95.2	-45.02	-13	-32.02	H
6.93	34.96	Pk	36.3	-20.9	-95.2	-44.84	-13	-31.84	V
6.93001	34.96	Pk	36.3	-20.9	-95.2	-44.84	-13	-31.84	H
High Channel, 1752.6MHz									
3.5041	37.17	Pk	30.2	-24.7	-95.2	-52.53	-13	-39.53	H
3.50538	37.16	Pk	30.2	-24.8	-95.2	-52.64	-13	-39.64	V
5.25702	37.14	Pk	33.5	-23.9	-95.2	-48.46	-13	-35.46	H
5.25854	36.94	Pk	33.4	-23.9	-95.2	-48.76	-13	-35.76	V
7.01065	35.85	Pk	36.6	-22	-95.2	-44.75	-13	-31.75	H
7.01143	35.76	Pk	36.5	-22	-95.2	-44.94	-13	-31.94	V

HSDPA MODE

Project #:	13571607
Date:	04/9/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	HSDPA Band 4
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1712.4MHz									
3.4262	37.31	Pk	30.5	-24.7	-95.2	-52.09	-13	-39.09	H
3.42668	37.06	Pk	30.5	-24.7	-95.2	-52.34	-13	-39.34	V
5.13981	38.99	Pk	33.8	-22.4	-95.2	-44.81	-13	-31.81	H
5.14007	38.48	Pk	33.8	-22.4	-95.2	-45.32	-13	-32.32	V
6.84837	35.81	Pk	36.1	-21.1	-95.2	-44.39	-13	-31.39	H
6.85008	35.3	Pk	36.1	-21	-95.2	-44.8	-13	-31.8	V
Mid Channel, 1732.6MHz									
3.4632	36.43	Pk	30.3	-24.6	-95.2	-53.07	-13	-40.07	V
3.46363	37.11	Pk	30.3	-24.6	-95.2	-52.39	-13	-39.39	H
5.19378	37.04	Pk	33.7	-23.5	-95.2	-47.96	-13	-34.96	V
5.20186	36.73	Pk	33.7	-23.6	-95.2	-48.37	-13	-35.37	H
6.92961	35.68	Pk	36.3	-20.9	-95.2	-44.12	-13	-31.12	H
6.92972	35.22	Pk	36.3	-20.9	-95.2	-44.58	-13	-31.58	V
High Channel, 1752.6MHz									
3.50503	29.52	Av	30.2	-24.8	-95.2	-60.28	-13	-47.28	V
3.50591	29.77	Av	30.3	-24.8	-95.2	-59.93	-13	-46.93	H
5.26058	36.45	Av	33.4	-23.9	-95.2	-49.25	-13	-36.25	H
5.2608	37.38	Av	33.4	-23.9	-95.2	-48.32	-13	-35.32	V
7.0093	28.9	Av	36.6	-21.9	-95.2	-51.6	-13	-38.6	H
7.01002	28.77	Av	36.6	-22	-95.2	-51.83	-13	-38.83	V

10.4. FIELD STRENGTH OF SPURIOUS RADIATION, Ant 3

10.4.1. GSM 1900

GPRS MODE

Project #:	13571607
Date:	04/30/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	GSM1900 GPRS
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1850.2MHz									
3.80199	39.55	Pk	30.9	-24.7	-95.2	-49.45	-13	-36.45	H
3.83575	38.24	Pk	31	-24.6	-95.2	-50.56	-13	-37.56	V
5.05076	36.64	Pk	33.8	-21.9	-95.2	-46.66	-13	-33.66	V
5.08892	36.75	Pk	33.8	-21.7	-95.2	-46.35	-13	-33.35	H
8.07841	35.48	Pk	37.1	-19.3	-95.2	-41.92	-13	-28.92	V
8.09842	35.15	Pk	37.2	-19.2	-95.2	-42.05	-13	-29.05	H
Mid Channel, 1880MHz									
3.83745	38.72	Pk	31	-24.6	-95.2	-50.08	-13	-37.08	H
3.95338	39.32	Pk	31.6	-24.3	-95.2	-48.58	-13	-35.58	V
5.11538	36.45	Pk	33.9	-22.1	-95.2	-46.95	-13	-33.95	V
5.69256	36.28	Pk	33	-21.4	-95.2	-47.32	-13	-34.32	H
7.78722	35.15	Pk	37.2	-19.1	-95.2	-41.95	-13	-28.95	V
8.48152	35.87	Pk	37.5	-19.4	-95.2	-41.23	-13	-28.23	H
High Channel, 1909.8MHz									
3.81792	39	Pk	30.9	-24.6	-95.2	-49.9	-13	-36.9	H
3.81964	42.27	Pk	30.9	-24.7	-95.2	-46.73	-13	-33.73	V
5.05377	37.18	Pk	33.8	-22	-95.2	-46.22	-13	-33.22	V
5.09179	36.75	Pk	33.9	-21.7	-95.2	-46.25	-13	-33.25	H
7.20768	35.48	Pk	37.1	-19.6	-95.2	-42.22	-13	-29.22	V
7.21862	34.93	Pk	37.2	-19.7	-95.2	-42.77	-13	-29.77	H

EGPRS MODE

Project #:	13571607
Date:	04/30/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	GSM1900 EGPRS
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1850.2MHz									
3.80238	39.34	Pk	30.9	-24.7	-95.2	-49.66	-13	-36.66	H
3.80306	40.02	Pk	30.9	-24.7	-95.2	-48.98	-13	-35.98	V
5.5473	37.45	Pk	33.2	-23.5	-95.2	-48.05	-13	-35.05	V
5.64893	35.77	Pk	33.1	-22	-95.2	-48.33	-13	-35.33	H
7.0955	35.81	Pk	36.6	-20.5	-95.2	-43.29	-13	-30.29	V
7.2989	35.59	Pk	37	-21	-95.2	-43.61	-13	-30.61	H
Mid Channel, 1880MHz									
3.83719	38.48	Pk	31	-24.6	-95.2	-50.32	-13	-37.32	H
3.94351	26.87	Pk	31.5	-24.1	-95.2	-60.93	-13	-47.93	V
5.62475	37.08	Pk	33.2	-22.4	-95.2	-47.32	-13	-34.32	H
5.66146	36.07	Pk	33.1	-21.6	-95.2	-47.63	-13	-34.63	V
7.72699	34.96	Pk	37.1	-19.6	-95.2	-42.74	-13	-29.74	V
7.80051	35.68	Pk	37.2	-19.1	-95.2	-41.42	-13	-28.42	H
High Channel, 1909.8MHz									
4.18774	37.93	Pk	31.8	-22.9	-95.2	-48.37	-13	-35.37	H
4.23044	37.01	Pk	31.8	-23.2	-95.2	-49.59	-13	-36.59	V
5.84841	36.24	Pk	33.6	-23	-95.2	-48.36	-13	-35.36	H
5.91072	35.97	Pk	34.1	-22.5	-95.2	-47.63	-13	-34.63	V
7.67073	35.77	Pk	36.9	-20.6	-95.2	-43.13	-13	-30.13	H
7.76492	35.12	Pk	37.1	-19.6	-95.2	-42.58	-13	-29.58	V

10.4.2. WCDMA BAND 2

REL 99 MODE

Project #:	13571607
Date:	04/6/2021
Test Engineer:	30606
Configuration:	EUT Only
Mode:	REL 99 Band 2
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1852.4MHz									
3.72305	37.92	Pk	33.4	-26.9	-95.2	-50.78	-13	-37.78	V
3.76104	37.48	Pk	33.7	-27	-95.2	-51.02	-13	-38.02	H
5.91216	35.91	Pk	35.7	-23.7	-95.2	-47.29	-13	-34.29	V
5.91598	35.07	Pk	35.7	-23.7	-95.2	-48.13	-13	-35.13	H
8.5701	33.75	Pk	36.2	-21.6	-95.2	-46.85	-13	-33.85	H
9.04728	32.98	Pk	36.4	-19.7	-95.2	-45.52	-13	-32.52	V
Mid Channel, 1880MHz									
3.79235	37.97	Pk	33.7	-27.1	-95.2	-50.63	-13	-37.63	V
3.88536	38.15	Pk	33.8	-27	-95.2	-50.25	-13	-37.25	H
5.69212	36.75	Pk	35.2	-25	-95.2	-48.25	-13	-35.25	H
5.71831	36.17	Pk	35.3	-25.5	-95.2	-49.23	-13	-36.23	V
7.80986	33.74	Pk	36	-21.7	-95.2	-47.16	-13	-34.16	H
8.42613	33.4	Pk	36.1	-20.7	-95.2	-46.40	-13	-33.40	V
High Channel, 1907.6MHz									
3.81206	39.07	Pk	33.7	-27.4	-95.2	-49.83	-13	-36.83	V
3.90646	38.08	Pk	33.8	-27.1	-95.2	-50.42	-13	-37.42	H
5.6876	35.38	Pk	35.2	-24.8	-95.2	-49.42	-13	-36.42	V
5.79572	35.83	Pk	35.4	-25.2	-95.2	-49.17	-13	-36.17	H
9.06223	33.89	Pk	36.4	-20	-95.2	-44.91	-13	-31.91	H
9.08766	32.65	Pk	36.4	-20.3	-95.2	-46.45	-13	-33.45	V

HSDPA MODE

Project #:	13571607
Date:	04/7/2021
Test Engineer:	30606
Configuration:	EUT Only
Mode:	HSDPA Band 2
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1852.4MHz									
3.51338	38.58	Pk	33.2	-27.3	-95.2	-50.72	-13	-37.72	H
3.53832	37.95	Pk	33.3	-27.2	-95.2	-51.15	-13	-38.15	V
5.70645	36.1	Pk	35.2	-25.3	-95.2	-49.2	-13	-36.2	H
5.8413	36.71	Pk	35.5	-24.8	-95.2	-47.79	-13	-34.79	V
8.38079	32.82	Pk	36.1	-21.2	-95.2	-47.48	-13	-34.48	V
9.33902	33.51	Pk	36.6	-20.1	-95.2	-45.19	-13	-32.19	H
Mid Channel, 1880MHz									
3.4651	36.92	Pk	30.3	-24.5	-95.2	-52.48	-13	-39.48	H
3.46658	36.62	Pk	30.3	-24.4	-95.2	-52.68	-13	-39.68	V
5.19922	36.89	Pk	33.7	-23.6	-95.2	-48.21	-13	-35.21	V
5.19947	36.86	Pk	33.7	-23.6	-95.2	-48.24	-13	-35.24	H
6.93201	35.91	Pk	36.3	-20.9	-95.2	-43.89	-13	-30.89	V
6.93241	35.57	Pk	36.3	-20.9	-95.2	-44.23	-13	-31.23	H
High Channel, 1907.6MHz									
3.51481	38.23	Pk	33.2	-27.3	-95.2	-51.07	-13	-38.07	V
3.57192	37.79	Pk	33.3	-26.9	-95.2	-51.01	-13	-38.01	H
5.49656	35.53	Pk	34.9	-25.5	-95.2	-50.27	-13	-37.27	H
5.80318	35.79	Pk	35.4	-25	-95.2	-49.01	-13	-36.01	V
8.40684	33.8	Pk	36.1	-20.8	-95.2	-46.1	-13	-33.1	H
9.59618	32.08	Pk	36.9	-19.4	-95.2	-45.62	-13	-32.62	V

10.4.3. WCDMA BAND 4

REL 99 MODE

Project #:	13571607
Date:	04/7/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	REL 99 Band 4
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1712.4MHz									
3.42447	37.34	Pk	30.5	-24.7	-95.2	-52.06	-13	-39.06	V
3.42508	36.99	Pk	30.5	-24.7	-95.2	-52.41	-13	-39.41	H
5.12726	36.18	Pk	33.8	-22.3	-95.2	-47.52	-13	-34.52	H
5.12864	36.91	Pk	33.8	-22.3	-95.2	-46.79	-13	-33.79	V
6.84934	35.72	Pk	36.1	-21	-95.2	-44.38	-13	-31.38	H
6.85269	35.13	Pk	36.1	-20.9	-95.2	-44.87	-13	-31.87	V
Mid Channel, 1732.6MHz									
3.46521	36.85	Pk	30.3	-24.5	-95.2	-52.55	-13	-39.55	H
3.46759	36.32	Pk	30.3	-24.4	-95.2	-52.98	-13	-39.98	V
5.19859	36.93	Pk	33.7	-23.6	-95.2	-48.17	-13	-35.17	H
5.1998	37.49	Pk	33.7	-23.6	-95.2	-47.61	-13	-34.61	V
6.92977	35.42	Pk	36.3	-20.9	-95.2	-44.38	-13	-31.38	H
6.93245	35.57	Pk	36.3	-20.9	-95.2	-44.23	-13	-31.23	V
High Channel, 1752.6MHz									
3.5055	36.76	Pk	30.2	-24.8	-95.2	-53.04	-13	-40.04	H
3.50611	36.78	Pk	30.3	-24.8	-95.2	-52.92	-13	-39.92	V
5.25658	37.2	Pk	33.5	-23.9	-95.2	-48.4	-13	-35.4	H
5.25745	37.35	Pk	33.4	-23.9	-95.2	-48.35	-13	-35.35	V
7.00898	35.18	Pk	36.6	-21.9	-95.2	-45.32	-13	-32.32	H
7.01126	35.53	Pk	36.5	-22	-95.2	-45.17	-13	-32.17	V

HSDPA MODE

Project #:	13571607
Date:	04/8/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	HSDPA Band 4
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1712.4MHz									
3.53832	37.95	Pk	33.3	-27.2	-95.2	-51.15	-13	-38.15	V
5.70645	36.1	Pk	35.2	-25.3	-95.2	-49.20	-13	-36.20	H
5.8413	36.71	Pk	35.5	-24.8	-95.2	-47.79	-13	-34.79	V
8.38079	32.82	Pk	36.1	-21.2	-95.2	-47.48	-13	-34.48	V
9.33902	33.51	Pk	36.6	-20.1	-95.2	-45.19	-13	-32.19	H
3.53832	37.95	Pk	33.3	-27.2	-95.2	-51.15	-13	-38.15	V
Mid Channel, 1732.6MHz									
3.4651	36.92	Pk	30.3	-24.5	-95.2	-52.48	-13	-39.48	H
3.46658	36.62	Pk	30.3	-24.4	-95.2	-52.68	-13	-39.68	V
5.19922	36.89	Pk	33.7	-23.6	-95.2	-48.21	-13	-35.21	V
5.19947	36.86	Pk	33.7	-23.6	-95.2	-48.24	-13	-35.24	H
6.93201	35.91	Pk	36.3	-20.9	-95.2	-43.89	-13	-30.89	V
6.93241	35.57	Pk	36.3	-20.9	-95.2	-44.23	-13	-31.23	H
High Channel, 1752.6MHz									
3.51481	38.23	Pk	33.2	-27.3	-95.2	-51.07	-13	-38.07	V
3.57192	37.79	Pk	33.3	-26.9	-95.2	-51.01	-13	-38.01	H
5.49656	35.53	Pk	34.9	-25.5	-95.2	-50.27	-13	-37.27	H
5.80318	35.79	Pk	35.4	-25	-95.2	-49.01	-13	-36.01	V
8.40684	33.8	Pk	36.1	-20.8	-95.2	-46.1	-13	-33.1	H
9.59618	32.08	Pk	36.9	-19.4	-95.2	-45.62	-13	-32.62	V

10.5. FIELD STRENGTH OF SPURIOUS RADIATION, Ant 4

10.5.1. GSM 1900

GPRS MODE

Project #:	13571607
Date:	04/31/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	GSM1900 GPRS
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1850.2MHz									
3.86247	38.52	Pk	31.3	-24.2	-95.2	-49.58	-13	-36.58	H
3.92694	38.82	Pk	31.4	-23.7	-95.2	-48.68	-13	-35.68	V
5.98512	35.68	Pk	34.4	-21.9	-95.2	-47.02	-13	-34.02	H
6.00287	36.6	Pk	34.4	-21.9	-95.2	-46.1	-13	-33.1	V
7.22996	35.32	Pk	37.2	-20.1	-95.2	-42.78	-13	-29.78	H
7.23607	36.42	Pk	37.2	-20.4	-95.2	-41.98	-13	-28.98	V
Mid Channel, 1880MHz									
3.79992	39.1	Pk	30.9	-24.7	-95.2	-49.9	-13	-36.9	V
3.80149	38.89	Pk	30.9	-24.7	-95.2	-50.11	-13	-37.11	H
5.26349	37.4	Pk	33.4	-24	-95.2	-48.4	-13	-35.4	V
5.32318	36.38	Pk	33.3	-22.8	-95.2	-48.32	-13	-35.32	H
7.70664	35.39	Pk	37	-20.4	-95.2	-43.21	-13	-30.21	H
7.75808	34.84	Pk	37.1	-19.6	-95.2	-42.86	-13	-29.86	V
High Channel, 1909.8MHz									
3.92129	38.52	Pk	31.5	-23.9	-95.2	-49.08	-13	-36.08	V
3.95012	37.32	Pk	31.6	-24.2	-95.2	-50.48	-13	-37.48	H
5.84917	36.93	Pk	33.6	-23	-95.2	-47.67	-13	-34.67	H
5.92658	36.28	Pk	34.2	-22.4	-95.2	-47.12	-13	-34.12	V
7.69337	36.26	Pk	37.1	-20.5	-95.2	-42.34	-13	-29.34	V
7.77296	35.32	Pk	37.2	-19.4	-95.2	-42.08	-13	-29.08	H

EGPRS MODE

Project #:	13571607
Date:	04/30/2021
Test Engineer:	50822
Configuration:	EUT Only
Mode:	GSM1900 EGPRS
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1850.2MHz									
3.89923	38.17	Pk	31.4	-24.1	-95.2	-49.73	-13	-36.73	V
3.93827	37.62	Pk	31.5	-24	-95.2	-50.08	-13	-37.08	H
5.63998	43.8	Pk	33.1	-22.2	-95.2	-40.5	-13	-27.5	V
5.64	43.27	Pk	33.1	-22.2	-95.2	-41.03	-13	-28.03	H
7.22106	35.85	Pk	37.1	-19.7	-95.2	-41.95	-13	-28.95	H
7.26286	35.87	Pk	37.1	-20.5	-95.2	-42.73	-13	-29.73	V
Mid Channel, 1880MHz									
4.15478	36.36	Pk	31.8	-23.3	-95.2	-50.34	-13	-37.34	H
4.20449	37.37	Pk	31.7	-22.9	-95.2	-49.03	-13	-36.03	V
6.19553	35.77	Pk	34.6	-22.6	-95.2	-47.43	-13	-34.43	V
6.31648	36.07	Pk	34.6	-21.4	-95.2	-45.93	-13	-32.93	H
8.94844	35.36	Pk	38.3	-18.4	-95.2	-39.94	-13	-26.94	V
8.98987	34.98	Pk	38.4	-18.1	-95.2	-39.92	-13	-26.92	H
High Channel, 1909.8MHz									
3.79481	39.03	Pk	30.8	-24.7	-95.2	-50.07	-13	-37.07	H
3.79621	38.74	Pk	30.8	-24.7	-95.2	-50.36	-13	-37.36	V
5.72921	38.64	Pk	33	-21.8	-95.2	-45.36	-13	-32.36	H
5.72929	45.72	Pk	33.1	-21.8	-95.2	-38.18	-13	-25.18	V
7.21684	35.96	Pk	37.2	-19.6	-95.2	-41.64	-13	-28.64	H
7.23028	35.64	Pk	37.2	-20.1	-95.2	-42.46	-13	-29.46	V

10.5.2. WCDMA BAND 2

REL 99 MODE

Project #:	13571607
Date:	04/6/2021
Test Engineer:	30606
Configuration:	EUT Only
Mode:	REL 99 Band 2
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1852.4MHz									
3.72864	38.5	Pk	33.5	-26.8	-95.2	-50.00	-13	-37.00	V
3.89226	38.14	Pk	33.9	-27	-95.2	-50.16	-13	-37.16	H
6.46665	34.51	Pk	36.4	-22.8	-95.2	-47.09	-13	-34.09	V
6.53978	35.72	Pk	36.6	-23.5	-95.2	-46.38	-13	-33.38	H
9.04175	32.61	Pk	36.4	-19.6	-95.2	-45.79	-13	-32.79	V
10.39674	32.8	Pk	37.7	-18.9	-95.2	-43.60	-13	-30.60	H
Mid Channel, 1880MHz									
3.77892	38.38	Pk	33.6	-26.9	-95.2	-50.12	-13	-37.12	V
3.84535	37.46	Pk	33.8	-27.3	-95.2	-51.24	-13	-38.24	H
5.9039	35.31	Pk	35.7	-23.7	-95.2	-47.89	-13	-34.89	V
6.46756	35.43	Pk	36.5	-22.8	-95.2	-46.07	-13	-33.07	H
9.3279	32.84	Pk	36.6	-20	-95.2	-45.76	-13	-32.76	H
9.48008	33.09	Pk	36.8	-20.8	-95.2	-46.11	-13	-33.11	V
High Channel, 1907.6MHz									
3.79294	37.53	Pk	33.7	-27.1	-95.2	-51.07	-13	-38.07	V
3.87901	38.9	Pk	33.8	-27.2	-95.2	-49.7	-13	-36.7	H
5.93428	35.24	Pk	35.7	-24	-95.2	-48.26	-13	-35.26	V
6.76874	33.47	Pk	36.7	-21.8	-95.2	-46.83	-13	-33.83	H
9.63048	32.2	Pk	37	-19.8	-95.2	-45.8	-13	-32.8	V
9.6482	33.3	Pk	37	-20	-95.2	-44.9	-13	-31.9	H

HSDPA MODE

Project #:	13571607
Date:	04/7/2021
Test Engineer:	30606
Configuration:	EUT Only
Mode:	HSDPA Band 2
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1852.4MHz									
3.62948	38.6	Pk	33.4	-27.5	-95.2	-50.70	-13	-37.70	V
3.64185	37.86	Pk	33.6	-27.6	-95.2	-51.34	-13	-38.34	H
5.88546	36.24	Pk	35.6	-24.1	-95.2	-47.46	-13	-34.46	H
5.95459	35.28	Pk	35.7	-24	-95.2	-48.22	-13	-35.22	V
8.96237	34.17	Pk	36.4	-20.1	-95.2	-44.73	-13	-31.73	H
8.9815	32.95	Pk	36.4	-19.8	-95.2	-45.65	-13	-32.65	V
Mid Channel, 1880MHz									
3.71523	37.62	Pk	33.4	-27	-95.2	-51.18	-13	-38.18	V
3.76236	38.54	Pk	33.7	-27	-95.2	-49.96	-13	-36.96	H
6.52483	34.76	Pk	36.5	-23.4	-95.2	-47.34	-13	-34.34	H
6.59337	34.57	Pk	36.6	-24	-95.2	-48.03	-13	-35.03	V
10.40286	31.34	Pk	37.7	-18.8	-95.2	-44.96	-13	-31.96	H
10.45696	31.84	Pk	37.7	-18.7	-95.2	-44.36	-13	-31.36	V
High Channel, 1907.6MHz									
3.57957	38.14	Pk	33.3	-27	-95.2	-50.76	-13	-37.76	V
3.86693	38.98	Pk	33.8	-27.3	-95.2	-49.72	-13	-36.72	H
5.70638	35.55	Pk	35.2	-25.3	-95.2	-49.75	-13	-36.75	V
6.51915	34.92	Pk	36.4	-23.5	-95.2	-47.38	-13	-34.38	H
9.89393	32.69	Pk	37.3	-19.3	-95.2	-44.51	-13	-31.51	V
10.42943	31.91	Pk	37.7	-19	-95.2	-44.59	-13	-31.59	H

10.5.3. WCDMA BAND 4

REL 99 MODE

Project #:	13571607
Date:	04/6/2021
Test Engineer:	30606
Configuration:	EUT Only
Mode:	REL 99 Band 4
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1712.4MHz									
3.43779	39.08	Pk	33.1	-28.1	-95.2	-51.12	-13	-38.12	V
3.46838	40.17	Pk	33.1	-28.1	-95.2	-50.03	-13	-37.03	H
5.66623	35.56	Pk	35.2	-24.4	-95.2	-48.84	-13	-35.84	H
5.68043	35.86	Pk	35.2	-24.6	-95.2	-48.74	-13	-35.74	V
8.98988	32.4	Pk	36.4	-19.9	-95.2	-46.30	-13	-33.30	H
9.48291	32.33	Pk	36.8	-20.8	-95.2	-46.87	-13	-33.87	V
Mid Channel, 1732.6MHz									
3.55725	37.84	Pk	33.3	-26.7	-95.2	-50.76	-13	-37.76	V
3.88446	38.35	Pk	33.8	-27	-95.2	-50.05	-13	-37.05	H
5.37672	35.81	Pk	34.8	-24.9	-95.2	-49.49	-13	-36.49	V
6.99754	33.43	Pk	36.1	-22.5	-95.2	-48.17	-13	-35.17	H
8.46898	32.74	Pk	36.1	-20.7	-95.2	-47.06	-13	-34.06	V
10.62167	31.81	Pk	37.8	-19.3	-95.2	-44.89	-13	-31.89	H
High Channel, 1752.6MHz									
3.5185	38.45	Pk	33.2	-27.4	-95.2	-50.95	-13	-37.95	V
3.63238	37	Pk	33.4	-27.5	-95.2	-52.3	-13	-39.3	H
5.8495	35.81	Pk	35.5	-24.7	-95.2	-48.59	-13	-35.59	V
6.19282	34.23	Pk	36	-23.2	-95.2	-48.17	-13	-35.17	H
8.65125	32.85	Pk	36.2	-21.6	-95.2	-47.75	-13	-34.75	V
9.02331	33.06	Pk	36.4	-19.7	-95.2	-45.44	-13	-32.44	H

HSDPA MODE

Project #:	13571607
Date:	04/7/2021
Test Engineer:	45258
Configuration:	EUT Only
Mode:	HSDPA Band 4
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1712.4MHz									
3.2876	38.25	Pk	33	-27	-95.2	-50.95	-13	-37.95	H
3.57348	38.71	Pk	33.3	-26.9	-95.2	-50.09	-13	-37.09	V
5.09403	35.92	Pk	34.4	-24.6	-95.2	-49.48	-13	-36.48	H
5.87979	35.46	Pk	35.5	-24.1	-95.2	-48.34	-13	-35.34	V
8.45275	32.68	Pk	36.2	-20.6	-95.2	-46.92	-13	-33.92	H
9.67076	32.69	Pk	37.1	-20	-95.2	-45.41	-13	-32.41	V
Mid Channel, 1732.6MHz									
3.71675	37.43	Pk	33.4	-27	-95.2	-51.37	-13	-38.37	V
3.77341	38.53	Pk	33.6	-26.9	-95.2	-49.97	-13	-36.97	H
4.87124	38.41	Pk	34.1	-26.5	-95.2	-49.19	-13	-36.19	V
5.12802	36.48	Pk	34.5	-25.4	-95.2	-49.62	-13	-36.62	H
7.18561	35.01	Pk	36	-23	-95.2	-47.19	-13	-34.19	H
7.63344	32.75	Pk	35.9	-21.1	-95.2	-47.65	-13	-34.65	V
High Channel, 1752.6MHz									
3.68054	38.04	Pk	33.4	-27.5	-95.2	-51.26	-13	-38.26	V
3.7363	37.38	Pk	33.5	-26.8	-95.2	-51.12	-13	-38.12	H
5.75157	36.83	Pk	35.3	-25.6	-95.2	-48.67	-13	-35.67	V
5.90991	34.89	Pk	35.7	-23.7	-95.2	-48.31	-13	-35.31	H
8.96211	33.04	Pk	36.4	-20.1	-95.2	-45.86	-13	-32.86	V
9.00379	32.91	Pk	36.4	-19.8	-95.2	-45.69	-13	-32.69	H

11. SETUP PHOTOS

Please refer to 13571607-EP1V1 for setup photos

END OF REPORT