

Date: 26.0CT. 2018 08:03:26
Fig. 72 Channel 1175: 1GHz~12.75GHz

## Conclusion: PASS

## A7.1.2.3. 1xEV-DO PCS Transmitter BCO Release 0



Fig. 73 Channel 384: 9KHz~150KHz


Date: 26.OCT. 2018 09:43:42
Fig. 74 Channel 384: 150KHz~30MHz


Fig. 75 Channel 384: 30MHz~1GHz


Date: 26.0CT. 2018 09:49:47
Fig. 76 Channel 384: 1GHz~12.75GHz


Date: 26.OCT. 2018 09:38:27
Fig. 77 Channel 777: 9KHz~150KHz


Date: 26.OCT. 2018 09:42:57
Fig. 78 Channel 777: 150KHz~30MHz


Fig. 79 Channel 777: 30MHz~1GHz


Date: 26.OCT. 2018 09:49:10
Fig. 80 Channel 777: 1GHz~12.75GHz


Fig. 81 Channel 1013: 9KHz~150KHz


Date: 26.OCT. 2018 09:41:43
Fig. 82 Channel 1013: 150KHz~30MHz


Date: 26.OCT. 2018 09:46:55
Fig. 83 Channel 1013: 30MHz~1GHz


Date: 26.0CT. 2018 09:48:16
Fig. 84 Channel 1013: $\mathbf{1 G H z \sim 1 2 . 7 5 G H z}$

## Conclusion: PASS

## A7.1.2.4. 1xEV-DO PCS Transmitter BC1 Release 0



Fig. 85 Channel 25: 9KHz~150KHz


Date: 26.OCT. 2018 10:24:45
Fig. 86 Channel 25: 150KHz~30MHz


Fig. 87 Channel 25: 30MHz~1GHz


Date: 26.0cT. 2018 10:33:08
Fig. 88 Channel 25: 1GHz~12.75GHz


Fig. 89 Channel 600: 9KHz~150KHz


Date: 26.OCT. 2018 10:23:30
Fig. 90 Channel 600: 150KHz~30MHz


Fig. 91 Channel 600: 30MHz~1GHz


Date: 26.OCT. 2018 10:32:22
Fig. 92 Channel 600: 1GHz~12.75GHz


Fig. 93 Channel 1175: 9KHz~150KHz


Date: 26.OCT. 2018 10:21:34
Fig. 94 Channel 1175: 150KHz~30MHz


Date: 26.OCT. 2018 10:30:51
Fig. 95 Channel 1175: 30MHz~1GHz


Date: 26.0CT. 2018 10:31:46
Fig. 96 Channel 1175: 1GHz~12.75GHz

## A7.1.2.5. 1xEV-DO PCS Transmitter BCO Release A



Date: 26.OCT. 2018 10:51:53
Fig. 97 Channel 384: 9KHz~150KHz


Date: 26.OCT. 2018 10:59:44
Fig. 98 Channel 384: 150KHz~30MHz


Fig. 99 Channel 384: 30MHz~1GHz


Date: 26.0cT. 2018 11:06:00
Fig. 100 Channel 384: 1GHz~12.75GHz


Fig. 101 Channel 777: 9KHz~150KHz


Date: 26.0CT. 2018 10:58:56
Fig. 102 Channel 777: 150KHz~30MHz


Fig. 103 Channel 777: 30MHz~1GHz


Date: 26.0CT. 2018 11:05:13
Fig. 104 Channel 777: 1GHz~12.75GHz


Fig. 105 Channel 1013: 9KHz~150KHz


Date: 26.OCT. 2018 10:57:26

Fig. 106 Channel 1013: 150KHz~30MHz


Date: 26.OCT. 2018 11:01:54
Fig. 107 Channel 1013: 30MHz~1GHz


Date: 26.0CT. 2018 11:03:58
Fig. 108 Channel 1013: 1GHz~12.75GHz

## Conclusion: PASS

## A7.1.2.6. 1xEV-DO PCS Transmitter BCO Release A



Fig. 109 Channel 25: 9KHz~150KHz


Date: 26.OCT. 2018 11:31:14
Fig. 110 Channel 25: 150KHz~30MHz


Fig. 111 Channel 25: 30MHz~1GHz


Date: 26.OCT. 2018 11:36:46
Fig.112 Channel 25: 1GHz~12.75GHz


Fig. 113 Channel 600: 9KHz~150KHz


Date: 26.OCT. 2018 11:30:37
Fig. 114 Channel 600: 150KHz~30MHz


Fig. 115 Channel 600: 30MHz~1GHz


Date: 26.OCT. 2018 11:36:12
Fig. 116 Channel 600: 1GHz~12.75GHz


Fig. 117 Channel 1175: 9KHz~150KHz


Date: 26.OCT. 2018 11:29:45
Fig. 118 Channel 1175: 150KHz~30MHz


Fig. 119 Channel 1175: 30MHz~1GHz


Date: 26.0CT. 2018 11:35:29
Fig. 120 Channel 1175: 1GHz~12.75GHz

## Conclusion: PASS

## ANNEX A.8. RADIATED

## A.8.1. ERP

## A.8.1.1. CDMA/1xEV-DO ERP

## A.8.1.1.1. Description

This is the test for the maximum radiated power from the EUT.
Rule Part 24.232(c) specifies, "Mobile/portable stations are limited to 2 watts e.i.r.p. Peak power"and 24.232(c) specifies that "Peak transmit power must be measured over any interval ofcontinuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage."Rule Part 22.913(a) specifies " The ERP of mobile transmitters and auxiliary test transmitters must
not exceed 7 Watts."

## A.8.1.1.2. Method of Measurement

The measurements procedures in TIA-603E-2016 are used.

1. EUT was placed on a 1.5 meter high non-conductive stand at a 3 meter test distance from thereceive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUTfor emission measurements. The height of receiving antenna is 1.5 m . The test setup refers tofigure below. Detected emissions were maximized at each frequency by rotating the EUTthrough
$360^{\circ}$ and adjusting the receiving antenna polarization. The radiated emissionmeasurements of all transmit frequencies in three channels (High, Middle, Low) weremeasured with peak detector.

2. The EUT is then put into continuously transmitting mode at its maximum power level duringthe test. And the maximum value of the receiver should be recorded as (Pr).
3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.


In the chamber, an substitution antenna for the frequency band of interest is placed at thereference point of the chamber. An RF Signal source for the frequency band of interest isconnected to the substitution antenna with a cable that has been constructed to not interferewith the radiation pattern of the antenna. A power (Рмеа) is applied to the input of thesubstitution antenna, and adjust the level of the signal generator output until the value of thereceiver reach the previously recorded ( Pr ). The power of signal source ( P меa) is recorded. Thetest should be performed by rotating the test item and adjusting the receiving antennapolarization.
4. A amplifier should be connected to the Signal Source output port. And the cable should beconnect between the Amplifier and the Substitution Antenna.
The cable loss ( $\mathrm{P}_{\mathrm{cl}}$ ),the Substitution Antenna Gain ( $\mathrm{Ga}_{\mathrm{a}}$ ) and the Amplifier Gain ( $\mathrm{Pag}_{\mathrm{Ag}}$ ) should berecorded after test.
The measurement results are obtained as described below:
Power(EIRP)=PMea+ $\mathrm{PAg}_{\mathrm{Ag}}-\mathrm{Pcl}_{\mathrm{cl}} \mathrm{Ga}_{\mathrm{a}}$
5. This value is EIRP since the measurement is calibrated using an antenna of known gain
(2.15dBi) and known input power.
6. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP -2.15 dBi .
A.8.1.1.3 CDMA2000 Cellular -ERP 22.913(a)

## A.8.1.1.3.1 Measurement result CDMA2000 Cellular BC0

| Frequency <br> $(\mathrm{MHz})$ | $\mathrm{PMea}(\mathrm{dBm})$ | $\mathrm{P}_{\mathrm{cl}}(\mathrm{dB})$ | $\mathrm{PAg}_{\mathrm{AB}}(\mathrm{dB})$ | $G_{a} A n t e n n a$ <br> Gain $(\mathrm{dBd})$ | PeakERP $(\mathrm{d}$ <br> $\mathrm{Bm})$ | Polarizati <br> on |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 836.52 | -15.29 | 3.1 | 37 | 3.11 | 21.72 | H |
| 848.31 | -15.69 | 3.1 | 37 | 3.11 | 21.32 | H |
| 824.7 | -14.61 | 3.1 | 37 | 3.11 | 22.4 | H |

Frequency: 824.7MHz
Peak ERP $(\mathrm{dBm})=$ PMea $^{(-14.61 d B m)}$ - $\mathrm{Pcl}_{\mathrm{cl}}(3.1 \mathrm{~dB})+\mathrm{Pag}_{\mathrm{Ag}}(37 \mathrm{~dB})+\mathrm{Ga}_{\mathrm{a}}(3.11 \mathrm{dBd})$
$=22.4 \mathrm{dBm}$
Note: ANALYZER SETTINGS: RBW = VBW $=3 \mathrm{MHz}$

## A.8.1.1.4 CDMA2000 PCS-EIRP 24.232(c)

## A.8.1.1.4.1 Measurement result

## CDMA2000 PCS BC1

| Frequency <br> $(\mathrm{MHz})$ | PMea $(\mathrm{dBm})$ | $\mathrm{P}_{\mathrm{cl}}(\mathrm{dB})$ | $\mathrm{PAg}_{\mathrm{Ag}}(\mathrm{dB})$ | GaAntenna <br> Gain(dBi) | PeakEIRP( <br> $\mathrm{dBm})$ | Polarizati <br> on |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1851.25 | -14.75 | 4.6 | 36 | 2.8 | 19.45 | V |
| 1880.0 | -13.75 | 4.6 | 35.6 | 2.8 | 20.05 | V |
| 1908.75 | -13.59 | 4.7 | 36 | 2.8 | 20.51 | H |

Frequency: 1908.75MHz
Peak EIRP(dBm)= Pmea $^{\text {( }} \mathbf{1 3 . 5 9 d B m ) ~}-\mathrm{Pcl}_{\mathrm{cl}}(4.7 \mathrm{~dB})+\mathrm{Pag}_{\mathrm{Ag}}(36 \mathrm{~dB})+\mathrm{Ga}_{\mathrm{a}}(2.8 \mathrm{~dB})=20.51 \mathrm{dBm}$
ANALYZER SETTINGS: RBW = VBW = 3 MHz

## A.8.1.1.5 1xEV-DO PCS-EIRP 24.232(c)

## A.8.1.1.5.1 Measurement result

## 1xEV-DO Cellular BCO Release 0

| Frequency <br> $(\mathrm{MHz})$ | $\mathrm{P}_{\mathrm{Mea}(\mathrm{dBm})}$ | $\mathrm{P}_{\mathrm{cl}}(\mathrm{dB})$ | $\mathrm{PAg}_{\mathrm{Ag}}(\mathrm{dB})$ | GaAntenna <br> Gain( dBd$)$ | PeakERP(d <br> $\mathrm{Bm})$ | Polarizati <br> on |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 836.52 | -14.75 | 3.1 | 37 | 3.11 | 22.26 | H |
| 848.31 | -14.49 | 3.1 | 37 | 3.11 | 22.52 | H |
| 824.7 | -14.96 | 3.1 | 37 | 3.11 | 22.05 | H |

Frequency: 824.7 MHz
Peak ERP(dBm)= Pmea(-14.96dBm) - $\mathrm{Pcl}_{\mathrm{cl}}(3.1 \mathrm{~dB})+\mathrm{Pag}_{\mathrm{Ag}}(37 \mathrm{~dB})+\mathrm{Ga}_{\mathrm{a}}(3.11 \mathrm{dBd})$

$$
=22.05 \mathrm{dBm}
$$

Note: ANALYZER SETTINGS: RBW = VBW $=3 \mathrm{MHz}$

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| :--- | :--- | :--- |
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## A.8.1.1.6 1xEV-DO PCS-EIRP 24.232(c)

## A.8.1.1.6.1 Measurement result

1xEV-DO PCS BC1 Release 0

| Frequency <br> $(\mathrm{MHz})$ | PMea $(\mathrm{dBm})$ | $\mathrm{P}_{\mathrm{cl}}(\mathrm{dB})$ | $\mathrm{PAg}_{\mathrm{Ag}}(\mathrm{dB})$ | GaAntenna <br> Gain(dBi) | PeakEIRP( <br> $\mathrm{dBm})$ | Polarizati <br> on |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1851.25 | -14.79 | 4.6 | 36 | 2.8 | 19.41 | H |
| 1880.0 | -14.39 | 4.6 | 35.6 | 2.8 | 19.41 | H |
| 1908.75 | -13.77 | 4.7 | 36 | 2.8 | 20.33 | H |

Frequency: 1908.75MHz
Peak EIRP(dBm)= $\mathrm{P}_{\text {mea }}(-13.77 \mathrm{dBm})-\mathrm{Pcl}_{\mathrm{cl}}(4.7 \mathrm{~dB})+\mathrm{Pag}_{\mathrm{Ag}}(36 \mathrm{~dB})+\mathrm{Ga}_{\mathrm{a}}(2.8 \mathrm{~dB})=20.33 \mathrm{dBm}$
ANALYZER SETTINGS: RBW = VBW = 3 MHz

## A.8.1.1.7 1xEV-DO PCS-EIRP 24.232(c)

## A.8.1.1.7.1 Measurement result

## 1xEV-DO Cellular BCO Release A

| Frequency <br> $(\mathrm{MHz})$ | $\mathrm{P}_{\text {Mea }(\mathrm{dBm})}$ | $\mathrm{P}_{\mathrm{cl}(\mathrm{dB})}$ | $\mathrm{Pag}_{\mathrm{Ag}}(\mathrm{dB})$ | $\mathrm{GaAntenna}_{\text {Gain(dBd) }}$ | PeakERP(d <br> $\mathrm{Bm})$ | Polarizati <br> on |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 836.52 | -14.29 | 3.1 | 37 | 3.11 | 22.72 | H |
| 848.31 | -14.3 | 3.1 | 37 | 3.11 | 22.71 | H |
| 824.7 | -14.97 | 3.1 | 37 | 3.11 | 22.04 | H |

Frequency: 824.7MHz
Peak ERP(dBm)= Pmea(-14.97dBm) - $\mathrm{Pcl}_{\mathrm{cl}}(3.1 \mathrm{~dB})+\mathrm{Pag}_{\mathrm{Ag}}(37 \mathrm{~dB})+\mathrm{Ga}_{\mathrm{a}}(3.11 \mathrm{dBd})$

$$
=22.04 \mathrm{dBm}
$$

Note: ANALYZER SETTINGS: RBW = VBW $=3 \mathrm{MHz}$

## A.8.1.1.8 1xEV-DO PCS-EIRP 24.232(c)

## A.8.1.1.8.1 Measurement result

1xEV-DO PCS BC1 Release A

| Frequency <br> $(\mathrm{MHz})$ | $\mathrm{P}_{\mathrm{Mea}(\mathrm{dBm})}$ | $\mathrm{P}_{\mathrm{cl}(\mathrm{dB})}$ | $\mathrm{Pag}_{\mathrm{Ag}}(\mathrm{dB})$ | GaAntenna <br> Gain(dBi) | PeakEIRP( <br> $\mathrm{dBm})$ | Polarizati <br> on |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1851.25 | -13.63 | 4.6 | 36 | 2.8 | 20.57 | H |
| 1880.0 | -12.85 | 4.6 | 35.6 | 2.8 | 20.95 | H |
| 1908.75 | -13.25 | 4.7 | 36 | 2.8 | 20.85 | H |

Frequency: 1908.75MHz
Peak EIRP(dBm)= $\mathbf{P}_{\text {mea }}(-13.25 \mathrm{dBm})-\mathrm{Pal}_{\mathrm{cl}}(4.7 \mathrm{~dB})+\mathrm{Pag}_{\mathrm{Ag}}(36 \mathrm{~dB})+\mathrm{G}_{\mathrm{a}}(2.8 \mathrm{~dB})=20.85 \mathrm{dBm}$
ANALYZER SETTINGS: RBW = VBW $=3 \mathrm{MHz}$

## A.8.2 EMISSION LIMIT (§2.1051/§22.917§24.238)

## A.8.2.1 CDMA/1xEV-DO Measurement Method

The measurement procedures in TIA-603E-2016are used.
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier that can be as high as 1910 MHz . The resolution bandwidth is set as outlined in Part 24.238 and Part 22.917. The spectrum is scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of PCS1900 and GSM850.

## A.8.2.2 The procedure of radiated spurious emissions is as follows:

1. EUT was placed on a 1.5 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.5 m . The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through $360^{\circ}$ and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the $10^{\text {th }}$ harmonic were measured with peak detector.

2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (Pr).
3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.


In the chamber, an substitution antenna for the frequency band of interest is placed at the

[^0]reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (Pмеa) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded ( Pr ). The power of signal source ( $\mathrm{P}_{\text {меа) }}$ ) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
4. The Path loss ( $\mathrm{P}_{\mathrm{pl}}$ ) between the Signal Source with the Substitution Antenna and the Substitution Antenna Gain (Ga) should be recorded after test.
A amplifier should be connected in for the test.
The Path loss ( $\mathrm{P}_{\mathrm{pl}}$ ) is the summation of the cable loss.
The measurement results are obtained as described below:
Power(EIRP)=PMea- $\mathrm{Pll}_{\text {pl }}$ Ga
5. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi ) and known input power.
6. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP -2.15 dBi

## A.8.2.3 Measurement Limit

Part 24.238 and Part 22.917 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power $(\mathrm{P})$ by a factor of at least $43+10 \log (P) d B$.
The specification that emissions shall be attenuated below the transmitter power $(\mathrm{P})$ by at least 43 $+10 \log (\mathrm{P}) \mathrm{dB}$, translates in the relevant power range ( 1 to 0.001 W ) to -13 dBm . At 1 W the specified minimum attenuation becomes 43 dB and relative to a $30 \mathrm{dBm}(1 \mathrm{~W})$ carrier becomes a limit of -13 dBm . At $0.001 \mathrm{~W}(0 \mathrm{dBm})$ the minimum attenuation is 13 dB , which again yields a limit of -13 dBm . In this way a translation of the specification from relative to absolute terms is carried out.

## A.8.2.4 Measurement Results

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of the PCS1900 band ( $1850.2 \mathrm{MHz}, 1880 \mathrm{MHz}$ and 1909.8 MHz ) and GSM850 band $(824.2 \mathrm{MHz}, 836.6 \mathrm{MHz}, 848.8 \mathrm{MHz})$. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of the PCS1900, GSM850 into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this.

## A.8.2.5 Measurement Results

Measurements results:

| Frequency | Channel | Frequency Range | Result |
| :---: | :---: | :---: | :---: |
| CDMA2000 <br> Cellular BC0 | Low | $30 \mathrm{MHz} \sim 10 \mathrm{GHz}$ | P |
|  | Middle | $30 \mathrm{MHz} \sim 10 \mathrm{GHz}$ | P |
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|  | High | $30 \mathrm{MHz} \sim 10 \mathrm{GHz}$ | P |
| :---: | :---: | :---: | :---: |
| CDMA2000 <br> PCS BC1 | Low | $30 \mathrm{MHz} \sim 20 \mathrm{GHz}$ | P |
|  | Middle | $30 \mathrm{MHz} \sim 20 \mathrm{GHz}$ | P |
|  | High | $30 \mathrm{MHz} \sim 20 \mathrm{GHz}$ | P |
|  | Low | $30 \mathrm{MHz} \sim 10 \mathrm{GHz}$ | P |
|  | Middle | $30 \mathrm{MHz} \sim 10 \mathrm{GHz}$ | P |
| 1xEV-DO Cellular <br> BC0 | High | $30 \mathrm{MHz} \sim 10 \mathrm{GHz}$ | P |
|  | Low | $30 \mathrm{MHz} \mathrm{\sim 20GHz}$ | P |
|  | Middle | $30 \mathrm{MHz} \mathrm{\sim 20GHz}$ | P |

## CDMA2000 Cellular

## BC0 Channel 384

Final result:

| Frequency <br> $(\mathrm{MHz})$ | PMea <br> $(\mathrm{dBm})$ | $\mathrm{Pcl}(\mathrm{dBm})$ | $\mathrm{Ga}(\mathrm{dBi})$ | Peak EIRP <br> $(\mathrm{dBm})$ | Limit <br> $(\mathrm{dBm})$ | Polarizatio <br> n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1648.9 | -41.14 | 4.3 | 2.9 | -42.54 | -13 | V |
| 2720.4 | -36.13 | 5.6 | 4.1 | -37.63 | -13 | V |
| 3575.8 | -46.74 | 6.5 | 4.7 | -48.54 | -13 | V |
| 3947.3 | -49.31 | 6.8 | 7.7 | -48.41 | -13 | H |
| 4615.4 | -47.96 | 7.4 | 7.3 | -48.06 | -13 | V |
| 5456.5 | -49.55 | 8.1 | 9.5 | -48.15 | -13 | V |

## Note:

## BC0, CH384

Power(ERP)= Pmea-Pcl+Ga=-49.55-8.1+9.5=-48.15dbm
This method Applicable to the following table.
BCO Channel 777

## Final result:

| Frequency <br> $(\mathrm{MHz})$ | PMea <br> $(\mathrm{dBm})$ | $\mathrm{Pcl}(\mathrm{dBm})$ | $\mathrm{Ga}(\mathrm{dBi})$ | Peak EIRP <br> $(\mathrm{dBm})$ | Limit <br> $(\mathrm{dBm})$ | Polarizatio <br> n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1671.4 | -41.26 | 4.3 | 2.9 | -42.66 | -13 | H |
| 2568.2 | -35.55 | 5.4 | 3.7 | -37.25 | -13 | V |
| 3347.3 | -46.75 | 6.2 | 4.7 | -48.25 | -13 | V |
| 4485.0 | -48.29 | 7.3 | 7.3 | -48.29 | -13 | H |
| 5531.5 | -49.39 | 8.2 | 9.5 | -48.09 | -13 | V |
| 6376.9 | -48.86 | 8.9 | 11.5 | -46.26 | -13 | V |

BCO Cellular Mode Channel 1013
Final result:

| Frequency <br> $(\mathrm{MHz})$ | PMea <br> $(\mathrm{dBm})$ | $\mathrm{Pcl}(\mathrm{dBm})$ | $\mathrm{Ga}(\mathrm{dBi})$ | Peak EIRP <br> $(\mathrm{dBm})$ | Limit <br> $(\mathrm{dBm})$ | Polarizatio <br> n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1856.8 | -40.9 | 4.6 | 2.9 | -42.6 | -13 | H |
| 2694.6 | -35.6 | 5.6 | 4.1 | -37.1 | -13 | V |
| 3391.2 | -46.97 | 6.3 | 4.7 | -48.57 | -13 | V |
| 4131.9 | -50.36 | 7.0 | 7.7 | -49.66 | -13 | H |
| 4956.9 | -49.39 | 7.7 | 9.0 | -48.09 | -13 | H |
| 6280.0 | -49.13 | 8.8 | 10.8 | -47.13 | -13 | V |

## CDMA2000 PCS

BC1 Mode Channel 25

## Final result:

| Frequency <br> $(\mathrm{MHz})$ | PMea <br> $(\mathrm{dBm})$ | $\mathrm{Pcl}(\mathrm{dBm})$ | $\mathrm{Ga}(\mathrm{dBi})$ | Peak EIRP <br> $(\mathrm{dBm})$ | Limit <br> $(\mathrm{dBm})$ | Polarizatio <br> n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3577.2 | -50 | 6.5 | 4.7 | -51.8 | -13 | H |
| 5799.6 | -53.49 | 8.4 | 10.5 | -51.39 | -13 | H |
| 8054.4 | -55.2 | 9.9 | 16.6 | -48.5 | -13 | H |
| 10813.2 | -49.57 | 11.7 | 17.3 | -43.97 | -13 | V |
| 12873.6 | -46.3 | 13.0 | 19.2 | -40.1 | -13 | V |
| 15976.8 | -42.23 | 15.0 | 20.4 | -36.83 | -13 | H |

## BC1 Mode Channel 600

## Final result:

| Frequency <br> $(\mathrm{MHz})$ | PMea <br> $(\mathrm{dBm})$ | $\mathrm{Pcl}(\mathrm{dBm})$ | $\mathrm{Ga}(\mathrm{dBi})$ | Peak EIRP <br> $(\mathrm{dBm})$ | Limit <br> $(\mathrm{dBm})$ | Polarizatio <br> $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3574.2 | -50.99 | 6.4 | 4.7 | -52.69 | -13 | H |
| 5692.8 | -53.56 | 8.5 | 10.5 | -51.56 | -13 | V |
| 7378.8 | -54.08 | 9.7 | 14.6 | -49.18 | -13 | H |
| 9200.4 | -54.83 | 10.5 | 18.5 | -46.83 | -13 | V |
| 11631.6 | -47.27 | 12.2 | 17.6 | -41.87 | -13 | H |
| 14281.2 | -48.71 | 13.6 | 23.5 | -38.81 | -13 | V |

## BC1 Mode Channel 1175

## Final result:

| Frequency <br> $(\mathrm{MHz})$ | PMea <br> $(\mathrm{dBm})$ | $\mathrm{Pcl}(\mathrm{dBm})$ | $\mathrm{Ga}(\mathrm{dBi})$ | Peak EIRP <br> $(\mathrm{dBm})$ | Limit <br> $(\mathrm{dBm})$ | Polarizatio <br> n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| 3569.4 | -50.22 | 6.4 | 4.7 | -51.92 | -13 | V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5782.2 | -53.45 | 8.4 | 10.5 | -51.35 | -13 | V |
| 7549.2 | -53.72 | 9.7 | 14.6 | -48.82 | -13 | H |
| 9200.4 | -54.68 | 10.5 | 18.5 | -46.68 | -13 | H |
| 10792.8 | -49.76 | 11.7 | 17.3 | -44.16 | -13 | H |
| 13562.4 | -49.4 | 13.8 | 23.4 | -39.8 | -13 | H |

## Conclusion: PASS

Note: the EUT was displayed in several different direction, the worst cases were shown.

## 1xEV-DO Cellular

BC0 Channel 384
Final result:

| Frequency <br> $(\mathrm{MHz})$ | PMea <br> $(\mathrm{dBm})$ | $\mathrm{Pcl}(\mathrm{dBm})$ | $\mathrm{Ga}(\mathrm{dBi})$ | Peak EIRP <br> $(\mathrm{dBm})$ | Limit <br> $(\mathrm{dBm})$ | Polarizatio <br> n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1650.0 | -41.91 | 4.3 | 2.9 | -43.31 | -13 | H |
| 2502.9 | -37.35 | 5.4 | 3.7 | -39.05 | -13 | V |
| 3216.9 | -46.31 | 6.1 | 4.7 | -47.71 | -13 | V |
| 3963.5 | -50.13 | 6.8 | 7.7 | -49.23 | -13 | V |
| 4933.8 | -49.49 | 7.7 | 9.0 | -48.19 | -13 | H |
| 5603.1 | -49.92 | 8.3 | 9.5 | -48.72 | -13 | H |

## Note:

BC0, CH384
Power(ERP)= Pmea-Pcl+Ga=-49.92-8.3+9.5=-48.72dbm
This method Applicable to the following table.
BCO Channel 777
Final result:

| Frequency <br> $(\mathrm{MHz})$ | PMea <br> $(\mathrm{dBm})$ | $\mathrm{Pcl}(\mathrm{dBm})$ | $\mathrm{Ga}(\mathrm{dBi})$ | Peak EIRP <br> $(\mathrm{dBm})$ | Limit <br> $(\mathrm{dBm})$ | Polarizatio <br> n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1672.5 | -37.94 | 4.3 | 2.9 | -39.34 | -13 | H |
| 2510.4 | -35.34 | 5.4 | 3.7 | -37.04 | -13 | V |
| 3345.0 | -45.93 | 6.2 | 4.7 | -47.43 | -13 | V |
| 4547.3 | -47.88 | 7.4 | 7.3 | -47.98 | -13 | V |
| 6072.3 | -49.75 | 8.6 | 10.4 | -47.95 | -13 | V |
| 6892.3 | -49.95 | 9.3 | 12.9 | -46.35 | -13 | V |

BCO Cellular Mode Channel 1013
Final result:

| Frequency <br> $(\mathrm{MHz})$ | PMea <br> $(\mathrm{dBm})$ | $\mathrm{Pcl}(\mathrm{dBm})$ | $\mathrm{Ga}(\mathrm{dBi})$ | Peak EIRP <br> $(\mathrm{dBm})$ | Limit <br> $(\mathrm{dBm})$ | Polarizatio <br> n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1865.4 | -41.17 | 4.6 | 2.9 | -42.87 | -13 | H |
| 2535.0 | -35.95 | 5.4 | 3.7 | -37.65 | -13 | H |
| 3186.9 | -48.11 | 6.1 | 4.7 | -49.51 | -13 | H |
| 4535.8 | -48.21 | 7.4 | 7.3 | -48.31 | -13 | V |
| 4963.8 | -49.12 | 7.7 | 9.0 | -47.82 | -13 | V |
| 6544.6 | -49.17 | 9.0 | 11.5 | -46.67 | -13 | H |

## 1xEV-DO PCS

BC1 Mode Channel 25
Final result:

| Frequency <br> $(\mathrm{MHz})$ | PMea <br> $(\mathrm{dBm})$ | $\mathrm{Pcl}(\mathrm{dBm})$ | $\mathrm{Ga}(\mathrm{dBi})$ | Peak EIRP <br> $(\mathrm{dBm})$ | Limit <br> $(\mathrm{dBm})$ | Polarizatio <br> n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3572.4 | -50.71 | 6.4 | 4.7 | -52.41 | -13 | H |


| 5776.2 | -54.21 | 8.4 | 10.5 | -52.11 | -13 | H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7866.0 | -54.36 | 9.9 | 15.3 | -48.96 | -13 | V |
| 9753.6 | -53.79 | 10.9 | 18.3 | -46.39 | -13 | H |
| 11601.6 | -48.21 | 12.2 | 18.1 | -42.31 | -13 | V |
| 14300.4 | -48.04 | 13.6 | 23.5 | -38.14 | -13 | H |

## BC1 Mode Channel 600

## Final result:

| Frequency <br> $(\mathrm{MHz})$ | PMea <br> $(\mathrm{dBm})$ | $\mathrm{Pcl}(\mathrm{dBm})$ | $\mathrm{Ga}(\mathrm{dBi})$ | Peak EIRP <br> $(\mathrm{dBm})$ | Limit <br> $(\mathrm{dBm})$ | Polarizatio <br> n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3582.0 | -50.26 | 6.5 | 4.7 | -52.06 | -13 | V |
| 5839.2 | -53.16 | 8.4 | 10.5 | -51.06 | -13 | H |
| 8066.4 | -55.31 | 9.9 | 16.6 | -48.61 | -13 | V |
| 9957.6 | -52.62 | 11.2 | 17.6 | -46.22 | -13 | V |
| 11896.8 | -47.43 | 12.5 | 17.1 | -42.83 | -13 | H |
| 14308.8 | -48.64 | 13.6 | 23.5 | -38.74 | -13 | V |

## BC1 Mode Channel 1175

## Final result

| Frequency <br> $(\mathrm{MHz})$ | PMea <br> $(\mathrm{dBm})$ | $\mathrm{Pcl}(\mathrm{dBm})$ | $\mathrm{Ga}(\mathrm{dBi})$ | Peak EIRP <br> $(\mathrm{dBm})$ | Limit <br> $(\mathrm{dBm})$ | Polarizatio <br> n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3568.2 | -50.83 | 6.4 | 4.7 | -52.53 | -13 | H |
| 5799.6 | -53.65 | 8.4 | 10.5 | -51.55 | -13 | V |
| 7875.6 | -55.38 | 9.9 | 16.6 | -48.68 | -13 | H |


| 10056.0 | -52.32 | 11.3 | 17.6 | -46.02 | -13 | V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11931.6 | -47.25 | 12.5 | 17.1 | -42.65 | -13 | H |
| 14306.4 | -48.18 | 13.6 | 23.5 | -38.28 | -13 | H |

This method Applicable to the following table.

## Conclusion: PASS

Note: the EUT was displayed in several different direction, the worst cases were shown.

## ANNEX B. Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.


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