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**Scanning Receivers Cellular Band Rejection [47 CFR 15.121(b)]**


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**Schema for the 38 dB rejection measurement****[ Preliminary Measurement ]**

The Signal Generator conditions :

Output level = 66 dB $\mu$ V

Modulation = Frequency modulated to 1 kHz tone at 3 kHz peak deviation.

Frequency Points = 824.040 MHz, 836.505 MHz, 848.970 MHz

869.040 MHz, 881.505 MHz, 893.970 MHz

(The cellular Radiotelephone Service mobile and base frequency bands)

The EUT condition :

Scanning Frequency = (25 ~ 54) MHz, (108 ~ 512) MHz, (764 ~ 960) MHz,  
(1 240 ~ 1 300) MHz

Scan Stopped point, was the detected frequency.

**[ Final Measurement ]**

Injected 12 dB SINAD Reading (SG RF Output)

The EUT condition :

Frequency = Scan stopped point

The Signal Generator condition :

Frequency = Cellular point

Detected 12 dB SINAD Reading (SG RF Output)

The EUT condition :

Frequency = Scan stopped point

The Signal Generator condition :

Frequency = Scan stopped point

Under the requirements of Section 15.121(b) of the Rule.

Injected 12 dB SINAD Reading – Detected 12 dB SINAD Reading = 38 dB or more.

### 1.1 Test Equipment List and Details

|                                     | Name of Instrument | Model No. | Manufacturer    | Serial No. | Cal. Date  | Next Cal. Date |
|-------------------------------------|--------------------|-----------|-----------------|------------|------------|----------------|
| <input checked="" type="checkbox"/> | SIGNAL GENERATOR   | SMT03     | ROHDE & SCHWARZ | 100417     | 2014.06.27 | 2015.06.27     |
| <input checked="" type="checkbox"/> | AUDIO ANALYZER     | UPL       | ROHDE & SCHWARZ | 101154     | 2014.06.27 | 2015.06.27     |

### 1.2 Test Environmental Conditions

|             |            |
|-------------|------------|
| Date        | 2015.02.06 |
| Temperature | 20 °C      |
| Humidity    | 39 % R.H.  |

### 1.3 Test Result

| Cellular frequency (MHz) | Image/Spurious frequency (MHz) | Cellular Image Rejection ratio (dB) |
|--------------------------|--------------------------------|-------------------------------------|
| 824.040                  | No point Detected              | -                                   |
| 836.505                  | No point Detected              | -                                   |
| 848.970                  | No point Detected              | -                                   |
| 869.040                  | No point Detected              | -                                   |
| 881.505                  | No point Detected              | -                                   |
| 893.970                  | No point Detected              | -                                   |

The above test results confirm that all the signal rejection ratios for the Cellular Radio Telephone Service Band are higher than 38dB.

Base on the above, we hereby attest that the equipment in question complies fully with the provision of 15.121 of FCC rules.

Tested by:

  
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