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

Schema for the 38 dB rejection measurement

[Preliminary Measurement]

The Signal Generator conditions :

Output level = 66 dBμV

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.

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1.1 Test Equipment List and Details

Name of Instrument		Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☒	SIGNAL GENERATOR	SMT03	ROHDE & SCHWARZ	100417	2015.06.25	2016.06.25
☒	AUDIO ANALYZER	UPL	ROHDE & SCHWARZ	101154	2015.06.25	2016.06.25

1.2 Test Environmental Conditions

Date	2016.03.02
Temperature	18 °C
Humidity	38 % 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	-

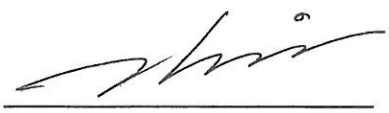
The above test results confirm that all the signal rejection ratios for the Cellular Radio Telephone Service Band are higher than 38dB.

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:

Engineer
DaeHwa Eun

Reviewed by:



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