Measurement Procedure & Test Equipment Used

Except where otherwise stated, all measurements are made following the Telecommunications Industries Association (TIA) “Land Mobile FM or PM Communications Equipment Measurement and Performance Standards” (TIA-603-D).

This exhibit presents a brief summary of how the measurements were made, the required limits, and the test equipment used.

The following procedures are presented with this application:

1.	Test Equipment List	x
2.	RF Power Output Data	x
3.	Radiated Spurious Emissions	x
4.	Conducted Spurious Emissions	x

Test Equipment List

Pursuant To FCC Rules 2.947 (d)

Equipment	Model No.	Serial No.	Cal Due date
HP DC Power Supply	6033A	2642A02483	6/1/2014
Agilent Power Meter	E4416A	GB41292919	7/4/2014
Agilent Power Sensor (with 30dB Pad)	E9301A	MY41495370	7/4/2014
PSA Spectrum Alayzer	E4445A	MY45300745	8/28/2014
Function Generator	33120A	US36005090	6/1/2014
Rohde & Schwarz Signal Generator	SMP22	847399/003	12/11/2013
Rohde & Schwarz Spectrum Analyzer/ESI Test Receiver	ESI 26	100017	8/7/2013
Rohde & Schwarz EMI Test Receiver	ESIB 40	100308	9/19/2013
Sunol Sciences System controller	SC99V	NA	No Cal. Reqired
Sunol Sciences Turntable. Flush Mount 2M Part# 15284	FM2011VS	NA	No Cal. Reqired
Sunol Sciences Antenna Positioning Tower	TLT2	NA	No Cal. Reqired
Sunol Sciences Antenna Positioning Tower	TLT2	NA	No Cal. Reqired
Motorola OATS RF Tray	2000	NA	No Cal. Reqired
HP Power Supply	6032A	3542A12712	12/19/2014
A.H. Systems Inc. DRG Horn Freq. 700MHZ-18GHZ	SAS-571	AAAAU499	9/24/2013
A.H. Systems Inc. DRG Horn Freq. 700MHZ-18GHZ	SAS-571	AAAAY772	8/14/2013
TESEQ GmbH Berlin Bilog Antenna 30MHz to 2GHz	CBL 6112D	NA	8/14/2013
EMCO Bilog Antenna	3141	9703-1047	4/30/2014

Table 1: List of equipments used

Test Name	FCC Rules Part (47 CFR)	IC Rules
RF Power Output Data	2.1046(a), 2.1033(c)(6), 2.1033(c)(7) and 2.1033(c)(8) * 90.545(b)(4) (700 MHz) 22.565(f) (VHF & UHF), * 24.132 (900 MHz) 74.461 (VHF & UHF)	RSS-Gen Sec 4.8, RSS-119 Sec 5.4.1, * RSS 134 (900 MHz)
TX Conducted Spurious Emissions	2.1051, 90.210, 22.359 (VHF,UHF), * 80.211(c) (VHF), 74.462(c) (VHF & UHF)	RSS GEN Sec 6.2, RSS 119, * RSS 182 (VHF)
TX Radiated Spurious Emissions	2.1053, 90.210, 22.359 (VHF,UHF) 74.462(c) (VHF & UHF)	RSS GEN Sec 4.9, RSS 119 Sec 4.2, 5.8

Table 2: List of FCC and IC reference

** Note: Not Applicable for this filing*

Measurement Procedures Used for Submitted Data

RF Power Output

Pursuant to FCC Rules 2.1046 (a)

Conducted power is measured in accordance with TIA-603-D section 2.2.1.2. The transmitter under test is connected to an Power Meter using the forward port of a 30 dB attenuator pad and power sensor. Appropriate calibration offsets, derived from a traceable RF attenuator, which has been precision characterized by an outside testing laboratory, are entered into the wattmeter to calibrate for the use of the coupler.

The transmitter is operated under normal conditions at the specified nominal dc input voltage. The DC voltage applied to the transmitter and the current it draws are read directly from the calibrated DC Power Supply. Remote voltage sensing is used to ensure the correct DC voltage is applied to the final PA stage. The DC input power to the final stage (in watts) is computed as the product of the DC current (in amperes) times the DC voltage (in volts). This measurement is performed at the lowest, the middle, and the highest operating frequencies of the operating bandwidth of the equipment.

The calibration of the power meter, detector, and attenuator pads is verified on an annual basis. Other power measurement systems that may be used are correlated with this calibrated reference system before measurements are performed, and calibration factors are adjusted as necessary to obtain precise correlation.

Conducted Spurious Emissions

Pursuant to FCC Rule 2.1051

The output of the transmitter is connected, via a suitable attenuator, to the input of an spectrum analyzer. The level of spurious emissions, in dBm, is plotted. This data is measured at the lower, middle, and upper frequency limits of the frequency range. Since the transmit power is adjustable, the measurement is repeated at various power levels including minimum and maximum.

Note:
RBW setting is adjusted to 100kHz for both Part 22 and RSS 119.

Radiated Spurious Emissions

Pursuant to FCC Rules 2.1053

Transmitter radiated spurious emissions were measured by the Motorola Plantation OATS (Open Area Test Site) Lab, located at 8000 West Sunrise Blvd, Plantation, Florida 33322. Measurements were made at an approved open field test site constructed in accordance with Appendix B, FCC/OST 55 (1982), and were performed in accordance with the Code of Federal Regulations, Title 47, Part 2, paragraph 2.1053. The data is plotted as “Radiated Spurious and Harmonic Emissions (Horizontal and Vertical)” on the graphs comprising EXHIBIT 6G. The specification limit corresponding to a level of 43 dB + 10 log (Pout) below the fundamental carrier power of the transmitter is indicated on each graph for reference.

Radiated Spurious and Harmonic Emissions were performed by:

Motorola Plantation OATS (Open Area Test Site) Lab
8000 West Sunrise Blvd.
Plantation, Florida 33322

FCC Registration: 0013253380
Industry of Canada: IC109U-1
ISO 25 certified

Note:
RBW setting is adjusted to 100kHz for both Part 22 and RSS 119.