

EXHIBIT 6: Measured data

Applicable Standards

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2, Sub-part J as well as the following parts:

- ☒ Part 15 Subpart B - Unintentional Radiators
- ☐ Part 22 Subpart H - Public Mobile Services
- ☒ Part 24 - Personal Communications Services
- ☒ Part 90 - Private Land Mobile Radio Service

Applicable Standards: TIA EIA 137-A, TIA EIA 98-C, ANSI 63.4 2001, RSS-118 (AMPS), RSS-128 (TDMA), RSS-129 (CDMA), RSS-133 (PCS)

6.1 Transmitter Output Power -- Pursuant 47 CFR 2.1046

Measurement Procedure

The RF output port of the equipment under test is directly coupled to the input of a HPE4406A Vector Signal Analyzer through a 10dB passive attenuator, adaptor (if needed), and specialized RF connector. The peak power output is measured for all channels.

GSM 1900			
Emission Frequency MHz		Power (W)	Power (dBm)
1850.20		0.955	29.8
1909.80		0.955	29.8

Table 6-1. Power measurement results

6.2 Emission Mask – Pursuant CFR Part 2.1049, 24.238, 22.917

Measurement Procedure

The RF output port of the equipment under test is directly coupled to the input of the spectrum analyzer through a custom RF connector and a 10dB passive attenuator. The amplitude of the spectrum analyzer is corrected for the attenuator and any other applicable losses.

The middle channel within the designated frequency block was measured. For digital modulation, the lower and upper band edge plots are displayed.

Measurement Results

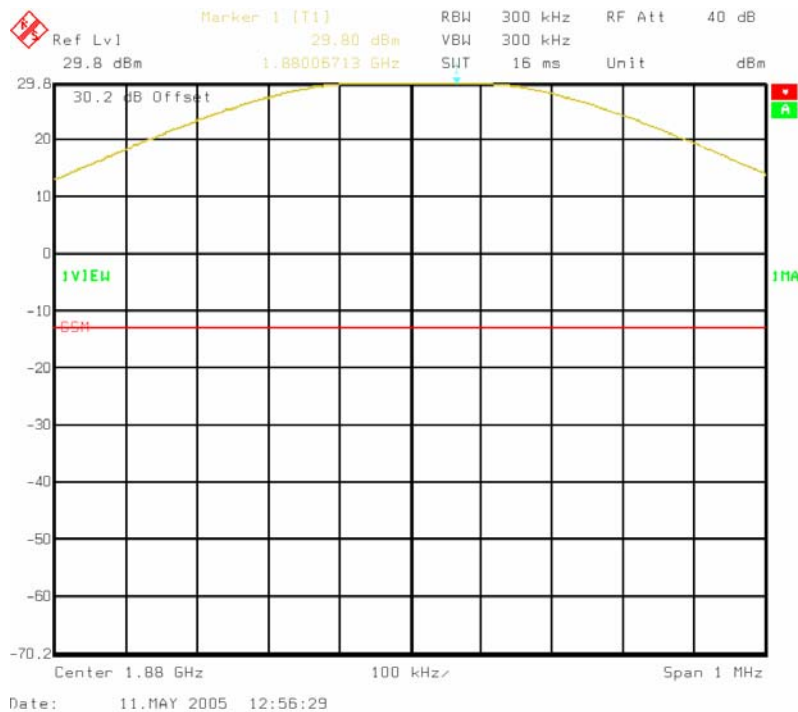
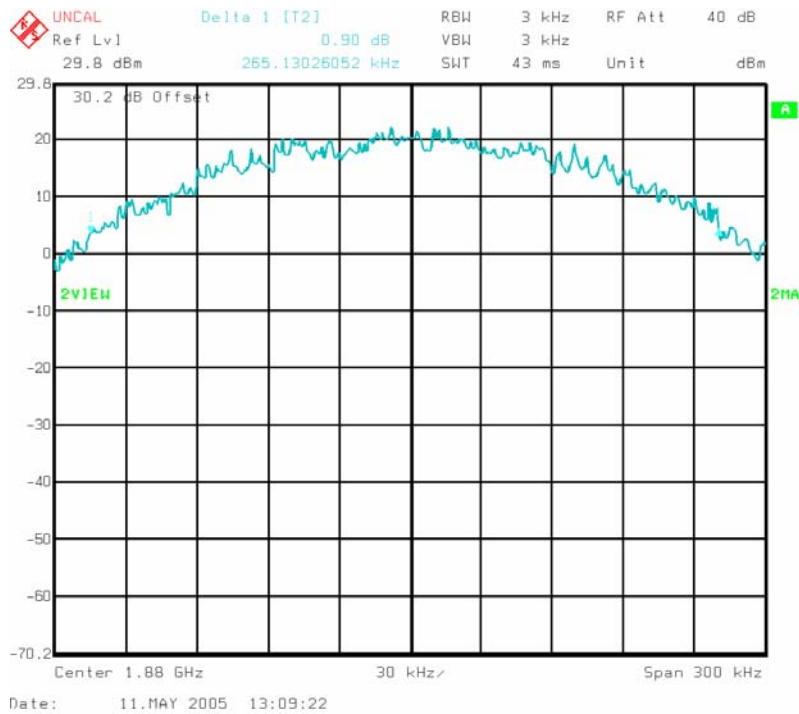
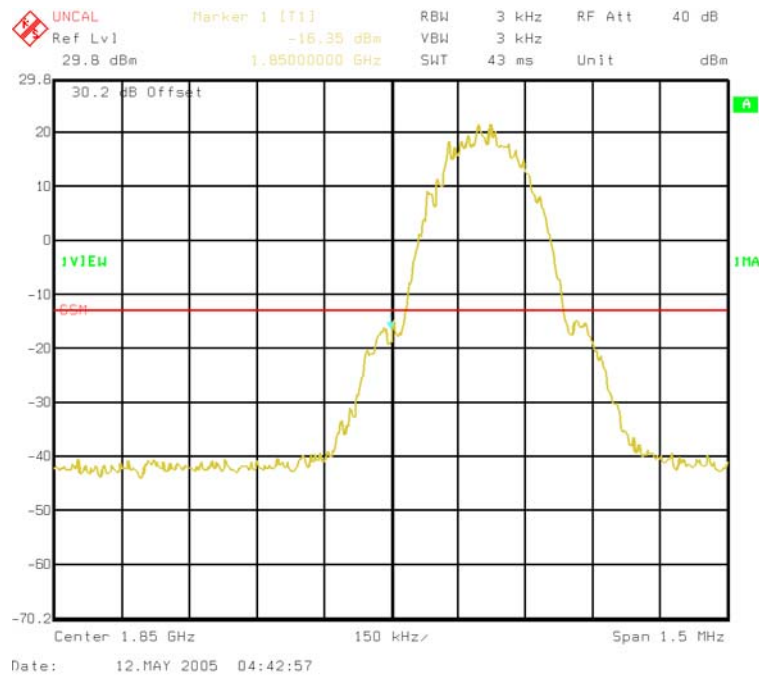


Figure 6-1. Reference power level

**Figure 6-2. Occupied bandwidth****Figure 6-3. GSM/PCS 1900 Ch 512 Lower Band Edge**

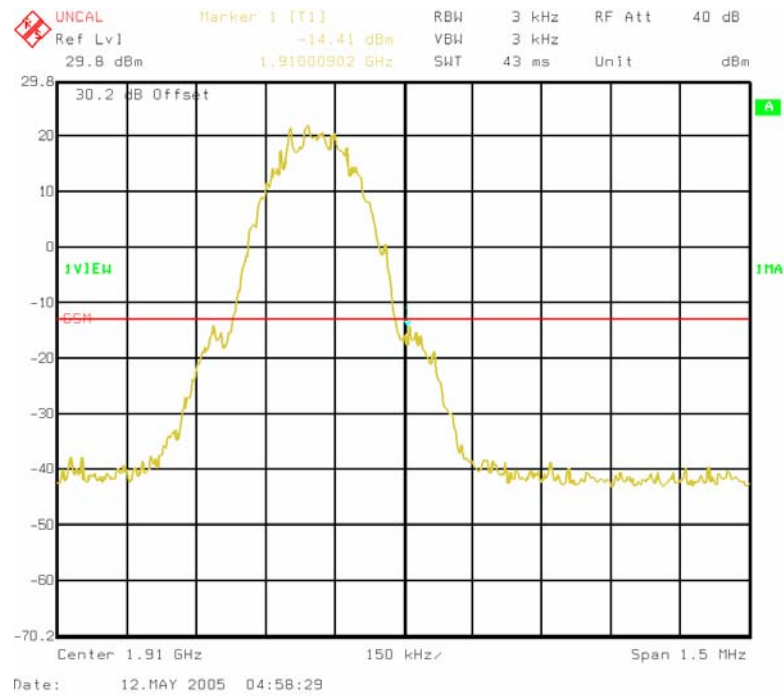


Figure 6-4. GSM/PCS 1900 Ch 810 Upper Band Edge

6.2 Transmitter Radiated Emissions – Pursuant 47 CFR Part 2.1053, 22.917, 24.238

HI/1850.2MHz		ERP dBm 28.35	
Emission Frequency MHz	FCC Maximum Limit (dBm)	Horizontal Measured Emission (dBm)	Vertical Measured Emission (dBm)
3700.40	-13	-25.37	-29.57
5550.60	-13	-29.01	-26.51
7400.80	-13	-33.17	-29.27
9251.00	-13	*	-26.46
11101.20	-13	*	-28.94
12951.40	-13	*	*
14801.60	-13	*	*
16651.80	-13	*	*
18502.00	-13	*	*

Table 6-2. Transmitter radiated emissions at the lower bandage at maximum power setting.

LO/1850.2MHz			
Emission Frequency MHz	FCC Maximum Limit (dBm)	Horizontal Measured Emission (dBm)	Vertical Measured Emission (dBm)
3700.40	-13	*	_*
5550.60	-13	*	*
7400.80	-13	*	*
9251.00	-13	*	*
11101.20	-13	*	*
12951.40	-13	*	*
14801.60	-13	*	*
16651.80	-13	*	*
18502.00	-13	*	*

Table 6-3. Transmitter radiated emissions at the lower bandage at minimum power setting.

HI/1909.8MHz		ERP dBm 28.38	
Emission Frequency MHz	FCC Maximum Limit (dBm)	Horizontal Measured Emission (dBm)	Vertical Measured Emission (dBm)
3819.60	-13	-23.29	-24.39
5729.40	-13	-28.99	-28.39
7639.20	-13	-27.32	-22.72
9549.00	-13	-29.23	-23.13
11458.80	-13	*	*
13368.60	-13	*	*
15278.40	-13	*	*
17188.20	-13	*	*
19098.00	-13	*	*

Table 6-4. Transmitter radiated emissions at the upper bandedge at maximum power setting.

LO/1909.8MHz			
Emission Frequency MHz	FCC Maximum Limit (dBm)	Horizontal Measured Emission (dBm)	Vertical Measured Emission (dBm)
3819.60	-13	*	*
5729.40	-13	*	*
7639.20	-13	*	*
9549.00	-13	*	*
11458.80	-13	*	*
13368.60	-13	*	*
15278.40	-13	*	*
17188.20	-13	*	*
19098.00	-13	*	*

Table 6-5. Transmitter radiated emissions at the upper bandedge at minimum power setting.

Note: An asterisk (*) in the data indicates the spurious emission was less than -33 dBm or could not be detected due to noise limitations or ambients.

6.3 Transmitter Frequency Stability

Test conditions:

Mode: PCS 1900

Channel: 661

Operation frequency: 1889.0 MHz

Deviation limit: 0.1 ppm

Frequency measurements are made at the extremes of the temperature range -30° C to +60° C and at intervals of 10° C with the primary supply voltage set to the nominal battery operating voltage. A period of time sufficient to stabilize all components of the equipment is allowed at each frequency measurement. The maximum variation of frequency is measured.

Temperature	Frequency Error	Frequency Error	Voltage	Voltage
°C	Hz	ppm	%	VDC
-30	-33	-0.018	100%	3.8
-20	35	0.019	100%	3.8
-10	-25	-0.013	100%	3.8
0	-20	-0.011	100%	3.8
10	-34	-0.018	100%	3.8
20	-24	-0.013	100%	3.8
30	-39	-0.021	100%	3.8
40	-27	-0.014	100%	3.8
50	-28	-0.015	100%	3.8
60	-30	-0.016	100%	3.8
20	-29	-0.015	battery endpoint	3.55

Table 6-6. Frequency stability data.

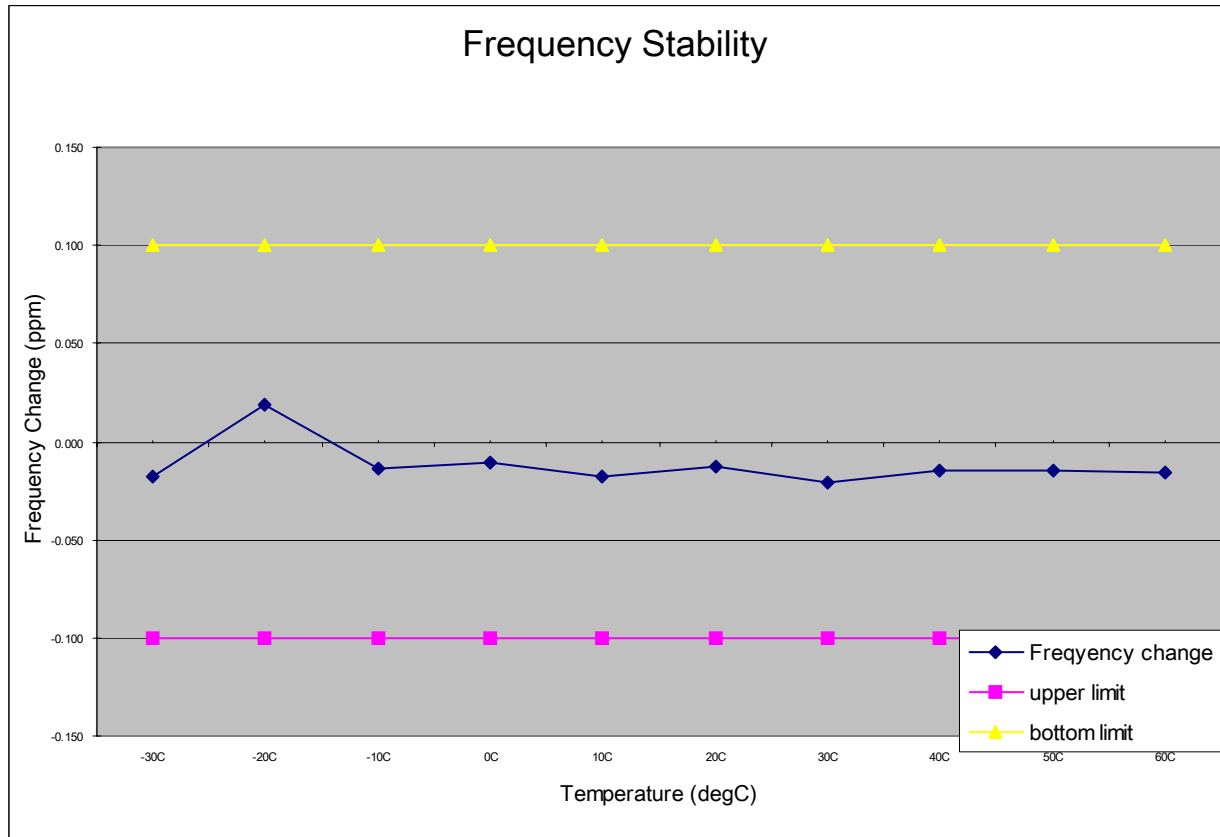


Figure 6-5. Frequency stability chart.

6.4 Effective Radiated Power (IERP)

Measurement Procedure

The phone was tested in a 16' cubical anechoic chamber with a 2-axis position system that permits taking complete spherical scans of the EUT's radiation patterns. For all tests, the phone was supported in a free space type environment, vertically oriented in the chamber. Tests were done for GSM 1900 three frequencies (1850.2, 1880.00, and 1909.80 MHz).

GSM measurements were made with the phone placed in a call using the HP8922M mobile station test set. The phone was weakly coupled to the test set and configured to transmit in full data rate mode. Radiated power was measured at each 15 degree step. The radiated power was measured using a Gigatronics 8542C power meter in "Burst Avg" mode. From these measurements, the software calculates the angle at which maximum radiated power occurs for each case, and the radiated power at this angle was extracted from the data. The max radiated power results for the IHDT6EA1 follows, as EIRP in dBm. To get ERP (effective radiated power referenced to a half-wave dipole), subtract 2.1 dB from these values.

Measurement Results

GSM 1900		
	Emission Frequency MHz	EIRP (dBm)
	1850.20	30.50
	1909.80	30.53

Table 6-7. Power measurement results

Note: Data provided by Timco Engineering (829ut5_TX_TEST_DATA.doc)

Max EIRP in GSM 1900 mode is 30.53 dBm

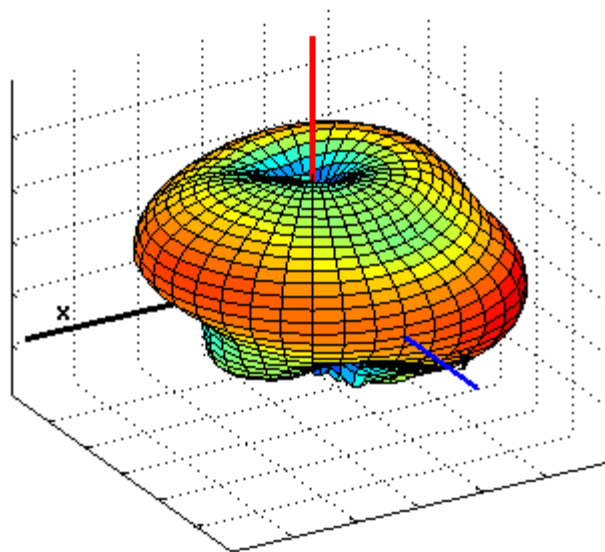


Figure 6-6. GSM PCS antenna radiation pattern.

Note: Data provided by iDEN Antenna Lab, Plantation, Florida

6.5 Power Line Conducted Spurious Voltage -- Pursuant 47 CFR 15.107

Conducted voltage limits:

-Per 47 CFR 15.207

This radio product can transmit in 800-900 MHz band and in 1900 MHz GSM/PCS band while resting in a battery charger that is connected to the AC power line. Each figure contains two measurement traces in addition to the two applicable limit lines (black traces), the higher being applicable to measurements utilizing a quasi-peak detector and the lower being applicable to measurements utilizing an average detector. The upper data trace (light blue) portrays the amplitude of the voltage measured during sweeping with a peak detector while the lower trace (light green) represents the amplitude of the voltage measured using an average detector. These detectors facilitated the measurement process. Measurements with a quasi-peak detector lie between these bounds.

NOTES:
829but5 ac line conducted line 1

FCC 15.107 Mask Class B

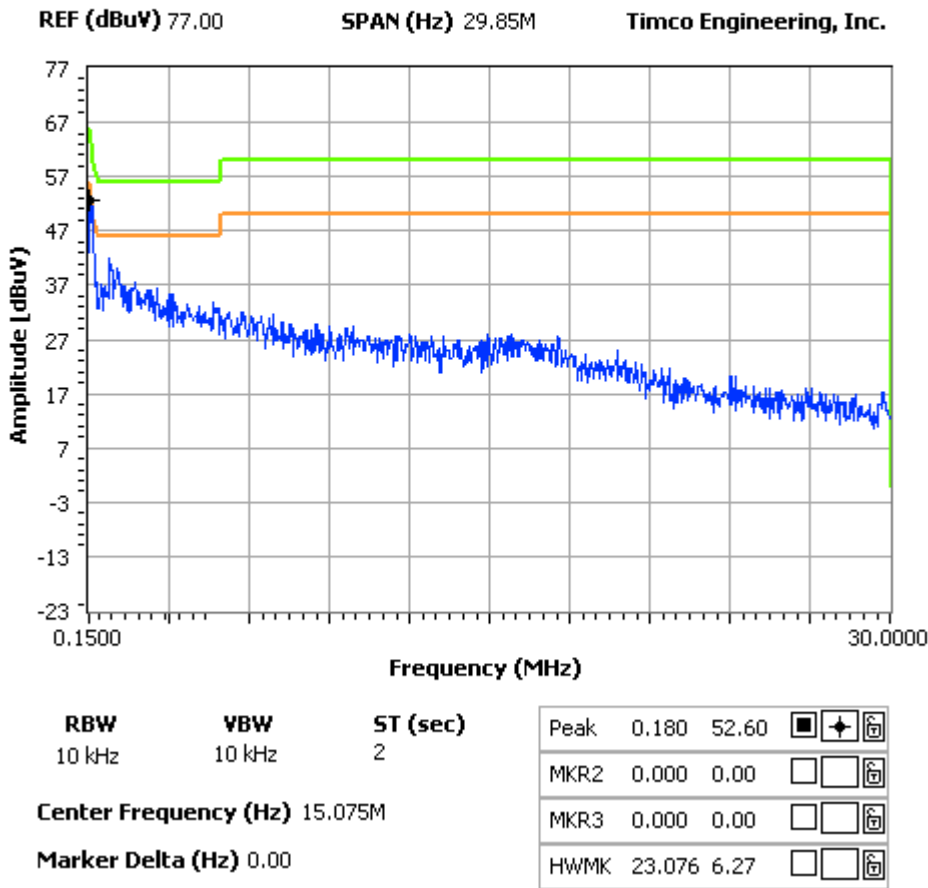


Figure 6-7. Mains Voltage with Peak and AverageDetector.

NOTES:
829but5 ac line conducted line 2

FCC 15.107 Mask Class B

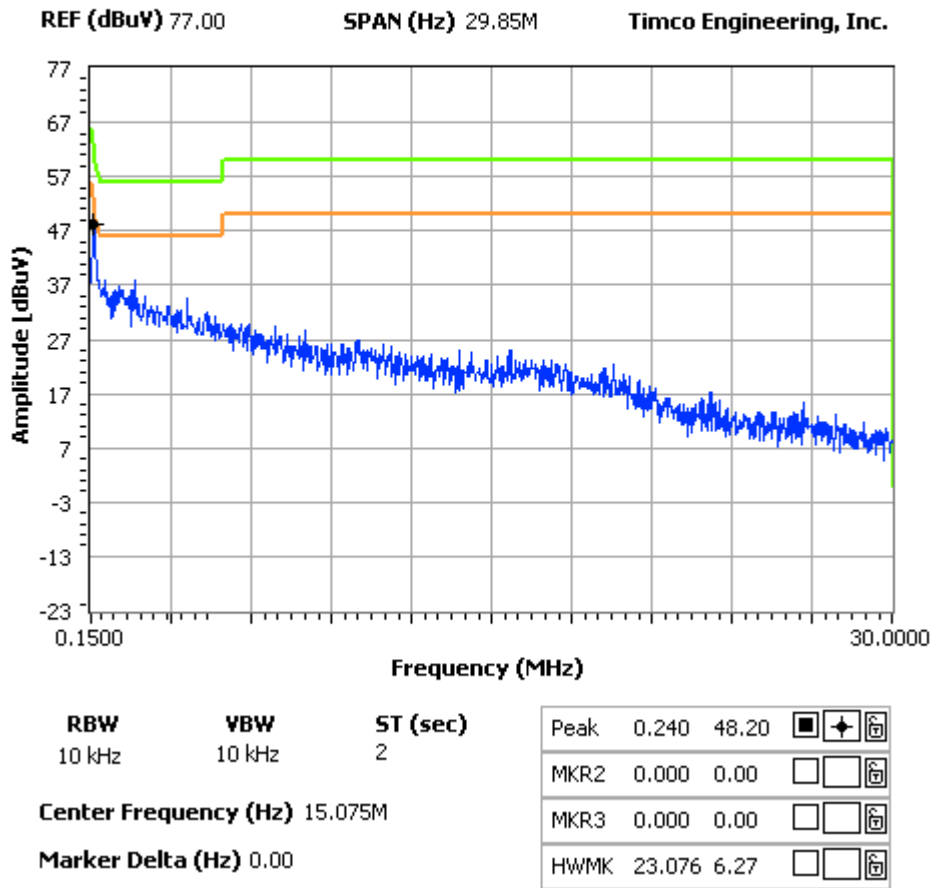


Figure 6-8. Mains Voltage with Peak and AverageDetector.