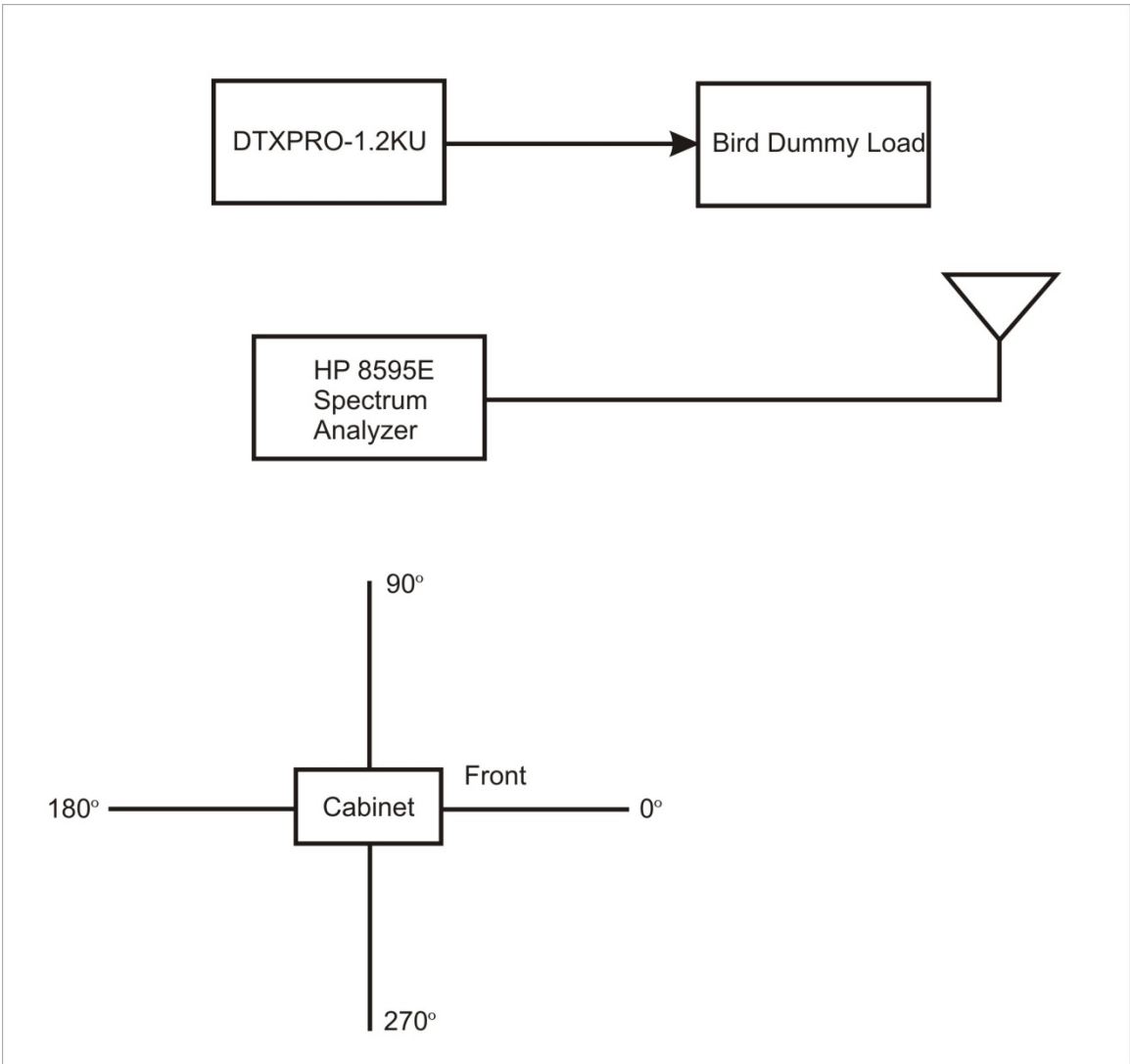


CABINET RADIATION

The transmitter and test equipment were configured as shown below including the angles of measurement with respect to the transmitter cabinet. The photo on the subsequent page also shows the physical set-up of the test equipment and equipment under test. The transmitter was operating at 1.2kW average power. The free space path loss, cable loss and antenna gain characteristics were obtained at the fundamental frequency and at each of the harmonics of the visual carrier frequency in order to accurately assess the level of the signal radiated from the cabinet. Radiation from the cabinet was measured at a distance of 30 feet in 4 different physical rotation angles: 0, 90, 180 and 270 degrees (0 degrees being the front of the cabinet). All spectral components above -80 dB referenced to peak sync power radiated from the cabinet were recorded. The values are tabulated in the table on the next page following the photo.



Physical Cabinet Radiation Test Configuration

This photograph shows the actual laboratory environment in which the cabinet radiation tests were conducted. The log periodic antenna, cable and spectrum analyzer are shown in the foreground and the DTXPRO-1.2KU is shown in the background. The transmitter was rotated 90 degrees for each of the measurement orientations.



As calculated from the spreadsheet data on the following page, the worst case measurement was -70.2 dBm at the second harmonic. (The photo above shows this particular measurement). The measurement tables for the remaining views of the transmitter are shown on the following pages.

Cabinet Radiation Test Results**Test Inputs**

Test Date August 29, 2010
 Test Engineer Jim collier
 Transmitter Model Number DTXPRO-1.2KU
 Operating Power Output Level 60.8 dBm 1200 watts (Power)
 Center Frequency 0.539 GHz Channel 25
 Antenna Model Number ETS 3147 Serial Number 9112-1053
 Spectrum Analyzer Model 8596E
 Distance to Transmitter 10 meters

Conditions and Parameters

(Power levels were measured in 500kHz segments between lower frequency edge and upper frequency edge. Center frequency of highest level in band segment is recorded below)

FRONT VIEW

Harmonic	Center Frequency GHz	Signal Level dBm	Cable Loss dB	Antenna Gain dB	Path Loss Db	Adj Level	Maximum Level	Status P=Pass	Lower Frequency Edge	Upper Frequency Edge
2	1.078	-70.2	0.6	6.5	53.15	-22.9128	0.8	P	1.072	1.084
3	1.617	-76.3	0.9	6.5	56.67	-25.2161	0.8	P	1.608	1.626
4	2.156	-79.6	1.2	4.3	59.17	-23.5425	0.8	P	2.144	2.168
5	2.695	-79.5	1.5	3.0	61.11	-19.9294	0.8	P	2.68	2.71
6	3.234	-80.7	1.7	4.4	62.69	-20.6709	0.8	P	3.216	3.252
7	3.773	-81	2.0	2.7	64.03	-17.657	0.8	P	3.752	3.794
8	4.312	-81.3	2.3	-0.2	65.19	-13.6223	0.8	P	4.288	4.336
9	4.851	-81.6	2.6	0.5	66.22	-3.3244	0.8	P	4.824	4.878
10	5.39	-81	2.8	1.9	67.13	-2.9343	0.8	P	5.36	5.42

LEFT VIEW

Harmonic	Center Frequency GHz	Signal Level dBm	Cable Loss dB	Antenna Gain dB	Path Loss dB	Adj. Level dBm	Maximum Level dBm	Status	Lower Frequency Edge	Upper Frequency Edge
2	1.078	-74.8	0.6	6.5	53.15	-27.5128	0.8	P	1.072	1.084
3	1.617	-79.9	0.9	6.5	56.67	-28.8161	0.8	P	1.608	1.626
4	2.156	-79.5	1.2	4.3	59.17	-23.4425	0.8	P	2.144	2.168
5	2.695	-79.6	1.5	3.0	61.11	-20.0294	0.8	P	2.68	2.71
6	3.234	-80.5	1.7	4.4	62.69	-20.4709	0.8	P	3.216	3.252
7	3.773	-81.1	2.0	2.7	64.03	-17.757	0.8	P	3.752	3.794
8	4.312	-81.7	2.3	-0.2	65.19	-14.0223	0.8	P	4.288	4.336
9	4.851	-82.2	2.6	0.5	66.22	-13.9244	0.8	P	4.824	4.878
10	5.39	-80.7	2.8	1.9	67.13	-12.6343	0.8	P	5.36	5.42

Cabinet Radiation Test Results**RIGHT VIEW**

Harmonic	Center Frequency GHz	Signal Level dBm	Cable Loss dB	Antenna Gain dB	Path Loss dB	Adj. Level dBm	Maximum Level dBm	Status	Lower Frequency Edge	Upper Frequency Edge
2	1.078	-75	0.6	6.5	53.15	-27.7128	0.8	P	1.072	1.084
3	1.617	-79.9	0.9	6.5	56.67	-28.8161	0.8	P	1.608	1.626
4	2.156	-79.6	1.2	4.3	59.17	-23.5425	0.8	P	2.144	2.168
5	2.695	-80.3	1.5	3.0	61.11	-20.7294	0.8	P	2.68	2.71
6	3.234	-80.9	1.7	4.4	62.69	-20.8709	0.8	P	3.216	3.252
7	3.773	-81.5	2.0	2.7	64.03	-18.157	0.8	P	3.752	3.794
8	4.312	-81.8	2.3	-0.2	65.19	-14.1223	0.8	P	4.288	4.336
9	4.851	-80.8	2.6	0.5	66.22	-12.5244	0.8	P	4.824	4.878
10	5.39	-80.5	2.8	1.9	67.13	-12.4343	0.8	P	5.36	5.42

REAR VIEW

Harmonic	Center Frequency GHz	Signal Level dBm	Cable Loss dB	Antenna Gain dB	Path Loss dB	Adj. Level dBm	Maximum Level dBm	Status	Lower Frequency Edge	Upper Frequency Edge
2	1.078	-72.5	0.6	6.5	53.15	-25.2128	0.8	P	1.072	1.084
3	1.617	-72.9	0.9	6.5	56.67	-21.8161	0.8	P	1.608	1.626
4	2.156	-79.5	1.2	4.3	59.17	-23.4425	0.8	P	2.144	2.168
5	2.695	-79.9	1.5	3.0	61.11	-20.3294	0.8	P	2.68	2.71
6	3.234	-80.9	1.7	4.4	62.69	-20.8709	0.8	P	3.216	3.252
7	3.773	-80.6	2.0	2.7	64.03	-17.257	0.8	P	3.752	3.794
8	4.312	-81.6	2.3	-0.2	65.19	-13.9223	0.8	P	4.288	4.336
9	4.851	-81.9	2.6	0.5	66.22	-13.6244	0.8	P	4.824	4.878
10	5.39	-80.5	2.8	1.9	67.13	-12.4343	0.8	P	5.36	5.42