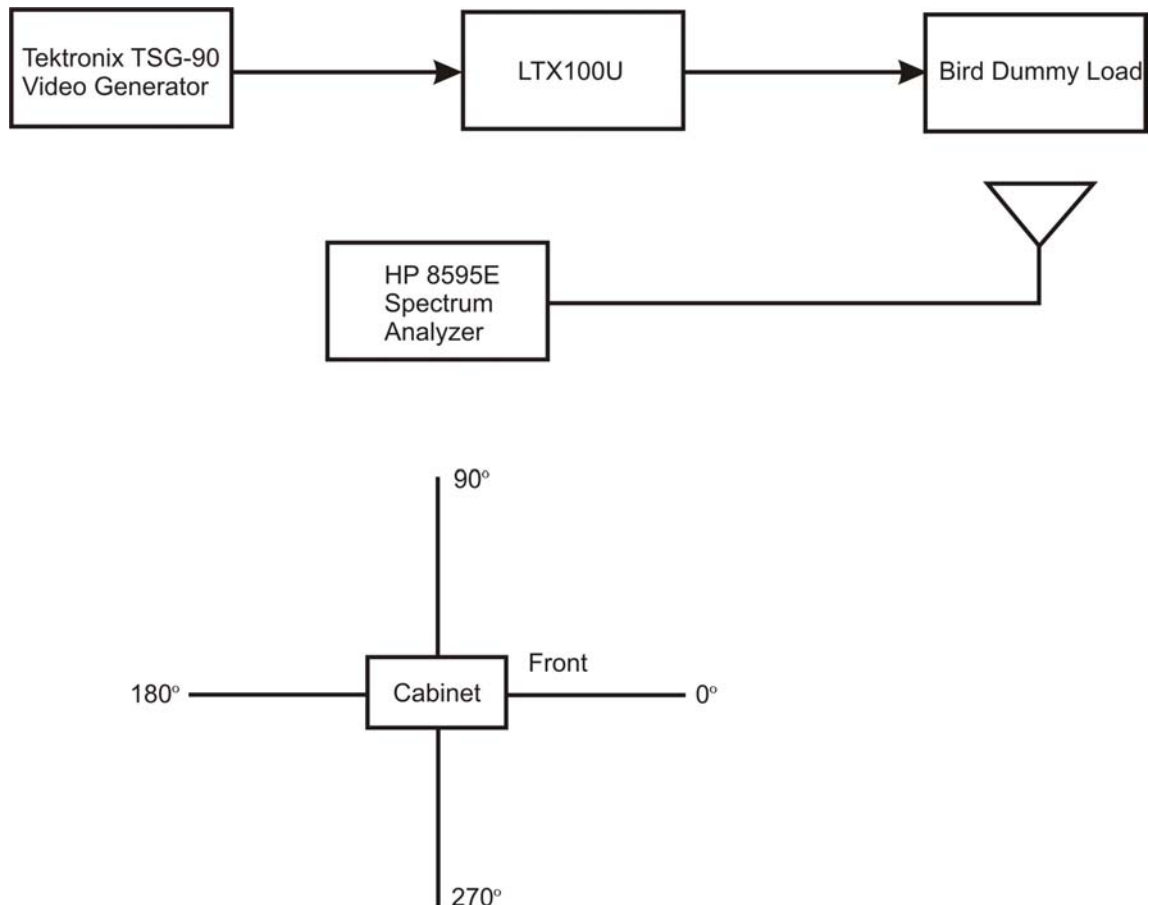


CABINET RADIATION

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 100W peak sync power with a 13dB visual/aural ratio with the video input signal being a sync signal and 50 IRE “set-up” level. 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 LTX100U 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 -64 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.

Pineapple Technology Inc.

CABINET RADIATION TEST

TEST INPUTS

CONDITIONS & PARAMETERS

TEST DATE: 3/12/2007
TEST ENGINEER: Jim Collier
TRANSMITTER MODEL NO: LTX100U
OPERATING POWER OUTPUT LEVEL 50.0 dBm 100 Power in Watts
OPERATING FREQUENCY IN GHz 0.66925 GHz 47 Channel
ANTENNA MODEL NUMBER ETS 3147 S/N 9112-1053
SPECTRUM ANALYZER MODEL 8595E
DISTANCE TO TRANSMITTER IN METERS 10 METERS

FRONT VIEW

Harmonic	Frequency GHz	SIGNAL LEVEL dBm	CABLE LOSS dB dB	ANTENNA GAIN dB dB	PATH LOSS dB dB	ADJ LEVEL dBm	MAXIMUM LEVEL dBm	STATUS P=PASS
Fc	0.66925	-53	0.4	6.6	49.01	-10.1619	-10.0	N/A
Fc*2	1.3385	-64	0.8	7.0	55.03	-15.2	-10.0	P
Fc*3	2.00775	-79	1.1	4.3	58.55	-23.6369	-10.0	P
Fc*4	2.677	-88	1.5	3.0	61.05	-28.4968	-10.0	P
Fc*5	3.34625	-88	1.8	4.4	62.99	-27.6172	-10.0	P
Fc*6	4.0155	-88	2.1	1.1	64.57	-22.3923	-10.0	P
Fc*7	4.68475	-88	2.5	-1.3	65.91	-18.312	-10.0	P
Fc*8	5.354	-88	2.8	1.9	67.07	-20.0109	-10.0	P
Fc*9	6.02325	-88	3.2	2.1	68.10	-18.8465	-10.0	P
Fc*10	6.6925	-88	3.5	2.1	69.01	-17.5901	-10.0	P

RIGHT VIEW

Harmonic	Frequency GHz	SIGNAL LEVEL dBm	CABLE LOSS dB dB	ANTENNA GAIN dB dB	PATH LOSS dB dB	ADJ LEVEL dBm	MAXIMUM LEVEL dBm	STATUS
Fc	0.66925	N/A	0.4	6.6	49.01	N/A	-10.0	N/A
Fc*2	1.3385	-63	0.8	7.0	55.03	-14.2	-10.0	P
Fc*3	2.00775	-78	1.1	4.3	58.55	-22.6369	-10.0	P
Fc*4	2.677	-88	1.5	3.0	61.05	-28.4968	-10.0	P
Fc*5	3.34625	-88	1.8	4.4	62.99	-27.6172	-10.0	P
Fc*6	4.0155	-88	2.1	1.1	64.57	-22.3923	-10.0	P
Fc*7	4.68475	-88	2.5	-1.3	65.91	-18.312	-10.0	P
Fc*8	5.354	-88	2.8	1.9	67.07	-20.0109	-10.0	P
Fc*9	6.02325	-88	3.2	2.1	68.10	-18.8465	-10.0	P
Fc*10	6.6925	-88	3.5	2.1	69.01	-17.5901	-10.0	P

REAR VIEW

Harmonic	Frequency GHz	SIGNAL LEVEL dBm	CABLE LOSS dB dB	ANTENNA GAIN dB dB	PATH LOSS dB dB	ADJ LEVEL dBm	MAXIMUM LEVEL dBm	STATUS
Fc	0.66925	N/A	0.4	6.6	49.01	N/A	-10.0	N/A
Fc*2	1.3385	-71	0.8	7.0	55.03	-22.2	-10.0	P
Fc*3	2.00775	-79	1.1	4.3	58.55	-23.6369	-10.0	P
Fc*4	2.677	-88	1.5	3.0	61.05	-28.4968	-10.0	P
Fc*5	3.34625	-88	1.8	4.4	62.99	-27.6172	-10.0	P
Fc*6	4.0155	-88	2.1	1.1	64.57	-22.3923	-10.0	P
Fc*7	4.68475	-88	2.5	-1.3	65.91	-18.312	-10.0	P
Fc*8	5.354	-88	2.8	1.9	67.07	-20.0109	-10.0	P
Fc*9	6.02325	-88	3.2	2.1	68.10	-18.8465	-10.0	P
Fc*10	6.6925	-88	3.5	2.1	69.01	-17.5901	-10.0	P

LEFT VIEW

Harmonic	Frequency GHz	SIGNAL LEVEL dBm	CABLE LOSS dB dB	ANTENNA GAIN dB dB	PATH LOSS dB dB	ADJ LEVEL dBm	MAXIMUM LEVEL dBm	STATUS
Fc	0.66925	N/A	0.4	6.6	49.01	N/A	-10.0	N/A
Fc*2	1.3385	-65	0.8	7.0	55.03	-16.2	-10.0	P
Fc*3	2.00775	-79	1.1	4.3	58.55	-23.6369	-10.0	P
Fc*4	2.677	-88	1.5	3.0	61.05	-28.4968	-10.0	P
Fc*5	3.34625	-88	1.8	4.4	62.99	-27.6172	-10.0	P
Fc*6	4.0155	-88	2.1	1.1	64.57	-22.3923	-10.0	P
Fc*7	4.68475	-88	2.5	-1.3	65.91	-18.312	-10.0	P
Fc*8	5.354	-88	2.8	1.9	67.07	-20.0109	-10.0	P
Fc*9	6.02325	-88	3.2	2.1	68.10	-18.8465	-10.0	P
Fc*10	6.6925	-88	3.5	2.1	69.01	-17.5901	-10.0	P