

Appendix A – Radiated and Conducted Emissions Measurement Data

A.1 Conducted Emissions Data

Conducted emissions limits do not apply to this Access BPL equipment.

A.2 Radiated Emissions Data

A.2.1 1.705 MHz to 30 MHz

Radiated emissions limits in this frequency range do not apply to this Access BPL equipment.

A.2.2 29.7 MHz to 50 MHz

Date: July 31, 2006

EUT: CT OTP™ URD 5000 (S/N: 101157960000042D)

Location: CURRENT Technologies Quince Orchard Riser

Mode: Downstream MV (transmitting high-density QAM signals on MV wire, 29.7 MHz to 50.0 MHz)

Frequency (MHz)	Antenna Location and Polarity	Antenna Height (m)	QP Level Measured on Analyzer (dBμV/m)	Measurement Distance (m)	Distance Correction Factor to 10m (dB)	QP Level Corrected to 10m (dBμV/m)	10m Limit (dBμV/m)	Margin (dB)
33.12	R1.9m vertical	1.0	35.1	12.64	2.03	37.13	39.08	-1.9
33.05	C0.0m vertical	1.0	35.0	12.50	1.94	36.94	39.08	-2.1
33.16	L7.6m vertical	1.0	33.5	14.63	3.30	36.80	39.08	-2.3
45.17	L3.8m vertical	1.0	33.7	13.06	2.32	36.02	39.08	-3.1
45.19	L7.6m vertical	1.0	32.6	14.63	3.30	35.90	39.08	-3.2
39.34	R3.8m vertical	1.0	32.5	13.06	2.32	34.82	39.08	-4.3
38.79	R1.9m vertical	1.0	32.1	12.64	2.03	34.13	39.08	-4.9

Date: August 2, 2006
 EUT: CT OTP URD 5000 (S/N: 101164C600000956)
 Location: CURRENT Technologies Urbana Farm Riser 1
 Mode: Downstream MV (transmitting high-density QAM signals on MV wire, 29.7 MHz to 50.0 MHz)

Frequency (MHz)	Antenna Location and Polarity	Antenna Height (m)	QP Level Measured on Analyzer (dBμV/m)	Measurement Distance (m)	Distance Correction Factor to 10m (dB)	QP Level Corrected to 10m (dBμV/m)	10m Limit (dBμV/m)	Margin (dB)
45.87	Right 5.7m vertical	1.0	37.2	11.51	1.22	38.42	39.08	-0.7
32.53	Right 3.8m vertical	1.0	37.7	10.70	0.59	38.29	39.08	-0.8
38.48	Right 3.8m vertical	1.0	37.7	10.70	0.59	38.29	39.08	-0.8
32.52	Left 5.7m vertical	1.0	36.6	11.51	1.22	37.82	39.08	-1.3
47.63	Left 5.7m vertical	1.0	36.4	11.51	1.22	37.62	39.08	-1.5
47.63	Left 3.8m vertical	1.0	37.0	10.70	0.59	37.59	39.08	-1.5
40.33	Right 3.8m vertical	1.0	36.9	10.70	0.59	37.49	39.08	-1.6
47.62	Left 7.6m vertical	1.0	35.9	11.98	1.57	37.47	39.08	-1.6
32.53	Right 5.7m vertical	1.0	36.2	11.51	1.22	37.42	39.08	-1.7
45.73	Center 0m vertical	1.0	37.4	10.00	0.00	37.40	39.08	-1.7
45.84	Left 1.9m vertical	1.0	37.2	10.18	0.15	37.35	39.08	-1.7
45.86	Right 3.8m vertical	1.0	36.6	10.70	0.59	37.19	39.08	-1.9
32.50	Right 1.9m vertical	1.0	36.6	10.18	0.15	36.75	39.08	-2.3
32.52	Left 7.6m vertical	1.0	34.7	11.98	1.57	36.27	39.08	-2.8
32.53	Left 3.8m vertical	1.0	35.5	10.70	0.59	36.09	39.08	-3.0

Date: August 3, 2006
 EUT: CT OTP URD 5000 (S/N: 101164C600000956)
 Location: CURRENT Technologies Urbana Farm Riser 2
 Mode: Downstream MV (transmitting high-density QAM signals on MV wire, 29.7 MHz to 50.0 MHz)

Frequency (MHz)	Antenna Location and Polarity	Antenna Height (m)	QP Level Measured on Analyzer (dBμV/m)	Measurement Distance (m)	Distance Correction Factor to 10m (dB)	QP Level Corrected to 10m (dBμV/m)	10m Limit (dBμV/m)	Margin (dB)
41.04	Left 1.9m vertical	1.0	38.6	10.18	0.15	38.75	39.08	-0.3
40.91	Center 0m vertical	1.0	38.7	10.00	0.00	38.70	39.08	-0.4
33.64	Left 5.7m vertical	1.0	36.7	11.51	1.22	37.92	39.08	-1.2
40.94	Right 5.7m vertical	1.0	36.6	11.51	1.22	37.82	39.08	-1.3
41.03	Left 7.6m vertical	1.0	35.6	12.56	1.98	37.58	39.08	-1.5
40.88	Right 7.6m vertical	1.0	35.4	12.56	1.98	37.38	39.08	-1.7
46.03	Left 3.8m vertical	1.0	36.7	10.70	0.59	37.29	39.08	-1.8
33.62	Right 3.8m vertical	1.0	36.5	10.70	0.59	37.09	39.08	-2.0
37.47	Right 3.8m vertical	1.0	36.4	10.70	0.59	36.99	39.08	-2.1
33.57	Left 7.6m vertical	1.0	34.8	12.56	1.98	36.78	39.08	-2.3
46.07	Center 0m vertical	1.0	36.7	10.00	0.00	36.70	39.08	-2.4
33.80	Right 5.7m vertical	1.0	35.2	11.51	1.22	36.42	39.08	-2.7
41.01	Left 3.8m vertical	1.0	35.8	10.70	0.59	36.39	39.08	-2.7
31.98	Left 5.7m vertical	1.0	35.0	11.51	1.22	36.22	39.08	-2.9

A.2.3 50 MHz to 1000 MHz

Date: October 27, 2005
 EUT: CT OTP URD 5000 (S/N: 101156E000000001)
 Location: Washington Laboratories Open Area Test Site
 Mode: Lab Normal (powered up)

Vertical Polarity:

Frequency (MHz)	Antenna Location	Antenna Height (m)	Peak Level Measured on Analyzer (dBμV/m)	Measurement Distance (m)	Distance Correction Factor to 10m (dB)	Peak Level Corrected to 10m (dBμV/m)	10m Limit (dBμV/m)	Margin (dB)
52.00		1.0	28.0	3.0	-10.5	17.5	39.1	-21.6
42.43			27.7	3.0	-10.5	17.2	39.1	-21.9
109.72	275	1.0	15.6	3.0	-10.5	5.1	43.5	-38.4
400.00	180	1.0	27.9	3.0	-10.5	17.4	46.4	-29.0

Horizontal Polarity:

Frequency (MHz)	Antenna Location	Antenna Height (m)	Peak Level Measured on Analyzer (dBμV/m)	Measurement Distance (m)	Distance Correction Factor to 10m (dB)	Peak Level Corrected to 10m (dBμV/m)	10m Limit (dBμV/m)	Margin (dB)
144.49	226	3.5	22.0	3.0	-10.5	11.5	43.5	-32.0
145.09	226	3.5	20.6	3.0	-10.5	10.1	43.5	-33.4
146.72	226	3.5	20.1	3.0	-10.5	9.6	43.5	-33.9
148.06	226	3.5	22.0	3.0	-10.5	11.5	43.5	-32.0
148.23	226	3.5	21.7	3.0	-10.5	11.2	43.5	-32.3
148.42	226	3.5	21.6	3.0	-10.5	11.1	43.5	-32.4
148.59	226	3.5	21.4	3.0	-10.5	10.9	43.5	-32.6
148.80	226	3.5	21.3	3.0	-10.5	10.8	43.5	-32.7
400.00	336	3.5	28.0	3.0	-10.5	17.5	46.4	-28.9

Date: January 5, 2006
 EUT: CT OTP URD 5000 (S/N: 101157960000042D)
 Location: CURRENT Technologies Quince Orchard Riser
 Mode: Downstream MV (transmitting high-density QAM signals on MV wire, 29.7 MHz to 50.0 MHz)

Vertical Polarity:

Frequency (MHz)	Antenna Location	Antenna Height (m)	Peak Level Measured on Analyzer (dBμV/m)	Measurement Distance (m)	Distance Correction Factor to 10m (dB)	Peak Level Corrected to 10m (dBμV/m)	10m Limit (dBμV/m)	Margin (dB)
52.00	R135	1.0	28.7	9.1	-0.8	27.9	39.1	-11.2
42.43	R90	1.0	23.7	9.1	-0.8	22.9	39.1	-16.2
109.72	R90	1.0	22.6	9.1	-0.8	21.8	43.5	-21.7
400.00	R135	1.75	30.9	10.0	0.0	30.9	46.4	-15.5

Horizontal Polarity:

Frequency (MHz)	Antenna Location	Antenna Height (m)	Peak Level Measured on Analyzer (dBμV/m)	Measurement Distance (m)	Distance Correction Factor to 10m (dB)	Peak Level Corrected to 10m (dBμV/m)	10m Limit (dBμV/m)	Margin (dB)
144.49	L90	1.0	27.5	9.1	-0.8	26.7	43.5	-16.8
145.09								
146.72								
148.06								
148.23								
148.42								
148.59								
148.80								
400.00	R135	1.75	31.8	10.0	0.0	31.8	46.4	-14.6

Date: August 2, 2006
 EUT: CT OTP URD 5000 (S/N: 101164C600000956)
 Location: CURRENT Technologies Urbana Farm Riser 1
 Mode: Downstream MV (transmitting high-density QAM signals on MV wire, 29.7 MHz to 50.0 MHz)

Vertical Polarity:

Frequency (MHz)	Antenna Location	Antenna Height (m)	Peak Level Measured on Analyzer (dBμV/m)	Measurement Distance (m)	Distance Correction Factor to 10m (dB)	Peak Level Corrected to 10m (dBμV/m)	10m Limit (dBμV/m)	Margin (dB)
52.00	<i>Below ambient level</i>							
42.43	<i>Below ambient level</i>							
109.72	R90	1.0	33.1	8.2	-1.7	31.4	43.5	-12.1
400.00	R135	1.0	31.6	8.2	-1.7	29.9	46.4	-16.5

Horizontal Polarity:

Frequency (MHz)	Antenna Location	Antenna Height (m)	Peak Level Measured on Analyzer (dBμV/m)	Measurement Distance (m)	Distance Correction Factor to 10m (dB)	Peak Level Corrected to 10m (dBμV/m)	10m Limit (dBμV/m)	Margin (dB)
144.49	R90	1.0	23.5	8.2	-1.7	21.8	43.5	-21.7
145.09								
146.72								
148.06								
148.23								
148.42								
148.59								
148.80								
400.00	R135	1.0	30.9	8.2	-1.7	29.2	46.4	-17.2