

Shell Communications, Inc.
FCC Form 312, Main Form
EXHIBIT E (restated)

Off-Axis EIRP Spectral Density Tabulation (restated)

Spectral Density Showing

PROJECT PARAMETERS:			
Antenna Manufacturer:	Andrew	Type 243	
Antenna Diameter:	2.40	m	
Transmit:	6.25	GHz	Horizontal
Antenna Gain (Main Beam):	42.00	dBi	
Max EIRP Density at Flange:	-19.61	dBW/4KHz	
FCC EIRP Density Limit:	-2.70	dBW/4KHz	

§25.209(a) CONFORMING ANTENNA			ACTUAL ANTENNA		
Angle (Degrees)	§25.209 Gain (dBi)	EIRP Density (dBW/4KHz)	Actual Gain (dBi)	EIRP Density (dBW/4KHz)	EIRP Margin (dBW/4KHz)
1.50	24.60	21.90	24.00	4.39	-17.51
1.75	22.92	20.22	17.62	-1.99	-22.22
2.00	21.47	18.77	18.50	-1.11	-19.89
2.25	20.20	17.50	17.62	-1.99	-19.49
2.50	19.05	16.35	13.00	-6.61	-22.97
2.75	18.02	15.32	3.00	-16.61	-31.93
3.00	17.07	14.37	7.00	-12.61	-26.99
3.25	16.20	13.50	9.00	-10.61	-24.12
3.50	15.40	12.70	6.00	-13.61	-26.31
3.75	14.65	11.95	-5.00	-24.61	-36.56
4.00	13.95	11.25	2.00	-17.61	-28.86
4.25	13.29	10.59	5.25	-14.36	-24.95
4.50	12.67	9.97	4.80	-14.81	-24.78
4.75	12.08	9.38	1.00	-18.61	-28.00
5.00	11.53	8.83	3.50	-16.11	-24.94
5.25	11.00	8.30	7.00	-12.61	-20.91
5.50	10.49	7.79	7.00	-12.61	-20.41
5.75	10.01	7.31	4.50	-15.11	-22.42
6.00	9.55	6.85	-5.50	-25.11	-31.96
16.00	1.90	-0.80	-11.50	-31.11	-30.31
26.00	-3.37	-6.07	-28.00	-47.61	-41.54
36.00	-6.91	-9.61	-24.00	-43.61	-34.01
46.00	-9.57	-12.27	-23.00	-42.61	-30.35
50.00	-10.00	-12.70	-28.00	-47.61	-34.91
70.00	-10.00	-12.70	-28.00	-47.61	-34.91
90.00	-10.00	-12.70	-21.00	-40.61	-27.91
110.00	-10.00	-12.70	-27.00	-46.61	-33.91
130.00	-10.00	-12.70	-17.00	-36.61	-23.91
150.00	-10.00	-12.70	-7.00	-26.61	-13.91
170.00	-10.00	-12.70	-11.00	-30.61	-17.91
180.00	-10.00	-12.70	-28.00	-47.61	-34.91

Spectral Density Showing (cont.)

PROJECT PARAMETERS:			
Antenna Manufacturer:	Andrew	Type 243	
Antenna Model:	2.40	m	
Transmit:	6.25	GHz	Vertical
Antenna Gain (Main Beam):	42.00	dBi	
Max EIRP Density at Flange:	-19.61	dBW/4KHz	
FCC EIRP Density Limit:	-2.70	dBW/4KHz	

§25.209(a) CONFORMING ANTENNA			ACTUAL ANTENNA		
Angle (Degrees)	§25.209 Gain (dBi)	EIRP Density (dBw/4KHz)	Actual Gain (dBi)	EIRP Density (dBw/4KHz)	EIRP Margin (dBw/4KHz)
1.50	24.60	21.90	21.00	1.39	-20.51
1.75	22.92	20.22	15.75	-3.86	-24.09
2.00	21.47	18.77	18.00	-1.61	-20.39
2.25	20.20	17.50	16.37	-3.24	-20.74
2.50	19.05	16.35	10.00	-9.61	-25.97
2.75	18.02	15.32	-3.00	-22.61	-37.93
3.00	17.07	14.37	10.50	-9.11	-23.49
3.25	16.20	13.50	11.00	-8.61	-22.12
3.50	15.40	12.70	8.00	-11.61	-24.31
3.75	14.65	11.95	-4.00	-23.61	-35.56
4.00	13.95	11.25	-6.00	-25.61	-36.86
4.25	13.29	10.59	-7.00	-26.61	-37.20
4.50	12.67	9.97	5.50	-14.11	-24.08
4.75	12.08	9.38	-4.00	-23.61	-33.00
5.00	11.53	8.83	-2.80	-22.41	-31.24
5.25	11.00	8.30	-3.00	-22.61	-30.91
5.50	10.49	7.79	4.80	-14.81	-22.61
5.75	10.01	7.31	-4.50	-24.11	-31.42
6.00	9.55	6.85	1.00	-18.61	-25.46
16.00	1.90	-0.80	-13.00	-32.61	-31.81
26.00	-3.37	-6.07	-23.00	-42.61	-36.54
36.00	-6.91	-9.61	-17.00	-36.61	-27.01
46.00	-9.57	-12.27	-22.00	-41.61	-29.35
50.00	-10.00	-12.70	-26.50	-46.11	-33.41
70.00	-10.00	-12.70	-24.50	-44.11	-31.41
90.00	-10.00	-12.70	-23.00	-42.61	-29.91
110.00	-10.00	-12.70	-19.50	-39.11	-26.41
130.00	-10.00	-12.70	-17.00	-36.61	-23.91
150.00	-10.00	-12.70	-4.25	-23.86	-11.16
170.00	-10.00	-12.70	-8.00	-27.61	-14.91
180.00	-10.00	-12.70	-30.00	-49.61	-36.91