

November 8, 2010

VIA ELECTRONIC FILING

Paul Blais  
Chief, Systems Analysis Branch  
Satellite Division, International Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street S.W.  
Washington, D.C. 20554

**Re: File Nos. SES-MOD-20100615-00702, SES-AMD-20100820-01064  
Call Sign WB81**

Dear Mr. Blais,

SES Americom, Inc. (doing business as “SES WORLD SKIES”) hereby clarifies and supplements its pending amended application (File Nos. SES-MOD-20100615-00702, SES-AMD-20100820-01064) as follows:

- The 3M00F3W emission designators should read 3M00F3D to reflect the fact that they will be used for TT&C functions. Any TT&C conducted pursuant to these emission designators using frequencies not at the edge of the conventional C-band will be limited to satellites for which a waiver of 47 C.F.R. § 25.202(g) has been received.
- The attached tables demonstrate that the 3M00F3D emission designators comply with the off-axis power density limits in 47 C.F.R. § 25.218, using the methodology specified in § 25.115(h).

Please contact me or Karis Hastings of Hogan Lovells (202-637-5767) if you have any questions.

Yours sincerely,

/s/

Daniel C.H. Mah  
Regulatory Counsel  
SES Americom, Inc.

cc: Frank Peace, FCC  
Trang Nguyen, FCC

**Table 1:**  
**0.1<=TH<=7**

WB 81 Vernon Valley TC1 Antenna off-axis EIRP Calculations  
Plane of Geostationary Orbit & Elevation Plane (25.115(h)(1) & (2))  
 $0.1^{\circ} \leq \Theta \leq 7^{\circ}$

				Limits Per 25.218(a)	Margin with respect to 25.218
$\Theta$ , degrees	Gain, dBi	EIRP, dBW	EIRP density dBW/4kHz	EIRP density dBW/4kHz	dB
0	56.80	83.80	55.05	n/a	n/a
0.1	54.00	81.00	52.25	n/a	n/a
0.2	46.47	73.47	44.72	n/a	n/a
0.3	42.07	69.07	40.32	n/a	n/a
0.4	38.95	65.95	37.20	n/a	n/a
0.5	36.53	63.53	34.78	n/a	n/a
0.6	34.55	61.55	32.80	n/a	n/a
0.7	32.87	59.87	31.12	n/a	n/a
0.8	31.42	58.42	29.67	n/a	n/a
0.9	30.14	57.14	28.39	n/a	n/a
1	29.00	56.00	27.25	n/a	n/a
1.1	27.97	54.97	26.21	n/a	n/a
1.2	27.02	54.02	25.27	n/a	n/a
1.3	26.15	53.15	24.40	n/a	n/a
1.4	25.35	52.35	23.60	n/a	n/a
1.5	24.60	51.60	22.85	25.10	2.25
1.6	23.90	50.90	22.15	24.40	2.25
1.7	23.24	50.24	21.49	23.74	2.25
1.8	22.62	49.62	20.87	23.12	2.25
1.9	22.03	49.03	20.28	22.53	2.25
2	21.47	48.47	19.72	21.97	2.25
2.1	20.94	47.94	19.19	21.44	2.25
2.2	20.44	47.44	18.69	20.94	2.25
2.3	19.96	46.96	18.21	20.46	2.25
2.4	19.49	46.49	17.74	19.99	2.25
2.5	19.05	46.05	17.30	19.55	2.25
2.6	18.63	45.63	16.88	19.13	2.25
2.7	18.22	45.22	16.47	18.72	2.25
2.8	17.82	44.82	16.07	18.32	2.25
2.9	17.44	44.44	15.69	17.94	2.25
3	17.07	44.07	15.32	17.57	2.25
3.1	16.72	43.72	14.97	17.22	2.25
3.2	16.37	43.37	14.62	16.87	2.25
3.3	16.04	43.04	14.29	16.54	2.25
3.4	15.71	42.71	13.96	16.21	2.25
3.5	15.40	42.40	13.65	15.90	2.25

WB 81 Vernon Valley TC1 Antenna off-axis EIRP Calculations  
 Plane of Geostationary Orbit & Elevation Plane (25.115(h)(1) & (2))  
 $0.1^\circ \leq \Theta \leq 7^\circ$

				Limits Per 25.218(a)	Margin with respect to 25.218
$\Theta$ , degrees	Gain, dBi	EIRP, dBW	EIRP density dBW/4kHz	EIRP density dBW/4kHz	dB
3.6	15.09	42.09	13.34	15.59	2.25
3.7	14.79	41.79	13.04	15.29	2.25
3.8	14.51	41.51	12.75	15.01	2.25
3.9	14.22	41.22	12.47	14.72	2.25
4	13.95	40.95	12.20	14.45	2.25
4.1	13.68	40.68	11.93	14.18	2.25
4.2	13.42	40.42	11.67	13.92	2.25
4.3	13.16	40.16	11.41	13.66	2.25
4.4	12.91	39.91	11.16	13.41	2.25
4.5	12.67	39.67	10.92	13.17	2.25
4.6	12.43	39.43	10.68	12.93	2.25
4.7	12.20	39.20	10.45	12.70	2.25
4.8	11.97	38.97	10.22	12.47	2.25
4.9	11.75	38.75	9.99	12.25	2.25
5	11.53	38.53	9.78	12.03	2.25
5.1	11.31	38.31	9.56	11.81	2.25
5.2	11.10	38.10	9.35	11.60	2.25
5.3	10.89	37.89	9.14	11.39	2.25
5.4	10.69	37.69	8.94	11.19	2.25
5.5	10.49	37.49	8.74	10.99	2.25
5.6	10.30	37.30	8.54	10.80	2.25
5.7	10.10	37.10	8.35	10.60	2.25
5.8	9.91	36.91	8.16	10.41	2.25
5.9	9.73	36.73	7.98	10.23	2.25
6	9.55	36.55	7.80	10.05	2.25
6.1	9.37	36.37	7.62	9.87	2.25
6.2	9.19	36.19	7.44	9.69	2.25
6.3	9.02	36.02	7.27	9.52	2.25
6.4	8.85	35.85	7.09	9.35	2.25
6.5	8.68	35.68	6.93	9.18	2.25
6.6	8.51	35.51	6.76	9.01	2.25
6.7	8.35	35.35	6.60	8.85	2.25
6.8	8.19	35.19	6.44	8.69	2.25
6.9	8.03	35.03	6.28	8.53	2.25
7	7.87	34.87	6.12	8.37	2.25

**Table 2:**  
**7<TH<=9.2**

WB 81 Vernon Valley TC1 Antenna off-axis EIRP Calculations  
Plane of Geostationary Orbit & Elevation Plane (25.115(h)(1) & (2))  
 $7^\circ < \Theta \leq 9.2^\circ$

				Limits Per 25.218(a)	Margin with respect to 25.218
$\Theta$ , degrees	Gain, dBi	EIRP, dBW	EIRP density dBW/4kHz	EIRP density dBW/4kHz	dB
0	56.80	83.80	55.05		
7.1	8.00	35.00	6.25	8.50	2.25
7.2	8.00	35.00	6.25	8.50	2.25
7.3	8.00	35.00	6.25	8.50	2.25
7.4	8.00	35.00	6.25	8.50	2.25
7.5	8.00	35.00	6.25	8.50	2.25
7.6	8.00	35.00	6.25	8.50	2.25
7.7	8.00	35.00	6.25	8.50	2.25
7.8	8.00	35.00	6.25	8.50	2.25
7.9	8.00	35.00	6.25	8.50	2.25
8	8.00	35.00	6.25	8.50	2.25
8.1	8.00	35.00	6.25	8.50	2.25
8.2	8.00	35.00	6.25	8.50	2.25
8.3	8.00	35.00	6.25	8.50	2.25
8.4	8.00	35.00	6.25	8.50	2.25
8.5	8.00	35.00	6.25	8.50	2.25
8.6	8.00	35.00	6.25	8.50	2.25
8.7	8.00	35.00	6.25	8.50	2.25
8.8	8.00	35.00	6.25	8.50	2.25
8.9	8.00	35.00	6.25	8.50	2.25
9	8.00	35.00	6.25	8.50	2.25
9.1	8.00	35.00	6.25	8.50	2.25
9.2	8.00	35.00	6.25	8.50	2.25

**Table 3:**  
**9.2<TH<=10**

WB 81 Vernon Valley TC1 Antenna off-axis EIRP Calculations  
Plane of Geostationary Orbit & Elevation Plane (25.115(h)(1) & (2))  
 $9.2^{\circ} < \Theta \leq 10^{\circ}$

				Limits Per 25.218(a)	Margin with respect to 25.218
$\Theta$ , degrees	Gain, dBi	EIRP, dBW	EIRP density dBW/4kHz	EIRP density dBW/4kHz	dB
0	56.80	83.80	55.05		
9.3	7.79	34.79	6.04	8.29	2.25
9.4	7.67	34.67	5.92	8.17	2.25
9.5	7.56	34.56	5.81	8.06	2.25
9.6	7.44	34.44	5.69	7.94	2.25
9.7	7.33	34.33	5.58	7.83	2.25
9.8	7.22	34.22	5.47	7.72	2.25
9.9	7.11	34.11	5.36	7.61	2.25
10	7.00	34.00	5.25	7.50	2.25

**Table 4:**  
**10<TH<=48**

WB 81 Vernon Valley TC1 Antenna off-axis EIRP Calculations  
Plane of Geostationary Orbit & Elevation Plane (25.115(h)(1) & (2))  
 $10^\circ < \Theta \leq 48^\circ$

				Limits Per 25.218(a)	Margin with respect to 25.218
$\Theta$ , degrees	Gain, dBi	EIRP, dBW	EIRP density dBW/4kHz	EIRP density dBW/4kHz	dB
0	56.80	83.80	55.05		
15	2.60	29.60	0.85	3.10	2.25
20	-0.53	26.47	-2.28	-0.03	2.25
25	-2.95	24.05	-4.70	-2.45	2.25
30	-4.93	22.07	-6.68	-4.43	2.25
35	-6.60	20.40	-8.35	-6.10	2.25
40	-8.05	18.95	-9.80	-7.55	2.25
45	-9.33	17.67	-11.08	-8.83	2.25
48	-10.03	16.97	-11.78	-9.53	2.25

**Table 5:**  
**48<TH<=180**

WB 81 Vernon Valley TC1 Antenna off-axis EIRP Calculations  
Plane of Geostationary Orbit & Elevation Plane (25.115(h)(1) & (2))  
48° < Θ ≤ 180°

				Limits Per 25.218(a)	Margin with respect to 25.218
Θ, degrees	Gain, dBi	EIRP, dBW	EIRP density dBW/4kHz	EIRP density dBW/4kHz	dB
0	56.80	83.80	55.05		
50	-10.00	17.00	-11.75	-9.50	2.25
55	-10.00	17.00	-11.75	-9.50	2.25
60	-10.00	17.00	-11.75	-9.50	2.25
65	-10.00	17.00	-11.75	-9.50	2.25
70	-10.00	17.00	-11.75	-9.50	2.25
75	-10.00	17.00	-11.75	-9.50	2.25
80	-10.00	17.00	-11.75	-9.50	2.25
85	-10.00	17.00	-11.75	-9.50	2.25
90	-10.00	17.00	-11.75	-9.50	2.25
95	-10.00	17.00	-11.75	-9.50	2.25
100	-10.00	17.00	-11.75	-9.50	2.25
105	-10.00	17.00	-11.75	-9.50	2.25
110	-10.00	17.00	-11.75	-9.50	2.25
115	-10.00	17.00	-11.75	-9.50	2.25
120	-10.00	17.00	-11.75	-9.50	2.25
125	-10.00	17.00	-11.75	-9.50	2.25
130	-10.00	17.00	-11.75	-9.50	2.25
135	-10.00	17.00	-11.75	-9.50	2.25
140	-10.00	17.00	-11.75	-9.50	2.25
145	-10.00	17.00	-11.75	-9.50	2.25
150	-10.00	17.00	-11.75	-9.50	2.25
155	-10.00	17.00	-11.75	-9.50	2.25
160	-10.00	17.00	-11.75	-9.50	2.25
165	-10.00	17.00	-11.75	-9.50	2.25
170	-10.00	17.00	-11.75	-9.50	2.25
175	-10.00	17.00	-11.75	-9.50	2.25
180	-10.00	17.00	-11.75	-9.50	2.25

**Table 6:**

WB 81 Vernon Valley TC1 Antenna off-axis EIRP Calculations  
Towards the Horizon (25.115(h)(3))

CITY	LAT	LONG (- = West, + = East)	SATELLITE	AZ	EL	HORIZON EL, deg	EL DISCR, deg	HORIZON EIRP LIMIT, dBW/4kHz	HORIZON EIRP ACTUAL, dBW/4kHz	MARGIN, dB
								25.218(c)(2)		
Vernon	41.2	-74.5	5.0 West	103.84	6.64	2.81	3.83	17.93	15.68	2.25
	41.2	-74.5	6.0 West	104.55	7.38	2.81	4.57	16.00	13.75	2.25
	41.2	-74.5	7.0 West	105.26	8.12	2.81	5.31	14.37	12.12	2.25
	41.2	-74.5	8.0 West	105.98	8.86	2.81	6.05	12.95	10.70	2.25
	41.2	-74.5	9.0 West	106.71	9.60	2.81	6.79	11.70	9.45	2.25
	41.2	-74.5	10.0 West	107.44	10.34	2.81	7.53	10.58	8.33	2.25
	41.2	-74.5	11.0 West	108.18	11.08	2.65	8.43	9.35	7.10	2.25
	41.2	-74.5	12.0 West	108.93	11.82	2.65	9.17	8.45	6.20	2.25
	41.2	-74.5	13.0 West	109.68	12.55	2.65	9.90	7.61	5.36	2.25
	41.2	-74.5	14.0 West	110.44	13.28	2.65	10.63	6.84	4.59	2.25
	41.2	-74.5	15.0 West	111.21	14.01	2.65	11.36	6.11	3.86	2.25
	41.2	-74.5	16.0 West	111.98	14.74	2.65	12.09	5.44	3.19	2.25
	41.2	-74.5	17.0 West	112.76	15.46	2.51	12.95	4.69	2.44	2.25
	41.2	-74.5	18.0 West	113.56	16.18	2.51	13.67	4.10	1.85	2.25
	41.2	-74.5	19.0 West	114.36	16.90	2.51	14.39	3.55	1.30	2.25
	41.2	-74.5	20.0 West	115.17	17.62	2.51	15.11	3.02	0.77	2.25
	41.2	-74.5	21.0 West	115.98	18.33	2.51	15.82	2.52	0.27	2.25
	41.2	-74.5	22.0 West	116.81	19.04	2.51	16.53	2.04	-0.21	2.25
	41.2	-74.5	23.0 West	117.65	19.74	2.92	16.82	1.85	-0.40	2.25
	41.2	-74.5	24.0 West	118.50	20.45	2.92	17.53	1.41	-0.84	2.25
	41.2	-74.5	25.0 West	119.36	21.14	2.92	18.22	0.99	-1.26	2.25
	41.2	-74.5	26.0 West	120.23	21.83	2.92	18.91	0.58	-1.67	2.25
	41.2	-74.5	27.0 West	121.11	22.52	2.92	19.60	0.19	-2.06	2.25
	41.2	-74.5	28.0 West	122.01	23.20	2.92	20.28	-0.18	-2.43	2.25
	41.2	-74.5	29.0 West	122.91	23.88	2.69	21.19	-0.65	-2.90	2.25
	41.2	-74.5	30.0 West	123.83	24.55	2.69	21.86	-0.99	-3.24	2.25
	41.2	-74.5	31.0 West	124.77	25.21	2.69	22.52	-1.32	-3.57	2.25
	41.2	-74.5	32.0 West	125.71	25.87	2.69	23.18	-1.63	-3.88	2.25
	41.2	-74.5	33.0 West	126.67	26.52	2.69	23.83	-1.93	-4.18	2.25
	41.2	-74.5	34.0 West	127.64	27.17	2.69	24.48	-2.22	-4.47	2.25
	41.2	-74.5	35.0 West	128.63	27.80	3.27	24.53	-2.24	-4.49	2.25
	41.2	-74.5	36.0 West	129.63	28.43	3.27	25.16	-2.52	-4.77	2.25
	41.2	-74.5	37.0 West	130.64	29.05	3.27	25.78	-2.78	-5.03	2.25
	41.2	-74.5	38.0 West	131.67	29.66	3.27	26.39	-3.04	-5.29	2.25
	41.2	-74.5	39.0 West	132.72	30.27	3.27	27.00	-3.28	-5.53	2.25



									RF input power = -1.75 dBw/4kHz	
CITY	LAT	LONG (- = West, + = East)	SATELLITE	AZ	EL	HORIZON EL, deg	EL DISCR, deg	HORIZON EIRP LIMIT, dBW/4kHz	HORIZON EIRP ACTUAL, dBW/4kHz	MARGIN, dB
	41.2	-74.5	40.0 West	133.78	30.86	3.61	27.25	-3.38	-5.63	2.25
	41.2	-74.5	41.0 West	134.86	31.45	3.61	27.84	-3.62	-5.87	2.25
	41.2	-74.5	42.0 West	135.96	32.02	3.61	28.41	-3.84	-6.09	2.25
	41.2	-74.5	43.0 West	137.07	32.58	3.61	28.97	-4.05	-6.30	2.25
	41.2	-74.5	44.0 West	138.19	33.14	4.30	28.84	-4.00	-6.25	2.25
	41.2	-74.5	45.0 West	139.34	33.68	4.30	29.38	-4.20	-6.45	2.25
	41.2	-74.5	46.0 West	140.50	34.21	4.30	29.91	-4.39	-6.64	2.25
	41.2	-74.5	47.0 West	141.68	34.73	4.30	30.43	-4.58	-6.83	2.25
	41.2	-74.5	48.0 West	142.88	35.23	4.25	30.98	-4.78	-7.03	2.25
	41.2	-74.5	49.0 West	144.09	35.72	4.25	31.47	-4.95	-7.20	2.25
	41.2	-74.5	50.0 West	145.32	36.20	4.25	31.95	-5.11	-7.36	2.25
	41.2	-74.5	51.0 West	146.57	36.66	4.25	32.41	-5.27	-7.52	2.25
	41.2	-74.5	52.0 West	147.84	37.11	4.16	32.95	-5.45	-7.70	2.25
	41.2	-74.5	53.0 West	149.12	37.54	4.16	33.38	-5.59	-7.84	2.25
	41.2	-74.5	54.0 West	150.42	37.96	4.16	33.80	-5.72	-7.97	2.25
	41.2	-74.5	55.0 West	151.74	38.36	4.16	34.20	-5.85	-8.10	2.25
	41.2	-74.5	56.0 West	153.07	38.75	4.73	34.02	-5.79	-8.04	2.25
	41.2	-74.5	57.0 West	154.42	39.12	4.73	34.39	-5.91	-8.16	2.25
	41.2	-74.5	58.0 West	155.79	39.47	4.73	34.74	-6.02	-8.27	2.25
	41.2	-74.5	59.0 West	157.17	39.80	4.73	35.07	-6.12	-8.37	2.25
	41.2	-74.5	60.0 West	158.56	40.11	4.17	35.94	-6.39	-8.64	2.25
	41.2	-74.5	61.0 West	159.97	40.41	4.17	36.24	-6.48	-8.73	2.25
	41.2	-74.5	62.0 West	161.40	40.69	4.17	36.52	-6.56	-8.81	2.25
	41.2	-74.5	63.0 West	162.84	40.94	3.13	37.81	-6.94	-9.19	2.25
	41.2	-74.5	64.0 West	164.28	41.18	3.13	38.05	-7.01	-9.26	2.25
	41.2	-74.5	65.0 West	165.75	41.39	3.13	38.26	-7.07	-9.32	2.25
	41.2	-74.5	66.0 West	167.22	41.59	3.13	38.46	-7.13	-9.38	2.25
	41.2	-74.5	67.0 West	168.70	41.77	3.16	38.61	-7.17	-9.42	2.25
	41.2	-74.5	68.0 West	170.19	41.92	3.16	38.76	-7.21	-9.46	2.25
	41.2	-74.5	69.0 West	171.68	42.05	3.16	38.89	-7.25	-9.50	2.25
	41.2	-74.5	70.0 West	173.19	42.16	3.34	38.82	-7.23	-9.48	2.25
	41.2	-74.5	71.0 West	174.70	42.25	3.34	38.91	-7.25	-9.50	2.25
	41.2	-74.5	72.0 West	176.21	42.32	3.34	38.98	-7.27	-9.52	2.25
	41.2	-74.5	73.0 West	177.72	42.36	2.88	39.48	-7.41	-9.66	2.25
	41.2	-74.5	74.0 West	179.24	42.38	2.88	39.50	-7.42	-9.67	2.25
	41.2	-74.5	75.0 West	180.76	42.38	2.88	39.50	-7.42	-9.67	2.25
	41.2	-74.5	76.0 West	182.28	42.36	2.88	39.48	-7.41	-9.66	2.25
	41.2	-74.5	77.0 West	183.79	42.32	2.51	39.81	-7.50	-9.75	2.25
	41.2	-74.5	78.0 West	185.30	42.25	2.51	39.74	-7.48	-9.73	2.25
	41.2	-74.5	79.0 West	186.81	42.16	2.51	39.65	-7.46	-9.71	2.25
	41.2	-74.5	80.0 West	188.32	42.05	2.05	40.00	-7.55	-9.80	2.25

									RF input power = -1.75 dBw/4kHz	
CITY	LAT	LONG (- = West, + = East)	SATELLITE	AZ	EL	HORIZON EL, deg	EL DISCR, deg	HORIZON EIRP LIMIT, dBW/4kHz	HORIZON EIRP ACTUAL, dBW/4kHz	MARGIN, dB
	41.2	-74.5	81.0 West	189.81	41.92	2.05	39.87	-7.52	-9.77	2.25
	41.2	-74.5	82.0 West	191.30	41.77	2.05	39.72	-7.47	-9.72	2.25
	41.2	-74.5	83.0 West	192.78	41.59	0.45	41.14	-7.86	-10.11	2.25
	41.2	-74.5	84.0 West	194.25	41.39	0.45	40.94	-7.80	-10.05	2.25
	41.2	-74.5	85.0 West	195.72	41.18	0.45	40.73	-7.75	-10.00	2.25
	41.2	-74.5	86.0 West	197.16	40.94	0.45	40.49	-7.68	-9.93	2.25
	41.2	-74.5	87.0 West	198.60	40.69	0.00	40.69	-7.74	-9.99	2.25
	41.2	-74.5	88.0 West	200.03	40.41	0.00	40.41	-7.66	-9.91	2.25
	41.2	-74.5	89.0 West	201.44	40.11	0.00	40.11	-7.58	-9.83	2.25
	41.2	-74.5	90.0 West	202.83	39.80	0.00	39.80	-7.50	-9.75	2.25
	41.2	-74.5	91.0 West	204.21	39.47	0.24	39.23	-7.34	-9.59	2.25
	41.2	-74.5	92.0 West	205.58	39.12	0.24	38.88	-7.24	-9.49	2.25
	41.2	-74.5	93.0 West	206.93	38.75	0.24	38.51	-7.14	-9.39	2.25
	41.2	-74.5	94.0 West	208.26	38.36	0.74	37.62	-6.89	-9.14	2.25
	41.2	-74.5	95.0 West	209.58	37.96	0.74	37.22	-6.77	-9.02	2.25
	41.2	-74.5	96.0 West	210.88	37.54	0.74	36.80	-6.65	-8.90	2.25
	41.2	-74.5	97.0 West	212.16	37.11	0.74	36.37	-6.52	-8.77	2.25
	41.2	-74.5	98.0 West	213.43	36.66	1.99	34.67	-6.00	-8.25	2.25
	41.2	-74.5	99.0 West	214.68	36.20	1.99	34.21	-5.85	-8.10	2.25
	41.2	-74.5	100.0 West	215.91	35.72	1.99	33.73	-5.70	-7.95	2.25
	41.2	-74.5	101.0 West	217.12	35.23	1.99	33.24	-5.54	-7.79	2.25
	41.2	-74.5	102.0 West	218.32	34.73	2.00	32.73	-5.37	-7.62	2.25
	41.2	-74.5	103.0 West	219.50	34.21	2.00	32.21	-5.20	-7.45	2.25
	41.2	-74.5	104.0 West	220.66	33.68	2.00	31.68	-5.02	-7.27	2.25
	41.2	-74.5	105.0 West	221.81	33.14	2.00	31.14	-4.83	-7.08	2.25
	41.2	-74.5	106.0 West	222.93	32.58	2.53	30.05	-4.45	-6.70	2.25
	41.2	-74.5	107.0 West	224.04	32.02	2.53	29.49	-4.24	-6.49	2.25
	41.2	-74.5	108.0 West	225.14	31.45	2.53	28.92	-4.03	-6.28	2.25
	41.2	-74.5	109.0 West	226.22	30.86	2.53	28.33	-3.81	-6.06	2.25
	41.2	-74.5	110.0 West	227.28	30.27	2.53	27.74	-3.58	-5.83	2.25
	41.2	-74.5	111.0 West	228.33	29.66	3.41	26.25	-2.98	-5.23	2.25
	41.2	-74.5	112.0 West	229.36	29.05	3.41	25.64	-2.72	-4.97	2.25
	41.2	-74.5	113.0 West	230.37	28.43	3.41	25.02	-2.46	-4.71	2.25
	41.2	-74.5	114.0 West	231.37	27.80	3.41	24.39	-2.18	-4.43	2.25
	41.2	-74.5	115.0 West	232.36	27.17	3.41	23.76	-1.89	-4.14	2.25
	41.2	-74.5	116.0 West	233.33	26.52	3.70	22.82	-1.46	-3.71	2.25
	41.2	-74.5	117.0 West	234.29	25.87	3.70	22.17	-1.14	-3.39	2.25
	41.2	-74.5	118.0 West	235.23	25.21	3.70	21.51	-0.82	-3.07	2.25
	41.2	-74.5	119.0 West	236.17	24.55	3.70	20.85	-0.48	-2.73	2.25
	41.2	-74.5	120.0 West	237.09	23.88	3.70	20.18	-0.12	-2.37	2.25
	41.2	-74.5	121.0 West	237.99	23.20	4.11	19.09	0.48	-1.77	2.25

									RF input power = -1.75 dBw/4kHz	
CITY	LAT	LONG (- = West, + = East)	SATELLITE	AZ	EL	HORIZON EL, deg	EL DISCR, deg	HORIZON EIRP LIMIT, dBw/4kHz	HORIZON EIRP ACTUAL, dBw/4kHz	MARGIN, dB
	41.2	-74.5	122.0 West	238.89	22.52	4.11	18.41	0.87	-1.38	2.25
	41.2	-74.5	123.0 West	239.77	21.83	4.11	17.72	1.29	-0.96	2.25
	41.2	-74.5	124.0 West	240.64	21.14	4.11	17.03	1.72	-0.53	2.25
	41.2	-74.5	125.0 West	241.50	20.45	4.11	16.34	2.17	-0.08	2.25
	41.2	-74.5	126.0 West	242.35	19.74	4.11	15.63	2.65	0.40	2.25
	41.2	-74.5	127.0 West	243.19	19.04	4.55	14.49	3.47	1.22	2.25
	41.2	-74.5	128.0 West	244.02	18.33	4.55	13.78	4.02	1.77	2.25
	41.2	-74.5	129.0 West	244.83	17.62	4.55	13.07	4.59	2.34	2.25
	41.2	-74.5	130.0 West	245.64	16.90	4.55	12.35	5.21	2.96	2.25
	41.2	-74.5	131.0 West	246.44	16.18	4.55	11.63	5.86	3.61	2.25
	41.2	-74.5	132.0 West	247.24	15.46	4.55	10.91	6.55	4.30	2.25
	41.2	-74.5	133.0 West	248.02	14.74	4.55	10.19	7.30	5.05	2.25
	41.2	-74.5	134.0 West	248.79	14.01	5.39	8.62	9.11	6.86	2.25
	41.2	-74.5	135.0 West	249.56	13.28	5.39	7.89	10.07	7.82	2.25
	41.2	-74.5	136.0 West	250.32	12.55	5.39	7.16	11.13	8.88	2.25
	41.2	-74.5	137.0 West	251.07	11.82	5.39	6.43	12.30	10.05	2.25
	41.2	-74.5	138.0 West	251.82	11.08	5.39	5.69	13.62	11.37	2.25
	41.2	-74.5	139.0 West	252.56	10.34	5.39	4.95	15.13	12.88	2.25
	41.2	-74.5	140.0 West	253.29	9.60	5.39	4.21	16.88	14.63	2.25
	41.2	-74.5	141.0 West	254.02	8.86	5.39	3.47	18.98	16.73	2.25
	41.2	-74.5	142.0 West	254.74	8.12	5.39	2.73	21.59	n/a	n/a
	41.2	-74.5	143.0 West	255.45	7.38	5.39	1.99	25.03	n/a	n/a
	41.2	-74.5	144.0 West	256.16	6.64	5.39	1.25	30.11	n/a	n/a