

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 1%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 1.01 12.1 Inches

BioInitiative ft. 75.50 906.0 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
0.25	9137.15	10.25	5.44	20.25	1.39	30.25	0.62
0.50	2284.29	10.50	5.18	20.50	1.36	30.50	0.61
0.75	1015.24	10.75	4.94	20.75	1.33	30.75	0.60
1.00	571.07	11.00	4.72	21.00	1.29	31.00	0.59
1.25	365.49	11.25	4.51	21.25	1.26	31.25	0.58
1.50	253.81	11.50	4.32	21.50	1.24	31.50	0.58
1.75	186.47	11.75	4.14	21.75	1.21	31.75	0.57
2.00	142.77	12.00	3.97	22.00	1.18	32.00	0.56
2.25	112.80	12.25	3.81	22.25	1.15	32.25	0.55
2.50	91.37	12.50	3.65	22.50	1.13	32.50	0.54
2.75	75.51	12.75	3.51	22.75	1.10	32.75	0.53
3.00	63.45	13.00	3.38	23.00	1.08	33.00	0.52
3.25	54.07	13.25	3.25	23.25	1.06	33.25	0.52
3.50	46.62	13.50	3.13	23.50	1.03	33.50	0.51
3.75	40.61	13.75	3.02	23.75	1.01	33.75	0.50
4.00	35.69	14.00	2.91	24.00	0.99	34.00	0.49
4.25	31.62	14.25	2.81	24.25	0.97	34.25	0.49
4.50	28.20	14.50	2.72	24.50	0.95	34.50	0.48
4.75	25.31	14.75	2.62	24.75	0.93	34.75	0.47
5.00	22.84	15.00	2.54	25.00	0.91	35.00	0.47
5.25	20.72	15.25	2.46	25.25	0.90	35.25	0.46
5.50	18.88	15.50	2.38	25.50	0.88	35.50	0.45
5.75	17.27	15.75	2.30	25.75	0.86	35.75	0.45
6.00	15.86	16.00	2.23	26.00	0.84	36.00	0.44
6.25	14.62	16.25	2.16	26.25	0.83	36.25	0.43
6.50	13.52	16.50	2.10	26.50	0.81	36.50	0.43
6.75	12.53	16.75	2.04	26.75	0.80	36.75	0.42
7.00	11.65	17.00	1.98	27.00	0.78	37.00	0.42
7.25	10.86	17.25	1.92	27.25	0.77	37.25	0.41
7.50	10.15	17.50	1.86	27.50	0.76	37.50	0.41
7.75	9.51	17.75	1.81	27.75	0.74	37.75	0.40
8.00	8.92	18.00	1.76	28.00	0.73	38.00	0.40
8.25	8.39	18.25	1.71	28.25	0.72	38.25	0.39
8.50	7.90	18.50	1.67	28.50	0.70	38.50	0.39
8.75	7.46	18.75	1.62	28.75	0.69	38.75	0.38
9.00	7.05	19.00	1.58	29.00	0.68	39.00	0.38
9.25	6.67	19.25	1.54	29.25	0.67	39.25	0.37
9.50	6.33	19.50	1.50	29.50	0.66	39.50	0.37
9.75	6.01	19.75	1.46	29.75	0.65	39.75	0.36
10.00	5.71	20.00	1.43	30.00	0.63	40.00	0.36

Notes:

- Formula OET Bulletin 65 equation (3) modified to include the effects of time averaged output and % reflections  

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi \cdot R^2)$$
  - S = Power Density uW/cm<sup>2</sup>
  - EIRP = 1.64 \* ERP
  - pi() = 3.1459
  - R = Distance to device
  - TA = Time average
  - %Ref = Percent reflections
- 60 percent reflections is equivalent to OET Bulletin 65 equation (10)
- 100 percent reflections is equivalent to OET Bulletin 65 equation (6)
- Collector meter ERP RFLAN-C = 0.189 W, ZigBee = 0.057 W, GSM = 0.733 W per Edison SmartConnect Community Meeting, Montecito, CA dated February 10, 2010
- TPO 0.267 watts at 902.25 to 927.75 MHz from TCB Grant of Equipment Authorization (SK9AMI-4)
- Antenna Gain 2.2dBi at 914.74 MHz per ACS Certification FCC ID: SK9AMI-4 RFLAN & RFLAN-E ERP = 0.270 W

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 1%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 1.01

12.11 Inches

BioInitiative ft. 75.50

906.00 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
40.25	0.35	54.25	0.19	68.25	0.12	82.25	0.08
40.50	0.35	54.50	0.19	68.50	0.12	82.50	0.08
40.75	0.34	54.75	0.19	68.75	0.12	82.75	0.08
41.00	0.34	55.00	0.19	69.00	0.12	83.00	0.08
41.25	0.34	55.25	0.19	69.25	0.12	83.25	0.08
41.50	0.33	55.50	0.19	69.50	0.12	83.50	0.08
41.75	0.33	55.75	0.18	69.75	0.12	83.75	0.08
42.00	0.32	56.00	0.18	70.00	0.12	84.00	0.08
42.25	0.32	56.25	0.18	70.25	0.12	84.25	0.08
42.50	0.32	56.50	0.18	70.50	0.11	84.50	0.08
42.75	0.31	56.75	0.18	70.75	0.11	84.75	0.08
43.00	0.31	57.00	0.18	71.00	0.11	85.00	0.08
43.25	0.31	57.25	0.17	71.25	0.11	85.25	0.08
43.50	0.30	57.50	0.17	71.50	0.11	85.50	0.08
43.75	0.30	57.75	0.17	71.75	0.11	85.75	0.08
44.00	0.29	58.00	0.17	72.00	0.11	86.00	0.08
44.25	0.29	58.25	0.17	72.25	0.11	86.25	0.08
44.50	0.29	58.50	0.17	72.50	0.11	86.50	0.08
44.75	0.29	58.75	0.17	72.75	0.11	86.75	0.08
45.00	0.28	59.00	0.16	73.00	0.11	87.00	0.08
45.25	0.28	59.25	0.16	73.25	0.11	87.25	0.08
45.50	0.28	59.50	0.16	73.50	0.11	87.50	0.07
45.75	0.27	59.75	0.16	73.75	0.10	87.75	0.07
46.00	0.27	60.00	0.16	74.00	0.10	88.00	0.07
46.25	0.27	60.25	0.16	74.25	0.10	88.25	0.07
46.50	0.26	60.50	0.16	74.50	0.10	88.50	0.07
46.75	0.26	60.75	0.15	74.75	0.10	88.75	0.07
47.00	0.26	61.00	0.15	75.00	0.10	89.00	0.07
47.25	0.26	61.25	0.15	75.25	0.10	89.25	0.07
47.50	0.25	61.50	0.15	75.50	0.10	89.50	0.07
47.75	0.25	61.75	0.15	75.75	0.10	89.75	0.07
48.00	0.25	62.00	0.15	76.00	0.10	90.00	0.07
48.25	0.25	62.25	0.15	76.25	0.10	90.25	0.07
48.50	0.24	62.50	0.15	76.50	0.10	90.50	0.07
48.75	0.24	62.75	0.15	76.75	0.10	90.75	0.07
49.00	0.24	63.00	0.14	77.00	0.10	91.00	0.07
49.25	0.24	63.25	0.14	77.25	0.10	91.25	0.07
49.50	0.23	63.50	0.14	77.50	0.10	91.50	0.07
49.75	0.23	63.75	0.14	77.75	0.09	91.75	0.07
50.00	0.23	64.00	0.14	78.00	0.09	92.00	0.07
50.25	0.23	64.25	0.14	78.25	0.09	92.25	0.07
50.50	0.22	64.50	0.14	78.50	0.09	92.50	0.07
50.75	0.22	64.75	0.14	78.75	0.09	92.75	0.07
51.00	0.22	65.00	0.14	79.00	0.09	93.00	0.07
51.25	0.22	65.25	0.13	79.25	0.09	93.25	0.07
51.50	0.22	65.50	0.13	79.50	0.09	93.50	0.07
51.75	0.21	65.75	0.13	79.75	0.09	93.75	0.06
52.00	0.21	66.00	0.13	80.00	0.09	94.00	0.06
52.25	0.21	66.25	0.13	80.25	0.09	94.25	0.06
52.50	0.21	66.50	0.13	80.50	0.09	94.50	0.06
52.75	0.21	66.75	0.13	80.75	0.09	94.75	0.06
53.00	0.20	67.00	0.13	81.00	0.09	95.00	0.06
53.25	0.20	67.25	0.13	81.25	0.09	95.25	0.06
53.50	0.20	67.50	0.13	81.50	0.09	95.50	0.06
53.75	0.20	67.75	0.12	81.75	0.09	95.75	0.06
54.00	0.20	68.00	0.12	82.00	0.08	96.00	0.06

Table 12 – 1%

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

**Meters** 1 Collector Meter

Time Avg: 10%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 3.19 38.3 Inches

BioInitiative ft. 239.00 2868.0 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
0.25	91371.53	10.25	54.36	20.25	13.93	30.25	6.24
0.50	22842.88	10.50	51.80	20.50	13.59	30.50	6.14
0.75	10152.39	10.75	49.42	20.75	13.26	30.75	6.04
1.00	5710.72	11.00	47.20	21.00	12.95	31.00	5.94
1.25	3654.86	11.25	45.12	21.25	12.65	31.25	5.85
1.50	2538.10	11.50	43.18	21.50	12.35	31.50	5.76
1.75	1864.73	11.75	41.36	21.75	12.07	31.75	5.67
2.00	1427.68	12.00	39.66	22.00	11.80	32.00	5.58
2.25	1128.04	12.25	38.06	22.25	11.54	32.25	5.49
2.50	913.72	12.50	36.55	22.50	11.28	32.50	5.41
2.75	755.14	12.75	35.13	22.75	11.03	32.75	5.32
3.00	634.52	13.00	33.79	23.00	10.80	33.00	5.24
3.25	540.66	13.25	32.53	23.25	10.56	33.25	5.17
3.50	466.18	13.50	31.33	23.50	10.34	33.50	5.09
3.75	406.10	13.75	30.21	23.75	10.12	33.75	5.01
4.00	356.92	14.00	29.14	24.00	9.91	34.00	4.94
4.25	316.16	14.25	28.12	24.25	9.71	34.25	4.87
4.50	282.01	14.50	27.16	24.50	9.51	34.50	4.80
4.75	253.11	14.75	26.25	24.75	9.32	34.75	4.73
5.00	228.43	15.00	25.38	25.00	9.14	35.00	4.66
5.25	207.19	15.25	24.56	25.25	8.96	35.25	4.60
5.50	188.78	15.50	23.77	25.50	8.78	35.50	4.53
5.75	172.73	15.75	23.02	25.75	8.61	35.75	4.47
6.00	158.63	16.00	22.31	26.00	8.45	36.00	4.41
6.25	146.19	16.25	21.63	26.25	8.29	36.25	4.35
6.50	135.16	16.50	20.98	26.50	8.13	36.50	4.29
6.75	125.34	16.75	20.35	26.75	7.98	36.75	4.23
7.00	116.55	17.00	19.76	27.00	7.83	37.00	4.17
7.25	108.65	17.25	19.19	27.25	7.69	37.25	4.12
7.50	101.52	17.50	18.65	27.50	7.55	37.50	4.06
7.75	95.08	17.75	18.13	27.75	7.42	37.75	4.01
8.00	89.23	18.00	17.63	28.00	7.28	38.00	3.95
8.25	83.90	18.25	17.15	28.25	7.16	38.25	3.90
8.50	79.04	18.50	16.69	28.50	7.03	38.50	3.85
8.75	74.59	18.75	16.24	28.75	6.91	38.75	3.80
9.00	70.50	19.00	15.82	29.00	6.79	39.00	3.75
9.25	66.74	19.25	15.41	29.25	6.67	39.25	3.71
9.50	63.28	19.50	15.02	29.50	6.56	39.50	3.66
9.75	60.07	19.75	14.64	29.75	6.45	39.75	3.61
10.00	57.11	20.00	14.28	30.00	6.35	40.00	3.57

Notes:

- Formula OET Bulletin 65 equation (3) modified to include the effects of time averaged output and % reflections  

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi \cdot R^2)$$
  - S = Power Density uW/cm<sup>2</sup>
  - EIRP = 1.64 \* ERP
  - pi() = 3.1459
  - R = Distance to device
  - TA = Time average
  - %Ref = Percent reflections
- 60 percent reflections is equivalent to OET Bulletin 65 equation (10)
- 100 percent reflections is equivalent to OET Bulletin 65 equation (6)
- Collector meter ERP RFLAN-C = 0.189 W, ZigBee = 0.057 W, GSM = 0.733 W per Edison SmartConnect Community Meeting, Montecito, CA dated February 10, 2010
- TPO 0.267 watts at 902.25 to 927.75 MHz from TCB Grant of Equipment Authorization (SK9AMI-4)
- Antenna Gain 2.2dBi at 914.74 MHz per ACS Certification FCC ID: SK9AMI-4 RFLAN & RFLAN-E ERP = 0.270 W

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 10%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 3.19

38.29 Inches

BioInitiative ft. 239.00

2868.00 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
40.25	3.53	54.25	1.94	68.25	1.23	82.25	0.84
40.50	3.48	54.50	1.92	68.50	1.22	82.50	0.84
40.75	3.44	54.75	1.91	68.75	1.21	82.75	0.83
41.00	3.40	55.00	1.89	69.00	1.20	83.00	0.83
41.25	3.36	55.25	1.87	69.25	1.19	83.25	0.82
41.50	3.32	55.50	1.85	69.50	1.18	83.50	0.82
41.75	3.28	55.75	1.84	69.75	1.17	83.75	0.81
42.00	3.24	56.00	1.82	70.00	1.17	84.00	0.81
42.25	3.20	56.25	1.80	70.25	1.16	84.25	0.80
42.50	3.16	56.50	1.79	70.50	1.15	84.50	0.80
42.75	3.12	56.75	1.77	70.75	1.14	84.75	0.80
43.00	3.09	57.00	1.76	71.00	1.13	85.00	0.79
43.25	3.05	57.25	1.74	71.25	1.12	85.25	0.79
43.50	3.02	57.50	1.73	71.50	1.12	85.50	0.78
43.75	2.98	57.75	1.71	71.75	1.11	85.75	0.78
44.00	2.95	58.00	1.70	72.00	1.10	86.00	0.77
44.25	2.92	58.25	1.68	72.25	1.09	86.25	0.77
44.50	2.88	58.50	1.67	72.50	1.09	86.50	0.76
44.75	2.85	58.75	1.65	72.75	1.08	86.75	0.76
45.00	2.82	59.00	1.64	73.00	1.07	87.00	0.75
45.25	2.79	59.25	1.63	73.25	1.06	87.25	0.75
45.50	2.76	59.50	1.61	73.50	1.06	87.50	0.75
45.75	2.73	59.75	1.60	73.75	1.05	87.75	0.74
46.00	2.70	60.00	1.59	74.00	1.04	88.00	0.74
46.25	2.67	60.25	1.57	74.25	1.04	88.25	0.73
46.50	2.64	60.50	1.56	74.50	1.03	88.50	0.73
46.75	2.61	60.75	1.55	74.75	1.02	88.75	0.73
47.00	2.59	61.00	1.53	75.00	1.02	89.00	0.72
47.25	2.56	61.25	1.52	75.25	1.01	89.25	0.72
47.50	2.53	61.50	1.51	75.50	1.00	89.50	0.71
47.75	2.50	61.75	1.50	75.75	1.00	89.75	0.71
48.00	2.48	62.00	1.49	76.00	0.99	90.00	0.71
48.25	2.45	62.25	1.47	76.25	0.98	90.25	0.70
48.50	2.43	62.50	1.46	76.50	0.98	90.50	0.70
48.75	2.40	62.75	1.45	76.75	0.97	90.75	0.69
49.00	2.38	63.00	1.44	77.00	0.96	91.00	0.69
49.25	2.35	63.25	1.43	77.25	0.96	91.25	0.69
49.50	2.33	63.50	1.42	77.50	0.95	91.50	0.68
49.75	2.31	63.75	1.41	77.75	0.94	91.75	0.68
50.00	2.28	64.00	1.39	78.00	0.94	92.00	0.67
50.25	2.26	64.25	1.38	78.25	0.93	92.25	0.67
50.50	2.24	64.50	1.37	78.50	0.93	92.50	0.67
50.75	2.22	64.75	1.36	78.75	0.92	92.75	0.66
51.00	2.20	65.00	1.35	79.00	0.92	93.00	0.66
51.25	2.17	65.25	1.34	79.25	0.91	93.25	0.66
51.50	2.15	65.50	1.33	79.50	0.90	93.50	0.65
51.75	2.13	65.75	1.32	79.75	0.90	93.75	0.65
52.00	2.11	66.00	1.31	80.00	0.89	94.00	0.65
52.25	2.09	66.25	1.30	80.25	0.89	94.25	0.64
52.50	2.07	66.50	1.29	80.50	0.88	94.50	0.64
52.75	2.05	66.75	1.28	80.75	0.88	94.75	0.64
53.00	2.03	67.00	1.27	81.00	0.87	95.00	0.63
53.25	2.01	67.25	1.26	81.25	0.87	95.25	0.63
53.50	2.00	67.50	1.25	81.50	0.86	95.50	0.63
53.75	1.98	67.75	1.24	81.75	0.85	95.75	0.62
54.00	1.96	68.00	1.24	82.00	0.85	96.00	0.62

Table 12 – 10%

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 20%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 4.51 54.2 Inches

BioInitiative ft. 338.00 4056.0 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
0.25	182743.06	10.25	108.71	20.25	27.85	30.25	12.48
0.50	45685.76	10.50	103.60	20.50	27.18	30.50	12.28
0.75	20304.78	10.75	98.83	20.75	26.53	30.75	12.08
1.00	11421.44	11.00	94.39	21.00	25.90	31.00	11.88
1.25	7309.72	11.25	90.24	21.25	25.29	31.25	11.70
1.50	5076.20	11.50	86.36	21.50	24.71	31.50	11.51
1.75	3729.45	11.75	82.73	21.75	24.14	31.75	11.33
2.00	2855.36	12.00	79.32	22.00	23.60	32.00	11.15
2.25	2256.09	12.25	76.11	22.25	23.07	32.25	10.98
2.50	1827.43	12.50	73.10	22.50	22.56	32.50	10.81
2.75	1510.27	12.75	70.26	22.75	22.07	32.75	10.65
3.00	1269.05	13.00	67.58	23.00	21.59	33.00	10.49
3.25	1081.32	13.25	65.06	23.25	21.13	33.25	10.33
3.50	932.36	13.50	62.67	23.50	20.68	33.50	10.18
3.75	812.19	13.75	60.41	23.75	20.25	33.75	10.03
4.00	713.84	14.00	58.27	24.00	19.83	34.00	9.88
4.25	632.33	14.25	56.25	24.25	19.42	34.25	9.74
4.50	564.02	14.50	54.32	24.50	19.03	34.50	9.60
4.75	506.21	14.75	52.50	24.75	18.65	34.75	9.46
5.00	456.86	15.00	50.76	25.00	18.27	35.00	9.32
5.25	414.38	15.25	49.11	25.25	17.91	35.25	9.19
5.50	377.57	15.50	47.54	25.50	17.56	35.50	9.06
5.75	345.45	15.75	46.04	25.75	17.23	35.75	8.94
6.00	317.26	16.00	44.62	26.00	16.90	36.00	8.81
6.25	292.39	16.25	43.25	26.25	16.58	36.25	8.69
6.50	270.33	16.50	41.95	26.50	16.26	36.50	8.57
6.75	250.68	16.75	40.71	26.75	15.96	36.75	8.46
7.00	233.09	17.00	39.52	27.00	15.67	37.00	8.34
7.25	217.29	17.25	38.38	27.25	15.38	37.25	8.23
7.50	203.05	17.50	37.29	27.50	15.10	37.50	8.12
7.75	190.16	17.75	36.25	27.75	14.83	37.75	8.01
8.00	178.46	18.00	35.25	28.00	14.57	38.00	7.91
8.25	167.81	18.25	34.29	28.25	14.31	38.25	7.81
8.50	158.08	18.50	33.37	28.50	14.06	38.50	7.71
8.75	149.18	18.75	32.49	28.75	13.82	38.75	7.61
9.00	141.01	19.00	31.64	29.00	13.58	39.00	7.51
9.25	133.49	19.25	30.82	29.25	13.35	39.25	7.41
9.50	126.55	19.50	30.04	29.50	13.12	39.50	7.32
9.75	120.15	19.75	29.28	29.75	12.90	39.75	7.23
10.00	114.21	20.00	28.55	30.00	12.69	40.00	7.14

Notes:

- Formula OET Bulletin 65 equation (3) modified to include the effects of time averaged output and % reflections  

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi \cdot R^2)$$
  - S = Power Density uW/cm<sup>2</sup>
  - EIRP = 1.64 \* ERP
  - pi() = 3.1459
  - R = Distance to device
  - TA = Time average
  - %Ref = Percent reflections
- 60 percent reflections is equivalent to OET Bulletin 65 equation (10)
- 100 percent reflections is equivalent to OET Bulletin 65 equation (6)
- Collector meter ERP RFLAN-C = 0.189 W, ZigBee = 0.057 W, GSM = 0.733 W per Edison SmartConnect Community Meeting, Montecito, CA dated February 10, 2010
- TPO 0.267 watts at 902.25 to 927.75 MHz from TCB Grant of Equipment Authorization (SK9AMI-4)
- Antenna Gain 2.2dBi at 914.74 MHz per ACS Certification FCC ID: SK9AMI-4 RFLAN & RFLAN-E ERP = 0.270 W

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

**Meters** 1 Collector Meter

Time Avg: 20%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 4.51

54.16 Inches

BioInitiative ft. 338.00

4056.00 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
40.25	7.05	54.25	3.88	68.25	2.45	82.25	1.69
40.50	6.96	54.50	3.85	68.50	2.43	82.50	1.68
40.75	6.88	54.75	3.81	68.75	2.42	82.75	1.67
41.00	6.79	55.00	3.78	69.00	2.40	83.00	1.66
41.25	6.71	55.25	3.74	69.25	2.38	83.25	1.65
41.50	6.63	55.50	3.71	69.50	2.36	83.50	1.64
41.75	6.55	55.75	3.67	69.75	2.35	83.75	1.63
42.00	6.47	56.00	3.64	70.00	2.33	84.00	1.62
42.25	6.40	56.25	3.61	70.25	2.31	84.25	1.61
42.50	6.32	56.50	3.58	70.50	2.30	84.50	1.60
42.75	6.25	56.75	3.55	70.75	2.28	84.75	1.59
43.00	6.18	57.00	3.52	71.00	2.27	85.00	1.58
43.25	6.11	57.25	3.48	71.25	2.25	85.25	1.57
43.50	6.04	57.50	3.45	71.50	2.23	85.50	1.56
43.75	5.97	57.75	3.42	71.75	2.22	85.75	1.55
44.00	5.90	58.00	3.40	72.00	2.20	86.00	1.54
44.25	5.83	58.25	3.37	72.25	2.19	86.25	1.54
44.50	5.77	58.50	3.34	72.50	2.17	86.50	1.53
44.75	5.70	58.75	3.31	72.75	2.16	86.75	1.52
45.00	5.64	59.00	3.28	73.00	2.14	87.00	1.51
45.25	5.58	59.25	3.25	73.25	2.13	87.25	1.50
45.50	5.52	59.50	3.23	73.50	2.11	87.50	1.49
45.75	5.46	59.75	3.20	73.75	2.10	87.75	1.48
46.00	5.40	60.00	3.17	74.00	2.09	88.00	1.47
46.25	5.34	60.25	3.15	74.25	2.07	88.25	1.47
46.50	5.28	60.50	3.12	74.50	2.06	88.50	1.46
46.75	5.23	60.75	3.09	74.75	2.04	88.75	1.45
47.00	5.17	61.00	3.07	75.00	2.03	89.00	1.44
47.25	5.12	61.25	3.04	75.25	2.02	89.25	1.43
47.50	5.06	61.50	3.02	75.50	2.00	89.50	1.43
47.75	5.01	61.75	3.00	75.75	1.99	89.75	1.42
48.00	4.96	62.00	2.97	76.00	1.98	90.00	1.41
48.25	4.91	62.25	2.95	76.25	1.96	90.25	1.40
48.50	4.86	62.50	2.92	76.50	1.95	90.50	1.39
48.75	4.81	62.75	2.90	76.75	1.94	90.75	1.39
49.00	4.76	63.00	2.88	77.00	1.93	91.00	1.38
49.25	4.71	63.25	2.85	77.25	1.91	91.25	1.37
49.50	4.66	63.50	2.83	77.50	1.90	91.50	1.36
49.75	4.61	63.75	2.81	77.75	1.89	91.75	1.36
50.00	4.57	64.00	2.79	78.00	1.88	92.00	1.35
50.25	4.52	64.25	2.77	78.25	1.87	92.25	1.34
50.50	4.48	64.50	2.75	78.50	1.85	92.50	1.33
50.75	4.43	64.75	2.72	78.75	1.84	92.75	1.33
51.00	4.39	65.00	2.70	79.00	1.83	93.00	1.32
51.25	4.35	65.25	2.68	79.25	1.82	93.25	1.31
51.50	4.31	65.50	2.66	79.50	1.81	93.50	1.31
51.75	4.26	65.75	2.64	79.75	1.80	93.75	1.30
52.00	4.22	66.00	2.62	80.00	1.78	94.00	1.29
52.25	4.18	66.25	2.60	80.25	1.77	94.25	1.29
52.50	4.14	66.50	2.58	80.50	1.76	94.50	1.28
52.75	4.10	66.75	2.56	80.75	1.75	94.75	1.27
53.00	4.07	67.00	2.54	81.00	1.74	95.00	1.27
53.25	4.03	67.25	2.53	81.25	1.73	95.25	1.26
53.50	3.99	67.50	2.51	81.50	1.72	95.50	1.25
53.75	3.95	67.75	2.49	81.75	1.71	95.75	1.25
54.00	3.92	68.00	2.47	82.00	1.70	96.00	1.24

Table 12 – 20%

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 30%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 5.53 66.3 Inches

BioInitiative ft. 413.00 4956.0 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
0.25	274114.59	10.25	163.07	20.25	41.78	30.25	18.72
0.50	68528.65	10.50	155.39	20.50	40.77	30.50	18.42
0.75	30457.18	10.75	148.25	20.75	39.79	30.75	18.12
1.00	17132.16	11.00	141.59	21.00	38.85	31.00	17.83
1.25	10964.58	11.25	135.37	21.25	37.94	31.25	17.54
1.50	7614.29	11.50	129.54	21.50	37.06	31.50	17.27
1.75	5594.18	11.75	124.09	21.75	36.22	31.75	17.00
2.00	4283.04	12.00	118.97	22.00	35.40	32.00	16.73
2.25	3384.13	12.25	114.17	22.25	34.61	32.25	16.47
2.50	2741.15	12.50	109.65	22.50	33.84	32.50	16.22
2.75	2265.41	12.75	105.39	22.75	33.10	32.75	15.97
3.00	1903.57	13.00	101.37	23.00	32.39	33.00	15.73
3.25	1621.98	13.25	97.58	23.25	31.69	33.25	15.50
3.50	1398.54	13.50	94.00	23.50	31.02	33.50	15.27
3.75	1218.29	13.75	90.62	23.75	30.37	33.75	15.04
4.00	1070.76	14.00	87.41	24.00	29.74	34.00	14.82
4.25	948.49	14.25	84.37	24.25	29.13	34.25	14.60
4.50	846.03	14.50	81.48	24.50	28.54	34.50	14.39
4.75	759.32	14.75	78.75	24.75	27.97	34.75	14.19
5.00	685.29	15.00	76.14	25.00	27.41	35.00	13.99
5.25	621.58	15.25	73.67	25.25	26.87	35.25	13.79
5.50	566.35	15.50	71.31	25.50	26.35	35.50	13.59
5.75	518.18	15.75	69.06	25.75	25.84	35.75	13.40
6.00	475.89	16.00	66.92	26.00	25.34	36.00	13.22
6.25	438.58	16.25	64.88	26.25	24.86	36.25	13.04
6.50	405.49	16.50	62.93	26.50	24.40	36.50	12.86
6.75	376.01	16.75	61.06	26.75	23.94	36.75	12.69
7.00	349.64	17.00	59.28	27.00	23.50	37.00	12.51
7.25	325.94	17.25	57.58	27.25	23.07	37.25	12.35
7.50	304.57	17.50	55.94	27.50	22.65	37.50	12.18
7.75	285.24	17.75	54.38	27.75	22.25	37.75	12.02
8.00	267.69	18.00	52.88	28.00	21.85	38.00	11.86
8.25	251.71	18.25	51.44	28.25	21.47	38.25	11.71
8.50	237.12	18.50	50.06	28.50	21.09	38.50	11.56
8.75	223.77	18.75	48.73	28.75	20.73	38.75	11.41
9.00	211.51	19.00	47.46	29.00	20.37	39.00	11.26
9.25	200.23	19.25	46.23	29.25	20.02	39.25	11.12
9.50	189.83	19.50	45.05	29.50	19.69	39.50	10.98
9.75	180.22	19.75	43.92	29.75	19.36	39.75	10.84
10.00	171.32	20.00	42.83	30.00	19.04	40.00	10.71

Notes:

- Formula OET Bulletin 65 equation (3) modified to include the effects of time averaged output and % reflections  

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi i) R^2$$
  - S = Power Density uW/cm<sup>2</sup>
  - EIRP = 1.64 \* ERP
  - pi() = 3.1459
  - R = Distance to device
  - TA = Time average
  - %Ref = Percent reflections
- 60 percent reflections is equivalent to OET Bulletin 65 equation (10)
- 100 percent reflections is equivalent to OET Bulletin 65 equation (6)
- Collector meter ERP RFLAN-C = 0.189 W, ZigBee = 0.057 W, GSM = 0.733 W per Edison SmartConnect Community Meeting, Montecito, CA dated February 10, 2010
- TPO 0.267 watts at 902.25 to 927.75 MHz from TCB Grant of Equipment Authorization (SK9AMI-4)
- Antenna Gain 2.2dBi at 914.74 MHz per ACS Certification FCC ID: SK9AMI-4 RFLAN & RFLAN-E ERP = 0.270 W

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

**Meters** 1 Collector Meter

Time Avg: 30%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 5.53

66.33 Inches

BioInitiative ft. 413.00

4956.00 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
40.25	10.58	54.25	5.82	68.25	3.68	82.25	2.53
40.50	10.44	54.50	5.77	68.50	3.65	82.50	2.52
40.75	10.32	54.75	5.72	68.75	3.62	82.75	2.50
41.00	10.19	55.00	5.66	69.00	3.60	83.00	2.49
41.25	10.07	55.25	5.61	69.25	3.57	83.25	2.47
41.50	9.95	55.50	5.56	69.50	3.55	83.50	2.46
41.75	9.83	55.75	5.51	69.75	3.52	83.75	2.44
42.00	9.71	56.00	5.46	70.00	3.50	84.00	2.43
42.25	9.60	56.25	5.41	70.25	3.47	84.25	2.41
42.50	9.48	56.50	5.37	70.50	3.45	84.50	2.40
42.75	9.37	56.75	5.32	70.75	3.42	84.75	2.39
43.00	9.27	57.00	5.27	71.00	3.40	85.00	2.37
43.25	9.16	57.25	5.23	71.25	3.37	85.25	2.36
43.50	9.05	57.50	5.18	71.50	3.35	85.50	2.34
43.75	8.95	57.75	5.14	71.75	3.33	85.75	2.33
44.00	8.85	58.00	5.09	72.00	3.30	86.00	2.32
44.25	8.75	58.25	5.05	72.25	3.28	86.25	2.30
44.50	8.65	58.50	5.01	72.50	3.26	86.50	2.29
44.75	8.56	58.75	4.96	72.75	3.24	86.75	2.28
45.00	8.46	59.00	4.92	73.00	3.21	87.00	2.26
45.25	8.37	59.25	4.88	73.25	3.19	87.25	2.25
45.50	8.28	59.50	4.84	73.50	3.17	87.50	2.24
45.75	8.19	59.75	4.80	73.75	3.15	87.75	2.22
46.00	8.10	60.00	4.76	74.00	3.13	88.00	2.21
46.25	8.01	60.25	4.72	74.25	3.11	88.25	2.20
46.50	7.92	60.50	4.68	74.50	3.09	88.50	2.19
46.75	7.84	60.75	4.64	74.75	3.07	88.75	2.18
47.00	7.76	61.00	4.60	75.00	3.05	89.00	2.16
47.25	7.67	61.25	4.57	75.25	3.03	89.25	2.15
47.50	7.59	61.50	4.53	75.50	3.01	89.50	2.14
47.75	7.51	61.75	4.49	75.75	2.99	89.75	2.13
48.00	7.44	62.00	4.46	76.00	2.97	90.00	2.12
48.25	7.36	62.25	4.42	76.25	2.95	90.25	2.10
48.50	7.28	62.50	4.39	76.50	2.93	90.50	2.09
48.75	7.21	62.75	4.35	76.75	2.91	90.75	2.08
49.00	7.14	63.00	4.32	77.00	2.89	91.00	2.07
49.25	7.06	63.25	4.28	77.25	2.87	91.25	2.06
49.50	6.99	63.50	4.25	77.50	2.85	91.50	2.05
49.75	6.92	63.75	4.22	77.75	2.83	91.75	2.04
50.00	6.85	64.00	4.18	78.00	2.82	92.00	2.02
50.25	6.78	64.25	4.15	78.25	2.80	92.25	2.01
50.50	6.72	64.50	4.12	78.50	2.78	92.50	2.00
50.75	6.65	64.75	4.09	78.75	2.76	92.75	1.99
51.00	6.59	65.00	4.05	79.00	2.75	93.00	1.98
51.25	6.52	65.25	4.02	79.25	2.73	93.25	1.97
51.50	6.46	65.50	3.99	79.50	2.71	93.50	1.96
51.75	6.40	65.75	3.96	79.75	2.69	93.75	1.95
52.00	6.34	66.00	3.93	80.00	2.68	94.00	1.94
52.25	6.28	66.25	3.90	80.25	2.66	94.25	1.93
52.50	6.22	66.50	3.87	80.50	2.64	94.50	1.92
52.75	6.16	66.75	3.85	80.75	2.63	94.75	1.91
53.00	6.10	67.00	3.82	81.00	2.61	95.00	1.90
53.25	6.04	67.25	3.79	81.25	2.60	95.25	1.89
53.50	5.99	67.50	3.76	81.50	2.58	95.50	1.88
53.75	5.93	67.75	3.73	81.75	2.56	95.75	1.87
54.00	5.88	68.00	3.71	82.00	2.55	96.00	1.86

Table 12 – 30%



# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

**Meters** 1 Collector Meter

Time Avg: 40%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 6.38 76.6 Inches

BioInitiative ft. 478.00 5736.0 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
0.25	365486.12	10.25	217.42	20.25	55.71	30.25	24.96
0.50	91371.53	10.50	207.19	20.50	54.36	30.50	24.56
0.75	40609.57	10.75	197.67	20.75	53.05	30.75	24.16
1.00	22842.88	11.00	188.78	21.00	51.80	31.00	23.77
1.25	14619.44	11.25	180.49	21.25	50.59	31.25	23.39
1.50	10152.39	11.50	172.73	21.50	49.42	31.50	23.02
1.75	7458.90	11.75	165.45	21.75	48.29	31.75	22.66
2.00	5710.72	12.00	158.63	22.00	47.20	32.00	22.31
2.25	4512.17	12.25	152.22	22.25	46.14	32.25	21.96
2.50	3654.86	12.50	146.19	22.50	45.12	32.50	21.63
2.75	3020.55	12.75	140.52	22.75	44.14	32.75	21.30
3.00	2538.10	13.00	135.16	23.00	43.18	33.00	20.98
3.25	2162.64	13.25	130.11	23.25	42.26	33.25	20.66
3.50	1864.73	13.50	125.34	23.50	41.36	33.50	20.35
3.75	1624.38	13.75	120.82	23.75	40.50	33.75	20.05
4.00	1427.68	14.00	116.55	24.00	39.66	34.00	19.76
4.25	1264.66	14.25	112.49	24.25	38.84	34.25	19.47
4.50	1128.04	14.50	108.65	24.50	38.06	34.50	19.19
4.75	1012.43	14.75	104.99	24.75	37.29	34.75	18.92
5.00	913.72	15.00	101.52	25.00	36.55	35.00	18.65
5.25	828.77	15.25	98.22	25.25	35.83	35.25	18.38
5.50	755.14	15.50	95.08	25.50	35.13	35.50	18.13
5.75	690.90	15.75	92.09	25.75	34.45	35.75	17.87
6.00	634.52	16.00	89.23	26.00	33.79	36.00	17.63
6.25	584.78	16.25	86.51	26.25	33.15	36.25	17.38
6.50	540.66	16.50	83.90	26.50	32.53	36.50	17.15
6.75	501.35	16.75	81.42	26.75	31.92	36.75	16.91
7.00	466.18	17.00	79.04	27.00	31.33	37.00	16.69
7.25	434.59	17.25	76.77	27.25	30.76	37.25	16.46
7.50	406.10	17.50	74.59	27.50	30.21	37.50	16.24
7.75	380.32	17.75	72.50	27.75	29.66	37.75	16.03
8.00	356.92	18.00	70.50	28.00	29.14	38.00	15.82
8.25	335.62	18.25	68.58	28.25	28.62	38.25	15.61
8.50	316.16	18.50	66.74	28.50	28.12	38.50	15.41
8.75	298.36	18.75	64.98	28.75	27.64	38.75	15.21
9.00	282.01	19.00	63.28	29.00	27.16	39.00	15.02
9.25	266.97	19.25	61.64	29.25	26.70	39.25	14.83
9.50	253.11	19.50	60.07	29.50	26.25	39.50	14.64
9.75	240.29	19.75	58.56	29.75	25.81	39.75	14.46
10.00	228.43	20.00	57.11	30.00	25.38	40.00	14.28

Notes:

- Formula OET Bulletin 65 equation (3) modified to include the effects of time averaged output and % reflections  

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi \cdot R^2)$$
  - S = Power Density uW/cm<sup>2</sup>
  - EIRP = 1.64 \* ERP
  - pi() = 3.1459
  - R = Distance to device
  - TA = Time average
  - %Ref = Percent reflections
- 60 percent reflections is equivalent to OET Bulletin 65 equation (10)
- 100 percent reflections is equivalent to OET Bulletin 65 equation (6)
- Collector meter ERP RFLAN-C = 0.189 W, ZigBee = 0.057 W, GSM = 0.733 W per Edison SmartConnect Community Meeting, Montecito, CA dated February 10, 2010
- TPO 0.267 watts at 902.25 to 927.75 MHz from TCB Grant of Equipment Authorization (SK9AMI-4)
- Antenna Gain 2.2dBi at 914.74 MHz per ACS Certification FCC ID: SK9AMI-4 RFLAN & RFLAN-E ERP = 0.270 W

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 40%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 6.38

76.59 Inches

BioInitiative ft. 478.00

5736.00 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
40.25	14.10	54.25	7.76	68.25	4.90	82.25	3.38
40.50	13.93	54.50	7.69	68.50	4.87	82.50	3.36
40.75	13.76	54.75	7.62	68.75	4.83	82.75	3.34
41.00	13.59	55.00	7.55	69.00	4.80	83.00	3.32
41.25	13.42	55.25	7.48	69.25	4.76	83.25	3.30
41.50	13.26	55.50	7.42	69.50	4.73	83.50	3.28
41.75	13.11	55.75	7.35	69.75	4.70	83.75	3.26
42.00	12.95	56.00	7.28	70.00	4.66	84.00	3.24
42.25	12.80	56.25	7.22	70.25	4.63	84.25	3.22
42.50	12.65	56.50	7.16	70.50	4.60	84.50	3.20
42.75	12.50	56.75	7.09	70.75	4.56	84.75	3.18
43.00	12.35	57.00	7.03	71.00	4.53	85.00	3.16
43.25	12.21	57.25	6.97	71.25	4.50	85.25	3.14
43.50	12.07	57.50	6.91	71.50	4.47	85.50	3.12
43.75	11.93	57.75	6.85	71.75	4.44	85.75	3.11
44.00	11.80	58.00	6.79	72.00	4.41	86.00	3.09
44.25	11.67	58.25	6.73	72.25	4.38	86.25	3.07
44.50	11.54	58.50	6.67	72.50	4.35	86.50	3.05
44.75	11.41	58.75	6.62	72.75	4.32	86.75	3.04
45.00	11.28	59.00	6.56	73.00	4.29	87.00	3.02
45.25	11.16	59.25	6.51	73.25	4.26	87.25	3.00
45.50	11.03	59.50	6.45	73.50	4.23	87.50	2.98
45.75	10.91	59.75	6.40	73.75	4.20	87.75	2.97
46.00	10.80	60.00	6.35	74.00	4.17	88.00	2.95
46.25	10.68	60.25	6.29	74.25	4.14	88.25	2.93
46.50	10.56	60.50	6.24	74.50	4.12	88.50	2.92
46.75	10.45	60.75	6.19	74.75	4.09	88.75	2.90
47.00	10.34	61.00	6.14	75.00	4.06	89.00	2.88
47.25	10.23	61.25	6.09	75.25	4.03	89.25	2.87
47.50	10.12	61.50	6.04	75.50	4.01	89.50	2.85
47.75	10.02	61.75	5.99	75.75	3.98	89.75	2.84
48.00	9.91	62.00	5.94	76.00	3.95	90.00	2.82
48.25	9.81	62.25	5.89	76.25	3.93	90.25	2.80
48.50	9.71	62.50	5.85	76.50	3.90	90.50	2.79
48.75	9.61	62.75	5.80	76.75	3.88	90.75	2.77
49.00	9.51	63.00	5.76	77.00	3.85	91.00	2.76
49.25	9.42	63.25	5.71	77.25	3.83	91.25	2.74
49.50	9.32	63.50	5.67	77.50	3.80	91.50	2.73
49.75	9.23	63.75	5.62	77.75	3.78	91.75	2.71
50.00	9.14	64.00	5.58	78.00	3.75	92.00	2.70
50.25	9.05	64.25	5.53	78.25	3.73	92.25	2.68
50.50	8.96	64.50	5.49	78.50	3.71	92.50	2.67
50.75	8.87	64.75	5.45	78.75	3.68	92.75	2.66
51.00	8.78	65.00	5.41	79.00	3.66	93.00	2.64
51.25	8.70	65.25	5.37	79.25	3.64	93.25	2.63
51.50	8.61	65.50	5.32	79.50	3.61	93.50	2.61
51.75	8.53	65.75	5.28	79.75	3.59	93.75	2.60
52.00	8.45	66.00	5.24	80.00	3.57	94.00	2.59
52.25	8.37	66.25	5.20	80.25	3.55	94.25	2.57
52.50	8.29	66.50	5.17	80.50	3.53	94.50	2.56
52.75	8.21	66.75	5.13	80.75	3.50	94.75	2.54
53.00	8.13	67.00	5.09	81.00	3.48	95.00	2.53
53.25	8.06	67.25	5.05	81.25	3.46	95.25	2.52
53.50	7.98	67.50	5.01	81.50	3.44	95.50	2.50
53.75	7.91	67.75	4.98	81.75	3.42	95.75	2.49
54.00	7.83	68.00	4.94	82.00	3.40	96.00	2.48

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 50%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 7.14 85.6 Inches

BioInitiative ft. 535.00 6420.0 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
0.25	456857.65	10.25	271.78	20.25	69.63	30.25	31.20
0.50	114214.41	10.50	258.99	20.50	67.94	30.50	30.69
0.75	50761.96	10.75	247.08	20.75	66.32	30.75	30.20
1.00	28553.60	11.00	235.98	21.00	64.75	31.00	29.71
1.25	18274.31	11.25	225.61	21.25	63.23	31.25	29.24
1.50	12690.49	11.50	215.91	21.50	61.77	31.50	28.78
1.75	9323.63	11.75	206.82	21.75	60.36	31.75	28.33
2.00	7138.40	12.00	198.29	22.00	59.00	32.00	27.88
2.25	5640.22	12.25	190.28	22.25	57.68	32.25	27.45
2.50	4568.58	12.50	182.74	22.50	56.40	32.50	27.03
2.75	3775.68	12.75	175.65	22.75	55.17	32.75	26.62
3.00	3172.62	13.00	168.96	23.00	53.98	33.00	26.22
3.25	2703.30	13.25	162.64	23.25	52.82	33.25	25.83
3.50	2330.91	13.50	156.67	23.50	51.70	33.50	25.44
3.75	2030.48	13.75	151.03	23.75	50.62	33.75	25.07
4.00	1784.60	14.00	145.68	24.00	49.57	34.00	24.70
4.25	1580.82	14.25	140.61	24.25	48.56	34.25	24.34
4.50	1410.05	14.50	135.81	24.50	47.57	34.50	23.99
4.75	1265.53	14.75	131.24	24.75	46.61	34.75	23.65
5.00	1142.14	15.00	126.90	25.00	45.69	35.00	23.31
5.25	1035.96	15.25	122.78	25.25	44.79	35.25	22.98
5.50	943.92	15.50	118.85	25.50	43.91	35.50	22.66
5.75	863.63	15.75	115.11	25.75	43.06	35.75	22.34
6.00	793.16	16.00	111.54	26.00	42.24	36.00	22.03
6.25	730.97	16.25	108.13	26.25	41.44	36.25	21.73
6.50	675.82	16.50	104.88	26.50	40.66	36.50	21.43
6.75	626.69	16.75	101.77	26.75	39.90	36.75	21.14
7.00	582.73	17.00	98.80	27.00	39.17	37.00	20.86
7.25	543.23	17.25	95.96	27.25	38.45	37.25	20.58
7.50	507.62	17.50	93.24	27.50	37.76	37.50	20.30
7.75	475.40	17.75	90.63	27.75	37.08	37.75	20.04
8.00	446.15	18.00	88.13	28.00	36.42	38.00	19.77
8.25	419.52	18.25	85.73	28.25	35.78	38.25	19.52
8.50	395.21	18.50	83.43	28.50	35.15	38.50	19.26
8.75	372.95	18.75	81.22	28.75	34.55	38.75	19.02
9.00	352.51	19.00	79.10	29.00	33.95	39.00	18.77
9.25	333.72	19.25	77.05	29.25	33.37	39.25	18.53
9.50	316.38	19.50	75.09	29.50	32.81	39.50	18.30
9.75	300.37	19.75	73.20	29.75	32.26	39.75	18.07
10.00	285.54	20.00	71.38	30.00	31.73	40.00	17.85

Notes:

- Formula OET Bulletin 65 equation (3) modified to include the effects of time averaged output and % reflections  

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi \cdot R^2)$$
  - S = Power Density uW/cm<sup>2</sup>
  - EIRP = 1.64 \* ERP
  - pi() = 3.1459
  - R = Distance to device
  - TA = Time average
  - %Ref = Percent reflections
- 60 percent reflections is equivalent to OET Bulletin 65 equation (10)
- 100 percent reflections is equivalent to OET Bulletin 65 equation (6)
- Collector meter ERP RFLAN-C = 0.189 W, ZigBee = 0.057 W, GSM = 0.733 W per Edison SmartConnect Community Meeting, Montecito, CA dated February 10, 2010
- TPO 0.267 watts at 902.25 to 927.75 MHz from TCB Grant of Equipment Authorization (SK9AMI-4)
- Antenna Gain 2.2dBi at 914.74 MHz per ACS Certification FCC ID: SK9AMI-4 RFLAN & RFLAN-E ERP = 0.270 W

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 50%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 7.14

85.63 Inches

BioInitiative ft. 535.00

6420.00 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
40.25	17.63	54.25	9.70	68.25	6.13	82.25	4.22
40.50	17.41	54.50	9.61	68.50	6.09	82.50	4.20
40.75	17.20	54.75	9.53	68.75	6.04	82.75	4.17
41.00	16.99	55.00	9.44	69.00	6.00	83.00	4.14
41.25	16.78	55.25	9.35	69.25	5.95	83.25	4.12
41.50	16.58	55.50	9.27	69.50	5.91	83.50	4.10
41.75	16.38	55.75	9.19	69.75	5.87	83.75	4.07
42.00	16.19	56.00	9.11	70.00	5.83	84.00	4.05
42.25	16.00	56.25	9.02	70.25	5.79	84.25	4.02
42.50	15.81	56.50	8.94	70.50	5.74	84.50	4.00
42.75	15.62	56.75	8.87	70.75	5.70	84.75	3.98
43.00	15.44	57.00	8.79	71.00	5.66	85.00	3.95
43.25	15.26	57.25	8.71	71.25	5.62	85.25	3.93
43.50	15.09	57.50	8.64	71.50	5.59	85.50	3.91
43.75	14.92	57.75	8.56	71.75	5.55	85.75	3.88
44.00	14.75	58.00	8.49	72.00	5.51	86.00	3.86
44.25	14.58	58.25	8.42	72.25	5.47	86.25	3.84
44.50	14.42	58.50	8.34	72.50	5.43	86.50	3.82
44.75	14.26	58.75	8.27	72.75	5.40	86.75	3.79
45.00	14.10	59.00	8.20	73.00	5.36	87.00	3.77
45.25	13.95	59.25	8.13	73.25	5.32	87.25	3.75
45.50	13.79	59.50	8.07	73.50	5.29	87.50	3.73
45.75	13.64	59.75	8.00	73.75	5.25	87.75	3.71
46.00	13.49	60.00	7.93	74.00	5.21	88.00	3.69
46.25	13.35	60.25	7.87	74.25	5.18	88.25	3.67
46.50	13.21	60.50	7.80	74.50	5.14	88.50	3.65
46.75	13.06	60.75	7.74	74.75	5.11	88.75	3.63
47.00	12.93	61.00	7.67	75.00	5.08	89.00	3.60
47.25	12.79	61.25	7.61	75.25	5.04	89.25	3.58
47.50	12.66	61.50	7.55	75.50	5.01	89.50	3.56
47.75	12.52	61.75	7.49	75.75	4.98	89.75	3.54
48.00	12.39	62.00	7.43	76.00	4.94	90.00	3.53
48.25	12.26	62.25	7.37	76.25	4.91	90.25	3.51
48.50	12.14	62.50	7.31	76.50	4.88	90.50	3.49
48.75	12.01	62.75	7.25	76.75	4.85	90.75	3.47
49.00	11.89	63.00	7.19	77.00	4.82	91.00	3.45
49.25	11.77	63.25	7.14	77.25	4.78	91.25	3.43
49.50	11.65	63.50	7.08	77.50	4.75	91.50	3.41
49.75	11.54	63.75	7.03	77.75	4.72	91.75	3.39
50.00	11.42	64.00	6.97	78.00	4.69	92.00	3.37
50.25	11.31	64.25	6.92	78.25	4.66	92.25	3.36
50.50	11.20	64.50	6.86	78.50	4.63	92.50	3.34
50.75	11.09	64.75	6.81	78.75	4.60	92.75	3.32
51.00	10.98	65.00	6.76	79.00	4.58	93.00	3.30
51.25	10.87	65.25	6.71	79.25	4.55	93.25	3.28
51.50	10.77	65.50	6.66	79.50	4.52	93.50	3.27
51.75	10.66	65.75	6.60	79.75	4.49	93.75	3.25
52.00	10.56	66.00	6.56	80.00	4.46	94.00	3.23
52.25	10.46	66.25	6.51	80.25	4.43	94.25	3.21
52.50	10.36	66.50	6.46	80.50	4.41	94.50	3.20
52.75	10.26	66.75	6.41	80.75	4.38	94.75	3.18
53.00	10.17	67.00	6.36	81.00	4.35	95.00	3.16
53.25	10.07	67.25	6.31	81.25	4.33	95.25	3.15
53.50	9.98	67.50	6.27	81.50	4.30	95.50	3.13
53.75	9.88	67.75	6.22	81.75	4.27	95.75	3.11
54.00	9.79	68.00	6.18	82.00	4.25	96.00	3.10

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 60%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 7.82 93.8 Inches

BioInitiative ft. 585.00 7020.0 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
0.25	548229.17	10.25	326.13	20.25	83.56	30.25	37.44
0.50	137057.29	10.50	310.79	20.50	81.53	30.50	36.83
0.75	60914.35	10.75	296.50	20.75	79.58	30.75	36.24
1.00	34264.32	11.00	283.18	21.00	77.70	31.00	35.65
1.25	21929.17	11.25	270.73	21.25	75.88	31.25	35.09
1.50	15228.59	11.50	259.09	21.50	74.13	31.50	34.53
1.75	11188.35	11.75	248.18	21.75	72.43	31.75	33.99
2.00	8566.08	12.00	237.95	22.00	70.79	32.00	33.46
2.25	6768.26	12.25	228.33	22.25	69.21	32.25	32.94
2.50	5482.29	12.50	219.29	22.50	67.68	32.50	32.44
2.75	4530.82	12.75	210.78	22.75	66.20	32.75	31.95
3.00	3807.15	13.00	202.75	23.00	64.77	33.00	31.46
3.25	3243.96	13.25	195.17	23.25	63.39	33.25	30.99
3.50	2797.09	13.50	188.01	23.50	62.04	33.50	30.53
3.75	2436.57	13.75	181.23	23.75	60.75	33.75	30.08
4.00	2141.52	14.00	174.82	24.00	59.49	34.00	29.64
4.25	1896.99	14.25	168.74	24.25	58.27	34.25	29.21
4.50	1692.07	14.50	162.97	24.50	57.08	34.50	28.79
4.75	1518.64	14.75	157.49	24.75	55.94	34.75	28.37
5.00	1370.57	15.00	152.29	25.00	54.82	35.00	27.97
5.25	1243.15	15.25	147.33	25.25	53.74	35.25	27.58
5.50	1132.70	15.50	142.62	25.50	52.69	35.50	27.19
5.75	1036.35	15.75	138.13	25.75	51.68	35.75	26.81
6.00	951.79	16.00	133.85	26.00	50.69	36.00	26.44
6.25	877.17	16.25	129.76	26.25	49.73	36.25	26.08
6.50	810.99	16.50	125.86	26.50	48.79	36.50	25.72
6.75	752.03	16.75	122.13	26.75	47.88	36.75	25.37
7.00	699.27	17.00	118.56	27.00	47.00	37.00	25.03
7.25	651.88	17.25	115.15	27.25	46.14	37.25	24.69
7.50	609.14	17.50	111.88	27.50	45.31	37.50	24.37
7.75	570.48	17.75	108.75	27.75	44.50	37.75	24.04
8.00	535.38	18.00	105.75	28.00	43.70	38.00	23.73
8.25	503.42	18.25	102.88	28.25	42.93	38.25	23.42
8.50	474.25	18.50	100.11	28.50	42.18	38.50	23.12
8.75	447.53	18.75	97.46	28.75	41.45	38.75	22.82
9.00	423.02	19.00	94.92	29.00	40.74	39.00	22.53
9.25	400.46	19.25	92.47	29.25	40.05	39.25	22.24
9.50	379.66	19.50	90.11	29.50	39.37	39.50	21.96
9.75	360.44	19.75	87.84	29.75	38.71	39.75	21.69
10.00	342.64	20.00	85.66	30.00	38.07	40.00	21.42

Notes:

- Formula OET Bulletin 65 equation (3) modified to include the effects of time averaged output and % reflections  

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi \cdot R^2)$$
  - S = Power Density uW/cm<sup>2</sup>
  - EIRP = 1.64 \* ERP
  - pi() = 3.1459
  - R = Distance to device
  - TA = Time average
  - %Ref = Percent reflections
- 60 percent reflections is equivalent to OET Bulletin 65 equation (10)
- 100 percent reflections is equivalent to OET Bulletin 65 equation (6)
- Collector meter ERP RFLAN-C = 0.189 W, ZigBee = 0.057 W, GSM = 0.733 W per Edison SmartConnect Community Meeting, Montecito, CA dated February 10, 2010
- TPO 0.267 watts at 902.25 to 927.75 MHz from TCB Grant of Equipment Authorization (SK9AMI-4)
- Antenna Gain 2.2dBi at 914.74 MHz per ACS Certification FCC ID: SK9AMI-4 RFLAN & RFLAN-E ERP = 0.270 W

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

**Meters** 1 Collector Meter

Time Avg: 60%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 7.82

93.80 Inches

BioInitiative ft. 585.00

7020.00 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
40.25	21.15	54.25	11.64	68.25	7.36	82.25	5.06
40.50	20.89	54.50	11.54	68.50	7.30	82.50	5.03
40.75	20.63	54.75	11.43	68.75	7.25	82.75	5.00
41.00	20.38	55.00	11.33	69.00	7.20	83.00	4.97
41.25	20.14	55.25	11.22	69.25	7.15	83.25	4.94
41.50	19.90	55.50	11.12	69.50	7.09	83.50	4.91
41.75	19.66	55.75	11.02	69.75	7.04	83.75	4.89
42.00	19.42	56.00	10.93	70.00	6.99	84.00	4.86
42.25	19.20	56.25	10.83	70.25	6.94	84.25	4.83
42.50	18.97	56.50	10.73	70.50	6.89	84.50	4.80
42.75	18.75	56.75	10.64	70.75	6.85	84.75	4.77
43.00	18.53	57.00	10.55	71.00	6.80	85.00	4.74
43.25	18.32	57.25	10.45	71.25	6.75	85.25	4.71
43.50	18.11	57.50	10.36	71.50	6.70	85.50	4.69
43.75	17.90	57.75	10.27	71.75	6.66	85.75	4.66
44.00	17.70	58.00	10.19	72.00	6.61	86.00	4.63
44.25	17.50	58.25	10.10	72.25	6.56	86.25	4.61
44.50	17.30	58.50	10.01	72.50	6.52	86.50	4.58
44.75	17.11	58.75	9.93	72.75	6.47	86.75	4.55
45.00	16.92	59.00	9.84	73.00	6.43	87.00	4.53
45.25	16.73	59.25	9.76	73.25	6.39	87.25	4.50
45.50	16.55	59.50	9.68	73.50	6.34	87.50	4.48
45.75	16.37	59.75	9.60	73.75	6.30	87.75	4.45
46.00	16.19	60.00	9.52	74.00	6.26	88.00	4.42
46.25	16.02	60.25	9.44	74.25	6.22	88.25	4.40
46.50	15.85	60.50	9.36	74.50	6.17	88.50	4.37
46.75	15.68	60.75	9.28	74.75	6.13	88.75	4.35
47.00	15.51	61.00	9.21	75.00	6.09	89.00	4.33
47.25	15.35	61.25	9.13	75.25	6.05	89.25	4.30
47.50	15.19	61.50	9.06	75.50	6.01	89.50	4.28
47.75	15.03	61.75	8.99	75.75	5.97	89.75	4.25
48.00	14.87	62.00	8.91	76.00	5.93	90.00	4.23
48.25	14.72	62.25	8.84	76.25	5.89	90.25	4.21
48.50	14.57	62.50	8.77	76.50	5.85	90.50	4.18
48.75	14.42	62.75	8.70	76.75	5.82	90.75	4.16
49.00	14.27	63.00	8.63	77.00	5.78	91.00	4.14
49.25	14.13	63.25	8.56	77.25	5.74	91.25	4.12
49.50	13.98	63.50	8.50	77.50	5.70	91.50	4.09
49.75	13.84	63.75	8.43	77.75	5.67	91.75	4.07
50.00	13.71	64.00	8.37	78.00	5.63	92.00	4.05
50.25	13.57	64.25	8.30	78.25	5.60	92.25	4.03
50.50	13.44	64.50	8.24	78.50	5.56	92.50	4.00
50.75	13.30	64.75	8.17	78.75	5.53	92.75	3.98
51.00	13.17	65.00	8.11	79.00	5.49	93.00	3.96
51.25	13.05	65.25	8.05	79.25	5.46	93.25	3.94
51.50	12.92	65.50	7.99	79.50	5.42	93.50	3.92
51.75	12.79	65.75	7.93	79.75	5.39	93.75	3.90
52.00	12.67	66.00	7.87	80.00	5.35	94.00	3.88
52.25	12.55	66.25	7.81	80.25	5.32	94.25	3.86
52.50	12.43	66.50	7.75	80.50	5.29	94.50	3.84
52.75	12.31	66.75	7.69	80.75	5.25	94.75	3.82
53.00	12.20	67.00	7.63	81.00	5.22	95.00	3.80
53.25	12.08	67.25	7.58	81.25	5.19	95.25	3.78
53.50	11.97	67.50	7.52	81.50	5.16	95.50	3.76
53.75	11.86	67.75	7.46	81.75	5.13	95.75	3.74
54.00	11.75	68.00	7.41	82.00	5.10	96.00	3.72

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 70%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 8.44 101.3 Inches

BioInitiative ft. 632.00 7584.0 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
0.25	639600.70	10.25	380.49	20.25	97.49	30.25	43.69
0.50	159900.18	10.50	362.59	20.50	95.12	30.50	42.97
0.75	71066.74	10.75	345.92	20.75	92.84	30.75	42.28
1.00	39975.04	11.00	330.37	21.00	90.65	31.00	41.60
1.25	25584.03	11.25	315.85	21.25	88.53	31.25	40.93
1.50	17766.69	11.50	302.27	21.50	86.48	31.50	40.29
1.75	13053.08	11.75	289.54	21.75	84.50	31.75	39.66
2.00	9993.76	12.00	277.60	22.00	82.59	32.00	39.04
2.25	7896.30	12.25	266.39	22.25	80.75	32.25	38.44
2.50	6396.01	12.50	255.84	22.50	78.96	32.50	37.85
2.75	5285.96	12.75	245.91	22.75	77.24	32.75	37.27
3.00	4441.67	13.00	236.54	23.00	75.57	33.00	36.71
3.25	3784.62	13.25	227.70	23.25	73.95	33.25	36.16
3.50	3263.27	13.50	219.34	23.50	72.39	33.50	35.62
3.75	2842.67	13.75	211.44	23.75	70.87	33.75	35.09
4.00	2498.44	14.00	203.95	24.00	69.40	34.00	34.58
4.25	2213.15	14.25	196.86	24.25	67.98	34.25	34.08
4.50	1974.08	14.50	190.13	24.50	66.60	34.50	33.59
4.75	1771.75	14.75	183.74	24.75	65.26	34.75	33.10
5.00	1599.00	15.00	177.67	25.00	63.96	35.00	32.63
5.25	1450.34	15.25	171.89	25.25	62.70	35.25	32.17
5.50	1321.49	15.50	166.39	25.50	61.48	35.50	31.72
5.75	1209.08	15.75	161.15	25.75	60.29	35.75	31.28
6.00	1110.42	16.00	156.15	26.00	59.13	36.00	30.84
6.25	1023.36	16.25	151.38	26.25	58.01	36.25	30.42
6.50	946.15	16.50	146.83	26.50	56.92	36.50	30.01
6.75	877.37	16.75	142.48	26.75	55.87	36.75	29.60
7.00	815.82	17.00	138.32	27.00	54.84	37.00	29.20
7.25	760.52	17.25	134.34	27.25	53.83	37.25	28.81
7.50	710.67	17.50	130.53	27.50	52.86	37.50	28.43
7.75	665.56	17.75	126.88	27.75	51.91	37.75	28.05
8.00	624.61	18.00	123.38	28.00	50.99	38.00	27.68
8.25	587.33	18.25	120.02	28.25	50.09	38.25	27.32
8.50	553.29	18.50	116.80	28.50	49.22	38.50	26.97
8.75	522.12	18.75	113.71	28.75	48.36	38.75	26.62
9.00	493.52	19.00	110.73	29.00	47.53	39.00	26.28
9.25	467.20	19.25	107.88	29.25	46.72	39.25	25.95
9.50	442.94	19.50	105.13	29.50	45.94	39.50	25.62
9.75	420.51	19.75	102.48	29.75	45.17	39.75	25.30
10.00	399.75	20.00	99.94	30.00	44.42	40.00	24.98

Notes:

- Formula OET Bulletin 65 equation (3) modified to include the effects of time averaged output and % reflections  
 $S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi \cdot R^2)$   
 S = Power Density uW/cm<sup>2</sup>  
 EIRP = 1.64 \* ERP  
 pi() = 3.1459  
 R = Distance to device  
 TA = Time average  
 %Ref = Percent reflections
- 60 percent reflections is equivalent to OET Bulletin 65 equation (10)
- 100 percent reflections is equivalent to OET Bulletin 65 equation (6)
- Collector meter ERP RFLAN-C = 0.189 W, ZigBee = 0.057 W, GSM = 0.733 W per Edison SmartConnect Community Meeting, Montecito, CA dated February 10, 2010
- TPO 0.267 watts at 902.25 to 927.75 MHz from TCB Grant of Equipment Authorization (SK9AMI-4)
- Antenna Gain 2.2dBi at 914.74 MHz per ACS Certification FCC ID: SK9AMI-4 RFLAN & RFLAN-E ERP = 0.270 W

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 70%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 8.44

101.32 Inches

BioInitiative ft. 632.00

7584.00 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
40.25	24.68	54.25	13.58	68.25	8.58	82.25	5.91
40.50	24.37	54.50	13.46	68.50	8.52	82.50	5.87
40.75	24.07	54.75	13.34	68.75	8.46	82.75	5.84
41.00	23.78	55.00	13.21	69.00	8.40	83.00	5.80
41.25	23.49	55.25	13.10	69.25	8.34	83.25	5.77
41.50	23.21	55.50	12.98	69.50	8.28	83.50	5.73
41.75	22.93	55.75	12.86	69.75	8.22	83.75	5.70
42.00	22.66	56.00	12.75	70.00	8.16	84.00	5.67
42.25	22.39	56.25	12.63	70.25	8.10	84.25	5.63
42.50	22.13	56.50	12.52	70.50	8.04	84.50	5.60
42.75	21.87	56.75	12.41	70.75	7.99	84.75	5.57
43.00	21.62	57.00	12.30	71.00	7.93	85.00	5.53
43.25	21.37	57.25	12.20	71.25	7.87	85.25	5.50
43.50	21.13	57.50	12.09	71.50	7.82	85.50	5.47
43.75	20.88	57.75	11.99	71.75	7.77	85.75	5.44
44.00	20.65	58.00	11.88	72.00	7.71	86.00	5.40
44.25	20.42	58.25	11.78	72.25	7.66	86.25	5.37
44.50	20.19	58.50	11.68	72.50	7.61	86.50	5.34
44.75	19.96	58.75	11.58	72.75	7.55	86.75	5.31
45.00	19.74	59.00	11.48	73.00	7.50	87.00	5.28
45.25	19.52	59.25	11.39	73.25	7.45	87.25	5.25
45.50	19.31	59.50	11.29	73.50	7.40	87.50	5.22
45.75	19.10	59.75	11.20	73.75	7.35	87.75	5.19
46.00	18.89	60.00	11.10	74.00	7.30	88.00	5.16
46.25	18.69	60.25	11.01	74.25	7.25	88.25	5.13
46.50	18.49	60.50	10.92	74.50	7.20	88.50	5.10
46.75	18.29	60.75	10.83	74.75	7.15	88.75	5.08
47.00	18.10	61.00	10.74	75.00	7.11	89.00	5.05
47.25	17.91	61.25	10.66	75.25	7.06	89.25	5.02
47.50	17.72	61.50	10.57	75.50	7.01	89.50	4.99
47.75	17.53	61.75	10.48	75.75	6.97	89.75	4.96
48.00	17.35	62.00	10.40	76.00	6.92	90.00	4.94
48.25	17.17	62.25	10.32	76.25	6.88	90.25	4.91
48.50	16.99	62.50	10.23	76.50	6.83	90.50	4.88
48.75	16.82	62.75	10.15	76.75	6.79	90.75	4.85
49.00	16.65	63.00	10.07	77.00	6.74	91.00	4.83
49.25	16.48	63.25	9.99	77.25	6.70	91.25	4.80
49.50	16.31	63.50	9.91	77.50	6.66	91.50	4.77
49.75	16.15	63.75	9.84	77.75	6.61	91.75	4.75
50.00	15.99	64.00	9.76	78.00	6.57	92.00	4.72
50.25	15.83	64.25	9.68	78.25	6.53	92.25	4.70
50.50	15.67	64.50	9.61	78.50	6.49	92.50	4.67
50.75	15.52	64.75	9.53	78.75	6.45	92.75	4.65
51.00	15.37	65.00	9.46	79.00	6.41	93.00	4.62
51.25	15.22	65.25	9.39	79.25	6.36	93.25	4.60
51.50	15.07	65.50	9.32	79.50	6.32	93.50	4.57
51.75	14.93	65.75	9.25	79.75	6.29	93.75	4.55
52.00	14.78	66.00	9.18	80.00	6.25	94.00	4.52
52.25	14.64	66.25	9.11	80.25	6.21	94.25	4.50
52.50	14.50	66.50	9.04	80.50	6.17	94.50	4.48
52.75	14.37	66.75	8.97	80.75	6.13	94.75	4.45
53.00	14.23	67.00	8.91	81.00	6.09	95.00	4.43
53.25	14.10	67.25	8.84	81.25	6.06	95.25	4.41
53.50	13.97	67.50	8.77	81.50	6.02	95.50	4.38
53.75	13.84	67.75	8.71	81.75	5.98	95.75	4.36
54.00	13.71	68.00	8.65	82.00	5.95	96.00	4.34



# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 80%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 9.03 108.3 Inches

BioInitiative ft. 675.00 8100.0 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
0.25	730972.23	10.25	434.84	20.25	111.41	30.25	49.93
0.50	182743.06	10.50	414.38	20.50	108.71	30.50	49.11
0.75	81219.14	10.75	395.33	20.75	106.11	30.75	48.32
1.00	45685.76	11.00	377.57	21.00	103.60	31.00	47.54
1.25	29238.89	11.25	360.97	21.25	101.17	31.25	46.78
1.50	20304.78	11.50	345.45	21.50	98.83	31.50	46.04
1.75	14917.80	11.75	330.91	21.75	96.57	31.75	45.32
2.00	11421.44	12.00	317.26	22.00	94.39	32.00	44.62
2.25	9024.35	12.25	304.44	22.25	92.28	32.25	43.93
2.50	7309.72	12.50	292.39	22.50	90.24	32.50	43.25
2.75	6041.09	12.75	281.04	22.75	88.27	32.75	42.59
3.00	5076.20	13.00	270.33	23.00	86.36	33.00	41.95
3.25	4325.28	13.25	260.23	23.25	84.52	33.25	41.32
3.50	3729.45	13.50	250.68	23.50	82.73	33.50	40.71
3.75	3248.77	13.75	241.64	23.75	80.99	33.75	40.11
4.00	2855.36	14.00	233.09	24.00	79.32	34.00	39.52
4.25	2529.32	14.25	224.98	24.25	77.69	34.25	38.95
4.50	2256.09	14.50	217.29	24.50	76.11	34.50	38.38
4.75	2024.85	14.75	209.99	24.75	74.58	34.75	37.83
5.00	1827.43	15.00	203.05	25.00	73.10	35.00	37.29
5.25	1657.53	15.25	196.45	25.25	71.66	35.25	36.77
5.50	1510.27	15.50	190.16	25.50	70.26	35.50	36.25
5.75	1381.80	15.75	184.17	25.75	68.90	35.75	35.75
6.00	1269.05	16.00	178.46	26.00	67.58	36.00	35.25
6.25	1169.56	16.25	173.01	26.25	66.30	36.25	34.77
6.50	1081.32	16.50	167.81	26.50	65.06	36.50	34.29
6.75	1002.71	16.75	162.84	26.75	63.85	36.75	33.83
7.00	932.36	17.00	158.08	27.00	62.67	37.00	33.37
7.25	869.17	17.25	153.53	27.25	61.52	37.25	32.93
7.50	812.19	17.50	149.18	27.50	60.41	37.50	32.49
7.75	760.64	17.75	145.01	27.75	59.33	37.75	32.06
8.00	713.84	18.00	141.01	28.00	58.27	38.00	31.64
8.25	671.23	18.25	137.17	28.25	57.25	38.25	31.23
8.50	632.33	18.50	133.49	28.50	56.25	38.50	30.82
8.75	596.71	18.75	129.95	28.75	55.27	38.75	30.43
9.00	564.02	19.00	126.55	29.00	54.32	39.00	30.04
9.25	533.95	19.25	123.29	29.25	53.40	39.25	29.66
9.50	506.21	19.50	120.15	29.50	52.50	39.50	29.28
9.75	480.59	19.75	117.12	29.75	51.62	39.75	28.91
10.00	456.86	20.00	114.21	30.00	50.76	40.00	28.55

Notes:

- Formula OET Bulletin 65 equation (3) modified to include the effects of time averaged output and % reflections  

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi \cdot R^2)$$
  - S = Power Density uW/cm<sup>2</sup>
  - EIRP = 1.64 \* ERP
  - pi() = 3.1459
  - R = Distance to device
  - TA = Time average
  - %Ref = Percent reflections
- 60 percent reflections is equivalent to OET Bulletin 65 equation (10)
- 100 percent reflections is equivalent to OET Bulletin 65 equation (6)
- Collector meter ERP RFLAN-C = 0.189 W, ZigBee = 0.057 W, GSM = 0.733 W per Edison SmartConnect Community Meeting, Montecito, CA dated February 10, 2010
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- Antenna Gain 2.2dBi at 914.74 MHz per ACS Certification FCC ID: SK9AMI-4 RFLAN & RFLAN-E ERP = 0.270 W

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 80%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 9.03

108.31 Inches

BioInitiative ft. 675.00

8100.00 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
40.25	28.20	54.25	15.52	68.25	9.81	82.25	6.75
40.50	27.85	54.50	15.38	68.50	9.74	82.50	6.71
40.75	27.51	54.75	15.24	68.75	9.67	82.75	6.67
41.00	27.18	55.00	15.10	69.00	9.60	83.00	6.63
41.25	26.85	55.25	14.97	69.25	9.53	83.25	6.59
41.50	26.53	55.50	14.83	69.50	9.46	83.50	6.55
41.75	26.21	55.75	14.70	69.75	9.39	83.75	6.51
42.00	25.90	56.00	14.57	70.00	9.32	84.00	6.47
42.25	25.59	56.25	14.44	70.25	9.26	84.25	6.44
42.50	25.29	56.50	14.31	70.50	9.19	84.50	6.40
42.75	25.00	56.75	14.19	70.75	9.13	84.75	6.36
43.00	24.71	57.00	14.06	71.00	9.06	85.00	6.32
43.25	24.42	57.25	13.94	71.25	9.00	85.25	6.29
43.50	24.14	57.50	13.82	71.50	8.94	85.50	6.25
43.75	23.87	57.75	13.70	71.75	8.87	85.75	6.21
44.00	23.60	58.00	13.58	72.00	8.81	86.00	6.18
44.25	23.33	58.25	13.46	72.25	8.75	86.25	6.14
44.50	23.07	58.50	13.35	72.50	8.69	86.50	6.11
44.75	22.81	58.75	13.24	72.75	8.63	86.75	6.07
45.00	22.56	59.00	13.12	73.00	8.57	87.00	6.04
45.25	22.31	59.25	13.01	73.25	8.51	87.25	6.00
45.50	22.07	59.50	12.90	73.50	8.46	87.50	5.97
45.75	21.83	59.75	12.80	73.75	8.40	87.75	5.93
46.00	21.59	60.00	12.69	74.00	8.34	88.00	5.90
46.25	21.36	60.25	12.59	74.25	8.29	88.25	5.87
46.50	21.13	60.50	12.48	74.50	8.23	88.50	5.83
46.75	20.90	60.75	12.38	74.75	8.18	88.75	5.80
47.00	20.68	61.00	12.28	75.00	8.12	89.00	5.77
47.25	20.46	61.25	12.18	75.25	8.07	89.25	5.74
47.50	20.25	61.50	12.08	75.50	8.01	89.50	5.70
47.75	20.04	61.75	11.98	75.75	7.96	89.75	5.67
48.00	19.83	62.00	11.88	76.00	7.91	90.00	5.64
48.25	19.62	62.25	11.79	76.25	7.86	90.25	5.61
48.50	19.42	62.50	11.70	76.50	7.81	90.50	5.58
48.75	19.22	62.75	11.60	76.75	7.76	90.75	5.55
49.00	19.03	63.00	11.51	77.00	7.71	91.00	5.52
49.25	18.84	63.25	11.42	77.25	7.66	91.25	5.49
49.50	18.65	63.50	11.33	77.50	7.61	91.50	5.46
49.75	18.46	63.75	11.24	77.75	7.56	91.75	5.43
50.00	18.27	64.00	11.15	78.00	7.51	92.00	5.40
50.25	18.09	64.25	11.07	78.25	7.46	92.25	5.37
50.50	17.91	64.50	10.98	78.50	7.41	92.50	5.34
50.75	17.74	64.75	10.90	78.75	7.37	92.75	5.31
51.00	17.56	65.00	10.81	79.00	7.32	93.00	5.28
51.25	17.39	65.25	10.73	79.25	7.27	93.25	5.25
51.50	17.23	65.50	10.65	79.50	7.23	93.50	5.23
51.75	17.06	65.75	10.57	79.75	7.18	93.75	5.20
52.00	16.90	66.00	10.49	80.00	7.14	94.00	5.17
52.25	16.73	66.25	10.41	80.25	7.09	94.25	5.14
52.50	16.58	66.50	10.33	80.50	7.05	94.50	5.12
52.75	16.42	66.75	10.25	80.75	7.01	94.75	5.09
53.00	16.26	67.00	10.18	81.00	6.96	95.00	5.06
53.25	16.11	67.25	10.10	81.25	6.92	95.25	5.04
53.50	15.96	67.50	10.03	81.50	6.88	95.50	5.01
53.75	15.81	67.75	9.95	81.75	6.84	95.75	4.98
54.00	15.67	68.00	9.88	82.00	6.79	96.00	4.96

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 90%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 9.57 114.9 Inches

BioInitiative ft. 718.00 8616.0 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
0.25	822343.76	10.25	489.20	20.25	125.34	30.25	56.17
0.50	205585.94	10.50	466.18	20.50	122.30	30.50	55.25
0.75	91371.53	10.75	444.75	20.75	119.37	30.75	54.36
1.00	51396.49	11.00	424.76	21.00	116.55	31.00	53.48
1.25	32893.75	11.25	406.10	21.25	113.82	31.25	52.63
1.50	22842.88	11.50	388.63	21.50	111.19	31.50	51.80
1.75	16782.53	11.75	372.27	21.75	108.65	31.75	50.99
2.00	12849.12	12.00	356.92	22.00	106.19	32.00	50.19
2.25	10152.39	12.25	342.50	22.25	103.82	32.25	49.42
2.50	8223.44	12.50	328.94	22.50	101.52	32.50	48.66
2.75	6796.23	12.75	316.16	22.75	99.30	32.75	47.92
3.00	5710.72	13.00	304.12	23.00	97.16	33.00	47.20
3.25	4865.94	13.25	292.75	23.25	95.08	33.25	46.49
3.50	4195.63	13.50	282.01	23.50	93.07	33.50	45.80
3.75	3654.86	13.75	271.85	23.75	91.12	33.75	45.12
4.00	3212.28	14.00	262.23	24.00	89.23	34.00	44.46
4.25	2845.48	14.25	253.11	24.25	87.40	34.25	43.81
4.50	2538.10	14.50	244.45	24.50	85.63	34.50	43.18
4.75	2277.96	14.75	236.24	24.75	83.90	34.75	42.56
5.00	2055.86	15.00	228.43	25.00	82.23	35.00	41.96
5.25	1864.73	15.25	221.00	25.25	80.61	35.25	41.36
5.50	1699.06	15.50	213.93	25.50	79.04	35.50	40.78
5.75	1554.53	15.75	207.19	25.75	77.51	35.75	40.21
6.00	1427.68	16.00	200.77	26.00	76.03	36.00	39.66
6.25	1315.75	16.25	194.64	26.25	74.59	36.25	39.11
6.50	1216.48	16.50	188.78	26.50	73.19	36.50	38.58
6.75	1128.04	16.75	183.19	26.75	71.83	36.75	38.06
7.00	1048.91	17.00	177.84	27.00	70.50	37.00	37.54
7.25	977.82	17.25	172.73	27.25	69.22	37.25	37.04
7.50	913.72	17.50	167.83	27.50	67.96	37.50	36.55
7.75	855.72	17.75	163.13	27.75	66.74	37.75	36.07
8.00	803.07	18.00	158.63	28.00	65.56	38.00	35.59
8.25	755.14	18.25	154.31	28.25	64.40	38.25	35.13
8.50	711.37	18.50	150.17	28.50	63.28	38.50	34.67
8.75	671.30	18.75	146.19	28.75	62.18	38.75	34.23
9.00	634.52	19.00	142.37	29.00	61.11	39.00	33.79
9.25	600.69	19.25	138.70	29.25	60.07	39.25	33.36
9.50	569.49	19.50	135.16	29.50	59.06	39.50	32.94
9.75	540.66	19.75	131.76	29.75	58.07	39.75	32.53
10.00	513.96	20.00	128.49	30.00	57.11	40.00	32.12

Notes:

- Formula OET Bulletin 65 equation (3) modified to include the effects of time averaged output and % reflections  

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi i) R^2$$

$$S = \text{Power Density uW/cm}^2$$

$$\text{EIRP} = 1.64 \cdot \text{ERP}$$

$$\pi() = 3.1459$$

$$R = \text{Distance to device}$$

$$\text{TA} = \text{Time average}$$

$$\% \text{Ref} = \text{Percent reflections}$$
- 60 percent reflections is equivalent to OET Bulletin 65 equation (10)
- 100 percent reflections is equivalent to OET Bulletin 65 equation (6)
- Collector meter ERP RFLAN-C = 0.189 W, ZigBee = 0.057 W, GSM = 0.733 W per Edison SmartConnect Community Meeting, Montecito, CA dated February 10, 2010
- TPO 0.267 watts at 902.25 to 927.75 MHz from TCB Grant of Equipment Authorization (SK9AMI-4)
- Antenna Gain 2.2dBi at 914.74 MHz per ACS Certification FCC ID: SK9AMI-4 RFLAN & RFLAN-E ERP = 0.270 W

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 90%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 9.57

114.89 Inches

BioInitiative ft. 718.00

8616.00 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
40.25	31.73	54.25	17.46	68.25	11.03	82.25	7.60
40.50	31.33	54.50	17.30	68.50	10.95	82.50	7.55
40.75	30.95	54.75	17.15	68.75	10.87	82.75	7.51
41.00	30.57	55.00	16.99	69.00	10.80	83.00	7.46
41.25	30.21	55.25	16.84	69.25	10.72	83.25	7.42
41.50	29.84	55.50	16.69	69.50	10.64	83.50	7.37
41.75	29.49	55.75	16.54	69.75	10.56	83.75	7.33
42.00	29.14	56.00	16.39	70.00	10.49	84.00	7.28
42.25	28.79	56.25	16.24	70.25	10.41	84.25	7.24
42.50	28.45	56.50	16.10	70.50	10.34	84.50	7.20
42.75	28.12	56.75	15.96	70.75	10.27	84.75	7.16
43.00	27.80	57.00	15.82	71.00	10.20	85.00	7.11
43.25	27.48	57.25	15.68	71.25	10.12	85.25	7.07
43.50	27.16	57.50	15.55	71.50	10.05	85.50	7.03
43.75	26.85	57.75	15.41	71.75	9.98	85.75	6.99
44.00	26.55	58.00	15.28	72.00	9.91	86.00	6.95
44.25	26.25	58.25	15.15	72.25	9.85	86.25	6.91
44.50	25.95	58.50	15.02	72.50	9.78	86.50	6.87
44.75	25.67	58.75	14.89	72.75	9.71	86.75	6.83
45.00	25.38	59.00	14.76	73.00	9.64	87.00	6.79
45.25	25.10	59.25	14.64	73.25	9.58	87.25	6.75
45.50	24.83	59.50	14.52	73.50	9.51	87.50	6.71
45.75	24.56	59.75	14.40	73.75	9.45	87.75	6.67
46.00	24.29	60.00	14.28	74.00	9.39	88.00	6.64
46.25	24.03	60.25	14.16	74.25	9.32	88.25	6.60
46.50	23.77	60.50	14.04	74.50	9.26	88.50	6.56
46.75	23.52	60.75	13.93	74.75	9.20	88.75	6.53
47.00	23.27	61.00	13.81	75.00	9.14	89.00	6.49
47.25	23.02	61.25	13.70	75.25	9.08	89.25	6.45
47.50	22.78	61.50	13.59	75.50	9.02	89.50	6.42
47.75	22.54	61.75	13.48	75.75	8.96	89.75	6.38
48.00	22.31	62.00	13.37	76.00	8.90	90.00	6.35
48.25	22.08	62.25	13.26	76.25	8.84	90.25	6.31
48.50	21.85	62.50	13.16	76.50	8.78	90.50	6.28
48.75	21.63	62.75	13.05	76.75	8.73	90.75	6.24
49.00	21.41	63.00	12.95	77.00	8.67	91.00	6.21
49.25	21.19	63.25	12.85	77.25	8.61	91.25	6.17
49.50	20.98	63.50	12.75	77.50	8.56	91.50	6.14
49.75	20.77	63.75	12.65	77.75	8.50	91.75	6.11
50.00	20.56	64.00	12.55	78.00	8.45	92.00	6.07
50.25	20.35	64.25	12.45	78.25	8.39	92.25	6.04
50.50	20.15	64.50	12.35	78.50	8.34	92.50	6.01
50.75	19.96	64.75	12.26	78.75	8.29	92.75	5.97
51.00	19.76	65.00	12.16	79.00	8.24	93.00	5.94
51.25	19.57	65.25	12.07	79.25	8.18	93.25	5.91
51.50	19.38	65.50	11.98	79.50	8.13	93.50	5.88
51.75	19.19	65.75	11.89	79.75	8.08	93.75	5.85
52.00	19.01	66.00	11.80	80.00	8.03	94.00	5.82
52.25	18.83	66.25	11.71	80.25	7.98	94.25	5.79
52.50	18.65	66.50	11.62	80.50	7.93	94.50	5.76
52.75	18.47	66.75	11.54	80.75	7.88	94.75	5.72
53.00	18.30	67.00	11.45	81.00	7.83	95.00	5.69
53.25	18.13	67.25	11.36	81.25	7.79	95.25	5.67
53.50	17.96	67.50	11.28	81.50	7.74	95.50	5.64
53.75	17.79	67.75	11.20	81.75	7.69	95.75	5.61
54.00	17.63	68.00	11.12	82.00	7.64	96.00	5.58

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 100%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 10.09 121.1 Inches

BioInitiative ft. 755.00 9060.0 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
0.25	913715.29	10.25	543.55	20.25	139.26	30.25	62.41
0.50	228428.82	10.50	517.98	20.50	135.89	30.50	61.39
0.75	101523.92	10.75	494.17	20.75	132.63	30.75	60.39
1.00	57107.21	11.00	471.96	21.00	129.49	31.00	59.42
1.25	36548.61	11.25	451.22	21.25	126.47	31.25	58.48
1.50	25380.98	11.50	431.81	21.50	123.54	31.50	57.55
1.75	18647.25	11.75	413.63	21.75	120.72	31.75	56.65
2.00	14276.80	12.00	396.58	22.00	117.99	32.00	55.77
2.25	11280.44	12.25	380.56	22.25	115.35	32.25	54.91
2.50	9137.15	12.50	365.49	22.50	112.80	32.50	54.07
2.75	7551.37	12.75	351.29	22.75	110.34	32.75	53.24
3.00	6345.25	13.00	337.91	23.00	107.95	33.00	52.44
3.25	5406.60	13.25	325.28	23.25	105.64	33.25	51.65
3.50	4661.81	13.50	313.35	23.50	103.41	33.50	50.89
3.75	4060.96	13.75	302.05	23.75	101.24	33.75	50.14
4.00	3569.20	14.00	291.36	24.00	99.14	34.00	49.40
4.25	3161.64	14.25	281.23	24.25	97.11	34.25	48.68
4.50	2820.11	14.50	271.62	24.50	95.14	34.50	47.98
4.75	2531.07	14.75	262.49	24.75	93.23	34.75	47.29
5.00	2284.29	15.00	253.81	25.00	91.37	35.00	46.62
5.25	2071.92	15.25	245.56	25.25	89.57	35.25	45.96
5.50	1887.84	15.50	237.70	25.50	87.82	35.50	45.31
5.75	1727.25	15.75	230.21	25.75	86.13	35.75	44.68
6.00	1586.31	16.00	223.08	26.00	84.48	36.00	44.06
6.25	1461.94	16.25	216.26	26.25	82.88	36.25	43.46
6.50	1351.65	16.50	209.76	26.50	81.32	36.50	42.87
6.75	1253.38	16.75	203.55	26.75	79.81	36.75	42.28
7.00	1165.45	17.00	197.60	27.00	78.34	37.00	41.71
7.25	1086.46	17.25	191.92	27.25	76.91	37.25	41.16
7.50	1015.24	17.50	186.47	27.50	75.51	37.50	40.61
7.75	950.80	17.75	181.26	27.75	74.16	37.75	40.07
8.00	892.30	18.00	176.26	28.00	72.84	38.00	39.55
8.25	839.04	18.25	171.46	28.25	71.56	38.25	39.03
8.50	790.41	18.50	166.86	28.50	70.31	38.50	38.53
8.75	745.89	18.75	162.44	28.75	69.09	38.75	38.03
9.00	705.03	19.00	158.19	29.00	67.90	39.00	37.55
9.25	667.43	19.25	154.11	29.25	66.75	39.25	37.07
9.50	632.77	19.50	150.18	29.50	65.62	39.50	36.60
9.75	600.73	19.75	146.41	29.75	64.52	39.75	36.14
10.00	571.07	20.00	142.77	30.00	63.45	40.00	35.69

Notes:

- Formula OET Bulletin 65 equation (3) modified to include the effects of time averaged output and % reflections  

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi \cdot R^2)$$
  - S = Power Density uW/cm<sup>2</sup>
  - EIRP = 1.64 \* ERP
  - pi() = 3.1459
  - R = Distance to device
  - TA = Time average
  - %Ref = Percent reflections
- 60 percent reflections is equivalent to OET Bulletin 65 equation (10)
- 100 percent reflections is equivalent to OET Bulletin 65 equation (6)
- Collector meter ERP RFLAN-C = 0.189 W, ZigBee = 0.057 W, GSM = 0.733 W per Edison SmartConnect Community Meeting, Montecito, CA dated February 10, 2010
- TPO 0.267 watts at 902.25 to 927.75 MHz from TCB Grant of Equipment Authorization (SK9AMI-4)
- Antenna Gain 2.2dBi at 914.74 MHz per ACS Certification FCC ID: SK9AMI-4 RFLAN & RFLAN-E ERP = 0.270 W

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 2000% reflections)

Meters 1 Collector Meter

Time Avg: 100%

% Reflection 2000%

Distance where limits are exceeded

FCC ft. 10.09 121.10 Inches

BioInitiative ft. 755.00 9060.00 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
40.25	35.25	54.25	19.40	68.25	12.26	82.25	8.44
40.50	34.82	54.50	19.23	68.50	12.17	82.50	8.39
40.75	34.39	54.75	19.05	68.75	12.08	82.75	8.34
41.00	33.97	55.00	18.88	69.00	11.99	83.00	8.29
41.25	33.56	55.25	18.71	69.25	11.91	83.25	8.24
41.50	33.16	55.50	18.54	69.50	11.82	83.50	8.19
41.75	32.76	55.75	18.37	69.75	11.74	83.75	8.14
42.00	32.37	56.00	18.21	70.00	11.65	84.00	8.09
42.25	31.99	56.25	18.05	70.25	11.57	84.25	8.05
42.50	31.62	56.50	17.89	70.50	11.49	84.50	8.00
42.75	31.25	56.75	17.73	70.75	11.41	84.75	7.95
43.00	30.89	57.00	17.58	71.00	11.33	85.00	7.90
43.25	30.53	57.25	17.42	71.25	11.25	85.25	7.86
43.50	30.18	57.50	17.27	71.50	11.17	85.50	7.81
43.75	29.84	57.75	17.12	71.75	11.09	85.75	7.77
44.00	29.50	58.00	16.98	72.00	11.02	86.00	7.72
44.25	29.17	58.25	16.83	72.25	10.94	86.25	7.68
44.50	28.84	58.50	16.69	72.50	10.86	86.50	7.63
44.75	28.52	58.75	16.55	72.75	10.79	86.75	7.59
45.00	28.20	59.00	16.41	73.00	10.72	87.00	7.54
45.25	27.89	59.25	16.27	73.25	10.64	87.25	7.50
45.50	27.58	59.50	16.13	73.50	10.57	87.50	7.46
45.75	27.28	59.75	16.00	73.75	10.50	87.75	7.42
46.00	26.99	60.00	15.86	74.00	10.43	88.00	7.37
46.25	26.70	60.25	15.73	74.25	10.36	88.25	7.33
46.50	26.41	60.50	15.60	74.50	10.29	88.50	7.29
46.75	26.13	60.75	15.47	74.75	10.22	88.75	7.25
47.00	25.85	61.00	15.35	75.00	10.15	89.00	7.21
47.25	25.58	61.25	15.22	75.25	10.09	89.25	7.17
47.50	25.31	61.50	15.10	75.50	10.02	89.50	7.13
47.75	25.05	61.75	14.98	75.75	9.95	89.75	7.09
48.00	24.79	62.00	14.86	76.00	9.89	90.00	7.05
48.25	24.53	62.25	14.74	76.25	9.82	90.25	7.01
48.50	24.28	62.50	14.62	76.50	9.76	90.50	6.97
48.75	24.03	62.75	14.50	76.75	9.69	90.75	6.93
49.00	23.78	63.00	14.39	77.00	9.63	91.00	6.90
49.25	23.54	63.25	14.27	77.25	9.57	91.25	6.86
49.50	23.31	63.50	14.16	77.50	9.51	91.50	6.82
49.75	23.07	63.75	14.05	77.75	9.45	91.75	6.78
50.00	22.84	64.00	13.94	78.00	9.39	92.00	6.75
50.25	22.62	64.25	13.83	78.25	9.33	92.25	6.71
50.50	22.39	64.50	13.73	78.50	9.27	92.50	6.67
50.75	22.17	64.75	13.62	78.75	9.21	92.75	6.64
51.00	21.96	65.00	13.52	79.00	9.15	93.00	6.60
51.25	21.74	65.25	13.41	79.25	9.09	93.25	6.57
51.50	21.53	65.50	13.31	79.50	9.04	93.50	6.53
51.75	21.32	65.75	13.21	79.75	8.98	93.75	6.50
52.00	21.12	66.00	13.11	80.00	8.92	94.00	6.46
52.25	20.92	66.25	13.01	80.25	8.87	94.25	6.43
52.50	20.72	66.50	12.91	80.50	8.81	94.50	6.39
52.75	20.52	66.75	12.82	80.75	8.76	94.75	6.36
53.00	20.33	67.00	12.72	81.00	8.70	95.00	6.33
53.25	20.14	67.25	12.63	81.25	8.65	95.25	6.29
53.50	19.95	67.50	12.53	81.50	8.60	95.50	6.26
53.75	19.77	67.75	12.44	81.75	8.55	95.75	6.23
54.00	19.58	68.00	12.35	82.00	8.49	96.00	6.20