

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 1%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 0.53 6.3 Inches

BioInitiative ft. 39.50 474.0 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	2507.02	10.25	1.49	20.25	0.38	30.25	0.17
0.50	626.75	10.50	1.42	20.50	0.37	30.50	0.17
0.75	278.56	10.75	1.36	20.75	0.36	30.75	0.17
1.00	156.69	11.00	1.29	21.00	0.36	31.00	0.16
1.25	100.28	11.25	1.24	21.25	0.35	31.25	0.16
1.50	69.64	11.50	1.18	21.50	0.34	31.50	0.16
1.75	51.16	11.75	1.13	21.75	0.33	31.75	0.16
2.00	39.17	12.00	1.09	22.00	0.32	32.00	0.15
2.25	30.95	12.25	1.04	22.25	0.32	32.25	0.15
2.50	25.07	12.50	1.00	22.50	0.31	32.50	0.15
2.75	20.72	12.75	0.96	22.75	0.30	32.75	0.15
3.00	17.41	13.00	0.93	23.00	0.30	33.00	0.14
3.25	14.83	13.25	0.89	23.25	0.29	33.25	0.14
3.50	12.79	13.50	0.86	23.50	0.28	33.50	0.14
3.75	11.14	13.75	0.83	23.75	0.28	33.75	0.14
4.00	9.79	14.00	0.80	24.00	0.27	34.00	0.14
4.25	8.67	14.25	0.77	24.25	0.27	34.25	0.13
4.50	7.74	14.50	0.75	24.50	0.26	34.50	0.13
4.75	6.94	14.75	0.72	24.75	0.26	34.75	0.13
5.00	6.27	15.00	0.70	25.00	0.25	35.00	0.13
5.25	5.68	15.25	0.67	25.25	0.25	35.25	0.13
5.50	5.18	15.50	0.65	25.50	0.24	35.50	0.12
5.75	4.74	15.75	0.63	25.75	0.24	35.75	0.12
6.00	4.35	16.00	0.61	26.00	0.23	36.00	0.12
6.25	4.01	16.25	0.59	26.25	0.23	36.25	0.12
6.50	3.71	16.50	0.58	26.50	0.22	36.50	0.12
6.75	3.44	16.75	0.56	26.75	0.22	36.75	0.12
7.00	3.20	17.00	0.54	27.00	0.21	37.00	0.11
7.25	2.98	17.25	0.53	27.25	0.21	37.25	0.11
7.50	2.79	17.50	0.51	27.50	0.21	37.50	0.11
7.75	2.61	17.75	0.50	27.75	0.20	37.75	0.11
8.00	2.45	18.00	0.48	28.00	0.20	38.00	0.11
8.25	2.30	18.25	0.47	28.25	0.20	38.25	0.11
8.50	2.17	18.50	0.46	28.50	0.19	38.50	0.11
8.75	2.05	18.75	0.45	28.75	0.19	38.75	0.10
9.00	1.93	19.00	0.43	29.00	0.19	39.00	0.10
9.25	1.83	19.25	0.42	29.25	0.18	39.25	0.10
9.50	1.74	19.50	0.41	29.50	0.18	39.50	0.10
9.75	1.65	19.75	0.40	29.75	0.18	39.75	0.10
10.00	1.57	20.00	0.39	30.00	0.17	40.00	0.10

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 – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 1%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 0.53

6.34 Inches

BioInitiative ft. 39.50

474.00 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	0.10	54.25	0.05	68.25	0.03	82.25	0.02
40.50	0.10	54.50	0.05	68.50	0.03	82.50	0.02
40.75	0.09	54.75	0.05	68.75	0.03	82.75	0.02
41.00	0.09	55.00	0.05	69.00	0.03	83.00	0.02
41.25	0.09	55.25	0.05	69.25	0.03	83.25	0.02
41.50	0.09	55.50	0.05	69.50	0.03	83.50	0.02
41.75	0.09	55.75	0.05	69.75	0.03	83.75	0.02
42.00	0.09	56.00	0.05	70.00	0.03	84.00	0.02
42.25	0.09	56.25	0.05	70.25	0.03	84.25	0.02
42.50	0.09	56.50	0.05	70.50	0.03	84.50	0.02
42.75	0.09	56.75	0.05	70.75	0.03	84.75	0.02
43.00	0.08	57.00	0.05	71.00	0.03	85.00	0.02
43.25	0.08	57.25	0.05	71.25	0.03	85.25	0.02
43.50	0.08	57.50	0.05	71.50	0.03	85.50	0.02
43.75	0.08	57.75	0.05	71.75	0.03	85.75	0.02
44.00	0.08	58.00	0.05	72.00	0.03	86.00	0.02
44.25	0.08	58.25	0.05	72.25	0.03	86.25	0.02
44.50	0.08	58.50	0.05	72.50	0.03	86.50	0.02
44.75	0.08	58.75	0.05	72.75	0.03	86.75	0.02
45.00	0.08	59.00	0.05	73.00	0.03	87.00	0.02
45.25	0.08	59.25	0.04	73.25	0.03	87.25	0.02
45.50	0.08	59.50	0.04	73.50	0.03	87.50	0.02
45.75	0.07	59.75	0.04	73.75	0.03	87.75	0.02
46.00	0.07	60.00	0.04	74.00	0.03	88.00	0.02
46.25	0.07	60.25	0.04	74.25	0.03	88.25	0.02
46.50	0.07	60.50	0.04	74.50	0.03	88.50	0.02
46.75	0.07	60.75	0.04	74.75	0.03	88.75	0.02
47.00	0.07	61.00	0.04	75.00	0.03	89.00	0.02
47.25	0.07	61.25	0.04	75.25	0.03	89.25	0.02
47.50	0.07	61.50	0.04	75.50	0.03	89.50	0.02
47.75	0.07	61.75	0.04	75.75	0.03	89.75	0.02
48.00	0.07	62.00	0.04	76.00	0.03	90.00	0.02
48.25	0.07	62.25	0.04	76.25	0.03	90.25	0.02
48.50	0.07	62.50	0.04	76.50	0.03	90.50	0.02
48.75	0.07	62.75	0.04	76.75	0.03	90.75	0.02
49.00	0.07	63.00	0.04	77.00	0.03	91.00	0.02
49.25	0.06	63.25	0.04	77.25	0.03	91.25	0.02
49.50	0.06	63.50	0.04	77.50	0.03	91.50	0.02
49.75	0.06	63.75	0.04	77.75	0.03	91.75	0.02
50.00	0.06	64.00	0.04	78.00	0.03	92.00	0.02
50.25	0.06	64.25	0.04	78.25	0.03	92.25	0.02
50.50	0.06	64.50	0.04	78.50	0.03	92.50	0.02
50.75	0.06	64.75	0.04	78.75	0.03	92.75	0.02
51.00	0.06	65.00	0.04	79.00	0.03	93.00	0.02
51.25	0.06	65.25	0.04	79.25	0.02	93.25	0.02
51.50	0.06	65.50	0.04	79.50	0.02	93.50	0.02
51.75	0.06	65.75	0.04	79.75	0.02	93.75	0.02
52.00	0.06	66.00	0.04	80.00	0.02	94.00	0.02
52.25	0.06	66.25	0.04	80.25	0.02	94.25	0.02
52.50	0.06	66.50	0.04	80.50	0.02	94.50	0.02
52.75	0.06	66.75	0.04	80.75	0.02	94.75	0.02
53.00	0.06	67.00	0.03	81.00	0.02	95.00	0.02
53.25	0.06	67.25	0.03	81.25	0.02	95.25	0.02
53.50	0.05	67.50	0.03	81.50	0.02	95.50	0.02
53.75	0.05	67.75	0.03	81.75	0.02	95.75	0.02
54.00	0.05	68.00	0.03	82.00	0.02	96.00	0.02

Table 11 – 1%

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 1000% reflections)

**Meters** 1 Collector Meter

Time Avg: 10%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 1.67 20.1 Inches

BioInitiative ft. 125.00 1500.0 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	25070.19	10.25	14.91	20.25	3.82	30.25	1.71
0.50	6267.55	10.50	14.21	20.50	3.73	30.50	1.68
0.75	2785.58	10.75	13.56	20.75	3.64	30.75	1.66
1.00	1566.89	11.00	12.95	21.00	3.55	31.00	1.63
1.25	1002.81	11.25	12.38	21.25	3.47	31.25	1.60
1.50	696.39	11.50	11.85	21.50	3.39	31.50	1.58
1.75	511.64	11.75	11.35	21.75	3.31	31.75	1.55
2.00	391.72	12.00	10.88	22.00	3.24	32.00	1.53
2.25	309.51	12.25	10.44	22.25	3.17	32.25	1.51
2.50	250.70	12.50	10.03	22.50	3.10	32.50	1.48
2.75	207.19	12.75	9.64	22.75	3.03	32.75	1.46
3.00	174.10	13.00	9.27	23.00	2.96	33.00	1.44
3.25	148.34	13.25	8.92	23.25	2.90	33.25	1.42
3.50	127.91	13.50	8.60	23.50	2.84	33.50	1.40
3.75	111.42	13.75	8.29	23.75	2.78	33.75	1.38
4.00	97.93	14.00	7.99	24.00	2.72	34.00	1.36
4.25	86.75	14.25	7.72	24.25	2.66	34.25	1.34
4.50	77.38	14.50	7.45	24.50	2.61	34.50	1.32
4.75	69.45	14.75	7.20	24.75	2.56	34.75	1.30
5.00	62.68	15.00	6.96	25.00	2.51	35.00	1.28
5.25	56.85	15.25	6.74	25.25	2.46	35.25	1.26
5.50	51.80	15.50	6.52	25.50	2.41	35.50	1.24
5.75	47.39	15.75	6.32	25.75	2.36	35.75	1.23
6.00	43.52	16.00	6.12	26.00	2.32	36.00	1.21
6.25	40.11	16.25	5.93	26.25	2.27	36.25	1.19
6.50	37.09	16.50	5.76	26.50	2.23	36.50	1.18
6.75	34.39	16.75	5.58	26.75	2.19	36.75	1.16
7.00	31.98	17.00	5.42	27.00	2.15	37.00	1.14
7.25	29.81	17.25	5.27	27.25	2.11	37.25	1.13
7.50	27.86	17.50	5.12	27.50	2.07	37.50	1.11
7.75	26.09	17.75	4.97	27.75	2.03	37.75	1.10
8.00	24.48	18.00	4.84	28.00	2.00	38.00	1.09
8.25	23.02	18.25	4.70	28.25	1.96	38.25	1.07
8.50	21.69	18.50	4.58	28.50	1.93	38.50	1.06
8.75	20.47	18.75	4.46	28.75	1.90	38.75	1.04
9.00	19.34	19.00	4.34	29.00	1.86	39.00	1.03
9.25	18.31	19.25	4.23	29.25	1.83	39.25	1.02
9.50	17.36	19.50	4.12	29.50	1.80	39.50	1.00
9.75	16.48	19.75	4.02	29.75	1.77	39.75	0.99
10.00	15.67	20.00	3.92	30.00	1.74	40.00	0.98

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)
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# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 10%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 1.67

20.06 Inches

BioInitiative ft. 125.00

1500.00 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	0.97	54.25	0.53	68.25	0.34	82.25	0.23
40.50	0.96	54.50	0.53	68.50	0.33	82.50	0.23
40.75	0.94	54.75	0.52	68.75	0.33	82.75	0.23
41.00	0.93	55.00	0.52	69.00	0.33	83.00	0.23
41.25	0.92	55.25	0.51	69.25	0.33	83.25	0.23
41.50	0.91	55.50	0.51	69.50	0.32	83.50	0.22
41.75	0.90	55.75	0.50	69.75	0.32	83.75	0.22
42.00	0.89	56.00	0.50	70.00	0.32	84.00	0.22
42.25	0.88	56.25	0.50	70.25	0.32	84.25	0.22
42.50	0.87	56.50	0.49	70.50	0.32	84.50	0.22
42.75	0.86	56.75	0.49	70.75	0.31	84.75	0.22
43.00	0.85	57.00	0.48	71.00	0.31	85.00	0.22
43.25	0.84	57.25	0.48	71.25	0.31	85.25	0.22
43.50	0.83	57.50	0.47	71.50	0.31	85.50	0.21
43.75	0.82	57.75	0.47	71.75	0.30	85.75	0.21
44.00	0.81	58.00	0.47	72.00	0.30	86.00	0.21
44.25	0.80	58.25	0.46	72.25	0.30	86.25	0.21
44.50	0.79	58.50	0.46	72.50	0.30	86.50	0.21
44.75	0.78	58.75	0.45	72.75	0.30	86.75	0.21
45.00	0.77	59.00	0.45	73.00	0.29	87.00	0.21
45.25	0.77	59.25	0.45	73.25	0.29	87.25	0.21
45.50	0.76	59.50	0.44	73.50	0.29	87.50	0.20
45.75	0.75	59.75	0.44	73.75	0.29	87.75	0.20
46.00	0.74	60.00	0.44	74.00	0.29	88.00	0.20
46.25	0.73	60.25	0.43	74.25	0.28	88.25	0.20
46.50	0.72	60.50	0.43	74.50	0.28	88.50	0.20
46.75	0.72	60.75	0.42	74.75	0.28	88.75	0.20
47.00	0.71	61.00	0.42	75.00	0.28	89.00	0.20
47.25	0.70	61.25	0.42	75.25	0.28	89.25	0.20
47.50	0.69	61.50	0.41	75.50	0.27	89.50	0.20
47.75	0.69	61.75	0.41	75.75	0.27	89.75	0.19
48.00	0.68	62.00	0.41	76.00	0.27	90.00	0.19
48.25	0.67	62.25	0.40	76.25	0.27	90.25	0.19
48.50	0.67	62.50	0.40	76.50	0.27	90.50	0.19
48.75	0.66	62.75	0.40	76.75	0.27	90.75	0.19
49.00	0.65	63.00	0.39	77.00	0.26	91.00	0.19
49.25	0.65	63.25	0.39	77.25	0.26	91.25	0.19
49.50	0.64	63.50	0.39	77.50	0.26	91.50	0.19
49.75	0.63	63.75	0.39	77.75	0.26	91.75	0.19
50.00	0.63	64.00	0.38	78.00	0.26	92.00	0.19
50.25	0.62	64.25	0.38	78.25	0.26	92.25	0.18
50.50	0.61	64.50	0.38	78.50	0.25	92.50	0.18
50.75	0.61	64.75	0.37	78.75	0.25	92.75	0.18
51.00	0.60	65.00	0.37	79.00	0.25	93.00	0.18
51.25	0.60	65.25	0.37	79.25	0.25	93.25	0.18
51.50	0.59	65.50	0.37	79.50	0.25	93.50	0.18
51.75	0.59	65.75	0.36	79.75	0.25	93.75	0.18
52.00	0.58	66.00	0.36	80.00	0.24	94.00	0.18
52.25	0.57	66.25	0.36	80.25	0.24	94.25	0.18
52.50	0.57	66.50	0.35	80.50	0.24	94.50	0.18
52.75	0.56	66.75	0.35	80.75	0.24	94.75	0.17
53.00	0.56	67.00	0.35	81.00	0.24	95.00	0.17
53.25	0.55	67.25	0.35	81.25	0.24	95.25	0.17
53.50	0.55	67.50	0.34	81.50	0.24	95.50	0.17
53.75	0.54	67.75	0.34	81.75	0.23	95.75	0.17
54.00	0.54	68.00	0.34	82.00	0.23	96.00	0.17

Table 11 – 10%

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 20%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 2.36 28.4 Inches

BioInitiative ft. 176.80 2121.6 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	50140.39	10.25	29.83	20.25	7.64	30.25	3.42
0.50	12535.10	10.50	28.42	20.50	7.46	30.50	3.37
0.75	5571.15	10.75	27.12	20.75	7.28	30.75	3.31
1.00	3133.77	11.00	25.90	21.00	7.11	31.00	3.26
1.25	2005.62	11.25	24.76	21.25	6.94	31.25	3.21
1.50	1392.79	11.50	23.70	21.50	6.78	31.50	3.16
1.75	1023.27	11.75	22.70	21.75	6.62	31.75	3.11
2.00	783.44	12.00	21.76	22.00	6.47	32.00	3.06
2.25	619.02	12.25	20.88	22.25	6.33	32.25	3.01
2.50	501.40	12.50	20.06	22.50	6.19	32.50	2.97
2.75	414.38	12.75	19.28	22.75	6.05	32.75	2.92
3.00	348.20	13.00	18.54	23.00	5.92	33.00	2.88
3.25	296.69	13.25	17.85	23.25	5.80	33.25	2.83
3.50	255.82	13.50	17.19	23.50	5.67	33.50	2.79
3.75	222.85	13.75	16.58	23.75	5.56	33.75	2.75
4.00	195.86	14.00	15.99	24.00	5.44	34.00	2.71
4.25	173.50	14.25	15.43	24.25	5.33	34.25	2.67
4.50	154.75	14.50	14.90	24.50	5.22	34.50	2.63
4.75	138.89	14.75	14.40	24.75	5.12	34.75	2.60
5.00	125.35	15.00	13.93	25.00	5.01	35.00	2.56
5.25	113.70	15.25	13.47	25.25	4.92	35.25	2.52
5.50	103.60	15.50	13.04	25.50	4.82	35.50	2.49
5.75	94.78	15.75	12.63	25.75	4.73	35.75	2.45
6.00	87.05	16.00	12.24	26.00	4.64	36.00	2.42
6.25	80.22	16.25	11.87	26.25	4.55	36.25	2.38
6.50	74.17	16.50	11.51	26.50	4.46	36.50	2.35
6.75	68.78	16.75	11.17	26.75	4.38	36.75	2.32
7.00	63.95	17.00	10.84	27.00	4.30	37.00	2.29
7.25	59.62	17.25	10.53	27.25	4.22	37.25	2.26
7.50	55.71	17.50	10.23	27.50	4.14	37.50	2.23
7.75	52.18	17.75	9.95	27.75	4.07	37.75	2.20
8.00	48.97	18.00	9.67	28.00	4.00	38.00	2.17
8.25	46.04	18.25	9.41	28.25	3.93	38.25	2.14
8.50	43.37	18.50	9.16	28.50	3.86	38.50	2.11
8.75	40.93	18.75	8.91	28.75	3.79	38.75	2.09
9.00	38.69	19.00	8.68	29.00	3.73	39.00	2.06
9.25	36.63	19.25	8.46	29.25	3.66	39.25	2.03
9.50	34.72	19.50	8.24	29.50	3.60	39.50	2.01
9.75	32.97	19.75	8.03	29.75	3.54	39.75	1.98
10.00	31.34	20.00	7.83	30.00	3.48	40.00	1.96

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 – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 20%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 2.36

28.37 Inches

BioInitiative ft. 176.80

2121.60 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	1.93	54.25	1.06	68.25	0.67	82.25	0.46
40.50	1.91	54.50	1.06	68.50	0.67	82.50	0.46
40.75	1.89	54.75	1.05	68.75	0.66	82.75	0.46
41.00	1.86	55.00	1.04	69.00	0.66	83.00	0.45
41.25	1.84	55.25	1.03	69.25	0.65	83.25	0.45
41.50	1.82	55.50	1.02	69.50	0.65	83.50	0.45
41.75	1.80	55.75	1.01	69.75	0.64	83.75	0.45
42.00	1.78	56.00	1.00	70.00	0.64	84.00	0.44
42.25	1.76	56.25	0.99	70.25	0.64	84.25	0.44
42.50	1.73	56.50	0.98	70.50	0.63	84.50	0.44
42.75	1.71	56.75	0.97	70.75	0.63	84.75	0.44
43.00	1.69	57.00	0.96	71.00	0.62	85.00	0.43
43.25	1.68	57.25	0.96	71.25	0.62	85.25	0.43
43.50	1.66	57.50	0.95	71.50	0.61	85.50	0.43
43.75	1.64	57.75	0.94	71.75	0.61	85.75	0.43
44.00	1.62	58.00	0.93	72.00	0.60	86.00	0.42
44.25	1.60	58.25	0.92	72.25	0.60	86.25	0.42
44.50	1.58	58.50	0.92	72.50	0.60	86.50	0.42
44.75	1.56	58.75	0.91	72.75	0.59	86.75	0.42
45.00	1.55	59.00	0.90	73.00	0.59	87.00	0.41
45.25	1.53	59.25	0.89	73.25	0.58	87.25	0.41
45.50	1.51	59.50	0.89	73.50	0.58	87.50	0.41
45.75	1.50	59.75	0.88	73.75	0.58	87.75	0.41
46.00	1.48	60.00	0.87	74.00	0.57	88.00	0.40
46.25	1.47	60.25	0.86	74.25	0.57	88.25	0.40
46.50	1.45	60.50	0.86	74.50	0.56	88.50	0.40
46.75	1.43	60.75	0.85	74.75	0.56	88.75	0.40
47.00	1.42	61.00	0.84	75.00	0.56	89.00	0.40
47.25	1.40	61.25	0.84	75.25	0.55	89.25	0.39
47.50	1.39	61.50	0.83	75.50	0.55	89.50	0.39
47.75	1.37	61.75	0.82	75.75	0.55	89.75	0.39
48.00	1.36	62.00	0.82	76.00	0.54	90.00	0.39
48.25	1.35	62.25	0.81	76.25	0.54	90.25	0.38
48.50	1.33	62.50	0.80	76.50	0.54	90.50	0.38
48.75	1.32	62.75	0.80	76.75	0.53	90.75	0.38
49.00	1.31	63.00	0.79	77.00	0.53	91.00	0.38
49.25	1.29	63.25	0.78	77.25	0.53	91.25	0.38
49.50	1.28	63.50	0.78	77.50	0.52	91.50	0.37
49.75	1.27	63.75	0.77	77.75	0.52	91.75	0.37
50.00	1.25	64.00	0.77	78.00	0.52	92.00	0.37
50.25	1.24	64.25	0.76	78.25	0.51	92.25	0.37
50.50	1.23	64.50	0.75	78.50	0.51	92.50	0.37
50.75	1.22	64.75	0.75	78.75	0.51	92.75	0.36
51.00	1.20	65.00	0.74	79.00	0.50	93.00	0.36
51.25	1.19	65.25	0.74	79.25	0.50	93.25	0.36
51.50	1.18	65.50	0.73	79.50	0.50	93.50	0.36
51.75	1.17	65.75	0.72	79.75	0.49	93.75	0.36
52.00	1.16	66.00	0.72	80.00	0.49	94.00	0.35
52.25	1.15	66.25	0.71	80.25	0.49	94.25	0.35
52.50	1.14	66.50	0.71	80.50	0.48	94.50	0.35
52.75	1.13	66.75	0.70	80.75	0.48	94.75	0.35
53.00	1.12	67.00	0.70	81.00	0.48	95.00	0.35
53.25	1.11	67.25	0.69	81.25	0.47	95.25	0.35
53.50	1.09	67.50	0.69	81.50	0.47	95.50	0.34
53.75	1.08	67.75	0.68	81.75	0.47	95.75	0.34
54.00	1.07	68.00	0.68	82.00	0.47	96.00	0.34

Table 11 – 20%

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 30%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 2.90 34.7 Inches

BioInitiative ft. 217.00 2604.0 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	75210.58	10.25	44.74	20.25	11.46	30.25	5.14
0.50	18802.64	10.50	42.64	20.50	11.19	30.50	5.05
0.75	8356.73	10.75	40.68	20.75	10.92	30.75	4.97
1.00	4700.66	11.00	38.85	21.00	10.66	31.00	4.89
1.25	3008.42	11.25	37.14	21.25	10.41	31.25	4.81
1.50	2089.18	11.50	35.54	21.50	10.17	31.50	4.74
1.75	1534.91	11.75	34.05	21.75	9.94	31.75	4.66
2.00	1175.17	12.00	32.64	22.00	9.71	32.00	4.59
2.25	928.53	12.25	31.32	22.25	9.50	32.25	4.52
2.50	752.11	12.50	30.08	22.50	9.29	32.50	4.45
2.75	621.58	12.75	28.92	22.75	9.08	32.75	4.38
3.00	522.30	13.00	27.81	23.00	8.89	33.00	4.32
3.25	445.03	13.25	26.77	23.25	8.70	33.25	4.25
3.50	383.73	13.50	25.79	23.50	8.51	33.50	4.19
3.75	334.27	13.75	24.86	23.75	8.33	33.75	4.13
4.00	293.79	14.00	23.98	24.00	8.16	34.00	4.07
4.25	260.24	14.25	23.15	24.25	7.99	34.25	4.01
4.50	232.13	14.50	22.36	24.50	7.83	34.50	3.95
4.75	208.34	14.75	21.61	24.75	7.67	34.75	3.89
5.00	188.03	15.00	20.89	25.00	7.52	35.00	3.84
5.25	170.55	15.25	20.21	25.25	7.37	35.25	3.78
5.50	155.39	15.50	19.57	25.50	7.23	35.50	3.73
5.75	142.18	15.75	18.95	25.75	7.09	35.75	3.68
6.00	130.57	16.00	18.36	26.00	6.95	36.00	3.63
6.25	120.34	16.25	17.80	26.25	6.82	36.25	3.58
6.50	111.26	16.50	17.27	26.50	6.69	36.50	3.53
6.75	103.17	16.75	16.75	26.75	6.57	36.75	3.48
7.00	95.93	17.00	16.27	27.00	6.45	37.00	3.43
7.25	89.43	17.25	15.80	27.25	6.33	37.25	3.39
7.50	83.57	17.50	15.35	27.50	6.22	37.50	3.34
7.75	78.26	17.75	14.92	27.75	6.10	37.75	3.30
8.00	73.45	18.00	14.51	28.00	6.00	38.00	3.26
8.25	69.06	18.25	14.11	28.25	5.89	38.25	3.21
8.50	65.06	18.50	13.73	28.50	5.79	38.50	3.17
8.75	61.40	18.75	13.37	28.75	5.69	38.75	3.13
9.00	58.03	19.00	13.02	29.00	5.59	39.00	3.09
9.25	54.94	19.25	12.69	29.25	5.49	39.25	3.05
9.50	52.08	19.50	12.36	29.50	5.40	39.50	3.01
9.75	49.45	19.75	12.05	29.75	5.31	39.75	2.97
10.00	47.01	20.00	11.75	30.00	5.22	40.00	2.94

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 – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 30%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 2.90

34.74 Inches

BioInitiative ft. 217.00

2604.00 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	2.90	54.25	1.60	68.25	1.01	82.25	0.69
40.50	2.87	54.50	1.58	68.50	1.00	82.50	0.69
40.75	2.83	54.75	1.57	68.75	0.99	82.75	0.69
41.00	2.80	55.00	1.55	69.00	0.99	83.00	0.68
41.25	2.76	55.25	1.54	69.25	0.98	83.25	0.68
41.50	2.73	55.50	1.53	69.50	0.97	83.50	0.67
41.75	2.70	55.75	1.51	69.75	0.97	83.75	0.67
42.00	2.66	56.00	1.50	70.00	0.96	84.00	0.67
42.25	2.63	56.25	1.49	70.25	0.95	84.25	0.66
42.50	2.60	56.50	1.47	70.50	0.95	84.50	0.66
42.75	2.57	56.75	1.46	70.75	0.94	84.75	0.65
43.00	2.54	57.00	1.45	71.00	0.93	85.00	0.65
43.25	2.51	57.25	1.43	71.25	0.93	85.25	0.65
43.50	2.48	57.50	1.42	71.50	0.92	85.50	0.64
43.75	2.46	57.75	1.41	71.75	0.91	85.75	0.64
44.00	2.43	58.00	1.40	72.00	0.91	86.00	0.64
44.25	2.40	58.25	1.39	72.25	0.90	86.25	0.63
44.50	2.37	58.50	1.37	72.50	0.89	86.50	0.63
44.75	2.35	58.75	1.36	72.75	0.89	86.75	0.62
45.00	2.32	59.00	1.35	73.00	0.88	87.00	0.62
45.25	2.30	59.25	1.34	73.25	0.88	87.25	0.62
45.50	2.27	59.50	1.33	73.50	0.87	87.50	0.61
45.75	2.25	59.75	1.32	73.75	0.86	87.75	0.61
46.00	2.22	60.00	1.31	74.00	0.86	88.00	0.61
46.25	2.20	60.25	1.29	74.25	0.85	88.25	0.60
46.50	2.17	60.50	1.28	74.50	0.85	88.50	0.60
46.75	2.15	60.75	1.27	74.75	0.84	88.75	0.60
47.00	2.13	61.00	1.26	75.00	0.84	89.00	0.59
47.25	2.11	61.25	1.25	75.25	0.83	89.25	0.59
47.50	2.08	61.50	1.24	75.50	0.82	89.50	0.59
47.75	2.06	61.75	1.23	75.75	0.82	89.75	0.58
48.00	2.04	62.00	1.22	76.00	0.81	90.00	0.58
48.25	2.02	62.25	1.21	76.25	0.81	90.25	0.58
48.50	2.00	62.50	1.20	76.50	0.80	90.50	0.57
48.75	1.98	62.75	1.19	76.75	0.80	90.75	0.57
49.00	1.96	63.00	1.18	77.00	0.79	91.00	0.57
49.25	1.94	63.25	1.18	77.25	0.79	91.25	0.56
49.50	1.92	63.50	1.17	77.50	0.78	91.50	0.56
49.75	1.90	63.75	1.16	77.75	0.78	91.75	0.56
50.00	1.88	64.00	1.15	78.00	0.77	92.00	0.56
50.25	1.86	64.25	1.14	78.25	0.77	92.25	0.55
50.50	1.84	64.50	1.13	78.50	0.76	92.50	0.55
50.75	1.83	64.75	1.12	78.75	0.76	92.75	0.55
51.00	1.81	65.00	1.11	79.00	0.75	93.00	0.54
51.25	1.79	65.25	1.10	79.25	0.75	93.25	0.54
51.50	1.77	65.50	1.10	79.50	0.74	93.50	0.54
51.75	1.76	65.75	1.09	79.75	0.74	93.75	0.53
52.00	1.74	66.00	1.08	80.00	0.73	94.00	0.53
52.25	1.72	66.25	1.07	80.25	0.73	94.25	0.53
52.50	1.71	66.50	1.06	80.50	0.73	94.50	0.53
52.75	1.69	66.75	1.06	80.75	0.72	94.75	0.52
53.00	1.67	67.00	1.05	81.00	0.72	95.00	0.52
53.25	1.66	67.25	1.04	81.25	0.71	95.25	0.52
53.50	1.64	67.50	1.03	81.50	0.71	95.50	0.52
53.75	1.63	67.75	1.02	81.75	0.70	95.75	0.51
54.00	1.61	68.00	1.02	82.00	0.70	96.00	0.51

Table 11 – 30%



# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 40%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 3.34 40.1 Inches

BioInitiative ft. 250.00 3000.0 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	100280.77	10.25	59.66	20.25	15.28	30.25	6.85
0.50	25070.19	10.50	56.85	20.50	14.91	30.50	6.74
0.75	11142.31	10.75	54.24	20.75	14.56	30.75	6.63
1.00	6267.55	11.00	51.80	21.00	14.21	31.00	6.52
1.25	4011.23	11.25	49.52	21.25	13.88	31.25	6.42
1.50	2785.58	11.50	47.39	21.50	13.56	31.50	6.32
1.75	2046.55	11.75	45.40	21.75	13.25	31.75	6.22
2.00	1566.89	12.00	43.52	22.00	12.95	32.00	6.12
2.25	1238.03	12.25	41.77	22.25	12.66	32.25	6.03
2.50	1002.81	12.50	40.11	22.50	12.38	32.50	5.93
2.75	828.77	12.75	38.55	22.75	12.11	32.75	5.84
3.00	696.39	13.00	37.09	23.00	11.85	33.00	5.76
3.25	593.38	13.25	35.70	23.25	11.59	33.25	5.67
3.50	511.64	13.50	34.39	23.50	11.35	33.50	5.58
3.75	445.69	13.75	33.15	23.75	11.11	33.75	5.50
4.00	391.72	14.00	31.98	24.00	10.88	34.00	5.42
4.25	346.99	14.25	30.87	24.25	10.66	34.25	5.34
4.50	309.51	14.50	29.81	24.50	10.44	34.50	5.27
4.75	277.79	14.75	28.81	24.75	10.23	34.75	5.19
5.00	250.70	15.00	27.86	25.00	10.03	35.00	5.12
5.25	227.39	15.25	26.95	25.25	9.83	35.25	5.04
5.50	207.19	15.50	26.09	25.50	9.64	35.50	4.97
5.75	189.57	15.75	25.27	25.75	9.45	35.75	4.90
6.00	174.10	16.00	24.48	26.00	9.27	36.00	4.84
6.25	160.45	16.25	23.74	26.25	9.10	36.25	4.77
6.50	148.34	16.50	23.02	26.50	8.92	36.50	4.70
6.75	137.56	16.75	22.34	26.75	8.76	36.75	4.64
7.00	127.91	17.00	21.69	27.00	8.60	37.00	4.58
7.25	119.24	17.25	21.06	27.25	8.44	37.25	4.52
7.50	111.42	17.50	20.47	27.50	8.29	37.50	4.46
7.75	104.35	17.75	19.89	27.75	8.14	37.75	4.40
8.00	97.93	18.00	19.34	28.00	7.99	38.00	4.34
8.25	92.09	18.25	18.82	28.25	7.85	38.25	4.28
8.50	86.75	18.50	18.31	28.50	7.72	38.50	4.23
8.75	81.86	18.75	17.83	28.75	7.58	38.75	4.17
9.00	77.38	19.00	17.36	29.00	7.45	39.00	4.12
9.25	73.25	19.25	16.91	29.25	7.33	39.25	4.07
9.50	69.45	19.50	16.48	29.50	7.20	39.50	4.02
9.75	65.93	19.75	16.07	29.75	7.08	39.75	3.97
10.00	62.68	20.00	15.67	30.00	6.96	40.00	3.92

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 – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 40%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 3.34

40.12 Inches

BioInitiative ft. 250.00

3000.00 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	3.87	54.25	2.13	68.25	1.35	82.25	0.93
40.50	3.82	54.50	2.11	68.50	1.34	82.50	0.92
40.75	3.77	54.75	2.09	68.75	1.33	82.75	0.92
41.00	3.73	55.00	2.07	69.00	1.32	83.00	0.91
41.25	3.68	55.25	2.05	69.25	1.31	83.25	0.90
41.50	3.64	55.50	2.03	69.50	1.30	83.50	0.90
41.75	3.60	55.75	2.02	69.75	1.29	83.75	0.89
42.00	3.55	56.00	2.00	70.00	1.28	84.00	0.89
42.25	3.51	56.25	1.98	70.25	1.27	84.25	0.88
42.50	3.47	56.50	1.96	70.50	1.26	84.50	0.88
42.75	3.43	56.75	1.95	70.75	1.25	84.75	0.87
43.00	3.39	57.00	1.93	71.00	1.24	85.00	0.87
43.25	3.35	57.25	1.91	71.25	1.23	85.25	0.86
43.50	3.31	57.50	1.90	71.50	1.23	85.50	0.86
43.75	3.27	57.75	1.88	71.75	1.22	85.75	0.85
44.00	3.24	58.00	1.86	72.00	1.21	86.00	0.85
44.25	3.20	58.25	1.85	72.25	1.20	86.25	0.84
44.50	3.17	58.50	1.83	72.50	1.19	86.50	0.84
44.75	3.13	58.75	1.82	72.75	1.18	86.75	0.83
45.00	3.10	59.00	1.80	73.00	1.18	87.00	0.83
45.25	3.06	59.25	1.79	73.25	1.17	87.25	0.82
45.50	3.03	59.50	1.77	73.50	1.16	87.50	0.82
45.75	2.99	59.75	1.76	73.75	1.15	87.75	0.81
46.00	2.96	60.00	1.74	74.00	1.14	88.00	0.81
46.25	2.93	60.25	1.73	74.25	1.14	88.25	0.80
46.50	2.90	60.50	1.71	74.50	1.13	88.50	0.80
46.75	2.87	60.75	1.70	74.75	1.12	88.75	0.80
47.00	2.84	61.00	1.68	75.00	1.11	89.00	0.79
47.25	2.81	61.25	1.67	75.25	1.11	89.25	0.79
47.50	2.78	61.50	1.66	75.50	1.10	89.50	0.78
47.75	2.75	61.75	1.64	75.75	1.09	89.75	0.78
48.00	2.72	62.00	1.63	76.00	1.09	90.00	0.77
48.25	2.69	62.25	1.62	76.25	1.08	90.25	0.77
48.50	2.66	62.50	1.60	76.50	1.07	90.50	0.77
48.75	2.64	62.75	1.59	76.75	1.06	90.75	0.76
49.00	2.61	63.00	1.58	77.00	1.06	91.00	0.76
49.25	2.58	63.25	1.57	77.25	1.05	91.25	0.75
49.50	2.56	63.50	1.55	77.50	1.04	91.50	0.75
49.75	2.53	63.75	1.54	77.75	1.04	91.75	0.74
50.00	2.51	64.00	1.53	78.00	1.03	92.00	0.74
50.25	2.48	64.25	1.52	78.25	1.02	92.25	0.74
50.50	2.46	64.50	1.51	78.50	1.02	92.50	0.73
50.75	2.43	64.75	1.49	78.75	1.01	92.75	0.73
51.00	2.41	65.00	1.48	79.00	1.00	93.00	0.72
51.25	2.39	65.25	1.47	79.25	1.00	93.25	0.72
51.50	2.36	65.50	1.46	79.50	0.99	93.50	0.72
51.75	2.34	65.75	1.45	79.75	0.99	93.75	0.71
52.00	2.32	66.00	1.44	80.00	0.98	94.00	0.71
52.25	2.30	66.25	1.43	80.25	0.97	94.25	0.71
52.50	2.27	66.50	1.42	80.50	0.97	94.50	0.70
52.75	2.25	66.75	1.41	80.75	0.96	94.75	0.70
53.00	2.23	67.00	1.40	81.00	0.96	95.00	0.69
53.25	2.21	67.25	1.39	81.25	0.95	95.25	0.69
53.50	2.19	67.50	1.38	81.50	0.94	95.50	0.69
53.75	2.17	67.75	1.37	81.75	0.94	95.75	0.68
54.00	2.15	68.00	1.36	82.00	0.93	96.00	0.68

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 50%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 3.74 44.9 Inches

BioInitiative ft. 280.00 3360.0 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	125350.96	10.25	74.57	20.25	19.11	30.25	8.56
0.50	31337.74	10.50	71.06	20.50	18.64	30.50	8.42
0.75	13927.88	10.75	67.79	20.75	18.20	30.75	8.29
1.00	7834.44	11.00	64.75	21.00	17.77	31.00	8.15
1.25	5014.04	11.25	61.90	21.25	17.35	31.25	8.02
1.50	3481.97	11.50	59.24	21.50	16.95	31.50	7.90
1.75	2558.18	11.75	56.75	21.75	16.56	31.75	7.77
2.00	1958.61	12.00	54.41	22.00	16.19	32.00	7.65
2.25	1547.54	12.25	52.21	22.25	15.83	32.25	7.53
2.50	1253.51	12.50	50.14	22.50	15.48	32.50	7.42
2.75	1035.96	12.75	48.19	22.75	15.14	32.75	7.30
3.00	870.49	13.00	46.36	23.00	14.81	33.00	7.19
3.25	741.72	13.25	44.62	23.25	14.49	33.25	7.09
3.50	639.55	13.50	42.99	23.50	14.19	33.50	6.98
3.75	557.12	13.75	41.44	23.75	13.89	33.75	6.88
4.00	489.65	14.00	39.97	24.00	13.60	34.00	6.78
4.25	433.74	14.25	38.58	24.25	13.32	34.25	6.68
4.50	386.89	14.50	37.26	24.50	13.05	34.50	6.58
4.75	347.23	14.75	36.01	24.75	12.79	34.75	6.49
5.00	313.38	15.00	34.82	25.00	12.54	35.00	6.40
5.25	284.24	15.25	33.69	25.25	12.29	35.25	6.31
5.50	258.99	15.50	32.61	25.50	12.05	35.50	6.22
5.75	236.96	15.75	31.58	25.75	11.82	35.75	6.13
6.00	217.62	16.00	30.60	26.00	11.59	36.00	6.05
6.25	200.56	16.25	29.67	26.25	11.37	36.25	5.96
6.50	185.43	16.50	28.78	26.50	11.16	36.50	5.88
6.75	171.95	16.75	27.92	26.75	10.95	36.75	5.80
7.00	159.89	17.00	27.11	27.00	10.75	37.00	5.72
7.25	149.05	17.25	26.33	27.25	10.55	37.25	5.65
7.50	139.28	17.50	25.58	27.50	10.36	37.50	5.57
7.75	130.44	17.75	24.87	27.75	10.17	37.75	5.50
8.00	122.41	18.00	24.18	28.00	9.99	38.00	5.43
8.25	115.11	18.25	23.52	28.25	9.82	38.25	5.35
8.50	108.44	18.50	22.89	28.50	9.65	38.50	5.29
8.75	102.33	18.75	22.28	28.75	9.48	38.75	5.22
9.00	96.72	19.00	21.70	29.00	9.32	39.00	5.15
9.25	91.56	19.25	21.14	29.25	9.16	39.25	5.09
9.50	86.81	19.50	20.60	29.50	9.00	39.50	5.02
9.75	82.41	19.75	20.09	29.75	8.85	39.75	4.96
10.00	78.34	20.00	19.59	30.00	8.70	40.00	4.90

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 – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 50%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 3.74

44.85 Inches

BioInitiative ft. 280.00

3360.00 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	4.84	54.25	2.66	68.25	1.68	82.25	1.16
40.50	4.78	54.50	2.64	68.50	1.67	82.50	1.15
40.75	4.72	54.75	2.61	68.75	1.66	82.75	1.14
41.00	4.66	55.00	2.59	69.00	1.65	83.00	1.14
41.25	4.60	55.25	2.57	69.25	1.63	83.25	1.13
41.50	4.55	55.50	2.54	69.50	1.62	83.50	1.12
41.75	4.49	55.75	2.52	69.75	1.61	83.75	1.12
42.00	4.44	56.00	2.50	70.00	1.60	84.00	1.11
42.25	4.39	56.25	2.48	70.25	1.59	84.25	1.10
42.50	4.34	56.50	2.45	70.50	1.58	84.50	1.10
42.75	4.29	56.75	2.43	70.75	1.57	84.75	1.09
43.00	4.24	57.00	2.41	71.00	1.55	85.00	1.08
43.25	4.19	57.25	2.39	71.25	1.54	85.25	1.08
43.50	4.14	57.50	2.37	71.50	1.53	85.50	1.07
43.75	4.09	57.75	2.35	71.75	1.52	85.75	1.07
44.00	4.05	58.00	2.33	72.00	1.51	86.00	1.06
44.25	4.00	58.25	2.31	72.25	1.50	86.25	1.05
44.50	3.96	58.50	2.29	72.50	1.49	86.50	1.05
44.75	3.91	58.75	2.27	72.75	1.48	86.75	1.04
45.00	3.87	59.00	2.25	73.00	1.47	87.00	1.04
45.25	3.83	59.25	2.23	73.25	1.46	87.25	1.03
45.50	3.78	59.50	2.21	73.50	1.45	87.50	1.02
45.75	3.74	59.75	2.19	73.75	1.44	87.75	1.02
46.00	3.70	60.00	2.18	74.00	1.43	88.00	1.01
46.25	3.66	60.25	2.16	74.25	1.42	88.25	1.01
46.50	3.62	60.50	2.14	74.50	1.41	88.50	1.00
46.75	3.58	60.75	2.12	74.75	1.40	88.75	0.99
47.00	3.55	61.00	2.11	75.00	1.39	89.00	0.99
47.25	3.51	61.25	2.09	75.25	1.38	89.25	0.98
47.50	3.47	61.50	2.07	75.50	1.37	89.50	0.98
47.75	3.44	61.75	2.05	75.75	1.37	89.75	0.97
48.00	3.40	62.00	2.04	76.00	1.36	90.00	0.97
48.25	3.37	62.25	2.02	76.25	1.35	90.25	0.96
48.50	3.33	62.50	2.01	76.50	1.34	90.50	0.96
48.75	3.30	62.75	1.99	76.75	1.33	90.75	0.95
49.00	3.26	63.00	1.97	77.00	1.32	91.00	0.95
49.25	3.23	63.25	1.96	77.25	1.31	91.25	0.94
49.50	3.20	63.50	1.94	77.50	1.30	91.50	0.94
49.75	3.17	63.75	1.93	77.75	1.30	91.75	0.93
50.00	3.13	64.00	1.91	78.00	1.29	92.00	0.93
50.25	3.10	64.25	1.90	78.25	1.28	92.25	0.92
50.50	3.07	64.50	1.88	78.50	1.27	92.50	0.92
50.75	3.04	64.75	1.87	78.75	1.26	92.75	0.91
51.00	3.01	65.00	1.85	79.00	1.26	93.00	0.91
51.25	2.98	65.25	1.84	79.25	1.25	93.25	0.90
51.50	2.95	65.50	1.83	79.50	1.24	93.50	0.90
51.75	2.93	65.75	1.81	79.75	1.23	93.75	0.89
52.00	2.90	66.00	1.80	80.00	1.22	94.00	0.89
52.25	2.87	66.25	1.78	80.25	1.22	94.25	0.88
52.50	2.84	66.50	1.77	80.50	1.21	94.50	0.88
52.75	2.82	66.75	1.76	80.75	1.20	94.75	0.87
53.00	2.79	67.00	1.75	81.00	1.19	95.00	0.87
53.25	2.76	67.25	1.73	81.25	1.19	95.25	0.86
53.50	2.74	67.50	1.72	81.50	1.18	95.50	0.86
53.75	2.71	67.75	1.71	81.75	1.17	95.75	0.85
54.00	2.69	68.00	1.69	82.00	1.17	96.00	0.85

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 60%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 4.09 49.1 Inches

BioInitiative ft. 307.00 3684.0 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	150421.16	10.25	89.48	20.25	22.93	30.25	10.27
0.50	37605.29	10.50	85.27	20.50	22.37	30.50	10.11
0.75	16713.46	10.75	81.35	20.75	21.83	30.75	9.94
1.00	9401.32	11.00	77.70	21.00	21.32	31.00	9.78
1.25	6016.85	11.25	74.28	21.25	20.82	31.25	9.63
1.50	4178.37	11.50	71.09	21.50	20.34	31.50	9.47
1.75	3069.82	11.75	68.09	21.75	19.87	31.75	9.33
2.00	2350.33	12.00	65.29	22.00	19.42	32.00	9.18
2.25	1857.05	12.25	62.65	22.25	18.99	32.25	9.04
2.50	1504.21	12.50	60.17	22.50	18.57	32.50	8.90
2.75	1243.15	12.75	57.83	22.75	18.16	32.75	8.77
3.00	1044.59	13.00	55.63	23.00	17.77	33.00	8.63
3.25	890.07	13.25	53.55	23.25	17.39	33.25	8.50
3.50	767.45	13.50	51.58	23.50	17.02	33.50	8.38
3.75	668.54	13.75	49.73	23.75	16.67	33.75	8.25
4.00	587.58	14.00	47.97	24.00	16.32	34.00	8.13
4.25	520.49	14.25	46.30	24.25	15.99	34.25	8.01
4.50	464.26	14.50	44.71	24.50	15.66	34.50	7.90
4.75	416.68	14.75	43.21	24.75	15.35	34.75	7.79
5.00	376.05	15.00	41.78	25.00	15.04	35.00	7.67
5.25	341.09	15.25	40.42	25.25	14.75	35.25	7.57
5.50	310.79	15.50	39.13	25.50	14.46	35.50	7.46
5.75	284.35	15.75	37.90	25.75	14.18	35.75	7.36
6.00	261.15	16.00	36.72	26.00	13.91	36.00	7.25
6.25	240.67	16.25	35.60	26.25	13.64	36.25	7.15
6.50	222.52	16.50	34.53	26.50	13.39	36.50	7.06
6.75	206.34	16.75	33.51	26.75	13.14	36.75	6.96
7.00	191.86	17.00	32.53	27.00	12.90	37.00	6.87
7.25	178.86	17.25	31.59	27.25	12.66	37.25	6.78
7.50	167.13	17.50	30.70	27.50	12.43	37.50	6.69
7.75	156.53	17.75	29.84	27.75	12.21	37.75	6.60
8.00	146.90	18.00	29.02	28.00	11.99	38.00	6.51
8.25	138.13	18.25	28.23	28.25	11.78	38.25	6.43
8.50	130.12	18.50	27.47	28.50	11.57	38.50	6.34
8.75	122.79	18.75	26.74	28.75	11.37	38.75	6.26
9.00	116.07	19.00	26.04	29.00	11.18	39.00	6.18
9.25	109.88	19.25	25.37	29.25	10.99	39.25	6.10
9.50	104.17	19.50	24.72	29.50	10.80	39.50	6.03
9.75	98.90	19.75	24.10	29.75	10.62	39.75	5.95
10.00	94.01	20.00	23.50	30.00	10.45	40.00	5.88

Notes:

- 1) 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
- 2) 60 percent reflections is equivalent to OET Bulletin 65 equation (10)
- 3) 100 percent reflections is equivalent to OET Bulletin 65 equation (6)
- 4) 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
- 5) TPO 0.267 watts at 902.25 to 927.75 MHz from TCB Grant of Equipment Authorization (SK9AMI-4)
- 6) 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 – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 60%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 4.09

49.13 Inches

BioInitiative ft. 307.00

3684.00 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	5.80	54.25	3.19	68.25	2.02	82.25	1.39
40.50	5.73	54.50	3.17	68.50	2.00	82.50	1.38
40.75	5.66	54.75	3.14	68.75	1.99	82.75	1.37
41.00	5.59	55.00	3.11	69.00	1.97	83.00	1.36
41.25	5.53	55.25	3.08	69.25	1.96	83.25	1.36
41.50	5.46	55.50	3.05	69.50	1.95	83.50	1.35
41.75	5.39	55.75	3.02	69.75	1.93	83.75	1.34
42.00	5.33	56.00	3.00	70.00	1.92	84.00	1.33
42.25	5.27	56.25	2.97	70.25	1.91	84.25	1.32
42.50	5.20	56.50	2.95	70.50	1.89	84.50	1.32
42.75	5.14	56.75	2.92	70.75	1.88	84.75	1.31
43.00	5.08	57.00	2.89	71.00	1.86	85.00	1.30
43.25	5.03	57.25	2.87	71.25	1.85	85.25	1.29
43.50	4.97	57.50	2.84	71.50	1.84	85.50	1.29
43.75	4.91	57.75	2.82	71.75	1.83	85.75	1.28
44.00	4.86	58.00	2.79	72.00	1.81	86.00	1.27
44.25	4.80	58.25	2.77	72.25	1.80	86.25	1.26
44.50	4.75	58.50	2.75	72.50	1.79	86.50	1.26
44.75	4.69	58.75	2.72	72.75	1.78	86.75	1.25
45.00	4.64	59.00	2.70	73.00	1.76	87.00	1.24
45.25	4.59	59.25	2.68	73.25	1.75	87.25	1.23
45.50	4.54	59.50	2.66	73.50	1.74	87.50	1.23
45.75	4.49	59.75	2.63	73.75	1.73	87.75	1.22
46.00	4.44	60.00	2.61	74.00	1.72	88.00	1.21
46.25	4.40	60.25	2.59	74.25	1.71	88.25	1.21
46.50	4.35	60.50	2.57	74.50	1.69	88.50	1.20
46.75	4.30	60.75	2.55	74.75	1.68	88.75	1.19
47.00	4.26	61.00	2.53	75.00	1.67	89.00	1.19
47.25	4.21	61.25	2.51	75.25	1.66	89.25	1.18
47.50	4.17	61.50	2.49	75.50	1.65	89.50	1.17
47.75	4.12	61.75	2.47	75.75	1.64	89.75	1.17
48.00	4.08	62.00	2.45	76.00	1.63	90.00	1.16
48.25	4.04	62.25	2.43	76.25	1.62	90.25	1.15
48.50	4.00	62.50	2.41	76.50	1.61	90.50	1.15
48.75	3.96	62.75	2.39	76.75	1.60	90.75	1.14
49.00	3.92	63.00	2.37	77.00	1.59	91.00	1.14
49.25	3.88	63.25	2.35	77.25	1.58	91.25	1.13
49.50	3.84	63.50	2.33	77.50	1.57	91.50	1.12
49.75	3.80	63.75	2.31	77.75	1.56	91.75	1.12
50.00	3.76	64.00	2.30	78.00	1.55	92.00	1.11
50.25	3.72	64.25	2.28	78.25	1.54	92.25	1.10
50.50	3.69	64.50	2.26	78.50	1.53	92.50	1.10
50.75	3.65	64.75	2.24	78.75	1.52	92.75	1.09
51.00	3.61	65.00	2.23	79.00	1.51	93.00	1.09
51.25	3.58	65.25	2.21	79.25	1.50	93.25	1.08
51.50	3.54	65.50	2.19	79.50	1.49	93.50	1.08
51.75	3.51	65.75	2.17	79.75	1.48	93.75	1.07
52.00	3.48	66.00	2.16	80.00	1.47	94.00	1.06
52.25	3.44	66.25	2.14	80.25	1.46	94.25	1.06
52.50	3.41	66.50	2.13	80.50	1.45	94.50	1.05
52.75	3.38	66.75	2.11	80.75	1.44	94.75	1.05
53.00	3.35	67.00	2.09	81.00	1.43	95.00	1.04
53.25	3.32	67.25	2.08	81.25	1.42	95.25	1.04
53.50	3.28	67.50	2.06	81.50	1.42	95.50	1.03
53.75	3.25	67.75	2.05	81.75	1.41	95.75	1.03
54.00	3.22	68.00	2.03	82.00	1.40	96.00	1.02

Table 11 – 60%

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 70%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 4.42 53.1 Inches

BioInitiative ft. 331.00 3972.0 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	175491.35	10.25	104.40	20.25	26.75	30.25	11.99
0.50	43872.84	10.50	99.48	20.50	26.10	30.50	11.79
0.75	19499.04	10.75	94.91	20.75	25.47	30.75	11.60
1.00	10968.21	11.00	90.65	21.00	24.87	31.00	11.41
1.25	7019.65	11.25	86.66	21.25	24.29	31.25	11.23
1.50	4874.76	11.50	82.94	21.50	23.73	31.50	11.05
1.75	3581.46	11.75	79.44	21.75	23.19	31.75	10.88
2.00	2742.05	12.00	76.17	22.00	22.66	32.00	10.71
2.25	2166.56	12.25	73.09	22.25	22.16	32.25	10.55
2.50	1754.91	12.50	70.20	22.50	21.67	32.50	10.38
2.75	1450.34	12.75	67.47	22.75	21.19	32.75	10.23
3.00	1218.69	13.00	64.90	23.00	20.73	33.00	10.07
3.25	1038.41	13.25	62.47	23.25	20.29	33.25	9.92
3.50	895.36	13.50	60.18	23.50	19.86	33.50	9.77
3.75	779.96	13.75	58.01	23.75	19.45	33.75	9.63
4.00	685.51	14.00	55.96	24.00	19.04	34.00	9.49
4.25	607.24	14.25	54.01	24.25	18.65	34.25	9.35
4.50	541.64	14.50	52.17	24.50	18.27	34.50	9.22
4.75	486.13	14.75	50.41	24.75	17.91	34.75	9.08
5.00	438.73	15.00	48.75	25.00	17.55	35.00	8.95
5.25	397.94	15.25	47.16	25.25	17.20	35.25	8.83
5.50	362.59	15.50	45.65	25.50	16.87	35.50	8.70
5.75	331.74	15.75	44.22	25.75	16.54	35.75	8.58
6.00	304.67	16.00	42.84	26.00	16.23	36.00	8.46
6.25	280.79	16.25	41.54	26.25	15.92	36.25	8.35
6.50	259.60	16.50	40.29	26.50	15.62	36.50	8.23
6.75	240.73	16.75	39.09	26.75	15.33	36.75	8.12
7.00	223.84	17.00	37.95	27.00	15.05	37.00	8.01
7.25	208.67	17.25	36.86	27.25	14.77	37.25	7.90
7.50	194.99	17.50	35.81	27.50	14.50	37.50	7.80
7.75	182.61	17.75	34.81	27.75	14.24	37.75	7.70
8.00	171.38	18.00	33.85	28.00	13.99	38.00	7.60
8.25	161.15	18.25	32.93	28.25	13.74	38.25	7.50
8.50	151.81	18.50	32.05	28.50	13.50	38.50	7.40
8.75	143.26	18.75	31.20	28.75	13.27	38.75	7.30
9.00	135.41	19.00	30.38	29.00	13.04	39.00	7.21
9.25	128.19	19.25	29.60	29.25	12.82	39.25	7.12
9.50	121.53	19.50	28.84	29.50	12.60	39.50	7.03
9.75	115.38	19.75	28.12	29.75	12.39	39.75	6.94
10.00	109.68	20.00	27.42	30.00	12.19	40.00	6.86

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 – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 70%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 4.42

53.07 Inches

BioInitiative ft. 331.00

3972.00 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	6.77	54.25	3.73	68.25	2.35	82.25	1.62
40.50	6.69	54.50	3.69	68.50	2.34	82.50	1.61
40.75	6.61	54.75	3.66	68.75	2.32	82.75	1.60
41.00	6.52	55.00	3.63	69.00	2.30	83.00	1.59
41.25	6.45	55.25	3.59	69.25	2.29	83.25	1.58
41.50	6.37	55.50	3.56	69.50	2.27	83.50	1.57
41.75	6.29	55.75	3.53	69.75	2.25	83.75	1.56
42.00	6.22	56.00	3.50	70.00	2.24	84.00	1.55
42.25	6.14	56.25	3.47	70.25	2.22	84.25	1.55
42.50	6.07	56.50	3.44	70.50	2.21	84.50	1.54
42.75	6.00	56.75	3.41	70.75	2.19	84.75	1.53
43.00	5.93	57.00	3.38	71.00	2.18	85.00	1.52
43.25	5.86	57.25	3.35	71.25	2.16	85.25	1.51
43.50	5.80	57.50	3.32	71.50	2.15	85.50	1.50
43.75	5.73	57.75	3.29	71.75	2.13	85.75	1.49
44.00	5.67	58.00	3.26	72.00	2.12	86.00	1.48
44.25	5.60	58.25	3.23	72.25	2.10	86.25	1.47
44.50	5.54	58.50	3.20	72.50	2.09	86.50	1.47
44.75	5.48	58.75	3.18	72.75	2.07	86.75	1.46
45.00	5.42	59.00	3.15	73.00	2.06	87.00	1.45
45.25	5.36	59.25	3.12	73.25	2.04	87.25	1.44
45.50	5.30	59.50	3.10	73.50	2.03	87.50	1.43
45.75	5.24	59.75	3.07	73.75	2.02	87.75	1.42
46.00	5.18	60.00	3.05	74.00	2.00	88.00	1.42
46.25	5.13	60.25	3.02	74.25	1.99	88.25	1.41
46.50	5.07	60.50	3.00	74.50	1.98	88.50	1.40
46.75	5.02	60.75	2.97	74.75	1.96	88.75	1.39
47.00	4.97	61.00	2.95	75.00	1.95	89.00	1.38
47.25	4.91	61.25	2.92	75.25	1.94	89.25	1.38
47.50	4.86	61.50	2.90	75.50	1.92	89.50	1.37
47.75	4.81	61.75	2.88	75.75	1.91	89.75	1.36
48.00	4.76	62.00	2.85	76.00	1.90	90.00	1.35
48.25	4.71	62.25	2.83	76.25	1.89	90.25	1.35
48.50	4.66	62.50	2.81	76.50	1.87	90.50	1.34
48.75	4.62	62.75	2.79	76.75	1.86	90.75	1.33
49.00	4.57	63.00	2.76	77.00	1.85	91.00	1.32
49.25	4.52	63.25	2.74	77.25	1.84	91.25	1.32
49.50	4.48	63.50	2.72	77.50	1.83	91.50	1.31
49.75	4.43	63.75	2.70	77.75	1.81	91.75	1.30
50.00	4.39	64.00	2.68	78.00	1.80	92.00	1.30
50.25	4.34	64.25	2.66	78.25	1.79	92.25	1.29
50.50	4.30	64.50	2.64	78.50	1.78	92.50	1.28
50.75	4.26	64.75	2.62	78.75	1.77	92.75	1.27
51.00	4.22	65.00	2.60	79.00	1.76	93.00	1.27
51.25	4.18	65.25	2.58	79.25	1.75	93.25	1.26
51.50	4.14	65.50	2.56	79.50	1.74	93.50	1.25
51.75	4.10	65.75	2.54	79.75	1.72	93.75	1.25
52.00	4.06	66.00	2.52	80.00	1.71	94.00	1.24
52.25	4.02	66.25	2.50	80.25	1.70	94.25	1.23
52.50	3.98	66.50	2.48	80.50	1.69	94.50	1.23
52.75	3.94	66.75	2.46	80.75	1.68	94.75	1.22
53.00	3.90	67.00	2.44	81.00	1.67	95.00	1.22
53.25	3.87	67.25	2.43	81.25	1.66	95.25	1.21
53.50	3.83	67.50	2.41	81.50	1.65	95.50	1.20
53.75	3.80	67.75	2.39	81.75	1.64	95.75	1.20
54.00	3.76	68.00	2.37	82.00	1.63	96.00	1.19

Table 11 – 70%



# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 80%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 4.73 56.7 Inches

BioInitiative ft. 354.00 4248.0 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	200561.54	10.25	119.31	20.25	30.57	30.25	13.70
0.50	50140.39	10.50	113.70	20.50	29.83	30.50	13.47
0.75	22284.62	10.75	108.47	20.75	29.11	30.75	13.26
1.00	12535.10	11.00	103.60	21.00	28.42	31.00	13.04
1.25	8022.46	11.25	99.04	21.25	27.76	31.25	12.84
1.50	5571.15	11.50	94.78	21.50	27.12	31.50	12.63
1.75	4093.09	11.75	90.79	21.75	26.50	31.75	12.43
2.00	3133.77	12.00	87.05	22.00	25.90	32.00	12.24
2.25	2476.07	12.25	83.53	22.25	25.32	32.25	12.05
2.50	2005.62	12.50	80.22	22.50	24.76	32.50	11.87
2.75	1657.53	12.75	77.11	22.75	24.22	32.75	11.69
3.00	1392.79	13.00	74.17	23.00	23.70	33.00	11.51
3.25	1186.75	13.25	71.40	23.25	23.19	33.25	11.34
3.50	1023.27	13.50	68.78	23.50	22.70	33.50	11.17
3.75	891.38	13.75	66.30	23.75	22.22	33.75	11.00
4.00	783.44	14.00	63.95	24.00	21.76	34.00	10.84
4.25	693.98	14.25	61.73	24.25	21.32	34.25	10.69
4.50	619.02	14.50	59.62	24.50	20.88	34.50	10.53
4.75	555.57	14.75	57.62	24.75	20.46	34.75	10.38
5.00	501.40	15.00	55.71	25.00	20.06	35.00	10.23
5.25	454.79	15.25	53.90	25.25	19.66	35.25	10.09
5.50	414.38	15.50	52.18	25.50	19.28	35.50	9.95
5.75	379.13	15.75	50.53	25.75	18.90	35.75	9.81
6.00	348.20	16.00	48.97	26.00	18.54	36.00	9.67
6.25	320.90	16.25	47.47	26.25	18.19	36.25	9.54
6.50	296.69	16.50	46.04	26.50	17.85	36.50	9.41
6.75	275.12	16.75	44.68	26.75	17.52	36.75	9.28
7.00	255.82	17.00	43.37	27.00	17.19	37.00	9.16
7.25	238.48	17.25	42.13	27.25	16.88	37.25	9.03
7.50	222.85	17.50	40.93	27.50	16.58	37.50	8.91
7.75	208.70	17.75	39.79	27.75	16.28	37.75	8.80
8.00	195.86	18.00	38.69	28.00	15.99	38.00	8.68
8.25	184.17	18.25	37.64	28.25	15.71	38.25	8.57
8.50	173.50	18.50	36.63	28.50	15.43	38.50	8.46
8.75	163.72	18.75	35.66	28.75	15.17	38.75	8.35
9.00	154.75	19.00	34.72	29.00	14.90	39.00	8.24
9.25	146.50	19.25	33.83	29.25	14.65	39.25	8.14
9.50	138.89	19.50	32.97	29.50	14.40	39.50	8.03
9.75	131.86	19.75	32.14	29.75	14.16	39.75	7.93
10.00	125.35	20.00	31.34	30.00	13.93	40.00	7.83

Notes:

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

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi R^2)$$
  - 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 – 1000% reflections)

Meters 1 Collector Meter

Time Avg: 80%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 4.73

56.74 Inches

BioInitiative ft. 354.00

4248.00 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	7.74	54.25	4.26	68.25	2.69	82.25	1.85
40.50	7.64	54.50	4.22	68.50	2.67	82.50	1.84
40.75	7.55	54.75	4.18	68.75	2.65	82.75	1.83
41.00	7.46	55.00	4.14	69.00	2.63	83.00	1.82
41.25	7.37	55.25	4.11	69.25	2.61	83.25	1.81
41.50	7.28	55.50	4.07	69.50	2.60	83.50	1.80
41.75	7.19	55.75	4.03	69.75	2.58	83.75	1.79
42.00	7.11	56.00	4.00	70.00	2.56	84.00	1.78
42.25	7.02	56.25	3.96	70.25	2.54	84.25	1.77
42.50	6.94	56.50	3.93	70.50	2.52	84.50	1.76
42.75	6.86	56.75	3.89	70.75	2.50	84.75	1.75
43.00	6.78	57.00	3.86	71.00	2.49	85.00	1.73
43.25	6.70	57.25	3.82	71.25	2.47	85.25	1.72
43.50	6.62	57.50	3.79	71.50	2.45	85.50	1.71
43.75	6.55	57.75	3.76	71.75	2.43	85.75	1.70
44.00	6.47	58.00	3.73	72.00	2.42	86.00	1.69
44.25	6.40	58.25	3.69	72.25	2.40	86.25	1.69
44.50	6.33	58.50	3.66	72.50	2.38	86.50	1.68
44.75	6.26	58.75	3.63	72.75	2.37	86.75	1.67
45.00	6.19	59.00	3.60	73.00	2.35	87.00	1.66
45.25	6.12	59.25	3.57	73.25	2.34	87.25	1.65
45.50	6.05	59.50	3.54	73.50	2.32	87.50	1.64
45.75	5.99	59.75	3.51	73.75	2.30	87.75	1.63
46.00	5.92	60.00	3.48	74.00	2.29	88.00	1.62
46.25	5.86	60.25	3.45	74.25	2.27	88.25	1.61
46.50	5.80	60.50	3.42	74.50	2.26	88.50	1.60
46.75	5.74	60.75	3.40	74.75	2.24	88.75	1.59
47.00	5.67	61.00	3.37	75.00	2.23	89.00	1.58
47.25	5.61	61.25	3.34	75.25	2.21	89.25	1.57
47.50	5.56	61.50	3.31	75.50	2.20	89.50	1.56
47.75	5.50	61.75	3.29	75.75	2.18	89.75	1.56
48.00	5.44	62.00	3.26	76.00	2.17	90.00	1.55
48.25	5.38	62.25	3.23	76.25	2.16	90.25	1.54
48.50	5.33	62.50	3.21	76.50	2.14	90.50	1.53
48.75	5.27	62.75	3.18	76.75	2.13	90.75	1.52
49.00	5.22	63.00	3.16	77.00	2.11	91.00	1.51
49.25	5.17	63.25	3.13	77.25	2.10	91.25	1.51
49.50	5.12	63.50	3.11	77.50	2.09	91.50	1.50
49.75	5.06	63.75	3.08	77.75	2.07	91.75	1.49
50.00	5.01	64.00	3.06	78.00	2.06	92.00	1.48
50.25	4.96	64.25	3.04	78.25	2.05	92.25	1.47
50.50	4.92	64.50	3.01	78.50	2.03	92.50	1.47
50.75	4.87	64.75	2.99	78.75	2.02	92.75	1.46
51.00	4.82	65.00	2.97	79.00	2.01	93.00	1.45
51.25	4.77	65.25	2.94	79.25	2.00	93.25	1.44
51.50	4.73	65.50	2.92	79.50	1.98	93.50	1.43
51.75	4.68	65.75	2.90	79.75	1.97	93.75	1.43
52.00	4.64	66.00	2.88	80.00	1.96	94.00	1.42
52.25	4.59	66.25	2.86	80.25	1.95	94.25	1.41
52.50	4.55	66.50	2.83	80.50	1.93	94.50	1.40
52.75	4.50	66.75	2.81	80.75	1.92	94.75	1.40
53.00	4.46	67.00	2.79	81.00	1.91	95.00	1.39
53.25	4.42	67.25	2.77	81.25	1.90	95.25	1.38
53.50	4.38	67.50	2.75	81.50	1.89	95.50	1.37
53.75	4.34	67.75	2.73	81.75	1.88	95.75	1.37
54.00	4.30	68.00	2.71	82.00	1.86	96.00	1.36

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 1000% reflections)

**Meters** 1 Collector Meter

Time Avg: 90%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 5.01 60.2 Inches

BioInitiative ft. 375.00 4500.0 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	225631.74	10.25	134.22	20.25	34.39	30.25	15.41
0.50	56407.93	10.50	127.91	20.50	33.56	30.50	15.16
0.75	25070.19	10.75	122.03	20.75	32.75	30.75	14.91
1.00	14101.98	11.00	116.55	21.00	31.98	31.00	14.67
1.25	9025.27	11.25	111.42	21.25	31.23	31.25	14.44
1.50	6267.55	11.50	106.63	21.50	30.51	31.50	14.21
1.75	4604.73	11.75	102.14	21.75	29.81	31.75	13.99
2.00	3525.50	12.00	97.93	22.00	29.14	32.00	13.77
2.25	2785.58	12.25	93.97	22.25	28.49	32.25	13.56
2.50	2256.32	12.50	90.25	22.50	27.86	32.50	13.35
2.75	1864.73	12.75	86.75	22.75	27.25	32.75	13.15
3.00	1566.89	13.00	83.44	23.00	26.66	33.00	12.95
3.25	1335.10	13.25	80.32	23.25	26.09	33.25	12.76
3.50	1151.18	13.50	77.38	23.50	25.54	33.50	12.57
3.75	1002.81	13.75	74.59	23.75	25.00	33.75	12.38
4.00	881.37	14.00	71.95	24.00	24.48	34.00	12.20
4.25	780.73	14.25	69.45	24.25	23.98	34.25	12.02
4.50	696.39	14.50	67.07	24.50	23.49	34.50	11.85
4.75	625.02	14.75	64.82	24.75	23.02	34.75	11.68
5.00	564.08	15.00	62.68	25.00	22.56	35.00	11.51
5.25	511.64	15.25	60.64	25.25	22.12	35.25	11.35
5.50	466.18	15.50	58.70	25.50	21.69	35.50	11.19
5.75	426.53	15.75	56.85	25.75	21.27	35.75	11.03
6.00	391.72	16.00	55.09	26.00	20.86	36.00	10.88
6.25	361.01	16.25	53.40	26.25	20.47	36.25	10.73
6.50	333.77	16.50	51.80	26.50	20.08	36.50	10.59
6.75	309.51	16.75	50.26	26.75	19.71	36.75	10.44
7.00	287.80	17.00	48.80	27.00	19.34	37.00	10.30
7.25	268.29	17.25	47.39	27.25	18.99	37.25	10.16
7.50	250.70	17.50	46.05	27.50	18.65	37.50	10.03
7.75	234.79	17.75	44.76	27.75	18.31	37.75	9.90
8.00	220.34	18.00	43.52	28.00	17.99	38.00	9.77
8.25	207.19	18.25	42.34	28.25	17.67	38.25	9.64
8.50	195.18	18.50	41.20	28.50	17.36	38.50	9.51
8.75	184.19	18.75	40.11	28.75	17.06	38.75	9.39
9.00	174.10	19.00	39.06	29.00	16.77	39.00	9.27
9.25	164.82	19.25	38.06	29.25	16.48	39.25	9.15
9.50	156.25	19.50	37.09	29.50	16.20	39.50	9.04
9.75	148.34	19.75	36.15	29.75	15.93	39.75	8.92
10.00	141.02	20.00	35.25	30.00	15.67	40.00	8.81

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 – 1000% reflections)

**Meters** 1 Collector Meter

Time Avg: 90%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 5.01

60.18 Inches

BioInitiative ft. 375.00

4500.00 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	8.70	54.25	4.79	68.25	3.03	82.25	2.08
40.50	8.60	54.50	4.75	68.50	3.01	82.50	2.07
40.75	8.49	54.75	4.70	68.75	2.98	82.75	2.06
41.00	8.39	55.00	4.66	69.00	2.96	83.00	2.05
41.25	8.29	55.25	4.62	69.25	2.94	83.25	2.03
41.50	8.19	55.50	4.58	69.50	2.92	83.50	2.02
41.75	8.09	55.75	4.54	69.75	2.90	83.75	2.01
42.00	7.99	56.00	4.50	70.00	2.88	84.00	2.00
42.25	7.90	56.25	4.46	70.25	2.86	84.25	1.99
42.50	7.81	56.50	4.42	70.50	2.84	84.50	1.97
42.75	7.72	56.75	4.38	70.75	2.82	84.75	1.96
43.00	7.63	57.00	4.34	71.00	2.80	85.00	1.95
43.25	7.54	57.25	4.30	71.25	2.78	85.25	1.94
43.50	7.45	57.50	4.27	71.50	2.76	85.50	1.93
43.75	7.37	57.75	4.23	71.75	2.74	85.75	1.92
44.00	7.28	58.00	4.19	72.00	2.72	86.00	1.91
44.25	7.20	58.25	4.16	72.25	2.70	86.25	1.90
44.50	7.12	58.50	4.12	72.50	2.68	86.50	1.88
44.75	7.04	58.75	4.09	72.75	2.66	86.75	1.87
45.00	6.96	59.00	4.05	73.00	2.65	87.00	1.86
45.25	6.89	59.25	4.02	73.25	2.63	87.25	1.85
45.50	6.81	59.50	3.98	73.50	2.61	87.50	1.84
45.75	6.74	59.75	3.95	73.75	2.59	87.75	1.83
46.00	6.66	60.00	3.92	74.00	2.58	88.00	1.82
46.25	6.59	60.25	3.88	74.25	2.56	88.25	1.81
46.50	6.52	60.50	3.85	74.50	2.54	88.50	1.80
46.75	6.45	60.75	3.82	74.75	2.52	88.75	1.79
47.00	6.38	61.00	3.79	75.00	2.51	89.00	1.78
47.25	6.32	61.25	3.76	75.25	2.49	89.25	1.77
47.50	6.25	61.50	3.73	75.50	2.47	89.50	1.76
47.75	6.18	61.75	3.70	75.75	2.46	89.75	1.75
48.00	6.12	62.00	3.67	76.00	2.44	90.00	1.74
48.25	6.06	62.25	3.64	76.25	2.43	90.25	1.73
48.50	6.00	62.50	3.61	76.50	2.41	90.50	1.72
48.75	5.93	62.75	3.58	76.75	2.39	90.75	1.71
49.00	5.87	63.00	3.55	77.00	2.38	91.00	1.70
49.25	5.81	63.25	3.53	77.25	2.36	91.25	1.69
49.50	5.76	63.50	3.50	77.50	2.35	91.50	1.68
49.75	5.70	63.75	3.47	77.75	2.33	91.75	1.68
50.00	5.64	64.00	3.44	78.00	2.32	92.00	1.67
50.25	5.58	64.25	3.42	78.25	2.30	92.25	1.66
50.50	5.53	64.50	3.39	78.50	2.29	92.50	1.65
50.75	5.48	64.75	3.36	78.75	2.27	92.75	1.64
51.00	5.42	65.00	3.34	79.00	2.26	93.00	1.63
51.25	5.37	65.25	3.31	79.25	2.25	93.25	1.62
51.50	5.32	65.50	3.29	79.50	2.23	93.50	1.61
51.75	5.27	65.75	3.26	79.75	2.22	93.75	1.60
52.00	5.22	66.00	3.24	80.00	2.20	94.00	1.60
52.25	5.17	66.25	3.21	80.25	2.19	94.25	1.59
52.50	5.12	66.50	3.19	80.50	2.18	94.50	1.58
52.75	5.07	66.75	3.17	80.75	2.16	94.75	1.57
53.00	5.02	67.00	3.14	81.00	2.15	95.00	1.56
53.25	4.97	67.25	3.12	81.25	2.14	95.25	1.55
53.50	4.93	67.50	3.10	81.50	2.12	95.50	1.55
53.75	4.88	67.75	3.07	81.75	2.11	95.75	1.54
54.00	4.84	68.00	3.05	82.00	2.10	96.00	1.53

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 1000% reflections)

**Meters** 1 Collector Meter

Time Avg: 100%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 5.29 63.4 Inches

BioInitiative ft. 395.00 4740.0 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	250701.93	10.25	149.14	20.25	38.21	30.25	17.12
0.50	62675.48	10.50	142.12	20.50	37.28	30.50	16.84
0.75	27855.77	10.75	135.59	20.75	36.39	30.75	16.57
1.00	15668.87	11.00	129.49	21.00	35.53	31.00	16.30
1.25	10028.08	11.25	123.80	21.25	34.70	31.25	16.04
1.50	6963.94	11.50	118.48	21.50	33.90	31.50	15.79
1.75	5116.37	11.75	113.49	21.75	33.12	31.75	15.54
2.00	3917.22	12.00	108.81	22.00	32.37	32.00	15.30
2.25	3095.09	12.25	104.42	22.25	31.65	32.25	15.07
2.50	2507.02	12.50	100.28	22.50	30.95	32.50	14.83
2.75	2071.92	12.75	96.39	22.75	30.27	32.75	14.61
3.00	1740.99	13.00	92.72	23.00	29.62	33.00	14.39
3.25	1483.44	13.25	89.25	23.25	28.99	33.25	14.17
3.50	1279.09	13.50	85.97	23.50	28.37	33.50	13.96
3.75	1114.23	13.75	82.88	23.75	27.78	33.75	13.76
4.00	979.30	14.00	79.94	24.00	27.20	34.00	13.55
4.25	867.48	14.25	77.16	24.25	26.64	34.25	13.36
4.50	773.77	14.50	74.52	24.50	26.10	34.50	13.16
4.75	694.47	14.75	72.02	24.75	25.58	34.75	12.98
5.00	626.75	15.00	69.64	25.00	25.07	35.00	12.79
5.25	568.49	15.25	67.37	25.25	24.58	35.25	12.61
5.50	517.98	15.50	65.22	25.50	24.10	35.50	12.43
5.75	473.92	15.75	63.17	25.75	23.63	35.75	12.26
6.00	435.25	16.00	61.21	26.00	23.18	36.00	12.09
6.25	401.12	16.25	59.34	26.25	22.74	36.25	11.92
6.50	370.86	16.50	57.55	26.50	22.31	36.50	11.76
6.75	343.90	16.75	55.85	26.75	21.90	36.75	11.60
7.00	319.77	17.00	54.22	27.00	21.49	37.00	11.45
7.25	298.10	17.25	52.66	27.25	21.10	37.25	11.29
7.50	278.56	17.50	51.16	27.50	20.72	37.50	11.14
7.75	260.88	17.75	49.73	27.75	20.35	37.75	11.00
8.00	244.83	18.00	48.36	28.00	19.99	38.00	10.85
8.25	230.21	18.25	47.04	28.25	19.63	38.25	10.71
8.50	216.87	18.50	45.78	28.50	19.29	38.50	10.57
8.75	204.65	18.75	44.57	28.75	18.96	38.75	10.44
9.00	193.44	19.00	43.40	29.00	18.63	39.00	10.30
9.25	183.13	19.25	42.28	29.25	18.31	39.25	10.17
9.50	173.62	19.50	41.21	29.50	18.01	39.50	10.04
9.75	164.83	19.75	40.17	29.75	17.70	39.75	9.92
10.00	156.69	20.00	39.17	30.00	17.41	40.00	9.79

Notes:

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

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi(\text{R})^2)$$
  - 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 – 1000% reflections)

**Meters** 1 Collector Meter

Time Avg: 100%

% Reflection 1000%

Distance where limits are exceeded

FCC ft. 5.29

63.43 Inches

BioInitiative ft. 395.00

4740.00 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	9.67	54.25	5.32	68.25	3.36	82.25	2.32
40.50	9.55	54.50	5.28	68.50	3.34	82.50	2.30
40.75	9.44	54.75	5.23	68.75	3.32	82.75	2.29
41.00	9.32	55.00	5.18	69.00	3.29	83.00	2.27
41.25	9.21	55.25	5.13	69.25	3.27	83.25	2.26
41.50	9.10	55.50	5.09	69.50	3.24	83.50	2.25
41.75	8.99	55.75	5.04	69.75	3.22	83.75	2.23
42.00	8.88	56.00	5.00	70.00	3.20	84.00	2.22
42.25	8.78	56.25	4.95	70.25	3.18	84.25	2.21
42.50	8.67	56.50	4.91	70.50	3.15	84.50	2.19
42.75	8.57	56.75	4.87	70.75	3.13	84.75	2.18
43.00	8.47	57.00	4.82	71.00	3.11	85.00	2.17
43.25	8.38	57.25	4.78	71.25	3.09	85.25	2.16
43.50	8.28	57.50	4.74	71.50	3.06	85.50	2.14
43.75	8.19	57.75	4.70	71.75	3.04	85.75	2.13
44.00	8.09	58.00	4.66	72.00	3.02	86.00	2.12
44.25	8.00	58.25	4.62	72.25	3.00	86.25	2.11
44.50	7.91	58.50	4.58	72.50	2.98	86.50	2.09
44.75	7.82	58.75	4.54	72.75	2.96	86.75	2.08
45.00	7.74	59.00	4.50	73.00	2.94	87.00	2.07
45.25	7.65	59.25	4.46	73.25	2.92	87.25	2.06
45.50	7.57	59.50	4.43	73.50	2.90	87.50	2.05
45.75	7.49	59.75	4.39	73.75	2.88	87.75	2.03
46.00	7.40	60.00	4.35	74.00	2.86	88.00	2.02
46.25	7.33	60.25	4.32	74.25	2.84	88.25	2.01
46.50	7.25	60.50	4.28	74.50	2.82	88.50	2.00
46.75	7.17	60.75	4.25	74.75	2.80	88.75	1.99
47.00	7.09	61.00	4.21	75.00	2.79	89.00	1.98
47.25	7.02	61.25	4.18	75.25	2.77	89.25	1.97
47.50	6.94	61.50	4.14	75.50	2.75	89.50	1.96
47.75	6.87	61.75	4.11	75.75	2.73	89.75	1.95
48.00	6.80	62.00	4.08	76.00	2.71	90.00	1.93
48.25	6.73	62.25	4.04	76.25	2.69	90.25	1.92
48.50	6.66	62.50	4.01	76.50	2.68	90.50	1.91
48.75	6.59	62.75	3.98	76.75	2.66	90.75	1.90
49.00	6.53	63.00	3.95	77.00	2.64	91.00	1.89
49.25	6.46	63.25	3.92	77.25	2.63	91.25	1.88
49.50	6.39	63.50	3.89	77.50	2.61	91.50	1.87
49.75	6.33	63.75	3.86	77.75	2.59	91.75	1.86
50.00	6.27	64.00	3.83	78.00	2.58	92.00	1.85
50.25	6.21	64.25	3.80	78.25	2.56	92.25	1.84
50.50	6.14	64.50	3.77	78.50	2.54	92.50	1.83
50.75	6.08	64.75	3.74	78.75	2.53	92.75	1.82
51.00	6.02	65.00	3.71	79.00	2.51	93.00	1.81
51.25	5.97	65.25	3.68	79.25	2.49	93.25	1.80
51.50	5.91	65.50	3.65	79.50	2.48	93.50	1.79
51.75	5.85	65.75	3.62	79.75	2.46	93.75	1.78
52.00	5.79	66.00	3.60	80.00	2.45	94.00	1.77
52.25	5.74	66.25	3.57	80.25	2.43	94.25	1.76
52.50	5.68	66.50	3.54	80.50	2.42	94.50	1.75
52.75	5.63	66.75	3.52	80.75	2.40	94.75	1.75
53.00	5.58	67.00	3.49	81.00	2.39	95.00	1.74
53.25	5.53	67.25	3.46	81.25	2.37	95.25	1.73
53.50	5.47	67.50	3.44	81.50	2.36	95.50	1.72
53.75	5.42	67.75	3.41	81.75	2.34	95.75	1.71
54.00	5.37	68.00	3.39	82.00	2.33	96.00	1.70