

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 100% reflections)

Meters 1 Collector Meter

Time Avg: 1%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.10 1.2 Inches

BioInitiative ft. 7.40 88.8 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	88.00	10.25	0.05	20.25	0.01	30.25	0.01
0.50	22.00	10.50	0.05	20.50	0.01	30.50	0.01
0.75	9.78	10.75	0.05	20.75	0.01	30.75	0.01
1.00	5.50	11.00	0.05	21.00	0.01	31.00	0.01
1.25	3.52	11.25	0.04	21.25	0.01	31.25	0.01
1.50	2.44	11.50	0.04	21.50	0.01	31.50	0.01
1.75	1.80	11.75	0.04	21.75	0.01	31.75	0.01
2.00	1.38	12.00	0.04	22.00	0.01	32.00	0.01
2.25	1.09	12.25	0.04	22.25	0.01	32.25	0.01
2.50	0.88	12.50	0.04	22.50	0.01	32.50	0.01
2.75	0.73	12.75	0.03	22.75	0.01	32.75	0.01
3.00	0.61	13.00	0.03	23.00	0.01	33.00	0.01
3.25	0.52	13.25	0.03	23.25	0.01	33.25	0.00
3.50	0.45	13.50	0.03	23.50	0.01	33.50	0.00
3.75	0.39	13.75	0.03	23.75	0.01	33.75	0.00
4.00	0.34	14.00	0.03	24.00	0.01	34.00	0.00
4.25	0.30	14.25	0.03	24.25	0.01	34.25	0.00
4.50	0.27	14.50	0.03	24.50	0.01	34.50	0.00
4.75	0.24	14.75	0.03	24.75	0.01	34.75	0.00
5.00	0.22	15.00	0.02	25.00	0.01	35.00	0.00
5.25	0.20	15.25	0.02	25.25	0.01	35.25	0.00
5.50	0.18	15.50	0.02	25.50	0.01	35.50	0.00
5.75	0.17	15.75	0.02	25.75	0.01	35.75	0.00
6.00	0.15	16.00	0.02	26.00	0.01	36.00	0.00
6.25	0.14	16.25	0.02	26.25	0.01	36.25	0.00
6.50	0.13	16.50	0.02	26.50	0.01	36.50	0.00
6.75	0.12	16.75	0.02	26.75	0.01	36.75	0.00
7.00	0.11	17.00	0.02	27.00	0.01	37.00	0.00
7.25	0.10	17.25	0.02	27.25	0.01	37.25	0.00
7.50	0.10	17.50	0.02	27.50	0.01	37.50	0.00
7.75	0.09	17.75	0.02	27.75	0.01	37.75	0.00
8.00	0.09	18.00	0.02	28.00	0.01	38.00	0.00
8.25	0.08	18.25	0.02	28.25	0.01	38.25	0.00
8.50	0.08	18.50	0.02	28.50	0.01	38.50	0.00
8.75	0.07	18.75	0.02	28.75	0.01	38.75	0.00
9.00	0.07	19.00	0.02	29.00	0.01	39.00	0.00
9.25	0.06	19.25	0.01	29.25	0.01	39.25	0.00
9.50	0.06	19.50	0.01	29.50	0.01	39.50	0.00
9.75	0.06	19.75	0.01	29.75	0.01	39.75	0.00
10.00	0.06	20.00	0.01	30.00	0.01	40.00	0.00

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 – 100% reflections)

Meters 1 Collector Meter

Time Avg: 1%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.10 1.17 Inches

BioInitiative ft. 7.40 88.80 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	0.00	54.25	0.00	68.25	0.00	82.25	0.00
40.50	0.00	54.50	0.00	68.50	0.00	82.50	0.00
40.75	0.00	54.75	0.00	68.75	0.00	82.75	0.00
41.00	0.00	55.00	0.00	69.00	0.00	83.00	0.00
41.25	0.00	55.25	0.00	69.25	0.00	83.25	0.00
41.50	0.00	55.50	0.00	69.50	0.00	83.50	0.00
41.75	0.00	55.75	0.00	69.75	0.00	83.75	0.00
42.00	0.00	56.00	0.00	70.00	0.00	84.00	0.00
42.25	0.00	56.25	0.00	70.25	0.00	84.25	0.00
42.50	0.00	56.50	0.00	70.50	0.00	84.50	0.00
42.75	0.00	56.75	0.00	70.75	0.00	84.75	0.00
43.00	0.00	57.00	0.00	71.00	0.00	85.00	0.00
43.25	0.00	57.25	0.00	71.25	0.00	85.25	0.00
43.50	0.00	57.50	0.00	71.50	0.00	85.50	0.00
43.75	0.00	57.75	0.00	71.75	0.00	85.75	0.00
44.00	0.00	58.00	0.00	72.00	0.00	86.00	0.00
44.25	0.00	58.25	0.00	72.25	0.00	86.25	0.00
44.50	0.00	58.50	0.00	72.50	0.00	86.50	0.00
44.75	0.00	58.75	0.00	72.75	0.00	86.75	0.00
45.00	0.00	59.00	0.00	73.00	0.00	87.00	0.00
45.25	0.00	59.25	0.00	73.25	0.00	87.25	0.00
45.50	0.00	59.50	0.00	73.50	0.00	87.50	0.00
45.75	0.00	59.75	0.00	73.75	0.00	87.75	0.00
46.00	0.00	60.00	0.00	74.00	0.00	88.00	0.00
46.25	0.00	60.25	0.00	74.25	0.00	88.25	0.00
46.50	0.00	60.50	0.00	74.50	0.00	88.50	0.00
46.75	0.00	60.75	0.00	74.75	0.00	88.75	0.00
47.00	0.00	61.00	0.00	75.00	0.00	89.00	0.00
47.25	0.00	61.25	0.00	75.25	0.00	89.25	0.00
47.50	0.00	61.50	0.00	75.50	0.00	89.50	0.00
47.75	0.00	61.75	0.00	75.75	0.00	89.75	0.00
48.00	0.00	62.00	0.00	76.00	0.00	90.00	0.00
48.25	0.00	62.25	0.00	76.25	0.00	90.25	0.00
48.50	0.00	62.50	0.00	76.50	0.00	90.50	0.00
48.75	0.00	62.75	0.00	76.75	0.00	90.75	0.00
49.00	0.00	63.00	0.00	77.00	0.00	91.00	0.00
49.25	0.00	63.25	0.00	77.25	0.00	91.25	0.00
49.50	0.00	63.50	0.00	77.50	0.00	91.50	0.00
49.75	0.00	63.75	0.00	77.75	0.00	91.75	0.00
50.00	0.00	64.00	0.00	78.00	0.00	92.00	0.00
50.25	0.00	64.25	0.00	78.25	0.00	92.25	0.00
50.50	0.00	64.50	0.00	78.50	0.00	92.50	0.00
50.75	0.00	64.75	0.00	78.75	0.00	92.75	0.00
51.00	0.00	65.00	0.00	79.00	0.00	93.00	0.00
51.25	0.00	65.25	0.00	79.25	0.00	93.25	0.00
51.50	0.00	65.50	0.00	79.50	0.00	93.50	0.00
51.75	0.00	65.75	0.00	79.75	0.00	93.75	0.00
52.00	0.00	66.00	0.00	80.00	0.00	94.00	0.00
52.25	0.00	66.25	0.00	80.25	0.00	94.25	0.00
52.50	0.00	66.50	0.00	80.50	0.00	94.50	0.00
52.75	0.00	66.75	0.00	80.75	0.00	94.75	0.00
53.00	0.00	67.00	0.00	81.00	0.00	95.00	0.00
53.25	0.00	67.25	0.00	81.25	0.00	95.25	0.00
53.50	0.00	67.50	0.00	81.50	0.00	95.50	0.00
53.75	0.00	67.75	0.00	81.75	0.00	95.75	0.00
54.00	0.00	68.00	0.00	82.00	0.00	96.00	0.00

Table 10 – 1%

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 100% reflections)

**Meters** 1 Collector Meter

Time Avg: 10%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.31 3.7 Inches

BioInitiative ft. 23.40 280.8 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	880.03	10.25	0.52	20.25	0.13	30.25	0.06
0.50	220.01	10.50	0.50	20.50	0.13	30.50	0.06
0.75	97.78	10.75	0.48	20.75	0.13	30.75	0.06
1.00	55.00	11.00	0.45	21.00	0.12	31.00	0.06
1.25	35.20	11.25	0.43	21.25	0.12	31.25	0.06
1.50	24.45	11.50	0.42	21.50	0.12	31.50	0.06
1.75	17.96	11.75	0.40	21.75	0.12	31.75	0.05
2.00	13.75	12.00	0.38	22.00	0.11	32.00	0.05
2.25	10.86	12.25	0.37	22.25	0.11	32.25	0.05
2.50	8.80	12.50	0.35	22.50	0.11	32.50	0.05
2.75	7.27	12.75	0.34	22.75	0.11	32.75	0.05
3.00	6.11	13.00	0.33	23.00	0.10	33.00	0.05
3.25	5.21	13.25	0.31	23.25	0.10	33.25	0.05
3.50	4.49	13.50	0.30	23.50	0.10	33.50	0.05
3.75	3.91	13.75	0.29	23.75	0.10	33.75	0.05
4.00	3.44	14.00	0.28	24.00	0.10	34.00	0.05
4.25	3.05	14.25	0.27	24.25	0.09	34.25	0.05
4.50	2.72	14.50	0.26	24.50	0.09	34.50	0.05
4.75	2.44	14.75	0.25	24.75	0.09	34.75	0.05
5.00	2.20	15.00	0.24	25.00	0.09	35.00	0.04
5.25	2.00	15.25	0.24	25.25	0.09	35.25	0.04
5.50	1.82	15.50	0.23	25.50	0.08	35.50	0.04
5.75	1.66	15.75	0.22	25.75	0.08	35.75	0.04
6.00	1.53	16.00	0.21	26.00	0.08	36.00	0.04
6.25	1.41	16.25	0.21	26.25	0.08	36.25	0.04
6.50	1.30	16.50	0.20	26.50	0.08	36.50	0.04
6.75	1.21	16.75	0.20	26.75	0.08	36.75	0.04
7.00	1.12	17.00	0.19	27.00	0.08	37.00	0.04
7.25	1.05	17.25	0.18	27.25	0.07	37.25	0.04
7.50	0.98	17.50	0.18	27.50	0.07	37.50	0.04
7.75	0.92	17.75	0.17	27.75	0.07	37.75	0.04
8.00	0.86	18.00	0.17	28.00	0.07	38.00	0.04
8.25	0.81	18.25	0.17	28.25	0.07	38.25	0.04
8.50	0.76	18.50	0.16	28.50	0.07	38.50	0.04
8.75	0.72	18.75	0.16	28.75	0.07	38.75	0.04
9.00	0.68	19.00	0.15	29.00	0.07	39.00	0.04
9.25	0.64	19.25	0.15	29.25	0.06	39.25	0.04
9.50	0.61	19.50	0.14	29.50	0.06	39.50	0.04
9.75	0.58	19.75	0.14	29.75	0.06	39.75	0.03
10.00	0.55	20.00	0.14	30.00	0.06	40.00	0.03

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 – 100% reflections)

Meters 1 Collector Meter

Time Avg: 10%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.31

3.71 Inches

BioInitiative ft. 23.40

280.80 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	0.03	54.25	0.02	68.25	0.01	82.25	0.01
40.50	0.03	54.50	0.02	68.50	0.01	82.50	0.01
40.75	0.03	54.75	0.02	68.75	0.01	82.75	0.01
41.00	0.03	55.00	0.02	69.00	0.01	83.00	0.01
41.25	0.03	55.25	0.02	69.25	0.01	83.25	0.01
41.50	0.03	55.50	0.02	69.50	0.01	83.50	0.01
41.75	0.03	55.75	0.02	69.75	0.01	83.75	0.01
42.00	0.03	56.00	0.02	70.00	0.01	84.00	0.01
42.25	0.03	56.25	0.02	70.25	0.01	84.25	0.01
42.50	0.03	56.50	0.02	70.50	0.01	84.50	0.01
42.75	0.03	56.75	0.02	70.75	0.01	84.75	0.01
43.00	0.03	57.00	0.02	71.00	0.01	85.00	0.01
43.25	0.03	57.25	0.02	71.25	0.01	85.25	0.01
43.50	0.03	57.50	0.02	71.50	0.01	85.50	0.01
43.75	0.03	57.75	0.02	71.75	0.01	85.75	0.01
44.00	0.03	58.00	0.02	72.00	0.01	86.00	0.01
44.25	0.03	58.25	0.02	72.25	0.01	86.25	0.01
44.50	0.03	58.50	0.02	72.50	0.01	86.50	0.01
44.75	0.03	58.75	0.02	72.75	0.01	86.75	0.01
45.00	0.03	59.00	0.02	73.00	0.01	87.00	0.01
45.25	0.03	59.25	0.02	73.25	0.01	87.25	0.01
45.50	0.03	59.50	0.02	73.50	0.01	87.50	0.01
45.75	0.03	59.75	0.02	73.75	0.01	87.75	0.01
46.00	0.03	60.00	0.02	74.00	0.01	88.00	0.01
46.25	0.03	60.25	0.02	74.25	0.01	88.25	0.01
46.50	0.03	60.50	0.02	74.50	0.01	88.50	0.01
46.75	0.03	60.75	0.01	74.75	0.01	88.75	0.01
47.00	0.02	61.00	0.01	75.00	0.01	89.00	0.01
47.25	0.02	61.25	0.01	75.25	0.01	89.25	0.01
47.50	0.02	61.50	0.01	75.50	0.01	89.50	0.01
47.75	0.02	61.75	0.01	75.75	0.01	89.75	0.01
48.00	0.02	62.00	0.01	76.00	0.01	90.00	0.01
48.25	0.02	62.25	0.01	76.25	0.01	90.25	0.01
48.50	0.02	62.50	0.01	76.50	0.01	90.50	0.01
48.75	0.02	62.75	0.01	76.75	0.01	90.75	0.01
49.00	0.02	63.00	0.01	77.00	0.01	91.00	0.01
49.25	0.02	63.25	0.01	77.25	0.01	91.25	0.01
49.50	0.02	63.50	0.01	77.50	0.01	91.50	0.01
49.75	0.02	63.75	0.01	77.75	0.01	91.75	0.01
50.00	0.02	64.00	0.01	78.00	0.01	92.00	0.01
50.25	0.02	64.25	0.01	78.25	0.01	92.25	0.01
50.50	0.02	64.50	0.01	78.50	0.01	92.50	0.01
50.75	0.02	64.75	0.01	78.75	0.01	92.75	0.01
51.00	0.02	65.00	0.01	79.00	0.01	93.00	0.01
51.25	0.02	65.25	0.01	79.25	0.01	93.25	0.01
51.50	0.02	65.50	0.01	79.50	0.01	93.50	0.01
51.75	0.02	65.75	0.01	79.75	0.01	93.75	0.01
52.00	0.02	66.00	0.01	80.00	0.01	94.00	0.01
52.25	0.02	66.25	0.01	80.25	0.01	94.25	0.01
52.50	0.02	66.50	0.01	80.50	0.01	94.50	0.01
52.75	0.02	66.75	0.01	80.75	0.01	94.75	0.01
53.00	0.02	67.00	0.01	81.00	0.01	95.00	0.01
53.25	0.02	67.25	0.01	81.25	0.01	95.25	0.01
53.50	0.02	67.50	0.01	81.50	0.01	95.50	0.01
53.75	0.02	67.75	0.01	81.75	0.01	95.75	0.01
54.00	0.02	68.00	0.01	82.00	0.01	96.00	0.01

Table 10 – 10%

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 100% reflections)

Meters 1 Collector Meter

Time Avg: 20%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.44 5.2 Inches

BioInitiative ft. 33.10 397.2 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	1760.05	10.25	1.05	20.25	0.27	30.25	0.12
0.50	440.01	10.50	1.00	20.50	0.26	30.50	0.12
0.75	195.56	10.75	0.95	20.75	0.26	30.75	0.12
1.00	110.00	11.00	0.91	21.00	0.25	31.00	0.11
1.25	70.40	11.25	0.87	21.25	0.24	31.25	0.11
1.50	48.89	11.50	0.83	21.50	0.24	31.50	0.11
1.75	35.92	11.75	0.80	21.75	0.23	31.75	0.11
2.00	27.50	12.00	0.76	22.00	0.23	32.00	0.11
2.25	21.73	12.25	0.73	22.25	0.22	32.25	0.11
2.50	17.60	12.50	0.70	22.50	0.22	32.50	0.10
2.75	14.55	12.75	0.68	22.75	0.21	32.75	0.10
3.00	12.22	13.00	0.65	23.00	0.21	33.00	0.10
3.25	10.41	13.25	0.63	23.25	0.20	33.25	0.10
3.50	8.98	13.50	0.60	23.50	0.20	33.50	0.10
3.75	7.82	13.75	0.58	23.75	0.20	33.75	0.10
4.00	6.88	14.00	0.56	24.00	0.19	34.00	0.10
4.25	6.09	14.25	0.54	24.25	0.19	34.25	0.09
4.50	5.43	14.50	0.52	24.50	0.18	34.50	0.09
4.75	4.88	14.75	0.51	24.75	0.18	34.75	0.09
5.00	4.40	15.00	0.49	25.00	0.18	35.00	0.09
5.25	3.99	15.25	0.47	25.25	0.17	35.25	0.09
5.50	3.64	15.50	0.46	25.50	0.17	35.50	0.09
5.75	3.33	15.75	0.44	25.75	0.17	35.75	0.09
6.00	3.06	16.00	0.43	26.00	0.16	36.00	0.08
6.25	2.82	16.25	0.42	26.25	0.16	36.25	0.08
6.50	2.60	16.50	0.40	26.50	0.16	36.50	0.08
6.75	2.41	16.75	0.39	26.75	0.15	36.75	0.08
7.00	2.24	17.00	0.38	27.00	0.15	37.00	0.08
7.25	2.09	17.25	0.37	27.25	0.15	37.25	0.08
7.50	1.96	17.50	0.36	27.50	0.15	37.50	0.08
7.75	1.83	17.75	0.35	27.75	0.14	37.75	0.08
8.00	1.72	18.00	0.34	28.00	0.14	38.00	0.08
8.25	1.62	18.25	0.33	28.25	0.14	38.25	0.08
8.50	1.52	18.50	0.32	28.50	0.14	38.50	0.07
8.75	1.44	18.75	0.31	28.75	0.13	38.75	0.07
9.00	1.36	19.00	0.30	29.00	0.13	39.00	0.07
9.25	1.29	19.25	0.30	29.25	0.13	39.25	0.07
9.50	1.22	19.50	0.29	29.50	0.13	39.50	0.07
9.75	1.16	19.75	0.28	29.75	0.12	39.75	0.07
10.00	1.10	20.00	0.28	30.00	0.12	40.00	0.07

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 – 100% reflections)

Meters 1 Collector Meter

Time Avg: 20%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.44

5.25 Inches

BioInitiative ft. 33.10

397.20 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	0.07	54.25	0.04	68.25	0.02	82.25	0.02
40.50	0.07	54.50	0.04	68.50	0.02	82.50	0.02
40.75	0.07	54.75	0.04	68.75	0.02	82.75	0.02
41.00	0.07	55.00	0.04	69.00	0.02	83.00	0.02
41.25	0.06	55.25	0.04	69.25	0.02	83.25	0.02
41.50	0.06	55.50	0.04	69.50	0.02	83.50	0.02
41.75	0.06	55.75	0.04	69.75	0.02	83.75	0.02
42.00	0.06	56.00	0.04	70.00	0.02	84.00	0.02
42.25	0.06	56.25	0.03	70.25	0.02	84.25	0.02
42.50	0.06	56.50	0.03	70.50	0.02	84.50	0.02
42.75	0.06	56.75	0.03	70.75	0.02	84.75	0.02
43.00	0.06	57.00	0.03	71.00	0.02	85.00	0.02
43.25	0.06	57.25	0.03	71.25	0.02	85.25	0.02
43.50	0.06	57.50	0.03	71.50	0.02	85.50	0.02
43.75	0.06	57.75	0.03	71.75	0.02	85.75	0.01
44.00	0.06	58.00	0.03	72.00	0.02	86.00	0.01
44.25	0.06	58.25	0.03	72.25	0.02	86.25	0.01
44.50	0.06	58.50	0.03	72.50	0.02	86.50	0.01
44.75	0.05	58.75	0.03	72.75	0.02	86.75	0.01
45.00	0.05	59.00	0.03	73.00	0.02	87.00	0.01
45.25	0.05	59.25	0.03	73.25	0.02	87.25	0.01
45.50	0.05	59.50	0.03	73.50	0.02	87.50	0.01
45.75	0.05	59.75	0.03	73.75	0.02	87.75	0.01
46.00	0.05	60.00	0.03	74.00	0.02	88.00	0.01
46.25	0.05	60.25	0.03	74.25	0.02	88.25	0.01
46.50	0.05	60.50	0.03	74.50	0.02	88.50	0.01
46.75	0.05	60.75	0.03	74.75	0.02	88.75	0.01
47.00	0.05	61.00	0.03	75.00	0.02	89.00	0.01
47.25	0.05	61.25	0.03	75.25	0.02	89.25	0.01
47.50	0.05	61.50	0.03	75.50	0.02	89.50	0.01
47.75	0.05	61.75	0.03	75.75	0.02	89.75	0.01
48.00	0.05	62.00	0.03	76.00	0.02	90.00	0.01
48.25	0.05	62.25	0.03	76.25	0.02	90.25	0.01
48.50	0.05	62.50	0.03	76.50	0.02	90.50	0.01
48.75	0.05	62.75	0.03	76.75	0.02	90.75	0.01
49.00	0.05	63.00	0.03	77.00	0.02	91.00	0.01
49.25	0.05	63.25	0.03	77.25	0.02	91.25	0.01
49.50	0.04	63.50	0.03	77.50	0.02	91.50	0.01
49.75	0.04	63.75	0.03	77.75	0.02	91.75	0.01
50.00	0.04	64.00	0.03	78.00	0.02	92.00	0.01
50.25	0.04	64.25	0.03	78.25	0.02	92.25	0.01
50.50	0.04	64.50	0.03	78.50	0.02	92.50	0.01
50.75	0.04	64.75	0.03	78.75	0.02	92.75	0.01
51.00	0.04	65.00	0.03	79.00	0.02	93.00	0.01
51.25	0.04	65.25	0.03	79.25	0.02	93.25	0.01
51.50	0.04	65.50	0.03	79.50	0.02	93.50	0.01
51.75	0.04	65.75	0.03	79.75	0.02	93.75	0.01
52.00	0.04	66.00	0.03	80.00	0.02	94.00	0.01
52.25	0.04	66.25	0.03	80.25	0.02	94.25	0.01
52.50	0.04	66.50	0.02	80.50	0.02	94.50	0.01
52.75	0.04	66.75	0.02	80.75	0.02	94.75	0.01
53.00	0.04	67.00	0.02	81.00	0.02	95.00	0.01
53.25	0.04	67.25	0.02	81.25	0.02	95.25	0.01
53.50	0.04	67.50	0.02	81.50	0.02	95.50	0.01
53.75	0.04	67.75	0.02	81.75	0.02	95.75	0.01
54.00	0.04	68.00	0.02	82.00	0.02	96.00	0.01

Table 10 – 20%

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 100% reflections)

Meters 1 Collector Meter

Time Avg: 30%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.54 6.4 Inches

BioInitiative ft. 40.60 487.2 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	2640.08	10.25	1.57	20.25	0.40	30.25	0.18
0.50	660.02	10.50	1.50	20.50	0.39	30.50	0.18
0.75	293.34	10.75	1.43	20.75	0.38	30.75	0.17
1.00	165.01	11.00	1.36	21.00	0.37	31.00	0.17
1.25	105.60	11.25	1.30	21.25	0.37	31.25	0.17
1.50	73.34	11.50	1.25	21.50	0.36	31.50	0.17
1.75	53.88	11.75	1.20	21.75	0.35	31.75	0.16
2.00	41.25	12.00	1.15	22.00	0.34	32.00	0.16
2.25	32.59	12.25	1.10	22.25	0.33	32.25	0.16
2.50	26.40	12.50	1.06	22.50	0.33	32.50	0.16
2.75	21.82	12.75	1.02	22.75	0.32	32.75	0.15
3.00	18.33	13.00	0.98	23.00	0.31	33.00	0.15
3.25	15.62	13.25	0.94	23.25	0.31	33.25	0.15
3.50	13.47	13.50	0.91	23.50	0.30	33.50	0.15
3.75	11.73	13.75	0.87	23.75	0.29	33.75	0.14
4.00	10.31	14.00	0.84	24.00	0.29	34.00	0.14
4.25	9.14	14.25	0.81	24.25	0.28	34.25	0.14
4.50	8.15	14.50	0.78	24.50	0.27	34.50	0.14
4.75	7.31	14.75	0.76	24.75	0.27	34.75	0.14
5.00	6.60	15.00	0.73	25.00	0.26	35.00	0.13
5.25	5.99	15.25	0.71	25.25	0.26	35.25	0.13
5.50	5.45	15.50	0.69	25.50	0.25	35.50	0.13
5.75	4.99	15.75	0.67	25.75	0.25	35.75	0.13
6.00	4.58	16.00	0.64	26.00	0.24	36.00	0.13
6.25	4.22	16.25	0.62	26.25	0.24	36.25	0.13
6.50	3.91	16.50	0.61	26.50	0.23	36.50	0.12
6.75	3.62	16.75	0.59	26.75	0.23	36.75	0.12
7.00	3.37	17.00	0.57	27.00	0.23	37.00	0.12
7.25	3.14	17.25	0.55	27.25	0.22	37.25	0.12
7.50	2.93	17.50	0.54	27.50	0.22	37.50	0.12
7.75	2.75	17.75	0.52	27.75	0.21	37.75	0.12
8.00	2.58	18.00	0.51	28.00	0.21	38.00	0.11
8.25	2.42	18.25	0.50	28.25	0.21	38.25	0.11
8.50	2.28	18.50	0.48	28.50	0.20	38.50	0.11
8.75	2.16	18.75	0.47	28.75	0.20	38.75	0.11
9.00	2.04	19.00	0.46	29.00	0.20	39.00	0.11
9.25	1.93	19.25	0.45	29.25	0.19	39.25	0.11
9.50	1.83	19.50	0.43	29.50	0.19	39.50	0.11
9.75	1.74	19.75	0.42	29.75	0.19	39.75	0.10
10.00	1.65	20.00	0.41	30.00	0.18	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 – 100% reflections)

Meters 1 Collector Meter

Time Avg: 30%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.54

6.42 Inches

BioInitiative ft. 40.60

487.20 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	0.06	68.25	0.04	82.25	0.02
40.50	0.10	54.50	0.06	68.50	0.04	82.50	0.02
40.75	0.10	54.75	0.06	68.75	0.03	82.75	0.02
41.00	0.10	55.00	0.05	69.00	0.03	83.00	0.02
41.25	0.10	55.25	0.05	69.25	0.03	83.25	0.02
41.50	0.10	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	0.09	57.00	0.05	71.00	0.03	85.00	0.02
43.25	0.09	57.25	0.05	71.25	0.03	85.25	0.02
43.50	0.09	57.50	0.05	71.50	0.03	85.50	0.02
43.75	0.09	57.75	0.05	71.75	0.03	85.75	0.02
44.00	0.09	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	0.05	73.25	0.03	87.25	0.02
45.50	0.08	59.50	0.05	73.50	0.03	87.50	0.02
45.75	0.08	59.75	0.05	73.75	0.03	87.75	0.02
46.00	0.08	60.00	0.05	74.00	0.03	88.00	0.02
46.25	0.08	60.25	0.05	74.25	0.03	88.25	0.02
46.50	0.08	60.50	0.05	74.50	0.03	88.50	0.02
46.75	0.08	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	0.07	63.25	0.04	77.25	0.03	91.25	0.02
49.50	0.07	63.50	0.04	77.50	0.03	91.50	0.02
49.75	0.07	63.75	0.04	77.75	0.03	91.75	0.02
50.00	0.07	64.00	0.04	78.00	0.03	92.00	0.02
50.25	0.07	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	0.03	93.25	0.02
51.50	0.06	65.50	0.04	79.50	0.03	93.50	0.02
51.75	0.06	65.75	0.04	79.75	0.03	93.75	0.02
52.00	0.06	66.00	0.04	80.00	0.03	94.00	0.02
52.25	0.06	66.25	0.04	80.25	0.03	94.25	0.02
52.50	0.06	66.50	0.04	80.50	0.03	94.50	0.02
52.75	0.06	66.75	0.04	80.75	0.03	94.75	0.02
53.00	0.06	67.00	0.04	81.00	0.03	95.00	0.02
53.25	0.06	67.25	0.04	81.25	0.02	95.25	0.02
53.50	0.06	67.50	0.04	81.50	0.02	95.50	0.02
53.75	0.06	67.75	0.04	81.75	0.02	95.75	0.02
54.00	0.06	68.00	0.04	82.00	0.02	96.00	0.02

Table 10 – 30%



# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 100% reflections)

Meters 1 Collector Meter

Time Avg: 40%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.62 7.4 Inches

BioInitiative ft. 47.00 564.0 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	3520.11	10.25	2.09	20.25	0.54	30.25	0.24
0.50	880.03	10.50	2.00	20.50	0.52	30.50	0.24
0.75	391.12	10.75	1.90	20.75	0.51	30.75	0.23
1.00	220.01	11.00	1.82	21.00	0.50	31.00	0.23
1.25	140.80	11.25	1.74	21.25	0.49	31.25	0.23
1.50	97.78	11.50	1.66	21.50	0.48	31.50	0.22
1.75	71.84	11.75	1.59	21.75	0.47	31.75	0.22
2.00	55.00	12.00	1.53	22.00	0.45	32.00	0.21
2.25	43.46	12.25	1.47	22.25	0.44	32.25	0.21
2.50	35.20	12.50	1.41	22.50	0.43	32.50	0.21
2.75	29.09	12.75	1.35	22.75	0.43	32.75	0.21
3.00	24.45	13.00	1.30	23.00	0.42	33.00	0.20
3.25	20.83	13.25	1.25	23.25	0.41	33.25	0.20
3.50	17.96	13.50	1.21	23.50	0.40	33.50	0.20
3.75	15.64	13.75	1.16	23.75	0.39	33.75	0.19
4.00	13.75	14.00	1.12	24.00	0.38	34.00	0.19
4.25	12.18	14.25	1.08	24.25	0.37	34.25	0.19
4.50	10.86	14.50	1.05	24.50	0.37	34.50	0.18
4.75	9.75	14.75	1.01	24.75	0.36	34.75	0.18
5.00	8.80	15.00	0.98	25.00	0.35	35.00	0.18
5.25	7.98	15.25	0.95	25.25	0.35	35.25	0.18
5.50	7.27	15.50	0.92	25.50	0.34	35.50	0.17
5.75	6.65	15.75	0.89	25.75	0.33	35.75	0.17
6.00	6.11	16.00	0.86	26.00	0.33	36.00	0.17
6.25	5.63	16.25	0.83	26.25	0.32	36.25	0.17
6.50	5.21	16.50	0.81	26.50	0.31	36.50	0.17
6.75	4.83	16.75	0.78	26.75	0.31	36.75	0.16
7.00	4.49	17.00	0.76	27.00	0.30	37.00	0.16
7.25	4.19	17.25	0.74	27.25	0.30	37.25	0.16
7.50	3.91	17.50	0.72	27.50	0.29	37.50	0.16
7.75	3.66	17.75	0.70	27.75	0.29	37.75	0.15
8.00	3.44	18.00	0.68	28.00	0.28	38.00	0.15
8.25	3.23	18.25	0.66	28.25	0.28	38.25	0.15
8.50	3.05	18.50	0.64	28.50	0.27	38.50	0.15
8.75	2.87	18.75	0.63	28.75	0.27	38.75	0.15
9.00	2.72	19.00	0.61	29.00	0.26	39.00	0.14
9.25	2.57	19.25	0.59	29.25	0.26	39.25	0.14
9.50	2.44	19.50	0.58	29.50	0.25	39.50	0.14
9.75	2.31	19.75	0.56	29.75	0.25	39.75	0.14
10.00	2.20	20.00	0.55	30.00	0.24	40.00	0.14

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 – 100% reflections)

Meters 1 Collector Meter

Time Avg: 40%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.62

7.42 Inches

BioInitiative ft. 47.00

564.00 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	0.14	54.25	0.07	68.25	0.05	82.25	0.03
40.50	0.13	54.50	0.07	68.50	0.05	82.50	0.03
40.75	0.13	54.75	0.07	68.75	0.05	82.75	0.03
41.00	0.13	55.00	0.07	69.00	0.05	83.00	0.03
41.25	0.13	55.25	0.07	69.25	0.05	83.25	0.03
41.50	0.13	55.50	0.07	69.50	0.05	83.50	0.03
41.75	0.13	55.75	0.07	69.75	0.05	83.75	0.03
42.00	0.12	56.00	0.07	70.00	0.04	84.00	0.03
42.25	0.12	56.25	0.07	70.25	0.04	84.25	0.03
42.50	0.12	56.50	0.07	70.50	0.04	84.50	0.03
42.75	0.12	56.75	0.07	70.75	0.04	84.75	0.03
43.00	0.12	57.00	0.07	71.00	0.04	85.00	0.03
43.25	0.12	57.25	0.07	71.25	0.04	85.25	0.03
43.50	0.12	57.50	0.07	71.50	0.04	85.50	0.03
43.75	0.11	57.75	0.07	71.75	0.04	85.75	0.03
44.00	0.11	58.00	0.07	72.00	0.04	86.00	0.03
44.25	0.11	58.25	0.06	72.25	0.04	86.25	0.03
44.50	0.11	58.50	0.06	72.50	0.04	86.50	0.03
44.75	0.11	58.75	0.06	72.75	0.04	86.75	0.03
45.00	0.11	59.00	0.06	73.00	0.04	87.00	0.03
45.25	0.11	59.25	0.06	73.25	0.04	87.25	0.03
45.50	0.11	59.50	0.06	73.50	0.04	87.50	0.03
45.75	0.11	59.75	0.06	73.75	0.04	87.75	0.03
46.00	0.10	60.00	0.06	74.00	0.04	88.00	0.03
46.25	0.10	60.25	0.06	74.25	0.04	88.25	0.03
46.50	0.10	60.50	0.06	74.50	0.04	88.50	0.03
46.75	0.10	60.75	0.06	74.75	0.04	88.75	0.03
47.00	0.10	61.00	0.06	75.00	0.04	89.00	0.03
47.25	0.10	61.25	0.06	75.25	0.04	89.25	0.03
47.50	0.10	61.50	0.06	75.50	0.04	89.50	0.03
47.75	0.10	61.75	0.06	75.75	0.04	89.75	0.03
48.00	0.10	62.00	0.06	76.00	0.04	90.00	0.03
48.25	0.09	62.25	0.06	76.25	0.04	90.25	0.03
48.50	0.09	62.50	0.06	76.50	0.04	90.50	0.03
48.75	0.09	62.75	0.06	76.75	0.04	90.75	0.03
49.00	0.09	63.00	0.06	77.00	0.04	91.00	0.03
49.25	0.09	63.25	0.05	77.25	0.04	91.25	0.03
49.50	0.09	63.50	0.05	77.50	0.04	91.50	0.03
49.75	0.09	63.75	0.05	77.75	0.04	91.75	0.03
50.00	0.09	64.00	0.05	78.00	0.04	92.00	0.03
50.25	0.09	64.25	0.05	78.25	0.04	92.25	0.03
50.50	0.09	64.50	0.05	78.50	0.04	92.50	0.03
50.75	0.09	64.75	0.05	78.75	0.04	92.75	0.03
51.00	0.08	65.00	0.05	79.00	0.04	93.00	0.03
51.25	0.08	65.25	0.05	79.25	0.04	93.25	0.03
51.50	0.08	65.50	0.05	79.50	0.03	93.50	0.03
51.75	0.08	65.75	0.05	79.75	0.03	93.75	0.03
52.00	0.08	66.00	0.05	80.00	0.03	94.00	0.02
52.25	0.08	66.25	0.05	80.25	0.03	94.25	0.02
52.50	0.08	66.50	0.05	80.50	0.03	94.50	0.02
52.75	0.08	66.75	0.05	80.75	0.03	94.75	0.02
53.00	0.08	67.00	0.05	81.00	0.03	95.00	0.02
53.25	0.08	67.25	0.05	81.25	0.03	95.25	0.02
53.50	0.08	67.50	0.05	81.50	0.03	95.50	0.02
53.75	0.08	67.75	0.05	81.75	0.03	95.75	0.02
54.00	0.08	68.00	0.05	82.00	0.03	96.00	0.02

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 100% reflections)

Meters 1 Collector Meter

Time Avg: 50%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.69 8.3 Inches

BioInitiative ft. 52.50 630.0 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	4400.14	10.25	2.62	20.25	0.67	30.25	0.30
0.50	1100.03	10.50	2.49	20.50	0.65	30.50	0.30
0.75	488.90	10.75	2.38	20.75	0.64	30.75	0.29
1.00	275.01	11.00	2.27	21.00	0.62	31.00	0.29
1.25	176.01	11.25	2.17	21.25	0.61	31.25	0.28
1.50	122.23	11.50	2.08	21.50	0.59	31.50	0.28
1.75	89.80	11.75	1.99	21.75	0.58	31.75	0.27
2.00	68.75	12.00	1.91	22.00	0.57	32.00	0.27
2.25	54.32	12.25	1.83	22.25	0.56	32.25	0.26
2.50	44.00	12.50	1.76	22.50	0.54	32.50	0.26
2.75	36.36	12.75	1.69	22.75	0.53	32.75	0.26
3.00	30.56	13.00	1.63	23.00	0.52	33.00	0.25
3.25	26.04	13.25	1.57	23.25	0.51	33.25	0.25
3.50	22.45	13.50	1.51	23.50	0.50	33.50	0.25
3.75	19.56	13.75	1.45	23.75	0.49	33.75	0.24
4.00	17.19	14.00	1.40	24.00	0.48	34.00	0.24
4.25	15.23	14.25	1.35	24.25	0.47	34.25	0.23
4.50	13.58	14.50	1.31	24.50	0.46	34.50	0.23
4.75	12.19	14.75	1.26	24.75	0.45	34.75	0.23
5.00	11.00	15.00	1.22	25.00	0.44	35.00	0.22
5.25	9.98	15.25	1.18	25.25	0.43	35.25	0.22
5.50	9.09	15.50	1.14	25.50	0.42	35.50	0.22
5.75	8.32	15.75	1.11	25.75	0.41	35.75	0.22
6.00	7.64	16.00	1.07	26.00	0.41	36.00	0.21
6.25	7.04	16.25	1.04	26.25	0.40	36.25	0.21
6.50	6.51	16.50	1.01	26.50	0.39	36.50	0.21
6.75	6.04	16.75	0.98	26.75	0.38	36.75	0.20
7.00	5.61	17.00	0.95	27.00	0.38	37.00	0.20
7.25	5.23	17.25	0.92	27.25	0.37	37.25	0.20
7.50	4.89	17.50	0.90	27.50	0.36	37.50	0.20
7.75	4.58	17.75	0.87	27.75	0.36	37.75	0.19
8.00	4.30	18.00	0.85	28.00	0.35	38.00	0.19
8.25	4.04	18.25	0.83	28.25	0.34	38.25	0.19
8.50	3.81	18.50	0.80	28.50	0.34	38.50	0.19
8.75	3.59	18.75	0.78	28.75	0.33	38.75	0.18
9.00	3.40	19.00	0.76	29.00	0.33	39.00	0.18
9.25	3.21	19.25	0.74	29.25	0.32	39.25	0.18
9.50	3.05	19.50	0.72	29.50	0.32	39.50	0.18
9.75	2.89	19.75	0.71	29.75	0.31	39.75	0.17
10.00	2.75	20.00	0.69	30.00	0.31	40.00	0.17

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 – 100% reflections)

Meters 1 Collector Meter

Time Avg: 50%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.69

8.30 Inches

BioInitiative ft. 52.50

630.00 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	0.17	54.25	0.09	68.25	0.06	82.25	0.04
40.50	0.17	54.50	0.09	68.50	0.06	82.50	0.04
40.75	0.17	54.75	0.09	68.75	0.06	82.75	0.04
41.00	0.16	55.00	0.09	69.00	0.06	83.00	0.04
41.25	0.16	55.25	0.09	69.25	0.06	83.25	0.04
41.50	0.16	55.50	0.09	69.50	0.06	83.50	0.04
41.75	0.16	55.75	0.09	69.75	0.06	83.75	0.04
42.00	0.16	56.00	0.09	70.00	0.06	84.00	0.04
42.25	0.15	56.25	0.09	70.25	0.06	84.25	0.04
42.50	0.15	56.50	0.09	70.50	0.06	84.50	0.04
42.75	0.15	56.75	0.09	70.75	0.05	84.75	0.04
43.00	0.15	57.00	0.08	71.00	0.05	85.00	0.04
43.25	0.15	57.25	0.08	71.25	0.05	85.25	0.04
43.50	0.15	57.50	0.08	71.50	0.05	85.50	0.04
43.75	0.14	57.75	0.08	71.75	0.05	85.75	0.04
44.00	0.14	58.00	0.08	72.00	0.05	86.00	0.04
44.25	0.14	58.25	0.08	72.25	0.05	86.25	0.04
44.50	0.14	58.50	0.08	72.50	0.05	86.50	0.04
44.75	0.14	58.75	0.08	72.75	0.05	86.75	0.04
45.00	0.14	59.00	0.08	73.00	0.05	87.00	0.04
45.25	0.13	59.25	0.08	73.25	0.05	87.25	0.04
45.50	0.13	59.50	0.08	73.50	0.05	87.50	0.04
45.75	0.13	59.75	0.08	73.75	0.05	87.75	0.04
46.00	0.13	60.00	0.08	74.00	0.05	88.00	0.04
46.25	0.13	60.25	0.08	74.25	0.05	88.25	0.04
46.50	0.13	60.50	0.08	74.50	0.05	88.50	0.04
46.75	0.13	60.75	0.07	74.75	0.05	88.75	0.03
47.00	0.12	61.00	0.07	75.00	0.05	89.00	0.03
47.25	0.12	61.25	0.07	75.25	0.05	89.25	0.03
47.50	0.12	61.50	0.07	75.50	0.05	89.50	0.03
47.75	0.12	61.75	0.07	75.75	0.05	89.75	0.03
48.00	0.12	62.00	0.07	76.00	0.05	90.00	0.03
48.25	0.12	62.25	0.07	76.25	0.05	90.25	0.03
48.50	0.12	62.50	0.07	76.50	0.05	90.50	0.03
48.75	0.12	62.75	0.07	76.75	0.05	90.75	0.03
49.00	0.11	63.00	0.07	77.00	0.05	91.00	0.03
49.25	0.11	63.25	0.07	77.25	0.05	91.25	0.03
49.50	0.11	63.50	0.07	77.50	0.05	91.50	0.03
49.75	0.11	63.75	0.07	77.75	0.05	91.75	0.03
50.00	0.11	64.00	0.07	78.00	0.05	92.00	0.03
50.25	0.11	64.25	0.07	78.25	0.04	92.25	0.03
50.50	0.11	64.50	0.07	78.50	0.04	92.50	0.03
50.75	0.11	64.75	0.07	78.75	0.04	92.75	0.03
51.00	0.11	65.00	0.07	79.00	0.04	93.00	0.03
51.25	0.10	65.25	0.06	79.25	0.04	93.25	0.03
51.50	0.10	65.50	0.06	79.50	0.04	93.50	0.03
51.75	0.10	65.75	0.06	79.75	0.04	93.75	0.03
52.00	0.10	66.00	0.06	80.00	0.04	94.00	0.03
52.25	0.10	66.25	0.06	80.25	0.04	94.25	0.03
52.50	0.10	66.50	0.06	80.50	0.04	94.50	0.03
52.75	0.10	66.75	0.06	80.75	0.04	94.75	0.03
53.00	0.10	67.00	0.06	81.00	0.04	95.00	0.03
53.25	0.10	67.25	0.06	81.25	0.04	95.25	0.03
53.50	0.10	67.50	0.06	81.50	0.04	95.50	0.03
53.75	0.10	67.75	0.06	81.75	0.04	95.75	0.03
54.00	0.09	68.00	0.06	82.00	0.04	96.00	0.03

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 100% reflections)

Meters 1 Collector Meter

Time Avg: 60%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.76 9.1 Inches

BioInitiative ft. 57.50 690.0 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	5280.16	10.25	3.14	20.25	0.80	30.25	0.36
0.50	1320.04	10.50	2.99	20.50	0.79	30.50	0.35
0.75	586.68	10.75	2.86	20.75	0.77	30.75	0.35
1.00	330.01	11.00	2.73	21.00	0.75	31.00	0.34
1.25	211.21	11.25	2.61	21.25	0.73	31.25	0.34
1.50	146.67	11.50	2.50	21.50	0.71	31.50	0.33
1.75	107.76	11.75	2.39	21.75	0.70	31.75	0.33
2.00	82.50	12.00	2.29	22.00	0.68	32.00	0.32
2.25	65.19	12.25	2.20	22.25	0.67	32.25	0.32
2.50	52.80	12.50	2.11	22.50	0.65	32.50	0.31
2.75	43.64	12.75	2.03	22.75	0.64	32.75	0.31
3.00	36.67	13.00	1.95	23.00	0.62	33.00	0.30
3.25	31.24	13.25	1.88	23.25	0.61	33.25	0.30
3.50	26.94	13.50	1.81	23.50	0.60	33.50	0.29
3.75	23.47	13.75	1.75	23.75	0.59	33.75	0.29
4.00	20.63	14.00	1.68	24.00	0.57	34.00	0.29
4.25	18.27	14.25	1.63	24.25	0.56	34.25	0.28
4.50	16.30	14.50	1.57	24.50	0.55	34.50	0.28
4.75	14.63	14.75	1.52	24.75	0.54	34.75	0.27
5.00	13.20	15.00	1.47	25.00	0.53	35.00	0.27
5.25	11.97	15.25	1.42	25.25	0.52	35.25	0.27
5.50	10.91	15.50	1.37	25.50	0.51	35.50	0.26
5.75	9.98	15.75	1.33	25.75	0.50	35.75	0.26
6.00	9.17	16.00	1.29	26.00	0.49	36.00	0.25
6.25	8.45	16.25	1.25	26.25	0.48	36.25	0.25
6.50	7.81	16.50	1.21	26.50	0.47	36.50	0.25
6.75	7.24	16.75	1.18	26.75	0.46	36.75	0.24
7.00	6.73	17.00	1.14	27.00	0.45	37.00	0.24
7.25	6.28	17.25	1.11	27.25	0.44	37.25	0.24
7.50	5.87	17.50	1.08	27.50	0.44	37.50	0.23
7.75	5.49	17.75	1.05	27.75	0.43	37.75	0.23
8.00	5.16	18.00	1.02	28.00	0.42	38.00	0.23
8.25	4.85	18.25	0.99	28.25	0.41	38.25	0.23
8.50	4.57	18.50	0.96	28.50	0.41	38.50	0.22
8.75	4.31	18.75	0.94	28.75	0.40	38.75	0.22
9.00	4.07	19.00	0.91	29.00	0.39	39.00	0.22
9.25	3.86	19.25	0.89	29.25	0.39	39.25	0.21
9.50	3.66	19.50	0.87	29.50	0.38	39.50	0.21
9.75	3.47	19.75	0.85	29.75	0.37	39.75	0.21
10.00	3.30	20.00	0.83	30.00	0.37	40.00	0.21

Notes:

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

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi \cdot R^2)$$
  - 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
- 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 – 100% reflections)

Meters 1 Collector Meter

Time Avg: 60%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.76

9.09 Inches

BioInitiative ft. 57.50

690.00 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	0.20	54.25	0.11	68.25	0.07	82.25	0.05
40.50	0.20	54.50	0.11	68.50	0.07	82.50	0.05
40.75	0.20	54.75	0.11	68.75	0.07	82.75	0.05
41.00	0.20	55.00	0.11	69.00	0.07	83.00	0.05
41.25	0.19	55.25	0.11	69.25	0.07	83.25	0.05
41.50	0.19	55.50	0.11	69.50	0.07	83.50	0.05
41.75	0.19	55.75	0.11	69.75	0.07	83.75	0.05
42.00	0.19	56.00	0.11	70.00	0.07	84.00	0.05
42.25	0.18	56.25	0.10	70.25	0.07	84.25	0.05
42.50	0.18	56.50	0.10	70.50	0.07	84.50	0.05
42.75	0.18	56.75	0.10	70.75	0.07	84.75	0.05
43.00	0.18	57.00	0.10	71.00	0.07	85.00	0.05
43.25	0.18	57.25	0.10	71.25	0.07	85.25	0.05
43.50	0.17	57.50	0.10	71.50	0.06	85.50	0.05
43.75	0.17	57.75	0.10	71.75	0.06	85.75	0.04
44.00	0.17	58.00	0.10	72.00	0.06	86.00	0.04
44.25	0.17	58.25	0.10	72.25	0.06	86.25	0.04
44.50	0.17	58.50	0.10	72.50	0.06	86.50	0.04
44.75	0.16	58.75	0.10	72.75	0.06	86.75	0.04
45.00	0.16	59.00	0.09	73.00	0.06	87.00	0.04
45.25	0.16	59.25	0.09	73.25	0.06	87.25	0.04
45.50	0.16	59.50	0.09	73.50	0.06	87.50	0.04
45.75	0.16	59.75	0.09	73.75	0.06	87.75	0.04
46.00	0.16	60.00	0.09	74.00	0.06	88.00	0.04
46.25	0.15	60.25	0.09	74.25	0.06	88.25	0.04
46.50	0.15	60.50	0.09	74.50	0.06	88.50	0.04
46.75	0.15	60.75	0.09	74.75	0.06	88.75	0.04
47.00	0.15	61.00	0.09	75.00	0.06	89.00	0.04
47.25	0.15	61.25	0.09	75.25	0.06	89.25	0.04
47.50	0.15	61.50	0.09	75.50	0.06	89.50	0.04
47.75	0.14	61.75	0.09	75.75	0.06	89.75	0.04
48.00	0.14	62.00	0.09	76.00	0.06	90.00	0.04
48.25	0.14	62.25	0.09	76.25	0.06	90.25	0.04
48.50	0.14	62.50	0.08	76.50	0.06	90.50	0.04
48.75	0.14	62.75	0.08	76.75	0.06	90.75	0.04
49.00	0.14	63.00	0.08	77.00	0.06	91.00	0.04
49.25	0.14	63.25	0.08	77.25	0.06	91.25	0.04
49.50	0.13	63.50	0.08	77.50	0.05	91.50	0.04
49.75	0.13	63.75	0.08	77.75	0.05	91.75	0.04
50.00	0.13	64.00	0.08	78.00	0.05	92.00	0.04
50.25	0.13	64.25	0.08	78.25	0.05	92.25	0.04
50.50	0.13	64.50	0.08	78.50	0.05	92.50	0.04
50.75	0.13	64.75	0.08	78.75	0.05	92.75	0.04
51.00	0.13	65.00	0.08	79.00	0.05	93.00	0.04
51.25	0.13	65.25	0.08	79.25	0.05	93.25	0.04
51.50	0.12	65.50	0.08	79.50	0.05	93.50	0.04
51.75	0.12	65.75	0.08	79.75	0.05	93.75	0.04
52.00	0.12	66.00	0.08	80.00	0.05	94.00	0.04
52.25	0.12	66.25	0.08	80.25	0.05	94.25	0.04
52.50	0.12	66.50	0.07	80.50	0.05	94.50	0.04
52.75	0.12	66.75	0.07	80.75	0.05	94.75	0.04
53.00	0.12	67.00	0.07	81.00	0.05	95.00	0.04
53.25	0.12	67.25	0.07	81.25	0.05	95.25	0.04
53.50	0.12	67.50	0.07	81.50	0.05	95.50	0.04
53.75	0.11	67.75	0.07	81.75	0.05	95.75	0.04
54.00	0.11	68.00	0.07	82.00	0.05	96.00	0.04

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 100% reflections)

Meters 1 Collector Meter

Time Avg: 70%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.82 9.8 Inches

BioInitiative ft. 62.00 744.0 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	6160.19	10.25	3.66	20.25	0.94	30.25	0.42
0.50	1540.05	10.50	3.49	20.50	0.92	30.50	0.41
0.75	684.47	10.75	3.33	20.75	0.89	30.75	0.41
1.00	385.01	11.00	3.18	21.00	0.87	31.00	0.40
1.25	246.41	11.25	3.04	21.25	0.85	31.25	0.39
1.50	171.12	11.50	2.91	21.50	0.83	31.50	0.39
1.75	125.72	11.75	2.79	21.75	0.81	31.75	0.38
2.00	96.25	12.00	2.67	22.00	0.80	32.00	0.38
2.25	76.05	12.25	2.57	22.25	0.78	32.25	0.37
2.50	61.60	12.50	2.46	22.50	0.76	32.50	0.36
2.75	50.91	12.75	2.37	22.75	0.74	32.75	0.36
3.00	42.78	13.00	2.28	23.00	0.73	33.00	0.35
3.25	36.45	13.25	2.19	23.25	0.71	33.25	0.35
3.50	31.43	13.50	2.11	23.50	0.70	33.50	0.34
3.75	27.38	13.75	2.04	23.75	0.68	33.75	0.34
4.00	24.06	14.00	1.96	24.00	0.67	34.00	0.33
4.25	21.32	14.25	1.90	24.25	0.65	34.25	0.33
4.50	19.01	14.50	1.83	24.50	0.64	34.50	0.32
4.75	17.06	14.75	1.77	24.75	0.63	34.75	0.32
5.00	15.40	15.00	1.71	25.00	0.62	35.00	0.31
5.25	13.97	15.25	1.66	25.25	0.60	35.25	0.31
5.50	12.73	15.50	1.60	25.50	0.59	35.50	0.31
5.75	11.64	15.75	1.55	25.75	0.58	35.75	0.30
6.00	10.69	16.00	1.50	26.00	0.57	36.00	0.30
6.25	9.86	16.25	1.46	26.25	0.56	36.25	0.29
6.50	9.11	16.50	1.41	26.50	0.55	36.50	0.29
6.75	8.45	16.75	1.37	26.75	0.54	36.75	0.29
7.00	7.86	17.00	1.33	27.00	0.53	37.00	0.28
7.25	7.32	17.25	1.29	27.25	0.52	37.25	0.28
7.50	6.84	17.50	1.26	27.50	0.51	37.50	0.27
7.75	6.41	17.75	1.22	27.75	0.50	37.75	0.27
8.00	6.02	18.00	1.19	28.00	0.49	38.00	0.27
8.25	5.66	18.25	1.16	28.25	0.48	38.25	0.26
8.50	5.33	18.50	1.12	28.50	0.47	38.50	0.26
8.75	5.03	18.75	1.10	28.75	0.47	38.75	0.26
9.00	4.75	19.00	1.07	29.00	0.46	39.00	0.25
9.25	4.50	19.25	1.04	29.25	0.45	39.25	0.25
9.50	4.27	19.50	1.01	29.50	0.44	39.50	0.25
9.75	4.05	19.75	0.99	29.75	0.44	39.75	0.24
10.00	3.85	20.00	0.96	30.00	0.43	40.00	0.24

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 – 100% reflections)

Meters 1 Collector Meter

Time Avg: 70%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.82 9.82 Inches

BioInitiative ft. 62.00

744.00 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	0.24	54.25	0.13	68.25	0.08	82.25	0.06
40.50	0.23	54.50	0.13	68.50	0.08	82.50	0.06
40.75	0.23	54.75	0.13	68.75	0.08	82.75	0.06
41.00	0.23	55.00	0.13	69.00	0.08	83.00	0.06
41.25	0.23	55.25	0.13	69.25	0.08	83.25	0.06
41.50	0.22	55.50	0.12	69.50	0.08	83.50	0.06
41.75	0.22	55.75	0.12	69.75	0.08	83.75	0.05
42.00	0.22	56.00	0.12	70.00	0.08	84.00	0.05
42.25	0.22	56.25	0.12	70.25	0.08	84.25	0.05
42.50	0.21	56.50	0.12	70.50	0.08	84.50	0.05
42.75	0.21	56.75	0.12	70.75	0.08	84.75	0.05
43.00	0.21	57.00	0.12	71.00	0.08	85.00	0.05
43.25	0.21	57.25	0.12	71.25	0.08	85.25	0.05
43.50	0.20	57.50	0.12	71.50	0.08	85.50	0.05
43.75	0.20	57.75	0.12	71.75	0.07	85.75	0.05
44.00	0.20	58.00	0.11	72.00	0.07	86.00	0.05
44.25	0.20	58.25	0.11	72.25	0.07	86.25	0.05
44.50	0.19	58.50	0.11	72.50	0.07	86.50	0.05
44.75	0.19	58.75	0.11	72.75	0.07	86.75	0.05
45.00	0.19	59.00	0.11	73.00	0.07	87.00	0.05
45.25	0.19	59.25	0.11	73.25	0.07	87.25	0.05
45.50	0.19	59.50	0.11	73.50	0.07	87.50	0.05
45.75	0.18	59.75	0.11	73.75	0.07	87.75	0.05
46.00	0.18	60.00	0.11	74.00	0.07	88.00	0.05
46.25	0.18	60.25	0.11	74.25	0.07	88.25	0.05
46.50	0.18	60.50	0.11	74.50	0.07	88.50	0.05
46.75	0.18	60.75	0.10	74.75	0.07	88.75	0.05
47.00	0.17	61.00	0.10	75.00	0.07	89.00	0.05
47.25	0.17	61.25	0.10	75.25	0.07	89.25	0.05
47.50	0.17	61.50	0.10	75.50	0.07	89.50	0.05
47.75	0.17	61.75	0.10	75.75	0.07	89.75	0.05
48.00	0.17	62.00	0.10	76.00	0.07	90.00	0.05
48.25	0.17	62.25	0.10	76.25	0.07	90.25	0.05
48.50	0.16	62.50	0.10	76.50	0.07	90.50	0.05
48.75	0.16	62.75	0.10	76.75	0.07	90.75	0.05
49.00	0.16	63.00	0.10	77.00	0.06	91.00	0.05
49.25	0.16	63.25	0.10	77.25	0.06	91.25	0.05
49.50	0.16	63.50	0.10	77.50	0.06	91.50	0.05
49.75	0.16	63.75	0.09	77.75	0.06	91.75	0.05
50.00	0.15	64.00	0.09	78.00	0.06	92.00	0.05
50.25	0.15	64.25	0.09	78.25	0.06	92.25	0.05
50.50	0.15	64.50	0.09	78.50	0.06	92.50	0.04
50.75	0.15	64.75	0.09	78.75	0.06	92.75	0.04
51.00	0.15	65.00	0.09	79.00	0.06	93.00	0.04
51.25	0.15	65.25	0.09	79.25	0.06	93.25	0.04
51.50	0.15	65.50	0.09	79.50	0.06	93.50	0.04
51.75	0.14	65.75	0.09	79.75	0.06	93.75	0.04
52.00	0.14	66.00	0.09	80.00	0.06	94.00	0.04
52.25	0.14	66.25	0.09	80.25	0.06	94.25	0.04
52.50	0.14	66.50	0.09	80.50	0.06	94.50	0.04
52.75	0.14	66.75	0.09	80.75	0.06	94.75	0.04
53.00	0.14	67.00	0.09	81.00	0.06	95.00	0.04
53.25	0.14	67.25	0.09	81.25	0.06	95.25	0.04
53.50	0.13	67.50	0.08	81.50	0.06	95.50	0.04
53.75	0.13	67.75	0.08	81.75	0.06	95.75	0.04
54.00	0.13	68.00	0.08	82.00	0.06	96.00	0.04



# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 100% reflections)

Meters 1 Collector Meter

Time Avg: 80%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.87 10.5 Inches

BioInitiative ft. 66.40 796.8 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	7040.22	10.25	4.19	20.25	1.07	30.25	0.48
0.50	1760.05	10.50	3.99	20.50	1.05	30.50	0.47
0.75	782.25	10.75	3.81	20.75	1.02	30.75	0.47
1.00	440.01	11.00	3.64	21.00	1.00	31.00	0.46
1.25	281.61	11.25	3.48	21.25	0.97	31.25	0.45
1.50	195.56	11.50	3.33	21.50	0.95	31.50	0.44
1.75	143.68	11.75	3.19	21.75	0.93	31.75	0.44
2.00	110.00	12.00	3.06	22.00	0.91	32.00	0.43
2.25	86.92	12.25	2.93	22.25	0.89	32.25	0.42
2.50	70.40	12.50	2.82	22.50	0.87	32.50	0.42
2.75	58.18	12.75	2.71	22.75	0.85	32.75	0.41
3.00	48.89	13.00	2.60	23.00	0.83	33.00	0.40
3.25	41.66	13.25	2.51	23.25	0.81	33.25	0.40
3.50	35.92	13.50	2.41	23.50	0.80	33.50	0.39
3.75	31.29	13.75	2.33	23.75	0.78	33.75	0.39
4.00	27.50	14.00	2.24	24.00	0.76	34.00	0.38
4.25	24.36	14.25	2.17	24.25	0.75	34.25	0.38
4.50	21.73	14.50	2.09	24.50	0.73	34.50	0.37
4.75	19.50	14.75	2.02	24.75	0.72	34.75	0.36
5.00	17.60	15.00	1.96	25.00	0.70	35.00	0.36
5.25	15.96	15.25	1.89	25.25	0.69	35.25	0.35
5.50	14.55	15.50	1.83	25.50	0.68	35.50	0.35
5.75	13.31	15.75	1.77	25.75	0.66	35.75	0.34
6.00	12.22	16.00	1.72	26.00	0.65	36.00	0.34
6.25	11.26	16.25	1.67	26.25	0.64	36.25	0.33
6.50	10.41	16.50	1.62	26.50	0.63	36.50	0.33
6.75	9.66	16.75	1.57	26.75	0.61	36.75	0.33
7.00	8.98	17.00	1.52	27.00	0.60	37.00	0.32
7.25	8.37	17.25	1.48	27.25	0.59	37.25	0.32
7.50	7.82	17.50	1.44	27.50	0.58	37.50	0.31
7.75	7.33	17.75	1.40	27.75	0.57	37.75	0.31
8.00	6.88	18.00	1.36	28.00	0.56	38.00	0.30
8.25	6.46	18.25	1.32	28.25	0.55	38.25	0.30
8.50	6.09	18.50	1.29	28.50	0.54	38.50	0.30
8.75	5.75	18.75	1.25	28.75	0.53	38.75	0.29
9.00	5.43	19.00	1.22	29.00	0.52	39.00	0.29
9.25	5.14	19.25	1.19	29.25	0.51	39.25	0.29
9.50	4.88	19.50	1.16	29.50	0.51	39.50	0.28
9.75	4.63	19.75	1.13	29.75	0.50	39.75	0.28
10.00	4.40	20.00	1.10	30.00	0.49	40.00	0.28

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 – 100% reflections)

Meters 1 Collector Meter

Time Avg: 80%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.87 10.49 Inches

BioInitiative ft. 66.40 796.80 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	0.27	54.25	0.15	68.25	0.09	82.25	0.07
40.50	0.27	54.50	0.15	68.50	0.09	82.50	0.06
40.75	0.26	54.75	0.15	68.75	0.09	82.75	0.06
41.00	0.26	55.00	0.15	69.00	0.09	83.00	0.06
41.25	0.26	55.25	0.14	69.25	0.09	83.25	0.06
41.50	0.26	55.50	0.14	69.50	0.09	83.50	0.06
41.75	0.25	55.75	0.14	69.75	0.09	83.75	0.06
42.00	0.25	56.00	0.14	70.00	0.09	84.00	0.06
42.25	0.25	56.25	0.14	70.25	0.09	84.25	0.06
42.50	0.24	56.50	0.14	70.50	0.09	84.50	0.06
42.75	0.24	56.75	0.14	70.75	0.09	84.75	0.06
43.00	0.24	57.00	0.14	71.00	0.09	85.00	0.06
43.25	0.24	57.25	0.13	71.25	0.09	85.25	0.06
43.50	0.23	57.50	0.13	71.50	0.09	85.50	0.06
43.75	0.23	57.75	0.13	71.75	0.09	85.75	0.06
44.00	0.23	58.00	0.13	72.00	0.08	86.00	0.06
44.25	0.22	58.25	0.13	72.25	0.08	86.25	0.06
44.50	0.22	58.50	0.13	72.50	0.08	86.50	0.06
44.75	0.22	58.75	0.13	72.75	0.08	86.75	0.06
45.00	0.22	59.00	0.13	73.00	0.08	87.00	0.06
45.25	0.21	59.25	0.13	73.25	0.08	87.25	0.06
45.50	0.21	59.50	0.12	73.50	0.08	87.50	0.06
45.75	0.21	59.75	0.12	73.75	0.08	87.75	0.06
46.00	0.21	60.00	0.12	74.00	0.08	88.00	0.06
46.25	0.21	60.25	0.12	74.25	0.08	88.25	0.06
46.50	0.20	60.50	0.12	74.50	0.08	88.50	0.06
46.75	0.20	60.75	0.12	74.75	0.08	88.75	0.06
47.00	0.20	61.00	0.12	75.00	0.08	89.00	0.06
47.25	0.20	61.25	0.12	75.25	0.08	89.25	0.06
47.50	0.20	61.50	0.12	75.50	0.08	89.50	0.05
47.75	0.19	61.75	0.12	75.75	0.08	89.75	0.05
48.00	0.19	62.00	0.11	76.00	0.08	90.00	0.05
48.25	0.19	62.25	0.11	76.25	0.08	90.25	0.05
48.50	0.19	62.50	0.11	76.50	0.08	90.50	0.05
48.75	0.19	62.75	0.11	76.75	0.07	90.75	0.05
49.00	0.18	63.00	0.11	77.00	0.07	91.00	0.05
49.25	0.18	63.25	0.11	77.25	0.07	91.25	0.05
49.50	0.18	63.50	0.11	77.50	0.07	91.50	0.05
49.75	0.18	63.75	0.11	77.75	0.07	91.75	0.05
50.00	0.18	64.00	0.11	78.00	0.07	92.00	0.05
50.25	0.17	64.25	0.11	78.25	0.07	92.25	0.05
50.50	0.17	64.50	0.11	78.50	0.07	92.50	0.05
50.75	0.17	64.75	0.10	78.75	0.07	92.75	0.05
51.00	0.17	65.00	0.10	79.00	0.07	93.00	0.05
51.25	0.17	65.25	0.10	79.25	0.07	93.25	0.05
51.50	0.17	65.50	0.10	79.50	0.07	93.50	0.05
51.75	0.16	65.75	0.10	79.75	0.07	93.75	0.05
52.00	0.16	66.00	0.10	80.00	0.07	94.00	0.05
52.25	0.16	66.25	0.10	80.25	0.07	94.25	0.05
52.50	0.16	66.50	0.10	80.50	0.07	94.50	0.05
52.75	0.16	66.75	0.10	80.75	0.07	94.75	0.05
53.00	0.16	67.00	0.10	81.00	0.07	95.00	0.05
53.25	0.16	67.25	0.10	81.25	0.07	95.25	0.05
53.50	0.15	67.50	0.10	81.50	0.07	95.50	0.05
53.75	0.15	67.75	0.10	81.75	0.07	95.75	0.05
54.00	0.15	68.00	0.10	82.00	0.07	96.00	0.05

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 100% reflections)

Meters 1 Collector Meter

Time Avg: 90%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.93 11.1 Inches

BioInitiative ft. 70.50 846.0 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	7920.25	10.25	4.71	20.25	1.21	30.25	0.54
0.50	1980.06	10.50	4.49	20.50	1.18	30.50	0.53
0.75	880.03	10.75	4.28	20.75	1.15	30.75	0.52
1.00	495.02	11.00	4.09	21.00	1.12	31.00	0.52
1.25	316.81	11.25	3.91	21.25	1.10	31.25	0.51
1.50	220.01	11.50	3.74	21.50	1.07	31.50	0.50
1.75	161.64	11.75	3.59	21.75	1.05	31.75	0.49
2.00	123.75	12.00	3.44	22.00	1.02	32.00	0.48
2.25	97.78	12.25	3.30	22.25	1.00	32.25	0.48
2.50	79.20	12.50	3.17	22.50	0.98	32.50	0.47
2.75	65.46	12.75	3.05	22.75	0.96	32.75	0.46
3.00	55.00	13.00	2.93	23.00	0.94	33.00	0.45
3.25	46.87	13.25	2.82	23.25	0.92	33.25	0.45
3.50	40.41	13.50	2.72	23.50	0.90	33.50	0.44
3.75	35.20	13.75	2.62	23.75	0.88	33.75	0.43
4.00	30.94	14.00	2.53	24.00	0.86	34.00	0.43
4.25	27.41	14.25	2.44	24.25	0.84	34.25	0.42
4.50	24.45	14.50	2.35	24.50	0.82	34.50	0.42
4.75	21.94	14.75	2.28	24.75	0.81	34.75	0.41
5.00	19.80	15.00	2.20	25.00	0.79	35.00	0.40
5.25	17.96	15.25	2.13	25.25	0.78	35.25	0.40
5.50	16.36	15.50	2.06	25.50	0.76	35.50	0.39
5.75	14.97	15.75	2.00	25.75	0.75	35.75	0.39
6.00	13.75	16.00	1.93	26.00	0.73	36.00	0.38
6.25	12.67	16.25	1.87	26.25	0.72	36.25	0.38
6.50	11.72	16.50	1.82	26.50	0.70	36.50	0.37
6.75	10.86	16.75	1.76	26.75	0.69	36.75	0.37
7.00	10.10	17.00	1.71	27.00	0.68	37.00	0.36
7.25	9.42	17.25	1.66	27.25	0.67	37.25	0.36
7.50	8.80	17.50	1.62	27.50	0.65	37.50	0.35
7.75	8.24	17.75	1.57	27.75	0.64	37.75	0.35
8.00	7.73	18.00	1.53	28.00	0.63	38.00	0.34
8.25	7.27	18.25	1.49	28.25	0.62	38.25	0.34
8.50	6.85	18.50	1.45	28.50	0.61	38.50	0.33
8.75	6.47	18.75	1.41	28.75	0.60	38.75	0.33
9.00	6.11	19.00	1.37	29.00	0.59	39.00	0.33
9.25	5.79	19.25	1.34	29.25	0.58	39.25	0.32
9.50	5.48	19.50	1.30	29.50	0.57	39.50	0.32
9.75	5.21	19.75	1.27	29.75	0.56	39.75	0.31
10.00	4.95	20.00	1.24	30.00	0.55	40.00	0.31

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 – 100% reflections)

Meters 1 Collector Meter

Time Avg: 90%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.93

11.13 Inches

BioInitiative ft. 70.50

846.00 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	0.31	54.25	0.17	68.25	0.11	82.25	0.07
40.50	0.30	54.50	0.17	68.50	0.11	82.50	0.07
40.75	0.30	54.75	0.17	68.75	0.10	82.75	0.07
41.00	0.29	55.00	0.16	69.00	0.10	83.00	0.07
41.25	0.29	55.25	0.16	69.25	0.10	83.25	0.07
41.50	0.29	55.50	0.16	69.50	0.10	83.50	0.07
41.75	0.28	55.75	0.16	69.75	0.10	83.75	0.07
42.00	0.28	56.00	0.16	70.00	0.10	84.00	0.07
42.25	0.28	56.25	0.16	70.25	0.10	84.25	0.07
42.50	0.27	56.50	0.16	70.50	0.10	84.50	0.07
42.75	0.27	56.75	0.15	70.75	0.10	84.75	0.07
43.00	0.27	57.00	0.15	71.00	0.10	85.00	0.07
43.25	0.26	57.25	0.15	71.25	0.10	85.25	0.07
43.50	0.26	57.50	0.15	71.50	0.10	85.50	0.07
43.75	0.26	57.75	0.15	71.75	0.10	85.75	0.07
44.00	0.26	58.00	0.15	72.00	0.10	86.00	0.07
44.25	0.25	58.25	0.15	72.25	0.09	86.25	0.07
44.50	0.25	58.50	0.14	72.50	0.09	86.50	0.07
44.75	0.25	58.75	0.14	72.75	0.09	86.75	0.07
45.00	0.24	59.00	0.14	73.00	0.09	87.00	0.07
45.25	0.24	59.25	0.14	73.25	0.09	87.25	0.07
45.50	0.24	59.50	0.14	73.50	0.09	87.50	0.06
45.75	0.24	59.75	0.14	73.75	0.09	87.75	0.06
46.00	0.23	60.00	0.14	74.00	0.09	88.00	0.06
46.25	0.23	60.25	0.14	74.25	0.09	88.25	0.06
46.50	0.23	60.50	0.14	74.50	0.09	88.50	0.06
46.75	0.23	60.75	0.13	74.75	0.09	88.75	0.06
47.00	0.22	61.00	0.13	75.00	0.09	89.00	0.06
47.25	0.22	61.25	0.13	75.25	0.09	89.25	0.06
47.50	0.22	61.50	0.13	75.50	0.09	89.50	0.06
47.75	0.22	61.75	0.13	75.75	0.09	89.75	0.06
48.00	0.21	62.00	0.13	76.00	0.09	90.00	0.06
48.25	0.21	62.25	0.13	76.25	0.09	90.25	0.06
48.50	0.21	62.50	0.13	76.50	0.08	90.50	0.06
48.75	0.21	62.75	0.13	76.75	0.08	90.75	0.06
49.00	0.21	63.00	0.12	77.00	0.08	91.00	0.06
49.25	0.20	63.25	0.12	77.25	0.08	91.25	0.06
49.50	0.20	63.50	0.12	77.50	0.08	91.50	0.06
49.75	0.20	63.75	0.12	77.75	0.08	91.75	0.06
50.00	0.20	64.00	0.12	78.00	0.08	92.00	0.06
50.25	0.20	64.25	0.12	78.25	0.08	92.25	0.06
50.50	0.19	64.50	0.12	78.50	0.08	92.50	0.06
50.75	0.19	64.75	0.12	78.75	0.08	92.75	0.06
51.00	0.19	65.00	0.12	79.00	0.08	93.00	0.06
51.25	0.19	65.25	0.12	79.25	0.08	93.25	0.06
51.50	0.19	65.50	0.12	79.50	0.08	93.50	0.06
51.75	0.18	65.75	0.11	79.75	0.08	93.75	0.06
52.00	0.18	66.00	0.11	80.00	0.08	94.00	0.06
52.25	0.18	66.25	0.11	80.25	0.08	94.25	0.06
52.50	0.18	66.50	0.11	80.50	0.08	94.50	0.06
52.75	0.18	66.75	0.11	80.75	0.08	94.75	0.06
53.00	0.18	67.00	0.11	81.00	0.08	95.00	0.05
53.25	0.17	67.25	0.11	81.25	0.07	95.25	0.05
53.50	0.17	67.50	0.11	81.50	0.07	95.50	0.05
53.75	0.17	67.75	0.11	81.75	0.07	95.75	0.05
54.00	0.17	68.00	0.11	82.00	0.07	96.00	0.05

# SMART Meter Power Density Computer Modeling

(1 Collector Meter – 100% reflections)

Meters 1 Collector Meter

Time Avg: 100%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.98 11.7 Inches

BioInitiative ft. 74.00 888.0 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	8800.27	10.25	5.24	20.25	1.34	30.25	0.60
0.50	2200.07	10.50	4.99	20.50	1.31	30.50	0.59
0.75	977.81	10.75	4.76	20.75	1.28	30.75	0.58
1.00	550.02	11.00	4.55	21.00	1.25	31.00	0.57
1.25	352.01	11.25	4.35	21.25	1.22	31.25	0.56
1.50	244.45	11.50	4.16	21.50	1.19	31.50	0.55
1.75	179.60	11.75	3.98	21.75	1.16	31.75	0.55
2.00	137.50	12.00	3.82	22.00	1.14	32.00	0.54
2.25	108.65	12.25	3.67	22.25	1.11	32.25	0.53
2.50	88.00	12.50	3.52	22.50	1.09	32.50	0.52
2.75	72.73	12.75	3.38	22.75	1.06	32.75	0.51
3.00	61.11	13.00	3.25	23.00	1.04	33.00	0.51
3.25	52.07	13.25	3.13	23.25	1.02	33.25	0.50
3.50	44.90	13.50	3.02	23.50	1.00	33.50	0.49
3.75	39.11	13.75	2.91	23.75	0.98	33.75	0.48
4.00	34.38	14.00	2.81	24.00	0.95	34.00	0.48
4.25	30.45	14.25	2.71	24.25	0.94	34.25	0.47
4.50	27.16	14.50	2.62	24.50	0.92	34.50	0.46
4.75	24.38	14.75	2.53	24.75	0.90	34.75	0.46
5.00	22.00	15.00	2.44	25.00	0.88	35.00	0.45
5.25	19.96	15.25	2.37	25.25	0.86	35.25	0.44
5.50	18.18	15.50	2.29	25.50	0.85	35.50	0.44
5.75	16.64	15.75	2.22	25.75	0.83	35.75	0.43
6.00	15.28	16.00	2.15	26.00	0.81	36.00	0.42
6.25	14.08	16.25	2.08	26.25	0.80	36.25	0.42
6.50	13.02	16.50	2.02	26.50	0.78	36.50	0.41
6.75	12.07	16.75	1.96	26.75	0.77	36.75	0.41
7.00	11.22	17.00	1.90	27.00	0.75	37.00	0.40
7.25	10.46	17.25	1.85	27.25	0.74	37.25	0.40
7.50	9.78	17.50	1.80	27.50	0.73	37.50	0.39
7.75	9.16	17.75	1.75	27.75	0.71	37.75	0.39
8.00	8.59	18.00	1.70	28.00	0.70	38.00	0.38
8.25	8.08	18.25	1.65	28.25	0.69	38.25	0.38
8.50	7.61	18.50	1.61	28.50	0.68	38.50	0.37
8.75	7.18	18.75	1.56	28.75	0.67	38.75	0.37
9.00	6.79	19.00	1.52	29.00	0.65	39.00	0.36
9.25	6.43	19.25	1.48	29.25	0.64	39.25	0.36
9.50	6.09	19.50	1.45	29.50	0.63	39.50	0.35
9.75	5.79	19.75	1.41	29.75	0.62	39.75	0.35
10.00	5.50	20.00	1.38	30.00	0.61	40.00	0.34

Notes:

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

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

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

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

$$\pi() = 3.1459$$

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 – 100% reflections)

**Meters** 1 Collector Meter

Time Avg: 100%

% Reflection 100%

Distance where limits are exceeded

FCC ft. 0.98 11.73 Inches

BiolInitiative ft. 74.00

888.00 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	0.34	54.25	0.19	68.25	0.12	82.25	0.08
40.50	0.34	54.50	0.19	68.50	0.12	82.50	0.08
40.75	0.33	54.75	0.18	68.75	0.12	82.75	0.08
41.00	0.33	55.00	0.18	69.00	0.12	83.00	0.08
41.25	0.32	55.25	0.18	69.25	0.11	83.25	0.08
41.50	0.32	55.50	0.18	69.50	0.11	83.50	0.08
41.75	0.32	55.75	0.18	69.75	0.11	83.75	0.08
42.00	0.31	56.00	0.18	70.00	0.11	84.00	0.08
42.25	0.31	56.25	0.17	70.25	0.11	84.25	0.08
42.50	0.30	56.50	0.17	70.50	0.11	84.50	0.08
42.75	0.30	56.75	0.17	70.75	0.11	84.75	0.08
43.00	0.30	57.00	0.17	71.00	0.11	85.00	0.08
43.25	0.29	57.25	0.17	71.25	0.11	85.25	0.08
43.50	0.29	57.50	0.17	71.50	0.11	85.50	0.08
43.75	0.29	57.75	0.16	71.75	0.11	85.75	0.07
44.00	0.28	58.00	0.16	72.00	0.11	86.00	0.07
44.25	0.28	58.25	0.16	72.25	0.11	86.25	0.07
44.50	0.28	58.50	0.16	72.50	0.10	86.50	0.07
44.75	0.27	58.75	0.16	72.75	0.10	86.75	0.07
45.00	0.27	59.00	0.16	73.00	0.10	87.00	0.07
45.25	0.27	59.25	0.16	73.25	0.10	87.25	0.07
45.50	0.27	59.50	0.16	73.50	0.10	87.50	0.07
45.75	0.26	59.75	0.15	73.75	0.10	87.75	0.07
46.00	0.26	60.00	0.15	74.00	0.10	88.00	0.07
46.25	0.26	60.25	0.15	74.25	0.10	88.25	0.07
46.50	0.25	60.50	0.15	74.50	0.10	88.50	0.07
46.75	0.25	60.75	0.15	74.75	0.10	88.75	0.07
47.00	0.25	61.00	0.15	75.00	0.10	89.00	0.07
47.25	0.25	61.25	0.15	75.25	0.10	89.25	0.07
47.50	0.24	61.50	0.15	75.50	0.10	89.50	0.07
47.75	0.24	61.75	0.14	75.75	0.10	89.75	0.07
48.00	0.24	62.00	0.14	76.00	0.10	90.00	0.07
48.25	0.24	62.25	0.14	76.25	0.09	90.25	0.07
48.50	0.23	62.50	0.14	76.50	0.09	90.50	0.07
48.75	0.23	62.75	0.14	76.75	0.09	90.75	0.07
49.00	0.23	63.00	0.14	77.00	0.09	91.00	0.07
49.25	0.23	63.25	0.14	77.25	0.09	91.25	0.07
49.50	0.22	63.50	0.14	77.50	0.09	91.50	0.07
49.75	0.22	63.75	0.14	77.75	0.09	91.75	0.07
50.00	0.22	64.00	0.13	78.00	0.09	92.00	0.06
50.25	0.22	64.25	0.13	78.25	0.09	92.25	0.06
50.50	0.22	64.50	0.13	78.50	0.09	92.50	0.06
50.75	0.21	64.75	0.13	78.75	0.09	92.75	0.06
51.00	0.21	65.00	0.13	79.00	0.09	93.00	0.06
51.25	0.21	65.25	0.13	79.25	0.09	93.25	0.06
51.50	0.21	65.50	0.13	79.50	0.09	93.50	0.06
51.75	0.21	65.75	0.13	79.75	0.09	93.75	0.06
52.00	0.20	66.00	0.13	80.00	0.09	94.00	0.06
52.25	0.20	66.25	0.13	80.25	0.09	94.25	0.06
52.50	0.20	66.50	0.12	80.50	0.08	94.50	0.06
52.75	0.20	66.75	0.12	80.75	0.08	94.75	0.06
53.00	0.20	67.00	0.12	81.00	0.08	95.00	0.06
53.25	0.19	67.25	0.12	81.25	0.08	95.25	0.06
53.50	0.19	67.50	0.12	81.50	0.08	95.50	0.06
53.75	0.19	67.75	0.12	81.75	0.08	95.75	0.06
54.00	0.19	68.00	0.12	82.00	0.08	96.00	0.06