

SMART Meter Power Density Computer Modeling

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 1%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.12 1.4 Inches

BiolInitiative ft. 9.70 116.4 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
0.25	75.36	10.25	0.09	20.25	0.02	30.25	0.01
0.50	30.14	10.50	0.09	20.50	0.02	30.50	0.01
0.75	15.07	10.75	0.08	20.75	0.02	30.75	0.01
1.00	8.87	11.00	0.08	21.00	0.02	31.00	0.01
1.25	5.80	11.25	0.07	21.25	0.02	31.25	0.01
1.50	4.07	11.50	0.07	21.50	0.02	31.50	0.01
1.75	3.01	11.75	0.07	21.75	0.02	31.75	0.01
2.00	2.32	12.00	0.07	22.00	0.02	32.00	0.01
2.25	1.84	12.25	0.06	22.25	0.02	32.25	0.01
2.50	1.49	12.50	0.06	22.50	0.02	32.50	0.01
2.75	1.24	12.75	0.06	22.75	0.02	32.75	0.01
3.00	1.04	13.00	0.06	23.00	0.02	33.00	0.01
3.25	0.89	13.25	0.05	23.25	0.02	33.25	0.01
3.50	0.77	13.50	0.05	23.50	0.02	33.50	0.01
3.75	0.67	13.75	0.05	23.75	0.02	33.75	0.01
4.00	0.59	14.00	0.05	24.00	0.02	34.00	0.01
4.25	0.52	14.25	0.05	24.25	0.02	34.25	0.01
4.50	0.46	14.50	0.04	24.50	0.02	34.50	0.01
4.75	0.42	14.75	0.04	24.75	0.02	34.75	0.01
5.00	0.38	15.00	0.04	25.00	0.02	35.00	0.01
5.25	0.34	15.25	0.04	25.25	0.01	35.25	0.01
5.50	0.31	15.50	0.04	25.50	0.01	35.50	0.01
5.75	0.28	15.75	0.04	25.75	0.01	35.75	0.01
6.00	0.26	16.00	0.04	26.00	0.01	36.00	0.01
6.25	0.24	16.25	0.04	26.25	0.01	36.25	0.01
6.50	0.22	16.50	0.03	26.50	0.01	36.50	0.01
6.75	0.21	16.75	0.03	26.75	0.01	36.75	0.01
7.00	0.19	17.00	0.03	27.00	0.01	37.00	0.01
7.25	0.18	17.25	0.03	27.25	0.01	37.25	0.01
7.50	0.17	17.50	0.03	27.50	0.01	37.50	0.01
7.75	0.16	17.75	0.03	27.75	0.01	37.75	0.01
8.00	0.15	18.00	0.03	28.00	0.01	38.00	0.01
8.25	0.14	18.25	0.03	28.25	0.01	38.25	0.01
8.50	0.13	18.50	0.03	28.50	0.01	38.50	0.01
8.75	0.12	18.75	0.03	28.75	0.01	38.75	0.01
9.00	0.12	19.00	0.03	29.00	0.01	39.00	0.01
9.25	0.11	19.25	0.03	29.25	0.01	39.25	0.01
9.50	0.10	19.50	0.02	29.50	0.01	39.50	0.01
9.75	0.10	19.75	0.02	29.75	0.01	39.75	0.01
10.00	0.09	20.00	0.02	30.00	0.01	40.00	0.01

Notes:

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

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

S = Power Density uW/cm²
 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

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 1%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.12

1.44 Inches

BioInitiative ft. 9.70

116.40 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
40.25	0.01	54.25	0.00	68.25	0.00	82.25	0.00
40.50	0.01	54.50	0.00	68.50	0.00	82.50	0.00
40.75	0.01	54.75	0.00	68.75	0.00	82.75	0.00
41.00	0.01	55.00	0.00	69.00	0.00	83.00	0.00
41.25	0.01	55.25	0.00	69.25	0.00	83.25	0.00
41.50	0.01	55.50	0.00	69.50	0.00	83.50	0.00
41.75	0.01	55.75	0.00	69.75	0.00	83.75	0.00
42.00	0.01	56.00	0.00	70.00	0.00	84.00	0.00
42.25	0.01	56.25	0.00	70.25	0.00	84.25	0.00
42.50	0.01	56.50	0.00	70.50	0.00	84.50	0.00
42.75	0.01	56.75	0.00	70.75	0.00	84.75	0.00
43.00	0.01	57.00	0.00	71.00	0.00	85.00	0.00
43.25	0.01	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 5 – 1%

SMART Meter Power Density Computer Modeling

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 10%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.29 3.4 Inches

BioInitiative ft. 30.70 368.4 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
0.25	753.56	10.25	0.90	20.25	0.23	30.25	0.10
0.50	301.42	10.50	0.85	20.50	0.22	30.50	0.10
0.75	150.71	10.75	0.81	20.75	0.22	30.75	0.10
1.00	88.65	11.00	0.78	21.00	0.21	31.00	0.10
1.25	57.97	11.25	0.74	21.25	0.21	31.25	0.10
1.50	40.73	11.50	0.71	21.50	0.20	31.50	0.09
1.75	30.14	11.75	0.68	21.75	0.20	31.75	0.09
2.00	23.19	12.00	0.65	22.00	0.19	32.00	0.09
2.25	18.38	12.25	0.63	22.25	0.19	32.25	0.09
2.50	14.92	12.50	0.60	22.50	0.19	32.50	0.09
2.75	12.35	12.75	0.58	22.75	0.18	32.75	0.09
3.00	10.39	13.00	0.56	23.00	0.18	33.00	0.09
3.25	8.87	13.25	0.54	23.25	0.17	33.25	0.09
3.50	7.65	13.50	0.52	23.50	0.17	33.50	0.08
3.75	6.67	13.75	0.50	23.75	0.17	33.75	0.08
4.00	5.86	14.00	0.48	24.00	0.16	34.00	0.08
4.25	5.20	14.25	0.46	24.25	0.16	34.25	0.08
4.50	4.64	14.50	0.45	24.50	0.16	34.50	0.08
4.75	4.16	14.75	0.43	24.75	0.15	34.75	0.08
5.00	3.76	15.00	0.42	25.00	0.15	35.00	0.08
5.25	3.41	15.25	0.40	25.25	0.15	35.25	0.08
5.50	3.11	15.50	0.39	25.50	0.14	35.50	0.07
5.75	2.84	15.75	0.38	25.75	0.14	35.75	0.07
6.00	2.61	16.00	0.37	26.00	0.14	36.00	0.07
6.25	2.41	16.25	0.36	26.25	0.14	36.25	0.07
6.50	2.23	16.50	0.35	26.50	0.13	36.50	0.07
6.75	2.06	16.75	0.34	26.75	0.13	36.75	0.07
7.00	1.92	17.00	0.33	27.00	0.13	37.00	0.07
7.25	1.79	17.25	0.32	27.25	0.13	37.25	0.07
7.50	1.67	17.50	0.31	27.50	0.12	37.50	0.07
7.75	1.57	17.75	0.30	27.75	0.12	37.75	0.07
8.00	1.47	18.00	0.29	28.00	0.12	38.00	0.07
8.25	1.38	18.25	0.28	28.25	0.12	38.25	0.06
8.50	1.30	18.50	0.28	28.50	0.12	38.50	0.06
8.75	1.23	18.75	0.27	28.75	0.11	38.75	0.06
9.00	1.16	19.00	0.26	29.00	0.11	39.00	0.06
9.25	1.10	19.25	0.25	29.25	0.11	39.25	0.06
9.50	1.04	19.50	0.25	29.50	0.11	39.50	0.06
9.75	0.99	19.75	0.24	29.75	0.11	39.75	0.06
10.00	0.94	20.00	0.24	30.00	0.10	40.00	0.06

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/cm²
 - 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

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 10%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.29

3.42 Inches

BioInitiative ft. 30.70

368.40 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
40.25	0.06	54.25	0.03	68.25	0.02	82.25	0.01
40.50	0.06	54.50	0.03	68.50	0.02	82.50	0.01
40.75	0.06	54.75	0.03	68.75	0.02	82.75	0.01
41.00	0.06	55.00	0.03	69.00	0.02	83.00	0.01
41.25	0.06	55.25	0.03	69.25	0.02	83.25	0.01
41.50	0.05	55.50	0.03	69.50	0.02	83.50	0.01
41.75	0.05	55.75	0.03	69.75	0.02	83.75	0.01
42.00	0.05	56.00	0.03	70.00	0.02	84.00	0.01
42.25	0.05	56.25	0.03	70.25	0.02	84.25	0.01
42.50	0.05	56.50	0.03	70.50	0.02	84.50	0.01
42.75	0.05	56.75	0.03	70.75	0.02	84.75	0.01
43.00	0.05	57.00	0.03	71.00	0.02	85.00	0.01
43.25	0.05	57.25	0.03	71.25	0.02	85.25	0.01
43.50	0.05	57.50	0.03	71.50	0.02	85.50	0.01
43.75	0.05	57.75	0.03	71.75	0.02	85.75	0.01
44.00	0.05	58.00	0.03	72.00	0.02	86.00	0.01
44.25	0.05	58.25	0.03	72.25	0.02	86.25	0.01
44.50	0.05	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	0.04	60.00	0.03	74.00	0.02	88.00	0.01
46.25	0.04	60.25	0.03	74.25	0.02	88.25	0.01
46.50	0.04	60.50	0.03	74.50	0.02	88.50	0.01
46.75	0.04	60.75	0.03	74.75	0.02	88.75	0.01
47.00	0.04	61.00	0.03	75.00	0.02	89.00	0.01
47.25	0.04	61.25	0.03	75.25	0.02	89.25	0.01
47.50	0.04	61.50	0.02	75.50	0.02	89.50	0.01
47.75	0.04	61.75	0.02	75.75	0.02	89.75	0.01
48.00	0.04	62.00	0.02	76.00	0.02	90.00	0.01
48.25	0.04	62.25	0.02	76.25	0.02	90.25	0.01
48.50	0.04	62.50	0.02	76.50	0.02	90.50	0.01
48.75	0.04	62.75	0.02	76.75	0.02	90.75	0.01
49.00	0.04	63.00	0.02	77.00	0.02	91.00	0.01
49.25	0.04	63.25	0.02	77.25	0.02	91.25	0.01
49.50	0.04	63.50	0.02	77.50	0.02	91.50	0.01
49.75	0.04	63.75	0.02	77.75	0.02	91.75	0.01
50.00	0.04	64.00	0.02	78.00	0.02	92.00	0.01
50.25	0.04	64.25	0.02	78.25	0.02	92.25	0.01
50.50	0.04	64.50	0.02	78.50	0.02	92.50	0.01
50.75	0.04	64.75	0.02	78.75	0.02	92.75	0.01
51.00	0.04	65.00	0.02	79.00	0.02	93.00	0.01
51.25	0.04	65.25	0.02	79.25	0.01	93.25	0.01
51.50	0.04	65.50	0.02	79.50	0.01	93.50	0.01
51.75	0.04	65.75	0.02	79.75	0.01	93.75	0.01
52.00	0.03	66.00	0.02	80.00	0.01	94.00	0.01
52.25	0.03	66.25	0.02	80.25	0.01	94.25	0.01
52.50	0.03	66.50	0.02	80.50	0.01	94.50	0.01
52.75	0.03	66.75	0.02	80.75	0.01	94.75	0.01
53.00	0.03	67.00	0.02	81.00	0.01	95.00	0.01
53.25	0.03	67.25	0.02	81.25	0.01	95.25	0.01
53.50	0.03	67.50	0.02	81.50	0.01	95.50	0.01
53.75	0.03	67.75	0.02	81.75	0.01	95.75	0.01
54.00	0.03	68.00	0.02	82.00	0.01	96.00	0.01

Table 5 – 10%

SMART Meter Power Density Computer Modeling

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 20%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.47 5.7 Inches

BioInitiative ft. 43.50 522.0 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
0.25	1507.12	10.25	1.79	20.25	0.46	30.25	0.21
0.50	602.85	10.50	1.71	20.50	0.45	30.50	0.20
0.75	301.42	10.75	1.63	20.75	0.44	30.75	0.20
1.00	177.31	11.00	1.56	21.00	0.43	31.00	0.20
1.25	115.93	11.25	1.49	21.25	0.42	31.25	0.19
1.50	81.47	11.50	1.42	21.50	0.41	31.50	0.19
1.75	60.28	11.75	1.36	21.75	0.40	31.75	0.19
2.00	46.37	12.00	1.31	22.00	0.39	32.00	0.18
2.25	36.76	12.25	1.25	22.25	0.38	32.25	0.18
2.50	29.84	12.50	1.21	22.50	0.37	32.50	0.18
2.75	24.71	12.75	1.16	22.75	0.36	32.75	0.18
3.00	20.79	13.00	1.11	23.00	0.36	33.00	0.17
3.25	17.73	13.25	1.07	23.25	0.35	33.25	0.17
3.50	15.30	13.50	1.03	23.50	0.34	33.50	0.17
3.75	13.34	13.75	1.00	23.75	0.33	33.75	0.17
4.00	11.73	14.00	0.96	24.00	0.33	34.00	0.16
4.25	10.39	14.25	0.93	24.25	0.32	34.25	0.16
4.50	9.27	14.50	0.90	24.50	0.31	34.50	0.16
4.75	8.33	14.75	0.87	24.75	0.31	34.75	0.16
5.00	7.52	15.00	0.84	25.00	0.30	35.00	0.15
5.25	6.82	15.25	0.81	25.25	0.30	35.25	0.15
5.50	6.21	15.50	0.78	25.50	0.29	35.50	0.15
5.75	5.69	15.75	0.76	25.75	0.28	35.75	0.15
6.00	5.22	16.00	0.74	26.00	0.28	36.00	0.15
6.25	4.82	16.25	0.71	26.25	0.27	36.25	0.14
6.50	4.45	16.50	0.69	26.50	0.27	36.50	0.14
6.75	4.13	16.75	0.67	26.75	0.26	36.75	0.14
7.00	3.84	17.00	0.65	27.00	0.26	37.00	0.14
7.25	3.58	17.25	0.63	27.25	0.25	37.25	0.14
7.50	3.35	17.50	0.62	27.50	0.25	37.50	0.13
7.75	3.13	17.75	0.60	27.75	0.24	37.75	0.13
8.00	2.94	18.00	0.58	28.00	0.24	38.00	0.13
8.25	2.77	18.25	0.57	28.25	0.24	38.25	0.13
8.50	2.61	18.50	0.55	28.50	0.23	38.50	0.13
8.75	2.46	18.75	0.54	28.75	0.23	38.75	0.13
9.00	2.32	19.00	0.52	29.00	0.22	39.00	0.12
9.25	2.20	19.25	0.51	29.25	0.22	39.25	0.12
9.50	2.09	19.50	0.50	29.50	0.22	39.50	0.12
9.75	1.98	19.75	0.48	29.75	0.21	39.75	0.12
10.00	1.88	20.00	0.47	30.00	0.21	40.00	0.12

Notes:

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

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi \cdot R^2)$$
 - S = Power Density uW/cm²
 - 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

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 20%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.47

5.70 Inches

BioInitiative ft. 43.50

522.00 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
40.25	0.12	54.25	0.06	68.25	0.04	82.25	0.03
40.50	0.11	54.50	0.06	68.50	0.04	82.50	0.03
40.75	0.11	54.75	0.06	68.75	0.04	82.75	0.03
41.00	0.11	55.00	0.06	69.00	0.04	83.00	0.03
41.25	0.11	55.25	0.06	69.25	0.04	83.25	0.03
41.50	0.11	55.50	0.06	69.50	0.04	83.50	0.03
41.75	0.11	55.75	0.06	69.75	0.04	83.75	0.03
42.00	0.11	56.00	0.06	70.00	0.04	84.00	0.03
42.25	0.11	56.25	0.06	70.25	0.04	84.25	0.03
42.50	0.10	56.50	0.06	70.50	0.04	84.50	0.03
42.75	0.10	56.75	0.06	70.75	0.04	84.75	0.03
43.00	0.10	57.00	0.06	71.00	0.04	85.00	0.03
43.25	0.10	57.25	0.06	71.25	0.04	85.25	0.03
43.50	0.10	57.50	0.06	71.50	0.04	85.50	0.03
43.75	0.10	57.75	0.06	71.75	0.04	85.75	0.03
44.00	0.10	58.00	0.06	72.00	0.04	86.00	0.03
44.25	0.10	58.25	0.06	72.25	0.04	86.25	0.03
44.50	0.10	58.50	0.06	72.50	0.04	86.50	0.03
44.75	0.09	58.75	0.05	72.75	0.04	86.75	0.03
45.00	0.09	59.00	0.05	73.00	0.04	87.00	0.02
45.25	0.09	59.25	0.05	73.25	0.04	87.25	0.02
45.50	0.09	59.50	0.05	73.50	0.03	87.50	0.02
45.75	0.09	59.75	0.05	73.75	0.03	87.75	0.02
46.00	0.09	60.00	0.05	74.00	0.03	88.00	0.02
46.25	0.09	60.25	0.05	74.25	0.03	88.25	0.02
46.50	0.09	60.50	0.05	74.50	0.03	88.50	0.02
46.75	0.09	60.75	0.05	74.75	0.03	88.75	0.02
47.00	0.09	61.00	0.05	75.00	0.03	89.00	0.02
47.25	0.08	61.25	0.05	75.25	0.03	89.25	0.02
47.50	0.08	61.50	0.05	75.50	0.03	89.50	0.02
47.75	0.08	61.75	0.05	75.75	0.03	89.75	0.02
48.00	0.08	62.00	0.05	76.00	0.03	90.00	0.02
48.25	0.08	62.25	0.05	76.25	0.03	90.25	0.02
48.50	0.08	62.50	0.05	76.50	0.03	90.50	0.02
48.75	0.08	62.75	0.05	76.75	0.03	90.75	0.02
49.00	0.08	63.00	0.05	77.00	0.03	91.00	0.02
49.25	0.08	63.25	0.05	77.25	0.03	91.25	0.02
49.50	0.08	63.50	0.05	77.50	0.03	91.50	0.02
49.75	0.08	63.75	0.05	77.75	0.03	91.75	0.02
50.00	0.08	64.00	0.05	78.00	0.03	92.00	0.02
50.25	0.07	64.25	0.05	78.25	0.03	92.25	0.02
50.50	0.07	64.50	0.05	78.50	0.03	92.50	0.02
50.75	0.07	64.75	0.04	78.75	0.03	92.75	0.02
51.00	0.07	65.00	0.04	79.00	0.03	93.00	0.02
51.25	0.07	65.25	0.04	79.25	0.03	93.25	0.02
51.50	0.07	65.50	0.04	79.50	0.03	93.50	0.02
51.75	0.07	65.75	0.04	79.75	0.03	93.75	0.02
52.00	0.07	66.00	0.04	80.00	0.03	94.00	0.02
52.25	0.07	66.25	0.04	80.25	0.03	94.25	0.02
52.50	0.07	66.50	0.04	80.50	0.03	94.50	0.02
52.75	0.07	66.75	0.04	80.75	0.03	94.75	0.02
53.00	0.07	67.00	0.04	81.00	0.03	95.00	0.02
53.25	0.07	67.25	0.04	81.25	0.03	95.25	0.02
53.50	0.07	67.50	0.04	81.50	0.03	95.50	0.02
53.75	0.07	67.75	0.04	81.75	0.03	95.75	0.02
54.00	0.06	68.00	0.04	82.00	0.03	96.00	0.02

Table 5 – 20%

SMART Meter Power Density Computer Modeling

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 30%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.61 7.3 Inches

BioInitiative ft. 53.20 638.4 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
0.25	2260.69	10.25	2.69	20.25	0.69	30.25	0.31
0.50	904.27	10.50	2.56	20.50	0.67	30.50	0.30
0.75	452.14	10.75	2.44	20.75	0.66	30.75	0.30
1.00	265.96	11.00	2.33	21.00	0.64	31.00	0.29
1.25	173.90	11.25	2.23	21.25	0.63	31.25	0.29
1.50	122.20	11.50	2.14	21.50	0.61	31.50	0.28
1.75	90.43	11.75	2.05	21.75	0.60	31.75	0.28
2.00	69.56	12.00	1.96	22.00	0.58	32.00	0.28
2.25	55.14	12.25	1.88	22.25	0.57	32.25	0.27
2.50	44.77	12.50	1.81	22.50	0.56	32.50	0.27
2.75	37.06	12.75	1.74	22.75	0.55	32.75	0.26
3.00	31.18	13.00	1.67	23.00	0.53	33.00	0.26
3.25	26.60	13.25	1.61	23.25	0.52	33.25	0.26
3.50	22.95	13.50	1.55	23.50	0.51	33.50	0.25
3.75	20.01	13.75	1.49	23.75	0.50	33.75	0.25
4.00	17.59	14.00	1.44	24.00	0.49	34.00	0.24
4.25	15.59	14.25	1.39	24.25	0.48	34.25	0.24
4.50	13.91	14.50	1.34	24.50	0.47	34.50	0.24
4.75	12.49	14.75	1.30	24.75	0.46	34.75	0.23
5.00	11.28	15.00	1.26	25.00	0.45	35.00	0.23
5.25	10.23	15.25	1.21	25.25	0.44	35.25	0.23
5.50	9.32	15.50	1.18	25.50	0.43	35.50	0.22
5.75	8.53	15.75	1.14	25.75	0.43	35.75	0.22
6.00	7.84	16.00	1.10	26.00	0.42	36.00	0.22
6.25	7.22	16.25	1.07	26.25	0.41	36.25	0.22
6.50	6.68	16.50	1.04	26.50	0.40	36.50	0.21
6.75	6.19	16.75	1.01	26.75	0.39	36.75	0.21
7.00	5.76	17.00	0.98	27.00	0.39	37.00	0.21
7.25	5.37	17.25	0.95	27.25	0.38	37.25	0.20
7.50	5.02	17.50	0.92	27.50	0.37	37.50	0.20
7.75	4.70	17.75	0.90	27.75	0.37	37.75	0.20
8.00	4.41	18.00	0.87	28.00	0.36	38.00	0.20
8.25	4.15	18.25	0.85	28.25	0.35	38.25	0.19
8.50	3.91	18.50	0.83	28.50	0.35	38.50	0.19
8.75	3.69	18.75	0.80	28.75	0.34	38.75	0.19
9.00	3.49	19.00	0.78	29.00	0.34	39.00	0.19
9.25	3.30	19.25	0.76	29.25	0.33	39.25	0.18
9.50	3.13	19.50	0.74	29.50	0.32	39.50	0.18
9.75	2.97	19.75	0.72	29.75	0.32	39.75	0.18
10.00	2.82	20.00	0.71	30.00	0.31	40.00	0.18

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/cm²
 - 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

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 30%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.61

7.29 Inches

BioInitiative ft. 53.20

638.40 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
40.25	0.17	54.25	0.10	68.25	0.06	82.25	0.04
40.50	0.17	54.50	0.10	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	0.17	55.00	0.09	69.00	0.06	83.00	0.04
41.25	0.17	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	0.16	56.25	0.09	70.25	0.06	84.25	0.04
42.50	0.16	56.50	0.09	70.50	0.06	84.50	0.04
42.75	0.15	56.75	0.09	70.75	0.06	84.75	0.04
43.00	0.15	57.00	0.09	71.00	0.06	85.00	0.04
43.25	0.15	57.25	0.09	71.25	0.06	85.25	0.04
43.50	0.15	57.50	0.09	71.50	0.06	85.50	0.04
43.75	0.15	57.75	0.08	71.75	0.05	85.75	0.04
44.00	0.15	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	0.14	59.25	0.08	73.25	0.05	87.25	0.04
45.50	0.14	59.50	0.08	73.50	0.05	87.50	0.04
45.75	0.14	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	0.08	74.75	0.05	88.75	0.04
47.00	0.13	61.00	0.08	75.00	0.05	89.00	0.04
47.25	0.13	61.25	0.08	75.25	0.05	89.25	0.04
47.50	0.13	61.50	0.07	75.50	0.05	89.50	0.04
47.75	0.12	61.75	0.07	75.75	0.05	89.75	0.04
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	0.12	63.00	0.07	77.00	0.05	91.00	0.03
49.25	0.12	63.25	0.07	77.25	0.05	91.25	0.03
49.50	0.12	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	0.05	92.25	0.03
50.50	0.11	64.50	0.07	78.50	0.05	92.50	0.03
50.75	0.11	64.75	0.07	78.75	0.05	92.75	0.03
51.00	0.11	65.00	0.07	79.00	0.05	93.00	0.03
51.25	0.11	65.25	0.07	79.25	0.04	93.25	0.03
51.50	0.11	65.50	0.07	79.50	0.04	93.50	0.03
51.75	0.11	65.75	0.07	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	0.10	68.00	0.06	82.00	0.04	96.00	0.03

Table 5 – 30%

SMART Meter Power Density Computer Modeling

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 40%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.72 8.6 Inches

BioInitiative ft. 61.30 735.6 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
0.25	3014.25	10.25	3.58	20.25	0.92	30.25	0.41
0.50	1205.70	10.50	3.42	20.50	0.90	30.50	0.41
0.75	602.85	10.75	3.26	20.75	0.87	30.75	0.40
1.00	354.62	11.00	3.11	21.00	0.85	31.00	0.39
1.25	231.87	11.25	2.98	21.25	0.83	31.25	0.39
1.50	162.93	11.50	2.85	21.50	0.81	31.50	0.38
1.75	120.57	11.75	2.73	21.75	0.80	31.75	0.37
2.00	92.75	12.00	2.62	22.00	0.78	32.00	0.37
2.25	73.52	12.25	2.51	22.25	0.76	32.25	0.36
2.50	59.69	12.50	2.41	22.50	0.74	32.50	0.36
2.75	49.41	12.75	2.32	22.75	0.73	32.75	0.35
3.00	41.58	13.00	2.23	23.00	0.71	33.00	0.35
3.25	35.46	13.25	2.15	23.25	0.70	33.25	0.34
3.50	30.60	13.50	2.07	23.50	0.68	33.50	0.34
3.75	26.67	13.75	1.99	23.75	0.67	33.75	0.33
4.00	23.46	14.00	1.92	24.00	0.65	34.00	0.33
4.25	20.79	14.25	1.85	24.25	0.64	34.25	0.32
4.50	18.55	14.50	1.79	24.50	0.63	34.50	0.32
4.75	16.65	14.75	1.73	24.75	0.62	34.75	0.31
5.00	15.03	15.00	1.67	25.00	0.60	35.00	0.31
5.25	13.64	15.25	1.62	25.25	0.59	35.25	0.30
5.50	12.43	15.50	1.57	25.50	0.58	35.50	0.30
5.75	11.37	15.75	1.52	25.75	0.57	35.75	0.29
6.00	10.45	16.00	1.47	26.00	0.56	36.00	0.29
6.25	9.63	16.25	1.43	26.25	0.55	36.25	0.29
6.50	8.90	16.50	1.38	26.50	0.54	36.50	0.28
6.75	8.26	16.75	1.34	26.75	0.53	36.75	0.28
7.00	7.68	17.00	1.30	27.00	0.52	37.00	0.28
7.25	7.16	17.25	1.27	27.25	0.51	37.25	0.27
7.50	6.69	17.50	1.23	27.50	0.50	37.50	0.27
7.75	6.27	17.75	1.20	27.75	0.49	37.75	0.26
8.00	5.88	18.00	1.16	28.00	0.48	38.00	0.26
8.25	5.53	18.25	1.13	28.25	0.47	38.25	0.26
8.50	5.21	18.50	1.10	28.50	0.46	38.50	0.25
8.75	4.92	18.75	1.07	28.75	0.46	38.75	0.25
9.00	4.65	19.00	1.04	29.00	0.45	39.00	0.25
9.25	4.40	19.25	1.02	29.25	0.44	39.25	0.24
9.50	4.17	19.50	0.99	29.50	0.43	39.50	0.24
9.75	3.96	19.75	0.97	29.75	0.43	39.75	0.24
10.00	3.77	20.00	0.94	30.00	0.42	40.00	0.24

Notes:

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

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi \cdot R^2)$$
 - S = Power Density uW/cm²
 - 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

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 40%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.72

8.60 Inches

BioInitiative ft. 61.30

735.60 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
40.25	0.23	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	0.22	55.00	0.12	69.00	0.08	83.00	0.05
41.25	0.22	55.25	0.12	69.25	0.08	83.25	0.05
41.50	0.22	55.50	0.12	69.50	0.08	83.50	0.05
41.75	0.22	55.75	0.12	69.75	0.08	83.75	0.05
42.00	0.21	56.00	0.12	70.00	0.08	84.00	0.05
42.25	0.21	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	0.20	57.00	0.12	71.00	0.07	85.00	0.05
43.25	0.20	57.25	0.11	71.25	0.07	85.25	0.05
43.50	0.20	57.50	0.11	71.50	0.07	85.50	0.05
43.75	0.20	57.75	0.11	71.75	0.07	85.75	0.05
44.00	0.19	58.00	0.11	72.00	0.07	86.00	0.05
44.25	0.19	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	0.18	59.25	0.11	73.25	0.07	87.25	0.05
45.50	0.18	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	0.10	74.00	0.07	88.00	0.05
46.25	0.18	60.25	0.10	74.25	0.07	88.25	0.05
46.50	0.17	60.50	0.10	74.50	0.07	88.50	0.05
46.75	0.17	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	0.16	62.00	0.10	76.00	0.07	90.00	0.05
48.25	0.16	62.25	0.10	76.25	0.06	90.25	0.05
48.50	0.16	62.50	0.10	76.50	0.06	90.50	0.05
48.75	0.16	62.75	0.10	76.75	0.06	90.75	0.05
49.00	0.16	63.00	0.09	77.00	0.06	91.00	0.05
49.25	0.16	63.25	0.09	77.25	0.06	91.25	0.05
49.50	0.15	63.50	0.09	77.50	0.06	91.50	0.05
49.75	0.15	63.75	0.09	77.75	0.06	91.75	0.04
50.00	0.15	64.00	0.09	78.00	0.06	92.00	0.04
50.25	0.15	64.25	0.09	78.25	0.06	92.25	0.04
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	0.14	65.00	0.09	79.00	0.06	93.00	0.04
51.25	0.14	65.25	0.09	79.25	0.06	93.25	0.04
51.50	0.14	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	0.08	80.75	0.06	94.75	0.04
53.00	0.13	67.00	0.08	81.00	0.06	95.00	0.04
53.25	0.13	67.25	0.08	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

Table 5 – 40%

SMART Meter Power Density Computer Modeling

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 50%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.81 9.7 Inches

BioInitiative ft. 68.50 822.0 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
0.25	3767.81	10.25	4.48	20.25	1.15	30.25	0.51
0.50	1507.12	10.50	4.27	20.50	1.12	30.50	0.51
0.75	753.56	10.75	4.07	20.75	1.09	30.75	0.50
1.00	443.27	11.00	3.89	21.00	1.07	31.00	0.49
1.25	289.83	11.25	3.72	21.25	1.04	31.25	0.48
1.50	203.67	11.50	3.56	21.50	1.02	31.50	0.47
1.75	150.71	11.75	3.41	21.75	1.00	31.75	0.47
2.00	115.93	12.00	3.27	22.00	0.97	32.00	0.46
2.25	91.90	12.25	3.14	22.25	0.95	32.25	0.45
2.50	74.61	12.50	3.01	22.50	0.93	32.50	0.45
2.75	61.77	12.75	2.90	22.75	0.91	32.75	0.44
3.00	51.97	13.00	2.79	23.00	0.89	33.00	0.43
3.25	44.33	13.25	2.68	23.25	0.87	33.25	0.43
3.50	38.25	13.50	2.58	23.50	0.85	33.50	0.42
3.75	33.34	13.75	2.49	23.75	0.83	33.75	0.41
4.00	29.32	14.00	2.40	24.00	0.82	34.00	0.41
4.25	25.98	14.25	2.32	24.25	0.80	34.25	0.40
4.50	23.19	14.50	2.24	24.50	0.78	34.50	0.40
4.75	20.82	14.75	2.16	24.75	0.77	34.75	0.39
5.00	18.79	15.00	2.09	25.00	0.75	35.00	0.38
5.25	17.05	15.25	2.02	25.25	0.74	35.25	0.38
5.50	15.54	15.50	1.96	25.50	0.72	35.50	0.37
5.75	14.22	15.75	1.90	25.75	0.71	35.75	0.37
6.00	13.06	16.00	1.84	26.00	0.70	36.00	0.36
6.25	12.04	16.25	1.78	26.25	0.68	36.25	0.36
6.50	11.13	16.50	1.73	26.50	0.67	36.50	0.35
6.75	10.32	16.75	1.68	26.75	0.66	36.75	0.35
7.00	9.60	17.00	1.63	27.00	0.65	37.00	0.34
7.25	8.95	17.25	1.58	27.25	0.63	37.25	0.34
7.50	8.36	17.50	1.54	27.50	0.62	37.50	0.33
7.75	7.83	17.75	1.49	27.75	0.61	37.75	0.33
8.00	7.35	18.00	1.45	28.00	0.60	38.00	0.33
8.25	6.91	18.25	1.41	28.25	0.59	38.25	0.32
8.50	6.51	18.50	1.38	28.50	0.58	38.50	0.32
8.75	6.15	18.75	1.34	28.75	0.57	38.75	0.31
9.00	5.81	19.00	1.30	29.00	0.56	39.00	0.31
9.25	5.50	19.25	1.27	29.25	0.55	39.25	0.31
9.50	5.21	19.50	1.24	29.50	0.54	39.50	0.30
9.75	4.95	19.75	1.21	29.75	0.53	39.75	0.30
10.00	4.71	20.00	1.18	30.00	0.52	40.00	0.29

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/cm²
 - 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)
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- 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

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 50%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.81 9.73 Inches

BioInitiative ft. 68.50

822.00 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
40.25	0.29	54.25	0.16	68.25	0.10	82.25	0.07
40.50	0.29	54.50	0.16	68.50	0.10	82.50	0.07
40.75	0.28	54.75	0.16	68.75	0.10	82.75	0.07
41.00	0.28	55.00	0.16	69.00	0.10	83.00	0.07
41.25	0.28	55.25	0.15	69.25	0.10	83.25	0.07
41.50	0.27	55.50	0.15	69.50	0.10	83.50	0.07
41.75	0.27	55.75	0.15	69.75	0.10	83.75	0.07
42.00	0.27	56.00	0.15	70.00	0.10	84.00	0.07
42.25	0.26	56.25	0.15	70.25	0.10	84.25	0.07
42.50	0.26	56.50	0.15	70.50	0.09	84.50	0.07
42.75	0.26	56.75	0.15	70.75	0.09	84.75	0.07
43.00	0.25	57.00	0.14	71.00	0.09	85.00	0.07
43.25	0.25	57.25	0.14	71.25	0.09	85.25	0.06
43.50	0.25	57.50	0.14	71.50	0.09	85.50	0.06
43.75	0.25	57.75	0.14	71.75	0.09	85.75	0.06
44.00	0.24	58.00	0.14	72.00	0.09	86.00	0.06
44.25	0.24	58.25	0.14	72.25	0.09	86.25	0.06
44.50	0.24	58.50	0.14	72.50	0.09	86.50	0.06
44.75	0.24	58.75	0.14	72.75	0.09	86.75	0.06
45.00	0.23	59.00	0.14	73.00	0.09	87.00	0.06
45.25	0.23	59.25	0.13	73.25	0.09	87.25	0.06
45.50	0.23	59.50	0.13	73.50	0.09	87.50	0.06
45.75	0.23	59.75	0.13	73.75	0.09	87.75	0.06
46.00	0.22	60.00	0.13	74.00	0.09	88.00	0.06
46.25	0.22	60.25	0.13	74.25	0.09	88.25	0.06
46.50	0.22	60.50	0.13	74.50	0.08	88.50	0.06
46.75	0.22	60.75	0.13	74.75	0.08	88.75	0.06
47.00	0.21	61.00	0.13	75.00	0.08	89.00	0.06
47.25	0.21	61.25	0.13	75.25	0.08	89.25	0.06
47.50	0.21	61.50	0.12	75.50	0.08	89.50	0.06
47.75	0.21	61.75	0.12	75.75	0.08	89.75	0.06
48.00	0.20	62.00	0.12	76.00	0.08	90.00	0.06
48.25	0.20	62.25	0.12	76.25	0.08	90.25	0.06
48.50	0.20	62.50	0.12	76.50	0.08	90.50	0.06
48.75	0.20	62.75	0.12	76.75	0.08	90.75	0.06
49.00	0.20	63.00	0.12	77.00	0.08	91.00	0.06
49.25	0.19	63.25	0.12	77.25	0.08	91.25	0.06
49.50	0.19	63.50	0.12	77.50	0.08	91.50	0.06
49.75	0.19	63.75	0.12	77.75	0.08	91.75	0.06
50.00	0.19	64.00	0.11	78.00	0.08	92.00	0.06
50.25	0.19	64.25	0.11	78.25	0.08	92.25	0.06
50.50	0.18	64.50	0.11	78.50	0.08	92.50	0.06
50.75	0.18	64.75	0.11	78.75	0.08	92.75	0.05
51.00	0.18	65.00	0.11	79.00	0.08	93.00	0.05
51.25	0.18	65.25	0.11	79.25	0.07	93.25	0.05
51.50	0.18	65.50	0.11	79.50	0.07	93.50	0.05
51.75	0.18	65.75	0.11	79.75	0.07	93.75	0.05
52.00	0.17	66.00	0.11	80.00	0.07	94.00	0.05
52.25	0.17	66.25	0.11	80.25	0.07	94.25	0.05
52.50	0.17	66.50	0.11	80.50	0.07	94.50	0.05
52.75	0.17	66.75	0.11	80.75	0.07	94.75	0.05
53.00	0.17	67.00	0.10	81.00	0.07	95.00	0.05
53.25	0.17	67.25	0.10	81.25	0.07	95.25	0.05
53.50	0.16	67.50	0.10	81.50	0.07	95.50	0.05
53.75	0.16	67.75	0.10	81.75	0.07	95.75	0.05
54.00	0.16	68.00	0.10	82.00	0.07	96.00	0.05

Table 5 – 50%

SMART Meter Power Density Computer Modeling

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 60%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.90 10.7 Inches

BioInitiative ft. 75.00 900.0 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
0.25	4521.37	10.25	5.38	20.25	1.38	30.25	0.62
0.50	1808.55	10.50	5.12	20.50	1.34	30.50	0.61
0.75	904.27	10.75	4.89	20.75	1.31	30.75	0.60
1.00	531.93	11.00	4.67	21.00	1.28	31.00	0.59
1.25	347.80	11.25	4.46	21.25	1.25	31.25	0.58
1.50	244.40	11.50	4.27	21.50	1.22	31.50	0.57
1.75	180.85	11.75	4.09	21.75	1.19	31.75	0.56
2.00	139.12	12.00	3.92	22.00	1.17	32.00	0.55
2.25	110.28	12.25	3.76	22.25	1.14	32.25	0.54
2.50	89.53	12.50	3.62	22.50	1.12	32.50	0.54
2.75	74.12	12.75	3.48	22.75	1.09	32.75	0.53
3.00	62.36	13.00	3.34	23.00	1.07	33.00	0.52
3.25	53.19	13.25	3.22	23.25	1.05	33.25	0.51
3.50	45.90	13.50	3.10	23.50	1.02	33.50	0.50
3.75	40.01	13.75	2.99	23.75	1.00	33.75	0.50
4.00	35.19	14.00	2.88	24.00	0.98	34.00	0.49
4.25	31.18	14.25	2.78	24.25	0.96	34.25	0.48
4.50	27.82	14.50	2.69	24.50	0.94	34.50	0.47
4.75	24.98	14.75	2.60	24.75	0.92	34.75	0.47
5.00	22.55	15.00	2.51	25.00	0.90	35.00	0.46
5.25	20.46	15.25	2.43	25.25	0.89	35.25	0.45
5.50	18.64	15.50	2.35	25.50	0.87	35.50	0.45
5.75	17.06	15.75	2.28	25.75	0.85	35.75	0.44
6.00	15.67	16.00	2.21	26.00	0.84	36.00	0.44
6.25	14.45	16.25	2.14	26.25	0.82	36.25	0.43
6.50	13.36	16.50	2.08	26.50	0.80	36.50	0.42
6.75	12.39	16.75	2.01	26.75	0.79	36.75	0.42
7.00	11.52	17.00	1.96	27.00	0.78	37.00	0.41
7.25	10.74	17.25	1.90	27.25	0.76	37.25	0.41
7.50	10.04	17.50	1.85	27.50	0.75	37.50	0.40
7.75	9.40	17.75	1.79	27.75	0.73	37.75	0.40
8.00	8.82	18.00	1.74	28.00	0.72	38.00	0.39
8.25	8.30	18.25	1.70	28.25	0.71	38.25	0.39
8.50	7.82	18.50	1.65	28.50	0.70	38.50	0.38
8.75	7.38	18.75	1.61	28.75	0.68	38.75	0.38
9.00	6.97	19.00	1.57	29.00	0.67	39.00	0.37
9.25	6.60	19.25	1.52	29.25	0.66	39.25	0.37
9.50	6.26	19.50	1.49	29.50	0.65	39.50	0.36
9.75	5.94	19.75	1.45	29.75	0.64	39.75	0.36
10.00	5.65	20.00	1.41	30.00	0.63	40.00	0.35

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/cm²
 - 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

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 60%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.90

10.74 Inches

BioInitiative ft. 75.00

900.00 Inches

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

Table 5 – 60%

SMART Meter Power Density Computer Modeling

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 70%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.97 11.7 Inches

BioInitiative ft. 81.00 972.0 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
0.25	5274.93	10.25	6.27	20.25	1.61	30.25	0.72
0.50	2109.97	10.50	5.98	20.50	1.57	30.50	0.71
0.75	1054.99	10.75	5.70	20.75	1.53	30.75	0.70
1.00	620.58	11.00	5.45	21.00	1.49	31.00	0.69
1.25	405.76	11.25	5.21	21.25	1.46	31.25	0.68
1.50	285.13	11.50	4.98	21.50	1.43	31.50	0.66
1.75	211.00	11.75	4.77	21.75	1.39	31.75	0.65
2.00	162.31	12.00	4.58	22.00	1.36	32.00	0.64
2.25	128.66	12.25	4.39	22.25	1.33	32.25	0.63
2.50	104.45	12.50	4.22	22.50	1.30	32.50	0.62
2.75	86.47	12.75	4.05	22.75	1.27	32.75	0.61
3.00	72.76	13.00	3.90	23.00	1.25	33.00	0.61
3.25	62.06	13.25	3.75	23.25	1.22	33.25	0.60
3.50	53.55	13.50	3.62	23.50	1.19	33.50	0.59
3.75	46.68	13.75	3.49	23.75	1.17	33.75	0.58
4.00	41.05	14.00	3.36	24.00	1.14	34.00	0.57
4.25	36.38	14.25	3.25	24.25	1.12	34.25	0.56
4.50	32.46	14.50	3.14	24.50	1.10	34.50	0.55
4.75	29.14	14.75	3.03	24.75	1.08	34.75	0.55
5.00	26.31	15.00	2.93	25.00	1.05	35.00	0.54
5.25	23.87	15.25	2.83	25.25	1.03	35.25	0.53
5.50	21.75	15.50	2.74	25.50	1.01	35.50	0.52
5.75	19.91	15.75	2.66	25.75	0.99	35.75	0.52
6.00	18.28	16.00	2.58	26.00	0.98	36.00	0.51
6.25	16.85	16.25	2.50	26.25	0.96	36.25	0.50
6.50	15.58	16.50	2.42	26.50	0.94	36.50	0.49
6.75	14.45	16.75	2.35	26.75	0.92	36.75	0.49
7.00	13.44	17.00	2.28	27.00	0.90	37.00	0.48
7.25	12.53	17.25	2.22	27.25	0.89	37.25	0.48
7.50	11.71	17.50	2.15	27.50	0.87	37.50	0.47
7.75	10.97	17.75	2.09	27.75	0.86	37.75	0.46
8.00	10.29	18.00	2.03	28.00	0.84	38.00	0.46
8.25	9.68	18.25	1.98	28.25	0.83	38.25	0.45
8.50	9.12	18.50	1.93	28.50	0.81	38.50	0.44
8.75	8.61	18.75	1.88	28.75	0.80	38.75	0.44
9.00	8.13	19.00	1.83	29.00	0.78	39.00	0.43
9.25	7.70	19.25	1.78	29.25	0.77	39.25	0.43
9.50	7.30	19.50	1.73	29.50	0.76	39.50	0.42
9.75	6.93	19.75	1.69	29.75	0.74	39.75	0.42
10.00	6.59	20.00	1.65	30.00	0.73	40.00	0.41

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/cm²
 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

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 70%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 0.97 11.67 Inches

BioInitiative ft. 81.00 972.00 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
40.25	0.41	54.25	0.22	68.25	0.14	82.25	0.10
40.50	0.40	54.50	0.22	68.50	0.14	82.50	0.10
40.75	0.40	54.75	0.22	68.75	0.14	82.75	0.10
41.00	0.39	55.00	0.22	69.00	0.14	83.00	0.10
41.25	0.39	55.25	0.22	69.25	0.14	83.25	0.10
41.50	0.38	55.50	0.21	69.50	0.14	83.50	0.09
41.75	0.38	55.75	0.21	69.75	0.14	83.75	0.09
42.00	0.37	56.00	0.21	70.00	0.13	84.00	0.09
42.25	0.37	56.25	0.21	70.25	0.13	84.25	0.09
42.50	0.37	56.50	0.21	70.50	0.13	84.50	0.09
42.75	0.36	56.75	0.20	70.75	0.13	84.75	0.09
43.00	0.36	57.00	0.20	71.00	0.13	85.00	0.09
43.25	0.35	57.25	0.20	71.25	0.13	85.25	0.09
43.50	0.35	57.50	0.20	71.50	0.13	85.50	0.09
43.75	0.34	57.75	0.20	71.75	0.13	85.75	0.09
44.00	0.34	58.00	0.20	72.00	0.13	86.00	0.09
44.25	0.34	58.25	0.19	72.25	0.13	86.25	0.09
44.50	0.33	58.50	0.19	72.50	0.13	86.50	0.09
44.75	0.33	58.75	0.19	72.75	0.12	86.75	0.09
45.00	0.33	59.00	0.19	73.00	0.12	87.00	0.09
45.25	0.32	59.25	0.19	73.25	0.12	87.25	0.09
45.50	0.32	59.50	0.19	73.50	0.12	87.50	0.09
45.75	0.32	59.75	0.18	73.75	0.12	87.75	0.09
46.00	0.31	60.00	0.18	74.00	0.12	88.00	0.09
46.25	0.31	60.25	0.18	74.25	0.12	88.25	0.08
46.50	0.30	60.50	0.18	74.50	0.12	88.50	0.08
46.75	0.30	60.75	0.18	74.75	0.12	88.75	0.08
47.00	0.30	61.00	0.18	75.00	0.12	89.00	0.08
47.25	0.30	61.25	0.18	75.25	0.12	89.25	0.08
47.50	0.29	61.50	0.17	75.50	0.12	89.50	0.08
47.75	0.29	61.75	0.17	75.75	0.11	89.75	0.08
48.00	0.29	62.00	0.17	76.00	0.11	90.00	0.08
48.25	0.28	62.25	0.17	76.25	0.11	90.25	0.08
48.50	0.28	62.50	0.17	76.50	0.11	90.50	0.08
48.75	0.28	62.75	0.17	76.75	0.11	90.75	0.08
49.00	0.27	63.00	0.17	77.00	0.11	91.00	0.08
49.25	0.27	63.25	0.16	77.25	0.11	91.25	0.08
49.50	0.27	63.50	0.16	77.50	0.11	91.50	0.08
49.75	0.27	63.75	0.16	77.75	0.11	91.75	0.08
50.00	0.26	64.00	0.16	78.00	0.11	92.00	0.08
50.25	0.26	64.25	0.16	78.25	0.11	92.25	0.08
50.50	0.26	64.50	0.16	78.50	0.11	92.50	0.08
50.75	0.26	64.75	0.16	78.75	0.11	92.75	0.08
51.00	0.25	65.00	0.16	79.00	0.11	93.00	0.08
51.25	0.25	65.25	0.15	79.25	0.10	93.25	0.08
51.50	0.25	65.50	0.15	79.50	0.10	93.50	0.08
51.75	0.25	65.75	0.15	79.75	0.10	93.75	0.08
52.00	0.24	66.00	0.15	80.00	0.10	94.00	0.07
52.25	0.24	66.25	0.15	80.25	0.10	94.25	0.07
52.50	0.24	66.50	0.15	80.50	0.10	94.50	0.07
52.75	0.24	66.75	0.15	80.75	0.10	94.75	0.07
53.00	0.23	67.00	0.15	81.00	0.10	95.00	0.07
53.25	0.23	67.25	0.15	81.25	0.10	95.25	0.07
53.50	0.23	67.50	0.14	81.50	0.10	95.50	0.07
53.75	0.23	67.75	0.14	81.75	0.10	95.75	0.07
54.00	0.23	68.00	0.14	82.00	0.10	96.00	0.07

Table 5 – 70%

SMART Meter Power Density Computer Modeling

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 80%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 1.04 12.5 Inches

BioInitiative ft. 87.00 1044.0 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
0.25	6028.50	10.25	7.17	20.25	1.84	30.25	0.82
0.50	2411.40	10.50	6.83	20.50	1.79	30.50	0.81
0.75	1205.70	10.75	6.52	20.75	1.75	30.75	0.80
1.00	709.23	11.00	6.22	21.00	1.71	31.00	0.78
1.25	463.73	11.25	5.95	21.25	1.67	31.25	0.77
1.50	325.86	11.50	5.70	21.50	1.63	31.50	0.76
1.75	241.14	11.75	5.46	21.75	1.59	31.75	0.75
2.00	185.49	12.00	5.23	22.00	1.56	32.00	0.74
2.25	147.04	12.25	5.02	22.25	1.52	32.25	0.72
2.50	119.38	12.50	4.82	22.50	1.49	32.50	0.71
2.75	98.83	12.75	4.63	22.75	1.46	32.75	0.70
3.00	83.15	13.00	4.46	23.00	1.42	33.00	0.69
3.25	70.92	13.25	4.29	23.25	1.39	33.25	0.68
3.50	61.20	13.50	4.13	23.50	1.36	33.50	0.67
3.75	53.35	13.75	3.98	23.75	1.34	33.75	0.66
4.00	46.91	14.00	3.84	24.00	1.31	34.00	0.65
4.25	41.58	14.25	3.71	24.25	1.28	34.25	0.64
4.50	37.10	14.50	3.58	24.50	1.26	34.50	0.63
4.75	33.31	14.75	3.46	24.75	1.23	34.75	0.62
5.00	30.07	15.00	3.35	25.00	1.21	35.00	0.62
5.25	27.28	15.25	3.24	25.25	1.18	35.25	0.61
5.50	24.86	15.50	3.14	25.50	1.16	35.50	0.60
5.75	22.75	15.75	3.04	25.75	1.14	35.75	0.59
6.00	20.90	16.00	2.94	26.00	1.11	36.00	0.58
6.25	19.26	16.25	2.85	26.25	1.09	36.25	0.57
6.50	17.81	16.50	2.77	26.50	1.07	36.50	0.57
6.75	16.52	16.75	2.69	26.75	1.05	36.75	0.56
7.00	15.36	17.00	2.61	27.00	1.03	37.00	0.55
7.25	14.32	17.25	2.53	27.25	1.01	37.25	0.54
7.50	13.38	17.50	2.46	27.50	1.00	37.50	0.54
7.75	12.53	17.75	2.39	27.75	0.98	37.75	0.53
8.00	11.76	18.00	2.33	28.00	0.96	38.00	0.52
8.25	11.06	18.25	2.26	28.25	0.94	38.25	0.52
8.50	10.42	18.50	2.20	28.50	0.93	38.50	0.51
8.75	9.83	18.75	2.14	28.75	0.91	38.75	0.50
9.00	9.30	19.00	2.09	29.00	0.90	39.00	0.50
9.25	8.80	19.25	2.03	29.25	0.88	39.25	0.49
9.50	8.34	19.50	1.98	29.50	0.87	39.50	0.48
9.75	7.92	19.75	1.93	29.75	0.85	39.75	0.48
10.00	7.53	20.00	1.88	30.00	0.84	40.00	0.47

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/cm²
 - 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

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 80%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 1.04

12.52 Inches

BioInitiative ft. 87.00

1044.00 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
40.25	0.47	54.25	0.26	68.25	0.16	82.25	0.11
40.50	0.46	54.50	0.25	68.50	0.16	82.50	0.11
40.75	0.45	54.75	0.25	68.75	0.16	82.75	0.11
41.00	0.45	55.00	0.25	69.00	0.16	83.00	0.11
41.25	0.44	55.25	0.25	69.25	0.16	83.25	0.11
41.50	0.44	55.50	0.24	69.50	0.16	83.50	0.11
41.75	0.43	55.75	0.24	69.75	0.15	83.75	0.11
42.00	0.43	56.00	0.24	70.00	0.15	84.00	0.11
42.25	0.42	56.25	0.24	70.25	0.15	84.25	0.11
42.50	0.42	56.50	0.24	70.50	0.15	84.50	0.11
42.75	0.41	56.75	0.23	70.75	0.15	84.75	0.10
43.00	0.41	57.00	0.23	71.00	0.15	85.00	0.10
43.25	0.40	57.25	0.23	71.25	0.15	85.25	0.10
43.50	0.40	57.50	0.23	71.50	0.15	85.50	0.10
43.75	0.39	57.75	0.23	71.75	0.15	85.75	0.10
44.00	0.39	58.00	0.22	72.00	0.15	86.00	0.10
44.25	0.38	58.25	0.22	72.25	0.14	86.25	0.10
44.50	0.38	58.50	0.22	72.50	0.14	86.50	0.10
44.75	0.38	58.75	0.22	72.75	0.14	86.75	0.10
45.00	0.37	59.00	0.22	73.00	0.14	87.00	0.10
45.25	0.37	59.25	0.21	73.25	0.14	87.25	0.10
45.50	0.36	59.50	0.21	73.50	0.14	87.50	0.10
45.75	0.36	59.75	0.21	73.75	0.14	87.75	0.10
46.00	0.36	60.00	0.21	74.00	0.14	88.00	0.10
46.25	0.35	60.25	0.21	74.25	0.14	88.25	0.10
46.50	0.35	60.50	0.21	74.50	0.14	88.50	0.10
46.75	0.34	60.75	0.20	74.75	0.13	88.75	0.10
47.00	0.34	61.00	0.20	75.00	0.13	89.00	0.10
47.25	0.34	61.25	0.20	75.25	0.13	89.25	0.09
47.50	0.33	61.50	0.20	75.50	0.13	89.50	0.09
47.75	0.33	61.75	0.20	75.75	0.13	89.75	0.09
48.00	0.33	62.00	0.20	76.00	0.13	90.00	0.09
48.25	0.32	62.25	0.19	76.25	0.13	90.25	0.09
48.50	0.32	62.50	0.19	76.50	0.13	90.50	0.09
48.75	0.32	62.75	0.19	76.75	0.13	90.75	0.09
49.00	0.31	63.00	0.19	77.00	0.13	91.00	0.09
49.25	0.31	63.25	0.19	77.25	0.13	91.25	0.09
49.50	0.31	63.50	0.19	77.50	0.13	91.50	0.09
49.75	0.30	63.75	0.19	77.75	0.12	91.75	0.09
50.00	0.30	64.00	0.18	78.00	0.12	92.00	0.09
50.25	0.30	64.25	0.18	78.25	0.12	92.25	0.09
50.50	0.30	64.50	0.18	78.50	0.12	92.50	0.09
50.75	0.29	64.75	0.18	78.75	0.12	92.75	0.09
51.00	0.29	65.00	0.18	79.00	0.12	93.00	0.09
51.25	0.29	65.25	0.18	79.25	0.12	93.25	0.09
51.50	0.28	65.50	0.18	79.50	0.12	93.50	0.09
51.75	0.28	65.75	0.17	79.75	0.12	93.75	0.09
52.00	0.28	66.00	0.17	80.00	0.12	94.00	0.09
52.25	0.28	66.25	0.17	80.25	0.12	94.25	0.08
52.50	0.27	66.50	0.17	80.50	0.12	94.50	0.08
52.75	0.27	66.75	0.17	80.75	0.12	94.75	0.08
53.00	0.27	67.00	0.17	81.00	0.11	95.00	0.08
53.25	0.27	67.25	0.17	81.25	0.11	95.25	0.08
53.50	0.26	67.50	0.17	81.50	0.11	95.50	0.08
53.75	0.26	67.75	0.16	81.75	0.11	95.75	0.08
54.00	0.26	68.00	0.16	82.00	0.11	96.00	0.08

Table 5 – 80%

SMART Meter Power Density Computer Modeling

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 90%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 1.11 13.3 Inches

BioInitiative ft. 92.00 1104.0 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
0.25	6782.06	10.25	8.06	20.25	2.07	30.25	0.93
0.50	2712.82	10.50	7.69	20.50	2.02	30.50	0.91
0.75	1356.41	10.75	7.33	20.75	1.97	30.75	0.90
1.00	797.89	11.00	7.00	21.00	1.92	31.00	0.88
1.25	521.70	11.25	6.70	21.25	1.88	31.25	0.87
1.50	366.60	11.50	6.41	21.50	1.83	31.50	0.85
1.75	271.28	11.75	6.14	21.75	1.79	31.75	0.84
2.00	208.68	12.00	5.88	22.00	1.75	32.00	0.83
2.25	165.42	12.25	5.65	22.25	1.71	32.25	0.82
2.50	134.30	12.50	5.42	22.50	1.67	32.50	0.80
2.75	111.18	12.75	5.21	22.75	1.64	32.75	0.79
3.00	93.55	13.00	5.01	23.00	1.60	33.00	0.78
3.25	79.79	13.25	4.83	23.25	1.57	33.25	0.77
3.50	68.85	13.50	4.65	23.50	1.53	33.50	0.76
3.75	60.02	13.75	4.48	23.75	1.50	33.75	0.74
4.00	52.78	14.00	4.32	24.00	1.47	34.00	0.73
4.25	46.77	14.25	4.17	24.25	1.44	34.25	0.72
4.50	41.74	14.50	4.03	24.50	1.41	34.50	0.71
4.75	37.47	14.75	3.90	24.75	1.38	34.75	0.70
5.00	33.83	15.00	3.77	25.00	1.36	35.00	0.69
5.25	30.69	15.25	3.64	25.25	1.33	35.25	0.68
5.50	27.97	15.50	3.53	25.50	1.30	35.50	0.67
5.75	25.59	15.75	3.42	25.75	1.28	35.75	0.66
6.00	23.51	16.00	3.31	26.00	1.25	36.00	0.65
6.25	21.67	16.25	3.21	26.25	1.23	36.25	0.65
6.50	20.04	16.50	3.11	26.50	1.21	36.50	0.64
6.75	18.58	16.75	3.02	26.75	1.18	36.75	0.63
7.00	17.28	17.00	2.93	27.00	1.16	37.00	0.62
7.25	16.11	17.25	2.85	27.25	1.14	37.25	0.61
7.50	15.05	17.50	2.77	27.50	1.12	37.50	0.60
7.75	14.10	17.75	2.69	27.75	1.10	37.75	0.59
8.00	13.23	18.00	2.62	28.00	1.08	38.00	0.59
8.25	12.44	18.25	2.54	28.25	1.06	38.25	0.58
8.50	11.72	18.50	2.48	28.50	1.04	38.50	0.57
8.75	11.06	18.75	2.41	28.75	1.03	38.75	0.56
9.00	10.46	19.00	2.35	29.00	1.01	39.00	0.56
9.25	9.90	19.25	2.29	29.25	0.99	39.25	0.55
9.50	9.39	19.50	2.23	29.50	0.97	39.50	0.54
9.75	8.91	19.75	2.17	29.75	0.96	39.75	0.54
10.00	8.47	20.00	2.12	30.00	0.94	40.00	0.53

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/cm²
 - 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

(8 SMART Meters – 60% reflections)

Meters 8 Electric SMART Meters

Time Avg: 90%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 1.11

13.32 Inches

BioInitiative ft. 92.00

1104.00 Inches

Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²	Distance (ft)	uW/cm ²
40.25	0.52	54.25	0.29	68.25	0.18	82.25	0.13
40.50	0.52	54.50	0.29	68.50	0.18	82.50	0.12
40.75	0.51	54.75	0.28	68.75	0.18	82.75	0.12
41.00	0.50	55.00	0.28	69.00	0.18	83.00	0.12
41.25	0.50	55.25	0.28	69.25	0.18	83.25	0.12
41.50	0.49	55.50	0.28	69.50	0.18	83.50	0.12
41.75	0.49	55.75	0.27	69.75	0.17	83.75	0.12
42.00	0.48	56.00	0.27	70.00	0.17	84.00	0.12
42.25	0.47	56.25	0.27	70.25	0.17	84.25	0.12
42.50	0.47	56.50	0.27	70.50	0.17	84.50	0.12
42.75	0.46	56.75	0.26	70.75	0.17	84.75	0.12
43.00	0.46	57.00	0.26	71.00	0.17	85.00	0.12
43.25	0.45	57.25	0.26	71.25	0.17	85.25	0.12
43.50	0.45	57.50	0.26	71.50	0.17	85.50	0.12
43.75	0.44	57.75	0.25	71.75	0.16	85.75	0.12
44.00	0.44	58.00	0.25	72.00	0.16	86.00	0.11
44.25	0.43	58.25	0.25	72.25	0.16	86.25	0.11
44.50	0.43	58.50	0.25	72.50	0.16	86.50	0.11
44.75	0.42	58.75	0.25	72.75	0.16	86.75	0.11
45.00	0.42	59.00	0.24	73.00	0.16	87.00	0.11
45.25	0.41	59.25	0.24	73.25	0.16	87.25	0.11
45.50	0.41	59.50	0.24	73.50	0.16	87.50	0.11
45.75	0.41	59.75	0.24	73.75	0.16	87.75	0.11
46.00	0.40	60.00	0.24	74.00	0.15	88.00	0.11
46.25	0.40	60.25	0.23	74.25	0.15	88.25	0.11
46.50	0.39	60.50	0.23	74.50	0.15	88.50	0.11
46.75	0.39	60.75	0.23	74.75	0.15	88.75	0.11
47.00	0.38	61.00	0.23	75.00	0.15	89.00	0.11
47.25	0.38	61.25	0.23	75.25	0.15	89.25	0.11
47.50	0.38	61.50	0.22	75.50	0.15	89.50	0.11
47.75	0.37	61.75	0.22	75.75	0.15	89.75	0.11
48.00	0.37	62.00	0.22	76.00	0.15	90.00	0.10
48.25	0.36	62.25	0.22	76.25	0.15	90.25	0.10
48.50	0.36	62.50	0.22	76.50	0.14	90.50	0.10
48.75	0.36	62.75	0.22	76.75	0.14	90.75	0.10
49.00	0.35	63.00	0.21	77.00	0.14	91.00	0.10
49.25	0.35	63.25	0.21	77.25	0.14	91.25	0.10
49.50	0.35	63.50	0.21	77.50	0.14	91.50	0.10
49.75	0.34	63.75	0.21	77.75	0.14	91.75	0.10
50.00	0.34	64.00	0.21	78.00	0.14	92.00	0.10
50.25	0.34	64.25	0.21	78.25	0.14	92.25	0.10
50.50	0.33	64.50	0.20	78.50	0.14	92.50	0.10
50.75	0.33	64.75	0.20	78.75	0.14	92.75	0.10
51.00	0.33	65.00	0.20	79.00	0.14	93.00	0.10
51.25	0.32	65.25	0.20	79.25	0.13	93.25	0.10
51.50	0.32	65.50	0.20	79.50	0.13	93.50	0.10
51.75	0.32	65.75	0.20	79.75	0.13	93.75	0.10
52.00	0.31	66.00	0.19	80.00	0.13	94.00	0.10
52.25	0.31	66.25	0.19	80.25	0.13	94.25	0.10
52.50	0.31	66.50	0.19	80.50	0.13	94.50	0.09
52.75	0.30	66.75	0.19	80.75	0.13	94.75	0.09
53.00	0.30	67.00	0.19	81.00	0.13	95.00	0.09
53.25	0.30	67.25	0.19	81.25	0.13	95.25	0.09
53.50	0.30	67.50	0.19	81.50	0.13	95.50	0.09
53.75	0.29	67.75	0.18	81.75	0.13	95.75	0.09
54.00	0.29	68.00	0.18	82.00	0.13	96.00	0.09

Table 5 – 90%