

# SMART Meter Power Density Computer Modeling

(1 Collector Meter - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
Time Avg: 1%      % Reflection 60%

Distance where limits are exceeded			
FCC ft.	0.14	1.6 Inches	
BioInitiative ft.	10.85	130.2 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	94.10	10.25	0.11	20.25	0.03	30.25	0.01
0.50	37.64	10.50	0.11	20.50	0.03	30.50	0.01
0.75	18.82	10.75	0.10	20.75	0.03	30.75	0.01
1.00	11.07	11.00	0.10	21.00	0.03	31.00	0.01
1.25	7.24	11.25	0.09	21.25	0.03	31.25	0.01
1.50	5.09	11.50	0.09	21.50	0.03	31.50	0.01
1.75	3.76	11.75	0.09	21.75	0.02	31.75	0.01
2.00	2.90	12.00	0.08	22.00	0.02	32.00	0.01
2.25	2.30	12.25	0.08	22.25	0.02	32.25	0.01
2.50	1.86	12.50	0.08	22.50	0.02	32.50	0.01
2.75	1.54	12.75	0.07	22.75	0.02	32.75	0.01
3.00	1.30	13.00	0.07	23.00	0.02	33.00	0.01
3.25	1.11	13.25	0.07	23.25	0.02	33.25	0.01
3.50	0.96	13.50	0.06	23.50	0.02	33.50	0.01
3.75	0.83	13.75	0.06	23.75	0.02	33.75	0.01
4.00	0.73	14.00	0.06	24.00	0.02	34.00	0.01
4.25	0.65	14.25	0.06	24.25	0.02	34.25	0.01
4.50	0.58	14.50	0.06	24.50	0.02	34.50	0.01
4.75	0.52	14.75	0.05	24.75	0.02	34.75	0.01
5.00	0.47	15.00	0.05	25.00	0.02	35.00	0.01
5.25	0.43	15.25	0.05	25.25	0.02	35.25	0.01
5.50	0.39	15.50	0.05	25.50	0.02	35.50	0.01
5.75	0.36	15.75	0.05	25.75	0.02	35.75	0.01
6.00	0.33	16.00	0.05	26.00	0.02	36.00	0.01
6.25	0.30	16.25	0.04	26.25	0.02	36.25	0.01
6.50	0.28	16.50	0.04	26.50	0.02	36.50	0.01
6.75	0.26	16.75	0.04	26.75	0.02	36.75	0.01
7.00	0.24	17.00	0.04	27.00	0.02	37.00	0.01
7.25	0.22	17.25	0.04	27.25	0.02	37.25	0.01
7.50	0.21	17.50	0.04	27.50	0.02	37.50	0.01
7.75	0.20	17.75	0.04	27.75	0.02	37.75	0.01
8.00	0.18	18.00	0.04	28.00	0.02	38.00	0.01
8.25	0.17	18.25	0.04	28.25	0.01	38.25	0.01
8.50	0.16	18.50	0.03	28.50	0.01	38.50	0.01
8.75	0.15	18.75	0.03	28.75	0.01	38.75	0.01
9.00	0.15	19.00	0.03	29.00	0.01	39.00	0.01
9.25	0.14	19.25	0.03	29.25	0.01	39.25	0.01
9.50	0.13	19.50	0.03	29.50	0.01	39.50	0.01
9.75	0.12	19.75	0.03	29.75	0.01	39.75	0.01
10.00	0.12	20.00	0.03	30.00	0.01	40.00	0.01

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 - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
 Time Avg: 1%      % Reflection 60%

Distance where limits are exceeded  
 FCC ft. 0.14      1.64 Inches  
 BioInitiative ft. 10.85      130.20 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	0.01	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	0.01	57.50	0.00	71.50	0.00	85.50	0.00
43.75	0.01	57.75	0.00	71.75	0.00	85.75	0.00
44.00	0.01	58.00	0.00	72.00	0.00	86.00	0.00
44.25	0.01	58.25	0.00	72.25	0.00	86.25	0.00
44.50	0.01	58.50	0.00	72.50	0.00	86.50	0.00
44.75	0.01	58.75	0.00	72.75	0.00	86.75	0.00
45.00	0.01	59.00	0.00	73.00	0.00	87.00	0.00
45.25	0.01	59.25	0.00	73.25	0.00	87.25	0.00
45.50	0.01	59.50	0.00	73.50	0.00	87.50	0.00
45.75	0.01	59.75	0.00	73.75	0.00	87.75	0.00
46.00	0.01	60.00	0.00	74.00	0.00	88.00	0.00
46.25	0.01	60.25	0.00	74.25	0.00	88.25	0.00
46.50	0.01	60.50	0.00	74.50	0.00	88.50	0.00
46.75	0.01	60.75	0.00	74.75	0.00	88.75	0.00
47.00	0.01	61.00	0.00	75.00	0.00	89.00	0.00
47.25	0.01	61.25	0.00	75.25	0.00	89.25	0.00
47.50	0.01	61.50	0.00	75.50	0.00	89.50	0.00
47.75	0.01	61.75	0.00	75.75	0.00	89.75	0.00
48.00	0.01	62.00	0.00	76.00	0.00	90.00	0.00
48.25	0.01	62.25	0.00	76.25	0.00	90.25	0.00
48.50	0.01	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 13 – 1%

# SMART Meter Power Density Computer Modeling

(1 Collector Meter - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
Time Avg: 10%      % Reflection 60%

Distance where limits are exceeded	
FCC ft.	4.2 Inches
BioInitiative ft.	411.6 Inches
0.35	
34.30	

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	940.98	10.25	1.12	20.25	0.29	30.25	0.13
0.50	376.39	10.50	1.07	20.50	0.28	30.50	0.13
0.75	188.20	10.75	1.02	20.75	0.27	30.75	0.12
1.00	110.70	11.00	0.97	21.00	0.27	31.00	0.12
1.25	72.38	11.25	0.93	21.25	0.26	31.25	0.12
1.50	50.86	11.50	0.89	21.50	0.25	31.50	0.12
1.75	37.64	11.75	0.85	21.75	0.25	31.75	0.12
2.00	28.95	12.00	0.82	22.00	0.24	32.00	0.11
2.25	22.95	12.25	0.78	22.25	0.24	32.25	0.11
2.50	18.63	12.50	0.75	22.50	0.23	32.50	0.11
2.75	15.43	12.75	0.72	22.75	0.23	32.75	0.11
3.00	12.98	13.00	0.70	23.00	0.22	33.00	0.11
3.25	11.07	13.25	0.67	23.25	0.22	33.25	0.11
3.50	9.55	13.50	0.65	23.50	0.21	33.50	0.10
3.75	8.33	13.75	0.62	23.75	0.21	33.75	0.10
4.00	7.32	14.00	0.60	24.00	0.20	34.00	0.10
4.25	6.49	14.25	0.58	24.25	0.20	34.25	0.10
4.50	5.79	14.50	0.56	24.50	0.20	34.50	0.10
4.75	5.20	14.75	0.54	24.75	0.19	34.75	0.10
5.00	4.69	15.00	0.52	25.00	0.19	35.00	0.10
5.25	4.26	15.25	0.51	25.25	0.18	35.25	0.09
5.50	3.88	15.50	0.49	25.50	0.18	35.50	0.09
5.75	3.55	15.75	0.47	25.75	0.18	35.75	0.09
6.00	3.26	16.00	0.46	26.00	0.17	36.00	0.09
6.25	3.01	16.25	0.45	26.25	0.17	36.25	0.09
6.50	2.78	16.50	0.43	26.50	0.17	36.50	0.09
6.75	2.58	16.75	0.42	26.75	0.16	36.75	0.09
7.00	2.40	17.00	0.41	27.00	0.16	37.00	0.09
7.25	2.24	17.25	0.40	27.25	0.16	37.25	0.08
7.50	2.09	17.50	0.38	27.50	0.16	37.50	0.08
7.75	1.96	17.75	0.37	27.75	0.15	37.75	0.08
8.00	1.84	18.00	0.36	28.00	0.15	38.00	0.08
8.25	1.73	18.25	0.35	28.25	0.15	38.25	0.08
8.50	1.63	18.50	0.34	28.50	0.14	38.50	0.08
8.75	1.54	18.75	0.33	28.75	0.14	38.75	0.08
9.00	1.45	19.00	0.33	29.00	0.14	39.00	0.08
9.25	1.37	19.25	0.32	29.25	0.14	39.25	0.08
9.50	1.30	19.50	0.31	29.50	0.14	39.50	0.08
9.75	1.24	19.75	0.30	29.75	0.13	39.75	0.07
10.00	1.18	20.00	0.29	30.00	0.13	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 - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
 Time Avg: 10%      % Reflection 60%

Distance where limits are exceeded  
 FCC ft. 0.35      4.24 Inches  
 BioInitiative ft. 34.30      411.60 Inches

Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>	Distance (ft)	uW/cm <sup>2</sup>
40.25	0.07	54.25	0.04	68.25	0.03	82.25	0.02
40.50	0.07	54.50	0.04	68.50	0.03	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	0.07	55.25	0.04	69.25	0.02	83.25	0.02
41.50	0.07	55.50	0.04	69.50	0.02	83.50	0.02
41.75	0.07	55.75	0.04	69.75	0.02	83.75	0.02
42.00	0.07	56.00	0.04	70.00	0.02	84.00	0.02
42.25	0.07	56.25	0.04	70.25	0.02	84.25	0.02
42.50	0.07	56.50	0.04	70.50	0.02	84.50	0.02
42.75	0.06	56.75	0.04	70.75	0.02	84.75	0.02
43.00	0.06	57.00	0.04	71.00	0.02	85.00	0.02
43.25	0.06	57.25	0.04	71.25	0.02	85.25	0.02
43.50	0.06	57.50	0.04	71.50	0.02	85.50	0.02
43.75	0.06	57.75	0.04	71.75	0.02	85.75	0.02
44.00	0.06	58.00	0.03	72.00	0.02	86.00	0.02
44.25	0.06	58.25	0.03	72.25	0.02	86.25	0.02
44.50	0.06	58.50	0.03	72.50	0.02	86.50	0.02
44.75	0.06	58.75	0.03	72.75	0.02	86.75	0.02
45.00	0.06	59.00	0.03	73.00	0.02	87.00	0.02
45.25	0.06	59.25	0.03	73.25	0.02	87.25	0.02
45.50	0.06	59.50	0.03	73.50	0.02	87.50	0.02
45.75	0.06	59.75	0.03	73.75	0.02	87.75	0.02
46.00	0.06	60.00	0.03	74.00	0.02	88.00	0.02
46.25	0.05	60.25	0.03	74.25	0.02	88.25	0.02
46.50	0.05	60.50	0.03	74.50	0.02	88.50	0.02
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	0.05	63.50	0.03	77.50	0.02	91.50	0.01
49.75	0.05	63.75	0.03	77.75	0.02	91.75	0.01
50.00	0.05	64.00	0.03	78.00	0.02	92.00	0.01
50.25	0.05	64.25	0.03	78.25	0.02	92.25	0.01
50.50	0.05	64.50	0.03	78.50	0.02	92.50	0.01
50.75	0.05	64.75	0.03	78.75	0.02	92.75	0.01
51.00	0.05	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	0.03	80.50	0.02	94.50	0.01
52.75	0.04	66.75	0.03	80.75	0.02	94.75	0.01
53.00	0.04	67.00	0.03	81.00	0.02	95.00	0.01
53.25	0.04	67.25	0.03	81.25	0.02	95.25	0.01
53.50	0.04	67.50	0.03	81.50	0.02	95.50	0.01
53.75	0.04	67.75	0.03	81.75	0.02	95.75	0.01
54.00	0.04	68.00	0.03	82.00	0.02	96.00	0.01

Table 13 – 10%

# SMART Meter Power Density Computer Modeling

(1 Collector Meter - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
Time Avg: 20%      % Reflection 60%

Distance where limits are exceeded	
FCC ft.	6.7 Inches
BioInitiative ft.	582.0 Inches
0.56	
48.50	

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	1881.95	10.25	2.24	20.25	0.57	30.25	0.26
0.50	752.78	10.50	2.13	20.50	0.56	30.50	0.25
0.75	376.39	10.75	2.03	20.75	0.55	30.75	0.25
1.00	221.41	11.00	1.94	21.00	0.53	31.00	0.24
1.25	144.77	11.25	1.86	21.25	0.52	31.25	0.24
1.50	101.73	11.50	1.78	21.50	0.51	31.50	0.24
1.75	75.28	11.75	1.70	21.75	0.50	31.75	0.23
2.00	57.91	12.00	1.63	22.00	0.49	32.00	0.23
2.25	45.90	12.25	1.57	22.25	0.48	32.25	0.23
2.50	37.27	12.50	1.50	22.50	0.46	32.50	0.22
2.75	30.85	12.75	1.45	22.75	0.45	32.75	0.22
3.00	25.96	13.00	1.39	23.00	0.44	33.00	0.22
3.25	22.14	13.25	1.34	23.25	0.44	33.25	0.21
3.50	19.11	13.50	1.29	23.50	0.43	33.50	0.21
3.75	16.65	13.75	1.24	23.75	0.42	33.75	0.21
4.00	14.65	14.00	1.20	24.00	0.41	34.00	0.20
4.25	12.98	14.25	1.16	24.25	0.40	34.25	0.20
4.50	11.58	14.50	1.12	24.50	0.39	34.50	0.20
4.75	10.40	14.75	1.08	24.75	0.38	34.75	0.19
5.00	9.39	15.00	1.05	25.00	0.38	35.00	0.19
5.25	8.52	15.25	1.01	25.25	0.37	35.25	0.19
5.50	7.76	15.50	0.98	25.50	0.36	35.50	0.19
5.75	7.10	15.75	0.95	25.75	0.35	35.75	0.18
6.00	6.52	16.00	0.92	26.00	0.35	36.00	0.18
6.25	6.01	16.25	0.89	26.25	0.34	36.25	0.18
6.50	5.56	16.50	0.86	26.50	0.33	36.50	0.18
6.75	5.16	16.75	0.84	26.75	0.33	36.75	0.17
7.00	4.79	17.00	0.81	27.00	0.32	37.00	0.17
7.25	4.47	17.25	0.79	27.25	0.32	37.25	0.17
7.50	4.18	17.50	0.77	27.50	0.31	37.50	0.17
7.75	3.91	17.75	0.75	27.75	0.31	37.75	0.17
8.00	3.67	18.00	0.73	28.00	0.30	38.00	0.16
8.25	3.45	18.25	0.71	28.25	0.29	38.25	0.16
8.50	3.25	18.50	0.69	28.50	0.29	38.50	0.16
8.75	3.07	18.75	0.67	28.75	0.28	38.75	0.16
9.00	2.90	19.00	0.65	29.00	0.28	39.00	0.15
9.25	2.75	19.25	0.63	29.25	0.27	39.25	0.15
9.50	2.60	19.50	0.62	29.50	0.27	39.50	0.15
9.75	2.47	19.75	0.60	29.75	0.27	39.75	0.15
10.00	2.35	20.00	0.59	30.00	0.26	40.00	0.15

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 - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
 Time Avg: 20%      % Reflection 60%

Distance where limits are exceeded  
 FCC ft. 0.56      6.70 Inches  
 BioInitiative ft. 48.50      582.00 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	0.15	54.25	0.08	68.25	0.05	82.25	0.03
40.50	0.14	54.50	0.08	68.50	0.05	82.50	0.03
40.75	0.14	54.75	0.08	68.75	0.05	82.75	0.03
41.00	0.14	55.00	0.08	69.00	0.05	83.00	0.03
41.25	0.14	55.25	0.08	69.25	0.05	83.25	0.03
41.50	0.14	55.50	0.08	69.50	0.05	83.50	0.03
41.75	0.13	55.75	0.08	69.75	0.05	83.75	0.03
42.00	0.13	56.00	0.08	70.00	0.05	84.00	0.03
42.25	0.13	56.25	0.07	70.25	0.05	84.25	0.03
42.50	0.13	56.50	0.07	70.50	0.05	84.50	0.03
42.75	0.13	56.75	0.07	70.75	0.05	84.75	0.03
43.00	0.13	57.00	0.07	71.00	0.05	85.00	0.03
43.25	0.13	57.25	0.07	71.25	0.05	85.25	0.03
43.50	0.12	57.50	0.07	71.50	0.05	85.50	0.03
43.75	0.12	57.75	0.07	71.75	0.05	85.75	0.03
44.00	0.12	58.00	0.07	72.00	0.05	86.00	0.03
44.25	0.12	58.25	0.07	72.25	0.05	86.25	0.03
44.50	0.12	58.50	0.07	72.50	0.04	86.50	0.03
44.75	0.12	58.75	0.07	72.75	0.04	86.75	0.03
45.00	0.12	59.00	0.07	73.00	0.04	87.00	0.03
45.25	0.11	59.25	0.07	73.25	0.04	87.25	0.03
45.50	0.11	59.50	0.07	73.50	0.04	87.50	0.03
45.75	0.11	59.75	0.07	73.75	0.04	87.75	0.03
46.00	0.11	60.00	0.07	74.00	0.04	88.00	0.03
46.25	0.11	60.25	0.06	74.25	0.04	88.25	0.03
46.50	0.11	60.50	0.06	74.50	0.04	88.50	0.03
46.75	0.11	60.75	0.06	74.75	0.04	88.75	0.03
47.00	0.11	61.00	0.06	75.00	0.04	89.00	0.03
47.25	0.11	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	0.10	62.25	0.06	76.25	0.04	90.25	0.03
48.50	0.10	62.50	0.06	76.50	0.04	90.50	0.03
48.75	0.10	62.75	0.06	76.75	0.04	90.75	0.03
49.00	0.10	63.00	0.06	77.00	0.04	91.00	0.03
49.25	0.10	63.25	0.06	77.25	0.04	91.25	0.03
49.50	0.10	63.50	0.06	77.50	0.04	91.50	0.03
49.75	0.10	63.75	0.06	77.75	0.04	91.75	0.03
50.00	0.09	64.00	0.06	78.00	0.04	92.00	0.03
50.25	0.09	64.25	0.06	78.25	0.04	92.25	0.03
50.50	0.09	64.50	0.06	78.50	0.04	92.50	0.03
50.75	0.09	64.75	0.06	78.75	0.04	92.75	0.03
51.00	0.09	65.00	0.06	79.00	0.04	93.00	0.03
51.25	0.09	65.25	0.06	79.25	0.04	93.25	0.03
51.50	0.09	65.50	0.05	79.50	0.04	93.50	0.03
51.75	0.09	65.75	0.05	79.75	0.04	93.75	0.03
52.00	0.09	66.00	0.05	80.00	0.04	94.00	0.03
52.25	0.09	66.25	0.05	80.25	0.04	94.25	0.03
52.50	0.09	66.50	0.05	80.50	0.04	94.50	0.03
52.75	0.08	66.75	0.05	80.75	0.04	94.75	0.03
53.00	0.08	67.00	0.05	81.00	0.04	95.00	0.03
53.25	0.08	67.25	0.05	81.25	0.04	95.25	0.03
53.50	0.08	67.50	0.05	81.50	0.04	95.50	0.03
53.75	0.08	67.75	0.05	81.75	0.04	95.75	0.03
54.00	0.08	68.00	0.05	82.00	0.03	96.00	0.03

Table 13 – 20%

# SMART Meter Power Density Computer Modeling

(1 Collector Meter - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7SMART Meters  
Time Avg: 30%      % Reflection 60%

Distance where limits are exceeded	
FCC ft.	8.5 Inches
BioInitiative ft.	714.0 Inches
0.71	
59.50	

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	2822.93	10.25	3.36	20.25	0.86	30.25	0.39
0.50	1129.17	10.50	3.20	20.50	0.84	30.50	0.38
0.75	564.59	10.75	3.05	20.75	0.82	30.75	0.37
1.00	332.11	11.00	2.91	21.00	0.80	31.00	0.37
1.25	217.15	11.25	2.79	21.25	0.78	31.25	0.36
1.50	152.59	11.50	2.67	21.50	0.76	31.50	0.36
1.75	112.92	11.75	2.55	21.75	0.75	31.75	0.35
2.00	86.86	12.00	2.45	22.00	0.73	32.00	0.34
2.25	68.85	12.25	2.35	22.25	0.71	32.25	0.34
2.50	55.90	12.50	2.26	22.50	0.70	32.50	0.33
2.75	46.28	12.75	2.17	22.75	0.68	32.75	0.33
3.00	38.94	13.00	2.09	23.00	0.67	33.00	0.32
3.25	33.21	13.25	2.01	23.25	0.65	33.25	0.32
3.50	28.66	13.50	1.94	23.50	0.64	33.50	0.31
3.75	24.98	13.75	1.87	23.75	0.63	33.75	0.31
4.00	21.97	14.00	1.80	24.00	0.61	34.00	0.31
4.25	19.47	14.25	1.74	24.25	0.60	34.25	0.30
4.50	17.37	14.50	1.68	24.50	0.59	34.50	0.30
4.75	15.60	14.75	1.62	24.75	0.58	34.75	0.29
5.00	14.08	15.00	1.57	25.00	0.56	35.00	0.29
5.25	12.77	15.25	1.52	25.25	0.55	35.25	0.28
5.50	11.64	15.50	1.47	25.50	0.54	35.50	0.28
5.75	10.65	15.75	1.42	25.75	0.53	35.75	0.28
6.00	9.78	16.00	1.38	26.00	0.52	36.00	0.27
6.25	9.02	16.25	1.34	26.25	0.51	36.25	0.27
6.50	8.34	16.50	1.30	26.50	0.50	36.50	0.26
6.75	7.73	16.75	1.26	26.75	0.49	36.75	0.26
7.00	7.19	17.00	1.22	27.00	0.48	37.00	0.26
7.25	6.71	17.25	1.19	27.25	0.48	37.25	0.25
7.50	6.27	17.50	1.15	27.50	0.47	37.50	0.25
7.75	5.87	17.75	1.12	27.75	0.46	37.75	0.25
8.00	5.51	18.00	1.09	28.00	0.45	38.00	0.24
8.25	5.18	18.25	1.06	28.25	0.44	38.25	0.24
8.50	4.88	18.50	1.03	28.50	0.43	38.50	0.24
8.75	4.61	18.75	1.00	28.75	0.43	38.75	0.23
9.00	4.35	19.00	0.98	29.00	0.42	39.00	0.23
9.25	4.12	19.25	0.95	29.25	0.41	39.25	0.23
9.50	3.91	19.50	0.93	29.50	0.41	39.50	0.23
9.75	3.71	19.75	0.90	29.75	0.40	39.75	0.22
10.00	3.53	20.00	0.88	30.00	0.39	40.00	0.22

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 - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7SMART Meters  
Time Avg: 30%      % Reflection 60%

Distance where limits are exceeded  
FCC ft. 0.71      8.48 Inches  
BioInitiative ft. 59.50      714.00 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	0.22	54.25	0.12	68.25	0.08	82.25	0.05
40.50	0.22	54.50	0.12	68.50	0.08	82.50	0.05
40.75	0.21	54.75	0.12	68.75	0.07	82.75	0.05
41.00	0.21	55.00	0.12	69.00	0.07	83.00	0.05
41.25	0.21	55.25	0.12	69.25	0.07	83.25	0.05
41.50	0.20	55.50	0.11	69.50	0.07	83.50	0.05
41.75	0.20	55.75	0.11	69.75	0.07	83.75	0.05
42.00	0.20	56.00	0.11	70.00	0.07	84.00	0.05
42.25	0.20	56.25	0.11	70.25	0.07	84.25	0.05
42.50	0.20	56.50	0.11	70.50	0.07	84.50	0.05
42.75	0.19	56.75	0.11	70.75	0.07	84.75	0.05
43.00	0.19	57.00	0.11	71.00	0.07	85.00	0.05
43.25	0.19	57.25	0.11	71.25	0.07	85.25	0.05
43.50	0.19	57.50	0.11	71.50	0.07	85.50	0.05
43.75	0.18	57.75	0.11	71.75	0.07	85.75	0.05
44.00	0.18	58.00	0.10	72.00	0.07	86.00	0.05
44.25	0.18	58.25	0.10	72.25	0.07	86.25	0.05
44.50	0.18	58.50	0.10	72.50	0.07	86.50	0.05
44.75	0.18	58.75	0.10	72.75	0.07	86.75	0.05
45.00	0.17	59.00	0.10	73.00	0.07	87.00	0.05
45.25	0.17	59.25	0.10	73.25	0.07	87.25	0.05
45.50	0.17	59.50	0.10	73.50	0.07	87.50	0.05
45.75	0.17	59.75	0.10	73.75	0.06	87.75	0.05
46.00	0.17	60.00	0.10	74.00	0.06	88.00	0.05
46.25	0.16	60.25	0.10	74.25	0.06	88.25	0.05
46.50	0.16	60.50	0.10	74.50	0.06	88.50	0.05
46.75	0.16	60.75	0.10	74.75	0.06	88.75	0.04
47.00	0.16	61.00	0.09	75.00	0.06	89.00	0.04
47.25	0.16	61.25	0.09	75.25	0.06	89.25	0.04
47.50	0.16	61.50	0.09	75.50	0.06	89.50	0.04
47.75	0.15	61.75	0.09	75.75	0.06	89.75	0.04
48.00	0.15	62.00	0.09	76.00	0.06	90.00	0.04
48.25	0.15	62.25	0.09	76.25	0.06	90.25	0.04
48.50	0.15	62.50	0.09	76.50	0.06	90.50	0.04
48.75	0.15	62.75	0.09	76.75	0.06	90.75	0.04
49.00	0.15	63.00	0.09	77.00	0.06	91.00	0.04
49.25	0.15	63.25	0.09	77.25	0.06	91.25	0.04
49.50	0.14	63.50	0.09	77.50	0.06	91.50	0.04
49.75	0.14	63.75	0.09	77.75	0.06	91.75	0.04
50.00	0.14	64.00	0.09	78.00	0.06	92.00	0.04
50.25	0.14	64.25	0.09	78.25	0.06	92.25	0.04
50.50	0.14	64.50	0.08	78.50	0.06	92.50	0.04
50.75	0.14	64.75	0.08	78.75	0.06	92.75	0.04
51.00	0.14	65.00	0.08	79.00	0.06	93.00	0.04
51.25	0.13	65.25	0.08	79.25	0.06	93.25	0.04
51.50	0.13	65.50	0.08	79.50	0.06	93.50	0.04
51.75	0.13	65.75	0.08	79.75	0.06	93.75	0.04
52.00	0.13	66.00	0.08	80.00	0.06	94.00	0.04
52.25	0.13	66.25	0.08	80.25	0.05	94.25	0.04
52.50	0.13	66.50	0.08	80.50	0.05	94.50	0.04
52.75	0.13	66.75	0.08	80.75	0.05	94.75	0.04
53.00	0.13	67.00	0.08	81.00	0.05	95.00	0.04
53.25	0.12	67.25	0.08	81.25	0.05	95.25	0.04
53.50	0.12	67.50	0.08	81.50	0.05	95.50	0.04
53.75	0.12	67.75	0.08	81.75	0.05	95.75	0.04
54.00	0.12	68.00	0.08	82.00	0.05	96.00	0.04

Table 13 – 30%



# SMART Meter Power Density Computer Modeling

(1 Collector Meter - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
Time Avg: 40%      % Reflection 60%

Distance where limits are exceeded	
FCC ft.	0.83      9.9 Inches
BioInitiative ft.	68.50      822.0 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	3763.90	10.25	4.48	20.25	1.15	30.25	0.51
0.50	1505.56	10.50	4.27	20.50	1.12	30.50	0.51
0.75	752.78	10.75	4.07	20.75	1.09	30.75	0.50
1.00	442.81	11.00	3.89	21.00	1.07	31.00	0.49
1.25	289.53	11.25	3.72	21.25	1.04	31.25	0.48
1.50	203.45	11.50	3.56	21.50	1.02	31.50	0.47
1.75	150.56	11.75	3.41	21.75	0.99	31.75	0.47
2.00	115.81	12.00	3.27	22.00	0.97	32.00	0.46
2.25	91.80	12.25	3.13	22.25	0.95	32.25	0.45
2.50	74.53	12.50	3.01	22.50	0.93	32.50	0.45
2.75	61.70	12.75	2.89	22.75	0.91	32.75	0.44
3.00	51.92	13.00	2.78	23.00	0.89	33.00	0.43
3.25	44.28	13.25	2.68	23.25	0.87	33.25	0.43
3.50	38.21	13.50	2.58	23.50	0.85	33.50	0.42
3.75	33.31	13.75	2.49	23.75	0.83	33.75	0.41
4.00	29.29	14.00	2.40	24.00	0.82	34.00	0.41
4.25	25.96	14.25	2.32	24.25	0.80	34.25	0.40
4.50	23.16	14.50	2.24	24.50	0.78	34.50	0.40
4.75	20.80	14.75	2.16	24.75	0.77	34.75	0.39
5.00	18.77	15.00	2.09	25.00	0.75	35.00	0.38
5.25	17.03	15.25	2.02	25.25	0.74	35.25	0.38
5.50	15.52	15.50	1.96	25.50	0.72	35.50	0.37
5.75	14.20	15.75	1.90	25.75	0.71	35.75	0.37
6.00	13.05	16.00	1.84	26.00	0.70	36.00	0.36
6.25	12.03	16.25	1.78	26.25	0.68	36.25	0.36
6.50	11.12	16.50	1.73	26.50	0.67	36.50	0.35
6.75	10.31	16.75	1.68	26.75	0.66	36.75	0.35
7.00	9.59	17.00	1.63	27.00	0.65	37.00	0.34
7.25	8.94	17.25	1.58	27.25	0.63	37.25	0.34
7.50	8.35	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	7.34	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	1.37	28.50	0.58	38.50	0.32
8.75	6.14	18.75	1.34	28.75	0.57	38.75	0.31
9.00	5.80	19.00	1.30	29.00	0.56	39.00	0.31
9.25	5.49	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	4.70	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  

$$S = \text{EIRP} \cdot [\text{TA} \cdot (1 + \% \text{Ref})^2] / (4\pi \cdot R^2)$$
  - 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 - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
 Time Avg: 40%      % Reflection 60%

Distance where limits are exceeded  
 FCC ft. 0.83      9.94 Inches  
 BioInitiative ft. 68.50      822.00 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	0.29	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	0.23	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	0.22	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	0.05
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

# SMART Meter Power Density Computer Modeling

(1 Collector Meter - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
Time Avg: 50%      % Reflection 60%

Distance where limits are exceeded	
FCC ft.	0.93      11.2 Inches
BioInitiative ft.	76.50      918.0 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	4704.88	10.25	5.59	20.25	1.43	30.25	0.64
0.50	1881.95	10.50	5.33	20.50	1.40	30.50	0.63
0.75	940.98	10.75	5.09	20.75	1.37	30.75	0.62
1.00	553.51	11.00	4.86	21.00	1.33	31.00	0.61
1.25	361.91	11.25	4.64	21.25	1.30	31.25	0.60
1.50	254.32	11.50	4.44	21.50	1.27	31.50	0.59
1.75	188.20	11.75	4.26	21.75	1.24	31.75	0.58
2.00	144.77	12.00	4.08	22.00	1.21	32.00	0.57
2.25	114.75	12.25	3.92	22.25	1.19	32.25	0.57
2.50	93.17	12.50	3.76	22.50	1.16	32.50	0.56
2.75	77.13	12.75	3.62	22.75	1.14	32.75	0.55
3.00	64.89	13.00	3.48	23.00	1.11	33.00	0.54
3.25	55.35	13.25	3.35	23.25	1.09	33.25	0.53
3.50	47.77	13.50	3.23	23.50	1.06	33.50	0.52
3.75	41.64	13.75	3.11	23.75	1.04	33.75	0.52
4.00	36.61	14.00	3.00	24.00	1.02	34.00	0.51
4.25	32.45	14.25	2.90	24.25	1.00	34.25	0.50
4.50	28.95	14.50	2.80	24.50	0.98	34.50	0.49
4.75	25.99	14.75	2.70	24.75	0.96	34.75	0.49
5.00	23.47	15.00	2.61	25.00	0.94	35.00	0.48
5.25	21.29	15.25	2.53	25.25	0.92	35.25	0.47
5.50	19.40	15.50	2.45	25.50	0.90	35.50	0.47
5.75	17.75	15.75	2.37	25.75	0.89	35.75	0.46
6.00	16.31	16.00	2.30	26.00	0.87	36.00	0.45
6.25	15.03	16.25	2.23	26.25	0.85	36.25	0.45
6.50	13.90	16.50	2.16	26.50	0.84	36.50	0.44
6.75	12.89	16.75	2.10	26.75	0.82	36.75	0.44
7.00	11.99	17.00	2.03	27.00	0.81	37.00	0.43
7.25	11.18	17.25	1.98	27.25	0.79	37.25	0.42
7.50	10.44	17.50	1.92	27.50	0.78	37.50	0.42
7.75	9.78	17.75	1.87	27.75	0.76	37.75	0.41
8.00	9.18	18.00	1.81	28.00	0.75	38.00	0.41
8.25	8.63	18.25	1.77	28.25	0.74	38.25	0.40
8.50	8.13	18.50	1.72	28.50	0.72	38.50	0.40
8.75	7.68	18.75	1.67	28.75	0.71	38.75	0.39
9.00	7.26	19.00	1.63	29.00	0.70	39.00	0.39
9.25	6.87	19.25	1.59	29.25	0.69	39.25	0.38
9.50	6.51	19.50	1.55	29.50	0.68	39.50	0.38
9.75	6.18	19.75	1.51	29.75	0.66	39.75	0.37
10.00	5.88	20.00	1.47	30.00	0.65	40.00	0.37

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 - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
 Time Avg: 50%      % Reflection 60%

Distance where limits are exceeded  
 FCC ft. 0.93      11.21 Inches  
 BioInitiative ft. 76.50      918.00 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	0.36	54.25	0.20	68.25	0.13	82.25	0.09
40.50	0.36	54.50	0.20	68.50	0.13	82.50	0.09
40.75	0.35	54.75	0.20	68.75	0.12	82.75	0.09
41.00	0.35	55.00	0.19	69.00	0.12	83.00	0.09
41.25	0.35	55.25	0.19	69.25	0.12	83.25	0.08
41.50	0.34	55.50	0.19	69.50	0.12	83.50	0.08
41.75	0.34	55.75	0.19	69.75	0.12	83.75	0.08
42.00	0.33	56.00	0.19	70.00	0.12	84.00	0.08
42.25	0.33	56.25	0.19	70.25	0.12	84.25	0.08
42.50	0.33	56.50	0.18	70.50	0.12	84.50	0.08
42.75	0.32	56.75	0.18	70.75	0.12	84.75	0.08
43.00	0.32	57.00	0.18	71.00	0.12	85.00	0.08
43.25	0.31	57.25	0.18	71.25	0.12	85.25	0.08
43.50	0.31	57.50	0.18	71.50	0.12	85.50	0.08
43.75	0.31	57.75	0.18	71.75	0.11	85.75	0.08
44.00	0.30	58.00	0.17	72.00	0.11	86.00	0.08
44.25	0.30	58.25	0.17	72.25	0.11	86.25	0.08
44.50	0.30	58.50	0.17	72.50	0.11	86.50	0.08
44.75	0.29	58.75	0.17	72.75	0.11	86.75	0.08
45.00	0.29	59.00	0.17	73.00	0.11	87.00	0.08
45.25	0.29	59.25	0.17	73.25	0.11	87.25	0.08
45.50	0.28	59.50	0.17	73.50	0.11	87.50	0.08
45.75	0.28	59.75	0.16	73.75	0.11	87.75	0.08
46.00	0.28	60.00	0.16	74.00	0.11	88.00	0.08
46.25	0.27	60.25	0.16	74.25	0.11	88.25	0.08
46.50	0.27	60.50	0.16	74.50	0.11	88.50	0.08
46.75	0.27	60.75	0.16	74.75	0.11	88.75	0.07
47.00	0.27	61.00	0.16	75.00	0.10	89.00	0.07
47.25	0.26	61.25	0.16	75.25	0.10	89.25	0.07
47.50	0.26	61.50	0.16	75.50	0.10	89.50	0.07
47.75	0.26	61.75	0.15	75.75	0.10	89.75	0.07
48.00	0.26	62.00	0.15	76.00	0.10	90.00	0.07
48.25	0.25	62.25	0.15	76.25	0.10	90.25	0.07
48.50	0.25	62.50	0.15	76.50	0.10	90.50	0.07
48.75	0.25	62.75	0.15	76.75	0.10	90.75	0.07
49.00	0.24	63.00	0.15	77.00	0.10	91.00	0.07
49.25	0.24	63.25	0.15	77.25	0.10	91.25	0.07
49.50	0.24	63.50	0.15	77.50	0.10	91.50	0.07
49.75	0.24	63.75	0.14	77.75	0.10	91.75	0.07
50.00	0.24	64.00	0.14	78.00	0.10	92.00	0.07
50.25	0.23	64.25	0.14	78.25	0.10	92.25	0.07
50.50	0.23	64.50	0.14	78.50	0.10	92.50	0.07
50.75	0.23	64.75	0.14	78.75	0.09	92.75	0.07
51.00	0.23	65.00	0.14	79.00	0.09	93.00	0.07
51.25	0.22	65.25	0.14	79.25	0.09	93.25	0.07
51.50	0.22	65.50	0.14	79.50	0.09	93.50	0.07
51.75	0.22	65.75	0.14	79.75	0.09	93.75	0.07
52.00	0.22	66.00	0.14	80.00	0.09	94.00	0.07
52.25	0.22	66.25	0.13	80.25	0.09	94.25	0.07
52.50	0.21	66.50	0.13	80.50	0.09	94.50	0.07
52.75	0.21	66.75	0.13	80.75	0.09	94.75	0.07
53.00	0.21	67.00	0.13	81.00	0.09	95.00	0.07
53.25	0.21	67.25	0.13	81.25	0.09	95.25	0.06
53.50	0.21	67.50	0.13	81.50	0.09	95.50	0.06
53.75	0.20	67.75	0.13	81.75	0.09	95.75	0.06
54.00	0.20	68.00	0.13	82.00	0.09	96.00	0.06

# SMART Meter Power Density Computer Modeling

(1 Collector Meter - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
Time Avg: 60%      % Reflection 60%

Distance where limits are exceeded	
FCC ft.	12.4 Inches
BioInitiative ft.	1008.0 Inches
1.03	
84.00	

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	5645.85	10.25	6.71	20.25	1.72	30.25	0.77
0.50	2258.34	10.50	6.40	20.50	1.68	30.50	0.76
0.75	1129.17	10.75	6.10	20.75	1.64	30.75	0.75
1.00	664.22	11.00	5.83	21.00	1.60	31.00	0.73
1.25	434.30	11.25	5.57	21.25	1.56	31.25	0.72
1.50	305.18	11.50	5.33	21.50	1.53	31.50	0.71
1.75	225.83	11.75	5.11	21.75	1.49	31.75	0.70
2.00	173.72	12.00	4.90	22.00	1.46	32.00	0.69
2.25	137.70	12.25	4.70	22.25	1.43	32.25	0.68
2.50	111.80	12.50	4.51	22.50	1.39	32.50	0.67
2.75	92.55	12.75	4.34	22.75	1.36	32.75	0.66
3.00	77.87	13.00	4.17	23.00	1.33	33.00	0.65
3.25	66.42	13.25	4.02	23.25	1.31	33.25	0.64
3.50	57.32	13.50	3.87	23.50	1.28	33.50	0.63
3.75	49.96	13.75	3.73	23.75	1.25	33.75	0.62
4.00	43.94	14.00	3.60	24.00	1.23	34.00	0.61
4.25	38.94	14.25	3.47	24.25	1.20	34.25	0.60
4.50	34.74	14.50	3.36	24.50	1.18	34.50	0.59
4.75	31.19	14.75	3.24	24.75	1.15	34.75	0.58
5.00	28.16	15.00	3.14	25.00	1.13	35.00	0.58
5.25	25.55	15.25	3.03	25.25	1.11	35.25	0.57
5.50	23.28	15.50	2.94	25.50	1.09	35.50	0.56
5.75	21.31	15.75	2.84	25.75	1.06	35.75	0.55
6.00	19.57	16.00	2.76	26.00	1.04	36.00	0.54
6.25	18.04	16.25	2.67	26.25	1.02	36.25	0.54
6.50	16.68	16.50	2.59	26.50	1.00	36.50	0.53
6.75	15.47	16.75	2.51	26.75	0.99	36.75	0.52
7.00	14.38	17.00	2.44	27.00	0.97	37.00	0.52
7.25	13.41	17.25	2.37	27.25	0.95	37.25	0.51
7.50	12.53	17.50	2.30	27.50	0.93	37.50	0.50
7.75	11.74	17.75	2.24	27.75	0.92	37.75	0.50
8.00	11.02	18.00	2.18	28.00	0.90	38.00	0.49
8.25	10.36	18.25	2.12	28.25	0.88	38.25	0.48
8.50	9.76	18.50	2.06	28.50	0.87	38.50	0.48
8.75	9.21	18.75	2.01	28.75	0.85	38.75	0.47
9.00	8.71	19.00	1.95	29.00	0.84	39.00	0.46
9.25	8.24	19.25	1.90	29.25	0.82	39.25	0.46
9.50	7.81	19.50	1.86	29.50	0.81	39.50	0.45
9.75	7.42	19.75	1.81	29.75	0.80	39.75	0.45
10.00	7.05	20.00	1.76	30.00	0.78	40.00	0.44

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 - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
Time Avg: 60%      % Reflection 60%

Distance where limits are exceeded  
FCC ft. 1.03      12.36 Inches  
BioInitiative ft. 84.00      1008.00 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	0.44	54.25	0.24	68.25	0.15	82.25	0.10
40.50	0.43	54.50	0.24	68.50	0.15	82.50	0.10
40.75	0.42	54.75	0.24	68.75	0.15	82.75	0.10
41.00	0.42	55.00	0.23	69.00	0.15	83.00	0.10
41.25	0.41	55.25	0.23	69.25	0.15	83.25	0.10
41.50	0.41	55.50	0.23	69.50	0.15	83.50	0.10
41.75	0.40	55.75	0.23	69.75	0.15	83.75	0.10
42.00	0.40	56.00	0.23	70.00	0.14	84.00	0.10
42.25	0.40	56.25	0.22	70.25	0.14	84.25	0.10
42.50	0.39	56.50	0.22	70.50	0.14	84.50	0.10
42.75	0.39	56.75	0.22	70.75	0.14	84.75	0.10
43.00	0.38	57.00	0.22	71.00	0.14	85.00	0.10
43.25	0.38	57.25	0.22	71.25	0.14	85.25	0.10
43.50	0.37	57.50	0.21	71.50	0.14	85.50	0.10
43.75	0.37	57.75	0.21	71.75	0.14	85.75	0.10
44.00	0.36	58.00	0.21	72.00	0.14	86.00	0.10
44.25	0.36	58.25	0.21	72.25	0.14	86.25	0.09
44.50	0.36	58.50	0.21	72.50	0.13	86.50	0.09
44.75	0.35	58.75	0.20	72.75	0.13	86.75	0.09
45.00	0.35	59.00	0.20	73.00	0.13	87.00	0.09
45.25	0.34	59.25	0.20	73.25	0.13	87.25	0.09
45.50	0.34	59.50	0.20	73.50	0.13	87.50	0.09
45.75	0.34	59.75	0.20	73.75	0.13	87.75	0.09
46.00	0.33	60.00	0.20	74.00	0.13	88.00	0.09
46.25	0.33	60.25	0.19	74.25	0.13	88.25	0.09
46.50	0.33	60.50	0.19	74.50	0.13	88.50	0.09
46.75	0.32	60.75	0.19	74.75	0.13	88.75	0.09
47.00	0.32	61.00	0.19	75.00	0.13	89.00	0.09
47.25	0.32	61.25	0.19	75.25	0.12	89.25	0.09
47.50	0.31	61.50	0.19	75.50	0.12	89.50	0.09
47.75	0.31	61.75	0.19	75.75	0.12	89.75	0.09
48.00	0.31	62.00	0.18	76.00	0.12	90.00	0.09
48.25	0.30	62.25	0.18	76.25	0.12	90.25	0.09
48.50	0.30	62.50	0.18	76.50	0.12	90.50	0.09
48.75	0.30	62.75	0.18	76.75	0.12	90.75	0.09
49.00	0.29	63.00	0.18	77.00	0.12	91.00	0.09
49.25	0.29	63.25	0.18	77.25	0.12	91.25	0.08
49.50	0.29	63.50	0.18	77.50	0.12	91.50	0.08
49.75	0.29	63.75	0.17	77.75	0.12	91.75	0.08
50.00	0.28	64.00	0.17	78.00	0.12	92.00	0.08
50.25	0.28	64.25	0.17	78.25	0.12	92.25	0.08
50.50	0.28	64.50	0.17	78.50	0.11	92.50	0.08
50.75	0.27	64.75	0.17	78.75	0.11	92.75	0.08
51.00	0.27	65.00	0.17	79.00	0.11	93.00	0.08
51.25	0.27	65.25	0.17	79.25	0.11	93.25	0.08
51.50	0.27	65.50	0.16	79.50	0.11	93.50	0.08
51.75	0.26	65.75	0.16	79.75	0.11	93.75	0.08
52.00	0.26	66.00	0.16	80.00	0.11	94.00	0.08
52.25	0.26	66.25	0.16	80.25	0.11	94.25	0.08
52.50	0.26	66.50	0.16	80.50	0.11	94.50	0.08
52.75	0.25	66.75	0.16	80.75	0.11	94.75	0.08
53.00	0.25	67.00	0.16	81.00	0.11	95.00	0.08
53.25	0.25	67.25	0.16	81.25	0.11	95.25	0.08
53.50	0.25	67.50	0.15	81.50	0.11	95.50	0.08
53.75	0.24	67.75	0.15	81.75	0.11	95.75	0.08
54.00	0.24	68.00	0.15	82.00	0.10	96.00	0.08

# SMART Meter Power Density Computer Modeling

(1 Collector Meter - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
Time Avg: 70%      % Reflection 60%

Distance where limits are exceeded	
FCC ft.	13.4 Inches
BioInitiative ft.	1088.4 Inches
1.12	
90.70	

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	6586.83	10.25	7.83	20.25	2.01	30.25	0.90
0.50	2634.73	10.50	7.46	20.50	1.96	30.50	0.89
0.75	1317.37	10.75	7.12	20.75	1.91	30.75	0.87
1.00	774.92	11.00	6.80	21.00	1.87	31.00	0.86
1.25	506.68	11.25	6.50	21.25	1.82	31.25	0.84
1.50	356.04	11.50	6.22	21.50	1.78	31.50	0.83
1.75	263.47	11.75	5.96	21.75	1.74	31.75	0.82
2.00	202.67	12.00	5.72	22.00	1.70	32.00	0.80
2.25	160.65	12.25	5.48	22.25	1.66	32.25	0.79
2.50	130.43	12.50	5.27	22.50	1.63	32.50	0.78
2.75	107.98	12.75	5.06	22.75	1.59	32.75	0.77
3.00	90.85	13.00	4.87	23.00	1.56	33.00	0.76
3.25	77.49	13.25	4.69	23.25	1.52	33.25	0.74
3.50	66.87	13.50	4.52	23.50	1.49	33.50	0.73
3.75	58.29	13.75	4.35	23.75	1.46	33.75	0.72
4.00	51.26	14.00	4.20	24.00	1.43	34.00	0.71
4.25	45.43	14.25	4.05	24.25	1.40	34.25	0.70
4.50	40.53	14.50	3.91	24.50	1.37	34.50	0.69
4.75	36.39	14.75	3.78	24.75	1.34	34.75	0.68
5.00	32.85	15.00	3.66	25.00	1.32	35.00	0.67
5.25	29.80	15.25	3.54	25.25	1.29	35.25	0.66
5.50	27.16	15.50	3.43	25.50	1.27	35.50	0.65
5.75	24.86	15.75	3.32	25.75	1.24	35.75	0.64
6.00	22.83	16.00	3.22	26.00	1.22	36.00	0.64
6.25	21.04	16.25	3.12	26.25	1.19	36.25	0.63
6.50	19.46	16.50	3.02	26.50	1.17	36.50	0.62
6.75	18.05	16.75	2.93	26.75	1.15	36.75	0.61
7.00	16.78	17.00	2.85	27.00	1.13	37.00	0.60
7.25	15.65	17.25	2.77	27.25	1.11	37.25	0.59
7.50	14.62	17.50	2.69	27.50	1.09	37.50	0.59
7.75	13.69	17.75	2.61	27.75	1.07	37.75	0.58
8.00	12.85	18.00	2.54	28.00	1.05	38.00	0.57
8.25	12.09	18.25	2.47	28.25	1.03	38.25	0.56
8.50	11.39	18.50	2.41	28.50	1.01	38.50	0.56
8.75	10.75	18.75	2.34	28.75	1.00	38.75	0.55
9.00	10.16	19.00	2.28	29.00	0.98	39.00	0.54
9.25	9.62	19.25	2.22	29.25	0.96	39.25	0.53
9.50	9.12	19.50	2.16	29.50	0.95	39.50	0.53
9.75	8.66	19.75	2.11	29.75	0.93	39.75	0.52
10.00	8.23	20.00	2.06	30.00	0.91	40.00	0.51

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 - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
Time Avg: 70%      % Reflection 60%

Distance where limits are exceeded  
FCC ft. 1.12      13.40 Inches  
BioInitiative ft. 90.70      1088.40 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	0.51	54.25	0.28	68.25	0.18	82.25	0.12
40.50	0.50	54.50	0.28	68.50	0.18	82.50	0.12
40.75	0.50	54.75	0.27	68.75	0.17	82.75	0.12
41.00	0.49	55.00	0.27	69.00	0.17	83.00	0.12
41.25	0.48	55.25	0.27	69.25	0.17	83.25	0.12
41.50	0.48	55.50	0.27	69.50	0.17	83.50	0.12
41.75	0.47	55.75	0.26	69.75	0.17	83.75	0.12
42.00	0.47	56.00	0.26	70.00	0.17	84.00	0.12
42.25	0.46	56.25	0.26	70.25	0.17	84.25	0.12
42.50	0.46	56.50	0.26	70.50	0.17	84.50	0.12
42.75	0.45	56.75	0.26	70.75	0.16	84.75	0.11
43.00	0.45	57.00	0.25	71.00	0.16	85.00	0.11
43.25	0.44	57.25	0.25	71.25	0.16	85.25	0.11
43.50	0.44	57.50	0.25	71.50	0.16	85.50	0.11
43.75	0.43	57.75	0.25	71.75	0.16	85.75	0.11
44.00	0.43	58.00	0.24	72.00	0.16	86.00	0.11
44.25	0.42	58.25	0.24	72.25	0.16	86.25	0.11
44.50	0.42	58.50	0.24	72.50	0.16	86.50	0.11
44.75	0.41	58.75	0.24	72.75	0.16	86.75	0.11
45.00	0.41	59.00	0.24	73.00	0.15	87.00	0.11
45.25	0.40	59.25	0.23	73.25	0.15	87.25	0.11
45.50	0.40	59.50	0.23	73.50	0.15	87.50	0.11
45.75	0.39	59.75	0.23	73.75	0.15	87.75	0.11
46.00	0.39	60.00	0.23	74.00	0.15	88.00	0.11
46.25	0.38	60.25	0.23	74.25	0.15	88.25	0.11
46.50	0.38	60.50	0.22	74.50	0.15	88.50	0.11
46.75	0.38	60.75	0.22	74.75	0.15	88.75	0.10
47.00	0.37	61.00	0.22	75.00	0.15	89.00	0.10
47.25	0.37	61.25	0.22	75.25	0.15	89.25	0.10
47.50	0.36	61.50	0.22	75.50	0.14	89.50	0.10
47.75	0.36	61.75	0.22	75.75	0.14	89.75	0.10
48.00	0.36	62.00	0.21	76.00	0.14	90.00	0.10
48.25	0.35	62.25	0.21	76.25	0.14	90.25	0.10
48.50	0.35	62.50	0.21	76.50	0.14	90.50	0.10
48.75	0.35	62.75	0.21	76.75	0.14	90.75	0.10
49.00	0.34	63.00	0.21	77.00	0.14	91.00	0.10
49.25	0.34	63.25	0.21	77.25	0.14	91.25	0.10
49.50	0.34	63.50	0.20	77.50	0.14	91.50	0.10
49.75	0.33	63.75	0.20	77.75	0.14	91.75	0.10
50.00	0.33	64.00	0.20	78.00	0.14	92.00	0.10
50.25	0.33	64.25	0.20	78.25	0.13	92.25	0.10
50.50	0.32	64.50	0.20	78.50	0.13	92.50	0.10
50.75	0.32	64.75	0.20	78.75	0.13	92.75	0.10
51.00	0.32	65.00	0.19	79.00	0.13	93.00	0.10
51.25	0.31	65.25	0.19	79.25	0.13	93.25	0.09
51.50	0.31	65.50	0.19	79.50	0.13	93.50	0.09
51.75	0.31	65.75	0.19	79.75	0.13	93.75	0.09
52.00	0.30	66.00	0.19	80.00	0.13	94.00	0.09
52.25	0.30	66.25	0.19	80.25	0.13	94.25	0.09
52.50	0.30	66.50	0.19	80.50	0.13	94.50	0.09
52.75	0.30	66.75	0.18	80.75	0.13	94.75	0.09
53.00	0.29	67.00	0.18	81.00	0.13	95.00	0.09
53.25	0.29	67.25	0.18	81.25	0.12	95.25	0.09
53.50	0.29	67.50	0.18	81.50	0.12	95.50	0.09
53.75	0.28	67.75	0.18	81.75	0.12	95.75	0.09
54.00	0.28	68.00	0.18	82.00	0.12	96.00	0.09



# SMART Meter Power Density Computer Modeling

(1 Collector Meter - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter

Time Avg: 80%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 1.20 14.4 Inches

BioInitiative ft. 97.00 1164.0 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	7527.80	10.25	8.95	20.25	2.29	30.25	1.03
0.50	3011.12	10.50	8.53	20.50	2.24	30.50	1.01
0.75	1505.56	10.75	8.14	20.75	2.19	30.75	1.00
1.00	885.62	11.00	7.77	21.00	2.13	31.00	0.98
1.25	579.06	11.25	7.43	21.25	2.08	31.25	0.96
1.50	406.91	11.50	7.11	21.50	2.04	31.50	0.95
1.75	301.11	11.75	6.81	21.75	1.99	31.75	0.93
2.00	231.62	12.00	6.53	22.00	1.94	32.00	0.92
2.25	183.60	12.25	6.27	22.25	1.90	32.25	0.90
2.50	149.07	12.50	6.02	22.50	1.86	32.50	0.89
2.75	123.41	12.75	5.79	22.75	1.82	32.75	0.88
3.00	103.83	13.00	5.57	23.00	1.78	33.00	0.86
3.25	88.56	13.25	5.36	23.25	1.74	33.25	0.85
3.50	76.42	13.50	5.16	23.50	1.70	33.50	0.84
3.75	66.62	13.75	4.98	23.75	1.67	33.75	0.83
4.00	58.58	14.00	4.80	24.00	1.63	34.00	0.81
4.25	51.92	14.25	4.63	24.25	1.60	34.25	0.80
4.50	46.32	14.50	4.47	24.50	1.57	34.50	0.79
4.75	41.59	14.75	4.32	24.75	1.54	34.75	0.78
5.00	37.55	15.00	4.18	25.00	1.51	35.00	0.77
5.25	34.06	15.25	4.05	25.25	1.48	35.25	0.76
5.50	31.04	15.50	3.92	25.50	1.45	35.50	0.75
5.75	28.41	15.75	3.79	25.75	1.42	35.75	0.74
6.00	26.09	16.00	3.67	26.00	1.39	36.00	0.73
6.25	24.05	16.25	3.56	26.25	1.37	36.25	0.72
6.50	22.24	16.50	3.46	26.50	1.34	36.50	0.71
6.75	20.62	16.75	3.35	26.75	1.31	36.75	0.70
7.00	19.18	17.00	3.26	27.00	1.29	37.00	0.69
7.25	17.88	17.25	3.16	27.25	1.27	37.25	0.68
7.50	16.71	17.50	3.07	27.50	1.24	37.50	0.67
7.75	15.65	17.75	2.99	27.75	1.22	37.75	0.66
8.00	14.69	18.00	2.90	28.00	1.20	38.00	0.65
8.25	13.81	18.25	2.82	28.25	1.18	38.25	0.64
8.50	13.01	18.50	2.75	28.50	1.16	38.50	0.63
8.75	12.28	18.75	2.68	28.75	1.14	38.75	0.63
9.00	11.61	19.00	2.61	29.00	1.12	39.00	0.62
9.25	10.99	19.25	2.54	29.25	1.10	39.25	0.61
9.50	10.42	19.50	2.47	29.50	1.08	39.50	0.60
9.75	9.89	19.75	2.41	29.75	1.06	39.75	0.60
10.00	9.40	20.00	2.35	30.00	1.05	40.00	0.59

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 - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
Time Avg: 80%      % Reflection 60%

Distance where limits are exceeded  
FCC ft. 1.20      14.37 Inches  
BioInitiative ft. 97.00      1164.00 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	0.58	54.25	0.32	68.25	0.20	82.25	0.14
40.50	0.57	54.50	0.32	68.50	0.20	82.50	0.14
40.75	0.57	54.75	0.31	68.75	0.20	82.75	0.14
41.00	0.56	55.00	0.31	69.00	0.20	83.00	0.14
41.25	0.55	55.25	0.31	69.25	0.20	83.25	0.14
41.50	0.55	55.50	0.31	69.50	0.19	83.50	0.13
41.75	0.54	55.75	0.30	69.75	0.19	83.75	0.13
42.00	0.53	56.00	0.30	70.00	0.19	84.00	0.13
42.25	0.53	56.25	0.30	70.25	0.19	84.25	0.13
42.50	0.52	56.50	0.29	70.50	0.19	84.50	0.13
42.75	0.51	56.75	0.29	70.75	0.19	84.75	0.13
43.00	0.51	57.00	0.29	71.00	0.19	85.00	0.13
43.25	0.50	57.25	0.29	71.25	0.19	85.25	0.13
43.50	0.50	57.50	0.28	71.50	0.18	85.50	0.13
43.75	0.49	57.75	0.28	71.75	0.18	85.75	0.13
44.00	0.49	58.00	0.28	72.00	0.18	86.00	0.13
44.25	0.48	58.25	0.28	72.25	0.18	86.25	0.13
44.50	0.48	58.50	0.27	72.50	0.18	86.50	0.13
44.75	0.47	58.75	0.27	72.75	0.18	86.75	0.13
45.00	0.46	59.00	0.27	73.00	0.18	87.00	0.12
45.25	0.46	59.25	0.27	73.25	0.18	87.25	0.12
45.50	0.45	59.50	0.27	73.50	0.17	87.50	0.12
45.75	0.45	59.75	0.26	73.75	0.17	87.75	0.12
46.00	0.44	60.00	0.26	74.00	0.17	88.00	0.12
46.25	0.44	60.25	0.26	74.25	0.17	88.25	0.12
46.50	0.44	60.50	0.26	74.50	0.17	88.50	0.12
46.75	0.43	60.75	0.25	74.75	0.17	88.75	0.12
47.00	0.43	61.00	0.25	75.00	0.17	89.00	0.12
47.25	0.42	61.25	0.25	75.25	0.17	89.25	0.12
47.50	0.42	61.50	0.25	75.50	0.17	89.50	0.12
47.75	0.41	61.75	0.25	75.75	0.16	89.75	0.12
48.00	0.41	62.00	0.24	76.00	0.16	90.00	0.12
48.25	0.40	62.25	0.24	76.25	0.16	90.25	0.12
48.50	0.40	62.50	0.24	76.50	0.16	90.50	0.11
48.75	0.40	62.75	0.24	76.75	0.16	90.75	0.11
49.00	0.39	63.00	0.24	77.00	0.16	91.00	0.11
49.25	0.39	63.25	0.24	77.25	0.16	91.25	0.11
49.50	0.38	63.50	0.23	77.50	0.16	91.50	0.11
49.75	0.38	63.75	0.23	77.75	0.16	91.75	0.11
50.00	0.38	64.00	0.23	78.00	0.15	92.00	0.11
50.25	0.37	64.25	0.23	78.25	0.15	92.25	0.11
50.50	0.37	64.50	0.23	78.50	0.15	92.50	0.11
50.75	0.37	64.75	0.22	78.75	0.15	92.75	0.11
51.00	0.36	65.00	0.22	79.00	0.15	93.00	0.11
51.25	0.36	65.25	0.22	79.25	0.15	93.25	0.11
51.50	0.35	65.50	0.22	79.50	0.15	93.50	0.11
51.75	0.35	65.75	0.22	79.75	0.15	93.75	0.11
52.00	0.35	66.00	0.22	80.00	0.15	94.00	0.11
52.25	0.34	66.25	0.21	80.25	0.15	94.25	0.11
52.50	0.34	66.50	0.21	80.50	0.15	94.50	0.11
52.75	0.34	66.75	0.21	80.75	0.14	94.75	0.10
53.00	0.33	67.00	0.21	81.00	0.14	95.00	0.10
53.25	0.33	67.25	0.21	81.25	0.14	95.25	0.10
53.50	0.33	67.50	0.21	81.50	0.14	95.50	0.10
53.75	0.33	67.75	0.20	81.75	0.14	95.75	0.10
54.00	0.32	68.00	0.20	82.00	0.14	96.00	0.10

# SMART Meter Power Density Computer Modeling

(1 Collector Meter - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
Time Avg: 90%      % Reflection 60%

Distance where limits are exceeded	
FCC ft.	1.27      15.3 Inches
BioInitiative ft.	103.00      1236.0 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	8468.78	10.25	10.07	20.25	2.58	30.25	1.16
0.50	3387.51	10.50	9.60	20.50	2.52	30.50	1.14
0.75	1693.76	10.75	9.16	20.75	2.46	30.75	1.12
1.00	996.33	11.00	8.74	21.00	2.40	31.00	1.10
1.25	651.44	11.25	8.36	21.25	2.34	31.25	1.08
1.50	457.77	11.50	8.00	21.50	2.29	31.50	1.07
1.75	338.75	11.75	7.66	21.75	2.24	31.75	1.05
2.00	260.58	12.00	7.35	22.00	2.19	32.00	1.03
2.25	206.56	12.25	7.05	22.25	2.14	32.25	1.02
2.50	167.70	12.50	6.77	22.50	2.09	32.50	1.00
2.75	138.83	12.75	6.51	22.75	2.05	32.75	0.99
3.00	116.81	13.00	6.26	23.00	2.00	33.00	0.97
3.25	99.63	13.25	6.03	23.25	1.96	33.25	0.96
3.50	85.98	13.50	5.81	23.50	1.92	33.50	0.94
3.75	74.94	13.75	5.60	23.75	1.88	33.75	0.93
4.00	65.90	14.00	5.40	24.00	1.84	34.00	0.92
4.25	58.41	14.25	5.21	24.25	1.80	34.25	0.90
4.50	52.12	14.50	5.03	24.50	1.76	34.50	0.89
4.75	46.79	14.75	4.86	24.75	1.73	34.75	0.88
5.00	42.24	15.00	4.70	25.00	1.69	35.00	0.86
5.25	38.32	15.25	4.55	25.25	1.66	35.25	0.85
5.50	34.92	15.50	4.41	25.50	1.63	35.50	0.84
5.75	31.96	15.75	4.27	25.75	1.60	35.75	0.83
6.00	29.35	16.00	4.13	26.00	1.57	36.00	0.82
6.25	27.06	16.25	4.01	26.25	1.54	36.25	0.81
6.50	25.02	16.50	3.89	26.50	1.51	36.50	0.79
6.75	23.20	16.75	3.77	26.75	1.48	36.75	0.78
7.00	21.58	17.00	3.66	27.00	1.45	37.00	0.77
7.25	20.12	17.25	3.56	27.25	1.43	37.25	0.76
7.50	18.80	17.50	3.46	27.50	1.40	37.50	0.75
7.75	17.61	17.75	3.36	27.75	1.37	37.75	0.74
8.00	16.52	18.00	3.27	28.00	1.35	38.00	0.73
8.25	15.54	18.25	3.18	28.25	1.33	38.25	0.72
8.50	14.64	18.50	3.09	28.50	1.30	38.50	0.71
8.75	13.82	18.75	3.01	28.75	1.28	38.75	0.70
9.00	13.06	19.00	2.93	29.00	1.26	39.00	0.70
9.25	12.36	19.25	2.86	29.25	1.24	39.25	0.69
9.50	11.72	19.50	2.78	29.50	1.22	39.50	0.68
9.75	11.13	19.75	2.71	29.75	1.20	39.75	0.67
10.00	10.58	20.00	2.65	30.00	1.18	40.00	0.66

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 - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
 Time Avg: 90%      % Reflection 60%

Distance where limits are exceeded  
 FCC ft. 1.27      15.28 Inches  
 BioInitiative ft. 103.00      1236.00 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	0.65	54.25	0.36	68.25	0.23	82.25	0.16
40.50	0.65	54.50	0.36	68.50	0.23	82.50	0.16
40.75	0.64	54.75	0.35	68.75	0.22	82.75	0.15
41.00	0.63	55.00	0.35	69.00	0.22	83.00	0.15
41.25	0.62	55.25	0.35	69.25	0.22	83.25	0.15
41.50	0.61	55.50	0.34	69.50	0.22	83.50	0.15
41.75	0.61	55.75	0.34	69.75	0.22	83.75	0.15
42.00	0.60	56.00	0.34	70.00	0.22	84.00	0.15
42.25	0.59	56.25	0.33	70.25	0.21	84.25	0.15
42.50	0.59	56.50	0.33	70.50	0.21	84.50	0.15
42.75	0.58	56.75	0.33	70.75	0.21	84.75	0.15
43.00	0.57	57.00	0.33	71.00	0.21	85.00	0.15
43.25	0.57	57.25	0.32	71.25	0.21	85.25	0.15
43.50	0.56	57.50	0.32	71.50	0.21	85.50	0.14
43.75	0.55	57.75	0.32	71.75	0.21	85.75	0.14
44.00	0.55	58.00	0.31	72.00	0.20	86.00	0.14
44.25	0.54	58.25	0.31	72.25	0.20	86.25	0.14
44.50	0.53	58.50	0.31	72.50	0.20	86.50	0.14
44.75	0.53	58.75	0.31	72.75	0.20	86.75	0.14
45.00	0.52	59.00	0.30	73.00	0.20	87.00	0.14
45.25	0.52	59.25	0.30	73.25	0.20	87.25	0.14
45.50	0.51	59.50	0.30	73.50	0.20	87.50	0.14
45.75	0.51	59.75	0.30	73.75	0.19	87.75	0.14
46.00	0.50	60.00	0.29	74.00	0.19	88.00	0.14
46.25	0.49	60.25	0.29	74.25	0.19	88.25	0.14
46.50	0.49	60.50	0.29	74.50	0.19	88.50	0.14
46.75	0.48	60.75	0.29	74.75	0.19	88.75	0.13
47.00	0.48	61.00	0.28	75.00	0.19	89.00	0.13
47.25	0.47	61.25	0.28	75.25	0.19	89.25	0.13
47.50	0.47	61.50	0.28	75.50	0.19	89.50	0.13
47.75	0.46	61.75	0.28	75.75	0.18	89.75	0.13
48.00	0.46	62.00	0.28	76.00	0.18	90.00	0.13
48.25	0.45	62.25	0.27	76.25	0.18	90.25	0.13
48.50	0.45	62.50	0.27	76.50	0.18	90.50	0.13
48.75	0.45	62.75	0.27	76.75	0.18	90.75	0.13
49.00	0.44	63.00	0.27	77.00	0.18	91.00	0.13
49.25	0.44	63.25	0.26	77.25	0.18	91.25	0.13
49.50	0.43	63.50	0.26	77.50	0.18	91.50	0.13
49.75	0.43	63.75	0.26	77.75	0.18	91.75	0.13
50.00	0.42	64.00	0.26	78.00	0.17	92.00	0.13
50.25	0.42	64.25	0.26	78.25	0.17	92.25	0.12
50.50	0.42	64.50	0.25	78.50	0.17	92.50	0.12
50.75	0.41	64.75	0.25	78.75	0.17	92.75	0.12
51.00	0.41	65.00	0.25	79.00	0.17	93.00	0.12
51.25	0.40	65.25	0.25	79.25	0.17	93.25	0.12
51.50	0.40	65.50	0.25	79.50	0.17	93.50	0.12
51.75	0.40	65.75	0.24	79.75	0.17	93.75	0.12
52.00	0.39	66.00	0.24	80.00	0.17	94.00	0.12
52.25	0.39	66.25	0.24	80.25	0.16	94.25	0.12
52.50	0.38	66.50	0.24	80.50	0.16	94.50	0.12
52.75	0.38	66.75	0.24	80.75	0.16	94.75	0.12
53.00	0.38	67.00	0.24	81.00	0.16	95.00	0.12
53.25	0.37	67.25	0.23	81.25	0.16	95.25	0.12
53.50	0.37	67.50	0.23	81.50	0.16	95.50	0.12
53.75	0.37	67.75	0.23	81.75	0.16	95.75	0.12
54.00	0.36	68.00	0.23	82.00	0.16	96.00	0.11

# SMART Meter Power Density Computer Modeling

(1 Collector Meter - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters

Time Avg: 100%

% Reflection 60%

Distance where limits are exceeded

FCC ft. 1.34 16.1 Inches

BioInitiative ft. 108.50 1302.0 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	9409.75	10.25	11.19	20.25	2.87	30.25	1.29
0.50	3763.90	10.50	10.66	20.50	2.80	30.50	1.26
0.75	1881.95	10.75	10.17	20.75	2.73	30.75	1.24
1.00	1107.03	11.00	9.72	21.00	2.67	31.00	1.22
1.25	723.83	11.25	9.29	21.25	2.60	31.25	1.20
1.50	508.64	11.50	8.89	21.50	2.54	31.50	1.19
1.75	376.39	11.75	8.52	21.75	2.49	31.75	1.17
2.00	289.53	12.00	8.16	22.00	2.43	32.00	1.15
2.25	229.51	12.25	7.83	22.25	2.38	32.25	1.13
2.50	186.33	12.50	7.52	22.50	2.32	32.50	1.11
2.75	154.26	12.75	7.23	22.75	2.27	32.75	1.10
3.00	129.79	13.00	6.96	23.00	2.22	33.00	1.08
3.25	110.70	13.25	6.70	23.25	2.18	33.25	1.06
3.50	95.53	13.50	6.45	23.50	2.13	33.50	1.05
3.75	83.27	13.75	6.22	23.75	2.09	33.75	1.03
4.00	73.23	14.00	6.00	24.00	2.04	34.00	1.02
4.25	64.89	14.25	5.79	24.25	2.00	34.25	1.00
4.50	57.91	14.50	5.59	24.50	1.96	34.50	0.99
4.75	51.99	14.75	5.40	24.75	1.92	34.75	0.97
5.00	46.93	15.00	5.23	25.00	1.88	35.00	0.96
5.25	42.58	15.25	5.06	25.25	1.84	35.25	0.95
5.50	38.80	15.50	4.89	25.50	1.81	35.50	0.93
5.75	35.51	15.75	4.74	25.75	1.77	35.75	0.92
6.00	32.62	16.00	4.59	26.00	1.74	36.00	0.91
6.25	30.06	16.25	4.45	26.25	1.71	36.25	0.90
6.50	27.80	16.50	4.32	26.50	1.67	36.50	0.88
6.75	25.78	16.75	4.19	26.75	1.64	36.75	0.87
7.00	23.97	17.00	4.07	27.00	1.61	37.00	0.86
7.25	22.35	17.25	3.95	27.25	1.58	37.25	0.85
7.50	20.89	17.50	3.84	27.50	1.56	37.50	0.84
7.75	19.56	17.75	3.73	27.75	1.53	37.75	0.83
8.00	18.36	18.00	3.63	28.00	1.50	38.00	0.81
8.25	17.27	18.25	3.53	28.25	1.47	38.25	0.80
8.50	16.27	18.50	3.44	28.50	1.45	38.50	0.79
8.75	15.35	18.75	3.35	28.75	1.42	38.75	0.78
9.00	14.51	19.00	3.26	29.00	1.40	39.00	0.77
9.25	13.74	19.25	3.17	29.25	1.37	39.25	0.76
9.50	13.02	19.50	3.09	29.50	1.35	39.50	0.75
9.75	12.36	19.75	3.01	29.75	1.33	39.75	0.74
10.00	11.75	20.00	2.94	30.00	1.31	40.00	0.74

Notes:

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

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

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

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

$$\pi() = 3.14159$$

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

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

$$\% \text{Ref} = \text{Percent reflections}$$

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 - 7 SMART Meters – 60% reflections)

**Meters** 1 Collector Meter - 7 SMART Meters  
 Time Avg: 100%      % Reflection 60%

Distance where limits are exceeded	
FCC ft. 1.34	16.14 Inches
BioInitiative ft. 108.50	1302.00 Inches

Distance (ft)	μW/cm <sup>2</sup>	Distance (ft)	μW/cm <sup>2</sup>	Distance (ft)	μW/cm <sup>2</sup>	Distance (ft)	μW/cm <sup>2</sup>
40.25	0.73	54.25	0.40	68.25	0.25	82.25	0.17
40.50	0.72	54.50	0.40	68.50	0.25	82.50	0.17
40.75	0.71	54.75	0.39	68.75	0.25	82.75	0.17
41.00	0.70	55.00	0.39	69.00	0.25	83.00	0.17
41.25	0.69	55.25	0.39	69.25	0.25	83.25	0.17
41.50	0.68	55.50	0.38	69.50	0.24	83.50	0.17
41.75	0.67	55.75	0.38	69.75	0.24	83.75	0.17
42.00	0.67	56.00	0.38	70.00	0.24	84.00	0.17
42.25	0.66	56.25	0.37	70.25	0.24	84.25	0.17
42.50	0.65	56.50	0.37	70.50	0.24	84.50	0.16
42.75	0.64	56.75	0.37	70.75	0.23	84.75	0.16
43.00	0.64	57.00	0.36	71.00	0.23	85.00	0.16
43.25	0.63	57.25	0.36	71.25	0.23	85.25	0.16
43.50	0.62	57.50	0.36	71.50	0.23	85.50	0.16
43.75	0.61	57.75	0.35	71.75	0.23	85.75	0.16
44.00	0.61	58.00	0.35	72.00	0.23	86.00	0.16
44.25	0.60	58.25	0.35	72.25	0.23	86.25	0.16
44.50	0.59	58.50	0.34	72.50	0.22	86.50	0.16
44.75	0.59	58.75	0.34	72.75	0.22	86.75	0.16
45.00	0.58	59.00	0.34	73.00	0.22	87.00	0.16
45.25	0.57	59.25	0.34	73.25	0.22	87.25	0.15
45.50	0.57	59.50	0.33	73.50	0.22	87.50	0.15
45.75	0.56	59.75	0.33	73.75	0.22	87.75	0.15
46.00	0.56	60.00	0.33	74.00	0.21	88.00	0.15
46.25	0.55	60.25	0.32	74.25	0.21	88.25	0.15
46.50	0.54	60.50	0.32	74.50	0.21	88.50	0.15
46.75	0.54	60.75	0.32	74.75	0.21	88.75	0.15
47.00	0.53	61.00	0.32	75.00	0.21	89.00	0.15
47.25	0.53	61.25	0.31	75.25	0.21	89.25	0.15
47.50	0.52	61.50	0.31	75.50	0.21	89.50	0.15
47.75	0.52	61.75	0.31	75.75	0.20	89.75	0.15
48.00	0.51	62.00	0.31	76.00	0.20	90.00	0.15
48.25	0.51	62.25	0.30	76.25	0.20	90.25	0.14
48.50	0.50	62.50	0.30	76.50	0.20	90.50	0.14
48.75	0.49	62.75	0.30	76.75	0.20	90.75	0.14
49.00	0.49	63.00	0.30	77.00	0.20	91.00	0.14
49.25	0.48	63.25	0.29	77.25	0.20	91.25	0.14
49.50	0.48	63.50	0.29	77.50	0.20	91.50	0.14
49.75	0.48	63.75	0.29	77.75	0.19	91.75	0.14
50.00	0.47	64.00	0.29	78.00	0.19	92.00	0.14
50.25	0.47	64.25	0.28	78.25	0.19	92.25	0.14
50.50	0.46	64.50	0.28	78.50	0.19	92.50	0.14
50.75	0.46	64.75	0.28	78.75	0.19	92.75	0.14
51.00	0.45	65.00	0.28	79.00	0.19	93.00	0.14
51.25	0.45	65.25	0.28	79.25	0.19	93.25	0.14
51.50	0.44	65.50	0.27	79.50	0.19	93.50	0.13
51.75	0.44	65.75	0.27	79.75	0.18	93.75	0.13
52.00	0.43	66.00	0.27	80.00	0.18	94.00	0.13
52.25	0.43	66.25	0.27	80.25	0.18	94.25	0.13
52.50	0.43	66.50	0.27	80.50	0.18	94.50	0.13
52.75	0.42	66.75	0.26	80.75	0.18	94.75	0.13
53.00	0.42	67.00	0.26	81.00	0.18	95.00	0.13
53.25	0.41	67.25	0.26	81.25	0.18	95.25	0.13
53.50	0.41	67.50	0.26	81.50	0.18	95.50	0.13
53.75	0.41	67.75	0.26	81.75	0.18	95.75	0.13
54.00	0.40	68.00	0.25	82.00	0.17	96.00	0.13

Table 13 – 100%