

Appendix B – Table of Radial Measurements

1.1 Hammond Farm

	Lateral Range (meters)	Rx (dB μ V)	Antenna Factor	Tx Power From Eq 1 (dBm)	Test Signal Power dBm	Field Strength (dB μ V/m)
Radial 1 25 meters						
Vertical 1 meter						
	1	56.9	13.8	-16	8.2	46.5
	2	52.7	13.8	-16	8.2	42.3
	3	48.9	13.8	-16	8.2	38.5
	5	42.8	13.8	-16	8.2	32.4
	10	33.3	13.8	-16	8.2	22.9
	20	22.6	13.8	-16	8.2	12.2
	30	17.2	13.8	-16	8.2	6.8
	50	11.6	13.8	-16	8.2	1.2
Vertical 2 meter						
	1	55.4	13.8	-16	8.2	45
	2	51.7	13.8	-16	8.2	41.3
	3	48.5	13.8	-16	8.2	38.1
	5	42.3	13.8	-16	8.2	31.9
	10	33.8	13.8	-16	8.2	23.4
	20	23.6	13.8	-16	8.2	13.2
	30	18.2	13.8	-16	8.2	7.8
	50	11.5	13.8	-16	8.2	1.1
Horizontal 1 meter						
	1	53.8	13.8	-16	8.2	43.4
	2	46.7	13.8	-16	8.2	36.3
	3	42.1	13.8	-16	8.2	31.7
	5	34.6	13.8	-16	8.2	24.2
	10	23.7	13.8	-16	8.2	13.3
	20	11.9	13.8	-16	8.2	1.5
	30	9	13.8	-16	8.2	-1.4

**Radial 2 70
meters**

Vertical 1 meter

1	55	13.8	-16	8.2	44.6
2	50.8	13.8	-16	8.2	40.4
3	46	13.8	-16	8.2	35.6
5	37	13.8	-16	8.2	26.6
10	24.5	13.8	-16	8.2	14.1
20	23.1	13.8	-16	8.2	12.7
30	19.4	13.8	-16	8.2	9
50	16.1	13.8	-16	8.2	5.7

Vertical 2 meter

1	52.9	13.8	-16	8.2	42.5
2	49.2	13.8	-16	8.2	38.8
3	45.3	13.8	-16	8.2	34.9
5	37.1	13.8	-16	8.2	26.7
10	24.6	13.8	-16	8.2	14.2
20	24.3	13.8	-16	8.2	13.9
30	20.3	13.8	-16	8.2	9.9
50	16.2	13.8	-16	8.2	5.8

0

Horizontal 1 meter

1	50.9	13.8	-16	8.2	40.5
2	43.7	13.8	-16	8.2	33.3
3	38.7	13.8	-16	8.2	28.3
5	31	13.8	-16	8.2	20.6
10	17.5	13.8	-16	8.2	7.1
20	14.5	13.8	-16	8.2	4.1
30	12.5	13.8	-16	8.2	2.1
50	8.9	13.8	-16	8.2	-1.5

0

Radial 3 130 meters

Vertical 1 meter

1	56.5	13.8	-16	8.2	46.1
2	50.9	13.8	-16	8.2	40.5
3	46	13.8	-16	8.2	35.6
5	37.9	13.8	-16	8.2	27.5
10	25.5	13.8	-16	8.2	15.1
20	16.2	13.8	-16	8.2	5.8
30	17	13.8	-16	8.2	6.6
50	13	13.8	-16	8.2	2.6

Vertical 2 meter

1	52.5	13.8	-16	8.2	42.1
2	48.5	13.8	-16	8.2	38.1
3	44.4	13.8	-16	8.2	34
5	38	13.8	-16	8.2	27.6
10	24.9	13.8	-16	8.2	14.5
20	16	13.8	-16	8.2	5.6
30	17.5	13.8	-16	8.2	7.1
50	12.7	13.8	-16	8.2	2.3

Horizontal 1 meter

1	50.9	13.8	-16	8.2	40.5
2	44.2	13.8	-16	8.2	33.8
3	39.1	13.8	-16	8.2	28.7
5	30	13.8	-16	8.2	19.6
10	13.7	13.8	-16	8.2	3.3
20	10.1	13.8	-16	8.2	-0.3

Radial 4 165 meters

Vertical 1 meter

1	56.8	13.8	-16	8.2	46.4
2	52.4	13.8	-16	8.2	42
3	48.4	13.8	-16	8.2	38
5	41.1	13.8	-16	8.2	30.7
10	24	13.8	-16	8.2	13.6
20	20.8	13.8	-16	8.2	10.4
30	17.7	13.8	-16	8.2	7.3
50	14.4	13.8	-16	8.2	4

Vertical 2 meter

1	54.6	13.8	-16	8.2	44.2
2	51.3	13.8	-16	8.2	40.9
3	47.6	13.8	-16	8.2	37.2
5	40.1	13.8	-16	8.2	29.7
10	24	13.8	-16	8.2	13.6
20	20.9	13.8	-16	8.2	10.5
30	17.3	13.8	-16	8.2	6.9
50	14.8	13.8	-16	8.2	4.4

Horizontal 1 meter

1	52.5	13.8	-16	8.2	42.1
2	45.7	13.8	-16	8.2	35.3
3	41.4	13.8	-16	8.2	31
5	30.5	13.8	-16	8.2	20.1
10	10.7	13.8	-16	8.2	0.3
20	10.2	13.8	-16	8.2	-0.2

1.2 SITE

	Lateral Range (meters)	Rx (dBμV)	Antenna Factor	Tx Power From Eq 1 (dBm)	Test Signal Power dBm	Field Strength (dBμV/m)
Radial 1 75 meters						
Vertical 1 meter						
	1	50.8	13.8	-10.5	14.5	39.6
	2	46.3	13.8	-10.5	14.5	35.1
	3	42.7	13.8	-10.5	14.5	31.5
	5	33.3	13.8	-10.5	14.5	22.1
	10	25	13.8	-10.5	14.5	13.8
	20	11.1	13.8	-10.5	14.5	-0.1
	30	23	13.8	-10.5	14.5	11.8
	50	13.9	13.8	-10.5	14.5	2.7
Vertical 2 meter						
	1	49.9	13.8	-10.5	14.5	38.7
	2	47.6	13.8	-10.5	14.5	36.4
	3	45.5	13.8	-10.5	14.5	34.3
	5	36.9	13.8	-10.5	14.5	25.7
	10	25.1	13.8	-10.5	14.5	13.9
	20	13.1	13.8	-10.5	14.5	1.9
	30	22.7	13.8	-10.5	14.5	11.5
	50	15.2	13.8	-10.5	14.5	4
Horizontal 1 meter						
	1	52.9	13.8	-10.5	14.5	41.7
	2	46.4	13.8	-10.5	14.5	35.2
	3	42.7	13.8	-10.5	14.5	31.5
	5	36	13.8	-10.5	14.5	24.8
	10	22.7	13.8	-10.5	14.5	11.5
	20	17.7	13.8	-10.5	14.5	6.5
	30	9.9	13.8	-10.5	14.5	-1.3

**Radial 2 95
meters**

Vertical 1 meter

1	55.9	13.8	-10.5	14.5	44.7
2	52.3	13.8	-10.5	14.5	41.1
3	47.7	13.8	-10.5	14.5	36.5
5	42.7	13.8	-10.5	14.5	31.5
10	21.4	13.8	-10.5	14.5	10.2
20	23	13.8	-10.5	14.5	11.8
30	15.7	13.8	-10.5	14.5	4.5
50	13	13.8	-10.5	14.5	1.8

Vertical 2 meter

1	54.7	13.8	-10.5	14.5	43.5
2	50.1	13.8	-10.5	14.5	38.9
3	46.1	13.8	-10.5	14.5	34.9
5	42.9	13.8	-10.5	14.5	31.7
10	22.3	13.8	-10.5	14.5	11.1
20	22.6	13.8	-10.5	14.5	11.4
30	15.4	13.8	-10.5	14.5	4.2
50	12.6	13.8	-10.5	14.5	1.4

Horizontal 1 meter

1	57.4	13.8	-10.5	14.5	46.2
2	51.5	13.8	-10.5	14.5	40.3
3	44.5	13.8	-10.5	14.5	33.3
5	39.7	13.8	-10.5	14.5	28.5
10	32.4	13.8	-10.5	14.5	21.2
20	13.7	13.8	-10.5	14.5	2.5

Radial 3 150 meters outside cable

Vertical 1 meter

1	54.9	13.8	-10.5	14.5	43.7
2	52.5	13.8	-10.5	14.5	41.3
3	50.7	13.8	-10.5	14.5	39.5
5	43.8	13.8	-10.5	14.5	32.6
10	33.6	13.8	-10.5	14.5	22.4
20	30.6	13.8	-10.5	14.5	19.4
30	30.6	13.8	-10.5	14.5	19.4
50	21.4	13.8	-10.5	14.5	10.2

Vertical 2 meter

1	53	13.8	-10.5	14.5	41.8
2	51.6	13.8	-10.5	14.5	40.4
3	49.3	13.8	-10.5	14.5	38.1
5	43	13.8	-10.5	14.5	31.8
10	34.7	13.8	-10.5	14.5	23.5
20	31.2	13.8	-10.5	14.5	20
30	30.9	13.8	-10.5	14.5	19.7
50	22.7	13.8	-10.5	14.5	11.5

Horizontal 1 meter

1	53.6	13.8	-10.5	14.5	42.4
2	49.7	13.8	-10.5	14.5	38.5
3	44.1	13.8	-10.5	14.5	32.9
5	35.7	13.8	-10.5	14.5	24.5
10	24.4	13.8	-10.5	14.5	13.2
20	22.6	13.8	-10.5	14.5	11.4
30	20.5	13.8	-10.5	14.5	9.3
50	14.3	13.8	-10.5	14.5	3.1

Radial 4 150 meters inside cable

Vertical 1 meter

1	62.9	13.8	-10.5	14.5	51.7
2	59.4	13.8	-10.5	14.5	48.2
3	55.2	13.8	-10.5	14.5	44
5	46.8	13.8	-10.5	14.5	35.6
10	34.4	13.8	-10.5	14.5	23.2
20	31.4	13.8	-10.5	14.5	20.2
30	30.8	13.8	-10.5	14.5	19.6
50	23.9	13.8	-10.5	14.5	12.7

Vertical 2 meter

1	59.3	13.8	-10.5	14.5	48.1
2	58.5	13.8	-10.5	14.5	47.3
3	54.5	13.8	-10.5	14.5	43.3
5	49.3	13.8	-10.5	14.5	38.1
10	36.2	13.8	-10.5	14.5	25
20	31.6	13.8	-10.5	14.5	20.4
30	30.8	13.8	-10.5	14.5	19.6
50	22.8	13.8	-10.5	14.5	11.6

Horizontal 1 meter

1	60.1	13.8	-10.5	14.5	48.9
2	56.4	13.8	-10.5	14.5	45.2
3	51.7	13.8	-10.5	14.5	40.5
5	41.1	13.8	-10.5	14.5	29.9
10	25.3	13.8	-10.5	14.5	14.1
20	21.5	13.8	-10.5	14.5	10.3
30	20.4	13.8	-10.5	14.5	9.2
50	11.6	13.8	-10.5	14.5	0.4

1.3 JWP

	Lateral Range (meters)	Rx (dBμV)	Antenna Factor	Tx Power From Eq 1 (dBm)	Test Signal Power dBm	Field Strength (dBμV/m)
Radial 1 40 meters						
Vertical 1 meter						
	1	62.5	13.8	-9	16.8	50.5
	2	60.1	13.8	-9	16.8	48.1
	3	57.3	13.8	-9	16.8	45.3
	5	51.9	13.8	-9	16.8	39.9
	10	40.8	13.8	-9	16.8	28.8
	20	32.5	13.8	-9	16.8	20.5
	30	28.2	13.8	-9	16.8	16.2
	50	24.1	13.8	-9	16.8	12.1
Vertical 2 meter						
	1	60.3	13.8	-9	16.8	48.3
	2	58	13.8	-9	16.8	46
	3	55.5	13.8	-9	16.8	43.5
	5	51	13.8	-9	16.8	39
	10	43.1	13.8	-9	16.8	31.1
	20	31	13.8	-9	16.8	19
	30	28.4	13.8	-9	16.8	16.4
	50	26.4	13.8	-9	16.8	14.4
Horizontal 1 meter						
	1	59	13.8	-9	16.8	47
	2	52.1	13.8	-9	16.8	40.1
	3	47	13.8	-9	16.8	35
	5	39.4	13.8	-9	16.8	27.4
	10	28.5	13.8	-9	16.8	16.5
	20	23.2	13.8	-9	16.8	11.2
	30	16.1	13.8	-9	16.8	4.1

Radial 2 355 meters

Vertical 1 meter

1	61.7	13.8	-9	16.8	49.7
2	56.8	13.8	-9	16.8	44.8
3	53.4	13.8	-9	16.8	41.4
5	44.6	13.8	-9	16.8	32.6
10	20.1	13.8	-9	16.8	8.1
20	24.1	13.8	-9	16.8	12.1
30	20.2	13.8	-9	16.8	8.2
50	17.3	13.8	-9	16.8	5.3

Vertical 2 meter

1	58.1	13.8	-9	16.8	46.1
2	54.6	13.8	-9	16.8	42.6
3	51.3	13.8	-9	16.8	39.3
5	43	13.8	-9	16.8	31
10	17.5	13.8	-9	16.8	5.5
20	24.8	13.8	-9	16.8	12.8
30	20.5	13.8	-9	16.8	8.5
50	17.9	13.8	-9	16.8	5.9

Horizontal 1 meter

1	60.2	13.8	-9	16.8	48.2
2	55.6	13.8	-9	16.8	43.6
3	48.6	13.8	-9	16.8	36.6
5	37.5	13.8	-9	16.8	25.5
10	15.3	13.8	-9	16.8	3.3
20	14.2	13.8	-9	16.8	2.2
30	13.1	13.8	-9	16.8	1.1

Radial 3 375 meters

Vertical 1 meter

1	60.7	13.8	-9	16.8	48.7
2	56.2	13.8	-9	16.8	44.2
3	50.3	13.8	-9	16.8	38.3
5	41.7	13.8	-9	16.8	29.7
10	30.1	13.8	-9	16.8	18.1
20	19.8	13.8	-9	16.8	7.8
30	20.8	13.8	-9	16.8	8.8
50	18.2	13.8	-9	16.8	6.2

Vertical 2 meter

1	56.6	13.8	-9	16.8	44.6
2	52.6	13.8	-9	16.8	40.6
3	48.3	13.8	-9	16.8	36.3
5	40.9	13.8	-9	16.8	28.9
10	30.3	13.8	-9	16.8	18.3
20	20.1	13.8	-9	16.8	8.1
30	20.1	13.8	-9	16.8	8.1
50	19.1	13.8	-9	16.8	7.1
			-9	16.8	-25.8

Horizontal 1 meter

			-9	16.8	-25.8
1	57.8	13.8	-9	16.8	45.8
2	50.2	13.8	-9	16.8	38.2
3	42.5	13.8	-9	16.8	30.5
5	33.6	13.8	-9	16.8	21.6
10	23.2	13.8	-9	16.8	11.2
20	11.9	13.8	-9	16.8	-0.1
30	10.6	13.8	-9	16.8	-1.4

Radial 4 400 meters

Vertical 1 meter

1	63.6	13.8	-9	16.8	51.6
2	57.8	13.8	-9	16.8	45.8
3	51	13.8	-9	16.8	39
5	38.2	13.8	-9	16.8	26.2
10	27.1	13.8	-9	16.8	15.1
20	21.2	13.8	-9	16.8	9.2
30	20.8	13.8	-9	16.8	8.8
50	14.9	13.8	-9	16.8	2.9

Vertical 2 meter

1	58.2	13.8	-9	16.8	46.2
2	53.9	13.8	-9	16.8	41.9
3	49.2	13.8	-9	16.8	37.2
5	36.1	13.8	-9	16.8	24.1
10	25.9	13.8	-9	16.8	13.9
20	21	13.8	-9	16.8	9
30	21.7	13.8	-9	16.8	9.7
50	15.4	13.8	-9	16.8	3.4

Horizontal 1 meter

1	60.3	13.8	-9	16.8	48.3
2	53.9	13.8	-9	16.8	41.9
3	46.3	13.8	-9	16.8	34.3
5	34.1	13.8	-9	16.8	22.1
10	16	13.8	-9	16.8	4
20	13.7	13.8	-9	16.8	1.7
30	11.6	13.8	-9	16.8	-0.4