

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P302868

Luminaire Tested: **GLNA-AF-08-LED-E1-T4W-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P302868
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191569)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-08-LED-E1-T4W-7050-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38140.5 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G5

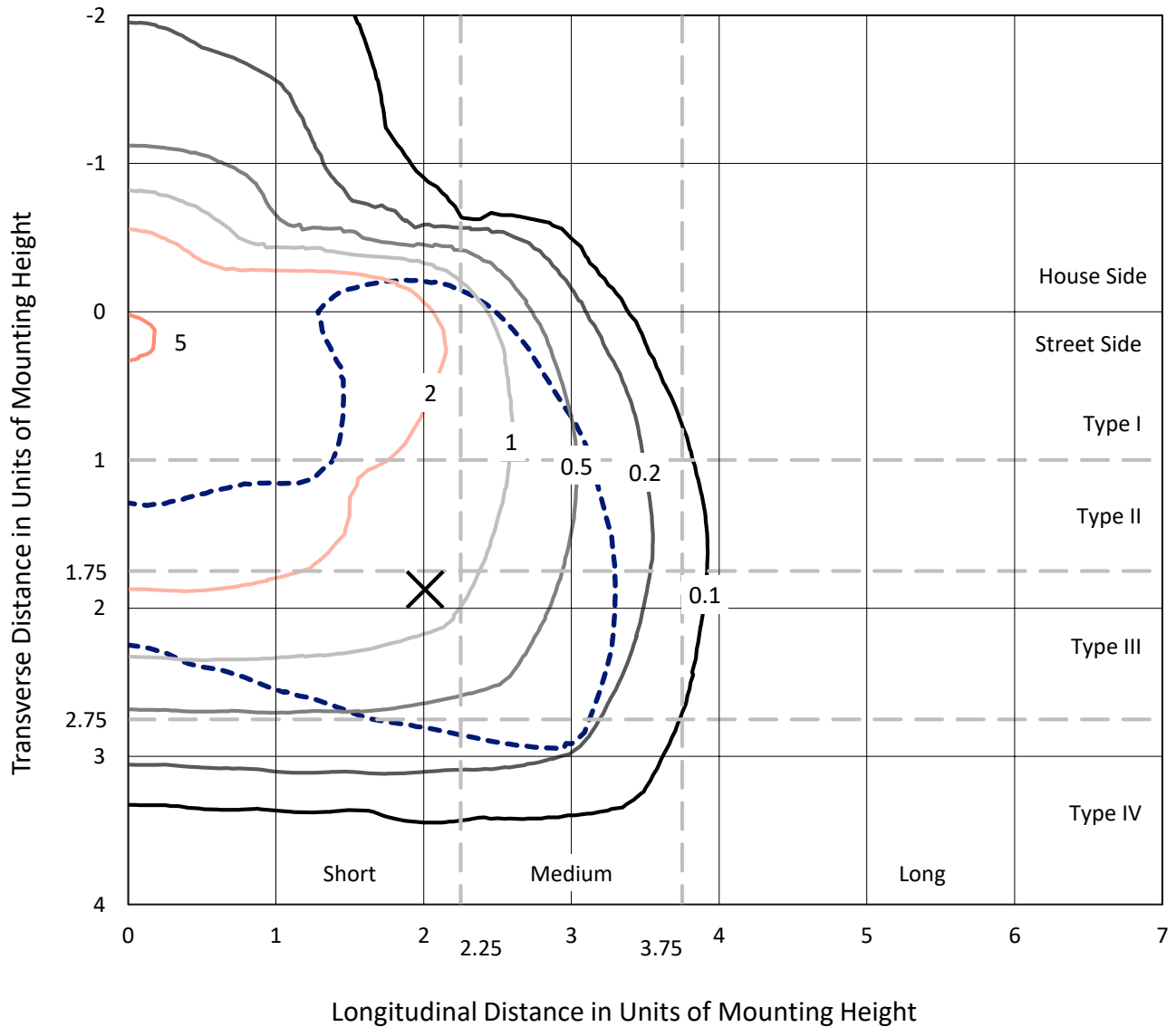
Input Watts (W): 334
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

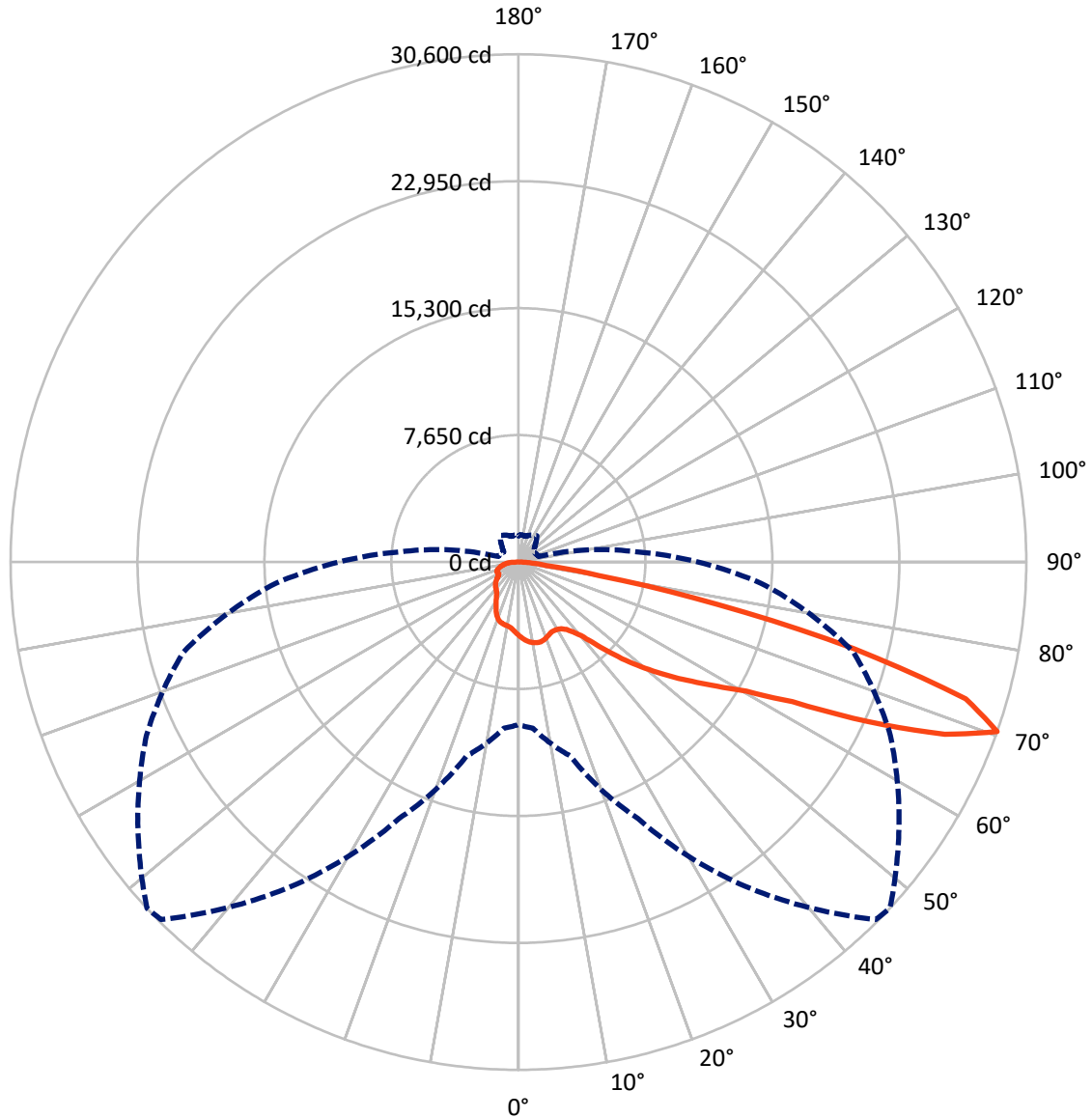
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.7 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7956.9	0.0	7956.9
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	30183.6	0.0	30183.6
	% Fixture	79.1	0.0	79.1
Total	Lumens	38140.5	0.0	38140.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.0	1.1
10°-20°	1244.0	3.3
20°-30°	1837.1	4.8
30°-40°	2670.2	7.0
40°-50°	4805.3	12.6
50°-60°	8324.7	21.8
60°-70°	11881.8	31.2
70°-80°	6099.4	16.0
80°-90°	853.9	2.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	38140.5	100.0
0°-180°	38140.5	100.0

Coefficient of Utilization



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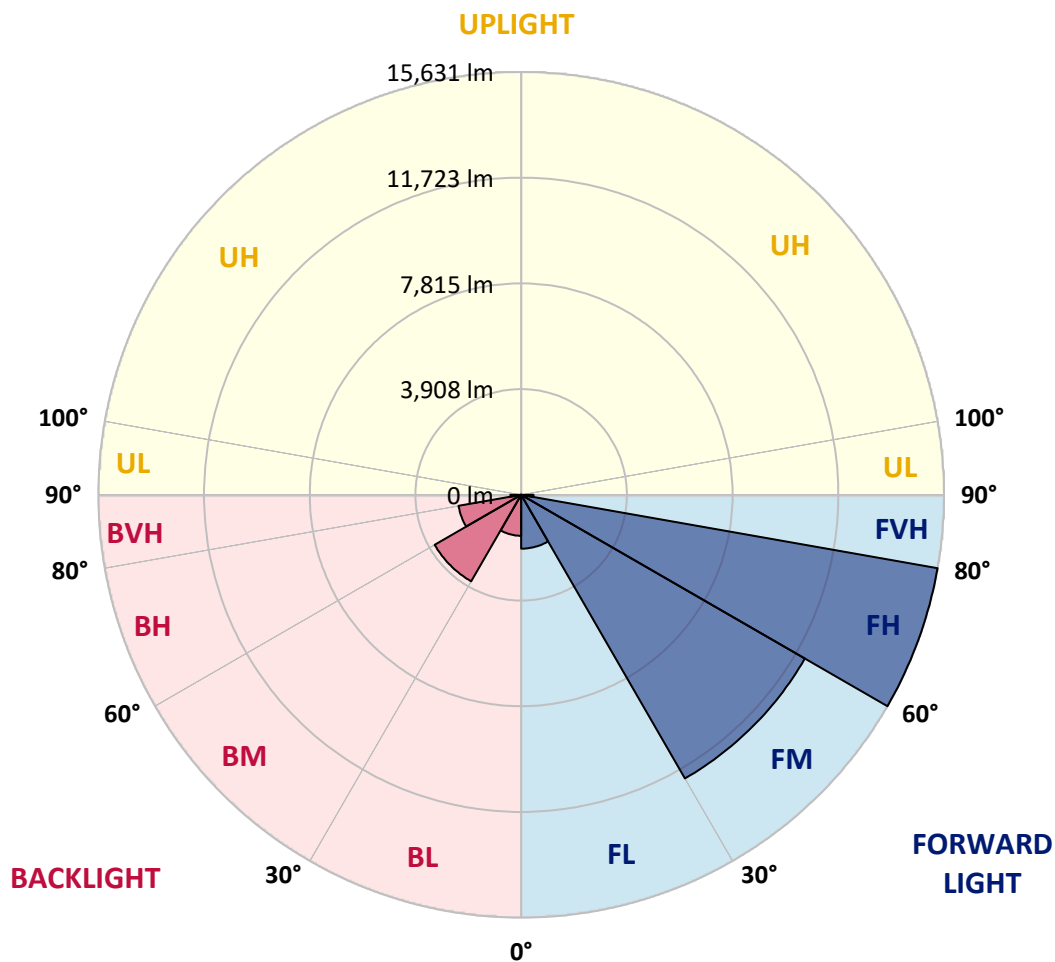
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1990.1	5.2			
FM	(30°-60°)	12106.8	31.7			
FH	(60°-80°)	15631.0	41.0			G5
FVH	(80°-90°)	455.7	1.2			G3/500
BL	(0°-30°)	1515.0	4.0	B3/2500		
BM	(30°-60°)	3693.3	9.7	B3/5000		
BH	(60°-80°)	2350.2	6.2	B3/2500		G3/2500
BVH	(80°-90°)	398.3	1.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	4425.4	4425.4	4425.4	4425.4	4425.4	4425.4	4425.4	4425.4	4425.4	4425.4	4425.4
2.5°	4685.4	4676.2	4672.5	4665.1	4655.9	4609.0	4599.8	4566.5	4520.3	4471.6	4421.7
5°	4993.6	4991.7	4970.8	4933.8	4874.6	4772.3	4748.3	4667.0	4557.3	4451.3	4345.9
7.5°	5264.1	5247.5	5208.6	5134.1	5030.5	4891.3	4858.0	4744.6	4594.2	4449.4	4306.4
10°	5462.5	5453.3	5368.3	5266.0	5130.4	4976.3	4937.5	4811.2	4646.0	4462.4	4284.3
12.5°	5575.9	5557.5	5458.9	5336.8	5175.4	5025.0	4985.6	4858.0	4672.5	4462.4	4252.8
15°	5568.5	5555.6	5457.0	5323.3	5160.6	5028.7	4993.6	4865.4	4667.0	4443.9	4212.2
17.5°	5420.0	5425.6	5342.4	5210.5	5076.8	4976.3	4944.9	4826.6	4629.4	4406.9	4164.1
20°	5160.6	5186.5	5130.4	5013.9	4939.3	4870.9	4850.6	4750.1	4572.0	4353.3	4111.7
22.5°	4900.5	4924.6	4902.4	4803.8	4792.7	4752.0	4740.9	4668.8	4522.1	4320.0	4080.3
25°	4709.5	4731.7	4728.0	4642.3	4676.2	4674.3	4665.1	4629.4	4511.0	4320.0	4085.8
27.5°	4657.7	4665.1	4657.7	4579.4	4625.7	4663.3	4655.9	4649.7	4544.3	4373.6	4156.7
30°	4835.8	4824.7	4766.8	4609.0	4652.2	4703.9	4696.5	4700.2	4644.2	4514.7	4314.5
32.5°	5546.4	5495.8	5314.0	4870.9	4757.5	4785.3	4789.0	4850.6	4859.8	4731.7	4559.1
35°	6609.4	6553.9	6317.9	5572.2	5086.0	4989.9	4989.9	5082.3	5137.8	5043.5	4939.3
37.5°	7735.9	7674.3	7548.6	6544.7	5776.2	5344.2	5335.0	5399.7	5479.2	5502.0	5527.9
40°	9015.9	8951.2	8986.3	7635.5	6739.4	5958.0	5826.1	5779.9	5995.0	6138.0	6346.3
42.5°	10417.3	10387.1	10400.0	8850.8	7835.8	6876.9	6689.5	6449.8	6709.9	6963.8	7400.1
45°	11713.9	11739.8	11726.9	10151.7	9057.2	7997.2	7798.8	7334.8	7589.3	8025.0	8736.1
47.5°	12849.7	12741.8	12908.8	11572.8	10424.7	9251.9	9006.7	8385.5	8643.1	9181.1	10383.4
50°	14228.3	14213.5	13968.8	13469.6	12077.5	10511.6	10190.5	9470.7	9871.3	10619.4	12460.2
52.5°	15677.7	15408.4	15184.1	14944.4	13831.4	11803.3	11409.5	10552.3	11315.2	12255.6	14991.2
55°	15974.1	15854.0	16131.9	16534.9	15521.8	13144.9	12686.4	11908.7	12940.9	14126.6	17909.8
57.5°	16608.9	16607.0	17182.6	17900.6	17262.1	14567.8	14105.6	13547.3	14768.1	16269.3	21008.4
60°	17037.8	17158.0	18227.2	19620.6	18971.0	16212.0	15786.8	15438.0	16846.8	18664.7	23895.6
62.5°	17262.1	17425.4	18884.1	20318.2	21386.8	18948.8	18524.2	18021.4	19596.5	21292.5	25584.1
65°	16329.1	16649.6	18781.8	20921.5	23502.4	23385.3	23194.3	22311.2	23034.6	23368.7	24974.0
67.5°	13745.7	14074.2	16557.1	20358.8	25012.9	27664.6	27705.3	26196.7	25150.3	23546.8	20997.3
70°	9793.6	10051.2	12105.9	17069.2	23862.3	30460.6	30599.9	27986.9	24728.8	20882.0	14670.1
72.5°	4649.7	4807.5	6752.4	11109.4	18935.9	27909.3	28178.6	25701.2	21026.9	15460.2	8002.8
75°	1708.9	1757.0	2282.0	4726.1	10983.0	20581.9	20899.3	18423.8	13938.6	7697.1	3048.6
77.5°	1024.2	1055.7	1280.6	1994.8	4320.0	11764.4	12233.4	10019.8	6091.8	2865.0	1499.4
80°	716.1	738.3	918.2	1241.2	2041.1	4483.3	4900.5	4089.5	2426.8	1813.0	1090.8
82.5°	484.4	495.5	645.8	838.7	1356.4	1601.0	1727.4	1818.6	1636.8	1349.0	692.1
85°	317.4	328.5	438.2	552.8	862.8	827.6	846.1	1070.4	1194.9	916.4	383.9
87.5°	181.8	189.2	263.8	295.2	423.4	350.7	354.4	563.9	764.8	618.1	233.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4425.4	4425.4	4425.4	4425.4	4425.4	4425.4	4425.4	4425.4	4425.4	4425.4	4425.4
2.5°	4408.7	4384.7	4331.1	4297.2	4265.8	4258.4	4245.4	4243.6	4241.7	4241.7	4236.2
5°	4310.1	4269.5	4186.3	4139.4	4100.6	4096.9	4095.1	4104.3	4108.0	4111.7	4106.2
7.5°	4247.3	4191.8	4087.7	4021.1	3974.9	3963.2	3982.3	4024.8	4052.5	4063.6	4058.1
10°	4208.5	4139.4	4019.3	3946.5	3907.7	3902.2	3926.2	3976.7	4034.1	4056.2	4054.4
12.5°	4164.1	4085.8	3957.6	3881.8	3859.7	3870.7	3902.2	3948.4	4008.2	4043.3	4045.1
15°	4119.1	4028.5	3896.6	3830.1	3820.8	3835.6	3865.2	3900.3	3946.5	3982.3	3986.0
17.5°	4065.5	3970.6	3839.3	3770.3	3762.9	3770.3	3772.1	3790.6	3820.8	3854.1	3863.3
20°	4008.2	3911.4	3774.0	3705.6	3672.3	3642.7	3608.8	3612.5	3621.8	3655.7	3663.1
22.5°	3966.9	3870.7	3724.1	3629.2	3540.4	3451.1	3384.5	3375.3	3379.0	3406.7	3415.9
25°	3970.6	3868.9	3711.1	3547.8	3353.1	3210.1	3120.8	3106.0	3104.1	3124.4	3138.0
27.5°	4043.3	3941.0	3759.2	3464.0	3149.1	2937.1	2842.8	2831.7	2816.9	2822.5	2837.3
30°	4204.8	4109.9	3876.3	3379.0	2927.9	2670.3	2571.7	2560.6	2540.2	2531.0	2542.1
32.5°	4467.9	4390.3	4047.0	3297.0	2707.2	2441.6	2341.8	2317.8	2304.8	2293.7	2303.0
35°	4906.1	4872.8	4275.0	3208.3	2512.5	2265.4	2174.8	2137.8	2119.3	2139.7	2154.5
37.5°	5592.6	5611.1	4573.9	3069.0	2362.1	2148.9	2072.5	2030.0	2002.2	2018.9	2035.5
40°	6565.0	6578.0	4904.2	2872.4	2232.1	2079.9	1998.5	1959.7	1920.3	1890.7	1888.8
42.5°	7841.3	7710.1	5229.0	2659.2	2081.7	2037.4	1946.8	1898.1	1838.9	1757.0	1740.3
45°	9355.5	8893.9	5475.5	2413.9	1912.9	1985.6	1888.8	1822.3	1729.2	1640.5	1631.2
47.5°	11100.1	10164.6	5596.3	2160.0	1755.1	1909.2	1818.6	1712.6	1595.5	1551.1	1545.6
50°	13229.9	11673.2	5653.6	1912.9	1618.3	1809.3	1716.3	1591.8	1493.8	1484.6	1479.0
52.5°	15655.5	13488.1	5672.7	1710.7	1504.9	1679.3	1633.1	1512.3	1434.0	1442.1	1442.1
55°	18193.9	15362.2	5420.0	1564.1	1400.8	1545.6	1577.0	1480.9	1415.6	1445.8	1456.8
57.5°	20524.0	17023.0	4625.7	1451.3	1302.8	1443.9	1556.7	1510.5	1466.1	1586.3	1593.7
60°	22313.0	18004.1	3454.8	1349.0	1230.1	1408.2	1610.9	1623.9	1634.9	1922.1	1961.6
62.5°	22687.7	17678.1	2375.1	1269.5	1196.8	1438.4	1708.9	1710.7	1697.8	1898.1	1922.1
65°	20967.7	15612.4	1727.4	1224.5	1169.0	1492.0	1792.7	1753.3	1668.2	1820.4	1775.5
67.5°	16651.4	11762.6	1438.4	1191.2	1128.4	1488.3	1881.4	1792.7	1651.6	1783.5	1710.7
70°	10808.6	7112.3	1280.6	1163.5	1079.7	1417.4	1933.2	1789.0	1602.9	1659.0	1573.3
72.5°	5273.4	3180.5	1174.6	1122.8	1029.8	1319.4	1931.4	1755.1	1553.0	1549.3	1503.1
75°	2063.2	1456.8	1077.8	1061.2	944.7	1207.9	1879.6	1707.0	1493.8	1434.0	1417.4
77.5°	1207.9	1039.0	955.8	970.6	842.4	1096.3	1803.8	1623.9	1411.9	1341.6	1323.1
80°	879.4	777.7	814.7	838.7	719.8	985.4	1701.5	1521.6	1321.3	1356.4	1330.5
82.5°	563.9	501.0	660.6	684.7	599.6	872.0	1590.0	1413.7	1193.1	1083.4	1057.5
85°	287.8	317.4	491.8	521.4	462.2	716.1	1455.0	1271.3	1048.3	901.6	916.4
87.5°	161.5	216.9	313.7	350.7	326.6	550.9	1180.1	1048.3	855.4	695.8	612.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)