

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: P300332

Luminaire Tested: **GLNA-AF-07-LED-E1-T4FT-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300332  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-07-LED-E1-T4FT-7027  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36676.2 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5

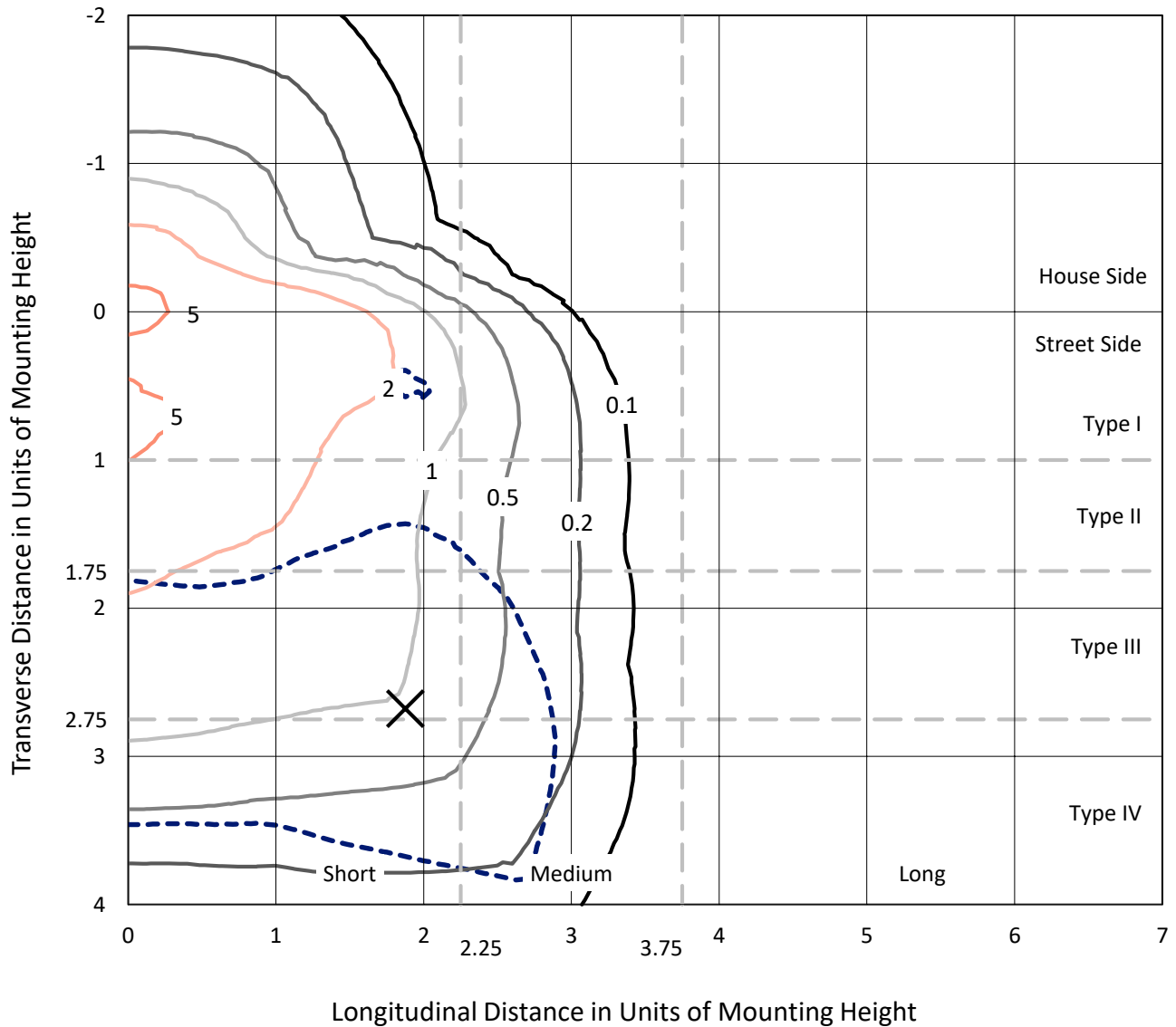
Input Watts (W): 391  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

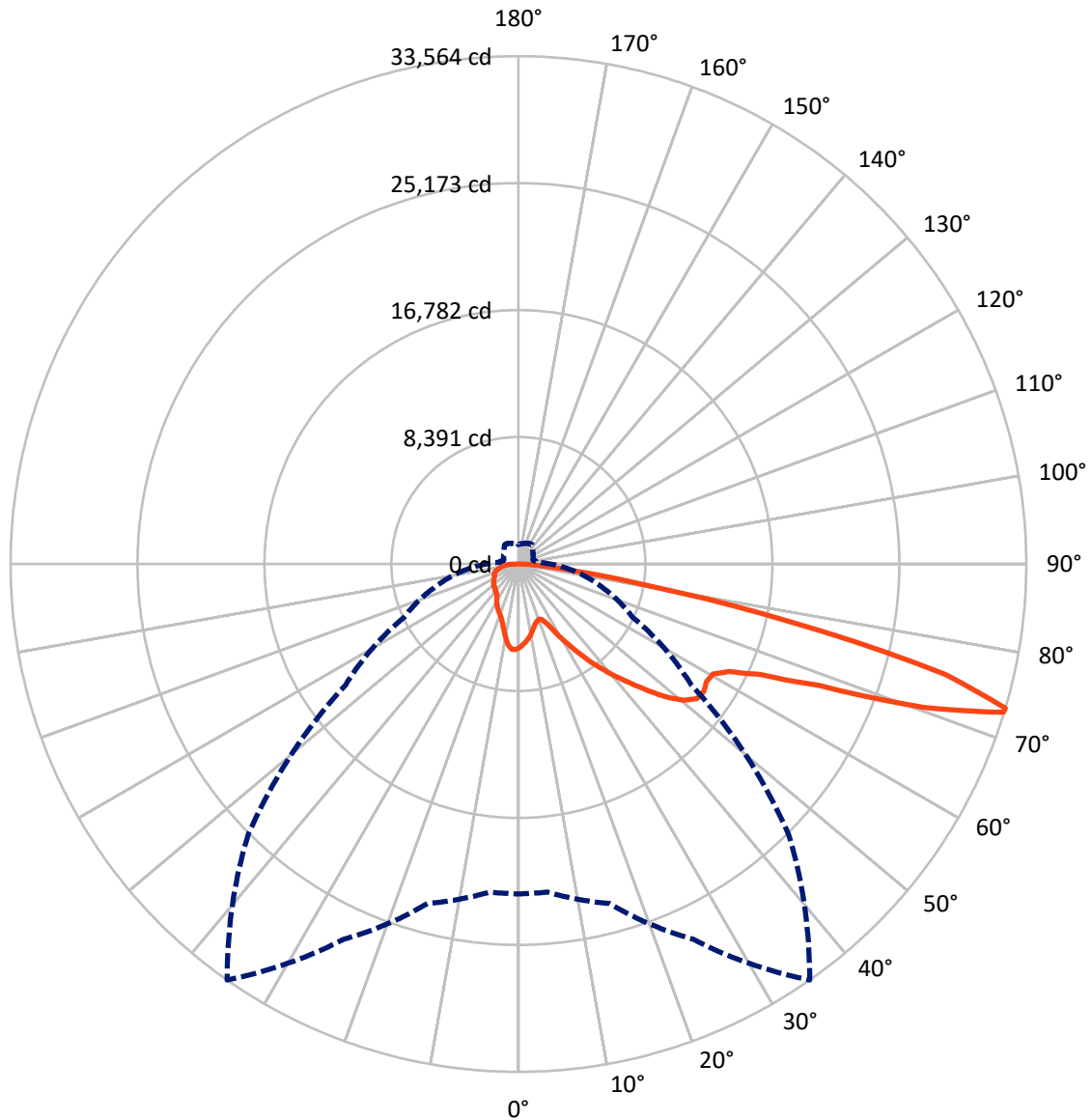
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.2 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6995.2	0.0	6995.2
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	29681.0	0.0	29681.0
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	36676.2	0.0	36676.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	501.1	1.4
10°-20°	1250.7	3.4
20°-30°	2022.0	5.5
30°-40°	3390.6	9.2
40°-50°	5226.5	14.3
50°-60°	7011.9	19.1
60°-70°	9341.3	25.5
70°-80°	7124.5	19.4
80°-90°	807.5	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°	36676.2	100.0
0°-180°	36676.2	100.0



REPORT NUMBER: P300332

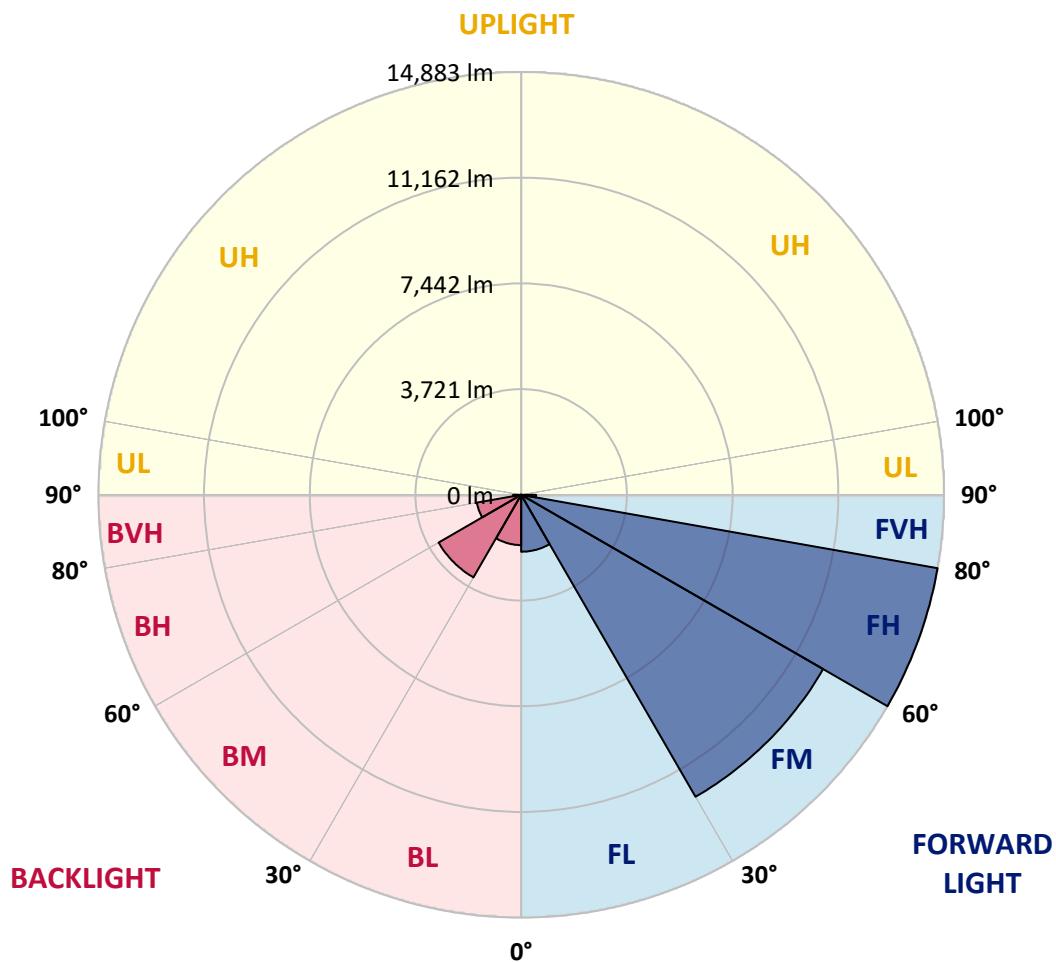
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2003.8	5.5			
FM	(30°-60°)	12272.1	33.5			
FH	(60°-80°)	14883.2	40.6			G5
FVH	(80°-90°)	522.0	1.4			G4/750
BL	(0°-30°)	1770.1	4.8	B3/2500		
BM	(30°-60°)	3356.9	9.2	B3/5000		
BH	(60°-80°)	1582.6	4.3	B3/2500		G3/2500
BVH	(80°-90°)	285.5	0.8			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°	55°	65°	75°	85°	90°
0°	5535.6	5535.6	5535.6	5535.6	5535.6	5535.6	5535.6	5535.6	5535.6	5535.6	5535.6
2.5°	5317.2	5327.7	5315.4	5331.3	5357.7	5385.9	5405.2	5433.4	5465.1	5509.2	5519.7
5°	5067.1	5082.9	5082.9	5111.1	5162.2	5208.0	5250.3	5296.0	5363.0	5438.7	5468.6
7.5°	4792.3	4801.1	4817.0	4859.3	4933.2	4998.4	5058.3	5132.3	5223.8	5324.2	5377.1
10°	4461.2	4473.5	4498.2	4558.1	4658.5	4748.3	4834.6	4936.8	5053.0	5178.0	5245.0
12.5°	4227.0	4223.5	4234.0	4278.1	4366.1	4475.3	4600.4	4730.7	4873.3	5019.5	5100.5
15°	4147.7	4128.3	4087.8	4077.3	4124.8	4234.0	4378.4	4538.7	4709.6	4885.7	4986.1
17.5°	4197.0	4163.6	4052.6	3971.6	3964.5	4047.3	4200.6	4380.2	4577.5	4792.3	4917.4
20°	4507.0	4427.8	4154.8	3966.3	3901.1	3941.7	4075.5	4265.7	4498.2	4783.5	4943.8
22.5°	5248.5	5132.3	4552.8	4202.3	3982.2	3932.8	4033.2	4235.8	4507.0	4892.7	5097.0
25°	6328.1	6162.6	5236.2	4790.6	4336.2	4073.7	4096.6	4304.5	4632.1	5146.3	5392.9
27.5°	7180.6	7073.1	6129.1	5620.1	4980.8	4454.2	4302.7	4477.1	4887.4	5562.0	5813.9
30°	7687.8	7622.6	7083.7	6560.6	5803.3	5060.0	4697.2	4801.1	5287.2	6137.9	6345.7
32.5°	8276.1	8237.3	7973.1	7492.3	6690.9	5856.1	5322.5	5285.5	5822.7	6830.1	6925.2
35°	8885.5	8873.1	8718.1	8372.9	7643.8	6905.8	6152.0	5901.9	6405.6	7548.7	7488.8
37.5°	9452.6	9431.4	9341.6	9140.8	8640.6	8033.0	6997.4	6534.2	7034.4	8235.6	7969.6
40°	10497.0	10331.4	10023.2	9871.7	9648.1	8982.3	7668.4	7124.2	7686.0	8890.7	8385.3
42.5°	11770.4	11500.9	10926.7	10718.9	10687.2	9730.8	8126.4	7696.6	8343.0	9540.6	8793.9
45°	12772.5	12518.9	12024.0	11761.6	11877.8	10408.9	8586.0	8307.8	9019.3	10222.2	9214.8
47.5°	13841.6	13443.5	12788.4	12867.6	13121.2	11050.0	9054.5	8964.7	9760.8	10984.9	9737.9
50°	13880.3	13575.6	13288.6	13762.3	14156.8	11640.0	9641.0	9653.4	10667.8	11944.7	10433.6
52.5°	13075.4	13010.3	13466.4	14211.4	14780.3	12106.8	10308.5	10364.9	11828.5	13047.3	11198.0
55°	12793.6	12719.7	13246.3	14054.7	14864.9	12492.5	11032.4	11134.6	13232.2	14209.7	11943.0
57.5°	13480.5	13316.7	13352.0	13980.7	14658.8	12915.2	11821.4	12027.5	14757.4	15225.9	12422.0
60°	15400.3	15049.8	14384.0	14368.2	14769.8	13549.2	12733.8	12985.6	16342.5	15712.0	12235.3
62.5°	18093.2	17742.7	16495.8	15683.8	15624.0	14595.4	13853.9	13920.8	17258.4	15053.3	11095.8
65°	21008.1	20694.6	19301.4	18154.9	17601.8	16328.5	15155.5	14338.2	16959.0	13241.0	9102.1
67.5°	24546.4	24210.0	23012.4	21953.8	21422.0	19125.3	16069.5	13938.4	15058.6	10257.5	6543.0
70°	27020.9	26677.5	26205.5	27063.2	28364.8	23160.3	16187.6	12312.8	11247.3	6817.8	3938.1
72.5°	23792.6	23632.3	24493.6	28105.9	33527.0	25608.4	14632.4	8964.7	6532.4	3619.3	2279.0
73°	21798.9	21763.6	23232.5	27374.9	33563.9	25231.5	13950.8	8332.4	5602.5	3201.9	2083.5
75°	9843.6	10127.1	13346.7	20909.4	29160.8	20791.4	9818.9	4780.0	3164.9	2212.1	1572.8
77.5°	2365.3	2464.0	4175.9	9929.9	18415.5	12390.3	4448.9	2363.6	2023.7	1562.2	1148.3
80°	1007.4	1040.9	1608.0	3668.7	8670.6	4989.6	2050.1	1583.4	1400.2	1090.2	804.9
82.5°	560.1	595.3	912.3	1664.4	3499.6	1701.4	1250.5	1102.5	921.1	656.9	523.1
85°	317.0	336.4	533.7	929.9	1483.0	683.4	748.5	732.7	519.6	338.2	257.1
87.5°	149.7	162.0	257.1	431.5	581.2	267.7	380.4	419.2	325.8	206.1	133.9
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5535.6	5535.6	5535.6	5535.6	5535.6	5535.6	5535.6	5535.6	5535.6	5535.6
2.5°	5532.1	5563.8	5600.7	5620.1	5637.7	5658.9	5680.0	5680.0	5683.5	5685.3
5°	5493.3	5558.5	5616.6	5641.2	5646.5	5646.5	5641.2	5613.1	5588.4	5599.0
7.5°	5412.3	5507.4	5556.7	5547.9	5481.0	5403.5	5338.3	5259.1	5218.6	5211.5
10°	5296.0	5405.2	5414.0	5326.0	5160.4	4994.9	4857.5	4723.6	4660.2	4644.4
12.5°	5167.5	5267.9	5211.5	5030.1	4764.2	4522.9	4348.5	4212.9	4153.0	4137.2
15°	5063.6	5132.3	4989.6	4704.3	4369.6	4114.3	3969.8	3869.4	3827.2	3814.8
17.5°	5009.0	5023.1	4762.4	4376.7	4020.9	3807.8	3718.0	3670.4	3654.6	3645.8
20°	5035.4	4936.8	4545.8	4072.0	3735.6	3585.9	3564.7	3552.4	3548.9	3543.6
22.5°	5167.5	4910.3	4346.7	3783.1	3485.5	3420.3	3437.9	3436.2	3432.7	3429.1
25°	5403.5	4933.2	4153.0	3508.4	3275.9	3261.8	3293.5	3293.5	3279.4	3279.4
27.5°	5715.2	4980.8	3936.4	3247.7	3085.7	3087.5	3112.1	3105.1	3089.2	3078.6
30°	6095.6	5010.7	3682.8	3013.5	2907.8	2900.8	2907.8	2877.9	2830.3	2826.8
32.5°	6484.9	4973.7	3388.6	2805.7	2719.4	2703.5	2698.2	2655.9	2601.4	2585.5
35°	6837.1	4838.1	3089.2	2640.1	2539.7	2504.5	2529.1	2515.0	2465.7	2453.4
37.5°	7094.3	4586.3	2819.7	2493.9	2411.1	2402.3	2418.2	2423.5	2365.3	2353.0
40°	7266.9	4244.6	2589.0	2370.6	2386.5	2353.0	2300.2	2263.2	2245.6	2240.3
42.5°	7406.0	3888.8	2395.3	2312.5	2391.8	2294.9	2180.4	2120.5	2152.2	2166.3
45°	7566.3	3541.9	2233.3	2240.3	2365.3	2228.0	2097.6	2039.5	2051.8	2055.4
47.5°	7786.4	3119.2	2058.9	2124.1	2277.3	2182.2	2046.6	1963.8	1905.7	1879.2
50°	8091.1	2619.0	1877.5	1993.7	2191.0	2148.7	1967.3	1879.2	1771.8	1747.1
52.5°	8302.5	2152.2	1727.8	1884.5	2113.5	2081.8	1903.9	1789.4	1676.7	1655.6
55°	8188.0	1787.7	1597.4	1763.0	2011.3	1999.0	1851.1	1697.8	1609.8	1592.2
57.5°	7615.6	1556.9	1497.1	1648.5	1886.3	1928.6	1780.6	1620.3	1556.9	1544.6
60°	6523.6	1412.5	1433.6	1571.0	1784.1	1858.1	1710.2	1578.1	1535.8	1527.0
62.5°	5061.8	1315.6	1386.1	1514.7	1704.9	1808.8	1671.4	1572.8	1556.9	1546.4
65°	3626.4	1238.2	1335.0	1458.3	1632.7	1763.0	1657.3	1565.7	1569.3	1560.5
67.5°	2464.0	1169.5	1273.4	1394.9	1562.2	1722.5	1638.0	1541.1	1585.1	1574.5
70°	1724.3	1102.5	1201.2	1313.9	1474.2	1666.1	1602.7	1504.1	1500.6	1458.3
72.5°	1345.6	1014.5	1102.5	1201.2	1361.4	1586.9	1532.3	1421.3	1363.2	1319.2
73°	1283.9	993.3	1077.9	1176.5	1336.8	1567.5	1512.9	1398.4	1333.3	1292.7
75°	1062.0	901.8	979.2	1067.3	1231.1	1475.9	1417.8	1294.5	1211.7	1187.1
77.5°	834.8	771.4	845.4	924.7	1084.9	1342.1	1276.9	1158.9	1113.1	1092.0
80°	618.2	639.3	704.5	774.9	940.5	1199.4	1141.3	1023.3	1227.6	1176.5
82.5°	435.0	484.3	544.2	607.6	789.0	1060.3	989.8	868.3	898.2	746.8
85°	257.1	317.0	373.4	428.0	568.9	878.9	817.2	692.2	567.1	540.7
87.5°	149.7	176.1	192.0	248.3	391.0	662.2	575.9	512.5	294.1	199.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)