

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: P300411

Luminaire Tested: **GLNA-AF-10-LED-E1-T4FT-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300411  
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-10-LED-E1-T4FT-7030-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 46160.6 lumens  
Efficiency: N/A  
Efficacy: 110.2 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 419  
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

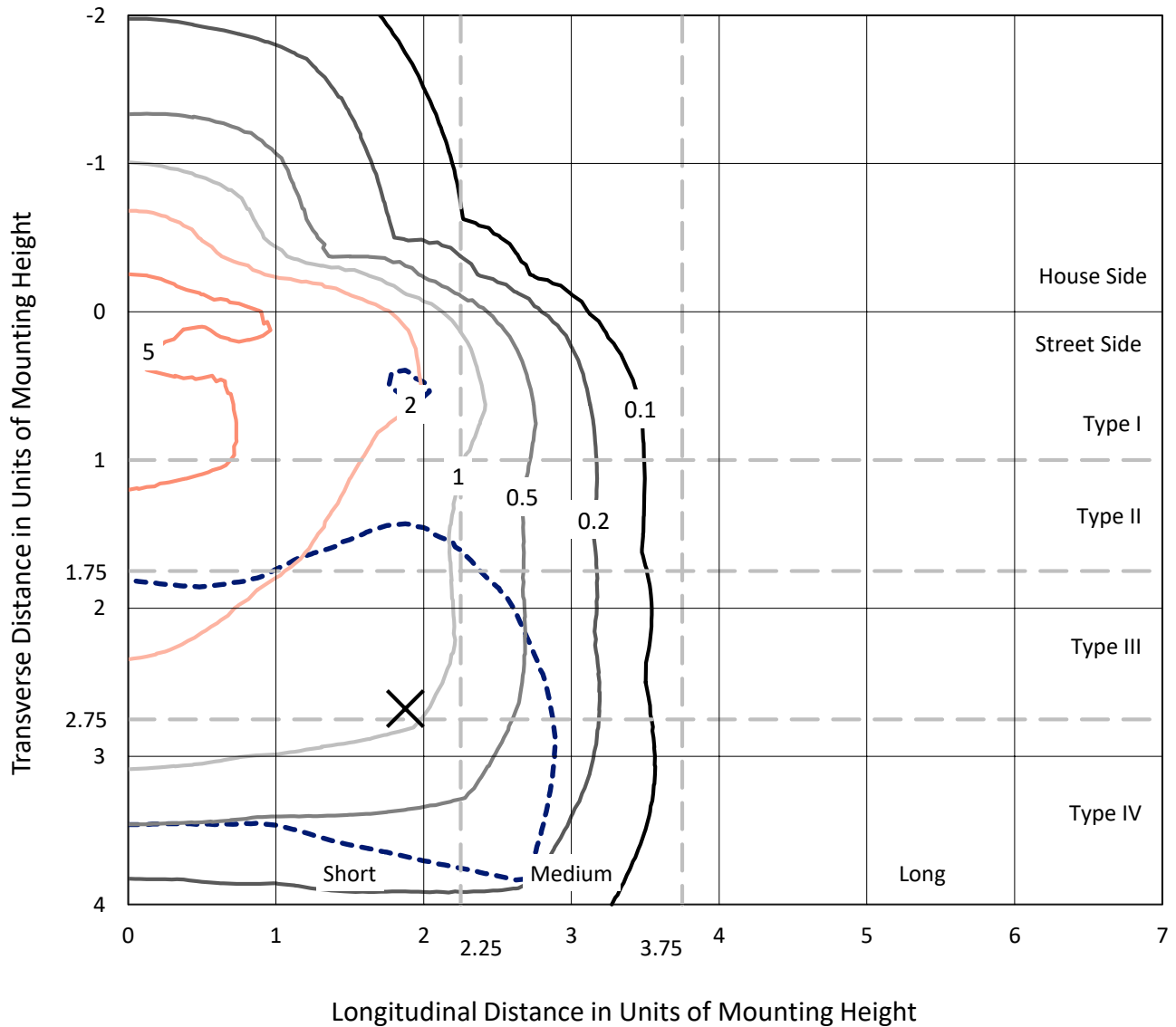


REPORT NUMBER: P300411

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7030-800

### Iso-Footcandle Lines of Horizontal Illumination

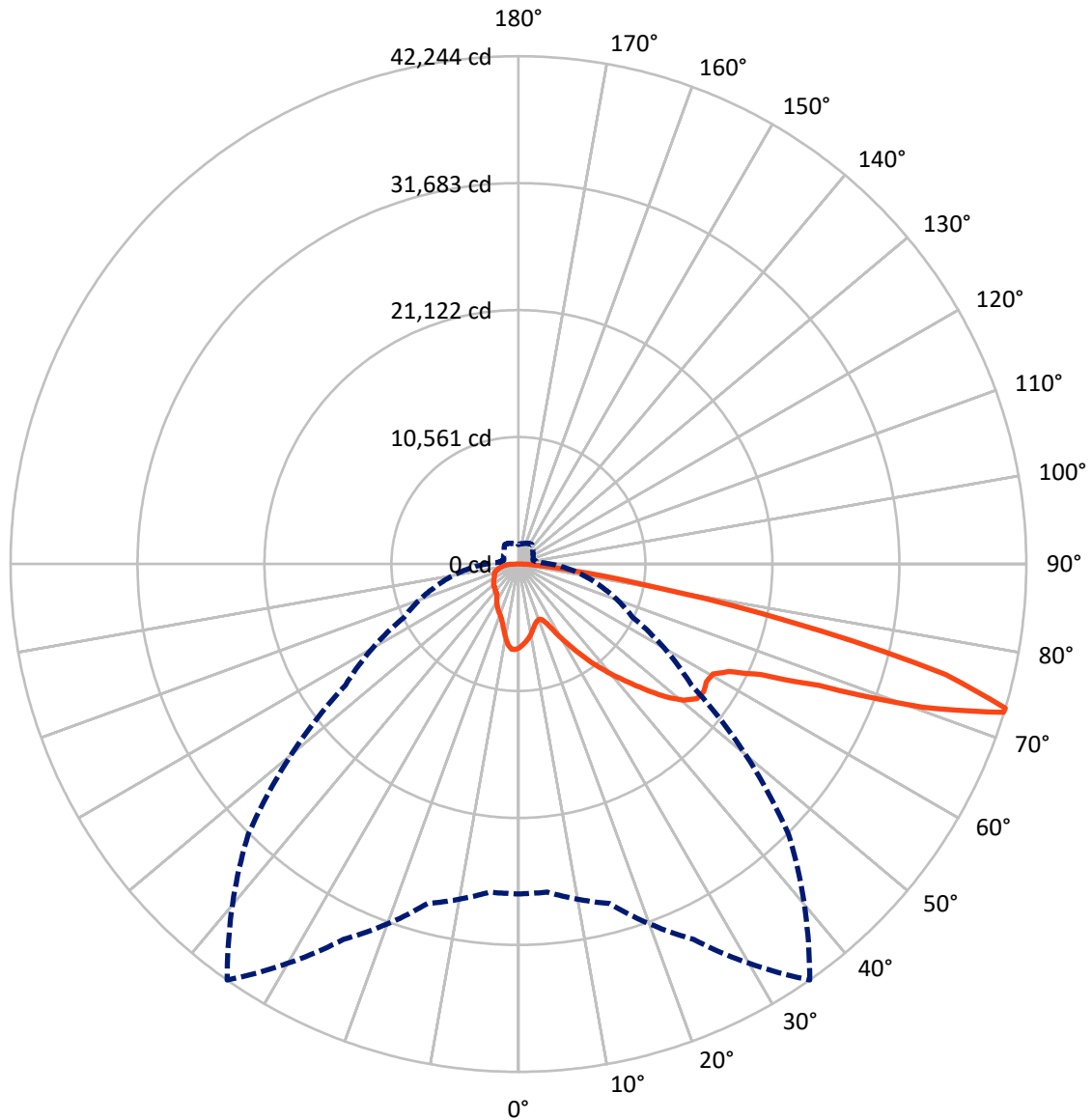
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.7 fc  
 Type IV - Short - Non-Cutoff

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CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7030-800

### 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	8804.1	0.0	8804.1
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	37356.5	0.0	37356.5
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	46160.6	0.0	46160.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	630.7	1.4
10°-20°	1574.2	3.4
20°-30°	2544.9	5.5
30°-40°	4267.4	9.2
40°-50°	6578.0	14.3
50°-60°	8825.1	19.1
60°-70°	11756.9	25.5
70°-80°	8966.9	19.4
80°-90°	1016.4	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°	46160.6	100.0
0°-180°	46160.6	100.0

**Coefficient of Utilization**



REPORT NUMBER: P300411

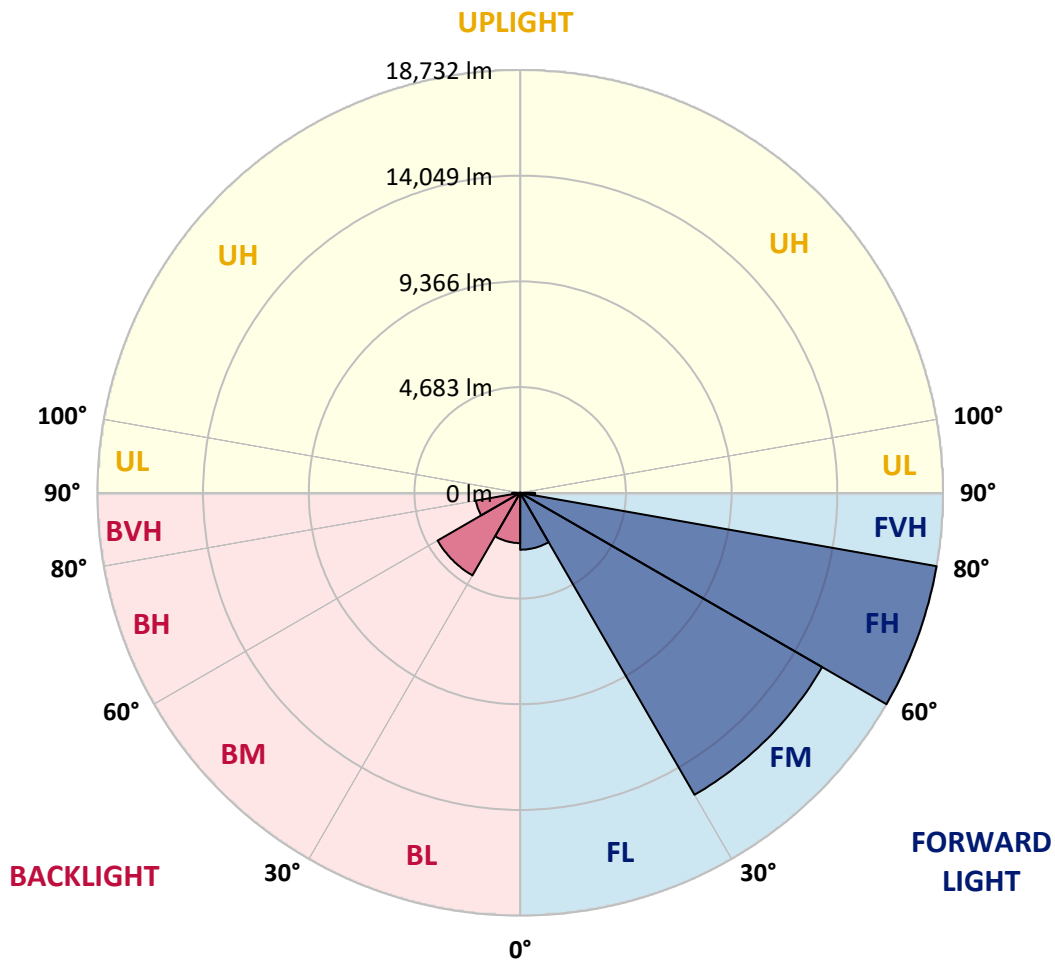
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2521.9	5.5			
FM	(30°-60°)	15445.6	33.5			
FH	(60°-80°)	18731.9	40.6			G5
FVH	(80°-90°)	657.0	1.4			G4/750
BL	(0°-30°)	2227.9	4.8	B3/2500		
BM	(30°-60°)	4225.0	9.2	B3/5000		
BH	(60°-80°)	1991.9	4.3	B3/2500		G3/2500
BVH	(80°-90°)	359.4	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°	6967.1	6967.1	6967.1	6967.1	6967.1	6967.1	6967.1	6967.1	6967.1	6967.1	6967.1
2.5°	6692.2	6705.5	6690.0	6709.9	6743.2	6778.6	6803.0	6838.5	6878.4	6933.8	6947.1
5°	6377.4	6397.4	6397.4	6432.8	6497.1	6554.8	6608.0	6665.6	6749.8	6845.1	6882.8
7.5°	6031.6	6042.7	6062.7	6115.9	6209.0	6291.0	6366.3	6459.4	6574.7	6701.1	6767.6
10°	5614.9	5630.4	5661.4	5736.8	5863.1	5976.2	6084.8	6213.4	6359.7	6517.1	6601.3
12.5°	5320.1	5315.6	5328.9	5384.3	5495.2	5632.6	5790.0	5954.0	6133.6	6317.6	6419.5
15°	5220.3	5195.9	5144.9	5131.6	5191.5	5328.9	5510.7	5712.4	5927.4	6149.1	6275.5
17.5°	5282.4	5240.3	5100.6	4998.6	4989.8	5094.0	5286.8	5512.9	5761.2	6031.6	6189.0
20°	5672.5	5572.8	5229.2	4992.0	4910.0	4961.0	5129.4	5368.8	5661.4	6020.5	6222.3
22.5°	6605.7	6459.4	5730.1	5289.0	5011.9	4949.9	5076.2	5331.1	5672.5	6158.0	6415.1
25°	7964.6	7756.2	6590.2	6029.4	5457.5	5127.2	5156.0	5417.6	5829.9	6477.2	6787.5
27.5°	9037.5	8902.2	7714.1	7073.5	6268.8	5606.0	5415.4	5634.8	6151.3	7000.3	7317.3
30°	9675.9	9593.8	8915.5	8257.2	7304.0	6368.6	5911.9	6042.7	6654.5	7725.2	7986.7
32.5°	10416.2	10367.5	10035.0	9429.8	8421.2	7370.5	6698.8	6652.3	7328.4	8596.3	8716.0
35°	11183.2	11167.7	10972.6	10538.2	9620.4	8691.6	7742.9	7428.1	8062.1	9500.7	9425.4
37.5°	11897.0	11870.4	11757.3	11504.6	10875.1	10110.3	8806.9	8223.9	8853.5	10365.2	10030.5
40°	13211.5	13003.1	12615.2	12424.6	12143.0	11305.1	9651.5	8966.5	9673.6	11189.9	10553.7
42.5°	14814.1	14475.0	13752.4	13490.8	13450.9	12247.2	10227.8	9686.9	10500.5	12007.8	11067.9
45°	16075.4	15756.2	15133.4	14803.1	14949.4	13100.6	10806.4	10456.1	11351.7	12865.7	11597.7
47.5°	17421.0	16920.0	16095.4	16195.1	16514.4	13907.5	11396.0	11283.0	12284.9	13825.5	12256.1
50°	17469.7	17086.3	16724.9	17321.2	17817.8	14650.1	12134.2	12149.7	13426.5	15033.6	13131.7
52.5°	16456.7	16374.7	16948.8	17886.5	18602.5	15237.5	12974.3	13045.2	14887.3	16421.3	14093.7
55°	16102.0	16008.9	16671.7	17689.2	18708.9	15723.0	13885.4	14013.9	16654.0	17884.3	15031.4
57.5°	16966.6	16760.4	16804.7	17596.1	18449.5	16255.0	14878.4	15137.8	18573.7	19163.3	15634.3
60°	19382.8	18941.6	18103.7	18083.8	18589.2	17053.0	16026.7	16343.7	20568.7	19775.1	15399.4
62.5°	22772.1	22330.9	20761.5	19739.6	19664.3	18369.7	17436.5	17520.7	21721.4	18946.1	13965.2
65°	26440.7	26046.1	24292.7	22849.7	22153.6	20550.9	19074.6	18046.1	21344.5	16665.1	11455.9
67.5°	30894.0	30470.6	28963.3	27631.1	26961.6	24071.1	20225.1	17542.9	18952.7	12910.0	8235.0
70°	34008.5	33576.2	32982.2	34061.7	35699.8	29149.5	20373.6	15496.9	14155.8	8580.8	4956.5
72.5°	29945.3	29743.6	30827.5	35374.0	42196.9	32230.7	18416.3	11283.0	8221.7	4555.3	2868.4
73°	27436.0	27391.7	29240.4	34454.0	42243.5	31756.3	17558.4	10487.2	7051.3	4029.9	2622.3
75°	12389.1	12746.0	16798.1	26316.6	36701.8	26168.0	12358.1	6016.1	3983.4	2784.2	1979.5
77.5°	2977.0	3101.2	5255.8	12497.7	23177.7	15594.4	5599.4	2974.8	2547.0	1966.2	1445.3
80°	1267.9	1310.1	2023.8	4617.4	10912.8	6279.9	2580.2	1992.8	1762.3	1372.1	1013.0
82.5°	704.9	749.2	1148.2	2094.8	4404.6	2141.3	1573.9	1387.6	1159.3	826.8	658.4
85°	399.0	423.4	671.7	1170.4	1866.5	860.1	942.1	922.1	653.9	425.6	323.6
87.5°	188.4	203.9	323.6	543.1	731.5	336.9	478.8	527.6	410.1	259.4	168.5
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°	6967.1	6967.1	6967.1	6967.1	6967.1	6967.1	6967.1	6967.1	6967.1	6967.1
2.5°	6962.6	7002.5	7049.1	7073.5	7095.6	7122.2	7148.8	7148.8	7153.3	7155.5
5°	6913.9	6995.9	7069.0	7100.1	7106.7	7106.7	7100.1	7064.6	7033.6	7046.9
7.5°	6811.9	6931.6	6993.7	6982.6	6898.3	6800.8	6718.8	6619.0	6568.1	6559.2
10°	6665.6	6803.0	6814.1	6703.3	6494.9	6286.5	6113.6	5945.2	5865.4	5845.4
12.5°	6503.8	6630.1	6559.2	6330.9	5996.2	5692.5	5473.0	5302.3	5227.0	5207.0
15°	6373.0	6459.4	6279.9	5920.8	5499.6	5178.2	4996.4	4870.1	4816.9	4801.4
17.5°	6304.3	6322.0	5993.9	5508.5	5060.7	4792.5	4679.4	4619.6	4599.6	4588.6
20°	6337.5	6213.4	5721.3	5125.0	4701.6	4513.2	4486.6	4471.1	4466.6	4460.0
22.5°	6503.8	6180.1	5470.8	4761.5	4386.8	4304.8	4327.0	4324.8	4320.3	4315.9
25°	6800.8	6209.0	5227.0	4415.6	4123.0	4105.3	4145.2	4145.2	4127.5	4127.5
27.5°	7193.2	6268.8	4954.3	4087.6	3883.6	3885.9	3916.9	3908.0	3888.1	3874.8
30°	7672.0	6306.5	4635.1	3792.8	3659.8	3650.9	3659.8	3622.1	3562.2	3557.8
32.5°	8161.9	6259.9	4264.9	3531.2	3422.6	3402.6	3396.0	3342.8	3274.1	3254.1
35°	8605.2	6089.3	3888.1	3322.8	3196.5	3152.1	3183.2	3165.4	3103.4	3087.9
37.5°	8928.8	5772.3	3548.9	3138.8	3034.7	3023.6	3043.5	3050.2	2977.0	2961.5
40°	9146.1	5342.2	3258.5	2983.7	3003.6	2961.5	2895.0	2848.4	2826.3	2819.6
42.5°	9321.2	4894.5	3014.7	2910.5	3010.3	2888.3	2744.3	2668.9	2708.8	2726.5
45°	9522.9	4457.8	2810.8	2819.6	2977.0	2804.1	2640.1	2566.9	2582.4	2586.9
47.5°	9800.0	3925.8	2591.3	2673.3	2866.2	2746.5	2575.8	2471.6	2398.5	2365.2
50°	10183.5	3296.2	2363.0	2509.3	2757.6	2704.4	2476.0	2365.2	2230.0	2199.0
52.5°	10449.5	2708.8	2174.6	2371.9	2660.0	2620.1	2396.2	2252.2	2110.3	2083.7
55°	10305.4	2249.9	2010.5	2218.9	2531.5	2515.9	2329.7	2136.9	2026.1	2003.9
57.5°	9585.0	1959.6	1884.2	2074.8	2374.1	2427.3	2241.1	2039.4	1959.6	1944.0
60°	8210.6	1777.8	1804.4	1977.3	2245.5	2338.6	2152.4	1986.2	1933.0	1921.9
62.5°	6370.8	1655.9	1744.5	1906.4	2145.8	2276.5	2103.6	1979.5	1959.6	1946.3
65°	4564.2	1558.3	1680.3	1835.4	2054.9	2218.9	2085.9	1970.6	1975.1	1964.0
67.5°	3101.2	1471.9	1602.7	1755.6	1966.2	2167.9	2061.5	1939.6	1995.0	1981.7
70°	2170.1	1387.6	1511.8	1653.7	1855.4	2097.0	2017.2	1893.1	1888.6	1835.4
72.5°	1693.6	1276.8	1387.6	1511.8	1713.5	1997.2	1928.5	1788.9	1715.7	1660.3
73°	1616.0	1250.2	1356.6	1480.7	1682.5	1972.9	1904.1	1760.1	1678.0	1627.1
75°	1336.7	1134.9	1232.5	1343.3	1549.5	1857.6	1784.4	1629.3	1525.1	1494.1
77.5°	1050.7	970.9	1064.0	1163.8	1365.5	1689.1	1607.1	1458.6	1400.9	1374.3
80°	778.1	804.7	886.7	975.3	1183.7	1509.6	1436.4	1287.9	1545.0	1480.7
82.5°	547.5	609.6	685.0	764.8	993.1	1334.4	1245.8	1092.8	1130.5	939.9
85°	323.6	399.0	469.9	538.7	716.0	1106.1	1028.5	871.2	713.8	680.5
87.5°	188.4	221.7	241.6	312.6	492.1	833.5	724.9	645.1	370.2	250.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)