

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: P299212

Luminaire Tested: **GLNA-AF-10-LED-E1-T3-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299212
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)
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-T3-800
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47444 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B4 - U0 - G5

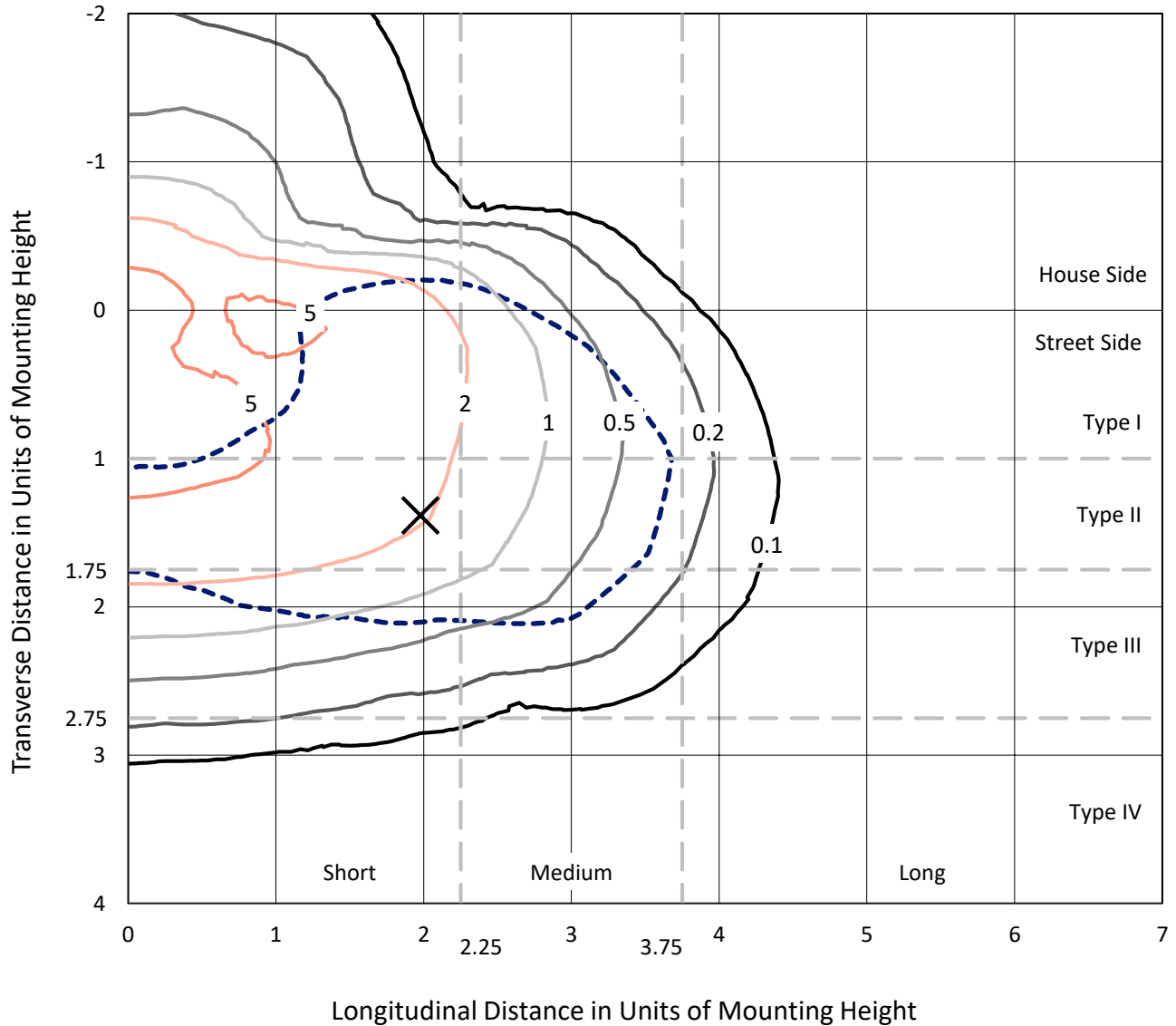
Input Watts (W): 419
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299212
 CATALOG NUMBER: GLNA-AF-10-LED-E1-T3-800

Iso-Footcandle Lines of Horizontal Illumination

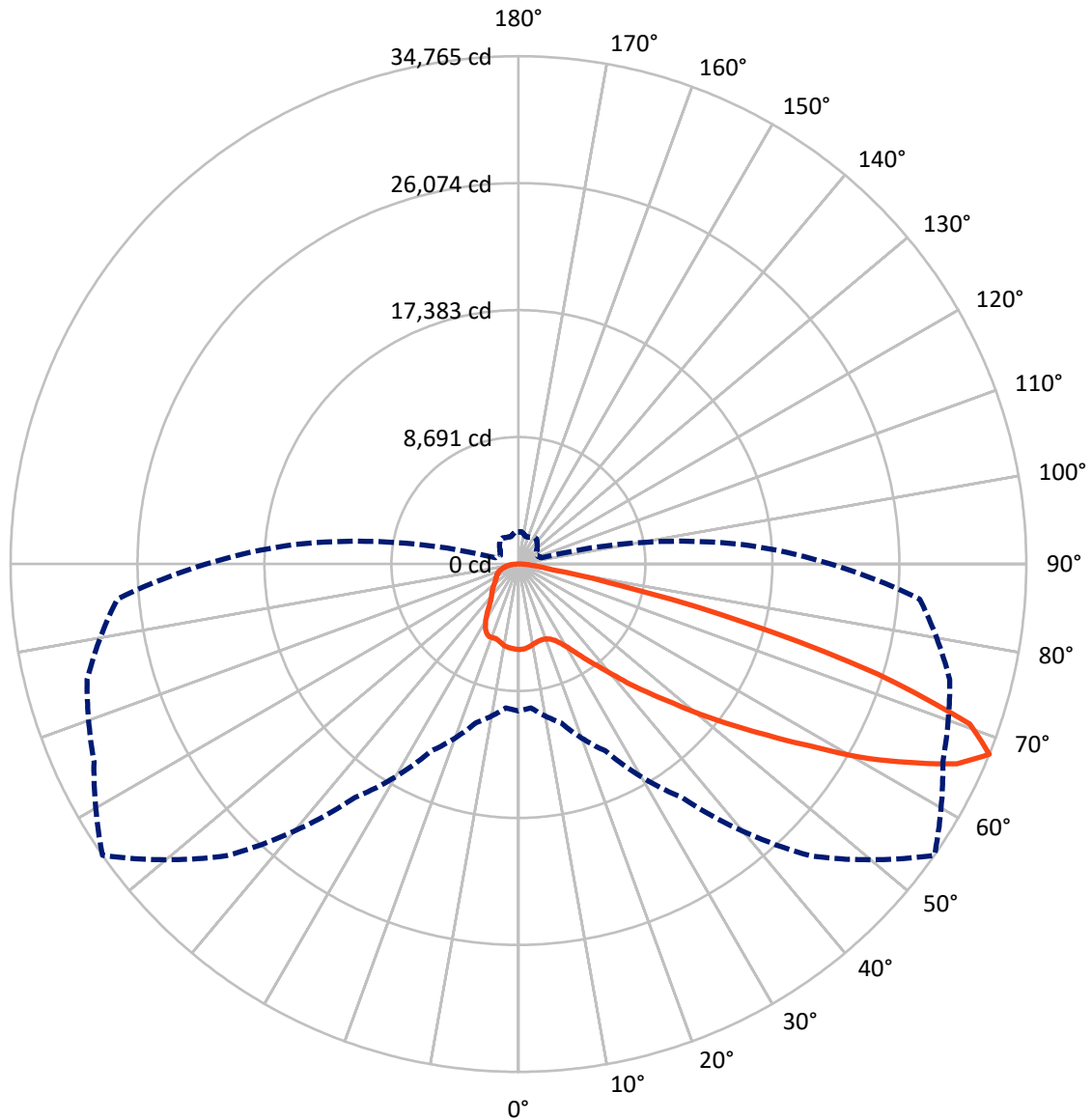
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.7 fc
 Type III - Short - Full Cutoff

REPORT NUMBER: P299212
CATALOG NUMBER: GLNA-AF-10-LED-E1-T3-800

Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P299212

CATALOG NUMBER: GLNA-AF-10-LED-E1-T3-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10248.9	0.0	10248.9
	% Fixture	21.6	0.0	21.6
Street Side	Lumens	37195.1	0.0	37195.1
	% Fixture	78.4	0.0	78.4
Total	Lumens	47444.0	0.0	47444.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	546.1	1.2
10°-20°	1546.5	3.3
20°-30°	2590.7	5.5
30°-40°	4260.2	9.0
40°-50°	7171.2	15.1
50°-60°	11286.9	23.8
60°-70°	13469.7	28.4
70°-80°	5784.1	12.2
80°-90°	788.6	1.7
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°	47444.0	100.0
0°-180°	47444.0	100.0



REPORT NUMBER: P299212

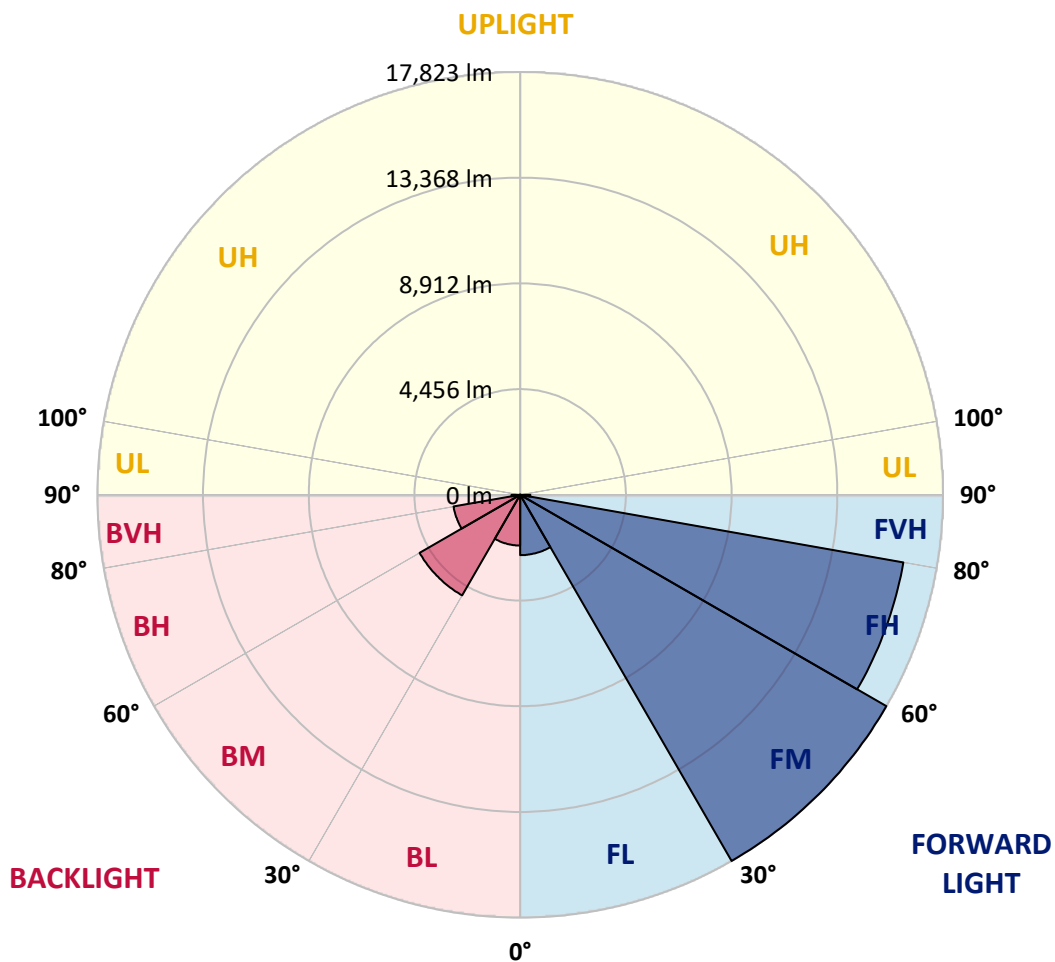
CATALOG NUMBER: GLNA-AF-10-LED-E1-T3-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2543.1	5.4			
FM	(30°-60°)	17823.5	37.6			
FH	(60°-80°)	16401.6	34.6			G5
FVH	(80°-90°)	426.9	0.9			G3/500
BL	(0°-30°)	2140.2	4.5	B3/2500		
BM	(30°-60°)	4894.8	10.3	B3/5000		
BH	(60°-80°)	2852.2	6.0	B4/5000		G4/5000
BVH	(80°-90°)	361.7	0.8			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Short





REPORT NUMBER: P299212

CATALOG NUMBER: GLNA-AF-10-LED-E1-T3-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5850.4	5850.4	5850.4	5850.4	5850.4	5850.4	5850.4	5850.4	5850.4	5850.4	5850.4
2.5°	5799.9	5802.2	5806.8	5825.2	5841.2	5836.6	5838.9	5829.7	5827.4	5813.7	5827.4
5°	5726.6	5733.5	5735.8	5765.6	5783.9	5788.5	5781.6	5770.2	5756.4	5742.7	5749.5
7.5°	5559.3	5577.7	5580.0	5621.2	5651.0	5689.9	5692.2	5694.5	5687.7	5678.5	5692.2
10°	5453.9	5458.5	5456.2	5486.0	5508.9	5552.5	5577.7	5621.2	5639.5	5644.1	5653.3
12.5°	5447.0	5442.5	5435.6	5435.6	5428.7	5447.0	5492.9	5554.7	5598.3	5612.0	5623.5
15°	5520.4	5518.1	5495.2	5460.8	5417.3	5403.5	5442.5	5511.2	5568.5	5598.3	5609.7
17.5°	5685.4	5671.6	5635.0	5557.0	5463.1	5426.4	5431.0	5488.3	5554.7	5593.7	5605.2
20°	5987.9	5987.9	5909.9	5763.3	5596.0	5508.9	5467.7	5502.0	5566.2	5618.9	5635.0
22.5°	6510.3	6514.9	6384.3	6143.7	5861.8	5676.2	5573.1	5566.2	5641.8	5701.4	5719.7
25°	7250.5	7232.2	7048.8	6705.1	6276.6	5969.5	5790.8	5749.5	5813.7	5880.1	5903.1
27.5°	8112.1	8045.7	7828.0	7413.2	6858.6	6409.5	6134.5	6068.1	6129.9	6205.6	6228.5
30°	8964.6	8895.8	8636.9	8183.2	7566.7	6998.4	6604.3	6496.6	6583.7	6691.4	6705.1
32.5°	9817.1	9817.1	9528.3	8999.0	8327.5	7701.9	7229.9	7101.6	7245.9	7376.5	7406.3
35°	10836.8	10841.4	10561.8	9924.8	9202.9	8540.7	8020.5	7926.5	8144.2	8235.9	8306.9
37.5°	12090.3	12115.5	11755.7	10985.8	10195.2	9498.5	8879.8	8751.5	8969.2	9219.0	9448.1
40°	13444.6	13476.7	13080.2	12131.5	11340.9	10612.2	9943.1	9711.6	10073.7	10550.4	10846.0
42.5°	14737.0	14902.0	14519.3	13543.1	12693.0	11939.0	11260.7	10923.9	11377.6	12097.2	12353.8
45°	16604.7	16723.8	16057.0	15172.4	14372.7	13529.4	12631.1	12275.9	12910.7	13818.1	13870.8
47.5°	17849.0	17759.6	17420.5	16870.5	16364.0	15575.8	14223.7	13834.2	14677.5	15745.3	15449.7
50°	18511.2	18538.7	18492.9	18525.0	18543.3	18048.3	16176.1	15642.2	16648.2	17938.4	17257.8
52.5°	19130.0	18946.6	19097.9	19849.5	20757.0	20573.6	18300.4	17743.6	18761.0	20372.0	19168.9
55°	19116.2	18836.6	19329.3	20656.1	22624.6	22835.4	20685.9	20044.3	20995.3	22982.1	21194.7
57.5°	18440.2	18454.0	19212.5	20949.5	23926.2	24962.0	23454.1	22491.7	23364.8	25626.5	23044.0
60°	17509.8	17635.9	18728.9	20901.3	24968.9	26705.9	26850.2	25129.3	25686.1	28030.4	24574.7
62.5°	16008.9	16141.8	17649.6	20401.8	24810.7	28385.6	29920.9	28122.1	28112.9	29487.8	25023.9
65°	13641.7	13602.7	15186.2	18534.2	23483.9	29627.6	32971.0	30709.2	29941.6	29510.7	24121.0
67.5°	10060.0	9885.8	11244.7	14116.0	19519.5	28236.6	34765.3	32056.7	30564.9	27569.8	21361.9
70°	5220.2	5046.0	6146.0	8242.8	12837.3	22038.0	32778.5	31360.0	29187.6	23110.4	16735.3
72.5°	2232.0	2202.2	2649.0	3616.1	6210.1	12711.3	25702.2	27143.6	25044.5	17218.8	11505.9
75°	1501.0	1491.8	1659.1	1970.7	2793.4	5158.3	16084.5	19267.5	18323.3	10676.4	6471.4
77.5°	1177.9	1166.4	1264.9	1416.2	1810.3	2034.9	7138.2	10344.1	9574.1	4647.3	2832.4
80°	921.2	912.0	973.9	1056.4	1301.6	1283.3	2348.9	4115.6	3185.3	1780.5	1377.2
82.5°	726.4	726.4	776.8	779.1	923.5	875.4	1226.0	1812.6	1590.3	1038.1	843.3
85°	664.6	664.6	717.3	582.1	602.7	552.3	760.8	1074.7	1008.3	426.2	366.7
87.5°	334.6	325.4	602.7	515.6	327.7	293.3	371.2	520.2	559.1	236.0	183.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299212

CATALOG NUMBER: GLNA-AF-10-LED-E1-T3-800

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5850.4	5850.4	5850.4	5850.4	5850.4	5850.4	5850.4	5850.4	5850.4	5850.4
2.5°	5822.9	5820.6	5825.2	5827.4	5845.8	5871.0	5882.4	5898.5	5907.6	5903.1
5°	5754.1	5758.7	5777.0	5790.8	5822.9	5864.1	5887.0	5905.4	5921.4	5914.5
7.5°	5696.8	5708.3	5735.8	5747.2	5765.6	5777.0	5774.7	5781.6	5795.4	5779.3
10°	5664.7	5678.5	5699.1	5683.1	5639.5	5577.7	5520.4	5490.6	5499.8	5488.3
12.5°	5632.7	5651.0	5635.0	5559.3	5437.9	5357.7	5314.1	5318.7	5339.3	5343.9
15°	5614.3	5621.2	5552.5	5410.4	5286.6	5275.2	5298.1	5293.5	5295.8	5295.8
17.5°	5614.3	5596.0	5467.7	5325.6	5272.9	5252.3	5181.2	5091.9	5052.9	5039.1
20°	5644.1	5596.0	5440.2	5346.2	5231.6	5055.2	4867.3	4702.3	4629.0	4608.3
22.5°	5733.5	5651.0	5518.1	5355.4	5030.0	4734.4	4436.5	4239.4	4106.5	4083.6
25°	5914.5	5822.9	5671.6	5233.9	4709.2	4287.5	3948.4	3728.4	3595.5	3577.1
27.5°	6230.8	6171.2	5754.1	4965.8	4282.9	3831.5	3517.5	3348.0	3249.4	3242.6
30°	6707.4	6677.6	5712.9	4569.4	3758.2	3389.2	3238.0	3139.4	3066.1	3063.8
32.5°	7468.2	7227.6	5577.7	4085.9	3279.2	3075.3	3013.4	2953.8	2896.5	2896.5
35°	8446.7	7672.2	5321.0	3568.0	2988.2	2901.1	2823.2	2729.3	2653.6	2649.0
37.5°	9597.1	7947.1	4860.4	3150.9	2850.7	2784.2	2669.7	2529.9	2397.0	2374.1
40°	10758.9	8029.6	4211.9	2894.2	2763.6	2667.4	2527.6	2362.6	2234.3	2227.4
42.5°	11824.5	7871.5	3524.4	2717.8	2676.5	2548.2	2401.6	2254.9	2154.1	2151.8
45°	12718.2	7461.3	2946.9	2550.5	2584.9	2440.5	2309.9	2190.7	2112.8	2096.8
47.5°	13559.2	6881.6	2541.3	2374.1	2493.2	2380.9	2270.9	2158.7	2083.0	2071.6
50°	14535.4	6256.0	2257.2	2202.2	2413.0	2360.3	2303.0	2186.2	2060.1	2046.4
52.5°	15717.8	5715.2	2034.9	2050.9	2351.1	2387.8	2385.5	2264.1	2044.1	2025.7
55°	17037.8	5114.8	1867.6	1927.2	2325.9	2438.2	2406.1	2337.4	2057.8	2030.3
57.5°	18337.1	4413.5	1750.8	1833.3	2289.3	2433.6	2307.6	2209.1	2089.9	2050.9
60°	19311.0	3471.7	1661.4	1750.8	2209.1	2358.0	2199.9	2069.3	2083.0	2053.2
62.5°	19375.2	2683.4	1553.7	1679.7	2087.6	2282.4	2128.9	2007.4	2112.8	2085.3
65°	18236.3	2028.0	1450.6	1594.9	1957.0	2234.3	2060.1	1973.0	2174.7	2144.9
67.5°	15353.5	1631.6	1363.5	1507.8	1826.4	2133.4	1998.2	1941.0	2229.7	2177.0
70°	11084.3	1391.0	1278.7	1402.4	1709.5	2018.9	1943.2	1883.7	2080.7	1998.2
72.5°	6824.3	1205.4	1182.4	1262.7	1620.1	1899.7	1860.7	1776.0	1874.5	1808.0
75°	3407.6	1045.0	1074.7	1125.2	1494.1	1764.5	1723.3	1638.5	1652.2	1638.5
77.5°	1631.6	893.7	948.7	987.7	1331.4	1611.0	1567.4	1480.3	1464.3	1466.6
80°	1033.5	747.0	799.8	827.3	1189.3	1432.2	1388.7	1301.6	1484.9	1377.2
82.5°	646.2	607.3	621.0	671.4	1035.8	1246.6	1189.3	1111.4	1338.3	1058.7
85°	357.5	423.9	442.3	485.8	797.5	1042.7	985.4	886.8	795.2	781.4
87.5°	213.1	252.1	258.9	291.0	536.2	753.9	666.8	632.5	524.8	522.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)