

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: P299864

Luminaire Tested: **GLNA-AF-09-LED-E1-SL3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299864
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-09-LED-E1-SL3-7030
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 51299.5 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G5

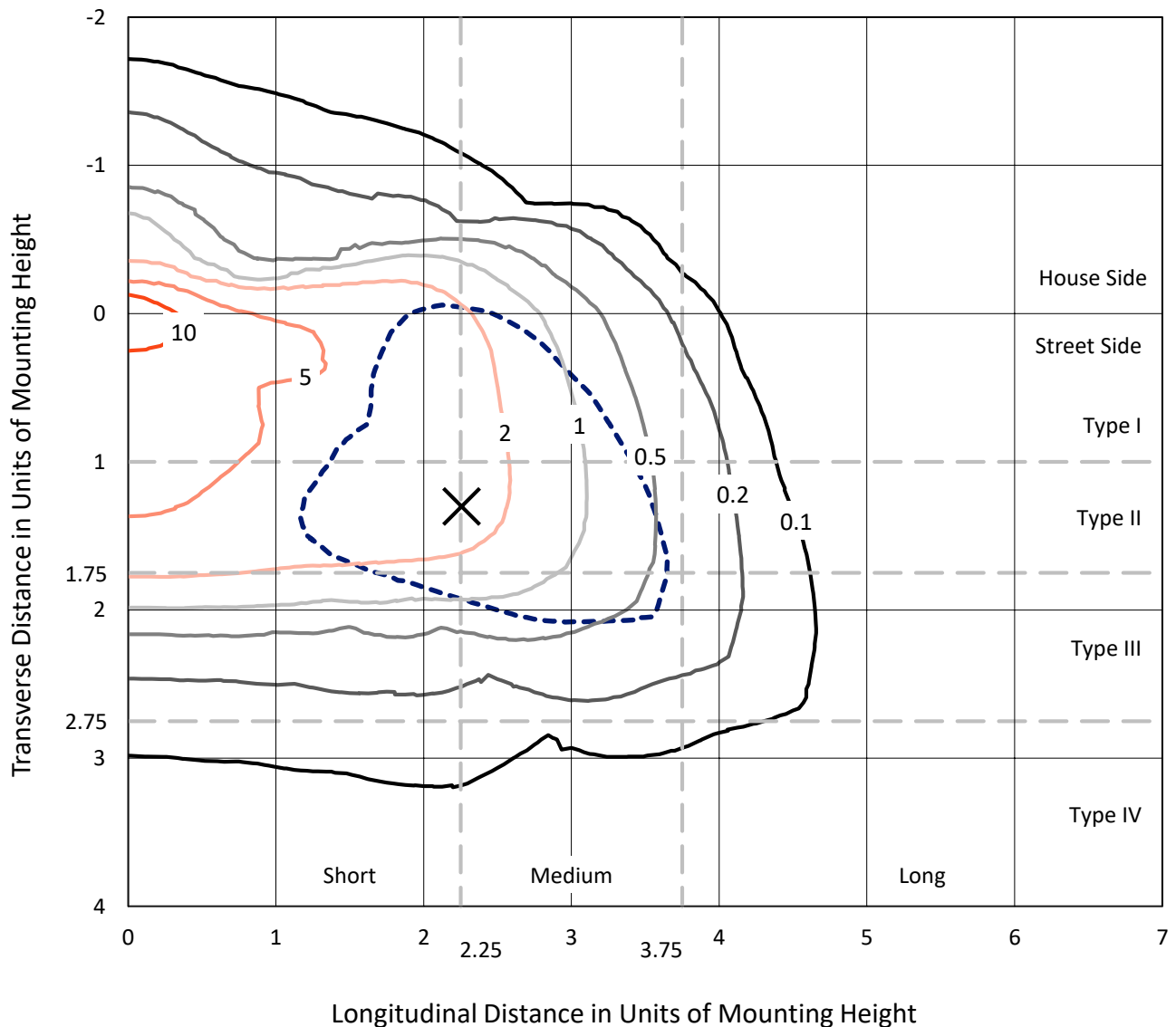
Input Watts (W): 501
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299864
 CATALOG NUMBER: GLNA-AF-09-LED-E1-SL3-7030

Iso-Footcandle Lines of Horizontal Illumination

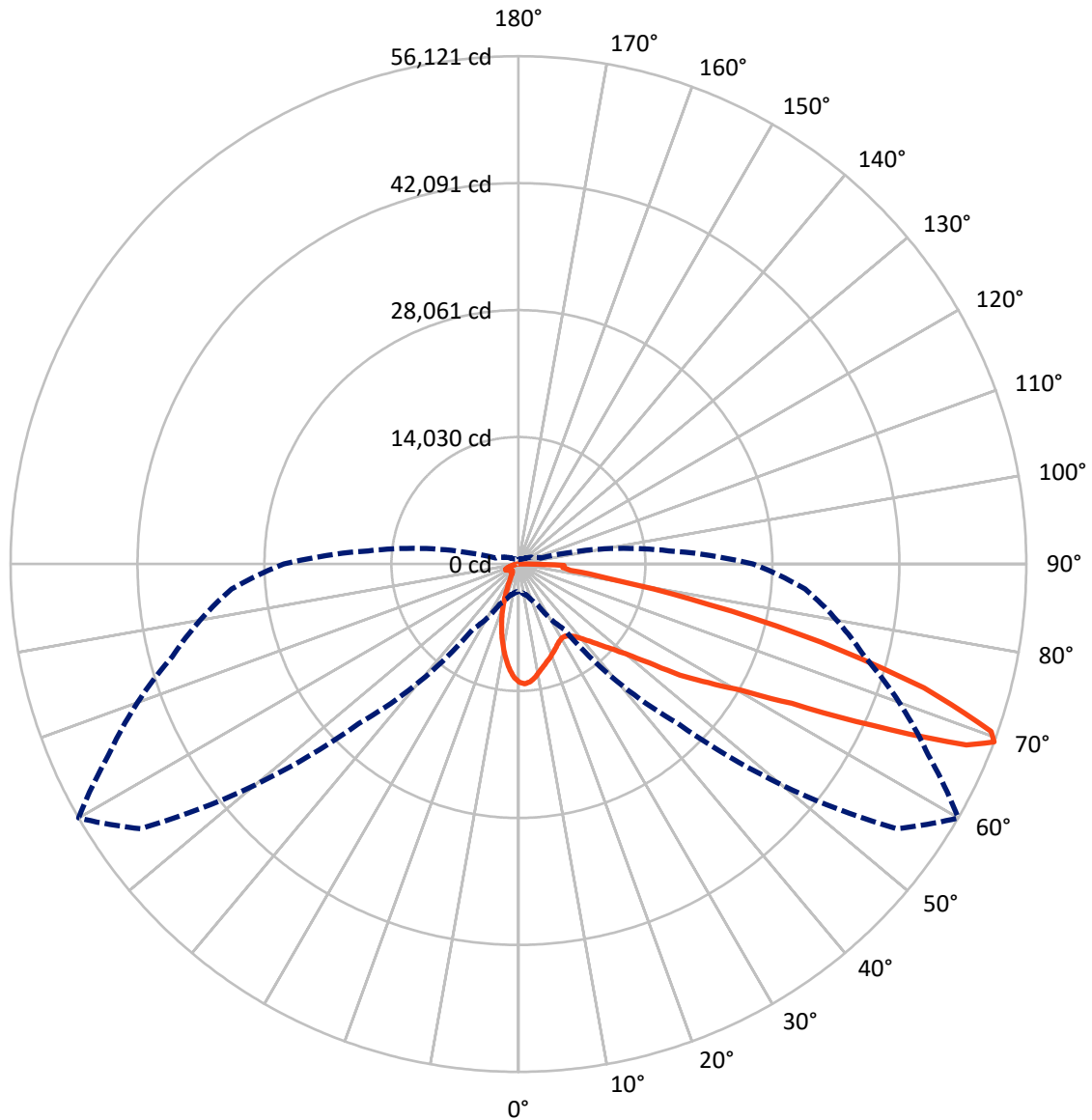
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 14.5 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P299864
CATALOG NUMBER: GLNA-AF-09-LED-E1-SL3-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P299864

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL3-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7298.3	0.0	7298.3
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	44001.2	0.0	44001.2
	% Fixture	85.8	0.0	85.8
Total	Lumens	51299.5	0.0	51299.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1105.3	2.2
10°-20°	2354.9	4.6
20°-30°	3000.5	5.8
30°-40°	4124.9	8.0
40°-50°	6693.1	13.0
50°-60°	10734.1	20.9
60°-70°	14286.2	27.8
70°-80°	7713.5	15.0
80°-90°	1287.0	2.5
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°	51299.5	100.0
0°-180°	51299.5	100.0

Coefficient of Utilization



REPORT NUMBER: P299864

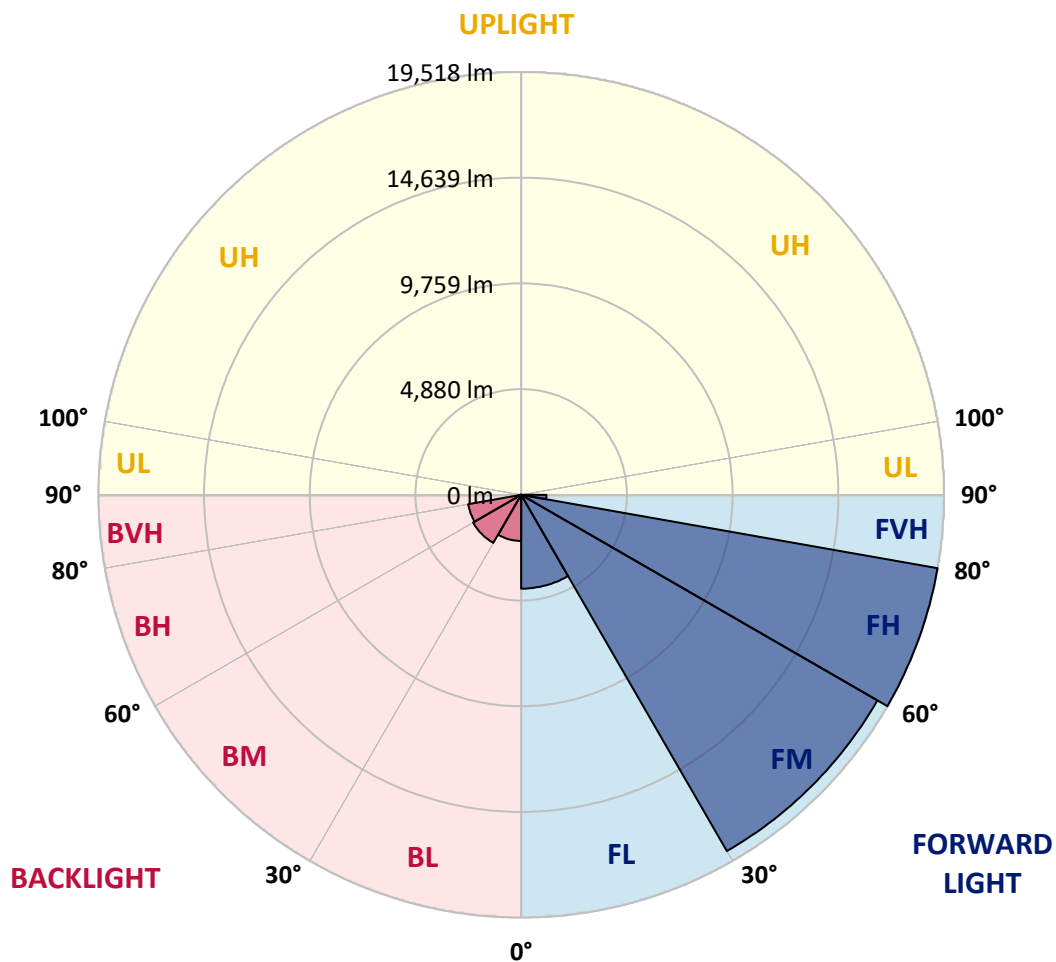
CATALOG NUMBER: GLNA-AF-09-LED-E1-SL3-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4331.5	8.4			
FM	(30°-60°)	18988.1	37.0			
FH	(60°-80°)	19518.5	38.0			G5
FVH	(80°-90°)	1163.1	2.3			G5
BL	(0°-30°)	2129.1	4.2	B3/2500		
BM	(30°-60°)	2564.0	5.0	B3/5000		
BH	(60°-80°)	2481.2	4.8	B3/2500		G3/2500
BVH	(80°-90°)	123.9	0.2			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Medium





REPORT NUMBER: P299864

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL3-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	13071.9	13071.9	13071.9	13071.9	13071.9	13071.9	13071.9	13071.9	13071.9	13071.9	13071.9
2.5°	13339.5	13369.3	13356.9	13349.4	13371.7	13337.0	13265.2	13242.9	13208.2	13126.4	12987.6
5°	12838.9	12928.2	12923.2	12990.1	13101.6	13131.4	13099.1	13104.1	13039.7	12938.1	12707.6
7.5°	11974.1	12011.3	12031.1	12177.3	12380.5	12544.1	12682.8	12727.4	12697.7	12611.0	12313.6
10°	11082.0	11111.7	11158.8	11329.8	11587.5	11813.0	12075.7	12226.9	12291.3	12276.4	11944.4
12.5°	10316.3	10346.0	10407.9	10601.2	10908.5	11186.1	11567.7	11756.0	11909.7	12001.4	11644.5
15°	9629.8	9694.3	9753.7	9976.8	10321.2	10685.5	11116.7	11354.6	11592.5	11798.2	11379.4
17.5°	9094.6	9159.0	9193.7	9396.9	9763.6	10209.7	10715.2	10995.3	11292.6	11629.6	11116.7
20°	8784.8	8814.5	8799.7	8913.7	9243.3	9716.6	10316.3	10640.9	11000.2	11471.0	10854.0
22.5°	8698.1	8700.6	8646.0	8633.6	8846.8	9245.7	9890.0	10284.0	10725.1	11367.0	10628.5
25°	8908.7	8901.3	8752.6	8631.2	8653.5	8886.4	9478.7	9937.1	10494.7	11344.7	10455.0
27.5°	9377.1	9399.4	9178.8	8950.8	8725.3	8717.9	9166.4	9649.7	10306.3	11446.3	10380.7
30°	10033.8	10070.9	9835.5	9545.6	9121.8	8772.4	9045.0	9478.7	10189.9	11656.9	10368.3
32.5°	10752.4	10792.1	10613.6	10308.8	9753.7	9109.4	9129.3	9493.5	10184.9	11951.8	10452.6
35°	11518.1	11562.7	11471.0	11213.3	10596.3	9731.4	9451.4	9733.9	10346.0	12402.8	10678.1
37.5°	12373.1	12442.5	12467.2	12221.9	11562.7	10551.7	9979.2	10189.9	10710.3	13029.8	11091.9
40°	13604.7	13701.3	13693.9	13342.0	12670.4	11659.4	10794.5	10849.0	11277.8	13867.4	11753.5
42.5°	15963.8	15983.6	15366.6	14600.9	13889.7	12824.1	11756.0	11711.4	12060.8	14928.0	12727.4
45°	18964.8	18883.0	17510.1	16030.7	15163.4	14162.2	13007.5	12789.4	13054.5	16221.5	13946.7
47.5°	21455.2	21266.9	19532.3	17490.3	16511.5	15616.9	14477.0	14095.3	14241.5	17688.6	15522.7
50°	22320.1	22178.8	20741.6	18704.6	17787.7	17391.2	16286.0	15745.7	15785.4	19438.1	17368.9
52.5°	22134.2	22114.4	21155.4	19505.0	18982.1	19254.7	18848.3	18117.3	17730.7	21380.9	19361.3
55°	21695.6	21737.7	21390.8	20436.8	20347.5	21053.8	22196.2	21656.0	20454.1	23341.1	21420.6
57.5°	20171.6	20280.6	21043.9	21608.9	22545.6	23596.3	24892.3	24738.7	23385.7	25459.8	23868.9
60°	16251.3	16504.0	18550.9	21380.9	24808.1	28094.0	28673.9	28317.1	26408.9	28089.1	27102.8
62.5°	11386.8	11649.5	14082.9	18511.3	24436.4	33174.1	35434.1	33895.2	30750.5	31962.3	31288.3
65°	6096.1	6222.5	8081.0	12843.9	20630.0	34222.3	45314.2	42972.4	37624.7	36737.6	34869.1
67.5°	3362.8	3432.1	4143.4	6485.1	13213.1	30136.0	51608.6	53377.9	46216.3	39917.0	34217.4
69°	3040.6	3105.0	3570.9	4911.6	8841.8	24917.1	50994.0	56121.2	49982.9	39602.2	31808.7
70°	2973.7	3033.2	3452.0	4527.5	7156.7	20538.4	48934.7	55419.9	50880.0	38474.7	29707.3
72.5°	2676.3	2740.8	3147.2	4066.5	6115.9	10239.4	38762.2	46858.1	46193.9	33360.0	22533.2
75°	2495.4	2554.9	3243.8	3982.3	5855.7	6480.2	25554.0	34534.6	33957.2	23336.1	12150.0
77.5°	1068.1	1063.1	1504.2	3370.2	5942.4	6274.5	13731.1	21574.2	19683.4	9974.3	3489.1
80°	713.7	701.3	713.7	991.2	5449.3	6309.2	7193.9	10950.6	8271.8	2542.5	1719.8
82.5°	614.6	604.7	627.0	604.7	1915.6	7201.3	6115.9	5823.5	3932.7	1444.7	852.5
85°	413.8	396.5	540.2	542.7	904.5	6398.4	6889.1	4919.0	3181.9	857.4	421.3
87.5°	198.2	193.3	314.7	384.1	530.3	2599.5	7729.1	5040.4	3209.1	438.6	200.7
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: P299864

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL3-7030

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	13071.9	13071.9	13071.9	13071.9	13071.9	13071.9	13071.9	13071.9	13071.9	13071.9	13071.9
2.5°	12945.5	12843.9	12744.8	12625.8	12501.9	12363.2	12293.8	12224.4	12207.0	12187.2	12117.8
5°	12588.7	12444.9	12197.1	11924.5	11637.1	11357.1	11143.9	11010.1	10908.5	10856.5	10764.8
7.5°	12127.7	11917.1	11483.4	11012.6	10529.4	10088.3	9706.7	9466.3	9238.3	9131.7	9010.3
10°	11689.1	11374.4	10700.4	10006.5	9312.6	8646.0	8019.1	7575.5	7181.5	6960.9	6804.8
12.5°	11312.4	10881.3	9947.0	9007.8	8056.2	7107.1	6167.9	5429.5	4812.4	4487.8	4321.8
15°	10945.7	10425.3	9230.9	8038.9	6817.2	5526.1	4292.0	3454.4	2944.0	2740.8	2671.4
17.5°	10613.6	9947.0	8512.2	7062.5	5538.5	3977.3	2884.5	2423.6	2227.8	2160.9	2138.6
20°	10254.3	9463.8	7766.3	6041.6	4205.3	2780.4	2252.6	2049.4	1970.1	1950.3	1940.3
22.5°	9907.4	8988.0	7052.6	4948.7	3020.8	2146.0	1935.4	1851.1	1838.7	1856.1	1856.1
25°	9612.5	8561.8	6281.9	3806.3	2217.9	1806.5	1732.2	1712.4	1759.4	1823.9	1836.3
27.5°	9391.9	8212.4	5461.7	2810.1	1766.9	1571.1	1568.6	1600.8	1717.3	1841.2	1866.0
30°	9240.8	7880.3	4584.5	2027.1	1481.9	1382.8	1422.4	1491.8	1662.8	1838.7	1885.8
32.5°	9164.0	7635.0	3670.0	1568.6	1268.8	1214.3	1281.2	1365.4	1533.9	1697.5	1759.4
35°	9223.4	7454.1	2807.7	1308.4	1120.1	1078.0	1147.4	1229.1	1328.3	1397.6	1444.7
37.5°	9446.5	7382.2	2118.8	1172.1	1018.5	978.8	1033.4	1080.4	1120.1	1139.9	1162.2
40°	9927.2	7459.0	1697.5	1102.7	961.5	911.9	934.2	951.6	976.4	996.2	1006.1
42.5°	10635.9	7689.5	1521.5	1075.5	931.8	859.9	854.9	862.4	894.6	931.8	939.2
45°	11627.2	8095.9	1509.2	1092.8	916.9	817.8	795.5	805.4	854.9	911.9	921.8
47.5°	12893.5	8715.4	1608.3	1144.9	929.3	795.5	758.3	770.7	832.6	909.5	921.8
50°	14427.4	9580.3	1774.3	1221.7	983.8	800.4	745.9	753.3	817.8	902.0	914.4
52.5°	16238.9	10806.9	1955.2	1296.0	1040.8	832.6	755.8	738.5	797.9	872.3	887.2
55°	18253.6	12380.5	2141.1	1362.9	1070.5	872.3	775.6	718.6	760.8	822.7	835.1
57.5°	20726.7	14581.0	2463.2	1427.4	1090.4	899.5	795.5	698.8	713.7	758.3	768.2
60°	24074.6	17693.5	3030.7	1533.9	1135.0	909.5	793.0	681.5	666.6	691.4	696.3
62.5°	28086.6	21073.6	3504.0	1667.8	1209.3	916.9	778.1	669.1	627.0	627.0	631.9
65°	30468.0	21978.1	3241.3	1779.3	1271.3	909.5	760.8	656.7	597.2	570.0	572.4
67.5°	28448.4	19329.0	2777.9	1801.6	1268.8	874.8	733.5	634.4	567.5	525.4	522.9
69°	25918.3	16677.5	2569.8	1742.1	1209.3	830.2	698.8	609.6	545.2	500.6	498.1
70°	23878.8	15059.3	2433.5	1677.7	1144.9	797.9	671.6	587.3	527.8	485.7	480.7
72.5°	17361.5	9867.7	2079.1	1442.2	944.1	669.1	579.9	515.4	470.8	446.1	441.1
75°	8675.8	4705.9	1687.6	1169.7	723.6	535.3	475.8	431.2	408.9	403.9	401.4
77.5°	2849.8	2155.9	1206.8	872.3	537.7	418.8	384.1	351.9	346.9	361.8	356.8
80°	1566.1	1253.9	765.7	577.4	366.8	307.3	302.3	285.0	292.4	317.2	312.2
82.5°	797.9	651.7	473.3	346.9	247.8	220.5	240.4	230.5	240.4	262.7	260.2
85°	394.0	356.8	299.8	210.6	163.6	141.3	171.0	178.4	183.4	200.7	200.7
87.5°	228.0	210.6	158.6	99.1	81.8	74.3	99.1	96.6	114.0	123.9	121.4
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)