

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: P301255

Luminaire Tested: **GLNA-AF-10-LED-E1-T3R-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301255
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194839)
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-T3R-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38250.2 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G5

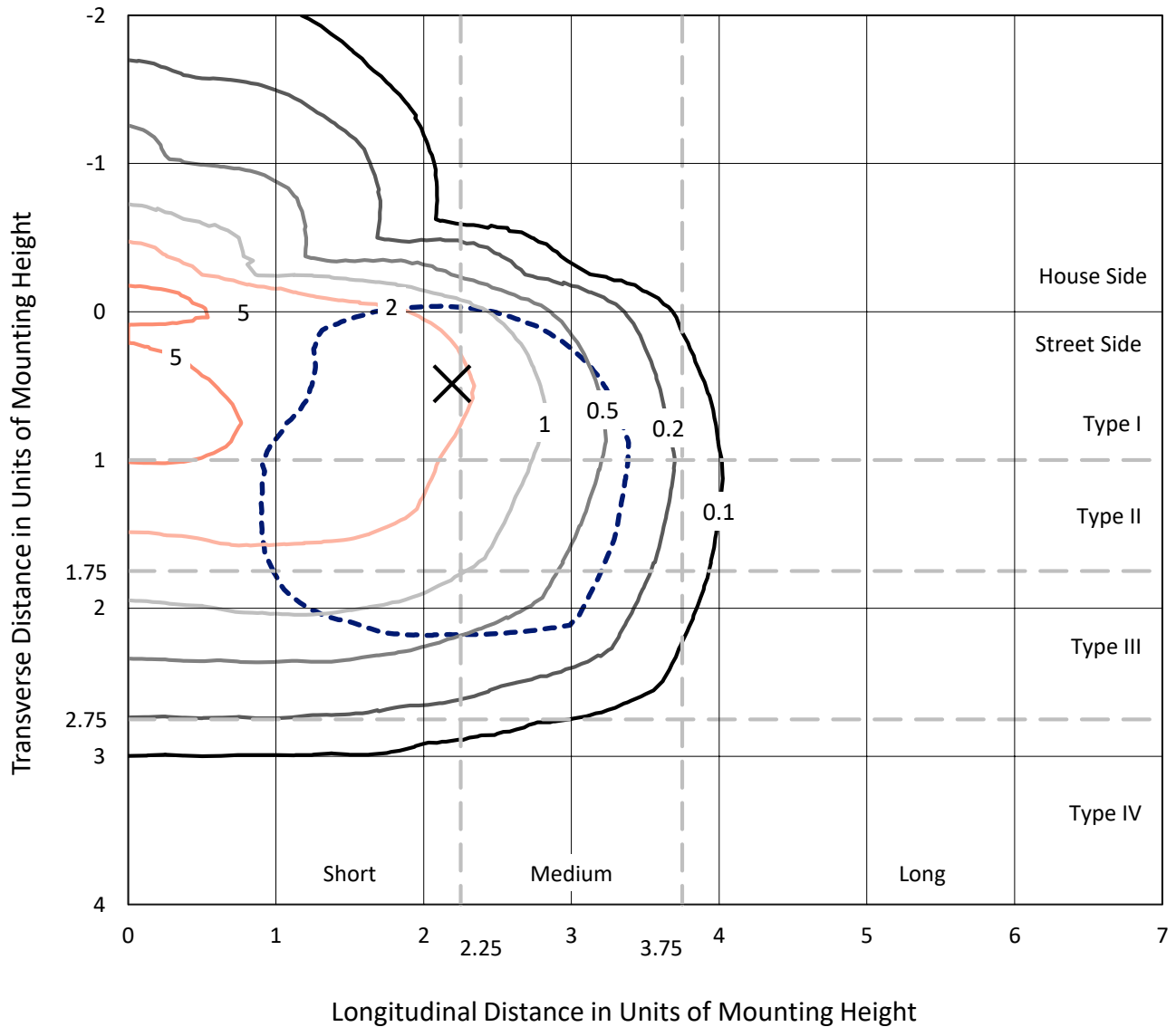
Input Watts (W): 323
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P301255
 CATALOG NUMBER: GLNA-AF-10-LED-E1-T3R-7030-600

Iso-Footcandle Lines of Horizontal Illumination

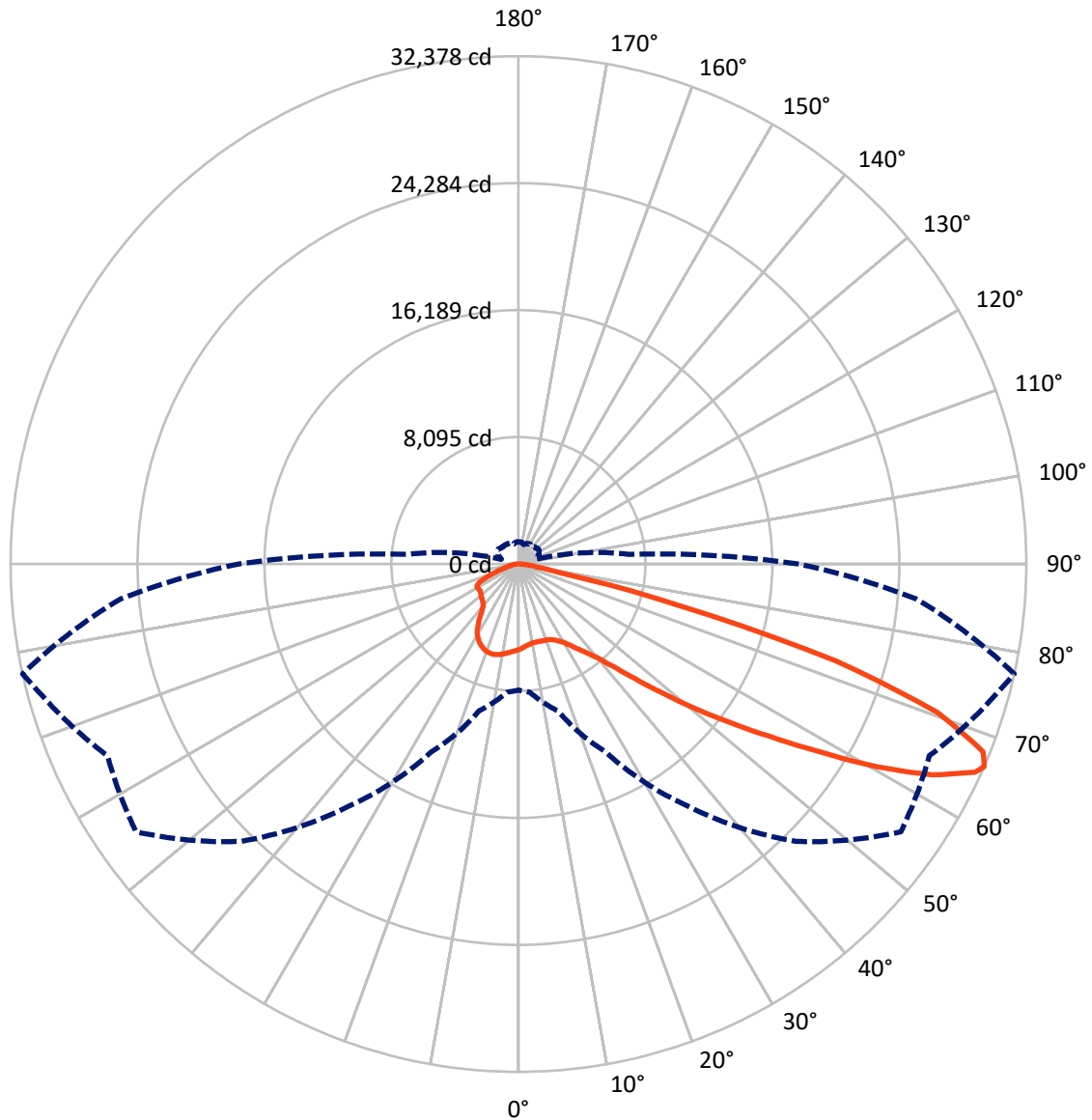
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.5 fc
 Type III - Short - Full Cutoff

REPORT NUMBER: P301255
CATALOG NUMBER: GLNA-AF-10-LED-E1-T3R-7030-600

Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P301255

CATALOG NUMBER: GLNA-AF-10-LED-E1-T3R-7030-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6534.8	0.0	6534.8
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	31715.4	0.0	31715.4
	% Fixture	82.9	0.0	82.9
Total	Lumens	38250.2	0.0	38250.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	487.0	1.3
10°-20°	1373.9	3.6
20°-30°	2344.7	6.1
30°-40°	3753.5	9.8
40°-50°	5798.8	15.2
50°-60°	8224.7	21.5
60°-70°	11002.4	28.8
70°-80°	4778.1	12.5
80°-90°	487.2	1.3
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°	38250.2	100.0
0°-180°	38250.2	100.0



REPORT NUMBER: P301255

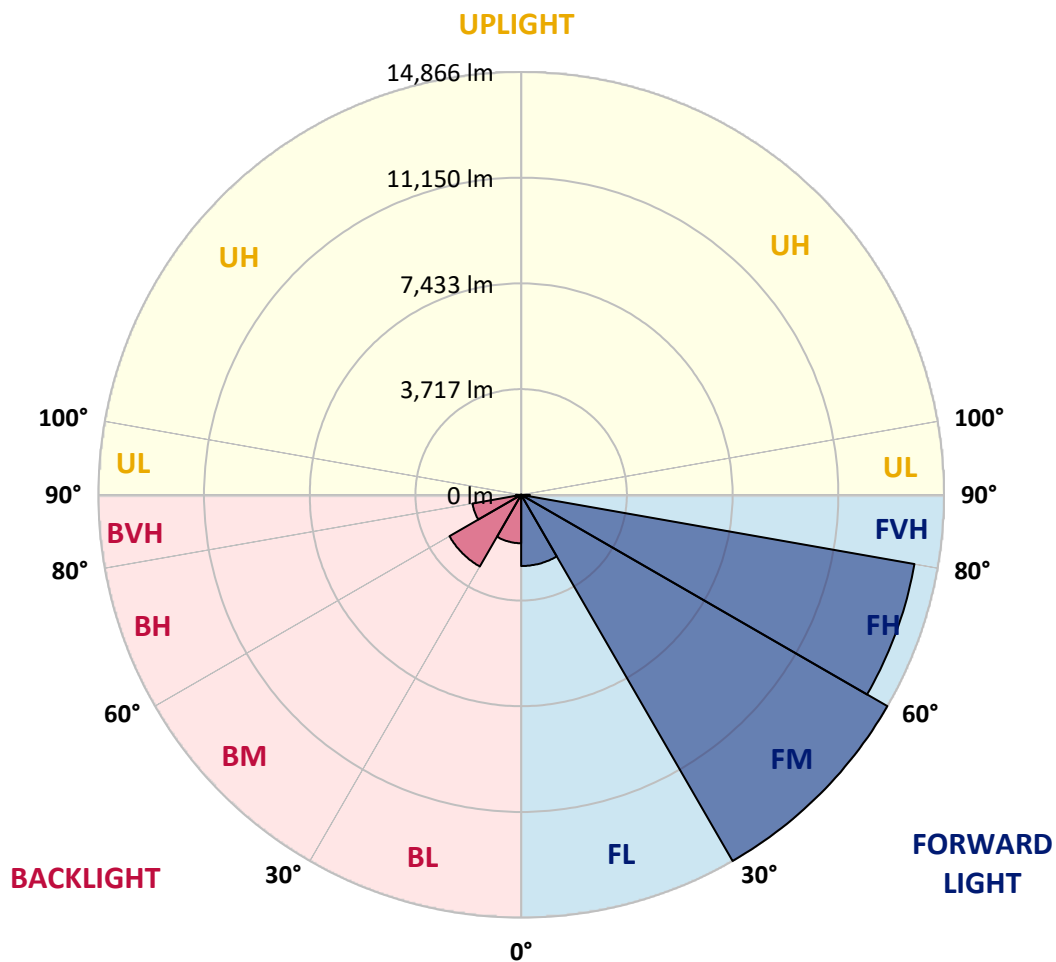
CATALOG NUMBER: GLNA-AF-10-LED-E1-T3R-7030-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2503.7	6.5			
FM	(30°-60°)	14866.0	38.9			
FH	(60°-80°)	14040.1	36.7			G5
FVH	(80°-90°)	305.6	0.8			G3/500
BL	(0°-30°)	1701.9	4.4	B3/2500		
BM	(30°-60°)	2910.9	7.6	B3/5000		
BH	(60°-80°)	1740.4	4.5	B3/2500		G3/2500
BVH	(80°-90°)	181.6	0.5			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 Short





REPORT NUMBER: P301255
 CATALOG NUMBER: GLNA-AF-10-LED-E1-T3R-7030-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	5450.8	5450.8	5450.8	5450.8	5450.8	5450.8	5450.8	5450.8	5450.8	5450.8	5450.8
2.5°	4822.0	4854.3	4881.7	4906.8	4957.2	5040.4	5136.1	5213.8	5326.0	5347.9	5407.5
5°	4379.3	4379.3	4400.7	4439.0	4507.4	4632.1	4762.4	4935.9	5179.9	5237.4	5396.6
7.5°	4164.3	4165.9	4178.5	4210.8	4270.4	4384.3	4527.1	4731.7	5062.3	5158.0	5428.9
10°	4243.6	4225.6	4198.2	4182.3	4191.1	4257.9	4393.6	4621.2	4990.0	5112.6	5501.7
12.5°	4688.0	4654.0	4559.9	4435.2	4315.9	4267.2	4346.5	4568.7	4959.4	5102.2	5597.4
15°	5414.7	5400.4	5224.8	4966.5	4677.6	4435.2	4381.0	4549.0	4962.7	5114.8	5711.3
17.5°	6325.8	6305.5	6074.6	5698.7	5227.0	4755.3	4501.9	4565.4	4975.3	5136.1	5821.2
20°	7245.6	7183.8	6934.8	6486.7	5880.9	5190.3	4702.7	4607.0	4991.7	5159.7	5937.3
22.5°	7932.4	7881.5	7657.7	7222.1	6524.4	5694.8	4972.0	4679.2	5044.2	5228.6	6079.5
25°	8536.0	8539.2	8317.1	7896.3	7175.0	6230.0	5318.9	4872.4	5177.7	5369.2	6274.9
27.5°	9282.4	9239.1	9031.2	8613.7	7818.6	6770.1	5738.1	5138.3	5376.9	5570.1	6531.5
30°	10174.9	10144.2	9904.0	9430.7	8532.1	7350.2	6216.9	5446.9	5633.5	5833.8	6867.5
32.5°	11225.0	11210.7	10961.2	10352.2	9356.2	8033.6	6779.4	5855.7	6016.6	6224.5	7350.2
35°	12457.8	12459.5	12165.1	11432.9	10258.0	8828.7	7416.9	6381.6	6482.8	6699.5	7925.3
37.5°	13216.8	13308.7	13198.8	12452.4	11279.1	9717.9	8244.8	7079.3	7014.2	7233.0	8541.4
40°	13379.3	13491.5	13840.1	13460.9	12421.7	10697.4	8978.7	7749.6	7668.6	7935.7	9334.9
42.5°	13151.7	13307.1	14044.7	14311.8	13634.3	11904.6	9965.3	8745.5	8642.7	9002.2	10321.5
45°	13016.0	13132.0	13985.1	14755.0	14686.1	13269.3	11221.7	9995.9	9958.2	10429.9	11460.3
47.5°	12781.2	12886.3	13706.6	14857.9	15304.4	14519.7	12730.9	11525.4	11599.3	12217.6	12745.1
50°	12907.6	12950.9	13395.7	14595.8	15483.4	15436.3	14416.8	13296.2	13549.5	14321.1	14200.2
52.5°	12889.6	13001.8	13359.6	14165.7	15506.9	16002.1	16077.6	15271.6	15805.1	16690.5	15813.9
55°	10421.1	10626.9	12935.0	14057.3	15589.5	16556.4	17556.2	17353.7	18347.5	19379.5	17635.5
57.5°	9951.1	10081.3	11360.7	14285.0	16030.6	17615.8	19200.6	19645.5	21307.9	22506.3	19855.0
60°	9858.6	10019.5	11344.3	14563.5	16925.3	19341.8	21639.0	22419.8	24910.2	26222.4	22428.6
62.5°	9571.3	9744.8	11237.5	14526.8	18195.9	21729.2	24760.2	25369.3	28325.9	29602.0	24581.3
65°	8660.7	8823.2	10368.6	13943.5	19052.8	24277.6	28453.9	28073.1	31022.5	31981.8	25654.4
66°	8036.9	8196.1	9683.5	13256.8	18853.6	25000.5	29762.9	28909.8	31626.1	32378.0	25444.8
67.5°	6896.5	7021.3	8353.2	11718.5	17796.4	25202.9	30863.3	29538.5	31689.0	31955.0	24247.0
70°	4357.4	4393.6	5428.9	8089.4	13471.8	21857.3	29187.7	27977.3	29076.1	28356.5	20326.7
72.5°	1890.6	1878.0	2606.4	4115.0	7627.0	14666.4	23610.6	23084.7	22808.3	21167.3	14229.2
75°	1051.7	1066.5	1353.8	1910.3	3099.4	7204.0	15445.1	14780.2	12479.2	10648.7	6452.2
77.5°	843.8	864.0	1122.3	1355.4	1391.6	2512.3	7227.6	5880.9	3540.5	2841.1	1792.7
80°	667.1	703.2	979.5	1055.6	937.9	1035.3	2335.0	1867.1	1400.9	1284.9	929.2
82.5°	527.5	553.2	840.5	798.9	656.1	697.7	1118.5	1090.0	911.1	829.6	536.8
85°	379.8	426.3	690.6	601.9	430.1	470.1	742.6	711.9	522.0	426.3	236.9
87.5°	155.4	202.5	488.1	399.5	240.2	218.9	370.5	348.6	247.3	180.6	117.7
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: P301255

CATALOG NUMBER: GLNA-AF-10-LED-E1-T3R-7030-600

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5450.8	5450.8	5450.8	5450.8	5450.8	5450.8	5450.8	5450.8	5450.8	5450.8	5450.8
2.5°	5445.3	5488.5	5544.9	5579.4	5597.4	5610.0	5629.7	5628.1	5633.5	5635.2	5642.3
5°	5481.4	5553.7	5635.2	5657.1	5657.1	5636.8	5617.1	5584.3	5571.7	5568.4	5571.7
7.5°	5575.5	5654.9	5725.5	5700.3	5646.1	5566.2	5463.4	5373.1	5324.4	5308.0	5304.7
10°	5694.8	5790.6	5819.6	5723.8	5564.6	5373.1	5169.0	5020.7	4935.9	4912.3	4905.2
12.5°	5839.3	5929.6	5890.2	5687.7	5392.8	5084.1	4801.8	4565.4	4388.1	4332.3	4328.4
15°	5998.5	6069.1	5929.6	5575.5	5136.1	4680.9	4178.5	3770.3	3549.8	3479.2	3473.7
17.5°	6146.8	6182.9	5906.1	5380.2	4758.6	4021.5	3354.4	3039.8	2964.2	2982.3	2985.6
20°	6273.2	6273.2	5826.7	5100.0	4164.3	3151.9	2730.6	2725.7	2779.8	2834.0	2845.0
22.5°	6412.2	6329.1	5687.7	4704.4	3321.6	2579.0	2517.7	2568.1	2629.4	2689.0	2698.3
25°	6584.1	6374.5	5494.0	4104.6	2611.3	2342.1	2365.6	2407.2	2437.8	2476.1	2481.6
27.5°	6775.6	6431.9	5239.6	3278.3	2266.6	2194.3	2212.4	2226.6	2222.8	2237.5	2240.8
30°	7004.9	6499.2	4890.4	2562.6	2123.7	2067.4	2035.1	2022.5	2022.5	2046.0	2054.8
32.5°	7312.4	6598.3	4389.7	2196.0	2054.8	1977.1	1872.6	1825.5	1843.6	1922.9	1941.0
35°	7650.6	6705.0	3712.3	2071.2	2040.6	1935.5	1773.0	1686.0	1688.1	1762.0	1785.6
37.5°	8018.8	6840.7	2969.2	2047.7	2072.8	1937.7	1720.4	1601.1	1552.4	1552.4	1561.7
40°	8490.5	6979.7	2403.9	2064.1	2141.8	1959.0	1693.6	1534.4	1397.0	1400.9	1408.0
42.5°	9105.1	7099.0	2100.2	2098.0	2225.0	1988.0	1691.4	1445.7	1326.4	1408.0	1481.9
45°	9788.5	7158.6	1966.1	2129.2	2291.7	2006.1	1663.0	1431.5	1335.7	1577.6	1718.8
47.5°	10574.3	7124.2	1892.3	2139.6	2308.1	2006.1	1630.1	1466.0	1398.7	1827.1	1991.9
50°	11436.7	7025.1	1820.0	2118.3	2302.7	2002.2	1660.8	1499.9	1422.2	1870.4	1984.2
52.5°	12450.7	6941.9	1744.0	2071.2	2264.4	1982.5	1696.9	1485.7	1348.3	1700.7	1780.1
55°	13607.0	6965.5	1659.1	2004.4	2204.7	1944.8	1684.3	1427.7	1270.6	1498.3	1547.0
57.5°	15085.5	7245.6	1557.9	1919.6	2123.7	1881.3	1639.4	1400.9	1247.1	1359.3	1388.3
60°	16735.4	7733.2	1431.5	1834.3	2022.5	1780.1	1605.0	1413.4	1258.0	1348.3	1362.6
62.5°	17946.4	8017.2	1323.2	1709.5	1885.1	1667.9	1561.7	1429.3	1287.0	1386.1	1382.8
65°	18275.2	7551.0	1187.5	1527.3	1699.1	1550.8	1507.0	1447.4	1299.6	1416.7	1400.9
66°	17814.5	7048.6	1127.8	1442.5	1605.0	1492.8	1480.2	1445.7	1294.2	1420.6	1393.2
67.5°	16696.0	6018.2	1024.9	1317.7	1455.0	1406.3	1437.0	1429.3	1279.4	1416.7	1379.0
70°	13616.3	4106.3	876.6	1097.2	1211.0	1237.8	1353.8	1371.9	1232.3	1353.8	1270.6
72.5°	9513.8	2501.3	775.4	851.5	979.5	1055.6	1240.0	1292.0	1169.4	1182.0	1102.6
75°	4597.7	1328.6	703.2	659.9	760.6	882.1	1102.6	1183.6	1069.8	988.8	959.8
77.5°	1433.1	811.5	596.5	531.3	596.5	711.9	921.5	1037.5	952.7	827.9	817.0
80°	769.9	596.5	459.1	426.3	471.7	558.7	724.5	865.7	818.6	742.6	663.2
82.5°	507.8	386.9	339.8	330.5	359.5	426.3	538.5	717.4	717.4	636.4	462.9
85°	262.1	236.9	233.1	233.1	251.2	284.0	366.6	553.2	589.3	336.0	278.5
87.5°	130.2	135.7	126.4	131.9	141.2	139.0	175.1	278.5	332.7	204.1	169.6
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)