

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: P299840

Luminaire Tested: **GLNA-AF-05-LED-E1-SL3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299840
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-05-LED-E1-SL3-7030
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 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: 28679.8 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

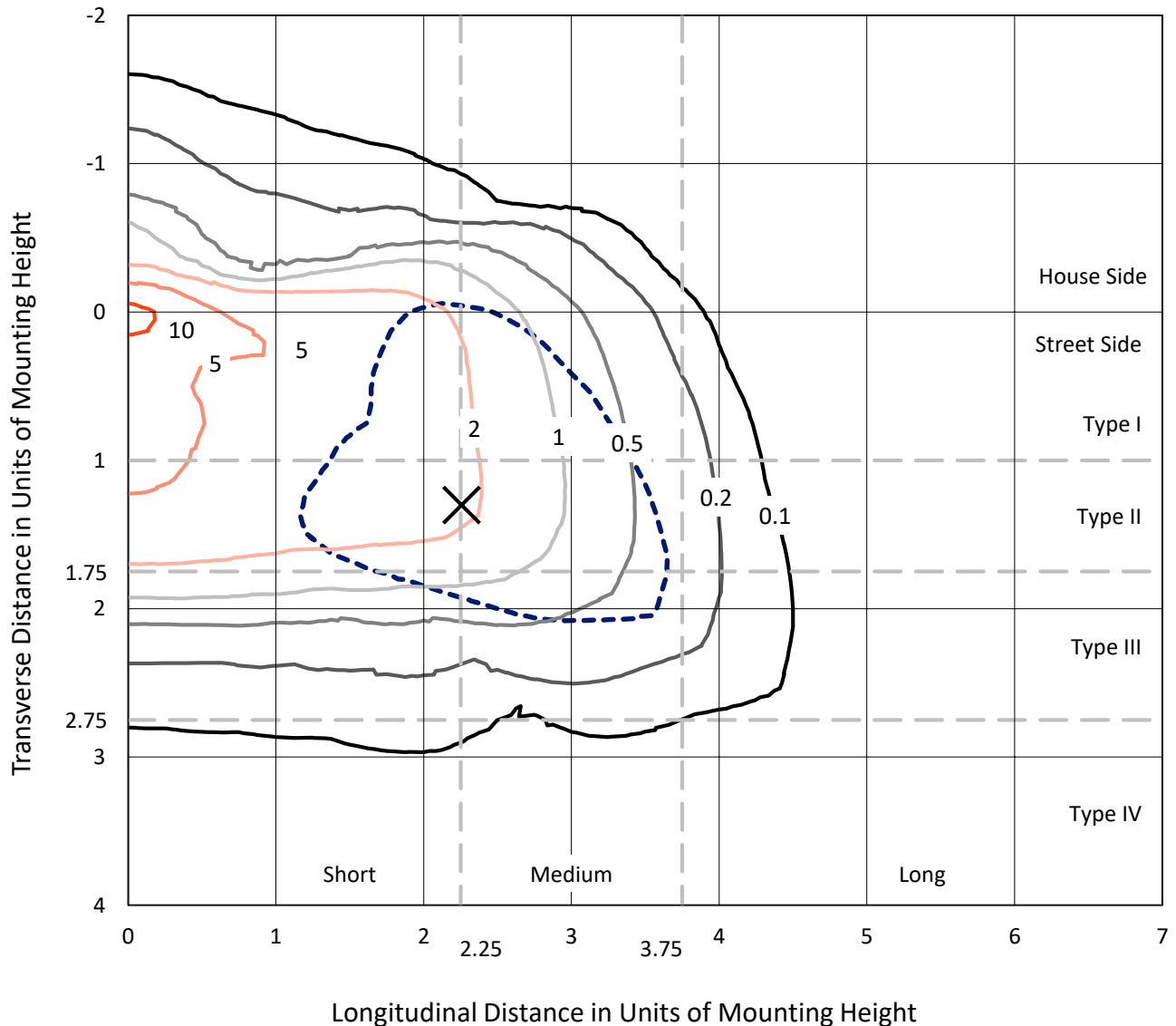
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

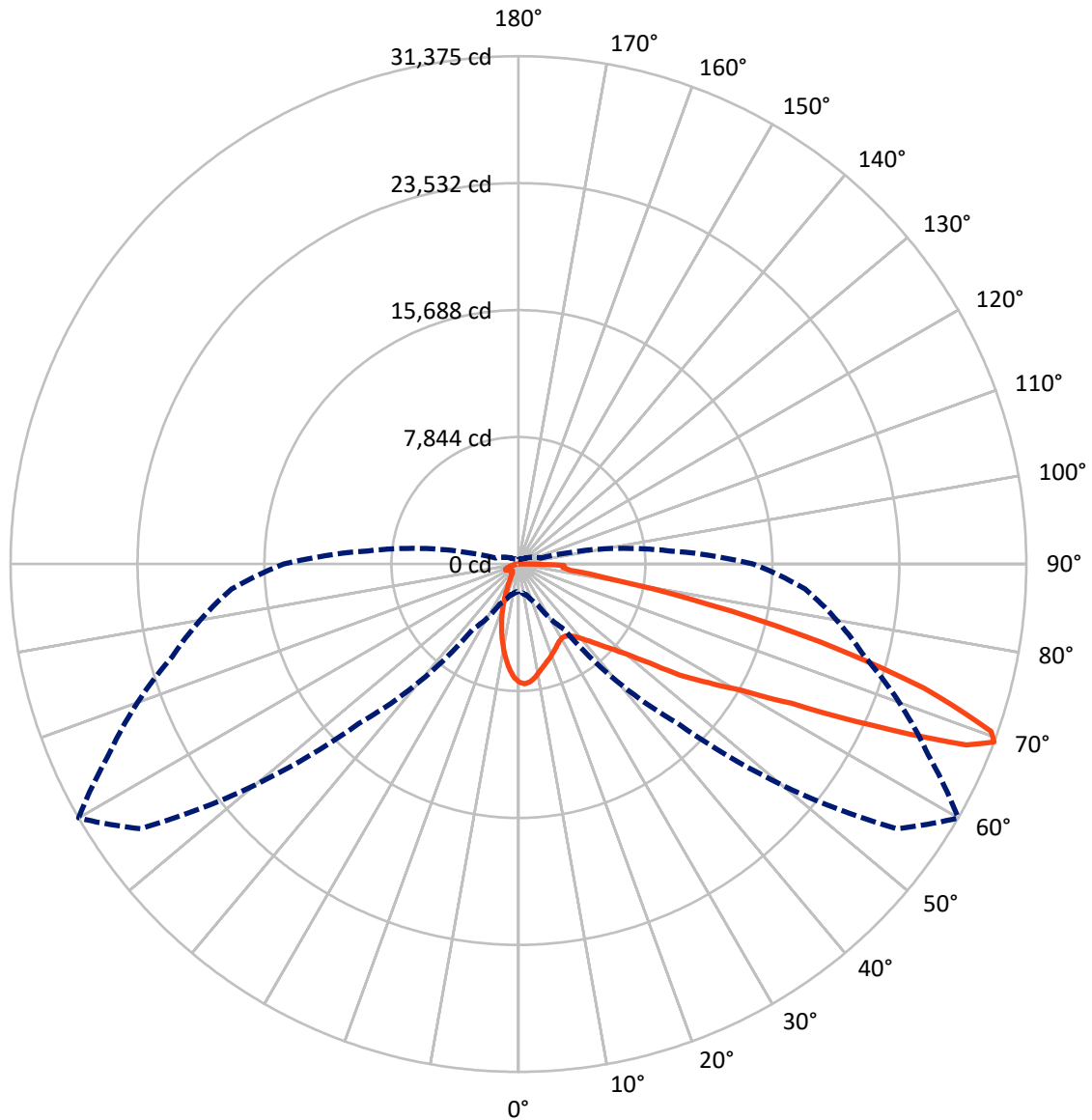
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.7 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4080.2	0.0	4080.2
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	24599.6	0.0	24599.6
	% Fixture	85.8	0.0	85.8
Total	Lumens	28679.8	0.0	28679.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	617.9	2.2
10°-20°	1316.5	4.6
20°-30°	1677.5	5.8
30°-40°	2306.1	8.0
40°-50°	3741.9	13.0
50°-60°	6001.1	20.9
60°-70°	7986.9	27.8
70°-80°	4312.3	15.0
80°-90°	719.5	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°	28679.8	100.0
0°-180°	28679.8	100.0



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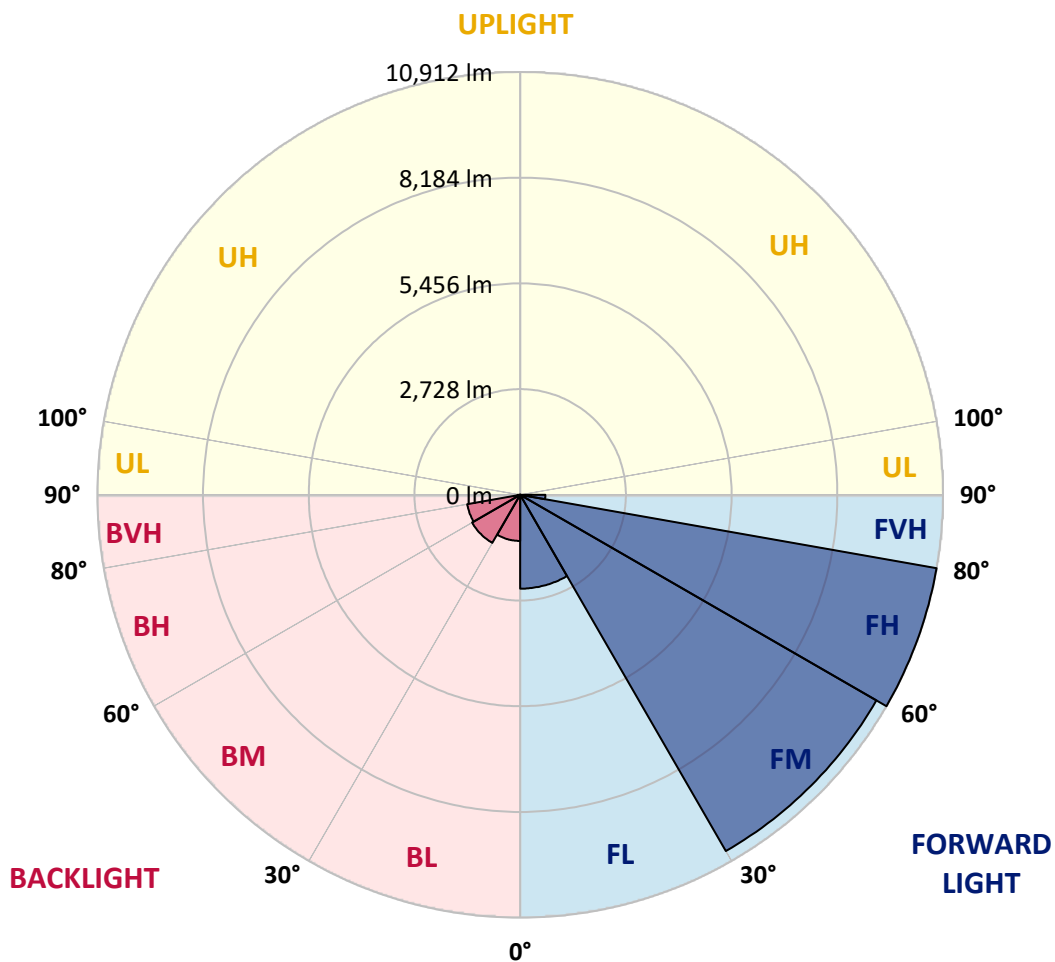
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2421.6	8.4			
FM	(30°-60°)	10615.6	37.0			
FH	(60°-80°)	10912.1	38.0			G4/12000
FVH	(80°-90°)	650.3	2.3			G4/750
BL	(0°-30°)	1190.3	4.2	B3/2500		
BM	(30°-60°)	1433.5	5.0	B2/2500		
BH	(60°-80°)	1387.1	4.8	B3/2500		G3/2500
BVH	(80°-90°)	69.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	7308.1	7308.1	7308.1	7308.1	7308.1	7308.1	7308.1	7308.1	7308.1	7308.1	7308.1
2.5°	7457.7	7474.3	7467.4	7463.2	7475.7	7456.3	7416.1	7403.6	7384.2	7338.5	7260.9
5°	7177.8	7227.7	7224.9	7262.3	7324.7	7341.3	7323.3	7326.1	7290.0	7233.2	7104.4
7.5°	6694.3	6715.1	6726.2	6807.9	6921.5	7013.0	7090.5	7115.5	7098.9	7050.4	6884.1
10°	6195.6	6212.2	6238.5	6334.1	6478.2	6604.3	6751.1	6835.6	6871.6	6863.3	6677.7
12.5°	5767.5	5784.1	5818.7	5926.8	6098.6	6253.8	6467.1	6572.4	6658.3	6709.6	6510.1
15°	5383.7	5419.7	5453.0	5577.7	5770.2	5973.9	6215.0	6348.0	6481.0	6596.0	6361.8
17.5°	5084.5	5120.5	5139.9	5253.5	5458.5	5707.9	5990.5	6147.1	6313.3	6501.7	6215.0
20°	4911.3	4927.9	4919.6	4983.3	5167.6	5432.2	5767.5	5949.0	6149.8	6413.1	6068.1
22.5°	4862.8	4864.2	4833.7	4826.8	4945.9	5169.0	5529.2	5749.5	5996.1	6354.9	5942.0
25°	4980.6	4976.4	4893.3	4825.4	4837.9	4968.1	5299.2	5555.5	5867.2	6342.4	5845.1
27.5°	5242.4	5254.9	5131.6	5004.1	4878.0	4873.9	5124.6	5394.8	5761.9	6399.2	5803.5
30°	5609.5	5630.3	5498.7	5336.6	5099.7	4904.4	5056.8	5299.2	5696.8	6517.0	5796.6
32.5°	6011.3	6033.5	5933.7	5763.3	5453.0	5092.8	5103.9	5307.5	5694.0	6681.8	5843.7
35°	6439.4	6464.3	6413.1	6269.0	5924.0	5440.5	5284.0	5441.9	5784.1	6934.0	5969.7
37.5°	6917.4	6956.2	6970.0	6832.9	6464.3	5899.1	5579.1	5696.8	5987.8	7284.5	6201.1
40°	7605.9	7659.9	7655.8	7459.1	7083.6	6518.4	6034.9	6065.3	6305.0	7752.8	6571.0
42.5°	8924.8	8935.9	8590.9	8162.9	7765.2	7169.5	6572.4	6547.5	6742.8	8345.7	7115.5
45°	10602.6	10556.8	9789.3	8962.2	8477.3	7917.6	7272.0	7150.1	7298.4	9068.9	7797.1
47.5°	11994.9	11889.6	10919.8	9778.2	9231.0	8730.9	8093.6	7880.2	7962.0	9889.1	8678.2
50°	12478.4	12399.4	11595.9	10457.1	9944.5	9722.8	9104.9	8802.9	8825.1	10867.2	9710.4
52.5°	12374.5	12363.4	11827.3	10904.6	10612.3	10764.7	10537.4	10128.8	9912.6	11953.3	10824.2
55°	12129.3	12152.8	11958.9	11425.5	11375.6	11770.5	12409.1	12107.1	11435.2	13049.2	11975.5
57.5°	11277.3	11338.2	11764.9	12080.8	12604.5	13191.9	13916.5	13830.6	13074.1	14233.7	13344.3
60°	9085.5	9226.8	10371.2	11953.3	13869.4	15706.4	16030.6	15831.1	14764.3	15703.7	15152.3
62.5°	6366.0	6512.8	7873.3	10349.0	13661.6	18546.5	19810.0	18949.7	17191.6	17869.1	17492.2
65°	3408.1	3478.8	4517.8	7180.6	11533.6	19132.6	25333.7	24024.4	21034.7	20538.7	19494.1
67.5°	1880.0	1918.8	2316.4	3625.6	7387.0	16848.0	28852.6	29841.8	25837.9	22316.2	19129.8
69°	1699.9	1735.9	1996.4	2745.9	4943.2	13930.3	28509.0	31375.4	27943.8	22140.3	17783.2
70°	1662.5	1695.7	1929.9	2531.1	4001.1	11482.3	27357.7	30983.4	28445.3	21509.9	16608.3
72.5°	1496.2	1532.3	1759.5	2273.5	3419.2	5724.5	21670.6	26196.8	25825.5	18650.4	12597.6
75°	1395.1	1428.4	1813.5	2226.4	3273.7	3622.9	14286.4	19307.1	18984.3	13046.4	6792.7
77.5°	597.1	594.3	840.9	1884.2	3322.2	3507.9	7676.6	12061.4	11004.3	5576.3	1950.7
80°	399.0	392.1	399.0	554.2	3046.5	3527.3	4021.9	6122.1	4624.5	1421.4	961.5
82.5°	343.6	338.0	350.5	338.0	1070.9	4026.0	3419.2	3255.7	2198.7	807.7	476.6
85°	231.4	221.7	302.0	303.4	505.7	3577.1	3851.4	2750.0	1778.9	479.4	235.5
87.5°	110.8	108.1	175.9	214.7	296.5	1453.3	4321.1	2817.9	1794.1	245.2	112.2
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7308.1	7308.1	7308.1	7308.1	7308.1	7308.1	7308.1	7308.1	7308.1	7308.1	7308.1
2.5°	7237.4	7180.6	7125.2	7058.7	6989.4	6911.8	6873.0	6834.2	6824.5	6813.5	6774.7
5°	7037.9	6957.5	6819.0	6666.6	6505.9	6349.3	6230.2	6155.4	6098.6	6069.5	6018.2
7.5°	6780.2	6662.4	6420.0	6156.8	5886.6	5640.0	5426.7	5292.3	5164.8	5105.2	5037.4
10°	6535.0	6359.0	5982.2	5594.3	5206.4	4833.7	4483.2	4235.2	4014.9	3891.6	3804.3
12.5°	6324.4	6083.3	5561.0	5036.0	4504.0	3973.4	3448.3	3035.4	2690.5	2509.0	2416.2
15°	6119.4	5828.4	5160.7	4494.3	3811.3	3089.5	2399.5	1931.3	1645.9	1532.3	1493.5
17.5°	5933.7	5561.0	4758.9	3948.4	3096.4	2223.6	1612.6	1354.9	1245.5	1208.1	1195.6
20°	5732.8	5290.9	4341.9	3377.6	2351.0	1554.4	1259.3	1145.7	1101.4	1090.3	1084.8
22.5°	5538.9	5024.9	3942.9	2766.7	1688.8	1199.8	1082.0	1034.9	1028.0	1037.7	1037.7
25°	5374.0	4786.6	3512.0	2128.0	1239.9	1010.0	968.4	957.3	983.6	1019.7	1026.6
27.5°	5250.7	4591.3	3053.4	1571.1	987.8	878.4	877.0	895.0	960.1	1029.4	1043.2
30°	5166.2	4405.6	2563.0	1133.3	828.5	773.1	795.2	834.0	929.6	1028.0	1054.3
32.5°	5123.3	4268.5	2051.8	877.0	709.3	678.9	716.3	763.4	857.6	949.0	983.6
35°	5156.5	4167.3	1569.7	731.5	626.2	602.7	641.4	687.2	742.6	781.4	807.7
37.5°	5281.2	4127.1	1184.5	655.3	569.4	547.2	577.7	604.0	626.2	637.3	649.8
40°	5550.0	4170.1	949.0	616.5	537.5	509.8	522.3	532.0	545.9	556.9	562.5
42.5°	5946.2	4298.9	850.6	601.3	520.9	480.7	478.0	482.1	500.1	520.9	525.1
45°	6500.4	4526.1	843.7	611.0	512.6	457.2	444.7	450.3	478.0	509.8	515.4
47.5°	7208.3	4872.5	899.1	640.1	519.5	444.7	423.9	430.9	465.5	508.4	515.4
50°	8065.9	5356.0	992.0	683.0	550.0	447.5	417.0	421.2	457.2	504.3	511.2
52.5°	9078.6	6041.8	1093.1	724.6	581.9	465.5	422.6	412.9	446.1	487.7	496.0
55°	10205.0	6921.5	1197.0	762.0	598.5	487.7	433.6	401.8	425.3	460.0	466.9
57.5°	11587.6	8151.8	1377.1	798.0	609.6	502.9	444.7	390.7	399.0	423.9	429.5
60°	13459.3	9891.8	1694.4	857.6	634.5	508.4	443.3	381.0	372.7	386.5	389.3
62.5°	15702.3	11781.6	1959.0	932.4	676.1	512.6	435.0	374.1	350.5	350.5	353.3
65°	17033.6	12287.2	1812.1	994.7	710.7	508.4	425.3	367.1	333.9	318.6	320.0
67.5°	15904.5	10806.2	1553.0	1007.2	709.3	489.1	410.1	354.7	317.3	293.7	292.3
69°	14490.0	9323.8	1436.7	973.9	676.1	464.1	390.7	340.8	304.8	279.9	278.5
70°	13349.8	8419.2	1360.5	937.9	640.1	446.1	375.4	328.3	295.1	271.5	268.8
72.5°	9706.2	5516.7	1162.4	806.3	527.8	374.1	324.2	288.2	263.2	249.4	246.6
75°	4850.3	2630.9	943.5	653.9	404.5	299.2	266.0	241.1	228.6	225.8	224.4
77.5°	1593.2	1205.3	674.7	487.7	300.6	234.1	214.7	196.7	194.0	202.3	199.5
80°	875.6	701.0	428.1	322.8	205.0	171.8	169.0	159.3	163.5	177.3	174.6
82.5°	446.1	364.4	264.6	194.0	138.5	123.3	134.4	128.8	134.4	146.9	145.5
85°	220.3	199.5	167.6	117.8	91.4	79.0	95.6	99.7	102.5	112.2	112.2
87.5°	127.5	117.8	88.7	55.4	45.7	41.6	55.4	54.0	63.7	69.3	67.9
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)