

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: P299857

Luminaire Tested: **GLNA-AF-08-LED-E1-SL3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299857
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-08-LED-E1-SL3-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K 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: 41307.7 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G5

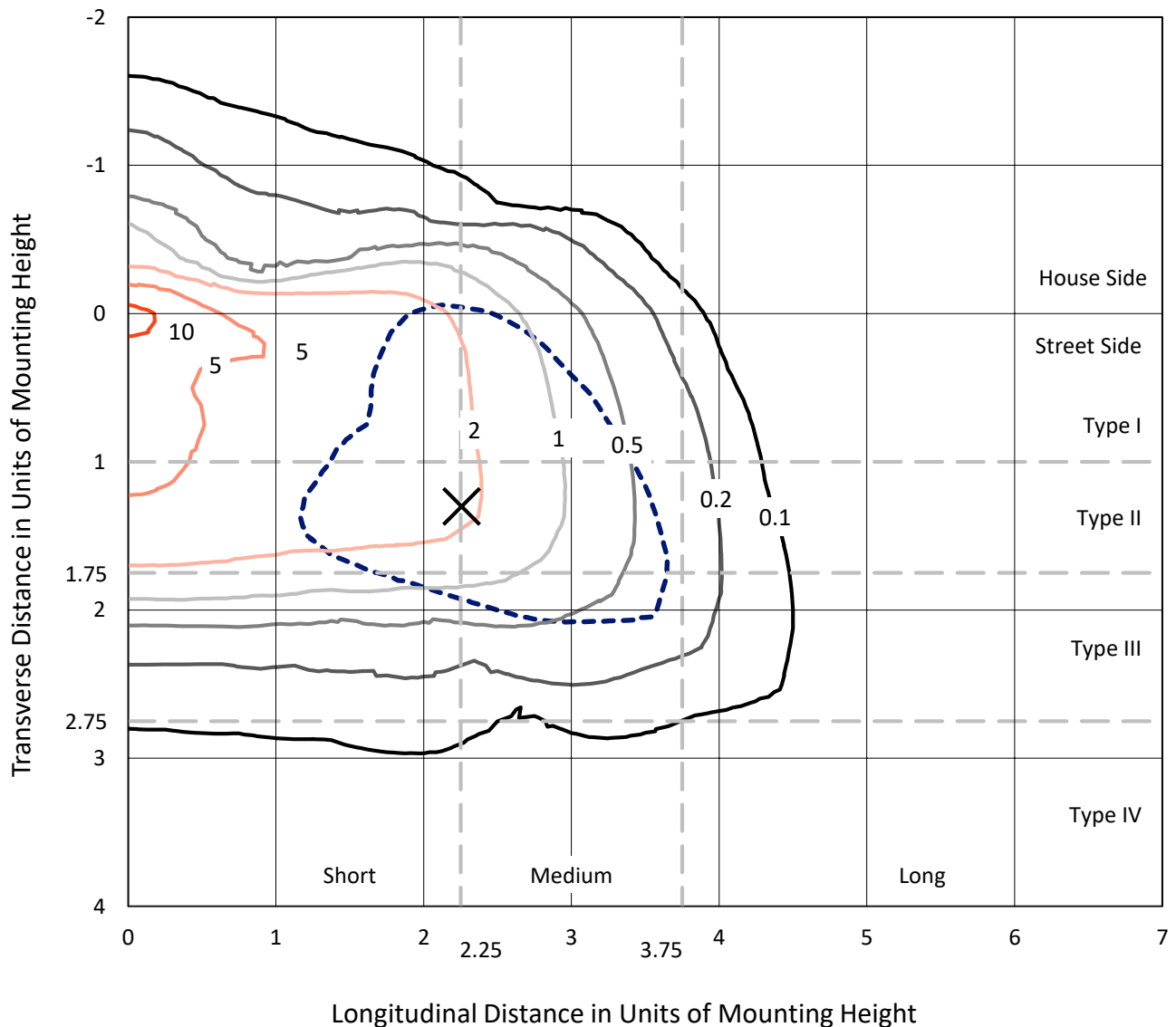
Input Watts (W): 445
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299857
 CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7027

Iso-Footcandle Lines of Horizontal Illumination

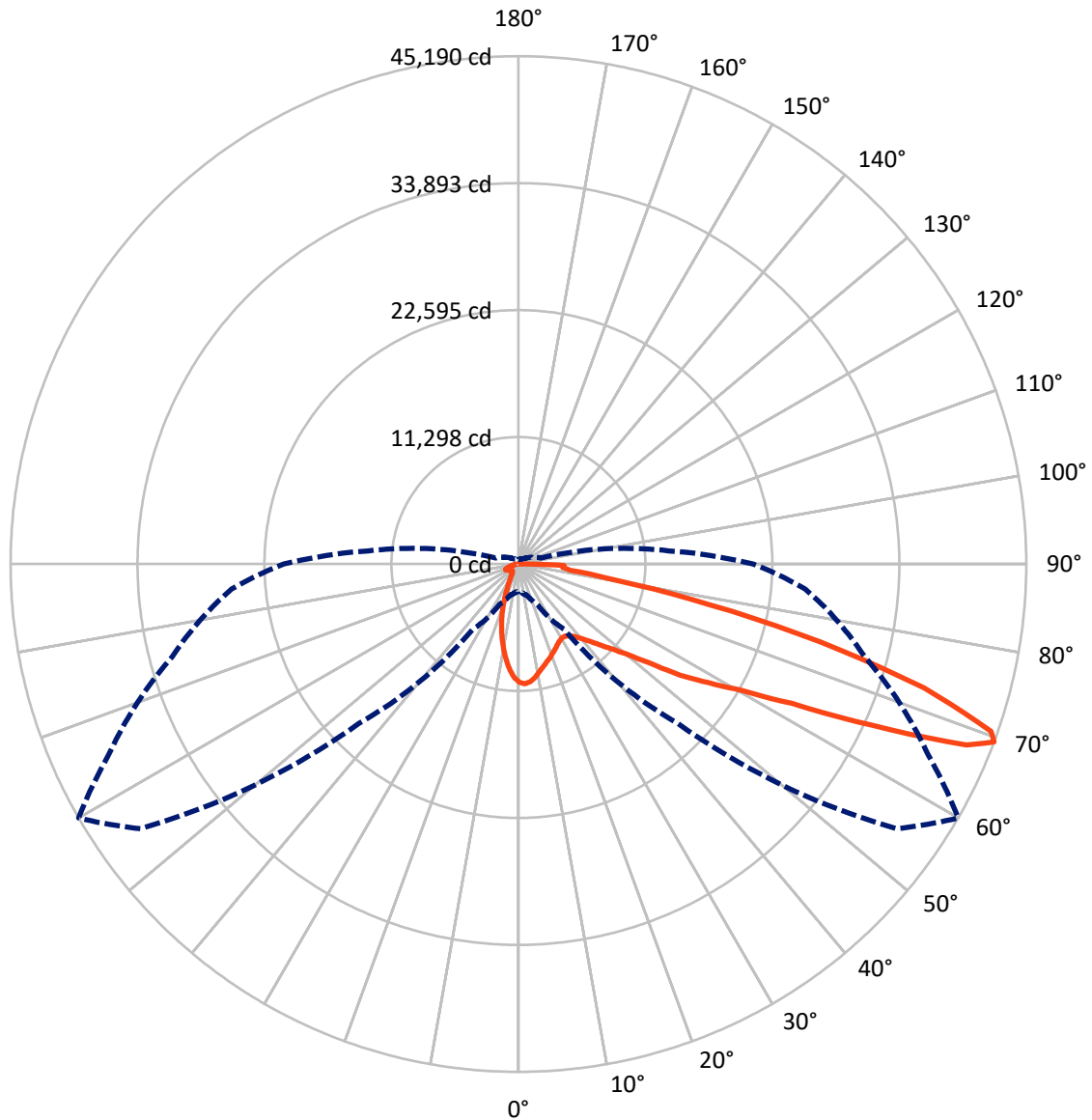
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.7 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P299857
CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299857

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5876.8	0.0	5876.8
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	35430.9	0.0	35430.9
	% Fixture	85.8	0.0	85.8
Total	Lumens	41307.7	0.0	41307.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	890.0	2.2
10°-20°	1896.2	4.6
20°-30°	2416.1	5.8
30°-40°	3321.5	8.0
40°-50°	5389.5	13.0
50°-60°	8643.3	20.9
60°-70°	11503.6	27.8
70°-80°	6211.1	15.0
80°-90°	1036.4	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°	41307.7	100.0
0°-180°	41307.7	100.0

Coefficient of Utilization



REPORT NUMBER: P299857

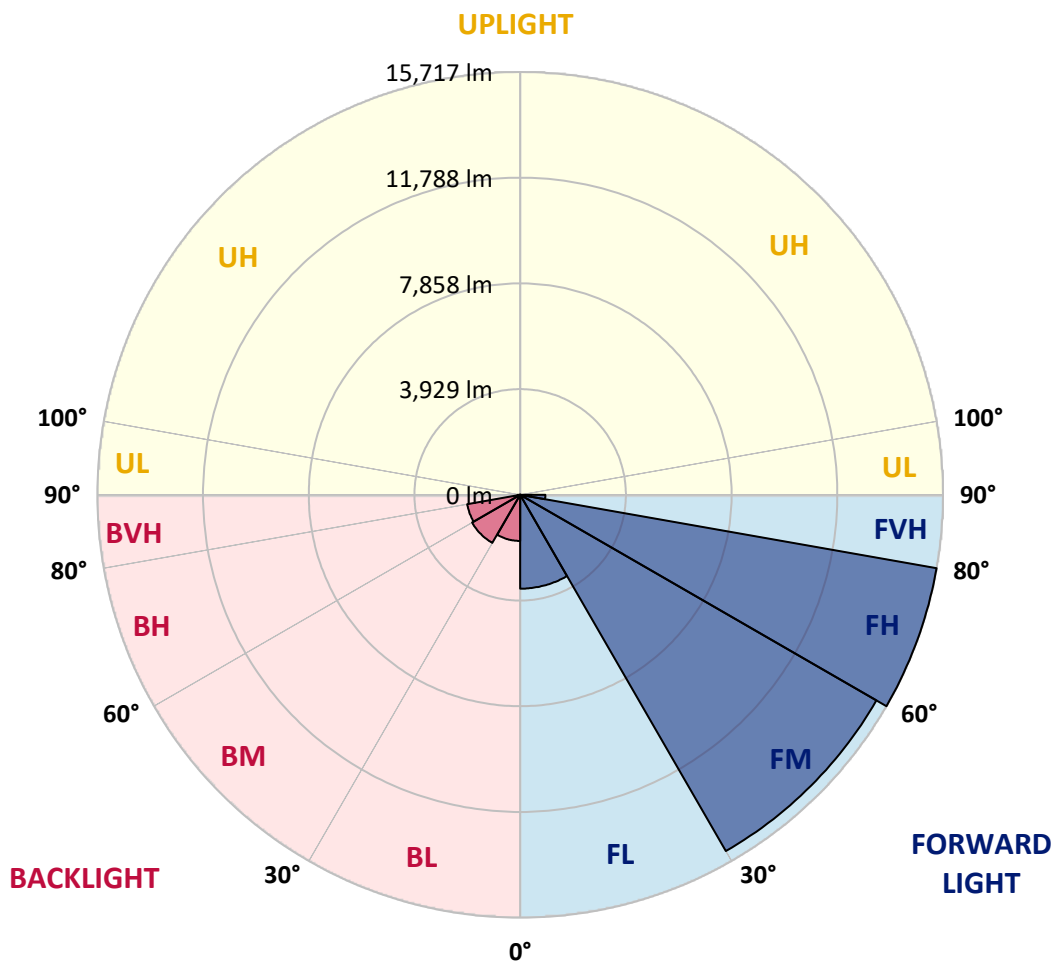
CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3487.9	8.4			
FM	(30°-60°)	15289.7	37.0			
FH	(60°-80°)	15716.8	38.0			G5
FVH	(80°-90°)	936.6	2.3			G5
BL	(0°-30°)	1714.4	4.2	B3/2500		
BM	(30°-60°)	2064.6	5.0	B2/2500		
BH	(60°-80°)	1997.9	4.8	B3/2500		G3/2500
BVH	(80°-90°)	99.8	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-G5

Type III Medium





REPORT NUMBER: P299857

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	10525.8	10525.8	10525.8	10525.8	10525.8	10525.8	10525.8	10525.8	10525.8	10525.8	10525.8
2.5°	10741.3	10765.3	10755.3	10749.3	10767.3	10739.3	10681.5	10663.5	10635.6	10569.7	10458.0
5°	10338.3	10410.1	10406.1	10460.0	10549.8	10573.7	10547.8	10551.8	10499.9	10418.1	10232.5
7.5°	9641.9	9671.8	9687.8	9805.5	9969.1	10100.8	10212.5	10248.5	10224.5	10154.7	9915.2
10°	8923.5	8947.5	8985.4	9123.0	9330.6	9512.2	9723.7	9845.4	9897.3	9885.3	9617.9
12.5°	8306.9	8330.9	8380.8	8536.4	8783.8	9007.3	9314.6	9466.3	9590.0	9663.8	9376.5
15°	7754.2	7806.1	7854.0	8033.6	8310.9	8604.2	8951.4	9143.0	9334.6	9500.2	9163.0
17.5°	7323.2	7375.1	7403.0	7566.6	7861.9	8221.1	8628.2	8853.7	9093.1	9364.5	8951.4
20°	7073.8	7097.7	7085.7	7177.5	7442.9	7824.0	8306.9	8568.3	8857.7	9236.8	8739.9
22.5°	7003.9	7005.9	6962.0	6952.0	7123.6	7444.9	7963.7	8281.0	8636.2	9153.0	8558.3
25°	7173.5	7167.5	7047.8	6950.0	6968.0	7155.6	7632.5	8001.6	8450.6	9135.0	8418.7
27.5°	7550.7	7568.6	7391.0	7207.4	7025.9	7019.9	7381.0	7770.2	8298.9	9216.8	8358.8
30°	8079.4	8109.4	7919.8	7686.3	7345.1	7063.8	7283.3	7632.5	8205.2	9386.4	8348.8
32.5°	8658.1	8690.0	8546.4	8300.9	7854.0	7335.2	7351.1	7644.4	8201.2	9623.9	8416.7
35°	9274.7	9310.6	9236.8	9029.3	8532.4	7836.0	7610.5	7838.0	8330.9	9987.1	8598.3
37.5°	9963.1	10019.0	10038.9	9841.4	9310.6	8496.5	8035.5	8205.2	8624.2	10491.9	8931.5
40°	10954.8	11032.7	11026.7	10743.3	10202.6	9388.4	8692.0	8735.9	9081.1	11166.4	9464.3
42.5°	12854.5	12870.4	12373.6	11757.0	11184.3	10326.3	9466.3	9430.3	9711.7	12020.4	10248.5
45°	15270.9	15205.1	14099.6	12908.4	12210.0	11403.8	10473.9	10298.3	10511.9	13062.0	11230.2
47.5°	17276.3	17124.7	15727.9	14083.7	13295.5	12575.1	11657.2	11349.9	11467.7	14243.3	12499.3
50°	17972.7	17859.0	16701.6	15061.4	14323.1	14003.8	13113.9	12678.9	12710.8	15652.1	13985.9
52.5°	17823.1	17807.1	17034.9	15705.9	15284.9	15504.4	15177.1	14588.5	14277.2	17216.5	15590.2
55°	17469.9	17503.8	17224.4	16456.2	16384.4	16953.1	17873.0	17438.0	16470.2	18794.8	17248.4
57.5°	16242.7	16330.5	16945.1	17400.0	18154.3	19000.4	20044.0	19920.3	18830.8	20500.9	19219.9
60°	13085.9	13289.5	14937.7	17216.5	19976.1	22622.0	23089.0	22801.6	21265.2	22618.1	21823.9
62.5°	9168.9	9380.5	11340.0	14905.8	19676.8	26712.7	28532.5	27293.3	24761.1	25736.9	25194.1
65°	4908.7	5010.5	6507.1	10342.2	16611.8	27556.7	36488.2	34602.5	30296.4	29582.1	28077.5
67.5°	2707.8	2763.7	3336.3	5222.0	10639.6	24266.3	41556.6	42981.3	37214.5	32142.2	27552.7
69°	2448.4	2500.3	2875.4	3954.9	7119.6	20063.9	41061.7	45190.2	40247.6	31888.8	25613.2
70°	2394.5	2442.4	2779.6	3645.6	5762.8	16538.0	39403.5	44625.5	40969.9	30980.8	23921.1
72.5°	2155.1	2206.9	2534.2	3274.5	4924.7	8245.1	31212.3	37731.3	37196.6	26862.3	18144.3
75°	2009.4	2057.3	2612.0	3206.6	4715.2	5218.0	20576.7	27808.1	27343.2	18790.8	9783.5
77.5°	860.0	856.0	1211.2	2713.8	4785.0	5052.4	11056.6	17372.1	15849.6	8031.6	2809.5
80°	574.7	564.7	574.7	798.2	4387.9	5080.3	5792.7	8817.7	6660.7	2047.3	1384.8
82.5°	494.9	486.9	504.8	486.9	1542.5	5798.7	4924.7	4689.2	3166.7	1163.3	686.4
85°	333.2	319.3	435.0	437.0	728.3	5152.2	5547.3	3960.9	2562.1	690.4	339.2
87.5°	159.6	155.6	253.4	309.3	427.0	2093.2	6223.7	4058.7	2584.1	353.2	161.6
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: P299857

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10525.8	10525.8	10525.8	10525.8	10525.8	10525.8	10525.8	10525.8	10525.8	10525.8	10525.8
2.5°	10424.1	10342.2	10262.4	10166.7	10066.9	9955.1	9899.3	9843.4	9829.4	9813.5	9757.6
5°	10136.7	10021.0	9821.4	9601.9	9370.5	9145.0	8973.4	8865.6	8783.8	8741.9	8668.1
7.5°	9765.6	9596.0	9246.8	8867.6	8478.5	8123.3	7816.0	7622.5	7438.9	7353.1	7255.3
10°	9412.4	9159.0	8616.2	8057.5	7498.8	6962.0	6457.2	6100.0	5782.7	5605.1	5479.4
12.5°	9109.1	8761.9	8009.6	7253.3	6487.1	5722.9	4966.6	4372.0	3875.1	3613.7	3480.0
15°	8813.8	8394.7	7432.9	6473.1	5489.4	4449.8	3456.1	2781.6	2370.6	2206.9	2151.1
17.5°	8546.4	8009.6	6854.3	5686.9	4459.8	3202.6	2322.7	1951.5	1793.9	1740.0	1722.0
20°	8257.0	7620.5	6253.6	4864.8	3386.2	2238.9	1813.8	1650.2	1586.4	1570.4	1562.4
22.5°	7977.7	7237.4	5679.0	3984.8	2432.4	1728.0	1558.4	1490.6	1480.6	1494.6	1494.6
25°	7740.2	6894.2	5058.4	3065.0	1785.9	1454.7	1394.8	1378.8	1416.7	1468.6	1478.6
27.5°	7562.6	6612.8	4397.9	2262.8	1422.7	1265.1	1263.1	1289.0	1382.8	1482.6	1502.5
30°	7440.9	6345.4	3691.5	1632.3	1193.3	1113.4	1145.4	1201.2	1338.9	1480.6	1518.5
32.5°	7379.1	6147.9	2955.2	1263.1	1021.7	977.8	1031.6	1099.5	1235.2	1366.9	1416.7
35°	7426.9	6002.2	2260.8	1053.6	901.9	868.0	923.9	989.7	1069.5	1125.4	1163.3
37.5°	7606.5	5944.3	1706.1	943.8	820.1	788.2	832.1	870.0	901.9	917.9	935.9
40°	7993.6	6006.2	1366.9	888.0	774.2	734.3	752.3	766.2	786.2	802.2	810.1
42.5°	8564.3	6191.8	1225.2	866.0	750.3	692.4	688.4	694.4	720.3	750.3	756.3
45°	9362.5	6519.0	1215.2	880.0	738.3	658.5	640.5	648.5	688.4	734.3	742.3
47.5°	10382.2	7017.9	1295.0	921.9	748.3	640.5	610.6	620.6	670.5	732.3	742.3
50°	11617.3	7714.3	1428.7	983.7	792.2	644.5	600.6	606.6	658.5	726.3	736.3
52.5°	13076.0	8702.0	1574.4	1043.6	838.1	670.5	608.6	594.6	642.5	702.4	714.4
55°	14698.2	9969.1	1724.0	1097.5	862.0	702.4	624.6	578.7	612.6	662.5	672.5
57.5°	16689.7	11741.0	1983.4	1149.4	878.0	724.3	640.5	562.7	574.7	610.6	618.6
60°	19385.5	14247.3	2440.4	1235.2	913.9	732.3	638.5	548.7	536.8	556.7	560.7
62.5°	22616.1	16969.0	2821.5	1342.9	973.8	738.3	626.6	538.8	504.8	504.8	508.8
65°	24533.7	17697.4	2610.0	1432.7	1023.6	732.3	612.6	528.8	480.9	458.9	460.9
67.5°	22907.4	15564.3	2236.9	1450.7	1021.7	704.4	590.6	510.8	457.0	423.0	421.0
69°	20870.1	13429.2	2069.2	1402.8	973.8	668.5	562.7	490.9	439.0	403.1	401.1
70°	19227.8	12126.2	1959.5	1350.9	921.9	642.5	540.8	472.9	425.0	391.1	387.1
72.5°	13979.9	7945.8	1674.2	1161.3	760.3	538.8	466.9	415.0	379.1	359.2	355.2
75°	6986.0	3789.3	1358.9	941.8	582.7	431.0	383.1	347.2	329.2	325.3	323.3
77.5°	2294.7	1736.0	971.8	702.4	433.0	337.2	309.3	283.3	279.4	291.3	287.3
80°	1261.1	1009.7	616.6	464.9	295.3	247.4	243.4	229.5	235.5	255.4	251.4
82.5°	642.5	524.8	381.1	279.4	199.5	177.6	193.6	185.6	193.6	211.5	209.5
85°	317.3	287.3	241.4	169.6	131.7	113.7	137.7	143.7	147.7	161.6	161.6
87.5°	183.6	169.6	127.7	79.8	65.8	59.9	79.8	77.8	91.8	99.8	97.8
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)