

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: P456610

Luminaire Tested: **GALN-SA7D-827-U-SL4**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456610
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA7D-827-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38771 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

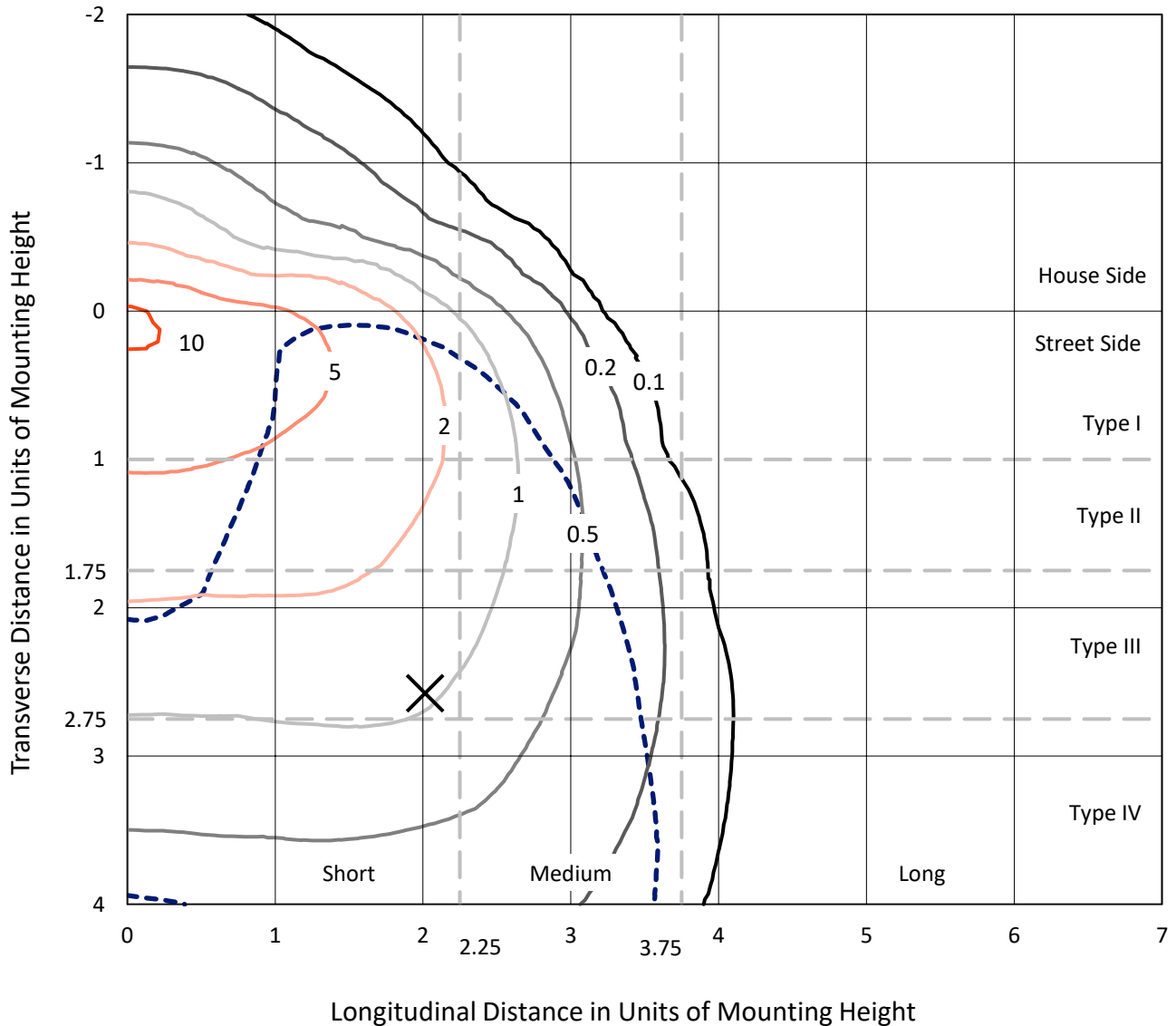
Input Watts (W): 433
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

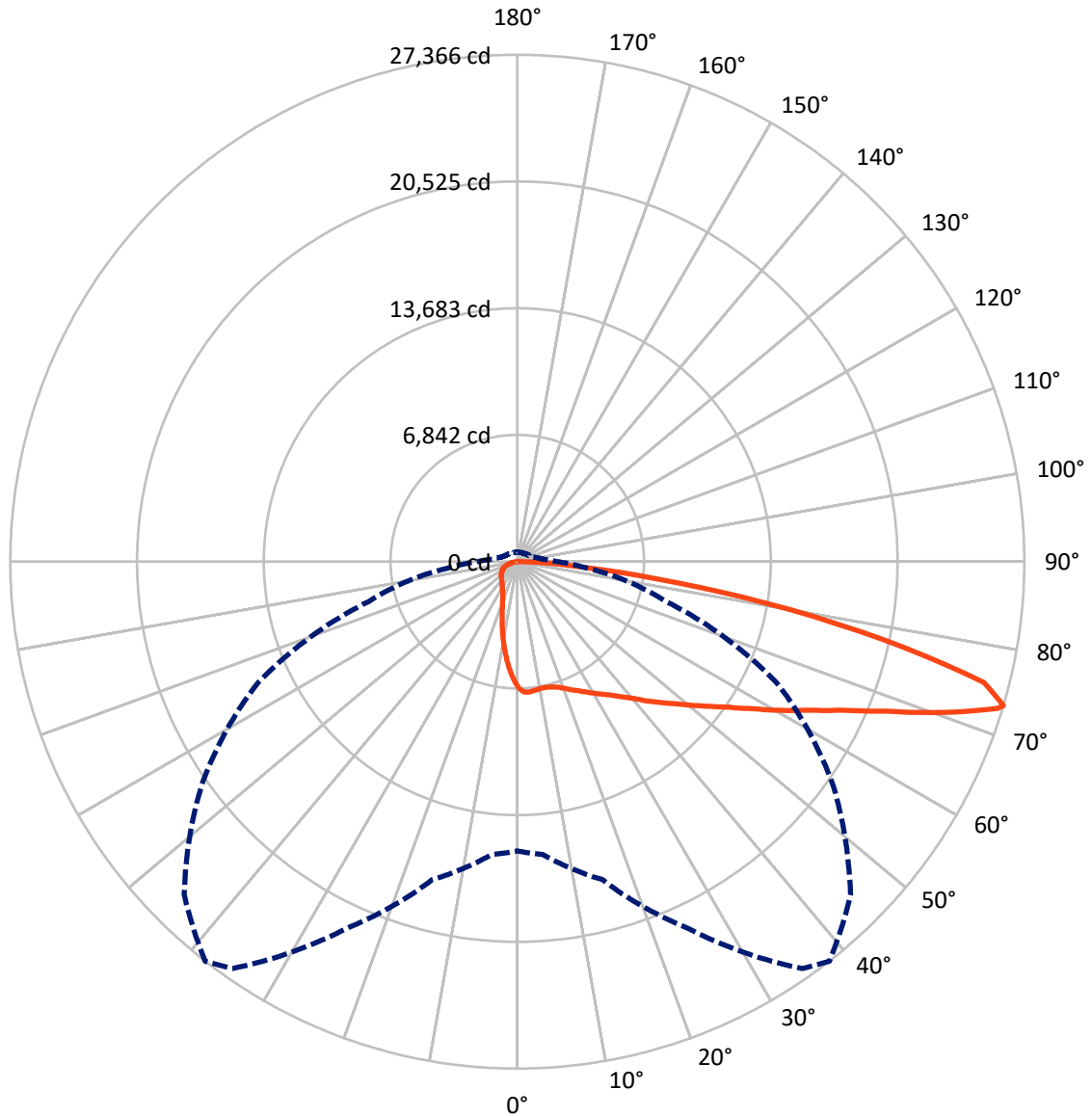
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5212.0	0.0	5212.0
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	33559.0	0.0	33559.0
	% Fixture	86.6	0.0	86.6
Total	Lumens	38771.0	0.0	38771.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	594.5	1.5
10°-20°	1524.7	3.9
20°-30°	2374.2	6.1
30°-40°	3482.4	9.0
40°-50°	5165.7	13.3
50°-60°	7318.8	18.9
60°-70°	9284.1	23.9
70°-80°	7728.3	19.9
80°-90°	1298.5	3.3
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°	38771.0	100.0
0°-180°	38771.0	100.0

Coefficient of Utilization



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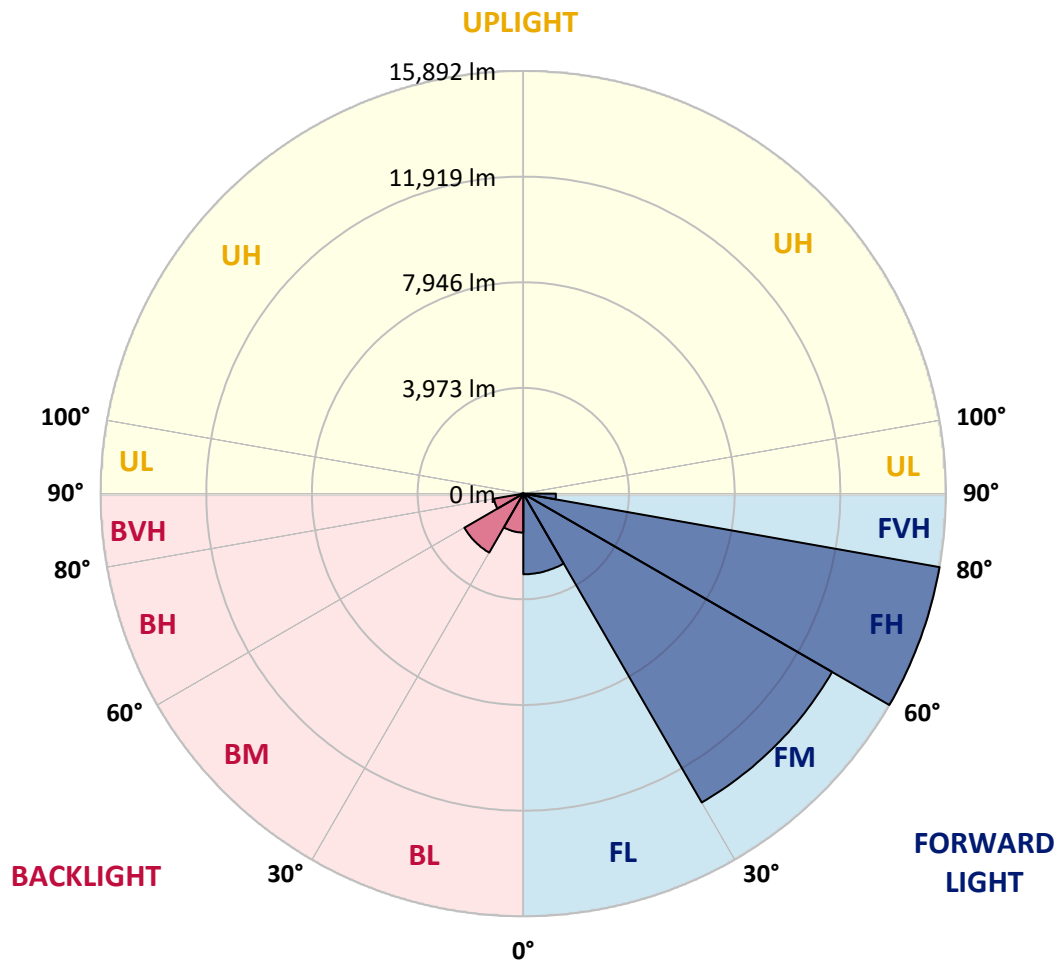
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3030.8	7.8			
FM	(30°-60°)	13408.1	34.6			
FH	(60°-80°)	15892.1	41.0			G5
FVH	(80°-90°)	1228.1	3.2			G5
BL	(0°-30°)	1462.5	3.8	B3/2500		
BM	(30°-60°)	2558.8	6.6	B3/5000		
BH	(60°-80°)	1120.3	2.9	B3/2500		G3/2500
BVH	(80°-90°)	70.4	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4
2.5°	7085.1	7120.1	7102.6	7078.5	7063.2	7047.9	7026.0	6962.5	6912.1	6857.4	6772.0
5°	7137.6	7159.5	7144.2	7113.6	7078.5	7063.2	7021.6	6938.4	6857.4	6765.4	6638.4
7.5°	7107.0	7115.7	7098.2	7061.0	7030.4	7001.9	6953.7	6861.8	6763.2	6651.6	6485.2
10°	6997.5	7030.4	7030.4	6999.7	6969.0	6953.7	6905.6	6818.0	6728.2	6601.2	6404.2
12.5°	6907.7	6942.8	6971.2	6962.5	6960.3	6960.3	6923.1	6857.4	6752.3	6631.9	6397.6
15°	6846.4	6888.0	6949.3	6984.4	7006.3	7012.8	6997.5	6940.6	6833.3	6693.2	6423.9
17.5°	6833.3	6883.7	6995.3	7072.0	7128.9	7126.7	7122.3	7043.5	6925.3	6780.8	6456.7
20°	6892.4	6958.1	7113.6	7234.0	7317.2	7301.8	7277.8	7174.9	7036.9	6874.9	6487.4
22.5°	7069.8	7137.6	7308.4	7439.8	7520.8	7520.8	7448.5	7312.8	7166.1	6984.4	6529.0
25°	7323.7	7398.2	7579.9	7713.5	7750.7	7722.2	7650.0	7485.8	7317.2	7142.0	6616.5
27.5°	7634.6	7724.4	7893.0	8004.7	7993.7	7971.8	7897.4	7687.2	7518.6	7358.8	6765.4
30°	8022.2	8087.9	8263.0	8289.3	8249.9	8245.5	8140.4	7930.2	7772.6	7650.0	6977.8
32.5°	8387.8	8446.9	8587.1	8598.0	8527.9	8536.7	8438.2	8245.5	8155.7	8111.9	7334.7
35°	8775.4	8806.0	8926.4	8913.3	8867.3	8860.7	8821.3	8637.4	8665.9	8744.7	7840.5
37.5°	9099.4	9160.7	9228.6	9239.5	9237.3	9259.2	9285.5	9197.9	9362.1	9609.5	8503.9
40°	9397.2	9449.7	9550.4	9585.5	9670.8	9714.6	9804.4	9806.6	10185.4	10592.6	9320.5
42.5°	9598.6	9688.4	9876.7	9940.1	10148.1	10279.5	10413.1	10555.4	11104.9	11628.2	10283.9
45°	9773.7	9892.0	10205.1	10402.1	10684.6	10844.4	11126.8	11424.6	12215.0	12900.3	11262.6
47.5°	10038.7	10143.8	10502.8	10851.0	11277.9	11461.8	11884.4	12328.8	13362.3	14113.3	12199.7
50°	10406.5	10470.0	10835.6	11402.7	11947.9	12184.3	12742.7	13384.2	14588.4	15310.9	13022.9
52.5°	10877.2	10903.5	11194.7	11950.1	12668.2	12961.6	13701.6	14450.4	15661.2	16350.9	13675.4
55°	11433.4	11389.6	11617.3	12530.3	13491.4	13874.6	14669.4	15529.8	16867.6	17191.6	14150.5
57.5°	11982.9	11915.0	12096.8	13235.3	14507.4	14969.3	15895.5	16642.1	17944.8	17977.6	14483.3
60°	12565.3	12514.9	12731.7	14062.9	15753.2	16300.5	17156.6	17795.9	18987.0	18525.0	14535.8
62.5°	13163.0	13082.0	13390.7	14993.4	17156.6	17653.6	18483.4	19022.0	20009.5	18728.6	14030.1
65°	13743.2	13706.0	14183.3	16099.1	18754.9	19319.8	20125.5	20491.1	20828.3	18422.1	12775.5
67.5°	14360.7	14435.1	15197.0	17574.8	20839.3	21548.7	22417.9	22074.1	21062.6	16970.5	10759.0
70°	15302.1	15350.3	16528.2	19508.1	23525.7	24381.8	24802.2	22636.8	19932.8	14214.0	8087.9
72.5°	15707.2	15919.6	17717.1	21537.7	26577.8	27101.1	25603.5	21382.3	16604.9	9655.5	4249.7
73°	15617.4	15871.4	17771.8	21846.4	26816.5	27366.1	25432.8	20736.4	15435.7	8315.6	3643.3
75°	14498.6	14811.7	17060.3	21588.1	26352.3	26023.9	22687.2	17673.3	10430.6	3781.2	1659.6
77.5°	11439.9	11529.7	13517.7	17432.5	20751.7	20143.0	16979.3	11045.8	4260.7	1405.6	941.5
80°	5738.6	6069.2	7619.3	9986.1	13876.8	13677.6	10717.4	5224.0	1775.7	825.4	624.0
82.5°	2760.9	2995.2	3711.1	4869.4	7667.5	7485.8	5307.2	2855.1	1127.6	481.7	367.8
85°	1777.8	1953.0	2362.4	2323.0	3152.8	3010.5	2384.3	2161.0	667.8	251.8	256.2
87.5°	1173.6	1285.2	1541.4	1232.7	1147.3	1037.8	1053.1	1217.3	131.4	96.3	35.0
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°	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4
2.5°	6737.0	6708.5	6614.4	6522.4	6434.8	6351.6	6296.9	6224.6	6176.5	6189.6	6209.3
5°	6568.4	6504.9	6338.5	6176.5	6023.2	5841.5	5694.8	5576.6	5486.8	5453.9	5447.4
7.5°	6391.0	6283.7	6045.1	5767.0	5506.5	5281.0	5020.4	4891.3	4740.2	4687.6	4670.1
10°	6283.7	6139.2	5804.3	5416.7	5024.8	4650.4	4368.0	4138.1	3930.1	3890.7	3871.0
12.5°	6253.1	6062.6	5611.6	5112.4	4591.3	4131.5	3713.3	3411.2	3209.7	3163.8	3095.9
15°	6235.6	5999.1	5432.0	4805.9	4144.6	3584.1	3144.1	2791.6	2607.6	2485.0	2487.2
17.5°	6220.3	5926.9	5230.6	4470.9	3759.3	3113.4	2627.4	2309.9	2141.3	2075.6	2069.0
20°	6198.4	5841.5	4998.5	4118.4	3319.2	2684.3	2244.2	2007.7	1893.9	1839.1	1837.0
22.5°	6189.6	5758.3	4770.8	3759.3	2929.5	2353.7	1990.2	1823.8	1751.6	1714.3	1714.3
25°	6211.5	5699.2	4532.2	3417.7	2583.6	2071.2	1815.1	1701.2	1659.6	1639.9	1633.3
27.5°	6279.4	5672.9	4295.7	3076.2	2266.1	1878.6	1696.8	1618.0	1587.4	1572.0	1574.2
30°	6408.5	5670.7	4063.6	2739.0	2029.6	1731.9	1602.7	1547.9	1523.9	1515.1	1512.9
32.5°	6616.5	5718.9	3835.9	2461.0	1830.4	1609.3	1515.1	1475.7	1464.7	1458.2	1456.0
35°	6969.0	5854.6	3610.4	2207.0	1677.1	1499.8	1431.9	1412.2	1396.9	1403.4	1405.6
37.5°	7444.2	6088.9	3395.9	2007.7	1561.1	1418.8	1361.8	1344.3	1335.6	1342.1	1348.7
40°	8081.3	6426.1	3216.3	1847.9	1477.9	1350.9	1300.5	1285.2	1276.5	1287.4	1289.6
42.5°	8784.1	6815.8	3067.4	1723.1	1410.0	1294.0	1245.8	1228.3	1221.7	1228.3	1230.5
45°	9506.6	7269.0	2990.8	1633.3	1353.1	1252.4	1202.0	1182.3	1167.0	1162.6	1169.2
47.5°	10218.2	7663.1	2988.6	1578.6	1307.1	1215.1	1160.4	1138.5	1118.8	1107.9	1105.7
50°	10798.4	7976.2	3041.2	1554.5	1267.7	1173.6	1118.8	1096.9	1070.6	1048.8	1053.1
52.5°	11236.3	8179.8	3065.2	1543.6	1245.8	1129.8	1075.0	1055.3	1024.7	996.2	996.2
55°	11518.7	8228.0	3006.1	1532.6	1228.3	1083.8	1024.7	1007.2	976.5	948.0	948.0
57.5°	11615.1	8079.1	2793.7	1506.3	1210.8	1044.4	974.3	959.0	934.9	906.4	902.1
60°	11391.8	7575.5	2421.5	1427.5	1175.7	1002.8	919.6	913.0	904.2	880.2	878.0
62.5°	10531.3	6507.1	2016.5	1324.6	1116.6	959.0	869.2	880.2	886.7	873.6	871.4
65°	9099.4	5283.2	1723.1	1182.3	1037.8	897.7	814.5	842.9	860.5	860.5	856.1
67.5°	7380.7	4057.1	1451.6	1059.7	939.3	814.5	753.2	775.1	788.2	783.8	794.8
70°	5245.9	2747.8	1182.3	919.6	814.5	720.3	674.4	674.4	665.6	661.2	661.2
72.5°	2544.2	1569.8	959.0	768.5	694.1	615.2	578.0	562.7	545.2	543.0	532.0
73°	2126.0	1407.8	915.2	740.0	665.6	599.9	558.3	534.2	523.3	514.5	512.3
75°	1294.0	1068.5	764.1	624.0	567.1	516.7	479.5	457.6	446.6	440.1	437.9
77.5°	851.7	797.0	593.3	477.3	433.5	402.9	387.5	365.6	359.1	350.3	350.3
80°	634.9	608.7	424.8	337.2	310.9	284.6	280.3	275.9	258.4	247.4	243.0
82.5°	409.4	433.5	289.0	225.5	197.1	175.2	177.3	183.9	166.4	151.1	146.7
85°	291.2	313.1	175.2	102.9	83.2	72.3	81.0	72.3	74.4	59.1	48.2
87.5°	48.2	83.2	30.7	13.1	6.6	4.4	0.0	0.0	0.0	0.0	0.0
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)