

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: P456849

Luminaire Tested: **GALN-SA8A-827-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456849
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA8A-827-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27301 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

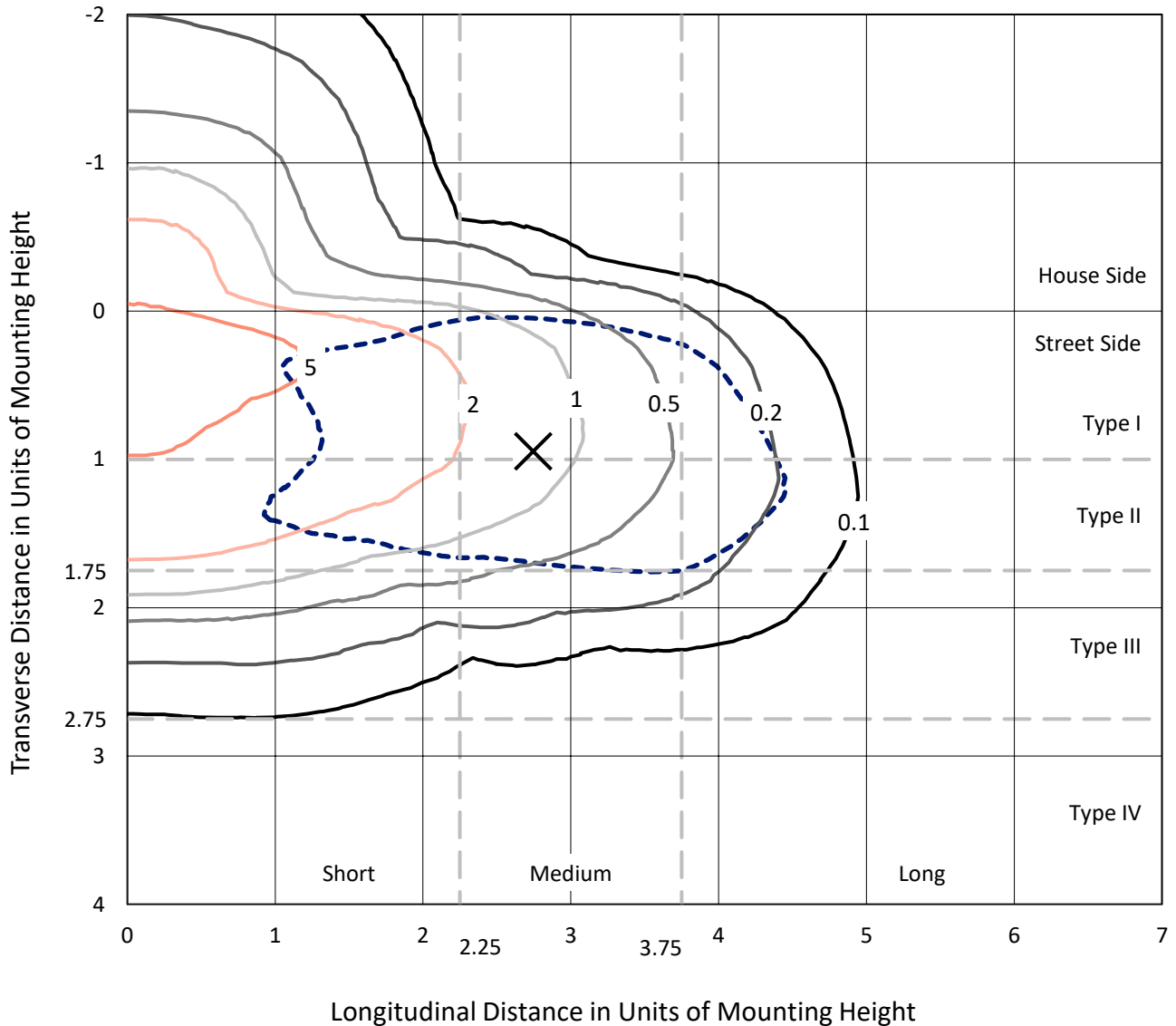
Input Watts (W): 244
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

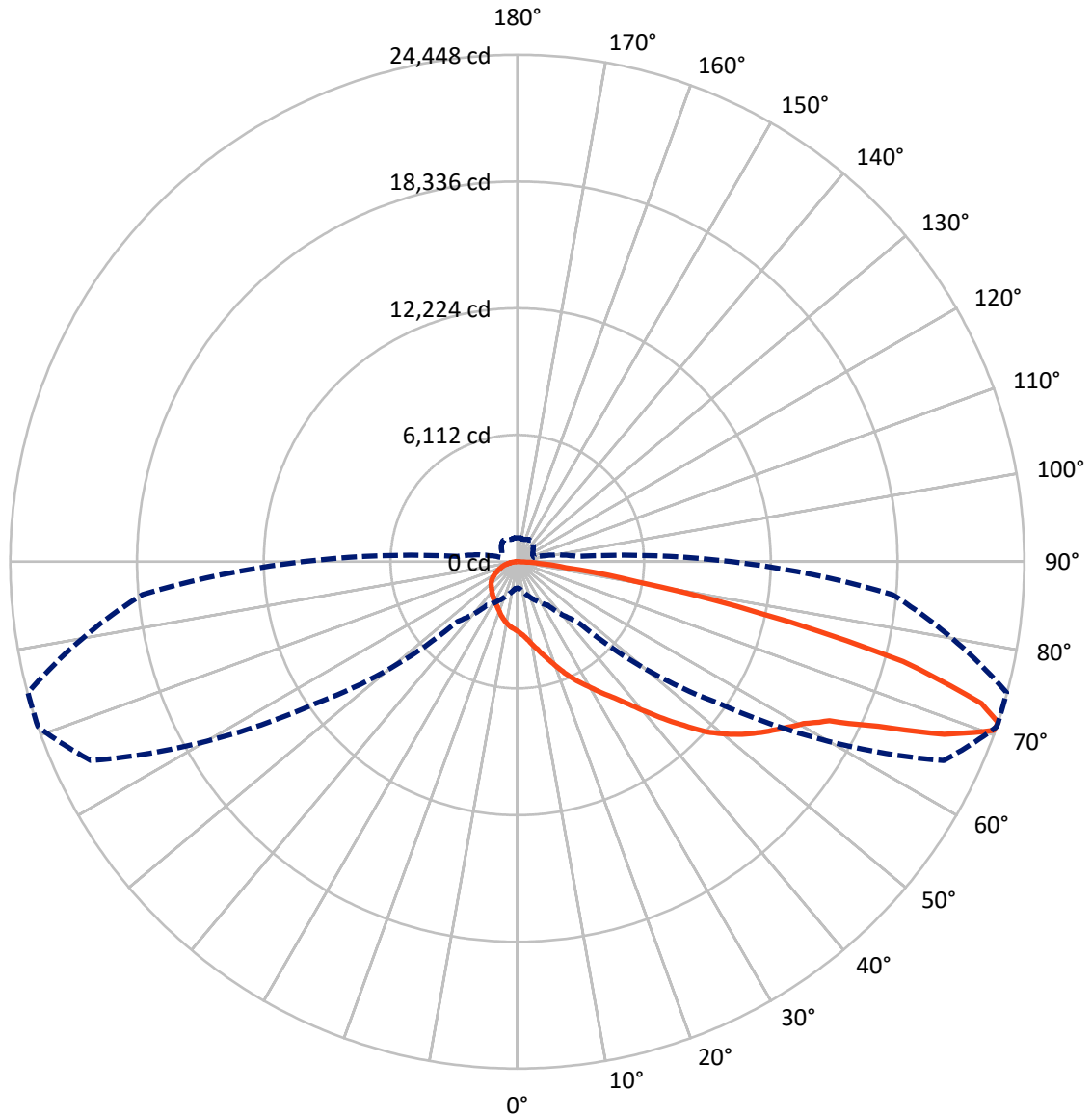
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4910.0	0.0	4910.0
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	22391.0	0.0	22391.0
	% Fixture	82.0	0.0	82.0
Total	Lumens	27301.0	0.0	27301.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	336.4	1.2
10°-20°	1093.0	4.0
20°-30°	1910.2	7.0
30°-40°	2841.1	10.4
40°-50°	4186.0	15.3
50°-60°	5860.5	21.5
60°-70°	6554.8	24.0
70°-80°	4003.9	14.7
80°-90°	515.1	1.9
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°	27301.0	100.0
0°-180°	27301.0	100.0

Coefficient of Utilization



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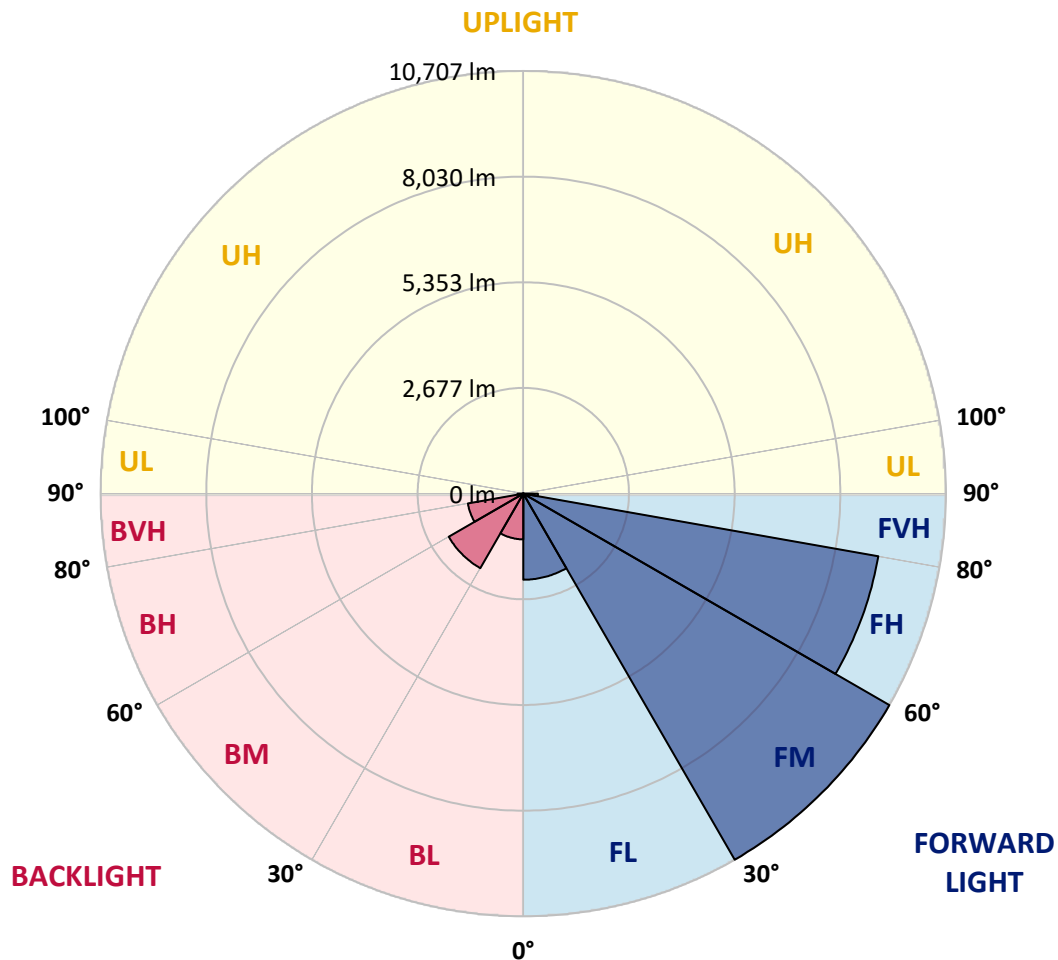
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2181.4	8.0			
FM (30°-60°)	10706.9	39.2			
FH (60°-80°)	9132.1	33.4			G4/12000
FVH (80°-90°)	370.6	1.4			G3/500
BL (0°-30°)	1158.3	4.2	B3/2500		
BM (30°-60°)	2180.7	8.0	B2/2500		
BH (60°-80°)	1426.6	5.2	B3/2500		G3/2500
BVH (80°-90°)	144.5	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-G4

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	3350.7	3350.7	3350.7	3350.7	3350.7	3350.7	3350.7	3350.7	3350.7	3350.7	3350.7
2.5°	3719.8	3701.8	3703.3	3677.8	3644.8	3608.7	3557.7	3512.7	3476.7	3455.7	3394.2
5°	4121.9	4103.9	4081.4	4025.9	4001.9	3913.4	3800.8	3698.8	3620.8	3577.2	3454.2
7.5°	4447.5	4443.0	4437.0	4405.5	4344.0	4221.0	4124.9	3947.9	3832.3	3749.8	3539.7
10°	4648.6	4656.1	4660.6	4666.6	4641.1	4576.6	4444.5	4221.0	4073.9	3968.9	3650.8
12.5°	4750.6	4758.1	4783.7	4839.2	4873.7	4866.2	4758.1	4539.1	4336.5	4198.5	3769.3
15°	4813.7	4825.7	4870.7	4944.2	5059.8	5133.3	5080.8	4878.2	4656.1	4492.6	3910.4
17.5°	4882.7	4896.2	4945.7	5050.7	5202.3	5361.4	5418.4	5244.3	5002.7	4807.7	4067.9
20°	4921.7	4939.7	5010.2	5148.3	5325.3	5556.4	5745.5	5654.0	5389.9	5173.8	4249.5
22.5°	4984.7	4999.7	5059.8	5206.8	5418.4	5708.0	6072.6	6053.1	5820.5	5541.4	4449.0
25°	5155.8	5179.8	5209.8	5298.3	5502.4	5862.5	6344.2	6479.2	6237.7	5925.6	4632.1
27.5°	5478.4	5497.9	5496.4	5508.4	5623.9	5996.1	6579.8	6900.9	6651.8	6314.2	4809.2
30°	5846.0	5853.5	5859.5	5832.5	5858.0	6132.6	6795.9	7318.0	7068.9	6713.3	4963.7
32.5°	6293.2	6308.2	6257.2	6188.1	6167.1	6335.2	6974.4	7735.2	7562.6	7118.5	5116.8
35°	6821.4	6860.4	6756.8	6635.3	6549.8	6626.3	7214.5	8161.3	8068.3	7636.1	5319.3
37.5°	7424.6	7472.6	7376.6	7138.0	7016.4	7037.4	7528.1	8688.0	8707.5	8225.8	5620.9
40°	7918.2	7981.3	7984.3	7646.6	7462.1	7486.1	7925.7	9255.2	9478.8	8955.1	5976.6
42.5°	8243.9	8305.4	8369.9	8171.8	7978.3	8114.8	8389.4	9870.4	10346.1	9840.4	6473.2
45°	8601.0	8656.5	8692.5	8602.5	8494.4	8848.6	8949.1	10524.6	11270.4	10829.2	7016.4
47.5°	9015.1	9076.6	9111.2	9025.6	8985.1	9492.3	9552.3	11135.4	12257.7	11789.6	7616.6
50°	9567.3	9613.8	9595.8	9541.8	9532.8	9986.0	10131.5	11707.1	13072.5	12823.4	8239.4
52.5°	10254.5	10310.1	10329.6	10253.0	10218.5	10338.6	10598.2	12227.7	13813.8	13711.7	8904.1
55°	10670.2	10758.7	11055.8	11175.9	11258.4	10794.7	11100.8	12802.4	14478.5	14648.1	9618.3
57.5°	10137.5	10251.5	10916.3	11516.5	12292.3	11935.1	11813.6	13402.6	15143.2	15555.9	10473.6
60°	8838.1	8863.6	9720.4	10826.2	12386.8	13401.1	13300.6	14357.0	15863.5	16471.2	11600.5
62.5°	6131.1	6185.1	7198.0	8962.6	11219.4	13929.3	15830.5	16004.5	16895.8	17841.2	13252.6
65°	3161.6	3091.1	4013.9	5632.9	8458.4	12674.9	17880.2	19034.1	19134.6	19983.9	15578.4
67.5°	1946.2	1977.7	2409.8	3289.1	5001.2	9211.7	17665.6	22735.9	22206.2	22614.3	17737.6
70°	1461.5	1500.5	1797.6	2250.8	3049.1	5266.8	14206.9	23633.2	24372.9	24267.9	18394.9
71°	1270.9	1311.5	1620.6	2048.2	2561.4	4064.9	11969.6	22693.9	24448.0	24430.0	18147.3
72.5°	1083.4	1108.9	1350.5	1734.6	2159.2	2849.5	8992.6	20353.0	23405.1	24003.8	17263.5
75°	850.8	870.3	978.3	1323.5	1700.1	1749.6	4825.7	15258.8	19223.2	20363.5	14372.0
77.5°	693.2	706.7	762.3	982.8	1311.5	1239.4	2531.4	9931.9	12043.2	13191.1	8465.9
80°	550.7	565.7	598.7	666.2	982.8	883.8	1207.9	5032.7	5817.5	5805.5	3379.2
82.5°	427.6	432.1	471.2	489.2	672.2	627.2	654.2	2130.7	2360.3	2438.3	1219.9
85°	270.1	283.6	417.1	375.1	402.1	367.6	322.6	846.3	1042.9	1027.9	487.7
87.5°	82.5	87.0	141.0	159.1	178.6	160.6	118.5	249.1	304.6	330.1	121.5
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°	3350.7	3350.7	3350.7	3350.7	3350.7	3350.7	3350.7	3350.7	3350.7	3350.7	3350.7
2.5°	3370.2	3353.7	3295.1	3247.1	3202.1	3152.6	3110.6	3098.6	3088.1	3083.6	3082.1
5°	3401.7	3352.2	3236.6	3142.1	3067.1	2998.0	2954.5	2935.0	2915.5	2915.5	2921.5
7.5°	3446.7	3356.7	3178.1	3037.1	2942.5	2878.0	2846.5	2843.5	2848.0	2852.5	2854.0
10°	3496.2	3353.7	3092.6	2917.0	2833.0	2803.0	2804.5	2830.0	2854.0	2872.0	2875.0
12.5°	3544.2	3335.7	2992.0	2804.5	2750.5	2756.5	2798.5	2855.5	2902.0	2927.5	2929.0
15°	3598.2	3307.1	2870.5	2697.9	2679.9	2726.4	2804.5	2891.5	2962.0	3004.0	3008.5
17.5°	3643.3	3259.1	2742.9	2594.4	2616.9	2702.4	2810.5	2923.0	3008.5	3061.1	3070.1
20°	3694.3	3197.6	2610.9	2495.4	2559.9	2675.4	2798.5	2920.0	3008.5	3059.6	3071.6
22.5°	3734.8	3110.6	2484.9	2414.3	2508.9	2642.4	2758.0	2855.5	2927.5	2954.5	2972.5
25°	3751.3	3001.0	2366.3	2348.3	2468.4	2588.4	2666.4	2721.9	2744.4	2741.4	2749.0
27.5°	3742.3	2875.0	2264.3	2295.8	2417.3	2504.4	2543.4	2538.9	2498.4	2460.9	2478.9
30°	3704.8	2724.9	2178.8	2241.8	2351.3	2399.3	2393.3	2334.8	2258.3	2187.8	2192.3
32.5°	3637.3	2562.9	2099.2	2180.3	2258.3	2279.3	2238.8	2162.2	2052.7	1961.2	1947.7
35°	3580.2	2408.3	2028.7	2109.7	2165.2	2154.7	2115.7	2016.7	1917.7	1836.6	1823.1
37.5°	3571.2	2276.3	1961.2	2030.2	2061.7	2046.7	1998.7	1914.7	1878.6	1817.1	1809.6
40°	3619.3	2183.3	1892.2	1946.2	1961.2	1949.2	1896.7	1848.6	1881.7	1866.6	1866.6
42.5°	3749.8	2133.7	1830.6	1862.1	1874.1	1883.2	1845.6	1805.1	1845.6	1776.6	1754.1
45°	3956.9	2135.2	1775.1	1779.6	1815.6	1847.1	1821.6	1761.6	1740.6	1602.6	1575.5
47.5°	4261.5	2186.3	1730.1	1701.6	1766.1	1818.6	1782.6	1695.6	1602.6	1511.0	1494.5
50°	4617.1	2277.8	1689.6	1620.6	1700.1	1782.6	1755.6	1653.6	1557.5	1502.0	1491.5
52.5°	5011.7	2393.3	1640.1	1530.5	1619.1	1766.1	1761.6	1647.6	1515.5	1478.0	1469.0
55°	5499.4	2507.4	1578.5	1425.5	1547.0	1752.6	1745.1	1598.1	1506.5	1479.5	1476.5
57.5°	6066.6	2672.4	1490.0	1319.0	1464.5	1697.1	1680.6	1568.0	1476.5	1457.0	1455.5
60°	6980.4	2929.0	1364.0	1221.4	1380.5	1599.6	1620.6	1517.0	1428.5	1424.0	1422.5
62.5°	8182.3	3289.1	1233.4	1120.9	1282.9	1473.5	1533.5	1448.0	1377.5	1400.0	1403.0
65°	9841.9	3592.2	1098.4	1035.4	1174.9	1352.0	1451.0	1383.5	1320.5	1364.0	1364.0
67.5°	10923.8	3598.2	975.3	946.8	1065.4	1249.9	1364.0	1307.0	1246.9	1320.5	1323.5
70°	10698.7	3152.6	873.3	853.8	958.8	1140.4	1267.9	1222.9	1153.9	1219.9	1195.9
71°	10335.6	2905.0	832.8	817.8	916.8	1087.9	1222.9	1185.4	1116.4	1159.9	1146.4
72.5°	9756.4	2522.4	766.8	769.8	853.8	1021.9	1159.9	1120.9	1051.9	1075.9	1071.4
75°	8246.9	2202.8	655.7	669.2	733.8	909.3	1033.9	1003.8	933.3	933.3	928.8
77.5°	5155.8	1539.5	544.7	552.2	622.7	778.8	888.3	862.8	795.3	772.8	766.8
80°	1923.7	795.3	426.1	435.2	478.7	613.7	735.3	711.2	642.2	616.7	592.7
82.5°	727.8	399.1	313.6	306.1	352.6	468.2	576.2	547.7	493.7	432.1	414.1
85°	274.6	198.1	192.1	186.1	207.1	277.6	357.1	351.1	294.1	250.6	246.1
87.5°	72.0	64.5	75.0	55.5	58.5	52.5	54.0	22.5	10.5	4.5	3.0
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)