

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: P453456

Luminaire Tested: **GALN-SA4C-727-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453456
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-SA4C-727-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23392 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

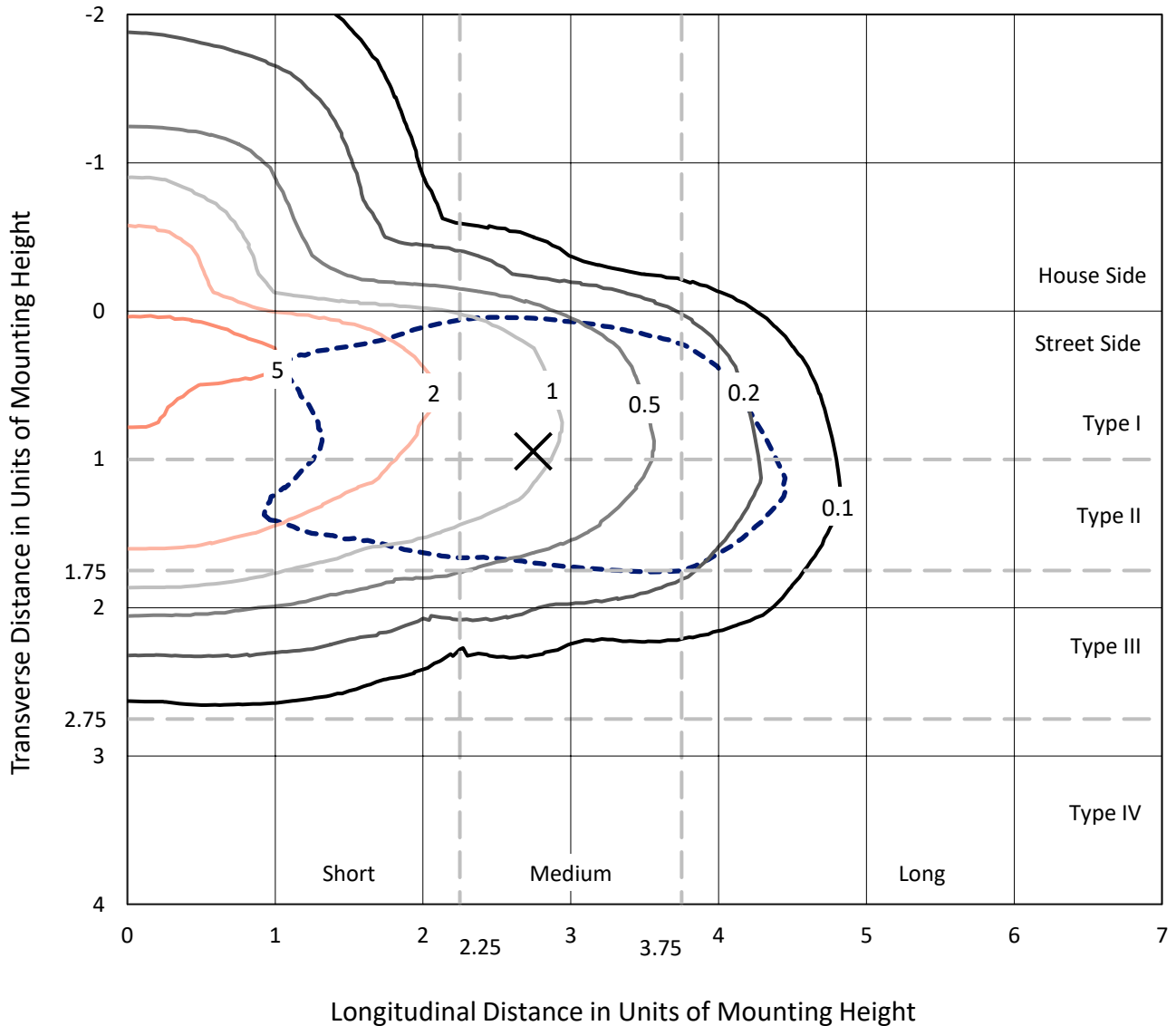
Input Watts (W): 213
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

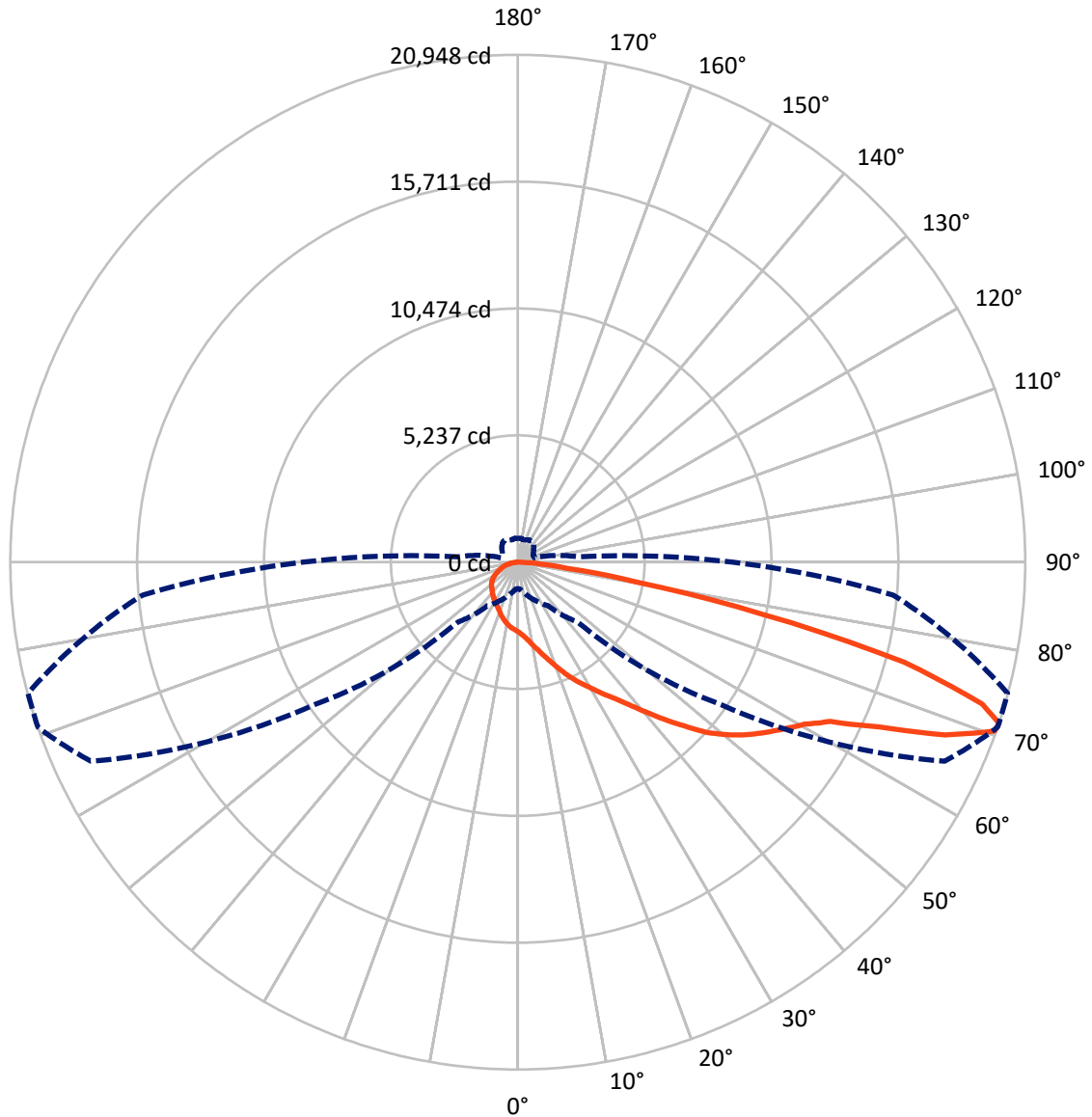
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 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	4207.0	0.0	4207.0
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	19185.0	0.0	19185.0
	% Fixture	82.0	0.0	82.0
Total	Lumens	23392.0	0.0	23392.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.3	1.2
10°-20°	936.5	4.0
20°-30°	1636.7	7.0
30°-40°	2434.3	10.4
40°-50°	3586.7	15.3
50°-60°	5021.4	21.5
60°-70°	5616.2	24.0
70°-80°	3430.6	14.7
80°-90°	441.3	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°	23392.0	100.0
0°-180°	23392.0	100.0

Coefficient of Utilization



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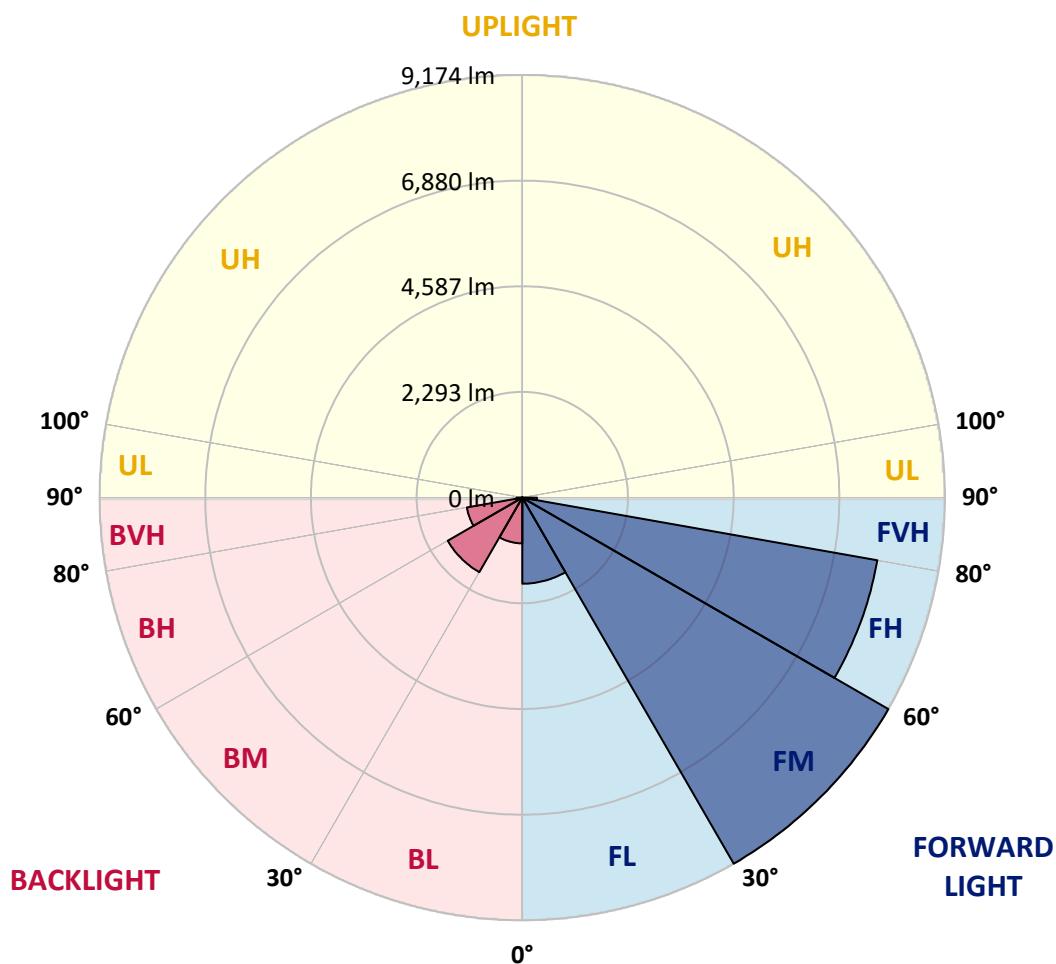
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1869.0	8.0			
FM	(30°-60°)	9173.9	39.2			
FH	(60°-80°)	7824.6	33.4			G4/12000
FVH	(80°-90°)	317.5	1.4			G3/500
BL	(0°-30°)	992.4	4.2	B2/1000		
BM	(30°-60°)	1868.5	8.0	B2/2500		
BH	(60°-80°)	1222.3	5.2	B3/2500		G3/2500
BVH	(80°-90°)	123.8	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°	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9
2.5°	3187.2	3171.8	3173.0	3151.2	3122.9	3092.0	3048.3	3009.8	2978.9	2960.9	2908.2
5°	3531.7	3516.3	3497.0	3449.5	3428.9	3353.0	3256.6	3169.2	3102.3	3065.0	2959.6
7.5°	3810.7	3806.9	3801.7	3774.7	3722.0	3616.6	3534.3	3382.6	3283.6	3212.9	3032.9
10°	3983.0	3989.4	3993.3	3998.4	3976.6	3921.3	3808.2	3616.6	3490.6	3400.6	3128.0
12.5°	4070.4	4076.9	4098.7	4146.3	4175.9	4169.4	4076.9	3889.2	3715.6	3597.3	3229.6
15°	4124.4	4134.7	4173.3	4236.3	4335.3	4398.3	4353.3	4179.7	3989.4	3849.3	3350.5
17.5°	4183.6	4195.1	4237.6	4327.6	4457.4	4593.7	4642.6	4493.4	4286.4	4119.3	3485.5
20°	4217.0	4232.4	4292.9	4411.1	4562.9	4760.8	4922.8	4844.4	4618.1	4433.0	3641.0
22.5°	4271.0	4283.9	4335.3	4461.3	4642.6	4890.7	5203.1	5186.4	4987.1	4748.0	3812.0
25°	4417.6	4438.1	4463.9	4539.7	4714.6	5023.1	5435.8	5551.5	5344.5	5077.1	3968.9
27.5°	4694.0	4710.7	4709.4	4719.7	4818.7	5137.5	5637.7	5912.8	5699.4	5410.1	4120.6
30°	5009.0	5015.4	5020.6	4997.4	5019.3	5254.5	5822.8	6270.2	6056.8	5752.1	4253.0
32.5°	5392.1	5405.0	5361.3	5302.1	5284.1	5428.1	5975.8	6627.6	6479.8	6099.2	4384.1
35°	5844.7	5878.1	5789.4	5685.2	5612.0	5677.5	6181.5	6992.8	6913.1	6542.8	4557.7
37.5°	6361.5	6402.6	6320.4	6115.9	6011.8	6029.8	6450.2	7444.0	7460.8	7048.1	4816.1
40°	6784.5	6838.5	6841.1	6551.8	6393.6	6414.2	6790.9	7930.0	8121.6	7672.9	5120.8
42.5°	7063.5	7116.2	7171.5	7001.8	6835.9	6952.9	7188.2	8457.2	8864.7	8431.4	5546.4
45°	7369.5	7417.0	7447.9	7370.8	7278.2	7581.6	7667.8	9017.7	9656.7	9278.7	6011.8
47.5°	7724.3	7777.0	7806.6	7733.3	7698.6	8133.2	8184.6	9541.0	10502.7	10101.5	6526.1
50°	8197.4	8237.3	8221.9	8175.6	8167.9	8556.2	8680.9	10030.8	11200.8	10987.4	7059.6
52.5°	8786.3	8833.9	8850.6	8785.0	8755.4	8858.3	9080.7	10476.9	11835.9	11748.5	7629.2
55°	9142.4	9218.3	9472.8	9575.7	9646.4	9249.1	9511.4	10969.4	12405.5	12550.7	8241.2
57.5°	8686.0	8783.7	9353.3	9867.5	10532.2	10226.2	10122.1	11483.6	12975.0	13328.6	8974.0
60°	7572.6	7594.5	8328.6	9276.1	10613.2	11482.3	11396.2	12301.3	13592.1	14112.8	9939.5
62.5°	5253.3	5299.5	6167.4	7679.3	9613.0	11934.9	13563.8	13713.0	14476.7	15286.6	11355.1
65°	2708.9	2648.5	3439.2	4826.4	7247.3	10860.1	15320.1	16308.8	16394.9	17122.6	13347.9
67.5°	1667.5	1694.5	2064.8	2818.2	4285.1	7892.7	15136.2	19480.5	19026.7	19376.4	15197.9
70°	1252.2	1285.7	1540.2	1928.5	2612.5	4512.7	12172.7	20249.3	20883.2	20793.2	15761.1
71°	1089.0	1123.7	1388.5	1754.9	2194.6	3482.9	10255.8	19444.5	20947.5	20932.0	15548.9
72.5°	928.3	950.1	1157.1	1486.2	1850.1	2441.5	7705.0	17438.9	20053.9	20566.9	14791.7
75°	729.0	745.7	838.3	1134.0	1456.7	1499.1	4134.7	13074.0	16470.7	17447.9	12314.2
77.5°	594.0	605.6	653.1	842.1	1123.7	1062.0	2168.9	8509.9	10318.8	11302.3	7253.8
80°	471.8	484.7	513.0	570.8	842.1	757.3	1035.0	4312.1	4984.6	4974.3	2895.3
82.5°	366.4	370.3	403.7	419.1	576.0	537.4	560.6	1825.7	2022.4	2089.2	1045.3
85°	231.4	243.0	357.4	321.4	344.6	315.0	276.4	725.1	893.5	880.7	417.8
87.5°	70.7	74.6	120.9	136.3	153.0	137.6	101.6	213.4	261.0	282.8	104.1
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°	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9
2.5°	2887.6	2873.5	2823.3	2782.2	2743.6	2701.2	2665.2	2654.9	2645.9	2642.1	2640.8
5°	2914.6	2872.2	2773.2	2692.2	2627.9	2568.8	2531.5	2514.8	2498.1	2498.1	2503.2
7.5°	2953.2	2876.0	2723.1	2602.2	2521.2	2465.9	2438.9	2436.3	2440.2	2444.1	2445.3
10°	2995.6	2873.5	2649.8	2499.3	2427.3	2401.6	2402.9	2424.8	2445.3	2460.8	2463.3
12.5°	3036.8	2858.0	2563.6	2402.9	2356.6	2361.8	2397.8	2446.6	2486.5	2508.3	2509.6
15°	3083.0	2833.6	2459.5	2311.6	2296.2	2336.1	2402.9	2477.5	2537.9	2573.9	2577.8
17.5°	3121.6	2792.5	2350.2	2222.9	2242.2	2315.5	2408.1	2504.5	2577.8	2622.8	2630.5
20°	3165.3	2739.8	2237.1	2138.1	2193.4	2292.4	2397.8	2501.9	2577.8	2621.5	2631.8
22.5°	3200.0	2665.2	2129.1	2068.6	2149.6	2264.1	2363.1	2446.6	2508.3	2531.5	2546.9
25°	3214.2	2571.3	2027.5	2012.1	2114.9	2217.8	2284.6	2332.2	2351.5	2348.9	2355.4
27.5°	3206.5	2463.3	1940.1	1967.1	2071.2	2145.8	2179.2	2175.4	2140.6	2108.5	2123.9
30°	3174.3	2334.8	1866.8	1920.8	2014.6	2055.8	2050.6	2000.5	1934.9	1874.5	1878.4
32.5°	3116.5	2195.9	1798.7	1868.1	1934.9	1952.9	1918.2	1852.7	1758.8	1680.4	1668.8
35°	3067.6	2063.5	1738.2	1807.7	1855.2	1846.2	1812.8	1727.9	1643.1	1573.7	1562.1
37.5°	3059.9	1950.4	1680.4	1739.5	1766.5	1753.7	1712.5	1640.5	1609.7	1556.9	1550.5
40°	3101.0	1870.7	1621.2	1667.5	1680.4	1670.1	1625.1	1583.9	1612.2	1599.4	1599.4
42.5°	3212.9	1828.2	1568.5	1595.5	1605.8	1613.5	1581.4	1546.7	1581.4	1522.2	1503.0
45°	3390.3	1829.5	1521.0	1524.8	1555.7	1582.7	1560.8	1509.4	1491.4	1373.1	1350.0
47.5°	3651.3	1873.2	1482.4	1458.0	1513.2	1558.2	1527.4	1452.8	1373.1	1294.7	1280.5
50°	3956.0	1951.7	1447.7	1388.5	1456.7	1527.4	1504.2	1416.8	1334.5	1287.0	1278.0
52.5°	4294.1	2050.6	1405.2	1311.4	1387.2	1513.2	1509.4	1411.7	1298.5	1266.4	1258.7
55°	4712.0	2148.4	1352.5	1221.4	1325.5	1501.7	1495.2	1369.2	1290.8	1267.7	1265.1
57.5°	5198.0	2289.8	1276.7	1130.1	1254.8	1454.1	1440.0	1343.5	1265.1	1248.4	1247.1
60°	5980.9	2509.6	1168.7	1046.5	1182.8	1370.5	1388.5	1299.8	1224.0	1220.1	1218.8
62.5°	7010.8	2818.2	1056.8	960.4	1099.2	1262.5	1314.0	1240.7	1180.2	1199.5	1202.1
65°	8432.7	3077.9	941.1	887.1	1006.7	1158.4	1243.2	1185.4	1131.4	1168.7	1168.7
67.5°	9359.7	3083.0	835.7	811.3	912.8	1071.0	1168.7	1119.8	1068.4	1131.4	1134.0
70°	9166.8	2701.2	748.3	731.5	821.5	977.1	1086.4	1047.8	988.7	1045.3	1024.7
71°	8855.7	2489.1	713.5	700.7	785.5	932.1	1047.8	1015.7	956.5	993.8	982.3
72.5°	8359.4	2161.2	657.0	659.5	731.5	875.5	993.8	960.4	901.3	921.8	918.0
75°	7066.1	1887.4	561.8	573.4	628.7	779.1	885.8	860.1	799.7	799.7	795.8
77.5°	4417.6	1319.1	466.7	473.1	533.6	667.3	761.1	739.3	681.4	662.1	657.0
80°	1648.2	681.4	365.1	372.8	410.1	525.8	630.0	609.4	550.3	528.4	507.8
82.5°	623.6	342.0	268.7	262.3	302.1	401.1	493.7	469.3	423.0	370.3	354.8
85°	235.3	169.7	164.6	159.4	177.4	237.8	306.0	300.8	252.0	214.7	210.9
87.5°	61.7	55.3	64.3	47.6	50.1	45.0	46.3	19.3	9.0	3.9	2.6
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)