

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: P647415

Luminaire Tested: **GALN-SA4D-835-U-T4FT**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P647415  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4D-835-U-T4FT  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23908.9 lumens  
Efficiency: N/A  
Efficacy: 97.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G4

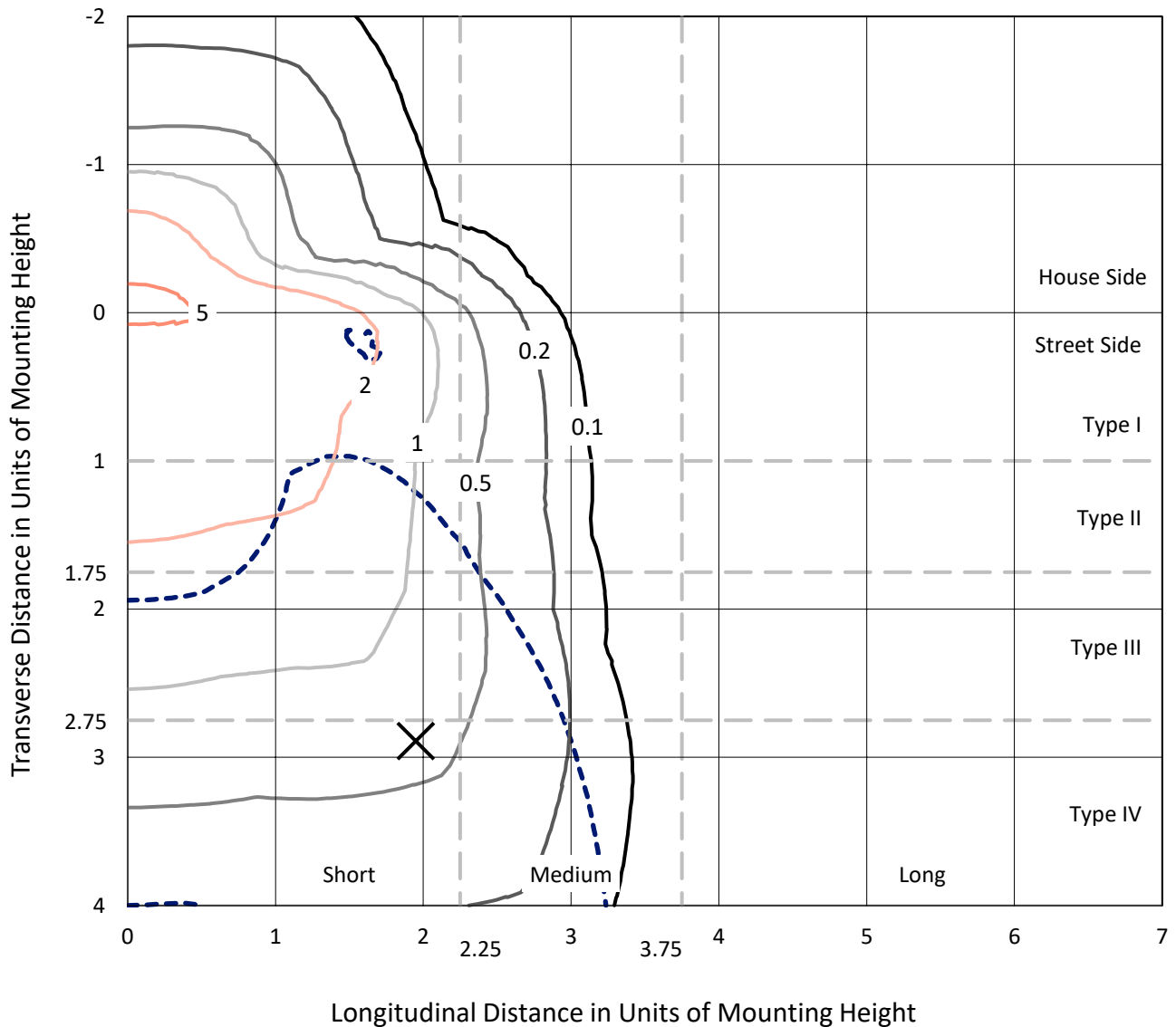
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

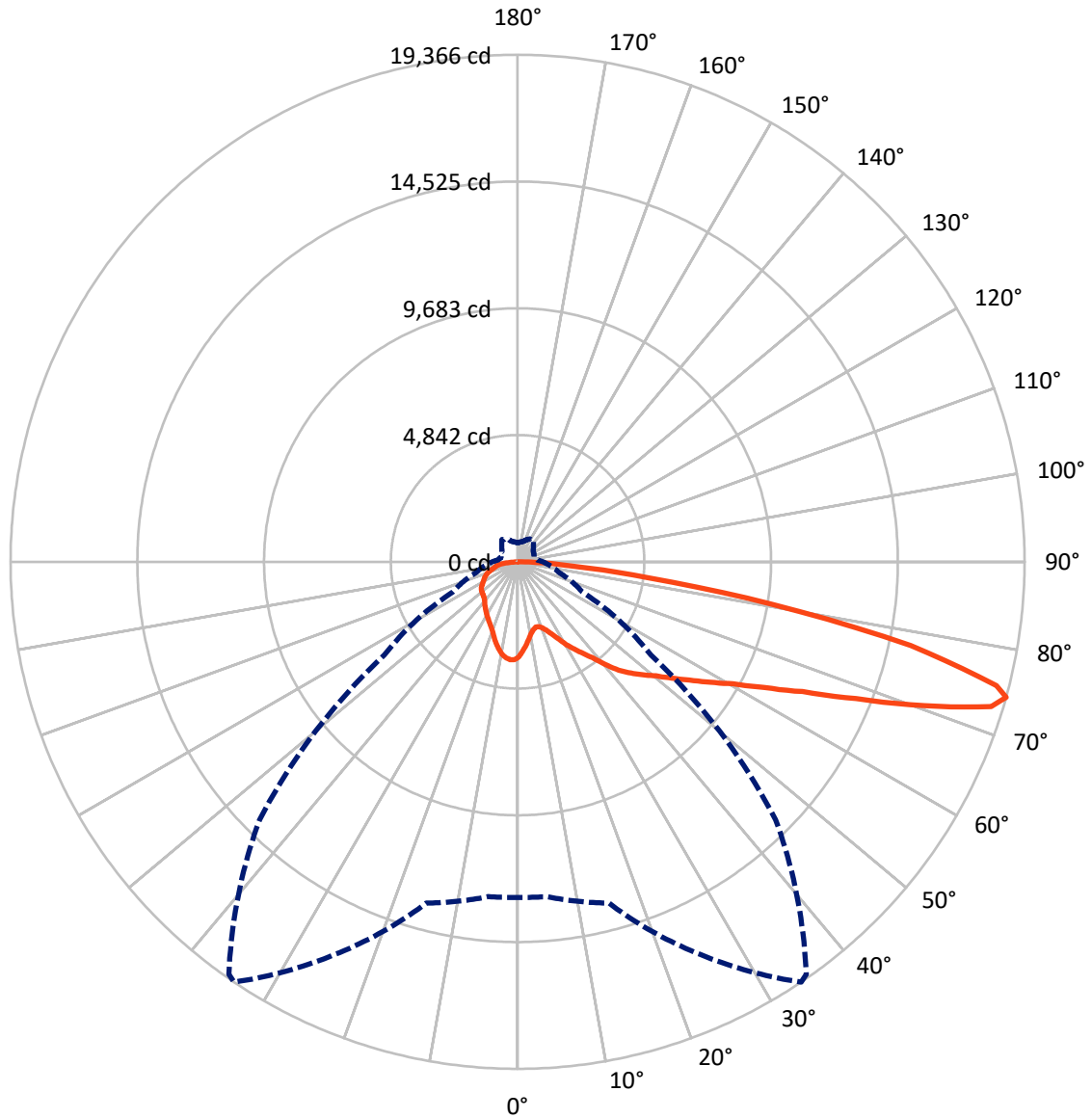
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral      - - - Horizontal Cone Through 74-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5088.0	0.0	5088.0
	% Fixture	21.3	0.0	21.3
<b>Street Side</b>	Lumens	18820.9	0.0	18820.9
	% Fixture	78.7	0.0	78.7
<b>Total</b>	Lumens	23908.9	0.0	23908.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	332.0	1.4
10°-20°	908.8	3.8
20°-30°	1498.4	6.3
30°-40°	2244.4	9.4
40°-50°	3262.8	13.6
50°-60°	4557.3	19.1
60°-70°	5705.5	23.9
70°-80°	4718.0	19.7
80°-90°	681.7	2.9
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°	23908.9	100.0
0°-180°	23908.9	100.0

**Coefficient of Utilization**

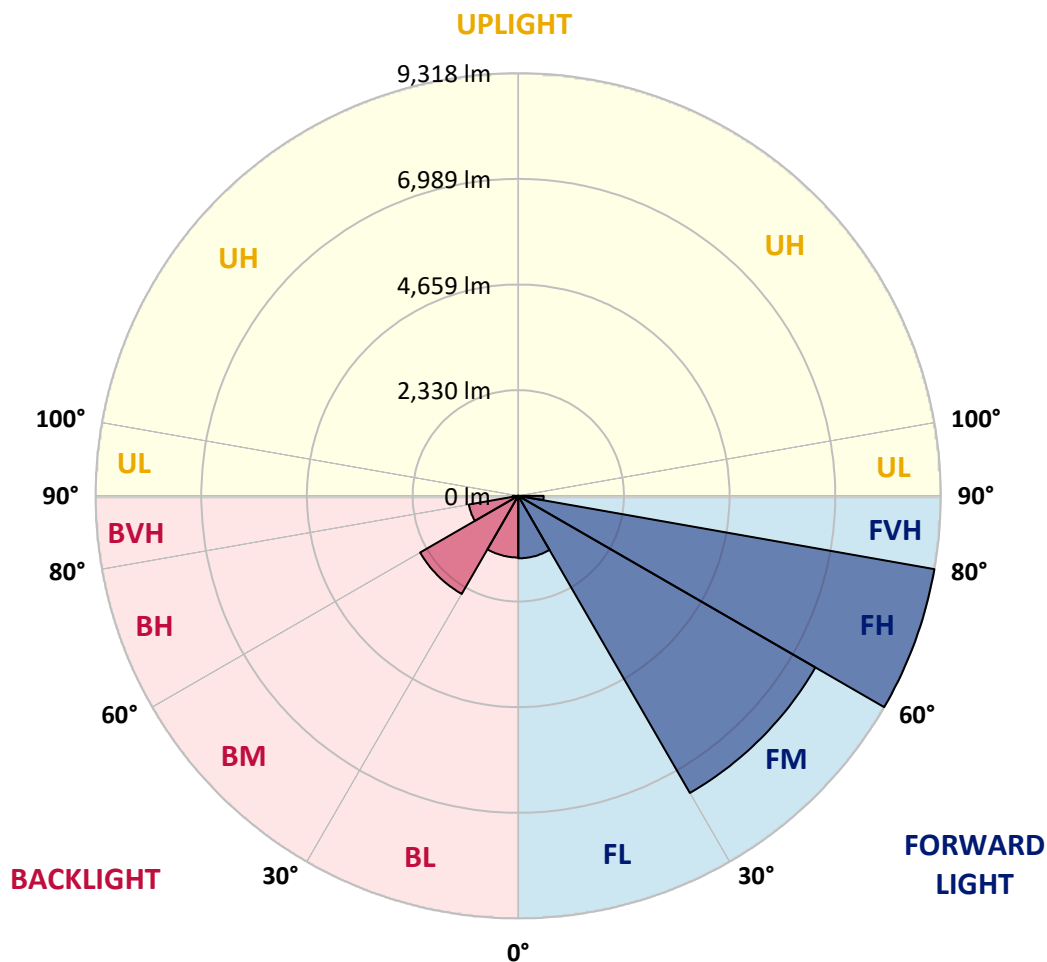


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1378.2	5.8			
FM (30°-60°)	7565.8	31.6			
FH (60°-80°)	9318.4	39.0			G4/12000
FVH (80°-90°)	558.5	2.3			G4/750
BL (0°-30°)	1361.0	5.7	B3/2500		
BM (30°-60°)	2498.7	10.5	B2/2500		
BH (60°-80°)	1105.1	4.6	B3/2500		G3/2500
BVH (80°-90°)	123.2	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	3650.4	3650.4	3650.4	3650.4	3650.4	3650.4	3650.4	3650.4	3650.4	3650.4	3650.4
2.5°	3373.6	3390.8	3400.1	3433.2	3441.1	3451.7	3479.6	3516.6	3564.3	3606.7	3643.8
5°	3092.8	3119.3	3135.2	3164.3	3221.3	3226.6	3300.7	3385.5	3482.2	3572.3	3646.4
7.5°	2826.6	2855.7	2868.9	2921.9	2997.4	3009.3	3118.0	3251.7	3413.3	3549.7	3663.7
10°	2626.6	2641.1	2670.3	2710.0	2800.1	2808.0	2949.7	3128.6	3337.9	3539.2	3692.8
12.5°	2518.0	2525.9	2532.5	2574.9	2663.6	2675.6	2823.9	3026.5	3278.2	3547.1	3740.5
15°	2533.9	2536.5	2507.3	2515.3	2586.8	2604.0	2751.1	2959.0	3241.2	3567.0	3812.0
17.5°	2667.6	2658.4	2586.8	2549.8	2600.0	2608.0	2736.5	2932.5	3223.9	3604.1	3886.2
20°	2878.2	2865.0	2741.8	2659.7	2688.8	2695.4	2784.2	2952.4	3241.2	3665.0	4001.4
22.5°	3140.5	3135.2	2948.4	2849.1	2847.8	2847.8	2894.1	3023.9	3292.8	3748.5	4121.9
25°	3507.4	3479.6	3235.8	3107.3	3071.6	3069.0	3063.6	3141.8	3359.0	3837.2	4265.0
27.5°	3883.5	3835.8	3618.6	3421.2	3344.4	3335.2	3300.7	3308.7	3443.8	3937.9	4427.9
30°	4221.3	4190.9	3986.9	3768.3	3676.9	3655.7	3560.4	3516.6	3585.5	4119.3	4687.5
32.5°	4479.5	4461.1	4302.1	4103.4	3968.3	3964.3	3825.3	3789.5	3806.7	4339.2	4984.2
35°	4688.8	4695.5	4614.7	4442.5	4287.6	4265.0	4172.3	4127.3	4076.9	4657.0	5357.8
37.5°	4974.9	4989.5	4984.2	4835.9	4646.5	4651.8	4630.6	4556.4	4422.6	5012.1	5772.4
40°	5290.2	5300.8	5299.5	5242.5	5143.1	5148.5	5140.6	5055.8	4855.8	5463.7	6233.2
42.5°	5726.0	5675.7	5544.5	5601.4	5659.8	5684.9	5739.2	5658.4	5384.2	5945.9	6666.4
45°	6213.4	6118.0	5821.3	5847.8	6063.7	6111.4	6410.7	6299.5	5957.8	6499.5	7176.4
47.5°	6520.7	6426.6	6176.3	6171.0	6457.1	6503.4	7033.3	6992.2	6479.6	7096.9	7798.8
50°	6794.9	6781.6	6499.5	6567.0	6846.6	6915.4	7711.5	7673.0	7000.2	7801.5	8477.0
52.5°	7201.5	7094.2	6869.0	7008.1	7377.7	7467.7	8384.3	8271.7	7478.4	8424.1	9135.3
55°	7384.3	7359.1	7345.9	7466.4	7973.7	8038.6	9038.6	8780.3	7886.3	8951.2	9636.0
57.5°	7873.1	7826.7	7957.8	8039.9	8675.7	8775.0	9722.1	9311.5	8243.9	9369.8	9879.7
60°	8506.2	8481.0	8601.5	8749.9	9459.8	9610.9	10500.9	9764.5	8531.3	9580.4	9745.9
62.5°	9451.9	9449.2	9426.7	9744.6	10571.1	10710.2	11395.0	10205.5	8576.4	9422.7	9054.5
65°	10808.2	10760.5	10564.5	10911.5	11953.9	12116.8	12326.1	10451.9	8304.8	8613.5	7624.0
67.5°	12226.8	12224.1	12065.2	12515.6	13939.4	14107.6	13490.4	10397.6	7551.2	6977.6	5414.7
70°	13403.0	13346.0	13548.6	14748.7	16475.9	16670.6	14508.9	9757.8	6014.7	4608.0	3217.3
72.5°	13685.1	13687.7	14109.0	16470.6	18911.7	18942.2	14875.8	7908.8	4025.2	2541.8	1609.3
74°	12816.2	12838.7	13491.7	16556.7	19366.0	19228.3	13938.1	6216.0	2721.9	1659.6	1160.3
75°	11698.3	11556.5	12501.0	15983.1	18894.5	18746.1	12840.0	4988.2	2076.9	1325.9	1015.9
77.5°	6254.4	6398.8	7855.8	11927.4	15350.0	15179.2	8706.2	2392.1	1121.9	923.2	731.2
80°	2226.5	2455.7	3451.7	6241.2	9841.3	9894.3	4155.1	1096.7	789.4	680.8	516.5
82.5°	908.6	933.8	1482.1	2769.6	4997.5	5045.2	1696.8	651.7	564.2	468.9	308.6
85°	355.0	365.6	655.6	1245.0	2132.5	2271.6	586.8	344.4	347.0	268.9	157.6
87.5°	119.2	135.1	268.9	414.6	724.5	709.9	170.9	102.0	124.5	116.6	49.0
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°	3650.4	3650.4	3650.4	3650.4	3650.4	3650.4	3650.4	3650.4	3650.4	3650.4	3650.4
2.5°	3662.3	3687.5	3704.7	3723.2	3740.5	3745.8	3741.8	3753.7	3755.0	3756.4	3757.7
5°	3683.5	3718.0	3751.1	3769.6	3777.6	3770.9	3748.5	3736.5	3725.9	3718.0	3720.6
7.5°	3712.7	3761.7	3792.1	3800.1	3778.9	3748.5	3692.8	3649.1	3621.3	3602.7	3601.4
10°	3757.7	3805.4	3830.6	3808.0	3749.8	3675.6	3588.2	3506.0	3443.8	3425.2	3423.9
12.5°	3814.7	3869.0	3867.6	3801.4	3699.4	3567.0	3425.2	3329.9	3245.1	3202.7	3219.9
15°	3888.8	3929.9	3891.5	3772.3	3610.6	3429.2	3254.4	3124.6	3029.2	2984.2	2986.8
17.5°	3974.9	4010.7	3908.7	3720.6	3486.2	3253.1	3050.4	2927.2	2851.7	2818.6	2816.0
20°	4082.2	4092.8	3908.7	3630.5	3325.9	3047.7	2854.3	2768.3	2725.9	2708.7	2714.0
22.5°	4197.4	4176.3	3887.5	3503.4	3115.3	2833.2	2703.4	2664.9	2643.8	2641.1	2643.8
25°	4327.2	4267.7	3843.8	3331.2	2895.5	2647.7	2572.2	2578.9	2582.8	2582.8	2592.1
27.5°	4486.2	4367.0	3770.9	3114.0	2638.5	2475.5	2454.4	2500.7	2521.9	2525.9	2532.5
30°	4695.5	4475.6	3650.4	2842.4	2419.9	2320.6	2357.7	2419.9	2443.7	2458.3	2455.7
32.5°	4944.5	4594.8	3487.5	2570.9	2243.8	2212.0	2257.0	2320.6	2347.0	2355.0	2344.5
35°	5237.2	4729.9	3272.9	2316.6	2090.1	2108.7	2161.6	2181.5	2205.3	2205.3	2210.6
37.5°	5552.4	4838.5	3010.6	2083.5	1970.9	2038.5	2076.9	2058.4	2047.7	2034.5	2041.1
40°	5873.0	4919.4	2670.3	1853.0	1851.7	1965.6	1976.2	1923.2	1880.8	1867.6	1861.0
42.5°	6152.5	4969.6	2362.9	1674.2	1739.1	1894.1	1902.1	1817.3	1749.7	1710.0	1696.8
45°	6482.3	5028.0	2062.3	1525.8	1634.5	1837.2	1857.0	1743.1	1643.8	1560.3	1539.1
47.5°	6933.9	5160.4	1825.2	1410.7	1559.0	1801.4	1829.2	1682.2	1551.0	1442.4	1425.2
50°	7443.9	5341.9	1641.1	1332.5	1500.7	1769.6	1804.0	1619.9	1464.9	1344.4	1331.2
52.5°	7911.4	5439.9	1482.1	1262.3	1443.8	1711.3	1770.9	1574.8	1380.2	1246.4	1234.5
55°	8167.1	5280.9	1325.9	1193.4	1365.6	1635.8	1724.6	1512.6	1298.1	1194.7	1177.5
57.5°	8201.5	4952.4	1184.1	1119.2	1283.5	1543.1	1638.4	1437.1	1245.0	1159.0	1144.4
60°	7935.3	4462.4	1074.2	1058.3	1200.0	1438.4	1541.7	1370.9	1190.8	1119.2	1104.7
62.5°	7273.1	3929.9	997.4	1002.7	1115.2	1328.5	1470.2	1307.3	1139.1	1075.5	1062.3
65°	6133.9	3243.8	923.2	945.7	1039.7	1242.4	1405.3	1254.4	1087.4	1042.4	1030.5
67.5°	4261.0	2341.8	862.2	886.1	968.3	1155.0	1329.8	1197.4	1029.2	1005.3	986.8
70°	2359.0	1441.1	790.8	818.5	894.0	1057.0	1245.0	1111.3	944.4	933.8	907.3
72.5°	1239.8	917.9	709.9	740.4	793.4	931.1	1115.2	1017.3	860.9	815.9	781.5
74°	968.3	752.3	655.6	687.4	723.2	857.0	1038.4	949.7	801.3	748.4	721.8
75°	843.8	670.2	609.3	650.4	682.1	806.6	978.8	902.0	768.2	717.9	694.1
77.5°	596.0	502.0	498.0	547.0	564.2	707.3	882.1	821.2	684.8	631.8	609.3
80°	418.6	376.2	394.7	425.2	449.1	625.1	818.5	709.9	561.6	499.3	491.4
82.5°	272.9	246.3	282.1	309.9	317.9	461.0	660.9	539.1	409.3	332.5	308.6
85°	125.8	123.2	161.6	157.6	156.3	225.2	392.0	315.2	235.8	176.2	165.6
87.5°	31.8	30.5	39.7	33.1	39.7	34.5	35.8	9.2	1.3	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)