

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: P457321

Luminaire Tested: **GALN-SA8C-827-U-T4FT**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P457321  
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-SA8C-827-U-T4FT  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 2700K, 1050mA 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: 41641 lumens  
Efficiency: N/A  
Efficacy: 97.1 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

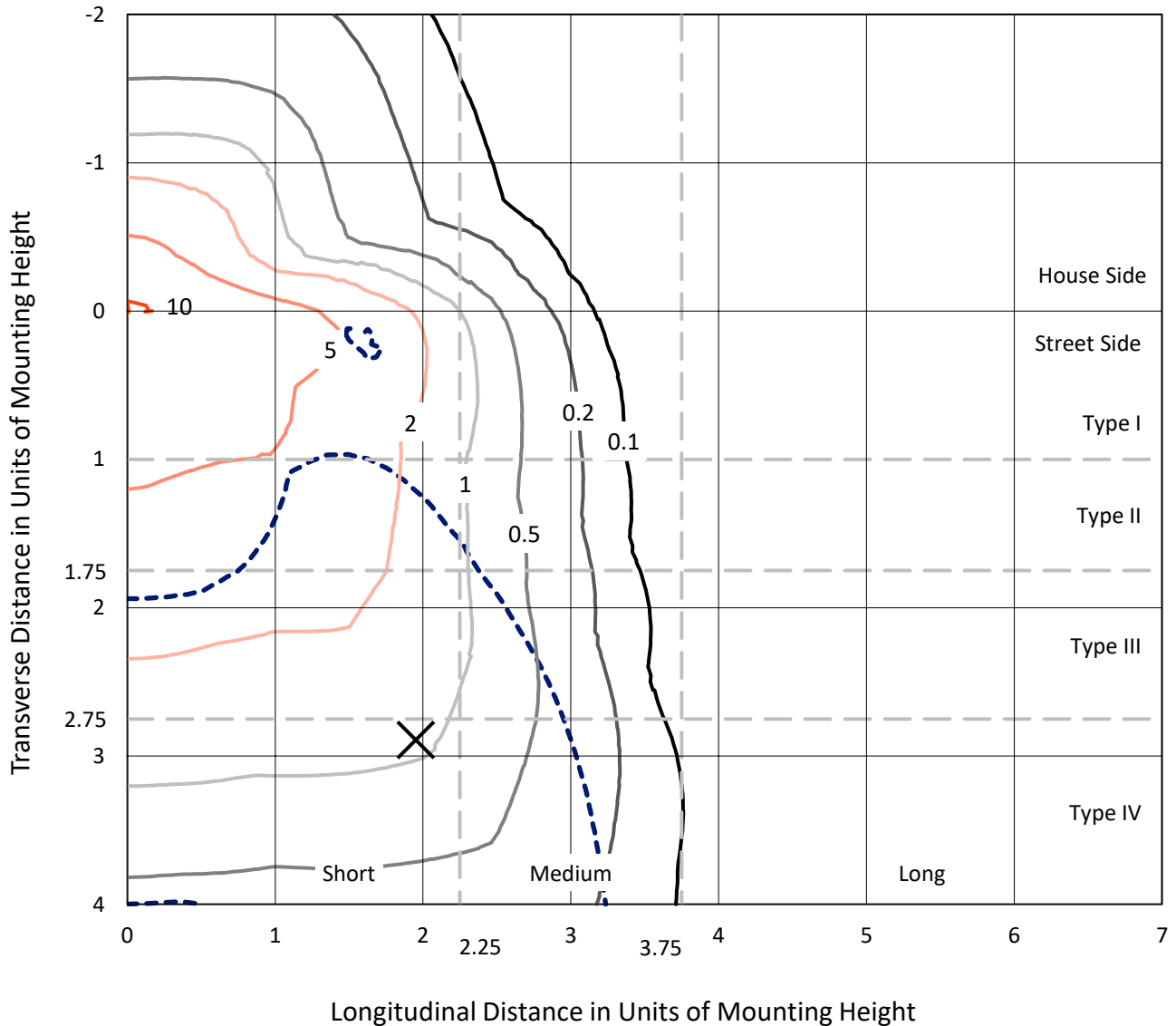
Input Watts (W): 429  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

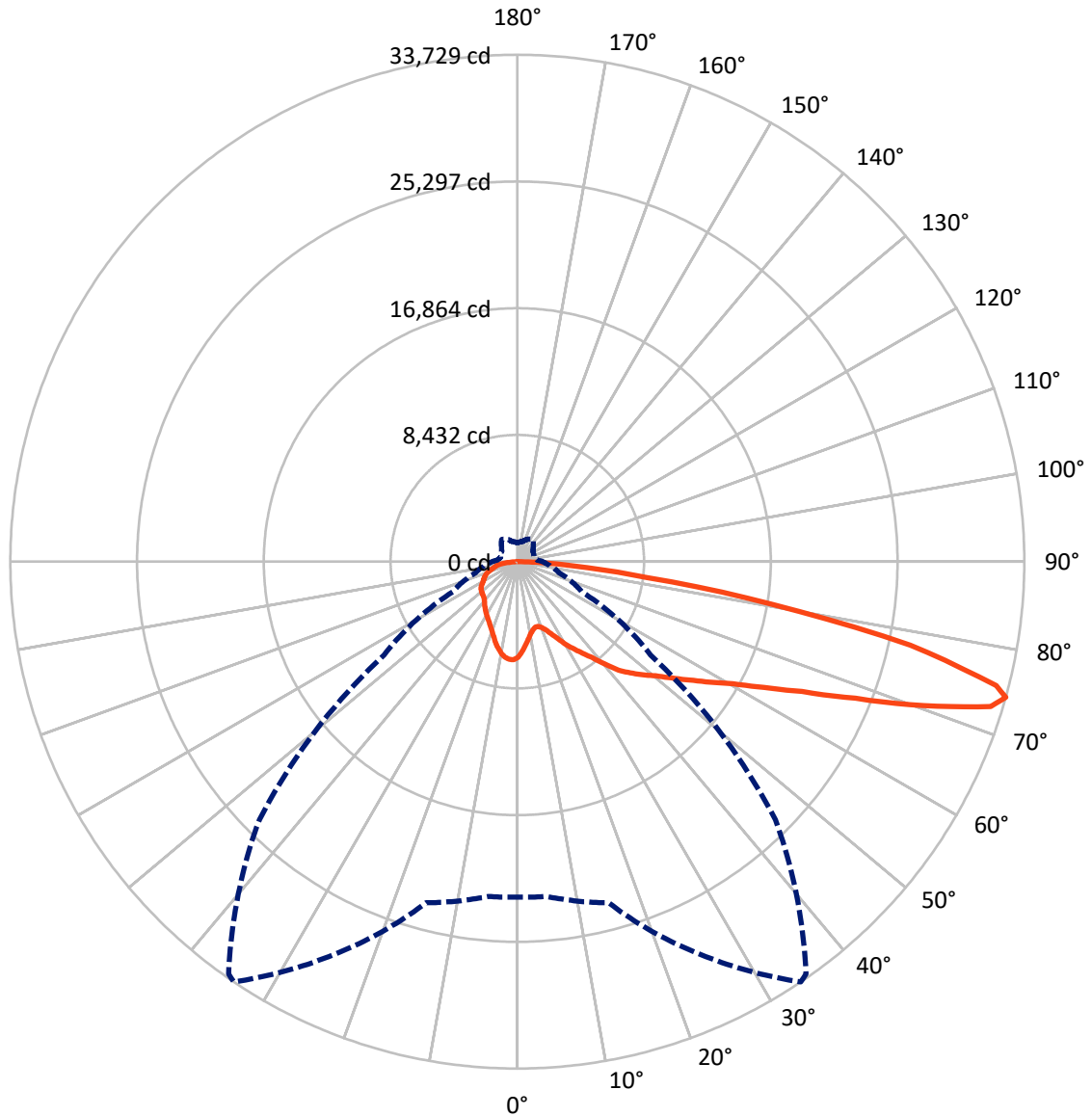
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 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	8861.5	0.0	8861.5
	% Fixture	21.3	0.0	21.3
<b>Street Side</b>	Lumens	32779.5	0.0	32779.5
	% Fixture	78.7	0.0	78.7
<b>Total</b>	Lumens	41641.0	0.0	41641.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	578.2	1.4
10°-20°	1582.8	3.8
20°-30°	2609.7	6.3
30°-40°	3909.0	9.4
40°-50°	5682.6	13.6
50°-60°	7937.3	19.1
60°-70°	9937.0	23.9
70°-80°	8217.1	19.7
80°-90°	1187.3	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°	41641.0	100.0
0°-180°	41641.0	100.0

**Coefficient of Utilization**



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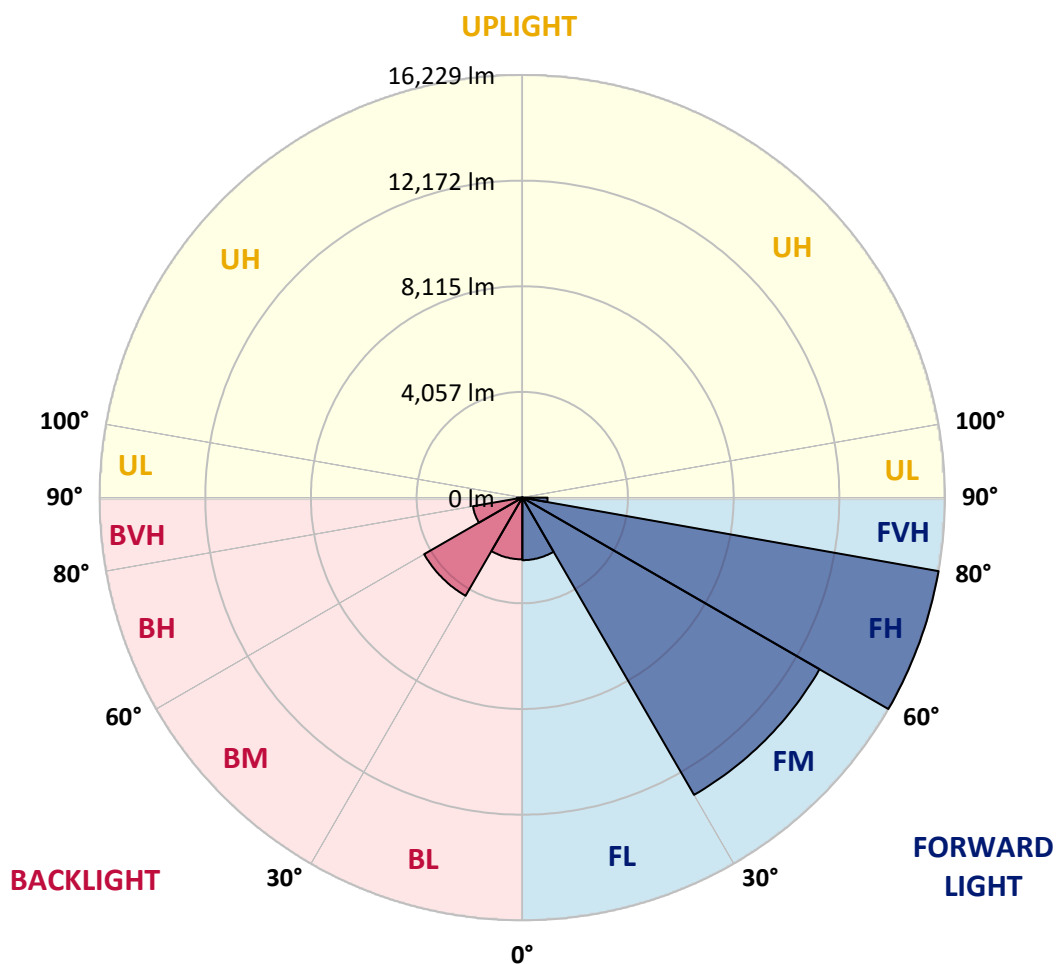
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2400.4	5.8			
FM	(30°-60°)	13176.9	31.6			
FH	(60°-80°)	16229.5	39.0			G5
FVH	(80°-90°)	972.7	2.3			G5
BL	(0°-30°)	2370.3	5.7	B3/2500		
BM	(30°-60°)	4351.9	10.5	B3/5000		
BH	(60°-80°)	1924.7	4.6	B3/2500		G3/2500
BVH	(80°-90°)	214.6	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-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	6357.8	6357.8	6357.8	6357.8	6357.8	6357.8	6357.8	6357.8	6357.8	6357.8	6357.8
2.5°	5875.6	5905.6	5921.8	5979.4	5993.3	6011.7	6060.2	6124.8	6207.8	6281.6	6346.2
5°	5386.6	5432.7	5460.4	5511.1	5610.3	5619.6	5748.7	5896.4	6064.8	6221.7	6350.8
7.5°	4922.9	4973.6	4996.7	5089.0	5220.5	5241.2	5430.4	5663.4	5944.8	6182.4	6380.8
10°	4574.5	4599.9	4650.7	4719.9	4876.7	4890.6	5137.4	5448.8	5813.3	6164.0	6431.6
12.5°	4385.4	4399.2	4410.8	4484.6	4639.1	4659.9	4918.3	5271.2	5709.5	6177.8	6514.6
15°	4413.1	4417.7	4366.9	4380.8	4505.3	4535.3	4791.4	5153.6	5644.9	6212.4	6639.2
17.5°	4646.1	4629.9	4505.3	4440.7	4528.4	4542.2	4766.0	5107.4	5614.9	6277.0	6768.4
20°	5012.8	4989.8	4775.2	4632.2	4683.0	4694.5	4849.1	5142.0	5644.9	6383.1	6969.1
22.5°	5469.6	5460.4	5135.1	4962.1	4959.8	4959.8	5040.5	5266.6	5734.9	6528.5	7179.0
25°	6108.6	6060.2	5635.7	5411.9	5349.7	5345.0	5335.8	5471.9	5850.2	6683.0	7428.1
27.5°	6763.8	6680.7	6302.4	5958.7	5824.9	5808.7	5748.7	5762.6	5997.9	6858.3	7711.9
30°	7352.0	7299.0	6943.7	6563.1	6403.9	6367.0	6200.9	6124.8	6244.7	7174.4	8164.0
32.5°	7801.9	7769.6	7492.7	7146.7	6911.4	6904.5	6662.3	6600.0	6630.0	7557.3	8680.8
35°	8166.3	8177.9	8037.2	7737.3	7467.4	7428.1	7266.7	7188.2	7100.6	8111.0	9331.3
37.5°	8664.6	8690.0	8680.8	8422.4	8092.5	8101.8	8064.8	7935.7	7702.7	8729.2	10053.4
40°	9213.7	9232.1	9229.8	9130.6	8957.6	8966.8	8953.0	8805.4	8457.0	9515.9	10856.2
42.5°	9972.6	9885.0	9656.6	9755.8	9857.3	9901.1	9995.7	9855.0	9377.5	10355.6	11610.5
45°	10821.6	10655.5	10138.7	10184.9	10560.9	10643.9	11165.3	10971.5	10376.3	11319.9	12498.7
47.5°	11356.8	11193.0	10757.0	10747.7	11246.0	11326.8	12249.5	12178.0	11285.2	12360.3	13582.9
50°	11834.3	11811.2	11319.9	11437.5	11924.3	12044.2	13430.6	13363.7	12191.9	13587.5	14764.0
52.5°	12542.5	12355.6	11963.5	12205.7	12849.3	13006.2	14602.5	14406.5	13024.6	14671.7	15910.5
55°	12860.8	12817.0	12793.9	13003.9	13887.4	14000.4	15742.1	15292.3	13735.2	15589.9	16782.5
57.5°	13712.1	13631.3	13859.7	14002.8	15110.1	15283.1	16932.5	16217.4	14358.0	16318.9	17207.0
60°	14814.8	14770.9	14980.9	15239.2	16475.7	16738.7	18288.9	17006.3	14858.6	16685.7	16974.0
62.5°	16461.9	16457.3	16418.1	16971.7	18411.2	18653.4	19846.1	17774.5	14937.0	16411.1	15769.8
65°	18824.1	18741.1	18399.7	19004.1	20819.6	21103.3	21467.8	18203.6	14464.1	15001.6	13278.4
67.5°	21294.8	21290.2	21013.4	21797.7	24277.6	24570.6	23495.6	18109.0	13151.5	12152.6	9430.5
70°	23343.3	23244.1	23597.1	25687.1	28695.3	29034.4	25269.5	16994.8	10475.5	8025.6	5603.4
72.5°	23834.7	23839.3	24572.9	28686.0	32937.6	32990.7	25908.6	13774.4	7010.6	4426.9	2802.9
74°	22321.4	22360.6	23497.9	28836.0	33728.9	33489.0	24275.3	10826.2	4740.6	2890.5	2020.8
75°	20374.4	20127.5	21772.3	27837.1	32907.6	32649.3	22362.9	8687.7	3617.2	2309.2	1769.4
77.5°	10893.1	11144.5	13682.1	20773.4	26734.4	26436.8	15163.1	4166.2	1953.9	1607.9	1273.4
80°	3877.9	4277.0	6011.7	10870.0	17140.1	17232.4	7236.7	1910.1	1374.9	1185.7	899.7
82.5°	1582.5	1626.3	2581.4	4823.7	8703.9	8786.9	2955.1	1135.0	982.7	816.6	537.5
85°	618.2	636.7	1141.9	2168.5	3714.1	3956.3	1021.9	599.8	604.4	468.3	274.5
87.5°	207.6	235.3	468.3	722.1	1261.9	1236.5	297.6	177.6	216.8	203.0	85.4
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°	6357.8	6357.8	6357.8	6357.8	6357.8	6357.8	6357.8	6357.8	6357.8	6357.8	6357.8
2.5°	6378.5	6422.3	6452.3	6484.6	6514.6	6523.9	6516.9	6537.7	6540.0	6542.3	6544.6
5°	6415.4	6475.4	6533.1	6565.4	6579.2	6567.7	6528.5	6507.7	6489.2	6475.4	6480.0
7.5°	6466.2	6551.5	6604.6	6618.4	6581.5	6528.5	6431.6	6355.5	6307.0	6274.7	6272.4
10°	6544.6	6627.7	6671.5	6632.3	6530.8	6401.6	6249.3	6106.3	5997.9	5965.6	5963.3
12.5°	6643.8	6738.4	6736.1	6620.7	6443.1	6212.4	5965.6	5799.5	5651.9	5578.0	5608.0
15°	6773.0	6844.5	6777.6	6570.0	6288.6	5972.5	5668.0	5441.9	5275.8	5197.4	5202.0
17.5°	6922.9	6985.2	6807.6	6480.0	6071.7	5665.7	5312.7	5098.2	4966.7	4909.0	4904.4
20°	7109.8	7128.3	6807.6	6323.2	5792.6	5308.1	4971.3	4821.4	4747.6	4717.6	4726.8
22.5°	7310.5	7273.6	6770.7	6101.7	5425.8	4934.4	4708.3	4641.4	4604.5	4599.9	4604.5
25°	7536.6	7432.8	6694.6	5801.8	5042.8	4611.5	4480.0	4491.5	4498.4	4498.4	4514.6
27.5°	7813.4	7605.8	6567.7	5423.5	4595.3	4311.6	4274.6	4355.4	4392.3	4399.2	4410.8
30°	8177.9	7794.9	6357.8	4950.6	4214.7	4041.7	4106.2	4214.7	4256.2	4281.6	4277.0
32.5°	8611.6	8002.6	6074.0	4477.7	3907.9	3852.5	3930.9	4041.7	4087.8	4101.6	4083.2
35°	9121.4	8237.9	5700.3	4034.7	3640.3	3672.6	3764.8	3799.4	3841.0	3841.0	3850.2
37.5°	9670.4	8427.0	5243.5	3628.7	3432.6	3550.3	3617.2	3584.9	3566.4	3543.4	3554.9
40°	10228.7	8567.7	4650.7	3227.3	3225.0	3423.4	3441.9	3349.6	3275.8	3252.7	3241.2
42.5°	10715.5	8655.4	4115.5	2915.9	3028.9	3298.8	3312.7	3165.0	3047.4	2978.2	2955.1
45°	11289.9	8756.9	3591.8	2657.5	2846.7	3199.6	3234.2	3035.9	2862.8	2717.5	2680.6
47.5°	12076.5	8987.6	3178.9	2456.8	2715.2	3137.4	3185.8	2929.7	2701.4	2512.2	2482.2
50°	12964.7	9303.6	2858.2	2320.7	2613.7	3082.0	3142.0	2821.3	2551.4	2341.5	2318.4
52.5°	13779.0	9474.3	2581.4	2198.5	2514.5	2980.5	3084.3	2742.9	2403.8	2170.8	2150.0
55°	14224.2	9197.5	2309.2	2078.5	2378.4	2849.0	3003.6	2634.5	2260.7	2080.8	2050.8
57.5°	14284.2	8625.4	2062.3	1949.3	2235.4	2687.5	2853.6	2503.0	2168.5	2018.5	1993.1
60°	13820.5	7771.9	1870.9	1843.2	2090.0	2505.3	2685.2	2387.6	2073.9	1949.3	1923.9
62.5°	12667.1	6844.5	1737.1	1746.3	1942.4	2313.8	2560.6	2276.9	1983.9	1873.2	1850.1
65°	10683.2	5649.5	1607.9	1647.1	1810.9	2163.9	2447.6	2184.6	1893.9	1815.5	1794.8
67.5°	7421.2	4078.6	1501.8	1543.3	1686.3	2011.6	2316.1	2085.4	1792.4	1750.9	1718.6
70°	4108.6	2509.9	1377.2	1425.7	1557.1	1840.9	2168.5	1935.5	1644.8	1626.3	1580.2
72.5°	2159.2	1598.7	1236.5	1289.5	1381.8	1621.7	1942.4	1771.7	1499.5	1421.0	1361.1
74°	1686.3	1310.3	1141.9	1197.3	1259.6	1492.6	1808.6	1654.0	1395.7	1303.4	1257.2
75°	1469.5	1167.3	1061.2	1132.7	1188.0	1404.9	1704.8	1571.0	1338.0	1250.3	1208.8
77.5°	1038.1	874.3	867.4	952.7	982.7	1231.9	1536.4	1430.3	1192.7	1100.4	1061.2
80°	729.0	655.2	687.4	740.5	782.0	1088.8	1425.7	1236.5	978.1	869.7	855.9
82.5°	475.2	429.1	491.4	539.8	553.7	802.8	1151.1	938.9	712.8	579.0	537.5
85°	219.2	214.5	281.4	274.5	272.2	392.2	682.8	549.0	410.6	306.8	288.4
87.5°	55.4	53.1	69.2	57.7	69.2	60.0	62.3	16.1	2.3	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)