

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: P457313

Luminaire Tested: **GALN-SA8C-827-U-T2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P457313  
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-SA8C-827-U-T2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 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: 41971 lumens  
Efficiency: N/A  
Efficacy: 97.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G5

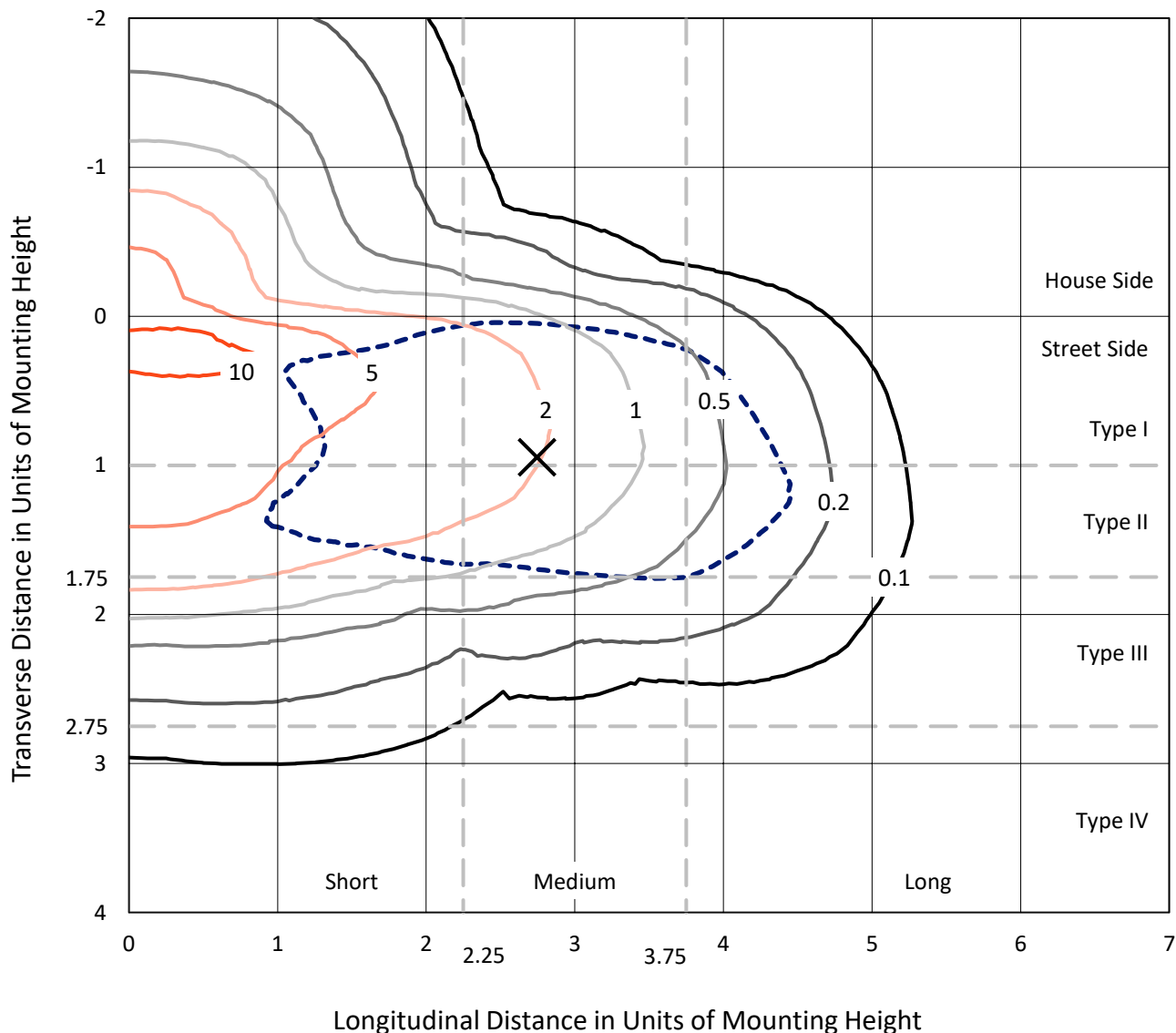
Input Watts (W): 429  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

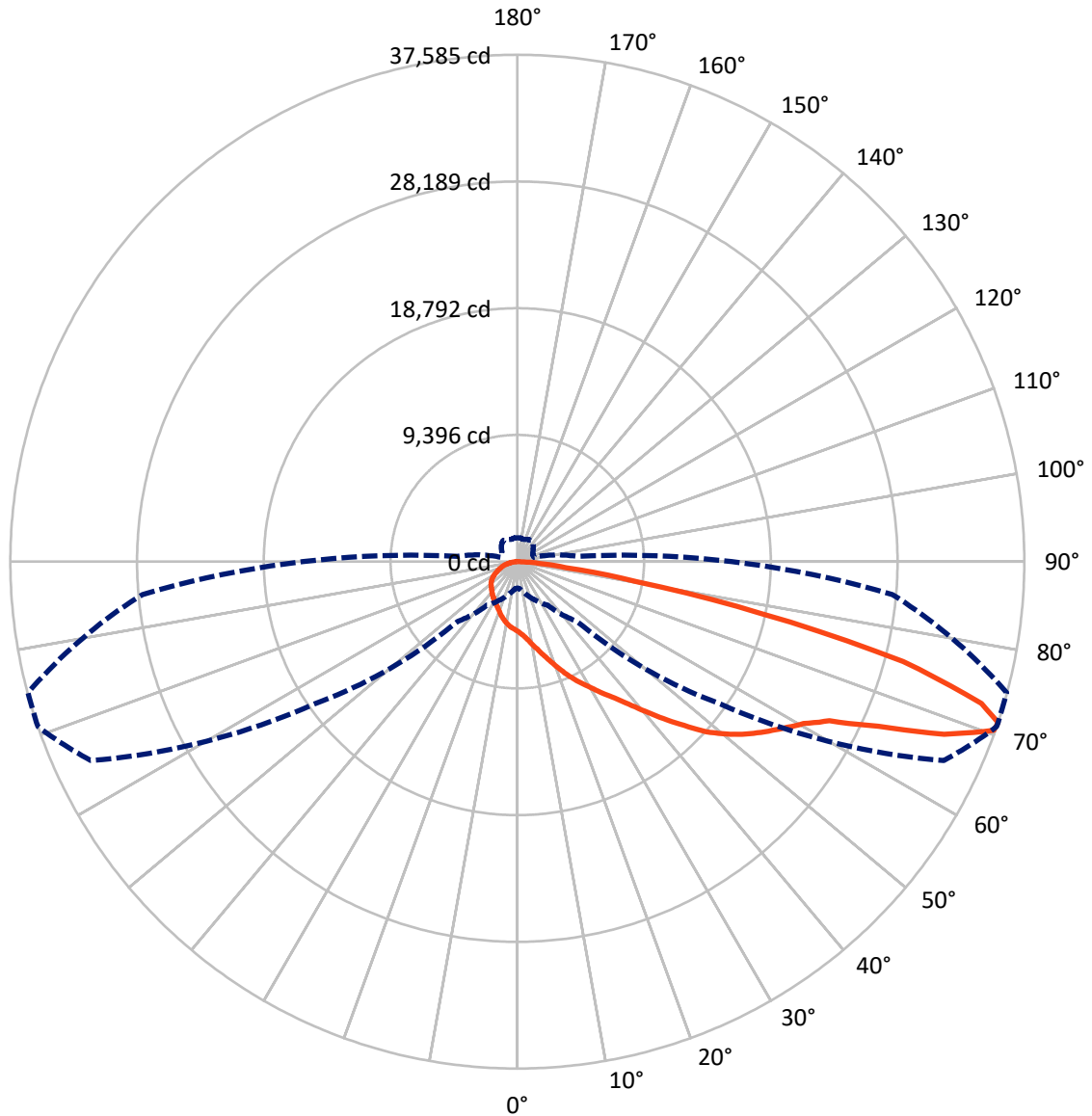
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.7 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
<b>House Side</b>	Lumens	7548.4	0.0	7548.4
	% Fixture	18.0	0.0	18.0
<b>Street Side</b>	Lumens	34422.6	0.0	34422.6
	% Fixture	82.0	0.0	82.0
<b>Total</b>	Lumens	41971.0	0.0	41971.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	517.2	1.2
10°-20°	1680.4	4.0
20°-30°	2936.6	7.0
30°-40°	4367.8	10.4
40°-50°	6435.4	15.3
50°-60°	9009.6	21.5
60°-70°	10076.9	24.0
70°-80°	6155.4	14.7
80°-90°	791.8	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°	41971.0	100.0
0°-180°	41971.0	100.0

**Coefficient of Utilization**



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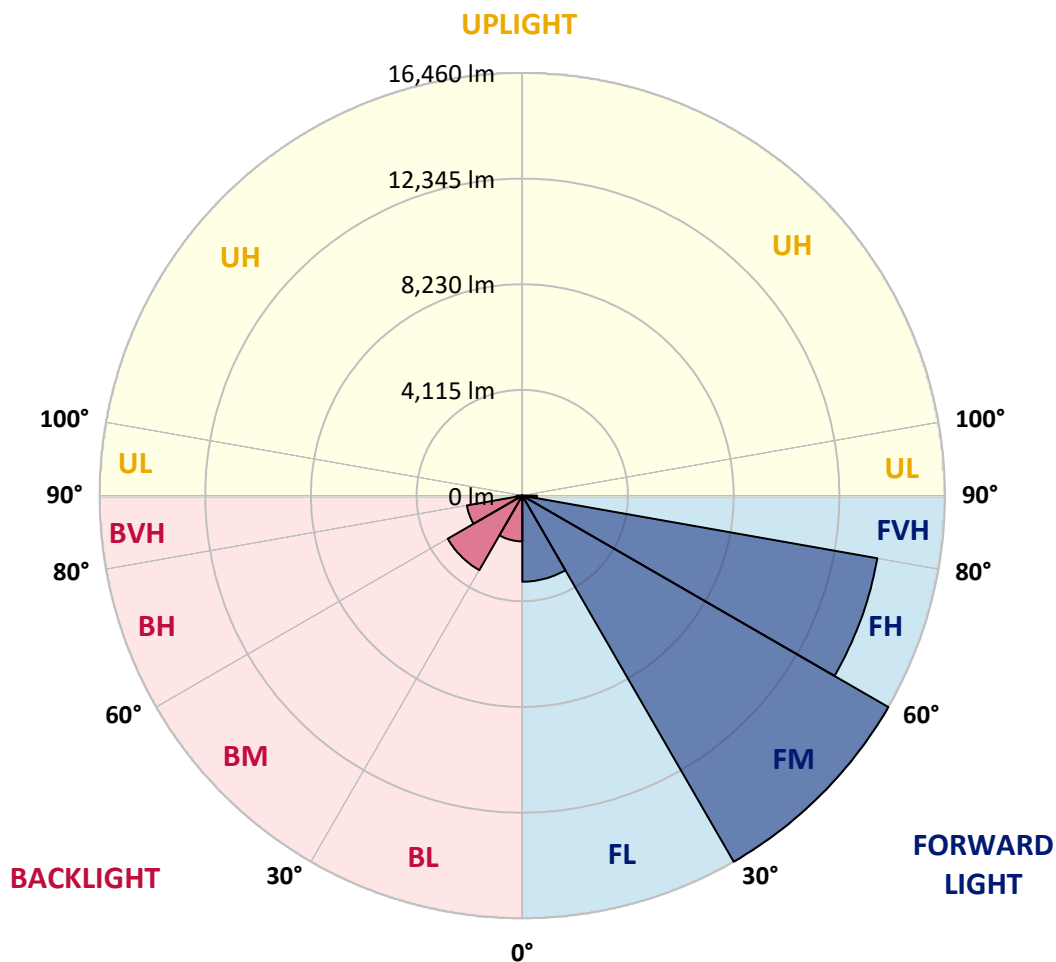
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3353.5	8.0			
FM	(30°-60°)	16460.2	39.2			
FH	(60°-80°)	14039.2	33.4			G5
FVH	(80°-90°)	569.7	1.4			G4/750
BL	(0°-30°)	1780.6	4.2	B3/2500		
BM	(30°-60°)	3352.5	8.0	B3/5000		
BH	(60°-80°)	2193.1	5.2	B3/2500		G3/2500
BVH	(80°-90°)	222.1	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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1
2.5°	5718.6	5690.9	5693.2	5654.0	5603.2	5547.9	5469.5	5400.2	5344.9	5312.6	5218.0
5°	6336.8	6309.1	6274.5	6189.2	6152.3	6016.2	5843.2	5686.3	5566.3	5499.4	5310.3
7.5°	6837.4	6830.5	6821.2	6772.8	6678.2	6489.1	6341.4	6069.2	5891.6	5764.7	5441.8
10°	7146.5	7158.0	7165.0	7174.2	7135.0	7035.8	6832.8	6489.1	6263.0	6101.5	5612.5
12.5°	7303.4	7314.9	7354.1	7439.5	7492.5	7481.0	7314.9	6978.1	6666.7	6454.5	5794.7
15°	7400.3	7418.7	7487.9	7600.9	7778.6	7891.6	7810.9	7499.4	7158.0	6906.6	6011.6
17.5°	7506.4	7527.1	7603.3	7764.7	7997.7	8242.2	8329.9	8062.3	7690.9	7391.0	6253.8
20°	7566.3	7594.0	7702.4	7914.7	8186.9	8542.1	8832.8	8692.1	8286.1	7953.9	6532.9
22.5°	7663.2	7686.3	7778.6	8004.6	8329.9	8775.1	9335.7	9305.7	8948.1	8519.1	6839.7
25°	7926.2	7963.1	8009.3	8145.4	8459.1	9012.7	9753.2	9960.8	9589.4	9109.6	7121.1
27.5°	8422.2	8452.2	8449.9	8468.3	8645.9	9218.0	10115.4	10609.0	10226.1	9707.1	7393.3
30°	8987.3	8998.9	9008.1	8966.6	9005.8	9427.9	10447.6	11250.3	10867.4	10320.7	7630.9
32.5°	9674.8	9697.8	9619.4	9513.3	9481.0	9739.4	10722.1	11891.6	11626.3	10943.5	7866.2
35°	10486.8	10546.7	10387.6	10200.7	10069.2	10186.9	11091.2	12546.8	12403.7	11739.4	8177.7
37.5°	11414.1	11487.9	11340.3	10973.5	10786.7	10819.0	11573.3	13356.4	13386.4	12645.9	8641.3
40°	12173.0	12269.9	12274.5	11755.5	11471.8	11508.7	12184.6	14228.4	14572.1	13767.1	9188.0
42.5°	12673.6	12768.2	12867.4	12562.9	12265.3	12475.2	12897.4	15174.2	15905.5	15128.1	9951.6
45°	13222.6	13308.0	13363.4	13225.0	13058.9	13603.3	13757.8	16180.0	17326.5	16648.3	10786.7
47.5°	13859.3	13953.9	14007.0	13875.5	13813.2	14592.9	14685.2	17118.9	18844.4	18124.6	11709.4
50°	14708.2	14779.7	14752.1	14669.0	14655.2	15351.8	15575.6	17997.8	20097.0	19714.0	12666.7
52.5°	15764.8	15850.1	15880.1	15762.4	15709.4	15893.9	16293.0	18798.2	21236.5	21079.7	13688.6
55°	16403.7	16539.8	16996.6	17181.1	17308.0	16595.2	17065.8	19681.7	22258.4	22519.1	14786.7
57.5°	15584.8	15760.1	16782.1	17704.8	18897.4	18348.4	18161.5	20604.4	23280.4	23914.7	16101.6
60°	13587.1	13626.3	14943.5	16643.7	19042.7	20602.1	20447.6	22071.6	24387.6	25321.9	17834.0
62.5°	9425.6	9508.7	11065.8	13778.6	17248.0	21414.1	24336.9	24604.5	25974.7	27428.0	20373.8
65°	4860.5	4752.0	6170.7	8659.8	13003.5	19485.6	27488.0	29261.9	29416.5	30722.1	23949.3
67.5°	2991.9	3040.4	3704.7	5056.5	7688.6	14161.5	27158.1	34952.8	34138.5	34766.0	27268.8
70°	2246.8	2306.8	2763.6	3460.2	4687.4	8096.9	21840.9	36332.3	37469.6	37308.1	28279.2
71°	1953.9	2016.2	2491.4	3148.8	3937.7	6249.2	18401.4	34888.2	37584.9	37557.2	27898.6
72.5°	1665.5	1704.7	2076.1	2666.7	3319.5	4380.6	13824.7	31289.6	35981.7	36902.1	26539.9
75°	1308.0	1338.0	1504.0	2034.6	2613.6	2689.7	7418.7	23458.0	29552.6	31305.8	22094.7
77.5°	1065.7	1086.5	1171.9	1511.0	2016.2	1905.4	3891.6	15268.8	18514.5	20279.2	13015.0
80°	846.6	869.7	920.4	1024.2	1511.0	1358.7	1857.0	7737.0	8943.5	8925.1	5194.9
82.5°	657.4	664.4	724.3	752.0	1033.5	964.2	1005.8	3275.7	3628.6	3748.6	1875.4
85°	415.2	436.0	641.3	576.7	618.2	565.2	496.0	1301.0	1603.2	1580.2	749.7
87.5°	126.9	133.8	216.8	244.5	274.5	246.8	182.2	382.9	468.3	507.5	186.9
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°	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1
2.5°	5181.1	5155.7	5065.8	4991.9	4922.7	4846.6	4782.0	4763.6	4747.4	4740.5	4738.2
5°	5229.5	5153.4	4975.8	4830.5	4715.1	4609.0	4542.1	4512.1	4482.1	4482.1	4491.4
7.5°	5298.7	5160.3	4885.8	4669.0	4523.7	4424.5	4376.0	4371.4	4378.3	4385.3	4387.6
10°	5374.9	5155.7	4754.3	4484.4	4355.3	4309.1	4311.4	4350.6	4387.6	4415.2	4419.9
12.5°	5448.7	5128.0	4599.8	4311.4	4228.4	4237.6	4302.2	4389.9	4461.4	4500.6	4502.9
15°	5531.7	5084.2	4412.9	4147.6	4120.0	4191.5	4311.4	4445.2	4553.6	4618.2	4625.2
17.5°	5600.9	5010.4	4216.9	3988.5	4023.1	4154.6	4320.7	4493.7	4625.2	4705.9	4719.7
20°	5679.4	4915.8	4013.9	3836.2	3935.4	4113.0	4302.2	4489.1	4625.2	4703.6	4722.0
22.5°	5741.7	4782.0	3820.1	3711.7	3857.0	4062.3	4239.9	4389.9	4500.6	4542.1	4569.8
25°	5767.0	4613.6	3637.8	3610.2	3794.7	3979.3	4099.2	4184.6	4219.2	4214.5	4226.1
27.5°	5753.2	4419.9	3481.0	3529.4	3716.3	3850.1	3910.0	3903.1	3840.8	3783.2	3810.9
30°	5695.5	4189.2	3349.5	3446.4	3614.8	3688.6	3679.4	3589.4	3471.8	3363.3	3370.3
32.5°	5591.7	3940.0	3227.2	3351.8	3471.8	3504.0	3441.8	3324.1	3155.7	3015.0	2994.2
35°	5504.1	3702.4	3118.8	3243.4	3328.7	3312.6	3252.6	3100.4	2948.1	2823.5	2802.8
37.5°	5490.2	3499.4	3015.0	3121.1	3169.6	3146.5	3072.7	2943.5	2888.1	2793.5	2782.0
40°	5564.0	3356.4	2908.9	2991.9	3015.0	2996.5	2915.8	2842.0	2892.7	2869.7	2869.7
42.5°	5764.7	3280.3	2814.3	2862.8	2881.2	2895.0	2837.4	2775.1	2837.4	2731.3	2696.7
45°	6083.1	3282.6	2729.0	2735.9	2791.2	2839.7	2800.5	2708.2	2675.9	2463.7	2422.2
47.5°	6551.3	3361.0	2659.8	2615.9	2715.1	2795.9	2740.5	2606.7	2463.7	2323.0	2297.6
50°	7098.1	3501.7	2597.5	2491.4	2613.6	2740.5	2699.0	2542.1	2394.5	2309.1	2293.0
52.5°	7704.8	3679.4	2521.3	2352.9	2489.1	2715.1	2708.2	2532.9	2329.9	2272.2	2258.4
55°	8454.5	3854.7	2426.8	2191.5	2378.3	2694.4	2682.8	2456.8	2316.0	2274.5	2269.9
57.5°	9326.4	4108.4	2290.7	2027.7	2251.4	2609.0	2583.6	2410.6	2269.9	2239.9	2237.6
60°	10731.3	4502.9	2096.9	1877.7	2122.3	2459.1	2491.4	2332.2	2196.1	2189.2	2186.9
62.5°	12579.0	5056.5	1896.2	1723.2	1972.3	2265.3	2357.6	2226.1	2117.7	2152.3	2156.9
65°	15130.4	5522.5	1688.6	1591.7	1806.2	2078.4	2230.7	2126.9	2030.0	2096.9	2096.9
67.5°	16793.6	5531.7	1499.4	1455.6	1637.8	1921.6	2096.9	2009.2	1917.0	2030.0	2034.6
70°	16447.6	4846.6	1342.6	1312.6	1474.1	1753.2	1949.3	1880.1	1773.9	1875.4	1838.5
71°	15889.3	4466.0	1280.3	1257.2	1409.5	1672.4	1880.1	1822.4	1716.3	1783.2	1762.4
72.5°	14998.9	3877.8	1178.8	1183.4	1312.6	1570.9	1783.2	1723.2	1617.1	1654.0	1647.1
75°	12678.2	3386.4	1008.1	1028.8	1128.0	1397.9	1589.4	1543.3	1434.8	1434.8	1427.9
77.5°	7926.2	2366.8	837.4	848.9	957.3	1197.2	1365.6	1326.4	1222.6	1188.0	1178.8
80°	2957.3	1222.6	655.1	669.0	735.9	943.5	1130.3	1093.4	987.3	948.1	911.2
82.5°	1118.8	613.6	482.1	470.6	542.1	719.7	885.8	842.0	758.9	664.4	636.7
85°	422.1	304.5	295.3	286.0	318.3	426.8	549.0	539.8	452.1	385.2	378.3
87.5°	110.7	99.2	115.3	85.4	90.0	80.7	83.0	34.6	16.1	6.9	4.6
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)