

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: P647869

Luminaire Tested: **GALN-SA4A-835-U-AFL-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P647869  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4A-835-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11605.6 lumens  
Efficiency: N/A  
Efficacy: 95.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

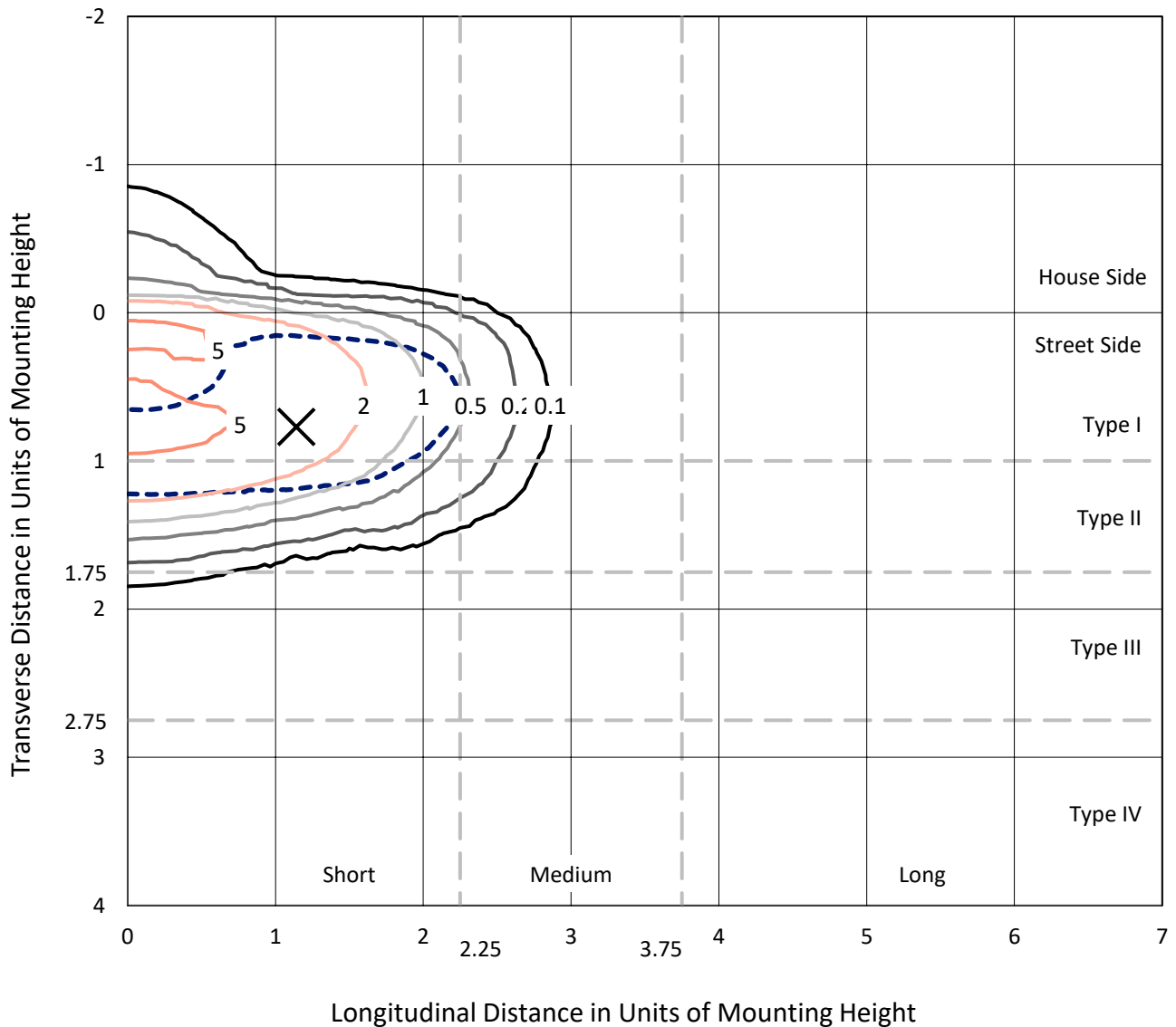
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

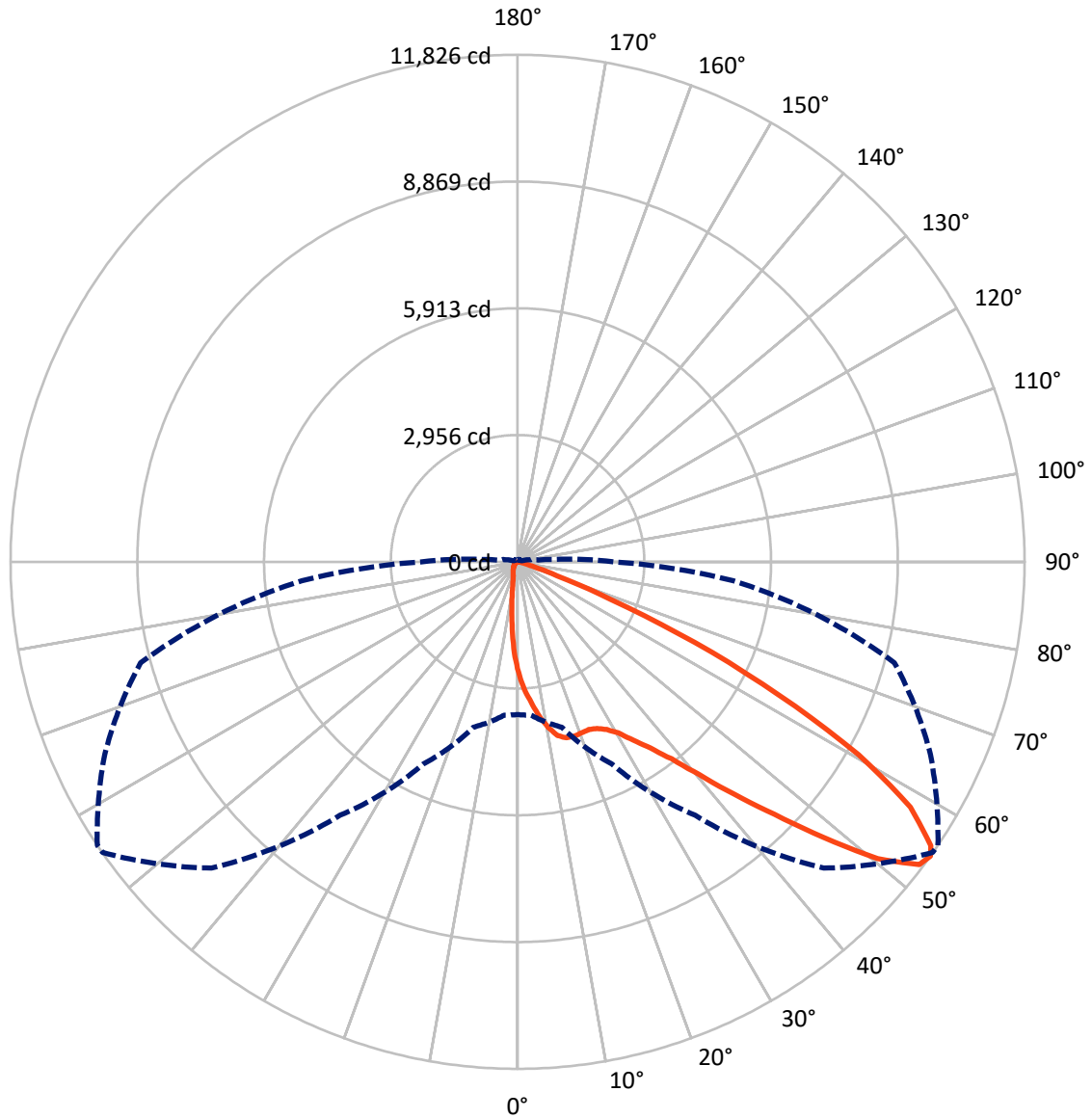
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 54-Deg Vertical

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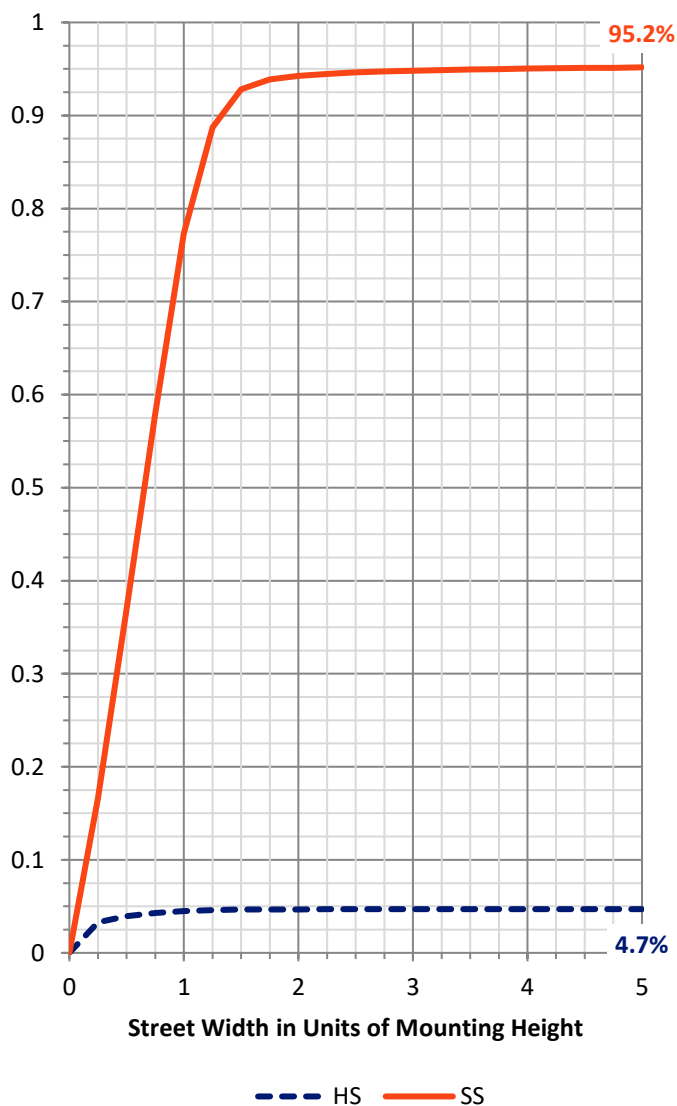
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	548.8	0.0	548.8
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	11056.8	0.0	11056.8
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	11605.6	0.0	11605.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.8	2.0
10°-20°	615.9	5.3
20°-30°	1066.8	9.2
30°-40°	1841.4	15.9
40°-50°	3134.1	27.0
50°-60°	3101.6	26.7
60°-70°	1415.6	12.2
70°-80°	181.8	1.6
80°-90°	20.5	0.2
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°	11605.6	100.0
0°-180°	11605.6	100.0

**Coefficient of Utilization**

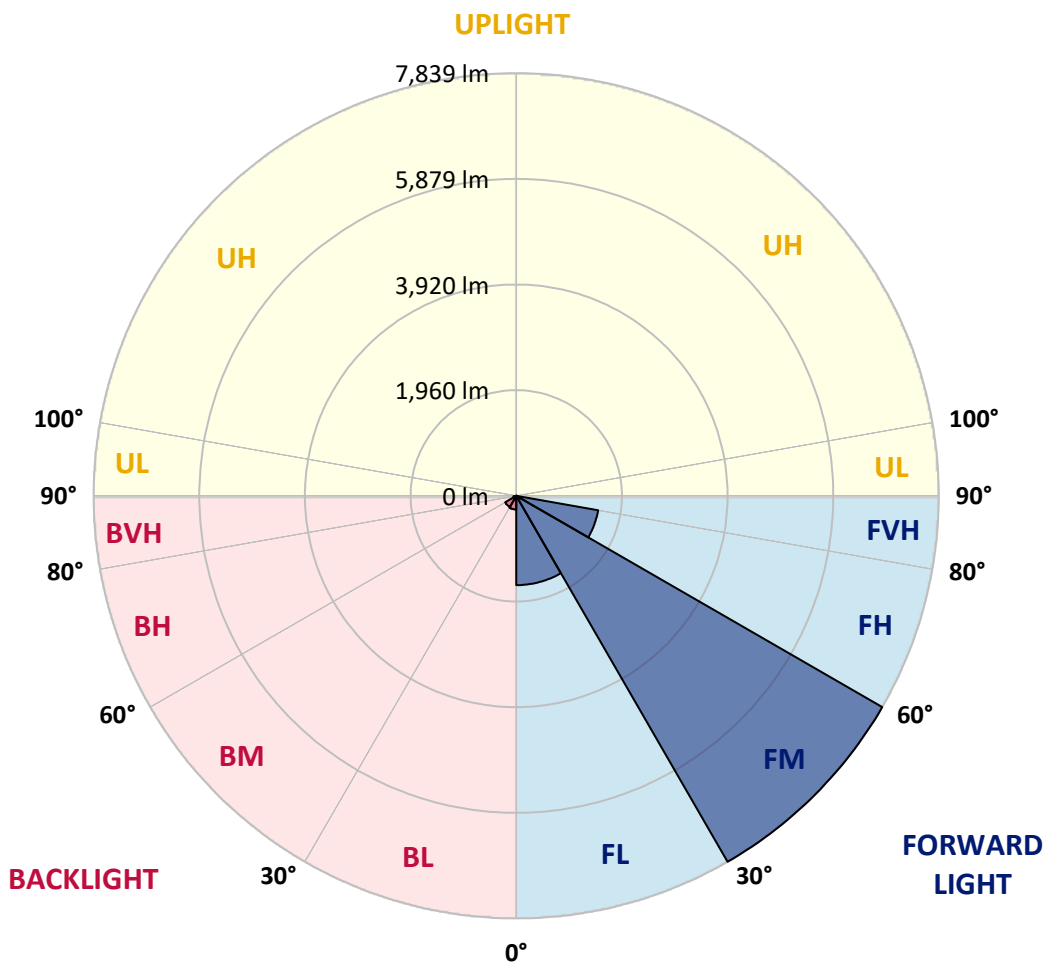


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1656.7	14.3			
FM (30°-60°)	7839.3	67.5			
FH (60°-80°)	1542.5	13.3			G1/1800
FVH (80°-90°)	18.3	0.2			G1/100
BL (0°-30°)	253.8	2.2	B1/500		
BM (30°-60°)	237.8	2.0	B1/1000		
BH (60°-80°)	55.0	0.5	B0/110		G0/110
BVH (80°-90°)	2.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	2578.4	2578.4	2578.4	2578.4	2578.4	2578.4	2578.4	2578.4	2578.4	2578.4	2578.4
2.5°	3276.9	3254.1	3222.8	3198.6	3141.4	3059.2	2972.3	2972.3	2888.5	2771.8	2652.8
5°	3779.5	3764.7	3734.1	3671.5	3607.3	3492.2	3317.6	3287.0	3137.5	2926.1	2703.7
7.5°	3983.9	3991.0	3992.5	3976.1	3945.5	3832.0	3659.0	3637.8	3399.0	3115.6	2770.3
10°	3788.2	3822.6	3856.3	3924.4	4020.7	4048.1	3950.2	3928.3	3693.4	3307.4	2842.3
12.5°	3496.9	3515.7	3534.5	3641.7	3835.1	4056.7	4159.3	4158.5	3959.6	3498.4	2933.9
15°	3361.4	3377.9	3379.4	3427.2	3594.8	3917.3	4248.6	4260.3	4219.6	3734.1	3032.6
17.5°	3389.6	3402.9	3392.0	3403.7	3491.4	3763.9	4238.4	4277.5	4430.2	3960.4	3121.8
20°	3573.6	3599.5	3557.2	3524.3	3550.9	3723.2	4203.9	4258.7	4579.0	4181.2	3203.3
22.5°	3904.0	3918.1	3864.9	3774.8	3727.9	3808.5	4194.5	4248.6	4705.8	4362.1	3250.2
25°	4271.3	4266.6	4207.8	4106.8	4008.2	3980.8	4256.4	4304.9	4810.8	4525.0	3264.3
27.5°	4638.5	4652.6	4553.9	4428.6	4310.4	4239.2	4395.0	4431.0	4929.0	4710.5	3281.6
30°	5065.2	5042.5	4945.4	4802.1	4666.7	4567.2	4618.1	4628.3	5091.8	4956.4	3327.0
32.5°	5620.4	5557.7	5448.9	5198.3	5101.2	4932.9	4945.4	4958.0	5289.9	5199.9	3381.8
35°	6373.7	6370.6	6157.6	5820.1	5583.6	5374.5	5319.7	5329.9	5589.8	5561.6	3503.1
37.5°	7280.4	7292.9	7050.2	6710.4	6275.0	5943.0	5830.3	5831.9	6045.6	6061.3	3687.9
40°	8018.8	8051.7	7906.8	7677.4	7247.5	6728.4	6538.9	6521.7	6686.1	6666.5	3951.8
42.5°	8336.7	8367.2	8421.2	8501.1	8264.6	7836.3	7389.2	7412.7	7462.9	7325.8	4247.8
45°	8180.9	8229.4	8441.6	8934.9	9157.3	9013.2	8480.0	8397.8	8185.6	8042.3	4545.3
47.5°	7531.8	7650.0	8004.7	8826.1	9604.4	10091.4	9710.8	9602.0	8909.1	8565.3	4734.8
50°	6464.5	6471.6	6965.6	8015.6	9372.6	10771.8	10967.6	10886.1	9583.2	8858.9	4830.3
52.5°	4686.3	4840.5	5293.1	6509.2	8368.8	10668.5	11768.6	11734.9	10278.5	9009.3	4968.1
54°	3562.6	3592.4	3994.9	5201.5	7215.4	10100.8	11817.9	11825.7	10623.8	9100.1	5049.6
55°	2920.6	2849.3	3272.2	4431.0	6428.5	9598.9	11656.6	11694.2	10778.9	9147.1	5109.9
57.5°	1384.3	1385.1	1708.5	2337.3	4026.2	7453.5	10670.8	10803.9	10796.1	9227.7	5295.4
60°	700.8	705.5	776.7	1079.0	1988.8	4954.8	8822.9	9140.0	9965.3	9239.5	5356.5
62.5°	490.2	484.7	472.9	519.1	837.0	2518.1	6568.7	6844.3	8466.7	8792.4	5162.3
65°	419.7	407.9	375.1	368.0	422.8	1003.0	4091.2	4540.6	6464.5	7613.2	4609.5
67.5°	358.6	353.9	324.2	306.2	299.1	436.9	2111.0	2347.4	4418.5	5472.4	3491.4
70°	304.6	302.2	284.2	261.5	241.9	261.5	783.0	970.1	2462.5	2946.4	1647.4
72.5°	247.4	249.8	252.9	223.9	203.6	185.6	334.3	389.2	1030.4	1053.1	576.3
75°	216.9	214.5	214.5	195.0	169.9	137.8	184.0	198.1	315.5	292.8	133.9
77.5°	152.7	147.2	172.3	160.5	141.7	97.9	104.9	111.2	130.8	112.0	62.6
80°	105.7	105.7	110.4	144.1	127.6	71.3	64.2	68.9	77.5	66.6	36.0
82.5°	59.5	61.1	72.0	76.7	74.4	47.8	42.3	43.1	51.7	45.4	22.7
85°	7.0	11.7	41.5	40.7	30.5	21.1	23.5	24.3	32.1	28.2	13.3
87.5°	0.8	1.6	8.6	11.0	7.8	8.6	8.6	8.6	11.0	12.5	9.4
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°	2578.4	2578.4	2578.4	2578.4	2578.4	2578.4	2578.4	2578.4	2578.4	2578.4	2578.4
2.5°	2588.6	2529.1	2387.4	2222.9	2118.0	1947.3	1803.2	1699.1	1673.3	1623.2	1638.0
5°	2585.5	2461.8	2172.8	1867.5	1541.7	1299.0	1118.1	975.6	913.0	871.5	842.5
7.5°	2587.0	2393.6	1930.1	1443.9	1054.7	816.7	649.1	562.2	504.3	480.0	483.1
10°	2591.7	2316.9	1648.2	1069.6	711.7	527.7	425.2	383.7	364.1	361.0	360.2
12.5°	2602.7	2233.1	1378.9	794.0	498.0	383.7	344.5	330.4	324.2	324.2	321.8
15°	2614.4	2140.7	1154.9	590.4	383.7	329.6	311.6	304.6	300.7	300.7	299.9
17.5°	2614.4	2034.2	945.9	458.1	330.4	303.0	288.9	279.5	276.4	276.4	275.6
20°	2598.0	1910.5	760.3	368.8	299.9	278.0	263.9	253.7	249.8	248.2	247.4
22.5°	2540.8	1745.3	605.3	317.1	274.8	256.0	238.0	226.3	223.2	221.6	222.4
25°	2439.0	1559.0	479.2	278.7	252.1	229.4	213.8	205.1	202.0	202.0	202.8
27.5°	2334.1	1364.0	379.8	249.8	224.7	204.4	191.8	186.4	185.6	187.9	188.7
30°	2237.0	1168.2	307.7	226.3	200.4	183.2	174.6	173.0	173.0	173.8	174.6
32.5°	2129.0	996.8	257.6	205.9	180.9	166.0	161.3	161.3	162.9	162.9	164.4
35°	2060.9	849.6	226.3	186.4	166.0	153.5	150.3	151.1	153.5	156.6	158.2
37.5°	2024.1	732.1	205.9	170.7	151.9	143.3	140.2	141.7	147.2	152.7	153.5
40°	2027.2	643.6	189.5	157.4	140.9	131.5	129.2	133.9	139.4	144.9	145.6
42.5°	2061.6	577.9	173.8	141.7	131.5	118.2	117.4	122.1	124.5	130.0	130.8
45°	2102.4	530.1	157.4	125.3	114.3	102.6	103.4	107.3	110.4	119.0	120.6
47.5°	2114.9	497.2	138.6	106.5	94.0	90.0	90.8	93.2	99.4	107.3	108.1
50°	2129.0	476.8	120.6	90.0	79.9	79.1	79.9	81.4	85.3	88.5	87.7
52.5°	2189.3	476.1	105.7	78.3	68.1	69.7	70.5	69.7	66.6	61.9	60.3
54°	2245.6	478.4	98.7	72.8	62.6	65.0	64.2	60.3	52.5	47.8	45.4
55°	2291.1	480.8	94.7	68.9	59.5	60.3	61.1	53.2	43.1	38.4	36.8
57.5°	2380.3	475.3	85.3	60.3	52.5	49.3	48.5	35.2	23.5	20.4	18.8
60°	2335.7	429.1	77.5	51.7	44.6	39.9	32.9	19.6	11.7	8.6	8.6
62.5°	2160.3	364.1	68.9	42.3	36.8	30.5	17.2	11.0	5.5	3.1	2.3
65°	1932.4	306.2	61.9	33.7	29.0	19.6	9.4	7.0	2.3	0.0	0.0
67.5°	1436.8	227.1	52.5	26.6	21.9	12.5	6.3	3.9	0.8	0.0	0.0
70°	665.6	138.6	44.6	20.4	15.7	9.4	4.7	2.3	0.0	0.0	0.0
72.5°	191.1	86.9	36.8	14.9	11.0	7.8	3.9	1.6	0.8	0.0	0.0
75°	66.6	69.7	27.4	11.0	8.6	5.5	3.1	1.6	0.8	0.0	0.0
77.5°	39.9	56.4	17.2	9.4	7.0	4.7	3.1	1.6	0.8	0.8	0.0
80°	22.7	37.6	11.0	7.8	6.3	3.9	2.3	1.6	0.8	0.8	0.0
82.5°	12.5	18.0	8.6	7.0	5.5	3.9	2.3	1.6	0.8	0.8	0.8
85°	10.2	9.4	7.0	6.3	4.7	3.1	2.3	0.8	0.0	0.0	0.0
87.5°	7.8	6.3	6.3	6.3	4.7	3.1	2.3	0.8	0.0	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)