

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: P651402

Luminaire Tested: **GALN-SA5D-840-U-SL4-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651402  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA5D-840-U-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26800.1 lumens  
Efficiency: N/A  
Efficacy: 86.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4

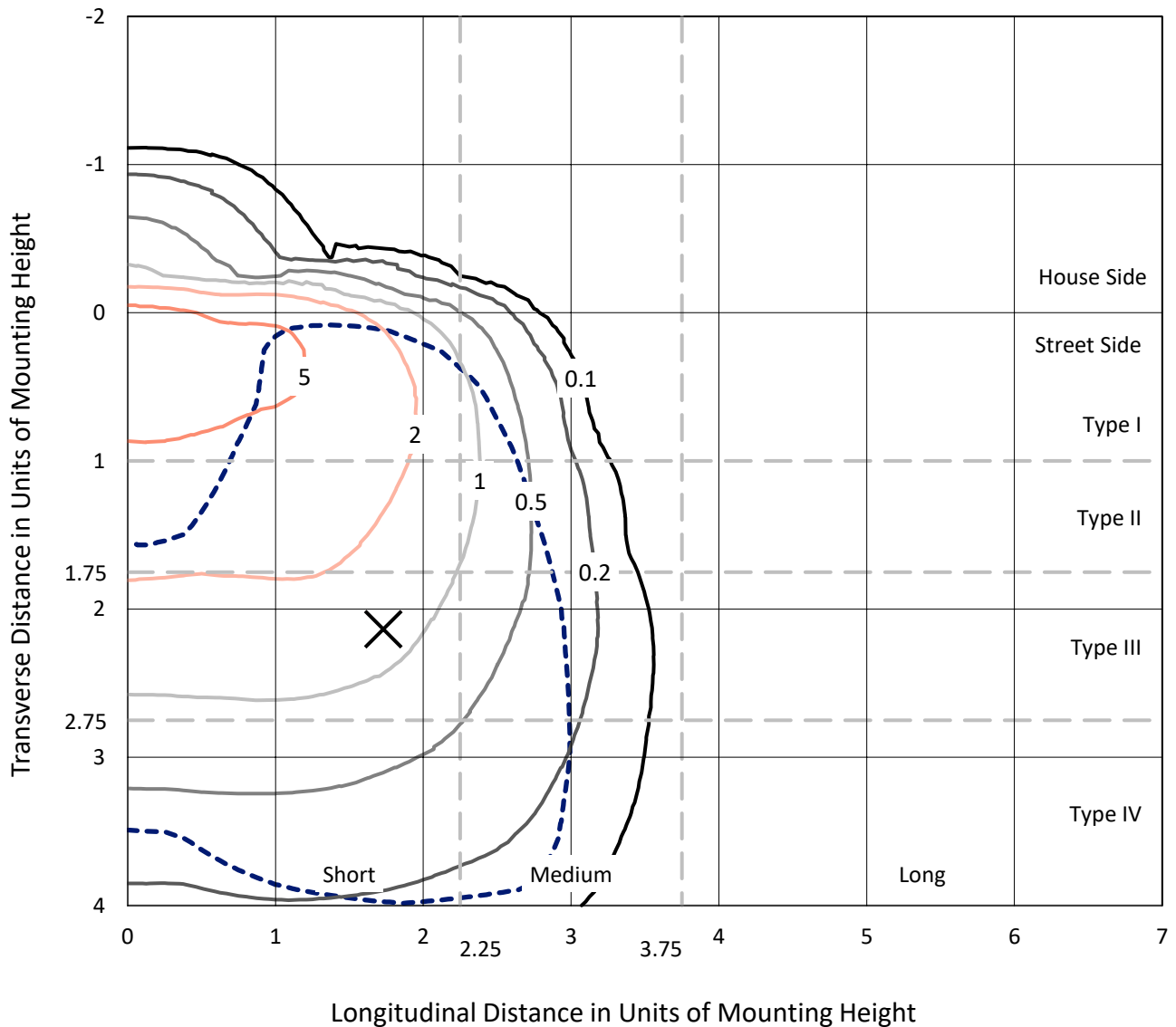
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

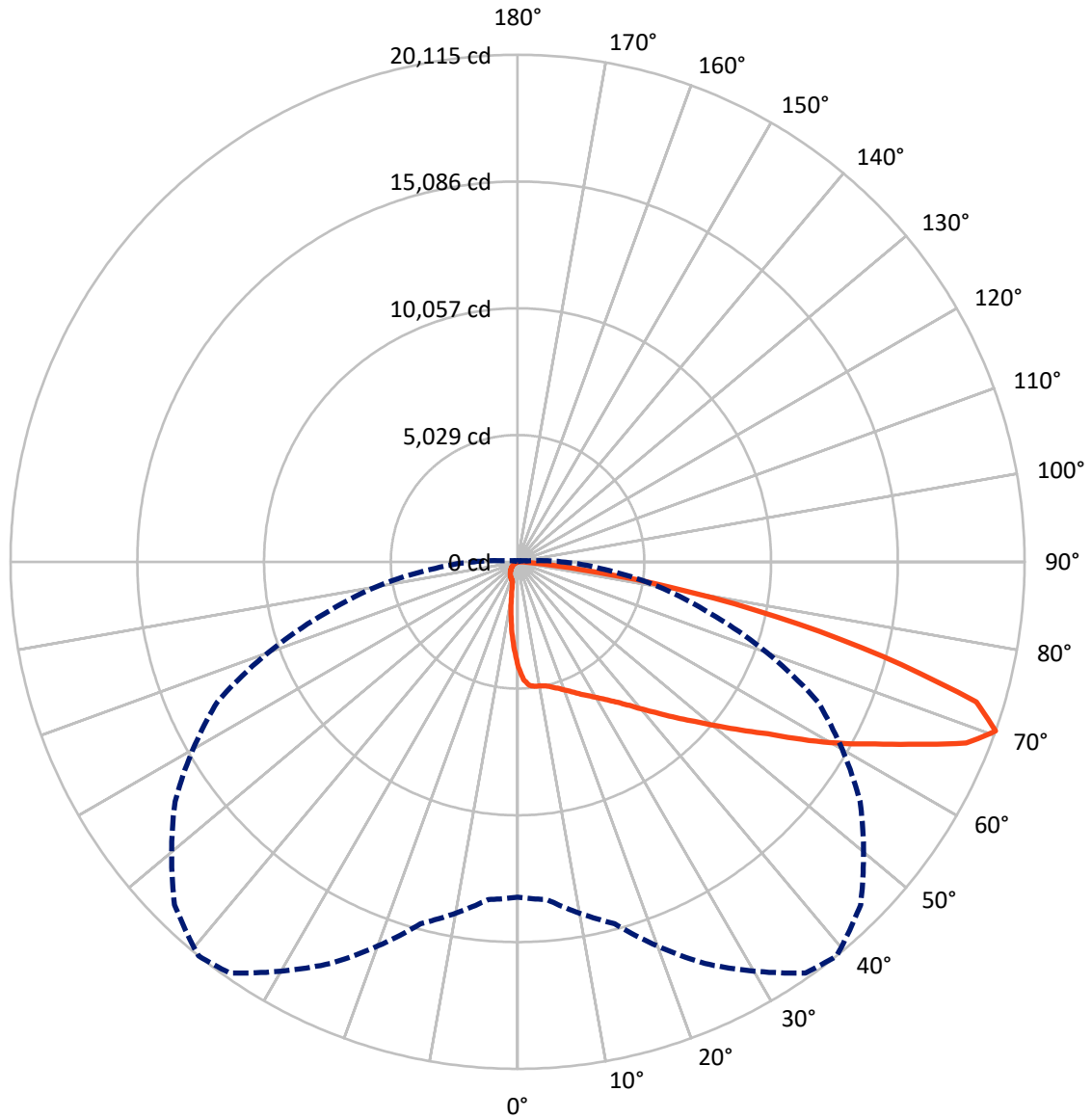
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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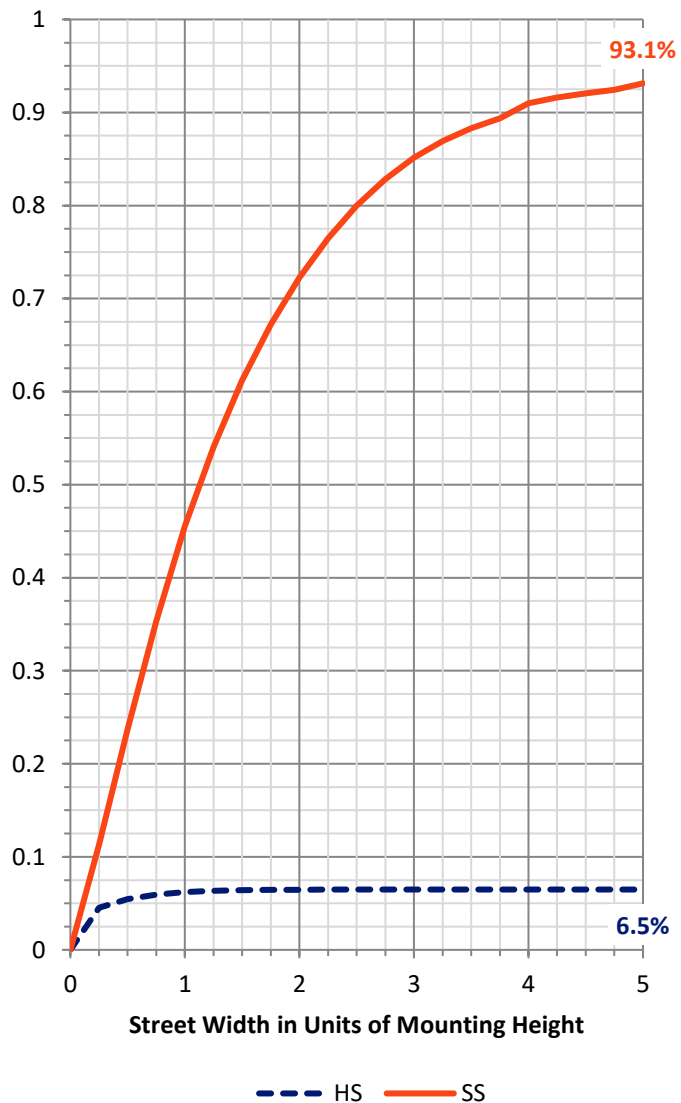
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1747.5	0.0	1747.5
	% Fixture	6.5	0.0	6.5
<b>Street Side</b>	Lumens	25052.6	0.0	25052.6
	% Fixture	93.5	0.0	93.5
<b>Total</b>	Lumens	26800.1	0.0	26800.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	356.7	1.3
10°-20°	926.9	3.5
20°-30°	1552.8	5.8
30°-40°	2408.2	9.0
40°-50°	3816.3	14.2
50°-60°	5594.1	20.9
60°-70°	7170.3	26.8
70°-80°	4505.6	16.8
80°-90°	469.4	1.8
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°	26800.1	100.0
0°-180°	26800.1	100.0

**Coefficient of Utilization**

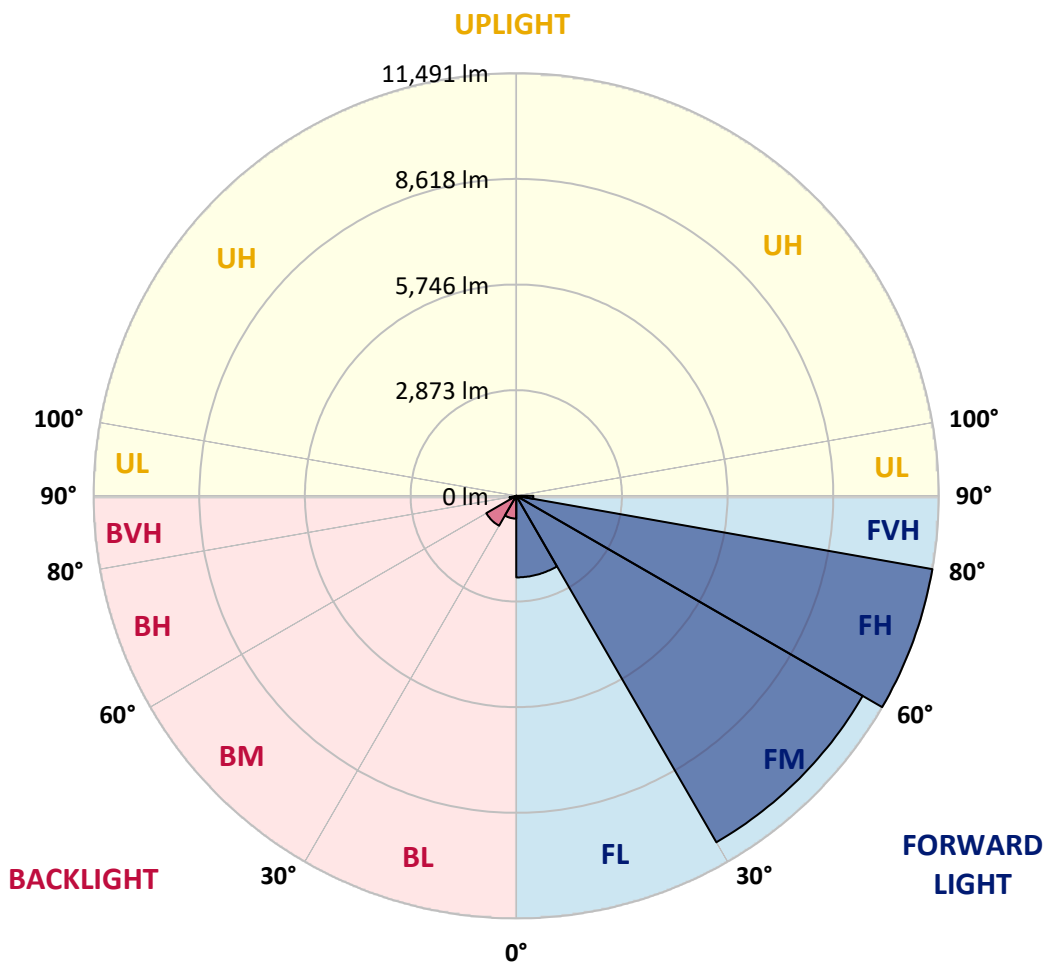


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2217.6	8.3			
FM (30°-60°)	10878.1	40.6			
FH (60°-80°)	11491.0	42.9			G4/12000
FVH (80°-90°)	465.9	1.7			G3/500
BL (0°-30°)	618.8	2.3	B2/1000		
BM (30°-60°)	940.4	3.5	B1/1000		
BH (60°-80°)	184.8	0.7	B1/500		G1/500
BVH (80°-90°)	3.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	4181.7	4181.7	4181.7	4181.7	4181.7	4181.7	4181.7	4181.7	4181.7	4181.7	4181.7
2.5°	4831.9	4815.7	4794.0	4768.8	4696.8	4684.2	4641.0	4549.1	4439.3	4349.2	4224.9
5°	5060.6	5069.6	5053.4	5008.4	4956.1	4925.5	4871.5	4729.2	4587.0	4405.1	4201.6
7.5°	5112.9	5130.9	5111.0	5067.8	5017.4	4984.9	4941.7	4819.3	4653.6	4446.5	4167.3
10°	5107.4	5129.0	5116.4	5076.8	5035.4	5004.8	4957.9	4860.7	4727.4	4509.5	4178.2
12.5°	5098.4	5127.2	5125.4	5105.6	5071.4	5048.0	5019.2	4932.7	4808.5	4601.4	4237.5
15°	5073.2	5109.2	5141.6	5157.9	5159.6	5159.6	5123.6	5031.8	4913.0	4722.0	4315.0
17.5°	5084.0	5125.4	5206.5	5253.3	5285.7	5282.1	5244.3	5145.2	5013.8	4846.3	4396.1
20°	5150.6	5206.5	5319.9	5413.6	5446.0	5435.2	5384.8	5269.5	5120.0	4952.6	4475.3
22.5°	5314.5	5364.9	5507.2	5617.0	5640.5	5611.7	5539.7	5383.0	5247.9	5067.8	4570.8
25°	5559.4	5618.9	5750.3	5833.2	5833.2	5816.9	5716.1	5532.4	5392.0	5228.1	4695.0
27.5°	5856.6	5907.0	6036.7	6110.5	6067.3	6020.5	5919.6	5698.1	5563.0	5429.7	4844.5
30°	6157.4	6189.8	6326.7	6359.1	6314.1	6254.6	6146.5	5925.0	5806.2	5703.5	5060.6
32.5°	6441.9	6512.1	6625.6	6618.4	6557.2	6528.3	6429.3	6193.4	6126.8	6115.9	5363.1
35°	6726.5	6780.5	6881.3	6906.5	6852.6	6847.1	6775.1	6600.4	6602.2	6672.4	5835.0
37.5°	6971.4	7020.0	7138.8	7194.7	7205.5	7232.5	7203.7	7088.5	7252.3	7445.0	6459.9
40°	7176.7	7245.1	7396.4	7493.6	7605.3	7704.3	7709.8	7734.9	8064.5	8395.9	7275.7
42.5°	7337.0	7432.4	7652.1	7832.2	8088.0	8214.0	8314.9	8453.6	9008.2	9503.5	8237.4
45°	7545.9	7655.7	7929.5	8212.2	8612.0	8819.1	8959.6	9330.6	10117.6	10792.9	9224.3
47.5°	7891.6	7949.3	8228.4	8640.9	9166.7	9462.0	9735.8	10297.7	11308.0	11913.1	10045.6
50°	8336.5	8374.3	8585.0	9157.7	9838.4	10227.4	10726.3	11387.2	12543.4	12842.4	10510.1
52.5°	8828.1	8840.8	8999.2	9726.8	10591.2	11081.1	11639.4	12455.2	13550.1	13505.1	10818.1
55°	9399.0	9381.0	9516.1	10344.5	11482.7	12042.8	12692.9	13548.3	14423.6	13975.1	10994.6
57.5°	10052.7	10004.1	10135.6	11163.9	12624.5	13294.4	13955.4	14492.0	15100.7	14369.6	11079.2
60°	10737.1	10639.8	10796.5	12084.2	13969.8	14605.5	15154.7	15298.8	15813.9	14682.9	10933.4
62.5°	11282.8	11284.6	11576.4	13063.9	15352.9	15909.4	16201.1	16330.8	16428.0	14614.5	10166.2
65°	12134.6	12163.5	12629.9	14423.6	16953.9	17436.5	17636.4	17215.0	16455.0	13764.5	9013.6
67.5°	13013.5	13105.3	13958.9	16296.6	18803.4	19192.5	18934.9	17386.1	15720.2	11824.9	6834.5
70°	13299.8	13451.1	14857.6	17586.0	19912.8	20114.5	19242.8	16588.3	13141.3	7906.1	3439.8
72.5°	12186.8	12431.7	14340.7	17115.9	19205.1	19030.3	17216.8	13912.2	8354.5	3002.1	1049.9
75°	8594.0	8702.1	11918.5	14198.4	15446.5	14951.3	13096.3	8968.6	3436.2	842.9	360.2
77.5°	4437.5	4385.2	7088.5	9420.6	11016.3	10503.0	8576.0	4642.7	1302.0	351.2	223.3
80°	2294.4	2332.2	3067.0	4936.3	6724.6	6188.0	4572.5	2152.1	693.3	194.5	171.1
82.5°	1285.9	1206.6	1763.1	2155.7	3144.4	2465.5	1754.1	1523.6	302.6	117.1	162.1
85°	234.1	244.9	967.1	1165.2	1091.4	693.3	565.5	1017.5	88.2	64.8	113.5
87.5°	3.6	3.6	187.3	335.0	212.5	97.2	178.3	145.9	18.0	25.2	19.8
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°	4181.7	4181.7	4181.7	4181.7	4181.7	4181.7	4181.7	4181.7	4181.7	4181.7	4181.7
2.5°	4161.9	4093.5	3965.7	3839.6	3679.3	3547.8	3459.5	3367.7	3274.1	3281.2	3302.9
5°	4089.9	3971.0	3718.9	3452.4	3196.6	2966.1	2739.2	2535.7	2452.9	2377.3	2380.8
7.5°	4017.9	3850.4	3481.2	3063.3	2676.1	2283.6	1999.1	1764.9	1640.6	1547.0	1519.9
10°	3985.4	3763.9	3263.2	2688.8	2139.5	1710.8	1345.3	1154.4	1006.7	959.9	972.5
12.5°	3999.9	3720.7	3067.0	2350.2	1696.5	1192.2	936.5	839.2	806.8	801.4	797.8
15°	4026.9	3690.1	2874.3	1975.6	1246.3	886.1	787.0	769.0	765.4	761.8	763.6
17.5°	4062.9	3663.1	2669.0	1624.4	956.3	774.4	745.5	736.5	734.8	734.8	734.8
20°	4098.9	3632.4	2440.2	1311.0	797.8	731.2	713.2	707.8	705.9	705.9	704.2
22.5°	4140.3	3605.5	2208.0	1030.1	734.8	700.6	684.3	680.8	678.9	677.2	677.2
25°	4199.8	3571.2	1961.2	842.9	695.2	671.7	655.6	651.9	650.1	642.9	644.7
27.5°	4279.0	3546.0	1707.3	727.5	659.2	635.7	624.9	619.5	615.9	610.5	612.3
30°	4387.1	3524.4	1437.1	664.6	617.7	597.9	587.1	583.5	579.9	574.5	574.5
32.5°	4574.4	3533.4	1152.6	614.1	579.9	556.5	545.6	542.1	538.5	533.1	533.1
35°	4855.3	3585.6	922.1	570.9	534.9	511.5	500.6	500.6	495.3	488.0	486.3
37.5°	5314.5	3718.9	740.2	529.5	491.6	470.0	457.4	453.8	448.4	437.7	435.8
40°	5856.6	3926.0	623.1	488.0	452.0	430.4	419.6	408.8	394.4	383.6	381.8
42.5°	6537.3	4138.6	540.3	446.7	414.2	394.4	381.8	363.8	342.2	327.7	326.0
45°	7246.9	4333.0	484.4	408.8	378.2	362.0	347.6	318.7	291.7	273.7	272.0
47.5°	7776.4	4369.1	439.4	372.8	347.6	331.4	311.6	275.5	239.5	223.3	217.9
50°	8026.7	4194.3	392.6	336.7	317.0	299.0	273.7	232.3	192.7	172.9	169.3
52.5°	8115.0	3891.8	354.8	304.4	286.4	264.7	234.1	187.3	151.3	131.4	129.7
55°	8078.9	3510.0	320.6	273.7	250.4	225.1	194.5	149.4	111.7	95.5	91.8
57.5°	7889.8	3023.7	286.4	243.1	214.3	189.1	154.9	111.7	75.6	61.2	59.5
60°	7380.2	2361.0	252.1	208.9	181.9	154.9	122.4	79.2	46.8	34.2	34.2
62.5°	6519.3	1752.3	219.8	174.7	153.1	124.3	86.5	50.5	25.2	18.0	16.2
65°	5447.8	1293.0	183.7	147.7	127.8	97.2	61.2	30.6	12.6	5.4	3.6
67.5°	3801.7	797.8	153.1	120.7	104.5	70.2	37.8	12.6	5.4	0.0	0.0
70°	1727.1	380.0	117.1	91.8	79.2	50.5	19.8	7.2	3.6	0.0	0.0
72.5°	536.6	199.9	82.8	66.6	54.0	32.4	10.8	5.4	3.6	0.0	0.0
75°	248.5	127.8	52.2	36.0	30.6	16.2	7.2	3.6	1.8	0.0	0.0
77.5°	185.5	99.1	30.6	19.8	16.2	10.8	5.4	3.6	1.8	0.0	0.0
80°	162.1	50.5	18.0	12.6	9.0	7.2	3.6	1.8	0.0	0.0	0.0
82.5°	145.9	25.2	10.8	7.2	5.4	3.6	1.8	1.8	0.0	0.0	0.0
85°	79.2	14.4	7.2	5.4	3.6	1.8	1.8	0.0	0.0	0.0	0.0
87.5°	14.4	7.2	5.4	3.6	3.6	1.8	1.8	1.8	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)