

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: P190920

Luminaire Tested: **GLEON-AF-02-LED-E1-AFL-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190920  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-02-LED-E1-AFL-800-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K, 800mA 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: 8239.9 lumens  
Efficiency: N/A  
Efficacy: 96.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 85  
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: 25 FT

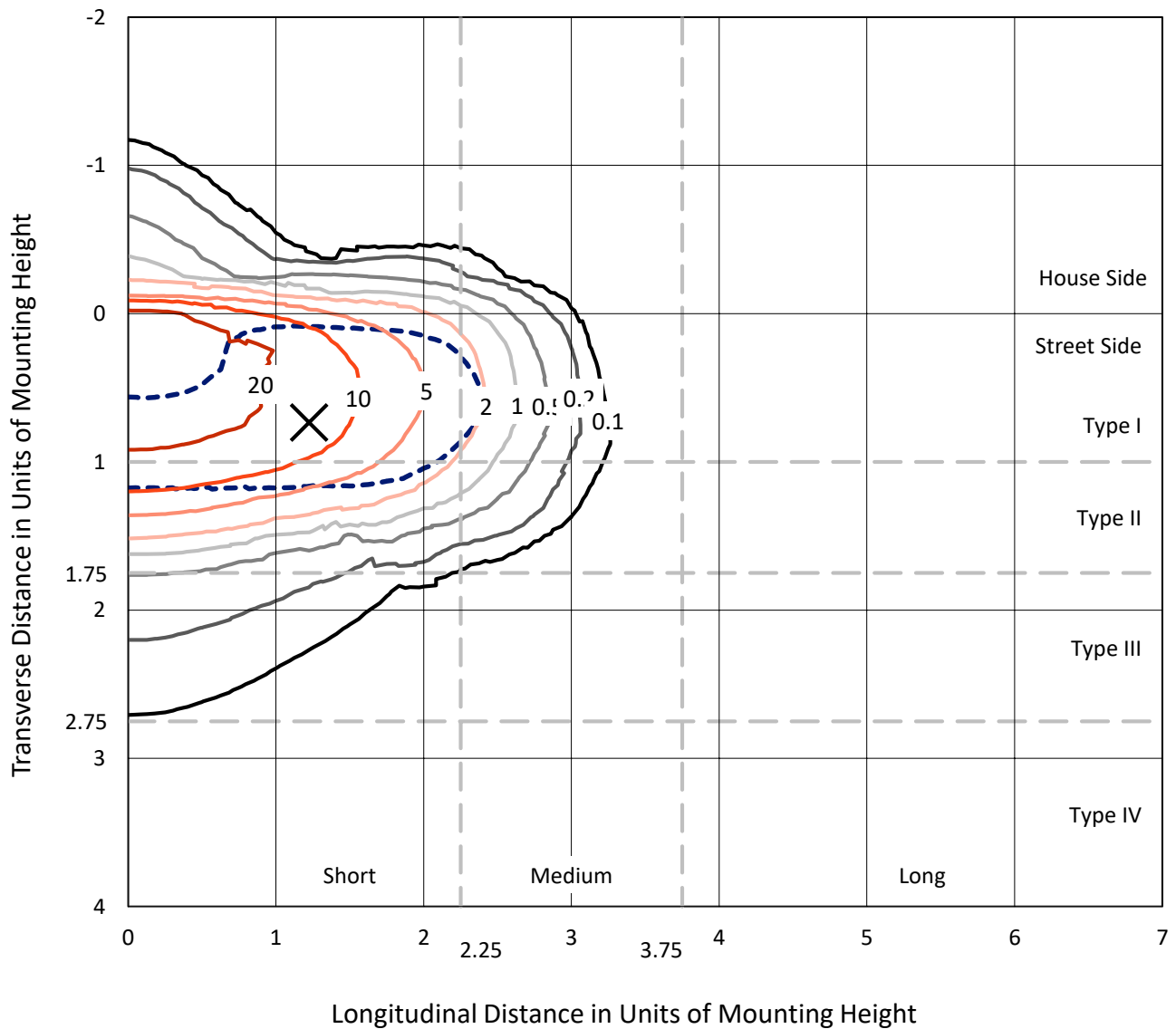


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### Iso-Footcandle Lines of Horizontal Illumination

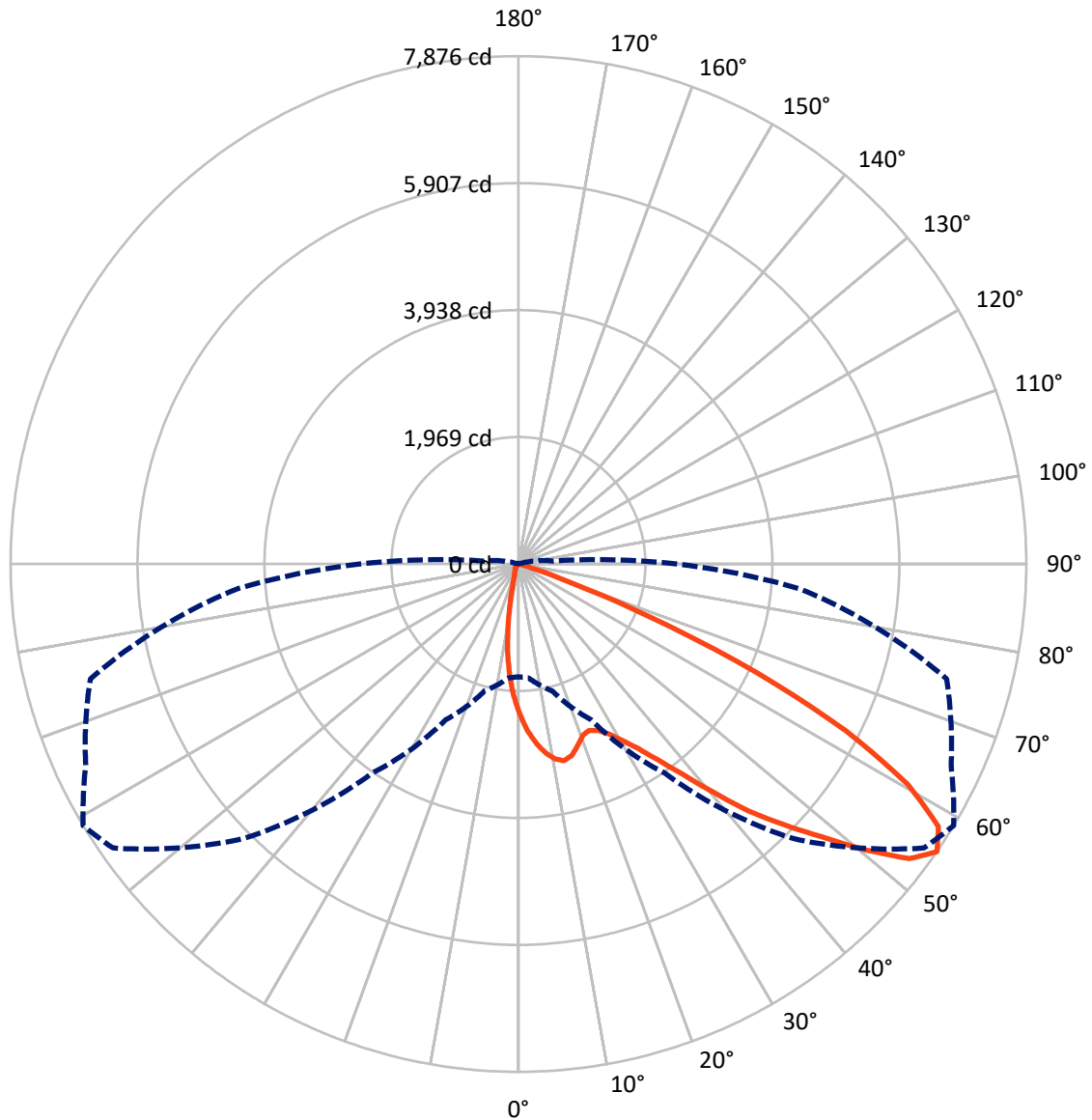
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 28.9 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral    - - - Horizontal Cone Through 55-Deg Vertical

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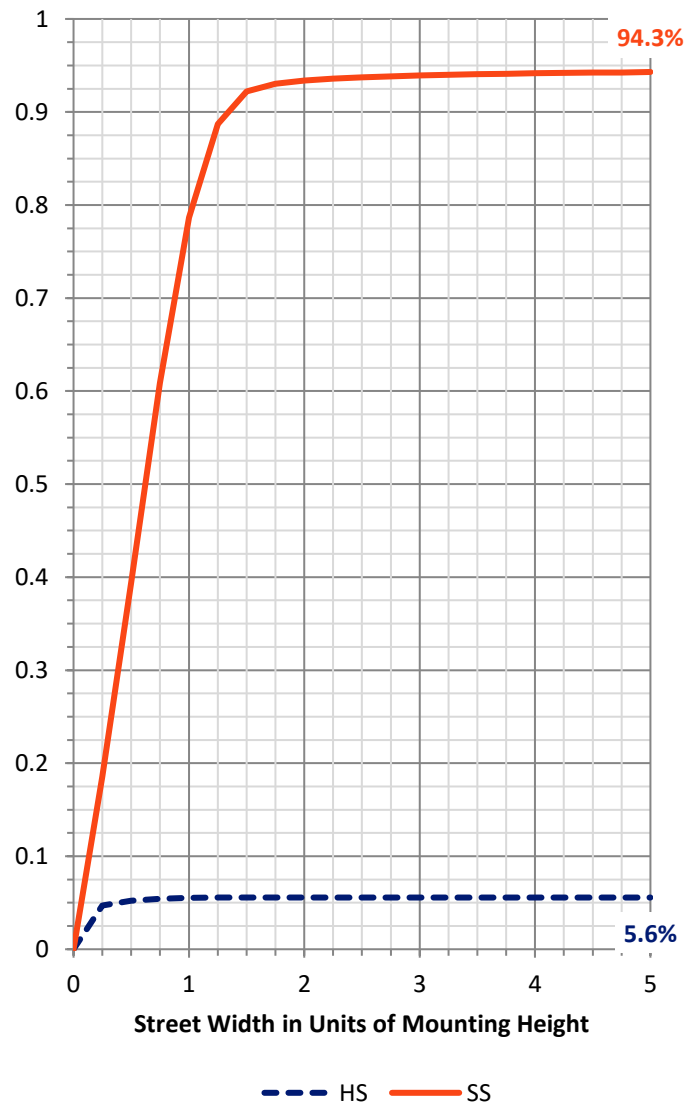
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	460.2	0.0	460.2
	% Fixture	5.6	0.0	5.6
<b>Street Side</b>	Lumens	7779.6	0.0	7779.6
	% Fixture	94.4	0.0	94.4
<b>Total</b>	Lumens	8239.9	0.0	8239.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.3	2.4
10°-20°	465.2	5.6
20°-30°	791.5	9.6
30°-40°	1361.3	16.5
40°-50°	2101.6	25.5
50°-60°	2112.8	25.6
60°-70°	1083.5	13.1
70°-80°	117.4	1.4
80°-90°	12.3	0.1
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°	8239.9	100.0
0°-180°	8239.9	100.0

**Coefficient of Utilization**



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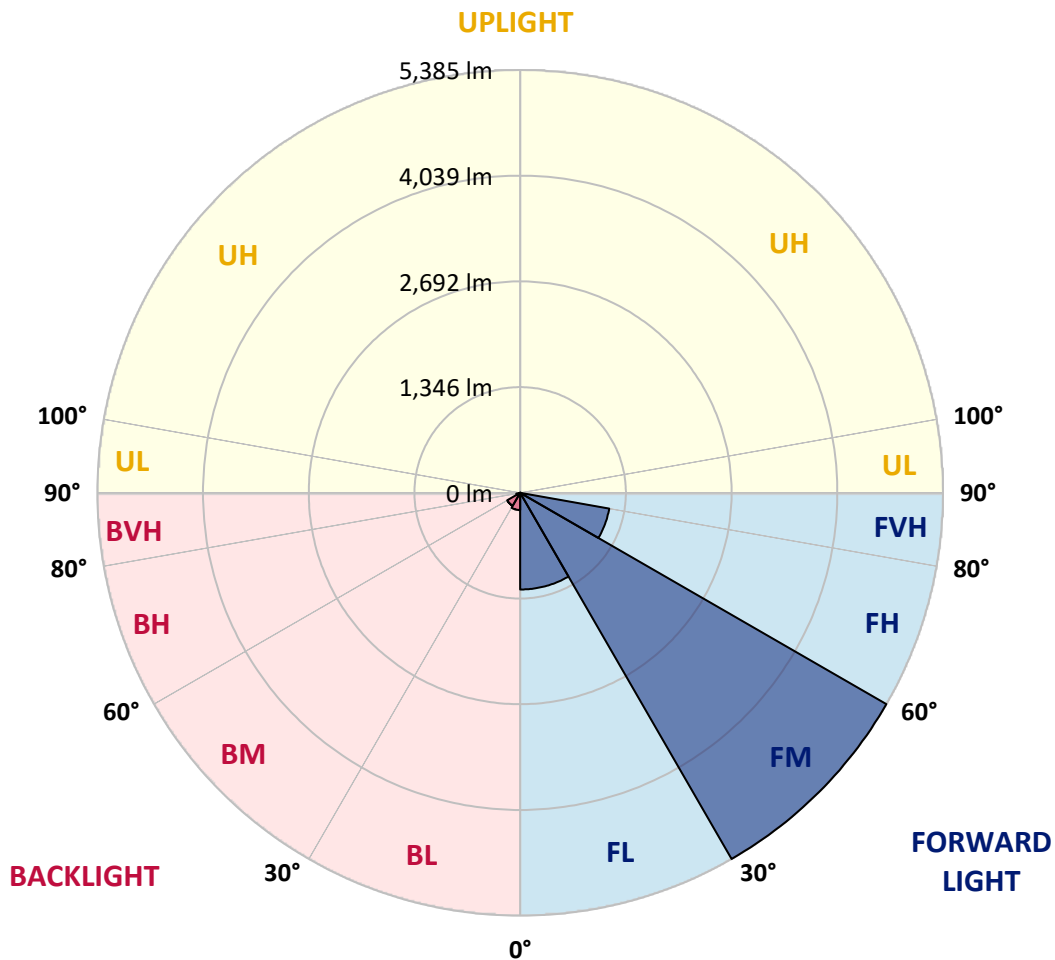
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1231.3	14.9			
FM	(30°-60°)	5384.7	65.3			
FH	(60°-80°)	1151.6	14.0			G1/1800
FVH	(80°-90°)	12.0	0.1			G1/100
BL	(0°-30°)	219.7	2.7	B1/500		
BM	(30°-60°)	191.0	2.3	B0/220		
BH	(60°-80°)	49.3	0.6	B0/110		G0/110
BVH	(80°-90°)	0.3	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°	59°	65°	75°	85°
0°	2319.5	2319.5	2319.5	2319.5	2319.5	2319.5	2319.5	2319.5	2319.5	2319.5	2319.5
2.5°	2744.5	2715.3	2706.5	2700.7	2674.0	2640.4	2594.7	2573.3	2529.6	2459.1	2372.5
5°	2995.9	2990.5	2971.1	2960.4	2931.7	2884.0	2811.1	2776.1	2706.5	2588.0	2432.8
7.5°	2885.9	2919.5	2946.3	2991.0	3047.5	3045.5	2984.3	2947.7	2870.0	2713.4	2499.9
10°	2461.5	2488.7	2532.5	2634.1	2841.2	3024.0	3096.1	3069.8	3007.6	2828.7	2564.5
12.5°	2378.4	2375.4	2383.2	2412.8	2521.3	2781.9	3077.1	3130.1	3117.4	2934.1	2625.8
15°	2422.6	2419.2	2418.3	2428.4	2454.7	2564.5	2934.6	3086.9	3184.5	3031.9	2677.9
17.5°	2546.5	2532.0	2524.2	2515.9	2508.2	2535.4	2763.5	2965.7	3194.8	3117.4	2721.2
20°	2759.1	2734.8	2706.1	2659.4	2615.6	2602.0	2691.5	2841.2	3158.3	3182.6	2749.4
22.5°	3026.0	2994.9	2945.3	2860.3	2771.3	2719.7	2727.0	2801.9	3103.8	3253.6	2762.5
25°	3326.0	3286.2	3220.0	3101.9	2971.1	2879.7	2832.0	2858.2	3079.1	3336.8	2777.5
27.5°	3647.5	3603.2	3516.7	3355.7	3207.5	3083.9	2986.6	2983.2	3121.3	3445.7	2801.9
30°	3966.0	3959.2	3846.4	3676.2	3479.8	3329.5	3189.5	3171.5	3239.5	3596.4	2850.0
32.5°	4391.0	4340.0	4201.9	4026.7	3800.2	3619.8	3454.0	3412.2	3420.8	3771.9	2924.4
35°	4926.8	4871.0	4676.4	4434.8	4181.4	3968.4	3785.1	3728.2	3706.8	4059.4	3049.8
37.5°	5273.1	5272.1	5150.0	4904.0	4632.2	4397.4	4198.0	4131.3	4088.0	4406.6	3244.4
40°	5282.3	5305.1	5321.2	5318.8	5125.3	4908.8	4731.9	4649.7	4549.1	4870.5	3495.7
42.5°	4998.9	5057.7	5199.1	5439.3	5554.1	5468.1	5318.8	5238.0	5088.3	5366.9	3802.1
45°	4615.7	4656.5	4904.0	5346.6	5786.5	6022.4	5908.7	5764.2	5566.8	5884.8	4076.9
47.5°	4444.0	4451.3	4611.3	5097.1	5804.1	6476.6	6545.7	6310.8	6001.6	6302.0	4291.8
50°	3931.0	3944.1	4164.8	4664.8	5598.9	6691.0	7185.6	6962.8	6475.6	6623.4	4370.0
52.5°	2962.9	2981.3	3261.4	3954.3	5034.8	6599.6	7643.6	7589.7	6994.9	6780.5	4374.4
55°	1748.1	1772.5	2039.9	2661.8	3960.1	6018.0	7677.7	7876.1	7404.8	6873.4	4367.7
57.5°	816.4	833.5	986.6	1371.3	2463.0	4756.2	7165.2	7679.6	7631.0	6922.5	4415.8
60°	433.7	438.6	475.6	593.7	1113.1	3015.9	6164.9	6934.7	7424.8	6990.5	4474.6
62.5°	331.6	333.1	331.1	345.2	467.8	1338.7	4659.8	5701.0	6594.8	6939.5	4409.4
65°	287.3	289.8	276.2	272.8	300.0	477.5	2768.3	4063.8	5182.2	6250.4	3965.5
67.5°	257.7	258.7	242.1	228.0	232.9	258.2	1092.2	2224.7	3430.2	4581.6	2874.3
70°	237.3	236.3	218.3	196.0	189.7	176.6	347.2	815.5	1639.2	2323.4	1336.8
72.5°	210.1	210.5	201.8	172.7	157.5	123.5	160.9	237.7	489.2	633.1	313.1
75°	186.3	183.8	173.1	154.7	129.8	81.2	79.8	106.0	150.8	149.8	67.6
77.5°	134.7	132.3	135.6	126.9	99.6	52.5	39.9	51.0	61.3	59.3	18.9
80°	98.7	97.3	87.6	105.6	88.0	36.0	24.8	27.2	31.6	26.7	5.8
82.5°	67.6	67.1	61.8	58.3	50.1	21.9	15.5	17.0	20.5	15.0	3.0
85°	10.7	12.2	44.7	35.5	29.7	9.7	10.7	11.7	13.6	8.3	1.0
87.5°	0.0	0.0	20.9	18.5	5.8	3.9	6.3	6.9	6.9	4.4	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2319.5	2319.5	2319.5	2319.5	2319.5	2319.5	2319.5	2319.5	2319.5	2319.5	2319.5
2.5°	2328.2	2279.6	2189.6	2096.7	2010.7	1908.1	1837.6	1784.6	1723.4	1706.8	1742.8
5°	2344.3	2252.4	2058.9	1848.3	1650.4	1431.1	1263.3	1130.6	1010.5	969.7	1006.6
7.5°	2369.6	2232.9	1917.3	1570.6	1226.4	884.0	649.7	495.5	397.3	368.1	383.7
10°	2394.8	2204.8	1753.4	1242.0	771.2	430.4	280.1	223.7	202.7	198.4	200.8
12.5°	2415.8	2166.8	1553.7	883.0	412.4	230.5	183.3	174.1	171.1	171.1	172.2
15°	2428.4	2109.4	1316.8	561.6	237.3	174.1	160.0	157.0	157.0	157.5	158.6
17.5°	2427.0	2036.5	1057.6	339.9	177.5	154.2	145.9	143.4	143.0	143.9	144.4
20°	2408.9	1941.2	797.5	224.1	154.7	140.6	132.3	127.9	127.4	128.4	129.3
22.5°	2374.9	1823.5	570.4	172.7	139.5	127.4	117.2	113.3	113.3	114.3	115.3
25°	2333.6	1679.6	389.9	146.4	125.9	113.3	103.6	100.1	101.2	103.6	104.0
27.5°	2282.1	1517.6	265.0	125.4	109.5	99.2	91.9	89.5	91.9	95.3	96.3
30°	2237.8	1348.9	189.1	108.4	92.9	85.6	81.2	81.2	84.6	90.9	92.4
32.5°	2203.7	1185.5	145.9	95.7	80.7	74.4	72.0	74.4	79.8	86.0	87.6
35°	2199.3	1050.8	123.5	85.6	72.0	65.7	64.7	69.0	74.4	79.3	80.2
37.5°	2232.9	926.4	111.4	77.3	64.1	58.3	57.4	62.7	68.0	74.0	75.4
40°	2296.6	828.6	102.6	69.6	57.9	51.6	49.6	53.5	60.8	68.5	70.5
42.5°	2379.3	747.9	92.9	61.8	51.6	42.8	40.4	44.7	52.5	60.8	63.2
45°	2458.0	678.3	82.1	53.0	43.3	33.0	32.1	38.0	41.8	50.1	52.1
47.5°	2501.3	617.0	72.9	43.3	33.6	26.7	26.7	28.2	32.1	41.8	43.8
50°	2486.8	567.9	63.2	32.1	23.3	20.5	20.5	19.9	25.8	33.6	35.0
52.5°	2457.6	539.7	54.4	24.8	16.1	14.6	13.1	14.6	18.0	21.4	21.9
55°	2453.2	534.9	45.7	19.9	11.2	9.7	7.3	7.3	7.3	6.9	5.8
57.5°	2487.3	542.7	38.5	16.1	8.3	6.3	3.9	0.0	0.0	0.0	0.0
60°	2522.3	551.0	33.0	11.2	5.8	3.4	0.5	0.0	0.0	0.0	0.0
62.5°	2463.9	532.4	27.7	6.9	4.4	1.4	0.0	0.0	0.0	0.0	0.0
65°	2164.4	453.2	21.9	4.9	3.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	1539.5	303.4	14.6	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
70°	702.7	126.9	9.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	150.3	39.4	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	30.6	28.6	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	9.7	45.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	5.8	32.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)