

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: P299167

Luminaire Tested: **GLNA-AF-03-LED-E1-SL2-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299167  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-SL2-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Narrow OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12452.5 lumens  
Efficiency: N/A  
Efficacy: 100.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G3

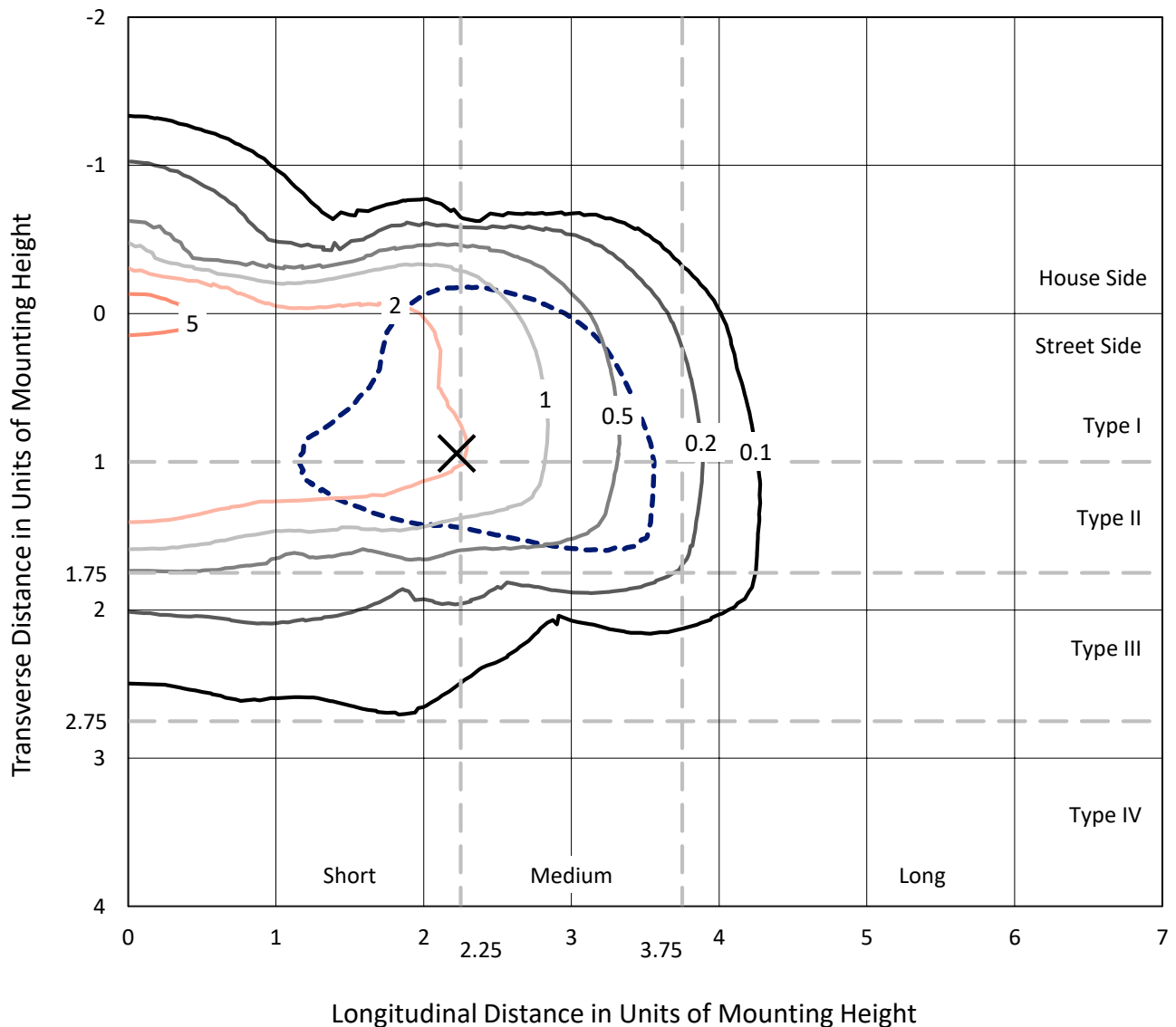
Input Watts (W): 124  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

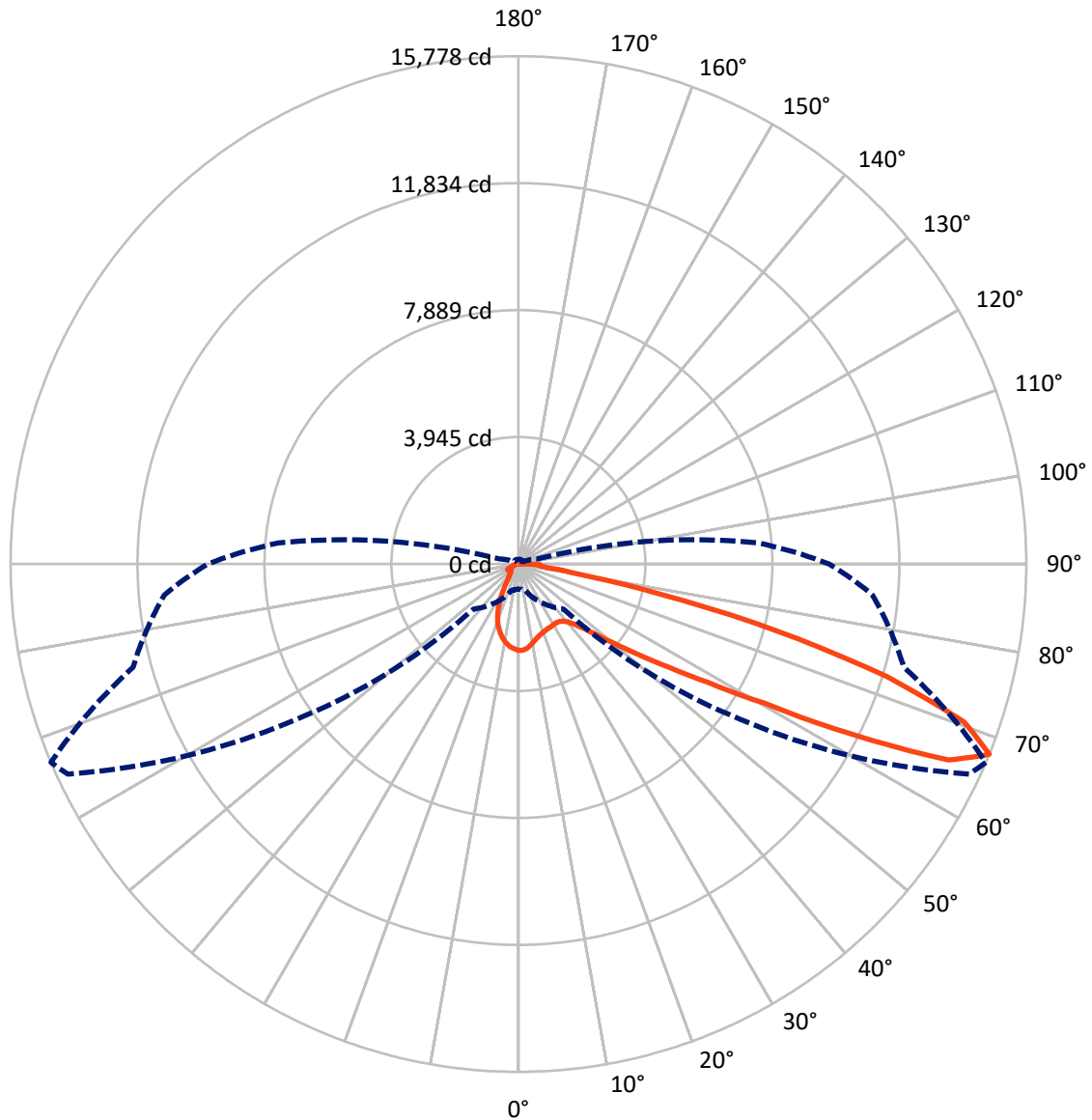
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.7 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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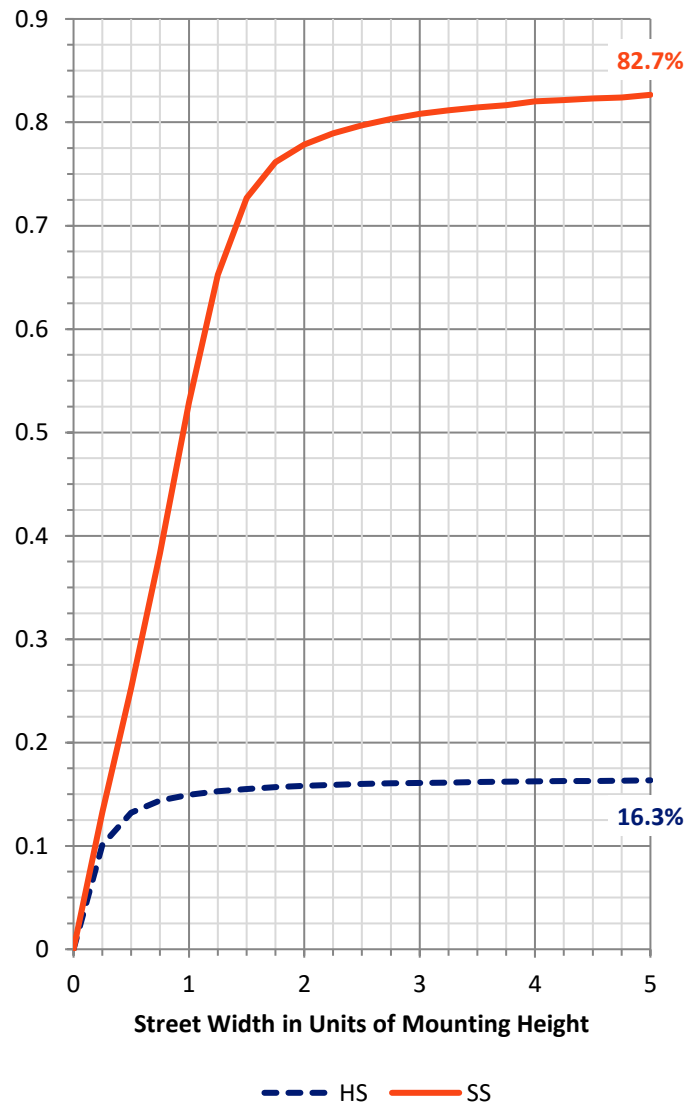
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2063.2	0.0	2063.2
	% Fixture	16.6	0.0	16.6
<b>Street Side</b>	Lumens	10389.2	0.0	10389.2
	% Fixture	83.4	0.0	83.4
<b>Total</b>	Lumens	12452.5	0.0	12452.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	229.2	1.8
10°-20°	530.2	4.3
20°-30°	718.7	5.8
30°-40°	1021.7	8.2
40°-50°	1709.4	13.7
50°-60°	2704.3	21.7
60°-70°	3445.0	27.7
70°-80°	1804.5	14.5
80°-90°	289.4	2.3
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°	12452.5	100.0
0°-180°	12452.5	100.0



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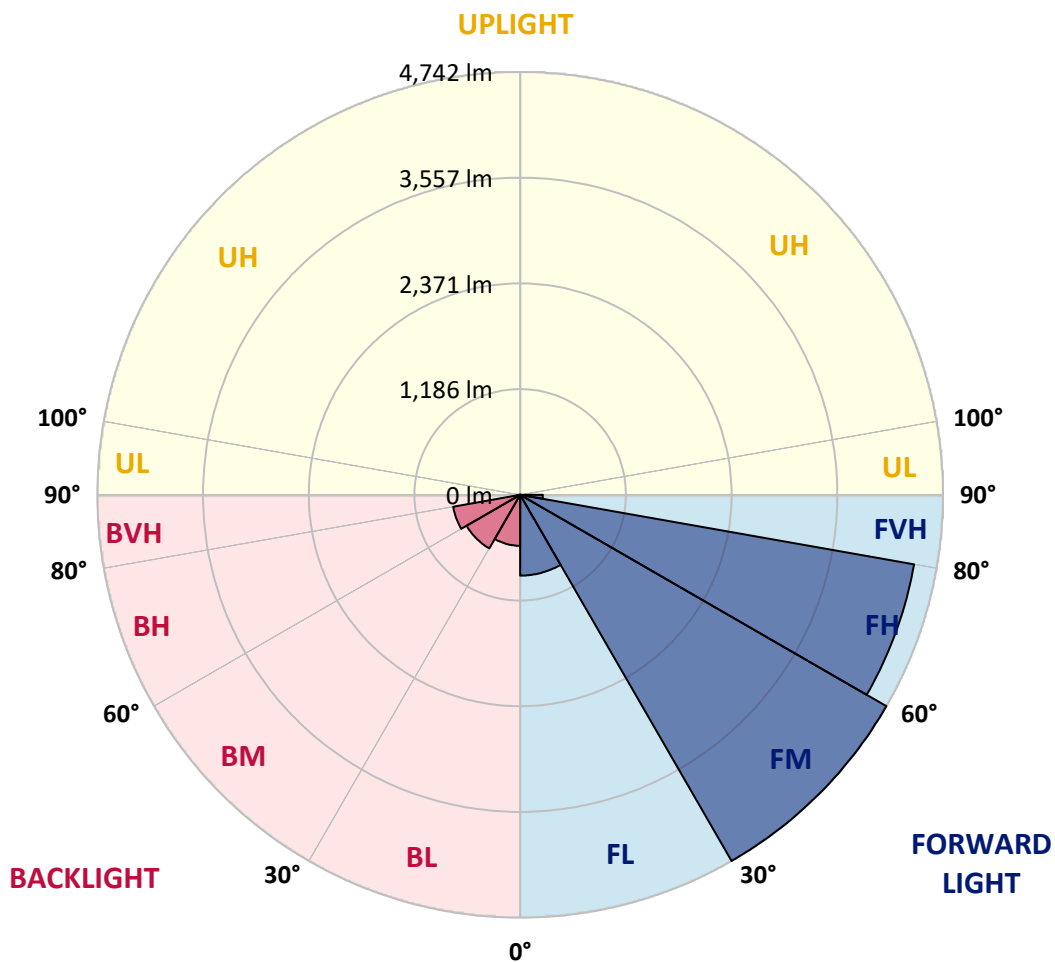
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	906.2	7.3			
FM	(30°-60°)	4742.2	38.1			
FH	(60°-80°)	4486.4	36.0			G2/5000
FVH	(80°-90°)	254.5	2.0			G3/500
BL	(0°-30°)	571.9	4.6	B2/1000		
BM	(30°-60°)	693.3	5.6	B1/1000		
BH	(60°-80°)	763.1	6.1	B2/1000		G2/1000
BVH	(80°-90°)	34.9	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2686.0	2686.0	2686.0	2686.0	2686.0	2686.0	2686.0	2686.0	2686.0	2686.0	2686.0
2.5°	2575.4	2579.7	2593.2	2601.8	2640.5	2657.1	2668.8	2680.4	2682.3	2687.8	2682.3
5°	2305.2	2314.5	2339.6	2367.9	2442.8	2501.7	2563.8	2628.2	2639.9	2681.7	2693.3
7.5°	2095.8	2093.4	2114.3	2148.0	2224.8	2306.5	2415.2	2543.5	2568.7	2662.6	2708.1
10°	1942.9	1941.1	1963.2	1998.2	2071.3	2148.6	2271.5	2447.1	2482.7	2632.5	2722.2
12.5°	1829.9	1830.6	1852.7	1891.4	1965.7	2043.6	2168.3	2353.8	2399.2	2597.5	2736.9
15°	1755.0	1759.9	1777.7	1818.9	1891.4	1969.3	2091.5	2283.7	2334.7	2569.9	2753.5
17.5°	1729.9	1737.8	1744.0	1774.1	1836.1	1914.1	2033.8	2232.2	2286.2	2550.9	2768.3
20°	1753.2	1762.4	1750.7	1761.2	1800.5	1869.2	1988.4	2191.6	2246.9	2529.4	2770.1
22.5°	1853.3	1861.9	1827.5	1797.4	1794.9	1836.7	1950.9	2159.7	2216.8	2513.4	2770.7
25°	2029.5	2035.0	1977.3	1907.3	1839.2	1825.0	1924.5	2137.6	2198.4	2499.3	2759.0
27.5°	2245.7	2250.0	2183.7	2080.5	1943.5	1852.7	1915.3	2124.7	2188.0	2487.0	2739.4
30°	2508.5	2528.8	2439.7	2309.5	2110.0	1934.3	1933.7	2117.9	2176.3	2466.1	2700.7
32.5°	2777.5	2786.1	2724.7	2592.6	2334.1	2078.0	1985.3	2122.9	2173.2	2440.9	2651.6
35°	3050.1	3061.2	3021.3	2915.0	2640.5	2288.7	2086.0	2151.7	2192.2	2432.4	2617.2
37.5°	3403.2	3417.9	3362.7	3239.9	3013.3	2574.2	2253.7	2224.2	2250.6	2456.9	2606.8
40°	3961.4	3954.6	3793.1	3610.1	3421.0	2939.6	2493.1	2347.0	2362.3	2536.1	2638.7
42.5°	4611.1	4594.5	4316.3	4028.9	3869.3	3381.7	2810.0	2560.1	2557.0	2692.1	2751.1
45°	5129.4	5115.9	4865.3	4511.0	4383.3	3885.3	3219.6	2877.6	2854.8	2939.6	2958.6
47.5°	5410.0	5410.6	5266.3	4977.1	4974.0	4525.1	3745.9	3336.9	3297.6	3337.5	3317.2
50°	5311.8	5324.6	5309.3	5217.2	5513.2	5363.9	4433.0	3977.4	3898.2	3937.5	3859.5
52.5°	4836.5	4853.0	4943.9	5085.2	5739.8	6377.8	5442.6	4773.2	4681.1	4667.0	4580.4
55°	3993.9	4014.2	4199.7	4583.5	5551.2	7058.8	7035.5	5787.7	5640.9	5507.6	5470.8
57.5°	2752.9	2786.7	3085.1	3655.0	4941.5	7264.5	8932.3	7233.8	6935.4	6469.9	6478.5
60°	1551.8	1591.1	1942.9	2460.6	3710.9	7041.0	10375.4	9424.2	8794.2	7596.7	7660.6
62.5°	986.8	1029.2	1296.3	1709.6	2226.6	5837.4	10966.8	12469.4	11669.3	8985.8	9048.4
65°	798.9	817.3	943.2	1411.1	1616.9	3516.8	10517.9	14977.9	14679.5	10748.8	10456.5
67.5°	779.9	786.0	851.1	1184.6	1550.5	1976.7	8389.5	15447.1	15778.1	12395.1	11042.9
70°	770.7	792.2	959.2	1130.5	1484.8	1667.2	5041.6	14161.2	14683.8	12825.6	10262.4
72.5°	374.0	372.7	482.7	1022.4	1672.7	1729.2	2590.2	11458.0	11982.5	11111.7	8433.1
75°	301.5	275.7	263.4	374.6	1608.3	1785.7	1650.6	7884.1	8263.6	7450.0	5184.0
77.5°	286.2	255.5	234.0	234.6	679.8	1893.8	1398.2	4363.6	4474.2	3365.1	1420.4
80°	237.0	208.8	193.4	218.0	329.1	1803.5	1511.9	1974.9	1812.1	826.5	472.8
82.5°	164.6	149.8	145.5	183.0	263.4	1285.3	1758.1	1061.1	889.8	413.9	291.7
85°	105.0	89.7	99.5	133.3	205.1	593.2	1810.9	827.2	657.7	262.8	164.6
87.5°	48.5	39.3	49.1	73.7	133.9	204.5	1723.1	929.1	677.3	138.8	103.8
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°	2686.0	2686.0	2686.0	2686.0	2686.0	2686.0	2686.0	2686.0	2686.0	2686.0	2686.0
2.5°	2687.2	2675.5	2666.3	2649.1	2630.1	2611.7	2595.1	2574.2	2568.1	2562.5	2571.1
5°	2695.8	2684.1	2650.3	2597.5	2539.2	2484.5	2429.9	2383.2	2354.4	2338.4	2347.6
7.5°	2708.7	2692.1	2622.1	2525.1	2420.1	2324.3	2225.4	2146.2	2087.9	2060.2	2068.2
10°	2720.4	2688.4	2574.2	2428.7	2275.1	2132.7	1976.7	1847.8	1752.0	1701.6	1713.9
12.5°	2725.3	2674.3	2507.3	2308.3	2097.7	1888.9	1659.2	1466.4	1328.9	1278.5	1268.1
15°	2730.2	2658.3	2433.6	2171.4	1883.4	1588.0	1266.2	1035.3	921.1	895.9	890.4
17.5°	2731.4	2630.7	2350.1	2022.8	1632.2	1230.0	865.8	719.1	719.7	760.2	765.1
20°	2718.5	2589.6	2248.7	1837.9	1331.3	850.5	594.4	569.2	662.0	763.3	775.6
22.5°	2689.0	2534.9	2133.9	1622.4	986.8	560.0	459.9	487.6	607.3	731.4	745.5
25°	2651.6	2468.6	1998.2	1372.5	653.4	400.4	385.6	419.4	500.5	583.4	591.4
27.5°	2600.6	2390.0	1845.9	1086.3	424.3	329.8	339.6	362.3	395.5	432.3	436.0
30°	2534.9	2296.0	1683.2	792.2	320.5	296.6	310.7	323.0	337.1	358.0	359.8
32.5°	2459.4	2205.8	1516.2	547.1	284.3	279.4	290.5	296.6	307.7	320.5	321.8
35°	2396.1	2119.8	1343.0	386.9	269.0	266.5	273.9	276.3	286.8	300.9	302.1
37.5°	2359.9	2049.8	1164.3	312.0	258.5	254.8	259.1	259.1	273.9	294.8	297.8
40°	2362.3	2011.1	985.6	281.9	249.9	245.0	245.6	245.6	264.7	287.4	289.2
42.5°	2429.3	2020.9	827.2	270.2	243.2	237.6	234.6	236.4	252.4	267.1	268.4
45°	2586.5	2090.3	678.6	262.8	236.4	234.6	227.8	227.2	233.3	240.1	240.1
47.5°	2844.4	2227.3	577.8	257.9	230.9	230.3	222.3	214.3	213.7	216.2	216.2
50°	3263.8	2463.1	510.3	252.4	227.2	222.3	213.1	200.8	196.5	198.3	198.3
52.5°	3892.6	2883.7	484.5	245.0	219.2	211.2	200.8	188.5	184.8	185.5	185.5
55°	4717.3	3529.7	480.8	236.4	210.6	197.7	189.1	179.9	175.6	176.9	176.9
57.5°	5725.0	4423.2	546.5	222.9	199.0	184.2	179.3	173.2	170.1	171.9	171.3
60°	6950.1	5592.4	810.6	208.8	187.3	171.9	171.9	167.0	164.6	166.4	165.8
62.5°	8361.3	6935.4	1139.7	198.3	175.0	162.1	164.6	162.1	159.7	160.9	160.3
65°	9612.7	7810.4	1067.3	190.4	162.7	152.9	157.2	156.0	154.1	155.4	154.7
67.5°	9649.0	7486.2	599.3	181.8	151.1	143.7	149.8	149.2	148.0	149.2	148.6
70°	8611.2	6321.3	337.7	165.8	138.8	132.6	141.2	140.6	139.4	141.9	141.2
72.5°	6899.1	4587.1	246.9	146.1	126.5	121.0	130.8	130.2	130.2	133.9	132.0
75°	3970.0	2360.5	197.1	125.3	113.6	109.3	117.9	118.5	119.7	124.7	121.0
77.5°	1131.7	735.7	160.9	106.2	97.6	95.8	104.4	105.6	106.2	111.8	106.8
80°	420.6	339.0	132.6	89.0	79.8	80.4	88.4	90.3	90.9	96.4	90.3
82.5°	268.4	223.5	107.5	68.8	62.6	62.0	71.8	74.3	74.3	74.9	71.2
85°	156.6	133.9	81.1	49.7	44.2	42.4	53.4	57.7	55.9	54.7	52.2
87.5°	105.0	92.1	49.7	27.6	23.9	22.7	31.3	34.4	33.2	31.3	29.5
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)