

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: P950434

Luminaire Tested: **GALN-SB4D-850-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P950434
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB4D-850-U-T3R
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 5000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40048 lumens
Efficiency: N/A
Efficacy: 136.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G5

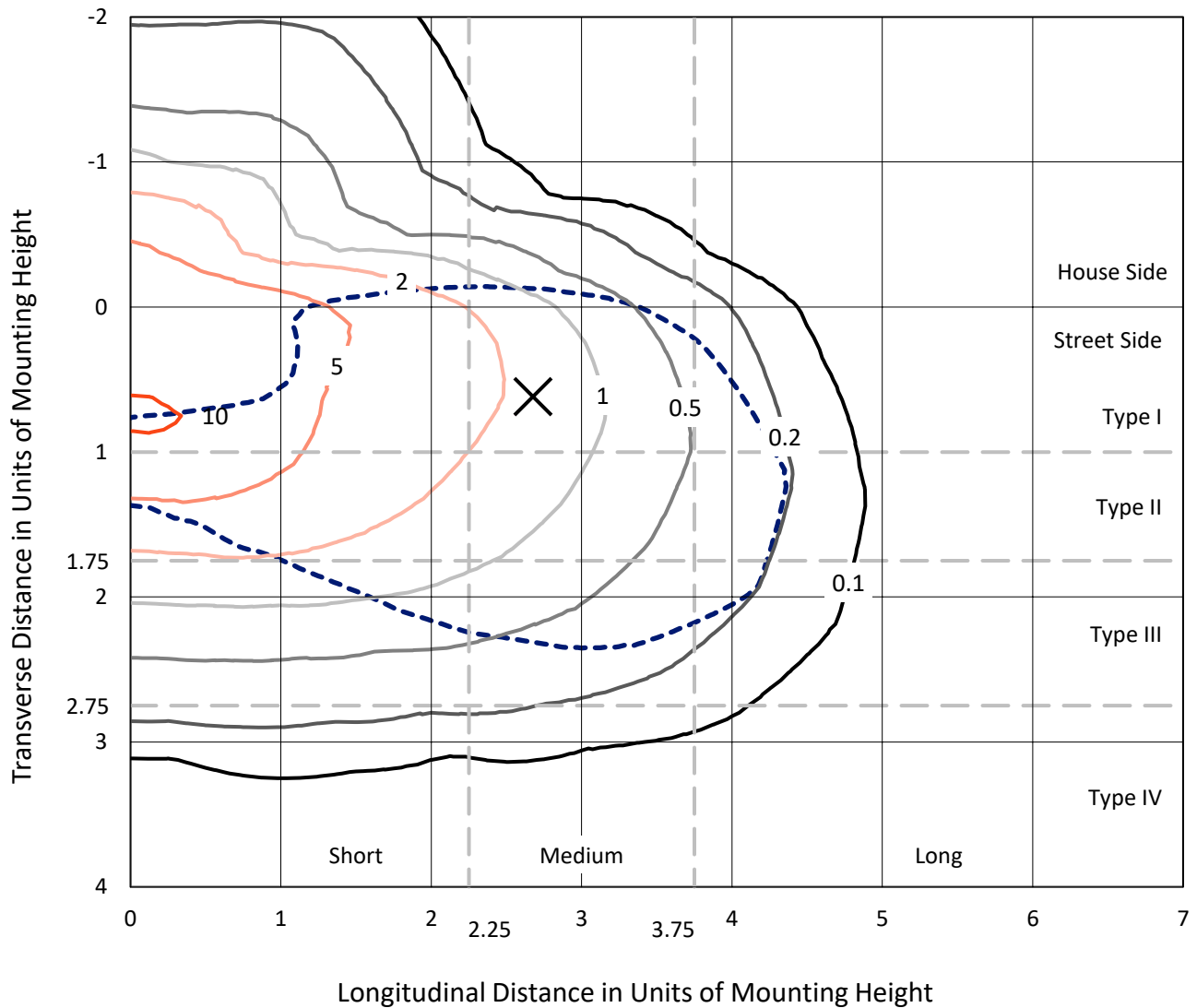
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

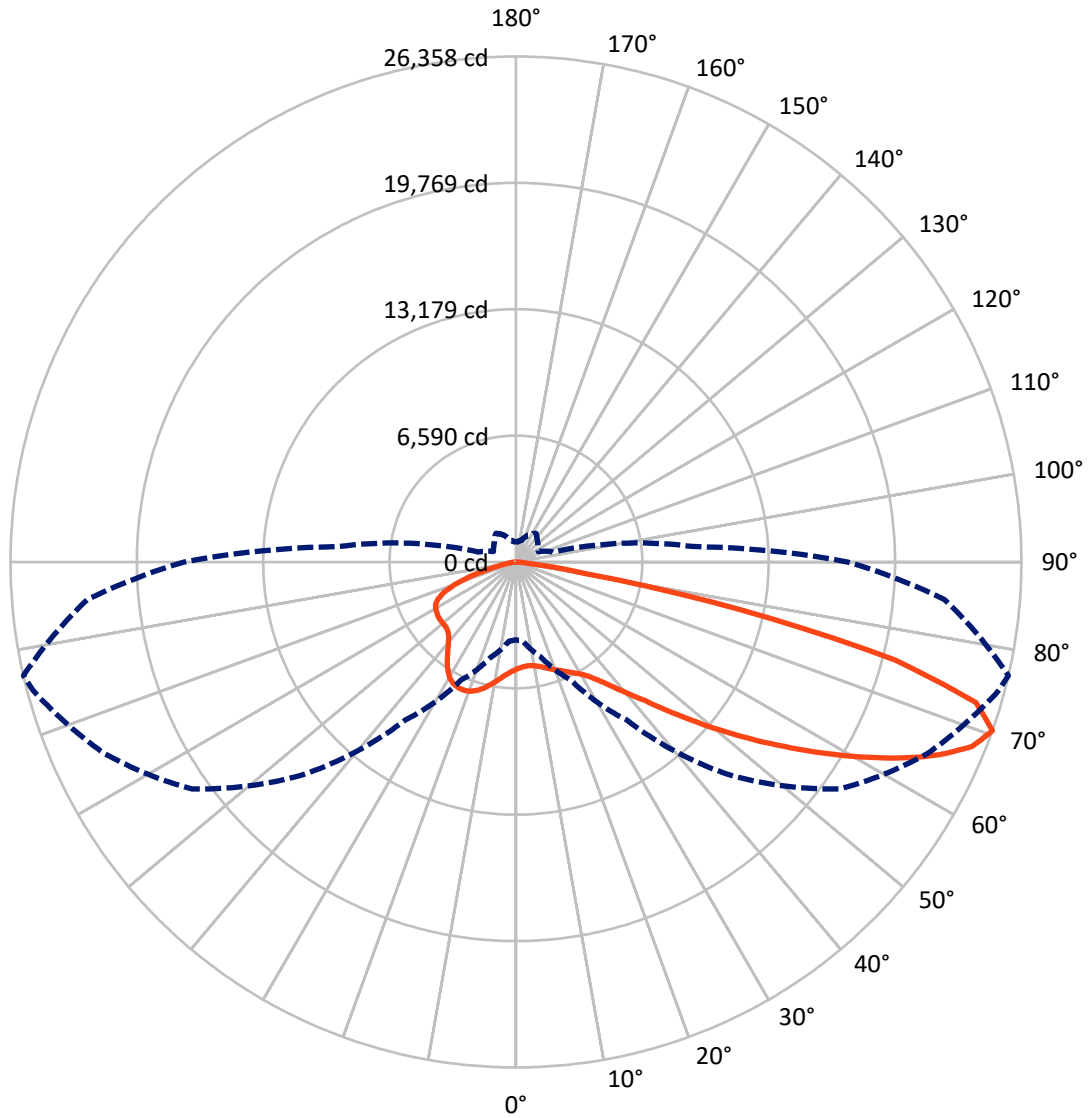
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8769.9	0.0	8769.9
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	31278.1	0.0	31278.1
	% Fixture	78.1	0.0	78.1
Total	Lumens	40048.0	0.0	40048.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	532.9	1.3
10°-20°	1537.9	3.8
20°-30°	2630.0	6.6
30°-40°	4229.3	10.6
40°-50°	6603.0	16.5
50°-60°	8820.0	22.0
60°-70°	9400.8	23.5
70°-80°	5787.1	14.5
80°-90°	507.1	1.3
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°	40048.0	100.0
0°-180°	40048.0	100.0



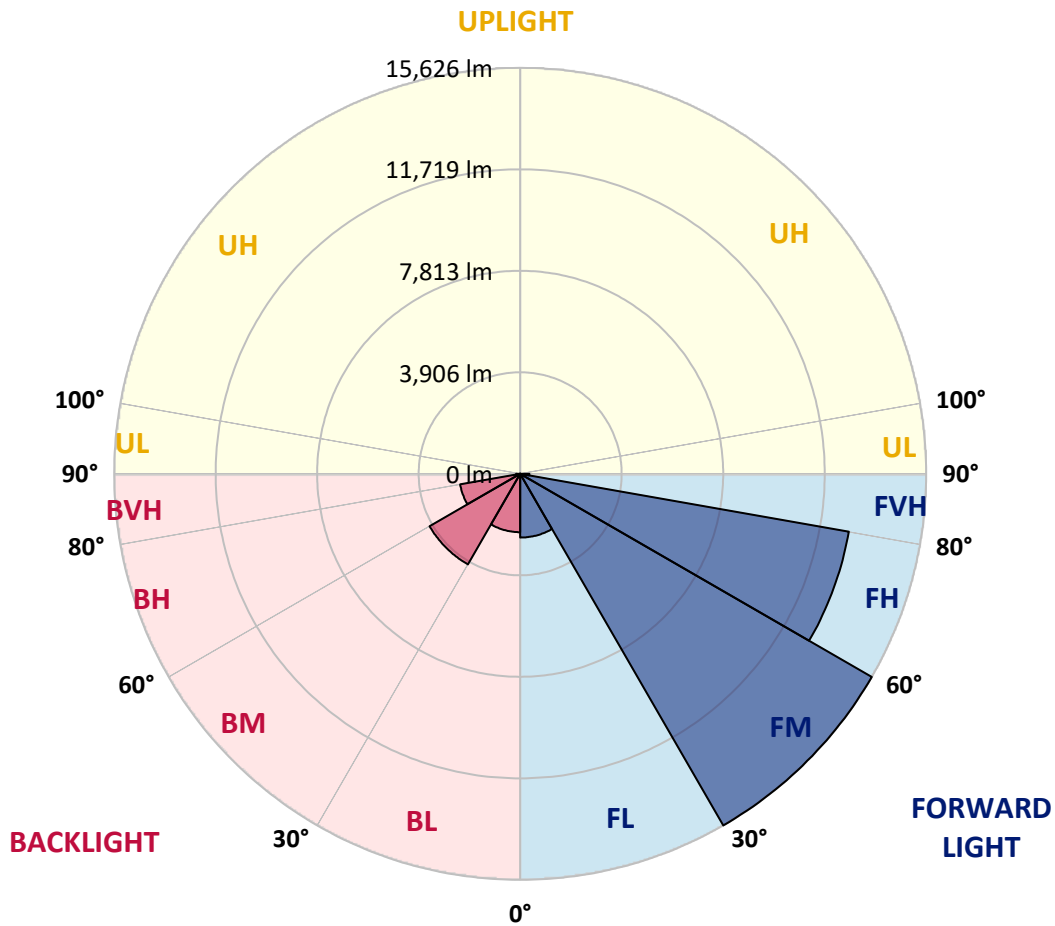
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2453.6	6.1			
FM (30°-60°)	15625.9	39.0			
FH (60°-80°)	12844.1	32.1			G5
FVH (80°-90°)	354.6	0.9			G3/500
BL (0°-30°)	2247.1	5.6	B3/2500		
BM (30°-60°)	4026.4	10.1	B3/5000		
BH (60°-80°)	2343.8	5.9	B3/2500		G3/2500
BVH (80°-90°)	152.5	0.4			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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°
0°	5587.1	5587.1	5587.1	5587.1	5587.1	5587.1	5587.1	5587.1	5587.1	5587.1
2.5°	5150.2	5148.1	5174.8	5183.0	5232.2	5267.1	5332.7	5402.5	5492.7	5503.0
5°	4852.8	4852.8	4883.6	4916.4	4980.0	5049.7	5150.2	5271.2	5427.1	5451.7
7.5°	4600.5	4616.9	4643.6	4707.2	4781.0	4881.5	5035.3	5207.6	5412.7	5451.7
10°	4397.5	4415.9	4448.7	4500.0	4610.8	4750.2	4951.2	5172.7	5447.6	5509.1
12.5°	4333.9	4352.3	4370.8	4409.8	4512.3	4676.4	4916.4	5189.2	5531.7	5593.2
15°	4481.5	4504.1	4489.7	4479.5	4532.8	4682.5	4932.8	5248.6	5636.3	5724.5
17.5°	4822.0	4830.2	4797.4	4701.0	4692.8	4772.8	5010.7	5330.7	5767.6	5864.0
20°	5371.7	5357.3	5289.7	5098.9	4990.2	4973.8	5144.0	5453.7	5902.9	6005.5
22.5°	6118.3	6101.9	5966.5	5665.0	5423.0	5263.0	5336.8	5613.7	6054.7	6169.6
25°	7049.5	7026.9	6827.9	6417.7	6042.4	5646.5	5599.4	5825.0	6241.3	6348.0
27.5°	8136.5	8118.1	7902.7	7361.2	6819.7	6171.6	5925.5	6073.2	6436.2	6557.2
30°	9305.6	9358.9	8977.4	8394.9	7709.9	6856.7	6364.4	6378.8	6688.5	6797.2
32.5°	10679.8	10772.1	10312.7	9574.3	8639.0	7601.2	6918.2	6805.4	7055.6	7145.9
35°	12041.7	12146.3	11764.8	10948.5	9871.7	8479.0	7496.6	7295.6	7543.8	7642.2
37.5°	13219.0	13358.5	13161.6	12451.9	11190.5	9537.4	8251.4	7871.9	8144.7	8267.8
40°	14148.1	14361.5	14347.1	13904.1	12745.2	10821.3	9209.2	8583.6	8891.3	9024.6
42.5°	14902.9	15087.5	15247.5	15224.9	14367.6	12279.6	10335.2	9508.7	9742.5	9896.3
45°	15423.9	15620.8	15965.4	16336.6	15928.5	13840.5	11625.4	10606.0	10819.3	11051.1
47.5°	15889.5	16113.1	16560.2	17148.8	17253.4	15407.5	13038.5	11883.8	12078.6	12318.6
50°	15930.5	16123.3	16816.6	17651.3	18194.9	16913.0	14556.3	13317.5	13500.0	13756.4
52.5°	14939.9	15243.4	16453.5	17637.0	18627.6	18172.3	16063.8	14808.6	15013.7	15321.3
55°	11596.6	12041.7	15389.0	17087.3	18473.8	18986.6	17497.5	16394.0	16656.6	16978.6
57.5°	9988.6	10183.5	12216.1	16086.4	17772.4	19197.8	18707.6	17995.9	18418.4	18771.2
60°	8977.4	9139.5	10341.4	14529.6	16849.4	18863.5	19642.9	19489.1	20219.3	20639.7
62.5°	7894.5	8048.3	9141.5	12132.0	15668.0	18307.7	20233.6	20867.4	22065.2	22524.6
65°	6819.7	6951.0	7999.1	10193.7	14166.6	17751.8	20539.2	22059.0	23773.7	24249.6
67.5°	5621.9	5730.6	6721.3	8600.1	12341.2	16990.9	20691.0	22996.4	25260.7	25668.9
70°	4057.0	4141.1	5164.5	6801.3	10050.1	15682.3	20629.5	23660.9	26031.9	26358.0
72.5°	1917.7	1993.6	3195.5	4415.9	7098.7	13134.9	19384.5	23133.8	25248.4	25086.4
75°	1023.5	1089.1	1835.7	2422.3	3749.3	9004.1	15862.8	19928.0	21201.7	20414.1
77.5°	693.3	744.5	1136.3	1454.2	1712.6	4274.4	10195.8	13797.4	13274.4	11974.0
80°	549.7	603.0	931.2	984.5	828.6	1544.4	4212.9	6387.0	4588.2	3669.3
82.5°	422.5	482.0	783.5	713.8	451.2	633.8	1226.5	2020.3	1175.3	894.3
85°	258.4	322.0	615.3	455.3	254.3	289.2	416.4	562.0	358.9	299.5
87.5°	131.3	184.6	311.8	166.1	114.9	67.7	110.8	110.8	94.3	82.0
90°	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):

85°		90°	95°	105°	115°	125°	135°	145°	155°	165°	175°
5587.1	0°	5587.1	5587.1	5587.1	5587.1	5587.1	5587.1	5587.1	5587.1	5587.1	5587.1
5558.3	2.5°	5607.6	5648.6	5718.3	5784.0	5835.2	5884.5	5933.7	5960.4	5968.6	6001.4
5589.1	5°	5673.2	5749.1	5884.5	6011.6	6091.6	6140.8	6175.7	6196.2	6200.3	6210.6
5673.2	7.5°	5794.2	5915.2	6103.9	6231.1	6290.6	6286.5	6272.1	6220.8	6200.3	6181.9
5796.3	10°	5964.5	6124.4	6356.2	6444.4	6407.5	6309.0	6181.9	6032.1	5962.4	5894.7
5964.5	12.5°	6175.7	6378.8	6606.4	6602.3	6419.8	6167.5	5872.2	5642.4	5496.8	5392.2
6171.6	15°	6432.1	6665.9	6840.3	6700.8	6300.8	5847.5	5414.8	5115.3	4984.1	4869.2
6380.8	17.5°	6696.7	6946.9	7026.9	6670.0	6001.4	5373.8	4883.6	4647.7	4518.5	4456.9
6606.4	20°	6955.1	7203.3	7137.7	6493.6	5546.0	4836.4	4399.5	4270.3	4243.6	4258.0
6825.9	22.5°	7227.9	7449.4	7160.2	6153.2	4965.6	4286.7	4046.7	4050.8	4110.3	4153.4
7055.6	25°	7506.8	7656.6	7100.7	5660.9	4342.1	3882.6	3823.2	3888.8	4005.7	4089.8
7314.0	27.5°	7775.5	7841.2	6971.5	5051.7	3806.7	3593.4	3603.7	3739.1	3915.5	4032.4
7627.9	30°	8079.1	8005.2	6723.3	4366.7	3435.5	3345.3	3431.4	3589.3	3765.7	3870.3
8023.7	32.5°	8421.6	8146.8	6329.5	3732.9	3173.0	3146.3	3287.8	3390.4	3468.3	3499.1
8548.8	35°	8848.2	8345.7	5825.0	3287.8	2937.1	3000.7	3136.1	3084.8	3054.0	3037.6
9254.3	37.5°	9402.0	8614.4	5234.3	2998.6	2746.4	2896.1	2951.5	2791.5	2670.5	2611.0
10109.6	40°	10068.6	9008.2	4666.1	2775.1	2625.3	2805.8	2709.4	2516.6	2362.8	2278.7
11071.6	42.5°	10809.0	9420.5	4188.2	2606.9	2557.7	2732.0	2531.0	2301.3	2053.1	2026.4
12218.1	45°	11586.4	9845.0	3862.1	2477.7	2524.8	2668.4	2428.4	2057.2	1880.8	1989.5
13368.7	47.5°	12363.7	10234.7	3665.2	2381.3	2508.4	2596.6	2338.2	1921.8	1796.7	1954.7
14601.4	50°	13229.3	10583.4	3577.0	2311.5	2490.0	2567.9	2202.8	1887.0	1708.5	1813.1
15877.2	52.5°	14088.7	10854.2	3511.4	2241.8	2463.3	2545.4	2137.2	1845.9	1601.9	1608.0
17161.1	55°	14946.0	11030.5	3439.6	2149.5	2403.8	2496.1	2131.0	1800.8	1521.9	1493.2
18518.9	57.5°	15860.8	11131.1	3351.4	2046.9	2301.3	2371.0	2124.9	1766.0	1497.3	1450.1
19907.5	60°	16791.9	11278.7	3236.6	1921.8	2163.9	2221.3	2110.5	1753.6	1482.9	1402.9
21216.1	62.5°	17626.7	11330.0	3099.1	1802.9	1987.5	2073.6	2079.8	1743.4	1443.9	1306.5
22303.1	65°	18174.4	11108.5	2859.2	1667.5	1796.7	1921.8	2020.3	1708.5	1374.2	1236.8
22840.5	67.5°	18151.8	10476.8	2483.8	1493.2	1612.1	1753.6	1934.1	1649.0	1290.1	1150.6
22434.4	70°	17306.8	9229.7	2008.0	1290.1	1409.1	1573.2	1823.4	1560.8	1189.6	1056.3
19948.5	72.5°	14843.5	7223.8	1458.3	1052.2	1173.2	1386.5	1679.8	1454.2	1087.1	972.2
14743.0	75°	10603.9	4571.8	988.6	808.1	912.7	1175.3	1501.4	1329.1	992.7	976.3
7383.8	77.5°	5416.8	2184.4	654.3	590.7	635.8	927.1	1261.4	1187.6	1007.1	806.1
2100.3	80°	1761.9	806.1	412.3	402.0	422.5	617.4	976.3	974.2	763.0	547.6
508.7	82.5°	562.0	346.6	268.7	258.4	248.2	387.6	680.9	771.2	514.8	346.6
182.5	85°	223.6	207.2	157.9	145.6	104.6	182.5	356.9	512.8	383.5	250.2
47.2	87.5°	82.0	82.0	43.1	30.8	22.6	61.5	96.4	153.8	219.5	129.2
0.0	90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END O

<u>180°</u>
5587.1
6019.8
6227.0
6186.0
5874.2
5367.6
4856.9
4475.4
4251.8
4163.6
4112.4
4061.1
3894.9
3515.5
3054.0
2625.3
2284.9
2053.1
2046.9
2028.5
1891.1
1651.1
1513.7
1456.2
1409.1
1306.5
1236.8
1156.8
1068.6
966.0
920.9
717.9
484.0
344.6
256.4
127.2
0.0

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