

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: P949359

Luminaire Tested: **GALN-SB4A-850-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P949359
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB4A-850-U-T2R
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 5000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17515 lumens
Efficiency: N/A
Efficacy: 153.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

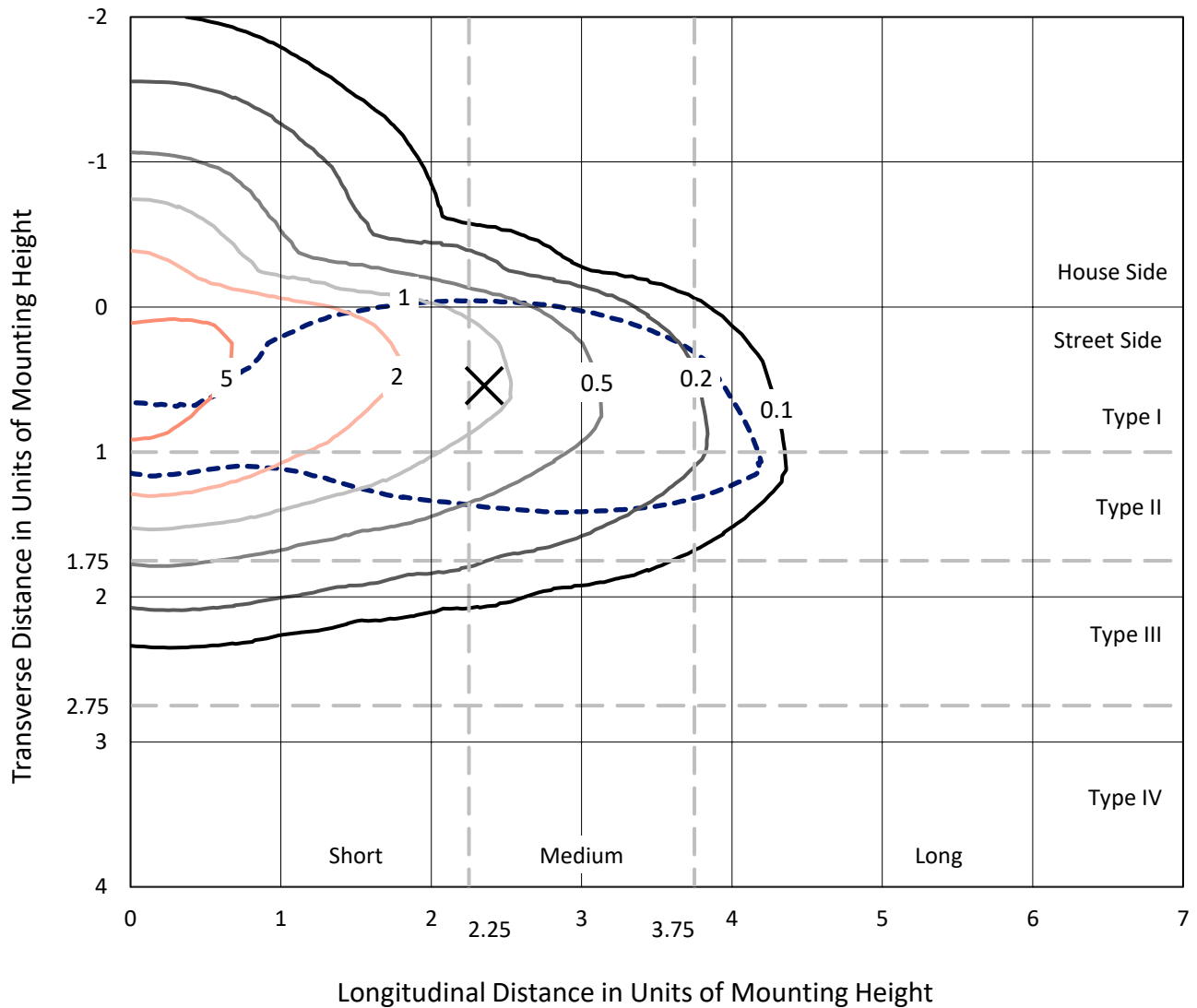
Input Watts (W): 114
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

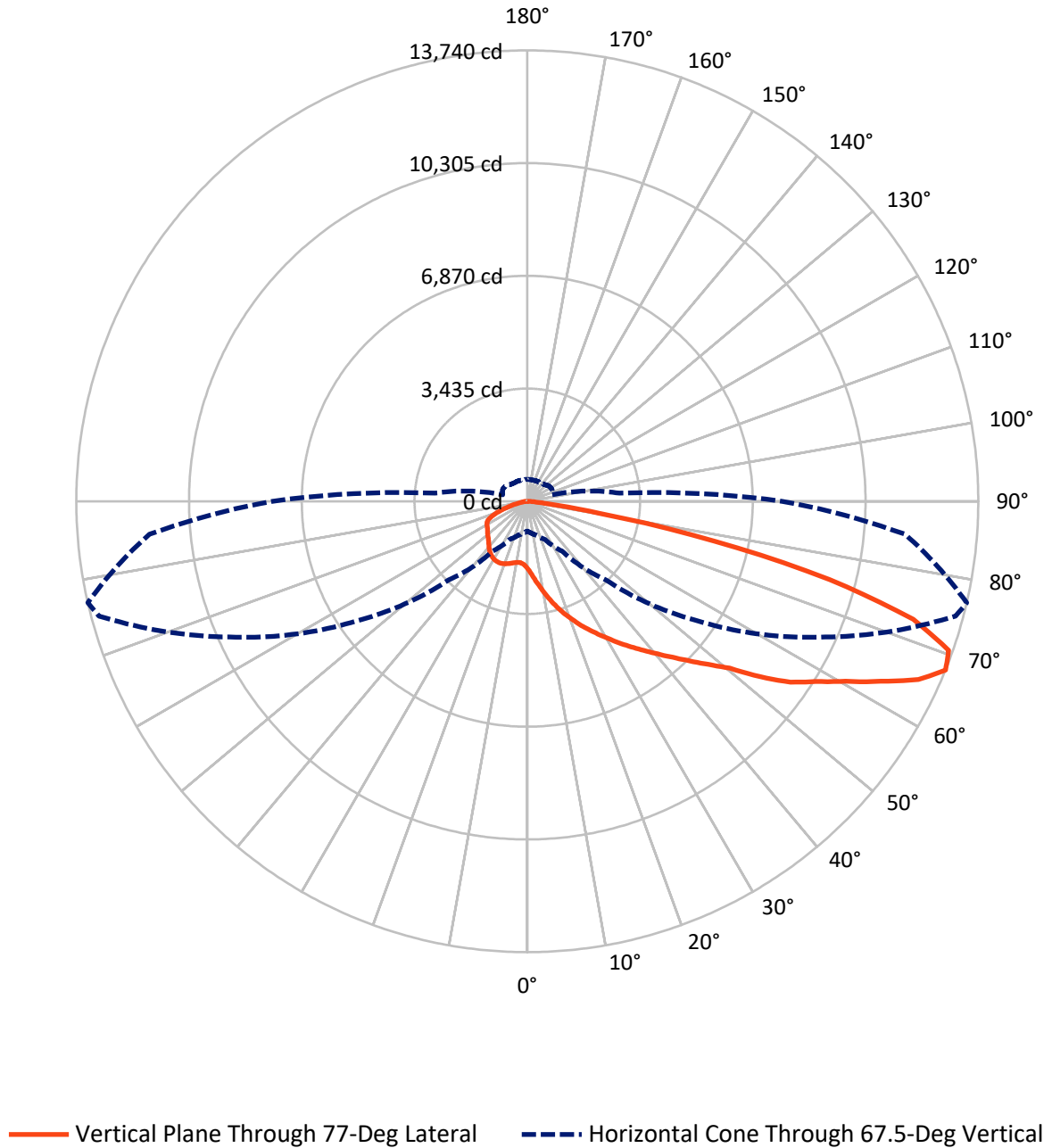
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3313.1	0.0	3313.1
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	14201.9	0.0	14201.9
	% Fixture	81.1	0.0	81.1
Total	Lumens	17515.0	0.0	17515.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.3	1.3
10°-20°	791.4	4.5
20°-30°	1494.2	8.5
30°-40°	2407.1	13.7
40°-50°	3292.4	18.8
50°-60°	3713.9	21.2
60°-70°	3466.4	19.8
70°-80°	1900.2	10.8
80°-90°	229.2	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°	17515.0	100.0
0°-180°	17515.0	100.0

Coefficient of Utilization



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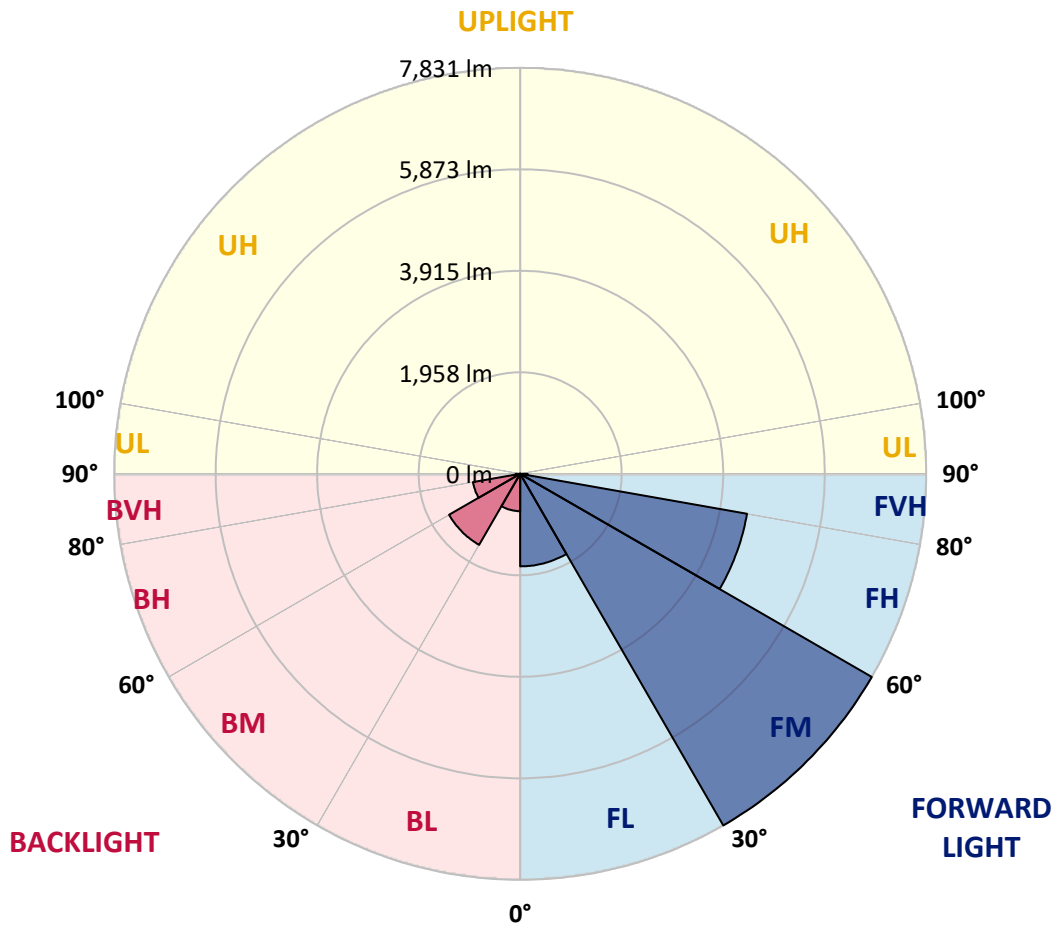
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1785.4	10.2			
FM (30°-60°)	7830.8	44.7			
FH (60°-80°)	4442.3	25.4			G2/5000
FVH (80°-90°)	143.3	0.8			G2/225
BL (0°-30°)	720.4	4.1	B2/1000		
BM (30°-60°)	1582.6	9.0	B2/2500		
BH (60°-80°)	924.3	5.3	B2/1000		G2/1000
BVH (80°-90°)	85.9	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°
0°	2055.1	2055.1	2055.1	2055.1	2055.1	2055.1	2055.1	2055.1	2055.1	2055.1
2.5°	2573.1	2591.2	2568.6	2568.6	2492.6	2452.9	2376.9	2319.1	2215.1	2197.0
5°	3041.4	3064.0	3032.4	3018.8	2929.3	2847.1	2719.6	2593.9	2408.6	2389.6
7.5°	3404.0	3432.9	3404.9	3390.4	3310.9	3218.6	3069.5	2894.1	2632.8	2595.7
10°	3699.6	3704.2	3695.1	3700.5	3638.2	3562.2	3409.4	3205.1	2878.7	2828.1
12.5°	3866.9	3887.7	3905.8	3938.3	3927.5	3880.5	3743.0	3498.9	3139.1	3074.0
15°	3945.6	3981.7	4022.4	4097.4	4158.0	4169.8	4064.9	3814.5	3404.0	3325.3
17.5°	3973.6	4007.9	4072.1	4180.6	4310.8	4398.5	4351.5	4121.0	3666.2	3575.8
20°	4115.5	4125.5	4164.4	4267.4	4408.5	4554.0	4589.3	4415.7	3925.7	3823.5
22.5°	4419.3	4399.4	4410.3	4457.3	4558.5	4699.6	4780.1	4676.1	4192.4	4074.8
25°	4921.1	4863.2	4805.4	4751.1	4802.7	4882.2	4973.5	4936.5	4471.8	4322.6
27.5°	5554.9	5484.4	5356.9	5178.8	5116.4	5144.4	5185.1	5177.9	4730.3	4579.3
30°	6178.7	6096.4	5944.6	5686.9	5522.3	5448.2	5417.5	5396.7	5011.5	4850.6
32.5°	6676.9	6611.8	6462.6	6174.2	5935.5	5808.9	5706.8	5632.6	5305.3	5144.4
35°	7112.7	7052.1	6881.2	6566.6	6307.1	6172.4	6038.6	5880.4	5610.9	5448.2
37.5°	7510.5	7449.9	7215.7	6888.5	6627.2	6534.0	6414.7	6146.2	5917.4	5763.7
40°	7761.8	7748.3	7529.5	7158.8	6887.5	6841.4	6801.7	6454.5	6257.4	6114.5
42.5°	7826.0	7855.9	7682.3	7377.6	7119.0	7081.9	7175.1	6803.5	6638.9	6502.4
45°	7671.4	7757.3	7643.4	7436.3	7283.6	7263.7	7506.0	7185.0	7061.1	6936.4
47.5°	7279.9	7425.5	7378.5	7349.6	7327.9	7413.7	7797.1	7590.0	7539.4	7430.9
50°	6489.7	6765.5	6847.8	7030.4	7240.2	7530.4	8062.0	8032.2	8098.2	7988.8
52.5°	5123.6	5503.3	5980.7	6438.2	6970.7	7491.5	8353.1	8666.8	8945.3	8885.6
55°	4229.5	4400.3	4767.4	5606.4	6448.1	7327.9	8484.2	9179.5	9786.1	9732.8
57.5°	3542.3	3695.1	3921.1	4621.8	5658.0	6956.3	8565.6	9492.3	10362.1	10356.6
60°	2805.5	2967.3	3198.8	3695.1	4734.9	6314.3	8547.5	9848.5	11097.1	11142.3
62.5°	1973.7	2151.8	2408.6	2871.5	3791.9	5482.6	8178.6	10106.2	11962.3	12085.3
65°	1297.4	1414.9	1608.4	2008.0	2825.4	4413.0	7474.3	10139.7	12888.2	13096.1
67.5°	909.5	954.7	1068.7	1285.7	1862.5	3384.1	6352.3	9793.4	13505.7	13739.8
70°	709.7	732.3	790.2	877.0	1169.9	2275.7	4867.8	8892.9	13373.7	13617.8
72.5°	613.0	634.7	656.4	667.2	784.8	1405.0	3297.3	7435.4	12130.5	12296.0
75°	556.0	561.5	579.5	575.9	598.5	911.3	1903.2	5417.5	9571.0	9514.0
77.5°	467.4	474.7	504.5	500.0	531.6	622.9	988.2	3496.2	6204.9	5818.0
80°	396.0	399.6	432.2	426.7	462.0	451.2	504.5	1782.0	2631.9	2229.5
82.5°	137.4	170.0	330.0	339.9	352.6	273.0	291.1	726.9	803.8	615.7
85°	66.9	71.4	168.2	238.7	237.8	137.4	141.9	259.5	253.2	198.9
87.5°	10.8	13.6	19.9	93.1	74.1	36.2	48.8	50.6	52.4	45.2
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°
2055.1	0°	2055.1	2055.1	2055.1	2055.1	2055.1	2055.1	2055.1	2055.1	2055.1	2055.1
2128.3	2.5°	2077.7	2032.5	1937.5	1849.8	1781.1	1715.1	1678.0	1646.4	1628.3	1624.7
2227.7	5°	2133.7	2040.6	1867.9	1722.3	1627.4	1556.9	1519.8	1496.3	1484.6	1477.3
2361.5	7.5°	2214.2	2077.7	1831.7	1666.3	1566.8	1516.2	1497.2	1493.6	1492.7	1493.6
2523.4	10°	2325.4	2138.2	1828.1	1652.7	1569.5	1541.5	1540.6	1541.5	1545.1	1546.0
2699.7	12.5°	2445.6	2200.6	1842.6	1664.5	1603.9	1588.5	1585.8	1584.9	1587.6	1589.4
2877.8	15°	2576.7	2282.9	1867.0	1689.8	1641.9	1625.6	1622.9	1617.5	1616.6	1615.7
3065.0	17.5°	2711.4	2364.3	1894.1	1716.9	1666.3	1643.7	1633.7	1621.1	1611.1	1608.4
3258.4	20°	2848.0	2444.7	1913.1	1730.5	1668.1	1636.4	1616.6	1594.9	1577.7	1567.7
3453.7	22.5°	2993.5	2528.8	1924.9	1726.9	1651.8	1608.4	1572.3	1546.9	1520.7	1503.5
3650.8	25°	3135.5	2602.0	1924.0	1707.9	1620.2	1565.0	1518.9	1486.4	1450.2	1432.1
3854.2	27.5°	3272.0	2668.0	1901.4	1674.4	1575.0	1513.5	1458.3	1419.5	1384.2	1367.0
4059.5	30°	3413.0	2723.2	1866.1	1625.6	1521.6	1453.8	1393.2	1359.8	1328.1	1311.9
4276.5	32.5°	3553.2	2773.8	1816.4	1565.0	1460.1	1395.0	1335.4	1304.6	1285.7	1285.7
4509.7	35°	3701.4	2809.1	1750.4	1494.5	1395.0	1332.7	1285.7	1267.6	1265.8	1254.9
4756.5	37.5°	3857.9	2831.7	1669.9	1422.2	1330.9	1272.1	1257.6	1235.9	1217.8	1194.3
5027.8	40°	4022.4	2854.3	1573.2	1347.1	1263.0	1230.5	1224.2	1195.2	1143.7	1085.8
5335.2	42.5°	4222.2	2869.7	1472.8	1272.1	1191.6	1180.8	1189.8	1140.1	1057.8	1014.4
5705.9	45°	4453.7	2895.0	1380.6	1198.0	1118.4	1118.4	1156.4	1091.3	1023.5	996.3
6129.0	47.5°	4753.8	2953.7	1294.7	1116.6	1050.6	1068.7	1082.2	1032.5	994.5	961.1
6644.3	50°	5187.8	3094.8	1206.1	1034.3	999.0	1035.2	1016.2	987.3	943.0	915.9
7463.5	52.5°	5726.7	3178.0	1127.4	960.2	954.7	990.9	963.8	936.7	903.2	867.0
8084.6	55°	6093.7	3193.3	1061.4	905.9	924.9	921.3	911.3	886.9	868.9	820.9
8697.6	57.5°	6504.2	3224.1	1007.2	873.4	905.9	866.1	862.5	841.7	818.2	785.7
9445.3	60°	6995.1	3272.0	960.2	860.7	889.6	830.0	811.9	803.8	780.3	764.0
10344.9	62.5°	7530.4	3315.4	912.3	862.5	870.7	794.7	767.6	764.9	750.4	745.0
11189.3	65°	7895.6	3197.0	852.6	860.7	840.8	758.6	724.2	723.3	711.5	709.7
11555.5	67.5°	7768.2	2821.7	772.1	835.4	810.1	722.4	684.4	680.8	665.4	666.3
11173.1	70°	7129.9	2286.5	660.9	773.0	772.1	689.8	642.8	631.1	610.3	613.9
9714.7	72.5°	5932.8	1694.3	511.7	669.0	711.5	660.0	594.9	575.9	549.7	553.3
7171.4	75°	4284.6	1151.8	372.5	509.0	619.3	624.7	547.9	515.3	483.7	489.1
3991.7	77.5°	2192.5	652.8	273.9	350.8	486.4	567.8	505.4	462.0	454.8	505.4
1150.9	80°	715.2	327.3	189.9	245.9	319.2	464.7	443.0	393.3	391.5	403.2
241.4	82.5°	213.4	138.3	122.1	161.8	176.3	356.2	382.4	297.5	255.9	269.4
80.5	85°	73.2	66.9	69.6	80.5	84.1	208.9	267.6	197.1	186.2	205.2
18.1	87.5°	17.2	23.5	19.9	18.1	18.1	50.6	104.0	82.3	113.9	75.9
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>
2055.1
1624.7
1476.4
1496.3
1546.9
1590.3
1614.7
1611.1
1571.4
1504.4
1432.1
1366.1
1311.0
1286.6
1252.2
1190.7
1077.7
1015.3
1000.9
960.2
913.2
859.8
821.8
774.8
768.5
745.0
708.8
666.3
617.5
552.4
490.9
498.2
346.3
278.5
202.5
73.2
0.0

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