

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: P950345

Luminaire Tested: **GALN-SB4D-827-U-T2R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P950345  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SB4D-827-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

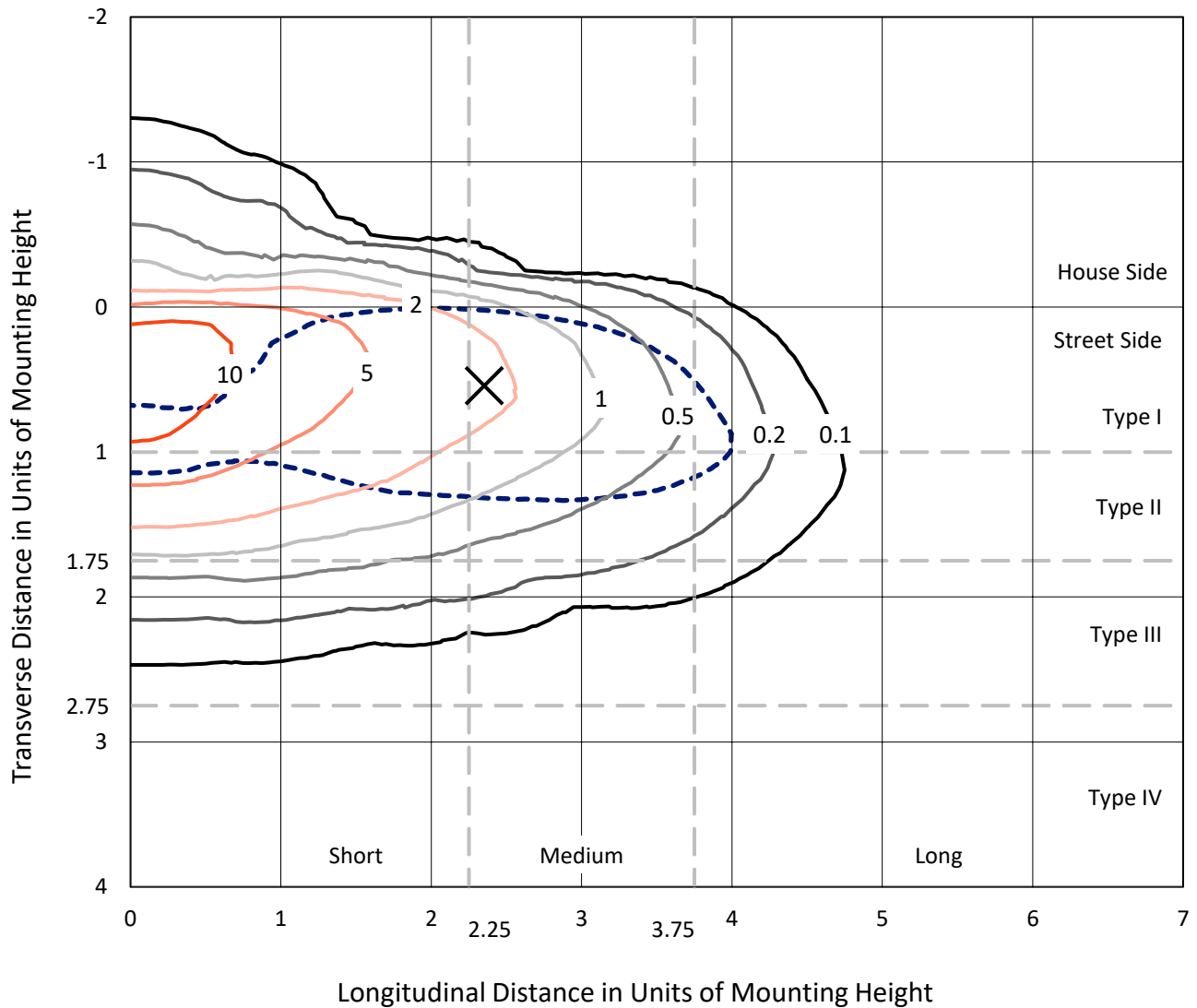
Lumens per Lamp: N/A  
Luminaire Lumens: 30026 lumens  
Efficiency: N/A  
Efficacy: 102.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 293.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

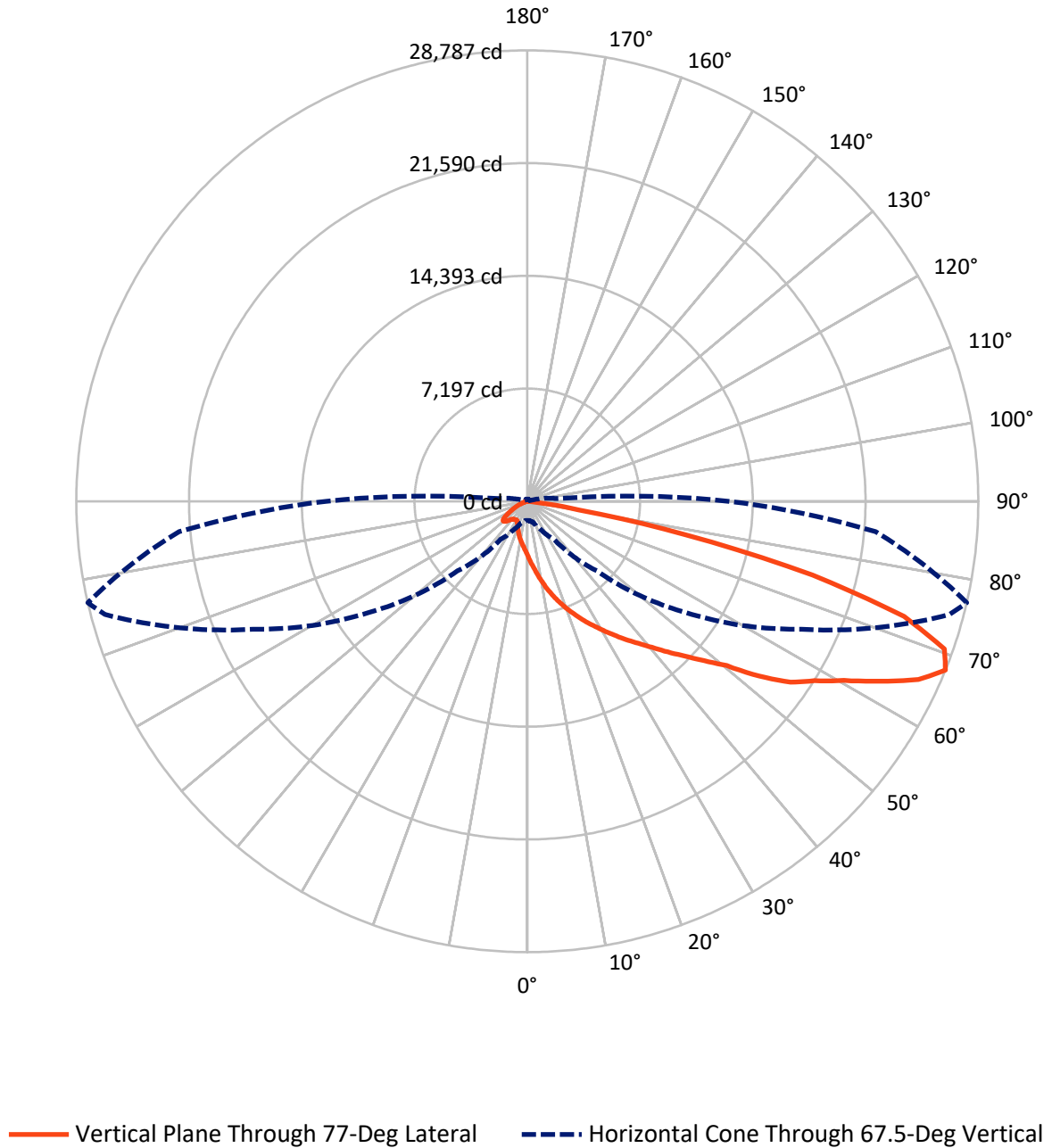
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2209.0	0.0	2209.0
	% Fixture	7.4	0.0	7.4
<b>Street Side</b>	Lumens	27817.0	0.0	27817.0
	% Fixture	92.6	0.0	92.6
<b>Total</b>	Lumens	30026.0	0.0	30026.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	353.4	1.2
10°-20°	1237.6	4.1
20°-30°	2388.1	8.0
30°-40°	4146.0	13.8
40°-50°	6019.7	20.0
50°-60°	6912.9	23.0
60°-70°	6001.7	20.0
70°-80°	2826.9	9.4
80°-90°	139.8	0.5
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°	30026.0	100.0
0°-180°	30026.0	100.0

**Coefficient of Utilization**



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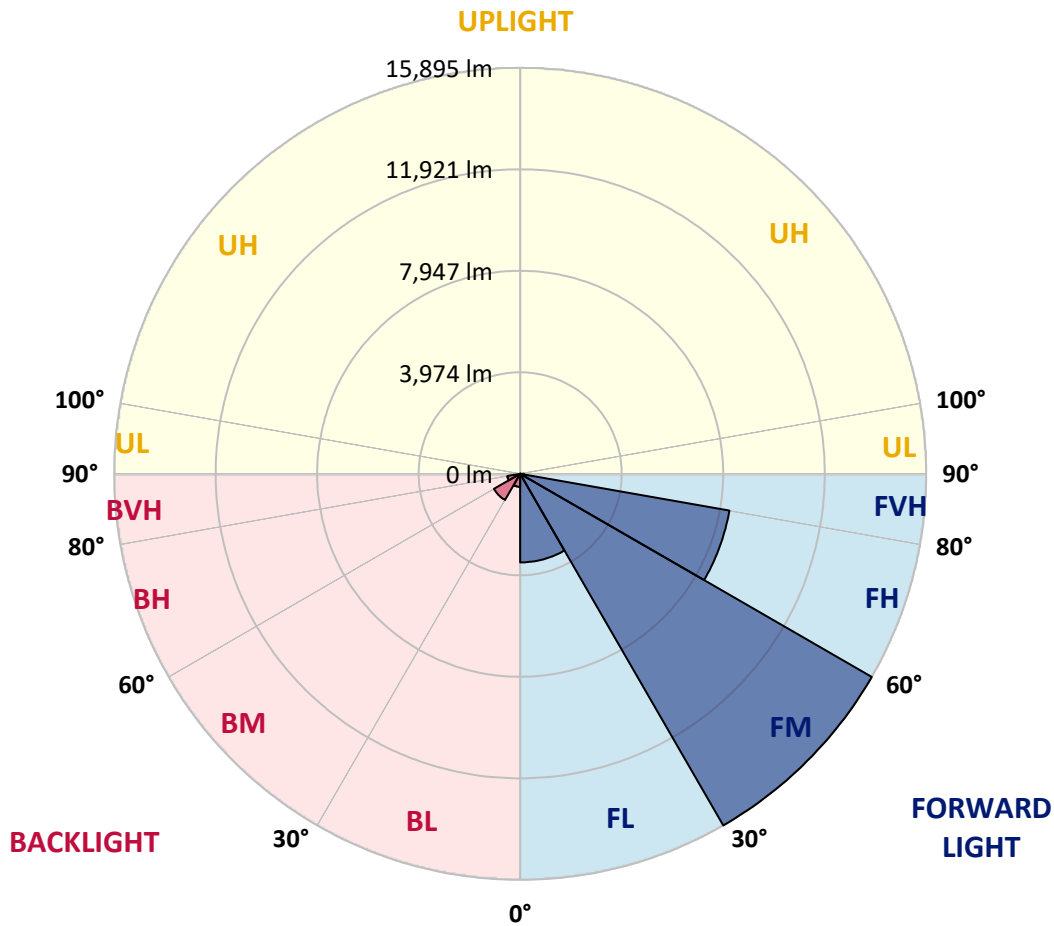
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3467.7	11.5			
FM (30°-60°)	15895.0	52.9			
FH (60°-80°)	8317.1	27.7			G4/12000
FVH (80°-90°)	137.2	0.5			G2/225
BL (0°-30°)	511.4	1.7	B2/1000		
BM (30°-60°)	1183.6	3.9	B2/2500		
BH (60°-80°)	511.4	1.7	B2/1000		G2/1000
BVH (80°-90°)	2.6	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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°
0°	3462.4	3462.4	3462.4	3462.4	3462.4	3462.4	3462.4	3462.4	3462.4	3462.4
2.5°	4793.7	4823.5	4780.7	4698.6	4575.6	4495.4	4299.6	4115.0	3909.9	3844.7
5°	5843.4	5869.6	5821.1	5731.6	5567.5	5410.9	5153.6	4767.6	4366.7	4238.1
7.5°	6621.0	6635.9	6617.2	6535.2	6378.6	6201.4	5914.3	5457.5	4862.7	4721.0
10°	7180.3	7228.8	7223.2	7191.5	7087.1	6943.5	6637.7	6117.5	5418.3	5235.6
12.5°	7551.4	7605.4	7637.1	7708.0	7702.4	7611.0	7342.5	6792.5	5972.1	5757.7
15°	7659.5	7717.3	7838.5	8002.6	8148.0	8194.6	8006.3	7454.4	6581.8	6307.7
17.5°	7598.0	7687.5	7832.9	8092.1	8410.9	8621.6	8601.1	8093.9	7135.6	6822.3
20°	7734.1	7819.9	7933.6	8151.7	8522.8	8905.0	9057.9	8705.5	7685.6	7357.5
22.5°	8487.4	8472.4	8483.6	8519.1	8740.9	9119.4	9434.5	9261.1	8230.1	7894.4
25°	9680.7	9613.5	9499.8	9307.8	9251.8	9434.5	9762.7	9753.4	8804.3	8444.5
27.5°	11049.2	11038.0	10771.4	10309.0	10048.0	9977.1	10133.7	10232.6	9373.0	8988.9
30°	12360.0	12389.8	12030.0	11515.4	11036.2	10758.4	10616.7	10687.5	9951.0	9576.2
32.5°	13501.1	13532.8	13141.2	12539.0	11946.1	11610.5	11312.1	11136.9	10581.2	10172.9
35°	14465.1	14496.7	14047.4	13381.8	12749.7	12445.8	12108.3	11629.1	11215.2	10834.8
37.5°	15326.5	15317.1	14714.9	14043.7	13422.8	13182.3	13005.1	12235.1	11867.8	11500.4
40°	15835.5	15874.6	15360.0	14619.8	14017.6	13842.3	13831.1	12986.5	12621.0	12264.9
42.5°	15984.6	16053.6	15680.7	15072.9	14526.6	14336.4	14629.1	13799.4	13497.4	13150.6
45°	15716.2	15783.3	15613.6	15192.2	14873.4	14750.3	15315.3	14642.2	14433.4	14090.3
47.5°	14933.1	15017.0	15058.0	14968.5	14964.7	15089.7	15930.6	15529.7	15544.6	15194.1
50°	13417.2	13558.9	13935.5	14252.5	14742.9	15358.2	16529.1	16491.8	16797.6	16495.5
52.5°	10661.4	10862.8	12160.5	13027.5	14129.4	15307.8	17187.3	18035.6	18995.9	18554.0
55°	8567.5	8567.5	9622.9	11245.0	12932.4	14975.9	17474.4	19038.8	20493.1	20388.7
57.5°	6984.5	7068.4	7741.5	9175.4	11200.3	14185.4	17651.5	19669.0	21699.4	21623.0
60°	4310.8	4491.7	5763.3	7178.5	9229.4	12777.6	17539.7	20306.6	23163.1	23224.6
62.5°	2427.6	2494.7	3061.6	5164.8	7176.6	10885.1	16683.8	20662.8	25035.1	25296.1
65°	1676.2	1709.8	1927.9	3214.5	4974.6	8666.4	15011.4	20440.9	26910.8	27438.5
67.5°	1217.5	1234.3	1370.4	1963.4	2951.6	6283.5	12389.8	19322.2	27904.6	28786.5
70°	936.0	947.2	1046.0	1290.3	1743.3	3878.2	8998.2	17097.8	27184.9	28238.4
72.5°	760.7	771.9	848.4	954.6	1156.0	2293.4	5453.8	13885.2	24007.7	25145.1
75°	641.4	656.3	725.3	794.3	906.2	1473.0	2558.1	9669.5	18054.3	18800.1
77.5°	356.1	328.2	589.2	658.2	764.5	932.3	1197.0	5690.6	10111.4	10318.3
80°	221.9	229.3	468.0	529.5	587.3	469.9	548.2	2190.8	3505.3	3330.1
82.5°	13.1	29.8	359.9	382.2	402.7	201.4	207.0	743.9	844.6	775.6
85°	0.0	0.0	164.1	132.4	139.8	57.8	59.7	173.4	113.7	123.1
87.5°	0.0	0.0	0.0	3.7	0.0	5.6	11.2	14.9	5.6	7.5
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°
3462.4	0°	3462.4	3462.4	3462.4	3462.4	3462.4	3462.4	3462.4	3462.4	3462.4	3462.4
3639.6	2.5°	3509.1	3378.5	3113.8	2854.6	2643.9	2448.1	2308.3	2175.9	2108.8	2105.1
3874.5	5°	3615.3	3341.2	2811.7	2343.7	1967.1	1665.0	1469.3	1329.4	1258.6	1234.3
4163.5	7.5°	3764.5	3352.4	2547.0	1896.2	1452.5	1193.3	1081.4	1036.7	1021.8	1005.0
4489.8	10°	3952.8	3378.5	2310.2	1527.1	1144.8	1014.3	969.6	950.9	939.7	928.5
4857.1	12.5°	4163.5	3402.8	2075.2	1267.9	1006.8	939.7	908.0	885.7	870.7	857.7
5233.7	15°	4368.6	3417.7	1831.0	1087.0	936.0	881.9	848.4	824.1	803.6	788.7
5602.9	17.5°	4571.8	3438.2	1601.6	978.9	878.2	824.1	790.6	760.7	743.9	727.2
5990.7	20°	4797.4	3434.5	1385.3	902.4	820.4	766.3	730.9	702.9	686.1	667.5
6400.9	22.5°	5006.3	3415.8	1195.2	837.2	760.7	708.5	669.4	641.4	624.6	609.7
6820.5	25°	5246.8	3400.9	1036.7	777.5	704.8	652.6	609.7	583.6	565.0	551.9
7241.8	27.5°	5478.0	3378.5	921.1	723.4	650.7	600.4	559.4	529.5	512.7	503.4
7676.3	30°	5705.5	3372.9	878.2	671.2	602.2	551.9	510.9	482.9	469.9	466.1
8153.6	32.5°	5979.6	3387.9	896.8	652.6	557.5	507.2	468.0	447.5	434.4	434.4
8685.0	35°	6272.3	3384.1	924.8	669.4	527.7	462.4	432.6	419.5	406.5	406.5
9274.2	37.5°	6639.6	3389.7	947.2	697.3	516.5	425.1	408.3	391.6	384.1	384.1
9919.3	40°	7187.8	3574.3	936.0	721.6	512.7	399.0	365.4	359.9	354.3	354.3
10648.4	42.5°	7859.0	3975.2	950.9	723.4	510.9	380.4	335.6	346.8	333.8	331.9
11470.6	45°	8593.6	4413.4	1046.0	684.3	509.0	371.0	320.7	333.8	313.2	313.2
12423.4	47.5°	9322.7	4847.8	1143.0	628.3	503.4	369.2	307.6	300.2	294.6	296.5
13665.2	50°	10327.7	5202.0	1180.2	551.9	490.4	365.4	283.4	285.3	281.5	285.3
15416.0	52.5°	11422.1	5276.6	1135.5	466.1	453.1	354.3	266.6	274.1	272.2	276.0
16648.4	55°	12104.6	5196.5	937.9	387.8	395.3	309.5	249.8	264.8	264.8	264.8
17852.9	57.5°	12809.3	4855.2	665.6	315.1	328.2	253.6	234.9	255.4	253.6	251.7
19303.5	60°	13316.5	4303.3	438.2	259.2	261.0	208.8	218.2	240.5	238.7	229.3
20798.9	62.5°	13695.0	3693.6	281.5	220.0	199.5	188.3	199.5	218.2	210.7	190.2
22066.8	65°	13652.1	2849.0	216.3	188.3	164.1	164.1	173.4	190.2	167.8	134.2
22309.1	67.5°	12856.0	1927.9	179.0	158.5	138.0	136.1	143.6	158.5	143.6	113.7
21067.4	70°	11433.3	1260.4	143.6	123.1	110.0	100.7	115.6	136.1	121.2	91.4
17935.0	72.5°	9279.8	768.2	108.1	89.5	80.2	65.3	91.4	111.9	97.0	67.1
12471.9	75°	6003.8	391.6	74.6	57.8	42.9	39.2	67.1	83.9	67.1	41.0
5533.9	77.5°	2297.1	164.1	41.0	26.1	22.4	18.6	37.3	50.3	28.0	9.3
1072.1	80°	441.9	69.0	20.5	13.1	11.2	7.5	5.6	3.7	0.0	0.0
190.2	82.5°	76.4	22.4	7.5	3.7	0.0	0.0	0.0	0.0	0.0	0.0
37.3	85°	26.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.1	87.5°	9.3	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

(END O

<u>180°</u>
3462.4
2101.3
1230.6
1001.3
924.8
854.0
786.8
725.3
665.6
607.8
550.0
503.4
464.3
434.4
406.5
384.1
354.3
330.0
313.2
296.5
285.3
276.0
264.8
251.7
229.3
186.5
130.5
<i>110.0</i>
87.6
63.4
35.4
7.5
0.0
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