

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: P949347

Luminaire Tested: **GALN-SB4A-850-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P949347
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
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-AFL-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 5000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14662 lumens
Efficiency: N/A
Efficacy: 128.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

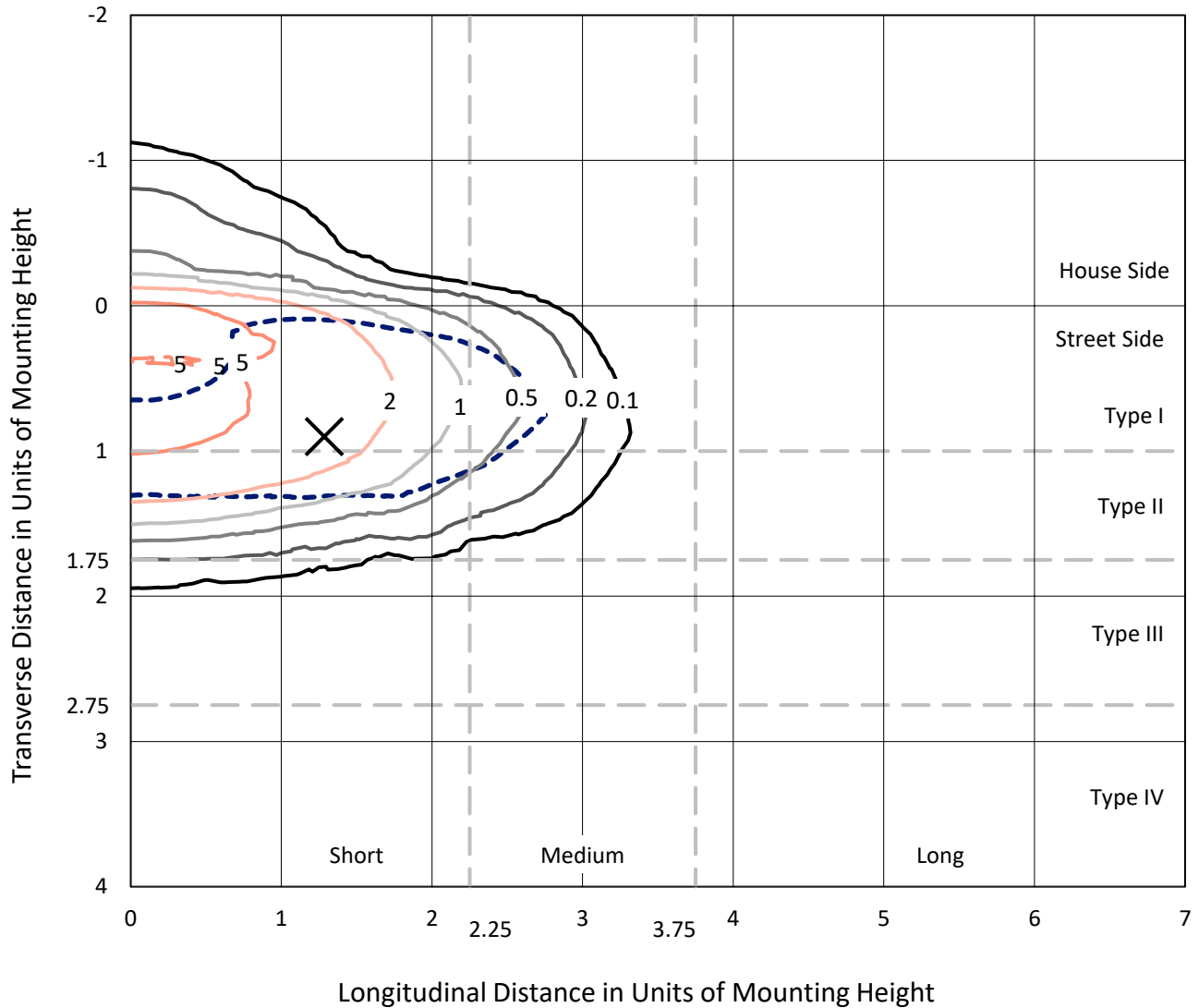
Input Watts (W): 114
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

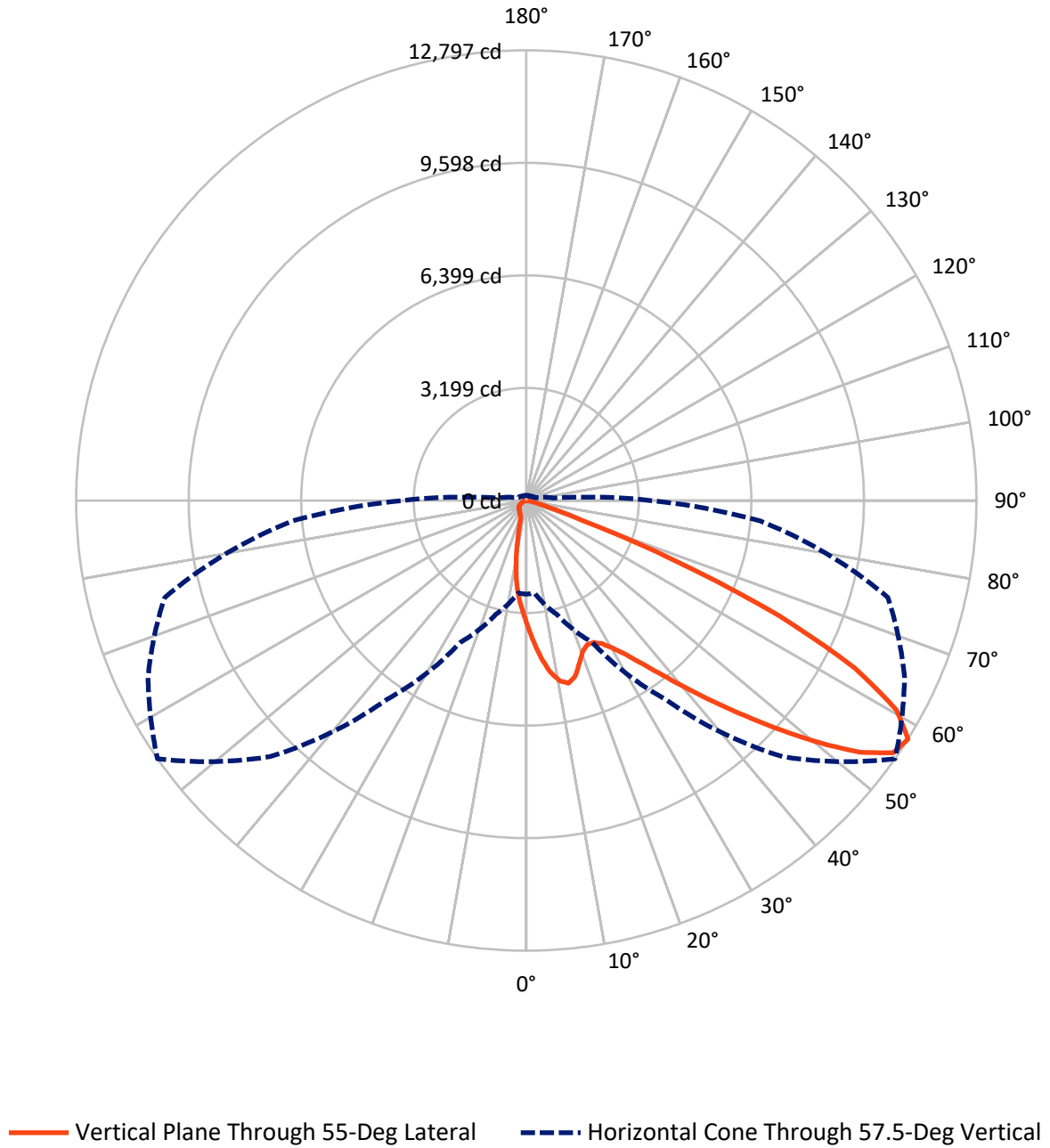
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1145.0	0.0	1145.0
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	13517.0	0.0	13517.0
	% Fixture	92.2	0.0	92.2
Total	Lumens	14662.0	0.0	14662.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.7	2.2
10°-20°	794.1	5.4
20°-30°	1270.5	8.7
30°-40°	2150.4	14.7
40°-50°	3530.5	24.1
50°-60°	3880.3	26.5
60°-70°	2225.8	15.2
70°-80°	454.8	3.1
80°-90°	26.8	0.2
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°	14662.0	100.0
0°-180°	14662.0	100.0

Coefficient of Utilization



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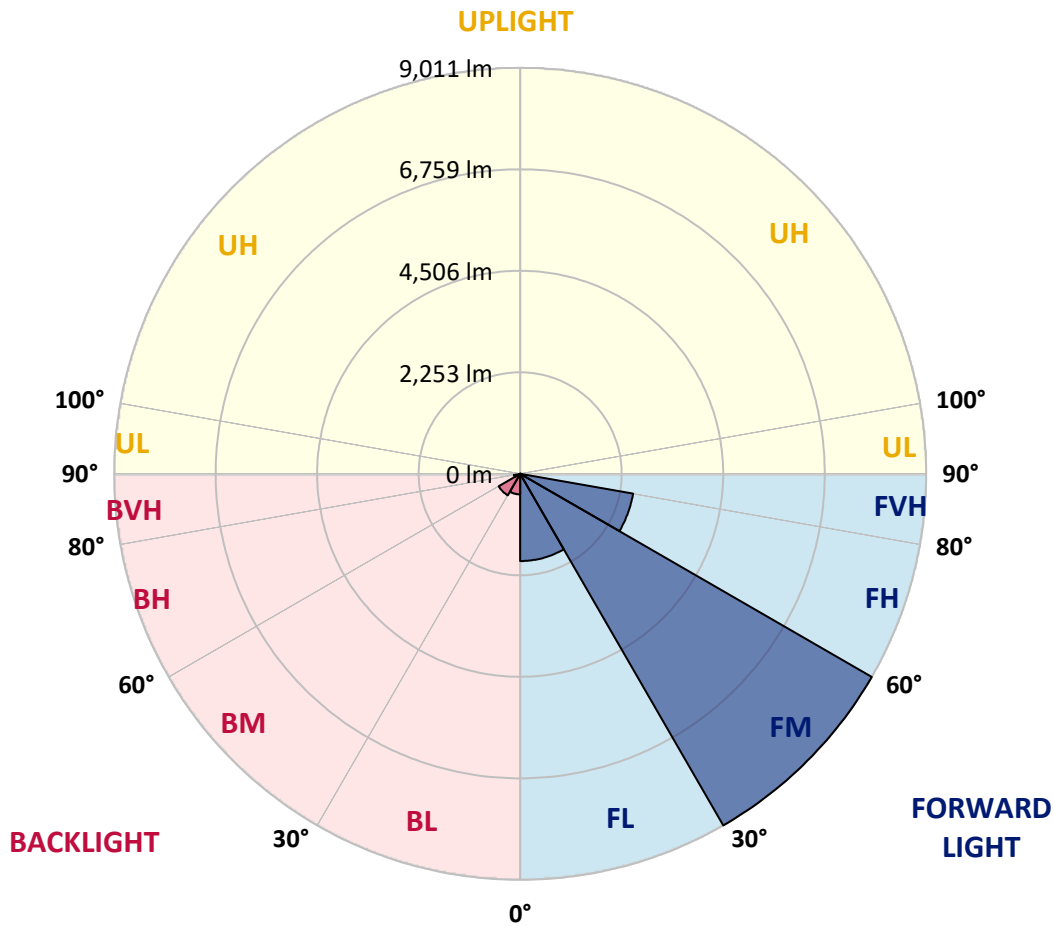
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1936.2	13.2			
FM (30°-60°)	9011.4	61.5			
FH (60°-80°)	2544.4	17.4			G2/5000
FVH (80°-90°)	25.0	0.2			G1/100
BL (0°-30°)	457.1	3.1	B1/500		
BM (30°-60°)	549.9	3.8	B1/1000		
BH (60°-80°)	136.2	0.9	B1/500		G1/500
BVH (80°-90°)	1.8	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-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3533.2	3533.2	3533.2	3533.2	3533.2	3533.2	3533.2	3533.2	3533.2	3533.2
2.5°	4383.9	4328.8	4320.6	4309.8	4204.9	4126.3	4012.3	3887.6	3747.4	3604.6
5°	5064.7	5021.3	5013.2	4962.5	4843.2	4709.4	4506.9	4251.0	3989.7	3682.4
7.5°	5196.7	5188.6	5225.6	5223.8	5207.6	5101.8	4930.9	4626.2	4233.8	3778.2
10°	4608.1	4628.9	4739.2	4836.0	5097.3	5249.1	5212.1	4960.7	4485.2	3887.6
12.5°	4072.0	4047.6	4126.3	4235.7	4539.4	4991.5	5328.7	5240.1	4772.7	4011.4
15°	3735.7	3725.8	3770.1	3820.7	4052.1	4507.8	5193.1	5467.0	5049.3	4157.9
17.5°	3628.1	3620.0	3633.5	3646.2	3796.3	4148.9	4870.3	5606.3	5314.2	4325.2
20°	3715.8	3705.0	3703.1	3693.2	3755.6	3996.1	4578.3	5616.2	5552.0	4477.0
22.5°	3971.7	3959.0	3914.7	3874.9	3880.4	4016.9	4448.1	5516.8	5731.0	4619.0
25°	4435.5	4414.7	4322.5	4188.6	4103.7	4161.5	4468.0	5385.7	5901.9	4730.2
27.5°	5015.9	4988.8	4870.3	4671.4	4477.0	4406.5	4611.8	5295.3	6043.8	4815.2
30°	5584.6	5549.3	5432.7	5278.1	4994.2	4771.8	4871.2	5335.0	6212.9	4903.8
32.5°	6198.4	6165.0	6010.4	5818.7	5583.7	5284.4	5226.5	5529.4	6419.9	5027.6
35°	6975.0	6922.6	6702.9	6441.6	6192.1	5889.2	5707.5	5864.8	6695.7	5216.6
37.5°	7859.2	7788.7	7551.9	7191.1	6865.7	6526.6	6293.4	6325.9	7099.8	5469.7
40°	8692.8	8628.6	8409.8	8069.9	7661.3	7249.9	7001.3	6928.9	7657.6	5778.0
42.5°	9192.8	9134.9	9042.7	8899.0	8554.5	8135.0	7821.3	7664.9	8317.6	6146.9
45°	9220.8	9170.2	9294.0	9461.3	9393.5	9114.1	8731.7	8445.1	8980.3	6493.2
47.5°	8772.4	8738.0	9114.1	9698.2	9989.3	10106.8	9754.2	9160.2	9527.3	6741.8
50°	7550.0	7537.4	8311.3	9383.5	10216.2	10976.5	10832.8	9825.6	9951.3	6870.2
52.5°	6546.5	6500.4	6951.5	8376.4	9886.2	11434.0	11887.0	10478.4	10247.9	6894.6
55°	4965.3	4924.6	5490.5	6691.2	8822.1	11271.3	12658.2	11151.9	10460.3	6832.2
57.5°	2663.4	2638.1	3353.3	4453.5	6896.4	10294.9	12797.4	11864.4	10639.3	6666.8
60°	1037.0	1032.5	1300.1	2160.8	4191.4	8375.5	12094.9	12292.0	10751.4	6463.3
62.5°	627.4	641.0	684.4	970.1	1851.6	5203.0	10475.7	11805.6	10826.5	6277.1
65°	518.9	519.9	525.3	666.3	886.9	2177.0	7886.4	10205.4	10641.1	5945.3
67.5°	444.8	452.9	473.7	528.9	625.6	954.7	4540.3	7905.4	9513.7	5173.2
70°	350.8	361.6	387.9	434.9	482.8	597.6	1678.0	5260.0	7268.0	3899.3
72.5°	295.6	294.7	308.3	353.5	383.3	420.4	645.5	2947.3	4223.9	1861.5
75°	228.7	237.8	255.0	295.6	313.7	304.7	349.9	1076.8	1513.4	564.2
77.5°	179.0	186.2	201.6	241.4	259.5	216.1	201.6	385.1	486.4	202.5
80°	80.5	86.8	137.4	178.1	211.6	149.2	109.4	197.1	216.1	92.2
82.5°	14.5	24.4	80.5	94.0	108.5	96.7	57.0	102.2	105.8	37.1
85°	0.9	1.8	28.0	34.4	43.4	31.6	17.2	40.7	35.3	12.7
87.5°	0.0	0.0	0.0	0.9	0.9	4.5	5.4	7.2	5.4	4.5
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):

90°		95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
3533.2	0°	3533.2	3533.2	3533.2	3533.2	3533.2	3533.2	3533.2	3533.2	3533.2	3533.2
3541.3	2.5°	3476.2	3347.8	3223.1	3120.9	3061.2	2960.0	2893.1	2882.2	2854.2	2878.6
3550.4	5°	3409.3	3179.7	2947.3	2739.4	2568.5	2347.9	2183.4	2113.8	2053.2	2074.0
3573.9	7.5°	3377.7	3015.1	2653.5	2298.2	1932.9	1580.3	1318.2	1208.8	1125.6	1137.3
3600.1	10°	3335.2	2844.3	2277.4	1734.9	1245.8	897.8	716.9	650.0	613.0	613.9
3639.0	12.5°	3302.6	2639.9	1840.7	1176.2	758.5	573.2	517.1	500.9	490.0	490.9
3697.7	15°	3286.4	2399.5	1409.5	783.8	542.5	485.5	471.9	464.7	457.5	456.6
3762.8	17.5°	3259.2	2131.8	1031.6	572.3	474.6	454.8	443.0	434.9	425.8	424.0
3818.9	20°	3218.6	1828.1	754.0	483.7	444.8	429.4	413.2	402.3	391.5	389.7
3854.1	22.5°	3143.5	1507.1	579.5	447.5	423.1	405.9	386.0	373.4	362.5	360.7
3837.0	25°	3004.3	1206.1	488.2	424.9	404.1	383.3	361.6	344.5	334.5	332.7
3799.9	27.5°	2828.0	947.5	443.0	404.1	379.7	360.7	336.3	320.0	311.0	309.2
3751.1	30°	2620.1	729.6	416.8	380.6	350.8	334.5	312.8	299.3	293.8	293.8
3716.7	32.5°	2395.8	583.1	405.9	357.1	325.5	307.4	290.2	284.8	283.0	282.1
3735.7	35°	2185.2	506.3	400.5	338.1	302.9	285.7	278.5	279.4	283.0	283.0
3794.5	37.5°	1998.0	481.9	397.8	324.6	283.0	267.6	272.1	280.3	276.7	276.7
3897.5	40°	1829.0	484.6	396.0	314.6	266.7	257.7	266.7	260.4	251.3	250.4
4023.2	42.5°	1699.7	507.2	392.4	306.5	256.8	250.4	246.8	236.9	236.0	237.8
4153.4	45°	1605.7	527.1	391.5	302.9	245.9	234.2	229.6	219.7	237.8	242.3
4206.7	47.5°	1494.5	527.1	391.5	290.2	227.8	223.3	216.1	205.2	223.3	227.8
4156.1	50°	1350.7	493.6	376.1	275.7	213.4	210.7	198.0	184.4	180.8	183.5
4037.7	52.5°	1169.0	433.1	337.2	255.9	198.9	193.5	178.1	168.2	165.4	165.4
3825.2	55°	962.0	362.5	284.8	226.9	183.5	173.6	162.7	158.2	155.5	153.7
3527.8	57.5°	782.0	297.4	228.7	201.6	169.1	156.4	152.8	147.4	142.8	140.1
3279.1	60°	641.9	234.2	189.0	179.0	154.6	142.8	141.9	134.7	123.0	121.1
3073.9	62.5°	495.4	171.8	159.1	155.5	140.1	130.2	128.4	113.9	95.8	92.2
2782.8	65°	349.9	133.8	128.4	136.5	124.8	115.7	111.2	89.5	70.5	67.8
2328.9	67.5°	245.9	112.1	101.3	119.3	108.5	96.7	94.0	75.9	58.8	57.0
1761.2	70°	175.4	91.3	83.2	102.2	86.8	85.0	79.6	63.3	47.9	46.1
871.5	72.5°	123.9	69.6	64.2	88.6	59.7	73.2	65.1	48.8	36.2	34.4
296.5	75°	91.3	49.7	45.2	51.5	43.4	55.1	46.1	32.5	22.6	21.7
133.8	77.5°	66.9	31.6	27.1	25.3	25.3	34.4	25.3	13.6	9.9	9.0
67.8	80°	47.0	14.5	12.7	10.8	9.9	8.1	3.6	1.8	0.9	0.9
23.5	82.5°	28.0	6.3	6.3	4.5	2.7	0.0	0.0	0.0	0.0	0.0
9.0	85°	6.3	2.7	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
3.6	87.5°	0.9	0.9	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

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