

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: P949705

Luminaire Tested: **GALN-SB4B-850-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P949705
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SB4B-850-U-AFL
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 5000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21954 lumens
Efficiency: N/A
Efficacy: 149.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

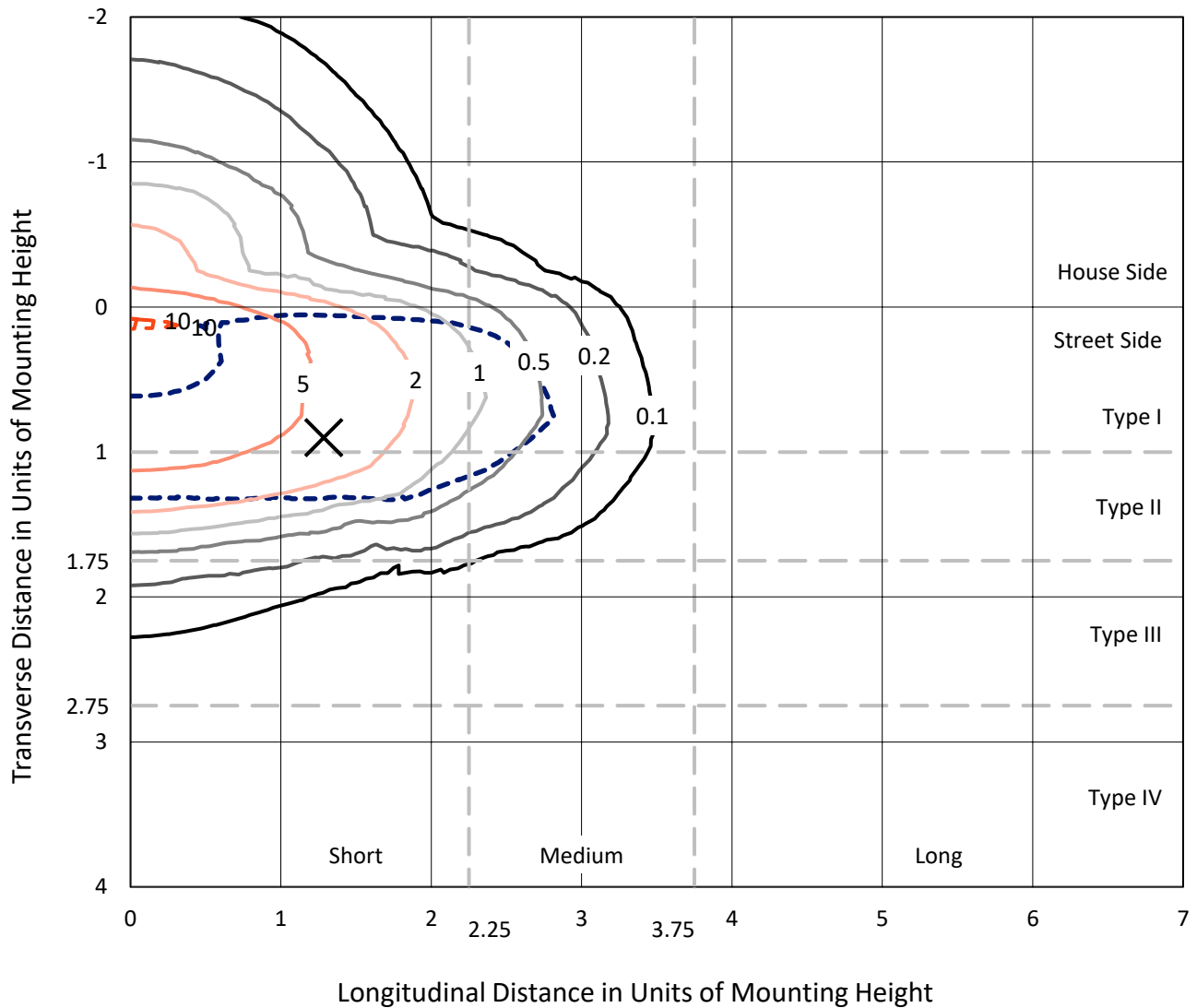
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

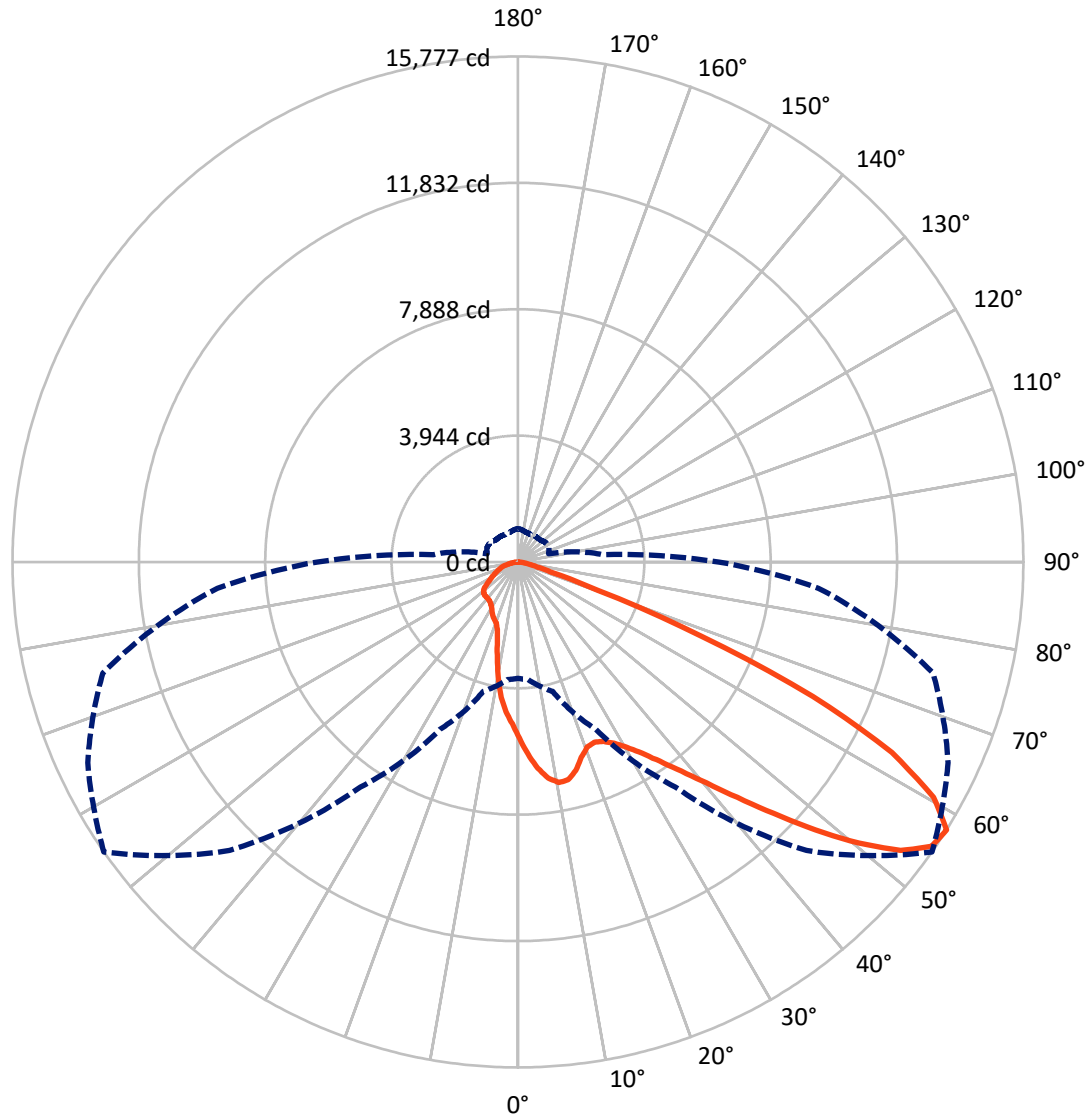
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3972.5	0.0	3972.5
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	17981.5	0.0	17981.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	21954.0	0.0	21954.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	510.5	2.3
10°-20°	1288.4	5.9
20°-30°	2055.9	9.4
30°-40°	3255.1	14.8
40°-50°	4982.2	22.7
50°-60°	5336.4	24.3
60°-70°	3357.2	15.3
70°-80°	992.8	4.5
80°-90°	175.5	0.8
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°	21954.0	100.0
0°-180°	21954.0	100.0

Coefficient of Utilization



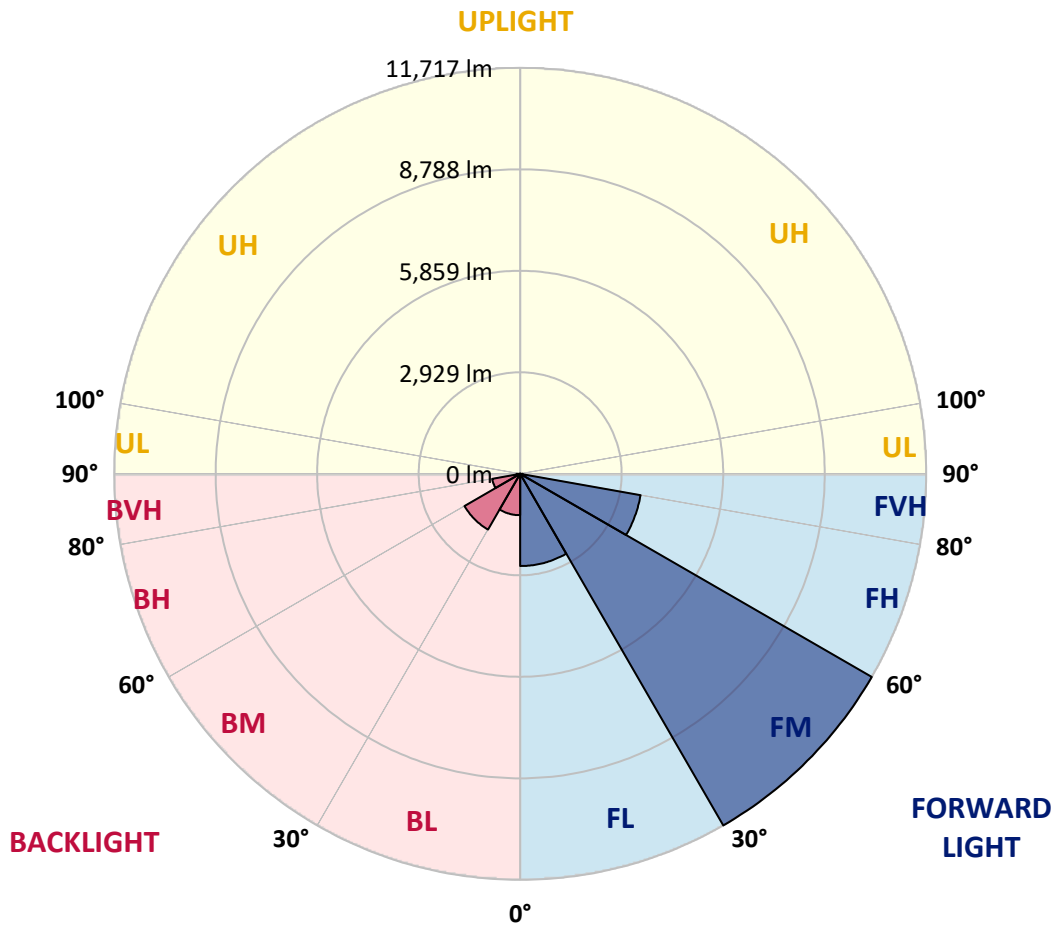
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2660.8	12.1			
FM (30°-60°)	11717.0	53.4			
FH (60°-80°)	3529.5	16.1			G2/5000
FVH (80°-90°)	74.2	0.3			G1/100
BL (0°-30°)	1194.0	5.4	B3/2500		
BM (30°-60°)	1856.7	8.5	B2/2500		
BH (60°-80°)	820.4	3.7	B2/1000		G2/1000
BVH (80°-90°)	101.4	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	5501.0	5501.0	5501.0	5501.0	5501.0	5501.0	5501.0	5501.0	5501.0	5501.0
2.5°	6311.3	6306.8	6331.7	6246.6	6188.7	6110.4	6007.1	5875.5	5733.6	5583.8
5°	6879.9	6840.2	6866.3	6802.7	6739.2	6621.1	6467.9	6253.4	5991.2	5692.8
7.5°	6790.2	6763.0	6830.0	6886.7	6934.4	6919.6	6807.3	6582.5	6244.3	5810.8
10°	6067.3	6036.6	6130.8	6327.2	6615.5	6866.3	7002.5	6862.9	6503.1	5940.2
12.5°	5429.5	5414.7	5477.1	5636.0	5956.1	6437.3	6977.5	7108.0	6772.1	6093.4
15°	5157.1	5138.9	5178.6	5259.2	5463.5	5911.8	6750.5	7276.0	7036.5	6270.4
17.5°	5096.9	5076.5	5093.5	5135.5	5267.2	5608.8	6407.8	7358.8	7312.3	6467.9
20°	5208.2	5191.1	5193.4	5191.1	5283.1	5554.3	6169.4	7327.0	7552.9	6649.5
22.5°	5477.1	5448.8	5449.9	5389.7	5439.7	5649.6	6107.0	7241.9	7767.4	6808.4
25°	5915.2	5864.1	5874.3	5721.1	5707.5	5863.0	6204.6	7176.1	7980.8	6935.5
27.5°	6514.4	6456.6	6425.9	6197.8	6088.8	6166.0	6403.2	7198.8	8182.8	7045.6
30°	7263.5	7193.1	7130.7	6807.3	6609.8	6581.4	6711.9	7348.6	8421.1	7161.3
32.5°	8181.6	8099.9	7986.4	7557.4	7279.4	7130.7	7111.4	7615.3	8700.3	7308.9
35°	9274.6	9167.9	9006.7	8451.8	8099.9	7795.8	7638.0	8000.1	9082.8	7531.3
37.5°	10400.4	10280.1	10132.6	9472.0	9039.6	8591.3	8280.4	8522.1	9592.3	7833.2
40°	11438.9	11303.8	11166.5	10578.6	10114.4	9574.2	9066.9	9182.6	10215.4	8194.1
42.5°	12051.7	11951.8	11899.6	11581.9	11223.2	10675.1	10045.2	9965.7	10915.7	8609.5
45°	12024.5	11983.6	12144.8	12276.4	12191.3	11887.2	11191.5	10831.7	11618.2	8969.3
47.5°	11382.1	11409.4	11769.1	12509.1	12834.8	12993.7	12496.6	11681.7	12228.8	9238.3
50°	9634.3	9657.0	10490.1	12085.8	13000.5	13896.0	13791.6	12511.4	12702.0	9402.8
52.5°	8250.9	8265.6	8623.1	10830.5	12453.5	14349.9	14958.3	13293.3	13048.2	9448.2
55°	6214.8	6265.9	6666.5	8497.1	11030.3	13990.2	15668.7	14099.1	13267.2	9452.8
57.5°	3630.6	3686.2	4181.0	5767.7	8573.2	12736.1	15776.5	14814.1	13415.9	9416.4
60°	1778.4	1802.3	2017.9	3031.4	5286.5	10319.8	14909.5	15160.3	13498.7	9397.1
62.5°	1198.5	1195.1	1204.2	1495.8	2604.6	6630.2	13102.7	14554.2	13454.5	9323.4
65°	1030.5	1018.0	984.0	1049.8	1349.4	3032.5	10123.5	12745.2	13117.4	9138.4
67.5°	890.9	892.0	893.2	872.8	963.5	1399.4	6186.5	10039.5	11907.6	8262.2
70°	737.7	747.9	752.5	752.5	785.4	918.2	2641.0	6881.0	9392.6	6478.1
72.5°	671.9	650.3	652.6	641.2	641.2	699.1	1063.4	3900.7	5917.5	3644.2
75°	548.2	561.8	564.1	556.1	530.0	533.4	631.0	1636.6	2532.0	1511.7
77.5°	473.3	473.3	477.8	472.1	451.7	399.5	421.1	634.4	861.4	619.7
80°	380.2	379.1	398.4	409.7	377.9	295.1	269.0	350.7	382.5	272.4
82.5°	185.0	196.3	273.5	312.1	287.1	213.4	164.6	217.9	204.3	120.3
85°	107.8	102.1	122.6	173.6	164.6	118.0	79.4	113.5	106.7	61.3
87.5°	34.0	31.8	25.0	59.0	47.7	32.9	21.6	32.9	29.5	13.6
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°
5501.0	0°	5501.0	5501.0	5501.0	5501.0	5501.0	5501.0	5501.0	5501.0	5501.0	5501.0
5519.1	2.5°	5438.5	5304.6	5171.8	5050.4	4976.6	4929.0	4881.3	4828.0	4807.5	4776.9
5533.9	5°	5384.1	5125.3	4894.9	4696.3	4515.8	4374.0	4231.0	4115.2	4063.0	4098.2
5580.4	7.5°	5352.3	4977.8	4622.5	4258.2	3907.5	3627.2	3383.2	3211.8	3134.7	3153.9
5625.8	10°	5323.9	4810.9	4269.6	3694.2	3190.3	2843.0	2593.3	2462.8	2414.0	2424.2
5687.1	12.5°	5297.8	4623.7	3844.0	3087.0	2551.3	2322.0	2250.5	2251.7	2260.8	2267.6
5784.7	15°	5293.3	4397.8	3368.4	2555.8	2206.3	2191.5	2268.7	2317.5	2343.6	2351.6
5866.4	17.5°	5286.5	4127.7	2883.8	2193.8	2122.3	2222.2	2293.7	2325.5	2345.9	2347.0
5945.8	20°	5259.2	3785.0	2436.7	2021.3	2104.1	2190.4	2234.7	2259.6	2276.7	2282.3
6006.0	22.5°	5175.2	3403.6	2088.3	1944.1	2031.5	2100.7	2152.9	2181.3	2191.5	2198.3
6017.3	25°	5024.3	2976.9	1847.7	1870.3	1930.5	2017.9	2059.9	2065.6	2062.2	2072.4
5989.0	27.5°	4826.8	2519.5	1697.8	1770.5	1847.7	1922.6	1945.3	1941.8	1935.0	1946.4
5940.2	30°	4588.5	2108.7	1602.5	1658.1	1763.7	1831.8	1852.2	1844.2	1830.6	1843.1
5915.2	32.5°	4336.5	1772.7	1524.2	1579.8	1694.4	1761.4	1781.8	1773.9	1763.7	1773.9
5943.6	35°	4101.6	1537.8	1451.6	1527.6	1640.0	1705.8	1731.9	1733.0	1733.0	1745.5
6018.5	37.5°	3886.0	1400.5	1391.4	1494.7	1602.5	1661.5	1699.0	1701.2	1652.4	1655.8
6145.6	40°	3686.2	1342.6	1364.2	1473.1	1566.2	1622.9	1625.2	1498.1	1408.4	1406.2
6290.9	42.5°	3522.8	1331.3	1372.1	1470.9	1540.1	1542.4	1382.3	1283.6	1258.6	1259.8
6424.8	45°	3369.6	1327.9	1390.3	1470.9	1501.5	1332.4	1224.6	1198.5	1200.7	1209.8
6484.9	47.5°	3198.2	1314.2	1393.7	1450.4	1390.3	1184.9	1153.1	1141.7	1137.2	1139.5
6471.3	50°	3010.9	1265.4	1350.6	1409.6	1199.6	1121.3	1081.6	1078.2	1083.8	1087.3
6395.3	52.5°	2813.5	1186.0	1276.8	1335.8	1112.2	1065.7	1021.4	1029.4	1054.3	1062.3
6315.8	55°	2684.1	1092.9	1179.2	1188.3	1050.9	1013.5	976.0	994.2	1040.7	1055.5
6268.2	57.5°	2650.0	994.2	1068.0	1057.7	972.6	968.1	945.4	961.3	1020.3	1041.9
6265.9	60°	2639.8	905.7	959.0	951.1	896.6	918.2	912.5	920.4	940.8	947.7
6243.2	62.5°	2560.4	835.3	861.4	850.1	828.5	865.9	879.6	862.5	878.4	886.4
6087.7	65°	2358.4	778.6	766.1	758.1	767.2	801.3	828.5	794.4	809.2	831.9
5488.5	67.5°	2024.7	701.4	667.3	676.4	704.8	722.9	758.1	719.5	732.0	770.6
4420.5	70°	1637.7	603.8	573.1	599.2	626.5	663.9	669.6	643.5	673.0	716.1
2697.7	72.5°	1158.8	505.0	483.5	536.8	545.9	594.7	582.2	569.7	610.6	625.3
1333.5	75°	803.5	407.4	395.0	435.8	468.7	510.7	501.6	516.4	602.6	609.5
666.2	77.5°	508.4	316.6	308.7	334.8	380.2	426.7	441.5	609.5	1029.4	1070.2
346.2	80°	295.1	236.1	227.0	247.4	287.1	330.3	425.6	747.9	678.7	670.7
155.5	82.5°	164.6	162.3	150.9	156.6	191.8	238.3	601.5	526.6	427.9	441.5
62.4	85°	77.2	95.3	81.7	78.3	107.8	279.2	401.8	300.8	199.7	195.2
13.6	87.5°	20.4	18.2	18.2	20.4	45.4	240.6	160.0	128.2	76.0	73.8
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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