

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: P950419

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P950419
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-SB4D-850-U-AFL
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 5000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39674 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

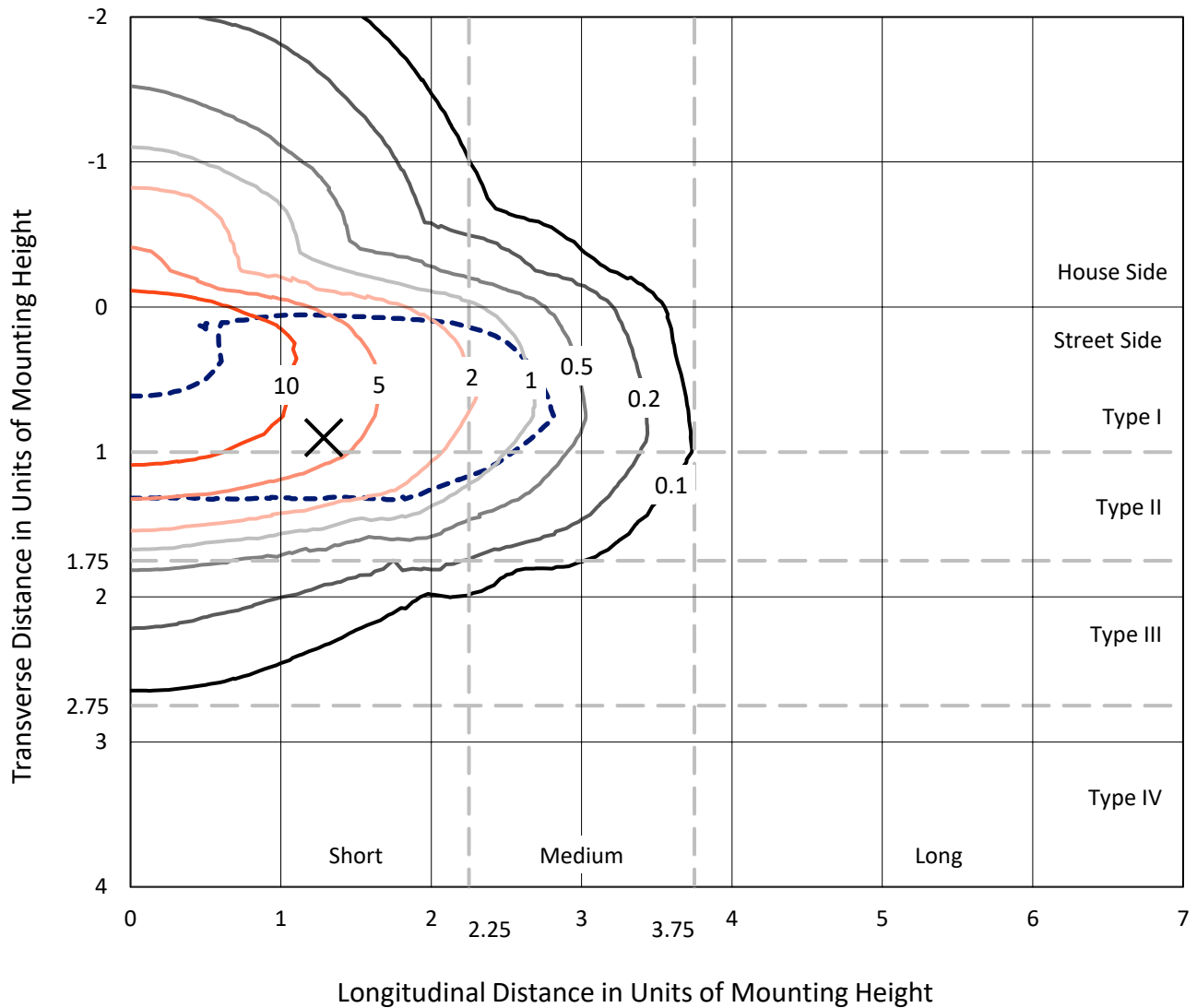
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

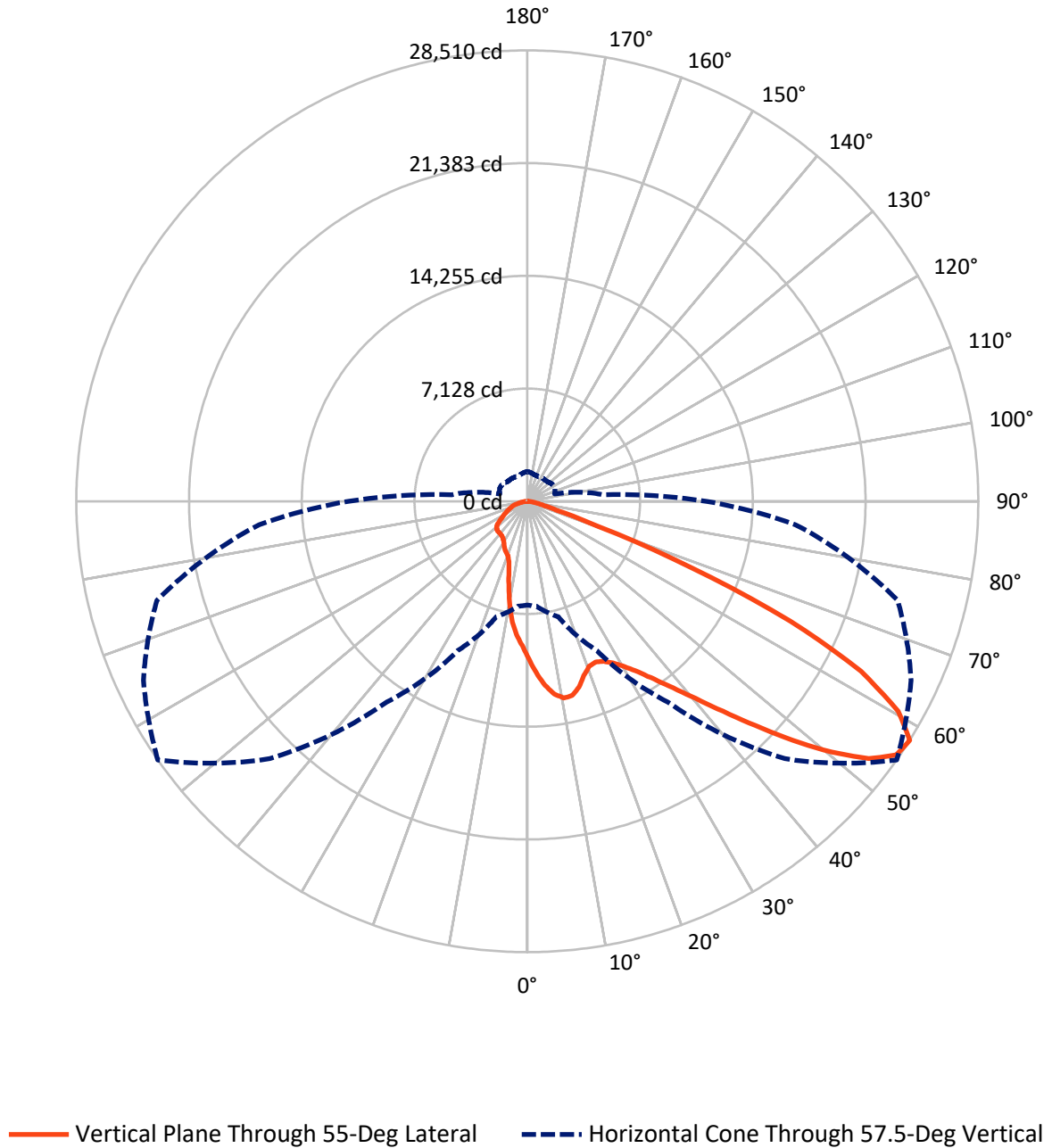
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 19.2 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	7178.8	0.0	7178.8
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	32495.2	0.0	32495.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	39674.0	0.0	39674.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	922.5	2.3
10°-20°	2328.4	5.9
20°-30°	3715.4	9.4
30°-40°	5882.4	14.8
40°-50°	9003.6	22.7
50°-60°	9643.7	24.3
60°-70°	6066.9	15.3
70°-80°	1794.1	4.5
80°-90°	317.2	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°	39674.0	100.0
0°-180°	39674.0	100.0

Coefficient of Utilization



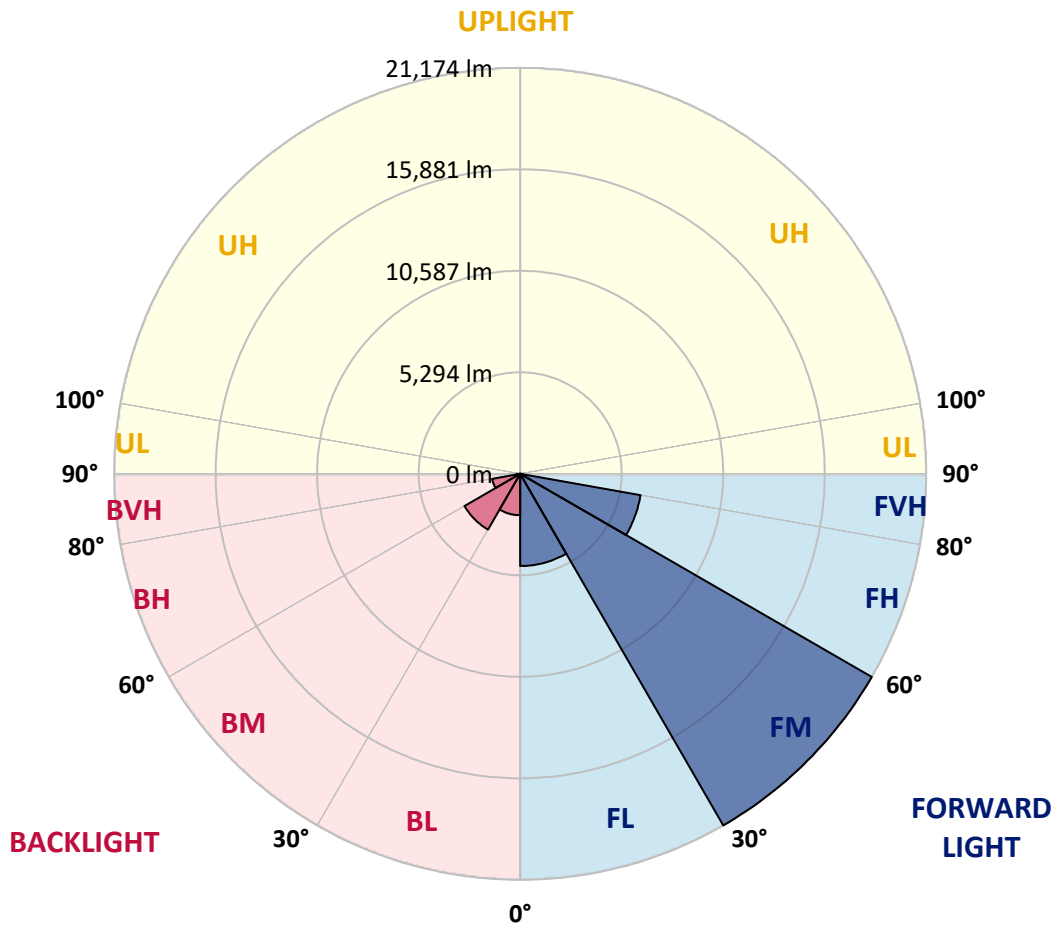
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4808.5	12.1			
FM (30°-60°)	21174.3	53.4			
FH (60°-80°)	6378.4	16.1			G3/7500
FVH (80°-90°)	134.0	0.3			G2/225
BL (0°-30°)	2157.7	5.4	B3/2500		
BM (30°-60°)	3355.3	8.5	B3/5000		
BH (60°-80°)	1482.6	3.7	B3/2500		G3/2500
BVH (80°-90°)	183.2	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-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	9941.0	9941.0	9941.0	9941.0	9941.0	9941.0	9941.0	9941.0	9941.0	9941.0
2.5°	11405.4	11397.2	11442.3	11288.5	11183.9	11042.4	10855.7	10617.8	10361.5	10090.7
5°	12432.9	12361.2	12408.3	12293.5	12178.6	11965.3	11688.4	11300.8	10827.0	10287.6
7.5°	12270.9	12221.7	12342.7	12445.2	12531.4	12504.7	12301.7	11895.6	11284.4	10500.9
10°	10964.4	10909.1	11079.3	11434.1	11955.1	12408.3	12654.4	12402.2	11752.0	10734.7
12.5°	9811.8	9785.1	9897.9	10185.1	10763.5	11633.1	12609.3	12845.2	12238.1	11011.6
15°	9319.6	9286.8	9358.5	9504.2	9873.3	10683.5	12199.1	13148.7	12716.0	11331.6
17.5°	9210.9	9174.0	9204.7	9280.6	9518.5	10135.9	11579.7	13298.4	13214.4	11688.4
20°	9411.9	9381.1	9385.2	9381.1	9547.2	10037.4	11149.0	13241.0	13649.2	12016.6
22.5°	9897.9	9846.7	9848.7	9740.0	9830.3	10209.7	11036.2	13087.2	14036.8	12303.7
25°	10689.6	10597.3	10615.8	10338.9	10314.3	10595.3	11212.6	12968.2	14422.4	12533.4
27.5°	11772.5	11667.9	11612.6	11200.3	11003.4	11142.9	11571.5	13009.3	14787.4	12732.4
30°	13126.2	12999.0	12886.2	12301.7	11944.8	11893.5	12129.4	13280.0	15218.1	12941.6
32.5°	14785.4	14637.7	14432.6	13657.4	13154.9	12886.2	12851.3	13762.0	15722.7	13208.2
35°	16760.5	16567.7	16276.4	15273.5	14637.7	14088.1	13803.0	14457.2	16413.9	13610.2
37.5°	18795.0	18577.6	18311.0	17117.3	16335.9	15525.8	14963.8	15400.7	17334.7	14155.7
40°	20671.7	20427.6	20179.4	19117.0	18278.2	17301.9	16385.1	16594.3	18460.7	14808.0
42.5°	21779.2	21598.7	21504.3	20930.1	20282.0	19291.4	18153.1	18009.5	19726.2	15558.6
45°	21730.0	21656.1	21947.4	22185.3	22031.4	21481.8	20224.5	19574.4	20995.7	16208.8
47.5°	20569.1	20618.3	21268.5	22605.7	23194.3	23481.5	22583.2	21110.6	22099.1	16694.8
50°	17410.6	17451.6	18957.0	21840.7	23493.8	25112.0	24923.3	22609.8	22954.4	16992.2
52.5°	14910.5	14937.2	15583.2	19572.3	22505.2	25932.4	27031.7	24022.9	23579.9	17074.3
55°	11231.1	11323.4	12047.4	15355.6	19933.3	25282.2	28315.6	25479.1	23975.8	17082.5
57.5°	6561.0	6661.5	7555.7	10423.0	15493.0	23015.9	28510.4	26771.2	24244.4	17016.8
60°	3213.9	3256.9	3646.6	5478.1	9553.4	18649.4	26943.5	27396.8	24394.2	16982.0
62.5°	2165.8	2159.7	2176.1	2703.2	4707.0	11981.7	23678.4	26301.5	24314.2	16848.7
65°	1862.3	1839.7	1778.2	1897.1	2438.6	5480.2	18294.6	23032.3	23705.0	16514.4
67.5°	1610.0	1612.1	1614.1	1577.2	1741.3	2528.8	11179.8	18142.8	21518.7	14931.0
70°	1333.1	1351.6	1359.8	1359.8	1419.3	1659.2	4772.6	12435.0	16973.8	11706.9
72.5°	1214.2	1175.2	1179.3	1158.8	1158.8	1263.4	1921.8	7049.2	10693.7	6585.6
75°	990.6	1015.2	1019.3	1005.0	957.8	964.0	1140.3	2957.5	4575.7	2731.9
77.5°	855.3	855.3	863.5	853.2	816.3	721.9	760.9	1146.5	1556.7	1119.8
80°	687.1	685.0	719.9	740.4	683.0	533.3	486.1	633.7	691.2	492.2
82.5°	334.3	354.8	494.3	564.0	518.9	385.6	297.4	393.8	369.2	217.4
85°	194.8	184.6	221.5	313.8	297.4	213.3	143.6	205.1	192.8	110.8
87.5°	61.5	57.4	45.1	106.7	86.1	59.5	39.0	59.5	53.3	24.6
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°
9941.0	0°	9941.0	9941.0	9941.0	9941.0	9941.0	9941.0	9941.0	9941.0	9941.0	9941.0
9973.8	2.5°	9828.2	9586.2	9346.2	9126.8	8993.5	8907.3	8821.2	8724.8	8687.9	8632.5
10000.5	5°	9729.8	9262.1	8845.8	8486.9	8160.8	7904.4	7646.0	7436.8	7342.4	7406.0
10084.6	7.5°	9672.3	8995.5	8353.6	7695.2	7061.5	6554.9	6113.9	5804.2	5664.8	5699.6
10166.6	10°	9621.1	8694.0	7715.7	6675.9	5765.3	5137.7	4686.4	4450.6	4362.4	4380.9
10277.4	12.5°	9573.9	8355.6	6946.6	5578.6	4610.6	4196.3	4067.1	4069.1	4085.5	4097.8
10453.8	15°	9565.7	7947.5	6087.3	4618.8	3987.1	3960.4	4099.9	4188.1	4235.2	4249.6
10601.4	17.5°	9553.4	7459.4	5211.5	3964.5	3835.3	4015.8	4145.0	4202.4	4239.3	4241.4
10745.0	20°	9504.2	6840.0	4403.4	3652.8	3802.5	3958.4	4038.3	4083.5	4114.2	4124.5
10853.7	22.5°	9352.4	6150.8	3773.8	3513.3	3671.2	3796.3	3890.7	3942.0	3960.4	3972.7
10874.2	25°	9079.6	5379.7	3339.0	3380.0	3488.7	3646.6	3722.5	3732.8	3726.6	3745.1
10822.9	27.5°	8722.7	4553.1	3068.2	3199.5	3339.0	3474.3	3515.4	3509.2	3496.9	3517.4
10734.7	30°	8292.0	3810.7	2896.0	2996.5	3187.2	3310.3	3347.2	3332.8	3308.2	3330.8
10689.6	32.5°	7836.7	3203.6	2754.4	2854.9	3062.1	3183.1	3220.0	3205.7	3187.2	3205.7
10740.9	35°	7412.2	2779.1	2623.2	2760.6	2963.6	3082.6	3129.8	3131.8	3131.8	3154.4
10876.3	37.5°	7022.5	2530.9	2514.5	2701.1	2896.0	3002.6	3070.3	3074.4	2986.2	2992.4
11106.0	40°	6661.5	2426.3	2465.3	2662.1	2830.3	2932.9	2937.0	2707.3	2545.2	2541.1
11368.5	42.5°	6366.2	2405.8	2479.6	2658.0	2783.2	2787.3	2498.1	2319.6	2274.5	2276.6
11610.5	45°	6089.3	2399.6	2512.4	2658.0	2713.4	2407.8	2213.0	2165.8	2169.9	2186.3
11719.2	47.5°	5779.6	2375.0	2518.6	2621.1	2512.4	2141.2	2083.8	2063.3	2055.1	2059.2
11694.6	50°	5441.2	2286.8	2440.6	2547.3	2167.9	2026.4	1954.6	1948.4	1958.7	1964.8
11557.2	52.5°	5084.3	2143.3	2307.3	2414.0	2009.9	1925.9	1845.9	1860.2	1905.3	1919.7
11413.6	55°	4850.5	1975.1	2131.0	2147.4	1899.2	1831.5	1763.8	1796.6	1880.7	1907.4
11327.5	57.5°	4789.0	1796.6	1930.0	1911.5	1757.7	1749.5	1708.5	1737.2	1843.8	1882.8
11323.4	60°	4770.5	1636.7	1733.1	1718.7	1620.3	1659.2	1649.0	1663.3	1700.2	1712.6
11282.3	62.5°	4627.0	1509.5	1556.7	1536.2	1497.2	1564.9	1589.5	1558.7	1587.4	1601.8
11001.4	65°	4261.9	1407.0	1384.4	1370.0	1386.5	1448.0	1497.2	1435.7	1462.3	1503.4
9918.5	67.5°	3658.9	1267.5	1206.0	1222.4	1273.6	1306.5	1370.0	1300.3	1322.9	1392.6
7988.5	70°	2959.5	1091.1	1035.7	1082.9	1132.1	1199.8	1210.1	1162.9	1216.2	1294.2
4875.1	72.5°	2094.0	912.7	873.7	970.1	986.5	1074.7	1052.1	1029.6	1103.4	1130.1
2409.9	75°	1452.1	736.3	713.7	787.6	847.0	922.9	906.5	933.2	1089.1	1101.4
1203.9	77.5°	918.8	572.2	557.9	605.0	687.1	771.2	797.8	1101.4	1860.2	1934.1
625.5	80°	533.3	426.6	410.2	447.1	518.9	596.8	769.1	1351.6	1226.5	1212.1
281.0	82.5°	297.4	293.3	272.8	283.0	346.6	430.7	1087.0	951.6	773.2	797.8
112.8	85°	139.5	172.3	147.7	141.5	194.8	504.5	726.0	543.5	361.0	352.8
24.6	87.5°	36.9	32.8	32.8	36.9	82.0	434.8	289.2	231.8	137.4	133.3
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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