

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: P950409

Luminaire Tested: **GALN-SB4D-840-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P950409
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-SB4D-840-U-T2R
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39734 lumens
Efficiency: N/A
Efficacy: 135.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

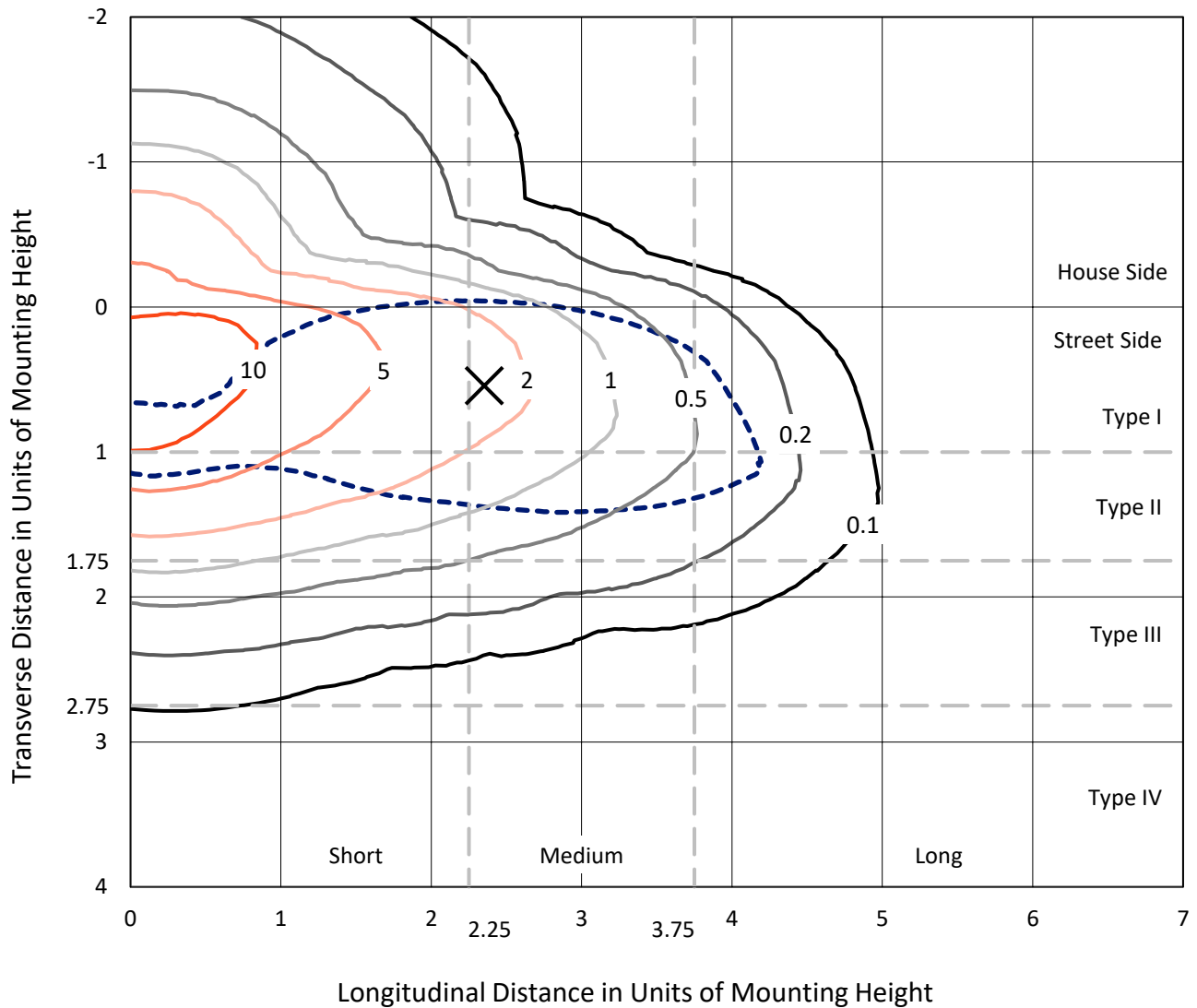
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

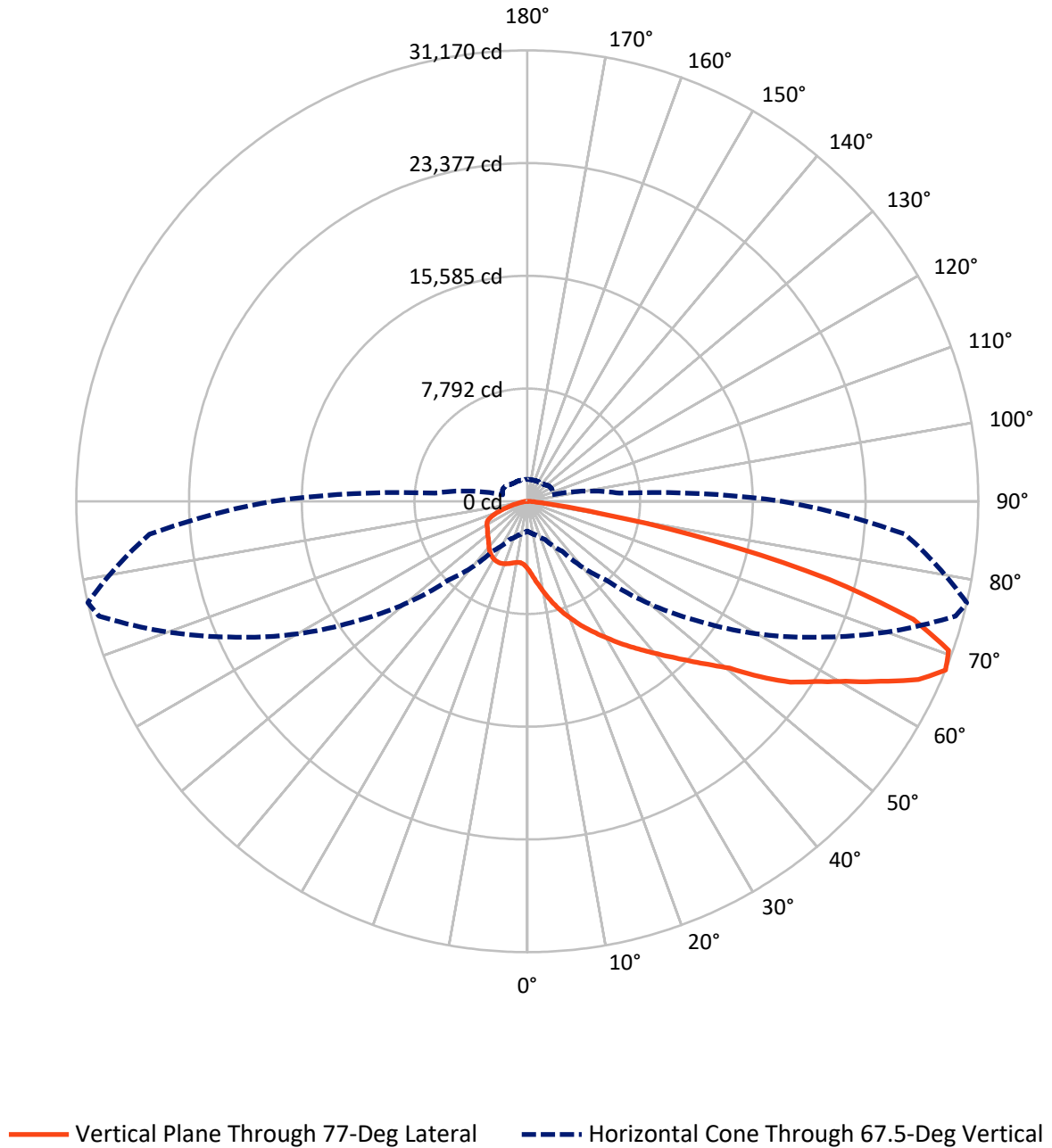
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.6 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	7516.1	0.0	7516.1
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	32217.9	0.0	32217.9
	% Fixture	81.1	0.0	81.1
Total	Lumens	39734.0	0.0	39734.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	499.7	1.3
10°-20°	1795.2	4.5
20°-30°	3389.6	8.5
30°-40°	5460.6	13.7
40°-50°	7469.1	18.8
50°-60°	8425.2	21.2
60°-70°	7863.9	19.8
70°-80°	4310.7	10.8
80°-90°	520.0	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°	39734.0	100.0
0°-180°	39734.0	100.0

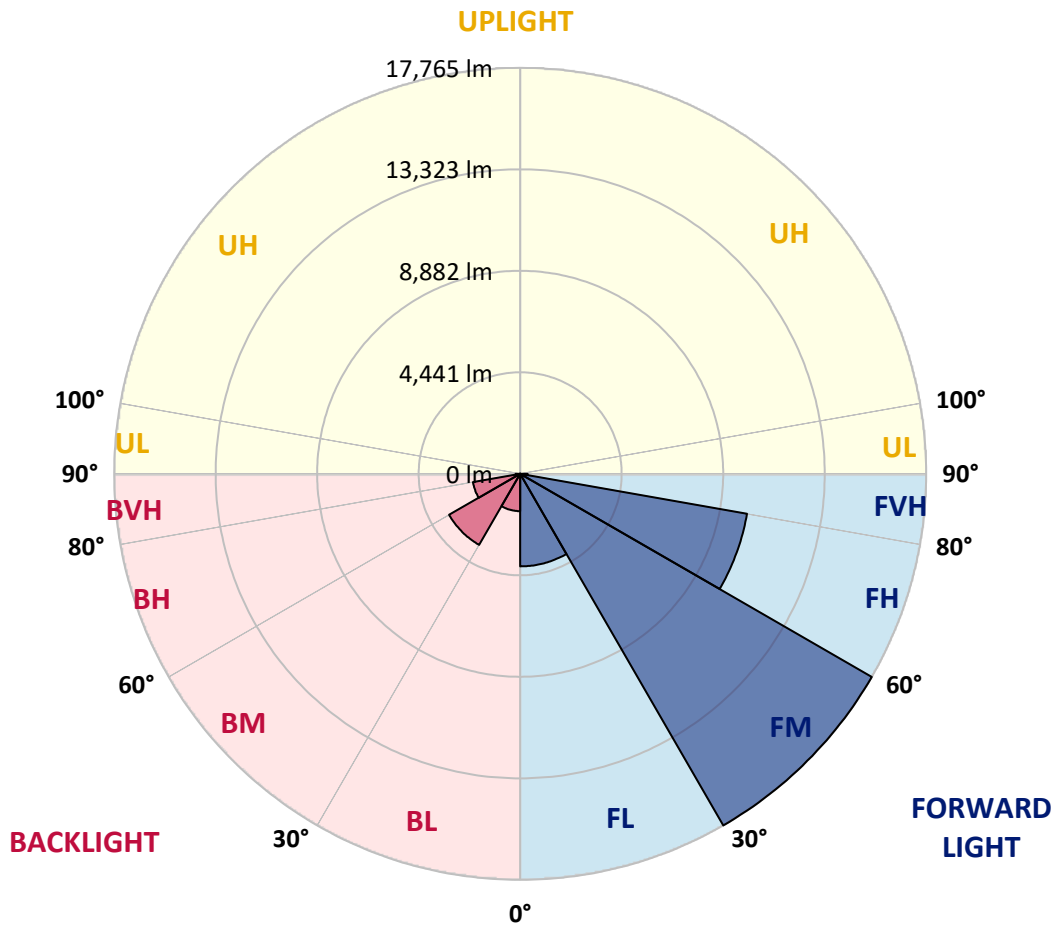


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4050.4	10.2			
FM (30°-60°)	17764.6	44.7			
FH (60°-80°)	10077.7	25.4			G4/12000
FVH (80°-90°)	325.2	0.8			G3/500
BL (0°-30°)	1634.2	4.1	B3/2500		
BM (30°-60°)	3590.2	9.0	B3/5000		
BH (60°-80°)	2096.9	5.3	B3/2500		G3/2500
BVH (80°-90°)	194.8	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-G4
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°
0°	4662.0	4662.0	4662.0	4662.0	4662.0	4662.0	4662.0	4662.0	4662.0	4662.0
2.5°	5837.3	5878.3	5827.0	5827.0	5654.7	5564.5	5392.2	5260.9	5025.1	4984.0
5°	6899.7	6951.0	6879.2	6848.5	6645.4	6458.8	6169.6	5884.5	5464.0	5420.9
7.5°	7722.2	7787.8	7724.2	7691.4	7510.9	7301.7	6963.3	6565.4	5972.7	5888.6
10°	8392.9	8403.1	8382.6	8394.9	8253.4	8081.1	7734.5	7271.0	6530.5	6415.7
12.5°	8772.3	8819.5	8860.5	8934.4	8909.8	8803.1	8491.3	7937.6	7121.2	6973.6
15°	8950.8	9032.8	9125.1	9295.4	9432.8	9459.4	9221.5	8653.4	7722.2	7543.8
17.5°	9014.4	9092.3	9237.9	9484.0	9779.4	9978.3	9871.7	9348.7	8317.0	8111.9
20°	9336.4	9358.9	9447.1	9680.9	10000.9	10331.1	10411.1	10017.3	8905.7	8673.9
22.5°	10025.5	9980.4	10005.0	10111.7	10341.4	10661.3	10843.9	10608.0	9510.7	9244.1
25°	11163.9	11032.6	10901.3	10778.3	10895.2	11075.7	11282.8	11198.7	10144.5	9806.1
27.5°	12601.6	12441.7	12152.5	11748.4	11606.9	11670.5	11762.8	11746.4	10731.1	10388.6
30°	14016.9	13830.2	13485.6	12901.1	12527.8	12359.6	12289.9	12242.7	11369.0	11003.9
32.5°	15147.0	14999.3	14660.9	14006.6	13465.1	13178.0	12946.2	12778.0	12035.6	11670.5
35°	16135.6	15998.2	15610.5	14896.8	14308.1	14002.5	13699.0	13340.0	12728.8	12359.6
37.5°	17038.1	16900.6	16369.4	15626.9	15034.2	14822.9	14552.2	13943.0	13424.1	13075.4
40°	17608.2	17577.5	17081.1	16240.2	15624.9	15520.3	15430.0	14642.4	14195.3	13871.2
42.5°	17753.9	17821.6	17427.8	16736.6	16150.0	16065.9	16277.1	15434.1	15060.8	14751.1
45°	17403.1	17598.0	17339.6	16869.9	16523.2	16478.1	17027.8	16299.7	16018.7	15735.6
47.5°	16515.0	16845.3	16738.6	16673.0	16623.7	16818.6	17688.2	17218.5	17103.7	16857.6
50°	14722.4	15348.0	15534.6	15949.0	16424.8	17083.2	18289.2	18221.5	18371.2	18123.1
52.5°	11623.3	12484.7	13567.7	14605.5	15813.6	16995.0	18949.6	19661.3	20293.1	20157.7
55°	9594.8	9982.5	10815.2	12718.6	14628.1	16623.7	19247.0	20824.3	22200.5	22079.5
57.5°	8036.0	8382.6	8895.4	10485.0	12835.5	15780.8	19431.6	21534.0	23507.1	23494.8
60°	6364.4	6731.5	7256.6	8382.6	10741.3	14324.5	19390.6	22342.1	25174.6	25277.1
62.5°	4477.4	4881.5	5464.0	6514.1	8602.1	12437.6	18553.8	22926.6	27137.4	27416.4
65°	2943.3	3209.9	3648.8	4555.4	6409.5	10011.2	16956.0	23002.5	29237.7	29709.4
67.5°	2063.4	2165.9	2424.3	2916.6	4225.2	7677.1	14410.7	22217.0	30638.6	31169.8
70°	1610.1	1661.3	1792.6	1989.5	2654.1	5162.5	11042.8	20174.1	30339.1	30892.9
72.5°	1390.6	1439.8	1489.1	1513.7	1780.3	3187.3	7480.2	16867.8	27518.9	27894.3
75°	1261.4	1273.7	1314.7	1306.5	1357.8	2067.5	4317.5	12289.9	21712.4	21583.2
77.5°	1060.4	1076.8	1144.5	1134.2	1206.0	1413.2	2241.8	7931.4	14076.3	13198.5
80°	898.4	906.6	980.4	968.1	1048.1	1023.5	1144.5	4042.6	5970.6	5057.9
82.5°	311.8	385.6	748.6	771.2	799.9	619.4	660.4	1649.0	1823.4	1396.8
85°	151.8	162.0	381.5	541.5	539.4	311.8	322.0	588.7	574.3	451.2
87.5°	24.6	30.8	45.1	211.3	168.2	82.0	110.8	114.9	119.0	102.6
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):

85°		90°	95°	105°	115°	125°	135°	145°	155°	165°	175°
4662.0	0°	4662.0	4662.0	4662.0	4662.0	4662.0	4662.0	4662.0	4662.0	4662.0	4662.0
4828.2	2.5°	4713.3	4610.8	4395.4	4196.4	4040.6	3890.8	3806.7	3735.0	3693.9	3685.7
5053.8	5°	4840.5	4629.2	4237.5	3907.2	3691.9	3531.9	3447.8	3394.5	3367.8	3351.4
5357.3	7.5°	5023.0	4713.3	4155.4	3780.1	3554.5	3439.6	3396.5	3388.3	3386.3	3388.3
5724.5	10°	5275.3	4850.7	4147.2	3749.3	3560.6	3497.0	3495.0	3497.0	3505.2	3507.3
6124.4	12.5°	5548.1	4992.3	4180.0	3776.0	3638.6	3603.7	3597.5	3595.5	3601.6	3605.7
6528.5	15°	5845.5	5178.9	4235.4	3833.4	3724.7	3687.8	3681.6	3669.3	3667.3	3665.2
6953.1	17.5°	6151.1	5363.5	4296.9	3894.9	3780.1	3728.8	3706.2	3677.5	3655.0	3648.8
7392.0	20°	6460.8	5546.0	4340.0	3925.7	3784.2	3712.4	3667.3	3618.0	3579.1	3556.5
7835.0	22.5°	6791.0	5736.8	4366.7	3917.5	3747.3	3648.8	3566.8	3509.3	3449.9	3410.9
8282.1	25°	7113.0	5902.9	4364.6	3874.4	3675.5	3550.4	3445.8	3371.9	3289.9	3248.9
8743.6	27.5°	7422.7	6052.6	4313.4	3798.5	3572.9	3433.5	3308.3	3220.1	3140.2	3101.2
9209.2	30°	7742.7	6177.8	4233.4	3687.8	3451.9	3298.1	3160.7	3084.8	3013.0	2976.1
9701.5	32.5°	8060.6	6292.6	4120.6	3550.4	3312.4	3164.8	3029.4	2959.7	2916.6	2916.6
10230.6	35°	8397.0	6372.6	3970.8	3390.4	3164.8	3023.2	2916.6	2875.6	2871.5	2846.9
10790.6	37.5°	8751.8	6423.9	3788.3	3226.3	3019.1	2885.8	2853.0	2803.8	2762.8	2709.4
11405.9	40°	9125.1	6475.2	3568.8	3056.1	2865.3	2791.5	2777.1	2711.5	2594.6	2463.3
12103.2	42.5°	9578.4	6510.0	3341.2	2885.8	2703.3	2678.7	2699.2	2586.4	2399.7	2301.3
12944.2	45°	10103.5	6567.5	3132.0	2717.6	2537.1	2537.1	2623.3	2475.6	2321.8	2260.3
13904.1	47.5°	10784.4	6700.8	2937.1	2533.0	2383.3	2424.3	2455.1	2342.3	2256.2	2180.3
15073.2	50°	11768.9	7020.7	2736.1	2346.4	2266.4	2348.5	2305.4	2239.7	2139.2	2077.7
16931.4	52.5°	12991.3	7209.4	2557.7	2178.2	2165.9	2247.9	2186.4	2124.9	2049.0	1967.0
18340.5	55°	13824.1	7244.3	2407.9	2055.2	2098.2	2090.0	2067.5	2012.1	1971.1	1862.4
19731.1	57.5°	14755.2	7314.0	2284.9	1981.3	2055.2	1964.9	1956.7	1909.5	1856.2	1782.4
21427.3	60°	15869.0	7422.7	2178.2	1952.6	2018.2	1882.9	1841.8	1823.4	1770.1	1733.1
23468.1	62.5°	17083.2	7521.2	2069.5	1956.7	1975.2	1802.9	1741.3	1735.2	1702.4	1690.1
25383.8	65°	17911.8	7252.5	1934.1	1952.6	1907.5	1720.8	1642.9	1640.8	1614.2	1610.1
26214.4	67.5°	17622.6	6401.3	1751.6	1895.2	1837.7	1638.8	1552.6	1544.4	1509.6	1511.6
25346.9	70°	16174.6	5187.1	1499.3	1753.6	1751.6	1564.9	1458.3	1431.6	1384.5	1392.7
22038.5	72.5°	13459.0	3843.7	1160.9	1517.8	1614.2	1497.3	1349.6	1306.5	1247.0	1255.2
16268.9	75°	9719.9	2613.0	845.0	1154.7	1405.0	1417.3	1242.9	1169.1	1097.3	1109.6
9055.4	77.5°	4973.8	1480.9	621.5	795.8	1103.5	1288.1	1146.5	1048.1	1031.7	1146.5
2611.0	80°	1622.4	742.5	430.7	557.9	724.0	1054.2	1005.0	892.2	888.1	914.8
547.6	82.5°	484.0	313.8	276.9	367.1	400.0	808.1	867.6	674.8	580.4	611.2
182.5	85°	166.1	151.8	157.9	182.5	190.7	473.8	607.1	447.1	422.5	465.6
41.0	87.5°	39.0	53.3	45.1	41.0	41.0	114.9	235.9	186.6	258.4	172.3
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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180°
4662.0
3685.7
3349.4
3394.5
3509.3
3607.8
3663.2
3655.0
3564.7
3412.9
3248.9
3099.1
2974.0
2918.6
2840.7
2701.2
2444.8
2303.3
2270.5
2178.2
2071.6
1950.5
1864.4
1757.7
1743.4
1690.1
1608.0
1511.6
1400.9
1253.2
1113.7
1130.1
785.6
631.7
459.4
166.1
0.0

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