

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: P947542

Luminaire Tested: **GALN-SB2D-840-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P947542
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-SB2D-840-U-AFL
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19797 lumens
Efficiency: N/A
Efficacy: 134.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

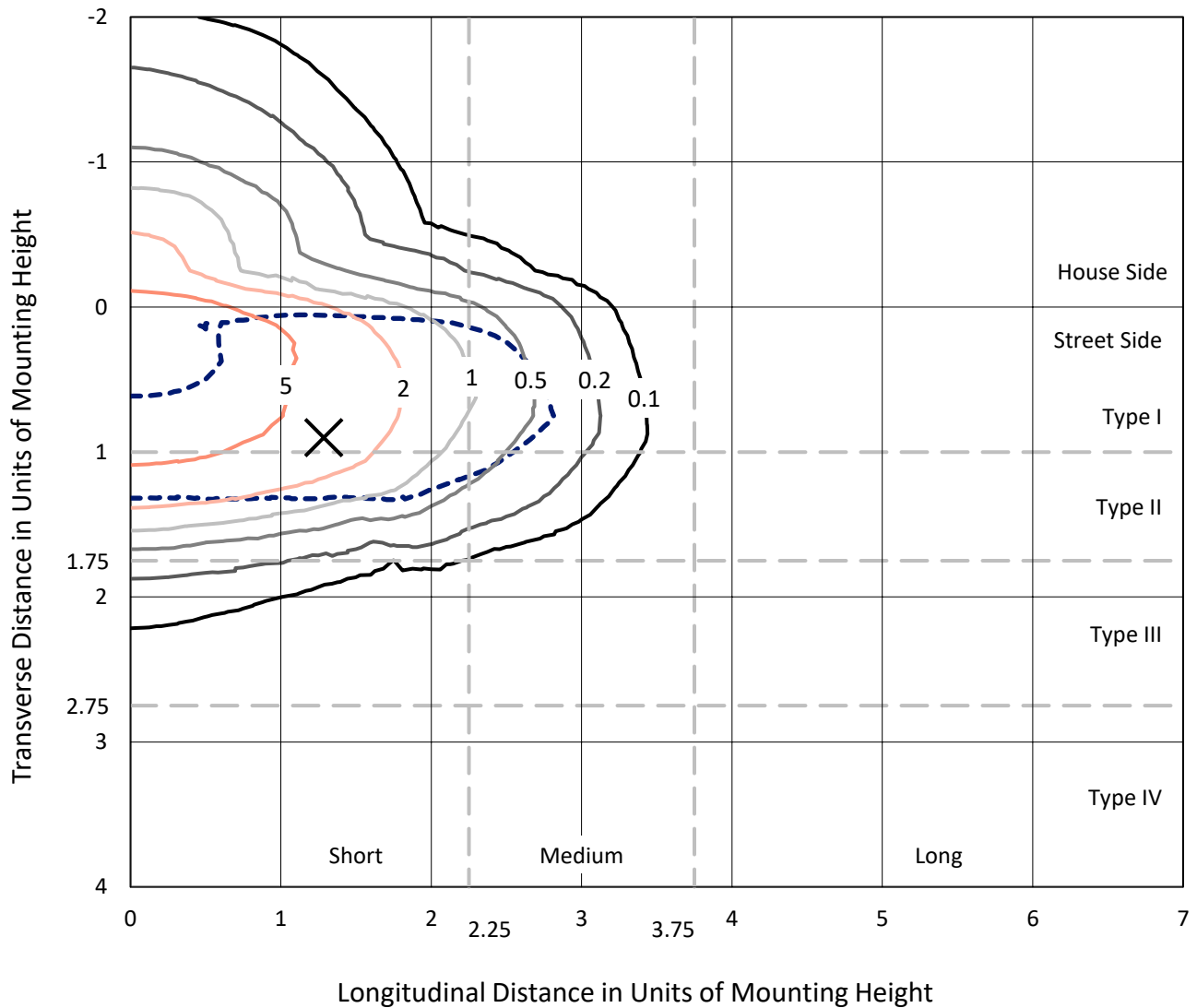
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

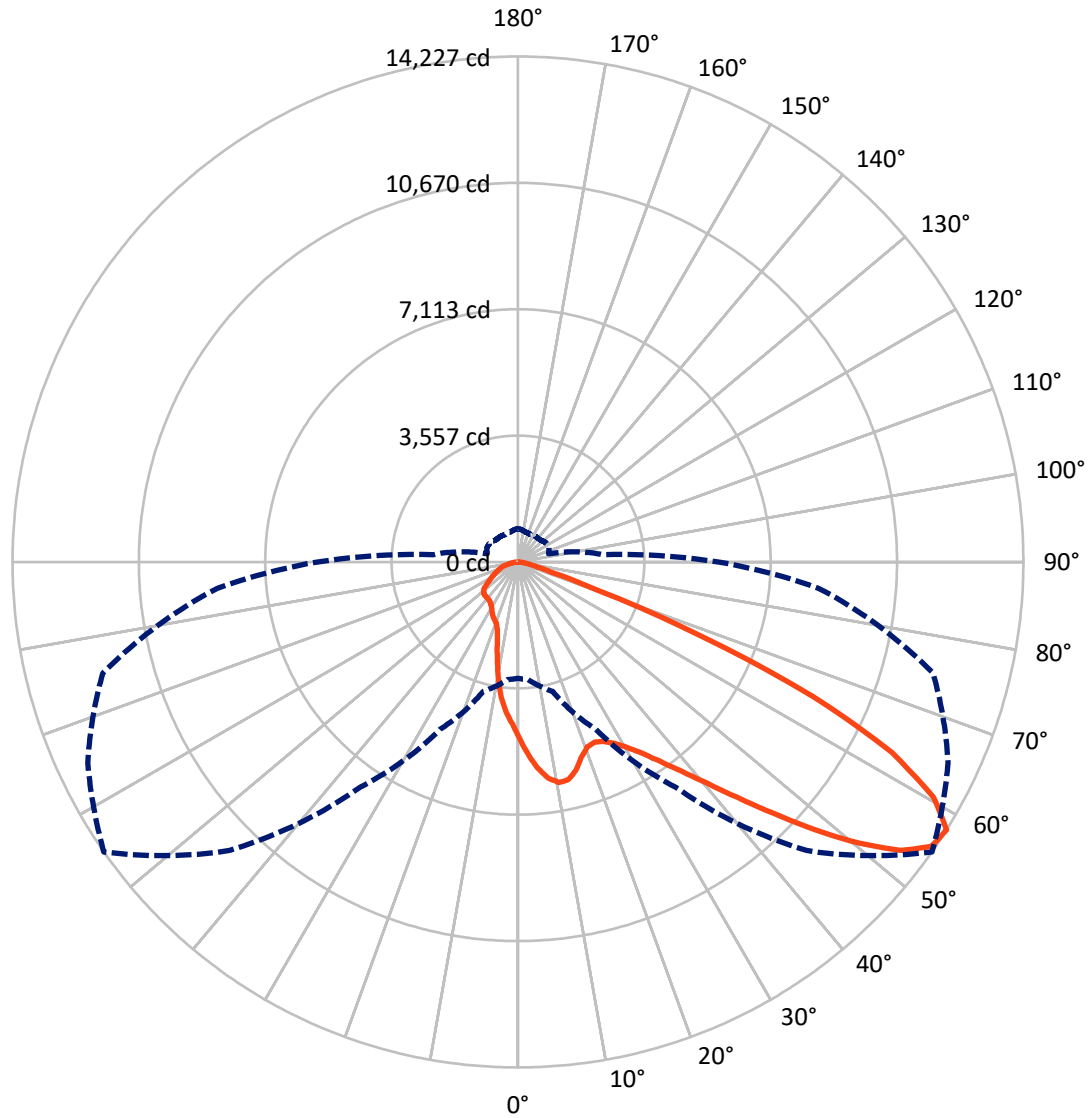
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 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	3582.2	0.0	3582.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	16214.8	0.0	16214.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	19797.0	0.0	19797.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	460.3	2.3
10°-20°	1161.8	5.9
20°-30°	1853.9	9.4
30°-40°	2935.3	14.8
40°-50°	4492.7	22.7
50°-60°	4812.1	24.3
60°-70°	3027.3	15.3
70°-80°	895.2	4.5
80°-90°	158.3	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°	19797.0	100.0
0°-180°	19797.0	100.0

Coefficient of Utilization



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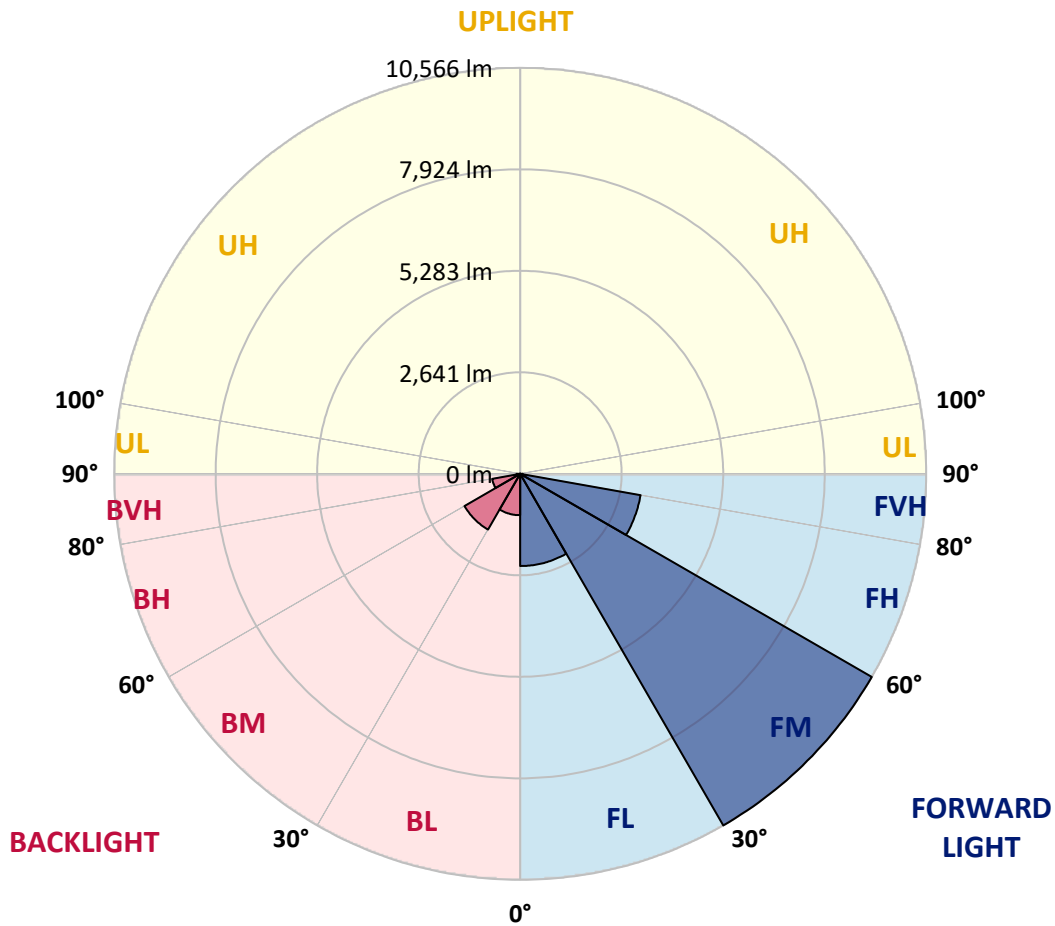
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2399.4	12.1			
FM (30°-60°)	10565.8	53.4			
FH (60°-80°)	3182.8	16.1			G2/5000
FVH (80°-90°)	66.9	0.3			G1/100
BL (0°-30°)	1076.7	5.4	B3/2500		
BM (30°-60°)	1674.3	8.5	B2/2500		
BH (60°-80°)	739.8	3.7	B2/1000		G2/1000
BVH (80°-90°)	91.4	0.5			G1/100
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°	4960.5	4960.5	4960.5	4960.5	4960.5	4960.5	4960.5	4960.5	4960.5	4960.5
2.5°	5691.2	5687.1	5709.6	5632.9	5580.7	5510.1	5416.9	5298.2	5170.3	5035.2
5°	6203.9	6168.1	6191.7	6134.3	6077.0	5970.6	5832.4	5639.0	5402.6	5133.4
7.5°	6123.1	6098.5	6158.9	6210.1	6253.1	6239.8	6138.4	5935.8	5630.8	5239.9
10°	5471.2	5443.5	5528.5	5705.5	5965.5	6191.7	6314.5	6188.6	5864.2	5356.5
12.5°	4896.0	4882.7	4939.0	5082.3	5370.9	5804.8	6291.9	6409.6	6106.7	5494.7
15°	4650.4	4634.0	4669.8	4742.5	4926.7	5331.0	6087.3	6561.1	6345.2	5654.4
17.5°	4596.2	4577.7	4593.1	4630.9	4749.7	5057.7	5778.2	6635.8	6593.9	5832.4
20°	4696.4	4681.1	4683.1	4681.1	4764.0	5008.6	5563.3	6607.2	6810.8	5996.2
22.5°	4939.0	4913.4	4914.4	4860.2	4905.2	5094.6	5507.0	6530.4	7004.2	6139.5
25°	5334.0	5288.0	5297.2	5159.0	5146.7	5287.0	5595.0	6471.0	7196.6	6254.1
27.5°	5874.4	5822.2	5794.6	5588.9	5490.6	5560.2	5774.1	6491.5	7378.8	6353.4
30°	6549.8	6486.4	6430.1	6138.4	5960.4	5934.8	6052.5	6626.6	7593.7	6457.7
32.5°	7377.8	7304.1	7201.8	6814.9	6564.2	6430.1	6412.7	6867.1	7845.5	6590.8
35°	8363.3	8267.1	8121.8	7621.4	7304.1	7029.8	6887.6	7214.0	8190.4	6791.4
37.5°	9378.6	9270.1	9137.0	8541.4	8151.5	7747.2	7466.8	7684.8	8649.9	7063.6
40°	10315.0	10193.2	10069.4	9539.2	9120.7	8633.5	8176.1	8280.4	9211.7	7389.0
42.5°	10867.6	10777.6	10730.5	10443.9	10120.5	9626.2	9058.2	8986.6	9843.2	7763.6
45°	10843.1	10806.2	10951.5	11070.3	10993.5	10719.2	10091.9	9767.5	10476.7	8088.0
47.5°	10263.8	10288.4	10612.8	11280.1	11573.8	11717.1	11268.8	10534.0	11027.3	8330.6
50°	8687.8	8708.2	9459.4	10898.3	11723.2	12530.7	12436.5	11282.1	11454.0	8479.0
52.5°	7440.2	7453.5	7775.9	9766.4	11229.9	12940.0	13488.6	11987.2	11766.2	8519.9
55°	5604.2	5650.3	6011.5	7662.3	9946.6	12615.6	14129.2	12713.9	11963.7	8524.0
57.5°	3273.9	3324.0	3770.3	5201.0	7730.9	11484.7	14226.5	13358.6	12097.8	8491.3
60°	1603.7	1625.2	1819.6	2733.5	4767.1	9305.9	13444.6	13670.8	12172.5	8473.9
62.5°	1080.7	1077.7	1085.8	1348.9	2348.7	5978.8	11815.3	13124.3	12132.6	8407.3
65°	929.3	918.0	887.3	946.7	1216.8	2734.6	9128.8	11492.9	11828.6	8240.5
67.5°	803.4	804.4	805.4	787.0	868.9	1261.9	5578.6	9053.1	10737.7	7450.5
70°	665.2	674.4	678.5	678.5	708.2	827.9	2381.5	6205.0	8469.8	5841.6
72.5°	605.9	586.4	588.5	578.2	578.2	630.4	958.9	3517.5	5336.1	3286.2
75°	494.3	506.6	508.6	501.5	477.9	481.0	569.0	1475.8	2283.2	1363.2
77.5°	426.8	426.8	430.9	425.7	407.3	360.2	379.7	572.1	776.8	558.8
80°	342.8	341.8	359.2	369.5	340.8	266.1	242.5	316.2	344.9	245.6
82.5°	166.8	177.1	246.6	281.4	258.9	192.4	148.4	196.5	184.2	108.5
85°	97.2	92.1	110.5	156.6	148.4	106.4	71.6	102.3	96.2	55.3
87.5°	30.7	28.7	22.5	53.2	43.0	29.7	19.4	29.7	26.6	12.3
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°
4960.5	0°	4960.5	4960.5	4960.5	4960.5	4960.5	4960.5	4960.5	4960.5	4960.5	4960.5
4976.9	2.5°	4904.2	4783.4	4663.7	4554.2	4487.7	4444.7	4401.7	4353.6	4335.2	4307.5
4990.2	5°	4855.1	4621.7	4414.0	4234.9	4072.2	3944.2	3815.3	3710.9	3663.8	3695.5
5032.1	7.5°	4826.4	4488.7	4168.4	3839.8	3523.6	3270.8	3050.8	2896.3	2826.7	2844.1
5073.1	10°	4800.8	4338.3	3850.1	3331.2	2876.8	2563.7	2338.5	2220.8	2176.8	2186.0
5128.3	12.5°	4777.3	4169.4	3466.3	2783.7	2300.6	2093.9	2029.4	2030.5	2038.6	2044.8
5216.3	15°	4773.2	3965.7	3037.5	2304.7	1989.5	1976.2	2045.8	2089.8	2113.3	2120.5
5290.0	17.5°	4767.1	3722.2	2600.5	1978.3	1913.8	2003.8	2068.3	2097.0	2115.4	2116.4
5361.7	20°	4742.5	3413.1	2197.3	1822.7	1897.4	1975.2	2015.1	2037.6	2053.0	2058.1
5415.9	22.5°	4666.8	3069.2	1883.1	1753.1	1831.9	1894.3	1941.4	1967.0	1976.2	1982.4
5426.1	25°	4530.7	2684.4	1666.1	1686.6	1740.8	1819.6	1857.5	1862.6	1859.5	1868.8
5400.6	27.5°	4352.6	2272.0	1531.0	1596.5	1666.1	1733.7	1754.1	1751.1	1744.9	1755.2
5356.5	30°	4137.7	1901.5	1445.1	1495.2	1590.4	1651.8	1670.2	1663.0	1650.8	1662.0
5334.0	32.5°	3910.5	1598.6	1374.4	1424.6	1528.0	1588.3	1606.8	1599.6	1590.4	1599.6
5359.6	35°	3698.6	1386.7	1308.9	1377.5	1478.8	1538.2	1561.7	1562.8	1562.8	1574.0
5427.2	37.5°	3504.2	1262.9	1254.7	1347.8	1445.1	1498.3	1532.1	1534.1	1490.1	1493.2
5541.8	40°	3324.0	1210.7	1230.1	1328.4	1412.3	1463.5	1465.5	1350.9	1270.1	1268.0
5672.8	42.5°	3176.7	1200.5	1237.3	1326.3	1388.8	1390.8	1246.5	1157.5	1135.0	1136.0
5793.5	45°	3038.5	1197.4	1253.7	1326.3	1354.0	1201.5	1104.3	1080.7	1082.8	1091.0
5847.8	47.5°	2884.0	1185.1	1256.8	1307.9	1253.7	1068.4	1039.8	1029.6	1025.5	1027.5
5835.5	50°	2715.1	1141.1	1217.9	1271.1	1081.7	1011.1	975.3	972.2	977.4	980.4
5766.9	52.5°	2537.0	1069.5	1151.3	1204.6	1002.9	961.0	921.1	928.2	950.8	957.9
5695.3	55°	2420.4	985.5	1063.3	1071.5	947.7	913.9	880.1	896.5	938.5	951.8
5652.3	57.5°	2389.7	896.5	963.0	953.8	877.1	873.0	852.5	866.8	920.0	939.5
5650.3	60°	2380.5	816.7	864.8	857.6	808.5	827.9	822.8	830.0	848.4	854.6
5629.8	62.5°	2308.8	753.2	776.8	766.5	747.1	780.9	793.1	777.8	792.1	799.3
5489.6	65°	2126.7	702.1	690.8	683.6	691.8	722.5	747.1	716.4	729.7	750.2
4949.2	67.5°	1825.8	632.5	601.8	610.0	635.5	651.9	683.6	648.8	660.1	694.9
3986.2	70°	1476.8	544.5	516.8	540.4	564.9	598.7	603.8	580.3	606.9	645.8
2432.7	72.5°	1044.9	455.4	436.0	484.1	492.3	536.3	525.0	513.8	550.6	563.9
1202.5	75°	724.6	367.4	356.1	393.0	422.7	460.5	452.3	465.7	543.4	549.6
600.7	77.5°	458.5	285.5	278.4	301.9	342.8	384.8	398.1	549.6	928.2	965.1
312.1	80°	266.1	212.9	204.7	223.1	258.9	297.8	383.8	674.4	612.0	604.8
140.2	82.5°	148.4	146.3	136.1	141.2	173.0	214.9	542.4	474.9	385.8	398.1
56.3	85°	69.6	86.0	73.7	70.6	97.2	251.8	362.3	271.2	180.1	176.0
12.3	87.5°	18.4	16.4	16.4	18.4	40.9	217.0	144.3	115.6	68.6	66.5
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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