

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: P949631

Luminaire Tested: **GALN-SB4B-827-U-T2R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P949631  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SB4B-827-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

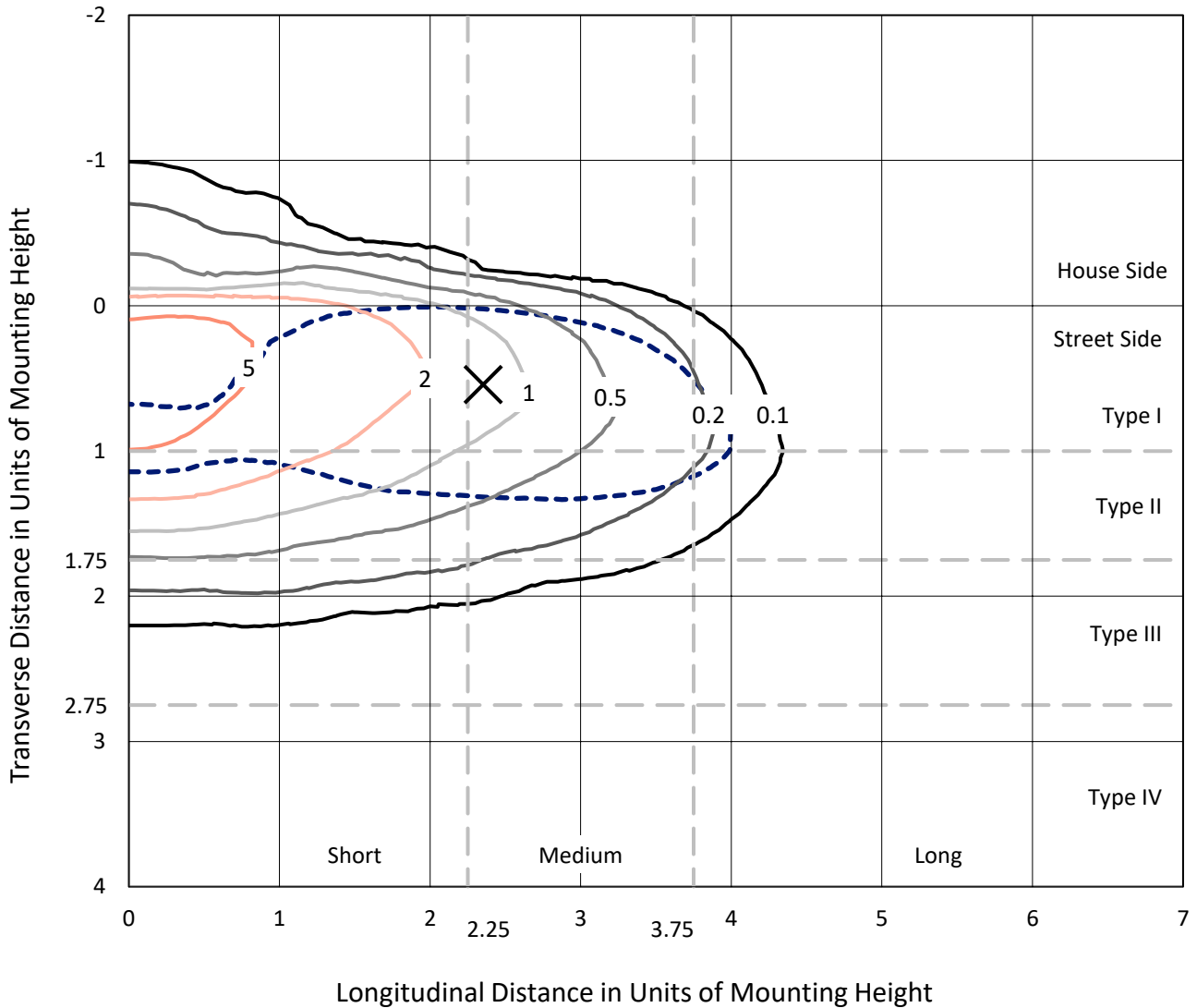
Lumens per Lamp: N/A  
Luminaire Lumens: 16616 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 147  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

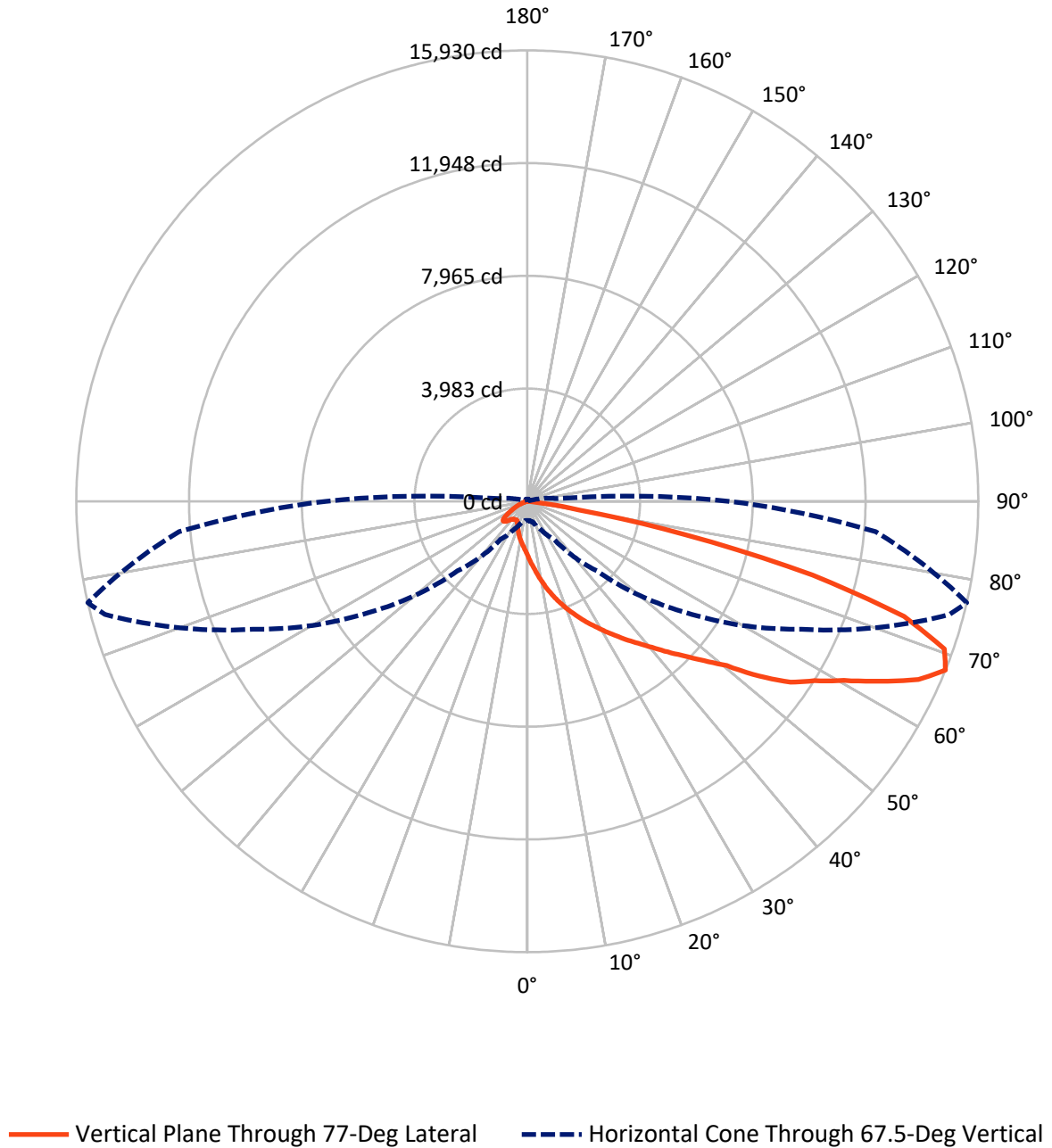
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1222.4	0.0	1222.4
	% Fixture	7.4	0.0	7.4
<b>Street Side</b>	Lumens	15393.6	0.0	15393.6
	% Fixture	92.6	0.0	92.6
<b>Total</b>	Lumens	16616.0	0.0	16616.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.6	1.2
10°-20°	684.8	4.1
20°-30°	1321.6	8.0
30°-40°	2294.3	13.8
40°-50°	3331.2	20.0
50°-60°	3825.5	23.0
60°-70°	3321.2	20.0
70°-80°	1564.3	9.4
80°-90°	77.4	0.5
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°	16616.0	100.0
0°-180°	16616.0	100.0

**Coefficient of Utilization**



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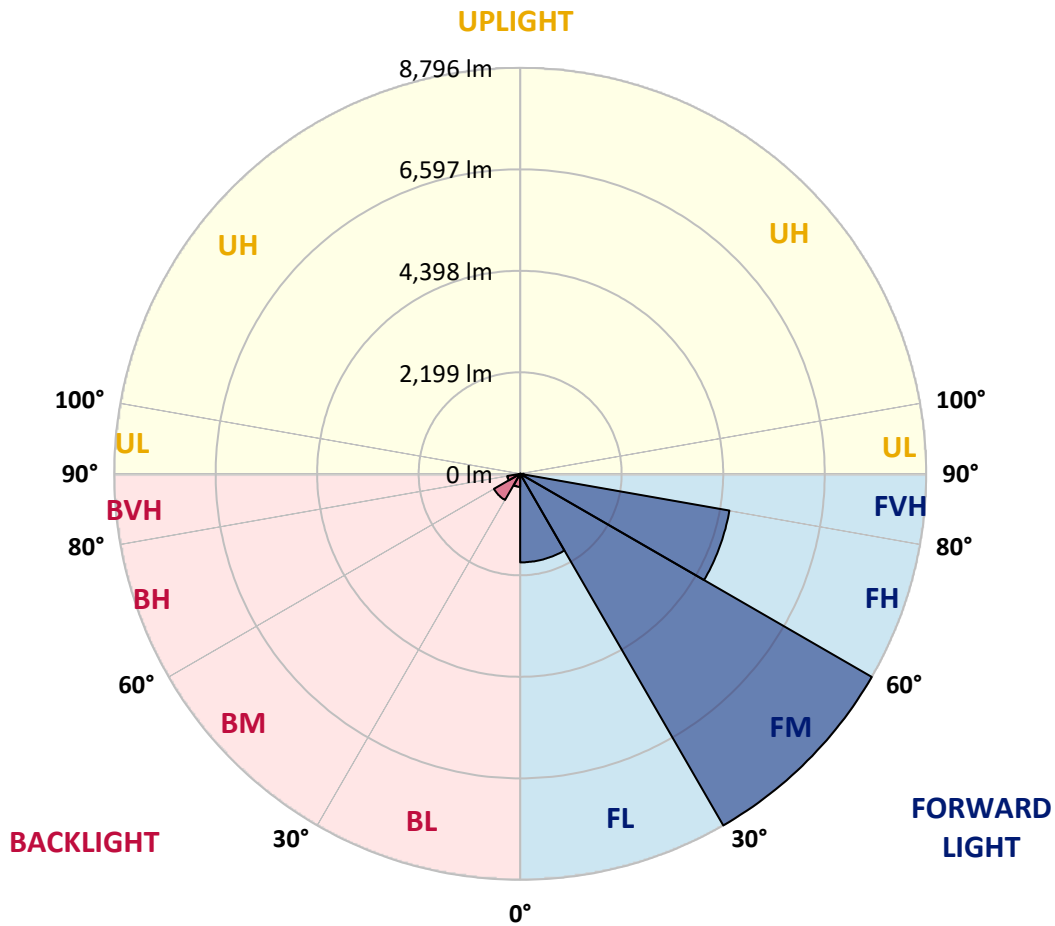
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1919.0	11.5			
FM (30°-60°)	8796.1	52.9			
FH (60°-80°)	4602.6	27.7			G2/5000
FVH (80°-90°)	75.9	0.5			G1/100
BL (0°-30°)	283.0	1.7	B1/500		
BM (30°-60°)	655.0	3.9	B1/1000		
BH (60°-80°)	283.0	1.7	B1/500		G1/500
BVH (80°-90°)	1.4	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 Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°
0°	1916.1	1916.1	1916.1	1916.1	1916.1	1916.1	1916.1	1916.1	1916.1	1916.1
2.5°	2652.8	2669.3	2645.6	2600.2	2532.1	2487.7	2379.4	2277.2	2163.7	2127.6
5°	3233.7	3248.1	3221.3	3171.8	3081.0	2994.3	2851.9	2638.3	2416.5	2345.3
7.5°	3664.0	3672.2	3661.9	3616.5	3529.8	3431.8	3272.9	3020.1	2691.0	2612.5
10°	3973.5	4000.3	3997.2	3979.7	3921.9	3842.5	3673.2	3385.4	2998.4	2897.3
12.5°	4178.8	4208.7	4226.3	4265.5	4262.4	4211.8	4063.3	3758.9	3304.9	3186.2
15°	4238.7	4270.7	4337.7	4428.5	4509.0	4534.8	4430.6	4125.2	3642.3	3490.6
17.5°	4204.6	4254.1	4334.6	4478.1	4654.5	4771.1	4759.7	4479.1	3948.7	3775.4
20°	4279.9	4327.4	4390.3	4511.1	4716.4	4927.9	5012.5	4817.5	4253.1	4071.5
22.5°	4696.8	4688.5	4694.7	4714.3	4837.1	5046.6	5221.0	5125.0	4554.4	4368.7
25°	5357.2	5320.0	5257.1	5150.8	5119.8	5221.0	5402.6	5397.4	4872.2	4673.1
27.5°	6114.5	6108.3	5960.8	5704.9	5560.4	5521.2	5607.9	5662.6	5186.9	4974.4
30°	6839.9	6856.4	6657.2	6372.5	6107.3	5953.5	5875.1	5914.3	5506.8	5299.4
32.5°	7471.3	7488.9	7272.2	6938.9	6610.8	6425.1	6260.0	6163.0	5855.5	5629.5
35°	8004.8	8022.3	7773.6	7405.3	7055.5	6887.3	6700.6	6435.4	6206.3	5995.8
37.5°	8481.5	8476.3	8143.0	7771.6	7428.0	7294.9	7196.9	6770.7	6567.5	6364.2
40°	8763.2	8784.8	8500.0	8090.4	7757.1	7660.1	7654.0	7186.5	6984.3	6787.2
42.5°	8845.7	8883.9	8677.5	8341.1	8038.8	7933.6	8095.6	7636.4	7469.3	7277.3
45°	8697.1	8734.3	8640.4	8407.2	8230.7	8162.6	8475.3	8102.8	7987.2	7797.4
47.5°	8263.8	8310.2	8332.9	8283.4	8281.3	8350.4	8815.8	8593.9	8602.2	8408.2
50°	7424.9	7503.3	7711.7	7887.1	8158.5	8499.0	9147.0	9126.3	9295.6	9128.4
52.5°	5899.9	6011.3	6729.5	7209.2	7819.0	8471.2	9511.2	9980.7	10512.1	10267.5
55°	4741.2	4741.2	5325.2	6222.8	7156.6	8287.5	9670.1	10535.8	11340.6	11282.8
57.5°	3865.2	3911.6	4284.1	5077.5	6198.1	7850.0	9768.1	10884.6	12008.2	11965.9
60°	2385.5	2485.6	3189.3	3972.5	5107.5	7071.0	9706.2	11237.4	12818.2	12852.2
62.5°	1343.4	1380.6	1694.2	2858.1	3971.4	6023.7	9232.6	11434.5	13854.1	13998.6
65°	927.6	946.2	1066.9	1778.8	2752.9	4795.8	8307.1	11311.7	14892.1	15184.1
67.5°	673.8	683.1	758.4	1086.5	1633.4	3477.2	6856.4	10692.6	15442.1	15930.1
70°	518.0	524.2	578.8	714.0	964.7	2146.2	4979.5	9461.7	15043.8	15626.7
72.5°	421.0	427.2	469.5	528.3	639.7	1269.1	3018.0	7683.9	13285.6	13915.0
75°	354.9	363.2	401.4	439.6	501.5	815.1	1415.6	5351.0	9991.0	10403.7
77.5°	197.1	181.6	326.1	364.2	423.0	515.9	662.4	3149.1	5595.5	5710.0
80°	122.8	126.9	259.0	293.0	325.0	260.0	303.4	1212.4	1939.8	1842.8
82.5°	7.2	16.5	199.1	211.5	222.9	111.4	114.5	411.7	467.4	429.2
85°	0.0	0.0	90.8	73.3	77.4	32.0	33.0	96.0	62.9	68.1
87.5°	0.0	0.0	0.0	2.1	0.0	3.1	6.2	8.3	3.1	4.1
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°
1916.1	0°	1916.1	1916.1	1916.1	1916.1	1916.1	1916.1	1916.1	1916.1	1916.1	1916.1
2014.1	2.5°	1941.9	1869.6	1723.1	1579.7	1463.1	1354.8	1277.4	1204.1	1167.0	1164.9
2144.1	5°	2000.7	1849.0	1556.0	1297.0	1088.6	921.4	813.1	735.7	696.5	683.1
2304.0	7.5°	2083.2	1855.2	1409.5	1049.3	803.8	660.4	598.4	573.7	565.4	556.1
2484.6	10°	2187.4	1869.6	1278.4	845.1	633.5	561.3	536.5	526.2	520.0	513.8
2687.9	12.5°	2304.0	1883.1	1148.4	701.6	557.2	520.0	502.5	490.1	481.9	474.6
2896.3	15°	2417.5	1891.3	1013.2	601.5	518.0	488.0	469.5	456.1	444.7	436.5
3100.6	17.5°	2530.0	1902.7	886.3	541.7	486.0	456.1	437.5	421.0	411.7	402.4
3315.2	20°	2654.8	1900.6	766.6	499.4	454.0	424.1	404.5	389.0	379.7	369.4
3542.2	22.5°	2770.4	1890.3	661.4	463.3	421.0	392.1	370.4	354.9	345.7	337.4
3774.4	25°	2903.5	1882.0	573.7	430.3	390.0	361.1	337.4	323.0	312.6	305.4
4007.5	27.5°	3031.5	1869.6	509.7	400.3	360.1	332.2	309.5	293.0	283.7	278.6
4248.0	30°	3157.3	1866.5	486.0	371.5	333.3	305.4	282.7	267.2	260.0	258.0
4512.1	32.5°	3309.0	1874.8	496.3	361.1	308.5	280.7	259.0	247.6	240.4	240.4
4806.2	35°	3471.0	1872.7	511.8	370.4	292.0	255.9	239.4	232.2	224.9	224.9
5132.2	37.5°	3674.3	1875.8	524.2	385.9	285.8	235.3	226.0	216.7	212.6	212.6
5489.2	40°	3977.6	1978.0	518.0	399.3	283.7	220.8	202.2	199.1	196.0	196.0
5892.7	42.5°	4349.1	2199.8	526.2	400.3	282.7	210.5	185.7	191.9	184.7	183.7
6347.7	45°	4755.6	2442.3	578.8	378.7	281.7	205.3	177.5	184.7	173.3	173.3
6874.9	47.5°	5159.0	2682.7	632.5	347.7	278.6	204.3	170.2	166.1	163.0	164.1
7562.1	50°	5715.2	2878.7	653.1	305.4	271.4	202.2	156.8	157.9	155.8	157.9
8531.0	52.5°	6320.9	2920.0	628.4	258.0	250.7	196.0	147.5	151.7	150.6	152.7
9213.0	55°	6698.5	2875.7	519.0	214.6	218.7	171.3	138.3	146.5	146.5	146.5
9879.6	57.5°	7088.5	2686.8	368.4	174.4	181.6	140.3	130.0	141.4	140.3	139.3
10682.3	60°	7369.2	2381.4	242.5	143.4	144.5	115.6	120.7	133.1	132.1	126.9
11509.8	62.5°	7578.6	2044.0	155.8	121.8	110.4	104.2	110.4	120.7	116.6	105.2
12211.5	65°	7554.9	1576.6	119.7	104.2	90.8	90.8	96.0	105.2	92.9	74.3
12345.6	67.5°	7114.3	1066.9	99.1	87.7	76.4	75.3	79.4	87.7	79.4	62.9
11658.4	70°	6327.1	697.5	79.4	68.1	60.9	55.7	64.0	75.3	67.1	50.6
9925.0	72.5°	5135.3	425.1	59.8	49.5	44.4	36.1	50.6	61.9	53.7	37.1
6901.8	75°	3322.4	216.7	41.3	32.0	23.7	21.7	37.1	46.4	37.1	22.7
3062.4	77.5°	1271.2	90.8	22.7	14.4	12.4	10.3	20.6	27.9	15.5	5.2
593.3	80°	244.5	38.2	11.3	7.2	6.2	4.1	3.1	2.1	0.0	0.0
105.2	82.5°	42.3	12.4	4.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0
20.6	85°	14.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.2	87.5°	5.2	0.0	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

(END O

<u>180°</u>
1916.1
1162.8
681.0
554.1
511.8
472.6
435.4
401.4
368.4
336.4
304.4
278.6
256.9
240.4
224.9
212.6
196.0
182.6
173.3
164.1
157.9
152.7
146.5
139.3
126.9
103.2
72.2
60.9
48.5
35.1
19.6
4.1
0.0
0.0
0.0
0.0
0.0

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