

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P638701

Luminaire Tested: GWS-SA4F-735-U-SLL-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638701
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-40)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4F-735-U-SLL-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: (64) 3500K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20318.5 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

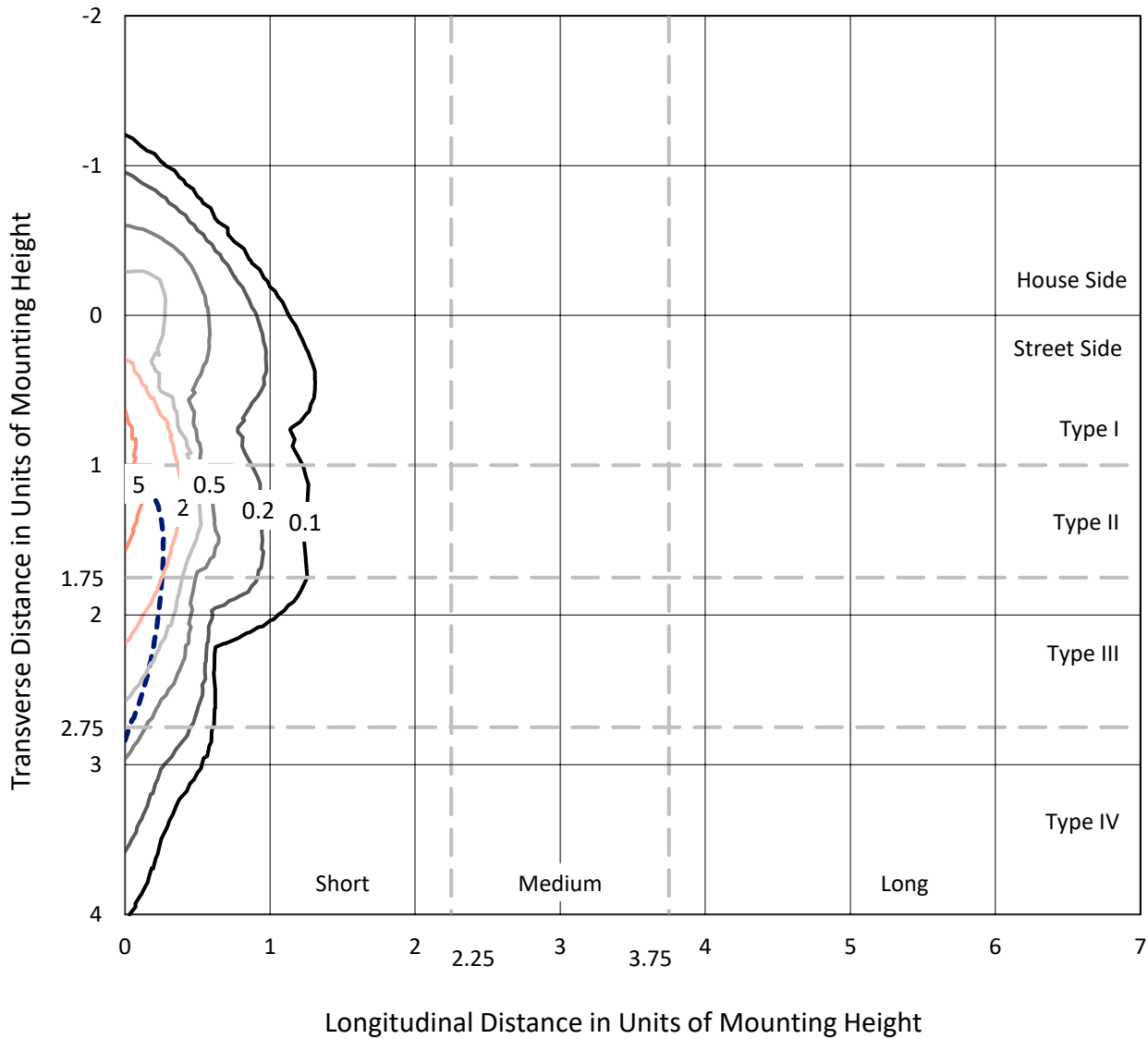
Input Watts (W): 225.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

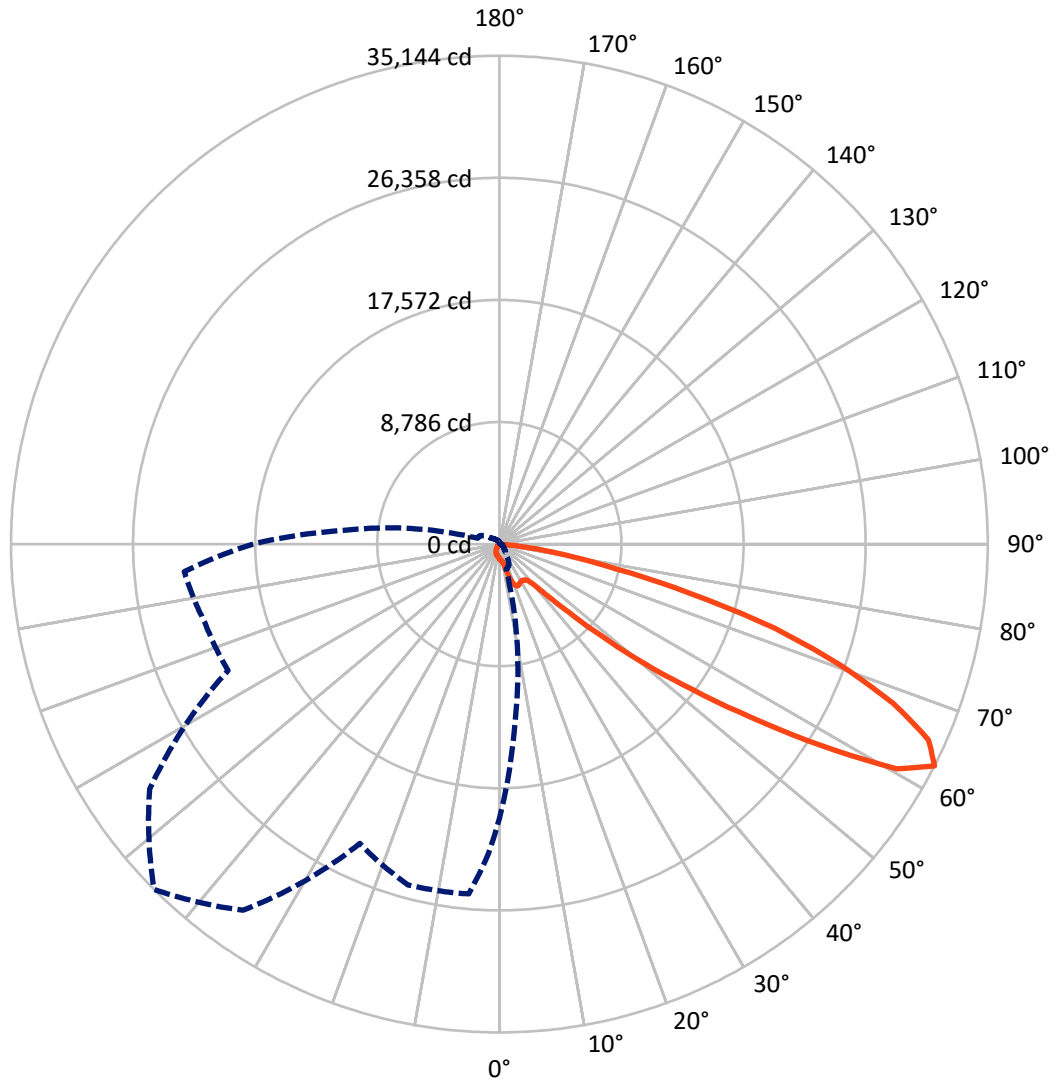
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2360.7	0.0	2360.7
	% Fixture	11.6	0.0	11.6
Street Side	Lumens	17957.8	0.0	17957.8
	% Fixture	88.4	0.0	88.4
Total	Lumens	20318.5	0.0	20318.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.0	0.4
10°-20°	311.9	1.5
20°-30°	704.6	3.5
30°-40°	1213.8	6.0
40°-50°	2289.7	11.3
50°-60°	5112.3	25.2
60°-70°	6837.6	33.7
70°-80°	3428.9	16.9
80°-90°	328.7	1.6
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°	20318.5	100.0
0°-180°	20318.5	100.0

Coefficient of Utilization



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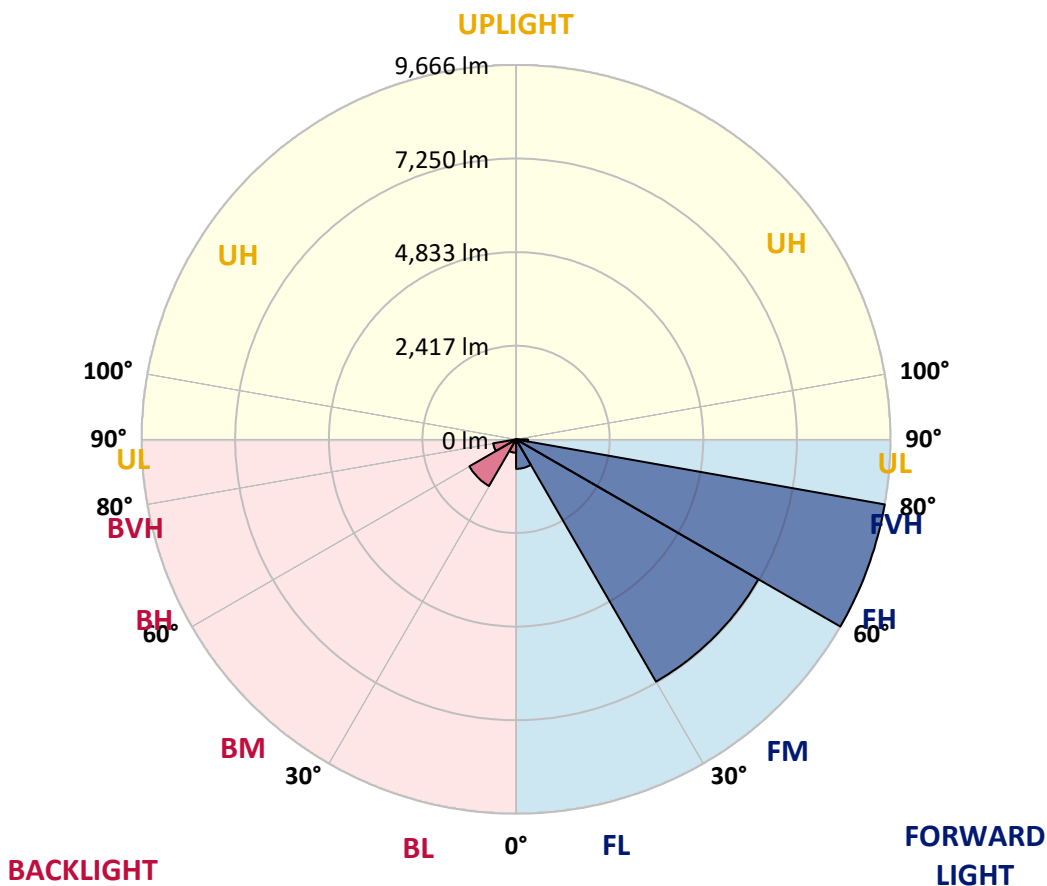
CATALOG NUMBER: GWS-SA4F-735-U-SLL-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	761.0	3.7			
FM (30°-60°)	7223.8	35.6			
FH (60°-80°)	9666.2	47.6			G4/12000
FVH (80°-90°)	306.8	1.5			G3/500
BL (0°-30°)	346.5	1.7	B1/500		
BM (30°-60°)	1392.0	6.9	B2/2500		
BH (60°-80°)	600.3	3.0	B2/1000		G2/1000
BVH (80°-90°)	21.9	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7
2.5°	1041.7	1039.3	1034.5	1020.1	1008.0	1000.8	986.4	986.4	984.0	979.2	969.5
5°	1008.0	998.4	988.8	962.3	933.5	916.6	897.4	895.0	895.0	890.2	887.7
7.5°	955.1	945.5	933.5	890.2	863.7	846.8	830.0	827.6	820.4	820.4	820.4
10°	926.2	911.8	892.6	844.4	818.0	803.5	791.5	784.3	779.5	772.3	769.9
12.5°	988.8	962.3	921.4	834.8	798.7	779.5	765.0	760.2	745.8	736.2	729.0
15°	1183.7	1118.7	1036.9	856.5	791.5	762.6	743.4	733.8	721.7	704.9	692.9
17.5°	1503.6	1409.8	1272.7	926.2	784.3	748.2	724.2	707.3	690.5	671.2	656.8
20°	1946.3	1806.8	1643.2	1053.7	784.3	731.4	702.5	680.8	656.8	635.1	618.3
22.5°	2509.3	2369.7	2090.7	1270.3	793.9	709.7	676.0	647.2	618.3	599.0	579.8
25°	3139.6	2942.3	2682.5	1532.5	820.4	680.8	644.8	615.9	589.4	565.4	543.7
27.5°	3842.1	3628.0	3281.5	1905.4	878.1	652.0	611.1	584.6	560.6	536.5	507.6
30°	4489.2	4361.7	4008.1	2352.9	971.9	632.7	584.6	560.6	536.5	505.2	478.8
32.5°	5266.3	5040.2	4749.1	2862.9	1097.1	613.5	563.0	529.3	510.0	481.2	452.3
35°	6048.2	5855.8	5473.2	3490.8	1236.6	594.2	536.5	505.2	488.4	454.7	423.4
37.5°	6854.2	6810.9	6433.1	4186.1	1373.7	572.6	505.2	486.0	469.1	430.6	394.6
40°	7648.1	7568.7	7219.8	4980.0	1457.9	548.5	478.8	466.7	447.5	404.2	363.3
42.5°	8408.3	8348.2	8009.0	5740.3	1445.9	526.9	452.3	437.9	423.4	380.1	329.6
45°	9341.8	9243.1	8814.9	6303.2	1323.2	550.9	425.8	401.8	399.4	358.5	295.9
47.5°	11088.4	10763.6	10037.1	6736.3	1200.5	613.5	397.0	368.1	384.9	336.8	262.2
50°	13535.1	13152.6	12101.2	7073.1	1198.1	695.3	392.1	336.8	372.9	320.0	233.4
52.5°	15993.9	15320.2	14042.7	7253.5	1287.1	755.4	435.5	305.5	358.5	303.1	211.7
55°	18349.1	16951.4	14855.9	6656.9	1356.9	820.4	514.8	288.7	332.0	283.9	199.7
57.5°	20593.8	18262.5	15209.6	5266.3	1590.2	846.8	563.0	295.9	293.5	259.8	190.1
60°	20901.7	18200.0	14495.0	3062.6	1753.8	801.1	543.7	329.6	257.4	231.0	173.2
62.5°	19737.3	16989.9	12866.3	1910.2	1628.7	784.3	483.6	375.3	233.4	204.5	151.6
65°	17969.0	15091.7	10727.5	1231.8	1234.2	870.9	423.4	368.1	218.9	180.4	129.9
67.5°	15204.7	12630.5	8451.6	825.2	697.7	743.4	370.5	252.6	214.1	154.0	101.0
70°	11098.0	8990.5	5502.1	550.9	416.2	594.2	310.4	180.4	202.1	127.5	72.2
72.5°	8112.4	6041.0	3072.2	360.9	235.8	346.4	228.6	129.9	156.4	93.8	50.5
75°	5838.9	4157.2	1753.8	231.0	156.4	190.1	149.2	89.0	101.0	74.6	45.7
77.5°	2810.0	2025.7	796.3	127.5	105.9	96.2	79.4	55.3	62.6	67.4	40.9
80°	105.9	79.4	60.1	62.6	67.4	43.3	36.1	28.9	36.1	45.7	21.7
82.5°	0.0	0.0	0.0	7.2	9.6	12.0	14.4	12.0	14.4	16.8	2.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7
2.5°	976.8	971.9	976.8	981.6	986.4	991.2	984.0	988.8	993.6	981.6	986.4
5°	899.8	897.4	911.8	919.0	928.6	933.5	928.6	928.6	926.2	911.8	911.8
7.5°	832.4	834.8	846.8	863.7	875.7	882.9	878.1	875.7	868.5	846.8	846.8
10°	781.9	781.9	801.1	815.6	832.4	839.6	834.8	827.6	820.4	798.7	796.3
12.5°	741.0	741.0	755.4	779.5	798.7	808.4	805.9	796.3	784.3	762.6	760.2
15°	702.5	700.1	721.7	743.4	769.9	781.9	777.1	769.9	748.2	729.0	724.2
17.5°	664.0	661.6	680.8	709.7	738.6	755.4	753.0	736.2	716.9	692.9	688.1
20°	625.5	620.7	644.8	673.6	702.5	719.3	714.5	700.1	676.0	652.0	647.2
22.5°	587.0	584.6	601.5	625.5	652.0	666.4	664.0	652.0	627.9	606.3	606.3
25°	543.7	543.7	555.7	572.6	591.8	599.0	601.5	596.6	582.2	570.2	570.2
27.5°	507.6	500.4	505.2	510.0	519.7	531.7	531.7	536.5	538.9	534.1	536.5
30°	478.8	466.7	459.5	449.9	445.1	449.9	454.7	471.5	488.4	498.0	502.8
32.5°	445.1	430.6	411.4	384.9	368.1	363.3	377.7	409.0	440.3	461.9	473.9
35°	411.4	392.1	356.1	317.6	295.9	288.7	305.5	341.6	387.3	425.8	442.7
37.5°	377.7	351.2	300.7	255.0	231.0	226.1	243.0	281.5	334.4	387.3	409.0
40°	339.2	307.9	247.8	199.7	180.4	175.6	190.1	228.6	283.9	344.0	377.7
42.5°	300.7	262.2	199.7	158.8	139.5	139.5	158.8	187.7	238.2	303.1	344.0
45°	262.2	221.3	163.6	127.5	115.5	117.9	129.9	158.8	199.7	267.0	305.5
47.5°	226.1	190.1	134.7	105.9	96.2	98.6	113.1	137.1	170.8	231.0	271.9
50°	194.9	161.2	117.9	89.0	81.8	86.6	101.0	122.7	151.6	204.5	238.2
52.5°	175.6	144.3	108.3	77.0	72.2	77.0	91.4	110.7	137.1	180.4	214.1
55°	166.0	141.9	108.3	69.8	62.6	67.4	81.8	101.0	122.7	163.6	192.5
57.5°	163.6	146.8	115.5	62.6	52.9	57.7	72.2	91.4	113.1	149.2	173.2
60°	154.0	139.5	113.1	50.5	40.9	48.1	60.1	79.4	103.5	139.5	161.2
62.5°	134.7	122.7	98.6	40.9	31.3	36.1	50.5	69.8	93.8	127.5	151.6
65°	110.7	98.6	77.0	26.5	19.2	24.1	38.5	60.1	81.8	115.5	137.1
67.5°	81.8	69.8	52.9	16.8	9.6	16.8	31.3	50.5	74.6	103.5	125.1
70°	50.5	40.9	28.9	9.6	7.2	14.4	28.9	48.1	67.4	96.2	117.9
72.5°	28.9	19.2	12.0	4.8	7.2	14.4	28.9	48.1	65.0	91.4	110.7
75°	21.7	12.0	4.8	2.4	4.8	12.0	26.5	43.3	62.6	86.6	105.9
77.5°	14.4	7.2	2.4	0.0	2.4	9.6	24.1	40.9	57.7	81.8	101.0
80°	2.4	0.0	0.0	0.0	0.0	7.2	21.7	36.1	52.9	72.2	89.0
82.5°	0.0	0.0	0.0	0.0	0.0	2.4	16.8	31.3	45.7	60.1	72.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	9.6	24.1	36.1	45.7	50.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	24.1	28.9	33.7
90°	0.0	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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7
2.5°	984.0	998.4	998.4	1008.0	1020.1	1041.7	1053.7	1070.6	1082.6	1094.6	1099.5
5°	909.4	911.8	914.2	919.0	933.5	957.5	979.2	1005.6	1036.9	1061.0	1075.4
7.5°	846.8	846.8	846.8	854.1	868.5	885.3	907.0	943.1	979.2	1008.0	1032.1
10°	793.9	801.1	803.5	815.6	832.4	854.1	878.1	909.4	950.3	988.8	1032.1
12.5°	760.2	767.5	779.5	791.5	808.4	832.4	858.9	899.8	984.0	1063.4	1154.8
15°	729.0	738.6	753.0	769.9	789.1	815.6	844.4	928.6	1125.9	1275.1	1419.4
17.5°	695.3	709.7	729.0	745.8	769.9	798.7	834.8	998.4	1385.7	1633.5	1878.9
20°	652.0	671.2	692.9	719.3	748.2	781.9	834.8	1142.8	1761.1	2117.1	2441.9
22.5°	611.1	630.3	656.8	690.5	724.2	757.8	846.8	1361.7	2244.6	2694.5	3105.9
25°	577.4	601.5	627.9	656.8	695.3	733.8	875.7	1669.6	2826.8	3406.6	3697.7
27.5°	546.1	575.0	601.5	625.5	659.2	702.5	940.7	2081.0	3514.9	4104.3	4332.9
30°	514.8	548.5	575.0	599.0	632.7	678.4	1039.3	2605.5	4279.9	4852.5	4876.6
32.5°	488.4	519.7	550.9	575.0	606.3	659.2	1176.4	3219.0	5064.2	5617.6	5391.4
35°	459.5	495.6	524.5	550.9	584.6	642.4	1335.2	3880.6	5855.8	6320.1	5903.9
37.5°	430.6	471.5	507.6	526.9	560.6	625.5	1450.7	4571.0	6664.1	7005.7	6353.8
40°	404.2	449.9	490.8	510.0	526.9	603.9	1467.5	5278.4	7484.5	7681.8	6777.2
42.5°	375.3	425.8	461.9	488.4	502.8	589.4	1366.5	5875.0	8172.6	8355.4	7330.5
45°	344.0	404.2	433.0	452.3	481.2	599.0	1236.6	6336.9	8959.3	9274.4	8242.3
47.5°	312.8	380.1	404.2	418.6	457.1	656.8	1188.5	6644.9	10256.0	10910.4	9779.6
50°	283.9	358.5	384.9	382.5	452.3	731.4	1241.4	6878.2	12204.7	12974.6	11887.1
52.5°	252.6	334.4	365.7	356.1	488.4	789.1	1347.3	7063.5	13703.5	15394.8	14718.8
55°	226.1	307.9	336.8	334.4	555.7	832.4	1429.1	6086.7	14324.2	17644.2	17908.9
57.5°	206.9	279.1	303.1	344.0	599.0	832.4	1652.8	4320.8	14336.2	19299.4	22143.1
60°	190.1	252.6	269.5	377.7	582.2	789.1	1636.0	2646.4	13212.7	19186.4	24395.0
62.5°	175.6	228.6	250.2	387.3	514.8	781.9	1477.2	1640.8	11268.8	17726.0	22761.4
65°	163.6	209.3	240.6	356.1	466.7	837.2	996.0	1178.8	9139.7	16061.2	20887.3
67.5°	151.6	192.5	255.0	291.1	423.4	748.2	719.3	837.2	7174.1	14235.2	19167.1
70°	141.9	182.8	269.5	238.2	370.5	584.6	510.0	635.1	5492.5	11877.5	16744.5
72.5°	134.7	170.8	226.1	187.7	300.7	452.3	356.1	461.9	3589.5	9272.0	13650.6
75°	127.5	156.4	166.0	151.6	223.7	295.9	269.5	310.4	2138.8	6777.2	10357.0
77.5°	125.1	146.8	134.7	122.7	151.6	175.6	204.5	209.3	1044.1	3389.8	5427.5
80°	110.7	132.3	115.5	101.0	103.5	115.5	151.6	139.5	238.2	861.3	1448.3
82.5°	86.6	103.5	96.2	84.2	84.2	84.2	101.0	93.8	77.0	387.3	654.4
85°	60.1	72.2	72.2	67.4	65.0	65.0	62.6	60.1	21.7	24.1	36.1
87.5°	40.9	50.5	52.9	50.5	43.3	38.5	33.7	28.9	9.6	0.0	4.8
90°	0.0	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):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7	1053.7
2.5°	1116.3	1123.5	1123.5	1113.9	1106.7	1087.4	1068.2	1048.9	1044.1	1041.7
5°	1116.3	1145.2	1159.6	1157.2	1140.4	1109.1	1068.2	1024.9	1012.8	1008.0
7.5°	1099.5	1154.8	1198.1	1205.3	1174.0	1118.7	1044.1	979.2	962.3	955.1
10°	1138.0	1246.2	1332.8	1344.9	1308.8	1200.5	1080.2	969.5	943.1	926.2
12.5°	1344.9	1522.9	1628.7	1679.3	1609.5	1472.4	1272.7	1075.4	1015.3	988.8
15°	1763.5	2016.1	2218.2	2218.2	2153.2	1910.2	1657.6	1337.6	1255.8	1183.7
17.5°	2300.0	2617.5	2795.6	2776.3	2677.7	2506.9	2203.7	1744.2	1578.2	1503.6
20°	2911.0	3101.1	3142.0	3130.0	3086.7	2988.0	2778.7	2285.5	2061.8	1946.3
22.5°	3440.3	3389.8	3329.6	3281.5	3269.5	3298.4	3269.5	2889.4	2713.8	2509.3
25°	3798.8	3512.5	3332.1	3245.4	3286.3	3452.3	3632.8	3490.8	3351.3	3139.6
27.5°	3993.7	3498.1	3238.2	3149.2	3219.0	3454.7	3846.9	4087.5	3943.1	3842.1
30°	4099.5	3486.0	3178.1	3091.5	3197.3	3493.2	3996.1	4645.6	4650.4	4489.2
32.5°	4251.1	3563.0	3190.1	3110.7	3252.7	3608.7	4183.7	5213.4	5352.9	5266.3
35°	4421.9	3680.9	3245.4	3173.3	3348.9	3762.7	4393.0	5786.0	6077.1	6048.2
37.5°	4583.1	3813.2	3375.4	3305.6	3495.6	3895.0	4595.1	6348.9	6753.1	6854.2
40°	4751.5	3998.5	3774.7	3842.1	3947.9	4104.3	4775.5	6837.3	7496.5	7648.1
42.5°	5148.4	4640.8	4982.4	5109.9	5124.4	4802.0	5170.1	7462.8	8227.9	8408.3
45°	6033.8	5783.6	6762.7	6943.2	6849.4	5872.6	6120.4	8365.0	9250.4	9341.8
47.5°	7152.5	7268.0	9199.8	9822.9	9260.0	7135.6	7272.8	10263.2	11122.1	11088.4
50°	8456.4	9002.6	11966.5	13436.5	12089.2	8776.4	8600.8	12596.8	13638.6	13535.1
52.5°	9998.6	11018.6	15291.4	17379.6	16104.5	10621.7	10549.5	15688.3	16323.4	15993.9
55°	11940.1	12964.9	19116.6	22034.9	20220.9	12873.5	13121.3	19273.0	19395.7	18349.1
57.5°	14836.7	15503.1	23625.1	27373.4	24517.7	15933.7	17730.9	24043.7	22576.2	20593.8
60°	20095.8	18767.8	27982.0	32834.6	29088.7	20237.7	23810.3	26870.5	23634.7	20901.7
62.5°	21926.6	21539.3	30710.2	35144.1	32163.3	23771.8	25391.0	25268.3	22263.4	19737.3
65°	19152.7	20848.8	30221.8	33924.4	31768.8	23189.6	22785.5	23500.0	20718.9	17969.0
67.5°	17692.4	19227.3	28371.8	30558.7	29581.9	21214.5	20309.9	20115.0	17394.0	15204.7
70°	16220.0	17740.5	25689.3	25961.1	25506.4	17995.5	16807.0	15500.7	13001.0	11098.0
72.5°	14449.3	15286.5	21967.5	20678.0	20163.1	14134.2	13884.0	11673.0	9746.0	8112.4
75°	12601.7	12358.7	17127.0	14191.9	14576.8	10997.0	11725.9	8571.9	7140.5	5838.9
77.5°	9166.2	8985.7	11470.9	8620.0	9546.3	7203.0	6471.6	3421.1	3257.5	2810.0
80°	5114.8	6166.1	6195.0	4830.9	6026.6	4696.1	1619.1	113.1	72.2	105.9
82.5°	2376.9	2651.2	3358.5	2239.8	3437.9	2326.4	334.4	0.0	0.0	0.0
85°	769.9	1125.9	943.1	329.6	832.4	786.7	55.3	0.0	0.0	0.0
87.5°	45.7	93.8	24.1	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

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