

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: LUMARK

Report Number: P303576

Luminaire Tested: **WPLLED45-C**

Issue Date: 6/24/2020

Test Information

Test Method: LM-79-08
Report Number: P303576
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1906-360-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 6/24/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: WPLLED45-C
Description: LARGE LED WALL PACK - 120W, 5000K
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15678.1 lumens
Efficiency: N/A
Efficacy: 129.5 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.38' x L: 0.25' x H: 0.68')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U4 - G5

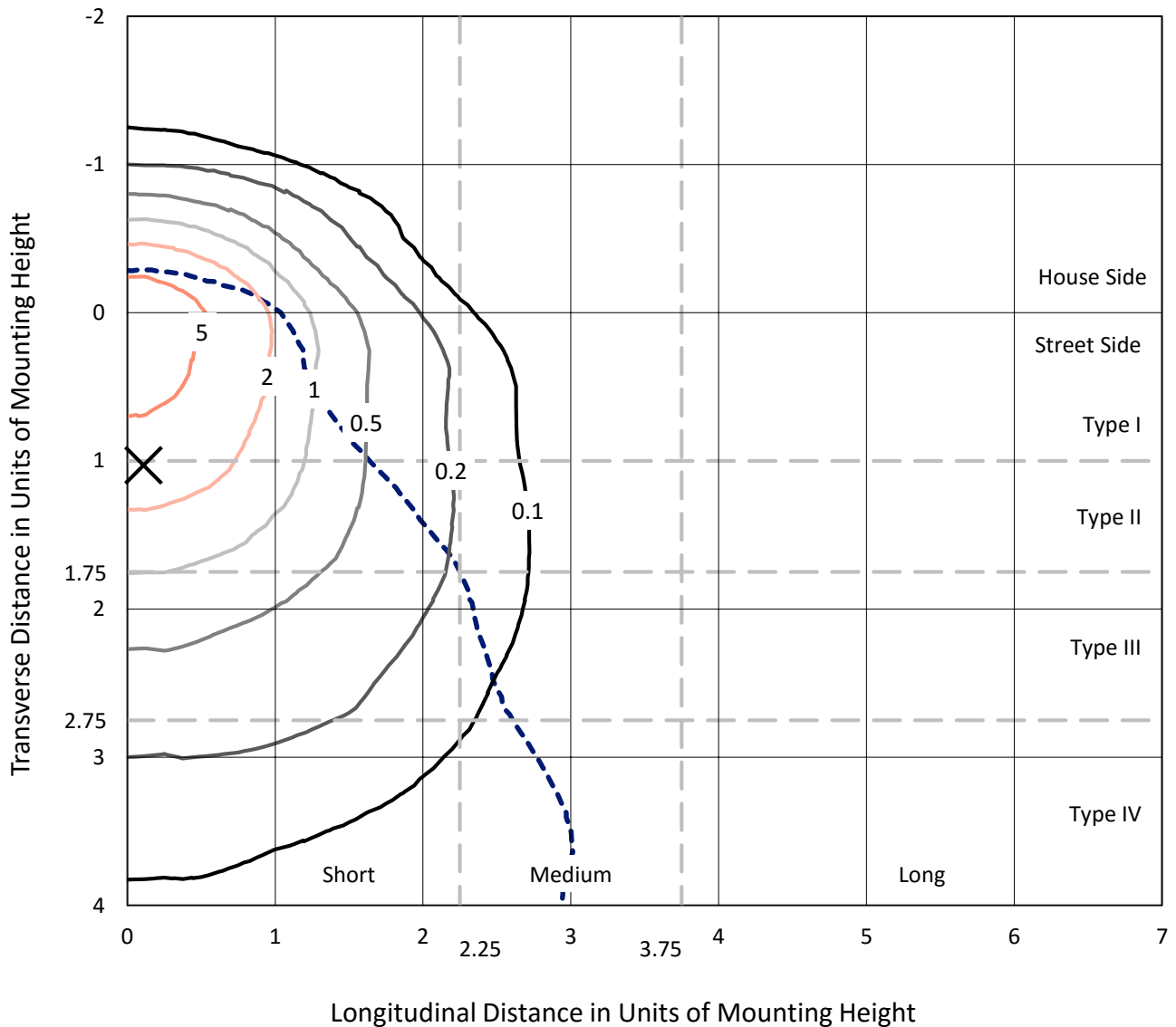
Input Watts (W): 121.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

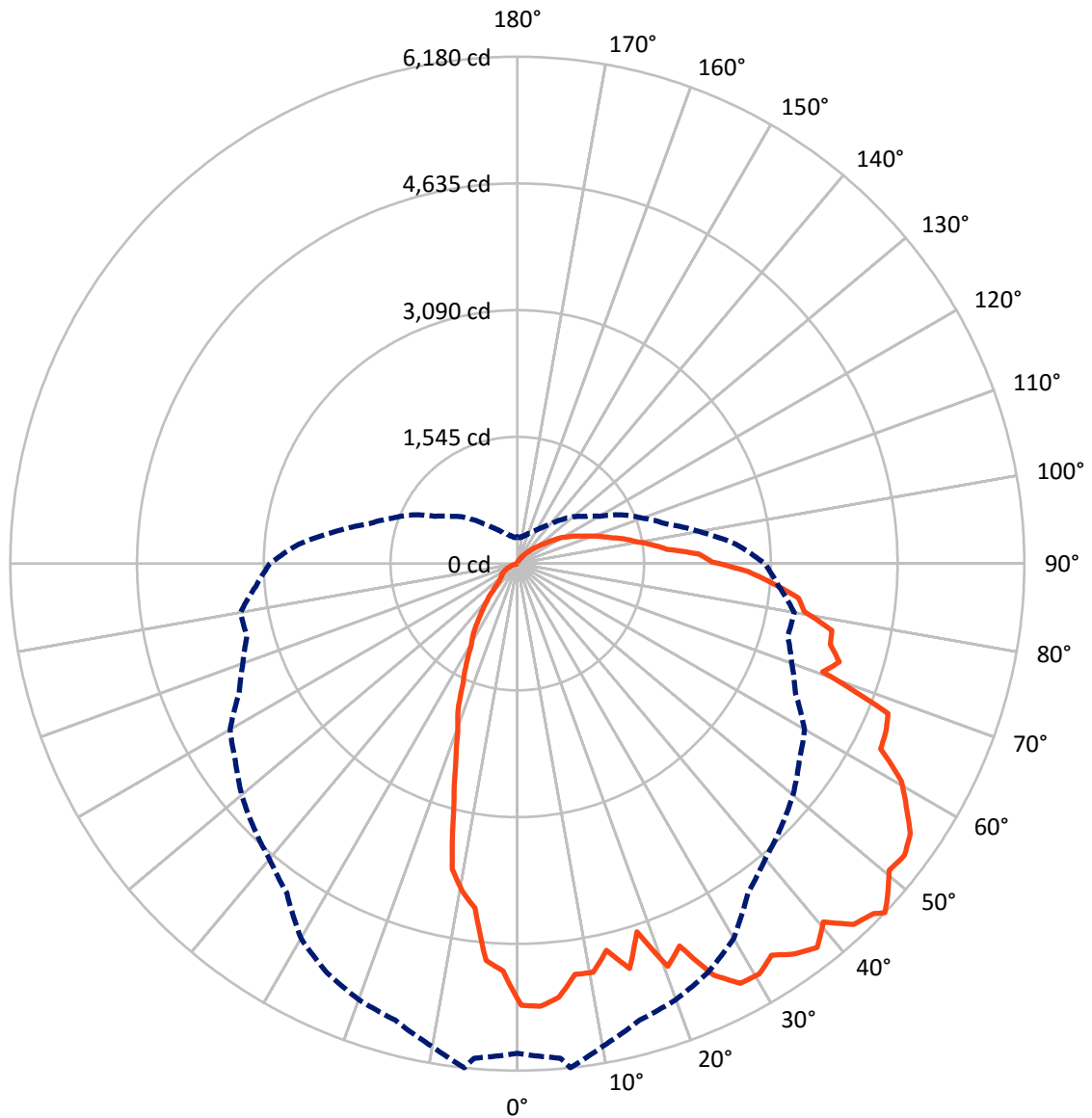
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 6-Deg Lateral - - - Horizontal Cone Through 46-Deg Vertical



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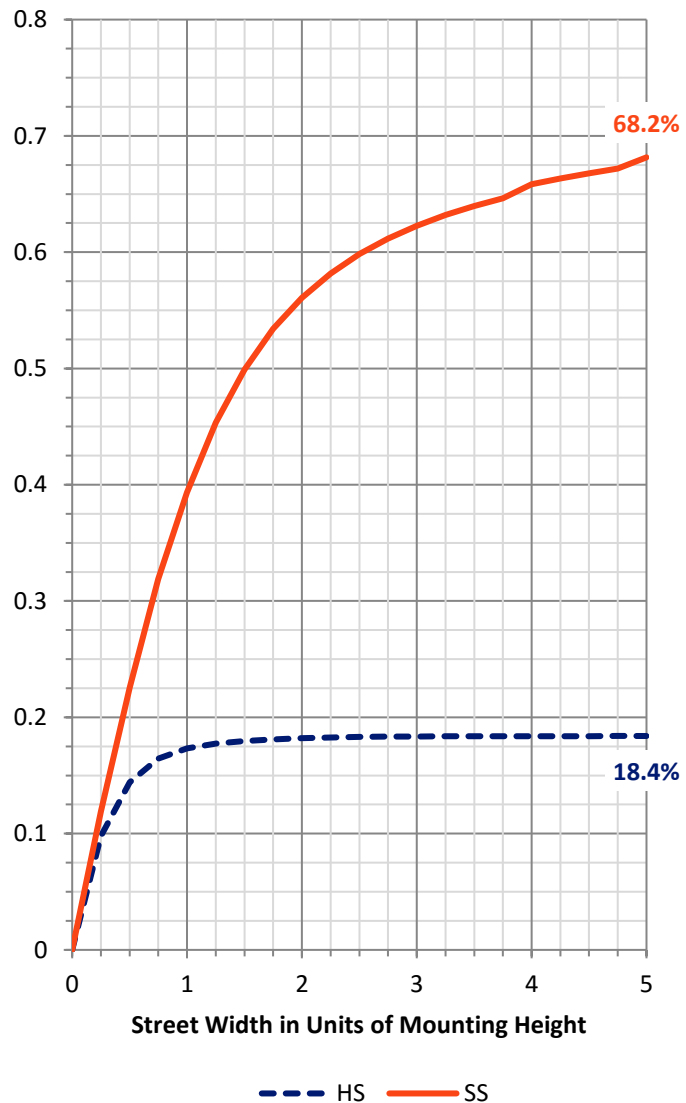
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2912.8	19.6	2932.4
	% Fixture	18.6	0.1	18.7
Street Side	Lumens	11412.9	1332.8	12745.7
	% Fixture	72.8	8.5	81.3
Total	Lumens	14325.8	1352.3	15678.1
	% Fixture	91.4	8.6	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	479.0	3.1
10°-20°	1249.3	8.0
20°-30°	1747.6	11.1
30°-40°	2082.5	13.3
40°-50°	2212.5	14.1
50°-60°	2152.1	13.7
60°-70°	1891.8	12.1
70°-80°	1469.5	9.4
80°-90°	1041.6	6.6
90°-100°	610.7	3.9
100°-110°	353.5	2.3
110°-120°	207.5	1.3
120°-130°	107.7	0.7
130°-140°	47.8	0.3
140°-150°	18.2	0.1
150°-160°	5.8	0.0
160°-170°	1.2	0.0
170°-180°	0.0	0.0
0°-90°	14325.8	91.4
0°-180°	15678.1	100.0



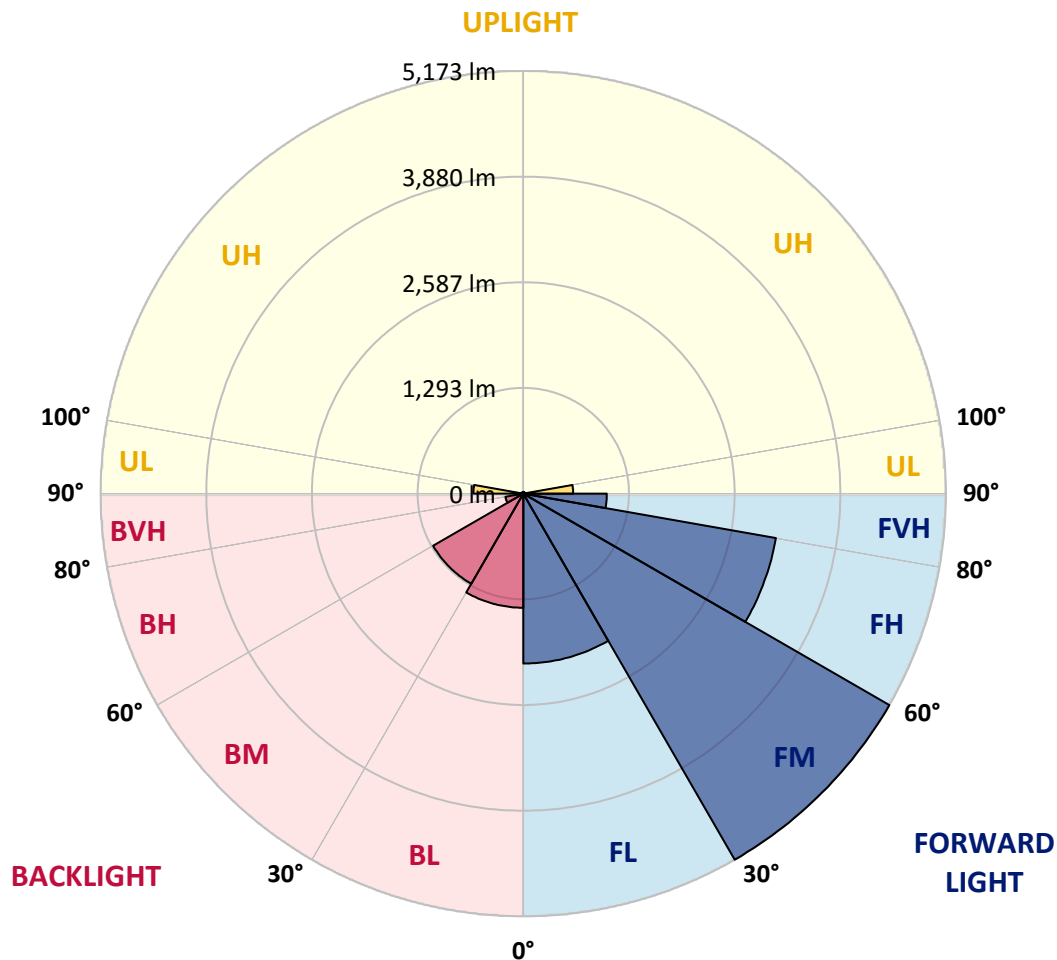
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2079.3	13.3			
FM	(30°-60°)	5173.1	33.0			
FH	(60°-80°)	3138.9	20.0			G2/5000
FVH	(80°-90°)	1021.7	6.5			G5
BL	(0°-30°)	1396.6	8.9	B3/2500		
BM	(30°-60°)	1274.0	8.1	B2/2500		
BH	(60°-80°)	222.3	1.4	B1/500		G1/500
BVH	(80°-90°)	19.9	0.1			G1/100
UL	(90°-100°)	610.7	3.9		U4/1000	
UH	(100°-180°)	19.6	0.1		U2/50	

BUG Rating: B3-U4-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	6°	10°	15°	20°	25°	30°	35°	40°	45°
0°	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3
2.5°	5547.2	5474.7	5403.1	5358.4	5238.2	5121.9	5225.3	5197.4	5246.1	5210.4	5392.2
5°	5495.6	5402.1	5308.7	5275.9	5269.0	5335.6	5522.4	5472.7	5496.6	5469.7	5674.4
7.5°	5258.1	5137.8	5057.3	5072.2	5115.9	4975.8	5042.4	5115.9	5097.1	4962.9	5279.9
10°	5222.3	5122.9	5067.2	5171.6	5058.3	5017.6	5189.5	4999.7	5077.2	4982.8	5086.1
12.5°	4944.0	4855.6	4836.7	4888.4	4745.3	4801.9	4837.7	4918.2	4917.2	5125.9	5138.8
15°	5149.7	5069.2	5121.9	5086.1	5064.3	4944.0	4965.9	4732.3	4717.4	4788.0	4961.9
17.5°	4768.1	4714.5	4717.4	4594.2	4526.6	4525.6	4691.6	4865.5	5068.2	4762.2	4760.2
20°	5192.5	5215.3	5240.2	5184.5	5064.3	4892.3	4832.7	4586.3	4525.6	4733.3	5102.0
22.5°	5076.2	5085.1	5064.3	4970.9	4791.0	4772.1	4963.9	5076.2	4833.7	4460.1	4635.0
25°	5501.5	5514.4	5556.2	5506.5	5349.5	5199.4	5033.5	4782.0	4781.0	4947.0	4644.9
27.5°	5775.8	5720.2	5792.7	5582.0	5338.5	5203.4	5298.8	5268.0	4877.4	4630.0	4904.3
30°	5715.2	5729.1	5808.6	5734.1	5650.6	5583.0	5508.5	5221.3	5101.0	4966.9	4632.0
32.5°	5581.0	5604.9	5690.3	5571.1	5477.7	5397.2	5461.8	5425.0	5191.5	4956.9	4926.1
35°	5731.1	5749.0	5842.4	5687.4	5507.5	5370.3	5374.3	5294.8	5105.0	5054.3	4872.5
37.5°	5742.0	5787.7	5936.8	5803.6	5663.5	5542.3	5428.0	5237.2	5045.4	4922.2	4911.2
40°	5559.2	5611.8	5745.0	5570.1	5403.1	5384.3	5421.0	5285.9	4979.8	4868.5	4759.2
42.5°	5835.4	5880.2	6012.3	5752.0	5482.6	5353.5	5330.6	5217.3	4930.1	4784.0	4655.8
45°	5911.0	5978.5	6087.9	5866.2	5684.4	5565.1	5457.8	5187.5	4896.3	4730.4	4582.3
46°	5968.6	6051.1	6180.3	5976.5	5760.9	5654.6	5498.5	5274.9	4900.3	4701.5	4545.5
47.5°	5859.3	5947.7	6072.0	5918.9	5784.8	5698.3	5627.7	5363.4	4983.8	4694.6	4472.0
50°	5680.4	5745.0	5875.2	5739.0	5586.0	5560.2	5585.0	5465.7	5072.2	4788.0	4418.3
52.5°	5708.2	5769.8	5910.0	5807.6	5656.6	5597.9	5486.6	5295.8	5000.7	4820.8	4454.1
55°	5706.2	5708.2	5813.6	5585.0	5242.2	5243.1	5340.5	5292.8	4988.7	4766.1	4386.5
57.5°	5377.3	5417.1	5592.0	5543.3	5345.5	5305.8	5306.7	5185.5	4894.3	4685.6	4322.9
60°	5234.2	5214.3	5379.3	5313.7	5113.0	5134.8	5110.0	4899.3	4664.8	4605.1	4263.3
62.5°	4826.8	4804.9	4971.8	4953.0	4876.4	4900.3	4925.1	4946.0	4668.7	4407.4	4071.5
65°	4808.9	4774.1	4939.1	4831.7	4641.9	4598.2	4600.2	4519.7	4384.5	4340.8	3960.2
67.5°	4724.4	4726.4	4873.5	4832.7	4651.9	4570.4	4489.9	4376.6	4166.9	4049.6	3778.3
70°	3844.9	3807.1	3949.3	3994.0	4103.3	4288.1	4200.7	4048.6	3944.3	3849.9	3574.6
72.5°	4021.8	3974.1	4104.3	4128.1	4202.7	4213.6	4236.5	4334.8	3871.7	3512.0	3196.0
75°	3860.8	3843.9	3940.3	3848.9	3678.0	3660.1	3640.2	3620.3	3464.3	3301.3	2912.7
77.5°	3861.8	3831.0	3919.4	3801.2	3614.4	3548.8	3442.4	3280.4	3108.5	3082.7	2848.2
80°	3464.3	3486.2	3547.8	3546.8	3556.7	3652.1	3512.0	3254.6	2977.3	2792.5	2568.9
82.5°	3431.5	3406.7	3453.4	3394.7	3285.4	3226.8	3070.8	3043.9	2906.8	2642.4	2277.7
85°	3110.5	3097.6	3132.4	3119.5	3064.8	3129.4	3019.1	2791.5	2571.9	2379.1	2085.9
87.5°	2793.5	2788.5	2817.3	2747.8	2667.3	2620.6	2508.3	2448.7	2335.4	2152.5	1864.3
90°	2368.2	2357.2	2372.1	2329.4	2274.7	2255.9	2226.1	2193.3	2007.4	1821.6	1592.0
92.5°	2221.1	2264.8	2216.1	2213.1	2164.4	2120.7	2000.5	1813.6	1658.6	1528.4	1380.4
95°	1827.5	1827.5	1830.5	1809.7	1768.9	1737.1	1682.5	1590.0	1470.8	1383.3	1223.3
97.5°	1664.6	1665.6	1655.6	1639.7	1592.0	1553.3	1500.6	1425.1	1329.7	1219.4	1044.5
100°	1474.8	1479.7	1472.8	1480.7	1449.9	1438.0	1383.3	1284.0	1163.7	1040.5	885.5
102.5°	1349.5	1344.6	1335.6	1323.7	1284.9	1242.2	1186.6	1113.0	1024.6	910.3	760.2
105°	1196.5	1202.5	1182.6	1182.6	1155.8	1125.0	1077.2	998.7	901.4	785.1	665.8
107.5°	1090.2	1088.2	1069.3	1064.3	1042.5	999.7	957.0	876.5	789.1	693.7	578.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	6°	10°	15°	20°	25°	30°	35°	40°	45°
110°	977.9	982.8	963.0	961.0	933.2	894.4	848.7	773.2	690.7	602.2	506.8
112.5°	874.5	877.5	856.6	855.6	831.8	795.0	760.2	690.7	619.1	537.6	456.1
115°	799.0	803.0	780.1	780.1	757.3	716.5	678.7	605.2	537.6	465.1	394.5
117.5°	714.5	710.5	692.7	693.7	669.8	628.1	598.3	533.7	470.1	406.5	345.8
120°	643.0	645.0	624.1	622.1	595.3	558.5	522.7	469.1	416.4	361.7	306.1
122.5°	548.6	548.6	528.7	528.7	504.8	470.1	440.2	386.6	346.8	304.1	260.4
125°	451.2	453.2	433.3	434.3	413.4	384.6	367.7	329.9	298.1	262.4	227.6
127.5°	384.6	388.6	372.7	375.6	359.7	334.9	321.0	285.2	259.4	223.6	193.8
130°	327.0	327.9	317.0	317.0	304.1	285.2	273.3	245.5	221.6	193.8	164.0
132.5°	281.2	281.2	269.3	270.3	257.4	239.5	230.6	205.7	185.8	162.0	141.1
135°	234.5	234.5	225.6	225.6	213.7	197.8	190.8	170.9	154.0	137.1	117.3
137.5°	190.8	191.8	182.9	183.8	175.9	164.0	159.0	142.1	129.2	112.3	96.4
140°	158.0	156.0	151.1	151.1	144.1	134.2	132.2	118.3	107.3	92.4	80.5
142.5°	129.2	129.2	124.2	126.2	119.3	110.3	108.3	97.4	87.5	77.5	66.6
145°	105.3	105.3	102.4	102.4	97.4	89.4	88.4	79.5	72.5	62.6	55.7
147.5°	86.5	86.5	83.5	84.5	79.5	74.5	72.5	64.6	58.6	51.7	45.7
150°	72.5	70.6	68.6	68.6	64.6	59.6	59.6	52.7	48.7	42.7	36.8
152.5°	58.6	57.6	56.6	56.6	52.7	49.7	47.7	43.7	39.8	33.8	28.8
155°	46.7	46.7	45.7	44.7	42.7	38.8	37.8	33.8	29.8	25.8	20.9
157.5°	36.8	36.8	35.8	35.8	32.8	29.8	29.8	25.8	21.9	17.9	14.9
160°	28.8	27.8	26.8	26.8	24.8	21.9	20.9	17.9	14.9	11.9	8.9
162.5°	20.9	19.9	19.9	18.9	16.9	14.9	13.9	10.9	8.9	7.0	6.0
165°	11.9	11.9	11.9	10.9	9.9	8.0	8.0	6.0	4.0	4.0	5.0
167.5°	5.0	5.0	5.0	4.0	3.0	3.0	4.0	4.0	4.0	4.0	5.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3
2.5°	5261.0	5258.1	5164.6	5113.0	5129.9	5157.7	5171.6	5206.4	5287.9	5386.2	5390.2
5°	5529.4	5483.6	5326.6	5198.4	5111.0	5042.4	5048.4	5106.0	5251.1	5405.1	5300.8
7.5°	5424.0	5632.7	5534.3	5296.8	5212.3	5132.8	5081.2	5107.0	5312.7	5439.9	5135.8
10°	5126.9	5143.8	5240.2	5431.0	5393.2	5280.9	5142.8	5068.2	5341.5	5373.3	5037.4
12.5°	5042.4	5045.4	4942.0	5119.9	5552.2	5297.8	5106.0	4926.1	5270.0	5122.9	4786.0
15°	5125.9	5050.4	4880.4	4910.2	5195.4	5383.3	5073.2	4855.6	5228.2	4964.9	4574.3
17.5°	4793.0	4990.7	4956.9	4829.7	4893.3	5339.5	5034.5	4793.0	5180.5	4782.0	4489.9
20°	4650.9	4675.7	4872.5	4815.8	4724.4	5069.2	5046.4	4693.6	5060.3	4563.4	4472.0
22.5°	4935.1	4617.1	4527.6	4882.4	4613.1	4801.9	5052.3	4563.4	4892.3	4394.5	4421.3
25°	4456.1	4802.9	4389.5	4504.8	4699.6	4593.2	4979.8	4449.1	4720.4	4266.3	4153.0
27.5°	4560.4	4360.7	4621.0	4206.6	4695.6	4394.5	4845.6	4334.8	4521.7	4181.8	3882.7
30°	4747.3	4336.8	4423.3	4240.4	4417.3	4329.9	4670.7	4203.7	4277.2	4047.6	3664.0
32.5°	4516.7	4586.3	4152.0	4326.9	4111.2	4292.1	4470.0	4082.4	4083.4	3863.8	3501.1
35°	4743.3	4405.4	4306.0	4194.7	4005.9	4182.8	4348.7	4007.9	3927.4	3715.7	3379.8
37.5°	4710.5	4468.0	4402.4	4018.8	4020.8	4085.4	4191.7	3898.6	3806.1	3534.8	3192.0
40°	4724.4	4480.9	4254.3	4003.9	3934.3	3903.5	4020.8	3739.6	3621.3	3343.1	2956.5
42.5°	4599.2	4451.1	4193.7	3965.2	3807.1	3722.7	3802.2	3544.8	3405.7	3095.6	2673.2
45°	4442.2	4296.1	4096.3	3802.2	3632.2	3493.1	3535.8	3307.3	3133.4	2797.5	2375.1
46°	4387.5	4195.7	4042.7	3740.6	3560.7	3412.6	3426.5	3201.9	3015.1	2681.2	2251.9
47.5°	4275.2	4066.5	3921.4	3627.3	3439.4	3302.3	3306.3	3049.9	2869.0	2499.3	2095.9
50°	4201.7	3901.6	3688.9	3463.3	3224.8	3079.7	3060.8	2789.5	2582.8	2209.2	1821.6
52.5°	4119.2	3762.4	3550.7	3280.4	3005.2	2851.1	2826.3	2576.9	2360.2	1982.6	1581.1
55°	4034.7	3687.9	3332.1	3076.7	2822.3	2661.3	2610.6	2367.2	2144.6	1737.1	1352.5
57.5°	3978.1	3542.8	3189.0	2909.8	2645.4	2467.5	2439.7	2204.2	1941.8	1538.4	1148.8
60°	3892.6	3436.5	3041.9	2720.9	2463.6	2257.9	2209.2	1966.7	1675.5	1231.3	942.1
62.5°	3725.7	3310.3	2911.8	2525.2	2256.9	2079.0	2013.4	1755.0	1409.2	1018.6	777.1
65°	3602.4	3210.9	2764.7	2336.4	2050.2	1895.1	1841.5	1580.1	1189.5	815.9	659.9
67.5°	3422.6	3004.2	2666.3	2198.2	1861.3	1709.3	1636.7	1361.5	973.9	657.9	572.4
70°	3305.3	2855.1	2427.8	2052.1	1679.5	1507.6	1396.3	1108.1	749.3	550.6	497.9
72.5°	2915.7	2599.7	2216.1	1847.4	1508.5	1293.9	1159.7	868.6	565.5	452.2	430.3
75°	2716.0	2397.0	2030.3	1687.4	1361.5	1102.1	936.1	650.9	439.2	373.7	363.7
77.5°	2515.2	2180.3	1847.4	1520.5	1183.6	929.2	732.4	487.9	337.9	306.1	290.2
80°	2351.3	1989.5	1628.8	1328.7	1037.5	759.2	569.4	359.7	257.4	242.5	225.6
82.5°	2033.3	1753.0	1437.0	1133.9	865.6	623.1	435.3	270.3	197.8	185.8	168.9
85°	1819.6	1517.5	1211.4	962.0	707.6	497.9	333.9	201.7	147.1	138.1	121.2
87.5°	1589.0	1318.7	1040.5	789.1	590.3	398.5	258.4	153.0	108.3	101.4	89.4
90°	1379.4	1139.9	903.3	664.8	480.0	332.9	201.7	114.3	83.5	76.5	70.6
92.5°	1216.4	997.7	779.1	564.5	412.4	273.3	164.0	90.4	68.6	61.6	56.6
95°	1048.4	885.5	680.7	490.9	349.8	227.6	134.2	74.5	58.6	52.7	48.7
97.5°	892.4	747.3	582.4	414.4	291.2	185.8	112.3	65.6	53.7	49.7	42.7
100°	751.3	615.1	477.0	346.8	239.5	155.0	95.4	60.6	52.7	47.7	39.8
102.5°	629.1	515.8	391.5	277.3	197.8	130.2	83.5	56.6	52.7	45.7	35.8
105°	552.5	440.2	331.9	229.6	165.0	111.3	74.5	54.7	52.7	44.7	32.8
107.5°	479.0	386.6	286.2	198.8	144.1	98.4	68.6	52.7	50.7	42.7	29.8



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	419.4	334.9	251.4	177.9	130.2	88.4	63.6	51.7	49.7	40.7	27.8
112.5°	373.7	292.2	220.6	160.0	117.3	78.5	59.6	49.7	46.7	37.8	24.8
115°	325.0	257.4	194.8	143.1	105.3	68.6	55.7	46.7	43.7	34.8	22.9
117.5°	287.2	227.6	174.9	127.2	90.4	60.6	50.7	43.7	39.8	31.8	20.9
120°	250.4	194.8	151.1	109.3	74.5	53.7	44.7	38.8	34.8	27.8	17.9
122.5°	215.6	170.9	134.2	95.4	63.6	47.7	38.8	34.8	31.8	24.8	15.9
125°	190.8	151.1	118.3	79.5	55.7	41.7	33.8	30.8	27.8	21.9	13.9
127.5°	161.0	129.2	98.4	67.6	46.7	35.8	28.8	26.8	23.9	18.9	11.9
130°	137.1	108.3	81.5	56.6	41.7	30.8	24.8	21.9	19.9	15.9	9.9
132.5°	118.3	92.4	69.6	48.7	35.8	24.8	19.9	17.9	15.9	12.9	8.0
135°	97.4	78.5	59.6	41.7	29.8	19.9	15.9	14.9	12.9	9.9	7.0
137.5°	81.5	64.6	49.7	35.8	24.8	15.9	12.9	11.9	9.9	8.0	6.0
140°	67.6	52.7	41.7	28.8	18.9	10.9	10.9	8.9	8.0	7.0	5.0
142.5°	56.6	43.7	34.8	23.9	14.9	8.9	8.9	7.0	7.0	6.0	5.0
145°	46.7	36.8	28.8	17.9	9.9	7.0	8.0	7.0	6.0	6.0	5.0
147.5°	37.8	28.8	21.9	12.9	7.0	7.0	7.0	6.0	6.0	5.0	4.0
150°	29.8	21.9	15.9	8.9	6.0	6.0	6.0	5.0	5.0	5.0	4.0
152.5°	22.9	15.9	9.9	6.0	6.0	6.0	6.0	5.0	5.0	4.0	3.0
155°	15.9	10.9	7.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	3.0
157.5°	10.9	7.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	3.0
160°	7.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	3.0
162.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	3.0
165°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0
167.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	3.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3	5384.3
2.5°	5573.1	5426.0	5363.4	5273.0	5432.0	5214.3	5186.5	5180.5	5129.9	5085.1	4984.8
5°	5305.8	5091.1	5019.5	4890.4	5005.6	4754.2	4683.7	4670.7	4720.4	4834.7	4910.2
7.5°	5122.9	4842.7	4653.8	4610.1	4939.1	4864.5	4680.7	4579.3	4535.6	4460.1	4281.2
10°	4928.1	4649.9	4717.4	4689.6	4686.6	4354.7	4164.9	4325.9	4457.1	4439.2	4360.7
12.5°	4724.4	4816.8	4592.2	4225.5	4271.2	4385.5	4269.2	4184.8	3880.7	3768.4	3634.2
15°	4711.5	4592.2	4196.7	4156.0	4358.7	4015.8	3681.9	3700.8	3772.4	3740.6	3492.1
17.5°	4680.7	4195.7	4149.0	4071.5	3830.0	3614.4	3669.0	3410.6	3195.0	3098.6	2984.3
20°	4318.9	4054.6	4022.8	3618.3	3665.0	3440.4	3134.4	3018.1	2828.3	2559.0	2437.7
22.5°	4028.8	4019.8	3622.3	3446.4	3331.1	3017.1	2800.5	2462.6	2384.1	2257.9	2108.8
25°	3903.5	3687.9	3397.7	3166.2	2957.5	2625.5	2286.7	2268.8	2052.1	1898.1	1912.0
27.5°	3778.3	3404.7	3195.0	2805.4	2597.7	2195.2	2150.5	1891.1	1876.2	1721.2	1547.3
30°	3476.2	3191.0	2851.1	2513.3	2189.3	2091.9	1797.7	1792.8	1547.3	1502.6	1348.5
32.5°	3163.2	2975.4	2537.1	2156.5	2089.9	1770.9	1691.4	1468.8	1369.4	1258.1	1153.8
35°	2949.5	2666.3	2281.7	1946.8	1811.6	1650.7	1425.1	1290.9	1181.6	1076.3	1028.6
37.5°	2776.6	2421.8	2021.3	1829.5	1611.9	1412.2	1247.2	1125.0	1007.7	956.0	860.6
40°	2537.1	2201.2	1864.3	1636.7	1465.8	1253.1	1092.2	968.9	878.5	804.0	705.6
42.5°	2275.7	1948.8	1670.5	1434.0	1237.2	1062.3	938.1	828.8	733.4	638.0	576.4
45°	1979.6	1717.2	1507.6	1258.1	1070.3	939.1	819.9	691.7	578.4	526.7	455.1
46°	1874.3	1622.8	1406.2	1154.8	1004.7	888.4	757.3	631.0	539.6	476.0	416.4
47.5°	1709.3	1473.8	1292.9	1028.6	932.2	816.9	676.8	553.5	472.0	412.4	364.7
50°	1476.7	1284.0	1076.3	910.3	805.9	694.6	551.5	452.2	381.6	342.9	307.1
52.5°	1257.1	1091.2	920.2	777.1	685.7	552.5	451.2	369.7	320.0	291.2	268.3
55°	1069.3	927.2	788.1	674.8	555.5	455.1	372.7	308.1	274.3	253.4	236.5
57.5°	915.3	803.0	690.7	580.4	455.1	375.6	307.1	261.4	233.5	219.6	207.7
60°	769.2	702.6	601.2	467.1	369.7	308.1	250.4	220.6	201.7	187.8	181.9
62.5°	648.9	611.2	506.8	381.6	302.1	250.4	202.7	182.9	168.9	158.0	156.0
65°	563.5	525.7	414.4	311.1	245.5	198.8	164.0	149.1	138.1	132.2	128.2
67.5°	495.9	440.2	338.9	252.4	194.8	153.0	129.2	115.3	106.3	103.4	99.4
70°	433.3	365.7	279.3	200.7	151.1	118.3	99.4	86.5	79.5	72.5	71.6
72.5°	366.7	297.1	222.6	162.0	117.3	91.4	70.6	58.6	51.7	45.7	43.7
75°	298.1	235.5	171.9	124.2	86.5	64.6	43.7	30.8	20.9	5.0	1.0
77.5°	233.5	183.8	129.2	90.4	57.6	36.8	16.9	2.0	0.0	0.0	0.0
80°	175.9	136.1	96.4	62.6	34.8	15.9	4.0	0.0	0.0	0.0	0.0
82.5°	132.2	99.4	67.6	43.7	23.9	10.9	2.0	0.0	0.0	0.0	0.0
85°	97.4	73.5	49.7	31.8	16.9	7.0	1.0	0.0	0.0	0.0	0.0
87.5°	70.6	54.7	37.8	23.9	11.9	5.0	1.0	0.0	0.0	0.0	0.0
90°	55.7	43.7	29.8	18.9	9.9	4.0	1.0	0.0	0.0	0.0	0.0
92.5°	46.7	35.8	24.8	16.9	8.0	4.0	1.0	0.0	0.0	0.0	0.0
95°	40.7	30.8	20.9	12.9	7.0	4.0	1.0	0.0	0.0	0.0	0.0
97.5°	33.8	25.8	17.9	10.9	5.0	3.0	1.0	0.0	0.0	0.0	0.0
100°	29.8	21.9	14.9	8.9	4.0	2.0	1.0	0.0	0.0	0.0	0.0
102.5°	26.8	19.9	12.9	7.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0
105°	22.9	16.9	10.9	6.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0
107.5°	20.9	14.9	8.9	5.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0



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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	18.9	12.9	8.0	4.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0°
112.5°	16.9	10.9	6.0	4.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	2.5°
115°	14.9	8.9	5.0	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	5°
117.5°	13.9	8.0	5.0	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	7.5°
120°	11.9	7.0	4.0	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	10°
122.5°	9.9	6.0	4.0	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	12.5°
125°	8.9	5.0	4.0	3.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	15°
127.5°	7.0	5.0	4.0	3.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	17.5°
130°	6.0	5.0	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	20°
132.5°	6.0	4.0	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	22.5°
135°	5.0	4.0	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	25°
137.5°	5.0	4.0	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	27.5°
140°	5.0	4.0	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	30°
142.5°	4.0	3.0	3.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	32.5°
145°	4.0	3.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	35°
147.5°	4.0	3.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	37.5°
150°	3.0	3.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	40°
152.5°	3.0	2.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	42.5°
155°	3.0	3.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	45°
157.5°	3.0	2.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	46°
160°	3.0	3.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	47.5°
162.5°	3.0	3.0	3.0	2.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	50°
165°	4.0	3.0	3.0	2.0	2.0	1.0	1.0	1.0	1.0	0.0	0.0	52.5°
167.5°	3.0	3.0	3.0	2.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	55°
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

