

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: PORTFOLIO

Report Number: P245444

Luminaire Tested: **LSR8B20D010 EC8B209727 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245444  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B20D010 EC8B209727 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1557.0 lumens  
Efficiency: N/A  
Efficacy: 73.1 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

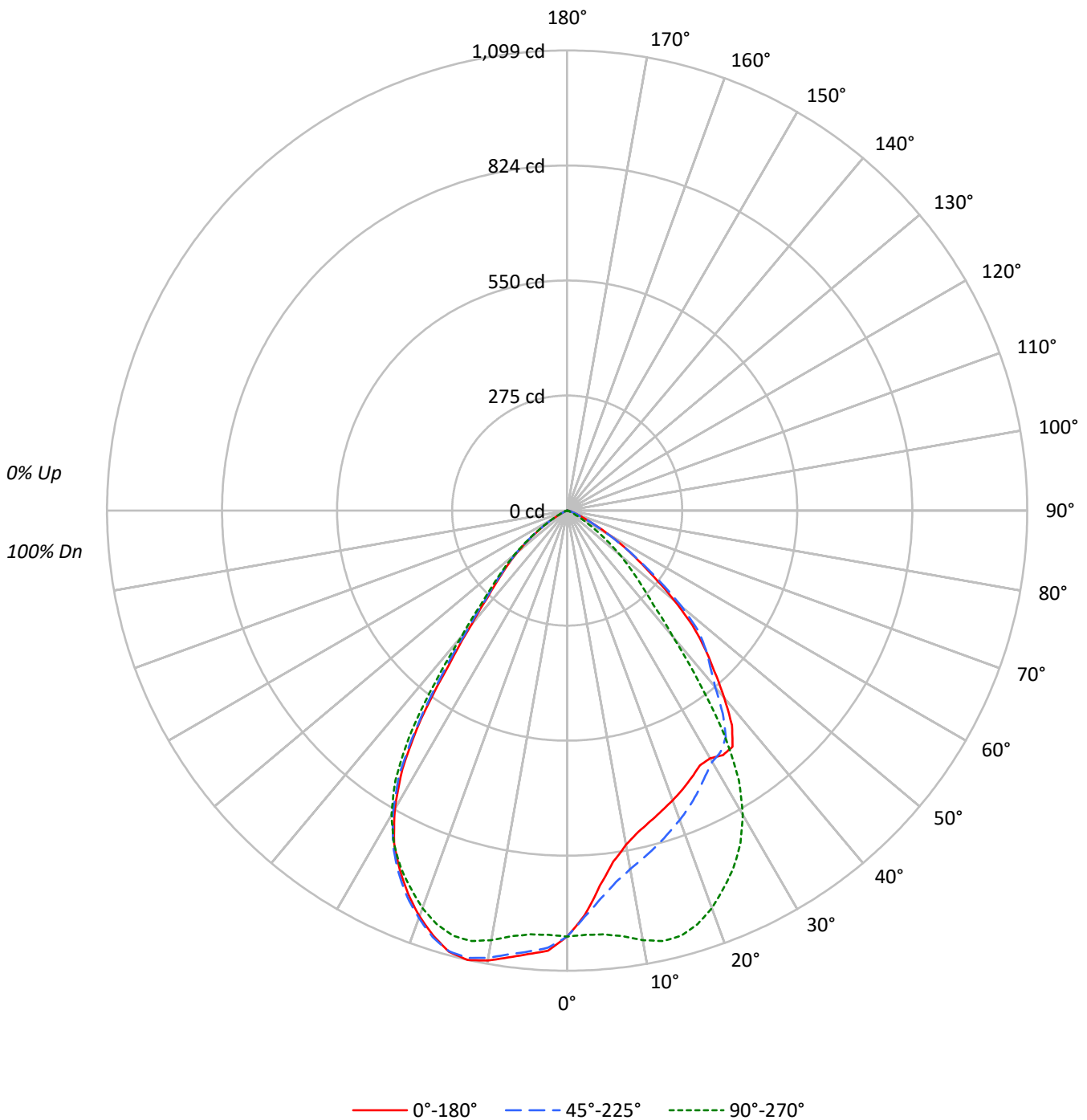
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.8	6.1
10°-20°	273.8	17.6
20°-30°	397.4	25.5
30°-40°	391.4	25.1
40°-50°	245.4	15.8
50°-60°	118.4	7.6
60°-70°	28.7	1.8
70°-80°	5.8	0.4
80°-90°	1.3	0.1
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°-30°	766.0	49.2
0°-40°	1157.5	74.3
0°-60°	1521.2	97.7
0°-90°	1557.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1557.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1017	1017	1017	1017	1017	
5°	899	930	1016	1057	1063	83
15°	768	828	1051	1090	1091	217
25°	703	740	941	954	947	326
35°	689	661	657	619	609	417
45°	465	468	248	238	231	355
55°	207	213	90	89	85	190
65°	48	48	13	12	10	55
75°	12	10	3	1	1	13
85°	4	3	0	0	0	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2
2.5°	966.9	960.8	949.3	963.2	963.2	955.4	970.9	961.6	969.1	980.8	970.4
5°	899.0	894.0	884.3	899.0	900.9	893.7	912.4	905.4	916.4	930.8	929.5
7.5°	845.3	838.9	830.1	845.3	848.3	843.4	861.3	858.1	872.6	891.3	894.5
10°	810.3	803.6	795.9	809.8	811.9	808.7	826.9	825.0	839.2	860.8	869.4
12.5°	785.5	779.8	771.3	786.0	788.4	783.8	801.0	800.1	814.8	837.6	848.3
15°	768.1	761.4	753.6	766.2	769.4	764.3	780.6	779.0	794.0	816.5	828.5
17.5°	751.8	745.6	737.6	749.4	752.6	747.2	763.3	760.6	773.4	794.8	807.1
20°	736.5	729.9	722.6	734.7	736.5	730.4	746.4	743.0	754.4	774.2	786.3
22.5°	720.8	713.8	706.3	718.1	720.0	713.8	728.5	724.5	735.2	753.1	764.1
25°	703.4	697.0	689.5	700.5	702.1	695.4	710.9	705.8	715.2	730.9	740.0
27.5°	686.0	679.9	671.6	682.8	683.6	677.2	691.4	684.4	692.2	706.6	714.4
30°	683.1	676.1	667.6	676.7	676.9	668.7	682.0	673.7	678.0	688.7	693.2
32.5°	692.4	685.5	676.7	684.2	683.4	674.3	687.1	676.9	678.3	683.9	682.8
35°	688.7	680.4	670.0	678.0	678.0	667.1	679.9	667.9	666.5	667.3	660.6
37.5°	646.2	639.8	629.9	637.7	636.9	628.6	638.5	628.6	624.0	622.2	610.1
40°	583.7	575.9	568.4	576.7	577.5	568.7	581.5	570.3	569.0	563.6	549.5
42.5°	520.3	517.7	510.4	517.4	521.1	513.7	524.3	519.0	519.8	518.5	505.1
45°	465.0	460.5	455.1	463.1	465.6	461.8	472.5	469.3	472.5	479.2	468.2
47.5°	405.4	400.9	395.0	403.5	407.8	400.9	410.0	408.9	413.7	425.2	424.1
50°	333.5	330.3	329.3	330.3	333.0	329.8	336.2	336.5	339.7	355.4	356.5
52.5°	264.0	263.2	259.5	263.0	263.0	257.9	264.3	261.4	264.6	275.3	282.2
55°	206.6	205.8	203.4	206.6	203.1	201.2	203.1	200.2	197.8	206.1	213.3
57.5°	160.9	158.2	155.3	156.6	156.3	152.3	154.5	151.0	149.1	152.1	158.5
60°	114.7	113.8	111.2	112.5	113.6	110.6	112.8	111.2	108.0	110.4	110.6
62.5°	76.2	76.7	75.1	75.4	74.6	74.0	75.4	76.2	75.4	74.3	74.6
65°	48.4	48.1	47.8	48.1	48.6	47.6	48.4	48.9	48.1	48.1	47.8
67.5°	32.1	31.3	30.5	31.0	31.5	30.7	31.5	31.3	31.5	31.3	30.5
70°	21.6	21.4	21.1	21.4	21.4	20.8	21.4	21.1	21.4	21.1	20.3
72.5°	15.8	15.8	15.5	15.8	15.8	15.2	15.5	15.0	15.2	15.0	14.4
75°	11.8	11.8	11.5	11.8	11.5	11.2	11.5	11.2	10.7	10.7	10.2
77.5°	8.6	8.6	8.6	8.6	8.6	8.3	8.3	8.0	7.8	7.5	7.5
80°	6.4	6.1	6.1	6.1	6.1	5.9	6.1	5.9	5.6	5.3	5.1
82.5°	4.5	4.8	4.5	4.5	4.5	4.3	4.5	4.3	4.3	4.0	3.5
85°	3.5	3.5	3.5	3.5	3.5	3.2	3.2	3.2	2.9	2.9	2.7
87.5°	1.9	1.9	1.9	2.1	1.9	1.9	1.9	1.6	1.6	1.3	1.3
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2
2.5°	984.3	985.6	982.7	987.2	1004.9	990.7	996.6	998.4	1011.8	1014.2	1012.6
5°	946.9	952.7	956.5	966.6	986.2	976.0	986.4	993.1	1010.2	1015.8	1017.2
7.5°	917.5	929.8	938.9	955.4	978.4	970.7	986.4	997.4	1018.2	1025.4	1028.9
10°	895.6	914.3	930.0	952.7	978.7	973.6	994.2	1009.7	1032.9	1041.5	1045.8
12.5°	879.0	901.7	922.8	951.7	979.7	977.3	1002.2	1019.8	1044.4	1053.0	1058.0
15°	860.8	887.0	911.6	943.9	974.1	973.6	1000.3	1019.0	1044.1	1051.4	1056.2
17.5°	839.2	867.2	894.2	929.2	959.2	959.7	986.7	1005.1	1029.7	1035.6	1038.8
20°	817.3	845.0	872.0	908.1	937.5	938.3	964.8	981.9	1005.4	1010.2	1011.0
22.5°	794.0	819.9	846.9	882.7	911.1	911.6	937.8	953.8	973.9	976.3	978.4
25°	767.5	792.9	818.3	853.9	880.9	882.5	906.2	920.4	938.9	940.7	941.5
27.5°	740.0	760.9	785.2	815.6	842.9	841.8	864.3	880.3	896.9	895.8	895.6
30°	712.2	729.6	744.6	774.0	794.0	794.8	815.9	823.7	841.0	838.9	838.6
32.5°	692.7	697.3	701.3	716.2	735.2	728.5	743.0	752.6	764.6	763.8	764.1
35°	656.9	648.6	636.6	638.7	650.2	639.8	647.5	647.3	659.6	656.6	660.1
37.5°	595.7	572.2	545.5	530.2	532.4	519.3	516.6	523.0	527.3	519.0	521.9
40°	530.5	495.8	454.1	419.3	417.4	401.1	398.2	391.8	400.1	393.1	395.3
42.5°	482.4	436.4	381.6	339.4	330.3	316.7	308.7	307.6	310.0	305.2	303.9
45°	445.5	396.6	333.8	285.4	275.3	260.6	252.6	249.6	249.9	248.3	246.9
47.5°	402.2	353.0	289.4	240.0	228.5	214.6	206.6	204.7	205.8	203.6	202.0
50°	342.3	298.3	240.3	195.1	184.9	174.8	168.4	166.5	166.2	164.6	163.6
52.5°	277.9	241.3	191.1	153.4	144.3	134.4	129.9	127.5	127.7	126.1	124.5
55°	215.1	192.4	148.1	116.0	107.7	100.0	95.7	92.7	91.9	90.3	89.5
57.5°	160.1	144.8	110.9	83.6	78.8	71.4	67.1	63.6	63.1	62.3	62.0
60°	112.2	101.3	78.0	59.6	54.0	49.4	45.2	41.7	40.1	39.8	39.0
62.5°	72.7	66.0	51.3	39.8	35.5	32.3	28.1	25.7	24.6	23.5	23.8
65°	45.2	40.1	32.1	25.7	23.3	20.8	17.6	15.5	14.4	13.4	13.6
67.5°	28.1	25.1	20.3	16.6	15.0	13.1	10.7	9.1	8.3	7.5	6.9
70°	19.0	16.3	13.9	11.8	10.7	9.4	7.8	6.4	5.9	5.3	4.8
72.5°	13.4	12.0	10.2	8.8	8.0	6.9	5.9	5.1	4.5	4.0	3.5
75°	9.6	8.6	7.5	6.4	5.9	5.3	4.5	4.0	3.5	2.9	2.4
77.5°	6.9	6.1	5.3	4.8	4.5	3.7	3.2	2.9	2.7	2.1	1.6
80°	4.8	4.3	3.5	3.2	3.2	2.7	2.4	2.1	1.9	1.3	1.1
82.5°	3.2	2.9	2.7	2.4	2.1	1.9	1.9	1.3	1.1	0.8	0.5
85°	2.4	2.1	1.9	1.6	1.6	1.3	1.1	0.8	0.8	0.5	0.3
87.5°	1.3	1.3	1.1	0.8	0.8	0.5	0.5	0.3	0.3	0.3	0.3
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2
2.5°	1026.2	1027.0	1031.6	1028.1	1036.9	1043.3	1040.1	1047.4	1045.0	1044.4	1052.7
5°	1033.2	1035.1	1041.2	1038.0	1047.6	1054.6	1051.4	1059.4	1057.0	1056.4	1065.0
7.5°	1046.6	1048.4	1053.8	1051.1	1061.3	1067.4	1063.4	1072.2	1069.0	1068.7	1077.0
10°	1063.4	1066.1	1070.6	1067.9	1077.3	1082.6	1078.6	1087.2	1084.2	1082.9	1092.0
12.5°	1076.0	1077.8	1082.4	1080.2	1089.3	1093.3	1089.8	1098.1	1094.4	1093.3	1101.3
15°	1073.0	1074.9	1078.6	1076.8	1085.3	1089.0	1084.5	1093.6	1089.8	1087.7	1094.9
17.5°	1054.3	1055.4	1058.0	1056.2	1065.3	1067.7	1062.6	1071.7	1068.2	1064.5	1071.4
20°	1026.8	1026.2	1027.8	1027.0	1034.5	1035.9	1032.7	1039.3	1035.3	1033.2	1037.2
22.5°	992.6	992.0	993.1	991.0	998.4	999.3	994.4	1002.5	998.4	994.4	1001.1
25°	954.6	951.7	951.1	951.9	957.0	957.8	952.7	958.6	953.6	950.3	956.8
27.5°	907.9	904.1	903.3	904.1	909.2	905.4	901.2	905.4	900.4	897.4	901.4
30°	850.1	844.8	842.4	840.8	846.1	844.8	834.9	839.7	831.7	827.4	830.3
32.5°	772.4	769.4	763.0	759.3	764.3	754.2	748.0	748.0	744.8	737.6	739.2
35°	664.4	659.8	654.0	650.8	651.6	637.9	627.8	629.9	619.2	617.3	618.2
37.5°	527.8	520.3	518.2	511.5	513.1	501.1	487.2	487.5	481.9	476.0	474.1
40°	396.6	395.3	393.1	387.5	389.7	376.6	371.2	371.5	367.7	363.5	365.6
42.5°	306.5	302.3	300.9	299.1	299.6	297.5	290.5	291.3	288.1	287.0	286.0
45°	249.1	244.5	241.3	242.9	242.9	240.5	237.9	239.5	237.9	235.7	236.8
47.5°	205.2	201.0	199.4	199.1	201.0	199.4	196.7	197.2	197.0	196.2	195.6
50°	163.8	162.8	161.4	160.6	161.4	160.9	158.5	159.8	160.6	157.9	158.7
52.5°	124.8	124.8	124.5	122.7	124.3	122.7	122.4	122.9	122.1	121.1	120.8
55°	91.4	90.6	89.3	89.0	89.5	89.0	88.5	88.7	89.3	86.6	86.6
57.5°	62.5	62.0	61.2	61.2	62.3	60.9	60.1	61.2	60.1	59.1	59.1
60°	40.1	39.8	39.0	39.0	39.0	38.8	37.9	38.2	38.8	37.1	37.4
62.5°	24.1	23.3	23.0	22.7	23.0	22.7	22.7	22.4	22.2	22.2	21.4
65°	13.1	12.6	12.0	12.3	12.3	12.0	12.0	12.0	11.5	11.2	11.0
67.5°	6.7	6.1	6.1	5.9	5.9	5.9	5.9	5.6	5.6	5.6	5.3
70°	4.3	4.0	3.7	3.7	3.7	3.5	3.5	3.5	3.5	3.5	3.2
72.5°	2.9	2.7	2.4	2.4	2.4	2.1	2.1	2.1	2.1	1.9	1.9
75°	2.1	1.9	1.6	1.6	1.6	1.3	1.3	1.3	1.3	1.3	1.3
77.5°	1.3	1.1	1.1	1.1	1.1	0.8	0.8	0.8	0.8	0.8	0.5
80°	0.8	0.8	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3
82.5°	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
87.5°	0.3	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):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2
2.5°	1049.8	1047.6	1049.0	1058.8	1054.6	1053.2	1042.0	1051.9
5°	1062.3	1060.7	1060.7	1071.9	1066.9	1065.8	1054.8	1063.4
7.5°	1074.1	1072.5	1072.7	1084.2	1080.2	1078.6	1067.7	1076.2
10°	1089.3	1088.2	1088.5	1099.5	1095.2	1093.6	1082.4	1091.2
12.5°	1098.4	1096.8	1096.8	1108.6	1103.7	1101.3	1090.7	1099.2
15°	1091.5	1089.0	1089.0	1100.8	1095.5	1092.0	1082.6	1090.7
17.5°	1067.7	1065.3	1065.3	1075.4	1071.4	1066.3	1056.7	1064.2
20°	1034.5	1031.6	1030.8	1042.5	1036.9	1032.4	1023.8	1031.1
22.5°	997.1	995.8	993.4	1005.1	1000.1	995.2	986.2	991.8
25°	952.2	950.1	947.7	959.2	954.1	949.3	942.1	946.6
27.5°	896.4	896.6	895.3	904.4	899.3	896.6	887.8	895.3
30°	828.7	825.8	824.7	835.4	830.6	827.1	816.2	823.4
32.5°	740.6	736.3	730.7	742.7	734.4	731.5	722.1	732.5
35°	612.3	610.9	605.9	616.0	611.5	606.1	600.2	609.1
37.5°	473.3	474.4	473.8	476.5	473.8	470.4	463.9	460.7
40°	361.3	358.7	356.5	361.3	355.7	355.7	352.0	356.0
42.5°	283.3	282.2	284.9	286.0	282.8	282.2	281.7	281.4
45°	233.8	233.8	234.4	235.4	234.4	233.8	232.2	231.2
47.5°	192.7	193.8	192.7	196.2	194.3	193.8	190.5	191.9
50°	156.1	154.7	156.1	157.1	157.4	155.8	154.2	155.0
52.5°	121.1	118.9	118.4	120.0	118.9	118.9	117.9	117.6
55°	85.3	86.1	84.7	86.1	85.5	84.7	83.9	85.0
57.5°	57.7	58.0	57.5	58.3	56.9	57.2	56.9	56.7
60°	37.4	36.3	36.3	37.1	35.8	35.8	35.5	35.5
62.5°	21.4	21.1	21.1	20.8	20.6	20.6	20.6	20.0
65°	11.0	10.7	10.4	10.4	10.4	10.4	10.2	10.2
67.5°	5.3	5.1	5.1	5.3	5.1	5.1	5.1	5.1
70°	3.2	3.2	2.9	3.2	2.9	2.9	2.9	2.9
72.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
75°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
77.5°	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	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
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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