

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: P245450

Luminaire Tested: **LSR8B20D010 EC8B209730 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245450
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 EC8B209730 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1647.0 lumens
Efficiency: N/A
Efficacy: 77.3 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

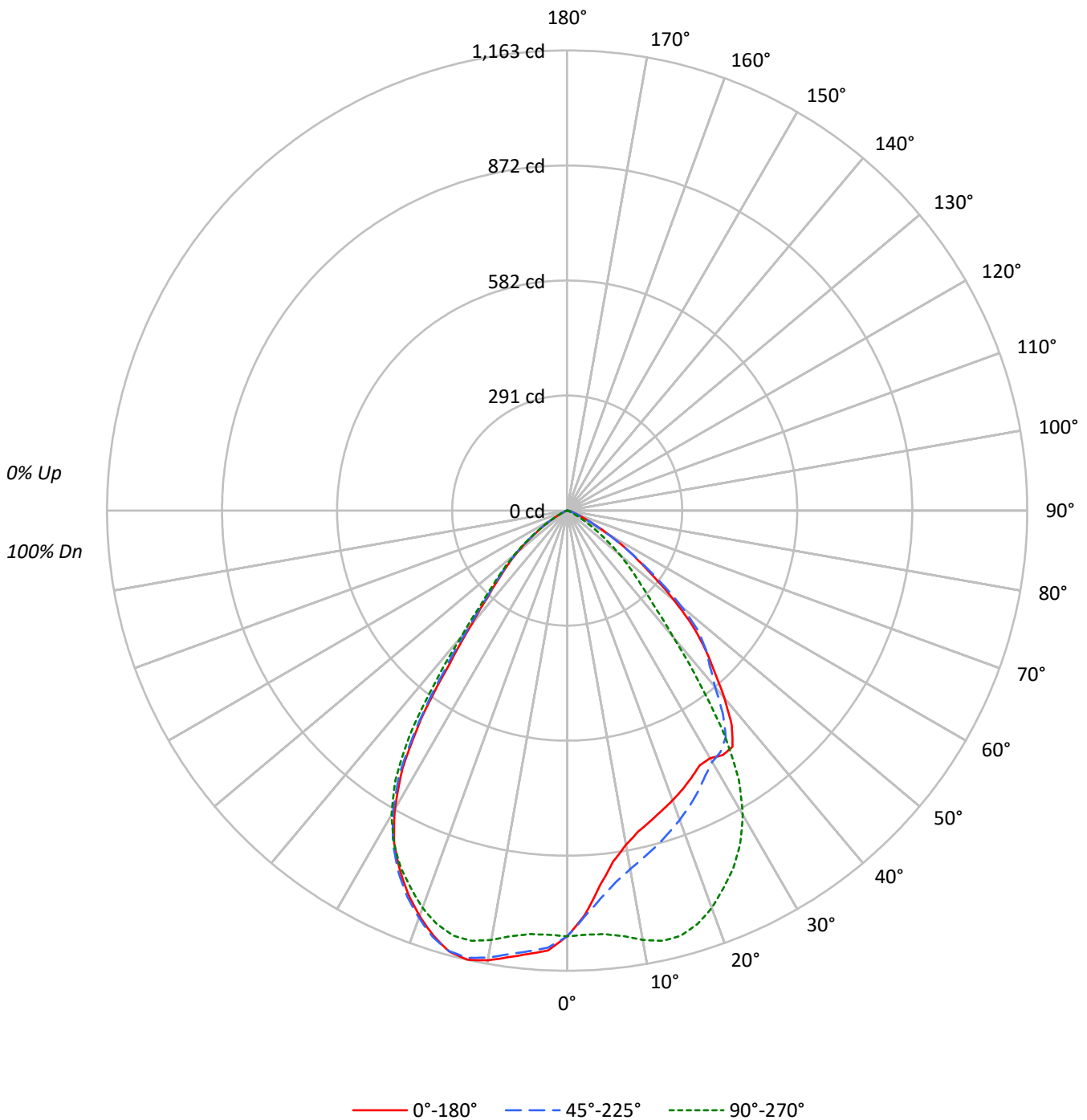
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	100.3	6.1
10°-20°	289.6	17.6
20°-30°	420.4	25.5
30°-40°	414.1	25.1
40°-50°	259.5	15.8
50°-60°	125.2	7.6
60°-70°	30.3	1.8
70°-80°	6.1	0.4
80°-90°	1.4	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°	810.3	49.2
0°-40°	1224.4	74.3
0°-60°	1609.2	97.7
0°-90°	1647.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1647.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1076	1076	1076	1076	1076	
5°	951	983	1074	1118	1125	88
15°	812	876	1112	1153	1154	230
25°	744	783	995	1009	1001	344
35°	728	699	695	655	644	441
45°	492	495	263	252	244	376
55°	218	226	96	94	90	201
65°	51	51	14	12	11	58
75°	12	11	3	1	1	14
85°	4	3	1	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°	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0
2.5°	1022.8	1016.3	1004.1	1018.8	1018.8	1010.6	1027.0	1017.2	1025.1	1037.5	1026.5
5°	951.0	945.6	935.5	951.0	953.0	945.3	965.1	957.8	969.4	984.6	983.2
7.5°	894.2	887.4	878.1	894.2	897.3	892.2	911.1	907.7	923.0	942.8	946.2
10°	857.1	850.1	841.9	856.6	858.8	855.4	874.7	872.7	887.7	910.6	919.6
12.5°	830.9	824.9	815.9	831.4	834.0	829.2	847.2	846.4	861.9	886.0	897.3
15°	812.5	805.4	797.2	810.5	813.9	808.5	825.8	824.1	839.9	863.6	876.4
17.5°	795.2	788.7	780.2	792.7	796.1	790.4	807.4	804.6	818.1	840.7	853.8
20°	779.1	772.1	764.4	777.1	779.1	772.6	789.6	785.9	798.1	819.0	831.7
22.5°	762.4	755.1	747.2	759.6	761.6	755.1	770.6	766.4	777.7	796.6	808.2
25°	744.1	737.3	729.4	741.0	742.6	735.6	752.0	746.6	756.5	773.2	782.8
27.5°	725.7	719.2	710.4	722.3	723.1	716.4	731.3	724.0	732.2	747.5	755.7
30°	722.6	715.2	706.2	715.8	716.1	707.3	721.4	712.7	717.2	728.5	733.3
32.5°	732.5	725.1	715.8	723.7	722.9	713.2	726.8	716.1	717.5	723.4	722.3
35°	728.5	719.8	708.7	717.2	717.2	705.6	719.2	706.5	705.1	705.9	698.8
37.5°	683.6	676.8	666.3	674.5	673.7	664.9	675.4	664.9	660.1	658.1	645.4
40°	617.4	609.2	601.3	610.1	610.9	601.6	615.2	603.3	601.9	596.2	581.2
42.5°	550.4	547.6	540.0	547.3	551.3	543.3	554.7	549.0	549.8	548.4	534.3
45°	491.9	487.1	481.4	489.9	492.5	488.5	499.8	496.4	499.8	506.9	495.3
47.5°	428.9	424.0	417.8	426.9	431.4	424.0	433.7	432.5	437.6	449.8	448.6
50°	352.8	349.4	348.3	349.4	352.2	348.9	355.6	355.9	359.3	376.0	377.1
52.5°	279.3	278.5	274.5	278.2	278.2	272.8	279.6	276.5	279.9	291.2	298.5
55°	218.5	217.7	215.1	218.5	214.9	212.9	214.9	211.7	209.2	218.0	225.6
57.5°	170.2	167.4	164.2	165.7	165.4	161.1	163.4	159.7	157.7	160.9	167.6
60°	121.3	120.4	117.6	119.0	120.1	117.0	119.3	117.6	114.2	116.8	117.0
62.5°	80.6	81.1	79.4	79.7	78.9	78.3	79.7	80.6	79.7	78.6	78.9
65°	51.2	50.9	50.6	50.9	51.5	50.3	51.2	51.7	50.9	50.9	50.6
67.5°	33.9	33.1	32.2	32.8	33.4	32.5	33.4	33.1	33.4	33.1	32.2
70°	22.9	22.6	22.3	22.6	22.6	22.1	22.6	22.3	22.6	22.3	21.5
72.5°	16.7	16.7	16.4	16.7	16.7	16.1	16.4	15.8	16.1	15.8	15.3
75°	12.4	12.4	12.2	12.4	12.2	11.9	12.2	11.9	11.3	11.3	10.7
77.5°	9.0	9.0	9.0	9.0	9.0	8.8	8.8	8.5	8.2	7.9	7.9
80°	6.8	6.5	6.5	6.5	6.5	6.2	6.5	6.2	5.9	5.7	5.4
82.5°	4.8	5.1	4.8	4.8	4.8	4.5	4.8	4.5	4.5	4.2	3.7
85°	3.7	3.7	3.7	3.7	3.7	3.4	3.4	3.4	3.1	3.1	2.8
87.5°	2.0	2.0	2.0	2.3	2.0	2.0	2.0	1.7	1.7	1.4	1.4
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°	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0
2.5°	1041.2	1042.6	1039.5	1044.3	1062.9	1048.0	1054.2	1056.2	1070.3	1072.8	1071.1
5°	1001.6	1007.8	1011.8	1022.5	1043.2	1032.4	1043.4	1050.5	1068.6	1074.5	1076.0
7.5°	970.5	983.5	993.1	1010.6	1035.0	1026.8	1043.4	1055.0	1077.1	1084.7	1088.4
10°	947.3	967.1	983.8	1007.8	1035.2	1029.9	1051.6	1068.0	1092.6	1101.7	1106.2
12.5°	929.8	953.8	976.2	1006.7	1036.4	1033.8	1060.1	1078.8	1104.8	1113.8	1119.2
15°	910.6	938.3	964.3	998.5	1030.4	1029.9	1058.1	1077.9	1104.5	1112.1	1117.2
17.5°	887.7	917.4	945.9	982.9	1014.6	1015.2	1043.7	1063.2	1089.2	1095.5	1098.9
20°	864.5	893.9	922.4	960.6	991.7	992.6	1020.5	1038.6	1063.5	1068.6	1069.4
22.5°	839.9	867.3	895.9	933.8	963.7	964.3	992.0	1009.0	1030.2	1032.7	1035.0
25°	811.9	838.8	865.6	903.2	931.8	933.5	958.6	973.6	993.1	995.1	995.9
27.5°	782.8	804.8	830.6	862.8	891.6	890.5	914.2	931.2	948.7	947.6	947.3
30°	753.4	771.8	787.6	818.7	839.9	840.7	863.1	871.3	889.7	887.4	887.1
32.5°	732.8	737.6	741.8	757.6	777.7	770.6	785.9	796.1	808.8	808.0	808.2
35°	694.9	686.1	673.4	675.7	687.8	676.8	685.0	684.7	697.7	694.6	698.3
37.5°	630.1	605.3	577.0	560.9	563.1	549.3	546.5	553.2	557.8	549.0	552.1
40°	561.2	524.4	480.3	443.6	441.6	424.3	421.2	414.4	423.2	415.8	418.1
42.5°	510.3	461.6	403.7	359.0	349.4	335.0	326.5	325.4	327.9	322.8	321.4
45°	471.3	419.5	353.1	301.9	291.2	275.6	267.2	264.0	264.3	262.6	261.2
47.5°	425.5	373.4	306.2	253.9	241.7	227.0	218.5	216.5	217.7	215.4	213.7
50°	362.1	315.5	254.1	206.4	195.6	184.9	178.1	176.1	175.8	174.1	173.0
52.5°	294.0	255.3	202.1	162.3	152.7	142.2	137.4	134.8	135.1	133.4	131.7
55°	227.6	203.5	156.6	122.7	113.9	105.7	101.2	98.1	97.2	95.6	94.7
57.5°	169.3	153.2	117.3	88.5	83.4	75.5	71.0	67.3	66.7	65.9	65.6
60°	118.7	107.1	82.5	63.0	57.1	52.3	47.8	44.1	42.4	42.1	41.3
62.5°	76.9	69.8	54.3	42.1	37.6	34.2	29.7	27.1	26.0	24.9	25.2
65°	47.8	42.4	33.9	27.1	24.6	22.1	18.7	16.4	15.3	14.1	14.4
67.5°	29.7	26.6	21.5	17.5	15.8	13.9	11.3	9.6	8.8	7.9	7.4
70°	20.1	17.2	14.7	12.4	11.3	9.9	8.2	6.8	6.2	5.7	5.1
72.5°	14.1	12.7	10.7	9.3	8.5	7.4	6.2	5.4	4.8	4.2	3.7
75°	10.2	9.0	7.9	6.8	6.2	5.7	4.8	4.2	3.7	3.1	2.5
77.5°	7.4	6.5	5.7	5.1	4.8	4.0	3.4	3.1	2.8	2.3	1.7
80°	5.1	4.5	3.7	3.4	3.4	2.8	2.5	2.3	2.0	1.4	1.1
82.5°	3.4	3.1	2.8	2.5	2.3	2.0	2.0	1.4	1.1	0.8	0.6
85°	2.5	2.3	2.0	1.7	1.7	1.4	1.1	0.8	0.8	0.6	0.3
87.5°	1.4	1.4	1.1	0.8	0.8	0.6	0.6	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°	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0
2.5°	1085.6	1086.4	1091.2	1087.5	1096.9	1103.7	1100.3	1107.9	1105.4	1104.8	1113.6
5°	1092.9	1094.9	1101.4	1098.0	1108.2	1115.5	1112.1	1120.6	1118.1	1117.5	1126.6
7.5°	1107.0	1109.0	1114.7	1111.9	1122.6	1129.1	1124.9	1134.2	1130.8	1130.5	1139.3
10°	1124.9	1127.7	1132.5	1129.7	1139.6	1145.2	1141.0	1150.0	1146.9	1145.5	1155.1
12.5°	1138.1	1140.1	1144.9	1142.7	1152.3	1156.5	1152.8	1161.6	1157.7	1156.5	1165.0
15°	1135.0	1137.0	1141.0	1139.0	1148.0	1152.0	1147.2	1156.8	1152.8	1150.6	1158.2
17.5°	1115.2	1116.4	1119.2	1117.2	1126.8	1129.4	1124.0	1133.6	1129.9	1126.0	1133.3
20°	1086.1	1085.6	1087.3	1086.4	1094.3	1095.7	1092.3	1099.4	1095.2	1092.9	1097.2
22.5°	1049.9	1049.4	1050.5	1048.2	1056.2	1057.0	1051.9	1060.4	1056.2	1051.9	1059.0
25°	1009.8	1006.7	1006.1	1007.0	1012.3	1013.2	1007.8	1014.0	1008.7	1005.3	1012.1
27.5°	960.3	956.4	955.5	956.4	961.7	957.8	953.3	957.8	952.4	949.3	953.5
30°	899.3	893.6	891.1	889.4	895.0	893.6	883.2	888.2	879.8	875.2	878.3
32.5°	817.0	813.9	807.1	803.1	808.5	797.8	791.3	791.3	787.9	780.2	781.9
35°	702.8	698.0	691.8	688.4	689.2	674.8	664.1	666.3	655.0	653.0	653.9
37.5°	558.3	550.4	548.2	541.1	542.8	530.1	515.4	515.6	509.7	503.5	501.5
40°	419.5	418.1	415.8	409.9	412.2	398.3	392.7	393.0	389.0	384.5	386.7
42.5°	324.3	319.7	318.3	316.3	316.9	314.6	307.3	308.1	304.7	303.6	302.5
45°	263.5	258.7	255.3	257.0	257.0	254.4	251.6	253.3	251.6	249.3	250.5
47.5°	217.1	212.6	210.9	210.6	212.6	210.9	208.1	208.6	208.3	207.5	206.9
50°	173.3	172.2	170.8	169.9	170.8	170.2	167.6	169.1	169.9	167.1	167.9
52.5°	132.0	132.0	131.7	129.8	131.5	129.8	129.5	130.0	129.2	128.1	127.8
55°	96.7	95.8	94.4	94.1	94.7	94.1	93.6	93.9	94.4	91.6	91.6
57.5°	66.2	65.6	64.7	64.7	65.9	64.5	63.6	64.7	63.6	62.5	62.5
60°	42.4	42.1	41.3	41.3	41.3	41.0	40.1	40.4	41.0	39.3	39.6
62.5°	25.4	24.6	24.3	24.0	24.3	24.0	24.0	23.7	23.5	23.5	22.6
65°	13.9	13.3	12.7	13.0	13.0	12.7	12.7	12.7	12.2	11.9	11.6
67.5°	7.1	6.5	6.5	6.2	6.2	6.2	6.2	5.9	5.9	5.9	5.7
70°	4.5	4.2	4.0	4.0	4.0	3.7	3.7	3.7	3.7	3.7	3.4
72.5°	3.1	2.8	2.5	2.5	2.5	2.3	2.3	2.3	2.3	2.0	2.0
75°	2.3	2.0	1.7	1.7	1.7	1.4	1.4	1.4	1.4	1.4	1.4
77.5°	1.4	1.1	1.1	1.1	1.1	0.8	0.8	0.8	0.8	0.8	0.6
80°	0.8	0.8	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.3
82.5°	0.6	0.6	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°	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0	1076.0
2.5°	1110.4	1108.2	1109.6	1120.1	1115.5	1114.1	1102.2	1112.7
5°	1123.7	1122.0	1122.0	1133.9	1128.5	1127.4	1115.8	1124.9
7.5°	1136.2	1134.5	1134.8	1146.9	1142.7	1141.0	1129.4	1138.4
10°	1152.3	1151.1	1151.4	1163.0	1158.5	1156.8	1144.9	1154.3
12.5°	1161.9	1160.2	1160.2	1172.6	1167.5	1165.0	1153.7	1162.7
15°	1154.5	1152.0	1152.0	1164.4	1158.8	1155.1	1145.2	1153.7
17.5°	1129.4	1126.8	1126.8	1137.6	1133.3	1128.0	1117.8	1125.7
20°	1094.3	1091.2	1090.4	1102.8	1096.9	1092.1	1083.0	1090.7
22.5°	1054.7	1053.3	1050.8	1063.2	1057.9	1052.8	1043.2	1049.1
25°	1007.3	1005.0	1002.4	1014.6	1009.2	1004.1	996.5	1001.3
27.5°	948.2	948.5	947.0	956.7	951.3	948.5	939.1	947.0
30°	876.6	873.5	872.4	883.7	878.6	875.0	863.4	871.0
32.5°	783.4	778.8	772.9	785.6	776.9	773.7	763.9	774.9
35°	647.7	646.2	640.9	651.6	646.8	641.2	634.9	644.3
37.5°	500.7	501.8	501.2	504.1	501.2	497.5	490.8	487.4
40°	382.2	379.4	377.1	382.2	376.3	376.3	372.3	376.6
42.5°	299.7	298.5	301.4	302.5	299.1	298.5	298.0	297.7
45°	247.4	247.4	247.9	249.1	247.9	247.4	245.7	244.5
47.5°	203.8	205.0	203.8	207.5	205.5	205.0	201.6	203.0
50°	165.1	163.7	165.1	166.2	166.5	164.8	163.1	164.0
52.5°	128.1	125.8	125.2	126.9	125.8	125.8	124.7	124.4
55°	90.2	91.0	89.6	91.0	90.5	89.6	88.8	89.9
57.5°	61.1	61.3	60.8	61.6	60.2	60.5	60.2	59.9
60°	39.6	38.4	38.4	39.3	37.9	37.9	37.6	37.6
62.5°	22.6	22.3	22.3	22.1	21.8	21.8	21.8	21.2
65°	11.6	11.3	11.0	11.0	11.0	11.0	10.7	10.7
67.5°	5.7	5.4	5.4	5.7	5.4	5.4	5.4	5.4
70°	3.4	3.4	3.1	3.4	3.1	3.1	3.1	3.1
72.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
75°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
77.5°	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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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