

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: P244226

Luminaire Tested: **LSR8B20D010 EC8B20930 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244226
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B20D010 EC8B20930 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1903.4 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

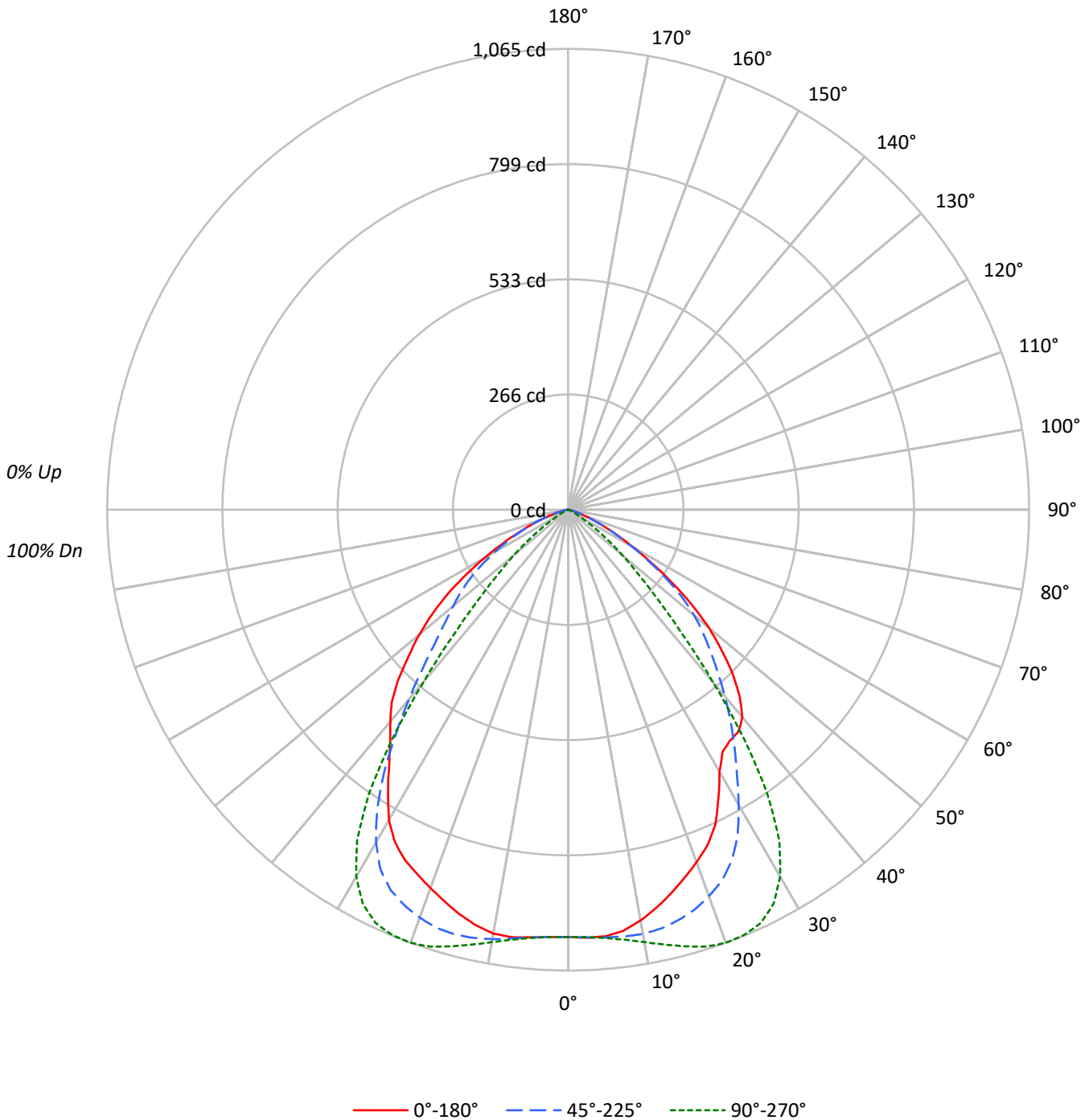
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

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°	95.0	5.0
10°-20°	281.3	14.8
20°-30°	429.2	22.5
30°-40°	447.8	23.5
40°-50°	336.4	17.7
50°-60°	207.0	10.9
60°-70°	84.2	4.4
70°-80°	19.8	1.0
80°-90°	2.7	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°	805.4	42.3
0°-40°	1253.3	65.8
0°-60°	1796.7	94.4
0°-90°	1903.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1903.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	988	988	988	988	988	
5°	990	992	993	992	992	94
15°	918	982	1044	1016	968	259
25°	804	894	1054	970	893	366
35°	652	670	802	742	721	411
45°	538	465	290	434	555	410
55°	290	276	76	276	340	261
65°	91	92	12	123	130	95
75°	16	16	2	28	29	19
85°	2	2	1	4	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	987.5	987.5	987.5	987.5	987.5	987.5	987.5	987.5	987.5	987.5	987.5
2.5°	990.1	988.5	990.1	990.1	990.6	989.5	990.1	990.6	989.5	989.5	989.5
5°	989.5	988.5	989.5	989.1	990.1	990.1	991.1	991.1	992.2	992.2	993.8
7.5°	981.2	979.1	981.2	982.8	983.8	985.9	988.5	990.6	992.6	994.8	997.5
10°	963.8	963.8	965.4	968.5	971.7	975.4	980.1	985.4	990.6	995.3	1000.0
12.5°	942.4	940.9	944.0	948.1	952.8	958.7	966.0	973.8	982.2	991.6	999.0
15°	917.8	916.2	919.8	924.0	929.8	938.2	947.1	957.6	969.7	982.2	994.2
17.5°	892.5	892.1	895.7	901.5	906.2	915.1	926.6	939.2	952.8	969.7	985.4
20°	866.9	866.4	870.0	874.7	881.1	889.4	900.9	915.6	931.9	950.7	969.1
22.5°	840.2	840.8	843.9	849.0	854.3	863.3	875.3	890.0	907.8	928.2	948.7
25°	804.0	801.4	805.6	810.8	819.7	827.1	838.6	854.3	872.7	894.1	918.3
27.5°	751.6	751.1	754.8	759.5	767.3	776.2	788.8	805.1	824.5	848.0	871.6
30°	699.2	700.2	701.9	706.6	711.7	720.7	733.2	746.9	765.2	787.7	812.9
32.5°	663.5	663.5	665.6	668.8	672.5	677.2	686.1	696.0	710.2	726.0	744.2
35°	651.5	649.4	651.5	652.0	652.5	653.5	655.1	658.3	663.0	669.8	676.6
37.5°	646.3	644.7	644.7	642.6	640.0	636.8	632.6	627.9	622.7	615.9	610.6
40°	625.9	624.7	623.7	621.6	615.9	609.6	602.8	591.8	579.7	562.9	546.2
42.5°	586.5	585.5	584.9	580.7	575.5	568.1	560.3	548.7	533.6	512.1	488.0
45°	537.7	535.6	534.0	530.5	526.8	520.5	513.1	502.7	487.4	465.4	436.6
47.5°	481.1	480.1	479.6	478.0	474.3	470.7	466.0	457.6	443.9	423.0	393.1
50°	424.0	421.9	423.0	422.5	420.8	418.2	415.1	409.4	398.9	380.0	352.8
52.5°	358.5	358.5	357.9	359.5	360.1	359.5	360.1	353.8	344.9	330.7	307.7
55°	290.3	290.3	291.9	294.0	296.2	296.6	296.2	293.5	287.2	275.7	255.3
57.5°	226.4	225.4	228.6	231.7	233.7	235.9	234.3	232.2	228.6	219.0	203.3
60°	172.4	172.4	174.5	176.7	178.7	180.8	180.3	179.8	176.7	170.3	157.7
62.5°	126.8	127.3	127.3	128.9	131.0	133.2	134.7	133.2	131.6	127.3	118.9
65°	90.7	90.1	90.7	92.3	93.8	96.0	97.0	96.4	94.8	91.7	85.4
67.5°	60.8	60.3	62.3	62.9	63.9	66.0	65.5	66.0	65.5	62.9	57.6
70°	39.8	38.8	39.8	39.3	40.9	41.4	42.5	42.9	42.5	40.9	39.3
72.5°	24.7	24.1	24.7	25.1	25.7	26.2	27.2	27.2	26.7	25.7	23.5
75°	15.7	14.1	14.7	13.7	14.7	14.7	15.7	16.3	15.7	15.7	14.7
77.5°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	10.0	10.4	9.4	9.0
80°	4.7	4.7	5.3	5.3	5.3	5.7	5.3	5.3	5.3	5.7	4.1
82.5°	3.7	3.1	3.1	3.1	3.7	3.1	3.1	3.1	3.1	3.1	3.1
85°	1.6	2.1	1.6	1.0	1.6	1.6	2.1	1.6	1.6	1.6	2.1
87.5°	0.6	0.6	0.0	0.0	0.0	0.6	0.0	0.6	0.6	1.0	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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	987.5	987.5	987.5	987.5	987.5	987.5	987.5	987.5	987.5	987.5	987.5
2.5°	990.1	989.1	989.1	988.5	989.5	988.5	989.1	988.5	988.5	989.5	988.5
5°	993.8	994.2	993.2	992.6	994.2	994.2	994.2	993.2	993.2	993.8	993.2
7.5°	999.0	1000.0	1000.6	1001.1	1002.2	1002.6	1002.6	1002.2	1001.6	1003.2	1001.1
10°	1004.8	1006.3	1009.5	1011.0	1013.6	1013.6	1014.7	1014.7	1013.6	1014.7	1014.2
12.5°	1002.6	1012.0	1017.3	1021.0	1024.7	1027.8	1028.9	1029.4	1028.9	1031.0	1028.9
15°	1006.3	1014.2	1022.6	1028.9	1035.7	1039.3	1040.4	1044.5	1045.7	1046.1	1043.0
17.5°	1000.6	1014.7	1023.6	1033.0	1043.0	1049.8	1056.1	1058.8	1059.2	1060.4	1056.1
20°	987.5	1003.2	1016.7	1030.4	1042.0	1052.4	1057.7	1065.1	1062.9	1067.1	1061.4
22.5°	969.7	987.5	1004.8	1022.6	1034.7	1047.2	1058.2	1063.5	1066.1	1066.1	1059.8
25°	941.3	962.3	981.2	999.5	1017.9	1033.0	1045.7	1053.5	1055.1	1054.5	1047.2
27.5°	897.2	919.8	941.9	962.8	985.4	1003.2	1017.9	1027.3	1029.9	1029.9	1022.0
30°	836.5	860.6	882.1	907.2	930.3	950.3	970.7	979.1	983.8	983.8	974.9
32.5°	764.2	784.6	804.5	829.2	854.3	876.8	896.2	907.8	913.5	913.1	905.2
35°	685.6	695.5	710.7	729.1	751.6	772.6	791.4	802.4	812.4	811.8	804.5
37.5°	606.9	604.3	605.9	612.7	626.9	641.5	656.2	666.7	675.1	678.8	677.2
40°	529.9	516.2	503.1	498.4	499.5	504.8	512.6	520.5	529.9	534.6	536.7
42.5°	460.7	437.6	414.5	397.3	387.3	384.2	387.9	390.4	396.3	403.0	409.8
45°	405.1	374.2	343.8	317.1	300.3	290.3	288.3	290.3	293.5	300.3	309.3
47.5°	359.5	323.4	289.3	259.4	234.8	221.7	218.0	217.0	220.2	226.4	238.4
50°	319.1	283.1	245.3	210.7	185.0	170.3	165.1	163.0	166.7	171.4	182.4
52.5°	275.2	239.6	200.8	167.1	140.5	125.2	119.5	116.4	118.5	124.8	135.8
55°	227.5	194.5	159.3	124.8	99.1	84.9	78.1	76.0	78.1	84.9	96.0
57.5°	179.8	152.0	122.6	90.1	67.0	52.9	46.1	44.1	49.8	52.5	63.9
60°	140.5	117.9	92.8	66.0	46.1	35.1	28.2	26.7	29.4	34.1	43.5
62.5°	105.4	91.2	71.3	47.2	34.1	22.5	18.8	17.3	18.8	22.5	29.9
65°	76.6	65.5	49.8	34.6	23.1	16.8	12.6	11.5	13.1	15.7	22.0
67.5°	52.5	44.1	34.6	24.1	15.7	10.4	9.0	9.0	9.4	11.5	16.3
70°	34.1	28.8	22.0	15.7	10.4	7.8	6.8	5.7	6.8	8.4	11.0
72.5°	21.5	18.4	14.1	11.0	7.8	5.7	4.7	4.1	5.3	6.3	8.4
75°	13.1	10.0	7.3	5.7	4.1	4.1	4.1	2.1	2.6	4.1	5.3
77.5°	7.8	6.8	5.7	4.7	3.7	2.1	2.1	2.1	2.6	3.1	4.7
80°	4.1	3.7	2.6	2.6	2.1	1.6	2.1	1.6	1.0	2.6	3.1
82.5°	2.6	2.1	2.1	2.1	2.6	1.0	1.6	1.0	1.6	2.1	1.6
85°	1.6	1.6	1.6	1.0	2.6	1.0	1.0	0.6	0.6	1.0	1.0
87.5°	0.0	0.6	0.6	0.0	0.6	0.0	0.6	0.6	0.6	0.6	0.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	987.5	987.5	987.5	987.5	987.5	987.5	987.5	987.5	987.5	987.5	987.5
2.5°	989.1	988.5	989.1	988.5	988.5	988.5	989.1	989.1	988.5	988.5	989.5
5°	993.2	993.2	993.2	992.6	992.2	992.2	993.2	993.2	991.6	993.2	993.2
7.5°	1002.2	1000.6	1002.2	1000.0	999.0	999.5	1000.0	999.0	997.9	998.5	998.5
10°	1013.6	1012.0	1012.0	1010.5	1008.9	1007.9	1006.9	1004.2	1001.6	1001.1	999.0
12.5°	1027.3	1024.7	1023.1	1020.0	1017.3	1013.6	1010.5	1006.3	1001.1	997.5	993.8
15°	1041.0	1036.7	1033.0	1027.8	1022.0	1015.7	1008.9	1002.2	993.8	986.4	980.1
17.5°	1051.9	1046.1	1039.3	1031.0	1022.6	1013.2	1003.2	993.2	981.2	971.7	964.4
20°	1055.5	1047.2	1038.3	1027.3	1016.3	1003.2	990.6	977.5	963.8	953.9	945.6
22.5°	1050.8	1041.0	1029.9	1018.4	1003.7	989.5	974.9	959.7	947.6	934.0	926.2
25°	1037.8	1025.7	1013.6	1000.0	985.9	970.1	954.4	938.7	924.0	916.6	906.8
27.5°	1011.0	997.9	984.8	970.7	954.4	938.7	922.5	907.2	894.7	884.7	879.0
30°	963.8	948.7	933.5	918.3	904.1	887.8	872.7	860.0	847.5	839.6	833.9
32.5°	891.5	878.0	862.7	848.0	834.9	821.4	808.7	797.7	788.8	783.6	779.3
35°	794.0	780.4	768.9	758.5	747.4	741.7	733.8	727.5	723.8	721.7	721.3
37.5°	671.4	663.5	659.8	657.8	655.7	654.1	655.1	657.8	659.8	663.5	667.8
40°	540.3	547.2	549.3	556.6	563.4	572.4	582.4	593.8	603.2	615.3	623.7
42.5°	420.8	433.5	448.2	463.9	480.6	496.8	516.8	535.2	551.9	567.1	580.2
45°	323.4	342.8	364.8	387.3	409.8	433.5	457.6	480.1	500.0	516.2	529.9
47.5°	252.1	273.6	301.9	329.7	356.9	384.7	411.4	435.1	451.8	467.6	479.6
50°	199.7	224.3	255.3	287.2	317.1	346.4	374.8	396.7	413.5	426.1	435.1
52.5°	154.6	184.0	215.5	249.0	280.9	312.9	339.1	359.5	373.2	384.2	391.0
55°	115.4	144.2	177.7	212.3	244.7	275.7	300.3	318.1	330.2	336.5	340.1
57.5°	83.3	109.5	143.0	177.7	207.0	236.4	256.3	272.5	279.4	283.1	284.6
60°	60.8	84.9	114.8	144.6	172.4	196.1	213.3	224.3	229.6	231.7	231.2
62.5°	44.5	65.5	91.2	116.4	138.9	158.3	172.0	179.2	181.8	182.9	181.4
65°	34.1	50.3	72.3	91.7	109.1	123.2	133.2	137.9	139.5	138.9	137.9
67.5°	25.1	37.8	54.0	68.7	81.3	92.3	97.5	101.7	102.7	101.1	99.5
70°	17.8	27.8	39.3	49.3	58.7	65.0	70.7	71.3	71.3	70.7	69.7
72.5°	12.6	19.4	26.7	33.5	39.3	44.1	46.1	47.6	47.2	46.6	45.6
75°	8.4	12.1	19.4	21.0	26.2	27.8	29.9	29.9	30.4	28.8	28.8
77.5°	5.3	8.4	11.5	13.7	15.7	17.8	18.8	18.8	19.4	18.8	18.8
80°	3.1	5.3	6.3	9.4	9.4	11.0	11.5	12.1	11.0	12.6	11.0
82.5°	2.1	3.1	4.7	4.7	5.7	6.8	6.8	7.3	7.3	6.8	6.8
85°	1.6	2.1	2.6	3.1	3.1	3.7	3.1	3.1	3.7	4.1	3.7
87.5°	0.6	1.0	0.6	1.0	1.0	2.1	1.6	1.6	1.6	2.1	2.1
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):

	165°	170°	175°	180°
0°	987.5	987.5	987.5	987.5
2.5°	988.5	989.1	988.5	988.5
5°	993.2	992.6	993.2	992.2
7.5°	996.9	996.9	996.3	996.3
10°	996.9	994.8	994.8	994.8
12.5°	989.1	986.4	984.8	983.8
15°	975.4	970.7	968.5	968.1
17.5°	957.6	953.4	950.7	949.2
20°	937.2	932.9	929.8	930.3
22.5°	919.3	914.6	912.5	911.5
25°	901.5	895.7	894.1	893.1
27.5°	872.7	869.6	868.0	866.4
30°	828.6	827.1	824.5	828.1
32.5°	777.7	775.2	773.0	774.6
35°	721.7	720.1	721.7	720.7
37.5°	670.4	671.9	674.1	675.1
40°	630.0	635.7	637.8	638.9
42.5°	589.6	596.5	600.6	603.2
45°	539.9	546.7	551.4	554.6
47.5°	488.5	494.2	499.0	498.4
50°	441.8	445.0	447.1	449.2
52.5°	394.7	394.7	395.2	395.2
55°	341.2	340.1	339.7	340.1
57.5°	282.5	281.5	280.9	279.4
60°	229.0	225.9	223.8	223.8
62.5°	179.2	175.5	174.0	173.5
65°	134.7	134.2	131.0	130.5
67.5°	97.5	95.4	93.3	93.8
70°	68.7	65.5	65.5	64.5
72.5°	44.5	42.9	42.5	42.5
75°	27.8	27.8	26.7	28.8
77.5°	18.4	18.4	17.8	18.4
80°	11.0	11.0	11.0	10.4
82.5°	6.8	7.3	6.8	6.8
85°	3.7	4.1	3.1	4.7
87.5°	2.1	2.6	2.1	2.6
90°	0.0	0.0	0.0	0.0

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