

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: P245498

Luminaire Tested: **LSR8B20D010 EC8B20935 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245498
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 EC8B20935 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1912.0 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

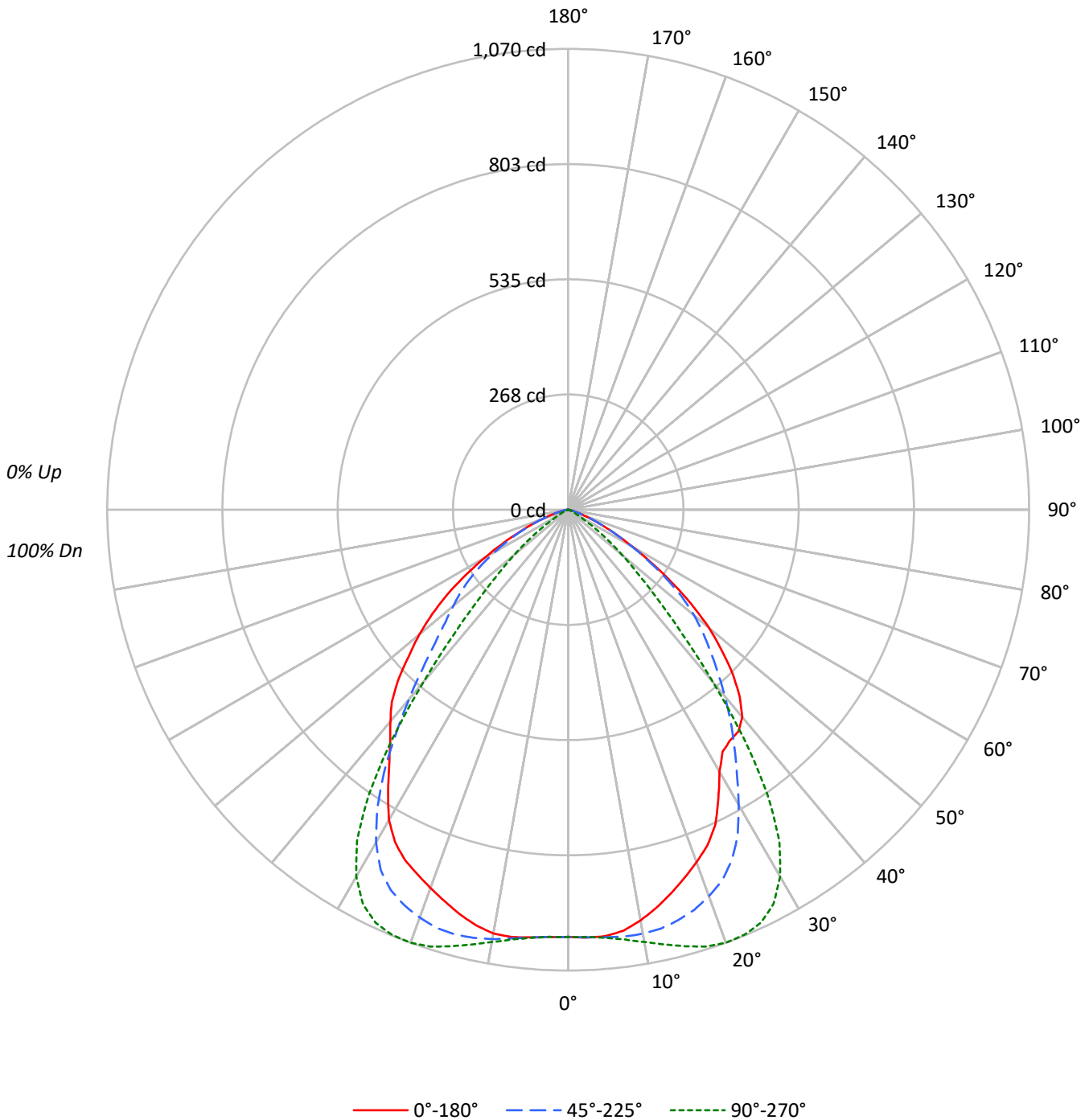
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	30587	30587	30587
5°	30768	30883	30849
10°	30316	31916	31290
15°	29431	33498	31043
20°	28576	35106	30666
25°	27478	36004	30523
30°	25007	35019	29618
35°	24634	30341	27251
40°	25304	21045	25835
45°	23558	12721	24290
50°	20432	7853	21645
55°	15682	4102	18370
60°	10682	1653	13864
65°	6647	846	9566
70°	3606	523	5842
75°	1882	250	3455
80°	835	284	1865
85°	566	177	1663



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.4	5.0
10°-20°	282.6	14.8
20°-30°	431.1	22.5
30°-40°	449.9	23.5
40°-50°	337.9	17.7
50°-60°	207.9	10.9
60°-70°	84.6	4.4
70°-80°	19.9	1.0
80°-90°	2.8	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°	809.1	42.3
0°-40°	1258.9	65.8
0°-60°	1804.7	94.4
0°-90°	1912.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1912.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	992	992	992	992	992	
5°	994	997	998	997	997	94
15°	922	987	1049	1020	972	260
25°	808	898	1058	974	897	367
35°	654	673	806	745	724	413
45°	540	468	292	435	557	412
55°	292	277	76	277	342	262
65°	91	92	12	124	131	95
75°	16	16	2	28	29	19
85°	2	2	0	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°	991.9	991.9	991.9	991.9	991.9	991.9	991.9	991.9	991.9	991.9	991.9
2.5°	994.5	992.9	994.5	994.5	995.0	994.0	994.5	995.0	994.0	994.0	994.0
5°	994.0	992.9	994.0	993.5	994.5	994.5	995.6	995.6	996.6	996.6	998.2
7.5°	985.6	983.5	985.6	987.2	988.2	990.3	992.9	995.0	997.1	999.3	1001.9
10°	968.2	968.2	969.8	972.9	976.1	979.8	984.5	989.8	995.0	999.8	1004.5
12.5°	946.6	945.0	948.2	952.4	957.1	962.9	970.3	978.2	986.6	996.1	1003.5
15°	921.9	920.3	924.0	928.2	934.0	942.4	951.4	961.9	974.0	986.6	998.7
17.5°	896.6	896.1	899.7	905.5	910.3	919.2	930.8	943.4	957.1	974.0	989.8
20°	870.8	870.3	874.0	878.7	885.0	893.4	905.0	919.8	936.1	955.0	973.5
22.5°	843.9	844.5	847.6	852.9	858.2	867.1	879.2	894.0	911.9	932.4	952.9
25°	807.6	805.0	809.2	814.5	823.4	830.8	842.4	858.2	876.6	898.2	922.4
27.5°	755.0	754.4	758.1	762.9	770.8	779.7	792.3	808.7	828.1	851.8	875.5
30°	702.3	703.4	705.0	709.7	715.0	723.9	736.5	750.2	768.7	791.3	816.6
32.5°	666.5	666.5	668.6	671.8	675.5	680.2	689.2	699.2	713.4	729.2	747.6
35°	654.4	652.3	654.4	654.9	655.5	656.5	658.1	661.3	666.0	672.8	679.7
37.5°	649.2	647.6	647.6	645.5	642.8	639.7	635.5	630.7	625.5	618.6	613.4
40°	628.6	627.6	626.5	624.4	618.6	612.3	605.4	594.4	582.3	565.4	548.6
42.5°	589.1	588.1	587.5	583.3	578.1	570.7	562.8	551.2	536.0	514.4	490.1
45°	540.2	538.1	536.5	532.8	529.1	522.8	515.4	504.9	489.6	467.5	438.6
47.5°	483.3	482.3	481.7	480.2	476.5	472.8	468.0	459.6	445.9	424.9	394.9
50°	425.9	423.8	424.9	424.3	422.8	420.1	417.0	411.2	400.6	381.7	354.3
52.5°	360.1	360.1	359.6	361.2	361.7	361.2	361.7	355.4	346.4	332.2	309.0
55°	291.7	291.7	293.2	295.4	297.5	298.0	297.5	294.8	288.5	276.9	256.4
57.5°	227.4	226.4	229.5	232.7	234.8	236.9	235.3	233.2	229.5	220.1	204.3
60°	173.2	173.2	175.3	177.4	179.5	181.6	181.1	180.6	177.4	171.1	158.5
62.5°	127.4	127.9	127.9	129.5	131.6	133.7	135.3	133.7	132.1	127.9	119.5
65°	91.1	90.5	91.1	92.7	94.2	96.3	97.4	96.9	95.3	92.1	85.8
67.5°	61.1	60.5	62.6	63.2	64.2	66.3	65.8	66.3	65.8	63.2	57.9
70°	40.0	39.0	40.0	39.5	41.1	41.6	42.6	43.2	42.6	41.1	39.5
72.5°	24.7	24.2	24.7	25.3	25.8	26.3	27.4	27.4	26.8	25.8	23.7
75°	15.8	14.2	14.7	13.7	14.7	14.7	15.8	16.3	15.8	15.8	14.7
77.5°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	10.0	10.5	9.5	9.0
80°	4.7	4.7	5.3	5.3	5.3	5.8	5.3	5.3	5.3	5.8	4.2
82.5°	3.7	3.2	3.2	3.2	3.7	3.2	3.2	3.2	3.2	3.2	3.2
85°	1.6	2.1	1.6	1.1	1.6	1.6	2.1	1.6	1.6	1.6	2.1
87.5°	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.5	0.5	1.1	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°	991.9	991.9	991.9	991.9	991.9	991.9	991.9	991.9	991.9	991.9	991.9
2.5°	994.5	993.5	993.5	992.9	994.0	992.9	993.5	992.9	992.9	994.0	992.9
5°	998.2	998.7	997.7	997.1	998.7	998.7	998.7	997.7	997.7	998.2	997.7
7.5°	1003.5	1004.5	1005.0	1005.6	1006.6	1007.2	1007.2	1006.6	1006.1	1007.7	1005.6
10°	1009.3	1010.8	1014.0	1015.6	1018.2	1018.2	1019.3	1019.3	1018.2	1019.3	1018.7
12.5°	1007.2	1016.6	1021.9	1025.6	1029.3	1032.4	1033.5	1034.0	1033.5	1035.6	1033.5
15°	1010.8	1018.7	1027.2	1033.5	1040.3	1044.0	1045.1	1049.3	1050.3	1050.9	1047.7
17.5°	1005.0	1019.3	1028.2	1037.7	1047.7	1054.5	1060.8	1063.5	1064.0	1065.1	1060.8
20°	991.9	1007.7	1021.4	1035.1	1046.6	1057.2	1062.4	1069.8	1067.7	1071.9	1066.1
22.5°	974.0	991.9	1009.3	1027.2	1039.3	1051.9	1063.0	1068.2	1070.9	1070.9	1064.5
25°	945.6	966.6	985.6	1004.0	1022.4	1037.7	1050.3	1058.2	1059.8	1059.3	1051.9
27.5°	901.3	924.0	946.1	967.1	989.8	1007.7	1022.4	1031.9	1034.5	1034.5	1026.6
30°	840.3	864.5	886.1	911.3	934.5	954.5	975.0	983.5	988.2	988.2	979.3
32.5°	767.6	788.1	808.1	832.9	858.2	880.8	900.3	911.9	917.7	917.1	909.2
35°	688.6	698.6	713.9	732.3	755.0	776.0	795.0	806.0	816.0	815.5	808.1
37.5°	609.7	607.0	608.6	615.5	629.7	644.4	659.1	669.7	678.1	681.8	680.2
40°	532.3	518.6	505.4	500.7	501.7	507.0	514.9	522.8	532.3	537.0	539.1
42.5°	462.8	439.6	416.4	399.1	389.1	385.9	389.6	392.2	398.0	404.9	411.7
45°	407.0	375.9	345.4	318.5	301.7	291.7	289.6	291.7	294.8	301.7	310.6
47.5°	361.2	324.8	290.6	260.6	235.9	222.7	219.0	218.0	221.1	227.4	239.5
50°	320.6	284.3	246.4	211.6	185.8	171.1	165.8	163.7	167.4	172.2	183.2
52.5°	276.4	240.6	201.6	167.9	141.1	125.8	120.0	116.9	119.0	125.3	136.4
55°	228.5	195.3	160.0	125.3	99.5	85.3	78.4	76.3	78.4	85.3	96.3
57.5°	180.6	152.7	123.2	90.5	67.4	53.2	46.3	44.2	50.0	52.6	64.2
60°	141.1	118.5	93.2	66.3	46.3	35.3	28.4	26.8	29.5	34.2	43.7
62.5°	105.8	91.6	71.6	47.4	34.2	22.6	18.9	17.4	18.9	22.6	30.0
65°	76.9	65.8	50.0	34.7	23.2	16.8	12.6	11.6	13.2	15.8	22.1
67.5°	52.6	44.2	34.7	24.2	15.8	10.5	9.0	9.0	9.5	11.6	16.3
70°	34.2	29.0	22.1	15.8	10.5	7.9	6.8	5.8	6.8	8.4	11.1
72.5°	21.6	18.4	14.2	11.1	7.9	5.8	4.7	4.2	5.3	6.3	8.4
75°	13.2	10.0	7.4	5.8	4.2	4.2	4.2	2.1	2.6	4.2	5.3
77.5°	7.9	6.8	5.8	4.7	3.7	2.1	2.1	2.1	2.6	3.2	4.7
80°	4.2	3.7	2.6	2.6	2.1	1.6	2.1	1.6	1.1	2.6	3.2
82.5°	2.6	2.1	2.1	2.1	2.6	1.1	1.6	1.1	1.6	2.1	1.6
85°	1.6	1.6	1.6	1.1	2.6	1.1	1.1	0.5	0.5	1.1	1.1
87.5°	0.0	0.5	0.5	0.0	0.5	0.0	0.5	0.5	0.5	0.5	0.5
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°	991.9	991.9	991.9	991.9	991.9	991.9	991.9	991.9	991.9	991.9	991.9
2.5°	993.5	992.9	993.5	992.9	992.9	992.9	993.5	993.5	992.9	992.9	994.0
5°	997.7	997.7	997.7	997.1	996.6	996.6	997.7	997.7	996.1	997.7	997.7
7.5°	1006.6	1005.0	1006.6	1004.5	1003.5	1004.0	1004.5	1003.5	1002.4	1002.9	1002.9
10°	1018.2	1016.6	1016.6	1015.1	1013.5	1012.4	1011.4	1008.7	1006.1	1005.6	1003.5
12.5°	1031.9	1029.3	1027.7	1024.5	1021.9	1018.2	1015.1	1010.8	1005.6	1001.9	998.2
15°	1045.6	1041.4	1037.7	1032.4	1026.6	1020.3	1013.5	1006.6	998.2	990.8	984.5
17.5°	1056.6	1050.9	1044.0	1035.6	1027.2	1017.7	1007.7	997.7	985.6	976.1	968.7
20°	1060.3	1051.9	1043.0	1031.9	1020.8	1007.7	995.0	981.9	968.2	958.2	949.8
22.5°	1055.6	1045.6	1034.5	1022.9	1008.2	994.0	979.3	964.0	951.9	938.2	930.3
25°	1042.4	1030.3	1018.2	1004.5	990.3	974.5	958.7	942.9	928.2	920.8	910.8
27.5°	1015.6	1002.4	989.3	975.0	958.7	942.9	926.6	911.3	898.7	888.7	882.9
30°	968.2	952.9	937.7	922.4	908.2	891.8	876.6	863.9	851.3	843.4	837.6
32.5°	895.5	881.9	866.6	851.8	838.7	825.0	812.4	801.3	792.3	787.1	782.9
35°	797.6	783.9	772.3	761.8	750.8	745.0	737.1	730.7	727.1	725.0	724.4
37.5°	674.4	666.5	662.8	660.7	658.6	657.0	658.1	660.7	662.8	666.5	670.7
40°	542.8	549.6	551.8	559.1	566.0	574.9	584.9	596.5	606.0	618.1	626.5
42.5°	422.8	435.4	450.1	465.9	482.8	499.1	519.1	537.5	554.4	569.6	582.8
45°	324.8	344.3	366.4	389.1	411.7	435.4	459.6	482.3	502.3	518.6	532.3
47.5°	253.2	274.8	303.3	331.2	358.5	386.4	413.3	437.0	453.8	469.6	481.7
50°	200.6	225.3	256.4	288.5	318.5	348.0	376.4	398.5	415.4	428.0	437.0
52.5°	155.3	184.8	216.4	250.1	282.2	314.3	340.6	361.2	374.9	385.9	392.7
55°	115.8	144.8	178.5	213.2	245.9	276.9	301.7	319.6	331.7	338.0	341.7
57.5°	83.7	110.0	143.7	178.5	208.0	237.4	257.4	273.8	280.6	284.3	285.9
60°	61.1	85.3	115.3	145.3	173.2	196.9	214.3	225.3	230.6	232.7	232.2
62.5°	44.8	65.8	91.6	116.9	139.5	159.0	172.7	180.1	182.7	183.7	182.2
65°	34.2	50.5	72.7	92.1	109.5	123.7	133.7	138.5	140.0	139.5	138.5
67.5°	25.3	37.9	54.2	69.0	81.6	92.7	97.9	102.1	103.2	101.6	100.0
70°	17.9	27.9	39.5	49.5	59.0	65.3	71.1	71.6	71.6	71.1	70.0
72.5°	12.6	19.5	26.8	33.7	39.5	44.2	46.3	47.9	47.4	46.9	45.8
75°	8.4	12.1	19.5	21.1	26.3	27.9	30.0	30.0	30.5	29.0	29.0
77.5°	5.3	8.4	11.6	13.7	15.8	17.9	18.9	18.9	19.5	18.9	18.9
80°	3.2	5.3	6.3	9.5	9.5	11.1	11.6	12.1	11.1	12.6	11.1
82.5°	2.1	3.2	4.7	4.7	5.8	6.8	6.8	7.4	7.4	6.8	6.8
85°	1.6	2.1	2.6	3.2	3.2	3.7	3.2	3.2	3.7	4.2	3.7
87.5°	0.5	1.1	0.5	1.1	1.1	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°	991.9	991.9	991.9	991.9
2.5°	992.9	993.5	992.9	992.9
5°	997.7	997.1	997.7	996.6
7.5°	1001.4	1001.4	1000.8	1000.8
10°	1001.4	999.3	999.3	999.3
12.5°	993.5	990.8	989.3	988.2
15°	979.8	975.0	972.9	972.4
17.5°	961.9	957.7	955.0	953.5
20°	941.3	937.1	934.0	934.5
22.5°	923.4	918.7	916.6	915.5
25°	905.5	899.7	898.2	897.1
27.5°	876.6	873.4	871.8	870.3
30°	832.4	830.8	828.1	831.8
32.5°	781.3	778.7	776.6	778.1
35°	725.0	723.4	725.0	723.9
37.5°	673.4	674.9	677.1	678.1
40°	632.8	638.6	640.7	641.8
42.5°	592.3	599.1	603.3	606.0
45°	542.3	549.1	553.9	557.0
47.5°	490.7	496.5	501.2	500.7
50°	443.8	447.0	449.1	451.2
52.5°	396.4	396.4	397.0	397.0
55°	342.7	341.7	341.2	341.7
57.5°	283.8	282.7	282.2	280.6
60°	230.1	226.9	224.8	224.8
62.5°	180.1	176.4	174.8	174.3
65°	135.3	134.8	131.6	131.1
67.5°	97.9	95.8	93.7	94.2
70°	69.0	65.8	65.8	64.8
72.5°	44.8	43.2	42.6	42.6
75°	27.9	27.9	26.8	29.0
77.5°	18.4	18.4	17.9	18.4
80°	11.1	11.1	11.1	10.5
82.5°	6.8	7.4	6.8	6.8
85°	3.7	4.2	3.2	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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