

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: P244634

Luminaire Tested: **LSR8B20D010 EC8B20935 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244634
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B20D010 EC8B20935 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1897.0 lumens
Efficiency: N/A
Efficacy: 89.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

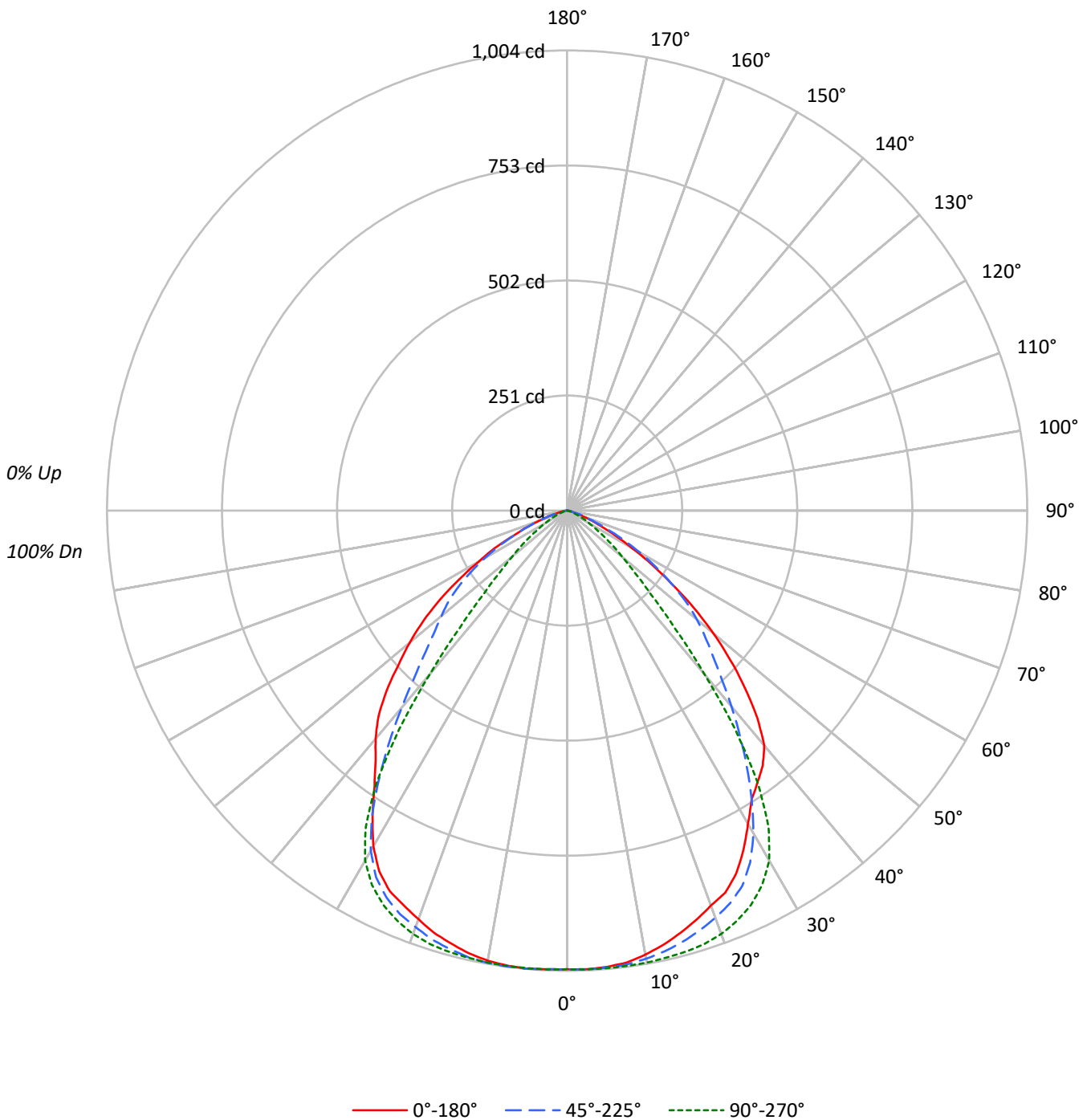
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	52	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	30864	30864	30864
5°	30932	31016	31050
10°	30802	31356	31221
15°	30459	31816	31215
20°	30095	32264	31135
25°	29703	32299	31166
30°	28101	31391	30109
35°	27262	27281	27567
40°	26926	18770	26169
45°	23989	11269	24321
50°	19947	7498	21497
55°	14962	5172	18225
60°	10139	3447	13753
65°	6114	2233	9449
70°	3390	1208	5815
75°	1537	512	3014
80°	1332	568	2095
85°	1521	743	2087



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.5	5.0
10°-20°	277.4	14.6
20°-30°	421.1	22.2
30°-40°	442.2	23.3
40°-50°	331.6	17.5
50°-60°	212.7	11.2
60°-70°	91.0	4.8
70°-80°	21.5	1.1
80°-90°	4.0	0.2
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°	794.0	41.9
0°-40°	1236.2	65.2
0°-60°	1780.5	93.9
0°-90°	1897.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1897.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1001	1001	1001	1001	1001	
5°	999	1001	1002	1004	1003	95
15°	954	974	997	990	978	269
25°	873	904	949	932	916	399
35°	724	684	725	716	732	455
45°	550	450	258	437	558	421
55°	278	278	96	290	339	252
65°	84	99	31	127	130	89
75°	13	15	4	26	25	19
85°	4	3	2	4	6	5
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°	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9
2.5°	1001.4	1002.5	1002.0	1002.0	1001.4	1002.0	1002.0	1003.1	1003.1	1002.0	1001.4
5°	999.3	1000.4	1000.4	999.3	999.3	1002.0	1000.4	1001.4	1001.4	1000.9	1000.9
7.5°	994.5	994.5	996.6	995.0	995.0	996.6	996.1	997.1	998.2	998.8	998.8
10°	983.7	984.8	985.3	985.3	985.9	987.5	988.5	990.7	991.8	992.8	993.4
12.5°	970.3	971.9	972.4	971.9	973.5	975.6	978.3	981.0	982.6	984.8	986.4
15°	954.1	954.1	955.2	956.8	957.9	961.1	963.8	967.0	971.3	974.0	976.7
17.5°	936.4	937.5	939.1	939.1	941.3	946.6	948.2	953.1	957.9	960.6	966.0
20°	917.1	918.2	919.8	920.9	923.5	927.8	931.1	935.4	940.7	945.6	950.9
22.5°	902.0	899.9	901.0	902.0	904.7	908.5	912.3	917.6	923.0	927.8	933.2
25°	873.0	873.6	875.2	876.2	879.5	882.7	887.0	893.4	898.3	903.7	909.6
27.5°	833.8	834.4	837.0	837.0	839.7	845.1	847.8	853.2	859.6	865.0	872.0
30°	789.2	790.3	790.3	792.4	794.0	796.7	799.4	804.8	808.0	812.9	822.5
32.5°	748.4	749.5	748.9	748.4	746.8	746.2	745.7	746.8	747.9	749.5	753.2
35°	724.2	721.5	719.4	715.6	711.3	705.9	701.1	694.7	688.8	683.9	678.6
37.5°	701.1	700.6	697.3	692.0	683.4	673.7	662.4	648.5	634.5	619.4	604.9
40°	668.9	667.3	664.6	657.1	647.4	635.6	620.5	603.3	580.8	557.7	534.0
42.5°	614.1	614.6	611.4	605.5	596.4	585.1	569.5	550.7	526.5	499.1	468.5
45°	550.1	550.1	549.1	544.2	537.8	528.7	516.8	501.3	477.6	449.7	416.9
47.5°	483.5	484.1	482.4	481.4	478.7	472.8	464.2	452.4	435.7	408.8	376.1
50°	415.8	415.8	418.5	418.0	418.0	415.8	412.1	405.1	390.6	369.1	338.5
52.5°	348.1	349.2	350.8	353.0	355.7	360.0	355.7	352.4	343.3	326.6	300.3
55°	278.3	279.4	282.1	285.8	289.0	293.3	294.4	294.4	289.6	278.3	258.4
57.5°	218.7	217.0	219.2	222.4	226.7	231.0	234.2	238.0	237.5	229.9	213.8
60°	164.4	164.9	166.5	169.8	173.0	176.8	181.1	184.3	185.9	182.1	171.9
62.5°	119.8	119.8	122.0	125.2	126.8	132.2	134.8	136.5	138.1	137.5	131.1
65°	83.8	84.9	86.0	87.6	89.2	92.4	94.0	97.2	98.3	98.9	94.0
67.5°	59.1	57.5	58.6	59.6	61.2	63.4	66.6	66.6	68.2	68.2	65.0
70°	37.6	37.6	38.1	39.8	40.8	41.4	42.4	43.5	45.1	44.6	44.6
72.5°	25.3	24.7	25.3	25.8	26.3	27.9	27.9	28.5	29.6	30.1	27.9
75°	12.9	13.4	14.5	14.0	15.6	14.5	15.0	16.7	16.1	15.0	15.0
77.5°	10.7	10.7	10.7	10.2	11.3	11.3	10.7	11.8	11.3	11.3	10.7
80°	7.5	8.1	7.5	7.0	7.5	7.0	7.0	7.0	7.0	7.0	6.4
82.5°	5.9	4.8	5.4	4.8	5.4	5.4	4.8	4.3	4.3	4.8	4.3
85°	4.3	3.2	3.8	3.8	3.2	3.2	3.2	3.2	3.2	2.7	2.7
87.5°	2.7	1.6	1.6	1.6	2.1	2.1	2.1	1.6	2.1	2.1	1.1
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9
2.5°	1002.5	1002.0	1003.1	1002.5	1002.5	1002.0	1002.5	1002.0	1003.1	1000.9	1001.4
5°	1002.5	1001.4	1002.0	1002.5	1003.1	1002.0	1002.0	1002.0	1003.1	1002.0	1002.5
7.5°	1000.4	999.8	1001.4	1002.5	1002.0	1001.4	1002.5	1002.0	1003.1	1002.5	1003.6
10°	996.1	996.6	997.7	999.3	999.8	1000.4	1001.4	1001.4	1003.1	1000.9	1002.0
12.5°	989.6	991.8	994.5	995.5	997.7	997.7	998.8	999.3	1000.4	999.8	1001.4
15°	981.6	984.2	987.5	990.2	992.8	994.5	996.1	996.6	998.2	996.6	997.1
17.5°	971.9	975.1	979.9	983.2	987.5	989.1	991.2	992.3	993.9	992.8	993.4
20°	958.4	962.2	967.6	972.4	975.1	978.9	981.6	983.2	984.2	983.2	983.7
22.5°	939.6	945.0	952.0	955.8	961.1	964.4	964.9	968.7	971.3	968.7	969.7
25°	917.6	923.0	928.4	936.4	941.3	945.0	948.8	949.3	952.0	951.5	950.9
27.5°	881.1	888.1	897.2	903.7	910.1	916.0	920.3	921.4	924.1	923.0	923.5
30°	831.1	838.7	847.2	857.4	866.6	872.5	877.9	881.6	884.3	882.7	882.2
32.5°	760.2	767.7	776.9	787.1	797.8	806.4	812.9	817.7	820.9	819.8	817.2
35°	679.1	681.2	687.1	695.2	704.3	713.5	719.4	724.7	728.5	729.6	729.6
37.5°	595.8	588.8	584.5	584.5	589.9	593.7	599.0	602.3	608.2	610.3	611.9
40°	515.2	499.1	484.1	472.8	465.3	464.7	464.7	466.3	471.7	478.7	485.1
42.5°	443.2	417.4	394.3	373.4	358.3	349.8	346.0	346.5	350.8	357.3	368.0
45°	385.7	353.5	324.5	299.2	278.8	265.4	259.0	258.4	261.6	269.2	281.0
47.5°	341.2	306.8	274.0	245.0	223.0	208.5	200.9	198.8	200.9	207.9	221.9
50°	304.1	268.6	234.8	204.7	181.1	166.0	159.0	156.3	159.0	164.9	178.9
52.5°	269.7	233.2	201.5	172.5	147.2	134.3	126.8	125.2	126.8	133.8	145.1
55°	229.9	198.8	167.6	138.6	116.6	103.7	97.8	96.2	97.8	104.2	116.0
57.5°	190.7	163.9	136.5	110.1	91.3	80.0	74.7	72.5	76.3	80.6	94.6
60°	154.2	132.7	109.6	86.5	70.9	60.7	56.4	55.9	56.9	62.3	72.0
62.5°	120.9	103.2	84.9	66.1	53.2	48.9	43.5	43.0	44.1	47.3	54.8
65°	87.0	75.8	61.8	48.3	38.1	32.2	30.1	30.6	31.7	33.8	40.8
67.5°	60.7	52.6	43.0	33.8	26.3	23.6	21.5	21.0	21.5	25.3	29.0
70°	40.8	36.0	29.0	25.8	18.3	14.5	15.0	13.4	15.6	15.6	18.8
72.5°	26.9	23.6	19.3	15.0	12.9	10.2	10.2	9.7	10.7	11.3	14.0
75°	14.0	10.7	10.7	7.5	5.4	2.7	4.8	4.3	3.8	4.3	5.4
77.5°	9.7	8.1	7.5	5.9	5.4	4.3	4.3	4.3	4.3	4.8	5.4
80°	5.9	5.9	4.3	3.8	3.2	2.7	3.2	3.2	3.2	3.2	3.8
82.5°	3.8	3.2	3.2	2.7	2.7	2.1	2.1	2.1	2.1	2.1	3.2
85°	3.2	2.1	2.1	1.6	2.1	3.8	1.6	2.1	2.1	2.1	1.6
87.5°	1.1	1.6	1.6	1.6	1.1	0.5	1.1	1.6	1.6	2.7	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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9
2.5°	1002.5	1003.1	1003.1	1002.5	1002.5	1001.4	1003.6	1002.0	1002.5	1004.7	1003.1
5°	1003.6	1004.1	1004.1	1003.6	1003.6	1003.6	1004.1	1004.1	1003.6	1003.1	1004.1
7.5°	1005.7	1005.2	1005.2	1004.1	1004.1	1003.1	1004.1	1002.5	1003.6	1002.5	1004.1
10°	1003.1	1003.6	1003.1	1002.5	1002.5	1002.0	1002.0	1000.4	1000.9	999.3	1000.4
12.5°	1001.4	1000.9	1000.9	999.8	998.8	997.7	997.1	995.5	995.5	991.8	993.4
15°	997.1	997.7	996.1	993.9	992.8	990.2	989.1	986.9	984.8	982.1	982.6
17.5°	993.4	991.8	989.6	987.5	983.2	981.0	978.9	975.6	974.6	971.3	970.3
20°	982.1	981.0	978.3	974.6	971.9	967.0	964.9	961.7	959.0	955.8	954.1
22.5°	967.6	966.5	963.3	959.5	955.2	953.1	950.9	945.0	942.3	939.1	938.6
25°	949.3	947.7	944.5	940.2	938.0	932.1	930.0	925.7	924.6	921.4	920.9
27.5°	921.4	919.2	915.5	910.1	906.3	902.6	900.4	897.2	896.1	892.9	892.4
30°	879.5	876.8	869.3	867.1	860.7	856.9	856.9	852.6	853.2	851.0	851.0
32.5°	813.4	809.1	803.2	798.9	794.6	792.4	792.4	790.8	791.9	791.9	793.0
35°	725.8	719.9	716.7	714.0	714.0	716.1	722.6	724.2	727.4	730.1	732.3
37.5°	613.5	613.0	616.8	620.0	628.0	637.2	648.5	658.1	667.3	673.7	680.2
40°	492.1	505.6	516.3	531.3	543.7	561.4	581.8	598.5	614.1	625.4	637.2
42.5°	384.1	401.3	423.9	445.9	467.9	492.1	519.0	542.1	562.5	578.1	590.4
45°	299.2	322.9	350.3	378.2	406.7	436.8	464.7	488.4	509.9	526.0	538.3
47.5°	241.2	267.0	298.2	328.8	361.0	392.7	423.9	444.3	462.0	474.9	486.2
50°	199.3	226.7	259.5	294.4	326.6	358.3	385.2	405.1	419.6	430.9	437.9
52.5°	166.5	195.6	230.5	265.4	297.6	326.6	350.8	365.9	377.7	385.7	392.2
55°	137.5	165.5	198.2	231.0	262.7	290.1	310.0	321.3	330.4	335.2	339.0
57.5°	112.3	138.1	168.2	198.2	225.6	248.2	263.8	275.1	279.4	283.1	282.6
60°	88.1	112.3	139.7	165.5	189.1	207.4	218.7	225.1	228.3	229.9	228.9
62.5°	69.3	91.3	112.3	134.8	152.0	167.6	178.4	178.4	180.0	180.5	182.1
65°	51.6	68.2	86.5	103.2	117.1	127.3	133.2	134.8	137.0	136.5	135.4
67.5°	38.1	50.5	63.9	76.3	86.0	92.4	96.7	100.5	99.9	98.9	98.3
70°	26.3	34.4	46.2	53.7	60.7	67.2	68.2	68.8	69.3	69.8	68.8
72.5°	18.3	24.2	30.6	37.1	41.4	44.1	46.7	47.3	47.3	47.3	46.7
75°	9.1	12.4	18.3	21.0	24.7	25.8	27.9	27.9	29.6	27.4	26.9
77.5°	8.1	9.7	12.9	15.0	16.7	18.3	18.8	20.4	19.9	18.8	19.3
80°	4.8	5.9	8.1	9.1	11.3	11.8	12.4	12.9	12.4	12.9	12.9
82.5°	3.8	4.3	5.4	5.4	7.0	7.0	7.5	7.5	8.1	8.1	8.1
85°	2.1	3.8	3.2	6.4	4.3	4.3	5.4	6.4	5.4	5.4	6.4
87.5°	2.1	2.1	1.6	2.1	2.1	2.1	2.7	3.2	3.2	3.8	3.2
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°	1000.9	1000.9	1000.9	1000.9
2.5°	1002.5	1003.6	1002.0	1001.4
5°	1004.1	1004.1	1003.1	1003.1
7.5°	1004.1	1004.1	1002.5	1001.4
10°	999.8	999.8	998.2	997.1
12.5°	991.8	991.8	991.2	989.6
15°	981.6	981.6	979.4	977.8
17.5°	967.6	968.7	966.0	966.0
20°	952.5	952.0	949.9	948.8
22.5°	937.0	935.9	935.4	932.1
25°	920.3	919.2	917.6	916.0
27.5°	891.8	891.3	889.7	887.5
30°	848.3	847.8	845.6	845.6
32.5°	791.9	791.4	789.2	789.8
35°	733.3	735.5	734.4	732.3
37.5°	684.5	686.1	687.1	686.1
40°	643.6	648.5	649.0	650.1
42.5°	600.1	606.6	608.7	609.8
45°	548.0	553.9	558.7	557.7
47.5°	494.8	499.1	503.4	500.2
50°	443.8	446.5	448.1	448.1
52.5°	395.4	395.4	394.9	395.4
55°	340.1	340.1	337.9	339.0
57.5°	282.1	283.1	281.5	278.8
60°	228.3	225.6	224.6	223.0
62.5°	177.8	177.8	174.1	178.9
65°	133.2	131.6	130.0	129.5
67.5°	96.7	96.2	94.6	94.0
70°	68.2	66.1	65.5	64.5
72.5°	45.7	45.7	44.6	44.6
75°	27.9	25.3	24.7	25.3
77.5°	19.3	18.8	18.8	18.3
80°	12.9	12.4	13.4	11.8
82.5°	8.1	8.6	8.1	8.6
85°	5.4	6.4	5.9	5.9
87.5°	3.2	3.2	3.2	3.2
90°	0.0	0.0	0.0	0.0

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