

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: P246110

Luminaire Tested: **LSR8B20D010 EC8B20830 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246110  
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 EC8B20830 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1893.0 lumens  
Efficiency: N/A  
Efficacy: 88.9 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

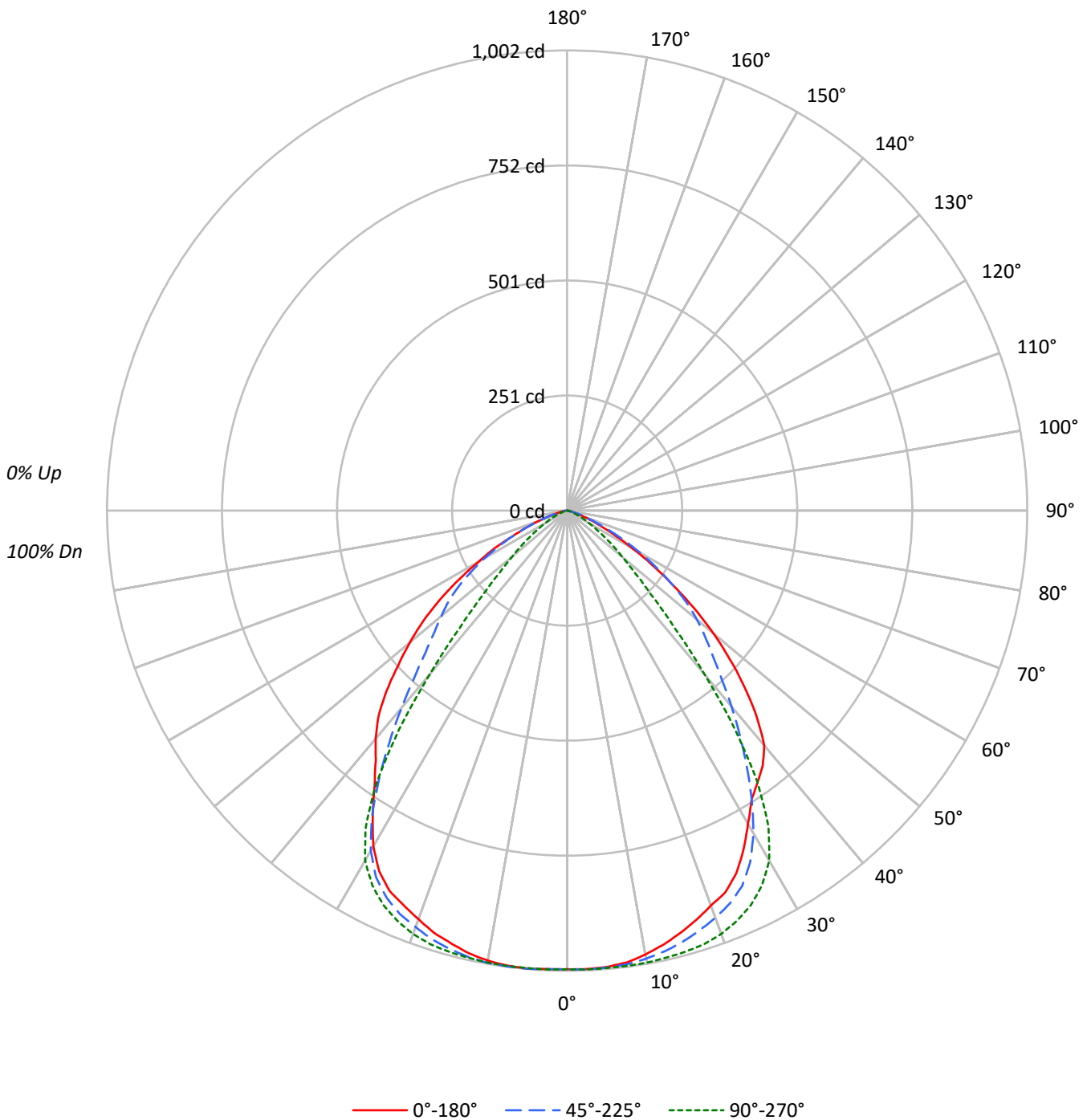
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	51	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°	30799	30799	30799
5°	30867	30951	30982
10°	30736	31290	31155
15°	30395	31749	31148
20°	30033	32195	31070
25°	29642	32231	31101
30°	28044	31327	30045
35°	27205	27224	27507
40°	26870	18730	26113
45°	23941	11247	24268
50°	19909	7484	21449
55°	14930	5161	18188
60°	10120	3441	13722
65°	6100	2233	9427
70°	3381	1208	5797
75°	1537	512	3002
80°	1332	568	2095
85°	1521	743	2087



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.3	5.0
10°-20°	276.8	14.6
20°-30°	420.2	22.2
30°-40°	441.3	23.3
40°-50°	330.9	17.5
50°-60°	212.3	11.2
60°-70°	90.8	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°	792.3	41.9
0°-40°	1233.6	65.2
0°-60°	1776.7	93.9
0°-90°	1893.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1893.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	999	999	999	999	999	
5°	997	999	1000	1002	1001	95
15°	952	972	994	988	976	269
25°	871	902	947	930	914	398
35°	723	682	723	715	731	454
45°	549	449	258	436	556	420
55°	278	278	96	290	338	252
65°	84	99	31	127	129	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°	998.8	998.8	998.8	998.8	998.8	998.8	998.8	998.8	998.8	998.8	998.8
2.5°	999.3	1000.4	999.9	999.9	999.3	999.9	999.9	1000.9	1000.9	999.9	999.3
5°	997.2	998.2	998.2	997.2	997.2	999.9	998.2	999.3	999.3	998.8	998.8
7.5°	992.4	992.4	994.5	992.9	992.9	994.5	994.0	995.0	996.1	996.6	996.6
10°	981.6	982.7	983.2	983.2	983.8	985.4	986.5	988.6	989.7	990.7	991.3
12.5°	968.2	969.8	970.4	969.8	971.4	973.6	976.3	978.9	980.6	982.7	984.3
15°	952.1	952.1	953.2	954.8	955.9	959.1	961.8	965.0	969.3	972.0	974.7
17.5°	934.5	935.5	937.1	937.1	939.3	944.6	946.2	951.1	955.9	958.6	963.9
20°	915.2	916.2	917.8	918.9	921.6	925.9	929.1	933.4	938.7	943.6	948.9
22.5°	900.1	898.0	899.1	900.1	902.8	906.6	910.3	915.7	921.0	925.9	931.2
25°	871.2	871.7	873.3	874.4	877.6	880.8	885.1	891.6	896.4	901.8	907.6
27.5°	832.1	832.6	835.3	835.3	837.9	843.3	846.0	851.4	857.8	863.1	870.1
30°	787.6	788.6	788.6	790.8	792.4	795.1	797.7	803.1	806.3	811.1	820.8
32.5°	746.8	747.9	747.3	746.8	745.2	744.7	744.1	745.2	746.3	747.9	751.6
35°	722.7	720.0	717.9	714.1	709.8	704.5	699.6	693.2	687.3	682.5	677.1
37.5°	699.6	699.1	695.9	690.5	681.9	672.3	661.0	647.1	633.1	618.1	603.7
40°	667.5	665.9	663.2	655.7	646.0	634.2	619.2	602.1	579.5	556.5	532.9
42.5°	612.8	613.3	610.1	604.2	595.1	583.8	568.3	549.5	525.4	498.0	467.5
45°	549.0	549.0	547.9	543.1	536.7	527.5	515.7	500.2	476.6	448.7	416.0
47.5°	482.5	483.0	481.4	480.4	477.7	471.8	463.2	451.4	434.8	408.0	375.3
50°	415.0	415.0	417.6	417.1	417.1	415.0	411.2	404.2	389.8	368.3	337.8
52.5°	347.4	348.5	350.1	352.2	354.9	359.2	354.9	351.7	342.6	326.0	299.7
55°	277.7	278.8	281.5	285.2	288.4	292.7	293.8	293.8	289.0	277.7	257.9
57.5°	218.2	216.6	218.7	222.0	226.2	230.5	233.7	237.5	237.0	229.5	213.4
60°	164.1	164.6	166.2	169.4	172.6	176.4	180.7	183.9	185.5	181.7	171.6
62.5°	119.6	119.6	121.7	124.9	126.5	131.9	134.6	136.2	137.8	137.2	130.8
65°	83.6	84.7	85.8	87.4	89.0	92.2	93.8	97.0	98.1	98.6	93.8
67.5°	59.0	57.4	58.4	59.5	61.1	63.3	66.5	66.5	68.1	68.1	64.9
70°	37.5	37.5	38.1	39.7	40.7	41.3	42.4	43.4	45.0	44.5	44.5
72.5°	25.2	24.7	25.2	25.7	26.3	27.9	27.9	28.4	29.5	30.0	27.9
75°	12.9	13.4	14.5	13.9	15.5	14.5	15.0	16.6	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	8.0	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°	998.8	998.8	998.8	998.8	998.8	998.8	998.8	998.8	998.8	998.8	998.8
2.5°	1000.4	999.9	1000.9	1000.4	1000.4	999.9	1000.4	999.9	1000.9	998.8	999.3
5°	1000.4	999.3	999.9	1000.4	1000.9	999.9	999.9	999.9	1000.9	999.9	1000.4
7.5°	998.2	997.7	999.3	1000.4	999.9	999.3	1000.4	999.9	1000.9	1000.4	1001.5
10°	994.0	994.5	995.6	997.2	997.7	998.2	999.3	999.3	1000.9	998.8	999.9
12.5°	987.5	989.7	992.4	993.4	995.6	995.6	996.6	997.2	998.2	997.7	999.3
15°	979.5	982.2	985.4	988.1	990.7	992.4	994.0	994.5	996.1	994.5	995.0
17.5°	969.8	973.0	977.9	981.1	985.4	987.0	989.1	990.2	991.8	990.7	991.3
20°	956.4	960.2	965.5	970.4	973.0	976.8	979.5	981.1	982.2	981.1	981.6
22.5°	937.7	943.0	950.0	953.8	959.1	962.3	962.9	966.6	969.3	966.6	967.7
25°	915.7	921.0	926.4	934.5	939.3	943.0	946.8	947.3	950.0	949.5	948.9
27.5°	879.2	886.2	895.3	901.8	908.2	914.1	918.4	919.4	922.1	921.0	921.6
30°	829.4	836.9	845.5	855.6	864.8	870.6	876.0	879.8	882.4	880.8	880.3
32.5°	758.6	766.1	775.2	785.4	796.1	804.7	811.1	816.0	819.2	818.1	815.4
35°	677.7	679.8	685.7	693.7	702.8	712.0	717.9	723.2	727.0	728.0	728.0
37.5°	594.6	587.6	583.3	583.3	588.7	592.4	597.8	601.0	606.9	609.0	610.6
40°	514.1	498.0	483.0	471.8	464.3	463.7	463.7	465.3	470.7	477.7	484.1
42.5°	442.3	416.6	393.5	372.6	357.6	349.0	345.3	345.8	350.1	356.5	367.2
45°	384.9	352.8	323.8	298.6	278.2	264.8	258.4	257.9	261.1	268.6	280.4
47.5°	340.4	306.1	273.4	244.5	222.5	208.0	200.5	198.4	200.5	207.5	221.4
50°	303.4	268.1	234.3	204.3	180.7	165.7	158.7	156.0	158.7	164.6	178.5
52.5°	269.1	232.7	201.0	172.1	146.9	134.0	126.5	124.9	126.5	133.5	144.8
55°	229.5	198.4	167.3	138.3	116.3	103.5	97.6	96.0	97.6	104.0	115.8
57.5°	190.3	163.5	136.2	109.9	91.1	79.9	74.5	72.4	76.1	80.4	94.4
60°	153.9	132.4	109.4	86.3	70.8	60.6	56.3	55.8	56.8	62.2	71.8
62.5°	120.6	102.9	84.7	65.9	53.1	48.8	43.4	42.9	44.0	47.2	54.7
65°	86.9	75.6	61.7	48.2	38.1	32.2	30.0	30.6	31.6	33.8	40.7
67.5°	60.6	52.5	42.9	33.8	26.3	23.6	21.4	20.9	21.4	25.2	29.0
70°	40.7	35.9	29.0	25.7	18.2	14.5	15.0	13.4	15.5	15.5	18.8
72.5°	26.8	23.6	19.3	15.0	12.9	10.2	10.2	9.7	10.7	11.3	13.9
75°	13.9	10.7	10.7	7.5	5.4	2.7	4.8	4.3	3.8	4.3	5.4
77.5°	9.7	8.0	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°	998.8	998.8	998.8	998.8	998.8	998.8	998.8	998.8	998.8	998.8	998.8
2.5°	1000.4	1000.9	1000.9	1000.4	1000.4	999.3	1001.5	999.9	1000.4	1002.5	1000.9
5°	1001.5	1002.0	1002.0	1001.5	1001.5	1001.5	1002.0	1002.0	1001.5	1000.9	1002.0
7.5°	1003.6	1003.1	1003.1	1002.0	1002.0	1000.9	1002.0	1000.4	1001.5	1000.4	1002.0
10°	1000.9	1001.5	1000.9	1000.4	1000.4	999.9	999.9	998.2	998.8	997.2	998.2
12.5°	999.3	998.8	998.8	997.7	996.6	995.6	995.0	993.4	993.4	989.7	991.3
15°	995.0	995.6	994.0	991.8	990.7	988.1	987.0	984.8	982.7	980.0	980.6
17.5°	991.3	989.7	987.5	985.4	981.1	978.9	976.8	973.6	972.5	969.3	968.2
20°	980.0	978.9	976.3	972.5	969.8	965.0	962.9	959.7	957.0	953.8	952.1
22.5°	965.5	964.5	961.3	957.5	953.2	951.1	948.9	943.0	940.3	937.1	936.6
25°	947.3	945.7	942.5	938.2	936.1	930.2	928.0	923.7	922.7	919.4	918.9
27.5°	919.4	917.3	913.5	908.2	904.4	900.7	898.5	895.3	894.2	891.0	890.5
30°	877.6	874.9	867.4	865.3	858.9	855.1	855.1	850.8	851.4	849.2	849.2
32.5°	811.7	807.4	801.5	797.2	792.9	790.8	790.8	789.2	790.2	790.2	791.3
35°	724.3	718.4	715.2	712.5	712.5	714.6	721.1	722.7	725.9	728.6	730.7
37.5°	612.2	611.7	615.5	618.7	626.7	635.8	647.1	656.7	665.9	672.3	678.7
40°	491.1	504.5	515.2	530.2	542.5	560.2	580.6	597.2	612.8	624.0	635.8
42.5°	383.3	400.5	423.0	445.0	467.0	491.1	517.9	540.9	561.3	576.9	589.2
45°	298.6	322.2	349.6	377.4	405.8	435.9	463.7	487.3	508.8	524.9	537.2
47.5°	240.7	266.5	297.5	328.1	360.3	391.9	423.0	443.4	461.1	473.9	485.2
50°	198.9	226.2	258.9	293.8	326.0	357.6	384.4	404.2	418.7	430.0	436.9
52.5°	166.2	195.1	230.0	264.8	297.0	326.0	350.1	365.1	376.9	384.9	391.4
55°	137.2	165.1	197.8	230.5	262.2	289.5	309.3	320.6	329.7	334.5	338.3
57.5°	112.1	137.8	167.8	197.8	225.2	247.7	263.2	274.5	278.8	282.5	282.0
60°	87.9	112.1	139.4	165.1	188.7	206.9	218.2	224.6	227.8	229.5	228.4
62.5°	69.2	91.1	112.1	134.6	151.7	167.3	178.0	178.0	179.6	180.1	181.7
65°	51.5	68.1	86.3	102.9	116.9	127.1	133.0	134.6	136.7	136.2	135.1
67.5°	38.1	50.4	63.8	76.1	85.8	92.2	96.5	100.3	99.7	98.6	98.1
70°	26.3	34.3	46.1	53.6	60.6	67.0	68.1	68.6	69.2	69.7	68.6
72.5°	18.2	24.1	30.6	37.0	41.3	44.0	46.6	47.2	47.2	47.2	46.6
75°	9.1	12.3	18.2	20.9	24.7	25.7	27.9	27.9	29.5	27.3	26.8
77.5°	8.0	9.7	12.9	15.0	16.6	18.2	18.8	20.4	19.8	18.8	19.3
80°	4.8	5.9	8.0	9.1	11.3	11.8	12.3	12.9	12.3	12.9	12.9
82.5°	3.8	4.3	5.4	5.4	7.0	7.0	7.5	7.5	8.0	8.0	8.0
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°	998.8	998.8	998.8	998.8
2.5°	1000.4	1001.5	999.9	999.3
5°	1002.0	1002.0	1000.9	1000.9
7.5°	1002.0	1002.0	1000.4	999.3
10°	997.7	997.7	996.1	995.0
12.5°	989.7	989.7	989.1	987.5
15°	979.5	979.5	977.3	975.7
17.5°	965.5	966.6	963.9	963.9
20°	950.5	950.0	947.9	946.8
22.5°	935.0	933.9	933.4	930.2
25°	918.4	917.3	915.7	914.1
27.5°	890.0	889.4	887.8	885.7
30°	846.5	846.0	843.8	843.8
32.5°	790.2	789.7	787.6	788.1
35°	731.8	733.9	732.9	730.7
37.5°	683.0	684.6	685.7	684.6
40°	642.3	647.1	647.6	648.7
42.5°	598.8	605.3	607.4	608.5
45°	546.8	552.7	557.6	556.5
47.5°	493.8	498.0	502.3	499.1
50°	442.8	445.5	447.1	447.1
52.5°	394.6	394.6	394.0	394.6
55°	339.4	339.4	337.2	338.3
57.5°	281.5	282.5	280.9	278.2
60°	227.8	225.2	224.1	222.5
62.5°	177.5	177.5	173.7	178.5
65°	133.0	131.3	129.7	129.2
67.5°	96.5	96.0	94.4	93.8
70°	68.1	65.9	65.4	64.3
72.5°	45.6	45.6	44.5	44.5
75°	27.9	25.2	24.7	25.2
77.5°	19.3	18.8	18.8	18.2
80°	12.9	12.3	13.4	11.8
82.5°	8.0	8.6	8.0	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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