

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: P246152

Luminaire Tested: **LSR8B20D010 EC8B20940 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246152
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 EC8B20940 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1753.0 lumens
Efficiency: N/A
Efficacy: 82.3 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

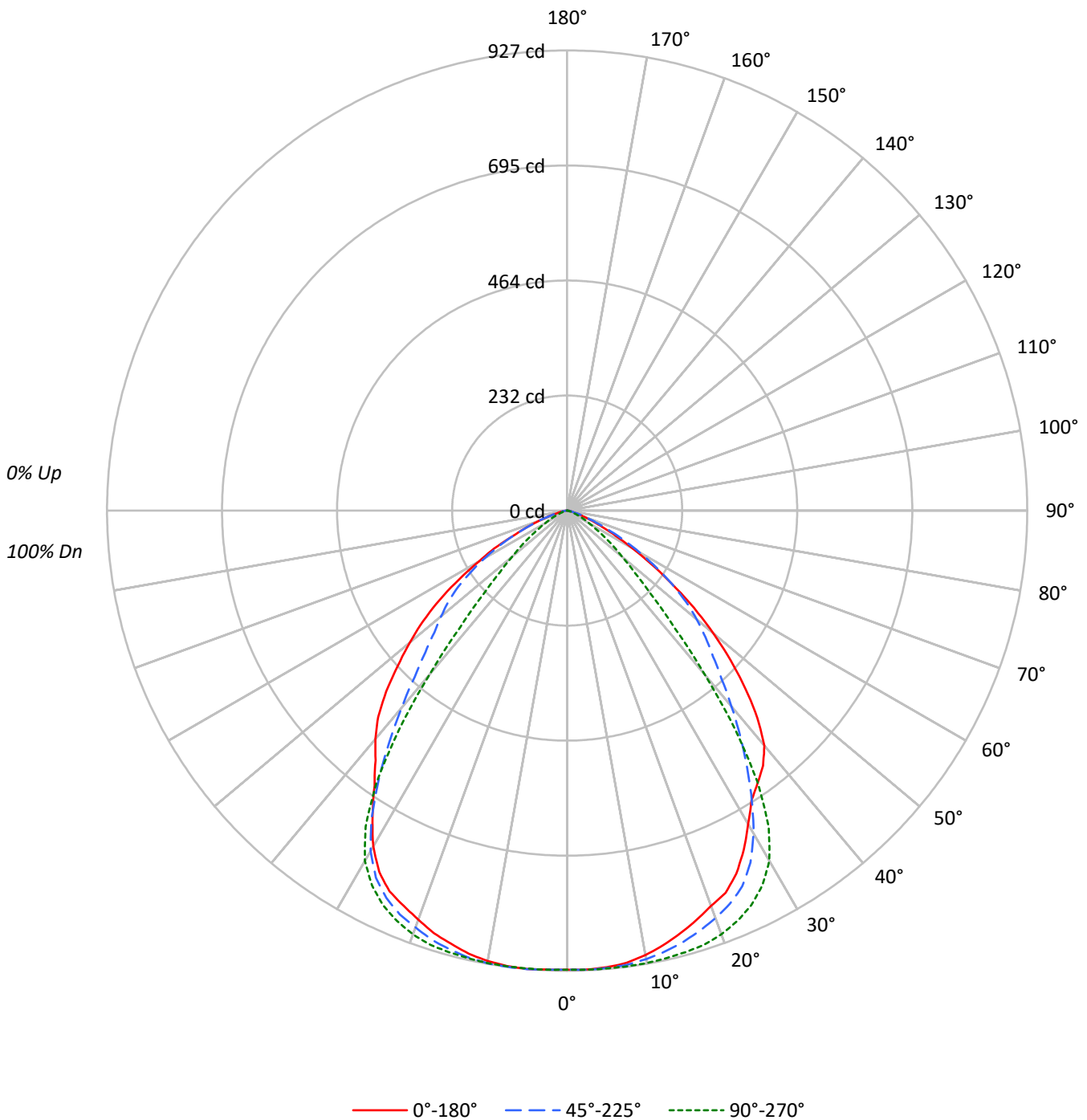
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	28521	28521	28521
5°	28583	28660	28691
10°	28463	28976	28851
15°	28147	29399	28847
20°	27811	29813	28772
25°	27451	29849	28801
30°	25968	29009	27823
35°	25191	25210	25474
40°	24881	17345	24181
45°	22171	10414	22472
50°	18436	6932	19866
55°	13827	4779	16843
60°	9368	3182	12705
65°	5655	2065	8727
70°	3138	1118	5373
75°	1418	477	2776
80°	1225	533	1936
85°	1415	708	1946



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.3	5.0
10°-20°	256.3	14.6
20°-30°	389.1	22.2
30°-40°	408.7	23.3
40°-50°	306.4	17.5
50°-60°	196.6	11.2
60°-70°	84.1	4.8
70°-80°	19.9	1.1
80°-90°	3.7	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°	733.7	41.9
0°-40°	1142.4	65.2
0°-60°	1645.3	93.9
0°-90°	1753.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1753.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	925	925	925	925	925	
5°	923	925	926	927	927	88
15°	882	900	921	915	904	249
25°	807	835	877	861	846	369
35°	669	632	670	662	677	420
45°	508	416	239	404	515	389
55°	257	257	89	268	313	233
65°	78	91	28	118	120	83
75°	12	14	4	24	23	17
85°	4	2	2	4	6	4
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°	924.9	924.9	924.9	924.9	924.9	924.9	924.9	924.9	924.9	924.9	924.9
2.5°	925.4	926.4	925.9	925.9	925.4	925.9	925.9	926.9	926.9	925.9	925.4
5°	923.4	924.4	924.4	923.4	923.4	925.9	924.4	925.4	925.4	924.9	924.9
7.5°	919.0	919.0	920.9	919.5	919.5	920.9	920.4	921.4	922.4	922.9	922.9
10°	909.0	910.0	910.5	910.5	911.0	912.5	913.5	915.5	916.5	917.5	918.0
12.5°	896.6	898.1	898.6	898.1	899.6	901.6	904.1	906.5	908.0	910.0	911.5
15°	881.7	881.7	882.7	884.2	885.2	888.2	890.7	893.6	897.6	900.1	902.6
17.5°	865.3	866.3	867.8	867.8	869.8	874.8	876.3	880.7	885.2	887.7	892.7
20°	847.5	848.5	850.0	850.9	853.4	857.4	860.4	864.3	869.3	873.8	878.7
22.5°	833.6	831.6	832.6	833.6	836.1	839.5	843.0	848.0	852.9	857.4	862.4
25°	806.8	807.3	808.7	809.7	812.7	815.7	819.7	825.6	830.1	835.1	840.5
27.5°	770.5	771.0	773.5	773.5	776.0	780.9	783.4	788.4	794.4	799.3	805.8
30°	729.3	730.3	730.3	732.3	733.8	736.3	738.7	743.7	746.7	751.2	760.1
32.5°	691.6	692.6	692.1	691.6	690.1	689.6	689.1	690.1	691.1	692.6	696.0
35°	669.2	666.8	664.8	661.3	657.3	652.4	647.9	641.9	636.5	632.0	627.0
37.5°	647.9	647.4	644.4	639.4	631.5	622.6	612.1	599.2	586.3	572.4	559.0
40°	618.1	616.6	614.1	607.2	598.2	587.3	573.4	557.5	536.7	515.3	493.5
42.5°	567.5	568.0	565.0	559.5	551.1	540.6	526.3	508.9	486.5	461.2	432.9
45°	508.4	508.4	507.4	502.9	497.0	488.5	477.6	463.2	441.4	415.5	385.3
47.5°	446.8	447.3	445.8	444.8	442.3	436.9	428.9	418.0	402.6	377.8	347.5
50°	384.3	384.3	386.7	386.2	386.2	384.3	380.8	374.3	360.9	341.1	312.8
52.5°	321.7	322.7	324.2	326.2	328.7	332.6	328.7	325.7	317.2	301.8	277.5
55°	257.2	258.2	260.6	264.1	267.1	271.1	272.1	272.1	267.6	257.2	238.8
57.5°	202.1	200.6	202.6	205.5	209.5	213.5	216.5	219.9	219.4	212.5	197.6
60°	151.9	152.4	153.9	156.9	159.9	163.3	167.3	170.3	171.8	168.3	158.9
62.5°	110.7	110.7	112.7	115.7	117.2	122.1	124.6	126.1	127.6	127.1	121.1
65°	77.5	78.4	79.4	80.9	82.4	85.4	86.9	89.9	90.9	91.4	86.9
67.5°	54.6	53.1	54.1	55.1	56.6	58.6	61.6	61.6	63.0	63.0	60.1
70°	34.8	34.8	35.3	36.7	37.7	38.2	39.2	40.2	41.7	41.2	41.2
72.5°	23.3	22.8	23.3	23.8	24.3	25.8	25.8	26.3	27.3	27.8	25.8
75°	11.9	12.4	13.4	12.9	14.4	13.4	13.9	15.4	14.9	13.9	13.9
77.5°	9.9	9.9	9.9	9.4	10.4	10.4	9.9	10.9	10.4	10.4	9.9
80°	6.9	7.4	6.9	6.5	6.9	6.5	6.5	6.5	6.5	6.5	6.0
82.5°	5.5	4.5	5.0	4.5	5.0	5.0	4.5	4.0	4.0	4.5	4.0
85°	4.0	3.0	3.5	3.5	3.0	3.0	3.0	3.0	3.0	2.5	2.5
87.5°	2.5	1.5	1.5	1.5	2.0	2.0	2.0	1.5	2.0	2.0	1.0
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°	924.9	924.9	924.9	924.9	924.9	924.9	924.9	924.9	924.9	924.9	924.9
2.5°	926.4	925.9	926.9	926.4	926.4	925.9	926.4	925.9	926.9	924.9	925.4
5°	926.4	925.4	925.9	926.4	926.9	925.9	925.9	925.9	926.9	925.9	926.4
7.5°	924.4	923.9	925.4	926.4	925.9	925.4	926.4	925.9	926.9	926.4	927.4
10°	920.4	920.9	921.9	923.4	923.9	924.4	925.4	925.4	926.9	924.9	925.9
12.5°	914.5	916.5	919.0	919.9	921.9	921.9	922.9	923.4	924.4	923.9	925.4
15°	907.0	909.5	912.5	915.0	917.5	919.0	920.4	920.9	922.4	920.9	921.4
17.5°	898.1	901.1	905.6	908.5	912.5	914.0	916.0	917.0	918.5	917.5	918.0
20°	885.7	889.2	894.1	898.6	901.1	904.6	907.0	908.5	909.5	908.5	909.0
22.5°	868.3	873.3	879.7	883.2	888.2	891.2	891.7	895.1	897.6	895.1	896.1
25°	848.0	852.9	857.9	865.3	869.8	873.3	876.8	877.3	879.7	879.2	878.7
27.5°	814.2	820.7	829.1	835.1	841.0	846.5	850.5	851.4	853.9	852.9	853.4
30°	768.0	775.0	782.9	792.4	800.8	806.3	811.2	814.7	817.2	815.7	815.2
32.5°	702.5	709.5	717.9	727.3	737.3	745.2	751.2	755.6	758.6	757.6	755.1
35°	627.5	629.5	635.0	642.4	650.9	659.3	664.8	669.7	673.2	674.2	674.2
37.5°	550.6	544.1	540.2	540.2	545.1	548.6	553.6	556.5	562.0	564.0	565.5
40°	476.1	461.2	447.3	436.9	429.9	429.4	429.4	430.9	435.9	442.3	448.3
42.5°	409.6	385.8	364.4	345.0	331.1	323.2	319.7	320.2	324.2	330.2	340.1
45°	356.5	326.7	299.9	276.5	257.7	245.3	239.3	238.8	241.8	248.7	259.7
47.5°	315.3	283.5	253.2	226.4	206.0	192.6	185.7	183.7	185.7	192.1	205.0
50°	281.0	248.2	217.0	189.2	167.3	153.4	147.0	144.5	147.0	152.4	165.3
52.5°	249.2	215.5	186.2	159.4	136.0	124.1	117.2	115.7	117.2	123.6	134.1
55°	212.5	183.7	154.9	128.1	107.7	95.8	90.4	88.9	90.4	96.3	107.2
57.5°	176.3	151.4	126.1	101.8	84.4	74.0	69.0	67.0	70.5	74.5	87.4
60°	142.5	122.6	101.3	79.9	65.5	56.1	52.1	51.6	52.6	57.6	66.5
62.5°	111.7	95.3	78.4	61.1	49.1	45.2	40.2	39.7	40.7	43.7	50.6
65°	80.4	70.0	57.1	44.7	35.3	29.8	27.8	28.3	29.3	31.3	37.7
67.5°	56.1	48.7	39.7	31.3	24.3	21.8	19.9	19.4	19.9	23.3	26.8
70°	37.7	33.3	26.8	23.8	16.9	13.4	13.9	12.4	14.4	14.4	17.4
72.5°	24.8	21.8	17.9	13.9	11.9	9.4	9.4	8.9	9.9	10.4	12.9
75°	12.9	9.9	9.9	6.9	5.0	2.5	4.5	4.0	3.5	4.0	5.0
77.5°	8.9	7.4	6.9	5.5	5.0	4.0	4.0	4.0	4.0	4.5	5.0
80°	5.5	5.5	4.0	3.5	3.0	2.5	3.0	3.0	3.0	3.0	3.5
82.5°	3.5	3.0	3.0	2.5	2.5	2.0	2.0	2.0	2.0	2.0	3.0
85°	3.0	2.0	2.0	1.5	2.0	3.5	1.5	2.0	2.0	2.0	1.5
87.5°	1.0	1.5	1.5	1.5	1.0	0.5	1.0	1.5	1.5	2.5	2.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	924.9	924.9	924.9	924.9	924.9	924.9	924.9	924.9	924.9	924.9	924.9
2.5°	926.4	926.9	926.9	926.4	926.4	925.4	927.4	925.9	926.4	928.4	926.9
5°	927.4	927.9	927.9	927.4	927.4	927.4	927.9	927.9	927.4	926.9	927.9
7.5°	929.4	928.9	928.9	927.9	927.9	926.9	927.9	926.4	927.4	926.4	927.9
10°	926.9	927.4	926.9	926.4	926.4	925.9	925.9	924.4	924.9	923.4	924.4
12.5°	925.4	924.9	924.9	923.9	922.9	921.9	921.4	919.9	919.9	916.5	918.0
15°	921.4	921.9	920.4	918.5	917.5	915.0	914.0	912.0	910.0	907.5	908.0
17.5°	918.0	916.5	914.5	912.5	908.5	906.5	904.6	901.6	900.6	897.6	896.6
20°	907.5	906.5	904.1	900.6	898.1	893.6	891.7	888.7	886.2	883.2	881.7
22.5°	894.1	893.1	890.2	886.7	882.7	880.7	878.7	873.3	870.8	867.8	867.3
25°	877.3	875.8	872.8	868.8	866.8	861.4	859.4	855.4	854.4	851.4	850.9
27.5°	851.4	849.5	846.0	841.0	837.5	834.1	832.1	829.1	828.1	825.1	824.6
30°	812.7	810.2	803.3	801.3	795.3	791.9	791.9	787.9	788.4	786.4	786.4
32.5°	751.7	747.7	742.2	738.2	734.3	732.3	732.3	730.8	731.8	731.8	732.8
35°	670.7	665.3	662.3	659.8	659.8	661.8	667.7	669.2	672.2	674.7	676.7
37.5°	567.0	566.5	569.9	572.9	580.4	588.8	599.2	608.2	616.6	622.6	628.5
40°	454.8	467.2	477.1	491.0	502.4	518.8	537.7	553.1	567.5	577.9	588.8
42.5°	355.0	370.9	391.7	412.1	432.4	454.8	479.6	500.9	519.8	534.2	545.6
45°	276.5	298.4	323.7	349.5	375.8	403.6	429.4	451.3	471.2	486.0	497.5
47.5°	222.9	246.7	275.5	303.8	333.6	362.9	391.7	410.6	427.0	438.9	449.3
50°	184.2	209.5	239.8	272.1	301.8	331.1	356.0	374.3	387.7	398.2	404.6
52.5°	153.9	180.7	213.0	245.3	275.0	301.8	324.2	338.1	349.0	356.5	362.4
55°	127.1	152.9	183.2	213.5	242.8	268.1	286.5	296.9	305.3	309.8	313.3
57.5°	103.8	127.6	155.4	183.2	208.5	229.4	243.8	254.2	258.2	261.6	261.1
60°	81.4	103.8	129.1	152.9	174.8	191.6	202.1	208.0	211.0	212.5	211.5
62.5°	64.0	84.4	103.8	124.6	140.5	154.9	164.8	164.8	166.3	166.8	168.3
65°	47.7	63.0	79.9	95.3	108.2	117.7	123.1	124.6	126.6	126.1	125.1
67.5°	35.3	46.7	59.1	70.5	79.4	85.4	89.4	92.8	92.3	91.4	90.9
70°	24.3	31.8	42.7	49.6	56.1	62.1	63.0	63.5	64.0	64.5	63.5
72.5°	16.9	22.3	28.3	34.3	38.2	40.7	43.2	43.7	43.7	43.7	43.2
75°	8.4	11.4	16.9	19.4	22.8	23.8	25.8	25.8	27.3	25.3	24.8
77.5°	7.4	8.9	11.9	13.9	15.4	16.9	17.4	18.9	18.4	17.4	17.9
80°	4.5	5.5	7.4	8.4	10.4	10.9	11.4	11.9	11.4	11.9	11.9
82.5°	3.5	4.0	5.0	5.0	6.5	6.5	6.9	6.9	7.4	7.4	7.4
85°	2.0	3.5	3.0	6.0	4.0	4.0	5.0	6.0	5.0	5.0	6.0
87.5°	2.0	2.0	1.5	2.0	2.0	2.0	2.5	3.0	3.0	3.5	3.0
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):

	165°	170°	175°	180°
0°	924.9	924.9	924.9	924.9
2.5°	926.4	927.4	925.9	925.4
5°	927.9	927.9	926.9	926.9
7.5°	927.9	927.9	926.4	925.4
10°	923.9	923.9	922.4	921.4
12.5°	916.5	916.5	916.0	914.5
15°	907.0	907.0	905.1	903.6
17.5°	894.1	895.1	892.7	892.7
20°	880.2	879.7	877.8	876.8
22.5°	865.8	864.8	864.3	861.4
25°	850.5	849.5	848.0	846.5
27.5°	824.1	823.6	822.1	820.2
30°	783.9	783.4	781.4	781.4
32.5°	731.8	731.3	729.3	729.8
35°	677.7	679.7	678.7	676.7
37.5°	632.5	634.0	635.0	634.0
40°	594.8	599.2	599.7	600.7
42.5°	554.6	560.5	562.5	563.5
45°	506.4	511.9	516.3	515.3
47.5°	457.2	461.2	465.2	462.2
50°	410.1	412.6	414.1	414.1
52.5°	365.4	365.4	364.9	365.4
55°	314.3	314.3	312.3	313.3
57.5°	260.6	261.6	260.1	257.7
60°	211.0	208.5	207.5	206.0
62.5°	164.3	164.3	160.9	165.3
65°	123.1	121.6	120.1	119.6
67.5°	89.4	88.9	87.4	86.9
70°	63.0	61.1	60.6	59.6
72.5°	42.2	42.2	41.2	41.2
75°	25.8	23.3	22.8	23.3
77.5°	17.9	17.4	17.4	16.9
80°	11.9	11.4	12.4	10.9
82.5°	7.4	7.9	7.4	7.9
85°	5.0	6.0	5.5	5.5
87.5°	3.0	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0

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