

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: P244652

Luminaire Tested: **LSR8B20D010 EC8B209727 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244652  
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 EC8B209727 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1549.0 lumens  
Efficiency: N/A  
Efficacy: 72.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

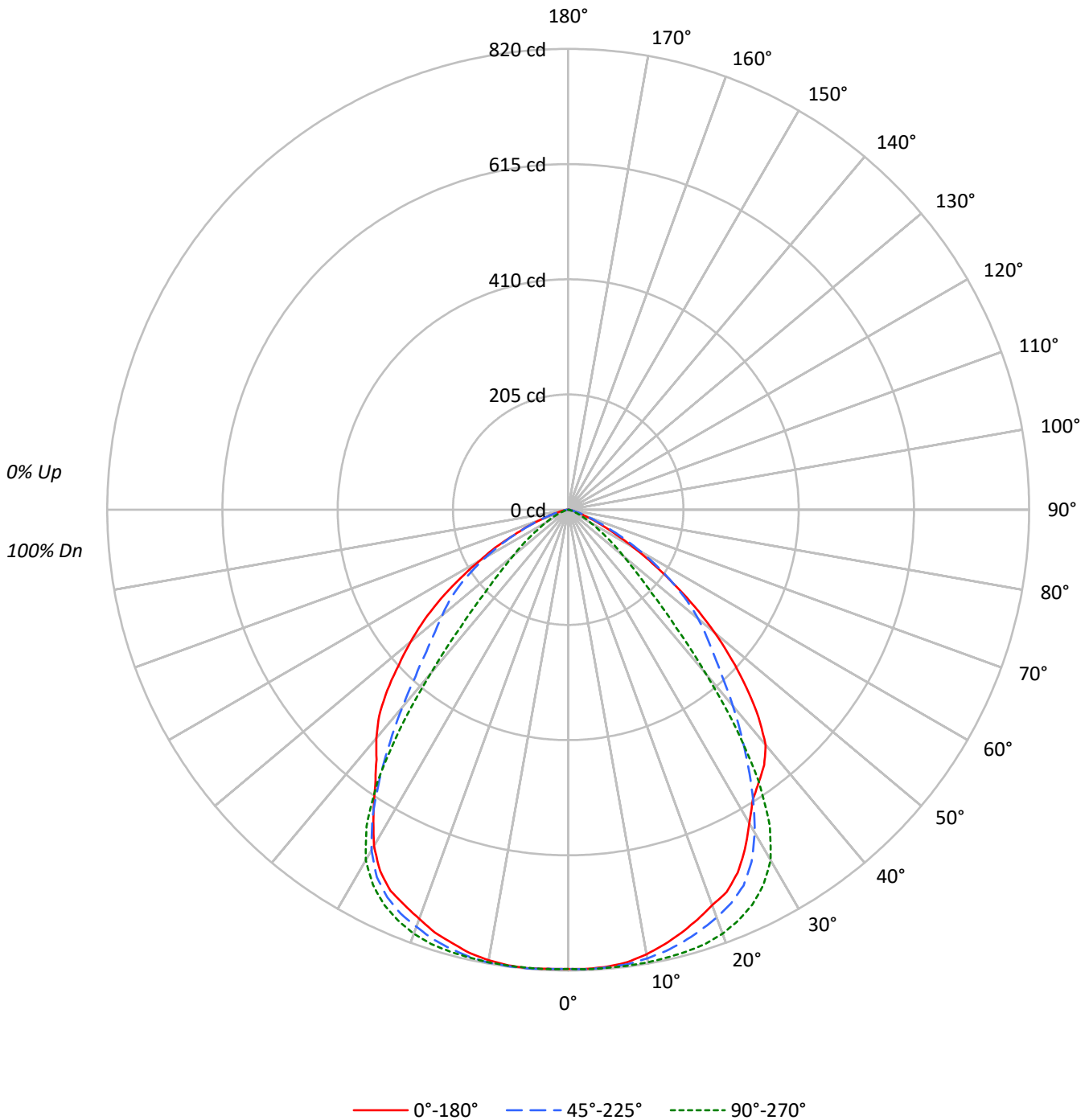
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10				
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90	90	90	90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79	79	79	79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70	70	70	70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62	62	62	62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55	55	55	55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	52	50	50	50	50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45	45	45	45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41	41	41	41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37	37	37	37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34	34	34	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°	78.0	5.0
10°-20°	226.5	14.6
20°-30°	343.8	22.2
30°-40°	361.1	23.3
40°-50°	270.7	17.5
50°-60°	173.7	11.2
60°-70°	74.3	4.8
70°-80°	17.6	1.1
80°-90°	3.3	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°	648.3	41.9
0°-40°	1009.4	65.2
0°-60°	1453.9	93.9
0°-90°	1549.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1549.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	817	817	817	817	817	
5°	816	817	818	820	819	78
15°	779	795	814	808	798	220
25°	713	738	775	761	748	326
35°	591	558	592	585	598	371
45°	449	367	211	357	455	344
55°	227	227	78	237	277	206
65°	68	81	25	104	106	73
75°	10	12	4	21	21	15
85°	4	2	2	4	5	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°	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3
2.5°	817.7	818.6	818.2	818.2	817.7	818.2	818.2	819.0	819.0	818.2	817.7
5°	816.0	816.8	816.8	816.0	816.0	818.2	816.8	817.7	817.7	817.3	817.3
7.5°	812.0	812.0	813.8	812.5	812.5	813.8	813.3	814.2	815.1	815.5	815.5
10°	803.2	804.1	804.6	804.6	805.0	806.3	807.2	809.0	809.8	810.7	811.1
12.5°	792.3	793.6	794.0	793.6	794.9	796.7	798.9	801.1	802.4	804.1	805.4
15°	779.1	779.1	780.0	781.3	782.2	784.8	787.0	789.6	793.2	795.4	797.5
17.5°	764.6	765.5	766.8	766.8	768.6	773.0	774.3	778.2	782.2	784.4	788.8
20°	748.9	749.7	751.0	751.9	754.1	757.6	760.3	763.8	768.2	772.1	776.5
22.5°	736.6	734.8	735.7	736.6	738.8	741.8	744.9	749.3	753.7	757.6	762.0
25°	712.9	713.3	714.6	715.5	718.1	720.8	724.3	729.5	733.5	737.9	742.7
27.5°	680.9	681.3	683.5	683.5	685.7	690.1	692.3	696.6	701.9	706.3	712.0
30°	644.4	645.3	645.3	647.1	648.4	650.6	652.8	657.2	659.8	663.7	671.6
32.5°	611.1	612.0	611.5	611.1	609.8	609.3	608.9	609.8	610.7	612.0	615.0
35°	591.4	589.2	587.4	584.3	580.8	576.4	572.5	567.2	562.4	558.5	554.1
37.5°	572.5	572.1	569.4	565.0	558.0	550.1	540.9	529.5	518.1	505.8	494.0
40°	546.2	544.9	542.7	536.5	528.6	519.0	506.7	492.7	474.2	455.4	436.1
42.5°	501.4	501.9	499.2	494.4	487.0	477.7	465.0	449.7	429.9	407.5	382.5
45°	449.2	449.2	448.3	444.4	439.1	431.7	422.0	409.3	390.0	367.2	340.4
47.5°	394.8	395.3	393.9	393.1	390.9	386.1	379.0	369.4	355.8	333.8	307.1
50°	339.6	339.6	341.7	341.3	341.3	339.6	336.5	330.8	318.9	301.4	276.4
52.5°	284.3	285.2	286.5	288.2	290.4	293.9	290.4	287.8	280.3	266.7	245.2
55°	227.2	228.1	230.3	233.4	236.0	239.5	240.4	240.4	236.5	227.2	211.0
57.5°	178.6	177.2	179.0	181.6	185.1	188.6	191.3	194.3	193.9	187.8	174.6
60°	134.2	134.7	136.0	138.6	141.3	144.3	147.8	150.5	151.8	148.7	140.4
62.5°	97.8	97.8	99.6	102.2	103.5	107.9	110.1	111.4	112.7	112.3	107.0
65°	68.4	69.3	70.2	71.5	72.8	75.5	76.8	79.4	80.3	80.7	76.8
67.5°	48.3	46.9	47.8	48.7	50.0	51.8	54.4	54.4	55.7	55.7	53.1
70°	30.7	30.7	31.2	32.5	33.3	33.8	34.7	35.5	36.9	36.4	36.4
72.5°	20.6	20.2	20.6	21.1	21.5	22.8	22.8	23.3	24.1	24.6	22.8
75°	10.5	11.0	11.8	11.4	12.7	11.8	12.3	13.6	13.2	12.3	12.3
77.5°	8.8	8.8	8.8	8.3	9.2	9.2	8.8	9.7	9.2	9.2	8.8
80°	6.1	6.6	6.1	5.7	6.1	5.7	5.7	5.7	5.7	5.7	5.3
82.5°	4.8	4.0	4.4	4.0	4.4	4.4	4.0	3.5	3.5	4.0	3.5
85°	3.5	2.6	3.1	3.1	2.6	2.6	2.6	2.6	2.6	2.2	2.2
87.5°	2.2	1.3	1.3	1.3	1.7	1.7	1.7	1.3	1.7	1.7	0.9
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°	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3
2.5°	818.6	818.2	819.0	818.6	818.6	818.2	818.6	818.2	819.0	817.3	817.7
5°	818.6	817.7	818.2	818.6	819.0	818.2	818.2	818.2	819.0	818.2	818.6
7.5°	816.8	816.4	817.7	818.6	818.2	817.7	818.6	818.2	819.0	818.6	819.5
10°	813.3	813.8	814.7	816.0	816.4	816.8	817.7	817.7	819.0	817.3	818.2
12.5°	808.1	809.8	812.0	812.9	814.7	814.7	815.5	816.0	816.8	816.4	817.7
15°	801.5	803.7	806.3	808.5	810.7	812.0	813.3	813.8	815.1	813.8	814.2
17.5°	793.6	796.2	800.2	802.8	806.3	807.6	809.4	810.3	811.6	810.7	811.1
20°	782.6	785.7	790.1	794.0	796.2	799.3	801.5	802.8	803.7	802.8	803.2
22.5°	767.3	771.7	777.4	780.4	784.8	787.5	787.9	791.0	793.2	791.0	791.8
25°	749.3	753.7	758.1	764.6	768.6	771.7	774.7	775.2	777.4	776.9	776.5
27.5°	719.5	725.2	732.6	737.9	743.1	748.0	751.5	752.4	754.6	753.7	754.1
30°	678.7	684.8	691.8	700.2	707.6	712.4	716.8	719.9	722.1	720.8	720.3
32.5°	620.8	626.9	634.4	642.7	651.5	658.5	663.7	667.7	670.3	669.4	667.3
35°	554.5	556.3	561.1	567.7	575.1	582.6	587.4	591.8	594.9	595.7	595.7
37.5°	486.5	480.8	477.3	477.3	481.7	484.8	489.1	491.8	496.6	498.4	499.7
40°	420.7	407.5	395.3	386.1	379.9	379.5	379.5	380.8	385.2	390.9	396.1
42.5°	361.9	340.9	322.0	304.9	292.6	285.6	282.5	283.0	286.5	291.7	300.5
45°	315.0	288.7	265.0	244.4	227.7	216.7	211.5	211.0	213.6	219.8	229.4
47.5°	278.6	250.5	223.7	200.0	182.1	170.2	164.1	162.3	164.1	169.8	181.2
50°	248.3	219.4	191.7	167.1	147.8	135.6	129.9	127.7	129.9	134.7	146.1
52.5°	220.2	190.4	164.5	140.8	120.2	109.7	103.5	102.2	103.5	109.2	118.5
55°	187.8	162.3	136.9	113.2	95.2	84.7	79.8	78.5	79.8	85.1	94.8
57.5°	155.7	133.8	111.4	89.9	74.6	65.4	61.0	59.2	62.3	65.8	77.2
60°	125.9	108.4	89.5	70.6	57.9	49.6	46.1	45.6	46.5	50.9	58.8
62.5°	98.7	84.2	69.3	54.0	43.4	39.9	35.5	35.1	36.0	38.6	44.8
65°	71.1	61.9	50.5	39.5	31.2	26.3	24.6	25.0	25.9	27.6	33.3
67.5°	49.6	43.0	35.1	27.6	21.5	19.3	17.6	17.1	17.6	20.6	23.7
70°	33.3	29.4	23.7	21.1	14.9	11.8	12.3	11.0	12.7	12.7	15.3
72.5°	21.9	19.3	15.8	12.3	10.5	8.3	8.3	7.9	8.8	9.2	11.4
75°	11.4	8.8	8.8	6.1	4.4	2.2	4.0	3.5	3.1	3.5	4.4
77.5°	7.9	6.6	6.1	4.8	4.4	3.5	3.5	3.5	3.5	4.0	4.4
80°	4.8	4.8	3.5	3.1	2.6	2.2	2.6	2.6	2.6	2.6	3.1
82.5°	3.1	2.6	2.6	2.2	2.2	1.7	1.7	1.7	1.7	1.7	2.6
85°	2.6	1.7	1.7	1.3	1.7	3.1	1.3	1.7	1.7	1.7	1.3
87.5°	0.9	1.3	1.3	1.3	0.9	0.4	0.9	1.3	1.3	2.2	1.7
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°	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3
2.5°	818.6	819.0	819.0	818.6	818.6	817.7	819.5	818.2	818.6	820.4	819.0
5°	819.5	819.9	819.9	819.5	819.5	819.5	819.9	819.9	819.5	819.0	819.9
7.5°	821.2	820.8	820.8	819.9	819.9	819.0	819.9	818.6	819.5	818.6	819.9
10°	819.0	819.5	819.0	818.6	818.6	818.2	818.2	816.8	817.3	816.0	816.8
12.5°	817.7	817.3	817.3	816.4	815.5	814.7	814.2	812.9	812.9	809.8	811.1
15°	814.2	814.7	813.3	811.6	810.7	808.5	807.6	805.9	804.1	801.9	802.4
17.5°	811.1	809.8	808.1	806.3	802.8	801.1	799.3	796.7	795.8	793.2	792.3
20°	801.9	801.1	798.9	795.8	793.6	789.6	787.9	785.3	783.1	780.4	779.1
22.5°	790.1	789.2	786.6	783.5	780.0	778.2	776.5	771.7	769.5	766.8	766.4
25°	775.2	773.9	771.2	767.7	766.0	761.1	759.4	755.9	755.0	752.4	751.9
27.5°	752.4	750.6	747.5	743.1	740.1	737.0	735.3	732.6	731.7	729.1	728.7
30°	718.1	715.9	709.8	708.1	702.8	699.7	699.7	696.2	696.6	694.9	694.9
32.5°	664.2	660.7	655.8	652.3	648.8	647.1	647.1	645.8	646.6	646.6	647.5
35°	592.7	587.9	585.2	583.0	583.0	584.8	590.0	591.4	594.0	596.2	597.9
37.5°	501.0	500.6	503.6	506.3	512.8	520.3	529.5	537.4	544.9	550.1	555.4
40°	401.8	412.8	421.6	433.9	444.0	458.4	475.1	488.7	501.4	510.6	520.3
42.5°	313.7	327.7	346.1	364.1	382.1	401.8	423.8	442.6	459.3	472.0	482.1
45°	244.4	263.7	286.0	308.8	332.1	356.7	379.5	398.8	416.3	429.5	439.6
47.5°	197.0	218.0	243.5	268.5	294.8	320.7	346.1	362.8	377.3	387.8	397.0
50°	162.8	185.1	211.9	240.4	266.7	292.6	314.5	330.8	342.6	351.8	357.5
52.5°	136.0	159.7	188.2	216.7	243.0	266.7	286.5	298.8	308.4	315.0	320.2
55°	112.3	135.1	161.9	188.6	214.5	236.9	253.1	262.3	269.8	273.7	276.8
57.5°	91.7	112.7	137.3	161.9	184.3	202.7	215.4	224.6	228.1	231.2	230.8
60°	72.0	91.7	114.1	135.1	154.4	169.3	178.6	183.8	186.4	187.8	186.9
62.5°	56.6	74.6	91.7	110.1	124.2	136.9	145.7	145.7	147.0	147.4	148.7
65°	42.1	55.7	70.6	84.2	95.6	104.0	108.8	110.1	111.9	111.4	110.6
67.5°	31.2	41.2	52.2	62.3	70.2	75.5	79.0	82.0	81.6	80.7	80.3
70°	21.5	28.1	37.7	43.9	49.6	54.8	55.7	56.2	56.6	57.0	56.2
72.5°	14.9	19.7	25.0	30.3	33.8	36.0	38.2	38.6	38.6	38.6	38.2
75°	7.5	10.1	14.9	17.1	20.2	21.1	22.8	22.8	24.1	22.4	21.9
77.5°	6.6	7.9	10.5	12.3	13.6	14.9	15.3	16.7	16.2	15.3	15.8
80°	4.0	4.8	6.6	7.5	9.2	9.7	10.1	10.5	10.1	10.5	10.5
82.5°	3.1	3.5	4.4	4.4	5.7	5.7	6.1	6.1	6.6	6.6	6.6
85°	1.7	3.1	2.6	5.3	3.5	3.5	4.4	5.3	4.4	4.4	5.3
87.5°	1.7	1.7	1.3	1.7	1.7	1.7	2.2	2.6	2.6	3.1	2.6
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):**

	165°	170°	175°	180°
0°	817.3	817.3	817.3	817.3
2.5°	818.6	819.5	818.2	817.7
5°	819.9	819.9	819.0	819.0
7.5°	819.9	819.9	818.6	817.7
10°	816.4	816.4	815.1	814.2
12.5°	809.8	809.8	809.4	808.1
15°	801.5	801.5	799.7	798.4
17.5°	790.1	791.0	788.8	788.8
20°	777.8	777.4	775.6	774.7
22.5°	765.1	764.2	763.8	761.1
25°	751.5	750.6	749.3	748.0
27.5°	728.2	727.8	726.5	724.7
30°	692.7	692.3	690.5	690.5
32.5°	646.6	646.2	644.4	644.9
35°	598.8	600.6	599.7	597.9
37.5°	558.9	560.2	561.1	560.2
40°	525.6	529.5	529.9	530.8
42.5°	490.0	495.3	497.0	497.9
45°	447.5	452.3	456.2	455.4
47.5°	404.0	407.5	411.1	408.4
50°	362.4	364.6	365.9	365.9
52.5°	322.9	322.9	322.4	322.9
55°	277.7	277.7	275.9	276.8
57.5°	230.3	231.2	229.9	227.7
60°	186.4	184.3	183.4	182.1
62.5°	145.2	145.2	142.1	146.1
65°	108.8	107.5	106.2	105.7
67.5°	79.0	78.5	77.2	76.8
70°	55.7	54.0	53.5	52.6
72.5°	37.3	37.3	36.4	36.4
75°	22.8	20.6	20.2	20.6
77.5°	15.8	15.3	15.3	14.9
80°	10.5	10.1	11.0	9.7
82.5°	6.6	7.0	6.6	7.0
85°	4.4	5.3	4.8	4.8
87.5°	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0

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