

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: P246242

Luminaire Tested: **LSR8B20D010 EC8B209730 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246242  
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 EC8B209730 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1620.0 lumens  
Efficiency: N/A  
Efficacy: 76.1 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

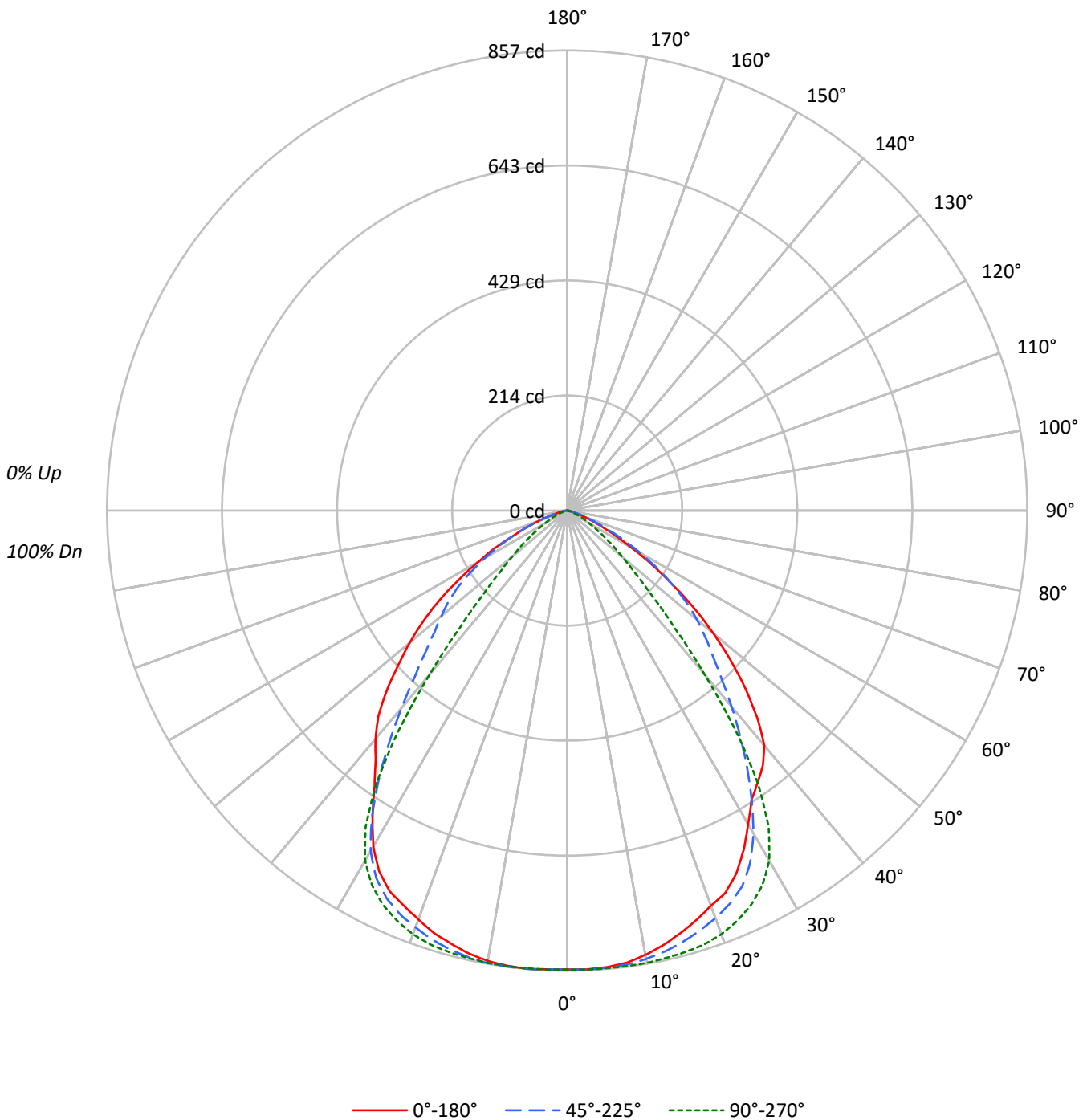
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	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°	81.6	5.0
10°-20°	236.9	14.6
20°-30°	359.6	22.2
30°-40°	377.7	23.3
40°-50°	283.1	17.5
50°-60°	181.7	11.2
60°-70°	77.7	4.8
70°-80°	18.4	1.1
80°-90°	3.4	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°	678.0	41.9
0°-40°	1055.7	65.2
0°-60°	1520.5	93.9
0°-90°	1620.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1620.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	855	855	855	855	855	
5°	853	855	856	857	857	81
15°	815	832	851	846	835	230
25°	746	772	811	796	782	341
35°	618	584	619	612	625	388
45°	470	384	221	373	476	360
55°	238	238	82	248	290	216
65°	72	84	26	109	111	76
75°	11	13	4	22	22	16
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°	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7
2.5°	855.2	856.1	855.7	855.7	855.2	855.7	855.7	856.6	856.6	855.7	855.2
5°	853.4	854.3	854.3	853.4	853.4	855.7	854.3	855.2	855.2	854.7	854.7
7.5°	849.2	849.2	851.1	849.7	849.7	851.1	850.6	851.5	852.5	852.9	852.9
10°	840.1	841.0	841.4	841.4	841.9	843.3	844.2	846.0	846.9	847.9	848.3
12.5°	828.6	830.0	830.4	830.0	831.3	833.2	835.5	837.8	839.2	841.0	842.4
15°	814.8	814.8	815.7	817.1	818.0	820.8	823.1	825.8	829.5	831.8	834.1
17.5°	799.7	800.6	802.0	802.0	803.8	808.4	809.8	813.9	818.0	820.3	824.9
20°	783.2	784.1	785.5	786.4	788.7	792.3	795.1	798.8	803.4	807.5	812.1
22.5°	770.3	768.5	769.4	770.3	772.6	775.8	779.0	783.6	788.2	792.3	796.9
25°	745.5	746.0	747.4	748.3	751.1	753.8	757.5	763.0	767.1	771.7	776.7
27.5°	712.1	712.5	714.8	714.8	717.1	721.7	724.0	728.6	734.1	738.7	744.6
30°	674.0	674.9	674.9	676.7	678.1	680.4	682.7	687.3	690.0	694.2	702.4
32.5°	639.1	640.0	639.6	639.1	637.7	637.3	636.8	637.7	638.7	640.0	643.2
35°	618.5	616.2	614.3	611.1	607.5	602.9	598.7	593.2	588.2	584.0	579.5
37.5°	598.7	598.3	595.5	590.9	583.6	575.3	565.7	553.8	541.8	529.0	516.6
40°	571.2	569.8	567.5	561.1	552.9	542.8	529.9	515.2	496.0	476.2	456.0
42.5°	524.4	524.9	522.1	517.1	509.3	499.6	486.3	470.3	449.6	426.2	400.1
45°	469.8	469.8	468.9	464.8	459.3	451.5	441.4	428.1	407.9	384.0	356.0
47.5°	412.9	413.4	412.0	411.1	408.8	403.7	396.4	386.3	372.1	349.1	321.2
50°	355.1	355.1	357.4	356.9	356.9	355.1	351.9	345.9	333.5	315.2	289.0
52.5°	297.3	298.2	299.6	301.4	303.7	307.4	303.7	301.0	293.2	278.9	256.5
55°	237.7	238.6	240.9	244.1	246.8	250.5	251.4	251.4	247.3	237.7	220.7
57.5°	186.7	185.4	187.2	189.9	193.6	197.3	200.0	203.2	202.8	196.4	182.6
60°	140.4	140.9	142.2	145.0	147.7	150.9	154.6	157.4	158.7	155.5	146.8
62.5°	102.3	102.3	104.1	106.9	108.3	112.9	115.2	116.5	117.9	117.4	111.9
65°	71.6	72.5	73.4	74.8	76.2	78.9	80.3	83.0	84.0	84.4	80.3
67.5°	50.5	49.1	50.0	50.9	52.3	54.1	56.9	56.9	58.3	58.3	55.5
70°	32.1	32.1	32.6	33.9	34.9	35.3	36.2	37.2	38.5	38.1	38.1
72.5°	21.6	21.1	21.6	22.0	22.5	23.9	23.9	24.3	25.2	25.7	23.9
75°	11.0	11.5	12.4	11.9	13.3	12.4	12.8	14.2	13.8	12.8	12.8
77.5°	9.2	9.2	9.2	8.7	9.6	9.6	9.2	10.1	9.6	9.6	9.2
80°	6.4	6.9	6.4	6.0	6.4	6.0	6.0	6.0	6.0	6.0	5.5
82.5°	5.1	4.1	4.6	4.1	4.6	4.6	4.1	3.7	3.7	4.1	3.7
85°	3.7	2.8	3.2	3.2	2.8	2.8	2.8	2.8	2.8	2.3	2.3
87.5°	2.3	1.4	1.4	1.4	1.8	1.8	1.8	1.4	1.8	1.8	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°	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7
2.5°	856.1	855.7	856.6	856.1	856.1	855.7	856.1	855.7	856.6	854.7	855.2
5°	856.1	855.2	855.7	856.1	856.6	855.7	855.7	855.7	856.6	855.7	856.1
7.5°	854.3	853.8	855.2	856.1	855.7	855.2	856.1	855.7	856.6	856.1	857.0
10°	850.6	851.1	852.0	853.4	853.8	854.3	855.2	855.2	856.6	854.7	855.7
12.5°	845.1	846.9	849.2	850.2	852.0	852.0	852.9	853.4	854.3	853.8	855.2
15°	838.2	840.5	843.3	845.6	847.9	849.2	850.6	851.1	852.5	851.1	851.5
17.5°	830.0	832.7	836.8	839.6	843.3	844.7	846.5	847.4	848.8	847.9	848.3
20°	818.5	821.7	826.3	830.4	832.7	835.9	838.2	839.6	840.5	839.6	840.1
22.5°	802.4	807.0	813.0	816.2	820.8	823.5	824.0	827.2	829.5	827.2	828.1
25°	783.6	788.2	792.8	799.7	803.8	807.0	810.2	810.7	813.0	812.5	812.1
27.5°	752.4	758.4	766.2	771.7	777.2	782.3	785.9	786.8	789.1	788.2	788.7
30°	709.8	716.2	723.5	732.2	740.0	745.1	749.7	752.9	755.2	753.8	753.3
32.5°	649.2	655.6	663.4	672.1	681.3	688.7	694.2	698.3	701.0	700.1	697.8
35°	579.9	581.8	586.8	593.7	601.5	609.3	614.3	618.9	622.1	623.0	623.0
37.5°	508.8	502.9	499.2	499.2	503.8	507.0	511.6	514.3	519.4	521.2	522.6
40°	440.0	426.2	413.4	403.7	397.3	396.9	396.9	398.2	402.8	408.8	414.3
42.5°	378.5	356.5	336.8	318.9	306.0	298.7	295.5	295.9	299.6	305.1	314.3
45°	329.4	301.9	277.1	255.6	238.1	226.6	221.1	220.7	223.4	229.9	240.0
47.5°	291.3	262.0	234.0	209.2	190.4	178.0	171.6	169.8	171.6	177.6	189.5
50°	259.7	229.4	200.5	174.8	154.6	141.8	135.8	133.5	135.8	140.9	152.8
52.5°	230.3	199.1	172.1	147.3	125.7	114.7	108.3	106.9	108.3	114.2	123.9
55°	196.4	169.8	143.1	118.4	99.6	88.6	83.5	82.1	83.5	89.0	99.1
57.5°	162.9	139.9	116.5	94.1	78.0	68.4	63.8	61.9	65.1	68.8	80.7
60°	131.7	113.3	93.6	73.9	60.6	51.8	48.2	47.7	48.6	53.2	61.5
62.5°	103.2	88.1	72.5	56.4	45.4	41.7	37.2	36.7	37.6	40.4	46.8
65°	74.3	64.7	52.8	41.3	32.6	27.5	25.7	26.2	27.1	28.9	34.9
67.5°	51.8	45.0	36.7	28.9	22.5	20.2	18.4	17.9	18.4	21.6	24.8
70°	34.9	30.7	24.8	22.0	15.6	12.4	12.8	11.5	13.3	13.3	16.1
72.5°	22.9	20.2	16.5	12.8	11.0	8.7	8.7	8.3	9.2	9.6	11.9
75°	11.9	9.2	9.2	6.4	4.6	2.3	4.1	3.7	3.2	3.7	4.6
77.5°	8.3	6.9	6.4	5.1	4.6	3.7	3.7	3.7	3.7	4.1	4.6
80°	5.1	5.1	3.7	3.2	2.8	2.3	2.8	2.8	2.8	2.8	3.2
82.5°	3.2	2.8	2.8	2.3	2.3	1.8	1.8	1.8	1.8	1.8	2.8
85°	2.8	1.8	1.8	1.4	1.8	3.2	1.4	1.8	1.8	1.8	1.4
87.5°	0.9	1.4	1.4	1.4	0.9	0.5	0.9	1.4	1.4	2.3	1.8
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°	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7	854.7
2.5°	856.1	856.6	856.6	856.1	856.1	855.2	857.0	855.7	856.1	858.0	856.6
5°	857.0	857.5	857.5	857.0	857.0	857.0	857.5	857.5	857.0	856.6	857.5
7.5°	858.9	858.4	858.4	857.5	857.5	856.6	857.5	856.1	857.0	856.1	857.5
10°	856.6	857.0	856.6	856.1	856.1	855.7	855.7	854.3	854.7	853.4	854.3
12.5°	855.2	854.7	854.7	853.8	852.9	852.0	851.5	850.2	850.2	846.9	848.3
15°	851.5	852.0	850.6	848.8	847.9	845.6	844.7	842.8	841.0	838.7	839.2
17.5°	848.3	846.9	845.1	843.3	839.6	837.8	835.9	833.2	832.3	829.5	828.6
20°	838.7	837.8	835.5	832.3	830.0	825.8	824.0	821.3	819.0	816.2	814.8
22.5°	826.3	825.4	822.6	819.4	815.7	813.9	812.1	807.0	804.7	802.0	801.5
25°	810.7	809.3	806.6	802.9	801.1	796.0	794.2	790.5	789.6	786.8	786.4
27.5°	786.8	785.0	781.8	777.2	774.0	770.8	769.0	766.2	765.3	762.5	762.1
30°	751.1	748.8	742.3	740.5	735.0	731.8	731.8	728.1	728.6	726.7	726.7
32.5°	694.6	691.0	685.9	682.2	678.6	676.7	676.7	675.4	676.3	676.3	677.2
35°	619.8	614.8	612.0	609.7	609.7	611.6	617.1	618.5	621.2	623.5	625.3
37.5°	523.9	523.5	526.7	529.5	536.3	544.1	553.8	562.0	569.8	575.3	580.8
40°	420.3	431.7	440.9	453.8	464.3	479.4	496.9	511.1	524.4	534.0	544.1
42.5°	328.0	342.7	362.0	380.8	399.6	420.3	443.2	462.9	480.4	493.7	504.2
45°	255.6	275.7	299.1	323.0	347.3	373.0	396.9	417.0	435.4	449.2	459.7
47.5°	206.0	228.0	254.6	280.8	308.3	335.4	362.0	379.4	394.6	405.6	415.2
50°	170.2	193.6	221.6	251.4	278.9	306.0	329.0	345.9	358.3	368.0	373.9
52.5°	142.2	167.0	196.8	226.6	254.2	278.9	299.6	312.4	322.5	329.4	334.9
55°	117.4	141.3	169.3	197.3	224.4	247.7	264.7	274.4	282.2	286.3	289.5
57.5°	95.9	117.9	143.6	169.3	192.7	212.0	225.3	234.9	238.6	241.8	241.3
60°	75.2	95.9	119.3	141.3	161.5	177.1	186.7	192.2	195.0	196.4	195.4
62.5°	59.2	78.0	95.9	115.2	129.8	143.1	152.3	152.3	153.7	154.2	155.5
65°	44.0	58.3	73.9	88.1	100.0	108.7	113.8	115.2	117.0	116.5	115.6
67.5°	32.6	43.1	54.6	65.1	73.4	78.9	82.6	85.8	85.3	84.4	84.0
70°	22.5	29.4	39.5	45.9	51.8	57.4	58.3	58.7	59.2	59.6	58.7
72.5°	15.6	20.6	26.2	31.7	35.3	37.6	39.9	40.4	40.4	40.4	39.9
75°	7.8	10.6	15.6	17.9	21.1	22.0	23.9	23.9	25.2	23.4	22.9
77.5°	6.9	8.3	11.0	12.8	14.2	15.6	16.1	17.4	17.0	16.1	16.5
80°	4.1	5.1	6.9	7.8	9.6	10.1	10.6	11.0	10.6	11.0	11.0
82.5°	3.2	3.7	4.6	4.6	6.0	6.0	6.4	6.4	6.9	6.9	6.9
85°	1.8	3.2	2.8	5.5	3.7	3.7	4.6	5.5	4.6	4.6	5.5
87.5°	1.8	1.8	1.4	1.8	1.8	1.8	2.3	2.8	2.8	3.2	2.8
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°	854.7	854.7	854.7	854.7
2.5°	856.1	857.0	855.7	855.2
5°	857.5	857.5	856.6	856.6
7.5°	857.5	857.5	856.1	855.2
10°	853.8	853.8	852.5	851.5
12.5°	846.9	846.9	846.5	845.1
15°	838.2	838.2	836.4	835.0
17.5°	826.3	827.2	824.9	824.9
20°	813.5	813.0	811.2	810.2
22.5°	800.2	799.2	798.8	796.0
25°	785.9	785.0	783.6	782.3
27.5°	761.6	761.2	759.8	757.9
30°	724.4	724.0	722.2	722.2
32.5°	676.3	675.8	674.0	674.4
35°	626.3	628.1	627.2	625.3
37.5°	584.5	585.9	586.8	585.9
40°	549.6	553.8	554.2	555.2
42.5°	512.5	518.0	519.8	520.7
45°	468.0	473.0	477.2	476.2
47.5°	422.6	426.2	429.9	427.1
50°	379.0	381.3	382.6	382.6
52.5°	337.7	337.7	337.2	337.7
55°	290.4	290.4	288.6	289.5
57.5°	240.9	241.8	240.4	238.1
60°	195.0	192.7	191.8	190.4
62.5°	151.9	151.9	148.7	152.8
65°	113.8	112.4	111.0	110.6
67.5°	82.6	82.1	80.7	80.3
70°	58.3	56.4	56.0	55.1
72.5°	39.0	39.0	38.1	38.1
75°	23.9	21.6	21.1	21.6
77.5°	16.5	16.1	16.1	15.6
80°	11.0	10.6	11.5	10.1
82.5°	6.9	7.3	6.9	7.3
85°	4.6	5.5	5.1	5.1
87.5°	2.8	2.8	2.8	2.8
90°	0.0	0.0	0.0	0.0

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