

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: P246092

Luminaire Tested: **LSR8B20D010 EC8B209727 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246092  
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 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1514.0 lumens  
Efficiency: N/A  
Efficacy: 71.1 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

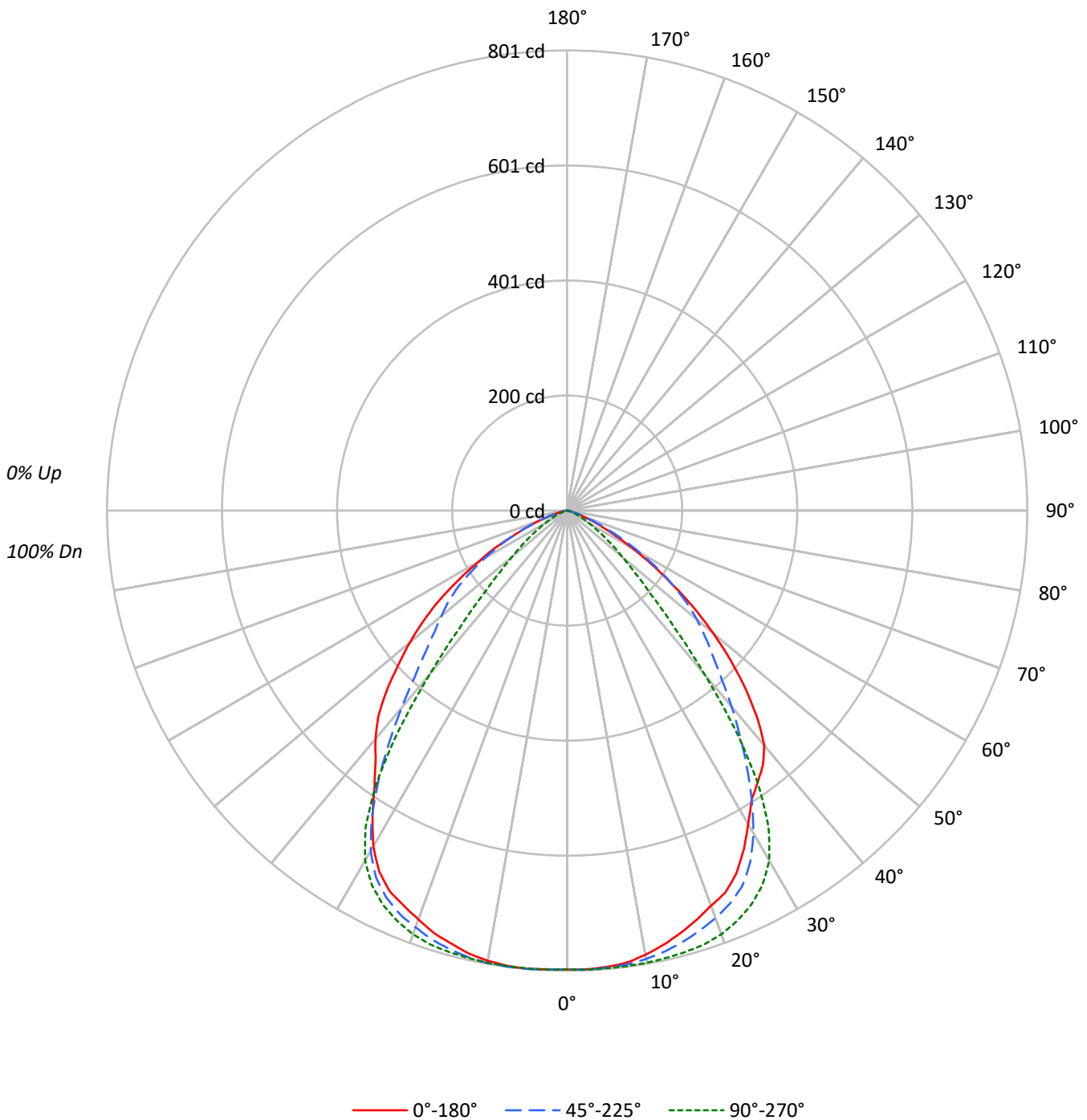
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	76.2	5.0
10°-20°	221.4	14.6
20°-30°	336.0	22.2
30°-40°	352.9	23.3
40°-50°	264.6	17.5
50°-60°	169.8	11.2
60°-70°	72.6	4.8
70°-80°	17.2	1.1
80°-90°	3.2	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°	633.7	41.9
0°-40°	986.6	65.2
0°-60°	1421.0	93.9
0°-90°	1514.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1514.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	799	799	799	799	799	
5°	798	799	800	801	800	76
15°	762	777	795	790	780	215
25°	697	721	758	744	731	318
35°	578	546	578	572	584	363
45°	439	359	206	349	445	336
55°	222	222	77	232	271	201
65°	67	79	24	102	103	71
75°	10	12	3	21	20	15
85°	3	2	2	3	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°	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8
2.5°	799.2	800.1	799.7	799.7	799.2	799.7	799.7	800.5	800.5	799.7	799.2
5°	797.5	798.4	798.4	797.5	797.5	799.7	798.4	799.2	799.2	798.8	798.8
7.5°	793.7	793.7	795.4	794.1	794.1	795.4	795.0	795.8	796.7	797.1	797.1
10°	785.1	786.0	786.4	786.4	786.8	788.1	789.0	790.7	791.5	792.4	792.8
12.5°	774.4	775.7	776.1	775.7	777.0	778.7	780.8	783.0	784.2	786.0	787.2
15°	761.5	761.5	762.4	763.7	764.5	767.1	769.2	771.8	775.2	777.4	779.5
17.5°	747.4	748.2	749.5	749.5	751.2	755.5	756.8	760.7	764.5	766.7	771.0
20°	731.9	732.8	734.1	734.9	737.1	740.5	743.1	746.5	750.8	754.7	758.9
22.5°	719.9	718.2	719.1	719.9	722.1	725.1	728.1	732.4	736.6	740.5	744.8
25°	696.8	697.2	698.5	699.3	701.9	704.5	707.9	713.1	716.9	721.2	725.9
27.5°	665.5	665.9	668.0	668.0	670.2	674.5	676.6	680.9	686.1	690.3	695.9
30°	629.9	630.7	630.7	632.5	633.7	635.9	638.0	642.3	644.9	648.7	656.5
32.5°	597.3	598.1	597.7	597.3	596.0	595.6	595.1	596.0	596.9	598.1	601.1
35°	578.0	575.8	574.1	571.1	567.7	563.4	559.6	554.4	549.7	545.8	541.6
37.5°	559.6	559.1	556.6	552.3	545.4	537.7	528.7	517.5	506.4	494.4	482.8
40°	533.8	532.5	530.4	524.4	516.7	507.2	495.2	481.5	463.5	445.1	426.2
42.5°	490.1	490.5	488.0	483.2	475.9	466.9	454.5	439.5	420.2	398.3	373.9
45°	439.1	439.1	438.2	434.4	429.2	421.9	412.5	400.1	381.2	358.9	332.7
47.5°	385.9	386.3	385.0	384.2	382.0	377.3	370.5	361.0	347.7	326.3	300.1
50°	331.9	331.9	334.0	333.6	333.6	331.9	328.9	323.3	311.7	294.6	270.1
52.5°	277.8	278.7	280.0	281.7	283.8	287.3	283.8	281.3	274.0	260.7	239.7
55°	222.1	223.0	225.1	228.1	230.7	234.1	235.0	235.0	231.1	222.1	206.2
57.5°	174.5	173.2	174.9	177.5	180.9	184.4	186.9	189.9	189.5	183.5	170.7
60°	131.2	131.6	132.9	135.5	138.1	141.1	144.5	147.1	148.4	145.4	137.2
62.5°	95.6	95.6	97.3	99.9	101.2	105.5	107.6	108.9	110.2	109.8	104.6
65°	66.9	67.7	68.6	69.9	71.2	73.7	75.0	77.6	78.5	78.9	75.0
67.5°	47.2	45.9	46.7	47.6	48.9	50.6	53.2	53.2	54.5	54.5	51.9
70°	30.0	30.0	30.4	31.7	32.6	33.0	33.9	34.7	36.0	35.6	35.6
72.5°	20.2	19.7	20.2	20.6	21.0	22.3	22.3	22.7	23.6	24.0	22.3
75°	10.3	10.7	11.6	11.2	12.4	11.6	12.0	13.3	12.9	12.0	12.0
77.5°	8.6	8.6	8.6	8.2	9.0	9.0	8.6	9.4	9.0	9.0	8.6
80°	6.0	6.4	6.0	5.6	6.0	5.6	5.6	5.6	5.6	5.6	5.1
82.5°	4.7	3.9	4.3	3.9	4.3	4.3	3.9	3.4	3.4	3.9	3.4
85°	3.4	2.6	3.0	3.0	2.6	2.6	2.6	2.6	2.6	2.1	2.1
87.5°	2.1	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°	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8
2.5°	800.1	799.7	800.5	800.1	800.1	799.7	800.1	799.7	800.5	798.8	799.2
5°	800.1	799.2	799.7	800.1	800.5	799.7	799.7	799.7	800.5	799.7	800.1
7.5°	798.4	798.0	799.2	800.1	799.7	799.2	800.1	799.7	800.5	800.1	801.0
10°	795.0	795.4	796.2	797.5	798.0	798.4	799.2	799.2	800.5	798.8	799.7
12.5°	789.8	791.5	793.7	794.5	796.2	796.2	797.1	797.5	798.4	798.0	799.2
15°	783.4	785.5	788.1	790.2	792.4	793.7	795.0	795.4	796.7	795.4	795.8
17.5°	775.7	778.2	782.1	784.7	788.1	789.4	791.1	792.0	793.2	792.4	792.8
20°	764.9	767.9	772.2	776.1	778.2	781.2	783.4	784.7	785.5	784.7	785.1
22.5°	749.9	754.2	759.8	762.8	767.1	769.7	770.1	773.1	775.2	773.1	774.0
25°	732.4	736.6	740.9	747.4	751.2	754.2	757.2	757.7	759.8	759.4	758.9
27.5°	703.2	708.8	716.1	721.2	726.4	731.1	734.5	735.4	737.5	736.6	737.1
30°	663.3	669.3	676.2	684.3	691.6	696.3	700.6	703.6	705.8	704.5	704.1
32.5°	606.7	612.7	620.0	628.2	636.7	643.6	648.7	652.6	655.2	654.3	652.2
35°	542.0	543.7	548.4	554.8	562.1	569.4	574.1	578.4	581.4	582.3	582.3
37.5°	475.5	469.9	466.5	466.5	470.8	473.8	478.1	480.7	485.4	487.1	488.4
40°	411.2	398.3	386.3	377.3	371.3	370.9	370.9	372.2	376.5	382.0	387.2
42.5°	353.7	333.2	314.7	298.0	286.0	279.1	276.1	276.6	280.0	285.1	293.7
45°	307.9	282.1	259.0	238.8	222.5	211.8	206.7	206.2	208.8	214.8	224.3
47.5°	272.3	244.8	218.7	195.5	177.9	166.4	160.4	158.7	160.4	165.9	177.1
50°	242.7	214.4	187.4	163.4	144.5	132.5	126.9	124.8	126.9	131.6	142.8
52.5°	215.2	186.1	160.8	137.6	117.5	107.2	101.2	99.9	101.2	106.8	115.8
55°	183.5	158.7	133.8	110.6	93.0	82.8	78.0	76.8	78.0	83.2	92.6
57.5°	152.2	130.8	108.9	87.9	72.9	63.9	59.6	57.9	60.9	64.3	75.5
60°	123.1	105.9	87.5	69.0	56.6	48.5	45.0	44.6	45.4	49.7	57.5
62.5°	96.5	82.3	67.7	52.7	42.4	39.0	34.7	34.3	35.2	37.7	43.7
65°	69.5	60.5	49.3	38.6	30.4	25.7	24.0	24.4	25.3	27.0	32.6
67.5°	48.5	42.0	34.3	27.0	21.0	18.9	17.2	16.7	17.2	20.2	23.2
70°	32.6	28.7	23.2	20.6	14.6	11.6	12.0	10.7	12.4	12.4	15.0
72.5°	21.4	18.9	15.4	12.0	10.3	8.2	8.2	7.7	8.6	9.0	11.2
75°	11.2	8.6	8.6	6.0	4.3	2.1	3.9	3.4	3.0	3.4	4.3
77.5°	7.7	6.4	6.0	4.7	4.3	3.4	3.4	3.4	3.4	3.9	4.3
80°	4.7	4.7	3.4	3.0	2.6	2.1	2.6	2.6	2.6	2.6	3.0
82.5°	3.0	2.6	2.6	2.1	2.1	1.7	1.7	1.7	1.7	1.7	2.6
85°	2.6	1.7	1.7	1.3	1.7	3.0	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	2.1	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°	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8
2.5°	800.1	800.5	800.5	800.1	800.1	799.2	801.0	799.7	800.1	801.8	800.5
5°	801.0	801.4	801.4	801.0	801.0	801.0	801.4	801.4	801.0	800.5	801.4
7.5°	802.7	802.2	802.2	801.4	801.4	800.5	801.4	800.1	801.0	800.1	801.4
10°	800.5	801.0	800.5	800.1	800.1	799.7	799.7	798.4	798.8	797.5	798.4
12.5°	799.2	798.8	798.8	798.0	797.1	796.2	795.8	794.5	794.5	791.5	792.8
15°	795.8	796.2	795.0	793.2	792.4	790.2	789.4	787.7	786.0	783.8	784.2
17.5°	792.8	791.5	789.8	788.1	784.7	783.0	781.2	778.7	777.8	775.2	774.4
20°	783.8	783.0	780.8	777.8	775.7	771.8	770.1	767.5	765.4	762.8	761.5
22.5°	772.2	771.4	768.8	765.8	762.4	760.7	758.9	754.2	752.1	749.5	749.1
25°	757.7	756.4	753.8	750.4	748.6	743.9	742.2	738.8	737.9	735.4	734.9
27.5°	735.4	733.6	730.6	726.4	723.4	720.3	718.6	716.1	715.2	712.6	712.2
30°	701.9	699.8	693.8	692.1	686.9	683.9	683.9	680.5	680.9	679.2	679.2
32.5°	649.2	645.7	641.0	637.6	634.2	632.5	632.5	631.2	632.0	632.0	632.9
35°	579.3	574.6	572.0	569.8	569.8	571.6	576.7	578.0	580.6	582.7	584.4
37.5°	489.7	489.2	492.2	494.8	501.2	508.5	517.5	525.3	532.5	537.7	542.8
40°	392.8	403.5	412.1	424.1	433.9	448.1	464.4	477.7	490.1	499.1	508.5
42.5°	306.6	320.3	338.3	355.9	373.5	392.8	414.2	432.6	448.9	461.4	471.2
45°	238.8	257.7	279.6	301.9	324.6	348.6	370.9	389.8	406.9	419.8	429.6
47.5°	192.5	213.1	238.0	262.4	288.1	313.4	338.3	354.6	368.7	379.0	388.1
50°	159.1	180.9	207.1	235.0	260.7	286.0	307.4	323.3	334.9	343.9	349.5
52.5°	132.9	156.1	183.9	211.8	237.5	260.7	280.0	292.0	301.4	307.9	313.0
55°	109.8	132.1	158.2	184.4	209.7	231.5	247.4	256.4	263.7	267.6	270.6
57.5°	89.6	110.2	134.2	158.2	180.1	198.1	210.5	219.5	223.0	226.0	225.5
60°	70.3	89.6	111.5	132.1	150.9	165.5	174.5	179.7	182.2	183.5	182.7
62.5°	55.3	72.9	89.6	107.6	121.3	133.8	142.4	142.4	143.6	144.1	145.4
65°	41.2	54.5	69.0	82.3	93.5	101.6	106.3	107.6	109.3	108.9	108.1
67.5°	30.4	40.3	51.0	60.9	68.6	73.7	77.2	80.2	79.8	78.9	78.5
70°	21.0	27.4	36.9	42.9	48.5	53.6	54.5	54.9	55.3	55.7	54.9
72.5°	14.6	19.3	24.4	29.6	33.0	35.2	37.3	37.7	37.7	37.7	37.3
75°	7.3	9.9	14.6	16.7	19.7	20.6	22.3	22.3	23.6	21.9	21.4
77.5°	6.4	7.7	10.3	12.0	13.3	14.6	15.0	16.3	15.9	15.0	15.4
80°	3.9	4.7	6.4	7.3	9.0	9.4	9.9	10.3	9.9	10.3	10.3
82.5°	3.0	3.4	4.3	4.3	5.6	5.6	6.0	6.0	6.4	6.4	6.4
85°	1.7	3.0	2.6	5.1	3.4	3.4	4.3	5.1	4.3	4.3	5.1
87.5°	1.7	1.7	1.3	1.7	1.7	1.7	2.1	2.6	2.6	3.0	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°	798.8	798.8	798.8	798.8
2.5°	800.1	801.0	799.7	799.2
5°	801.4	801.4	800.5	800.5
7.5°	801.4	801.4	800.1	799.2
10°	798.0	798.0	796.7	795.8
12.5°	791.5	791.5	791.1	789.8
15°	783.4	783.4	781.7	780.4
17.5°	772.2	773.1	771.0	771.0
20°	760.2	759.8	758.1	757.2
22.5°	747.8	746.9	746.5	743.9
25°	734.5	733.6	732.4	731.1
27.5°	711.8	711.3	710.1	708.3
30°	677.0	676.6	674.9	674.9
32.5°	632.0	631.6	629.9	630.3
35°	585.3	587.0	586.1	584.4
37.5°	546.3	547.6	548.4	547.6
40°	513.7	517.5	518.0	518.8
42.5°	478.9	484.1	485.8	486.7
45°	437.4	442.1	445.9	445.1
47.5°	394.9	398.3	401.8	399.2
50°	354.2	356.3	357.6	357.6
52.5°	315.6	315.6	315.2	315.6
55°	271.4	271.4	269.7	270.6
57.5°	225.1	226.0	224.7	222.5
60°	182.2	180.1	179.2	177.9
62.5°	141.9	141.9	138.9	142.8
65°	106.3	105.1	103.8	103.3
67.5°	77.2	76.8	75.5	75.0
70°	54.5	52.7	52.3	51.5
72.5°	36.4	36.4	35.6	35.6
75°	22.3	20.2	19.7	20.2
77.5°	15.4	15.0	15.0	14.6
80°	10.3	9.9	10.7	9.4
82.5°	6.4	6.9	6.4	6.9
85°	4.3	5.1	4.7	4.7
87.5°	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0

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