

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 EC8B20927 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 EC8B20927 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: 1742.6 lumens  
Efficiency: N/A  
Efficacy: 81.8 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

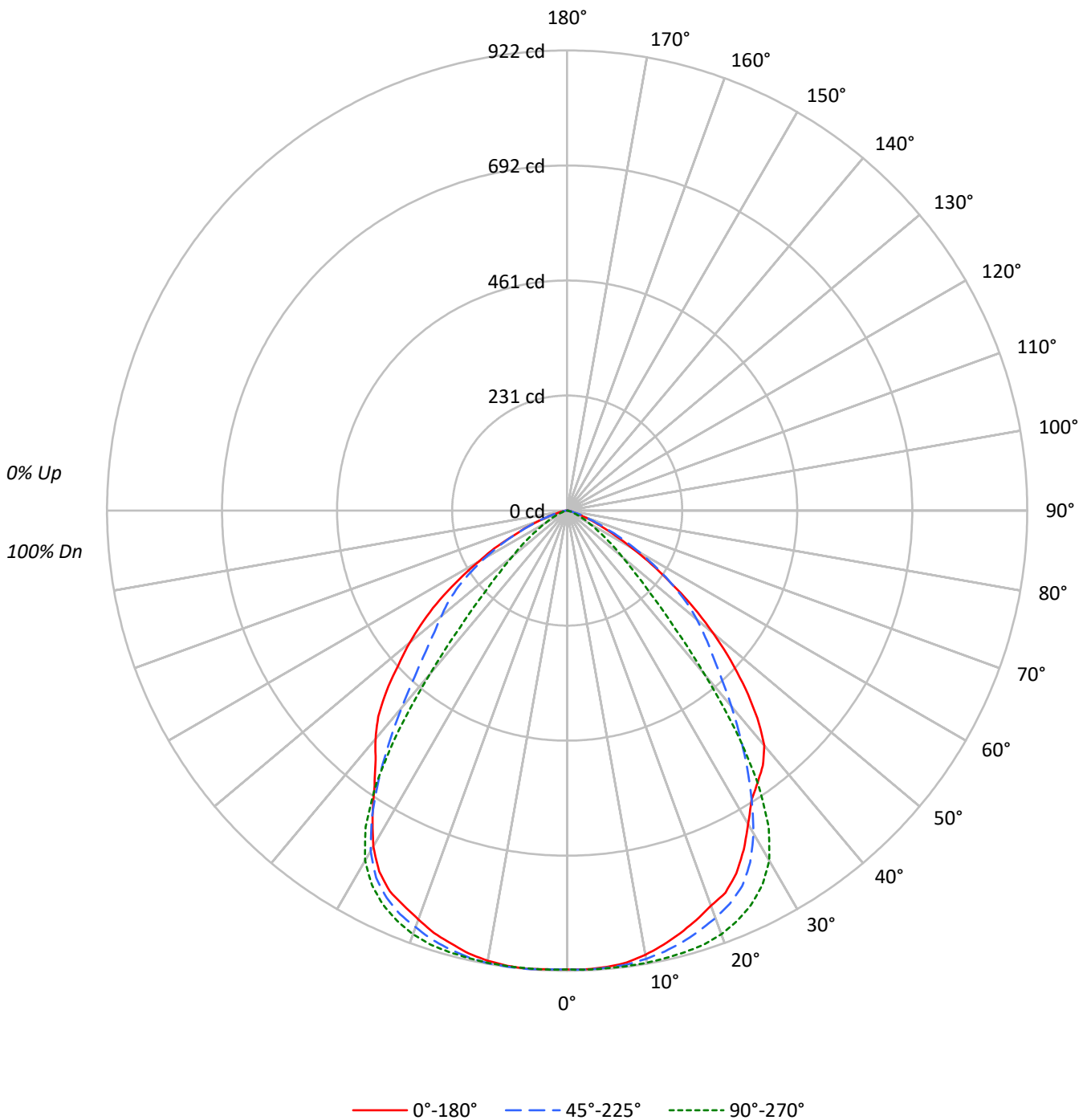
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	52	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°	87.7	5.0
10°-20°	254.8	14.6
20°-30°	386.8	22.2
30°-40°	406.2	23.3
40°-50°	304.6	17.5
50°-60°	195.4	11.2
60°-70°	83.6	4.8
70°-80°	19.7	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°	729.4	41.9
0°-40°	1135.6	65.2
0°-60°	1635.6	93.9
0°-90°	1742.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1742.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	920	920	920	920	920	
5°	918	920	920	922	921	87
15°	876	895	916	910	898	247
25°	802	830	872	856	842	366
35°	665	628	666	658	673	418
45°	505	413	237	401	512	387
55°	256	256	88	266	311	232
65°	77	91	28	117	119	82
75°	12	14	4	24	23	17
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°	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5
2.5°	919.9	920.9	920.5	920.5	919.9	920.5	920.5	921.4	921.4	920.5	919.9
5°	918.0	918.9	918.9	918.0	918.0	920.5	918.9	919.9	919.9	919.5	919.5
7.5°	913.5	913.5	915.5	914.1	914.1	915.5	915.0	916.0	917.0	917.4	917.4
10°	903.6	904.6	905.2	905.2	905.6	907.1	908.1	910.1	911.0	912.0	912.5
12.5°	891.3	892.8	893.2	892.8	894.3	896.3	898.8	901.2	902.7	904.6	906.1
15°	876.5	876.5	877.5	879.0	880.0	882.9	885.4	888.3	892.4	894.8	897.2
17.5°	860.2	861.2	862.6	862.6	864.7	869.6	871.1	875.5	880.0	882.4	887.4
20°	842.5	843.4	844.9	845.9	848.4	852.3	855.3	859.3	864.2	868.6	873.6
22.5°	828.7	826.6	827.7	828.7	831.2	834.5	838.0	843.0	847.9	852.3	857.2
25°	802.0	802.5	803.9	804.9	807.9	810.9	814.8	820.7	825.2	830.1	835.5
27.5°	766.0	766.5	768.9	768.9	771.4	776.4	778.8	783.7	789.6	794.6	801.0
30°	724.9	726.0	726.0	728.0	729.4	731.9	734.4	739.4	742.3	746.7	755.6
32.5°	687.5	688.5	687.9	687.5	686.0	685.5	685.0	686.0	687.0	688.5	691.9
35°	665.3	662.8	660.8	657.3	653.4	648.4	644.1	638.1	632.7	628.3	623.4
37.5°	644.1	643.6	640.6	635.6	627.8	618.9	608.5	595.7	582.9	569.0	555.8
40°	614.5	613.0	610.5	603.6	594.7	583.9	570.0	554.3	533.5	512.3	490.6
42.5°	564.1	564.6	561.6	556.2	547.9	537.4	523.1	505.9	483.6	458.4	430.3
45°	505.4	505.4	504.3	500.0	494.0	485.7	474.8	460.5	438.8	413.1	383.0
47.5°	444.2	444.7	443.1	442.2	439.8	434.4	426.4	415.6	400.3	375.5	345.5
50°	382.0	382.0	384.4	384.0	384.0	382.0	378.6	372.2	358.8	339.1	311.0
52.5°	319.8	320.8	322.3	324.2	326.7	330.6	326.7	323.8	315.3	300.0	275.8
55°	255.6	256.6	259.1	262.6	265.5	269.4	270.4	270.4	266.1	255.6	237.4
57.5°	200.9	199.4	201.4	204.3	208.2	212.2	215.2	218.6	218.1	211.3	196.4
60°	151.0	151.5	153.0	155.9	159.0	162.3	166.3	169.3	170.8	167.3	158.0
62.5°	110.0	110.0	112.0	115.0	116.4	121.4	123.9	125.3	126.8	126.3	120.4
65°	77.0	78.0	79.0	80.4	81.9	84.9	86.4	89.3	90.3	90.8	86.4
67.5°	54.3	52.8	53.8	54.8	56.2	58.3	61.2	61.2	62.7	62.7	59.7
70°	34.5	34.5	35.1	36.6	37.5	38.0	39.0	39.9	41.5	40.9	40.9
72.5°	23.2	22.7	23.2	23.7	24.2	25.6	25.6	26.2	27.1	27.7	25.6
75°	11.8	12.4	13.3	12.8	14.3	13.3	13.8	15.3	14.8	13.8	13.8
77.5°	9.9	9.9	9.9	9.3	10.4	10.4	9.9	10.9	10.4	10.4	9.9
80°	6.9	7.4	6.9	6.4	6.9	6.4	6.4	6.4	6.4	6.4	6.0
82.5°	5.4	4.5	5.0	4.5	5.0	5.0	4.5	3.9	3.9	4.5	3.9
85°	3.9	2.9	3.5	3.5	2.9	2.9	2.9	2.9	2.9	2.5	2.5
87.5°	2.5	1.5	1.5	1.5	1.9	1.9	1.9	1.5	1.9	1.9	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°	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5
2.5°	920.9	920.5	921.4	920.9	920.9	920.5	920.9	920.5	921.4	919.5	919.9
5°	920.9	919.9	920.5	920.9	921.4	920.5	920.5	920.5	921.4	920.5	920.9
7.5°	918.9	918.4	919.9	920.9	920.5	919.9	920.9	920.5	921.4	920.9	921.9
10°	915.0	915.5	916.5	918.0	918.4	918.9	919.9	919.9	921.4	919.5	920.5
12.5°	909.1	911.0	913.5	914.5	916.5	916.5	917.4	918.0	918.9	918.4	919.9
15°	901.7	904.2	907.1	909.6	912.0	913.5	915.0	915.5	917.0	915.5	916.0
17.5°	892.8	895.7	900.2	903.2	907.1	908.6	910.6	911.6	913.0	912.0	912.5
20°	880.4	883.9	888.9	893.2	895.7	899.2	901.7	903.2	904.2	903.2	903.6
22.5°	863.2	868.2	874.6	878.0	882.9	885.9	886.4	889.9	892.4	889.9	890.8
25°	843.0	847.9	852.9	860.2	864.7	868.2	871.5	872.1	874.6	874.0	873.6
27.5°	809.4	815.8	824.2	830.1	836.0	841.5	845.4	846.4	848.9	847.9	848.4
30°	763.5	770.4	778.3	787.7	796.1	801.4	806.4	809.9	812.4	810.9	810.3
32.5°	698.4	705.3	713.7	723.0	732.9	740.8	746.7	751.2	754.1	753.1	750.7
35°	623.8	625.8	631.2	638.7	647.0	655.4	660.8	665.8	669.3	670.2	670.2
37.5°	547.3	540.9	537.0	537.0	541.9	545.4	550.2	553.3	558.7	560.7	562.2
40°	473.3	458.4	444.7	434.4	427.4	426.9	426.9	428.4	433.4	439.8	445.6
42.5°	407.1	383.5	362.2	343.0	329.2	321.3	317.8	318.4	322.3	328.2	338.1
45°	354.4	324.8	298.1	275.0	256.2	243.8	237.9	237.4	240.3	247.3	258.1
47.5°	313.4	281.8	251.7	225.0	204.9	191.5	184.6	182.6	184.6	191.0	203.8
50°	279.3	246.8	215.7	188.0	166.3	152.5	146.1	143.7	146.1	151.5	164.4
52.5°	247.7	214.2	185.1	158.4	135.2	123.4	116.4	115.0	116.4	122.8	133.3
55°	211.3	182.6	154.0	127.4	107.1	95.3	89.8	88.3	89.8	95.7	106.6
57.5°	175.2	150.5	125.3	101.1	83.9	73.6	68.6	66.6	70.1	74.0	86.9
60°	141.6	122.0	100.7	79.4	65.1	55.8	51.9	51.3	52.3	57.3	66.1
62.5°	111.0	94.7	78.0	60.8	48.8	44.9	39.9	39.5	40.5	43.4	50.4
65°	80.0	69.6	56.8	44.4	35.1	29.6	27.7	28.1	29.1	31.0	37.5
67.5°	55.8	48.4	39.5	31.0	24.2	21.7	19.8	19.2	19.8	23.2	26.7
70°	37.5	33.1	26.7	23.7	16.8	13.3	13.8	12.4	14.3	14.3	17.2
72.5°	24.6	21.7	17.8	13.8	11.8	9.3	9.3	8.9	9.9	10.4	12.8
75°	12.8	9.9	9.9	6.9	5.0	2.5	4.5	3.9	3.5	3.9	5.0
77.5°	8.9	7.4	6.9	5.4	5.0	3.9	3.9	3.9	3.9	4.5	5.0
80°	5.4	5.4	3.9	3.5	2.9	2.5	2.9	2.9	2.9	2.9	3.5
82.5°	3.5	2.9	2.9	2.5	2.5	1.9	1.9	1.9	1.9	1.9	2.9
85°	2.9	1.9	1.9	1.5	1.9	3.5	1.5	1.9	1.9	1.9	1.5
87.5°	1.0	1.5	1.5	1.5	1.0	0.4	1.0	1.5	1.5	2.5	1.9
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5
2.5°	920.9	921.4	921.4	920.9	920.9	919.9	921.9	920.5	920.9	923.0	921.4
5°	921.9	922.4	922.4	921.9	921.9	921.9	922.4	922.4	921.9	921.4	922.4
7.5°	923.8	923.4	923.4	922.4	922.4	921.4	922.4	920.9	921.9	920.9	922.4
10°	921.4	921.9	921.4	920.9	920.9	920.5	920.5	918.9	919.5	918.0	918.9
12.5°	919.9	919.5	919.5	918.4	917.4	916.5	916.0	914.5	914.5	911.0	912.5
15°	916.0	916.5	915.0	913.0	912.0	909.6	908.6	906.6	904.6	902.1	902.7
17.5°	912.5	911.0	909.1	907.1	903.2	901.2	899.2	896.3	895.3	892.4	891.3
20°	902.1	901.2	898.8	895.3	892.8	888.3	886.4	883.5	881.0	878.0	876.5
22.5°	888.9	887.8	884.9	881.4	877.5	875.5	873.6	868.2	865.7	862.6	862.2
25°	872.1	870.6	867.6	863.7	861.8	856.2	854.3	850.4	849.4	846.4	845.9
27.5°	846.4	844.4	840.9	836.0	832.6	829.1	827.2	824.2	823.2	820.2	819.8
30°	807.9	805.4	798.5	796.6	790.6	787.2	787.2	783.2	783.7	781.8	781.8
32.5°	747.2	743.3	737.8	733.8	729.9	728.0	728.0	726.5	727.4	727.4	728.4
35°	666.8	661.4	658.4	655.9	655.9	657.9	663.8	665.3	668.2	670.7	672.6
37.5°	563.6	563.2	566.6	569.6	576.9	585.3	595.7	604.6	613.0	618.9	624.8
40°	452.0	464.4	474.3	488.1	499.5	515.7	534.5	549.8	564.1	574.4	585.3
42.5°	352.9	368.7	389.4	409.6	429.9	452.0	476.8	497.9	516.7	531.0	542.4
45°	275.0	296.7	321.8	347.4	373.6	401.3	426.9	448.6	468.3	483.2	494.6
47.5°	221.6	245.2	273.9	302.1	331.7	360.8	389.4	408.2	424.5	436.3	446.6
50°	183.2	208.2	238.4	270.4	300.0	329.2	353.8	372.2	385.4	395.8	402.2
52.5°	153.0	179.7	211.7	243.8	273.4	300.0	322.3	336.2	347.0	354.4	360.2
55°	126.3	152.0	182.1	212.2	241.3	266.5	284.7	295.1	303.5	307.9	311.4
57.5°	103.2	126.8	154.5	182.1	207.3	228.0	242.3	252.7	256.6	260.1	259.7
60°	81.0	103.2	128.4	152.0	173.7	190.5	200.9	206.8	209.7	211.3	210.3
62.5°	63.7	83.9	103.2	123.9	139.7	154.0	163.9	163.9	165.4	165.8	167.3
65°	47.4	62.7	79.4	94.7	107.6	117.0	122.4	123.9	125.9	125.3	124.4
67.5°	35.1	46.4	58.7	70.1	79.0	84.9	88.9	92.2	91.8	90.8	90.3
70°	24.2	31.6	42.4	49.4	55.8	61.6	62.7	63.2	63.7	64.1	63.2
72.5°	16.8	22.2	28.1	34.1	38.0	40.5	43.0	43.4	43.4	43.4	43.0
75°	8.4	11.4	16.8	19.2	22.7	23.7	25.6	25.6	27.1	25.2	24.6
77.5°	7.4	8.9	11.8	13.8	15.3	16.8	17.2	18.8	18.2	17.2	17.8
80°	4.5	5.4	7.4	8.4	10.4	10.9	11.4	11.8	11.4	11.8	11.8
82.5°	3.5	3.9	5.0	5.0	6.4	6.4	6.9	6.9	7.4	7.4	7.4
85°	1.9	3.5	2.9	6.0	3.9	3.9	5.0	6.0	5.0	5.0	6.0
87.5°	1.9	1.9	1.5	1.9	1.9	1.9	2.5	2.9	2.9	3.5	2.9
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):**

	165°	170°	175°	180°
0°	919.5	919.5	919.5	919.5
2.5°	920.9	921.9	920.5	919.9
5°	922.4	922.4	921.4	921.4
7.5°	922.4	922.4	920.9	919.9
10°	918.4	918.4	917.0	916.0
12.5°	911.0	911.0	910.6	909.1
15°	901.7	901.7	899.7	898.2
17.5°	888.9	889.9	887.4	887.4
20°	875.0	874.6	872.6	871.5
22.5°	860.7	859.7	859.3	856.2
25°	845.4	844.4	843.0	841.5
27.5°	819.2	818.8	817.3	815.3
30°	779.3	778.8	776.8	776.8
32.5°	727.4	727.0	724.9	725.5
35°	673.6	675.7	674.7	672.6
37.5°	628.8	630.2	631.2	630.2
40°	591.3	595.7	596.1	597.2
42.5°	551.2	557.2	559.1	560.1
45°	503.4	508.8	513.2	512.3
47.5°	454.5	458.4	462.5	459.4
50°	407.7	410.2	411.6	411.6
52.5°	363.3	363.3	362.7	363.3
55°	312.4	312.4	310.4	311.4
57.5°	259.1	260.1	258.6	256.2
60°	209.7	207.3	206.3	204.9
62.5°	163.4	163.4	159.9	164.4
65°	122.4	120.9	119.5	118.9
67.5°	88.9	88.3	86.9	86.4
70°	62.7	60.8	60.2	59.2
72.5°	42.0	42.0	40.9	40.9
75°	25.6	23.2	22.7	23.2
77.5°	17.8	17.2	17.2	16.8
80°	11.8	11.4	12.4	10.9
82.5°	7.4	7.9	7.4	7.9
85°	5.0	6.0	5.4	5.4
87.5°	2.9	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0

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