

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: P244220

Luminaire Tested: **LSR8B20D010 EC8B20927 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244220  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B20D010 EC8B20927 8LBDW0LI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1805.6 lumens  
Efficiency: N/A  
Efficacy: 84.8 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

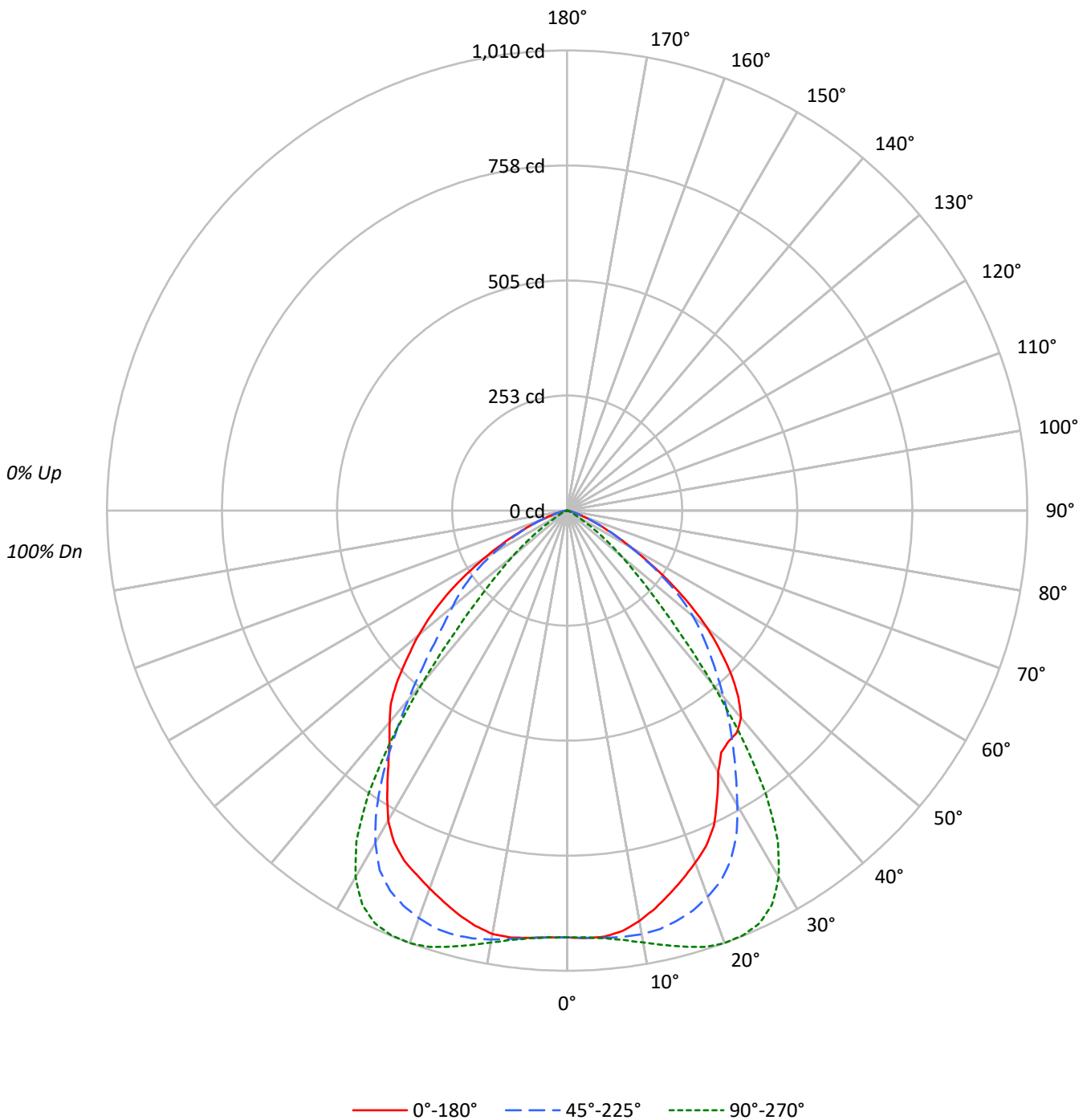
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				
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			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79			
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38			
10	60	48	41	36	59	48	41	36	47	41	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°	90.1	5.0
10°-20°	266.9	14.8
20°-30°	407.1	22.5
30°-40°	424.8	23.5
40°-50°	319.1	17.7
50°-60°	196.3	10.9
60°-70°	79.9	4.4
70°-80°	18.8	1.0
80°-90°	2.6	0.1
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°	764.0	42.3
0°-40°	1188.9	65.8
0°-60°	1704.3	94.4
0°-90°	1805.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1805.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	937	937	937	937	937	
5°	939	941	942	941	941	89
15°	870	932	991	964	918	245
25°	763	848	999	920	847	347
35°	618	635	761	704	684	390
45°	510	441	275	411	526	389
55°	275	262	72	262	323	248
65°	86	87	11	117	124	90
75°	15	15	2	26	27	18
85°	2	2	0	4	4	2
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°	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7
2.5°	939.2	937.7	939.2	939.2	939.7	938.7	939.2	939.7	938.7	938.7	938.7
5°	938.7	937.7	938.7	938.1	939.2	939.2	940.2	940.2	941.2	941.2	942.6
7.5°	930.7	928.8	930.7	932.2	933.2	935.2	937.7	939.7	941.6	943.6	946.1
10°	914.3	914.3	915.9	918.8	921.8	925.3	929.7	934.8	939.7	944.1	948.6
12.5°	893.9	892.5	895.4	899.4	903.9	909.3	916.3	923.7	931.7	940.7	947.6
15°	870.5	869.1	872.6	876.5	882.0	890.0	898.4	908.3	919.8	931.7	943.2
17.5°	846.7	846.2	849.7	855.1	859.6	868.0	879.1	891.0	903.9	919.8	934.8
20°	822.4	821.8	825.3	829.8	835.8	843.8	854.7	868.6	884.0	901.9	919.4
22.5°	796.9	797.5	800.4	805.4	810.4	818.9	830.2	844.2	861.1	880.5	899.9
25°	762.6	760.2	764.2	769.2	777.6	784.6	795.5	810.4	827.8	848.2	871.1
27.5°	712.9	712.5	715.9	720.4	727.9	736.3	748.2	763.6	782.1	804.5	826.8
30°	663.2	664.2	665.8	670.2	675.2	683.7	695.6	708.5	725.8	747.2	771.2
32.5°	629.4	629.4	631.5	634.4	637.9	642.4	650.8	660.3	673.6	688.6	706.1
35°	618.0	616.1	618.0	618.5	619.0	620.0	621.4	624.5	629.0	635.4	641.8
37.5°	613.0	611.6	611.6	609.5	607.1	604.1	600.1	595.6	590.6	584.2	579.3
40°	593.7	592.6	591.6	589.6	584.2	578.2	571.7	561.4	549.9	533.9	518.1
42.5°	556.3	555.4	554.8	550.9	546.0	539.0	531.4	520.5	506.1	485.8	462.8
45°	510.1	508.2	506.6	503.2	499.6	493.6	486.8	476.8	462.4	441.4	414.1
47.5°	456.4	455.4	455.0	453.5	450.0	446.5	442.0	434.0	421.1	401.2	372.9
50°	402.2	400.3	401.2	400.7	399.3	396.8	393.8	388.3	378.3	360.4	334.6
52.5°	340.1	340.1	339.6	341.1	341.6	341.1	341.6	335.6	327.2	313.8	291.8
55°	275.4	275.4	277.0	278.9	280.9	281.4	280.9	278.4	272.5	261.6	242.1
57.5°	214.8	213.8	216.8	219.7	221.7	223.8	222.2	220.3	216.8	207.8	192.9
60°	163.6	163.6	165.6	167.5	169.5	171.6	171.0	170.5	167.5	161.5	149.6
62.5°	120.3	120.8	120.8	122.3	124.3	126.3	127.8	126.3	124.8	120.8	112.8
65°	86.1	85.5	86.1	87.5	89.0	91.0	92.0	91.5	90.0	87.0	81.0
67.5°	57.7	57.2	59.2	59.6	60.6	62.7	62.1	62.7	62.1	59.6	54.7
70°	37.8	36.8	37.8	37.2	38.8	39.3	40.3	40.7	40.3	38.8	37.2
72.5°	23.4	22.8	23.4	23.8	24.4	24.9	25.9	25.9	25.3	24.4	22.4
75°	15.0	13.4	14.0	12.9	14.0	14.0	15.0	15.4	15.0	15.0	14.0
77.5°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.5	9.9	9.0	8.4
80°	4.5	4.5	5.0	5.0	5.0	5.5	5.0	5.0	5.0	5.5	3.9
82.5°	3.5	2.9	2.9	2.9	3.5	2.9	2.9	2.9	2.9	2.9	2.9
85°	1.5	2.0	1.5	1.0	1.5	1.5	2.0	1.5	1.5	1.5	2.0
87.5°	0.4	0.4	0.0	0.0	0.0	0.4	0.0	0.4	0.4	1.0	0.0
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°	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7
2.5°	939.2	938.1	938.1	937.7	938.7	937.7	938.1	937.7	937.7	938.7	937.7
5°	942.6	943.2	942.2	941.6	943.2	943.2	943.2	942.2	942.2	942.6	942.2
7.5°	947.6	948.6	949.2	949.6	950.6	951.1	951.1	950.6	950.2	951.6	949.6
10°	953.1	954.6	957.6	959.1	961.5	961.5	962.6	962.6	961.5	962.6	962.1
12.5°	951.1	960.1	965.0	968.5	972.0	974.9	975.9	976.5	975.9	978.0	975.9
15°	954.6	962.1	970.0	975.9	982.5	986.0	987.0	990.9	991.9	992.4	989.4
17.5°	949.2	962.6	971.0	980.0	989.4	995.8	1001.8	1004.3	1004.8	1005.8	1001.8
20°	936.7	951.6	964.6	977.5	988.4	998.3	1003.3	1010.2	1008.3	1012.3	1006.8
22.5°	919.8	936.7	953.1	970.0	981.4	993.4	1003.8	1008.8	1011.3	1011.3	1005.3
25°	892.9	912.8	930.7	948.2	965.6	980.0	991.9	999.3	1000.8	1000.4	993.4
27.5°	851.2	872.6	893.5	913.4	934.8	951.6	965.6	974.5	977.0	977.0	969.5
30°	793.5	816.4	836.8	860.6	882.6	901.4	920.8	928.8	933.2	933.2	924.8
32.5°	724.9	744.3	763.2	786.6	810.4	831.8	850.2	861.1	866.6	866.1	858.6
35°	650.4	659.8	674.2	691.5	712.9	732.8	750.7	761.2	770.6	770.2	763.2
37.5°	575.8	573.3	574.8	581.2	594.7	608.5	622.5	632.5	640.4	643.8	642.4
40°	502.6	489.7	477.3	472.8	473.8	478.8	486.2	493.6	502.6	507.2	509.2
42.5°	437.1	415.1	393.3	376.9	367.4	364.4	367.9	370.3	375.9	382.4	388.8
45°	384.3	355.0	326.1	300.8	284.8	275.4	273.5	275.4	278.4	284.8	293.3
47.5°	341.1	306.8	274.5	246.2	222.8	210.3	206.9	205.9	208.8	214.8	226.2
50°	302.7	268.4	232.6	199.9	175.5	161.5	156.6	154.6	158.1	162.6	173.0
52.5°	261.0	227.2	190.5	158.6	133.2	118.8	113.4	110.4	112.4	118.4	128.8
55°	215.8	184.5	151.1	118.4	93.9	80.6	74.0	72.1	74.0	80.6	91.0
57.5°	170.5	144.2	116.3	85.5	63.7	50.2	43.8	41.7	47.2	49.7	60.6
60°	133.2	111.8	88.0	62.7	43.8	33.3	26.9	25.3	27.9	32.3	41.3
62.5°	99.9	86.5	67.6	44.8	32.3	21.4	17.9	16.4	17.9	21.4	28.4
65°	72.6	62.1	47.2	32.8	21.8	15.9	11.9	10.9	12.5	15.0	20.9
67.5°	49.7	41.7	32.8	22.8	15.0	9.9	8.4	8.4	9.0	10.9	15.4
70°	32.3	27.3	20.9	15.0	9.9	7.4	6.4	5.5	6.4	8.0	10.5
72.5°	20.4	17.4	13.4	10.5	7.4	5.5	4.5	3.9	5.0	6.0	8.0
75°	12.5	9.5	7.0	5.5	3.9	3.9	3.9	2.0	2.5	3.9	5.0
77.5°	7.4	6.4	5.5	4.5	3.5	2.0	2.0	2.0	2.5	2.9	4.5
80°	3.9	3.5	2.5	2.5	2.0	1.5	2.0	1.5	1.0	2.5	2.9
82.5°	2.5	2.0	2.0	2.0	2.5	1.0	1.5	1.0	1.5	2.0	1.5
85°	1.5	1.5	1.5	1.0	2.5	1.0	1.0	0.4	0.4	1.0	1.0
87.5°	0.0	0.4	0.4	0.0	0.4	0.0	0.4	0.4	0.4	0.4	0.4
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°	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7
2.5°	938.1	937.7	938.1	937.7	937.7	937.7	938.1	938.1	937.7	937.7	938.7
5°	942.2	942.2	942.2	941.6	941.2	941.2	942.2	942.2	940.7	942.2	942.2
7.5°	950.6	949.2	950.6	948.6	947.6	948.2	948.6	947.6	946.7	947.1	947.1
10°	961.5	960.1	960.1	958.6	957.0	956.1	955.1	952.6	950.2	949.6	947.6
12.5°	974.5	972.0	970.5	967.5	965.0	961.5	958.6	954.6	949.6	946.1	942.6
15°	987.4	983.5	980.0	974.9	969.5	963.6	957.0	950.6	942.6	935.7	929.7
17.5°	997.9	992.4	986.0	978.0	970.0	961.1	951.6	942.2	930.7	921.8	914.8
20°	1001.4	993.4	984.9	974.5	964.0	951.6	939.7	927.2	914.3	904.8	897.0
22.5°	996.9	987.4	977.0	966.0	952.1	938.7	924.8	910.4	898.9	885.9	878.5
25°	984.4	973.0	961.5	948.6	935.2	920.2	905.4	890.4	876.5	869.6	860.2
27.5°	959.1	946.7	934.2	920.8	905.4	890.4	875.0	860.6	848.7	839.2	833.7
30°	914.3	899.9	885.5	871.1	857.7	842.2	827.8	815.8	803.9	796.5	791.0
32.5°	845.7	832.8	818.3	804.5	792.0	779.1	767.1	756.7	748.2	743.3	739.4
35°	753.2	740.4	729.3	719.4	709.0	703.6	696.0	690.1	686.6	684.7	684.1
37.5°	636.9	629.4	625.9	623.9	622.0	620.4	621.4	623.9	625.9	629.4	633.4
40°	512.6	519.1	521.1	528.0	534.5	542.9	552.4	563.3	572.3	583.6	591.6
42.5°	399.3	411.2	425.1	440.0	456.0	471.4	490.3	507.6	523.6	538.0	550.4
45°	306.8	325.1	346.0	367.4	388.8	411.2	434.0	455.4	474.3	489.7	502.6
47.5°	239.2	259.5	286.4	312.8	338.6	365.0	390.3	412.6	428.6	443.5	455.0
50°	189.5	212.8	242.1	272.5	300.8	328.6	355.5	376.4	392.3	404.2	412.6
52.5°	146.7	174.5	204.3	236.1	266.5	296.8	321.6	341.1	354.0	364.4	370.9
55°	109.4	136.7	168.5	201.4	232.2	261.6	284.8	301.8	313.2	319.2	322.7
57.5°	79.1	104.0	135.7	168.5	196.4	224.2	243.1	258.5	265.0	268.4	270.0
60°	57.7	80.6	108.9	137.2	163.6	186.0	202.4	212.8	217.8	219.7	219.3
62.5°	42.3	62.1	86.5	110.4	131.7	150.2	163.1	170.0	172.6	173.5	172.0
65°	32.3	47.7	68.6	87.0	103.4	116.9	126.3	130.7	132.3	131.7	130.7
67.5°	23.8	35.8	51.2	65.1	77.1	87.5	92.5	96.4	97.4	96.0	94.5
70°	16.9	26.3	37.2	46.7	55.7	61.6	67.2	67.6	67.6	67.2	66.1
72.5°	11.9	18.4	25.3	31.8	37.2	41.7	43.8	45.2	44.8	44.2	43.3
75°	8.0	11.5	18.4	19.9	24.9	26.3	28.4	28.4	28.8	27.3	27.3
77.5°	5.0	8.0	10.9	12.9	15.0	16.9	17.9	17.9	18.4	17.9	17.9
80°	2.9	5.0	6.0	9.0	9.0	10.5	10.9	11.5	10.5	11.9	10.5
82.5°	2.0	2.9	4.5	4.5	5.5	6.4	6.4	7.0	7.0	6.4	6.4
85°	1.5	2.0	2.5	2.9	2.9	3.5	2.9	2.9	3.5	3.9	3.5
87.5°	0.4	1.0	0.4	1.0	1.0	2.0	1.5	1.5	1.5	2.0	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):**

	165°	170°	175°	180°
0°	936.7	936.7	936.7	936.7
2.5°	937.7	938.1	937.7	937.7
5°	942.2	941.6	942.2	941.2
7.5°	945.7	945.7	945.1	945.1
10°	945.7	943.6	943.6	943.6
12.5°	938.1	935.7	934.2	933.2
15°	925.3	920.8	918.8	918.3
17.5°	908.3	904.4	901.9	900.4
20°	889.0	885.0	882.0	882.6
22.5°	872.1	867.6	865.6	864.6
25°	855.1	849.7	848.2	847.2
27.5°	827.8	824.8	823.4	821.8
30°	786.0	784.6	782.1	785.6
32.5°	737.8	735.3	733.4	734.8
35°	684.7	683.1	684.7	683.7
37.5°	636.0	637.4	639.3	640.4
40°	597.6	603.1	605.0	606.0
42.5°	559.4	565.8	569.8	572.3
45°	512.1	518.5	523.0	526.1
47.5°	463.4	468.9	473.3	472.8
50°	419.2	422.1	424.1	426.0
52.5°	374.4	374.4	374.8	374.8
55°	323.7	322.7	322.2	322.7
57.5°	268.0	267.0	266.5	265.0
60°	217.2	214.3	212.3	212.3
62.5°	170.0	166.5	165.0	164.6
65°	127.8	127.2	124.3	123.8
67.5°	92.5	90.4	88.5	89.0
70°	65.1	62.1	62.1	61.2
72.5°	42.3	40.7	40.3	40.3
75°	26.3	26.3	25.3	27.3
77.5°	17.4	17.4	16.9	17.4
80°	10.5	10.5	10.5	9.9
82.5°	6.4	7.0	6.4	6.4
85°	3.5	3.9	2.9	4.5
87.5°	2.0	2.5	2.0	2.5
90°	0.0	0.0	0.0	0.0

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