

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: P244658

Luminaire Tested: **LSR8B20D010 EC8B20930 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244658  
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 EC8B20930 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1837.3 lumens  
Efficiency: N/A  
Efficacy: 86.3 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

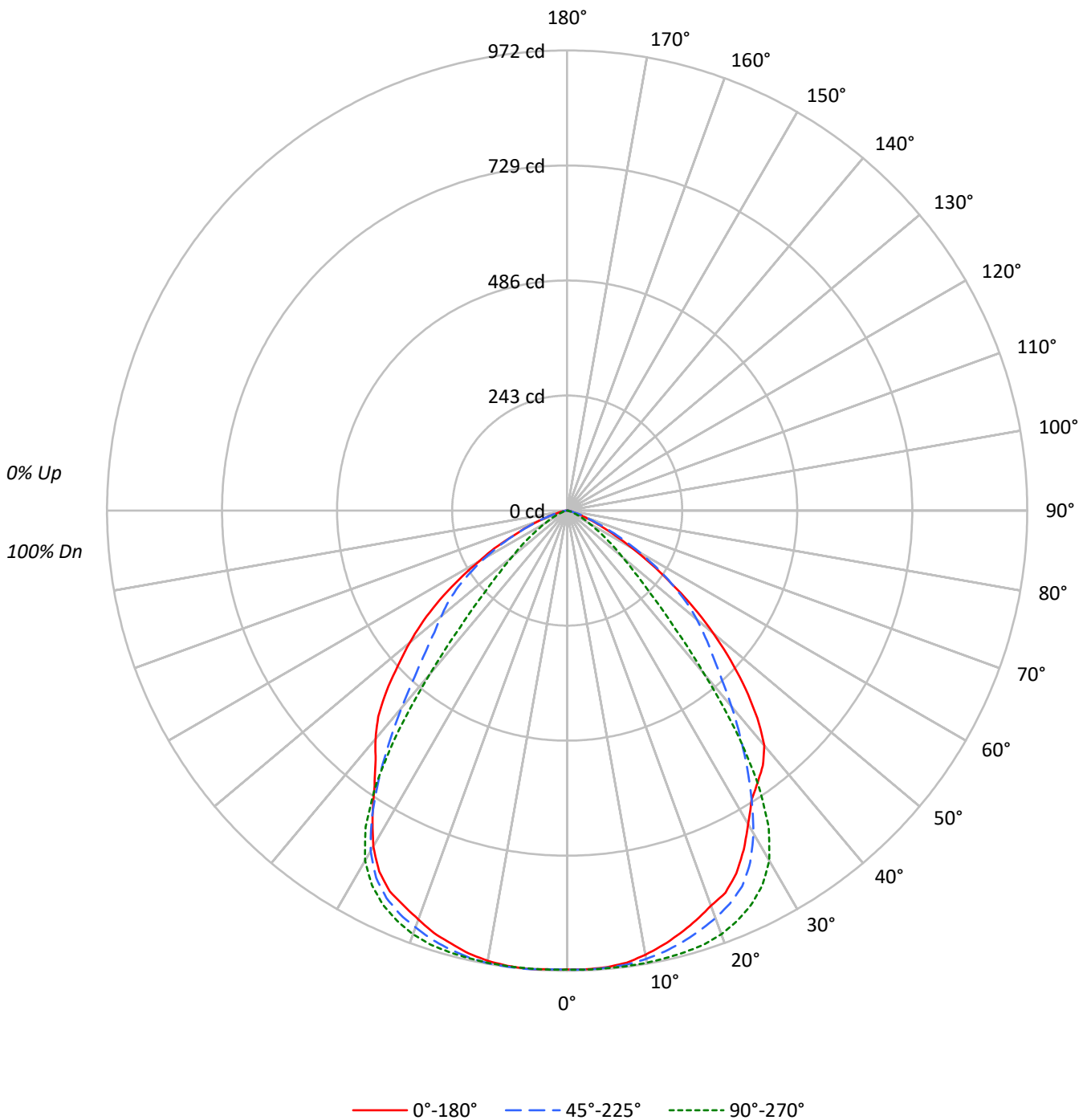
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	92.5	5.0
10°-20°	268.7	14.6
20°-30°	407.8	22.2
30°-40°	428.3	23.3
40°-50°	321.1	17.5
50°-60°	206.0	11.2
60°-70°	88.1	4.8
70°-80°	20.8	1.1
80°-90°	3.9	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°	769.0	41.9
0°-40°	1197.3	65.2
0°-60°	1724.5	93.9
0°-90°	1837.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1837.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	969	969	969	969	969	
5°	968	969	970	972	972	92
15°	924	943	965	959	947	261
25°	846	875	919	903	887	386
35°	701	662	702	694	709	440
45°	533	436	250	423	540	408
55°	270	270	93	281	328	244
65°	81	96	30	123	125	87
75°	12	15	4	25	24	18
85°	4	3	2	4	6	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°	969.4	969.4	969.4	969.4	969.4	969.4	969.4	969.4	969.4	969.4	969.4
2.5°	969.9	971.0	970.4	970.4	969.9	970.4	970.4	971.5	971.5	970.4	969.9
5°	967.9	968.9	968.9	967.9	967.9	970.4	968.9	969.9	969.9	969.4	969.4
7.5°	963.2	963.2	965.3	963.7	963.7	965.3	964.7	965.7	966.9	967.3	967.3
10°	952.7	953.7	954.3	954.3	954.9	956.4	957.4	959.6	960.6	961.6	962.2
12.5°	939.7	941.3	941.9	941.3	942.9	945.0	947.6	950.2	951.7	953.7	955.3
15°	924.2	924.2	925.2	926.7	927.7	930.9	933.5	936.6	940.7	943.4	946.0
17.5°	907.0	908.0	909.6	909.6	911.6	916.9	918.4	923.1	927.7	930.4	935.6
20°	888.3	889.3	890.9	891.9	894.4	898.6	901.7	905.9	911.1	915.9	921.0
22.5°	873.7	871.6	872.6	873.7	876.3	879.9	883.6	888.7	894.0	898.6	903.9
25°	845.6	846.1	847.7	848.7	851.8	855.0	859.1	865.3	870.0	875.3	881.0
27.5°	807.6	808.1	810.7	810.7	813.3	818.6	821.1	826.3	832.6	837.7	844.6
30°	764.4	765.4	765.4	767.5	769.1	771.7	774.3	779.4	782.6	787.3	796.7
32.5°	724.8	725.8	725.4	724.8	723.3	722.7	722.3	723.3	724.3	725.8	729.5
35°	701.4	698.8	696.7	693.1	689.0	683.7	679.1	672.8	667.1	662.4	657.2
37.5°	679.1	678.5	675.4	670.2	661.8	652.5	641.5	628.1	614.5	600.0	585.9
40°	647.8	646.3	643.7	636.4	627.0	615.5	601.0	584.4	562.5	540.1	517.2
42.5°	594.8	595.3	592.1	586.4	577.5	566.7	551.5	533.4	509.9	483.4	453.8
45°	532.8	532.8	531.8	527.1	520.8	512.1	500.5	485.5	462.6	435.5	403.8
47.5°	468.4	468.8	467.2	466.2	463.6	457.9	449.6	438.1	422.1	395.9	364.2
50°	402.8	402.8	405.4	404.8	404.8	402.8	399.1	392.4	378.3	357.5	327.8
52.5°	337.2	338.2	339.8	341.9	344.5	348.6	344.5	341.3	332.5	316.3	290.9
55°	269.5	270.6	273.2	276.8	279.9	284.1	285.2	285.2	280.5	269.5	250.3
57.5°	211.8	210.2	212.3	215.5	219.6	223.8	226.9	230.5	230.0	222.7	207.0
60°	159.2	159.7	161.3	164.5	167.6	171.2	175.3	178.5	180.0	176.4	166.5
62.5°	116.0	116.0	118.2	121.2	122.7	128.0	130.6	132.2	133.7	133.2	127.0
65°	81.2	82.2	83.3	84.9	86.4	89.5	91.0	94.2	95.2	95.7	91.0
67.5°	57.3	55.7	56.7	57.7	59.3	61.4	64.6	64.6	66.0	66.0	63.0
70°	36.4	36.4	37.0	38.5	39.6	40.0	41.1	42.1	43.7	43.2	43.2
72.5°	24.4	24.0	24.4	25.0	25.4	27.0	27.0	27.6	28.6	29.1	27.0
75°	12.4	13.0	14.0	13.6	15.1	14.0	14.6	16.1	15.6	14.6	14.6
77.5°	10.4	10.4	10.4	9.9	10.9	10.9	10.4	11.4	10.9	10.9	10.4
80°	7.3	7.8	7.3	6.7	7.3	6.7	6.7	6.7	6.7	6.7	6.3
82.5°	5.7	4.7	5.2	4.7	5.2	5.2	4.7	4.1	4.1	4.7	4.1
85°	4.1	3.1	3.6	3.6	3.1	3.1	3.1	3.1	3.1	2.6	2.6
87.5°	2.6	1.6	1.6	1.6	2.1	2.1	2.1	1.6	2.1	2.1	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°	969.4	969.4	969.4	969.4	969.4	969.4	969.4	969.4	969.4	969.4	969.4
2.5°	971.0	970.4	971.5	971.0	971.0	970.4	971.0	970.4	971.5	969.4	969.9
5°	971.0	969.9	970.4	971.0	971.5	970.4	970.4	970.4	971.5	970.4	971.0
7.5°	968.9	968.3	969.9	971.0	970.4	969.9	971.0	970.4	971.5	971.0	972.0
10°	964.7	965.3	966.3	967.9	968.3	968.9	969.9	969.9	971.5	969.4	970.4
12.5°	958.5	960.6	963.2	964.2	966.3	966.3	967.3	967.9	968.9	968.3	969.9
15°	950.7	953.3	956.4	959.0	961.6	963.2	964.7	965.3	966.9	965.3	965.7
17.5°	941.3	944.4	949.2	952.2	956.4	958.0	960.0	961.0	962.6	961.6	962.2
20°	928.3	932.0	937.2	941.9	944.4	948.0	950.7	952.2	953.3	952.2	952.7
22.5°	910.1	915.3	922.0	925.7	930.9	934.0	934.6	938.2	940.7	938.2	939.3
25°	888.7	894.0	899.2	907.0	911.6	915.3	918.9	919.4	922.0	921.6	921.0
27.5°	853.4	860.1	869.0	875.3	881.4	887.2	891.3	892.4	895.0	894.0	894.4
30°	805.0	812.3	820.6	830.4	839.3	845.0	850.3	853.9	856.4	855.0	854.4
32.5°	736.3	743.6	752.4	762.3	772.7	781.0	787.3	792.0	795.1	794.0	791.4
35°	657.7	659.8	665.5	673.4	682.1	691.0	696.7	702.0	705.6	706.7	706.7
37.5°	577.1	570.3	566.1	566.1	571.4	575.0	580.2	583.3	589.1	591.1	592.7
40°	499.0	483.4	468.8	457.9	450.6	450.1	450.1	451.7	456.9	463.6	469.9
42.5°	429.2	404.3	381.9	361.6	347.1	338.8	335.1	335.6	339.8	346.1	356.5
45°	373.6	342.4	314.3	289.8	270.0	257.0	250.8	250.3	253.5	260.7	272.2
47.5°	330.5	297.1	265.3	237.3	215.9	201.9	194.6	192.6	194.6	201.3	214.9
50°	294.5	260.2	227.3	198.3	175.3	160.8	154.0	151.4	154.0	159.7	173.3
52.5°	261.2	225.9	195.2	167.0	142.6	130.0	122.7	121.2	122.7	129.6	140.5
55°	222.7	192.6	162.3	134.3	112.9	100.4	94.7	93.2	94.7	101.0	112.4
57.5°	184.7	158.7	132.2	106.7	88.4	77.6	72.3	70.3	73.9	78.0	91.6
60°	149.3	128.6	106.2	83.7	68.7	58.9	54.6	54.1	55.2	60.3	69.7
62.5°	117.0	99.9	82.2	64.0	51.6	47.3	42.1	41.6	42.7	45.7	53.1
65°	84.3	73.4	59.9	46.9	37.0	31.2	29.1	29.7	30.7	32.7	39.6
67.5°	58.9	51.0	41.6	32.7	25.4	22.9	20.9	20.3	20.9	24.4	28.1
70°	39.6	34.9	28.1	25.0	17.7	14.0	14.6	13.0	15.1	15.1	18.2
72.5°	26.0	22.9	18.7	14.6	12.4	9.9	9.9	9.4	10.4	10.9	13.6
75°	13.6	10.4	10.4	7.3	5.2	2.6	4.7	4.1	3.6	4.1	5.2
77.5°	9.4	7.8	7.3	5.7	5.2	4.1	4.1	4.1	4.1	4.7	5.2
80°	5.7	5.7	4.1	3.6	3.1	2.6	3.1	3.1	3.1	3.1	3.6
82.5°	3.6	3.1	3.1	2.6	2.6	2.1	2.1	2.1	2.1	2.1	3.1
85°	3.1	2.1	2.1	1.6	2.1	3.6	1.6	2.1	2.1	2.1	1.6
87.5°	1.0	1.6	1.6	1.6	1.0	0.6	1.0	1.6	1.6	2.6	2.1
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°	969.4	969.4	969.4	969.4	969.4	969.4	969.4	969.4	969.4	969.4	969.4
2.5°	971.0	971.5	971.5	971.0	971.0	969.9	972.0	970.4	971.0	973.0	971.5
5°	972.0	972.6	972.6	972.0	972.0	972.0	972.6	972.6	972.0	971.5	972.6
7.5°	974.0	973.6	973.6	972.6	972.6	971.5	972.6	971.0	972.0	971.0	972.6
10°	971.5	972.0	971.5	971.0	971.0	970.4	970.4	968.9	969.4	967.9	968.9
12.5°	969.9	969.4	969.4	968.3	967.3	966.3	965.7	964.2	964.2	960.6	962.2
15°	965.7	966.3	964.7	962.6	961.6	959.0	958.0	955.9	953.7	951.2	951.7
17.5°	962.2	960.6	958.5	956.4	952.2	950.2	948.0	945.0	943.9	940.7	939.7
20°	951.2	950.2	947.6	943.9	941.3	936.6	934.6	931.4	928.9	925.7	924.2
22.5°	937.2	936.1	933.0	929.3	925.2	923.1	921.0	915.3	912.7	909.6	909.0
25°	919.4	917.9	914.7	910.6	908.6	902.9	900.7	896.6	895.6	892.4	891.9
27.5°	892.4	890.3	886.7	881.4	877.9	874.2	872.1	869.0	868.0	864.9	864.3
30°	851.8	849.2	841.9	839.9	833.6	830.0	830.0	825.8	826.3	824.3	824.3
32.5°	787.8	783.7	777.9	773.7	769.6	767.5	767.5	766.0	767.0	767.0	768.0
35°	703.0	697.3	694.1	691.5	691.5	693.6	699.8	701.4	704.5	707.1	709.3
37.5°	594.2	593.7	597.4	600.5	608.3	617.1	628.1	637.4	646.3	652.5	658.8
40°	476.6	489.7	500.1	514.7	526.5	543.8	563.5	579.7	594.8	605.7	617.1
42.5°	372.1	388.7	410.5	431.9	453.2	476.6	502.7	525.1	544.8	559.9	571.8
45°	289.8	312.8	339.3	366.3	393.9	423.1	450.1	472.9	493.8	509.4	521.4
47.5°	233.6	258.6	288.8	318.5	349.6	380.4	410.5	430.4	447.5	459.9	470.9
50°	193.0	219.6	251.3	285.2	316.3	347.1	373.1	392.4	406.4	417.3	424.1
52.5°	161.3	189.4	223.2	257.0	288.3	316.3	339.8	354.3	365.8	373.6	379.8
55°	133.2	160.3	192.0	223.8	254.5	281.0	300.2	311.2	320.0	324.6	328.3
57.5°	108.7	133.7	162.9	192.0	218.6	240.5	255.5	266.5	270.6	274.2	273.7
60°	85.3	108.7	135.3	160.3	183.2	200.9	211.8	218.0	221.2	222.7	221.6
62.5°	67.1	88.4	108.7	130.6	147.3	162.3	172.7	172.7	174.3	174.9	176.4
65°	50.0	66.0	83.7	99.9	113.4	123.3	129.0	130.6	132.7	132.2	131.2
67.5°	37.0	48.9	61.9	73.9	83.3	89.5	93.6	97.3	96.7	95.7	95.2
70°	25.4	33.3	44.7	52.0	58.9	65.0	66.0	66.6	67.1	67.6	66.6
72.5°	17.7	23.4	29.7	35.9	40.0	42.7	45.3	45.7	45.7	45.7	45.3
75°	8.9	12.0	17.7	20.3	24.0	25.0	27.0	27.0	28.6	26.6	26.0
77.5°	7.8	9.4	12.4	14.6	16.1	17.7	18.2	19.7	19.3	18.2	18.7
80°	4.7	5.7	7.8	8.9	10.9	11.4	12.0	12.4	12.0	12.4	12.4
82.5°	3.6	4.1	5.2	5.2	6.7	6.7	7.3	7.3	7.8	7.8	7.8
85°	2.1	3.6	3.1	6.3	4.1	4.1	5.2	6.3	5.2	5.2	6.3
87.5°	2.1	2.1	1.6	2.1	2.1	2.1	2.6	3.1	3.1	3.6	3.1
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°	969.4	969.4	969.4	969.4
2.5°	971.0	972.0	970.4	969.9
5°	972.6	972.6	971.5	971.5
7.5°	972.6	972.6	971.0	969.9
10°	968.3	968.3	966.9	965.7
12.5°	960.6	960.6	960.0	958.5
15°	950.7	950.7	948.6	947.0
17.5°	937.2	938.2	935.6	935.6
20°	922.6	922.0	920.0	918.9
22.5°	907.4	906.4	905.9	902.9
25°	891.3	890.3	888.7	887.2
27.5°	863.7	863.3	861.7	859.6
30°	821.6	821.1	819.0	819.0
32.5°	767.0	766.4	764.4	765.0
35°	710.3	712.4	711.3	709.3
37.5°	663.0	664.5	665.5	664.5
40°	623.4	628.1	628.5	629.7
42.5°	581.2	587.5	589.5	590.5
45°	530.8	536.5	541.2	540.1
47.5°	479.2	483.4	487.5	484.5
50°	429.8	432.4	433.9	433.9
52.5°	382.9	382.9	382.5	382.9
55°	329.3	329.3	327.3	328.3
57.5°	273.2	274.2	272.6	270.0
60°	221.2	218.6	217.5	215.9
62.5°	172.2	172.2	168.6	173.3
65°	129.0	127.5	125.9	125.4
67.5°	93.6	93.2	91.6	91.0
70°	66.0	64.0	63.4	62.4
72.5°	44.3	44.3	43.2	43.2
75°	27.0	24.4	24.0	24.4
77.5°	18.7	18.2	18.2	17.7
80°	12.4	12.0	13.0	11.4
82.5°	7.8	8.3	7.8	8.3
85°	5.2	6.3	5.7	5.7
87.5°	3.1	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0

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