

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: P246236

Luminaire Tested: **LSR8B20D010 EC8B20927 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246236  
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 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1722.4 lumens  
Efficiency: N/A  
Efficacy: 80.9 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

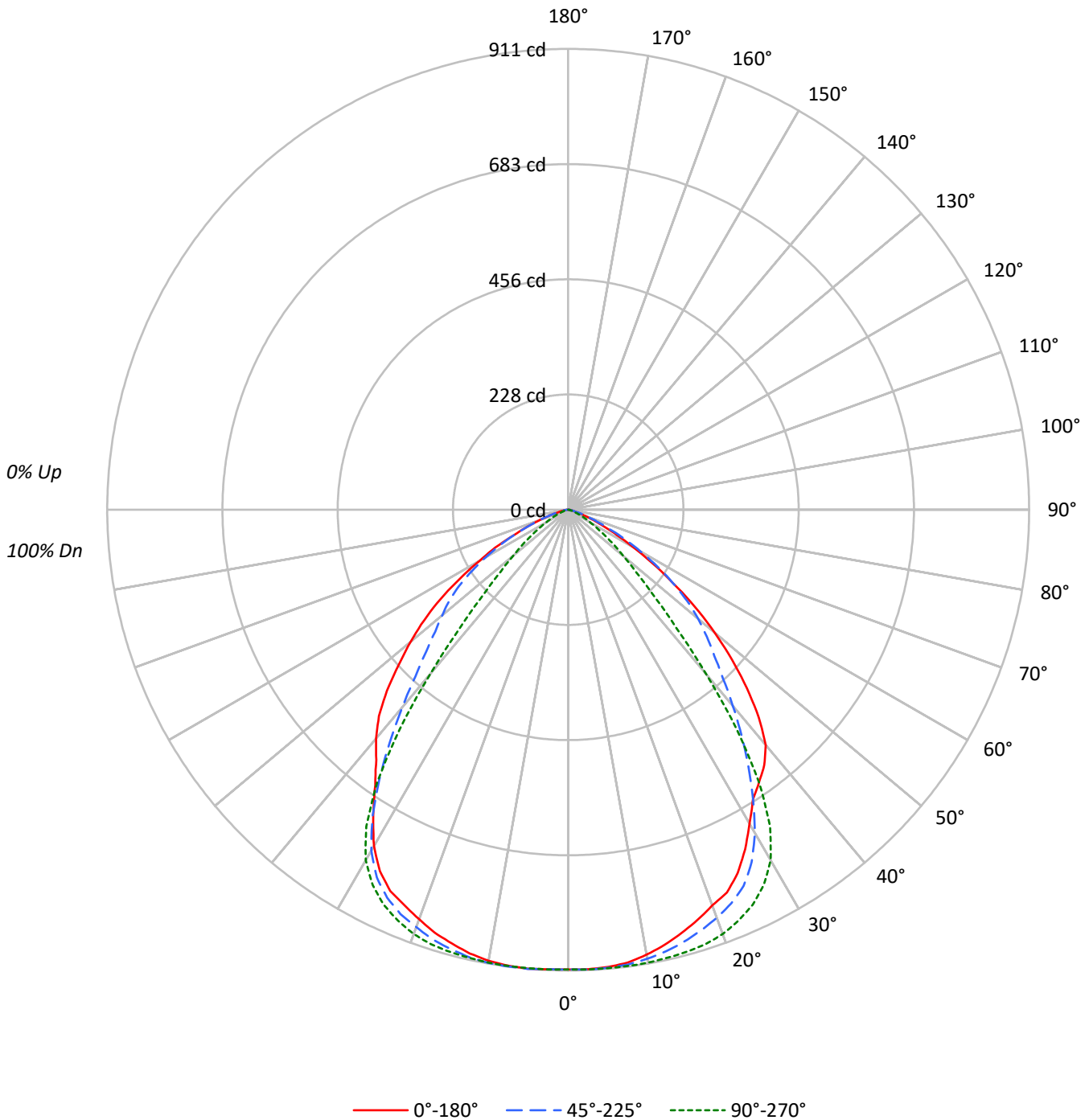
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	86.7	5.0
10°-20°	251.9	14.6
20°-30°	382.3	22.2
30°-40°	401.5	23.3
40°-50°	301.0	17.5
50°-60°	193.1	11.2
60°-70°	82.6	4.8
70°-80°	19.5	1.1
80°-90°	3.6	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°	720.9	41.9
0°-40°	1122.4	65.2
0°-60°	1616.6	93.9
0°-90°	1722.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1722.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	909	909	909	909	909	
5°	907	909	910	911	911	86
15°	866	884	905	899	888	244
25°	793	820	862	846	832	362
35°	658	621	658	650	665	413
45°	500	408	235	397	506	383
55°	253	253	87	263	308	229
65°	76	90	28	116	118	81
75°	12	14	4	23	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°	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8
2.5°	909.2	910.2	909.8	909.8	909.2	909.8	909.8	910.7	910.7	909.8	909.2
5°	907.3	908.3	908.3	907.3	907.3	909.8	908.3	909.2	909.2	908.8	908.8
7.5°	902.9	902.9	904.8	903.4	903.4	904.8	904.4	905.4	906.3	906.9	906.9
10°	893.1	894.2	894.6	894.6	895.0	896.5	897.5	899.6	900.4	901.5	901.9
12.5°	881.0	882.4	882.9	882.4	883.9	885.8	888.3	890.7	892.1	894.2	895.6
15°	866.4	866.4	867.3	868.7	869.7	872.7	875.1	878.1	881.9	884.4	886.8
17.5°	850.3	851.2	852.6	852.6	854.7	859.5	861.0	865.4	869.7	872.2	877.0
20°	832.7	833.6	835.1	836.1	838.5	842.4	845.3	849.3	854.1	858.5	863.4
22.5°	819.0	817.1	818.0	819.0	821.5	824.8	828.2	833.2	838.0	842.4	847.4
25°	792.7	793.1	794.6	795.6	798.5	801.4	805.4	811.2	815.6	820.5	825.9
27.5°	757.0	757.6	759.9	759.9	762.4	767.2	769.7	774.6	780.5	785.4	791.7
30°	716.6	717.5	717.5	719.6	720.9	723.4	725.8	730.7	733.6	738.0	746.8
32.5°	679.5	680.5	679.9	679.5	678.0	677.6	677.0	678.0	679.1	680.5	683.9
35°	657.6	655.1	653.2	649.8	645.9	640.9	636.5	630.7	625.4	621.0	616.1
37.5°	636.5	636.1	633.2	628.3	620.4	611.7	601.4	588.7	576.1	562.4	549.2
40°	607.3	605.8	603.4	596.6	587.8	577.0	563.4	547.8	527.3	506.4	484.9
42.5°	557.6	558.0	555.1	549.8	541.5	531.2	517.1	500.0	478.0	453.2	425.4
45°	499.5	499.5	498.5	494.1	488.2	480.0	469.2	455.1	433.7	408.3	378.6
47.5°	439.0	439.5	438.1	437.1	434.6	429.3	421.4	410.7	395.6	371.2	341.4
50°	377.6	377.6	380.0	379.5	379.5	377.6	374.2	367.8	354.6	335.1	307.3
52.5°	316.1	317.0	318.5	320.5	322.9	326.8	322.9	320.0	311.7	296.6	272.7
55°	252.7	253.7	256.0	259.5	262.5	266.3	267.3	267.3	262.9	252.7	234.7
57.5°	198.6	197.1	199.0	201.9	205.9	209.7	212.6	216.1	215.6	208.8	194.2
60°	149.3	149.7	151.2	154.1	157.0	160.5	164.4	167.3	168.8	165.4	156.0
62.5°	108.8	108.8	110.7	113.6	115.1	120.0	122.4	123.9	125.3	124.9	119.0
65°	76.0	77.1	78.1	79.5	81.0	83.9	85.4	88.3	89.2	89.8	85.4
67.5°	53.7	52.2	53.2	54.1	55.6	57.6	60.5	60.5	62.0	62.0	59.1
70°	34.2	34.2	34.6	36.1	37.1	37.6	38.6	39.5	40.9	40.5	40.5
72.5°	23.0	22.4	23.0	23.4	24.0	25.3	25.3	25.9	26.8	27.3	25.3
75°	11.7	12.2	13.2	12.7	14.2	13.2	13.6	15.1	14.6	13.6	13.6
77.5°	9.8	9.8	9.8	9.2	10.2	10.2	9.8	10.7	10.2	10.2	9.8
80°	6.9	7.3	6.9	6.3	6.9	6.3	6.3	6.3	6.3	6.3	5.9
82.5°	5.4	4.4	4.8	4.4	4.8	4.8	4.4	3.9	3.9	4.4	3.9
85°	3.9	2.9	3.4	3.4	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°	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8
2.5°	910.2	909.8	910.7	910.2	910.2	909.8	910.2	909.8	910.7	908.8	909.2
5°	910.2	909.2	909.8	910.2	910.7	909.8	909.8	909.8	910.7	909.8	910.2
7.5°	908.3	907.8	909.2	910.2	909.8	909.2	910.2	909.8	910.7	910.2	911.2
10°	904.4	904.8	905.8	907.3	907.8	908.3	909.2	909.2	910.7	908.8	909.8
12.5°	898.5	900.4	902.9	903.8	905.8	905.8	906.9	907.3	908.3	907.8	909.2
15°	891.2	893.6	896.5	899.0	901.5	902.9	904.4	904.8	906.3	904.8	905.4
17.5°	882.4	885.4	889.8	892.7	896.5	898.0	900.0	900.9	902.5	901.5	901.9
20°	870.2	873.7	878.5	882.9	885.4	888.8	891.2	892.7	893.6	892.7	893.1
22.5°	853.2	858.0	864.3	867.8	872.7	875.6	876.0	879.5	881.9	879.5	880.4
25°	833.2	838.0	843.0	850.3	854.7	858.0	861.4	862.0	864.3	863.9	863.4
27.5°	800.0	806.3	814.6	820.5	826.3	831.7	835.6	836.6	839.0	838.0	838.5
30°	754.6	761.4	769.3	778.5	786.8	792.2	797.1	800.4	802.9	801.4	801.0
32.5°	690.2	697.1	705.4	714.6	724.4	732.2	738.0	742.4	745.3	744.4	741.9
35°	616.6	618.5	623.9	631.2	639.4	647.8	653.2	658.0	661.4	662.4	662.4
37.5°	541.0	534.6	530.8	530.8	535.6	539.0	543.9	546.9	552.2	554.2	555.6
40°	467.8	453.2	439.5	429.3	422.4	422.0	422.0	423.4	428.3	434.6	440.4
42.5°	402.4	379.0	358.1	339.0	325.3	317.6	314.1	314.7	318.5	324.3	334.1
45°	350.2	321.0	294.6	271.7	253.1	241.0	235.1	234.7	237.6	244.4	255.2
47.5°	309.7	278.6	248.7	222.4	202.4	189.2	182.5	180.5	182.5	188.8	201.5
50°	276.1	243.9	213.2	185.8	164.4	150.8	144.3	142.0	144.3	149.7	162.5
52.5°	244.9	211.7	182.9	156.6	133.6	122.0	115.1	113.6	115.1	121.5	131.7
55°	208.8	180.5	152.2	125.9	105.9	94.2	88.8	87.3	88.8	94.6	105.4
57.5°	173.1	148.7	123.9	100.0	82.9	72.7	67.8	65.8	69.3	73.1	85.8
60°	140.0	120.5	99.6	78.5	64.4	55.1	51.2	50.7	51.8	56.6	65.4
62.5°	109.8	93.7	77.1	60.0	48.3	44.4	39.5	39.0	40.1	43.0	49.7
65°	79.0	68.7	56.1	43.9	34.6	29.2	27.3	27.8	28.8	30.7	37.1
67.5°	55.1	47.8	39.0	30.7	24.0	21.5	19.5	19.0	19.5	23.0	26.3
70°	37.1	32.6	26.3	23.4	16.5	13.2	13.6	12.2	14.2	14.2	17.1
72.5°	24.4	21.5	17.6	13.6	11.7	9.2	9.2	8.8	9.8	10.2	12.7
75°	12.7	9.8	9.8	6.9	4.8	2.5	4.4	3.9	3.4	3.9	4.8
77.5°	8.8	7.3	6.9	5.4	4.8	3.9	3.9	3.9	3.9	4.4	4.8
80°	5.4	5.4	3.9	3.4	2.9	2.5	2.9	2.9	2.9	2.9	3.4
82.5°	3.4	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	3.4	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°	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8
2.5°	910.2	910.7	910.7	910.2	910.2	909.2	911.2	909.8	910.2	912.2	910.7
5°	911.2	911.7	911.7	911.2	911.2	911.2	911.7	911.7	911.2	910.7	911.7
7.5°	913.2	912.7	912.7	911.7	911.7	910.7	911.7	910.2	911.2	910.2	911.7
10°	910.7	911.2	910.7	910.2	910.2	909.8	909.8	908.3	908.8	907.3	908.3
12.5°	909.2	908.8	908.8	907.8	906.9	905.8	905.4	903.8	903.8	900.4	901.9
15°	905.4	905.8	904.4	902.5	901.5	899.0	898.0	896.1	894.2	891.7	892.1
17.5°	901.9	900.4	898.5	896.5	892.7	890.7	888.8	885.8	884.8	881.9	881.0
20°	891.7	890.7	888.3	884.8	882.4	878.1	876.0	873.1	870.8	867.8	866.4
22.5°	878.5	877.5	874.6	871.2	867.3	865.4	863.4	858.0	855.6	852.6	852.2
25°	862.0	860.5	857.6	853.6	851.7	846.3	844.3	840.5	839.5	836.6	836.1
27.5°	836.6	834.6	831.2	826.3	822.9	819.4	817.5	814.6	813.6	810.7	810.2
30°	798.5	796.1	789.3	787.3	781.4	778.1	778.1	774.1	774.6	772.6	772.6
32.5°	738.6	734.6	729.2	725.4	721.5	719.6	719.6	718.0	719.0	719.0	720.0
35°	659.0	653.6	650.7	648.2	648.2	650.2	656.1	657.6	660.5	663.0	664.9
37.5°	557.1	556.5	560.0	562.9	570.3	578.5	588.7	597.6	605.8	611.7	617.5
40°	446.8	459.0	468.8	482.4	493.6	509.7	528.3	543.4	557.6	567.8	578.5
42.5°	348.8	364.4	384.9	404.9	424.9	446.8	471.3	492.2	510.8	524.8	536.1
45°	271.7	293.2	318.0	343.5	369.2	396.6	422.0	443.4	462.9	477.6	488.8
47.5°	219.0	242.4	270.7	298.6	327.8	356.6	384.9	403.4	419.5	431.2	441.4
50°	181.0	205.9	235.6	267.3	296.6	325.3	349.8	367.8	380.9	391.2	397.6
52.5°	151.2	177.5	209.2	241.0	270.2	296.6	318.5	332.2	342.9	350.2	356.1
55°	124.9	150.3	180.0	209.7	238.5	263.4	281.5	291.7	300.0	304.4	307.8
57.5°	101.9	125.3	152.7	180.0	204.9	225.3	239.5	249.8	253.7	257.1	256.6
60°	80.0	101.9	126.8	150.3	171.7	188.3	198.6	204.4	207.3	208.8	207.8
62.5°	62.9	82.9	101.9	122.4	138.0	152.2	162.0	162.0	163.5	163.9	165.4
65°	46.8	62.0	78.5	93.7	106.3	115.6	120.9	122.4	124.4	123.9	123.0
67.5°	34.6	45.9	58.0	69.3	78.1	83.9	87.8	91.2	90.8	89.8	89.2
70°	24.0	31.3	42.0	48.8	55.1	61.0	62.0	62.4	62.9	63.4	62.4
72.5°	16.5	21.9	27.8	33.6	37.6	40.1	42.4	43.0	43.0	43.0	42.4
75°	8.3	11.2	16.5	19.0	22.4	23.4	25.3	25.3	26.8	24.9	24.4
77.5°	7.3	8.8	11.7	13.6	15.1	16.5	17.1	18.6	18.0	17.1	17.6
80°	4.4	5.4	7.3	8.3	10.2	10.7	11.2	11.7	11.2	11.7	11.7
82.5°	3.4	3.9	4.8	4.8	6.3	6.3	6.9	6.9	7.3	7.3	7.3
85°	1.9	3.4	2.9	5.9	3.9	3.9	4.8	5.9	4.8	4.8	5.9
87.5°	1.9	1.9	1.5	1.9	1.9	1.9	2.5	2.9	2.9	3.4	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°	908.8	908.8	908.8	908.8
2.5°	910.2	911.2	909.8	909.2
5°	911.7	911.7	910.7	910.7
7.5°	911.7	911.7	910.2	909.2
10°	907.8	907.8	906.3	905.4
12.5°	900.4	900.4	900.0	898.5
15°	891.2	891.2	889.2	887.7
17.5°	878.5	879.5	877.0	877.0
20°	864.9	864.3	862.4	861.4
22.5°	850.7	849.7	849.3	846.3
25°	835.6	834.6	833.2	831.7
27.5°	809.8	809.2	807.8	805.8
30°	770.2	769.7	767.8	767.8
32.5°	719.0	718.5	716.6	717.1
35°	665.9	667.8	666.8	664.9
37.5°	621.4	622.9	623.9	622.9
40°	584.3	588.7	589.3	590.3
42.5°	544.8	550.7	552.7	553.6
45°	497.6	502.9	507.3	506.4
47.5°	449.2	453.2	457.1	454.2
50°	403.0	405.3	406.8	406.8
52.5°	359.0	359.0	358.5	359.0
55°	308.8	308.8	306.8	307.8
57.5°	256.0	257.1	255.6	253.1
60°	207.3	204.9	203.8	202.4
62.5°	161.4	161.4	158.1	162.5
65°	120.9	119.5	118.0	117.6
67.5°	87.8	87.3	85.8	85.4
70°	62.0	60.0	59.5	58.5
72.5°	41.5	41.5	40.5	40.5
75°	25.3	23.0	22.4	23.0
77.5°	17.6	17.1	17.1	16.5
80°	11.7	11.2	12.2	10.7
82.5°	7.3	7.8	7.3	7.8
85°	4.8	5.9	5.4	5.4
87.5°	2.9	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)