

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: P249533

Luminaire Tested: **LSR8B70D010 EC8B70835 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249533  
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: LSR8B70D010 EC8B70835 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7547.0 lumens  
Efficiency: N/A  
Efficacy: 99.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

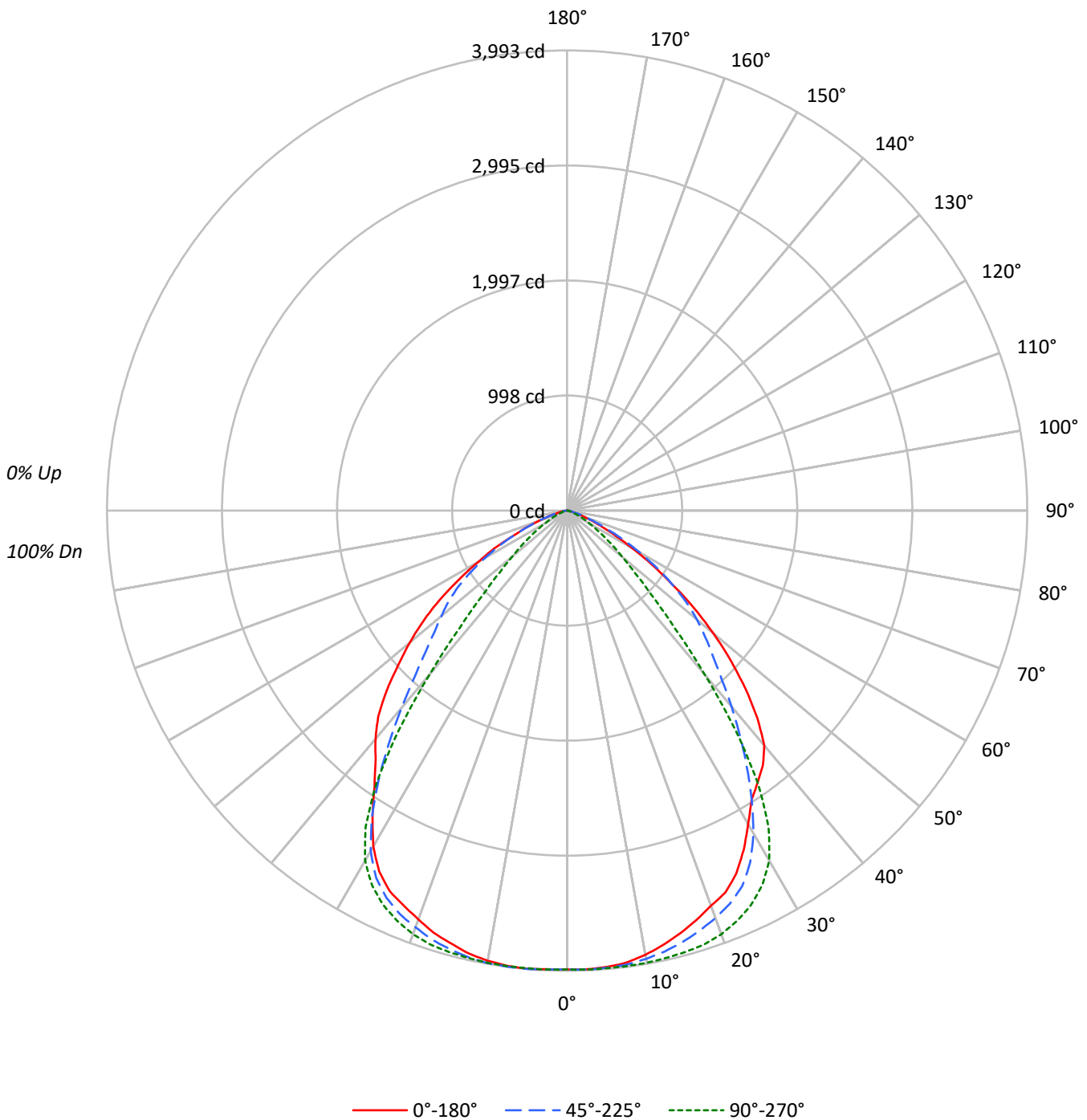
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	122787	122787	122787
5°	123058	123389	123522
10°	122540	124750	124215
15°	121184	126573	124188
20°	119727	128354	123865
25°	118173	128502	123994
30°	111798	124887	119788
35°	108460	108539	109669
40°	107116	74679	104109
45°	95447	44835	96751
50°	79366	29839	85516
55°	59525	20569	72508
60°	40334	13710	54704
65°	24334	8894	37584
70°	13488	4815	23126
75°	6112	2037	11974
80°	5310	2273	8346
85°	6050	3007	8314



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	380.0	5.0
10°-20°	1103.6	14.6
20°-30°	1675.1	22.2
30°-40°	1759.4	23.3
40°-50°	1319.1	17.5
50°-60°	846.3	11.2
60°-70°	362.0	4.8
70°-80°	85.5	1.1
80°-90°	15.9	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°	3158.8	41.9
0°-40°	4918.1	65.2
0°-60°	7083.5	93.9
0°-90°	7547.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7547.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3982	3982	3982	3982	3982	
5°	3976	3982	3986	3993	3990	378
15°	3796	3875	3965	3939	3890	1071
25°	3473	3595	3777	3708	3644	1587
35°	2881	2721	2883	2849	2913	1808
45°	2189	1789	1028	1738	2219	1676
55°	1107	1107	383	1154	1349	1004
65°	334	393	122	507	515	356
75°	51	60	17	103	100	75
85°	17	11	8	17	24	18
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°	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9
2.5°	3984.1	3988.4	3986.2	3986.2	3984.1	3986.2	3986.2	3990.5	3990.5	3986.2	3984.1
5°	3975.5	3979.8	3979.8	3975.5	3975.5	3986.2	3979.8	3984.1	3984.1	3981.9	3981.9
7.5°	3956.3	3956.3	3964.8	3958.5	3958.5	3964.8	3962.7	3967.0	3971.3	3973.4	3973.4
10°	3913.5	3917.8	3920.0	3920.0	3922.1	3928.5	3932.8	3941.4	3945.6	3949.9	3952.0
12.5°	3860.1	3866.5	3868.7	3866.5	3873.0	3881.5	3892.2	3902.9	3909.3	3917.8	3924.3
15°	3796.0	3796.0	3800.3	3806.7	3811.0	3823.8	3834.5	3847.3	3864.4	3875.1	3885.8
17.5°	3725.5	3729.8	3736.1	3736.1	3744.7	3766.1	3772.5	3791.7	3811.0	3821.7	3843.0
20°	3648.5	3652.8	3659.2	3663.5	3674.2	3691.3	3704.1	3721.2	3742.6	3761.8	3783.2
22.5°	3588.7	3580.1	3584.4	3588.7	3599.4	3614.3	3629.3	3650.6	3672.0	3691.3	3712.7
25°	3473.2	3475.4	3481.8	3486.1	3498.9	3511.7	3528.8	3554.5	3573.7	3595.1	3618.6
27.5°	3317.2	3319.4	3330.0	3330.0	3340.7	3362.1	3372.8	3394.2	3419.8	3441.2	3469.0
30°	3139.8	3144.1	3144.1	3152.7	3159.0	3169.8	3180.4	3201.8	3214.6	3233.9	3272.4
32.5°	2977.4	2981.6	2979.5	2977.4	2971.0	2968.8	2966.7	2971.0	2975.3	2981.6	2996.6
35°	2881.2	2870.5	2862.0	2847.0	2829.9	2808.5	2789.3	2763.7	2740.1	2720.9	2699.5
37.5°	2789.3	2787.1	2774.3	2752.9	2718.7	2680.3	2635.4	2579.8	2524.2	2464.4	2406.7
40°	2661.0	2654.6	2643.9	2614.0	2575.5	2528.5	2468.7	2400.3	2310.5	2218.6	2124.6
42.5°	2443.0	2445.2	2432.3	2408.8	2372.5	2327.6	2265.6	2190.8	2094.7	1985.6	1863.8
45°	2188.7	2188.7	2184.4	2165.2	2139.5	2103.2	2056.2	1994.2	1900.2	1789.0	1658.6
47.5°	1923.6	1925.8	1919.4	1915.1	1904.4	1880.9	1846.7	1799.7	1733.4	1626.5	1496.2
50°	1654.4	1654.4	1665.0	1662.9	1662.9	1654.4	1639.4	1611.6	1553.9	1468.4	1346.6
52.5°	1385.0	1389.3	1395.7	1404.3	1414.9	1432.0	1414.9	1402.1	1365.8	1299.5	1194.8
55°	1107.2	1111.4	1122.1	1137.1	1149.9	1167.0	1171.3	1171.3	1152.0	1107.2	1028.1
57.5°	869.9	863.5	872.1	884.9	902.0	919.1	931.9	946.9	944.7	914.8	850.7
60°	654.0	656.2	662.6	675.4	688.2	703.2	720.3	733.1	739.6	724.6	684.0
62.5°	476.6	476.6	485.2	498.0	504.4	525.8	536.5	542.9	549.3	547.1	521.5
65°	333.5	337.7	342.0	348.4	354.8	367.6	374.0	386.9	391.1	393.3	374.0
67.5°	235.1	228.7	233.0	237.2	243.7	252.2	265.0	265.0	271.4	271.4	258.6
70°	149.6	149.6	151.8	158.2	162.4	164.6	168.9	173.1	179.5	177.4	177.4
72.5°	100.5	98.3	100.5	102.6	104.8	111.1	111.1	113.3	117.6	119.7	111.1
75°	51.3	53.4	57.7	55.6	62.0	57.7	59.8	66.3	64.1	59.8	59.8
77.5°	42.7	42.7	42.7	40.6	44.9	44.9	42.7	47.0	44.9	44.9	42.7
80°	29.9	32.1	29.9	27.8	29.9	27.8	27.8	27.8	27.8	27.8	25.6
82.5°	23.5	19.2	21.4	19.2	21.4	21.4	19.2	17.1	17.1	19.2	17.1
85°	17.1	12.8	15.0	15.0	12.8	12.8	12.8	12.8	12.8	10.7	10.7
87.5°	10.7	6.4	6.4	6.4	8.5	8.5	8.5	6.4	8.5	8.5	4.3
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°	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9
2.5°	3988.4	3986.2	3990.5	3988.4	3988.4	3986.2	3988.4	3986.2	3990.5	3981.9	3984.1
5°	3988.4	3984.1	3986.2	3988.4	3990.5	3986.2	3986.2	3986.2	3990.5	3986.2	3988.4
7.5°	3979.8	3977.7	3984.1	3988.4	3986.2	3984.1	3988.4	3986.2	3990.5	3988.4	3992.6
10°	3962.7	3964.8	3969.1	3975.5	3977.7	3979.8	3984.1	3984.1	3990.5	3981.9	3986.2
12.5°	3937.1	3945.6	3956.3	3960.6	3969.1	3969.1	3973.4	3975.5	3979.8	3977.7	3984.1
15°	3905.0	3915.7	3928.5	3939.2	3949.9	3956.3	3962.7	3964.8	3971.3	3964.8	3967.0
17.5°	3866.5	3879.3	3898.6	3911.4	3928.5	3934.9	3943.5	3947.7	3954.2	3949.9	3952.0
20°	3813.1	3828.1	3849.4	3868.7	3879.3	3894.3	3905.0	3911.4	3915.7	3911.4	3913.5
22.5°	3738.3	3759.7	3787.4	3802.4	3823.8	3836.6	3838.8	3853.7	3864.4	3853.7	3858.0
25°	3650.6	3672.0	3693.4	3725.5	3744.7	3759.7	3774.6	3776.8	3787.4	3785.3	3783.2
27.5°	3505.3	3533.1	3569.4	3595.1	3620.7	3644.3	3661.4	3665.6	3676.3	3672.0	3674.2
30°	3306.5	3336.5	3370.7	3411.3	3447.6	3471.1	3492.5	3507.4	3518.1	3511.7	3509.6
32.5°	3024.4	3054.3	3090.7	3131.3	3174.0	3208.2	3233.9	3253.1	3265.9	3261.6	3251.0
35°	2701.7	2710.2	2733.7	2765.8	2802.1	2838.4	2862.0	2883.3	2898.3	2902.6	2902.6
37.5°	2370.4	2342.6	2325.5	2325.5	2346.8	2361.8	2383.2	2396.0	2419.5	2428.1	2434.5
40°	2049.7	1985.6	1925.8	1880.9	1851.0	1848.9	1848.9	1855.2	1876.6	1904.4	1930.1
42.5°	1763.3	1660.7	1568.8	1485.5	1425.7	1391.4	1376.5	1378.6	1395.7	1421.4	1464.1
45°	1534.6	1406.4	1291.0	1190.5	1109.3	1055.9	1030.2	1028.1	1040.9	1070.8	1117.9
47.5°	1357.2	1220.4	1090.1	974.6	887.0	829.3	799.4	790.9	799.4	827.2	882.7
50°	1209.8	1068.7	934.0	814.3	720.3	660.5	632.7	622.0	632.7	656.2	711.7
52.5°	1073.0	927.6	801.5	686.1	585.6	534.3	504.4	498.0	504.4	532.2	577.1
55°	914.8	790.9	666.9	551.4	463.8	412.5	389.0	382.6	389.0	414.7	461.7
57.5°	758.8	651.9	542.9	438.2	363.4	318.4	297.1	288.5	303.5	320.6	376.2
60°	613.4	528.0	436.0	344.1	282.1	241.5	224.4	222.3	226.6	247.9	286.4
62.5°	480.9	410.4	337.7	262.9	211.6	194.5	173.1	171.0	175.3	188.1	218.0
65°	346.3	301.4	245.8	192.4	151.8	128.2	119.7	121.9	126.1	134.7	162.4
67.5°	241.5	209.5	171.0	134.7	104.8	94.0	85.5	83.4	85.5	100.5	115.4
70°	162.4	143.2	115.4	102.6	72.7	57.7	59.8	53.4	62.0	62.0	74.8
72.5°	106.8	94.0	76.9	59.8	51.3	40.6	40.6	38.5	42.7	44.9	55.6
75°	55.6	42.7	42.7	29.9	21.4	10.7	19.2	17.1	15.0	17.1	21.4
77.5°	38.5	32.1	29.9	23.5	21.4	17.1	17.1	17.1	17.1	19.2	21.4
80°	23.5	23.5	17.1	15.0	12.8	10.7	12.8	12.8	12.8	12.8	15.0
82.5°	15.0	12.8	12.8	10.7	10.7	8.5	8.5	8.5	8.5	8.5	12.8
85°	12.8	8.5	8.5	6.4	8.5	15.0	6.4	8.5	8.5	8.5	6.4
87.5°	4.3	6.4	6.4	6.4	4.3	2.1	4.3	6.4	6.4	10.7	8.5
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°	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9	3981.9
2.5°	3988.4	3990.5	3990.5	3988.4	3988.4	3984.1	3992.6	3986.2	3988.4	3996.9	3990.5
5°	3992.6	3994.8	3994.8	3992.6	3992.6	3992.6	3994.8	3994.8	3992.6	3990.5	3994.8
7.5°	4001.2	3999.0	3999.0	3994.8	3994.8	3990.5	3994.8	3988.4	3992.6	3988.4	3994.8
10°	3990.5	3992.6	3990.5	3988.4	3988.4	3986.2	3986.2	3979.8	3981.9	3975.5	3979.8
12.5°	3984.1	3981.9	3981.9	3977.7	3973.4	3969.1	3967.0	3960.6	3960.6	3945.6	3952.0
15°	3967.0	3969.1	3962.7	3954.2	3949.9	3939.2	3934.9	3926.4	3917.8	3907.2	3909.3
17.5°	3952.0	3945.6	3937.1	3928.5	3911.4	3902.9	3894.3	3881.5	3877.2	3864.4	3860.1
20°	3907.2	3902.9	3892.2	3877.2	3866.5	3847.3	3838.8	3825.9	3815.2	3802.4	3796.0
22.5°	3849.4	3845.1	3832.3	3817.4	3800.3	3791.7	3783.2	3759.7	3749.0	3736.1	3734.0
25°	3776.8	3770.3	3757.5	3740.4	3731.9	3708.4	3699.8	3682.7	3678.5	3665.6	3663.5
27.5°	3665.6	3657.1	3642.1	3620.7	3605.8	3590.8	3582.3	3569.4	3565.2	3552.3	3550.2
30°	3498.9	3488.2	3458.3	3449.8	3424.1	3409.1	3409.1	3392.0	3394.2	3385.6	3385.6
32.5°	3236.0	3218.9	3195.4	3178.3	3161.2	3152.7	3152.7	3146.2	3150.5	3150.5	3154.8
35°	2887.6	2864.1	2851.3	2840.6	2840.6	2849.1	2874.8	2881.2	2894.0	2904.7	2913.3
37.5°	2440.9	2438.8	2453.7	2466.5	2498.6	2535.0	2579.8	2618.3	2654.6	2680.3	2705.9
40°	1957.8	2011.3	2054.0	2113.9	2163.0	2233.6	2314.8	2381.0	2443.0	2487.9	2535.0
42.5°	1528.2	1596.6	1686.4	1774.0	1861.7	1957.8	2064.7	2156.6	2237.8	2299.8	2349.0
45°	1190.5	1284.6	1393.6	1504.7	1618.0	1737.7	1848.9	1942.9	2028.4	2092.5	2141.7
47.5°	959.7	1062.3	1186.2	1308.1	1436.3	1562.4	1686.4	1767.6	1838.1	1889.4	1934.4
50°	792.9	902.0	1032.4	1171.3	1299.5	1425.7	1532.5	1611.6	1669.3	1714.2	1742.0
52.5°	662.6	778.0	916.9	1055.9	1184.1	1299.5	1395.7	1455.6	1502.6	1534.6	1560.3
55°	547.1	658.3	788.7	919.1	1045.2	1154.2	1233.2	1278.2	1314.5	1333.7	1348.7
57.5°	446.7	549.3	669.0	788.7	897.7	987.5	1049.5	1094.3	1111.4	1126.4	1124.3
60°	350.6	446.7	555.7	658.3	752.4	825.0	869.9	895.6	908.4	914.8	910.5
62.5°	275.7	363.4	446.7	536.5	604.9	666.9	709.6	709.6	716.0	718.2	724.6
65°	205.2	271.4	344.1	410.4	465.9	506.6	530.1	536.5	545.1	542.9	538.6
67.5°	151.8	200.9	254.3	303.5	342.0	367.6	384.7	399.7	397.6	393.3	391.1
70°	104.8	136.8	183.8	213.7	241.5	267.2	271.4	273.6	275.7	277.9	273.6
72.5°	72.7	96.2	121.9	147.5	164.6	175.3	186.0	188.1	188.1	188.1	186.0
75°	36.3	49.2	72.7	83.4	98.3	102.6	111.1	111.1	117.6	109.0	106.8
77.5°	32.1	38.5	51.3	59.8	66.3	72.7	74.8	81.2	79.1	74.8	76.9
80°	19.2	23.5	32.1	36.3	44.9	47.0	49.2	51.3	49.2	51.3	51.3
82.5°	15.0	17.1	21.4	21.4	27.8	27.8	29.9	29.9	32.1	32.1	32.1
85°	8.5	15.0	12.8	25.6	17.1	17.1	21.4	25.6	21.4	21.4	25.6
87.5°	8.5	8.5	6.4	8.5	8.5	8.5	10.7	12.8	12.8	15.0	12.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P249533

CATALOG NUMBER: LSR8B70D010 EC8B70835 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3981.9	3981.9	3981.9	3981.9
2.5°	3988.4	3992.6	3986.2	3984.1
5°	3994.8	3994.8	3990.5	3990.5
7.5°	3994.8	3994.8	3988.4	3984.1
10°	3977.7	3977.7	3971.3	3967.0
12.5°	3945.6	3945.6	3943.5	3937.1
15°	3905.0	3905.0	3896.4	3890.1
17.5°	3849.4	3853.7	3843.0	3843.0
20°	3789.6	3787.4	3778.9	3774.6
22.5°	3727.6	3723.3	3721.2	3708.4
25°	3661.4	3657.1	3650.6	3644.3
27.5°	3548.1	3545.9	3539.5	3531.0
30°	3374.9	3372.8	3364.2	3364.2
32.5°	3150.5	3148.4	3139.8	3142.0
35°	2917.5	2926.1	2921.8	2913.3
37.5°	2723.0	2729.5	2733.7	2729.5
40°	2560.6	2579.8	2582.0	2586.3
42.5°	2387.5	2413.1	2421.7	2425.9
45°	2180.1	2203.6	2222.9	2218.6
47.5°	1968.5	1985.6	2002.7	1989.9
50°	1765.5	1776.2	1782.6	1782.6
52.5°	1573.1	1573.1	1571.0	1573.1
55°	1353.0	1353.0	1344.4	1348.7
57.5°	1122.1	1126.4	1120.0	1109.3
60°	908.4	897.7	893.4	887.0
62.5°	707.5	707.5	692.5	711.7
65°	530.1	523.7	517.2	515.1
67.5°	384.7	382.6	376.2	374.0
70°	271.4	262.9	260.8	256.5
72.5°	181.7	181.7	177.4	177.4
75°	111.1	100.5	98.3	100.5
77.5°	76.9	74.8	74.8	72.7
80°	51.3	49.2	53.4	47.0
82.5°	32.1	34.2	32.1	34.2
85°	21.4	25.6	23.5	23.5
87.5°	12.8	12.8	12.8	12.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)