

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: P248516

Luminaire Tested: **LSR8B70D010 EC8B70950 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248516  
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: LSR8B70D010 EC8B70950 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7093.0 lumens  
Efficiency: N/A  
Efficacy: 93.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

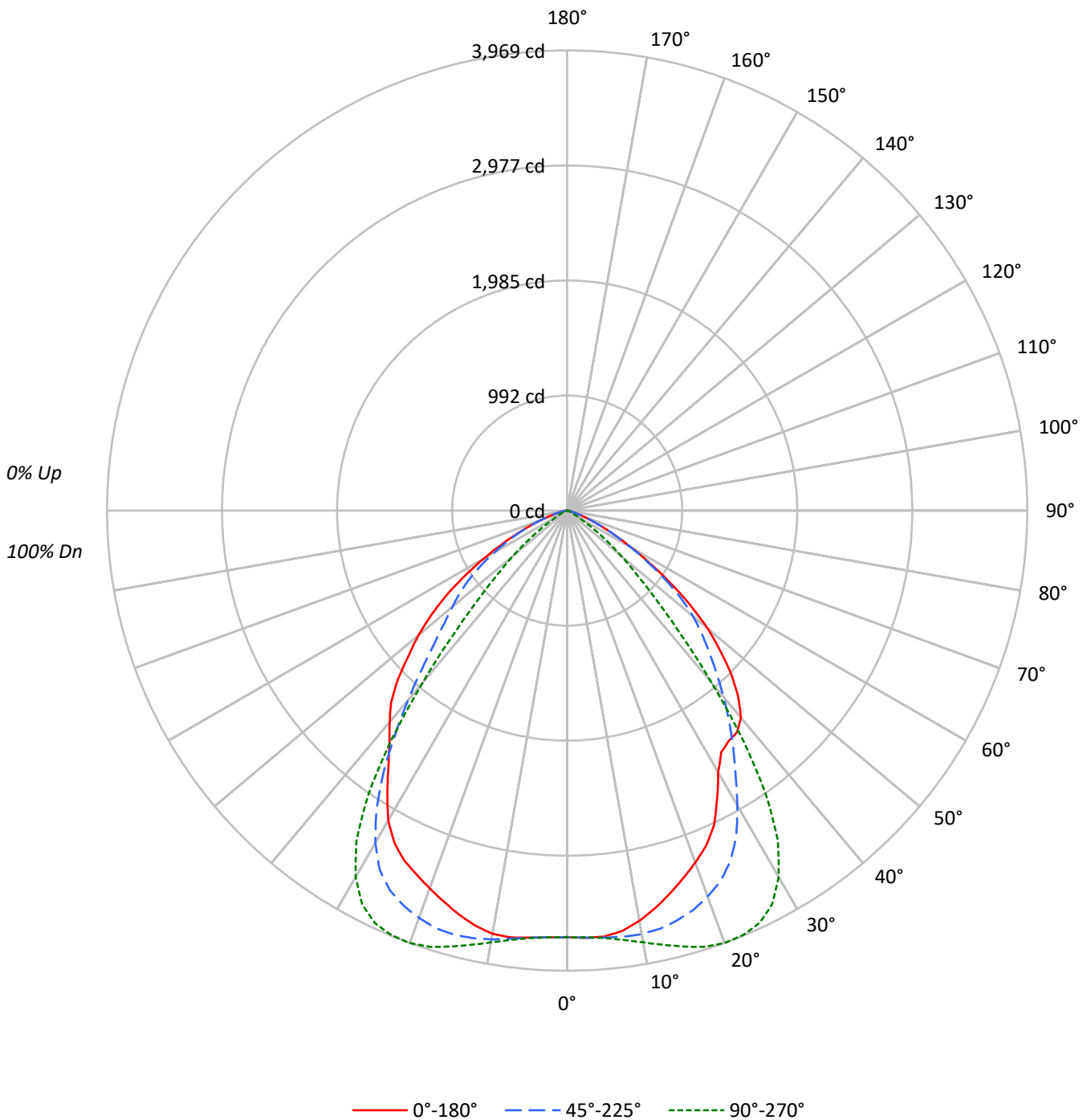
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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					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	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

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

	0°	90°	180°
0°	113465	113465	113465
5°	114140	114564	114444
10°	112463	118397	116074
15°	109177	124265	115160
20°	106007	130234	113761
25°	101936	133568	113236
30°	92770	129908	109879
35°	91389	112564	101093
40°	93872	78069	95837
45°	87388	47185	90114
50°	75797	29139	80297
55°	58170	15225	68148
60°	39631	6143	51435
65°	24655	3137	35483
70°	13380	1938	21656
75°	6982	929	12796
80°	3125	1048	6926
85°	2087	708	6227



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	353.9	5.0
10°-20°	1048.3	14.8
20°-30°	1599.2	22.5
30°-40°	1668.8	23.5
40°-50°	1253.5	17.7
50°-60°	771.3	10.9
60°-70°	313.9	4.4
70°-80°	73.9	1.0
80°-90°	10.2	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°	3001.4	42.3
0°-40°	4670.2	65.8
0°-60°	6695.0	94.4
0°-90°	7093.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7093.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3680	3680	3680	3680	3680	
5°	3687	3697	3701	3697	3697	349
15°	3420	3660	3892	3785	3607	963
25°	2996	3332	3926	3615	3328	1362
35°	2428	2496	2990	2764	2686	1533
45°	2004	1734	1082	1615	2066	1529
55°	1082	1027	283	1027	1268	973
65°	338	342	43	459	486	352
75°	59	59	8	104	107	71
85°	6	6	2	14	18	8
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°	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6
2.5°	3689.4	3683.5	3689.4	3689.4	3691.4	3687.4	3689.4	3691.4	3687.4	3687.4	3687.4
5°	3687.4	3683.5	3687.4	3685.5	3689.4	3689.4	3693.3	3693.3	3697.2	3697.2	3703.1
7.5°	3656.2	3648.4	3656.2	3662.1	3665.9	3673.8	3683.5	3691.4	3699.1	3707.0	3716.7
10°	3591.7	3591.7	3597.6	3609.3	3621.0	3634.7	3652.3	3671.8	3691.4	3708.9	3726.5
12.5°	3511.7	3505.8	3517.5	3533.1	3550.7	3572.2	3599.6	3628.8	3660.1	3695.2	3722.6
15°	3419.9	3414.0	3427.7	3443.3	3464.8	3496.0	3529.3	3568.3	3613.2	3660.1	3705.0
17.5°	3326.1	3324.1	3337.8	3359.3	3376.9	3410.1	3453.1	3499.9	3550.7	3613.2	3671.8
20°	3230.4	3228.5	3242.1	3259.7	3283.1	3314.4	3357.4	3412.0	3472.6	3542.9	3611.3
22.5°	3130.8	3132.8	3144.5	3164.0	3183.5	3216.7	3261.6	3316.4	3382.7	3458.9	3535.1
25°	2996.0	2986.3	3001.9	3021.4	3054.6	3082.0	3125.0	3183.5	3251.9	3332.0	3421.8
27.5°	2800.7	2798.8	2812.5	2830.0	2859.3	2892.5	2939.4	2999.9	3072.2	3160.1	3248.0
30°	2605.4	2609.3	2615.2	2632.8	2652.3	2685.5	2732.4	2783.2	2851.5	2935.5	3029.2
32.5°	2472.6	2472.6	2480.4	2492.1	2505.8	2523.4	2556.6	2593.7	2646.4	2705.0	2773.4
35°	2427.7	2419.9	2427.7	2429.6	2431.6	2435.5	2441.3	2453.1	2470.6	2496.1	2521.4
37.5°	2408.2	2402.3	2402.3	2394.5	2384.7	2373.0	2357.4	2339.8	2320.3	2294.9	2275.4
40°	2332.0	2328.1	2324.2	2316.4	2294.9	2271.5	2246.0	2205.0	2160.1	2097.6	2035.1
42.5°	2185.5	2181.6	2179.6	2164.0	2144.5	2117.1	2087.8	2044.9	1988.3	1908.2	1818.3
45°	2003.9	1996.0	1990.2	1976.5	1962.8	1939.4	1912.1	1873.0	1816.4	1734.4	1626.9
47.5°	1792.9	1789.0	1787.1	1781.2	1767.6	1753.9	1736.3	1705.1	1654.3	1576.1	1464.8
50°	1580.0	1572.3	1576.1	1574.2	1568.3	1558.6	1546.8	1525.4	1486.3	1416.0	1314.4
52.5°	1335.9	1335.9	1334.0	1339.8	1341.8	1339.8	1341.8	1318.4	1285.1	1232.4	1146.5
55°	1082.0	1082.0	1087.9	1095.7	1103.5	1105.5	1103.5	1093.7	1070.3	1027.3	951.1
57.5°	843.7	839.8	851.5	863.3	871.1	878.9	873.0	865.2	851.5	816.4	757.8
60°	642.6	642.6	650.4	658.2	666.0	673.8	671.9	669.9	658.2	634.7	587.9
62.5°	472.6	474.6	474.6	480.5	488.3	496.1	501.9	496.1	490.2	474.6	443.3
65°	337.9	335.9	337.9	343.7	349.6	357.4	361.3	359.4	353.5	341.8	318.4
67.5°	226.6	224.6	232.4	234.4	238.3	246.1	244.2	246.1	244.2	234.4	214.9
70°	148.4	144.5	148.4	146.5	152.4	154.3	158.2	160.1	158.2	152.4	146.5
72.5°	91.8	89.8	91.8	93.8	95.7	97.6	101.6	101.6	99.6	95.7	87.9
75°	58.6	52.7	54.7	50.8	54.7	54.7	58.6	60.5	58.6	58.6	54.7
77.5°	35.2	35.2	35.2	35.2	35.2	35.2	35.2	37.1	39.0	35.2	33.2
80°	17.6	17.6	19.5	19.5	19.5	21.5	19.5	19.5	19.5	21.5	15.6
82.5°	13.7	11.7	11.7	11.7	13.7	11.7	11.7	11.7	11.7	11.7	11.7
85°	5.9	7.8	5.9	3.9	5.9	5.9	7.8	5.9	5.9	5.9	7.8
87.5°	2.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	3.9	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°	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6
2.5°	3689.4	3685.5	3685.5	3683.5	3687.4	3683.5	3685.5	3683.5	3683.5	3683.5	3683.5
5°	3703.1	3705.0	3701.1	3699.1	3705.0	3705.0	3705.0	3701.1	3701.1	3703.1	3701.1
7.5°	3722.6	3726.5	3728.4	3730.4	3734.3	3736.3	3736.3	3734.3	3732.4	3738.2	3730.4
10°	3744.1	3749.9	3761.7	3767.5	3777.3	3777.3	3781.2	3781.2	3777.3	3781.2	3779.2
12.5°	3736.3	3771.4	3790.9	3804.6	3818.3	3830.0	3833.9	3835.9	3833.9	3841.7	3833.9
15°	3749.9	3779.2	3810.5	3833.9	3859.3	3873.0	3876.9	3892.5	3896.4	3898.4	3886.7
17.5°	3728.4	3781.2	3814.4	3849.5	3886.7	3912.0	3935.5	3945.3	3947.2	3951.1	3935.5
20°	3679.6	3738.2	3789.0	3839.8	3882.7	3921.8	3941.3	3968.7	3960.9	3976.5	3955.0
22.5°	3613.2	3679.6	3744.1	3810.5	3855.4	3902.3	3943.3	3962.8	3972.6	3972.6	3949.1
25°	3507.7	3585.9	3656.2	3724.5	3792.9	3849.5	3896.4	3925.7	3931.6	3929.6	3902.3
27.5°	3343.7	3427.7	3509.7	3587.8	3671.8	3738.2	3792.9	3828.0	3837.8	3837.8	3808.5
30°	3117.1	3207.0	3287.1	3380.8	3466.7	3541.0	3617.1	3648.4	3665.9	3665.9	3632.8
32.5°	2847.6	2923.8	2998.0	3089.8	3183.5	3267.5	3339.8	3382.7	3404.2	3402.3	3373.0
35°	2554.6	2591.7	2648.4	2716.7	2800.7	2878.8	2949.1	2990.2	3027.3	3025.3	2998.0
37.5°	2261.7	2251.9	2257.8	2283.2	2335.9	2390.6	2445.3	2484.3	2515.6	2529.3	2523.4
40°	1974.6	1923.8	1874.9	1857.4	1861.3	1880.8	1910.1	1939.4	1974.6	1992.2	2000.0
42.5°	1716.8	1630.8	1544.9	1480.5	1443.3	1431.6	1445.3	1455.0	1476.5	1501.9	1527.3
45°	1509.7	1394.5	1281.2	1181.6	1119.1	1082.0	1074.2	1082.0	1093.7	1119.1	1152.3
47.5°	1339.8	1205.0	1078.1	966.8	875.0	826.2	812.5	808.6	820.3	843.7	888.6
50°	1189.4	1054.7	914.1	785.1	689.4	634.7	615.2	607.4	621.1	638.7	679.7
52.5°	1025.4	892.6	748.0	623.0	523.4	466.8	445.3	433.6	441.4	464.8	505.8
55°	847.6	724.6	593.7	464.8	369.1	316.4	291.0	283.2	291.0	316.4	357.4
57.5°	669.9	566.4	457.0	335.9	250.0	197.3	171.8	164.1	185.6	195.3	238.3
60°	523.4	439.5	345.7	246.1	171.8	130.8	105.5	99.6	109.4	126.9	162.1
62.5°	392.6	339.8	265.6	175.8	126.9	84.0	70.3	64.5	70.3	84.0	111.3
65°	285.2	244.2	185.6	128.9	85.9	62.5	46.9	43.0	48.8	58.6	82.1
67.5°	195.3	164.1	128.9	89.8	58.6	39.0	33.2	33.2	35.2	43.0	60.5
70°	126.9	107.4	82.1	58.6	39.0	29.3	25.4	21.5	25.4	31.3	41.0
72.5°	80.1	68.3	52.7	41.0	29.3	21.5	17.6	15.6	19.5	23.4	31.3
75°	48.8	37.1	27.3	21.5	15.6	15.6	15.6	7.8	9.7	15.6	19.5
77.5°	29.3	25.4	21.5	17.6	13.7	7.8	7.8	7.8	9.7	11.7	17.6
80°	15.6	13.7	9.7	9.7	7.8	5.9	7.8	5.9	3.9	9.7	11.7
82.5°	9.7	7.8	7.8	7.8	9.7	3.9	5.9	3.9	5.9	7.8	5.9
85°	5.9	5.9	5.9	3.9	9.7	3.9	3.9	2.0	2.0	3.9	3.9
87.5°	0.0	2.0	2.0	0.0	2.0	0.0	2.0	2.0	2.0	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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6	3679.6
2.5°	3685.5	3683.5	3685.5	3683.5	3683.5	3683.5	3685.5	3685.5	3683.5	3683.5	3687.4
5°	3701.1	3701.1	3701.1	3699.1	3697.2	3697.2	3701.1	3701.1	3695.2	3701.1	3701.1
7.5°	3734.3	3728.4	3734.3	3726.5	3722.6	3724.5	3726.5	3722.6	3718.7	3720.6	3720.6
10°	3777.3	3771.4	3771.4	3765.6	3759.7	3755.8	3751.9	3742.1	3732.4	3730.4	3722.6
12.5°	3828.0	3818.3	3812.4	3800.7	3790.9	3777.3	3765.6	3749.9	3730.4	3716.7	3703.1
15°	3878.8	3863.2	3849.5	3830.0	3808.5	3785.1	3759.7	3734.3	3703.1	3675.7	3652.3
17.5°	3919.8	3898.4	3873.0	3841.7	3810.5	3775.3	3738.2	3701.1	3656.2	3621.0	3593.7
20°	3933.5	3902.3	3869.1	3828.0	3787.0	3738.2	3691.4	3642.5	3591.7	3554.6	3523.4
22.5°	3916.0	3878.8	3837.8	3794.9	3740.1	3687.4	3632.8	3576.1	3531.2	3480.4	3451.1
25°	3867.1	3822.2	3777.3	3726.5	3673.8	3615.2	3556.6	3498.0	3443.3	3415.9	3378.9
27.5°	3767.5	3718.7	3669.8	3617.1	3556.6	3498.0	3437.5	3380.8	3333.9	3296.8	3275.4
30°	3591.7	3535.1	3478.5	3421.8	3369.1	3308.5	3251.9	3205.0	3158.1	3128.8	3107.4
32.5°	3322.2	3271.4	3214.8	3160.1	3111.3	3060.5	3013.6	2972.6	2939.4	2919.9	2904.2
35°	2958.9	2908.1	2865.2	2826.1	2785.1	2763.6	2734.3	2710.9	2697.2	2689.4	2687.5
37.5°	2501.9	2472.6	2458.9	2451.1	2443.3	2437.5	2441.3	2451.1	2458.9	2472.6	2488.2
40°	2013.6	2039.0	2046.8	2074.2	2099.6	2132.8	2169.9	2212.9	2248.0	2292.9	2324.2
42.5°	1568.3	1615.2	1669.9	1728.5	1791.0	1851.5	1925.7	1994.1	2056.6	2113.2	2162.1
45°	1205.0	1277.3	1359.4	1443.3	1527.3	1615.2	1705.1	1789.0	1863.2	1923.8	1974.6
47.5°	939.4	1019.5	1125.0	1228.5	1330.1	1433.6	1533.2	1621.0	1683.6	1742.1	1787.1
50°	744.1	835.9	951.1	1070.3	1181.6	1291.0	1396.4	1478.5	1541.0	1587.9	1621.0
52.5°	576.1	685.5	802.7	927.7	1046.9	1166.0	1263.6	1339.8	1390.6	1431.6	1457.0
55°	429.7	537.1	662.1	791.0	912.1	1027.3	1119.1	1185.5	1230.5	1253.9	1267.6
57.5°	310.5	408.2	533.2	662.1	771.5	880.8	955.1	1015.6	1041.0	1054.7	1060.5
60°	226.6	316.4	427.7	539.1	642.6	730.5	794.9	835.9	855.5	863.3	861.3
62.5°	166.0	244.2	339.8	433.6	517.6	589.8	640.6	667.9	677.7	681.6	675.8
65°	126.9	187.5	269.5	341.8	406.3	459.0	496.1	513.7	519.5	517.6	513.7
67.5°	93.8	140.6	201.2	255.9	302.7	343.7	363.3	378.9	382.8	377.0	371.1
70°	66.4	103.5	146.5	183.6	218.7	242.2	263.7	265.6	265.6	263.7	259.8
72.5°	46.9	72.3	99.6	125.0	146.5	164.1	171.8	177.7	175.8	173.8	169.9
75°	31.3	44.9	72.3	78.1	97.6	103.5	111.3	111.3	113.3	107.4	107.4
77.5°	19.5	31.3	43.0	50.8	58.6	66.4	70.3	70.3	72.3	70.3	70.3
80°	11.7	19.5	23.4	35.2	35.2	41.0	43.0	44.9	41.0	46.9	41.0
82.5°	7.8	11.7	17.6	17.6	21.5	25.4	25.4	27.3	27.3	25.4	25.4
85°	5.9	7.8	9.7	11.7	11.7	13.7	11.7	11.7	13.7	15.6	13.7
87.5°	2.0	3.9	2.0	3.9	3.9	7.8	5.9	5.9	5.9	7.8	7.8
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: P248516

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3679.6	3679.6	3679.6	3679.6
2.5°	3683.5	3685.5	3683.5	3683.5
5°	3701.1	3699.1	3701.1	3697.2
7.5°	3714.8	3714.8	3712.8	3712.8
10°	3714.8	3707.0	3707.0	3707.0
12.5°	3685.5	3675.7	3669.8	3665.9
15°	3634.7	3617.1	3609.3	3607.3
17.5°	3568.3	3552.7	3542.9	3537.0
20°	3492.1	3476.5	3464.8	3466.7
22.5°	3425.7	3408.2	3400.3	3396.4
25°	3359.3	3337.8	3332.0	3328.1
27.5°	3251.9	3240.2	3234.3	3228.5
30°	3087.8	3082.0	3072.2	3085.9
32.5°	2898.4	2888.6	2880.8	2886.7
35°	2689.4	2683.5	2689.4	2685.5
37.5°	2498.0	2503.8	2511.7	2515.6
40°	2347.6	2369.1	2376.9	2380.8
42.5°	2197.2	2222.6	2238.2	2248.0
45°	2011.7	2037.0	2054.6	2066.4
47.5°	1820.3	1841.8	1859.3	1857.4
50°	1646.5	1658.2	1666.0	1673.8
52.5°	1470.7	1470.7	1472.6	1472.6
55°	1271.5	1267.6	1265.6	1267.6
57.5°	1052.7	1048.8	1046.9	1041.0
60°	853.5	841.8	834.0	834.0
62.5°	667.9	654.3	648.4	646.5
65°	501.9	500.0	488.3	486.3
67.5°	363.3	355.5	347.7	349.6
70°	255.9	244.2	244.2	240.2
72.5°	166.0	160.1	158.2	158.2
75°	103.5	103.5	99.6	107.4
77.5°	68.3	68.3	66.4	68.3
80°	41.0	41.0	41.0	39.0
82.5°	25.4	27.3	25.4	25.4
85°	13.7	15.6	11.7	17.6
87.5°	7.8	9.7	7.8	9.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)