

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: P249263

Luminaire Tested: **LSR8B70D010 EC8B70940 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249263
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 EC8B70940 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6763.0 lumens
Efficiency: N/A
Efficacy: 89.1 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

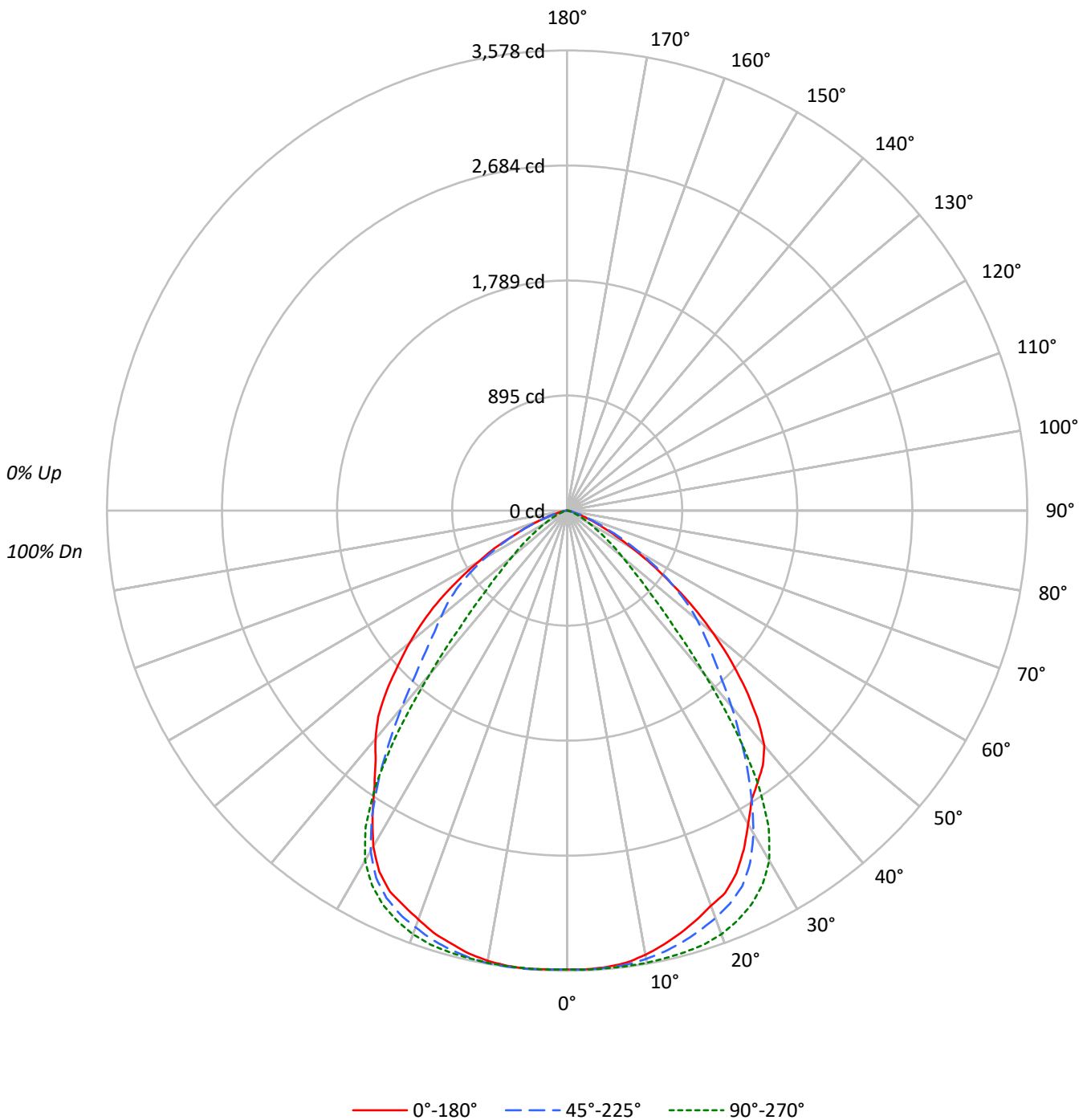
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	110033	110033	110033
5°	110274	110571	110692
10°	109811	111790	111311
15°	108593	113426	111284
20°	107290	115021	110998
25°	105897	115151	111113
30°	100187	111915	107347
35°	97194	97265	98274
40°	95990	66922	93293
45°	85531	40177	86699
50°	71120	26740	76632
55°	53337	18435	64976
60°	36146	12285	49024
65°	21802	7968	33681
70°	12090	4319	20719
75°	5481	1823	10723
80°	4759	2042	7476
85°	5413	2689	7465



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	340.5	5.0
10°-20°	989.0	14.6
20°-30°	1501.1	22.2
30°-40°	1576.6	23.3
40°-50°	1182.0	17.5
50°-60°	758.4	11.2
60°-70°	324.4	4.8
70°-80°	76.6	1.1
80°-90°	14.3	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°	2830.6	41.9
0°-40°	4407.2	65.2
0°-60°	6347.7	93.9
0°-90°	6763.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6763.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3568	3568	3568	3568	3568	
5°	3562	3568	3572	3578	3576	338
15°	3402	3472	3553	3530	3486	959
25°	3112	3222	3384	3323	3266	1422
35°	2582	2438	2584	2553	2611	1620
45°	1961	1603	921	1557	1988	1502
55°	992	992	343	1034	1209	900
65°	299	352	109	454	462	319
75°	46	54	15	92	90	67
85°	15	10	8	15	21	16
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°	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3
2.5°	3570.2	3574.1	3572.1	3572.1	3570.2	3572.1	3572.1	3576.0	3576.0	3572.1	3570.2
5°	3562.5	3566.4	3566.4	3562.5	3562.5	3572.1	3566.4	3570.2	3570.2	3568.3	3568.3
7.5°	3545.3	3545.3	3553.0	3547.2	3547.2	3553.0	3551.0	3554.9	3558.7	3560.7	3560.7
10°	3507.0	3510.8	3512.8	3512.8	3514.7	3520.4	3524.2	3531.9	3535.7	3539.6	3541.5
12.5°	3459.1	3464.9	3466.8	3464.9	3470.6	3478.3	3487.9	3497.4	3503.2	3510.8	3516.6
15°	3401.6	3401.6	3405.5	3411.2	3415.1	3426.6	3436.1	3447.6	3462.9	3472.5	3482.1
17.5°	3338.5	3342.3	3348.0	3348.0	3355.7	3374.8	3380.6	3397.8	3415.1	3424.6	3443.8
20°	3269.5	3273.3	3279.1	3282.9	3292.5	3307.8	3319.3	3334.6	3353.8	3371.0	3390.2
22.5°	3215.9	3208.2	3212.0	3215.9	3225.5	3238.9	3252.3	3271.4	3290.6	3307.8	3327.0
25°	3112.4	3114.4	3120.1	3123.9	3135.4	3146.9	3162.2	3185.2	3202.5	3221.6	3242.7
27.5°	2972.6	2974.6	2984.1	2984.1	2993.7	3012.8	3022.4	3041.6	3064.6	3083.7	3108.6
30°	2813.7	2817.5	2817.5	2825.1	2830.9	2840.5	2850.0	2869.2	2880.7	2897.9	2932.4
32.5°	2668.1	2671.9	2670.0	2668.1	2662.3	2660.4	2658.5	2662.3	2666.2	2671.9	2685.3
35°	2581.9	2572.3	2564.7	2551.3	2535.9	2516.8	2499.5	2476.6	2455.5	2438.2	2419.1
37.5°	2499.5	2497.6	2486.1	2467.0	2436.3	2401.9	2361.6	2311.8	2262.0	2208.4	2156.7
40°	2384.6	2378.8	2369.3	2342.5	2308.0	2265.9	2212.2	2150.9	2070.5	1988.1	1903.9
42.5°	2189.2	2191.1	2179.7	2158.6	2126.1	2085.8	2030.3	1963.2	1877.1	1779.3	1670.2
45°	1961.3	1961.3	1957.5	1940.2	1917.3	1884.7	1842.6	1787.0	1702.8	1603.1	1486.3
47.5°	1723.8	1725.7	1720.0	1716.2	1706.6	1685.5	1654.9	1612.7	1553.4	1457.6	1340.7
50°	1482.5	1482.5	1492.1	1490.1	1490.1	1482.5	1469.1	1444.2	1392.5	1315.8	1206.7
52.5°	1241.1	1245.0	1250.7	1258.4	1267.9	1283.3	1267.9	1256.5	1223.9	1164.5	1070.7
55°	992.1	996.0	1005.5	1019.0	1030.5	1045.8	1049.6	1049.6	1032.4	992.1	921.3
57.5°	779.6	773.8	781.5	793.0	808.3	823.6	835.1	848.5	846.6	819.8	762.3
60°	586.1	588.0	593.7	605.3	616.7	630.2	645.5	657.0	662.7	649.3	612.9
62.5°	427.1	427.1	434.8	446.3	452.0	471.2	480.7	486.5	492.2	490.3	467.3
65°	298.8	302.6	306.5	312.2	317.9	329.4	335.2	346.7	350.5	352.4	335.2
67.5°	210.7	204.9	208.8	212.6	218.3	226.0	237.5	237.5	243.2	243.2	231.8
70°	134.1	134.1	136.0	141.7	145.6	147.5	151.3	155.1	160.9	159.0	159.0
72.5°	90.0	88.1	90.0	91.9	93.9	99.6	99.6	101.5	105.4	107.3	99.6
75°	46.0	47.9	51.7	49.8	55.5	51.7	53.6	59.4	57.5	53.6	53.6
77.5°	38.3	38.3	38.3	36.4	40.2	40.2	38.3	42.1	40.2	40.2	38.3
80°	26.8	28.7	26.8	24.9	26.8	24.9	24.9	24.9	24.9	24.9	23.0
82.5°	21.1	17.2	19.2	17.2	19.2	19.2	17.2	15.3	15.3	17.2	15.3
85°	15.3	11.5	13.4	13.4	11.5	11.5	11.5	11.5	11.5	9.6	9.6
87.5°	9.6	5.8	5.8	5.8	7.6	7.6	7.6	5.8	7.6	7.6	3.8
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°	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3
2.5°	3574.1	3572.1	3576.0	3574.1	3574.1	3572.1	3574.1	3572.1	3576.0	3568.3	3570.2
5°	3574.1	3570.2	3572.1	3574.1	3576.0	3572.1	3572.1	3572.1	3576.0	3572.1	3574.1
7.5°	3566.4	3564.4	3570.2	3574.1	3572.1	3570.2	3574.1	3572.1	3576.0	3574.1	3577.9
10°	3551.0	3553.0	3556.8	3562.5	3564.4	3566.4	3570.2	3570.2	3576.0	3568.3	3572.1
12.5°	3528.1	3535.7	3545.3	3549.1	3556.8	3556.8	3560.7	3562.5	3566.4	3564.4	3570.2
15°	3499.4	3508.9	3520.4	3530.0	3539.6	3545.3	3551.0	3553.0	3558.7	3553.0	3554.9
17.5°	3464.9	3476.3	3493.6	3505.1	3520.4	3526.2	3533.8	3537.6	3543.4	3539.6	3541.5
20°	3417.0	3430.4	3449.5	3466.8	3476.3	3489.7	3499.4	3505.1	3508.9	3505.1	3507.0
22.5°	3349.9	3369.1	3394.0	3407.4	3426.6	3438.1	3440.0	3453.4	3462.9	3453.4	3457.2
25°	3271.4	3290.6	3309.7	3338.5	3355.7	3369.1	3382.5	3384.4	3394.0	3392.1	3390.2
27.5°	3141.2	3166.1	3198.6	3221.6	3244.6	3265.7	3281.0	3284.8	3294.4	3290.6	3292.5
30°	2963.0	2989.9	3020.5	3056.9	3089.5	3110.5	3129.7	3143.1	3152.6	3146.9	3145.0
32.5°	2710.2	2737.0	2769.6	2806.0	2844.3	2874.9	2897.9	2915.2	2926.7	2922.8	2913.3
35°	2421.0	2428.7	2449.8	2478.5	2511.0	2543.6	2564.7	2583.8	2597.2	2601.0	2601.0
37.5°	2124.1	2099.2	2083.9	2083.9	2103.0	2116.4	2135.6	2147.1	2168.2	2175.8	2181.6
40°	1836.8	1779.3	1725.7	1685.5	1658.7	1656.8	1656.8	1662.5	1681.7	1706.6	1729.6
42.5°	1580.2	1488.2	1405.9	1331.2	1277.6	1246.9	1233.5	1235.4	1250.7	1273.7	1312.0
45°	1375.2	1260.3	1156.9	1066.8	994.1	946.2	923.2	921.3	932.8	959.6	1001.7
47.5°	1216.3	1093.7	976.8	873.4	794.9	743.1	716.3	708.7	716.3	741.2	791.0
50°	1084.1	957.7	837.0	729.7	645.5	591.9	566.9	557.4	566.9	588.0	637.8
52.5°	961.5	831.3	718.3	614.8	524.8	478.8	452.0	446.3	452.0	476.9	517.2
55°	819.8	708.7	597.6	494.2	415.6	369.7	348.6	342.9	348.6	371.6	413.7
57.5°	680.0	584.2	486.5	392.6	325.6	285.4	266.2	258.6	272.0	287.3	337.1
60°	549.7	473.1	390.7	308.4	252.8	216.4	201.1	199.2	203.0	222.2	256.6
62.5°	431.0	367.8	302.6	235.6	189.6	174.3	155.1	153.2	157.0	168.5	195.4
65°	310.3	270.1	220.3	172.4	136.0	114.9	107.3	109.2	113.0	120.7	145.6
67.5°	216.4	187.7	153.2	120.7	93.9	84.3	76.6	74.7	76.6	90.0	103.4
70°	145.6	128.3	103.4	91.9	65.1	51.7	53.6	47.9	55.5	55.5	67.0
72.5°	95.7	84.3	68.9	53.6	46.0	36.4	36.4	34.5	38.3	40.2	49.8
75°	49.8	38.3	38.3	26.8	19.2	9.6	17.2	15.3	13.4	15.3	19.2
77.5°	34.5	28.7	26.8	21.1	19.2	15.3	15.3	15.3	15.3	17.2	19.2
80°	21.1	21.1	15.3	13.4	11.5	9.6	11.5	11.5	11.5	11.5	13.4
82.5°	13.4	11.5	11.5	9.6	9.6	7.6	7.6	7.6	7.6	7.6	11.5
85°	11.5	7.6	7.6	5.8	7.6	13.4	5.8	7.6	7.6	7.6	5.8
87.5°	3.8	5.8	5.8	5.8	3.8	1.9	3.8	5.8	5.8	9.6	7.6
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°	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3	3568.3
2.5°	3574.1	3576.0	3576.0	3574.1	3574.1	3570.2	3577.9	3572.1	3574.1	3581.7	3576.0
5°	3577.9	3579.8	3579.8	3577.9	3577.9	3577.9	3579.8	3579.8	3577.9	3576.0	3579.8
7.5°	3585.5	3583.6	3583.6	3579.8	3579.8	3576.0	3579.8	3574.1	3577.9	3574.1	3579.8
10°	3576.0	3577.9	3576.0	3574.1	3574.1	3572.1	3572.1	3566.4	3568.3	3562.5	3566.4
12.5°	3570.2	3568.3	3568.3	3564.4	3560.7	3556.8	3554.9	3549.1	3549.1	3535.7	3541.5
15°	3554.9	3556.8	3551.0	3543.4	3539.6	3530.0	3526.2	3518.5	3510.8	3501.3	3503.2
17.5°	3541.5	3535.7	3528.1	3520.4	3505.1	3497.4	3489.7	3478.3	3474.4	3462.9	3459.1
20°	3501.3	3497.4	3487.9	3474.4	3464.9	3447.6	3440.0	3428.5	3418.9	3407.4	3401.6
22.5°	3449.5	3445.7	3434.2	3420.8	3405.5	3397.8	3390.2	3369.1	3359.5	3348.0	3346.1
25°	3384.4	3378.7	3367.2	3351.9	3344.2	3323.1	3315.5	3300.1	3296.3	3284.8	3282.9
27.5°	3284.8	3277.2	3263.8	3244.6	3231.2	3217.8	3210.1	3198.6	3194.8	3183.3	3181.4
30°	3135.4	3125.8	3099.0	3091.4	3068.4	3055.0	3055.0	3039.6	3041.6	3033.9	3033.9
32.5°	2899.8	2884.5	2863.4	2848.1	2832.8	2825.1	2825.1	2819.4	2823.2	2823.2	2827.1
35°	2587.6	2566.6	2555.1	2545.5	2545.5	2553.1	2576.1	2581.9	2593.4	2603.0	2610.6
37.5°	2187.3	2185.4	2198.8	2210.3	2239.0	2271.6	2311.8	2346.3	2378.8	2401.9	2424.8
40°	1754.5	1802.4	1840.6	1894.3	1938.3	2001.5	2074.3	2133.7	2189.2	2229.5	2271.6
42.5°	1369.5	1430.8	1511.2	1589.7	1668.3	1754.5	1850.2	1932.6	2005.4	2060.9	2105.0
45°	1066.8	1151.1	1248.8	1348.4	1449.9	1557.2	1656.8	1741.1	1817.7	1875.1	1919.2
47.5°	860.0	951.9	1063.0	1172.2	1287.1	1400.1	1511.2	1584.0	1647.2	1693.2	1733.4
50°	710.6	808.3	925.1	1049.6	1164.5	1277.6	1373.3	1444.2	1495.9	1536.1	1561.0
52.5°	593.7	697.2	821.7	946.2	1061.1	1164.5	1250.7	1304.4	1346.5	1375.2	1398.2
55°	490.3	589.9	706.8	823.6	936.6	1034.3	1105.1	1145.4	1177.9	1195.2	1208.6
57.5°	400.3	492.2	599.5	706.8	804.4	884.9	940.4	980.7	996.0	1009.4	1007.5
60°	314.1	400.3	498.0	589.9	674.2	739.3	779.6	802.5	814.0	819.8	815.9
62.5°	247.1	325.6	400.3	480.7	542.0	597.6	635.9	635.9	641.6	643.6	649.3
65°	183.9	243.2	308.4	367.8	417.5	453.9	475.0	480.7	488.4	486.5	482.7
67.5°	136.0	180.1	227.9	272.0	306.5	329.4	344.7	358.2	356.3	352.4	350.5
70°	93.9	122.6	164.7	191.5	216.4	239.4	243.2	245.2	247.1	249.0	245.2
72.5°	65.1	86.2	109.2	132.2	147.5	157.0	166.7	168.5	168.5	168.5	166.7
75°	32.6	44.1	65.1	74.7	88.1	91.9	99.6	99.6	105.4	97.7	95.7
77.5°	28.7	34.5	46.0	53.6	59.4	65.1	67.0	72.8	70.9	67.0	68.9
80°	17.2	21.1	28.7	32.6	40.2	42.1	44.1	46.0	44.1	46.0	46.0
82.5°	13.4	15.3	19.2	19.2	24.9	24.9	26.8	26.8	28.7	28.7	28.7
85°	7.6	13.4	11.5	23.0	15.3	15.3	19.2	23.0	19.2	19.2	23.0
87.5°	7.6	7.6	5.8	7.6	7.6	7.6	9.6	11.5	11.5	13.4	11.5
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: P249263

CATALOG NUMBER: LSR8B70D010 EC8B70940 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3568.3	3568.3	3568.3	3568.3
2.5°	3574.1	3577.9	3572.1	3570.2
5°	3579.8	3579.8	3576.0	3576.0
7.5°	3579.8	3579.8	3574.1	3570.2
10°	3564.4	3564.4	3558.7	3554.9
12.5°	3535.7	3535.7	3533.8	3528.1
15°	3499.4	3499.4	3491.7	3485.9
17.5°	3449.5	3453.4	3443.8	3443.8
20°	3395.9	3394.0	3386.4	3382.5
22.5°	3340.4	3336.5	3334.6	3323.1
25°	3281.0	3277.2	3271.4	3265.7
27.5°	3179.5	3177.6	3171.8	3164.2
30°	3024.3	3022.4	3014.8	3014.8
32.5°	2823.2	2821.3	2813.7	2815.6
35°	2614.4	2622.1	2618.3	2610.6
37.5°	2440.1	2445.9	2449.8	2445.9
40°	2294.6	2311.8	2313.7	2317.6
42.5°	2139.5	2162.4	2170.1	2173.9
45°	1953.6	1974.7	1992.0	1988.1
47.5°	1764.0	1779.3	1794.7	1783.2
50°	1582.1	1591.6	1597.4	1597.4
52.5°	1409.7	1409.7	1407.8	1409.7
55°	1212.4	1212.4	1204.8	1208.6
57.5°	1005.5	1009.4	1003.6	994.1
60°	814.0	804.4	800.6	794.9
62.5°	634.0	634.0	620.6	637.8
65°	475.0	469.3	463.5	461.6
67.5°	344.7	342.9	337.1	335.2
70°	243.2	235.6	233.7	229.8
72.5°	162.8	162.8	159.0	159.0
75°	99.6	90.0	88.1	90.0
77.5°	68.9	67.0	67.0	65.1
80°	46.0	44.1	47.9	42.1
82.5°	28.7	30.6	28.7	30.6
85°	19.2	23.0	21.1	21.1
87.5°	11.5	11.5	11.5	11.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)