

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: P248417

Luminaire Tested: **LSR8B70D010 EC8B70927 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248417
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 EC8B70927 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6196.5 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

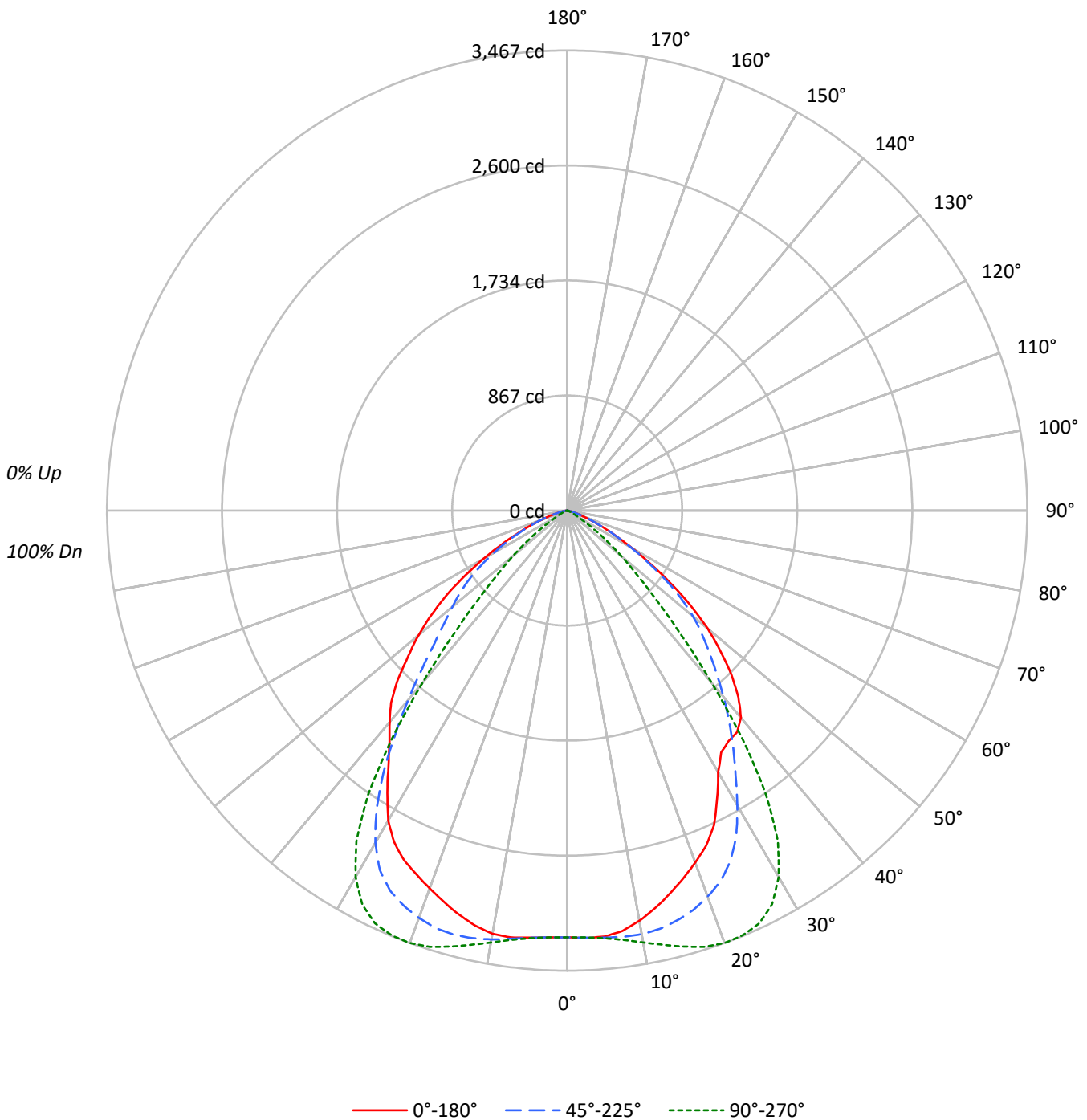
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	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°	309.1	5.0
10°-20°	915.8	14.8
20°-30°	1397.1	22.5
30°-40°	1457.9	23.5
40°-50°	1095.1	17.7
50°-60°	673.8	10.9
60°-70°	274.2	4.4
70°-80°	64.6	1.0
80°-90°	8.9	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°	2622.0	42.3
0°-40°	4079.9	65.8
0°-60°	5848.8	94.4
0°-90°	6196.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6196.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3215	3215	3215	3215	3215	
5°	3221	3230	3233	3230	3230	305
15°	2988	3198	3400	3307	3151	842
25°	2617	2911	3430	3158	2908	1190
35°	2121	2181	2612	2414	2346	1339
45°	1751	1515	945	1411	1805	1336
55°	945	898	247	898	1107	850
65°	295	299	38	401	425	308
75°	51	51	7	90	94	62
85°	5	5	2	12	15	7
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°	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6
2.5°	3223.1	3218.0	3223.1	3223.1	3224.8	3221.3	3223.1	3224.8	3221.3	3221.3	3221.3
5°	3221.3	3218.0	3221.3	3219.6	3223.1	3223.1	3226.5	3226.5	3229.9	3229.9	3235.0
7.5°	3194.1	3187.2	3194.1	3199.2	3202.5	3209.4	3218.0	3224.8	3231.6	3238.4	3247.0
10°	3137.7	3137.7	3142.9	3153.2	3163.4	3175.3	3190.6	3207.7	3224.8	3240.1	3255.5
12.5°	3067.9	3062.7	3072.9	3086.5	3102.0	3120.8	3144.6	3170.1	3197.5	3228.2	3252.2
15°	2987.7	2982.5	2994.4	3008.0	3026.8	3054.2	3083.2	3117.3	3156.5	3197.5	3236.7
17.5°	2905.8	2904.0	2915.9	2934.7	2950.1	2979.1	3016.7	3057.5	3102.0	3156.5	3207.7
20°	2822.2	2820.4	2832.4	2847.7	2868.2	2895.5	2933.0	2980.8	3033.7	3095.1	3154.8
22.5°	2735.1	2736.8	2747.0	2764.1	2781.2	2810.1	2849.4	2897.2	2955.2	3021.8	3088.2
25°	2617.3	2608.9	2622.5	2639.6	2668.5	2692.5	2730.0	2781.2	2840.8	2910.8	2989.4
27.5°	2446.8	2445.0	2457.0	2472.3	2498.0	2527.0	2567.9	2620.8	2683.9	2760.6	2837.5
30°	2276.1	2279.5	2284.6	2300.1	2317.0	2346.1	2387.0	2431.4	2491.1	2564.4	2646.3
32.5°	2160.1	2160.1	2167.0	2177.1	2189.1	2204.4	2233.5	2265.9	2312.0	2363.2	2422.8
35°	2120.8	2114.0	2120.8	2122.5	2124.2	2127.7	2132.8	2143.0	2158.3	2180.6	2202.8
37.5°	2103.8	2098.7	2098.7	2091.8	2083.3	2073.0	2059.4	2044.0	2027.0	2004.9	1987.8
40°	2037.3	2033.8	2030.4	2023.6	2004.9	1984.4	1962.1	1926.3	1887.1	1832.5	1778.0
42.5°	1909.2	1905.9	1904.2	1890.6	1873.5	1849.5	1824.0	1786.4	1737.0	1667.0	1588.5
45°	1750.6	1743.8	1738.7	1726.8	1714.7	1694.2	1670.4	1636.3	1586.8	1515.1	1421.3
47.5°	1566.3	1562.9	1561.2	1556.1	1544.2	1532.1	1516.8	1489.5	1445.2	1376.9	1279.7
50°	1380.4	1373.5	1376.9	1375.2	1370.1	1361.6	1351.4	1332.6	1298.5	1237.0	1148.3
52.5°	1167.1	1167.1	1165.4	1170.4	1172.1	1170.4	1172.1	1151.8	1122.8	1076.6	1001.6
55°	945.2	945.2	950.4	957.3	964.0	965.7	964.0	955.5	935.0	897.5	830.9
57.5°	737.1	733.7	744.0	754.2	760.9	767.8	762.6	755.9	744.0	713.1	662.1
60°	561.4	561.4	568.1	575.0	581.8	588.7	586.9	585.2	575.0	554.5	513.6
62.5°	412.9	414.6	414.6	419.7	426.6	433.4	438.5	433.4	428.3	414.6	387.3
65°	295.2	293.4	295.2	300.3	305.4	312.2	315.7	314.0	308.8	298.6	278.1
67.5°	197.9	196.2	203.1	204.8	208.1	215.0	213.3	215.0	213.3	204.8	187.6
70°	129.7	126.2	129.7	127.9	133.1	134.8	138.2	140.0	138.2	133.1	127.9
72.5°	80.2	78.5	80.2	81.9	83.6	85.3	88.8	88.8	87.0	83.6	76.7
75°	51.2	46.0	47.8	44.3	47.8	47.8	51.2	52.9	51.2	51.2	47.8
77.5°	30.7	30.7	30.7	30.7	30.7	30.7	30.7	32.4	34.1	30.7	29.0
80°	15.4	15.4	17.1	17.1	17.1	18.8	17.1	17.1	17.1	18.8	13.6
82.5°	11.9	10.2	10.2	10.2	11.9	10.2	10.2	10.2	10.2	10.2	10.2
85°	5.2	6.8	5.2	3.4	5.2	5.2	6.8	5.2	5.2	5.2	6.8
87.5°	1.7	1.7	0.0	0.0	0.0	1.7	0.0	1.7	1.7	3.4	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°	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6
2.5°	3223.1	3219.6	3219.6	3218.0	3221.3	3218.0	3219.6	3218.0	3218.0	3221.3	3218.0
5°	3235.0	3236.7	3233.4	3231.6	3236.7	3236.7	3236.7	3233.4	3233.4	3235.0	3233.4
7.5°	3252.2	3255.5	3257.2	3258.9	3262.3	3264.1	3264.1	3262.3	3260.6	3265.8	3258.9
10°	3270.8	3276.0	3286.2	3291.3	3299.8	3299.8	3303.3	3303.3	3299.8	3303.3	3301.5
12.5°	3264.1	3294.7	3311.8	3323.7	3335.6	3345.9	3349.4	3351.0	3349.4	3356.2	3349.4
15°	3276.0	3301.5	3328.9	3349.4	3371.5	3383.4	3386.8	3400.5	3403.9	3405.6	3395.5
17.5°	3257.2	3303.3	3332.2	3363.0	3395.5	3417.6	3438.0	3446.6	3448.4	3451.7	3438.0
20°	3214.6	3265.8	3310.1	3354.4	3392.0	3426.1	3443.2	3467.0	3460.3	3473.9	3455.1
22.5°	3156.5	3214.6	3270.8	3328.9	3368.1	3409.1	3444.9	3462.0	3470.5	3470.5	3450.0
25°	3064.4	3132.7	3194.1	3253.7	3313.5	3363.0	3403.9	3429.6	3434.6	3432.9	3409.1
27.5°	2921.1	2994.4	3066.1	3134.4	3207.7	3265.8	3313.5	3344.2	3352.7	3352.7	3327.2
30°	2723.2	2801.6	2871.6	2953.5	3028.6	3093.4	3160.0	3187.2	3202.5	3202.5	3173.6
32.5°	2487.7	2554.2	2619.1	2699.2	2781.2	2854.6	2917.7	2955.2	2973.9	2972.2	2946.7
35°	2231.8	2264.2	2313.7	2373.4	2446.8	2514.9	2576.4	2612.2	2644.6	2643.0	2619.1
37.5°	1975.8	1967.3	1972.5	1994.6	2040.6	2088.5	2136.2	2170.4	2197.6	2209.6	2204.4
40°	1725.0	1680.6	1638.0	1622.7	1626.1	1643.1	1668.7	1694.2	1725.0	1740.4	1747.2
42.5°	1499.7	1424.7	1349.7	1293.3	1260.9	1250.7	1262.6	1271.1	1289.9	1312.1	1334.2
45°	1319.0	1218.3	1119.3	1032.3	977.6	945.2	938.5	945.2	955.5	977.6	1006.6
47.5°	1170.4	1052.8	941.8	844.5	764.3	721.8	709.8	706.4	716.6	737.1	776.4
50°	1039.0	921.4	798.5	685.9	602.3	554.5	537.5	530.7	542.6	557.9	593.8
52.5°	895.7	779.7	653.5	544.3	457.3	407.8	389.0	378.8	385.5	406.1	441.9
55°	740.5	633.0	518.7	406.1	322.4	276.4	254.2	247.4	254.2	276.4	312.2
57.5°	585.2	494.8	399.3	293.4	218.4	172.4	150.1	143.3	162.1	170.7	208.1
60°	457.3	384.0	302.1	215.0	150.1	114.3	92.1	87.0	95.5	110.9	141.6
62.5°	343.0	296.9	232.1	153.6	110.9	73.4	61.4	56.4	61.4	73.4	97.3
65°	249.1	213.3	162.1	112.6	75.0	54.6	40.9	37.6	42.6	51.2	71.7
67.5°	170.7	143.3	112.6	78.5	51.2	34.1	29.0	29.0	30.7	37.6	52.9
70°	110.9	93.8	71.7	51.2	34.1	25.5	22.2	18.8	22.2	27.3	35.8
72.5°	70.0	59.7	46.0	35.8	25.5	18.8	15.4	13.6	17.1	20.5	27.3
75°	42.6	32.4	23.8	18.8	13.6	13.6	13.6	6.8	8.5	13.6	17.1
77.5°	25.5	22.2	18.8	15.4	11.9	6.8	6.8	6.8	8.5	10.2	15.4
80°	13.6	11.9	8.5	8.5	6.8	5.2	6.8	5.2	3.4	8.5	10.2
82.5°	8.5	6.8	6.8	6.8	8.5	3.4	5.2	3.4	5.2	6.8	5.2
85°	5.2	5.2	5.2	3.4	8.5	3.4	3.4	1.7	1.7	3.4	3.4
87.5°	0.0	1.7	1.7	0.0	1.7	0.0	1.7	1.7	1.7	1.7	1.7
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°	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6	3214.6
2.5°	3219.6	3218.0	3219.6	3218.0	3218.0	3218.0	3219.6	3219.6	3218.0	3218.0	3221.3
5°	3233.4	3233.4	3233.4	3231.6	3229.9	3229.9	3233.4	3233.4	3228.2	3233.4	3233.4
7.5°	3262.3	3257.2	3262.3	3255.5	3252.2	3253.7	3255.5	3252.2	3248.7	3250.4	3250.4
10°	3299.8	3294.7	3294.7	3289.6	3284.6	3281.1	3277.7	3269.1	3260.6	3258.9	3252.2
12.5°	3344.2	3335.6	3330.6	3320.3	3311.8	3299.8	3289.6	3276.0	3258.9	3247.0	3235.0
15°	3388.6	3374.9	3363.0	3345.9	3327.2	3306.7	3284.6	3262.3	3235.0	3211.1	3190.6
17.5°	3424.4	3405.6	3383.4	3356.2	3328.9	3298.2	3265.8	3233.4	3194.1	3163.4	3139.4
20°	3436.3	3409.1	3380.1	3344.2	3308.4	3265.8	3224.8	3182.2	3137.7	3105.3	3078.0
22.5°	3421.0	3388.6	3352.7	3315.3	3267.5	3221.3	3173.6	3124.1	3084.9	3040.5	3014.9
25°	3378.4	3339.1	3299.8	3255.5	3209.4	3158.2	3107.0	3055.8	3008.0	2984.2	2951.8
27.5°	3291.3	3248.7	3206.0	3160.0	3107.0	3055.8	3003.0	2953.5	2912.5	2880.1	2861.3
30°	3137.7	3088.2	3038.8	2989.4	2943.2	2890.4	2840.8	2799.9	2759.0	2733.4	2714.6
32.5°	2902.3	2858.0	2808.5	2760.6	2718.0	2673.7	2632.7	2597.0	2567.9	2550.8	2537.1
35°	2584.9	2540.6	2503.0	2468.9	2433.0	2414.4	2388.7	2368.2	2356.3	2349.5	2347.8
37.5°	2185.6	2160.1	2148.2	2141.3	2134.5	2129.4	2132.8	2141.3	2148.2	2160.1	2173.7
40°	1759.2	1781.3	1788.2	1812.0	1834.2	1863.2	1895.6	1933.2	1963.9	2003.1	2030.4
42.5°	1370.1	1411.1	1458.8	1510.0	1564.6	1617.5	1682.3	1742.1	1796.6	1846.1	1888.8
45°	1052.8	1115.9	1187.6	1260.9	1334.2	1411.1	1489.5	1562.9	1627.8	1680.6	1725.0
47.5°	820.7	890.7	982.8	1073.2	1161.9	1252.4	1339.4	1416.1	1470.7	1521.9	1561.2
50°	650.0	730.2	830.9	935.0	1032.3	1127.8	1220.0	1291.6	1346.2	1387.2	1416.1
52.5°	503.3	598.8	701.2	810.4	914.5	1018.6	1104.0	1170.4	1214.9	1250.7	1272.8
55°	375.4	469.2	578.5	691.0	796.8	897.5	977.6	1035.7	1074.9	1095.4	1107.3
57.5°	271.2	356.6	465.8	578.5	674.0	769.5	834.3	887.3	909.4	921.4	926.4
60°	197.9	276.4	373.6	470.9	561.4	638.1	694.5	730.2	747.3	754.2	752.4
62.5°	145.0	213.3	296.9	378.8	452.1	515.2	559.7	583.5	592.1	595.5	590.4
65°	110.9	163.8	235.5	298.6	354.9	401.0	433.4	448.8	453.8	452.1	448.8
67.5°	81.9	122.8	175.7	223.5	264.5	300.3	317.4	331.0	334.5	329.3	324.2
70°	58.0	90.4	127.9	160.4	191.1	211.6	230.3	232.1	232.1	230.3	226.9
72.5°	40.9	63.1	87.0	109.2	127.9	143.3	150.1	155.2	153.6	151.9	148.5
75°	27.3	39.3	63.1	68.3	85.3	90.4	97.3	97.3	99.0	93.8	93.8
77.5°	17.1	27.3	37.6	44.3	51.2	58.0	61.4	61.4	63.1	61.4	61.4
80°	10.2	17.1	20.5	30.7	30.7	35.8	37.6	39.3	35.8	40.9	35.8
82.5°	6.8	10.2	15.4	15.4	18.8	22.2	22.2	23.8	23.8	22.2	22.2
85°	5.2	6.8	8.5	10.2	10.2	11.9	10.2	10.2	11.9	13.6	11.9
87.5°	1.7	3.4	1.7	3.4	3.4	6.8	5.2	5.2	5.2	6.8	6.8
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: P248417

CATALOG NUMBER: LSR8B70D010 EC8B70927 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3214.6	3214.6	3214.6	3214.6
2.5°	3218.0	3219.6	3218.0	3218.0
5°	3233.4	3231.6	3233.4	3229.9
7.5°	3245.3	3245.3	3243.5	3243.5
10°	3245.3	3238.4	3238.4	3238.4
12.5°	3219.6	3211.1	3206.0	3202.5
15°	3175.3	3160.0	3153.2	3151.4
17.5°	3117.3	3103.6	3095.1	3090.0
20°	3050.8	3037.0	3026.8	3028.6
22.5°	2992.7	2977.4	2970.6	2967.1
25°	2934.7	2915.9	2910.8	2907.5
27.5°	2840.8	2830.6	2825.5	2820.4
30°	2697.5	2692.5	2683.9	2695.8
32.5°	2532.0	2523.5	2516.7	2521.8
35°	2349.5	2344.4	2349.5	2346.1
37.5°	2182.3	2187.3	2194.2	2197.6
40°	2050.9	2069.7	2076.5	2079.9
42.5°	1919.5	1941.6	1955.4	1963.9
45°	1757.4	1779.6	1794.9	1805.2
47.5°	1590.2	1609.0	1624.3	1622.7
50°	1438.3	1448.6	1455.4	1462.3
52.5°	1284.8	1284.8	1286.4	1286.4
55°	1110.7	1107.3	1105.6	1107.3
57.5°	919.7	916.3	914.5	909.4
60°	745.6	735.4	728.6	728.6
62.5°	583.5	571.6	566.4	564.8
65°	438.5	436.7	426.6	424.8
67.5°	317.4	310.5	303.8	305.4
70°	223.5	213.3	213.3	209.9
72.5°	145.0	140.0	138.2	138.2
75°	90.4	90.4	87.0	93.8
77.5°	59.7	59.7	58.0	59.7
80°	35.8	35.8	35.8	34.1
82.5°	22.2	23.8	22.2	22.2
85°	11.9	13.6	10.2	15.4
87.5°	6.8	8.5	6.8	8.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)