

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: P249155

Luminaire Tested: **LSR8B70D010 EC8B70940 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249155
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 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6798.0 lumens
Efficiency: N/A
Efficacy: 89.6 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

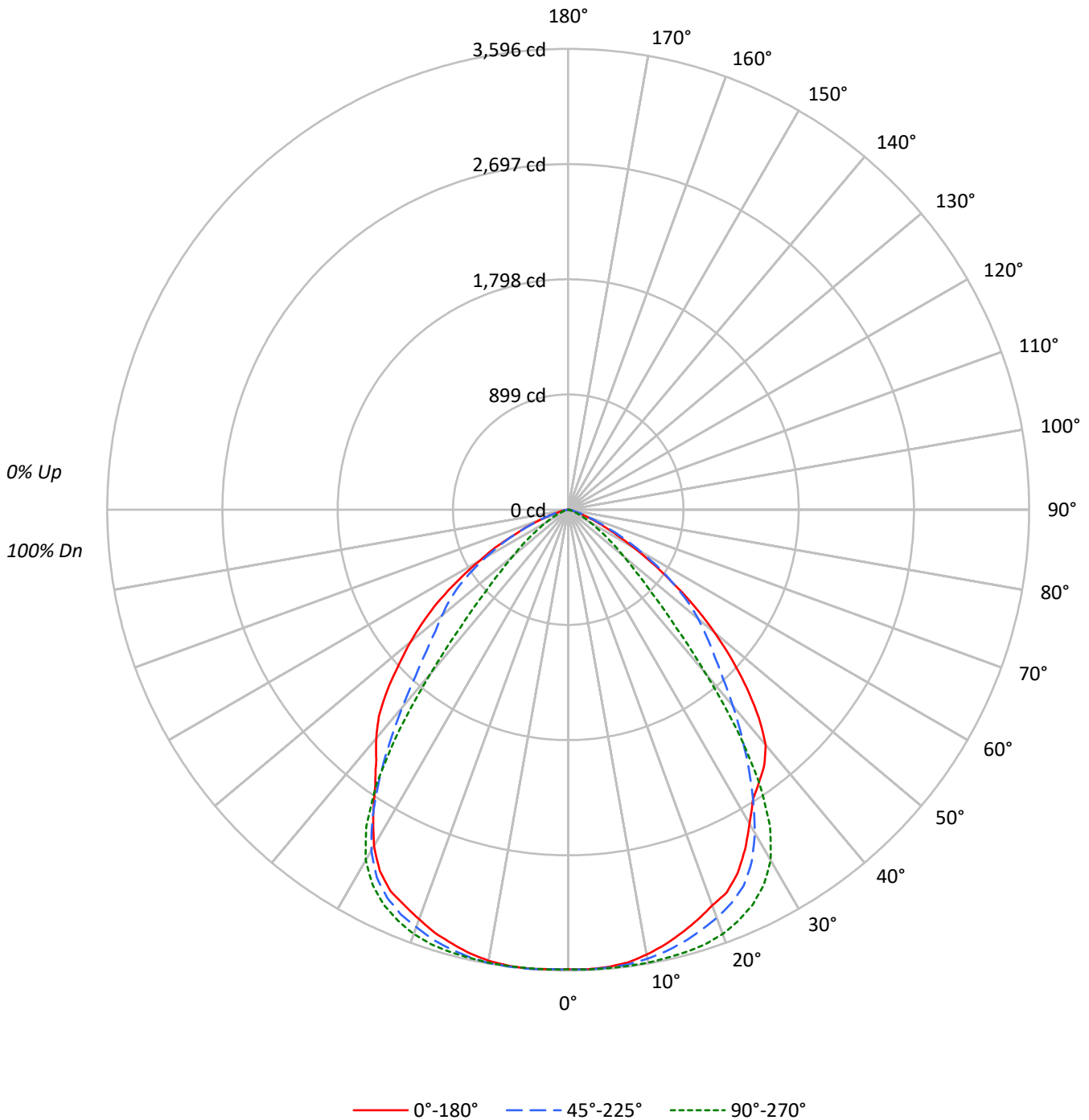
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	110604	110604	110604
5°	110847	111144	111265
10°	110378	112369	111887
15°	109155	114014	111862
20°	107844	115615	111572
25°	106444	115750	111688
30°	100703	112492	107903
35°	97698	97769	98786
40°	96489	67268	93776
45°	85975	40382	87148
50°	71489	26879	77030
55°	53616	18526	65309
60°	36331	12347	49276
65°	21919	8012	33856
70°	12153	4337	20827
75°	5504	1835	10782
80°	4777	2042	7529
85°	5449	2724	7501



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.3	5.0
10°-20°	994.1	14.6
20°-30°	1508.9	22.2
30°-40°	1584.8	23.3
40°-50°	1188.1	17.5
50°-60°	762.3	11.2
60°-70°	326.1	4.8
70°-80°	77.0	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°	2845.3	41.9
0°-40°	4430.0	65.2
0°-60°	6380.5	93.9
0°-90°	6798.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6798.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3587	3587	3587	3587	3587	
5°	3581	3587	3591	3596	3594	340
15°	3419	3490	3571	3548	3504	964
25°	3128	3238	3402	3340	3283	1429
35°	2595	2451	2597	2566	2624	1629
45°	1972	1611	926	1565	1998	1510
55°	997	997	345	1040	1215	905
65°	300	354	110	456	464	321
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°	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8
2.5°	3588.7	3592.6	3590.6	3590.6	3588.7	3590.6	3590.6	3594.5	3594.5	3590.6	3588.7
5°	3581.0	3584.8	3584.8	3581.0	3581.0	3590.6	3584.8	3588.7	3588.7	3586.8	3586.8
7.5°	3563.7	3563.7	3571.4	3565.6	3565.6	3571.4	3569.4	3573.3	3577.1	3579.1	3579.1
10°	3525.1	3529.0	3530.9	3530.9	3532.9	3538.6	3542.5	3550.2	3554.0	3557.9	3559.8
12.5°	3477.0	3482.8	3484.7	3482.8	3488.6	3496.3	3505.9	3515.5	3521.3	3529.0	3534.8
15°	3419.2	3419.2	3423.1	3428.9	3432.8	3444.3	3453.9	3465.5	3480.9	3490.5	3500.1
17.5°	3355.7	3359.6	3365.4	3365.4	3373.1	3392.3	3398.1	3415.4	3432.8	3442.4	3461.6
20°	3286.4	3290.3	3296.1	3299.9	3309.5	3324.9	3336.5	3351.9	3371.1	3388.5	3407.7
22.5°	3232.5	3224.8	3228.6	3232.5	3242.2	3255.6	3269.1	3288.3	3307.6	3324.9	3344.2
25°	3128.5	3130.5	3136.3	3140.1	3151.7	3163.2	3178.6	3201.7	3219.0	3238.3	3259.5
27.5°	2988.0	2989.9	2999.6	2999.6	3009.2	3028.4	3038.0	3057.3	3080.4	3099.7	3124.7
30°	2828.2	2832.0	2832.0	2839.8	2845.5	2855.2	2864.8	2884.0	2895.6	2912.9	2947.6
32.5°	2681.9	2685.7	2683.8	2681.9	2676.1	2674.2	2672.3	2676.1	2680.0	2685.7	2699.2
35°	2595.3	2585.6	2577.9	2564.5	2549.1	2529.8	2512.5	2489.4	2468.2	2450.8	2431.6
37.5°	2512.5	2510.5	2499.0	2479.7	2448.9	2414.3	2373.9	2323.8	2273.7	2219.8	2167.9
40°	2397.0	2391.2	2381.5	2354.6	2319.9	2277.6	2223.7	2162.1	2081.2	1998.4	1913.7
42.5°	2200.6	2202.5	2190.9	2169.7	2137.1	2096.6	2040.8	1973.4	1886.8	1788.6	1678.8
45°	1971.5	1971.5	1967.6	1950.3	1927.2	1894.4	1852.1	1796.3	1711.6	1611.4	1494.0
47.5°	1732.7	1734.7	1728.9	1725.0	1715.4	1694.2	1663.4	1621.1	1561.4	1465.1	1347.7
50°	1490.2	1490.2	1499.8	1497.8	1497.8	1490.2	1476.7	1451.6	1399.7	1322.7	1212.9
52.5°	1247.6	1251.4	1257.2	1264.9	1274.5	1289.9	1274.5	1263.0	1230.2	1170.5	1076.2
55°	997.3	1001.1	1010.8	1024.2	1035.8	1051.2	1055.0	1055.0	1037.7	997.3	926.0
57.5°	783.6	777.8	785.5	797.1	812.5	827.9	839.4	852.9	851.0	824.0	766.3
60°	589.1	591.1	596.8	608.4	619.9	633.4	648.8	660.4	666.2	652.7	616.1
62.5°	429.3	429.3	437.0	448.6	454.4	473.6	483.2	489.0	494.8	492.8	469.8
65°	300.4	304.2	308.0	313.8	319.6	331.1	336.9	348.5	352.3	354.3	336.9
67.5°	211.8	206.0	209.9	213.7	219.5	227.2	238.7	238.7	244.5	244.5	232.9
70°	134.8	134.8	136.7	142.5	146.3	148.2	152.1	155.9	161.7	159.8	159.8
72.5°	90.5	88.6	90.5	92.4	94.4	100.1	100.1	102.0	105.9	107.8	100.1
75°	46.2	48.1	52.0	50.1	55.8	52.0	53.9	59.7	57.8	53.9	53.9
77.5°	38.5	38.5	38.5	36.6	40.4	40.4	38.5	42.4	40.4	40.4	38.5
80°	26.9	28.9	26.9	25.0	26.9	25.0	25.0	25.0	25.0	25.0	23.1
82.5°	21.2	17.3	19.3	17.3	19.3	19.3	17.3	15.4	15.4	17.3	15.4
85°	15.4	11.5	13.5	13.5	11.5	11.5	11.5	11.5	11.5	9.6	9.6
87.5°	9.6	5.8	5.8	5.8	7.7	7.7	7.7	5.8	7.7	7.7	3.9
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8
2.5°	3592.6	3590.6	3594.5	3592.6	3592.6	3590.6	3592.6	3590.6	3594.5	3586.8	3588.7
5°	3592.6	3588.7	3590.6	3592.6	3594.5	3590.6	3590.6	3590.6	3594.5	3590.6	3592.6
7.5°	3584.8	3582.9	3588.7	3592.6	3590.6	3588.7	3592.6	3590.6	3594.5	3592.6	3596.4
10°	3569.4	3571.4	3575.2	3581.0	3582.9	3584.8	3588.7	3588.7	3594.5	3586.8	3590.6
12.5°	3546.3	3554.0	3563.7	3567.5	3575.2	3575.2	3579.1	3581.0	3584.8	3582.9	3588.7
15°	3517.5	3527.1	3538.6	3548.3	3557.9	3563.7	3569.4	3571.4	3577.1	3571.4	3573.3
17.5°	3482.8	3494.3	3511.7	3523.2	3538.6	3544.4	3552.1	3556.0	3561.7	3557.9	3559.8
20°	3434.6	3448.2	3467.4	3484.7	3494.3	3507.8	3517.5	3523.2	3527.1	3523.2	3525.1
22.5°	3367.3	3386.5	3411.6	3425.0	3444.3	3455.8	3457.8	3471.2	3480.9	3471.2	3475.1
25°	3288.3	3307.6	3326.9	3355.7	3373.1	3386.5	3400.0	3402.0	3411.6	3409.6	3407.7
27.5°	3157.4	3182.5	3215.2	3238.3	3261.4	3282.6	3298.0	3301.8	3311.5	3307.6	3309.5
30°	2978.4	3005.4	3036.2	3072.7	3105.5	3126.6	3145.9	3159.3	3169.0	3163.2	3161.3
32.5°	2724.3	2751.2	2783.9	2820.5	2859.0	2889.8	2912.9	2930.3	2941.8	2937.9	2928.3
35°	2433.6	2441.2	2462.4	2491.3	2524.0	2556.7	2577.9	2597.2	2610.6	2614.5	2614.5
37.5°	2135.1	2110.1	2094.7	2094.7	2113.9	2127.4	2146.7	2158.2	2179.4	2187.1	2192.9
40°	1846.3	1788.6	1734.7	1694.2	1667.3	1665.4	1665.4	1671.1	1690.4	1715.4	1738.5
42.5°	1588.3	1495.9	1413.1	1338.1	1284.2	1253.4	1239.9	1241.8	1257.2	1280.3	1318.8
45°	1382.3	1266.8	1162.9	1072.4	999.2	951.1	928.0	926.0	937.6	964.5	1006.9
47.5°	1222.5	1099.3	981.9	877.9	799.0	747.0	720.0	712.4	720.0	745.1	795.1
50°	1089.7	962.7	841.3	733.5	648.8	594.9	569.9	560.3	569.9	591.1	641.1
52.5°	966.5	835.6	722.0	618.0	527.5	481.3	454.4	448.6	454.4	479.4	519.8
55°	824.0	712.4	600.7	496.7	417.8	371.6	350.4	344.6	350.4	373.5	415.9
57.5°	683.5	587.2	489.0	394.7	327.3	286.8	267.6	259.9	273.4	288.8	338.8
60°	552.5	475.6	392.7	310.0	254.1	217.5	202.1	200.2	204.1	223.3	258.0
62.5°	433.2	369.7	304.2	236.8	190.6	175.2	155.9	154.0	157.9	169.4	196.4
65°	311.9	271.5	221.4	173.3	136.7	115.5	107.8	109.8	113.6	121.3	146.3
67.5°	217.5	188.7	154.0	121.3	94.4	84.7	77.0	75.1	77.0	90.5	104.0
70°	146.3	129.0	104.0	92.4	65.5	52.0	53.9	48.1	55.8	55.8	67.4
72.5°	96.2	84.7	69.3	53.9	46.2	36.6	36.6	34.7	38.5	40.4	50.1
75°	50.1	38.5	38.5	26.9	19.3	9.6	17.3	15.4	13.5	15.4	19.3
77.5°	34.7	28.9	26.9	21.2	19.3	15.4	15.4	15.4	15.4	17.3	19.3
80°	21.2	21.2	15.4	13.5	11.5	9.6	11.5	11.5	11.5	11.5	13.5
82.5°	13.5	11.5	11.5	9.6	9.6	7.7	7.7	7.7	7.7	7.7	11.5
85°	11.5	7.7	7.7	5.8	7.7	13.5	5.8	7.7	7.7	7.7	5.8
87.5°	3.9	5.8	5.8	5.8	3.9	1.9	3.9	5.8	5.8	9.6	7.7
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°	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8	3586.8
2.5°	3592.6	3594.5	3594.5	3592.6	3592.6	3588.7	3596.4	3590.6	3592.6	3600.2	3594.5
5°	3596.4	3598.3	3598.3	3596.4	3596.4	3596.4	3598.3	3598.3	3596.4	3594.5	3598.3
7.5°	3604.1	3602.2	3602.2	3598.3	3598.3	3594.5	3598.3	3592.6	3596.4	3592.6	3598.3
10°	3594.5	3596.4	3594.5	3592.6	3592.6	3590.6	3590.6	3584.8	3586.8	3581.0	3584.8
12.5°	3588.7	3586.8	3586.8	3582.9	3579.1	3575.2	3573.3	3567.5	3567.5	3554.0	3559.8
15°	3573.3	3575.2	3569.4	3561.7	3557.9	3548.3	3544.4	3536.7	3529.0	3519.4	3521.3
17.5°	3559.8	3554.0	3546.3	3538.6	3523.2	3515.5	3507.8	3496.3	3492.4	3480.9	3477.0
20°	3519.4	3515.5	3505.9	3492.4	3482.8	3465.5	3457.8	3446.2	3436.6	3425.0	3419.2
22.5°	3467.4	3463.5	3452.0	3438.5	3423.1	3415.4	3407.7	3386.5	3376.9	3365.4	3363.4
25°	3402.0	3396.2	3384.6	3369.2	3361.5	3340.3	3332.6	3317.2	3313.4	3301.8	3299.9
27.5°	3301.8	3294.1	3280.7	3261.4	3247.9	3234.4	3226.8	3215.2	3211.4	3199.8	3197.9
30°	3151.7	3142.0	3115.1	3107.4	3084.3	3070.8	3070.8	3055.4	3057.3	3049.6	3049.6
32.5°	2914.9	2899.5	2878.3	2862.8	2847.4	2839.8	2839.8	2834.0	2837.8	2837.8	2841.7
35°	2601.0	2579.9	2568.3	2558.7	2558.7	2566.4	2589.5	2595.3	2606.8	2616.4	2624.2
37.5°	2198.6	2196.7	2210.2	2221.8	2250.6	2283.4	2323.8	2358.5	2391.2	2414.3	2437.4
40°	1763.5	1811.7	1850.2	1904.1	1948.3	2011.9	2085.0	2144.7	2200.6	2241.0	2283.4
42.5°	1376.5	1438.2	1519.0	1598.0	1676.9	1763.5	1859.8	1942.6	2015.8	2071.6	2115.9
45°	1072.4	1157.1	1255.3	1355.4	1457.4	1565.3	1665.4	1750.1	1827.1	1884.8	1929.1
47.5°	864.4	956.9	1068.5	1178.3	1293.8	1407.4	1519.0	1592.2	1655.7	1701.9	1742.4
50°	714.3	812.5	929.9	1055.0	1170.5	1284.2	1380.4	1451.6	1503.6	1544.1	1569.1
52.5°	596.8	700.8	825.9	951.1	1066.6	1170.5	1257.2	1311.1	1353.5	1382.3	1405.4
55°	492.8	593.0	710.4	827.9	941.5	1039.6	1110.9	1151.3	1184.0	1201.3	1214.8
57.5°	402.4	494.8	602.6	710.4	808.6	889.5	945.3	985.7	1001.1	1014.6	1012.7
60°	315.8	402.4	500.6	593.0	677.7	743.1	783.6	806.7	818.2	824.0	820.2
62.5°	248.4	327.3	402.4	483.2	544.9	600.7	639.2	639.2	645.0	646.9	652.7
65°	184.8	244.5	310.0	369.7	419.7	456.3	477.5	483.2	491.0	489.0	485.2
67.5°	136.7	181.0	229.1	273.4	308.0	331.1	346.5	360.0	358.1	354.3	352.3
70°	94.4	123.2	165.6	192.5	217.5	240.7	244.5	246.4	248.4	250.3	246.4
72.5°	65.5	86.6	109.8	132.8	148.2	157.9	167.5	169.4	169.4	169.4	167.5
75°	32.7	44.3	65.5	75.1	88.6	92.4	100.1	100.1	105.9	98.2	96.2
77.5°	28.9	34.7	46.2	53.9	59.7	65.5	67.4	73.2	71.2	67.4	69.3
80°	17.3	21.2	28.9	32.7	40.4	42.4	44.3	46.2	44.3	46.2	46.2
82.5°	13.5	15.4	19.3	19.3	25.0	25.0	26.9	26.9	28.9	28.9	28.9
85°	7.7	13.5	11.5	23.1	15.4	15.4	19.3	23.1	19.3	19.3	23.1
87.5°	7.7	7.7	5.8	7.7	7.7	7.7	9.6	11.5	11.5	13.5	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: P249155

CATALOG NUMBER: LSR8B70D010 EC8B70940 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3586.8	3586.8	3586.8	3586.8
2.5°	3592.6	3596.4	3590.6	3588.7
5°	3598.3	3598.3	3594.5	3594.5
7.5°	3598.3	3598.3	3592.6	3588.7
10°	3582.9	3582.9	3577.1	3573.3
12.5°	3554.0	3554.0	3552.1	3546.3
15°	3517.5	3517.5	3509.7	3504.0
17.5°	3467.4	3471.2	3461.6	3461.6
20°	3413.5	3411.6	3403.9	3400.0
22.5°	3357.7	3353.8	3351.9	3340.3
25°	3298.0	3294.1	3288.3	3282.6
27.5°	3195.9	3194.0	3188.2	3180.5
30°	3040.0	3038.0	3030.4	3030.4
32.5°	2837.8	2835.9	2828.2	2830.2
35°	2628.0	2635.7	2631.8	2624.2
37.5°	2452.8	2458.6	2462.4	2458.6
40°	2306.5	2323.8	2325.7	2329.6
42.5°	2150.5	2173.6	2181.3	2185.2
45°	1963.7	1984.9	2002.3	1998.4
47.5°	1773.1	1788.6	1804.0	1792.4
50°	1590.3	1599.9	1605.7	1605.7
52.5°	1417.0	1417.0	1415.1	1417.0
55°	1218.7	1218.7	1211.0	1214.8
57.5°	1010.8	1014.6	1008.8	999.2
60°	818.2	808.6	804.7	799.0
62.5°	637.3	637.3	623.8	641.1
65°	477.5	471.7	465.9	464.0
67.5°	346.5	344.6	338.8	336.9
70°	244.5	236.8	234.9	231.0
72.5°	163.7	163.7	159.8	159.8
75°	100.1	90.5	88.6	90.5
77.5°	69.3	67.4	67.4	65.5
80°	46.2	44.3	48.1	42.4
82.5°	28.9	30.8	28.9	30.8
85°	19.3	23.1	21.2	21.2
87.5°	11.5	11.5	11.5	11.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)