

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: P249443

Luminaire Tested: **LSR8B70D010 EC8B70850 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249443
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 EC8B70850 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6842.0 lumens
Efficiency: N/A
Efficacy: 90.1 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

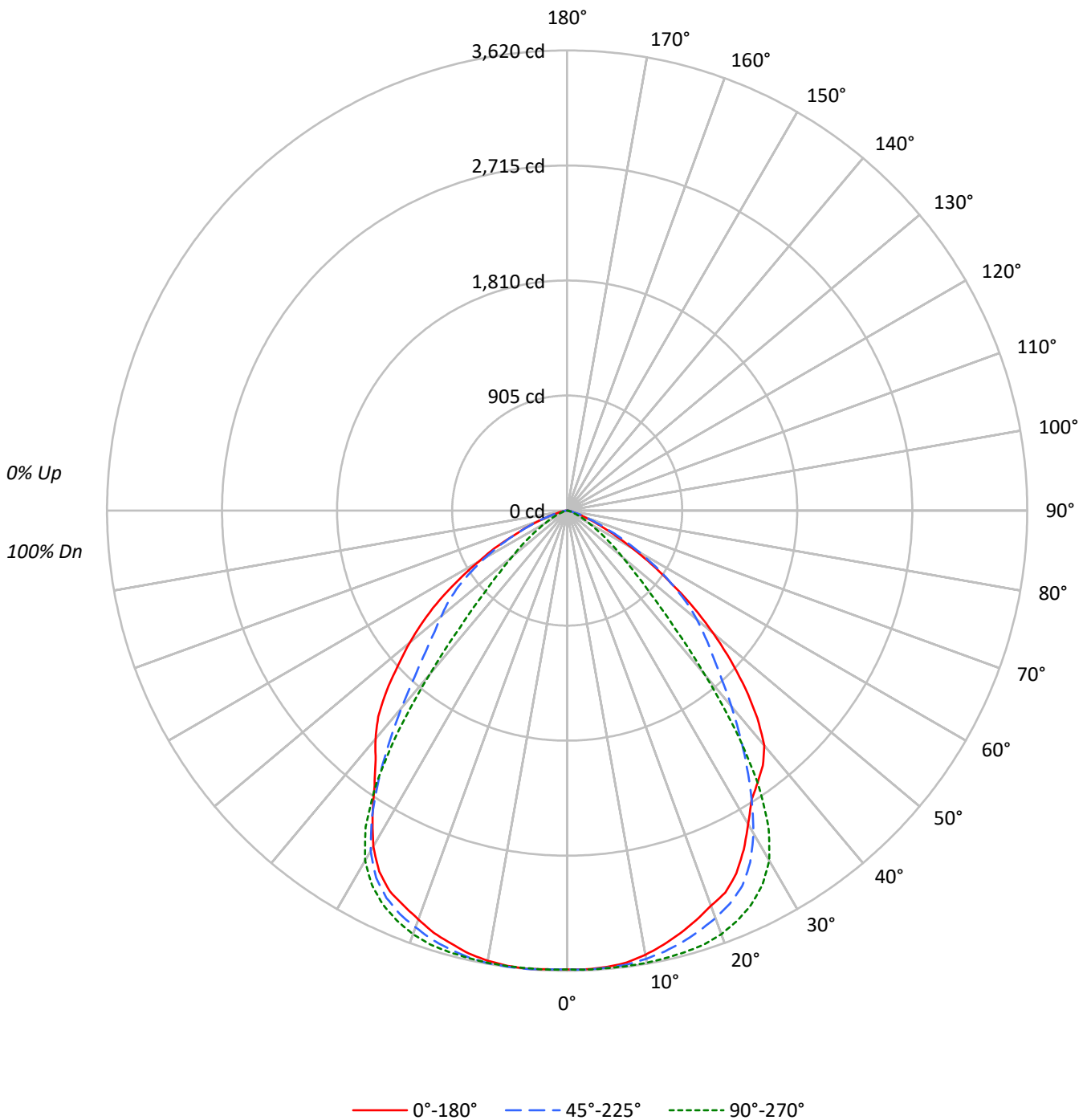
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	111319	111319	111319
5°	111562	111865	111983
10°	111095	113096	112611
15°	109864	114751	112587
20°	108543	116363	112294
25°	107135	116499	112409
30°	101354	113222	108600
35°	98330	98402	99422
40°	97113	67703	94383
45°	86529	40644	87715
50°	71950	27052	77529
55°	53960	18650	65734
60°	36566	12427	49597
65°	22057	8063	34075
70°	12226	4373	20962
75°	5540	1847	10854
80°	4812	2060	7565
85°	5484	2724	7536



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	344.5	5.0
10°-20°	1000.5	14.6
20°-30°	1518.6	22.2
30°-40°	1595.0	23.3
40°-50°	1195.8	17.5
50°-60°	767.3	11.2
60°-70°	328.2	4.8
70°-80°	77.5	1.1
80°-90°	14.4	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°	2863.7	41.9
0°-40°	4458.7	65.2
0°-60°	6421.8	93.9
0°-90°	6842.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6842.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3610	3610	3610	3610	3610	
5°	3604	3610	3614	3620	3618	342
15°	3441	3513	3594	3571	3527	971
25°	3149	3259	3424	3362	3304	1439
35°	2612	2467	2614	2583	2641	1639
45°	1984	1622	932	1575	2011	1520
55°	1004	1004	347	1046	1223	910
65°	302	356	110	459	467	323
75°	46	54	16	93	91	68
85°	16	10	8	16	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°	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0
2.5°	3611.9	3615.8	3613.9	3613.9	3611.9	3613.9	3613.9	3617.7	3617.7	3613.9	3611.9
5°	3604.1	3608.0	3608.0	3604.1	3604.1	3613.9	3608.0	3611.9	3611.9	3610.0	3610.0
7.5°	3586.7	3586.7	3594.5	3588.7	3588.7	3594.5	3592.5	3596.4	3600.3	3602.2	3602.2
10°	3548.0	3551.8	3553.8	3553.8	3555.7	3561.5	3565.4	3573.2	3577.0	3580.9	3582.9
12.5°	3499.5	3505.3	3507.3	3505.3	3511.2	3518.9	3528.6	3538.3	3544.1	3551.8	3557.7
15°	3441.4	3441.4	3445.3	3451.1	3455.0	3466.6	3476.3	3487.9	3503.4	3513.1	3522.8
17.5°	3377.5	3381.3	3387.1	3387.1	3394.9	3414.3	3420.1	3437.5	3455.0	3464.7	3484.0
20°	3307.7	3311.6	3317.4	3321.3	3330.9	3346.5	3358.1	3373.6	3393.0	3410.4	3429.8
22.5°	3253.4	3245.7	3249.5	3253.4	3263.1	3276.7	3290.3	3309.6	3329.0	3346.5	3365.8
25°	3148.8	3150.7	3156.6	3160.4	3172.1	3183.7	3199.2	3222.4	3239.9	3259.3	3280.5
27.5°	3007.4	3009.3	3019.0	3019.0	3028.6	3048.0	3057.7	3077.1	3100.4	3119.7	3144.9
30°	2846.5	2850.4	2850.4	2858.1	2863.9	2873.7	2883.3	2902.7	2914.3	2931.8	2966.7
32.5°	2699.3	2703.1	2701.2	2699.3	2693.4	2691.5	2689.5	2693.4	2697.3	2703.1	2716.7
35°	2612.1	2602.4	2594.6	2581.1	2565.6	2546.2	2528.7	2505.5	2484.2	2466.7	2447.4
37.5°	2528.7	2526.8	2515.2	2495.8	2464.8	2429.9	2389.2	2338.8	2288.4	2234.2	2181.9
40°	2412.5	2406.6	2397.0	2369.8	2334.9	2292.3	2238.1	2176.1	2094.7	2011.4	1926.1
42.5°	2214.8	2216.7	2205.1	2183.8	2150.9	2110.2	2054.0	1986.2	1899.0	1800.1	1689.7
45°	1984.2	1984.2	1980.3	1962.9	1939.7	1906.7	1864.1	1807.9	1722.7	1621.9	1503.7
47.5°	1743.9	1745.9	1740.1	1736.2	1726.5	1705.2	1674.2	1631.6	1571.5	1474.6	1356.4
50°	1499.8	1499.8	1509.5	1507.5	1507.5	1499.8	1486.3	1461.0	1408.7	1331.2	1220.8
52.5°	1255.6	1259.5	1265.4	1273.1	1282.8	1298.3	1282.8	1271.1	1238.2	1178.1	1083.2
55°	1003.7	1007.6	1017.3	1030.9	1042.5	1058.0	1061.9	1061.9	1044.4	1003.7	932.0
57.5°	788.7	782.8	790.6	802.2	817.7	833.2	844.9	858.4	856.5	829.3	771.2
60°	592.9	594.9	600.7	612.3	624.0	637.5	653.0	664.6	670.5	656.9	620.1
62.5°	432.1	432.1	439.9	451.5	457.3	476.7	486.4	492.2	498.0	496.0	472.8
65°	302.3	306.1	310.0	315.9	321.6	333.3	339.1	350.7	354.6	356.5	339.1
67.5°	213.2	207.3	211.2	215.1	220.9	228.7	240.3	240.3	246.1	246.1	234.5
70°	135.6	135.6	137.6	143.4	147.3	149.2	153.1	156.9	162.8	160.8	160.8
72.5°	91.1	89.1	91.1	93.0	95.0	100.8	100.8	102.7	106.6	108.5	100.8
75°	46.5	48.5	52.3	50.4	56.2	52.3	54.2	60.1	58.1	54.2	54.2
77.5°	38.7	38.7	38.7	36.8	40.7	40.7	38.7	42.6	40.7	40.7	38.7
80°	27.1	29.1	27.1	25.2	27.1	25.2	25.2	25.2	25.2	25.2	23.2
82.5°	21.3	17.4	19.4	17.4	19.4	19.4	17.4	15.5	15.5	17.4	15.5
85°	15.5	11.6	13.6	13.6	11.6	11.6	11.6	11.6	11.6	9.7	9.7
87.5°	9.7	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°	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0
2.5°	3615.8	3613.9	3617.7	3615.8	3615.8	3613.9	3615.8	3613.9	3617.7	3610.0	3611.9
5°	3615.8	3611.9	3613.9	3615.8	3617.7	3613.9	3613.9	3613.9	3617.7	3613.9	3615.8
7.5°	3608.0	3606.1	3611.9	3615.8	3613.9	3611.9	3615.8	3613.9	3617.7	3615.8	3619.6
10°	3592.5	3594.5	3598.4	3604.1	3606.1	3608.0	3611.9	3611.9	3617.7	3610.0	3613.9
12.5°	3569.3	3577.0	3586.7	3590.6	3598.4	3598.4	3602.2	3604.1	3608.0	3606.1	3611.9
15°	3540.2	3549.9	3561.5	3571.2	3580.9	3586.7	3592.5	3594.5	3600.3	3594.5	3596.4
17.5°	3505.3	3517.0	3534.4	3546.0	3561.5	3567.3	3575.1	3579.0	3584.8	3580.9	3582.9
20°	3456.9	3470.5	3489.8	3507.3	3517.0	3530.5	3540.2	3546.0	3549.9	3546.0	3548.0
22.5°	3389.1	3408.5	3433.6	3447.2	3466.6	3478.2	3480.2	3493.7	3503.4	3493.7	3497.6
25°	3309.6	3329.0	3348.4	3377.5	3394.9	3408.5	3422.0	3424.0	3433.6	3431.7	3429.8
27.5°	3177.9	3203.1	3236.0	3259.3	3282.5	3303.8	3319.3	3323.2	3332.9	3329.0	3330.9
30°	2997.6	3024.8	3055.8	3092.6	3125.6	3146.8	3166.2	3179.8	3189.5	3183.7	3181.7
32.5°	2741.9	2769.0	2802.0	2838.8	2877.5	2908.5	2931.8	2949.2	2960.8	2957.0	2947.3
35°	2449.3	2457.0	2478.4	2507.4	2540.3	2573.3	2594.6	2614.0	2627.5	2631.4	2631.4
37.5°	2148.9	2123.8	2108.3	2108.3	2127.6	2141.2	2160.6	2172.2	2193.5	2201.2	2207.1
40°	1858.3	1800.1	1745.9	1705.2	1678.1	1676.1	1676.1	1681.9	1701.3	1726.5	1749.8
42.5°	1598.6	1505.6	1422.3	1346.7	1292.5	1261.5	1247.9	1249.9	1265.4	1288.6	1327.3
45°	1391.3	1275.0	1170.4	1079.3	1005.7	957.2	934.0	932.0	943.7	970.8	1013.5
47.5°	1230.5	1106.4	988.2	883.6	804.2	751.8	724.7	717.0	724.7	749.9	800.3
50°	1096.8	968.9	846.8	738.3	653.0	598.8	573.6	563.9	573.6	594.9	645.2
52.5°	972.7	841.0	726.7	622.0	530.9	484.4	457.3	451.5	457.3	482.5	523.2
55°	829.3	717.0	604.6	499.9	420.5	374.0	352.7	346.9	352.7	375.9	418.6
57.5°	687.9	591.0	492.2	397.2	329.4	288.7	269.4	261.6	275.1	290.6	341.0
60°	556.1	478.6	395.3	312.0	255.8	219.0	203.4	201.5	205.4	224.8	259.6
62.5°	436.0	372.0	306.1	238.3	191.8	176.3	156.9	155.0	158.9	170.5	197.7
65°	313.9	273.2	222.8	174.4	137.6	116.3	108.5	110.5	114.3	122.1	147.3
67.5°	219.0	189.9	155.0	122.1	95.0	85.2	77.5	75.6	77.5	91.1	104.6
70°	147.3	129.8	104.6	93.0	65.9	52.3	54.2	48.5	56.2	56.2	67.8
72.5°	96.9	85.2	69.7	54.2	46.5	36.8	36.8	34.9	38.7	40.7	50.4
75°	50.4	38.7	38.7	27.1	19.4	9.7	17.4	15.5	13.6	15.5	19.4
77.5°	34.9	29.1	27.1	21.3	19.4	15.5	15.5	15.5	15.5	17.4	19.4
80°	21.3	21.3	15.5	13.6	11.6	9.7	11.6	11.6	11.6	11.6	13.6
82.5°	13.6	11.6	11.6	9.7	9.7	7.7	7.7	7.7	7.7	7.7	11.6
85°	11.6	7.7	7.7	5.8	7.7	13.6	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	9.7	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°	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0	3610.0
2.5°	3615.8	3617.7	3617.7	3615.8	3615.8	3611.9	3619.6	3613.9	3615.8	3623.5	3617.7
5°	3619.6	3621.6	3621.6	3619.6	3619.6	3619.6	3621.6	3621.6	3619.6	3617.7	3621.6
7.5°	3627.4	3625.5	3625.5	3621.6	3621.6	3617.7	3621.6	3615.8	3619.6	3615.8	3621.6
10°	3617.7	3619.6	3617.7	3615.8	3615.8	3613.9	3613.9	3608.0	3610.0	3604.1	3608.0
12.5°	3611.9	3610.0	3610.0	3606.1	3602.2	3598.4	3596.4	3590.6	3590.6	3577.0	3582.9
15°	3596.4	3598.4	3592.5	3584.8	3580.9	3571.2	3567.3	3559.6	3551.8	3542.2	3544.1
17.5°	3582.9	3577.0	3569.3	3561.5	3546.0	3538.3	3530.5	3518.9	3515.0	3503.4	3499.5
20°	3542.2	3538.3	3528.6	3515.0	3505.3	3487.9	3480.2	3468.5	3458.8	3447.2	3441.4
22.5°	3489.8	3485.9	3474.3	3460.8	3445.3	3437.5	3429.8	3408.5	3398.7	3387.1	3385.2
25°	3424.0	3418.1	3406.5	3391.0	3383.2	3362.0	3354.2	3338.7	3334.8	3323.2	3321.3
27.5°	3323.2	3315.4	3301.9	3282.5	3268.9	3255.4	3247.6	3236.0	3232.1	3220.5	3218.6
30°	3172.1	3162.3	3135.2	3127.5	3104.2	3090.7	3090.7	3075.2	3077.1	3069.4	3069.4
32.5°	2933.7	2918.2	2896.9	2881.4	2865.9	2858.1	2858.1	2852.3	2856.2	2856.2	2860.1
35°	2617.9	2596.6	2584.9	2575.2	2575.2	2583.0	2606.2	2612.1	2623.7	2633.4	2641.1
37.5°	2212.9	2211.0	2224.5	2236.1	2265.2	2298.2	2338.8	2373.7	2406.6	2429.9	2453.1
40°	1775.0	1823.4	1862.1	1916.4	1961.0	2024.9	2098.5	2158.6	2214.8	2255.5	2298.2
42.5°	1385.5	1447.5	1528.9	1608.3	1687.8	1775.0	1871.9	1955.2	2028.8	2085.0	2129.6
45°	1079.3	1164.6	1263.4	1364.2	1466.9	1575.4	1676.1	1761.4	1838.9	1897.0	1941.6
47.5°	870.0	963.1	1075.4	1185.9	1302.1	1416.5	1528.9	1602.5	1666.4	1712.9	1753.7
50°	718.9	817.7	935.9	1061.9	1178.1	1292.5	1389.3	1461.0	1513.4	1554.1	1579.2
52.5°	600.7	705.3	831.3	957.2	1073.5	1178.1	1265.4	1319.6	1362.2	1391.3	1414.5
55°	496.0	596.8	715.0	833.2	947.5	1046.4	1118.0	1158.8	1191.7	1209.1	1222.7
57.5°	405.0	498.0	606.5	715.0	813.8	895.3	951.4	992.1	1007.6	1021.2	1019.2
60°	317.8	405.0	503.8	596.8	682.1	747.9	788.7	811.9	823.5	829.3	825.5
62.5°	250.0	329.4	405.0	486.4	548.4	604.6	643.3	643.3	649.1	651.1	656.9
65°	186.0	246.1	312.0	372.0	422.4	459.2	480.6	486.4	494.1	492.2	488.3
67.5°	137.6	182.2	230.6	275.1	310.0	333.3	348.8	362.4	360.4	356.5	354.6
70°	95.0	124.0	166.7	193.8	219.0	242.2	246.1	248.0	250.0	251.9	248.0
72.5°	65.9	87.2	110.5	133.7	149.2	158.9	168.6	170.5	170.5	170.5	168.6
75°	33.0	44.6	65.9	75.6	89.1	93.0	100.8	100.8	106.6	98.8	96.9
77.5°	29.1	34.9	46.5	54.2	60.1	65.9	67.8	73.6	71.7	67.8	69.7
80°	17.4	21.3	29.1	33.0	40.7	42.6	44.6	46.5	44.6	46.5	46.5
82.5°	13.6	15.5	19.4	19.4	25.2	25.2	27.1	27.1	29.1	29.1	29.1
85°	7.7	13.6	11.6	23.2	15.5	15.5	19.4	23.2	19.4	19.4	23.2
87.5°	7.7	7.7	5.8	7.7	7.7	7.7	9.7	11.6	11.6	13.6	11.6
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: P249443

CATALOG NUMBER: LSR8B70D010 EC8B70850 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3610.0	3610.0	3610.0	3610.0
2.5°	3615.8	3619.6	3613.9	3611.9
5°	3621.6	3621.6	3617.7	3617.7
7.5°	3621.6	3621.6	3615.8	3611.9
10°	3606.1	3606.1	3600.3	3596.4
12.5°	3577.0	3577.0	3575.1	3569.3
15°	3540.2	3540.2	3532.5	3526.7
17.5°	3489.8	3493.7	3484.0	3484.0
20°	3435.6	3433.6	3425.9	3422.0
22.5°	3379.4	3375.5	3373.6	3362.0
25°	3319.3	3315.4	3309.6	3303.8
27.5°	3216.6	3214.7	3208.9	3201.1
30°	3059.7	3057.7	3050.0	3050.0
32.5°	2856.2	2854.3	2846.5	2848.5
35°	2645.0	2652.8	2648.9	2641.1
37.5°	2468.6	2474.5	2478.4	2474.5
40°	2321.4	2338.8	2340.8	2344.7
42.5°	2164.4	2187.7	2195.5	2199.3
45°	1976.5	1997.8	2015.2	2011.4
47.5°	1784.6	1800.1	1815.6	1804.0
50°	1600.6	1610.2	1616.1	1616.1
52.5°	1426.2	1426.2	1424.2	1426.2
55°	1226.6	1226.6	1218.8	1222.7
57.5°	1017.3	1021.2	1015.3	1005.7
60°	823.5	813.8	810.0	804.2
62.5°	641.4	641.4	627.8	645.2
65°	480.6	474.7	468.9	467.0
67.5°	348.8	346.9	341.0	339.1
70°	246.1	238.3	236.4	232.5
72.5°	164.7	164.7	160.8	160.8
75°	100.8	91.1	89.1	91.1
77.5°	69.7	67.8	67.8	65.9
80°	46.5	44.6	48.5	42.6
82.5°	29.1	31.0	29.1	31.0
85°	19.4	23.2	21.3	21.3
87.5°	11.6	11.6	11.6	11.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)