

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: P248462

Luminaire Tested: **LSR8B70D010 EC8B70840 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248462
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 EC8B70840 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7642.0 lumens
Efficiency: N/A
Efficacy: 100.7 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

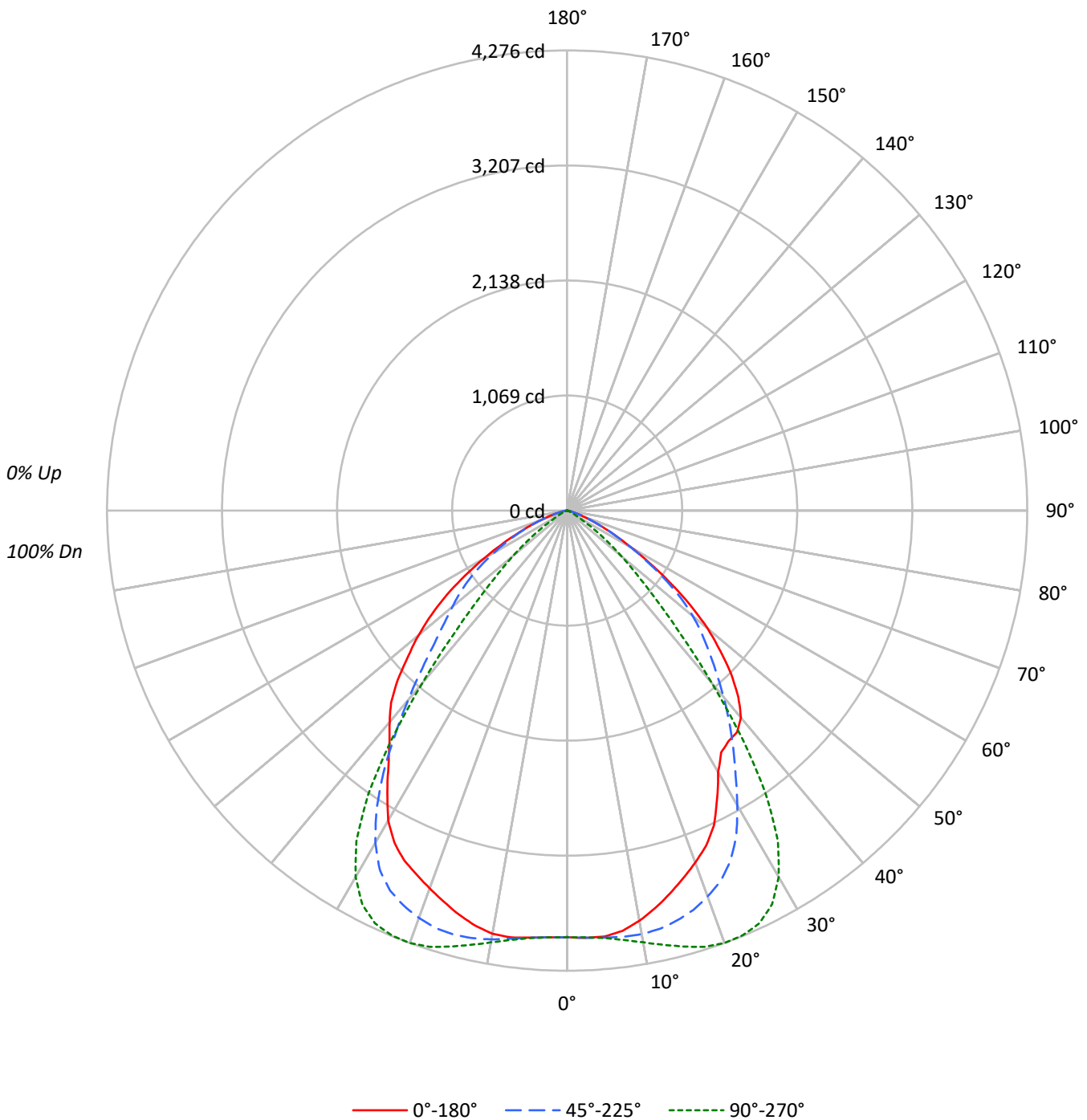
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	122247	122247	122247
5°	122974	123433	123299
10°	121168	127562	125057
15°	117628	133883	124076
20°	114214	140312	122569
25°	109826	143908	122000
30°	99952	139963	118382
35°	98462	121275	108920
40°	101138	84111	103255
45°	94152	50835	97087
50°	81664	31393	86514
55°	62670	16403	73422
60°	42696	6617	55413
65°	26559	3378	38226
70°	14416	2092	23333
75°	7518	1001	13785
80°	3356	1119	7476
85°	2229	743	6687



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	381.3	5.0
10°-20°	1129.4	14.8
20°-30°	1723.0	22.5
30°-40°	1798.0	23.5
40°-50°	1350.5	17.7
50°-60°	831.0	10.9
60°-70°	338.2	4.4
70°-80°	79.7	1.0
80°-90°	11.0	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°	3233.7	42.3
0°-40°	5031.7	65.8
0°-60°	7213.2	94.4
0°-90°	7642.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7642.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3964	3964	3964	3964	3964	
5°	3973	3983	3988	3983	3983	376
15°	3685	3943	4194	4078	3887	1038
25°	3228	3590	4230	3895	3586	1467
35°	2616	2689	3222	2978	2893	1652
45°	2159	1869	1166	1740	2226	1647
55°	1166	1107	305	1107	1366	1048
65°	364	368	46	494	524	380
75°	63	63	8	112	116	76
85°	6	6	2	15	19	9
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°	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4
2.5°	3975.0	3968.6	3975.0	3975.0	3977.1	3972.8	3975.0	3977.1	3972.8	3972.8	3972.8
5°	3972.8	3968.6	3972.8	3970.7	3975.0	3975.0	3979.2	3979.2	3983.3	3983.3	3989.7
7.5°	3939.2	3930.8	3939.2	3945.5	3949.7	3958.1	3968.6	3977.1	3985.5	3993.9	4004.4
10°	3869.7	3869.7	3876.0	3888.7	3901.3	3916.0	3934.9	3956.0	3977.1	3996.0	4014.9
12.5°	3783.5	3777.1	3789.8	3806.6	3825.5	3848.7	3878.2	3909.7	3943.4	3981.2	4010.7
15°	3684.6	3678.2	3693.0	3709.8	3733.0	3766.6	3802.4	3844.5	3892.9	3943.4	3991.8
17.5°	3583.5	3581.4	3596.2	3619.3	3638.3	3674.0	3720.3	3770.8	3825.5	3892.9	3956.0
20°	3480.5	3478.4	3493.1	3512.0	3537.3	3570.9	3617.2	3676.1	3741.4	3817.1	3890.8
22.5°	3373.1	3375.2	3387.8	3408.9	3430.0	3465.7	3514.1	3573.0	3644.6	3726.6	3808.7
25°	3227.9	3217.4	3234.3	3255.3	3291.0	3320.5	3366.8	3430.0	3503.6	3589.9	3686.7
27.5°	3017.5	3015.4	3030.2	3049.1	3080.6	3116.4	3166.9	3232.1	3310.0	3404.7	3499.4
30°	2807.1	2811.3	2817.6	2836.6	2857.6	2893.4	2943.9	2998.6	3072.2	3162.7	3263.7
32.5°	2664.0	2664.0	2672.4	2685.0	2699.8	2718.7	2754.5	2794.4	2851.3	2914.4	2988.0
35°	2615.6	2607.2	2615.6	2617.7	2619.8	2624.0	2630.3	2643.0	2661.9	2689.3	2716.6
37.5°	2594.6	2588.2	2588.2	2579.8	2569.3	2556.7	2539.8	2520.9	2499.9	2472.5	2451.5
40°	2512.5	2508.3	2504.1	2495.7	2472.5	2447.3	2419.9	2375.7	2327.3	2260.0	2192.7
42.5°	2354.7	2350.5	2348.4	2331.5	2310.5	2281.0	2249.4	2203.2	2142.1	2055.9	1959.1
45°	2159.0	2150.5	2144.3	2129.5	2114.8	2089.5	2060.1	2018.0	1956.9	1868.6	1752.8
47.5°	1931.7	1927.5	1925.4	1919.1	1904.4	1889.6	1870.7	1837.0	1782.3	1698.1	1578.2
50°	1702.3	1693.9	1698.1	1696.1	1689.7	1679.2	1666.6	1643.4	1601.3	1525.6	1416.2
52.5°	1439.3	1439.3	1437.2	1443.5	1445.6	1443.5	1445.6	1420.4	1384.6	1327.8	1235.2
55°	1165.7	1165.7	1172.1	1180.5	1188.9	1191.0	1188.9	1178.4	1153.1	1106.8	1024.8
57.5°	909.0	904.8	917.5	930.1	938.5	946.9	940.6	932.2	917.5	879.6	816.4
60°	692.3	692.3	700.7	709.1	717.5	726.0	723.9	721.8	709.1	683.9	633.4
62.5°	509.2	511.3	511.3	517.7	526.1	534.5	540.8	534.5	528.2	511.3	477.7
65°	364.0	361.9	364.0	370.4	376.7	385.1	389.3	387.2	380.9	368.2	343.0
67.5°	244.1	242.0	250.4	252.5	256.7	265.2	263.0	265.2	263.0	252.5	231.5
70°	159.9	155.7	159.9	157.8	164.1	166.3	170.4	172.5	170.4	164.1	157.8
72.5°	98.9	96.8	98.9	101.0	103.1	105.2	109.4	109.4	107.3	103.1	94.7
75°	63.1	56.8	58.9	54.7	58.9	58.9	63.1	65.2	63.1	63.1	58.9
77.5°	37.9	37.9	37.9	37.9	37.9	37.9	37.9	40.0	42.1	37.9	35.8
80°	18.9	18.9	21.1	21.1	21.1	23.2	21.1	21.1	21.1	23.2	16.8
82.5°	14.7	12.6	12.6	12.6	14.7	12.6	12.6	12.6	12.6	12.6	12.6
85°	6.3	8.4	6.3	4.2	6.3	6.3	8.4	6.3	6.3	6.3	8.4
87.5°	2.1	2.1	0.0	0.0	0.0	2.1	0.0	2.1	2.1	4.2	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°	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4
2.5°	3975.0	3970.7	3970.7	3968.6	3972.8	3968.6	3970.7	3968.6	3968.6	3972.8	3968.6
5°	3989.7	3991.8	3987.6	3985.5	3991.8	3991.8	3991.8	3987.6	3987.6	3989.7	3987.6
7.5°	4010.7	4014.9	4017.0	4019.1	4023.4	4025.5	4025.5	4023.4	4021.2	4027.6	4019.1
10°	4033.9	4040.2	4052.8	4059.1	4069.6	4069.6	4073.9	4073.9	4069.6	4073.9	4071.8
12.5°	4025.5	4063.3	4084.4	4099.1	4113.8	4126.4	4130.7	4132.8	4130.7	4139.1	4130.7
15°	4040.2	4071.8	4105.4	4130.7	4158.0	4172.7	4176.9	4193.8	4198.0	4200.1	4187.5
17.5°	4017.0	4073.9	4109.6	4147.5	4187.5	4214.8	4240.1	4250.6	4252.7	4256.9	4240.1
20°	3964.4	4027.6	4082.3	4137.0	4183.3	4225.3	4246.4	4275.8	4267.5	4284.3	4261.1
22.5°	3892.9	3964.4	4033.9	4105.4	4153.8	4204.3	4248.5	4269.5	4280.1	4280.1	4254.8
25°	3779.2	3863.4	3939.2	4012.8	4086.5	4147.5	4198.0	4229.6	4235.9	4233.8	4204.3
27.5°	3602.5	3693.0	3781.4	3865.5	3956.0	4027.6	4086.5	4124.3	4134.9	4134.9	4103.3
30°	3358.4	3455.2	3541.5	3642.4	3735.1	3815.0	3897.1	3930.8	3949.7	3949.7	3913.9
32.5°	3068.0	3150.1	3230.0	3328.9	3430.0	3520.4	3598.3	3644.6	3667.7	3665.6	3634.1
35°	2752.4	2792.3	2853.4	2927.0	3017.5	3101.7	3177.4	3221.6	3261.6	3259.5	3230.0
37.5°	2436.7	2426.2	2432.5	2459.9	2516.7	2575.6	2634.5	2676.6	2710.3	2725.0	2718.7
40°	2127.4	2072.7	2020.1	2001.2	2005.3	2026.4	2058.0	2089.5	2127.4	2146.4	2154.8
42.5°	1849.6	1757.1	1664.4	1595.0	1555.0	1542.4	1557.1	1567.6	1590.8	1618.2	1645.5
45°	1626.6	1502.5	1380.4	1273.1	1205.7	1165.7	1157.3	1165.7	1178.4	1205.7	1241.5
47.5°	1443.5	1298.3	1161.6	1041.6	942.7	890.1	875.4	871.2	883.8	909.0	957.4
50°	1281.5	1136.3	984.8	845.9	742.8	683.9	662.9	654.4	669.1	688.1	732.3
52.5°	1104.7	961.6	805.9	671.2	563.9	502.9	479.8	467.1	475.5	500.8	545.0
55°	913.2	780.7	639.7	500.8	397.7	340.9	313.5	305.1	313.5	340.9	385.1
57.5°	721.8	610.2	492.4	361.9	269.3	212.5	185.2	176.8	199.9	210.4	256.7
60°	563.9	473.5	372.5	265.2	185.2	141.0	113.6	107.3	117.9	136.8	174.6
62.5°	423.0	366.1	286.2	189.4	136.8	90.5	75.7	69.5	75.7	90.5	120.0
65°	307.2	263.0	199.9	138.9	92.6	67.3	50.5	46.3	52.6	63.1	88.4
67.5°	210.4	176.8	138.9	96.8	63.1	42.1	35.8	35.8	37.9	46.3	65.2
70°	136.8	115.7	88.4	63.1	42.1	31.6	27.3	23.2	27.3	33.7	44.2
72.5°	86.3	73.6	56.8	44.2	31.6	23.2	18.9	16.8	21.1	25.2	33.7
75°	52.6	40.0	29.5	23.2	16.8	16.8	16.8	8.4	10.5	16.8	21.1
77.5°	31.6	27.3	23.2	18.9	14.7	8.4	8.4	8.4	10.5	12.6	18.9
80°	16.8	14.7	10.5	10.5	8.4	6.3	8.4	6.3	4.2	10.5	12.6
82.5°	10.5	8.4	8.4	8.4	10.5	4.2	6.3	4.2	6.3	8.4	6.3
85°	6.3	6.3	6.3	4.2	10.5	4.2	4.2	2.1	2.1	4.2	4.2
87.5°	0.0	2.1	2.1	0.0	2.1	0.0	2.1	2.1	2.1	2.1	2.1
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°	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4	3964.4
2.5°	3970.7	3968.6	3970.7	3968.6	3968.6	3968.6	3970.7	3970.7	3968.6	3968.6	3972.8
5°	3987.6	3987.6	3987.6	3985.5	3983.3	3983.3	3987.6	3987.6	3981.2	3987.6	3987.6
7.5°	4023.4	4017.0	4023.4	4014.9	4010.7	4012.8	4014.9	4010.7	4006.5	4008.6	4008.6
10°	4069.6	4063.3	4063.3	4057.0	4050.7	4046.5	4042.3	4031.7	4021.2	4019.1	4010.7
12.5°	4124.3	4113.8	4107.5	4094.9	4084.4	4069.6	4057.0	4040.2	4019.1	4004.4	3989.7
15°	4179.1	4162.2	4147.5	4126.4	4103.3	4078.0	4050.7	4023.4	3989.7	3960.2	3934.9
17.5°	4223.2	4200.1	4172.7	4139.1	4105.4	4067.5	4027.6	3987.6	3939.2	3901.3	3871.8
20°	4238.0	4204.3	4168.5	4124.3	4080.1	4027.6	3977.1	3924.4	3869.7	3829.8	3796.1
22.5°	4219.1	4179.1	4134.9	4088.6	4029.6	3972.8	3913.9	3852.9	3804.5	3749.8	3718.2
25°	4166.4	4118.0	4069.6	4014.9	3958.1	3895.0	3831.9	3768.7	3709.8	3680.3	3640.4
27.5°	4059.1	4006.5	3953.9	3897.1	3831.9	3768.7	3703.5	3642.4	3592.0	3552.0	3528.9
30°	3869.7	3808.7	3747.7	3686.7	3629.8	3564.6	3503.6	3453.1	3402.6	3371.0	3347.9
32.5°	3579.3	3524.6	3463.6	3404.7	3352.1	3297.4	3246.9	3202.7	3166.9	3145.8	3129.0
35°	3188.0	3133.2	3086.9	3044.9	3000.7	2977.5	2946.0	2920.7	2906.0	2897.6	2895.5
37.5°	2695.5	2664.0	2649.2	2640.9	2632.4	2626.1	2630.3	2640.9	2649.2	2664.0	2680.8
40°	2169.5	2196.8	2205.3	2234.7	2262.1	2297.8	2337.9	2384.1	2422.0	2470.4	2504.1
42.5°	1689.7	1740.2	1799.1	1862.3	1929.6	1994.8	2074.8	2148.4	2215.8	2276.8	2329.4
45°	1298.3	1376.2	1464.6	1555.0	1645.5	1740.2	1837.0	1927.5	2007.5	2072.7	2127.4
47.5°	1012.1	1098.4	1212.1	1323.6	1433.0	1544.5	1651.8	1746.5	1813.9	1877.0	1925.4
50°	801.7	900.6	1024.8	1153.1	1273.1	1390.9	1504.5	1592.9	1660.3	1710.8	1746.5
52.5°	620.7	738.6	864.8	999.5	1127.9	1256.2	1361.4	1443.5	1498.2	1542.4	1569.8
55°	462.9	578.7	713.4	852.2	982.7	1106.8	1205.7	1277.3	1325.7	1350.9	1365.7
57.5°	334.6	439.8	574.4	713.4	831.2	949.0	1029.0	1094.2	1121.6	1136.3	1142.6
60°	244.1	340.9	460.8	580.8	692.3	787.0	856.4	900.6	921.7	930.1	928.0
62.5°	178.9	263.0	366.1	467.1	557.6	635.5	690.2	719.6	730.2	734.4	728.1
65°	136.8	202.0	290.4	368.2	437.7	494.5	534.5	553.4	559.7	557.6	553.4
67.5°	101.0	151.5	216.8	275.7	326.2	370.4	391.4	408.2	412.4	406.1	399.8
70°	71.6	111.5	157.8	197.8	235.7	260.9	284.1	286.2	286.2	284.1	279.9
72.5°	50.5	77.8	107.3	134.7	157.8	176.8	185.2	191.5	189.4	187.3	183.1
75°	33.7	48.4	77.8	84.2	105.2	111.5	120.0	120.0	122.0	115.7	115.7
77.5°	21.1	33.7	46.3	54.7	63.1	71.6	75.7	75.7	77.8	75.7	75.7
80°	12.6	21.1	25.2	37.9	37.9	44.2	46.3	48.4	44.2	50.5	44.2
82.5°	8.4	12.6	18.9	18.9	23.2	27.3	27.3	29.5	29.5	27.3	27.3
85°	6.3	8.4	10.5	12.6	12.6	14.7	12.6	12.6	14.7	16.8	14.7
87.5°	2.1	4.2	2.1	4.2	4.2	8.4	6.3	6.3	6.3	8.4	8.4
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: P248462

CATALOG NUMBER: LSR8B70D010 EC8B70840 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3964.4	3964.4	3964.4	3964.4
2.5°	3968.6	3970.7	3968.6	3968.6
5°	3987.6	3985.5	3987.6	3983.3
7.5°	4002.3	4002.3	4000.2	4000.2
10°	4002.3	3993.9	3993.9	3993.9
12.5°	3970.7	3960.2	3953.9	3949.7
15°	3916.0	3897.1	3888.7	3886.6
17.5°	3844.5	3827.6	3817.1	3810.8
20°	3762.4	3745.6	3733.0	3735.1
22.5°	3690.8	3671.9	3663.5	3659.3
25°	3619.3	3596.2	3589.9	3585.7
27.5°	3503.6	3491.0	3484.6	3478.4
30°	3326.8	3320.5	3310.0	3324.7
32.5°	3122.7	3112.2	3103.8	3110.1
35°	2897.6	2891.2	2897.6	2893.4
37.5°	2691.4	2697.6	2706.1	2710.3
40°	2529.3	2552.5	2560.9	2565.1
42.5°	2367.3	2394.6	2411.5	2422.0
45°	2167.4	2194.7	2213.7	2226.3
47.5°	1961.2	1984.3	2003.2	2001.2
50°	1773.9	1786.5	1794.9	1803.4
52.5°	1584.5	1584.5	1586.6	1586.6
55°	1369.9	1365.7	1363.5	1365.7
57.5°	1134.2	1130.0	1127.9	1121.6
60°	919.6	907.0	898.5	898.5
62.5°	719.6	704.9	698.6	696.5
65°	540.8	538.7	526.1	523.9
67.5°	391.4	383.0	374.6	376.7
70°	275.7	263.0	263.0	258.8
72.5°	178.9	172.5	170.4	170.4
75°	111.5	111.5	107.3	115.7
77.5°	73.6	73.6	71.6	73.6
80°	44.2	44.2	44.2	42.1
82.5°	27.3	29.5	27.3	27.3
85°	14.7	16.8	12.6	18.9
87.5°	8.4	10.5	8.4	10.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)