

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: P249335

Luminaire Tested: **LSR8B70D010 EC8B70850 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249335
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 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7557.0 lumens
Efficiency: N/A
Efficacy: 99.6 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

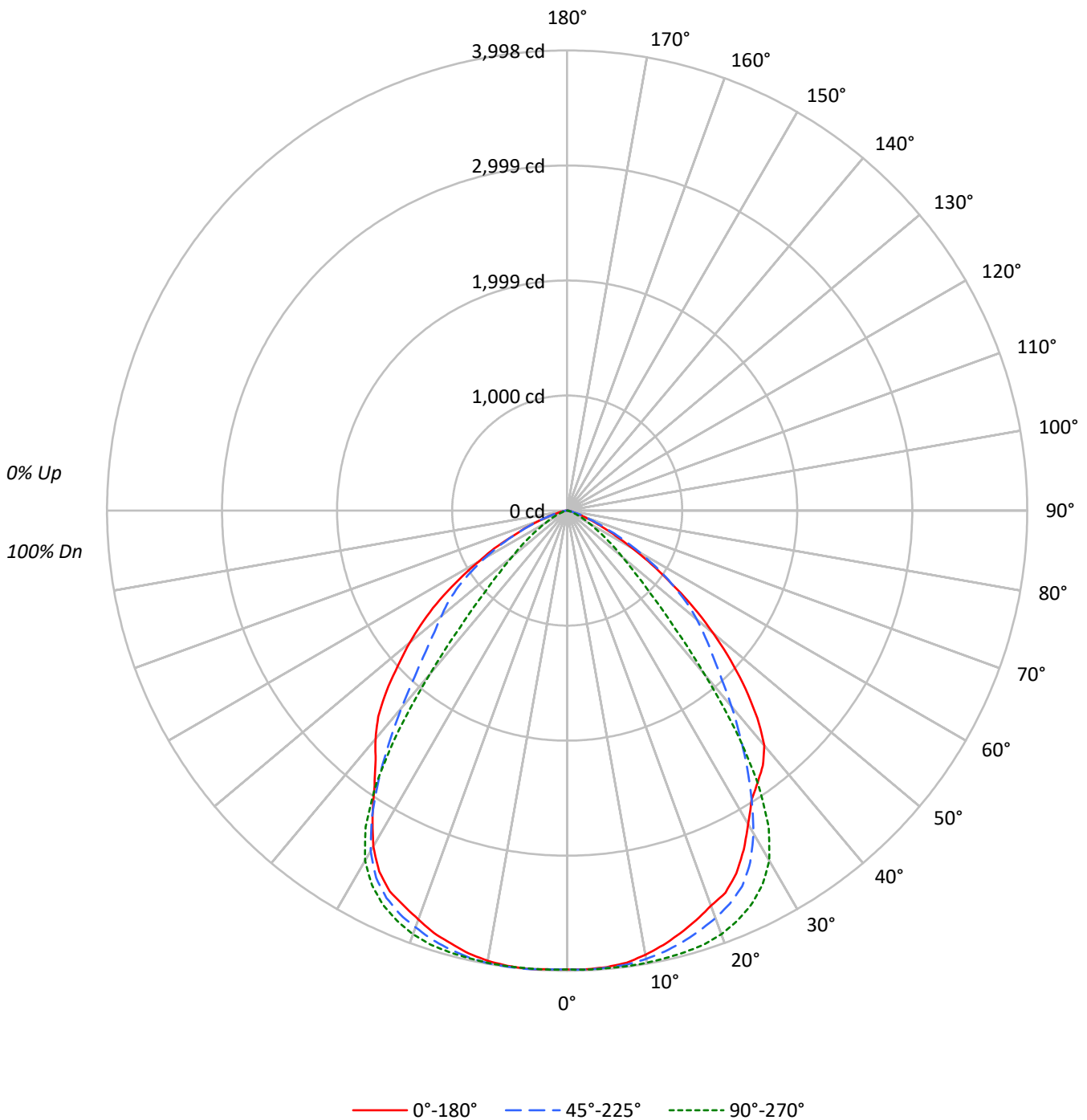
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	122951	122951	122951
5°	123222	123553	123686
10°	122702	124916	124378
15°	121344	126742	124351
20°	119887	128524	124029
25°	118329	128672	124157
30°	111947	125054	119948
35°	108603	108683	109812
40°	107261	74780	104246
45°	95574	44891	96878
50°	79467	29877	85631
55°	59600	20596	72605
60°	40389	13728	54778
65°	24363	8902	37635
70°	13506	4824	23153
75°	6124	2037	11986
80°	5327	2273	8364
85°	6050	3007	8350



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	380.5	5.0
10°-20°	1105.1	14.6
20°-30°	1677.3	22.2
30°-40°	1761.7	23.3
40°-50°	1320.8	17.5
50°-60°	847.5	11.2
60°-70°	362.5	4.8
70°-80°	85.6	1.1
80°-90°	15.9	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°	3162.9	41.9
0°-40°	4924.6	65.2
0°-60°	7092.9	93.9
0°-90°	7557.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7557.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3987	3987	3987	3987	3987	
5°	3981	3987	3992	3998	3996	378
15°	3801	3880	3970	3944	3895	1072
25°	3478	3600	3782	3713	3649	1589
35°	2885	2724	2887	2853	2917	1811
45°	2192	1791	1029	1740	2222	1678
55°	1109	1109	383	1156	1350	1006
65°	334	394	122	507	516	356
75°	51	60	17	103	101	75
85°	17	11	8	17	24	18
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°	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2
2.5°	3989.4	3993.7	3991.5	3991.5	3989.4	3991.5	3991.5	3995.8	3995.8	3991.5	3989.4
5°	3980.8	3985.1	3985.1	3980.8	3980.8	3991.5	3985.1	3989.4	3989.4	3987.2	3987.2
7.5°	3961.6	3961.6	3970.1	3963.7	3963.7	3970.1	3968.0	3972.2	3976.5	3978.7	3978.7
10°	3918.7	3923.0	3925.2	3925.2	3927.3	3933.7	3938.0	3946.6	3950.8	3955.1	3957.3
12.5°	3865.3	3871.6	3873.8	3871.6	3878.1	3886.6	3897.4	3908.0	3914.5	3923.0	3929.5
15°	3801.0	3801.0	3805.3	3811.7	3816.0	3828.9	3839.5	3852.4	3869.5	3880.2	3890.9
17.5°	3730.4	3734.7	3741.1	3741.1	3749.7	3771.0	3777.5	3796.8	3816.0	3826.7	3848.1
20°	3653.4	3657.6	3664.1	3668.4	3679.0	3696.2	3709.0	3726.1	3747.5	3766.8	3788.2
22.5°	3593.4	3584.9	3589.1	3593.4	3604.2	3619.1	3634.1	3655.5	3676.9	3696.2	3717.6
25°	3477.8	3480.0	3486.4	3490.7	3503.6	3516.4	3533.5	3559.2	3578.4	3599.9	3623.4
27.5°	3321.6	3323.8	3334.5	3334.5	3345.1	3366.6	3377.2	3398.7	3424.4	3445.7	3473.6
30°	3144.0	3148.2	3148.2	3156.8	3163.2	3174.0	3184.6	3206.1	3218.9	3238.2	3276.7
32.5°	2981.3	2985.6	2983.4	2981.3	2974.9	2972.8	2970.6	2974.9	2979.2	2985.6	3000.6
35°	2885.0	2874.3	2865.8	2850.8	2833.7	2812.2	2793.0	2767.3	2743.8	2724.5	2703.1
37.5°	2793.0	2790.8	2778.0	2756.6	2722.3	2683.8	2638.9	2583.2	2527.6	2467.7	2409.9
40°	2664.6	2658.1	2647.4	2617.5	2579.0	2531.9	2472.0	2403.5	2313.6	2221.5	2127.4
42.5°	2446.3	2448.4	2435.6	2412.0	2375.7	2330.7	2268.6	2193.7	2097.4	1988.2	1866.3
45°	2191.6	2191.6	2187.3	2168.0	2142.4	2106.0	2058.9	1996.8	1902.7	1791.3	1660.8
47.5°	1926.2	1928.3	1921.9	1917.7	1906.9	1883.4	1849.2	1802.1	1735.7	1628.7	1498.1
50°	1656.5	1656.5	1667.2	1665.1	1665.1	1656.5	1641.6	1613.7	1555.9	1470.3	1348.4
52.5°	1386.9	1391.1	1397.6	1406.1	1416.8	1433.9	1416.8	1404.0	1367.6	1301.2	1196.4
55°	1108.6	1112.9	1123.6	1138.6	1151.5	1168.6	1172.8	1172.8	1153.6	1108.6	1029.4
57.5°	871.1	864.6	873.2	886.1	903.2	920.3	933.1	948.1	946.0	916.0	851.8
60°	654.9	657.1	663.4	676.3	689.2	704.1	721.3	734.1	740.5	725.6	684.9
62.5°	477.3	477.3	485.8	498.6	505.1	526.5	537.2	543.6	550.0	547.9	522.2
65°	333.9	338.1	342.4	348.9	355.3	368.1	374.5	387.4	391.7	393.8	374.5
67.5°	235.4	229.0	233.3	237.5	244.0	252.6	265.4	265.4	271.8	271.8	259.0
70°	149.8	149.8	152.0	158.4	162.7	164.8	169.1	173.3	179.8	177.6	177.6
72.5°	100.6	98.5	100.6	102.7	104.9	111.3	111.3	113.4	117.7	119.9	111.3
75°	51.4	53.5	57.8	55.7	62.1	57.8	59.9	66.3	64.2	59.9	59.9
77.5°	42.8	42.8	42.8	40.7	44.9	44.9	42.8	47.1	44.9	44.9	42.8
80°	30.0	32.1	30.0	27.8	30.0	27.8	27.8	27.8	27.8	27.8	25.7
82.5°	23.6	19.3	21.4	19.3	21.4	21.4	19.3	17.1	17.1	19.3	17.1
85°	17.1	12.8	15.0	15.0	12.8	12.8	12.8	12.8	12.8	10.7	10.7
87.5°	10.7	6.4	6.4	6.4	8.5	8.5	8.5	6.4	8.5	8.5	4.3
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°	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2
2.5°	3993.7	3991.5	3995.8	3993.7	3993.7	3991.5	3993.7	3991.5	3995.8	3987.2	3989.4
5°	3993.7	3989.4	3991.5	3993.7	3995.8	3991.5	3991.5	3991.5	3995.8	3991.5	3993.7
7.5°	3985.1	3982.9	3989.4	3993.7	3991.5	3989.4	3993.7	3991.5	3995.8	3993.7	3997.9
10°	3968.0	3970.1	3974.4	3980.8	3982.9	3985.1	3989.4	3989.4	3995.8	3987.2	3991.5
12.5°	3942.3	3950.8	3961.6	3965.8	3974.4	3974.4	3978.7	3980.8	3985.1	3982.9	3989.4
15°	3910.2	3920.9	3933.7	3944.4	3955.1	3961.6	3968.0	3970.1	3976.5	3970.1	3972.2
17.5°	3871.6	3884.5	3903.7	3916.6	3933.7	3940.1	3948.7	3953.0	3959.4	3955.1	3957.3
20°	3818.1	3833.2	3854.5	3873.8	3884.5	3899.5	3910.2	3916.6	3920.9	3916.6	3918.7
22.5°	3743.2	3764.7	3792.5	3807.4	3828.9	3841.7	3843.8	3858.8	3869.5	3858.8	3863.1
25°	3655.5	3676.9	3698.3	3730.4	3749.7	3764.7	3779.6	3781.8	3792.5	3790.3	3788.2
27.5°	3509.9	3537.8	3574.1	3599.9	3625.5	3649.1	3666.2	3670.5	3681.2	3676.9	3679.0
30°	3310.9	3340.9	3375.1	3415.8	3452.2	3475.7	3497.1	3512.1	3522.8	3516.4	3514.2
32.5°	3028.4	3058.4	3094.8	3135.4	3178.2	3212.4	3238.2	3257.4	3270.3	3266.0	3255.3
35°	2705.3	2713.8	2737.4	2769.5	2805.8	2842.2	2865.8	2887.1	2902.1	2906.4	2906.4
37.5°	2373.5	2345.7	2328.6	2328.6	2349.9	2364.9	2386.3	2399.2	2422.7	2431.3	2437.7
40°	2052.4	1988.2	1928.3	1883.4	1853.4	1851.3	1851.3	1857.7	1879.1	1906.9	1932.6
42.5°	1765.7	1662.9	1570.9	1487.5	1427.5	1393.3	1378.3	1380.5	1397.6	1423.2	1466.0
45°	1536.7	1408.3	1292.7	1192.1	1110.8	1057.3	1031.6	1029.4	1042.3	1072.2	1119.4
47.5°	1359.0	1222.1	1091.5	975.9	888.2	830.4	800.4	791.9	800.4	828.2	883.9
50°	1211.4	1070.1	935.3	815.4	721.3	661.4	633.5	622.8	633.5	657.1	712.7
52.5°	1074.4	928.8	802.6	687.0	586.4	535.0	505.1	498.6	505.1	532.9	577.9
55°	916.0	791.9	667.7	552.2	464.4	413.1	389.5	383.1	389.5	415.2	462.3
57.5°	759.8	652.8	543.6	438.7	363.8	318.9	297.5	288.9	303.9	321.0	376.7
60°	614.2	528.7	436.6	344.6	282.5	241.8	224.7	222.6	226.9	248.3	286.8
62.5°	481.6	410.9	338.1	263.3	211.9	194.8	173.3	171.2	175.5	188.3	218.3
65°	346.7	301.8	246.1	192.6	152.0	128.4	119.9	122.0	126.3	134.8	162.7
67.5°	241.8	209.7	171.2	134.8	104.9	94.2	85.6	83.5	85.6	100.6	115.6
70°	162.7	143.4	115.6	102.7	72.8	57.8	59.9	53.5	62.1	62.1	74.9
72.5°	107.0	94.2	77.0	59.9	51.4	40.7	40.7	38.5	42.8	44.9	55.7
75°	55.7	42.8	42.8	30.0	21.4	10.7	19.3	17.1	15.0	17.1	21.4
77.5°	38.5	32.1	30.0	23.6	21.4	17.1	17.1	17.1	17.1	19.3	21.4
80°	23.6	23.6	17.1	15.0	12.8	10.7	12.8	12.8	12.8	12.8	15.0
82.5°	15.0	12.8	12.8	10.7	10.7	8.5	8.5	8.5	8.5	8.5	12.8
85°	12.8	8.5	8.5	6.4	8.5	15.0	6.4	8.5	8.5	8.5	6.4
87.5°	4.3	6.4	6.4	6.4	4.3	2.1	4.3	6.4	6.4	10.7	8.5
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°	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2	3987.2
2.5°	3993.7	3995.8	3995.8	3993.7	3993.7	3989.4	3997.9	3991.5	3993.7	4002.2	3995.8
5°	3997.9	4000.1	4000.1	3997.9	3997.9	3997.9	4000.1	4000.1	3997.9	3995.8	4000.1
7.5°	4006.5	4004.3	4004.3	4000.1	4000.1	3995.8	4000.1	3993.7	3997.9	3993.7	4000.1
10°	3995.8	3997.9	3995.8	3993.7	3993.7	3991.5	3991.5	3985.1	3987.2	3980.8	3985.1
12.5°	3989.4	3987.2	3987.2	3982.9	3978.7	3974.4	3972.2	3965.8	3965.8	3950.8	3957.3
15°	3972.2	3974.4	3968.0	3959.4	3955.1	3944.4	3940.1	3931.6	3923.0	3912.3	3914.5
17.5°	3957.3	3950.8	3942.3	3933.7	3916.6	3908.0	3899.5	3886.6	3882.3	3869.5	3865.3
20°	3912.3	3908.0	3897.4	3882.3	3871.6	3852.4	3843.8	3831.0	3820.3	3807.4	3801.0
22.5°	3854.5	3850.2	3837.4	3822.4	3805.3	3796.8	3788.2	3764.7	3753.9	3741.1	3738.9
25°	3781.8	3775.3	3762.5	3745.4	3736.8	3713.3	3704.7	3687.6	3683.3	3670.5	3668.4
27.5°	3670.5	3661.9	3646.9	3625.5	3610.5	3595.6	3587.0	3574.1	3569.9	3557.0	3554.9
30°	3503.6	3492.8	3462.9	3454.3	3428.6	3413.6	3413.6	3396.5	3398.7	3390.1	3390.1
32.5°	3240.3	3223.2	3199.6	3182.5	3165.4	3156.8	3156.8	3150.4	3154.7	3154.7	3159.0
35°	2891.4	2867.9	2855.0	2844.3	2844.3	2852.9	2878.6	2885.0	2897.9	2908.6	2917.1
37.5°	2444.1	2442.0	2457.0	2469.8	2501.9	2538.3	2583.2	2621.8	2658.1	2683.8	2709.5
40°	1960.4	2014.0	2056.7	2116.7	2165.9	2236.5	2317.8	2384.2	2446.3	2491.2	2538.3
42.5°	1530.2	1598.7	1688.6	1776.4	1864.1	1960.4	2067.5	2159.5	2240.8	2302.9	2352.1
45°	1192.1	1286.3	1395.4	1506.7	1620.2	1740.0	1851.3	1945.5	2031.1	2095.3	2144.5
47.5°	960.9	1063.7	1187.8	1309.8	1438.2	1564.5	1688.6	1770.0	1840.6	1891.9	1936.9
50°	794.0	903.2	1033.7	1172.8	1301.2	1427.5	1534.5	1613.7	1671.5	1716.5	1744.3
52.5°	663.4	779.0	918.2	1057.3	1185.7	1301.2	1397.6	1457.5	1504.6	1536.7	1562.3
55°	547.9	659.2	789.8	920.3	1046.6	1155.7	1234.9	1279.9	1316.2	1335.5	1350.5
57.5°	447.3	550.0	669.9	789.8	898.9	988.8	1050.9	1095.8	1112.9	1127.9	1125.7
60°	351.0	447.3	556.5	659.2	753.4	826.1	871.1	896.7	909.6	916.0	911.7
62.5°	276.1	363.8	447.3	537.2	605.7	667.7	710.6	710.6	717.0	719.1	725.6
65°	205.4	271.8	344.6	410.9	466.5	507.2	530.8	537.2	545.8	543.6	539.3
67.5°	152.0	201.2	254.7	303.9	342.4	368.1	385.2	400.2	398.1	393.8	391.7
70°	104.9	137.0	184.1	214.0	241.8	267.5	271.8	273.9	276.1	278.2	273.9
72.5°	72.8	96.3	122.0	147.7	164.8	175.5	186.2	188.3	188.3	188.3	186.2
75°	36.4	49.2	72.8	83.5	98.5	102.7	111.3	111.3	117.7	109.1	107.0
77.5°	32.1	38.5	51.4	59.9	66.3	72.8	74.9	81.3	79.2	74.9	77.0
80°	19.3	23.6	32.1	36.4	44.9	47.1	49.2	51.4	49.2	51.4	51.4
82.5°	15.0	17.1	21.4	21.4	27.8	27.8	30.0	30.0	32.1	32.1	32.1
85°	8.5	15.0	12.8	25.7	17.1	17.1	21.4	25.7	21.4	21.4	25.7
87.5°	8.5	8.5	6.4	8.5	8.5	8.5	10.7	12.8	12.8	15.0	12.8
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: P249335

CATALOG NUMBER: LSR8B70D010 EC8B70850 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3987.2	3987.2	3987.2	3987.2
2.5°	3993.7	3997.9	3991.5	3989.4
5°	4000.1	4000.1	3995.8	3995.8
7.5°	4000.1	4000.1	3993.7	3989.4
10°	3982.9	3982.9	3976.5	3972.2
12.5°	3950.8	3950.8	3948.7	3942.3
15°	3910.2	3910.2	3901.6	3895.2
17.5°	3854.5	3858.8	3848.1	3848.1
20°	3794.6	3792.5	3783.9	3779.6
22.5°	3732.6	3728.3	3726.1	3713.3
25°	3666.2	3661.9	3655.5	3649.1
27.5°	3552.8	3550.6	3544.2	3535.7
30°	3379.4	3377.2	3368.7	3368.7
32.5°	3154.7	3152.5	3144.0	3146.1
35°	2921.4	2930.0	2925.7	2917.1
37.5°	2726.6	2733.1	2737.4	2733.1
40°	2564.0	2583.2	2585.4	2589.7
42.5°	2390.6	2416.3	2424.9	2429.1
45°	2183.0	2206.6	2225.8	2221.5
47.5°	1971.1	1988.2	2005.4	1992.5
50°	1767.8	1778.5	1785.0	1785.0
52.5°	1575.2	1575.2	1573.1	1575.2
55°	1354.8	1354.8	1346.2	1350.5
57.5°	1123.6	1127.9	1121.5	1110.8
60°	909.6	898.9	894.6	888.2
62.5°	708.4	708.4	693.5	712.7
65°	530.8	524.4	517.9	515.8
67.5°	385.2	383.1	376.7	374.5
70°	271.8	263.3	261.1	256.8
72.5°	181.9	181.9	177.6	177.6
75°	111.3	100.6	98.5	100.6
77.5°	77.0	74.9	74.9	72.8
80°	51.4	49.2	53.5	47.1
82.5°	32.1	34.2	32.1	34.2
85°	21.4	25.7	23.6	23.6
87.5°	12.8	12.8	12.8	12.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)