

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: P248436

Luminaire Tested: **LSR8B80D010 EC8B80827 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248436
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: LSR8B80D010 EC8B80827 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8025.0 lumens
Efficiency: N/A
Efficacy: 107.9 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

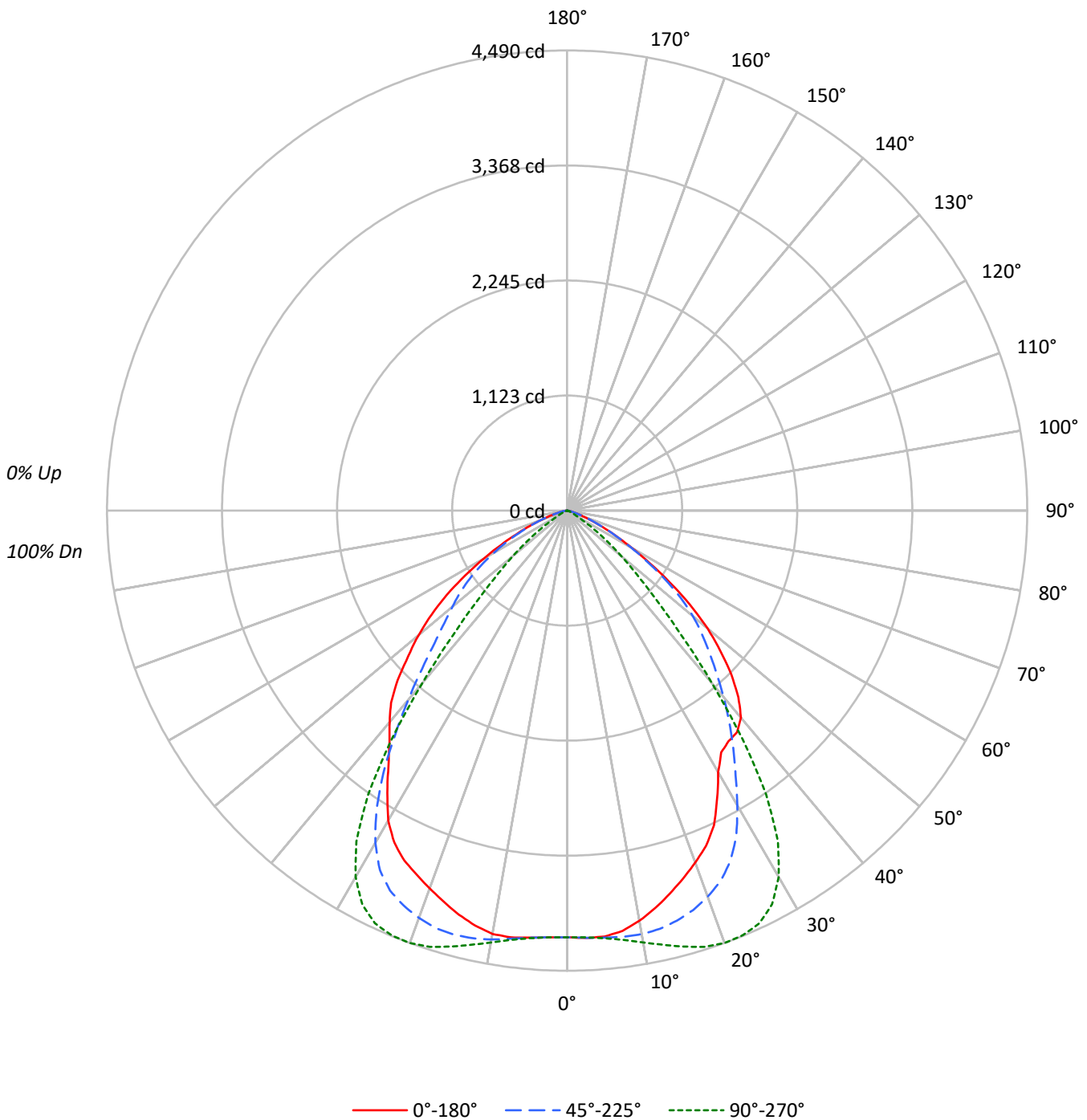
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	128375	128375	128375
5°	129141	129617	129481
10°	127243	133953	131326
15°	123521	140594	130292
20°	119937	147344	128712
25°	115332	151118	128114
30°	104958	146977	124314
35°	103397	127354	114378
40°	106206	88325	108428
45°	98871	53386	101954
50°	85761	32967	90846
55°	65815	17225	77099
60°	44836	6951	58188
65°	27894	3546	40145
70°	15138	2191	24505
75°	7899	1048	14476
80°	3534	1172	7849
85°	2335	778	7041



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	400.4	5.0
10°-20°	1186.0	14.8
20°-30°	1809.4	22.5
30°-40°	1888.1	23.5
40°-50°	1418.2	17.7
50°-60°	872.6	10.9
60°-70°	355.1	4.4
70°-80°	83.7	1.0
80°-90°	11.5	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°	3395.8	42.3
0°-40°	5283.9	65.8
0°-60°	7574.7	94.4
0°-90°	8025.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8025.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4163	4163	4163	4163	4163	
5°	4172	4183	4187	4183	4183	395
15°	3869	4141	4404	4282	4081	1090
25°	3390	3770	4442	4090	3765	1541
35°	2747	2824	3383	3127	3038	1734
45°	2267	1962	1224	1827	2338	1730
55°	1224	1162	320	1162	1434	1100
65°	382	387	49	519	550	399
75°	66	66	9	117	122	80
85°	7	7	2	16	20	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°	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1
2.5°	4174.2	4167.5	4174.2	4174.2	4176.4	4172.0	4174.2	4176.4	4172.0	4172.0	4172.0
5°	4172.0	4167.5	4172.0	4169.7	4174.2	4174.2	4178.6	4178.6	4183.0	4183.0	4189.6
7.5°	4136.6	4127.8	4136.6	4143.2	4147.6	4156.5	4167.5	4176.4	4185.2	4194.1	4205.1
10°	4063.7	4063.7	4070.3	4083.6	4096.8	4112.3	4132.2	4154.3	4176.4	4196.2	4216.1
12.5°	3973.1	3966.4	3979.7	3997.4	4017.3	4041.6	4072.5	4105.7	4141.0	4180.8	4211.7
15°	3869.2	3862.6	3878.0	3895.7	3920.0	3955.4	3993.0	4037.2	4088.0	4141.0	4191.8
17.5°	3763.1	3760.9	3776.4	3800.7	3820.6	3858.1	3906.8	3959.8	4017.3	4088.0	4154.3
20°	3654.9	3652.7	3668.1	3688.0	3714.5	3749.9	3798.5	3860.4	3928.9	4008.5	4085.8
22.5°	3542.2	3544.4	3557.6	3579.7	3601.9	3639.4	3690.2	3752.1	3827.2	3913.4	3999.6
25°	3389.7	3378.7	3396.3	3418.5	3456.0	3486.9	3535.6	3601.9	3679.2	3769.8	3871.4
27.5°	3168.7	3166.5	3182.0	3201.9	3235.0	3272.6	3325.6	3394.1	3475.9	3575.3	3674.7
30°	2947.7	2952.2	2958.8	2978.7	3000.8	3038.4	3091.4	3148.9	3226.2	3321.2	3427.3
32.5°	2797.5	2797.5	2806.4	2819.6	2835.1	2855.0	2892.5	2934.5	2994.2	3060.5	3137.8
35°	2746.7	2737.8	2746.7	2748.9	2751.1	2755.5	2762.1	2775.4	2795.3	2824.0	2852.7
37.5°	2724.6	2718.0	2718.0	2709.1	2698.1	2684.8	2667.1	2647.2	2625.2	2596.4	2574.3
40°	2638.4	2634.0	2629.6	2620.7	2596.4	2569.9	2541.2	2494.8	2443.9	2373.2	2302.5
42.5°	2472.7	2468.3	2466.0	2448.4	2426.3	2395.3	2362.2	2313.6	2249.5	2158.9	2057.2
45°	2267.2	2258.3	2251.7	2236.3	2220.7	2194.2	2163.3	2119.1	2055.0	1962.2	1840.7
47.5°	2028.5	2024.1	2021.9	2015.3	1999.8	1984.3	1964.5	1929.1	1871.6	1783.2	1657.3
50°	1787.7	1778.8	1783.2	1781.1	1774.4	1763.4	1750.1	1725.8	1681.6	1602.0	1487.1
52.5°	1511.4	1511.4	1509.3	1515.9	1518.1	1515.9	1518.1	1491.6	1454.0	1394.3	1297.1
55°	1224.2	1224.2	1230.8	1239.7	1248.5	1250.7	1248.5	1237.5	1210.9	1162.3	1076.1
57.5°	954.6	950.2	963.4	976.7	985.6	994.4	987.7	978.9	963.4	923.6	857.4
60°	727.0	727.0	735.8	744.7	753.5	762.4	760.1	757.9	744.7	718.1	665.1
62.5°	534.7	537.0	537.0	543.6	552.4	561.3	567.9	561.3	554.6	537.0	501.6
65°	382.3	380.0	382.3	388.9	395.6	404.4	408.8	406.6	399.9	386.7	360.2
67.5°	256.3	254.1	262.9	265.2	269.6	278.4	276.2	278.4	276.2	265.2	243.1
70°	167.9	163.5	167.9	165.7	172.4	174.6	179.0	181.2	179.0	172.4	165.7
72.5°	103.9	101.6	103.9	106.1	108.3	110.5	114.9	114.9	112.7	108.3	99.4
75°	66.3	59.6	61.9	57.5	61.9	61.9	66.3	68.5	66.3	66.3	61.9
77.5°	39.8	39.8	39.8	39.8	39.8	39.8	39.8	42.0	44.2	39.8	37.6
80°	19.9	19.9	22.1	22.1	22.1	24.3	22.1	22.1	22.1	24.3	17.7
82.5°	15.5	13.2	13.2	13.2	15.5	13.2	13.2	13.2	13.2	13.2	13.2
85°	6.6	8.8	6.6	4.4	6.6	6.6	8.8	6.6	6.6	6.6	8.8
87.5°	2.2	2.2	0.0	0.0	0.0	2.2	0.0	2.2	2.2	4.4	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°	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1
2.5°	4174.2	4169.7	4169.7	4167.5	4172.0	4167.5	4169.7	4167.5	4167.5	4172.0	4167.5
5°	4189.6	4191.8	4187.4	4185.2	4191.8	4191.8	4191.8	4187.4	4187.4	4189.6	4187.4
7.5°	4211.7	4216.1	4218.3	4220.6	4225.0	4227.2	4227.2	4225.0	4222.8	4229.4	4220.6
10°	4236.0	4242.7	4255.9	4262.6	4273.6	4273.6	4278.0	4278.0	4273.6	4278.0	4275.8
12.5°	4227.2	4267.0	4289.1	4304.5	4320.0	4333.2	4337.7	4339.9	4337.7	4346.5	4337.7
15°	4242.7	4275.8	4311.2	4337.7	4366.4	4381.8	4386.3	4404.0	4408.4	4410.6	4397.4
17.5°	4218.3	4278.0	4315.6	4355.4	4397.4	4426.1	4452.6	4463.7	4465.9	4470.2	4452.6
20°	4163.1	4229.4	4286.8	4344.3	4392.9	4437.1	4459.2	4490.1	4481.3	4499.0	4474.7
22.5°	4088.0	4163.1	4236.0	4311.2	4362.0	4415.0	4461.4	4483.5	4494.6	4494.6	4468.0
25°	3968.7	4057.1	4136.6	4213.9	4291.3	4355.4	4408.4	4441.5	4448.2	4446.0	4415.0
27.5°	3783.0	3878.0	3970.9	4059.3	4154.3	4229.4	4291.3	4331.0	4342.1	4342.1	4309.0
30°	3526.7	3628.4	3719.0	3825.0	3922.3	4006.2	4092.4	4127.8	4147.6	4147.6	4110.1
32.5°	3221.8	3307.9	3391.9	3495.8	3601.9	3696.9	3778.6	3827.2	3851.5	3849.3	3816.2
35°	2890.3	2932.3	2996.4	3073.7	3168.7	3257.1	3336.7	3383.1	3425.1	3422.8	3391.9
37.5°	2558.8	2547.8	2554.4	2583.2	2642.8	2704.7	2766.6	2810.8	2846.1	2861.6	2855.0
40°	2234.0	2176.6	2121.3	2101.5	2105.8	2128.0	2161.1	2194.2	2234.0	2253.9	2262.8
42.5°	1942.3	1845.1	1747.9	1675.0	1633.0	1619.7	1635.2	1646.2	1670.5	1699.3	1728.0
45°	1708.1	1577.8	1449.6	1336.9	1266.2	1224.2	1215.3	1224.2	1237.5	1266.2	1303.7
47.5°	1515.9	1363.4	1219.8	1093.8	989.9	934.7	919.3	914.8	928.1	954.6	1005.4
50°	1345.7	1193.2	1034.2	888.3	780.0	718.1	696.1	687.2	702.7	722.6	769.0
52.5°	1160.1	1009.8	846.3	704.9	592.2	528.1	503.8	490.6	499.4	525.9	572.3
55°	959.0	819.8	671.7	525.9	417.6	358.0	329.2	320.4	329.2	358.0	404.4
57.5°	757.9	640.8	517.1	380.0	282.8	223.2	194.4	185.6	209.9	221.0	269.6
60°	592.2	497.2	391.1	278.4	194.4	148.0	119.3	112.7	123.8	143.6	183.4
62.5°	444.2	384.5	300.5	198.9	143.6	95.0	79.5	72.9	79.5	95.0	126.0
65°	322.6	276.2	209.9	145.8	97.2	70.7	53.0	48.6	55.3	66.3	92.8
67.5°	221.0	185.6	145.8	101.6	66.3	44.2	37.6	37.6	39.8	48.6	68.5
70°	143.6	121.5	92.8	66.3	44.2	33.1	28.7	24.3	28.7	35.4	46.4
72.5°	90.6	77.3	59.6	46.4	33.1	24.3	19.9	17.7	22.1	26.5	35.4
75°	55.3	42.0	30.9	24.3	17.7	17.7	17.7	8.8	11.0	17.7	22.1
77.5°	33.1	28.7	24.3	19.9	15.5	8.8	8.8	8.8	11.0	13.2	19.9
80°	17.7	15.5	11.0	11.0	8.8	6.6	8.8	6.6	4.4	11.0	13.2
82.5°	11.0	8.8	8.8	8.8	11.0	4.4	6.6	4.4	6.6	8.8	6.6
85°	6.6	6.6	6.6	4.4	11.0	4.4	4.4	2.2	2.2	4.4	4.4
87.5°	0.0	2.2	2.2	0.0	2.2	0.0	2.2	2.2	2.2	2.2	2.2
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°	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1	4163.1
2.5°	4169.7	4167.5	4169.7	4167.5	4167.5	4167.5	4169.7	4169.7	4167.5	4167.5	4172.0
5°	4187.4	4187.4	4187.4	4185.2	4183.0	4183.0	4187.4	4187.4	4180.8	4187.4	4187.4
7.5°	4225.0	4218.3	4225.0	4216.1	4211.7	4213.9	4216.1	4211.7	4207.3	4209.5	4209.5
10°	4273.6	4267.0	4267.0	4260.4	4253.7	4249.3	4244.9	4233.8	4222.8	4220.6	4211.7
12.5°	4331.0	4320.0	4313.4	4300.1	4289.1	4273.6	4260.4	4242.7	4220.6	4205.1	4189.6
15°	4388.5	4370.8	4355.4	4333.2	4309.0	4282.4	4253.7	4225.0	4189.6	4158.7	4132.2
17.5°	4434.9	4410.6	4381.8	4346.5	4311.2	4271.4	4229.4	4187.4	4136.6	4096.8	4065.9
20°	4450.4	4415.0	4377.5	4331.0	4284.6	4229.4	4176.4	4121.1	4063.7	4021.7	3986.3
22.5°	4430.5	4388.5	4342.1	4293.5	4231.6	4172.0	4110.1	4046.0	3995.2	3937.7	3904.6
25°	4375.2	4324.4	4273.6	4216.1	4156.5	4090.2	4023.9	3957.6	3895.7	3864.8	3822.8
27.5°	4262.6	4207.3	4152.1	4092.4	4023.9	3957.6	3889.1	3825.0	3772.0	3730.0	3705.7
30°	4063.7	3999.6	3935.5	3871.4	3811.8	3743.2	3679.2	3626.1	3573.1	3540.0	3515.7
32.5°	3758.7	3701.3	3637.2	3575.3	3520.1	3462.6	3409.6	3363.2	3325.6	3303.5	3285.8
35°	3347.7	3290.3	3241.7	3197.5	3151.0	3126.8	3093.6	3067.1	3051.6	3042.8	3040.6
37.5°	2830.6	2797.5	2782.0	2773.2	2764.3	2757.7	2762.1	2773.2	2782.0	2797.5	2815.2
40°	2278.2	2306.9	2315.8	2346.7	2375.4	2413.0	2455.0	2503.6	2543.4	2594.2	2629.6
42.5°	1774.4	1827.4	1889.3	1955.6	2026.3	2094.8	2178.8	2256.1	2326.8	2390.9	2446.2
45°	1363.4	1445.1	1538.0	1633.0	1728.0	1827.4	1929.1	2024.1	2108.1	2176.6	2234.0
47.5°	1062.9	1153.5	1272.8	1389.9	1504.8	1621.9	1734.6	1834.0	1904.8	1971.1	2021.9
50°	841.9	945.8	1076.1	1210.9	1336.9	1460.6	1579.9	1672.8	1743.5	1796.5	1834.0
52.5°	651.8	775.6	908.2	1049.6	1184.4	1319.2	1429.7	1515.9	1573.3	1619.7	1648.4
55°	486.1	607.7	749.1	894.9	1031.9	1162.3	1266.2	1341.3	1392.1	1418.6	1434.1
57.5°	351.3	461.8	603.2	749.1	872.8	996.6	1080.6	1149.1	1177.8	1193.2	1199.9
60°	256.3	358.0	483.9	609.9	727.0	826.4	899.4	945.8	967.9	976.7	974.5
62.5°	187.8	276.2	384.5	490.6	585.6	667.3	724.8	755.7	766.8	771.2	764.6
65°	143.6	212.1	304.9	386.7	459.6	519.3	561.3	581.2	587.8	585.6	581.2
67.5°	106.1	159.1	227.6	289.5	342.5	388.9	411.0	428.7	433.1	426.5	419.8
70°	75.2	117.1	165.7	207.7	247.5	274.0	298.3	300.5	300.5	298.3	293.9
72.5°	53.0	81.8	112.7	141.4	165.7	185.6	194.4	201.1	198.9	196.6	192.3
75°	35.4	50.8	81.8	88.4	110.5	117.1	126.0	126.0	128.1	121.5	121.5
77.5°	22.1	35.4	48.6	57.5	66.3	75.2	79.5	79.5	81.8	79.5	79.5
80°	13.2	22.1	26.5	39.8	39.8	46.4	48.6	50.8	46.4	53.0	46.4
82.5°	8.8	13.2	19.9	19.9	24.3	28.7	28.7	30.9	30.9	28.7	28.7
85°	6.6	8.8	11.0	13.2	13.2	15.5	13.2	13.2	15.5	17.7	15.5
87.5°	2.2	4.4	2.2	4.4	4.4	8.8	6.6	6.6	6.6	8.8	8.8
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: P248436

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4163.1	4163.1	4163.1	4163.1
2.5°	4167.5	4169.7	4167.5	4167.5
5°	4187.4	4185.2	4187.4	4183.0
7.5°	4202.9	4202.9	4200.7	4200.7
10°	4202.9	4194.1	4194.1	4194.1
12.5°	4169.7	4158.7	4152.1	4147.6
15°	4112.3	4092.4	4083.6	4081.3
17.5°	4037.2	4019.5	4008.5	4001.8
20°	3951.0	3933.3	3920.0	3922.3
22.5°	3875.8	3856.0	3847.1	3842.7
25°	3800.7	3776.4	3769.8	3765.4
27.5°	3679.2	3665.9	3659.3	3652.7
30°	3493.6	3486.9	3475.9	3491.3
32.5°	3279.2	3268.2	3259.3	3266.0
35°	3042.8	3036.1	3042.8	3038.4
37.5°	2826.3	2832.8	2841.7	2846.1
40°	2656.1	2680.4	2689.2	2693.6
42.5°	2485.9	2514.7	2532.3	2543.4
45°	2276.0	2304.7	2324.6	2337.9
47.5°	2059.5	2083.8	2103.6	2101.5
50°	1862.8	1876.1	1884.9	1893.7
52.5°	1663.9	1663.9	1666.1	1666.1
55°	1438.5	1434.1	1431.9	1434.1
57.5°	1191.0	1186.6	1184.4	1177.8
60°	965.7	952.4	943.5	943.5
62.5°	755.7	740.2	733.6	731.4
65°	567.9	565.7	552.4	550.2
67.5°	411.0	402.2	393.3	395.6
70°	289.5	276.2	276.2	271.8
72.5°	187.8	181.2	179.0	179.0
75°	117.1	117.1	112.7	121.5
77.5°	77.3	77.3	75.2	77.3
80°	46.4	46.4	46.4	44.2
82.5°	28.7	30.9	28.7	28.7
85°	15.5	17.7	13.2	19.9
87.5°	8.8	11.0	8.8	11.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)