

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: P248409

Luminaire Tested: **LSR8B80D010 EC8B80950 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248409
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 EC8B80950 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8111.0 lumens
Efficiency: N/A
Efficacy: 109.0 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

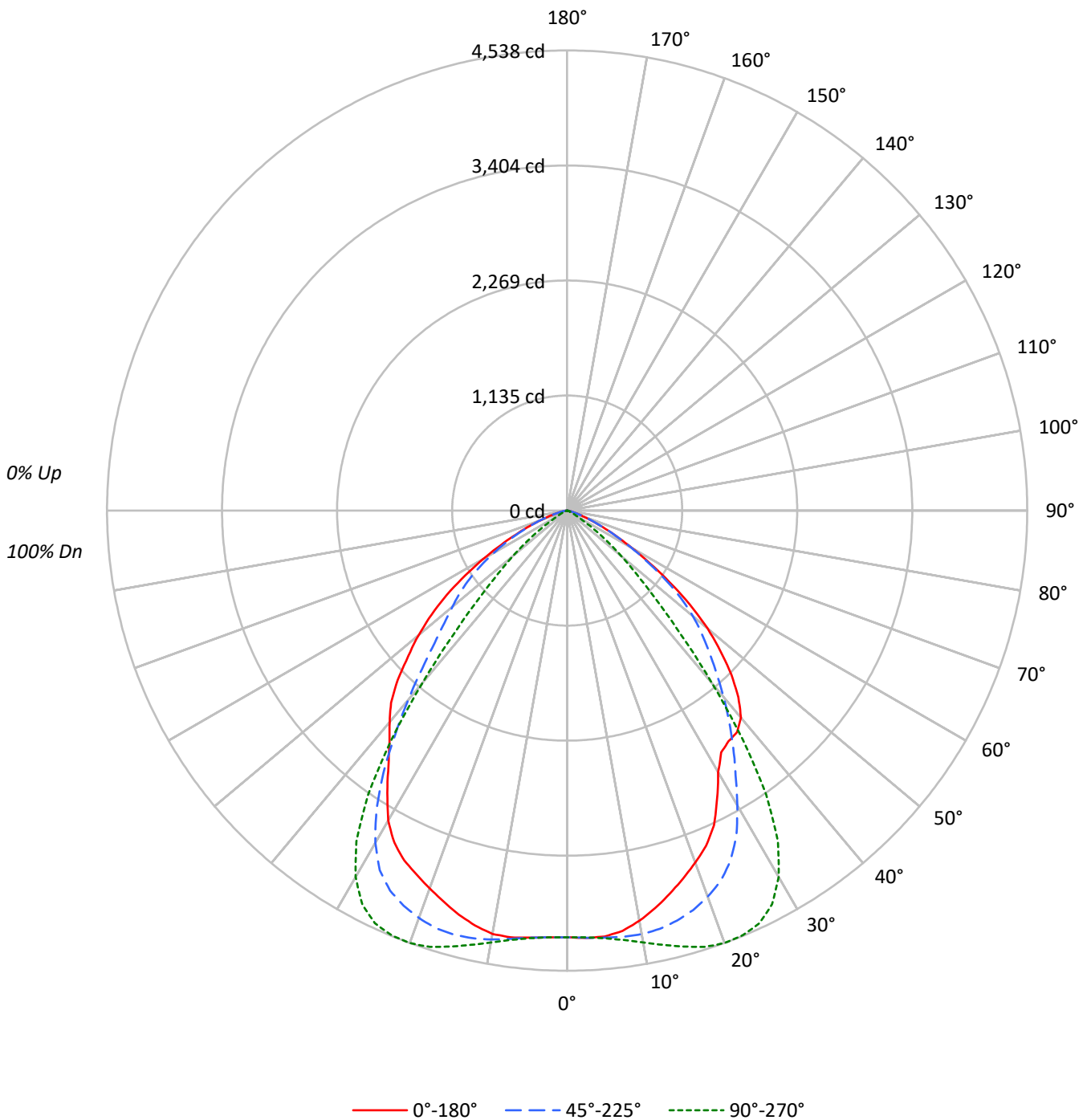
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	129750	129750	129750
5°	130524	131007	130868
10°	128605	135390	132732
15°	124846	142101	131690
20°	121223	148926	130090
25°	116567	152738	129486
30°	106083	148551	125649
35°	104504	128721	115602
40°	107345	89275	109591
45°	99930	53958	103048
50°	86677	33322	91820
55°	66519	17408	77927
60°	45317	7025	58817
65°	28194	3583	40576
70°	15300	2218	24767
75°	7983	1060	14631
80°	3569	1190	7920
85°	2371	778	7112



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	404.6	5.0
10°-20°	1198.7	14.8
20°-30°	1828.8	22.5
30°-40°	1908.4	23.5
40°-50°	1433.4	17.7
50°-60°	882.0	10.9
60°-70°	358.9	4.4
70°-80°	84.6	1.0
80°-90°	11.6	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°	3432.1	42.3
0°-40°	5340.5	65.8
0°-60°	7655.9	94.4
0°-90°	8111.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8111.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4208	4208	4208	4208	4208	
5°	4217	4228	4232	4228	4228	399
15°	3911	4185	4451	4328	4125	1102
25°	3426	3810	4489	4134	3806	1558
35°	2776	2854	3419	3160	3071	1753
45°	2292	1983	1237	1847	2363	1748
55°	1237	1175	324	1175	1450	1112
65°	386	391	49	525	556	403
75°	67	67	9	118	123	81
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°	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7
2.5°	4218.9	4212.2	4218.9	4218.9	4221.1	4216.7	4218.9	4221.1	4216.7	4216.7	4216.7
5°	4216.7	4212.2	4216.7	4214.4	4218.9	4218.9	4223.4	4223.4	4227.8	4227.8	4234.5
7.5°	4180.9	4172.0	4180.9	4187.6	4192.1	4201.0	4212.2	4221.1	4230.1	4239.0	4250.2
10°	4107.2	4107.2	4113.9	4127.3	4140.7	4156.3	4176.4	4198.8	4221.1	4241.2	4261.3
12.5°	4015.7	4008.9	4022.3	4040.2	4060.3	4084.9	4116.2	4149.7	4185.4	4225.6	4256.9
15°	3910.7	3904.0	3919.6	3937.5	3962.1	3997.8	4035.8	4080.4	4131.8	4185.4	4236.8
17.5°	3803.5	3801.2	3816.9	3841.5	3861.6	3899.5	3948.7	4002.2	4060.3	4131.8	4198.8
20°	3694.1	3691.8	3707.5	3727.6	3754.3	3790.1	3839.2	3901.7	3971.0	4051.4	4129.6
22.5°	3580.1	3582.4	3595.8	3618.1	3640.5	3678.4	3729.8	3792.3	3868.2	3955.3	4042.4
25°	3426.0	3414.9	3432.7	3455.1	3493.0	3524.3	3573.5	3640.5	3718.6	3810.2	3912.9
27.5°	3202.7	3200.4	3216.1	3236.2	3269.7	3307.7	3361.3	3430.5	3513.1	3613.6	3714.1
30°	2979.3	2983.8	2990.5	3010.6	3032.9	3070.9	3124.5	3182.6	3260.8	3356.8	3464.0
32.5°	2827.5	2827.5	2836.4	2849.8	2865.4	2885.6	2923.5	2965.9	3026.3	3093.3	3171.4
35°	2776.1	2767.2	2776.1	2778.3	2780.6	2785.1	2791.7	2805.2	2825.2	2854.3	2883.3
37.5°	2753.8	2747.1	2747.1	2738.2	2727.0	2713.6	2695.7	2675.6	2653.3	2624.2	2601.9
40°	2666.7	2662.2	2657.7	2648.8	2624.2	2597.5	2568.4	2521.5	2470.1	2398.6	2327.2
42.5°	2499.2	2494.7	2492.5	2474.6	2452.3	2421.0	2387.5	2338.4	2273.6	2182.0	2079.3
45°	2291.5	2282.5	2275.9	2260.2	2244.5	2217.8	2186.5	2141.8	2077.0	1983.3	1860.4
47.5°	2050.3	2045.8	2043.5	2036.9	2021.2	2005.6	1985.5	1949.8	1891.7	1802.3	1675.1
50°	1806.8	1797.9	1802.3	1800.1	1793.4	1782.3	1768.8	1744.3	1699.6	1619.2	1503.1
52.5°	1527.6	1527.6	1525.4	1532.1	1534.3	1532.1	1534.3	1507.6	1469.6	1409.3	1311.0
55°	1237.3	1237.3	1244.0	1253.0	1261.9	1264.1	1261.9	1250.7	1223.9	1174.8	1087.7
57.5°	964.8	960.4	973.8	987.2	996.1	1005.0	998.3	989.4	973.8	933.5	866.5
60°	734.8	734.8	743.7	752.7	761.6	770.5	768.3	766.1	752.7	725.8	672.3
62.5°	540.5	542.7	542.7	549.4	558.3	567.3	574.0	567.3	560.6	542.7	507.0
65°	386.4	384.1	386.4	393.1	399.8	408.7	413.2	410.9	404.2	390.8	364.1
67.5°	259.1	256.8	265.8	268.0	272.5	281.4	279.2	281.4	279.2	268.0	245.7
70°	169.7	165.3	169.7	167.5	174.2	176.5	180.9	183.1	180.9	174.2	167.5
72.5°	105.0	102.7	105.0	107.2	109.5	111.6	116.1	116.1	113.9	109.5	100.5
75°	67.0	60.3	62.5	58.1	62.5	62.5	67.0	69.2	67.0	67.0	62.5
77.5°	40.2	40.2	40.2	40.2	40.2	40.2	40.2	42.5	44.6	40.2	38.0
80°	20.1	20.1	22.4	22.4	22.4	24.6	22.4	22.4	22.4	24.6	17.9
82.5°	15.6	13.4	13.4	13.4	15.6	13.4	13.4	13.4	13.4	13.4	13.4
85°	6.7	8.9	6.7	4.5	6.7	6.7	8.9	6.7	6.7	6.7	8.9
87.5°	2.2	2.2	0.0	0.0	0.0	2.2	0.0	2.2	2.2	4.5	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°	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7
2.5°	4218.9	4214.4	4214.4	4212.2	4216.7	4212.2	4214.4	4212.2	4212.2	4216.7	4212.2
5°	4234.5	4236.8	4232.3	4230.1	4236.8	4236.8	4236.8	4232.3	4232.3	4234.5	4232.3
7.5°	4256.9	4261.3	4263.6	4265.8	4270.3	4272.5	4272.5	4270.3	4268.0	4274.8	4265.8
10°	4281.4	4288.1	4301.5	4308.3	4319.4	4319.4	4323.9	4323.9	4319.4	4323.9	4321.6
12.5°	4272.5	4312.7	4335.0	4350.7	4366.3	4379.7	4384.2	4386.4	4384.2	4393.1	4384.2
15°	4288.1	4321.6	4357.4	4384.2	4413.2	4428.8	4433.3	4451.2	4455.6	4457.9	4444.5
17.5°	4263.6	4323.9	4361.8	4402.0	4444.5	4473.5	4500.3	4511.5	4513.7	4518.2	4500.3
20°	4207.7	4274.8	4332.8	4390.9	4440.0	4484.7	4507.0	4538.3	4529.4	4547.2	4522.6
22.5°	4131.8	4207.7	4281.4	4357.4	4408.7	4462.4	4509.2	4531.5	4542.7	4542.7	4515.9
25°	4011.2	4100.5	4180.9	4259.1	4337.3	4402.0	4455.6	4489.1	4495.9	4493.6	4462.4
27.5°	3823.6	3919.6	4013.4	4102.8	4198.8	4274.8	4337.3	4377.4	4388.6	4388.6	4355.1
30°	3564.5	3667.2	3758.8	3866.0	3964.3	4049.2	4136.3	4172.0	4192.1	4192.1	4154.1
32.5°	3256.3	3343.4	3428.3	3533.2	3640.5	3736.5	3819.1	3868.2	3892.8	3890.6	3857.1
35°	2921.3	2963.7	3028.5	3106.7	3202.7	3292.0	3372.4	3419.4	3461.8	3459.5	3428.3
37.5°	2586.3	2575.1	2581.8	2610.8	2671.1	2733.7	2796.2	2840.9	2876.6	2892.3	2885.6
40°	2258.0	2199.9	2144.0	2124.0	2128.4	2150.8	2184.3	2217.8	2258.0	2278.1	2287.0
42.5°	1963.2	1864.9	1766.6	1692.9	1650.5	1637.1	1652.7	1663.9	1688.4	1717.5	1746.5
45°	1726.4	1594.7	1465.1	1351.2	1279.7	1237.3	1228.4	1237.3	1250.7	1279.7	1317.7
47.5°	1532.1	1378.0	1232.8	1105.5	1000.5	944.7	929.1	924.6	938.0	964.8	1016.2
50°	1360.1	1206.0	1045.2	897.8	788.4	725.8	703.5	694.6	710.2	730.3	777.2
52.5°	1172.5	1020.7	855.4	712.4	598.6	533.8	509.2	495.8	504.7	531.6	578.4
55°	969.3	828.6	678.9	531.6	422.1	361.8	332.8	323.8	332.8	361.8	408.7
57.5°	766.1	647.7	522.6	384.1	285.9	225.6	196.5	187.6	212.2	223.3	272.5
60°	598.6	502.5	395.3	281.4	196.5	149.6	120.6	113.9	125.1	145.1	185.4
62.5°	448.9	388.6	303.7	201.0	145.1	96.0	80.4	73.7	80.4	96.0	127.3
65°	326.1	279.2	212.2	147.4	98.3	71.5	53.6	49.1	55.8	67.0	93.8
67.5°	223.3	187.6	147.4	102.7	67.0	44.6	38.0	38.0	40.2	49.1	69.2
70°	145.1	122.8	93.8	67.0	44.6	33.5	29.0	24.6	29.0	35.7	46.9
72.5°	91.6	78.1	60.3	46.9	33.5	24.6	20.1	17.9	22.4	26.8	35.7
75°	55.8	42.5	31.3	24.6	17.9	17.9	17.9	8.9	11.1	17.9	22.4
77.5°	33.5	29.0	24.6	20.1	15.6	8.9	8.9	8.9	11.1	13.4	20.1
80°	17.9	15.6	11.1	11.1	8.9	6.7	8.9	6.7	4.5	11.1	13.4
82.5°	11.1	8.9	8.9	8.9	11.1	4.5	6.7	4.5	6.7	8.9	6.7
85°	6.7	6.7	6.7	4.5	11.1	4.5	4.5	2.2	2.2	4.5	4.5
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°	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7
2.5°	4214.4	4212.2	4214.4	4212.2	4212.2	4212.2	4214.4	4214.4	4212.2	4212.2	4216.7
5°	4232.3	4232.3	4232.3	4230.1	4227.8	4227.8	4232.3	4232.3	4225.6	4232.3	4232.3
7.5°	4270.3	4263.6	4270.3	4261.3	4256.9	4259.1	4261.3	4256.9	4252.4	4254.6	4254.6
10°	4319.4	4312.7	4312.7	4306.0	4299.3	4294.8	4290.4	4279.2	4268.0	4265.8	4256.9
12.5°	4377.4	4366.3	4359.6	4346.2	4335.0	4319.4	4306.0	4288.1	4265.8	4250.2	4234.5
15°	4435.5	4417.7	4402.0	4379.7	4355.1	4328.3	4299.3	4270.3	4234.5	4203.3	4176.4
17.5°	4482.4	4457.9	4428.8	4393.1	4357.4	4317.2	4274.8	4232.3	4180.9	4140.7	4109.4
20°	4498.0	4462.4	4424.4	4377.4	4330.5	4274.8	4221.1	4165.3	4107.2	4064.8	4029.1
22.5°	4478.0	4435.5	4388.6	4339.5	4276.9	4216.7	4154.1	4089.3	4038.0	3979.9	3946.4
25°	4422.1	4370.8	4319.4	4261.3	4201.0	4134.0	4067.0	4000.0	3937.5	3906.2	3863.8
27.5°	4308.3	4252.4	4196.6	4136.3	4067.0	4000.0	3930.8	3866.0	3812.4	3770.0	3745.4
30°	4107.2	4042.4	3977.7	3912.9	3852.6	3783.4	3718.6	3665.0	3611.4	3577.9	3553.3
32.5°	3799.0	3741.0	3676.2	3613.6	3557.8	3499.7	3446.1	3399.2	3361.3	3338.9	3321.0
35°	3383.6	3325.5	3276.4	3231.7	3184.8	3160.3	3126.8	3099.9	3084.3	3075.4	3073.2
37.5°	2861.0	2827.5	2811.8	2802.9	2794.0	2787.3	2791.7	2802.9	2811.8	2827.5	2845.3
40°	2302.6	2331.6	2340.6	2371.9	2400.9	2438.9	2481.3	2530.5	2570.6	2622.0	2657.7
42.5°	1793.4	1847.0	1909.6	1976.5	2048.0	2117.3	2202.1	2280.3	2351.8	2416.5	2472.4
45°	1378.0	1460.6	1554.5	1650.5	1746.5	1847.0	1949.8	2045.8	2130.7	2199.9	2258.0
47.5°	1074.3	1165.9	1286.5	1404.8	1521.0	1639.3	1753.2	1853.7	1925.2	1992.2	2043.5
50°	850.9	955.9	1087.7	1223.9	1351.2	1476.3	1596.9	1690.7	1762.2	1815.8	1853.7
52.5°	658.8	783.9	917.9	1060.9	1197.1	1333.3	1445.0	1532.1	1590.2	1637.1	1666.1
55°	491.3	614.2	757.1	904.5	1043.0	1174.8	1279.7	1355.7	1407.1	1433.8	1449.5
57.5°	355.1	466.8	609.7	757.1	882.2	1007.3	1092.1	1161.4	1190.4	1206.0	1212.7
60°	259.1	361.8	489.1	616.4	734.8	835.3	909.0	955.9	978.2	987.2	984.9
62.5°	189.8	279.2	388.6	495.8	591.8	674.5	732.6	763.8	775.0	779.4	772.8
65°	145.1	214.4	308.2	390.8	464.6	524.8	567.3	587.4	594.1	591.8	587.4
67.5°	107.2	160.8	230.1	292.6	346.2	393.1	415.4	433.3	437.7	431.1	424.3
70°	76.0	118.4	167.5	210.0	250.1	277.0	301.5	303.7	303.7	301.5	297.1
72.5°	53.6	82.6	113.9	143.0	167.5	187.6	196.5	203.2	201.0	198.8	194.3
75°	35.7	51.4	82.6	89.3	111.6	118.4	127.3	127.3	129.5	122.8	122.8
77.5°	22.4	35.7	49.1	58.1	67.0	76.0	80.4	80.4	82.6	80.4	80.4
80°	13.4	22.4	26.8	40.2	40.2	46.9	49.1	51.4	46.9	53.6	46.9
82.5°	8.9	13.4	20.1	20.1	24.6	29.0	29.0	31.3	31.3	29.0	29.0
85°	6.7	8.9	11.1	13.4	13.4	15.6	13.4	13.4	15.6	17.9	15.6
87.5°	2.2	4.5	2.2	4.5	4.5	8.9	6.7	6.7	6.7	8.9	8.9
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: P248409

CATALOG NUMBER: LSR8B80D010 EC8B80950 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4207.7	4207.7	4207.7	4207.7
2.5°	4212.2	4214.4	4212.2	4212.2
5°	4232.3	4230.1	4232.3	4227.8
7.5°	4247.9	4247.9	4245.7	4245.7
10°	4247.9	4239.0	4239.0	4239.0
12.5°	4214.4	4203.3	4196.6	4192.1
15°	4156.3	4136.3	4127.3	4125.1
17.5°	4080.4	4062.6	4051.4	4044.7
20°	3993.3	3975.4	3962.1	3964.3
22.5°	3917.4	3897.3	3888.3	3883.9
25°	3841.5	3816.9	3810.2	3805.7
27.5°	3718.6	3705.2	3698.5	3691.8
30°	3531.0	3524.3	3513.1	3528.8
32.5°	3314.4	3303.2	3294.3	3301.0
35°	3075.4	3068.7	3075.4	3070.9
37.5°	2856.5	2863.2	2872.2	2876.6
40°	2684.6	2709.1	2718.1	2722.5
42.5°	2512.6	2541.6	2559.5	2570.6
45°	2300.4	2329.4	2349.5	2363.0
47.5°	2081.5	2106.1	2126.2	2124.0
50°	1882.8	1896.2	1905.1	1914.0
52.5°	1681.7	1681.7	1684.0	1684.0
55°	1454.0	1449.5	1447.2	1449.5
57.5°	1203.8	1199.3	1197.1	1190.4
60°	976.0	962.6	953.7	953.7
62.5°	763.8	748.2	741.5	739.3
65°	574.0	571.7	558.3	556.1
67.5°	415.4	406.5	397.6	399.8
70°	292.6	279.2	279.2	274.7
72.5°	189.8	183.1	180.9	180.9
75°	118.4	118.4	113.9	122.8
77.5°	78.1	78.1	76.0	78.1
80°	46.9	46.9	46.9	44.6
82.5°	29.0	31.3	29.0	29.0
85°	15.6	17.9	13.4	20.1
87.5°	8.9	11.1	8.9	11.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)