

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: P248355

Luminaire Tested: **LSR8B80D010 EC8B80840 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248355
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 EC8B80840 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8738.0 lumens
Efficiency: N/A
Efficacy: 117.4 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

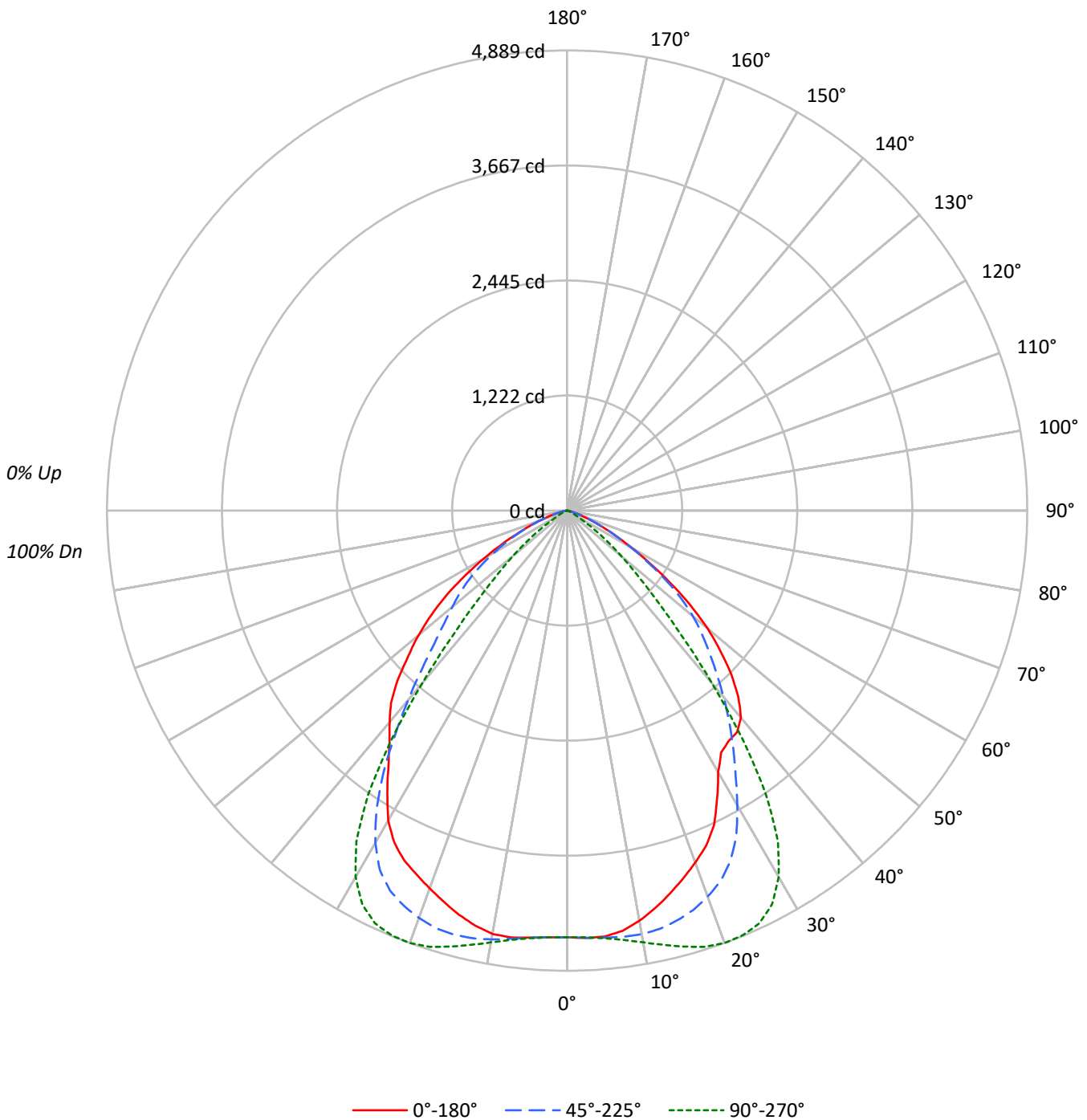
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	139781	139781	139781
5°	140612	141135	140984
10°	138546	145854	142993
15°	134496	153082	141871
20°	130592	160437	140144
25°	125580	164547	139495
30°	114283	160034	135359
35°	112582	138670	124538
40°	115642	96175	118061
45°	107654	58127	111011
50°	93379	35898	98920
55°	71659	18757	83949
60°	48820	7567	63362
65°	30368	3860	43713
70°	16490	2389	26678
75°	8602	1144	15763
80°	3853	1279	8542
85°	2547	849	7678



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	435.9	5.0
10°-20°	1291.4	14.8
20°-30°	1970.1	22.5
30°-40°	2055.9	23.5
40°-50°	1544.2	17.7
50°-60°	950.1	10.9
60°-70°	386.7	4.4
70°-80°	91.1	1.0
80°-90°	12.5	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°	3697.5	42.3
0°-40°	5753.3	65.8
0°-60°	8247.7	94.4
0°-90°	8738.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8738.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4533	4533	4533	4533	4533	
5°	4543	4555	4560	4555	4555	430
15°	4213	4509	4795	4663	4444	1187
25°	3691	4105	4836	4454	4100	1678
35°	2991	3075	3684	3405	3308	1888
45°	2469	2137	1333	1990	2546	1883
55°	1333	1266	349	1266	1562	1198
65°	416	421	53	565	599	434
75°	72	72	10	128	132	87
85°	7	7	2	17	22	10
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°	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0
2.5°	4545.0	4537.8	4545.0	4545.0	4547.4	4542.6	4545.0	4547.4	4542.6	4542.6	4542.6
5°	4542.6	4537.8	4542.6	4540.2	4545.0	4545.0	4549.9	4549.9	4554.6	4554.6	4561.9
7.5°	4504.1	4494.5	4504.1	4511.4	4516.1	4525.8	4537.8	4547.4	4557.0	4566.7	4578.7
10°	4424.7	4424.7	4431.9	4446.4	4460.8	4477.6	4499.3	4523.4	4547.4	4569.1	4590.7
12.5°	4326.1	4318.8	4333.3	4352.5	4374.2	4400.7	4434.4	4470.4	4508.9	4552.2	4585.9
15°	4213.0	4205.8	4222.6	4241.8	4268.3	4306.8	4347.8	4395.9	4451.2	4508.9	4564.3
17.5°	4097.5	4095.1	4111.9	4138.4	4160.1	4200.9	4253.9	4311.6	4374.2	4451.2	4523.4
20°	3979.6	3977.2	3994.1	4015.7	4044.6	4083.1	4136.0	4203.3	4277.9	4364.6	4448.8
22.5°	3856.9	3859.3	3873.7	3897.8	3921.9	3962.7	4018.1	4085.5	4167.3	4261.1	4354.9
25°	3690.9	3678.9	3698.1	3722.2	3763.0	3796.7	3849.7	3921.9	4006.1	4104.7	4215.4
27.5°	3450.3	3447.8	3464.7	3486.3	3522.4	3563.3	3621.1	3695.7	3784.7	3893.0	4001.2
30°	3209.6	3214.5	3221.7	3243.4	3267.4	3308.3	3366.1	3428.6	3512.8	3616.3	3731.8
32.5°	3046.0	3046.0	3055.7	3070.1	3087.0	3108.6	3149.5	3195.2	3260.2	3332.4	3416.6
35°	2990.7	2981.1	2990.7	2993.1	2995.5	3000.4	3007.5	3022.0	3043.6	3074.9	3106.2
37.5°	2966.7	2959.4	2959.4	2949.8	2937.8	2923.3	2904.1	2882.4	2858.4	2827.1	2803.1
40°	2872.8	2868.0	2863.2	2853.6	2827.1	2798.2	2766.9	2716.4	2661.1	2584.1	2507.1
42.5°	2692.4	2687.6	2685.2	2665.9	2641.8	2608.1	2572.1	2519.1	2449.4	2350.7	2240.0
45°	2468.6	2459.0	2451.8	2434.9	2418.0	2389.2	2355.5	2307.4	2237.6	2136.6	2004.2
47.5°	2208.8	2203.9	2201.5	2194.3	2177.5	2160.6	2139.0	2100.5	2037.9	1941.7	1804.5
50°	1946.5	1936.9	1941.7	1939.3	1932.1	1920.0	1905.6	1879.1	1831.0	1744.4	1619.3
52.5°	1645.7	1645.7	1643.4	1650.5	1652.9	1650.5	1652.9	1624.1	1583.2	1518.2	1412.3
55°	1332.9	1332.9	1340.2	1349.8	1359.4	1361.8	1359.4	1347.4	1318.5	1265.6	1171.7
57.5°	1039.4	1034.6	1049.0	1063.5	1073.1	1082.7	1075.5	1065.9	1049.0	1005.7	933.5
60°	791.6	791.6	801.2	810.8	820.4	830.1	827.7	825.3	810.8	781.9	724.2
62.5°	582.2	584.7	584.7	591.9	601.5	611.1	618.3	611.1	603.9	584.7	546.2
65°	416.2	413.8	416.2	423.5	430.7	440.3	445.1	442.7	435.5	421.1	392.2
67.5°	279.1	276.7	286.3	288.7	293.5	303.2	300.8	303.2	300.8	288.7	264.7
70°	182.9	178.0	182.9	180.4	187.7	190.1	194.9	197.3	194.9	187.7	180.4
72.5°	113.1	110.7	113.1	115.5	117.9	120.3	125.1	125.1	122.7	117.9	108.3
75°	72.2	64.9	67.4	62.6	67.4	67.4	72.2	74.6	72.2	72.2	67.4
77.5°	43.3	43.3	43.3	43.3	43.3	43.3	43.3	45.7	48.1	43.3	40.9
80°	21.7	21.7	24.1	24.1	24.1	26.5	24.1	24.1	24.1	26.5	19.3
82.5°	16.8	14.4	14.4	14.4	16.8	14.4	14.4	14.4	14.4	14.4	14.4
85°	7.2	9.6	7.2	4.8	7.2	7.2	9.6	7.2	7.2	7.2	9.6
87.5°	2.4	2.4	0.0	0.0	0.0	2.4	0.0	2.4	2.4	4.8	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°	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0
2.5°	4545.0	4540.2	4540.2	4537.8	4542.6	4537.8	4540.2	4537.8	4537.8	4542.6	4537.8
5°	4561.9	4564.3	4559.5	4557.0	4564.3	4564.3	4564.3	4559.5	4559.5	4561.9	4559.5
7.5°	4585.9	4590.7	4593.1	4595.5	4600.4	4602.8	4602.8	4600.4	4598.0	4605.2	4595.5
10°	4612.4	4619.6	4634.0	4641.3	4653.3	4653.3	4658.1	4658.1	4653.3	4658.1	4655.7
12.5°	4602.8	4646.1	4670.1	4687.0	4703.8	4718.2	4723.1	4725.5	4723.1	4732.7	4723.1
15°	4619.6	4655.7	4694.2	4723.1	4754.3	4771.2	4776.0	4795.2	4800.1	4802.5	4788.1
17.5°	4593.1	4658.1	4699.0	4742.3	4788.1	4819.3	4848.2	4860.2	4862.6	4867.4	4848.2
20°	4533.0	4605.2	4667.7	4730.3	4783.2	4831.3	4855.4	4889.1	4879.5	4898.7	4872.2
22.5°	4451.2	4533.0	4612.4	4694.2	4749.6	4807.3	4857.8	4881.8	4893.9	4893.9	4865.0
25°	4321.3	4417.5	4504.1	4588.3	4672.6	4742.3	4800.1	4836.2	4843.4	4841.0	4807.3
27.5°	4119.2	4222.6	4323.7	4419.9	4523.4	4605.2	4672.6	4715.8	4727.9	4727.9	4691.8
30°	3840.0	3950.7	4049.4	4164.8	4270.7	4362.2	4456.0	4494.5	4516.1	4516.1	4475.3
32.5°	3508.0	3601.8	3693.3	3806.4	3921.9	4025.3	4114.3	4167.3	4193.7	4191.3	4155.2
35°	3147.1	3192.8	3262.6	3346.8	3450.3	3546.5	3633.1	3683.7	3729.4	3727.0	3693.3
37.5°	2786.2	2774.2	2781.4	2812.7	2877.6	2945.0	3012.4	3060.5	3099.0	3115.9	3108.6
40°	2432.5	2370.0	2309.8	2288.2	2292.9	2317.0	2353.1	2389.2	2432.5	2454.2	2463.8
42.5°	2114.9	2009.1	1903.2	1823.8	1778.1	1763.6	1780.5	1792.5	1819.0	1850.2	1881.5
45°	1859.9	1717.9	1578.4	1455.7	1378.7	1332.9	1323.3	1332.9	1347.4	1378.7	1419.6
47.5°	1650.5	1484.5	1328.2	1191.0	1077.9	1017.8	1000.9	996.1	1010.5	1039.4	1094.7
50°	1465.3	1299.2	1126.0	967.2	849.3	781.9	757.9	748.3	765.1	786.8	837.3
52.5°	1263.2	1099.6	921.5	767.5	644.8	575.1	548.6	534.1	543.7	572.6	623.2
55°	1044.2	892.6	731.4	572.6	454.7	389.8	358.5	348.9	358.5	389.8	440.3
57.5°	825.3	697.8	563.0	413.8	308.0	243.0	211.7	202.1	228.6	240.6	293.5
60°	644.8	541.4	425.9	303.2	211.7	161.2	129.9	122.7	134.8	156.4	199.7
62.5°	483.6	418.6	327.2	216.5	156.4	103.4	86.6	79.4	86.6	103.4	137.2
65°	351.3	300.8	228.6	158.8	105.9	77.0	57.8	52.9	60.2	72.2	101.1
67.5°	240.6	202.1	158.8	110.7	72.2	48.1	40.9	40.9	43.3	52.9	74.6
70°	156.4	132.3	101.1	72.2	48.1	36.1	31.3	26.5	31.3	38.5	50.5
72.5°	98.7	84.2	64.9	50.5	36.1	26.5	21.7	19.3	24.1	28.8	38.5
75°	60.2	45.7	33.7	26.5	19.3	19.3	19.3	9.6	12.0	19.3	24.1
77.5°	36.1	31.3	26.5	21.7	16.8	9.6	9.6	9.6	12.0	14.4	21.7
80°	19.3	16.8	12.0	12.0	9.6	7.2	9.6	7.2	4.8	12.0	14.4
82.5°	12.0	9.6	9.6	9.6	12.0	4.8	7.2	4.8	7.2	9.6	7.2
85°	7.2	7.2	7.2	4.8	12.0	4.8	4.8	2.4	2.4	4.8	4.8
87.5°	0.0	2.4	2.4	0.0	2.4	0.0	2.4	2.4	2.4	2.4	2.4
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°	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0	4533.0
2.5°	4540.2	4537.8	4540.2	4537.8	4537.8	4537.8	4540.2	4540.2	4537.8	4537.8	4542.6
5°	4559.5	4559.5	4559.5	4557.0	4554.6	4554.6	4559.5	4559.5	4552.2	4559.5	4559.5
7.5°	4600.4	4593.1	4600.4	4590.7	4585.9	4588.3	4590.7	4585.9	4581.1	4583.5	4583.5
10°	4653.3	4646.1	4646.1	4638.9	4631.6	4626.8	4622.0	4610.0	4598.0	4595.5	4585.9
12.5°	4715.8	4703.8	4696.6	4682.1	4670.1	4653.3	4638.9	4619.6	4595.5	4578.7	4561.9
15°	4778.4	4759.2	4742.3	4718.2	4691.8	4662.9	4631.6	4600.4	4561.9	4528.2	4499.3
17.5°	4828.9	4802.5	4771.2	4732.7	4694.2	4650.9	4605.2	4559.5	4504.1	4460.8	4427.1
20°	4845.8	4807.3	4766.4	4715.8	4665.3	4605.2	4547.4	4487.3	4424.7	4379.0	4340.5
22.5°	4824.1	4778.4	4727.9	4675.0	4607.6	4542.6	4475.3	4405.4	4350.1	4287.6	4251.5
25°	4764.0	4708.6	4653.3	4590.7	4525.8	4453.6	4381.4	4309.3	4241.8	4208.2	4162.5
27.5°	4641.3	4581.1	4521.0	4456.0	4381.4	4309.3	4234.7	4164.8	4107.1	4061.4	4035.0
30°	4424.7	4354.9	4285.2	4215.4	4150.4	4075.8	4006.1	3948.3	3890.6	3854.5	3828.0
32.5°	4092.7	4030.1	3960.4	3893.0	3832.9	3770.3	3712.5	3662.0	3621.1	3597.0	3577.8
35°	3645.2	3582.6	3529.7	3481.6	3431.0	3404.6	3368.5	3339.6	3322.7	3313.1	3310.7
37.5°	3082.1	3046.0	3029.2	3019.6	3009.9	3002.8	3007.5	3019.6	3029.2	3046.0	3065.3
40°	2480.6	2511.9	2521.5	2555.2	2586.5	2627.4	2673.1	2726.1	2769.3	2824.7	2863.2
42.5°	1932.1	1989.8	2057.2	2129.3	2206.3	2280.9	2372.4	2456.6	2533.6	2603.3	2663.5
45°	1484.5	1573.5	1674.6	1778.1	1881.5	1989.8	2100.5	2203.9	2295.4	2370.0	2432.5
47.5°	1157.3	1256.0	1385.9	1513.4	1638.5	1766.0	1888.7	1997.0	2074.0	2146.2	2201.5
50°	916.7	1029.8	1171.7	1318.5	1455.7	1590.4	1720.3	1821.4	1898.4	1956.1	1997.0
52.5°	709.8	844.5	988.9	1142.9	1289.6	1436.4	1556.7	1650.5	1713.1	1763.6	1794.9
55°	529.3	661.7	815.7	974.4	1123.6	1265.6	1378.7	1460.5	1515.8	1544.7	1561.5
57.5°	382.6	502.9	656.8	815.7	950.4	1085.1	1176.6	1251.1	1282.4	1299.2	1306.5
60°	279.1	389.8	526.9	664.1	791.6	899.9	979.3	1029.8	1053.9	1063.5	1061.1
62.5°	204.5	300.8	418.6	534.1	637.6	726.6	789.2	822.9	834.9	839.7	832.5
65°	156.4	231.0	332.0	421.1	500.5	565.4	611.1	632.8	640.0	637.6	632.8
67.5°	115.5	173.3	247.8	315.2	373.0	423.5	447.5	466.8	471.6	464.4	457.1
70°	81.8	127.5	180.4	226.2	269.5	298.4	324.8	327.2	327.2	324.8	320.0
72.5°	57.8	89.0	122.7	154.0	180.4	202.1	211.7	218.9	216.5	214.1	209.3
75°	38.5	55.3	89.0	96.3	120.3	127.5	137.2	137.2	139.5	132.3	132.3
77.5°	24.1	38.5	52.9	62.6	72.2	81.8	86.6	86.6	89.0	86.6	86.6
80°	14.4	24.1	28.8	43.3	43.3	50.5	52.9	55.3	50.5	57.8	50.5
82.5°	9.6	14.4	21.7	21.7	26.5	31.3	31.3	33.7	33.7	31.3	31.3
85°	7.2	9.6	12.0	14.4	14.4	16.8	14.4	14.4	16.8	19.3	16.8
87.5°	2.4	4.8	2.4	4.8	4.8	9.6	7.2	7.2	7.2	9.6	9.6
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: P248355

CATALOG NUMBER: LSR8B80D010 EC8B80840 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4533.0	4533.0	4533.0	4533.0
2.5°	4537.8	4540.2	4537.8	4537.8
5°	4559.5	4557.0	4559.5	4554.6
7.5°	4576.3	4576.3	4573.9	4573.9
10°	4576.3	4566.7	4566.7	4566.7
12.5°	4540.2	4528.2	4521.0	4516.1
15°	4477.6	4456.0	4446.4	4444.0
17.5°	4395.9	4376.6	4364.6	4357.4
20°	4302.0	4282.8	4268.3	4270.7
22.5°	4220.2	4198.6	4188.9	4184.1
25°	4138.4	4111.9	4104.7	4099.9
27.5°	4006.1	3991.6	3984.4	3977.2
30°	3804.0	3796.7	3784.7	3801.5
32.5°	3570.6	3558.5	3548.9	3556.2
35°	3313.1	3305.9	3313.1	3308.3
37.5°	3077.4	3084.5	3094.2	3099.0
40°	2892.1	2918.5	2928.2	2932.9
42.5°	2706.8	2738.1	2757.3	2769.3
45°	2478.2	2509.5	2531.1	2545.6
47.5°	2242.4	2268.9	2290.5	2288.2
50°	2028.3	2042.7	2052.3	2062.0
52.5°	1811.7	1811.7	1814.1	1814.1
55°	1566.3	1561.5	1559.1	1561.5
57.5°	1296.8	1292.1	1289.6	1282.4
60°	1051.5	1037.0	1027.4	1027.4
62.5°	822.9	806.0	798.8	796.4
65°	618.3	615.9	601.5	599.1
67.5°	447.5	437.9	428.3	430.7
70°	315.2	300.8	300.8	295.9
72.5°	204.5	197.3	194.9	194.9
75°	127.5	127.5	122.7	132.3
77.5°	84.2	84.2	81.8	84.2
80°	50.5	50.5	50.5	48.1
82.5°	31.3	33.7	31.3	31.3
85°	16.8	19.3	14.4	21.7
87.5°	9.6	12.0	9.6	12.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)