

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: P248328

Luminaire Tested: **LSR8B80D010 EC8B80827 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248328
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 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8252.0 lumens
Efficiency: N/A
Efficacy: 110.9 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

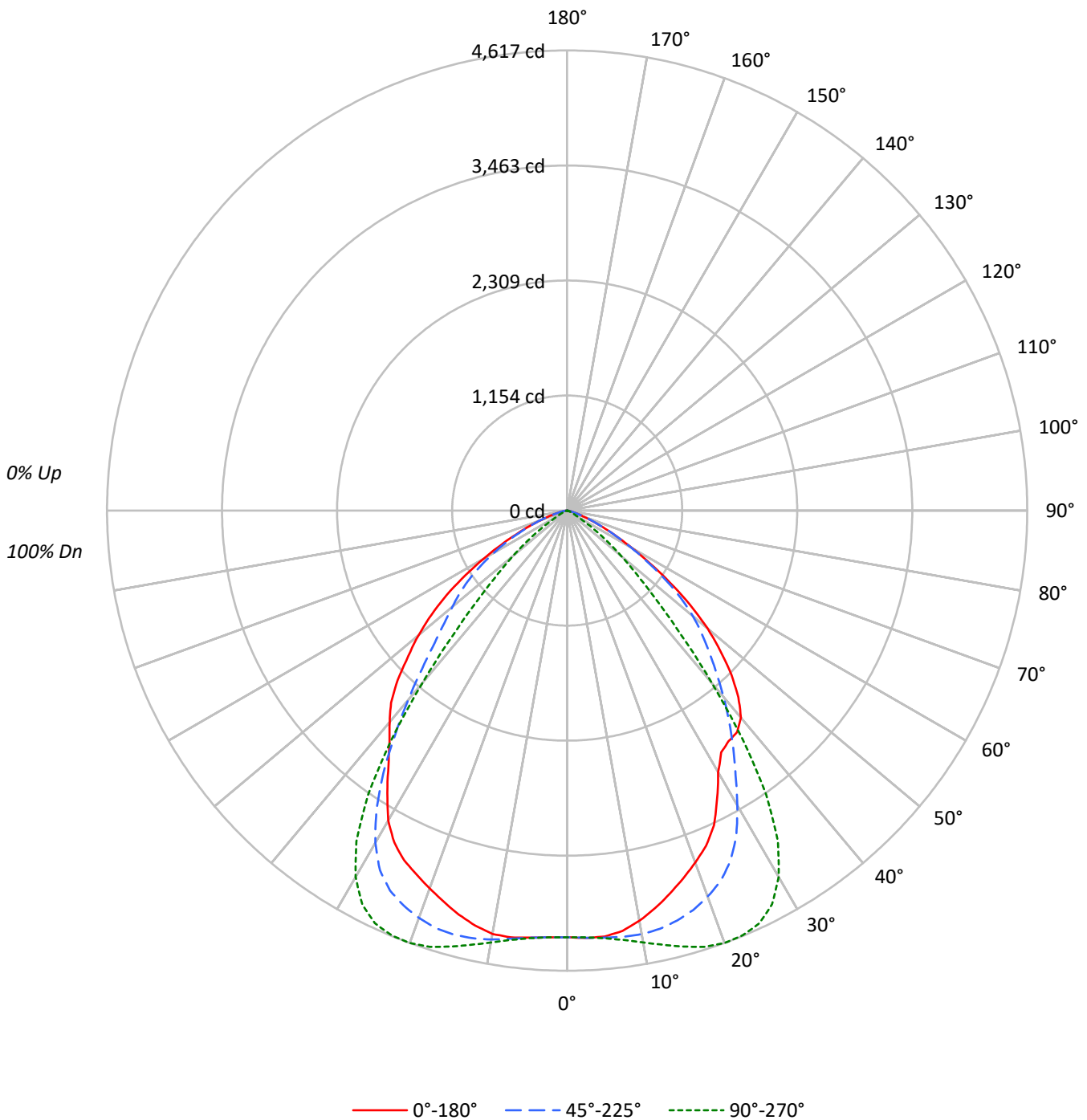
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	132004	132004	132004
5°	132793	133285	133143
10°	130840	137742	135039
15°	127016	144568	133979
20°	123330	151515	132351
25°	118594	155395	131738
30°	107927	151133	127832
35°	106322	130957	117612
40°	109209	90825	111495
45°	101666	54895	104836
50°	88184	33898	93417
55°	67675	17714	79282
60°	46106	7148	59835
65°	28683	3648	41284
70°	15571	2254	25200
75°	8126	1084	14893
80°	3640	1208	8062
85°	2406	814	7253



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	411.7	5.0
10°-20°	1219.6	14.8
20°-30°	1860.6	22.5
30°-40°	1941.5	23.5
40°-50°	1458.3	17.7
50°-60°	897.3	10.9
60°-70°	365.2	4.4
70°-80°	86.0	1.0
80°-90°	11.8	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°	3491.8	42.3
0°-40°	5433.3	65.8
0°-60°	7789.0	94.4
0°-90°	8252.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8252.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4281	4281	4281	4281	4281	
5°	4290	4301	4306	4301	4301	406
15°	3979	4258	4528	4404	4197	1121
25°	3486	3876	4567	4206	3872	1585
35°	2824	2904	3479	3215	3124	1783
45°	2331	2018	1259	1879	2404	1779
55°	1259	1195	330	1195	1475	1132
65°	393	398	50	534	566	410
75°	68	68	9	120	125	82
85°	7	7	2	16	20	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°	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8
2.5°	4292.2	4285.4	4292.2	4292.2	4294.5	4290.0	4292.2	4294.5	4290.0	4290.0	4290.0
5°	4290.0	4285.4	4290.0	4287.7	4292.2	4292.2	4296.8	4296.8	4301.3	4301.3	4308.1
7.5°	4253.6	4244.5	4253.6	4260.4	4264.9	4274.1	4285.4	4294.5	4303.6	4312.7	4324.0
10°	4178.6	4178.6	4185.4	4199.1	4212.7	4228.6	4249.0	4271.8	4294.5	4314.9	4335.4
12.5°	4085.5	4078.6	4092.3	4110.4	4130.9	4155.9	4187.7	4221.8	4258.2	4299.0	4330.9
15°	3978.7	3971.8	3987.7	4005.9	4030.9	4067.3	4105.9	4151.4	4203.6	4258.2	4310.4
17.5°	3869.6	3867.3	3883.2	3908.2	3928.7	3967.3	4017.3	4071.8	4130.9	4203.6	4271.8
20°	3758.3	3756.0	3771.9	3792.4	3819.6	3856.0	3906.0	3969.6	4040.0	4121.8	4201.3
22.5°	3642.4	3644.6	3658.3	3681.0	3703.7	3742.3	3794.6	3858.2	3935.5	4024.1	4112.7
25°	3485.6	3474.2	3492.4	3515.2	3553.7	3585.5	3635.6	3703.7	3783.2	3876.4	3981.0
27.5°	3258.4	3256.1	3272.0	3292.4	3326.5	3365.2	3419.7	3490.1	3574.2	3676.4	3778.7
30°	3031.1	3035.7	3042.5	3063.0	3085.7	3124.3	3178.8	3237.9	3317.5	3415.1	3524.2
32.5°	2876.6	2876.6	2885.7	2899.4	2915.3	2935.7	2974.4	3017.5	3078.9	3147.0	3226.5
35°	2824.4	2815.3	2824.4	2826.6	2828.9	2833.5	2840.3	2853.9	2874.3	2903.9	2933.4
37.5°	2801.7	2794.8	2794.8	2785.8	2774.4	2760.8	2742.6	2722.1	2699.4	2669.9	2647.2
40°	2713.0	2708.5	2703.9	2694.9	2669.9	2642.6	2613.0	2565.3	2513.1	2440.3	2367.7
42.5°	2542.6	2538.1	2535.8	2517.6	2494.9	2463.1	2429.0	2379.0	2313.1	2220.0	2115.4
45°	2331.3	2322.2	2315.4	2299.5	2283.6	2256.3	2224.5	2179.0	2113.2	2017.7	1892.8
47.5°	2085.9	2081.4	2079.1	2072.3	2056.4	2040.4	2020.0	1983.7	1924.6	1833.7	1704.2
50°	1838.2	1829.2	1833.7	1831.4	1824.6	1813.3	1799.6	1774.6	1729.1	1647.4	1529.2
52.5°	1554.2	1554.2	1551.9	1558.7	1561.0	1558.7	1561.0	1533.8	1495.1	1433.8	1333.8
55°	1258.8	1258.8	1265.6	1274.7	1283.8	1286.1	1283.8	1272.5	1245.2	1195.2	1106.6
57.5°	981.6	977.1	990.7	1004.3	1013.4	1022.5	1015.7	1006.6	990.7	949.8	881.6
60°	747.6	747.6	756.6	765.7	774.8	783.9	781.6	779.4	765.7	738.4	684.0
62.5°	549.9	552.1	552.1	559.0	568.0	577.2	583.9	577.2	570.3	552.1	515.8
65°	393.1	390.8	393.1	399.9	406.8	415.8	420.4	418.1	411.3	397.6	370.4
67.5°	263.6	261.3	270.4	272.7	277.2	286.3	284.0	286.3	284.0	272.7	250.0
70°	172.7	168.1	172.7	170.4	177.2	179.5	184.0	186.3	184.0	177.2	170.4
72.5°	106.8	104.5	106.8	109.1	111.4	113.6	118.1	118.1	115.9	111.4	102.2
75°	68.2	61.3	63.6	59.1	63.6	63.6	68.2	70.4	68.2	68.2	63.6
77.5°	40.9	40.9	40.9	40.9	40.9	40.9	40.9	43.2	45.4	40.9	38.6
80°	20.5	20.5	22.7	22.7	22.7	25.0	22.7	22.7	22.7	25.0	18.2
82.5°	15.9	13.6	13.6	13.6	15.9	13.6	13.6	13.6	13.6	13.6	13.6
85°	6.8	9.1	6.8	4.6	6.8	6.8	9.1	6.8	6.8	6.8	9.1
87.5°	2.3	2.3	0.0	0.0	0.0	2.3	0.0	2.3	2.3	4.6	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°	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8
2.5°	4292.2	4287.7	4287.7	4285.4	4290.0	4285.4	4287.7	4285.4	4285.4	4290.0	4285.4
5°	4308.1	4310.4	4305.9	4303.6	4310.4	4310.4	4310.4	4305.9	4305.9	4308.1	4305.9
7.5°	4330.9	4335.4	4337.7	4339.9	4344.5	4346.8	4346.8	4344.5	4342.2	4349.1	4339.9
10°	4355.8	4362.7	4376.3	4383.1	4394.5	4394.5	4399.0	4399.0	4394.5	4399.0	4396.8
12.5°	4346.8	4387.6	4410.4	4426.3	4442.2	4455.8	4460.4	4462.6	4460.4	4469.5	4460.4
15°	4362.7	4396.8	4433.1	4460.4	4489.9	4505.8	4510.4	4528.5	4533.1	4535.4	4521.7
17.5°	4337.7	4399.0	4437.6	4478.6	4521.7	4551.3	4578.5	4589.9	4592.2	4596.7	4578.5
20°	4280.8	4349.1	4408.1	4467.2	4517.2	4562.6	4585.4	4617.2	4608.1	4626.3	4601.3
22.5°	4203.6	4280.8	4355.8	4433.1	4485.4	4539.9	4587.6	4610.3	4621.7	4621.7	4594.4
25°	4080.9	4171.8	4253.6	4333.1	4412.7	4478.6	4533.1	4567.2	4574.0	4571.7	4539.9
27.5°	3890.1	3987.7	4083.2	4174.1	4271.8	4349.1	4412.7	4453.5	4464.9	4464.9	4430.8
30°	3626.5	3731.0	3824.2	3933.2	4033.2	4119.6	4208.2	4244.5	4264.9	4264.9	4226.4
32.5°	3312.9	3401.5	3487.9	3594.7	3703.7	3801.4	3885.5	3935.5	3960.5	3958.2	3924.1
35°	2972.1	3015.2	3081.2	3160.7	3258.4	3349.3	3431.0	3478.8	3521.9	3519.7	3487.9
37.5°	2631.2	2619.9	2626.7	2656.2	2717.6	2781.2	2844.8	2890.3	2926.6	2942.6	2935.7
40°	2297.2	2238.1	2181.3	2160.9	2165.4	2188.2	2222.2	2256.3	2297.2	2317.7	2326.8
42.5°	1997.3	1897.3	1797.3	1722.4	1679.2	1665.5	1681.4	1692.8	1717.8	1747.3	1776.9
45°	1756.4	1622.4	1490.6	1374.7	1302.0	1258.8	1249.7	1258.8	1272.5	1302.0	1340.6
47.5°	1558.7	1401.9	1254.3	1124.7	1017.9	961.2	945.3	940.7	954.3	981.6	1033.8
50°	1383.8	1227.0	1063.4	913.4	802.1	738.4	715.8	706.6	722.5	743.0	790.7
52.5°	1192.9	1038.4	870.3	724.8	609.0	543.1	518.1	504.4	513.5	540.8	588.5
55°	986.1	843.0	690.7	540.8	429.4	368.1	338.5	329.5	338.5	368.1	415.8
57.5°	779.4	658.9	531.7	390.8	290.8	229.5	199.9	190.9	215.9	227.2	277.2
60°	609.0	511.3	402.2	286.3	199.9	152.2	122.7	115.9	127.3	147.7	188.6
62.5°	456.7	395.4	309.0	204.5	147.7	97.7	81.8	75.0	81.8	97.7	129.5
65°	331.8	284.0	215.9	149.9	100.0	72.7	54.5	50.0	56.8	68.2	95.5
67.5°	227.2	190.9	149.9	104.5	68.2	45.4	38.6	38.6	40.9	50.0	70.4
70°	147.7	125.0	95.5	68.2	45.4	34.1	29.5	25.0	29.5	36.4	47.7
72.5°	93.2	79.5	61.3	47.7	34.1	25.0	20.5	18.2	22.7	27.2	36.4
75°	56.8	43.2	31.8	25.0	18.2	18.2	18.2	9.1	11.3	18.2	22.7
77.5°	34.1	29.5	25.0	20.5	15.9	9.1	9.1	9.1	11.3	13.6	20.5
80°	18.2	15.9	11.3	11.3	9.1	6.8	9.1	6.8	4.6	11.3	13.6
82.5°	11.3	9.1	9.1	9.1	11.3	4.6	6.8	4.6	6.8	9.1	6.8
85°	6.8	6.8	6.8	4.6	11.3	4.6	4.6	2.3	2.3	4.6	4.6
87.5°	0.0	2.3	2.3	0.0	2.3	0.0	2.3	2.3	2.3	2.3	2.3
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8	4280.8
2.5°	4287.7	4285.4	4287.7	4285.4	4285.4	4285.4	4287.7	4287.7	4285.4	4285.4	4290.0
5°	4305.9	4305.9	4305.9	4303.6	4301.3	4301.3	4305.9	4305.9	4299.0	4305.9	4305.9
7.5°	4344.5	4337.7	4344.5	4335.4	4330.9	4333.1	4335.4	4330.9	4326.3	4328.6	4328.6
10°	4394.5	4387.6	4387.6	4380.9	4374.0	4369.5	4365.0	4353.6	4342.2	4339.9	4330.9
12.5°	4453.5	4442.2	4435.4	4421.7	4410.4	4394.5	4380.9	4362.7	4339.9	4324.0	4308.1
15°	4512.6	4494.5	4478.6	4455.8	4430.8	4403.6	4374.0	4344.5	4308.1	4276.3	4249.0
17.5°	4560.3	4535.4	4505.8	4469.5	4433.1	4392.2	4349.1	4305.9	4253.6	4212.7	4180.9
20°	4576.2	4539.9	4501.3	4453.5	4405.8	4349.1	4294.5	4237.7	4178.6	4135.5	4099.1
22.5°	4555.8	4512.6	4464.9	4414.9	4351.3	4290.0	4226.4	4160.4	4108.2	4049.1	4015.0
25°	4499.0	4446.7	4394.5	4335.4	4274.1	4205.9	4137.7	4069.6	4005.9	3974.1	3931.0
27.5°	4383.1	4326.3	4269.5	4208.2	4137.7	4069.6	3999.1	3933.2	3878.7	3835.5	3810.5
30°	4178.6	4112.7	4046.8	3981.0	3919.6	3849.1	3783.2	3728.7	3674.2	3640.1	3615.1
32.5°	3865.0	3806.0	3740.1	3676.4	3619.7	3560.6	3506.0	3458.3	3419.7	3397.0	3378.8
35°	3442.4	3383.3	3333.4	3287.9	3240.2	3215.2	3181.1	3153.8	3137.9	3128.9	3126.6
37.5°	2910.7	2876.6	2860.7	2851.7	2842.5	2835.8	2840.3	2851.7	2860.7	2876.6	2894.8
40°	2342.7	2372.2	2381.3	2413.1	2442.6	2481.3	2524.5	2574.4	2615.3	2667.6	2703.9
42.5°	1824.6	1879.1	1942.7	2010.9	2083.6	2154.1	2240.4	2319.9	2392.6	2458.5	2515.3
45°	1401.9	1486.0	1581.5	1679.2	1776.9	1879.1	1983.7	2081.4	2167.7	2238.1	2297.2
47.5°	1092.9	1186.1	1308.8	1429.2	1547.4	1667.8	1783.7	1885.9	1958.6	2026.8	2079.1
50°	865.7	972.5	1106.6	1245.2	1374.7	1501.9	1624.6	1720.1	1792.8	1847.3	1885.9
52.5°	670.3	797.5	933.9	1079.3	1217.9	1356.5	1470.1	1558.7	1617.8	1665.5	1695.1
55°	499.9	624.9	770.3	920.3	1061.1	1195.2	1302.0	1379.3	1431.5	1458.8	1474.7
57.5°	361.3	474.9	620.3	770.3	897.5	1024.8	1111.1	1181.6	1211.1	1227.0	1233.8
60°	263.6	368.1	497.6	627.1	747.6	849.8	924.8	972.5	995.3	1004.3	1002.0
62.5°	193.1	284.0	395.4	504.4	602.1	686.2	745.3	777.1	788.5	793.0	786.2
65°	147.7	218.1	313.6	397.6	472.6	534.0	577.2	597.6	604.4	602.1	597.6
67.5°	109.1	163.6	234.1	297.7	352.2	399.9	422.7	440.8	445.3	438.6	431.7
70°	77.3	120.4	170.4	213.6	254.5	281.8	306.7	309.0	309.0	306.7	302.2
72.5°	54.5	84.1	115.9	145.4	170.4	190.9	199.9	206.8	204.5	202.2	197.7
75°	36.4	52.3	84.1	90.9	113.6	120.4	129.5	129.5	131.8	125.0	125.0
77.5°	22.7	36.4	50.0	59.1	68.2	77.3	81.8	81.8	84.1	81.8	81.8
80°	13.6	22.7	27.2	40.9	40.9	47.7	50.0	52.3	47.7	54.5	47.7
82.5°	9.1	13.6	20.5	20.5	25.0	29.5	29.5	31.8	31.8	29.5	29.5
85°	6.8	9.1	11.3	13.6	13.6	15.9	13.6	13.6	15.9	18.2	15.9
87.5°	2.3	4.6	2.3	4.6	4.6	9.1	6.8	6.8	6.8	9.1	9.1
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: P248328

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4280.8	4280.8	4280.8	4280.8
2.5°	4285.4	4287.7	4285.4	4285.4
5°	4305.9	4303.6	4305.9	4301.3
7.5°	4321.8	4321.8	4319.5	4319.5
10°	4321.8	4312.7	4312.7	4312.7
12.5°	4287.7	4276.3	4269.5	4264.9
15°	4228.6	4208.2	4199.1	4196.8
17.5°	4151.4	4133.2	4121.8	4115.0
20°	4062.7	4044.6	4030.9	4033.2
22.5°	3985.5	3965.1	3955.9	3951.4
25°	3908.2	3883.2	3876.4	3871.9
27.5°	3783.2	3769.6	3762.8	3756.0
30°	3592.4	3585.5	3574.2	3590.1
32.5°	3372.0	3360.6	3351.5	3358.4
35°	3128.9	3122.0	3128.9	3124.3
37.5°	2906.2	2913.0	2922.1	2926.6
40°	2731.2	2756.2	2765.3	2769.8
42.5°	2556.3	2585.8	2604.0	2615.3
45°	2340.4	2369.9	2390.4	2404.0
47.5°	2117.7	2142.7	2163.1	2160.9
50°	1915.5	1929.1	1938.2	1947.3
52.5°	1711.0	1711.0	1713.2	1713.2
55°	1479.2	1474.7	1472.4	1474.7
57.5°	1224.7	1220.2	1217.9	1211.1
60°	993.0	979.4	970.2	970.2
62.5°	777.1	761.2	754.4	752.1
65°	583.9	581.7	568.0	565.8
67.5°	422.7	413.5	404.5	406.8
70°	297.7	284.0	284.0	279.5
72.5°	193.1	186.3	184.0	184.0
75°	120.4	120.4	115.9	125.0
77.5°	79.5	79.5	77.3	79.5
80°	47.7	47.7	47.7	45.4
82.5°	29.5	31.8	29.5	29.5
85°	15.9	18.2	13.6	20.5
87.5°	9.1	11.3	9.1	11.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)