

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: P249111

Luminaire Tested: **LSR8B80D010 EC8B80840 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249111
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: LSR8B80D010 EC8B80840 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8432.0 lumens
Efficiency: N/A
Efficacy: 113.3 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

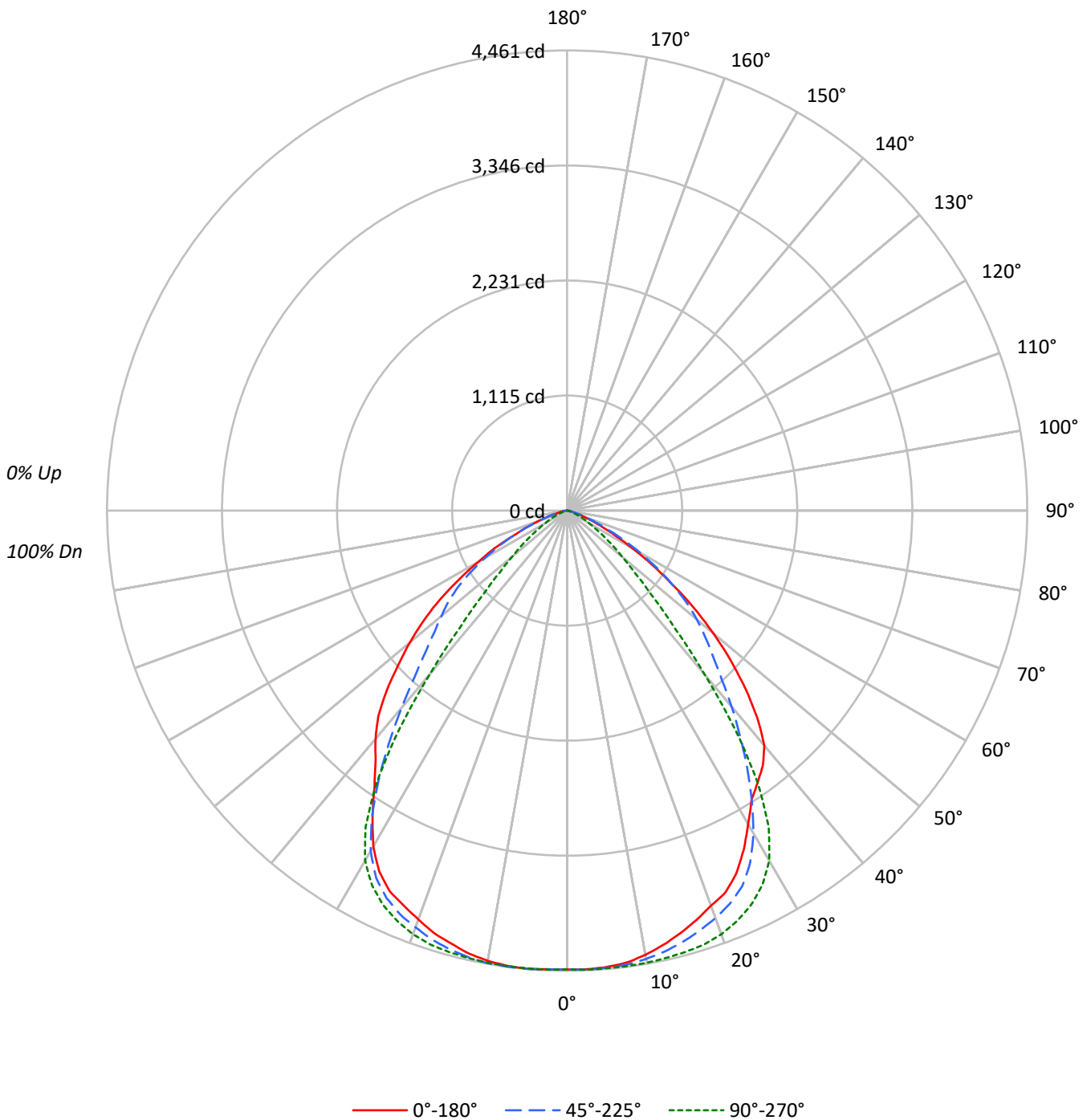
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	137188	137188	137188
5°	137489	137860	138009
10°	136912	139379	138781
15°	135393	141417	138749
20°	133768	143406	138392
25°	132031	143572	138533
30°	124908	139532	133838
35°	121180	121267	122528
40°	119679	83438	116314
45°	106637	50089	108098
50°	88673	33336	95543
55°	66503	22983	81008
60°	45064	15313	61118
65°	27187	9931	41991
70°	15075	5383	25831
75°	6827	2276	13368
80°	5931	2539	9323
85°	6758	3361	9305



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.6	5.0
10°-20°	1233.1	14.6
20°-30°	1871.5	22.2
30°-40°	1965.7	23.3
40°-50°	1473.7	17.5
50°-60°	945.6	11.2
60°-70°	404.5	4.8
70°-80°	95.6	1.1
80°-90°	17.8	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°	3529.2	41.9
0°-40°	5494.8	65.2
0°-60°	7914.2	93.9
0°-90°	8432.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8432.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4449	4449	4449	4449	4449	
5°	4442	4449	4454	4461	4458	422
15°	4241	4330	4430	4401	4346	1196
25°	3880	4017	4220	4143	4072	1773
35°	3219	3040	3221	3183	3255	2020
45°	2445	1999	1149	1942	2479	1873
55°	1237	1237	428	1290	1507	1122
65°	373	439	136	566	576	398
75°	57	67	19	115	112	83
85°	19	12	10	19	26	20
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°	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9
2.5°	4451.3	4456.1	4453.7	4453.7	4451.3	4453.7	4453.7	4458.5	4458.5	4453.7	4451.3
5°	4441.7	4446.5	4446.5	4441.7	4441.7	4453.7	4446.5	4451.3	4451.3	4448.9	4448.9
7.5°	4420.3	4420.3	4429.8	4422.7	4422.7	4429.8	4427.4	4432.2	4437.0	4439.4	4439.4
10°	4372.5	4377.3	4379.6	4379.6	4382.0	4389.2	4394.0	4403.5	4408.3	4413.1	4415.5
12.5°	4312.8	4319.9	4322.3	4319.9	4327.1	4336.6	4348.6	4360.5	4367.7	4377.3	4384.4
15°	4241.1	4241.1	4245.9	4253.1	4257.9	4272.2	4284.1	4298.4	4317.5	4329.5	4341.4
17.5°	4162.3	4167.1	4174.3	4174.3	4183.8	4207.7	4214.9	4236.4	4257.9	4269.8	4293.7
20°	4076.4	4081.1	4088.3	4093.1	4105.0	4124.1	4138.4	4157.6	4181.4	4203.0	4226.8
22.5°	4009.5	4000.0	4004.7	4009.5	4021.5	4038.2	4054.9	4078.7	4102.6	4124.1	4148.0
25°	3880.5	3882.9	3890.1	3894.8	3909.2	3923.5	3942.6	3971.3	3992.8	4016.7	4042.9
27.5°	3706.2	3708.6	3720.5	3720.5	3732.5	3756.4	3768.3	3792.2	3820.9	3844.7	3875.8
30°	3508.0	3512.8	3512.8	3522.3	3529.5	3541.5	3553.4	3577.3	3591.6	3613.1	3656.1
32.5°	3326.5	3331.3	3328.9	3326.5	3319.4	3317.0	3314.6	3319.4	3324.1	3331.3	3348.0
35°	3219.1	3207.1	3197.6	3180.9	3161.8	3137.9	3116.4	3087.7	3061.4	3039.9	3016.1
37.5°	3116.4	3114.0	3099.7	3075.8	3037.5	2994.6	2944.5	2882.3	2820.2	2753.4	2688.9
40°	2973.1	2965.9	2954.0	2920.6	2877.6	2825.0	2758.2	2681.8	2581.4	2478.8	2373.7
42.5°	2729.5	2731.9	2717.6	2691.3	2650.7	2600.5	2531.3	2447.7	2340.3	2218.5	2082.4
45°	2445.3	2445.3	2440.6	2419.1	2390.4	2349.8	2297.3	2228.0	2123.0	1998.8	1853.1
47.5°	2149.2	2151.6	2144.4	2139.7	2127.7	2101.5	2063.3	2010.7	1936.7	1817.3	1671.6
50°	1848.4	1848.4	1860.3	1857.9	1857.9	1848.4	1831.6	1800.6	1736.1	1640.6	1504.5
52.5°	1547.4	1552.2	1559.4	1568.9	1580.9	1600.0	1580.9	1566.5	1525.9	1451.9	1334.9
55°	1237.0	1241.8	1253.7	1270.4	1284.8	1303.9	1308.6	1308.6	1287.1	1237.0	1148.6
57.5°	971.9	964.8	974.3	988.7	1007.8	1026.9	1041.2	1057.9	1055.5	1022.1	950.4
60°	730.7	733.1	740.3	754.6	769.0	785.7	804.8	819.1	826.3	809.6	764.2
62.5°	532.5	532.5	542.1	556.4	563.6	587.5	599.4	606.6	613.7	611.3	582.7
65°	372.6	377.3	382.1	389.3	396.4	410.7	417.9	432.2	437.0	439.4	417.9
67.5°	262.7	255.5	260.3	265.0	272.2	281.8	296.1	296.1	303.3	303.3	288.9
70°	167.2	167.2	169.6	176.7	181.5	183.9	188.7	193.4	200.6	198.2	198.2
72.5°	112.2	109.9	112.2	114.6	117.0	124.2	124.2	126.6	131.4	133.7	124.2
75°	57.3	59.7	64.5	62.1	69.2	64.5	66.8	74.0	71.6	66.8	66.8
77.5°	47.7	47.7	47.7	45.4	50.1	50.1	47.7	52.5	50.1	50.1	47.7
80°	33.4	35.8	33.4	31.0	33.4	31.0	31.0	31.0	31.0	31.0	28.6
82.5°	26.3	21.5	23.9	21.5	23.9	23.9	21.5	19.1	19.1	21.5	19.1
85°	19.1	14.3	16.7	16.7	14.3	14.3	14.3	14.3	14.3	11.9	11.9
87.5°	11.9	7.2	7.2	7.2	9.5	9.5	9.5	7.2	9.5	9.5	4.8
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°	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9
2.5°	4456.1	4453.7	4458.5	4456.1	4456.1	4453.7	4456.1	4453.7	4458.5	4448.9	4451.3
5°	4456.1	4451.3	4453.7	4456.1	4458.5	4453.7	4453.7	4453.7	4458.5	4453.7	4456.1
7.5°	4446.5	4444.1	4451.3	4456.1	4453.7	4451.3	4456.1	4453.7	4458.5	4456.1	4460.8
10°	4427.4	4429.8	4434.6	4441.7	4444.1	4446.5	4451.3	4451.3	4458.5	4448.9	4453.7
12.5°	4398.8	4408.3	4420.3	4425.0	4434.6	4434.6	4439.4	4441.7	4446.5	4444.1	4451.3
15°	4362.9	4374.9	4389.2	4401.1	4413.1	4420.3	4427.4	4429.8	4437.0	4429.8	4432.2
17.5°	4319.9	4334.2	4355.8	4370.1	4389.2	4396.4	4405.9	4410.7	4417.9	4413.1	4415.5
20°	4260.2	4277.0	4300.8	4322.3	4334.2	4351.0	4362.9	4370.1	4374.9	4370.1	4372.5
22.5°	4176.7	4200.6	4231.6	4248.3	4272.2	4286.5	4288.9	4305.6	4317.5	4305.6	4310.4
25°	4078.7	4102.6	4126.5	4162.3	4183.8	4200.6	4217.3	4219.7	4231.6	4229.2	4226.8
27.5°	3916.3	3947.4	3988.0	4016.7	4045.3	4071.6	4090.7	4095.4	4107.4	4102.6	4105.0
30°	3694.3	3727.7	3765.9	3811.3	3851.9	3878.1	3902.0	3918.7	3930.7	3923.5	3921.1
32.5°	3379.1	3412.5	3453.1	3498.4	3546.2	3584.4	3613.1	3634.6	3648.9	3644.1	3632.2
35°	3018.5	3028.0	3054.3	3090.1	3130.7	3171.3	3197.6	3221.4	3238.1	3242.9	3242.9
37.5°	2648.3	2617.3	2598.2	2598.2	2622.0	2638.8	2662.6	2677.0	2703.3	2712.8	2720.0
40°	2290.1	2218.5	2151.6	2101.5	2068.1	2065.7	2065.7	2072.8	2096.7	2127.7	2156.4
42.5°	1970.1	1855.5	1752.8	1659.7	1592.8	1554.6	1537.9	1540.3	1559.4	1588.0	1635.8
45°	1714.6	1571.3	1442.4	1330.1	1239.4	1179.7	1151.0	1148.6	1163.0	1196.4	1249.0
47.5°	1516.4	1363.5	1217.9	1088.9	991.0	926.5	893.1	883.6	893.1	924.1	986.3
50°	1351.6	1194.0	1043.6	909.8	804.8	737.9	706.8	694.9	706.8	733.1	795.2
52.5°	1198.8	1036.4	895.5	766.6	654.3	597.0	563.6	556.4	563.6	594.6	644.8
55°	1022.1	883.6	745.1	616.1	518.2	460.9	434.6	427.5	434.6	463.3	515.8
57.5°	847.8	728.3	606.6	489.5	406.0	355.8	331.9	322.4	339.1	358.2	420.3
60°	685.3	589.9	487.1	384.5	315.2	269.8	250.7	248.3	253.1	277.0	320.0
62.5°	537.3	458.5	377.3	293.7	236.4	217.3	193.4	191.1	195.8	210.1	243.6
65°	386.9	336.7	274.6	214.9	169.6	143.3	133.7	136.1	140.9	150.5	181.5
67.5°	269.8	234.0	191.1	150.5	117.0	105.1	95.5	93.1	95.5	112.2	129.0
70°	181.5	160.0	129.0	114.6	81.2	64.5	66.8	59.7	69.2	69.2	83.6
72.5°	119.4	105.1	86.0	66.8	57.3	45.4	45.4	43.0	47.7	50.1	62.1
75°	62.1	47.7	47.7	33.4	23.9	11.9	21.5	19.1	16.7	19.1	23.9
77.5°	43.0	35.8	33.4	26.3	23.9	19.1	19.1	19.1	19.1	21.5	23.9
80°	26.3	26.3	19.1	16.7	14.3	11.9	14.3	14.3	14.3	14.3	16.7
82.5°	16.7	14.3	14.3	11.9	11.9	9.5	9.5	9.5	9.5	9.5	14.3
85°	14.3	9.5	9.5	7.2	9.5	16.7	7.2	9.5	9.5	9.5	7.2
87.5°	4.8	7.2	7.2	7.2	4.8	2.4	4.8	7.2	7.2	11.9	9.5
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°	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9	4448.9
2.5°	4456.1	4458.5	4458.5	4456.1	4456.1	4451.3	4460.8	4453.7	4456.1	4465.6	4458.5
5°	4460.8	4463.2	4463.2	4460.8	4460.8	4460.8	4463.2	4463.2	4460.8	4458.5	4463.2
7.5°	4470.4	4468.0	4468.0	4463.2	4463.2	4458.5	4463.2	4456.1	4460.8	4456.1	4463.2
10°	4458.5	4460.8	4458.5	4456.1	4456.1	4453.7	4453.7	4446.5	4448.9	4441.7	4446.5
12.5°	4451.3	4448.9	4448.9	4444.1	4439.4	4434.6	4432.2	4425.0	4425.0	4408.3	4415.5
15°	4432.2	4434.6	4427.4	4417.9	4413.1	4401.1	4396.4	4386.8	4377.3	4365.3	4367.7
17.5°	4415.5	4408.3	4398.8	4389.2	4370.1	4360.5	4351.0	4336.6	4331.9	4317.5	4312.8
20°	4365.3	4360.5	4348.6	4331.9	4319.9	4298.4	4288.9	4274.6	4262.6	4248.3	4241.1
22.5°	4300.8	4296.0	4281.7	4265.0	4245.9	4236.4	4226.8	4200.6	4188.6	4174.3	4171.9
25°	4219.7	4212.5	4198.2	4179.1	4169.5	4143.2	4133.7	4114.5	4109.8	4095.4	4093.1
27.5°	4095.4	4085.9	4069.2	4045.3	4028.6	4011.9	4002.4	3988.0	3983.3	3968.9	3966.5
30°	3909.2	3897.2	3863.8	3854.3	3825.6	3808.9	3808.9	3789.8	3792.2	3782.7	3782.7
32.5°	3615.5	3596.4	3570.1	3551.0	3531.9	3522.3	3522.3	3515.2	3520.0	3520.0	3524.7
35°	3226.2	3200.0	3185.6	3173.7	3173.7	3183.2	3211.9	3219.1	3233.4	3245.3	3254.9
37.5°	2727.1	2724.8	2741.5	2755.8	2791.6	2832.2	2882.3	2925.4	2965.9	2994.6	3023.2
40°	2187.4	2247.1	2294.9	2361.8	2416.7	2495.5	2586.2	2660.3	2729.5	2779.7	2832.2
42.5°	1707.4	1783.8	1884.2	1982.0	2080.0	2187.4	2306.9	2409.5	2500.3	2569.5	2624.4
45°	1330.1	1435.2	1557.0	1681.2	1807.7	1941.5	2065.7	2170.7	2266.3	2337.9	2392.8
47.5°	1072.2	1186.9	1325.3	1461.5	1604.8	1745.6	1884.2	1974.9	2053.7	2111.0	2161.2
50°	885.9	1007.8	1153.4	1308.6	1451.9	1592.8	1712.2	1800.6	1865.1	1915.2	1946.2
52.5°	740.3	869.2	1024.5	1179.7	1322.9	1451.9	1559.4	1626.3	1678.8	1714.6	1743.2
55°	611.3	735.5	881.2	1026.9	1167.7	1289.5	1377.9	1428.1	1468.6	1490.1	1506.8
57.5°	499.1	613.7	747.5	881.2	1003.0	1103.3	1172.5	1222.7	1241.8	1258.5	1256.1
60°	391.7	499.1	620.9	735.5	840.6	921.8	971.9	1000.6	1014.9	1022.1	1017.3
62.5°	308.0	406.0	499.1	599.4	675.8	745.1	792.9	792.9	800.0	802.4	809.6
65°	229.2	303.3	384.5	458.5	520.6	566.0	592.3	599.4	609.0	606.6	601.8
67.5°	169.6	224.5	284.2	339.1	382.1	410.7	429.8	446.6	444.2	439.4	437.0
70°	117.0	152.9	205.4	238.8	269.8	298.5	303.3	305.7	308.0	310.4	305.7
72.5°	81.2	107.5	136.1	164.8	183.9	195.8	207.8	210.1	210.1	210.1	207.8
75°	40.6	54.9	81.2	93.1	109.9	114.6	124.2	124.2	131.4	121.8	119.4
77.5°	35.8	43.0	57.3	66.8	74.0	81.2	83.6	90.7	88.3	83.6	86.0
80°	21.5	26.3	35.8	40.6	50.1	52.5	54.9	57.3	54.9	57.3	57.3
82.5°	16.7	19.1	23.9	23.9	31.0	31.0	33.4	33.4	35.8	35.8	35.8
85°	9.5	16.7	14.3	28.6	19.1	19.1	23.9	28.6	23.9	23.9	28.6
87.5°	9.5	9.5	7.2	9.5	9.5	9.5	11.9	14.3	14.3	16.7	14.3
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: P249111

CATALOG NUMBER: LSR8B80D010 EC8B80840 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4448.9	4448.9	4448.9	4448.9
2.5°	4456.1	4460.8	4453.7	4451.3
5°	4463.2	4463.2	4458.5	4458.5
7.5°	4463.2	4463.2	4456.1	4451.3
10°	4444.1	4444.1	4437.0	4432.2
12.5°	4408.3	4408.3	4405.9	4398.8
15°	4362.9	4362.9	4353.4	4346.2
17.5°	4300.8	4305.6	4293.7	4293.7
20°	4234.0	4231.6	4222.1	4217.3
22.5°	4164.7	4159.9	4157.6	4143.2
25°	4090.7	4085.9	4078.7	4071.6
27.5°	3964.1	3961.7	3954.6	3945.0
30°	3770.7	3768.3	3758.8	3758.8
32.5°	3520.0	3517.6	3508.0	3510.4
35°	3259.6	3269.2	3264.4	3254.9
37.5°	3042.3	3049.5	3054.3	3049.5
40°	2860.8	2882.3	2884.7	2889.5
42.5°	2667.4	2696.1	2705.7	2710.4
45°	2435.8	2462.1	2483.6	2478.8
47.5°	2199.3	2218.5	2237.6	2223.2
50°	1972.5	1984.4	1991.6	1991.6
52.5°	1757.6	1757.6	1755.2	1757.6
55°	1511.6	1511.6	1502.1	1506.8
57.5°	1253.7	1258.5	1251.3	1239.4
60°	1014.9	1003.0	998.2	991.0
62.5°	790.5	790.5	773.7	795.2
65°	592.3	585.1	577.9	575.5
67.5°	429.8	427.5	420.3	417.9
70°	303.3	293.7	291.3	286.5
72.5°	203.0	203.0	198.2	198.2
75°	124.2	112.2	109.9	112.2
77.5°	86.0	83.6	83.6	81.2
80°	57.3	54.9	59.7	52.5
82.5°	35.8	38.2	35.8	38.2
85°	23.9	28.6	26.3	26.3
87.5°	14.3	14.3	14.3	14.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)