

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: P248473

Luminaire Tested: **LSR8B90D010 EC8B90850 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248473
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: LSR8B90D010 EC8B90850 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9758.0 lumens
Efficiency: N/A
Efficacy: 113.3 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

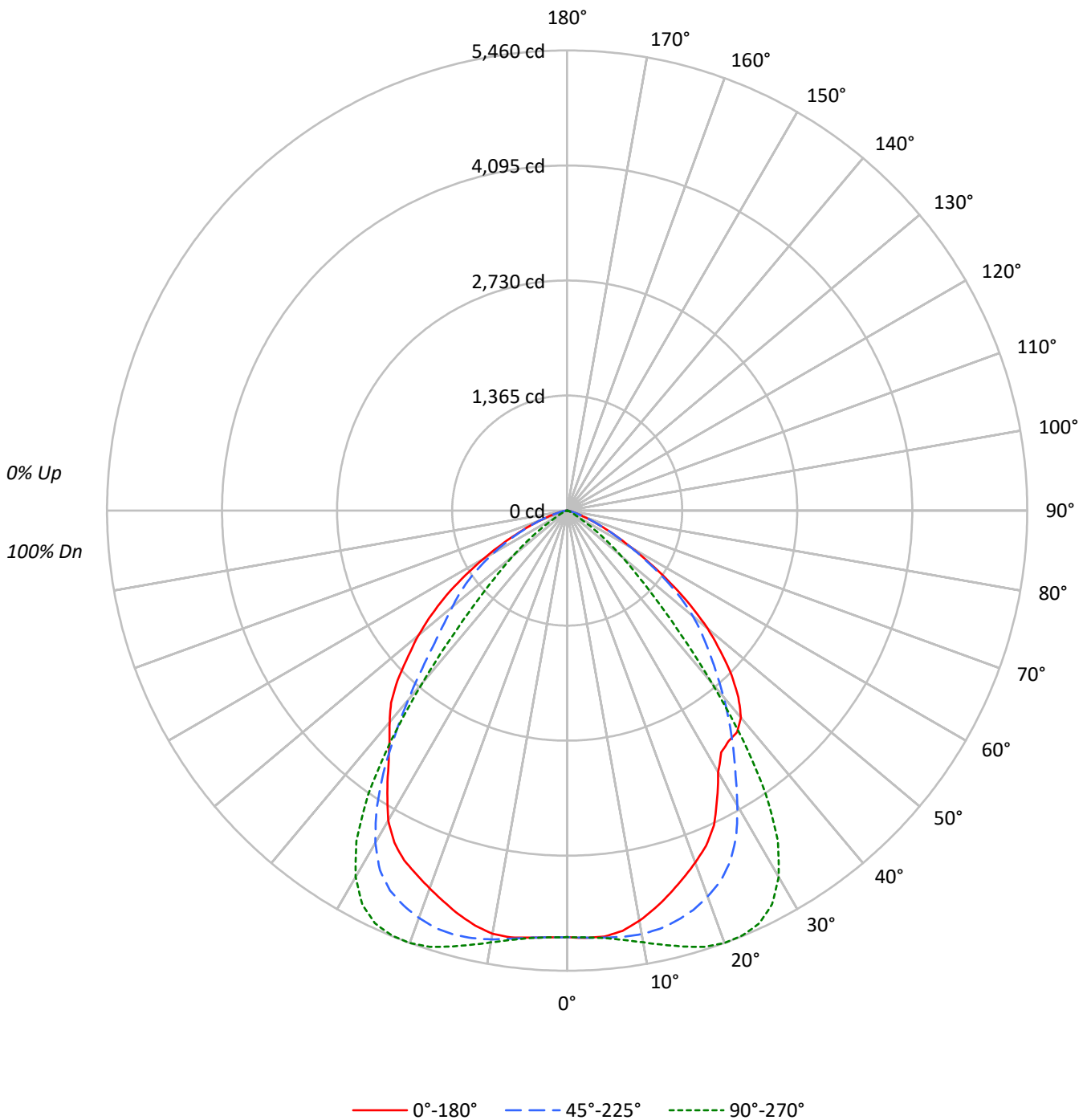
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	156097	156097	156097
5°	157027	157609	157442
10°	154719	162882	159685
15°	150197	170954	158430
20°	145838	179165	156506
25°	140237	183754	155779
30°	127625	178717	151161
35°	125724	154857	139076
40°	129143	107402	131844
45°	120222	64912	123972
50°	104278	40086	110467
55°	80024	20945	93749
60°	54519	8449	70757
65°	33914	4312	48814
70°	18411	2669	29798
75°	9603	1275	17609
80°	4297	1438	9536
85°	2866	955	8562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	486.8	5.0
10°-20°	1442.1	14.8
20°-30°	2200.1	22.5
30°-40°	2295.9	23.5
40°-50°	1724.5	17.7
50°-60°	1061.0	10.9
60°-70°	431.8	4.4
70°-80°	101.7	1.0
80°-90°	14.0	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°	4129.1	42.3
0°-40°	6424.9	65.8
0°-60°	9210.5	94.4
0°-90°	9758.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9758.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5062	5062	5062	5062	5062	
5°	5073	5086	5092	5086	5086	480
15°	4705	5035	5355	5207	4963	1325
25°	4122	4584	5401	4974	4578	1874
35°	3340	3434	4114	3802	3694	2109
45°	2757	2386	1488	2222	2843	2103
55°	1488	1413	390	1413	1744	1338
65°	465	470	59	631	669	485
75°	81	81	11	142	148	97
85°	8	8	3	19	24	11
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°	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1
2.5°	5075.6	5067.5	5075.6	5075.6	5078.3	5072.9	5075.6	5078.3	5072.9	5072.9	5072.9
5°	5072.9	5067.5	5072.9	5070.2	5075.6	5075.6	5081.0	5081.0	5086.3	5086.3	5094.4
7.5°	5029.9	5019.2	5029.9	5038.0	5043.3	5054.1	5067.5	5078.3	5089.0	5099.8	5113.2
10°	4941.2	4941.2	4949.3	4965.4	4981.5	5000.3	5024.5	5051.4	5078.3	5102.4	5126.6
12.5°	4831.1	4823.0	4839.1	4860.6	4884.8	4914.4	4952.0	4992.3	5035.3	5083.6	5121.3
15°	4704.8	4696.7	4715.5	4737.0	4766.6	4809.6	4855.3	4909.0	4970.8	5035.3	5097.1
17.5°	4575.8	4573.1	4591.9	4621.5	4645.7	4691.3	4750.5	4814.9	4884.8	4970.8	5051.4
20°	4444.2	4441.5	4460.3	4484.5	4516.7	4559.7	4618.8	4694.0	4777.3	4874.1	4968.1
22.5°	4307.1	4309.8	4325.9	4352.8	4379.7	4425.3	4487.1	4562.4	4653.7	4758.5	4863.3
25°	4121.7	4108.3	4129.8	4156.7	4202.3	4239.9	4299.1	4379.7	4473.7	4583.9	4707.5
27.5°	3853.0	3850.3	3869.2	3893.3	3933.6	3979.3	4043.8	4127.1	4226.5	4347.4	4468.3
30°	3584.3	3589.7	3597.8	3622.0	3648.8	3694.5	3759.0	3828.9	3922.9	4038.4	4167.4
32.5°	3401.6	3401.6	3412.4	3428.5	3447.3	3471.5	3517.2	3568.2	3640.8	3721.4	3815.4
35°	3339.8	3329.1	3339.8	3342.5	3345.2	3350.6	3358.6	3374.8	3398.9	3433.9	3468.8
37.5°	3313.0	3304.9	3304.9	3294.2	3280.7	3264.6	3243.1	3218.9	3192.1	3157.1	3130.3
40°	3208.2	3202.8	3197.4	3186.7	3157.1	3124.9	3089.9	3033.5	2971.7	2885.7	2799.8
42.5°	3006.7	3001.3	2998.6	2977.1	2950.2	2912.6	2872.3	2813.2	2735.3	2625.1	2501.5
45°	2756.8	2746.0	2738.0	2719.2	2700.3	2668.1	2630.5	2576.7	2498.8	2386.0	2238.2
47.5°	2466.6	2461.2	2458.5	2450.5	2431.7	2412.8	2388.7	2345.7	2275.8	2168.3	2015.2
50°	2173.7	2163.0	2168.3	2165.7	2157.6	2144.2	2128.0	2098.5	2044.7	1948.0	1808.3
52.5°	1837.8	1837.8	1835.2	1843.2	1845.9	1843.2	1845.9	1813.7	1768.0	1695.4	1577.2
55°	1488.5	1488.5	1496.6	1507.4	1518.1	1520.8	1518.1	1504.7	1472.4	1413.3	1308.5
57.5°	1160.7	1155.4	1171.5	1187.6	1198.4	1209.1	1201.0	1190.3	1171.5	1123.1	1042.5
60°	884.0	884.0	894.7	905.5	916.2	927.0	924.3	921.6	905.5	873.2	808.8
62.5°	650.2	652.9	652.9	661.0	671.7	682.5	690.5	682.5	674.4	652.9	609.9
65°	464.8	462.1	464.8	472.9	481.0	491.7	497.1	494.4	486.3	470.2	438.0
67.5°	311.7	309.0	319.7	322.4	327.8	338.6	335.9	338.6	335.9	322.4	295.6
70°	204.2	198.8	204.2	201.5	209.6	212.3	217.6	220.3	217.6	209.6	201.5
72.5°	126.3	123.6	126.3	129.0	131.7	134.3	139.7	139.7	137.0	131.7	120.9
75°	80.6	72.5	75.2	69.9	75.2	75.2	80.6	83.3	80.6	80.6	75.2
77.5°	48.4	48.4	48.4	48.4	48.4	48.4	48.4	51.1	53.7	48.4	45.7
80°	24.2	24.2	26.9	26.9	26.9	29.6	26.9	26.9	26.9	29.6	21.5
82.5°	18.8	16.1	16.1	16.1	18.8	16.1	16.1	16.1	16.1	16.1	16.1
85°	8.1	10.7	8.1	5.4	8.1	8.1	10.7	8.1	8.1	8.1	10.7
87.5°	2.7	2.7	0.0	0.0	0.0	2.7	0.0	2.7	2.7	5.4	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°	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1
2.5°	5075.6	5070.2	5070.2	5067.5	5072.9	5067.5	5070.2	5067.5	5067.5	5072.9	5067.5
5°	5094.4	5097.1	5091.7	5089.0	5097.1	5097.1	5097.1	5091.7	5091.7	5094.4	5091.7
7.5°	5121.3	5126.6	5129.3	5132.0	5137.4	5140.1	5140.1	5137.4	5134.7	5142.8	5132.0
10°	5150.8	5158.9	5175.0	5183.1	5196.5	5196.5	5201.9	5201.9	5196.5	5201.9	5199.2
12.5°	5140.1	5188.4	5215.3	5234.1	5252.9	5269.0	5274.4	5277.1	5274.4	5285.2	5274.4
15°	5158.9	5199.2	5242.2	5274.4	5309.3	5328.1	5333.5	5355.0	5360.4	5363.1	5347.0
17.5°	5129.3	5201.9	5247.5	5295.9	5347.0	5381.9	5414.1	5427.6	5430.3	5435.6	5414.1
20°	5062.1	5142.8	5212.6	5282.5	5341.6	5395.3	5422.2	5459.8	5449.1	5470.6	5441.0
22.5°	4970.8	5062.1	5150.8	5242.2	5304.0	5368.5	5424.9	5451.7	5465.2	5465.2	5432.9
25°	4825.7	4933.2	5029.9	5123.9	5218.0	5295.9	5360.4	5400.7	5408.8	5406.1	5368.5
27.5°	4600.0	4715.5	4828.4	4935.9	5051.4	5142.8	5218.0	5266.3	5279.8	5279.8	5239.5
30°	4288.3	4411.9	4522.1	4651.0	4769.3	4871.4	4976.2	5019.2	5043.3	5043.3	4997.7
32.5°	3917.5	4022.3	4124.4	4250.7	4379.7	4495.2	4594.6	4653.7	4683.3	4680.6	4640.3
35°	3514.5	3565.5	3643.5	3737.5	3853.0	3960.5	4057.2	4113.7	4164.7	4162.0	4124.4
37.5°	3111.4	3098.0	3106.1	3141.0	3213.5	3288.8	3364.0	3417.8	3460.7	3479.6	3471.5
40°	2716.5	2646.6	2579.4	2555.3	2560.6	2587.5	2627.8	2668.1	2716.5	2740.7	2751.4
42.5°	2361.8	2243.6	2125.3	2036.7	1985.6	1969.5	1988.3	2001.7	2031.3	2066.2	2101.2
45°	2077.0	1918.5	1762.6	1625.6	1539.6	1488.5	1477.8	1488.5	1504.7	1539.6	1585.3
47.5°	1843.2	1657.8	1483.2	1330.0	1203.7	1136.6	1117.8	1112.4	1128.5	1160.7	1222.5
50°	1636.3	1450.9	1257.5	1080.1	948.5	873.2	846.4	835.6	854.4	878.6	935.0
52.5°	1410.6	1227.9	1029.1	857.1	720.1	642.2	612.6	596.5	607.2	639.5	695.9
55°	1166.1	996.8	816.8	639.5	507.8	435.3	400.3	389.6	400.3	435.3	491.7
57.5°	921.6	779.2	628.7	462.1	343.9	271.4	236.4	225.7	255.3	268.7	327.8
60°	720.1	604.6	475.6	338.6	236.4	180.0	145.1	137.0	150.5	174.6	223.0
62.5°	540.1	467.5	365.4	241.8	174.6	115.5	96.7	88.7	96.7	115.5	153.2
65°	392.3	335.9	255.3	177.3	118.2	86.0	64.5	59.1	67.2	80.6	112.9
67.5°	268.7	225.7	177.3	123.6	80.6	53.7	45.7	45.7	48.4	59.1	83.3
70°	174.6	147.8	112.9	80.6	53.7	40.3	34.9	29.6	34.9	43.0	56.4
72.5°	110.2	94.0	72.5	56.4	40.3	29.6	24.2	21.5	26.9	32.2	43.0
75°	67.2	51.1	37.6	29.6	21.5	21.5	21.5	10.7	13.4	21.5	26.9
77.5°	40.3	34.9	29.6	24.2	18.8	10.7	10.7	10.7	13.4	16.1	24.2
80°	21.5	18.8	13.4	13.4	10.7	8.1	10.7	8.1	5.4	13.4	16.1
82.5°	13.4	10.7	10.7	10.7	13.4	5.4	8.1	5.4	8.1	10.7	8.1
85°	8.1	8.1	8.1	5.4	13.4	5.4	5.4	2.7	2.7	5.4	5.4
87.5°	0.0	2.7	2.7	0.0	2.7	0.0	2.7	2.7	2.7	2.7	2.7
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°	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1	5062.1
2.5°	5070.2	5067.5	5070.2	5067.5	5067.5	5067.5	5070.2	5070.2	5067.5	5067.5	5072.9
5°	5091.7	5091.7	5091.7	5089.0	5086.3	5086.3	5091.7	5091.7	5083.6	5091.7	5091.7
7.5°	5137.4	5129.3	5137.4	5126.6	5121.3	5123.9	5126.6	5121.3	5115.9	5118.6	5118.6
10°	5196.5	5188.4	5188.4	5180.4	5172.3	5166.9	5161.6	5148.1	5134.7	5132.0	5121.3
12.5°	5266.3	5252.9	5244.9	5228.7	5215.3	5196.5	5180.4	5158.9	5132.0	5113.2	5094.4
15°	5336.2	5314.7	5295.9	5269.0	5239.5	5207.2	5172.3	5137.4	5094.4	5056.8	5024.5
17.5°	5392.6	5363.1	5328.1	5285.2	5242.2	5193.8	5142.8	5091.7	5029.9	4981.5	4943.9
20°	5411.4	5368.5	5322.8	5266.3	5209.9	5142.8	5078.3	5011.1	4941.2	4890.2	4847.2
22.5°	5387.3	5336.2	5279.8	5220.7	5145.4	5072.9	4997.7	4919.7	4857.9	4788.1	4747.8
25°	5320.1	5258.3	5196.5	5126.6	5054.1	4973.5	4892.9	4812.3	4737.0	4699.4	4648.4
27.5°	5183.1	5115.9	5048.7	4976.2	4892.9	4812.3	4729.0	4651.0	4586.6	4535.5	4506.0
30°	4941.2	4863.3	4785.4	4707.5	4634.9	4551.6	4473.7	4409.2	4344.7	4304.4	4274.9
32.5°	4570.4	4500.6	4422.7	4347.4	4280.3	4210.4	4145.9	4089.5	4043.8	4016.9	3995.4
35°	4070.7	4000.8	3941.7	3888.0	3831.5	3802.0	3761.7	3729.4	3710.6	3699.9	3697.2
37.5°	3441.9	3401.6	3382.8	3372.1	3361.3	3353.3	3358.6	3372.1	3382.8	3401.6	3423.1
40°	2770.2	2805.1	2815.9	2853.5	2888.4	2934.1	2985.2	3044.3	3092.6	3154.4	3197.4
42.5°	2157.6	2222.1	2297.3	2377.9	2463.9	2547.2	2649.3	2743.3	2829.3	2907.2	2974.4
45°	1657.8	1757.2	1870.1	1985.6	2101.2	2222.1	2345.7	2461.2	2563.3	2646.6	2716.5
47.5°	1292.4	1402.6	1547.7	1690.1	1829.8	1972.2	2109.2	2230.1	2316.1	2396.7	2458.5
50°	1023.7	1150.0	1308.5	1472.4	1625.6	1776.0	1921.1	2034.0	2120.0	2184.5	2230.1
52.5°	792.6	943.1	1104.3	1276.3	1440.2	1604.1	1738.4	1843.2	1913.1	1969.5	2004.4
55°	591.1	738.9	910.9	1088.2	1254.8	1413.3	1539.6	1631.0	1692.8	1725.0	1743.8
57.5°	427.2	561.6	733.5	910.9	1061.3	1211.8	1313.9	1397.2	1432.1	1450.9	1459.0
60°	311.7	435.3	588.4	741.6	884.0	1004.9	1093.6	1150.0	1176.9	1187.6	1184.9
62.5°	228.4	335.9	467.5	596.5	712.0	811.4	881.3	918.9	932.4	937.7	929.7
65°	174.6	257.9	370.8	470.2	558.9	631.4	682.5	706.7	714.7	712.0	706.7
67.5°	129.0	193.5	276.8	352.0	416.5	472.9	499.8	521.3	526.6	518.6	510.5
70°	91.4	142.4	201.5	252.6	300.9	333.2	362.7	365.4	365.4	362.7	357.4
72.5°	64.5	99.4	137.0	172.0	201.5	225.7	236.4	244.5	241.8	239.1	233.8
75°	43.0	61.8	99.4	107.5	134.3	142.4	153.2	153.2	155.8	147.8	147.8
77.5°	26.9	43.0	59.1	69.9	80.6	91.4	96.7	96.7	99.4	96.7	96.7
80°	16.1	26.9	32.2	48.4	48.4	56.4	59.1	61.8	56.4	64.5	56.4
82.5°	10.7	16.1	24.2	24.2	29.6	34.9	34.9	37.6	37.6	34.9	34.9
85°	8.1	10.7	13.4	16.1	16.1	18.8	16.1	16.1	18.8	21.5	18.8
87.5°	2.7	5.4	2.7	5.4	5.4	10.7	8.1	8.1	8.1	10.7	10.7
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: P248473

CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5062.1	5062.1	5062.1	5062.1
2.5°	5067.5	5070.2	5067.5	5067.5
5°	5091.7	5089.0	5091.7	5086.3
7.5°	5110.5	5110.5	5107.8	5107.8
10°	5110.5	5099.8	5099.8	5099.8
12.5°	5070.2	5056.8	5048.7	5043.3
15°	5000.3	4976.2	4965.4	4962.7
17.5°	4909.0	4887.5	4874.1	4866.0
20°	4804.2	4782.7	4766.6	4769.3
22.5°	4712.8	4688.7	4677.9	4672.5
25°	4621.5	4591.9	4583.9	4578.5
27.5°	4473.7	4457.6	4449.5	4441.5
30°	4248.0	4239.9	4226.5	4245.3
32.5°	3987.4	3973.9	3963.2	3971.3
35°	3699.9	3691.8	3699.9	3694.5
37.5°	3436.6	3444.6	3455.4	3460.7
40°	3229.7	3259.2	3270.0	3275.3
42.5°	3022.8	3057.7	3079.2	3092.6
45°	2767.5	2802.4	2826.6	2842.8
47.5°	2504.2	2533.8	2557.9	2555.3
50°	2265.1	2281.2	2291.9	2302.7
52.5°	2023.2	2023.2	2025.9	2025.9
55°	1749.2	1743.8	1741.1	1743.8
57.5°	1448.2	1442.9	1440.2	1432.1
60°	1174.2	1158.1	1147.3	1147.3
62.5°	918.9	900.1	892.1	889.4
65°	690.5	687.8	671.7	669.0
67.5°	499.8	489.0	478.3	481.0
70°	352.0	335.9	335.9	330.5
72.5°	228.4	220.3	217.6	217.6
75°	142.4	142.4	137.0	147.8
77.5°	94.0	94.0	91.4	94.0
80°	56.4	56.4	56.4	53.7
82.5°	34.9	37.6	34.9	34.9
85°	18.8	21.5	16.1	24.2
87.5°	10.7	13.4	10.7	13.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)