

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: P248438

Luminaire Tested: **LSR8B100D010 EC8B100827 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248438
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: LSR8B100D010 EC8B100827 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10428.0 lumens
Efficiency: N/A
Efficacy: 98.1 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

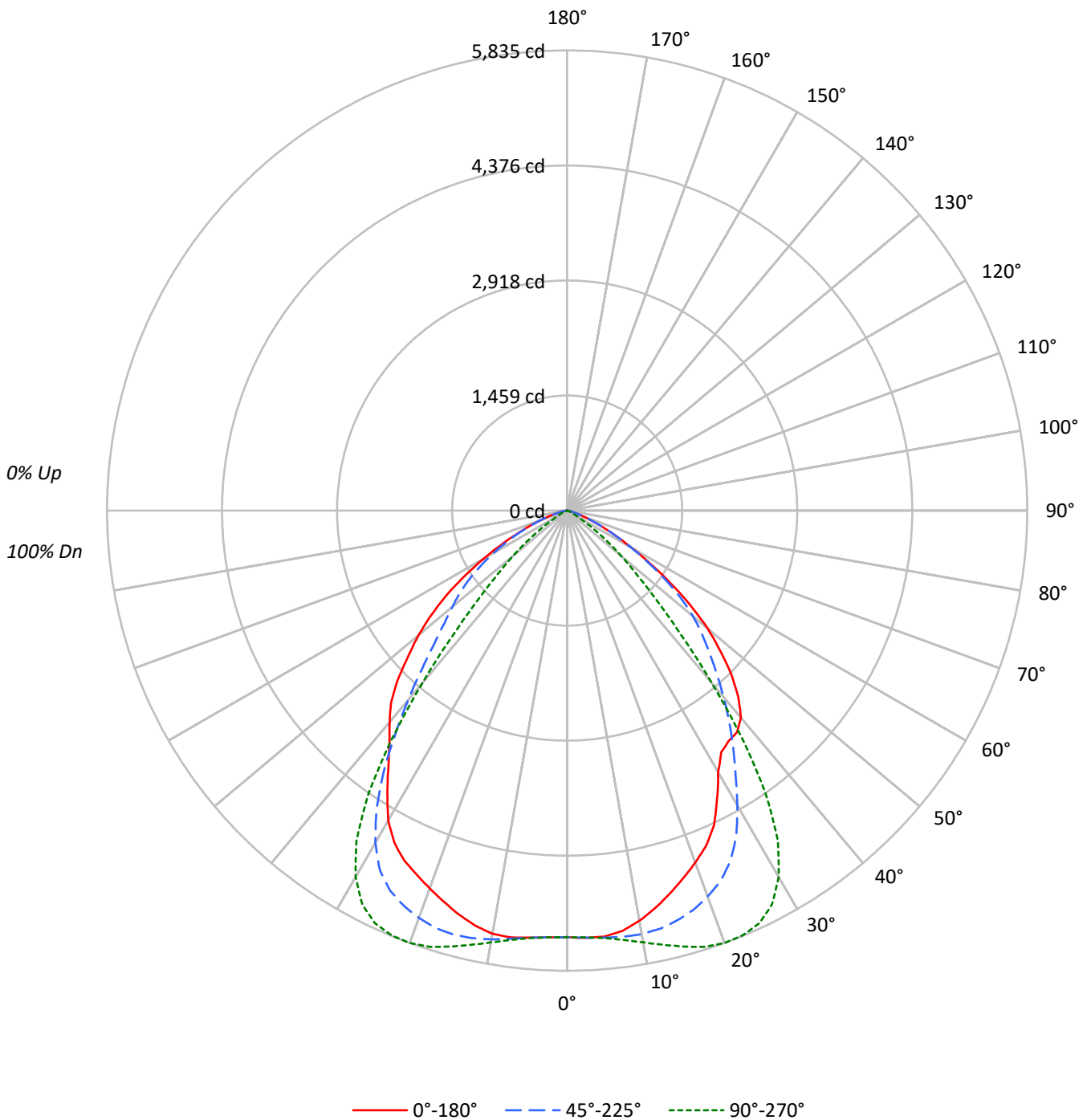
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	166815	166815	166815
5°	167808	168431	168251
10°	165343	174063	170647
15°	160508	182692	169306
20°	155850	191468	167250
25°	149866	196370	166477
30°	136388	190987	161541
35°	134356	165488	148627
40°	138011	114776	140897
45°	128477	69369	132485
50°	111441	42840	118051
55°	85518	22386	100185
60°	58262	9029	75617
65°	36242	4611	52163
70°	19673	2849	31844
75°	10258	1370	18813
80°	4599	1527	10193
85°	3043	1026	9164



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	520.2	5.0
10°-20°	1541.2	14.8
20°-30°	2351.2	22.5
30°-40°	2453.5	23.5
40°-50°	1842.9	17.7
50°-60°	1133.9	10.9
60°-70°	461.5	4.4
70°-80°	108.7	1.0
80°-90°	15.0	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°	4412.6	42.3
0°-40°	6866.1	65.8
0°-60°	9842.9	94.4
0°-90°	10428.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10428.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5410	5410	5410	5410	5410	
5°	5421	5436	5441	5436	5436	513
15°	5028	5381	5723	5565	5303	1416
25°	4405	4899	5772	5315	4893	2002
35°	3569	3670	4396	4063	3948	2254
45°	2946	2550	1591	2375	3038	2248
55°	1591	1510	416	1510	1864	1430
65°	497	502	63	675	715	518
75°	86	86	12	152	158	104
85°	9	9	3	20	26	12
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°	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7
2.5°	5424.1	5415.4	5424.1	5424.1	5427.0	5421.2	5424.1	5427.0	5421.2	5421.2	5421.2
5°	5421.2	5415.4	5421.2	5418.3	5424.1	5424.1	5429.8	5429.8	5435.5	5435.5	5444.2
7.5°	5375.3	5363.8	5375.3	5383.9	5389.6	5401.1	5415.4	5427.0	5438.4	5449.9	5464.3
10°	5280.5	5280.5	5289.1	5306.3	5323.5	5343.6	5369.5	5398.2	5427.0	5452.7	5478.6
12.5°	5162.8	5154.1	5171.4	5194.3	5220.2	5251.8	5292.0	5335.1	5381.0	5432.7	5472.9
15°	5027.8	5019.2	5039.3	5062.3	5093.9	5139.8	5188.6	5246.0	5312.1	5381.0	5447.1
17.5°	4890.0	4887.1	4907.2	4938.8	4964.7	5013.4	5076.7	5145.5	5220.2	5312.1	5398.2
20°	4749.3	4746.4	4766.5	4792.4	4826.8	4872.8	4935.9	5016.3	5105.3	5208.7	5309.2
22.5°	4602.8	4605.7	4622.9	4651.7	4680.4	4729.2	4795.2	4875.6	4973.2	5085.2	5197.2
25°	4404.7	4390.4	4413.3	4442.1	4490.8	4531.0	4594.3	4680.4	4780.9	4898.6	5030.7
27.5°	4117.6	4114.7	4134.8	4160.6	4203.7	4252.5	4321.4	4410.5	4516.7	4645.9	4775.1
30°	3830.4	3836.2	3844.8	3870.7	3899.3	3948.2	4017.1	4091.8	4192.2	4315.7	4453.5
32.5°	3635.2	3635.2	3646.7	3663.9	3684.0	3709.8	3758.7	3813.2	3890.8	3976.9	4077.4
35°	3569.1	3557.7	3569.1	3572.0	3574.9	3580.6	3589.2	3606.5	3632.3	3669.7	3707.0
37.5°	3540.5	3531.8	3531.8	3520.4	3506.0	3488.7	3465.8	3439.9	3411.2	3373.9	3345.2
40°	3428.5	3422.7	3416.9	3405.5	3373.9	3339.4	3302.1	3241.8	3175.7	3083.8	2992.0
42.5°	3213.1	3207.4	3204.5	3181.5	3152.8	3112.6	3069.5	3006.4	2923.1	2805.3	2673.3
45°	2946.1	2934.5	2926.0	2905.9	2885.7	2851.3	2811.1	2753.6	2670.4	2549.8	2391.9
47.5°	2636.0	2630.2	2627.3	2618.7	2598.6	2578.5	2552.7	2506.7	2432.1	2317.2	2153.6
50°	2323.0	2311.5	2317.2	2314.4	2305.7	2291.4	2274.1	2242.6	2185.1	2081.8	1932.5
52.5°	1964.0	1964.0	1961.2	1969.8	1972.6	1969.8	1972.6	1938.2	1889.4	1811.8	1685.5
55°	1590.7	1590.7	1599.4	1610.9	1622.3	1625.2	1622.3	1608.0	1573.5	1510.3	1398.4
57.5°	1240.4	1234.7	1251.9	1269.1	1280.7	1292.1	1283.5	1272.0	1251.9	1200.2	1114.1
60°	944.7	944.7	956.1	967.7	979.1	990.6	987.8	984.9	967.7	933.2	864.3
62.5°	694.9	697.7	697.7	706.4	717.8	729.4	737.9	729.4	720.7	697.7	651.8
65°	496.7	493.8	496.7	505.4	514.0	525.5	531.2	528.3	519.7	502.5	468.1
67.5°	333.1	330.2	341.7	344.5	350.3	361.8	358.9	361.8	358.9	344.5	315.9
70°	218.2	212.5	218.2	215.3	224.0	226.9	232.6	235.4	232.6	224.0	215.3
72.5°	135.0	132.1	135.0	137.8	140.7	143.5	149.3	149.3	146.4	140.7	129.2
75°	86.1	77.5	80.4	74.7	80.4	80.4	86.1	89.0	86.1	86.1	80.4
77.5°	51.7	51.7	51.7	51.7	51.7	51.7	51.7	54.6	57.4	51.7	48.8
80°	25.9	25.9	28.7	28.7	28.7	31.6	28.7	28.7	28.7	31.6	23.0
82.5°	20.1	17.2	17.2	17.2	20.1	17.2	17.2	17.2	17.2	17.2	17.2
85°	8.6	11.5	8.6	5.8	8.6	8.6	11.5	8.6	8.6	8.6	11.5
87.5°	2.9	2.9	0.0	0.0	0.0	2.9	0.0	2.9	2.9	5.8	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°	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7
2.5°	5424.1	5418.3	5418.3	5415.4	5421.2	5415.4	5418.3	5415.4	5415.4	5421.2	5415.4
5°	5444.2	5447.1	5441.3	5438.4	5447.1	5447.1	5447.1	5441.3	5441.3	5444.2	5441.3
7.5°	5472.9	5478.6	5481.5	5484.4	5490.1	5493.0	5493.0	5490.1	5487.2	5495.9	5484.4
10°	5504.5	5513.1	5530.3	5539.0	5553.3	5553.3	5559.0	5559.0	5553.3	5559.0	5556.2
12.5°	5493.0	5544.6	5573.4	5593.5	5613.6	5630.8	5636.5	5639.4	5636.5	5648.1	5636.5
15°	5513.1	5556.2	5602.1	5636.5	5673.9	5693.9	5699.7	5722.7	5728.4	5731.3	5714.1
17.5°	5481.5	5559.0	5607.8	5659.5	5714.1	5751.4	5785.8	5800.2	5803.1	5808.8	5785.8
20°	5409.7	5495.9	5570.5	5645.2	5708.3	5765.7	5794.5	5834.7	5823.2	5846.2	5814.6
22.5°	5312.1	5409.7	5504.5	5602.1	5668.2	5737.1	5797.4	5826.0	5840.4	5840.4	5805.9
25°	5157.0	5271.9	5375.3	5475.7	5576.3	5659.5	5728.4	5771.5	5780.1	5777.3	5737.1
27.5°	4915.8	5039.3	5159.9	5274.8	5398.2	5495.9	5576.3	5627.9	5642.3	5642.3	5599.2
30°	4582.7	4714.8	4832.6	4970.4	5096.7	5205.9	5317.8	5363.8	5389.6	5389.6	5340.8
32.5°	4186.5	4298.5	4407.6	4542.5	4680.4	4803.8	4910.1	4973.2	5004.8	5002.0	4958.9
35°	3755.8	3810.3	3893.6	3994.1	4117.6	4232.4	4335.8	4396.1	4450.7	4447.8	4407.6
37.5°	3325.0	3310.7	3319.4	3356.7	3434.2	3514.6	3595.0	3652.4	3698.3	3718.5	3709.8
40°	2903.0	2828.3	2756.5	2730.7	2736.4	2765.2	2808.2	2851.3	2903.0	2928.9	2940.3
42.5°	2524.0	2397.6	2271.2	2176.5	2121.9	2104.7	2124.8	2139.2	2170.8	2208.1	2245.5
45°	2219.6	2050.2	1883.6	1737.2	1645.3	1590.7	1579.3	1590.7	1608.0	1645.3	1694.1
47.5°	1969.8	1771.6	1585.0	1421.3	1286.4	1214.6	1194.5	1188.8	1206.0	1240.4	1306.5
50°	1748.7	1550.5	1343.8	1154.3	1013.6	933.2	904.5	893.0	913.1	938.9	999.2
52.5°	1507.5	1312.2	1099.8	916.0	769.5	686.3	654.7	637.5	648.9	683.4	743.7
55°	1246.2	1065.3	872.9	683.4	542.7	465.2	427.8	416.4	427.8	465.2	525.5
57.5°	984.9	832.7	671.9	493.8	367.5	290.0	252.7	241.2	272.8	287.1	350.3
60°	769.5	646.1	508.2	361.8	252.7	192.4	155.1	146.4	160.8	186.6	238.3
62.5°	577.2	499.6	390.5	258.4	186.6	123.4	103.4	94.8	103.4	123.4	163.7
65°	419.2	358.9	272.8	189.5	126.3	91.9	68.9	63.2	71.8	86.1	120.6
67.5°	287.1	241.2	189.5	132.1	86.1	57.4	48.8	48.8	51.7	63.2	89.0
70°	186.6	157.9	120.6	86.1	57.4	43.1	37.3	31.6	37.3	45.9	60.3
72.5°	117.8	100.5	77.5	60.3	43.1	31.6	25.9	23.0	28.7	34.4	45.9
75°	71.8	54.6	40.2	31.6	23.0	23.0	23.0	11.5	14.3	23.0	28.7
77.5°	43.1	37.3	31.6	25.9	20.1	11.5	11.5	11.5	14.3	17.2	25.9
80°	23.0	20.1	14.3	14.3	11.5	8.6	11.5	8.6	5.8	14.3	17.2
82.5°	14.3	11.5	11.5	11.5	14.3	5.8	8.6	5.8	8.6	11.5	8.6
85°	8.6	8.6	8.6	5.8	14.3	5.8	5.8	2.9	2.9	5.8	5.8
87.5°	0.0	2.9	2.9	0.0	2.9	0.0	2.9	2.9	2.9	2.9	2.9
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°	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7	5409.7
2.5°	5418.3	5415.4	5418.3	5415.4	5415.4	5415.4	5418.3	5418.3	5415.4	5415.4	5421.2
5°	5441.3	5441.3	5441.3	5438.4	5435.5	5435.5	5441.3	5441.3	5432.7	5441.3	5441.3
7.5°	5490.1	5481.5	5490.1	5478.6	5472.9	5475.7	5478.6	5472.9	5467.1	5470.0	5470.0
10°	5553.3	5544.6	5544.6	5536.1	5527.4	5521.7	5516.0	5501.6	5487.2	5484.4	5472.9
12.5°	5627.9	5613.6	5605.0	5587.7	5573.4	5553.3	5536.1	5513.1	5484.4	5464.3	5444.2
15°	5702.6	5679.6	5659.5	5630.8	5599.2	5564.7	5527.4	5490.1	5444.2	5404.0	5369.5
17.5°	5762.9	5731.3	5693.9	5648.1	5602.1	5550.4	5495.9	5441.3	5375.3	5323.5	5283.4
20°	5783.0	5737.1	5688.3	5627.9	5567.6	5495.9	5427.0	5355.2	5280.5	5226.0	5180.0
22.5°	5757.2	5702.6	5642.3	5579.1	5498.7	5421.2	5340.8	5257.5	5191.5	5116.8	5073.8
25°	5685.4	5619.3	5553.3	5478.6	5401.1	5315.0	5228.8	5142.7	5062.3	5022.1	4967.5
27.5°	5539.0	5467.1	5395.3	5317.8	5228.8	5142.7	5053.7	4970.4	4901.5	4846.9	4815.4
30°	5280.5	5197.2	5114.0	5030.7	4953.1	4864.1	4780.9	4711.9	4643.0	4600.0	4568.4
32.5°	4884.2	4809.6	4726.3	4645.9	4574.2	4499.5	4430.6	4370.3	4321.4	4292.7	4269.7
35°	4350.2	4275.5	4212.3	4154.9	4094.6	4063.0	4020.0	3985.5	3965.4	3953.9	3951.0
37.5°	3678.2	3635.2	3615.1	3603.6	3592.1	3583.5	3589.2	3603.6	3615.1	3635.2	3658.1
40°	2960.4	2997.7	3009.2	3049.4	3086.7	3135.6	3190.1	3253.3	3305.0	3371.0	3416.9
42.5°	2305.7	2374.7	2455.0	2541.2	2633.1	2722.1	2831.2	2931.7	3023.6	3106.8	3178.6
45°	1771.6	1877.9	1998.5	2121.9	2245.5	2374.7	2506.7	2630.2	2739.3	2828.3	2903.0
47.5°	1381.1	1498.9	1653.9	1806.1	1955.4	2107.6	2254.0	2383.2	2475.1	2561.3	2627.3
50°	1094.0	1229.0	1398.4	1573.5	1737.2	1898.0	2053.0	2173.7	2265.5	2334.5	2383.2
52.5°	847.0	1007.9	1180.1	1363.9	1539.1	1714.2	1857.8	1969.8	2044.4	2104.7	2142.0
55°	631.7	789.6	973.4	1162.9	1340.9	1510.3	1645.3	1743.0	1809.0	1843.4	1863.5
57.5°	456.5	600.1	783.9	973.4	1134.2	1295.0	1404.1	1493.1	1530.4	1550.5	1559.2
60°	333.1	465.2	628.8	792.5	944.7	1073.9	1168.7	1229.0	1257.7	1269.1	1266.3
62.5°	244.1	358.9	499.6	637.5	760.9	867.1	941.8	982.0	996.4	1002.1	993.5
65°	186.6	275.6	396.3	502.5	597.3	674.8	729.4	755.2	763.8	760.9	755.2
67.5°	137.8	206.8	295.8	376.2	445.1	505.4	534.1	557.1	562.8	554.2	545.6
70°	97.7	152.2	215.3	269.9	321.6	356.1	387.6	390.5	390.5	387.6	381.9
72.5°	68.9	106.2	146.4	183.8	215.3	241.2	252.7	261.3	258.4	255.5	249.8
75°	45.9	66.0	106.2	114.9	143.5	152.2	163.7	163.7	166.5	157.9	157.9
77.5°	28.7	45.9	63.2	74.7	86.1	97.7	103.4	103.4	106.2	103.4	103.4
80°	17.2	28.7	34.4	51.7	51.7	60.3	63.2	66.0	60.3	68.9	60.3
82.5°	11.5	17.2	25.9	25.9	31.6	37.3	37.3	40.2	40.2	37.3	37.3
85°	8.6	11.5	14.3	17.2	17.2	20.1	17.2	17.2	20.1	23.0	20.1
87.5°	2.9	5.8	2.9	5.8	5.8	11.5	8.6	8.6	8.6	11.5	11.5
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: P248438

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5409.7	5409.7	5409.7	5409.7
2.5°	5415.4	5418.3	5415.4	5415.4
5°	5441.3	5438.4	5441.3	5435.5
7.5°	5461.4	5461.4	5458.5	5458.5
10°	5461.4	5449.9	5449.9	5449.9
12.5°	5418.3	5404.0	5395.3	5389.6
15°	5343.6	5317.8	5306.3	5303.4
17.5°	5246.0	5223.1	5208.7	5200.1
20°	5134.1	5111.1	5093.9	5096.7
22.5°	5036.4	5010.6	4999.1	4993.3
25°	4938.8	4907.2	4898.6	4892.9
27.5°	4780.9	4763.7	4755.0	4746.4
30°	4539.7	4531.0	4516.7	4536.8
32.5°	4261.2	4246.8	4235.3	4244.0
35°	3953.9	3945.3	3953.9	3948.2
37.5°	3672.5	3681.1	3692.6	3698.3
40°	3451.4	3483.0	3494.5	3500.2
42.5°	3230.3	3267.6	3290.6	3305.0
45°	2957.5	2994.8	3020.7	3038.0
47.5°	2676.1	2707.8	2733.5	2730.7
50°	2420.6	2437.8	2449.3	2460.8
52.5°	2162.1	2162.1	2165.0	2165.0
55°	1869.3	1863.5	1860.7	1863.5
57.5°	1547.7	1542.0	1539.1	1530.4
60°	1254.8	1237.6	1226.1	1226.1
62.5°	982.0	961.9	953.3	950.5
65°	737.9	735.0	717.8	714.9
67.5°	534.1	522.6	511.1	514.0
70°	376.2	358.9	358.9	353.2
72.5°	244.1	235.4	232.6	232.6
75°	152.2	152.2	146.4	157.9
77.5°	100.5	100.5	97.7	100.5
80°	60.3	60.3	60.3	57.4
82.5°	37.3	40.2	37.3	37.3
85°	20.1	23.0	17.2	25.9
87.5°	11.5	14.3	11.5	14.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)