

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: P249266

Luminaire Tested: **LSR8B100D010 EC8B100940 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249266
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: LSR8B100D010 EC8B100940 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9773.0 lumens
Efficiency: N/A
Efficacy: 91.9 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

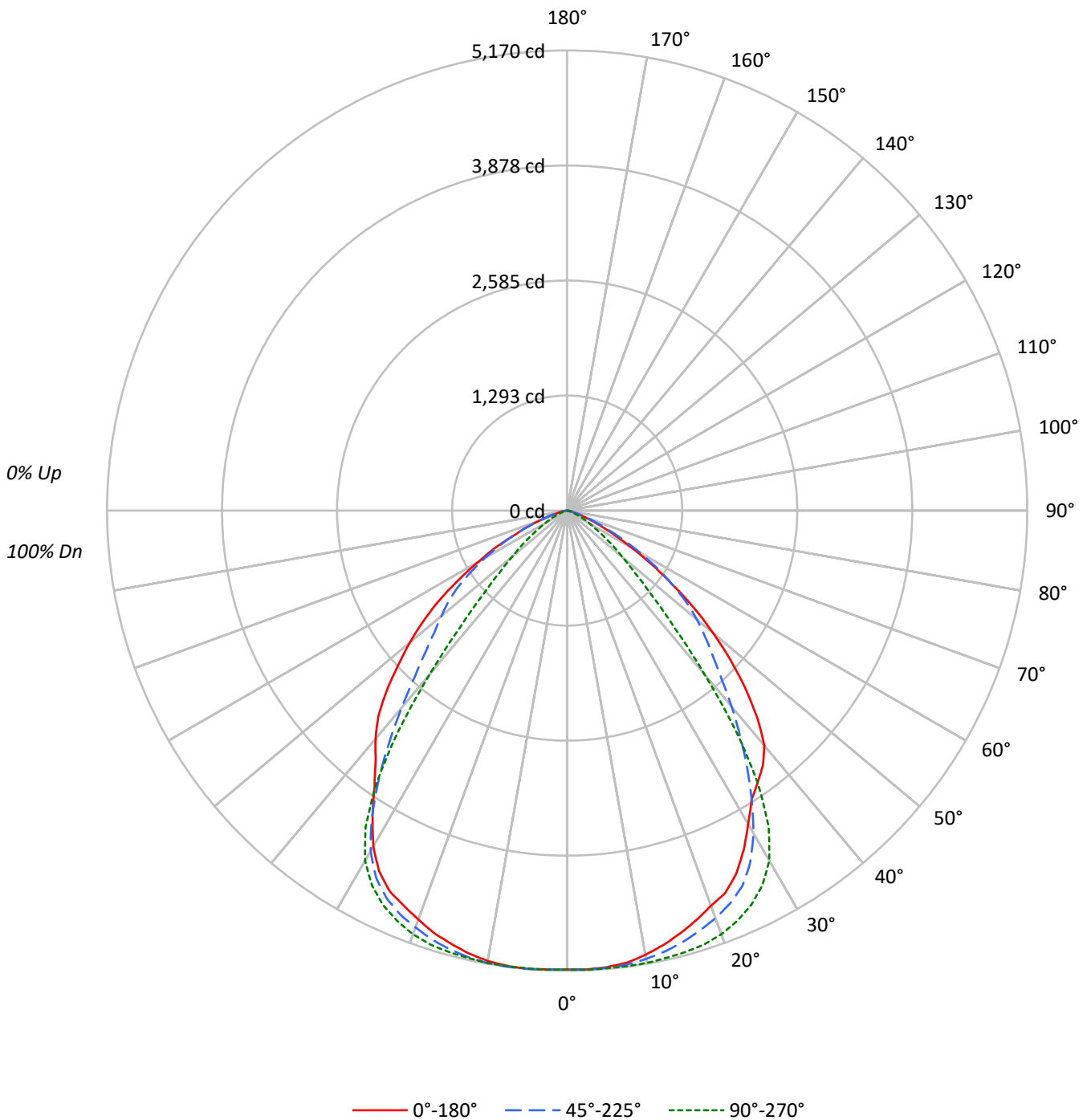
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	159004	159004	159004
5°	159355	159785	159955
10°	158683	161545	160853
15°	156926	163908	160814
20°	155043	166213	160401
25°	153030	166402	160563
30°	144773	161726	155121
35°	140450	140556	142016
40°	138711	96706	134815
45°	123597	58057	125289
50°	102772	38637	110740
55°	77078	26639	93894
60°	52237	17749	70843
65°	31506	11514	48668
70°	17473	6239	29942
75°	7911	2633	15500
80°	6872	2948	10815
85°	7819	3892	10791



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	492.1	5.0
10°-20°	1429.2	14.6
20°-30°	2169.2	22.2
30°-40°	2278.3	23.3
40°-50°	1708.1	17.5
50°-60°	1096.0	11.2
60°-70°	468.8	4.8
70°-80°	110.8	1.1
80°-90°	20.6	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°	4090.4	41.9
0°-40°	6368.7	65.2
0°-60°	9172.8	93.9
0°-90°	9773.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9773.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5156	5156	5156	5156	5156	
5°	5148	5156	5162	5170	5168	489
15°	4916	5018	5134	5101	5037	1386
25°	4498	4656	4891	4802	4719	2055
35°	3731	3523	3734	3690	3773	2342
45°	2834	2317	1331	2250	2873	2171
55°	1434	1434	496	1495	1746	1300
65°	432	509	158	656	667	461
75°	66	78	22	133	130	97
85°	22	14	11	22	30	23
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°	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4
2.5°	5159.2	5164.8	5162.0	5162.0	5159.2	5162.0	5162.0	5167.5	5167.5	5162.0	5159.2
5°	5148.1	5153.7	5153.7	5148.1	5148.1	5162.0	5153.7	5159.2	5159.2	5156.4	5156.4
7.5°	5123.2	5123.2	5134.3	5126.0	5126.0	5134.3	5131.5	5137.1	5142.6	5145.4	5145.4
10°	5067.8	5073.4	5076.2	5076.2	5078.9	5087.2	5092.8	5103.9	5109.4	5114.9	5117.7
12.5°	4998.7	5007.0	5009.7	5007.0	5015.3	5026.3	5040.2	5054.0	5062.4	5073.4	5081.7
15°	4915.6	4915.6	4921.2	4929.5	4935.0	4951.6	4965.4	4982.0	5004.2	5018.1	5031.9
17.5°	4824.3	4829.9	4838.1	4838.1	4849.2	4876.9	4885.2	4910.1	4935.0	4948.9	4976.6
20°	4724.7	4730.2	4738.5	4744.1	4757.9	4780.0	4796.6	4818.8	4846.5	4871.4	4899.0
22.5°	4647.1	4636.1	4641.6	4647.1	4661.0	4680.4	4699.8	4727.4	4755.1	4780.0	4807.7
25°	4497.7	4500.5	4508.8	4514.3	4530.9	4547.5	4569.7	4602.9	4627.8	4655.5	4685.9
27.5°	4295.7	4298.4	4312.2	4312.2	4326.1	4353.8	4367.6	4395.3	4428.5	4456.2	4492.2
30°	4065.9	4071.4	4071.4	4082.5	4090.8	4104.7	4118.5	4146.2	4162.8	4187.7	4237.5
32.5°	3855.6	3861.1	3858.3	3855.6	3847.3	3844.5	3841.7	3847.3	3852.8	3861.1	3880.4
35°	3731.0	3717.2	3706.1	3686.8	3664.6	3636.9	3612.0	3578.8	3548.3	3523.4	3495.8
37.5°	3612.0	3609.2	3592.6	3564.9	3520.6	3470.8	3412.7	3340.8	3268.8	3191.3	3116.6
40°	3445.9	3437.6	3423.8	3385.0	3335.2	3274.3	3196.8	3108.3	2992.0	2873.0	2751.2
42.5°	3163.6	3166.4	3149.8	3119.3	3072.3	3014.1	2933.9	2837.0	2712.5	2571.3	2413.5
45°	2834.2	2834.2	2828.7	2803.8	2770.6	2723.5	2662.6	2582.4	2460.6	2316.6	2147.8
47.5°	2491.0	2493.8	2485.5	2480.0	2466.1	2435.7	2391.4	2330.5	2244.7	2106.3	1937.4
50°	2142.3	2142.3	2156.1	2153.3	2153.3	2142.3	2122.9	2086.9	2012.2	1901.5	1743.8
52.5°	1793.5	1799.1	1807.4	1818.5	1832.3	1854.4	1832.3	1815.7	1768.6	1682.8	1547.2
55°	1433.7	1439.3	1453.1	1472.5	1489.1	1511.3	1516.7	1516.7	1491.8	1433.7	1331.3
57.5°	1126.5	1118.2	1129.3	1145.9	1168.0	1190.2	1206.8	1226.1	1223.4	1184.6	1101.6
60°	847.0	849.7	858.0	874.7	891.2	910.6	932.8	949.4	957.7	938.3	885.7
62.5°	617.2	617.2	628.3	644.9	653.2	680.9	694.7	703.0	711.3	708.5	675.3
65°	431.8	437.3	442.8	451.2	459.4	476.0	484.4	501.0	506.5	509.3	484.4
67.5°	304.5	296.2	301.7	307.2	315.5	326.6	343.2	343.2	351.5	351.5	334.9
70°	193.8	193.8	196.5	204.8	210.4	213.1	218.7	224.2	232.5	229.7	229.7
72.5°	130.1	127.3	130.1	132.9	135.6	143.9	143.9	146.7	152.2	155.0	143.9
75°	66.4	69.2	74.7	72.0	80.3	74.7	77.5	85.8	83.0	77.5	77.5
77.5°	55.3	55.3	55.3	52.6	58.1	58.1	55.3	60.9	58.1	58.1	55.3
80°	38.7	41.5	38.7	36.0	38.7	36.0	36.0	36.0	36.0	36.0	33.2
82.5°	30.5	24.9	27.7	24.9	27.7	27.7	24.9	22.1	22.1	24.9	22.1
85°	22.1	16.6	19.4	19.4	16.6	16.6	16.6	16.6	16.6	13.8	13.8
87.5°	13.8	8.3	8.3	8.3	11.0	11.0	11.0	8.3	11.0	11.0	5.6
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°	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4
2.5°	5164.8	5162.0	5167.5	5164.8	5164.8	5162.0	5164.8	5162.0	5167.5	5156.4	5159.2
5°	5164.8	5159.2	5162.0	5164.8	5167.5	5162.0	5162.0	5162.0	5167.5	5162.0	5164.8
7.5°	5153.7	5150.9	5159.2	5164.8	5162.0	5159.2	5164.8	5162.0	5167.5	5164.8	5170.2
10°	5131.5	5134.3	5139.8	5148.1	5150.9	5153.7	5159.2	5159.2	5167.5	5156.4	5162.0
12.5°	5098.3	5109.4	5123.2	5128.7	5139.8	5139.8	5145.4	5148.1	5153.7	5150.9	5159.2
15°	5056.8	5070.6	5087.2	5101.1	5114.9	5123.2	5131.5	5134.3	5142.6	5134.3	5137.1
17.5°	5007.0	5023.6	5048.5	5065.1	5087.2	5095.5	5106.6	5112.1	5120.5	5114.9	5117.7
20°	4937.7	4957.2	4984.8	5009.7	5023.6	5042.9	5056.8	5065.1	5070.6	5065.1	5067.8
22.5°	4840.9	4868.6	4904.6	4923.9	4951.6	4968.2	4971.0	4990.4	5004.2	4990.4	4995.9
25°	4727.4	4755.1	4782.8	4824.3	4849.2	4868.6	4888.0	4890.7	4904.6	4901.8	4899.0
27.5°	4539.2	4575.2	4622.2	4655.5	4688.7	4719.1	4741.3	4746.8	4760.6	4755.1	4757.9
30°	4281.8	4320.6	4364.9	4417.4	4464.5	4494.9	4522.6	4542.0	4555.8	4547.5	4544.7
32.5°	3916.5	3955.2	4002.3	4054.8	4110.2	4154.5	4187.7	4212.6	4229.2	4223.7	4209.9
35°	3498.5	3509.6	3540.1	3581.6	3628.6	3675.6	3706.1	3733.8	3753.1	3758.7	3758.7
37.5°	3069.5	3033.6	3011.4	3011.4	3039.0	3058.4	3086.1	3102.7	3133.2	3144.2	3152.5
40°	2654.3	2571.3	2493.8	2435.7	2396.9	2394.2	2394.2	2402.4	2430.1	2466.1	2499.3
42.5°	2283.4	2150.6	2031.6	1923.6	1846.2	1801.9	1782.5	1785.3	1807.4	1840.6	1895.9
45°	1987.3	1821.2	1671.8	1541.7	1436.5	1367.3	1334.1	1331.3	1347.9	1386.6	1447.6
47.5°	1757.6	1580.4	1411.6	1262.1	1148.7	1073.9	1035.2	1024.1	1035.2	1071.1	1143.1
50°	1566.6	1383.9	1209.5	1054.5	932.8	855.3	819.3	805.4	819.3	849.7	921.7
52.5°	1389.4	1201.2	1037.9	888.5	758.4	691.9	653.2	644.9	653.2	689.2	747.3
55°	1184.6	1024.1	863.5	714.1	600.6	534.2	503.7	495.5	503.7	537.0	597.9
57.5°	982.6	844.2	703.0	567.4	470.5	412.4	384.7	373.6	393.0	415.1	487.1
60°	794.3	683.7	564.6	445.6	365.4	312.7	290.6	287.8	293.4	321.1	370.9
62.5°	622.8	531.4	437.3	340.4	274.0	251.9	224.2	221.5	226.9	243.5	282.3
65°	448.4	390.3	318.3	249.1	196.5	166.1	155.0	157.8	163.3	174.4	210.4
67.5°	312.7	271.2	221.5	174.4	135.6	121.8	110.7	108.0	110.7	130.1	149.5
70°	210.4	185.4	149.5	132.9	94.1	74.7	77.5	69.2	80.3	80.3	96.8
72.5°	138.4	121.8	99.6	77.5	66.4	52.6	52.6	49.8	55.3	58.1	72.0
75°	72.0	55.3	55.3	38.7	27.7	13.8	24.9	22.1	19.4	22.1	27.7
77.5°	49.8	41.5	38.7	30.5	27.7	22.1	22.1	22.1	22.1	24.9	27.7
80°	30.5	30.5	22.1	19.4	16.6	13.8	16.6	16.6	16.6	16.6	19.4
82.5°	19.4	16.6	16.6	13.8	13.8	11.0	11.0	11.0	11.0	11.0	16.6
85°	16.6	11.0	11.0	8.3	11.0	19.4	8.3	11.0	11.0	11.0	8.3
87.5°	5.6	8.3	8.3	8.3	5.6	2.8	5.6	8.3	8.3	13.8	11.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4	5156.4
2.5°	5164.8	5167.5	5167.5	5164.8	5164.8	5159.2	5170.2	5162.0	5164.8	5175.8	5167.5
5°	5170.2	5173.0	5173.0	5170.2	5170.2	5170.2	5173.0	5173.0	5170.2	5167.5	5173.0
7.5°	5181.3	5178.6	5178.6	5173.0	5173.0	5167.5	5173.0	5164.8	5170.2	5164.8	5173.0
10°	5167.5	5170.2	5167.5	5164.8	5164.8	5162.0	5162.0	5153.7	5156.4	5148.1	5153.7
12.5°	5159.2	5156.4	5156.4	5150.9	5145.4	5139.8	5137.1	5128.7	5128.7	5109.4	5117.7
15°	5137.1	5139.8	5131.5	5120.5	5114.9	5101.1	5095.5	5084.4	5073.4	5059.6	5062.4
17.5°	5117.7	5109.4	5098.3	5087.2	5065.1	5054.0	5042.9	5026.3	5020.8	5004.2	4998.7
20°	5059.6	5054.0	5040.2	5020.8	5007.0	4982.0	4971.0	4954.4	4940.5	4923.9	4915.6
22.5°	4984.8	4979.3	4962.7	4943.3	4921.2	4910.1	4899.0	4868.6	4854.7	4838.1	4835.3
25°	4890.7	4882.4	4865.8	4843.7	4832.6	4802.2	4791.1	4768.9	4763.4	4746.8	4744.1
27.5°	4746.8	4735.7	4716.4	4688.7	4669.3	4649.9	4638.9	4622.2	4616.7	4600.1	4597.4
30°	4530.9	4517.0	4478.3	4467.3	4434.0	4414.6	4414.6	4392.5	4395.3	4384.2	4384.2
32.5°	4190.5	4168.3	4137.9	4115.7	4093.6	4082.5	4082.5	4074.2	4079.8	4079.8	4085.3
35°	3739.3	3708.9	3692.2	3678.4	3678.4	3689.5	3722.7	3731.0	3747.6	3761.5	3772.6
37.5°	3160.8	3158.1	3177.5	3194.1	3235.6	3282.6	3340.8	3390.6	3437.6	3470.8	3504.0
40°	2535.3	2604.5	2659.9	2737.4	2801.0	2892.4	2997.5	3083.3	3163.6	3221.8	3282.6
42.5°	1979.0	2067.5	2183.8	2297.3	2410.8	2535.3	2673.7	2792.7	2897.9	2978.2	3041.8
45°	1541.7	1663.4	1804.6	1948.6	2095.2	2250.3	2394.2	2515.9	2626.7	2709.7	2773.4
47.5°	1242.7	1375.6	1536.1	1693.9	1860.0	2023.3	2183.8	2289.0	2380.3	2446.7	2504.9
50°	1026.8	1168.0	1336.9	1516.7	1682.8	1846.2	1984.5	2086.9	2161.7	2219.8	2255.7
52.5°	858.0	1007.5	1187.4	1367.3	1533.3	1682.8	1807.4	1884.9	1945.8	1987.3	2020.5
55°	708.5	852.5	1021.3	1190.2	1353.5	1494.6	1597.0	1655.2	1702.2	1727.1	1746.5
57.5°	578.5	711.3	866.3	1021.3	1162.5	1278.8	1359.0	1417.1	1439.3	1458.6	1455.9
60°	454.0	578.5	719.6	852.5	974.3	1068.3	1126.5	1159.7	1176.3	1184.6	1179.1
62.5°	357.0	470.5	578.5	694.7	783.3	863.5	918.9	918.9	927.2	930.0	938.3
65°	265.7	351.5	445.6	531.4	603.4	656.0	686.4	694.7	705.8	703.0	697.5
67.5°	196.5	260.2	329.3	393.0	442.8	476.0	498.2	517.6	514.8	509.3	506.5
70°	135.6	177.2	238.0	276.8	312.7	346.0	351.5	354.3	357.0	359.8	354.3
72.5°	94.1	124.5	157.8	191.0	213.1	226.9	240.8	243.5	243.5	243.5	240.8
75°	47.1	63.7	94.1	108.0	127.3	132.9	143.9	143.9	152.2	141.1	138.4
77.5°	41.5	49.8	66.4	77.5	85.8	94.1	96.8	105.2	102.4	96.8	99.6
80°	24.9	30.5	41.5	47.1	58.1	60.9	63.7	66.4	63.7	66.4	66.4
82.5°	19.4	22.1	27.7	27.7	36.0	36.0	38.7	38.7	41.5	41.5	41.5
85°	11.0	19.4	16.6	33.2	22.1	22.1	27.7	33.2	27.7	27.7	33.2
87.5°	11.0	11.0	8.3	11.0	11.0	11.0	13.8	16.6	16.6	19.4	16.6
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: P249266

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5156.4	5156.4	5156.4	5156.4
2.5°	5164.8	5170.2	5162.0	5159.2
5°	5173.0	5173.0	5167.5	5167.5
7.5°	5173.0	5173.0	5164.8	5159.2
10°	5150.9	5150.9	5142.6	5137.1
12.5°	5109.4	5109.4	5106.6	5098.3
15°	5056.8	5056.8	5045.7	5037.4
17.5°	4984.8	4990.4	4976.6	4976.6
20°	4907.3	4904.6	4893.5	4888.0
22.5°	4827.1	4821.5	4818.8	4802.2
25°	4741.3	4735.7	4727.4	4719.1
27.5°	4594.6	4591.8	4583.5	4572.4
30°	4370.4	4367.6	4356.5	4356.5
32.5°	4079.8	4077.0	4065.9	4068.7
35°	3778.0	3789.1	3783.6	3772.6
37.5°	3526.2	3534.5	3540.1	3534.5
40°	3315.8	3340.8	3343.5	3349.1
42.5°	3091.7	3124.8	3136.0	3141.4
45°	2823.1	2853.6	2878.5	2873.0
47.5°	2549.1	2571.3	2593.4	2576.8
50°	2286.2	2300.0	2308.4	2308.4
52.5°	2037.1	2037.1	2034.4	2037.1
55°	1752.0	1752.0	1741.0	1746.5
57.5°	1453.1	1458.6	1450.3	1436.5
60°	1176.3	1162.5	1156.9	1148.7
62.5°	916.2	916.2	896.8	921.7
65°	686.4	678.1	669.8	667.0
67.5°	498.2	495.5	487.1	484.4
70°	351.5	340.4	337.7	332.1
72.5°	235.3	235.3	229.7	229.7
75°	143.9	130.1	127.3	130.1
77.5°	99.6	96.8	96.8	94.1
80°	66.4	63.7	69.2	60.9
82.5°	41.5	44.3	41.5	44.3
85°	27.7	33.2	30.5	30.5
87.5°	16.6	16.6	16.6	16.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)