

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: P249114

Luminaire Tested: **LSR8B120D010 EC8B120840 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249114
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: LSR8B120D010 EC8B120840 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: 12422.0 lumens
Efficiency: N/A
Efficacy: 105.0 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

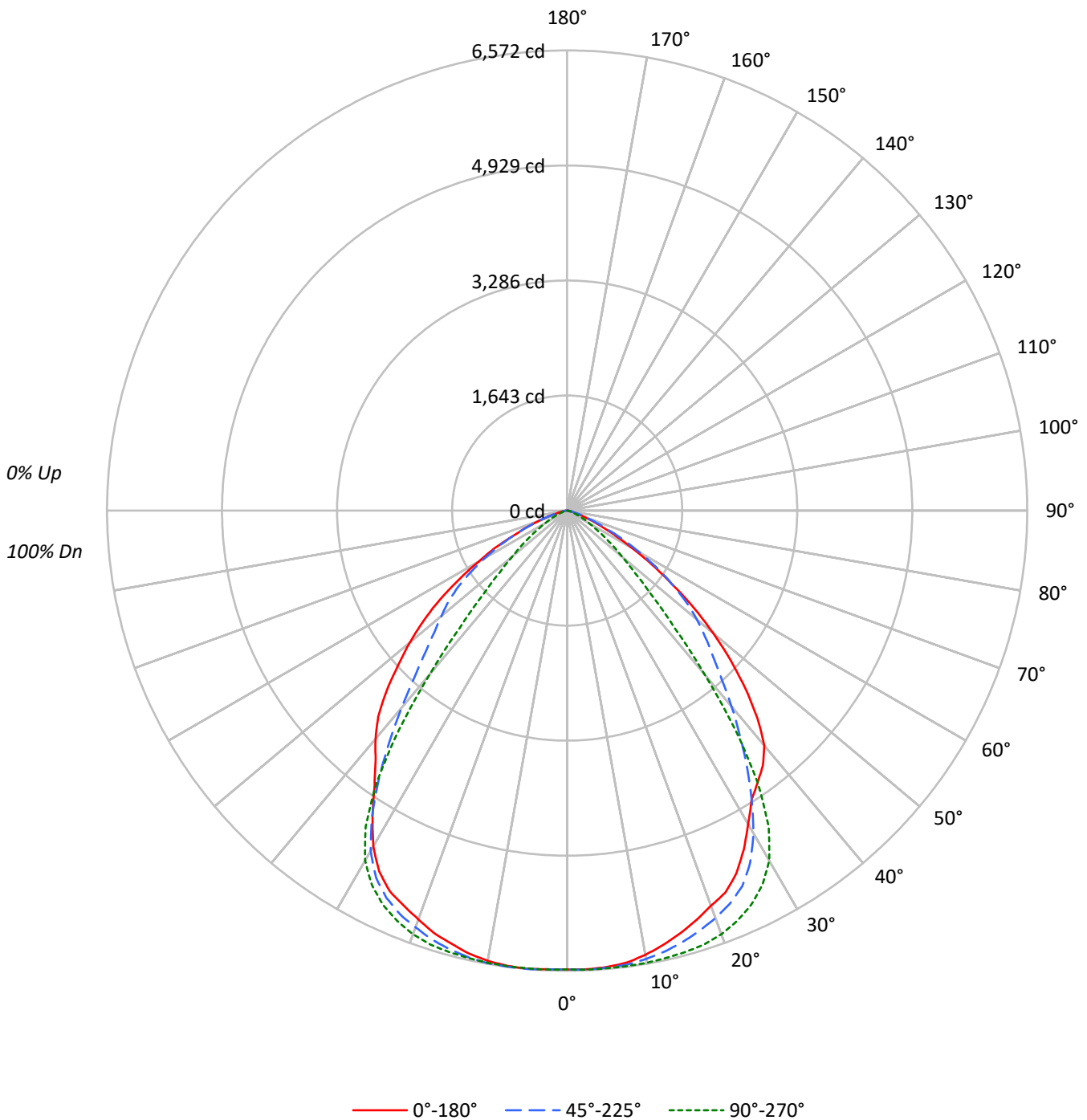
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	202104	202104	202104
5°	202548	203093	203313
10°	201696	205332	204452
15°	199462	208333	204404
20°	197066	211265	203878
25°	194509	211507	204087
30°	184015	205561	197169
35°	178524	178652	180508
40°	176312	122919	171357
45°	157102	73795	159247
50°	130630	49115	140757
55°	97970	33859	119340
60°	66391	22560	90042
65°	40043	14637	61860
70°	22206	7934	38056
75°	10056	3348	19706
80°	8737	3747	13745
85°	9942	4953	13692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	625.5	5.0
10°-20°	1816.5	14.6
20°-30°	2757.1	22.2
30°-40°	2895.8	23.3
40°-50°	2171.1	17.5
50°-60°	1393.0	11.2
60°-70°	595.9	4.8
70°-80°	140.8	1.1
80°-90°	26.2	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°	5199.2	41.9
0°-40°	8095.0	65.2
0°-60°	11659.1	93.9
0°-90°	12422.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12422.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6554	6554	6554	6554	6554	
5°	6544	6554	6561	6572	6568	622
15°	6248	6378	6526	6484	6403	1762
25°	5717	5917	6216	6104	5998	2612
35°	4742	4478	4746	4690	4795	2976
45°	3602	2945	1692	2860	3652	2759
55°	1822	1822	630	1900	2220	1653
65°	549	647	201	834	848	586
75°	84	98	28	169	165	123
85°	28	18	14	28	39	30
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°	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1
2.5°	6557.6	6564.7	6561.1	6561.1	6557.6	6561.1	6561.1	6568.2	6568.2	6561.1	6557.6
5°	6543.5	6550.6	6550.6	6543.5	6543.5	6561.1	6550.6	6557.6	6557.6	6554.1	6554.1
7.5°	6511.9	6511.9	6525.9	6515.4	6515.4	6525.9	6522.4	6529.5	6536.5	6540.1	6540.1
10°	6441.5	6448.6	6452.1	6452.1	6455.6	6466.1	6473.2	6487.3	6494.3	6501.3	6504.9
12.5°	6353.6	6364.1	6367.6	6364.1	6374.7	6388.7	6406.4	6423.9	6434.5	6448.6	6459.1
15°	6248.0	6248.0	6255.0	6265.6	6272.7	6293.8	6311.3	6332.4	6360.6	6378.2	6395.8
17.5°	6132.0	6139.0	6149.5	6149.5	6163.6	6198.8	6209.3	6241.0	6272.7	6290.3	6325.5
20°	6005.3	6012.3	6022.9	6029.9	6047.5	6075.7	6096.7	6124.9	6160.1	6191.8	6226.9
22.5°	5906.8	5892.7	5899.7	5906.8	5924.4	5949.0	5973.6	6008.8	6044.0	6075.7	6110.9
25°	5716.8	5720.3	5730.9	5737.9	5759.0	5780.1	5808.3	5850.5	5882.1	5917.4	5956.0
27.5°	5460.0	5463.5	5481.1	5481.1	5498.7	5533.9	5551.4	5586.6	5628.9	5664.0	5709.8
30°	5168.0	5175.0	5175.0	5189.1	5199.6	5217.3	5234.8	5270.0	5291.1	5322.8	5386.1
32.5°	4900.7	4907.6	4904.1	4900.7	4890.1	4886.5	4883.0	4890.1	4897.1	4907.6	4932.2
35°	4742.4	4724.7	4710.7	4686.1	4657.9	4622.7	4591.0	4548.8	4510.1	4478.4	4443.3
37.5°	4591.0	4587.5	4566.4	4531.2	4474.9	4411.6	4337.8	4246.3	4154.8	4056.3	3961.3
40°	4380.0	4369.4	4351.8	4302.6	4239.2	4161.8	4063.3	3950.8	3803.0	3651.7	3496.9
42.5°	4021.1	4024.6	4003.5	3964.8	3905.0	3831.1	3729.1	3606.0	3447.7	3268.2	3067.7
45°	3602.5	3602.5	3595.4	3563.7	3521.6	3461.7	3384.3	3282.3	3127.6	2944.6	2730.0
47.5°	3166.2	3169.7	3159.2	3152.2	3134.5	3095.9	3039.6	2962.2	2853.1	2677.2	2462.6
50°	2723.0	2723.0	2740.5	2737.0	2737.0	2723.0	2698.4	2652.6	2557.6	2416.9	2216.4
52.5°	2279.7	2286.7	2297.3	2311.4	2328.9	2357.1	2328.9	2307.8	2248.0	2138.9	1966.6
55°	1822.3	1829.4	1846.9	1871.6	1892.7	1920.9	1927.9	1927.9	1896.2	1822.3	1692.2
57.5°	1431.9	1421.3	1435.4	1456.5	1484.6	1512.8	1533.9	1558.5	1555.0	1505.7	1400.2
60°	1076.5	1080.1	1090.6	1111.7	1132.8	1157.4	1185.6	1206.7	1217.3	1192.6	1125.8
62.5°	784.5	784.5	798.6	819.7	830.2	865.5	883.0	893.6	904.1	900.6	858.4
65°	548.8	555.8	562.9	573.5	584.0	605.1	615.6	636.7	643.8	647.3	615.6
67.5°	387.0	376.4	383.5	390.5	401.0	415.2	436.3	436.3	446.8	446.8	425.7
70°	246.3	246.3	249.8	260.3	267.4	270.9	278.0	284.9	295.5	292.0	292.0
72.5°	165.4	161.8	165.4	168.9	172.4	182.9	182.9	186.5	193.5	197.0	182.9
75°	84.4	88.0	94.9	91.5	102.0	94.9	98.5	109.1	105.5	98.5	98.5
77.5°	70.3	70.3	70.3	66.9	73.9	73.9	70.3	77.4	73.9	73.9	70.3
80°	49.2	52.8	49.2	45.7	49.2	45.7	45.7	45.7	45.7	45.7	42.2
82.5°	38.7	31.7	35.2	31.7	35.2	35.2	31.7	28.1	28.1	31.7	28.1
85°	28.1	21.1	24.6	24.6	21.1	21.1	21.1	21.1	21.1	17.6	17.6
87.5°	17.6	10.6	10.6	10.6	14.0	14.0	14.0	10.6	14.0	14.0	7.1
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°	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1
2.5°	6564.7	6561.1	6568.2	6564.7	6564.7	6561.1	6564.7	6561.1	6568.2	6554.1	6557.6
5°	6564.7	6557.6	6561.1	6564.7	6568.2	6561.1	6561.1	6561.1	6568.2	6561.1	6564.7
7.5°	6550.6	6547.0	6557.6	6564.7	6561.1	6557.6	6564.7	6561.1	6568.2	6564.7	6571.7
10°	6522.4	6525.9	6533.0	6543.5	6547.0	6550.6	6557.6	6557.6	6568.2	6554.1	6561.1
12.5°	6480.2	6494.3	6511.9	6518.9	6533.0	6533.0	6540.1	6543.5	6550.6	6547.0	6557.6
15°	6427.5	6445.0	6466.1	6483.8	6501.3	6511.9	6522.4	6525.9	6536.5	6525.9	6529.5
17.5°	6364.1	6385.2	6416.9	6438.0	6466.1	6476.7	6490.7	6497.8	6508.4	6501.3	6504.9
20°	6276.1	6300.8	6336.0	6367.6	6385.2	6409.8	6427.5	6438.0	6445.0	6438.0	6441.5
22.5°	6153.0	6188.2	6234.0	6258.6	6293.8	6314.9	6318.4	6343.0	6360.6	6343.0	6350.1
25°	6008.8	6044.0	6079.2	6132.0	6163.6	6188.2	6212.9	6216.4	6234.0	6230.4	6226.9
27.5°	5769.6	5815.3	5875.1	5917.4	5959.5	5998.3	6026.4	6033.4	6051.0	6044.0	6047.5
30°	5442.4	5491.7	5548.0	5614.8	5674.6	5713.3	5748.5	5773.1	5790.6	5780.1	5776.6
32.5°	4978.0	5027.3	5087.1	5153.9	5224.3	5280.5	5322.8	5354.5	5375.6	5368.5	5350.9
35°	4446.8	4460.9	4499.6	4552.4	4612.1	4671.9	4710.7	4745.8	4770.4	4777.5	4777.5
37.5°	3901.5	3855.8	3827.7	3827.7	3862.8	3887.4	3922.6	3943.7	3982.4	3996.5	4007.1
40°	3373.8	3268.2	3169.7	3095.9	3046.6	3043.1	3043.1	3053.6	3088.8	3134.5	3176.8
42.5°	2902.4	2733.5	2582.2	2445.0	2346.6	2290.3	2265.6	2269.2	2297.3	2339.5	2409.8
45°	2525.9	2314.9	2124.9	1959.5	1825.9	1737.9	1695.7	1692.2	1713.3	1762.5	1840.0
47.5°	2234.0	2008.8	1794.2	1604.2	1460.0	1365.0	1315.7	1301.7	1315.7	1361.5	1453.0
50°	1991.2	1759.1	1537.4	1340.4	1185.6	1087.1	1041.3	1023.8	1041.3	1080.1	1171.5
52.5°	1766.0	1526.8	1319.3	1129.3	963.9	879.5	830.2	819.7	830.2	876.0	949.9
55°	1505.7	1301.7	1097.6	907.6	763.4	679.0	640.3	629.8	640.3	682.5	759.9
57.5°	1248.9	1073.0	893.6	721.2	598.1	524.1	489.0	474.9	499.5	527.7	619.2
60°	1009.6	869.0	717.7	566.4	464.4	397.5	369.4	365.8	372.9	408.1	471.4
62.5°	791.6	675.5	555.8	432.7	348.3	320.1	284.9	281.5	288.5	309.5	358.9
65°	569.9	496.1	404.6	316.6	249.8	211.1	197.0	200.6	207.5	221.7	267.4
67.5°	397.5	344.8	281.5	221.7	172.4	154.8	140.7	137.2	140.7	165.4	190.0
70°	267.4	235.7	190.0	168.9	119.7	94.9	98.5	88.0	102.0	102.0	123.1
72.5°	175.9	154.8	126.6	98.5	84.4	66.9	66.9	63.4	70.3	73.9	91.5
75°	91.5	70.3	70.3	49.2	35.2	17.6	31.7	28.1	24.6	28.1	35.2
77.5°	63.4	52.8	49.2	38.7	35.2	28.1	28.1	28.1	28.1	31.7	35.2
80°	38.7	38.7	28.1	24.6	21.1	17.6	21.1	21.1	21.1	21.1	24.6
82.5°	24.6	21.1	21.1	17.6	17.6	14.0	14.0	14.0	14.0	14.0	21.1
85°	21.1	14.0	14.0	10.6	14.0	24.6	10.6	14.0	14.0	14.0	10.6
87.5°	7.1	10.6	10.6	10.6	7.1	3.5	7.1	10.6	10.6	17.6	14.0
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°	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1	6554.1
2.5°	6564.7	6568.2	6568.2	6564.7	6564.7	6557.6	6571.7	6561.1	6564.7	6578.7	6568.2
5°	6571.7	6575.2	6575.2	6571.7	6571.7	6571.7	6575.2	6575.2	6571.7	6568.2	6575.2
7.5°	6585.8	6582.2	6582.2	6575.2	6575.2	6568.2	6575.2	6564.7	6571.7	6564.7	6575.2
10°	6568.2	6571.7	6568.2	6564.7	6564.7	6561.1	6561.1	6550.6	6554.1	6543.5	6550.6
12.5°	6557.6	6554.1	6554.1	6547.0	6540.1	6533.0	6529.5	6518.9	6518.9	6494.3	6504.9
15°	6529.5	6533.0	6522.4	6508.4	6501.3	6483.8	6476.7	6462.6	6448.6	6431.0	6434.5
17.5°	6504.9	6494.3	6480.2	6466.1	6438.0	6423.9	6409.8	6388.7	6381.7	6360.6	6353.6
20°	6431.0	6423.9	6406.4	6381.7	6364.1	6332.4	6318.4	6297.3	6279.7	6258.6	6248.0
22.5°	6336.0	6328.9	6307.8	6283.2	6255.0	6241.0	6226.9	6188.2	6170.6	6149.5	6146.0
25°	6216.4	6205.8	6184.7	6156.6	6142.5	6103.8	6089.7	6061.5	6054.6	6033.4	6029.9
27.5°	6033.4	6019.4	5994.7	5959.5	5934.9	5910.3	5896.3	5875.1	5868.1	5846.9	5843.5
30°	5759.0	5741.4	5692.2	5678.1	5635.9	5611.3	5611.3	5583.1	5586.6	5572.6	5572.6
32.5°	5326.3	5298.2	5259.4	5231.3	5203.1	5189.1	5189.1	5178.5	5185.6	5185.6	5192.6
35°	4752.9	4714.2	4693.0	4675.5	4675.5	4689.5	4731.8	4742.4	4763.4	4781.0	4795.1
37.5°	4017.6	4014.1	4038.7	4059.8	4112.6	4172.4	4246.3	4309.6	4369.4	4411.6	4453.8
40°	3222.5	3310.5	3380.8	3479.4	3560.2	3676.3	3810.0	3919.1	4021.1	4095.0	4172.4
42.5°	2515.4	2628.0	2775.8	2919.9	3064.2	3222.5	3398.5	3549.7	3683.4	3785.4	3866.3
45°	1959.5	2114.3	2293.8	2476.7	2663.2	2860.2	3043.1	3197.9	3338.6	3444.2	3525.1
47.5°	1579.6	1748.5	1952.5	2153.0	2364.1	2571.7	2775.8	2909.4	3025.5	3109.9	3183.9
50°	1305.2	1484.6	1699.2	1927.9	2138.9	2346.6	2522.4	2652.6	2747.6	2821.5	2867.2
52.5°	1090.6	1280.5	1509.3	1737.9	1949.0	2138.9	2297.3	2395.8	2473.2	2525.9	2568.1
55°	900.6	1083.6	1298.2	1512.8	1720.3	1899.7	2029.9	2103.8	2163.6	2195.2	2219.8
57.5°	735.3	904.1	1101.1	1298.2	1477.6	1625.4	1727.4	1801.2	1829.4	1854.0	1850.5
60°	577.0	735.3	914.7	1083.6	1238.4	1357.9	1431.9	1474.0	1495.1	1505.7	1498.7
62.5°	453.8	598.1	735.3	883.0	995.6	1097.6	1168.0	1168.0	1178.5	1182.1	1192.6
65°	337.7	446.8	566.4	675.5	766.9	833.8	872.5	883.0	897.1	893.6	886.5
67.5°	249.8	330.7	418.6	499.5	562.9	605.1	633.2	657.9	654.4	647.3	643.8
70°	172.4	225.2	302.6	351.8	397.5	439.8	446.8	450.3	453.8	457.3	450.3
72.5°	119.7	158.3	200.6	242.7	270.9	288.5	306.1	309.5	309.5	309.5	306.1
75°	59.8	80.9	119.7	137.2	161.8	168.9	182.9	182.9	193.5	179.4	175.9
77.5°	52.8	63.4	84.4	98.5	109.1	119.7	123.1	133.7	130.2	123.1	126.6
80°	31.7	38.7	52.8	59.8	73.9	77.4	80.9	84.4	80.9	84.4	84.4
82.5°	24.6	28.1	35.2	35.2	45.7	45.7	49.2	49.2	52.8	52.8	52.8
85°	14.0	24.6	21.1	42.2	28.1	28.1	35.2	42.2	35.2	35.2	42.2
87.5°	14.0	14.0	10.6	14.0	14.0	14.0	17.6	21.1	21.1	24.6	21.1
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: P249114

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6554.1	6554.1	6554.1	6554.1
2.5°	6564.7	6571.7	6561.1	6557.6
5°	6575.2	6575.2	6568.2	6568.2
7.5°	6575.2	6575.2	6564.7	6557.6
10°	6547.0	6547.0	6536.5	6529.5
12.5°	6494.3	6494.3	6490.7	6480.2
15°	6427.5	6427.5	6413.4	6402.8
17.5°	6336.0	6343.0	6325.5	6325.5
20°	6237.5	6234.0	6219.9	6212.9
22.5°	6135.5	6128.4	6124.9	6103.8
25°	6026.4	6019.4	6008.8	5998.3
27.5°	5840.0	5836.4	5825.9	5811.8
30°	5555.0	5551.4	5537.4	5537.4
32.5°	5185.6	5182.1	5168.0	5171.5
35°	4802.1	4816.2	4809.2	4795.1
37.5°	4482.0	4492.5	4499.6	4492.5
40°	4214.6	4246.3	4249.8	4256.9
42.5°	3929.7	3971.8	3986.0	3992.9
45°	3588.4	3627.1	3658.8	3651.7
47.5°	3240.1	3268.2	3296.4	3275.3
50°	2905.9	2923.5	2934.1	2934.1
52.5°	2589.3	2589.3	2585.8	2589.3
55°	2226.9	2226.9	2212.9	2219.8
57.5°	1846.9	1854.0	1843.4	1825.9
60°	1495.1	1477.6	1470.5	1460.0
62.5°	1164.5	1164.5	1139.9	1171.5
65°	872.5	861.9	851.3	847.8
67.5°	633.2	629.8	619.2	615.6
70°	446.8	432.7	429.2	422.1
72.5°	299.0	299.0	292.0	292.0
75°	182.9	165.4	161.8	165.4
77.5°	126.6	123.1	123.1	119.7
80°	84.4	80.9	88.0	77.4
82.5°	52.8	56.3	52.8	56.3
85°	35.2	42.2	38.7	38.7
87.5°	21.1	21.1	21.1	21.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)