

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: P249222

Luminaire Tested: **LSR8B120D010 EC8B120840 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249222
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 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12357.0 lumens
Efficiency: N/A
Efficacy: 104.5 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

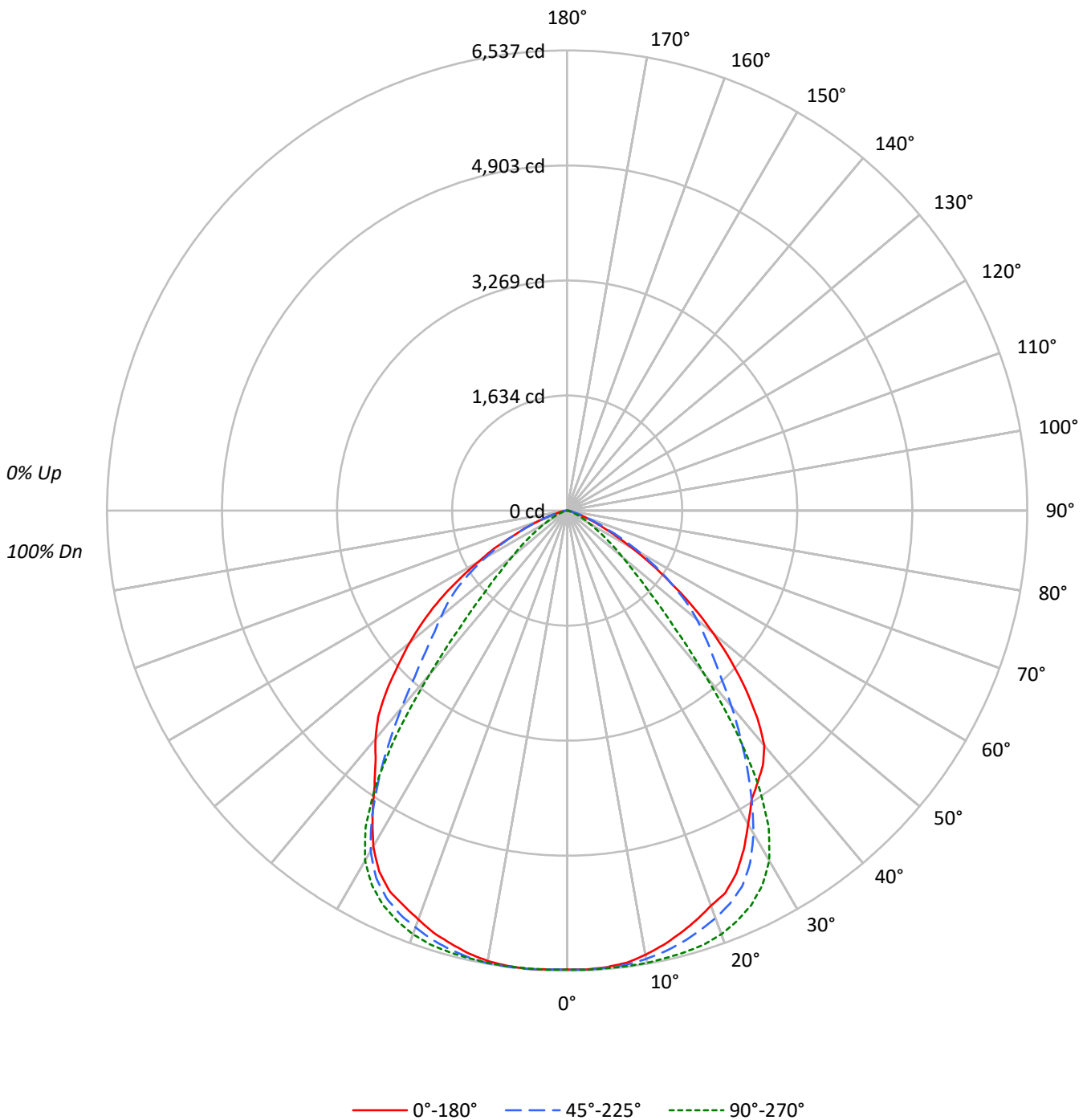
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	201047	201047	201047
5°	201490	202031	202248
10°	200641	204258	203381
15°	198418	207245	203334
20°	196035	210159	202812
25°	193492	210402	203018
30°	183054	204486	196136
35°	177586	177718	179563
40°	175386	122275	170459
45°	156278	73407	158415
50°	129944	48855	140018
55°	97459	33682	118716
60°	66045	22443	89573
65°	39839	14557	61539
70°	22089	7889	37858
75°	10008	3336	19599
80°	8701	3729	13674
85°	9907	4953	13622



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	622.2	5.0
10°-20°	1807.0	14.6
20°-30°	2742.7	22.2
30°-40°	2880.7	23.3
40°-50°	2159.7	17.5
50°-60°	1385.7	11.2
60°-70°	592.8	4.8
70°-80°	140.1	1.1
80°-90°	26.1	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°	5172.0	41.9
0°-40°	8052.6	65.2
0°-60°	11598.1	93.9
0°-90°	12357.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12357.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6520	6520	6520	6520	6520	
5°	6509	6520	6527	6537	6534	618
15°	6215	6345	6492	6450	6369	1753
25°	5687	5886	6184	6072	5967	2598
35°	4718	4455	4721	4665	4770	2961
45°	3584	2929	1683	2845	3633	2744
55°	1813	1813	626	1890	2208	1644
65°	546	644	200	829	843	583
75°	84	98	28	168	164	122
85°	28	18	14	28	38	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°	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8
2.5°	6523.3	6530.3	6526.8	6526.8	6523.3	6526.8	6526.8	6533.8	6533.8	6526.8	6523.3
5°	6509.3	6516.3	6516.3	6509.3	6509.3	6526.8	6516.3	6523.3	6523.3	6519.8	6519.8
7.5°	6477.8	6477.8	6491.8	6481.3	6481.3	6491.8	6488.3	6495.3	6502.3	6505.8	6505.8
10°	6407.8	6414.8	6418.3	6418.3	6421.8	6432.3	6439.3	6453.3	6460.3	6467.3	6470.8
12.5°	6320.4	6330.8	6334.3	6330.8	6341.3	6355.3	6372.9	6390.3	6400.9	6414.8	6425.3
15°	6215.3	6215.3	6222.3	6232.8	6239.9	6260.8	6278.3	6299.3	6327.3	6344.9	6362.3
17.5°	6099.9	6106.9	6117.3	6117.3	6131.4	6166.3	6176.8	6208.4	6239.9	6257.3	6292.4
20°	5973.9	5980.8	5991.4	5998.4	6015.9	6043.9	6064.8	6092.8	6127.9	6159.4	6194.3
22.5°	5875.9	5861.9	5868.8	5875.9	5893.4	5917.9	5942.4	5977.3	6012.4	6043.9	6078.9
25°	5686.9	5690.4	5700.9	5707.9	5728.9	5749.9	5777.9	5819.9	5851.4	5886.4	5924.8
27.5°	5431.4	5434.9	5452.4	5452.4	5469.9	5504.9	5522.4	5557.4	5599.4	5634.4	5679.9
30°	5141.0	5147.9	5147.9	5162.0	5172.4	5190.0	5207.4	5242.5	5263.4	5294.9	5358.0
32.5°	4875.0	4881.9	4878.4	4875.0	4864.5	4861.0	4857.5	4864.5	4871.5	4881.9	4906.4
35°	4717.5	4700.0	4686.0	4661.5	4633.5	4598.5	4567.0	4525.0	4486.5	4455.0	4420.1
37.5°	4567.0	4563.5	4542.5	4507.5	4451.5	4388.5	4315.1	4224.1	4133.0	4035.1	3940.6
40°	4357.0	4346.5	4329.0	4280.1	4217.0	4140.0	4042.1	3930.1	3783.1	3632.6	3478.6
42.5°	4000.0	4003.6	3982.6	3944.0	3884.6	3811.1	3709.6	3587.1	3429.7	3251.1	3051.7
45°	3583.6	3583.6	3576.6	3545.1	3503.1	3443.6	3366.6	3265.2	3111.2	2929.2	2715.7
47.5°	3149.6	3153.2	3142.6	3135.7	3118.1	3079.7	3023.7	2946.7	2838.2	2663.2	2449.7
50°	2708.7	2708.7	2726.2	2722.7	2722.7	2708.7	2684.2	2638.7	2544.2	2404.2	2204.8
52.5°	2267.7	2274.8	2285.3	2299.3	2316.7	2344.7	2316.7	2295.7	2236.2	2127.7	1956.3
55°	1812.8	1819.8	1837.3	1861.8	1882.8	1910.8	1917.8	1917.8	1886.3	1812.8	1683.3
57.5°	1424.4	1413.8	1427.9	1448.9	1476.9	1504.9	1525.8	1550.3	1546.8	1497.8	1392.9
60°	1070.9	1074.4	1084.9	1105.9	1126.9	1151.4	1179.4	1200.4	1210.9	1186.4	1119.9
62.5°	780.4	780.4	794.4	815.4	825.9	860.9	878.4	888.9	899.4	895.9	853.9
65°	546.0	552.9	559.9	570.5	580.9	601.9	612.4	633.4	640.4	643.9	612.4
67.5°	385.0	374.5	381.5	388.4	399.0	413.0	434.0	434.0	444.4	444.4	423.4
70°	245.0	245.0	248.5	258.9	266.0	269.5	276.5	283.4	294.0	290.5	290.5
72.5°	164.5	161.0	164.5	168.0	171.5	182.0	182.0	185.5	192.5	196.0	182.0
75°	84.0	87.5	94.5	91.0	101.5	94.5	98.0	108.5	105.0	98.0	98.0
77.5°	70.0	70.0	70.0	66.5	73.5	73.5	70.0	77.0	73.5	73.5	70.0
80°	49.0	52.5	49.0	45.5	49.0	45.5	45.5	45.5	45.5	45.5	42.0
82.5°	38.5	31.5	35.0	31.5	35.0	35.0	31.5	28.0	28.0	31.5	28.0
85°	28.0	21.0	24.5	24.5	21.0	21.0	21.0	21.0	21.0	17.5	17.5
87.5°	17.5	10.5	10.5	10.5	14.0	14.0	14.0	10.5	14.0	14.0	7.0
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°	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8
2.5°	6530.3	6526.8	6533.8	6530.3	6530.3	6526.8	6530.3	6526.8	6533.8	6519.8	6523.3
5°	6530.3	6523.3	6526.8	6530.3	6533.8	6526.8	6526.8	6526.8	6533.8	6526.8	6530.3
7.5°	6516.3	6512.8	6523.3	6530.3	6526.8	6523.3	6530.3	6526.8	6533.8	6530.3	6537.3
10°	6488.3	6491.8	6498.8	6509.3	6512.8	6516.3	6523.3	6523.3	6533.8	6519.8	6526.8
12.5°	6446.3	6460.3	6477.8	6484.8	6498.8	6498.8	6505.8	6509.3	6516.3	6512.8	6523.3
15°	6393.8	6411.3	6432.3	6449.8	6467.3	6477.8	6488.3	6491.8	6502.3	6491.8	6495.3
17.5°	6330.8	6351.8	6383.3	6404.3	6432.3	6442.8	6456.8	6463.8	6474.3	6467.3	6470.8
20°	6243.3	6267.9	6302.8	6334.3	6351.8	6376.3	6393.8	6404.3	6411.3	6404.3	6407.8
22.5°	6120.8	6155.9	6201.3	6225.8	6260.8	6281.8	6285.3	6309.8	6327.3	6309.8	6316.9
25°	5977.3	6012.4	6047.4	6099.9	6131.4	6155.9	6180.4	6183.9	6201.3	6197.8	6194.3
27.5°	5739.4	5784.9	5844.3	5886.4	5928.3	5966.9	5994.9	6001.8	6019.4	6012.4	6015.9
30°	5413.9	5462.9	5518.9	5585.4	5644.9	5683.4	5718.4	5742.9	5760.3	5749.9	5746.4
32.5°	4952.0	5001.0	5060.5	5126.9	5197.0	5252.9	5294.9	5326.5	5347.4	5340.4	5322.9
35°	4423.6	4437.5	4476.1	4528.6	4588.0	4647.5	4686.0	4721.0	4745.5	4752.5	4752.5
37.5°	3881.1	3835.6	3807.6	3807.6	3842.6	3867.1	3902.1	3923.1	3961.6	3975.6	3986.1
40°	3356.1	3251.1	3153.2	3079.7	3030.7	3027.2	3027.2	3037.6	3072.7	3118.1	3160.2
42.5°	2887.2	2719.2	2568.7	2432.2	2334.3	2278.3	2253.8	2257.3	2285.3	2327.3	2397.2
45°	2512.7	2302.8	2113.8	1949.3	1816.3	1728.8	1686.8	1683.3	1704.3	1753.3	1830.3
47.5°	2222.3	1998.3	1784.8	1595.8	1452.4	1357.8	1308.9	1294.9	1308.9	1354.3	1445.4
50°	1980.8	1749.9	1529.4	1333.3	1179.4	1081.4	1035.9	1018.4	1035.9	1074.4	1165.3
52.5°	1756.8	1518.8	1312.4	1123.4	958.9	874.9	825.9	815.4	825.9	871.4	944.9
55°	1497.8	1294.9	1091.9	902.9	759.5	675.4	636.9	626.5	636.9	679.0	755.9
57.5°	1242.4	1067.4	888.9	717.4	595.0	521.4	486.5	472.4	496.9	524.9	615.9
60°	1004.4	864.4	713.9	563.4	462.0	395.4	367.4	363.9	371.0	406.0	468.9
62.5°	787.5	671.9	552.9	430.5	346.5	318.5	283.4	280.0	286.9	307.9	357.0
65°	567.0	493.5	402.5	314.9	248.5	210.0	196.0	199.5	206.5	220.5	266.0
67.5°	395.4	342.9	280.0	220.5	171.5	154.0	140.0	136.5	140.0	164.5	189.0
70°	266.0	234.5	189.0	168.0	119.0	94.5	98.0	87.5	101.5	101.5	122.5
72.5°	174.9	154.0	126.0	98.0	84.0	66.5	66.5	63.0	70.0	73.5	91.0
75°	91.0	70.0	70.0	49.0	35.0	17.5	31.5	28.0	24.5	28.0	35.0
77.5°	63.0	52.5	49.0	38.5	35.0	28.0	28.0	28.0	28.0	31.5	35.0
80°	38.5	38.5	28.0	24.5	21.0	17.5	21.0	21.0	21.0	21.0	24.5
82.5°	24.5	21.0	21.0	17.5	17.5	14.0	14.0	14.0	14.0	14.0	21.0
85°	21.0	14.0	14.0	10.5	14.0	24.5	10.5	14.0	14.0	14.0	10.5
87.5°	7.0	10.5	10.5	10.5	7.0	3.5	7.0	10.5	10.5	17.5	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°	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8	6519.8
2.5°	6530.3	6533.8	6533.8	6530.3	6530.3	6523.3	6537.3	6526.8	6530.3	6544.3	6533.8
5°	6537.3	6540.8	6540.8	6537.3	6537.3	6537.3	6540.8	6540.8	6537.3	6533.8	6540.8
7.5°	6551.3	6547.8	6547.8	6540.8	6540.8	6533.8	6540.8	6530.3	6537.3	6530.3	6540.8
10°	6533.8	6537.3	6533.8	6530.3	6530.3	6526.8	6526.8	6516.3	6519.8	6509.3	6516.3
12.5°	6523.3	6519.8	6519.8	6512.8	6505.8	6498.8	6495.3	6484.8	6484.8	6460.3	6470.8
15°	6495.3	6498.8	6488.3	6474.3	6467.3	6449.8	6442.8	6428.8	6414.8	6397.3	6400.9
17.5°	6470.8	6460.3	6446.3	6432.3	6404.3	6390.3	6376.3	6355.3	6348.3	6327.3	6320.4
20°	6397.3	6390.3	6372.9	6348.3	6330.8	6299.3	6285.3	6264.4	6246.8	6225.8	6215.3
22.5°	6302.8	6295.8	6274.8	6250.3	6222.3	6208.4	6194.3	6155.9	6138.3	6117.3	6113.8
25°	6183.9	6173.3	6152.4	6124.4	6110.3	6071.9	6057.8	6029.8	6022.9	6001.8	5998.4
27.5°	6001.8	5987.9	5963.4	5928.3	5903.9	5879.4	5865.4	5844.3	5837.4	5816.3	5812.9
30°	5728.9	5711.4	5662.4	5648.4	5606.4	5581.9	5581.9	5553.9	5557.4	5543.4	5543.4
32.5°	5298.5	5270.5	5231.9	5203.9	5175.9	5162.0	5162.0	5151.4	5158.4	5158.4	5165.5
35°	4728.0	4689.5	4668.5	4651.0	4651.0	4665.0	4707.0	4717.5	4738.5	4756.0	4770.0
37.5°	3996.5	3993.1	4017.6	4038.6	4091.1	4150.6	4224.1	4287.1	4346.5	4388.5	4430.5
40°	3205.7	3293.2	3363.1	3461.2	3541.6	3657.1	3790.1	3898.6	4000.0	4073.6	4150.6
42.5°	2502.2	2614.2	2761.2	2904.7	3048.2	3205.7	3380.7	3531.1	3664.1	3765.6	3846.1
45°	1949.3	2103.2	2281.8	2463.8	2649.2	2845.2	3027.2	3181.2	3321.2	3426.1	3506.6
47.5°	1571.3	1739.3	1942.3	2141.8	2351.7	2558.2	2761.2	2894.2	3009.6	3093.6	3167.2
50°	1298.3	1476.9	1690.3	1917.8	2127.7	2334.3	2509.2	2638.7	2733.2	2806.7	2852.2
52.5°	1084.9	1273.8	1501.4	1728.8	1938.8	2127.7	2285.3	2383.3	2460.2	2512.7	2554.7
55°	895.9	1077.9	1291.4	1504.9	1711.3	1889.8	2019.2	2092.8	2152.2	2183.7	2208.2
57.5°	731.5	899.4	1095.4	1291.4	1469.8	1616.9	1718.3	1791.8	1819.8	1844.3	1840.8
60°	574.0	731.5	909.9	1077.9	1231.9	1350.8	1424.4	1466.3	1487.3	1497.8	1490.8
62.5°	451.4	595.0	731.5	878.4	990.4	1091.9	1161.9	1161.9	1172.4	1175.9	1186.4
65°	335.9	444.4	563.4	671.9	762.9	829.4	867.9	878.4	892.4	888.9	881.9
67.5°	248.5	329.0	416.4	496.9	559.9	601.9	629.9	654.5	651.0	643.9	640.4
70°	171.5	224.0	301.0	350.0	395.4	437.5	444.4	447.9	451.4	455.0	447.9
72.5°	119.0	157.5	199.5	241.5	269.5	286.9	304.5	307.9	307.9	307.9	304.5
75°	59.5	80.5	119.0	136.5	161.0	168.0	182.0	182.0	192.5	178.5	174.9
77.5°	52.5	63.0	84.0	98.0	108.5	119.0	122.5	133.0	129.5	122.5	126.0
80°	31.5	38.5	52.5	59.5	73.5	77.0	80.5	84.0	80.5	84.0	84.0
82.5°	24.5	28.0	35.0	35.0	45.5	45.5	49.0	49.0	52.5	52.5	52.5
85°	14.0	24.5	21.0	42.0	28.0	28.0	35.0	42.0	35.0	35.0	42.0
87.5°	14.0	14.0	10.5	14.0	14.0	14.0	17.5	21.0	21.0	24.5	21.0
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: P249222

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBDWOWMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6519.8	6519.8	6519.8	6519.8
2.5°	6530.3	6537.3	6526.8	6523.3
5°	6540.8	6540.8	6533.8	6533.8
7.5°	6540.8	6540.8	6530.3	6523.3
10°	6512.8	6512.8	6502.3	6495.3
12.5°	6460.3	6460.3	6456.8	6446.3
15°	6393.8	6393.8	6379.8	6369.3
17.5°	6302.8	6309.8	6292.4	6292.4
20°	6204.8	6201.3	6187.4	6180.4
22.5°	6103.4	6096.4	6092.8	6071.9
25°	5994.9	5987.9	5977.3	5966.9
27.5°	5809.4	5805.9	5795.4	5781.4
30°	5525.9	5522.4	5508.4	5508.4
32.5°	5158.4	5154.9	5141.0	5144.5
35°	4777.0	4791.0	4784.0	4770.0
37.5°	4458.5	4469.0	4476.1	4469.0
40°	4192.5	4224.1	4227.6	4234.6
42.5°	3909.1	3951.1	3965.1	3972.0
45°	3569.6	3608.1	3639.6	3632.6
47.5°	3223.1	3251.1	3279.1	3258.1
50°	2890.7	2908.2	2918.7	2918.7
52.5°	2575.8	2575.8	2572.2	2575.8
55°	2215.3	2215.3	2201.3	2208.2
57.5°	1837.3	1844.3	1833.8	1816.3
60°	1487.3	1469.8	1462.8	1452.4
62.5°	1158.4	1158.4	1133.9	1165.3
65°	867.9	857.4	846.9	843.4
67.5°	629.9	626.5	615.9	612.4
70°	444.4	430.5	427.0	419.9
72.5°	297.5	297.5	290.5	290.5
75°	182.0	164.5	161.0	164.5
77.5°	126.0	122.5	122.5	119.0
80°	84.0	80.5	87.5	77.0
82.5°	52.5	56.0	52.5	56.0
85°	35.0	42.0	38.5	38.5
87.5°	21.0	21.0	21.0	21.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)