

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: P249420

Luminaire Tested: **LSR8B120D010 EC8B120830 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249420
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 EC8B120830 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10640.0 lumens
Efficiency: N/A
Efficacy: 89.9 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

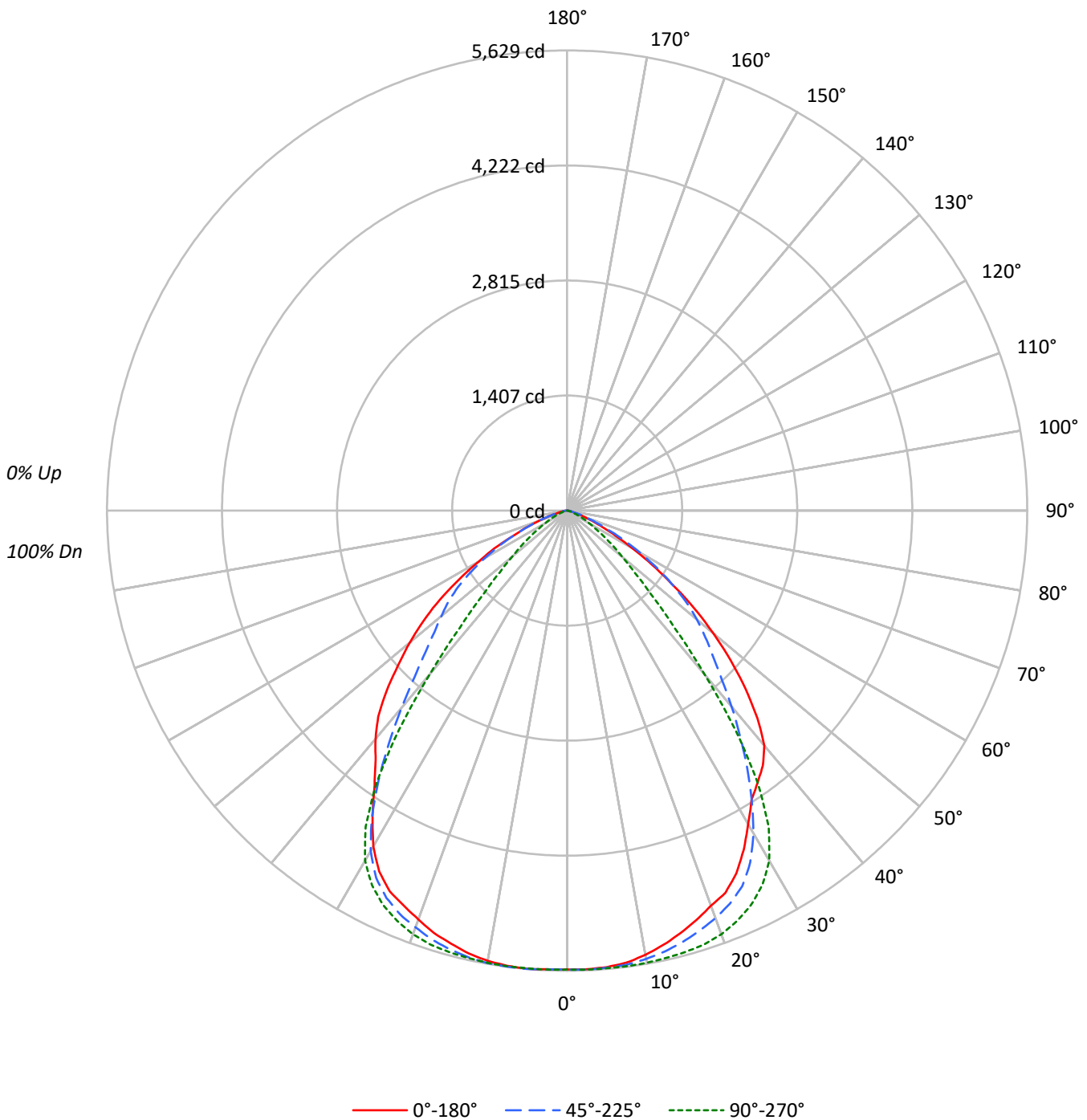
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	173112	173112	173112
5°	173492	173959	174148
10°	172761	175876	175122
15°	170848	178449	175081
20°	168795	180957	174630
25°	166606	181165	174809
30°	157617	176072	168883
35°	152911	153024	154612
40°	151017	105288	146774
45°	134565	63207	136405
50°	111892	42067	120565
55°	83916	28999	102222
60°	56868	19328	77128
65°	34301	12535	52987
70°	19015	6798	32602
75°	8614	2871	16871
80°	7494	3214	11774
85°	8527	4246	11746



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	535.8	5.0
10°-20°	1555.9	14.6
20°-30°	2361.6	22.2
30°-40°	2480.4	23.3
40°-50°	1859.6	17.5
50°-60°	1193.2	11.2
60°-70°	510.4	4.8
70°-80°	120.6	1.1
80°-90°	22.4	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°	4453.3	41.9
0°-40°	6933.7	65.2
0°-60°	9986.6	93.9
0°-90°	10640.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10640.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5614	5614	5614	5614	5614	
5°	5605	5614	5620	5629	5626	532
15°	5352	5463	5590	5554	5484	1509
25°	4897	5068	5325	5228	5138	2237
35°	4062	3836	4065	4017	4107	2549
45°	3086	2522	1449	2450	3128	2363
55°	1561	1561	539	1627	1901	1416
65°	470	554	172	714	726	502
75°	72	84	24	145	142	105
85°	24	15	12	24	33	25
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°	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9
2.5°	5616.9	5622.9	5619.9	5619.9	5616.9	5619.9	5619.9	5626.0	5626.0	5619.9	5616.9
5°	5604.8	5610.9	5610.9	5604.8	5604.8	5619.9	5610.9	5616.9	5616.9	5613.9	5613.9
7.5°	5577.7	5577.7	5589.8	5580.8	5580.8	5589.8	5586.7	5592.8	5598.8	5601.9	5601.9
10°	5517.4	5523.5	5526.5	5526.5	5529.5	5538.5	5544.6	5556.7	5562.6	5568.7	5571.7
12.5°	5442.1	5451.1	5454.2	5451.1	5460.2	5472.2	5487.3	5502.4	5511.5	5523.5	5532.5
15°	5351.7	5351.7	5357.7	5366.8	5372.8	5390.9	5405.9	5424.0	5448.1	5463.2	5478.3
17.5°	5252.3	5258.3	5267.3	5267.3	5279.4	5309.5	5318.6	5345.7	5372.8	5387.9	5418.0
20°	5143.8	5149.8	5158.9	5164.9	5180.0	5204.1	5222.1	5246.2	5276.4	5303.5	5333.6
22.5°	5059.4	5047.4	5053.4	5059.4	5074.5	5095.6	5116.7	5146.8	5176.9	5204.1	5234.2
25°	4896.7	4899.7	4908.8	4914.7	4932.9	4950.9	4975.1	5011.2	5038.3	5068.5	5101.6
27.5°	4676.7	4679.8	4694.8	4694.8	4709.8	4740.0	4755.0	4785.2	4821.4	4851.5	4890.7
30°	4426.6	4432.6	4432.6	4444.7	4453.7	4468.8	4483.9	4514.0	4532.1	4559.2	4613.5
32.5°	4197.6	4203.6	4200.6	4197.6	4188.6	4185.5	4182.5	4188.6	4194.6	4203.6	4224.7
35°	4062.0	4046.9	4034.9	4013.8	3989.7	3959.6	3932.4	3896.3	3863.1	3836.0	3805.9
37.5°	3932.4	3929.4	3911.3	3881.2	3833.0	3778.8	3715.5	3637.1	3558.7	3474.4	3393.1
40°	3751.6	3742.6	3727.5	3685.3	3631.1	3564.8	3480.4	3384.0	3257.4	3127.9	2995.3
42.5°	3444.2	3447.3	3429.2	3396.0	3344.8	3281.5	3194.1	3088.7	2953.1	2799.4	2627.7
45°	3085.7	3085.7	3079.6	3052.5	3016.4	2965.1	2898.8	2811.5	2678.9	2522.1	2338.3
47.5°	2712.0	2715.0	2706.0	2700.0	2684.9	2651.8	2603.5	2537.3	2443.8	2293.1	2109.3
50°	2332.4	2332.4	2347.4	2344.4	2344.4	2332.4	2311.3	2272.0	2190.7	2070.2	1898.4
52.5°	1952.6	1958.7	1967.8	1979.8	1994.8	2018.9	1994.8	1976.8	1925.5	1832.1	1684.5
55°	1560.9	1567.0	1582.0	1603.1	1621.2	1645.3	1651.3	1651.3	1624.2	1560.9	1449.4
57.5°	1226.5	1217.4	1229.5	1247.5	1271.7	1295.8	1313.8	1334.9	1331.9	1289.7	1199.3
60°	922.1	925.1	934.1	952.2	970.3	991.4	1015.5	1033.6	1042.6	1021.6	964.3
62.5°	672.0	672.0	684.0	702.1	711.1	741.3	756.3	765.4	774.4	771.4	735.3
65°	470.1	476.1	482.1	491.2	500.2	518.3	527.3	545.4	551.4	554.5	527.3
67.5°	331.5	322.4	328.5	334.4	343.5	355.6	373.7	373.7	382.7	382.7	364.6
70°	210.9	210.9	214.0	223.0	229.0	232.0	238.1	244.1	253.1	250.1	250.1
72.5°	141.6	138.6	141.6	144.7	147.7	156.7	156.7	159.7	165.7	168.8	156.7
75°	72.3	75.4	81.3	78.4	87.4	81.3	84.4	93.4	90.4	84.4	84.4
77.5°	60.2	60.2	60.2	57.3	63.3	63.3	60.2	66.3	63.3	63.3	60.2
80°	42.2	45.2	42.2	39.2	42.2	39.2	39.2	39.2	39.2	39.2	36.1
82.5°	33.2	27.1	30.2	27.1	30.2	30.2	27.1	24.1	24.1	27.1	24.1
85°	24.1	18.1	21.1	21.1	18.1	18.1	18.1	18.1	18.1	15.0	15.0
87.5°	15.0	9.1	9.1	9.1	12.0	12.0	12.0	9.1	12.0	12.0	6.0
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°	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9
2.5°	5622.9	5619.9	5626.0	5622.9	5622.9	5619.9	5622.9	5619.9	5626.0	5613.9	5616.9
5°	5622.9	5616.9	5619.9	5622.9	5626.0	5619.9	5619.9	5619.9	5626.0	5619.9	5622.9
7.5°	5610.9	5607.8	5616.9	5622.9	5619.9	5616.9	5622.9	5619.9	5626.0	5622.9	5628.9
10°	5586.7	5589.8	5595.8	5604.8	5607.8	5610.9	5616.9	5616.9	5626.0	5613.9	5619.9
12.5°	5550.6	5562.6	5577.7	5583.7	5595.8	5595.8	5601.9	5604.8	5610.9	5607.8	5616.9
15°	5505.4	5520.5	5538.5	5553.6	5568.7	5577.7	5586.7	5589.8	5598.8	5589.8	5592.8
17.5°	5451.1	5469.2	5496.3	5514.4	5538.5	5547.6	5559.6	5565.7	5574.7	5568.7	5571.7
20°	5375.8	5397.0	5427.0	5454.2	5469.2	5490.3	5505.4	5514.4	5520.5	5514.4	5517.4
22.5°	5270.4	5300.5	5339.7	5360.8	5390.9	5409.0	5412.0	5433.1	5448.1	5433.1	5439.1
25°	5146.8	5176.9	5207.1	5252.3	5279.4	5300.5	5321.6	5324.6	5339.7	5336.6	5333.6
27.5°	4941.9	4981.1	5032.3	5068.5	5104.6	5137.8	5161.9	5167.9	5183.0	5176.9	5180.0
30°	4661.6	4703.9	4752.1	4809.3	4860.6	4893.7	4923.8	4944.9	4959.9	4950.9	4947.9
32.5°	4263.9	4306.1	4357.3	4414.6	4474.9	4523.0	4559.2	4586.3	4604.4	4598.4	4583.3
35°	3808.9	3820.9	3854.1	3899.3	3950.5	4001.7	4034.9	4065.0	4086.1	4092.1	4092.1
37.5°	3341.8	3302.7	3278.6	3278.6	3308.6	3329.7	3359.9	3378.0	3411.1	3423.2	3432.2
40°	2889.8	2799.4	2715.0	2651.8	2609.6	2606.6	2606.6	2615.6	2645.7	2684.9	2721.1
42.5°	2486.0	2341.4	2211.8	2094.3	2009.9	1961.7	1940.6	1943.6	1967.8	2003.9	2064.1
45°	2163.6	1982.8	1820.1	1678.4	1563.9	1488.6	1452.4	1449.4	1467.5	1509.7	1576.0
47.5°	1913.5	1720.6	1536.8	1374.1	1250.6	1169.2	1127.0	1115.0	1127.0	1166.1	1244.5
50°	1705.6	1506.7	1316.9	1148.1	1015.5	931.2	891.9	876.9	891.9	925.1	1003.4
52.5°	1512.7	1307.8	1130.0	967.3	825.7	753.3	711.1	702.1	711.1	750.3	813.6
55°	1289.7	1115.0	940.2	777.4	653.9	581.6	548.4	539.4	548.4	584.6	650.9
57.5°	1069.8	919.1	765.4	617.7	512.3	449.0	418.9	406.8	427.9	452.0	530.4
60°	864.8	744.3	614.7	485.2	397.8	340.5	316.4	313.4	319.4	349.6	403.8
62.5°	678.0	578.6	476.1	370.6	298.3	274.2	244.1	241.1	247.1	265.1	307.4
65°	488.2	424.9	346.5	271.2	214.0	180.8	168.8	171.8	177.8	189.9	229.0
67.5°	340.5	295.3	241.1	189.9	147.7	132.6	120.6	117.5	120.6	141.6	162.7
70°	229.0	201.9	162.7	144.7	102.5	81.3	84.4	75.4	87.4	87.4	105.4
72.5°	150.6	132.6	108.5	84.4	72.3	57.3	57.3	54.3	60.2	63.3	78.4
75°	78.4	60.2	60.2	42.2	30.2	15.0	27.1	24.1	21.1	24.1	30.2
77.5°	54.3	45.2	42.2	33.2	30.2	24.1	24.1	24.1	24.1	27.1	30.2
80°	33.2	33.2	24.1	21.1	18.1	15.0	18.1	18.1	18.1	18.1	21.1
82.5°	21.1	18.1	18.1	15.0	15.0	12.0	12.0	12.0	12.0	12.0	18.1
85°	18.1	12.0	12.0	9.1	12.0	21.1	9.1	12.0	12.0	12.0	9.1
87.5°	6.0	9.1	9.1	9.1	6.0	3.0	6.0	9.1	9.1	15.0	12.0
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°	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9	5613.9
2.5°	5622.9	5626.0	5626.0	5622.9	5622.9	5616.9	5628.9	5619.9	5622.9	5635.0	5626.0
5°	5628.9	5631.9	5631.9	5628.9	5628.9	5628.9	5631.9	5631.9	5628.9	5626.0	5631.9
7.5°	5641.0	5638.0	5638.0	5631.9	5631.9	5626.0	5631.9	5622.9	5628.9	5622.9	5631.9
10°	5626.0	5628.9	5626.0	5622.9	5622.9	5619.9	5619.9	5610.9	5613.9	5604.8	5610.9
12.5°	5616.9	5613.9	5613.9	5607.8	5601.9	5595.8	5592.8	5583.7	5583.7	5562.6	5571.7
15°	5592.8	5595.8	5586.7	5574.7	5568.7	5553.6	5547.6	5535.5	5523.5	5508.4	5511.5
17.5°	5571.7	5562.6	5550.6	5538.5	5514.4	5502.4	5490.3	5472.2	5466.2	5448.1	5442.1
20°	5508.4	5502.4	5487.3	5466.2	5451.1	5424.0	5412.0	5393.9	5378.8	5360.8	5351.7
22.5°	5427.0	5421.0	5402.9	5381.8	5357.7	5345.7	5333.6	5300.5	5285.4	5267.3	5264.3
25°	5324.6	5315.6	5297.5	5273.4	5261.3	5228.2	5216.1	5192.0	5186.0	5167.9	5164.9
27.5°	5167.9	5155.9	5134.8	5104.6	5083.5	5062.4	5050.4	5032.3	5026.3	5008.2	5005.2
30°	4932.9	4917.8	4875.6	4863.6	4827.4	4806.3	4806.3	4782.2	4785.2	4773.2	4773.2
32.5°	4562.2	4538.1	4504.9	4480.8	4456.7	4444.7	4444.7	4435.6	4441.7	4441.7	4447.7
35°	4071.0	4037.9	4019.8	4004.7	4004.7	4016.8	4053.0	4062.0	4080.1	4095.1	4107.2
37.5°	3441.2	3438.3	3459.4	3477.4	3522.6	3573.9	3637.1	3691.4	3742.6	3778.8	3814.9
40°	2760.2	2835.6	2895.8	2980.2	3049.5	3148.9	3263.4	3356.9	3444.2	3507.6	3573.9
42.5°	2154.5	2251.0	2377.6	2501.1	2624.6	2760.2	2910.9	3040.5	3155.0	3242.4	3311.7
45°	1678.4	1811.0	1964.7	2121.4	2281.1	2449.9	2606.6	2739.1	2859.7	2950.1	3019.4
47.5°	1353.0	1497.6	1672.4	1844.2	2025.0	2202.7	2377.6	2492.1	2591.5	2663.8	2727.1
50°	1117.9	1271.7	1455.5	1651.3	1832.1	2009.9	2160.6	2272.0	2353.4	2416.7	2455.9
52.5°	934.1	1096.8	1292.7	1488.6	1669.4	1832.1	1967.8	2052.1	2118.4	2163.6	2199.7
55°	771.4	928.1	1111.9	1295.8	1473.5	1627.2	1738.7	1802.0	1853.2	1880.3	1901.4
57.5°	629.8	774.4	943.2	1111.9	1265.6	1392.2	1479.6	1542.8	1567.0	1588.0	1585.0
60°	494.2	629.8	783.5	928.1	1060.7	1163.1	1226.5	1262.6	1280.7	1289.7	1283.7
62.5°	388.7	512.3	629.8	756.3	852.8	940.2	1000.5	1000.5	1009.5	1012.5	1021.6
65°	289.3	382.7	485.2	578.6	656.9	714.2	747.3	756.3	768.4	765.4	759.4
67.5°	214.0	283.3	358.6	427.9	482.1	518.3	542.4	563.5	560.5	554.5	551.4
70°	147.7	192.9	259.2	301.3	340.5	376.7	382.7	385.7	388.7	391.7	385.7
72.5°	102.5	135.6	171.8	207.9	232.0	247.1	262.2	265.1	265.1	265.1	262.2
75°	51.2	69.3	102.5	117.5	138.6	144.7	156.7	156.7	165.7	153.7	150.6
77.5°	45.2	54.3	72.3	84.4	93.4	102.5	105.4	114.5	111.5	105.4	108.5
80°	27.1	33.2	45.2	51.2	63.3	66.3	69.3	72.3	69.3	72.3	72.3
82.5°	21.1	24.1	30.2	30.2	39.2	39.2	42.2	42.2	45.2	45.2	45.2
85°	12.0	21.1	18.1	36.1	24.1	24.1	30.2	36.1	30.2	30.2	36.1
87.5°	12.0	12.0	9.1	12.0	12.0	12.0	15.0	18.1	18.1	21.1	18.1
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: P249420

CATALOG NUMBER: LSR8B120D010 EC8B120830 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5613.9	5613.9	5613.9	5613.9
2.5°	5622.9	5628.9	5619.9	5616.9
5°	5631.9	5631.9	5626.0	5626.0
7.5°	5631.9	5631.9	5622.9	5616.9
10°	5607.8	5607.8	5598.8	5592.8
12.5°	5562.6	5562.6	5559.6	5550.6
15°	5505.4	5505.4	5493.3	5484.3
17.5°	5427.0	5433.1	5418.0	5418.0
20°	5342.7	5339.7	5327.6	5321.6
22.5°	5255.3	5249.3	5246.2	5228.2
25°	5161.9	5155.9	5146.8	5137.8
27.5°	5002.2	4999.2	4990.1	4978.1
30°	4758.1	4755.0	4743.0	4743.0
32.5°	4441.7	4438.7	4426.6	4429.7
35°	4113.2	4125.3	4119.3	4107.2
37.5°	3839.0	3848.1	3854.1	3848.1
40°	3610.0	3637.1	3640.1	3646.2
42.5°	3365.9	3402.1	3414.2	3420.1
45°	3073.6	3106.8	3133.9	3127.9
47.5°	2775.3	2799.4	2823.5	2805.4
50°	2489.0	2504.1	2513.2	2513.2
52.5°	2217.9	2217.9	2214.8	2217.9
55°	1907.4	1907.4	1895.4	1901.4
57.5°	1582.0	1588.0	1579.0	1563.9
60°	1280.7	1265.6	1259.6	1250.6
62.5°	997.4	997.4	976.4	1003.4
65°	747.3	738.3	729.2	726.2
67.5°	542.4	539.4	530.4	527.3
70°	382.7	370.6	367.6	361.6
72.5°	256.1	256.1	250.1	250.1
75°	156.7	141.6	138.6	141.6
77.5°	108.5	105.4	105.4	102.5
80°	72.3	69.3	75.4	66.3
82.5°	45.2	48.2	45.2	48.2
85°	30.2	36.1	33.2	33.2
87.5°	18.1	18.1	18.1	18.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)