

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: P249150

Luminaire Tested: **LSR8B120D010 EC8B120935 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249150
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 EC8B120935 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10663.0 lumens
Efficiency: N/A
Efficacy: 90.1 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

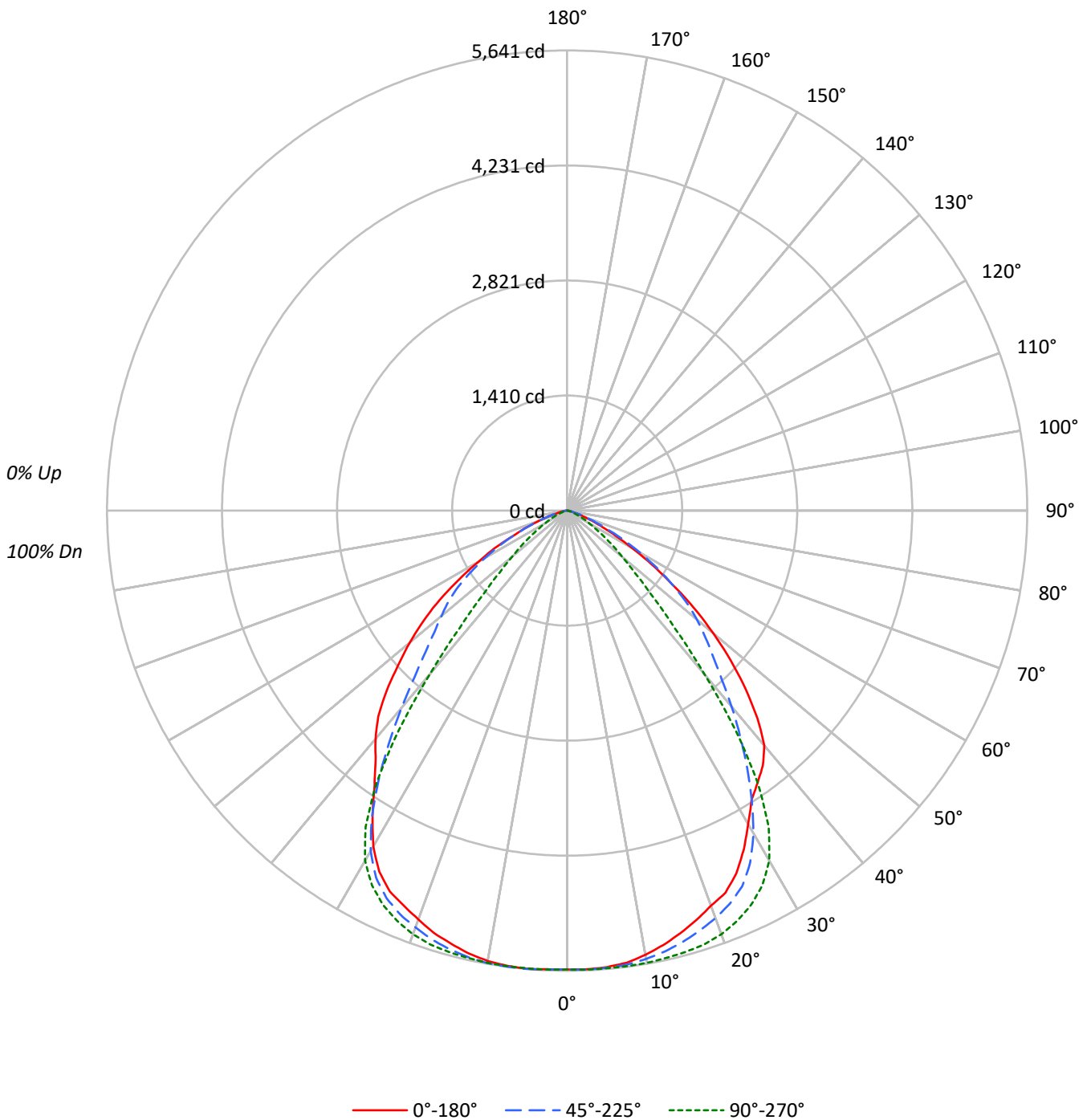
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	173485	173485	173485
5°	173866	174337	174522
10°	173137	176255	175501
15°	171219	178832	175461
20°	169160	181347	175007
25°	166967	181556	175187
30°	157958	176453	169249
35°	153242	153355	154947
40°	151343	105514	147092
45°	134853	63347	136697
50°	112132	42158	120824
55°	84099	29063	102442
60°	56992	19365	77294
65°	34374	12565	53104
70°	19060	6807	32674
75°	8638	2883	16906
80°	7512	3214	11791
85°	8562	4246	11746



TEST NUMBER: P249150

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	536.9	5.0
10°-20°	1559.3	14.6
20°-30°	2366.7	22.2
30°-40°	2485.8	23.3
40°-50°	1863.7	17.5
50°-60°	1195.8	11.2
60°-70°	511.5	4.8
70°-80°	120.9	1.1
80°-90°	22.5	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°	4462.9	41.9
0°-40°	6948.7	65.2
0°-60°	10008.1	93.9
0°-90°	10663.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10663.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5626	5626	5626	5626	5626	
5°	5617	5626	5632	5641	5638	534
15°	5363	5475	5602	5566	5496	1513
25°	4907	5079	5336	5240	5149	2242
35°	4071	3844	4074	4026	4116	2555
45°	3092	2528	1453	2455	3135	2368
55°	1564	1564	541	1631	1906	1419
65°	471	556	172	716	728	503
75°	72	84	24	145	142	106
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°	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0
2.5°	5629.0	5635.1	5632.1	5632.1	5629.0	5632.1	5632.1	5638.1	5638.1	5632.1	5629.0
5°	5616.9	5623.0	5623.0	5616.9	5616.9	5632.1	5623.0	5629.0	5629.0	5626.0	5626.0
7.5°	5589.8	5589.8	5601.8	5592.8	5592.8	5601.8	5598.8	5604.9	5610.9	5614.0	5614.0
10°	5529.4	5535.4	5538.4	5538.4	5541.5	5550.5	5556.6	5568.7	5574.7	5580.7	5583.7
12.5°	5453.9	5462.9	5466.0	5462.9	5472.0	5484.1	5499.2	5514.3	5523.4	5535.4	5544.5
15°	5363.3	5363.3	5369.3	5378.4	5384.5	5402.6	5417.6	5435.7	5459.9	5475.0	5490.1
17.5°	5263.6	5269.7	5278.7	5278.7	5290.8	5321.0	5330.1	5357.3	5384.5	5399.5	5429.8
20°	5154.9	5160.9	5170.0	5176.1	5191.2	5215.3	5233.4	5257.6	5287.8	5315.0	5345.1
22.5°	5070.3	5058.3	5064.3	5070.3	5085.5	5106.6	5127.8	5157.9	5188.1	5215.3	5245.5
25°	4907.3	4910.3	4919.4	4925.4	4943.5	4961.7	4985.8	5022.0	5049.2	5079.4	5112.6
27.5°	4686.8	4689.9	4705.0	4705.0	4720.0	4750.2	4765.3	4795.5	4831.8	4862.0	4901.3
30°	4436.2	4442.2	4442.2	4454.3	4463.3	4478.5	4493.6	4523.8	4541.9	4569.1	4623.4
32.5°	4206.7	4212.7	4209.7	4206.7	4197.6	4194.6	4191.6	4197.6	4203.7	4212.7	4233.8
35°	4070.8	4055.7	4043.6	4022.5	3998.3	3968.1	3940.9	3904.7	3871.5	3844.3	3814.1
37.5°	3940.9	3937.9	3919.8	3889.6	3841.2	3786.9	3723.5	3645.0	3566.4	3481.9	3400.4
40°	3759.7	3750.6	3735.6	3693.3	3638.9	3572.5	3488.0	3391.3	3264.4	3134.6	3001.8
42.5°	3451.7	3454.7	3436.6	3403.4	3352.1	3288.6	3201.0	3095.4	2959.5	2805.4	2633.3
45°	3092.3	3092.3	3086.3	3059.1	3022.9	2971.5	2905.1	2817.5	2684.7	2527.6	2343.4
47.5°	2717.9	2720.9	2711.8	2705.8	2690.7	2657.5	2609.2	2542.7	2449.1	2298.1	2113.9
50°	2337.4	2337.4	2352.5	2349.4	2349.4	2337.4	2316.3	2277.0	2195.5	2074.6	1902.6
52.5°	1956.9	1962.9	1972.0	1984.1	1999.1	2023.3	1999.1	1981.0	1929.7	1836.1	1688.1
55°	1564.3	1570.3	1585.4	1606.5	1624.7	1648.9	1654.9	1654.9	1627.7	1564.3	1452.6
57.5°	1229.1	1220.0	1232.1	1250.2	1274.4	1298.6	1316.7	1337.8	1334.8	1292.5	1201.9
60°	924.1	927.1	936.1	954.3	972.4	993.5	1017.7	1035.8	1044.9	1023.8	966.4
62.5°	673.4	673.4	685.5	703.6	712.7	742.9	758.0	767.1	776.1	773.1	736.8
65°	471.1	477.1	483.2	492.3	501.3	519.4	528.5	546.6	552.6	555.7	528.5
67.5°	332.2	323.1	329.2	335.2	344.3	356.4	374.5	374.5	383.5	383.5	365.4
70°	211.4	211.4	214.4	223.4	229.5	232.5	238.6	244.6	253.7	250.6	250.6
72.5°	141.9	138.9	141.9	145.0	148.0	157.0	157.0	160.0	166.1	169.1	157.0
75°	72.5	75.5	81.5	78.5	87.6	81.5	84.5	93.6	90.6	84.5	84.5
77.5°	60.4	60.4	60.4	57.4	63.4	63.4	60.4	66.4	63.4	63.4	60.4
80°	42.3	45.3	42.3	39.2	42.3	39.2	39.2	39.2	39.2	39.2	36.2
82.5°	33.2	27.2	30.2	27.2	30.2	30.2	27.2	24.2	24.2	27.2	24.2
85°	24.2	18.1	21.1	21.1	18.1	18.1	18.1	18.1	18.1	15.1	15.1
87.5°	15.1	9.1	9.1	9.1	12.0	12.0	12.0	9.1	12.0	12.0	6.1
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: P249150

CATALOG NUMBER: LSR8B120D010 EC8B120935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0
2.5°	5635.1	5632.1	5638.1	5635.1	5635.1	5632.1	5635.1	5632.1	5638.1	5626.0	5629.0
5°	5635.1	5629.0	5632.1	5635.1	5638.1	5632.1	5632.1	5632.1	5638.1	5632.1	5635.1
7.5°	5623.0	5620.0	5629.0	5635.1	5632.1	5629.0	5635.1	5632.1	5638.1	5635.1	5641.1
10°	5598.8	5601.8	5607.9	5616.9	5620.0	5623.0	5629.0	5629.0	5638.1	5626.0	5632.1
12.5°	5562.6	5574.7	5589.8	5595.8	5607.9	5607.9	5614.0	5616.9	5623.0	5620.0	5629.0
15°	5517.3	5532.4	5550.5	5565.6	5580.7	5589.8	5598.8	5601.8	5610.9	5601.8	5604.9
17.5°	5462.9	5481.0	5508.2	5526.3	5550.5	5559.6	5571.6	5577.7	5586.8	5580.7	5583.7
20°	5387.4	5408.6	5438.8	5466.0	5481.0	5502.2	5517.3	5526.3	5532.4	5526.3	5529.4
22.5°	5281.7	5312.0	5351.2	5372.3	5402.6	5420.7	5423.7	5444.8	5459.9	5444.8	5450.9
25°	5157.9	5188.1	5218.3	5263.6	5290.8	5312.0	5333.1	5336.1	5351.2	5348.2	5345.1
27.5°	4952.6	4991.9	5043.2	5079.4	5115.6	5148.9	5173.1	5179.0	5194.2	5188.1	5191.2
30°	4671.7	4714.0	4762.4	4819.7	4871.1	4904.2	4934.5	4955.6	4970.7	4961.7	4958.6
32.5°	4273.1	4315.4	4366.8	4424.1	4484.5	4532.8	4569.1	4596.3	4614.4	4608.3	4593.2
35°	3817.1	3829.2	3862.4	3907.7	3959.0	4010.4	4043.6	4073.8	4094.9	4101.0	4101.0
37.5°	3349.0	3309.8	3285.6	3285.6	3315.8	3336.9	3367.2	3385.3	3418.5	3430.6	3439.6
40°	2896.0	2805.4	2720.9	2657.5	2615.2	2612.2	2612.2	2621.2	2651.4	2690.7	2727.0
42.5°	2491.4	2346.4	2216.6	2098.8	2014.3	1966.0	1944.8	1947.8	1972.0	2008.2	2068.6
45°	2168.3	1987.1	1824.0	1682.1	1567.3	1491.8	1455.6	1452.6	1470.7	1512.9	1579.4
47.5°	1917.6	1724.3	1540.1	1377.0	1253.3	1171.7	1129.4	1117.4	1129.4	1168.7	1247.2
50°	1709.3	1510.0	1319.7	1150.6	1017.7	933.2	893.9	878.8	893.9	927.1	1005.6
52.5°	1516.0	1310.6	1132.5	969.4	827.4	754.9	712.7	703.6	712.7	751.9	815.4
55°	1292.5	1117.4	942.2	779.1	655.3	582.9	549.6	540.6	549.6	585.9	652.3
57.5°	1072.1	921.1	767.1	619.1	513.4	449.9	419.8	407.7	428.8	453.0	531.5
60°	866.7	745.9	616.0	486.2	398.6	341.2	317.1	314.0	320.1	350.3	404.6
62.5°	679.5	579.8	477.1	371.5	299.0	274.8	244.6	241.6	247.6	265.7	308.1
65°	489.2	425.8	347.3	271.8	214.4	181.2	169.1	172.2	178.2	190.3	229.5
67.5°	341.2	295.9	241.6	190.3	148.0	132.9	120.8	117.8	120.8	141.9	163.1
70°	229.5	202.3	163.1	145.0	102.7	81.5	84.5	75.5	87.6	87.6	105.7
72.5°	151.0	132.9	108.7	84.5	72.5	57.4	57.4	54.4	60.4	63.4	78.5
75°	78.5	60.4	60.4	42.3	30.2	15.1	27.2	24.2	21.1	24.2	30.2
77.5°	54.4	45.3	42.3	33.2	30.2	24.2	24.2	24.2	24.2	27.2	30.2
80°	33.2	33.2	24.2	21.1	18.1	15.1	18.1	18.1	18.1	18.1	21.1
82.5°	21.1	18.1	18.1	15.1	15.1	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°	6.1	9.1	9.1	9.1	6.1	3.0	6.1	9.1	9.1	15.1	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



TEST NUMBER: P249150

CATALOG NUMBER: LSR8B120D010 EC8B120935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0	5626.0
2.5°	5635.1	5638.1	5638.1	5635.1	5635.1	5629.0	5641.1	5632.1	5635.1	5647.1	5638.1
5°	5641.1	5644.1	5644.1	5641.1	5641.1	5641.1	5644.1	5644.1	5641.1	5638.1	5644.1
7.5°	5653.2	5650.2	5650.2	5644.1	5644.1	5638.1	5644.1	5635.1	5641.1	5635.1	5644.1
10°	5638.1	5641.1	5638.1	5635.1	5635.1	5632.1	5632.1	5623.0	5626.0	5616.9	5623.0
12.5°	5629.0	5626.0	5626.0	5620.0	5614.0	5607.9	5604.9	5595.8	5595.8	5574.7	5583.7
15°	5604.9	5607.9	5598.8	5586.8	5580.7	5565.6	5559.6	5547.5	5535.4	5520.3	5523.4
17.5°	5583.7	5574.7	5562.6	5550.5	5526.3	5514.3	5502.2	5484.1	5478.0	5459.9	5453.9
20°	5520.3	5514.3	5499.2	5478.0	5462.9	5435.7	5423.7	5405.6	5390.4	5372.3	5363.3
22.5°	5438.8	5432.7	5414.6	5393.5	5369.3	5357.3	5345.1	5312.0	5296.8	5278.7	5275.7
25°	5336.1	5327.0	5308.9	5284.8	5272.7	5239.5	5227.4	5203.2	5197.2	5179.0	5176.1
27.5°	5179.0	5167.0	5145.9	5115.6	5094.5	5073.4	5061.3	5043.2	5037.2	5019.0	5016.0
30°	4943.5	4928.4	4886.1	4874.1	4837.8	4816.7	4816.7	4792.5	4795.5	4783.5	4783.5
32.5°	4572.1	4547.9	4514.7	4490.5	4466.4	4454.3	4454.3	4445.2	4451.3	4451.3	4457.3
35°	4079.8	4046.7	4028.5	4013.4	4013.4	4025.5	4061.7	4070.8	4088.9	4104.0	4116.1
37.5°	3448.7	3445.7	3466.8	3484.9	3530.2	3581.6	3645.0	3699.4	3750.6	3786.9	3823.1
40°	2766.2	2841.7	2902.1	2986.7	3056.1	3155.7	3270.5	3364.1	3451.7	3515.2	3581.6
42.5°	2159.2	2255.8	2382.7	2506.5	2630.3	2766.2	2917.2	3047.1	3161.8	3249.4	3318.8
45°	1682.1	1814.9	1969.0	2126.0	2286.0	2455.2	2612.2	2745.1	2865.9	2956.5	3025.9
47.5°	1355.9	1500.9	1676.0	1848.2	2029.4	2207.5	2382.7	2497.5	2597.1	2669.5	2733.0
50°	1120.3	1274.4	1458.6	1654.9	1836.1	2014.3	2165.2	2277.0	2358.5	2421.9	2461.2
52.5°	936.1	1099.2	1295.5	1491.8	1673.0	1836.1	1972.0	2056.5	2123.0	2168.3	2204.5
55°	773.1	930.1	1114.4	1298.6	1476.7	1630.7	1742.4	1805.9	1857.2	1884.4	1905.5
57.5°	631.2	776.1	945.2	1114.4	1268.3	1395.2	1482.8	1546.2	1570.3	1591.5	1588.4
60°	495.3	631.2	785.2	930.1	1063.0	1165.6	1229.1	1265.3	1283.4	1292.5	1286.4
62.5°	389.6	513.4	631.2	758.0	854.6	942.2	1002.6	1002.6	1011.6	1014.7	1023.8
65°	289.9	383.5	486.2	579.8	658.3	715.7	749.0	758.0	770.1	767.1	761.0
67.5°	214.4	283.9	359.3	428.8	483.2	519.4	543.5	564.7	561.7	555.7	552.6
70°	148.0	193.3	259.7	302.0	341.2	377.5	383.5	386.5	389.6	392.6	386.5
72.5°	102.7	135.9	172.2	208.4	232.5	247.6	262.8	265.7	265.7	265.7	262.8
75°	51.4	69.5	102.7	117.8	138.9	145.0	157.0	157.0	166.1	154.0	151.0
77.5°	45.3	54.4	72.5	84.5	93.6	102.7	105.7	114.8	111.7	105.7	108.7
80°	27.2	33.2	45.3	51.4	63.4	66.4	69.5	72.5	69.5	72.5	72.5
82.5°	21.1	24.2	30.2	30.2	39.2	39.2	42.3	42.3	45.3	45.3	45.3
85°	12.0	21.1	18.1	36.2	24.2	24.2	30.2	36.2	30.2	30.2	36.2
87.5°	12.0	12.0	9.1	12.0	12.0	12.0	15.1	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: P249150

CATALOG NUMBER: LSR8B120D010 EC8B120935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5626.0	5626.0	5626.0	5626.0
2.5°	5635.1	5641.1	5632.1	5629.0
5°	5644.1	5644.1	5638.1	5638.1
7.5°	5644.1	5644.1	5635.1	5629.0
10°	5620.0	5620.0	5610.9	5604.9
12.5°	5574.7	5574.7	5571.6	5562.6
15°	5517.3	5517.3	5505.2	5496.2
17.5°	5438.8	5444.8	5429.8	5429.8
20°	5354.2	5351.2	5339.2	5333.1
22.5°	5266.7	5260.6	5257.6	5239.5
25°	5173.1	5167.0	5157.9	5148.9
27.5°	5013.0	5010.0	5000.9	4988.8
30°	4768.4	4765.3	4753.3	4753.3
32.5°	4451.3	4448.3	4436.2	4439.2
35°	4122.1	4134.2	4128.2	4116.1
37.5°	3847.3	3856.4	3862.4	3856.4
40°	3617.8	3645.0	3648.0	3654.1
42.5°	3373.2	3409.4	3421.5	3427.5
45°	3080.2	3113.5	3140.7	3134.6
47.5°	2781.3	2805.4	2829.6	2811.5
50°	2494.4	2509.5	2518.6	2518.6
52.5°	2222.6	2222.6	2219.6	2222.6
55°	1911.6	1911.6	1899.5	1905.5
57.5°	1585.4	1591.5	1582.4	1567.3
60°	1283.4	1268.3	1262.3	1253.3
62.5°	999.6	999.6	978.5	1005.6
65°	749.0	739.9	730.8	727.8
67.5°	543.5	540.6	531.5	528.5
70°	383.5	371.5	368.4	362.4
72.5°	256.7	256.7	250.6	250.6
75°	157.0	141.9	138.9	141.9
77.5°	108.7	105.7	105.7	102.7
80°	72.5	69.5	75.5	66.4
82.5°	45.3	48.3	45.3	48.3
85°	30.2	36.2	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)