

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: P249105

Luminaire Tested: **LSR8B120D010 EC8B120835 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249105
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 EC8B120835 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12503.0 lumens
Efficiency: N/A
Efficacy: 105.7 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

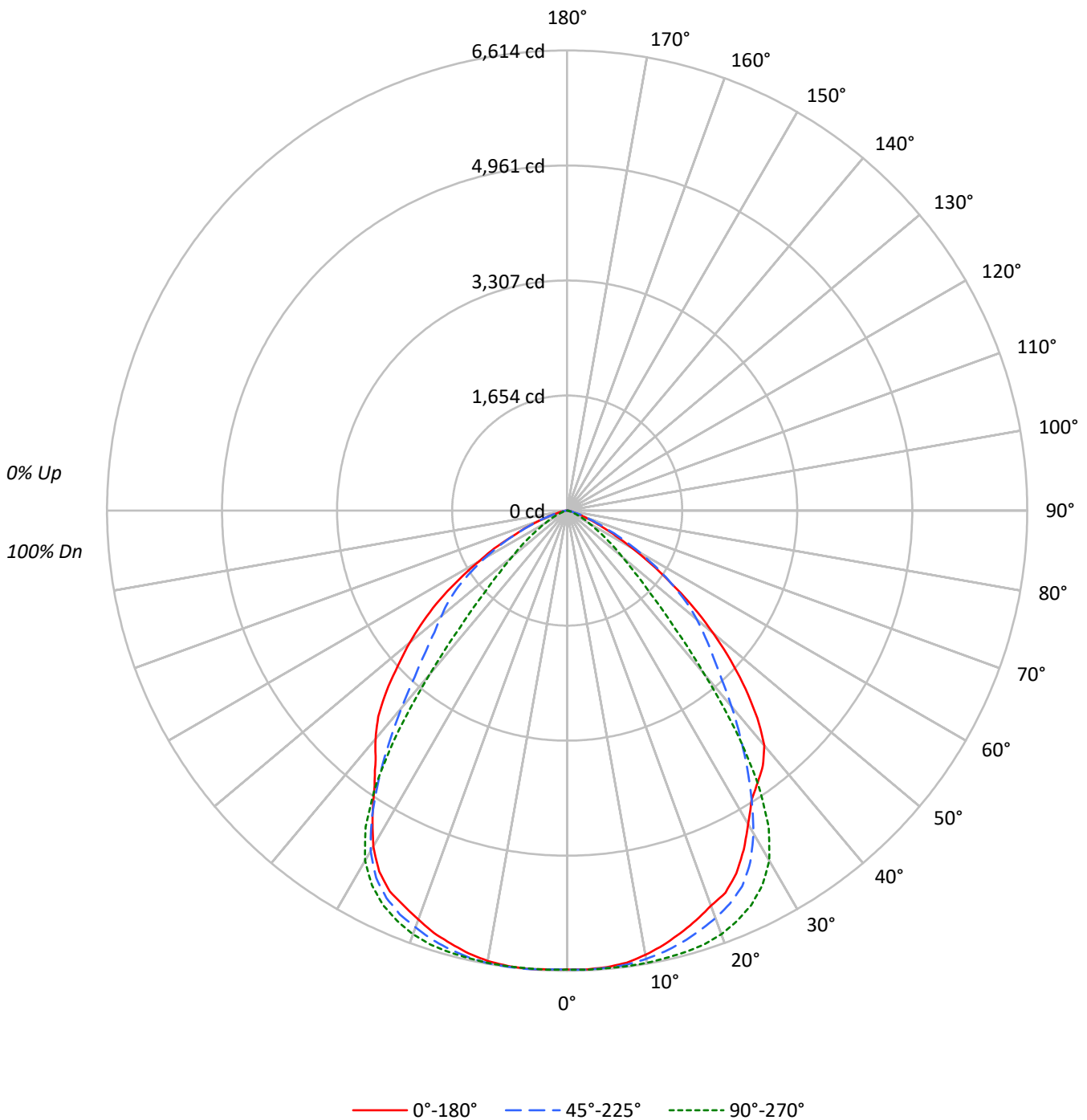
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	203421	203421	203421
5°	203870	204418	204638
10°	203011	206672	205783
15°	200761	209693	205738
20°	198352	212643	205207
25°	195778	212885	205417
30°	185215	206900	198454
35°	179687	179815	181686
40°	177460	123721	172472
45°	158127	74275	160285
50°	131479	49431	141673
55°	98609	34079	120119
60°	66822	22708	90628
65°	40306	14732	62261
70°	22351	7979	38309
75°	10127	3372	19825
80°	8808	3765	13833
85°	10013	4989	13798



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	629.6	5.0
10°-20°	1828.4	14.6
20°-30°	2775.1	22.2
30°-40°	2914.7	23.3
40°-50°	2185.3	17.5
50°-60°	1402.1	11.2
60°-70°	599.8	4.8
70°-80°	141.7	1.1
80°-90°	26.4	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°	5233.1	41.9
0°-40°	8147.8	65.2
0°-60°	11735.1	93.9
0°-90°	12503.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12503.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6597	6597	6597	6597	6597	
5°	6586	6597	6604	6614	6611	626
15°	6289	6420	6568	6526	6445	1774
25°	5754	5956	6257	6144	6037	2629
35°	4773	4508	4777	4720	4826	2996
45°	3626	2964	1703	2879	3676	2777
55°	1834	1834	634	1912	2234	1664
65°	552	652	202	839	853	590
75°	85	99	28	170	166	124
85°	28	18	14	28	39	30
90°	0	0	0	0	0	



TEST NUMBER: P249105

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8
2.5°	6600.4	6607.5	6603.9	6603.9	6600.4	6603.9	6603.9	6611.0	6611.0	6603.9	6600.4
5°	6586.2	6593.3	6593.3	6586.2	6586.2	6603.9	6593.3	6600.4	6600.4	6596.8	6596.8
7.5°	6554.4	6554.4	6568.5	6557.9	6557.9	6568.5	6564.9	6572.0	6579.2	6582.7	6582.7
10°	6483.5	6490.6	6494.2	6494.2	6497.7	6508.3	6515.4	6529.6	6536.6	6543.7	6547.3
12.5°	6395.0	6405.6	6409.2	6405.6	6416.3	6430.4	6448.1	6465.8	6476.5	6490.6	6501.3
15°	6288.7	6288.7	6295.8	6306.5	6313.6	6334.8	6352.5	6373.7	6402.1	6419.8	6437.5
17.5°	6171.9	6179.0	6189.6	6189.6	6203.8	6239.2	6249.8	6281.7	6313.6	6331.3	6366.7
20°	6044.5	6051.5	6062.2	6069.3	6086.9	6115.3	6136.5	6164.8	6200.3	6232.2	6267.5
22.5°	5945.3	5931.2	5938.2	5945.3	5963.0	5987.8	6012.6	6048.0	6083.4	6115.3	6150.7
25°	5754.1	5757.6	5768.3	5775.3	5796.6	5817.8	5846.2	5888.6	5920.5	5955.9	5994.8
27.5°	5495.6	5499.2	5516.8	5516.8	5534.5	5569.9	5587.6	5623.1	5665.6	5701.0	5747.0
30°	5201.7	5208.7	5208.7	5222.9	5233.5	5251.3	5269.0	5304.4	5325.6	5357.5	5421.3
32.5°	4932.6	4939.6	4936.1	4932.6	4922.0	4918.4	4914.9	4922.0	4929.1	4939.6	4964.4
35°	4773.3	4755.5	4741.4	4716.6	4688.3	4652.8	4621.0	4578.5	4539.5	4507.6	4472.3
37.5°	4621.0	4617.4	4596.2	4560.7	4504.1	4440.4	4366.1	4274.0	4181.9	4082.7	3987.2
40°	4408.5	4397.9	4380.2	4330.6	4266.9	4189.0	4089.8	3976.5	3827.8	3675.5	3519.7
42.5°	4047.3	4050.9	4029.6	3990.6	3930.5	3856.1	3753.4	3629.5	3470.2	3289.5	3087.7
45°	3626.0	3626.0	3618.9	3587.0	3544.5	3484.3	3406.4	3303.7	3148.0	2963.8	2747.8
47.5°	3186.9	3190.4	3179.8	3172.7	3155.0	3116.1	3059.4	2981.5	2871.7	2694.7	2478.7
50°	2740.7	2740.7	2758.4	2754.9	2754.9	2740.7	2716.0	2669.9	2574.3	2432.6	2230.9
52.5°	2294.5	2301.6	2312.3	2326.4	2344.1	2372.4	2344.1	2322.9	2262.7	2152.9	1979.4
55°	1834.2	1841.3	1859.0	1883.8	1905.1	1933.4	1940.4	1940.4	1908.5	1834.2	1703.2
57.5°	1441.2	1430.5	1444.8	1466.0	1494.3	1522.6	1543.9	1568.7	1565.1	1515.5	1409.3
60°	1083.5	1087.1	1097.7	1119.0	1140.2	1165.0	1193.3	1214.5	1225.2	1200.4	1133.1
62.5°	789.7	789.7	803.8	825.0	835.7	871.1	888.8	899.4	910.0	906.4	864.0
65°	552.4	559.4	566.6	577.2	587.8	609.0	619.7	640.9	648.0	651.5	619.7
67.5°	389.5	378.9	386.0	393.0	403.7	417.9	439.1	439.1	449.7	449.7	428.4
70°	247.9	247.9	251.4	262.0	269.1	272.7	279.8	286.8	297.4	293.9	293.9
72.5°	166.4	162.9	166.4	170.0	173.5	184.1	184.1	187.7	194.8	198.3	184.1
75°	85.0	88.5	95.6	92.1	102.7	95.6	99.1	109.8	106.2	99.1	99.1
77.5°	70.8	70.8	70.8	67.3	74.3	74.3	70.8	77.9	74.3	74.3	70.8
80°	49.6	53.1	49.6	46.0	49.6	46.0	46.0	46.0	46.0	46.0	42.5
82.5°	39.0	31.9	35.4	31.9	35.4	35.4	31.9	28.3	28.3	31.9	28.3
85°	28.3	21.2	24.8	24.8	21.2	21.2	21.2	21.2	21.2	17.7	17.7
87.5°	17.7	10.7	10.7	10.7	14.1	14.1	14.1	10.7	14.1	14.1	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



TEST NUMBER: P249105

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8
2.5°	6607.5	6603.9	6611.0	6607.5	6607.5	6603.9	6607.5	6603.9	6611.0	6596.8	6600.4
5°	6607.5	6600.4	6603.9	6607.5	6611.0	6603.9	6603.9	6603.9	6611.0	6603.9	6607.5
7.5°	6593.3	6589.7	6600.4	6607.5	6603.9	6600.4	6607.5	6603.9	6611.0	6607.5	6614.5
10°	6564.9	6568.5	6575.6	6586.2	6589.7	6593.3	6600.4	6600.4	6611.0	6596.8	6603.9
12.5°	6522.5	6536.6	6554.4	6561.4	6575.6	6575.6	6582.7	6586.2	6593.3	6589.7	6600.4
15°	6469.4	6487.1	6508.3	6526.0	6543.7	6554.4	6564.9	6568.5	6579.2	6568.5	6572.0
17.5°	6405.6	6426.8	6458.7	6480.0	6508.3	6518.9	6533.1	6540.2	6550.8	6543.7	6547.3
20°	6317.1	6341.9	6377.3	6409.2	6426.8	6451.6	6469.4	6480.0	6487.1	6480.0	6483.5
22.5°	6193.2	6228.6	6274.6	6299.4	6334.8	6356.1	6359.6	6384.4	6402.1	6384.4	6391.5
25°	6048.0	6083.4	6118.8	6171.9	6203.8	6228.6	6253.4	6256.9	6274.6	6271.1	6267.5
27.5°	5807.2	5853.3	5913.4	5955.9	5998.4	6037.4	6065.7	6072.7	6090.5	6083.4	6086.9
30°	5477.9	5527.5	5584.2	5651.4	5711.6	5750.5	5785.9	5810.7	5828.4	5817.8	5814.3
32.5°	5010.5	5060.1	5120.3	5187.5	5258.4	5315.0	5357.5	5389.4	5410.6	5403.5	5385.8
35°	4475.8	4490.0	4528.9	4582.1	4642.2	4702.4	4741.4	4776.7	4801.5	4808.6	4808.6
37.5°	3927.0	3880.9	3852.6	3852.6	3888.0	3912.8	3948.2	3969.4	4008.4	4022.5	4033.2
40°	3395.8	3289.5	3190.4	3116.1	3066.5	3063.0	3063.0	3073.5	3109.0	3155.0	3197.5
42.5°	2921.3	2751.3	2599.1	2461.0	2361.9	2305.2	2280.4	2284.0	2312.3	2354.8	2425.5
45°	2542.4	2330.0	2138.8	1972.3	1837.8	1749.2	1706.8	1703.2	1724.4	1774.0	1852.0
47.5°	2248.5	2021.9	1805.9	1614.7	1469.5	1373.9	1324.3	1310.2	1324.3	1370.3	1462.4
50°	2004.2	1770.5	1547.4	1349.1	1193.3	1094.2	1048.1	1030.4	1048.1	1087.1	1179.1
52.5°	1777.5	1536.8	1327.9	1136.7	970.2	885.2	835.7	825.0	835.7	881.7	956.1
55°	1515.5	1310.2	1104.8	913.6	768.4	683.4	644.4	633.9	644.4	687.0	764.9
57.5°	1257.1	1080.0	899.4	725.9	602.0	527.6	492.2	478.0	502.8	531.1	623.2
60°	1016.2	874.6	722.3	570.1	467.4	400.1	371.8	368.2	375.3	410.8	474.5
62.5°	796.8	679.9	559.4	435.5	350.6	322.2	286.8	283.3	290.3	311.6	361.2
65°	573.7	499.3	407.2	318.7	251.4	212.4	198.3	201.9	208.9	223.1	269.1
67.5°	400.1	347.0	283.3	223.1	173.5	155.8	141.7	138.1	141.7	166.4	191.2
70°	269.1	237.2	191.2	170.0	120.4	95.6	99.1	88.5	102.7	102.7	123.9
72.5°	177.0	155.8	127.5	99.1	85.0	67.3	67.3	63.8	70.8	74.3	92.1
75°	92.1	70.8	70.8	49.6	35.4	17.7	31.9	28.3	24.8	28.3	35.4
77.5°	63.8	53.1	49.6	39.0	35.4	28.3	28.3	28.3	28.3	31.9	35.4
80°	39.0	39.0	28.3	24.8	21.2	17.7	21.2	21.2	21.2	21.2	24.8
82.5°	24.8	21.2	21.2	17.7	17.7	14.1	14.1	14.1	14.1	14.1	21.2
85°	21.2	14.1	14.1	10.7	14.1	24.8	10.7	14.1	14.1	14.1	10.7
87.5°	7.1	10.7	10.7	10.7	7.1	3.6	7.1	10.7	10.7	17.7	14.1
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: P249105

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8	6596.8
2.5°	6607.5	6611.0	6611.0	6607.5	6607.5	6600.4	6614.5	6603.9	6607.5	6621.6	6611.0
5°	6614.5	6618.1	6618.1	6614.5	6614.5	6614.5	6618.1	6618.1	6614.5	6611.0	6618.1
7.5°	6628.7	6625.2	6625.2	6618.1	6618.1	6611.0	6618.1	6607.5	6614.5	6607.5	6618.1
10°	6611.0	6614.5	6611.0	6607.5	6607.5	6603.9	6603.9	6593.3	6596.8	6586.2	6593.3
12.5°	6600.4	6596.8	6596.8	6589.7	6582.7	6575.6	6572.0	6561.4	6561.4	6536.6	6547.3
15°	6572.0	6575.6	6564.9	6550.8	6543.7	6526.0	6518.9	6504.7	6490.6	6472.9	6476.5
17.5°	6547.3	6536.6	6522.5	6508.3	6480.0	6465.8	6451.6	6430.4	6423.3	6402.1	6395.0
20°	6472.9	6465.8	6448.1	6423.3	6405.6	6373.7	6359.6	6338.4	6320.6	6299.4	6288.7
22.5°	6377.3	6370.2	6348.9	6324.2	6295.8	6281.7	6267.5	6228.6	6210.8	6189.6	6186.1
25°	6256.9	6246.3	6225.0	6196.7	6182.5	6143.6	6129.4	6101.1	6094.0	6072.7	6069.3
27.5°	6072.7	6058.6	6033.8	5998.4	5973.6	5948.8	5934.7	5913.4	5906.4	5885.1	5881.6
30°	5796.6	5778.8	5729.3	5715.2	5672.6	5647.8	5647.8	5619.5	5623.1	5608.9	5608.9
32.5°	5361.1	5332.7	5293.7	5265.4	5237.1	5222.9	5222.9	5212.3	5219.4	5219.4	5226.5
35°	4783.8	4744.9	4723.6	4706.0	4706.0	4720.1	4762.6	4773.3	4794.5	4812.2	4826.4
37.5°	4043.8	4040.3	4065.1	4086.3	4139.4	4199.6	4274.0	4337.7	4397.9	4440.4	4482.9
40°	3243.5	3332.1	3402.9	3502.1	3583.4	3700.3	3834.9	3944.6	4047.3	4121.7	4199.6
42.5°	2531.8	2645.1	2793.9	2939.0	3084.2	3243.5	3420.6	3572.9	3707.4	3810.1	3891.5
45°	1972.3	2128.1	2308.7	2492.9	2680.5	2878.8	3063.0	3218.7	3360.4	3466.6	3548.1
47.5°	1589.9	1759.9	1965.2	2167.1	2379.5	2588.4	2793.9	2928.4	3045.2	3130.2	3204.6
50°	1313.7	1494.3	1710.3	1940.4	2152.9	2361.9	2538.9	2669.9	2765.5	2839.9	2885.9
52.5°	1097.7	1288.9	1519.1	1749.2	1961.7	2152.9	2312.3	2411.4	2489.3	2542.4	2584.9
55°	906.4	1090.6	1306.6	1522.6	1731.5	1912.1	2043.1	2117.5	2177.7	2209.5	2234.3
57.5°	740.1	910.0	1108.3	1306.6	1487.2	1636.0	1738.6	1813.0	1841.3	1866.1	1862.5
60°	580.8	740.1	920.7	1090.6	1246.4	1366.8	1441.2	1483.7	1504.9	1515.5	1508.4
62.5°	456.8	602.0	740.1	888.8	1002.1	1104.8	1175.6	1175.6	1186.2	1189.8	1200.4
65°	339.9	449.7	570.1	679.9	771.9	839.2	878.2	888.8	903.0	899.4	892.3
67.5°	251.4	332.9	421.3	502.8	566.6	609.0	637.3	662.2	658.7	651.5	648.0
70°	173.5	226.7	304.5	354.1	400.1	442.7	449.7	453.2	456.8	460.3	453.2
72.5°	120.4	159.3	201.9	244.3	272.7	290.3	308.1	311.6	311.6	311.6	308.1
75°	60.2	81.4	120.4	138.1	162.9	170.0	184.1	184.1	194.8	180.6	177.0
77.5°	53.1	63.8	85.0	99.1	109.8	120.4	123.9	134.6	131.0	123.9	127.5
80°	31.9	39.0	53.1	60.2	74.3	77.9	81.4	85.0	81.4	85.0	85.0
82.5°	24.8	28.3	35.4	35.4	46.0	46.0	49.6	49.6	53.1	53.1	53.1
85°	14.1	24.8	21.2	42.5	28.3	28.3	35.4	42.5	35.4	35.4	42.5
87.5°	14.1	14.1	10.7	14.1	14.1	14.1	17.7	21.2	21.2	24.8	21.2
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: P249105

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6596.8	6596.8	6596.8	6596.8
2.5°	6607.5	6614.5	6603.9	6600.4
5°	6618.1	6618.1	6611.0	6611.0
7.5°	6618.1	6618.1	6607.5	6600.4
10°	6589.7	6589.7	6579.2	6572.0
12.5°	6536.6	6536.6	6533.1	6522.5
15°	6469.4	6469.4	6455.2	6444.6
17.5°	6377.3	6384.4	6366.7	6366.7
20°	6278.2	6274.6	6260.5	6253.4
22.5°	6175.5	6168.4	6164.8	6143.6
25°	6065.7	6058.6	6048.0	6037.4
27.5°	5878.0	5874.5	5863.8	5849.7
30°	5591.2	5587.6	5573.5	5573.5
32.5°	5219.4	5215.8	5201.7	5205.3
35°	4833.4	4847.6	4840.5	4826.4
37.5°	4511.2	4521.8	4528.9	4521.8
40°	4242.1	4274.0	4277.5	4284.6
42.5°	3955.3	3997.7	4012.0	4019.0
45°	3611.8	3650.7	3682.6	3675.5
47.5°	3261.2	3289.5	3317.9	3296.6
50°	2924.9	2942.5	2953.2	2953.2
52.5°	2606.2	2606.2	2602.6	2606.2
55°	2241.4	2241.4	2227.3	2234.3
57.5°	1859.0	1866.1	1855.4	1837.8
60°	1504.9	1487.2	1480.1	1469.5
62.5°	1172.1	1172.1	1147.3	1179.1
65°	878.2	867.5	856.9	853.3
67.5°	637.3	633.9	623.2	619.7
70°	449.7	435.5	432.0	424.9
72.5°	301.0	301.0	293.9	293.9
75°	184.1	166.4	162.9	166.4
77.5°	127.5	123.9	123.9	120.4
80°	85.0	81.4	88.5	77.9
82.5°	53.1	56.7	53.1	56.7
85°	35.4	42.5	39.0	39.0
87.5°	21.2	21.2	21.2	21.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)