

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: P250227

Luminaire Tested: **LSR8B100D010 EC8B100840 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250227  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B100D010 EC8B100840 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11015.0 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

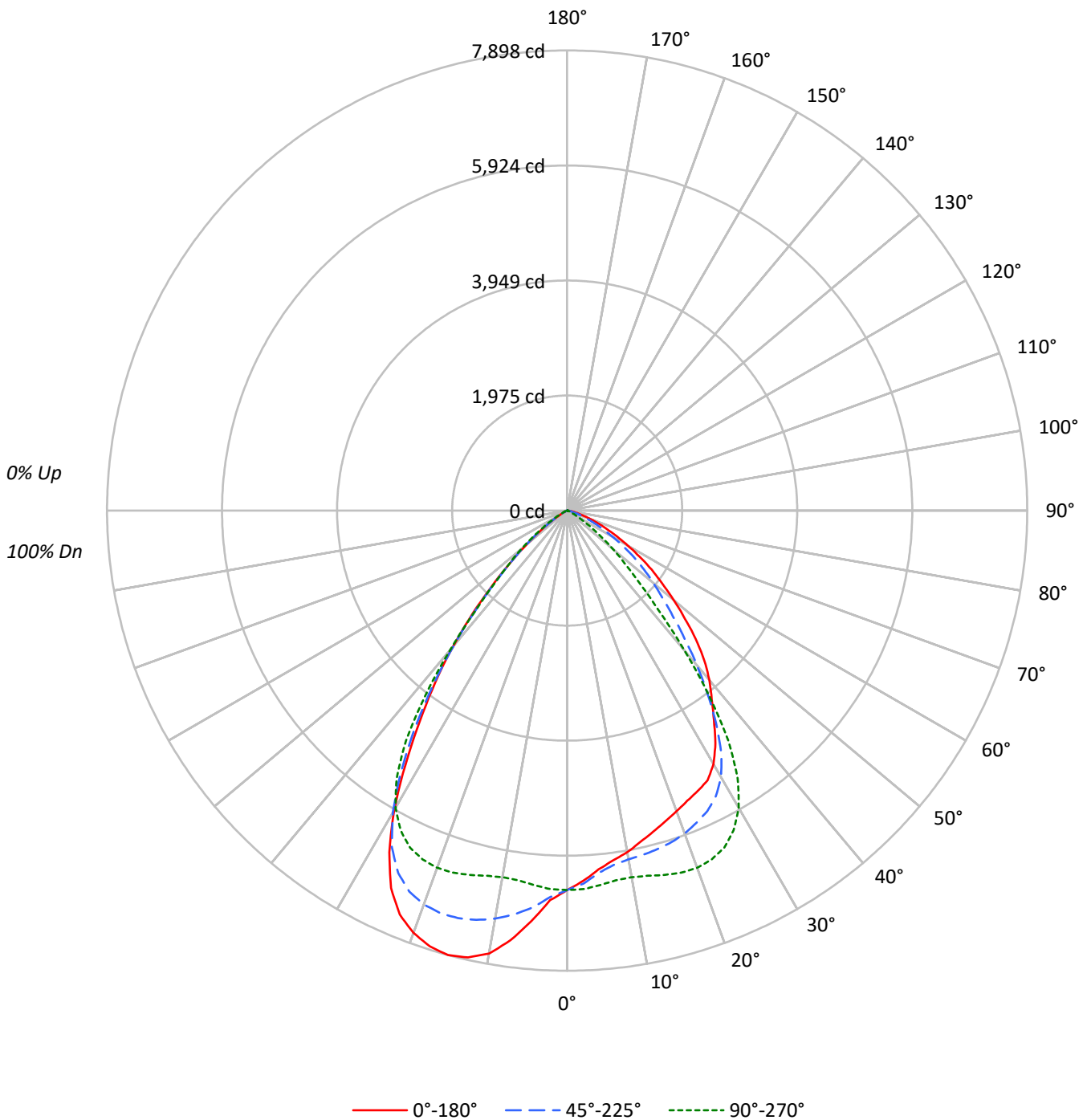
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60					60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42					42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	200843	200843	200843
5°	191343	199725	218948
10°	186407	200034	241682
15°	182181	206664	252137
20°	180176	214130	253082
25°	180597	217155	243249
30°	178920	209699	211543
35°	165330	181483	165555
40°	152776	125822	122762
45°	136043	75924	78440
50°	114468	48913	44389
55°	95233	26832	20295
60°	74334	11638	6383
65°	54855	5779	3108
70°	38146	3570	1370
75°	23209	727	0
80°	16746	1083	0
85°	10756	1061	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	626.1	5.7
10°-20°	1874.0	17.0
20°-30°	2869.8	26.1
30°-40°	2813.3	25.5
40°-50°	1694.2	15.4
50°-60°	779.8	7.1
60°-70°	273.9	2.5
70°-80°	71.6	0.7
80°-90°	12.2	0.1
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°	5369.9	48.8
0°-40°	8183.2	74.3
0°-60°	10657.2	96.8
0°-90°	11015.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11015.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6513	6513	6513	6513	6513	
5°	6182	6239	6452	6839	7073	584
15°	5707	6014	6474	7241	7898	1612
25°	5308	5692	6382	6863	7149	2445
35°	4392	4453	4821	4544	4398	2751
45°	3120	2569	1741	1753	1799	2392
55°	1771	1403	499	393	378	1581
65°	752	520	79	40	43	766
75°	195	113	6	0	0	236
85°	30	15	3	0	0	42
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°	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2
2.5°	6361.0	6367.1	6367.1	6367.1	6379.3	6382.4	6379.3	6382.4	6388.4	6409.7	6418.9
5°	6181.5	6172.3	6178.5	6175.3	6190.6	6199.8	6193.6	6202.8	6224.1	6239.3	6254.5
7.5°	6053.7	6053.7	6053.7	6059.7	6068.8	6087.1	6084.1	6090.1	6111.4	6132.7	6154.0
10°	5953.2	5950.2	5950.2	5965.4	5977.5	5998.8	6005.0	6023.2	6050.6	6078.0	6102.3
12.5°	5822.3	5825.4	5840.6	5855.9	5883.2	5916.6	5934.9	5959.4	6001.9	6047.5	6075.0
15°	5706.7	5709.7	5722.0	5752.3	5785.8	5825.4	5864.9	5904.5	5956.2	6014.1	6062.8
17.5°	5594.0	5597.1	5606.2	5639.8	5682.4	5734.1	5779.7	5831.4	5898.5	5965.4	6026.2
20°	5490.6	5487.6	5502.7	5533.2	5588.0	5636.6	5682.4	5743.3	5816.3	5898.5	5968.4
22.5°	5390.1	5390.1	5405.4	5435.8	5484.6	5533.2	5581.9	5645.8	5718.8	5798.0	5880.2
25°	5307.9	5304.9	5326.2	5341.5	5377.9	5426.7	5478.4	5530.2	5603.2	5691.5	5770.6
27.5°	5219.7	5216.7	5219.7	5238.0	5271.5	5307.9	5347.5	5393.2	5454.1	5527.2	5603.2
30°	5024.9	5027.9	5027.9	5043.2	5061.5	5101.0	5122.3	5168.0	5222.7	5283.6	5350.6
32.5°	4735.8	4738.8	4738.8	4744.9	4760.1	4778.4	4796.7	4830.1	4872.7	4924.5	4985.3
35°	4391.9	4391.9	4388.8	4391.9	4401.0	4401.0	4416.2	4401.0	4422.3	4452.8	4498.4
37.5°	4075.3	4069.2	4063.2	4057.0	4047.9	4032.7	4011.4	3974.9	3965.7	3953.6	3956.6
40°	3795.3	3792.3	3774.0	3758.8	3728.3	3691.9	3640.1	3576.2	3524.5	3463.6	3411.9
42.5°	3484.9	3481.8	3466.6	3439.2	3405.7	3351.0	3268.8	3183.6	3080.1	2988.8	2894.5
45°	3119.6	3128.8	3107.5	3077.0	3037.4	2985.7	2894.5	2790.9	2687.4	2568.8	2450.0
47.5°	2739.1	2736.1	2721.0	2702.7	2669.2	2617.5	2556.6	2444.0	2334.4	2224.9	2103.1
50°	2386.1	2374.0	2367.8	2349.7	2328.4	2285.8	2221.8	2130.4	2033.1	1929.6	1817.0
52.5°	2051.4	2051.4	2036.1	2023.9	2005.7	1972.2	1917.5	1844.4	1762.2	1664.8	1546.1
55°	1771.4	1765.3	1750.1	1734.8	1716.5	1695.2	1646.6	1585.7	1497.4	1403.1	1299.6
57.5°	1473.1	1470.0	1464.0	1445.7	1436.5	1415.2	1360.5	1299.6	1223.6	1141.4	1056.1
60°	1205.3	1193.1	1180.8	1168.7	1153.5	1132.2	1095.7	1043.9	980.0	907.0	821.8
62.5°	964.9	983.0	946.6	946.6	916.1	897.8	864.4	834.0	766.9	700.0	627.0
65°	751.8	751.8	736.5	724.3	706.1	684.8	651.3	620.9	572.1	520.4	468.7
67.5°	575.3	572.1	557.0	544.8	529.5	517.4	493.1	456.5	420.0	377.5	334.7
70°	423.1	420.0	416.9	395.6	383.5	368.3	350.0	325.7	298.3	267.8	228.3
72.5°	304.3	304.3	295.3	286.1	274.0	261.7	243.5	228.3	203.9	182.7	155.2
75°	194.8	191.8	191.8	176.5	176.5	158.2	146.1	136.9	124.8	112.6	88.3
77.5°	140.1	136.9	133.9	127.8	121.8	115.6	106.5	94.3	85.2	73.0	63.9
80°	94.3	88.3	85.2	85.2	76.0	73.0	76.0	57.9	54.7	45.6	39.6
82.5°	57.9	57.9	54.7	54.7	51.7	48.7	39.6	39.6	36.6	33.4	27.4
85°	30.4	39.6	27.4	30.4	27.4	30.4	27.4	21.3	18.3	15.2	15.2
87.5°	18.3	12.2	12.2	18.3	15.2	12.2	12.2	12.2	9.1	6.1	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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2
2.5°	6412.8	6434.1	6431.0	6458.4	6467.6	6488.9	6488.9	6504.0	6513.2	6534.5	6552.8
5°	6260.6	6294.1	6303.2	6336.7	6364.1	6397.6	6418.9	6452.3	6482.8	6528.5	6571.1
7.5°	6166.3	6193.6	6211.9	6251.5	6281.9	6318.4	6355.0	6400.6	6443.2	6498.0	6558.9
10°	6120.6	6157.2	6184.5	6224.1	6260.6	6300.2	6336.7	6388.4	6437.2	6507.2	6574.1
12.5°	6108.4	6151.0	6184.5	6239.3	6275.8	6318.4	6361.0	6418.9	6470.6	6543.6	6619.8
15°	6108.4	6166.3	6211.9	6272.8	6315.4	6370.1	6415.9	6473.6	6531.5	6607.5	6680.6
17.5°	6096.3	6166.3	6224.1	6294.1	6348.8	6403.7	6461.5	6516.3	6577.1	6650.2	6732.3
20°	6047.5	6135.9	6205.8	6287.9	6345.8	6406.7	6464.6	6525.3	6589.4	6665.4	6735.4
22.5°	5962.4	6065.8	6145.0	6233.2	6300.2	6361.0	6418.9	6479.7	6549.8	6622.8	6695.8
25°	5849.7	5947.1	6032.4	6123.6	6190.6	6257.5	6312.4	6382.4	6446.3	6516.3	6574.1
27.5°	5679.2	5782.7	5864.9	5959.4	6020.1	6084.1	6129.7	6187.6	6248.5	6306.2	6352.0
30°	5423.7	5518.0	5603.2	5688.4	5749.3	5795.0	5843.6	5889.3	5928.9	5968.4	6008.0
32.5°	5049.2	5134.5	5216.7	5295.8	5344.5	5384.1	5420.5	5448.0	5469.3	5490.6	5493.6
35°	4535.0	4604.9	4656.6	4726.6	4772.4	4808.8	4808.8	4821.0	4818.0	4808.8	4799.7
37.5°	3959.7	3987.0	4008.3	4035.7	4038.8	4038.8	4020.6	4005.3	3981.0	3974.9	3956.6
40°	3360.1	3323.6	3296.1	3259.7	3238.4	3192.6	3153.2	3125.7	3086.2	3080.1	3074.0
42.5°	2790.9	2705.7	2629.7	2565.8	2492.7	2428.7	2371.0	2328.4	2297.9	2294.8	2297.9
45°	2328.4	2230.9	2118.3	2030.1	1947.9	1868.7	1792.7	1741.0	1713.5	1707.4	1713.5
47.5°	1978.3	1865.7	1756.1	1655.6	1567.4	1479.1	1403.1	1333.1	1299.6	1290.5	1287.5
50°	1701.4	1585.7	1470.0	1366.5	1269.2	1180.8	1086.5	1019.6	977.0	961.7	949.6
52.5°	1430.5	1327.0	1208.3	1101.8	1004.3	900.9	803.5	727.3	684.8	666.6	654.3
55°	1193.1	1089.6	980.0	876.6	773.1	669.6	572.1	499.1	453.5	432.2	416.9
57.5°	952.6	855.3	760.9	657.4	572.1	471.8	374.3	310.4	270.8	246.5	234.4
60°	736.5	660.5	578.3	493.1	410.9	328.7	249.5	188.7	158.2	140.1	124.8
62.5°	557.0	493.1	438.2	365.2	301.3	231.3	170.5	121.8	94.3	79.2	73.0
65°	401.8	353.0	304.3	258.7	213.1	161.4	115.6	79.2	54.7	45.6	42.6
67.5°	286.1	246.5	210.0	179.5	146.1	115.6	82.2	54.7	42.6	36.6	33.4
70°	200.8	170.5	146.1	118.8	97.3	76.0	63.9	39.6	24.3	27.4	21.3
72.5°	133.9	112.6	100.5	82.2	66.9	54.7	39.6	27.4	27.4	21.3	18.3
75°	73.0	66.9	51.7	39.6	33.4	30.4	12.2	6.1	3.0	9.1	3.0
77.5°	51.7	45.6	39.6	33.4	27.4	21.3	12.2	12.2	9.1	12.2	6.1
80°	33.4	27.4	24.3	24.3	15.2	9.1	6.1	6.1	9.1	3.0	3.0
82.5°	21.3	18.3	15.2	15.2	15.2	9.1	9.1	9.1	9.1	6.1	6.1
85°	12.2	9.1	6.1	6.1	3.0	6.1	0.0	3.0	3.0	0.0	0.0
87.5°	6.1	3.0	3.0	3.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0
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°	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2	6513.2
2.5°	6564.9	6577.1	6592.4	6604.5	6632.0	6638.0	6650.2	6662.4	6671.5	6680.6	6683.7
5°	6607.5	6653.3	6695.8	6741.4	6799.3	6838.9	6884.5	6924.1	6963.7	6997.1	7021.4
7.5°	6619.8	6689.7	6753.7	6832.8	6918.0	6991.1	7067.2	7143.2	7222.4	7283.3	7335.0
10°	6644.1	6729.3	6811.5	6905.8	7015.4	7112.8	7207.1	7307.6	7408.0	7493.2	7569.4
12.5°	6686.7	6781.0	6869.4	6972.8	7085.5	7194.9	7298.4	7411.0	7517.7	7612.0	7697.2
15°	6756.7	6844.9	6930.2	7027.6	7140.2	7240.7	7344.1	7453.6	7560.2	7657.6	7736.8
17.5°	6802.3	6884.5	6969.7	7058.0	7152.3	7243.7	7341.0	7438.5	7535.8	7624.1	7697.2
20°	6802.3	6881.5	6945.4	7024.6	7112.8	7191.9	7271.1	7356.3	7441.5	7514.5	7584.5
22.5°	6747.6	6823.6	6872.4	6933.2	7009.3	7076.3	7118.9	7213.2	7277.1	7341.0	7392.8
25°	6619.8	6674.5	6714.1	6756.7	6817.6	6863.2	6899.8	6954.5	7018.4	7042.9	7079.3
27.5°	6388.4	6428.0	6449.3	6458.4	6488.9	6513.2	6519.3	6543.6	6571.1	6577.1	6592.4
30°	6023.2	6026.2	6017.1	6014.1	5998.8	5980.6	5977.5	5974.5	5962.4	5950.2	5953.2
32.5°	5472.3	5457.1	5420.5	5381.1	5341.5	5298.9	5274.5	5244.0	5225.7	5207.6	5186.3
35°	4760.1	4723.6	4671.9	4623.2	4577.6	4544.0	4489.2	4471.0	4452.8	4428.4	4422.3
37.5°	3923.1	3901.8	3853.1	3816.6	3792.3	3777.1	3749.6	3731.5	3731.5	3722.3	3716.2
40°	3058.7	3052.7	3034.4	3043.6	3031.4	3037.4	3034.4	3028.3	3043.6	3043.6	3049.7
42.5°	2294.8	2297.9	2307.1	2313.1	2331.4	2334.4	2349.7	2349.7	2358.8	2367.8	2374.0
45°	1707.4	1719.7	1719.7	1731.8	1750.1	1753.1	1759.1	1762.2	1768.3	1783.5	1789.6
47.5°	1281.3	1284.3	1284.3	1287.5	1293.5	1299.6	1296.6	1299.6	1308.8	1302.6	1308.8
50°	946.6	949.6	940.4	931.3	940.4	940.4	937.4	928.3	937.4	925.3	931.3
52.5°	645.3	642.2	633.0	636.1	630.0	627.0	627.0	620.9	620.9	620.9	608.7
55°	407.9	407.9	401.8	401.8	398.8	392.6	389.6	386.5	383.5	380.5	380.5
57.5°	228.3	231.3	222.2	219.1	222.2	219.1	213.1	213.1	213.1	203.9	210.0
60°	124.8	121.8	118.8	115.6	112.6	115.6	115.6	109.6	109.6	109.6	112.6
62.5°	66.9	66.9	63.9	63.9	60.9	60.9	66.9	57.9	60.9	57.9	60.9
65°	36.6	45.6	33.4	33.4	42.6	39.6	36.6	36.6	39.6	33.4	36.6
67.5°	39.6	27.4	24.3	27.4	24.3	24.3	24.3	30.4	27.4	21.3	27.4
70°	18.3	21.3	21.3	15.2	24.3	12.2	21.3	12.2	18.3	15.2	18.3
72.5°	18.3	18.3	18.3	12.2	18.3	12.2	15.2	15.2	12.2	12.2	18.3
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	6.1	6.1	3.0	3.0	3.0	3.0	6.1	6.1	6.1	0.0	3.0
80°	6.1	6.1	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	6.1
82.5°	3.0	6.1	3.0	3.0	6.1	6.1	6.1	3.0	3.0	3.0	3.0
85°	0.0	3.0	0.0	0.0	0.0	0.0	6.1	0.0	0.0	0.0	3.0
87.5°	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	0.0
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: P250227

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	6513.2	6513.2	6513.2	6513.2
2.5°	6686.7	6689.7	6695.8	6692.8
5°	7039.7	7064.2	7076.3	7073.3
7.5°	7371.5	7414.2	7438.5	7438.5
10°	7627.1	7675.9	7712.3	7718.5
12.5°	7764.1	7818.9	7867.7	7855.4
15°	7803.7	7858.5	7907.1	7898.0
17.5°	7758.1	7812.8	7849.4	7843.2
20°	7633.3	7678.9	7715.5	7712.3
22.5°	7438.5	7478.1	7508.5	7505.4
25°	7109.8	7137.2	7161.5	7149.3
27.5°	6604.5	6613.7	6628.8	6610.7
30°	5931.9	5937.9	5944.1	5941.1
32.5°	5177.1	5174.0	5168.0	5161.8
35°	4413.2	4413.2	4416.2	4397.9
37.5°	3719.2	3716.2	3725.3	3716.2
40°	3055.7	3052.7	3064.9	3049.7
42.5°	2383.1	2392.3	2395.3	2395.3
45°	1792.7	1795.7	1798.7	1798.7
47.5°	1308.8	1311.8	1327.0	1308.8
50°	925.3	928.3	931.3	925.3
52.5°	611.7	614.9	611.7	602.6
55°	374.3	377.5	377.5	377.5
57.5°	200.8	203.9	203.9	200.8
60°	109.6	106.5	109.6	103.5
62.5°	57.9	63.9	60.9	54.7
65°	36.6	36.6	36.6	42.6
67.5°	30.4	24.3	27.4	21.3
70°	18.3	21.3	21.3	15.2
72.5°	15.2	15.2	15.2	18.3
75°	0.0	0.0	0.0	0.0
77.5°	6.1	6.1	6.1	3.0
80°	3.0	0.0	3.0	0.0
82.5°	3.0	3.0	6.1	3.0
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)