

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: P249723

Luminaire Tested: **LSR8B100D010 EC8B100840 8LBSWOLI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249723  
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 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11423.0 lumens  
Efficiency: N/A  
Efficacy: 107.5 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

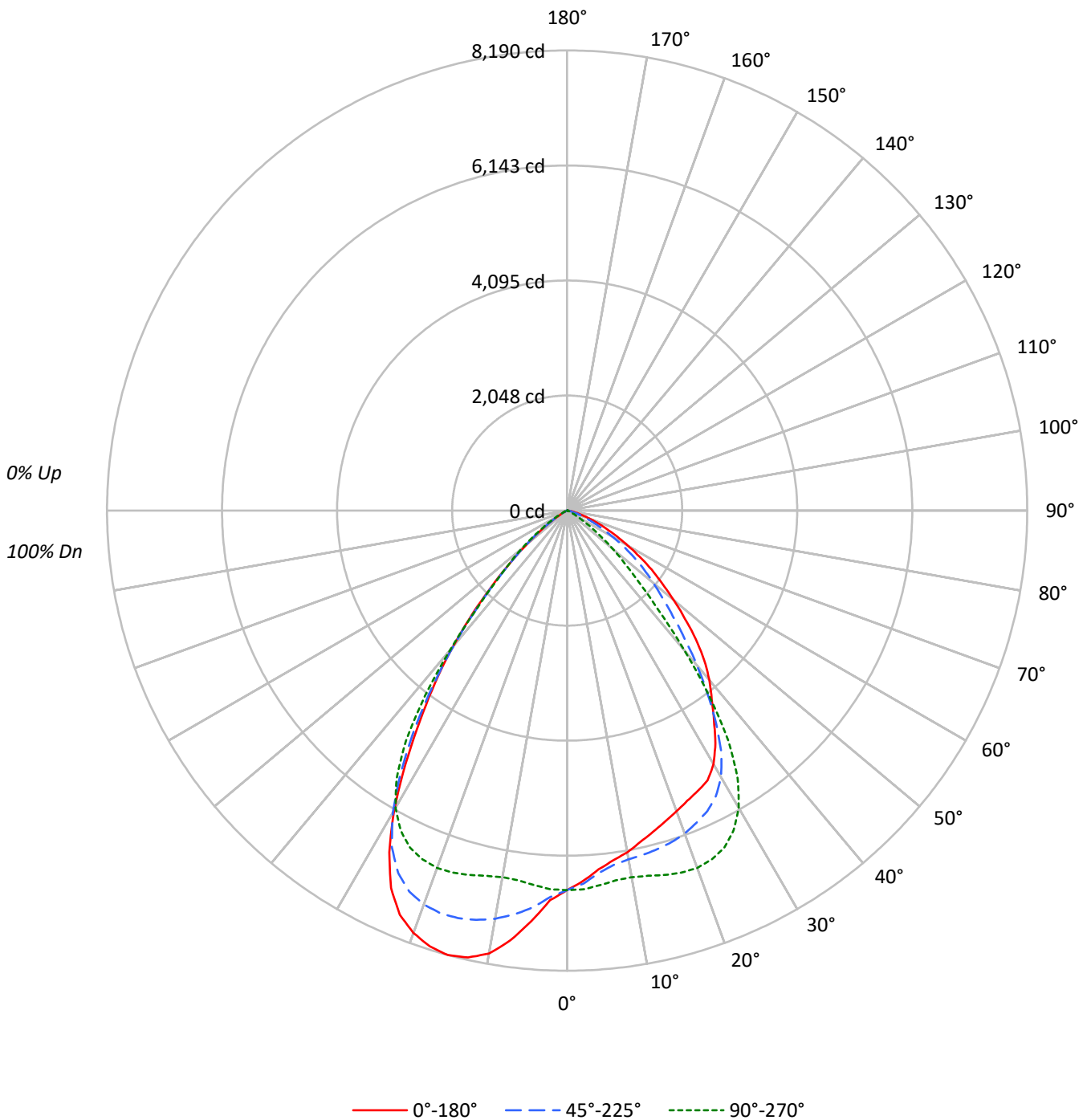
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	208281	208281	208281
5°	198428	207123	227058
10°	193311	207442	250634
15°	188927	214319	261474
20°	186847	222061	262457
25°	187286	225199	252262
30°	185547	217468	219376
35°	171454	188202	171688
40°	158436	130483	127311
45°	141084	78732	81344
50°	118709	50726	46035
55°	98760	27827	21042
60°	77085	12069	6617
65°	56883	5990	3225
70°	39553	3706	1416
75°	24067	763	0
80°	17367	1137	0
85°	11180	1097	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	649.3	5.7
10°-20°	1943.4	17.0
20°-30°	2976.1	26.1
30°-40°	2917.5	25.5
40°-50°	1757.0	15.4
50°-60°	808.7	7.1
60°-70°	284.1	2.5
70°-80°	74.3	0.7
80°-90°	12.7	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°	5568.8	48.8
0°-40°	8486.3	74.3
0°-60°	11052.0	96.8
0°-90°	11423.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11423.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6754	6754	6754	6754	6754	
5°	6410	6470	6691	7092	7335	605
15°	5918	6237	6713	7509	8190	1672
25°	5504	5902	6619	7117	7414	2535
35°	4555	4618	5000	4712	4561	2853
45°	3235	2664	1805	1818	1865	2481
55°	1837	1455	518	407	391	1639
65°	780	540	82	41	44	794
75°	202	117	6	0	0	245
85°	32	16	3	0	0	43
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°	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4
2.5°	6596.6	6603.0	6603.0	6603.0	6615.6	6618.8	6615.6	6618.8	6625.0	6647.1	6656.6
5°	6410.4	6400.9	6407.3	6404.1	6419.9	6429.4	6423.0	6432.5	6454.6	6470.4	6486.2
7.5°	6277.9	6277.9	6277.9	6284.1	6293.6	6312.6	6309.5	6315.7	6337.8	6359.9	6382.0
10°	6173.7	6170.6	6170.6	6186.3	6198.9	6221.0	6227.4	6246.3	6274.7	6303.1	6328.3
12.5°	6038.0	6041.2	6056.9	6072.8	6101.1	6135.8	6154.8	6180.1	6224.3	6271.5	6300.0
15°	5918.0	5921.2	5933.9	5965.3	6000.2	6041.2	6082.1	6123.2	6176.8	6236.9	6287.4
17.5°	5801.3	5804.4	5813.9	5848.7	5892.8	5946.5	5993.8	6047.4	6116.9	6186.3	6249.5
20°	5693.9	5690.8	5706.5	5738.1	5795.0	5845.4	5892.8	5956.0	6031.7	6116.9	6189.4
22.5°	5589.8	5589.8	5605.6	5637.2	5687.7	5738.1	5788.7	5854.9	5930.6	6012.8	6098.0
25°	5504.5	5501.4	5523.5	5539.3	5577.1	5627.7	5681.3	5735.0	5810.7	5902.3	5984.3
27.5°	5413.1	5409.9	5413.1	5432.0	5466.7	5504.5	5545.6	5593.0	5656.1	5731.9	5810.7
30°	5211.0	5214.2	5214.2	5230.0	5249.0	5289.9	5312.0	5359.4	5416.2	5479.3	5548.8
32.5°	4911.2	4914.3	4914.3	4920.7	4936.4	4955.4	4974.3	5009.0	5053.2	5106.9	5170.0
35°	4554.6	4554.6	4551.3	4554.6	4564.1	4564.1	4579.8	4564.1	4586.2	4617.7	4665.0
37.5°	4226.3	4219.9	4213.7	4207.3	4197.8	4182.1	4160.0	4122.1	4112.6	4100.0	4103.1
40°	3935.9	3932.8	3913.8	3898.0	3866.4	3828.6	3775.0	3708.7	3655.0	3591.9	3538.3
42.5°	3614.0	3610.7	3595.0	3566.6	3531.9	3475.1	3389.9	3301.5	3194.2	3099.5	3001.7
45°	3235.2	3244.6	3222.6	3191.0	3149.9	3096.3	3001.7	2894.3	2787.0	2663.9	2540.8
47.5°	2840.6	2837.5	2821.8	2802.8	2768.1	2714.5	2651.3	2534.5	2420.8	2307.3	2181.0
50°	2474.5	2461.9	2455.5	2436.7	2414.6	2370.4	2304.1	2209.3	2108.4	2001.1	1884.3
52.5°	2127.4	2127.4	2111.5	2098.9	2079.9	2045.3	1988.5	1912.7	1827.5	1726.4	1603.4
55°	1837.0	1830.6	1814.9	1799.1	1780.1	1758.0	1707.6	1644.5	1552.9	1455.1	1347.7
57.5°	1527.7	1524.4	1518.2	1499.2	1489.7	1467.7	1410.9	1347.7	1268.9	1183.7	1095.2
60°	1249.9	1237.3	1224.6	1212.0	1196.3	1174.2	1136.2	1082.6	1016.3	940.6	852.2
62.5°	1000.6	1019.4	981.6	981.6	950.1	931.1	896.4	864.8	795.3	726.0	650.2
65°	779.6	779.6	763.8	751.2	732.2	710.1	675.4	643.9	593.3	539.7	486.0
67.5°	596.6	593.3	577.6	565.0	549.2	536.6	511.3	473.4	435.6	391.4	347.1
70°	438.7	435.6	432.4	410.3	397.7	382.0	363.0	337.8	309.3	277.8	236.7
72.5°	315.6	315.6	306.2	296.7	284.1	271.4	252.6	236.7	211.5	189.4	161.0
75°	202.0	198.9	198.9	183.1	183.1	164.1	151.5	142.0	129.4	116.8	91.6
77.5°	145.2	142.0	138.9	132.5	126.3	119.9	110.4	97.8	88.3	75.7	66.3
80°	97.8	91.6	88.3	88.3	78.9	75.7	78.9	60.0	56.8	47.3	41.1
82.5°	60.0	60.0	56.8	56.8	53.7	50.5	41.1	41.1	37.9	34.7	28.5
85°	31.6	41.1	28.5	31.6	28.5	31.6	28.5	22.1	19.0	15.7	15.7
87.5°	19.0	12.6	12.6	19.0	15.7	12.6	12.6	12.6	9.5	6.4	6.4
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°	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4
2.5°	6650.4	6672.5	6669.2	6697.7	6707.2	6729.2	6729.2	6745.0	6754.4	6776.5	6795.5
5°	6492.5	6527.2	6536.7	6571.4	6599.8	6634.5	6656.6	6691.3	6722.9	6770.3	6814.5
7.5°	6394.7	6423.0	6442.0	6483.1	6514.6	6552.4	6590.4	6637.6	6681.8	6738.7	6801.9
10°	6347.3	6385.2	6413.5	6454.6	6492.5	6533.6	6571.4	6625.0	6675.6	6748.2	6817.6
12.5°	6334.7	6378.9	6413.5	6470.4	6508.3	6552.4	6596.6	6656.6	6710.3	6786.0	6865.0
15°	6334.7	6394.7	6442.0	6505.1	6549.3	6606.1	6653.5	6713.4	6773.4	6852.3	6928.0
17.5°	6322.1	6394.7	6454.6	6527.2	6584.0	6640.9	6700.8	6757.7	6820.7	6896.6	6981.7
20°	6271.5	6363.1	6435.6	6520.9	6580.9	6644.0	6704.0	6767.0	6833.4	6912.3	6984.9
22.5°	6183.2	6290.5	6372.6	6464.1	6533.6	6596.6	6656.6	6719.8	6792.4	6868.1	6943.9
25°	6066.4	6167.4	6255.8	6350.4	6419.9	6489.3	6546.2	6618.8	6685.1	6757.7	6817.6
27.5°	5889.6	5996.9	6082.1	6180.1	6243.1	6309.5	6356.8	6416.8	6479.9	6539.8	6587.2
30°	5624.6	5722.4	5810.7	5899.1	5962.2	6009.6	6060.0	6107.5	6148.5	6189.4	6230.5
32.5°	5236.2	5324.7	5409.9	5491.9	5542.5	5583.5	5621.3	5649.8	5671.9	5693.9	5697.1
35°	4702.9	4775.4	4829.1	4901.7	4949.1	4986.9	4986.9	4999.5	4996.4	4986.9	4977.5
37.5°	4106.4	4134.7	4156.8	4185.2	4188.4	4188.4	4169.5	4153.7	4128.5	4122.1	4103.1
40°	3484.6	3446.7	3418.2	3380.4	3358.3	3310.9	3270.0	3241.5	3200.5	3194.2	3187.9
42.5°	2894.3	2805.9	2727.1	2660.8	2585.1	2518.7	2458.8	2414.6	2383.0	2379.8	2383.0
45°	2414.6	2313.5	2196.7	2105.3	2020.1	1938.0	1859.1	1805.4	1777.0	1770.6	1777.0
47.5°	2051.6	1934.8	1821.2	1717.0	1625.5	1533.9	1455.1	1382.4	1347.7	1338.3	1335.1
50°	1764.4	1644.5	1524.4	1417.1	1316.2	1224.6	1126.8	1057.4	1013.2	997.4	984.8
52.5°	1483.5	1376.2	1253.0	1142.6	1041.5	934.2	833.3	754.3	710.1	691.3	678.5
55°	1237.3	1130.0	1016.3	909.0	801.7	694.4	593.3	517.6	470.3	448.2	432.4
57.5°	987.9	886.9	789.1	681.8	593.3	489.3	388.2	321.9	280.9	255.7	243.1
60°	763.8	684.9	599.7	511.3	426.1	340.9	258.8	195.7	164.1	145.2	129.4
62.5°	577.6	511.3	454.4	378.7	312.4	239.8	176.8	126.3	97.8	82.1	75.7
65°	416.6	366.1	315.6	268.3	221.0	167.3	119.9	82.1	56.8	47.3	44.2
67.5°	296.7	255.7	217.7	186.2	151.5	119.9	85.2	56.8	44.2	37.9	34.7
70°	208.3	176.8	151.5	123.2	100.9	78.9	66.3	41.1	25.2	28.5	22.1
72.5°	138.9	116.8	104.2	85.2	69.4	56.8	41.1	28.5	28.5	22.1	19.0
75°	75.7	69.4	53.7	41.1	34.7	31.6	12.6	6.4	3.1	9.5	3.1
77.5°	53.7	47.3	41.1	34.7	28.5	22.1	12.6	12.6	9.5	12.6	6.4
80°	34.7	28.5	25.2	25.2	15.7	9.5	6.4	6.4	9.5	3.1	3.1
82.5°	22.1	19.0	15.7	15.7	15.7	9.5	9.5	9.5	9.5	6.4	6.4
85°	12.6	9.5	6.4	6.4	3.1	6.4	0.0	3.1	3.1	0.0	0.0
87.5°	6.4	3.1	3.1	3.1	3.1	0.0	0.0	3.1	0.0	3.1	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°	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4	6754.4
2.5°	6808.1	6820.7	6836.6	6849.2	6877.6	6883.8	6896.6	6909.2	6918.7	6928.0	6931.3
5°	6852.3	6899.7	6943.9	6991.2	7051.2	7092.2	7139.5	7180.6	7221.6	7256.3	7281.5
7.5°	6865.0	6937.5	7003.9	7085.9	7174.2	7250.1	7328.9	7407.8	7489.9	7553.0	7606.7
10°	6890.2	6978.5	7063.8	7161.6	7275.3	7376.2	7474.0	7578.2	7682.4	7770.8	7849.8
12.5°	6934.4	7032.2	7123.8	7231.1	7347.9	7461.4	7568.8	7685.5	7796.1	7893.9	7982.3
15°	7007.0	7098.5	7186.9	7287.9	7404.7	7508.9	7616.2	7729.7	7840.3	7941.2	8023.3
17.5°	7054.3	7139.5	7227.9	7319.4	7417.3	7512.0	7612.9	7714.0	7814.9	7906.5	7982.3
20°	7054.3	7136.4	7202.7	7284.8	7376.2	7458.3	7540.4	7628.8	7717.1	7792.9	7865.5
22.5°	6997.5	7076.4	7126.9	7190.1	7268.9	7338.4	7382.6	7480.4	7546.7	7612.9	7666.6
25°	6865.0	6921.8	6962.8	7007.0	7070.1	7117.4	7155.4	7212.1	7278.4	7303.7	7341.5
27.5°	6625.0	6666.1	6688.2	6697.7	6729.2	6754.4	6760.8	6786.0	6814.5	6820.7	6836.6
30°	6246.3	6249.5	6240.0	6236.9	6221.0	6202.2	6198.9	6195.8	6183.2	6170.6	6173.7
32.5°	5675.0	5659.3	5621.3	5580.4	5539.3	5495.2	5469.8	5438.3	5419.3	5400.5	5378.4
35°	4936.4	4898.6	4844.9	4794.4	4747.1	4712.3	4655.5	4636.6	4617.7	4592.4	4586.2
37.5°	4068.4	4046.4	3995.8	3958.0	3932.8	3917.0	3888.5	3869.7	3869.7	3860.2	3853.8
40°	3172.0	3165.8	3146.8	3156.3	3143.7	3149.9	3146.8	3140.5	3156.3	3156.3	3162.7
42.5°	2379.8	2383.0	2392.5	2398.8	2417.7	2420.8	2436.7	2436.7	2446.2	2455.5	2461.9
45°	1770.6	1783.4	1783.4	1796.0	1814.9	1818.0	1824.3	1827.5	1833.8	1849.6	1855.8
47.5°	1328.8	1331.9	1331.9	1335.1	1341.4	1347.7	1344.6	1347.7	1357.2	1350.9	1357.2
50°	981.6	984.8	975.3	965.8	975.3	975.3	972.2	962.7	972.2	959.6	965.8
52.5°	669.2	665.9	656.5	659.7	653.3	650.2	650.2	643.9	643.9	643.9	631.3
55°	423.0	423.0	416.6	416.6	413.5	407.2	404.0	400.8	397.7	394.6	394.6
57.5°	236.7	239.8	230.5	227.2	230.5	227.2	221.0	221.0	221.0	211.5	217.7
60°	129.4	126.3	123.2	119.9	116.8	119.9	119.9	113.7	113.7	113.7	116.8
62.5°	69.4	69.4	66.3	66.3	63.1	63.1	69.4	60.0	63.1	60.0	63.1
65°	37.9	47.3	34.7	34.7	44.2	41.1	37.9	37.9	41.1	34.7	37.9
67.5°	41.1	28.5	25.2	28.5	25.2	25.2	25.2	31.6	28.5	22.1	28.5
70°	19.0	22.1	22.1	15.7	25.2	12.6	22.1	12.6	19.0	15.7	19.0
72.5°	19.0	19.0	19.0	12.6	19.0	12.6	15.7	15.7	12.6	12.6	19.0
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°	6.4	6.4	3.1	3.1	3.1	3.1	6.4	6.4	6.4	0.0	3.1
80°	6.4	6.4	0.0	3.1	0.0	0.0	3.1	0.0	3.1	0.0	6.4
82.5°	3.1	6.4	3.1	3.1	6.4	6.4	6.4	3.1	3.1	3.1	3.1
85°	0.0	3.1	0.0	0.0	0.0	0.0	6.4	0.0	0.0	0.0	3.1
87.5°	0.0	3.1	0.0	0.0	0.0	0.0	3.1	3.1	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: P249723

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBSW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	6754.4	6754.4	6754.4	6754.4
2.5°	6934.4	6937.5	6943.9	6940.7
5°	7300.5	7325.8	7338.4	7335.3
7.5°	7644.5	7688.8	7714.0	7714.0
10°	7909.7	7960.2	7998.0	8004.4
12.5°	8051.7	8108.6	8159.1	8146.4
15°	8092.7	8149.6	8200.0	8190.5
17.5°	8045.4	8102.2	8140.1	8133.8
20°	7916.0	7963.3	8001.2	7998.0
22.5°	7714.0	7755.1	7786.6	7783.4
25°	7373.1	7401.6	7426.8	7414.2
27.5°	6849.2	6858.6	6874.4	6855.5
30°	6151.6	6157.9	6164.2	6161.1
32.5°	5368.9	5365.6	5359.4	5353.0
35°	4576.7	4576.7	4579.8	4560.8
37.5°	3856.9	3853.8	3863.3	3853.8
40°	3168.9	3165.8	3178.4	3162.7
42.5°	2471.4	2480.9	2484.0	2484.0
45°	1859.1	1862.2	1865.3	1865.3
47.5°	1357.2	1360.3	1376.2	1357.2
50°	959.6	962.7	965.8	959.6
52.5°	634.4	637.6	634.4	624.9
55°	388.2	391.4	391.4	391.4
57.5°	208.3	211.5	211.5	208.3
60°	113.7	110.4	113.7	107.3
62.5°	60.0	66.3	63.1	56.8
65°	37.9	37.9	37.9	44.2
67.5°	31.6	25.2	28.5	22.1
70°	19.0	22.1	22.1	15.7
72.5°	15.7	15.7	15.7	19.0
75°	0.0	0.0	0.0	0.0
77.5°	6.4	6.4	6.4	3.1
80°	3.1	0.0	3.1	0.0
82.5°	3.1	3.1	6.4	3.1
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)