

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: P250228

Luminaire Tested: **LSR8B120D010 EC8B120840 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250228  
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: LSR8B120D010 EC8B120840 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: 12487.0 lumens  
Efficiency: N/A  
Efficacy: 105.6 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

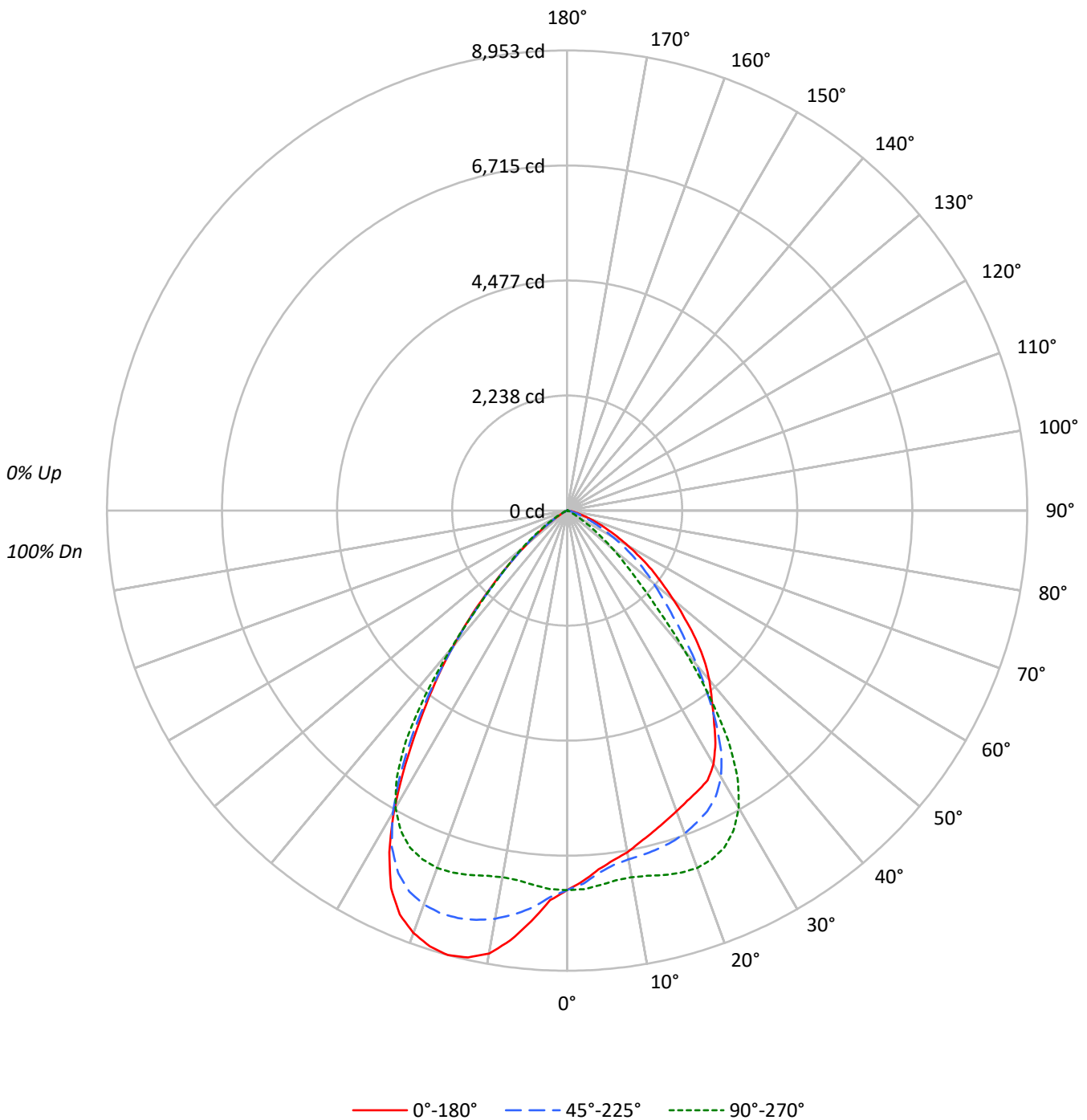
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	227683	227683	227683
5°	216911	226417	248205
10°	211319	226765	273977
15°	206527	234281	285829
20°	204252	242748	286904
25°	204730	246175	275759
30°	202830	237721	239811
35°	187423	205733	187679
40°	173193	142640	139170
45°	154224	86067	88923
50°	129766	55452	50319
55°	107958	30418	23005
60°	84263	13192	7234
65°	62181	6552	3524
70°	43240	4048	1551
75°	26307	834	0
80°	18983	1243	0
85°	12206	1203	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	709.8	5.7
10°-20°	2124.4	17.0
20°-30°	3253.3	26.1
30°-40°	3189.3	25.5
40°-50°	1920.6	15.4
50°-60°	884.0	7.1
60°-70°	310.5	2.5
70°-80°	81.2	0.7
80°-90°	13.8	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°	6087.5	48.8
0°-40°	9276.8	74.3
0°-60°	12081.4	96.8
0°-90°	12487.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12487.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	7384	7384	7384	7384	7384	
5°	7008	7073	7315	7753	8018	662
15°	6469	6818	7339	8208	8953	1828
25°	6017	6452	7235	7780	8105	2771
35°	4979	5048	5465	5151	4986	3118
45°	3536	2912	1974	1987	2039	2712
55°	2008	1591	566	445	428	1792
65°	852	590	90	45	48	868
75°	221	128	7	0	0	268
85°	34	17	3	0	0	47
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°	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6
2.5°	7211.0	7218.0	7218.0	7218.0	7231.8	7235.3	7231.8	7235.3	7242.1	7266.3	7276.7
5°	7007.5	6997.2	7004.1	7000.6	7017.9	7028.3	7021.3	7031.7	7055.8	7073.1	7090.3
7.5°	6862.7	6862.7	6862.7	6869.5	6879.9	6900.6	6897.2	6904.0	6928.1	6952.3	6976.4
10°	6748.8	6745.4	6745.4	6762.6	6776.3	6800.5	6807.4	6828.2	6859.1	6890.2	6917.8
12.5°	6600.4	6603.9	6621.1	6638.4	6669.4	6707.3	6728.0	6755.7	6804.0	6855.7	6886.8
15°	6469.3	6472.7	6486.6	6521.0	6559.0	6603.9	6648.7	6693.5	6752.2	6817.8	6873.0
17.5°	6341.6	6345.0	6355.4	6393.4	6441.7	6500.4	6552.1	6610.7	6686.7	6762.6	6831.6
20°	6224.3	6220.9	6238.1	6272.6	6334.8	6389.9	6441.7	6510.8	6593.6	6686.7	6766.0
22.5°	6110.4	6110.4	6127.7	6162.2	6217.5	6272.6	6327.8	6400.3	6483.1	6572.8	6666.0
25°	6017.2	6013.8	6038.0	6055.3	6096.6	6151.9	6210.5	6269.2	6352.0	6452.1	6541.7
27.5°	5917.3	5913.9	5917.3	5938.0	5975.9	6017.2	6062.1	6114.0	6183.0	6265.8	6352.0
30°	5696.4	5699.8	5699.8	5717.2	5737.9	5782.6	5806.8	5858.6	5920.7	5989.7	6065.7
32.5°	5368.7	5372.1	5372.1	5379.0	5396.2	5416.9	5437.7	5475.6	5523.9	5582.5	5651.6
35°	4978.8	4978.8	4975.3	4978.8	4989.2	4989.2	5006.4	4989.2	5013.3	5047.8	5099.5
37.5°	4619.9	4613.0	4606.2	4599.2	4588.8	4571.7	4547.5	4506.0	4495.7	4481.9	4485.3
40°	4302.5	4299.1	4278.4	4261.1	4226.6	4185.2	4126.6	4054.2	3995.5	3926.5	3867.8
42.5°	3950.6	3947.1	3929.9	3898.8	3860.9	3798.8	3705.6	3609.1	3491.8	3388.2	3281.3
45°	3536.5	3546.9	3522.7	3488.2	3443.3	3384.7	3281.3	3163.8	3046.5	2912.1	2777.4
47.5°	3105.2	3101.8	3084.6	3063.9	3025.9	2967.3	2898.3	2770.6	2646.3	2522.2	2384.2
50°	2705.0	2691.2	2684.3	2663.7	2639.5	2591.2	2518.7	2415.1	2304.8	2187.5	2059.8
52.5°	2325.5	2325.5	2308.2	2294.4	2273.7	2235.8	2173.7	2090.9	1997.7	1887.3	1752.8
55°	2008.1	2001.2	1984.0	1966.6	1945.9	1921.8	1866.7	1797.6	1697.5	1590.6	1473.3
57.5°	1670.0	1666.4	1659.6	1638.9	1628.5	1604.4	1542.3	1473.3	1387.1	1293.9	1197.2
60°	1366.3	1352.6	1338.6	1324.9	1307.7	1283.5	1242.1	1183.4	1111.0	1028.2	931.6
62.5°	1093.8	1114.4	1073.1	1073.1	1038.6	1017.8	979.9	945.4	869.4	793.6	710.8
65°	852.2	852.2	834.9	821.1	800.4	776.3	738.3	703.8	648.6	589.9	531.3
67.5°	652.1	648.6	631.4	617.6	600.3	586.5	559.0	517.5	476.2	427.9	379.5
70°	479.6	476.2	472.6	448.5	434.7	417.5	396.8	369.2	338.1	303.6	258.8
72.5°	345.0	345.0	334.7	324.4	310.6	296.7	276.1	258.8	231.2	207.1	176.0
75°	220.8	217.4	217.4	200.1	200.1	179.4	165.6	155.2	141.4	127.7	100.1
77.5°	158.8	155.2	151.8	144.9	138.0	131.1	120.7	106.9	96.6	82.8	72.4
80°	106.9	100.1	96.6	96.6	86.2	82.8	86.2	65.6	62.1	51.7	44.9
82.5°	65.6	65.6	62.1	62.1	58.7	55.2	44.9	44.9	41.5	37.9	31.1
85°	34.5	44.9	31.1	34.5	31.1	34.5	31.1	24.1	20.7	17.2	17.2
87.5°	20.7	13.8	13.8	20.7	17.2	13.8	13.8	13.8	10.4	7.0	7.0
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°	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6
2.5°	7269.8	7294.0	7290.4	7321.5	7331.9	7356.0	7356.0	7373.2	7383.6	7407.7	7428.5
5°	7097.3	7135.2	7145.6	7183.5	7214.6	7252.5	7276.7	7314.6	7349.1	7400.9	7449.2
7.5°	6990.3	7021.3	7042.0	7086.9	7121.4	7162.8	7204.2	7255.9	7304.2	7366.4	7435.4
10°	6938.5	6980.0	7010.9	7055.8	7097.3	7142.2	7183.5	7242.1	7297.4	7376.8	7452.6
12.5°	6924.7	6973.0	7010.9	7073.1	7114.5	7162.8	7211.0	7276.7	7335.3	7418.1	7504.4
15°	6924.7	6990.3	7042.0	7111.1	7159.3	7221.4	7273.2	7338.7	7404.3	7490.5	7573.3
17.5°	6911.0	6990.3	7055.8	7135.2	7197.3	7259.5	7324.9	7387.1	7456.0	7539.0	7632.0
20°	6855.7	6955.8	7035.1	7128.2	7193.9	7262.9	7328.5	7397.4	7469.9	7556.1	7635.5
22.5°	6759.1	6876.4	6966.2	7066.2	7142.2	7211.0	7276.7	7345.7	7425.1	7507.9	7590.6
25°	6631.5	6741.8	6838.5	6941.9	7017.9	7093.7	7155.9	7235.3	7307.8	7387.1	7452.6
27.5°	6438.2	6555.5	6648.7	6755.7	6824.6	6897.2	6948.9	7014.5	7083.5	7149.0	7200.8
30°	6148.5	6255.4	6352.0	6448.6	6517.6	6569.4	6624.5	6676.3	6721.2	6766.0	6810.8
32.5°	5724.0	5820.7	5913.9	6003.5	6058.7	6103.6	6144.9	6176.0	6200.2	6224.3	6227.7
35°	5141.0	5220.2	5278.9	5358.3	5410.1	5451.5	5451.5	5465.2	5461.8	5451.5	5441.1
37.5°	4488.9	4519.8	4544.0	4575.1	4578.5	4578.5	4557.9	4540.6	4513.0	4506.0	4485.3
40°	3809.2	3767.7	3736.6	3695.3	3671.1	3619.3	3574.6	3543.5	3498.6	3491.8	3484.8
42.5°	3163.8	3067.3	2981.1	2908.6	2825.8	2753.3	2687.8	2639.5	2605.0	2601.5	2605.0
45°	2639.5	2529.0	2401.4	2301.4	2208.2	2118.5	2032.3	1973.6	1942.5	1935.5	1942.5
47.5°	2242.7	2115.1	1990.8	1876.9	1776.9	1676.8	1590.6	1511.2	1473.3	1462.9	1459.5
50°	1928.7	1797.6	1666.4	1549.1	1438.8	1338.6	1231.7	1155.9	1107.6	1090.3	1076.5
52.5°	1621.7	1504.4	1369.8	1249.0	1138.5	1021.2	910.9	824.5	776.3	755.7	741.8
55°	1352.6	1235.3	1111.0	993.7	876.4	759.1	648.6	565.8	514.1	490.0	472.6
57.5°	1079.9	969.5	862.6	745.3	648.6	534.8	424.3	351.9	307.0	279.5	265.7
60°	834.9	748.7	655.5	559.0	465.8	372.7	282.9	213.9	179.4	158.8	141.4
62.5°	631.4	559.0	496.8	414.0	341.6	262.2	193.3	138.0	106.9	89.8	82.8
65°	455.4	400.2	345.0	293.3	241.6	182.9	131.1	89.8	62.1	51.7	48.3
67.5°	324.4	279.5	238.0	203.5	165.6	131.1	93.2	62.1	48.3	41.5	37.9
70°	227.7	193.3	165.6	134.6	110.3	86.2	72.4	44.9	27.6	31.1	24.1
72.5°	151.8	127.7	113.9	93.2	75.8	62.1	44.9	31.1	31.1	24.1	20.7
75°	82.8	75.8	58.7	44.9	37.9	34.5	13.8	7.0	3.4	10.4	3.4
77.5°	58.7	51.7	44.9	37.9	31.1	24.1	13.8	13.8	10.4	13.8	7.0
80°	37.9	31.1	27.6	27.6	17.2	10.4	7.0	7.0	10.4	3.4	3.4
82.5°	24.1	20.7	17.2	17.2	17.2	10.4	10.4	10.4	10.4	7.0	7.0
85°	13.8	10.4	7.0	7.0	3.4	7.0	0.0	3.4	3.4	0.0	0.0
87.5°	7.0	3.4	3.4	3.4	3.4	0.0	0.0	3.4	0.0	3.4	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°	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6	7383.6
2.5°	7442.2	7456.0	7473.3	7487.1	7518.2	7525.0	7539.0	7552.7	7563.1	7573.3	7576.9
5°	7490.5	7542.4	7590.6	7642.3	7708.0	7752.8	7804.5	7849.4	7894.3	7932.2	7959.8
7.5°	7504.4	7583.7	7656.3	7745.9	7842.4	7925.4	8011.6	8097.8	8187.5	8256.6	8315.2
10°	7532.0	7628.6	7721.7	7828.7	7952.9	8063.3	8170.2	8284.1	8398.0	8494.6	8580.9
12.5°	7580.3	7687.2	7787.3	7904.6	8032.3	8156.4	8273.8	8401.4	8522.3	8629.2	8725.8
15°	7659.7	7759.6	7856.4	7966.7	8094.4	8208.3	8325.6	8449.7	8570.6	8680.9	8770.7
17.5°	7711.4	7804.5	7901.1	8001.2	8108.2	8211.7	8322.0	8432.5	8542.9	8643.0	8725.8
20°	7711.4	7801.1	7873.5	7963.3	8063.3	8153.0	8242.8	8339.4	8435.9	8518.7	8598.1
22.5°	7649.3	7735.5	7790.8	7859.8	7946.0	8022.0	8070.2	8177.2	8249.6	8322.0	8380.7
25°	7504.4	7566.5	7611.4	7659.7	7728.7	7780.4	7821.9	7883.9	7956.3	7984.0	8025.4
27.5°	7242.1	7287.0	7311.2	7321.5	7356.0	7383.6	7390.5	7418.1	7449.2	7456.0	7473.3
30°	6828.2	6831.6	6821.2	6817.8	6800.5	6779.9	6776.3	6772.9	6759.1	6745.4	6748.8
32.5°	6203.6	6186.4	6144.9	6100.2	6055.3	6007.0	5979.3	5944.8	5924.1	5903.5	5879.3
35°	5396.2	5354.9	5296.2	5241.0	5189.3	5151.2	5089.2	5068.4	5047.8	5020.1	5013.3
37.5°	4447.4	4423.3	4368.0	4326.7	4299.1	4281.8	4250.7	4230.1	4230.1	4219.7	4212.8
40°	3467.5	3460.7	3439.9	3450.3	3436.5	3443.3	3439.9	3433.0	3450.3	3450.3	3457.3
42.5°	2601.5	2605.0	2615.4	2622.2	2642.9	2646.3	2663.7	2663.7	2674.0	2684.3	2691.2
45°	1935.5	1949.5	1949.5	1963.2	1984.0	1987.4	1994.2	1997.7	2004.6	2021.9	2028.7
47.5°	1452.5	1456.0	1456.0	1459.5	1466.3	1473.3	1469.9	1473.3	1483.6	1476.7	1483.6
50°	1073.1	1076.5	1066.1	1055.8	1066.1	1066.1	1062.7	1052.3	1062.7	1048.9	1055.8
52.5°	731.5	728.0	717.6	721.2	714.2	710.8	710.8	703.8	703.8	703.8	690.1
55°	462.4	462.4	455.4	455.4	452.0	445.1	441.7	438.1	434.7	431.3	431.3
57.5°	258.8	262.2	251.9	248.4	251.9	248.4	241.6	241.6	241.6	231.2	238.0
60°	141.4	138.0	134.6	131.1	127.7	131.1	131.1	124.3	124.3	124.3	127.7
62.5°	75.8	75.8	72.4	72.4	69.0	69.0	75.8	65.6	69.0	65.6	69.0
65°	41.5	51.7	37.9	37.9	48.3	44.9	41.5	41.5	44.9	37.9	41.5
67.5°	44.9	31.1	27.6	31.1	27.6	27.6	27.6	34.5	31.1	24.1	31.1
70°	20.7	24.1	24.1	17.2	27.6	13.8	24.1	13.8	20.7	17.2	20.7
72.5°	20.7	20.7	20.7	13.8	20.7	13.8	17.2	17.2	13.8	13.8	20.7
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°	7.0	7.0	3.4	3.4	3.4	3.4	7.0	7.0	7.0	0.0	3.4
80°	7.0	7.0	0.0	3.4	0.0	0.0	3.4	0.0	3.4	0.0	7.0
82.5°	3.4	7.0	3.4	3.4	7.0	7.0	7.0	3.4	3.4	3.4	3.4
85°	0.0	3.4	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	3.4
87.5°	0.0	3.4	0.0	0.0	0.0	0.0	3.4	3.4	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: P250228

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	7383.6	7383.6	7383.6	7383.6
2.5°	7580.3	7583.7	7590.6	7587.2
5°	7980.5	8008.2	8022.0	8018.5
7.5°	8356.5	8405.0	8432.5	8432.5
10°	8646.4	8701.6	8743.0	8749.9
12.5°	8801.6	8863.8	8919.1	8905.2
15°	8846.5	8908.7	8963.8	8953.4
17.5°	8794.8	8856.9	8898.3	8891.4
20°	8653.4	8705.1	8746.5	8743.0
22.5°	8432.5	8477.4	8511.9	8508.4
25°	8059.9	8091.0	8118.5	8104.8
27.5°	7487.1	7497.5	7514.7	7494.1
30°	6724.6	6731.4	6738.4	6735.0
32.5°	5869.0	5865.4	5858.6	5851.7
35°	5003.0	5003.0	5006.4	4985.6
37.5°	4216.2	4212.8	4223.2	4212.8
40°	3464.1	3460.7	3474.4	3457.3
42.5°	2701.6	2712.0	2715.4	2715.4
45°	2032.3	2035.7	2039.1	2039.1
47.5°	1483.6	1487.1	1504.4	1483.6
50°	1048.9	1052.3	1055.8	1048.9
52.5°	693.5	697.0	693.5	683.1
55°	424.3	427.9	427.9	427.9
57.5°	227.7	231.2	231.2	227.7
60°	124.3	120.7	124.3	117.3
62.5°	65.6	72.4	69.0	62.1
65°	41.5	41.5	41.5	48.3
67.5°	34.5	27.6	31.1	24.1
70°	20.7	24.1	24.1	17.2
72.5°	17.2	17.2	17.2	20.7
75°	0.0	0.0	0.0	0.0
77.5°	7.0	7.0	7.0	3.4
80°	3.4	0.0	3.4	0.0
82.5°	3.4	3.4	7.0	3.4
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)