

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: P250271

Luminaire Tested: **LSR8B150D010 EC8B150950 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250271  
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: LSR8B150D010 EC8B150950 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15276.0 lumens  
Efficiency: N/A  
Efficacy: 96.4 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

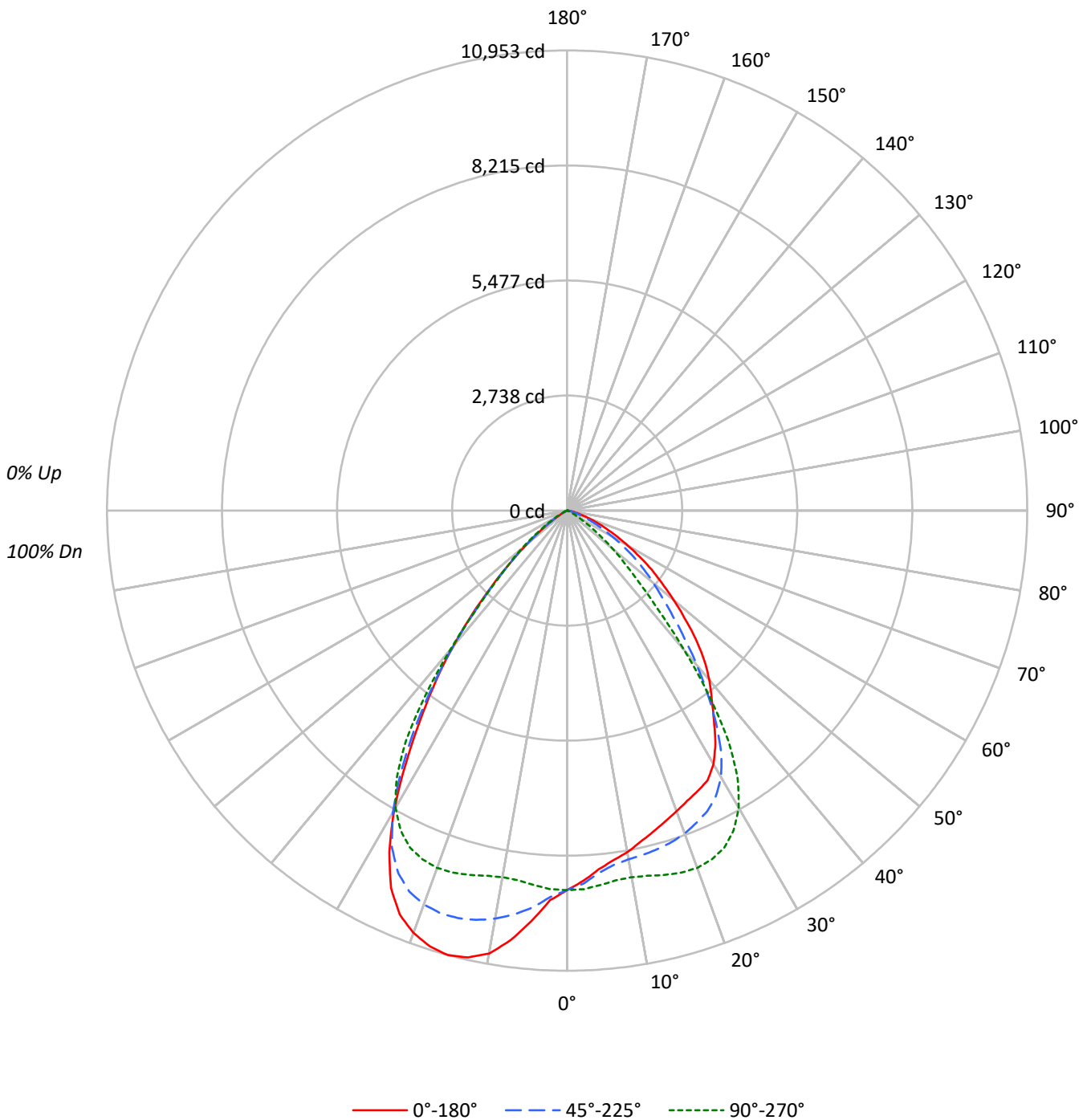
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	278535	278535	278535
5°	265360	276987	303644
10°	258515	277415	335170
15°	252654	286608	349671
20°	249872	296966	350983
25°	250458	301161	337349
30°	248132	290818	293374
35°	229287	251685	229599
40°	211877	174497	170250
45°	188671	105290	108783
50°	158752	67834	61559
55°	132070	37214	28144
60°	103086	16134	8850
65°	76073	8012	4312
70°	52896	4950	1893
75°	32192	1013	0
80°	23227	1509	0
85°	14931	1486	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	868.4	5.7
10°-20°	2598.9	17.0
20°-30°	3979.9	26.1
30°-40°	3901.6	25.5
40°-50°	2349.6	15.4
50°-60°	1081.4	7.1
60°-70°	379.9	2.5
70°-80°	99.4	0.7
80°-90°	16.9	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°	7447.1	48.8
0°-40°	11348.8	74.3
0°-60°	14779.8	96.8
0°-90°	15276.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15276.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	9033	9033	9033	9033	9033	
5°	8573	8653	8948	9484	9810	810
15°	7914	8341	8978	10042	10953	2236
25°	7361	7893	8851	9518	9915	3390
35°	6091	6175	6686	6302	6099	3815
45°	4326	3562	2414	2431	2494	3318
55°	2457	1946	692	544	524	2192
65°	1043	722	110	55	59	1062
75°	270	156	8	0	0	328
85°	42	21	4	0	0	58
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°	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7
2.5°	8821.6	8830.2	8830.2	8830.2	8847.0	8851.4	8847.0	8851.4	8859.7	8889.2	8901.9
5°	8572.7	8560.0	8568.5	8564.2	8585.4	8598.0	8589.5	8602.2	8631.7	8652.9	8674.0
7.5°	8395.5	8395.5	8395.5	8403.8	8416.5	8441.9	8437.7	8446.0	8475.6	8505.1	8534.6
10°	8256.1	8252.0	8252.0	8273.0	8289.8	8319.4	8327.9	8353.2	8391.1	8429.2	8462.9
12.5°	8074.6	8078.9	8099.9	8121.1	8159.0	8205.4	8230.8	8264.6	8323.7	8387.0	8425.0
15°	7914.2	7918.4	7935.4	7977.5	8024.0	8078.9	8133.6	8188.5	8260.3	8340.6	8408.1
17.5°	7758.0	7762.2	7774.9	7821.4	7880.5	7952.3	8015.5	8087.3	8180.2	8273.0	8357.4
20°	7614.5	7610.4	7631.4	7673.6	7749.7	7817.1	7880.5	7964.9	8066.2	8180.2	8277.2
22.5°	7475.2	7475.2	7496.4	7538.6	7606.2	7673.6	7741.2	7829.8	7931.1	8040.9	8154.8
25°	7361.2	7357.0	7386.6	7407.8	7458.3	7525.9	7597.7	7669.4	7770.7	7893.2	8002.8
27.5°	7238.9	7234.7	7238.9	7264.3	7310.7	7361.2	7416.1	7479.5	7564.0	7665.3	7770.7
30°	6968.7	6972.9	6972.9	6994.1	7019.5	7074.2	7103.7	7167.1	7243.1	7327.5	7420.5
32.5°	6567.8	6571.9	6571.9	6580.4	6601.5	6626.8	6652.2	6698.6	6757.7	6829.4	6913.8
35°	6090.9	6090.9	6086.5	6090.9	6103.5	6103.5	6124.6	6103.5	6133.1	6175.3	6238.5
37.5°	5651.8	5643.3	5635.0	5626.5	5613.8	5592.7	5563.2	5512.5	5499.8	5482.9	5487.1
40°	5263.5	5259.3	5234.0	5212.8	5170.6	5120.0	5048.3	4959.7	4887.9	4803.5	4731.7
42.5°	4833.0	4828.7	4807.6	4769.6	4723.2	4647.3	4533.3	4415.2	4271.7	4145.0	4014.2
45°	4326.4	4339.1	4309.5	4267.3	4212.4	4140.7	4014.2	3870.5	3727.0	3562.5	3397.8
47.5°	3798.7	3794.6	3773.6	3748.2	3701.8	3630.0	3545.6	3389.4	3237.4	3085.6	2916.7
50°	3309.2	3292.3	3283.8	3258.6	3229.1	3170.0	3081.2	2954.6	2819.6	2676.1	2519.9
52.5°	2844.9	2844.9	2823.7	2806.9	2781.5	2735.1	2659.2	2557.9	2444.0	2308.8	2144.3
55°	2456.6	2448.1	2427.1	2405.9	2380.5	2351.0	2283.6	2199.2	2076.7	1945.8	1802.3
57.5°	2043.0	2038.6	2030.3	2004.9	1992.2	1962.7	1886.8	1802.3	1696.9	1582.9	1464.6
60°	1671.5	1654.7	1637.6	1620.8	1599.8	1570.2	1519.5	1447.7	1359.1	1257.9	1139.7
62.5°	1338.1	1363.3	1312.8	1312.8	1270.5	1245.2	1198.8	1156.6	1063.6	970.8	869.6
65°	1042.6	1042.6	1021.4	1004.5	979.2	949.6	903.3	861.0	793.5	721.7	649.9
67.5°	797.8	793.5	772.4	755.6	734.4	717.5	683.8	633.1	582.5	523.5	464.2
70°	586.7	582.5	578.2	548.7	531.8	510.8	485.4	451.7	413.7	371.4	316.5
72.5°	422.0	422.0	409.5	396.8	380.0	362.9	337.7	316.5	282.8	253.3	215.3
75°	270.2	266.0	266.0	244.8	244.8	219.4	202.6	189.9	173.0	156.2	122.5
77.5°	194.2	189.9	185.7	177.2	168.9	160.4	147.7	130.8	118.1	101.3	88.6
80°	130.8	122.5	118.1	118.1	105.5	101.3	105.5	80.3	75.9	63.2	54.9
82.5°	80.3	80.3	75.9	75.9	71.8	67.6	54.9	54.9	50.7	46.4	38.0
85°	42.2	54.9	38.0	42.2	38.0	42.2	38.0	29.5	25.4	21.0	21.0
87.5°	25.4	16.9	16.9	25.4	21.0	16.9	16.9	16.9	12.7	8.5	8.5
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°	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7
2.5°	8893.6	8923.1	8918.8	8956.8	8969.5	8999.0	8999.0	9020.0	9032.7	9062.3	9087.6
5°	8682.5	8728.9	8741.5	8787.9	8826.0	8872.4	8901.9	8948.3	8990.5	9053.9	9113.0
7.5°	8551.7	8589.5	8614.9	8669.8	8712.0	8762.6	8813.3	8876.5	8935.6	9011.7	9096.1
10°	8488.2	8539.0	8576.8	8631.7	8682.5	8737.4	8787.9	8859.7	8927.3	9024.4	9117.2
12.5°	8471.4	8530.5	8576.8	8652.9	8703.5	8762.6	8821.6	8901.9	8973.7	9074.9	9180.6
15°	8471.4	8551.7	8614.9	8699.3	8758.4	8834.3	8897.7	8977.8	9058.1	9163.6	9264.8
17.5°	8454.5	8551.7	8631.7	8728.9	8804.8	8880.9	8961.0	9037.1	9121.3	9222.8	9336.6
20°	8387.0	8509.4	8606.4	8720.4	8800.6	8885.1	8965.3	9049.6	9138.4	9243.8	9340.9
22.5°	8268.8	8412.3	8522.1	8644.4	8737.4	8821.6	8901.9	8986.3	9083.5	9184.8	9286.0
25°	8112.6	8247.6	8365.9	8492.4	8585.4	8678.1	8754.2	8851.4	8940.0	9037.1	9117.2
27.5°	7876.2	8019.7	8133.6	8264.6	8348.9	8437.7	8500.9	8581.2	8665.6	8745.7	8809.1
30°	7521.7	7652.6	7770.7	7888.9	7973.3	8036.7	8104.1	8167.5	8222.4	8277.2	8332.1
32.5°	7002.4	7120.8	7234.7	7344.4	7411.9	7466.8	7517.4	7555.5	7585.0	7614.5	7618.7
35°	6289.3	6386.2	6458.0	6555.1	6618.5	6669.0	6669.0	6685.9	6681.7	6669.0	6656.4
37.5°	5491.5	5529.3	5558.9	5596.9	5601.1	5601.1	5575.9	5554.7	5521.0	5512.5	5487.1
40°	4660.0	4609.2	4571.2	4520.6	4491.1	4427.7	4372.9	4334.9	4280.0	4271.7	4263.1
42.5°	3870.5	3752.4	3646.9	3558.3	3457.0	3368.2	3288.1	3229.1	3186.8	3182.5	3186.8
45°	3229.1	3093.9	2937.7	2815.4	2701.4	2591.6	2486.2	2414.4	2376.4	2367.9	2376.4
47.5°	2743.6	2587.5	2435.4	2296.1	2173.8	2051.3	1945.8	1848.7	1802.3	1789.7	1785.5
50°	2359.5	2199.2	2038.6	1895.1	1760.1	1637.6	1506.8	1414.0	1355.0	1333.8	1316.9
52.5°	1983.9	1840.4	1675.7	1528.0	1392.8	1249.3	1114.3	1008.7	949.6	924.5	907.4
55°	1654.7	1511.2	1359.1	1215.6	1072.1	928.6	793.5	692.2	628.9	599.4	578.2
57.5°	1321.1	1186.1	1055.3	911.8	793.5	654.3	519.1	430.5	375.6	341.9	325.1
60°	1021.4	915.9	802.0	683.8	569.9	455.9	346.1	261.6	219.4	194.2	173.0
62.5°	772.4	683.8	607.7	506.4	417.8	320.7	236.5	168.9	130.8	109.8	101.3
65°	557.2	489.6	422.0	358.8	295.5	223.8	160.4	109.8	75.9	63.2	59.1
67.5°	396.8	341.9	291.2	249.0	202.6	160.4	114.0	75.9	59.1	50.7	46.4
70°	278.5	236.5	202.6	164.7	135.0	105.5	88.6	54.9	33.7	38.0	29.5
72.5°	185.7	156.2	139.3	114.0	92.8	75.9	54.9	38.0	38.0	29.5	25.4
75°	101.3	92.8	71.8	54.9	46.4	42.2	16.9	8.5	4.2	12.7	4.2
77.5°	71.8	63.2	54.9	46.4	38.0	29.5	16.9	16.9	12.7	16.9	8.5
80°	46.4	38.0	33.7	33.7	21.0	12.7	8.5	8.5	12.7	4.2	4.2
82.5°	29.5	25.4	21.0	21.0	21.0	12.7	12.7	12.7	12.7	8.5	8.5
85°	16.9	12.7	8.5	8.5	4.2	8.5	0.0	4.2	4.2	0.0	0.0
87.5°	8.5	4.2	4.2	4.2	4.2	0.0	0.0	4.2	0.0	4.2	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°	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7	9032.7
2.5°	9104.5	9121.3	9142.5	9159.4	9197.4	9205.8	9222.8	9239.7	9252.3	9264.8	9269.2
5°	9163.6	9227.0	9286.0	9349.3	9429.5	9484.4	9547.7	9602.6	9657.5	9703.9	9737.6
7.5°	9180.6	9277.5	9366.3	9475.9	9594.1	9695.5	9801.0	9906.5	10016.3	10100.7	10172.4
10°	9214.3	9332.4	9446.4	9577.2	9729.2	9864.2	9995.1	10134.4	10273.7	10391.9	10497.5
12.5°	9273.4	9404.2	9526.7	9670.2	9826.4	9978.2	10121.7	10277.9	10425.7	10556.6	10674.7
15°	9370.5	9492.8	9611.1	9746.1	9902.3	10041.6	10185.1	10337.0	10484.8	10619.8	10729.6
17.5°	9433.7	9547.7	9665.8	9788.3	9919.1	10045.8	10180.8	10315.9	10450.9	10573.4	10674.7
20°	9433.7	9543.5	9632.1	9741.9	9864.2	9974.0	10083.8	10202.0	10320.1	10421.4	10518.5
22.5°	9357.8	9463.3	9530.8	9615.3	9720.7	9813.7	9872.7	10003.6	10092.2	10180.8	10252.5
25°	9180.6	9256.5	9311.4	9370.5	9454.9	9518.2	9568.9	9644.8	9733.4	9767.3	9817.8
27.5°	8859.7	8914.6	8944.1	8956.8	8999.0	9032.7	9041.2	9074.9	9113.0	9121.3	9142.5
30°	8353.2	8357.4	8344.7	8340.6	8319.4	8294.2	8289.8	8285.7	8268.8	8252.0	8256.1
32.5°	7589.2	7568.1	7517.4	7462.7	7407.8	7348.7	7314.8	7272.6	7247.2	7222.1	7192.5
35°	6601.5	6550.9	6479.2	6411.6	6348.3	6301.8	6225.8	6200.5	6175.3	6141.4	6133.1
37.5°	5440.7	5411.2	5343.6	5293.1	5259.3	5238.2	5200.1	5174.9	5174.9	5162.2	5153.7
40°	4241.9	4233.6	4208.2	4220.9	4204.1	4212.4	4208.2	4199.7	4220.9	4220.9	4229.4
42.5°	3182.5	3186.8	3199.5	3207.9	3233.2	3237.4	3258.6	3258.6	3271.3	3283.8	3292.3
45°	2367.9	2384.9	2384.9	2401.7	2427.1	2431.3	2439.6	2444.0	2452.3	2473.5	2481.8
47.5°	1777.0	1781.1	1781.1	1785.5	1793.8	1802.3	1798.2	1802.3	1815.0	1806.5	1815.0
50°	1312.8	1316.9	1304.2	1291.6	1304.2	1304.2	1300.1	1287.4	1300.1	1283.2	1291.6
52.5°	894.9	890.6	877.9	882.2	873.7	869.6	869.6	861.0	861.0	861.0	844.2
55°	565.7	565.7	557.2	557.2	553.0	544.5	540.3	536.0	531.8	527.6	527.6
57.5°	316.5	320.7	308.2	303.9	308.2	303.9	295.5	295.5	295.5	282.8	291.2
60°	173.0	168.9	164.7	160.4	156.2	160.4	160.4	152.0	152.0	152.0	156.2
62.5°	92.8	92.8	88.6	88.6	84.4	84.4	92.8	80.3	84.4	80.3	84.4
65°	50.7	63.2	46.4	46.4	59.1	54.9	50.7	50.7	54.9	46.4	50.7
67.5°	54.9	38.0	33.7	38.0	33.7	33.7	33.7	42.2	38.0	29.5	38.0
70°	25.4	29.5	29.5	21.0	33.7	16.9	29.5	16.9	25.4	21.0	25.4
72.5°	25.4	25.4	25.4	16.9	25.4	16.9	21.0	21.0	16.9	16.9	25.4
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°	8.5	8.5	4.2	4.2	4.2	4.2	8.5	8.5	8.5	0.0	4.2
80°	8.5	8.5	0.0	4.2	0.0	0.0	4.2	0.0	4.2	0.0	8.5
82.5°	4.2	8.5	4.2	4.2	8.5	8.5	8.5	4.2	4.2	4.2	4.2
85°	0.0	4.2	0.0	0.0	0.0	0.0	8.5	0.0	0.0	0.0	4.2
87.5°	0.0	4.2	0.0	0.0	0.0	0.0	4.2	4.2	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: P250271

CATALOG NUMBER: LSR8B150D010 EC8B150950 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	9032.7	9032.7	9032.7	9032.7
2.5°	9273.4	9277.5	9286.0	9281.9
5°	9762.9	9796.8	9813.7	9809.5
7.5°	10223.0	10282.2	10315.9	10315.9
10°	10577.6	10645.2	10695.7	10704.2
12.5°	10767.5	10843.6	10911.2	10894.1
15°	10822.4	10898.5	10965.9	10953.2
17.5°	10759.2	10835.1	10885.8	10877.3
20°	10586.1	10649.3	10700.1	10695.7
22.5°	10315.9	10370.8	10413.1	10408.7
25°	9860.1	9898.1	9931.8	9915.0
27.5°	9159.4	9172.1	9193.1	9167.9
30°	8226.6	8234.9	8243.4	8239.3
32.5°	7179.8	7175.5	7167.1	7158.6
35°	6120.4	6120.4	6124.6	6099.2
37.5°	5157.9	5153.7	5166.4	5153.7
40°	4237.8	4233.6	4250.5	4229.4
42.5°	3305.0	3317.7	3321.8	3321.8
45°	2486.2	2490.3	2494.5	2494.5
47.5°	1815.0	1819.2	1840.4	1815.0
50°	1283.2	1287.4	1291.6	1283.2
52.5°	848.4	852.7	848.4	835.7
55°	519.1	523.5	523.5	523.5
57.5°	278.5	282.8	282.8	278.5
60°	152.0	147.7	152.0	143.5
62.5°	80.3	88.6	84.4	75.9
65°	50.7	50.7	50.7	59.1
67.5°	42.2	33.7	38.0	29.5
70°	25.4	29.5	29.5	21.0
72.5°	21.0	21.0	21.0	25.4
75°	0.0	0.0	0.0	0.0
77.5°	8.5	8.5	8.5	4.2
80°	4.2	0.0	4.2	0.0
82.5°	4.2	4.2	8.5	4.2
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)