

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: P249529

Luminaire Tested: **LSR8B150D010 EC8B150830 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249529
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: LSR8B150D010 EC8B150830 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15656.0 lumens
Efficiency: N/A
Efficacy: 98.8 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

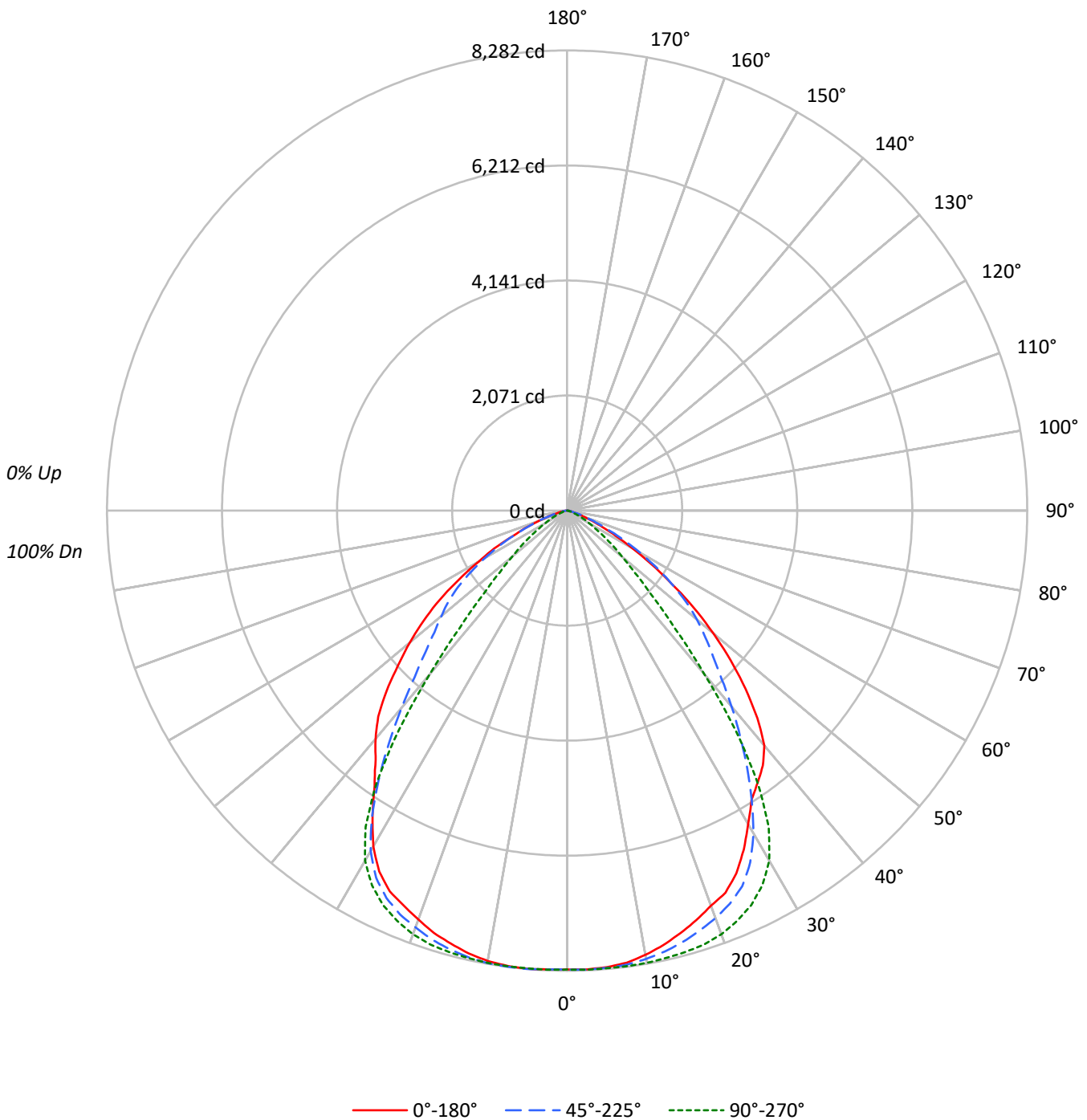
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249529

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBDW0MW

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°	254720	254720	254720
5°	255282	255969	256244
10°	254207	258791	257679
15°	251390	262573	257621
20°	248373	266267	256957
25°	245147	266572	257219
30°	231924	259078	248499
35°	224999	225161	227503
40°	222214	154921	215966
45°	198003	93005	200707
50°	164638	61899	177399
55°	123479	42670	150414
60°	83677	28437	113484
65°	50470	18446	77963
70°	27985	9999	47965
75°	12677	4230	24829
80°	11028	4724	17314
85°	12560	6262	17266



TEST NUMBER: P249529

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	788.3	5.0
10°-20°	2289.4	14.6
20°-30°	3475.0	22.2
30°-40°	3649.7	23.3
40°-50°	2736.3	17.5
50°-60°	1755.7	11.2
60°-70°	751.1	4.8
70°-80°	177.4	1.1
80°-90°	33.0	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°	6552.7	41.9
0°-40°	10202.5	65.2
0°-60°	14694.5	93.9
0°-90°	15656.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15656.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8260	8260	8260	8260	8260	
5°	8247	8260	8269	8282	8278	783
15°	7875	8039	8225	8172	8070	2221
25°	7205	7458	7835	7693	7560	3292
35°	5977	5644	5981	5910	6044	3751
45°	4540	3711	2133	3605	4602	3477
55°	2297	2297	794	2394	2798	2083
65°	692	816	253	1051	1068	738
75°	106	124	36	213	208	155
85°	36	22	18	36	49	37
90°	0	0	0	0	0	



TEST NUMBER: P249529

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBDW0MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4
2.5°	8264.9	8273.8	8269.3	8269.3	8264.9	8269.3	8269.3	8278.2	8278.2	8269.3	8264.9
5°	8247.1	8256.0	8256.0	8247.1	8247.1	8269.3	8256.0	8264.9	8264.9	8260.4	8260.4
7.5°	8207.3	8207.3	8224.9	8211.7	8211.7	8224.9	8220.5	8229.4	8238.3	8242.7	8242.7
10°	8118.5	8127.4	8131.9	8131.9	8136.3	8149.5	8158.4	8176.2	8185.0	8193.9	8198.4
12.5°	8007.7	8021.0	8025.4	8021.0	8034.3	8052.0	8074.2	8096.4	8109.7	8127.4	8140.7
15°	7874.6	7874.6	7883.5	7896.9	7905.8	7932.3	7954.5	7981.1	8016.5	8038.8	8060.9
17.5°	7728.4	7737.3	7750.5	7750.5	7768.3	7812.6	7825.9	7865.8	7905.8	7927.9	7972.3
20°	7568.8	7577.6	7590.9	7599.8	7621.9	7657.4	7684.0	7719.5	7763.8	7803.8	7848.0
22.5°	7444.6	7426.9	7435.7	7444.6	7466.8	7497.8	7528.9	7573.1	7617.5	7657.4	7701.8
25°	7205.1	7209.6	7222.9	7231.7	7258.4	7285.0	7320.4	7373.6	7413.5	7457.9	7506.6
27.5°	6881.5	6885.9	6908.1	6908.1	6930.2	6974.6	6996.7	7041.1	7094.3	7138.6	7196.3
30°	6513.5	6522.3	6522.3	6540.1	6553.3	6575.5	6597.7	6642.0	6668.6	6708.6	6788.4
32.5°	6176.5	6185.3	6180.9	6176.5	6163.2	6158.7	6154.3	6163.2	6172.1	6185.3	6216.3
35°	5977.0	5954.8	5937.1	5906.0	5870.6	5826.2	5786.3	5733.1	5684.3	5644.4	5600.1
37.5°	5786.3	5781.8	5755.2	5710.9	5639.9	5560.2	5467.1	5351.8	5236.4	5112.3	4992.7
40°	5520.3	5506.9	5484.8	5422.7	5342.9	5245.3	5121.2	4979.3	4793.0	4602.4	4407.3
42.5°	5068.0	5072.4	5045.8	4997.0	4921.7	4828.5	4699.9	4544.8	4345.3	4119.1	3866.4
45°	4540.4	4540.4	4531.5	4491.5	4438.4	4363.0	4265.4	4136.9	3941.8	3711.2	3440.7
47.5°	3990.5	3995.0	3981.6	3972.8	3950.6	3901.9	3830.9	3733.4	3595.9	3374.2	3103.7
50°	3431.9	3431.9	3454.0	3449.6	3449.6	3431.9	3400.9	3343.2	3223.5	3046.1	2793.4
52.5°	2873.2	2882.1	2895.4	2913.1	2935.2	2970.7	2935.2	2908.7	2833.3	2695.8	2478.6
55°	2296.8	2305.7	2327.8	2358.8	2385.5	2421.0	2429.8	2429.8	2389.8	2296.8	2132.7
57.5°	1804.6	1791.3	1809.1	1835.7	1871.1	1906.6	1933.2	1964.2	1959.8	1897.7	1764.7
60°	1356.8	1361.2	1374.5	1401.2	1427.7	1458.8	1494.2	1520.8	1534.2	1503.1	1418.8
62.5°	988.8	988.8	1006.5	1033.1	1046.4	1090.8	1112.9	1126.2	1139.5	1135.0	1081.9
65°	691.7	700.5	709.4	722.8	736.0	762.6	775.9	802.5	811.4	815.9	775.9
67.5°	487.8	474.4	483.3	492.1	505.5	523.3	549.8	549.8	563.1	563.1	536.5
70°	310.4	310.4	314.8	328.1	337.0	341.4	350.3	359.1	372.5	368.0	368.0
72.5°	208.4	204.0	208.4	212.9	217.3	230.5	230.5	235.0	243.9	248.3	230.5
75°	106.4	110.9	119.7	115.3	128.6	119.7	124.1	137.5	133.0	124.1	124.1
77.5°	88.6	88.6	88.6	84.3	93.1	93.1	88.6	97.5	93.1	93.1	88.6
80°	62.1	66.5	62.1	57.6	62.1	57.6	57.6	57.6	57.6	57.6	53.2
82.5°	48.8	39.9	44.4	39.9	44.4	44.4	39.9	35.5	35.5	39.9	35.5
85°	35.5	26.6	31.0	31.0	26.6	26.6	26.6	26.6	26.6	22.1	22.1
87.5°	22.1	13.3	13.3	13.3	17.7	17.7	17.7	13.3	17.7	17.7	8.9
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: P249529

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4
2.5°	8273.8	8269.3	8278.2	8273.8	8273.8	8269.3	8273.8	8269.3	8278.2	8260.4	8264.9
5°	8273.8	8264.9	8269.3	8273.8	8278.2	8269.3	8269.3	8269.3	8278.2	8269.3	8273.8
7.5°	8256.0	8251.5	8264.9	8273.8	8269.3	8264.9	8273.8	8269.3	8278.2	8273.8	8282.5
10°	8220.5	8224.9	8233.8	8247.1	8251.5	8256.0	8264.9	8264.9	8278.2	8260.4	8269.3
12.5°	8167.3	8185.0	8207.3	8216.0	8233.8	8233.8	8242.7	8247.1	8256.0	8251.5	8264.9
15°	8100.8	8123.0	8149.5	8171.8	8193.9	8207.3	8220.5	8224.9	8238.3	8224.9	8229.4
17.5°	8021.0	8047.6	8087.5	8114.1	8149.5	8162.9	8180.6	8189.5	8202.8	8193.9	8198.4
20°	7910.1	7941.2	7985.5	8025.4	8047.6	8078.6	8100.8	8114.1	8123.0	8114.1	8118.5
22.5°	7755.0	7799.3	7856.9	7888.0	7932.3	7958.9	7963.4	7994.4	8016.5	7994.4	8003.3
25°	7573.1	7617.5	7661.9	7728.4	7768.3	7799.3	7830.4	7834.8	7856.9	7852.5	7848.0
27.5°	7271.6	7329.3	7404.6	7457.9	7511.1	7559.9	7595.4	7604.2	7626.4	7617.5	7621.9
30°	6859.3	6921.4	6992.4	7076.6	7152.0	7200.7	7245.0	7276.1	7298.2	7285.0	7280.5
32.5°	6274.0	6336.1	6411.5	6495.7	6584.4	6655.3	6708.6	6748.5	6775.1	6766.2	6744.0
35°	5604.5	5622.2	5671.1	5737.6	5812.9	5888.3	5937.1	5981.3	6012.4	6021.3	6021.3
37.5°	4917.3	4859.6	4824.2	4824.2	4868.4	4899.5	4943.8	4970.4	5019.2	5036.9	5050.3
40°	4252.1	4119.1	3995.0	3901.9	3839.8	3835.4	3835.4	3848.6	3893.0	3950.6	4003.9
42.5°	3658.0	3445.1	3254.5	3081.6	2957.5	2886.5	2855.5	2859.9	2895.4	2948.6	3037.2
45°	3183.6	2917.5	2678.1	2469.7	2301.2	2190.3	2137.2	2132.7	2159.3	2221.4	2319.0
47.5°	2815.6	2531.8	2261.3	2021.8	1840.1	1720.3	1658.3	1640.6	1658.3	1715.9	1831.2
50°	2509.6	2217.0	1937.7	1689.3	1494.2	1370.1	1312.4	1290.3	1312.4	1361.2	1476.5
52.5°	2225.8	1924.3	1662.7	1423.3	1214.9	1108.5	1046.4	1033.1	1046.4	1104.0	1197.2
55°	1897.7	1640.6	1383.4	1143.9	962.2	855.8	807.0	793.7	807.0	860.2	957.8
57.5°	1574.1	1352.3	1126.2	908.9	753.8	660.6	616.3	598.5	629.6	665.1	780.4
60°	1272.5	1095.2	904.5	713.9	585.3	501.0	465.5	461.1	470.0	514.4	594.1
62.5°	997.7	851.3	700.5	545.4	439.0	403.5	359.1	354.8	363.6	390.1	452.3
65°	718.3	625.2	509.9	399.0	314.8	266.0	248.3	252.8	261.6	279.4	337.0
67.5°	501.0	434.5	354.8	279.4	217.3	195.1	177.4	172.9	177.4	208.4	239.4
70°	337.0	297.1	239.4	212.9	150.8	119.7	124.1	110.9	128.6	128.6	155.1
72.5°	221.6	195.1	159.6	124.1	106.4	84.3	84.3	79.8	88.6	93.1	115.3
75°	115.3	88.6	88.6	62.1	44.4	22.1	39.9	35.5	31.0	35.5	44.4
77.5°	79.8	66.5	62.1	48.8	44.4	35.5	35.5	35.5	35.5	39.9	44.4
80°	48.8	48.8	35.5	31.0	26.6	22.1	26.6	26.6	26.6	26.6	31.0
82.5°	31.0	26.6	26.6	22.1	22.1	17.7	17.7	17.7	17.7	17.7	26.6
85°	26.6	17.7	17.7	13.3	17.7	31.0	13.3	17.7	17.7	17.7	13.3
87.5°	8.9	13.3	13.3	13.3	8.9	4.4	8.9	13.3	13.3	22.1	17.7
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: P249529

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4	8260.4
2.5°	8273.8	8278.2	8278.2	8273.8	8273.8	8264.9	8282.5	8269.3	8273.8	8291.4	8278.2
5°	8282.5	8287.0	8287.0	8282.5	8282.5	8282.5	8287.0	8287.0	8282.5	8278.2	8287.0
7.5°	8300.3	8295.9	8295.9	8287.0	8287.0	8278.2	8287.0	8273.8	8282.5	8273.8	8287.0
10°	8278.2	8282.5	8278.2	8273.8	8273.8	8269.3	8269.3	8256.0	8260.4	8247.1	8256.0
12.5°	8264.9	8260.4	8260.4	8251.5	8242.7	8233.8	8229.4	8216.0	8216.0	8185.0	8198.4
15°	8229.4	8233.8	8220.5	8202.8	8193.9	8171.8	8162.9	8145.1	8127.4	8105.3	8109.7
17.5°	8198.4	8185.0	8167.3	8149.5	8114.1	8096.4	8078.6	8052.0	8043.1	8016.5	8007.7
20°	8105.3	8096.4	8074.2	8043.1	8021.0	7981.1	7963.4	7936.8	7914.5	7888.0	7874.6
22.5°	7985.5	7976.6	7950.0	7919.0	7883.5	7865.8	7848.0	7799.3	7777.1	7750.5	7746.1
25°	7834.8	7821.5	7794.9	7759.4	7741.6	7692.9	7675.1	7639.6	7630.8	7604.2	7599.8
27.5°	7604.2	7586.5	7555.4	7511.1	7480.0	7449.0	7431.3	7404.6	7395.8	7369.2	7364.8
30°	7258.4	7236.1	7174.1	7156.4	7103.1	7072.1	7072.1	7036.6	7041.1	7023.4	7023.4
32.5°	6713.0	6677.5	6628.7	6593.2	6557.8	6540.1	6540.1	6526.7	6535.6	6535.6	6544.5
35°	5990.2	5941.5	5914.8	5892.7	5892.7	5910.4	5963.7	5977.0	6003.6	6025.7	6043.5
37.5°	5063.5	5059.2	5090.2	5116.8	5183.3	5258.7	5351.8	5431.6	5506.9	5560.2	5613.3
40°	4061.5	4172.4	4261.0	4385.2	4487.1	4633.4	4801.9	4939.4	5068.0	5161.1	5258.7
42.5°	3170.2	3312.1	3498.4	3680.1	3862.0	4061.5	4283.2	4473.9	4642.3	4770.9	4872.9
45°	2469.7	2664.8	2891.0	3121.5	3356.5	3604.8	3835.4	4030.4	4207.8	4340.8	4442.8
47.5°	1990.8	2203.7	2460.8	2713.6	2979.6	3241.2	3498.4	3666.9	3813.1	3919.6	4012.8
50°	1644.9	1871.1	2141.6	2429.8	2695.8	2957.5	3179.1	3343.2	3462.9	3556.0	3613.6
52.5°	1374.5	1613.9	1902.2	2190.3	2456.4	2695.8	2895.4	3019.5	3117.1	3183.6	3236.7
55°	1135.0	1365.7	1636.2	1906.6	2168.2	2394.3	2558.3	2651.5	2726.8	2766.7	2797.8
57.5°	926.7	1139.5	1387.8	1636.2	1862.3	2048.5	2177.1	2270.2	2305.7	2336.7	2332.2
60°	727.2	926.7	1152.8	1365.7	1560.8	1711.5	1804.6	1857.8	1884.4	1897.7	1888.8
62.5°	572.0	753.8	926.7	1112.9	1254.8	1383.4	1472.1	1472.1	1485.4	1489.8	1503.1
65°	425.6	563.1	713.9	851.3	966.6	1050.8	1099.7	1112.9	1130.7	1126.2	1117.4
67.5°	314.8	416.8	527.6	629.6	709.4	762.6	798.1	829.2	824.7	815.9	811.4
70°	217.3	283.8	381.3	443.4	501.0	554.3	563.1	567.5	572.0	576.4	567.5
72.5°	150.8	199.5	252.8	305.9	341.4	363.6	385.8	390.1	390.1	390.1	385.8
75°	75.4	102.0	150.8	172.9	204.0	212.9	230.5	230.5	243.9	226.1	221.6
77.5°	66.5	79.8	106.4	124.1	137.5	150.8	155.1	168.5	164.0	155.1	159.6
80°	39.9	48.8	66.5	75.4	93.1	97.5	102.0	106.4	102.0	106.4	106.4
82.5°	31.0	35.5	44.4	44.4	57.6	57.6	62.1	62.1	66.5	66.5	66.5
85°	17.7	31.0	26.6	53.2	35.5	35.5	44.4	53.2	44.4	44.4	53.2
87.5°	17.7	17.7	13.3	17.7	17.7	17.7	22.1	26.6	26.6	31.0	26.6
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: P249529

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8260.4	8260.4	8260.4	8260.4
2.5°	8273.8	8282.5	8269.3	8264.9
5°	8287.0	8287.0	8278.2	8278.2
7.5°	8287.0	8287.0	8273.8	8264.9
10°	8251.5	8251.5	8238.3	8229.4
12.5°	8185.0	8185.0	8180.6	8167.3
15°	8100.8	8100.8	8083.0	8069.8
17.5°	7985.5	7994.4	7972.3	7972.3
20°	7861.4	7856.9	7839.2	7830.4
22.5°	7732.8	7723.9	7719.5	7692.9
25°	7595.4	7586.5	7573.1	7559.9
27.5°	7360.4	7355.9	7342.6	7324.9
30°	7001.2	6996.7	6979.0	6979.0
32.5°	6535.6	6531.2	6513.5	6517.9
35°	6052.3	6070.1	6061.2	6043.5
37.5°	5648.8	5662.2	5671.1	5662.2
40°	5311.8	5351.8	5356.2	5365.1
42.5°	4952.7	5005.9	5023.7	5032.5
45°	4522.6	4571.4	4611.3	4602.4
47.5°	4083.6	4119.1	4154.6	4128.0
50°	3662.4	3684.6	3697.9	3697.9
52.5°	3263.4	3263.4	3259.0	3263.4
55°	2806.7	2806.7	2789.0	2797.8
57.5°	2327.8	2336.7	2323.3	2301.2
60°	1884.4	1862.3	1853.4	1840.1
62.5°	1467.7	1467.7	1436.6	1476.5
65°	1099.7	1086.3	1073.0	1068.5
67.5°	798.1	793.7	780.4	775.9
70°	563.1	545.4	540.9	532.0
72.5°	376.9	376.9	368.0	368.0
75°	230.5	208.4	204.0	208.4
77.5°	159.6	155.1	155.1	150.8
80°	106.4	102.0	110.9	97.5
82.5°	66.5	71.0	66.5	71.0
85°	44.4	53.2	48.8	48.8
87.5°	26.6	26.6	26.6	26.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)