

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: P249223

Luminaire Tested: **LSR8B150D010 EC8B150840 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249223
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 EC8B150840 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16273.0 lumens
Efficiency: N/A
Efficacy: 102.7 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

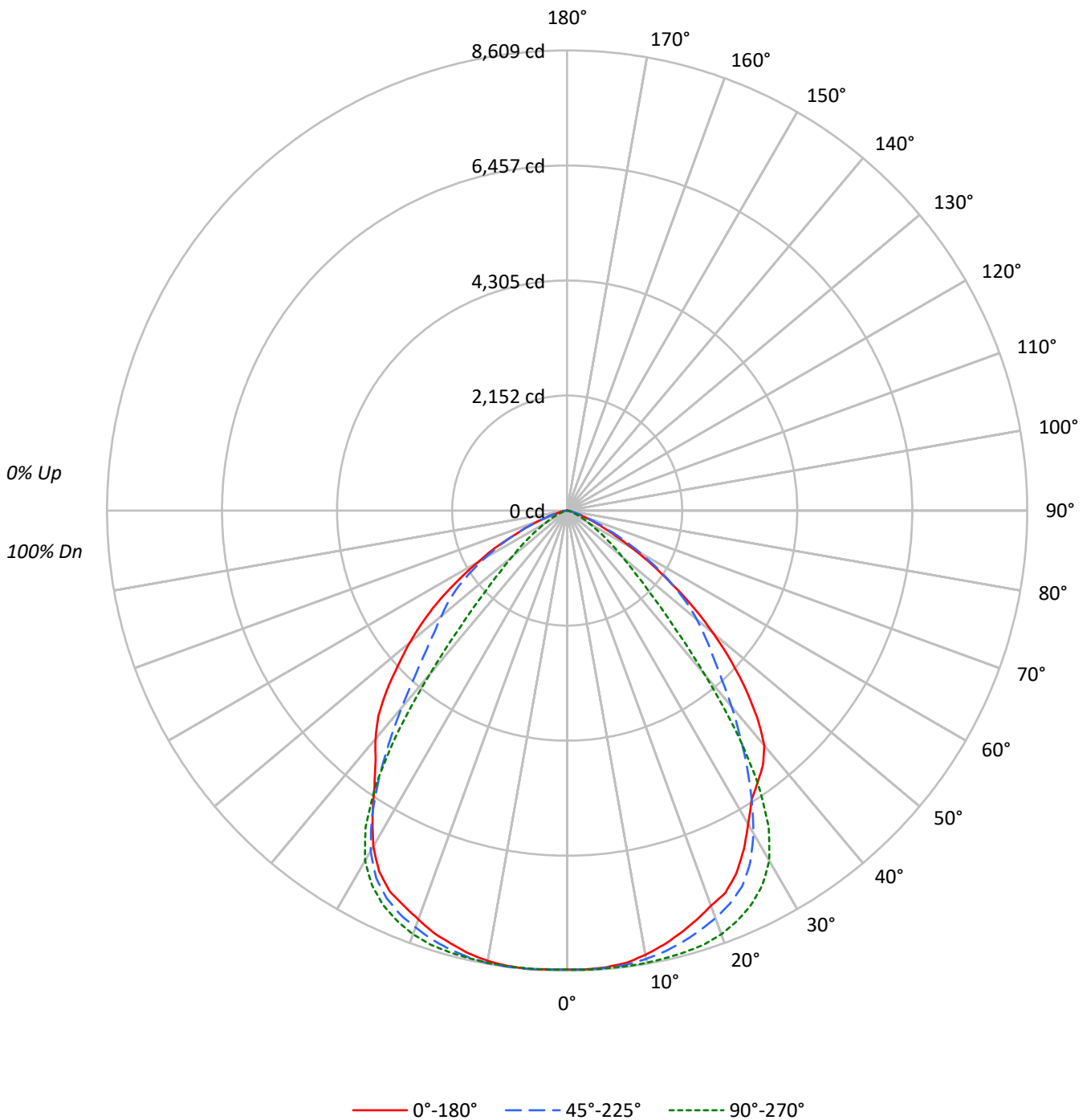
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249223

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBDW0WMH

Luminous Intensity Polar Plot





TEST NUMBER: P249223

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBDW0WMH

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	264761	264761	264761
5°	265342	266057	266341
10°	264226	268989	267834
15°	261299	272922	267773
20°	258161	276758	267081
25°	254810	277079	267355
30°	241065	269286	258295
35°	233865	234038	236470
40°	230969	161028	224476
45°	205805	96673	208617
50°	171129	64336	184393
55°	128345	44353	156338
60°	86977	29560	117955
65°	52462	19168	81035
70°	29085	10386	49858
75°	13177	4396	25806
80°	11454	4901	18007
85°	13055	6510	17938



TEST NUMBER: P249223

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBDW0WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	819.4	5.0
10°-20°	2379.7	14.6
20°-30°	3611.9	22.2
30°-40°	3793.6	23.3
40°-50°	2844.2	17.5
50°-60°	1824.9	11.2
60°-70°	780.7	4.8
70°-80°	184.4	1.1
80°-90°	34.3	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°	6811.0	41.9
0°-40°	10604.6	65.2
0°-60°	15273.6	93.9
0°-90°	16273.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16273.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8586	8586	8586	8586	8586	
5°	8572	8586	8595	8609	8604	814
15°	8185	8356	8549	8494	8388	2309
25°	7489	7752	8144	7996	7858	3421
35°	6212	5867	6217	6143	6282	3899
45°	4719	3857	2217	3747	4784	3614
55°	2387	2387	825	2489	2908	2165
65°	719	848	263	1092	1111	768
75°	111	129	37	221	217	161
85°	37	23	18	37	51	39
90°	0	0	0	0	0	



TEST NUMBER: P249223

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBDW0WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0
2.5°	8590.6	8599.8	8595.2	8595.2	8590.6	8595.2	8595.2	8604.4	8604.4	8595.2	8590.6
5°	8572.1	8581.3	8581.3	8572.1	8572.1	8595.2	8581.3	8590.6	8590.6	8586.0	8586.0
7.5°	8530.7	8530.7	8549.1	8535.3	8535.3	8549.1	8544.5	8553.7	8562.9	8567.6	8567.6
10°	8438.5	8447.7	8452.3	8452.3	8456.9	8470.7	8480.0	8498.4	8507.6	8516.8	8521.5
12.5°	8323.3	8337.1	8341.7	8337.1	8350.9	8369.3	8392.4	8415.5	8429.3	8447.7	8461.6
15°	8185.0	8185.0	8194.2	8208.1	8217.3	8244.9	8268.0	8295.6	8332.5	8355.6	8378.6
17.5°	8032.9	8042.2	8056.0	8056.0	8074.4	8120.5	8134.3	8175.8	8217.3	8240.3	8286.4
20°	7867.1	7876.2	7890.1	7899.3	7922.3	7959.2	7986.8	8023.7	8069.8	8111.3	8157.3
22.5°	7737.9	7719.6	7728.7	7737.9	7761.1	7793.3	7825.6	7871.6	7917.7	7959.2	8005.3
25°	7489.1	7493.7	7507.6	7516.7	7544.4	7572.1	7608.9	7664.2	7705.7	7751.8	7802.5
27.5°	7152.7	7157.3	7180.3	7180.3	7203.3	7249.4	7272.4	7318.6	7373.9	7419.9	7479.9
30°	6770.2	6779.3	6779.3	6797.8	6811.6	6834.7	6857.7	6903.8	6931.4	6972.9	7055.9
32.5°	6419.9	6429.1	6424.4	6419.9	6406.1	6401.4	6396.8	6406.1	6415.3	6429.1	6461.3
35°	6212.5	6189.4	6171.1	6138.8	6101.9	6055.8	6014.3	5959.0	5908.3	5866.8	5820.8
37.5°	6014.3	6009.7	5982.1	5935.9	5862.2	5779.3	5682.5	5562.7	5442.8	5313.8	5189.4
40°	5737.8	5723.9	5700.9	5636.4	5553.4	5452.1	5323.0	5175.5	4981.9	4783.8	4581.0
42.5°	5267.7	5272.3	5244.7	5193.9	5115.7	5018.8	4885.2	4723.9	4516.5	4281.4	4018.8
45°	4719.3	4719.3	4710.0	4668.5	4613.3	4534.9	4433.5	4299.9	4097.2	3857.4	3576.3
47.5°	4147.8	4152.4	4138.5	4129.4	4106.3	4055.7	3981.9	3880.5	3737.7	3507.2	3226.0
50°	3567.2	3567.2	3590.2	3585.5	3585.5	3567.2	3534.9	3474.9	3350.5	3166.2	2903.5
52.5°	2986.4	2995.7	3009.5	3027.9	3050.9	3087.8	3050.9	3023.3	2944.9	2802.0	2576.3
55°	2387.3	2396.5	2419.5	2451.8	2479.5	2516.4	2525.5	2525.5	2484.0	2387.3	2216.8
57.5°	1875.8	1861.9	1880.4	1908.0	1944.9	1981.8	2009.4	2041.6	2037.0	1972.5	1834.3
60°	1410.3	1414.9	1428.6	1456.4	1484.0	1516.3	1553.1	1580.8	1594.6	1562.4	1474.8
62.5°	1027.8	1027.8	1046.1	1073.8	1087.6	1133.8	1156.8	1170.6	1184.4	1179.8	1124.5
65°	719.0	728.1	737.4	751.3	765.0	792.6	806.5	834.1	843.4	848.0	806.5
67.5°	507.0	493.1	502.4	511.5	525.4	543.9	571.5	571.5	585.3	585.3	557.6
70°	322.6	322.6	327.2	341.0	350.3	354.9	364.1	373.3	387.1	382.5	382.5
72.5°	216.6	212.0	216.6	221.2	225.9	239.6	239.6	244.3	253.5	258.1	239.6
75°	110.6	115.2	124.4	119.9	133.6	124.4	129.0	142.9	138.3	129.0	129.0
77.5°	92.1	92.1	92.1	87.6	96.8	96.8	92.1	101.4	96.8	96.8	92.1
80°	64.5	69.1	64.5	59.9	64.5	59.9	59.9	59.9	59.9	59.9	55.3
82.5°	50.7	41.5	46.1	41.5	46.1	46.1	41.5	36.9	36.9	41.5	36.9
85°	36.9	27.6	32.3	32.3	27.6	27.6	27.6	27.6	27.6	23.0	23.0
87.5°	23.0	13.9	13.9	13.9	18.4	18.4	18.4	13.9	18.4	18.4	9.2
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: P249223

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0
2.5°	8599.8	8595.2	8604.4	8599.8	8599.8	8595.2	8599.8	8595.2	8604.4	8586.0	8590.6
5°	8599.8	8590.6	8595.2	8599.8	8604.4	8595.2	8595.2	8595.2	8604.4	8595.2	8599.8
7.5°	8581.3	8576.7	8590.6	8599.8	8595.2	8590.6	8599.8	8595.2	8604.4	8599.8	8609.0
10°	8544.5	8549.1	8558.3	8572.1	8576.7	8581.3	8590.6	8590.6	8604.4	8586.0	8595.2
12.5°	8489.2	8507.6	8530.7	8539.8	8558.3	8558.3	8567.6	8572.1	8581.3	8576.7	8590.6
15°	8420.1	8443.1	8470.7	8493.8	8516.8	8530.7	8544.5	8549.1	8562.9	8549.1	8553.7
17.5°	8337.1	8364.7	8406.2	8433.8	8470.7	8484.6	8503.0	8512.2	8526.1	8516.8	8521.5
20°	8221.8	8254.2	8300.2	8341.7	8364.7	8397.0	8420.1	8433.8	8443.1	8433.8	8438.5
22.5°	8060.6	8106.7	8166.6	8198.8	8244.9	8272.6	8277.2	8309.5	8332.5	8309.5	8318.7
25°	7871.6	7917.7	7963.8	8032.9	8074.4	8106.7	8138.9	8143.6	8166.6	8162.0	8157.3
27.5°	7558.2	7618.2	7696.5	7751.8	7807.1	7857.8	7894.7	7903.8	7926.9	7917.7	7922.3
30°	7129.6	7194.2	7267.9	7355.4	7433.8	7484.5	7530.6	7562.8	7585.8	7572.1	7567.4
32.5°	6521.3	6585.8	6664.2	6751.7	6843.9	6917.6	6972.9	7014.4	7042.1	7032.8	7009.8
35°	5825.4	5843.8	5894.5	5963.7	6041.9	6120.3	6171.1	6217.1	6249.3	6258.6	6258.6
37.5°	5111.0	5051.2	5014.3	5014.3	5060.3	5092.6	5138.7	5166.3	5217.0	5235.4	5249.3
40°	4419.7	4281.4	4152.4	4055.7	3991.2	3986.5	3986.5	4000.3	4046.4	4106.3	4161.7
42.5°	3802.2	3580.9	3382.8	3203.0	3074.0	3000.3	2968.0	2972.6	3009.5	3064.8	3156.9
45°	3309.0	3032.5	2783.6	2567.0	2391.9	2276.7	2221.4	2216.8	2244.4	2308.9	2410.4
47.5°	2926.5	2631.5	2350.4	2101.5	1912.6	1788.1	1723.6	1705.3	1723.6	1783.5	1903.4
50°	2608.5	2304.4	2014.0	1755.9	1553.1	1424.1	1364.1	1341.1	1364.1	1414.9	1534.6
52.5°	2313.5	2000.1	1728.3	1479.4	1262.8	1152.1	1087.6	1073.8	1087.6	1147.5	1244.4
55°	1972.5	1705.3	1437.9	1189.0	1000.1	889.5	838.8	825.0	838.8	894.1	995.5
57.5°	1636.1	1405.6	1170.6	944.8	783.5	686.6	640.6	622.1	654.4	691.3	811.1
60°	1322.6	1138.4	940.1	742.0	608.4	520.8	483.9	479.3	488.5	534.6	617.5
62.5°	1037.0	884.9	728.1	566.9	456.3	419.4	373.3	368.7	377.9	405.5	470.1
65°	746.6	649.9	530.0	414.8	327.2	276.5	258.1	262.7	271.9	290.4	350.3
67.5°	520.8	451.6	368.7	290.4	225.9	202.8	184.4	179.7	184.4	216.6	248.9
70°	350.3	308.8	248.9	221.2	156.7	124.4	129.0	115.2	133.6	133.6	161.3
72.5°	230.4	202.8	165.9	129.0	110.6	87.6	87.6	83.0	92.1	96.8	119.9
75°	119.9	92.1	92.1	64.5	46.1	23.0	41.5	36.9	32.3	36.9	46.1
77.5°	83.0	69.1	64.5	50.7	46.1	36.9	36.9	36.9	36.9	41.5	46.1
80°	50.7	50.7	36.9	32.3	27.6	23.0	27.6	27.6	27.6	27.6	32.3
82.5°	32.3	27.6	27.6	23.0	23.0	18.4	18.4	18.4	18.4	18.4	27.6
85°	27.6	18.4	18.4	13.9	18.4	32.3	13.9	18.4	18.4	18.4	13.9
87.5°	9.2	13.9	13.9	13.9	9.2	4.6	9.2	13.9	13.9	23.0	18.4
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: P249223

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0	8586.0
2.5°	8599.8	8604.4	8604.4	8599.8	8599.8	8590.6	8609.0	8595.2	8599.8	8618.2	8604.4
5°	8609.0	8613.6	8613.6	8609.0	8609.0	8609.0	8613.6	8613.6	8609.0	8604.4	8613.6
7.5°	8627.5	8622.8	8622.8	8613.6	8613.6	8604.4	8613.6	8599.8	8609.0	8599.8	8613.6
10°	8604.4	8609.0	8604.4	8599.8	8599.8	8595.2	8595.2	8581.3	8586.0	8572.1	8581.3
12.5°	8590.6	8586.0	8586.0	8576.7	8567.6	8558.3	8553.7	8539.8	8539.8	8507.6	8521.5
15°	8553.7	8558.3	8544.5	8526.1	8516.8	8493.8	8484.6	8466.1	8447.7	8424.7	8429.3
17.5°	8521.5	8507.6	8489.2	8470.7	8433.8	8415.5	8397.0	8369.3	8360.1	8332.5	8323.3
20°	8424.7	8415.5	8392.4	8360.1	8337.1	8295.6	8277.2	8249.6	8226.5	8198.8	8185.0
22.5°	8300.2	8291.0	8263.3	8231.1	8194.2	8175.8	8157.3	8106.7	8083.6	8056.0	8051.3
25°	8143.6	8129.7	8102.1	8065.2	8046.7	7996.1	7977.6	7940.7	7931.6	7903.8	7899.3
27.5°	7903.8	7885.4	7853.2	7807.1	7774.8	7742.6	7724.2	7696.5	7687.3	7659.6	7655.1
30°	7544.4	7521.3	7456.8	7438.4	7383.1	7350.8	7350.8	7313.9	7318.6	7300.2	7300.2
32.5°	6977.6	6940.7	6889.9	6853.1	6816.2	6797.8	6797.8	6783.9	6793.2	6793.2	6802.4
35°	6226.3	6175.7	6147.9	6124.9	6124.9	6143.3	6198.7	6212.5	6240.2	6263.2	6281.7
37.5°	5263.1	5258.5	5290.8	5318.4	5387.5	5465.9	5562.7	5645.7	5723.9	5779.3	5834.6
40°	4221.5	4336.8	4428.9	4558.0	4663.9	4816.0	4991.2	5134.0	5267.7	5364.5	5465.9
42.5°	3295.2	3442.7	3636.3	3825.2	4014.2	4221.5	4452.0	4650.2	4825.3	4958.9	5064.9
45°	2567.0	2769.8	3004.9	3244.5	3488.8	3746.9	3986.5	4189.3	4373.7	4511.9	4617.9
47.5°	2069.3	2290.5	2557.8	2820.5	3097.0	3368.9	3636.3	3811.4	3963.4	4074.0	4170.9
50°	1709.8	1944.9	2226.0	2525.5	2802.0	3074.0	3304.4	3474.9	3599.4	3696.2	3756.0
52.5°	1428.6	1677.5	1977.1	2276.7	2553.2	2802.0	3009.5	3138.5	3239.9	3309.0	3364.3
55°	1179.8	1419.5	1700.6	1981.8	2253.6	2488.7	2659.2	2756.0	2834.3	2875.8	2908.0
57.5°	963.3	1184.4	1442.5	1700.6	1935.6	2129.3	2262.9	2359.6	2396.5	2428.8	2424.1
60°	755.9	963.3	1198.3	1419.5	1622.3	1778.9	1875.8	1931.0	1958.6	1972.5	1963.3
62.5°	594.5	783.5	963.3	1156.8	1304.3	1437.9	1530.1	1530.1	1543.9	1548.5	1562.4
65°	442.4	585.3	742.0	884.9	1004.6	1092.3	1143.0	1156.8	1175.3	1170.6	1161.4
67.5°	327.2	433.2	548.4	654.4	737.4	792.6	829.5	861.9	857.3	848.0	843.4
70°	225.9	295.0	396.4	460.9	520.8	576.1	585.3	589.9	594.5	599.1	589.9
72.5°	156.7	207.4	262.7	318.0	354.9	377.9	401.0	405.5	405.5	405.5	401.0
75°	78.4	106.0	156.7	179.7	212.0	221.2	239.6	239.6	253.5	235.0	230.4
77.5°	69.1	83.0	110.6	129.0	142.9	156.7	161.3	175.1	170.5	161.3	165.9
80°	41.5	50.7	69.1	78.4	96.8	101.4	106.0	110.6	106.0	110.6	110.6
82.5°	32.3	36.9	46.1	46.1	59.9	59.9	64.5	64.5	69.1	69.1	69.1
85°	18.4	32.3	27.6	55.3	36.9	36.9	46.1	55.3	46.1	46.1	55.3
87.5°	18.4	18.4	13.9	18.4	18.4	18.4	23.0	27.6	27.6	32.3	27.6
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: P249223

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8586.0	8586.0	8586.0	8586.0
2.5°	8599.8	8609.0	8595.2	8590.6
5°	8613.6	8613.6	8604.4	8604.4
7.5°	8613.6	8613.6	8599.8	8590.6
10°	8576.7	8576.7	8562.9	8553.7
12.5°	8507.6	8507.6	8503.0	8489.2
15°	8420.1	8420.1	8401.6	8387.8
17.5°	8300.2	8309.5	8286.4	8286.4
20°	8171.2	8166.6	8148.2	8138.9
22.5°	8037.6	8028.3	8023.7	7996.1
25°	7894.7	7885.4	7871.6	7857.8
27.5°	7650.4	7645.8	7631.9	7613.6
30°	7277.1	7272.4	7254.1	7254.1
32.5°	6793.2	6788.6	6770.2	6774.8
35°	6290.8	6309.3	6300.1	6281.7
37.5°	5871.4	5885.3	5894.5	5885.3
40°	5521.2	5562.7	5567.3	5576.5
42.5°	5147.9	5203.2	5221.7	5230.8
45°	4700.8	4751.5	4793.0	4783.8
47.5°	4244.5	4281.4	4318.3	4290.7
50°	3806.8	3829.8	3843.7	3843.7
52.5°	3392.0	3392.0	3387.4	3392.0
55°	2917.3	2917.3	2898.9	2908.0
57.5°	2419.5	2428.8	2414.9	2391.9
60°	1958.6	1935.6	1926.4	1912.6
62.5°	1525.5	1525.5	1493.3	1534.6
65°	1143.0	1129.1	1115.3	1110.6
67.5°	829.5	825.0	811.1	806.5
70°	585.3	566.9	562.3	553.0
72.5°	391.8	391.8	382.5	382.5
75°	239.6	216.6	212.0	216.6
77.5°	165.9	161.3	161.3	156.7
80°	110.6	106.0	115.2	101.4
82.5°	69.1	73.7	69.1	73.7
85°	46.1	55.3	50.7	50.7
87.5°	27.6	27.6	27.6	27.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)