

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: P249493

Luminaire Tested: **LSR8B150D010 EC8B150950 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249493
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 EC8B150950 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13437.0 lumens
Efficiency: N/A
Efficacy: 84.8 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

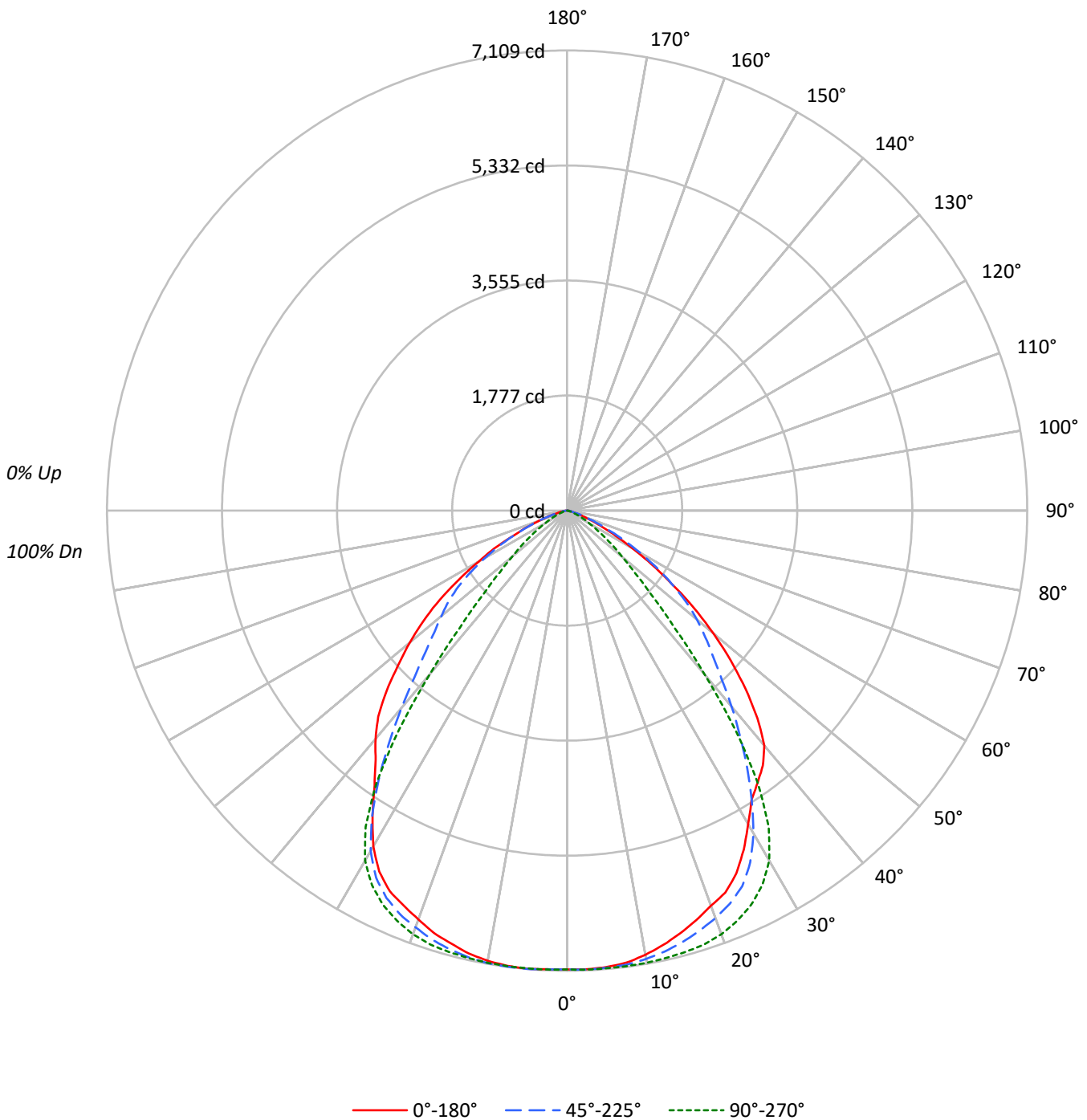
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	218617	218617	218617
5°	219099	219691	219926
10°	218176	222109	221157
15°	215759	225359	221106
20°	213168	228526	220535
25°	210402	228788	220762
30°	199052	222357	213281
35°	193107	193250	195257
40°	190715	132963	185357
45°	169936	79822	172260
50°	141304	53125	152256
55°	105975	36622	129092
60°	71818	24404	97400
65°	43319	15833	66916
70°	24018	8583	41167
75°	10878	3622	21315
80°	9465	4049	14863
85°	10756	5378	14825



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	676.6	5.0
10°-20°	1965.0	14.6
20°-30°	2982.4	22.2
30°-40°	3132.4	23.3
40°-50°	2348.5	17.5
50°-60°	1506.9	11.2
60°-70°	644.6	4.8
70°-80°	152.3	1.1
80°-90°	28.3	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°	5624.0	41.9
0°-40°	8756.4	65.2
0°-60°	12611.8	93.9
0°-90°	13437.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13437.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7090	7090	7090	7090	7090	
5°	7078	7090	7097	7109	7105	672
15°	6758	6899	7059	7014	6926	1906
25°	6184	6401	6724	6602	6488	2825
35°	5130	4844	5134	5073	5187	3220
45°	3897	3185	1830	3094	3950	2984
55°	1971	1971	681	2055	2401	1788
65°	594	700	217	902	917	634
75°	91	106	30	183	179	133
85°	30	19	15	30	42	32
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°	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6
2.5°	7093.4	7101.1	7097.3	7097.3	7093.4	7097.3	7097.3	7104.9	7104.9	7097.3	7093.4
5°	7078.2	7085.8	7085.8	7078.2	7078.2	7097.3	7085.8	7093.4	7093.4	7089.6	7089.6
7.5°	7044.0	7044.0	7059.2	7047.8	7047.8	7059.2	7055.4	7063.0	7070.6	7074.4	7074.4
10°	6967.8	6975.5	6979.3	6979.3	6983.1	6994.5	7002.1	7017.4	7024.9	7032.5	7036.4
12.5°	6872.8	6884.1	6887.9	6884.1	6895.6	6910.8	6929.8	6948.8	6960.3	6975.5	6986.9
15°	6758.5	6758.5	6766.1	6777.6	6785.2	6808.0	6827.0	6849.9	6880.3	6899.4	6918.4
17.5°	6633.0	6640.6	6652.0	6652.0	6667.3	6705.3	6716.7	6751.0	6785.2	6804.2	6842.3
20°	6496.0	6503.6	6515.0	6522.7	6541.6	6572.1	6594.9	6625.4	6663.4	6697.7	6735.7
22.5°	6389.4	6374.2	6381.8	6389.4	6408.5	6435.1	6461.8	6499.7	6537.8	6572.1	6610.2
25°	6183.9	6187.7	6199.2	6206.7	6229.6	6252.4	6282.9	6328.5	6362.8	6400.9	6442.7
27.5°	5906.1	5910.0	5929.0	5929.0	5948.0	5986.0	6005.0	6043.1	6088.8	6126.8	6176.4
30°	5590.3	5597.8	5597.8	5613.1	5624.5	5643.6	5662.6	5700.6	5723.5	5757.7	5826.2
32.5°	5301.1	5308.6	5304.8	5301.1	5289.6	5285.8	5282.0	5289.6	5297.3	5308.6	5335.3
35°	5129.8	5110.8	5095.6	5069.0	5038.5	5000.4	4966.2	4920.5	4878.6	4844.4	4806.4
37.5°	4966.2	4962.3	4939.5	4901.4	4840.5	4772.1	4692.2	4593.2	4494.3	4387.7	4285.0
40°	4737.8	4726.4	4707.4	4654.1	4585.6	4501.9	4395.4	4273.6	4113.7	3950.1	3782.7
42.5°	4349.6	4353.5	4330.7	4288.8	4224.1	4144.1	4033.8	3900.6	3729.4	3535.3	3318.4
45°	3896.8	3896.8	3889.2	3854.9	3809.3	3744.6	3660.9	3550.5	3383.1	3185.2	2953.0
47.5°	3424.9	3428.7	3417.3	3409.7	3390.7	3348.9	3288.0	3204.2	3086.3	2895.9	2663.8
50°	2945.5	2945.5	2964.5	2960.7	2960.7	2945.5	2918.9	2869.3	2766.6	2614.4	2397.5
52.5°	2465.9	2473.6	2485.0	2500.2	2519.2	2549.7	2519.2	2496.4	2431.7	2313.7	2127.3
55°	1971.2	1978.9	1997.9	2024.5	2047.4	2077.8	2085.4	2085.4	2051.1	1971.2	1830.4
57.5°	1548.9	1537.4	1552.7	1575.5	1605.9	1636.4	1659.2	1685.8	1682.0	1628.8	1514.6
60°	1164.5	1168.3	1179.7	1202.6	1225.4	1252.0	1282.5	1305.3	1316.7	1290.1	1217.7
62.5°	848.6	848.6	863.8	886.6	898.1	936.2	955.2	966.6	978.0	974.2	928.5
65°	593.7	601.2	608.9	620.3	631.7	654.5	666.0	688.8	696.4	700.2	666.0
67.5°	418.6	407.2	414.8	422.4	433.8	449.1	471.9	471.9	483.3	483.3	460.5
70°	266.4	266.4	270.2	281.6	289.2	293.0	300.7	308.2	319.7	315.8	315.8
72.5°	178.9	175.1	178.9	182.7	186.5	197.9	197.9	201.7	209.3	213.1	197.9
75°	91.3	95.2	102.7	99.0	110.3	102.7	106.5	118.0	114.2	106.5	106.5
77.5°	76.1	76.1	76.1	72.3	79.9	79.9	76.1	83.7	79.9	79.9	76.1
80°	53.3	57.1	53.3	49.4	53.3	49.4	49.4	49.4	49.4	49.4	45.6
82.5°	41.9	34.3	38.1	34.3	38.1	38.1	34.3	30.4	30.4	34.3	30.4
85°	30.4	22.8	26.6	26.6	22.8	22.8	22.8	22.8	22.8	19.0	19.0
87.5°	19.0	11.5	11.5	11.5	15.2	15.2	15.2	11.5	15.2	15.2	7.6
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°	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6
2.5°	7101.1	7097.3	7104.9	7101.1	7101.1	7097.3	7101.1	7097.3	7104.9	7089.6	7093.4
5°	7101.1	7093.4	7097.3	7101.1	7104.9	7097.3	7097.3	7097.3	7104.9	7097.3	7101.1
7.5°	7085.8	7082.0	7093.4	7101.1	7097.3	7093.4	7101.1	7097.3	7104.9	7101.1	7108.6
10°	7055.4	7059.2	7066.8	7078.2	7082.0	7085.8	7093.4	7093.4	7104.9	7089.6	7097.3
12.5°	7009.7	7024.9	7044.0	7051.5	7066.8	7066.8	7074.4	7078.2	7085.8	7082.0	7093.4
15°	6952.7	6971.7	6994.5	7013.5	7032.5	7044.0	7055.4	7059.2	7070.6	7059.2	7063.0
17.5°	6884.1	6906.9	6941.2	6964.0	6994.5	7005.9	7021.1	7028.7	7040.2	7032.5	7036.4
20°	6789.0	6815.7	6853.7	6887.9	6906.9	6933.6	6952.7	6964.0	6971.7	6964.0	6967.8
22.5°	6655.8	6693.9	6743.3	6770.0	6808.0	6830.9	6834.7	6861.3	6880.3	6861.3	6868.9
25°	6499.7	6537.8	6575.9	6633.0	6667.3	6693.9	6720.5	6724.3	6743.3	6739.5	6735.7
27.5°	6241.0	6290.5	6355.1	6400.9	6446.5	6488.4	6518.8	6526.4	6545.5	6537.8	6541.6
30°	5887.1	5940.4	6001.3	6073.6	6138.3	6180.1	6218.2	6244.8	6263.8	6252.4	6248.6
32.5°	5384.8	5438.1	5502.8	5575.0	5651.2	5712.0	5757.7	5792.0	5814.8	5807.2	5788.2
35°	4810.2	4825.4	4867.3	4924.3	4989.0	5053.7	5095.6	5133.6	5160.2	5167.8	5167.8
37.5°	4220.3	4170.9	4140.4	4140.4	4178.4	4205.0	4243.1	4265.9	4307.8	4323.0	4334.5
40°	3649.4	3535.3	3428.7	3348.9	3295.6	3291.8	3291.8	3303.1	3341.2	3390.7	3436.4
42.5°	3139.5	2956.8	2793.2	2644.8	2538.3	2477.4	2450.8	2454.6	2485.0	2530.7	2606.7
45°	2732.3	2504.0	2298.5	2119.7	1975.0	1879.9	1834.3	1830.4	1853.3	1906.5	1990.3
47.5°	2416.5	2172.9	1940.8	1735.3	1579.3	1476.5	1423.3	1408.1	1423.3	1472.7	1571.7
50°	2153.9	1902.8	1663.0	1449.9	1282.5	1175.9	1126.4	1107.4	1126.4	1168.3	1267.2
52.5°	1910.3	1651.6	1427.1	1221.6	1042.7	951.3	898.1	886.6	898.1	947.5	1027.5
55°	1628.8	1408.1	1187.3	981.8	825.8	734.5	692.6	681.2	692.6	738.3	822.0
57.5°	1351.0	1160.7	966.6	780.1	647.0	567.0	529.0	513.7	540.3	570.8	669.8
60°	1092.1	940.0	776.3	612.7	502.4	430.0	399.6	395.7	403.4	441.5	509.9
62.5°	856.3	730.7	601.2	468.1	376.7	346.3	308.2	304.5	312.0	334.8	388.2
65°	616.5	536.6	437.6	342.5	270.2	228.3	213.1	217.0	224.5	239.8	289.2
67.5°	430.0	372.9	304.5	239.8	186.5	167.4	152.2	148.4	152.2	178.9	205.5
70°	289.2	254.9	205.5	182.7	129.4	102.7	106.5	95.2	110.3	110.3	133.2
72.5°	190.2	167.4	137.0	106.5	91.3	72.3	72.3	68.5	76.1	79.9	99.0
75°	99.0	76.1	76.1	53.3	38.1	19.0	34.3	30.4	26.6	30.4	38.1
77.5°	68.5	57.1	53.3	41.9	38.1	30.4	30.4	30.4	30.4	34.3	38.1
80°	41.9	41.9	30.4	26.6	22.8	19.0	22.8	22.8	22.8	22.8	26.6
82.5°	26.6	22.8	22.8	19.0	19.0	15.2	15.2	15.2	15.2	15.2	22.8
85°	22.8	15.2	15.2	11.5	15.2	26.6	11.5	15.2	15.2	15.2	11.5
87.5°	7.6	11.5	11.5	11.5	7.6	3.8	7.6	11.5	11.5	19.0	15.2
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°	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6	7089.6
2.5°	7101.1	7104.9	7104.9	7101.1	7101.1	7093.4	7108.6	7097.3	7101.1	7116.3	7104.9
5°	7108.6	7112.4	7112.4	7108.6	7108.6	7108.6	7112.4	7112.4	7108.6	7104.9	7112.4
7.5°	7123.9	7120.1	7120.1	7112.4	7112.4	7104.9	7112.4	7101.1	7108.6	7101.1	7112.4
10°	7104.9	7108.6	7104.9	7101.1	7101.1	7097.3	7097.3	7085.8	7089.6	7078.2	7085.8
12.5°	7093.4	7089.6	7089.6	7082.0	7074.4	7066.8	7063.0	7051.5	7051.5	7024.9	7036.4
15°	7063.0	7066.8	7055.4	7040.2	7032.5	7013.5	7005.9	6990.6	6975.5	6956.5	6960.3
17.5°	7036.4	7024.9	7009.7	6994.5	6964.0	6948.8	6933.6	6910.8	6903.1	6880.3	6872.8
20°	6956.5	6948.8	6929.8	6903.1	6884.1	6849.9	6834.7	6811.9	6792.8	6770.0	6758.5
22.5°	6853.7	6846.0	6823.2	6796.6	6766.1	6751.0	6735.7	6693.9	6674.8	6652.0	6648.2
25°	6724.3	6712.9	6690.1	6659.6	6644.4	6602.5	6587.3	6556.8	6549.3	6526.4	6522.7
27.5°	6526.4	6511.2	6484.6	6446.5	6419.9	6393.2	6378.0	6355.1	6347.6	6324.7	6321.0
30°	6229.6	6210.5	6157.3	6142.1	6096.4	6069.7	6069.7	6039.3	6043.1	6027.9	6027.9
32.5°	5761.5	5731.1	5689.2	5658.7	5628.3	5613.1	5613.1	5601.7	5609.3	5609.3	5616.9
35°	5141.2	5099.4	5076.5	5057.5	5057.5	5072.7	5118.4	5129.8	5152.7	5171.7	5186.9
37.5°	4345.8	4342.1	4368.7	4391.5	4448.6	4513.3	4593.2	4661.8	4726.4	4772.1	4817.7
40°	3485.8	3581.0	3657.1	3763.7	3851.1	3976.7	4121.3	4239.3	4349.6	4429.6	4513.3
42.5°	2720.9	2842.7	3002.6	3158.5	3314.6	3485.8	3676.1	3839.8	3984.4	4094.7	4182.2
45°	2119.7	2287.1	2481.2	2679.1	2880.8	3093.9	3291.8	3459.2	3611.4	3725.6	3813.1
47.5°	1708.6	1891.3	2112.0	2329.0	2557.3	2781.8	3002.6	3147.2	3272.7	3364.0	3444.0
50°	1411.8	1605.9	1838.1	2085.4	2313.7	2538.3	2728.5	2869.3	2972.1	3052.0	3101.5
52.5°	1179.7	1385.2	1632.6	1879.9	2108.2	2313.7	2485.0	2591.6	2675.3	2732.3	2778.0
55°	974.2	1172.1	1404.3	1636.4	1860.9	2054.9	2195.7	2275.7	2340.3	2374.6	2401.2
57.5°	795.4	978.0	1191.1	1404.3	1598.3	1758.2	1868.5	1948.4	1978.9	2005.5	2001.7
60°	624.1	795.4	989.4	1172.1	1339.5	1468.9	1548.9	1594.5	1617.3	1628.8	1621.1
62.5°	490.9	647.0	795.4	955.2	1077.0	1187.3	1263.5	1263.5	1274.8	1278.6	1290.1
65°	365.3	483.3	612.7	730.7	829.6	901.9	943.8	955.2	970.4	966.6	959.0
67.5°	270.2	357.7	452.8	540.3	608.9	654.5	685.0	711.7	707.9	700.2	696.4
70°	186.5	243.6	327.3	380.6	430.0	475.7	483.3	487.1	490.9	494.7	487.1
72.5°	129.4	171.2	217.0	262.6	293.0	312.0	331.1	334.8	334.8	334.8	331.1
75°	64.7	87.5	129.4	148.4	175.1	182.7	197.9	197.9	209.3	194.1	190.2
77.5°	57.1	68.5	91.3	106.5	118.0	129.4	133.2	144.6	140.8	133.2	137.0
80°	34.3	41.9	57.1	64.7	79.9	83.7	87.5	91.3	87.5	91.3	91.3
82.5°	26.6	30.4	38.1	38.1	49.4	49.4	53.3	53.3	57.1	57.1	57.1
85°	15.2	26.6	22.8	45.6	30.4	30.4	38.1	45.6	38.1	38.1	45.6
87.5°	15.2	15.2	11.5	15.2	15.2	15.2	19.0	22.8	22.8	26.6	22.8
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: P249493

CATALOG NUMBER: LSR8B150D010 EC8B150950 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7089.6	7089.6	7089.6	7089.6
2.5°	7101.1	7108.6	7097.3	7093.4
5°	7112.4	7112.4	7104.9	7104.9
7.5°	7112.4	7112.4	7101.1	7093.4
10°	7082.0	7082.0	7070.6	7063.0
12.5°	7024.9	7024.9	7021.1	7009.7
15°	6952.7	6952.7	6937.4	6926.0
17.5°	6853.7	6861.3	6842.3	6842.3
20°	6747.2	6743.3	6728.2	6720.5
22.5°	6636.8	6629.2	6625.4	6602.5
25°	6518.8	6511.2	6499.7	6488.4
27.5°	6317.1	6313.3	6301.9	6286.7
30°	6008.8	6005.0	5989.9	5989.9
32.5°	5609.3	5605.5	5590.3	5594.1
35°	5194.5	5209.7	5202.1	5186.9
37.5°	4848.2	4859.6	4867.3	4859.6
40°	4559.0	4593.2	4597.0	4604.7
42.5°	4250.8	4296.4	4311.7	4319.2
45°	3881.6	3923.5	3957.7	3950.1
47.5°	3504.8	3535.3	3565.7	3542.9
50°	3143.3	3162.3	3173.8	3173.8
52.5°	2800.9	2800.9	2797.1	2800.9
55°	2408.9	2408.9	2393.7	2401.2
57.5°	1997.9	2005.5	1994.0	1975.0
60°	1617.3	1598.3	1590.7	1579.3
62.5°	1259.6	1259.6	1233.0	1267.2
65°	943.8	932.4	920.9	917.1
67.5°	685.0	681.2	669.8	666.0
70°	483.3	468.1	464.3	456.6
72.5°	323.5	323.5	315.8	315.8
75°	197.9	178.9	175.1	178.9
77.5°	137.0	133.2	133.2	129.4
80°	91.3	87.5	95.2	83.7
82.5°	57.1	60.9	57.1	60.9
85°	38.1	45.6	41.9	41.9
87.5°	22.8	22.8	22.8	22.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)