

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: P249421

Luminaire Tested: **LSR8B150D010 EC8B150830 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249421
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 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14012.0 lumens
Efficiency: N/A
Efficacy: 88.4 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

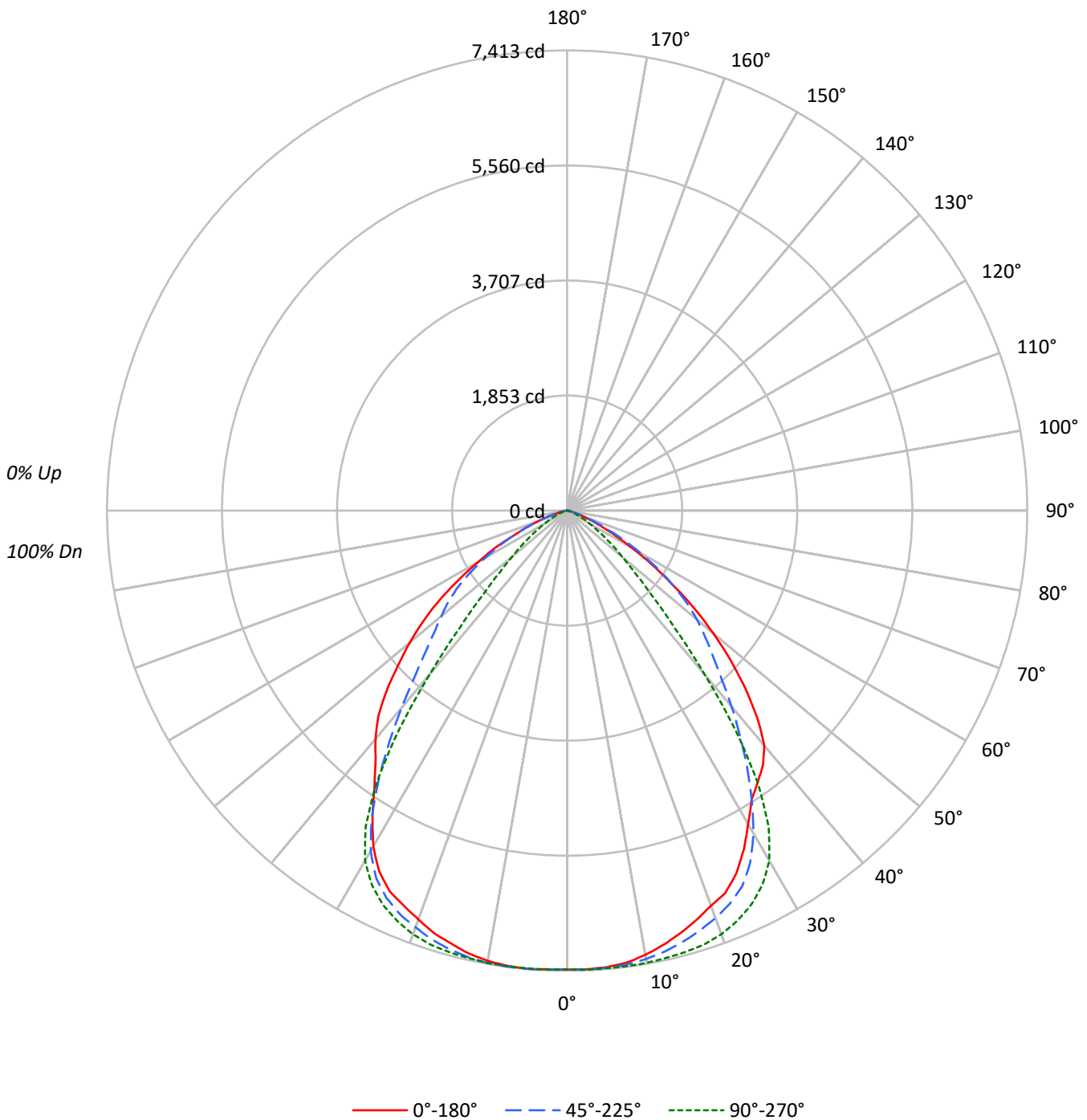
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	227973	227973	227973
5°	228475	229091	229336
10°	227513	231615	230619
15°	224991	235003	230569
20°	222291	238305	229973
25°	219404	238580	230207
30°	207569	231871	222407
35°	201374	201521	203614
40°	198879	138655	193287
45°	177210	83241	179630
50°	147348	55399	158771
55°	110512	38192	134619
60°	74889	25452	101569
65°	45173	16505	69776
70°	25046	8944	42934
75°	11354	3789	22220
80°	9856	4226	15503
85°	11251	5590	15461



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	705.6	5.0
10°-20°	2049.0	14.6
20°-30°	3110.1	22.2
30°-40°	3266.5	23.3
40°-50°	2449.0	17.5
50°-60°	1571.3	11.2
60°-70°	672.2	4.8
70°-80°	158.8	1.1
80°-90°	29.5	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°	5864.7	41.9
0°-40°	9131.1	65.2
0°-60°	13151.5	93.9
0°-90°	14012.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14012.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7393	7393	7393	7393	7393	
5°	7381	7393	7401	7413	7409	701
15°	7048	7195	7361	7314	7222	1988
25°	6448	6675	7012	6885	6766	2946
35°	5349	5052	5353	5290	5409	3357
45°	4064	3322	1909	3226	4119	3112
55°	2056	2056	710	2143	2504	1865
65°	619	730	226	940	956	661
75°	95	111	32	190	186	139
85°	32	20	16	32	44	33
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°	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0
2.5°	7397.0	7404.9	7401.0	7401.0	7397.0	7401.0	7401.0	7408.9	7408.9	7401.0	7397.0
5°	7381.1	7389.0	7389.0	7381.1	7381.1	7401.0	7389.0	7397.0	7397.0	7393.0	7393.0
7.5°	7345.4	7345.4	7361.3	7349.4	7349.4	7361.3	7357.3	7365.2	7373.2	7377.2	7377.2
10°	7266.0	7274.0	7277.9	7277.9	7281.9	7293.8	7301.7	7317.7	7325.5	7333.5	7337.5
12.5°	7166.9	7178.7	7182.7	7178.7	7190.7	7206.5	7226.4	7246.2	7258.1	7274.0	7285.9
15°	7047.7	7047.7	7055.7	7067.6	7075.6	7099.4	7119.2	7143.0	7174.7	7194.6	7214.4
17.5°	6916.8	6924.8	6936.6	6936.6	6952.6	6992.2	7004.1	7039.9	7075.6	7095.4	7135.1
20°	6774.0	6781.9	6793.8	6801.8	6821.6	6853.3	6877.1	6908.9	6948.6	6984.3	7023.9
22.5°	6662.8	6647.0	6654.9	6662.8	6682.7	6710.5	6738.3	6777.9	6817.6	6853.3	6893.0
25°	6448.5	6452.5	6464.4	6472.3	6496.2	6520.0	6551.7	6599.3	6635.1	6674.8	6718.4
27.5°	6158.9	6162.9	6182.7	6182.7	6202.5	6242.2	6262.0	6301.7	6349.4	6389.0	6440.7
30°	5829.5	5837.4	5837.4	5853.3	5865.2	5885.1	5904.9	5944.6	5968.4	6004.1	6075.6
32.5°	5527.9	5535.8	5531.8	5527.9	5516.0	5512.0	5508.0	5516.0	5524.0	5535.8	5563.6
35°	5349.4	5329.5	5313.6	5285.9	5254.1	5214.4	5178.7	5131.1	5087.4	5051.7	5012.0
37.5°	5178.7	5174.7	5150.9	5111.2	5047.7	4976.3	4893.0	4789.8	4686.6	4575.5	4468.4
40°	4940.6	4928.6	4908.8	4853.3	4781.8	4694.5	4583.5	4456.4	4289.7	4119.1	3944.5
42.5°	4535.8	4539.8	4516.0	4472.3	4404.9	4321.5	4206.4	4067.6	3889.0	3686.6	3460.4
45°	4063.6	4063.6	4055.6	4019.9	3972.3	3904.8	3817.5	3702.5	3527.9	3321.5	3079.4
47.5°	3571.5	3575.5	3563.5	3555.7	3535.8	3492.2	3428.7	3341.4	3218.3	3019.9	2777.8
50°	3071.5	3071.5	3091.3	3087.4	3087.4	3071.5	3043.8	2992.1	2885.0	2726.2	2500.1
52.5°	2571.5	2579.4	2591.4	2607.2	2627.0	2658.8	2627.0	2603.2	2535.7	2412.7	2218.3
55°	2055.6	2063.5	2083.4	2111.1	2135.0	2166.8	2174.6	2174.6	2138.9	2055.6	1908.8
57.5°	1615.1	1603.2	1619.1	1642.9	1674.7	1706.4	1730.2	1758.0	1754.0	1698.5	1579.4
60°	1214.3	1218.3	1230.1	1254.0	1277.8	1305.6	1337.3	1361.1	1373.1	1345.3	1269.9
62.5°	885.0	885.0	900.8	924.6	936.5	976.2	996.0	1008.0	1019.8	1015.8	968.3
65°	619.1	627.0	634.9	646.9	658.7	682.5	694.5	718.2	726.2	730.2	694.5
67.5°	436.6	424.6	432.6	440.4	452.4	468.3	492.1	492.1	503.9	503.9	480.2
70°	277.8	277.8	281.8	293.6	301.6	305.6	313.5	321.4	333.3	329.4	329.4
72.5°	186.5	182.5	186.5	190.5	194.5	206.3	206.3	210.3	218.3	222.3	206.3
75°	95.3	99.2	107.1	103.2	115.1	107.1	111.1	123.0	119.0	111.1	111.1
77.5°	79.3	79.3	79.3	75.4	83.3	83.3	79.3	87.3	83.3	83.3	79.3
80°	55.5	59.5	55.5	51.6	55.5	51.6	51.6	51.6	51.6	51.6	47.6
82.5°	43.7	35.7	39.7	35.7	39.7	39.7	35.7	31.8	31.8	35.7	31.8
85°	31.8	23.8	27.8	27.8	23.8	23.8	23.8	23.8	23.8	19.8	19.8
87.5°	19.8	11.9	11.9	11.9	15.8	15.8	15.8	11.9	15.8	15.8	8.0
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°	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0
2.5°	7404.9	7401.0	7408.9	7404.9	7404.9	7401.0	7404.9	7401.0	7408.9	7393.0	7397.0
5°	7404.9	7397.0	7401.0	7404.9	7408.9	7401.0	7401.0	7401.0	7408.9	7401.0	7404.9
7.5°	7389.0	7385.0	7397.0	7404.9	7401.0	7397.0	7404.9	7401.0	7408.9	7404.9	7412.8
10°	7357.3	7361.3	7369.2	7381.1	7385.0	7389.0	7397.0	7397.0	7408.9	7393.0	7401.0
12.5°	7309.7	7325.5	7345.4	7353.3	7369.2	7369.2	7377.2	7381.1	7389.0	7385.0	7397.0
15°	7250.2	7270.0	7293.8	7313.7	7333.5	7345.4	7357.3	7361.3	7373.2	7361.3	7365.2
17.5°	7178.7	7202.5	7238.2	7262.0	7293.8	7305.7	7321.5	7329.5	7341.4	7333.5	7337.5
20°	7079.5	7107.3	7147.0	7182.7	7202.5	7230.3	7250.2	7262.0	7270.0	7262.0	7266.0
22.5°	6940.6	6980.3	7031.9	7059.7	7099.4	7123.2	7127.1	7154.9	7174.7	7154.9	7162.9
25°	6777.9	6817.6	6857.3	6916.8	6952.6	6980.3	7008.1	7012.1	7031.9	7027.9	7023.9
27.5°	6508.0	6559.7	6627.1	6674.8	6722.3	6766.0	6797.8	6805.7	6825.6	6817.6	6821.6
30°	6139.0	6194.6	6258.1	6333.5	6400.9	6444.5	6484.3	6512.0	6531.8	6520.0	6516.0
32.5°	5615.2	5670.8	5738.2	5813.6	5893.0	5956.4	6004.1	6039.8	6063.6	6055.7	6035.9
35°	5016.0	5031.9	5075.5	5135.1	5202.5	5269.9	5313.6	5353.3	5381.0	5389.0	5389.0
37.5°	4400.9	4349.3	4317.6	4317.6	4357.2	4385.0	4424.7	4448.5	4492.2	4508.0	4519.9
40°	3805.6	3686.6	3575.5	3492.2	3436.6	3432.6	3432.6	3444.5	3484.2	3535.8	3583.4
42.5°	3273.9	3083.4	2912.8	2758.0	2646.9	2583.4	2555.6	2559.6	2591.4	2639.0	2718.3
45°	2849.3	2611.2	2396.9	2210.4	2059.6	1960.3	1912.7	1908.8	1932.6	1988.1	2075.5
47.5°	2519.9	2265.9	2023.8	1809.5	1646.9	1539.7	1484.2	1468.3	1484.2	1535.7	1638.9
50°	2246.1	1984.2	1734.2	1511.9	1337.3	1226.3	1174.6	1154.8	1174.6	1218.3	1321.4
52.5°	1992.1	1722.2	1488.1	1273.8	1087.3	992.1	936.5	924.6	936.5	988.1	1071.5
55°	1698.5	1468.3	1238.1	1023.8	861.2	765.9	722.2	710.4	722.2	769.9	857.2
57.5°	1408.8	1210.3	1008.0	813.5	674.6	591.2	551.6	535.7	563.5	595.2	698.4
60°	1138.9	980.2	809.5	638.9	523.8	448.4	416.7	412.7	420.6	460.3	531.7
62.5°	892.9	761.9	627.0	488.1	392.9	361.1	321.4	317.5	325.4	349.2	404.8
65°	642.9	559.6	456.4	357.1	281.8	238.1	222.3	226.2	234.1	250.0	301.6
67.5°	448.4	388.9	317.5	250.0	194.5	174.6	158.8	154.8	158.8	186.5	214.3
70°	301.6	265.9	214.3	190.5	135.0	107.1	111.1	99.2	115.1	115.1	138.9
72.5°	198.4	174.6	142.8	111.1	95.3	75.4	75.4	71.5	79.3	83.3	103.2
75°	103.2	79.3	79.3	55.5	39.7	19.8	35.7	31.8	27.8	31.8	39.7
77.5°	71.5	59.5	55.5	43.7	39.7	31.8	31.8	31.8	31.8	35.7	39.7
80°	43.7	43.7	31.8	27.8	23.8	19.8	23.8	23.8	23.8	23.8	27.8
82.5°	27.8	23.8	23.8	19.8	19.8	15.8	15.8	15.8	15.8	15.8	23.8
85°	23.8	15.8	15.8	11.9	15.8	27.8	11.9	15.8	15.8	15.8	11.9
87.5°	8.0	11.9	11.9	11.9	8.0	4.0	8.0	11.9	11.9	19.8	15.8
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°	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0	7393.0
2.5°	7404.9	7408.9	7408.9	7404.9	7404.9	7397.0	7412.8	7401.0	7404.9	7420.8	7408.9
5°	7412.8	7416.8	7416.8	7412.8	7412.8	7412.8	7416.8	7416.8	7412.8	7408.9	7416.8
7.5°	7428.7	7424.8	7424.8	7416.8	7416.8	7408.9	7416.8	7404.9	7412.8	7404.9	7416.8
10°	7408.9	7412.8	7408.9	7404.9	7404.9	7401.0	7401.0	7389.0	7393.0	7381.1	7389.0
12.5°	7397.0	7393.0	7393.0	7385.0	7377.2	7369.2	7365.2	7353.3	7353.3	7325.5	7337.5
15°	7365.2	7369.2	7357.3	7341.4	7333.5	7313.7	7305.7	7289.8	7274.0	7254.2	7258.1
17.5°	7337.5	7325.5	7309.7	7293.8	7262.0	7246.2	7230.3	7206.5	7198.5	7174.7	7166.9
20°	7254.2	7246.2	7226.4	7198.5	7178.7	7143.0	7127.1	7103.4	7083.5	7059.7	7047.7
22.5°	7147.0	7139.0	7115.2	7087.4	7055.7	7039.9	7023.9	6980.3	6960.4	6936.6	6932.7
25°	7012.1	7000.1	6976.4	6944.6	6928.7	6885.1	6869.2	6837.4	6829.5	6805.7	6801.8
27.5°	6805.7	6789.8	6762.1	6722.3	6694.6	6666.8	6651.0	6627.1	6619.2	6595.3	6591.5
30°	6496.2	6476.3	6420.8	6404.9	6357.3	6329.5	6329.5	6297.7	6301.7	6285.9	6285.9
32.5°	6008.1	5976.3	5932.6	5900.9	5869.1	5853.3	5853.3	5841.4	5849.3	5849.3	5857.3
35°	5361.2	5317.6	5293.7	5273.9	5273.9	5289.8	5337.4	5349.4	5373.2	5393.0	5408.9
37.5°	4531.8	4527.9	4555.7	4579.5	4639.0	4706.5	4789.8	4861.3	4928.6	4976.3	5023.9
40°	3635.0	3734.2	3813.6	3924.7	4015.9	4146.9	4297.7	4420.7	4535.8	4619.2	4706.5
42.5°	2837.3	2964.3	3131.0	3293.7	3456.4	3635.0	3833.5	4004.1	4154.9	4269.9	4361.2
45°	2210.4	2384.9	2587.4	2793.7	3004.0	3226.3	3432.6	3607.2	3766.0	3885.0	3976.3
47.5°	1781.8	1972.3	2202.4	2428.6	2666.7	2900.8	3131.0	3281.8	3412.7	3508.0	3591.4
50°	1472.2	1674.7	1916.7	2174.6	2412.7	2646.9	2845.3	2992.1	3099.3	3182.6	3234.2
52.5°	1230.1	1444.4	1702.4	1960.3	2198.4	2412.7	2591.4	2702.5	2789.7	2849.3	2896.8
55°	1015.8	1222.3	1464.3	1706.4	1940.5	2142.9	2289.7	2373.1	2440.5	2476.2	2504.0
57.5°	829.4	1019.8	1242.1	1464.3	1666.7	1833.4	1948.5	2031.8	2063.5	2091.3	2087.3
60°	650.9	829.4	1031.8	1222.3	1396.9	1531.7	1615.1	1662.7	1686.5	1698.5	1690.5
62.5°	511.9	674.6	829.4	996.0	1123.0	1238.1	1317.5	1317.5	1329.4	1333.4	1345.3
65°	380.9	503.9	638.9	761.9	865.1	940.5	984.2	996.0	1012.0	1008.0	1000.0
67.5°	281.8	373.1	472.2	563.5	634.9	682.5	714.3	742.1	738.1	730.2	726.2
70°	194.5	254.0	341.3	396.8	448.4	496.1	503.9	507.9	511.9	515.9	507.9
72.5°	135.0	178.6	226.2	273.8	305.6	325.4	345.3	349.2	349.2	349.2	345.3
75°	67.5	91.3	135.0	154.8	182.5	190.5	206.3	206.3	218.3	202.4	198.4
77.5°	59.5	71.5	95.3	111.1	123.0	135.0	138.9	150.8	146.8	138.9	142.8
80°	35.7	43.7	59.5	67.5	83.3	87.3	91.3	95.3	91.3	95.3	95.3
82.5°	27.8	31.8	39.7	39.7	51.6	51.6	55.5	55.5	59.5	59.5	59.5
85°	15.8	27.8	23.8	47.6	31.8	31.8	39.7	47.6	39.7	39.7	47.6
87.5°	15.8	15.8	11.9	15.8	15.8	15.8	19.8	23.8	23.8	27.8	23.8
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: P249421

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7393.0	7393.0	7393.0	7393.0
2.5°	7404.9	7412.8	7401.0	7397.0
5°	7416.8	7416.8	7408.9	7408.9
7.5°	7416.8	7416.8	7404.9	7397.0
10°	7385.0	7385.0	7373.2	7365.2
12.5°	7325.5	7325.5	7321.5	7309.7
15°	7250.2	7250.2	7234.3	7222.4
17.5°	7147.0	7154.9	7135.1	7135.1
20°	7035.9	7031.9	7016.1	7008.1
22.5°	6920.8	6912.9	6908.9	6885.1
25°	6797.8	6789.8	6777.9	6766.0
27.5°	6587.5	6583.5	6571.6	6555.7
30°	6266.0	6262.0	6246.2	6246.2
32.5°	5849.3	5845.3	5829.5	5833.5
35°	5416.8	5432.7	5424.7	5408.9
37.5°	5055.6	5067.6	5075.5	5067.6
40°	4754.1	4789.8	4793.8	4801.7
42.5°	4432.7	4480.2	4496.2	4504.0
45°	4047.7	4091.4	4127.1	4119.1
47.5°	3654.8	3686.6	3718.3	3694.5
50°	3277.9	3297.7	3309.6	3309.6
52.5°	2920.7	2920.7	2916.8	2920.7
55°	2511.9	2511.9	2496.1	2504.0
57.5°	2083.4	2091.3	2079.4	2059.6
60°	1686.5	1666.7	1658.7	1646.9
62.5°	1313.6	1313.6	1285.8	1321.4
65°	984.2	972.3	960.3	956.3
67.5°	714.3	710.4	698.4	694.5
70°	503.9	488.1	484.1	476.2
72.5°	337.3	337.3	329.4	329.4
75°	206.3	186.5	182.5	186.5
77.5°	142.8	138.9	138.9	135.0
80°	95.3	91.3	99.2	87.3
82.5°	59.5	63.5	59.5	63.5
85°	39.7	47.6	43.7	43.7
87.5°	23.8	23.8	23.8	23.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)