

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: P249704

Luminaire Tested: **LSR8B150D010 EC8B150827 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249704
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 EC8B150827 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16116.0 lumens
Efficiency: N/A
Efficacy: 101.7 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

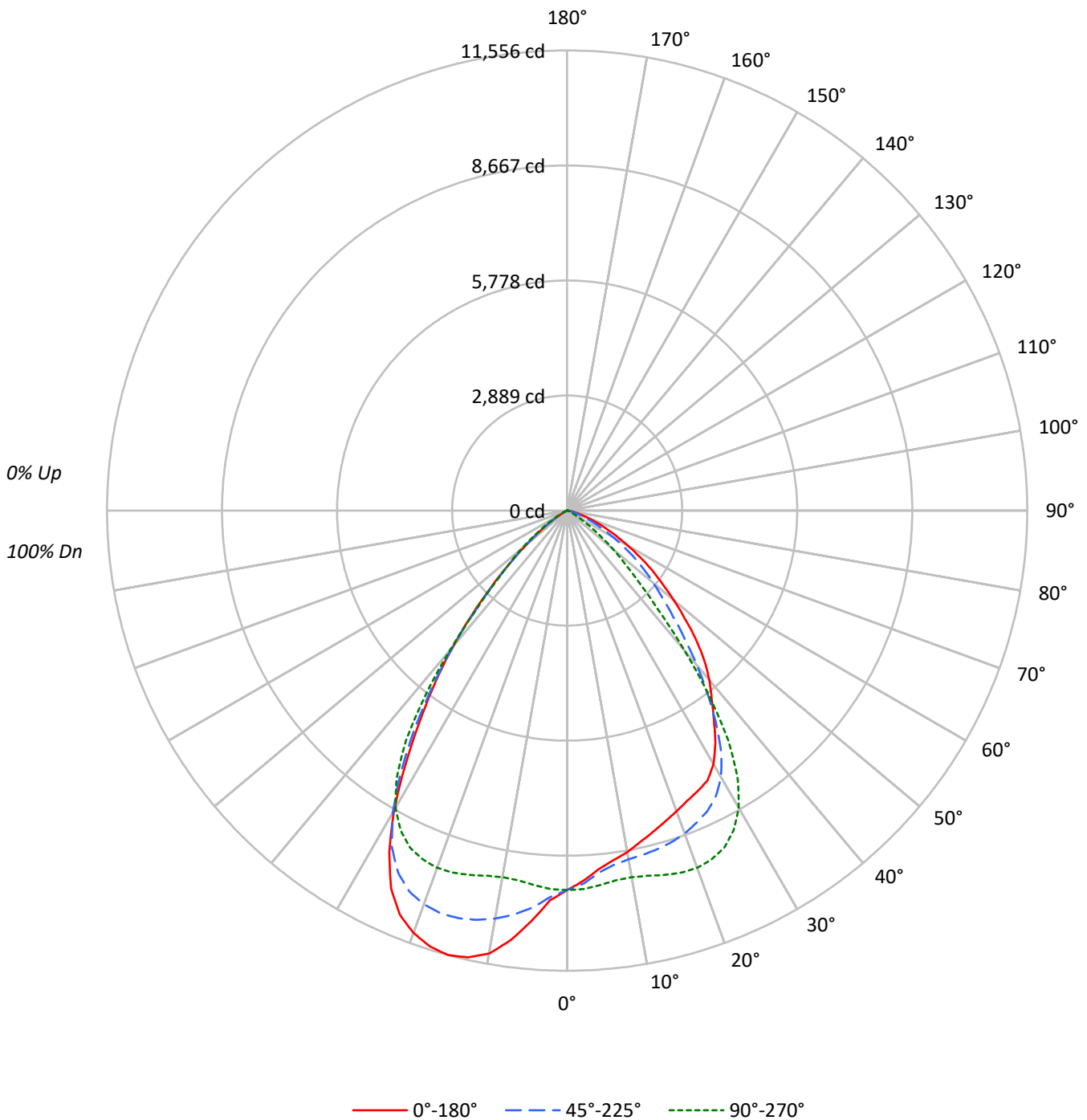
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	293852	293852	293852
5°	279952	292216	320341
10°	272731	292670	353603
15°	266547	302369	368899
20°	263612	313294	370285
25°	264231	317721	355899
30°	261777	306809	309504
35°	241894	265523	242225
40°	223530	184093	179613
45°	199045	111081	114766
50°	167478	71566	64946
55°	139334	39257	29692
60°	108754	17022	9337
65°	80254	8449	4546
70°	55809	5220	2002
75°	33956	1072	0
80°	24506	1598	0
85°	15744	1557	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	916.1	5.7
10°-20°	2741.8	17.0
20°-30°	4198.8	26.1
30°-40°	4116.2	25.5
40°-50°	2478.8	15.4
50°-60°	1140.9	7.1
60°-70°	400.8	2.5
70°-80°	104.8	0.7
80°-90°	17.9	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°	7856.7	48.8
0°-40°	11972.8	74.3
0°-60°	15592.5	96.8
0°-90°	16116.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16116.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9529	9529	9529	9529	9529	
5°	9044	9129	9440	10006	10349	854
15°	8349	8799	9472	10594	11556	2359
25°	7766	8327	9338	10042	10460	3577
35°	6426	6515	7054	6648	6435	4024
45°	4564	3758	2547	2565	2632	3500
55°	2592	2053	730	574	552	2312
65°	1100	761	116	58	62	1120
75°	285	165	9	0	0	346
85°	44	22	4	0	0	61
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°	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4
2.5°	9306.7	9315.7	9315.7	9315.7	9333.5	9338.1	9333.5	9338.1	9346.9	9378.0	9391.4
5°	9044.1	9030.7	9039.7	9035.1	9057.5	9070.8	9061.9	9075.2	9106.4	9128.8	9150.9
7.5°	8857.1	8857.1	8857.1	8865.9	8879.3	8906.1	8901.7	8910.5	8941.6	8972.8	9003.9
10°	8710.1	8705.7	8705.7	8727.9	8745.7	8776.8	8785.8	8812.6	8852.5	8892.7	8928.2
12.5°	8518.6	8523.2	8545.3	8567.7	8607.7	8656.6	8683.4	8719.1	8781.4	8848.1	8888.3
15°	8349.4	8353.8	8371.8	8416.1	8465.2	8523.2	8580.9	8638.8	8714.5	8799.2	8870.5
17.5°	8184.6	8189.0	8202.4	8251.5	8313.8	8389.5	8456.3	8532.0	8630.0	8727.9	8817.0
20°	8033.2	8028.8	8051.0	8095.5	8175.8	8246.9	8313.8	8402.9	8509.8	8630.0	8732.3
22.5°	7886.2	7886.2	7908.6	7953.1	8024.4	8095.5	8166.8	8260.3	8367.2	8483.0	8603.3
25°	7766.0	7761.6	7792.8	7815.1	7868.5	7939.8	8015.5	8091.1	8198.0	8327.2	8442.9
27.5°	7637.0	7632.6	7637.0	7663.7	7712.7	7766.0	7823.9	7890.8	7979.9	8086.8	8198.0
30°	7351.9	7356.3	7356.3	7378.7	7405.5	7463.2	7494.4	7561.3	7641.4	7730.4	7828.5
32.5°	6928.9	6933.3	6933.3	6942.3	6964.5	6991.2	7018.0	7066.9	7129.2	7204.9	7294.0
35°	6425.8	6425.8	6421.2	6425.8	6439.2	6439.2	6461.3	6439.2	6470.3	6514.9	6581.6
37.5°	5962.6	5953.6	5944.8	5935.8	5922.5	5900.3	5869.1	5815.6	5802.2	5784.4	5788.8
40°	5553.0	5548.6	5521.8	5499.4	5454.9	5401.6	5325.9	5232.4	5156.7	5067.6	4991.9
42.5°	5098.8	5094.2	5072.0	5031.9	4982.9	4902.8	4782.6	4657.9	4506.5	4372.9	4234.9
45°	4564.3	4577.7	4546.5	4502.0	4444.0	4368.3	4234.9	4083.3	3931.9	3758.4	3584.6
47.5°	4007.6	4003.2	3981.1	3954.3	3905.4	3829.7	3740.6	3575.8	3415.4	3255.2	3077.1
50°	3491.1	3473.3	3464.4	3437.8	3406.6	3344.3	3250.6	3117.0	2974.6	2823.2	2658.4
52.5°	3001.4	3001.4	2979.0	2961.2	2934.5	2885.5	2805.4	2698.6	2578.3	2435.7	2262.2
55°	2591.7	2582.7	2560.6	2538.2	2511.4	2480.3	2409.2	2320.1	2190.9	2052.8	1901.4
57.5°	2155.3	2150.7	2141.9	2115.2	2101.8	2070.6	1990.5	1901.4	1790.2	1670.0	1545.1
60°	1763.4	1745.7	1727.7	1709.9	1687.7	1656.6	1603.1	1527.4	1433.9	1327.0	1202.4
62.5°	1411.7	1438.3	1384.9	1384.9	1340.4	1313.6	1264.7	1220.2	1122.1	1024.2	917.4
65°	1099.9	1099.9	1077.6	1059.8	1033.0	1001.9	952.9	908.4	837.1	761.4	685.7
67.5°	841.7	837.1	814.9	797.1	774.8	757.0	721.4	667.9	614.6	552.3	489.8
70°	619.0	614.6	610.0	578.8	561.1	538.9	512.1	476.6	436.4	391.9	334.0
72.5°	445.2	445.2	432.0	418.6	400.9	382.9	356.3	334.0	298.4	267.2	227.1
75°	285.0	280.6	280.6	258.3	258.3	231.5	213.7	200.3	182.6	164.8	129.2
77.5°	204.9	200.3	195.9	187.0	178.2	169.2	155.8	138.0	124.6	106.9	93.5
80°	138.0	129.2	124.6	124.6	111.3	106.9	111.3	84.7	80.1	66.7	57.9
82.5°	84.7	84.7	80.1	80.1	75.7	71.3	57.9	57.9	53.5	48.9	40.1
85°	44.5	57.9	40.1	44.5	40.1	44.5	40.1	31.2	26.8	22.2	22.2
87.5°	26.8	17.8	17.8	26.8	22.2	17.8	17.8	17.8	13.4	9.0	9.0
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°	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4
2.5°	9382.6	9413.8	9409.2	9449.3	9462.7	9493.9	9493.9	9516.0	9529.4	9560.6	9587.3
5°	9159.9	9208.9	9222.2	9271.2	9311.3	9360.2	9391.4	9440.3	9484.9	9551.8	9614.1
7.5°	9021.9	9061.9	9088.6	9146.5	9191.1	9244.4	9297.9	9364.6	9427.0	9507.2	9596.3
10°	8955.0	9008.5	9048.5	9106.4	9159.9	9217.8	9271.2	9346.9	9418.2	9520.6	9618.5
12.5°	8937.2	8999.5	9048.5	9128.8	9182.1	9244.4	9306.7	9391.4	9467.1	9574.0	9685.4
15°	8937.2	9021.9	9088.6	9177.7	9240.0	9320.1	9387.0	9471.5	9556.2	9667.4	9774.3
17.5°	8919.4	9021.9	9106.4	9208.9	9288.9	9369.2	9453.7	9534.0	9622.9	9729.9	9850.0
20°	8848.1	8977.4	9079.6	9199.9	9284.5	9373.6	9458.3	9547.2	9640.9	9752.1	9854.6
22.5°	8723.5	8874.9	8990.7	9119.8	9217.8	9306.7	9391.4	9480.5	9582.9	9689.8	9796.7
25°	8558.7	8701.1	8826.0	8959.4	9057.5	9155.3	9235.6	9338.1	9431.5	9534.0	9618.5
27.5°	8309.3	8460.7	8580.9	8719.1	8808.0	8901.7	8968.4	9053.1	9142.1	9226.6	9293.5
30°	7935.4	8073.4	8198.0	8322.6	8411.7	8478.6	8549.7	8616.6	8674.6	8732.3	8790.2
32.5°	7387.5	7512.3	7632.6	7748.2	7819.5	7877.4	7930.8	7970.9	8002.1	8033.2	8037.6
35°	6635.1	6737.4	6813.1	6915.5	6982.4	7035.8	7035.8	7053.5	7049.1	7035.8	7022.4
37.5°	5793.4	5833.4	5864.5	5904.7	5909.1	5909.1	5882.5	5860.1	5824.6	5815.6	5788.8
40°	4916.2	4862.7	4822.5	4769.2	4738.0	4671.1	4613.4	4573.3	4515.3	4506.5	4497.6
42.5°	4083.3	3958.7	3847.4	3754.0	3647.1	3553.4	3468.9	3406.6	3362.1	3357.5	3362.1
45°	3406.6	3264.0	3099.2	2970.2	2850.0	2734.1	2622.9	2547.2	2507.0	2498.1	2507.0
47.5°	2894.5	2729.7	2569.4	2422.4	2293.3	2164.1	2052.8	1950.4	1901.4	1888.1	1883.7
50°	2489.3	2320.1	2150.7	1999.3	1856.9	1727.7	1589.7	1491.8	1429.5	1407.1	1389.3
52.5°	2093.0	1941.6	1767.8	1612.0	1469.4	1318.0	1175.6	1064.2	1001.9	975.3	957.3
55°	1745.7	1594.3	1433.9	1282.5	1131.1	979.7	837.1	730.2	663.5	632.4	610.0
57.5°	1393.7	1251.3	1113.3	961.9	837.1	690.3	547.7	454.2	396.3	360.7	342.9
60°	1077.6	966.3	846.1	721.4	601.2	481.0	365.1	276.0	231.5	204.9	182.6
62.5°	814.9	721.4	641.1	534.3	440.8	338.4	249.5	178.2	138.0	115.8	106.9
65°	587.8	516.5	445.2	378.5	311.8	236.1	169.2	115.8	80.1	66.7	62.3
67.5°	418.6	360.7	307.2	262.7	213.7	169.2	120.2	80.1	62.3	53.5	48.9
70°	293.8	249.5	213.7	173.8	142.4	111.3	93.5	57.9	35.6	40.1	31.2
72.5°	195.9	164.8	147.0	120.2	97.9	80.1	57.9	40.1	40.1	31.2	26.8
75°	106.9	97.9	75.7	57.9	48.9	44.5	17.8	9.0	4.4	13.4	4.4
77.5°	75.7	66.7	57.9	48.9	40.1	31.2	17.8	17.8	13.4	17.8	9.0
80°	48.9	40.1	35.6	35.6	22.2	13.4	9.0	9.0	13.4	4.4	4.4
82.5°	31.2	26.8	22.2	22.2	22.2	13.4	13.4	13.4	13.4	9.0	9.0
85°	17.8	13.4	9.0	9.0	4.4	9.0	0.0	4.4	4.4	0.0	0.0
87.5°	9.0	4.4	4.4	4.4	4.4	0.0	0.0	4.4	0.0	4.4	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°	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4	9529.4
2.5°	9605.1	9622.9	9645.3	9663.0	9703.2	9712.0	9729.9	9747.7	9761.1	9774.3	9778.9
5°	9667.4	9734.3	9796.7	9863.4	9948.1	10006.0	10072.7	10130.6	10188.5	10237.5	10273.0
7.5°	9685.4	9787.7	9881.3	9997.0	10121.6	10228.7	10339.9	10451.2	10567.0	10656.1	10731.8
10°	9721.0	9845.6	9965.8	10103.9	10264.2	10406.7	10544.7	10691.7	10838.7	10963.3	11074.7
12.5°	9783.3	9921.3	10050.5	10201.9	10366.7	10526.9	10678.3	10843.1	10999.0	11137.1	11261.7
15°	9885.7	10014.8	10139.6	10282.0	10446.8	10593.8	10745.2	10905.4	11061.4	11203.8	11319.6
17.5°	9952.5	10072.7	10197.3	10326.6	10464.6	10598.2	10740.6	10883.2	11025.6	11154.8	11261.7
20°	9952.5	10068.3	10161.8	10277.6	10406.7	10522.5	10638.3	10763.0	10887.6	10994.5	11096.9
22.5°	9872.4	9983.6	10054.9	10144.0	10255.3	10353.3	10415.6	10553.6	10647.1	10740.6	10816.3
25°	9685.4	9765.5	9823.4	9885.7	9974.8	10041.5	10095.1	10175.2	10268.6	10304.4	10357.7
27.5°	9346.9	9404.8	9435.9	9449.3	9493.9	9529.4	9538.4	9574.0	9614.1	9622.9	9645.3
30°	8812.6	8817.0	8803.6	8799.2	8776.8	8750.3	8745.7	8741.3	8723.5	8705.7	8710.1
32.5°	8006.5	7984.3	7930.8	7873.0	7815.1	7752.8	7717.1	7672.5	7645.8	7619.2	7588.0
35°	6964.5	6911.1	6835.4	6764.1	6697.4	6648.3	6568.2	6541.4	6514.9	6479.1	6470.3
37.5°	5739.9	5708.7	5637.4	5584.1	5548.6	5526.2	5486.0	5459.5	5459.5	5446.1	5437.1
40°	4475.2	4466.4	4439.6	4453.0	4435.2	4444.0	4439.6	4430.7	4453.0	4453.0	4462.0
42.5°	3357.5	3362.1	3375.5	3384.3	3411.0	3415.4	3437.8	3437.8	3451.2	3464.4	3473.3
45°	2498.1	2516.0	2516.0	2533.8	2560.6	2565.0	2573.8	2578.3	2587.1	2609.5	2618.3
47.5°	1874.7	1879.1	1879.1	1883.7	1892.5	1901.4	1897.1	1901.4	1914.8	1905.8	1914.8
50°	1384.9	1389.3	1376.0	1362.6	1376.0	1376.0	1371.6	1358.2	1371.6	1353.8	1362.6
52.5°	944.1	939.5	926.2	930.7	921.8	917.4	917.4	908.4	908.4	908.4	890.6
55°	596.8	596.8	587.8	587.8	583.4	574.4	570.0	565.4	561.1	556.7	556.7
57.5°	334.0	338.4	325.2	320.6	325.2	320.6	311.8	311.8	311.8	298.4	307.2
60°	182.6	178.2	173.8	169.2	164.8	169.2	169.2	160.4	160.4	160.4	164.8
62.5°	97.9	97.9	93.5	93.5	89.1	89.1	97.9	84.7	89.1	84.7	89.1
65°	53.5	66.7	48.9	48.9	62.3	57.9	53.5	53.5	57.9	48.9	53.5
67.5°	57.9	40.1	35.6	40.1	35.6	35.6	35.6	44.5	40.1	31.2	40.1
70°	26.8	31.2	31.2	22.2	35.6	17.8	31.2	17.8	26.8	22.2	26.8
72.5°	26.8	26.8	26.8	17.8	26.8	17.8	22.2	22.2	17.8	17.8	26.8
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°	9.0	9.0	4.4	4.4	4.4	4.4	9.0	9.0	9.0	0.0	4.4
80°	9.0	9.0	0.0	4.4	0.0	0.0	4.4	0.0	4.4	0.0	9.0
82.5°	4.4	9.0	4.4	4.4	9.0	9.0	9.0	4.4	4.4	4.4	4.4
85°	0.0	4.4	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0	4.4
87.5°	0.0	4.4	0.0	0.0	0.0	0.0	4.4	4.4	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: P249704

CATALOG NUMBER: LSR8B150D010 EC8B150827 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9529.4	9529.4	9529.4	9529.4
2.5°	9783.3	9787.7	9796.7	9792.3
5°	10299.8	10335.5	10353.3	10348.9
7.5°	10785.1	10847.6	10883.2	10883.2
10°	11159.2	11230.5	11283.9	11292.9
12.5°	11359.6	11439.9	11511.2	11493.2
15°	11417.5	11497.8	11568.9	11555.5
17.5°	11350.8	11430.9	11484.4	11475.4
20°	11168.2	11234.9	11288.5	11283.9
22.5°	10883.2	10941.1	10985.7	10981.1
25°	10402.3	10442.4	10478.0	10460.2
27.5°	9663.0	9676.4	9698.6	9672.0
30°	8679.0	8687.8	8696.7	8692.3
32.5°	7574.6	7570.1	7561.3	7552.3
35°	6456.9	6456.9	6461.3	6434.6
37.5°	5441.5	5437.1	5450.5	5437.1
40°	4470.8	4466.4	4484.2	4462.0
42.5°	3486.7	3500.1	3504.5	3504.5
45°	2622.9	2627.3	2631.7	2631.7
47.5°	1914.8	1919.2	1941.6	1914.8
50°	1353.8	1358.2	1362.6	1353.8
52.5°	895.0	899.6	895.0	881.6
55°	547.7	552.3	552.3	552.3
57.5°	293.8	298.4	298.4	293.8
60°	160.4	155.8	160.4	151.4
62.5°	84.7	93.5	89.1	80.1
65°	53.5	53.5	53.5	62.3
67.5°	44.5	35.6	40.1	31.2
70°	26.8	31.2	31.2	22.2
72.5°	22.2	22.2	22.2	26.8
75°	0.0	0.0	0.0	0.0
77.5°	9.0	9.0	9.0	4.4
80°	4.4	0.0	4.4	0.0
82.5°	4.4	4.4	9.0	4.4
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)