

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: P249259

Luminaire Tested: **LSR8B150D010 EC8B150935 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249259  
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 EC8B150935 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 3500 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13969.0 lumens  
Efficiency: N/A  
Efficacy: 88.1 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

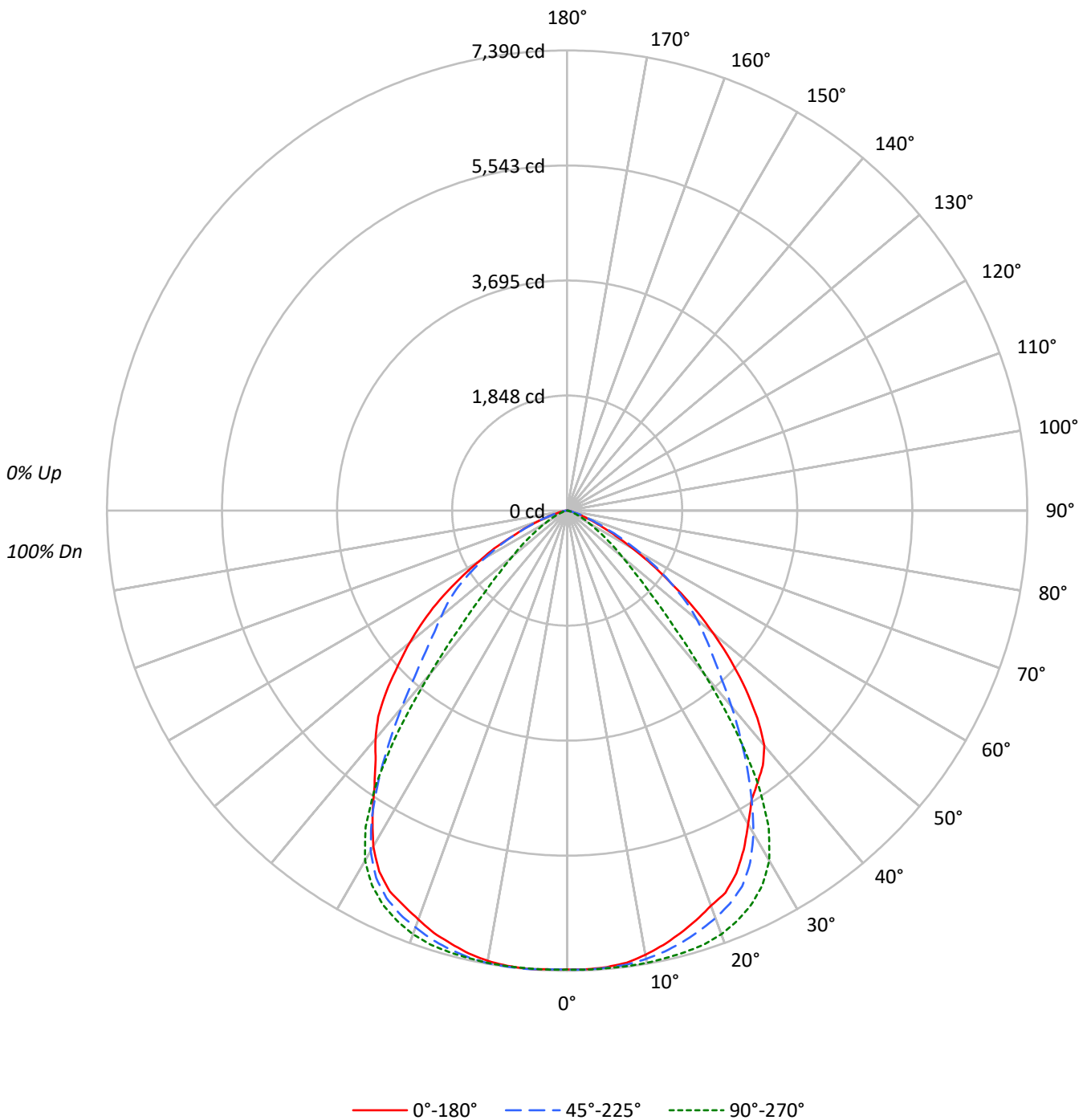
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	227273	227273	227273
5°	227773	228389	228633
10°	226815	230904	229912
15°	224302	234281	229860
20°	221608	237573	229268
25°	218731	237849	229503
30°	206932	231159	221723
35°	200753	200900	202989
40°	198267	138228	192696
45°	176665	82984	179081
50°	146897	55231	158286
55°	110173	38074	134205
60°	74661	25372	101254
65°	45034	16454	69565
70°	24965	8917	42799
75°	11319	3777	22160
80°	9838	4209	15449
85°	11216	5590	15426



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	703.4	5.0
10°-20°	2042.8	14.6
20°-30°	3100.5	22.2
30°-40°	3256.5	23.3
40°-50°	2441.5	17.5
50°-60°	1566.5	11.2
60°-70°	670.1	4.8
70°-80°	158.3	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°	5846.7	41.9
0°-40°	9103.1	65.2
0°-60°	13111.1	93.9
0°-90°	13969.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13969.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	7370	7370	7370	7370	7370	
5°	7358	7370	7378	7390	7386	699
15°	7026	7173	7339	7291	7200	1982
25°	6429	6654	6991	6864	6745	2937
35°	5333	5036	5337	5274	5392	3347
45°	4051	3311	1903	3216	4106	3102
55°	2049	2049	708	2136	2496	1859
65°	617	728	226	938	953	659
75°	95	111	32	190	186	138
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°	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3
2.5°	7374.3	7382.2	7378.3	7378.3	7374.3	7378.3	7378.3	7386.2	7386.2	7378.3	7374.3
5°	7358.4	7366.4	7366.4	7358.4	7358.4	7378.3	7366.4	7374.3	7374.3	7370.3	7370.3
7.5°	7322.9	7322.9	7338.7	7326.9	7326.9	7338.7	7334.7	7342.6	7350.6	7354.5	7354.5
10°	7243.7	7251.6	7255.6	7255.6	7259.6	7271.4	7279.3	7295.2	7303.0	7311.0	7314.9
12.5°	7144.9	7156.7	7160.6	7156.7	7168.6	7184.4	7204.2	7224.0	7235.9	7251.6	7263.5
15°	7026.1	7026.1	7034.0	7045.9	7053.9	7077.6	7097.3	7121.1	7152.7	7172.6	7192.3
17.5°	6895.6	6903.5	6915.4	6915.4	6931.2	6970.7	6982.6	7018.3	7053.9	7073.6	7113.2
20°	6753.2	6761.1	6773.0	6780.9	6800.6	6832.3	6856.0	6887.7	6927.3	6962.9	7002.4
22.5°	6642.4	6626.6	6634.4	6642.4	6662.2	6689.9	6717.6	6757.1	6796.7	6832.3	6871.9
25°	6428.7	6432.7	6444.6	6452.5	6476.3	6500.0	6531.6	6579.1	6614.7	6654.3	6697.7
27.5°	6140.0	6143.9	6163.7	6163.7	6183.4	6223.0	6242.8	6282.4	6329.9	6369.4	6420.9
30°	5811.6	5819.5	5819.5	5835.3	5847.2	5867.0	5886.8	5926.3	5950.1	5985.7	6056.9
32.5°	5511.0	5518.8	5514.8	5511.0	5499.1	5495.1	5491.1	5499.1	5507.0	5518.8	5546.5
35°	5332.9	5313.1	5297.3	5269.6	5238.0	5198.4	5162.8	5115.3	5071.8	5036.2	4996.7
37.5°	5162.8	5158.8	5135.1	5095.5	5032.2	4961.0	4878.0	4775.1	4672.2	4561.4	4454.7
40°	4925.4	4913.5	4893.8	4838.4	4767.2	4680.1	4569.4	4442.8	4276.6	4106.5	3932.4
42.5°	4521.9	4525.8	4502.1	4458.6	4391.4	4308.2	4193.5	4055.1	3877.1	3675.2	3449.8
45°	4051.1	4051.1	4043.2	4007.6	3960.1	3892.8	3805.8	3691.1	3517.1	3311.3	3069.9
47.5°	3560.5	3564.5	3552.6	3544.7	3524.9	3481.4	3418.1	3331.1	3208.5	3010.6	2769.3
50°	3062.1	3062.1	3081.8	3077.9	3077.9	3062.1	3034.4	2982.9	2876.1	2717.9	2492.4
52.5°	2563.6	2571.5	2583.4	2599.2	2618.9	2650.6	2618.9	2595.2	2528.0	2405.3	2211.5
55°	2049.3	2057.2	2077.0	2104.6	2128.5	2160.1	2168.0	2168.0	2132.3	2049.3	1902.9
57.5°	1610.2	1598.3	1614.2	1637.9	1669.5	1701.2	1724.9	1752.6	1748.6	1693.2	1574.6
60°	1210.6	1214.6	1226.4	1250.2	1273.9	1301.6	1333.2	1357.0	1368.9	1341.2	1266.0
62.5°	882.2	882.2	898.0	921.7	933.6	973.2	993.0	1004.9	1016.7	1012.7	965.3
65°	617.2	625.0	633.0	644.9	656.7	680.4	692.3	716.0	724.0	727.9	692.3
67.5°	435.2	423.3	431.2	439.1	451.0	466.9	490.6	490.6	502.4	502.4	478.7
70°	276.9	276.9	280.9	292.7	300.7	304.6	312.6	320.4	332.3	328.3	328.3
72.5°	186.0	182.0	186.0	189.9	193.9	205.7	205.7	209.7	217.6	221.6	205.7
75°	95.0	98.9	106.8	102.9	114.7	106.8	110.7	122.6	118.7	110.7	110.7
77.5°	79.1	79.1	79.1	75.2	83.1	83.1	79.1	87.0	83.1	83.1	79.1
80°	55.4	59.3	55.4	51.4	55.4	51.4	51.4	51.4	51.4	51.4	47.4
82.5°	43.6	35.6	39.6	35.6	39.6	39.6	35.6	31.7	31.7	35.6	31.7
85°	31.7	23.7	27.7	27.7	23.7	23.7	23.7	23.7	23.7	19.7	19.7
87.5°	19.7	11.9	11.9	11.9	15.8	15.8	15.8	11.9	15.8	15.8	7.9
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°	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3
2.5°	7382.2	7378.3	7386.2	7382.2	7382.2	7378.3	7382.2	7378.3	7386.2	7370.3	7374.3
5°	7382.2	7374.3	7378.3	7382.2	7386.2	7378.3	7378.3	7378.3	7386.2	7378.3	7382.2
7.5°	7366.4	7362.4	7374.3	7382.2	7378.3	7374.3	7382.2	7378.3	7386.2	7382.2	7390.1
10°	7334.7	7338.7	7346.6	7358.4	7362.4	7366.4	7374.3	7374.3	7386.2	7370.3	7378.3
12.5°	7287.3	7303.0	7322.9	7330.7	7346.6	7346.6	7354.5	7358.4	7366.4	7362.4	7374.3
15°	7227.9	7247.7	7271.4	7291.2	7311.0	7322.9	7334.7	7338.7	7350.6	7338.7	7342.6
17.5°	7156.7	7180.4	7216.0	7239.7	7271.4	7283.3	7299.1	7307.0	7318.9	7311.0	7314.9
20°	7057.8	7085.5	7125.0	7160.6	7180.4	7208.1	7227.9	7239.7	7247.7	7239.7	7243.7
22.5°	6919.3	6958.9	7010.3	7038.0	7077.6	7101.3	7105.3	7133.0	7152.7	7133.0	7140.9
25°	6757.1	6796.7	6836.3	6895.6	6931.2	6958.9	6986.6	6990.6	7010.3	7006.3	7002.4
27.5°	6488.1	6539.6	6606.8	6654.3	6701.7	6745.3	6776.9	6784.8	6804.6	6796.7	6800.6
30°	6120.1	6175.6	6238.9	6314.0	6381.3	6424.8	6464.4	6492.0	6511.8	6500.0	6496.0
32.5°	5598.0	5653.4	5720.6	5795.8	5874.9	5938.2	5985.7	6021.3	6045.0	6037.1	6017.3
35°	5000.6	5016.4	5060.0	5119.3	5186.5	5253.8	5297.3	5336.8	5364.5	5372.4	5372.4
37.5°	4387.4	4336.0	4304.3	4304.3	4343.8	4371.5	4411.1	4434.8	4478.4	4494.2	4506.1
40°	3793.9	3675.2	3564.5	3481.4	3426.1	3422.1	3422.1	3433.9	3473.5	3524.9	3572.4
42.5°	3263.8	3073.9	2903.8	2749.5	2638.8	2575.5	2547.8	2551.8	2583.4	2630.9	2709.9
45°	2840.5	2603.2	2389.5	2203.6	2053.2	1954.3	1906.9	1902.9	1926.6	1982.0	2069.1
47.5°	2512.2	2258.9	2017.6	1804.0	1641.8	1535.0	1479.6	1463.8	1479.6	1531.0	1633.9
50°	2239.2	1978.1	1728.9	1507.3	1333.2	1222.5	1171.0	1151.3	1171.0	1214.6	1317.4
52.5°	1986.0	1717.0	1483.6	1269.9	1084.0	989.0	933.6	921.7	933.6	985.0	1068.2
55°	1693.2	1463.8	1234.3	1020.7	858.5	763.6	720.0	708.2	720.0	767.5	854.6
57.5°	1404.5	1206.6	1004.9	811.0	672.6	589.4	549.9	534.1	561.7	593.4	696.3
60°	1135.4	977.2	807.0	636.9	522.2	447.0	415.4	411.4	419.3	458.9	530.1
62.5°	890.2	759.6	625.0	486.6	391.7	360.0	320.4	316.5	324.4	348.1	403.6
65°	640.9	557.9	455.0	356.0	280.9	237.4	221.6	225.5	233.4	249.3	300.7
67.5°	447.0	387.7	316.5	249.3	193.9	174.0	158.3	154.3	158.3	186.0	213.6
70°	300.7	265.0	213.6	189.9	134.6	106.8	110.7	98.9	114.7	114.7	138.4
72.5°	197.8	174.0	142.4	110.7	95.0	75.2	75.2	71.2	79.1	83.1	102.9
75°	102.9	79.1	79.1	55.4	39.6	19.7	35.6	31.7	27.7	31.7	39.6
77.5°	71.2	59.3	55.4	43.6	39.6	31.7	31.7	31.7	31.7	35.6	39.6
80°	43.6	43.6	31.7	27.7	23.7	19.7	23.7	23.7	23.7	23.7	27.7
82.5°	27.7	23.7	23.7	19.7	19.7	15.8	15.8	15.8	15.8	15.8	23.7
85°	23.7	15.8	15.8	11.9	15.8	27.7	11.9	15.8	15.8	15.8	11.9
87.5°	7.9	11.9	11.9	11.9	7.9	4.0	7.9	11.9	11.9	19.7	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°	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3	7370.3
2.5°	7382.2	7386.2	7386.2	7382.2	7382.2	7374.3	7390.1	7378.3	7382.2	7398.0	7386.2
5°	7390.1	7394.0	7394.0	7390.1	7390.1	7390.1	7394.0	7394.0	7390.1	7386.2	7394.0
7.5°	7405.9	7402.0	7402.0	7394.0	7394.0	7386.2	7394.0	7382.2	7390.1	7382.2	7394.0
10°	7386.2	7390.1	7386.2	7382.2	7382.2	7378.3	7378.3	7366.4	7370.3	7358.4	7366.4
12.5°	7374.3	7370.3	7370.3	7362.4	7354.5	7346.6	7342.6	7330.7	7330.7	7303.0	7314.9
15°	7342.6	7346.6	7334.7	7318.9	7311.0	7291.2	7283.3	7267.4	7251.6	7231.9	7235.9
17.5°	7314.9	7303.0	7287.3	7271.4	7239.7	7224.0	7208.1	7184.4	7176.4	7152.7	7144.9
20°	7231.9	7224.0	7204.2	7176.4	7156.7	7121.1	7105.3	7081.6	7061.7	7038.0	7026.1
22.5°	7125.0	7117.1	7093.4	7065.7	7034.0	7018.3	7002.4	6958.9	6939.1	6915.4	6911.4
25°	6990.6	6978.7	6954.9	6923.3	6907.4	6864.0	6848.1	6816.4	6808.6	6784.8	6780.9
27.5°	6784.8	6769.0	6741.3	6701.7	6674.0	6646.3	6630.6	6606.8	6598.9	6575.1	6571.2
30°	6476.3	6456.4	6401.1	6385.3	6337.7	6310.1	6310.1	6278.4	6282.4	6266.6	6266.6
32.5°	5989.6	5958.0	5914.4	5882.8	5851.1	5835.3	5835.3	5823.4	5831.4	5831.4	5839.3
35°	5344.8	5301.3	5277.5	5257.7	5257.7	5273.5	5321.0	5332.9	5356.7	5376.4	5392.3
37.5°	4517.9	4514.0	4541.7	4565.4	4624.8	4692.0	4775.1	4846.3	4913.5	4961.0	5008.5
40°	3623.8	3722.8	3801.9	3912.7	4003.6	4134.2	4284.5	4407.1	4521.9	4605.0	4692.0
42.5°	2828.6	2955.2	3121.4	3283.6	3445.8	3623.8	3821.7	3991.8	4142.1	4256.8	4347.8
45°	2203.6	2377.6	2579.5	2785.2	2994.8	3216.4	3422.1	3596.2	3754.4	3873.1	3964.1
47.5°	1776.3	1966.2	2195.6	2421.2	2658.5	2891.9	3121.4	3271.8	3402.3	3497.2	3580.4
50°	1467.7	1669.5	1910.8	2168.0	2405.3	2638.8	2836.6	2982.9	3089.8	3172.8	3224.2
52.5°	1226.4	1440.0	1697.2	1954.3	2191.7	2405.3	2583.4	2694.2	2781.2	2840.5	2888.0
55°	1012.7	1218.5	1459.9	1701.2	1934.6	2136.3	2282.7	2365.8	2433.0	2468.6	2496.3
57.5°	826.9	1016.7	1238.3	1459.9	1661.6	1827.8	1942.5	2025.6	2057.2	2084.9	2080.9
60°	648.9	826.9	1028.6	1218.5	1392.6	1527.0	1610.2	1657.6	1681.3	1693.2	1685.3
62.5°	510.3	672.6	826.9	993.0	1119.6	1234.3	1313.5	1313.5	1325.3	1329.3	1341.2
65°	379.8	502.4	636.9	759.6	862.4	937.6	981.2	993.0	1008.9	1004.9	997.0
67.5°	280.9	371.9	470.7	561.7	633.0	680.4	712.1	739.8	735.9	727.9	724.0
70°	193.9	253.2	340.3	395.6	447.0	494.6	502.4	506.4	510.3	514.3	506.4
72.5°	134.6	178.0	225.5	273.0	304.6	324.4	344.2	348.1	348.1	348.1	344.2
75°	67.3	91.0	134.6	154.3	182.0	189.9	205.7	205.7	217.6	201.7	197.8
77.5°	59.3	71.2	95.0	110.7	122.6	134.6	138.4	150.3	146.4	138.4	142.4
80°	35.6	43.6	59.3	67.3	83.1	87.0	91.0	95.0	91.0	95.0	95.0
82.5°	27.7	31.7	39.6	39.6	51.4	51.4	55.4	55.4	59.3	59.3	59.3
85°	15.8	27.7	23.7	47.4	31.7	31.7	39.6	47.4	39.6	39.6	47.4
87.5°	15.8	15.8	11.9	15.8	15.8	15.8	19.7	23.7	23.7	27.7	23.7
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: P249259

CATALOG NUMBER: LSR8B150D010 EC8B150935 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	7370.3	7370.3	7370.3	7370.3
2.5°	7382.2	7390.1	7378.3	7374.3
5°	7394.0	7394.0	7386.2	7386.2
7.5°	7394.0	7394.0	7382.2	7374.3
10°	7362.4	7362.4	7350.6	7342.6
12.5°	7303.0	7303.0	7299.1	7287.3
15°	7227.9	7227.9	7212.1	7200.2
17.5°	7125.0	7133.0	7113.2	7113.2
20°	7014.3	7010.3	6994.5	6986.6
22.5°	6899.6	6891.6	6887.7	6864.0
25°	6776.9	6769.0	6757.1	6745.3
27.5°	6567.3	6563.3	6551.4	6535.6
30°	6246.8	6242.8	6227.0	6227.0
32.5°	5831.4	5827.4	5811.6	5815.6
35°	5400.1	5416.0	5408.1	5392.3
37.5°	5040.1	5052.0	5060.0	5052.0
40°	4739.5	4775.1	4779.1	4787.0
42.5°	4419.1	4466.5	4482.4	4490.2
45°	4035.2	4078.8	4114.4	4106.5
47.5°	3643.6	3675.2	3706.9	3683.2
50°	3267.8	3287.6	3299.5	3299.5
52.5°	2911.8	2911.8	2907.8	2911.8
55°	2504.2	2504.2	2488.5	2496.3
57.5°	2077.0	2084.9	2073.0	2053.2
60°	1681.3	1661.6	1653.6	1641.8
62.5°	1309.5	1309.5	1281.8	1317.4
65°	981.2	969.3	957.4	953.4
67.5°	712.1	708.2	696.3	692.3
70°	502.4	486.6	482.6	474.7
72.5°	336.3	336.3	328.3	328.3
75°	205.7	186.0	182.0	186.0
77.5°	142.4	138.4	138.4	134.6
80°	95.0	91.0	98.9	87.0
82.5°	59.3	63.3	59.3	63.3
85°	39.6	47.4	43.6	43.6
87.5°	23.7	23.7	23.7	23.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)