

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: P249412

Luminaire Tested: **LSR8B150D010 EC8B150827 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249412  
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 EC8B150827 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13670.0 lumens  
Efficiency: N/A  
Efficacy: 86.2 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

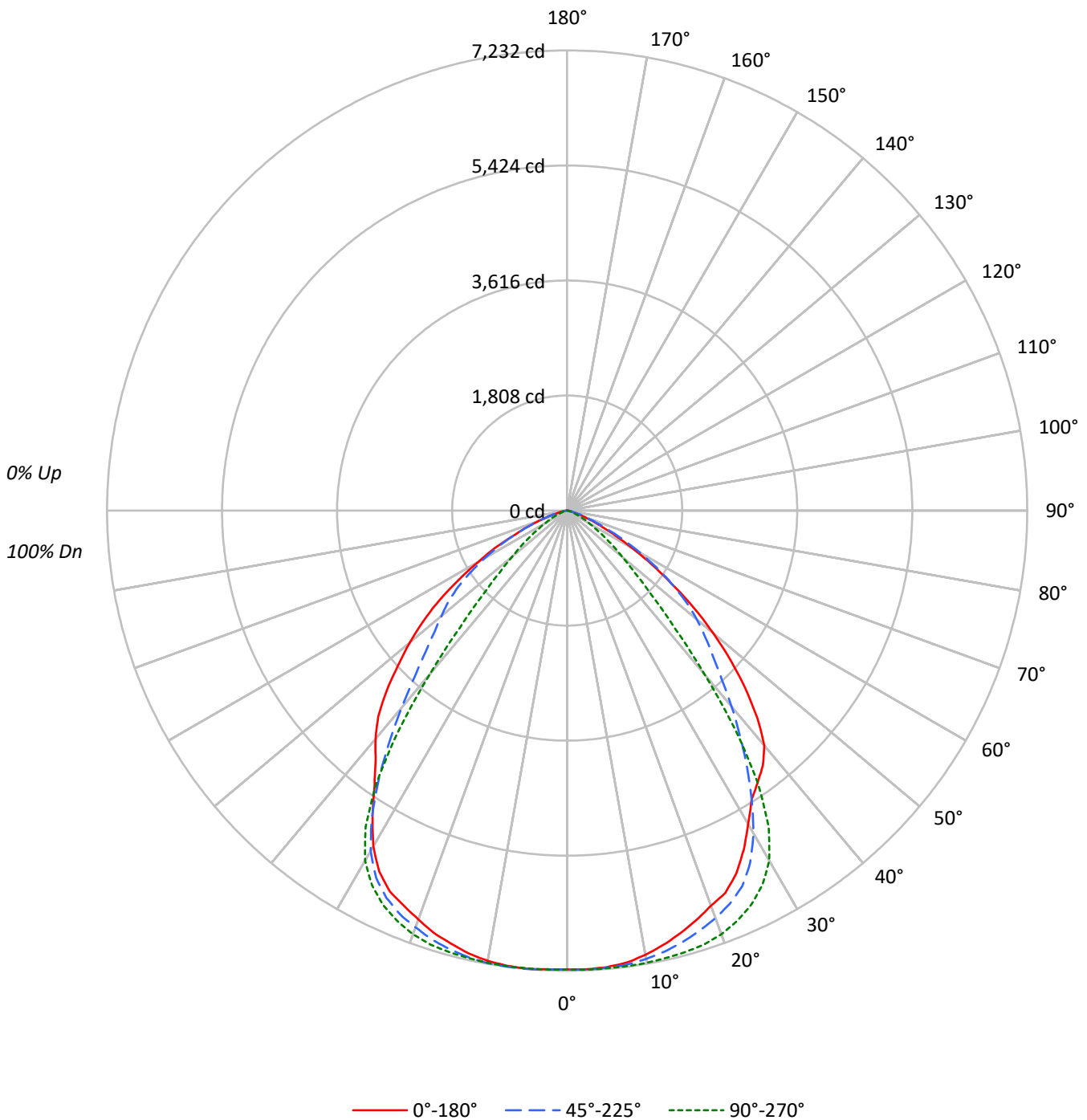
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	222410	222410	222410
5°	222897	223498	223739
10°	221961	225960	224992
15°	219501	229266	224940
20°	216867	232490	224362
25°	214049	232756	224590
30°	202502	226213	216977
35°	196457	196601	198645
40°	194024	135269	188570
45°	172884	81209	175248
50°	143755	54046	154895
55°	107813	37257	131334
60°	73064	24829	99089
65°	44071	16103	68076
70°	24433	8727	41888
75°	11068	3693	21684
80°	9625	4120	15130
85°	10968	5449	15072



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	688.3	5.0
10°-20°	1999.0	14.6
20°-30°	3034.1	22.2
30°-40°	3186.8	23.3
40°-50°	2389.2	17.5
50°-60°	1533.0	11.2
60°-70°	655.8	4.8
70°-80°	154.9	1.1
80°-90°	28.8	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°	5721.5	41.9
0°-40°	8908.3	65.2
0°-60°	12830.5	93.9
0°-90°	13670.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13670.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	7213	7213	7213	7213	7213	
5°	7201	7213	7220	7232	7228	684
15°	6876	7019	7182	7135	7046	1939
25°	6291	6512	6841	6717	6601	2874
35°	5219	4928	5223	5161	5277	3275
45°	3964	3240	1862	3148	4019	3036
55°	2005	2005	693	2091	2443	1819
65°	604	712	221	918	933	645
75°	93	108	31	186	182	135
85°	31	19	15	31	43	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°	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6
2.5°	7216.4	7224.2	7220.3	7220.3	7216.4	7220.3	7220.3	7228.1	7228.1	7220.3	7216.4
5°	7200.9	7208.7	7208.7	7200.9	7200.9	7220.3	7208.7	7216.4	7216.4	7212.6	7212.6
7.5°	7166.1	7166.1	7181.6	7170.0	7170.0	7181.6	7177.7	7185.5	7193.2	7197.1	7197.1
10°	7088.7	7096.4	7100.3	7100.3	7104.2	7115.7	7123.5	7139.0	7146.7	7154.5	7158.4
12.5°	6991.9	7003.5	7007.4	7003.5	7015.1	7030.6	7050.0	7069.3	7081.0	7096.4	7108.1
15°	6875.7	6875.7	6883.5	6895.1	6902.9	6926.1	6945.4	6968.6	6999.6	7019.0	7038.4
17.5°	6748.0	6755.8	6767.3	6767.3	6782.9	6821.5	6833.2	6868.0	6902.9	6922.2	6961.0
20°	6608.7	6616.3	6628.0	6635.8	6655.1	6686.1	6709.3	6740.2	6779.0	6813.8	6852.5
22.5°	6500.2	6484.8	6492.4	6500.2	6519.6	6546.7	6573.8	6612.5	6651.2	6686.1	6724.8
25°	6291.1	6295.0	6306.7	6314.3	6337.6	6360.9	6391.8	6438.2	6473.1	6511.9	6554.4
27.5°	6008.6	6012.4	6031.8	6031.8	6051.1	6089.8	6109.2	6147.9	6194.4	6233.1	6283.5
30°	5687.2	5694.9	5694.9	5710.4	5722.0	5741.4	5760.7	5799.5	5822.7	5857.6	5927.3
32.5°	5393.0	5400.7	5396.8	5393.0	5381.4	5377.5	5373.6	5381.4	5389.1	5400.7	5427.8
35°	5218.8	5199.4	5183.9	5156.8	5125.9	5087.1	5052.3	5005.9	4963.2	4928.4	4889.7
37.5°	5052.3	5048.4	5025.2	4986.4	4924.5	4854.9	4773.6	4672.9	4572.2	4463.8	4359.3
40°	4820.0	4808.3	4789.0	4734.8	4665.1	4580.0	4471.6	4347.7	4185.0	4018.6	3848.3
42.5°	4425.1	4429.0	4405.7	4363.1	4297.4	4216.0	4103.7	3968.3	3794.1	3596.6	3375.9
45°	3964.4	3964.4	3956.6	3921.8	3875.4	3809.5	3724.4	3612.1	3441.8	3240.4	3004.2
47.5°	3484.3	3488.2	3476.6	3468.9	3449.5	3406.9	3345.0	3259.8	3139.8	2946.2	2710.0
50°	2996.6	2996.6	3015.9	3012.0	3012.0	2996.6	2969.5	2919.1	2814.6	2659.7	2439.1
52.5°	2508.7	2516.5	2528.1	2543.6	2562.9	2593.9	2562.9	2539.7	2473.8	2353.8	2164.2
55°	2005.4	2013.2	2032.5	2059.6	2082.9	2113.9	2121.5	2121.5	2086.7	2005.4	1862.2
57.5°	1575.7	1564.1	1579.6	1602.8	1633.8	1664.8	1688.0	1715.1	1711.2	1657.0	1540.9
60°	1184.7	1188.6	1200.1	1223.4	1246.6	1273.7	1304.7	1327.9	1339.6	1312.5	1238.9
62.5°	863.4	863.4	878.8	902.0	913.7	952.4	971.7	983.4	994.9	991.1	944.6
65°	604.0	611.7	619.4	631.1	642.6	665.9	677.5	700.7	708.5	712.4	677.5
67.5°	425.9	414.2	422.0	429.7	441.3	456.9	480.1	480.1	491.6	491.6	468.4
70°	271.0	271.0	274.9	286.5	294.2	298.1	305.9	313.6	325.2	321.3	321.3
72.5°	182.0	178.1	182.0	185.9	189.7	201.3	201.3	205.2	212.9	216.8	201.3
75°	92.9	96.8	104.5	100.7	112.3	104.5	108.4	120.0	116.1	108.4	108.4
77.5°	77.4	77.4	77.4	73.6	81.3	81.3	77.4	85.2	81.3	81.3	77.4
80°	54.2	58.1	54.2	50.3	54.2	50.3	50.3	50.3	50.3	50.3	46.4
82.5°	42.6	34.9	38.7	34.9	38.7	38.7	34.9	31.0	31.0	34.9	31.0
85°	31.0	23.2	27.1	27.1	23.2	23.2	23.2	23.2	23.2	19.3	19.3
87.5°	19.3	11.6	11.6	11.6	15.4	15.4	15.4	11.6	15.4	15.4	7.8
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6
2.5°	7224.2	7220.3	7228.1	7224.2	7224.2	7220.3	7224.2	7220.3	7228.1	7212.6	7216.4
5°	7224.2	7216.4	7220.3	7224.2	7228.1	7220.3	7220.3	7220.3	7228.1	7220.3	7224.2
7.5°	7208.7	7204.8	7216.4	7224.2	7220.3	7216.4	7224.2	7220.3	7228.1	7224.2	7231.9
10°	7177.7	7181.6	7189.4	7200.9	7204.8	7208.7	7216.4	7216.4	7228.1	7212.6	7220.3
12.5°	7131.3	7146.7	7166.1	7173.8	7189.4	7189.4	7197.1	7200.9	7208.7	7204.8	7216.4
15°	7073.2	7092.5	7115.7	7135.2	7154.5	7166.1	7177.7	7181.6	7193.2	7181.6	7185.5
17.5°	7003.5	7026.7	7061.6	7084.8	7115.7	7127.4	7142.8	7150.6	7162.3	7154.5	7158.4
20°	6906.7	6933.9	6972.5	7007.4	7026.7	7053.8	7073.2	7084.8	7092.5	7084.8	7088.7
22.5°	6771.2	6810.0	6860.3	6887.4	6926.1	6949.3	6953.2	6980.3	6999.6	6980.3	6988.1
25°	6612.5	6651.2	6689.9	6748.0	6782.9	6810.0	6837.1	6840.9	6860.3	6856.4	6852.5
27.5°	6349.2	6399.6	6465.3	6511.9	6558.3	6600.9	6631.9	6639.5	6659.0	6651.2	6655.1
30°	5989.1	6043.4	6105.4	6178.9	6244.7	6287.3	6326.0	6353.1	6372.4	6360.9	6357.0
32.5°	5478.2	5532.4	5598.2	5671.7	5749.2	5811.0	5857.6	5892.4	5915.6	5907.9	5888.5
35°	4893.6	4909.0	4951.7	5009.7	5075.5	5141.3	5183.9	5222.6	5249.7	5257.5	5257.5
37.5°	4293.5	4243.2	4212.2	4212.2	4250.9	4278.0	4316.7	4339.9	4382.5	4398.0	4409.6
40°	3712.7	3596.6	3488.2	3406.9	3352.7	3348.9	3348.9	3360.4	3399.2	3449.5	3496.0
42.5°	3194.0	3008.1	2841.7	2690.7	2582.3	2520.4	2493.3	2497.1	2528.1	2574.5	2651.9
45°	2779.7	2547.4	2338.4	2156.4	2009.3	1912.5	1866.1	1862.2	1885.4	1939.6	2024.8
47.5°	2458.4	2210.6	1974.4	1765.4	1606.7	1502.1	1447.9	1432.5	1447.9	1498.2	1598.9
50°	2191.3	1935.8	1691.9	1475.0	1304.7	1196.3	1145.9	1126.6	1145.9	1188.6	1289.2
52.5°	1943.5	1680.2	1451.8	1242.7	1060.8	967.8	913.7	902.0	913.7	964.0	1045.3
55°	1657.0	1432.5	1207.9	998.8	840.1	747.2	704.6	693.0	704.6	751.1	836.3
57.5°	1374.4	1180.8	983.4	793.6	658.2	576.8	538.2	522.6	549.7	580.7	681.4
60°	1111.1	956.3	789.8	623.3	511.1	437.5	406.5	402.6	410.4	449.1	518.7
62.5°	871.1	743.3	611.7	476.2	383.3	352.3	313.6	309.8	317.4	340.6	394.9
65°	627.2	545.9	445.2	348.4	274.9	232.3	216.8	220.7	228.4	243.9	294.2
67.5°	437.5	379.4	309.8	243.9	189.7	170.3	154.9	151.0	154.9	182.0	209.1
70°	294.2	259.4	209.1	185.9	131.7	104.5	108.4	96.8	112.3	112.3	135.5
72.5°	193.5	170.3	139.3	108.4	92.9	73.6	73.6	69.7	77.4	81.3	100.7
75°	100.7	77.4	77.4	54.2	38.7	19.3	34.9	31.0	27.1	31.0	38.7
77.5°	69.7	58.1	54.2	42.6	38.7	31.0	31.0	31.0	31.0	34.9	38.7
80°	42.6	42.6	31.0	27.1	23.2	19.3	23.2	23.2	23.2	23.2	27.1
82.5°	27.1	23.2	23.2	19.3	19.3	15.4	15.4	15.4	15.4	15.4	23.2
85°	23.2	15.4	15.4	11.6	15.4	27.1	11.6	15.4	15.4	15.4	11.6
87.5°	7.8	11.6	11.6	11.6	7.8	3.9	7.8	11.6	11.6	19.3	15.4
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°	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6	7212.6
2.5°	7224.2	7228.1	7228.1	7224.2	7224.2	7216.4	7231.9	7220.3	7224.2	7239.7	7228.1
5°	7231.9	7235.8	7235.8	7231.9	7231.9	7231.9	7235.8	7235.8	7231.9	7228.1	7235.8
7.5°	7247.4	7243.5	7243.5	7235.8	7235.8	7228.1	7235.8	7224.2	7231.9	7224.2	7235.8
10°	7228.1	7231.9	7228.1	7224.2	7224.2	7220.3	7220.3	7208.7	7212.6	7200.9	7208.7
12.5°	7216.4	7212.6	7212.6	7204.8	7197.1	7189.4	7185.5	7173.8	7173.8	7146.7	7158.4
15°	7185.5	7189.4	7177.7	7162.3	7154.5	7135.2	7127.4	7111.9	7096.4	7077.1	7081.0
17.5°	7158.4	7146.7	7131.3	7115.7	7084.8	7069.3	7053.8	7030.6	7022.8	6999.6	6991.9
20°	7077.1	7069.3	7050.0	7022.8	7003.5	6968.6	6953.2	6930.0	6910.6	6887.4	6875.7
22.5°	6972.5	6964.8	6941.5	6914.4	6883.5	6868.0	6852.5	6810.0	6790.5	6767.3	6763.5
25°	6840.9	6829.3	6806.1	6775.1	6759.6	6717.0	6701.5	6670.5	6662.8	6639.5	6635.8
27.5°	6639.5	6624.1	6597.0	6558.3	6531.2	6504.1	6488.6	6465.3	6457.7	6434.4	6430.6
30°	6337.6	6318.2	6264.0	6248.6	6202.1	6175.0	6175.0	6144.0	6147.9	6132.5	6132.5
32.5°	5861.4	5830.5	5787.8	5756.9	5725.9	5710.4	5710.4	5698.8	5706.6	5706.6	5714.3
35°	5230.4	5187.8	5164.5	5145.2	5145.2	5160.6	5207.2	5218.8	5242.0	5261.3	5276.9
37.5°	4421.2	4417.4	4444.5	4467.7	4525.8	4591.6	4672.9	4742.6	4808.3	4854.9	4901.3
40°	3546.3	3643.1	3720.5	3828.9	3917.9	4045.7	4192.8	4312.8	4425.1	4506.4	4591.6
42.5°	2768.1	2892.0	3054.6	3213.3	3372.1	3546.3	3739.9	3906.3	4053.4	4165.7	4254.7
45°	2156.4	2326.7	2524.2	2725.5	2930.7	3147.6	3348.9	3519.2	3674.1	3790.2	3879.2
47.5°	1738.3	1924.1	2148.6	2369.4	2601.6	2830.0	3054.6	3201.7	3329.4	3422.4	3503.7
50°	1436.3	1633.8	1869.9	2121.5	2353.8	2582.3	2775.8	2919.1	3023.6	3104.9	3155.2
52.5°	1200.1	1409.2	1660.9	1912.5	2144.8	2353.8	2528.1	2636.5	2721.7	2779.7	2826.1
55°	991.1	1192.4	1428.6	1664.8	1893.2	2090.6	2233.8	2315.2	2380.9	2415.8	2442.9
57.5°	809.2	994.9	1211.8	1428.6	1626.0	1788.7	1900.9	1982.2	2013.2	2040.3	2036.4
60°	635.0	809.2	1006.6	1192.4	1362.8	1494.3	1575.7	1622.1	1645.3	1657.0	1649.2
62.5°	499.4	658.2	809.2	971.7	1095.6	1207.9	1285.4	1285.4	1296.9	1300.8	1312.5
65°	371.6	491.6	623.3	743.3	843.9	917.5	960.2	971.7	987.3	983.4	975.6
67.5°	274.9	363.9	460.7	549.7	619.4	665.9	696.8	724.0	720.1	712.4	708.5
70°	189.7	247.8	333.0	387.2	437.5	484.0	491.6	495.5	499.4	503.3	495.5
72.5°	131.7	174.2	220.7	267.1	298.1	317.4	336.9	340.6	340.6	340.6	336.9
75°	65.8	89.0	131.7	151.0	178.1	185.9	201.3	201.3	212.9	197.4	193.5
77.5°	58.1	69.7	92.9	108.4	120.0	131.7	135.5	147.1	143.2	135.5	139.3
80°	34.9	42.6	58.1	65.8	81.3	85.2	89.0	92.9	89.0	92.9	92.9
82.5°	27.1	31.0	38.7	38.7	50.3	50.3	54.2	54.2	58.1	58.1	58.1
85°	15.4	27.1	23.2	46.4	31.0	31.0	38.7	46.4	38.7	38.7	46.4
87.5°	15.4	15.4	11.6	15.4	15.4	15.4	19.3	23.2	23.2	27.1	23.2
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: P249412

CATALOG NUMBER: LSR8B150D010 EC8B150827 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	7212.6	7212.6	7212.6	7212.6
2.5°	7224.2	7231.9	7220.3	7216.4
5°	7235.8	7235.8	7228.1	7228.1
7.5°	7235.8	7235.8	7224.2	7216.4
10°	7204.8	7204.8	7193.2	7185.5
12.5°	7146.7	7146.7	7142.8	7131.3
15°	7073.2	7073.2	7057.7	7046.1
17.5°	6972.5	6980.3	6961.0	6961.0
20°	6864.1	6860.3	6844.8	6837.1
22.5°	6751.9	6744.1	6740.2	6717.0
25°	6631.9	6624.1	6612.5	6600.9
27.5°	6426.7	6422.8	6411.2	6395.7
30°	6113.0	6109.2	6093.7	6093.7
32.5°	5706.6	5702.7	5687.2	5691.1
35°	5284.5	5300.1	5292.3	5276.9
37.5°	4932.2	4943.9	4951.7	4943.9
40°	4638.0	4672.9	4676.8	4684.5
42.5°	4324.5	4370.9	4386.4	4394.1
45°	3948.9	3991.5	4026.4	4018.6
47.5°	3565.6	3596.6	3627.5	3604.3
50°	3197.9	3217.2	3228.8	3228.8
52.5°	2849.4	2849.4	2845.6	2849.4
55°	2450.6	2450.6	2435.2	2442.9
57.5°	2032.5	2040.3	2028.6	2009.3
60°	1645.3	1626.0	1618.3	1606.7
62.5°	1281.5	1281.5	1254.4	1289.2
65°	960.2	948.5	936.9	933.0
67.5°	696.8	693.0	681.4	677.5
70°	491.6	476.2	472.3	464.6
72.5°	329.1	329.1	321.3	321.3
75°	201.3	182.0	178.1	182.0
77.5°	139.3	135.5	135.5	131.7
80°	92.9	89.0	96.8	85.2
82.5°	58.1	62.0	58.1	62.0
85°	38.7	46.4	42.6	42.6
87.5°	23.2	23.2	23.2	23.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)