

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: P249538

Luminaire Tested: **LSR8B150D010 EC8B150835 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249538  
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 EC8B150835 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16281.0 lumens  
Efficiency: N/A  
Efficacy: 102.7 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

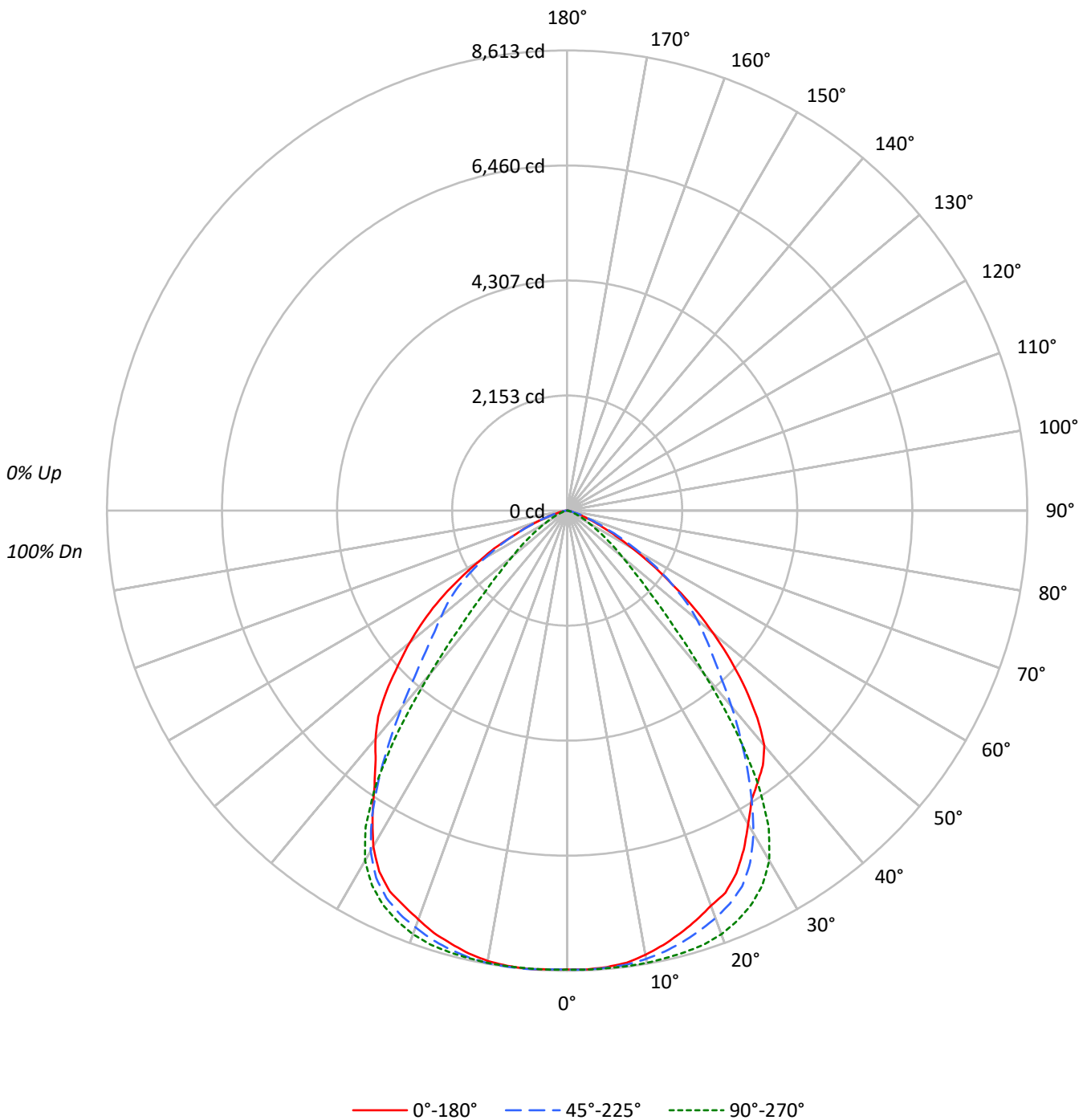
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	264890	264890	264890
5°	265472	266187	266475
10°	264355	269120	267965
15°	261426	273056	267904
20°	258286	276896	267212
25°	254936	277215	267487
30°	241182	269418	258419
35°	233981	234151	236586
40°	231082	161108	224589
45°	205905	96721	208718
50°	171210	64370	184479
55°	128404	44375	156419
60°	87020	29572	118017
65°	52491	19182	81079
70°	29103	10395	49885
75°	13189	4396	25818
80°	11454	4901	18007
85°	13055	6510	17973



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CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	819.8	5.0
10°-20°	2380.8	14.6
20°-30°	3613.7	22.2
30°-40°	3795.4	23.3
40°-50°	2845.6	17.5
50°-60°	1825.8	11.2
60°-70°	781.0	4.8
70°-80°	184.5	1.1
80°-90°	34.3	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°	6814.3	41.9
0°-40°	10609.8	65.2
0°-60°	15281.1	93.9
0°-90°	16281.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16281.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	8590	8590	8590	8590	8590	
5°	8576	8590	8599	8613	8609	815
15°	8189	8360	8553	8498	8392	2310
25°	7493	7756	8148	8000	7862	3423
35°	6216	5870	6220	6146	6285	3901
45°	4722	3859	2218	3749	4786	3616
55°	2388	2388	825	2490	2910	2167
65°	719	848	263	1093	1111	768
75°	111	129	37	221	217	161
85°	37	23	18	37	51	39
90°	0	0	0	0	0	



TEST NUMBER: P249538

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2
2.5°	8594.8	8604.1	8599.4	8599.4	8594.8	8599.4	8599.4	8608.7	8608.7	8599.4	8594.8
5°	8576.3	8585.6	8585.6	8576.3	8576.3	8599.4	8585.6	8594.8	8594.8	8590.2	8590.2
7.5°	8534.9	8534.9	8553.3	8539.5	8539.5	8553.3	8548.7	8557.9	8567.2	8571.8	8571.8
10°	8442.6	8451.9	8456.5	8456.5	8461.1	8474.9	8484.1	8502.6	8511.8	8521.0	8525.6
12.5°	8327.4	8341.2	8345.8	8341.2	8355.1	8373.4	8396.6	8419.6	8433.5	8451.9	8465.7
15°	8189.0	8189.0	8198.2	8212.1	8221.4	8249.0	8272.0	8299.7	8336.6	8359.7	8382.7
17.5°	8036.9	8046.1	8059.9	8059.9	8078.4	8124.4	8138.3	8179.8	8221.4	8244.4	8290.5
20°	7870.9	7880.1	7893.9	7903.2	7926.2	7963.1	7990.8	8027.6	8073.8	8115.3	8161.3
22.5°	7741.8	7723.4	7732.5	7741.8	7764.9	7797.1	7829.4	7875.4	7921.6	7963.1	8009.3
25°	7492.8	7497.4	7511.3	7520.4	7548.1	7575.8	7612.7	7668.0	7709.5	7755.6	7806.3
27.5°	7156.2	7160.8	7183.8	7183.8	7206.9	7253.0	7276.0	7322.2	7377.6	7423.6	7483.6
30°	6773.5	6782.7	6782.7	6801.2	6814.9	6838.0	6861.1	6907.2	6934.8	6976.4	7059.4
32.5°	6423.1	6432.2	6427.6	6423.1	6409.2	6404.6	6400.0	6409.2	6418.5	6432.2	6464.5
35°	6215.6	6192.5	6174.1	6141.8	6104.9	6058.8	6017.3	5962.0	5911.2	5869.7	5823.7
37.5°	6017.3	6012.6	5985.0	5938.9	5865.1	5782.1	5685.3	5565.4	5445.5	5316.4	5192.0
40°	5740.6	5726.7	5703.7	5639.2	5556.2	5454.7	5325.7	5178.1	4984.4	4786.1	4583.3
42.5°	5270.3	5274.9	5247.3	5196.5	5118.2	5021.3	4887.6	4726.2	4518.8	4283.5	4020.8
45°	4721.6	4721.6	4712.4	4670.8	4615.6	4537.1	4435.7	4302.0	4099.2	3859.3	3578.0
47.5°	4149.8	4154.5	4140.6	4131.4	4108.3	4057.7	3983.9	3882.4	3739.5	3508.9	3227.6
50°	3568.9	3568.9	3591.9	3587.3	3587.3	3568.9	3536.6	3476.6	3352.2	3167.7	2904.9
52.5°	2987.9	2997.1	3011.0	3029.4	3052.4	3089.3	3052.4	3024.8	2946.4	2803.4	2577.5
55°	2388.4	2397.7	2420.7	2453.0	2480.7	2517.6	2526.8	2526.8	2485.3	2388.4	2217.9
57.5°	1876.7	1862.8	1881.3	1909.0	1945.8	1982.7	2010.4	2042.6	2038.0	1973.5	1835.2
60°	1411.0	1415.6	1429.3	1457.1	1484.7	1517.0	1553.9	1581.5	1595.4	1563.2	1475.5
62.5°	1028.3	1028.3	1046.7	1074.3	1088.2	1134.3	1157.3	1171.2	1185.0	1180.3	1125.1
65°	719.4	728.5	737.7	751.6	765.4	793.0	806.9	834.5	843.8	848.4	806.9
67.5°	507.2	493.4	502.6	511.8	525.6	544.1	571.8	571.8	585.5	585.5	557.9
70°	322.8	322.8	327.4	341.2	350.4	355.1	364.3	373.4	387.3	382.7	382.7
72.5°	216.7	212.1	216.7	221.4	226.0	239.7	239.7	244.4	253.6	258.2	239.7
75°	110.7	115.3	124.4	119.9	133.7	124.4	129.1	142.9	138.3	129.1	129.1
77.5°	92.2	92.2	92.2	87.7	96.8	96.8	92.2	101.4	96.8	96.8	92.2
80°	64.5	69.2	64.5	59.9	64.5	59.9	59.9	59.9	59.9	59.9	55.3
82.5°	50.8	41.5	46.1	41.5	46.1	46.1	41.5	36.9	36.9	41.5	36.9
85°	36.9	27.6	32.3	32.3	27.6	27.6	27.6	27.6	27.6	23.0	23.0
87.5°	23.0	13.9	13.9	13.9	18.4	18.4	18.4	13.9	18.4	18.4	9.3
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: P249538

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2
2.5°	8604.1	8599.4	8608.7	8604.1	8604.1	8599.4	8604.1	8599.4	8608.7	8590.2	8594.8
5°	8604.1	8594.8	8599.4	8604.1	8608.7	8599.4	8599.4	8599.4	8608.7	8599.4	8604.1
7.5°	8585.6	8580.9	8594.8	8604.1	8599.4	8594.8	8604.1	8599.4	8608.7	8604.1	8613.2
10°	8548.7	8553.3	8562.5	8576.3	8580.9	8585.6	8594.8	8594.8	8608.7	8590.2	8599.4
12.5°	8493.4	8511.8	8534.9	8544.0	8562.5	8562.5	8571.8	8576.3	8585.6	8580.9	8594.8
15°	8424.2	8447.2	8474.9	8498.0	8521.0	8534.9	8548.7	8553.3	8567.2	8553.3	8557.9
17.5°	8341.2	8368.8	8410.3	8438.0	8474.9	8488.7	8507.1	8516.4	8530.3	8521.0	8525.6
20°	8225.9	8258.2	8304.3	8345.8	8368.8	8401.1	8424.2	8438.0	8447.2	8438.0	8442.6
22.5°	8064.5	8110.7	8170.6	8202.9	8249.0	8276.6	8281.3	8313.5	8336.6	8313.5	8322.8
25°	7875.4	7921.6	7967.7	8036.9	8078.4	8110.7	8142.9	8147.6	8170.6	8166.0	8161.3
27.5°	7561.9	7621.9	7700.2	7755.6	7810.9	7861.7	7898.6	7907.7	7930.8	7921.6	7926.2
30°	7133.1	7197.7	7271.5	7359.1	7437.5	7488.1	7534.3	7566.5	7589.6	7575.8	7571.2
32.5°	6524.5	6589.0	6667.5	6755.0	6847.3	6921.0	6976.4	7017.9	7045.5	7036.3	7013.3
35°	5828.3	5846.7	5897.4	5966.6	6044.9	6123.3	6174.1	6220.1	6252.4	6261.6	6261.6
37.5°	5113.6	5053.6	5016.8	5016.8	5062.8	5095.1	5141.2	5168.8	5219.6	5238.0	5251.9
40°	4421.8	4283.5	4154.5	4057.7	3993.1	3988.5	3988.5	4002.3	4048.4	4108.3	4163.7
42.5°	3804.0	3582.7	3384.4	3204.6	3075.5	3001.7	2969.5	2974.1	3011.0	3066.3	3158.5
45°	3310.7	3034.0	2785.0	2568.3	2393.1	2277.8	2222.5	2217.9	2245.5	2310.0	2411.6
47.5°	2928.0	2632.8	2351.6	2102.6	1913.6	1789.0	1724.5	1706.1	1724.5	1784.4	1904.3
50°	2609.8	2305.5	2015.0	1756.8	1553.9	1424.8	1364.8	1341.8	1364.8	1415.6	1535.4
52.5°	2314.7	2001.1	1729.1	1480.1	1263.4	1152.7	1088.2	1074.3	1088.2	1148.1	1245.0
55°	1973.5	1706.1	1438.6	1189.6	1000.6	889.9	839.2	825.4	839.2	894.6	996.0
57.5°	1636.9	1406.3	1171.2	945.2	783.9	687.0	640.9	622.4	654.7	691.6	811.5
60°	1323.3	1138.9	940.6	742.4	608.7	521.0	484.1	479.5	488.7	534.9	617.8
62.5°	1037.5	885.3	728.5	567.2	456.5	419.6	373.4	368.9	378.1	405.7	470.4
65°	747.0	650.2	530.3	415.0	327.4	276.6	258.2	262.9	272.0	290.5	350.4
67.5°	521.0	451.9	368.9	290.5	226.0	202.9	184.5	179.8	184.5	216.7	249.0
70°	350.4	308.9	249.0	221.4	156.8	124.4	129.1	115.3	133.7	133.7	161.3
72.5°	230.5	202.9	166.0	129.1	110.7	87.7	87.7	83.0	92.2	96.8	119.9
75°	119.9	92.2	92.2	64.5	46.1	23.0	41.5	36.9	32.3	36.9	46.1
77.5°	83.0	69.2	64.5	50.8	46.1	36.9	36.9	36.9	36.9	41.5	46.1
80°	50.8	50.8	36.9	32.3	27.6	23.0	27.6	27.6	27.6	27.6	32.3
82.5°	32.3	27.6	27.6	23.0	23.0	18.4	18.4	18.4	18.4	18.4	27.6
85°	27.6	18.4	18.4	13.9	18.4	32.3	13.9	18.4	18.4	18.4	13.9
87.5°	9.3	13.9	13.9	13.9	9.3	4.6	9.3	13.9	13.9	23.0	18.4
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: P249538

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2	8590.2
2.5°	8604.1	8608.7	8608.7	8604.1	8604.1	8594.8	8613.2	8599.4	8604.1	8622.4	8608.7
5°	8613.2	8617.8	8617.8	8613.2	8613.2	8613.2	8617.8	8617.8	8613.2	8608.7	8617.8
7.5°	8631.7	8627.1	8627.1	8617.8	8617.8	8608.7	8617.8	8604.1	8613.2	8604.1	8617.8
10°	8608.7	8613.2	8608.7	8604.1	8604.1	8599.4	8599.4	8585.6	8590.2	8576.3	8585.6
12.5°	8594.8	8590.2	8590.2	8580.9	8571.8	8562.5	8557.9	8544.0	8544.0	8511.8	8525.6
15°	8557.9	8562.5	8548.7	8530.3	8521.0	8498.0	8488.7	8470.2	8451.9	8428.8	8433.5
17.5°	8525.6	8511.8	8493.4	8474.9	8438.0	8419.6	8401.1	8373.4	8364.2	8336.6	8327.4
20°	8428.8	8419.6	8396.6	8364.2	8341.2	8299.7	8281.3	8253.6	8230.5	8202.9	8189.0
22.5°	8304.3	8295.0	8267.4	8235.1	8198.2	8179.8	8161.3	8110.7	8087.6	8059.9	8055.3
25°	8147.6	8133.7	8106.1	8069.2	8050.7	8000.0	7981.5	7944.6	7935.5	7907.7	7903.2
27.5°	7907.7	7889.3	7857.1	7810.9	7778.6	7746.4	7728.0	7700.2	7691.1	7663.3	7658.8
30°	7548.1	7525.0	7460.5	7442.1	7386.7	7354.4	7354.4	7317.5	7322.2	7303.8	7303.8
32.5°	6981.0	6944.1	6893.3	6856.4	6819.5	6801.2	6801.2	6787.3	6796.5	6796.5	6805.8
35°	6229.4	6178.7	6151.0	6127.9	6127.9	6146.3	6201.7	6215.6	6243.2	6266.3	6284.8
37.5°	5265.6	5261.1	5293.4	5321.0	5390.2	5468.6	5565.4	5648.4	5726.7	5782.1	5837.4
40°	4223.6	4338.9	4431.1	4560.3	4666.2	4818.4	4993.6	5136.6	5270.3	5367.2	5468.6
42.5°	3296.8	3444.4	3638.1	3827.0	4016.1	4223.6	4454.2	4652.5	4827.7	4961.4	5067.4
45°	2568.3	2771.1	3006.4	3246.1	3490.5	3748.7	3988.5	4191.3	4375.8	4514.1	4620.2
47.5°	2070.3	2291.6	2559.0	2821.9	3098.6	3370.6	3638.1	3813.3	3965.4	4076.0	4173.0
50°	1710.6	1945.8	2227.1	2526.8	2803.4	3075.5	3306.0	3476.6	3601.2	3698.0	3757.9
52.5°	1429.3	1678.3	1978.1	2277.8	2554.4	2803.4	3011.0	3140.1	3241.5	3310.7	3365.9
55°	1180.3	1420.2	1701.5	1982.7	2254.8	2489.9	2660.5	2757.4	2835.7	2877.2	2909.5
57.5°	963.7	1185.0	1443.2	1701.5	1936.6	2130.3	2264.0	2360.8	2397.7	2430.0	2425.3
60°	756.2	963.7	1198.8	1420.2	1623.1	1779.8	1876.7	1932.0	1959.6	1973.5	1964.2
62.5°	594.8	783.9	963.7	1157.3	1304.9	1438.6	1530.9	1530.9	1544.7	1549.3	1563.2
65°	442.6	585.5	742.4	885.3	1005.1	1092.8	1143.6	1157.3	1175.8	1171.2	1162.0
67.5°	327.4	433.5	548.7	654.7	737.7	793.0	829.9	862.3	857.7	848.4	843.8
70°	226.0	295.1	396.6	461.1	521.0	576.4	585.5	590.2	594.8	599.4	590.2
72.5°	156.8	207.5	262.9	318.2	355.1	378.1	401.2	405.7	405.7	405.7	401.2
75°	78.4	106.1	156.8	179.8	212.1	221.4	239.7	239.7	253.6	235.1	230.5
77.5°	69.2	83.0	110.7	129.1	142.9	156.8	161.3	175.2	170.6	161.3	166.0
80°	41.5	50.8	69.2	78.4	96.8	101.4	106.1	110.7	106.1	110.7	110.7
82.5°	32.3	36.9	46.1	46.1	59.9	59.9	64.5	64.5	69.2	69.2	69.2
85°	18.4	32.3	27.6	55.3	36.9	36.9	46.1	55.3	46.1	46.1	55.3
87.5°	18.4	18.4	13.9	18.4	18.4	18.4	23.0	27.6	27.6	32.3	27.6
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: P249538

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	8590.2	8590.2	8590.2	8590.2
2.5°	8604.1	8613.2	8599.4	8594.8
5°	8617.8	8617.8	8608.7	8608.7
7.5°	8617.8	8617.8	8604.1	8594.8
10°	8580.9	8580.9	8567.2	8557.9
12.5°	8511.8	8511.8	8507.1	8493.4
15°	8424.2	8424.2	8405.7	8391.9
17.5°	8304.3	8313.5	8290.5	8290.5
20°	8175.2	8170.6	8152.2	8142.9
22.5°	8041.5	8032.3	8027.6	8000.0
25°	7898.6	7889.3	7875.4	7861.7
27.5°	7654.2	7649.6	7635.7	7617.3
30°	7280.6	7276.0	7257.6	7257.6
32.5°	6796.5	6791.9	6773.5	6778.1
35°	6293.9	6312.4	6303.2	6284.8
37.5°	5874.3	5888.2	5897.4	5888.2
40°	5523.9	5565.4	5570.0	5579.3
42.5°	5150.4	5205.7	5224.2	5233.4
45°	4703.1	4753.9	4795.4	4786.1
47.5°	4246.6	4283.5	4320.4	4292.8
50°	3808.7	3831.7	3845.5	3845.5
52.5°	3393.7	3393.7	3389.1	3393.7
55°	2918.7	2918.7	2900.3	2909.5
57.5°	2420.7	2430.0	2416.1	2393.1
60°	1959.6	1936.6	1927.3	1913.6
62.5°	1526.3	1526.3	1494.0	1535.4
65°	1143.6	1129.7	1115.8	1111.2
67.5°	829.9	825.4	811.5	806.9
70°	585.5	567.2	562.5	553.3
72.5°	391.9	391.9	382.7	382.7
75°	239.7	216.7	212.1	216.7
77.5°	166.0	161.3	161.3	156.8
80°	110.7	106.1	115.3	101.4
82.5°	69.2	73.8	69.2	73.8
85°	46.1	55.3	50.8	50.8
87.5°	27.6	27.6	27.6	27.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)