

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: P249447

Luminaire Tested: **LSR8B120D010 EC8B120850 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249447  
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: LSR8B120D010 EC8B120850 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11208.0 lumens  
Efficiency: N/A  
Efficacy: 94.7 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

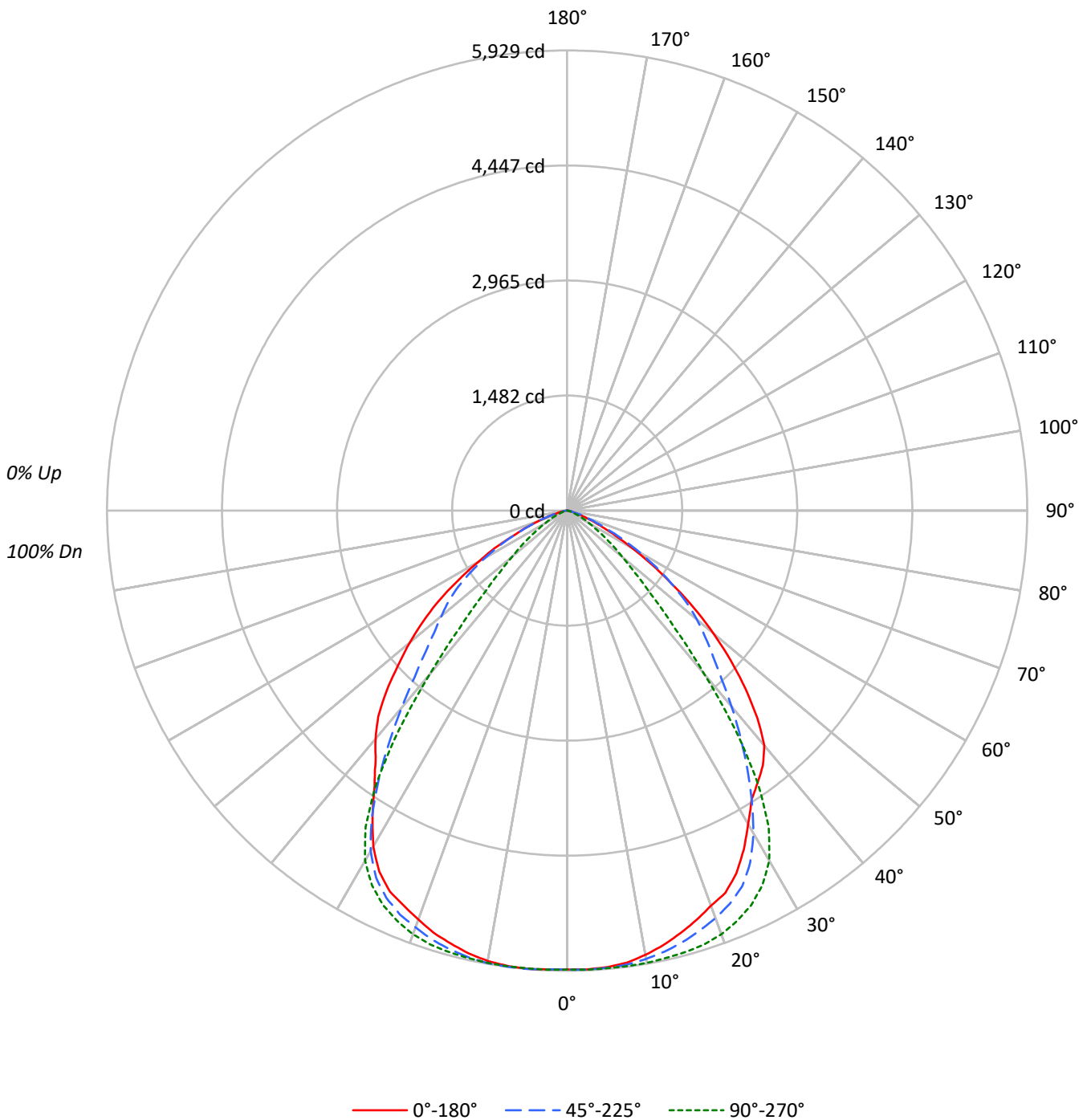
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249447

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0B

### Luminous Intensity Polar Plot





TEST NUMBER: P249447

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0B

**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°	182354	182354	182354
5°	182753	183245	183443
10°	181985	185264	184468
15°	179969	187975	184429
20°	177807	190618	183953
25°	175500	190838	184142
30°	166034	185472	177898
35°	161076	161192	162868
40°	159080	110908	154607
45°	141747	66582	143683
50°	117864	44312	126998
55°	88395	30547	107679
60°	59903	20358	81241
65°	36132	13207	55818
70°	20033	7159	34342
75°	9079	3026	17776
80°	7885	3374	12395
85°	8987	4493	12348



TEST NUMBER: P249447

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	564.4	5.0
10°-20°	1639.0	14.6
20°-30°	2487.7	22.2
30°-40°	2612.8	23.3
40°-50°	1958.9	17.5
50°-60°	1256.9	11.2
60°-70°	537.7	4.8
70°-80°	127.0	1.1
80°-90°	23.6	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°	4691.1	41.9
0°-40°	7303.9	65.2
0°-60°	10519.7	93.9
0°-90°	11208.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11208.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5914	5914	5914	5914	5914	
5°	5904	5914	5920	5929	5926	561
15°	5637	5755	5888	5850	5777	1590
25°	5158	5339	5609	5507	5412	2356
35°	4279	4041	4282	4231	4326	2685
45°	3250	2657	1527	2581	3295	2489
55°	1644	1644	568	1714	2003	1491
65°	495	584	181	752	765	529
75°	76	89	25	152	149	111
85°	25	16	13	25	35	27
90°	0	0	0	0	0	



TEST NUMBER: P249447

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0B

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6
2.5°	5916.7	5923.1	5919.9	5919.9	5916.7	5919.9	5919.9	5926.3	5926.3	5919.9	5916.7
5°	5904.0	5910.4	5910.4	5904.0	5904.0	5919.9	5910.4	5916.7	5916.7	5913.6	5913.6
7.5°	5875.5	5875.5	5888.2	5878.7	5878.7	5888.2	5885.0	5891.3	5897.7	5900.9	5900.9
10°	5812.0	5818.3	5821.5	5821.5	5824.7	5834.2	5840.6	5853.3	5859.6	5866.0	5869.1
12.5°	5732.7	5742.1	5745.3	5742.1	5751.7	5764.4	5780.3	5796.1	5805.7	5818.3	5827.9
15°	5637.4	5637.4	5643.7	5653.3	5659.7	5678.7	5694.5	5713.6	5739.0	5754.9	5770.7
17.5°	5532.7	5539.0	5548.5	5548.5	5561.3	5592.9	5602.5	5631.1	5659.7	5675.5	5707.3
20°	5418.4	5424.7	5434.3	5440.6	5456.5	5481.9	5500.9	5526.3	5558.1	5586.7	5618.3
22.5°	5329.5	5316.8	5323.1	5329.5	5345.4	5367.6	5389.8	5421.5	5453.3	5481.9	5513.6
25°	5158.1	5161.3	5170.8	5177.1	5196.2	5215.2	5240.6	5278.7	5307.3	5339.1	5373.9
27.5°	4926.4	4929.6	4945.4	4945.4	4961.3	4993.0	5008.9	5040.7	5078.8	5110.5	5151.8
30°	4663.0	4669.2	4669.2	4682.0	4691.5	4707.4	4723.2	4755.0	4774.0	4802.6	4859.8
32.5°	4421.7	4428.0	4424.8	4421.7	4412.2	4409.0	4405.8	4412.2	4418.5	4428.0	4450.2
35°	4278.9	4263.0	4250.3	4228.1	4202.7	4170.9	4142.3	4104.3	4069.3	4040.8	4009.1
37.5°	4142.3	4139.2	4120.1	4088.4	4037.6	3980.5	3913.8	3831.3	3748.7	3659.9	3574.2
40°	3951.9	3942.3	3926.5	3882.1	3824.9	3755.1	3666.2	3564.6	3431.3	3294.8	3155.2
42.5°	3628.1	3631.3	3612.3	3577.3	3523.4	3456.7	3364.7	3253.6	3110.8	2948.8	2767.9
45°	3250.4	3250.4	3244.0	3215.5	3177.4	3123.4	3053.6	2961.6	2821.9	2656.8	2463.2
47.5°	2856.8	2860.0	2850.4	2844.1	2828.2	2793.3	2742.5	2672.7	2574.3	2415.6	2221.9
50°	2456.9	2456.9	2472.7	2469.5	2469.5	2456.9	2434.7	2393.3	2307.7	2180.7	1999.8
52.5°	2056.9	2063.2	2072.8	2085.5	2101.3	2126.7	2101.3	2082.3	2028.3	1929.9	1774.4
55°	1644.2	1650.6	1666.4	1688.7	1707.8	1733.2	1739.5	1739.5	1710.9	1644.2	1526.8
57.5°	1291.9	1282.4	1295.1	1314.1	1339.5	1364.9	1384.0	1406.2	1403.0	1358.6	1263.3
60°	971.3	974.5	984.0	1003.1	1022.1	1044.3	1069.7	1088.7	1098.3	1076.1	1015.7
62.5°	707.9	707.9	720.5	739.6	749.1	780.9	796.7	806.3	815.7	812.6	774.5
65°	495.2	501.5	507.9	517.4	526.9	545.9	555.5	574.5	580.9	584.1	555.5
67.5°	349.2	339.6	346.0	352.3	361.9	374.6	393.6	393.6	403.1	403.1	384.1
70°	222.2	222.2	225.4	234.9	241.2	244.4	250.8	257.1	266.6	263.5	263.5
72.5°	149.2	146.0	149.2	152.4	155.6	165.0	165.0	168.2	174.6	177.8	165.0
75°	76.2	79.4	85.7	82.6	92.0	85.7	88.9	98.4	95.2	88.9	88.9
77.5°	63.5	63.5	63.5	60.3	66.6	66.6	63.5	69.8	66.6	66.6	63.5
80°	44.4	47.6	44.4	41.2	44.4	41.2	41.2	41.2	41.2	41.2	38.1
82.5°	34.9	28.6	31.8	28.6	31.8	31.8	28.6	25.4	25.4	28.6	25.4
85°	25.4	19.0	22.2	22.2	19.0	19.0	19.0	19.0	19.0	15.8	15.8
87.5°	15.8	9.6	9.6	9.6	12.7	12.7	12.7	9.6	12.7	12.7	6.4
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: P249447

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6
2.5°	5923.1	5919.9	5926.3	5923.1	5923.1	5919.9	5923.1	5919.9	5926.3	5913.6	5916.7
5°	5923.1	5916.7	5919.9	5923.1	5926.3	5919.9	5919.9	5919.9	5926.3	5919.9	5923.1
7.5°	5910.4	5907.2	5916.7	5923.1	5919.9	5916.7	5923.1	5919.9	5926.3	5923.1	5929.4
10°	5885.0	5888.2	5894.5	5904.0	5907.2	5910.4	5916.7	5916.7	5926.3	5913.6	5919.9
12.5°	5846.9	5859.6	5875.5	5881.8	5894.5	5894.5	5900.9	5904.0	5910.4	5907.2	5916.7
15°	5799.3	5815.2	5834.2	5850.1	5866.0	5875.5	5885.0	5888.2	5897.7	5888.2	5891.3
17.5°	5742.1	5761.2	5789.8	5808.8	5834.2	5843.7	5856.4	5862.8	5872.3	5866.0	5869.1
20°	5662.8	5685.1	5716.8	5745.3	5761.2	5783.4	5799.3	5808.8	5815.2	5808.8	5812.0
22.5°	5551.7	5583.5	5624.7	5646.9	5678.7	5697.7	5700.9	5723.1	5739.0	5723.1	5729.5
25°	5421.5	5453.3	5485.1	5532.7	5561.3	5583.5	5605.7	5608.9	5624.7	5621.5	5618.3
27.5°	5205.7	5247.0	5300.9	5339.1	5377.1	5412.1	5437.5	5443.7	5459.7	5453.3	5456.5
30°	4910.5	4955.0	5005.8	5066.0	5120.0	5154.9	5186.7	5208.9	5224.7	5215.2	5212.1
32.5°	4491.5	4536.0	4589.9	4650.2	4713.7	4764.5	4802.6	4831.2	4850.2	4843.8	4828.0
35°	4012.2	4024.9	4059.9	4107.5	4161.4	4215.4	4250.3	4282.0	4304.2	4310.6	4310.6
37.5°	3520.2	3479.0	3453.6	3453.6	3485.3	3507.5	3539.3	3558.3	3593.2	3605.9	3615.4
40°	3044.0	2948.8	2860.0	2793.3	2748.9	2745.7	2745.7	2755.2	2787.0	2828.2	2866.3
42.5°	2618.7	2466.3	2329.9	2206.1	2117.2	2066.4	2044.2	2047.4	2072.8	2110.9	2174.3
45°	2279.1	2088.6	1917.2	1768.0	1647.4	1568.0	1530.0	1526.8	1545.8	1590.3	1660.2
47.5°	2015.6	1812.5	1618.8	1447.4	1317.3	1231.6	1187.2	1174.5	1187.2	1228.4	1311.0
50°	1796.6	1587.1	1387.1	1209.4	1069.7	980.9	939.6	923.7	939.6	974.5	1057.0
52.5°	1593.4	1377.6	1190.3	1018.9	869.7	793.5	749.1	739.6	749.1	790.4	857.1
55°	1358.6	1174.5	990.3	818.9	688.8	612.6	577.7	568.2	577.7	615.8	685.7
57.5°	1126.9	968.1	806.3	650.7	539.6	472.9	441.2	428.5	450.7	476.1	558.7
60°	911.0	784.1	647.5	511.1	419.0	358.7	333.3	330.1	336.5	368.2	425.3
62.5°	714.2	609.5	501.5	390.4	314.2	288.8	257.1	254.0	260.3	279.3	323.8
65°	514.2	447.6	365.0	285.7	225.4	190.4	177.8	181.0	187.3	200.0	241.2
67.5°	358.7	311.1	254.0	200.0	155.6	139.6	127.0	123.8	127.0	149.2	171.4
70°	241.2	212.7	171.4	152.4	108.0	85.7	88.9	79.4	92.0	92.0	111.1
72.5°	158.7	139.6	114.3	88.9	76.2	60.3	60.3	57.2	63.5	66.6	82.6
75°	82.6	63.5	63.5	44.4	31.8	15.8	28.6	25.4	22.2	25.4	31.8
77.5°	57.2	47.6	44.4	34.9	31.8	25.4	25.4	25.4	25.4	28.6	31.8
80°	34.9	34.9	25.4	22.2	19.0	15.8	19.0	19.0	19.0	19.0	22.2
82.5°	22.2	19.0	19.0	15.8	15.8	12.7	12.7	12.7	12.7	12.7	19.0
85°	19.0	12.7	12.7	9.6	12.7	22.2	9.6	12.7	12.7	12.7	9.6
87.5°	6.4	9.6	9.6	9.6	6.4	3.2	6.4	9.6	9.6	15.8	12.7
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: P249447

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6	5913.6
2.5°	5923.1	5926.3	5926.3	5923.1	5923.1	5916.7	5929.4	5919.9	5923.1	5935.8	5926.3
5°	5929.4	5932.6	5932.6	5929.4	5929.4	5929.4	5932.6	5932.6	5929.4	5926.3	5932.6
7.5°	5942.1	5939.0	5939.0	5932.6	5932.6	5926.3	5932.6	5923.1	5929.4	5923.1	5932.6
10°	5926.3	5929.4	5926.3	5923.1	5923.1	5919.9	5919.9	5910.4	5913.6	5904.0	5910.4
12.5°	5916.7	5913.6	5913.6	5907.2	5900.9	5894.5	5891.3	5881.8	5881.8	5859.6	5869.1
15°	5891.3	5894.5	5885.0	5872.3	5866.0	5850.1	5843.7	5831.0	5818.3	5802.5	5805.7
17.5°	5869.1	5859.6	5846.9	5834.2	5808.8	5796.1	5783.4	5764.4	5758.0	5739.0	5732.7
20°	5802.5	5796.1	5780.3	5758.0	5742.1	5713.6	5700.9	5681.9	5666.0	5646.9	5637.4
22.5°	5716.8	5710.4	5691.4	5669.1	5643.7	5631.1	5618.3	5583.5	5567.6	5548.5	5545.3
25°	5608.9	5599.3	5580.3	5554.9	5542.2	5507.3	5494.5	5469.1	5462.9	5443.7	5440.6
27.5°	5443.7	5431.1	5408.9	5377.1	5354.9	5332.7	5320.0	5300.9	5294.6	5275.5	5272.4
30°	5196.2	5180.3	5135.9	5123.2	5085.1	5062.9	5062.9	5037.5	5040.7	5028.0	5028.0
32.5°	4805.8	4780.4	4745.4	4720.0	4694.6	4682.0	4682.0	4672.4	4678.8	4678.8	4685.2
35°	4288.4	4253.5	4234.4	4218.5	4218.5	4231.2	4269.3	4278.9	4297.9	4313.8	4326.5
37.5°	3624.9	3621.8	3644.0	3663.1	3710.7	3764.6	3831.3	3888.4	3942.3	3980.5	4018.5
40°	2907.6	2987.0	3050.4	3139.3	3212.3	3317.0	3437.7	3536.1	3628.1	3694.8	3764.6
42.5°	2269.5	2371.1	2504.5	2634.6	2764.7	2907.6	3066.3	3202.8	3323.4	3415.4	3488.5
45°	1768.0	1907.7	2069.6	2234.7	2402.9	2580.7	2745.7	2885.4	3012.4	3107.6	3180.6
47.5°	1425.2	1577.6	1761.7	1942.6	2133.1	2320.3	2504.5	2625.1	2729.8	2806.0	2872.7
50°	1177.6	1339.5	1533.2	1739.5	1929.9	2117.2	2275.9	2393.3	2479.1	2545.7	2587.0
52.5°	984.0	1155.4	1361.8	1568.0	1758.5	1929.9	2072.8	2161.7	2231.5	2279.1	2317.1
55°	812.6	977.7	1171.3	1364.9	1552.2	1714.1	1831.5	1898.2	1952.1	1980.7	2002.9
57.5°	663.4	815.7	993.5	1171.3	1333.2	1466.5	1558.6	1625.2	1650.6	1672.8	1669.6
60°	520.6	663.4	825.3	977.7	1117.3	1225.2	1291.9	1330.0	1349.0	1358.6	1352.2
62.5°	409.5	539.6	663.4	796.7	898.3	990.3	1053.9	1053.9	1063.4	1066.5	1076.1
65°	304.7	403.1	511.1	609.5	691.9	752.3	787.2	796.7	809.5	806.3	799.9
67.5°	225.4	298.4	377.7	450.7	507.9	545.9	571.3	593.6	590.4	584.1	580.9
70°	155.6	203.2	273.0	317.4	358.7	396.8	403.1	406.3	409.5	412.6	406.3
72.5°	108.0	142.8	181.0	219.0	244.4	260.3	276.2	279.3	279.3	279.3	276.2
75°	54.0	73.0	108.0	123.8	146.0	152.4	165.0	165.0	174.6	161.9	158.7
77.5°	47.6	57.2	76.2	88.9	98.4	108.0	111.1	120.6	117.4	111.1	114.3
80°	28.6	34.9	47.6	54.0	66.6	69.8	73.0	76.2	73.0	76.2	76.2
82.5°	22.2	25.4	31.8	31.8	41.2	41.2	44.4	44.4	47.6	47.6	47.6
85°	12.7	22.2	19.0	38.1	25.4	25.4	31.8	38.1	31.8	31.8	38.1
87.5°	12.7	12.7	9.6	12.7	12.7	12.7	15.8	19.0	19.0	22.2	19.0
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: P249447

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5913.6	5913.6	5913.6	5913.6
2.5°	5923.1	5929.4	5919.9	5916.7
5°	5932.6	5932.6	5926.3	5926.3
7.5°	5932.6	5932.6	5923.1	5916.7
10°	5907.2	5907.2	5897.7	5891.3
12.5°	5859.6	5859.6	5856.4	5846.9
15°	5799.3	5799.3	5786.6	5777.1
17.5°	5716.8	5723.1	5707.3	5707.3
20°	5627.9	5624.7	5612.1	5605.7
22.5°	5535.9	5529.5	5526.3	5507.3
25°	5437.5	5431.1	5421.5	5412.1
27.5°	5269.2	5266.0	5256.5	5243.8
30°	5012.1	5008.9	4996.2	4996.2
32.5°	4678.8	4675.6	4663.0	4666.1
35°	4332.8	4345.5	4339.2	4326.5
37.5°	4043.9	4053.5	4059.9	4053.5
40°	3802.7	3831.3	3834.5	3840.8
42.5°	3545.6	3583.7	3596.4	3602.7
45°	3237.7	3272.6	3301.2	3294.8
47.5°	2923.4	2948.8	2974.2	2955.2
50°	2621.9	2637.8	2647.3	2647.3
52.5°	2336.3	2336.3	2333.1	2336.3
55°	2009.3	2009.3	1996.6	2002.9
57.5°	1666.4	1672.8	1663.3	1647.4
60°	1349.0	1333.2	1326.8	1317.3
62.5°	1050.7	1050.7	1028.5	1057.0
65°	787.2	777.7	768.1	765.0
67.5°	571.3	568.2	558.7	555.5
70°	403.1	390.4	387.3	380.9
72.5°	269.8	269.8	263.5	263.5
75°	165.0	149.2	146.0	149.2
77.5°	114.3	111.1	111.1	108.0
80°	76.2	73.0	79.4	69.8
82.5°	47.6	50.8	47.6	50.8
85°	31.8	38.1	34.9	34.9
87.5°	19.0	19.0	19.0	19.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)