

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: P248403

Luminaire Tested: **LSR8B120D010 EC8B120940 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248403  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B120D010 EC8B120940 8LBDWOLI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11541.0 lumens  
Efficiency: N/A  
Efficacy: 97.6 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

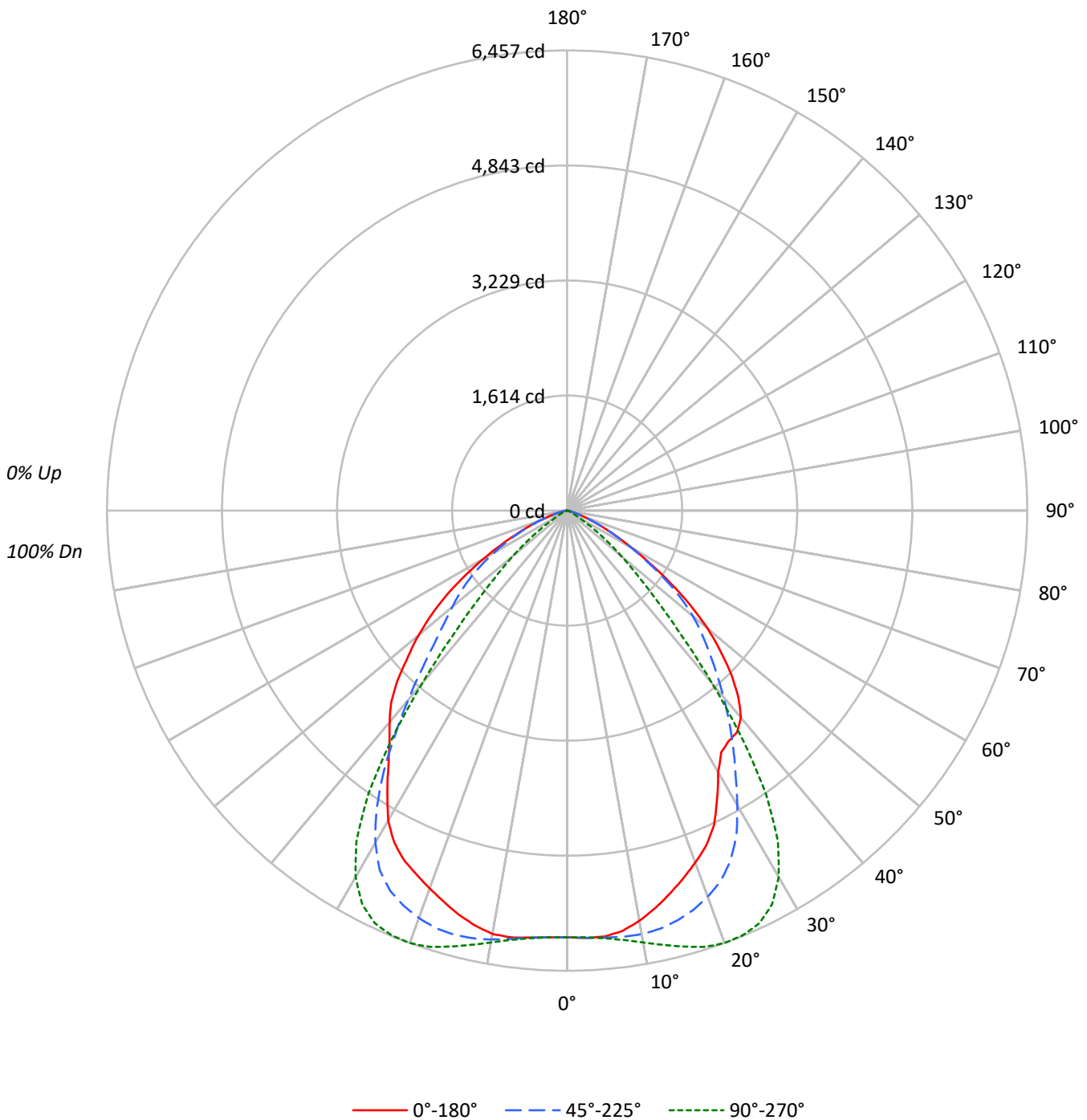
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P248403

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDW0LI

### Luminous Intensity Polar Plot





TEST NUMBER: P248403

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDW0LI

**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	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	184620	184620	184620
5°	185718	186409	186211
10°	182991	192644	188862
15°	177642	202191	187379
20°	172484	211902	185101
25°	165861	217329	184244
30°	150944	211372	178781
35°	148698	183150	164490
40°	152740	127025	155936
45°	142188	76774	146623
50°	123333	47412	130649
55°	94647	24773	110878
60°	64479	9991	83684
65°	40109	5100	57737
70°	21773	3156	35243
75°	11354	1513	20826
80°	5079	1705	11276
85°	3397	1132	10119



TEST NUMBER: P248403

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDWOLI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	575.8	5.0
10°-20°	1705.6	14.8
20°-30°	2602.1	22.5
30°-40°	2715.4	23.5
40°-50°	2039.6	17.7
50°-60°	1254.9	10.9
60°-70°	510.7	4.4
70°-80°	120.3	1.0
80°-90°	16.6	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°	4883.5	42.3
0°-40°	7598.9	65.8
0°-60°	10893.4	94.4
0°-90°	11541.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11541.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5987	5987	5987	5987	5987	
5°	6000	6016	6022	6016	6016	568
15°	5564	5955	6334	6159	5870	1568
25°	4875	5422	6388	5882	5415	2216
35°	3950	4061	4865	4497	4370	2494
45°	3260	2822	1760	2628	3362	2488
55°	1760	1672	461	1672	2062	1583
65°	550	556	70	747	791	573
75°	95	95	13	168	175	115
85°	10	10	3	22	29	13
90°	0	0	0	0	0	



TEST NUMBER: P248403

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDWOLI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1
2.5°	6003.0	5993.4	6003.0	6003.0	6006.2	5999.8	6003.0	6006.2	5999.8	5999.8	5999.8
5°	5999.8	5993.4	5999.8	5996.6	6003.0	6003.0	6009.4	6009.4	6015.7	6015.7	6025.2
7.5°	5949.0	5936.3	5949.0	5958.5	5964.8	5977.6	5993.4	6006.2	6018.9	6031.6	6047.5
10°	5844.1	5844.1	5853.6	5872.7	5891.7	5914.0	5942.6	5974.4	6006.2	6034.7	6063.3
12.5°	5713.8	5704.3	5723.3	5748.7	5777.4	5812.3	5856.8	5904.5	5955.3	6012.5	6057.0
15°	5564.5	5554.9	5577.1	5602.6	5637.5	5688.4	5742.4	5806.0	5879.1	5955.3	6028.4
17.5°	5411.9	5408.7	5430.9	5465.9	5494.5	5548.5	5618.5	5694.7	5777.4	5879.1	5974.4
20°	5256.2	5253.0	5275.3	5303.9	5342.0	5392.8	5462.7	5551.7	5650.2	5764.7	5875.9
22.5°	5094.1	5097.3	5116.3	5148.1	5179.9	5233.9	5307.0	5396.0	5504.0	5628.0	5751.9
25°	4874.8	4859.0	4884.4	4916.2	4970.2	5014.6	5084.6	5179.9	5291.1	5421.5	5567.6
27.5°	4557.0	4553.8	4576.2	4604.7	4652.4	4706.4	4782.7	4881.2	4998.8	5141.8	5284.8
30°	4239.2	4245.6	4255.2	4283.8	4315.5	4369.6	4445.8	4528.5	4639.7	4776.3	4928.9
32.5°	4023.2	4023.2	4035.9	4055.0	4077.2	4105.8	4159.8	4220.2	4306.0	4401.4	4512.6
35°	3950.1	3937.4	3950.1	3953.2	3956.4	3962.8	3972.3	3991.4	4020.0	4061.3	4102.6
37.5°	3918.3	3908.8	3908.8	3896.1	3880.2	3861.1	3835.7	3807.1	3775.3	3734.0	3702.2
40°	3794.4	3788.0	3781.6	3769.0	3734.0	3695.9	3654.5	3587.8	3514.7	3413.0	3311.4
42.5°	3556.1	3549.7	3546.5	3521.1	3489.3	3444.8	3397.1	3327.2	3235.1	3104.8	2958.6
45°	3260.5	3247.8	3238.3	3216.0	3193.7	3155.6	3111.1	3047.5	2955.4	2822.0	2647.2
47.5°	2917.3	2910.9	2907.7	2898.2	2876.0	2853.7	2825.1	2774.3	2691.6	2564.5	2383.4
50°	2570.9	2558.2	2564.5	2561.4	2551.8	2536.0	2516.8	2481.9	2418.3	2303.9	2138.7
52.5°	2173.6	2173.6	2170.5	2180.0	2183.2	2180.0	2183.2	2145.1	2091.0	2005.2	1865.4
55°	1760.5	1760.5	1770.1	1782.8	1795.5	1798.7	1795.5	1779.6	1741.4	1671.5	1547.6
57.5°	1372.8	1366.5	1385.6	1404.6	1417.4	1430.0	1420.5	1407.8	1385.6	1328.3	1233.0
60°	1045.5	1045.5	1058.2	1070.9	1083.6	1096.4	1093.2	1090.0	1070.9	1032.8	956.6
62.5°	769.0	772.2	772.2	781.8	794.4	807.2	816.7	807.2	797.6	772.2	721.4
65°	549.7	546.6	549.7	559.3	568.9	581.5	587.9	584.7	575.2	556.1	518.0
67.5°	368.6	365.5	378.1	381.3	387.7	400.4	397.3	400.4	397.3	381.3	349.6
70°	241.5	235.1	241.5	238.3	247.9	251.1	257.4	260.6	257.4	247.9	238.3
72.5°	149.4	146.2	149.4	152.6	155.7	158.9	165.2	165.2	162.0	155.7	143.0
75°	95.3	85.8	89.0	82.7	89.0	89.0	95.3	98.5	95.3	95.3	89.0
77.5°	57.2	57.2	57.2	57.2	57.2	57.2	57.2	60.4	63.5	57.2	54.0
80°	28.6	28.6	31.8	31.8	31.8	35.0	31.8	31.8	31.8	35.0	25.4
82.5°	22.2	19.1	19.1	19.1	22.2	19.1	19.1	19.1	19.1	19.1	19.1
85°	9.6	12.7	9.6	6.4	9.6	9.6	12.7	9.6	9.6	9.6	12.7
87.5°	3.2	3.2	0.0	0.0	0.0	3.2	0.0	3.2	3.2	6.4	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



TEST NUMBER: P248403

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDWOLI

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1
2.5°	6003.0	5996.6	5996.6	5993.4	5999.8	5993.4	5996.6	5993.4	5993.4	5999.8	5993.4
5°	6025.2	6028.4	6022.1	6018.9	6028.4	6028.4	6028.4	6022.1	6022.1	6025.2	6022.1
7.5°	6057.0	6063.3	6066.5	6069.7	6076.1	6079.3	6079.3	6076.1	6072.9	6082.5	6069.7
10°	6092.0	6101.5	6120.6	6130.1	6146.0	6146.0	6152.4	6152.4	6146.0	6152.4	6149.2
12.5°	6079.3	6136.4	6168.2	6190.5	6212.7	6231.8	6238.1	6241.3	6238.1	6250.9	6238.1
15°	6101.5	6149.2	6200.0	6238.1	6279.4	6301.7	6308.0	6333.5	6339.8	6343.0	6324.0
17.5°	6066.5	6152.4	6206.3	6263.6	6324.0	6365.3	6403.4	6419.3	6422.5	6428.8	6403.4
20°	5987.1	6082.5	6165.0	6247.7	6317.6	6381.1	6412.9	6457.4	6444.7	6470.2	6435.2
22.5°	5879.1	5987.1	6092.0	6200.0	6273.1	6349.4	6416.1	6447.9	6463.8	6463.8	6425.6
25°	5707.4	5834.6	5949.0	6060.2	6171.4	6263.6	6339.8	6387.5	6397.1	6393.9	6349.4
27.5°	5440.5	5577.1	5710.6	5837.8	5974.4	6082.5	6171.4	6228.6	6244.5	6244.5	6196.9
30°	5071.9	5218.0	5348.4	5500.8	5640.7	5761.5	5885.4	5936.3	5964.8	5964.8	5910.9
32.5°	4633.3	4757.3	4878.0	5027.4	5179.9	5316.6	5434.1	5504.0	5539.0	5535.8	5488.2
35°	4156.7	4217.0	4309.2	4420.4	4557.0	4684.2	4798.5	4865.3	4925.7	4922.5	4878.0
37.5°	3679.9	3664.1	3673.6	3714.9	3800.7	3889.7	3978.7	4042.3	4093.1	4115.4	4105.8
40°	3212.8	3130.2	3050.7	3022.2	3028.5	3060.3	3108.0	3155.6	3212.8	3241.5	3254.1
42.5°	2793.3	2653.5	2513.7	2408.8	2348.4	2329.4	2351.6	2367.5	2402.5	2443.8	2485.1
45°	2456.5	2269.0	2084.7	1922.6	1820.9	1760.5	1747.8	1760.5	1779.6	1820.9	1875.0
47.5°	2180.0	1960.7	1754.2	1573.0	1423.7	1344.3	1322.0	1315.6	1334.7	1372.8	1445.9
50°	1935.3	1716.0	1487.3	1277.5	1121.8	1032.8	1001.0	988.3	1010.5	1039.1	1105.9
52.5°	1668.4	1452.3	1217.1	1013.7	851.7	759.5	724.5	705.5	718.2	756.3	823.1
55°	1379.2	1179.0	966.1	756.3	600.6	514.8	473.5	460.8	473.5	514.8	581.5
57.5°	1090.0	921.6	743.6	546.6	406.7	321.0	279.6	266.9	301.9	317.8	387.7
60°	851.7	715.1	562.5	400.4	279.6	212.9	171.6	162.0	178.0	206.5	263.8
62.5°	638.8	552.9	432.2	286.0	206.5	136.6	114.4	104.9	114.4	136.6	181.2
65°	464.0	397.3	301.9	209.7	139.8	101.7	76.3	69.9	79.5	95.3	133.5
67.5°	317.8	266.9	209.7	146.2	95.3	63.5	54.0	54.0	57.2	69.9	98.5
70°	206.5	174.8	133.5	95.3	63.5	47.7	41.3	35.0	41.3	50.9	66.7
72.5°	130.3	111.2	85.8	66.7	47.7	35.0	28.6	25.4	31.8	38.1	50.9
75°	79.5	60.4	44.5	35.0	25.4	25.4	25.4	12.7	15.9	25.4	31.8
77.5°	47.7	41.3	35.0	28.6	22.2	12.7	12.7	12.7	15.9	19.1	28.6
80°	25.4	22.2	15.9	15.9	12.7	9.6	12.7	9.6	6.4	15.9	19.1
82.5°	15.9	12.7	12.7	12.7	15.9	6.4	9.6	6.4	9.6	12.7	9.6
85°	9.6	9.6	9.6	6.4	15.9	6.4	6.4	3.2	3.2	6.4	6.4
87.5°	0.0	3.2	3.2	0.0	3.2	0.0	3.2	3.2	3.2	3.2	3.2
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: P248403

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDWOLI

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1	5987.1
2.5°	5996.6	5993.4	5996.6	5993.4	5993.4	5993.4	5996.6	5996.6	5993.4	5993.4	5999.8
5°	6022.1	6022.1	6022.1	6018.9	6015.7	6015.7	6022.1	6022.1	6012.5	6022.1	6022.1
7.5°	6076.1	6066.5	6076.1	6063.3	6057.0	6060.2	6063.3	6057.0	6050.7	6053.9	6053.9
10°	6146.0	6136.4	6136.4	6126.9	6117.4	6111.0	6104.7	6088.8	6072.9	6069.7	6057.0
12.5°	6228.6	6212.7	6203.2	6184.1	6168.2	6146.0	6126.9	6101.5	6069.7	6047.5	6025.2
15°	6311.2	6285.8	6263.6	6231.8	6196.9	6158.7	6117.4	6076.1	6025.2	5980.8	5942.6
17.5°	6377.9	6343.0	6301.7	6250.9	6200.0	6142.8	6082.5	6022.1	5949.0	5891.7	5847.3
20°	6400.2	6349.4	6295.4	6228.6	6161.9	6082.5	6006.2	5926.7	5844.1	5783.7	5732.9
22.5°	6371.6	6311.2	6244.5	6174.6	6085.6	5999.8	5910.9	5818.6	5745.6	5663.0	5615.3
25°	6292.2	6219.1	6146.0	6063.3	5977.6	5882.2	5786.9	5691.6	5602.6	5558.1	5497.7
27.5°	6130.1	6050.7	5971.2	5885.4	5786.9	5691.6	5593.1	5500.8	5424.6	5364.2	5329.3
30°	5844.1	5751.9	5659.8	5567.6	5481.8	5383.3	5291.1	5214.9	5138.6	5090.9	5056.0
32.5°	5405.5	5322.9	5230.8	5141.8	5062.4	4979.7	4903.4	4836.7	4782.7	4750.9	4725.5
35°	4814.5	4731.8	4661.9	4598.4	4531.6	4496.7	4449.0	4410.9	4388.6	4375.9	4372.7
37.5°	4070.8	4023.2	4000.9	3988.2	3975.5	3966.0	3972.3	3988.2	4000.9	4023.2	4048.6
40°	3276.4	3317.7	3330.4	3374.9	3416.2	3470.2	3530.6	3600.5	3657.7	3730.8	3781.6
42.5°	2551.8	2628.1	2717.1	2812.4	2914.1	3012.6	3133.4	3244.6	3346.3	3438.4	3517.9
45°	1960.7	2078.3	2211.8	2348.4	2485.1	2628.1	2774.3	2910.9	3031.7	3130.2	3212.8
47.5°	1528.5	1658.9	1830.5	1998.9	2164.1	2332.6	2494.6	2637.6	2739.3	2834.6	2907.7
50°	1210.8	1360.1	1547.6	1741.4	1922.6	2100.5	2272.1	2405.6	2507.4	2583.6	2637.6
52.5°	937.4	1115.4	1306.1	1509.5	1703.3	1897.2	2056.1	2180.0	2262.7	2329.4	2370.7
55°	699.1	873.9	1077.3	1287.0	1484.1	1671.5	1820.9	1929.0	2002.1	2040.2	2062.4
57.5°	505.3	664.2	867.5	1077.3	1255.2	1433.2	1554.0	1652.5	1693.8	1716.0	1725.6
60°	368.6	514.8	695.9	877.1	1045.5	1188.5	1293.4	1360.1	1391.9	1404.6	1401.4
62.5°	270.1	397.3	552.9	705.5	842.1	959.7	1042.3	1086.8	1102.7	1109.1	1099.6
65°	206.5	305.0	438.5	556.1	661.0	746.8	807.2	835.8	845.3	842.1	835.8
67.5°	152.6	228.8	327.4	416.3	492.6	559.3	591.1	616.5	622.8	613.3	603.8
70°	108.1	168.4	238.3	298.7	355.9	394.1	429.0	432.2	432.2	429.0	422.7
72.5°	76.3	117.6	162.0	203.4	238.3	266.9	279.6	289.2	286.0	282.8	276.5
75°	50.9	73.1	117.6	127.1	158.9	168.4	181.2	181.2	184.3	174.8	174.8
77.5°	31.8	50.9	69.9	82.7	95.3	108.1	114.4	114.4	117.6	114.4	114.4
80°	19.1	31.8	38.1	57.2	57.2	66.7	69.9	73.1	66.7	76.3	66.7
82.5°	12.7	19.1	28.6	28.6	35.0	41.3	41.3	44.5	44.5	41.3	41.3
85°	9.6	12.7	15.9	19.1	19.1	22.2	19.1	19.1	22.2	25.4	22.2
87.5°	3.2	6.4	3.2	6.4	6.4	12.7	9.6	9.6	9.6	12.7	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: P248403

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDWOLI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5987.1	5987.1	5987.1	5987.1
2.5°	5993.4	5996.6	5993.4	5993.4
5°	6022.1	6018.9	6022.1	6015.7
7.5°	6044.3	6044.3	6041.1	6041.1
10°	6044.3	6031.6	6031.6	6031.6
12.5°	5996.6	5980.8	5971.2	5964.8
15°	5914.0	5885.4	5872.7	5869.5
17.5°	5806.0	5780.5	5764.7	5755.1
20°	5682.0	5656.6	5637.5	5640.7
22.5°	5573.9	5545.4	5532.7	5526.3
25°	5465.9	5430.9	5421.5	5415.1
27.5°	5291.1	5272.1	5262.5	5253.0
30°	5024.2	5014.6	4998.8	5021.0
32.5°	4716.0	4700.0	4687.4	4696.9
35°	4375.9	4366.4	4375.9	4369.6
37.5°	4064.5	4074.0	4086.8	4093.1
40°	3819.8	3854.7	3867.5	3873.8
42.5°	3575.1	3616.4	3641.8	3657.7
45°	3273.2	3314.5	3343.1	3362.2
47.5°	2961.8	2996.8	3025.3	3022.2
50°	2679.0	2698.0	2710.7	2723.4
52.5°	2392.9	2392.9	2396.1	2396.1
55°	2068.8	2062.4	2059.2	2062.4
57.5°	1712.8	1706.5	1703.3	1693.8
60°	1388.7	1369.7	1356.9	1356.9
62.5°	1086.8	1064.6	1055.1	1051.9
65°	816.7	813.5	794.4	791.3
67.5°	591.1	578.4	565.7	568.9
70°	416.3	397.3	397.3	390.9
72.5°	270.1	260.6	257.4	257.4
75°	168.4	168.4	162.0	174.8
77.5°	111.2	111.2	108.1	111.2
80°	66.7	66.7	66.7	63.5
82.5°	41.3	44.5	41.3	41.3
85°	22.2	25.4	19.1	28.6
87.5°	12.7	15.9	12.7	15.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)