

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: P249375

Luminaire Tested: **LSR8B120D010 EC8B120940 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249375  
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 EC8B120940 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10886.0 lumens  
Efficiency: N/A  
Efficacy: 92.0 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

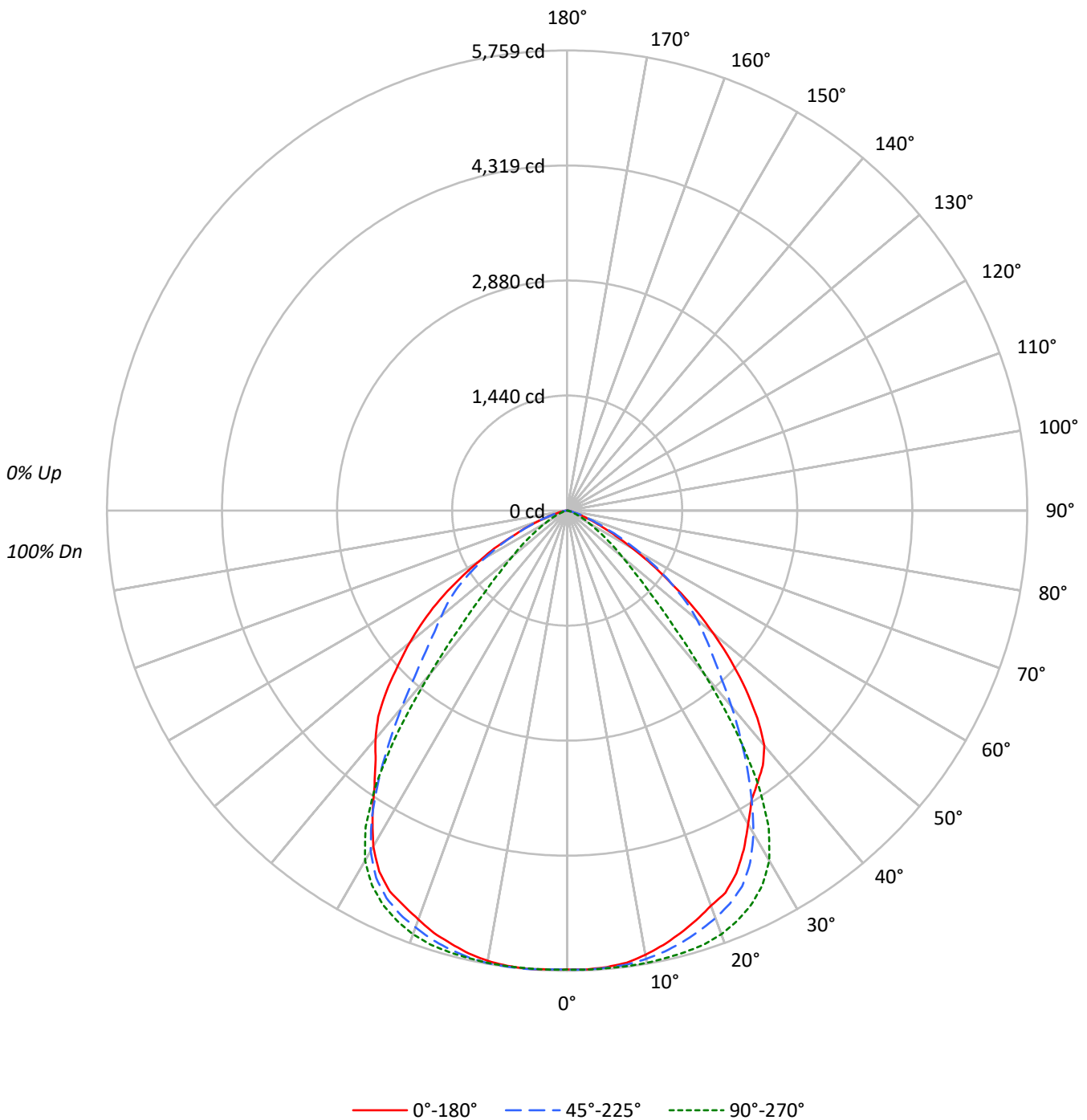
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249375

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDW0GPH

### Luminous Intensity Polar Plot





TEST NUMBER: P249375

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDW0GPH

**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°	177115	177115	177115
5°	177503	177983	178172
10°	176756	179944	179170
15°	174797	182574	179129
20°	172700	185141	178666
25°	170457	185353	178851
30°	161263	180141	172789
35°	156449	156562	158188
40°	154511	107720	150167
45°	137674	64668	139558
50°	114477	43041	123352
55°	85857	29671	104588
60°	58182	19772	78910
65°	35096	12827	54213
70°	19456	6951	33350
75°	8817	2943	17264
80°	7671	3285	12040
85°	8739	4352	11994



TEST NUMBER: P249375

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDW0GPH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	548.2	5.0
10°-20°	1591.9	14.6
20°-30°	2416.2	22.2
30°-40°	2537.8	23.3
40°-50°	1902.6	17.5
50°-60°	1220.8	11.2
60°-70°	522.2	4.8
70°-80°	123.4	1.1
80°-90°	23.0	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°	4556.3	41.9
0°-40°	7094.0	65.2
0°-60°	10217.4	93.9
0°-90°	10886.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10886.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5744	5744	5744	5744	5744	
5°	5734	5744	5750	5759	5756	545
15°	5475	5590	5719	5682	5611	1544
25°	5010	5186	5448	5349	5257	2289
35°	4156	3925	4159	4110	4202	2608
45°	3157	2580	1483	2506	3200	2418
55°	1597	1597	552	1665	1945	1449
65°	481	567	176	731	743	513
75°	74	86	25	148	145	108
85°	25	15	12	25	34	26
90°	0	0	0	0	0	



TEST NUMBER: P249375

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDW0GPH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7
2.5°	5746.8	5752.9	5749.9	5749.9	5746.8	5749.9	5749.9	5756.0	5756.0	5749.9	5746.8
5°	5734.4	5740.6	5740.6	5734.4	5734.4	5749.9	5740.6	5746.8	5746.8	5743.7	5743.7
7.5°	5706.7	5706.7	5719.0	5709.8	5709.8	5719.0	5715.9	5722.1	5728.3	5731.4	5731.4
10°	5645.0	5651.2	5654.3	5654.3	5657.4	5666.6	5672.8	5685.1	5691.2	5697.4	5700.5
12.5°	5568.0	5577.2	5580.3	5577.2	5586.5	5598.8	5614.2	5629.6	5638.9	5651.2	5660.5
15°	5475.4	5475.4	5481.6	5490.9	5497.1	5515.5	5530.9	5549.4	5574.1	5589.5	5604.9
17.5°	5373.7	5379.9	5389.1	5389.1	5401.5	5432.3	5441.5	5469.3	5497.1	5512.5	5543.3
20°	5262.8	5268.9	5278.1	5284.3	5299.7	5324.4	5342.9	5367.5	5398.4	5426.2	5456.9
22.5°	5176.4	5164.1	5170.2	5176.4	5191.8	5213.4	5235.0	5265.8	5296.6	5324.4	5355.2
25°	5009.9	5013.0	5022.3	5028.4	5046.9	5065.4	5090.1	5127.0	5154.8	5185.7	5219.5
27.5°	4784.9	4788.0	4803.4	4803.4	4818.7	4849.6	4865.0	4895.8	4932.9	4963.7	5003.8
30°	4529.0	4535.1	4535.1	4547.5	4556.7	4572.1	4587.5	4618.4	4636.9	4664.6	4720.1
32.5°	4294.7	4300.8	4297.7	4294.7	4285.4	4282.3	4279.2	4285.4	4291.6	4300.8	4322.4
35°	4156.0	4140.5	4128.2	4106.6	4081.9	4051.1	4023.3	3986.4	3952.4	3924.7	3893.9
37.5°	4023.3	4020.2	4001.8	3970.9	3921.6	3866.1	3801.4	3721.2	3641.0	3554.7	3471.5
40°	3838.4	3829.1	3813.7	3770.5	3715.0	3647.2	3560.9	3462.2	3332.7	3200.2	3064.5
42.5°	3523.9	3527.0	3508.5	3474.5	3422.2	3357.4	3268.0	3160.1	3021.4	2864.1	2688.4
45°	3157.0	3157.0	3150.8	3123.1	3086.1	3033.7	2965.9	2876.5	2740.8	2580.5	2392.4
47.5°	2774.7	2777.8	2768.5	2762.4	2746.9	2713.1	2663.7	2595.9	2500.3	2346.2	2158.1
50°	2386.3	2386.3	2401.7	2398.6	2398.6	2386.3	2364.7	2324.6	2241.4	2118.0	1942.3
52.5°	1997.8	2004.0	2013.3	2025.5	2040.9	2065.6	2040.9	2022.5	1970.0	1874.5	1723.4
55°	1597.0	1603.2	1618.6	1640.1	1658.7	1683.4	1689.5	1689.5	1661.7	1597.0	1482.9
57.5°	1254.8	1245.5	1257.9	1276.4	1301.1	1325.7	1344.2	1365.8	1362.7	1319.5	1227.1
60°	943.4	946.5	955.7	974.3	992.7	1014.3	1039.0	1057.5	1066.7	1045.2	986.6
62.5°	687.5	687.5	699.8	718.3	727.6	758.4	773.8	783.1	792.3	789.2	752.3
65°	481.0	487.1	493.3	502.6	511.8	530.2	539.5	558.0	564.2	567.3	539.5
67.5°	339.2	329.9	336.1	342.2	351.5	363.8	382.3	382.3	391.5	391.5	373.0
70°	215.8	215.8	218.9	228.1	234.3	237.4	243.6	249.7	259.0	255.9	255.9
72.5°	144.9	141.8	144.9	148.0	151.1	160.3	160.3	163.4	169.6	172.7	160.3
75°	74.0	77.1	83.2	80.2	89.4	83.2	86.3	95.6	92.5	86.3	86.3
77.5°	61.6	61.6	61.6	58.6	64.7	64.7	61.6	67.8	64.7	64.7	61.6
80°	43.2	46.2	43.2	40.1	43.2	40.1	40.1	40.1	40.1	40.1	37.0
82.5°	33.9	27.8	30.9	27.8	30.9	30.9	27.8	24.7	24.7	27.8	24.7
85°	24.7	18.5	21.6	21.6	18.5	18.5	18.5	18.5	18.5	15.4	15.4
87.5°	15.4	9.3	9.3	9.3	12.3	12.3	12.3	9.3	12.3	12.3	6.2
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: P249375

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7
2.5°	5752.9	5749.9	5756.0	5752.9	5752.9	5749.9	5752.9	5749.9	5756.0	5743.7	5746.8
5°	5752.9	5746.8	5749.9	5752.9	5756.0	5749.9	5749.9	5749.9	5756.0	5749.9	5752.9
7.5°	5740.6	5737.5	5746.8	5752.9	5749.9	5746.8	5752.9	5749.9	5756.0	5752.9	5759.1
10°	5715.9	5719.0	5725.2	5734.4	5737.5	5740.6	5746.8	5746.8	5756.0	5743.7	5749.9
12.5°	5678.9	5691.2	5706.7	5712.8	5725.2	5725.2	5731.4	5734.4	5740.6	5737.5	5746.8
15°	5632.7	5648.1	5666.6	5682.0	5697.4	5706.7	5715.9	5719.0	5728.3	5719.0	5722.1
17.5°	5577.2	5595.7	5623.4	5641.9	5666.6	5675.8	5688.1	5694.3	5703.6	5697.4	5700.5
20°	5500.1	5521.7	5552.5	5580.3	5595.7	5617.2	5632.7	5641.9	5648.1	5641.9	5645.0
22.5°	5392.2	5423.1	5463.1	5484.7	5515.5	5534.0	5537.1	5558.7	5574.1	5558.7	5564.9
25°	5265.8	5296.6	5327.5	5373.7	5401.5	5423.1	5444.6	5447.7	5463.1	5460.0	5456.9
27.5°	5056.1	5096.3	5148.6	5185.7	5222.6	5256.6	5281.2	5287.4	5302.8	5296.6	5299.7
30°	4769.4	4812.6	4862.0	4920.5	4972.9	5006.8	5037.7	5059.2	5074.6	5065.4	5062.3
32.5°	4362.5	4405.6	4458.1	4516.6	4578.3	4627.6	4664.6	4692.4	4710.9	4704.7	4689.3
35°	3897.0	3909.3	3943.2	3989.5	4041.8	4094.2	4128.2	4159.0	4180.5	4186.7	4186.7
37.5°	3419.1	3379.0	3354.4	3354.4	3385.1	3406.7	3437.6	3456.1	3490.0	3502.3	3511.6
40°	2956.6	2864.1	2777.8	2713.1	2669.9	2666.8	2666.8	2676.0	2706.9	2746.9	2784.0
42.5°	2543.5	2395.5	2262.9	2142.7	2056.4	2007.1	1985.5	1988.6	2013.3	2050.2	2111.8
45°	2213.6	2028.6	1862.2	1717.2	1600.1	1523.0	1486.0	1482.9	1501.4	1544.6	1612.5
47.5°	1957.7	1760.4	1572.3	1405.8	1279.5	1196.2	1153.0	1140.8	1153.0	1193.1	1273.3
50°	1745.0	1541.5	1347.3	1174.6	1039.0	952.7	912.6	897.2	912.6	946.5	1026.6
52.5°	1547.7	1338.0	1156.1	989.7	844.7	770.7	727.6	718.3	727.6	767.6	832.4
55°	1319.5	1140.8	961.9	795.4	669.0	595.0	561.1	551.9	561.1	598.1	666.0
57.5°	1094.5	940.3	783.1	632.0	524.1	459.3	428.6	416.2	437.8	462.4	542.6
60°	884.8	761.5	628.9	496.4	407.0	348.4	323.7	320.6	326.8	357.6	413.1
62.5°	693.7	592.0	487.1	379.2	305.2	280.5	249.7	246.7	252.8	271.3	314.5
65°	499.5	434.7	354.6	277.5	218.9	185.0	172.7	175.8	181.9	194.2	234.3
67.5°	348.4	302.1	246.7	194.2	151.1	135.6	123.3	120.2	123.3	144.9	166.5
70°	234.3	206.5	166.5	148.0	104.9	83.2	86.3	77.1	89.4	89.4	107.9
72.5°	154.1	135.6	111.0	86.3	74.0	58.6	58.6	55.5	61.6	64.7	80.2
75°	80.2	61.6	61.6	43.2	30.9	15.4	27.8	24.7	21.6	24.7	30.9
77.5°	55.5	46.2	43.2	33.9	30.9	24.7	24.7	24.7	24.7	27.8	30.9
80°	33.9	33.9	24.7	21.6	18.5	15.4	18.5	18.5	18.5	18.5	21.6
82.5°	21.6	18.5	18.5	15.4	15.4	12.3	12.3	12.3	12.3	12.3	18.5
85°	18.5	12.3	12.3	9.3	12.3	21.6	9.3	12.3	12.3	12.3	9.3
87.5°	6.2	9.3	9.3	9.3	6.2	3.1	6.2	9.3	9.3	15.4	12.3
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: P249375

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7	5743.7
2.5°	5752.9	5756.0	5756.0	5752.9	5752.9	5746.8	5759.1	5749.9	5752.9	5765.2	5756.0
5°	5759.1	5762.2	5762.2	5759.1	5759.1	5759.1	5762.2	5762.2	5759.1	5756.0	5762.2
7.5°	5771.4	5768.3	5768.3	5762.2	5762.2	5756.0	5762.2	5752.9	5759.1	5752.9	5762.2
10°	5756.0	5759.1	5756.0	5752.9	5752.9	5749.9	5749.9	5740.6	5743.7	5734.4	5740.6
12.5°	5746.8	5743.7	5743.7	5737.5	5731.4	5725.2	5722.1	5712.8	5712.8	5691.2	5700.5
15°	5722.1	5725.2	5715.9	5703.6	5697.4	5682.0	5675.8	5663.5	5651.2	5635.8	5638.9
17.5°	5700.5	5691.2	5678.9	5666.6	5641.9	5629.6	5617.2	5598.8	5592.6	5574.1	5568.0
20°	5635.8	5629.6	5614.2	5592.6	5577.2	5549.4	5537.1	5518.6	5503.2	5484.7	5475.4
22.5°	5552.5	5546.3	5527.8	5506.3	5481.6	5469.3	5456.9	5423.1	5407.6	5389.1	5386.0
25°	5447.7	5438.5	5420.0	5395.3	5382.9	5349.1	5336.7	5312.0	5305.9	5287.4	5284.3
27.5°	5287.4	5275.1	5253.5	5222.6	5201.1	5179.5	5167.2	5148.6	5142.5	5124.0	5120.9
30°	5046.9	5031.5	4988.3	4976.0	4939.0	4917.4	4917.4	4892.7	4895.8	4883.5	4883.5
32.5°	4667.7	4643.0	4609.1	4584.4	4559.8	4547.5	4547.5	4538.2	4544.4	4544.4	4550.6
35°	4165.2	4131.3	4112.7	4097.3	4097.3	4109.6	4146.7	4156.0	4174.4	4189.8	4202.2
37.5°	3520.8	3517.8	3539.3	3557.8	3604.1	3656.5	3721.2	3776.7	3829.1	3866.1	3903.1
40°	2824.0	2901.1	2962.8	3049.1	3120.0	3221.7	3338.9	3434.5	3523.9	3588.7	3656.5
42.5°	2204.3	2303.0	2432.5	2558.9	2685.3	2824.0	2978.2	3110.8	3227.9	3317.3	3388.2
45°	1717.2	1852.9	2010.2	2170.5	2333.9	2506.5	2666.8	2802.5	2925.8	3018.3	3089.2
47.5°	1384.3	1532.3	1711.1	1886.8	2071.8	2253.7	2432.5	2549.7	2651.4	2725.4	2790.2
50°	1143.8	1301.1	1489.1	1689.5	1874.5	2056.4	2210.5	2324.6	2407.9	2472.6	2512.6
52.5°	955.7	1122.2	1322.6	1523.0	1708.0	1874.5	2013.3	2099.6	2167.4	2213.6	2250.6
55°	789.2	949.6	1137.7	1325.7	1507.6	1664.8	1778.9	1843.7	1896.0	1923.8	1945.4
57.5°	644.4	792.3	965.0	1137.7	1294.9	1424.4	1513.8	1578.5	1603.2	1624.8	1621.7
60°	505.6	644.4	801.6	949.6	1085.2	1190.0	1254.8	1291.8	1310.3	1319.5	1313.4
62.5°	397.7	524.1	644.4	773.8	872.5	961.9	1023.6	1023.6	1032.8	1035.9	1045.2
65°	295.9	391.5	496.4	592.0	672.1	730.7	764.6	773.8	786.2	783.1	776.9
67.5°	218.9	289.8	366.8	437.8	493.3	530.2	554.9	576.6	573.5	567.3	564.2
70°	151.1	197.3	265.2	308.3	348.4	385.4	391.5	394.6	397.7	400.8	394.6
72.5°	104.9	138.7	175.8	212.7	237.4	252.8	268.3	271.3	271.3	271.3	268.3
75°	52.4	70.9	104.9	120.2	141.8	148.0	160.3	160.3	169.6	157.2	154.1
77.5°	46.2	55.5	74.0	86.3	95.6	104.9	107.9	117.2	114.1	107.9	111.0
80°	27.8	33.9	46.2	52.4	64.7	67.8	70.9	74.0	70.9	74.0	74.0
82.5°	21.6	24.7	30.9	30.9	40.1	40.1	43.2	43.2	46.2	46.2	46.2
85°	12.3	21.6	18.5	37.0	24.7	24.7	30.9	37.0	30.9	30.9	37.0
87.5°	12.3	12.3	9.3	12.3	12.3	12.3	15.4	18.5	18.5	21.6	18.5
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: P249375

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5743.7	5743.7	5743.7	5743.7
2.5°	5752.9	5759.1	5749.9	5746.8
5°	5762.2	5762.2	5756.0	5756.0
7.5°	5762.2	5762.2	5752.9	5746.8
10°	5737.5	5737.5	5728.3	5722.1
12.5°	5691.2	5691.2	5688.1	5678.9
15°	5632.7	5632.7	5620.3	5611.1
17.5°	5552.5	5558.7	5543.3	5543.3
20°	5466.2	5463.1	5450.8	5444.6
22.5°	5376.8	5370.6	5367.5	5349.1
25°	5281.2	5275.1	5265.8	5256.6
27.5°	5117.8	5114.8	5105.5	5093.2
30°	4868.1	4865.0	4852.7	4852.7
32.5°	4544.4	4541.3	4529.0	4532.1
35°	4208.3	4220.7	4214.5	4202.2
37.5°	3927.8	3937.0	3943.2	3937.0
40°	3693.5	3721.2	3724.3	3730.5
42.5°	3443.8	3480.7	3493.1	3499.2
45°	3144.7	3178.6	3206.4	3200.2
47.5°	2839.4	2864.1	2888.8	2870.3
50°	2546.6	2562.0	2571.3	2571.3
52.5°	2269.1	2269.1	2266.0	2269.1
55°	1951.5	1951.5	1939.2	1945.4
57.5°	1618.6	1624.8	1615.5	1600.1
60°	1310.3	1294.9	1288.7	1279.5
62.5°	1020.5	1020.5	998.9	1026.6
65°	764.6	755.3	746.1	743.0
67.5°	554.9	551.9	542.6	539.5
70°	391.5	379.2	376.1	369.9
72.5°	262.1	262.1	255.9	255.9
75°	160.3	144.9	141.8	144.9
77.5°	111.0	107.9	107.9	104.9
80°	74.0	70.9	77.1	67.8
82.5°	46.2	49.3	46.2	49.3
85°	30.9	37.0	33.9	33.9
87.5°	18.5	18.5	18.5	18.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)