

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: P249402

Luminaire Tested: **LSR8B120D010 EC8B1209730 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249402  
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 EC8B1209730 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9004.0 lumens  
Efficiency: N/A  
Efficacy: 76.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

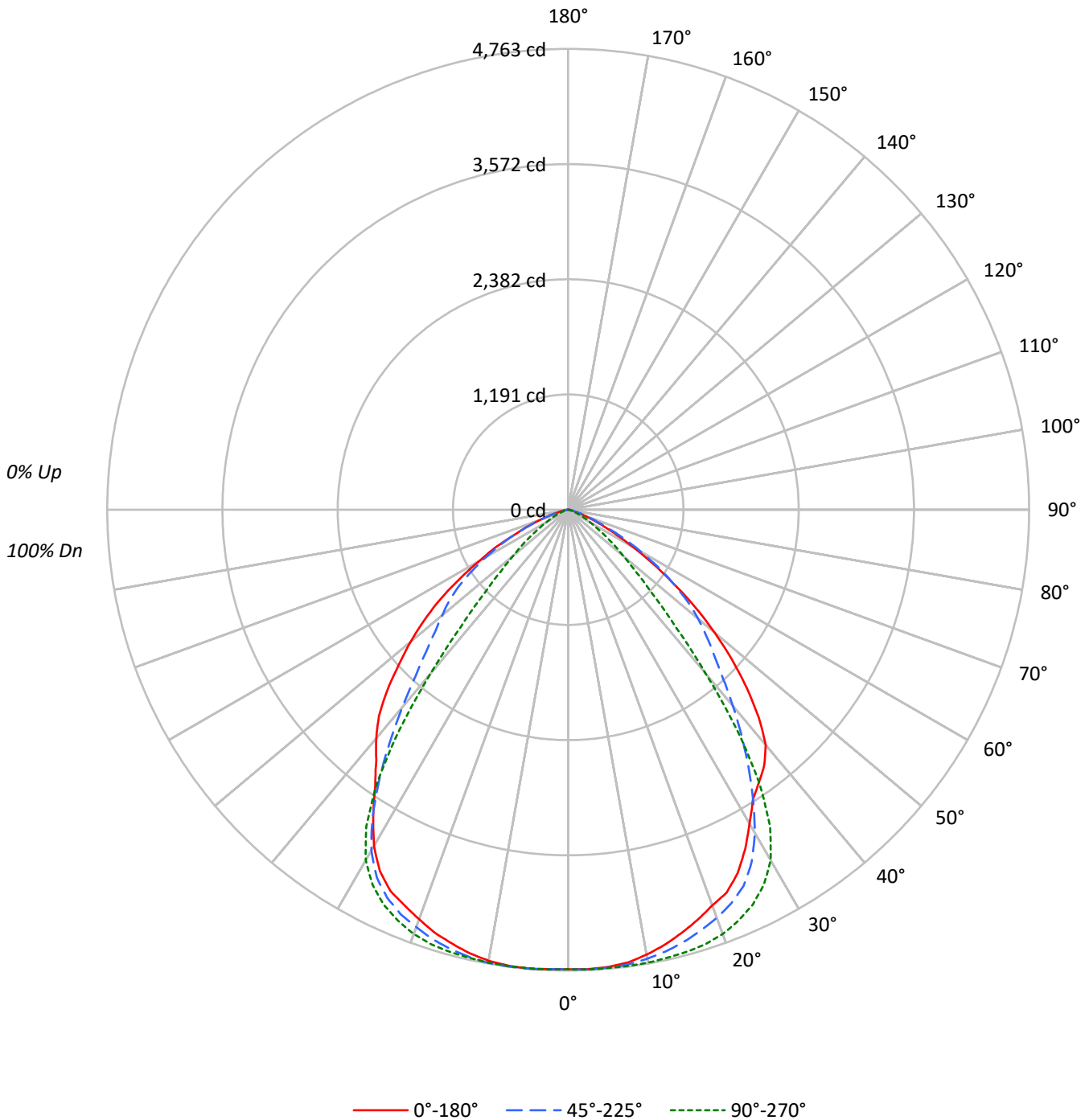
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

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

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	453.4	5.0
10°-20°	1316.7	14.6
20°-30°	1998.5	22.2
30°-40°	2099.0	23.3
40°-50°	1573.7	17.5
50°-60°	1009.7	11.2
60°-70°	431.9	4.8
70°-80°	102.0	1.1
80°-90°	19.0	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°	3768.6	41.9
0°-40°	5867.6	65.2
0°-60°	8451.0	93.9
0°-90°	9004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9004.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4751	4751	4751	4751	4751	
5°	4743	4751	4756	4763	4761	451
15°	4529	4623	4730	4700	4641	1277
25°	4144	4289	4506	4424	4348	1893
35°	3438	3246	3440	3399	3476	2157
45°	2611	2134	1227	2073	2647	2000
55°	1321	1321	456	1377	1609	1198
65°	398	469	145	604	614	425
75°	61	71	20	122	120	89
85°	20	13	10	20	28	22
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°	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7
2.5°	4753.2	4758.4	4755.8	4755.8	4753.2	4755.8	4755.8	4760.9	4760.9	4755.8	4753.2
5°	4743.0	4748.1	4748.1	4743.0	4743.0	4755.8	4748.1	4753.2	4753.2	4750.7	4750.7
7.5°	4720.1	4720.1	4730.3	4722.7	4722.7	4730.3	4727.7	4732.8	4738.0	4740.5	4740.5
10°	4669.1	4674.2	4676.7	4676.7	4679.3	4686.9	4692.0	4702.3	4707.3	4712.4	4715.0
12.5°	4605.4	4613.0	4615.5	4613.0	4620.7	4630.8	4643.6	4656.3	4664.0	4674.2	4681.9
15°	4528.8	4528.8	4533.9	4541.6	4546.7	4562.0	4574.7	4590.0	4610.4	4623.2	4635.9
17.5°	4444.7	4449.8	4457.4	4457.4	4467.7	4493.1	4500.8	4523.8	4546.7	4559.4	4585.0
20°	4352.9	4358.0	4365.6	4370.8	4383.5	4403.9	4419.2	4439.6	4465.1	4488.1	4513.5
22.5°	4281.5	4271.3	4276.4	4281.5	4294.3	4312.1	4330.0	4355.4	4380.9	4403.9	4429.4
25°	4143.8	4146.3	4154.0	4159.1	4174.4	4189.7	4210.1	4240.7	4263.6	4289.2	4317.2
27.5°	3957.6	3960.2	3972.9	3972.9	3985.7	4011.2	4023.9	4049.4	4080.1	4105.5	4138.7
30°	3746.0	3751.1	3751.1	3761.3	3768.9	3781.7	3794.4	3819.9	3835.2	3858.2	3904.1
32.5°	3552.2	3557.3	3554.7	3552.2	3544.5	3542.0	3539.4	3544.5	3549.6	3557.3	3575.1
35°	3437.5	3424.7	3414.5	3396.7	3376.3	3350.7	3327.8	3297.2	3269.1	3246.2	3220.7
37.5°	3327.8	3325.2	3309.9	3284.4	3243.6	3197.7	3144.2	3077.9	3011.6	2940.2	2871.4
40°	3174.8	3167.1	3154.4	3118.7	3072.8	3016.7	2945.3	2863.7	2756.5	2646.9	2534.7
42.5°	2914.7	2917.2	2901.9	2873.8	2830.5	2776.9	2703.0	2613.8	2499.0	2368.9	2223.6
45°	2611.2	2611.2	2606.1	2583.2	2552.6	2509.2	2453.1	2379.2	2267.0	2134.3	1978.8
47.5°	2295.0	2297.6	2289.9	2284.8	2272.0	2244.0	2203.2	2147.1	2068.1	1940.5	1785.0
50°	1973.7	1973.7	1986.5	1983.9	1983.9	1973.7	1955.9	1922.7	1853.9	1751.9	1606.5
52.5°	1652.4	1657.5	1665.2	1675.4	1688.1	1708.5	1688.1	1672.8	1629.4	1550.4	1425.5
55°	1320.9	1326.0	1338.7	1356.6	1371.9	1392.3	1397.4	1397.4	1374.4	1320.9	1226.6
57.5°	1037.9	1030.2	1040.4	1055.7	1076.1	1096.5	1111.8	1129.7	1127.1	1091.4	1014.9
60°	780.3	782.9	790.5	805.8	821.1	839.0	859.4	874.7	882.3	864.5	816.0
62.5°	568.7	568.7	578.8	594.1	601.8	627.3	640.0	647.7	655.3	652.8	622.2
65°	397.8	402.9	408.0	415.7	423.3	438.6	446.2	461.5	466.7	469.2	446.2
67.5°	280.5	272.9	278.0	283.0	290.7	300.9	316.2	316.2	323.8	323.8	308.5
70°	178.5	178.5	181.1	188.7	193.8	196.4	201.5	206.5	214.2	211.6	211.6
72.5°	119.9	117.3	119.9	122.4	125.0	132.6	132.6	135.1	140.3	142.8	132.6
75°	61.2	63.8	68.8	66.3	73.9	68.8	71.4	79.1	76.5	71.4	71.4
77.5°	51.0	51.0	51.0	48.5	53.5	53.5	51.0	56.1	53.5	53.5	51.0
80°	35.7	38.2	35.7	33.1	35.7	33.1	33.1	33.1	33.1	33.1	30.6
82.5°	28.1	23.0	25.5	23.0	25.5	25.5	23.0	20.4	20.4	23.0	20.4
85°	20.4	15.3	17.8	17.8	15.3	15.3	15.3	15.3	15.3	12.7	12.7
87.5°	12.7	7.7	7.7	7.7	10.2	10.2	10.2	7.7	10.2	10.2	5.1
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°	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7
2.5°	4758.4	4755.8	4760.9	4758.4	4758.4	4755.8	4758.4	4755.8	4760.9	4750.7	4753.2
5°	4758.4	4753.2	4755.8	4758.4	4760.9	4755.8	4755.8	4755.8	4760.9	4755.8	4758.4
7.5°	4748.1	4745.6	4753.2	4758.4	4755.8	4753.2	4758.4	4755.8	4760.9	4758.4	4763.4
10°	4727.7	4730.3	4735.4	4743.0	4745.6	4748.1	4753.2	4753.2	4760.9	4750.7	4755.8
12.5°	4697.2	4707.3	4720.1	4725.2	4735.4	4735.4	4740.5	4743.0	4748.1	4745.6	4753.2
15°	4658.9	4671.6	4686.9	4699.7	4712.4	4720.1	4727.7	4730.3	4738.0	4730.3	4732.8
17.5°	4613.0	4628.3	4651.2	4666.5	4686.9	4694.6	4704.8	4709.9	4717.6	4712.4	4715.0
20°	4549.2	4567.1	4592.6	4615.5	4628.3	4646.1	4658.9	4666.5	4671.6	4666.5	4669.1
22.5°	4460.0	4485.5	4518.6	4536.5	4562.0	4577.3	4579.8	4597.7	4610.4	4597.7	4602.8
25°	4355.4	4380.9	4406.5	4444.7	4467.7	4485.5	4503.4	4505.9	4518.6	4516.1	4513.5
27.5°	4182.0	4215.2	4258.5	4289.2	4319.7	4347.8	4368.2	4373.3	4386.1	4380.9	4383.5
30°	3944.9	3980.6	4021.4	4069.8	4113.2	4141.2	4166.7	4184.6	4197.3	4189.7	4187.1
32.5°	3608.3	3644.0	3687.4	3735.8	3786.8	3827.6	3858.2	3881.2	3896.4	3891.3	3878.6
35°	3223.3	3233.4	3261.5	3299.8	3343.1	3386.4	3414.5	3440.0	3457.8	3462.9	3462.9
37.5°	2828.0	2794.9	2774.5	2774.5	2799.9	2817.8	2843.3	2858.6	2886.6	2896.8	2904.5
40°	2445.4	2368.9	2297.6	2244.0	2208.3	2205.8	2205.8	2213.4	2238.9	2272.0	2302.7
42.5°	2103.8	1981.4	1871.7	1772.3	1700.9	1660.1	1642.2	1644.8	1665.2	1695.8	1746.7
45°	1830.9	1677.9	1540.2	1420.4	1323.5	1259.7	1229.1	1226.6	1241.8	1277.5	1333.7
47.5°	1619.3	1456.0	1300.5	1162.8	1058.3	989.4	953.7	943.5	953.7	986.8	1053.2
50°	1443.3	1275.0	1114.4	971.6	859.4	788.0	754.8	742.1	754.8	782.9	849.1
52.5°	1280.1	1106.7	956.3	818.6	698.7	637.5	601.8	594.1	601.8	634.9	688.5
55°	1091.4	943.5	795.6	657.9	553.4	492.2	464.1	456.5	464.1	494.7	550.8
57.5°	905.3	777.8	647.7	522.7	433.5	379.9	354.5	344.2	362.1	382.5	448.8
60°	731.8	629.9	520.2	410.6	336.6	288.1	267.7	265.2	270.3	295.8	341.7
62.5°	573.8	489.6	402.9	313.7	252.4	232.0	206.5	204.0	209.1	224.4	260.1
65°	413.1	359.6	293.3	229.5	181.1	153.0	142.8	145.4	150.4	160.7	193.8
67.5°	288.1	249.9	204.0	160.7	125.0	112.2	102.0	99.5	102.0	119.9	137.7
70°	193.8	170.8	137.7	122.4	86.7	68.8	71.4	63.8	73.9	73.9	89.2
72.5°	127.5	112.2	91.8	71.4	61.2	48.5	48.5	45.9	51.0	53.5	66.3
75°	66.3	51.0	51.0	35.7	25.5	12.7	23.0	20.4	17.8	20.4	25.5
77.5°	45.9	38.2	35.7	28.1	25.5	20.4	20.4	20.4	20.4	23.0	25.5
80°	28.1	28.1	20.4	17.8	15.3	12.7	15.3	15.3	15.3	15.3	17.8
82.5°	17.8	15.3	15.3	12.7	12.7	10.2	10.2	10.2	10.2	10.2	15.3
85°	15.3	10.2	10.2	7.7	10.2	17.8	7.7	10.2	10.2	10.2	7.7
87.5°	5.1	7.7	7.7	7.7	5.1	2.6	5.1	7.7	7.7	12.7	10.2
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°	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7	4750.7
2.5°	4758.4	4760.9	4760.9	4758.4	4758.4	4753.2	4763.4	4755.8	4758.4	4768.5	4760.9
5°	4763.4	4766.0	4766.0	4763.4	4763.4	4763.4	4766.0	4766.0	4763.4	4760.9	4766.0
7.5°	4773.6	4771.1	4771.1	4766.0	4766.0	4760.9	4766.0	4758.4	4763.4	4758.4	4766.0
10°	4760.9	4763.4	4760.9	4758.4	4758.4	4755.8	4755.8	4748.1	4750.7	4743.0	4748.1
12.5°	4753.2	4750.7	4750.7	4745.6	4740.5	4735.4	4732.8	4725.2	4725.2	4707.3	4715.0
15°	4732.8	4735.4	4727.7	4717.6	4712.4	4699.7	4694.6	4684.4	4674.2	4661.5	4664.0
17.5°	4715.0	4707.3	4697.2	4686.9	4666.5	4656.3	4646.1	4630.8	4625.7	4610.4	4605.4
20°	4661.5	4656.3	4643.6	4625.7	4613.0	4590.0	4579.8	4564.6	4551.8	4536.5	4528.8
22.5°	4592.6	4587.5	4572.2	4554.3	4533.9	4523.8	4513.5	4485.5	4472.7	4457.4	4454.9
25°	4505.9	4498.2	4483.0	4462.5	4452.3	4424.3	4414.1	4393.7	4388.6	4373.3	4370.8
27.5°	4373.3	4363.1	4345.2	4319.7	4301.9	4284.0	4273.9	4258.5	4253.5	4238.1	4235.6
30°	4174.4	4161.6	4125.9	4115.8	4085.1	4067.3	4067.3	4046.9	4049.4	4039.3	4039.3
32.5°	3860.7	3840.3	3812.3	3791.9	3771.5	3761.3	3761.3	3753.6	3758.7	3758.7	3763.8
35°	3445.1	3417.1	3401.7	3389.0	3389.0	3399.2	3429.8	3437.5	3452.7	3465.5	3475.7
37.5°	2912.1	2909.6	2927.4	2942.7	2981.0	3024.3	3077.9	3123.8	3167.1	3197.7	3228.3
40°	2335.8	2399.6	2450.6	2522.0	2580.6	2664.8	2761.7	2840.7	2914.7	2968.3	3024.3
42.5°	1823.2	1904.9	2012.0	2116.5	2221.1	2335.8	2463.4	2573.0	2669.9	2743.8	2802.5
45°	1420.4	1532.5	1662.6	1795.2	1930.4	2073.2	2205.8	2318.0	2420.0	2496.5	2555.1
47.5°	1144.9	1267.4	1415.2	1560.6	1713.6	1864.0	2012.0	2108.9	2193.0	2254.2	2307.8
50°	946.0	1076.1	1231.7	1397.4	1550.4	1700.9	1828.4	1922.7	1991.6	2045.1	2078.3
52.5°	790.5	928.2	1094.0	1259.7	1412.7	1550.4	1665.2	1736.6	1792.7	1830.9	1861.5
55°	652.8	785.4	941.0	1096.5	1247.0	1377.0	1471.3	1524.9	1568.2	1591.2	1609.0
57.5°	533.0	655.3	798.2	941.0	1071.0	1178.1	1252.1	1305.6	1326.0	1343.9	1341.3
60°	418.2	533.0	663.0	785.4	897.6	984.3	1037.9	1068.5	1083.7	1091.4	1086.3
62.5°	328.9	433.5	533.0	640.0	721.7	795.6	846.6	846.6	854.2	856.8	864.5
65°	244.8	323.8	410.6	489.6	555.9	604.4	632.4	640.0	650.3	647.7	642.6
67.5°	181.1	239.7	303.4	362.1	408.0	438.6	459.0	476.9	474.3	469.2	466.7
70°	125.0	163.2	219.3	255.0	288.1	318.8	323.8	326.4	328.9	331.5	326.4
72.5°	86.7	114.7	145.4	176.0	196.4	209.1	221.9	224.4	224.4	224.4	221.9
75°	43.4	58.7	86.7	99.5	117.3	122.4	132.6	132.6	140.3	130.0	127.5
77.5°	38.2	45.9	61.2	71.4	79.1	86.7	89.2	96.9	94.3	89.2	91.8
80°	23.0	28.1	38.2	43.4	53.5	56.1	58.7	61.2	58.7	61.2	61.2
82.5°	17.8	20.4	25.5	25.5	33.1	33.1	35.7	35.7	38.2	38.2	38.2
85°	10.2	17.8	15.3	30.6	20.4	20.4	25.5	30.6	25.5	25.5	30.6
87.5°	10.2	10.2	7.7	10.2	10.2	10.2	12.7	15.3	15.3	17.8	15.3
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: P249402

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4750.7	4750.7	4750.7	4750.7
2.5°	4758.4	4763.4	4755.8	4753.2
5°	4766.0	4766.0	4760.9	4760.9
7.5°	4766.0	4766.0	4758.4	4753.2
10°	4745.6	4745.6	4738.0	4732.8
12.5°	4707.3	4707.3	4704.8	4697.2
15°	4658.9	4658.9	4648.7	4641.1
17.5°	4592.6	4597.7	4585.0	4585.0
20°	4521.2	4518.6	4508.5	4503.4
22.5°	4447.3	4442.1	4439.6	4424.3
25°	4368.2	4363.1	4355.4	4347.8
27.5°	4233.1	4230.5	4222.8	4212.7
30°	4026.5	4023.9	4013.7	4013.7
32.5°	3758.7	3756.2	3746.0	3748.6
35°	3480.8	3491.0	3485.9	3475.7
37.5°	3248.7	3256.4	3261.5	3256.4
40°	3054.9	3077.9	3080.4	3085.6
42.5°	2848.4	2879.0	2889.2	2894.3
45°	2601.0	2629.1	2652.0	2646.9
47.5°	2348.5	2368.9	2389.4	2374.1
50°	2106.3	2119.1	2126.7	2126.7
52.5°	1876.8	1876.8	1874.3	1876.8
55°	1614.2	1614.2	1604.0	1609.0
57.5°	1338.7	1343.9	1336.2	1323.5
60°	1083.7	1071.0	1065.9	1058.3
62.5°	844.1	844.1	826.2	849.1
65°	632.4	624.8	617.1	614.5
67.5°	459.0	456.5	448.8	446.2
70°	323.8	313.7	311.1	306.0
72.5°	216.8	216.8	211.6	211.6
75°	132.6	119.9	117.3	119.9
77.5°	91.8	89.2	89.2	86.7
80°	61.2	58.7	63.8	56.1
82.5°	38.2	40.8	38.2	40.8
85°	25.5	30.6	28.1	28.1
87.5°	15.3	15.3	15.3	15.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)