

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: P249194

Luminaire Tested: **LSR8B100D010 EC8B100827 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249194
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: LSR8B100D010 EC8B100827 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10294.0 lumens
Efficiency: N/A
Efficacy: 96.8 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

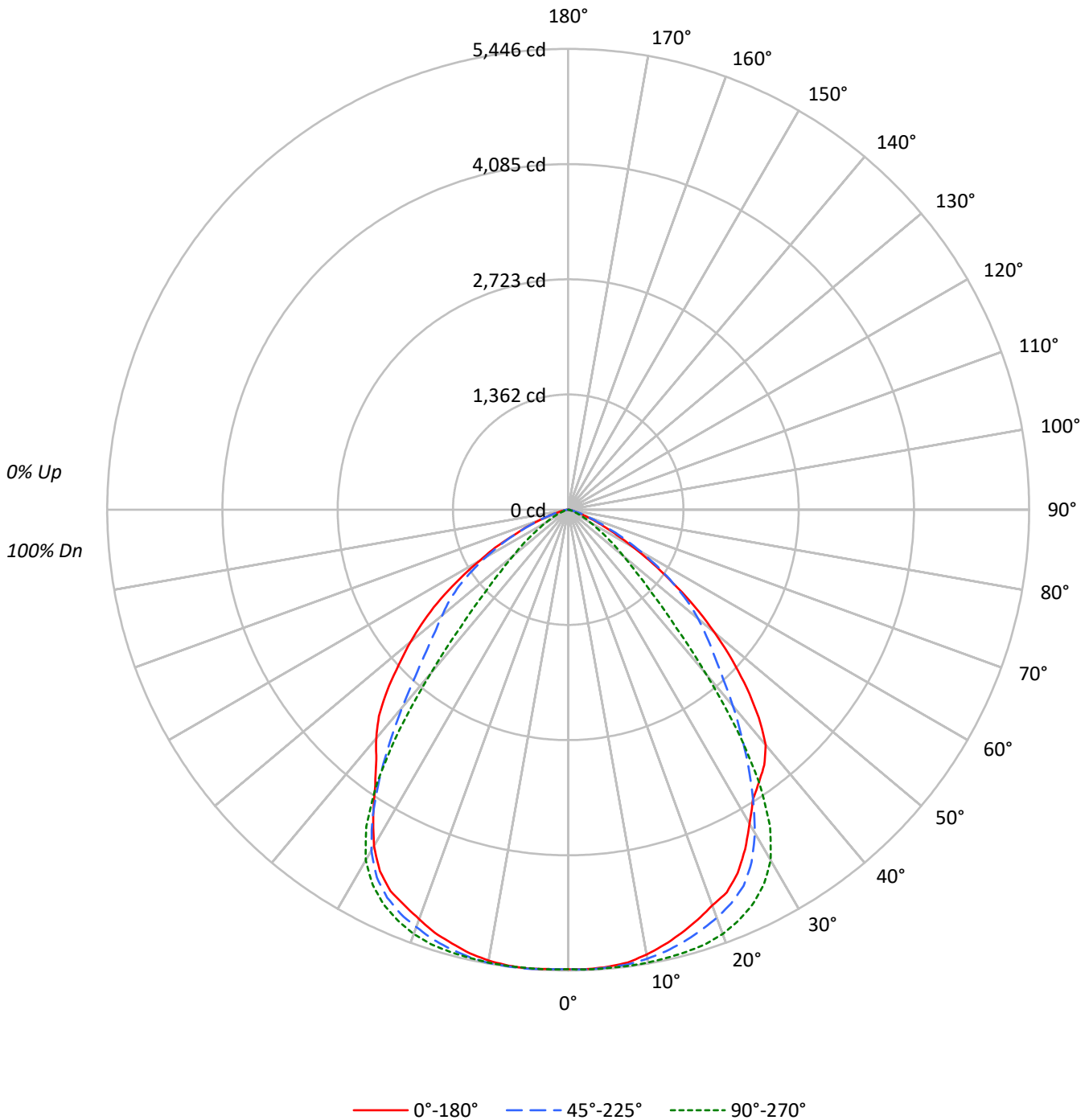
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	167481	167481	167481
5°	167849	168304	168483
10°	167144	170156	169426
15°	165293	172646	169389
20°	163309	175073	168950
25°	161186	175275	169124
30°	152493	170346	163392
35°	147938	148047	149587
40°	146106	101863	142000
45°	130186	61153	131966
50°	108251	40700	116641
55°	81185	28058	98900
60°	55018	18699	74618
65°	33184	12127	51265
70°	18402	6573	31538
75°	8340	2776	16323
80°	7245	3108	11383
85°	8244	4104	11357



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	518.3	5.0
10°-20°	1505.3	14.6
20°-30°	2284.8	22.2
30°-40°	2399.7	23.3
40°-50°	1799.2	17.5
50°-60°	1154.4	11.2
60°-70°	493.8	4.8
70°-80°	116.7	1.1
80°-90°	21.7	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°	4308.5	41.9
0°-40°	6708.2	65.2
0°-60°	9661.8	93.9
0°-90°	10294.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10294.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5431	5431	5431	5431	5431	
5°	5422	5431	5437	5446	5443	515
15°	5178	5286	5408	5373	5306	1460
25°	4737	4904	5152	5058	4971	2164
35°	3930	3711	3933	3886	3974	2466
45°	2985	2440	1402	2370	3026	2286
55°	1510	1510	522	1574	1840	1370
65°	455	536	166	691	703	485
75°	70	82	23	140	137	102
85°	23	15	12	23	32	25
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°	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3
2.5°	5434.2	5440.1	5437.2	5437.2	5434.2	5437.2	5437.2	5443.0	5443.0	5437.2	5434.2
5°	5422.5	5428.4	5428.4	5422.5	5422.5	5437.2	5428.4	5434.2	5434.2	5431.3	5431.3
7.5°	5396.4	5396.4	5408.0	5399.3	5399.3	5408.0	5405.1	5410.9	5416.8	5419.7	5419.7
10°	5338.0	5343.9	5346.8	5346.8	5349.7	5358.4	5364.3	5376.0	5381.7	5387.6	5390.5
12.5°	5265.2	5273.9	5276.8	5273.9	5282.7	5294.3	5308.9	5323.5	5332.2	5343.9	5352.6
15°	5177.7	5177.7	5183.5	5192.3	5198.1	5215.6	5230.2	5247.6	5271.0	5285.6	5300.1
17.5°	5081.5	5087.3	5096.0	5096.0	5107.7	5136.9	5145.6	5171.9	5198.1	5212.7	5241.9
20°	4976.6	4982.3	4991.1	4997.0	5011.5	5034.8	5052.3	5075.6	5104.8	5131.1	5160.2
22.5°	4894.9	4883.3	4889.0	4894.9	4909.5	4929.9	4950.3	4979.4	5008.6	5034.8	5064.0
25°	4737.4	4740.4	4749.1	4754.9	4772.5	4790.0	4813.3	4848.2	4874.5	4903.7	4935.7
27.5°	4524.7	4527.6	4542.1	4542.1	4556.7	4585.9	4600.4	4629.6	4664.6	4693.7	4731.7
30°	4282.7	4288.5	4288.5	4300.2	4308.9	4323.5	4338.0	4367.2	4384.7	4411.0	4463.5
32.5°	4061.1	4066.9	4064.0	4061.1	4052.4	4049.4	4046.5	4052.4	4058.2	4066.9	4087.3
35°	3929.9	3915.3	3903.7	3883.3	3860.0	3830.8	3804.5	3769.6	3737.5	3711.2	3682.1
37.5°	3804.5	3801.6	3784.1	3755.0	3708.3	3655.9	3594.7	3518.8	3443.0	3361.4	3282.7
40°	3629.6	3620.9	3606.3	3565.5	3513.0	3448.9	3367.3	3274.0	3151.5	3026.1	2897.9
42.5°	3332.2	3335.2	3317.7	3285.6	3236.1	3174.8	3090.3	2988.3	2857.1	2708.3	2542.2
45°	2985.3	2985.3	2979.5	2953.2	2918.3	2868.7	2804.6	2720.0	2591.8	2440.1	2262.3
47.5°	2623.8	2626.7	2618.0	2612.2	2597.6	2565.5	2518.9	2454.8	2364.4	2218.6	2040.7
50°	2256.5	2256.5	2271.1	2268.1	2268.1	2256.5	2236.1	2198.2	2119.5	2002.9	1836.7
52.5°	1889.1	1895.0	1903.8	1915.4	1929.9	1953.3	1929.9	1912.5	1862.9	1772.5	1629.7
55°	1510.1	1516.0	1530.5	1550.9	1568.5	1591.8	1597.6	1597.6	1571.4	1510.1	1402.3
57.5°	1186.6	1177.8	1189.5	1207.0	1230.3	1253.6	1271.1	1291.5	1288.6	1247.8	1160.3
60°	892.1	895.0	903.7	921.3	938.8	959.2	982.5	1000.0	1008.7	988.3	932.9
62.5°	650.1	650.1	661.8	679.2	688.0	717.2	731.7	740.5	749.2	746.3	711.3
65°	454.8	460.6	466.5	475.2	483.9	501.4	510.2	527.7	533.5	536.4	510.2
67.5°	320.7	311.9	317.8	323.6	332.3	344.0	361.5	361.5	370.2	370.2	352.7
70°	204.1	204.1	207.0	215.7	221.6	224.5	230.3	236.1	244.9	242.0	242.0
72.5°	137.0	134.1	137.0	140.0	142.9	151.6	151.6	154.5	160.4	163.3	151.6
75°	70.0	72.9	78.7	75.8	84.5	78.7	81.6	90.4	87.5	81.6	81.6
77.5°	58.3	58.3	58.3	55.4	61.2	61.2	58.3	64.1	61.2	61.2	58.3
80°	40.8	43.7	40.8	37.9	40.8	37.9	37.9	37.9	37.9	37.9	35.0
82.5°	32.1	26.3	29.2	26.3	29.2	29.2	26.3	23.3	23.3	26.3	23.3
85°	23.3	17.5	20.4	20.4	17.5	17.5	17.5	17.5	17.5	14.6	14.6
87.5°	14.6	8.8	8.8	8.8	11.6	11.6	11.6	8.8	11.6	11.6	5.8
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°	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3
2.5°	5440.1	5437.2	5443.0	5440.1	5440.1	5437.2	5440.1	5437.2	5443.0	5431.3	5434.2
5°	5440.1	5434.2	5437.2	5440.1	5443.0	5437.2	5437.2	5437.2	5443.0	5437.2	5440.1
7.5°	5428.4	5425.5	5434.2	5440.1	5437.2	5434.2	5440.1	5437.2	5443.0	5440.1	5445.9
10°	5405.1	5408.0	5413.8	5422.5	5425.5	5428.4	5434.2	5434.2	5443.0	5431.3	5437.2
12.5°	5370.1	5381.7	5396.4	5402.1	5413.8	5413.8	5419.7	5422.5	5428.4	5425.5	5434.2
15°	5326.4	5340.9	5358.4	5373.0	5387.6	5396.4	5405.1	5408.0	5416.8	5408.0	5410.9
17.5°	5273.9	5291.4	5317.6	5335.1	5358.4	5367.2	5378.8	5384.7	5393.4	5387.6	5390.5
20°	5201.0	5221.4	5250.6	5276.8	5291.4	5311.8	5326.4	5335.1	5340.9	5335.1	5338.0
22.5°	5099.0	5128.1	5166.0	5186.4	5215.6	5233.1	5236.0	5256.4	5271.0	5256.4	5262.3
25°	4979.4	5008.6	5037.8	5081.5	5107.7	5128.1	5148.5	5151.5	5166.0	5163.1	5160.2
27.5°	4781.2	4819.1	4868.6	4903.7	4938.6	4970.7	4994.0	4999.8	5014.4	5008.6	5011.5
30°	4510.0	4550.9	4597.6	4652.9	4702.5	4734.5	4763.7	4784.1	4798.7	4790.0	4787.0
32.5°	4125.3	4166.1	4215.6	4271.0	4329.3	4375.9	4411.0	4437.2	4454.7	4448.8	4434.3
35°	3685.1	3696.7	3728.8	3772.5	3822.0	3871.6	3903.7	3932.8	3953.2	3959.1	3959.1
37.5°	3233.2	3195.3	3171.9	3171.9	3201.1	3221.5	3250.6	3268.1	3300.2	3311.8	3320.6
40°	2795.8	2708.3	2626.7	2565.5	2524.7	2521.8	2521.8	2530.5	2559.7	2597.6	2632.6
42.5°	2405.2	2265.2	2139.9	2026.2	1944.6	1897.9	1877.5	1880.4	1903.8	1938.7	1997.0
45°	2093.2	1918.3	1760.9	1623.9	1513.1	1440.2	1405.2	1402.3	1419.8	1460.6	1524.8
47.5°	1851.3	1664.7	1486.8	1329.4	1209.9	1131.1	1090.3	1078.7	1090.3	1128.2	1204.1
50°	1650.1	1457.7	1274.0	1110.7	982.5	900.9	862.9	848.4	862.9	895.0	970.8
52.5°	1463.5	1265.3	1093.3	935.8	798.8	728.8	688.0	679.2	688.0	725.9	787.2
55°	1247.8	1078.7	909.6	752.1	632.7	562.7	530.6	521.9	530.6	565.6	629.7
57.5°	1035.0	889.2	740.5	597.6	495.6	434.4	405.2	393.6	414.0	437.3	513.1
60°	836.7	720.1	594.7	469.4	384.8	329.4	306.1	303.2	309.0	338.2	390.6
62.5°	656.0	559.8	460.6	358.6	288.6	265.3	236.1	233.3	239.0	256.5	297.4
65°	472.3	411.1	335.3	262.4	207.0	174.9	163.3	166.2	172.0	183.7	221.6
67.5°	329.4	285.7	233.3	183.7	142.9	128.3	116.6	113.7	116.6	137.0	157.4
70°	221.6	195.3	157.4	140.0	99.2	78.7	81.6	72.9	84.5	84.5	102.0
72.5°	145.7	128.3	104.9	81.6	70.0	55.4	55.4	52.5	58.3	61.2	75.8
75°	75.8	58.3	58.3	40.8	29.2	14.6	26.3	23.3	20.4	23.3	29.2
77.5°	52.5	43.7	40.8	32.1	29.2	23.3	23.3	23.3	23.3	26.3	29.2
80°	32.1	32.1	23.3	20.4	17.5	14.6	17.5	17.5	17.5	17.5	20.4
82.5°	20.4	17.5	17.5	14.6	14.6	11.6	11.6	11.6	11.6	11.6	17.5
85°	17.5	11.6	11.6	8.8	11.6	20.4	8.8	11.6	11.6	11.6	8.8
87.5°	5.8	8.8	8.8	8.8	5.8	2.9	5.8	8.8	8.8	14.6	11.6
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°	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3	5431.3
2.5°	5440.1	5443.0	5443.0	5440.1	5440.1	5434.2	5445.9	5437.2	5440.1	5451.7	5443.0
5°	5445.9	5448.8	5448.8	5445.9	5445.9	5445.9	5448.8	5448.8	5445.9	5443.0	5448.8
7.5°	5457.6	5454.6	5454.6	5448.8	5448.8	5443.0	5448.8	5440.1	5445.9	5440.1	5448.8
10°	5443.0	5445.9	5443.0	5440.1	5440.1	5437.2	5437.2	5428.4	5431.3	5422.5	5428.4
12.5°	5434.2	5431.3	5431.3	5425.5	5419.7	5413.8	5410.9	5402.1	5402.1	5381.7	5390.5
15°	5410.9	5413.8	5405.1	5393.4	5387.6	5373.0	5367.2	5355.5	5343.9	5329.3	5332.2
17.5°	5390.5	5381.7	5370.1	5358.4	5335.1	5323.5	5311.8	5294.3	5288.4	5271.0	5265.2
20°	5329.3	5323.5	5308.9	5288.4	5273.9	5247.6	5236.0	5218.5	5203.9	5186.4	5177.7
22.5°	5250.6	5244.7	5227.2	5206.8	5183.5	5171.9	5160.2	5128.1	5113.5	5096.0	5093.1
25°	5151.5	5142.7	5125.2	5101.9	5090.2	5058.2	5046.5	5023.1	5017.4	4999.8	4997.0
27.5°	4999.8	4988.2	4967.8	4938.6	4918.2	4897.8	4886.2	4868.6	4862.9	4845.3	4842.5
30°	4772.5	4757.9	4717.0	4705.4	4670.4	4650.0	4650.0	4626.7	4629.6	4618.0	4618.0
32.5°	4413.9	4390.5	4358.5	4335.1	4311.8	4300.2	4300.2	4291.4	4297.2	4297.2	4303.1
35°	3938.6	3906.6	3889.1	3874.5	3874.5	3886.1	3921.2	3929.9	3947.4	3962.0	3973.7
37.5°	3329.3	3326.5	3346.9	3364.3	3408.1	3457.6	3518.8	3571.3	3620.9	3655.9	3690.8
40°	2670.5	2743.4	2801.7	2883.3	2950.3	3046.5	3157.3	3247.7	3332.2	3393.5	3457.6
42.5°	2084.5	2177.8	2300.2	2419.7	2539.3	2670.5	2816.3	2941.6	3052.4	3136.9	3204.0
45°	1623.9	1752.1	1900.8	2052.4	2206.9	2370.2	2521.8	2650.1	2766.7	2854.2	2921.2
47.5°	1309.0	1448.9	1618.0	1784.2	1959.1	2131.1	2300.2	2411.0	2507.2	2577.2	2638.4
50°	1081.6	1230.3	1408.1	1597.6	1772.5	1944.6	2090.3	2198.2	2276.9	2338.1	2376.0
52.5°	903.7	1061.2	1250.7	1440.2	1615.1	1772.5	1903.8	1985.4	2049.5	2093.2	2128.2
55°	746.3	898.0	1075.8	1253.6	1425.6	1574.3	1682.1	1743.4	1792.9	1819.2	1839.6
57.5°	609.3	749.2	912.5	1075.8	1224.5	1346.9	1431.5	1492.7	1516.0	1536.4	1533.5
60°	478.2	609.3	758.0	898.0	1026.2	1125.3	1186.6	1221.5	1239.0	1247.8	1241.9
62.5°	376.1	495.6	609.3	731.7	825.1	909.6	967.9	967.9	976.6	979.6	988.3
65°	279.8	370.2	469.4	559.8	635.5	690.9	723.0	731.7	743.4	740.5	734.7
67.5°	207.0	274.1	346.9	414.0	466.5	501.4	524.7	545.2	542.3	536.4	533.5
70°	142.9	186.6	250.7	291.5	329.4	364.4	370.2	373.2	376.1	379.0	373.2
72.5°	99.2	131.2	166.2	201.2	224.5	239.0	253.7	256.5	256.5	256.5	253.7
75°	49.6	67.1	99.2	113.7	134.1	140.0	151.6	151.6	160.4	148.7	145.7
77.5°	43.7	52.5	70.0	81.6	90.4	99.2	102.0	110.8	107.9	102.0	104.9
80°	26.3	32.1	43.7	49.6	61.2	64.1	67.1	70.0	67.1	70.0	70.0
82.5°	20.4	23.3	29.2	29.2	37.9	37.9	40.8	40.8	43.7	43.7	43.7
85°	11.6	20.4	17.5	35.0	23.3	23.3	29.2	35.0	29.2	29.2	35.0
87.5°	11.6	11.6	8.8	11.6	11.6	11.6	14.6	17.5	17.5	20.4	17.5
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: P249194

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5431.3	5431.3	5431.3	5431.3
2.5°	5440.1	5445.9	5437.2	5434.2
5°	5448.8	5448.8	5443.0	5443.0
7.5°	5448.8	5448.8	5440.1	5434.2
10°	5425.5	5425.5	5416.8	5410.9
12.5°	5381.7	5381.7	5378.8	5370.1
15°	5326.4	5326.4	5314.7	5306.0
17.5°	5250.6	5256.4	5241.9	5241.9
20°	5168.9	5166.0	5154.4	5148.5
22.5°	5084.4	5078.6	5075.6	5058.2
25°	4994.0	4988.2	4979.4	4970.7
27.5°	4839.5	4836.6	4827.8	4816.2
30°	4603.3	4600.4	4588.8	4588.8
32.5°	4297.2	4294.3	4282.7	4285.6
35°	3979.5	3991.1	3985.3	3973.7
37.5°	3714.2	3722.9	3728.8	3722.9
40°	3492.6	3518.8	3521.8	3527.6
42.5°	3256.5	3291.4	3303.1	3308.9
45°	2973.6	3005.7	3032.0	3026.1
47.5°	2685.0	2708.3	2731.7	2714.2
50°	2408.1	2422.7	2431.4	2431.4
52.5°	2145.7	2145.7	2142.8	2145.7
55°	1845.4	1845.4	1833.8	1839.6
57.5°	1530.5	1536.4	1527.6	1513.1
60°	1239.0	1224.5	1218.6	1209.9
62.5°	965.0	965.0	944.6	970.8
65°	723.0	714.3	705.5	702.6
67.5°	524.7	521.9	513.1	510.2
70°	370.2	358.6	355.7	349.8
72.5°	247.8	247.8	242.0	242.0
75°	151.6	137.0	134.1	137.0
77.5°	104.9	102.0	102.0	99.2
80°	70.0	67.1	72.9	64.1
82.5°	43.7	46.7	43.7	46.7
85°	29.2	35.0	32.1	32.1
87.5°	17.5	17.5	17.5	17.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)