

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: P249518

Luminaire Tested: **LSR8B100D010 EC8B100827 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249518  
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 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10231.0 lumens  
Efficiency: N/A  
Efficacy: 96.2 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

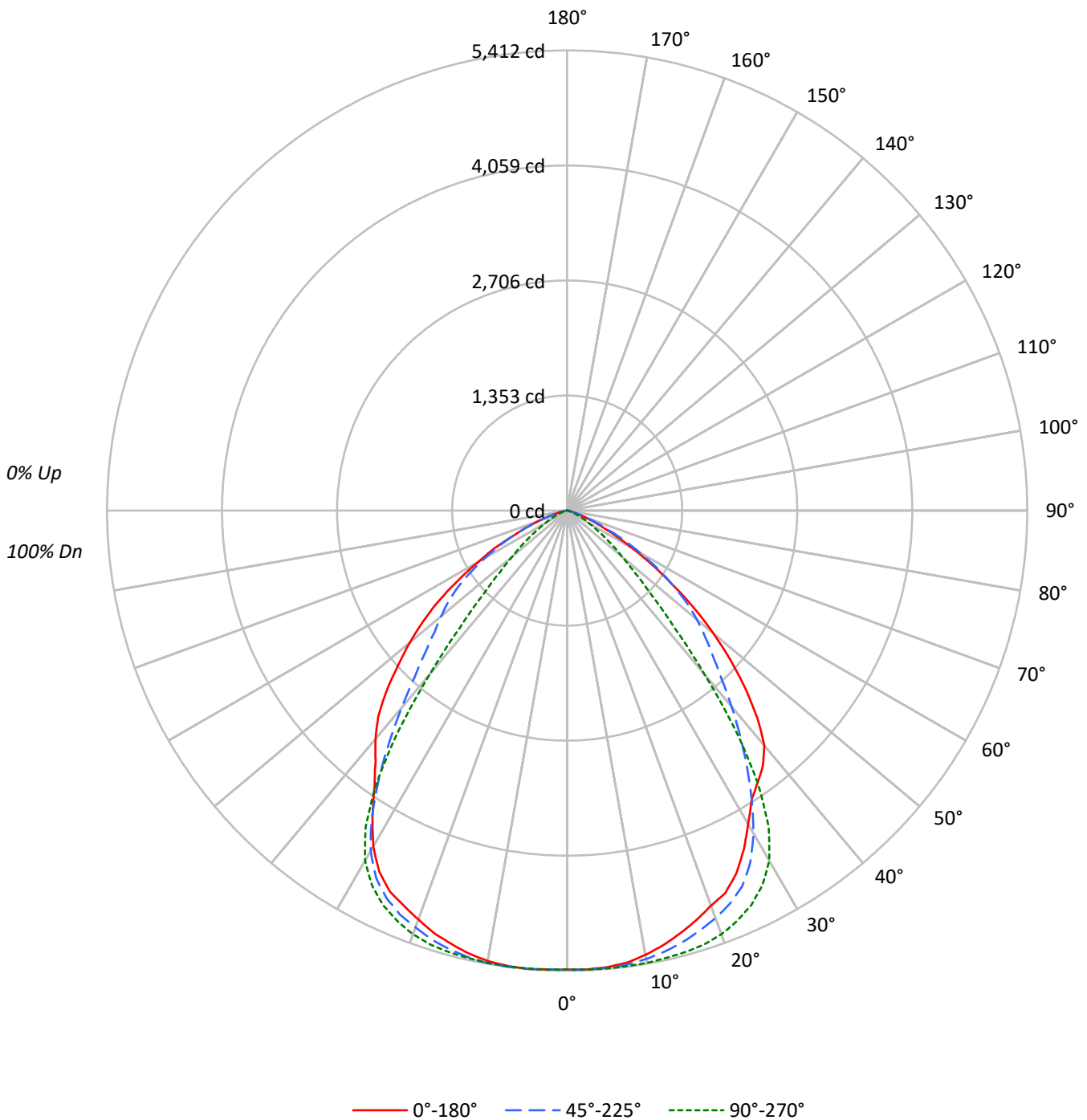
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	166458	166458	166458
5°	166824	167273	167452
10°	166120	169116	168390
15°	164281	171589	168352
20°	162308	174000	167916
25°	160203	174200	168089
30°	151560	169303	162392
35°	147034	147140	148672
40°	145212	101239	141130
45°	129393	60778	131159
50°	107589	40451	115926
55°	80691	27886	98292
60°	54679	18582	74161
65°	32980	12054	50951
70°	18284	6537	31348
75°	8292	2764	16227
80°	7210	3090	11312
85°	8208	4104	11286



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	515.2	5.0
10°-20°	1496.1	14.6
20°-30°	2270.8	22.2
30°-40°	2385.1	23.3
40°-50°	1788.2	17.5
50°-60°	1147.3	11.2
60°-70°	490.8	4.8
70°-80°	116.0	1.1
80°-90°	21.6	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°	4282.1	41.9
0°-40°	6667.2	65.2
0°-60°	9602.7	93.9
0°-90°	10231.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10231.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5398	5398	5398	5398	5398	
5°	5389	5398	5404	5412	5410	512
15°	5146	5253	5375	5340	5274	1451
25°	4708	4874	5120	5027	4940	2151
35°	3906	3688	3909	3862	3949	2451
45°	2967	2425	1394	2356	3008	2272
55°	1501	1501	519	1565	1828	1361
65°	452	533	165	687	698	483
75°	70	81	23	139	136	101
85°	23	14	12	23	32	24
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°	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1
2.5°	5401.0	5406.8	5403.9	5403.9	5401.0	5403.9	5403.9	5409.7	5409.7	5403.9	5401.0
5°	5389.4	5395.2	5395.2	5389.4	5389.4	5403.9	5395.2	5401.0	5401.0	5398.1	5398.1
7.5°	5363.3	5363.3	5374.9	5366.2	5366.2	5374.9	5372.0	5377.8	5383.6	5386.5	5386.5
10°	5305.3	5311.2	5314.1	5314.1	5317.0	5325.6	5331.4	5343.1	5348.8	5354.6	5357.5
12.5°	5233.0	5241.6	5244.5	5241.6	5250.3	5261.9	5276.4	5290.9	5299.6	5311.2	5319.9
15°	5146.0	5146.0	5151.8	5160.5	5166.3	5183.7	5198.1	5215.5	5238.7	5253.2	5267.7
17.5°	5050.4	5056.2	5064.9	5064.9	5076.5	5105.4	5114.1	5140.2	5166.3	5180.8	5209.8
20°	4946.1	4951.8	4960.6	4966.4	4980.8	5004.0	5021.4	5044.6	5073.6	5099.7	5128.6
22.5°	4864.9	4853.4	4859.1	4864.9	4879.5	4899.7	4920.0	4948.9	4977.9	5004.0	5033.0
25°	4708.5	4711.4	4720.1	4725.8	4743.3	4760.6	4783.8	4818.6	4844.6	4873.6	4905.5
27.5°	4497.0	4499.9	4514.3	4514.3	4528.8	4557.8	4572.3	4601.3	4636.1	4665.0	4702.7
30°	4256.5	4262.2	4262.2	4273.9	4282.5	4297.0	4311.5	4340.5	4357.9	4384.0	4436.1
32.5°	4036.3	4042.0	4039.1	4036.3	4027.6	4024.6	4021.7	4027.6	4033.4	4042.0	4062.3
35°	3905.9	3891.4	3879.8	3859.5	3836.3	3807.3	3781.3	3746.5	3714.6	3688.5	3659.6
37.5°	3781.3	3778.3	3761.0	3732.0	3685.6	3633.5	3572.7	3497.3	3421.9	3340.8	3262.6
40°	3607.4	3598.7	3584.2	3543.7	3491.5	3427.8	3346.7	3253.9	3132.2	3007.6	2880.1
42.5°	3311.8	3314.7	3297.4	3265.5	3216.3	3155.4	3071.4	2970.0	2839.6	2691.8	2526.7
45°	2967.1	2967.1	2961.3	2935.2	2900.4	2851.1	2787.4	2703.4	2575.9	2425.2	2248.4
47.5°	2607.8	2610.7	2601.9	2596.2	2581.7	2549.8	2503.5	2439.7	2349.9	2205.0	2028.2
50°	2242.7	2242.7	2257.2	2254.3	2254.3	2242.7	2222.4	2184.7	2106.5	1990.6	1825.5
52.5°	1877.6	1883.4	1892.1	1903.7	1918.1	1941.3	1918.1	1900.8	1851.5	1761.7	1619.7
55°	1500.9	1506.7	1521.2	1541.5	1558.9	1582.1	1587.8	1587.8	1561.7	1500.9	1393.7
57.5°	1179.3	1170.6	1182.2	1199.6	1222.8	1246.0	1263.3	1283.6	1280.7	1240.1	1153.2
60°	886.6	889.6	898.2	915.6	933.0	953.3	976.5	993.8	1002.6	982.3	927.2
62.5°	646.2	646.2	657.7	675.1	683.8	712.8	727.3	736.0	744.6	741.7	707.0
65°	452.0	457.8	463.6	472.3	481.0	498.3	507.1	524.4	530.2	533.2	507.1
67.5°	318.8	310.0	315.8	321.6	330.3	341.9	359.3	359.3	368.0	368.0	350.6
70°	202.8	202.8	205.7	214.4	220.2	223.1	228.9	234.7	243.4	240.5	240.5
72.5°	136.2	133.3	136.2	139.1	142.0	150.7	150.7	153.6	159.4	162.3	150.7
75°	69.6	72.5	78.2	75.4	84.0	78.2	81.1	89.8	86.9	81.1	81.1
77.5°	57.9	57.9	57.9	55.1	60.8	60.8	57.9	63.7	60.8	60.8	57.9
80°	40.6	43.5	40.6	37.6	40.6	37.6	37.6	37.6	37.6	37.6	34.7
82.5°	31.9	26.1	29.0	26.1	29.0	29.0	26.1	23.2	23.2	26.1	23.2
85°	23.2	17.4	20.3	20.3	17.4	17.4	17.4	17.4	17.4	14.5	14.5
87.5°	14.5	8.7	8.7	8.7	11.6	11.6	11.6	8.7	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°	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1
2.5°	5406.8	5403.9	5409.7	5406.8	5406.8	5403.9	5406.8	5403.9	5409.7	5398.1	5401.0
5°	5406.8	5401.0	5403.9	5406.8	5409.7	5403.9	5403.9	5403.9	5409.7	5403.9	5406.8
7.5°	5395.2	5392.3	5401.0	5406.8	5403.9	5401.0	5406.8	5403.9	5409.7	5406.8	5412.5
10°	5372.0	5374.9	5380.7	5389.4	5392.3	5395.2	5401.0	5401.0	5409.7	5398.1	5403.9
12.5°	5337.2	5348.8	5363.3	5369.1	5380.7	5380.7	5386.5	5389.4	5395.2	5392.3	5401.0
15°	5293.8	5308.2	5325.6	5340.2	5354.6	5363.3	5372.0	5374.9	5383.6	5374.9	5377.8
17.5°	5241.6	5259.0	5285.1	5302.4	5325.6	5334.3	5345.9	5351.7	5360.4	5354.6	5357.5
20°	5169.1	5189.5	5218.4	5244.5	5259.0	5279.3	5293.8	5302.4	5308.2	5302.4	5305.3
22.5°	5067.8	5096.8	5134.4	5154.7	5183.7	5201.1	5204.0	5224.2	5238.7	5224.2	5230.0
25°	4948.9	4977.9	5006.9	5050.4	5076.5	5096.8	5117.0	5119.9	5134.4	5131.5	5128.6
27.5°	4751.9	4789.6	4838.8	4873.6	4908.4	4940.3	4963.5	4969.2	4983.8	4977.9	4980.8
30°	4482.4	4523.1	4569.4	4624.4	4673.7	4705.5	4734.5	4754.8	4769.3	4760.6	4757.7
32.5°	4100.0	4140.6	4189.8	4244.9	4302.8	4349.1	4384.0	4410.0	4427.4	4421.6	4407.1
35°	3662.5	3674.1	3706.0	3749.4	3798.6	3847.9	3879.8	3908.7	3929.0	3934.8	3934.8
37.5°	3213.4	3175.7	3152.5	3152.5	3181.5	3201.7	3230.7	3248.1	3280.0	3291.6	3300.3
40°	2778.7	2691.8	2610.7	2549.8	2509.3	2506.4	2506.4	2515.0	2544.0	2581.7	2616.5
42.5°	2390.5	2251.4	2126.8	2013.8	1932.7	1886.3	1866.0	1868.9	1892.1	1926.9	1984.8
45°	2080.4	1906.6	1750.1	1613.9	1503.8	1431.4	1396.6	1393.7	1411.1	1451.6	1515.4
47.5°	1839.9	1654.5	1477.7	1321.2	1202.5	1124.2	1083.7	1072.1	1083.7	1121.3	1196.7
50°	1640.0	1448.8	1266.2	1103.9	976.5	895.4	857.6	843.2	857.6	889.6	964.8
52.5°	1454.5	1257.5	1086.6	930.1	793.9	724.4	683.8	675.1	683.8	721.5	782.4
55°	1240.1	1072.1	904.0	747.5	628.8	559.2	527.3	518.7	527.3	562.1	625.9
57.5°	1028.7	883.7	736.0	594.0	492.6	431.7	402.8	391.1	411.4	434.6	510.0
60°	831.6	715.7	591.1	466.5	382.5	327.4	304.2	301.3	307.1	336.1	388.2
62.5°	652.0	556.3	457.8	356.4	286.9	263.7	234.7	231.8	237.6	254.9	295.6
65°	469.4	408.6	333.2	260.8	205.7	173.8	162.3	165.2	170.9	182.6	220.2
67.5°	327.4	283.9	231.8	182.6	142.0	127.5	115.9	113.0	115.9	136.2	156.5
70°	220.2	194.1	156.5	139.1	98.5	78.2	81.1	72.5	84.0	84.0	101.4
72.5°	144.8	127.5	104.3	81.1	69.6	55.1	55.1	52.2	57.9	60.8	75.4
75°	75.4	57.9	57.9	40.6	29.0	14.5	26.1	23.2	20.3	23.2	29.0
77.5°	52.2	43.5	40.6	31.9	29.0	23.2	23.2	23.2	23.2	26.1	29.0
80°	31.9	31.9	23.2	20.3	17.4	14.5	17.4	17.4	17.4	17.4	20.3
82.5°	20.3	17.4	17.4	14.5	14.5	11.6	11.6	11.6	11.6	11.6	17.4
85°	17.4	11.6	11.6	8.7	11.6	20.3	8.7	11.6	11.6	11.6	8.7
87.5°	5.8	8.7	8.7	8.7	5.8	2.9	5.8	8.7	8.7	14.5	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°	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1	5398.1
2.5°	5406.8	5409.7	5409.7	5406.8	5406.8	5401.0	5412.5	5403.9	5406.8	5418.4	5409.7
5°	5412.5	5415.4	5415.4	5412.5	5412.5	5412.5	5415.4	5415.4	5412.5	5409.7	5415.4
7.5°	5424.2	5421.3	5421.3	5415.4	5415.4	5409.7	5415.4	5406.8	5412.5	5406.8	5415.4
10°	5409.7	5412.5	5409.7	5406.8	5406.8	5403.9	5403.9	5395.2	5398.1	5389.4	5395.2
12.5°	5401.0	5398.1	5398.1	5392.3	5386.5	5380.7	5377.8	5369.1	5369.1	5348.8	5357.5
15°	5377.8	5380.7	5372.0	5360.4	5354.6	5340.2	5334.3	5322.7	5311.2	5296.7	5299.6
17.5°	5357.5	5348.8	5337.2	5325.6	5302.4	5290.9	5279.3	5261.9	5256.1	5238.7	5233.0
20°	5296.7	5290.9	5276.4	5256.1	5241.6	5215.5	5204.0	5186.6	5172.1	5154.7	5146.0
22.5°	5218.4	5212.6	5195.2	5175.0	5151.8	5140.2	5128.6	5096.8	5082.2	5064.9	5062.0
25°	5119.9	5111.2	5093.9	5070.7	5059.0	5027.2	5015.6	4992.4	4986.7	4969.2	4966.4
27.5°	4969.2	4957.7	4937.4	4908.4	4888.1	4867.8	4856.3	4838.8	4833.1	4815.7	4812.8
30°	4743.3	4728.7	4688.2	4676.6	4641.8	4621.5	4621.5	4598.4	4601.3	4589.7	4589.7
32.5°	4386.9	4363.7	4331.8	4308.6	4285.4	4273.9	4273.9	4265.1	4270.9	4270.9	4276.8
35°	3914.5	3882.7	3865.3	3850.8	3850.8	3862.4	3897.2	3905.9	3923.3	3937.7	3949.4
37.5°	3308.9	3306.1	3326.4	3343.7	3387.2	3436.5	3497.3	3549.5	3598.7	3633.5	3668.2
40°	2654.1	2726.6	2784.5	2865.7	2932.3	3027.9	3138.0	3227.8	3311.8	3372.7	3436.5
42.5°	2071.7	2164.4	2286.2	2404.9	2523.7	2654.1	2799.0	2923.6	3033.7	3117.7	3184.4
45°	1613.9	1741.4	1889.2	2039.9	2193.4	2355.7	2506.4	2633.8	2749.8	2836.7	2903.3
47.5°	1301.0	1440.1	1608.1	1773.3	1947.1	2118.1	2286.2	2396.3	2491.8	2561.4	2622.3
50°	1075.0	1222.8	1399.5	1587.8	1761.7	1932.7	2077.5	2184.7	2263.0	2323.8	2361.5
52.5°	898.2	1054.7	1243.0	1431.4	1605.2	1761.7	1892.1	1973.2	2037.0	2080.4	2115.2
55°	741.7	892.5	1069.2	1246.0	1416.9	1564.6	1671.8	1732.7	1781.9	1808.0	1828.3
57.5°	605.6	744.6	906.9	1069.2	1217.0	1338.7	1422.7	1483.5	1506.7	1527.0	1524.1
60°	475.2	605.6	753.4	892.5	1019.9	1118.4	1179.3	1214.1	1231.4	1240.1	1234.3
62.5°	373.8	492.6	605.6	727.3	820.0	904.0	962.0	962.0	970.7	973.6	982.3
65°	278.1	368.0	466.5	556.3	631.6	686.7	718.6	727.3	738.9	736.0	730.2
67.5°	205.7	272.4	344.8	411.4	463.6	498.3	521.5	541.9	539.0	533.2	530.2
70°	142.0	185.5	249.2	289.8	327.4	362.2	368.0	370.9	373.8	376.7	370.9
72.5°	98.5	130.4	165.2	199.9	223.1	237.6	252.1	254.9	254.9	254.9	252.1
75°	49.3	66.6	98.5	113.0	133.3	139.1	150.7	150.7	159.4	147.8	144.8
77.5°	43.5	52.2	69.6	81.1	89.8	98.5	101.4	110.1	107.2	101.4	104.3
80°	26.1	31.9	43.5	49.3	60.8	63.7	66.6	69.6	66.6	69.6	69.6
82.5°	20.3	23.2	29.0	29.0	37.6	37.6	40.6	40.6	43.5	43.5	43.5
85°	11.6	20.3	17.4	34.7	23.2	23.2	29.0	34.7	29.0	29.0	34.7
87.5°	11.6	11.6	8.7	11.6	11.6	11.6	14.5	17.4	17.4	20.3	17.4
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: P249518

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5398.1	5398.1	5398.1	5398.1
2.5°	5406.8	5412.5	5403.9	5401.0
5°	5415.4	5415.4	5409.7	5409.7
7.5°	5415.4	5415.4	5406.8	5401.0
10°	5392.3	5392.3	5383.6	5377.8
12.5°	5348.8	5348.8	5345.9	5337.2
15°	5293.8	5293.8	5282.2	5273.5
17.5°	5218.4	5224.2	5209.8	5209.8
20°	5137.3	5134.4	5122.9	5117.0
22.5°	5053.3	5047.5	5044.6	5027.2
25°	4963.5	4957.7	4948.9	4940.3
27.5°	4809.9	4807.0	4798.3	4786.7
30°	4575.2	4572.3	4560.7	4560.7
32.5°	4270.9	4268.0	4256.5	4259.4
35°	3955.1	3966.7	3960.9	3949.4
37.5°	3691.4	3700.1	3706.0	3700.1
40°	3471.2	3497.3	3500.2	3506.0
42.5°	3236.5	3271.3	3282.9	3288.7
45°	2955.4	2987.3	3013.4	3007.6
47.5°	2668.6	2691.8	2715.0	2697.6
50°	2393.4	2407.8	2416.5	2416.5
52.5°	2132.6	2132.6	2129.7	2132.6
55°	1834.1	1834.1	1822.6	1828.3
57.5°	1521.2	1527.0	1518.3	1503.8
60°	1231.4	1217.0	1211.1	1202.5
62.5°	959.1	959.1	938.8	964.8
65°	718.6	709.9	701.2	698.3
67.5°	521.5	518.7	510.0	507.1
70°	368.0	356.4	353.5	347.7
72.5°	246.3	246.3	240.5	240.5
75°	150.7	136.2	133.3	136.2
77.5°	104.3	101.4	101.4	98.5
80°	69.6	66.6	72.5	63.7
82.5°	43.5	46.4	43.5	46.4
85°	29.0	34.7	31.9	31.9
87.5°	17.4	17.4	17.4	17.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)