

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: P249221

Luminaire Tested: **LSR8B100D010 EC8B100840 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249221  
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 EC8B100840 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10901.0 lumens  
Efficiency: N/A  
Efficacy: 102.5 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

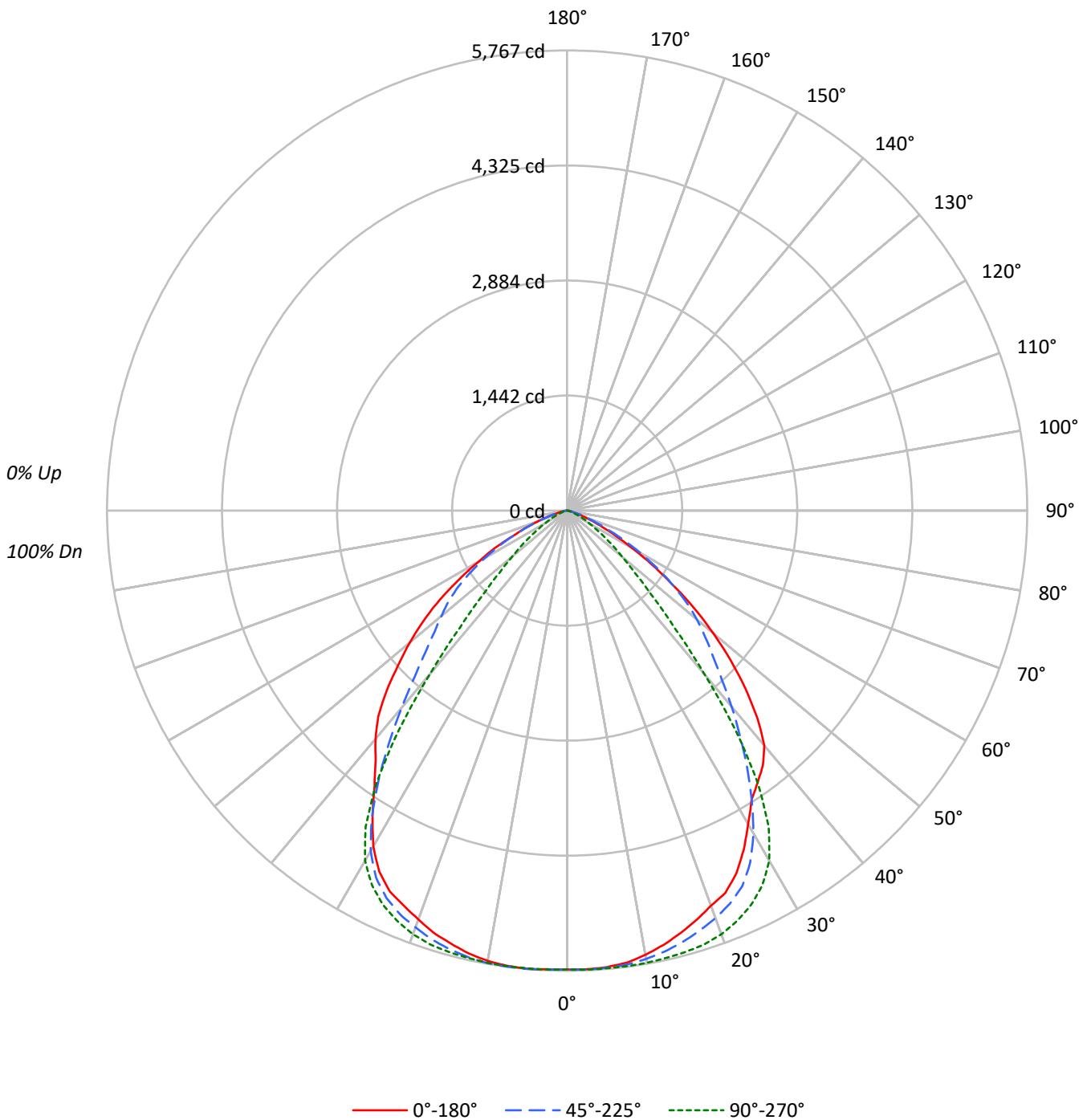
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249221

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDW0WMH

### Luminous Intensity Polar Plot





TEST NUMBER: P249221

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDW0WMH

**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°	177358	177358	177358
5°	177748	178228	178419
10°	177001	180191	179418
15°	175040	182826	179378
20°	172937	185397	178912
25°	170692	185608	179096
30°	161484	180391	173027
35°	156664	156777	158407
40°	154724	107869	150373
45°	137866	64760	139750
50°	114636	43099	123520
55°	85975	29714	104727
60°	58262	19797	79015
65°	35140	12842	54286
70°	19483	6960	33404
75°	8828	2943	17288
80°	7671	3285	12058
85°	8739	4352	12029



TEST NUMBER: P249221

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDW0WMH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	548.9	5.0
10°-20°	1594.1	14.6
20°-30°	2419.5	22.2
30°-40°	2541.2	23.3
40°-50°	1905.3	17.5
50°-60°	1222.5	11.2
60°-70°	522.9	4.8
70°-80°	123.5	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°	4562.6	41.9
0°-40°	7103.8	65.2
0°-60°	10231.5	93.9
0°-90°	10901.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10901.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5752	5752	5752	5752	5752	
5°	5742	5752	5758	5767	5764	545
15°	5483	5597	5727	5690	5619	1546
25°	5017	5193	5455	5356	5264	2292
35°	4162	3930	4165	4115	4208	2612
45°	3161	2584	1485	2510	3205	2421
55°	1599	1599	553	1667	1948	1451
65°	482	568	176	732	744	514
75°	74	86	25	148	145	108
85°	25	15	12	25	34	26
90°	0	0	0	0	0	



TEST NUMBER: P249221

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDW0WMH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6
2.5°	5754.7	5760.9	5757.8	5757.8	5754.7	5757.8	5757.8	5764.0	5764.0	5757.8	5754.7
5°	5742.3	5748.5	5748.5	5742.3	5742.3	5757.8	5748.5	5754.7	5754.7	5751.6	5751.6
7.5°	5714.6	5714.6	5726.9	5717.7	5717.7	5726.9	5723.8	5730.0	5736.2	5739.3	5739.3
10°	5652.8	5659.0	5662.1	5662.1	5665.2	5674.4	5680.6	5693.0	5699.1	5705.3	5708.4
12.5°	5575.6	5584.9	5588.0	5584.9	5594.2	5606.5	5622.0	5637.4	5646.7	5659.0	5668.3
15°	5483.0	5483.0	5489.2	5498.4	5504.6	5523.1	5538.6	5557.1	5581.8	5597.3	5612.7
17.5°	5381.1	5387.3	5396.5	5396.5	5408.9	5439.8	5449.0	5476.8	5504.6	5520.0	5550.9
20°	5270.0	5276.1	5285.4	5291.6	5307.0	5331.7	5350.2	5374.9	5405.8	5433.6	5464.5
22.5°	5183.5	5171.2	5177.3	5183.5	5199.0	5220.6	5242.2	5273.0	5303.9	5331.7	5362.6
25°	5016.8	5019.9	5029.2	5035.3	5053.9	5072.4	5097.1	5134.1	5161.9	5192.8	5226.7
27.5°	4791.5	4794.6	4810.0	4810.0	4825.4	4856.3	4871.7	4902.6	4939.7	4970.5	5010.7
30°	4535.2	4541.3	4541.3	4553.7	4563.0	4578.4	4593.8	4624.7	4643.3	4671.0	4726.6
32.5°	4300.6	4306.7	4303.6	4300.6	4291.3	4288.2	4285.1	4291.3	4297.5	4306.7	4328.3
35°	4161.7	4146.2	4133.9	4112.3	4087.6	4056.7	4028.9	3991.9	3957.9	3930.1	3899.3
37.5°	4028.9	4025.8	4007.3	3976.4	3927.0	3871.5	3806.6	3726.3	3646.0	3559.6	3476.3
40°	3843.7	3834.4	3819.0	3775.7	3720.1	3652.2	3565.8	3467.0	3337.3	3204.6	3068.8
42.5°	3528.7	3531.8	3513.3	3479.3	3426.9	3362.0	3272.5	3164.5	3025.5	2868.0	2692.1
45°	3161.4	3161.4	3155.2	3127.4	3090.4	3037.9	2970.0	2880.4	2744.6	2584.0	2395.7
47.5°	2778.5	2781.6	2772.3	2766.2	2750.7	2716.8	2667.4	2599.5	2503.8	2349.4	2161.1
50°	2389.6	2389.6	2405.0	2401.9	2401.9	2389.6	2368.0	2327.8	2244.5	2121.0	1945.0
52.5°	2000.5	2006.7	2016.0	2028.3	2043.8	2068.5	2043.8	2025.2	1972.7	1877.0	1725.8
55°	1599.2	1605.4	1620.8	1642.4	1661.0	1685.7	1691.8	1691.8	1664.0	1599.2	1485.0
57.5°	1256.5	1247.3	1259.6	1278.1	1302.8	1327.5	1346.1	1367.7	1364.6	1321.4	1228.7
60°	944.7	947.8	957.0	975.6	994.1	1015.7	1040.4	1058.9	1068.2	1046.6	987.9
62.5°	688.5	688.5	700.8	719.3	728.6	759.5	774.9	784.2	793.4	790.3	753.3
65°	481.6	487.8	494.0	503.2	512.5	531.0	540.3	558.8	565.0	568.1	540.3
67.5°	339.6	330.3	336.5	342.7	351.9	364.3	382.8	382.8	392.1	392.1	373.5
70°	216.1	216.1	219.2	228.4	234.6	237.7	243.9	250.0	259.3	256.2	256.2
72.5°	145.1	142.0	145.1	148.2	151.3	160.5	160.5	163.6	169.8	172.9	160.5
75°	74.1	77.2	83.3	80.3	89.5	83.3	86.4	95.7	92.6	86.4	86.4
77.5°	61.7	61.7	61.7	58.7	64.8	64.8	61.7	67.9	64.8	64.8	61.7
80°	43.2	46.3	43.2	40.1	43.2	40.1	40.1	40.1	40.1	40.1	37.0
82.5°	34.0	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: P249221

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6
2.5°	5760.9	5757.8	5764.0	5760.9	5760.9	5757.8	5760.9	5757.8	5764.0	5751.6	5754.7
5°	5760.9	5754.7	5757.8	5760.9	5764.0	5757.8	5757.8	5757.8	5764.0	5757.8	5760.9
7.5°	5748.5	5745.4	5754.7	5760.9	5757.8	5754.7	5760.9	5757.8	5764.0	5760.9	5767.0
10°	5723.8	5726.9	5733.1	5742.3	5745.4	5748.5	5754.7	5754.7	5764.0	5751.6	5757.8
12.5°	5686.8	5699.1	5714.6	5720.7	5733.1	5733.1	5739.3	5742.3	5748.5	5745.4	5754.7
15°	5640.5	5655.9	5674.4	5689.9	5705.3	5714.6	5723.8	5726.9	5736.2	5726.9	5730.0
17.5°	5584.9	5603.4	5631.2	5649.7	5674.4	5683.7	5696.0	5702.2	5711.5	5705.3	5708.4
20°	5507.7	5529.3	5560.2	5588.0	5603.4	5625.0	5640.5	5649.7	5655.9	5649.7	5652.8
22.5°	5399.6	5430.5	5470.6	5492.3	5523.1	5541.7	5544.8	5566.4	5581.8	5566.4	5572.5
25°	5273.0	5303.9	5334.8	5381.1	5408.9	5430.5	5452.1	5455.2	5470.6	5467.5	5464.5
27.5°	5063.1	5103.3	5155.7	5192.8	5229.8	5263.8	5288.5	5294.6	5310.1	5303.9	5307.0
30°	4776.0	4819.3	4868.7	4927.3	4979.8	5013.7	5044.6	5066.2	5081.6	5072.4	5069.3
32.5°	4368.5	4411.7	4464.2	4522.8	4584.6	4634.0	4671.0	4698.8	4717.4	4711.2	4695.8
35°	3902.3	3914.7	3948.7	3995.0	4047.4	4099.9	4133.9	4164.7	4186.3	4192.5	4192.5
37.5°	3423.8	3383.7	3359.0	3359.0	3389.8	3411.4	3442.3	3460.8	3494.8	3507.1	3516.4
40°	2960.7	2868.0	2781.6	2716.8	2673.6	2670.5	2670.5	2679.7	2710.6	2750.7	2787.8
42.5°	2547.0	2398.8	2266.1	2145.7	2059.2	2009.8	1988.2	1991.3	2016.0	2053.0	2114.8
45°	2216.7	2031.4	1864.7	1719.6	1602.3	1525.1	1488.1	1485.0	1503.5	1546.7	1614.7
47.5°	1960.4	1762.8	1574.5	1407.8	1281.2	1197.8	1154.6	1142.3	1154.6	1194.8	1275.0
50°	1747.4	1543.7	1349.2	1176.2	1040.4	954.0	913.8	898.4	913.8	947.8	1028.0
52.5°	1549.8	1339.9	1157.7	991.0	845.9	771.8	728.6	719.3	728.6	768.7	833.6
55°	1321.4	1142.3	963.2	796.5	670.0	595.9	561.9	552.7	561.9	599.0	666.9
57.5°	1096.0	941.6	784.2	632.9	524.9	460.0	429.1	416.8	438.4	463.1	543.4
60°	886.0	762.6	629.8	497.1	407.5	348.8	324.1	321.0	327.2	358.1	413.7
62.5°	694.7	592.8	487.8	379.7	305.6	280.9	250.0	247.0	253.1	271.6	314.9
65°	500.2	435.3	355.0	277.8	219.2	185.2	172.9	176.0	182.1	194.5	234.6
67.5°	348.8	302.5	247.0	194.5	151.3	135.8	123.5	120.4	123.5	145.1	166.7
70°	234.6	206.8	166.7	148.2	105.0	83.3	86.4	77.2	89.5	89.5	108.0
72.5°	154.3	135.8	111.1	86.4	74.1	58.7	58.7	55.6	61.7	64.8	80.3
75°	80.3	61.7	61.7	43.2	30.9	15.4	27.8	24.7	21.6	24.7	30.9
77.5°	55.6	46.3	43.2	34.0	30.9	24.7	24.7	24.7	24.7	27.8	30.9
80°	34.0	34.0	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: P249221

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6	5751.6
2.5°	5760.9	5764.0	5764.0	5760.9	5760.9	5754.7	5767.0	5757.8	5760.9	5773.2	5764.0
5°	5767.0	5770.1	5770.1	5767.0	5767.0	5767.0	5770.1	5770.1	5767.0	5764.0	5770.1
7.5°	5779.4	5776.3	5776.3	5770.1	5770.1	5764.0	5770.1	5760.9	5767.0	5760.9	5770.1
10°	5764.0	5767.0	5764.0	5760.9	5760.9	5757.8	5757.8	5748.5	5751.6	5742.3	5748.5
12.5°	5754.7	5751.6	5751.6	5745.4	5739.3	5733.1	5730.0	5720.7	5720.7	5699.1	5708.4
15°	5730.0	5733.1	5723.8	5711.5	5705.3	5689.9	5683.7	5671.3	5659.0	5643.6	5646.7
17.5°	5708.4	5699.1	5686.8	5674.4	5649.7	5637.4	5625.0	5606.5	5600.3	5581.8	5575.6
20°	5643.6	5637.4	5622.0	5600.3	5584.9	5557.1	5544.8	5526.2	5510.8	5492.3	5483.0
22.5°	5560.2	5554.0	5535.5	5513.9	5489.2	5476.8	5464.5	5430.5	5415.0	5396.5	5393.4
25°	5455.2	5445.9	5427.4	5402.7	5390.3	5356.4	5344.0	5319.3	5313.2	5294.6	5291.6
27.5°	5294.6	5282.3	5260.7	5229.8	5208.2	5186.6	5174.3	5155.7	5149.6	5131.0	5128.0
30°	5053.9	5038.4	4995.2	4982.9	4945.8	4924.2	4924.2	4899.5	4902.6	4890.3	4890.3
32.5°	4674.1	4649.4	4615.5	4590.8	4566.0	4553.7	4553.7	4544.4	4550.6	4550.6	4556.8
35°	4170.9	4137.0	4118.4	4103.0	4103.0	4115.3	4152.4	4161.7	4180.2	4195.6	4208.0
37.5°	3525.6	3522.6	3544.2	3562.7	3609.0	3661.5	3726.3	3781.9	3834.4	3871.5	3908.5
40°	2827.9	2905.1	2966.9	3053.3	3124.3	3226.2	3343.5	3439.2	3528.7	3593.6	3661.5
42.5°	2207.4	2306.2	2435.9	2562.4	2689.0	2827.9	2982.3	3115.1	3232.4	3321.9	3392.9
45°	1719.6	1855.4	2012.9	2173.5	2337.1	2510.0	2670.5	2806.3	2929.8	3022.5	3093.5
47.5°	1386.2	1534.4	1713.4	1889.4	2074.6	2256.8	2435.9	2553.2	2655.0	2729.1	2794.0
50°	1145.3	1302.8	1491.2	1691.8	1877.0	2059.2	2213.6	2327.8	2411.2	2476.0	2516.1
52.5°	957.0	1123.7	1324.5	1525.1	1710.3	1877.0	2016.0	2102.4	2170.4	2216.7	2253.7
55°	790.3	950.9	1139.2	1327.5	1509.7	1667.1	1781.3	1846.2	1898.6	1926.4	1948.0
57.5°	645.3	793.4	966.3	1139.2	1296.7	1426.4	1515.9	1580.7	1605.4	1627.0	1623.9
60°	506.3	645.3	802.7	950.9	1086.7	1191.7	1256.5	1293.6	1312.1	1321.4	1315.2
62.5°	398.3	524.9	645.3	774.9	873.7	963.2	1025.0	1025.0	1034.2	1037.3	1046.6
65°	296.3	392.1	497.1	592.8	673.0	731.7	765.7	774.9	787.3	784.2	778.0
67.5°	219.2	290.2	367.4	438.4	494.0	531.0	555.7	577.4	574.3	568.1	565.0
70°	151.3	197.6	265.5	308.7	348.8	385.9	392.1	395.2	398.3	401.3	395.2
72.5°	105.0	138.9	176.0	213.0	237.7	253.1	268.6	271.6	271.6	271.6	268.6
75°	52.5	71.0	105.0	120.4	142.0	148.2	160.5	160.5	169.8	157.4	154.3
77.5°	46.3	55.6	74.1	86.4	95.7	105.0	108.0	117.3	114.2	108.0	111.1
80°	27.8	34.0	46.3	52.5	64.8	67.9	71.0	74.1	71.0	74.1	74.1
82.5°	21.6	24.7	30.9	30.9	40.1	40.1	43.2	43.2	46.3	46.3	46.3
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: P249221

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5751.6	5751.6	5751.6	5751.6
2.5°	5760.9	5767.0	5757.8	5754.7
5°	5770.1	5770.1	5764.0	5764.0
7.5°	5770.1	5770.1	5760.9	5754.7
10°	5745.4	5745.4	5736.2	5730.0
12.5°	5699.1	5699.1	5696.0	5686.8
15°	5640.5	5640.5	5628.1	5618.9
17.5°	5560.2	5566.4	5550.9	5550.9
20°	5473.7	5470.6	5458.3	5452.1
22.5°	5384.2	5378.0	5374.9	5356.4
25°	5288.5	5282.3	5273.0	5263.8
27.5°	5124.9	5121.8	5112.5	5100.2
30°	4874.8	4871.7	4859.4	4859.4
32.5°	4550.6	4547.5	4535.2	4538.3
35°	4214.1	4226.5	4220.3	4208.0
37.5°	3933.2	3942.5	3948.7	3942.5
40°	3698.5	3726.3	3729.4	3735.6
42.5°	3448.5	3485.5	3497.9	3504.0
45°	3149.0	3183.0	3210.8	3204.6
47.5°	2843.3	2868.0	2892.8	2874.2
50°	2550.1	2565.5	2574.8	2574.8
52.5°	2272.3	2272.3	2269.2	2272.3
55°	1954.2	1954.2	1941.9	1948.0
57.5°	1620.8	1627.0	1617.7	1602.3
60°	1312.1	1296.7	1290.5	1281.2
62.5°	1021.9	1021.9	1000.3	1028.0
65°	765.7	756.4	747.1	744.0
67.5°	555.7	552.7	543.4	540.3
70°	392.1	379.7	376.6	370.5
72.5°	262.4	262.4	256.2	256.2
75°	160.5	145.1	142.0	145.1
77.5°	111.1	108.0	108.0	105.0
80°	74.1	71.0	77.2	67.9
82.5°	46.3	49.4	46.3	49.4
85°	30.9	37.0	34.0	34.0
87.5°	18.5	18.5	18.5	18.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)