

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: P249582

Luminaire Tested: **LSR8B120D010 EC8B120935 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249582  
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 EC8B120935 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 3500 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10543.0 lumens  
Efficiency: N/A  
Efficacy: 89.1 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

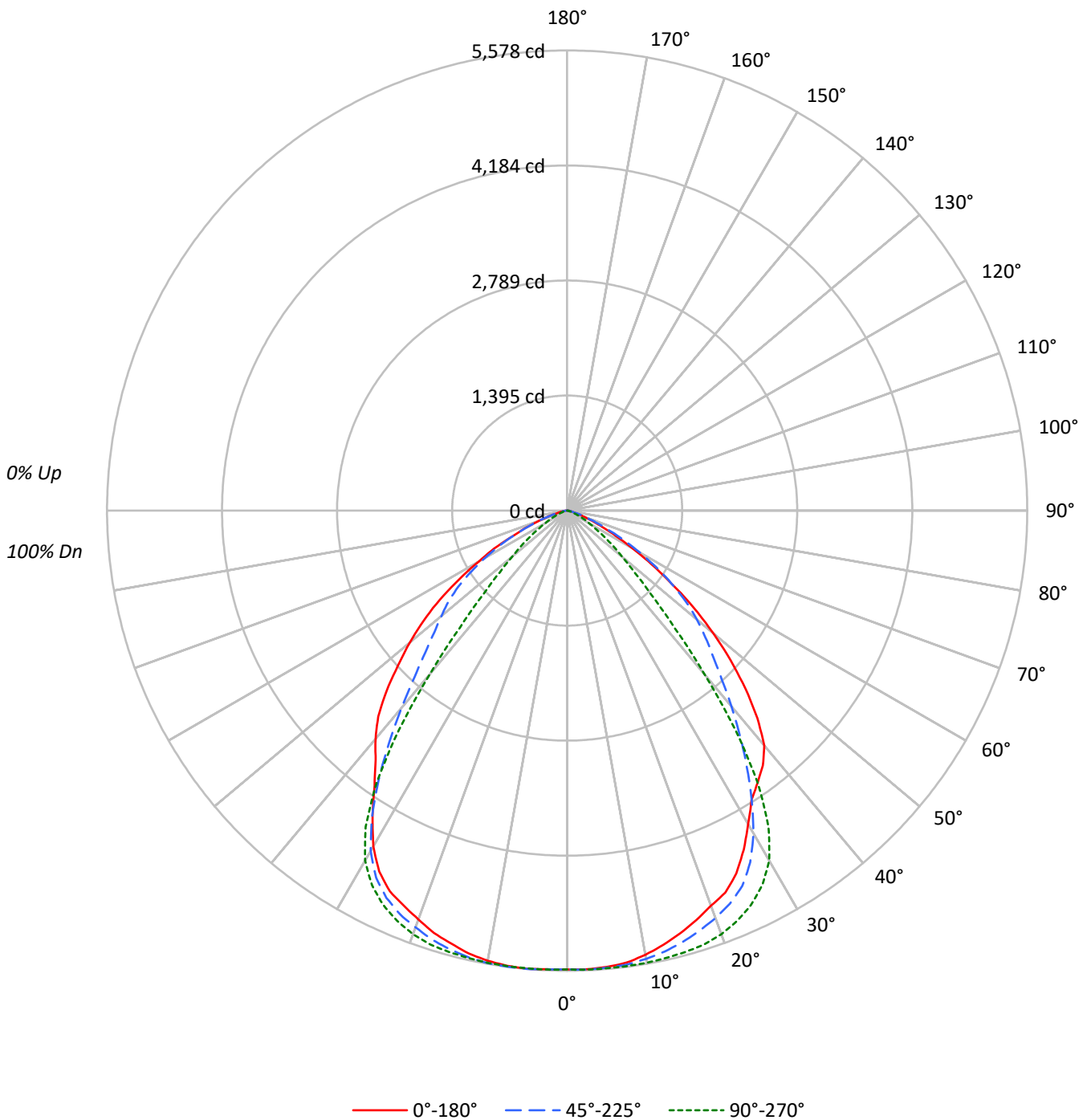
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	171533	171533	171533
5°	171910	172374	172560
10°	171186	174273	173525
15°	169290	176821	173485
20°	167256	179306	173038
25°	165085	179515	173213
30°	156182	174466	167344
35°	151518	151627	153204
40°	149640	104326	145433
45°	133335	62631	135158
50°	110870	41684	119462
55°	83153	28736	101292
60°	56350	19149	76425
65°	33987	12419	52506
70°	18843	6735	32304
75°	8543	2848	16716
80°	7423	3179	11667
85°	8456	4210	11640



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	530.9	5.0
10°-20°	1541.7	14.6
20°-30°	2340.1	22.2
30°-40°	2457.8	23.3
40°-50°	1842.7	17.5
50°-60°	1182.3	11.2
60°-70°	505.8	4.8
70°-80°	119.5	1.1
80°-90°	22.2	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°	4412.7	41.9
0°-40°	6870.5	65.2
0°-60°	9895.5	93.9
0°-90°	10543.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10543.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5563	5563	5563	5563	5563	
5°	5554	5563	5569	5578	5575	528
15°	5303	5413	5539	5503	5434	1496
25°	4852	5022	5276	5180	5091	2217
35°	4025	3801	4028	3980	4070	2526
45°	3058	2499	1436	2428	3099	2342
55°	1547	1547	534	1612	1884	1403
65°	466	549	170	708	720	497
75°	72	84	24	143	140	104
85°	24	15	12	24	33	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°	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7
2.5°	5565.7	5571.7	5568.7	5568.7	5565.7	5568.7	5568.7	5574.7	5574.7	5568.7	5565.7
5°	5553.7	5559.7	5559.7	5553.7	5553.7	5568.7	5559.7	5565.7	5565.7	5562.7	5562.7
7.5°	5526.9	5526.9	5538.8	5529.9	5529.9	5538.8	5535.8	5541.8	5547.8	5550.8	5550.8
10°	5467.1	5473.1	5476.1	5476.1	5479.1	5488.0	5494.0	5506.0	5511.9	5517.9	5520.9
12.5°	5392.5	5401.5	5404.4	5401.5	5410.4	5422.3	5437.3	5452.2	5461.2	5473.1	5482.1
15°	5302.9	5302.9	5308.9	5317.9	5323.9	5341.8	5356.7	5374.6	5398.5	5413.4	5428.3
17.5°	5204.4	5210.4	5219.3	5219.3	5231.3	5261.1	5270.1	5297.0	5323.9	5338.8	5368.6
20°	5096.9	5102.9	5111.8	5117.8	5132.7	5156.6	5174.5	5198.4	5228.3	5255.2	5285.0
22.5°	5013.3	5001.4	5007.3	5013.3	5028.3	5049.2	5070.1	5099.9	5129.7	5156.6	5186.5
25°	4852.0	4855.0	4864.0	4869.9	4887.9	4905.8	4929.7	4965.5	4992.4	5022.3	5055.1
27.5°	4634.1	4637.1	4652.0	4652.0	4666.9	4696.8	4711.7	4741.6	4777.4	4807.3	4846.1
30°	4386.3	4392.2	4392.2	4404.2	4413.1	4428.1	4443.0	4472.9	4490.8	4517.6	4571.4
32.5°	4159.4	4165.3	4162.3	4159.4	4150.4	4147.4	4144.4	4150.4	4156.4	4165.3	4186.2
35°	4025.0	4010.0	3998.1	3977.2	3953.3	3923.5	3896.6	3860.8	3827.9	3801.0	3771.2
37.5°	3896.6	3893.6	3875.7	3845.8	3798.0	3744.3	3681.6	3604.0	3526.3	3442.7	3362.1
40°	3717.4	3708.4	3693.5	3651.7	3598.0	3532.3	3448.7	3353.1	3227.7	3099.3	2968.0
42.5°	3412.8	3415.8	3397.9	3365.1	3314.4	3251.6	3165.0	3060.5	2926.2	2773.9	2603.7
45°	3057.5	3057.5	3051.6	3024.7	2988.9	2938.1	2872.4	2785.8	2654.5	2499.2	2317.0
47.5°	2687.3	2690.3	2681.3	2675.4	2660.4	2627.6	2579.8	2514.1	2421.6	2272.2	2090.1
50°	2311.1	2311.1	2326.0	2323.0	2323.0	2311.1	2290.2	2251.3	2170.7	2051.3	1881.1
52.5°	1934.8	1940.8	1949.8	1961.7	1976.6	2000.5	1976.6	1958.7	1908.0	1815.4	1669.1
55°	1546.7	1552.7	1567.6	1588.5	1606.4	1630.3	1636.2	1636.2	1609.4	1546.7	1436.2
57.5°	1215.3	1206.3	1218.3	1236.2	1260.1	1284.0	1301.9	1322.7	1319.8	1278.0	1188.4
60°	913.7	916.7	925.6	943.6	961.5	982.4	1006.3	1024.2	1033.1	1012.2	955.5
62.5°	665.9	665.9	677.8	695.7	704.7	734.5	749.4	758.4	767.3	764.4	728.6
65°	465.8	471.7	477.7	486.7	495.6	513.5	522.5	540.4	546.4	549.4	522.5
67.5°	328.5	319.5	325.5	331.4	340.4	352.4	370.3	370.3	379.2	379.2	361.3
70°	209.0	209.0	212.0	220.9	226.9	229.9	235.9	241.8	250.8	247.8	247.8
72.5°	140.3	137.4	140.3	143.3	146.3	155.3	155.3	158.2	164.2	167.2	155.3
75°	71.7	74.7	80.6	77.7	86.6	80.6	83.6	92.6	89.6	83.6	83.6
77.5°	59.7	59.7	59.7	56.8	62.7	62.7	59.7	65.7	62.7	62.7	59.7
80°	41.8	44.8	41.8	38.8	41.8	38.8	38.8	38.8	38.8	38.8	35.8
82.5°	32.9	26.9	29.9	26.9	29.9	29.9	26.9	23.9	23.9	26.9	23.9
85°	23.9	17.9	20.9	20.9	17.9	17.9	17.9	17.9	17.9	14.9	14.9
87.5°	14.9	9.0	9.0	9.0	11.9	11.9	11.9	9.0	11.9	11.9	6.0
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°	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7
2.5°	5571.7	5568.7	5574.7	5571.7	5571.7	5568.7	5571.7	5568.7	5574.7	5562.7	5565.7
5°	5571.7	5565.7	5568.7	5571.7	5574.7	5568.7	5568.7	5568.7	5574.7	5568.7	5571.7
7.5°	5559.7	5556.7	5565.7	5571.7	5568.7	5565.7	5571.7	5568.7	5574.7	5571.7	5577.6
10°	5535.8	5538.8	5544.8	5553.7	5556.7	5559.7	5565.7	5565.7	5574.7	5562.7	5568.7
12.5°	5500.0	5511.9	5526.9	5532.8	5544.8	5544.8	5550.8	5553.7	5559.7	5556.7	5565.7
15°	5455.2	5470.1	5488.0	5503.0	5517.9	5526.9	5535.8	5538.8	5547.8	5538.8	5541.8
17.5°	5401.5	5419.4	5446.2	5464.1	5488.0	5497.0	5508.9	5514.9	5523.9	5517.9	5520.9
20°	5326.8	5347.8	5377.6	5404.4	5419.4	5440.2	5455.2	5464.1	5470.1	5464.1	5467.1
22.5°	5222.3	5252.2	5291.0	5311.9	5341.8	5359.7	5362.7	5383.6	5398.5	5383.6	5389.5
25°	5099.9	5129.7	5159.6	5204.4	5231.3	5252.2	5273.1	5276.1	5291.0	5288.0	5285.0
27.5°	4896.8	4935.7	4986.4	5022.3	5058.1	5090.9	5114.8	5120.8	5135.7	5129.7	5132.7
30°	4619.1	4661.0	4708.8	4765.5	4816.2	4849.0	4878.9	4899.8	4914.7	4905.8	4902.8
32.5°	4225.0	4266.8	4317.6	4374.3	4434.1	4481.8	4517.6	4544.5	4562.4	4556.4	4541.5
35°	3774.2	3786.1	3819.0	3863.8	3914.5	3965.2	3998.1	4027.9	4048.8	4054.8	4054.8
37.5°	3311.4	3272.6	3248.7	3248.7	3278.5	3299.4	3329.3	3347.2	3380.0	3391.9	3400.9
40°	2863.4	2773.9	2690.3	2627.6	2585.8	2582.8	2582.8	2591.7	2621.6	2660.4	2696.3
42.5°	2463.4	2320.0	2191.6	2075.2	1991.6	1943.8	1922.9	1925.9	1949.8	1985.6	2045.3
45°	2143.9	1964.7	1803.5	1663.1	1549.7	1475.0	1439.2	1436.2	1454.1	1495.9	1561.6
47.5°	1896.0	1704.9	1522.8	1361.5	1239.2	1158.5	1116.7	1104.8	1116.7	1155.5	1233.2
50°	1690.0	1493.0	1304.8	1137.6	1006.3	922.7	883.8	868.9	883.8	916.7	994.3
52.5°	1498.9	1295.9	1119.7	958.5	818.1	746.5	704.7	695.7	704.7	743.5	806.2
55°	1278.0	1104.8	931.6	770.3	648.0	576.3	543.4	534.5	543.4	579.3	645.0
57.5°	1060.0	910.7	758.4	612.1	507.6	444.9	415.1	403.1	424.0	447.9	525.5
60°	856.9	737.5	609.1	480.7	394.2	337.4	313.5	310.5	316.5	346.4	400.1
62.5°	671.9	573.3	471.7	367.3	295.6	271.7	241.8	238.9	244.8	262.7	304.6
65°	483.7	421.0	343.4	268.7	212.0	179.1	167.2	170.2	176.1	188.1	226.9
67.5°	337.4	292.6	238.9	188.1	146.3	131.4	119.5	116.5	119.5	140.3	161.2
70°	226.9	200.0	161.2	143.3	101.6	80.6	83.6	74.7	86.6	86.6	104.5
72.5°	149.3	131.4	107.5	83.6	71.7	56.8	56.8	53.8	59.7	62.7	77.7
75°	77.7	59.7	59.7	41.8	29.9	14.9	26.9	23.9	20.9	23.9	29.9
77.5°	53.8	44.8	41.8	32.9	29.9	23.9	23.9	23.9	23.9	26.9	29.9
80°	32.9	32.9	23.9	20.9	17.9	14.9	17.9	17.9	17.9	17.9	20.9
82.5°	20.9	17.9	17.9	14.9	14.9	11.9	11.9	11.9	11.9	11.9	17.9
85°	17.9	11.9	11.9	9.0	11.9	20.9	9.0	11.9	11.9	11.9	9.0
87.5°	6.0	9.0	9.0	9.0	6.0	3.0	6.0	9.0	9.0	14.9	11.9
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°	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7	5562.7
2.5°	5571.7	5574.7	5574.7	5571.7	5571.7	5565.7	5577.6	5568.7	5571.7	5583.6	5574.7
5°	5577.6	5580.6	5580.6	5577.6	5577.6	5577.6	5580.6	5580.6	5577.6	5574.7	5580.6
7.5°	5589.6	5586.6	5586.6	5580.6	5580.6	5574.7	5580.6	5571.7	5577.6	5571.7	5580.6
10°	5574.7	5577.6	5574.7	5571.7	5571.7	5568.7	5568.7	5559.7	5562.7	5553.7	5559.7
12.5°	5565.7	5562.7	5562.7	5556.7	5550.8	5544.8	5541.8	5532.8	5532.8	5511.9	5520.9
15°	5541.8	5544.8	5535.8	5523.9	5517.9	5503.0	5497.0	5485.0	5473.1	5458.2	5461.2
17.5°	5520.9	5511.9	5500.0	5488.0	5464.1	5452.2	5440.2	5422.3	5416.4	5398.5	5392.5
20°	5458.2	5452.2	5437.3	5416.4	5401.5	5374.6	5362.7	5344.8	5329.8	5311.9	5302.9
22.5°	5377.6	5371.6	5353.7	5332.8	5308.9	5297.0	5285.0	5252.2	5237.2	5219.3	5216.3
25°	5276.1	5267.1	5249.2	5225.3	5213.3	5180.5	5168.5	5144.6	5138.7	5120.8	5117.8
27.5°	5120.8	5108.8	5088.0	5058.1	5037.2	5016.3	5004.4	4986.4	4980.5	4962.5	4959.6
30°	4887.9	4872.9	4831.1	4819.2	4783.4	4762.5	4762.5	4738.6	4741.6	4729.7	4729.7
32.5°	4520.6	4496.8	4463.9	4440.0	4416.1	4404.2	4404.2	4395.2	4401.2	4401.2	4407.2
35°	4033.9	4001.1	3983.1	3968.2	3968.2	3980.1	4016.0	4025.0	4042.9	4057.8	4069.8
37.5°	3409.8	3406.9	3427.8	3445.7	3490.5	3541.3	3604.0	3657.7	3708.4	3744.3	3780.1
40°	2735.1	2809.7	2869.4	2953.1	3021.7	3120.2	3233.7	3326.3	3412.8	3475.6	3541.3
42.5°	2134.9	2230.4	2355.9	2478.3	2600.7	2735.1	2884.4	3012.8	3126.2	3212.8	3281.5
45°	1663.1	1794.5	1946.8	2102.1	2260.3	2427.6	2582.8	2714.2	2833.6	2923.2	2991.9
47.5°	1340.6	1484.0	1657.1	1827.4	2006.5	2182.7	2355.9	2469.3	2567.8	2639.5	2702.3
50°	1107.7	1260.1	1442.2	1636.2	1815.4	1991.6	2140.9	2251.3	2332.0	2394.7	2433.5
52.5°	925.6	1086.8	1281.0	1475.0	1654.1	1815.4	1949.8	2033.4	2099.1	2143.9	2179.7
55°	764.4	919.7	1101.8	1284.0	1460.1	1612.4	1722.8	1785.6	1836.3	1863.2	1884.1
57.5°	624.1	767.3	934.6	1101.8	1254.1	1379.5	1466.1	1528.8	1552.7	1573.6	1570.6
60°	489.7	624.1	776.3	919.7	1051.0	1152.5	1215.3	1251.1	1269.0	1278.0	1272.0
62.5°	385.2	507.6	624.1	749.4	845.0	931.6	991.3	991.3	1000.3	1003.3	1012.2
65°	286.6	379.2	480.7	573.3	650.9	707.7	740.5	749.4	761.4	758.4	752.4
67.5°	212.0	280.7	355.3	424.0	477.7	513.5	537.4	558.4	555.4	549.4	546.4
70°	146.3	191.1	256.8	298.6	337.4	373.3	379.2	382.2	385.2	388.2	382.2
72.5°	101.6	134.4	170.2	206.0	229.9	244.8	259.8	262.7	262.7	262.7	259.8
75°	50.8	68.7	101.6	116.5	137.4	143.3	155.3	155.3	164.2	152.3	149.3
77.5°	44.8	53.8	71.7	83.6	92.6	101.6	104.5	113.5	110.5	104.5	107.5
80°	26.9	32.9	44.8	50.8	62.7	65.7	68.7	71.7	68.7	71.7	71.7
82.5°	20.9	23.9	29.9	29.9	38.8	38.8	41.8	41.8	44.8	44.8	44.8
85°	11.9	20.9	17.9	35.8	23.9	23.9	29.9	35.8	29.9	29.9	35.8
87.5°	11.9	11.9	9.0	11.9	11.9	11.9	14.9	17.9	17.9	20.9	17.9
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: P249582

CATALOG NUMBER: LSR8B120D010 EC8B120935 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5562.7	5562.7	5562.7	5562.7
2.5°	5571.7	5577.6	5568.7	5565.7
5°	5580.6	5580.6	5574.7	5574.7
7.5°	5580.6	5580.6	5571.7	5565.7
10°	5556.7	5556.7	5547.8	5541.8
12.5°	5511.9	5511.9	5508.9	5500.0
15°	5455.2	5455.2	5443.2	5434.3
17.5°	5377.6	5383.6	5368.6	5368.6
20°	5294.0	5291.0	5279.1	5273.1
22.5°	5207.4	5201.4	5198.4	5180.5
25°	5114.8	5108.8	5099.9	5090.9
27.5°	4956.6	4953.6	4944.6	4932.7
30°	4714.7	4711.7	4699.8	4699.8
32.5°	4401.2	4398.2	4386.3	4389.3
35°	4075.7	4087.7	4081.7	4069.8
37.5°	3804.0	3813.0	3819.0	3813.0
40°	3577.1	3604.0	3607.0	3612.9
42.5°	3335.2	3371.0	3383.0	3388.9
45°	3045.6	3078.4	3105.3	3099.3
47.5°	2750.0	2773.9	2797.8	2779.8
50°	2466.3	2481.3	2490.2	2490.2
52.5°	2197.6	2197.6	2194.6	2197.6
55°	1890.1	1890.1	1878.1	1884.1
57.5°	1567.6	1573.6	1564.6	1549.7
60°	1269.0	1254.1	1248.1	1239.2
62.5°	988.4	988.4	967.5	994.3
65°	740.5	731.5	722.6	719.6
67.5°	537.4	534.5	525.5	522.5
70°	379.2	367.3	364.3	358.3
72.5°	253.8	253.8	247.8	247.8
75°	155.3	140.3	137.4	140.3
77.5°	107.5	104.5	104.5	101.6
80°	71.7	68.7	74.7	65.7
82.5°	44.8	47.8	44.8	47.8
85°	29.9	35.8	32.9	32.9
87.5°	17.9	17.9	17.9	17.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)