

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: P249210

Luminaire Tested: **LSR8B80D010 EC8B80835 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249210  
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: LSR8B80D010 EC8B80835 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8444.0 lumens  
Efficiency: N/A  
Efficacy: 113.5 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

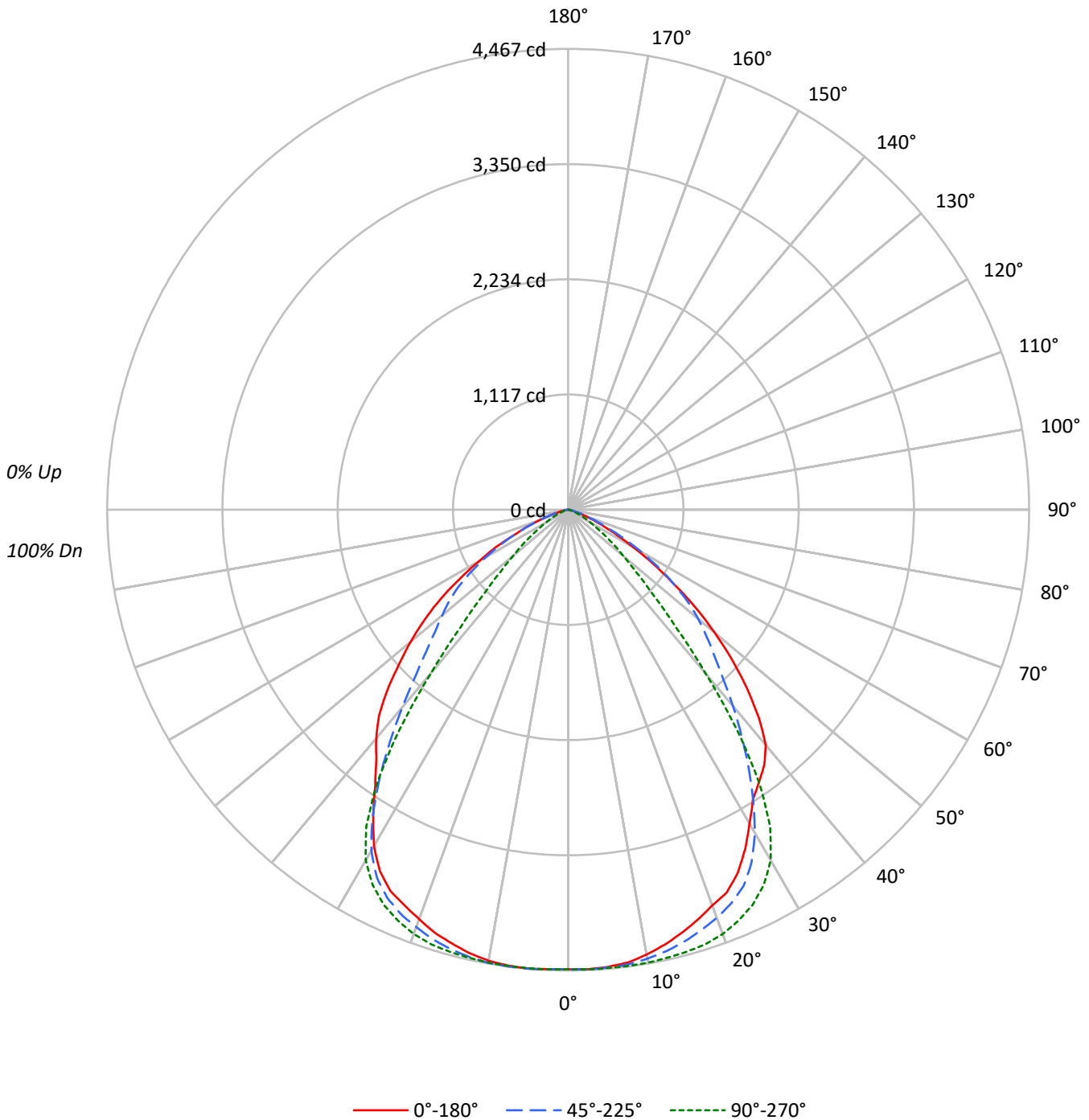
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	137382	137382	137382
5°	137684	138055	138204
10°	137106	139576	138978
15°	135585	141619	138946
20°	133959	143610	138589
25°	132221	143776	138730
30°	125086	139731	134027
35°	121354	121440	122701
40°	119848	83555	116479
45°	106790	50164	108251
50°	88798	33384	95682
55°	66594	23015	81126
60°	45132	15338	61210
65°	27223	9945	42050
70°	15093	5392	25876
75°	6839	2276	13392
80°	5949	2539	9341
85°	6758	3361	9305



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	425.2	5.0
10°-20°	1234.8	14.6
20°-30°	1874.2	22.2
30°-40°	1968.5	23.3
40°-50°	1475.8	17.5
50°-60°	946.9	11.2
60°-70°	405.1	4.8
70°-80°	95.7	1.1
80°-90°	17.8	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°	3534.2	41.9
0°-40°	5502.7	65.2
0°-60°	7925.4	93.9
0°-90°	8444.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8444.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4455	4455	4455	4455	4455	
5°	4448	4455	4460	4467	4465	423
15°	4247	4336	4436	4407	4352	1198
25°	3886	4022	4226	4149	4077	1775
35°	3224	3044	3226	3188	3260	2023
45°	2449	2002	1150	1944	2482	1875
55°	1239	1239	428	1291	1509	1124
65°	373	440	136	567	576	398
75°	57	67	19	115	112	84
85°	19	12	10	19	26	20
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°	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2
2.5°	4457.6	4462.4	4460.0	4460.0	4457.6	4460.0	4460.0	4464.8	4464.8	4460.0	4457.6
5°	4448.0	4452.8	4452.8	4448.0	4448.0	4460.0	4452.8	4457.6	4457.6	4455.2	4455.2
7.5°	4426.5	4426.5	4436.1	4428.9	4428.9	4436.1	4433.7	4438.5	4443.3	4445.7	4445.7
10°	4378.7	4383.5	4385.9	4385.9	4388.3	4395.4	4400.2	4409.8	4414.6	4419.4	4421.7
12.5°	4318.9	4326.1	4328.5	4326.1	4333.3	4342.8	4354.8	4366.7	4373.9	4383.5	4390.7
15°	4247.1	4247.1	4251.9	4259.1	4263.9	4278.3	4290.2	4304.5	4323.7	4335.7	4347.6
17.5°	4168.3	4173.1	4180.2	4180.2	4189.8	4213.7	4220.9	4242.4	4263.9	4275.9	4299.8
20°	4082.2	4086.9	4094.1	4098.9	4110.9	4130.0	4144.3	4163.5	4187.4	4208.9	4232.8
22.5°	4015.2	4005.7	4010.4	4015.2	4027.2	4043.9	4060.7	4084.5	4108.5	4130.0	4153.9
25°	3886.1	3888.5	3895.6	3900.4	3914.8	3929.1	3948.3	3976.9	3998.5	4022.4	4048.7
27.5°	3711.5	3713.9	3725.8	3725.8	3737.8	3761.7	3773.6	3797.6	3826.3	3850.2	3881.3
30°	3513.0	3517.8	3517.8	3527.4	3534.5	3546.5	3558.4	3582.4	3596.7	3618.2	3661.3
32.5°	3331.3	3336.0	3333.6	3331.3	3324.1	3321.7	3319.3	3324.1	3328.9	3336.0	3352.8
35°	3223.7	3211.7	3202.1	3185.4	3166.3	3142.3	3120.8	3092.1	3065.8	3044.3	3020.4
37.5°	3120.8	3118.4	3104.1	3080.1	3041.9	2998.9	2948.7	2886.5	2824.3	2757.3	2692.8
40°	2977.3	2970.1	2958.2	2924.7	2881.7	2829.0	2762.1	2685.6	2585.1	2482.3	2377.1
42.5°	2733.4	2735.8	2721.4	2695.1	2654.5	2604.2	2534.9	2451.2	2343.6	2221.6	2085.3
45°	2448.8	2448.8	2444.0	2422.5	2393.8	2353.2	2300.5	2231.2	2126.0	2001.6	1855.7
47.5°	2152.3	2154.7	2147.5	2142.7	2130.7	2104.5	2066.2	2013.6	1939.5	1819.9	1674.0
50°	1851.0	1851.0	1862.9	1860.5	1860.5	1851.0	1834.2	1803.1	1738.6	1642.9	1506.6
52.5°	1549.6	1554.4	1561.6	1571.2	1583.1	1602.2	1583.1	1568.8	1528.1	1454.0	1336.8
55°	1238.7	1243.5	1255.5	1272.2	1286.6	1305.7	1310.5	1310.5	1289.0	1238.7	1150.3
57.5°	973.3	966.1	975.7	990.1	1009.2	1028.3	1042.7	1059.4	1057.0	1023.5	951.8
60°	731.8	734.2	741.3	755.7	770.0	786.8	805.9	820.3	827.4	810.7	765.3
62.5°	533.3	533.3	542.8	557.2	564.4	588.3	600.2	607.4	614.6	612.2	583.5
65°	373.1	377.8	382.6	389.8	397.0	411.3	418.5	432.8	437.6	440.0	418.5
67.5°	263.1	255.9	260.7	265.4	272.6	282.2	296.5	296.5	303.7	303.7	289.4
70°	167.4	167.4	169.8	176.9	181.7	184.1	188.9	193.7	200.9	198.5	198.5
72.5°	112.4	110.0	112.4	114.8	117.2	124.3	124.3	126.7	131.5	133.9	124.3
75°	57.4	59.8	64.5	62.2	69.3	64.5	66.9	74.1	71.7	66.9	66.9
77.5°	47.8	47.8	47.8	45.5	50.2	50.2	47.8	52.6	50.2	50.2	47.8
80°	33.5	35.9	33.5	31.1	33.5	31.1	31.1	31.1	31.1	31.1	28.7
82.5°	26.3	21.5	23.9	21.5	23.9	23.9	21.5	19.1	19.1	21.5	19.1
85°	19.1	14.3	16.7	16.7	14.3	14.3	14.3	14.3	14.3	11.9	11.9
87.5°	11.9	7.2	7.2	7.2	9.5	9.5	9.5	7.2	9.5	9.5	4.8
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°	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2
2.5°	4462.4	4460.0	4464.8	4462.4	4462.4	4460.0	4462.4	4460.0	4464.8	4455.2	4457.6
5°	4462.4	4457.6	4460.0	4462.4	4464.8	4460.0	4460.0	4460.0	4464.8	4460.0	4462.4
7.5°	4452.8	4450.4	4457.6	4462.4	4460.0	4457.6	4462.4	4460.0	4464.8	4462.4	4467.2
10°	4433.7	4436.1	4440.9	4448.0	4450.4	4452.8	4457.6	4457.6	4464.8	4455.2	4460.0
12.5°	4405.0	4414.6	4426.5	4431.3	4440.9	4440.9	4445.7	4448.0	4452.8	4450.4	4457.6
15°	4369.1	4381.1	4395.4	4407.4	4419.4	4426.5	4433.7	4436.1	4443.3	4436.1	4438.5
17.5°	4326.1	4340.4	4361.9	4376.3	4395.4	4402.6	4412.2	4417.0	4424.1	4419.4	4421.7
20°	4266.3	4283.1	4306.9	4328.5	4340.4	4357.2	4369.1	4376.3	4381.1	4376.3	4378.7
22.5°	4182.6	4206.5	4237.6	4254.3	4278.3	4292.6	4295.0	4311.7	4323.7	4311.7	4316.5
25°	4084.5	4108.5	4132.4	4168.3	4189.8	4206.5	4223.3	4225.7	4237.6	4235.2	4232.8
27.5°	3921.9	3953.0	3993.7	4022.4	4051.1	4077.4	4096.5	4101.3	4113.3	4108.5	4110.9
30°	3699.5	3733.0	3771.3	3816.7	3857.4	3883.7	3907.6	3924.3	3936.3	3929.1	3926.7
32.5°	3383.9	3417.4	3458.0	3503.4	3551.3	3589.5	3618.2	3639.8	3654.1	3649.3	3637.4
35°	3022.8	3032.3	3058.7	3094.5	3135.1	3175.8	3202.1	3226.0	3242.7	3247.5	3247.5
37.5°	2652.1	2621.0	2601.9	2601.9	2625.8	2642.5	2666.4	2680.8	2707.1	2716.6	2723.8
40°	2293.4	2221.6	2154.7	2104.5	2071.0	2068.6	2068.6	2075.7	2099.7	2130.7	2159.5
42.5°	1972.9	1858.1	1755.3	1662.0	1595.1	1556.8	1540.1	1542.5	1561.6	1590.3	1638.1
45°	1717.0	1573.6	1444.4	1332.0	1241.1	1181.3	1152.7	1150.3	1164.6	1198.1	1250.7
47.5°	1518.6	1365.5	1219.6	1090.5	992.5	927.9	894.4	884.9	894.4	925.5	987.7
50°	1353.6	1195.7	1045.1	911.1	805.9	739.0	707.8	695.9	707.8	734.2	796.3
52.5°	1200.5	1037.9	896.8	767.6	655.2	597.8	564.4	557.2	564.4	595.4	645.7
55°	1023.5	884.9	746.1	617.0	519.0	461.6	435.2	428.1	435.2	464.0	516.6
57.5°	849.0	729.4	607.4	490.2	406.6	356.3	332.4	322.8	339.6	358.7	420.9
60°	686.3	590.7	487.8	385.0	315.7	270.2	251.1	248.7	253.5	277.4	320.4
62.5°	538.1	459.2	377.8	294.2	236.7	217.6	193.7	191.3	196.1	210.4	243.9
65°	387.4	337.2	275.0	215.2	169.8	143.5	133.9	136.3	141.1	150.7	181.7
67.5°	270.2	234.4	191.3	150.7	117.2	105.2	95.7	93.3	95.7	112.4	129.1
70°	181.7	160.2	129.1	114.8	81.3	64.5	66.9	59.8	69.3	69.3	83.7
72.5°	119.5	105.2	86.1	66.9	57.4	45.5	45.5	43.1	47.8	50.2	62.2
75°	62.2	47.8	47.8	33.5	23.9	11.9	21.5	19.1	16.7	19.1	23.9
77.5°	43.1	35.9	33.5	26.3	23.9	19.1	19.1	19.1	19.1	21.5	23.9
80°	26.3	26.3	19.1	16.7	14.3	11.9	14.3	14.3	14.3	14.3	16.7
82.5°	16.7	14.3	14.3	11.9	11.9	9.5	9.5	9.5	9.5	9.5	14.3
85°	14.3	9.5	9.5	7.2	9.5	16.7	7.2	9.5	9.5	9.5	7.2
87.5°	4.8	7.2	7.2	7.2	4.8	2.4	4.8	7.2	7.2	11.9	9.5
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°	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2	4455.2
2.5°	4462.4	4464.8	4464.8	4462.4	4462.4	4457.6	4467.2	4460.0	4462.4	4472.0	4464.8
5°	4467.2	4469.6	4469.6	4467.2	4467.2	4467.2	4469.6	4469.6	4467.2	4464.8	4469.6
7.5°	4476.8	4474.4	4474.4	4469.6	4469.6	4464.8	4469.6	4462.4	4467.2	4462.4	4469.6
10°	4464.8	4467.2	4464.8	4462.4	4462.4	4460.0	4460.0	4452.8	4455.2	4448.0	4452.8
12.5°	4457.6	4455.2	4455.2	4450.4	4445.7	4440.9	4438.5	4431.3	4431.3	4414.6	4421.7
15°	4438.5	4440.9	4433.7	4424.1	4419.4	4407.4	4402.6	4393.0	4383.5	4371.5	4373.9
17.5°	4421.7	4414.6	4405.0	4395.4	4376.3	4366.7	4357.2	4342.8	4338.0	4323.7	4318.9
20°	4371.5	4366.7	4354.8	4338.0	4326.1	4304.5	4295.0	4280.7	4268.7	4254.3	4247.1
22.5°	4306.9	4302.1	4287.8	4271.1	4251.9	4242.4	4232.8	4206.5	4194.5	4180.2	4177.8
25°	4225.7	4218.5	4204.1	4185.0	4175.4	4149.1	4139.5	4120.4	4115.7	4101.3	4098.9
27.5°	4101.3	4091.7	4075.0	4051.1	4034.3	4017.6	4008.1	3993.7	3988.9	3974.5	3972.2
30°	3914.8	3902.8	3869.3	3859.8	3831.0	3814.3	3814.3	3795.2	3797.6	3788.0	3788.0
32.5°	3620.6	3601.5	3575.2	3556.0	3536.9	3527.4	3527.4	3520.2	3525.0	3525.0	3529.8
35°	3230.8	3204.5	3190.1	3178.2	3178.2	3187.7	3216.5	3223.7	3238.0	3249.9	3259.5
37.5°	2731.0	2728.6	2745.4	2759.7	2795.6	2836.2	2886.5	2929.5	2970.1	2998.9	3027.5
40°	2190.5	2250.3	2298.1	2365.1	2420.1	2499.0	2589.9	2664.0	2733.4	2783.6	2836.2
42.5°	1709.8	1786.4	1886.9	1984.9	2082.9	2190.5	2310.1	2413.0	2503.8	2573.2	2628.2
45°	1332.0	1437.2	1559.2	1683.6	1810.3	1944.3	2068.6	2173.8	2269.5	2341.2	2396.2
47.5°	1073.7	1188.5	1327.2	1463.6	1607.0	1748.1	1886.9	1977.7	2056.6	2114.0	2164.3
50°	887.2	1009.2	1155.1	1310.5	1454.0	1595.1	1714.6	1803.1	1867.7	1917.9	1949.0
52.5°	741.3	870.5	1025.9	1181.3	1324.8	1454.0	1561.6	1628.6	1681.2	1717.0	1745.7
55°	612.2	736.6	882.5	1028.3	1169.4	1291.4	1379.8	1430.1	1470.7	1492.2	1509.0
57.5°	499.8	614.6	748.5	882.5	1004.4	1104.9	1174.2	1224.4	1243.5	1260.3	1257.9
60°	392.2	499.8	621.8	736.6	841.8	923.1	973.3	1002.0	1016.3	1023.5	1018.7
62.5°	308.5	406.6	499.8	600.2	676.8	746.1	794.0	794.0	801.1	803.5	810.7
65°	229.6	303.7	385.0	459.2	521.3	566.8	593.1	600.2	609.8	607.4	602.6
67.5°	169.8	224.8	284.6	339.6	382.6	411.3	430.4	447.2	444.8	440.0	437.6
70°	117.2	153.1	205.7	239.1	270.2	298.9	303.7	306.1	308.5	310.9	306.1
72.5°	81.3	107.6	136.3	165.0	184.1	196.1	208.1	210.4	210.4	210.4	208.1
75°	40.7	55.0	81.3	93.3	110.0	114.8	124.3	124.3	131.5	121.9	119.5
77.5°	35.9	43.1	57.4	66.9	74.1	81.3	83.7	90.9	88.5	83.7	86.1
80°	21.5	26.3	35.9	40.7	50.2	52.6	55.0	57.4	55.0	57.4	57.4
82.5°	16.7	19.1	23.9	23.9	31.1	31.1	33.5	33.5	35.9	35.9	35.9
85°	9.5	16.7	14.3	28.7	19.1	19.1	23.9	28.7	23.9	23.9	28.7
87.5°	9.5	9.5	7.2	9.5	9.5	9.5	11.9	14.3	14.3	16.7	14.3
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: P249210

CATALOG NUMBER: LSR8B80D010 EC8B80835 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4455.2	4455.2	4455.2	4455.2
2.5°	4462.4	4467.2	4460.0	4457.6
5°	4469.6	4469.6	4464.8	4464.8
7.5°	4469.6	4469.6	4462.4	4457.6
10°	4450.4	4450.4	4443.3	4438.5
12.5°	4414.6	4414.6	4412.2	4405.0
15°	4369.1	4369.1	4359.6	4352.4
17.5°	4306.9	4311.7	4299.8	4299.8
20°	4240.0	4237.6	4228.1	4223.3
22.5°	4170.7	4165.9	4163.5	4149.1
25°	4096.5	4091.7	4084.5	4077.4
27.5°	3969.8	3967.4	3960.2	3950.7
30°	3776.0	3773.6	3764.1	3764.1
32.5°	3525.0	3522.6	3513.0	3515.4
35°	3264.3	3273.9	3269.1	3259.5
37.5°	3046.7	3053.9	3058.7	3053.9
40°	2864.9	2886.5	2888.9	2893.6
42.5°	2671.2	2699.9	2709.5	2714.2
45°	2439.2	2465.6	2487.1	2482.3
47.5°	2202.5	2221.6	2240.7	2226.4
50°	1975.3	1987.3	1994.5	1994.5
52.5°	1760.1	1760.1	1757.7	1760.1
55°	1513.8	1513.8	1504.2	1509.0
57.5°	1255.5	1260.3	1253.1	1241.1
60°	1016.3	1004.4	999.6	992.5
62.5°	791.6	791.6	774.8	796.3
65°	593.1	585.9	578.7	576.3
67.5°	430.4	428.1	420.9	418.5
70°	303.7	294.2	291.8	287.0
72.5°	203.3	203.3	198.5	198.5
75°	124.3	112.4	110.0	112.4
77.5°	86.1	83.7	83.7	81.3
80°	57.4	55.0	59.8	52.6
82.5°	35.9	38.3	35.9	38.3
85°	23.9	28.7	26.3	26.3
87.5°	14.3	14.3	14.3	14.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)