

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: P250204

Luminaire Tested: **LSR8B80D010 EC8B80827 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250204
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B80D010 EC8B80827 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8004.0 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

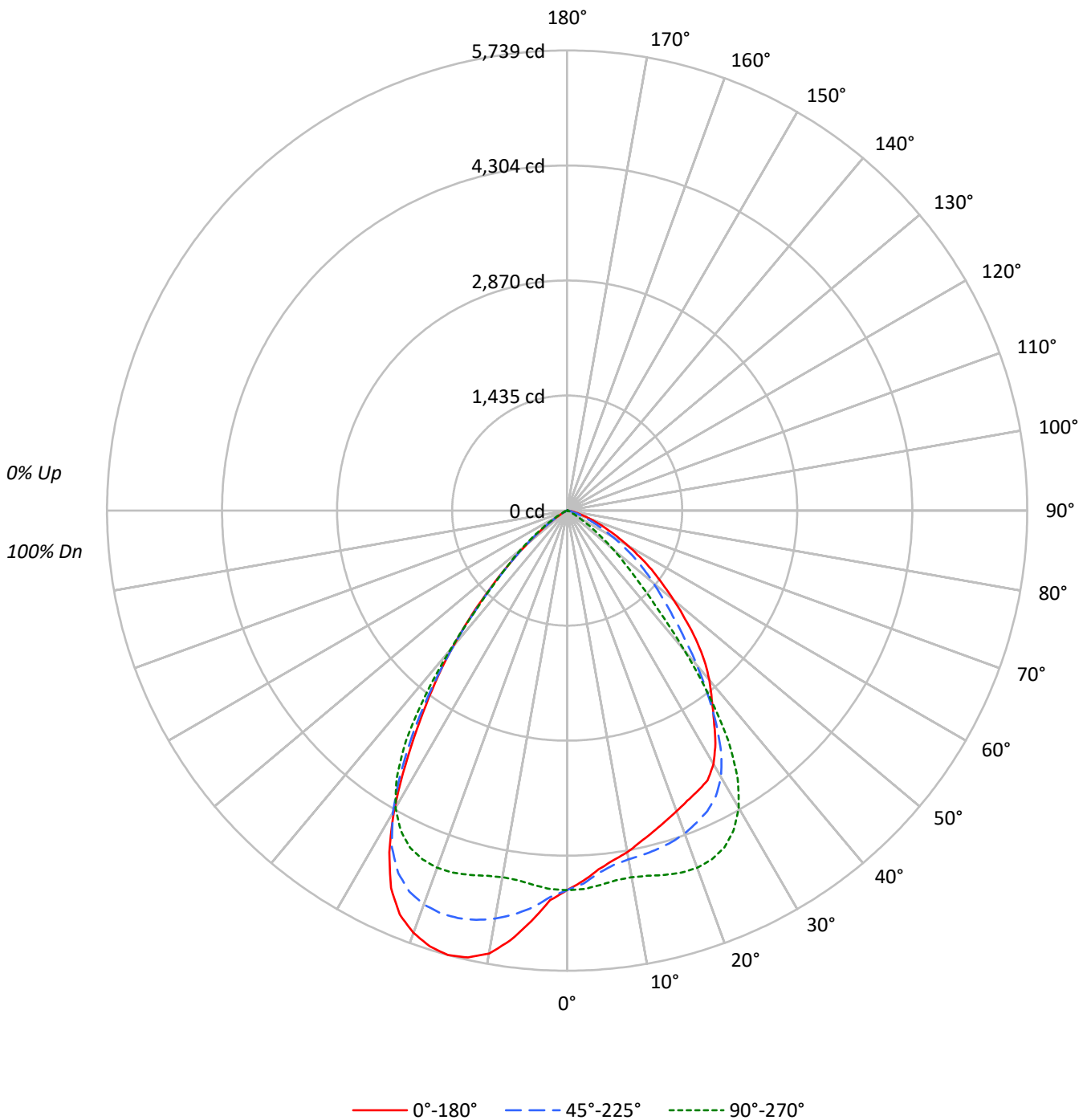
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60					60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42					42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	145942	145942	145942
5°	139037	145128	159098
10°	135453	145354	175617
15°	132380	150171	183212
20°	130923	155597	183900
25°	131231	157794	176755
30°	130011	152375	153714
35°	120138	131871	120300
40°	111016	91429	89207
45°	98853	55170	56997
50°	83180	35543	32257
55°	69202	19499	14747
60°	54013	8455	4638
65°	39861	4195	2262
70°	27715	2597	992
75°	16871	536	0
80°	12164	799	0
85°	7819	778	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	455.0	5.7
10°-20°	1361.7	17.0
20°-30°	2085.3	26.1
30°-40°	2044.3	25.5
40°-50°	1231.1	15.4
50°-60°	566.6	7.1
60°-70°	199.1	2.5
70°-80°	52.1	0.7
80°-90°	8.9	0.1
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°	3902.0	48.8
0°-40°	5946.3	74.3
0°-60°	7744.0	96.8
0°-90°	8004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8004.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4733	4733	4733	4733	4733	
5°	4492	4534	4688	4970	5140	424
15°	4147	4370	4704	5261	5739	1172
25°	3857	4136	4638	4987	5195	1776
35°	3191	3236	3503	3302	3196	1999
45°	2267	1867	1265	1274	1307	1738
55°	1287	1020	363	285	274	1148
65°	546	378	58	29	31	556
75°	142	82	4	0	0	172
85°	22	11	2	0	0	30
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°	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8
2.5°	4622.2	4626.6	4626.6	4626.6	4635.5	4637.7	4635.5	4637.7	4642.1	4657.6	4664.2
5°	4491.7	4485.1	4489.5	4487.3	4498.4	4505.0	4500.6	4507.2	4522.7	4533.8	4544.8
7.5°	4398.9	4398.9	4398.9	4403.3	4409.9	4423.2	4421.0	4425.4	4440.8	4456.3	4471.8
10°	4325.9	4323.7	4323.7	4334.7	4343.5	4359.0	4363.5	4376.8	4396.6	4416.5	4434.2
12.5°	4230.7	4233.0	4244.0	4255.1	4275.0	4299.3	4312.6	4330.3	4361.3	4394.4	4414.4
15°	4146.7	4148.9	4157.8	4179.9	4204.3	4233.0	4261.7	4290.5	4328.1	4370.1	4405.5
17.5°	4064.9	4067.1	4073.7	4098.1	4129.1	4166.7	4199.8	4237.4	4286.1	4334.7	4378.9
20°	3989.7	3987.5	3998.5	4020.6	4060.5	4095.8	4129.1	4173.3	4226.4	4286.1	4336.9
22.5°	3916.7	3916.7	3927.8	3949.9	3985.3	4020.6	4056.1	4102.5	4155.6	4213.1	4272.8
25°	3857.0	3854.8	3870.3	3881.4	3907.9	3943.3	3980.9	4018.5	4071.5	4135.7	4193.2
27.5°	3792.9	3790.7	3792.9	3806.2	3830.5	3857.0	3885.7	3919.0	3963.2	4016.3	4071.5
30°	3651.3	3653.5	3653.5	3664.6	3677.9	3706.6	3722.1	3755.3	3795.1	3839.3	3888.0
32.5°	3441.2	3443.4	3443.4	3447.9	3458.9	3472.2	3485.5	3509.8	3540.7	3578.3	3622.6
35°	3191.4	3191.4	3189.1	3191.4	3198.0	3198.0	3209.0	3198.0	3213.5	3235.6	3268.7
37.5°	2961.3	2956.9	2952.5	2948.0	2941.4	2930.4	2914.9	2888.3	2881.7	2872.8	2875.0
40°	2757.9	2755.7	2742.4	2731.3	2709.2	2682.7	2645.1	2598.7	2561.1	2516.8	2479.2
42.5°	2532.3	2530.0	2519.0	2499.1	2474.8	2435.0	2375.3	2313.4	2238.2	2171.8	2103.3
45°	2266.8	2273.5	2258.0	2235.9	2207.1	2169.5	2103.3	2028.0	1952.8	1866.6	1780.3
47.5°	1990.4	1988.2	1977.2	1963.9	1939.6	1902.0	1857.8	1775.9	1696.3	1616.7	1528.2
50°	1733.9	1725.0	1720.6	1707.4	1691.9	1660.9	1614.4	1548.1	1477.3	1402.1	1320.3
52.5°	1490.6	1490.6	1479.5	1470.7	1457.4	1433.1	1393.3	1340.2	1280.5	1209.7	1123.5
55°	1287.2	1282.7	1271.7	1260.6	1247.3	1231.8	1196.5	1152.3	1088.1	1019.5	944.4
57.5°	1070.4	1068.2	1063.8	1050.5	1043.9	1028.4	988.6	944.4	889.1	829.4	767.4
60°	875.8	867.0	858.1	849.2	838.2	822.7	796.2	758.6	712.1	659.1	597.2
62.5°	701.1	714.3	687.8	687.8	665.7	652.4	628.1	606.0	557.3	508.7	455.6
65°	546.3	546.3	535.2	526.3	513.0	497.6	473.3	451.1	415.7	378.1	340.5
67.5°	418.0	415.7	404.7	395.9	384.8	376.0	358.3	331.7	305.2	274.3	243.2
70°	307.4	305.2	303.0	287.5	278.6	267.6	254.3	236.7	216.7	194.6	165.9
72.5°	221.1	221.1	214.6	207.9	199.1	190.2	177.0	165.9	148.2	132.7	112.8
75°	141.6	139.4	139.4	128.3	128.3	115.0	106.1	99.5	90.7	81.8	64.2
77.5°	101.8	99.5	97.3	92.9	88.5	84.0	77.4	68.5	61.9	53.1	46.4
80°	68.5	64.2	61.9	61.9	55.3	53.1	55.3	42.1	39.8	33.1	28.8
82.5°	42.1	42.1	39.8	39.8	37.6	35.4	28.8	28.8	26.6	24.3	19.9
85°	22.1	28.8	19.9	22.1	19.9	22.1	19.9	15.5	13.3	11.0	11.0
87.5°	13.3	8.8	8.8	13.3	11.0	8.8	8.8	8.8	6.6	4.5	4.5
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8
2.5°	4659.9	4675.3	4673.1	4693.0	4699.6	4715.1	4715.1	4726.1	4732.8	4748.3	4761.5
5°	4549.3	4573.6	4580.2	4604.5	4624.5	4648.8	4664.2	4688.5	4710.7	4743.9	4774.8
7.5°	4480.7	4500.6	4513.9	4542.6	4564.7	4591.2	4617.8	4650.9	4681.9	4721.8	4766.0
10°	4447.5	4474.1	4493.9	4522.7	4549.3	4578.0	4604.5	4642.1	4677.5	4728.4	4777.0
12.5°	4438.7	4469.6	4493.9	4533.8	4560.3	4591.2	4622.2	4664.2	4701.8	4754.9	4810.2
15°	4438.7	4480.7	4513.9	4558.1	4589.0	4628.8	4662.1	4704.0	4746.1	4801.3	4854.4
17.5°	4429.8	4480.7	4522.7	4573.6	4613.3	4653.2	4695.2	4735.1	4779.2	4832.4	4892.0
20°	4394.4	4458.6	4509.4	4569.1	4611.2	4655.4	4697.5	4741.6	4788.1	4843.4	4894.3
22.5°	4332.5	4407.7	4465.2	4529.3	4578.0	4622.2	4664.2	4708.5	4759.4	4812.4	4865.5
25°	4250.7	4321.4	4383.4	4449.7	4498.4	4547.0	4586.9	4637.7	4684.2	4735.1	4777.0
27.5°	4126.8	4202.0	4261.7	4330.3	4374.5	4421.0	4454.1	4496.2	4540.4	4582.4	4615.6
30°	3941.1	4009.6	4071.5	4133.4	4177.7	4210.9	4246.2	4279.4	4308.2	4336.9	4365.7
32.5°	3669.0	3731.0	3790.7	3848.1	3883.6	3912.3	3938.8	3958.7	3974.2	3989.7	3991.9
35°	3295.3	3346.1	3383.7	3434.6	3467.8	3494.3	3494.3	3503.1	3501.0	3494.3	3487.7
37.5°	2877.3	2897.1	2912.6	2932.6	2934.7	2934.7	2921.5	2910.4	2892.8	2888.3	2875.0
40°	2441.6	2415.0	2395.1	2368.6	2353.1	2319.9	2291.2	2271.3	2242.5	2238.2	2233.7
42.5°	2028.0	1966.1	1910.8	1864.4	1811.3	1764.8	1722.8	1691.9	1669.8	1667.5	1669.8
45°	1691.9	1621.1	1539.2	1475.2	1415.4	1357.9	1302.7	1265.1	1245.1	1240.7	1245.1
47.5°	1437.6	1355.7	1276.1	1203.1	1139.0	1074.8	1019.5	968.7	944.4	937.7	935.5
50°	1236.3	1152.3	1068.2	993.0	922.2	858.1	789.5	740.9	709.9	698.8	690.0
52.5°	1039.5	964.3	878.0	800.6	729.8	654.6	583.9	528.5	497.6	484.4	475.5
55°	867.0	791.8	712.1	636.9	561.8	486.6	415.7	362.7	329.5	314.1	303.0
57.5°	692.2	621.5	552.9	477.7	415.7	342.8	272.0	225.6	196.8	179.1	170.3
60°	535.2	479.9	420.2	358.3	298.6	238.9	181.3	137.1	115.0	101.8	90.7
62.5°	404.7	358.3	318.4	265.4	218.9	168.0	123.9	88.5	68.5	57.5	53.1
65°	291.9	256.5	221.1	188.0	154.8	117.2	84.0	57.5	39.8	33.1	31.0
67.5°	207.9	179.1	152.6	130.4	106.1	84.0	59.7	39.8	31.0	26.6	24.3
70°	145.9	123.9	106.1	86.3	70.7	55.3	46.4	28.8	17.7	19.9	15.5
72.5°	97.3	81.8	73.0	59.7	48.6	39.8	28.8	19.9	19.9	15.5	13.3
75°	53.1	48.6	37.6	28.8	24.3	22.1	8.8	4.5	2.2	6.6	2.2
77.5°	37.6	33.1	28.8	24.3	19.9	15.5	8.8	8.8	6.6	8.8	4.5
80°	24.3	19.9	17.7	17.7	11.0	6.6	4.5	4.5	6.6	2.2	2.2
82.5°	15.5	13.3	11.0	11.0	11.0	6.6	6.6	6.6	6.6	4.5	4.5
85°	8.8	6.6	4.5	4.5	2.2	4.5	0.0	2.2	2.2	0.0	0.0
87.5°	4.5	2.2	2.2	2.2	2.2	0.0	0.0	2.2	0.0	2.2	0.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8	4732.8
2.5°	4770.4	4779.2	4790.3	4799.1	4819.1	4823.4	4832.4	4841.2	4847.8	4854.4	4856.7
5°	4801.3	4834.6	4865.5	4898.6	4940.7	4969.5	5002.6	5031.4	5060.1	5084.4	5102.1
7.5°	4810.2	4861.0	4907.6	4965.0	5026.9	5080.1	5135.3	5190.6	5248.1	5292.3	5329.9
10°	4827.9	4889.8	4949.5	5018.1	5097.7	5168.5	5237.0	5310.0	5383.0	5444.9	5500.3
12.5°	4858.9	4927.4	4991.6	5066.8	5148.6	5228.2	5303.4	5385.2	5462.7	5531.2	5593.1
15°	4909.7	4973.8	5035.8	5106.6	5188.4	5261.4	5336.6	5416.2	5493.6	5564.3	5621.9
17.5°	4942.9	5002.6	5064.5	5128.7	5197.2	5263.6	5334.3	5405.1	5475.9	5540.0	5593.1
20°	4942.9	5000.4	5046.8	5104.4	5168.5	5226.0	5283.5	5345.4	5407.3	5460.4	5511.3
22.5°	4903.1	4958.4	4993.8	5038.0	5093.3	5142.0	5172.9	5241.5	5287.9	5334.3	5371.9
25°	4810.2	4850.0	4878.8	4909.7	4954.0	4987.1	5013.7	5053.5	5099.9	5117.7	5144.2
27.5°	4642.1	4670.9	4686.4	4693.0	4715.1	4732.8	4737.2	4754.9	4774.8	4779.2	4790.3
30°	4376.8	4378.9	4372.3	4370.1	4359.0	4345.8	4343.5	4341.3	4332.5	4323.7	4325.9
32.5°	3976.4	3965.4	3938.8	3910.1	3881.4	3850.4	3832.7	3810.5	3797.3	3784.1	3768.6
35°	3458.9	3432.4	3394.8	3359.4	3326.3	3301.9	3262.1	3248.8	3235.6	3217.8	3213.5
37.5°	2850.7	2835.2	2799.8	2773.3	2755.7	2744.6	2724.6	2711.4	2711.4	2704.8	2700.3
40°	2222.6	2218.2	2204.9	2211.6	2202.8	2207.1	2204.9	2200.5	2211.6	2211.6	2216.1
42.5°	1667.5	1669.8	1676.4	1680.8	1694.1	1696.3	1707.4	1707.4	1714.0	1720.6	1725.0
45°	1240.7	1249.6	1249.6	1258.4	1271.7	1273.9	1278.3	1280.5	1284.9	1296.0	1300.4
47.5°	931.1	933.2	933.2	935.5	939.9	944.4	942.2	944.4	951.0	946.5	951.0
50°	687.8	690.0	683.4	676.7	683.4	683.4	681.2	674.5	681.2	672.4	676.7
52.5°	468.9	466.6	460.0	462.3	457.8	455.6	455.6	451.1	451.1	451.1	442.3
55°	296.4	296.4	291.9	291.9	289.8	285.3	283.1	280.8	278.6	276.5	276.5
57.5°	165.9	168.0	161.5	159.2	161.5	159.2	154.8	154.8	154.8	148.2	152.6
60°	90.7	88.5	86.3	84.0	81.8	84.0	84.0	79.7	79.7	79.7	81.8
62.5°	48.6	48.6	46.4	46.4	44.2	44.2	48.6	42.1	44.2	42.1	44.2
65°	26.6	33.1	24.3	24.3	31.0	28.8	26.6	26.6	28.8	24.3	26.6
67.5°	28.8	19.9	17.7	19.9	17.7	17.7	17.7	22.1	19.9	15.5	19.9
70°	13.3	15.5	15.5	11.0	17.7	8.8	15.5	8.8	13.3	11.0	13.3
72.5°	13.3	13.3	13.3	8.8	13.3	8.8	11.0	11.0	8.8	8.8	13.3
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	4.5	4.5	2.2	2.2	2.2	2.2	4.5	4.5	4.5	0.0	2.2
80°	4.5	4.5	0.0	2.2	0.0	0.0	2.2	0.0	2.2	0.0	4.5
82.5°	2.2	4.5	2.2	2.2	4.5	4.5	4.5	2.2	2.2	2.2	2.2
85°	0.0	2.2	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	2.2
87.5°	0.0	2.2	0.0	0.0	0.0	0.0	2.2	2.2	0.0	0.0	0.0
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: P250204

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4732.8	4732.8	4732.8	4732.8
2.5°	4858.9	4861.0	4865.5	4863.3
5°	5115.4	5133.1	5142.0	5139.8
7.5°	5356.4	5387.5	5405.1	5405.1
10°	5542.2	5577.6	5604.1	5608.6
12.5°	5641.7	5681.6	5717.0	5708.1
15°	5670.5	5710.4	5745.7	5739.0
17.5°	5637.4	5677.1	5703.7	5699.3
20°	5546.7	5579.8	5606.4	5604.1
22.5°	5405.1	5433.9	5456.0	5453.7
25°	5166.3	5186.2	5203.9	5195.0
27.5°	4799.1	4805.8	4816.8	4803.6
30°	4310.4	4314.8	4319.2	4317.0
32.5°	3761.9	3759.7	3755.3	3750.8
35°	3206.8	3206.8	3209.0	3195.7
37.5°	2702.5	2700.3	2707.0	2700.3
40°	2220.4	2218.2	2227.1	2216.1
42.5°	1731.7	1738.3	1740.5	1740.5
45°	1302.7	1304.8	1307.0	1307.0
47.5°	951.0	953.2	964.3	951.0
50°	672.4	674.5	676.7	672.4
52.5°	444.5	446.8	444.5	437.9
55°	272.0	274.3	274.3	274.3
57.5°	145.9	148.2	148.2	145.9
60°	79.7	77.4	79.7	75.2
62.5°	42.1	46.4	44.2	39.8
65°	26.6	26.6	26.6	31.0
67.5°	22.1	17.7	19.9	15.5
70°	13.3	15.5	15.5	11.0
72.5°	11.0	11.0	11.0	13.3
75°	0.0	0.0	0.0	0.0
77.5°	4.5	4.5	4.5	2.2
80°	2.2	0.0	2.2	0.0
82.5°	2.2	2.2	4.5	2.2
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)