

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: P249411

Luminaire Tested: **LSR8B120D010 EC8B120827 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249411
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 EC8B120827 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10380.0 lumens
Efficiency: N/A
Efficacy: 87.7 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

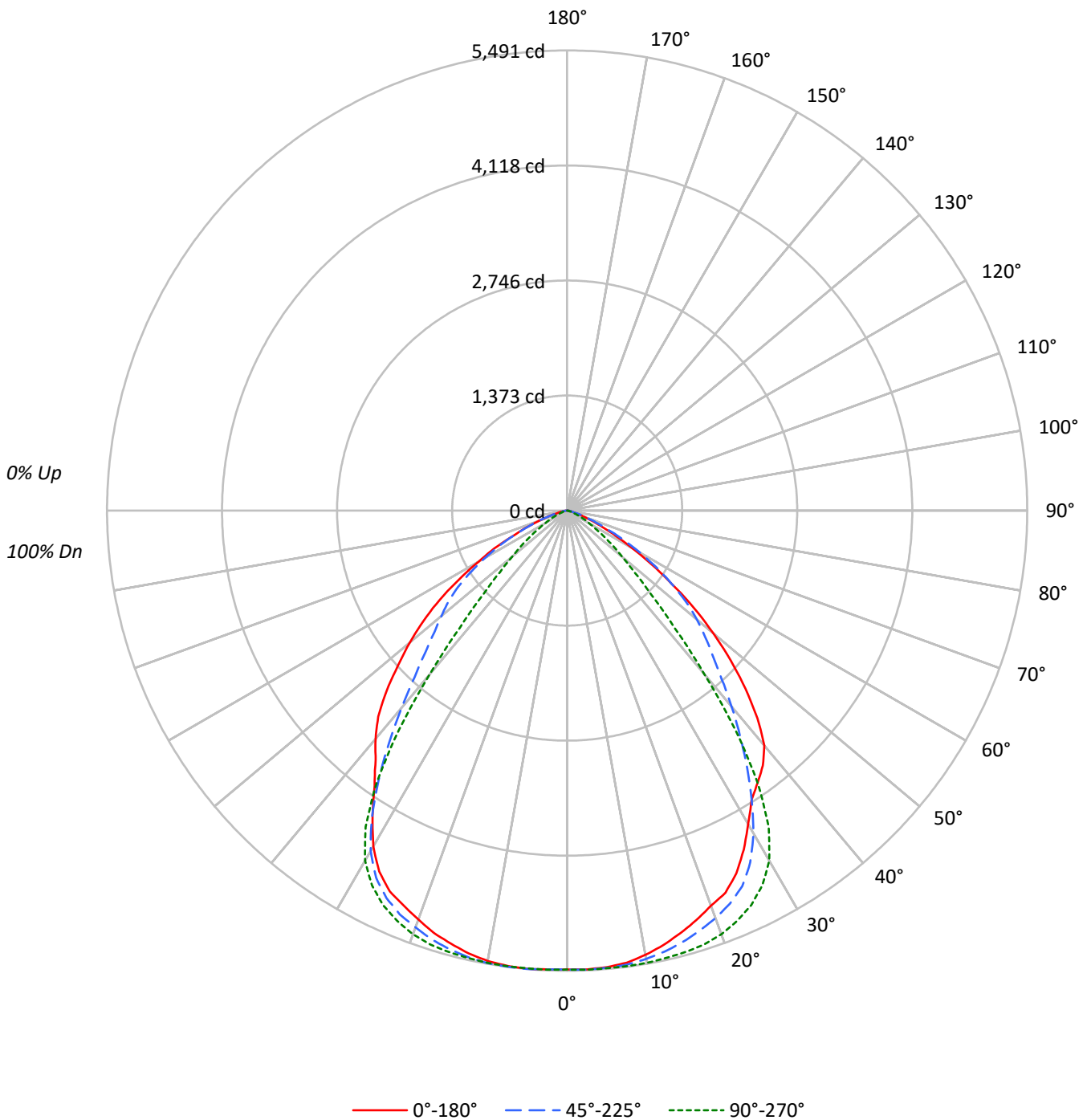
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	168881	168881	168881
5°	169251	169709	169892
10°	168540	171577	170841
15°	166673	174089	170804
20°	164671	176537	170364
25°	162533	176738	170536
30°	153768	171770	164756
35°	149176	149286	150837
40°	147329	102716	143187
45°	131277	61663	133069
50°	109157	41041	117615
55°	81868	28289	99722
60°	55481	18853	75241
65°	33462	12229	51688
70°	18555	6627	31799
75°	8411	2800	16465
80°	7299	3125	11489
85°	8314	4140	11463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	522.7	5.0
10°-20°	1517.9	14.6
20°-30°	2303.9	22.2
30°-40°	2419.8	23.3
40°-50°	1814.2	17.5
50°-60°	1164.0	11.2
60°-70°	498.0	4.8
70°-80°	117.6	1.1
80°-90°	21.9	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°	4344.5	41.9
0°-40°	6764.3	65.2
0°-60°	9742.5	93.9
0°-90°	10380.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10380.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5477	5477	5477	5477	5477	
5°	5468	5477	5483	5491	5488	519
15°	5221	5330	5453	5418	5350	1473
25°	4777	4945	5194	5100	5012	2182
35°	3963	3742	3966	3919	4007	2487
45°	3010	2460	1414	2390	3051	2305
55°	1523	1523	526	1587	1855	1381
65°	459	541	168	697	708	490
75°	71	82	24	141	138	103
85°	24	15	12	24	32	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°	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7
2.5°	5479.6	5485.5	5482.6	5482.6	5479.6	5482.6	5482.6	5488.5	5488.5	5482.6	5479.6
5°	5467.8	5473.7	5473.7	5467.8	5467.8	5482.6	5473.7	5479.6	5479.6	5476.7	5476.7
7.5°	5441.4	5441.4	5453.2	5444.4	5444.4	5453.2	5450.2	5456.1	5462.0	5465.0	5465.0
10°	5382.6	5388.5	5391.5	5391.5	5394.4	5403.2	5409.1	5420.9	5426.7	5432.6	5435.5
12.5°	5309.2	5317.9	5320.9	5317.9	5326.8	5338.5	5353.3	5367.9	5376.8	5388.5	5397.4
15°	5220.9	5220.9	5226.8	5235.7	5241.6	5259.2	5273.8	5291.5	5315.0	5329.7	5344.4
17.5°	5123.9	5129.8	5138.6	5138.6	5150.4	5179.8	5188.6	5215.1	5241.6	5256.2	5285.6
20°	5018.1	5024.0	5032.8	5038.7	5053.4	5076.9	5094.5	5118.0	5147.5	5173.9	5203.3
22.5°	4935.8	4924.1	4929.9	4935.8	4950.5	4971.1	4991.7	5021.0	5050.4	5076.9	5106.3
25°	4777.0	4780.0	4788.8	4794.7	4812.3	4830.0	4853.5	4888.7	4915.2	4944.6	4976.9
27.5°	4562.5	4565.4	4580.1	4580.1	4594.8	4624.2	4638.9	4668.3	4703.6	4732.9	4771.2
30°	4318.5	4324.3	4324.3	4336.1	4344.9	4359.6	4374.3	4403.7	4421.3	4447.8	4500.7
32.5°	4095.1	4100.9	4097.9	4095.1	4086.2	4083.3	4080.3	4086.2	4092.1	4100.9	4121.5
35°	3962.8	3948.0	3936.3	3915.7	3892.2	3862.8	3836.3	3801.1	3768.7	3742.2	3712.9
37.5°	3836.3	3833.4	3815.8	3786.3	3739.3	3686.4	3624.7	3548.2	3471.8	3389.5	3310.2
40°	3660.0	3651.1	3636.4	3595.3	3542.3	3477.7	3395.4	3301.3	3177.8	3051.4	2922.1
42.5°	3360.1	3363.0	3345.4	3313.0	3263.1	3201.3	3116.1	3013.2	2880.9	2731.0	2563.4
45°	3010.3	3010.3	3004.4	2977.9	2942.7	2892.7	2828.0	2742.8	2613.4	2460.5	2281.2
47.5°	2645.7	2648.7	2639.8	2634.0	2619.3	2587.0	2539.9	2475.3	2384.1	2237.1	2057.8
50°	2275.4	2275.4	2290.0	2287.1	2287.1	2275.4	2254.8	2216.5	2137.2	2019.6	1852.1
52.5°	1904.9	1910.8	1919.7	1931.4	1946.1	1969.6	1946.1	1928.4	1878.5	1787.3	1643.3
55°	1522.8	1528.7	1543.3	1563.9	1581.6	1605.1	1610.9	1610.9	1584.5	1522.8	1414.0
57.5°	1196.5	1187.6	1199.4	1217.1	1240.6	1264.1	1281.7	1302.3	1299.3	1258.2	1170.0
60°	899.6	902.5	911.3	929.0	946.6	967.2	990.7	1008.3	1017.2	996.6	940.7
62.5°	655.6	655.6	667.3	684.9	693.8	723.2	737.9	746.7	755.5	752.5	717.3
65°	458.6	464.5	470.4	479.2	488.0	505.6	514.4	532.1	538.0	540.9	514.4
67.5°	323.4	314.6	320.4	326.3	335.1	346.9	364.5	364.5	373.3	373.3	355.7
70°	205.8	205.8	208.7	217.5	223.4	226.4	232.3	238.1	246.9	244.0	244.0
72.5°	138.2	135.2	138.2	141.1	144.1	152.9	152.9	155.8	161.7	164.6	152.9
75°	70.6	73.5	79.3	76.5	85.2	79.3	82.3	91.1	88.2	82.3	82.3
77.5°	58.8	58.8	58.8	55.9	61.7	61.7	58.8	64.7	61.7	61.7	58.8
80°	41.1	44.1	41.1	38.2	41.1	38.2	38.2	38.2	38.2	38.2	35.2
82.5°	32.4	26.5	29.4	26.5	29.4	29.4	26.5	23.5	23.5	26.5	23.5
85°	23.5	17.6	20.6	20.6	17.6	17.6	17.6	17.6	17.6	14.7	14.7
87.5°	14.7	8.8	8.8	8.8	11.7	11.7	11.7	8.8	11.7	11.7	5.9
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7
2.5°	5485.5	5482.6	5488.5	5485.5	5485.5	5482.6	5485.5	5482.6	5488.5	5476.7	5479.6
5°	5485.5	5479.6	5482.6	5485.5	5488.5	5482.6	5482.6	5482.6	5488.5	5482.6	5485.5
7.5°	5473.7	5470.8	5479.6	5485.5	5482.6	5479.6	5485.5	5482.6	5488.5	5485.5	5491.4
10°	5450.2	5453.2	5459.1	5467.8	5470.8	5473.7	5479.6	5479.6	5488.5	5476.7	5482.6
12.5°	5415.0	5426.7	5441.4	5447.3	5459.1	5459.1	5465.0	5467.8	5473.7	5470.8	5479.6
15°	5370.9	5385.6	5403.2	5417.9	5432.6	5441.4	5450.2	5453.2	5462.0	5453.2	5456.1
17.5°	5317.9	5335.6	5362.0	5379.7	5403.2	5412.0	5423.8	5429.7	5438.5	5432.6	5435.5
20°	5244.4	5265.1	5294.4	5320.9	5335.6	5356.1	5370.9	5379.7	5385.6	5379.7	5382.6
22.5°	5141.6	5171.0	5209.2	5229.8	5259.2	5276.8	5279.7	5300.3	5315.0	5300.3	5306.2
25°	5021.0	5050.4	5079.9	5123.9	5150.4	5171.0	5191.6	5194.5	5209.2	5206.2	5203.3
27.5°	4821.1	4859.4	4909.3	4944.6	4979.9	5012.2	5035.8	5041.6	5056.3	5050.4	5053.4
30°	4547.7	4588.9	4636.0	4691.8	4741.8	4774.1	4803.5	4824.1	4838.7	4830.0	4827.0
32.5°	4159.7	4200.9	4250.9	4306.7	4365.5	4412.5	4447.8	4474.3	4491.9	4486.0	4471.3
35°	3715.8	3727.6	3759.9	3804.0	3853.9	3903.9	3936.3	3965.7	3986.2	3992.1	3992.1
37.5°	3260.2	3222.0	3198.4	3198.4	3227.8	3248.4	3277.8	3295.4	3327.8	3339.5	3348.3
40°	2819.2	2731.0	2648.7	2587.0	2545.8	2542.9	2542.9	2551.7	2581.1	2619.3	2654.6
42.5°	2425.3	2284.1	2157.8	2043.1	1960.8	1913.8	1893.2	1896.1	1919.7	1954.9	2013.7
45°	2110.7	1934.3	1775.6	1637.4	1525.7	1452.2	1417.0	1414.0	1431.6	1472.8	1537.5
47.5°	1866.7	1678.6	1499.2	1340.5	1220.0	1140.6	1099.5	1087.7	1099.5	1137.6	1214.1
50°	1663.9	1469.9	1284.7	1120.0	990.7	908.4	870.1	855.5	870.1	902.5	978.9
52.5°	1475.7	1275.8	1102.4	943.7	805.5	734.9	693.8	684.9	693.8	732.0	793.7
55°	1258.2	1087.7	917.2	758.4	637.9	567.4	535.0	526.2	535.0	570.3	635.0
57.5°	1043.6	896.6	746.7	602.6	499.8	438.0	408.6	396.8	417.4	440.9	517.4
60°	843.7	726.1	599.7	473.3	388.1	332.2	308.7	305.7	311.6	341.0	393.9
62.5°	661.5	564.4	464.5	361.6	291.0	267.5	238.1	235.2	241.0	258.7	299.9
65°	476.2	414.5	338.1	264.6	208.7	176.4	164.6	167.6	173.4	185.2	223.4
67.5°	332.2	288.1	235.2	185.2	144.1	129.3	117.6	114.7	117.6	138.2	158.7
70°	223.4	196.9	158.7	141.1	100.0	79.3	82.3	73.5	85.2	85.2	102.9
72.5°	147.0	129.3	105.8	82.3	70.6	55.9	55.9	52.9	58.8	61.7	76.5
75°	76.5	58.8	58.8	41.1	29.4	14.7	26.5	23.5	20.6	23.5	29.4
77.5°	52.9	44.1	41.1	32.4	29.4	23.5	23.5	23.5	23.5	26.5	29.4
80°	32.4	32.4	23.5	20.6	17.6	14.7	17.6	17.6	17.6	17.6	20.6
82.5°	20.6	17.6	17.6	14.7	14.7	11.7	11.7	11.7	11.7	11.7	17.6
85°	17.6	11.7	11.7	8.8	11.7	20.6	8.8	11.7	11.7	11.7	8.8
87.5°	5.9	8.8	8.8	8.8	5.9	2.9	5.9	8.8	8.8	14.7	11.7
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°	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7	5476.7
2.5°	5485.5	5488.5	5488.5	5485.5	5485.5	5479.6	5491.4	5482.6	5485.5	5497.3	5488.5
5°	5491.4	5494.3	5494.3	5491.4	5491.4	5491.4	5494.3	5494.3	5491.4	5488.5	5494.3
7.5°	5503.2	5500.2	5500.2	5494.3	5494.3	5488.5	5494.3	5485.5	5491.4	5485.5	5494.3
10°	5488.5	5491.4	5488.5	5485.5	5485.5	5482.6	5482.6	5473.7	5476.7	5467.8	5473.7
12.5°	5479.6	5476.7	5476.7	5470.8	5465.0	5459.1	5456.1	5447.3	5447.3	5426.7	5435.5
15°	5456.1	5459.1	5450.2	5438.5	5432.6	5417.9	5412.0	5400.2	5388.5	5373.8	5376.8
17.5°	5435.5	5426.7	5415.0	5403.2	5379.7	5367.9	5356.1	5338.5	5332.6	5315.0	5309.2
20°	5373.8	5367.9	5353.3	5332.6	5317.9	5291.5	5279.7	5262.1	5247.4	5229.8	5220.9
22.5°	5294.4	5288.5	5270.9	5250.3	5226.8	5215.1	5203.3	5171.0	5156.2	5138.6	5135.7
25°	5194.5	5185.7	5168.0	5144.5	5132.7	5100.4	5088.6	5065.1	5059.3	5041.6	5038.7
27.5°	5041.6	5029.9	5009.3	4979.9	4959.3	4938.7	4927.0	4909.3	4903.5	4885.8	4882.9
30°	4812.3	4797.6	4756.5	4744.7	4709.4	4688.8	4688.8	4665.3	4668.3	4656.5	4656.5
32.5°	4450.8	4427.2	4394.9	4371.3	4347.8	4336.1	4336.1	4327.2	4333.1	4333.1	4339.0
35°	3971.6	3939.3	3921.6	3906.9	3906.9	3918.6	3953.9	3962.8	3980.4	3995.1	4006.9
37.5°	3357.1	3354.2	3374.8	3392.4	3436.5	3486.5	3548.2	3601.2	3651.1	3686.4	3721.7
40°	2692.8	2766.3	2825.1	2907.4	2975.0	3072.0	3183.7	3274.8	3360.1	3421.9	3486.5
42.5°	2101.9	2196.0	2319.5	2439.9	2560.5	2692.8	2839.8	2966.2	3077.9	3163.1	3230.7
45°	1637.4	1766.8	1916.7	2069.6	2225.4	2390.0	2542.9	2672.2	2789.8	2878.0	2945.6
47.5°	1319.9	1461.0	1631.5	1799.1	1975.5	2148.9	2319.5	2431.2	2528.1	2598.7	2660.5
50°	1090.6	1240.6	1419.9	1610.9	1787.3	1960.8	2107.8	2216.5	2295.9	2357.7	2395.9
52.5°	911.3	1070.0	1261.2	1452.2	1628.6	1787.3	1919.7	2002.0	2066.6	2110.7	2146.0
55°	752.5	905.5	1084.8	1264.1	1437.5	1587.4	1696.2	1758.0	1807.9	1834.4	1854.9
57.5°	614.4	755.5	920.1	1084.8	1234.7	1358.2	1443.4	1505.1	1528.7	1549.2	1546.3
60°	482.1	614.4	764.3	905.5	1034.8	1134.7	1196.5	1231.7	1249.4	1258.2	1252.3
62.5°	379.2	499.8	614.4	737.9	831.9	917.2	976.0	976.0	984.8	987.7	996.6
65°	282.2	373.3	473.3	564.4	640.8	696.7	729.1	737.9	749.7	746.7	740.8
67.5°	208.7	276.4	349.8	417.4	470.4	505.6	529.1	549.8	546.8	540.9	538.0
70°	144.1	188.2	252.8	294.0	332.2	367.5	373.3	376.3	379.2	382.2	376.3
72.5°	100.0	132.3	167.6	202.8	226.4	241.0	255.8	258.7	258.7	258.7	255.8
75°	50.0	67.6	100.0	114.7	135.2	141.1	152.9	152.9	161.7	149.9	147.0
77.5°	44.1	52.9	70.6	82.3	91.1	100.0	102.9	111.7	108.8	102.9	105.8
80°	26.5	32.4	44.1	50.0	61.7	64.7	67.6	70.6	67.6	70.6	70.6
82.5°	20.6	23.5	29.4	29.4	38.2	38.2	41.1	41.1	44.1	44.1	44.1
85°	11.7	20.6	17.6	35.2	23.5	23.5	29.4	35.2	29.4	29.4	35.2
87.5°	11.7	11.7	8.8	11.7	11.7	11.7	14.7	17.6	17.6	20.6	17.6
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: P249411

CATALOG NUMBER: LSR8B120D010 EC8B120827 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5476.7	5476.7	5476.7	5476.7
2.5°	5485.5	5491.4	5482.6	5479.6
5°	5494.3	5494.3	5488.5	5488.5
7.5°	5494.3	5494.3	5485.5	5479.6
10°	5470.8	5470.8	5462.0	5456.1
12.5°	5426.7	5426.7	5423.8	5415.0
15°	5370.9	5370.9	5359.1	5350.3
17.5°	5294.4	5300.3	5285.6	5285.6
20°	5212.1	5209.2	5197.5	5191.6
22.5°	5126.9	5121.0	5118.0	5100.4
25°	5035.8	5029.9	5021.0	5012.2
27.5°	4880.0	4877.0	4868.2	4856.4
30°	4641.8	4638.9	4627.1	4627.1
32.5°	4333.1	4330.2	4318.5	4321.4
35°	4012.7	4024.5	4018.6	4006.9
37.5°	3745.2	3754.0	3759.9	3754.0
40°	3521.8	3548.2	3551.2	3557.1
42.5°	3283.7	3318.9	3330.7	3336.6
45°	2998.5	3030.9	3057.3	3051.4
47.5°	2707.5	2731.0	2754.5	2736.9
50°	2428.2	2442.9	2451.7	2451.7
52.5°	2163.7	2163.7	2160.7	2163.7
55°	1860.8	1860.8	1849.1	1854.9
57.5°	1543.3	1549.2	1540.4	1525.7
60°	1249.4	1234.7	1228.8	1220.0
62.5°	973.1	973.1	952.5	978.9
65°	729.1	720.2	711.4	708.4
67.5°	529.1	526.2	517.4	514.4
70°	373.3	361.6	358.6	352.7
72.5°	249.9	249.9	244.0	244.0
75°	152.9	138.2	135.2	138.2
77.5°	105.8	102.9	102.9	100.0
80°	70.6	67.6	73.5	64.7
82.5°	44.1	47.0	44.1	47.0
85°	29.4	35.2	32.4	32.4
87.5°	17.6	17.6	17.6	17.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)