

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: P249309

Luminaire Tested: **LSR8B80D010 EC8B80830 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249309
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 EC8B80830 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7978.0 lumens
Efficiency: N/A
Efficacy: 107.2 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

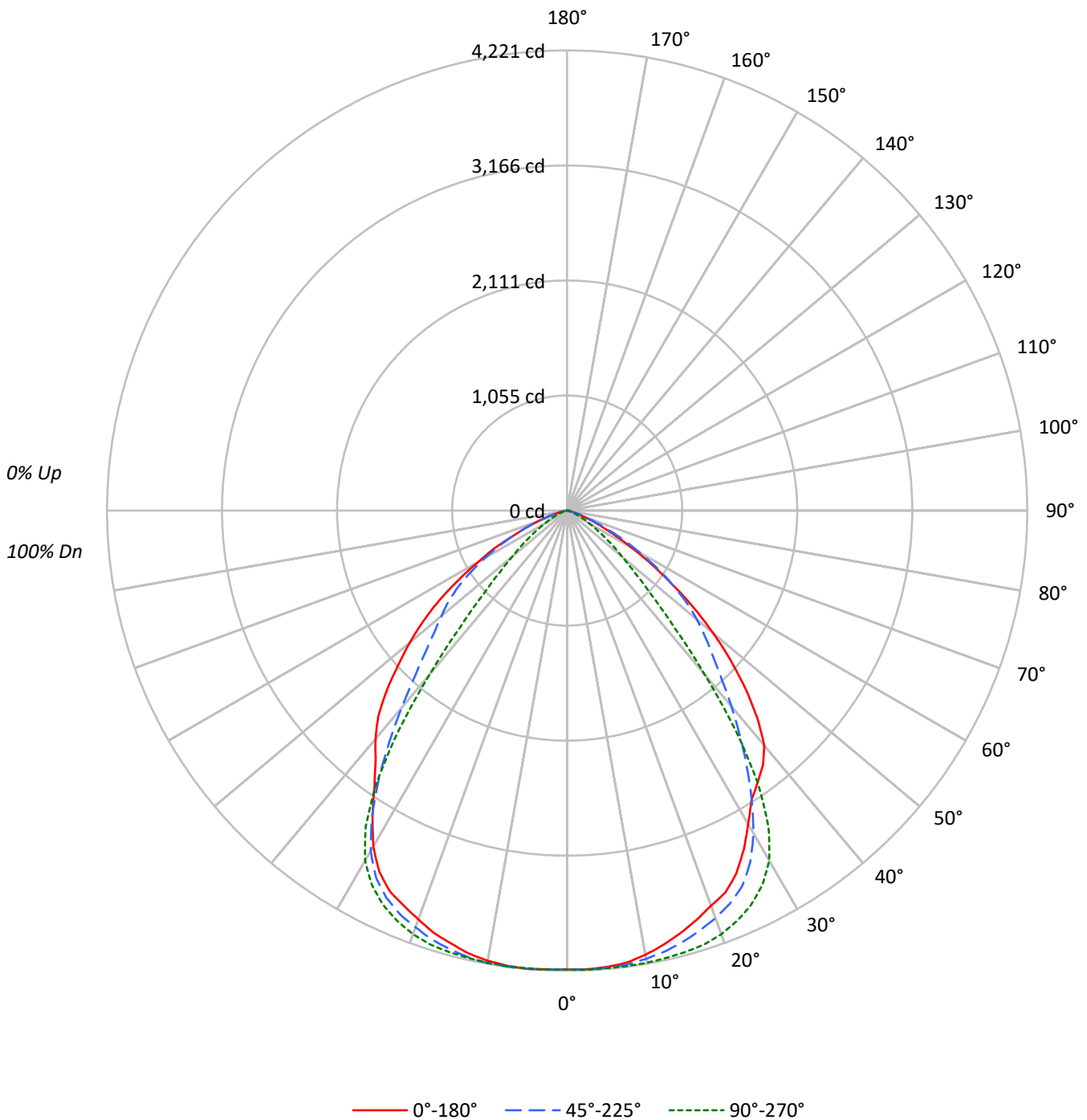
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	129799	129799	129799
5°	130088	130437	130577
10°	129538	131874	131307
15°	128105	133803	131278
20°	126565	135685	130940
25°	124923	135841	131074
30°	118182	132019	126632
35°	114657	114739	115933
40°	113234	78946	110054
45°	100898	47394	102277
50°	83895	31542	90400
55°	62922	21747	76648
60°	42640	14493	57830
65°	25720	9398	39729
70°	14263	5094	24442
75°	6458	2156	12653
80°	5612	2397	8826
85°	6404	3184	8810



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	401.7	5.0
10°-20°	1166.7	14.6
20°-30°	1770.8	22.2
30°-40°	1859.8	23.3
40°-50°	1394.4	17.5
50°-60°	894.7	11.2
60°-70°	382.7	4.8
70°-80°	90.4	1.1
80°-90°	16.8	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°	3339.2	41.9
0°-40°	5199.0	65.2
0°-60°	7488.0	93.9
0°-90°	7978.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7978.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4209	4209	4209	4209	4209	
5°	4203	4209	4214	4221	4218	399
15°	4013	4096	4191	4164	4112	1132
25°	3672	3800	3992	3920	3852	1677
35°	3046	2876	3048	3012	3080	1912
45°	2314	1891	1087	1837	2345	1772
55°	1170	1170	404	1220	1426	1062
65°	352	416	129	536	544	376
75°	54	63	18	108	106	79
85°	18	11	9	18	25	19
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°	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3
2.5°	4211.6	4216.1	4213.9	4213.9	4211.6	4213.9	4213.9	4218.4	4218.4	4213.9	4211.6
5°	4202.6	4207.1	4207.1	4202.6	4202.6	4213.9	4207.1	4211.6	4211.6	4209.3	4209.3
7.5°	4182.3	4182.3	4191.3	4184.5	4184.5	4191.3	4189.0	4193.5	4198.1	4200.3	4200.3
10°	4137.0	4141.6	4143.8	4143.8	4146.1	4152.8	4157.4	4166.4	4170.9	4175.5	4177.7
12.5°	4080.6	4087.3	4089.6	4087.3	4094.1	4103.1	4114.5	4125.8	4132.6	4141.6	4148.4
15°	4012.8	4012.8	4017.3	4024.1	4028.6	4042.2	4053.4	4067.0	4085.1	4096.4	4107.7
17.5°	3938.2	3942.8	3949.5	3949.5	3958.6	3981.1	3987.9	4008.3	4028.6	4039.9	4062.5
20°	3856.9	3861.4	3868.2	3872.7	3884.0	3902.1	3915.6	3933.7	3956.3	3976.7	3999.2
22.5°	3793.6	3784.6	3789.1	3793.6	3804.9	3820.7	3836.6	3859.1	3881.7	3902.1	3924.7
25°	3671.6	3673.9	3680.7	3685.1	3698.7	3712.3	3730.4	3757.5	3777.8	3800.4	3825.2
27.5°	3506.7	3508.9	3520.2	3520.2	3531.5	3554.1	3565.4	3588.0	3615.1	3637.7	3667.1
30°	3319.1	3323.6	3323.6	3332.7	3339.4	3350.8	3362.1	3384.7	3398.2	3418.6	3459.2
32.5°	3147.4	3151.9	3149.6	3147.4	3140.6	3138.4	3136.1	3140.6	3145.2	3151.9	3167.7
35°	3045.8	3034.4	3025.4	3009.6	2991.5	2968.9	2948.6	2921.5	2896.6	2876.3	2853.7
37.5°	2948.6	2946.3	2932.8	2910.2	2874.0	2833.4	2785.9	2727.2	2668.4	2605.1	2544.2
40°	2813.0	2806.2	2794.9	2763.3	2722.6	2672.9	2609.7	2537.4	2442.4	2345.3	2245.9
42.5°	2582.5	2584.8	2571.3	2546.4	2508.0	2460.5	2395.0	2315.9	2214.3	2099.0	1970.2
45°	2313.7	2313.7	2309.1	2288.8	2261.7	2223.3	2173.6	2108.1	2008.7	1891.1	1753.3
47.5°	2033.5	2035.8	2029.0	2024.5	2013.2	1988.3	1952.2	1902.5	1832.4	1719.4	1581.6
50°	1748.8	1748.8	1760.1	1757.8	1757.8	1748.8	1733.0	1703.6	1642.6	1552.2	1423.5
52.5°	1464.1	1468.6	1475.4	1484.5	1495.7	1513.8	1495.7	1482.2	1443.8	1373.7	1263.0
55°	1170.4	1174.9	1186.2	1202.0	1215.6	1233.7	1238.2	1238.2	1217.8	1170.4	1086.8
57.5°	919.6	912.8	921.9	935.4	953.5	971.6	985.1	1000.9	998.7	967.0	899.3
60°	691.4	693.7	700.4	714.0	727.6	743.4	761.4	775.0	781.8	766.0	723.0
62.5°	503.9	503.9	512.9	526.4	533.2	555.8	567.1	573.9	580.7	578.4	551.3
65°	352.5	357.0	361.5	368.3	375.1	388.6	395.4	408.9	413.5	415.7	395.4
67.5°	248.6	241.8	246.3	250.8	257.6	266.6	280.2	280.2	286.9	286.9	273.4
70°	158.2	158.2	160.4	167.2	171.7	174.0	178.5	183.0	189.8	187.5	187.5
72.5°	106.2	103.9	106.2	108.5	110.7	117.5	117.5	119.7	124.3	126.5	117.5
75°	54.2	56.5	61.0	58.8	65.5	61.0	63.2	70.0	67.8	63.2	63.2
77.5°	45.2	45.2	45.2	43.0	47.4	47.4	45.2	49.7	47.4	47.4	45.2
80°	31.6	33.9	31.6	29.4	31.6	29.4	29.4	29.4	29.4	29.4	27.1
82.5°	24.9	20.3	22.6	20.3	22.6	22.6	20.3	18.1	18.1	20.3	18.1
85°	18.1	13.5	15.8	15.8	13.5	13.5	13.5	13.5	13.5	11.3	11.3
87.5°	11.3	6.8	6.8	6.8	9.0	9.0	9.0	6.8	9.0	9.0	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°	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3
2.5°	4216.1	4213.9	4218.4	4216.1	4216.1	4213.9	4216.1	4213.9	4218.4	4209.3	4211.6
5°	4216.1	4211.6	4213.9	4216.1	4218.4	4213.9	4213.9	4213.9	4218.4	4213.9	4216.1
7.5°	4207.1	4204.8	4211.6	4216.1	4213.9	4211.6	4216.1	4213.9	4218.4	4216.1	4220.6
10°	4189.0	4191.3	4195.8	4202.6	4204.8	4207.1	4211.6	4211.6	4218.4	4209.3	4213.9
12.5°	4161.9	4170.9	4182.3	4186.7	4195.8	4195.8	4200.3	4202.6	4207.1	4204.8	4211.6
15°	4128.0	4139.3	4152.8	4164.2	4175.5	4182.3	4189.0	4191.3	4198.1	4191.3	4193.5
17.5°	4087.3	4100.9	4121.2	4134.8	4152.8	4159.6	4168.7	4173.2	4180.0	4175.5	4177.7
20°	4030.8	4046.7	4069.3	4089.6	4100.9	4116.7	4128.0	4134.8	4139.3	4134.8	4137.0
22.5°	3951.8	3974.4	4003.7	4019.6	4042.2	4055.7	4058.0	4073.8	4085.1	4073.8	4078.3
25°	3859.1	3881.7	3904.3	3938.2	3958.6	3974.4	3990.2	3992.5	4003.7	4001.5	3999.2
27.5°	3705.5	3734.9	3773.3	3800.4	3827.5	3852.4	3870.5	3874.9	3886.3	3881.7	3884.0
30°	3495.3	3527.0	3563.2	3606.1	3644.5	3669.3	3691.9	3707.7	3719.0	3712.3	3710.0
32.5°	3197.1	3228.8	3267.2	3310.1	3355.3	3391.4	3418.6	3438.9	3452.4	3447.9	3436.6
35°	2856.0	2865.0	2889.9	2923.7	2962.1	3000.5	3025.4	3048.0	3063.8	3068.3	3068.3
37.5°	2505.7	2476.4	2458.3	2458.3	2480.9	2496.7	2519.3	2532.8	2557.7	2566.7	2573.5
40°	2166.8	2099.0	2035.8	1988.3	1956.7	1954.4	1954.4	1961.2	1983.8	2013.2	2040.3
42.5°	1864.0	1755.6	1658.4	1570.3	1507.1	1470.9	1455.1	1457.4	1475.4	1502.5	1547.7
45°	1622.3	1486.7	1364.7	1258.5	1172.7	1116.2	1089.1	1086.8	1100.3	1132.0	1181.7
47.5°	1434.8	1290.1	1152.3	1030.3	937.7	876.7	845.0	836.0	845.0	874.4	933.2
50°	1278.9	1129.7	987.4	860.8	761.4	698.2	668.8	657.5	668.8	693.7	752.4
52.5°	1134.2	980.6	847.3	725.3	619.1	564.8	533.2	526.4	533.2	562.6	610.1
55°	967.0	836.0	704.9	582.9	490.3	436.1	411.2	404.5	411.2	438.4	488.1
57.5°	802.1	689.1	573.9	463.2	384.1	336.6	314.1	305.0	320.8	338.9	397.7
60°	648.4	558.1	460.9	363.8	298.3	255.3	237.2	235.0	239.5	262.1	302.7
62.5°	508.4	433.8	357.0	277.9	223.7	205.6	183.0	180.8	185.3	198.8	230.5
65°	366.0	318.6	259.8	203.3	160.4	135.6	126.5	128.8	133.3	142.4	171.7
67.5°	255.3	221.4	180.8	142.4	110.7	99.4	90.4	88.1	90.4	106.2	122.0
70°	171.7	151.4	122.0	108.5	76.8	61.0	63.2	56.5	65.5	65.5	79.1
72.5°	112.9	99.4	81.3	63.2	54.2	43.0	43.0	40.7	45.2	47.4	58.8
75°	58.8	45.2	45.2	31.6	22.6	11.3	20.3	18.1	15.8	18.1	22.6
77.5°	40.7	33.9	31.6	24.9	22.6	18.1	18.1	18.1	18.1	20.3	22.6
80°	24.9	24.9	18.1	15.8	13.5	11.3	13.5	13.5	13.5	13.5	15.8
82.5°	15.8	13.5	13.5	11.3	11.3	9.0	9.0	9.0	9.0	9.0	13.5
85°	13.5	9.0	9.0	6.8	9.0	15.8	6.8	9.0	9.0	9.0	6.8
87.5°	4.5	6.8	6.8	6.8	4.5	2.3	4.5	6.8	6.8	11.3	9.0
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°	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3	4209.3
2.5°	4216.1	4218.4	4218.4	4216.1	4216.1	4211.6	4220.6	4213.9	4216.1	4225.2	4218.4
5°	4220.6	4222.9	4222.9	4220.6	4220.6	4220.6	4222.9	4222.9	4220.6	4218.4	4222.9
7.5°	4229.7	4227.4	4227.4	4222.9	4222.9	4218.4	4222.9	4216.1	4220.6	4216.1	4222.9
10°	4218.4	4220.6	4218.4	4216.1	4216.1	4213.9	4213.9	4207.1	4209.3	4202.6	4207.1
12.5°	4211.6	4209.3	4209.3	4204.8	4200.3	4195.8	4193.5	4186.7	4186.7	4170.9	4177.7
15°	4193.5	4195.8	4189.0	4180.0	4175.5	4164.2	4159.6	4150.6	4141.6	4130.3	4132.6
17.5°	4177.7	4170.9	4161.9	4152.8	4134.8	4125.8	4116.7	4103.1	4098.6	4085.1	4080.6
20°	4130.3	4125.8	4114.5	4098.6	4087.3	4067.0	4058.0	4044.4	4033.1	4019.6	4012.8
22.5°	4069.3	4064.7	4051.2	4035.4	4017.3	4008.3	3999.2	3974.4	3963.1	3949.5	3947.2
25°	3992.5	3985.7	3972.1	3954.0	3945.0	3920.2	3911.1	3893.0	3888.5	3874.9	3872.7
27.5°	3874.9	3865.9	3850.1	3827.5	3811.7	3795.9	3786.9	3773.3	3768.8	3755.2	3753.0
30°	3698.7	3687.4	3655.8	3646.8	3619.6	3603.8	3603.8	3585.7	3588.0	3579.0	3579.0
32.5°	3420.8	3402.7	3377.9	3359.8	3341.7	3332.7	3332.7	3325.9	3330.4	3330.4	3335.0
35°	3052.5	3027.7	3014.1	3002.8	3002.8	3011.8	3039.0	3045.8	3059.3	3070.6	3079.7
37.5°	2580.3	2578.1	2593.9	2607.4	2641.3	2679.7	2727.2	2767.8	2806.2	2833.4	2860.4
40°	2069.7	2126.2	2171.3	2234.6	2286.5	2361.1	2447.0	2517.0	2582.5	2630.0	2679.7
42.5°	1615.5	1687.8	1782.7	1875.3	1968.0	2069.7	2182.7	2279.8	2365.6	2431.2	2483.1
45°	1258.5	1357.9	1473.2	1590.7	1710.4	1837.0	1954.4	2053.8	2144.2	2212.0	2264.0
47.5°	1014.5	1123.0	1254.0	1382.8	1518.3	1651.6	1782.7	1868.6	1943.1	1997.3	2044.8
50°	838.2	953.5	1091.3	1238.2	1373.7	1507.1	1620.0	1703.6	1764.6	1812.1	1841.4
52.5°	700.4	822.4	969.3	1116.2	1251.7	1373.7	1475.4	1538.7	1588.4	1622.3	1649.4
55°	578.4	695.9	833.8	971.6	1104.9	1220.1	1303.7	1351.2	1389.5	1409.9	1425.7
57.5°	472.2	580.7	707.2	833.8	949.0	1043.9	1109.4	1156.8	1174.9	1190.7	1188.5
60°	370.6	472.2	587.5	695.9	795.3	872.1	919.6	946.7	960.2	967.0	962.5
62.5°	291.5	384.1	472.2	567.1	639.4	704.9	750.2	750.2	756.9	759.2	766.0
65°	216.9	286.9	363.8	433.8	492.5	535.5	560.4	567.1	576.2	573.9	569.4
67.5°	160.4	212.4	268.9	320.8	361.5	388.6	406.7	422.5	420.3	415.7	413.5
70°	110.7	144.6	194.3	225.9	255.3	282.5	286.9	289.2	291.5	293.7	289.2
72.5°	76.8	101.7	128.8	155.9	174.0	185.3	196.6	198.8	198.8	198.8	196.6
75°	38.4	52.0	76.8	88.1	103.9	108.5	117.5	117.5	124.3	115.2	112.9
77.5°	33.9	40.7	54.2	63.2	70.0	76.8	79.1	85.9	83.6	79.1	81.3
80°	20.3	24.9	33.9	38.4	47.4	49.7	52.0	54.2	52.0	54.2	54.2
82.5°	15.8	18.1	22.6	22.6	29.4	29.4	31.6	31.6	33.9	33.9	33.9
85°	9.0	15.8	13.5	27.1	18.1	18.1	22.6	27.1	22.6	22.6	27.1
87.5°	9.0	9.0	6.8	9.0	9.0	9.0	11.3	13.5	13.5	15.8	13.5
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: P249309

CATALOG NUMBER: LSR8B80D010 EC8B80830 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4209.3	4209.3	4209.3	4209.3
2.5°	4216.1	4220.6	4213.9	4211.6
5°	4222.9	4222.9	4218.4	4218.4
7.5°	4222.9	4222.9	4216.1	4211.6
10°	4204.8	4204.8	4198.1	4193.5
12.5°	4170.9	4170.9	4168.7	4161.9
15°	4128.0	4128.0	4119.0	4112.2
17.5°	4069.3	4073.8	4062.5	4062.5
20°	4006.0	4003.7	3994.7	3990.2
22.5°	3940.5	3936.0	3933.7	3920.2
25°	3870.5	3865.9	3859.1	3852.4
27.5°	3750.7	3748.4	3741.6	3732.6
30°	3567.7	3565.4	3556.4	3556.4
32.5°	3330.4	3328.2	3319.1	3321.4
35°	3084.1	3093.2	3088.7	3079.7
37.5°	2878.5	2885.3	2889.9	2885.3
40°	2706.8	2727.2	2729.4	2734.0
42.5°	2523.8	2550.9	2560.0	2564.5
45°	2304.6	2329.5	2349.8	2345.3
47.5°	2080.9	2099.0	2117.1	2103.5
50°	1866.3	1877.6	1884.4	1884.4
52.5°	1663.0	1663.0	1660.7	1663.0
55°	1430.2	1430.2	1421.2	1425.7
57.5°	1186.2	1190.7	1183.9	1172.7
60°	960.2	949.0	944.4	937.7
62.5°	747.9	747.9	732.1	752.4
65°	560.4	553.6	546.8	544.5
67.5°	406.7	404.5	397.7	395.4
70°	286.9	277.9	275.7	271.1
72.5°	192.1	192.1	187.5	187.5
75°	117.5	106.2	103.9	106.2
77.5°	81.3	79.1	79.1	76.8
80°	54.2	52.0	56.5	49.7
82.5°	33.9	36.2	33.9	36.2
85°	22.6	27.1	24.9	24.9
87.5°	13.5	13.5	13.5	13.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)