

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: P249300

Luminaire Tested: **LSR8B80D010 EC8B80827 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249300
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 EC8B80827 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7783.0 lumens
Efficiency: N/A
Efficacy: 104.6 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

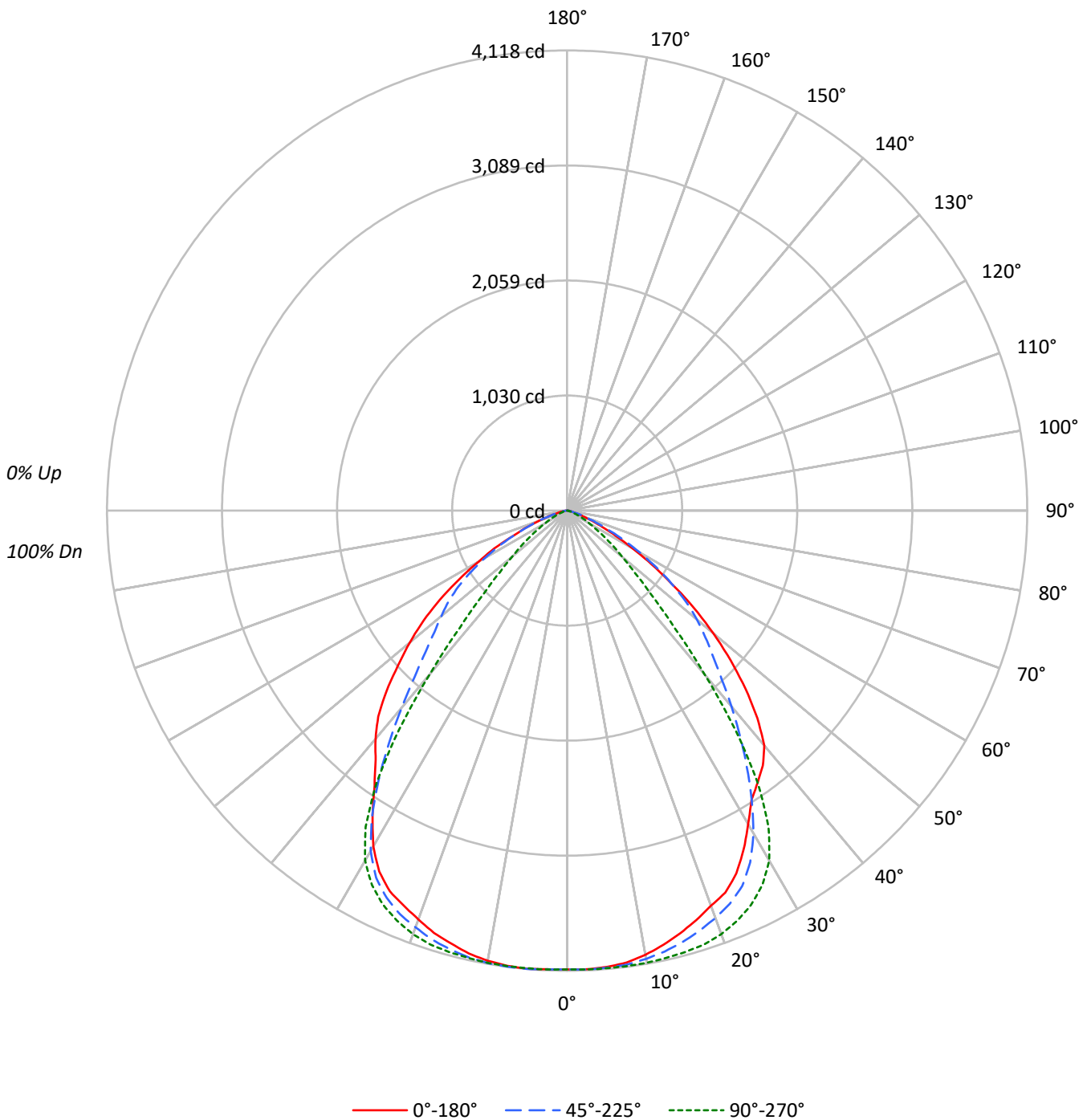
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	126629	126629	126629
5°	126906	127249	127385
10°	126372	128652	128097
15°	124973	130531	128070
20°	123471	132367	127740
25°	121871	132520	127869
30°	115295	128793	123537
35°	111852	111935	113098
40°	110469	77014	107361
45°	98430	46234	99778
50°	81846	30770	88188
55°	61385	21214	74771
60°	41598	14135	56418
65°	25093	9172	38759
70°	13912	4968	23847
75°	6303	2097	12343
80°	5487	2344	8613
85°	6227	3114	8598



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	391.9	5.0
10°-20°	1138.1	14.6
20°-30°	1727.5	22.2
30°-40°	1814.4	23.3
40°-50°	1360.3	17.5
50°-60°	872.8	11.2
60°-70°	373.4	4.8
70°-80°	88.2	1.1
80°-90°	16.4	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°	3257.5	41.9
0°-40°	5071.9	65.2
0°-60°	7305.0	93.9
0°-90°	7783.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7783.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4106	4106	4106	4106	4106	
5°	4100	4106	4111	4118	4115	389
15°	3915	3996	4089	4062	4012	1104
25°	3582	3708	3895	3824	3758	1636
35°	2971	2806	2974	2938	3004	1865
45°	2257	1845	1060	1792	2288	1729
55°	1142	1142	395	1190	1391	1036
65°	344	406	126	522	531	367
75°	53	62	18	106	104	77
85°	18	11	9	18	24	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°	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5
2.5°	4108.7	4113.1	4110.9	4110.9	4108.7	4110.9	4110.9	4115.3	4115.3	4110.9	4108.7
5°	4099.8	4104.3	4104.3	4099.8	4099.8	4110.9	4104.3	4108.7	4108.7	4106.5	4106.5
7.5°	4080.0	4080.0	4088.8	4082.2	4082.2	4088.8	4086.6	4091.0	4095.5	4097.7	4097.7
10°	4035.9	4040.3	4042.6	4042.6	4044.8	4051.3	4055.8	4064.6	4069.0	4073.4	4075.6
12.5°	3980.9	3987.4	3989.6	3987.4	3994.1	4002.9	4013.9	4024.9	4031.5	4040.3	4047.0
15°	3914.7	3914.7	3919.1	3925.7	3930.2	3943.4	3954.4	3967.6	3985.2	3996.3	4007.3
17.5°	3842.0	3846.4	3853.0	3853.0	3861.8	3883.8	3890.5	3910.3	3930.2	3941.2	3963.2
20°	3762.6	3767.0	3773.6	3778.1	3789.1	3806.7	3819.9	3837.6	3859.6	3879.5	3901.5
22.5°	3700.9	3692.1	3696.5	3700.9	3711.9	3727.4	3742.8	3764.8	3786.9	3806.7	3828.8
25°	3581.9	3584.1	3590.7	3595.1	3608.3	3621.5	3639.2	3665.6	3685.5	3707.5	3731.7
27.5°	3421.0	3423.2	3434.2	3434.2	3445.2	3467.2	3478.2	3500.3	3526.8	3548.8	3577.5
30°	3238.0	3242.4	3242.4	3251.2	3257.8	3268.9	3279.9	3301.9	3315.1	3335.0	3374.7
32.5°	3070.5	3074.9	3072.7	3070.5	3063.9	3061.7	3059.4	3063.9	3068.3	3074.9	3090.3
35°	2971.3	2960.3	2951.5	2936.0	2918.4	2896.4	2876.5	2850.1	2825.8	2806.0	2784.0
37.5°	2876.5	2874.3	2861.1	2839.0	2803.7	2764.1	2717.8	2660.5	2603.2	2541.5	2482.0
40°	2744.3	2737.6	2726.6	2695.8	2656.1	2607.6	2545.9	2475.3	2382.7	2288.0	2191.0
42.5°	2519.4	2521.6	2508.4	2484.1	2446.7	2400.4	2336.5	2259.3	2160.2	2047.7	1922.1
45°	2257.1	2257.1	2252.7	2232.9	2206.4	2168.9	2120.5	2056.5	1959.6	1844.9	1710.5
47.5°	1983.8	1986.0	1979.4	1975.0	1963.9	1939.7	1904.5	1856.0	1787.6	1677.4	1542.9
50°	1706.1	1706.1	1717.1	1714.9	1714.9	1706.1	1690.7	1662.0	1602.5	1514.3	1388.7
52.5°	1428.3	1432.8	1439.4	1448.2	1459.2	1476.8	1459.2	1446.0	1408.5	1340.1	1232.2
55°	1141.8	1146.2	1157.2	1172.6	1185.9	1203.5	1207.9	1207.9	1188.1	1141.8	1060.2
57.5°	897.1	890.5	899.3	912.6	930.2	947.8	961.0	976.5	974.3	943.4	877.3
60°	674.5	676.7	683.3	696.6	709.8	725.2	742.8	756.0	762.7	747.3	705.3
62.5°	491.6	491.6	500.3	513.6	520.2	542.2	553.3	559.9	566.5	564.3	537.8
65°	343.9	348.3	352.7	359.3	365.9	379.1	385.7	398.9	403.4	405.6	385.7
67.5°	242.5	235.9	240.3	244.6	251.3	260.1	273.3	273.3	279.9	279.9	266.7
70°	154.3	154.3	156.5	163.1	167.5	169.7	174.2	178.5	185.2	182.9	182.9
72.5°	103.6	101.4	103.6	105.8	108.0	114.6	114.6	116.8	121.2	123.5	114.6
75°	52.9	55.1	59.5	57.3	63.9	59.5	61.7	68.3	66.1	61.7	61.7
77.5°	44.1	44.1	44.1	41.9	46.3	46.3	44.1	48.5	46.3	46.3	44.1
80°	30.9	33.1	30.9	28.6	30.9	28.6	28.6	28.6	28.6	28.6	26.4
82.5°	24.3	19.8	22.1	19.8	22.1	22.1	19.8	17.6	17.6	19.8	17.6
85°	17.6	13.2	15.4	15.4	13.2	13.2	13.2	13.2	13.2	11.0	11.0
87.5°	11.0	6.6	6.6	6.6	8.8	8.8	8.8	6.6	8.8	8.8	4.4
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°	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5
2.5°	4113.1	4110.9	4115.3	4113.1	4113.1	4110.9	4113.1	4110.9	4115.3	4106.5	4108.7
5°	4113.1	4108.7	4110.9	4113.1	4115.3	4110.9	4110.9	4110.9	4115.3	4110.9	4113.1
7.5°	4104.3	4102.0	4108.7	4113.1	4110.9	4108.7	4113.1	4110.9	4115.3	4113.1	4117.5
10°	4086.6	4088.8	4093.2	4099.8	4102.0	4104.3	4108.7	4108.7	4115.3	4106.5	4110.9
12.5°	4060.2	4069.0	4080.0	4084.4	4093.2	4093.2	4097.7	4099.8	4104.3	4102.0	4108.7
15°	4027.1	4038.1	4051.3	4062.4	4073.4	4080.0	4086.6	4088.8	4095.5	4088.8	4091.0
17.5°	3987.4	4000.6	4020.5	4033.7	4051.3	4058.0	4066.8	4071.2	4077.8	4073.4	4075.6
20°	3932.3	3947.8	3969.8	3989.6	4000.6	4016.1	4027.1	4033.7	4038.1	4033.7	4035.9
22.5°	3855.2	3877.2	3905.9	3921.3	3943.4	3956.6	3958.8	3974.2	3985.2	3974.2	3978.6
25°	3764.8	3786.9	3808.9	3842.0	3861.8	3877.2	3892.7	3894.9	3905.9	3903.7	3901.5
27.5°	3614.9	3643.6	3681.0	3707.5	3733.9	3758.2	3775.8	3780.2	3791.3	3786.9	3789.1
30°	3409.9	3440.8	3476.1	3517.9	3555.4	3579.6	3601.7	3617.1	3628.1	3621.5	3619.3
32.5°	3119.0	3149.8	3187.3	3229.2	3273.3	3308.5	3335.0	3354.8	3368.1	3363.6	3352.6
35°	2786.2	2795.0	2819.2	2852.3	2889.7	2927.2	2951.5	2973.5	2988.9	2993.3	2993.3
37.5°	2444.5	2415.9	2398.2	2398.2	2420.2	2435.7	2457.7	2470.9	2495.2	2504.0	2510.6
40°	2113.8	2047.7	1986.0	1939.7	1908.9	1906.7	1906.7	1913.2	1935.3	1963.9	1990.4
42.5°	1818.5	1712.7	1617.9	1531.9	1470.2	1435.0	1419.5	1421.7	1439.4	1465.8	1509.9
45°	1582.6	1450.4	1331.4	1227.7	1144.0	1088.9	1062.4	1060.2	1073.4	1104.3	1152.8
47.5°	1399.7	1258.6	1124.1	1005.1	914.8	855.2	824.4	815.6	824.4	853.0	910.3
50°	1247.6	1102.1	963.3	839.8	742.8	681.1	652.4	641.4	652.4	676.7	734.0
52.5°	1106.5	956.6	826.6	707.6	604.0	551.0	520.2	513.6	520.2	548.8	595.2
55°	943.4	815.6	687.7	568.7	478.3	425.4	401.2	394.6	401.2	427.6	476.1
57.5°	782.5	672.3	559.9	451.9	374.7	328.4	306.4	297.6	313.0	330.6	387.9
60°	632.6	544.5	449.6	354.9	291.0	249.1	231.4	229.2	233.6	255.7	295.3
62.5°	496.0	423.2	348.3	271.1	218.2	200.6	178.5	176.4	180.7	193.9	224.8
65°	357.1	310.8	253.5	198.4	156.5	132.2	123.5	125.7	130.0	138.9	167.5
67.5°	249.1	216.0	176.4	138.9	108.0	97.0	88.2	86.0	88.2	103.6	119.0
70°	167.5	147.7	119.0	105.8	75.0	59.5	61.7	55.1	63.9	63.9	77.1
72.5°	110.2	97.0	79.3	61.7	52.9	41.9	41.9	39.7	44.1	46.3	57.3
75°	57.3	44.1	44.1	30.9	22.1	11.0	19.8	17.6	15.4	17.6	22.1
77.5°	39.7	33.1	30.9	24.3	22.1	17.6	17.6	17.6	17.6	19.8	22.1
80°	24.3	24.3	17.6	15.4	13.2	11.0	13.2	13.2	13.2	13.2	15.4
82.5°	15.4	13.2	13.2	11.0	11.0	8.8	8.8	8.8	8.8	8.8	13.2
85°	13.2	8.8	8.8	6.6	8.8	15.4	6.6	8.8	8.8	8.8	6.6
87.5°	4.4	6.6	6.6	6.6	4.4	2.2	4.4	6.6	6.6	11.0	8.8
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5	4106.5
2.5°	4113.1	4115.3	4115.3	4113.1	4113.1	4108.7	4117.5	4110.9	4113.1	4121.9	4115.3
5°	4117.5	4119.7	4119.7	4117.5	4117.5	4117.5	4119.7	4119.7	4117.5	4115.3	4119.7
7.5°	4126.3	4124.1	4124.1	4119.7	4119.7	4115.3	4119.7	4113.1	4117.5	4113.1	4119.7
10°	4115.3	4117.5	4115.3	4113.1	4113.1	4110.9	4110.9	4104.3	4106.5	4099.8	4104.3
12.5°	4108.7	4106.5	4106.5	4102.0	4097.7	4093.2	4091.0	4084.4	4084.4	4069.0	4075.6
15°	4091.0	4093.2	4086.6	4077.8	4073.4	4062.4	4058.0	4049.1	4040.3	4029.3	4031.5
17.5°	4075.6	4069.0	4060.2	4051.3	4033.7	4024.9	4016.1	4002.9	3998.4	3985.2	3980.9
20°	4029.3	4024.9	4013.9	3998.4	3987.4	3967.6	3958.8	3945.6	3934.5	3921.3	3914.7
22.5°	3969.8	3965.4	3952.2	3936.7	3919.1	3910.3	3901.5	3877.2	3866.2	3853.0	3850.8
25°	3894.9	3888.2	3875.0	3857.4	3848.6	3824.3	3815.5	3797.9	3793.5	3780.2	3778.1
27.5°	3780.2	3771.4	3756.0	3733.9	3718.5	3703.1	3694.3	3681.0	3676.7	3663.4	3661.2
30°	3608.3	3597.3	3566.4	3557.6	3531.2	3515.7	3515.7	3498.1	3500.3	3491.5	3491.5
32.5°	3337.2	3319.6	3295.3	3277.7	3260.0	3251.2	3251.2	3244.6	3249.0	3249.0	3253.4
35°	2977.9	2953.7	2940.4	2929.4	2929.4	2938.2	2964.7	2971.3	2984.5	2995.5	3004.4
37.5°	2517.2	2515.0	2530.5	2543.7	2576.7	2614.2	2660.5	2700.2	2737.6	2764.1	2790.5
40°	2019.1	2074.2	2118.2	2180.0	2230.6	2303.4	2387.2	2455.5	2519.4	2565.7	2614.2
42.5°	1576.0	1646.5	1739.1	1829.5	1919.9	2019.1	2129.3	2224.1	2307.8	2371.7	2422.4
45°	1227.7	1324.7	1437.2	1551.8	1668.6	1792.1	1906.7	2003.6	2091.8	2157.9	2208.6
47.5°	989.7	1095.5	1223.3	1349.0	1481.2	1611.3	1739.1	1822.9	1895.6	1948.5	1994.8
50°	817.7	930.2	1064.7	1207.9	1340.1	1470.2	1580.4	1662.0	1721.5	1767.8	1796.4
52.5°	683.3	802.3	945.6	1088.9	1221.1	1340.1	1439.4	1501.1	1549.6	1582.6	1609.1
55°	564.3	678.9	813.4	947.8	1077.9	1190.3	1271.8	1318.1	1355.6	1375.4	1390.8
57.5°	460.7	566.5	689.9	813.4	925.8	1018.4	1082.3	1128.6	1146.2	1161.6	1159.4
60°	361.5	460.7	573.1	678.9	775.9	850.8	897.1	923.6	936.8	943.4	939.0
62.5°	284.3	374.7	460.7	553.3	623.8	687.7	731.8	731.8	738.4	740.6	747.3
65°	211.6	279.9	354.9	423.2	480.5	522.4	546.7	553.3	562.1	559.9	555.5
67.5°	156.5	207.2	262.3	313.0	352.7	379.1	396.7	412.2	410.0	405.6	403.4
70°	108.0	141.1	189.6	220.4	249.1	275.5	279.9	282.1	284.3	286.6	282.1
72.5°	75.0	99.2	125.7	152.1	169.7	180.7	191.8	193.9	193.9	193.9	191.8
75°	37.5	50.7	75.0	86.0	101.4	105.8	114.6	114.6	121.2	112.4	110.2
77.5°	33.1	39.7	52.9	61.7	68.3	75.0	77.1	83.8	81.5	77.1	79.3
80°	19.8	24.3	33.1	37.5	46.3	48.5	50.7	52.9	50.7	52.9	52.9
82.5°	15.4	17.6	22.1	22.1	28.6	28.6	30.9	30.9	33.1	33.1	33.1
85°	8.8	15.4	13.2	26.4	17.6	17.6	22.1	26.4	22.1	22.1	26.4
87.5°	8.8	8.8	6.6	8.8	8.8	8.8	11.0	13.2	13.2	15.4	13.2
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: P249300

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4106.5	4106.5	4106.5	4106.5
2.5°	4113.1	4117.5	4110.9	4108.7
5°	4119.7	4119.7	4115.3	4115.3
7.5°	4119.7	4119.7	4113.1	4108.7
10°	4102.0	4102.0	4095.5	4091.0
12.5°	4069.0	4069.0	4066.8	4060.2
15°	4027.1	4027.1	4018.3	4011.7
17.5°	3969.8	3974.2	3963.2	3963.2
20°	3908.1	3905.9	3897.1	3892.7
22.5°	3844.2	3839.8	3837.6	3824.3
25°	3775.8	3771.4	3764.8	3758.2
27.5°	3659.0	3656.8	3650.2	3641.4
30°	3480.5	3478.2	3469.5	3469.5
32.5°	3249.0	3246.8	3238.0	3240.2
35°	3008.8	3017.6	3013.2	3004.4
37.5°	2808.2	2814.8	2819.2	2814.8
40°	2640.7	2660.5	2662.7	2667.1
42.5°	2462.1	2488.6	2497.4	2501.8
45°	2248.3	2272.6	2292.4	2288.0
47.5°	2030.1	2047.7	2065.3	2052.1
50°	1820.7	1831.7	1838.3	1838.3
52.5°	1622.3	1622.3	1620.1	1622.3
55°	1395.3	1395.3	1386.5	1390.8
57.5°	1157.2	1161.6	1155.0	1144.0
60°	936.8	925.8	921.4	914.8
62.5°	729.6	729.6	714.2	734.0
65°	546.7	540.0	533.4	531.2
67.5°	396.7	394.6	387.9	385.7
70°	279.9	271.1	268.9	264.5
72.5°	187.4	187.4	182.9	182.9
75°	114.6	103.6	101.4	103.6
77.5°	79.3	77.1	77.1	75.0
80°	52.9	50.7	55.1	48.5
82.5°	33.1	35.3	33.1	35.3
85°	22.1	26.4	24.3	24.3
87.5°	13.2	13.2	13.2	13.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)