

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: P249444

Luminaire Tested: **LSR8B80D010 EC8B80850 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249444
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 EC8B80850 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7608.0 lumens
Efficiency: N/A
Efficacy: 102.3 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

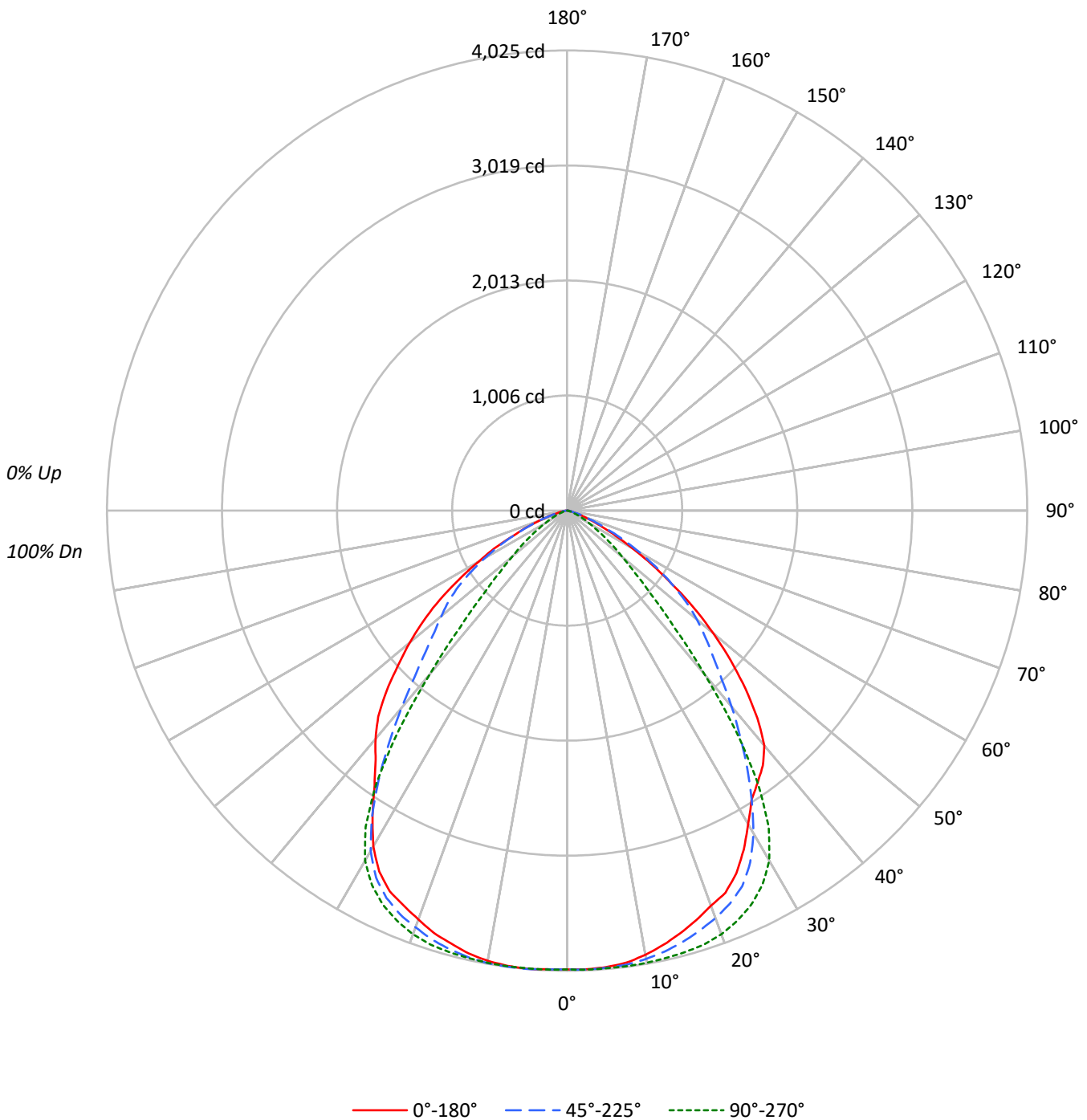
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	123780	123780	123780
5°	124052	124389	124522
10°	123532	125758	125220
15°	122164	127597	125190
20°	120695	129391	124866
25°	119129	129540	124994
30°	112702	125898	120757
35°	109338	109417	110553
40°	107985	75283	104950
45°	96219	45197	97532
50°	80004	30079	86207
55°	60003	20736	73094
60°	40661	13821	55148
65°	24524	8960	37891
70°	13596	4860	23306
75°	6160	2049	12069
80°	5363	2291	8417
85°	6085	3043	8385



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	383.1	5.0
10°-20°	1112.6	14.6
20°-30°	1688.6	22.2
30°-40°	1773.6	23.3
40°-50°	1329.7	17.5
50°-60°	853.2	11.2
60°-70°	365.0	4.8
70°-80°	86.2	1.1
80°-90°	16.0	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°	3184.3	41.9
0°-40°	4957.9	65.2
0°-60°	7140.8	93.9
0°-90°	7608.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7608.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4014	4014	4014	4014	4014	
5°	4008	4014	4018	4025	4023	381
15°	3827	3906	3997	3971	3922	1079
25°	3501	3624	3807	3738	3674	1600
35°	2904	2743	2907	2872	2937	1823
45°	2206	1803	1036	1752	2236	1690
55°	1116	1116	386	1164	1360	1012
65°	336	396	123	511	519	359
75°	52	60	17	103	101	75
85°	17	11	9	17	24	18
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°	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1
2.5°	4016.3	4020.6	4018.5	4018.5	4016.3	4018.5	4018.5	4022.8	4022.8	4018.5	4016.3
5°	4007.6	4012.0	4012.0	4007.6	4007.6	4018.5	4012.0	4016.3	4016.3	4014.1	4014.1
7.5°	3988.3	3988.3	3996.9	3990.5	3990.5	3996.9	3994.7	3999.1	4003.4	4005.5	4005.5
10°	3945.2	3949.5	3951.7	3951.7	3953.8	3960.3	3964.6	3973.2	3977.5	3981.8	3984.0
12.5°	3891.3	3897.8	3899.9	3897.8	3904.3	3912.9	3923.7	3934.4	3940.9	3949.5	3956.0
15°	3826.7	3826.7	3831.0	3837.5	3841.8	3854.7	3865.5	3878.4	3895.6	3906.4	3917.2
17.5°	3755.6	3759.9	3766.3	3766.3	3775.0	3796.5	3803.0	3822.4	3841.8	3852.5	3874.1
20°	3678.0	3682.3	3688.8	3693.1	3703.9	3721.1	3734.0	3751.3	3772.8	3792.2	3813.7
22.5°	3617.7	3609.1	3613.3	3617.7	3628.5	3643.6	3658.6	3680.1	3701.7	3721.1	3742.7
25°	3501.3	3503.5	3510.0	3514.2	3527.2	3540.1	3557.4	3583.2	3602.6	3624.2	3647.8
27.5°	3344.0	3346.2	3357.0	3357.0	3367.7	3389.3	3400.0	3421.6	3447.5	3469.0	3497.0
30°	3165.2	3169.5	3169.5	3178.1	3184.6	3195.4	3206.1	3227.7	3240.6	3260.0	3298.8
32.5°	3001.5	3005.7	3003.6	3001.5	2995.0	2992.8	2990.7	2995.0	2999.3	3005.7	3020.8
35°	2904.5	2893.7	2885.1	2870.0	2852.8	2831.2	2811.8	2786.0	2762.3	2742.9	2721.4
37.5°	2811.8	2809.7	2796.7	2775.2	2740.7	2702.0	2656.7	2600.7	2544.6	2484.3	2426.2
40°	2682.6	2676.1	2665.3	2635.2	2596.4	2549.0	2488.6	2419.7	2329.2	2236.5	2141.7
42.5°	2462.8	2464.9	2452.0	2428.3	2391.7	2346.4	2283.9	2208.5	2111.6	2001.7	1878.9
45°	2206.4	2206.4	2202.1	2182.7	2156.8	2120.2	2072.8	2010.3	1915.5	1803.4	1672.0
47.5°	1939.2	1941.3	1934.9	1930.6	1919.8	1896.1	1861.6	1814.2	1747.4	1639.7	1508.2
50°	1667.7	1667.7	1678.5	1676.3	1676.3	1667.7	1652.6	1624.6	1566.4	1480.2	1357.5
52.5°	1396.2	1400.5	1407.0	1415.6	1426.4	1443.6	1426.4	1413.5	1376.8	1310.0	1204.5
55°	1116.1	1120.4	1131.2	1146.3	1159.2	1176.5	1180.7	1180.7	1161.3	1116.1	1036.4
57.5°	877.0	870.5	879.1	892.0	909.3	926.5	939.4	954.5	952.4	922.2	857.6
60°	659.3	661.5	667.9	680.9	693.8	708.9	726.1	739.0	745.5	730.4	689.5
62.5°	480.5	480.5	489.1	502.0	508.5	530.1	540.8	547.3	553.7	551.6	525.7
65°	336.1	340.4	344.7	351.2	357.7	370.6	377.1	390.0	394.3	396.5	377.1
67.5°	237.0	230.5	234.9	239.1	245.6	254.3	267.2	267.2	273.6	273.6	260.7
70°	150.8	150.8	153.0	159.4	163.8	165.9	170.2	174.5	181.0	178.8	178.8
72.5°	101.3	99.1	101.3	103.4	105.6	112.0	112.0	114.2	118.5	120.7	112.0
75°	51.7	53.9	58.2	56.0	62.5	58.2	60.3	66.8	64.6	60.3	60.3
77.5°	43.1	43.1	43.1	41.0	45.2	45.2	43.1	47.4	45.2	45.2	43.1
80°	30.2	32.3	30.2	28.0	30.2	28.0	28.0	28.0	28.0	28.0	25.8
82.5°	23.7	19.4	21.6	19.4	21.6	21.6	19.4	17.2	17.2	19.4	17.2
85°	17.2	12.9	15.1	15.1	12.9	12.9	12.9	12.9	12.9	10.8	10.8
87.5°	10.8	6.5	6.5	6.5	8.6	8.6	8.6	6.5	8.6	8.6	4.3
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°	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1
2.5°	4020.6	4018.5	4022.8	4020.6	4020.6	4018.5	4020.6	4018.5	4022.8	4014.1	4016.3
5°	4020.6	4016.3	4018.5	4020.6	4022.8	4018.5	4018.5	4018.5	4022.8	4018.5	4020.6
7.5°	4012.0	4009.8	4016.3	4020.6	4018.5	4016.3	4020.6	4018.5	4022.8	4020.6	4024.9
10°	3994.7	3996.9	4001.2	4007.6	4009.8	4012.0	4016.3	4016.3	4022.8	4014.1	4018.5
12.5°	3968.9	3977.5	3988.3	3992.6	4001.2	4001.2	4005.5	4007.6	4012.0	4009.8	4016.3
15°	3936.6	3947.3	3960.3	3971.1	3981.8	3988.3	3994.7	3996.9	4003.4	3996.9	3999.1
17.5°	3897.8	3910.7	3930.1	3943.0	3960.3	3966.7	3975.3	3979.7	3986.1	3981.8	3984.0
20°	3843.9	3859.0	3880.5	3899.9	3910.7	3925.8	3936.6	3943.0	3947.3	3943.0	3945.2
22.5°	3768.5	3790.1	3818.1	3833.1	3854.7	3867.6	3869.8	3884.9	3895.6	3884.9	3889.2
25°	3680.1	3701.7	3723.3	3755.6	3775.0	3790.1	3805.1	3807.3	3818.1	3815.9	3813.7
27.5°	3533.6	3561.7	3598.3	3624.2	3650.0	3673.7	3690.9	3695.2	3706.0	3701.7	3703.9
30°	3333.2	3363.4	3397.9	3438.8	3475.5	3499.2	3520.7	3535.8	3546.5	3540.1	3538.0
32.5°	3048.9	3079.0	3115.7	3156.6	3199.7	3234.1	3260.0	3279.4	3292.3	3288.0	3277.2
35°	2723.5	2732.1	2755.8	2788.2	2824.7	2861.4	2885.1	2906.6	2921.7	2926.0	2926.0
37.5°	2389.5	2361.5	2344.3	2344.3	2365.8	2380.9	2402.4	2415.4	2439.1	2447.7	2454.2
40°	2066.3	2001.7	1941.3	1896.1	1866.0	1863.8	1863.8	1870.2	1891.8	1919.8	1945.7
42.5°	1777.6	1674.2	1581.5	1497.5	1437.2	1402.7	1387.6	1389.8	1407.0	1432.9	1475.9
45°	1547.0	1417.8	1301.4	1200.1	1118.3	1064.4	1038.6	1036.4	1049.3	1079.5	1126.9
47.5°	1368.2	1230.3	1098.9	982.5	894.2	836.0	805.8	797.2	805.8	833.8	889.9
50°	1219.5	1077.4	941.6	820.9	726.1	665.8	637.8	627.0	637.8	661.5	717.5
52.5°	1081.6	935.1	808.0	691.6	590.4	538.7	508.5	502.0	508.5	536.5	581.8
55°	922.2	797.2	672.2	555.9	467.6	415.9	392.1	385.7	392.1	418.0	465.4
57.5°	764.9	657.2	547.3	441.7	366.3	321.0	299.5	290.9	305.9	323.2	379.2
60°	618.4	532.2	439.5	346.9	284.4	243.5	226.2	224.1	228.4	250.0	288.7
62.5°	484.8	413.7	340.4	265.0	213.3	196.1	174.5	172.4	176.7	189.6	219.8
65°	349.1	303.8	247.8	193.9	153.0	129.3	120.7	122.8	127.1	135.8	163.8
67.5°	243.5	211.1	172.4	135.8	105.6	94.8	86.2	84.0	86.2	101.3	116.4
70°	163.8	144.4	116.4	103.4	73.3	58.2	60.3	53.9	62.5	62.5	75.4
72.5°	107.7	94.8	77.6	60.3	51.7	41.0	41.0	38.8	43.1	45.2	56.0
75°	56.0	43.1	43.1	30.2	21.6	10.8	19.4	17.2	15.1	17.2	21.6
77.5°	38.8	32.3	30.2	23.7	21.6	17.2	17.2	17.2	17.2	19.4	21.6
80°	23.7	23.7	17.2	15.1	12.9	10.8	12.9	12.9	12.9	12.9	15.1
82.5°	15.1	12.9	12.9	10.8	10.8	8.6	8.6	8.6	8.6	8.6	12.9
85°	12.9	8.6	8.6	6.5	8.6	15.1	6.5	8.6	8.6	8.6	6.5
87.5°	4.3	6.5	6.5	6.5	4.3	2.2	4.3	6.5	6.5	10.8	8.6
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°	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1	4014.1
2.5°	4020.6	4022.8	4022.8	4020.6	4020.6	4016.3	4024.9	4018.5	4020.6	4029.2	4022.8
5°	4024.9	4027.0	4027.0	4024.9	4024.9	4024.9	4027.0	4027.0	4024.9	4022.8	4027.0
7.5°	4033.5	4031.4	4031.4	4027.0	4027.0	4022.8	4027.0	4020.6	4024.9	4020.6	4027.0
10°	4022.8	4024.9	4022.8	4020.6	4020.6	4018.5	4018.5	4012.0	4014.1	4007.6	4012.0
12.5°	4016.3	4014.1	4014.1	4009.8	4005.5	4001.2	3999.1	3992.6	3992.6	3977.5	3984.0
15°	3999.1	4001.2	3994.7	3986.1	3981.8	3971.1	3966.7	3958.1	3949.5	3938.7	3940.9
17.5°	3984.0	3977.5	3968.9	3960.3	3943.0	3934.4	3925.8	3912.9	3908.5	3895.6	3891.3
20°	3938.7	3934.4	3923.7	3908.5	3897.8	3878.4	3869.8	3856.9	3846.1	3833.1	3826.7
22.5°	3880.5	3876.2	3863.3	3848.2	3831.0	3822.4	3813.7	3790.1	3779.3	3766.3	3764.2
25°	3807.3	3800.8	3787.9	3770.7	3762.0	3738.3	3729.7	3712.5	3708.2	3695.2	3693.1
27.5°	3695.2	3686.6	3671.5	3650.0	3634.9	3619.8	3611.2	3598.3	3594.0	3581.0	3578.9
30°	3527.2	3516.4	3486.2	3477.6	3451.8	3436.7	3436.7	3419.4	3421.6	3413.0	3413.0
32.5°	3262.2	3244.9	3221.2	3204.0	3186.7	3178.1	3178.1	3171.6	3176.0	3176.0	3180.3
35°	2910.9	2887.3	2874.3	2863.5	2863.5	2872.1	2898.0	2904.5	2917.4	2928.2	2936.8
37.5°	2460.6	2458.5	2473.6	2486.5	2518.8	2555.4	2600.7	2639.5	2676.1	2702.0	2727.8
40°	1973.7	2027.5	2070.6	2131.0	2180.5	2251.6	2333.5	2400.3	2462.8	2508.0	2555.4
42.5°	1540.6	1609.5	1700.0	1788.4	1876.7	1973.7	2081.4	2174.1	2255.9	2318.4	2368.0
45°	1200.1	1294.9	1404.9	1516.9	1631.1	1751.8	1863.8	1958.6	2044.8	2109.4	2159.0
47.5°	967.4	1070.9	1195.8	1318.7	1447.9	1575.0	1700.0	1781.9	1853.0	1904.7	1950.0
50°	799.4	909.3	1040.7	1180.7	1310.0	1437.2	1544.9	1624.6	1682.8	1728.0	1756.0
52.5°	667.9	784.3	924.4	1064.4	1193.7	1310.0	1407.0	1467.3	1514.7	1547.0	1572.9
55°	551.6	663.7	795.1	926.5	1053.6	1163.5	1243.2	1288.5	1325.1	1344.5	1359.6
57.5°	450.3	553.7	674.4	795.1	905.0	995.5	1058.0	1103.2	1120.4	1135.5	1133.3
60°	353.4	450.3	560.2	663.7	758.4	831.7	877.0	902.8	915.7	922.2	917.9
62.5°	277.9	366.3	450.3	540.8	609.8	672.2	715.4	715.4	721.8	724.0	730.4
65°	206.8	273.6	346.9	413.7	469.7	510.7	534.4	540.8	549.5	547.3	543.0
67.5°	153.0	202.6	256.4	305.9	344.7	370.6	387.8	402.9	400.8	396.5	394.3
70°	105.6	137.9	185.3	215.5	243.5	269.4	273.6	275.8	277.9	280.1	275.8
72.5°	73.3	97.0	122.8	148.7	165.9	176.7	187.5	189.6	189.6	189.6	187.5
75°	36.6	49.6	73.3	84.0	99.1	103.4	112.0	112.0	118.5	109.9	107.7
77.5°	32.3	38.8	51.7	60.3	66.8	73.3	75.4	81.9	79.7	75.4	77.6
80°	19.4	23.7	32.3	36.6	45.2	47.4	49.6	51.7	49.6	51.7	51.7
82.5°	15.1	17.2	21.6	21.6	28.0	28.0	30.2	30.2	32.3	32.3	32.3
85°	8.6	15.1	12.9	25.8	17.2	17.2	21.6	25.8	21.6	21.6	25.8
87.5°	8.6	8.6	6.5	8.6	8.6	8.6	10.8	12.9	12.9	15.1	12.9
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: P249444

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4014.1	4014.1	4014.1	4014.1
2.5°	4020.6	4024.9	4018.5	4016.3
5°	4027.0	4027.0	4022.8	4022.8
7.5°	4027.0	4027.0	4020.6	4016.3
10°	4009.8	4009.8	4003.4	3999.1
12.5°	3977.5	3977.5	3975.3	3968.9
15°	3936.6	3936.6	3927.9	3921.5
17.5°	3880.5	3884.9	3874.1	3874.1
20°	3820.2	3818.1	3809.5	3805.1
22.5°	3757.7	3753.4	3751.3	3738.3
25°	3690.9	3686.6	3680.1	3673.7
27.5°	3576.8	3574.6	3568.1	3559.5
30°	3402.2	3400.0	3391.4	3391.4
32.5°	3176.0	3173.8	3165.2	3167.4
35°	2941.1	2949.7	2945.4	2936.8
37.5°	2745.0	2751.5	2755.8	2751.5
40°	2581.3	2600.7	2602.8	2607.2
42.5°	2406.8	2432.6	2441.2	2445.5
45°	2197.7	2221.5	2240.9	2236.5
47.5°	1984.4	2001.7	2018.9	2006.0
50°	1779.8	1790.5	1797.0	1797.0
52.5°	1585.8	1585.8	1583.7	1585.8
55°	1363.9	1363.9	1355.3	1359.6
57.5°	1131.2	1135.5	1129.0	1118.3
60°	915.7	905.0	900.6	894.2
62.5°	713.2	713.2	698.1	717.5
65°	534.4	527.9	521.4	519.3
67.5°	387.8	385.7	379.2	377.1
70°	273.6	265.0	262.9	258.5
72.5°	183.2	183.2	178.8	178.8
75°	112.0	101.3	99.1	101.3
77.5°	77.6	75.4	75.4	73.3
80°	51.7	49.6	53.9	47.4
82.5°	32.3	34.5	32.3	34.5
85°	21.6	25.8	23.7	23.7
87.5°	12.9	12.9	12.9	12.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)