

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: P249489

Luminaire Tested: **LSR8B80D010 EC8B80950 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249489
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 EC8B80950 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6926.0 lumens
Efficiency: N/A
Efficacy: 93.1 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

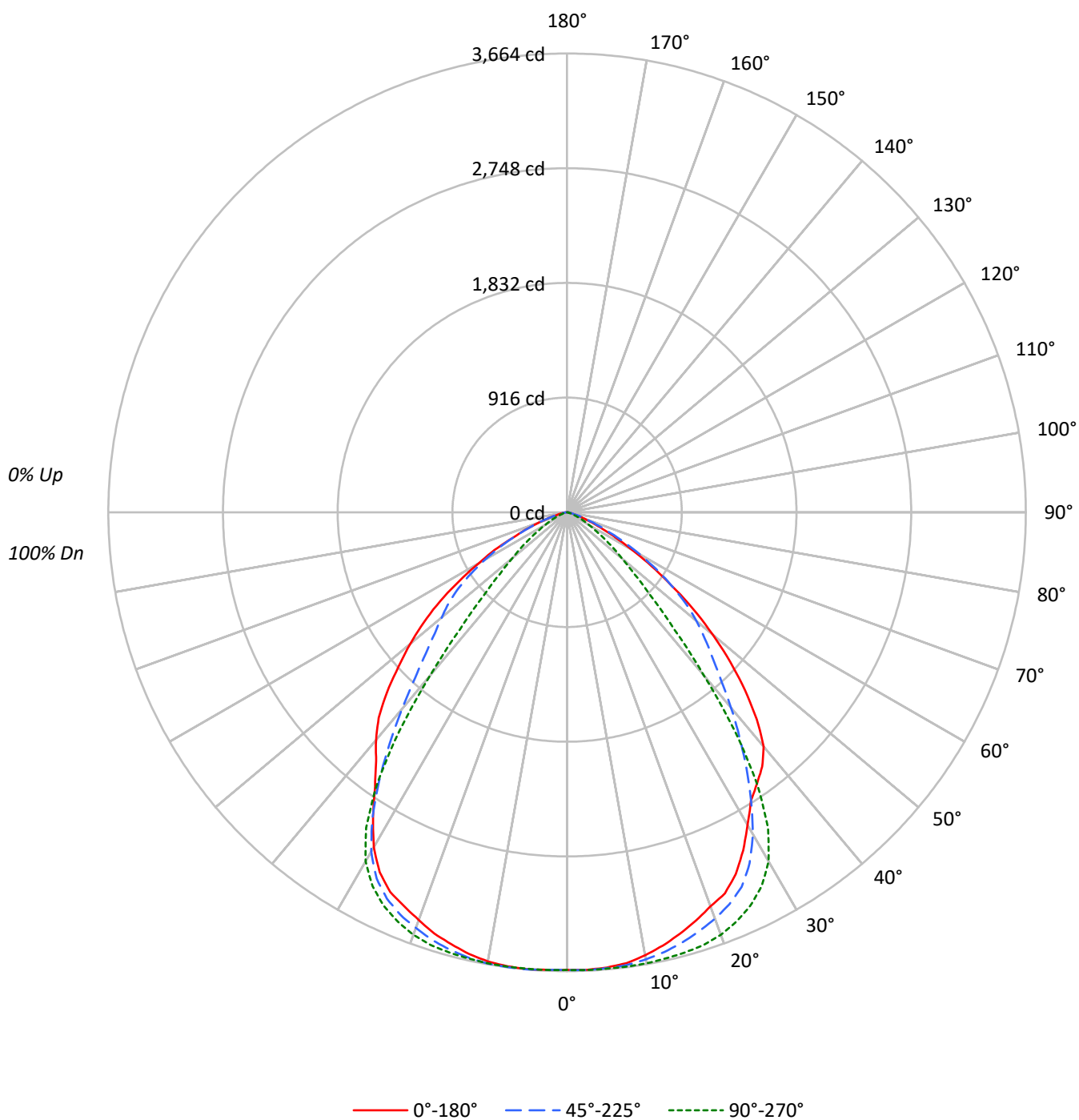
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249489

CATALOG NUMBER: LSR8B80D010 EC8B80950 8LBDW0B

Luminous Intensity Polar Plot





TEST NUMBER: P249489

CATALOG NUMBER: LSR8B80D010 EC8B80950 8LBDW0B

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	112	108	105	102	109	106	103	100		102	99	97		98	96	94		94	93	91
2	104	97	92	88	101	96	91	87		92	88	85		89	86	83		86	83	81
3	96	88	81	76	94	86	80	75		84	78	74		81	77	73		79	75	72
4	89	80	72	67	87	78	72	66		76	70	66		74	69	65		72	67	64
5	83	72	65	59	81	71	64	59		69	63	58		68	62	58		66	61	57
6	78	66	58	53	76	65	58	53		64	57	52		62	56	52		61	55	51
7	72	61	53	48	71	60	53	48		59	52	47		57	51	47		56	51	47
8	68	56	48	43	66	55	48	43		54	48	43		53	47	43		52	46	42
9	64	52	44	39	62	51	44	39		50	44	39		49	43	39		48	43	39
10	60	48	41	36	59	48	41	36		47	40	36		46	40	36		45	40	36

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	112685	112685	112685
5°	112933	113236	113360
10°	112457	114486	113995
15°	111211	116159	113969
20°	109876	117791	113672
25°	108448	117928	113790
30°	102601	114611	109932
35°	99535	99610	100646
40°	98304	68536	95539
45°	87593	41145	88788
50°	72832	27383	78479
55°	54627	18876	66541
60°	37016	12581	50202
65°	22327	8157	34491
70°	12379	4427	21224
75°	5612	1871	10985
80°	4883	2095	7654
85°	5555	2760	7642



TEST NUMBER: P249489

CATALOG NUMBER: LSR8B80D010 EC8B80950 8LBDW0B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	348.8	5.0
10°-20°	1012.8	14.6
20°-30°	1537.3	22.2
30°-40°	1614.6	23.3
40°-50°	1210.5	17.5
50°-60°	776.7	11.2
60°-70°	332.3	4.8
70°-80°	78.5	1.1
80°-90°	14.6	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°	2898.8	41.9
0°-40°	4513.4	65.2
0°-60°	6500.6	93.9
0°-90°	6926.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6926.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3654	3654	3654	3654	3654	
5°	3648	3654	3658	3664	3662	347
15°	3484	3556	3639	3615	3570	983
25°	3187	3299	3466	3403	3344	1456
35°	2644	2497	2646	2615	2674	1660
45°	2009	1642	944	1595	2036	1538
55°	1016	1016	351	1059	1238	922
65°	306	361	112	465	473	327
75°	47	55	16	94	92	69
85°	16	10	8	16	22	17
90°	0	0	0	0	0	



TEST NUMBER: P249489

CATALOG NUMBER: LSR8B80D010 EC8B80950 8LBDW0B

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3
2.5°	3656.3	3660.2	3658.2	3658.2	3656.3	3658.2	3658.2	3662.2	3662.2	3658.2	3656.3
5°	3648.4	3652.3	3652.3	3648.4	3648.4	3658.2	3652.3	3656.3	3656.3	3654.3	3654.3
7.5°	3630.8	3630.8	3638.6	3632.7	3632.7	3638.6	3636.6	3640.6	3644.5	3646.5	3646.5
10°	3591.5	3595.5	3597.4	3597.4	3599.4	3605.2	3609.2	3617.0	3620.9	3624.9	3626.8
12.5°	3542.5	3548.4	3550.3	3548.4	3554.3	3562.1	3571.9	3581.7	3587.6	3595.5	3601.4
15°	3483.6	3483.6	3487.6	3493.5	3497.4	3509.2	3518.9	3530.7	3546.4	3556.2	3566.0
17.5°	3418.9	3422.9	3428.7	3428.7	3436.6	3456.2	3462.1	3479.7	3497.4	3507.2	3526.8
20°	3348.3	3352.2	3358.1	3362.1	3371.8	3387.5	3399.3	3415.0	3434.6	3452.3	3471.9
22.5°	3293.4	3285.5	3289.4	3293.4	3303.2	3316.9	3330.7	3350.2	3369.9	3387.5	3407.2
25°	3187.4	3189.4	3195.3	3199.2	3211.0	3222.8	3238.5	3262.0	3279.6	3299.3	3320.8
27.5°	3044.3	3046.2	3056.0	3056.0	3065.8	3085.5	3095.2	3114.9	3138.4	3158.0	3183.6
30°	2881.5	2885.4	2885.4	2893.2	2899.1	2908.9	2918.7	2938.4	2950.1	2967.8	3003.1
32.5°	2732.4	2736.3	2734.3	2732.4	2726.5	2724.5	2722.6	2726.5	2730.4	2736.3	2750.0
35°	2644.1	2634.3	2626.5	2612.8	2597.1	2577.4	2559.8	2536.2	2514.7	2497.0	2477.4
37.5°	2559.8	2557.8	2546.0	2526.4	2495.0	2459.7	2418.6	2367.5	2316.5	2261.6	2208.7
40°	2442.1	2436.2	2426.4	2398.9	2363.6	2320.5	2265.6	2202.8	2120.4	2036.0	1949.7
42.5°	2242.0	2244.0	2232.2	2210.6	2177.3	2136.1	2079.2	2010.6	1922.3	1822.2	1710.4
45°	2008.6	2008.6	2004.7	1987.0	1963.5	1930.1	1887.0	1830.1	1743.8	1641.8	1522.1
47.5°	1765.4	1767.3	1761.4	1757.5	1747.7	1726.1	1694.8	1651.6	1590.8	1492.7	1373.0
50°	1518.2	1518.2	1528.0	1526.1	1526.1	1518.2	1504.5	1479.0	1426.0	1347.6	1235.8
52.5°	1271.1	1275.0	1280.9	1288.7	1298.5	1314.2	1298.5	1286.7	1253.4	1192.6	1096.5
55°	1016.1	1020.0	1029.8	1043.5	1055.3	1071.0	1074.9	1074.9	1057.2	1016.1	943.5
57.5°	798.3	792.4	800.3	812.1	827.8	843.5	855.2	869.0	867.0	839.5	780.7
60°	600.2	602.2	608.0	619.9	631.6	645.3	661.0	672.8	678.7	665.0	627.7
62.5°	437.4	437.4	445.3	457.0	462.9	482.5	492.3	498.2	504.1	502.1	478.6
65°	306.0	309.9	313.8	319.7	325.6	337.4	343.3	355.0	359.0	360.9	343.3
67.5°	215.8	209.9	213.8	217.7	223.6	231.5	243.2	243.2	249.1	249.1	237.3
70°	137.3	137.3	139.3	145.1	149.1	151.0	155.0	158.9	164.8	162.8	162.8
72.5°	92.2	90.2	92.2	94.2	96.1	102.0	102.0	104.0	107.9	109.9	102.0
75°	47.1	49.1	52.9	51.0	56.9	52.9	54.9	60.8	58.8	54.9	54.9
77.5°	39.2	39.2	39.2	37.3	41.2	41.2	39.2	43.1	41.2	41.2	39.2
80°	27.5	29.4	27.5	25.5	27.5	25.5	25.5	25.5	25.5	25.5	23.5
82.5°	21.6	17.7	19.6	17.7	19.6	19.6	17.7	15.7	15.7	17.7	15.7
85°	15.7	11.8	13.7	13.7	11.8	11.8	11.8	11.8	11.8	9.8	9.8
87.5°	9.8	5.9	5.9	5.9	7.8	7.8	7.8	5.9	7.8	7.8	3.9
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: P249489

CATALOG NUMBER: LSR8B80D010 EC8B80950 8LBDW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3
2.5°	3660.2	3658.2	3662.2	3660.2	3660.2	3658.2	3660.2	3658.2	3662.2	3654.3	3656.3
5°	3660.2	3656.3	3658.2	3660.2	3662.2	3658.2	3658.2	3658.2	3662.2	3658.2	3660.2
7.5°	3652.3	3650.4	3656.3	3660.2	3658.2	3656.3	3660.2	3658.2	3662.2	3660.2	3664.1
10°	3636.6	3638.6	3642.5	3648.4	3650.4	3652.3	3656.3	3656.3	3662.2	3654.3	3658.2
12.5°	3613.1	3620.9	3630.8	3634.7	3642.5	3642.5	3646.5	3648.4	3652.3	3650.4	3656.3
15°	3583.7	3593.5	3605.2	3615.1	3624.9	3630.8	3636.6	3638.6	3644.5	3638.6	3640.6
17.5°	3548.4	3560.1	3577.8	3589.5	3605.2	3611.1	3619.0	3622.9	3628.8	3624.9	3626.8
20°	3499.3	3513.1	3532.7	3550.3	3560.1	3573.9	3583.7	3589.5	3593.5	3589.5	3591.5
22.5°	3430.7	3450.3	3475.8	3489.5	3509.2	3520.9	3522.9	3536.6	3546.4	3536.6	3540.5
25°	3350.2	3369.9	3389.5	3418.9	3436.6	3450.3	3464.0	3466.0	3475.8	3473.8	3471.9
27.5°	3216.9	3242.4	3275.7	3299.3	3322.8	3344.4	3360.1	3364.0	3373.8	3369.9	3371.8
30°	3034.4	3061.9	3093.3	3130.6	3163.9	3185.5	3205.1	3218.8	3228.6	3222.8	3220.8
32.5°	2775.6	2803.0	2836.4	2873.6	2912.9	2944.2	2967.8	2985.4	2997.2	2993.3	2983.5
35°	2479.4	2487.2	2508.8	2538.2	2571.5	2604.9	2626.5	2646.1	2659.8	2663.7	2663.7
37.5°	2175.3	2149.8	2134.1	2134.1	2153.7	2167.5	2187.1	2198.8	2220.4	2228.3	2234.2
40°	1881.1	1822.2	1767.3	1726.1	1698.7	1696.7	1696.7	1702.6	1722.2	1747.7	1771.3
42.5°	1618.2	1524.1	1439.8	1363.3	1308.3	1277.0	1263.2	1265.2	1280.9	1304.4	1343.6
45°	1408.4	1290.7	1184.8	1092.6	1018.0	969.0	945.5	943.5	955.2	982.7	1025.9
47.5°	1245.6	1120.0	1000.4	894.4	814.0	761.1	733.6	725.8	733.6	759.1	810.1
50°	1110.2	980.8	857.2	747.3	661.0	606.1	580.6	570.8	580.6	602.2	653.2
52.5°	984.7	851.3	735.6	629.6	537.4	490.4	462.9	457.0	462.9	488.4	529.6
55°	839.5	725.8	612.0	506.1	425.7	378.6	357.0	351.1	357.0	380.6	423.7
57.5°	696.4	598.3	498.2	402.1	333.5	292.2	272.7	264.8	278.5	294.2	345.2
60°	562.9	484.5	400.1	315.8	258.9	221.6	205.9	204.0	207.9	227.5	262.8
62.5°	441.4	376.6	309.9	241.3	194.2	178.5	158.9	156.9	160.8	172.6	200.1
65°	317.8	276.6	225.6	176.5	139.3	117.7	109.9	111.8	115.7	123.6	149.1
67.5°	221.6	192.2	156.9	123.6	96.1	86.3	78.5	76.5	78.5	92.2	105.9
70°	149.1	131.4	105.9	94.2	66.7	52.9	54.9	49.1	56.9	56.9	68.6
72.5°	98.1	86.3	70.6	54.9	47.1	37.3	37.3	35.3	39.2	41.2	51.0
75°	51.0	39.2	39.2	27.5	19.6	9.8	17.7	15.7	13.7	15.7	19.6
77.5°	35.3	29.4	27.5	21.6	19.6	15.7	15.7	15.7	15.7	17.7	19.6
80°	21.6	21.6	15.7	13.7	11.8	9.8	11.8	11.8	11.8	11.8	13.7
82.5°	13.7	11.8	11.8	9.8	9.8	7.8	7.8	7.8	7.8	7.8	11.8
85°	11.8	7.8	7.8	5.9	7.8	13.7	5.9	7.8	7.8	7.8	5.9
87.5°	3.9	5.9	5.9	5.9	3.9	2.0	3.9	5.9	5.9	9.8	7.8
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: P249489

CATALOG NUMBER: LSR8B80D010 EC8B80950 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3	3654.3
2.5°	3660.2	3662.2	3662.2	3660.2	3660.2	3656.3	3664.1	3658.2	3660.2	3668.0	3662.2
5°	3664.1	3666.1	3666.1	3664.1	3664.1	3664.1	3666.1	3666.1	3664.1	3662.2	3666.1
7.5°	3672.0	3670.0	3670.0	3666.1	3666.1	3662.2	3666.1	3660.2	3664.1	3660.2	3666.1
10°	3662.2	3664.1	3662.2	3660.2	3660.2	3658.2	3658.2	3652.3	3654.3	3648.4	3652.3
12.5°	3656.3	3654.3	3654.3	3650.4	3646.5	3642.5	3640.6	3634.7	3634.7	3620.9	3626.8
15°	3640.6	3642.5	3636.6	3628.8	3624.9	3615.1	3611.1	3603.3	3595.5	3585.7	3587.6
17.5°	3626.8	3620.9	3613.1	3605.2	3589.5	3581.7	3573.9	3562.1	3558.2	3546.4	3542.5
20°	3585.7	3581.7	3571.9	3558.2	3548.4	3530.7	3522.9	3511.1	3501.3	3489.5	3483.6
22.5°	3532.7	3528.7	3517.0	3503.3	3487.6	3479.7	3471.9	3450.3	3440.5	3428.7	3426.7
25°	3466.0	3460.1	3448.3	3432.7	3424.8	3403.2	3395.4	3379.7	3375.8	3364.0	3362.1
27.5°	3364.0	3356.1	3342.4	3322.8	3309.1	3295.3	3287.5	3275.7	3271.8	3260.0	3258.1
30°	3211.0	3201.2	3173.7	3165.9	3142.3	3128.6	3128.6	3112.9	3114.9	3107.1	3107.1
32.5°	2969.7	2954.0	2932.4	2916.8	2901.1	2893.2	2893.2	2887.3	2891.3	2891.3	2895.2
35°	2650.0	2628.4	2616.6	2606.9	2606.9	2614.7	2638.2	2644.1	2655.9	2665.7	2673.6
37.5°	2240.0	2238.1	2251.8	2263.6	2293.0	2326.4	2367.5	2402.9	2436.2	2459.7	2483.3
40°	1796.7	1845.8	1885.0	1940.0	1985.0	2049.8	2124.3	2185.1	2242.0	2283.2	2326.4
42.5°	1402.5	1465.2	1547.6	1628.0	1708.5	1796.7	1894.8	1979.2	2053.7	2110.6	2155.7
45°	1092.6	1178.9	1278.9	1380.9	1484.9	1594.7	1696.7	1783.0	1861.5	1920.3	1965.4
47.5°	880.7	974.9	1088.6	1200.5	1318.1	1433.9	1547.6	1622.2	1686.9	1734.0	1775.2
50°	727.7	827.8	947.4	1074.9	1192.6	1308.3	1406.4	1479.0	1532.0	1573.1	1598.6
52.5°	608.0	714.0	841.5	969.0	1086.7	1192.6	1280.9	1335.8	1378.9	1408.4	1431.9
55°	502.1	604.2	723.8	843.5	959.2	1059.2	1131.8	1173.0	1206.3	1224.0	1237.7
57.5°	410.0	504.1	614.0	723.8	823.8	906.2	963.1	1004.3	1020.0	1033.7	1031.7
60°	321.7	410.0	510.0	604.2	690.5	757.1	798.3	821.9	833.6	839.5	835.6
62.5°	253.0	333.5	410.0	492.3	555.1	612.0	651.2	651.2	657.1	659.1	665.0
65°	188.3	249.1	315.8	376.6	427.6	464.9	486.5	492.3	500.2	498.2	494.3
67.5°	139.3	184.4	233.4	278.5	313.8	337.4	353.1	366.8	364.9	360.9	359.0
70°	96.1	125.6	168.7	196.2	221.6	245.2	249.1	251.1	253.0	255.0	251.1
72.5°	66.7	88.3	111.8	135.3	151.0	160.8	170.7	172.6	172.6	172.6	170.7
75°	33.4	45.1	66.7	76.5	90.2	94.2	102.0	102.0	107.9	100.0	98.1
77.5°	29.4	35.3	47.1	54.9	60.8	66.7	68.6	74.5	72.6	68.6	70.6
80°	17.7	21.6	29.4	33.4	41.2	43.1	45.1	47.1	45.1	47.1	47.1
82.5°	13.7	15.7	19.6	19.6	25.5	25.5	27.5	27.5	29.4	29.4	29.4
85°	7.8	13.7	11.8	23.5	15.7	15.7	19.6	23.5	19.6	19.6	23.5
87.5°	7.8	7.8	5.9	7.8	7.8	7.8	9.8	11.8	11.8	13.7	11.8
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: P249489

CATALOG NUMBER: LSR8B80D010 EC8B80950 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3654.3	3654.3	3654.3	3654.3
2.5°	3660.2	3664.1	3658.2	3656.3
5°	3666.1	3666.1	3662.2	3662.2
7.5°	3666.1	3666.1	3660.2	3656.3
10°	3650.4	3650.4	3644.5	3640.6
12.5°	3620.9	3620.9	3619.0	3613.1
15°	3583.7	3583.7	3575.8	3570.0
17.5°	3532.7	3536.6	3526.8	3526.8
20°	3477.8	3475.8	3468.0	3464.0
22.5°	3420.9	3417.0	3415.0	3403.2
25°	3360.1	3356.1	3350.2	3344.4
27.5°	3256.1	3254.2	3248.3	3240.4
30°	3097.2	3095.2	3087.4	3087.4
32.5°	2891.3	2889.3	2881.5	2883.4
35°	2677.5	2685.3	2681.4	2673.6
37.5°	2499.0	2504.9	2508.8	2504.9
40°	2349.9	2367.5	2369.5	2373.4
42.5°	2191.0	2214.5	2222.4	2226.3
45°	2000.7	2022.3	2040.0	2036.0
47.5°	1806.5	1822.2	1837.9	1826.2
50°	1620.2	1630.0	1635.9	1635.9
52.5°	1443.7	1443.7	1441.7	1443.7
55°	1241.6	1241.6	1233.8	1237.7
57.5°	1029.8	1033.7	1027.8	1018.0
60°	833.6	823.8	819.9	814.0
62.5°	649.3	649.3	635.5	653.2
65°	486.5	480.6	474.7	472.7
67.5°	353.1	351.1	345.2	343.3
70°	249.1	241.3	239.3	235.4
72.5°	166.7	166.7	162.8	162.8
75°	102.0	92.2	90.2	92.2
77.5°	70.6	68.6	68.6	66.7
80°	47.1	45.1	49.1	43.1
82.5°	29.4	31.4	29.4	31.4
85°	19.6	23.5	21.6	21.6
87.5°	11.8	11.8	11.8	11.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)