

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: P249147

Luminaire Tested: **LSR8B80D010 EC8B80935 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249147
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 EC8B80935 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7238.0 lumens
Efficiency: N/A
Efficacy: 97.3 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

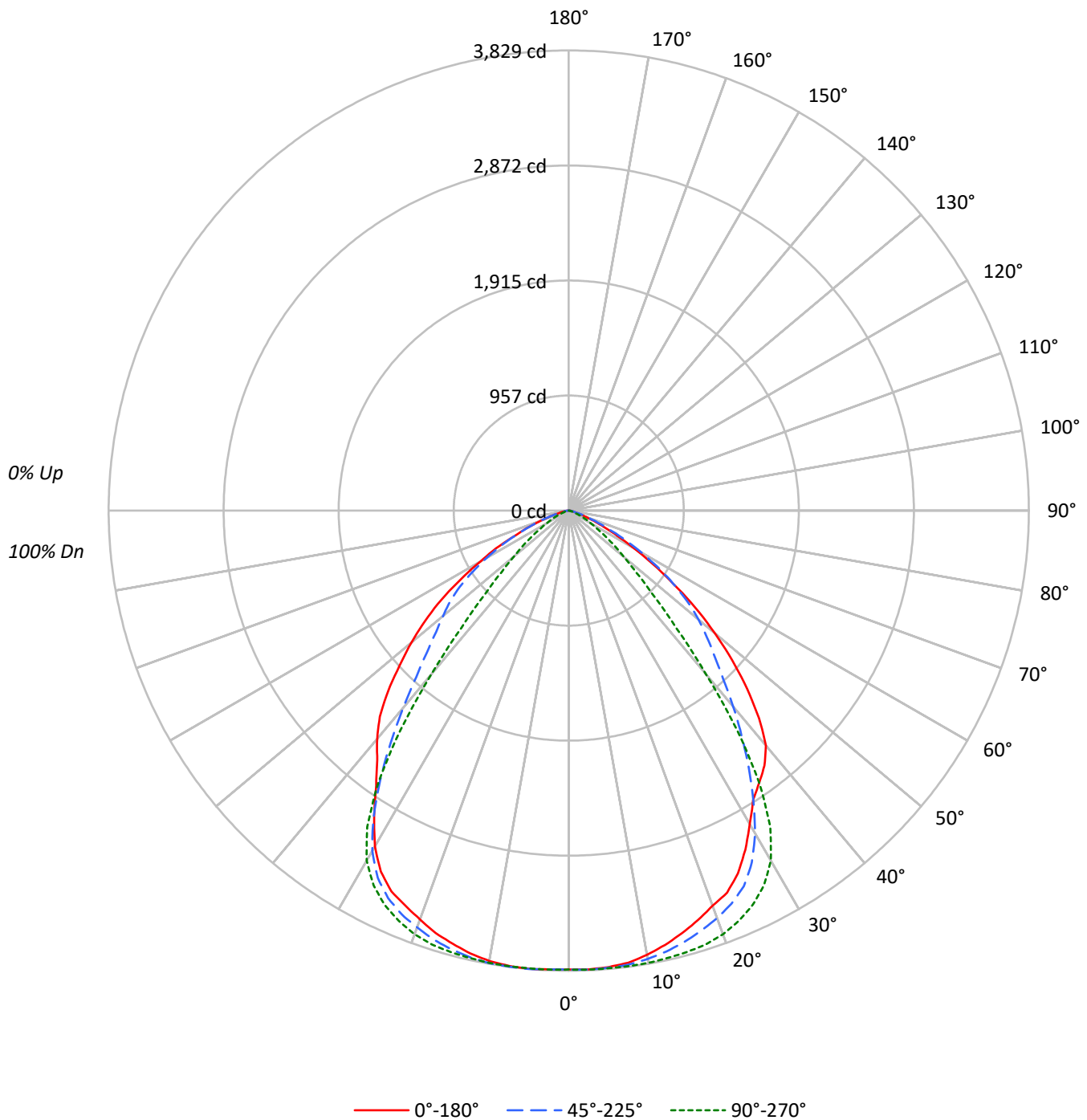
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	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	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°	117761	117761	117761
5°	118019	118338	118464
10°	117523	119643	119130
15°	116223	121391	119102
20°	114827	123100	118795
25°	113334	123239	118914
30°	107222	119774	114885
35°	104022	104097	105178
40°	102732	71624	99846
45°	91540	42999	92792
50°	76114	28616	82014
55°	57084	19725	69540
60°	38687	13149	52465
65°	23334	8530	36045
70°	12938	4625	22179
75°	5862	1954	11485
80°	5097	2184	8009
85°	5802	2901	7996



TEST NUMBER: P249147

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	364.5	5.0
10°-20°	1058.4	14.6
20°-30°	1606.5	22.2
30°-40°	1687.3	23.3
40°-50°	1265.0	17.5
50°-60°	811.7	11.2
60°-70°	347.2	4.8
70°-80°	82.0	1.1
80°-90°	15.3	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°	3029.4	41.9
0°-40°	4716.8	65.2
0°-60°	6793.5	93.9
0°-90°	7238.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7238.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3819	3819	3819	3819	3819	
5°	3813	3819	3823	3829	3827	362
15°	3641	3716	3802	3778	3731	1027
25°	3331	3448	3622	3556	3495	1522
35°	2763	2610	2765	2732	2794	1734
45°	2099	1716	986	1667	2128	1608
55°	1062	1062	367	1107	1294	963
65°	320	377	117	486	494	341
75°	49	57	16	98	96	72
85°	16	10	8	16	23	17
90°	0	0	0	0	0	



TEST NUMBER: P249147

CATALOG NUMBER: LSR8B80D010 EC8B80935 8LBDW0H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9
2.5°	3821.0	3825.1	3823.0	3823.0	3821.0	3823.0	3823.0	3827.1	3827.1	3823.0	3821.0
5°	3812.7	3816.9	3816.9	3812.7	3812.7	3823.0	3816.9	3821.0	3821.0	3818.9	3818.9
7.5°	3794.3	3794.3	3802.5	3796.4	3796.4	3802.5	3800.5	3804.6	3808.7	3810.7	3810.7
10°	3753.3	3757.4	3759.5	3759.5	3761.5	3767.7	3771.8	3780.0	3784.1	3788.2	3790.2
12.5°	3702.1	3708.2	3710.3	3708.2	3714.4	3722.6	3732.8	3743.1	3749.2	3757.4	3763.6
15°	3640.6	3640.6	3644.7	3650.8	3654.9	3667.2	3677.5	3689.8	3706.2	3716.4	3726.7
17.5°	3572.9	3577.1	3583.2	3583.2	3591.4	3611.9	3618.0	3636.5	3654.9	3665.2	3685.7
20°	3499.2	3503.2	3509.4	3513.5	3523.7	3540.1	3552.4	3568.8	3589.3	3607.8	3628.3
22.5°	3441.7	3433.6	3437.6	3441.7	3452.0	3466.4	3480.7	3501.2	3521.7	3540.1	3560.7
25°	3331.0	3333.1	3339.3	3343.3	3355.7	3367.9	3384.3	3408.9	3427.4	3447.9	3470.4
27.5°	3181.4	3183.5	3193.7	3193.7	3203.9	3224.4	3234.7	3255.2	3279.8	3300.3	3327.0
30°	3011.3	3015.3	3015.3	3023.6	3029.7	3040.0	3050.2	3070.7	3083.0	3101.5	3138.4
32.5°	2855.5	2859.6	2857.5	2855.5	2849.3	2847.3	2845.2	2849.3	2853.4	2859.6	2873.9
35°	2763.3	2753.0	2744.8	2730.5	2714.0	2693.5	2675.1	2650.5	2627.9	2609.5	2589.0
37.5°	2675.1	2673.0	2660.7	2640.2	2607.4	2570.6	2527.5	2474.2	2420.9	2363.5	2308.2
40°	2552.1	2545.9	2535.7	2507.0	2470.1	2425.0	2367.6	2302.0	2215.9	2127.8	2037.6
42.5°	2343.0	2345.0	2332.8	2310.2	2275.4	2232.3	2172.9	2101.1	2008.9	1904.3	1787.5
45°	2099.1	2099.1	2095.0	2076.5	2051.9	2017.1	1972.0	1912.5	1822.4	1715.7	1590.7
47.5°	1844.9	1846.9	1840.8	1836.7	1826.4	1803.9	1771.1	1726.0	1662.5	1559.9	1434.9
50°	1586.6	1586.6	1596.9	1594.8	1594.8	1586.6	1572.3	1545.6	1490.3	1408.3	1291.4
52.5°	1328.3	1332.4	1338.6	1346.8	1357.0	1373.4	1357.0	1344.7	1309.9	1246.3	1145.9
55°	1061.8	1065.9	1076.2	1090.5	1102.9	1119.3	1123.3	1123.3	1104.9	1061.8	986.0
57.5°	834.3	828.1	836.4	848.7	865.1	881.5	893.7	908.1	906.0	877.3	815.9
60°	627.3	629.3	635.4	647.8	660.1	674.4	690.8	703.1	709.3	694.9	656.0
62.5°	457.1	457.1	465.3	477.6	483.8	504.3	514.5	520.7	526.8	524.7	500.2
65°	319.8	323.9	328.0	334.1	340.3	352.6	358.7	371.0	375.1	377.2	358.7
67.5°	225.5	219.3	223.4	227.5	233.7	241.9	254.2	254.2	260.3	260.3	248.0
70°	143.5	143.5	145.6	151.7	155.8	157.8	162.0	166.0	172.2	170.1	170.1
72.5°	96.4	94.3	96.4	98.4	100.5	106.6	106.6	108.6	112.8	114.8	106.6
75°	49.2	51.3	55.3	53.3	59.4	55.3	57.4	63.5	61.5	57.4	57.4
77.5°	41.0	41.0	41.0	39.0	43.0	43.0	41.0	45.1	43.0	43.0	41.0
80°	28.7	30.7	28.7	26.6	28.7	26.6	26.6	26.6	26.6	26.6	24.6
82.5°	22.6	18.5	20.5	18.5	20.5	20.5	18.5	16.4	16.4	18.5	16.4
85°	16.4	12.3	14.3	14.3	12.3	12.3	12.3	12.3	12.3	10.2	10.2
87.5°	10.2	6.2	6.2	6.2	8.2	8.2	8.2	6.2	8.2	8.2	4.1
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: P249147

CATALOG NUMBER: LSR8B80D010 EC8B80935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9
2.5°	3825.1	3823.0	3827.1	3825.1	3825.1	3823.0	3825.1	3823.0	3827.1	3818.9	3821.0
5°	3825.1	3821.0	3823.0	3825.1	3827.1	3823.0	3823.0	3823.0	3827.1	3823.0	3825.1
7.5°	3816.9	3814.8	3821.0	3825.1	3823.0	3821.0	3825.1	3823.0	3827.1	3825.1	3829.1
10°	3800.5	3802.5	3806.6	3812.7	3814.8	3816.9	3821.0	3821.0	3827.1	3818.9	3823.0
12.5°	3775.9	3784.1	3794.3	3798.4	3806.6	3806.6	3810.7	3812.7	3816.9	3814.8	3821.0
15°	3745.1	3755.4	3767.7	3777.9	3788.2	3794.3	3800.5	3802.5	3808.7	3802.5	3804.6
17.5°	3708.2	3720.5	3739.0	3751.3	3767.7	3773.8	3782.0	3786.1	3792.3	3788.2	3790.2
20°	3657.0	3671.3	3691.8	3710.3	3720.5	3734.8	3745.1	3751.3	3755.4	3751.3	3753.3
22.5°	3585.2	3605.7	3632.4	3646.7	3667.2	3679.5	3681.6	3695.9	3706.2	3695.9	3700.0
25°	3501.2	3521.7	3542.2	3572.9	3591.4	3605.7	3620.1	3622.1	3632.4	3630.3	3628.3
27.5°	3361.8	3388.5	3423.3	3447.9	3472.5	3495.0	3511.4	3515.5	3525.8	3521.7	3523.7
30°	3171.1	3199.9	3232.7	3271.6	3306.5	3329.0	3349.5	3363.8	3374.1	3367.9	3365.9
32.5°	2900.6	2929.3	2964.1	3003.1	3044.1	3076.8	3101.5	3119.9	3132.2	3128.1	3117.9
35°	2591.1	2599.2	2621.8	2652.6	2687.4	2722.2	2744.8	2765.3	2779.6	2783.7	2783.7
37.5°	2273.3	2246.7	2230.3	2230.3	2250.8	2265.1	2285.6	2297.9	2320.5	2328.6	2334.8
40°	1965.8	1904.3	1846.9	1803.9	1775.2	1773.2	1773.2	1779.3	1799.8	1826.4	1851.0
42.5°	1691.1	1592.7	1504.6	1424.7	1367.3	1334.5	1320.1	1322.2	1338.6	1363.2	1404.1
45°	1471.8	1348.8	1238.1	1141.8	1063.9	1012.6	988.0	986.0	998.3	1027.0	1072.1
47.5°	1301.7	1170.5	1045.4	934.7	850.7	795.3	766.7	758.5	766.7	793.3	846.6
50°	1160.2	1025.0	895.8	781.0	690.8	633.4	606.8	596.5	606.8	629.3	682.6
52.5°	1029.0	889.6	768.7	658.0	561.7	512.5	483.8	477.6	483.8	510.4	553.5
55°	877.3	758.5	639.6	528.9	444.8	395.6	373.1	366.9	373.1	397.7	442.8
57.5°	727.7	625.2	520.7	420.2	348.5	305.4	284.9	276.7	291.1	307.5	360.8
60°	588.3	506.3	418.2	330.0	270.6	231.6	215.2	213.2	217.3	237.8	274.7
62.5°	461.2	393.6	323.9	252.1	202.9	186.5	166.0	164.0	168.1	180.4	209.1
65°	332.1	289.1	235.7	184.5	145.6	123.0	114.8	116.9	120.9	129.2	155.8
67.5°	231.6	200.9	164.0	129.2	100.5	90.2	82.0	80.0	82.0	96.4	110.7
70°	155.8	137.3	110.7	98.4	69.7	55.3	57.4	51.3	59.4	59.4	71.7
72.5°	102.5	90.2	73.8	57.4	49.2	39.0	39.0	36.9	41.0	43.0	53.3
75°	53.3	41.0	41.0	28.7	20.5	10.2	18.5	16.4	14.3	16.4	20.5
77.5°	36.9	30.7	28.7	22.6	20.5	16.4	16.4	16.4	16.4	18.5	20.5
80°	22.6	22.6	16.4	14.3	12.3	10.2	12.3	12.3	12.3	12.3	14.3
82.5°	14.3	12.3	12.3	10.2	10.2	8.2	8.2	8.2	8.2	8.2	12.3
85°	12.3	8.2	8.2	6.2	8.2	14.3	6.2	8.2	8.2	8.2	6.2
87.5°	4.1	6.2	6.2	6.2	4.1	2.1	4.1	6.2	6.2	10.2	8.2
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: P249147

CATALOG NUMBER: LSR8B80D010 EC8B80935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9	3818.9
2.5°	3825.1	3827.1	3827.1	3825.1	3825.1	3821.0	3829.1	3823.0	3825.1	3833.3	3827.1
5°	3829.1	3831.2	3831.2	3829.1	3829.1	3829.1	3831.2	3831.2	3829.1	3827.1	3831.2
7.5°	3837.4	3835.3	3835.3	3831.2	3831.2	3827.1	3831.2	3825.1	3829.1	3825.1	3831.2
10°	3827.1	3829.1	3827.1	3825.1	3825.1	3823.0	3823.0	3816.9	3818.9	3812.7	3816.9
12.5°	3821.0	3818.9	3818.9	3814.8	3810.7	3806.6	3804.6	3798.4	3798.4	3784.1	3790.2
15°	3804.6	3806.6	3800.5	3792.3	3788.2	3777.9	3773.8	3765.6	3757.4	3747.2	3749.2
17.5°	3790.2	3784.1	3775.9	3767.7	3751.3	3743.1	3734.8	3722.6	3718.4	3706.2	3702.1
20°	3747.2	3743.1	3732.8	3718.4	3708.2	3689.8	3681.6	3669.3	3659.0	3646.7	3640.6
22.5°	3691.8	3687.7	3675.4	3661.1	3644.7	3636.5	3628.3	3605.7	3595.5	3583.2	3581.1
25°	3622.1	3616.0	3603.7	3587.3	3579.1	3556.5	3548.3	3531.9	3527.8	3515.5	3513.5
27.5°	3515.5	3507.3	3493.0	3472.5	3458.1	3443.8	3435.6	3423.3	3419.2	3406.9	3404.9
30°	3355.7	3345.4	3316.7	3308.5	3283.9	3269.5	3269.5	3253.1	3255.2	3247.0	3247.0
32.5°	3103.5	3087.1	3064.5	3048.1	3031.7	3023.6	3023.6	3017.4	3021.5	3021.5	3025.6
35°	2769.4	2746.9	2734.5	2724.3	2724.3	2732.5	2757.1	2763.3	2775.5	2785.8	2794.0
37.5°	2340.9	2338.9	2353.3	2365.6	2396.3	2431.2	2474.2	2511.1	2545.9	2570.6	2595.1
40°	1877.7	1928.9	1969.9	2027.3	2074.4	2142.1	2220.0	2283.6	2343.0	2386.1	2431.2
42.5°	1465.6	1531.2	1617.4	1701.4	1785.4	1877.7	1980.2	2068.3	2146.2	2205.7	2252.8
45°	1141.8	1232.0	1336.5	1443.1	1551.8	1666.6	1773.2	1863.3	1945.3	2006.8	2054.0
47.5°	920.4	1018.8	1137.7	1254.5	1377.5	1498.4	1617.4	1695.3	1762.9	1812.1	1855.2
50°	760.5	865.1	990.1	1123.3	1246.3	1367.3	1469.8	1545.6	1601.0	1644.0	1670.6
52.5°	635.4	746.1	879.4	1012.6	1135.6	1246.3	1338.6	1396.0	1441.1	1471.8	1496.4
55°	524.7	631.4	756.4	881.5	1002.4	1106.9	1182.8	1225.8	1260.6	1279.1	1293.5
57.5°	428.4	526.8	641.6	756.4	860.9	947.1	1006.5	1049.5	1065.9	1080.3	1078.2
60°	336.2	428.4	533.0	631.4	721.6	791.2	834.3	858.9	871.2	877.3	873.2
62.5°	264.4	348.5	428.4	514.5	580.1	639.6	680.6	680.6	686.7	688.8	694.9
65°	196.8	260.3	330.0	393.6	446.9	485.8	508.4	514.5	522.7	520.7	516.6
67.5°	145.6	192.7	243.9	291.1	328.0	352.6	369.0	383.3	381.3	377.2	375.1
70°	100.5	131.2	176.3	205.0	231.6	256.3	260.3	262.4	264.4	266.5	262.4
72.5°	69.7	92.2	116.9	141.4	157.8	168.1	178.4	180.4	180.4	180.4	178.4
75°	34.9	47.1	69.7	80.0	94.3	98.4	106.6	106.6	112.8	104.5	102.5
77.5°	30.7	36.9	49.2	57.4	63.5	69.7	71.7	77.9	75.8	71.7	73.8
80°	18.5	22.6	30.7	34.9	43.0	45.1	47.1	49.2	47.1	49.2	49.2
82.5°	14.3	16.4	20.5	20.5	26.6	26.6	28.7	28.7	30.7	30.7	30.7
85°	8.2	14.3	12.3	24.6	16.4	16.4	20.5	24.6	20.5	20.5	24.6
87.5°	8.2	8.2	6.2	8.2	8.2	8.2	10.2	12.3	12.3	14.3	12.3
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: P249147

CATALOG NUMBER: LSR8B80D010 EC8B80935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3818.9	3818.9	3818.9	3818.9
2.5°	3825.1	3829.1	3823.0	3821.0
5°	3831.2	3831.2	3827.1	3827.1
7.5°	3831.2	3831.2	3825.1	3821.0
10°	3814.8	3814.8	3808.7	3804.6
12.5°	3784.1	3784.1	3782.0	3775.9
15°	3745.1	3745.1	3736.9	3730.8
17.5°	3691.8	3695.9	3685.7	3685.7
20°	3634.4	3632.4	3624.2	3620.1
22.5°	3575.0	3570.9	3568.8	3556.5
25°	3511.4	3507.3	3501.2	3495.0
27.5°	3402.8	3400.8	3394.6	3386.4
30°	3236.7	3234.7	3226.5	3226.5
32.5°	3021.5	3019.5	3011.3	3013.3
35°	2798.1	2806.3	2802.2	2794.0
37.5°	2611.5	2617.7	2621.8	2617.7
40°	2455.7	2474.2	2476.3	2480.4
42.5°	2289.7	2314.3	2322.5	2326.6
45°	2090.8	2113.4	2131.9	2127.8
47.5°	1887.9	1904.3	1920.7	1908.4
50°	1693.2	1703.4	1709.6	1709.6
52.5°	1508.7	1508.7	1506.7	1508.7
55°	1297.6	1297.6	1289.4	1293.5
57.5°	1076.2	1080.3	1074.1	1063.9
60°	871.2	860.9	856.8	850.7
62.5°	678.5	678.5	664.2	682.6
65°	508.4	502.2	496.1	494.0
67.5°	369.0	366.9	360.8	358.7
70°	260.3	252.1	250.1	246.0
72.5°	174.2	174.2	170.1	170.1
75°	106.6	96.4	94.3	96.4
77.5°	73.8	71.7	71.7	69.7
80°	49.2	47.1	51.3	45.1
82.5°	30.7	32.8	30.7	32.8
85°	20.5	24.6	22.6	22.6
87.5°	12.3	12.3	12.3	12.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)