

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: P249255

Luminaire Tested: **LSR8B80D010 EC8B80935 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249255
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 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7201.0 lumens
Efficiency: N/A
Efficacy: 96.8 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

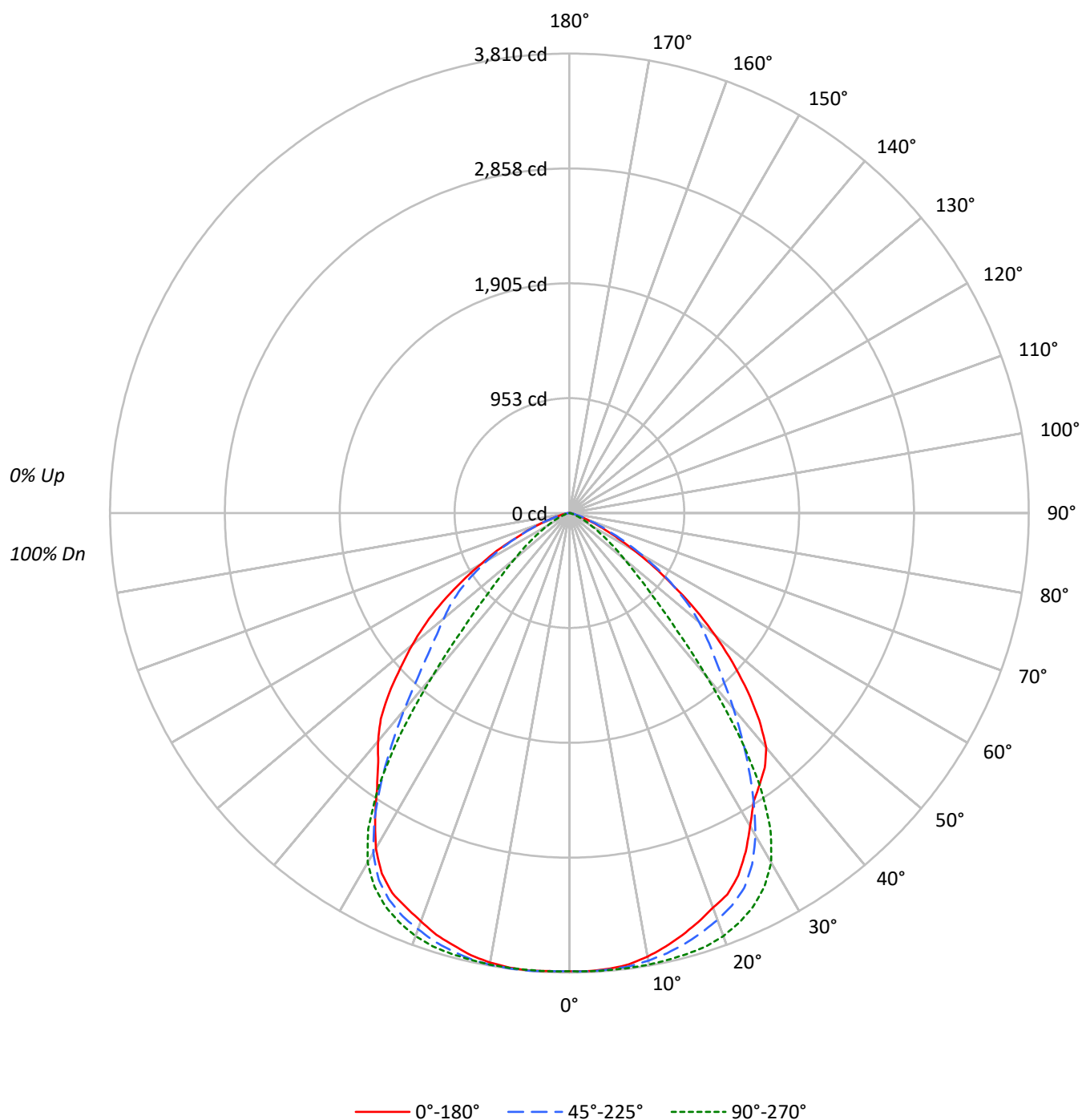
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249255

CATALOG NUMBER: LSR8B80D010 EC8B80935 8LBDW0WMH

Luminous Intensity Polar Plot





TEST NUMBER: P249255

CATALOG NUMBER: LSR8B80D010 EC8B80935 8LBDW0WMH

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	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°	117159	117159	117159
5°	117418	117734	117861
10°	116922	119029	118519
15°	115626	120772	118493
20°	114240	122470	118188
25°	112756	122609	118309
30°	106674	119161	114298
35°	103488	103563	104640
40°	102205	71258	99335
45°	91069	42776	92316
50°	75725	28472	81597
55°	56794	19628	69180
60°	38490	13081	52200
65°	23217	8486	35862
70°	12875	4598	22062
75°	5838	1942	11426
80°	5061	2166	7973
85°	5767	2866	7961



TEST NUMBER: P249255

CATALOG NUMBER: LSR8B80D010 EC8B80935 8LBDW0WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	362.6	5.0
10°-20°	1053.0	14.6
20°-30°	1598.3	22.2
30°-40°	1678.7	23.3
40°-50°	1258.6	17.5
50°-60°	807.5	11.2
60°-70°	345.5	4.8
70°-80°	81.6	1.1
80°-90°	15.2	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°	3013.9	41.9
0°-40°	4692.6	65.2
0°-60°	6758.8	93.9
0°-90°	7201.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7201.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3799	3799	3799	3799	3799	
5°	3793	3799	3804	3810	3808	360
15°	3622	3697	3783	3759	3712	1022
25°	3314	3430	3604	3538	3477	1514
35°	2749	2596	2751	2718	2780	1725
45°	2088	1707	981	1658	2117	1599
55°	1056	1056	365	1101	1287	958
65°	318	375	116	483	492	340
75°	49	57	16	98	96	71
85°	16	10	8	16	22	17
90°	0	0	0	0	0	



TEST NUMBER: P249255

CATALOG NUMBER: LSR8B80D010 EC8B80935 8LBDW0WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4
2.5°	3801.4	3805.5	3803.5	3803.5	3801.4	3803.5	3803.5	3807.6	3807.6	3803.5	3801.4
5°	3793.3	3797.3	3797.3	3793.3	3793.3	3803.5	3797.3	3801.4	3801.4	3799.4	3799.4
7.5°	3774.9	3774.9	3783.1	3777.0	3777.0	3783.1	3781.0	3785.1	3789.2	3791.3	3791.3
10°	3734.1	3738.2	3740.3	3740.3	3742.3	3748.4	3752.5	3760.7	3764.7	3768.8	3770.8
12.5°	3683.2	3689.3	3691.3	3689.3	3695.4	3703.5	3713.8	3723.9	3730.1	3738.2	3744.3
15°	3621.9	3621.9	3626.0	3632.2	3636.3	3648.5	3658.7	3670.9	3687.2	3697.4	3707.6
17.5°	3554.7	3558.8	3564.9	3564.9	3573.0	3593.4	3599.5	3617.9	3636.3	3646.4	3666.9
20°	3481.3	3485.3	3491.5	3495.5	3505.7	3522.0	3534.3	3550.6	3571.0	3589.4	3609.7
22.5°	3424.1	3416.0	3420.0	3424.1	3434.4	3448.6	3462.9	3483.3	3503.7	3522.0	3542.4
25°	3314.0	3316.1	3322.2	3326.2	3338.5	3350.7	3367.0	3391.5	3409.9	3430.3	3452.7
27.5°	3165.2	3167.2	3177.4	3177.4	3187.6	3208.0	3218.1	3238.6	3263.1	3283.4	3310.0
30°	2995.9	2999.9	2999.9	3008.1	3014.2	3024.4	3034.6	3055.0	3067.2	3085.6	3122.3
32.5°	2840.9	2844.9	2842.9	2840.9	2834.8	2832.7	2830.7	2834.8	2838.9	2844.9	2859.2
35°	2749.1	2738.9	2730.8	2716.5	2700.2	2679.8	2661.4	2637.0	2614.5	2596.1	2575.8
37.5°	2661.4	2659.4	2647.1	2626.7	2594.1	2557.4	2514.6	2461.6	2408.5	2351.4	2296.4
40°	2539.0	2532.9	2522.7	2494.2	2457.5	2412.6	2355.5	2290.2	2204.6	2116.9	2027.2
42.5°	2331.0	2333.1	2320.8	2298.4	2263.7	2220.9	2161.7	2090.4	1998.6	1894.6	1778.4
45°	2088.3	2088.3	2084.3	2065.9	2041.4	2006.8	1961.9	1902.8	1813.0	1707.0	1582.6
47.5°	1835.4	1837.5	1831.4	1827.3	1817.1	1794.7	1762.0	1717.2	1654.0	1552.0	1427.6
50°	1578.5	1578.5	1588.7	1586.6	1586.6	1578.5	1564.2	1537.7	1482.6	1401.1	1284.8
52.5°	1321.5	1325.6	1331.7	1339.9	1350.1	1366.4	1350.1	1337.8	1303.2	1239.9	1140.0
55°	1056.4	1060.5	1070.7	1084.9	1097.2	1113.5	1117.6	1117.6	1099.2	1056.4	980.9
57.5°	830.0	823.9	832.1	844.3	860.6	877.0	889.2	903.5	901.4	872.9	811.7
60°	624.1	626.1	632.2	644.5	656.7	671.0	687.3	699.5	705.6	691.4	652.6
62.5°	454.8	454.8	462.9	475.2	481.3	501.7	511.9	518.0	524.1	522.1	497.6
65°	318.2	322.2	326.3	332.4	338.5	350.8	356.9	369.1	373.2	375.3	356.9
67.5°	224.4	218.2	222.3	226.4	232.5	240.7	252.9	252.9	259.0	259.0	246.8
70°	142.8	142.8	144.8	150.9	155.0	157.0	161.1	165.2	171.3	169.3	169.3
72.5°	95.9	93.8	95.9	97.9	100.0	106.0	106.0	108.1	112.2	114.2	106.0
75°	49.0	51.0	55.0	53.0	59.1	55.0	57.1	63.2	61.2	57.1	57.1
77.5°	40.8	40.8	40.8	38.8	42.8	42.8	40.8	44.9	42.8	42.8	40.8
80°	28.5	30.6	28.5	26.5	28.5	26.5	26.5	26.5	26.5	26.5	24.5
82.5°	22.5	18.4	20.4	18.4	20.4	20.4	18.4	16.3	16.3	18.4	16.3
85°	16.3	12.2	14.3	14.3	12.2	12.2	12.2	12.2	12.2	10.2	10.2
87.5°	10.2	6.1	6.1	6.1	8.1	8.1	8.1	6.1	8.1	8.1	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: P249255

CATALOG NUMBER: LSR8B80D010 EC8B80935 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4
2.5°	3805.5	3803.5	3807.6	3805.5	3805.5	3803.5	3805.5	3803.5	3807.6	3799.4	3801.4
5°	3805.5	3801.4	3803.5	3805.5	3807.6	3803.5	3803.5	3803.5	3807.6	3803.5	3805.5
7.5°	3797.3	3795.3	3801.4	3805.5	3803.5	3801.4	3805.5	3803.5	3807.6	3805.5	3809.6
10°	3781.0	3783.1	3787.2	3793.3	3795.3	3797.3	3801.4	3801.4	3807.6	3799.4	3803.5
12.5°	3756.6	3764.7	3774.9	3779.0	3787.2	3787.2	3791.3	3793.3	3797.3	3795.3	3801.4
15°	3726.0	3736.2	3748.4	3758.6	3768.8	3774.9	3781.0	3783.1	3789.2	3783.1	3785.1
17.5°	3689.3	3701.5	3719.8	3732.1	3748.4	3754.5	3762.7	3766.8	3772.9	3768.8	3770.8
20°	3638.3	3652.6	3672.9	3691.3	3701.5	3715.8	3726.0	3732.1	3736.2	3732.1	3734.1
22.5°	3566.9	3587.3	3613.8	3628.1	3648.5	3660.7	3662.8	3677.0	3687.2	3677.0	3681.1
25°	3483.3	3503.7	3524.1	3554.7	3573.0	3587.3	3601.6	3603.6	3613.8	3611.8	3609.7
27.5°	3344.6	3371.1	3405.8	3430.3	3454.7	3477.2	3493.5	3497.5	3507.8	3503.7	3505.7
30°	3154.9	3183.5	3216.1	3254.9	3289.6	3312.0	3332.4	3346.6	3356.8	3350.7	3348.7
32.5°	2885.8	2914.3	2949.0	2987.7	3028.5	3061.1	3085.6	3104.0	3116.2	3112.1	3101.9
35°	2577.8	2586.0	2608.4	2639.0	2673.6	2708.3	2730.8	2751.1	2765.4	2769.5	2769.5
37.5°	2261.7	2235.2	2218.9	2218.9	2239.2	2253.5	2273.9	2286.2	2308.6	2316.7	2322.9
40°	1955.8	1894.6	1837.5	1794.7	1766.1	1764.1	1764.1	1770.2	1790.6	1817.1	1841.6
42.5°	1682.5	1584.6	1496.9	1417.4	1360.3	1327.7	1313.4	1315.4	1331.7	1356.2	1397.0
45°	1464.3	1341.9	1231.8	1135.9	1058.4	1007.4	983.0	980.9	993.2	1021.7	1066.6
47.5°	1295.0	1164.5	1040.1	930.0	846.4	791.3	762.7	754.6	762.7	789.2	842.3
50°	1154.3	1019.7	891.2	777.0	687.3	630.2	603.6	593.5	603.6	626.1	679.1
52.5°	1023.8	885.1	764.8	654.6	558.8	509.8	481.3	475.2	481.3	507.8	550.7
55°	872.9	754.6	636.3	526.2	442.6	393.6	371.2	365.1	371.2	395.7	440.5
57.5°	724.0	622.0	518.0	418.1	346.7	303.8	283.5	275.3	289.6	305.9	358.9
60°	585.3	503.7	416.0	328.3	269.2	230.4	214.1	212.1	216.2	236.6	273.3
62.5°	458.9	391.6	322.2	250.9	201.9	185.6	165.2	163.2	167.2	179.4	208.0
65°	330.4	287.6	234.5	183.5	144.8	122.4	114.2	116.3	120.3	128.5	155.0
67.5°	230.4	199.9	163.2	128.5	100.0	89.7	81.6	79.5	81.6	95.9	110.1
70°	155.0	136.6	110.1	97.9	69.4	55.0	57.1	51.0	59.1	59.1	71.4
72.5°	101.9	89.7	73.4	57.1	49.0	38.8	38.8	36.7	40.8	42.8	53.0
75°	53.0	40.8	40.8	28.5	20.4	10.2	18.4	16.3	14.3	16.3	20.4
77.5°	36.7	30.6	28.5	22.5	20.4	16.3	16.3	16.3	16.3	18.4	20.4
80°	22.5	22.5	16.3	14.3	12.2	10.2	12.2	12.2	12.2	12.2	14.3
82.5°	14.3	12.2	12.2	10.2	10.2	8.1	8.1	8.1	8.1	8.1	12.2
85°	12.2	8.1	8.1	6.1	8.1	14.3	6.1	8.1	8.1	8.1	6.1
87.5°	4.1	6.1	6.1	6.1	4.1	2.0	4.1	6.1	6.1	10.2	8.1
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: P249255

CATALOG NUMBER: LSR8B80D010 EC8B80935 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4	3799.4
2.5°	3805.5	3807.6	3807.6	3805.5	3805.5	3801.4	3809.6	3803.5	3805.5	3813.7	3807.6
5°	3809.6	3811.6	3811.6	3809.6	3809.6	3809.6	3811.6	3811.6	3809.6	3807.6	3811.6
7.5°	3817.8	3815.7	3815.7	3811.6	3811.6	3807.6	3811.6	3805.5	3809.6	3805.5	3811.6
10°	3807.6	3809.6	3807.6	3805.5	3805.5	3803.5	3803.5	3797.3	3799.4	3793.3	3797.3
12.5°	3801.4	3799.4	3799.4	3795.3	3791.3	3787.2	3785.1	3779.0	3779.0	3764.7	3770.8
15°	3785.1	3787.2	3781.0	3772.9	3768.8	3758.6	3754.5	3746.3	3738.2	3728.0	3730.1
17.5°	3770.8	3764.7	3756.6	3748.4	3732.1	3723.9	3715.8	3703.5	3699.4	3687.2	3683.2
20°	3728.0	3723.9	3713.8	3699.4	3689.3	3670.9	3662.8	3650.5	3640.3	3628.1	3621.9
22.5°	3672.9	3668.8	3656.6	3642.4	3626.0	3617.9	3609.7	3587.3	3577.1	3564.9	3562.8
25°	3603.6	3597.5	3585.3	3568.9	3560.8	3538.4	3530.2	3513.9	3509.8	3497.5	3495.5
27.5°	3497.5	3489.4	3475.1	3454.7	3440.5	3426.2	3418.0	3405.8	3401.7	3389.5	3387.5
30°	3338.5	3328.3	3299.7	3291.6	3267.1	3252.8	3252.8	3236.5	3238.6	3230.4	3230.4
32.5°	3087.7	3071.3	3048.9	3032.6	3016.2	3008.1	3008.1	3002.0	3006.1	3006.1	3010.2
35°	2755.2	2732.8	2720.5	2710.4	2710.4	2718.5	2743.0	2749.1	2761.4	2771.5	2779.7
37.5°	2329.0	2327.0	2341.2	2353.5	2384.1	2418.7	2461.6	2498.3	2532.9	2557.4	2581.9
40°	1868.1	1919.1	1959.9	2017.0	2063.8	2131.2	2208.7	2271.9	2331.0	2373.9	2418.7
42.5°	1458.1	1523.4	1609.1	1692.7	1776.3	1868.1	1970.1	2057.8	2135.3	2194.4	2241.3
45°	1135.9	1225.7	1329.7	1435.7	1543.8	1658.0	1764.1	1853.8	1935.4	1996.6	2043.5
47.5°	915.7	1013.6	1131.8	1248.1	1370.5	1490.8	1609.1	1686.6	1753.9	1802.8	1845.7
50°	756.6	860.6	985.0	1117.6	1239.9	1360.3	1462.2	1537.7	1592.8	1635.6	1662.1
52.5°	632.2	742.3	874.9	1007.4	1129.8	1239.9	1331.7	1388.8	1433.7	1464.3	1488.7
55°	522.1	628.1	752.6	877.0	997.3	1101.3	1176.7	1219.6	1254.2	1272.6	1286.8
57.5°	426.3	524.1	638.3	752.6	856.5	942.2	1001.4	1044.2	1060.5	1074.8	1072.7
60°	334.5	426.3	530.2	628.1	717.9	787.2	830.0	854.5	866.7	872.9	868.8
62.5°	263.1	346.7	426.3	511.9	577.2	636.3	677.1	677.1	683.2	685.2	691.4
65°	195.8	259.0	328.3	391.6	444.6	483.3	505.8	511.9	520.1	518.0	513.9
67.5°	144.8	191.7	242.7	289.6	326.3	350.8	367.1	381.4	379.3	375.3	373.2
70°	100.0	130.5	175.4	203.9	230.4	254.9	259.0	261.0	263.1	265.1	261.0
72.5°	69.4	91.8	116.3	140.7	157.0	167.2	177.4	179.4	179.4	179.4	177.4
75°	34.7	46.9	69.4	79.5	93.8	97.9	106.0	106.0	112.2	104.0	101.9
77.5°	30.6	36.7	49.0	57.1	63.2	69.4	71.4	77.5	75.5	71.4	73.4
80°	18.4	22.5	30.6	34.7	42.8	44.9	46.9	49.0	46.9	49.0	49.0
82.5°	14.3	16.3	20.4	20.4	26.5	26.5	28.5	28.5	30.6	30.6	30.6
85°	8.1	14.3	12.2	24.5	16.3	16.3	20.4	24.5	20.4	20.4	24.5
87.5°	8.1	8.1	6.1	8.1	8.1	8.1	10.2	12.2	12.2	14.3	12.2
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: P249255

CATALOG NUMBER: LSR8B80D010 EC8B80935 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3799.4	3799.4	3799.4	3799.4
2.5°	3805.5	3809.6	3803.5	3801.4
5°	3811.6	3811.6	3807.6	3807.6
7.5°	3811.6	3811.6	3805.5	3801.4
10°	3795.3	3795.3	3789.2	3785.1
12.5°	3764.7	3764.7	3762.7	3756.6
15°	3726.0	3726.0	3717.8	3711.7
17.5°	3672.9	3677.0	3666.9	3666.9
20°	3615.9	3613.8	3605.7	3601.6
22.5°	3556.7	3552.6	3550.6	3538.4
25°	3493.5	3489.4	3483.3	3477.2
27.5°	3385.4	3383.4	3377.2	3369.1
30°	3220.2	3218.1	3210.0	3210.0
32.5°	3006.1	3004.0	2995.9	2997.9
35°	2783.8	2791.9	2787.9	2779.7
37.5°	2598.2	2604.3	2608.4	2604.3
40°	2443.2	2461.6	2463.6	2467.7
42.5°	2278.0	2302.5	2310.7	2314.7
45°	2080.2	2102.6	2121.0	2116.9
47.5°	1878.3	1894.6	1910.9	1898.7
50°	1684.5	1694.7	1700.9	1700.9
52.5°	1501.0	1501.0	1499.0	1501.0
55°	1290.9	1290.9	1282.8	1286.8
57.5°	1070.7	1074.8	1068.6	1058.4
60°	866.7	856.5	852.5	846.4
62.5°	675.1	675.1	660.8	679.1
65°	505.8	499.7	493.5	491.5
67.5°	367.1	365.1	358.9	356.9
70°	259.0	250.9	248.8	244.7
72.5°	173.4	173.4	169.3	169.3
75°	106.0	95.9	93.8	95.9
77.5°	73.4	71.4	71.4	69.4
80°	49.0	46.9	51.0	44.9
82.5°	30.6	32.6	30.6	32.6
85°	20.4	24.5	22.5	22.5
87.5°	12.2	12.2	12.2	12.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)