

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: P249588

Luminaire Tested: **LSR8B80D010 EC8B80940 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249588
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 EC8B80940 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7475.0 lumens
Efficiency: N/A
Efficacy: 100.5 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

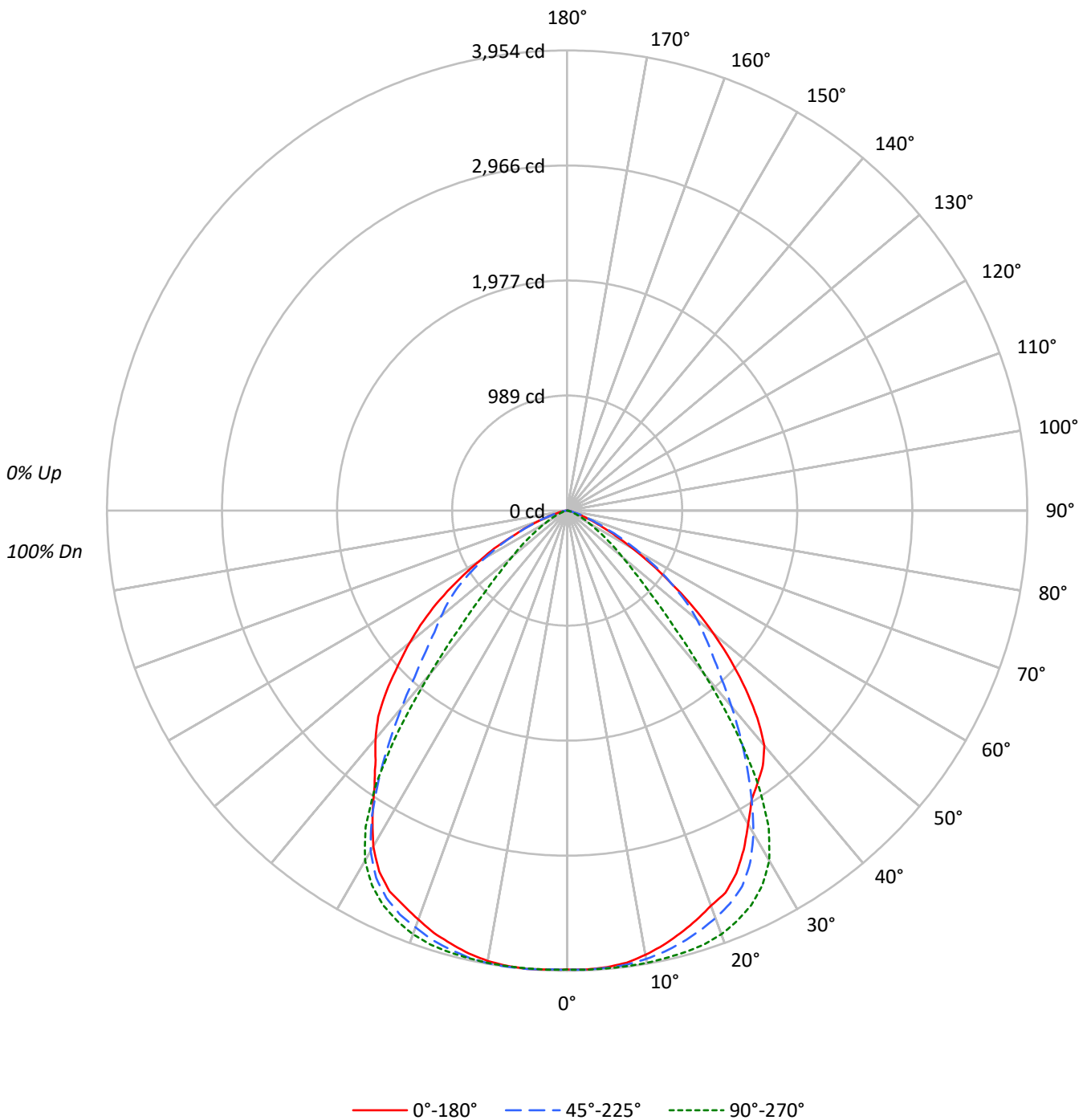
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	121618	121618	121618
5°	121885	122213	122346
10°	121372	123560	123028
15°	120028	125366	123000
20°	118585	127130	122683
25°	117046	127274	122810
30°	110733	123698	118649
35°	107425	107504	108622
40°	106097	73967	103115
45°	94536	44407	95827
50°	78608	29556	84701
55°	58955	20376	71815
60°	39952	13574	54186
65°	24100	8807	37227
70°	13362	4769	22900
75°	6052	2014	11855
80°	5256	2255	8275
85°	5979	2972	8244



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	376.4	5.0
10°-20°	1093.1	14.6
20°-30°	1659.1	22.2
30°-40°	1742.6	23.3
40°-50°	1306.5	17.5
50°-60°	838.3	11.2
60°-70°	358.6	4.8
70°-80°	84.7	1.1
80°-90°	15.8	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°	3128.6	41.9
0°-40°	4871.2	65.2
0°-60°	7015.9	93.9
0°-90°	7475.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7475.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3944	3944	3944	3944	3944	
5°	3938	3944	3948	3954	3952	374
15°	3760	3838	3927	3902	3853	1060
25°	3440	3561	3741	3673	3610	1572
35°	2854	2695	2856	2822	2886	1791
45°	2168	1772	1018	1721	2197	1660
55°	1097	1097	379	1143	1336	995
65°	330	390	121	502	510	353
75°	51	59	17	102	100	74
85°	17	11	8	17	23	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°	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0
2.5°	3946.1	3950.3	3948.2	3948.2	3946.1	3948.2	3948.2	3952.5	3952.5	3948.2	3946.1
5°	3937.6	3941.8	3941.8	3937.6	3937.6	3948.2	3941.8	3946.1	3946.1	3944.0	3944.0
7.5°	3918.6	3918.6	3927.0	3920.7	3920.7	3927.0	3924.9	3929.1	3933.4	3935.5	3935.5
10°	3876.2	3880.5	3882.6	3882.6	3884.7	3891.0	3895.3	3903.8	3908.0	3912.2	3914.3
12.5°	3823.3	3829.6	3831.8	3829.6	3836.0	3844.5	3855.1	3865.6	3872.0	3880.5	3886.8
15°	3759.8	3759.8	3764.0	3770.4	3774.6	3787.3	3797.9	3810.6	3827.5	3838.1	3848.7
17.5°	3689.9	3694.2	3700.5	3700.5	3709.0	3730.1	3736.5	3755.6	3774.6	3785.2	3806.4
20°	3613.7	3617.9	3624.3	3628.5	3639.1	3656.1	3668.7	3685.7	3706.9	3725.9	3747.1
22.5°	3554.4	3546.0	3550.2	3554.4	3565.0	3579.9	3594.7	3615.8	3637.0	3656.1	3677.2
25°	3440.1	3442.2	3448.6	3452.8	3465.5	3478.2	3495.2	3520.5	3539.6	3560.8	3584.1
27.5°	3285.6	3287.7	3298.3	3298.3	3308.8	3330.0	3340.6	3361.8	3387.2	3408.4	3435.9
30°	3109.9	3114.1	3114.1	3122.6	3128.9	3139.5	3150.1	3171.3	3184.0	3203.0	3241.1
32.5°	2949.0	2953.2	2951.1	2949.0	2942.6	2940.5	2938.4	2942.6	2946.9	2953.2	2968.0
35°	2853.7	2843.1	2834.7	2819.9	2802.9	2781.7	2762.7	2737.3	2714.0	2694.9	2673.8
37.5°	2762.7	2760.5	2747.9	2726.7	2692.8	2654.7	2610.3	2555.2	2500.2	2440.9	2383.8
40°	2635.7	2629.3	2618.7	2589.1	2551.0	2504.4	2445.1	2377.4	2288.4	2197.4	2104.3
42.5°	2419.7	2421.8	2409.1	2385.8	2349.9	2305.4	2244.0	2169.9	2074.7	1966.7	1846.0
45°	2167.8	2167.8	2163.6	2144.5	2119.1	2083.1	2036.5	1975.2	1882.0	1771.9	1642.8
47.5°	1905.3	1907.4	1901.0	1896.8	1886.2	1863.0	1829.1	1782.5	1716.9	1611.0	1481.9
50°	1638.6	1638.6	1649.1	1647.0	1647.0	1638.6	1623.8	1596.2	1539.1	1454.4	1333.7
52.5°	1371.8	1376.1	1382.4	1390.9	1401.4	1418.4	1401.4	1388.7	1352.7	1287.1	1183.4
55°	1096.6	1100.8	1111.4	1126.2	1139.0	1155.9	1160.1	1160.1	1141.0	1096.6	1018.3
57.5°	861.6	855.3	863.8	876.4	893.4	910.3	923.0	937.8	935.7	906.1	842.6
60°	647.8	649.9	656.2	669.0	681.7	696.5	713.4	726.1	732.5	717.7	677.4
62.5°	472.1	472.1	480.5	493.2	499.6	520.8	531.4	537.7	544.1	541.9	516.5
65°	330.3	334.5	338.7	345.1	351.4	364.1	370.5	383.2	387.4	389.5	370.5
67.5°	232.9	226.5	230.8	235.0	241.3	249.8	262.5	262.5	268.8	268.8	256.1
70°	148.2	148.2	150.3	156.6	160.9	163.0	167.3	171.5	177.8	175.7	175.7
72.5°	99.5	97.4	99.5	101.6	103.8	110.1	110.1	112.2	116.4	118.6	110.1
75°	50.8	52.9	57.1	55.1	61.4	57.1	59.3	65.6	63.5	59.3	59.3
77.5°	42.3	42.3	42.3	40.2	44.4	44.4	42.3	46.6	44.4	44.4	42.3
80°	29.6	31.8	29.6	27.5	29.6	27.5	27.5	27.5	27.5	27.5	25.4
82.5°	23.3	19.1	21.2	19.1	21.2	21.2	19.1	16.9	16.9	19.1	16.9
85°	16.9	12.7	14.8	14.8	12.7	12.7	12.7	12.7	12.7	10.6	10.6
87.5°	10.6	6.4	6.4	6.4	8.4	8.4	8.4	6.4	8.4	8.4	4.2
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°	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0
2.5°	3950.3	3948.2	3952.5	3950.3	3950.3	3948.2	3950.3	3948.2	3952.5	3944.0	3946.1
5°	3950.3	3946.1	3948.2	3950.3	3952.5	3948.2	3948.2	3948.2	3952.5	3948.2	3950.3
7.5°	3941.8	3939.7	3946.1	3950.3	3948.2	3946.1	3950.3	3948.2	3952.5	3950.3	3954.5
10°	3924.9	3927.0	3931.3	3937.6	3939.7	3941.8	3946.1	3946.1	3952.5	3944.0	3948.2
12.5°	3899.5	3908.0	3918.6	3922.8	3931.3	3931.3	3935.5	3937.6	3941.8	3939.7	3946.1
15°	3867.8	3878.3	3891.0	3901.6	3912.2	3918.6	3924.9	3927.0	3933.4	3927.0	3929.1
17.5°	3829.6	3842.3	3861.4	3874.1	3891.0	3897.4	3905.8	3910.1	3916.5	3912.2	3914.3
20°	3776.7	3791.6	3812.7	3831.8	3842.3	3857.1	3867.8	3874.1	3878.3	3874.1	3876.2
22.5°	3702.6	3723.8	3751.3	3766.1	3787.3	3800.0	3802.1	3816.9	3827.5	3816.9	3821.2
25°	3615.8	3637.0	3658.2	3689.9	3709.0	3723.8	3738.6	3740.7	3751.3	3749.2	3747.1
27.5°	3471.9	3499.4	3535.4	3560.8	3586.2	3609.5	3626.4	3630.6	3641.2	3637.0	3639.1
30°	3275.0	3304.6	3338.5	3378.7	3414.7	3438.0	3459.2	3474.0	3484.5	3478.2	3476.1
32.5°	2995.6	3025.2	3061.2	3101.4	3143.8	3177.6	3203.0	3222.1	3234.8	3230.5	3220.0
35°	2675.9	2684.4	2707.7	2739.4	2775.4	2811.4	2834.7	2855.8	2870.6	2874.9	2874.9
37.5°	2347.8	2320.3	2303.3	2303.3	2324.4	2339.3	2360.4	2373.1	2396.4	2404.9	2411.3
40°	2030.2	1966.7	1907.4	1863.0	1833.3	1831.2	1831.2	1837.5	1858.7	1886.2	1911.7
42.5°	1746.5	1644.9	1553.9	1471.3	1412.1	1378.2	1363.4	1365.5	1382.4	1407.8	1450.1
45°	1520.0	1393.0	1278.7	1179.2	1098.7	1045.8	1020.4	1018.3	1031.0	1060.6	1107.2
47.5°	1344.3	1208.8	1079.7	965.3	878.6	821.4	791.8	783.3	791.8	819.3	874.3
50°	1198.2	1058.5	925.1	806.6	713.4	654.2	626.6	616.1	626.6	649.9	704.9
52.5°	1062.7	918.8	793.9	679.6	580.1	529.2	499.6	493.2	499.6	527.1	571.6
55°	906.1	783.3	660.5	546.2	459.4	408.6	385.3	379.0	385.3	410.7	457.3
57.5°	751.6	645.7	537.7	434.0	359.9	315.4	294.3	285.8	300.6	317.5	372.6
60°	607.6	522.9	431.9	340.8	279.5	239.2	222.3	220.1	224.4	245.6	283.7
62.5°	476.3	406.5	334.5	260.4	209.6	192.6	171.5	169.4	173.6	186.3	216.0
65°	343.0	298.5	243.5	190.5	150.3	127.0	118.6	120.7	124.9	133.4	160.9
67.5°	239.2	207.5	169.4	133.4	103.8	93.1	84.7	82.6	84.7	99.5	114.3
70°	160.9	141.8	114.3	101.6	72.0	57.1	59.3	52.9	61.4	61.4	74.1
72.5°	105.8	93.1	76.2	59.3	50.8	40.2	40.2	38.1	42.3	44.4	55.1
75°	55.1	42.3	42.3	29.6	21.2	10.6	19.1	16.9	14.8	16.9	21.2
77.5°	38.1	31.8	29.6	23.3	21.2	16.9	16.9	16.9	16.9	19.1	21.2
80°	23.3	23.3	16.9	14.8	12.7	10.6	12.7	12.7	12.7	12.7	14.8
82.5°	14.8	12.7	12.7	10.6	10.6	8.4	8.4	8.4	8.4	8.4	12.7
85°	12.7	8.4	8.4	6.4	8.4	14.8	6.4	8.4	8.4	8.4	6.4
87.5°	4.2	6.4	6.4	6.4	4.2	2.1	4.2	6.4	6.4	10.6	8.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0	3944.0
2.5°	3950.3	3952.5	3952.5	3950.3	3950.3	3946.1	3954.5	3948.2	3950.3	3958.8	3952.5
5°	3954.5	3956.6	3956.6	3954.5	3954.5	3954.5	3956.6	3956.6	3954.5	3952.5	3956.6
7.5°	3963.0	3960.9	3960.9	3956.6	3956.6	3952.5	3956.6	3950.3	3954.5	3950.3	3956.6
10°	3952.5	3954.5	3952.5	3950.3	3950.3	3948.2	3948.2	3941.8	3944.0	3937.6	3941.8
12.5°	3946.1	3944.0	3944.0	3939.7	3935.5	3931.3	3929.1	3922.8	3922.8	3908.0	3914.3
15°	3929.1	3931.3	3924.9	3916.5	3912.2	3901.6	3897.4	3888.9	3880.5	3869.9	3872.0
17.5°	3914.3	3908.0	3899.5	3891.0	3874.1	3865.6	3857.1	3844.5	3840.2	3827.5	3823.3
20°	3869.9	3865.6	3855.1	3840.2	3829.6	3810.6	3802.1	3789.4	3778.8	3766.1	3759.8
22.5°	3812.7	3808.5	3795.8	3780.9	3764.0	3755.6	3747.1	3723.8	3713.2	3700.5	3698.4
25°	3740.7	3734.4	3721.7	3704.7	3696.3	3673.0	3664.5	3647.6	3643.4	3630.6	3628.5
27.5°	3630.6	3622.2	3607.4	3586.2	3571.4	3556.5	3548.1	3535.4	3531.2	3518.4	3516.4
30°	3465.5	3454.9	3425.3	3416.8	3391.4	3376.6	3376.6	3359.7	3361.8	3353.3	3353.3
32.5°	3205.1	3188.2	3164.9	3148.0	3131.0	3122.6	3122.6	3116.2	3120.4	3120.4	3124.7
35°	2860.1	2836.8	2824.1	2813.5	2813.5	2821.9	2847.4	2853.7	2866.4	2877.0	2885.5
37.5°	2417.6	2415.5	2430.3	2443.0	2474.8	2510.8	2555.2	2593.3	2629.3	2654.7	2680.1
40°	1939.2	1992.1	2034.4	2093.7	2142.4	2212.3	2292.7	2358.3	2419.7	2464.2	2510.8
42.5°	1513.6	1581.4	1670.3	1757.1	1843.9	1939.2	2045.0	2136.1	2216.5	2277.9	2326.6
45°	1179.2	1272.3	1380.3	1490.4	1602.6	1721.1	1831.2	1924.3	2009.0	2072.5	2121.2
47.5°	950.5	1052.1	1174.9	1295.6	1422.6	1547.5	1670.3	1750.8	1820.6	1871.4	1915.9
50°	785.4	893.4	1022.5	1160.1	1287.1	1412.1	1517.9	1596.2	1653.4	1697.8	1725.3
52.5°	656.2	770.6	908.2	1045.8	1172.8	1287.1	1382.4	1441.7	1488.2	1520.0	1545.4
55°	541.9	652.1	781.2	910.3	1035.2	1143.2	1221.5	1266.0	1301.9	1321.0	1335.8
57.5°	442.5	544.1	662.6	781.2	889.1	978.1	1039.5	1083.9	1100.8	1115.7	1113.5
60°	347.2	442.5	550.4	652.1	745.2	817.1	861.6	887.0	899.7	906.1	901.8
62.5°	273.1	359.9	442.5	531.4	599.1	660.5	702.9	702.9	709.2	711.3	717.7
65°	203.2	268.8	340.8	406.5	461.5	501.7	525.0	531.4	539.9	537.7	533.5
67.5°	150.3	199.0	251.9	300.6	338.7	364.1	381.0	395.9	393.8	389.5	387.4
70°	103.8	135.5	182.1	211.7	239.2	264.6	268.8	271.0	273.1	275.2	271.0
72.5°	72.0	95.3	120.7	146.1	163.0	173.6	184.2	186.3	186.3	186.3	184.2
75°	36.0	48.7	72.0	82.6	97.4	101.6	110.1	110.1	116.4	108.0	105.8
77.5°	31.8	38.1	50.8	59.3	65.6	72.0	74.1	80.4	78.3	74.1	76.2
80°	19.1	23.3	31.8	36.0	44.4	46.6	48.7	50.8	48.7	50.8	50.8
82.5°	14.8	16.9	21.2	21.2	27.5	27.5	29.6	29.6	31.8	31.8	31.8
85°	8.4	14.8	12.7	25.4	16.9	16.9	21.2	25.4	21.2	21.2	25.4
87.5°	8.4	8.4	6.4	8.4	8.4	8.4	10.6	12.7	12.7	14.8	12.7
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: P249588

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3944.0	3944.0	3944.0	3944.0
2.5°	3950.3	3954.5	3948.2	3946.1
5°	3956.6	3956.6	3952.5	3952.5
7.5°	3956.6	3956.6	3950.3	3946.1
10°	3939.7	3939.7	3933.4	3929.1
12.5°	3908.0	3908.0	3905.8	3899.5
15°	3867.8	3867.8	3859.3	3852.9
17.5°	3812.7	3816.9	3806.4	3806.4
20°	3753.4	3751.3	3742.9	3738.6
22.5°	3692.1	3687.8	3685.7	3673.0
25°	3626.4	3622.2	3615.8	3609.5
27.5°	3514.2	3512.1	3505.7	3497.3
30°	3342.7	3340.6	3332.2	3332.2
32.5°	3120.4	3118.3	3109.9	3112.0
35°	2889.7	2898.2	2893.9	2885.5
37.5°	2697.0	2703.4	2707.7	2703.4
40°	2536.2	2555.2	2557.3	2561.6
42.5°	2364.7	2390.1	2398.6	2402.8
45°	2159.3	2182.6	2201.7	2197.4
47.5°	1949.7	1966.7	1983.6	1970.9
50°	1748.6	1759.2	1765.6	1765.6
52.5°	1558.1	1558.1	1556.0	1558.1
55°	1340.1	1340.1	1331.6	1335.8
57.5°	1111.4	1115.7	1109.3	1098.7
60°	899.7	889.1	884.9	878.6
62.5°	700.7	700.7	685.9	704.9
65°	525.0	518.7	512.3	510.2
67.5°	381.0	379.0	372.6	370.5
70°	268.8	260.4	258.3	254.0
72.5°	180.0	180.0	175.7	175.7
75°	110.1	99.5	97.4	99.5
77.5°	76.2	74.1	74.1	72.0
80°	50.8	48.7	52.9	46.6
82.5°	31.8	33.9	31.8	33.9
85°	21.2	25.4	23.3	23.3
87.5°	12.7	12.7	12.7	12.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)