

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: P249084

Luminaire Tested: **LSR8B80D010 EC8B80827 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249084
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 EC8B80827 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7963.0 lumens
Efficiency: N/A
Efficacy: 107.0 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

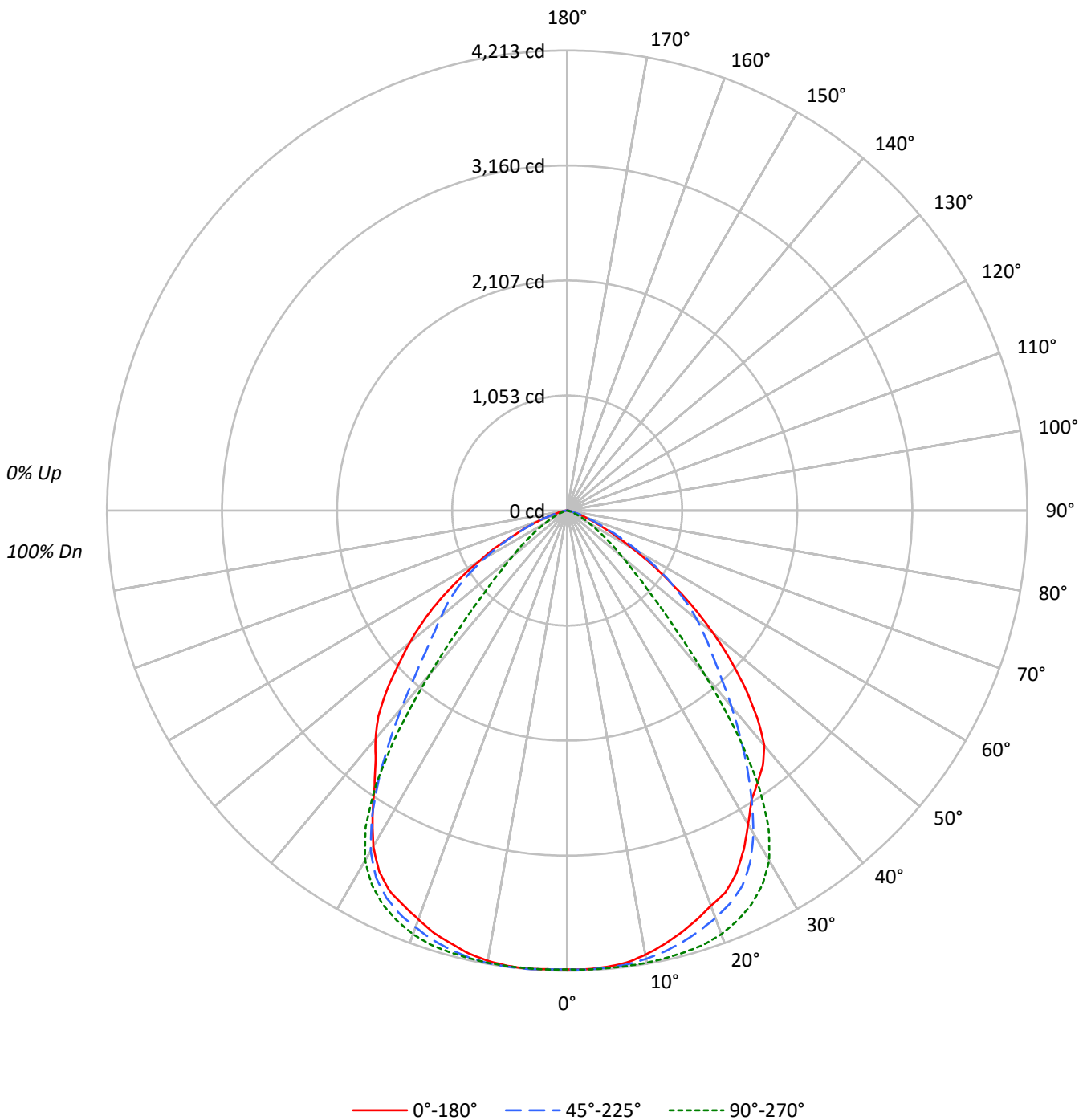
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	129556	129556	129556
5°	129840	130193	130332
10°	129297	131626	131063
15°	127862	133551	131032
20°	126329	135429	130694
25°	124688	135586	130826
30°	117961	131773	126393
35°	114438	114521	115714
40°	113021	78797	109845
45°	100707	47307	102085
50°	83737	31485	90227
55°	62804	21704	76503
60°	42560	14462	57719
65°	25669	9383	39656
70°	14236	5085	24397
75°	6446	2145	12629
80°	5612	2397	8808
85°	6369	3184	8774



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	401.0	5.0
10°-20°	1164.5	14.6
20°-30°	1767.4	22.2
30°-40°	1856.3	23.3
40°-50°	1391.8	17.5
50°-60°	893.0	11.2
60°-70°	382.0	4.8
70°-80°	90.2	1.1
80°-90°	16.8	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°	3332.9	41.9
0°-40°	5189.2	65.2
0°-60°	7474.0	93.9
0°-90°	7963.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7963.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4201	4201	4201	4201	4201	
5°	4195	4201	4206	4213	4210	398
15°	4005	4089	4183	4156	4104	1130
25°	3665	3793	3985	3913	3845	1674
35°	3040	2871	3042	3006	3074	1908
45°	2309	1888	1085	1834	2341	1769
55°	1168	1168	404	1218	1423	1060
65°	352	415	129	534	544	376
75°	54	63	18	108	106	79
85°	18	11	9	18	25	19
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°	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4
2.5°	4203.7	4208.2	4206.0	4206.0	4203.7	4206.0	4206.0	4210.5	4210.5	4206.0	4203.7
5°	4194.6	4199.2	4199.2	4194.6	4194.6	4206.0	4199.2	4203.7	4203.7	4201.4	4201.4
7.5°	4174.4	4174.4	4183.4	4176.7	4176.7	4183.4	4181.1	4185.7	4190.2	4192.4	4192.4
10°	4129.3	4133.8	4136.0	4136.0	4138.3	4145.0	4149.6	4158.6	4163.1	4167.6	4169.9
12.5°	4072.9	4079.7	4081.9	4079.7	4086.4	4095.4	4106.7	4118.0	4124.8	4133.8	4140.6
15°	4005.2	4005.2	4009.7	4016.5	4021.0	4034.6	4045.8	4059.3	4077.4	4088.7	4100.0
17.5°	3930.8	3935.4	3942.1	3942.1	3951.1	3973.6	3980.4	4000.7	4021.0	4032.3	4054.9
20°	3849.7	3854.1	3860.9	3865.4	3876.7	3894.7	3908.3	3926.3	3948.9	3969.2	3991.7
22.5°	3786.5	3777.5	3781.9	3786.5	3797.8	3813.6	3829.3	3851.9	3874.4	3894.7	3917.3
25°	3664.7	3667.0	3673.7	3678.2	3691.8	3705.3	3723.3	3750.4	3770.7	3793.3	3818.0
27.5°	3500.1	3502.3	3513.6	3513.6	3524.9	3547.4	3558.7	3581.3	3608.3	3630.9	3660.2
30°	3312.9	3317.4	3317.4	3326.4	3333.2	3344.5	3355.7	3378.3	3391.8	3412.1	3452.7
32.5°	3141.5	3146.0	3143.7	3141.5	3134.7	3132.5	3130.2	3134.7	3139.3	3146.0	3161.8
35°	3040.0	3028.7	3019.7	3003.9	2985.9	2963.3	2943.0	2916.0	2891.2	2870.9	2848.3
37.5°	2943.0	2940.8	2927.2	2904.7	2868.6	2828.0	2780.7	2722.0	2663.4	2600.2	2539.4
40°	2807.7	2800.9	2789.7	2758.1	2717.5	2667.9	2604.8	2532.6	2437.8	2340.9	2241.7
42.5°	2577.7	2579.9	2566.4	2541.6	2503.3	2455.9	2390.5	2311.6	2210.1	2095.1	1966.5
45°	2309.3	2309.3	2304.8	2284.5	2257.5	2219.1	2169.5	2104.1	2004.9	1887.6	1750.0
47.5°	2029.7	2031.9	2025.1	2020.7	2009.4	1984.6	1948.5	1898.9	1829.0	1716.2	1578.6
50°	1745.5	1745.5	1756.8	1754.5	1754.5	1745.5	1729.8	1700.4	1639.5	1549.3	1420.8
52.5°	1461.4	1465.9	1472.7	1481.7	1492.9	1511.0	1492.9	1479.4	1441.1	1371.1	1260.7
55°	1168.2	1172.7	1184.0	1199.7	1213.3	1231.4	1235.8	1235.8	1215.5	1168.2	1084.8
57.5°	917.9	911.1	920.1	933.7	951.7	969.8	983.3	999.1	996.8	965.2	897.6
60°	690.1	692.4	699.1	712.7	726.2	742.0	760.0	773.5	780.3	764.5	721.7
62.5°	502.9	502.9	511.9	525.4	532.2	554.8	566.0	572.8	579.6	577.3	550.3
65°	351.8	356.3	360.8	367.6	374.3	387.9	394.7	408.2	412.7	415.0	394.7
67.5°	248.1	241.3	245.8	250.3	257.1	266.1	279.7	279.7	286.4	286.4	272.9
70°	157.9	157.9	160.1	166.9	171.4	173.7	178.2	182.7	189.4	187.2	187.2
72.5°	106.0	103.7	106.0	108.3	110.5	117.3	117.3	119.5	124.0	126.3	117.3
75°	54.1	56.4	60.9	58.7	65.4	60.9	63.1	69.9	67.7	63.1	63.1
77.5°	45.1	45.1	45.1	42.9	47.3	47.3	45.1	49.6	47.3	47.3	45.1
80°	31.6	33.8	31.6	29.3	31.6	29.3	29.3	29.3	29.3	29.3	27.0
82.5°	24.8	20.3	22.6	20.3	22.6	22.6	20.3	18.0	18.0	20.3	18.0
85°	18.0	13.5	15.8	15.8	13.5	13.5	13.5	13.5	13.5	11.3	11.3
87.5°	11.3	6.8	6.8	6.8	9.0	9.0	9.0	6.8	9.0	9.0	4.5
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°	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4
2.5°	4208.2	4206.0	4210.5	4208.2	4208.2	4206.0	4208.2	4206.0	4210.5	4201.4	4203.7
5°	4208.2	4203.7	4206.0	4208.2	4210.5	4206.0	4206.0	4206.0	4210.5	4206.0	4208.2
7.5°	4199.2	4196.9	4203.7	4208.2	4206.0	4203.7	4208.2	4206.0	4210.5	4208.2	4212.7
10°	4181.1	4183.4	4187.9	4194.6	4196.9	4199.2	4203.7	4203.7	4210.5	4201.4	4206.0
12.5°	4154.1	4163.1	4174.4	4178.9	4187.9	4187.9	4192.4	4194.6	4199.2	4196.9	4203.7
15°	4120.3	4131.5	4145.0	4156.4	4167.6	4174.4	4181.1	4183.4	4190.2	4183.4	4185.7
17.5°	4079.7	4093.2	4113.5	4127.0	4145.0	4151.8	4160.8	4165.3	4172.1	4167.6	4169.9
20°	4023.3	4039.1	4061.6	4081.9	4093.2	4109.0	4120.3	4127.0	4131.5	4127.0	4129.3
22.5°	3944.3	3966.9	3996.2	4012.0	4034.6	4048.1	4050.3	4066.1	4077.4	4066.1	4070.7
25°	3851.9	3874.4	3897.0	3930.8	3951.1	3966.9	3982.7	3985.0	3996.2	3994.0	3991.7
27.5°	3698.5	3727.9	3766.2	3793.3	3820.3	3845.1	3863.2	3867.6	3879.0	3874.4	3876.7
30°	3488.8	3520.4	3556.5	3599.3	3637.6	3662.4	3685.0	3700.8	3712.0	3705.3	3703.0
32.5°	3191.1	3222.7	3261.0	3303.9	3349.0	3385.0	3412.1	3432.4	3446.0	3441.4	3430.2
35°	2850.6	2859.6	2884.4	2918.3	2956.6	2994.9	3019.7	3042.2	3058.0	3062.6	3062.6
37.5°	2501.0	2471.7	2453.7	2453.7	2476.2	2492.0	2514.5	2528.1	2552.9	2561.9	2568.7
40°	2162.7	2095.1	2031.9	1984.6	1953.0	1950.8	1950.8	1957.5	1980.1	2009.4	2036.5
42.5°	1860.5	1752.3	1655.3	1567.4	1504.2	1468.1	1452.4	1454.6	1472.7	1499.7	1544.8
45°	1619.2	1483.9	1362.1	1256.1	1170.4	1114.1	1087.0	1084.8	1098.3	1129.8	1179.5
47.5°	1432.1	1287.7	1150.1	1028.4	935.9	875.0	843.4	834.4	843.4	872.7	931.4
50°	1276.4	1127.6	985.5	859.2	760.0	696.9	667.5	656.3	667.5	692.4	751.0
52.5°	1132.1	978.7	845.7	723.9	617.9	563.8	532.2	525.4	532.2	561.5	608.9
55°	965.2	834.4	703.6	581.8	489.4	435.3	410.4	403.7	410.4	437.5	487.1
57.5°	800.6	687.8	572.8	462.3	383.4	336.0	313.5	304.4	320.2	338.3	396.9
60°	647.2	557.1	460.0	363.1	297.7	254.8	236.8	234.5	239.0	261.6	302.2
62.5°	507.4	433.0	356.3	277.4	223.3	205.2	182.7	180.4	184.9	198.4	230.0
65°	365.4	318.0	259.4	203.0	160.1	135.3	126.3	128.6	133.0	142.1	171.4
67.5°	254.8	221.0	180.4	142.1	110.5	99.2	90.2	88.0	90.2	106.0	121.8
70°	171.4	151.1	121.8	108.3	76.7	60.9	63.1	56.4	65.4	65.4	78.9
72.5°	112.7	99.2	81.2	63.1	54.1	42.9	42.9	40.6	45.1	47.3	58.7
75°	58.7	45.1	45.1	31.6	22.6	11.3	20.3	18.0	15.8	18.0	22.6
77.5°	40.6	33.8	31.6	24.8	22.6	18.0	18.0	18.0	18.0	20.3	22.6
80°	24.8	24.8	18.0	15.8	13.5	11.3	13.5	13.5	13.5	13.5	15.8
82.5°	15.8	13.5	13.5	11.3	11.3	9.0	9.0	9.0	9.0	9.0	13.5
85°	13.5	9.0	9.0	6.8	9.0	15.8	6.8	9.0	9.0	9.0	6.8
87.5°	4.5	6.8	6.8	6.8	4.5	2.3	4.5	6.8	6.8	11.3	9.0
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°	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4	4201.4
2.5°	4208.2	4210.5	4210.5	4208.2	4208.2	4203.7	4212.7	4206.0	4208.2	4217.2	4210.5
5°	4212.7	4215.0	4215.0	4212.7	4212.7	4212.7	4215.0	4215.0	4212.7	4210.5	4215.0
7.5°	4221.7	4219.5	4219.5	4215.0	4215.0	4210.5	4215.0	4208.2	4212.7	4208.2	4215.0
10°	4210.5	4212.7	4210.5	4208.2	4208.2	4206.0	4206.0	4199.2	4201.4	4194.6	4199.2
12.5°	4203.7	4201.4	4201.4	4196.9	4192.4	4187.9	4185.7	4178.9	4178.9	4163.1	4169.9
15°	4185.7	4187.9	4181.1	4172.1	4167.6	4156.4	4151.8	4142.8	4133.8	4122.5	4124.8
17.5°	4169.9	4163.1	4154.1	4145.0	4127.0	4118.0	4109.0	4095.4	4090.9	4077.4	4072.9
20°	4122.5	4118.0	4106.7	4090.9	4079.7	4059.3	4050.3	4036.8	4025.5	4012.0	4005.2
22.5°	4061.6	4057.1	4043.6	4027.8	4009.7	4000.7	3991.7	3966.9	3955.6	3942.1	3939.8
25°	3985.0	3978.2	3964.7	3946.6	3937.6	3912.8	3903.7	3885.7	3881.2	3867.6	3865.4
27.5°	3867.6	3858.7	3842.9	3820.3	3804.5	3788.7	3779.7	3766.2	3761.7	3748.1	3745.9
30°	3691.8	3680.5	3648.9	3639.9	3612.8	3597.0	3597.0	3579.0	3581.3	3572.3	3572.3
32.5°	3414.4	3396.3	3371.5	3353.5	3335.4	3326.4	3326.4	3319.6	3324.2	3324.2	3328.7
35°	3046.8	3022.0	3008.4	2997.2	2997.2	3006.2	3033.3	3040.0	3053.6	3064.8	3073.9
37.5°	2575.4	2573.2	2589.0	2602.5	2636.3	2674.7	2722.0	2762.6	2800.9	2828.0	2855.1
40°	2065.8	2122.2	2167.2	2230.4	2282.2	2356.7	2442.4	2512.3	2577.7	2625.1	2674.7
42.5°	1612.4	1684.6	1779.4	1871.8	1964.3	2065.8	2178.5	2275.5	2361.2	2426.6	2478.5
45°	1256.1	1355.4	1470.4	1587.7	1707.2	1833.5	1950.8	2050.0	2140.2	2207.9	2259.7
47.5°	1012.6	1120.8	1251.6	1380.2	1515.5	1648.5	1779.4	1865.1	1939.5	1993.6	2041.0
50°	836.7	951.7	1089.3	1235.8	1371.1	1504.2	1617.0	1700.4	1761.3	1808.7	1838.0
52.5°	699.1	820.9	967.5	1114.1	1249.4	1371.1	1472.7	1535.8	1585.4	1619.2	1646.3
55°	577.3	694.6	832.2	969.8	1102.8	1217.8	1301.2	1348.6	1386.9	1407.2	1423.0
57.5°	471.4	579.6	705.9	832.2	947.2	1041.9	1107.3	1154.7	1172.7	1188.5	1186.2
60°	369.9	471.4	586.4	694.6	793.8	870.5	917.9	944.9	958.4	965.2	960.7
62.5°	290.9	383.4	471.4	566.0	638.2	703.6	748.8	748.8	755.5	757.7	764.5
65°	216.5	286.4	363.1	433.0	491.6	534.5	559.3	566.0	575.1	572.8	568.3
67.5°	160.1	212.0	268.3	320.2	360.8	387.9	405.9	421.7	419.5	415.0	412.7
70°	110.5	144.4	194.0	225.5	254.8	281.9	286.4	288.7	290.9	293.2	288.7
72.5°	76.7	101.5	128.6	155.6	173.7	184.9	196.2	198.4	198.4	198.4	196.2
75°	38.4	51.9	76.7	88.0	103.7	108.3	117.3	117.3	124.0	115.0	112.7
77.5°	33.8	40.6	54.1	63.1	69.9	76.7	78.9	85.7	83.4	78.9	81.2
80°	20.3	24.8	33.8	38.4	47.3	49.6	51.9	54.1	51.9	54.1	54.1
82.5°	15.8	18.0	22.6	22.6	29.3	29.3	31.6	31.6	33.8	33.8	33.8
85°	9.0	15.8	13.5	27.0	18.0	18.0	22.6	27.0	22.6	22.6	27.0
87.5°	9.0	9.0	6.8	9.0	9.0	9.0	11.3	13.5	13.5	15.8	13.5
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: P249084

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4201.4	4201.4	4201.4	4201.4
2.5°	4208.2	4212.7	4206.0	4203.7
5°	4215.0	4215.0	4210.5	4210.5
7.5°	4215.0	4215.0	4208.2	4203.7
10°	4196.9	4196.9	4190.2	4185.7
12.5°	4163.1	4163.1	4160.8	4154.1
15°	4120.3	4120.3	4111.2	4104.5
17.5°	4061.6	4066.1	4054.9	4054.9
20°	3998.5	3996.2	3987.2	3982.7
22.5°	3933.1	3928.6	3926.3	3912.8
25°	3863.2	3858.7	3851.9	3845.1
27.5°	3743.7	3741.4	3734.6	3725.6
30°	3560.9	3558.7	3549.7	3549.7
32.5°	3324.2	3321.9	3312.9	3315.2
35°	3078.3	3087.4	3082.9	3073.9
37.5°	2873.1	2879.9	2884.4	2879.9
40°	2701.7	2722.0	2724.3	2728.8
42.5°	2519.1	2546.1	2555.2	2559.6
45°	2300.3	2325.1	2345.4	2340.9
47.5°	2077.0	2095.1	2113.1	2099.6
50°	1862.8	1874.1	1880.8	1880.8
52.5°	1659.8	1659.8	1657.6	1659.8
55°	1427.5	1427.5	1418.5	1423.0
57.5°	1184.0	1188.5	1181.7	1170.4
60°	958.4	947.2	942.7	935.9
62.5°	746.5	746.5	730.7	751.0
65°	559.3	552.5	545.7	543.5
67.5°	405.9	403.7	396.9	394.7
70°	286.4	277.4	275.1	270.6
72.5°	191.7	191.7	187.2	187.2
75°	117.3	106.0	103.7	106.0
77.5°	81.2	78.9	78.9	76.7
80°	54.1	51.9	56.4	49.6
82.5°	33.8	36.1	33.8	36.1
85°	22.6	27.0	24.8	24.8
87.5°	13.5	13.5	13.5	13.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)