

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: P249219

Luminaire Tested: **LSR8B80D010 EC8B80840 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249219
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 EC8B80840 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8388.0 lumens
Efficiency: N/A
Efficacy: 112.7 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

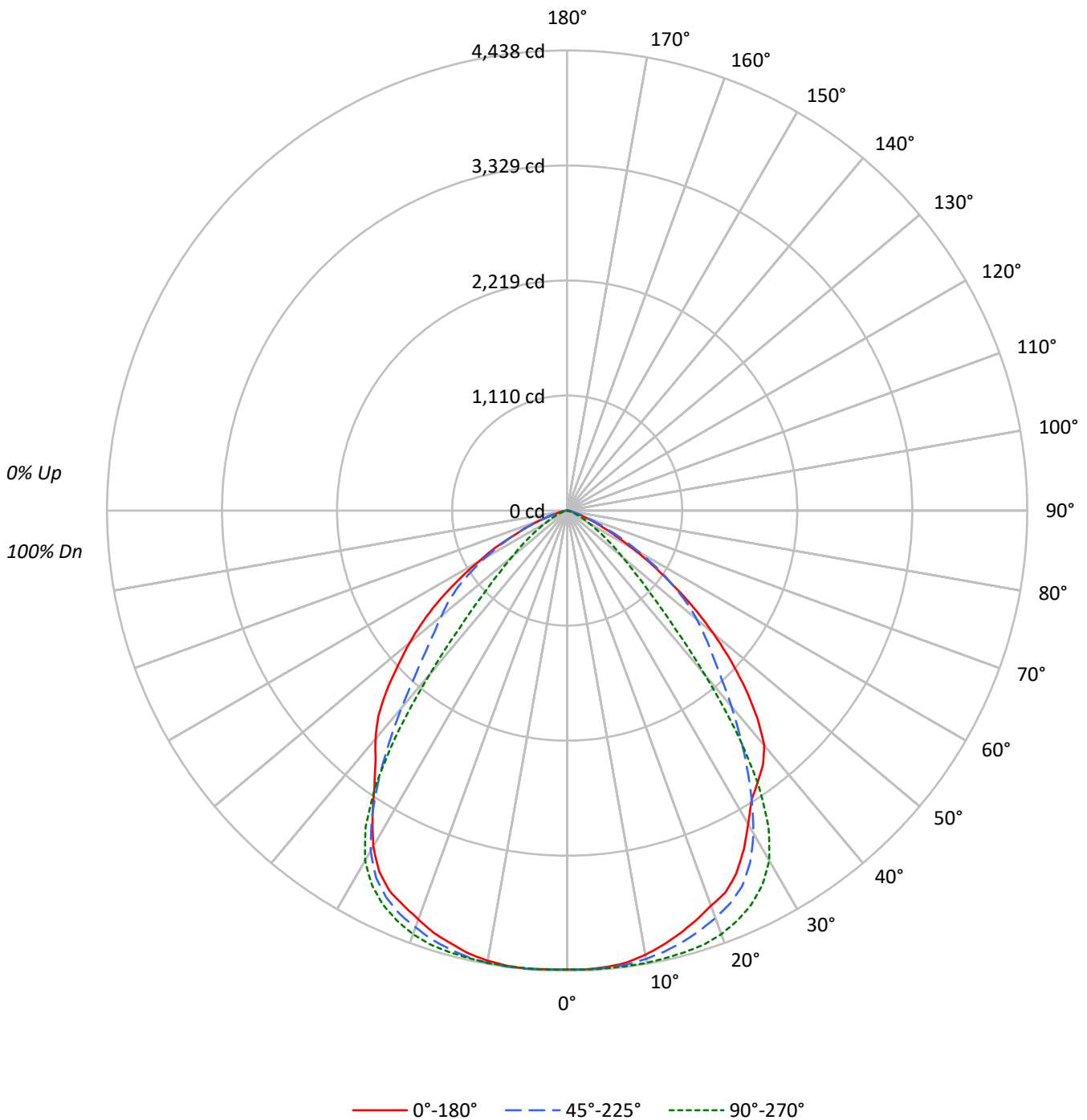
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	136472	136472	136472
5°	136771	137139	137288
10°	136195	138653	138055
15°	134688	140680	138024
20°	133069	142658	137670
25°	131343	142820	137811
30°	124257	138806	133137
35°	120548	120635	121888
40°	119055	83004	115710
45°	106084	49828	107531
50°	88208	33164	95044
55°	66153	22865	80588
60°	44830	15233	60803
65°	27041	9879	41772
70°	14994	5355	25704
75°	6791	2264	13308
80°	5896	2522	9287
85°	6722	3361	9270



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	422.4	5.0
10°-20°	1226.6	14.6
20°-30°	1861.8	22.2
30°-40°	1955.4	23.3
40°-50°	1466.0	17.5
50°-60°	940.6	11.2
60°-70°	402.4	4.8
70°-80°	95.1	1.1
80°-90°	17.7	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°	3510.8	41.9
0°-40°	5466.2	65.2
0°-60°	7872.9	93.9
0°-90°	8388.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8388.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4426	4426	4426	4426	4426	
5°	4418	4426	4430	4438	4435	420
15°	4219	4307	4407	4378	4324	1190
25°	3860	3996	4198	4122	4050	1764
35°	3202	3024	3205	3167	3238	2010
45°	2433	1988	1143	1931	2466	1863
55°	1230	1230	425	1283	1499	1116
65°	371	437	135	563	572	396
75°	57	66	19	114	112	83
85°	19	12	10	19	26	20
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°	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7
2.5°	4428.1	4432.8	4430.4	4430.4	4428.1	4430.4	4430.4	4435.2	4435.2	4430.4	4428.1
5°	4418.5	4423.3	4423.3	4418.5	4418.5	4430.4	4423.3	4428.1	4428.1	4425.7	4425.7
7.5°	4397.2	4397.2	4406.7	4399.6	4399.6	4406.7	4404.3	4409.0	4413.8	4416.2	4416.2
10°	4349.6	4354.4	4356.8	4356.8	4359.2	4366.3	4371.0	4380.6	4385.3	4390.0	4392.4
12.5°	4290.3	4297.4	4299.8	4297.4	4304.5	4314.0	4325.9	4337.8	4344.9	4354.4	4361.6
15°	4219.0	4219.0	4223.7	4230.9	4235.7	4249.9	4261.8	4276.0	4295.0	4306.9	4318.8
17.5°	4140.6	4145.4	4152.5	4152.5	4162.0	4185.7	4192.9	4214.3	4235.7	4247.5	4271.3
20°	4055.1	4059.8	4067.0	4071.7	4083.6	4102.6	4116.8	4135.9	4159.6	4181.0	4204.7
22.5°	3988.6	3979.1	3983.8	3988.6	4000.5	4017.1	4033.7	4057.4	4081.2	4102.6	4126.4
25°	3860.3	3862.7	3869.8	3874.5	3888.8	3903.1	3922.1	3950.6	3971.9	3995.7	4021.8
27.5°	3686.9	3689.3	3701.1	3701.1	3713.0	3736.8	3748.6	3772.4	3800.9	3824.6	3855.6
30°	3489.7	3494.4	3494.4	3504.0	3511.1	3523.0	3534.8	3558.6	3572.8	3594.2	3637.0
32.5°	3309.2	3313.9	3311.5	3309.2	3302.0	3299.7	3297.3	3302.0	3306.8	3313.9	3330.5
35°	3202.3	3190.4	3180.9	3164.3	3145.3	3121.5	3100.1	3071.6	3045.5	3024.1	3000.4
37.5°	3100.1	3097.7	3083.5	3059.7	3021.7	2979.0	2929.1	2867.3	2805.5	2739.0	2674.9
40°	2957.6	2950.4	2938.6	2905.3	2862.5	2810.3	2743.8	2667.8	2568.0	2465.8	2361.3
42.5°	2715.3	2717.6	2703.4	2677.2	2636.9	2587.0	2518.1	2435.0	2328.1	2206.9	2071.5
45°	2432.6	2432.6	2427.8	2406.4	2377.9	2337.5	2285.3	2216.4	2111.9	1988.3	1843.4
47.5°	2138.0	2140.4	2133.2	2128.5	2116.6	2090.5	2052.5	2000.2	1926.6	1807.8	1662.9
50°	1838.7	1838.7	1850.6	1848.2	1848.2	1838.7	1822.1	1791.2	1727.0	1632.0	1496.6
52.5°	1539.4	1544.1	1551.3	1560.7	1572.6	1591.6	1572.6	1558.4	1518.0	1444.3	1328.0
55°	1230.5	1235.3	1247.2	1263.8	1278.1	1297.1	1301.8	1301.8	1280.4	1230.5	1142.6
57.5°	966.9	959.7	969.3	983.5	1002.5	1021.5	1035.8	1052.4	1050.0	1016.7	945.5
60°	726.9	729.3	736.4	750.7	764.9	781.6	800.6	814.8	822.0	805.3	760.2
62.5°	529.8	529.8	539.2	553.5	560.6	584.4	596.3	603.4	610.5	608.1	579.6
65°	370.6	375.3	380.1	387.2	394.3	408.6	415.7	430.0	434.7	437.1	415.7
67.5°	261.3	254.2	259.0	263.7	270.8	280.3	294.6	294.6	301.7	301.7	287.4
70°	166.3	166.3	168.7	175.8	180.5	182.9	187.7	192.4	199.5	197.2	197.2
72.5°	111.7	109.3	111.7	114.0	116.4	123.5	123.5	125.9	130.7	133.1	123.5
75°	57.0	59.4	64.1	61.8	68.9	64.1	66.5	73.6	71.3	66.5	66.5
77.5°	47.5	47.5	47.5	45.2	49.9	49.9	47.5	52.3	49.9	49.9	47.5
80°	33.2	35.6	33.2	30.9	33.2	30.9	30.9	30.9	30.9	30.9	28.5
82.5°	26.2	21.4	23.8	21.4	23.8	23.8	21.4	19.0	19.0	21.4	19.0
85°	19.0	14.2	16.6	16.6	14.2	14.2	14.2	14.2	14.2	11.9	11.9
87.5°	11.9	7.1	7.1	7.1	9.5	9.5	9.5	7.1	9.5	9.5	4.8
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°	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7
2.5°	4432.8	4430.4	4435.2	4432.8	4432.8	4430.4	4432.8	4430.4	4435.2	4425.7	4428.1
5°	4432.8	4428.1	4430.4	4432.8	4435.2	4430.4	4430.4	4430.4	4435.2	4430.4	4432.8
7.5°	4423.3	4420.9	4428.1	4432.8	4430.4	4428.1	4432.8	4430.4	4435.2	4432.8	4437.5
10°	4404.3	4406.7	4411.4	4418.5	4420.9	4423.3	4428.1	4428.1	4435.2	4425.7	4430.4
12.5°	4375.8	4385.3	4397.2	4401.9	4411.4	4411.4	4416.2	4418.5	4423.3	4420.9	4428.1
15°	4340.2	4352.0	4366.3	4378.2	4390.0	4397.2	4404.3	4406.7	4413.8	4406.7	4409.0
17.5°	4297.4	4311.6	4333.0	4347.3	4366.3	4373.4	4382.9	4387.7	4394.8	4390.0	4392.4
20°	4238.0	4254.7	4278.4	4299.8	4311.6	4328.3	4340.2	4347.3	4352.0	4347.3	4349.6
22.5°	4154.9	4178.6	4209.5	4226.1	4249.9	4264.1	4266.5	4283.1	4295.0	4283.1	4287.9
25°	4057.4	4081.2	4105.0	4140.6	4162.0	4178.6	4195.3	4197.6	4209.5	4207.1	4204.7
27.5°	3895.9	3926.8	3967.2	3995.7	4024.2	4050.4	4069.4	4074.1	4086.0	4081.2	4083.6
30°	3675.0	3708.3	3746.3	3791.4	3831.8	3857.9	3881.7	3898.3	3910.2	3903.1	3900.7
32.5°	3361.4	3394.7	3435.1	3480.2	3527.7	3565.7	3594.2	3615.6	3629.9	3625.1	3613.2
35°	3002.7	3012.2	3038.4	3074.0	3114.3	3154.7	3180.9	3204.6	3221.2	3226.0	3226.0
37.5°	2634.5	2603.6	2584.6	2584.6	2608.4	2625.0	2648.8	2663.0	2689.2	2698.6	2705.8
40°	2278.1	2206.9	2140.4	2090.5	2057.3	2054.9	2054.9	2062.0	2085.7	2116.6	2145.1
42.5°	1959.8	1845.8	1743.7	1651.0	1584.5	1546.5	1529.9	1532.3	1551.3	1579.8	1627.2
45°	1705.7	1563.1	1434.8	1323.2	1232.9	1173.5	1145.0	1142.6	1156.9	1190.1	1242.4
47.5°	1508.5	1356.4	1211.5	1083.2	985.9	921.7	888.5	879.0	888.5	919.3	981.1
50°	1344.6	1187.8	1038.1	905.1	800.6	734.1	703.2	691.3	703.2	729.3	791.0
52.5°	1192.5	1031.0	890.8	762.6	650.9	593.9	560.6	553.5	560.6	591.5	641.4
55°	1016.7	879.0	741.2	612.9	515.5	458.5	432.3	425.3	432.3	460.9	513.1
57.5°	843.4	724.5	603.4	487.0	403.9	353.9	330.2	320.7	337.3	356.3	418.1
60°	681.8	586.8	484.6	382.5	313.6	268.4	249.4	247.0	251.8	275.6	318.3
62.5°	534.5	456.1	375.3	292.2	235.2	216.2	192.4	190.1	194.8	209.0	242.3
65°	384.9	335.0	273.2	213.8	168.7	142.5	133.1	135.4	140.1	149.7	180.5
67.5°	268.4	232.8	190.1	149.7	116.4	104.5	95.0	92.7	95.0	111.7	128.3
70°	180.5	159.2	128.3	114.0	80.8	64.1	66.5	59.4	68.9	68.9	83.1
72.5°	118.8	104.5	85.5	66.5	57.0	45.2	45.2	42.8	47.5	49.9	61.8
75°	61.8	47.5	47.5	33.2	23.8	11.9	21.4	19.0	16.6	19.0	23.8
77.5°	42.8	35.6	33.2	26.2	23.8	19.0	19.0	19.0	19.0	21.4	23.8
80°	26.2	26.2	19.0	16.6	14.2	11.9	14.2	14.2	14.2	14.2	16.6
82.5°	16.6	14.2	14.2	11.9	11.9	9.5	9.5	9.5	9.5	9.5	14.2
85°	14.2	9.5	9.5	7.1	9.5	16.6	7.1	9.5	9.5	9.5	7.1
87.5°	4.8	7.1	7.1	7.1	4.8	2.4	4.8	7.1	7.1	11.9	9.5
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7	4425.7
2.5°	4432.8	4435.2	4435.2	4432.8	4432.8	4428.1	4437.5	4430.4	4432.8	4442.3	4435.2
5°	4437.5	4439.9	4439.9	4437.5	4437.5	4437.5	4439.9	4439.9	4437.5	4435.2	4439.9
7.5°	4447.1	4444.7	4444.7	4439.9	4439.9	4435.2	4439.9	4432.8	4437.5	4432.8	4439.9
10°	4435.2	4437.5	4435.2	4432.8	4432.8	4430.4	4430.4	4423.3	4425.7	4418.5	4423.3
12.5°	4428.1	4425.7	4425.7	4420.9	4416.2	4411.4	4409.0	4401.9	4401.9	4385.3	4392.4
15°	4409.0	4411.4	4404.3	4394.8	4390.0	4378.2	4373.4	4363.9	4354.4	4342.6	4344.9
17.5°	4392.4	4385.3	4375.8	4366.3	4347.3	4337.8	4328.3	4314.0	4309.2	4295.0	4290.3
20°	4342.6	4337.8	4325.9	4309.2	4297.4	4276.0	4266.5	4252.3	4240.4	4226.1	4219.0
22.5°	4278.4	4273.6	4259.4	4242.8	4223.7	4214.3	4204.7	4178.6	4166.7	4152.5	4150.1
25°	4197.6	4190.5	4176.3	4157.2	4147.7	4121.6	4112.1	4093.1	4088.4	4074.1	4071.7
27.5°	4074.1	4064.6	4048.0	4024.2	4007.6	3990.9	3981.5	3967.2	3962.5	3948.2	3945.8
30°	3888.8	3876.9	3843.7	3834.2	3805.6	3789.0	3789.0	3770.0	3772.4	3762.9	3762.9
32.5°	3596.6	3577.6	3551.5	3532.4	3513.4	3504.0	3504.0	3496.8	3501.6	3501.6	3506.3
35°	3209.4	3183.3	3169.0	3157.1	3157.1	3166.6	3195.1	3202.3	3216.5	3228.4	3237.9
37.5°	2712.9	2710.5	2727.2	2741.4	2777.0	2817.4	2867.3	2910.1	2950.4	2979.0	3007.5
40°	2176.0	2235.4	2282.9	2349.5	2404.0	2482.5	2572.7	2646.4	2715.3	2765.2	2817.4
42.5°	1698.5	1774.5	1874.3	1971.7	2069.1	2176.0	2294.8	2397.0	2487.2	2556.1	2610.7
45°	1323.2	1427.7	1548.9	1672.4	1798.3	1931.4	2054.9	2159.4	2254.4	2325.7	2380.3
47.5°	1066.6	1180.7	1318.4	1453.9	1596.4	1736.5	1874.3	1964.6	2043.0	2100.0	2149.9
50°	881.3	1002.5	1147.4	1301.8	1444.3	1584.5	1703.3	1791.2	1855.3	1905.2	1936.1
52.5°	736.4	864.7	1019.1	1173.5	1316.0	1444.3	1551.3	1617.8	1670.0	1705.7	1734.1
55°	608.1	731.7	876.6	1021.5	1161.7	1282.8	1370.7	1420.6	1460.9	1482.3	1499.0
57.5°	496.5	610.5	743.6	876.6	997.7	1097.5	1166.4	1216.3	1235.3	1251.9	1249.5
60°	389.6	496.5	617.6	731.7	836.2	916.9	966.9	995.4	1009.6	1016.7	1012.0
62.5°	306.4	403.9	496.5	596.3	672.3	741.2	788.7	788.7	795.8	798.2	805.3
65°	228.0	301.7	382.5	456.1	517.8	563.0	589.2	596.3	605.8	603.4	598.6
67.5°	168.7	223.3	282.7	337.3	380.1	408.6	427.6	444.3	441.9	437.1	434.7
70°	116.4	152.1	204.3	237.6	268.4	297.0	301.7	304.1	306.4	308.8	304.1
72.5°	80.8	106.9	135.4	163.9	182.9	194.8	206.7	209.0	209.0	209.0	206.7
75°	40.4	54.6	80.8	92.7	109.3	114.0	123.5	123.5	130.7	121.1	118.8
77.5°	35.6	42.8	57.0	66.5	73.6	80.8	83.1	90.3	87.9	83.1	85.5
80°	21.4	26.2	35.6	40.4	49.9	52.3	54.6	57.0	54.6	57.0	57.0
82.5°	16.6	19.0	23.8	23.8	30.9	30.9	33.2	33.2	35.6	35.6	35.6
85°	9.5	16.6	14.2	28.5	19.0	19.0	23.8	28.5	23.8	23.8	28.5
87.5°	9.5	9.5	7.1	9.5	9.5	9.5	11.9	14.2	14.2	16.6	14.2
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: P249219

CATALOG NUMBER: LSR8B80D010 EC8B80840 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4425.7	4425.7	4425.7	4425.7
2.5°	4432.8	4437.5	4430.4	4428.1
5°	4439.9	4439.9	4435.2	4435.2
7.5°	4439.9	4439.9	4432.8	4428.1
10°	4420.9	4420.9	4413.8	4409.0
12.5°	4385.3	4385.3	4382.9	4375.8
15°	4340.2	4340.2	4330.6	4323.5
17.5°	4278.4	4283.1	4271.3	4271.3
20°	4211.9	4209.5	4200.0	4195.3
22.5°	4143.0	4138.2	4135.9	4121.6
25°	4069.4	4064.6	4057.4	4050.4
27.5°	3943.5	3941.1	3933.9	3924.5
30°	3751.0	3748.6	3739.1	3739.1
32.5°	3501.6	3499.2	3489.7	3492.1
35°	3242.6	3252.2	3247.4	3237.9
37.5°	3026.5	3033.6	3038.4	3033.6
40°	2845.9	2867.3	2869.7	2874.5
42.5°	2653.5	2682.0	2691.5	2696.2
45°	2423.1	2449.2	2470.6	2465.8
47.5°	2187.9	2206.9	2225.9	2211.6
50°	1962.2	1974.1	1981.2	1981.2
52.5°	1748.4	1748.4	1746.1	1748.4
55°	1503.7	1503.7	1494.3	1499.0
57.5°	1247.2	1251.9	1244.8	1232.9
60°	1009.6	997.7	993.0	985.9
62.5°	786.3	786.3	769.7	791.0
65°	589.2	582.0	574.9	572.5
67.5°	427.6	425.3	418.1	415.7
70°	301.7	292.2	289.8	285.1
72.5°	201.9	201.9	197.2	197.2
75°	123.5	111.7	109.3	111.7
77.5°	85.5	83.1	83.1	80.8
80°	57.0	54.6	59.4	52.3
82.5°	35.6	38.0	35.6	38.0
85°	23.8	28.5	26.2	26.2
87.5°	14.2	14.2	14.2	14.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)