

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: P248337

Luminaire Tested: **LSR8B80D010 EC8B80830 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248337
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B80D010 EC8B80830 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8459.0 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

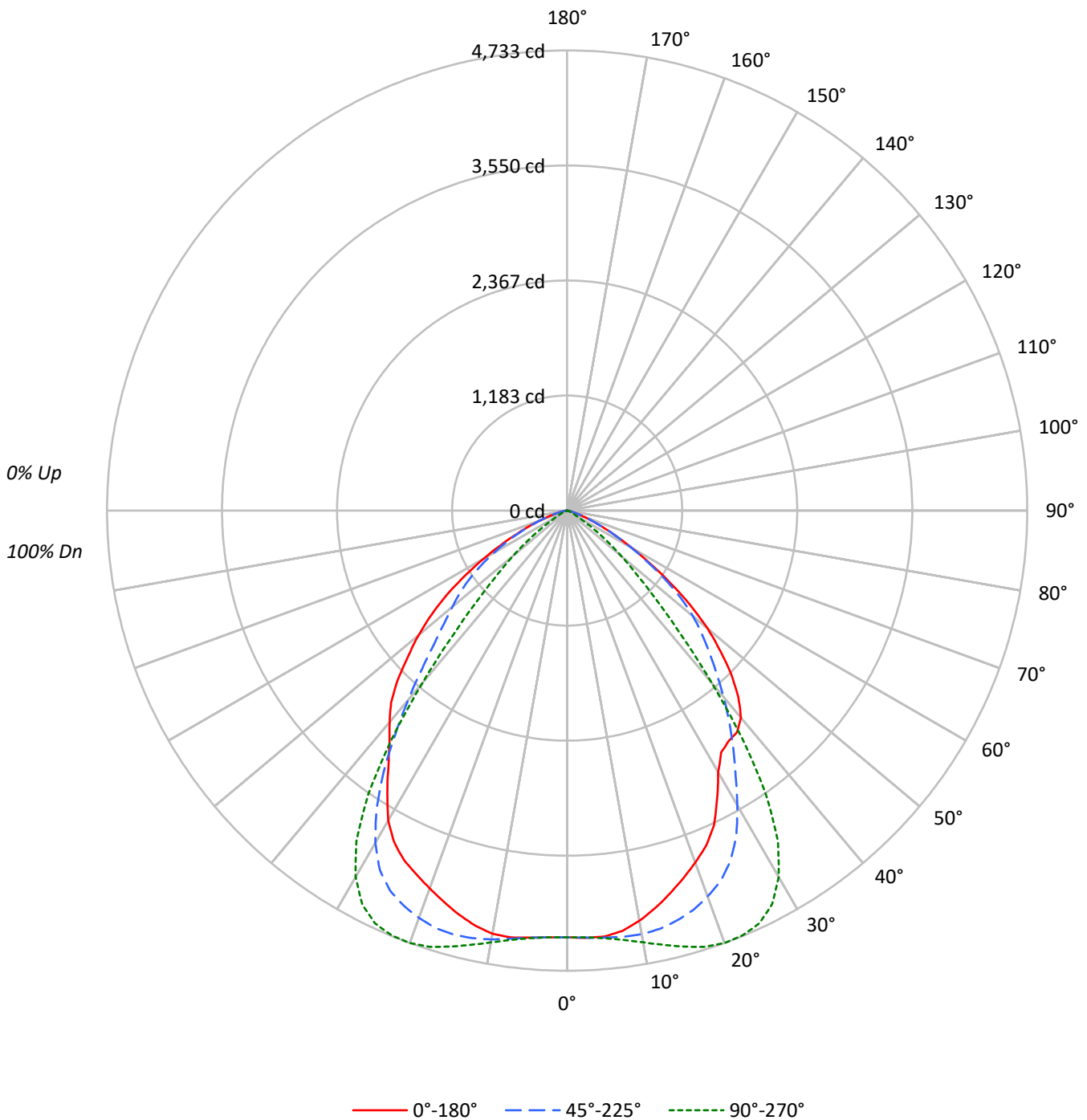
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	92	90				90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62				62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56				56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50				50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45				45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41				41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38				38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	135316	135316	135316
5°	136124	136628	136483
10°	134122	141198	138427
15°	130202	148195	137341
20°	126424	155315	135672
25°	121568	159291	135042
30°	110637	154925	131040
35°	108987	134243	120563
40°	111950	93103	114293
45°	104217	56273	107466
50°	90395	34751	95763
55°	69374	18155	81271
60°	47260	7327	61340
65°	29398	3736	42320
70°	15958	2308	25831
75°	8328	1108	15262
80°	3729	1243	8275
85°	2477	814	7430



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	422.0	5.0
10°-20°	1250.2	14.8
20°-30°	1907.2	22.5
30°-40°	1990.2	23.5
40°-50°	1494.9	17.7
50°-60°	919.8	10.9
60°-70°	374.3	4.4
70°-80°	88.2	1.0
80°-90°	12.1	0.1
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°	3579.4	42.3
0°-40°	5569.6	65.8
0°-60°	7984.3	94.4
0°-90°	8459.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8459.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4388	4388	4388	4388	4388	
5°	4398	4409	4414	4409	4409	416
15°	4078	4365	4642	4514	4302	1149
25°	3573	3974	4682	4311	3969	1624
35°	2895	2977	3566	3296	3203	1828
45°	2390	2068	1290	1926	2464	1823
55°	1290	1225	338	1225	1512	1160
65°	403	408	51	547	580	420
75°	70	70	9	123	128	84
85°	7	7	2	16	21	10
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°	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2
2.5°	4399.9	4392.9	4399.9	4399.9	4402.2	4397.6	4399.9	4402.2	4397.6	4397.6	4397.6
5°	4397.6	4392.9	4397.6	4395.2	4399.9	4399.9	4404.6	4404.6	4409.2	4409.2	4416.2
7.5°	4360.3	4351.0	4360.3	4367.3	4371.9	4381.3	4392.9	4402.2	4411.5	4420.9	4432.5
10°	4283.4	4283.4	4290.4	4304.4	4318.4	4334.7	4355.6	4378.9	4402.2	4423.2	4444.1
12.5°	4188.0	4180.9	4194.9	4213.5	4234.5	4260.2	4292.8	4327.7	4365.0	4406.9	4439.5
15°	4078.5	4071.5	4087.8	4106.4	4132.0	4169.3	4208.9	4255.5	4309.1	4365.0	4418.5
17.5°	3966.7	3964.3	3980.6	4006.3	4027.2	4066.8	4118.1	4173.9	4234.5	4309.1	4378.9
20°	3852.6	3850.2	3866.5	3887.5	3915.4	3952.7	4003.9	4069.1	4141.3	4225.2	4306.7
22.5°	3733.7	3736.1	3750.0	3773.3	3796.7	3836.2	3889.8	3955.0	4034.2	4125.0	4215.9
25°	3573.0	3561.4	3580.0	3603.3	3642.9	3675.5	3726.8	3796.7	3878.2	3973.7	4080.8
27.5°	3340.1	3337.8	3354.1	3375.0	3410.0	3449.6	3505.5	3577.7	3663.9	3768.7	3873.5
30°	3107.2	3111.8	3118.8	3139.8	3163.1	3202.7	3258.6	3319.2	3400.7	3500.8	3612.6
32.5°	2948.8	2948.8	2958.1	2972.1	2988.4	3009.4	3049.0	3093.2	3156.1	3226.0	3307.5
35°	2895.2	2885.9	2895.2	2897.5	2899.9	2904.6	2911.5	2925.5	2946.4	2976.8	3007.0
37.5°	2872.0	2864.9	2864.9	2855.7	2844.0	2830.0	2811.4	2790.4	2767.1	2736.8	2713.6
40°	2781.1	2776.4	2771.8	2762.5	2736.8	2708.9	2678.6	2629.7	2576.1	2501.6	2427.1
42.5°	2606.4	2601.8	2599.4	2580.8	2557.5	2524.9	2489.9	2438.7	2371.2	2275.6	2168.5
45°	2389.8	2380.5	2373.5	2357.2	2340.8	2312.9	2280.3	2233.7	2166.2	2068.4	1940.2
47.5°	2138.2	2133.6	2131.2	2124.3	2108.0	2091.6	2070.7	2033.4	1972.8	1879.7	1746.9
50°	1884.3	1875.0	1879.7	1877.4	1870.4	1858.7	1844.7	1819.1	1772.5	1688.7	1567.6
52.5°	1593.2	1593.2	1590.9	1597.8	1600.2	1597.8	1600.2	1572.2	1532.6	1469.7	1367.2
55°	1290.4	1290.4	1297.4	1306.7	1316.0	1318.3	1316.0	1304.4	1276.4	1225.2	1134.3
57.5°	1006.2	1001.6	1015.5	1029.5	1038.9	1048.1	1041.1	1031.8	1015.5	973.6	903.7
60°	766.3	766.3	775.6	785.0	794.2	803.6	801.3	798.9	785.0	757.0	701.1
62.5°	563.7	566.0	566.0	573.0	582.3	591.6	598.6	591.6	584.6	566.0	528.7
65°	402.9	400.6	402.9	409.9	417.0	426.2	430.9	428.6	421.6	407.6	379.7
67.5°	270.2	267.9	277.2	279.5	284.2	293.5	291.2	293.5	291.2	279.5	256.2
70°	177.0	172.3	177.0	174.7	181.7	184.0	188.6	191.0	188.6	181.7	174.7
72.5°	109.5	107.1	109.5	111.8	114.2	116.4	121.1	121.1	118.8	114.2	104.8
75°	69.9	62.9	65.2	60.6	65.2	65.2	69.9	72.2	69.9	69.9	65.2
77.5°	41.9	41.9	41.9	41.9	41.9	41.9	41.9	44.3	46.6	41.9	39.6
80°	21.0	21.0	23.3	23.3	23.3	25.6	23.3	23.3	23.3	25.6	18.6
82.5°	16.3	14.0	14.0	14.0	16.3	14.0	14.0	14.0	14.0	14.0	14.0
85°	7.0	9.3	7.0	4.7	7.0	7.0	9.3	7.0	7.0	7.0	9.3
87.5°	2.3	2.3	0.0	0.0	0.0	2.3	0.0	2.3	2.3	4.7	0.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2
2.5°	4399.9	4395.2	4395.2	4392.9	4397.6	4392.9	4395.2	4392.9	4392.9	4397.6	4392.9
5°	4416.2	4418.5	4413.9	4411.5	4418.5	4418.5	4418.5	4413.9	4413.9	4416.2	4413.9
7.5°	4439.5	4444.1	4446.5	4448.8	4453.5	4455.8	4455.8	4453.5	4451.1	4458.2	4448.8
10°	4465.1	4472.1	4486.1	4493.1	4504.7	4504.7	4509.4	4509.4	4504.7	4509.4	4507.1
12.5°	4455.8	4497.7	4521.0	4537.3	4553.6	4567.6	4572.3	4574.6	4572.3	4581.6	4572.3
15°	4472.1	4507.1	4544.3	4572.3	4602.5	4618.8	4623.5	4642.1	4646.8	4649.1	4635.2
17.5°	4446.5	4509.4	4548.9	4590.9	4635.2	4665.4	4693.4	4705.0	4707.4	4712.0	4693.4
20°	4388.2	4458.2	4518.7	4579.3	4630.5	4677.1	4700.4	4733.0	4723.7	4742.3	4716.7
22.5°	4309.1	4388.2	4465.1	4544.3	4597.9	4653.8	4702.7	4726.0	4737.6	4737.6	4709.7
25°	4183.3	4276.5	4360.3	4441.8	4523.4	4590.9	4646.8	4681.7	4688.7	4686.4	4653.8
27.5°	3987.6	4087.8	4185.6	4278.8	4378.9	4458.2	4523.4	4565.2	4576.9	4576.9	4542.0
30°	3717.4	3824.6	3920.1	4031.9	4134.4	4222.9	4313.7	4351.0	4371.9	4371.9	4332.4
32.5°	3396.0	3486.8	3575.4	3684.8	3796.7	3896.8	3983.0	4034.2	4059.8	4057.5	4022.6
35°	3046.6	3090.9	3158.5	3240.0	3340.1	3433.3	3517.1	3566.1	3610.3	3608.0	3575.4
37.5°	2697.2	2685.6	2692.6	2722.9	2785.7	2851.0	2916.2	2962.8	3000.0	3016.4	3009.4
40°	2354.9	2294.3	2236.0	2215.1	2219.7	2243.0	2278.0	2312.9	2354.9	2375.8	2385.1
42.5°	2047.4	1944.9	1842.4	1765.6	1721.3	1707.3	1723.6	1735.2	1760.9	1791.2	1821.5
45°	1800.5	1663.1	1528.0	1409.2	1334.6	1290.4	1281.1	1290.4	1304.4	1334.6	1374.3
47.5°	1597.8	1437.1	1285.7	1153.0	1043.5	985.3	969.0	964.3	978.3	1006.2	1059.8
50°	1418.5	1257.8	1090.1	936.3	822.2	757.0	733.7	724.4	740.7	761.6	810.5
52.5°	1222.8	1064.4	892.1	743.0	624.2	556.7	531.1	517.1	526.4	554.4	603.3
55°	1010.9	864.1	708.1	554.4	440.2	377.3	347.0	337.7	347.0	377.3	426.2
57.5°	798.9	675.5	545.0	400.6	298.1	235.3	204.9	195.7	221.3	232.9	284.2
60°	624.2	524.1	412.3	293.5	204.9	156.0	125.8	118.8	130.5	151.4	193.3
62.5°	468.2	405.3	316.8	209.6	151.4	100.1	83.8	76.9	83.8	100.1	132.8
65°	340.1	291.2	221.3	153.7	102.5	74.5	55.9	51.2	58.2	69.9	97.9
67.5°	232.9	195.7	153.7	107.1	69.9	46.6	39.6	39.6	41.9	51.2	72.2
70°	151.4	128.1	97.9	69.9	46.6	34.9	30.3	25.6	30.3	37.3	48.9
72.5°	95.5	81.5	62.9	48.9	34.9	25.6	21.0	18.6	23.3	27.9	37.3
75°	58.2	44.3	32.6	25.6	18.6	18.6	18.6	9.3	11.6	18.6	23.3
77.5°	34.9	30.3	25.6	21.0	16.3	9.3	9.3	9.3	11.6	14.0	21.0
80°	18.6	16.3	11.6	11.6	9.3	7.0	9.3	7.0	4.7	11.6	14.0
82.5°	11.6	9.3	9.3	9.3	11.6	4.7	7.0	4.7	7.0	9.3	7.0
85°	7.0	7.0	7.0	4.7	11.6	4.7	4.7	2.3	2.3	4.7	4.7
87.5°	0.0	2.3	2.3	0.0	2.3	0.0	2.3	2.3	2.3	2.3	2.3
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°	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2	4388.2
2.5°	4395.2	4392.9	4395.2	4392.9	4392.9	4392.9	4395.2	4395.2	4392.9	4392.9	4397.6
5°	4413.9	4413.9	4413.9	4411.5	4409.2	4409.2	4413.9	4413.9	4406.9	4413.9	4413.9
7.5°	4453.5	4446.5	4453.5	4444.1	4439.5	4441.8	4444.1	4439.5	4434.8	4437.2	4437.2
10°	4504.7	4497.7	4497.7	4490.8	4483.7	4479.1	4474.5	4462.8	4451.1	4448.8	4439.5
12.5°	4565.2	4553.6	4546.7	4532.6	4521.0	4504.7	4490.8	4472.1	4448.8	4432.5	4416.2
15°	4625.8	4607.2	4590.9	4567.6	4542.0	4514.0	4483.7	4453.5	4416.2	4383.6	4355.6
17.5°	4674.7	4649.1	4618.8	4581.6	4544.3	4502.4	4458.2	4413.9	4360.3	4318.4	4285.8
20°	4691.0	4653.8	4614.2	4565.2	4516.3	4458.2	4402.2	4344.0	4283.4	4239.2	4201.9
22.5°	4670.1	4625.8	4576.9	4525.7	4460.4	4397.6	4332.4	4264.8	4211.2	4150.7	4115.7
25°	4611.9	4558.3	4504.7	4444.1	4381.3	4311.4	4241.5	4171.7	4106.4	4073.8	4029.6
27.5°	4493.1	4434.8	4376.6	4313.7	4241.5	4171.7	4099.4	4031.9	3976.0	3931.7	3906.1
30°	4283.4	4215.9	4148.3	4080.8	4017.9	3945.7	3878.2	3822.2	3766.3	3731.4	3705.8
32.5°	3962.0	3901.5	3833.9	3768.7	3710.5	3649.9	3594.0	3545.1	3505.5	3482.2	3463.5
35°	3528.8	3468.2	3417.0	3370.4	3321.5	3295.9	3260.9	3232.9	3216.6	3207.4	3205.0
37.5°	2983.7	2948.8	2932.5	2923.2	2913.8	2906.9	2911.5	2923.2	2932.5	2948.8	2967.4
40°	2401.4	2431.7	2441.0	2473.6	2503.9	2543.5	2587.8	2639.0	2680.9	2734.5	2771.8
42.5°	1870.4	1926.3	1991.5	2061.4	2135.9	2208.1	2296.6	2378.1	2452.7	2520.2	2578.4
45°	1437.1	1523.3	1621.1	1721.3	1821.5	1926.3	2033.4	2133.6	2222.1	2294.3	2354.9
47.5°	1120.4	1215.9	1341.7	1465.1	1586.2	1709.7	1828.4	1933.2	2007.8	2077.7	2131.2
50°	887.4	996.9	1134.3	1276.4	1409.2	1539.6	1665.4	1763.2	1837.8	1893.7	1933.2
52.5°	687.1	817.6	957.3	1106.4	1248.5	1390.6	1507.0	1597.8	1658.4	1707.3	1737.6
55°	512.4	640.5	789.6	943.3	1087.8	1225.2	1334.6	1413.9	1467.4	1495.4	1511.7
57.5°	370.3	486.8	635.9	789.6	920.0	1050.5	1139.0	1211.2	1241.5	1257.8	1264.8
60°	270.2	377.3	510.1	642.9	766.3	871.1	948.0	996.9	1020.2	1029.5	1027.2
62.5°	198.0	291.2	405.3	517.1	617.2	703.4	764.0	796.6	808.3	812.9	805.9
65°	151.4	223.6	321.4	407.6	484.5	547.4	591.6	612.6	619.6	617.2	612.6
67.5°	111.8	167.7	239.9	305.1	361.0	409.9	433.3	451.9	456.5	449.6	442.5
70°	79.2	123.4	174.7	219.0	260.9	288.8	314.4	316.8	316.8	314.4	309.8
72.5°	55.9	86.2	118.8	149.1	174.7	195.7	204.9	212.0	209.6	207.3	202.7
75°	37.3	53.6	86.2	93.2	116.4	123.4	132.8	132.8	135.1	128.1	128.1
77.5°	23.3	37.3	51.2	60.6	69.9	79.2	83.8	83.8	86.2	83.8	83.8
80°	14.0	23.3	27.9	41.9	41.9	48.9	51.2	53.6	48.9	55.9	48.9
82.5°	9.3	14.0	21.0	21.0	25.6	30.3	30.3	32.6	32.6	30.3	30.3
85°	7.0	9.3	11.6	14.0	14.0	16.3	14.0	14.0	16.3	18.6	16.3
87.5°	2.3	4.7	2.3	4.7	4.7	9.3	7.0	7.0	7.0	9.3	9.3
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: P248337

CATALOG NUMBER: LSR8B80D010 EC8B80830 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4388.2	4388.2	4388.2	4388.2
2.5°	4392.9	4395.2	4392.9	4392.9
5°	4413.9	4411.5	4413.9	4409.2
7.5°	4430.2	4430.2	4427.8	4427.8
10°	4430.2	4420.9	4420.9	4420.9
12.5°	4395.2	4383.6	4376.6	4371.9
15°	4334.7	4313.7	4304.4	4302.1
17.5°	4255.5	4236.9	4225.2	4218.2
20°	4164.6	4146.0	4132.0	4134.4
22.5°	4085.4	4064.5	4055.2	4050.5
25°	4006.3	3980.6	3973.7	3969.0
27.5°	3878.2	3864.2	3857.2	3850.2
30°	3682.5	3675.5	3663.9	3680.2
32.5°	3456.6	3444.9	3435.6	3442.6
35°	3207.4	3200.3	3207.4	3202.7
37.5°	2979.1	2986.1	2995.4	3000.0
40°	2799.7	2825.3	2834.7	2839.3
42.5°	2620.4	2650.7	2669.3	2680.9
45°	2399.1	2429.4	2450.3	2464.3
47.5°	2170.8	2196.5	2217.4	2215.1
50°	1963.6	1977.5	1986.8	1996.2
52.5°	1753.9	1753.9	1756.2	1756.2
55°	1516.3	1511.7	1509.3	1511.7
57.5°	1255.4	1250.8	1248.5	1241.5
60°	1017.9	1003.9	994.6	994.6
62.5°	796.6	780.3	773.3	771.0
65°	598.6	596.3	582.3	580.0
67.5°	433.3	423.9	414.6	417.0
70°	305.1	291.2	291.2	286.5
72.5°	198.0	191.0	188.6	188.6
75°	123.4	123.4	118.8	128.1
77.5°	81.5	81.5	79.2	81.5
80°	48.9	48.9	48.9	46.6
82.5°	30.3	32.6	30.3	30.3
85°	16.3	18.6	14.0	21.0
87.5°	9.3	11.6	9.3	11.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)