

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: P249534

Luminaire Tested: **LSR8B80D010 EC8B80835 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249534
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 EC8B80835 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8392.0 lumens
Efficiency: N/A
Efficacy: 112.8 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

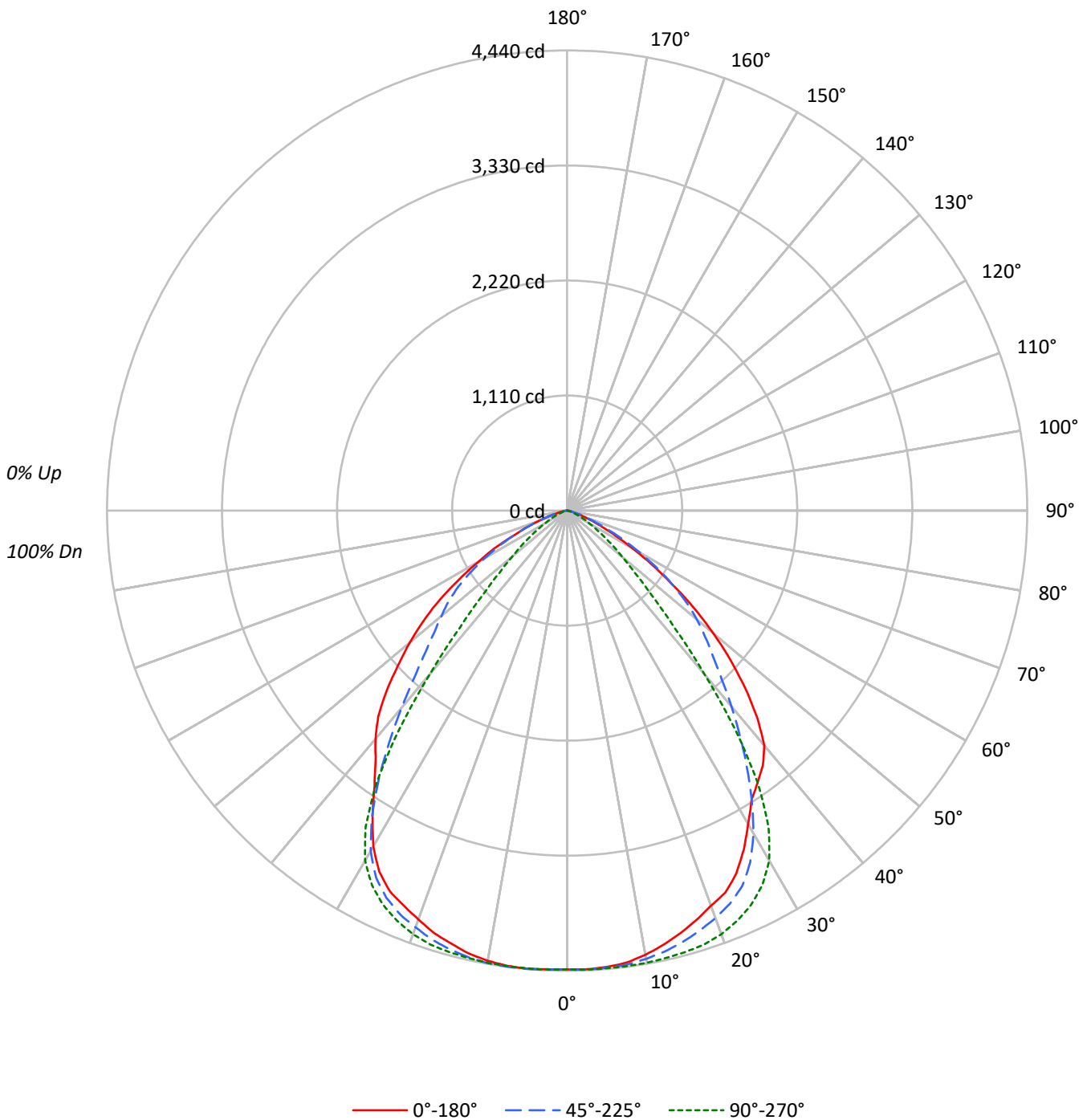
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	136537	136537	136537
5°	136836	137207	137353
10°	136260	138718	138124
15°	134752	140747	138091
20°	133135	142724	137736
25°	131405	142888	137876
30°	124317	138873	133201
35°	120604	120691	121948
40°	119111	83044	115762
45°	106132	49854	107584
50°	88251	33178	95092
55°	66186	22876	80626
60°	44855	15245	60828
65°	27055	9887	41794
70°	15003	5355	25713
75°	6791	2264	13308
80°	5913	2522	9287
85°	6722	3361	9270



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	422.6	5.0
10°-20°	1227.2	14.6
20°-30°	1862.7	22.2
30°-40°	1956.3	23.3
40°-50°	1466.7	17.5
50°-60°	941.1	11.2
60°-70°	402.6	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°	3512.4	41.9
0°-40°	5468.8	65.2
0°-60°	7876.6	93.9
0°-90°	8392.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8392.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4428	4428	4428	4428	4428	
5°	4421	4428	4433	4440	4437	420
15°	4221	4309	4409	4380	4326	1191
25°	3862	3998	4200	4124	4052	1764
35°	3204	3026	3206	3168	3240	2011
45°	2434	1989	1143	1932	2467	1864
55°	1231	1231	426	1283	1500	1117
65°	371	437	136	563	573	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°	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8
2.5°	4430.2	4434.9	4432.6	4432.6	4430.2	4432.6	4432.6	4437.3	4437.3	4432.6	4430.2
5°	4420.6	4425.4	4425.4	4420.6	4420.6	4432.6	4425.4	4430.2	4430.2	4427.8	4427.8
7.5°	4399.3	4399.3	4408.8	4401.7	4401.7	4408.8	4406.4	4411.2	4415.9	4418.3	4418.3
10°	4351.7	4356.5	4358.9	4358.9	4361.3	4368.4	4373.1	4382.7	4387.4	4392.1	4394.5
12.5°	4292.3	4299.4	4301.8	4299.4	4306.6	4316.1	4328.0	4339.9	4347.0	4356.5	4363.6
15°	4221.0	4221.0	4225.8	4232.9	4237.7	4251.9	4263.8	4278.0	4297.1	4309.0	4320.8
17.5°	4142.6	4147.4	4154.5	4154.5	4164.0	4187.7	4194.9	4216.3	4237.7	4249.5	4273.3
20°	4057.1	4061.8	4068.9	4073.7	4085.5	4104.6	4118.8	4137.8	4161.6	4183.0	4206.7
22.5°	3990.5	3981.0	3985.7	3990.5	4002.4	4019.0	4035.7	4059.4	4083.2	4104.6	4128.3
25°	3862.1	3864.5	3871.7	3876.4	3890.7	3904.9	3923.9	3952.4	3973.8	3997.6	4023.7
27.5°	3688.6	3691.0	3702.9	3702.9	3714.8	3738.5	3750.4	3774.2	3802.7	3826.5	3857.4
30°	3491.4	3496.1	3496.1	3505.6	3512.7	3524.7	3536.5	3560.3	3574.5	3595.9	3638.8
32.5°	3310.8	3315.5	3313.1	3310.8	3303.6	3301.2	3298.8	3303.6	3308.4	3315.5	3332.1
35°	3203.8	3191.9	3182.4	3165.8	3146.8	3123.0	3101.6	3073.1	3046.9	3025.5	3001.8
37.5°	3101.6	3099.2	3085.0	3061.2	3023.1	2980.4	2930.5	2868.7	2806.9	2740.3	2676.2
40°	2959.0	2951.8	2940.0	2906.7	2863.9	2811.6	2745.1	2669.0	2569.2	2467.0	2362.4
42.5°	2716.5	2718.9	2704.7	2678.5	2638.2	2588.2	2519.3	2436.1	2329.2	2207.9	2072.5
45°	2433.7	2433.7	2429.0	2407.6	2379.1	2338.7	2286.4	2217.5	2112.9	1989.3	1844.3
47.5°	2139.0	2141.4	2134.3	2129.5	2117.6	2091.5	2053.5	2001.2	1927.5	1808.6	1663.7
50°	1839.6	1839.6	1851.4	1849.1	1849.1	1839.6	1823.0	1792.0	1727.9	1632.8	1497.3
52.5°	1540.1	1544.9	1552.0	1561.5	1573.4	1592.4	1573.4	1559.1	1518.7	1445.0	1328.6
55°	1231.1	1235.9	1247.8	1264.4	1278.7	1297.7	1302.4	1302.4	1281.0	1231.1	1143.2
57.5°	967.3	960.2	969.7	984.0	1003.0	1022.0	1036.2	1052.9	1050.5	1017.2	945.9
60°	727.3	729.7	736.8	751.1	765.3	781.9	801.0	815.2	822.4	805.7	760.5
62.5°	530.0	530.0	539.5	553.7	560.9	584.7	596.5	603.7	610.8	608.4	579.9
65°	370.8	375.5	380.3	387.4	394.5	408.8	415.9	430.2	434.9	437.3	415.9
67.5°	261.5	254.3	259.1	263.8	270.9	280.5	294.7	294.7	301.8	301.8	287.6
70°	166.4	166.4	168.8	175.9	180.6	183.0	187.8	192.5	199.6	197.3	197.3
72.5°	111.7	109.3	111.7	114.1	116.5	123.6	123.6	126.0	130.7	133.1	123.6
75°	57.0	59.4	64.1	61.8	68.9	64.1	66.5	73.7	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°	33.3	35.6	33.3	30.9	33.3	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	7.2	7.2	7.2	9.5	9.5	9.5	7.2	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°	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8
2.5°	4434.9	4432.6	4437.3	4434.9	4434.9	4432.6	4434.9	4432.6	4437.3	4427.8	4430.2
5°	4434.9	4430.2	4432.6	4434.9	4437.3	4432.6	4432.6	4432.6	4437.3	4432.6	4434.9
7.5°	4425.4	4423.0	4430.2	4434.9	4432.6	4430.2	4434.9	4432.6	4437.3	4434.9	4439.6
10°	4406.4	4408.8	4413.5	4420.6	4423.0	4425.4	4430.2	4430.2	4437.3	4427.8	4432.6
12.5°	4377.9	4387.4	4399.3	4404.0	4413.5	4413.5	4418.3	4420.6	4425.4	4423.0	4430.2
15°	4342.2	4354.1	4368.4	4380.3	4392.1	4399.3	4406.4	4408.8	4415.9	4408.8	4411.2
17.5°	4299.4	4313.7	4335.1	4349.3	4368.4	4375.5	4385.0	4389.8	4396.9	4392.1	4394.5
20°	4240.0	4256.7	4280.4	4301.8	4313.7	4330.3	4342.2	4349.3	4354.1	4349.3	4351.7
22.5°	4156.8	4180.6	4211.5	4228.1	4251.9	4266.2	4268.6	4285.2	4297.1	4285.2	4290.0
25°	4059.4	4083.2	4106.9	4142.6	4164.0	4180.6	4197.3	4199.6	4211.5	4209.1	4206.7
27.5°	3897.8	3928.7	3969.1	3997.6	4026.1	4052.3	4071.3	4076.0	4087.9	4083.2	4085.5
30°	3676.7	3710.0	3748.1	3793.2	3833.6	3859.7	3883.5	3900.2	3912.0	3904.9	3902.5
32.5°	3363.0	3396.3	3436.7	3481.9	3529.4	3567.4	3595.9	3617.3	3631.6	3626.8	3615.0
35°	3004.2	3013.7	3039.8	3075.5	3115.8	3156.2	3182.4	3206.1	3222.8	3227.5	3227.5
37.5°	2635.8	2604.9	2585.9	2585.9	2609.6	2626.2	2650.0	2664.3	2690.4	2699.9	2707.1
40°	2279.2	2207.9	2141.4	2091.5	2058.2	2055.9	2055.9	2063.0	2086.7	2117.6	2146.2
42.5°	1960.8	1846.7	1744.5	1651.8	1585.3	1547.2	1530.6	1533.0	1552.0	1580.5	1628.0
45°	1706.5	1563.9	1435.5	1323.8	1233.5	1174.1	1145.6	1143.2	1157.4	1190.7	1243.0
47.5°	1509.2	1357.1	1212.1	1083.8	986.3	922.1	888.9	879.4	888.9	919.8	981.6
50°	1345.2	1188.4	1038.6	905.5	801.0	734.4	703.5	691.6	703.5	729.7	791.4
52.5°	1193.1	1031.5	891.3	762.9	651.2	594.2	560.9	553.7	560.9	591.8	641.7
55°	1017.2	879.4	741.5	613.2	515.8	458.7	432.5	425.5	432.5	461.1	513.4
57.5°	843.8	724.9	603.7	487.2	404.1	354.1	330.4	320.8	337.5	356.5	418.3
60°	682.1	587.1	484.8	382.7	313.7	268.6	249.5	247.2	251.9	275.7	318.5
62.5°	534.8	456.3	375.5	292.3	235.3	216.3	192.5	190.2	194.9	209.1	242.4
65°	385.0	335.1	273.3	213.9	168.8	142.6	133.1	135.5	140.2	149.7	180.6
67.5°	268.6	232.9	190.2	149.7	116.5	104.6	95.1	92.7	95.1	111.7	128.3
70°	180.6	159.2	128.3	114.1	80.8	64.1	66.5	59.4	68.9	68.9	83.2
72.5°	118.8	104.6	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	33.3	23.8	11.9	21.4	19.0	16.6	19.0	23.8
77.5°	42.8	35.6	33.3	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	7.2	9.5	16.6	7.2	9.5	9.5	9.5	7.2
87.5°	4.8	7.2	7.2	7.2	4.8	2.4	4.8	7.2	7.2	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°	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8	4427.8
2.5°	4434.9	4437.3	4437.3	4434.9	4434.9	4430.2	4439.6	4432.6	4434.9	4444.4	4437.3
5°	4439.6	4442.0	4442.0	4439.6	4439.6	4439.6	4442.0	4442.0	4439.6	4437.3	4442.0
7.5°	4449.2	4446.8	4446.8	4442.0	4442.0	4437.3	4442.0	4434.9	4439.6	4434.9	4442.0
10°	4437.3	4439.6	4437.3	4434.9	4434.9	4432.6	4432.6	4425.4	4427.8	4420.6	4425.4
12.5°	4430.2	4427.8	4427.8	4423.0	4418.3	4413.5	4411.2	4404.0	4404.0	4387.4	4394.5
15°	4411.2	4413.5	4406.4	4396.9	4392.1	4380.3	4375.5	4366.0	4356.5	4344.6	4347.0
17.5°	4394.5	4387.4	4377.9	4368.4	4349.3	4339.9	4330.3	4316.1	4311.3	4297.1	4292.3
20°	4344.6	4339.9	4328.0	4311.3	4299.4	4278.0	4268.6	4254.3	4242.4	4228.1	4221.0
22.5°	4280.4	4275.7	4261.4	4244.8	4225.8	4216.3	4206.7	4180.6	4168.7	4154.5	4152.1
25°	4199.6	4192.5	4178.2	4159.2	4149.7	4123.6	4114.0	4095.0	4090.3	4076.0	4073.7
27.5°	4076.0	4066.5	4049.9	4026.1	4009.5	3992.9	3983.4	3969.1	3964.4	3950.1	3947.7
30°	3890.7	3878.8	3845.5	3836.0	3807.5	3790.8	3790.8	3771.8	3774.2	3764.7	3764.7
32.5°	3598.3	3579.3	3553.1	3534.1	3515.1	3505.6	3505.6	3498.5	3503.3	3503.3	3508.0
35°	3210.9	3184.8	3170.5	3158.6	3158.6	3168.1	3196.7	3203.8	3218.1	3229.9	3239.5
37.5°	2714.2	2711.8	2728.5	2742.7	2778.4	2818.8	2868.7	2911.5	2951.8	2980.4	3008.9
40°	2177.1	2236.5	2284.0	2350.6	2405.2	2483.6	2574.0	2647.6	2716.5	2766.5	2818.8
42.5°	1699.3	1775.4	1875.2	1972.6	2070.1	2177.1	2295.9	2398.1	2488.4	2557.3	2612.0
45°	1323.8	1428.4	1549.6	1673.2	1799.2	1932.3	2055.9	2160.4	2255.5	2326.8	2381.5
47.5°	1067.1	1181.2	1319.0	1454.5	1597.1	1737.4	1875.2	1965.5	2043.9	2101.0	2150.9
50°	881.7	1003.0	1148.0	1302.4	1445.0	1585.3	1704.1	1792.0	1856.2	1906.1	1937.0
52.5°	736.8	865.1	1019.6	1174.1	1316.7	1445.0	1552.0	1618.5	1670.8	1706.5	1735.0
55°	608.4	732.0	877.0	1022.0	1162.2	1283.4	1371.3	1421.3	1461.6	1483.0	1499.7
57.5°	496.8	610.8	743.9	877.0	998.2	1098.1	1167.0	1216.9	1235.9	1252.5	1250.1
60°	389.8	496.8	617.9	732.0	836.6	917.4	967.3	995.8	1010.1	1017.2	1012.5
62.5°	306.6	404.1	496.8	596.5	672.6	741.5	789.1	789.1	796.2	798.6	805.7
65°	228.1	301.8	382.7	456.3	518.1	563.3	589.4	596.5	606.1	603.7	598.9
67.5°	168.8	223.4	282.8	337.5	380.3	408.8	427.8	444.5	442.1	437.3	434.9
70°	116.5	152.1	204.4	237.7	268.6	297.1	301.8	304.2	306.6	309.0	304.2
72.5°	80.8	106.9	135.5	164.0	183.0	194.9	206.8	209.1	209.1	209.1	206.8
75°	40.4	54.7	80.8	92.7	109.3	114.1	123.6	123.6	130.7	121.2	118.8
77.5°	35.6	42.8	57.0	66.5	73.7	80.8	83.2	90.3	87.9	83.2	85.5
80°	21.4	26.2	35.6	40.4	49.9	52.3	54.7	57.0	54.7	57.0	57.0
82.5°	16.6	19.0	23.8	23.8	30.9	30.9	33.3	33.3	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	7.2	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: P249534

CATALOG NUMBER: LSR8B80D010 EC8B80835 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4427.8	4427.8	4427.8	4427.8
2.5°	4434.9	4439.6	4432.6	4430.2
5°	4442.0	4442.0	4437.3	4437.3
7.5°	4442.0	4442.0	4434.9	4430.2
10°	4423.0	4423.0	4415.9	4411.2
12.5°	4387.4	4387.4	4385.0	4377.9
15°	4342.2	4342.2	4332.7	4325.6
17.5°	4280.4	4285.2	4273.3	4273.3
20°	4213.9	4211.5	4202.0	4197.3
22.5°	4145.0	4140.2	4137.8	4123.6
25°	4071.3	4066.5	4059.4	4052.3
27.5°	3945.3	3943.0	3935.8	3926.3
30°	3752.8	3750.4	3740.9	3740.9
32.5°	3503.3	3500.9	3491.4	3493.8
35°	3244.2	3253.7	3248.9	3239.5
37.5°	3027.9	3035.1	3039.8	3035.1
40°	2847.3	2868.7	2871.1	2875.8
42.5°	2654.8	2683.3	2692.8	2697.5
45°	2424.2	2450.4	2471.8	2467.0
47.5°	2188.9	2207.9	2226.9	2212.7
50°	1963.2	1975.0	1982.2	1982.2
52.5°	1749.3	1749.3	1746.9	1749.3
55°	1504.4	1504.4	1495.0	1499.7
57.5°	1247.8	1252.5	1245.4	1233.5
60°	1010.1	998.2	993.4	986.3
62.5°	786.7	786.7	770.1	791.4
65°	589.4	582.3	575.1	572.8
67.5°	427.8	425.5	418.3	415.9
70°	301.8	292.3	290.0	285.2
72.5°	202.0	202.0	197.3	197.3
75°	123.6	111.7	109.3	111.7
77.5°	85.5	83.2	83.2	80.8
80°	57.0	54.7	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)