

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: P249552

Luminaire Tested: **LSR8B80D010 EC8B80850 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249552
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 EC8B80850 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8501.0 lumens
Efficiency: N/A
Efficacy: 114.3 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

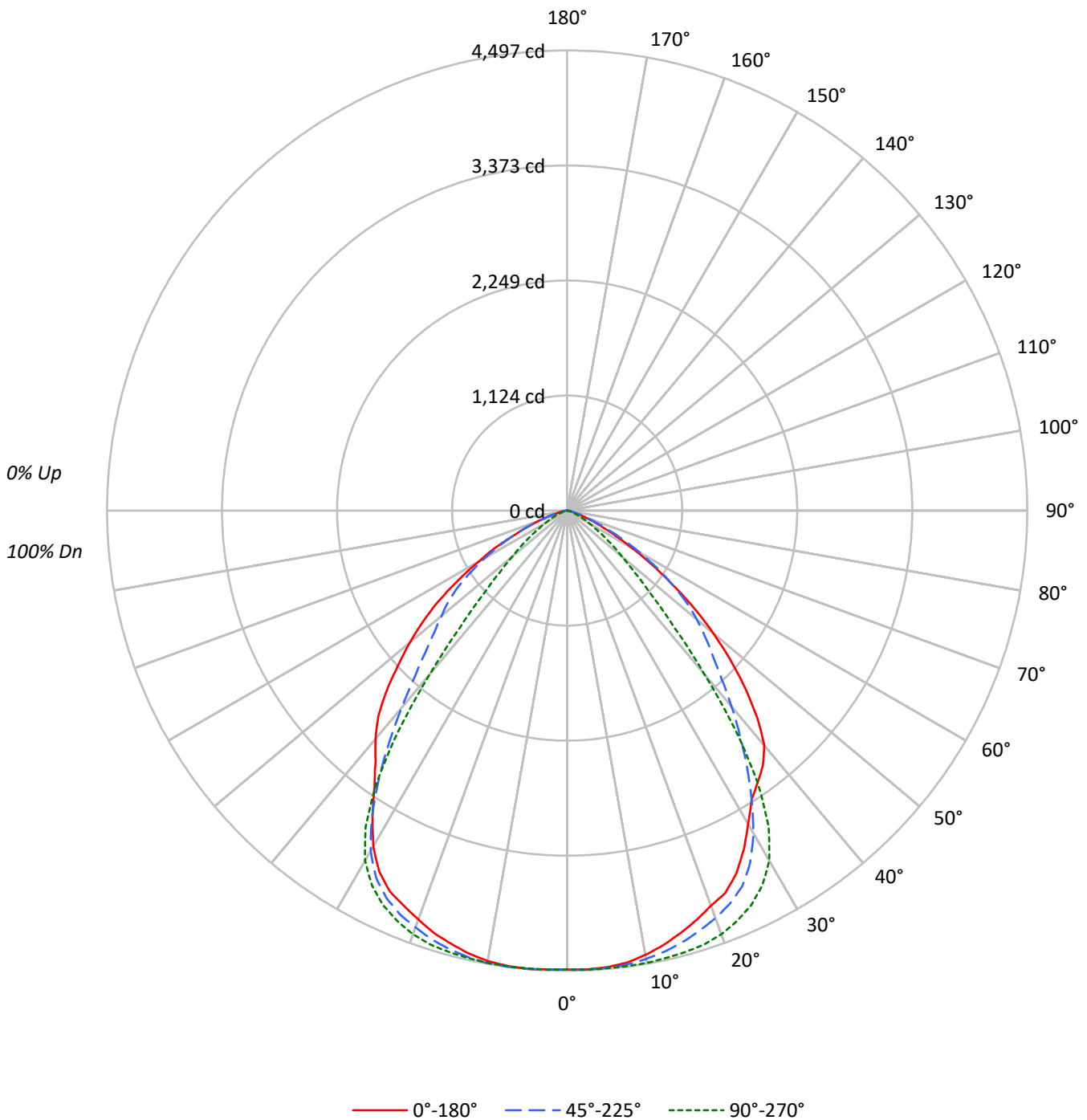
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249552

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBDW0MW

Luminous Intensity Polar Plot





TEST NUMBER: P249552

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBDW0MW

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°	138310	138310	138310
5°	138616	138987	139139
10°	138030	140519	139915
15°	136501	142573	139885
20°	134861	144578	139524
25°	133113	144745	139666
30°	125930	140675	134932
35°	122170	122261	123529
40°	120657	84119	117268
45°	107514	50499	108984
50°	89397	33610	96325
55°	67046	23171	81674
60°	45434	15443	61623
65°	27406	10018	42334
70°	15192	5428	26047
75°	6886	2299	13487
80°	5984	2557	9412
85°	6828	3397	9376



TEST NUMBER: P249552

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBDW0MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	428.1	5.0
10°-20°	1243.1	14.6
20°-30°	1886.9	22.2
30°-40°	1981.8	23.3
40°-50°	1485.8	17.5
50°-60°	953.3	11.2
60°-70°	407.8	4.8
70°-80°	96.3	1.1
80°-90°	17.9	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°	3558.1	41.9
0°-40°	5539.8	65.2
0°-60°	7978.9	93.9
0°-90°	8501.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8501.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4485	4485	4485	4485	4485	
5°	4478	4485	4490	4497	4495	425
15°	4276	4365	4466	4437	4382	1206
25°	3912	4050	4254	4177	4105	1787
35°	3245	3065	3248	3209	3282	2037
45°	2465	2015	1158	1957	2499	1888
55°	1247	1247	431	1300	1519	1131
65°	376	443	137	571	580	401
75°	58	67	19	116	113	84
85°	19	12	10	19	26	20
90°	0	0	0	0	0	



TEST NUMBER: P249552

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBDW0MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3
2.5°	4487.7	4492.5	4490.1	4490.1	4487.7	4490.1	4490.1	4495.0	4495.0	4490.1	4487.7
5°	4478.1	4482.9	4482.9	4478.1	4478.1	4490.1	4482.9	4487.7	4487.7	4485.3	4485.3
7.5°	4456.4	4456.4	4466.0	4458.8	4458.8	4466.0	4463.6	4468.4	4473.3	4475.7	4475.7
10°	4408.2	4413.1	4415.5	4415.5	4417.9	4425.1	4429.9	4439.6	4444.4	4449.2	4451.6
12.5°	4348.1	4355.3	4357.7	4355.3	4362.5	4372.1	4384.2	4396.2	4403.5	4413.1	4420.3
15°	4275.8	4275.8	4280.6	4287.9	4292.7	4307.2	4319.2	4333.6	4352.9	4364.9	4377.0
17.5°	4196.4	4201.2	4208.4	4208.4	4218.1	4242.1	4249.4	4271.0	4292.7	4304.7	4328.8
20°	4109.7	4114.5	4121.8	4126.6	4138.6	4157.9	4172.3	4191.6	4215.7	4237.3	4261.4
22.5°	4042.3	4032.7	4037.5	4042.3	4054.4	4071.2	4088.1	4112.1	4136.2	4157.9	4182.0
25°	3912.3	3914.7	3921.9	3926.7	3941.2	3955.6	3974.9	4003.8	4025.4	4049.5	4076.0
27.5°	3736.6	3739.0	3751.0	3751.0	3763.0	3787.1	3799.1	3823.2	3852.1	3876.2	3907.5
30°	3536.7	3541.5	3541.5	3551.2	3558.4	3570.4	3582.5	3606.5	3621.0	3642.7	3686.0
32.5°	3353.8	3358.5	3356.1	3353.8	3346.5	3344.1	3341.7	3346.5	3351.3	3358.5	3375.4
35°	3245.4	3233.4	3223.8	3206.9	3187.6	3163.5	3141.9	3113.0	3086.5	3064.8	3040.8
37.5°	3141.9	3139.5	3125.0	3100.9	3062.4	3019.1	2968.6	2905.9	2843.3	2775.9	2710.9
40°	2997.4	2990.2	2978.2	2944.5	2901.1	2848.1	2780.8	2703.7	2602.6	2499.1	2393.1
42.5°	2751.8	2754.2	2739.8	2713.3	2672.4	2621.8	2552.0	2467.8	2359.4	2236.6	2099.4
45°	2465.4	2465.4	2460.5	2438.8	2410.0	2369.0	2316.1	2246.3	2140.4	2015.1	1868.3
47.5°	2166.8	2169.2	2162.0	2157.2	2145.1	2118.7	2080.1	2027.2	1952.5	1832.1	1685.3
50°	1863.5	1863.5	1875.5	1873.1	1873.1	1863.5	1846.6	1815.3	1750.3	1654.0	1516.8
52.5°	1560.1	1564.9	1572.2	1581.8	1593.8	1613.1	1593.8	1579.4	1538.4	1463.8	1345.8
55°	1247.1	1251.9	1264.0	1280.8	1295.3	1314.6	1319.3	1319.3	1297.7	1247.1	1158.0
57.5°	979.9	972.7	982.3	996.7	1016.0	1035.3	1049.7	1066.6	1064.1	1030.4	958.2
60°	736.7	739.1	746.3	760.8	775.2	792.1	811.4	825.8	833.0	816.2	770.4
62.5°	536.9	536.9	546.5	560.9	568.2	592.3	604.3	611.5	618.7	616.3	587.4
65°	375.6	380.4	385.2	392.5	399.6	414.1	421.3	435.8	440.6	443.0	421.3
67.5°	264.9	257.6	262.4	267.2	274.5	284.1	298.6	298.6	305.7	305.7	291.3
70°	168.5	168.5	171.0	178.1	183.0	185.4	190.2	195.0	202.2	199.8	199.8
72.5°	113.2	110.7	113.2	115.6	118.0	125.2	125.2	127.6	132.4	134.8	125.2
75°	57.8	60.2	65.0	62.6	69.8	65.0	67.4	74.6	72.2	67.4	67.4
77.5°	48.1	48.1	48.1	45.8	50.5	50.5	48.1	53.0	50.5	50.5	48.1
80°	33.7	36.1	33.7	31.3	33.7	31.3	31.3	31.3	31.3	31.3	28.9
82.5°	26.5	21.7	24.1	21.7	24.1	24.1	21.7	19.3	19.3	21.7	19.3
85°	19.3	14.4	16.8	16.8	14.4	14.4	14.4	14.4	14.4	12.0	12.0
87.5°	12.0	7.2	7.2	7.2	9.6	9.6	9.6	7.2	9.6	9.6	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



TEST NUMBER: P249552

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3
2.5°	4492.5	4490.1	4495.0	4492.5	4492.5	4490.1	4492.5	4490.1	4495.0	4485.3	4487.7
5°	4492.5	4487.7	4490.1	4492.5	4495.0	4490.1	4490.1	4490.1	4495.0	4490.1	4492.5
7.5°	4482.9	4480.5	4487.7	4492.5	4490.1	4487.7	4492.5	4490.1	4495.0	4492.5	4497.3
10°	4463.6	4466.0	4470.9	4478.1	4480.5	4482.9	4487.7	4487.7	4495.0	4485.3	4490.1
12.5°	4434.8	4444.4	4456.4	4461.2	4470.9	4470.9	4475.7	4478.1	4482.9	4480.5	4487.7
15°	4398.6	4410.7	4425.1	4437.2	4449.2	4456.4	4463.6	4466.0	4473.3	4466.0	4468.4
17.5°	4355.3	4369.7	4391.4	4405.8	4425.1	4432.3	4441.9	4446.8	4454.0	4449.2	4451.6
20°	4295.1	4312.0	4336.0	4357.7	4369.7	4386.6	4398.6	4405.8	4410.7	4405.8	4408.2
22.5°	4210.8	4234.9	4266.2	4283.1	4307.2	4321.6	4324.0	4340.8	4352.9	4340.8	4345.7
25°	4112.1	4136.2	4160.3	4196.4	4218.1	4234.9	4251.8	4254.2	4266.2	4263.8	4261.4
27.5°	3948.4	3979.7	4020.6	4049.5	4078.4	4104.9	4124.2	4129.0	4141.0	4136.2	4138.6
30°	3724.5	3758.2	3796.8	3842.5	3883.4	3909.9	3934.0	3950.8	3962.8	3955.6	3953.2
32.5°	3406.7	3440.4	3481.4	3527.1	3575.3	3613.7	3642.7	3664.3	3678.8	3673.9	3661.9
35°	3043.2	3052.8	3079.3	3115.4	3156.3	3197.2	3223.8	3247.8	3264.6	3269.5	3269.5
37.5°	2670.0	2638.7	2619.5	2619.5	2643.5	2660.3	2684.4	2698.9	2725.4	2735.0	2742.2
40°	2308.8	2236.6	2169.2	2118.7	2085.0	2082.6	2082.6	2089.7	2113.8	2145.1	2174.0
42.5°	1986.2	1870.7	1767.2	1673.3	1605.9	1567.3	1550.5	1552.9	1572.2	1601.0	1649.2
45°	1728.6	1584.2	1454.2	1341.0	1249.5	1189.3	1160.5	1158.0	1172.5	1206.2	1259.2
47.5°	1528.8	1374.7	1227.8	1097.8	999.2	934.1	900.4	890.8	900.4	931.7	994.3
50°	1362.7	1203.8	1052.1	917.3	811.4	744.0	712.6	700.6	712.6	739.1	801.7
52.5°	1208.6	1044.9	902.8	772.8	659.7	601.9	568.2	560.9	568.2	599.5	650.1
55°	1030.4	890.8	751.2	621.1	522.5	464.7	438.2	431.0	438.2	467.1	520.1
57.5°	854.7	734.3	611.5	493.5	409.3	358.7	334.7	325.0	341.9	361.1	423.7
60°	690.9	594.7	491.1	387.6	317.8	272.0	252.8	250.4	255.2	279.3	322.6
62.5°	541.7	462.3	380.4	296.1	238.3	219.1	195.0	192.6	197.4	211.8	245.6
65°	390.0	339.5	276.9	216.7	171.0	144.4	134.8	137.3	142.0	151.7	183.0
67.5°	272.0	235.9	192.6	151.7	118.0	105.9	96.3	93.9	96.3	113.2	130.0
70°	183.0	161.3	130.0	115.6	81.9	65.0	67.4	60.2	69.8	69.8	84.2
72.5°	120.4	105.9	86.7	67.4	57.8	45.8	45.8	43.4	48.1	50.5	62.6
75°	62.6	48.1	48.1	33.7	24.1	12.0	21.7	19.3	16.8	19.3	24.1
77.5°	43.4	36.1	33.7	26.5	24.1	19.3	19.3	19.3	19.3	21.7	24.1
80°	26.5	26.5	19.3	16.8	14.4	12.0	14.4	14.4	14.4	14.4	16.8
82.5°	16.8	14.4	14.4	12.0	12.0	9.6	9.6	9.6	9.6	9.6	14.4
85°	14.4	9.6	9.6	7.2	9.6	16.8	7.2	9.6	9.6	9.6	7.2
87.5°	4.8	7.2	7.2	7.2	4.8	2.4	4.8	7.2	7.2	12.0	9.6
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: P249552

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3	4485.3
2.5°	4492.5	4495.0	4495.0	4492.5	4492.5	4487.7	4497.3	4490.1	4492.5	4502.1	4495.0
5°	4497.3	4499.7	4499.7	4497.3	4497.3	4497.3	4499.7	4499.7	4497.3	4495.0	4499.7
7.5°	4507.0	4504.6	4504.6	4499.7	4499.7	4495.0	4499.7	4492.5	4497.3	4492.5	4499.7
10°	4495.0	4497.3	4495.0	4492.5	4492.5	4490.1	4490.1	4482.9	4485.3	4478.1	4482.9
12.5°	4487.7	4485.3	4485.3	4480.5	4475.7	4470.9	4468.4	4461.2	4461.2	4444.4	4451.6
15°	4468.4	4470.9	4463.6	4454.0	4449.2	4437.2	4432.3	4422.7	4413.1	4401.1	4403.5
17.5°	4451.6	4444.4	4434.8	4425.1	4405.8	4396.2	4386.6	4372.1	4367.3	4352.9	4348.1
20°	4401.1	4396.2	4384.2	4367.3	4355.3	4333.6	4324.0	4309.6	4297.5	4283.1	4275.8
22.5°	4336.0	4331.2	4316.8	4299.9	4280.6	4271.0	4261.4	4234.9	4222.9	4208.4	4206.0
25°	4254.2	4246.9	4232.5	4213.3	4203.6	4177.1	4167.5	4148.2	4143.4	4129.0	4126.6
27.5°	4129.0	4119.4	4102.5	4078.4	4061.6	4044.7	4035.1	4020.6	4015.8	4001.4	3999.0
30°	3941.2	3929.1	3895.4	3885.8	3856.9	3840.1	3840.1	3820.8	3823.2	3813.6	3813.6
32.5°	3645.1	3625.8	3599.3	3580.0	3560.8	3551.2	3551.2	3543.9	3548.8	3548.8	3553.6
35°	3252.6	3226.2	3211.7	3199.7	3199.7	3209.3	3238.2	3245.4	3259.9	3271.9	3281.5
37.5°	2749.4	2747.1	2763.9	2778.3	2814.5	2855.4	2905.9	2949.3	2990.2	3019.1	3048.0
40°	2205.3	2265.5	2313.7	2381.1	2436.4	2515.9	2607.4	2682.0	2751.8	2802.4	2855.4
42.5°	1721.4	1798.4	1899.6	1998.3	2097.0	2205.3	2325.7	2429.2	2520.7	2590.5	2645.9
45°	1341.0	1446.9	1569.8	1694.9	1822.5	1957.4	2082.6	2188.5	2284.8	2357.0	2412.4
47.5°	1081.0	1196.6	1336.2	1473.4	1617.9	1759.9	1899.6	1991.1	2070.5	2128.3	2178.9
50°	893.2	1016.0	1162.9	1319.3	1463.8	1605.9	1726.2	1815.3	1880.3	1930.9	1962.2
52.5°	746.3	876.3	1032.9	1189.3	1333.8	1463.8	1572.2	1639.6	1692.5	1728.6	1757.5
55°	616.3	741.5	888.4	1035.3	1177.3	1300.1	1389.1	1439.7	1480.6	1502.3	1519.2
57.5°	503.2	618.7	753.6	888.4	1011.2	1112.3	1182.1	1232.7	1251.9	1268.8	1266.4
60°	394.9	503.2	626.0	741.5	847.5	929.3	979.9	1008.8	1023.2	1030.4	1025.6
62.5°	310.6	409.3	503.2	604.3	681.3	751.2	799.3	799.3	806.5	808.9	816.2
65°	231.1	305.7	387.6	462.3	524.8	570.6	597.1	604.3	614.0	611.5	606.7
67.5°	171.0	226.3	286.5	341.9	385.2	414.1	433.3	450.2	447.8	443.0	440.6
70°	118.0	154.1	207.1	240.8	272.0	301.0	305.7	308.2	310.6	313.0	308.2
72.5°	81.9	108.3	137.3	166.1	185.4	197.4	209.5	211.8	211.8	211.8	209.5
75°	40.9	55.4	81.9	93.9	110.7	115.6	125.2	125.2	132.4	122.8	120.4
77.5°	36.1	43.4	57.8	67.4	74.6	81.9	84.2	91.5	89.1	84.2	86.7
80°	21.7	26.5	36.1	40.9	50.5	53.0	55.4	57.8	55.4	57.8	57.8
82.5°	16.8	19.3	24.1	24.1	31.3	31.3	33.7	33.7	36.1	36.1	36.1
85°	9.6	16.8	14.4	28.9	19.3	19.3	24.1	28.9	24.1	24.1	28.9
87.5°	9.6	9.6	7.2	9.6	9.6	9.6	12.0	14.4	14.4	16.8	14.4
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: P249552

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4485.3	4485.3	4485.3	4485.3
2.5°	4492.5	4497.3	4490.1	4487.7
5°	4499.7	4499.7	4495.0	4495.0
7.5°	4499.7	4499.7	4492.5	4487.7
10°	4480.5	4480.5	4473.3	4468.4
12.5°	4444.4	4444.4	4441.9	4434.8
15°	4398.6	4398.6	4389.0	4381.8
17.5°	4336.0	4340.8	4328.8	4328.8
20°	4268.6	4266.2	4256.6	4251.8
22.5°	4198.8	4194.0	4191.6	4177.1
25°	4124.2	4119.4	4112.1	4104.9
27.5°	3996.6	3994.2	3986.9	3977.3
30°	3801.5	3799.1	3789.5	3789.5
32.5°	3548.8	3546.3	3536.7	3539.2
35°	3286.3	3296.0	3291.1	3281.5
37.5°	3067.2	3074.5	3079.3	3074.5
40°	2884.3	2905.9	2908.4	2913.2
42.5°	2689.3	2718.1	2727.8	2732.6
45°	2455.7	2482.2	2503.9	2499.1
47.5°	2217.3	2236.6	2255.9	2241.4
50°	1988.7	2000.7	2007.9	2007.9
52.5°	1772.0	1772.0	1769.6	1772.0
55°	1524.0	1524.0	1514.4	1519.2
57.5°	1264.0	1268.8	1261.5	1249.5
60°	1023.2	1011.2	1006.3	999.2
62.5°	796.9	796.9	780.1	801.7
65°	597.1	589.9	582.6	580.2
67.5°	433.3	431.0	423.7	421.3
70°	305.7	296.1	293.7	288.9
72.5°	204.7	204.7	199.8	199.8
75°	125.2	113.2	110.7	113.2
77.5°	86.7	84.2	84.2	81.9
80°	57.8	55.4	60.2	53.0
82.5°	36.1	38.5	36.1	38.5
85°	24.1	28.9	26.5	26.5
87.5°	14.4	14.4	14.4	14.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)