

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: P249617

Luminaire Tested: **LSR8B100D010 EC8B1009730 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249617
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: LSR8B100D010 EC8B1009730 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8034.0 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

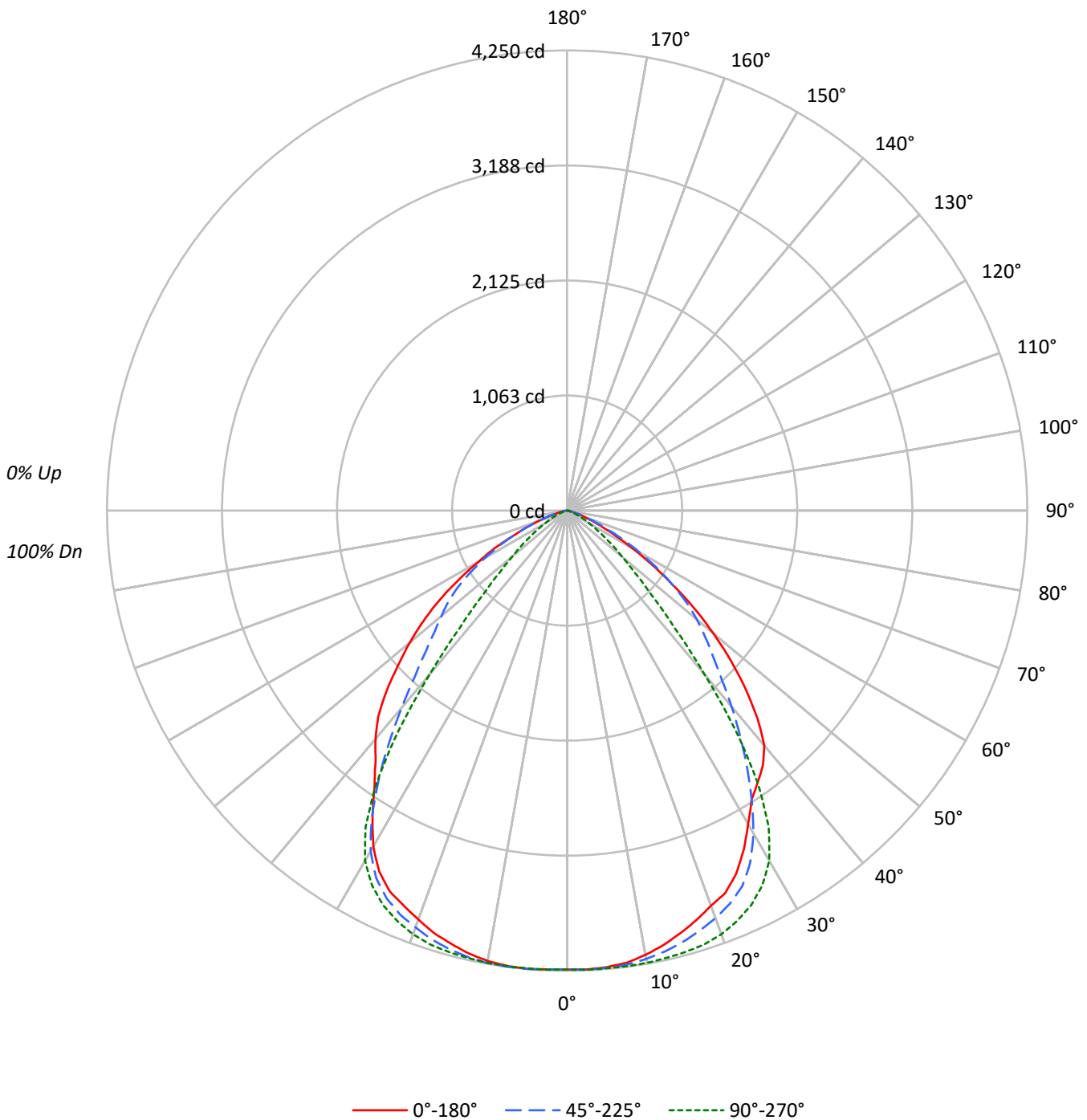
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0			
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90						
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79						
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70						
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62						
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55						
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50						
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45						
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41						
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37						
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34						

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	404.5	5.0
10°-20°	1174.8	14.6
20°-30°	1783.2	22.2
30°-40°	1872.9	23.3
40°-50°	1404.2	17.5
50°-60°	900.9	11.2
60°-70°	385.4	4.8
70°-80°	91.1	1.1
80°-90°	16.9	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°	3362.6	41.9
0°-40°	5235.5	65.2
0°-60°	7540.6	93.9
0°-90°	8034.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8034.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4239	4239	4239	4239	4239	
5°	4232	4239	4244	4250	4248	402
15°	4041	4125	4221	4193	4141	1140
25°	3697	3827	4020	3948	3879	1689
35°	3067	2896	3069	3033	3101	1925
45°	2330	1904	1094	1850	2362	1784
55°	1179	1179	407	1229	1436	1069
65°	355	419	130	539	548	379
75°	55	64	18	109	107	80
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°	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9
2.5°	4241.2	4245.7	4243.5	4243.5	4241.2	4243.5	4243.5	4248.0	4248.0	4243.5	4241.2
5°	4232.0	4236.6	4236.6	4232.0	4232.0	4243.5	4236.6	4241.2	4241.2	4238.9	4238.9
7.5°	4211.6	4211.6	4220.7	4213.9	4213.9	4220.7	4218.4	4223.0	4227.5	4229.8	4229.8
10°	4166.1	4170.6	4172.9	4172.9	4175.2	4182.0	4186.6	4195.7	4200.2	4204.8	4207.1
12.5°	4109.2	4116.0	4118.3	4116.0	4122.9	4131.9	4143.4	4154.7	4161.6	4170.6	4177.5
15°	4040.9	4040.9	4045.5	4052.3	4056.9	4070.5	4081.9	4095.5	4113.7	4125.2	4136.5
17.5°	3965.9	3970.4	3977.2	3977.2	3986.4	4009.1	4015.9	4036.4	4056.9	4068.3	4091.0
20°	3884.0	3888.5	3895.3	3899.9	3911.3	3929.5	3943.1	3961.3	3984.1	4004.6	4027.3
22.5°	3820.2	3811.2	3815.7	3820.2	3831.6	3847.6	3863.5	3886.2	3909.0	3929.5	3952.2
25°	3697.4	3699.6	3706.5	3711.0	3724.7	3738.3	3756.5	3783.8	3804.3	3827.1	3852.1
27.5°	3531.3	3533.6	3544.9	3544.9	3556.3	3579.1	3590.4	3613.2	3640.5	3663.2	3692.9
30°	3342.4	3347.0	3347.0	3356.1	3362.9	3374.3	3385.7	3408.4	3422.1	3442.5	3483.5
32.5°	3169.5	3174.0	3171.8	3169.5	3162.7	3160.4	3158.1	3162.7	3167.2	3174.0	3190.0
35°	3067.1	3055.7	3046.7	3030.7	3012.5	2989.8	2969.3	2942.0	2916.9	2896.5	2873.7
37.5°	2969.3	2967.0	2953.3	2930.6	2894.2	2853.2	2805.5	2746.3	2687.1	2623.4	2562.0
40°	2832.8	2825.9	2814.6	2782.7	2741.7	2691.7	2628.0	2555.2	2459.6	2361.8	2261.7
42.5°	2600.7	2602.9	2589.3	2564.2	2525.6	2477.8	2411.8	2332.2	2229.8	2113.7	1984.1
45°	2329.9	2329.9	2325.4	2304.9	2277.6	2238.9	2188.8	2122.9	2022.8	1904.4	1765.6
47.5°	2047.8	2050.1	2043.2	2038.7	2027.3	2002.3	1965.9	1915.8	1845.3	1731.5	1592.7
50°	1761.1	1761.1	1772.5	1770.2	1770.2	1761.1	1745.2	1715.6	1654.2	1563.1	1433.5
52.5°	1474.4	1479.0	1485.8	1494.9	1506.2	1524.4	1506.2	1492.6	1453.9	1383.4	1271.9
55°	1178.6	1183.2	1194.5	1210.4	1224.1	1242.3	1246.9	1246.9	1226.4	1178.6	1094.4
57.5°	926.1	919.2	928.3	942.0	960.2	978.4	992.0	1008.0	1005.7	973.8	905.6
60°	696.2	698.5	705.3	719.0	732.7	748.6	766.8	780.4	787.3	771.4	728.1
62.5°	507.4	507.4	516.5	530.1	537.0	559.7	571.1	577.9	584.7	582.5	555.2
65°	355.0	359.5	364.0	370.9	377.7	391.3	398.2	411.8	416.4	418.7	398.2
67.5°	250.3	243.5	248.0	252.5	259.4	268.5	282.2	282.2	288.9	288.9	275.3
70°	159.3	159.3	161.6	168.4	172.9	175.2	179.8	184.3	191.1	188.8	188.8
72.5°	106.9	104.7	106.9	109.2	111.5	118.3	118.3	120.6	125.2	127.4	118.3
75°	54.6	56.9	61.4	59.2	66.0	61.4	63.7	70.5	68.3	63.7	63.7
77.5°	45.5	45.5	45.5	43.3	47.8	47.8	45.5	50.1	47.8	47.8	45.5
80°	31.8	34.1	31.8	29.6	31.8	29.6	29.6	29.6	29.6	29.6	27.3
82.5°	25.1	20.5	22.8	20.5	22.8	22.8	20.5	18.2	18.2	20.5	18.2
85°	18.2	13.6	15.9	15.9	13.6	13.6	13.6	13.6	13.6	11.4	11.4
87.5°	11.4	6.8	6.8	6.8	9.1	9.1	9.1	6.8	9.1	9.1	4.6
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°	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9
2.5°	4245.7	4243.5	4248.0	4245.7	4245.7	4243.5	4245.7	4243.5	4248.0	4238.9	4241.2
5°	4245.7	4241.2	4243.5	4245.7	4248.0	4243.5	4243.5	4243.5	4248.0	4243.5	4245.7
7.5°	4236.6	4234.3	4241.2	4245.7	4243.5	4241.2	4245.7	4243.5	4248.0	4245.7	4250.3
10°	4218.4	4220.7	4225.3	4232.0	4234.3	4236.6	4241.2	4241.2	4248.0	4238.9	4243.5
12.5°	4191.1	4200.2	4211.6	4216.1	4225.3	4225.3	4229.8	4232.0	4236.6	4234.3	4241.2
15°	4157.0	4168.4	4182.0	4193.4	4204.8	4211.6	4218.4	4220.7	4227.5	4220.7	4223.0
17.5°	4116.0	4129.7	4150.2	4163.8	4182.0	4188.8	4197.9	4202.5	4209.3	4204.8	4207.1
20°	4059.1	4075.1	4097.8	4118.3	4129.7	4145.6	4157.0	4163.8	4168.4	4163.8	4166.1
22.5°	3979.5	4002.3	4031.8	4047.8	4070.5	4084.2	4086.5	4102.4	4113.7	4102.4	4107.0
25°	3886.2	3909.0	3931.7	3965.9	3986.4	4002.3	4018.2	4020.5	4031.8	4029.6	4027.3
27.5°	3731.5	3761.1	3799.7	3827.1	3854.4	3879.4	3897.6	3902.1	3913.5	3909.0	3911.3
30°	3519.9	3551.8	3588.2	3631.4	3670.1	3695.1	3717.9	3733.8	3745.1	3738.3	3736.1
32.5°	3219.6	3251.4	3290.1	3333.3	3378.9	3415.2	3442.5	3463.0	3476.7	3472.1	3460.8
35°	2876.0	2885.1	2910.1	2944.3	2982.9	3021.6	3046.7	3069.4	3085.3	3089.9	3089.9
37.5°	2523.3	2493.8	2475.6	2475.6	2498.3	2514.2	2537.0	2550.6	2575.7	2584.7	2591.6
40°	2182.0	2113.7	2050.1	2002.3	1970.4	1968.2	1968.2	1974.9	1997.7	2027.3	2054.6
42.5°	1877.1	1767.9	1670.1	1581.3	1517.6	1481.2	1465.3	1467.6	1485.8	1513.1	1558.6
45°	1633.7	1497.2	1374.3	1267.3	1180.9	1124.0	1096.7	1094.4	1108.1	1139.9	1190.0
47.5°	1444.8	1299.2	1160.4	1037.5	944.3	882.8	851.0	841.9	851.0	880.5	939.7
50°	1287.8	1137.7	994.3	866.9	766.8	703.1	673.5	662.1	673.5	698.5	757.7
52.5°	1142.2	987.5	853.2	730.4	623.4	568.8	537.0	530.1	537.0	566.5	614.4
55°	973.8	841.9	709.9	587.0	493.8	439.1	414.1	407.3	414.1	441.4	491.5
57.5°	807.8	694.0	577.9	466.4	386.8	339.0	316.3	307.1	323.1	341.3	400.5
60°	653.0	562.0	464.1	366.3	300.4	257.1	238.9	236.6	241.2	263.9	304.9
62.5°	512.0	436.9	359.5	279.9	225.3	207.0	184.3	182.0	186.6	200.2	232.1
65°	368.6	320.8	261.7	204.8	161.6	136.5	127.4	129.7	134.2	143.4	172.9
67.5°	257.1	223.0	182.0	143.4	111.5	100.1	91.0	88.7	91.0	106.9	122.9
70°	172.9	152.4	122.9	109.2	77.4	61.4	63.7	56.9	66.0	66.0	79.6
72.5°	113.7	100.1	81.9	63.7	54.6	43.3	43.3	41.0	45.5	47.8	59.2
75°	59.2	45.5	45.5	31.8	22.8	11.4	20.5	18.2	15.9	18.2	22.8
77.5°	41.0	34.1	31.8	25.1	22.8	18.2	18.2	18.2	18.2	20.5	22.8
80°	25.1	25.1	18.2	15.9	13.6	11.4	13.6	13.6	13.6	13.6	15.9
82.5°	15.9	13.6	13.6	11.4	11.4	9.1	9.1	9.1	9.1	9.1	13.6
85°	13.6	9.1	9.1	6.8	9.1	15.9	6.8	9.1	9.1	9.1	6.8
87.5°	4.6	6.8	6.8	6.8	4.6	2.3	4.6	6.8	6.8	11.4	9.1
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°	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9	4238.9
2.5°	4245.7	4248.0	4248.0	4245.7	4245.7	4241.2	4250.3	4243.5	4245.7	4254.8	4248.0
5°	4250.3	4252.5	4252.5	4250.3	4250.3	4250.3	4252.5	4252.5	4250.3	4248.0	4252.5
7.5°	4259.4	4257.1	4257.1	4252.5	4252.5	4248.0	4252.5	4245.7	4250.3	4245.7	4252.5
10°	4248.0	4250.3	4248.0	4245.7	4245.7	4243.5	4243.5	4236.6	4238.9	4232.0	4236.6
12.5°	4241.2	4238.9	4238.9	4234.3	4229.8	4225.3	4223.0	4216.1	4216.1	4200.2	4207.1
15°	4223.0	4225.3	4218.4	4209.3	4204.8	4193.4	4188.8	4179.7	4170.6	4159.3	4161.6
17.5°	4207.1	4200.2	4191.1	4182.0	4163.8	4154.7	4145.6	4131.9	4127.4	4113.7	4109.2
20°	4159.3	4154.7	4143.4	4127.4	4116.0	4095.5	4086.5	4072.8	4061.4	4047.8	4040.9
22.5°	4097.8	4093.3	4079.6	4063.7	4045.5	4036.4	4027.3	4002.3	3990.9	3977.2	3975.0
25°	4020.5	4013.6	4000.0	3981.8	3972.7	3947.7	3938.5	3920.3	3915.8	3902.1	3899.9
27.5°	3902.1	3893.1	3877.1	3854.4	3838.4	3822.5	3813.4	3799.7	3795.2	3781.5	3779.3
30°	3724.7	3713.3	3681.4	3672.4	3645.0	3629.1	3629.1	3610.9	3613.2	3604.1	3604.1
32.5°	3444.8	3426.6	3401.6	3383.4	3365.2	3356.1	3356.1	3349.2	3353.8	3353.8	3358.4
35°	3073.9	3048.9	3035.2	3023.9	3023.9	3033.0	3060.3	3067.1	3080.8	3092.1	3101.3
37.5°	2598.4	2596.1	2612.1	2625.7	2659.8	2698.5	2746.3	2787.3	2825.9	2853.2	2880.5
40°	2084.2	2141.1	2186.6	2250.3	2302.6	2377.7	2464.1	2534.7	2600.7	2648.5	2698.5
42.5°	1626.8	1699.6	1795.2	1888.5	1981.8	2084.2	2198.0	2295.8	2382.3	2448.2	2500.6
45°	1267.3	1367.4	1483.5	1601.8	1722.4	1849.8	1968.2	2068.3	2159.3	2227.5	2279.9
47.5°	1021.6	1130.8	1262.8	1392.5	1529.0	1663.2	1795.2	1881.7	1956.7	2011.4	2059.2
50°	844.1	960.2	1099.0	1246.9	1383.4	1517.6	1631.4	1715.6	1777.0	1824.8	1854.4
52.5°	705.3	828.2	976.1	1124.0	1260.5	1383.4	1485.8	1549.5	1599.5	1633.7	1661.0
55°	582.5	700.8	839.6	978.4	1112.6	1228.7	1312.8	1360.7	1399.3	1419.8	1435.7
57.5°	475.6	584.7	712.2	839.6	955.6	1051.2	1117.2	1165.0	1183.2	1199.1	1196.8
60°	373.2	475.6	591.6	700.8	800.9	878.2	926.1	953.3	967.0	973.8	969.3
62.5°	293.5	386.8	475.6	571.1	643.9	709.9	755.4	755.4	762.2	764.5	771.4
65°	218.4	288.9	366.3	436.9	496.0	539.2	564.3	571.1	580.2	577.9	573.4
67.5°	161.6	213.9	270.7	323.1	364.0	391.3	409.5	425.5	423.2	418.7	416.4
70°	111.5	145.6	195.7	227.5	257.1	284.4	288.9	291.2	293.5	295.8	291.2
72.5°	77.4	102.4	129.7	157.0	175.2	186.6	198.0	200.2	200.2	200.2	198.0
75°	38.7	52.3	77.4	88.7	104.7	109.2	118.3	118.3	125.2	116.0	113.7
77.5°	34.1	41.0	54.6	63.7	70.5	77.4	79.6	86.5	84.2	79.6	81.9
80°	20.5	25.1	34.1	38.7	47.8	50.1	52.3	54.6	52.3	54.6	54.6
82.5°	15.9	18.2	22.8	22.8	29.6	29.6	31.8	31.8	34.1	34.1	34.1
85°	9.1	15.9	13.6	27.3	18.2	18.2	22.8	27.3	22.8	22.8	27.3
87.5°	9.1	9.1	6.8	9.1	9.1	9.1	11.4	13.6	13.6	15.9	13.6
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: P249617

CATALOG NUMBER: LSR8B100D010 EC8B1009730 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4238.9	4238.9	4238.9	4238.9
2.5°	4245.7	4250.3	4243.5	4241.2
5°	4252.5	4252.5	4248.0	4248.0
7.5°	4252.5	4252.5	4245.7	4241.2
10°	4234.3	4234.3	4227.5	4223.0
12.5°	4200.2	4200.2	4197.9	4191.1
15°	4157.0	4157.0	4147.9	4141.1
17.5°	4097.8	4102.4	4091.0	4091.0
20°	4034.1	4031.8	4022.8	4018.2
22.5°	3968.2	3963.6	3961.3	3947.7
25°	3897.6	3893.1	3886.2	3879.4
27.5°	3777.0	3774.7	3767.9	3758.8
30°	3592.7	3590.4	3581.3	3581.3
32.5°	3353.8	3351.5	3342.4	3344.7
35°	3105.8	3114.9	3110.3	3101.3
37.5°	2898.7	2905.6	2910.1	2905.6
40°	2725.8	2746.3	2748.6	2753.1
42.5°	2541.5	2568.8	2577.9	2582.5
45°	2320.8	2345.8	2366.3	2361.8
47.5°	2095.5	2113.7	2131.9	2118.3
50°	1879.4	1890.8	1897.6	1897.6
52.5°	1674.6	1674.6	1672.4	1674.6
55°	1440.3	1440.3	1431.2	1435.7
57.5°	1194.5	1199.1	1192.2	1180.9
60°	967.0	955.6	951.1	944.3
62.5°	753.1	753.1	737.2	757.7
65°	564.3	557.5	550.6	548.3
67.5°	409.5	407.3	400.5	398.2
70°	288.9	279.9	277.6	273.0
72.5°	193.4	193.4	188.8	188.8
75°	118.3	106.9	104.7	106.9
77.5°	81.9	79.6	79.6	77.4
80°	54.6	52.3	56.9	50.1
82.5°	34.1	36.4	34.1	36.4
85°	22.8	27.3	25.1	25.1
87.5°	13.6	13.6	13.6	13.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)