

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: P248536

Luminaire Tested: **LSR8B90D010 EC8B90930 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248536
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: LSR8B90D010 EC8B90930 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7955.7 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

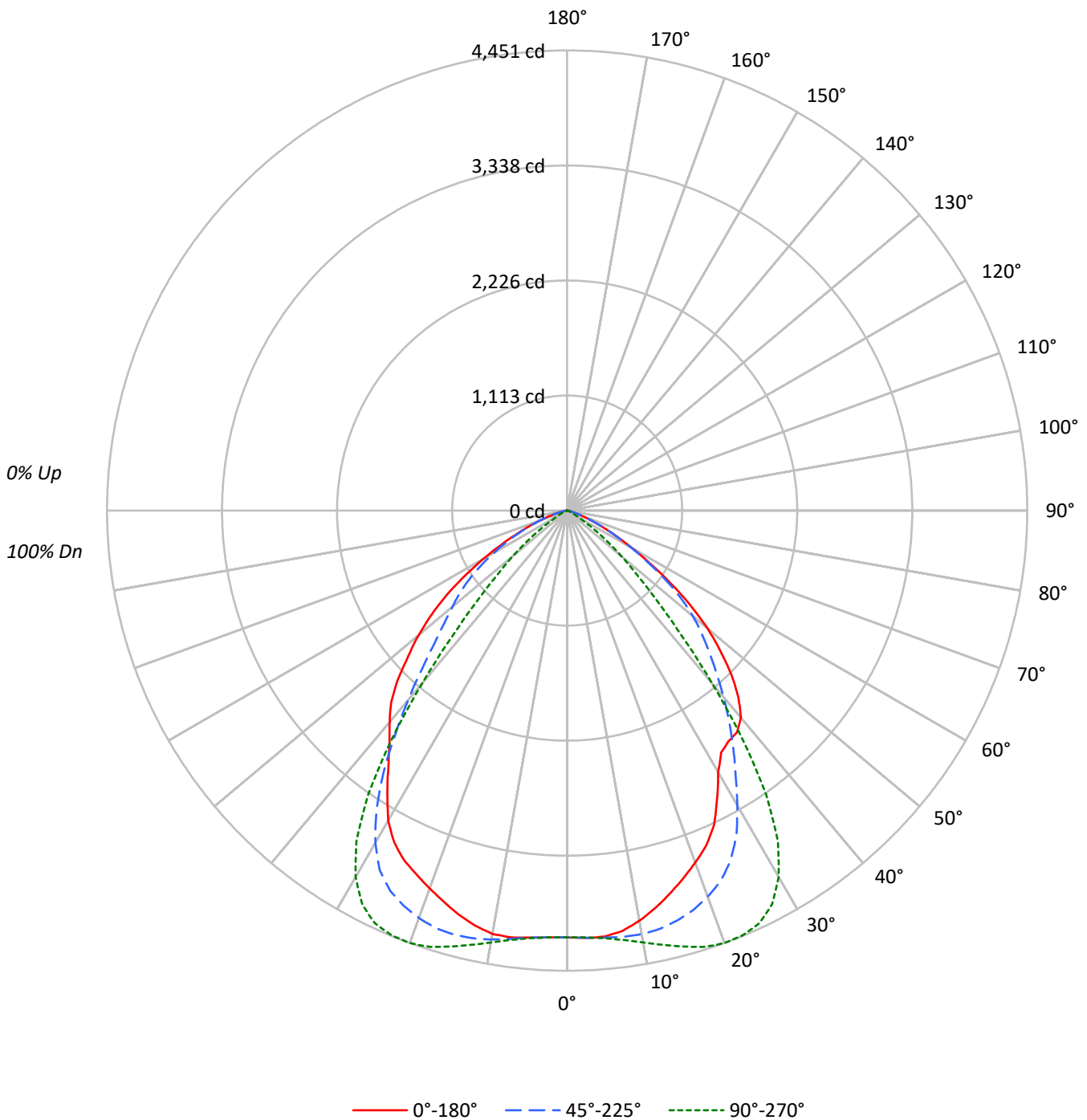
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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	92	90		
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79		
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70		
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62		
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56		
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50		
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45		
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41		
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38		
10	60	48	41	36	59	48	41	36	47	41	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°	396.9	5.0
10°-20°	1175.8	14.8
20°-30°	1793.8	22.5
30°-40°	1871.8	23.5
40°-50°	1406.0	17.7
50°-60°	865.1	10.9
60°-70°	352.1	4.4
70°-80°	82.9	1.0
80°-90°	11.4	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°	3366.4	42.3
0°-40°	5238.3	65.8
0°-60°	7509.3	94.4
0°-90°	7955.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7955.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4127	4127	4127	4127	4127	
5°	4136	4147	4151	4147	4147	391
15°	3836	4105	4366	4246	4046	1081
25°	3360	3737	4403	4055	3733	1528
35°	2723	2800	3354	3100	3012	1719
45°	2248	1945	1214	1812	2318	1715
55°	1214	1152	318	1152	1422	1091
65°	379	383	48	515	546	395
75°	66	66	9	116	120	79
85°	7	7	2	15	20	9
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°	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2
2.5°	4138.2	4131.6	4138.2	4138.2	4140.3	4135.9	4138.2	4140.3	4135.9	4135.9	4135.9
5°	4135.9	4131.6	4135.9	4133.8	4138.2	4138.2	4142.5	4142.5	4146.9	4146.9	4153.4
7.5°	4100.8	4092.1	4100.8	4107.5	4111.8	4120.6	4131.6	4140.3	4149.0	4157.9	4168.8
10°	4028.5	4028.5	4035.2	4048.3	4061.5	4076.7	4096.5	4118.4	4140.3	4160.0	4179.8
12.5°	3938.7	3932.2	3945.4	3962.8	3982.6	4006.7	4037.4	4070.2	4105.3	4144.7	4175.4
15°	3835.8	3829.2	3844.6	3862.1	3886.2	3921.3	3958.5	4002.3	4052.8	4105.3	4155.7
17.5°	3730.7	3728.4	3743.8	3767.9	3787.6	3824.9	3873.1	3925.6	3982.6	4052.8	4118.4
20°	3623.4	3621.2	3636.5	3656.3	3682.5	3717.6	3765.8	3827.1	3894.9	3973.8	4050.5
22.5°	3511.6	3513.8	3526.9	3548.9	3570.7	3607.9	3658.4	3719.7	3794.1	3879.7	3965.1
25°	3360.4	3349.5	3367.0	3389.0	3426.1	3456.8	3505.0	3570.7	3647.4	3737.3	3838.1
27.5°	3141.4	3139.1	3154.6	3174.2	3207.1	3244.3	3297.0	3364.8	3445.8	3544.5	3643.0
30°	2922.3	2926.7	2933.3	2953.1	2974.9	3012.1	3064.7	3121.6	3198.3	3292.5	3397.6
32.5°	2773.4	2773.4	2782.1	2795.2	2810.6	2830.3	2867.5	2909.2	2968.3	3034.1	3110.7
35°	2722.9	2714.2	2722.9	2725.2	2727.4	2731.8	2738.3	2751.5	2771.1	2799.7	2828.2
37.5°	2701.0	2694.5	2694.5	2685.8	2674.8	2661.6	2644.1	2624.4	2602.5	2574.0	2552.2
40°	2615.6	2611.3	2606.9	2598.1	2574.0	2547.7	2519.2	2473.3	2422.8	2352.8	2282.7
42.5°	2451.4	2446.9	2444.8	2427.2	2405.3	2374.6	2341.8	2293.6	2230.1	2140.2	2039.4
45°	2247.6	2238.9	2232.2	2217.0	2201.5	2175.3	2144.7	2100.8	2037.3	1945.3	1824.8
47.5°	2011.1	2006.6	2004.5	1997.8	1982.6	1967.1	1947.5	1912.4	1855.5	1767.8	1642.9
50°	1772.2	1763.4	1767.8	1765.7	1759.1	1748.2	1735.0	1710.9	1667.0	1588.2	1474.3
52.5°	1498.3	1498.3	1496.2	1502.8	1504.9	1502.8	1504.9	1478.7	1441.5	1382.3	1285.9
55°	1213.6	1213.6	1220.2	1229.0	1237.7	1239.9	1237.7	1226.8	1200.5	1152.3	1066.9
57.5°	946.3	942.0	955.1	968.2	977.1	985.8	979.2	970.4	955.1	915.6	849.9
60°	720.7	720.7	729.4	738.3	747.0	755.8	753.5	751.4	738.3	711.9	659.4
62.5°	530.1	532.4	532.4	538.9	547.6	556.5	563.0	556.5	549.9	532.4	497.3
65°	379.0	376.8	379.0	385.5	392.1	400.9	405.2	403.1	396.5	383.4	357.0
67.5°	254.1	251.9	260.6	262.9	267.2	276.1	273.9	276.1	273.9	262.9	241.0
70°	166.5	162.1	166.5	164.3	170.8	173.1	177.5	179.6	177.5	170.8	164.3
72.5°	103.0	100.8	103.0	105.1	107.4	109.5	113.9	113.9	111.7	107.4	98.5
75°	65.7	59.1	61.3	56.9	61.3	61.3	65.7	67.9	65.7	65.7	61.3
77.5°	39.5	39.5	39.5	39.5	39.5	39.5	39.5	41.7	43.8	39.5	37.2
80°	19.7	19.7	22.0	22.0	22.0	24.1	22.0	22.0	22.0	24.1	17.5
82.5°	15.4	13.1	13.1	13.1	15.4	13.1	13.1	13.1	13.1	13.1	13.1
85°	6.6	8.7	6.6	4.4	6.6	6.6	8.7	6.6	6.6	6.6	8.7
87.5°	2.2	2.2	0.0	0.0	0.0	2.2	0.0	2.2	2.2	4.4	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°	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2
2.5°	4138.2	4133.8	4133.8	4131.6	4135.9	4131.6	4133.8	4131.6	4131.6	4135.9	4131.6
5°	4153.4	4155.7	4151.3	4149.0	4155.7	4155.7	4155.7	4151.3	4151.3	4153.4	4151.3
7.5°	4175.4	4179.8	4181.9	4184.1	4188.5	4190.7	4190.7	4188.5	4186.4	4192.9	4184.1
10°	4199.5	4206.1	4219.2	4225.8	4236.7	4236.7	4241.1	4241.1	4236.7	4241.1	4238.9
12.5°	4190.7	4230.1	4252.1	4267.4	4282.7	4295.8	4300.3	4302.4	4300.3	4309.0	4300.3
15°	4206.1	4238.9	4273.9	4300.3	4328.7	4344.0	4348.5	4366.0	4370.3	4372.6	4359.5
17.5°	4181.9	4241.1	4278.3	4317.8	4359.5	4387.8	4414.2	4425.1	4427.3	4431.6	4414.2
20°	4127.2	4192.9	4249.8	4306.9	4355.0	4398.8	4420.8	4451.4	4442.6	4460.2	4436.0
22.5°	4052.8	4127.2	4199.5	4273.9	4324.4	4376.9	4422.9	4444.8	4455.8	4455.8	4429.5
25°	3934.4	4022.0	4100.8	4177.5	4254.2	4317.8	4370.3	4403.2	4409.8	4407.5	4376.9
27.5°	3750.4	3844.6	3936.6	4024.3	4118.4	4192.9	4254.2	4293.7	4304.6	4304.6	4271.8
30°	3496.3	3597.1	3686.9	3792.0	3888.4	3971.7	4057.1	4092.1	4111.8	4111.8	4074.6
32.5°	3194.0	3279.4	3362.7	3465.6	3570.7	3665.0	3746.0	3794.1	3818.4	3816.1	3783.3
35°	2865.4	2907.0	2970.5	3047.2	3141.4	3229.0	3307.8	3353.9	3395.5	3393.3	3362.7
37.5°	2536.7	2525.8	2532.5	2560.8	2620.0	2681.3	2742.6	2786.6	2821.6	2836.9	2830.3
40°	2214.8	2157.8	2103.0	2083.4	2087.6	2109.6	2142.5	2175.3	2214.8	2234.5	2243.2
42.5°	1925.5	1829.2	1732.7	1660.5	1618.8	1605.7	1621.1	1632.0	1656.2	1684.6	1713.1
45°	1693.4	1564.1	1437.0	1325.4	1255.3	1213.6	1204.9	1213.6	1226.8	1255.3	1292.5
47.5°	1502.8	1351.6	1209.2	1084.3	981.4	926.6	911.4	906.9	920.1	946.3	996.7
50°	1334.1	1182.9	1025.3	880.7	773.3	711.9	690.1	681.2	696.6	716.3	762.3
52.5°	1150.0	1001.2	839.1	698.8	587.1	523.6	499.4	486.3	495.0	521.4	567.3
55°	950.7	812.7	666.0	521.4	414.0	354.9	326.4	317.7	326.4	354.9	400.9
57.5°	751.4	635.3	512.6	376.8	280.4	221.3	192.7	184.1	208.2	219.0	267.2
60°	587.1	492.9	387.8	276.1	192.7	146.7	118.3	111.7	122.6	142.4	181.8
62.5°	440.3	381.1	298.0	197.2	142.4	94.2	78.8	72.3	78.8	94.2	124.9
65°	319.8	273.9	208.2	144.6	96.4	70.1	52.6	48.2	54.8	65.7	92.0
67.5°	219.0	184.1	144.6	100.8	65.7	43.8	37.2	37.2	39.5	48.2	67.9
70°	142.4	120.5	92.0	65.7	43.8	32.8	28.5	24.1	28.5	35.1	46.0
72.5°	89.8	76.7	59.1	46.0	32.8	24.1	19.7	17.5	22.0	26.2	35.1
75°	54.8	41.7	30.7	24.1	17.5	17.5	17.5	8.7	11.0	17.5	22.0
77.5°	32.8	28.5	24.1	19.7	15.4	8.7	8.7	8.7	11.0	13.1	19.7
80°	17.5	15.4	11.0	11.0	8.7	6.6	8.7	6.6	4.4	11.0	13.1
82.5°	11.0	8.7	8.7	8.7	11.0	4.4	6.6	4.4	6.6	8.7	6.6
85°	6.6	6.6	6.6	4.4	11.0	4.4	4.4	2.2	2.2	4.4	4.4
87.5°	0.0	2.2	2.2	0.0	2.2	0.0	2.2	2.2	2.2	2.2	2.2
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°	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2	4127.2
2.5°	4133.8	4131.6	4133.8	4131.6	4131.6	4131.6	4133.8	4133.8	4131.6	4131.6	4135.9
5°	4151.3	4151.3	4151.3	4149.0	4146.9	4146.9	4151.3	4151.3	4144.7	4151.3	4151.3
7.5°	4188.5	4181.9	4188.5	4179.8	4175.4	4177.5	4179.8	4175.4	4171.0	4173.1	4173.1
10°	4236.7	4230.1	4230.1	4223.6	4217.0	4212.6	4208.2	4197.2	4186.4	4184.1	4175.4
12.5°	4293.7	4282.7	4276.2	4262.9	4252.1	4236.7	4223.6	4206.1	4184.1	4168.8	4153.4
15°	4350.6	4333.1	4317.8	4295.8	4271.8	4245.5	4217.0	4188.5	4153.4	4122.8	4096.5
17.5°	4396.6	4372.6	4344.0	4309.0	4273.9	4234.5	4192.9	4151.3	4100.8	4061.5	4030.8
20°	4411.9	4376.9	4339.7	4293.7	4247.7	4192.9	4140.3	4085.6	4028.5	3986.9	3952.0
22.5°	4392.3	4350.6	4304.6	4256.4	4195.1	4135.9	4074.6	4011.1	3960.7	3903.8	3870.9
25°	4337.5	4287.2	4236.7	4179.8	4120.6	4054.9	3989.2	3923.5	3862.1	3831.5	3789.9
27.5°	4225.8	4171.0	4116.2	4057.1	3989.2	3923.5	3855.6	3792.0	3739.4	3697.8	3673.7
30°	4028.5	3965.1	3901.5	3838.1	3778.9	3711.0	3647.4	3594.8	3542.2	3509.4	3485.3
32.5°	3726.3	3669.4	3605.8	3544.5	3489.7	3432.7	3380.2	3334.2	3297.0	3275.0	3257.5
35°	3318.8	3261.9	3213.7	3169.9	3123.9	3099.8	3066.9	3040.6	3025.2	3016.5	3014.4
37.5°	2806.2	2773.4	2758.0	2749.3	2740.5	2733.9	2738.3	2749.3	2758.0	2773.4	2790.8
40°	2258.6	2287.1	2295.8	2326.4	2354.9	2392.2	2433.8	2482.0	2521.5	2571.8	2606.9
42.5°	1759.1	1811.6	1873.0	1938.7	2008.8	2076.8	2159.9	2236.6	2306.8	2370.2	2425.1
45°	1351.6	1432.6	1524.7	1618.8	1713.1	1811.6	1912.4	2006.6	2089.9	2157.8	2214.8
47.5°	1053.7	1143.5	1261.8	1377.9	1491.8	1608.0	1719.6	1818.3	1888.3	1954.0	2004.5
50°	834.6	937.6	1066.9	1200.5	1325.4	1448.0	1566.3	1658.3	1728.5	1781.0	1818.3
52.5°	646.3	768.9	900.4	1040.5	1174.2	1307.9	1417.3	1502.8	1559.8	1605.7	1634.2
55°	481.9	602.4	742.7	887.2	1023.0	1152.3	1255.3	1329.7	1380.2	1406.4	1421.8
57.5°	348.3	457.8	598.1	742.7	865.3	987.9	1071.2	1139.2	1167.6	1182.9	1189.5
60°	254.1	354.9	479.8	604.7	720.7	819.3	891.6	937.6	959.5	968.2	966.1
62.5°	186.2	273.9	381.1	486.3	580.5	661.5	718.6	749.2	760.2	764.5	758.0
65°	142.4	210.3	302.3	383.4	455.7	514.8	556.5	576.2	582.7	580.5	576.2
67.5°	105.1	157.7	225.7	287.0	339.6	385.5	407.5	425.0	429.3	422.8	416.2
70°	74.5	116.1	164.3	205.9	245.4	271.6	295.7	298.0	298.0	295.7	291.3
72.5°	52.6	81.0	111.7	140.2	164.3	184.1	192.7	199.3	197.2	194.9	190.6
75°	35.1	50.3	81.0	87.7	109.5	116.1	124.9	124.9	127.0	120.5	120.5
77.5°	22.0	35.1	48.2	56.9	65.7	74.5	78.8	78.8	81.0	78.8	78.8
80°	13.1	22.0	26.2	39.5	39.5	46.0	48.2	50.3	46.0	52.6	46.0
82.5°	8.7	13.1	19.7	19.7	24.1	28.5	28.5	30.7	30.7	28.5	28.5
85°	6.6	8.7	11.0	13.1	13.1	15.4	13.1	13.1	15.4	17.5	15.4
87.5°	2.2	4.4	2.2	4.4	4.4	8.7	6.6	6.6	6.6	8.7	8.7
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: P248536

CATALOG NUMBER: LSR8B90D010 EC8B90930 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4127.2	4127.2	4127.2	4127.2
2.5°	4131.6	4133.8	4131.6	4131.6
5°	4151.3	4149.0	4151.3	4146.9
7.5°	4166.6	4166.6	4164.4	4164.4
10°	4166.6	4157.9	4157.9	4157.9
12.5°	4133.8	4122.8	4116.2	4111.8
15°	4076.7	4057.1	4048.3	4046.1
17.5°	4002.3	3984.8	3973.8	3967.2
20°	3916.9	3899.4	3886.2	3888.4
22.5°	3842.3	3822.7	3813.9	3809.5
25°	3767.9	3743.8	3737.3	3732.8
27.5°	3647.4	3634.3	3627.7	3621.2
30°	3463.4	3456.8	3445.8	3461.2
32.5°	3250.9	3239.9	3231.2	3237.8
35°	3016.5	3009.9	3016.5	3012.1
37.5°	2801.8	2808.4	2817.2	2821.6
40°	2633.2	2657.2	2666.1	2670.3
42.5°	2464.5	2493.0	2510.5	2521.5
45°	2256.3	2284.8	2304.6	2317.8
47.5°	2041.7	2065.8	2085.5	2083.4
50°	1846.7	1859.9	1868.6	1877.3
52.5°	1649.6	1649.6	1651.7	1651.7
55°	1426.1	1421.8	1419.5	1421.8
57.5°	1180.7	1176.4	1174.2	1167.6
60°	957.3	944.2	935.4	935.4
62.5°	749.2	733.8	727.3	725.2
65°	563.0	560.7	547.6	545.5
67.5°	407.5	398.7	390.0	392.1
70°	287.0	273.9	273.9	269.5
72.5°	186.2	179.6	177.5	177.5
75°	116.1	116.1	111.7	120.5
77.5°	76.7	76.7	74.5	76.7
80°	46.0	46.0	46.0	43.8
82.5°	28.5	30.7	28.5	28.5
85°	15.4	17.5	13.1	19.7
87.5°	8.7	11.0	8.7	11.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)