

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: P249516

Luminaire Tested: **LSR8B80D010 EC8B80827 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249516
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 EC8B80827 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7873.0 lumens
Efficiency: N/A
Efficacy: 105.8 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

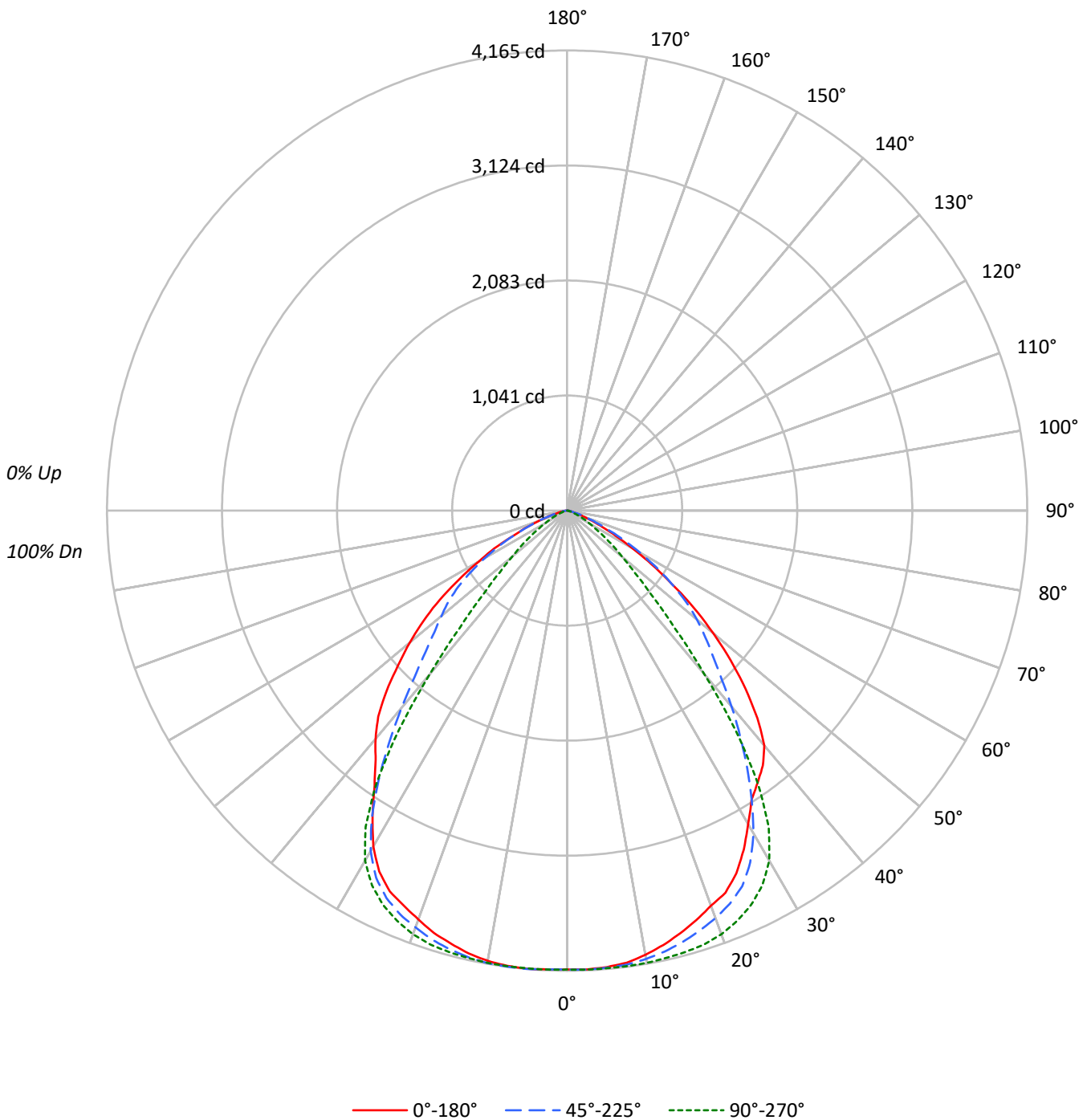
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	128091	128091	128091
5°	128373	128720	128859
10°	127834	130139	129579
15°	126416	132041	129551
20°	124898	133900	129217
25°	123280	134052	129349
30°	116630	130285	124965
35°	113147	113230	114404
40°	111745	77907	108605
45°	99568	46771	100929
50°	82791	31130	89210
55°	62095	21456	75637
60°	42079	14302	57066
65°	25385	9274	39204
70°	14074	5031	24127
75°	6374	2121	12486
80°	5540	2380	8701
85°	6298	3149	8668



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	396.4	5.0
10°-20°	1151.3	14.6
20°-30°	1747.5	22.2
30°-40°	1835.4	23.3
40°-50°	1376.0	17.5
50°-60°	882.9	11.2
60°-70°	377.7	4.8
70°-80°	89.2	1.1
80°-90°	16.6	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°	3295.2	41.9
0°-40°	5130.6	65.2
0°-60°	7389.5	93.9
0°-90°	7873.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7873.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4154	4154	4154	4154	4154	
5°	4147	4154	4158	4165	4163	394
15°	3960	4042	4136	4109	4058	1117
25°	3623	3750	3940	3869	3802	1655
35°	3006	2838	3008	2972	3039	1886
45°	2283	1866	1072	1813	2314	1749
55°	1155	1155	399	1204	1407	1048
65°	348	410	127	528	537	371
75°	54	62	18	107	105	78
85°	18	11	9	18	24	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°	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9
2.5°	4156.2	4160.7	4158.4	4158.4	4156.2	4158.4	4158.4	4162.9	4162.9	4158.4	4156.2
5°	4147.2	4151.7	4151.7	4147.2	4147.2	4158.4	4151.7	4156.2	4156.2	4153.9	4153.9
7.5°	4127.2	4127.2	4136.1	4129.5	4129.5	4136.1	4133.9	4138.3	4142.8	4145.1	4145.1
10°	4082.6	4087.1	4089.3	4089.3	4091.5	4098.2	4102.7	4111.6	4116.0	4120.5	4122.7
12.5°	4026.9	4033.5	4035.8	4033.5	4040.3	4049.1	4060.3	4071.5	4078.2	4087.1	4093.8
15°	3959.9	3959.9	3964.4	3971.1	3975.6	3989.0	4000.1	4013.5	4031.3	4042.5	4053.6
17.5°	3886.4	3890.9	3897.5	3897.5	3906.5	3928.7	3935.4	3955.5	3975.6	3986.7	4009.0
20°	3806.1	3810.6	3817.3	3821.7	3832.9	3850.7	3864.1	3881.9	3904.2	3924.3	3946.6
22.5°	3743.7	3734.8	3739.2	3743.7	3754.9	3770.5	3786.1	3808.3	3830.6	3850.7	3873.0
25°	3623.3	3625.5	3632.2	3636.6	3650.1	3663.4	3681.3	3708.0	3728.1	3750.4	3774.9
27.5°	3460.5	3462.8	3473.9	3473.9	3485.0	3507.3	3518.5	3540.8	3567.6	3589.8	3618.8
30°	3275.5	3279.9	3279.9	3288.8	3295.5	3306.7	3317.8	3340.1	3353.5	3373.6	3413.7
32.5°	3106.0	3110.4	3108.2	3106.0	3099.3	3097.1	3094.8	3099.3	3103.8	3110.4	3126.0
35°	3005.7	2994.5	2985.6	2970.0	2952.2	2929.8	2909.8	2883.0	2858.5	2838.4	2816.1
37.5°	2909.8	2907.5	2894.2	2871.9	2836.2	2796.1	2749.3	2691.3	2633.3	2570.9	2510.7
40°	2776.0	2769.3	2758.2	2726.9	2686.8	2637.7	2575.3	2504.0	2410.3	2314.4	2216.3
42.5°	2548.5	2550.8	2537.4	2512.9	2475.0	2428.1	2363.5	2285.5	2185.1	2071.4	1944.3
45°	2283.2	2283.2	2278.8	2258.7	2231.9	2194.0	2145.0	2080.3	1982.2	1866.2	1730.2
47.5°	2006.7	2009.0	2002.3	1997.8	1986.7	1962.2	1926.5	1877.4	1808.3	1696.8	1560.8
50°	1725.8	1725.8	1736.9	1734.7	1734.7	1725.8	1710.2	1681.2	1621.0	1531.8	1404.7
52.5°	1444.8	1449.3	1456.0	1464.9	1476.1	1493.9	1476.1	1462.7	1424.8	1355.6	1246.4
55°	1155.0	1159.5	1170.6	1186.2	1199.6	1217.4	1221.9	1221.9	1201.8	1155.0	1072.5
57.5°	907.5	900.8	909.7	923.1	941.0	958.8	972.2	987.8	985.5	954.3	887.4
60°	682.3	684.5	691.2	704.6	718.0	733.6	751.4	764.8	771.5	755.9	713.5
62.5°	497.2	497.2	506.1	519.5	526.2	548.5	559.7	566.4	573.0	570.8	544.0
65°	347.9	352.3	356.8	363.5	370.1	383.5	390.2	403.6	408.0	410.3	390.2
67.5°	245.3	238.6	243.1	247.5	254.2	263.1	276.5	276.5	283.2	283.2	269.8
70°	156.1	156.1	158.3	165.0	169.5	171.7	176.2	180.6	187.3	185.1	185.1
72.5°	104.8	102.6	104.8	107.0	109.3	115.9	115.9	118.2	122.6	124.9	115.9
75°	53.5	55.8	60.2	58.0	64.7	60.2	62.4	69.1	66.9	62.4	62.4
77.5°	44.6	44.6	44.6	42.4	46.8	46.8	44.6	49.0	46.8	46.8	44.6
80°	31.2	33.4	31.2	29.0	31.2	29.0	29.0	29.0	29.0	29.0	26.7
82.5°	24.5	20.1	22.3	20.1	22.3	22.3	20.1	17.8	17.8	20.1	17.8
85°	17.8	13.4	15.6	15.6	13.4	13.4	13.4	13.4	13.4	11.1	11.1
87.5°	11.1	6.7	6.7	6.7	8.9	8.9	8.9	6.7	8.9	8.9	4.5
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9
2.5°	4160.7	4158.4	4162.9	4160.7	4160.7	4158.4	4160.7	4158.4	4162.9	4153.9	4156.2
5°	4160.7	4156.2	4158.4	4160.7	4162.9	4158.4	4158.4	4158.4	4162.9	4158.4	4160.7
7.5°	4151.7	4149.5	4156.2	4160.7	4158.4	4156.2	4160.7	4158.4	4162.9	4160.7	4165.1
10°	4133.9	4136.1	4140.6	4147.2	4149.5	4151.7	4156.2	4156.2	4162.9	4153.9	4158.4
12.5°	4107.1	4116.0	4127.2	4131.6	4140.6	4140.6	4145.1	4147.2	4151.7	4149.5	4156.2
15°	4073.7	4084.8	4098.2	4109.4	4120.5	4127.2	4133.9	4136.1	4142.8	4136.1	4138.3
17.5°	4033.5	4046.9	4067.0	4080.4	4098.2	4104.9	4113.8	4118.3	4125.0	4120.5	4122.7
20°	3977.8	3993.4	4015.7	4035.8	4046.9	4062.5	4073.7	4080.4	4084.8	4080.4	4082.6
22.5°	3899.8	3922.1	3951.1	3966.7	3989.0	4002.3	4004.6	4020.2	4031.3	4020.2	4024.6
25°	3808.3	3830.6	3853.0	3886.4	3906.5	3922.1	3937.7	3939.9	3951.1	3948.8	3946.6
27.5°	3656.7	3685.7	3723.6	3750.4	3777.1	3801.7	3819.5	3823.9	3835.1	3830.6	3832.9
30°	3449.3	3480.6	3516.3	3558.6	3596.5	3621.0	3643.3	3659.0	3670.1	3663.4	3661.2
32.5°	3155.1	3186.3	3224.2	3266.5	3311.1	3346.8	3373.6	3393.6	3407.0	3402.5	3391.4
35°	2818.4	2827.3	2851.8	2885.3	2923.1	2961.1	2985.6	3007.9	3023.5	3027.9	3027.9
37.5°	2472.8	2443.8	2426.0	2426.0	2448.2	2463.8	2486.1	2499.5	2524.0	2532.9	2539.6
40°	2138.3	2071.4	2009.0	1962.2	1931.0	1928.7	1928.7	1935.4	1957.7	1986.7	2013.4
42.5°	1839.5	1732.5	1636.6	1549.6	1487.2	1451.6	1436.0	1438.2	1456.0	1482.8	1527.3
45°	1600.9	1467.2	1346.8	1241.9	1157.2	1101.5	1074.7	1072.5	1085.9	1117.1	1166.2
47.5°	1415.9	1273.2	1137.1	1016.7	925.3	865.1	833.9	825.0	833.9	862.9	920.9
50°	1262.0	1114.9	974.4	849.5	751.4	689.0	660.0	648.9	660.0	684.5	742.5
52.5°	1119.3	967.7	836.1	715.7	610.9	557.4	526.2	519.5	526.2	555.2	602.0
55°	954.3	825.0	695.7	575.3	483.9	430.3	405.8	399.1	405.8	432.6	481.6
57.5°	791.6	680.1	566.4	457.1	379.1	332.2	309.9	301.0	316.6	334.4	392.4
60°	639.9	550.8	454.8	359.0	294.3	251.9	234.1	231.9	236.3	258.7	298.8
62.5°	501.7	428.1	352.3	274.3	220.7	202.9	180.6	178.4	182.8	196.2	227.4
65°	361.2	314.4	256.4	200.7	158.3	133.8	124.9	127.1	131.5	140.5	169.5
67.5°	251.9	218.5	178.4	140.5	109.3	98.1	89.2	87.0	89.2	104.8	120.4
70°	169.5	149.4	120.4	107.0	75.8	60.2	62.4	55.8	64.7	64.7	78.0
72.5°	111.5	98.1	80.3	62.4	53.5	42.4	42.4	40.2	44.6	46.8	58.0
75°	58.0	44.6	44.6	31.2	22.3	11.1	20.1	17.8	15.6	17.8	22.3
77.5°	40.2	33.4	31.2	24.5	22.3	17.8	17.8	17.8	17.8	20.1	22.3
80°	24.5	24.5	17.8	15.6	13.4	11.1	13.4	13.4	13.4	13.4	15.6
82.5°	15.6	13.4	13.4	11.1	11.1	8.9	8.9	8.9	8.9	8.9	13.4
85°	13.4	8.9	8.9	6.7	8.9	15.6	6.7	8.9	8.9	8.9	6.7
87.5°	4.5	6.7	6.7	6.7	4.5	2.2	4.5	6.7	6.7	11.1	8.9
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°	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9	4153.9
2.5°	4160.7	4162.9	4162.9	4160.7	4160.7	4156.2	4165.1	4158.4	4160.7	4169.6	4162.9
5°	4165.1	4167.3	4167.3	4165.1	4165.1	4165.1	4167.3	4167.3	4165.1	4162.9	4167.3
7.5°	4174.0	4171.8	4171.8	4167.3	4167.3	4162.9	4167.3	4160.7	4165.1	4160.7	4167.3
10°	4162.9	4165.1	4162.9	4160.7	4160.7	4158.4	4158.4	4151.7	4153.9	4147.2	4151.7
12.5°	4156.2	4153.9	4153.9	4149.5	4145.1	4140.6	4138.3	4131.6	4131.6	4116.0	4122.7
15°	4138.3	4140.6	4133.9	4125.0	4120.5	4109.4	4104.9	4096.0	4087.1	4075.9	4078.2
17.5°	4122.7	4116.0	4107.1	4098.2	4080.4	4071.5	4062.5	4049.1	4044.7	4031.3	4026.9
20°	4075.9	4071.5	4060.3	4044.7	4033.5	4013.5	4004.6	3991.2	3980.0	3966.7	3959.9
22.5°	4015.7	4011.2	3997.9	3982.3	3964.4	3955.5	3946.6	3922.1	3910.9	3897.5	3895.3
25°	3939.9	3933.2	3919.8	3902.0	3893.1	3868.6	3859.6	3841.8	3837.4	3823.9	3821.7
27.5°	3823.9	3815.0	3799.4	3777.1	3761.5	3745.9	3737.0	3723.6	3719.2	3705.8	3703.6
30°	3650.1	3638.9	3607.7	3598.8	3572.0	3556.4	3556.4	3538.5	3540.8	3531.9	3531.9
32.5°	3375.8	3358.0	3333.4	3315.6	3297.7	3288.8	3288.8	3282.1	3286.6	3286.6	3291.1
35°	3012.3	2987.8	2974.4	2963.3	2963.3	2972.2	2999.0	3005.7	3019.0	3030.2	3039.1
37.5°	2546.3	2544.1	2559.7	2573.1	2606.5	2644.5	2691.3	2731.4	2769.3	2796.1	2822.8
40°	2042.4	2098.2	2142.7	2205.2	2256.4	2330.0	2414.8	2483.9	2548.5	2595.4	2644.5
42.5°	1594.2	1665.6	1759.3	1850.6	1942.1	2042.4	2153.9	2249.8	2334.5	2399.2	2450.4
45°	1241.9	1340.0	1453.8	1569.7	1687.9	1812.8	1928.7	2026.8	2116.0	2182.9	2234.2
47.5°	1001.1	1108.2	1237.5	1364.6	1498.4	1629.9	1759.3	1844.0	1917.5	1971.1	2017.9
50°	827.2	941.0	1077.0	1221.9	1355.6	1487.2	1598.7	1681.2	1741.4	1788.2	1817.2
52.5°	691.2	811.6	956.6	1101.5	1235.2	1355.6	1456.0	1518.4	1567.5	1600.9	1627.7
55°	570.8	686.8	822.8	958.8	1090.3	1204.0	1286.5	1333.4	1371.2	1391.3	1406.9
57.5°	466.0	573.0	697.9	822.8	936.5	1030.2	1094.8	1141.6	1159.5	1175.1	1172.8
60°	365.7	466.0	579.7	686.8	784.9	860.6	907.5	934.2	947.6	954.3	949.8
62.5°	287.6	379.1	466.0	559.7	631.0	695.7	740.3	740.3	746.9	749.2	755.9
65°	214.0	283.2	359.0	428.1	486.1	528.4	553.0	559.7	568.6	566.4	561.9
67.5°	158.3	209.6	265.3	316.6	356.8	383.5	401.3	417.0	414.7	410.3	408.0
70°	109.3	142.7	191.8	223.0	251.9	278.7	283.2	285.4	287.6	289.9	285.4
72.5°	75.8	100.3	127.1	153.9	171.7	182.8	194.0	196.2	196.2	196.2	194.0
75°	37.9	51.3	75.8	87.0	102.6	107.0	115.9	115.9	122.6	113.7	111.5
77.5°	33.4	40.2	53.5	62.4	69.1	75.8	78.0	84.7	82.5	78.0	80.3
80°	20.1	24.5	33.4	37.9	46.8	49.0	51.3	53.5	51.3	53.5	53.5
82.5°	15.6	17.8	22.3	22.3	29.0	29.0	31.2	31.2	33.4	33.4	33.4
85°	8.9	15.6	13.4	26.7	17.8	17.8	22.3	26.7	22.3	22.3	26.7
87.5°	8.9	8.9	6.7	8.9	8.9	8.9	11.1	13.4	13.4	15.6	13.4
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: P249516

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4153.9	4153.9	4153.9	4153.9
2.5°	4160.7	4165.1	4158.4	4156.2
5°	4167.3	4167.3	4162.9	4162.9
7.5°	4167.3	4167.3	4160.7	4156.2
10°	4149.5	4149.5	4142.8	4138.3
12.5°	4116.0	4116.0	4113.8	4107.1
15°	4073.7	4073.7	4064.7	4058.1
17.5°	4015.7	4020.2	4009.0	4009.0
20°	3953.3	3951.1	3942.2	3937.7
22.5°	3888.6	3884.2	3881.9	3868.6
25°	3819.5	3815.0	3808.3	3801.7
27.5°	3701.3	3699.1	3692.4	3683.5
30°	3520.7	3518.5	3509.6	3509.6
32.5°	3286.6	3284.4	3275.5	3277.7
35°	3043.5	3052.5	3048.0	3039.1
37.5°	2840.6	2847.4	2851.8	2847.4
40°	2671.2	2691.3	2693.5	2698.0
42.5°	2490.6	2517.3	2526.3	2530.7
45°	2274.3	2298.8	2318.9	2314.4
47.5°	2053.5	2071.4	2089.2	2075.9
50°	1841.7	1852.9	1859.6	1859.6
52.5°	1641.1	1641.1	1638.9	1641.1
55°	1411.4	1411.4	1402.5	1406.9
57.5°	1170.6	1175.1	1168.3	1157.2
60°	947.6	936.5	932.0	925.3
62.5°	738.1	738.1	722.4	742.5
65°	553.0	546.3	539.6	537.3
67.5°	401.3	399.1	392.4	390.2
70°	283.2	274.3	272.0	267.6
72.5°	189.5	189.5	185.1	185.1
75°	115.9	104.8	102.6	104.8
77.5°	80.3	78.0	78.0	75.8
80°	53.5	51.3	55.8	49.0
82.5°	33.4	35.7	33.4	35.7
85°	22.3	26.7	24.5	24.5
87.5°	13.4	13.4	13.4	13.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)