

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: P249426

Luminaire Tested: **LSR8B80D010 EC8B80835 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249426  
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 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7511.0 lumens  
Efficiency: N/A  
Efficacy: 101.0 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

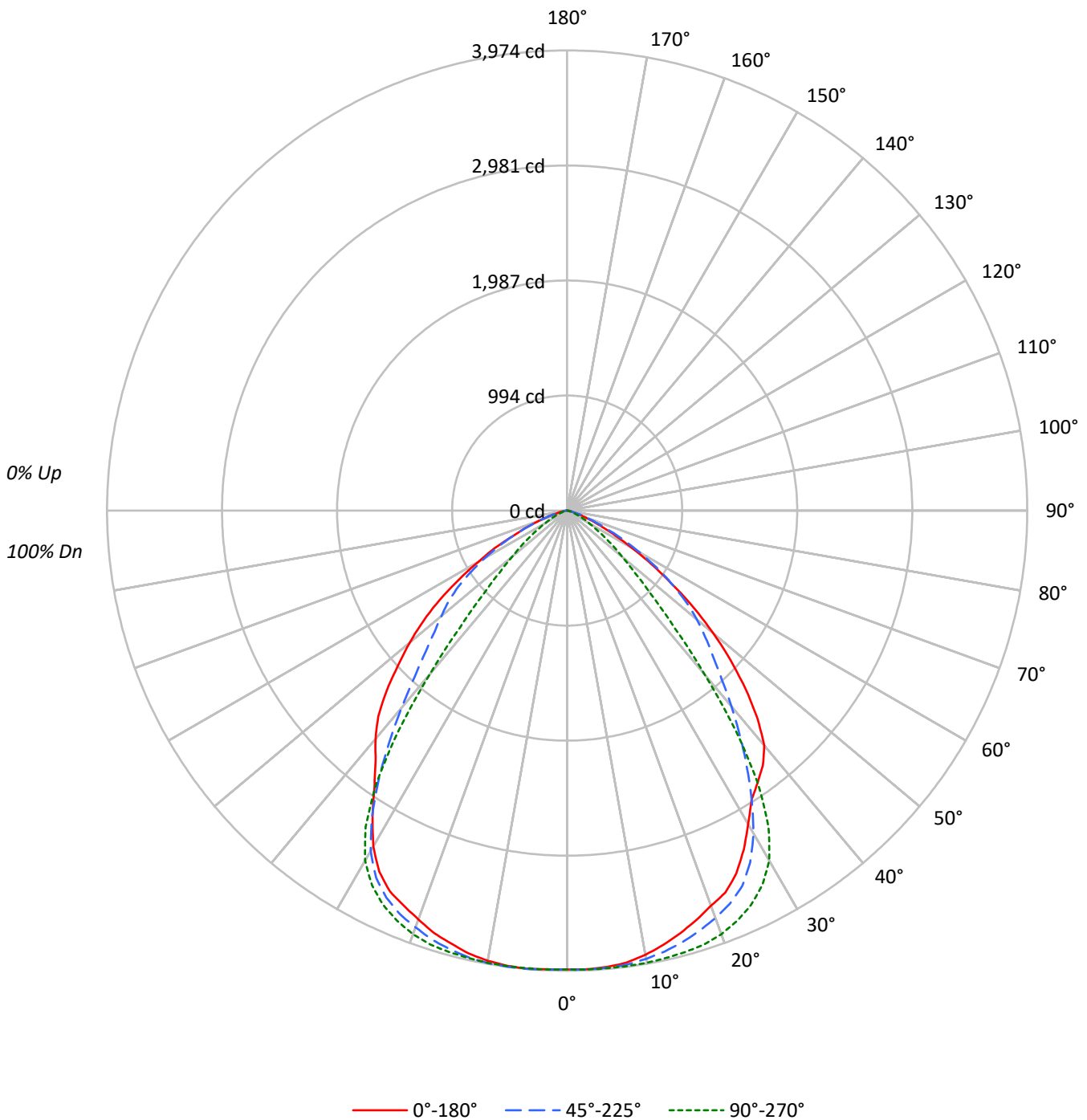
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	122204	122204	122204
5°	122473	122801	122934
10°	121957	124155	123623
15°	120606	125969	123594
20°	119156	127740	123274
25°	117611	127890	123402
30°	111267	124292	119218
35°	107945	108024	109146
40°	106609	74325	103610
45°	94989	44621	96289
50°	78987	29695	85109
55°	59240	20472	72159
60°	40143	13642	54445
65°	24217	8851	37402
70°	13425	4796	23009
75°	6088	2025	11914
80°	5292	2273	8311
85°	6015	3007	8279



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	378.2	5.0
10°-20°	1098.4	14.6
20°-30°	1667.1	22.2
30°-40°	1751.0	23.3
40°-50°	1312.8	17.5
50°-60°	842.3	11.2
60°-70°	360.3	4.8
70°-80°	85.1	1.1
80°-90°	15.8	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°	3143.7	41.9
0°-40°	4894.7	65.2
0°-60°	7049.7	93.9
0°-90°	7511.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7511.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3963	3963	3963	3963	3963	
5°	3957	3963	3967	3974	3972	376
15°	3778	3857	3946	3920	3872	1066
25°	3457	3578	3759	3691	3627	1579
35°	2868	2708	2870	2836	2899	1800
45°	2178	1780	1023	1729	2208	1668
55°	1102	1102	381	1149	1342	999
65°	332	391	121	504	513	354
75°	51	60	17	102	100	74
85°	17	11	8	17	23	18
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°	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0
2.5°	3965.1	3969.4	3967.2	3967.2	3965.1	3967.2	3967.2	3971.5	3971.5	3967.2	3965.1
5°	3956.6	3960.8	3960.8	3956.6	3956.6	3967.2	3960.8	3965.1	3965.1	3963.0	3963.0
7.5°	3937.4	3937.4	3945.9	3939.6	3939.6	3945.9	3943.8	3948.1	3952.3	3954.5	3954.5
10°	3894.9	3899.1	3901.3	3901.3	3903.4	3909.8	3914.0	3922.6	3926.8	3931.0	3933.2
12.5°	3841.7	3848.1	3850.2	3848.1	3854.5	3863.0	3873.6	3884.3	3890.7	3899.1	3905.5
15°	3777.9	3777.9	3782.1	3788.5	3792.8	3805.6	3816.2	3828.9	3845.9	3856.6	3867.2
17.5°	3707.7	3712.0	3718.3	3718.3	3726.9	3748.1	3754.5	3773.6	3792.8	3803.4	3824.7
20°	3631.1	3635.4	3641.8	3646.0	3656.6	3673.7	3686.4	3703.4	3724.7	3743.9	3765.1
22.5°	3571.5	3563.1	3567.3	3571.5	3582.2	3597.1	3612.0	3633.2	3654.5	3673.7	3695.0
25°	3456.7	3458.8	3465.2	3469.4	3482.2	3495.0	3512.0	3537.5	3556.7	3577.9	3601.3
27.5°	3301.4	3303.5	3314.2	3314.2	3324.8	3346.1	3356.7	3378.0	3403.5	3424.8	3452.5
30°	3124.9	3129.1	3129.1	3137.6	3144.0	3154.6	3165.3	3186.5	3199.3	3218.4	3256.8
32.5°	2963.2	2967.4	2965.3	2963.2	2956.8	2954.7	2952.5	2956.8	2961.1	2967.4	2982.3
35°	2867.5	2856.8	2848.3	2833.4	2816.4	2795.1	2776.0	2750.5	2727.1	2707.9	2686.7
37.5°	2776.0	2773.8	2761.1	2739.8	2705.8	2667.5	2622.8	2567.5	2512.2	2452.6	2395.2
40°	2648.4	2642.0	2631.3	2601.6	2563.3	2516.5	2456.9	2388.8	2299.5	2208.0	2114.4
42.5°	2431.4	2433.5	2420.7	2397.3	2361.2	2316.5	2254.8	2180.4	2084.7	1976.1	1854.9
45°	2178.2	2178.2	2174.0	2154.8	2129.3	2093.1	2046.4	1984.7	1891.1	1780.4	1650.7
47.5°	1914.5	1916.6	1910.2	1906.0	1895.3	1871.9	1837.9	1791.1	1725.2	1618.8	1489.0
50°	1646.5	1646.5	1657.1	1654.9	1654.9	1646.5	1631.6	1603.9	1546.5	1461.4	1340.2
52.5°	1378.4	1382.7	1389.1	1397.6	1408.2	1425.2	1408.2	1395.4	1359.3	1293.3	1189.1
55°	1101.9	1106.1	1116.8	1131.6	1144.5	1161.5	1165.7	1165.7	1146.5	1101.9	1023.2
57.5°	865.8	859.4	867.9	880.7	897.7	914.7	927.5	942.3	940.2	910.4	846.6
60°	650.9	653.1	659.4	672.2	685.0	699.8	716.9	729.6	736.0	721.1	680.7
62.5°	474.4	474.4	482.9	495.6	502.0	523.3	533.9	540.3	546.7	544.5	519.0
65°	331.9	336.1	340.3	346.7	353.1	365.9	372.3	385.0	389.3	391.4	372.3
67.5°	234.0	227.6	231.9	236.1	242.5	251.0	263.8	263.8	270.1	270.1	257.4
70°	148.9	148.9	151.0	157.4	161.7	163.8	168.1	172.3	178.7	176.6	176.6
72.5°	100.0	97.9	100.0	102.1	104.3	110.6	110.6	112.7	117.0	119.1	110.6
75°	51.1	53.2	57.4	55.3	61.7	57.4	59.5	65.9	63.8	59.5	59.5
77.5°	42.5	42.5	42.5	40.4	44.7	44.7	42.5	46.8	44.7	44.7	42.5
80°	29.8	31.9	29.8	27.6	29.8	27.6	27.6	27.6	27.6	27.6	25.5
82.5°	23.4	19.2	21.3	19.2	21.3	21.3	19.2	17.0	17.0	19.2	17.0
85°	17.0	12.8	14.9	14.9	12.8	12.8	12.8	12.8	12.8	10.6	10.6
87.5°	10.6	6.4	6.4	6.4	8.5	8.5	8.5	6.4	8.5	8.5	4.3
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°	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0
2.5°	3969.4	3967.2	3971.5	3969.4	3969.4	3967.2	3969.4	3967.2	3971.5	3963.0	3965.1
5°	3969.4	3965.1	3967.2	3969.4	3971.5	3967.2	3967.2	3967.2	3971.5	3967.2	3969.4
7.5°	3960.8	3958.7	3965.1	3969.4	3967.2	3965.1	3969.4	3967.2	3971.5	3969.4	3973.6
10°	3943.8	3945.9	3950.2	3956.6	3958.7	3960.8	3965.1	3965.1	3971.5	3963.0	3967.2
12.5°	3918.3	3926.8	3937.4	3941.7	3950.2	3950.2	3954.5	3956.6	3960.8	3958.7	3965.1
15°	3886.4	3897.0	3909.8	3920.4	3931.0	3937.4	3943.8	3945.9	3952.3	3945.9	3948.1
17.5°	3848.1	3860.8	3880.0	3892.7	3909.8	3916.2	3924.6	3928.9	3935.3	3931.0	3933.2
20°	3794.9	3809.8	3831.1	3850.2	3860.8	3875.7	3886.4	3892.7	3897.0	3892.7	3894.9
22.5°	3720.5	3741.7	3769.4	3784.3	3805.6	3818.3	3820.4	3835.3	3845.9	3835.3	3839.6
25°	3633.2	3654.5	3675.8	3707.7	3726.9	3741.7	3756.6	3758.8	3769.4	3767.2	3765.1
27.5°	3488.6	3516.3	3552.4	3577.9	3603.4	3626.9	3643.9	3648.1	3658.8	3654.5	3656.6
30°	3290.7	3320.6	3354.6	3395.0	3431.2	3454.5	3475.8	3490.7	3501.3	3495.0	3492.8
32.5°	3010.0	3039.8	3075.9	3116.3	3158.9	3192.9	3218.4	3237.6	3250.3	3246.1	3235.5
35°	2688.8	2697.3	2720.7	2752.6	2788.7	2824.9	2848.3	2869.6	2884.4	2888.7	2888.7
37.5°	2359.1	2331.4	2314.4	2314.4	2335.6	2350.5	2371.8	2384.6	2408.0	2416.5	2422.9
40°	2040.0	1976.1	1916.6	1871.9	1842.2	1840.0	1840.0	1846.4	1867.7	1895.3	1920.9
42.5°	1754.9	1652.8	1561.4	1478.4	1418.9	1384.8	1369.9	1372.1	1389.1	1414.6	1457.1
45°	1527.3	1399.7	1284.8	1184.8	1104.0	1050.8	1025.3	1023.2	1035.9	1065.7	1112.5
47.5°	1350.8	1214.6	1084.9	970.0	882.8	825.3	795.6	787.1	795.6	823.2	878.5
50°	1204.0	1063.6	929.6	810.5	716.9	657.3	629.6	619.0	629.6	653.1	708.3
52.5°	1067.8	923.2	797.7	682.8	582.8	531.8	502.0	495.6	502.0	529.7	574.4
55°	910.4	787.1	663.7	548.8	461.6	410.6	387.1	380.8	387.1	412.7	459.5
57.5°	755.2	648.8	540.3	436.1	361.6	316.9	295.7	287.2	302.0	319.1	374.4
60°	610.5	525.4	433.9	342.5	280.8	240.4	223.3	221.2	225.5	246.8	285.0
62.5°	478.6	408.4	336.1	261.6	210.6	193.6	172.3	170.2	174.4	187.2	217.0
65°	344.6	300.0	244.6	191.4	151.0	127.6	119.1	121.3	125.5	134.0	161.7
67.5°	240.4	208.5	170.2	134.0	104.3	93.6	85.1	83.0	85.1	100.0	114.9
70°	161.7	142.5	114.9	102.1	72.3	57.4	59.5	53.2	61.7	61.7	74.4
72.5°	106.3	93.6	76.6	59.5	51.1	40.4	40.4	38.3	42.5	44.7	55.3
75°	55.3	42.5	42.5	29.8	21.3	10.6	19.2	17.0	14.9	17.0	21.3
77.5°	38.3	31.9	29.8	23.4	21.3	17.0	17.0	17.0	17.0	19.2	21.3
80°	23.4	23.4	17.0	14.9	12.8	10.6	12.8	12.8	12.8	12.8	14.9
82.5°	14.9	12.8	12.8	10.6	10.6	8.5	8.5	8.5	8.5	8.5	12.8
85°	12.8	8.5	8.5	6.4	8.5	14.9	6.4	8.5	8.5	8.5	6.4
87.5°	4.3	6.4	6.4	6.4	4.3	2.1	4.3	6.4	6.4	10.6	8.5
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°	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0	3963.0
2.5°	3969.4	3971.5	3971.5	3969.4	3969.4	3965.1	3973.6	3967.2	3969.4	3977.8	3971.5
5°	3973.6	3975.7	3975.7	3973.6	3973.6	3973.6	3975.7	3975.7	3973.6	3971.5	3975.7
7.5°	3982.1	3980.0	3980.0	3975.7	3975.7	3971.5	3975.7	3969.4	3973.6	3969.4	3975.7
10°	3971.5	3973.6	3971.5	3969.4	3969.4	3967.2	3967.2	3960.8	3963.0	3956.6	3960.8
12.5°	3965.1	3963.0	3963.0	3958.7	3954.5	3950.2	3948.1	3941.7	3941.7	3926.8	3933.2
15°	3948.1	3950.2	3943.8	3935.3	3931.0	3920.4	3916.2	3907.6	3899.1	3888.5	3890.7
17.5°	3933.2	3926.8	3918.3	3909.8	3892.7	3884.3	3875.7	3863.0	3858.7	3845.9	3841.7
20°	3888.5	3884.3	3873.6	3858.7	3848.1	3828.9	3820.4	3807.7	3797.0	3784.3	3777.9
22.5°	3831.1	3826.8	3814.0	3799.2	3782.1	3773.6	3765.1	3741.7	3731.1	3718.3	3716.2
25°	3758.8	3752.4	3739.6	3722.6	3714.1	3690.7	3682.1	3665.1	3660.9	3648.1	3646.0
27.5°	3648.1	3639.6	3624.7	3603.4	3588.6	3573.7	3565.2	3552.4	3548.2	3535.4	3533.3
30°	3482.2	3471.6	3441.8	3433.3	3407.7	3392.9	3392.9	3375.8	3378.0	3369.5	3369.5
32.5°	3220.6	3203.6	3180.1	3163.1	3146.1	3137.6	3137.6	3131.2	3135.5	3135.5	3139.7
35°	2873.8	2850.5	2837.7	2827.0	2827.0	2835.5	2861.1	2867.5	2880.2	2890.8	2899.4
37.5°	2429.2	2427.1	2442.0	2454.8	2486.7	2522.9	2567.5	2605.8	2642.0	2667.5	2693.0
40°	1948.5	2001.7	2044.2	2103.8	2152.7	2222.9	2303.7	2369.7	2431.4	2476.1	2522.9
42.5°	1520.9	1589.0	1678.4	1765.6	1852.8	1948.5	2054.9	2146.3	2227.2	2288.9	2337.8
45°	1184.8	1278.4	1386.9	1497.6	1610.3	1729.4	1840.0	1933.6	2018.7	2082.5	2131.5
47.5°	955.1	1057.2	1180.6	1301.8	1429.5	1555.0	1678.4	1759.2	1829.4	1880.4	1925.1
50°	789.2	897.7	1027.4	1165.7	1293.3	1418.9	1525.2	1603.9	1661.3	1706.0	1733.6
52.5°	659.4	774.3	912.6	1050.8	1178.4	1293.3	1389.1	1448.6	1495.4	1527.3	1552.8
55°	544.5	655.2	784.9	914.7	1040.2	1148.7	1227.4	1272.1	1308.2	1327.4	1342.2
57.5°	444.6	546.7	665.8	784.9	893.4	982.8	1044.5	1089.1	1106.1	1121.0	1118.9
60°	348.9	444.6	553.1	655.2	748.8	821.1	865.8	891.3	904.0	910.4	906.2
62.5°	274.4	361.6	444.6	533.9	602.0	663.7	706.3	706.3	712.6	714.7	721.1
65°	204.2	270.1	342.5	408.4	463.7	504.1	527.6	533.9	542.5	540.3	536.1
67.5°	151.0	200.0	253.1	302.0	340.3	365.9	382.9	397.8	395.7	391.4	389.3
70°	104.3	136.2	183.0	212.7	240.4	265.9	270.1	272.3	274.4	276.5	272.3
72.5°	72.3	95.7	121.3	146.8	163.8	174.4	185.1	187.2	187.2	187.2	185.1
75°	36.2	48.9	72.3	83.0	97.9	102.1	110.6	110.6	117.0	108.5	106.3
77.5°	31.9	38.3	51.1	59.5	65.9	72.3	74.4	80.8	78.7	74.4	76.6
80°	19.2	23.4	31.9	36.2	44.7	46.8	48.9	51.1	48.9	51.1	51.1
82.5°	14.9	17.0	21.3	21.3	27.6	27.6	29.8	29.8	31.9	31.9	31.9
85°	8.5	14.9	12.8	25.5	17.0	17.0	21.3	25.5	21.3	21.3	25.5
87.5°	8.5	8.5	6.4	8.5	8.5	8.5	10.6	12.8	12.8	14.9	12.8
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: P249426

CATALOG NUMBER: LSR8B80D010 EC8B80835 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3963.0	3963.0	3963.0	3963.0
2.5°	3969.4	3973.6	3967.2	3965.1
5°	3975.7	3975.7	3971.5	3971.5
7.5°	3975.7	3975.7	3969.4	3965.1
10°	3958.7	3958.7	3952.3	3948.1
12.5°	3926.8	3926.8	3924.6	3918.3
15°	3886.4	3886.4	3877.9	3871.5
17.5°	3831.1	3835.3	3824.7	3824.7
20°	3771.5	3769.4	3760.9	3756.6
22.5°	3709.8	3705.6	3703.4	3690.7
25°	3643.9	3639.6	3633.2	3626.9
27.5°	3531.2	3529.0	3522.6	3514.1
30°	3358.8	3356.7	3348.2	3348.2
32.5°	3135.5	3133.3	3124.9	3127.0
35°	2903.6	2912.1	2907.9	2899.4
37.5°	2710.0	2716.4	2720.7	2716.4
40°	2548.4	2567.5	2569.7	2573.9
42.5°	2376.1	2401.6	2410.1	2414.3
45°	2169.7	2193.1	2212.3	2208.0
47.5°	1959.1	1976.1	1993.2	1980.4
50°	1757.1	1767.7	1774.1	1774.1
52.5°	1565.6	1565.6	1563.5	1565.6
55°	1346.5	1346.5	1338.0	1342.2
57.5°	1116.8	1121.0	1114.6	1104.0
60°	904.0	893.4	889.2	882.8
62.5°	704.1	704.1	689.2	708.3
65°	527.6	521.2	514.8	512.6
67.5°	382.9	380.8	374.4	372.3
70°	270.1	261.6	259.5	255.2
72.5°	180.8	180.8	176.6	176.6
75°	110.6	100.0	97.9	100.0
77.5°	76.6	74.4	74.4	72.3
80°	51.1	48.9	53.2	46.8
82.5°	31.9	34.0	31.9	34.0
85°	21.3	25.5	23.4	23.4
87.5°	12.8	12.8	12.8	12.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)