

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: P249541

Luminaire Tested: **LSR8B60D010 EC8B60840 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249541
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: LSR8B60D010 EC8B60840 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6211.0 lumens
Efficiency: N/A
Efficacy: 104.4 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

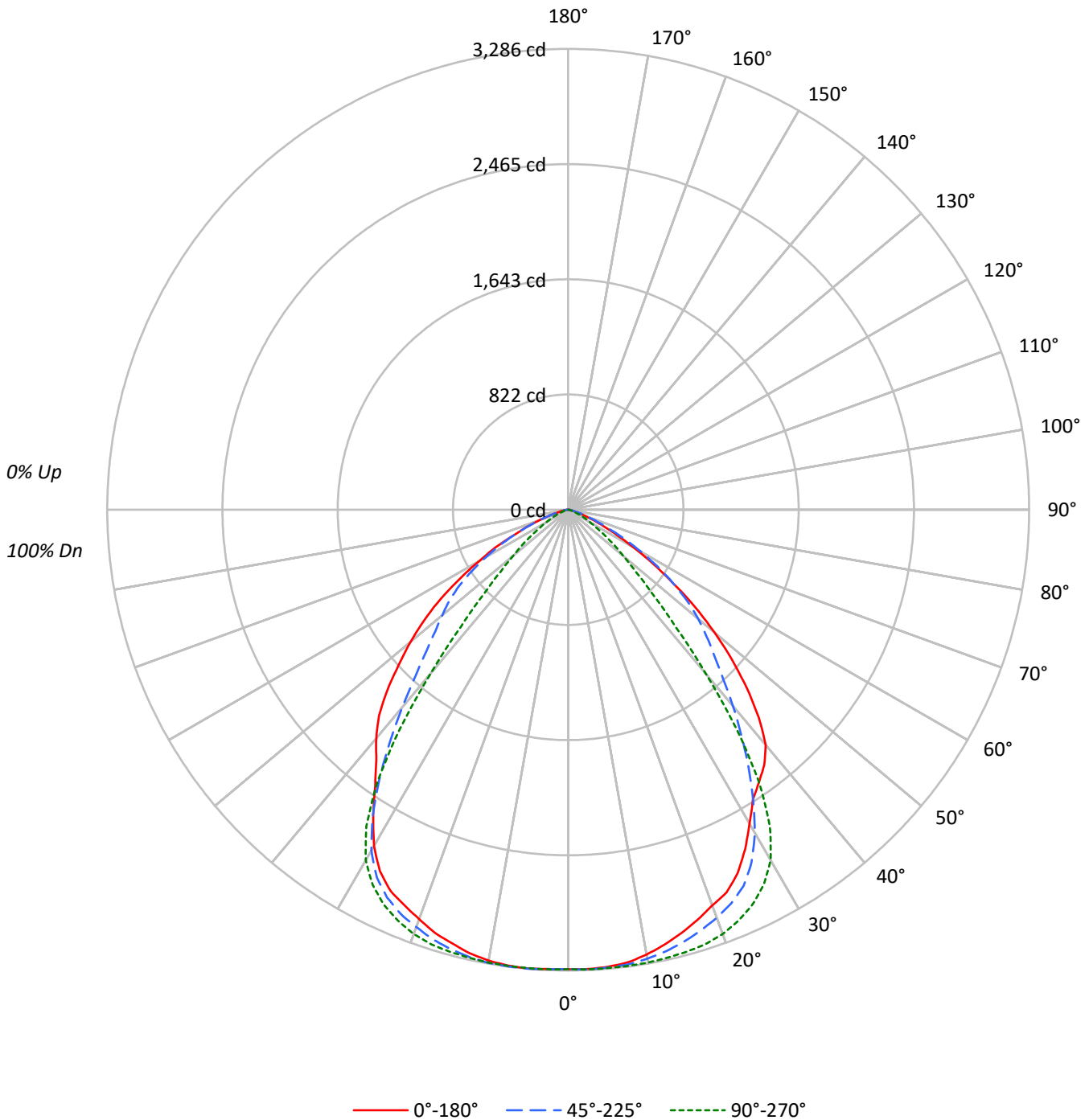
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	101051	101051	101051
5°	101276	101548	101656
10°	100847	102666	102224
15°	99731	104168	102202
20°	98535	105633	101938
25°	97255	105754	102042
30°	92008	102779	98584
35°	89262	89326	90256
40°	88156	61460	85677
45°	78549	36898	79626
50°	65315	24557	70376
55°	48987	16929	59670
60°	33198	11280	45021
65°	20022	7318	30930
70°	11099	3967	19033
75°	5028	1680	9853
80°	4368	1865	6872
85°	4989	2477	6864



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.7	5.0
10°-20°	908.3	14.6
20°-30°	1378.6	22.2
30°-40°	1447.9	23.3
40°-50°	1085.5	17.5
50°-60°	696.5	11.2
60°-70°	298.0	4.8
70°-80°	70.4	1.1
80°-90°	13.1	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°	2599.6	41.9
0°-40°	4047.5	65.2
0°-60°	5829.6	93.9
0°-90°	6211.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6211.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3277	3277	3277	3277	3277	
5°	3272	3277	3281	3286	3284	311
15°	3124	3189	3263	3242	3201	881
25°	2858	2959	3108	3052	2999	1306
35°	2371	2239	2373	2345	2398	1488
45°	1801	1472	846	1430	1826	1379
55°	911	911	315	950	1110	826
65°	274	324	100	417	424	293
75°	42	49	14	84	83	61
85°	14	9	7	14	19	15
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°	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0
2.5°	3278.8	3282.3	3280.6	3280.6	3278.8	3280.6	3280.6	3284.1	3284.1	3280.6	3278.8
5°	3271.8	3275.3	3275.3	3271.8	3271.8	3280.6	3275.3	3278.8	3278.8	3277.0	3277.0
7.5°	3256.0	3256.0	3263.0	3257.7	3257.7	3263.0	3261.2	3264.7	3268.3	3270.0	3270.0
10°	3220.7	3224.3	3226.0	3226.0	3227.8	3233.1	3236.6	3243.6	3247.1	3250.7	3252.4
12.5°	3176.8	3182.1	3183.8	3182.1	3187.3	3194.4	3203.2	3212.0	3217.3	3224.3	3229.6
15°	3124.0	3124.0	3127.5	3132.8	3136.3	3146.9	3155.7	3166.2	3180.3	3189.1	3197.9
17.5°	3066.0	3069.5	3074.8	3074.8	3081.8	3099.4	3104.7	3120.5	3136.3	3145.1	3162.7
20°	3002.7	3006.2	3011.4	3015.0	3023.8	3037.8	3048.4	3062.4	3080.0	3095.9	3113.4
22.5°	2953.4	2946.4	2949.9	2953.4	2962.2	2974.5	2986.8	3004.4	3022.0	3037.8	3055.4
25°	2858.4	2860.2	2865.5	2868.9	2879.5	2890.1	2904.1	2925.2	2941.1	2958.7	2978.0
27.5°	2730.0	2731.8	2740.5	2740.5	2749.3	2766.9	2775.7	2793.3	2814.4	2832.0	2854.9
30°	2584.0	2587.5	2587.5	2594.6	2599.8	2608.6	2617.4	2635.0	2645.6	2661.4	2693.1
32.5°	2450.3	2453.8	2452.1	2450.3	2445.0	2443.3	2441.5	2445.0	2448.6	2453.8	2466.1
35°	2371.2	2362.4	2355.3	2343.0	2329.0	2311.4	2295.5	2274.4	2255.1	2239.2	2221.7
37.5°	2295.5	2293.7	2283.2	2265.6	2237.5	2205.8	2168.9	2123.1	2077.4	2028.1	1980.7
40°	2190.0	2184.7	2175.9	2151.3	2119.6	2080.9	2031.7	1975.4	1901.5	1825.9	1748.5
42.5°	2010.5	2012.3	2001.8	1982.4	1952.5	1915.6	1864.5	1803.0	1723.8	1634.1	1533.9
45°	1801.2	1801.2	1797.7	1781.9	1760.8	1730.9	1692.2	1641.2	1563.8	1472.3	1365.0
47.5°	1583.1	1584.9	1579.6	1576.1	1567.3	1547.9	1519.8	1481.1	1426.6	1338.6	1231.3
50°	1361.5	1361.5	1370.3	1368.5	1368.5	1361.5	1349.2	1326.3	1278.8	1208.4	1108.2
52.5°	1139.8	1143.4	1148.7	1155.7	1164.5	1178.5	1164.5	1153.9	1124.0	1069.5	983.3
55°	911.2	914.7	923.5	935.8	946.4	960.4	963.9	963.9	948.1	911.2	846.1
57.5°	715.9	710.6	717.7	728.2	742.3	756.4	766.9	779.2	777.5	752.9	700.1
60°	538.3	540.0	545.3	555.9	566.4	578.7	592.8	603.3	608.6	596.3	562.9
62.5°	392.3	392.3	399.3	409.8	415.1	432.7	441.5	446.8	452.1	450.3	429.2
65°	274.4	277.9	281.4	286.7	292.0	302.5	307.8	318.4	321.9	323.7	307.8
67.5°	193.5	188.2	191.7	195.2	200.5	207.6	218.1	218.1	223.4	223.4	212.8
70°	123.1	123.1	124.9	130.2	133.7	135.4	139.0	142.5	147.8	146.0	146.0
72.5°	82.7	80.9	82.7	84.4	86.2	91.5	91.5	93.2	96.8	98.5	91.5
75°	42.2	44.0	47.5	45.8	51.0	47.5	49.2	54.5	52.8	49.2	49.2
77.5°	35.2	35.2	35.2	33.4	36.9	36.9	35.2	38.7	36.9	36.9	35.2
80°	24.6	26.4	24.6	22.9	24.6	22.9	22.9	22.9	22.9	22.9	21.1
82.5°	19.4	15.8	17.6	15.8	17.6	17.6	15.8	14.1	14.1	15.8	14.1
85°	14.1	10.5	12.3	12.3	10.5	10.5	10.5	10.5	10.5	8.8	8.8
87.5°	8.8	5.3	5.3	5.3	7.0	7.0	7.0	5.3	7.0	7.0	3.5
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°	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0
2.5°	3282.3	3280.6	3284.1	3282.3	3282.3	3280.6	3282.3	3280.6	3284.1	3277.0	3278.8
5°	3282.3	3278.8	3280.6	3282.3	3284.1	3280.6	3280.6	3280.6	3284.1	3280.6	3282.3
7.5°	3275.3	3273.5	3278.8	3282.3	3280.6	3278.8	3282.3	3280.6	3284.1	3282.3	3285.8
10°	3261.2	3263.0	3266.5	3271.8	3273.5	3275.3	3278.8	3278.8	3284.1	3277.0	3280.6
12.5°	3240.1	3247.1	3256.0	3259.4	3266.5	3266.5	3270.0	3271.8	3275.3	3273.5	3278.8
15°	3213.7	3222.5	3233.1	3241.9	3250.7	3256.0	3261.2	3263.0	3268.3	3263.0	3264.7
17.5°	3182.1	3192.6	3208.4	3219.0	3233.1	3238.4	3245.4	3248.9	3254.2	3250.7	3252.4
20°	3138.1	3150.4	3168.0	3183.8	3192.6	3204.9	3213.7	3219.0	3222.5	3219.0	3220.7
22.5°	3076.5	3094.1	3117.0	3129.3	3146.9	3157.4	3159.2	3171.5	3180.3	3171.5	3175.0
25°	3004.4	3022.0	3039.6	3066.0	3081.8	3094.1	3106.4	3108.2	3117.0	3115.2	3113.4
27.5°	2884.8	2907.7	2937.5	2958.7	2979.8	2999.1	3013.2	3016.7	3025.5	3022.0	3023.8
30°	2721.2	2745.8	2774.0	2807.4	2837.3	2856.6	2874.2	2886.5	2895.3	2890.1	2888.3
32.5°	2489.0	2513.6	2543.6	2577.0	2612.2	2640.3	2661.4	2677.2	2687.8	2684.3	2675.5
35°	2223.4	2230.4	2249.8	2276.2	2306.1	2336.0	2355.3	2372.9	2385.2	2388.7	2388.7
37.5°	1950.8	1927.9	1913.8	1913.8	1931.4	1943.7	1961.3	1971.8	1991.2	1998.2	2003.5
40°	1686.9	1634.1	1584.9	1547.9	1523.3	1521.6	1521.6	1526.8	1544.4	1567.3	1588.4
42.5°	1451.2	1366.7	1291.1	1222.5	1173.3	1145.1	1132.8	1134.6	1148.7	1169.7	1204.9
45°	1263.0	1157.4	1062.4	979.8	912.9	868.9	847.9	846.1	856.6	881.3	920.0
47.5°	1117.0	1004.4	897.1	802.1	730.0	682.5	657.9	650.9	657.9	680.7	726.5
50°	995.6	879.5	768.7	670.2	592.8	543.6	520.7	511.9	520.7	540.0	585.7
52.5°	883.0	763.4	659.6	564.6	482.0	439.7	415.1	409.8	415.1	438.0	474.9
55°	752.9	650.9	548.8	453.8	381.7	339.5	320.1	314.9	320.1	341.3	380.0
57.5°	624.5	536.5	446.8	360.6	299.0	262.1	244.5	237.5	249.8	263.8	309.6
60°	504.8	434.5	358.8	283.2	232.2	198.8	184.7	182.9	186.5	204.1	235.7
62.5°	395.8	337.7	277.9	216.4	174.1	160.1	142.5	140.7	144.2	154.8	179.4
65°	285.0	248.0	202.3	158.3	124.9	105.5	98.5	100.3	103.8	110.8	133.7
67.5°	198.8	172.4	140.7	110.8	86.2	77.4	70.4	68.6	70.4	82.7	95.0
70°	133.7	117.8	95.0	84.4	59.8	47.5	49.2	44.0	51.0	51.0	61.5
72.5°	87.9	77.4	63.3	49.2	42.2	33.4	33.4	31.7	35.2	36.9	45.8
75°	45.8	35.2	35.2	24.6	17.6	8.8	15.8	14.1	12.3	14.1	17.6
77.5°	31.7	26.4	24.6	19.4	17.6	14.1	14.1	14.1	14.1	15.8	17.6
80°	19.4	19.4	14.1	12.3	10.5	8.8	10.5	10.5	10.5	10.5	12.3
82.5°	12.3	10.5	10.5	8.8	8.8	7.0	7.0	7.0	7.0	7.0	10.5
85°	10.5	7.0	7.0	5.3	7.0	12.3	5.3	7.0	7.0	7.0	5.3
87.5°	3.5	5.3	5.3	5.3	3.5	1.8	3.5	5.3	5.3	8.8	7.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0	3277.0
2.5°	3282.3	3284.1	3284.1	3282.3	3282.3	3278.8	3285.8	3280.6	3282.3	3289.4	3284.1
5°	3285.8	3287.6	3287.6	3285.8	3285.8	3285.8	3287.6	3287.6	3285.8	3284.1	3287.6
7.5°	3292.9	3291.1	3291.1	3287.6	3287.6	3284.1	3287.6	3282.3	3285.8	3282.3	3287.6
10°	3284.1	3285.8	3284.1	3282.3	3282.3	3280.6	3280.6	3275.3	3277.0	3271.8	3275.3
12.5°	3278.8	3277.0	3277.0	3273.5	3270.0	3266.5	3264.7	3259.4	3259.4	3247.1	3252.4
15°	3264.7	3266.5	3261.2	3254.2	3250.7	3241.9	3238.4	3231.3	3224.3	3215.5	3217.3
17.5°	3252.4	3247.1	3240.1	3233.1	3219.0	3212.0	3204.9	3194.4	3190.8	3180.3	3176.8
20°	3215.5	3212.0	3203.2	3190.8	3182.1	3166.2	3159.2	3148.7	3139.8	3129.3	3124.0
22.5°	3168.0	3164.5	3153.9	3141.6	3127.5	3120.5	3113.4	3094.1	3085.3	3074.8	3073.0
25°	3108.2	3102.9	3092.4	3078.3	3071.2	3051.9	3044.8	3030.8	3027.3	3016.7	3015.0
27.5°	3016.7	3009.7	2997.4	2979.8	2967.5	2955.1	2948.1	2937.5	2934.1	2923.5	2921.7
30°	2879.5	2870.7	2846.1	2839.1	2817.9	2805.6	2805.6	2791.6	2793.3	2786.3	2786.3
32.5°	2663.2	2649.1	2629.7	2615.6	2601.6	2594.6	2594.6	2589.3	2592.8	2592.8	2596.3
35°	2376.4	2357.1	2346.5	2337.7	2337.7	2344.8	2365.9	2371.2	2381.7	2390.5	2397.6
37.5°	2008.8	2007.1	2019.4	2029.9	2056.3	2086.2	2123.1	2154.8	2184.7	2205.8	2226.9
40°	1611.3	1655.2	1690.4	1739.7	1780.1	1838.2	1905.0	1959.5	2010.5	2047.5	2086.2
42.5°	1257.7	1314.0	1387.9	1460.0	1532.1	1611.3	1699.2	1774.9	1841.7	1892.7	1933.2
45°	979.8	1057.2	1146.9	1238.4	1331.6	1430.1	1521.6	1598.9	1669.3	1722.1	1762.5
47.5°	789.8	874.2	976.2	1076.5	1182.1	1285.8	1387.9	1454.7	1512.7	1555.0	1591.9
50°	652.6	742.3	849.6	963.9	1069.5	1173.3	1261.2	1326.3	1373.8	1410.7	1433.6
52.5°	545.3	640.3	754.6	868.9	974.5	1069.5	1148.7	1197.9	1236.6	1263.0	1284.1
55°	450.3	541.8	649.1	756.4	860.2	949.9	1014.9	1051.9	1081.8	1097.6	1109.9
57.5°	367.6	452.1	550.6	649.1	738.8	812.7	863.7	900.6	914.7	927.0	925.2
60°	288.5	367.6	457.3	541.8	619.2	679.0	715.9	737.0	747.6	752.9	749.3
62.5°	226.9	299.0	367.6	441.5	497.8	548.8	584.0	584.0	589.3	591.0	596.3
65°	168.8	223.4	283.2	337.7	383.4	416.9	436.3	441.5	448.6	446.8	443.3
67.5°	124.9	165.4	209.3	249.8	281.4	302.5	316.6	329.0	327.2	323.7	321.9
70°	86.2	112.6	151.3	175.9	198.8	219.9	223.4	225.1	226.9	228.7	225.1
72.5°	59.8	79.2	100.3	121.4	135.4	144.2	153.1	154.8	154.8	154.8	153.1
75°	29.9	40.5	59.8	68.6	80.9	84.4	91.5	91.5	96.8	89.7	87.9
77.5°	26.4	31.7	42.2	49.2	54.5	59.8	61.5	66.8	65.1	61.5	63.3
80°	15.8	19.4	26.4	29.9	36.9	38.7	40.5	42.2	40.5	42.2	42.2
82.5°	12.3	14.1	17.6	17.6	22.9	22.9	24.6	24.6	26.4	26.4	26.4
85°	7.0	12.3	10.5	21.1	14.1	14.1	17.6	21.1	17.6	17.6	21.1
87.5°	7.0	7.0	5.3	7.0	7.0	7.0	8.8	10.5	10.5	12.3	10.5
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: P249541

CATALOG NUMBER: LSR8B60D010 EC8B60840 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3277.0	3277.0	3277.0	3277.0
2.5°	3282.3	3285.8	3280.6	3278.8
5°	3287.6	3287.6	3284.1	3284.1
7.5°	3287.6	3287.6	3282.3	3278.8
10°	3273.5	3273.5	3268.3	3264.7
12.5°	3247.1	3247.1	3245.4	3240.1
15°	3213.7	3213.7	3206.7	3201.4
17.5°	3168.0	3171.5	3162.7	3162.7
20°	3118.7	3117.0	3110.0	3106.4
22.5°	3067.7	3064.2	3062.4	3051.9
25°	3013.2	3009.7	3004.4	2999.1
27.5°	2920.0	2918.2	2912.9	2905.9
30°	2777.5	2775.7	2768.7	2768.7
32.5°	2592.8	2591.0	2584.0	2585.8
35°	2401.0	2408.1	2404.6	2397.6
37.5°	2241.0	2246.3	2249.8	2246.3
40°	2107.3	2123.1	2124.9	2128.4
42.5°	1964.8	1985.9	1993.0	1996.5
45°	1794.2	1813.5	1829.4	1825.9
47.5°	1620.0	1634.1	1648.2	1637.6
50°	1453.0	1461.7	1467.0	1467.0
52.5°	1294.7	1294.7	1292.9	1294.7
55°	1113.5	1113.5	1106.4	1109.9
57.5°	923.5	927.0	921.7	912.9
60°	747.6	738.8	735.3	730.0
62.5°	582.2	582.2	569.9	585.7
65°	436.3	431.0	425.7	423.9
67.5°	316.6	314.9	309.6	307.8
70°	223.4	216.4	214.6	211.1
72.5°	149.5	149.5	146.0	146.0
75°	91.5	82.7	80.9	82.7
77.5°	63.3	61.5	61.5	59.8
80°	42.2	40.5	44.0	38.7
82.5°	26.4	28.1	26.4	28.1
85°	17.6	21.1	19.4	19.4
87.5°	10.5	10.5	10.5	10.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)