

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: P248398

Luminaire Tested: **LSR8B60D010 EC8B60940 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248398
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: LSR8B60D010 EC8B60940 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5836.0 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

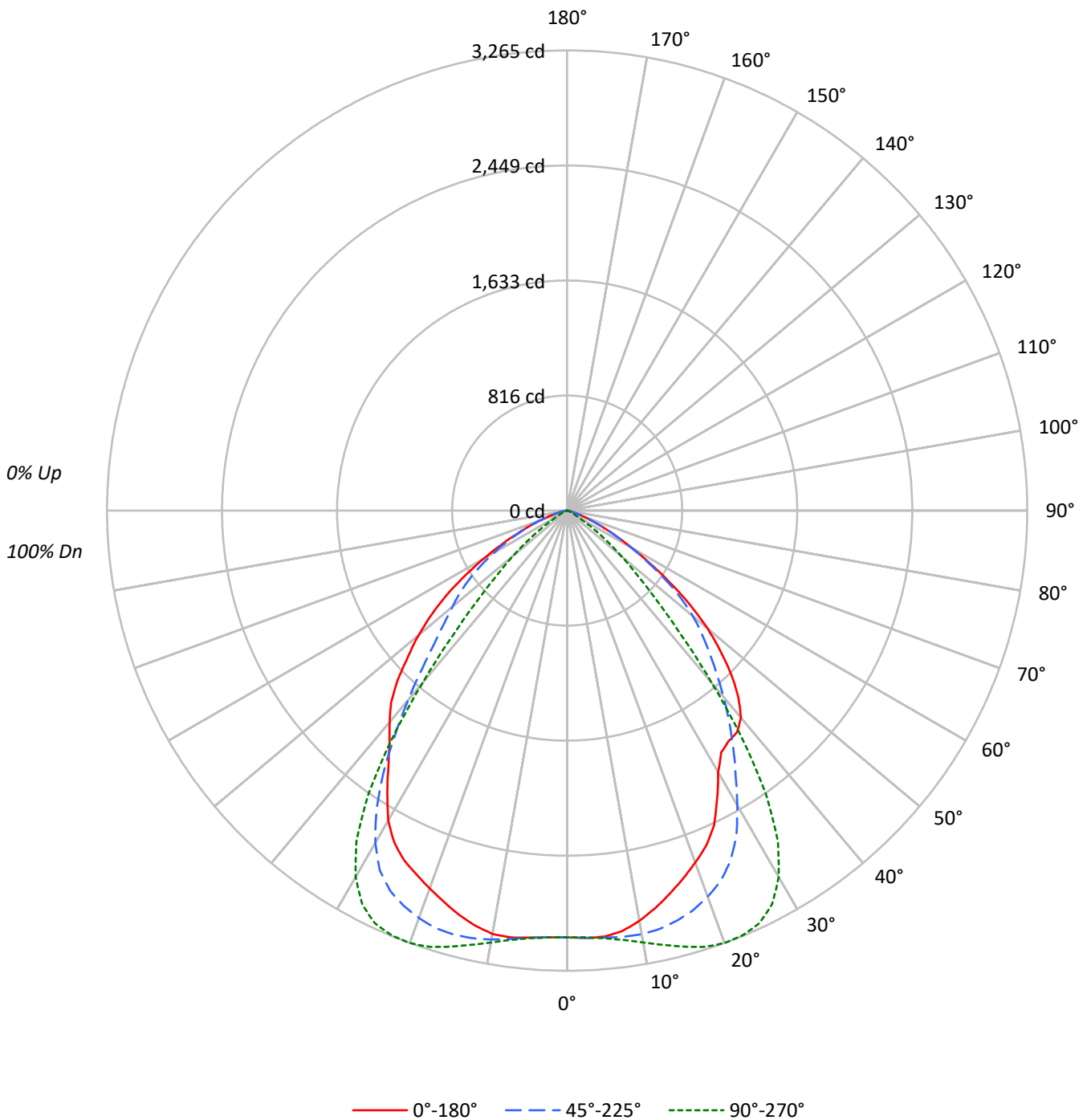
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	93357	93357	93357
5°	93915	94261	94162
10°	92533	97415	95502
15°	89828	102243	94754
20°	87220	107155	93602
25°	83873	109898	93168
30°	76330	106884	90405
35°	75191	92616	83179
40°	77235	64233	78853
45°	71903	38821	74144
50°	62365	23977	66068
55°	47858	12526	56068
60°	32606	5051	42320
65°	20284	2576	29193
70°	11008	1596	17825
75°	5743	763	10532
80°	2575	852	5700
85°	1698	566	5130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.2	5.0
10°-20°	862.5	14.8
20°-30°	1315.8	22.5
30°-40°	1373.1	23.5
40°-50°	1031.4	17.7
50°-60°	634.6	10.9
60°-70°	258.2	4.4
70°-80°	60.8	1.0
80°-90°	8.4	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°	2469.5	42.3
0°-40°	3842.6	65.8
0°-60°	5508.5	94.4
0°-90°	5836.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5836.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3028	3028	3028	3028	3028	
5°	3034	3042	3045	3042	3042	287
15°	2814	3012	3203	3114	2968	793
25°	2465	2742	3230	2974	2738	1121
35°	1997	2054	2460	2274	2210	1261
45°	1649	1427	890	1329	1700	1258
55°	890	845	233	845	1043	800
65°	278	281	35	378	400	290
75°	48	48	6	85	88	58
85°	5	5	2	11	14	7
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°	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5
2.5°	3035.6	3030.7	3035.6	3035.6	3037.2	3034.0	3035.6	3037.2	3034.0	3034.0	3034.0
5°	3034.0	3030.7	3034.0	3032.3	3035.6	3035.6	3038.8	3038.8	3042.0	3042.0	3046.8
7.5°	3008.2	3001.8	3008.2	3013.1	3016.3	3022.7	3030.7	3037.2	3043.6	3050.0	3058.1
10°	2955.2	2955.2	2960.0	2969.7	2979.3	2990.6	3005.0	3021.1	3037.2	3051.6	3066.1
12.5°	2889.3	2884.5	2894.1	2907.0	2921.5	2939.2	2961.6	2985.8	3011.5	3040.4	3062.9
15°	2813.8	2809.0	2820.2	2833.1	2850.8	2876.5	2903.8	2935.9	2972.9	3011.5	3048.4
17.5°	2736.7	2735.0	2746.3	2764.0	2778.5	2805.7	2841.1	2879.7	2921.5	2972.9	3021.1
20°	2657.9	2656.3	2667.6	2682.0	2701.3	2727.0	2762.4	2807.4	2857.2	2915.1	2971.3
22.5°	2576.0	2577.6	2587.2	2603.3	2619.4	2646.7	2683.6	2728.6	2783.3	2845.9	2908.6
25°	2465.1	2457.1	2469.9	2486.0	2513.3	2535.8	2571.2	2619.4	2675.6	2741.5	2815.4
27.5°	2304.4	2302.8	2314.1	2328.5	2352.6	2379.9	2418.5	2468.3	2527.8	2600.1	2672.4
30°	2143.7	2146.9	2151.7	2166.2	2182.3	2209.6	2248.2	2289.9	2346.2	2415.3	2492.4
32.5°	2034.4	2034.4	2040.9	2050.5	2061.7	2076.2	2103.5	2134.0	2177.5	2225.7	2281.9
35°	1997.4	1991.0	1997.4	1999.1	2000.7	2003.9	2008.7	2018.4	2032.8	2053.7	2074.6
37.5°	1981.4	1976.6	1976.6	1970.2	1962.1	1952.5	1939.6	1925.1	1909.1	1888.2	1872.1
40°	1918.7	1915.5	1912.3	1905.9	1888.2	1868.9	1848.0	1814.3	1777.3	1725.9	1674.5
42.5°	1798.2	1795.0	1793.4	1780.5	1764.4	1741.9	1717.8	1682.5	1635.9	1570.0	1496.1
45°	1648.8	1642.3	1637.5	1626.3	1615.0	1595.7	1573.2	1541.1	1494.5	1427.0	1338.6
47.5°	1475.2	1472.0	1470.4	1465.6	1454.3	1443.0	1428.6	1402.9	1361.1	1296.8	1205.2
50°	1300.0	1293.6	1296.8	1295.2	1290.4	1282.4	1272.7	1255.0	1222.9	1165.0	1081.5
52.5°	1099.1	1099.1	1097.6	1102.4	1104.0	1102.4	1104.0	1084.7	1057.4	1014.0	943.3
55°	890.2	890.2	895.1	901.5	907.9	909.5	907.9	899.9	880.6	845.3	782.6
57.5°	694.2	691.0	700.6	710.3	716.7	723.1	718.3	711.9	700.6	671.7	623.5
60°	528.7	528.7	535.1	541.6	548.0	554.4	552.8	551.2	541.6	522.2	483.7
62.5°	388.9	390.5	390.5	395.3	401.7	408.2	413.0	408.2	403.3	390.5	364.8
65°	278.0	276.4	278.0	282.8	287.7	294.1	297.3	295.7	290.8	281.2	261.9
67.5°	186.4	184.8	191.2	192.8	196.0	202.5	200.9	202.5	200.9	192.8	176.8
70°	122.1	118.9	122.1	120.5	125.4	127.0	130.1	131.8	130.1	125.4	120.5
72.5°	75.5	73.9	75.5	77.1	78.8	80.3	83.6	83.6	81.9	78.8	72.3
75°	48.2	43.4	45.0	41.8	45.0	45.0	48.2	49.8	48.2	48.2	45.0
77.5°	28.9	28.9	28.9	28.9	28.9	28.9	28.9	30.6	32.1	28.9	27.3
80°	14.5	14.5	16.1	16.1	16.1	17.7	16.1	16.1	16.1	17.7	12.9
82.5°	11.2	9.6	9.6	9.6	11.2	9.6	9.6	9.6	9.6	9.6	9.6
85°	4.8	6.4	4.8	3.2	4.8	4.8	6.4	4.8	4.8	4.8	6.4
87.5°	1.6	1.6	0.0	0.0	0.0	1.6	0.0	1.6	1.6	3.2	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°	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5
2.5°	3035.6	3032.3	3032.3	3030.7	3034.0	3030.7	3032.3	3030.7	3030.7	3034.0	3030.7
5°	3046.8	3048.4	3045.2	3043.6	3048.4	3048.4	3048.4	3045.2	3045.2	3046.8	3045.2
7.5°	3062.9	3066.1	3067.7	3069.3	3072.5	3074.1	3074.1	3072.5	3070.9	3075.8	3069.3
10°	3080.6	3085.4	3095.0	3099.9	3107.9	3107.9	3111.1	3111.1	3107.9	3111.1	3109.5
12.5°	3074.1	3103.0	3119.1	3130.4	3141.6	3151.3	3154.5	3156.1	3154.5	3160.9	3154.5
15°	3085.4	3109.5	3135.2	3154.5	3175.4	3186.6	3189.8	3202.7	3205.9	3207.5	3197.9
17.5°	3067.7	3111.1	3138.4	3167.3	3197.9	3218.8	3238.0	3246.1	3247.7	3250.9	3238.0
20°	3027.5	3075.8	3117.5	3159.3	3194.7	3226.8	3242.9	3265.4	3258.9	3271.8	3254.1
22.5°	2972.9	3027.5	3080.6	3135.2	3172.2	3210.7	3244.5	3260.5	3268.6	3268.6	3249.3
25°	2886.1	2950.4	3008.2	3064.5	3120.7	3167.3	3205.9	3230.0	3234.8	3233.2	3210.7
27.5°	2751.1	2820.2	2887.7	2952.0	3021.1	3075.8	3120.7	3149.6	3157.7	3157.7	3133.6
30°	2564.7	2638.6	2704.5	2781.6	2852.4	2913.4	2976.1	3001.8	3016.3	3016.3	2989.0
32.5°	2343.0	2405.6	2466.7	2542.2	2619.4	2688.5	2747.9	2783.3	2800.9	2799.3	2775.2
35°	2101.9	2132.4	2179.1	2235.3	2304.4	2368.7	2426.5	2460.3	2490.8	2489.2	2466.7
37.5°	1860.9	1852.8	1857.7	1878.5	1921.9	1966.9	2011.9	2044.1	2069.8	2081.0	2076.2
40°	1624.7	1582.9	1542.7	1528.2	1531.4	1547.5	1571.6	1595.7	1624.7	1639.1	1645.5
42.5°	1412.5	1341.8	1271.1	1218.1	1187.5	1177.9	1189.2	1197.2	1214.9	1235.7	1256.7
45°	1242.2	1147.4	1054.2	972.2	920.8	890.2	883.8	890.2	899.9	920.8	948.1
47.5°	1102.4	991.5	887.1	795.4	719.9	679.8	668.5	665.3	674.9	694.2	731.2
50°	978.6	867.8	752.1	646.0	567.3	522.2	506.2	499.8	511.0	525.5	559.2
52.5°	843.6	734.4	615.5	512.6	430.7	384.1	366.4	356.7	363.2	382.5	416.2
55°	697.4	596.2	488.5	382.5	303.7	260.3	239.4	233.0	239.4	260.3	294.1
57.5°	551.2	466.0	376.0	276.4	205.7	162.3	141.4	135.0	152.7	160.7	196.0
60°	430.7	361.6	284.4	202.5	141.4	107.7	86.8	81.9	90.0	104.4	133.4
62.5°	323.0	279.6	218.5	144.6	104.4	69.1	57.8	53.0	57.8	69.1	91.6
65°	234.6	200.9	152.7	106.0	70.7	51.4	38.6	35.3	40.2	48.2	67.5
67.5°	160.7	135.0	106.0	73.9	48.2	32.1	27.3	27.3	28.9	35.3	49.8
70°	104.4	88.4	67.5	48.2	32.1	24.1	20.9	17.7	20.9	25.7	33.7
72.5°	65.9	56.2	43.4	33.7	24.1	17.7	14.5	12.9	16.1	19.3	25.7
75°	40.2	30.6	22.5	17.7	12.9	12.9	12.9	6.4	8.0	12.9	16.1
77.5°	24.1	20.9	17.7	14.5	11.2	6.4	6.4	6.4	8.0	9.6	14.5
80°	12.9	11.2	8.0	8.0	6.4	4.8	6.4	4.8	3.2	8.0	9.6
82.5°	8.0	6.4	6.4	6.4	8.0	3.2	4.8	3.2	4.8	6.4	4.8
85°	4.8	4.8	4.8	3.2	8.0	3.2	3.2	1.6	1.6	3.2	3.2
87.5°	0.0	1.6	1.6	0.0	1.6	0.0	1.6	1.6	1.6	1.6	1.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5	3027.5
2.5°	3032.3	3030.7	3032.3	3030.7	3030.7	3030.7	3032.3	3032.3	3030.7	3030.7	3034.0
5°	3045.2	3045.2	3045.2	3043.6	3042.0	3042.0	3045.2	3045.2	3040.4	3045.2	3045.2
7.5°	3072.5	3067.7	3072.5	3066.1	3062.9	3064.5	3066.1	3062.9	3059.7	3061.3	3061.3
10°	3107.9	3103.0	3103.0	3098.2	3093.4	3090.2	3087.0	3078.9	3070.9	3069.3	3062.9
12.5°	3149.6	3141.6	3136.8	3127.1	3119.1	3107.9	3098.2	3085.4	3069.3	3058.1	3046.8
15°	3191.4	3178.6	3167.3	3151.3	3133.6	3114.3	3093.4	3072.5	3046.8	3024.3	3005.0
17.5°	3225.2	3207.5	3186.6	3160.9	3135.2	3106.3	3075.8	3045.2	3008.2	2979.3	2956.8
20°	3236.4	3210.7	3183.4	3149.6	3115.9	3075.8	3037.2	2997.0	2955.2	2924.7	2899.0
22.5°	3222.0	3191.4	3157.7	3122.3	3077.3	3034.0	2989.0	2942.3	2905.4	2863.6	2839.5
25°	3181.8	3144.8	3107.9	3066.1	3022.7	2974.5	2926.3	2878.1	2833.1	2810.6	2780.1
27.5°	3099.9	3059.7	3019.5	2976.1	2926.3	2878.1	2828.3	2781.6	2743.1	2712.6	2694.9
30°	2955.2	2908.6	2862.0	2815.4	2772.0	2722.2	2675.6	2637.0	2598.5	2574.3	2556.7
32.5°	2733.4	2691.7	2645.1	2600.1	2559.9	2518.1	2479.5	2445.8	2418.5	2402.4	2389.5
35°	2434.6	2392.8	2357.4	2325.3	2291.5	2273.9	2249.8	2230.5	2219.2	2212.8	2211.2
37.5°	2058.5	2034.4	2023.2	2016.8	2010.3	2005.5	2008.7	2016.8	2023.2	2034.4	2047.3
40°	1656.8	1677.7	1684.1	1706.6	1727.5	1754.8	1785.4	1820.7	1849.6	1886.6	1912.3
42.5°	1290.4	1329.0	1374.0	1422.2	1473.6	1523.4	1584.5	1640.7	1692.1	1738.7	1778.9
45°	991.5	1050.9	1118.5	1187.5	1256.7	1329.0	1402.9	1472.0	1533.0	1582.9	1624.7
47.5°	772.9	838.8	925.6	1010.8	1094.3	1179.5	1261.5	1333.8	1385.2	1433.4	1470.4
50°	612.2	687.8	782.6	880.6	972.2	1062.2	1149.0	1216.5	1267.9	1306.5	1333.8
52.5°	474.0	564.0	660.5	763.3	861.3	959.4	1039.7	1102.4	1144.2	1177.9	1198.8
55°	353.5	441.9	544.8	650.8	750.5	845.3	920.8	975.4	1012.4	1031.7	1042.9
57.5°	255.5	335.9	438.7	544.8	634.7	724.7	785.8	835.6	856.5	867.8	872.6
60°	186.4	260.3	351.9	443.5	528.7	601.0	654.0	687.8	703.9	710.3	708.7
62.5°	136.6	200.9	279.6	356.7	425.8	485.3	527.1	549.6	557.6	560.8	556.0
65°	104.4	154.3	221.8	281.2	334.3	377.6	408.2	422.6	427.4	425.8	422.6
67.5°	77.1	115.7	165.5	210.5	249.1	282.8	298.9	311.8	315.0	310.2	305.3
70°	54.7	85.2	120.5	151.1	180.0	199.3	216.9	218.5	218.5	216.9	213.7
72.5°	38.6	59.5	81.9	102.9	120.5	135.0	141.4	146.2	144.6	143.0	139.8
75°	25.7	37.0	59.5	64.3	80.3	85.2	91.6	91.6	93.2	88.4	88.4
77.5°	16.1	25.7	35.3	41.8	48.2	54.7	57.8	57.8	59.5	57.8	57.8
80°	9.6	16.1	19.3	28.9	28.9	33.7	35.3	37.0	33.7	38.6	33.7
82.5°	6.4	9.6	14.5	14.5	17.7	20.9	20.9	22.5	22.5	20.9	20.9
85°	4.8	6.4	8.0	9.6	9.6	11.2	9.6	9.6	11.2	12.9	11.2
87.5°	1.6	3.2	1.6	3.2	3.2	6.4	4.8	4.8	4.8	6.4	6.4
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: P248398

CATALOG NUMBER: LSR8B60D010 EC8B60940 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3027.5	3027.5	3027.5	3027.5
2.5°	3030.7	3032.3	3030.7	3030.7
5°	3045.2	3043.6	3045.2	3042.0
7.5°	3056.5	3056.5	3054.8	3054.8
10°	3056.5	3050.0	3050.0	3050.0
12.5°	3032.3	3024.3	3019.5	3016.3
15°	2990.6	2976.1	2969.7	2968.1
17.5°	2935.9	2923.1	2915.1	2910.2
20°	2873.3	2860.4	2850.8	2852.4
22.5°	2818.6	2804.2	2797.7	2794.5
25°	2764.0	2746.3	2741.5	2738.3
27.5°	2675.6	2666.0	2661.1	2656.3
30°	2540.6	2535.8	2527.8	2539.0
32.5°	2384.7	2376.7	2370.3	2375.1
35°	2212.8	2208.0	2212.8	2209.6
37.5°	2055.3	2060.1	2066.6	2069.8
40°	1931.6	1949.2	1955.7	1958.9
42.5°	1807.8	1828.7	1841.6	1849.6
45°	1655.2	1676.0	1690.5	1700.2
47.5°	1497.7	1515.4	1529.8	1528.2
50°	1354.7	1364.3	1370.7	1377.2
52.5°	1210.0	1210.0	1211.6	1211.6
55°	1046.1	1042.9	1041.3	1042.9
57.5°	866.1	863.0	861.3	856.5
60°	702.3	692.6	686.2	686.2
62.5°	549.6	538.3	533.5	531.9
65°	413.0	411.4	401.7	400.1
67.5°	298.9	292.5	286.1	287.7
70°	210.5	200.9	200.9	197.7
72.5°	136.6	131.8	130.1	130.1
75°	85.2	85.2	81.9	88.4
77.5°	56.2	56.2	54.7	56.2
80°	33.7	33.7	33.7	32.1
82.5°	20.9	22.5	20.9	20.9
85°	11.2	12.9	9.6	14.5
87.5°	6.4	8.0	6.4	8.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)