

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: P249469

Luminaire Tested: **LSR8B60D010 EC8B60935 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249469  
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 EC8B60935 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 3500 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4772.0 lumens  
Efficiency: N/A  
Efficacy: 80.2 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

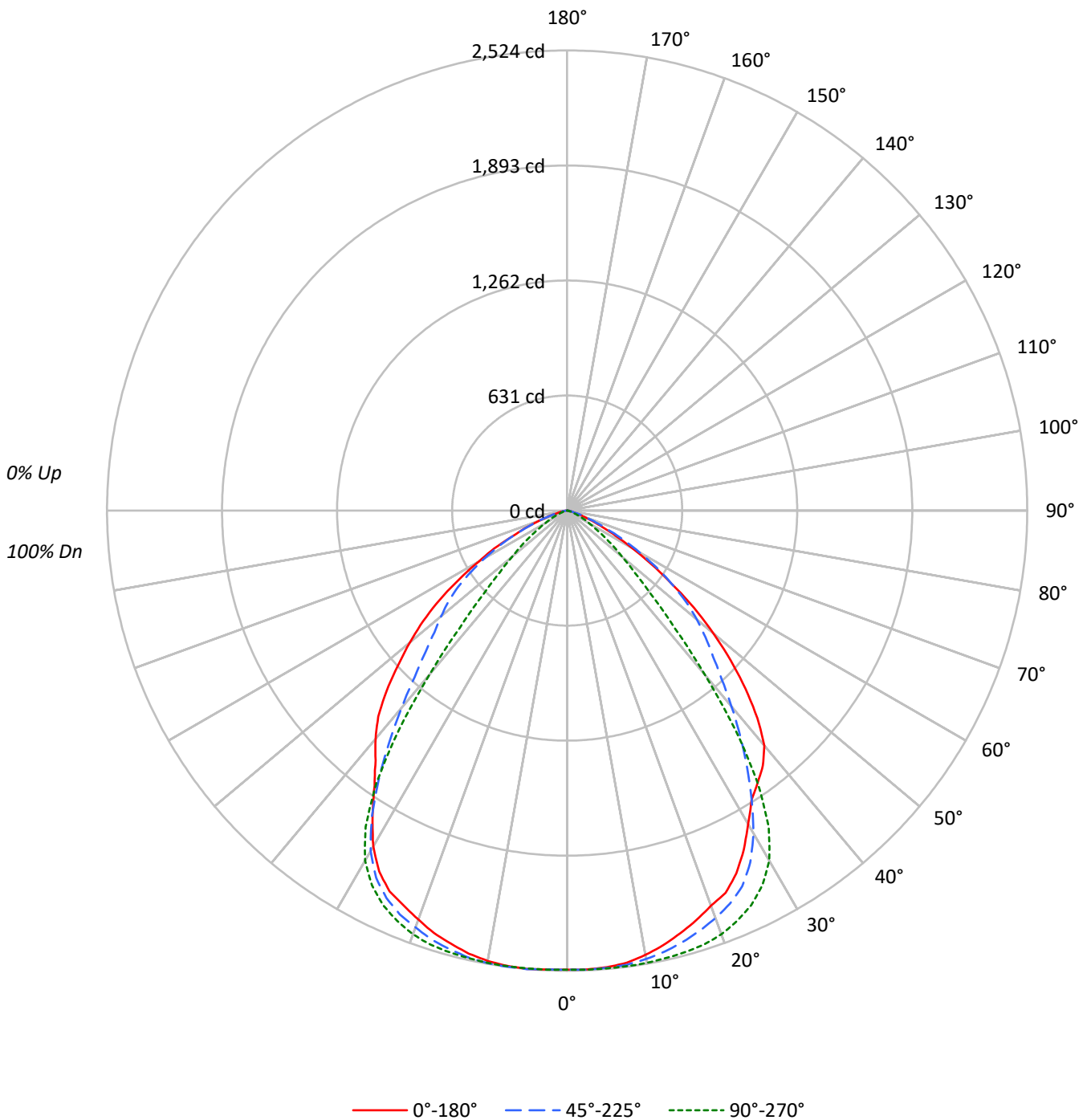
Input Watts (W): 59.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
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	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	77640	77640	77640
5°	77809	78020	78103
10°	77482	78881	78540
15°	76624	80034	78524
20°	75705	81159	78320
25°	74720	81253	78402
30°	70690	78969	75743
35°	68580	68629	69344
40°	67731	47222	65827
45°	60351	28350	61175
50°	50184	18868	54070
55°	37638	13005	45848
60°	25508	8665	34592
65°	15381	5618	23765
70°	8529	3047	14624
75°	3860	1287	7566
80°	3356	1438	5274
85°	3821	1911	5272



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	240.3	5.0
10°-20°	697.8	14.6
20°-30°	1059.2	22.2
30°-40°	1112.5	23.3
40°-50°	834.0	17.5
50°-60°	535.1	11.2
60°-70°	228.9	4.8
70°-80°	54.1	1.1
80°-90°	10.1	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°	1997.3	41.9
0°-40°	3109.7	65.2
0°-60°	4478.9	93.9
0°-90°	4772.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4772.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2518	2518	2518	2518	2518	
5°	2514	2518	2520	2524	2523	239
15°	2400	2450	2507	2491	2460	677
25°	2196	2273	2388	2345	2304	1003
35°	1822	1720	1823	1802	1842	1143
45°	1384	1131	650	1099	1403	1060
55°	700	700	242	730	853	635
65°	211	249	77	320	326	225
75°	32	38	11	65	64	47
85°	11	7	5	11	15	11
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°	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8
2.5°	2519.2	2521.9	2520.5	2520.5	2519.2	2520.5	2520.5	2523.2	2523.2	2520.5	2519.2
5°	2513.7	2516.4	2516.4	2513.7	2513.7	2520.5	2516.4	2519.2	2519.2	2517.8	2517.8
7.5°	2501.6	2501.6	2507.0	2503.0	2503.0	2507.0	2505.6	2508.3	2511.1	2512.4	2512.4
10°	2474.5	2477.3	2478.6	2478.6	2480.0	2484.0	2486.7	2492.1	2494.8	2497.5	2498.9
12.5°	2440.8	2444.8	2446.2	2444.8	2448.9	2454.3	2461.1	2467.8	2471.9	2477.3	2481.3
15°	2400.2	2400.2	2402.9	2407.0	2409.7	2417.8	2424.5	2432.7	2443.5	2450.2	2457.0
17.5°	2355.6	2358.3	2362.4	2362.4	2367.8	2381.3	2385.4	2397.5	2409.7	2416.4	2430.0
20°	2307.0	2309.7	2313.7	2316.4	2323.2	2334.0	2342.1	2352.9	2366.4	2378.6	2392.1
22.5°	2269.1	2263.7	2266.4	2269.1	2275.9	2285.4	2294.8	2308.3	2321.8	2334.0	2347.5
25°	2196.1	2197.5	2201.6	2204.2	2212.4	2220.5	2231.3	2247.5	2259.7	2273.2	2288.0
27.5°	2097.5	2098.9	2105.6	2105.6	2112.3	2125.9	2132.6	2146.1	2162.4	2175.9	2193.5
30°	1985.3	1988.0	1988.0	1993.4	1997.5	2004.2	2011.0	2024.5	2032.6	2044.8	2069.1
32.5°	1882.6	1885.3	1883.9	1882.6	1878.6	1877.2	1875.8	1878.6	1881.3	1885.3	1894.8
35°	1821.8	1815.0	1809.6	1800.2	1789.4	1775.8	1763.7	1747.5	1732.6	1720.4	1706.9
37.5°	1763.7	1762.3	1754.2	1740.7	1719.1	1694.8	1666.4	1631.2	1596.1	1558.3	1521.8
40°	1682.6	1678.5	1671.8	1652.9	1628.5	1598.8	1561.0	1517.7	1460.9	1402.8	1343.4
42.5°	1544.7	1546.1	1538.0	1523.1	1500.2	1471.7	1432.6	1385.3	1324.5	1255.5	1178.5
45°	1383.9	1383.9	1381.2	1369.0	1352.8	1329.8	1300.1	1260.9	1201.5	1131.2	1048.7
47.5°	1216.3	1217.7	1213.6	1210.9	1204.2	1189.3	1167.7	1138.0	1096.1	1028.5	946.0
50°	1046.1	1046.1	1052.8	1051.4	1051.4	1046.1	1036.6	1019.0	982.5	928.5	851.4
52.5°	875.8	878.5	882.5	887.9	894.7	905.5	894.7	886.6	863.6	821.7	755.5
55°	700.1	702.8	709.5	719.0	727.1	737.9	740.6	740.6	728.4	700.1	650.1
57.5°	550.1	546.0	551.4	559.5	570.3	581.1	589.2	598.7	597.3	578.4	537.9
60°	413.6	414.9	418.9	427.1	435.2	444.6	455.5	463.6	467.6	458.2	432.5
62.5°	301.4	301.4	306.8	314.9	318.9	332.5	339.2	343.3	347.3	346.0	329.8
65°	210.8	213.5	216.2	220.3	224.3	232.4	236.5	244.6	247.3	248.7	236.5
67.5°	148.7	144.6	147.3	150.0	154.1	159.5	167.6	167.6	171.6	171.6	163.5
70°	94.6	94.6	96.0	100.0	102.7	104.1	106.8	109.5	113.5	112.2	112.2
72.5°	63.5	62.2	63.5	64.9	66.2	70.3	70.3	71.6	74.3	75.7	70.3
75°	32.4	33.8	36.5	35.2	39.2	36.5	37.8	41.9	40.5	37.8	37.8
77.5°	27.0	27.0	27.0	25.7	28.4	28.4	27.0	29.7	28.4	28.4	27.0
80°	18.9	20.3	18.9	17.6	18.9	17.6	17.6	17.6	17.6	17.6	16.2
82.5°	14.9	12.2	13.5	12.2	13.5	13.5	12.2	10.8	10.8	12.2	10.8
85°	10.8	8.1	9.5	9.5	8.1	8.1	8.1	8.1	8.1	6.7	6.7
87.5°	6.7	4.1	4.1	4.1	5.4	5.4	5.4	4.1	5.4	5.4	2.7
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°	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8
2.5°	2521.9	2520.5	2523.2	2521.9	2521.9	2520.5	2521.9	2520.5	2523.2	2517.8	2519.2
5°	2521.9	2519.2	2520.5	2521.9	2523.2	2520.5	2520.5	2520.5	2523.2	2520.5	2521.9
7.5°	2516.4	2515.1	2519.2	2521.9	2520.5	2519.2	2521.9	2520.5	2523.2	2521.9	2524.5
10°	2505.6	2507.0	2509.7	2513.7	2515.1	2516.4	2519.2	2519.2	2523.2	2517.8	2520.5
12.5°	2489.4	2494.8	2501.6	2504.3	2509.7	2509.7	2512.4	2513.7	2516.4	2515.1	2519.2
15°	2469.2	2475.9	2484.0	2490.8	2497.5	2501.6	2505.6	2507.0	2511.1	2507.0	2508.3
17.5°	2444.8	2452.9	2465.1	2473.2	2484.0	2488.1	2493.5	2496.2	2500.2	2497.5	2498.9
20°	2411.0	2420.5	2434.0	2446.2	2452.9	2462.4	2469.2	2473.2	2475.9	2473.2	2474.5
22.5°	2363.7	2377.3	2394.8	2404.3	2417.8	2425.9	2427.3	2436.7	2443.5	2436.7	2439.4
25°	2308.3	2321.8	2335.4	2355.6	2367.8	2377.3	2386.7	2388.1	2394.8	2393.5	2392.1
27.5°	2216.4	2234.0	2257.0	2273.2	2289.4	2304.3	2315.1	2317.8	2324.5	2321.8	2323.2
30°	2090.7	2109.7	2131.3	2157.0	2179.9	2194.8	2208.3	2217.8	2224.5	2220.5	2219.1
32.5°	1912.3	1931.3	1954.2	1979.9	2007.0	2028.6	2044.8	2057.0	2065.1	2062.3	2055.6
35°	1708.3	1713.7	1728.6	1748.8	1771.8	1794.8	1809.6	1823.1	1832.6	1835.3	1835.3
37.5°	1498.8	1481.2	1470.4	1470.4	1483.9	1493.4	1506.9	1515.0	1529.9	1535.3	1539.3
40°	1296.1	1255.5	1217.7	1189.3	1170.4	1169.0	1169.0	1173.1	1186.6	1204.2	1220.4
42.5°	1115.0	1050.1	992.0	939.3	901.4	879.8	870.4	871.7	882.5	898.7	925.8
45°	970.4	889.3	816.3	752.8	701.4	667.6	651.4	650.1	658.2	677.1	706.8
47.5°	858.2	771.7	689.2	616.3	560.9	524.4	505.5	500.1	505.5	523.0	558.2
50°	764.9	675.8	590.6	514.9	455.5	417.6	400.0	393.3	400.0	414.9	450.0
52.5°	678.4	586.5	506.8	433.8	370.3	337.9	318.9	314.9	318.9	336.5	364.9
55°	578.4	500.1	421.7	348.7	293.3	260.8	246.0	241.9	246.0	262.2	291.9
57.5°	479.8	412.2	343.3	277.0	229.8	201.4	187.9	182.4	191.9	202.7	237.9
60°	387.9	333.8	275.7	217.6	178.4	152.7	141.9	140.5	143.3	156.8	181.1
62.5°	304.1	259.5	213.5	166.2	133.8	123.0	109.5	108.1	110.8	118.9	137.9
65°	218.9	190.6	155.4	121.6	96.0	81.1	75.7	77.0	79.7	85.2	102.7
67.5°	152.7	132.4	108.1	85.2	66.2	59.5	54.1	52.7	54.1	63.5	73.0
70°	102.7	90.5	73.0	64.9	46.0	36.5	37.8	33.8	39.2	39.2	47.3
72.5°	67.6	59.5	48.6	37.8	32.4	25.7	25.7	24.3	27.0	28.4	35.2
75°	35.2	27.0	27.0	18.9	13.5	6.7	12.2	10.8	9.5	10.8	13.5
77.5°	24.3	20.3	18.9	14.9	13.5	10.8	10.8	10.8	10.8	12.2	13.5
80°	14.9	14.9	10.8	9.5	8.1	6.7	8.1	8.1	8.1	8.1	9.5
82.5°	9.5	8.1	8.1	6.7	6.7	5.4	5.4	5.4	5.4	5.4	8.1
85°	8.1	5.4	5.4	4.1	5.4	9.5	4.1	5.4	5.4	5.4	4.1
87.5°	2.7	4.1	4.1	4.1	2.7	1.4	2.7	4.1	4.1	6.7	5.4
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°	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8	2517.8
2.5°	2521.9	2523.2	2523.2	2521.9	2521.9	2519.2	2524.5	2520.5	2521.9	2527.3	2523.2
5°	2524.5	2525.9	2525.9	2524.5	2524.5	2524.5	2525.9	2525.9	2524.5	2523.2	2525.9
7.5°	2530.0	2528.6	2528.6	2525.9	2525.9	2523.2	2525.9	2521.9	2524.5	2521.9	2525.9
10°	2523.2	2524.5	2523.2	2521.9	2521.9	2520.5	2520.5	2516.4	2517.8	2513.7	2516.4
12.5°	2519.2	2517.8	2517.8	2515.1	2512.4	2509.7	2508.3	2504.3	2504.3	2494.8	2498.9
15°	2508.3	2509.7	2505.6	2500.2	2497.5	2490.8	2488.1	2482.6	2477.3	2470.5	2471.9
17.5°	2498.9	2494.8	2489.4	2484.0	2473.2	2467.8	2462.4	2454.3	2451.6	2443.5	2440.8
20°	2470.5	2467.8	2461.1	2451.6	2444.8	2432.7	2427.3	2419.2	2412.4	2404.3	2400.2
22.5°	2434.0	2431.3	2423.2	2413.7	2402.9	2397.5	2392.1	2377.3	2370.5	2362.4	2361.0
25°	2388.1	2384.0	2375.9	2365.1	2359.7	2344.8	2339.4	2328.6	2325.9	2317.8	2316.4
27.5°	2317.8	2312.4	2302.9	2289.4	2279.9	2270.5	2265.1	2257.0	2254.3	2246.1	2244.8
30°	2212.4	2205.6	2186.7	2181.3	2165.1	2155.6	2155.6	2144.8	2146.1	2140.8	2140.8
32.5°	2046.1	2035.3	2020.5	2009.6	1998.8	1993.4	1993.4	1989.4	1992.1	1992.1	1994.8
35°	1825.8	1811.0	1802.9	1796.1	1796.1	1801.5	1817.7	1821.8	1829.9	1836.7	1842.1
37.5°	1543.4	1542.0	1551.5	1559.6	1579.9	1602.9	1631.2	1655.6	1678.5	1694.8	1711.0
40°	1238.0	1271.7	1298.8	1336.6	1367.7	1412.3	1463.6	1505.5	1544.7	1573.1	1602.9
42.5°	966.3	1009.5	1066.3	1121.7	1177.1	1238.0	1305.5	1363.6	1415.0	1454.2	1485.3
45°	752.8	812.2	881.2	951.4	1023.1	1098.8	1169.0	1228.5	1282.6	1323.1	1354.2
47.5°	606.8	671.7	750.1	827.1	908.2	987.9	1066.3	1117.7	1162.3	1194.7	1223.1
50°	501.4	570.3	652.8	740.6	821.7	901.4	969.0	1019.0	1055.5	1083.9	1101.4
52.5°	418.9	491.9	579.8	667.6	748.7	821.7	882.5	920.4	950.1	970.4	986.6
55°	346.0	416.3	498.7	581.1	660.9	729.8	779.8	808.2	831.1	843.3	852.8
57.5°	282.5	347.3	423.0	498.7	567.6	624.4	663.6	692.0	702.8	712.2	710.9
60°	221.7	282.5	351.4	416.3	475.7	521.7	550.1	566.3	574.4	578.4	575.7
62.5°	174.3	229.8	282.5	339.2	382.5	421.7	448.7	448.7	452.7	454.1	458.2
65°	129.7	171.6	217.6	259.5	294.6	320.3	335.2	339.2	344.6	343.3	340.6
67.5°	96.0	127.0	160.8	191.9	216.2	232.4	243.3	252.7	251.4	248.7	247.3
70°	66.2	86.5	116.2	135.2	152.7	168.9	171.6	173.0	174.3	175.7	173.0
72.5°	46.0	60.8	77.0	93.3	104.1	110.8	117.6	118.9	118.9	118.9	117.6
75°	23.0	31.1	46.0	52.7	62.2	64.9	70.3	70.3	74.3	68.9	67.6
77.5°	20.3	24.3	32.4	37.8	41.9	46.0	47.3	51.4	50.0	47.3	48.6
80°	12.2	14.9	20.3	23.0	28.4	29.7	31.1	32.4	31.1	32.4	32.4
82.5°	9.5	10.8	13.5	13.5	17.6	17.6	18.9	18.9	20.3	20.3	20.3
85°	5.4	9.5	8.1	16.2	10.8	10.8	13.5	16.2	13.5	13.5	16.2
87.5°	5.4	5.4	4.1	5.4	5.4	5.4	6.7	8.1	8.1	9.5	8.1
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: P249469

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2517.8	2517.8	2517.8	2517.8
2.5°	2521.9	2524.5	2520.5	2519.2
5°	2525.9	2525.9	2523.2	2523.2
7.5°	2525.9	2525.9	2521.9	2519.2
10°	2515.1	2515.1	2511.1	2508.3
12.5°	2494.8	2494.8	2493.5	2489.4
15°	2469.2	2469.2	2463.7	2459.7
17.5°	2434.0	2436.7	2430.0	2430.0
20°	2396.2	2394.8	2389.4	2386.7
22.5°	2357.0	2354.3	2352.9	2344.8
25°	2315.1	2312.4	2308.3	2304.3
27.5°	2243.5	2242.1	2238.0	2232.7
30°	2134.0	2132.6	2127.2	2127.2
32.5°	1992.1	1990.7	1985.3	1986.7
35°	1844.8	1850.2	1847.5	1842.1
37.5°	1721.8	1725.8	1728.6	1725.8
40°	1619.1	1631.2	1632.6	1635.3
42.5°	1509.6	1525.8	1531.2	1533.9
45°	1378.5	1393.4	1405.5	1402.8
47.5°	1244.7	1255.5	1266.3	1258.2
50°	1116.3	1123.1	1127.1	1127.1
52.5°	994.7	994.7	993.3	994.7
55°	855.5	855.5	850.1	852.8
57.5°	709.5	712.2	708.2	701.4
60°	574.4	567.6	564.9	560.9
62.5°	447.3	447.3	437.9	450.0
65°	335.2	331.1	327.0	325.7
67.5°	243.3	241.9	237.9	236.5
70°	171.6	166.2	164.9	162.2
72.5°	114.9	114.9	112.2	112.2
75°	70.3	63.5	62.2	63.5
77.5°	48.6	47.3	47.3	46.0
80°	32.4	31.1	33.8	29.7
82.5°	20.3	21.6	20.3	21.6
85°	13.5	16.2	14.9	14.9
87.5°	8.1	8.1	8.1	8.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)