

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: P246107

Luminaire Tested: **LSR8B50D010 EC8B50827 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246107
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: LSR8B50D010 EC8B50827 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4634.0 lumens
Efficiency: N/A
Efficacy: 87.4 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

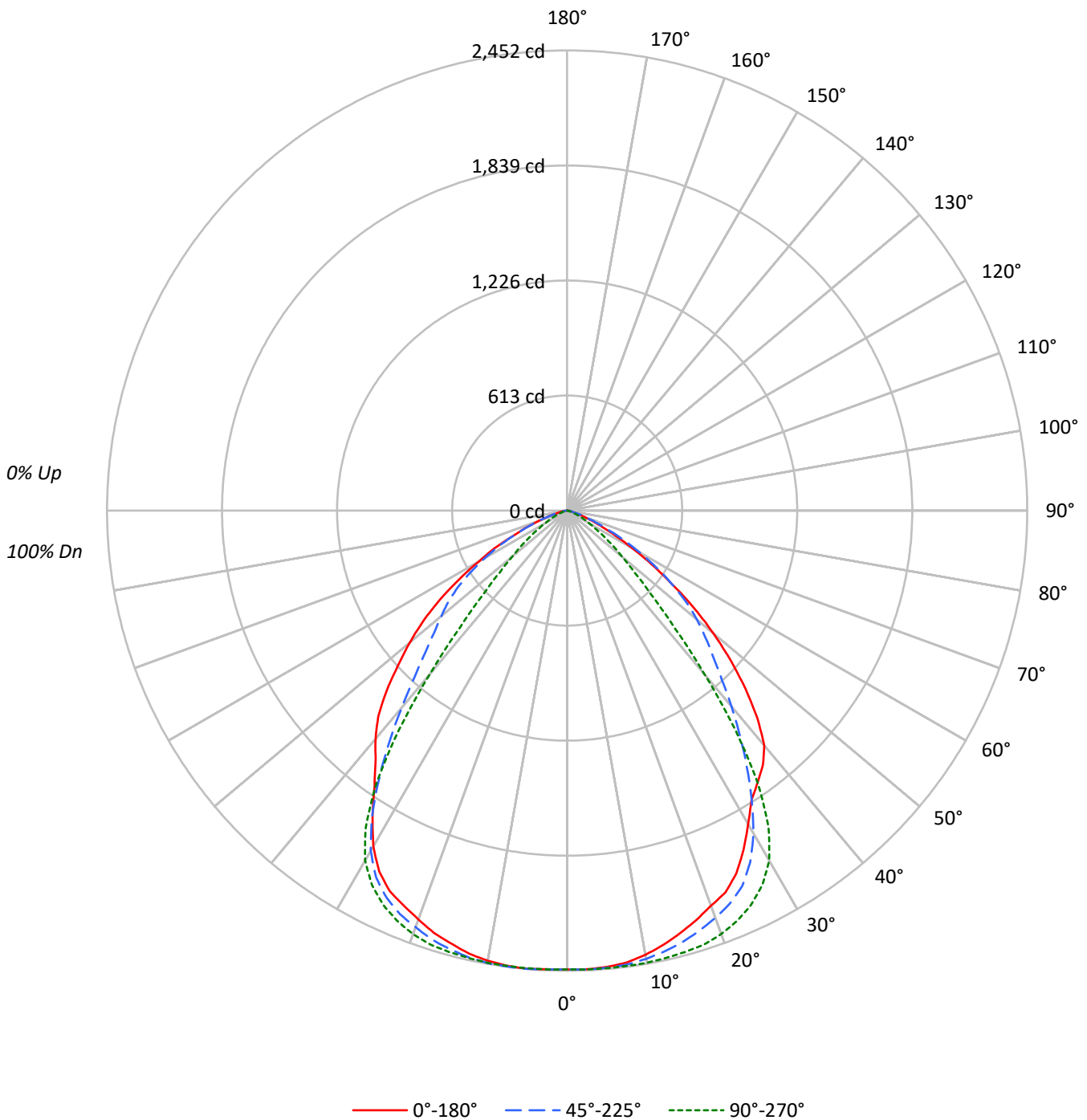
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	75395	75395	75395
5°	75559	75763	75847
10°	75243	76599	76270
15°	74409	77719	76254
20°	73516	78813	76056
25°	72560	78902	76132
30°	68646	76683	73553
35°	66596	66645	67338
40°	65771	45853	63923
45°	58606	27530	59409
50°	48731	18321	52506
55°	36547	12629	44520
60°	24768	8418	33593
65°	14936	5458	23079
70°	8286	2957	14200
75°	3753	1251	7351
80°	3267	1403	5132
85°	3715	1840	5095



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.3	5.0
10°-20°	677.7	14.6
20°-30°	1028.5	22.2
30°-40°	1080.3	23.3
40°-50°	809.9	17.5
50°-60°	519.7	11.2
60°-70°	222.3	4.8
70°-80°	52.5	1.1
80°-90°	9.8	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°	1939.5	41.9
0°-40°	3019.8	65.2
0°-60°	4349.4	93.9
0°-90°	4634.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4634.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2445	2445	2445	2445	2445	
5°	2441	2445	2448	2452	2450	232
15°	2331	2379	2434	2419	2389	657
25°	2133	2208	2319	2277	2238	974
35°	1769	1671	1770	1749	1789	1110
45°	1344	1098	631	1067	1362	1029
55°	680	680	235	709	828	617
65°	205	242	75	311	316	219
75°	32	37	10	63	62	46
85°	10	7	5	10	14	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°	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0
2.5°	2446.3	2448.9	2447.6	2447.6	2446.3	2447.6	2447.6	2450.3	2450.3	2447.6	2446.3
5°	2441.0	2443.7	2443.7	2441.0	2441.0	2447.6	2443.7	2446.3	2446.3	2445.0	2445.0
7.5°	2429.3	2429.3	2434.5	2430.6	2430.6	2434.5	2433.2	2435.8	2438.4	2439.8	2439.8
10°	2403.0	2405.6	2406.9	2406.9	2408.3	2412.2	2414.8	2420.1	2422.7	2425.3	2426.6
12.5°	2370.2	2374.1	2375.4	2374.1	2378.1	2383.3	2389.9	2396.4	2400.4	2405.6	2409.6
15°	2330.8	2330.8	2333.4	2337.4	2340.0	2347.9	2354.4	2362.3	2372.8	2379.4	2385.9
17.5°	2287.5	2290.1	2294.1	2294.1	2299.3	2312.4	2316.4	2328.2	2340.0	2346.6	2359.7
20°	2240.3	2242.9	2246.8	2249.5	2256.0	2266.5	2274.4	2284.9	2298.0	2309.8	2322.9
22.5°	2203.5	2198.3	2200.9	2203.5	2210.1	2219.3	2228.5	2241.6	2254.7	2266.5	2279.6
25°	2132.6	2134.0	2137.9	2140.5	2148.4	2156.3	2166.8	2182.5	2194.3	2207.5	2221.9
27.5°	2036.8	2038.2	2044.7	2044.7	2051.3	2064.4	2070.9	2084.1	2099.8	2112.9	2130.0
30°	1927.9	1930.5	1930.5	1935.8	1939.7	1946.3	1952.8	1966.0	1973.8	1985.7	2009.3
32.5°	1828.2	1830.8	1829.5	1828.2	1824.2	1822.9	1821.6	1824.2	1826.9	1830.8	1840.0
35°	1769.1	1762.5	1757.3	1748.1	1737.6	1724.5	1712.7	1696.9	1682.5	1670.7	1657.6
37.5°	1712.7	1711.4	1703.5	1690.4	1669.4	1645.7	1618.2	1584.1	1549.9	1513.2	1477.8
40°	1633.9	1630.0	1623.4	1605.1	1581.4	1552.6	1515.8	1473.8	1418.7	1362.3	1304.5
42.5°	1500.1	1501.4	1493.5	1479.1	1456.8	1429.2	1391.1	1345.2	1286.2	1219.2	1144.4
45°	1343.9	1343.9	1341.3	1329.4	1313.7	1291.4	1262.5	1224.5	1166.7	1098.5	1018.4
47.5°	1181.2	1182.5	1178.5	1175.9	1169.3	1154.9	1133.9	1105.0	1064.4	998.7	918.7
50°	1015.8	1015.8	1022.4	1021.0	1021.0	1015.8	1006.6	989.5	954.1	901.6	826.8
52.5°	850.4	853.1	857.0	862.2	868.8	879.3	868.8	860.9	838.6	797.9	733.6
55°	679.8	682.4	689.0	698.2	706.1	716.6	719.2	719.2	707.4	679.8	631.3
57.5°	534.2	530.2	535.5	543.3	553.8	564.3	572.2	581.4	580.1	561.7	522.3
60°	401.6	402.9	406.8	414.7	422.6	431.8	442.3	450.1	454.1	444.9	420.0
62.5°	292.7	292.7	297.9	305.8	309.7	322.9	329.4	333.4	337.3	336.0	320.2
65°	204.7	207.3	210.0	213.9	217.8	225.7	229.7	237.5	240.2	241.5	229.7
67.5°	144.4	140.4	143.1	145.7	149.6	154.9	162.7	162.7	166.7	166.7	158.8
70°	91.9	91.9	93.2	97.1	99.7	101.1	103.7	106.3	110.2	108.9	108.9
72.5°	61.7	60.4	61.7	63.0	64.3	68.2	68.2	69.6	72.2	73.5	68.2
75°	31.5	32.8	35.4	34.1	38.1	35.4	36.7	40.7	39.4	36.7	36.7
77.5°	26.2	26.2	26.2	25.0	27.6	27.6	26.2	28.9	27.6	27.6	26.2
80°	18.4	19.7	18.4	17.1	18.4	17.1	17.1	17.1	17.1	17.1	15.7
82.5°	14.4	11.8	13.1	11.8	13.1	13.1	11.8	10.5	10.5	11.8	10.5
85°	10.5	7.9	9.2	9.2	7.9	7.9	7.9	7.9	7.9	6.6	6.6
87.5°	6.6	3.9	3.9	3.9	5.2	5.2	5.2	3.9	5.2	5.2	2.6
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0
2.5°	2448.9	2447.6	2450.3	2448.9	2448.9	2447.6	2448.9	2447.6	2450.3	2445.0	2446.3
5°	2448.9	2446.3	2447.6	2448.9	2450.3	2447.6	2447.6	2447.6	2450.3	2447.6	2448.9
7.5°	2443.7	2442.4	2446.3	2448.9	2447.6	2446.3	2448.9	2447.6	2450.3	2448.9	2451.5
10°	2433.2	2434.5	2437.1	2441.0	2442.4	2443.7	2446.3	2446.3	2450.3	2445.0	2447.6
12.5°	2417.4	2422.7	2429.3	2431.9	2437.1	2437.1	2439.8	2441.0	2443.7	2442.4	2446.3
15°	2397.8	2404.3	2412.2	2418.8	2425.3	2429.3	2433.2	2434.5	2438.4	2434.5	2435.8
17.5°	2374.1	2382.0	2393.8	2401.7	2412.2	2416.1	2421.4	2424.0	2427.9	2425.3	2426.6
20°	2341.3	2350.5	2363.6	2375.4	2382.0	2391.2	2397.8	2401.7	2404.3	2401.7	2403.0
22.5°	2295.4	2308.5	2325.6	2334.7	2347.9	2355.7	2357.1	2366.3	2372.8	2366.3	2368.9
25°	2241.6	2254.7	2267.8	2287.5	2299.3	2308.5	2317.7	2319.0	2325.6	2324.2	2322.9
27.5°	2152.3	2169.4	2191.7	2207.5	2223.2	2237.6	2248.1	2250.7	2257.3	2254.7	2256.0
30°	2030.3	2048.7	2069.7	2094.6	2116.9	2131.3	2144.5	2153.6	2160.2	2156.3	2155.0
32.5°	1857.0	1875.4	1897.7	1922.7	1948.9	1969.9	1985.7	1997.5	2005.3	2002.7	1996.2
35°	1658.9	1664.1	1678.6	1698.3	1720.5	1742.9	1757.3	1770.4	1779.6	1782.2	1782.2
37.5°	1455.5	1438.4	1427.9	1427.9	1441.0	1450.2	1463.3	1471.2	1485.6	1490.9	1494.8
40°	1258.6	1219.2	1182.5	1154.9	1136.5	1135.2	1135.2	1139.1	1152.3	1169.3	1185.1
42.5°	1082.7	1019.7	963.3	912.1	875.4	854.4	845.2	846.5	857.0	872.7	899.0
45°	942.3	863.6	792.7	731.0	681.1	648.3	632.6	631.3	639.1	657.5	686.4
47.5°	833.4	749.4	669.3	598.4	544.7	509.2	490.8	485.6	490.8	507.9	542.0
50°	742.8	656.2	573.5	500.0	442.3	405.5	388.5	381.9	388.5	402.9	437.0
52.5°	658.8	569.6	492.2	421.3	359.6	328.1	309.7	305.8	309.7	326.8	354.4
55°	561.7	485.6	409.5	338.6	284.8	253.3	238.9	234.9	238.9	254.6	283.5
57.5°	465.9	400.3	333.4	269.0	223.1	195.5	182.4	177.2	186.3	196.8	231.0
60°	376.6	324.2	267.7	211.3	173.2	148.3	137.8	136.5	139.1	152.2	175.8
62.5°	295.3	252.0	207.3	161.4	129.9	119.4	106.3	105.0	107.6	115.5	133.9
65°	212.6	185.1	150.9	118.1	93.2	78.7	73.5	74.8	77.4	82.7	99.7
67.5°	148.3	128.6	105.0	82.7	64.3	57.7	52.5	51.2	52.5	61.7	70.9
70°	99.7	87.9	70.9	63.0	44.6	35.4	36.7	32.8	38.1	38.1	45.9
72.5°	65.6	57.7	47.2	36.7	31.5	25.0	25.0	23.6	26.2	27.6	34.1
75°	34.1	26.2	26.2	18.4	13.1	6.6	11.8	10.5	9.2	10.5	13.1
77.5°	23.6	19.7	18.4	14.4	13.1	10.5	10.5	10.5	10.5	11.8	13.1
80°	14.4	14.4	10.5	9.2	7.9	6.6	7.9	7.9	7.9	7.9	9.2
82.5°	9.2	7.9	7.9	6.6	6.6	5.2	5.2	5.2	5.2	5.2	7.9
85°	7.9	5.2	5.2	3.9	5.2	9.2	3.9	5.2	5.2	5.2	3.9
87.5°	2.6	3.9	3.9	3.9	2.6	1.3	2.6	3.9	3.9	6.6	5.2
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°	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0	2445.0
2.5°	2448.9	2450.3	2450.3	2448.9	2448.9	2446.3	2451.5	2447.6	2448.9	2454.2	2450.3
5°	2451.5	2452.9	2452.9	2451.5	2451.5	2451.5	2452.9	2452.9	2451.5	2450.3	2452.9
7.5°	2456.8	2455.5	2455.5	2452.9	2452.9	2450.3	2452.9	2448.9	2451.5	2448.9	2452.9
10°	2450.3	2451.5	2450.3	2448.9	2448.9	2447.6	2447.6	2443.7	2445.0	2441.0	2443.7
12.5°	2446.3	2445.0	2445.0	2442.4	2439.8	2437.1	2435.8	2431.9	2431.9	2422.7	2426.6
15°	2435.8	2437.1	2433.2	2427.9	2425.3	2418.8	2416.1	2410.9	2405.6	2399.1	2400.4
17.5°	2426.6	2422.7	2417.4	2412.2	2401.7	2396.4	2391.2	2383.3	2380.7	2372.8	2370.2
20°	2399.1	2396.4	2389.9	2380.7	2374.1	2362.3	2357.1	2349.2	2342.6	2334.7	2330.8
22.5°	2363.6	2361.0	2353.1	2343.9	2333.4	2328.2	2322.9	2308.5	2301.9	2294.1	2292.7
25°	2319.0	2315.1	2307.2	2296.7	2291.4	2277.0	2271.7	2261.2	2258.6	2250.7	2249.5
27.5°	2250.7	2245.5	2236.3	2223.2	2214.0	2204.8	2199.6	2191.7	2189.1	2181.2	2179.9
30°	2148.4	2141.8	2123.5	2118.2	2102.4	2093.3	2093.3	2082.8	2084.1	2078.8	2078.8
32.5°	1987.0	1976.5	1962.0	1951.5	1941.0	1935.8	1935.8	1931.8	1934.5	1934.5	1937.1
35°	1773.0	1758.6	1750.7	1744.2	1744.2	1749.4	1765.2	1769.1	1777.0	1783.5	1788.8
37.5°	1498.7	1497.5	1506.6	1514.5	1534.2	1556.5	1584.1	1607.7	1630.0	1645.7	1661.5
40°	1202.2	1235.0	1261.2	1298.0	1328.1	1371.4	1421.3	1462.0	1500.1	1527.6	1556.5
42.5°	938.4	980.4	1035.5	1089.3	1143.1	1202.2	1267.8	1324.2	1374.1	1412.1	1442.3
45°	731.0	788.7	855.7	923.9	993.5	1067.0	1135.2	1193.0	1245.5	1284.8	1315.0
47.5°	589.3	652.3	728.4	803.2	881.9	959.4	1035.5	1085.4	1128.6	1160.1	1187.7
50°	486.9	553.8	633.9	719.2	797.9	875.4	941.0	989.5	1025.0	1052.5	1069.6
52.5°	406.8	477.7	563.0	648.3	727.1	797.9	857.0	893.7	922.6	942.3	958.0
55°	336.0	404.2	484.3	564.3	641.8	708.7	757.2	784.8	807.1	818.9	828.1
57.5°	274.3	337.3	410.8	484.3	551.2	606.3	644.4	671.9	682.4	691.6	690.3
60°	215.2	274.3	341.2	404.2	462.0	506.6	534.2	549.9	557.8	561.7	559.1
62.5°	169.3	223.1	274.3	329.4	371.4	409.5	435.7	435.7	439.6	441.0	444.9
65°	126.0	166.7	211.3	252.0	286.1	311.0	325.5	329.4	334.7	333.4	330.7
67.5°	93.2	123.4	156.2	186.3	210.0	225.7	236.2	245.4	244.1	241.5	240.2
70°	64.3	84.0	112.9	131.2	148.3	164.1	166.7	168.0	169.3	170.6	168.0
72.5°	44.6	59.1	74.8	90.6	101.1	107.6	114.2	115.5	115.5	115.5	114.2
75°	22.3	30.2	44.6	51.2	60.4	63.0	68.2	68.2	72.2	66.9	65.6
77.5°	19.7	23.6	31.5	36.7	40.7	44.6	45.9	49.9	48.6	45.9	47.2
80°	11.8	14.4	19.7	22.3	27.6	28.9	30.2	31.5	30.2	31.5	31.5
82.5°	9.2	10.5	13.1	13.1	17.1	17.1	18.4	18.4	19.7	19.7	19.7
85°	5.2	9.2	7.9	15.7	10.5	10.5	13.1	15.7	13.1	13.1	15.7
87.5°	5.2	5.2	3.9	5.2	5.2	5.2	6.6	7.9	7.9	9.2	7.9
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: P246107

CATALOG NUMBER: LSR8B50D010 EC8B50827 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2445.0	2445.0	2445.0	2445.0
2.5°	2448.9	2451.5	2447.6	2446.3
5°	2452.9	2452.9	2450.3	2450.3
7.5°	2452.9	2452.9	2448.9	2446.3
10°	2442.4	2442.4	2438.4	2435.8
12.5°	2422.7	2422.7	2421.4	2417.4
15°	2397.8	2397.8	2392.5	2388.6
17.5°	2363.6	2366.3	2359.7	2359.7
20°	2326.9	2325.6	2320.3	2317.7
22.5°	2288.8	2286.2	2284.9	2277.0
25°	2248.1	2245.5	2241.6	2237.6
27.5°	2178.6	2177.3	2173.3	2168.1
30°	2072.3	2070.9	2065.7	2065.7
32.5°	1934.5	1933.2	1927.9	1929.2
35°	1791.4	1796.7	1794.0	1788.8
37.5°	1672.0	1675.9	1678.6	1675.9
40°	1572.2	1584.1	1585.4	1588.0
42.5°	1466.0	1481.7	1487.0	1489.6
45°	1338.6	1353.1	1364.9	1362.3
47.5°	1208.7	1219.2	1229.7	1221.8
50°	1084.0	1090.6	1094.5	1094.5
52.5°	965.9	965.9	964.6	965.9
55°	830.7	830.7	825.5	828.1
57.5°	689.0	691.6	687.7	681.1
60°	557.8	551.2	548.6	544.7
62.5°	434.4	434.4	425.2	437.0
65°	325.5	321.5	317.6	316.3
67.5°	236.2	234.9	231.0	229.7
70°	166.7	161.4	160.1	157.5
72.5°	111.6	111.6	108.9	108.9
75°	68.2	61.7	60.4	61.7
77.5°	47.2	45.9	45.9	44.6
80°	31.5	30.2	32.8	28.9
82.5°	19.7	21.0	19.7	21.0
85°	13.1	15.7	14.4	14.4
87.5°	7.9	7.9	7.9	7.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)