

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: P246173

Luminaire Tested: **LSR8B50D010 EC8B50930 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246173
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 EC8B50930 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4078.2 lumens
Efficiency: N/A
Efficacy: 76.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

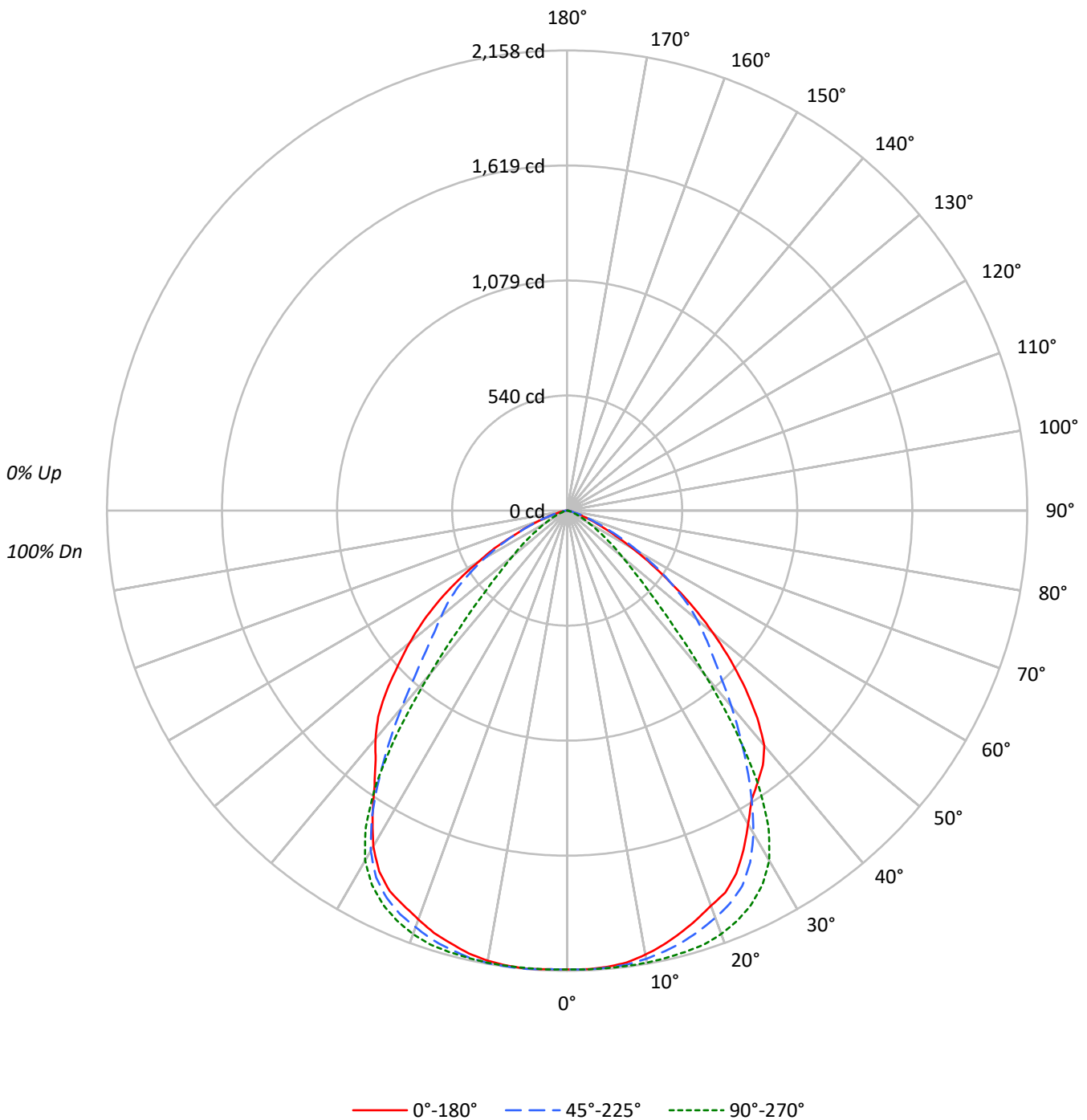
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.4	5.0
10°-20°	596.4	14.6
20°-30°	905.2	22.2
30°-40°	950.7	23.3
40°-50°	712.8	17.5
50°-60°	457.3	11.2
60°-70°	195.6	4.8
70°-80°	46.2	1.1
80°-90°	8.6	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°	1706.9	41.9
0°-40°	2657.6	65.2
0°-60°	3827.7	93.9
0°-90°	4078.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4078.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2152	2152	2152	2152	2152	
5°	2148	2152	2154	2158	2156	204
15°	2051	2094	2142	2129	2102	579
25°	1877	1943	2041	2004	1969	857
35°	1557	1470	1558	1540	1574	977
45°	1183	967	556	939	1199	906
55°	598	598	207	624	729	543
65°	180	212	66	274	278	192
75°	28	32	9	56	54	40
85°	9	6	5	9	13	10
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°	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8
2.5°	2152.9	2155.2	2154.0	2154.0	2152.9	2154.0	2154.0	2156.4	2156.4	2154.0	2152.9
5°	2148.3	2150.5	2150.5	2148.3	2148.3	2154.0	2150.5	2152.9	2152.9	2151.8	2151.8
7.5°	2137.9	2137.9	2142.5	2139.1	2139.1	2142.5	2141.3	2143.7	2145.9	2147.2	2147.2
10°	2114.8	2117.1	2118.2	2118.2	2119.4	2122.8	2125.2	2129.8	2132.1	2134.4	2135.6
12.5°	2086.0	2089.3	2090.6	2089.3	2092.8	2097.5	2103.2	2109.0	2112.5	2117.1	2120.6
15°	2051.2	2051.2	2053.6	2057.0	2059.4	2066.2	2072.1	2079.0	2088.2	2094.0	2099.7
17.5°	2013.1	2015.4	2018.9	2018.9	2023.5	2035.1	2038.5	2049.0	2059.4	2065.1	2076.7
20°	1971.6	1973.9	1977.3	1979.7	1985.4	1994.7	2001.5	2010.8	2022.4	2032.8	2044.4
22.5°	1939.2	1934.6	1936.9	1939.2	1945.0	1953.1	1961.2	1972.7	1984.3	1994.7	2006.3
25°	1876.9	1878.0	1881.5	1883.7	1890.7	1897.6	1906.9	1920.7	1931.1	1942.7	1955.4
27.5°	1792.6	1793.7	1799.4	1799.4	1805.3	1816.8	1822.5	1834.1	1848.0	1859.5	1874.5
30°	1696.6	1699.0	1699.0	1703.6	1707.1	1712.9	1718.6	1730.2	1737.1	1747.5	1768.3
32.5°	1608.9	1611.2	1610.1	1608.9	1605.4	1604.3	1603.1	1605.4	1607.7	1611.2	1619.3
35°	1557.0	1551.1	1546.5	1538.5	1529.2	1517.6	1507.3	1493.4	1480.7	1470.3	1458.8
37.5°	1507.3	1506.1	1499.2	1487.6	1469.2	1448.3	1424.1	1394.1	1364.0	1331.7	1300.5
40°	1437.9	1434.4	1428.7	1412.6	1391.7	1366.4	1334.0	1297.0	1248.6	1198.9	1148.0
42.5°	1320.1	1321.3	1314.4	1301.7	1282.1	1257.8	1224.2	1183.9	1131.9	1073.0	1007.1
45°	1182.7	1182.7	1180.4	1170.0	1156.1	1136.5	1111.1	1077.6	1026.8	966.8	896.2
47.5°	1039.5	1040.6	1037.1	1034.9	1029.1	1016.4	997.9	972.5	936.7	879.0	808.5
50°	894.0	894.0	899.7	898.6	898.6	894.0	885.9	870.9	839.6	793.4	727.6
52.5°	748.4	750.7	754.2	758.8	764.6	773.8	764.6	757.7	738.1	702.2	645.7
55°	598.3	600.6	606.3	614.4	621.4	630.7	632.9	632.9	622.5	598.3	555.6
57.5°	470.0	466.6	471.3	478.2	487.4	496.6	503.6	511.6	510.5	494.4	459.7
60°	353.5	354.6	358.0	365.0	371.9	380.0	389.2	396.2	399.6	391.6	369.6
62.5°	257.6	257.6	262.2	269.2	272.6	284.2	289.9	293.4	296.8	295.6	281.8
65°	180.1	182.5	184.7	188.3	191.7	198.6	202.1	209.1	211.3	212.5	202.1
67.5°	127.0	123.5	125.9	128.2	131.7	136.3	143.3	143.3	146.6	146.6	139.8
70°	80.8	80.8	82.1	85.4	87.8	88.9	91.2	93.5	97.0	95.8	95.8
72.5°	54.3	53.1	54.3	55.5	56.6	60.1	60.1	61.2	63.6	64.7	60.1
75°	27.7	28.9	31.2	30.0	33.5	31.2	32.3	35.8	34.6	32.3	32.3
77.5°	23.1	23.1	23.1	22.0	24.2	24.2	23.1	25.4	24.2	24.2	23.1
80°	16.1	17.4	16.1	15.0	16.1	15.0	15.0	15.0	15.0	15.0	13.9
82.5°	12.7	10.4	11.5	10.4	11.5	11.5	10.4	9.2	9.2	10.4	9.2
85°	9.2	7.0	8.1	8.1	7.0	7.0	7.0	7.0	7.0	5.7	5.7
87.5°	5.7	3.5	3.5	3.5	4.6	4.6	4.6	3.5	4.6	4.6	2.4
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8
2.5°	2155.2	2154.0	2156.4	2155.2	2155.2	2154.0	2155.2	2154.0	2156.4	2151.8	2152.9
5°	2155.2	2152.9	2154.0	2155.2	2156.4	2154.0	2154.0	2154.0	2156.4	2154.0	2155.2
7.5°	2150.5	2149.4	2152.9	2155.2	2154.0	2152.9	2155.2	2154.0	2156.4	2155.2	2157.5
10°	2141.3	2142.5	2144.8	2148.3	2149.4	2150.5	2152.9	2152.9	2156.4	2151.8	2154.0
12.5°	2127.4	2132.1	2137.9	2140.2	2144.8	2144.8	2147.2	2148.3	2150.5	2149.4	2152.9
15°	2110.2	2115.9	2122.8	2128.7	2134.4	2137.9	2141.3	2142.5	2145.9	2142.5	2143.7
17.5°	2089.3	2096.3	2106.7	2113.6	2122.8	2126.3	2130.9	2133.3	2136.7	2134.4	2135.6
20°	2060.5	2068.6	2080.1	2090.6	2096.3	2104.3	2110.2	2113.6	2115.9	2113.6	2114.8
22.5°	2020.0	2031.6	2046.6	2054.7	2066.2	2073.2	2074.4	2082.5	2088.2	2082.5	2084.7
25°	1972.7	1984.3	1995.8	2013.1	2023.5	2031.6	2039.7	2040.9	2046.6	2045.5	2044.4
27.5°	1894.2	1909.2	1928.8	1942.7	1956.6	1969.3	1978.5	1980.8	1986.6	1984.3	1985.4
30°	1786.8	1802.9	1821.4	1843.4	1863.0	1875.7	1887.2	1895.3	1901.1	1897.6	1896.5
32.5°	1634.3	1650.4	1670.1	1692.0	1715.1	1733.6	1747.5	1758.0	1764.8	1762.5	1756.7
35°	1459.9	1464.5	1477.3	1494.5	1514.1	1533.9	1546.5	1558.1	1566.1	1568.5	1568.5
37.5°	1280.9	1265.8	1256.6	1256.6	1268.2	1276.3	1287.8	1294.8	1307.4	1312.0	1315.5
40°	1107.7	1073.0	1040.6	1016.4	1000.3	999.0	999.0	1002.5	1014.1	1029.1	1043.0
42.5°	952.8	897.5	847.8	802.7	770.4	751.9	743.8	745.0	754.2	768.1	791.2
45°	829.3	760.0	697.6	643.3	599.4	570.6	556.7	555.6	562.5	578.7	604.1
47.5°	733.5	659.5	589.1	526.6	479.3	448.2	431.9	427.3	431.9	446.9	477.0
50°	653.8	577.5	504.8	440.0	389.2	356.9	341.9	336.1	341.9	354.6	384.6
52.5°	579.8	501.3	433.2	370.7	316.5	288.8	272.6	269.2	272.6	287.5	311.9
55°	494.4	427.3	360.4	298.0	250.7	223.0	210.2	206.7	210.2	224.1	249.5
57.5°	410.1	352.2	293.4	236.8	196.4	172.1	160.5	155.9	164.0	173.2	203.2
60°	331.5	285.3	235.6	186.0	152.5	130.5	121.3	120.1	122.4	134.0	154.8
62.5°	259.8	221.7	182.5	142.0	114.3	105.1	93.5	92.4	94.7	101.7	117.8
65°	187.1	162.9	132.8	103.9	82.1	69.3	64.7	65.8	68.2	72.8	87.8
67.5°	130.5	113.2	92.4	72.8	56.6	50.8	46.2	45.1	46.2	54.3	62.3
70°	87.8	77.3	62.3	55.5	39.2	31.2	32.3	28.9	33.5	33.5	40.5
72.5°	57.7	50.8	41.6	32.3	27.7	22.0	22.0	20.9	23.1	24.2	30.0
75°	30.0	23.1	23.1	16.1	11.5	5.7	10.4	9.2	8.1	9.2	11.5
77.5°	20.9	17.4	16.1	12.7	11.5	9.2	9.2	9.2	9.2	10.4	11.5
80°	12.7	12.7	9.2	8.1	7.0	5.7	7.0	7.0	7.0	7.0	8.1
82.5°	8.1	7.0	7.0	5.7	5.7	4.6	4.6	4.6	4.6	4.6	7.0
85°	7.0	4.6	4.6	3.5	4.6	8.1	3.5	4.6	4.6	4.6	3.5
87.5°	2.4	3.5	3.5	3.5	2.4	1.1	2.4	3.5	3.5	5.7	4.6
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°	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8	2151.8
2.5°	2155.2	2156.4	2156.4	2155.2	2155.2	2152.9	2157.5	2154.0	2155.2	2159.8	2156.4
5°	2157.5	2158.7	2158.7	2157.5	2157.5	2157.5	2158.7	2158.7	2157.5	2156.4	2158.7
7.5°	2162.2	2161.0	2161.0	2158.7	2158.7	2156.4	2158.7	2155.2	2157.5	2155.2	2158.7
10°	2156.4	2157.5	2156.4	2155.2	2155.2	2154.0	2154.0	2150.5	2151.8	2148.3	2150.5
12.5°	2152.9	2151.8	2151.8	2149.4	2147.2	2144.8	2143.7	2140.2	2140.2	2132.1	2135.6
15°	2143.7	2144.8	2141.3	2136.7	2134.4	2128.7	2126.3	2121.7	2117.1	2111.3	2112.5
17.5°	2135.6	2132.1	2127.4	2122.8	2113.6	2109.0	2104.3	2097.5	2095.1	2088.2	2086.0
20°	2111.3	2109.0	2103.2	2095.1	2089.3	2079.0	2074.4	2067.5	2061.6	2054.7	2051.2
22.5°	2080.1	2077.8	2070.9	2062.8	2053.6	2049.0	2044.4	2031.6	2025.9	2018.9	2017.8
25°	2040.9	2037.4	2030.5	2021.3	2016.6	2003.9	1999.3	1990.0	1987.8	1980.8	1979.7
27.5°	1980.8	1976.2	1968.1	1956.6	1948.4	1940.3	1935.7	1928.8	1926.6	1919.6	1918.5
30°	1890.7	1885.0	1868.8	1864.1	1850.3	1842.3	1842.3	1832.9	1834.1	1829.5	1829.5
32.5°	1748.6	1739.5	1726.7	1717.5	1708.2	1703.6	1703.6	1700.1	1702.5	1702.5	1704.8
35°	1560.4	1547.7	1540.7	1535.0	1535.0	1539.6	1553.5	1557.0	1563.9	1569.6	1574.2
37.5°	1319.0	1317.8	1325.9	1332.9	1350.1	1369.9	1394.1	1414.8	1434.4	1448.3	1462.2
40°	1058.0	1086.8	1109.9	1142.3	1168.9	1207.0	1250.8	1286.7	1320.1	1344.4	1369.9
42.5°	825.8	862.7	911.3	958.7	1006.0	1058.0	1115.7	1165.4	1209.2	1242.7	1269.3
45°	643.3	694.1	753.1	813.1	874.4	939.1	999.0	1049.9	1096.1	1130.8	1157.3
47.5°	518.6	574.1	641.0	706.9	776.2	844.3	911.3	955.2	993.3	1021.0	1045.2
50°	428.4	487.4	557.8	632.9	702.2	770.4	828.1	870.9	902.1	926.3	941.3
52.5°	358.0	420.4	495.5	570.6	639.9	702.2	754.2	786.6	811.9	829.3	843.1
55°	295.6	355.7	426.2	496.6	564.8	623.7	666.4	690.6	710.3	720.7	728.8
57.5°	241.4	296.8	361.5	426.2	485.1	533.6	567.1	591.3	600.6	608.7	607.5
60°	189.4	241.4	300.3	355.7	406.6	445.8	470.0	483.9	490.9	494.4	492.0
62.5°	149.0	196.4	241.4	289.9	326.9	360.4	383.5	383.5	387.0	388.1	391.6
65°	110.9	146.6	186.0	221.7	251.8	273.7	286.4	289.9	294.5	293.4	291.0
67.5°	82.1	108.6	137.4	164.0	184.7	198.6	207.8	216.0	214.8	212.5	211.3
70°	56.6	73.9	99.3	115.5	130.5	144.4	146.6	147.9	149.0	150.1	147.9
72.5°	39.2	52.0	65.8	79.7	88.9	94.7	100.4	101.7	101.7	101.7	100.4
75°	19.6	26.6	39.2	45.1	53.1	55.5	60.1	60.1	63.6	58.9	57.7
77.5°	17.4	20.9	27.7	32.3	35.8	39.2	40.5	43.9	42.7	40.5	41.6
80°	10.4	12.7	17.4	19.6	24.2	25.4	26.6	27.7	26.6	27.7	27.7
82.5°	8.1	9.2	11.5	11.5	15.0	15.0	16.1	16.1	17.4	17.4	17.4
85°	4.6	8.1	7.0	13.9	9.2	9.2	11.5	13.9	11.5	11.5	13.9
87.5°	4.6	4.6	3.5	4.6	4.6	4.6	5.7	7.0	7.0	8.1	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



TEST NUMBER: P246173

CATALOG NUMBER: LSR8B50D010 EC8B50930 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2151.8	2151.8	2151.8	2151.8
2.5°	2155.2	2157.5	2154.0	2152.9
5°	2158.7	2158.7	2156.4	2156.4
7.5°	2158.7	2158.7	2155.2	2152.9
10°	2149.4	2149.4	2145.9	2143.7
12.5°	2132.1	2132.1	2130.9	2127.4
15°	2110.2	2110.2	2105.6	2102.1
17.5°	2080.1	2082.5	2076.7	2076.7
20°	2047.8	2046.6	2042.0	2039.7
22.5°	2014.3	2012.0	2010.8	2003.9
25°	1978.5	1976.2	1972.7	1969.3
27.5°	1917.2	1916.1	1912.7	1908.1
30°	1823.8	1822.5	1817.9	1817.9
32.5°	1702.5	1701.3	1696.6	1697.9
35°	1576.6	1581.2	1578.8	1574.2
37.5°	1471.4	1474.9	1477.3	1474.9
40°	1383.7	1394.1	1395.2	1397.6
42.5°	1290.2	1303.9	1308.7	1310.9
45°	1178.1	1190.8	1201.2	1198.9
47.5°	1063.7	1073.0	1082.2	1075.3
50°	954.0	959.8	963.3	963.3
52.5°	850.1	850.1	848.9	850.1
55°	731.1	731.1	726.5	728.8
57.5°	606.3	608.7	605.2	599.4
60°	490.9	485.1	482.8	479.3
62.5°	382.3	382.3	374.2	384.6
65°	286.4	282.9	279.5	278.3
67.5°	207.8	206.7	203.2	202.1
70°	146.6	142.0	140.9	138.6
72.5°	98.2	98.2	95.8	95.8
75°	60.1	54.3	53.1	54.3
77.5°	41.6	40.5	40.5	39.2
80°	27.7	26.6	28.9	25.4
82.5°	17.4	18.5	17.4	18.5
85°	11.5	13.9	12.7	12.7
87.5°	7.0	7.0	7.0	7.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)