

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: P244204

Luminaire Tested: **LSR8B40D010 EC8B40935 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244204
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: LSR8B40D010 EC8B40935 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3942.0 lumens
Efficiency: N/A
Efficacy: 96.4 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

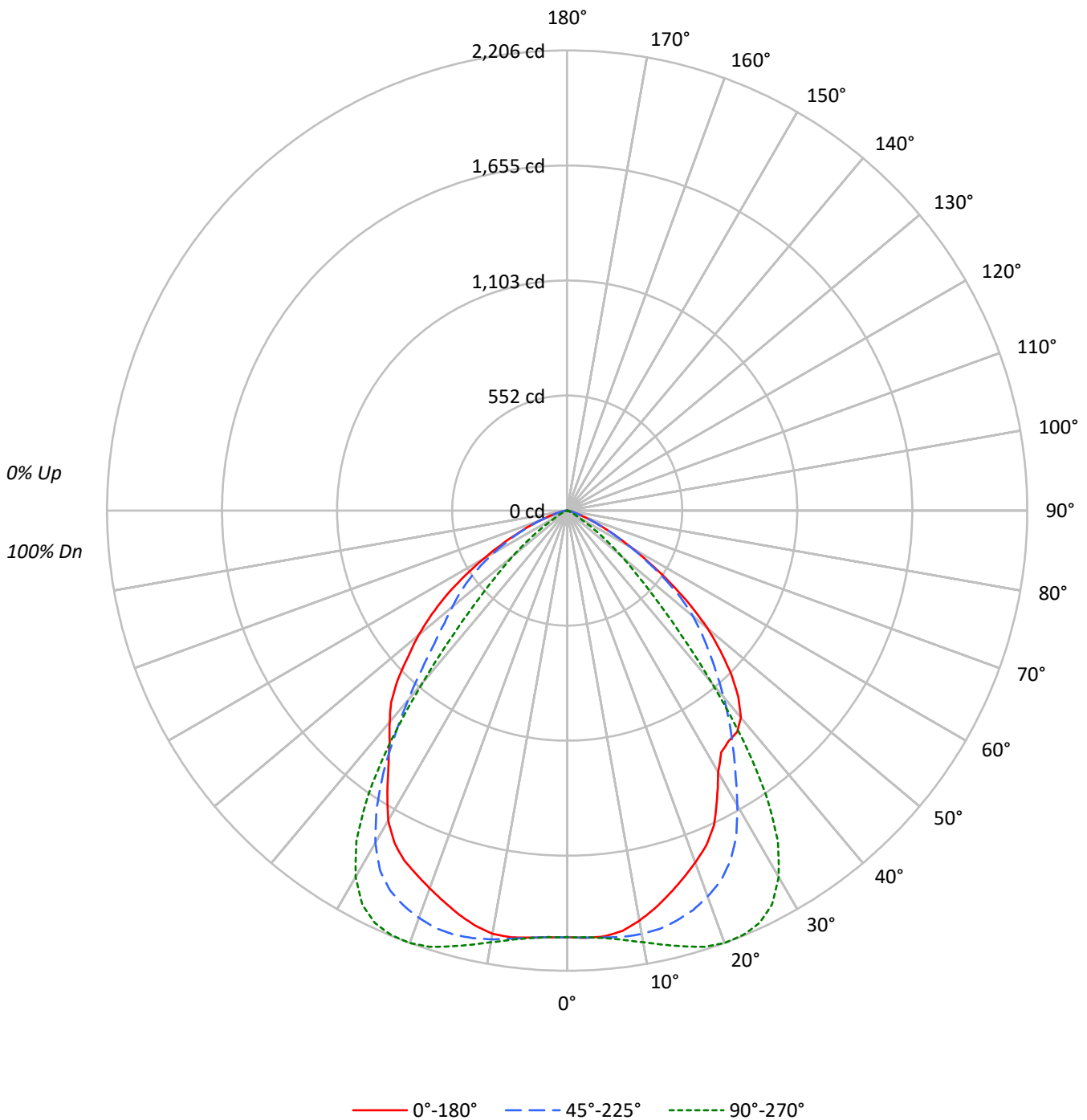
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P244204

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBDW0LI

Luminous Intensity Polar Plot





TEST NUMBER: P244204

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBDW0LI

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°	63060	63060	63060
5°	63434	63669	63601
10°	62502	65799	64509
15°	60675	69061	64001
20°	58913	72377	63225
25°	56654	74230	62931
30°	51559	72196	61066
35°	50790	62557	56184
40°	52169	43386	53260
45°	48567	26222	50081
50°	42125	16196	44624
55°	32327	8462	37875
60°	22023	3410	28585
65°	13703	1744	19722
70°	7438	1082	12036
75°	3884	512	7113
80°	1740	586	3853
85°	1168	389	3467



TEST NUMBER: P244204

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBDW0LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.7	5.0
10°-20°	582.6	14.8
20°-30°	888.8	22.5
30°-40°	927.5	23.5
40°-50°	696.7	17.7
50°-60°	428.6	10.9
60°-70°	174.4	4.4
70°-80°	41.1	1.0
80°-90°	5.7	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°	1668.0	42.3
0°-40°	2595.5	65.8
0°-60°	3720.8	94.4
0°-90°	3942.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3942.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2045	2045	2045	2045	2045	
5°	2049	2055	2057	2055	2055	194
15°	1901	2034	2163	2104	2005	535
25°	1665	1852	2182	2009	1850	757
35°	1349	1387	1662	1536	1492	852
45°	1114	964	601	898	1148	850
55°	601	571	157	571	704	541
65°	188	190	24	255	270	196
75°	33	33	4	58	60	39
85°	3	3	1	8	10	5
90°	0	0	0	0	0	



TEST NUMBER: P244204

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBDW0LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0
2.5°	2050.4	2047.1	2050.4	2050.4	2051.5	2049.3	2050.4	2051.5	2049.3	2049.3	2049.3
5°	2049.3	2047.1	2049.3	2048.2	2050.4	2050.4	2052.6	2052.6	2054.7	2054.7	2058.0
7.5°	2032.0	2027.6	2032.0	2035.2	2037.4	2041.7	2047.1	2051.5	2055.8	2060.2	2065.6
10°	1996.1	1996.1	1999.4	2005.9	2012.4	2020.0	2029.8	2040.6	2051.5	2061.3	2071.0
12.5°	1951.6	1948.4	1954.9	1963.6	1973.3	1985.3	2000.5	2016.8	2034.1	2053.7	2068.9
15°	1900.6	1897.4	1905.0	1913.6	1925.6	1943.0	1961.4	1983.1	2008.1	2034.1	2059.1
17.5°	1848.5	1847.4	1855.0	1867.0	1876.7	1895.2	1919.1	1945.1	1973.3	2008.1	2040.6
20°	1795.3	1794.3	1801.8	1811.6	1824.6	1842.0	1865.9	1896.3	1929.9	1969.0	2007.0
22.5°	1740.0	1741.1	1747.6	1758.4	1769.3	1787.7	1812.7	1843.1	1880.0	1922.3	1964.7
25°	1665.1	1659.7	1668.3	1679.2	1697.6	1712.8	1736.7	1769.3	1807.3	1851.8	1901.7
27.5°	1556.5	1555.4	1563.1	1572.8	1589.1	1607.5	1633.6	1667.2	1707.4	1756.2	1805.1
30°	1448.0	1450.2	1453.4	1463.2	1474.0	1492.5	1518.5	1546.8	1584.8	1631.4	1683.5
32.5°	1374.2	1374.2	1378.5	1385.0	1392.6	1402.4	1420.9	1441.5	1470.8	1503.4	1541.3
35°	1349.2	1344.9	1349.2	1350.3	1351.4	1353.6	1356.8	1363.3	1373.1	1387.2	1401.3
37.5°	1338.4	1335.1	1335.1	1330.8	1325.3	1318.8	1310.1	1300.4	1289.5	1275.4	1264.6
40°	1296.0	1293.9	1291.7	1287.3	1275.4	1262.4	1248.3	1225.5	1200.5	1165.8	1131.0
42.5°	1214.6	1212.4	1211.4	1202.7	1191.8	1176.6	1160.3	1136.5	1105.0	1060.5	1010.5
45°	1113.7	1109.3	1106.1	1098.5	1090.9	1077.8	1062.7	1040.9	1009.5	963.9	904.2
47.5°	996.4	994.3	993.2	989.9	982.3	974.7	965.0	947.6	919.4	875.9	814.1
50°	878.1	873.8	875.9	874.9	871.6	866.2	859.7	847.7	826.0	786.9	730.5
52.5°	742.4	742.4	741.4	744.6	745.7	744.6	745.7	732.7	714.2	684.9	637.2
55°	601.3	601.3	604.6	608.9	613.3	614.4	613.3	607.9	594.8	570.9	528.6
57.5°	468.9	466.7	473.3	479.8	484.1	488.4	485.2	480.9	473.3	453.7	421.1
60°	357.1	357.1	361.4	365.8	370.1	374.5	373.4	372.3	365.8	352.8	326.7
62.5°	262.7	263.8	263.8	267.0	271.4	275.7	279.0	275.7	272.4	263.8	246.4
65°	187.8	186.7	187.8	191.0	194.3	198.6	200.8	199.7	196.5	190.0	176.9
67.5°	125.9	124.8	129.2	130.2	132.4	136.8	135.7	136.8	135.7	130.2	119.4
70°	82.5	80.3	82.5	81.4	84.7	85.8	87.9	89.0	87.9	84.7	81.4
72.5°	51.0	49.9	51.0	52.1	53.2	54.3	56.4	56.4	55.3	53.2	48.8
75°	32.6	29.3	30.4	28.2	30.4	30.4	32.6	33.7	32.6	32.6	30.4
77.5°	19.5	19.5	19.5	19.5	19.5	19.5	19.5	20.6	21.7	19.5	18.5
80°	9.8	9.8	10.9	10.9	10.9	12.0	10.9	10.9	10.9	12.0	8.7
82.5°	7.6	6.5	6.5	6.5	7.6	6.5	6.5	6.5	6.5	6.5	6.5
85°	3.3	4.3	3.3	2.2	3.3	3.3	4.3	3.3	3.3	3.3	4.3
87.5°	1.1	1.1	0.0	0.0	0.0	1.1	0.0	1.1	1.1	2.2	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



TEST NUMBER: P244204

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0
2.5°	2050.4	2048.2	2048.2	2047.1	2049.3	2047.1	2048.2	2047.1	2047.1	2049.3	2047.1
5°	2058.0	2059.1	2056.9	2055.8	2059.1	2059.1	2059.1	2056.9	2056.9	2058.0	2056.9
7.5°	2068.9	2071.0	2072.1	2073.2	2075.4	2076.5	2076.5	2075.4	2074.3	2077.6	2073.2
10°	2080.8	2084.1	2090.6	2093.8	2099.3	2099.3	2101.4	2101.4	2099.3	2101.4	2100.3
12.5°	2076.5	2096.0	2106.9	2114.4	2122.0	2128.6	2130.7	2131.8	2130.7	2135.1	2130.7
15°	2084.1	2100.3	2117.7	2130.7	2144.8	2152.4	2154.6	2163.3	2165.5	2166.6	2160.1
17.5°	2072.1	2101.4	2119.9	2139.4	2160.1	2174.2	2187.2	2192.6	2193.7	2195.9	2187.2
20°	2045.0	2077.6	2105.8	2134.0	2157.9	2179.6	2190.4	2205.6	2201.3	2210.0	2198.0
22.5°	2008.1	2045.0	2080.8	2117.7	2142.7	2168.7	2191.5	2202.4	2207.8	2207.8	2194.8
25°	1949.5	1992.9	2032.0	2069.9	2107.9	2139.4	2165.5	2181.7	2185.0	2183.9	2168.7
27.5°	1858.3	1905.0	1950.6	1994.0	2040.6	2077.6	2107.9	2127.5	2132.9	2132.9	2116.6
30°	1732.4	1782.3	1826.8	1878.9	1926.7	1967.9	2010.3	2027.6	2037.4	2037.4	2018.9
32.5°	1582.6	1624.9	1666.2	1717.2	1769.3	1816.0	1856.1	1880.0	1891.9	1890.8	1874.6
35°	1419.8	1440.4	1471.9	1509.9	1556.5	1599.9	1639.0	1661.8	1682.4	1681.4	1666.2
37.5°	1256.9	1251.5	1254.8	1268.9	1298.2	1328.6	1359.0	1380.7	1398.0	1405.7	1402.4
40°	1097.4	1069.2	1042.0	1032.3	1034.4	1045.3	1061.6	1077.8	1097.4	1107.2	1111.5
42.5°	954.1	906.4	858.6	822.8	802.1	795.6	803.2	808.6	820.6	834.7	848.8
45°	839.1	775.0	712.0	656.7	622.0	601.3	597.0	601.3	607.9	622.0	640.4
47.5°	744.6	669.7	599.2	537.3	486.3	459.2	451.6	449.4	455.9	468.9	493.9
50°	661.0	586.1	508.0	436.3	383.2	352.8	341.9	337.6	345.2	354.9	377.7
52.5°	569.9	496.0	415.7	346.3	290.9	259.4	247.5	241.0	245.3	258.3	281.1
55°	471.1	402.7	330.0	258.3	205.1	175.8	161.7	157.4	161.7	175.8	198.6
57.5°	372.3	314.8	254.0	186.7	138.9	109.6	95.5	91.2	103.1	108.5	132.4
60°	290.9	244.2	192.1	136.8	95.5	72.7	58.6	55.3	60.8	70.5	90.1
62.5°	218.2	188.9	147.6	97.7	70.5	46.7	39.1	35.8	39.1	46.7	61.9
65°	158.5	135.7	103.1	71.6	47.8	34.7	26.1	23.9	27.1	32.6	45.6
67.5°	108.5	91.2	71.6	49.9	32.6	21.7	18.5	18.5	19.5	23.9	33.7
70°	70.5	59.7	45.6	32.6	21.7	16.3	14.1	12.0	14.1	17.4	22.8
72.5°	44.5	38.0	29.3	22.8	16.3	12.0	9.8	8.7	10.9	13.0	17.4
75°	27.1	20.6	15.2	12.0	8.7	8.7	8.7	4.3	5.4	8.7	10.9
77.5°	16.3	14.1	12.0	9.8	7.6	4.3	4.3	4.3	5.4	6.5	9.8
80°	8.7	7.6	5.4	5.4	4.3	3.3	4.3	3.3	2.2	5.4	6.5
82.5°	5.4	4.3	4.3	4.3	5.4	2.2	3.3	2.2	3.3	4.3	3.3
85°	3.3	3.3	3.3	2.2	5.4	2.2	2.2	1.1	1.1	2.2	2.2
87.5°	0.0	1.1	1.1	0.0	1.1	0.0	1.1	1.1	1.1	1.1	1.1
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: P244204

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0	2045.0
2.5°	2048.2	2047.1	2048.2	2047.1	2047.1	2047.1	2048.2	2048.2	2047.1	2047.1	2049.3
5°	2056.9	2056.9	2056.9	2055.8	2054.7	2054.7	2056.9	2056.9	2053.7	2056.9	2056.9
7.5°	2075.4	2072.1	2075.4	2071.0	2068.9	2069.9	2071.0	2068.9	2066.7	2067.8	2067.8
10°	2099.3	2096.0	2096.0	2092.7	2089.5	2087.3	2085.2	2079.7	2074.3	2073.2	2068.9
12.5°	2127.5	2122.0	2118.8	2112.3	2106.9	2099.3	2092.7	2084.1	2073.2	2065.6	2058.0
15°	2155.7	2147.0	2139.4	2128.6	2116.6	2103.6	2089.5	2075.4	2058.0	2042.8	2029.8
17.5°	2178.5	2166.6	2152.4	2135.1	2117.7	2098.2	2077.6	2056.9	2032.0	2012.4	1997.2
20°	2186.1	2168.7	2150.3	2127.5	2104.7	2077.6	2051.5	2024.4	1996.1	1975.5	1958.1
22.5°	2176.3	2155.7	2132.9	2109.0	2078.6	2049.3	2018.9	1987.4	1962.5	1934.3	1918.0
25°	2149.2	2124.2	2099.3	2071.0	2041.7	2009.2	1976.6	1944.0	1913.6	1898.4	1877.8
27.5°	2093.8	2066.7	2039.6	2010.3	1976.6	1944.0	1910.4	1878.9	1852.9	1832.2	1820.3
30°	1996.1	1964.7	1933.2	1901.7	1872.4	1838.7	1807.3	1781.2	1755.2	1738.9	1727.0
32.5°	1846.3	1818.1	1786.7	1756.2	1729.1	1700.9	1674.8	1652.1	1633.6	1622.7	1614.0
35°	1644.5	1616.2	1592.4	1570.7	1547.8	1535.9	1519.6	1506.6	1499.0	1494.7	1493.6
37.5°	1390.4	1374.2	1366.6	1362.2	1357.9	1354.6	1356.8	1362.2	1366.6	1374.2	1382.9
40°	1119.1	1133.2	1137.6	1152.7	1166.8	1185.3	1205.9	1229.8	1249.3	1274.3	1291.7
42.5°	871.6	897.7	928.1	960.6	995.4	1029.0	1070.3	1108.2	1143.0	1174.4	1201.6
45°	669.7	709.9	755.5	802.1	848.8	897.7	947.6	994.3	1035.5	1069.2	1097.4
47.5°	522.1	566.6	625.2	682.8	739.2	796.7	852.1	900.9	935.7	968.2	993.2
50°	413.6	464.6	528.6	594.8	656.7	717.5	776.1	821.7	856.4	882.5	900.9
52.5°	320.2	381.0	446.1	515.6	581.8	648.0	702.3	744.6	772.8	795.6	809.7
55°	238.8	298.5	368.0	439.6	506.9	570.9	622.0	658.9	683.8	696.9	704.5
57.5°	172.6	226.9	296.3	368.0	428.7	489.5	530.8	564.4	578.5	586.1	589.4
60°	125.9	175.8	237.7	299.6	357.1	406.0	441.8	464.6	475.4	479.8	478.7
62.5°	92.3	135.7	188.9	241.0	287.6	327.8	356.0	371.2	376.7	378.8	375.6
65°	70.5	104.2	149.8	190.0	225.8	255.1	275.7	285.5	288.7	287.6	285.5
67.5°	52.1	78.2	111.8	142.2	168.3	191.0	201.9	210.6	212.7	209.5	206.2
70°	36.9	57.5	81.4	102.0	121.6	134.6	146.5	147.6	147.6	146.5	144.4
72.5°	26.1	40.2	55.3	69.5	81.4	91.2	95.5	98.8	97.7	96.6	94.4
75°	17.4	25.0	40.2	43.4	54.3	57.5	61.9	61.9	62.9	59.7	59.7
77.5°	10.9	17.4	23.9	28.2	32.6	36.9	39.1	39.1	40.2	39.1	39.1
80°	6.5	10.9	13.0	19.5	19.5	22.8	23.9	25.0	22.8	26.1	22.8
82.5°	4.3	6.5	9.8	9.8	12.0	14.1	14.1	15.2	15.2	14.1	14.1
85°	3.3	4.3	5.4	6.5	6.5	7.6	6.5	6.5	7.6	8.7	7.6
87.5°	1.1	2.2	1.1	2.2	2.2	4.3	3.3	3.3	3.3	4.3	4.3
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: P244204

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2045.0	2045.0	2045.0	2045.0
2.5°	2047.1	2048.2	2047.1	2047.1
5°	2056.9	2055.8	2056.9	2054.7
7.5°	2064.5	2064.5	2063.4	2063.4
10°	2064.5	2060.2	2060.2	2060.2
12.5°	2048.2	2042.8	2039.6	2037.4
15°	2020.0	2010.3	2005.9	2004.8
17.5°	1983.1	1974.4	1969.0	1965.7
20°	1940.8	1932.1	1925.6	1926.7
22.5°	1903.9	1894.1	1889.8	1887.6
25°	1867.0	1855.0	1851.8	1849.6
27.5°	1807.3	1800.8	1797.5	1794.3
30°	1716.1	1712.8	1707.4	1715.0
32.5°	1610.8	1605.4	1601.0	1604.3
35°	1494.7	1491.4	1494.7	1492.5
37.5°	1388.3	1391.5	1395.9	1398.0
40°	1304.7	1316.6	1321.0	1323.1
42.5°	1221.1	1235.2	1243.9	1249.3
45°	1118.0	1132.1	1141.9	1148.4
47.5°	1011.6	1023.6	1033.3	1032.3
50°	915.0	921.5	925.9	930.2
52.5°	817.3	817.3	818.4	818.4
55°	706.6	704.5	703.4	704.5
57.5°	585.0	582.9	581.8	578.5
60°	474.3	467.8	463.5	463.5
62.5°	371.2	363.6	360.4	359.3
65°	279.0	277.9	271.4	270.3
67.5°	201.9	197.5	193.2	194.3
70°	142.2	135.7	135.7	133.5
72.5°	92.3	89.0	87.9	87.9
75°	57.5	57.5	55.3	59.7
77.5°	38.0	38.0	36.9	38.0
80°	22.8	22.8	22.8	21.7
82.5°	14.1	15.2	14.1	14.1
85°	7.6	8.7	6.5	9.8
87.5°	4.3	5.4	4.3	5.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)