

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: P244600

Luminaire Tested: **LSR8B40D010 EC8B40830 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244600
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: LSR8B40D010 EC8B40830 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4290.0 lumens
Efficiency: N/A
Efficacy: 104.9 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

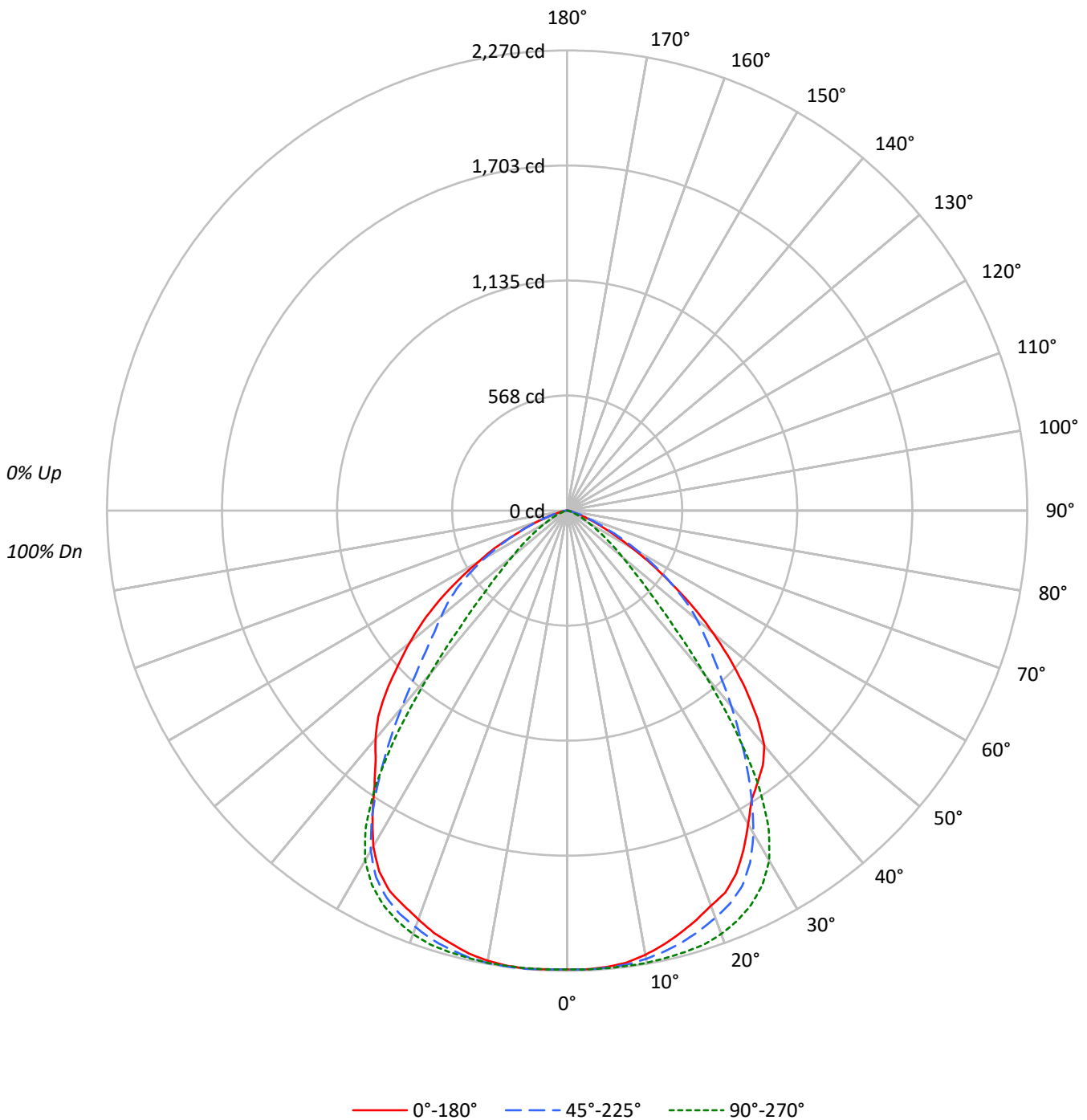
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	69798	69798	69798
5°	69950	70139	70216
10°	69657	70912	70609
15°	68886	71951	70594
20°	68059	72962	70409
25°	67174	73046	70481
30°	63551	70993	68094
35°	61654	61699	62339
40°	60888	42452	59177
45°	54254	25485	54995
50°	45114	16963	48611
55°	33832	11693	41214
60°	22930	7789	31095
65°	13827	5056	21364
70°	7673	2741	13145
75°	3479	1156	6803
80°	3019	1296	4741
85°	3432	1698	4741



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.0	5.0
10°-20°	627.3	14.6
20°-30°	952.2	22.2
30°-40°	1000.1	23.3
40°-50°	749.8	17.5
50°-60°	481.1	11.2
60°-70°	205.8	4.8
70°-80°	48.6	1.1
80°-90°	9.0	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°	1795.6	41.9
0°-40°	2795.7	65.2
0°-60°	4026.5	93.9
0°-90°	4290.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4290.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2264	2264	2264	2264	2264	
5°	2260	2264	2266	2270	2268	215
15°	2158	2203	2254	2239	2211	609
25°	1974	2044	2147	2108	2072	902
35°	1638	1547	1639	1620	1656	1028
45°	1244	1017	584	988	1261	953
55°	629	629	218	656	767	571
65°	190	224	69	288	293	202
75°	29	34	10	58	57	42
85°	10	6	5	10	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°	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5
2.5°	2264.7	2267.1	2265.9	2265.9	2264.7	2265.9	2265.9	2268.4	2268.4	2265.9	2264.7
5°	2259.8	2262.3	2262.3	2259.8	2259.8	2265.9	2262.3	2264.7	2264.7	2263.5	2263.5
7.5°	2248.9	2248.9	2253.8	2250.1	2250.1	2253.8	2252.5	2255.0	2257.4	2258.6	2258.6
10°	2224.6	2227.0	2228.3	2228.3	2229.5	2233.1	2235.5	2240.4	2242.8	2245.3	2246.5
12.5°	2194.3	2197.9	2199.1	2197.9	2201.5	2206.4	2212.5	2218.5	2222.2	2227.0	2230.7
15°	2157.8	2157.8	2160.2	2163.9	2166.3	2173.6	2179.7	2186.9	2196.7	2202.8	2208.8
17.5°	2117.7	2120.1	2123.8	2123.8	2128.6	2140.8	2144.4	2155.4	2166.3	2172.4	2184.5
20°	2074.0	2076.4	2080.0	2082.5	2088.5	2098.3	2105.5	2115.3	2127.4	2138.4	2150.5
22.5°	2039.9	2035.1	2037.5	2039.9	2046.0	2054.5	2063.0	2075.2	2087.3	2098.3	2110.4
25°	1974.3	1975.5	1979.2	1981.6	1988.9	1996.2	2005.9	2020.5	2031.4	2043.6	2056.9
27.5°	1885.6	1886.9	1892.9	1892.9	1899.0	1911.1	1917.2	1929.4	1944.0	1956.1	1971.9
30°	1784.8	1787.2	1787.2	1792.1	1795.7	1801.8	1807.9	1820.0	1827.3	1838.3	1860.1
32.5°	1692.5	1694.9	1693.7	1692.5	1688.8	1687.6	1686.4	1688.8	1691.2	1694.9	1703.4
35°	1637.8	1631.7	1626.9	1618.4	1608.6	1596.5	1585.5	1571.0	1557.6	1546.6	1534.5
37.5°	1585.5	1584.3	1577.0	1564.9	1545.4	1523.6	1498.1	1466.5	1434.9	1400.9	1368.1
40°	1512.6	1509.0	1502.9	1485.9	1464.0	1437.3	1403.3	1364.4	1313.4	1261.1	1207.7
42.5°	1388.7	1389.9	1382.6	1369.3	1348.6	1323.1	1287.9	1245.4	1190.7	1128.7	1059.5
45°	1244.1	1244.1	1241.7	1230.8	1216.2	1195.5	1168.8	1133.6	1080.1	1016.9	942.8
47.5°	1093.5	1094.7	1091.0	1088.6	1082.5	1069.2	1049.7	1023.0	985.3	924.6	850.5
50°	940.4	940.4	946.5	945.2	945.2	940.4	931.9	916.1	883.3	834.7	765.4
52.5°	787.3	789.7	793.4	798.2	804.3	814.0	804.3	797.0	776.4	738.7	679.2
55°	629.3	631.8	637.9	646.4	653.7	663.4	665.8	665.8	654.9	629.3	584.4
57.5°	494.5	490.8	495.7	503.0	512.7	522.4	529.7	538.2	537.0	520.0	483.6
60°	371.8	373.0	376.6	383.9	391.2	399.7	409.4	416.7	420.4	411.9	388.8
62.5°	270.9	270.9	275.8	283.1	286.7	298.9	305.0	308.6	312.2	311.0	296.5
65°	189.5	192.0	194.4	198.0	201.7	209.0	212.6	219.9	222.3	223.6	212.6
67.5°	133.7	130.0	132.4	134.8	138.5	143.4	150.7	150.7	154.3	154.3	147.0
70°	85.1	85.1	86.3	89.9	92.3	93.6	96.0	98.4	102.1	100.8	100.8
72.5°	57.1	55.9	57.1	58.3	59.5	63.2	63.2	64.4	66.8	68.0	63.2
75°	29.2	30.4	32.8	31.6	35.2	32.8	34.0	37.7	36.4	34.0	34.0
77.5°	24.3	24.3	24.3	23.1	25.5	25.5	24.3	26.7	25.5	25.5	24.3
80°	17.0	18.2	17.0	15.8	17.0	15.8	15.8	15.8	15.8	15.8	14.6
82.5°	13.4	10.9	12.2	10.9	12.2	12.2	10.9	9.7	9.7	10.9	9.7
85°	9.7	7.3	8.5	8.5	7.3	7.3	7.3	7.3	7.3	6.1	6.1
87.5°	6.1	3.7	3.7	3.7	4.8	4.8	4.8	3.7	4.8	4.8	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°	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5
2.5°	2267.1	2265.9	2268.4	2267.1	2267.1	2265.9	2267.1	2265.9	2268.4	2263.5	2264.7
5°	2267.1	2264.7	2265.9	2267.1	2268.4	2265.9	2265.9	2265.9	2268.4	2265.9	2267.1
7.5°	2262.3	2261.1	2264.7	2267.1	2265.9	2264.7	2267.1	2265.9	2268.4	2267.1	2269.6
10°	2252.5	2253.8	2256.2	2259.8	2261.1	2262.3	2264.7	2264.7	2268.4	2263.5	2265.9
12.5°	2238.0	2242.8	2248.9	2251.3	2256.2	2256.2	2258.6	2259.8	2262.3	2261.1	2264.7
15°	2219.8	2225.8	2233.1	2239.2	2245.3	2248.9	2252.5	2253.8	2257.4	2253.8	2255.0
17.5°	2197.9	2205.2	2216.1	2223.4	2233.1	2236.8	2241.6	2244.0	2247.7	2245.3	2246.5
20°	2167.5	2176.0	2188.2	2199.1	2205.2	2213.7	2219.8	2223.4	2225.8	2223.4	2224.6
22.5°	2125.0	2137.1	2152.9	2161.4	2173.6	2180.9	2182.1	2190.6	2196.7	2190.6	2193.0
25°	2075.2	2087.3	2099.5	2117.7	2128.6	2137.1	2145.6	2146.9	2152.9	2151.7	2150.5
27.5°	1992.5	2008.4	2029.0	2043.6	2058.2	2071.5	2081.3	2083.7	2089.8	2087.3	2088.5
30°	1879.5	1896.6	1916.0	1939.1	1959.8	1973.1	1985.3	1993.8	1999.8	1996.2	1995.0
32.5°	1719.2	1736.2	1756.9	1779.9	1804.2	1823.7	1838.3	1849.2	1856.5	1854.0	1848.0
35°	1535.7	1540.6	1554.0	1572.2	1592.8	1613.5	1626.9	1639.0	1647.5	1649.9	1649.9
37.5°	1347.4	1331.6	1321.9	1321.9	1334.0	1342.5	1354.7	1362.0	1375.4	1380.2	1383.9
40°	1165.1	1128.7	1094.7	1069.2	1052.2	1051.0	1051.0	1054.6	1066.7	1082.5	1097.1
42.5°	1002.4	944.0	891.8	844.4	810.4	791.0	782.5	783.7	793.4	808.0	832.2
45°	872.3	799.5	733.8	676.7	630.6	600.2	585.6	584.4	591.7	608.7	635.4
47.5°	771.5	693.7	619.6	554.0	504.2	471.4	454.4	449.6	454.4	470.2	501.8
50°	687.7	607.5	530.9	462.9	409.4	375.4	359.6	353.6	359.6	373.0	404.6
52.5°	609.9	527.3	455.6	390.0	332.9	303.7	286.7	283.1	286.7	302.5	328.1
55°	520.0	449.6	379.1	313.5	263.7	234.5	221.1	217.5	221.1	235.7	262.4
57.5°	431.3	370.6	308.6	249.1	206.6	181.0	168.9	164.0	172.5	182.2	213.8
60°	348.7	300.1	247.8	195.6	160.4	137.3	127.6	126.3	128.8	140.9	162.8
62.5°	273.4	233.3	192.0	149.4	120.3	110.6	98.4	97.2	99.6	106.9	123.9
65°	196.8	171.3	139.7	109.3	86.3	72.9	68.0	69.3	71.7	76.6	92.3
67.5°	137.3	119.1	97.2	76.6	59.5	53.5	48.6	47.4	48.6	57.1	65.6
70°	92.3	81.4	65.6	58.3	41.3	32.8	34.0	30.4	35.2	35.2	42.5
72.5°	60.7	53.5	43.7	34.0	29.2	23.1	23.1	21.9	24.3	25.5	31.6
75°	31.6	24.3	24.3	17.0	12.2	6.1	10.9	9.7	8.5	9.7	12.2
77.5°	21.9	18.2	17.0	13.4	12.2	9.7	9.7	9.7	9.7	10.9	12.2
80°	13.4	13.4	9.7	8.5	7.3	6.1	7.3	7.3	7.3	7.3	8.5
82.5°	8.5	7.3	7.3	6.1	6.1	4.8	4.8	4.8	4.8	4.8	7.3
85°	7.3	4.8	4.8	3.7	4.8	8.5	3.7	4.8	4.8	4.8	3.7
87.5°	2.4	3.7	3.7	3.7	2.4	1.2	2.4	3.7	3.7	6.1	4.8
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°	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5	2263.5
2.5°	2267.1	2268.4	2268.4	2267.1	2267.1	2264.7	2269.6	2265.9	2267.1	2272.0	2268.4
5°	2269.6	2270.8	2270.8	2269.6	2269.6	2269.6	2270.8	2270.8	2269.6	2268.4	2270.8
7.5°	2274.4	2273.2	2273.2	2270.8	2270.8	2268.4	2270.8	2267.1	2269.6	2267.1	2270.8
10°	2268.4	2269.6	2268.4	2267.1	2267.1	2265.9	2265.9	2262.3	2263.5	2259.8	2262.3
12.5°	2264.7	2263.5	2263.5	2261.1	2258.6	2256.2	2255.0	2251.3	2251.3	2242.8	2246.5
15°	2255.0	2256.2	2252.5	2247.7	2245.3	2239.2	2236.8	2231.9	2227.0	2221.0	2222.2
17.5°	2246.5	2242.8	2238.0	2233.1	2223.4	2218.5	2213.7	2206.4	2203.9	2196.7	2194.3
20°	2221.0	2218.5	2212.5	2203.9	2197.9	2186.9	2182.1	2174.8	2168.7	2161.4	2157.8
22.5°	2188.2	2185.7	2178.4	2169.9	2160.2	2155.4	2150.5	2137.1	2131.0	2123.8	2122.5
25°	2146.9	2143.2	2135.9	2126.2	2121.3	2108.0	2103.1	2093.4	2091.0	2083.7	2082.5
27.5°	2083.7	2078.8	2070.3	2058.2	2049.7	2041.1	2036.3	2029.0	2026.6	2019.3	2018.1
30°	1988.9	1982.8	1965.8	1961.0	1946.4	1937.9	1937.9	1928.2	1929.4	1924.5	1924.5
32.5°	1839.5	1829.8	1816.4	1806.7	1796.9	1792.1	1792.1	1788.4	1790.9	1790.9	1793.3
35°	1641.4	1628.1	1620.8	1614.7	1614.7	1619.5	1634.1	1637.8	1645.1	1651.1	1656.0
37.5°	1387.5	1386.3	1394.8	1402.1	1420.3	1441.0	1466.5	1488.4	1509.0	1523.6	1538.1
40°	1112.9	1143.3	1167.6	1201.6	1229.5	1269.6	1315.8	1353.5	1388.7	1414.2	1441.0
42.5°	868.7	907.6	958.6	1008.4	1058.2	1112.9	1173.7	1225.9	1272.1	1307.3	1335.2
45°	676.7	730.2	792.2	855.3	919.7	987.8	1051.0	1104.4	1153.0	1189.5	1217.4
47.5°	545.5	603.8	674.3	743.6	816.5	888.1	958.6	1004.8	1044.9	1074.0	1099.6
50°	450.7	512.7	586.8	665.8	738.7	810.4	871.1	916.1	948.9	974.4	990.2
52.5°	376.6	442.2	521.2	600.2	673.1	738.7	793.4	827.4	854.1	872.3	886.9
55°	311.0	374.2	448.3	522.4	594.1	656.1	701.0	726.6	747.2	758.1	766.6
57.5°	253.9	312.2	380.3	448.3	510.3	561.3	596.6	622.1	631.8	640.3	639.1
60°	199.3	253.9	315.9	374.2	427.7	469.0	494.5	509.1	516.4	520.0	517.6
62.5°	156.7	206.6	253.9	305.0	343.8	379.1	403.4	403.4	407.0	408.2	411.9
65°	116.6	154.3	195.6	233.3	264.9	287.9	301.3	305.0	309.8	308.6	306.2
67.5°	86.3	114.2	144.6	172.5	194.4	209.0	218.7	227.2	226.0	223.6	222.3
70°	59.5	77.8	104.5	121.5	137.3	151.9	154.3	155.5	156.7	157.9	155.5
72.5°	41.3	54.7	69.3	83.8	93.6	99.6	105.7	106.9	106.9	106.9	105.7
75°	20.7	27.9	41.3	47.4	55.9	58.3	63.2	63.2	66.8	62.0	60.7
77.5°	18.2	21.9	29.2	34.0	37.7	41.3	42.5	46.2	44.9	42.5	43.7
80°	10.9	13.4	18.2	20.7	25.5	26.7	27.9	29.2	27.9	29.2	29.2
82.5°	8.5	9.7	12.2	12.2	15.8	15.8	17.0	17.0	18.2	18.2	18.2
85°	4.8	8.5	7.3	14.6	9.7	9.7	12.2	14.6	12.2	12.2	14.6
87.5°	4.8	4.8	3.7	4.8	4.8	4.8	6.1	7.3	7.3	8.5	7.3
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: P244600

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2263.5	2263.5	2263.5	2263.5
2.5°	2267.1	2269.6	2265.9	2264.7
5°	2270.8	2270.8	2268.4	2268.4
7.5°	2270.8	2270.8	2267.1	2264.7
10°	2261.1	2261.1	2257.4	2255.0
12.5°	2242.8	2242.8	2241.6	2238.0
15°	2219.8	2219.8	2214.9	2211.3
17.5°	2188.2	2190.6	2184.5	2184.5
20°	2154.1	2152.9	2148.1	2145.6
22.5°	2118.9	2116.5	2115.3	2108.0
25°	2081.3	2078.8	2075.2	2071.5
27.5°	2016.9	2015.6	2012.0	2007.1
30°	1918.4	1917.2	1912.4	1912.4
32.5°	1790.9	1789.6	1784.8	1786.0
35°	1658.4	1663.3	1660.9	1656.0
37.5°	1547.9	1551.5	1554.0	1551.5
40°	1455.5	1466.5	1467.7	1470.1
42.5°	1357.1	1371.7	1376.6	1379.0
45°	1239.3	1252.6	1263.6	1261.1
47.5°	1119.0	1128.7	1138.4	1131.1
50°	1003.6	1009.6	1013.3	1013.3
52.5°	894.2	894.2	893.0	894.2
55°	769.1	769.1	764.2	766.6
57.5°	637.9	640.3	636.6	630.6
60°	516.4	510.3	507.9	504.2
62.5°	402.2	402.2	393.7	404.6
65°	301.3	297.7	294.0	292.8
67.5°	218.7	217.5	213.8	212.6
70°	154.3	149.4	148.2	145.8
72.5°	103.3	103.3	100.8	100.8
75°	63.2	57.1	55.9	57.1
77.5°	43.7	42.5	42.5	41.3
80°	29.2	27.9	30.4	26.7
82.5°	18.2	19.4	18.2	19.4
85°	12.2	14.6	13.4	13.4
87.5°	7.3	7.3	7.3	7.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)