

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: P246178

Luminaire Tested: **LSR8B40D010 EC8B40827 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246178
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 EC8B40827 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4138.0 lumens
Efficiency: N/A
Efficacy: 101.2 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

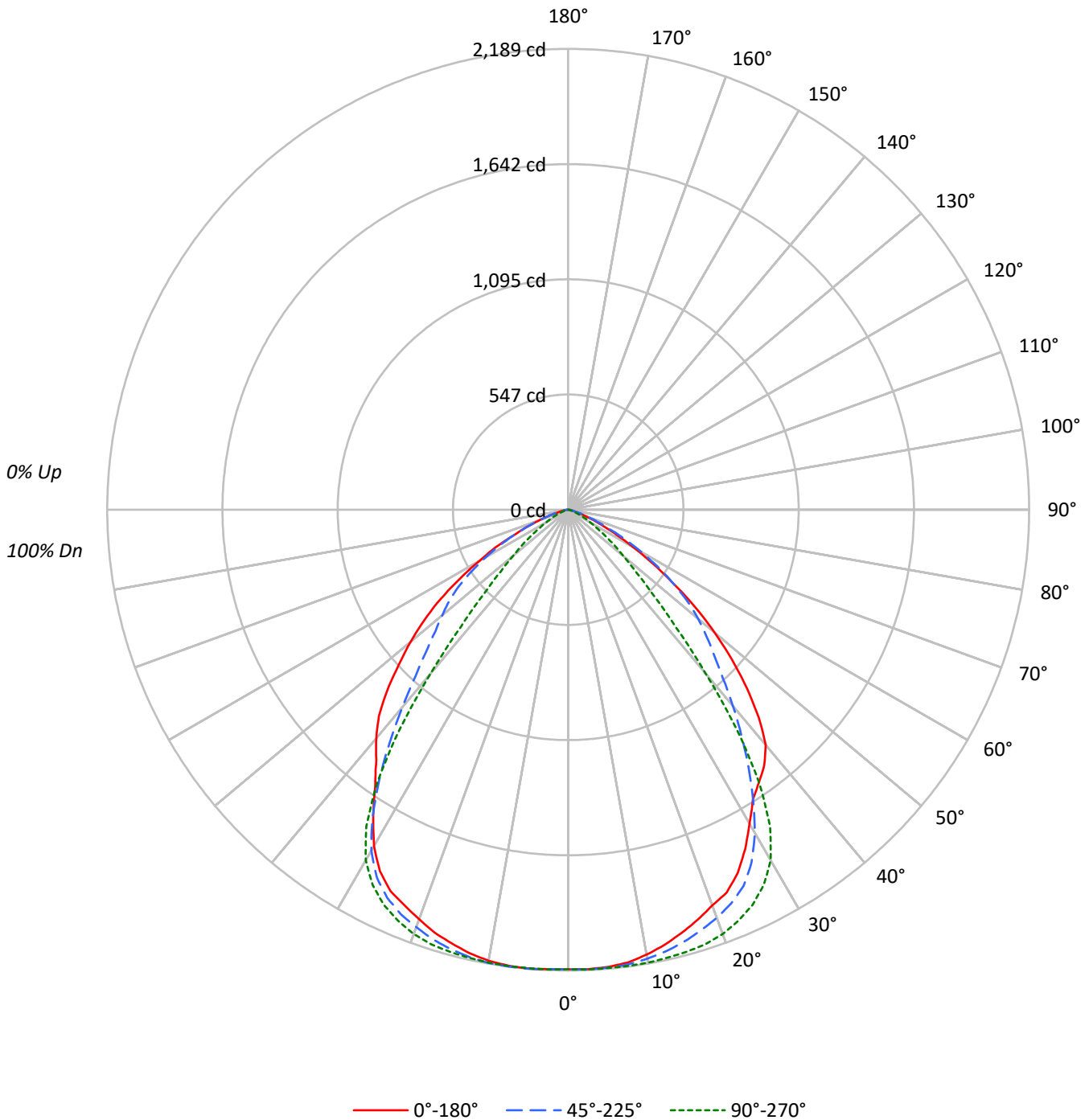
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	67325	67325	67325
5°	67474	67653	67728
10°	67189	68401	68107
15°	66444	69400	68091
20°	65647	70376	67915
25°	64796	70457	67984
30°	61301	68475	65680
35°	59470	59512	60129
40°	58731	40946	57080
45°	52335	24582	53051
50°	43516	16359	46889
55°	32639	11279	39757
60°	22116	7518	29998
65°	13338	4874	20605
70°	7393	2642	12676
75°	3348	1120	6565
80°	2912	1243	4582
85°	3326	1663	4564



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.4	5.0
10°-20°	605.1	14.6
20°-30°	918.5	22.2
30°-40°	964.7	23.3
40°-50°	723.2	17.5
50°-60°	464.0	11.2
60°-70°	198.5	4.8
70°-80°	46.9	1.1
80°-90°	8.7	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°	1731.9	41.9
0°-40°	2696.6	65.2
0°-60°	3883.9	93.9
0°-90°	4138.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4138.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2183	2183	2183	2183	2183	
5°	2180	2183	2186	2189	2188	207
15°	2081	2125	2174	2160	2133	587
25°	1904	1971	2071	2033	1998	870
35°	1580	1492	1581	1562	1597	991
45°	1200	981	564	953	1216	919
55°	607	607	210	633	740	551
65°	183	216	67	278	282	195
75°	28	33	9	56	55	41
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°	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3
2.5°	2184.5	2186.8	2185.6	2185.6	2184.5	2185.6	2185.6	2188.0	2188.0	2185.6	2184.5
5°	2179.8	2182.1	2182.1	2179.8	2179.8	2185.6	2182.1	2184.5	2184.5	2183.3	2183.3
7.5°	2169.2	2169.2	2173.9	2170.4	2170.4	2173.9	2172.7	2175.1	2177.4	2178.6	2178.6
10°	2145.8	2148.1	2149.3	2149.3	2150.5	2154.0	2156.3	2161.0	2163.4	2165.7	2166.9
12.5°	2116.5	2120.0	2121.2	2120.0	2123.5	2128.2	2134.1	2139.9	2143.5	2148.1	2151.7
15°	2081.3	2081.3	2083.7	2087.2	2089.6	2096.6	2102.4	2109.5	2118.8	2124.7	2130.6
17.5°	2042.7	2045.0	2048.5	2048.5	2053.2	2064.9	2068.4	2079.0	2089.6	2095.4	2107.1
20°	2000.5	2002.8	2006.3	2008.7	2014.5	2023.9	2030.9	2040.3	2052.0	2062.6	2074.3
22.5°	1967.7	1963.0	1965.3	1967.7	1973.5	1981.7	1989.9	2001.6	2013.4	2023.9	2035.6
25°	1904.4	1905.5	1909.1	1911.4	1918.4	1925.5	1934.8	1948.9	1959.5	1971.2	1984.1
27.5°	1818.8	1820.0	1825.9	1825.9	1831.7	1843.4	1849.3	1861.0	1875.1	1886.8	1902.0
30°	1721.6	1723.9	1723.9	1728.6	1732.1	1738.0	1743.8	1755.5	1762.6	1773.1	1794.2
32.5°	1632.5	1634.8	1633.6	1632.5	1629.0	1627.8	1626.6	1629.0	1631.3	1634.8	1643.0
35°	1579.8	1573.9	1569.2	1561.0	1551.6	1539.9	1529.4	1515.3	1502.4	1491.8	1480.1
37.5°	1529.4	1528.2	1521.2	1509.4	1490.7	1469.6	1445.0	1414.5	1384.0	1351.2	1319.6
40°	1459.0	1455.5	1449.7	1433.3	1412.2	1386.4	1353.6	1316.1	1266.8	1216.5	1164.9
42.5°	1339.5	1340.7	1333.6	1320.7	1300.8	1276.2	1242.2	1201.2	1148.5	1088.7	1021.9
45°	1200.1	1200.1	1197.7	1187.1	1173.1	1153.2	1127.4	1093.4	1041.9	980.9	909.4
47.5°	1054.7	1055.9	1052.4	1050.1	1044.2	1031.3	1012.5	986.8	950.4	891.8	820.3
50°	907.1	907.1	912.9	911.8	911.8	907.1	898.9	883.6	852.0	805.1	738.3
52.5°	759.4	761.8	765.3	770.0	775.8	785.2	775.8	768.8	748.8	712.5	655.1
55°	607.1	609.4	615.3	623.5	630.5	639.9	642.2	642.2	631.7	607.1	563.7
57.5°	477.0	473.5	478.2	485.2	494.6	503.9	511.0	519.2	518.0	501.6	466.4
60°	358.6	359.8	363.3	370.3	377.4	385.6	394.9	402.0	405.5	397.3	375.0
62.5°	261.3	261.3	266.0	273.0	276.6	288.3	294.1	297.7	301.2	300.0	285.9
65°	182.8	185.2	187.5	191.0	194.5	201.6	205.1	212.1	214.5	215.6	205.1
67.5°	128.9	125.4	127.7	130.1	133.6	138.3	145.3	145.3	148.8	148.8	141.8
70°	82.0	82.0	83.2	86.7	89.1	90.2	92.6	94.9	98.4	97.3	97.3
72.5°	55.1	53.9	55.1	56.3	57.4	60.9	60.9	62.1	64.5	65.6	60.9
75°	28.1	29.3	31.6	30.5	34.0	31.6	32.8	36.3	35.2	32.8	32.8
77.5°	23.4	23.4	23.4	22.3	24.6	24.6	23.4	25.8	24.6	24.6	23.4
80°	16.4	17.6	16.4	15.2	16.4	15.2	15.2	15.2	15.2	15.2	14.1
82.5°	12.9	10.6	11.7	10.6	11.7	11.7	10.6	9.4	9.4	10.6	9.4
85°	9.4	7.0	8.2	8.2	7.0	7.0	7.0	7.0	7.0	5.9	5.9
87.5°	5.9	3.5	3.5	3.5	4.7	4.7	4.7	3.5	4.7	4.7	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°	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3
2.5°	2186.8	2185.6	2188.0	2186.8	2186.8	2185.6	2186.8	2185.6	2188.0	2183.3	2184.5
5°	2186.8	2184.5	2185.6	2186.8	2188.0	2185.6	2185.6	2185.6	2188.0	2185.6	2186.8
7.5°	2182.1	2180.9	2184.5	2186.8	2185.6	2184.5	2186.8	2185.6	2188.0	2186.8	2189.1
10°	2172.7	2173.9	2176.3	2179.8	2180.9	2182.1	2184.5	2184.5	2188.0	2183.3	2185.6
12.5°	2158.7	2163.4	2169.2	2171.6	2176.3	2176.3	2178.6	2179.8	2182.1	2180.9	2184.5
15°	2141.1	2147.0	2154.0	2159.9	2165.7	2169.2	2172.7	2173.9	2177.4	2173.9	2175.1
17.5°	2120.0	2127.0	2137.6	2144.6	2154.0	2157.5	2162.2	2164.5	2168.1	2165.7	2166.9
20°	2090.7	2098.9	2110.6	2121.2	2127.0	2135.2	2141.1	2144.6	2147.0	2144.6	2145.8
22.5°	2049.7	2061.4	2076.6	2084.8	2096.6	2103.6	2104.8	2113.0	2118.8	2113.0	2115.3
25°	2001.6	2013.4	2025.1	2042.7	2053.2	2061.4	2069.6	2070.8	2076.6	2075.5	2074.3
27.5°	1921.9	1937.2	1957.1	1971.2	1985.2	1998.1	2007.5	2009.8	2015.7	2013.4	2014.5
30°	1813.0	1829.4	1848.1	1870.4	1890.3	1903.2	1914.9	1923.1	1929.0	1925.5	1924.3
32.5°	1658.3	1674.7	1694.6	1716.9	1740.3	1759.0	1773.1	1783.7	1790.7	1788.3	1782.5
35°	1481.3	1486.0	1498.9	1516.5	1536.4	1556.3	1569.2	1580.9	1589.1	1591.5	1591.5
37.5°	1299.7	1284.4	1275.1	1275.1	1286.8	1295.0	1306.7	1313.7	1326.6	1331.3	1334.8
40°	1123.9	1088.7	1055.9	1031.3	1014.9	1013.7	1013.7	1017.2	1028.9	1044.2	1058.3
42.5°	966.8	910.6	860.2	814.5	781.7	762.9	754.7	755.9	765.3	779.3	802.8
45°	841.4	771.1	707.8	652.8	608.2	578.9	564.9	563.7	570.7	587.1	612.9
47.5°	744.2	669.2	597.7	534.4	486.4	454.7	438.3	433.6	438.3	453.5	484.0
50°	663.3	586.0	512.1	446.5	394.9	362.1	346.9	341.0	346.9	359.8	390.2
52.5°	588.3	508.6	439.5	376.2	321.1	293.0	276.6	273.0	276.6	291.8	316.4
55°	501.6	433.6	365.6	302.4	254.3	226.2	213.3	209.8	213.3	227.4	253.1
57.5°	416.0	357.4	297.7	240.2	199.2	174.6	162.9	158.2	166.4	175.8	206.3
60°	336.3	289.5	239.1	188.7	154.7	132.4	123.0	121.9	124.2	135.9	157.0
62.5°	263.7	225.0	185.2	144.1	116.0	106.6	94.9	93.8	96.1	103.1	119.5
65°	189.9	165.3	134.8	105.5	83.2	70.3	65.6	66.8	69.1	73.8	89.1
67.5°	132.4	114.8	93.8	73.8	57.4	51.6	46.9	45.7	46.9	55.1	63.3
70°	89.1	78.5	63.3	56.3	39.9	31.6	32.8	29.3	34.0	34.0	41.0
72.5°	58.6	51.6	42.2	32.8	28.1	22.3	22.3	21.1	23.4	24.6	30.5
75°	30.5	23.4	23.4	16.4	11.7	5.9	10.6	9.4	8.2	9.4	11.7
77.5°	21.1	17.6	16.4	12.9	11.7	9.4	9.4	9.4	9.4	10.6	11.7
80°	12.9	12.9	9.4	8.2	7.0	5.9	7.0	7.0	7.0	7.0	8.2
82.5°	8.2	7.0	7.0	5.9	5.9	4.7	4.7	4.7	4.7	4.7	7.0
85°	7.0	4.7	4.7	3.5	4.7	8.2	3.5	4.7	4.7	4.7	3.5
87.5°	2.4	3.5	3.5	3.5	2.4	1.2	2.4	3.5	3.5	5.9	4.7
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3	2183.3
2.5°	2186.8	2188.0	2188.0	2186.8	2186.8	2184.5	2189.1	2185.6	2186.8	2191.5	2188.0
5°	2189.1	2190.3	2190.3	2189.1	2189.1	2189.1	2190.3	2190.3	2189.1	2188.0	2190.3
7.5°	2193.8	2192.7	2192.7	2190.3	2190.3	2188.0	2190.3	2186.8	2189.1	2186.8	2190.3
10°	2188.0	2189.1	2188.0	2186.8	2186.8	2185.6	2185.6	2182.1	2183.3	2179.8	2182.1
12.5°	2184.5	2183.3	2183.3	2180.9	2178.6	2176.3	2175.1	2171.6	2171.6	2163.4	2166.9
15°	2175.1	2176.3	2172.7	2168.1	2165.7	2159.9	2157.5	2152.8	2148.1	2142.3	2143.5
17.5°	2166.9	2163.4	2158.7	2154.0	2144.6	2139.9	2135.2	2128.2	2125.9	2118.8	2116.5
20°	2142.3	2139.9	2134.1	2125.9	2120.0	2109.5	2104.8	2097.8	2091.9	2084.8	2081.3
22.5°	2110.6	2108.3	2101.3	2093.0	2083.7	2079.0	2074.3	2061.4	2055.5	2048.5	2047.3
25°	2070.8	2067.3	2060.2	2050.9	2046.2	2033.3	2028.6	2019.2	2016.9	2009.8	2008.7
27.5°	2009.8	2005.2	1997.0	1985.2	1977.0	1968.8	1964.2	1957.1	1954.8	1947.7	1946.6
30°	1918.4	1912.6	1896.2	1891.5	1877.4	1869.2	1869.2	1859.8	1861.0	1856.3	1856.3
32.5°	1774.3	1764.9	1752.0	1742.6	1733.3	1728.6	1728.6	1725.1	1727.4	1727.4	1729.8
35°	1583.3	1570.4	1563.3	1557.5	1557.5	1562.2	1576.2	1579.8	1586.8	1592.6	1597.3
37.5°	1338.3	1337.2	1345.4	1352.4	1370.0	1389.9	1414.5	1435.6	1455.5	1469.6	1483.6
40°	1073.5	1102.8	1126.2	1159.0	1186.0	1224.7	1269.2	1305.5	1339.5	1364.1	1389.9
42.5°	837.9	875.4	924.7	972.7	1020.7	1073.5	1132.1	1182.5	1227.0	1261.0	1287.9
45°	652.8	704.3	764.1	825.0	887.1	952.8	1013.7	1065.3	1112.2	1147.3	1174.3
47.5°	526.2	582.4	650.4	717.2	787.5	856.7	924.7	969.2	1007.8	1036.0	1060.6
50°	434.8	494.6	566.0	642.2	712.5	781.7	840.3	883.6	915.3	939.9	955.1
52.5°	363.3	426.6	502.8	578.9	649.2	712.5	765.3	798.1	823.9	841.4	855.5
55°	300.0	361.0	432.4	503.9	573.1	632.8	676.2	700.8	720.7	731.3	739.5
57.5°	244.9	301.2	366.8	432.4	492.2	541.4	575.4	600.0	609.4	617.6	616.4
60°	192.2	244.9	304.7	361.0	412.5	452.3	477.0	491.0	498.1	501.6	499.2
62.5°	151.2	199.2	244.9	294.1	331.7	365.6	389.1	389.1	392.6	393.8	397.3
65°	112.5	148.8	188.7	225.0	255.5	277.7	290.6	294.1	298.9	297.7	295.3
67.5°	83.2	110.2	139.4	166.4	187.5	201.6	210.9	219.2	218.0	215.6	214.5
70°	57.4	75.0	100.8	117.2	132.4	146.5	148.8	150.0	151.2	152.4	150.0
72.5°	39.9	52.7	66.8	80.9	90.2	96.1	102.0	103.1	103.1	103.1	102.0
75°	19.9	27.0	39.9	45.7	53.9	56.3	60.9	60.9	64.5	59.8	58.6
77.5°	17.6	21.1	28.1	32.8	36.3	39.9	41.0	44.5	43.4	41.0	42.2
80°	10.6	12.9	17.6	19.9	24.6	25.8	27.0	28.1	27.0	28.1	28.1
82.5°	8.2	9.4	11.7	11.7	15.2	15.2	16.4	16.4	17.6	17.6	17.6
85°	4.7	8.2	7.0	14.1	9.4	9.4	11.7	14.1	11.7	11.7	14.1
87.5°	4.7	4.7	3.5	4.7	4.7	4.7	5.9	7.0	7.0	8.2	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: P246178

CATALOG NUMBER: LSR8B40D010 EC8B40827 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2183.3	2183.3	2183.3	2183.3
2.5°	2186.8	2189.1	2185.6	2184.5
5°	2190.3	2190.3	2188.0	2188.0
7.5°	2190.3	2190.3	2186.8	2184.5
10°	2180.9	2180.9	2177.4	2175.1
12.5°	2163.4	2163.4	2162.2	2158.7
15°	2141.1	2141.1	2136.4	2132.9
17.5°	2110.6	2113.0	2107.1	2107.1
20°	2077.8	2076.6	2072.0	2069.6
22.5°	2043.8	2041.5	2040.3	2033.3
25°	2007.5	2005.2	2001.6	1998.1
27.5°	1945.4	1944.2	1940.7	1936.0
30°	1850.5	1849.3	1844.6	1844.6
32.5°	1727.4	1726.2	1721.6	1722.7
35°	1599.7	1604.4	1602.0	1597.3
37.5°	1493.0	1496.6	1498.9	1496.6
40°	1404.0	1414.5	1415.7	1418.0
42.5°	1309.0	1323.1	1327.8	1330.1
45°	1195.3	1208.3	1218.8	1216.5
47.5°	1079.3	1088.7	1098.1	1091.1
50°	968.0	973.9	977.4	977.4
52.5°	862.5	862.5	861.4	862.5
55°	741.8	741.8	737.1	739.5
57.5°	615.3	617.6	614.1	608.2
60°	498.1	492.2	489.9	486.4
62.5°	387.9	387.9	379.7	390.2
65°	290.6	287.1	283.6	282.4
67.5°	210.9	209.8	206.3	205.1
70°	148.8	144.1	143.0	140.6
72.5°	99.6	99.6	97.3	97.3
75°	60.9	55.1	53.9	55.1
77.5°	42.2	41.0	41.0	39.9
80°	28.1	27.0	29.3	25.8
82.5°	17.6	18.8	17.6	18.8
85°	11.7	14.1	12.9	12.9
87.5°	7.0	7.0	7.0	7.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)