

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: P244660

Luminaire Tested: **LD8B40D010 ER8B40930 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244660  
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: LD8B40D010 ER8B40930 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
97 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3683.6 lumens  
Efficiency: N/A  
Efficacy: 90.1 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

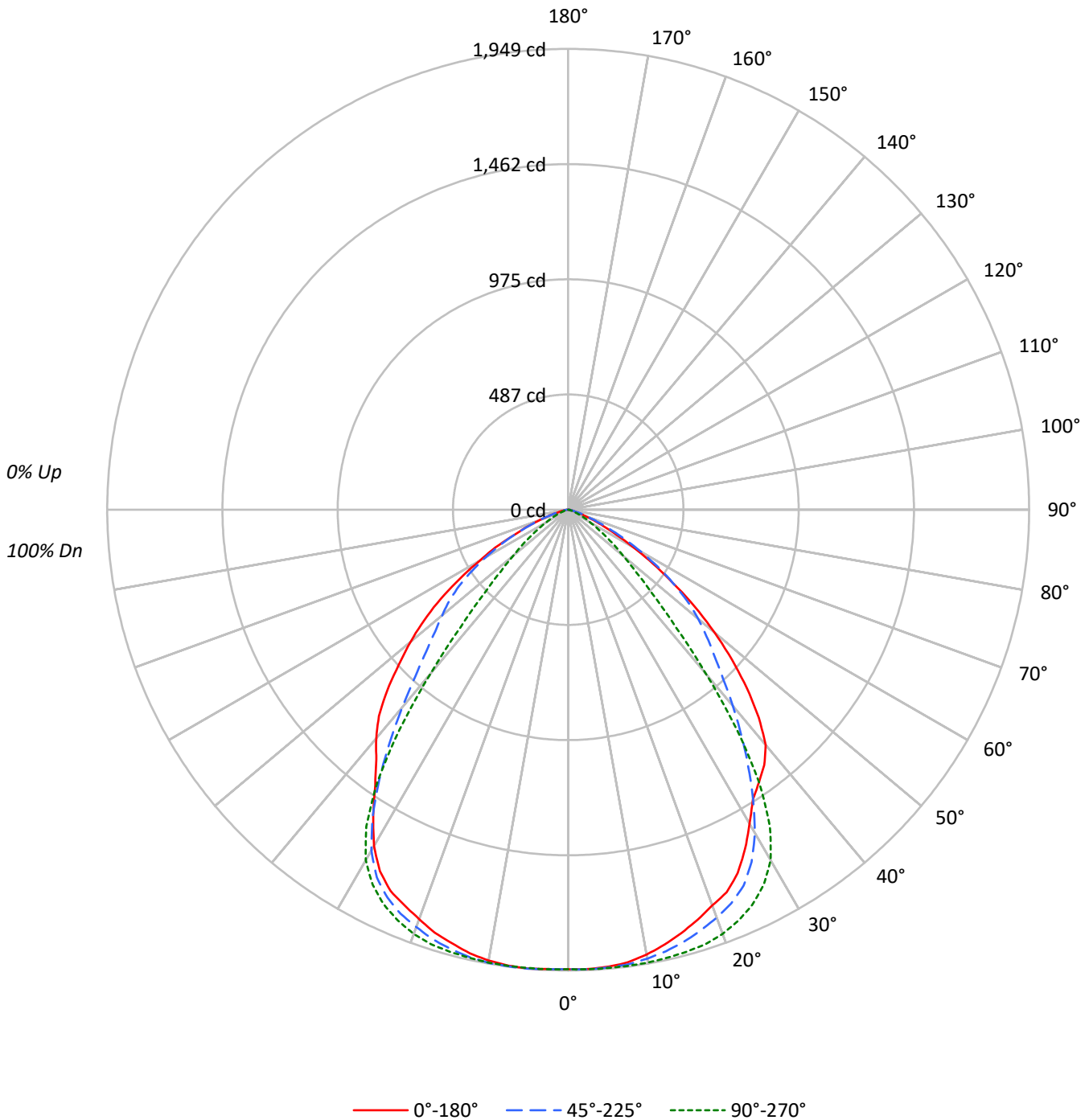
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	185.5	5.0
10°-20°	538.7	14.6
20°-30°	817.6	22.2
30°-40°	858.7	23.3
40°-50°	643.8	17.5
50°-60°	413.1	11.2
60°-70°	176.7	4.8
70°-80°	41.8	1.1
80°-90°	7.8	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°	1541.8	41.9
0°-40°	2400.5	65.2
0°-60°	3457.4	93.9
0°-90°	3683.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3683.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1944	1944	1944	1944	1944	
5°	1940	1944	1946	1949	1948	184
15°	1853	1891	1935	1923	1899	523
25°	1695	1755	1843	1810	1779	774
35°	1406	1328	1407	1391	1422	883
45°	1068	873	502	848	1083	818
55°	540	540	187	563	658	490
65°	163	192	60	247	251	174
75°	25	29	8	50	49	36
85°	8	5	4	8	11	9
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°	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6
2.5°	1944.6	1946.7	1945.6	1945.6	1944.6	1945.6	1945.6	1947.7	1947.7	1945.6	1944.6
5°	1940.5	1942.5	1942.5	1940.5	1940.5	1945.6	1942.5	1944.6	1944.6	1943.6	1943.6
7.5°	1931.0	1931.0	1935.2	1932.0	1932.0	1935.2	1934.2	1936.2	1938.3	1939.3	1939.3
10°	1910.2	1912.2	1913.3	1913.3	1914.3	1917.5	1919.6	1923.7	1925.8	1927.9	1928.9
12.5°	1884.1	1887.2	1888.2	1887.2	1890.3	1894.5	1899.8	1904.9	1908.1	1912.2	1915.3
15°	1852.8	1852.8	1854.9	1858.1	1860.1	1866.4	1871.5	1877.8	1886.2	1891.4	1896.6
17.5°	1818.4	1820.5	1823.5	1823.5	1827.8	1838.2	1841.4	1850.7	1860.1	1865.3	1875.8
20°	1780.8	1782.8	1786.0	1788.1	1793.4	1801.7	1807.9	1816.2	1826.7	1836.1	1846.5
22.5°	1751.6	1747.4	1749.5	1751.6	1756.8	1764.1	1771.4	1781.8	1792.3	1801.7	1812.1
25°	1695.3	1696.3	1699.4	1701.5	1707.7	1714.0	1722.4	1734.9	1744.3	1754.7	1766.1
27.5°	1619.1	1620.2	1625.3	1625.3	1630.6	1641.0	1646.2	1656.6	1669.2	1679.6	1693.2
30°	1532.5	1534.5	1534.5	1538.8	1541.9	1547.1	1552.4	1562.8	1569.1	1578.4	1597.2
32.5°	1453.3	1455.3	1454.3	1453.3	1450.1	1449.0	1448.0	1450.1	1452.1	1455.3	1462.6
35°	1406.3	1401.0	1396.9	1389.6	1381.3	1370.8	1361.5	1348.9	1337.5	1328.0	1317.6
37.5°	1361.5	1360.3	1354.2	1343.6	1326.9	1308.2	1286.3	1259.2	1232.1	1202.8	1174.7
40°	1298.8	1295.7	1290.5	1275.9	1257.1	1234.1	1205.0	1171.6	1127.7	1082.9	1036.9
42.5°	1192.4	1193.4	1187.3	1175.7	1158.0	1136.0	1105.9	1069.3	1022.4	969.1	909.7
45°	1068.3	1068.3	1066.2	1056.8	1044.3	1026.5	1003.6	973.4	927.4	873.1	809.6
47.5°	938.9	940.0	936.8	934.7	929.5	918.1	901.4	878.4	846.0	793.9	730.2
50°	807.5	807.5	812.7	811.6	811.6	807.5	800.2	786.6	758.5	716.7	657.2
52.5°	676.0	678.1	681.2	685.4	690.6	698.9	690.6	684.4	666.7	634.3	583.1
55°	540.4	542.5	547.7	555.0	561.3	569.6	571.7	571.7	562.3	540.4	501.8
57.5°	424.6	421.5	425.6	431.9	440.2	448.6	454.9	462.2	461.1	446.5	415.2
60°	319.3	320.3	323.4	329.7	336.0	343.3	351.5	357.8	361.0	353.7	333.8
62.5°	232.6	232.6	236.8	243.0	246.2	256.6	261.9	265.0	268.1	267.0	254.6
65°	162.8	164.8	166.9	170.1	173.2	179.5	182.6	188.8	190.9	191.9	182.6
67.5°	114.8	111.7	113.7	115.8	118.9	123.1	129.4	129.4	132.5	132.5	126.2
70°	73.0	73.0	74.1	77.2	79.3	80.4	82.4	84.5	87.7	86.5	86.5
72.5°	49.0	48.0	49.0	50.1	51.1	54.3	54.3	55.3	57.4	58.4	54.3
75°	25.0	26.1	28.1	27.1	30.3	28.1	29.3	32.4	31.3	29.3	29.3
77.5°	20.9	20.9	20.9	19.8	21.9	21.9	20.9	23.0	21.9	21.9	20.9
80°	14.6	15.7	14.6	13.6	14.6	13.6	13.6	13.6	13.6	13.6	12.6
82.5°	11.4	9.4	10.4	9.4	10.4	10.4	9.4	8.3	8.3	9.4	8.3
85°	8.3	6.3	7.3	7.3	6.3	6.3	6.3	6.3	6.3	5.2	5.2
87.5°	5.2	3.1	3.1	3.1	4.1	4.1	4.1	3.1	4.1	4.1	2.1
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°	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6
2.5°	1946.7	1945.6	1947.7	1946.7	1946.7	1945.6	1946.7	1945.6	1947.7	1943.6	1944.6
5°	1946.7	1944.6	1945.6	1946.7	1947.7	1945.6	1945.6	1945.6	1947.7	1945.6	1946.7
7.5°	1942.5	1941.5	1944.6	1946.7	1945.6	1944.6	1946.7	1945.6	1947.7	1946.7	1948.7
10°	1934.2	1935.2	1937.3	1940.5	1941.5	1942.5	1944.6	1944.6	1947.7	1943.6	1945.6
12.5°	1921.6	1925.8	1931.0	1933.1	1937.3	1937.3	1939.3	1940.5	1942.5	1941.5	1944.6
15°	1906.0	1911.2	1917.5	1922.7	1927.9	1931.0	1934.2	1935.2	1938.3	1935.2	1936.2
17.5°	1887.2	1893.5	1902.9	1909.1	1917.5	1920.6	1924.8	1926.9	1930.0	1927.9	1928.9
20°	1861.1	1868.5	1878.9	1888.2	1893.5	1900.8	1906.0	1909.1	1911.2	1909.1	1910.2
22.5°	1824.7	1835.1	1848.6	1855.9	1866.4	1872.6	1873.6	1880.9	1886.2	1880.9	1883.1
25°	1781.8	1792.3	1802.7	1818.4	1827.8	1835.1	1842.4	1843.4	1848.6	1847.5	1846.5
27.5°	1710.9	1724.4	1742.1	1754.7	1767.3	1778.7	1787.1	1789.1	1794.4	1792.3	1793.4
30°	1613.9	1628.5	1645.2	1665.0	1682.7	1694.2	1704.6	1712.0	1717.1	1714.0	1713.0
32.5°	1476.1	1490.8	1508.5	1528.4	1549.2	1565.9	1578.4	1587.8	1594.1	1591.9	1586.8
35°	1318.6	1322.8	1334.3	1349.9	1367.6	1385.4	1396.9	1407.3	1414.6	1416.7	1416.7
37.5°	1157.0	1143.4	1135.0	1135.0	1145.4	1152.7	1163.1	1169.4	1181.0	1185.1	1188.3
40°	1000.5	969.1	940.0	918.1	903.4	902.4	902.4	905.5	916.0	929.5	942.1
42.5°	860.7	810.6	765.8	725.1	695.8	679.1	671.8	672.9	681.2	693.8	714.6
45°	749.1	686.5	630.1	581.1	541.4	515.3	502.9	501.8	508.0	522.6	545.6
47.5°	662.5	595.7	532.0	475.8	432.9	404.8	390.2	386.0	390.2	403.7	430.9
50°	590.4	521.6	455.9	397.5	351.5	322.4	308.8	303.6	308.8	320.3	347.4
52.5°	523.7	452.8	391.2	334.8	285.9	260.9	246.2	243.0	246.2	259.7	281.7
55°	446.5	386.0	325.5	269.2	226.4	201.3	189.9	186.8	189.9	202.5	225.3
57.5°	370.4	318.1	265.0	213.9	177.3	155.5	145.1	140.8	148.1	156.5	183.6
60°	299.4	257.7	212.8	167.9	137.7	117.9	109.5	108.5	110.5	121.1	139.8
62.5°	234.7	200.3	164.8	128.4	103.2	94.9	84.5	83.5	85.5	91.8	106.4
65°	169.0	147.1	119.9	93.9	74.1	62.6	58.4	59.5	61.5	65.7	79.3
67.5°	117.9	102.2	83.5	65.7	51.1	45.8	41.7	40.7	41.7	49.0	56.4
70°	79.3	69.8	56.4	50.1	35.5	28.1	29.3	26.1	30.3	30.3	36.5
72.5°	52.1	45.8	37.6	29.3	25.0	19.8	19.8	18.8	20.9	21.9	27.1
75°	27.1	20.9	20.9	14.6	10.4	5.2	9.4	8.3	7.3	8.3	10.4
77.5°	18.8	15.7	14.6	11.4	10.4	8.3	8.3	8.3	8.3	9.4	10.4
80°	11.4	11.4	8.3	7.3	6.3	5.2	6.3	6.3	6.3	6.3	7.3
82.5°	7.3	6.3	6.3	5.2	5.2	4.1	4.1	4.1	4.1	4.1	6.3
85°	6.3	4.1	4.1	3.1	4.1	7.3	3.1	4.1	4.1	4.1	3.1
87.5°	2.1	3.1	3.1	3.1	2.1	1.0	2.1	3.1	3.1	5.2	4.1
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°	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6	1943.6
2.5°	1946.7	1947.7	1947.7	1946.7	1946.7	1944.6	1948.7	1945.6	1946.7	1950.9	1947.7
5°	1948.7	1949.8	1949.8	1948.7	1948.7	1948.7	1949.8	1949.8	1948.7	1947.7	1949.8
7.5°	1952.9	1951.9	1951.9	1949.8	1949.8	1947.7	1949.8	1946.7	1948.7	1946.7	1949.8
10°	1947.7	1948.7	1947.7	1946.7	1946.7	1945.6	1945.6	1942.5	1943.6	1940.5	1942.5
12.5°	1944.6	1943.6	1943.6	1941.5	1939.3	1937.3	1936.2	1933.1	1933.1	1925.8	1928.9
15°	1936.2	1937.3	1934.2	1930.0	1927.9	1922.7	1920.6	1916.5	1912.2	1907.0	1908.1
17.5°	1928.9	1925.8	1921.6	1917.5	1909.1	1904.9	1900.8	1894.5	1892.4	1886.2	1884.1
20°	1907.0	1904.9	1899.8	1892.4	1887.2	1877.8	1873.6	1867.4	1862.2	1855.9	1852.8
22.5°	1878.9	1876.8	1870.5	1863.2	1854.9	1850.7	1846.5	1835.1	1829.8	1823.5	1822.5
25°	1843.4	1840.2	1834.0	1825.7	1821.5	1810.0	1805.8	1797.5	1795.4	1789.1	1788.1
27.5°	1789.1	1785.0	1777.7	1767.3	1760.0	1752.7	1748.4	1742.1	1740.1	1733.9	1732.8
30°	1707.7	1702.6	1688.0	1683.7	1671.3	1663.9	1663.9	1655.6	1656.6	1652.5	1652.5
32.5°	1579.5	1571.1	1559.6	1551.2	1542.9	1538.8	1538.8	1535.7	1537.7	1537.7	1539.8
35°	1409.4	1398.0	1391.7	1386.5	1386.5	1390.6	1403.2	1406.3	1412.6	1417.7	1422.0
37.5°	1191.4	1190.4	1197.7	1203.8	1219.5	1237.2	1259.2	1277.9	1295.7	1308.2	1320.8
40°	955.7	981.7	1002.5	1031.8	1055.8	1090.2	1129.9	1162.1	1192.4	1214.4	1237.2
42.5°	745.9	779.3	823.2	865.9	908.7	955.7	1007.8	1052.6	1092.3	1122.6	1146.6
45°	581.1	627.0	680.2	734.5	789.7	848.1	902.4	948.3	990.1	1021.3	1045.3
47.5°	468.4	518.5	579.0	638.4	701.1	762.6	823.2	862.7	897.1	922.2	944.1
50°	387.1	440.2	503.9	571.7	634.3	695.8	748.0	786.6	814.7	836.7	850.3
52.5°	323.4	379.7	447.5	515.3	578.0	634.3	681.2	710.5	733.4	749.1	761.5
55°	267.0	321.3	385.0	448.6	510.2	563.3	602.0	623.8	641.5	651.0	658.3
57.5°	218.0	268.1	326.5	385.0	438.2	482.0	512.2	534.2	542.5	549.7	548.7
60°	171.1	218.0	271.3	321.3	367.2	402.7	424.6	437.1	443.4	446.5	444.4
62.5°	134.5	177.3	218.0	261.9	295.3	325.5	346.4	346.4	349.5	350.5	353.7
65°	100.1	132.5	167.9	200.3	227.5	247.3	258.7	261.9	266.0	265.0	262.9
67.5°	74.1	98.1	124.1	148.1	166.9	179.5	187.8	195.1	194.0	191.9	190.9
70°	51.1	66.8	89.7	104.4	117.9	130.4	132.5	133.5	134.5	135.6	133.5
72.5°	35.5	47.0	59.5	72.0	80.4	85.5	90.8	91.8	91.8	91.8	90.8
75°	17.7	24.0	35.5	40.7	48.0	50.1	54.3	54.3	57.4	53.2	52.1
77.5°	15.7	18.8	25.0	29.3	32.4	35.5	36.5	39.7	38.6	36.5	37.6
80°	9.4	11.4	15.7	17.7	21.9	23.0	24.0	25.0	24.0	25.0	25.0
82.5°	7.3	8.3	10.4	10.4	13.6	13.6	14.6	14.6	15.7	15.7	15.7
85°	4.1	7.3	6.3	12.6	8.3	8.3	10.4	12.6	10.4	10.4	12.6
87.5°	4.1	4.1	3.1	4.1	4.1	4.1	5.2	6.3	6.3	7.3	6.3
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: P244660

CATALOG NUMBER: LD8B40D010 ER8B40930 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1943.6	1943.6	1943.6	1943.6
2.5°	1946.7	1948.7	1945.6	1944.6
5°	1949.8	1949.8	1947.7	1947.7
7.5°	1949.8	1949.8	1946.7	1944.6
10°	1941.5	1941.5	1938.3	1936.2
12.5°	1925.8	1925.8	1924.8	1921.6
15°	1906.0	1906.0	1901.8	1898.6
17.5°	1878.9	1880.9	1875.8	1875.8
20°	1849.6	1848.6	1844.5	1842.4
22.5°	1819.4	1817.4	1816.2	1810.0
25°	1787.1	1785.0	1781.8	1778.7
27.5°	1731.7	1730.7	1727.6	1723.4
30°	1647.3	1646.2	1642.0	1642.0
32.5°	1537.7	1536.7	1532.5	1533.5
35°	1424.0	1428.2	1426.1	1422.0
37.5°	1329.1	1332.2	1334.3	1332.2
40°	1249.8	1259.2	1260.2	1262.4
42.5°	1165.3	1177.8	1182.0	1184.1
45°	1064.1	1075.6	1085.0	1082.9
47.5°	960.8	969.1	977.5	971.2
50°	861.7	866.9	870.0	870.0
52.5°	767.9	767.9	766.8	767.9
55°	660.4	660.4	656.2	658.3
57.5°	547.7	549.7	546.6	541.4
60°	443.4	438.2	436.1	432.9
62.5°	345.3	345.3	338.0	347.4
65°	258.7	255.6	252.4	251.4
67.5°	187.8	186.8	183.6	182.6
70°	132.5	128.4	127.2	125.2
72.5°	88.7	88.7	86.5	86.5
75°	54.3	49.0	48.0	49.0
77.5°	37.6	36.5	36.5	35.5
80°	25.0	24.0	26.1	23.0
82.5°	15.7	16.7	15.7	16.7
85°	10.4	12.6	11.4	11.4
87.5°	6.3	6.3	6.3	6.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)