

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: P244654

Luminaire Tested: **LSR8B40D010 EC8B40927 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244654
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 EC8B40927 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3494.2 lumens
Efficiency: N/A
Efficacy: 85.4 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

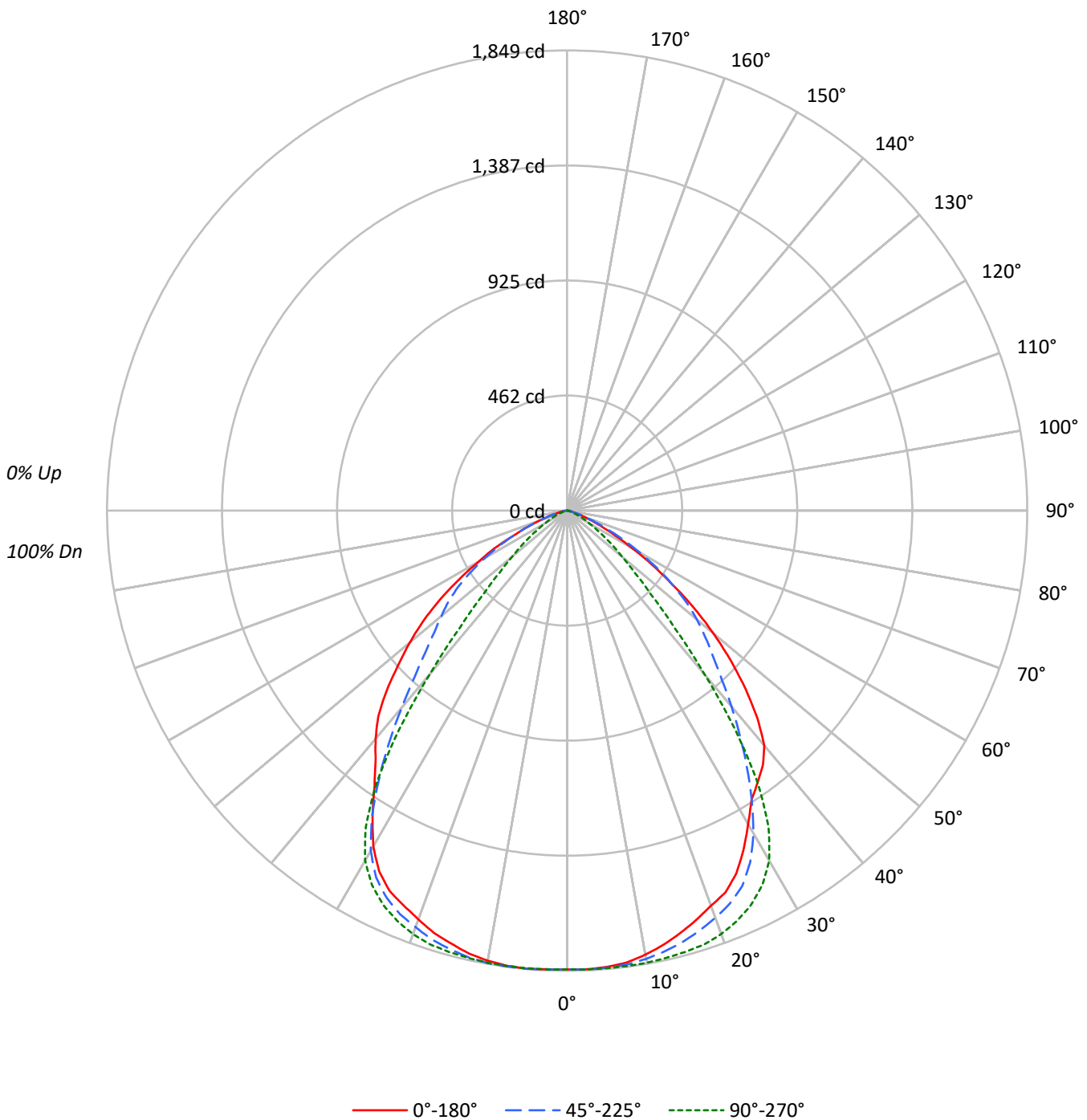
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P244654

CATALOG NUMBER: LSR8B40D010 EC8B40927 8LBDW0H

Luminous Intensity Polar Plot





TEST NUMBER: P244654

CATALOG NUMBER: LSR8B40D010 EC8B40927 8LBDW0H

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°			



TEST NUMBER: P244654

CATALOG NUMBER: LSR8B40D010 EC8B40927 8LBDW0H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.0	5.0
10°-20°	511.0	14.6
20°-30°	775.6	22.2
30°-40°	814.6	23.3
40°-50°	610.7	17.5
50°-60°	391.9	11.2
60°-70°	167.6	4.8
70°-80°	39.6	1.1
80°-90°	7.4	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°	1462.5	41.9
0°-40°	2277.1	65.2
0°-60°	3279.7	93.9
0°-90°	3494.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3494.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1844	1844	1844	1844	1844	
5°	1841	1844	1846	1849	1848	175
15°	1758	1794	1836	1824	1801	496
25°	1608	1665	1749	1717	1687	735
35°	1334	1260	1335	1319	1349	837
45°	1013	828	476	805	1027	776
55°	513	513	177	534	624	465
65°	154	182	56	235	238	165
75°	24	28	8	48	46	35
85°	8	5	4	8	11	8
90°	0	0	0	0	0	



TEST NUMBER: P244654

CATALOG NUMBER: LSR8B40D010 EC8B40927 8LBDW0H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6
2.5°	1844.7	1846.6	1845.7	1845.7	1844.7	1845.7	1845.7	1847.6	1847.6	1845.7	1844.7
5°	1840.6	1842.6	1842.6	1840.6	1840.6	1845.7	1842.6	1844.7	1844.7	1843.6	1843.6
7.5°	1831.7	1831.7	1835.7	1832.7	1832.7	1835.7	1834.8	1836.7	1838.7	1839.7	1839.7
10°	1811.9	1814.0	1815.0	1815.0	1816.0	1818.9	1820.9	1824.9	1826.8	1828.8	1829.8
12.5°	1787.3	1790.2	1791.2	1790.2	1793.1	1797.1	1802.1	1807.0	1810.0	1814.0	1816.9
15°	1757.5	1757.5	1759.5	1762.5	1764.4	1770.4	1775.4	1781.3	1789.2	1794.2	1799.1
17.5°	1724.8	1726.9	1729.8	1729.8	1733.8	1743.6	1746.7	1755.6	1764.4	1769.4	1779.3
20°	1689.3	1691.2	1694.2	1696.2	1701.1	1709.1	1715.0	1722.9	1732.8	1741.7	1751.6
22.5°	1661.5	1657.6	1659.6	1661.5	1666.5	1673.4	1680.4	1690.2	1700.1	1709.1	1719.0
25°	1608.1	1609.1	1612.1	1614.0	1620.0	1626.0	1633.8	1645.8	1654.6	1664.6	1675.4
27.5°	1535.9	1536.9	1541.8	1541.8	1546.8	1556.7	1561.6	1571.5	1583.4	1593.2	1606.2
30°	1453.7	1455.8	1455.8	1459.7	1462.6	1467.6	1472.5	1482.4	1488.4	1497.3	1515.1
32.5°	1378.6	1380.5	1379.5	1378.6	1375.5	1374.5	1373.5	1375.5	1377.6	1380.5	1387.5
35°	1334.0	1329.1	1325.1	1318.2	1310.3	1300.4	1291.4	1279.6	1268.7	1259.8	1249.9
37.5°	1291.4	1290.5	1284.5	1274.6	1258.8	1241.0	1220.2	1194.4	1168.8	1141.0	1114.3
40°	1232.1	1229.1	1224.1	1210.3	1192.5	1170.7	1143.0	1111.3	1069.8	1027.2	983.7
42.5°	1131.1	1132.1	1126.1	1115.3	1098.4	1077.6	1049.0	1014.3	969.9	919.4	863.0
45°	1013.4	1013.4	1011.4	1002.5	990.6	973.8	952.0	923.3	879.8	828.3	767.9
47.5°	890.7	891.7	888.6	886.7	881.8	870.9	855.0	833.3	802.6	753.1	692.7
50°	766.0	766.0	770.8	769.9	769.9	766.0	759.0	746.2	719.4	679.8	623.5
52.5°	641.2	643.3	646.2	650.1	655.1	663.1	655.1	649.1	632.4	601.6	553.2
55°	512.7	514.6	519.5	526.5	532.5	540.3	542.2	542.2	533.4	512.7	476.0
57.5°	402.8	399.8	403.8	409.7	417.6	425.6	431.4	438.4	437.4	423.6	393.9
60°	302.8	303.9	306.8	312.8	318.7	325.6	333.4	339.4	342.4	335.5	316.7
62.5°	220.7	220.7	224.7	230.5	233.6	243.4	248.4	251.3	254.4	253.4	241.4
65°	154.4	156.4	158.3	161.3	164.2	170.2	173.1	179.1	181.1	182.1	173.1
67.5°	108.9	105.9	107.9	109.8	112.8	116.8	122.7	122.7	125.7	125.7	119.7
70°	69.3	69.3	70.3	73.2	75.3	76.2	78.2	80.1	83.1	82.1	82.1
72.5°	46.5	45.6	46.5	47.5	48.5	51.4	51.4	52.4	54.4	55.5	51.4
75°	23.7	24.8	26.7	25.8	28.7	26.7	27.7	30.7	29.7	27.7	27.7
77.5°	19.8	19.8	19.8	18.8	20.8	20.8	19.8	21.7	20.8	20.8	19.8
80°	13.8	14.8	13.8	12.8	13.8	12.8	12.8	12.8	12.8	12.8	11.8
82.5°	10.9	8.9	9.9	8.9	9.9	9.9	8.9	7.9	7.9	8.9	7.9
85°	7.9	6.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	5.0	5.0
87.5°	5.0	2.9	2.9	2.9	3.9	3.9	3.9	2.9	3.9	3.9	2.0
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: P244654

CATALOG NUMBER: LSR8B40D010 EC8B40927 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6
2.5°	1846.6	1845.7	1847.6	1846.6	1846.6	1845.7	1846.6	1845.7	1847.6	1843.6	1844.7
5°	1846.6	1844.7	1845.7	1846.6	1847.6	1845.7	1845.7	1845.7	1847.6	1845.7	1846.6
7.5°	1842.6	1841.6	1844.7	1846.6	1845.7	1844.7	1846.6	1845.7	1847.6	1846.6	1848.6
10°	1834.8	1835.7	1837.7	1840.6	1841.6	1842.6	1844.7	1844.7	1847.6	1843.6	1845.7
12.5°	1822.8	1826.8	1831.7	1833.8	1837.7	1837.7	1839.7	1840.6	1842.6	1841.6	1844.7
15°	1808.0	1812.9	1818.9	1823.8	1828.8	1831.7	1834.8	1835.7	1838.7	1835.7	1836.7
17.5°	1790.2	1796.2	1805.1	1811.0	1818.9	1821.8	1825.8	1827.8	1830.8	1828.8	1829.8
20°	1765.5	1772.4	1782.2	1791.2	1796.2	1803.0	1808.0	1811.0	1812.9	1811.0	1811.9
22.5°	1730.8	1740.7	1753.5	1760.5	1770.4	1776.4	1777.4	1784.2	1789.2	1784.2	1786.3
25°	1690.2	1700.1	1710.0	1724.8	1733.8	1740.7	1747.7	1748.6	1753.5	1752.6	1751.6
27.5°	1622.9	1635.9	1652.6	1664.6	1676.4	1687.3	1695.2	1697.2	1702.1	1700.1	1701.1
30°	1530.9	1544.7	1560.6	1579.4	1596.3	1607.1	1617.0	1623.9	1628.9	1626.0	1625.0
32.5°	1400.3	1414.1	1431.0	1449.8	1469.6	1485.3	1497.3	1506.1	1512.1	1510.1	1505.2
35°	1250.9	1254.8	1265.7	1280.6	1297.4	1314.2	1325.1	1334.9	1341.9	1343.9	1343.9
37.5°	1097.4	1084.6	1076.7	1076.7	1086.6	1093.5	1103.4	1109.4	1120.3	1124.2	1127.1
40°	949.0	919.4	891.7	870.9	857.0	856.0	856.0	858.9	868.8	881.8	893.6
42.5°	816.4	768.9	726.4	687.8	660.0	644.3	637.3	638.3	646.2	658.1	677.9
45°	710.6	651.2	597.7	551.2	513.6	488.8	477.0	476.0	482.0	495.8	517.6
47.5°	628.4	565.1	504.7	451.2	410.7	384.0	370.1	366.2	370.1	383.0	408.7
50°	560.1	494.8	432.4	377.0	333.4	305.8	293.0	288.0	293.0	303.9	329.5
52.5°	496.8	429.5	371.1	317.7	271.1	247.4	233.6	230.5	233.6	246.4	267.2
55°	423.6	366.2	308.7	255.3	214.8	191.0	180.1	177.2	180.1	192.0	213.8
57.5°	351.3	301.8	251.3	202.8	168.2	147.5	137.6	133.5	140.5	148.4	174.2
60°	284.1	244.5	201.8	159.3	130.6	111.8	104.0	102.9	104.8	114.8	132.6
62.5°	222.6	190.0	156.4	121.7	98.0	90.0	80.1	79.2	81.1	87.1	100.9
65°	160.3	139.5	113.8	89.1	70.3	59.4	55.5	56.4	58.4	62.3	75.3
67.5°	111.8	97.0	79.2	62.3	48.5	43.5	39.6	38.6	39.6	46.5	53.4
70°	75.3	66.3	53.4	47.5	33.6	26.7	27.7	24.8	28.7	28.7	34.6
72.5°	49.5	43.5	35.7	27.7	23.7	18.8	18.8	17.8	19.8	20.8	25.8
75°	25.8	19.8	19.8	13.8	9.9	5.0	8.9	7.9	7.0	7.9	9.9
77.5°	17.8	14.8	13.8	10.9	9.9	7.9	7.9	7.9	7.9	8.9	9.9
80°	10.9	10.9	7.9	7.0	6.0	5.0	6.0	6.0	6.0	6.0	7.0
82.5°	7.0	6.0	6.0	5.0	5.0	3.9	3.9	3.9	3.9	3.9	6.0
85°	6.0	3.9	3.9	2.9	3.9	7.0	2.9	3.9	3.9	3.9	2.9
87.5°	2.0	2.9	2.9	2.9	2.0	1.0	2.0	2.9	2.9	5.0	3.9
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: P244654

CATALOG NUMBER: LSR8B40D010 EC8B40927 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6	1843.6
2.5°	1846.6	1847.6	1847.6	1846.6	1846.6	1844.7	1848.6	1845.7	1846.6	1850.5	1847.6
5°	1848.6	1849.6	1849.6	1848.6	1848.6	1848.6	1849.6	1849.6	1848.6	1847.6	1849.6
7.5°	1852.5	1851.5	1851.5	1849.6	1849.6	1847.6	1849.6	1846.6	1848.6	1846.6	1849.6
10°	1847.6	1848.6	1847.6	1846.6	1846.6	1845.7	1845.7	1842.6	1843.6	1840.6	1842.6
12.5°	1844.7	1843.6	1843.6	1841.6	1839.7	1837.7	1836.7	1833.8	1833.8	1826.8	1829.8
15°	1836.7	1837.7	1834.8	1830.8	1828.8	1823.8	1821.8	1817.9	1814.0	1809.0	1810.0
17.5°	1829.8	1826.8	1822.8	1818.9	1811.0	1807.0	1803.0	1797.1	1795.2	1789.2	1787.3
20°	1809.0	1807.0	1802.1	1795.2	1790.2	1781.3	1777.4	1771.4	1766.5	1760.5	1757.5
22.5°	1782.2	1780.3	1774.4	1767.5	1759.5	1755.6	1751.6	1740.7	1735.8	1729.8	1728.8
25°	1748.6	1745.7	1739.7	1731.8	1727.9	1717.0	1713.0	1705.0	1703.1	1697.2	1696.2
27.5°	1697.2	1693.2	1686.3	1676.4	1669.5	1662.5	1658.6	1652.6	1650.7	1644.8	1643.7
30°	1620.0	1615.0	1601.2	1597.3	1585.4	1578.4	1578.4	1570.5	1571.5	1567.6	1567.6
32.5°	1498.3	1490.4	1479.5	1471.5	1463.6	1459.7	1459.7	1456.6	1458.7	1458.7	1460.7
35°	1337.0	1326.0	1320.1	1315.2	1315.2	1319.2	1331.0	1334.0	1340.0	1344.8	1348.9
37.5°	1130.2	1129.2	1136.0	1142.0	1156.8	1173.7	1194.4	1212.3	1229.1	1241.0	1252.8
40°	906.5	931.3	951.0	978.8	1001.5	1034.1	1071.8	1102.4	1131.1	1151.9	1173.7
42.5°	707.5	739.2	780.9	821.4	862.0	906.5	956.0	998.6	1036.1	1064.8	1087.5
45°	551.2	594.8	645.2	696.7	749.1	804.6	856.0	899.6	939.2	968.8	991.6
47.5°	444.4	491.8	549.2	605.6	665.0	723.4	780.9	818.4	851.1	874.8	895.6
50°	367.1	417.6	478.0	542.2	601.6	660.0	709.5	746.2	772.9	793.7	806.5
52.5°	306.8	360.2	424.6	488.8	548.2	601.6	646.2	673.9	695.7	710.6	722.4
55°	253.4	304.8	365.2	425.6	483.9	534.4	570.9	591.8	608.6	617.5	624.5
57.5°	206.9	254.4	309.7	365.2	415.7	457.2	485.9	506.7	514.6	521.6	520.5
60°	162.3	206.9	257.3	304.8	348.3	381.9	402.8	414.7	420.5	423.6	421.5
62.5°	127.7	168.2	206.9	248.4	280.0	308.7	328.6	328.6	331.5	332.6	335.5
65°	95.0	125.7	159.3	190.0	215.8	234.6	245.5	248.4	252.3	251.3	249.4
67.5°	70.3	93.0	117.8	140.5	158.3	170.2	178.1	185.1	184.0	182.1	181.1
70°	48.5	63.3	85.2	99.0	111.8	123.8	125.7	126.7	127.7	128.7	126.7
72.5°	33.6	44.6	56.4	68.3	76.2	81.1	86.1	87.1	87.1	87.1	86.1
75°	16.9	22.7	33.6	38.6	45.6	47.5	51.4	51.4	54.4	50.5	49.5
77.5°	14.8	17.8	23.7	27.7	30.7	33.6	34.6	37.6	36.6	34.6	35.7
80°	8.9	10.9	14.8	16.9	20.8	21.7	22.7	23.7	22.7	23.7	23.7
82.5°	7.0	7.9	9.9	9.9	12.8	12.8	13.8	13.8	14.8	14.8	14.8
85°	3.9	7.0	6.0	11.8	7.9	7.9	9.9	11.8	9.9	9.9	11.8
87.5°	3.9	3.9	2.9	3.9	3.9	3.9	5.0	6.0	6.0	7.0	6.0
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: P244654

CATALOG NUMBER: LSR8B40D010 EC8B40927 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1843.6	1843.6	1843.6	1843.6
2.5°	1846.6	1848.6	1845.7	1844.7
5°	1849.6	1849.6	1847.6	1847.6
7.5°	1849.6	1849.6	1846.6	1844.7
10°	1841.6	1841.6	1838.7	1836.7
12.5°	1826.8	1826.8	1825.8	1822.8
15°	1808.0	1808.0	1804.0	1801.1
17.5°	1782.2	1784.2	1779.3	1779.3
20°	1754.6	1753.5	1749.6	1747.7
22.5°	1725.9	1724.0	1722.9	1717.0
25°	1695.2	1693.2	1690.2	1687.3
27.5°	1642.7	1641.7	1638.8	1634.9
30°	1562.6	1561.6	1557.7	1557.7
32.5°	1458.7	1457.7	1453.7	1454.7
35°	1350.8	1354.7	1352.8	1348.9
37.5°	1260.8	1263.7	1265.7	1263.7
40°	1185.5	1194.4	1195.4	1197.4
42.5°	1105.4	1117.2	1121.3	1123.2
45°	1009.4	1020.3	1029.1	1027.2
47.5°	911.4	919.4	927.2	921.4
50°	817.4	822.4	825.3	825.3
52.5°	728.3	728.3	727.3	728.3
55°	626.4	626.4	622.5	624.5
57.5°	519.5	521.6	518.5	513.6
60°	420.5	415.7	413.7	410.7
62.5°	327.6	327.6	320.6	329.5
65°	245.5	242.4	239.5	238.5
67.5°	178.1	177.2	174.2	173.1
70°	125.7	121.7	120.7	118.8
72.5°	84.1	84.1	82.1	82.1
75°	51.4	46.5	45.6	46.5
77.5°	35.7	34.6	34.6	33.6
80°	23.7	22.7	24.8	21.7
82.5°	14.8	15.9	14.8	15.9
85°	9.9	11.8	10.9	10.9
87.5°	6.0	6.0	6.0	6.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)