

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: P246148

Luminaire Tested: **LSR8B40D010 EC8B40935 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246148
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 EC8B40935 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3367.0 lumens
Efficiency: N/A
Efficacy: 82.3 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

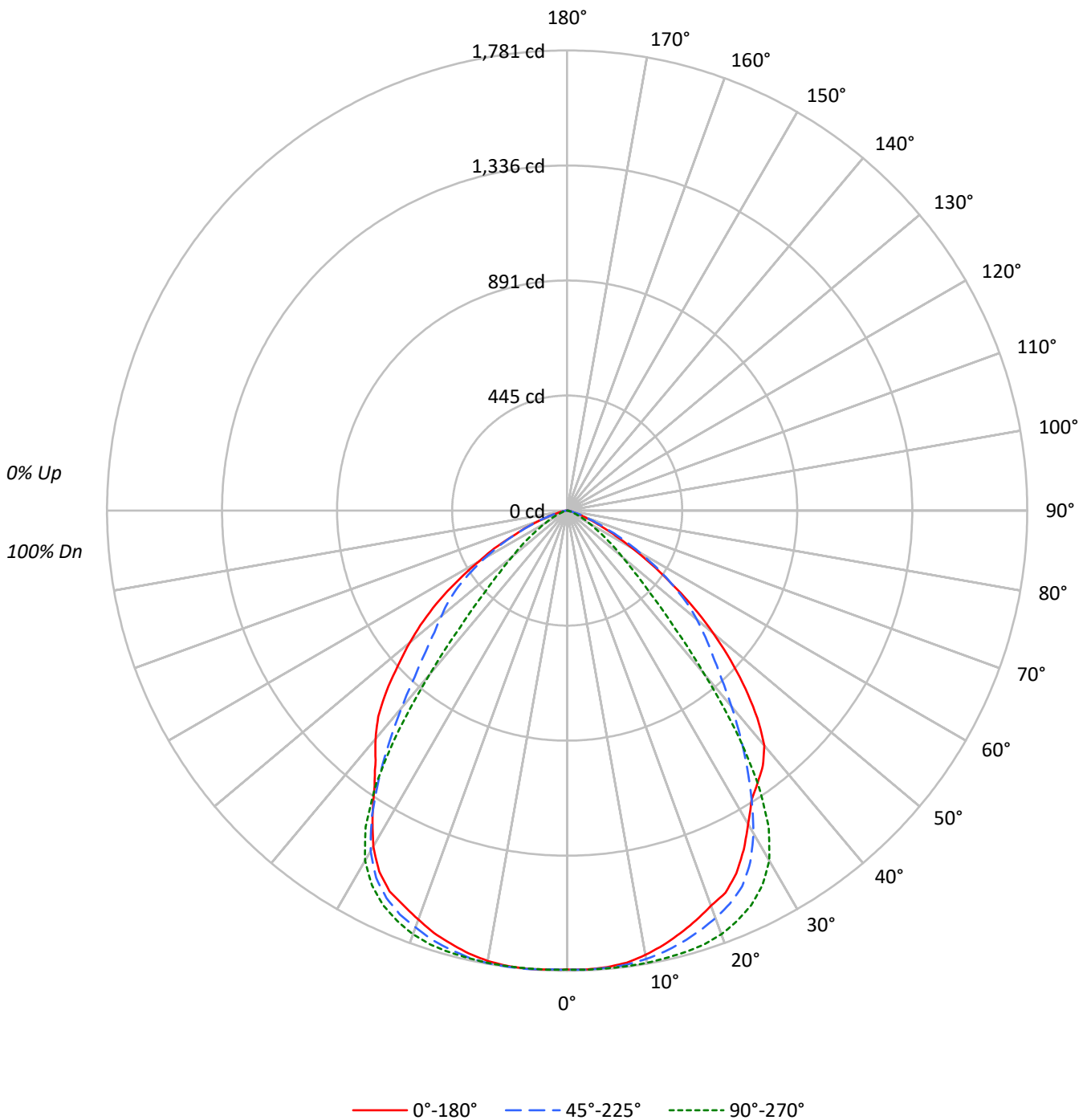
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	54781	54781	54781
5°	54900	55049	55108
10°	54671	55657	55416
15°	54063	56471	55404
20°	53417	57263	55261
25°	52720	57331	55316
30°	49878	55717	53442
35°	48388	48425	48926
40°	47789	33318	46445
45°	42584	20004	43164
50°	35409	13312	38153
55°	26553	9177	32348
60°	17996	6118	24404
65°	10857	3969	16767
70°	6023	2146	10314
75°	2728	905	5338
80°	2362	1012	3729
85°	2689	1344	3715



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.5	5.0
10°-20°	492.4	14.6
20°-30°	747.3	22.2
30°-40°	784.9	23.3
40°-50°	588.5	17.5
50°-60°	377.6	11.2
60°-70°	161.5	4.8
70°-80°	38.2	1.1
80°-90°	7.1	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°	1409.2	41.9
0°-40°	2194.2	65.2
0°-60°	3160.2	93.9
0°-90°	3367.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3367.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1776	1776	1776	1776	1776	
5°	1774	1776	1778	1781	1780	168
15°	1694	1729	1769	1757	1736	478
25°	1550	1604	1685	1654	1626	708
35°	1285	1214	1286	1271	1300	807
45°	976	798	459	775	990	748
55°	494	494	171	515	602	448
65°	149	176	54	226	230	159
75°	23	27	8	46	45	33
85°	8	5	4	8	10	8
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°	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5
2.5°	1777.5	1779.4	1778.4	1778.4	1777.5	1778.4	1778.4	1780.3	1780.3	1778.4	1777.5
5°	1773.6	1775.5	1775.5	1773.6	1773.6	1778.4	1775.5	1777.5	1777.5	1776.5	1776.5
7.5°	1765.1	1765.1	1768.9	1766.0	1766.0	1768.9	1767.9	1769.8	1771.7	1772.7	1772.7
10°	1746.0	1747.9	1748.8	1748.8	1749.8	1752.7	1754.6	1758.4	1760.3	1762.2	1763.1
12.5°	1722.2	1725.0	1726.0	1725.0	1727.9	1731.7	1736.5	1741.2	1744.1	1747.9	1750.8
15°	1693.5	1693.5	1695.4	1698.3	1700.2	1705.9	1710.7	1716.4	1724.0	1728.8	1733.6
17.5°	1662.1	1664.0	1666.8	1666.8	1670.7	1680.2	1683.0	1691.6	1700.2	1705.0	1714.5
20°	1627.8	1629.6	1632.5	1634.4	1639.2	1646.8	1652.5	1660.2	1669.7	1678.3	1687.8
22.5°	1601.0	1597.2	1599.1	1601.0	1605.8	1612.5	1619.2	1628.7	1638.2	1646.8	1656.4
25°	1549.5	1550.5	1553.4	1555.3	1561.0	1566.7	1574.3	1585.8	1594.4	1603.9	1614.4
27.5°	1479.9	1480.9	1485.7	1485.7	1490.4	1500.0	1504.7	1514.3	1525.7	1535.2	1547.7
30°	1400.8	1402.7	1402.7	1406.5	1409.4	1414.1	1418.9	1428.4	1434.2	1442.8	1459.9
32.5°	1328.3	1330.2	1329.3	1328.3	1325.5	1324.5	1323.5	1325.5	1327.4	1330.2	1336.9
35°	1285.4	1280.6	1276.8	1270.2	1262.5	1253.0	1244.4	1233.0	1222.5	1213.9	1204.4
37.5°	1244.4	1243.4	1237.7	1228.2	1212.9	1195.8	1175.8	1151.0	1126.2	1099.5	1073.7
40°	1187.2	1184.3	1179.6	1166.2	1149.0	1128.1	1101.4	1070.9	1030.8	989.8	947.8
42.5°	1089.9	1090.9	1085.2	1074.7	1058.5	1038.4	1010.8	977.4	934.5	885.9	831.5
45°	976.5	976.5	974.5	966.0	954.5	938.3	917.3	889.7	847.7	798.1	740.0
47.5°	858.2	859.2	856.3	854.4	849.6	839.1	823.9	802.9	773.3	725.7	667.5
50°	738.1	738.1	742.8	741.9	741.9	738.1	731.4	719.0	693.2	655.1	600.8
52.5°	617.9	619.8	622.7	626.5	631.3	638.9	631.3	625.5	609.3	579.8	533.0
55°	493.9	495.9	500.6	507.3	513.0	520.7	522.5	522.5	514.0	493.9	458.7
57.5°	388.1	385.2	389.1	394.8	402.4	410.0	415.8	422.4	421.5	408.1	379.5
60°	291.8	292.7	295.6	301.3	307.1	313.7	321.4	327.1	329.9	323.3	305.1
62.5°	212.7	212.7	216.5	222.2	225.0	234.6	239.3	242.2	245.1	244.1	232.7
65°	148.8	150.7	152.6	155.4	158.3	164.0	166.9	172.6	174.5	175.5	166.9
67.5°	104.9	102.0	103.9	105.8	108.7	112.5	118.2	118.2	121.1	121.1	115.4
70°	66.8	66.8	67.7	70.6	72.5	73.4	75.3	77.2	80.1	79.1	79.1
72.5°	44.8	43.9	44.8	45.8	46.7	49.6	49.6	50.5	52.5	53.4	49.6
75°	22.9	23.8	25.7	24.8	27.6	25.7	26.7	29.6	28.6	26.7	26.7
77.5°	19.1	19.1	19.1	18.1	20.0	20.0	19.1	21.0	20.0	20.0	19.1
80°	13.3	14.3	13.3	12.4	13.3	12.4	12.4	12.4	12.4	12.4	11.4
82.5°	10.5	8.6	9.5	8.6	9.5	9.5	8.6	7.6	7.6	8.6	7.6
85°	7.6	5.7	6.7	6.7	5.7	5.7	5.7	5.7	5.7	4.8	4.8
87.5°	4.8	2.9	2.9	2.9	3.8	3.8	3.8	2.9	3.8	3.8	1.9
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°	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5
2.5°	1779.4	1778.4	1780.3	1779.4	1779.4	1778.4	1779.4	1778.4	1780.3	1776.5	1777.5
5°	1779.4	1777.5	1778.4	1779.4	1780.3	1778.4	1778.4	1778.4	1780.3	1778.4	1779.4
7.5°	1775.5	1774.6	1777.5	1779.4	1778.4	1777.5	1779.4	1778.4	1780.3	1779.4	1781.3
10°	1767.9	1768.9	1770.8	1773.6	1774.6	1775.5	1777.5	1777.5	1780.3	1776.5	1778.4
12.5°	1756.5	1760.3	1765.1	1767.0	1770.8	1770.8	1772.7	1773.6	1775.5	1774.6	1777.5
15°	1742.2	1746.9	1752.7	1757.4	1762.2	1765.1	1767.9	1768.9	1771.7	1768.9	1769.8
17.5°	1725.0	1730.7	1739.3	1745.0	1752.7	1755.5	1759.3	1761.2	1764.1	1762.2	1763.1
20°	1701.2	1707.9	1717.4	1726.0	1730.7	1737.4	1742.2	1745.0	1746.9	1745.0	1746.0
22.5°	1667.8	1677.3	1689.7	1696.4	1705.9	1711.7	1712.6	1719.3	1724.0	1719.3	1721.2
25°	1628.7	1638.2	1647.8	1662.1	1670.7	1677.3	1684.0	1685.0	1689.7	1688.8	1687.8
27.5°	1563.8	1576.3	1592.5	1603.9	1615.3	1625.8	1633.5	1635.4	1640.1	1638.2	1639.2
30°	1475.2	1488.5	1503.8	1521.9	1538.1	1548.6	1558.1	1564.8	1569.6	1566.7	1565.8
32.5°	1349.3	1362.7	1378.9	1397.0	1416.1	1431.3	1442.8	1451.3	1457.1	1455.1	1450.4
35°	1205.3	1209.1	1219.6	1233.9	1250.1	1266.3	1276.8	1286.4	1293.0	1294.9	1294.9
37.5°	1057.5	1045.1	1037.5	1037.5	1047.0	1053.7	1063.2	1068.9	1079.4	1083.2	1086.1
40°	914.5	885.9	859.2	839.1	825.8	824.8	824.8	827.7	837.2	849.6	861.1
42.5°	786.7	740.9	699.9	662.7	636.0	620.8	614.1	615.1	622.7	634.1	653.2
45°	684.7	627.5	576.0	531.1	494.9	471.1	459.6	458.7	464.4	477.7	498.7
47.5°	605.5	544.5	486.3	434.8	395.7	370.0	356.6	352.8	356.6	369.0	393.8
50°	539.7	476.8	416.7	363.3	321.4	294.7	282.3	277.5	282.3	292.7	317.5
52.5°	478.7	413.8	357.6	306.1	261.3	238.4	225.0	222.2	225.0	237.4	257.5
55°	408.1	352.8	297.5	246.0	206.9	184.0	173.5	170.7	173.5	185.0	206.0
57.5°	338.5	290.8	242.2	195.5	162.1	142.1	132.6	128.7	135.4	143.0	167.8
60°	273.7	235.5	194.5	153.5	125.9	107.7	100.1	99.2	101.1	110.6	127.8
62.5°	214.6	183.1	150.7	117.3	94.4	86.8	77.2	76.3	78.2	83.9	97.3
65°	154.5	134.5	109.7	85.8	67.7	57.2	53.4	54.4	56.3	60.1	72.5
67.5°	107.7	93.4	76.3	60.1	46.7	42.0	38.1	37.2	38.1	44.8	51.5
70°	72.5	63.9	51.5	45.8	32.4	25.7	26.7	23.8	27.6	27.6	33.4
72.5°	47.7	42.0	34.3	26.7	22.9	18.1	18.1	17.2	19.1	20.0	24.8
75°	24.8	19.1	19.1	13.3	9.5	4.8	8.6	7.6	6.7	7.6	9.5
77.5°	17.2	14.3	13.3	10.5	9.5	7.6	7.6	7.6	7.6	8.6	9.5
80°	10.5	10.5	7.6	6.7	5.7	4.8	5.7	5.7	5.7	5.7	6.7
82.5°	6.7	5.7	5.7	4.8	4.8	3.8	3.8	3.8	3.8	3.8	5.7
85°	5.7	3.8	3.8	2.9	3.8	6.7	2.9	3.8	3.8	3.8	2.9
87.5°	1.9	2.9	2.9	2.9	1.9	1.0	1.9	2.9	2.9	4.8	3.8
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°	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5	1776.5
2.5°	1779.4	1780.3	1780.3	1779.4	1779.4	1777.5	1781.3	1778.4	1779.4	1783.2	1780.3
5°	1781.3	1782.2	1782.2	1781.3	1781.3	1781.3	1782.2	1782.2	1781.3	1780.3	1782.2
7.5°	1785.1	1784.1	1784.1	1782.2	1782.2	1780.3	1782.2	1779.4	1781.3	1779.4	1782.2
10°	1780.3	1781.3	1780.3	1779.4	1779.4	1778.4	1778.4	1775.5	1776.5	1773.6	1775.5
12.5°	1777.5	1776.5	1776.5	1774.6	1772.7	1770.8	1769.8	1767.0	1767.0	1760.3	1763.1
15°	1769.8	1770.8	1767.9	1764.1	1762.2	1757.4	1755.5	1751.7	1747.9	1743.1	1744.1
17.5°	1763.1	1760.3	1756.5	1752.7	1745.0	1741.2	1737.4	1731.7	1729.8	1724.0	1722.2
20°	1743.1	1741.2	1736.5	1729.8	1725.0	1716.4	1712.6	1706.9	1702.1	1696.4	1693.5
22.5°	1717.4	1715.5	1709.7	1703.1	1695.4	1691.6	1687.8	1677.3	1672.6	1666.8	1665.9
25°	1685.0	1682.1	1676.4	1668.7	1664.9	1654.4	1650.6	1643.0	1641.1	1635.4	1634.4
27.5°	1635.4	1631.6	1624.9	1615.3	1608.7	1602.0	1598.2	1592.5	1590.6	1584.8	1583.9
30°	1561.0	1556.2	1542.9	1539.1	1527.6	1520.9	1520.9	1513.3	1514.3	1510.5	1510.5
32.5°	1443.7	1436.1	1425.6	1417.9	1410.3	1406.5	1406.5	1403.6	1405.6	1405.6	1407.5
35°	1288.3	1277.8	1272.1	1267.3	1267.3	1271.1	1282.6	1285.4	1291.1	1295.9	1299.7
37.5°	1089.0	1088.0	1094.7	1100.4	1114.7	1130.9	1151.0	1168.1	1184.3	1195.8	1207.2
40°	873.5	897.3	916.4	943.1	965.0	996.5	1032.7	1062.3	1089.9	1110.0	1130.9
42.5°	681.8	712.3	752.4	791.5	830.6	873.5	921.2	962.2	998.4	1026.0	1048.0
45°	531.1	573.1	621.7	671.3	721.9	775.3	824.8	866.8	904.9	933.5	955.5
47.5°	428.1	473.9	529.2	583.6	640.8	697.1	752.4	788.6	820.1	842.9	863.0
50°	353.8	402.4	460.6	522.5	579.8	636.0	683.7	719.0	744.7	764.8	777.2
52.5°	295.6	347.1	409.1	471.1	528.3	579.8	622.7	649.4	670.4	684.7	696.1
55°	244.1	293.7	351.9	410.0	466.3	514.9	550.2	570.2	586.4	595.0	601.7
57.5°	199.3	245.1	298.5	351.9	400.5	440.6	468.2	488.2	495.9	502.5	501.6
60°	156.4	199.3	247.9	293.7	335.7	368.1	388.1	399.5	405.3	408.1	406.2
62.5°	123.0	162.1	199.3	239.3	269.9	297.5	316.6	316.6	319.4	320.4	323.3
65°	91.5	121.1	153.5	183.1	207.9	226.0	236.5	239.3	243.2	242.2	240.3
67.5°	67.7	89.6	113.5	135.4	152.6	164.0	171.6	178.3	177.4	175.5	174.5
70°	46.7	61.0	82.0	95.4	107.7	119.2	121.1	122.1	123.0	124.0	122.1
72.5°	32.4	42.9	54.4	65.8	73.4	78.2	83.0	83.9	83.9	83.9	83.0
75°	16.2	21.9	32.4	37.2	43.9	45.8	49.6	49.6	52.5	48.6	47.7
77.5°	14.3	17.2	22.9	26.7	29.6	32.4	33.4	36.2	35.3	33.4	34.3
80°	8.6	10.5	14.3	16.2	20.0	21.0	21.9	22.9	21.9	22.9	22.9
82.5°	6.7	7.6	9.5	9.5	12.4	12.4	13.3	13.3	14.3	14.3	14.3
85°	3.8	6.7	5.7	11.4	7.6	7.6	9.5	11.4	9.5	9.5	11.4
87.5°	3.8	3.8	2.9	3.8	3.8	3.8	4.8	5.7	5.7	6.7	5.7
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: P246148

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1776.5	1776.5	1776.5	1776.5
2.5°	1779.4	1781.3	1778.4	1777.5
5°	1782.2	1782.2	1780.3	1780.3
7.5°	1782.2	1782.2	1779.4	1777.5
10°	1774.6	1774.6	1771.7	1769.8
12.5°	1760.3	1760.3	1759.3	1756.5
15°	1742.2	1742.2	1738.3	1735.5
17.5°	1717.4	1719.3	1714.5	1714.5
20°	1690.7	1689.7	1685.9	1684.0
22.5°	1663.0	1661.1	1660.2	1654.4
25°	1633.5	1631.6	1628.7	1625.8
27.5°	1582.9	1582.0	1579.1	1575.3
30°	1505.7	1504.7	1500.9	1500.9
32.5°	1405.6	1404.6	1400.8	1401.8
35°	1301.6	1305.4	1303.5	1299.7
37.5°	1214.8	1217.7	1219.6	1217.7
40°	1142.4	1151.0	1151.9	1153.8
42.5°	1065.1	1076.6	1080.4	1082.3
45°	972.6	983.1	991.7	989.8
47.5°	878.2	885.9	893.5	887.8
50°	787.7	792.4	795.3	795.3
52.5°	701.8	701.8	700.9	701.8
55°	603.6	603.6	599.8	601.7
57.5°	500.6	502.5	499.7	494.9
60°	405.3	400.5	398.6	395.7
62.5°	315.6	315.6	309.0	317.5
65°	236.5	233.6	230.8	229.8
67.5°	171.6	170.7	167.8	166.9
70°	121.1	117.3	116.3	114.4
72.5°	81.1	81.1	79.1	79.1
75°	49.6	44.8	43.9	44.8
77.5°	34.3	33.4	33.4	32.4
80°	22.9	21.9	23.8	21.0
82.5°	14.3	15.3	14.3	15.3
85°	9.5	11.4	10.5	10.5
87.5°	5.7	5.7	5.7	5.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)