

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: P246238

Luminaire Tested: **LSR8B40D010 EC8B409727 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246238
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 EC8B409727 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3071.0 lumens
Efficiency: N/A
Efficacy: 75.1 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

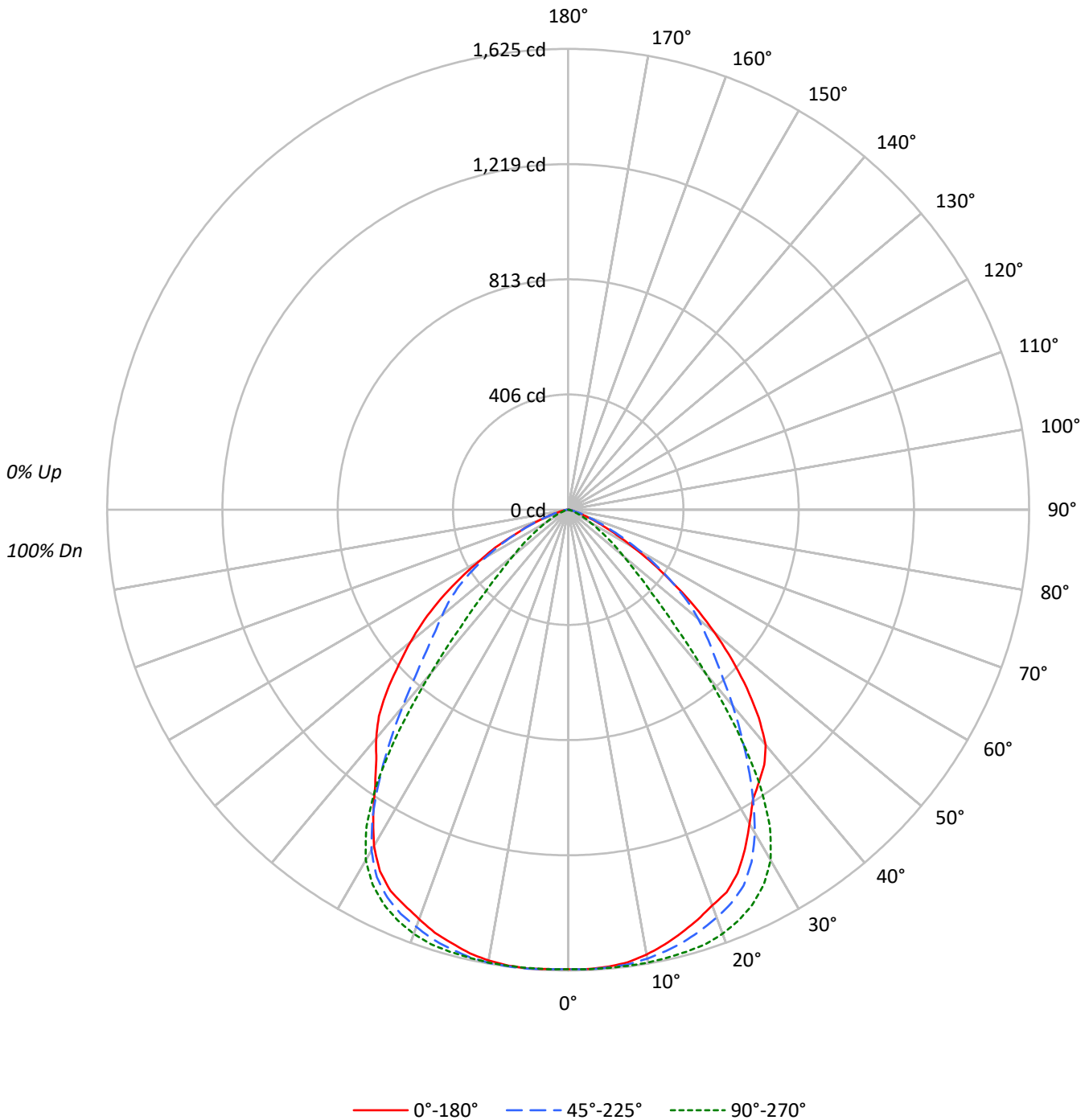
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90	90	90	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79	79	79	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70	70	70	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62	62	62	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55	55	55	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50	50	50	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45	45	45	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41	41	41	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37	37	37	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34	34	34	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°	154.6	5.0
10°-20°	449.1	14.6
20°-30°	681.6	22.2
30°-40°	715.9	23.3
40°-50°	536.7	17.5
50°-60°	344.4	11.2
60°-70°	147.3	4.8
70°-80°	34.8	1.1
80°-90°	6.5	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°	1285.4	41.9
0°-40°	2001.3	65.2
0°-60°	2882.4	93.9
0°-90°	3071.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3071.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1620	1620	1620	1620	1620	
5°	1618	1620	1622	1625	1624	154
15°	1545	1577	1613	1603	1583	436
25°	1413	1463	1537	1509	1483	646
35°	1172	1107	1173	1159	1186	736
45°	891	728	418	707	903	682
55°	450	450	156	470	549	409
65°	136	160	50	206	210	145
75°	21	24	7	42	41	30
85°	7	4	4	7	10	7
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°	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3
2.5°	1621.2	1622.9	1622.1	1622.1	1621.2	1622.1	1622.1	1623.8	1623.8	1622.1	1621.2
5°	1617.7	1619.4	1619.4	1617.7	1617.7	1622.1	1619.4	1621.2	1621.2	1620.3	1620.3
7.5°	1609.9	1609.9	1613.4	1610.8	1610.8	1613.4	1612.5	1614.2	1616.0	1616.9	1616.9
10°	1592.5	1594.2	1595.1	1595.1	1596.0	1598.6	1600.3	1603.8	1605.5	1607.3	1608.1
12.5°	1570.8	1573.4	1574.2	1573.4	1576.0	1579.4	1583.8	1588.1	1590.8	1594.2	1596.8
15°	1544.6	1544.6	1546.4	1549.0	1550.8	1556.0	1560.3	1565.5	1572.5	1576.8	1581.2
17.5°	1516.0	1517.7	1520.3	1520.3	1523.8	1532.5	1535.1	1542.9	1550.8	1555.1	1563.8
20°	1484.7	1486.4	1489.0	1490.7	1495.1	1502.0	1507.3	1514.2	1522.9	1530.7	1539.4
22.5°	1460.3	1456.8	1458.5	1460.3	1464.6	1470.7	1476.8	1485.5	1494.2	1502.0	1510.7
25°	1413.3	1414.2	1416.8	1418.5	1423.8	1429.0	1435.9	1446.4	1454.2	1462.9	1472.5
27.5°	1349.8	1350.7	1355.1	1355.1	1359.4	1368.1	1372.4	1381.1	1391.6	1400.3	1411.6
30°	1277.7	1279.4	1279.4	1282.9	1285.5	1289.8	1294.2	1302.9	1308.1	1315.9	1331.6
32.5°	1211.6	1213.3	1212.4	1211.6	1208.9	1208.1	1207.2	1208.9	1210.7	1213.3	1219.4
35°	1172.4	1168.1	1164.6	1158.5	1151.5	1142.8	1135.0	1124.6	1115.0	1107.2	1098.5
37.5°	1135.0	1134.1	1128.9	1120.2	1106.3	1090.7	1072.4	1049.8	1027.2	1002.8	979.3
40°	1082.8	1080.2	1075.9	1063.7	1048.0	1028.9	1004.6	976.7	940.2	902.8	864.5
42.5°	994.1	995.0	989.8	980.2	965.4	947.1	921.9	891.5	852.3	808.0	758.4
45°	890.6	890.6	888.9	881.0	870.6	855.8	836.7	811.5	773.2	728.0	674.9
47.5°	782.8	783.6	781.0	779.3	774.9	765.4	751.5	732.3	705.4	661.9	608.8
50°	673.2	673.2	677.5	676.7	676.7	673.2	667.1	655.8	632.3	597.5	547.9
52.5°	563.6	565.3	567.9	571.4	575.8	582.7	575.8	570.5	555.8	528.8	486.2
55°	450.5	452.3	456.6	462.7	467.9	474.9	476.6	476.6	468.8	450.5	418.3
57.5°	354.0	351.4	354.9	360.1	367.0	374.0	379.2	385.3	384.4	372.2	346.2
60°	266.1	267.0	269.6	274.8	280.1	286.1	293.1	298.3	300.9	294.8	278.3
62.5°	194.0	194.0	197.4	202.6	205.3	214.0	218.3	220.9	223.5	222.6	212.2
65°	135.7	137.4	139.2	141.8	144.4	149.6	152.2	157.4	159.2	160.0	152.2
67.5°	95.7	93.1	94.8	96.5	99.1	102.6	107.9	107.9	110.4	110.4	105.2
70°	60.9	60.9	61.8	64.4	66.1	67.0	68.7	70.4	73.1	72.2	72.2
72.5°	40.9	40.0	40.9	41.8	42.6	45.2	45.2	46.1	47.8	48.7	45.2
75°	20.9	21.7	23.5	22.6	25.2	23.5	24.3	27.0	26.1	24.3	24.3
77.5°	17.4	17.4	17.4	16.5	18.3	18.3	17.4	19.1	18.3	18.3	17.4
80°	12.2	13.0	12.2	11.3	12.2	11.3	11.3	11.3	11.3	11.3	10.4
82.5°	9.6	7.8	8.7	7.8	8.7	8.7	7.8	7.0	7.0	7.8	7.0
85°	7.0	5.2	6.1	6.1	5.2	5.2	5.2	5.2	5.2	4.3	4.3
87.5°	4.3	2.6	2.6	2.6	3.5	3.5	3.5	2.6	3.5	3.5	1.7
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3
2.5°	1622.9	1622.1	1623.8	1622.9	1622.9	1622.1	1622.9	1622.1	1623.8	1620.3	1621.2
5°	1622.9	1621.2	1622.1	1622.9	1623.8	1622.1	1622.1	1622.1	1623.8	1622.1	1622.9
7.5°	1619.4	1618.6	1621.2	1622.9	1622.1	1621.2	1622.9	1622.1	1623.8	1622.9	1624.7
10°	1612.5	1613.4	1615.1	1617.7	1618.6	1619.4	1621.2	1621.2	1623.8	1620.3	1622.1
12.5°	1602.1	1605.5	1609.9	1611.6	1615.1	1615.1	1616.9	1617.7	1619.4	1618.6	1621.2
15°	1589.0	1593.4	1598.6	1602.9	1607.3	1609.9	1612.5	1613.4	1616.0	1613.4	1614.2
17.5°	1573.4	1578.6	1586.4	1591.6	1598.6	1601.2	1604.7	1606.4	1609.0	1607.3	1608.1
20°	1551.6	1557.7	1566.4	1574.2	1578.6	1584.7	1589.0	1591.6	1593.4	1591.6	1592.5
22.5°	1521.2	1529.9	1541.2	1547.3	1556.0	1561.2	1562.1	1568.1	1572.5	1568.1	1569.9
25°	1485.5	1494.2	1502.9	1516.0	1523.8	1529.9	1536.0	1536.8	1541.2	1540.3	1539.4
27.5°	1426.4	1437.7	1452.5	1462.9	1473.3	1482.9	1489.9	1491.6	1496.0	1494.2	1495.1
30°	1345.5	1357.7	1371.6	1388.1	1402.9	1412.4	1421.2	1427.2	1431.6	1429.0	1428.1
32.5°	1230.7	1242.9	1257.6	1274.2	1291.6	1305.5	1315.9	1323.7	1329.0	1327.2	1322.9
35°	1099.4	1102.8	1112.4	1125.4	1140.2	1155.0	1164.6	1173.3	1179.4	1181.1	1181.1
37.5°	964.5	953.2	946.3	946.3	955.0	961.1	969.8	975.0	984.5	988.0	990.6
40°	834.1	808.0	783.6	765.4	753.2	752.3	752.3	754.9	763.6	774.9	785.4
42.5°	717.5	675.8	638.4	604.5	580.1	566.2	560.1	561.0	567.9	578.4	595.8
45°	624.5	572.3	525.3	484.4	451.4	429.6	419.2	418.3	423.6	435.7	454.9
47.5°	552.3	496.6	443.6	396.6	360.9	337.5	325.3	321.8	325.3	336.6	359.2
50°	492.3	434.9	380.1	331.4	293.1	268.8	257.4	253.1	257.4	267.0	289.6
52.5°	436.6	377.5	326.2	279.2	238.3	217.4	205.3	202.6	205.3	216.6	234.8
55°	372.2	321.8	271.4	224.4	188.7	167.9	158.3	155.7	158.3	168.7	187.9
57.5°	308.8	265.3	220.9	178.3	147.9	129.6	120.9	117.4	123.5	130.5	153.1
60°	249.6	214.8	177.4	140.0	114.8	98.3	91.3	90.4	92.2	100.9	116.5
62.5°	195.7	167.0	137.4	107.0	86.1	79.1	70.4	69.6	71.3	76.5	88.7
65°	140.9	122.6	100.0	78.3	61.8	52.2	48.7	49.6	51.3	54.8	66.1
67.5°	98.3	85.2	69.6	54.8	42.6	38.3	34.8	33.9	34.8	40.9	47.0
70°	66.1	58.3	47.0	41.8	29.6	23.5	24.3	21.7	25.2	25.2	30.4
72.5°	43.5	38.3	31.3	24.3	20.9	16.5	16.5	15.7	17.4	18.3	22.6
75°	22.6	17.4	17.4	12.2	8.7	4.3	7.8	7.0	6.1	7.0	8.7
77.5°	15.7	13.0	12.2	9.6	8.7	7.0	7.0	7.0	7.0	7.8	8.7
80°	9.6	9.6	7.0	6.1	5.2	4.3	5.2	5.2	5.2	5.2	6.1
82.5°	6.1	5.2	5.2	4.3	4.3	3.5	3.5	3.5	3.5	3.5	5.2
85°	5.2	3.5	3.5	2.6	3.5	6.1	2.6	3.5	3.5	3.5	2.6
87.5°	1.7	2.6	2.6	2.6	1.7	0.9	1.7	2.6	2.6	4.3	3.5
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°	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3	1620.3
2.5°	1622.9	1623.8	1623.8	1622.9	1622.9	1621.2	1624.7	1622.1	1622.9	1626.4	1623.8
5°	1624.7	1625.5	1625.5	1624.7	1624.7	1624.7	1625.5	1625.5	1624.7	1623.8	1625.5
7.5°	1628.2	1627.3	1627.3	1625.5	1625.5	1623.8	1625.5	1622.9	1624.7	1622.9	1625.5
10°	1623.8	1624.7	1623.8	1622.9	1622.9	1622.1	1622.1	1619.4	1620.3	1617.7	1619.4
12.5°	1621.2	1620.3	1620.3	1618.6	1616.9	1615.1	1614.2	1611.6	1611.6	1605.5	1608.1
15°	1614.2	1615.1	1612.5	1609.0	1607.3	1602.9	1601.2	1597.7	1594.2	1589.9	1590.8
17.5°	1608.1	1605.5	1602.1	1598.6	1591.6	1588.1	1584.7	1579.4	1577.7	1572.5	1570.8
20°	1589.9	1588.1	1583.8	1577.7	1573.4	1565.5	1562.1	1556.8	1552.5	1547.3	1544.6
22.5°	1566.4	1564.6	1559.4	1553.3	1546.4	1542.9	1539.4	1529.9	1525.5	1520.3	1519.4
25°	1536.8	1534.2	1529.0	1522.0	1518.6	1509.0	1505.5	1498.6	1496.8	1491.6	1490.7
27.5°	1491.6	1488.1	1482.0	1473.3	1467.2	1461.2	1457.7	1452.5	1450.7	1445.5	1444.6
30°	1423.8	1419.4	1407.2	1403.8	1393.3	1387.2	1387.2	1380.3	1381.1	1377.7	1377.7
32.5°	1316.8	1309.8	1300.3	1293.3	1286.3	1282.9	1282.9	1280.2	1282.0	1282.0	1283.7
35°	1175.0	1165.5	1160.2	1155.9	1155.9	1159.4	1169.8	1172.4	1177.6	1182.0	1185.5
37.5°	993.2	992.4	998.5	1003.7	1016.7	1031.5	1049.8	1065.4	1080.2	1090.7	1101.1
40°	796.7	818.4	835.8	860.2	880.2	908.9	941.9	968.9	994.1	1012.4	1031.5
42.5°	621.9	649.7	686.2	721.9	757.5	796.7	840.2	877.6	910.6	935.8	955.8
45°	484.4	522.7	567.1	612.3	658.4	707.1	752.3	790.6	825.4	851.5	871.5
47.5°	390.5	432.3	482.7	532.3	584.5	635.8	686.2	719.3	748.0	768.8	787.1
50°	322.7	367.0	420.1	476.6	528.8	580.1	623.6	655.8	679.3	697.5	708.8
52.5°	269.6	316.6	373.1	429.6	481.8	528.8	567.9	592.3	611.4	624.5	634.9
55°	222.6	267.9	320.9	374.0	425.3	469.7	501.8	520.1	534.9	542.7	548.8
57.5°	181.8	223.5	272.2	320.9	365.3	401.8	427.0	445.3	452.3	458.4	457.5
60°	142.6	181.8	226.1	267.9	306.1	335.7	354.0	364.4	369.6	372.2	370.5
62.5°	112.2	147.9	181.8	218.3	246.1	271.4	288.8	288.8	291.4	292.2	294.8
65°	83.5	110.4	140.0	167.0	189.6	206.1	215.7	218.3	221.8	220.9	219.2
67.5°	61.8	81.8	103.5	123.5	139.2	149.6	156.5	162.7	161.8	160.0	159.2
70°	42.6	55.7	74.8	87.0	98.3	108.7	110.4	111.3	112.2	113.1	111.3
72.5°	29.6	39.1	49.6	60.0	67.0	71.3	75.7	76.5	76.5	76.5	75.7
75°	14.8	20.0	29.6	33.9	40.0	41.8	45.2	45.2	47.8	44.4	43.5
77.5°	13.0	15.7	20.9	24.3	27.0	29.6	30.4	33.0	32.2	30.4	31.3
80°	7.8	9.6	13.0	14.8	18.3	19.1	20.0	20.9	20.0	20.9	20.9
82.5°	6.1	7.0	8.7	8.7	11.3	11.3	12.2	12.2	13.0	13.0	13.0
85°	3.5	6.1	5.2	10.4	7.0	7.0	8.7	10.4	8.7	8.7	10.4
87.5°	3.5	3.5	2.6	3.5	3.5	3.5	4.3	5.2	5.2	6.1	5.2
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: P246238

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1620.3	1620.3	1620.3	1620.3
2.5°	1622.9	1624.7	1622.1	1621.2
5°	1625.5	1625.5	1623.8	1623.8
7.5°	1625.5	1625.5	1622.9	1621.2
10°	1618.6	1618.6	1616.0	1614.2
12.5°	1605.5	1605.5	1604.7	1602.1
15°	1589.0	1589.0	1585.5	1582.9
17.5°	1566.4	1568.1	1563.8	1563.8
20°	1542.0	1541.2	1537.7	1536.0
22.5°	1516.8	1515.1	1514.2	1509.0
25°	1489.9	1488.1	1485.5	1482.9
27.5°	1443.8	1442.9	1440.3	1436.8
30°	1373.3	1372.4	1369.0	1369.0
32.5°	1282.0	1281.1	1277.7	1278.5
35°	1187.2	1190.7	1188.9	1185.5
37.5°	1108.0	1110.7	1112.4	1110.7
40°	1041.9	1049.8	1050.6	1052.4
42.5°	971.5	981.9	985.4	987.1
45°	887.1	896.7	904.5	902.8
47.5°	801.0	808.0	814.9	809.7
50°	718.4	722.7	725.4	725.4
52.5°	640.1	640.1	639.3	640.1
55°	550.5	550.5	547.1	548.8
57.5°	456.6	458.4	455.7	451.4
60°	369.6	365.3	363.5	360.9
62.5°	287.9	287.9	281.8	289.6
65°	215.7	213.1	210.5	209.6
67.5°	156.5	155.7	153.1	152.2
70°	110.4	107.0	106.1	104.4
72.5°	73.9	73.9	72.2	72.2
75°	45.2	40.9	40.0	40.9
77.5°	31.3	30.4	30.4	29.6
80°	20.9	20.0	21.7	19.1
82.5°	13.0	13.9	13.0	13.9
85°	8.7	10.4	9.6	9.6
87.5°	5.2	5.2	5.2	5.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)