

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: P246094

Luminaire Tested: **LSR8B40D010 EC8B409727 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246094
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 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3036.0 lumens
Efficiency: N/A
Efficacy: 74.2 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

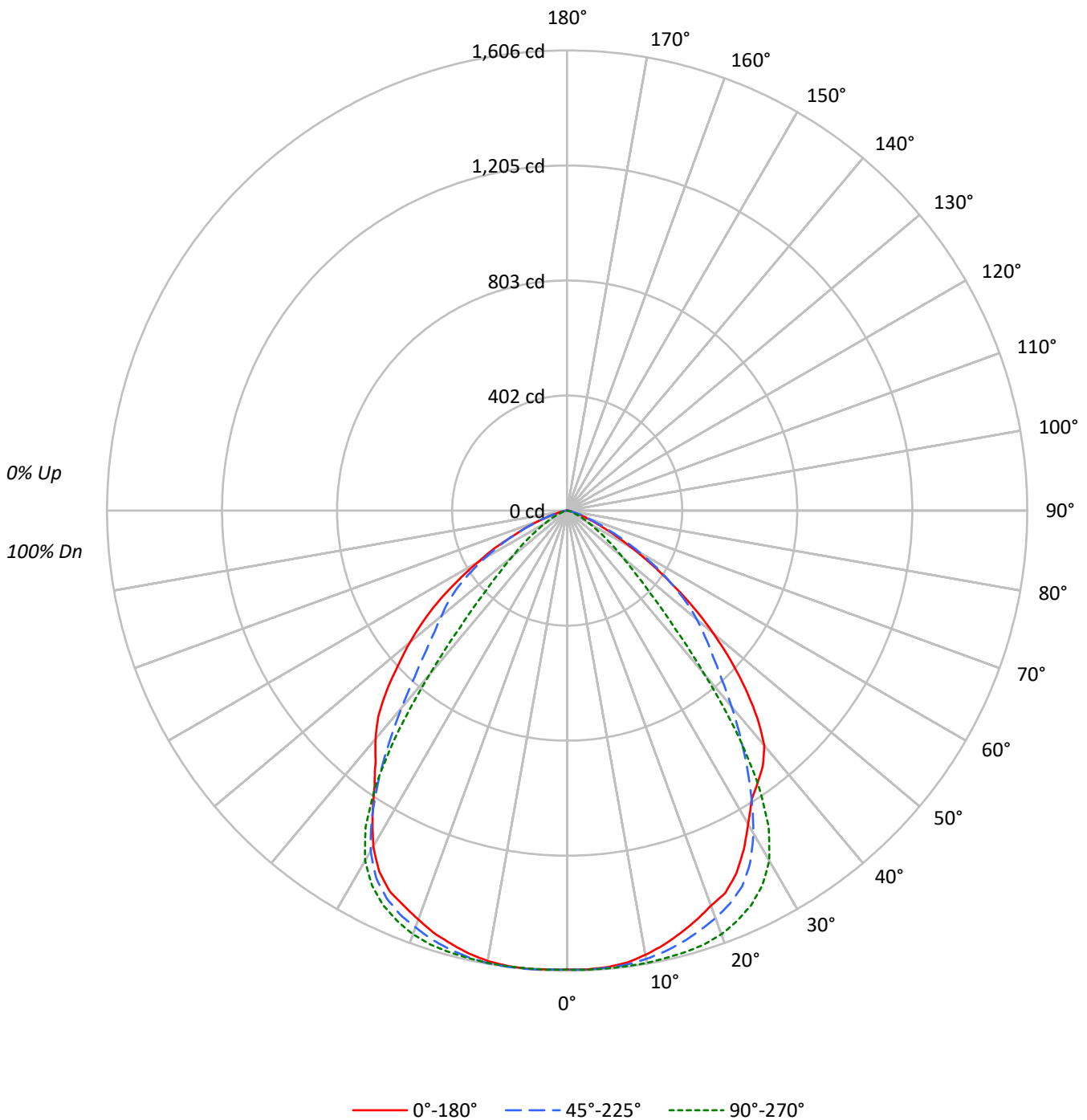
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	152.9	5.0
10°-20°	444.0	14.6
20°-30°	673.9	22.2
30°-40°	707.8	23.3
40°-50°	530.6	17.5
50°-60°	340.5	11.2
60°-70°	145.6	4.8
70°-80°	34.4	1.1
80°-90°	6.4	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°	1270.7	41.9
0°-40°	1978.5	65.2
0°-60°	2849.5	93.9
0°-90°	3036.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3036.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1602	1602	1602	1602	1602	
5°	1599	1602	1604	1606	1605	152
15°	1527	1559	1595	1585	1565	431
25°	1397	1446	1519	1492	1466	638
35°	1159	1095	1160	1146	1172	727
45°	880	720	414	699	892	674
55°	445	445	154	464	542	404
65°	134	158	49	204	207	143
75°	21	24	7	41	40	30
85°	7	4	3	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°	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9
2.5°	1602.7	1604.4	1603.6	1603.6	1602.7	1603.6	1603.6	1605.3	1605.3	1603.6	1602.7
5°	1599.3	1601.0	1601.0	1599.3	1599.3	1603.6	1601.0	1602.7	1602.7	1601.9	1601.9
7.5°	1591.5	1591.5	1595.0	1592.4	1592.4	1595.0	1594.1	1595.8	1597.6	1598.4	1598.4
10°	1574.3	1576.1	1576.9	1576.9	1577.8	1580.4	1582.1	1585.5	1587.2	1589.0	1589.8
12.5°	1552.9	1555.4	1556.3	1555.4	1558.0	1561.4	1565.8	1570.0	1572.6	1576.1	1578.6
15°	1527.0	1527.0	1528.8	1531.4	1533.1	1538.2	1542.5	1547.7	1554.6	1558.9	1563.2
17.5°	1498.7	1500.4	1503.0	1503.0	1506.4	1515.0	1517.6	1525.3	1533.1	1537.4	1546.0
20°	1467.7	1469.4	1472.0	1473.7	1478.0	1484.9	1490.1	1497.0	1505.6	1513.3	1521.9
22.5°	1443.6	1440.2	1441.9	1443.6	1448.0	1454.0	1460.0	1468.6	1477.2	1484.9	1493.5
25°	1397.2	1398.1	1400.7	1402.4	1407.5	1412.7	1419.6	1429.9	1437.6	1446.2	1455.7
27.5°	1334.5	1335.3	1339.6	1339.6	1343.9	1352.5	1356.8	1365.4	1375.7	1384.3	1395.5
30°	1263.1	1264.8	1264.8	1268.2	1270.8	1275.1	1279.4	1288.0	1293.2	1300.9	1316.4
32.5°	1197.7	1199.4	1198.6	1197.7	1195.2	1194.3	1193.4	1195.2	1196.9	1199.4	1205.5
35°	1159.1	1154.7	1151.3	1145.3	1138.4	1129.8	1122.1	1111.8	1102.3	1094.6	1086.0
37.5°	1122.1	1121.2	1116.1	1107.4	1093.7	1078.2	1060.2	1037.8	1015.4	991.4	968.2
40°	1070.5	1067.9	1063.6	1051.6	1036.1	1017.2	993.1	965.6	929.5	892.5	854.7
42.5°	982.8	983.6	978.5	969.0	954.4	936.3	911.4	881.3	842.6	798.8	749.8
45°	880.5	880.5	878.7	871.0	860.7	846.1	827.2	802.2	764.4	719.7	667.2
47.5°	773.8	774.7	772.1	770.4	766.1	756.7	742.9	724.0	697.3	654.3	601.9
50°	665.5	665.5	669.8	668.9	668.9	665.5	659.5	648.3	625.1	590.7	541.7
52.5°	557.2	558.9	561.5	564.9	569.2	576.1	569.2	564.0	549.4	522.8	480.6
55°	445.4	447.1	451.4	457.4	462.6	469.5	471.2	471.2	463.4	445.4	413.6
57.5°	350.0	347.4	350.8	356.0	362.9	369.7	374.9	380.9	380.0	368.0	342.2
60°	263.1	264.0	266.5	271.7	276.9	282.9	289.8	294.9	297.5	291.5	275.1
62.5°	191.7	191.7	195.2	200.3	202.9	211.5	215.8	218.4	221.0	220.1	209.8
65°	134.1	135.8	137.6	140.2	142.7	147.9	150.5	155.6	157.3	158.2	150.5
67.5°	94.6	92.0	93.7	95.4	98.0	101.5	106.6	106.6	109.2	109.2	104.0
70°	60.2	60.2	61.1	63.6	65.3	66.2	67.9	69.6	72.2	71.4	71.4
72.5°	40.4	39.6	40.4	41.3	42.1	44.7	44.7	45.6	47.3	48.2	44.7
75°	20.6	21.5	23.2	22.4	24.9	23.2	24.1	26.7	25.8	24.1	24.1
77.5°	17.2	17.2	17.2	16.3	18.1	18.1	17.2	18.9	18.1	18.1	17.2
80°	12.0	12.9	12.0	11.2	12.0	11.2	11.2	11.2	11.2	11.2	10.3
82.5°	9.5	7.7	8.6	7.7	8.6	8.6	7.7	6.9	6.9	7.7	6.9
85°	6.9	5.2	6.0	6.0	5.2	5.2	5.2	5.2	5.2	4.3	4.3
87.5°	4.3	2.6	2.6	2.6	3.4	3.4	3.4	2.6	3.4	3.4	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°	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9
2.5°	1604.4	1603.6	1605.3	1604.4	1604.4	1603.6	1604.4	1603.6	1605.3	1601.9	1602.7
5°	1604.4	1602.7	1603.6	1604.4	1605.3	1603.6	1603.6	1603.6	1605.3	1603.6	1604.4
7.5°	1601.0	1600.1	1602.7	1604.4	1603.6	1602.7	1604.4	1603.6	1605.3	1604.4	1606.1
10°	1594.1	1595.0	1596.7	1599.3	1600.1	1601.0	1602.7	1602.7	1605.3	1601.9	1603.6
12.5°	1583.8	1587.2	1591.5	1593.2	1596.7	1596.7	1598.4	1599.3	1601.0	1600.1	1602.7
15°	1570.9	1575.2	1580.4	1584.7	1589.0	1591.5	1594.1	1595.0	1597.6	1595.0	1595.8
17.5°	1555.4	1560.6	1568.3	1573.5	1580.4	1582.9	1586.4	1588.1	1590.7	1589.0	1589.8
20°	1533.9	1540.0	1548.5	1556.3	1560.6	1566.6	1570.9	1573.5	1575.2	1573.5	1574.3
22.5°	1503.8	1512.4	1523.6	1529.6	1538.2	1543.4	1544.2	1550.3	1554.6	1550.3	1552.0
25°	1468.6	1477.2	1485.8	1498.7	1506.4	1512.4	1518.5	1519.3	1523.6	1522.7	1521.9
27.5°	1410.1	1421.3	1435.9	1446.2	1456.5	1466.0	1472.9	1474.6	1478.9	1477.2	1478.0
30°	1330.1	1342.2	1356.0	1372.3	1386.9	1396.3	1405.0	1411.0	1415.3	1412.7	1411.8
32.5°	1216.7	1228.7	1243.3	1259.6	1276.8	1290.6	1300.9	1308.7	1313.8	1312.1	1307.8
35°	1086.8	1090.3	1099.7	1112.6	1127.2	1141.8	1151.3	1159.9	1165.9	1167.6	1167.6
37.5°	953.6	942.4	935.5	935.5	944.1	950.1	958.7	963.9	973.3	976.8	979.3
40°	824.6	798.8	774.7	756.7	744.6	743.8	743.8	746.3	754.9	766.1	776.4
42.5°	709.4	668.1	631.1	597.6	573.5	559.8	553.7	554.6	561.5	571.8	589.0
45°	617.4	565.8	519.3	478.9	446.2	424.7	414.4	413.6	418.7	430.8	449.7
47.5°	546.0	491.0	438.5	392.1	356.8	333.6	321.6	318.1	321.6	332.7	355.1
50°	486.7	429.9	375.7	327.6	289.8	265.7	254.5	250.2	254.5	264.0	286.3
52.5°	431.6	373.2	322.4	276.0	235.6	215.0	202.9	200.3	202.9	214.1	232.2
55°	368.0	318.1	268.3	221.8	186.6	166.0	156.5	153.9	156.5	166.8	185.7
57.5°	305.2	262.2	218.4	176.3	146.2	128.1	119.5	116.1	122.1	129.0	151.3
60°	246.8	212.4	175.4	138.4	113.5	97.2	90.3	89.4	91.1	99.7	115.2
62.5°	193.5	165.1	135.8	105.8	85.1	78.2	69.6	68.8	70.5	75.7	87.7
65°	139.3	121.2	98.9	77.4	61.1	51.6	48.2	49.0	50.7	54.2	65.3
67.5°	97.2	84.3	68.8	54.2	42.1	37.8	34.4	33.5	34.4	40.4	46.4
70°	65.3	57.6	46.4	41.3	29.2	23.2	24.1	21.5	24.9	24.9	30.1
72.5°	43.0	37.8	30.9	24.1	20.6	16.3	16.3	15.5	17.2	18.1	22.4
75°	22.4	17.2	17.2	12.0	8.6	4.3	7.7	6.9	6.0	6.9	8.6
77.5°	15.5	12.9	12.0	9.5	8.6	6.9	6.9	6.9	6.9	7.7	8.6
80°	9.5	9.5	6.9	6.0	5.2	4.3	5.2	5.2	5.2	5.2	6.0
82.5°	6.0	5.2	5.2	4.3	4.3	3.4	3.4	3.4	3.4	3.4	5.2
85°	5.2	3.4	3.4	2.6	3.4	6.0	2.6	3.4	3.4	3.4	2.6
87.5°	1.7	2.6	2.6	2.6	1.7	0.9	1.7	2.6	2.6	4.3	3.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9	1601.9
2.5°	1604.4	1605.3	1605.3	1604.4	1604.4	1602.7	1606.1	1603.6	1604.4	1607.9	1605.3
5°	1606.1	1607.0	1607.0	1606.1	1606.1	1606.1	1607.0	1607.0	1606.1	1605.3	1607.0
7.5°	1609.6	1608.7	1608.7	1607.0	1607.0	1605.3	1607.0	1604.4	1606.1	1604.4	1607.0
10°	1605.3	1606.1	1605.3	1604.4	1604.4	1603.6	1603.6	1601.0	1601.9	1599.3	1601.0
12.5°	1602.7	1601.9	1601.9	1600.1	1598.4	1596.7	1595.8	1593.2	1593.2	1587.2	1589.8
15°	1595.8	1596.7	1594.1	1590.7	1589.0	1584.7	1582.9	1579.5	1576.1	1571.8	1572.6
17.5°	1589.8	1587.2	1583.8	1580.4	1573.5	1570.0	1566.6	1561.4	1559.7	1554.6	1552.9
20°	1571.8	1570.0	1565.8	1559.7	1555.4	1547.7	1544.2	1539.1	1534.8	1529.6	1527.0
22.5°	1548.5	1546.8	1541.7	1535.6	1528.8	1525.3	1521.9	1512.4	1508.1	1503.0	1502.1
25°	1519.3	1516.7	1511.6	1504.7	1501.2	1491.8	1488.4	1481.5	1479.8	1474.6	1473.7
27.5°	1474.6	1471.2	1465.1	1456.5	1450.5	1444.5	1441.1	1435.9	1434.2	1429.0	1428.2
30°	1407.5	1403.2	1391.2	1387.8	1377.4	1371.4	1371.4	1364.5	1365.4	1362.0	1362.0
32.5°	1301.8	1294.9	1285.4	1278.6	1271.7	1268.2	1268.2	1265.7	1267.4	1267.4	1269.1
35°	1161.6	1152.2	1147.0	1142.7	1142.7	1146.1	1156.5	1159.1	1164.2	1168.5	1172.0
37.5°	981.9	981.1	987.1	992.2	1005.1	1019.8	1037.8	1053.3	1067.9	1078.2	1088.5
40°	787.6	809.1	826.3	850.4	870.1	898.5	931.2	957.8	982.8	1000.8	1019.8
42.5°	614.8	642.3	678.4	713.6	748.9	787.6	830.6	867.6	900.2	925.2	944.9
45°	478.9	516.7	560.6	605.3	650.9	699.0	743.8	781.6	816.0	841.8	861.5
47.5°	386.1	427.3	477.2	526.2	577.8	628.5	678.4	711.1	739.4	760.1	778.2
50°	319.0	362.9	415.3	471.2	522.8	573.5	616.5	648.3	671.5	689.6	700.8
52.5°	266.5	313.0	368.9	424.7	476.3	522.8	561.5	585.5	604.5	617.4	627.7
55°	220.1	264.8	317.3	369.7	420.5	464.3	496.1	514.2	528.8	536.5	542.5
57.5°	179.7	221.0	269.1	317.3	361.1	397.2	422.2	440.2	447.1	453.1	452.3
60°	141.0	179.7	223.6	264.8	302.7	331.9	350.0	360.3	365.4	368.0	366.3
62.5°	110.9	146.2	179.7	215.8	243.3	268.3	285.5	285.5	288.0	288.9	291.5
65°	82.5	109.2	138.4	165.1	187.4	203.8	213.2	215.8	219.3	218.4	216.7
67.5°	61.1	80.8	102.3	122.1	137.6	147.9	154.8	160.8	159.9	158.2	157.3
70°	42.1	55.0	74.0	86.0	97.2	107.5	109.2	110.1	110.9	111.8	110.1
72.5°	29.2	38.7	49.0	59.3	66.2	70.5	74.8	75.7	75.7	75.7	74.8
75°	14.6	19.8	29.2	33.5	39.6	41.3	44.7	44.7	47.3	43.8	43.0
77.5°	12.9	15.5	20.6	24.1	26.7	29.2	30.1	32.7	31.8	30.1	30.9
80°	7.7	9.5	12.9	14.6	18.1	18.9	19.8	20.6	19.8	20.6	20.6
82.5°	6.0	6.9	8.6	8.6	11.2	11.2	12.0	12.0	12.9	12.9	12.9
85°	3.4	6.0	5.2	10.3	6.9	6.9	8.6	10.3	8.6	8.6	10.3
87.5°	3.4	3.4	2.6	3.4	3.4	3.4	4.3	5.2	5.2	6.0	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: P246094

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1601.9	1601.9	1601.9	1601.9
2.5°	1604.4	1606.1	1603.6	1602.7
5°	1607.0	1607.0	1605.3	1605.3
7.5°	1607.0	1607.0	1604.4	1602.7
10°	1600.1	1600.1	1597.6	1595.8
12.5°	1587.2	1587.2	1586.4	1583.8
15°	1570.9	1570.9	1567.5	1564.9
17.5°	1548.5	1550.3	1546.0	1546.0
20°	1524.5	1523.6	1520.2	1518.5
22.5°	1499.5	1497.8	1497.0	1491.8
25°	1472.9	1471.2	1468.6	1466.0
27.5°	1427.3	1426.5	1423.9	1420.4
30°	1357.7	1356.8	1353.4	1353.4
32.5°	1267.4	1266.5	1263.1	1264.0
35°	1173.7	1177.1	1175.4	1172.0
37.5°	1095.4	1098.0	1099.7	1098.0
40°	1030.1	1037.8	1038.7	1040.4
42.5°	960.4	970.7	974.2	975.9
45°	877.0	886.5	894.2	892.5
47.5°	791.9	798.8	805.7	800.5
50°	710.2	714.5	717.1	717.1
52.5°	632.8	632.8	632.0	632.8
55°	544.3	544.3	540.8	542.5
57.5°	451.4	453.1	450.5	446.2
60°	365.4	361.1	359.4	356.8
62.5°	284.6	284.6	278.6	286.3
65°	213.2	210.7	208.1	207.2
67.5°	154.8	153.9	151.3	150.5
70°	109.2	105.8	104.9	103.2
72.5°	73.1	73.1	71.4	71.4
75°	44.7	40.4	39.6	40.4
77.5°	30.9	30.1	30.1	29.2
80°	20.6	19.8	21.5	18.9
82.5°	12.9	13.8	12.9	13.8
85°	8.6	10.3	9.5	9.5
87.5°	5.2	5.2	5.2	5.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)