

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: io LED

Report Number: P273476

Luminaire Tested: **0.05-12W-835-30-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273476
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-246-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 0.05-12W-835-30-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 30 DEGREE OPTIC.
V2 HIGH OUTPUT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2189.4 lumens
Efficiency: N/A
Efficacy: 62.2 lumens/watt
Spacing Criteria (0/90/45): 0.73 / 1.67 / 0.84
Luminous Opening: Rectangular (W 2.92' x L: 0.21' x H: 0')
CIE Type: Direct

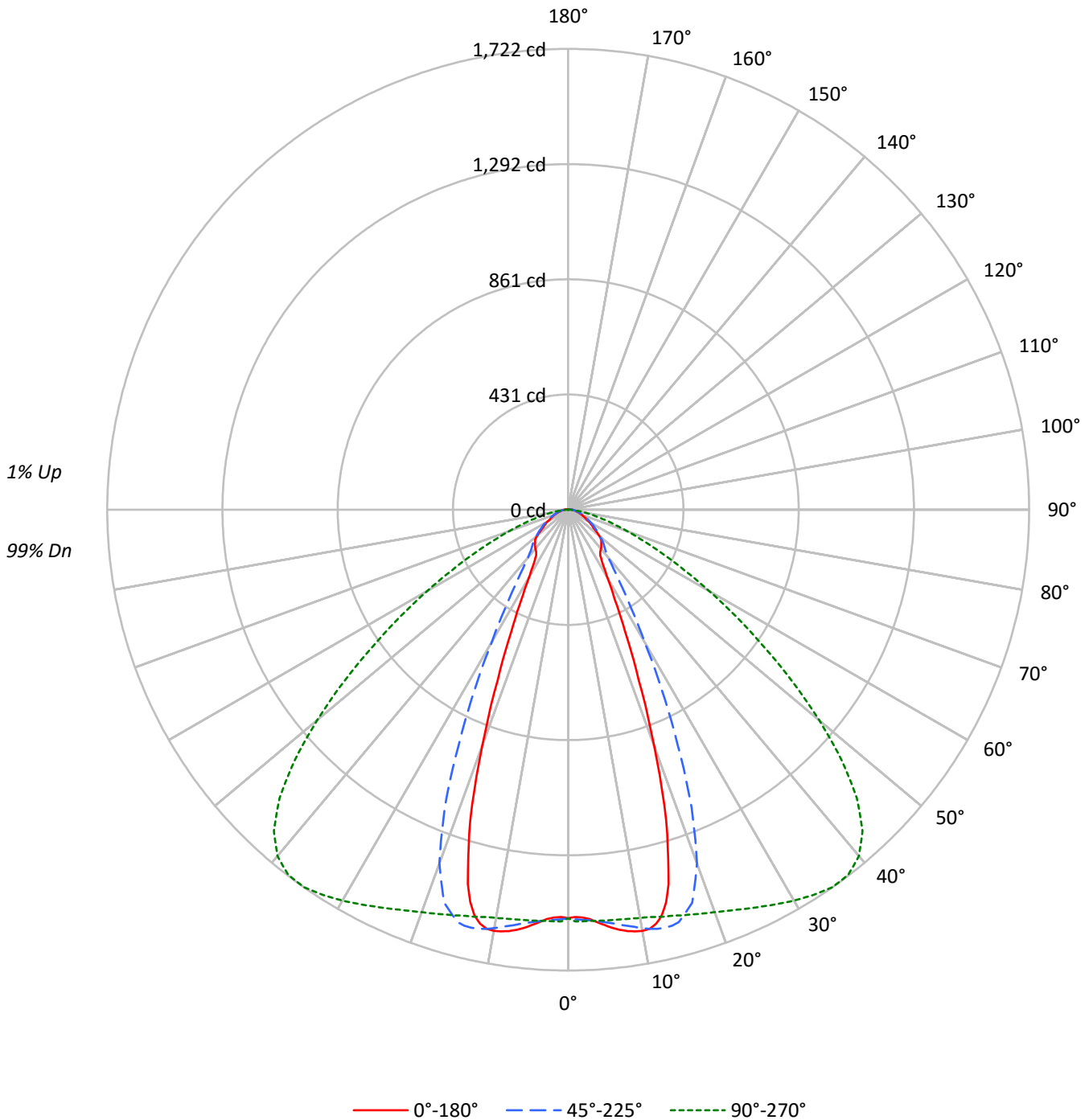
Input Watts (W): 35.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	99
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	82	80	78
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	71	69
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56
6	79	67	60	55	77	67	59	54	65	59	54	63	58	53	62	57	53	51
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	52	49	47
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43
9	66	54	47	42	64	54	47	42	52	46	42	51	46	42	50	45	41	40
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	47	42	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27039	27039	27039
5°	27708	27503	27402
10°	28757	28561	27868
15°	26564	29271	28794
20°	17650	26522	30168
25°	9796	18891	32070
30°	5997	11678	34499
35°	4509	7443	37236
40°	4412	5374	39073
45°	4389	4755	38189
50°	4183	4285	33729
55°	3499	3839	27521
60°	3167	3536	21551
65°	2834	3160	16301
70°	2693	2937	12120
75°	2703	2916	9041
80°	2918	3183	6468
85°	4329	4654	4024



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.5	6.8
10°-20°	425.3	19.4
20°-30°	480.9	22.0
30°-40°	395.4	18.1
40°-50°	307.5	14.0
50°-60°	211.9	9.7
60°-70°	123.0	5.6
70°-80°	60.9	2.8
80°-90°	24.1	1.1
90°-100°	8.6	0.4
100°-110°	3.1	0.1
110°-120°	0.2	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°	1054.7	48.2
0°-40°	1450.1	66.2
0°-60°	1969.5	90.0
0°-90°	2177.4	99.5
90°-120°	12.0	0.5
90°-150°	12.0	0.5
90°-180°	12.0	0.5
0°-180°	2189.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1526	1526	1526	1526	1526	
5°	1558	1553	1547	1530	1541	150
15°	1448	1504	1596	1586	1570	381
25°	501	593	966	1548	1641	244
35°	208	223	344	952	1722	138
45°	175	172	190	428	1524	135
55°	113	116	124	233	891	104
65°	68	68	75	130	389	68
75°	40	40	43	60	132	42
85°	21	22	23	20	20	19
90°	15	16	16	10	1	8
95°	11	11	10	4	0	9
105°	6	5	3	0	0	6
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1526.4	1526.4	1526.4	1526.4	1526.4	1526.4	1526.4	1526.4	1526.4	1526.4	1526.4
1°	1521.8	1521.2	1518.1	1520.2	1525.9	1531.1	1533.7	1532.7	1532.2	1531.1	1530.6
2°	1524.4	1523.8	1521.2	1523.3	1529.0	1534.2	1536.3	1535.3	1533.7	1533.2	1531.6
3°	1532.2	1531.6	1528.5	1530.1	1535.3	1538.9	1540.0	1538.9	1537.4	1536.3	1534.2
4°	1544.6	1543.6	1539.4	1539.4	1543.1	1545.2	1545.7	1544.1	1543.1	1541.0	1538.4
5°	1558.2	1556.1	1550.9	1550.4	1552.4	1554.0	1553.0	1551.4	1549.3	1546.7	1544.1
6°	1570.6	1569.1	1562.8	1561.8	1563.4	1563.4	1561.3	1558.7	1557.1	1553.5	1549.8
7°	1581.6	1579.5	1573.8	1572.7	1574.3	1573.8	1571.7	1568.6	1566.0	1561.3	1557.1
8°	1589.9	1587.8	1582.6	1581.6	1584.2	1583.6	1582.1	1579.0	1575.8	1570.1	1564.4
9°	1595.6	1593.0	1588.3	1588.3	1591.9	1592.5	1591.4	1588.8	1585.7	1578.4	1573.2
10°	1598.7	1595.1	1591.9	1591.9	1596.6	1599.2	1598.7	1596.6	1594.0	1587.8	1582.1
11°	1595.6	1590.9	1589.9	1591.4	1597.1	1601.3	1602.9	1602.9	1601.3	1595.6	1590.4
12°	1581.6	1577.4	1578.4	1579.5	1589.3	1596.6	1601.3	1604.4	1605.5	1600.8	1598.2
13°	1555.6	1550.9	1552.4	1558.2	1572.2	1583.1	1593.0	1600.3	1606.0	1603.9	1604.4
14°	1511.4	1505.6	1515.0	1519.2	1540.0	1557.1	1573.2	1587.3	1599.2	1602.3	1607.5
15°	1448.5	1443.3	1456.8	1462.5	1491.1	1516.0	1540.0	1563.4	1584.7	1596.1	1606.5
17.5°	1217.1	1211.4	1231.1	1256.6	1293.5	1346.6	1389.7	1443.8	1496.3	1540.0	1576.9
20°	936.3	940.0	953.5	978.5	1028.4	1086.6	1152.6	1235.3	1319.5	1406.9	1485.4
22.5°	687.8	692.0	703.4	726.8	771.5	832.4	894.8	985.2	1084.5	1204.1	1324.2
25°	501.2	508.5	513.7	535.0	570.9	614.5	671.2	745.5	841.7	966.5	1109.0
27.5°	376.9	381.1	386.3	401.4	425.3	457.5	503.8	561.5	643.1	751.8	883.8
30°	293.2	294.8	300.0	310.9	324.9	349.9	382.7	425.8	484.6	570.9	680.6
32.5°	238.1	239.2	242.3	247.5	259.4	275.5	299.5	332.2	374.3	440.9	526.7
35°	208.5	209.0	210.6	212.6	218.4	227.2	242.3	266.2	296.9	344.2	411.2
37.5°	197.0	197.0	197.6	198.1	199.6	202.8	210.0	223.0	243.3	278.7	328.6
40°	190.8	190.8	190.8	189.8	190.3	191.3	194.4	200.7	210.0	232.4	267.2
42.5°	183.5	183.0	182.5	181.4	180.9	182.0	185.6	188.7	193.9	205.4	226.7
45°	175.2	175.2	174.7	172.6	172.1	171.6	172.6	175.2	181.4	189.8	201.7
47.5°	167.4	166.9	165.3	162.2	161.2	161.2	162.2	162.7	165.3	173.6	184.6
50°	151.8	151.8	151.8	149.7	149.7	149.2	149.2	150.8	152.3	155.5	164.8
52.5°	131.0	131.0	131.5	131.0	134.1	134.7	135.2	135.7	137.3	140.9	146.6
55°	113.3	113.3	114.4	113.9	114.9	117.0	120.1	123.2	123.2	124.3	130.5
57.5°	101.4	101.4	101.9	100.9	101.4	101.9	103.5	107.1	110.2	111.8	115.4
60°	89.4	89.9	89.9	89.4	90.5	91.0	91.5	93.6	95.1	99.8	102.9
62.5°	76.9	77.5	77.5	77.5	78.5	79.5	80.1	81.6	83.2	85.8	91.0
65°	67.6	67.6	67.6	67.6	68.1	68.6	69.7	71.7	72.3	75.4	78.5
67.5°	59.3	59.3	59.8	59.3	59.8	60.3	60.3	61.9	63.4	66.0	68.1
70°	52.0	52.0	52.0	52.5	52.5	53.0	53.0	53.6	54.6	56.7	59.3
72.5°	45.2	45.8	45.8	46.3	46.3	46.3	46.3	47.3	47.3	48.9	51.0
75°	39.5	40.0	40.0	40.0	40.0	40.6	40.6	41.1	41.6	42.6	44.2
77.5°	34.3	34.3	34.3	34.3	34.8	34.8	35.4	35.4	35.9	36.9	38.0
80°	28.6	29.6	29.6	29.6	29.6	30.2	30.2	30.7	30.7	31.2	31.7
82.5°	25.0	25.0	25.0	25.5	25.5	25.5	25.5	26.5	26.5	27.0	27.0
85°	21.3	21.3	21.3	21.8	21.8	21.8	21.8	22.4	22.4	22.9	22.4
87.5°	18.2	18.2	18.2	18.2	18.2	18.7	18.7	18.7	18.7	18.7	18.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
90°	15.1	15.6	15.6	15.6	15.6	15.6	16.1	15.6	15.6	15.6	15.1
92.5°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	12.5	12.0
95°	11.4	11.4	11.4	11.4	11.4	11.4	10.9	10.9	10.4	9.9	8.8
97.5°	9.9	9.4	9.4	9.4	9.4	9.4	8.8	8.8	8.3	7.8	6.8
100°	8.3	8.3	8.3	8.3	8.3	7.8	7.3	7.3	6.8	5.7	4.7
102.5°	7.3	7.3	7.3	7.3	6.8	6.8	6.2	5.7	5.2	4.7	3.6
105°	5.7	5.7	5.7	5.7	5.7	5.2	4.7	4.7	3.6	3.1	2.1
107.5°	4.7	4.7	4.7	4.7	4.7	4.2	3.6	3.6	2.6	1.6	1.0
110°	3.6	3.6	3.6	3.6	3.6	3.6	2.6	2.1	1.6	1.0	1.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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°
0°	1526.4	1526.4	1526.4	1526.4	1526.4	1526.4	1526.4	1526.4
1°	1521.8	1520.2	1520.7	1522.3	1524.9	1534.2	1536.3	1538.9
2°	1523.3	1521.8	1522.3	1523.3	1525.9	1535.3	1536.8	1538.9
3°	1525.9	1523.3	1524.4	1524.9	1525.9	1535.3	1537.4	1538.9
4°	1530.1	1526.4	1527.0	1526.4	1527.5	1535.8	1538.4	1540.0
5°	1534.8	1530.1	1530.6	1529.6	1529.0	1537.4	1539.4	1541.0
6°	1540.0	1534.8	1534.8	1532.7	1531.6	1538.9	1540.5	1542.0
7°	1546.7	1539.4	1538.9	1536.3	1534.8	1541.0	1541.5	1543.1
8°	1554.0	1545.2	1544.6	1541.5	1537.9	1543.1	1544.1	1545.2
9°	1561.3	1551.4	1549.8	1545.7	1541.5	1545.7	1546.2	1546.2
10°	1569.6	1558.2	1556.1	1551.4	1546.7	1548.8	1548.8	1549.3
11°	1577.9	1565.4	1562.8	1556.6	1551.4	1553.0	1551.9	1551.4
12°	1584.7	1572.2	1570.1	1562.8	1556.6	1557.1	1555.6	1555.6
13°	1591.9	1580.0	1576.4	1569.6	1562.3	1562.3	1560.2	1560.8
14°	1596.1	1586.2	1583.1	1575.8	1568.6	1568.0	1564.9	1564.9
15°	1598.7	1590.9	1588.8	1583.1	1575.3	1574.3	1569.6	1570.1
17.5°	1591.4	1598.2	1600.8	1600.8	1593.0	1590.4	1583.6	1584.7
20°	1543.1	1574.3	1601.3	1611.7	1608.6	1608.6	1600.8	1600.3
22.5°	1432.9	1512.4	1576.9	1612.7	1622.6	1626.8	1621.1	1619.0
25°	1255.1	1386.6	1507.7	1588.3	1626.8	1644.5	1640.8	1640.8
27.5°	1034.1	1216.6	1386.1	1529.0	1611.7	1654.3	1661.1	1663.7
30°	828.7	1010.7	1217.6	1414.7	1564.4	1651.7	1679.3	1686.6
32.5°	650.4	814.2	1018.0	1264.4	1475.5	1628.3	1691.3	1706.3
35°	510.5	642.1	830.3	1073.1	1346.6	1568.0	1687.1	1721.9
37.5°	402.9	511.1	669.6	896.8	1182.3	1466.1	1657.5	1718.8
40°	324.9	409.2	535.0	737.2	1011.2	1334.6	1593.5	1689.7
42.5°	266.7	333.8	436.2	604.6	856.8	1188.5	1497.3	1627.3
45°	226.7	276.1	357.7	498.1	723.2	1042.9	1375.1	1524.4
47.5°	202.2	236.0	301.0	417.5	614.0	910.4	1234.3	1386.1
50°	181.4	209.0	258.9	355.1	524.1	785.1	1083.0	1223.9
52.5°	159.6	184.6	226.7	305.7	450.2	675.4	935.3	1057.5
55°	141.4	161.2	198.6	267.8	388.4	576.6	789.7	891.1
57.5°	124.8	141.4	172.6	233.4	338.5	488.2	657.7	743.5
60°	109.2	123.7	150.8	201.2	288.0	405.5	536.5	608.3
62.5°	97.7	108.1	131.5	173.6	241.2	334.3	438.8	488.7
65°	86.3	95.7	113.3	147.7	200.2	269.8	350.9	388.9
67.5°	73.3	83.2	96.7	124.8	163.3	215.8	277.1	302.6
70°	63.4	69.7	82.1	102.9	132.1	171.0	215.2	234.0
72.5°	54.1	58.2	68.1	83.2	104.0	133.1	164.8	177.8
75°	46.3	49.4	54.6	65.0	80.6	100.9	122.2	132.1
77.5°	39.5	40.6	43.7	49.9	59.3	73.8	88.4	94.6
80°	32.8	33.8	33.8	36.9	42.1	51.0	59.3	63.4
82.5°	27.0	27.0	27.0	27.0	28.6	32.8	36.4	38.5
85°	21.8	21.3	20.3	19.2	18.7	18.2	19.2	19.8
87.5°	18.2	17.2	15.1	13.0	10.9	8.8	7.3	7.3



TEST NUMBER: P273476

CATALOG NUMBER: 0.05-12W-835-30-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
90°	14.0	13.0	10.9	8.8	6.2	3.6	2.1	1.0
92.5°	10.9	9.4	7.3	5.2	3.1	1.0	0.0	0.0
95°	7.8	6.8	4.7	3.1	1.0	0.0	0.0	0.0
97.5°	5.7	4.2	2.6	1.0	0.0	0.0	0.0	0.0
100°	3.6	2.6	1.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)