

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: NEO-RAY

Report Number: P333320-935

Luminaire Tested: **S125DIP-S1270D810U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333320-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1270D810U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6831.4 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

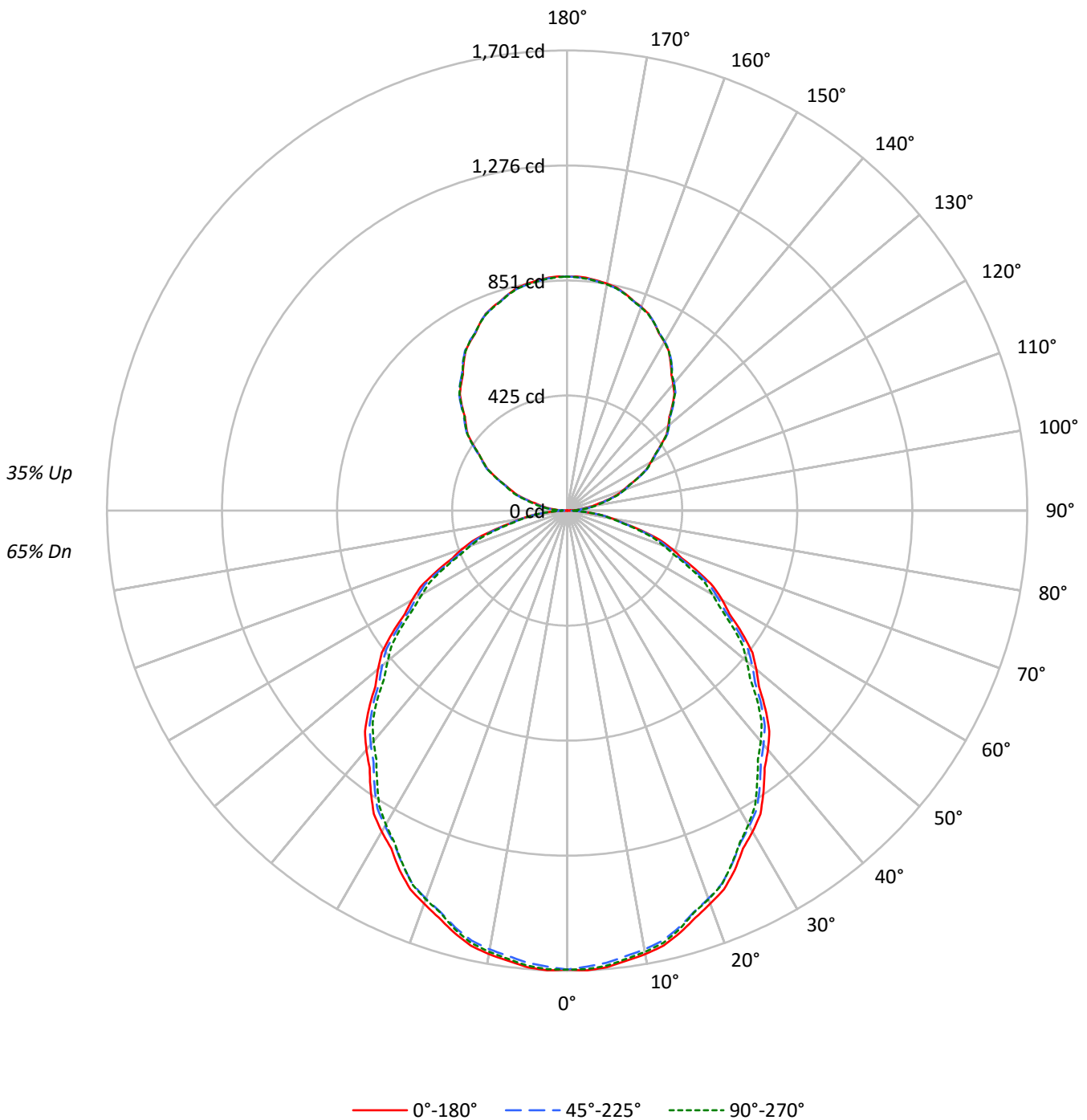
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	70	70	70	65
1	101	97	93	89	95	91	87	84	80	78	75	70	68	67	61	60	59	54
2	92	84	78	73	86	79	74	69	70	66	62	62	58	56	54	52	49	45
3	84	74	67	60	78	70	63	58	62	57	52	55	50	47	48	45	42	38
4	77	66	57	51	72	62	55	49	55	49	45	49	44	40	43	39	36	33
5	71	59	50	44	66	55	48	42	49	43	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	25
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25	22
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	22	28	23	20	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10959	10959	10959
5°	10983	10878	10949
10°	10916	10802	10864
15°	10797	10672	10717
20°	10628	10490	10509
25°	10446	10274	10264
30°	10221	10041	9991
35°	9980	9790	9653
40°	9732	9517	9382
45°	9465	9270	9085
50°	9171	8969	8699
55°	8888	8631	8389
60°	8548	8289	7994
65°	8145	7878	7610
70°	7757	7402	7149
75°	7069	6835	6598
80°	6289	6189	6044
85°	5476	5572	5269



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.0	2.3
10°-20°	451.9	6.6
20°-30°	667.3	9.8
30°-40°	778.6	11.4
40°-50°	782.0	11.4
50°-60°	686.5	10.0
60°-70°	511.5	7.5
70°-80°	292.5	4.3
80°-90°	87.0	1.3
90°-100°	57.9	0.8
100°-110°	171.1	2.5
110°-120°	289.8	4.2
120°-130°	381.4	5.6
130°-140°	427.4	6.3
140°-150°	418.9	6.1
150°-160°	351.8	5.2
160°-170°	233.9	3.4
170°-180°	81.8	1.2
0°-30°	1279.2	18.7
0°-40°	2057.8	30.1
0°-60°	3526.3	51.6
0°-90°	4417.2	64.7
90°-120°	518.9	7.6
90°-150°	1746.6	25.6
90°-180°	2414.0	35.3
0°-180°	6831.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1697	1697	1697	1697	1697	
5°	1694	1691	1678	1689	1689	161
15°	1615	1610	1596	1602	1603	455
25°	1466	1459	1442	1444	1440	674
35°	1266	1260	1242	1235	1224	791
45°	1036	1030	1015	999	995	798
55°	789	784	766	755	745	704
65°	533	530	516	504	498	529
75°	283	280	274	270	264	302
85°	74	75	75	74	71	82
90°	1	6	11	14	16	6
95°	44	45	52	56	58	47
105°	154	157	161	165	167	164
115°	290	293	294	294	293	287
125°	423	427	428	427	426	379
135°	551	555	555	555	553	424
145°	667	670	672	672	670	417
155°	763	763	764	766	763	351
165°	830	829	830	832	828	234
175°	863	861	860	864	860	82
180°	865	865	865	865	865	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8
2.5°	1701.1	1700.4	1699.7	1698.9	1698.2	1696.7	1694.3	1691.9	1689.5	1687.1	1689.5
5°	1694.1	1693.5	1692.9	1692.3	1691.7	1690.0	1687.0	1683.9	1681.0	1678.0	1680.7
7.5°	1678.5	1677.9	1677.3	1676.7	1676.1	1674.2	1670.9	1667.7	1664.4	1661.1	1663.7
10°	1664.6	1664.0	1663.4	1662.8	1662.2	1660.3	1657.0	1653.7	1650.4	1647.1	1649.5
12.5°	1647.4	1646.3	1645.3	1644.2	1643.1	1641.1	1638.0	1635.0	1631.9	1628.8	1630.8
15°	1614.9	1614.0	1613.1	1612.2	1611.4	1609.2	1605.9	1602.7	1599.4	1596.1	1597.6
17.5°	1577.6	1576.3	1574.9	1573.6	1572.4	1569.9	1566.6	1563.1	1559.8	1556.3	1558.2
20°	1546.4	1545.8	1545.2	1544.6	1544.0	1541.8	1537.9	1534.0	1530.2	1526.3	1528.4
22.5°	1515.3	1514.2	1513.1	1512.1	1511.0	1508.6	1505.0	1501.4	1497.7	1494.1	1495.5
25°	1465.9	1464.4	1462.9	1461.5	1459.9	1457.2	1453.4	1449.5	1445.6	1441.7	1442.3
27.5°	1408.2	1407.3	1406.4	1405.5	1404.6	1402.1	1398.2	1394.1	1390.2	1386.1	1386.3
30°	1370.6	1369.7	1368.8	1367.9	1367.0	1364.3	1359.9	1355.4	1350.9	1346.4	1345.8
32.5°	1329.8	1328.4	1327.1	1325.7	1324.3	1321.6	1317.6	1313.6	1309.6	1305.6	1304.6
35°	1265.8	1264.7	1263.5	1262.3	1261.1	1258.4	1254.2	1250.1	1245.9	1241.7	1240.3
37.5°	1199.5	1198.1	1196.6	1195.1	1193.6	1190.8	1187.0	1183.0	1179.1	1175.2	1172.9
40°	1154.4	1153.0	1151.5	1150.0	1148.5	1145.6	1141.5	1137.3	1133.2	1128.9	1126.3
42.5°	1106.1	1104.9	1103.6	1102.3	1101.1	1098.4	1094.2	1090.0	1085.9	1081.7	1079.3
45°	1036.3	1035.2	1034.0	1032.8	1031.6	1029.2	1025.6	1022.0	1018.5	1014.9	1011.2
47.5°	961.1	961.2	961.3	961.3	961.4	959.2	955.0	950.7	946.4	942.1	938.5
50°	912.8	912.0	911.0	910.2	909.2	907.0	903.4	899.8	896.3	892.7	888.8
52.5°	863.4	862.8	862.1	861.4	860.8	858.6	854.7	850.9	847.1	843.3	839.9
55°	789.4	788.4	787.6	786.6	785.7	783.3	779.0	774.9	770.7	766.5	763.8
57.5°	711.2	710.8	710.2	709.8	709.3	707.3	703.8	700.3	696.7	693.2	689.7
60°	661.8	660.6	659.4	658.2	657.0	654.8	651.5	648.2	645.0	641.7	638.7
62.5°	610.3	609.3	608.4	607.3	606.4	604.6	601.8	598.9	596.2	593.3	590.1
65°	533.0	532.4	531.8	531.2	530.5	528.6	525.3	522.0	518.8	515.5	512.8
67.5°	458.1	456.8	455.6	454.3	453.1	451.2	448.8	446.3	443.8	441.3	439.1
70°	410.8	409.3	407.8	406.3	404.8	402.7	400.0	397.4	394.7	392.0	390.2
72.5°	359.2	358.2	357.2	356.2	355.2	353.8	352.1	350.3	348.6	346.9	344.8
75°	283.3	282.7	282.1	281.5	280.9	279.8	278.4	276.8	275.3	273.9	272.9
77.5°	213.2	212.9	212.7	212.5	212.2	211.7	210.9	210.0	209.1	208.4	207.8
80°	169.1	169.1	169.1	169.1	169.1	168.8	168.2	167.6	167.0	166.4	166.2
82.5°	130.4	130.0	129.5	129.1	128.5	128.3	128.1	128.0	127.9	127.8	127.3
85°	73.9	74.1	74.4	74.7	75.0	75.2	75.2	75.2	75.2	75.2	74.9
87.5°	29.1	29.4	29.6	29.9	30.0	30.2	30.1	30.1	30.1	30.0	30.2
90°	0.7	1.9	3.1	4.3	5.4	6.5	7.7	8.7	9.7	10.8	11.5
92.5°	16.3	17.1	18.0	18.8	19.6	20.7	22.0	23.2	24.5	25.8	26.9
95°	43.7	44.1	44.3	44.7	44.9	45.9	47.4	48.8	50.4	51.8	52.9
97.5°	72.8	72.8	72.9	73.1	73.2	74.3	76.4	78.4	80.5	82.6	83.5
100°	94.3	94.3	94.3	94.3	94.3	95.2	97.2	99.1	101.1	103.0	104.4
102.5°	117.4	118.0	118.6	119.2	119.9	120.6	121.6	122.6	123.6	124.6	126.1
105°	153.5	154.3	155.0	155.8	156.5	157.3	158.3	159.1	160.0	160.9	161.8
107.5°	193.4	194.1	194.8	195.6	196.4	197.1	197.8	198.5	199.1	199.8	200.3
110°	220.8	221.6	222.3	223.1	223.9	224.5	224.9	225.3	225.8	226.2	226.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	248.8	249.3	249.6	250.0	250.4	250.9	251.4	252.0	252.6	253.1	253.4
115°	290.2	290.8	291.4	292.0	292.6	293.0	293.3	293.6	293.9	294.2	294.0
117.5°	331.7	331.9	332.2	332.4	332.7	333.0	333.3	333.6	333.8	334.1	334.2
120°	357.5	358.3	359.0	359.7	360.5	360.9	361.1	361.3	361.4	361.5	361.5
122.5°	385.5	385.8	386.1	386.3	386.6	386.9	387.3	387.7	388.1	388.5	388.3
125°	423.4	424.4	425.2	426.2	427.1	427.6	427.7	427.9	428.0	428.2	427.9
127.5°	463.9	464.4	464.9	465.4	465.9	466.2	466.4	466.6	466.8	467.0	466.8
130°	488.1	488.9	489.7	490.3	491.1	491.6	491.9	492.2	492.5	492.8	492.7
132.5°	512.4	513.6	514.8	516.0	517.3	517.8	517.8	517.7	517.6	517.6	517.5
135°	550.7	551.6	552.5	553.5	554.3	554.8	555.0	555.2	555.3	555.4	555.4
137.5°	586.9	587.7	588.6	589.4	590.3	590.9	591.2	591.5	591.9	592.2	592.4
140°	610.0	610.7	611.5	612.3	612.9	613.5	614.0	614.5	614.9	615.4	615.7
142.5°	633.2	633.8	634.4	635.0	635.7	636.3	636.8	637.4	637.9	638.5	638.7
145°	667.2	667.8	668.4	669.0	669.6	670.1	670.5	671.0	671.5	671.9	671.9
147.5°	698.7	699.0	699.4	699.7	700.0	700.3	700.8	701.1	701.5	701.8	702.1
150°	719.7	719.5	719.5	719.3	719.1	719.4	720.0	720.6	721.2	721.8	721.8
152.5°	736.9	737.2	737.4	737.6	737.8	738.0	738.2	738.5	738.7	739.0	739.3
155°	763.4	763.4	763.4	763.4	763.4	763.5	763.7	763.9	764.0	764.1	764.7
157.5°	787.2	786.9	786.5	786.2	785.8	785.7	785.9	786.1	786.2	786.4	787.0
160°	801.2	800.7	800.3	799.9	799.4	799.3	799.4	799.5	799.7	799.9	800.5
162.5°	813.6	813.2	812.9	812.6	812.3	812.1	812.1	812.2	812.2	812.3	813.0
165°	830.2	829.8	829.6	829.2	829.0	828.9	829.0	829.1	829.3	829.5	830.1
167.5°	844.1	843.5	842.9	842.3	841.7	841.5	841.5	841.5	841.5	841.5	842.3
170°	851.7	851.1	850.5	849.9	849.3	848.9	848.9	848.9	848.9	848.9	849.9
172.5°	857.0	856.4	855.8	855.2	854.6	854.4	854.4	854.4	854.4	854.4	855.2
175°	863.2	862.5	861.9	861.3	860.7	860.4	860.4	860.4	860.4	860.4	861.3
177.5°	866.3	865.7	865.3	864.8	864.3	864.0	863.9	863.8	863.7	863.5	864.3
180°	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8
2.5°	1691.9	1694.3	1696.7	1697.7	1697.5	1697.3	1697.0	1696.8
5°	1683.3	1686.1	1688.8	1690.0	1689.6	1689.4	1689.0	1688.8
7.5°	1666.3	1669.0	1671.5	1672.8	1672.5	1672.1	1671.9	1671.5
10°	1651.9	1654.3	1656.7	1657.7	1657.4	1657.1	1656.8	1656.6
12.5°	1632.7	1634.6	1636.5	1637.4	1637.4	1637.3	1637.3	1637.2
15°	1599.1	1600.6	1602.1	1602.8	1602.8	1602.8	1602.8	1602.8
17.5°	1560.0	1561.9	1563.7	1563.9	1562.5	1561.0	1559.4	1558.0
20°	1530.5	1532.6	1534.6	1535.0	1533.4	1532.0	1530.5	1529.0
22.5°	1496.8	1498.2	1499.6	1499.8	1498.7	1497.7	1496.7	1495.7
25°	1442.9	1443.6	1444.2	1444.0	1443.1	1442.2	1441.3	1440.4
27.5°	1386.4	1386.6	1386.6	1386.2	1385.3	1384.5	1383.5	1382.7
30°	1345.2	1344.6	1344.0	1343.3	1342.4	1341.5	1340.6	1339.7
32.5°	1303.5	1302.4	1301.3	1299.9	1298.4	1296.8	1295.1	1293.6
35°	1238.7	1237.3	1235.8	1233.8	1231.4	1229.1	1226.7	1224.3
37.5°	1170.7	1168.5	1166.3	1164.5	1163.1	1161.7	1160.4	1159.0
40°	1123.6	1120.9	1118.2	1116.5	1115.5	1114.7	1113.7	1112.8
42.5°	1076.9	1074.4	1071.9	1070.1	1068.7	1067.3	1065.9	1064.5
45°	1007.7	1004.1	1000.6	998.3	997.4	996.5	995.6	994.7
47.5°	934.8	931.2	927.6	924.7	922.6	920.5	918.4	916.4
50°	884.9	881.1	877.2	874.2	872.1	870.0	868.0	865.8
52.5°	836.5	833.1	829.7	826.8	824.5	822.2	819.8	817.5
55°	761.1	758.5	755.8	753.4	751.3	749.2	747.1	745.0
57.5°	686.3	682.9	679.4	677.1	676.0	674.9	673.6	672.5
60°	635.7	632.7	629.7	627.2	625.1	623.0	621.0	618.9
62.5°	586.9	583.7	580.5	578.1	576.4	574.8	573.2	571.6
65°	510.1	507.4	504.7	502.8	501.6	500.4	499.2	498.0
67.5°	436.9	434.5	432.3	430.8	430.1	429.4	428.7	427.9
70°	388.4	386.6	384.8	383.3	382.1	380.9	379.8	378.6
72.5°	342.9	340.8	338.8	337.2	336.0	334.8	333.6	332.3
75°	272.1	271.1	270.3	269.2	268.0	266.8	265.6	264.4
77.5°	207.2	206.7	206.2	205.5	204.7	203.8	203.0	202.2
80°	165.8	165.6	165.2	164.8	164.2	163.6	163.0	162.5
82.5°	126.7	126.2	125.6	125.4	125.2	125.1	124.9	124.8
85°	74.6	74.3	74.0	73.5	72.9	72.3	71.7	71.1
87.5°	30.4	30.6	30.7	30.6	30.1	29.8	29.4	29.0
90°	12.2	13.0	13.8	14.4	14.8	15.2	15.7	16.2
92.5°	27.8	28.8	29.8	30.5	30.8	31.1	31.4	31.8
95°	53.9	55.0	56.1	56.7	57.0	57.3	57.6	57.9
97.5°	84.6	85.5	86.5	87.0	87.2	87.4	87.6	87.8
100°	105.7	107.0	108.4	109.3	109.5	109.8	110.1	110.4
102.5°	127.5	129.0	130.4	131.4	131.8	132.2	132.6	133.0
105°	162.7	163.6	164.5	165.1	165.7	166.1	166.5	166.9
107.5°	200.7	201.1	201.6	201.8	201.8	201.7	201.7	201.7
110°	227.1	227.6	228.0	228.2	228.0	227.8	227.7	227.6



TEST NUMBER: P333320-935

CATALOG NUMBER: S125DIP-S1270D810U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	253.6	253.7	254.0	254.0	253.7	253.4	253.1	252.9
115°	293.9	293.8	293.6	293.4	293.3	293.2	293.0	292.9
117.5°	334.3	334.4	334.6	334.3	333.7	333.1	332.5	331.9
120°	361.5	361.5	361.5	361.3	360.7	360.1	359.5	358.9
122.5°	388.2	388.1	388.0	387.7	387.2	386.8	386.2	385.8
125°	427.6	427.3	427.0	426.8	426.6	426.5	426.4	426.2
127.5°	466.7	466.5	466.4	466.1	465.9	465.5	465.3	464.9
130°	492.5	492.4	492.2	492.0	491.7	491.4	491.1	490.8
132.5°	517.3	517.1	517.0	516.7	516.3	515.9	515.5	515.1
135°	555.4	555.4	555.4	555.2	554.6	554.0	553.4	552.8
137.5°	592.5	592.7	592.9	592.6	591.9	591.2	590.4	589.6
140°	616.0	616.2	616.6	616.3	615.6	614.8	614.1	613.4
142.5°	638.9	639.0	639.2	638.9	638.2	637.5	636.7	635.9
145°	671.9	671.9	671.9	671.7	671.2	670.8	670.4	669.9
147.5°	702.5	702.9	703.3	702.9	701.9	700.9	699.9	698.9
150°	721.8	721.8	721.8	721.6	721.3	721.0	720.7	720.4
152.5°	739.7	740.0	740.4	740.3	739.8	739.3	738.7	738.1
155°	765.3	765.9	766.5	766.5	765.7	765.0	764.2	763.4
157.5°	787.6	788.2	788.8	788.6	787.6	786.6	785.6	784.6
160°	801.1	801.6	802.2	802.2	801.4	800.6	799.9	799.2
162.5°	813.6	814.4	815.1	815.0	814.2	813.3	812.4	811.6
165°	830.7	831.3	831.8	831.7	830.8	829.9	829.0	828.1
167.5°	843.3	844.1	845.1	845.0	844.1	843.2	842.2	841.3
170°	850.8	851.7	852.6	852.5	851.4	850.4	849.4	848.3
172.5°	856.2	857.0	858.0	858.0	857.0	856.1	855.1	854.2
175°	862.2	863.2	864.0	863.9	862.9	861.9	860.8	859.8
177.5°	865.0	865.6	866.4	866.3	865.5	864.7	863.8	863.0
180°	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1

(END OF REPORT)