

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: P333319-930

Luminaire Tested: **S125DIP-S1270D810U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333319-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1270D810U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

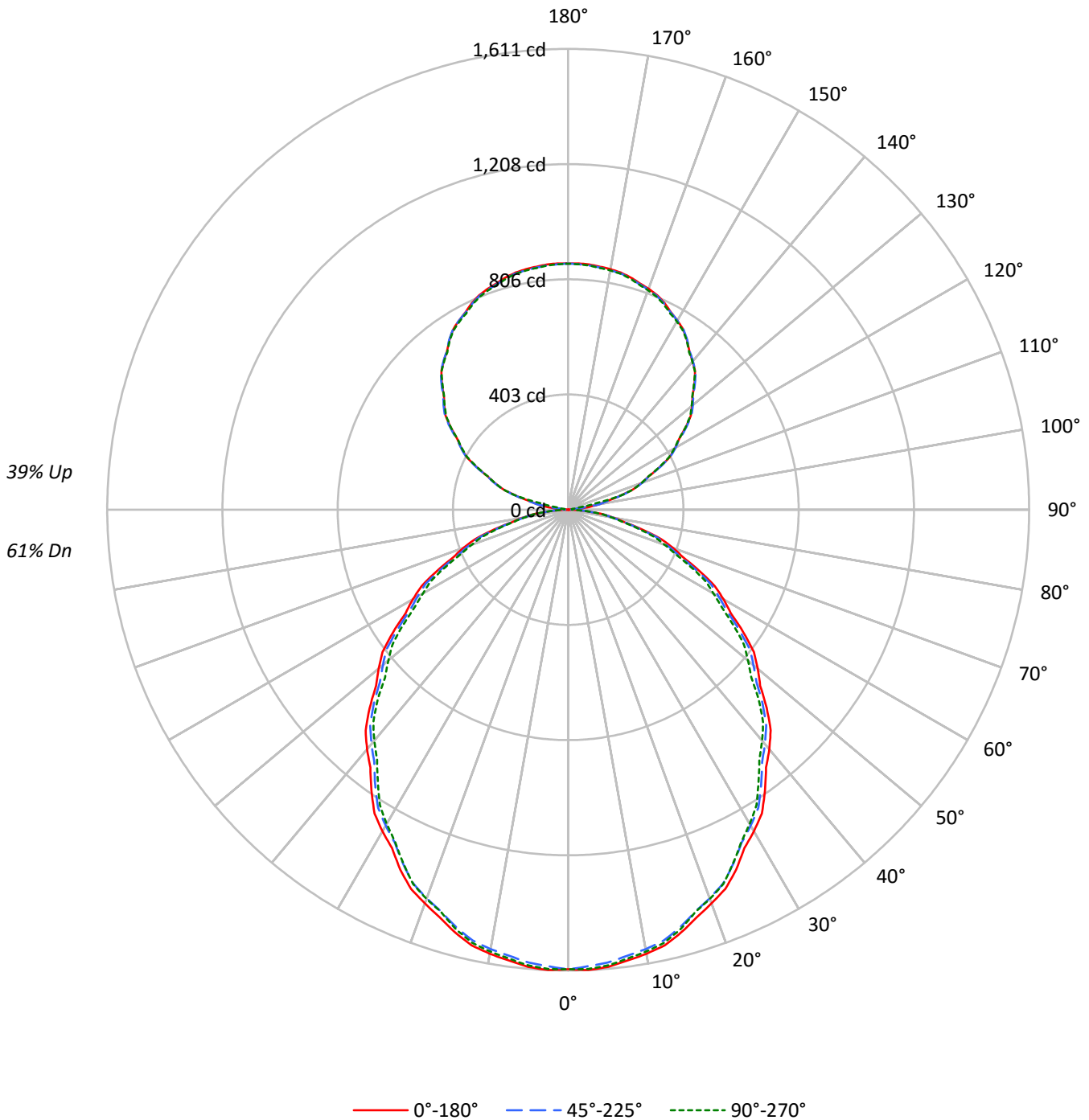
Lumens per Lamp: N/A
Luminaire Lumens: 6824.1 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	66	66	66	61
1	100	96	92	88	94	90	86	83	79	76	74	68	66	65	59	57	56	51
2	91	84	77	72	85	78	73	68	69	65	61	60	57	54	52	49	47	43
3	83	74	66	60	78	69	62	57	61	55	51	53	49	46	46	43	40	36
4	76	65	57	51	71	61	54	48	54	48	44	47	43	39	41	37	35	31
5	70	58	50	44	65	55	47	42	48	42	38	42	38	34	37	33	30	27
6	65	52	44	38	60	49	42	36	44	37	33	38	33	30	33	30	27	24
7	60	47	39	33	56	45	37	32	40	33	29	35	30	26	30	27	24	21
8	55	43	35	30	52	41	33	28	36	30	26	32	27	23	28	24	21	19
9	52	39	32	26	48	37	30	25	33	27	23	29	25	21	26	22	19	17
10	48	36	29	24	45	34	27	23	31	25	21	27	22	19	24	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10377	10377	10377
5°	10400	10301	10367
10°	10337	10228	10287
15°	10224	10105	10148
20°	10065	9933	9950
25°	9892	9728	9719
30°	9679	9508	9461
35°	9451	9270	9140
40°	9217	9012	8884
45°	8963	8777	8603
50°	8685	8493	8238
55°	8417	8173	7944
60°	8094	7848	7569
65°	7713	7459	7207
70°	7345	7009	6770
75°	6692	6470	6248
80°	5954	5861	5720
85°	5187	5276	4987



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.5	2.2
10°-20°	427.9	6.3
20°-30°	631.9	9.3
30°-40°	737.3	10.8
40°-50°	740.5	10.9
50°-60°	650.0	9.5
60°-70°	484.3	7.1
70°-80°	276.9	4.1
80°-90°	82.4	1.2
90°-100°	31.3	0.5
100°-110°	192.6	2.8
110°-120°	349.4	5.1
120°-130°	448.4	6.6
130°-140°	482.3	7.1
140°-150°	452.7	6.6
150°-160°	366.2	5.4
160°-170°	236.8	3.5
170°-180°	81.7	1.2
0°-30°	1211.3	17.8
0°-40°	1948.6	28.6
0°-60°	3339.1	48.9
0°-90°	4182.8	61.3
90°-120°	573.3	8.4
90°-150°	1956.6	28.7
90°-180°	2641.0	38.7
0°-180°	6824.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1607	1607	1607	1607	1607	
5°	1604	1601	1589	1600	1599	152
15°	1529	1525	1511	1517	1518	431
25°	1388	1381	1365	1367	1364	638
35°	1199	1193	1176	1169	1159	749
45°	981	976	961	946	942	756
55°	748	743	726	715	706	667
65°	505	501	488	477	472	501
75°	268	266	259	255	250	286
85°	70	71	71	70	67	78
90°	1	6	10	13	15	5
95°	36	33	10	13	13	46
105°	187	190	190	190	189	199
115°	352	355	356	353	349	349
125°	500	505	505	502	500	447
135°	624	628	627	625	622	481
145°	724	725	725	725	722	452
155°	797	793	794	796	791	367
165°	841	837	838	841	836	237
175°	860	857	857	861	856	82
180°	860	860	860	860	860	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7
2.5°	1610.8	1610.1	1609.5	1608.7	1608.1	1606.6	1604.3	1602.1	1599.9	1597.6	1599.9
5°	1604.2	1603.6	1603.0	1602.5	1601.9	1600.3	1597.4	1594.6	1591.8	1588.9	1591.5
7.5°	1589.4	1588.9	1588.3	1587.7	1587.1	1585.3	1582.3	1579.2	1576.1	1573.0	1575.4
10°	1576.2	1575.6	1575.1	1574.5	1573.9	1572.1	1569.0	1565.9	1562.8	1559.7	1562.0
12.5°	1559.9	1558.9	1558.0	1556.9	1555.9	1554.0	1551.0	1548.2	1545.3	1542.4	1544.3
15°	1529.2	1528.4	1527.5	1526.6	1525.8	1523.8	1520.7	1517.6	1514.5	1511.4	1512.8
17.5°	1493.9	1492.6	1491.3	1490.1	1488.9	1486.6	1483.4	1480.2	1477.0	1473.7	1475.5
20°	1464.4	1463.8	1463.2	1462.6	1462.1	1460.0	1456.3	1452.6	1448.9	1445.3	1447.2
22.5°	1434.8	1433.9	1432.8	1431.8	1430.8	1428.6	1425.1	1421.7	1418.2	1414.8	1416.1
25°	1388.1	1386.7	1385.3	1383.9	1382.4	1379.9	1376.2	1372.6	1368.9	1365.2	1365.8
27.5°	1333.4	1332.6	1331.7	1330.9	1330.1	1327.7	1324.0	1320.1	1316.4	1312.6	1312.7
30°	1297.9	1297.0	1296.2	1295.3	1294.5	1291.9	1287.7	1283.4	1279.2	1275.0	1274.4
32.5°	1259.2	1257.9	1256.6	1255.3	1254.0	1251.5	1247.7	1243.9	1240.1	1236.3	1235.3
35°	1198.7	1197.6	1196.5	1195.3	1194.2	1191.6	1187.6	1183.7	1179.7	1175.8	1174.4
37.5°	1135.9	1134.5	1133.1	1131.6	1130.2	1127.6	1124.0	1120.2	1116.5	1112.8	1110.7
40°	1093.2	1091.8	1090.4	1088.9	1087.5	1084.8	1080.9	1076.9	1073.0	1069.0	1066.5
42.5°	1047.4	1046.3	1045.1	1043.8	1042.7	1040.1	1036.2	1032.2	1028.3	1024.3	1022.0
45°	981.3	980.2	979.1	978.0	976.8	974.5	971.2	967.8	964.4	961.0	957.6
47.5°	910.1	910.2	910.3	910.3	910.4	908.3	904.3	900.3	896.2	892.1	888.7
50°	864.4	863.6	862.7	861.9	861.0	858.8	855.5	852.1	848.7	845.3	841.6
52.5°	817.6	817.0	816.4	815.7	815.1	813.0	809.3	805.8	802.2	798.5	795.3
55°	747.5	746.6	745.8	744.9	744.0	741.7	737.7	733.8	729.8	725.9	723.3
57.5°	673.4	673.0	672.5	672.1	671.6	669.8	666.4	663.1	659.7	656.4	653.1
60°	626.6	625.6	624.4	623.3	622.2	620.0	616.9	613.8	610.7	607.6	604.8
62.5°	577.9	577.0	576.1	575.1	574.2	572.5	569.8	567.1	564.5	561.8	558.8
65°	504.7	504.1	503.5	503.0	502.4	500.5	497.4	494.3	491.2	488.1	485.6
67.5°	433.7	432.5	431.4	430.2	429.0	427.2	424.9	422.6	420.3	417.9	415.8
70°	389.0	387.6	386.1	384.7	383.4	381.3	378.8	376.3	373.7	371.2	369.5
72.5°	340.1	339.2	338.3	337.3	336.3	335.0	333.4	331.7	330.1	328.5	326.5
75°	268.2	267.7	267.1	266.5	266.0	265.0	263.6	262.1	260.7	259.3	258.4
77.5°	201.9	201.6	201.4	201.2	201.0	200.5	199.7	198.9	198.0	197.3	196.8
80°	160.1	160.1	160.1	160.1	160.1	159.9	159.3	158.7	158.2	157.6	157.4
82.5°	123.5	123.1	122.6	122.2	121.7	121.5	121.3	121.2	121.2	121.0	120.5
85°	70.0	70.2	70.4	70.8	71.0	71.2	71.2	71.2	71.2	71.2	70.9
87.5°	27.6	27.8	28.0	28.3	28.5	28.6	28.5	28.5	28.5	28.5	28.6
90°	0.7	1.8	2.9	4.1	5.1	6.2	7.3	8.2	9.2	10.2	10.9
92.5°	9.8	9.0	8.2	7.4	6.7	6.7	7.6	8.5	9.3	10.2	10.9
95°	36.4	36.0	35.5	35.1	34.7	31.7	26.3	21.0	15.6	10.2	10.9
97.5°	75.9	76.6	77.4	78.2	78.9	74.0	63.3	52.7	42.0	31.4	27.4
100°	106.5	106.9	107.3	107.8	108.2	108.7	109.3	109.8	110.4	111.0	89.8
102.5°	137.6	138.1	138.7	139.2	139.7	140.1	140.6	140.9	141.2	141.5	137.5
105°	187.4	188.0	188.6	189.1	189.7	190.0	190.0	190.0	190.0	190.0	190.0
107.5°	239.2	239.2	239.2	239.2	239.2	239.4	239.6	239.9	240.2	240.5	240.5
110°	272.9	272.9	272.9	272.9	272.9	273.0	273.3	273.6	273.9	274.2	273.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	304.5	304.8	305.2	305.6	305.9	306.1	306.3	306.5	306.6	306.8	306.3
115°	352.0	352.7	353.4	354.1	354.8	355.2	355.4	355.5	355.6	355.8	355.2
117.5°	401.0	401.0	401.0	401.0	401.0	401.2	401.7	402.3	402.8	403.3	402.6
120°	431.6	431.5	431.4	431.2	431.0	431.2	431.6	432.1	432.5	432.9	432.7
122.5°	458.7	459.3	459.7	460.3	460.8	461.2	461.4	461.6	461.8	462.0	461.7
125°	500.5	501.5	502.5	503.5	504.5	505.0	505.0	505.0	505.0	505.0	504.4
127.5°	540.5	541.1	541.8	542.6	543.2	543.6	543.5	543.4	543.3	543.2	542.9
130°	564.9	565.7	566.3	567.0	567.8	568.2	568.3	568.4	568.6	568.8	568.3
132.5°	589.4	590.2	591.0	591.8	592.7	593.0	592.6	592.3	592.0	591.7	591.6
135°	624.2	625.1	625.9	626.8	627.6	627.9	627.6	627.3	627.0	626.8	626.5
137.5°	656.2	657.0	657.7	658.4	659.2	659.4	659.2	658.9	658.7	658.4	658.4
140°	677.1	677.4	677.7	678.0	678.2	678.3	678.2	678.1	677.9	677.8	678.1
142.5°	696.0	696.2	696.3	696.5	696.7	696.8	697.1	697.2	697.5	697.7	697.7
145°	723.7	724.0	724.2	724.6	724.8	725.0	725.0	725.0	725.0	725.0	725.1
147.5°	747.9	747.9	747.8	747.7	747.7	747.7	747.9	748.0	748.3	748.4	748.6
150°	763.2	763.0	762.6	762.4	762.1	762.1	762.4	762.6	763.0	763.2	763.5
152.5°	778.0	777.4	776.7	776.2	775.5	775.3	775.6	775.9	776.2	776.5	776.7
155°	797.0	796.1	795.3	794.4	793.6	793.3	793.6	793.9	794.2	794.4	794.8
157.5°	811.6	811.1	810.7	810.2	809.6	809.3	809.4	809.4	809.4	809.5	809.9
160°	821.9	821.0	820.2	819.3	818.5	818.2	818.2	818.4	818.6	818.6	819.2
162.5°	830.1	829.2	828.3	827.4	826.6	826.3	826.4	826.6	826.7	826.9	827.6
165°	841.0	840.2	839.3	838.5	837.6	837.2	837.4	837.6	837.6	837.8	838.7
167.5°	849.1	848.3	847.4	846.5	845.6	845.3	845.4	845.5	845.7	845.9	846.9
170°	853.8	852.7	851.7	850.8	849.8	849.4	849.5	849.6	849.8	849.9	851.1
172.5°	856.8	855.8	854.8	853.9	852.8	852.5	852.7	853.0	853.2	853.5	854.5
175°	860.1	859.2	858.4	857.6	856.7	856.4	856.5	856.6	856.8	857.0	858.1
177.5°	861.7	861.0	860.3	859.7	858.9	858.7	858.8	858.8	859.0	859.1	859.9
180°	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7
2.5°	1602.1	1604.3	1606.6	1607.6	1607.4	1607.2	1607.0	1606.7
5°	1594.0	1596.6	1599.1	1600.3	1599.9	1599.7	1599.4	1599.1
7.5°	1577.8	1580.4	1582.8	1584.0	1583.7	1583.4	1583.1	1582.8
10°	1564.2	1566.5	1568.7	1569.7	1569.5	1569.1	1568.9	1568.6
12.5°	1546.1	1547.8	1549.6	1550.5	1550.5	1550.4	1550.4	1550.3
15°	1514.3	1515.6	1517.0	1517.8	1517.8	1517.8	1517.8	1517.8
17.5°	1477.2	1479.0	1480.7	1480.9	1479.5	1478.1	1476.7	1475.3
20°	1449.3	1451.2	1453.2	1453.5	1452.0	1450.7	1449.3	1447.8
22.5°	1417.4	1418.7	1420.0	1420.2	1419.2	1418.2	1417.2	1416.3
25°	1366.4	1366.9	1367.5	1367.3	1366.5	1365.6	1364.8	1363.9
27.5°	1312.8	1313.0	1313.0	1312.6	1311.8	1311.0	1310.1	1309.3
30°	1273.8	1273.3	1272.7	1272.0	1271.1	1270.3	1269.4	1268.6
32.5°	1234.3	1233.3	1232.2	1230.9	1229.5	1227.9	1226.4	1224.9
35°	1173.0	1171.6	1170.2	1168.3	1166.0	1163.8	1161.6	1159.3
37.5°	1108.6	1106.5	1104.4	1102.7	1101.4	1100.1	1098.8	1097.5
40°	1064.0	1061.4	1058.8	1057.2	1056.3	1055.5	1054.6	1053.8
42.5°	1019.7	1017.3	1015.0	1013.3	1011.9	1010.6	1009.3	1008.0
45°	954.2	950.8	947.5	945.3	944.4	943.6	942.7	941.9
47.5°	885.2	881.7	878.3	875.6	873.6	871.6	869.7	867.7
50°	838.0	834.3	830.6	827.8	825.8	823.9	821.9	819.9
52.5°	792.1	788.9	785.6	782.9	780.7	778.5	776.3	774.1
55°	720.7	718.2	715.7	713.4	711.4	709.5	707.4	705.5
57.5°	649.9	646.6	643.4	641.2	640.1	639.0	637.9	636.8
60°	601.9	599.2	596.3	593.9	591.9	590.0	588.0	586.0
62.5°	555.7	552.7	549.7	547.4	545.8	544.3	542.7	541.3
65°	483.1	480.5	477.9	476.1	475.0	473.9	472.7	471.6
67.5°	413.7	411.5	409.4	408.0	407.2	406.6	405.9	405.2
70°	367.8	366.1	364.4	363.0	361.8	360.7	359.6	358.5
72.5°	324.7	322.7	320.8	319.3	318.1	317.0	315.8	314.7
75°	257.6	256.7	255.9	254.9	253.8	252.7	251.5	250.4
77.5°	196.2	195.8	195.3	194.6	193.8	193.0	192.2	191.4
80°	157.0	156.8	156.5	156.0	155.5	154.9	154.3	153.8
82.5°	120.0	119.5	119.0	118.7	118.5	118.5	118.3	118.2
85°	70.6	70.4	70.0	69.6	69.1	68.5	67.9	67.3
87.5°	28.8	28.9	29.0	28.9	28.5	28.2	27.8	27.5
90°	11.7	12.3	13.0	13.6	14.0	14.4	14.8	15.3
92.5°	11.7	12.3	13.0	13.5	13.7	13.9	14.1	14.3
95°	11.7	12.3	13.0	13.4	13.4	13.4	13.4	13.4
97.5°	23.4	19.4	15.4	13.4	13.4	13.4	13.4	13.4
100°	68.7	47.6	26.5	15.7	15.1	14.5	13.9	13.4
102.5°	133.5	129.6	125.6	118.8	109.1	99.5	89.8	80.2
105°	190.0	190.0	190.0	190.0	189.8	189.6	189.5	189.4
107.5°	240.6	240.6	240.6	240.4	240.0	239.5	239.1	238.7
110°	273.3	272.9	272.5	272.3	272.5	272.6	272.7	272.9



TEST NUMBER: P333319-930

CATALOG NUMBER: S125DIP-S1270D810U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	305.7	305.2	304.7	304.3	304.1	303.9	303.7	303.5
115°	354.7	354.1	353.5	352.8	352.0	351.1	350.3	349.4
117.5°	401.9	401.1	400.4	399.8	399.5	399.1	398.8	398.4
120°	432.4	432.1	431.8	431.3	430.6	429.9	429.2	428.4
122.5°	461.5	461.1	460.9	460.3	459.5	458.7	457.9	457.1
125°	503.9	503.3	502.7	502.2	501.8	501.3	500.9	500.5
127.5°	542.6	542.3	542.0	541.3	540.3	539.2	538.2	537.1
130°	567.9	567.4	567.0	566.5	565.7	565.1	564.4	563.6
132.5°	591.5	591.4	591.3	590.9	590.3	589.5	588.8	588.2
135°	626.2	625.9	625.7	625.1	624.2	623.4	622.5	621.7
137.5°	658.5	658.5	658.6	658.3	657.5	656.8	656.1	655.3
140°	678.3	678.7	678.9	678.7	677.8	676.9	676.0	675.2
142.5°	697.8	697.8	697.9	697.5	696.7	695.8	695.0	694.1
145°	725.2	725.4	725.5	725.1	724.3	723.5	722.6	721.8
147.5°	748.8	748.9	749.1	748.7	747.6	746.7	745.6	744.6
150°	763.8	764.1	764.3	763.9	762.8	761.7	760.5	759.4
152.5°	777.1	777.3	777.6	777.2	776.2	775.2	774.2	773.1
155°	795.3	795.7	796.1	795.8	794.7	793.5	792.4	791.2
157.5°	810.4	810.9	811.3	811.0	809.8	808.7	807.6	806.4
160°	819.8	820.4	820.9	820.7	819.5	818.4	817.3	816.1
162.5°	828.4	829.2	830.0	829.8	828.5	827.3	826.1	824.8
165°	839.5	840.3	841.2	841.1	839.9	838.8	837.6	836.5
167.5°	847.9	848.9	849.9	849.8	848.5	847.3	846.0	844.7
170°	852.2	853.3	854.4	854.4	853.1	851.8	850.5	849.3
172.5°	855.5	856.6	857.6	857.5	856.1	854.9	853.6	852.3
175°	859.2	860.3	861.4	861.4	860.1	858.8	857.6	856.3
177.5°	860.7	861.4	862.3	862.3	861.3	860.4	859.5	858.6
180°	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1

(END OF REPORT)