

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: P333321-930

Luminaire Tested: **S125DIP-S1270D810U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333321-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
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-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6553.9 lumens
Efficiency: N/A
Efficacy: 108.0 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

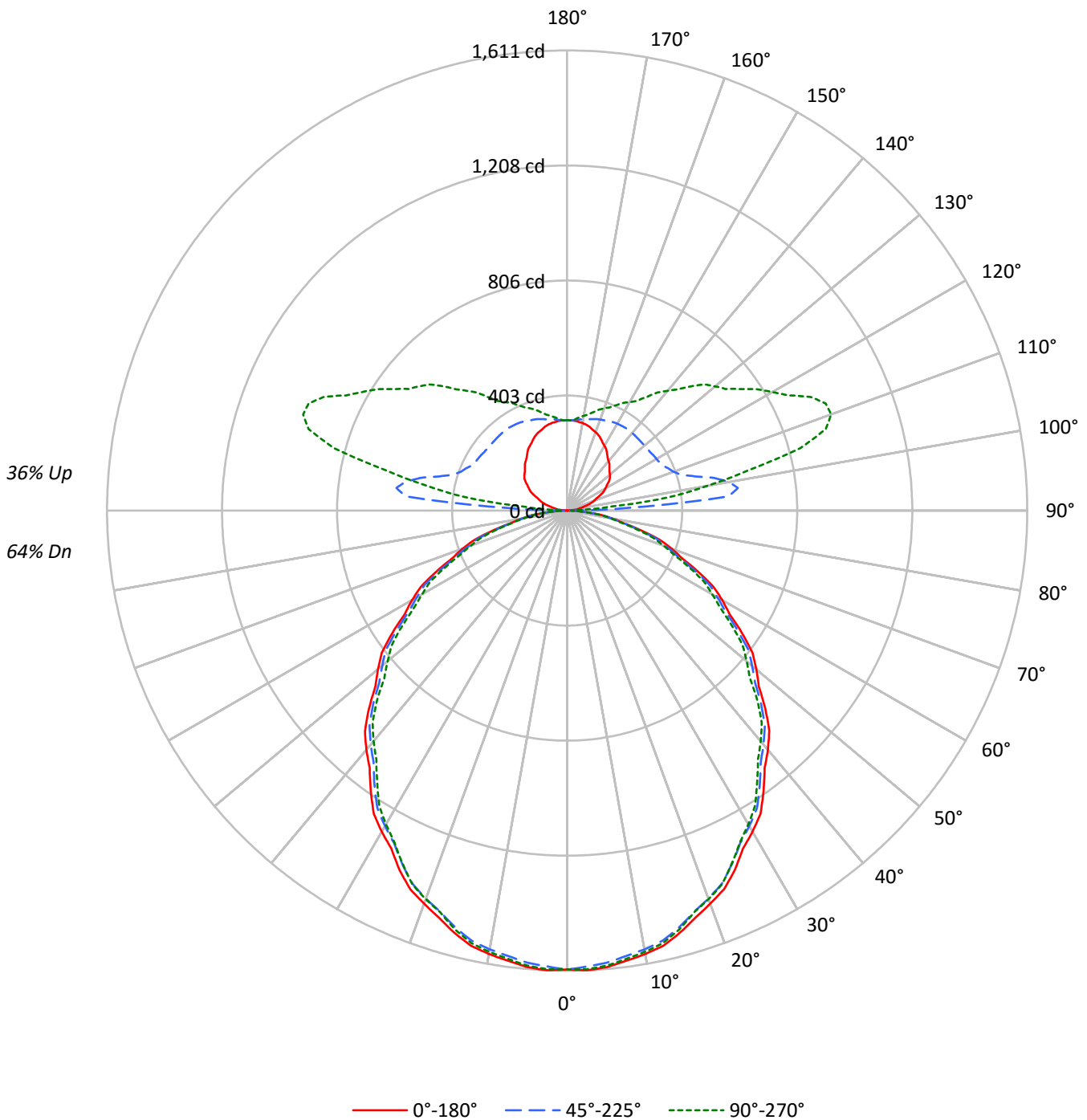
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20						20								20		
RC	80					70						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		104	104	104	104		91	91	91		79	79	79		69	69	69	64
1	101	96	92	89		94	91	87	84		80	77	75		70	68	66		61	59	58	54
2	92	84	78	72		86	79	74	69		70	66	62		61	58	55		53	51	49	45
3	84	74	66	60		78	70	63	58		62	56	52		54	50	47		47	44	41	38
4	77	65	57	51		72	62	54	49		55	49	44		48	44	40		42	39	36	33
5	70	58	50	44		66	55	48	42		49	43	38		43	39	35		38	34	31	28
6	65	52	44	38		61	50	42	37		44	38	33		39	34	30		35	31	27	25
7	60	47	39	34		56	45	38	32		40	34	30		36	31	27		32	28	24	22
8	56	43	35	30		52	41	34	29		37	31	26		33	28	24		29	25	22	20
9	52	39	32	27		49	38	30	26		34	28	24		30	25	22		27	23	20	18
10	49	36	29	24		46	35	28	23		31	25	21		28	23	20		25	21	18	16

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



TEST NUMBER: P333321-930

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.5	2.3
10°-20°	427.9	6.5
20°-30°	631.9	9.6
30°-40°	737.3	11.2
40°-50°	740.5	11.3
50°-60°	650.0	9.9
60°-70°	484.3	7.4
70°-80°	276.9	4.2
80°-90°	82.3	1.3
90°-100°	229.2	3.5
100°-110°	492.7	7.5
110°-120°	462.4	7.1
120°-130°	374.7	5.7
130°-140°	300.7	4.6
140°-150°	226.9	3.5
150°-160°	159.7	2.4
160°-170°	94.2	1.4
170°-180°	30.6	0.5
0°-30°	1211.3	18.5
0°-40°	1948.6	29.7
0°-60°	3339.1	50.9
0°-90°	4182.7	63.8
90°-120°	1184.3	18.1
90°-150°	2086.6	31.8
90°-180°	2371.0	36.2
0°-180°	6553.9	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°	21	62	565	256	150	22
105°	72	101	462	910	845	76
115°	129	155	371	800	941	127
125°	178	209	356	636	741	158
135°	209	252	353	533	616	162
145°	244	279	354	441	486	153
155°	278	299	346	390	407	128
165°	304	312	332	352	357	85
175°	316	316	318	322	321	30
180°	316	316	316	316	316	



TEST NUMBER: P333321-930

CATALOG NUMBER: S125DIP-S1270D810U930-4F0-1E-UDD-F4

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	27.7	28.0	28.2	28.5	28.6	28.5	28.5	28.5	28.5	28.6
90°	0.7	1.3	2.5	3.8	5.1	6.4	7.0	8.3	8.9	10.2	10.8
92.5°	7.7	9.5	14.8	22.7	33.7	52.3	87.1	145.4	208.8	205.5	166.4
95°	21.0	21.7	26.7	33.8	47.8	76.5	144.7	284.9	460.9	564.8	552.7
97.5°	34.9	35.7	39.3	46.3	58.9	79.6	124.7	227.5	411.6	603.2	699.3
100°	44.6	45.9	48.4	55.4	67.6	86.7	123.7	206.5	367.2	575.7	735.0
102.5°	55.4	56.1	58.1	65.6	76.7	95.4	128.2	197.9	333.5	527.2	713.6
105°	72.1	72.1	75.3	81.6	91.8	109.7	137.7	194.4	300.9	462.2	645.1
107.5°	88.4	89.6	92.7	97.9	108.5	124.6	151.7	200.3	287.1	417.4	575.3
110°	100.1	101.3	103.9	109.7	119.2	135.7	161.9	205.9	283.1	396.5	535.5



TEST NUMBER: P333321-930

CATALOG NUMBER: S125DIP-S1270D810U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	111.8	113.1	115.1	120.8	130.4	146.5	171.6	213.0	283.1	384.3	505.9
115°	128.7	130.0	132.0	137.7	147.2	163.2	186.8	223.7	284.9	371.0	473.6
117.5°	144.1	146.0	148.1	153.8	164.6	180.0	202.4	236.0	289.2	364.5	454.4
120°	154.3	156.2	158.7	164.4	175.3	191.3	213.5	244.2	293.3	361.4	443.7
122.5°	165.0	166.4	168.4	174.1	186.1	201.9	224.3	253.3	296.8	358.9	434.5
125°	178.5	179.8	183.0	188.7	200.8	217.4	238.4	265.8	302.8	355.7	422.0
127.5°	189.1	191.0	195.1	202.4	215.2	231.8	252.1	277.3	309.6	354.2	410.5
130°	195.7	197.6	202.7	211.0	224.4	241.0	260.7	284.9	313.6	353.2	402.9
132.5°	200.8	203.3	209.4	218.7	232.5	249.2	268.9	291.6	318.2	353.2	396.8
135°	209.1	211.7	219.3	229.5	242.9	260.1	279.9	300.9	324.5	353.2	389.5
137.5°	219.6	221.4	228.6	238.8	251.9	269.6	287.6	307.8	330.2	353.9	383.0
140°	225.7	227.6	235.2	245.4	257.6	274.8	293.3	312.3	332.7	354.4	379.9
142.5°	232.8	234.2	241.3	251.5	263.2	279.3	296.8	315.0	334.3	355.0	377.4
145°	243.5	244.8	251.2	260.1	271.6	286.3	302.8	318.7	336.0	354.4	373.6
147.5°	254.7	255.5	261.0	269.3	279.2	292.1	306.6	321.1	336.6	352.8	369.6
150°	261.4	262.6	267.1	275.4	284.3	295.1	309.2	322.5	336.6	351.2	366.6
152.5°	268.5	269.3	273.2	280.5	288.9	298.7	311.7	323.6	336.1	349.2	363.0
155°	277.9	277.9	281.8	288.1	294.5	303.5	314.3	324.5	334.7	345.5	357.0
157.5°	286.3	286.3	289.3	294.7	300.4	307.1	316.4	325.1	333.0	341.7	351.4
160°	292.0	291.3	293.9	298.3	303.5	309.2	317.5	325.1	331.5	339.2	346.8
162.5°	296.5	296.0	298.5	302.4	306.5	311.2	318.5	324.6	330.0	336.1	342.7
165°	303.5	302.1	304.1	307.3	309.8	313.6	318.7	323.8	327.7	331.5	336.6
167.5°	308.0	307.4	308.5	310.3	312.1	314.5	318.7	322.3	324.1	327.0	330.6
170°	311.1	310.5	311.1	312.3	313.6	315.5	318.7	321.3	322.5	324.5	327.0
172.5°	313.2	312.0	312.6	313.9	314.6	315.5	318.2	320.2	320.5	321.4	323.4
175°	315.5	314.3	315.0	315.5	315.5	315.5	317.5	318.7	318.1	318.1	318.7
177.5°	316.7	315.7	315.7	316.2	315.7	315.7	316.7	317.2	316.2	316.2	316.7
180°	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2



TEST NUMBER: P333321-930

CATALOG NUMBER: S125DIP-S1270D810U930-4F0-1E-UDD-F4

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°	28.7	28.9	29.0	29.0	28.5	28.1	27.8	27.3
90°	11.5	12.1	12.7	14.0	14.0	14.0	14.7	14.7
92.5°	113.0	82.0	61.7	52.3	44.1	42.6	41.7	40.7
95°	458.4	361.4	283.1	229.5	184.3	165.1	160.0	149.8
97.5°	682.7	614.7	538.3	463.8	424.4	388.7	370.2	362.1
100°	784.1	752.8	687.2	620.9	576.9	531.0	507.4	497.3
102.5°	818.2	837.6	806.0	761.2	714.1	681.4	655.8	648.2
105°	798.1	885.5	913.5	906.5	886.1	865.0	852.3	844.7
107.5°	726.2	842.8	914.8	948.0	958.4	958.2	954.1	948.9
110°	673.2	794.3	884.2	938.3	967.0	979.2	983.7	983.7



TEST NUMBER: P333321-930

CATALOG NUMBER: S125DIP-S1270D810U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	631.4	746.3	837.2	901.2	943.1	963.8	974.9	979.6
115°	578.9	677.7	765.0	834.5	884.2	914.8	932.6	940.9
117.5°	544.9	630.1	705.3	769.1	818.8	850.4	868.1	873.2
120°	526.5	603.1	673.2	729.3	776.4	807.1	824.3	829.3
122.5°	512.8	583.7	646.1	698.7	740.8	768.8	786.0	790.6
125°	492.8	557.8	613.3	659.2	694.9	721.0	735.0	741.4
127.5°	472.4	533.0	584.8	627.8	660.1	683.2	696.5	699.3
130°	459.6	515.8	565.4	606.9	638.8	659.8	672.5	676.4
132.5°	446.9	499.4	544.5	584.4	616.3	637.3	649.1	653.4
135°	430.3	474.3	515.1	551.4	579.4	600.5	612.0	615.8
137.5°	416.3	451.8	485.8	516.6	541.8	560.8	571.4	575.7
140°	408.6	438.5	467.9	494.6	518.3	534.8	544.4	547.6
142.5°	402.0	427.4	452.6	475.8	495.9	509.9	518.9	521.5
145°	393.3	413.1	432.8	450.0	465.4	476.2	483.2	485.8
147.5°	385.1	401.2	416.4	429.4	441.5	450.2	454.3	455.4
150°	380.6	394.6	406.7	418.2	427.8	435.4	438.0	438.5
152.5°	375.4	388.0	399.1	408.0	416.0	422.2	424.7	425.3
155°	367.9	378.1	386.9	394.0	400.3	404.8	406.7	407.3
157.5°	360.2	368.6	375.4	381.0	386.0	389.6	391.4	391.3
160°	355.1	361.4	367.9	372.3	376.7	379.9	381.2	380.6
162.5°	349.4	355.3	360.7	364.6	368.1	370.7	371.0	370.9
165°	341.7	346.2	350.0	353.2	355.7	357.0	357.0	357.0
167.5°	334.3	337.2	340.1	342.4	343.7	344.9	344.4	344.2
170°	330.2	332.2	334.0	335.3	336.6	337.2	337.2	336.6
172.5°	325.6	327.5	329.0	329.7	330.0	331.1	330.1	329.5
175°	320.7	320.7	322.0	322.0	322.0	322.5	321.3	320.7
177.5°	317.2	317.7	317.7	317.7	317.2	317.7	316.2	316.2
180°	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2

(END OF REPORT)