

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: P333320-940

Luminaire Tested: **S125DIP-S1270D810U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333320-940
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-S1270D810U940-4F0-1E-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: 7075.1 lumens
Efficiency: N/A
Efficacy: 116.6 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

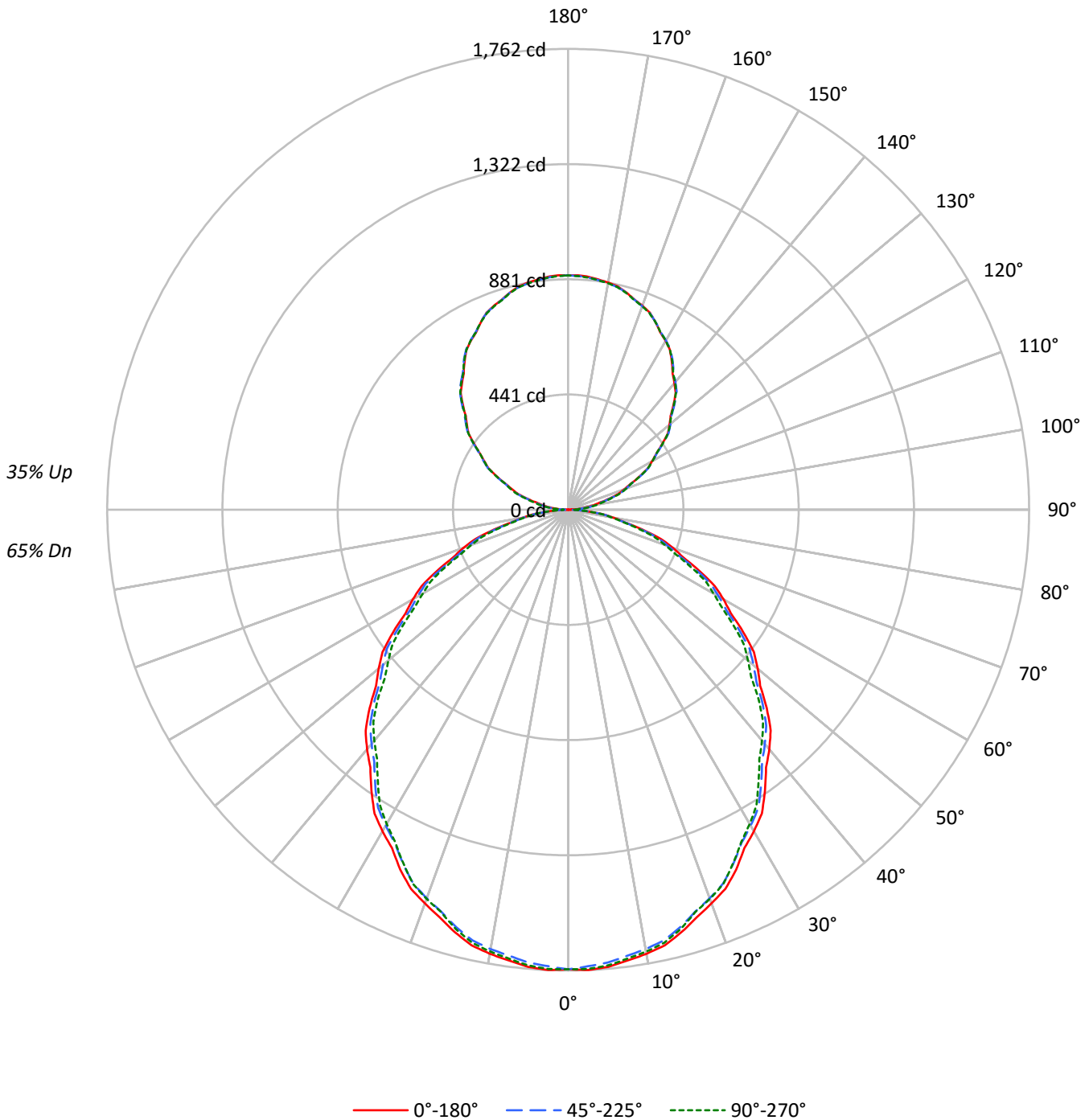
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	11349	11349	11349
5°	11374	11267	11339
10°	11305	11187	11252
15°	11183	11053	11099
20°	11008	10864	10883
25°	10819	10641	10630
30°	10586	10399	10347
35°	10336	10139	9996
40°	10080	9857	9716
45°	9803	9600	9409
50°	9499	9289	9010
55°	9205	8939	8688
60°	8853	8584	8280
65°	8436	8159	7882
70°	8033	7666	7404
75°	7321	7079	6832
80°	6512	6412	6259
85°	5669	5765	5461



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.7	2.3
10°-20°	468.1	6.6
20°-30°	691.1	9.8
30°-40°	806.4	11.4
40°-50°	809.9	11.4
50°-60°	710.9	10.0
60°-70°	529.7	7.5
70°-80°	302.9	4.3
80°-90°	90.1	1.3
90°-100°	60.0	0.8
100°-110°	177.2	2.5
110°-120°	300.2	4.2
120°-130°	395.0	5.6
130°-140°	442.6	6.3
140°-150°	433.8	6.1
150°-160°	364.4	5.2
160°-170°	242.2	3.4
170°-180°	84.8	1.2
0°-30°	1324.8	18.7
0°-40°	2131.2	30.1
0°-60°	3652.1	51.6
0°-90°	4574.8	64.7
90°-120°	537.4	7.6
90°-150°	1808.9	25.6
90°-180°	2500.0	35.3
0°-180°	7075.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1757	1757	1757	1757	1757	
5°	1754	1751	1738	1750	1749	166
15°	1672	1668	1653	1660	1660	471
25°	1518	1511	1493	1496	1492	698
35°	1311	1305	1286	1279	1268	820
45°	1073	1067	1051	1035	1030	827
55°	818	812	794	781	772	730
65°	552	548	534	522	516	548
75°	293	290	284	279	274	313
85°	76	78	78	76	74	85
90°	1	6	11	15	17	7
95°	45	47	54	58	60	48
105°	159	162	167	171	173	170
115°	300	303	305	304	303	297
125°	438	443	443	442	441	393
135°	570	574	575	575	572	439
145°	691	694	696	696	694	432
155°	791	791	791	794	791	364
165°	860	858	859	861	858	242
175°	894	891	891	895	890	85
180°	896	896	896	896	896	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3
2.5°	1761.8	1761.0	1760.3	1759.5	1758.8	1757.2	1754.7	1752.2	1749.8	1747.3	1749.8
5°	1754.5	1753.9	1753.3	1752.7	1752.0	1750.2	1747.1	1744.0	1741.0	1737.9	1740.6
7.5°	1738.4	1737.8	1737.1	1736.5	1735.9	1733.9	1730.5	1727.2	1723.8	1720.4	1723.1
10°	1723.9	1723.3	1722.7	1722.1	1721.4	1719.5	1716.1	1712.7	1709.2	1705.8	1708.3
12.5°	1706.1	1705.0	1704.0	1702.8	1701.7	1699.6	1696.4	1693.3	1690.1	1686.9	1689.0
15°	1672.5	1671.6	1670.6	1669.7	1668.8	1666.6	1663.2	1659.8	1656.4	1653.1	1654.6
17.5°	1633.9	1632.5	1631.1	1629.8	1628.4	1625.9	1622.5	1618.9	1615.4	1611.9	1613.8
20°	1601.6	1601.0	1600.4	1599.7	1599.1	1596.8	1592.8	1588.8	1584.7	1580.7	1582.9
22.5°	1569.3	1568.3	1567.1	1566.0	1564.9	1562.5	1558.7	1555.0	1551.1	1547.4	1548.8
25°	1518.2	1516.6	1515.1	1513.6	1512.0	1509.2	1505.2	1501.2	1497.2	1493.2	1493.8
27.5°	1458.4	1457.5	1456.5	1455.6	1454.7	1452.2	1448.0	1443.9	1439.8	1435.6	1435.7
30°	1419.5	1418.5	1417.6	1416.7	1415.8	1413.0	1408.4	1403.7	1399.1	1394.5	1393.8
32.5°	1377.2	1375.8	1374.4	1373.0	1371.5	1368.8	1364.6	1360.5	1356.3	1352.2	1351.1
35°	1311.0	1309.8	1308.6	1307.3	1306.1	1303.3	1299.0	1294.7	1290.3	1286.0	1284.5
37.5°	1242.3	1240.8	1239.3	1237.7	1236.2	1233.3	1229.3	1225.2	1221.1	1217.1	1214.8
40°	1195.6	1194.1	1192.6	1191.0	1189.5	1186.5	1182.2	1177.9	1173.6	1169.2	1166.4
42.5°	1145.6	1144.3	1143.0	1141.7	1140.4	1137.6	1133.3	1128.9	1124.6	1120.3	1117.8
45°	1073.3	1072.1	1070.9	1069.6	1068.4	1065.9	1062.2	1058.5	1054.8	1051.1	1047.3
47.5°	995.4	995.5	995.6	995.6	995.7	993.5	989.1	984.6	980.2	975.7	972.0
50°	945.4	944.5	943.5	942.6	941.6	939.3	935.7	931.9	928.3	924.5	920.5
52.5°	894.2	893.6	892.9	892.2	891.5	889.2	885.2	881.3	877.4	873.3	869.9
55°	817.5	816.5	815.6	814.7	813.8	811.2	806.8	802.5	798.2	793.9	791.0
57.5°	736.6	736.1	735.6	735.1	734.6	732.5	728.9	725.2	721.6	717.9	714.3
60°	685.4	684.2	683.0	681.7	680.5	678.1	674.8	671.4	668.0	664.6	661.5
62.5°	632.0	631.1	630.1	629.0	628.0	626.2	623.2	620.3	617.4	614.5	611.2
65°	552.0	551.3	550.7	550.1	549.5	547.4	544.0	540.6	537.3	533.9	531.1
67.5°	474.4	473.1	471.8	470.5	469.2	467.3	464.8	462.2	459.7	457.1	454.8
70°	425.4	423.9	422.3	420.8	419.3	417.1	414.3	411.5	408.8	406.0	404.1
72.5°	372.0	371.0	370.0	368.9	367.8	366.4	364.6	362.8	361.1	359.3	357.1
75°	293.4	292.7	292.1	291.5	290.9	289.8	288.3	286.7	285.2	283.7	282.7
77.5°	220.8	220.5	220.3	220.1	219.8	219.3	218.4	217.5	216.6	215.8	215.3
80°	175.1	175.1	175.1	175.1	175.1	174.9	174.2	173.6	173.0	172.4	172.1
82.5°	135.1	134.6	134.1	133.7	133.1	132.9	132.7	132.6	132.5	132.3	131.8
85°	76.5	76.8	77.0	77.4	77.7	77.8	77.8	77.8	77.8	77.8	77.6
87.5°	30.1	30.4	30.7	30.9	31.1	31.3	31.2	31.2	31.2	31.1	31.3
90°	0.7	2.0	3.2	4.5	5.6	6.8	7.9	9.0	10.1	11.1	11.9
92.5°	16.9	17.7	18.6	19.4	20.3	21.4	22.7	24.1	25.4	26.8	27.8
95°	45.3	45.7	45.9	46.3	46.5	47.5	49.0	50.6	52.2	53.7	54.8
97.5°	75.3	75.4	75.5	75.7	75.8	77.0	79.1	81.2	83.4	85.5	86.5
100°	97.6	97.6	97.6	97.6	97.6	98.6	100.7	102.6	104.7	106.6	108.1
102.5°	121.6	122.3	122.9	123.5	124.1	124.9	125.9	127.0	128.0	129.0	130.5
105°	159.0	159.8	160.5	161.3	162.1	162.9	163.9	164.8	165.7	166.7	167.6
107.5°	200.3	201.0	201.8	202.6	203.4	204.1	204.8	205.5	206.3	207.0	207.4
110°	228.7	229.5	230.2	231.0	231.8	232.5	232.9	233.4	233.8	234.3	234.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	257.7	258.2	258.5	259.0	259.3	259.8	260.4	261.0	261.6	262.2	262.4
115°	300.5	301.1	301.8	302.4	303.0	303.4	303.8	304.1	304.4	304.7	304.5
117.5°	343.5	343.8	344.0	344.3	344.6	344.9	345.2	345.4	345.7	346.0	346.1
120°	370.2	371.0	371.8	372.6	373.4	373.8	374.0	374.2	374.3	374.4	374.4
122.5°	399.2	399.6	399.8	400.1	400.4	400.7	401.1	401.5	401.9	402.3	402.2
125°	438.5	439.5	440.4	441.4	442.3	442.8	443.0	443.2	443.3	443.4	443.2
127.5°	480.5	481.0	481.4	482.0	482.5	482.9	483.0	483.2	483.5	483.7	483.5
130°	505.5	506.3	507.1	507.8	508.6	509.2	509.4	509.8	510.1	510.4	510.2
132.5°	530.7	531.9	533.2	534.4	535.7	536.3	536.3	536.2	536.1	536.1	535.9
135°	570.3	571.3	572.2	573.2	574.1	574.6	574.8	575.0	575.1	575.2	575.2
137.5°	607.8	608.7	609.6	610.5	611.4	612.0	612.3	612.6	613.0	613.3	613.5
140°	631.8	632.5	633.3	634.1	634.8	635.4	635.9	636.4	636.9	637.3	637.7
142.5°	655.8	656.4	657.0	657.6	658.4	659.0	659.5	660.1	660.7	661.3	661.5
145°	691.0	691.6	692.2	692.9	693.5	694.0	694.5	694.9	695.4	695.9	695.9
147.5°	723.6	724.0	724.3	724.7	725.0	725.3	725.8	726.1	726.5	726.8	727.2
150°	745.4	745.2	745.1	744.9	744.8	745.0	745.6	746.3	746.9	747.5	747.5
152.5°	763.2	763.5	763.7	763.9	764.1	764.4	764.6	764.8	765.1	765.4	765.7
155°	790.7	790.7	790.7	790.7	790.7	790.8	790.9	791.1	791.2	791.4	792.0
157.5°	815.3	814.9	814.6	814.2	813.9	813.8	814.0	814.1	814.2	814.4	815.0
160°	829.7	829.3	828.8	828.4	827.9	827.8	827.9	828.0	828.2	828.4	829.0
162.5°	842.6	842.2	841.9	841.6	841.2	841.1	841.1	841.2	841.2	841.2	842.0
165°	859.8	859.4	859.2	858.8	858.5	858.4	858.5	858.7	858.9	859.1	859.7
167.5°	874.2	873.6	873.0	872.4	871.7	871.5	871.5	871.5	871.5	871.5	872.4
170°	882.1	881.5	880.8	880.2	879.6	879.2	879.2	879.2	879.2	879.2	880.2
172.5°	887.6	887.0	886.4	885.7	885.1	884.8	884.8	884.8	884.8	884.8	885.7
175°	893.9	893.3	892.7	892.1	891.4	891.1	891.1	891.1	891.1	891.1	892.1
177.5°	897.2	896.6	896.2	895.6	895.1	894.8	894.7	894.6	894.5	894.3	895.1
180°	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3
2.5°	1752.2	1754.7	1757.2	1758.3	1758.1	1757.8	1757.6	1757.3
5°	1743.4	1746.2	1749.0	1750.2	1749.9	1749.6	1749.3	1749.0
7.5°	1725.7	1728.5	1731.2	1732.4	1732.1	1731.8	1731.5	1731.2
10°	1710.8	1713.3	1715.7	1716.8	1716.5	1716.2	1715.9	1715.7
12.5°	1691.0	1692.9	1694.9	1695.9	1695.8	1695.7	1695.7	1695.6
15°	1656.2	1657.7	1659.2	1660.0	1660.0	1660.0	1660.0	1660.0
17.5°	1615.7	1617.7	1619.5	1619.7	1618.2	1616.7	1615.1	1613.6
20°	1585.1	1587.2	1589.4	1589.7	1588.1	1586.6	1585.1	1583.5
22.5°	1550.2	1551.7	1553.1	1553.3	1552.2	1551.1	1550.1	1549.1
25°	1494.4	1495.0	1495.7	1495.5	1494.6	1493.6	1492.7	1491.7
27.5°	1435.8	1436.0	1436.1	1435.7	1434.8	1433.9	1432.9	1432.0
30°	1393.2	1392.6	1392.0	1391.2	1390.3	1389.4	1388.4	1387.5
32.5°	1350.0	1348.9	1347.7	1346.3	1344.7	1343.0	1341.3	1339.7
35°	1282.9	1281.4	1279.9	1277.8	1275.3	1272.9	1270.4	1267.9
37.5°	1212.5	1210.2	1207.9	1206.0	1204.6	1203.2	1201.8	1200.3
40°	1163.7	1160.9	1158.1	1156.3	1155.3	1154.4	1153.4	1152.5
42.5°	1115.3	1112.7	1110.2	1108.2	1106.8	1105.4	1103.9	1102.5
45°	1043.7	1039.9	1036.3	1033.9	1033.0	1032.1	1031.1	1030.2
47.5°	968.1	964.4	960.6	957.7	955.5	953.3	951.2	949.0
50°	916.5	912.5	908.5	905.4	903.2	901.1	898.9	896.7
52.5°	866.3	862.8	859.3	856.3	853.9	851.5	849.1	846.7
55°	788.3	785.5	782.7	780.2	778.1	776.0	773.7	771.6
57.5°	710.8	707.2	703.6	701.2	700.1	698.9	697.7	696.5
60°	658.4	655.3	652.2	649.6	647.4	645.2	643.1	641.0
62.5°	607.8	604.5	601.2	598.7	597.0	595.3	593.6	592.0
65°	528.3	525.5	522.7	520.8	519.5	518.3	517.0	515.8
67.5°	452.5	450.0	447.7	446.2	445.4	444.7	444.0	443.2
70°	402.3	400.4	398.5	397.0	395.7	394.5	393.3	392.1
72.5°	355.1	352.9	350.9	349.2	347.9	346.7	345.4	344.2
75°	281.8	280.8	279.9	278.8	277.6	276.3	275.1	273.8
77.5°	214.6	214.1	213.6	212.9	212.0	211.1	210.3	209.4
80°	171.7	171.5	171.1	170.7	170.0	169.4	168.8	168.3
82.5°	131.3	130.7	130.1	129.8	129.7	129.6	129.4	129.3
85°	77.2	77.0	76.6	76.2	75.5	74.9	74.3	73.7
87.5°	31.5	31.7	31.7	31.7	31.2	30.9	30.4	30.1
90°	12.7	13.5	14.3	14.9	15.3	15.8	16.2	16.8
92.5°	28.8	29.9	30.9	31.6	31.9	32.2	32.5	32.9
95°	55.8	57.0	58.1	58.8	59.0	59.4	59.7	59.9
97.5°	87.6	88.5	89.6	90.2	90.3	90.5	90.8	91.0
100°	109.5	110.8	112.3	113.2	113.4	113.7	114.0	114.3
102.5°	132.1	133.6	135.1	136.1	136.5	136.9	137.3	137.8
105°	168.5	169.4	170.4	171.0	171.6	172.0	172.5	172.9
107.5°	207.9	208.3	208.8	209.0	209.0	208.9	208.9	208.9
110°	235.2	235.7	236.1	236.3	236.1	235.9	235.9	235.7



TEST NUMBER: P333320-940

CATALOG NUMBER: S125DIP-S1270D810U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	262.6	262.8	263.1	263.1	262.7	262.4	262.2	261.9
115°	304.4	304.3	304.1	303.9	303.8	303.6	303.4	303.4
117.5°	346.3	346.3	346.5	346.3	345.6	345.0	344.4	343.8
120°	374.4	374.4	374.4	374.2	373.5	372.9	372.3	371.7
122.5°	402.1	402.0	401.8	401.5	401.0	400.6	400.0	399.6
125°	442.8	442.6	442.2	442.0	441.8	441.7	441.6	441.4
127.5°	483.3	483.1	483.0	482.8	482.5	482.1	481.9	481.5
130°	510.1	510.0	509.8	509.5	509.3	508.9	508.6	508.3
132.5°	535.7	535.6	535.5	535.1	534.8	534.3	533.9	533.4
135°	575.2	575.2	575.2	575.0	574.4	573.7	573.1	572.5
137.5°	613.7	613.9	614.0	613.8	613.0	612.2	611.4	610.6
140°	637.9	638.2	638.6	638.3	637.6	636.8	636.0	635.3
142.5°	661.6	661.8	662.0	661.7	660.9	660.2	659.4	658.6
145°	695.9	695.9	695.9	695.6	695.2	694.7	694.3	693.8
147.5°	727.5	728.0	728.3	728.0	726.9	725.9	724.9	723.8
150°	747.5	747.5	747.5	747.3	747.0	746.7	746.4	746.1
152.5°	766.1	766.4	766.8	766.7	766.2	765.6	765.1	764.5
155°	792.6	793.3	793.9	793.8	793.0	792.3	791.5	790.7
157.5°	815.6	816.3	816.9	816.7	815.6	814.7	813.6	812.6
160°	829.6	830.2	830.8	830.8	830.0	829.2	828.4	827.7
162.5°	842.7	843.5	844.2	844.1	843.2	842.3	841.4	840.5
165°	860.3	860.9	861.5	861.4	860.4	859.5	858.5	857.6
167.5°	873.3	874.2	875.2	875.1	874.2	873.3	872.3	871.3
170°	881.1	882.1	883.0	882.9	881.8	880.7	879.7	878.6
172.5°	886.7	887.6	888.6	888.6	887.6	886.6	885.6	884.7
175°	893.0	893.9	894.8	894.7	893.7	892.6	891.5	890.5
177.5°	895.8	896.5	897.3	897.2	896.3	895.5	894.7	893.8
180°	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0

(END OF REPORT)