

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: P333328-830

Luminaire Tested: **S125DIP-S1270D1035U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333328-830
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-S1270D1035U830-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8734.7 lumens
Efficiency: N/A
Efficacy: 130.8 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: General Diffuse

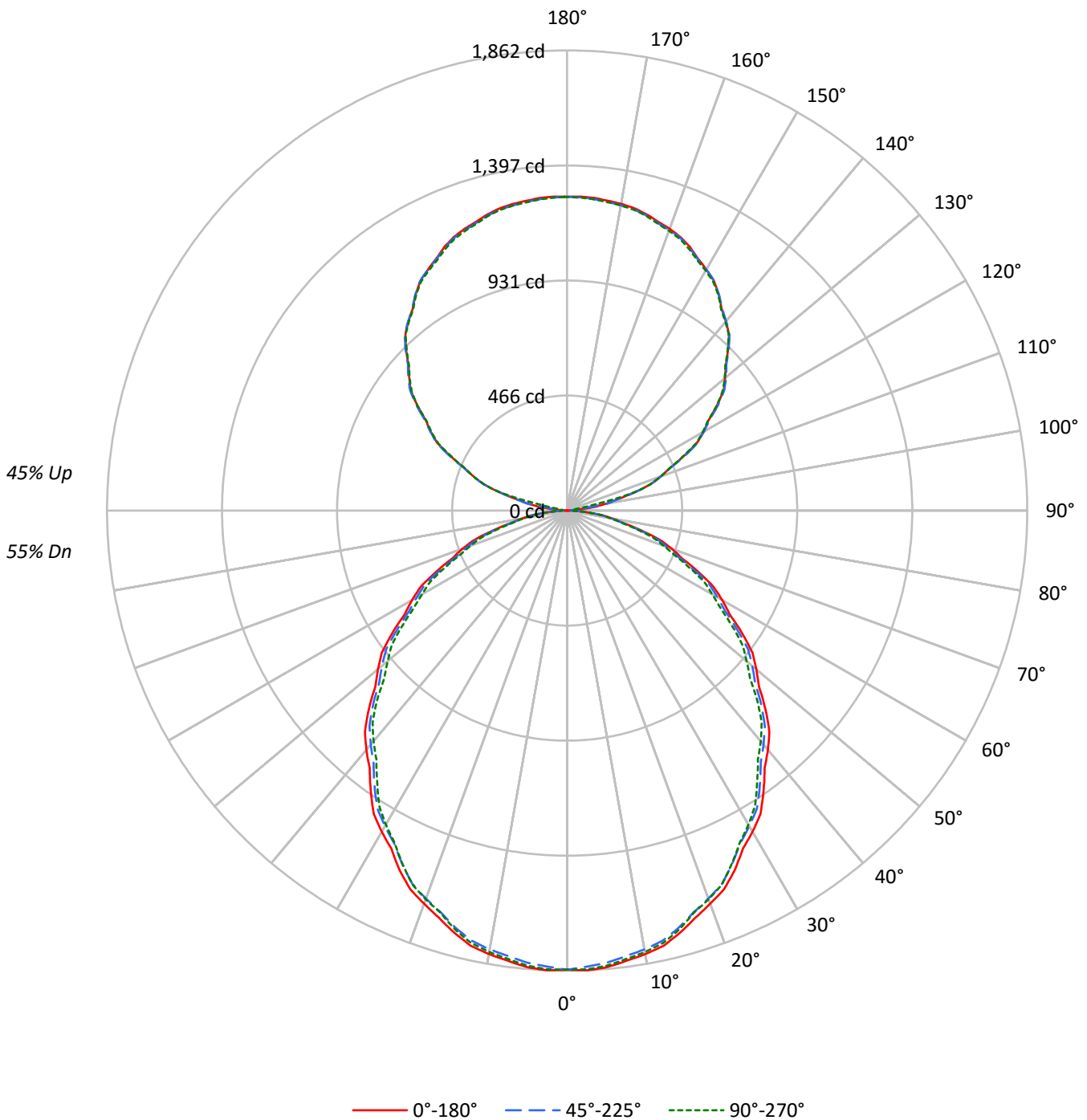
Input Watts (W): 66.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50
RCR																			
0	108	108	108	108		101	101	101	101		86	86	86		73	73	73		61
1	99	95	91	87		92	88	85	81		76	73	71		64	62	61		54
2	90	83	76	71		83	77	71	67		66	62	59		56	53	51		47
3	82	73	65	59		76	68	61	56		58	53	49		50	46	43		42
4	75	64	56	50		69	60	53	47		52	46	42		44	40	37		37
5	69	57	49	43		64	53	46	41		46	41	36		40	35	32		34
6	64	51	43	37		59	48	41	35		42	36	32		36	31	28		31
7	59	46	38	33		54	43	36	31		38	32	28		33	28	25		28
8	55	42	34	29		51	40	32	28		35	29	25		30	25	22		26
9	51	38	31	26		47	36	29	25		32	26	22		28	23	20		24
10	48	35	28	23		44	33	27	22		29	24	20		26	21	18		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11996	11996	11996
5°	12023	11909	11985
10°	11950	11825	11893
15°	11820	11683	11732
20°	11635	11483	11504
25°	11436	11247	11236
30°	11189	10992	10937
35°	10925	10717	10566
40°	10655	10420	10270
45°	10361	10147	9945
50°	10040	9818	9523
55°	9730	9448	9183
60°	9357	9074	8751
65°	8915	8623	8332
70°	8492	8103	7825
75°	7738	7481	7224
80°	6884	6776	6616
85°	5995	6099	5772



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.1	2.0
10°-20°	494.7	5.7
20°-30°	730.5	8.4
30°-40°	852.4	9.8
40°-50°	856.1	9.8
50°-60°	751.5	8.6
60°-70°	559.9	6.4
70°-80°	320.2	3.7
80°-90°	95.8	1.1
90°-100°	46.1	0.5
100°-110°	284.3	3.3
110°-120°	515.7	5.9
120°-130°	661.8	7.6
130°-140°	711.8	8.1
140°-150°	668.2	7.6
150°-160°	540.5	6.2
160°-170°	349.6	4.0
170°-180°	120.6	1.4
0°-30°	1400.3	16.0
0°-40°	2252.7	25.8
0°-60°	3860.3	44.2
0°-90°	4836.2	55.4
90°-120°	846.1	9.7
90°-150°	2887.9	33.1
90°-180°	3899.0	44.6
0°-180°	8734.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1858	1858	1858	1858	1858	
5°	1854	1851	1837	1849	1849	176
15°	1768	1763	1747	1754	1755	498
25°	1605	1597	1578	1581	1577	738
35°	1386	1379	1359	1352	1340	866
45°	1134	1128	1111	1094	1089	874
55°	864	859	839	826	816	771
65°	583	580	564	551	545	579
75°	310	307	300	295	290	331
85°	81	82	82	81	78	90
90°	1	8	15	20	23	7
95°	54	49	15	20	20	68
105°	277	280	280	280	280	293
115°	520	524	525	521	516	515
125°	739	745	745	742	739	660
135°	921	927	925	923	918	710
145°	1068	1070	1070	1071	1065	668
155°	1176	1171	1173	1175	1168	542
165°	1241	1236	1237	1242	1235	351
175°	1270	1264	1265	1271	1264	121
180°	1270	1270	1270	1270	1270	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5
2.5°	1862.2	1861.4	1860.7	1859.8	1859.1	1857.4	1854.7	1852.1	1849.6	1846.9	1849.6
5°	1854.5	1853.9	1853.2	1852.6	1851.9	1850.0	1846.7	1843.4	1840.2	1836.9	1839.8
7.5°	1837.5	1836.8	1836.2	1835.5	1834.8	1832.8	1829.2	1825.6	1822.0	1818.4	1821.3
10°	1822.2	1821.6	1820.9	1820.2	1819.6	1817.5	1813.9	1810.3	1806.7	1803.1	1805.7
12.5°	1803.4	1802.2	1801.1	1799.9	1798.7	1796.5	1793.1	1789.8	1786.5	1783.1	1785.3
15°	1767.8	1766.9	1765.9	1764.9	1764.0	1761.6	1758.0	1754.4	1750.9	1747.3	1748.9
17.5°	1727.0	1725.6	1724.1	1722.7	1721.3	1718.6	1715.0	1711.2	1707.5	1703.7	1705.8
20°	1692.9	1692.2	1691.6	1690.9	1690.3	1687.8	1683.6	1679.3	1675.1	1670.8	1673.1
22.5°	1658.8	1657.6	1656.4	1655.3	1654.1	1651.5	1647.6	1643.6	1639.6	1635.6	1637.1
25°	1604.8	1603.1	1601.5	1599.9	1598.2	1595.3	1591.0	1586.8	1582.5	1578.3	1578.9
27.5°	1541.5	1540.6	1539.5	1538.6	1537.7	1534.9	1530.6	1526.2	1521.8	1517.4	1517.6
30°	1500.4	1499.4	1498.5	1497.4	1496.5	1493.6	1488.7	1483.8	1478.8	1473.9	1473.3
32.5°	1455.8	1454.2	1452.7	1451.2	1449.7	1446.8	1442.4	1438.0	1433.6	1429.3	1428.1
35°	1385.7	1384.5	1383.2	1381.9	1380.5	1377.6	1373.0	1368.5	1363.9	1359.3	1357.7
37.5°	1313.2	1311.5	1309.9	1308.2	1306.6	1303.6	1299.4	1295.1	1290.7	1286.5	1284.0
40°	1263.8	1262.2	1260.6	1258.9	1257.3	1254.1	1249.6	1245.0	1240.5	1235.9	1232.9
42.5°	1210.9	1209.6	1208.2	1206.7	1205.4	1202.4	1197.9	1193.3	1188.7	1184.1	1181.5
45°	1134.4	1133.2	1131.9	1130.6	1129.3	1126.6	1122.8	1118.8	1114.9	1111.0	1107.0
47.5°	1052.2	1052.3	1052.3	1052.3	1052.4	1050.1	1045.5	1040.8	1036.0	1031.3	1027.4
50°	999.3	998.3	997.3	996.4	995.3	992.9	989.0	985.1	981.2	977.2	973.0
52.5°	945.2	944.5	943.8	943.0	942.4	939.9	935.7	931.5	927.4	923.1	919.5
55°	864.1	863.1	862.1	861.1	860.2	857.4	852.8	848.3	843.7	839.1	836.1
57.5°	778.5	778.1	777.5	777.0	776.5	774.3	770.4	766.6	762.7	758.8	755.1
60°	724.4	723.2	721.9	720.6	719.3	716.8	713.2	709.6	706.1	702.5	699.2
62.5°	668.1	667.0	666.0	664.9	663.8	661.9	658.7	655.6	652.6	649.5	646.0
65°	583.4	582.8	582.1	581.5	580.8	578.6	575.0	571.5	567.9	564.3	561.4
67.5°	501.4	500.0	498.7	497.3	496.0	493.9	491.3	488.5	485.9	483.1	480.7
70°	449.7	448.1	446.4	444.8	443.2	440.8	437.9	435.0	432.1	429.1	427.2
72.5°	393.2	392.1	391.1	389.9	388.8	387.3	385.4	383.5	381.6	379.8	377.5
75°	310.1	309.4	308.8	308.1	307.5	306.3	304.7	303.0	301.4	299.8	298.8
77.5°	233.4	233.1	232.8	232.6	232.3	231.8	230.8	229.9	228.9	228.1	227.5
80°	185.1	185.1	185.1	185.1	185.1	184.8	184.2	183.5	182.9	182.2	181.9
82.5°	142.8	142.3	141.8	141.3	140.7	140.4	140.3	140.2	140.1	139.9	139.3
85°	80.9	81.2	81.4	81.8	82.1	82.3	82.3	82.3	82.3	82.3	82.0
87.5°	32.0	32.2	32.6	32.9	33.3	33.5	33.5	33.6	33.6	33.6	33.7
90°	0.9	2.6	4.2	5.9	7.6	9.2	10.7	12.2	13.6	15.1	16.1
92.5°	14.5	13.3	12.2	10.9	9.8	9.9	11.1	12.4	13.8	15.1	16.1
95°	53.6	53.0	52.4	51.7	51.2	46.8	38.9	30.9	23.0	15.1	16.1
97.5°	112.0	113.1	114.2	115.4	116.5	109.2	93.5	77.8	62.0	46.3	40.4
100°	157.1	157.8	158.4	159.0	159.7	160.4	161.3	162.1	162.9	163.7	132.6
102.5°	203.1	203.9	204.7	205.5	206.2	206.9	207.5	207.9	208.4	209.0	203.0
105°	276.6	277.5	278.3	279.2	280.0	280.4	280.4	280.4	280.4	280.4	280.4
107.5°	353.1	353.1	353.1	353.1	353.1	353.3	353.7	354.1	354.6	355.0	355.1
110°	402.7	402.7	402.7	402.7	402.7	403.0	403.4	403.9	404.3	404.6	404.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	449.5	450.0	450.4	451.0	451.5	451.9	452.1	452.3	452.6	452.9	452.0
115°	519.5	520.6	521.6	522.6	523.7	524.3	524.5	524.7	524.9	525.1	524.3
117.5°	591.9	591.9	591.8	591.8	591.8	592.2	593.0	593.7	594.6	595.3	594.3
120°	637.2	636.9	636.7	636.5	636.3	636.5	637.2	637.7	638.4	639.0	638.6
122.5°	677.0	677.8	678.6	679.4	680.2	680.7	681.1	681.4	681.6	681.9	681.5
125°	738.8	740.2	741.7	743.2	744.6	745.4	745.4	745.4	745.4	745.4	744.5
127.5°	797.7	798.7	799.7	800.8	801.8	802.3	802.2	802.1	801.9	801.8	801.3
130°	833.8	834.9	835.9	837.0	838.0	838.6	838.9	839.1	839.2	839.4	838.9
132.5°	870.0	871.2	872.4	873.5	874.8	875.2	874.7	874.3	873.8	873.4	873.2
135°	921.3	922.6	923.9	925.1	926.3	926.8	926.3	926.0	925.5	925.1	924.6
137.5°	968.6	969.7	970.7	971.9	972.9	973.3	972.9	972.5	972.1	971.8	971.9
140°	999.5	999.8	1000.3	1000.7	1001.1	1001.3	1001.0	1000.8	1000.6	1000.4	1000.8
142.5°	1027.3	1027.6	1027.8	1028.0	1028.3	1028.6	1028.9	1029.2	1029.4	1029.7	1029.8
145°	1068.2	1068.6	1068.9	1069.4	1069.8	1070.1	1070.1	1070.1	1070.1	1070.1	1070.3
147.5°	1103.9	1103.8	1103.7	1103.6	1103.5	1103.6	1103.9	1104.2	1104.4	1104.7	1104.9
150°	1126.5	1126.1	1125.7	1125.2	1124.8	1124.8	1125.2	1125.7	1126.1	1126.5	1126.9
152.5°	1148.3	1147.5	1146.5	1145.6	1144.6	1144.4	1144.8	1145.2	1145.7	1146.0	1146.5
155°	1176.4	1175.2	1173.8	1172.6	1171.4	1170.9	1171.4	1171.8	1172.1	1172.6	1173.3
157.5°	1198.0	1197.2	1196.6	1195.8	1195.0	1194.7	1194.7	1194.8	1194.8	1194.9	1195.5
160°	1213.1	1211.8	1210.6	1209.3	1208.1	1207.5	1207.8	1208.0	1208.2	1208.3	1209.2
162.5°	1225.1	1223.9	1222.6	1221.3	1220.1	1219.6	1219.7	1220.0	1220.2	1220.4	1221.6
165°	1241.3	1240.0	1238.8	1237.6	1236.3	1235.8	1236.0	1236.1	1236.4	1236.6	1237.8
167.5°	1253.4	1252.1	1250.8	1249.4	1248.2	1247.6	1247.8	1248.0	1248.2	1248.5	1250.0
170°	1260.1	1258.7	1257.2	1255.7	1254.2	1253.7	1253.9	1254.1	1254.2	1254.5	1256.1
172.5°	1264.6	1263.2	1261.7	1260.3	1258.8	1258.3	1258.6	1259.0	1259.3	1259.7	1261.2
175°	1269.5	1268.3	1267.1	1265.7	1264.5	1264.0	1264.2	1264.4	1264.6	1264.8	1266.5
177.5°	1271.8	1270.8	1269.8	1268.8	1267.8	1267.3	1267.5	1267.7	1267.9	1268.0	1269.2
180°	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5
2.5°	1852.1	1854.7	1857.4	1858.5	1858.3	1858.0	1857.8	1857.5
5°	1842.8	1845.8	1848.7	1850.0	1849.6	1849.4	1849.0	1848.7
7.5°	1824.1	1827.0	1829.9	1831.2	1830.9	1830.5	1830.2	1829.9
10°	1808.4	1811.0	1813.5	1814.7	1814.4	1814.0	1813.7	1813.5
12.5°	1787.3	1789.4	1791.5	1792.5	1792.4	1792.3	1792.3	1792.2
15°	1750.6	1752.2	1753.8	1754.6	1754.6	1754.6	1754.6	1754.6
17.5°	1707.8	1709.9	1711.8	1712.0	1710.4	1708.8	1707.1	1705.5
20°	1675.5	1677.7	1680.0	1680.4	1678.7	1677.1	1675.5	1673.8
22.5°	1638.6	1640.1	1641.6	1641.8	1640.7	1639.6	1638.4	1637.4
25°	1579.6	1580.3	1580.9	1580.7	1579.8	1578.8	1577.8	1576.8
27.5°	1517.7	1517.9	1518.0	1517.5	1516.6	1515.6	1514.6	1513.6
30°	1472.6	1472.0	1471.3	1470.6	1469.5	1468.6	1467.5	1466.6
32.5°	1426.9	1425.8	1424.6	1423.1	1421.4	1419.6	1417.8	1416.1
35°	1356.0	1354.4	1352.8	1350.7	1348.0	1345.5	1342.8	1340.2
37.5°	1281.6	1279.2	1276.8	1274.8	1273.3	1271.8	1270.3	1268.8
40°	1230.0	1227.1	1224.1	1222.2	1221.2	1220.2	1219.2	1218.2
42.5°	1178.8	1176.1	1173.5	1171.4	1169.9	1168.4	1166.9	1165.4
45°	1103.2	1099.2	1095.3	1092.9	1091.8	1090.9	1089.9	1088.9
47.5°	1023.3	1019.4	1015.4	1012.3	1009.9	1007.7	1005.4	1003.1
50°	968.7	964.5	960.3	957.0	954.7	952.4	950.2	947.8
52.5°	915.7	912.0	908.2	905.1	902.6	900.0	897.5	894.9
55°	833.2	830.3	827.4	824.7	822.5	820.2	817.8	815.6
57.5°	751.3	747.5	743.8	741.2	740.0	738.8	737.4	736.2
60°	695.9	692.7	689.4	686.6	684.3	682.0	679.8	677.5
62.5°	642.4	638.9	635.5	632.8	631.0	629.2	627.5	625.8
65°	558.5	555.4	552.5	550.4	549.1	547.8	546.5	545.2
67.5°	478.2	475.7	473.3	471.6	470.8	470.0	469.3	468.4
70°	425.2	423.2	421.2	419.6	418.3	417.0	415.8	414.4
72.5°	375.3	373.1	370.9	369.1	367.8	366.5	365.1	363.8
75°	297.8	296.8	295.9	294.7	293.4	292.1	290.8	289.5
77.5°	226.9	226.3	225.7	225.0	224.0	223.1	222.3	221.3
80°	181.5	181.3	180.9	180.4	179.7	179.1	178.4	177.9
82.5°	138.7	138.2	137.5	137.2	137.0	137.0	136.8	136.7
85°	81.6	81.3	81.0	80.5	79.8	79.2	78.5	77.9
87.5°	34.0	34.2	34.4	34.3	33.9	33.6	33.1	32.7
90°	17.2	18.2	19.2	20.1	20.7	21.3	22.0	22.6
92.5°	17.2	18.2	19.2	19.9	20.2	20.5	20.8	21.1
95°	17.2	18.2	19.2	19.8	19.8	19.8	19.8	19.8
97.5°	34.5	28.7	22.7	19.8	19.8	19.8	19.8	19.8
100°	101.4	70.3	39.1	23.1	22.2	21.4	20.6	19.8
102.5°	197.1	191.2	185.3	175.3	161.1	146.8	132.6	118.4
105°	280.4	280.4	280.4	280.3	280.1	279.9	279.7	279.5
107.5°	355.1	355.2	355.2	354.9	354.2	353.6	353.0	352.3
110°	403.4	402.7	402.2	402.0	402.2	402.4	402.6	402.7



TEST NUMBER: P333328-830

CATALOG NUMBER: S125DIP-S1270D1035U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	451.3	450.4	449.7	449.1	448.8	448.6	448.3	448.0
115°	523.5	522.6	521.8	520.8	519.5	518.2	517.0	515.8
117.5°	593.1	592.1	591.0	590.1	589.7	589.1	588.5	588.0
120°	638.2	637.7	637.3	636.6	635.6	634.5	633.5	632.4
122.5°	681.1	680.7	680.2	679.4	678.3	677.0	675.8	674.6
125°	743.7	742.8	742.0	741.3	740.6	740.0	739.4	738.8
127.5°	800.9	800.4	799.9	799.0	797.4	795.9	794.4	792.8
130°	838.2	837.5	837.0	836.1	835.1	834.1	833.0	831.9
132.5°	873.1	873.0	872.8	872.2	871.2	870.2	869.1	868.1
135°	924.3	923.9	923.4	922.6	921.3	920.1	918.8	917.6
137.5°	971.9	972.0	972.1	971.6	970.5	969.4	968.4	967.2
140°	1001.3	1001.6	1002.0	1001.6	1000.4	999.1	997.9	996.6
142.5°	1029.9	1030.0	1030.1	1029.5	1028.2	1027.0	1025.8	1024.4
145°	1070.4	1070.6	1070.8	1070.4	1069.1	1067.8	1066.6	1065.4
147.5°	1105.1	1105.4	1105.7	1105.0	1103.5	1102.0	1100.5	1099.0
150°	1127.4	1127.8	1128.1	1127.6	1125.9	1124.2	1122.5	1120.9
152.5°	1146.9	1147.4	1147.7	1147.2	1145.7	1144.2	1142.6	1141.1
155°	1173.8	1174.5	1175.2	1174.6	1172.9	1171.2	1169.6	1167.9
157.5°	1196.2	1196.8	1197.5	1197.0	1195.3	1193.6	1191.9	1190.3
160°	1210.0	1210.9	1211.7	1211.3	1209.7	1208.0	1206.3	1204.6
162.5°	1222.8	1223.9	1225.1	1224.7	1222.9	1221.1	1219.3	1217.4
165°	1239.1	1240.4	1241.6	1241.4	1239.7	1238.0	1236.4	1234.7
167.5°	1251.5	1253.0	1254.5	1254.3	1252.5	1250.6	1248.7	1246.8
170°	1257.8	1259.5	1261.2	1261.0	1259.1	1257.4	1255.5	1253.6
172.5°	1262.7	1264.2	1265.7	1265.6	1263.7	1261.8	1259.9	1258.1
175°	1268.2	1269.9	1271.5	1271.4	1269.5	1267.6	1265.7	1263.9
177.5°	1270.4	1271.6	1272.7	1272.6	1271.3	1270.0	1268.7	1267.2
180°	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5

(END OF REPORT)