

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: P333637-840

Luminaire Tested: **S125RDIP-S1270D1205U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333637-840
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: S125RDIP-S1270D1205U840-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9790.0 lumens
Efficiency: N/A
Efficacy: 136.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

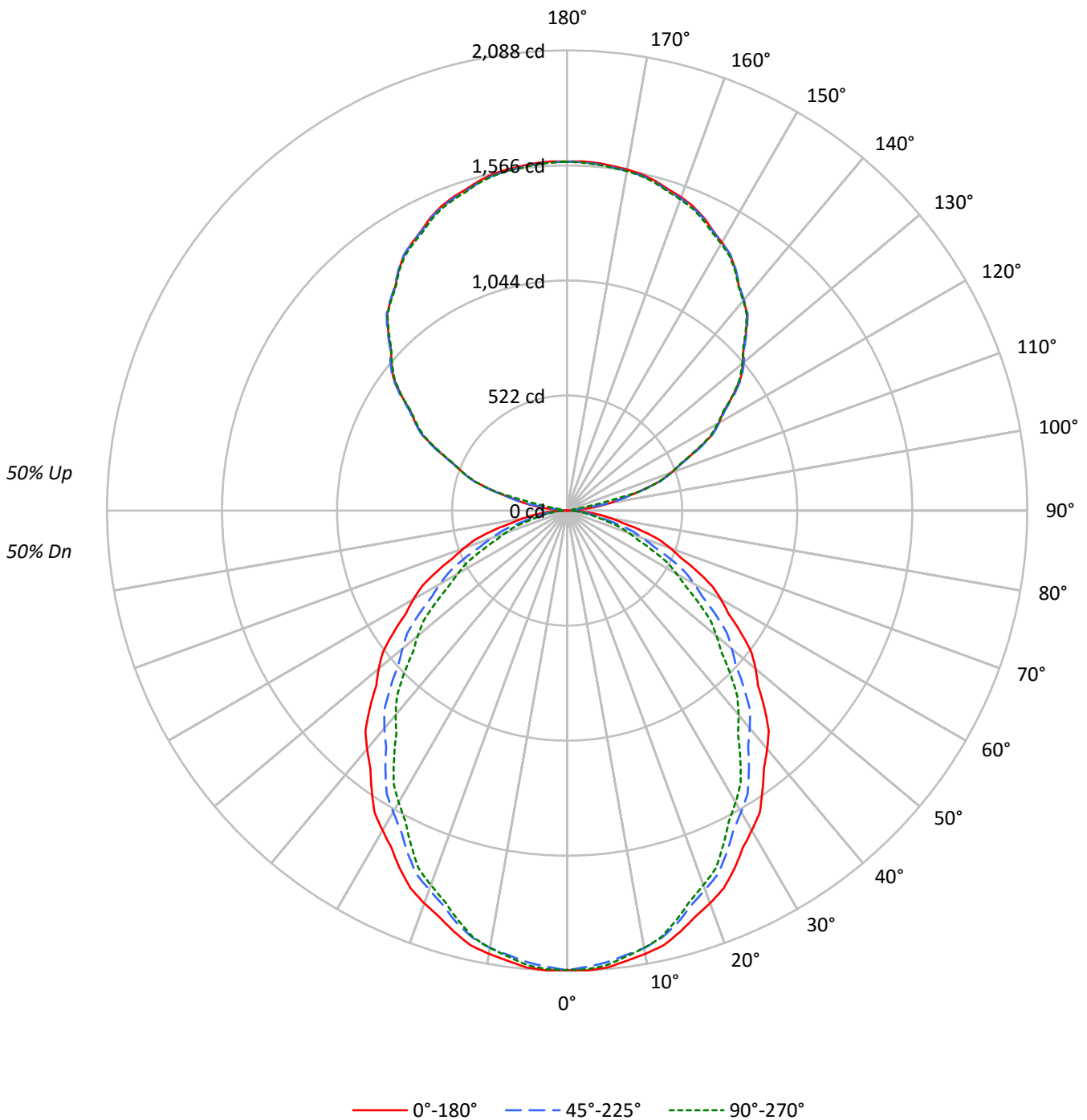
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50				
1	98	94	90	87	90	87	84	81	74	71	69	61	60	58	50	49	48	43				
2	89	82	76	71	82	76	71	66	65	61	58	54	51	49	44	43	41	36				
3	82	72	65	59	75	67	61	56	57	52	49	48	45	42	40	37	35	31				
4	75	64	56	50	69	60	53	47	51	46	42	43	39	36	35	33	30	27				
5	69	57	49	43	63	53	46	41	46	40	36	39	34	31	32	29	26	23				
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	21				
7	59	47	39	33	54	43	36	31	37	32	28	32	28	24	27	23	21	18				
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16				
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	23	19	17	15				
10	47	35	28	24	44	33	27	22	29	24	20	25	21	18	21	18	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13464	13464	13464
5°	13494	13341	13422
10°	13392	13217	13217
15°	13233	12948	12843
20°	13029	12575	12423
25°	12790	12207	11938
30°	12493	11777	11401
35°	12191	11334	10800
40°	11907	10871	10208
45°	11562	10355	9563
50°	11216	9792	8890
55°	10815	9254	8173
60°	10413	8603	7403
65°	9938	7844	6521
70°	9396	6898	5620
75°	8644	5814	4674
80°	7613	4567	3924
85°	6417	3735	3505



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.0	2.0
10°-20°	547.8	5.6
20°-30°	794.4	8.1
30°-40°	905.3	9.2
40°-50°	882.5	9.0
50°-60°	742.8	7.6
60°-70°	520.7	5.3
70°-80°	267.7	2.7
80°-90°	70.9	0.7
90°-100°	57.5	0.6
100°-110°	354.6	3.6
110°-120°	643.1	6.6
120°-130°	825.3	8.4
130°-140°	887.7	9.1
140°-150°	833.2	8.5
150°-160°	674.0	6.9
160°-170°	435.9	4.5
170°-180°	150.4	1.5
0°-30°	1538.2	15.7
0°-40°	2443.5	25.0
0°-60°	4068.9	41.6
0°-90°	4928.1	50.3
90°-120°	1055.2	10.8
90°-150°	3601.6	36.8
90°-180°	4862.0	49.7
0°-180°	9790.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2085	2085	2085	2085	2085	
5°	2082	2075	2058	2073	2070	197
15°	1979	1968	1937	1934	1921	558
25°	1795	1769	1713	1693	1675	826
35°	1546	1507	1438	1393	1370	968
45°	1266	1218	1134	1073	1047	976
55°	960	908	822	754	726	859
65°	650	595	513	452	427	644
75°	346	298	233	200	187	367
85°	87	59	50	49	47	97
90°	1	10	19	24	28	7
95°	67	61	19	24	25	85
105°	345	349	350	350	349	366
115°	648	654	655	650	643	642
125°	921	929	930	925	921	823
135°	1149	1156	1154	1151	1144	885
145°	1332	1334	1334	1335	1329	833
155°	1467	1461	1462	1465	1456	676
165°	1548	1542	1542	1548	1540	437
175°	1583	1577	1577	1586	1576	151
180°	1583	1583	1583	1583	1583	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7
2.5°	2088.4	2087.6	2086.7	2085.9	2085.1	2083.3	2080.4	2077.6	2074.9	2072.0	2074.9
5°	2081.5	2080.1	2078.7	2077.3	2075.9	2073.3	2069.4	2065.6	2061.7	2057.9	2061.3
7.5°	2061.0	2059.7	2058.4	2057.0	2055.7	2052.8	2048.1	2043.5	2038.9	2034.3	2036.7
10°	2042.1	2041.0	2040.0	2039.0	2037.9	2035.0	2030.0	2025.2	2020.2	2015.4	2016.4
12.5°	2020.7	2019.4	2018.0	2016.7	2015.4	2011.4	2004.9	1998.3	1991.7	1985.1	1985.9
15°	1979.1	1977.0	1975.0	1972.9	1970.8	1966.0	1958.6	1951.4	1944.0	1936.6	1936.3
17.5°	1932.2	1929.0	1925.8	1922.6	1919.3	1913.1	1903.9	1894.6	1885.4	1876.1	1874.4
20°	1895.7	1892.2	1888.6	1885.2	1881.7	1874.3	1863.2	1852.0	1840.8	1829.6	1827.9
22.5°	1855.4	1851.9	1848.4	1844.9	1841.4	1833.8	1822.0	1810.3	1798.5	1786.8	1783.3
25°	1794.9	1789.7	1784.4	1779.2	1773.9	1764.8	1751.9	1739.0	1726.0	1713.0	1708.5
27.5°	1725.7	1719.3	1712.9	1706.6	1700.2	1690.1	1676.2	1662.3	1648.5	1634.7	1628.3
30°	1675.3	1668.6	1661.9	1655.4	1648.7	1638.0	1623.3	1608.6	1593.9	1579.2	1571.1
32.5°	1626.2	1618.4	1610.6	1602.9	1595.1	1583.7	1568.7	1553.8	1538.7	1523.8	1514.9
35°	1546.2	1537.7	1529.3	1521.0	1512.6	1500.5	1484.7	1469.1	1453.3	1437.5	1427.3
37.5°	1467.7	1457.5	1447.3	1437.1	1426.8	1413.6	1397.5	1381.2	1364.9	1348.7	1336.6
40°	1412.3	1401.8	1391.3	1380.8	1370.4	1356.7	1339.9	1323.1	1306.3	1289.5	1276.3
42.5°	1354.4	1343.6	1332.8	1322.0	1311.3	1297.2	1279.9	1262.5	1245.2	1227.8	1215.1
45°	1265.9	1255.8	1245.6	1235.5	1225.3	1210.6	1191.3	1172.2	1152.9	1133.7	1119.6
47.5°	1174.3	1163.6	1152.9	1142.2	1131.5	1116.4	1097.0	1077.6	1058.2	1038.8	1024.4
50°	1116.3	1104.8	1093.2	1081.7	1070.2	1054.4	1034.4	1014.5	994.5	974.6	959.9
52.5°	1053.3	1041.5	1029.7	1017.8	1006.0	990.7	971.9	953.1	934.2	915.4	899.6
55°	960.5	949.3	938.1	926.9	915.6	900.3	880.7	861.1	841.5	821.9	806.2
57.5°	866.6	854.6	842.6	830.7	818.7	803.3	784.5	765.5	746.6	727.7	712.4
60°	806.2	793.9	781.6	769.4	757.2	741.5	722.7	703.8	684.9	666.0	650.7
62.5°	741.9	730.2	718.5	706.8	695.2	679.7	660.6	641.4	622.2	603.0	588.8
65°	650.3	638.3	626.5	614.6	602.7	587.4	569.0	550.4	531.8	513.3	499.3
67.5°	559.3	547.3	535.4	523.6	511.7	496.9	479.1	461.3	443.5	425.8	412.9
70°	497.6	485.6	473.7	461.8	450.0	435.3	417.8	400.3	382.7	365.3	354.5
72.5°	437.1	425.5	413.8	402.2	390.6	376.6	360.2	343.9	327.5	311.1	301.1
75°	346.4	335.9	325.4	314.9	304.4	291.9	277.1	262.5	247.7	233.0	225.3
77.5°	256.3	247.9	239.5	231.2	222.8	212.7	200.9	189.1	177.4	165.6	160.3
80°	204.7	196.3	187.9	179.5	171.1	162.0	152.2	142.4	132.6	122.8	119.7
82.5°	154.3	146.7	139.2	131.6	124.1	116.9	110.2	103.5	96.7	90.1	88.6
85°	86.6	80.3	74.0	67.7	61.4	57.4	55.6	53.9	52.1	50.4	50.0
87.5°	29.2	27.7	26.2	24.5	23.0	22.3	22.4	22.5	22.5	22.6	22.9
90°	1.2	3.2	5.4	7.5	9.5	11.5	13.3	15.1	17.0	18.8	20.1
92.5°	18.1	16.7	15.1	13.7	12.2	12.3	13.9	15.6	17.2	18.8	20.1
95°	66.9	66.1	65.3	64.5	63.7	58.5	48.5	38.6	28.7	18.8	20.1
97.5°	139.7	141.1	142.5	143.9	145.3	136.2	116.5	96.9	77.4	57.8	50.4
100°	196.0	196.8	197.5	198.3	199.1	200.1	201.1	202.2	203.2	204.2	165.3
102.5°	253.3	254.3	255.3	256.2	257.2	258.0	258.6	259.3	259.9	260.5	253.2
105°	345.1	346.1	347.1	348.2	349.2	349.7	349.7	349.7	349.7	349.7	349.7
107.5°	440.4	440.4	440.4	440.4	440.4	440.6	441.1	441.6	442.2	442.7	442.7
110°	502.3	502.3	502.3	502.3	502.3	502.6	503.1	503.6	504.1	504.6	503.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	560.6	561.2	561.8	562.4	563.0	563.5	563.8	564.1	564.4	564.7	563.8
115°	647.8	649.1	650.5	651.8	653.1	653.9	654.1	654.4	654.6	654.9	653.9
117.5°	738.2	738.2	738.1	738.1	738.0	738.5	739.5	740.4	741.4	742.5	741.1
120°	794.6	794.3	794.1	793.8	793.6	793.8	794.6	795.4	796.1	796.9	796.4
122.5°	844.3	845.4	846.3	847.3	848.3	849.0	849.3	849.7	850.1	850.4	849.9
125°	921.3	923.1	924.9	926.8	928.6	929.5	929.5	929.5	929.5	929.5	928.5
127.5°	994.8	996.1	997.3	998.7	1000.0	1000.6	1000.4	1000.3	1000.1	1000.0	999.4
130°	1039.9	1041.2	1042.5	1043.8	1045.1	1045.8	1046.1	1046.4	1046.6	1046.9	1046.1
132.5°	1084.9	1086.4	1087.9	1089.4	1091.0	1091.5	1090.9	1090.3	1089.7	1089.1	1089.0
135°	1149.0	1150.5	1152.2	1153.7	1155.3	1155.8	1155.3	1154.8	1154.2	1153.7	1153.2
137.5°	1207.9	1209.3	1210.6	1211.9	1213.4	1213.8	1213.4	1212.8	1212.3	1211.9	1212.0
140°	1246.4	1247.0	1247.5	1248.0	1248.5	1248.6	1248.4	1248.1	1247.9	1247.6	1248.1
142.5°	1281.1	1281.4	1281.8	1282.1	1282.4	1282.7	1283.1	1283.4	1283.8	1284.2	1284.3
145°	1332.1	1332.6	1333.1	1333.6	1334.1	1334.4	1334.4	1334.4	1334.4	1334.4	1334.7
147.5°	1376.6	1376.5	1376.4	1376.3	1376.2	1376.3	1376.6	1377.0	1377.4	1377.7	1378.0
150°	1404.8	1404.3	1403.8	1403.3	1402.8	1402.8	1403.3	1403.8	1404.3	1404.8	1405.3
152.5°	1432.1	1431.0	1429.8	1428.7	1427.4	1427.1	1427.7	1428.3	1428.8	1429.3	1429.8
155°	1467.0	1465.5	1463.9	1462.4	1460.8	1460.3	1460.8	1461.3	1461.9	1462.4	1463.2
157.5°	1494.1	1493.1	1492.2	1491.3	1490.3	1489.9	1490.0	1490.0	1490.1	1490.1	1490.9
160°	1512.9	1511.3	1509.7	1508.1	1506.6	1505.9	1506.2	1506.4	1506.7	1506.9	1508.0
162.5°	1527.8	1526.3	1524.7	1523.2	1521.6	1521.0	1521.2	1521.5	1521.8	1522.0	1523.5
165°	1548.0	1546.5	1544.9	1543.4	1541.8	1541.2	1541.4	1541.7	1541.9	1542.2	1543.8
167.5°	1563.1	1561.5	1559.8	1558.2	1556.6	1555.9	1556.2	1556.4	1556.7	1557.0	1558.8
170°	1571.6	1569.7	1567.8	1566.0	1564.2	1563.5	1563.7	1564.0	1564.2	1564.5	1566.6
172.5°	1577.1	1575.3	1573.5	1571.7	1569.8	1569.1	1569.6	1570.1	1570.5	1571.0	1573.0
175°	1583.3	1581.7	1580.1	1578.5	1577.0	1576.3	1576.6	1576.9	1577.1	1577.4	1579.4
177.5°	1586.1	1584.8	1583.6	1582.4	1581.0	1580.5	1580.7	1580.9	1581.1	1581.3	1582.9
180°	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7
2.5°	2077.6	2080.4	2083.3	2084.5	2084.3	2084.0	2083.7	2083.4
5°	2064.9	2068.4	2071.8	2073.3	2072.5	2071.8	2071.1	2070.4
7.5°	2039.1	2041.6	2044.1	2044.9	2044.1	2043.4	2042.6	2041.8
10°	2017.4	2018.5	2019.5	2019.5	2018.5	2017.4	2016.4	2015.4
12.5°	1986.7	1987.4	1988.2	1987.8	1986.2	1984.6	1983.0	1981.4
15°	1935.9	1935.6	1935.2	1933.5	1930.4	1927.2	1924.0	1920.9
17.5°	1872.7	1870.9	1869.2	1867.0	1864.4	1861.8	1859.3	1856.6
20°	1826.0	1824.3	1822.6	1820.1	1816.9	1813.8	1810.7	1807.6
22.5°	1779.9	1776.5	1773.0	1770.0	1767.5	1764.8	1762.2	1759.7
25°	1703.9	1699.4	1694.9	1690.6	1686.8	1682.9	1679.1	1675.3
27.5°	1621.9	1615.6	1609.2	1604.2	1600.4	1596.7	1593.0	1589.3
30°	1563.2	1555.1	1547.0	1541.5	1538.3	1535.1	1532.0	1528.8
32.5°	1506.0	1497.1	1488.2	1481.8	1477.8	1473.8	1469.9	1465.8
35°	1417.2	1407.0	1396.9	1389.4	1384.5	1379.6	1374.7	1369.8
37.5°	1324.3	1312.2	1300.0	1291.5	1286.8	1282.0	1277.3	1272.5
40°	1262.9	1249.6	1236.4	1227.6	1223.4	1219.2	1215.0	1210.8
42.5°	1202.3	1189.6	1176.9	1167.4	1161.2	1155.1	1148.9	1142.8
45°	1105.6	1091.7	1077.6	1068.0	1062.8	1057.5	1052.3	1047.0
47.5°	1010.1	995.6	981.2	971.1	965.2	959.5	953.6	947.9
50°	945.2	930.5	915.8	905.8	900.6	895.3	890.1	884.8
52.5°	883.7	868.0	852.1	841.6	836.4	831.1	825.9	820.6
55°	790.4	774.7	758.9	748.2	742.7	737.0	731.4	725.9
57.5°	696.9	681.6	666.1	656.0	651.0	646.0	641.1	636.1
60°	635.2	619.9	604.4	594.1	588.9	583.6	578.3	573.1
62.5°	574.5	560.2	545.9	536.1	530.9	525.6	520.4	515.1
65°	485.3	471.3	457.3	447.7	442.4	437.2	431.9	426.7
67.5°	400.1	387.3	374.6	366.0	361.8	357.6	353.5	349.2
70°	343.6	332.8	321.9	314.4	310.1	306.0	301.7	297.6
72.5°	291.1	281.1	271.0	264.7	261.9	259.1	256.3	253.5
75°	217.6	210.0	202.3	197.1	194.7	192.3	189.9	187.3
77.5°	154.8	149.5	144.1	140.5	138.7	136.8	135.0	133.2
80°	116.5	113.4	110.2	108.3	107.6	106.8	106.2	105.5
82.5°	87.2	85.6	84.2	83.2	82.8	82.4	82.0	81.6
85°	49.7	49.4	49.0	48.7	48.3	48.0	47.6	47.3
87.5°	23.1	23.4	23.7	23.7	23.6	23.5	23.4	23.2
90°	21.4	22.7	24.0	25.0	25.9	26.6	27.4	28.2
92.5°	21.4	22.7	24.0	24.8	25.1	25.5	26.0	26.3
95°	21.4	22.7	24.0	24.6	24.6	24.6	24.6	24.6
97.5°	43.0	35.6	28.3	24.6	24.6	24.6	24.6	24.6
100°	126.5	87.7	48.8	28.8	27.8	26.8	25.7	24.6
102.5°	245.8	238.5	231.2	218.6	200.9	183.1	165.4	147.6
105°	349.7	349.7	349.7	349.6	349.3	349.1	348.8	348.6
107.5°	442.8	442.8	442.9	442.5	441.7	441.0	440.2	439.4
110°	503.1	502.3	501.5	501.3	501.5	501.8	502.1	502.3



TEST NUMBER: P333637-840

CATALOG NUMBER: S125RDIP-S1270D1205U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	562.8	561.8	560.8	560.1	559.8	559.4	559.1	558.7
115°	652.8	651.8	650.8	649.4	647.8	646.3	644.7	643.2
117.5°	739.7	738.4	737.0	736.0	735.3	734.7	734.0	733.3
120°	795.9	795.4	794.9	794.0	792.6	791.3	790.0	788.7
122.5°	849.4	848.9	848.4	847.3	845.8	844.2	842.8	841.3
125°	927.5	926.3	925.3	924.4	923.6	922.9	922.1	921.3
127.5°	998.8	998.3	997.6	996.4	994.5	992.5	990.6	988.7
130°	1045.3	1044.5	1043.8	1042.7	1041.4	1040.2	1038.8	1037.5
132.5°	1088.8	1088.6	1088.5	1087.8	1086.5	1085.2	1083.9	1082.6
135°	1152.7	1152.2	1151.7	1150.5	1149.0	1147.4	1145.9	1144.3
137.5°	1212.1	1212.2	1212.3	1211.7	1210.3	1209.0	1207.6	1206.3
140°	1248.6	1249.1	1249.7	1249.1	1247.6	1246.1	1244.5	1242.9
142.5°	1284.4	1284.5	1284.6	1283.9	1282.3	1280.8	1279.2	1277.7
145°	1334.9	1335.2	1335.4	1334.8	1333.2	1331.7	1330.1	1328.6
147.5°	1378.3	1378.6	1378.9	1378.1	1376.2	1374.3	1372.5	1370.6
150°	1405.9	1406.4	1406.9	1406.1	1404.1	1402.0	1399.9	1397.9
152.5°	1430.3	1430.9	1431.4	1430.7	1428.8	1426.9	1425.0	1423.2
155°	1463.9	1464.7	1465.5	1464.8	1462.8	1460.7	1458.5	1456.5
157.5°	1491.8	1492.6	1493.4	1492.8	1490.7	1488.6	1486.5	1484.4
160°	1509.0	1510.1	1511.2	1510.7	1508.5	1506.4	1504.4	1502.3
162.5°	1524.9	1526.4	1527.8	1527.4	1525.1	1522.8	1520.6	1518.2
165°	1545.3	1546.9	1548.4	1548.1	1546.1	1544.0	1541.9	1539.8
167.5°	1560.7	1562.6	1564.5	1564.3	1561.9	1559.5	1557.2	1554.9
170°	1568.6	1570.7	1572.9	1572.7	1570.3	1568.0	1565.7	1563.3
172.5°	1574.8	1576.7	1578.5	1578.3	1576.0	1573.7	1571.2	1568.9
175°	1581.5	1583.7	1585.7	1585.6	1583.3	1580.9	1578.5	1576.2
177.5°	1584.3	1585.8	1587.2	1587.1	1585.5	1583.8	1582.1	1580.4
180°	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3

(END OF REPORT)