

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: P333486

Luminaire Tested: **S125DIW-S1270D1560U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333486  
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: S125DIW-S1270D1560U835-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1560 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11165.9 lumens  
Efficiency: N/A  
Efficacy: 134.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

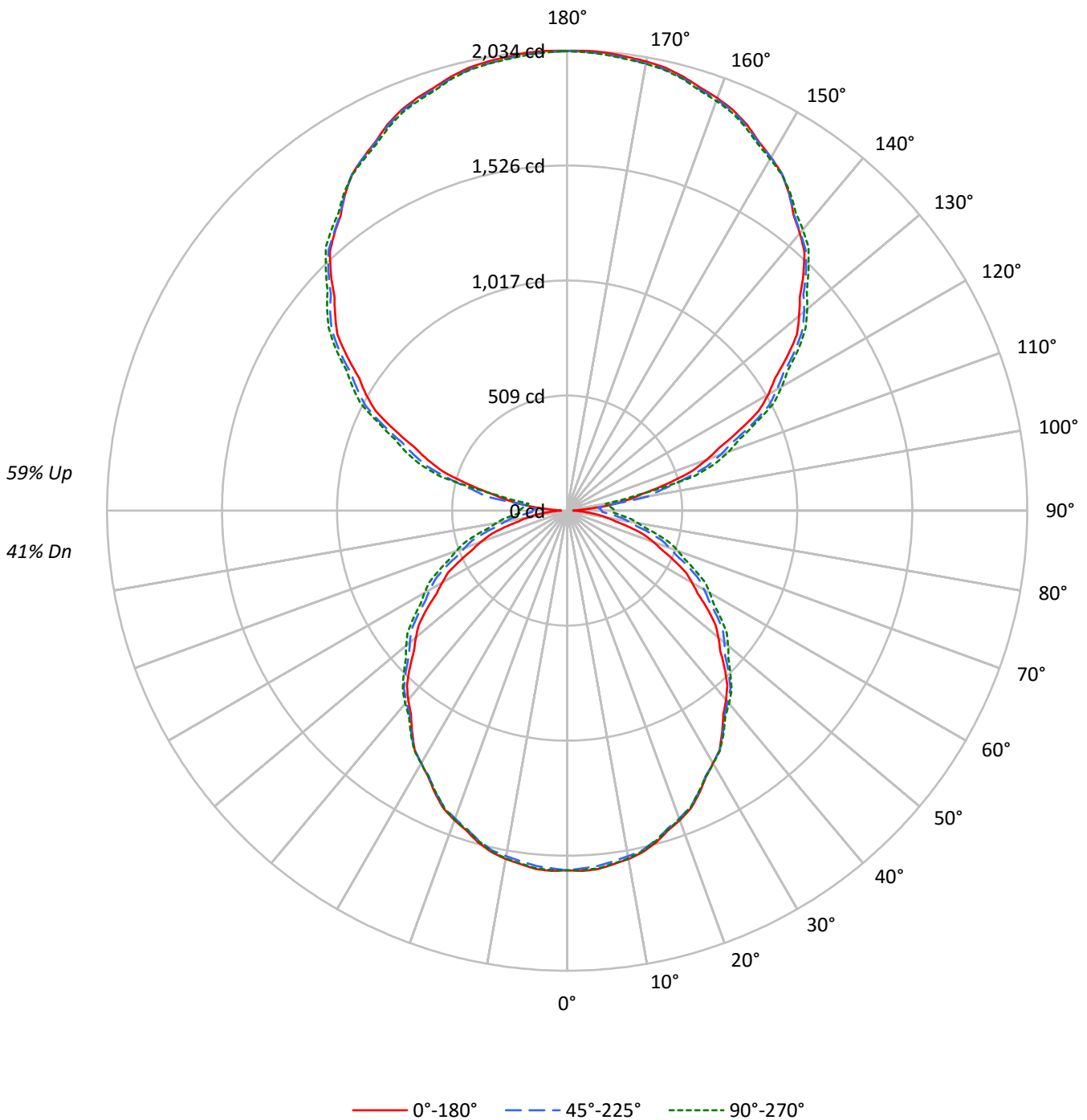
Input Watts (W): 82.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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									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	50	30	10	0														
RCR																																						
0	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41																				
1	95	91	87	83	87	83	79	76	68	65	63	54	53	51	42	41	40	34																				
2	86	79	73	67	78	72	67	62	59	55	52	47	44	42	36	34	33	28																				
3	79	69	62	56	71	63	57	51	52	47	43	42	38	35	32	30	28	23																				
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	24	20																				
5	66	54	46	40	60	50	42	37	41	36	31	33	29	26	26	23	20	17																				
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	23	20	18	15																				
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13																				
8	52	40	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12																				
9	48	36	29	23	44	33	26	22	28	23	19	23	19	16	18	15	13	11																				
10	45	33	26	21	41	30	24	20	26	20	17	21	17	14	17	14	12	10																				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10271	10271	10271
5°	10291	10081	10113
10°	10218	9901	9886
15°	10097	9686	9597
20°	9933	9419	9309
25°	9738	9134	8953
30°	9501	8820	8630
35°	9281	8532	8335
40°	9056	8229	8036
45°	8802	7969	7773
50°	8560	7687	7539
55°	8269	7421	7265
60°	7950	7117	6985
65°	7617	6800	6669
70°	7241	6366	6346
75°	6643	5948	5948
80°	5861	5444	5515
85°	5135	5104	5378



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.4	1.3
10°-20°	426.9	3.8
20°-30°	634.8	5.7
30°-40°	752.0	6.7
40°-50°	777.5	7.0
50°-60°	716.2	6.4
60°-70°	579.0	5.2
70°-80°	387.7	3.5
80°-90°	205.3	1.8
90°-100°	186.6	1.7
100°-110°	538.0	4.8
110°-120°	880.6	7.9
120°-130°	1090.3	9.8
130°-140°	1152.5	10.3
140°-150°	1071.6	9.6
150°-160°	864.6	7.7
160°-170°	559.1	5.0
170°-180°	192.9	1.7
0°-30°	1212.1	10.9
0°-40°	1964.1	17.6
0°-60°	3457.8	31.0
0°-90°	4629.8	41.5
90°-120°	1605.2	14.4
90°-150°	4919.5	44.1
90°-180°	6536.0	58.5
0°-180°	11165.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1590	1587	1576	1588	1587	151
15°	1519	1519	1509	1518	1512	428
25°	1380	1384	1375	1381	1374	635
35°	1194	1204	1200	1205	1205	747
45°	984	1000	1009	1019	1021	759
55°	756	781	806	823	830	676
65°	521	557	594	616	624	517
75°	287	328	377	407	416	304
85°	86	137	192	225	238	91
90°	26	88	152	194	211	20
95°	106	140	138	178	191	125
105°	457	488	534	564	575	484
115°	840	860	901	922	923	833
125°	1188	1198	1228	1246	1250	1060
135°	1477	1484	1492	1508	1508	1138
145°	1710	1712	1712	1720	1718	1069
155°	1882	1873	1876	1879	1868	867
165°	1986	1977	1978	1986	1975	561
175°	2031	2022	2023	2034	2022	193
180°	2031	2031	2031	2031	2031	



TEST NUMBER: P333486

CATALOG NUMBER: S125DIW-S1270D1560U835-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3
2.5°	1594.0	1593.5	1592.9	1592.4	1591.8	1590.6	1588.6	1586.7	1584.8	1582.8	1584.8
5°	1590.3	1589.6	1588.9	1588.2	1587.5	1586.0	1583.5	1581.1	1578.7	1576.3	1579.0
7.5°	1576.3	1576.0	1575.7	1575.4	1575.2	1573.8	1571.3	1568.8	1566.3	1563.8	1566.2
10°	1563.8	1563.8	1563.8	1563.8	1563.8	1562.4	1559.6	1556.9	1554.1	1551.3	1553.7
12.5°	1546.3	1546.6	1546.9	1547.2	1547.4	1546.5	1544.3	1542.0	1539.8	1537.6	1539.5
15°	1518.6	1518.9	1519.3	1519.6	1520.0	1518.9	1516.5	1514.1	1511.7	1509.2	1511.3
17.5°	1482.4	1483.1	1483.8	1484.5	1485.2	1484.3	1481.9	1479.5	1477.0	1474.6	1476.2
20°	1456.2	1456.9	1457.6	1458.3	1459.0	1458.1	1455.7	1453.3	1450.8	1448.4	1449.5
22.5°	1426.3	1427.5	1428.8	1430.0	1431.3	1430.5	1427.8	1425.1	1422.4	1419.7	1421.0
25°	1379.8	1380.9	1381.9	1382.9	1384.0	1383.5	1381.4	1379.3	1377.2	1375.1	1376.5
27.5°	1328.1	1329.6	1331.1	1332.6	1334.2	1333.7	1331.4	1329.0	1326.7	1324.3	1325.3
30°	1289.4	1291.5	1293.5	1295.6	1297.7	1297.7	1295.6	1293.5	1291.5	1289.4	1290.1
32.5°	1254.5	1256.3	1258.1	1259.9	1261.7	1261.8	1260.3	1258.8	1257.2	1255.7	1256.4
35°	1194.3	1196.7	1199.1	1201.6	1204.0	1204.7	1203.6	1202.6	1201.6	1200.5	1201.6
37.5°	1134.1	1136.3	1138.5	1140.8	1143.0	1143.9	1143.6	1143.2	1142.9	1142.5	1143.9
40°	1092.9	1095.7	1098.5	1101.3	1104.0	1105.2	1104.9	1104.5	1104.2	1103.9	1105.2
42.5°	1048.0	1051.6	1055.2	1058.8	1062.5	1064.6	1065.4	1066.2	1066.9	1067.7	1069.3
45°	983.8	987.6	991.4	995.2	999.0	1001.8	1003.6	1005.3	1007.0	1008.7	1011.2
47.5°	918.0	921.5	925.1	928.6	932.1	935.4	938.4	941.4	944.3	947.3	950.9
50°	873.1	876.9	880.7	884.5	888.4	892.2	896.0	899.8	903.6	907.4	911.2
52.5°	825.7	830.4	835.0	839.6	844.3	848.9	853.6	858.2	862.8	867.5	871.6
55°	756.2	761.7	767.3	772.8	778.3	783.9	789.4	795.0	800.5	806.1	809.9
57.5°	685.1	691.7	698.4	705.0	711.7	718.2	724.6	730.9	737.3	743.7	748.1
60°	637.7	644.6	651.5	658.5	665.4	672.3	679.3	686.2	693.1	700.0	705.2
62.5°	591.5	598.5	605.4	612.3	619.2	626.5	633.9	641.4	648.9	656.4	662.1
65°	520.7	528.7	536.7	544.7	552.6	560.8	569.1	577.4	585.7	594.0	599.2
67.5°	454.0	461.7	469.4	477.1	484.8	492.9	501.3	509.8	518.2	526.7	533.0
70°	405.4	413.3	421.3	429.3	437.2	445.7	454.7	463.8	472.8	481.8	488.4
72.5°	358.0	366.2	374.5	382.7	391.0	400.0	409.8	419.7	429.5	439.4	446.5
75°	286.9	295.9	304.9	313.9	322.9	333.0	344.0	355.1	366.2	377.3	384.2
77.5°	218.6	229.0	239.4	249.8	260.2	270.7	281.4	292.0	302.7	313.4	321.0
80°	176.2	186.6	197.0	207.4	217.8	228.8	240.6	252.4	264.2	276.0	283.6
82.5°	137.5	148.5	159.4	170.4	181.3	192.8	204.9	216.9	229.0	241.0	248.4
85°	85.8	97.2	108.6	120.1	131.5	143.3	155.4	167.5	179.6	191.8	199.4
87.5°	48.9	60.6	72.2	83.8	95.4	107.4	119.6	131.9	144.1	156.4	164.7
90°	26.5	40.2	54.0	67.7	81.5	95.4	109.6	123.7	137.8	151.9	161.6
92.5°	45.6	54.0	62.4	70.8	79.2	90.4	104.6	118.7	132.8	146.9	156.3
95°	106.1	114.1	122.1	130.1	138.1	141.6	140.7	139.8	138.8	137.9	147.2
97.5°	197.5	207.4	217.4	227.3	237.2	235.3	221.5	207.7	193.9	180.1	177.9
100°	268.5	276.8	285.1	293.4	301.7	312.0	324.4	336.9	349.3	361.7	319.1
102.5°	340.8	348.8	356.7	364.7	372.7	382.5	394.1	405.8	417.4	429.0	426.5
105°	456.6	463.5	470.4	477.3	484.1	492.8	503.2	513.6	524.0	534.3	541.3
107.5°	577.0	581.7	586.4	591.1	595.8	603.5	614.1	624.8	635.4	646.1	653.0
110°	655.2	659.4	663.5	667.7	671.8	679.1	689.5	699.8	710.2	720.6	726.2



TEST NUMBER: P333486

CATALOG NUMBER: S125DIW-S1270D1560U835-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	729.9	734.0	738.1	742.3	746.4	753.4	763.2	773.0	782.8	792.7	797.7
115°	840.3	844.4	848.5	852.6	856.7	863.4	872.8	882.1	891.4	900.8	905.7
117.5°	954.7	956.2	957.7	959.2	960.8	966.4	976.2	986.0	995.8	1005.6	1009.8
120°	1026.9	1027.6	1028.3	1029.0	1029.7	1034.6	1043.6	1052.5	1061.5	1070.5	1075.7
122.5°	1089.5	1091.3	1093.0	1094.8	1096.5	1101.5	1109.6	1117.8	1126.0	1134.1	1139.1
125°	1187.9	1189.9	1191.9	1193.9	1195.9	1200.4	1207.3	1214.2	1221.2	1228.1	1232.3
127.5°	1280.6	1281.9	1283.3	1284.6	1285.9	1289.3	1294.8	1300.3	1305.8	1311.2	1315.6
130°	1338.4	1339.7	1341.1	1342.4	1343.7	1347.0	1352.2	1357.4	1362.5	1367.7	1371.6
132.5°	1395.0	1396.8	1398.7	1400.6	1402.5	1404.9	1407.9	1410.9	1413.9	1416.9	1421.6
135°	1476.9	1478.5	1480.2	1481.8	1483.5	1485.2	1487.0	1488.7	1490.5	1492.2	1496.1
137.5°	1552.1	1553.6	1555.0	1556.5	1558.0	1559.0	1559.6	1560.1	1560.7	1561.3	1565.5
140°	1600.2	1600.9	1601.6	1602.3	1602.9	1603.3	1603.3	1603.3	1603.3	1603.3	1607.8
142.5°	1644.8	1644.9	1645.1	1645.2	1645.3	1645.6	1646.2	1646.7	1647.2	1647.8	1651.2
145°	1710.1	1710.5	1710.8	1711.1	1711.4	1711.6	1711.6	1711.6	1711.6	1711.6	1713.7
147.5°	1765.8	1765.6	1765.5	1765.4	1765.2	1765.4	1765.8	1766.2	1766.6	1767.0	1767.9
150°	1801.9	1801.2	1800.6	1799.9	1799.2	1799.2	1799.9	1800.6	1801.2	1801.9	1802.6
152.5°	1836.8	1835.4	1833.9	1832.4	1830.9	1830.5	1831.2	1831.9	1832.6	1833.2	1833.9
155°	1881.7	1879.7	1877.7	1875.7	1873.7	1873.0	1873.7	1874.3	1875.0	1875.7	1876.7
157.5°	1916.3	1915.1	1913.9	1912.7	1911.5	1910.9	1911.0	1911.1	1911.1	1911.2	1912.3
160°	1940.4	1938.4	1936.4	1934.4	1932.4	1931.5	1931.9	1932.2	1932.5	1932.9	1934.2
162.5°	1959.7	1957.7	1955.7	1953.6	1951.6	1950.8	1951.1	1951.5	1951.8	1952.1	1954.0
165°	1985.6	1983.6	1981.5	1979.5	1977.5	1976.7	1977.0	1977.4	1977.7	1978.0	1980.0
167.5°	2004.8	2002.8	2000.7	1998.6	1996.5	1995.7	1996.0	1996.3	1996.7	1997.0	1999.4
170°	2015.7	2013.3	2011.0	2008.6	2006.3	2005.3	2005.6	2006.0	2006.3	2006.6	2009.3
172.5°	2022.9	2020.6	2018.2	2015.9	2013.5	2012.7	2013.3	2013.9	2014.5	2015.1	2017.5
175°	2030.7	2028.7	2026.7	2024.7	2022.7	2021.9	2022.2	2022.5	2022.9	2023.2	2025.9
177.5°	2034.3	2032.7	2031.1	2029.5	2027.9	2027.2	2027.5	2027.8	2028.0	2028.3	2030.2
180°	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7



TEST NUMBER: P333486

CATALOG NUMBER: S125DIW-S1270D1560U835-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3
2.5°	1586.7	1588.6	1590.6	1591.4	1591.1	1590.9	1590.6	1590.3
5°	1581.8	1584.6	1587.4	1588.6	1588.2	1587.9	1587.5	1587.2
7.5°	1568.6	1571.1	1573.5	1574.5	1574.2	1573.8	1573.5	1573.1
10°	1556.2	1558.6	1561.0	1562.1	1561.7	1561.4	1561.0	1560.7
12.5°	1541.3	1543.2	1545.1	1545.6	1544.7	1543.8	1542.9	1542.0
15°	1513.4	1515.5	1517.5	1517.9	1516.5	1515.1	1513.7	1512.3
17.5°	1477.8	1479.4	1481.0	1481.4	1480.5	1479.7	1478.9	1478.0
20°	1450.5	1451.5	1452.6	1453.1	1453.1	1453.1	1453.1	1453.1
22.5°	1422.4	1423.7	1425.0	1425.2	1424.4	1423.6	1422.7	1421.9
25°	1377.9	1379.3	1380.7	1380.5	1378.8	1377.0	1375.3	1373.6
27.5°	1326.3	1327.2	1328.2	1328.4	1327.7	1327.1	1326.5	1325.9
30°	1290.8	1291.5	1292.2	1292.3	1292.0	1291.6	1291.3	1290.9
32.5°	1257.1	1257.8	1258.5	1258.7	1258.3	1258.0	1257.6	1257.3
35°	1202.6	1203.6	1204.7	1205.2	1205.2	1205.2	1205.2	1205.2
37.5°	1145.3	1146.7	1148.1	1148.7	1148.5	1148.4	1148.3	1148.1
40°	1106.6	1108.0	1109.4	1110.4	1111.1	1111.8	1112.5	1113.2
42.5°	1071.0	1072.7	1074.3	1075.2	1075.4	1075.5	1075.7	1075.8
45°	1013.6	1016.0	1018.4	1019.8	1020.2	1020.5	1020.9	1021.2
47.5°	954.4	957.9	961.5	963.6	964.4	965.1	965.9	966.7
50°	915.0	918.8	922.7	925.1	926.1	927.2	928.2	929.2
52.5°	875.7	879.8	883.8	886.3	887.0	887.8	888.6	889.3
55°	813.7	817.5	821.3	823.9	825.3	826.7	828.1	829.5
57.5°	752.4	756.8	761.2	763.9	764.9	765.9	767.0	768.0
60°	710.4	715.6	720.8	723.9	725.0	726.0	727.1	728.1
62.5°	667.9	673.6	679.4	682.9	684.2	685.6	686.9	688.2
65°	604.4	609.6	614.8	618.1	619.5	620.9	622.3	623.6
67.5°	539.3	545.6	551.9	555.9	557.7	559.5	561.4	563.2
70°	494.9	501.5	508.1	512.4	514.5	516.6	518.7	520.7
72.5°	453.6	460.8	467.9	472.2	473.8	475.3	476.8	478.3
75°	391.2	398.1	405.0	409.4	411.1	412.8	414.6	416.3
77.5°	328.6	336.2	343.9	348.4	349.8	351.1	352.5	353.9
80°	291.2	298.8	306.5	311.0	312.3	313.7	315.1	316.5
82.5°	255.7	263.1	270.4	275.3	277.8	280.3	282.8	285.3
85°	207.0	214.6	222.3	227.5	230.2	233.0	235.8	238.5
87.5°	173.0	181.3	189.6	195.0	197.7	200.3	202.9	205.5
90°	171.2	180.9	190.5	197.0	200.5	203.9	207.3	210.7
92.5°	165.7	175.0	184.4	190.5	193.4	196.3	199.2	202.1
95°	156.5	165.8	175.1	180.9	183.4	185.8	188.2	190.6
97.5°	175.8	173.6	171.5	171.6	173.9	176.3	178.6	181.0
100°	276.6	234.0	191.4	170.5	171.3	172.0	172.8	173.5
102.5°	424.1	421.7	419.2	407.7	387.0	366.4	345.7	325.0
105°	548.2	555.1	562.1	566.6	568.7	570.8	572.8	574.9
107.5°	659.9	666.9	673.8	677.8	679.0	680.1	681.3	682.4
110°	731.7	737.3	742.9	747.1	749.8	752.6	755.3	758.1





TEST NUMBER: P333486

CATALOG NUMBER: S125DIW-S1270D1560U835-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	802.7	807.8	812.8	816.3	818.3	820.2	822.2	824.1
115°	910.6	915.5	920.4	922.9	922.9	923.0	923.1	923.2
117.5°	1013.9	1018.1	1022.2	1025.0	1026.5	1028.0	1029.5	1031.0
120°	1080.9	1086.1	1091.4	1094.2	1094.6	1095.0	1095.4	1095.8
122.5°	1144.0	1149.0	1153.9	1156.4	1156.6	1156.7	1156.9	1157.0
125°	1236.5	1240.7	1244.9	1247.4	1248.1	1248.8	1249.6	1250.3
127.5°	1320.0	1324.4	1328.8	1330.8	1330.3	1329.8	1329.4	1328.9
130°	1375.4	1379.3	1383.1	1385.1	1385.1	1385.2	1385.2	1385.3
132.5°	1426.2	1430.9	1435.5	1437.7	1437.5	1437.3	1437.1	1436.9
135°	1499.9	1503.7	1507.6	1509.4	1509.1	1508.8	1508.5	1508.3
137.5°	1569.7	1574.0	1578.2	1580.1	1579.8	1579.4	1579.0	1578.7
140°	1612.3	1616.7	1621.2	1623.2	1622.5	1621.9	1621.3	1620.7
142.5°	1654.6	1658.0	1661.3	1662.7	1662.1	1661.5	1660.9	1660.2
145°	1715.7	1717.8	1719.9	1720.6	1720.0	1719.3	1718.7	1718.1
147.5°	1768.9	1769.9	1770.8	1770.4	1768.6	1766.8	1765.0	1763.3
150°	1803.2	1803.9	1804.6	1803.8	1801.4	1799.1	1796.8	1794.4
152.5°	1834.6	1835.2	1835.9	1835.1	1832.7	1830.4	1828.0	1825.7
155°	1877.7	1878.7	1879.7	1878.8	1876.2	1873.5	1870.8	1868.1
157.5°	1913.3	1914.4	1915.5	1914.7	1912.0	1909.3	1906.6	1904.0
160°	1935.5	1936.9	1938.2	1937.6	1934.9	1932.2	1929.5	1926.9
162.5°	1955.9	1957.8	1959.6	1959.1	1956.2	1953.2	1950.3	1947.3
165°	1982.0	1984.1	1986.1	1985.7	1983.1	1980.4	1977.7	1975.0
167.5°	2001.8	2004.2	2006.6	2006.3	2003.3	2000.3	1997.3	1994.3
170°	2012.0	2014.7	2017.3	2017.2	2014.2	2011.2	2008.1	2005.1
172.5°	2019.9	2022.3	2024.7	2024.4	2021.4	2018.4	2015.4	2012.4
175°	2028.5	2031.2	2033.9	2033.7	2030.7	2027.7	2024.7	2021.7
177.5°	2032.1	2033.9	2035.8	2035.7	2033.5	2031.4	2029.2	2027.1
180°	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7

(END OF REPORT)