

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: P333487

Luminaire Tested: **S125DIW-S1270D1560U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333487
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: S125DIW-S1270D1560U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10337.7 lumens
Efficiency: N/A
Efficacy: 124.7 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

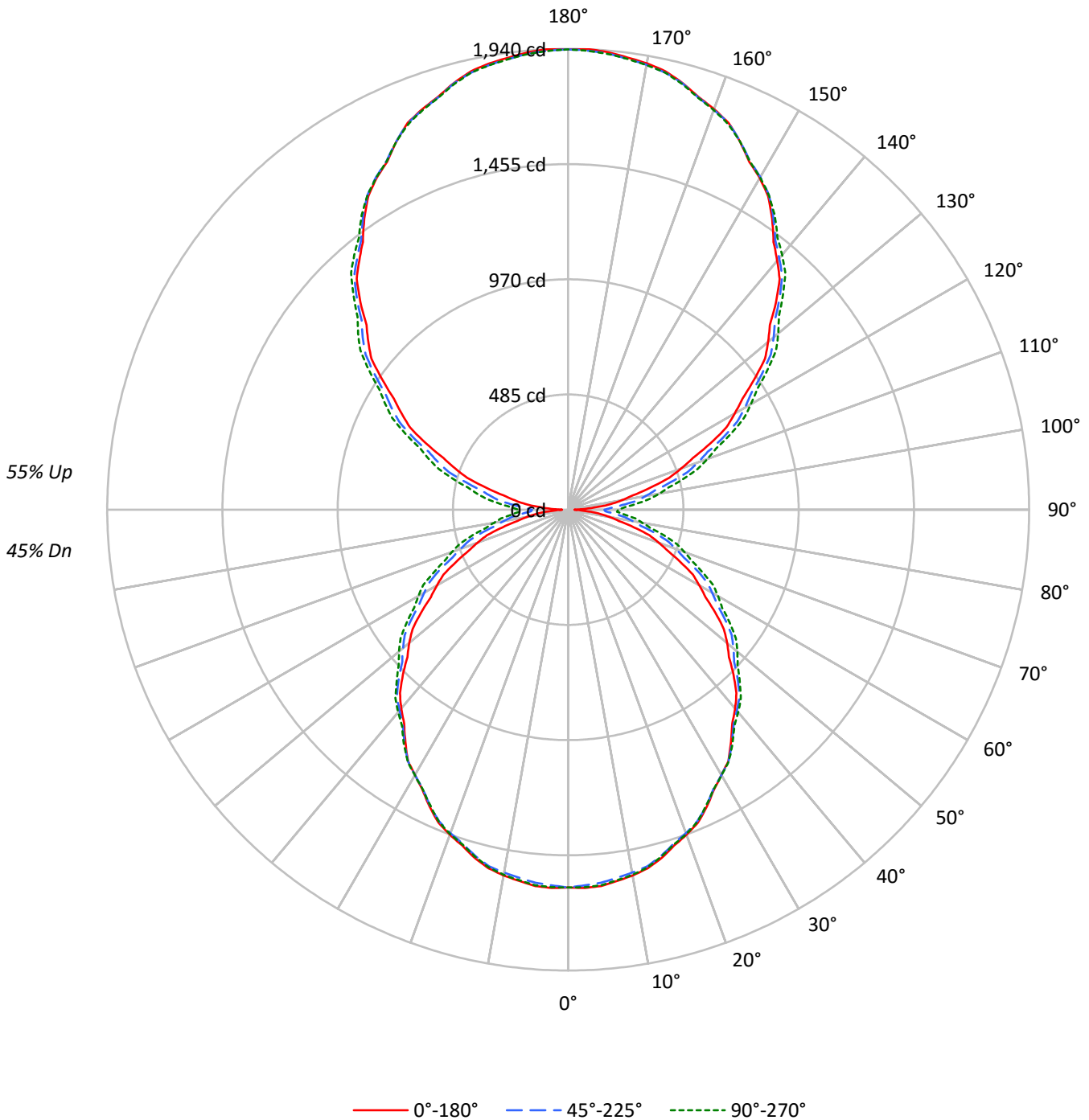
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45				
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42	36				
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30				
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	31	29	25				
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	27	25	21				
5	66	55	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18				
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	25	21	19	16				
7	56	44	36	30	51	41	33	28	34	29	24	28	24	21	22	19	17	14				
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	21	17	15	13				
9	49	36	29	24	44	34	27	22	28	23	19	24	19	16	19	16	14	11				
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	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	1.5
10°-20°	426.9	4.1
20°-30°	634.8	6.1
30°-40°	752.0	7.3
40°-50°	777.5	7.5
50°-60°	716.2	6.9
60°-70°	579.0	5.6
70°-80°	387.7	3.8
80°-90°	205.3	2.0
90°-100°	242.6	2.3
100°-110°	466.5	4.5
110°-120°	705.0	6.8
120°-130°	886.1	8.6
130°-140°	971.2	9.4
140°-150°	941.1	9.1
150°-160°	788.1	7.6
160°-170°	523.9	5.1
170°-180°	183.3	1.8
0°-30°	1212.1	11.7
0°-40°	1964.1	19.0
0°-60°	3457.8	33.4
0°-90°	4629.8	44.8
90°-120°	1414.1	13.7
90°-150°	4212.5	40.7
90°-180°	5708.0	55.2
0°-180°	10337.7	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	22
95°	118	163	230	273	289	121
105°	358	392	446	485	502	382
115°	659	678	720	745	754	652
125°	955	964	995	1016	1023	855
135°	1237	1245	1257	1276	1279	953
145°	1496	1501	1505	1513	1515	935
155°	1710	1710	1712	1717	1710	787
165°	1860	1857	1858	1863	1855	524
175°	1934	1928	1927	1935	1926	184
180°	1938	1938	1938	1938	1938	



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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	67.8	81.5	95.5	109.6	123.7	137.9	152.0	161.6
92.5°	58.9	71.1	83.2	95.3	107.5	121.0	136.0	150.9	165.8	180.8	190.7
95°	118.3	128.0	137.7	147.3	157.0	169.4	184.5	199.7	214.8	229.9	239.9
97.5°	181.3	189.7	198.0	206.4	214.8	227.0	243.0	258.9	274.9	290.9	300.4
100°	228.3	235.6	242.8	250.1	257.4	268.8	284.2	299.6	315.1	330.5	340.8
102.5°	278.9	287.0	295.1	303.1	311.2	321.7	334.7	347.8	360.8	373.8	384.1
105°	357.9	365.1	372.3	379.6	386.8	396.6	409.0	421.4	433.8	446.2	455.1
107.5°	445.3	451.7	458.1	464.5	470.9	479.8	491.3	502.9	514.4	525.9	533.8
110°	505.6	511.4	517.3	523.1	528.9	537.2	547.9	558.6	569.3	580.0	587.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	568.3	572.5	576.7	580.9	585.1	592.6	603.3	614.0	624.7	635.4	642.1
115°	659.4	663.1	666.9	670.7	674.4	681.2	690.8	700.5	710.2	719.9	725.8
117.5°	750.7	752.9	755.1	757.3	759.5	765.2	774.3	783.4	792.5	801.7	807.8
120°	808.6	811.3	814.1	816.8	819.5	825.0	833.3	841.6	849.9	858.2	864.1
122.5°	870.1	871.2	872.3	873.4	874.5	879.3	887.9	896.4	905.0	913.6	918.9
125°	954.9	956.5	958.2	959.9	961.5	966.0	973.3	980.5	987.8	995.1	999.9
127.5°	1043.8	1044.6	1045.4	1046.2	1047.0	1050.4	1056.5	1062.6	1068.7	1074.7	1079.5
130°	1098.1	1099.4	1100.8	1102.1	1103.4	1106.8	1112.4	1117.9	1123.4	1128.9	1133.4
132.5°	1151.1	1153.8	1156.5	1159.2	1161.9	1165.0	1168.6	1172.2	1175.8	1179.4	1183.9
135°	1236.8	1238.5	1240.1	1241.8	1243.5	1245.7	1248.4	1251.2	1253.9	1256.7	1261.2
137.5°	1317.3	1319.0	1320.7	1322.3	1324.0	1325.8	1327.7	1329.6	1331.5	1333.4	1337.9
140°	1368.0	1369.6	1371.3	1373.0	1374.7	1376.2	1377.5	1378.9	1380.2	1381.6	1386.1
142.5°	1419.8	1421.0	1422.1	1423.2	1424.4	1425.6	1426.9	1428.3	1429.6	1431.0	1434.6
145°	1496.1	1497.1	1498.1	1499.1	1500.1	1501.1	1502.1	1503.1	1504.1	1505.1	1506.9
147.5°	1565.2	1565.9	1566.6	1567.4	1568.1	1568.9	1569.7	1570.5	1571.3	1572.1	1573.5
150°	1612.2	1611.9	1611.6	1611.2	1610.9	1611.4	1612.7	1614.1	1615.4	1616.8	1616.8
152.5°	1650.8	1651.3	1651.8	1652.2	1652.7	1653.2	1653.8	1654.3	1654.8	1655.4	1656.2
155°	1710.3	1710.3	1710.3	1710.3	1710.3	1710.4	1710.8	1711.1	1711.4	1711.8	1713.1
157.5°	1763.3	1762.6	1761.9	1761.1	1760.4	1760.2	1760.5	1760.9	1761.2	1761.5	1762.9
160°	1794.7	1793.7	1792.7	1791.7	1790.7	1790.4	1790.7	1791.0	1791.4	1791.7	1793.0
162.5°	1822.5	1821.7	1821.0	1820.3	1819.5	1819.2	1819.2	1819.3	1819.4	1819.4	1821.1
165°	1859.6	1858.9	1858.2	1857.6	1856.9	1856.7	1857.1	1857.4	1857.7	1858.1	1859.4
167.5°	1890.9	1889.6	1888.3	1886.9	1885.6	1884.9	1884.9	1884.9	1884.9	1884.9	1886.9
170°	1907.8	1906.5	1905.1	1903.8	1902.5	1901.8	1901.8	1901.8	1901.8	1901.8	1903.8
172.5°	1919.9	1918.6	1917.2	1915.9	1914.5	1913.9	1913.9	1913.9	1913.9	1913.9	1915.9
175°	1933.5	1932.1	1930.8	1929.4	1928.1	1927.4	1927.4	1927.4	1927.4	1927.4	1929.4
177.5°	1940.4	1939.3	1938.3	1937.2	1936.1	1935.4	1935.2	1934.9	1934.6	1934.4	1936.0
180°	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0



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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	195.1	197.7	200.3	202.9	205.6
90°	171.3	180.9	190.6	197.1	200.5	204.0	207.4	210.8
92.5°	200.6	210.5	220.4	226.9	230.1	233.2	236.4	239.6
95°	249.9	259.8	269.8	276.3	279.4	282.5	285.6	288.7
97.5°	309.9	319.4	328.9	335.0	337.8	340.5	343.3	346.0
100°	351.1	361.4	371.7	378.2	381.0	383.7	386.5	389.2
102.5°	394.4	404.7	414.9	421.6	424.6	427.6	430.6	433.7
105°	464.1	473.0	482.0	488.1	491.6	495.0	498.4	501.9
107.5°	541.6	549.5	557.4	562.3	564.4	566.5	568.6	570.7
110°	595.2	602.8	610.4	615.2	617.3	619.4	621.5	623.6



TEST NUMBER: P333487

CATALOG NUMBER: S125DIW-S1270D1560U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	648.9	655.7	662.5	666.8	668.6	670.4	672.2	674.0
115°	731.7	737.6	743.5	747.3	749.0	750.8	752.5	754.3
117.5°	814.0	820.1	826.3	829.9	830.9	831.9	832.9	834.0
120°	870.0	875.9	881.8	885.1	885.8	886.6	887.3	888.0
122.5°	924.2	929.6	934.9	938.1	939.1	940.1	941.1	942.1
125°	1004.8	1009.7	1014.5	1017.7	1019.1	1020.5	1021.9	1023.3
127.5°	1084.3	1089.1	1093.9	1097.0	1098.3	1099.7	1101.0	1102.3
130°	1138.0	1142.5	1147.0	1149.8	1150.8	1151.9	1153.0	1154.0
132.5°	1188.5	1193.0	1197.5	1200.0	1200.5	1201.0	1201.6	1202.1
135°	1265.7	1270.2	1274.7	1277.2	1277.6	1278.0	1278.3	1278.7
137.5°	1342.4	1346.9	1351.4	1353.5	1353.2	1352.9	1352.6	1352.3
140°	1390.5	1395.0	1399.5	1401.6	1401.3	1401.0	1400.7	1400.4
142.5°	1438.3	1441.9	1445.6	1447.3	1447.0	1446.7	1446.4	1446.1
145°	1508.6	1510.3	1512.1	1513.1	1513.5	1513.9	1514.3	1514.7
147.5°	1574.8	1576.2	1577.5	1577.4	1575.7	1574.1	1572.4	1570.8
150°	1616.8	1616.8	1616.8	1616.6	1616.3	1615.9	1615.6	1615.3
152.5°	1657.0	1657.8	1658.6	1658.4	1657.3	1656.1	1655.0	1653.9
155°	1714.4	1715.8	1717.1	1717.0	1715.3	1713.6	1711.9	1710.3
157.5°	1764.2	1765.6	1766.9	1766.5	1764.2	1762.0	1759.8	1757.6
160°	1794.4	1795.7	1797.1	1796.9	1795.2	1793.5	1791.9	1790.2
162.5°	1822.7	1824.3	1825.9	1825.7	1823.8	1821.8	1819.9	1817.9
165°	1860.7	1862.1	1863.4	1863.1	1861.1	1859.1	1857.1	1855.0
167.5°	1888.9	1890.9	1892.9	1892.9	1890.8	1888.8	1886.7	1884.6
170°	1905.8	1907.8	1909.8	1909.7	1907.3	1905.0	1902.6	1900.3
172.5°	1917.9	1919.9	1921.9	1921.9	1919.8	1917.7	1915.6	1913.6
175°	1931.5	1933.5	1935.5	1935.3	1933.0	1930.6	1928.3	1925.9
177.5°	1937.6	1939.2	1940.8	1940.7	1938.8	1936.9	1935.0	1933.2
180°	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0

(END OF REPORT)