

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: P333486-830

Luminaire Tested: **S125DIW-S1270D1560U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333486-830
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: S125DIW-S1270D1560U830-4F0-1E-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: 10524.4 lumens
Efficiency: N/A
Efficacy: 127.0 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

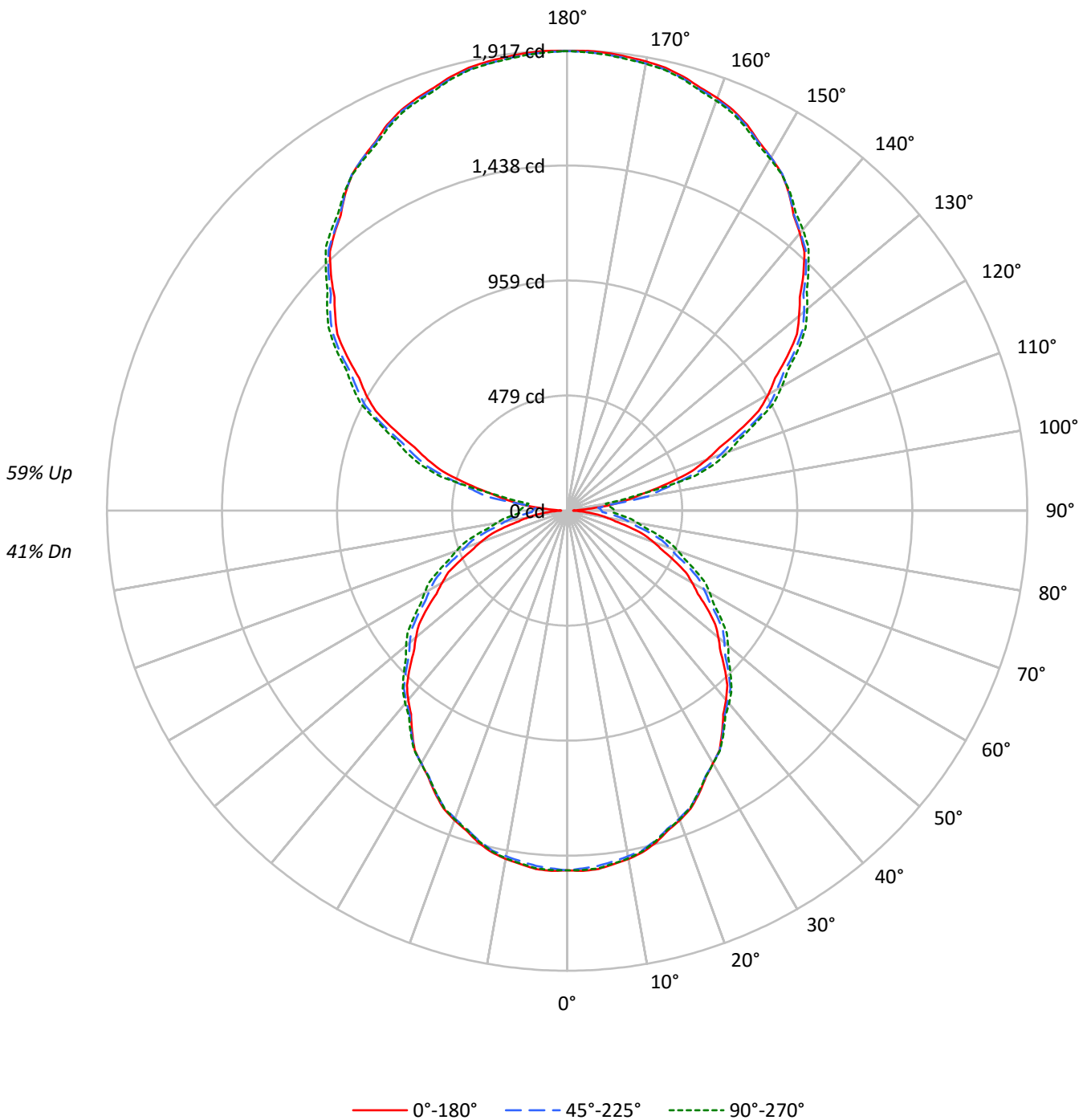
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333486-830

CATALOG NUMBER: S125DIW-S1270D1560U830-4F0-1E-UDD-D

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	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°	9680	9680	9680
5°	9700	9502	9532
10°	9630	9332	9318
15°	9517	9129	9046
20°	9362	8878	8774
25°	9178	8609	8439
30°	8955	8314	8134
35°	8748	8042	7856
40°	8535	7756	7574
45°	8297	7510	7326
50°	8068	7245	7106
55°	7794	6995	6847
60°	7494	6708	6584
65°	7180	6410	6286
70°	6825	6000	5981
75°	6261	5606	5607
80°	5525	5130	5198
85°	4842	4811	5069



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.7	1.3
10°-20°	402.4	3.8
20°-30°	598.4	5.7
30°-40°	708.8	6.7
40°-50°	732.8	7.0
50°-60°	675.1	6.4
60°-70°	545.7	5.2
70°-80°	365.5	3.5
80°-90°	193.5	1.8
90°-100°	175.9	1.7
100°-110°	507.1	4.8
110°-120°	830.0	7.9
120°-130°	1027.6	9.8
130°-140°	1086.2	10.3
140°-150°	1010.0	9.6
150°-160°	814.9	7.7
160°-170°	527.0	5.0
170°-180°	181.8	1.7
0°-30°	1142.5	10.9
0°-40°	1851.2	17.6
0°-60°	3259.1	31.0
0°-90°	4363.8	41.5
90°-120°	1513.0	14.4
90°-150°	4636.9	44.1
90°-180°	6161.0	58.5
0°-180°	10524.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1499	1499	1499	1499	1499	
5°	1499	1496	1486	1497	1496	142
15°	1431	1432	1422	1430	1425	403
25°	1300	1304	1296	1301	1295	598
35°	1126	1135	1132	1136	1136	704
45°	927	943	951	961	962	715
55°	713	736	760	775	782	637
65°	491	525	560	581	588	487
75°	270	309	356	384	392	287
85°	81	130	181	212	225	86
90°	25	83	143	183	199	19
95°	100	132	130	168	180	118
105°	430	460	504	532	542	456
115°	792	811	849	869	870	785
125°	1120	1129	1158	1175	1178	999
135°	1392	1399	1406	1422	1422	1073
145°	1612	1613	1613	1621	1619	1007
155°	1774	1766	1768	1771	1761	817
165°	1872	1864	1864	1872	1862	528
175°	1914	1906	1907	1917	1906	182
180°	1914	1914	1914	1914	1914	



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CATALOG NUMBER: S125DIW-S1270D1560U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1502.4	1501.9	1501.4	1500.9	1500.3	1499.2	1497.3	1495.5	1493.7	1491.9	1493.7
5°	1498.9	1498.3	1497.6	1496.9	1496.3	1494.9	1492.5	1490.3	1488.0	1485.7	1488.3
7.5°	1485.7	1485.4	1485.2	1484.9	1484.7	1483.4	1481.0	1478.7	1476.3	1473.9	1476.2
10°	1473.9	1473.9	1473.9	1473.9	1473.9	1472.6	1470.0	1467.4	1464.8	1462.2	1464.4
12.5°	1457.5	1457.7	1458.0	1458.3	1458.5	1457.6	1455.6	1453.4	1451.3	1449.3	1451.0
15°	1431.3	1431.6	1432.0	1432.3	1432.7	1431.6	1429.4	1427.1	1424.8	1422.5	1424.5
17.5°	1397.2	1397.9	1398.5	1399.2	1399.9	1399.0	1396.8	1394.5	1392.1	1389.9	1391.4
20°	1372.5	1373.2	1373.9	1374.5	1375.2	1374.3	1372.1	1369.8	1367.4	1365.2	1366.2
22.5°	1344.3	1345.5	1346.7	1347.8	1349.1	1348.3	1345.8	1343.2	1340.7	1338.1	1339.4
25°	1300.5	1301.6	1302.5	1303.4	1304.5	1304.0	1302.0	1300.0	1298.1	1296.1	1297.4
27.5°	1251.8	1253.2	1254.6	1256.0	1257.5	1257.1	1254.9	1252.6	1250.5	1248.2	1249.2
30°	1215.3	1217.3	1219.2	1221.2	1223.1	1223.1	1221.2	1219.2	1217.3	1215.3	1216.0
32.5°	1182.4	1184.1	1185.8	1187.5	1189.2	1189.3	1187.9	1186.5	1185.0	1183.6	1184.2
35°	1125.7	1127.9	1130.2	1132.6	1134.8	1135.5	1134.4	1133.5	1132.6	1131.5	1132.6
37.5°	1068.9	1071.0	1073.1	1075.3	1077.3	1078.2	1077.9	1077.5	1077.2	1076.9	1078.2
40°	1030.1	1032.7	1035.4	1038.0	1040.6	1041.7	1041.4	1041.0	1040.8	1040.5	1041.7
42.5°	987.8	991.2	994.6	998.0	1001.5	1003.4	1004.2	1004.9	1005.6	1006.4	1007.9
45°	927.3	930.9	934.4	938.0	941.6	944.2	945.9	947.5	949.1	950.7	953.1
47.5°	865.3	868.6	871.9	875.2	878.5	881.7	884.5	887.3	890.0	892.9	896.3
50°	822.9	826.5	830.1	833.7	837.4	840.9	844.5	848.1	851.7	855.3	858.8
52.5°	778.3	782.7	787.0	791.4	795.8	800.1	804.6	808.9	813.2	817.7	821.5
55°	712.8	717.9	723.2	728.4	733.6	738.9	744.0	749.3	754.5	759.8	763.4
57.5°	645.7	652.0	658.3	664.5	670.8	676.9	683.0	688.9	694.9	701.0	705.1
60°	601.1	607.6	614.1	620.7	627.2	633.7	640.3	646.8	653.3	659.8	664.7
62.5°	557.5	564.1	570.6	577.1	583.6	590.5	597.5	604.5	611.6	618.7	624.1
65°	490.8	498.3	505.9	513.4	520.8	528.6	536.4	544.2	552.0	559.9	564.8
67.5°	427.9	435.2	442.4	449.7	456.9	464.6	472.5	480.5	488.4	496.4	502.4
70°	382.1	389.6	397.1	404.6	412.1	420.1	428.6	437.2	445.6	454.1	460.3
72.5°	337.4	345.2	353.0	360.7	368.5	377.0	386.3	395.6	404.8	414.2	420.8
75°	270.4	278.9	287.4	295.9	304.3	313.9	324.2	334.7	345.2	355.6	362.1
77.5°	206.0	215.8	225.6	235.4	245.2	255.1	265.2	275.2	285.3	295.4	302.6
80°	166.1	175.9	185.7	195.5	205.3	215.7	226.8	237.9	249.0	260.1	267.3
82.5°	129.6	140.0	150.2	160.6	170.9	181.7	193.1	204.4	215.8	227.2	234.1
85°	80.9	91.6	102.4	113.2	123.9	135.1	146.5	157.9	169.3	180.8	187.9
87.5°	46.1	57.1	68.1	79.0	89.9	101.2	112.7	124.3	135.8	147.4	155.2
90°	25.0	37.9	50.9	63.8	76.8	89.9	103.3	116.6	129.9	143.2	152.3
92.5°	43.0	50.9	58.8	66.7	74.6	85.2	98.6	111.9	125.2	138.5	147.3
95°	100.0	107.5	115.1	122.6	130.2	133.5	132.6	131.8	130.8	130.0	138.7
97.5°	186.2	195.5	204.9	214.2	223.6	221.8	208.8	195.8	182.8	169.8	167.7
100°	253.1	260.9	268.7	276.5	284.4	294.1	305.8	317.5	329.2	340.9	300.8
102.5°	321.2	328.8	336.2	343.7	351.3	360.5	371.5	382.5	393.4	404.4	402.0
105°	430.4	436.9	443.4	449.9	456.3	464.5	474.3	484.1	493.9	503.6	510.2
107.5°	543.8	548.3	552.7	557.1	561.6	568.8	578.8	588.9	598.9	609.0	615.5
110°	617.6	621.5	625.4	629.3	633.2	640.1	649.9	659.6	669.4	679.2	684.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	688.0	691.8	695.7	699.6	703.5	710.1	719.3	728.6	737.8	747.2	751.9
115°	792.0	795.9	799.7	803.6	807.5	813.8	822.7	831.4	840.2	849.0	853.7
117.5°	899.8	901.3	902.7	904.1	905.6	910.9	920.1	929.3	938.6	947.8	951.8
120°	967.9	968.6	969.2	969.9	970.5	975.2	983.6	992.0	1000.5	1009.0	1013.9
122.5°	1026.9	1028.6	1030.2	1031.9	1033.5	1038.2	1045.8	1053.6	1061.3	1068.9	1073.7
125°	1119.6	1121.5	1123.4	1125.3	1127.2	1131.4	1137.9	1144.4	1151.0	1157.5	1161.5
127.5°	1207.0	1208.2	1209.6	1210.8	1212.0	1215.2	1220.4	1225.6	1230.8	1235.9	1240.0
130°	1261.5	1262.7	1264.0	1265.3	1266.5	1269.6	1274.5	1279.4	1284.2	1289.1	1292.8
132.5°	1314.8	1316.5	1318.3	1320.1	1321.9	1324.2	1327.0	1329.8	1332.7	1335.5	1339.9
135°	1392.0	1393.5	1395.2	1396.7	1398.3	1399.9	1401.6	1403.2	1404.9	1406.5	1410.1
137.5°	1462.9	1464.3	1465.7	1467.1	1468.5	1469.4	1470.0	1470.5	1471.0	1471.6	1475.6
140°	1508.3	1508.9	1509.6	1510.2	1510.8	1511.2	1511.2	1511.2	1511.2	1511.2	1515.4
142.5°	1550.3	1550.4	1550.6	1550.7	1550.8	1551.0	1551.6	1552.1	1552.6	1553.1	1556.3
145°	1611.8	1612.2	1612.5	1612.8	1613.1	1613.3	1613.3	1613.3	1613.3	1613.3	1615.2
147.5°	1664.3	1664.2	1664.1	1664.0	1663.8	1664.0	1664.3	1664.7	1665.1	1665.5	1666.3
150°	1698.4	1697.7	1697.1	1696.5	1695.8	1695.8	1696.5	1697.1	1697.7	1698.4	1699.0
152.5°	1731.3	1729.9	1728.5	1727.1	1725.7	1725.3	1726.0	1726.6	1727.3	1727.9	1728.5
155°	1773.6	1771.7	1769.8	1767.9	1766.0	1765.4	1766.0	1766.6	1767.3	1767.9	1768.9
157.5°	1806.2	1805.1	1803.9	1802.8	1801.7	1801.1	1801.2	1801.3	1801.3	1801.4	1802.4
160°	1828.9	1827.0	1825.1	1823.3	1821.4	1820.5	1820.9	1821.2	1821.5	1821.8	1823.1
162.5°	1847.1	1845.2	1843.3	1841.4	1839.5	1838.7	1839.0	1839.4	1839.7	1839.9	1841.7
165°	1871.5	1869.6	1867.6	1865.8	1863.9	1863.1	1863.4	1863.8	1864.1	1864.3	1866.2
167.5°	1889.6	1887.7	1885.7	1883.8	1881.8	1881.0	1881.3	1881.6	1882.0	1882.3	1884.5
170°	1899.9	1897.6	1895.5	1893.2	1891.0	1890.1	1890.4	1890.7	1891.0	1891.3	1893.9
172.5°	1906.7	1904.5	1902.2	1900.1	1897.8	1897.1	1897.6	1898.2	1898.8	1899.3	1901.6
175°	1914.0	1912.1	1910.3	1908.4	1906.5	1905.7	1906.0	1906.3	1906.7	1907.0	1909.5
177.5°	1917.4	1915.9	1914.4	1912.9	1911.4	1910.7	1911.0	1911.3	1911.5	1911.8	1913.5
180°	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1495.5	1497.3	1499.2	1500.0	1499.7	1499.5	1499.2	1498.9
5°	1490.9	1493.6	1496.2	1497.3	1496.9	1496.7	1496.3	1496.0
7.5°	1478.5	1480.8	1483.1	1484.0	1483.8	1483.4	1483.1	1482.7
10°	1466.8	1469.0	1471.3	1472.3	1472.0	1471.7	1471.3	1471.0
12.5°	1452.7	1454.5	1456.3	1456.8	1455.9	1455.1	1454.2	1453.4
15°	1426.4	1428.4	1430.3	1430.7	1429.4	1428.0	1426.7	1425.4
17.5°	1392.9	1394.4	1395.9	1396.3	1395.4	1394.7	1393.9	1393.1
20°	1367.2	1368.1	1369.1	1369.6	1369.6	1369.6	1369.6	1369.6
22.5°	1340.7	1341.9	1343.1	1343.3	1342.6	1341.8	1341.0	1340.2
25°	1298.7	1300.0	1301.4	1301.2	1299.6	1297.9	1296.3	1294.7
27.5°	1250.1	1250.9	1251.9	1252.1	1251.4	1250.8	1250.3	1249.7
30°	1216.6	1217.3	1218.0	1218.0	1217.8	1217.4	1217.1	1216.7
32.5°	1184.9	1185.5	1186.2	1186.4	1186.0	1185.7	1185.3	1185.1
35°	1133.5	1134.4	1135.5	1136.0	1136.0	1136.0	1136.0	1136.0
37.5°	1079.5	1080.8	1082.1	1082.7	1082.5	1082.4	1082.3	1082.1
40°	1043.0	1044.3	1045.7	1046.6	1047.3	1047.9	1048.6	1049.2
42.5°	1009.5	1011.1	1012.6	1013.4	1013.6	1013.7	1013.9	1014.0
45°	955.4	957.6	959.9	961.2	961.6	961.9	962.2	962.5
47.5°	899.6	902.9	906.3	908.2	909.0	909.6	910.4	911.2
50°	862.4	866.0	869.7	871.9	872.9	873.9	874.9	875.8
52.5°	825.4	829.2	833.0	835.4	836.0	836.8	837.5	838.2
55°	766.9	770.5	774.1	776.6	777.9	779.2	780.5	781.8
57.5°	709.2	713.3	717.5	720.0	721.0	721.9	722.9	723.9
60°	669.6	674.5	679.4	682.3	683.3	684.3	685.3	686.3
62.5°	629.5	634.9	640.4	643.7	644.9	646.2	647.4	648.7
65°	569.7	574.6	579.5	582.6	583.9	585.2	586.5	587.8
67.5°	508.3	514.3	520.2	524.0	525.7	527.4	529.1	530.8
70°	466.5	472.7	478.9	483.0	484.9	486.9	488.9	490.8
72.5°	427.5	434.3	441.0	445.1	446.6	448.0	449.4	450.8
75°	368.7	375.2	381.7	385.9	387.5	389.1	390.8	392.4
77.5°	309.7	316.9	324.1	328.4	329.7	330.9	332.2	333.6
80°	274.5	281.6	288.9	293.1	294.4	295.7	297.0	298.3
82.5°	241.0	248.0	254.9	259.5	261.8	264.2	266.6	268.9
85°	195.1	202.3	209.5	214.4	217.0	219.6	222.3	224.8
87.5°	163.1	170.9	178.7	183.8	186.3	188.8	191.2	193.7
90°	161.4	170.5	179.6	185.7	189.0	192.2	195.4	198.6
92.5°	156.2	164.9	173.8	179.6	182.3	185.0	187.8	190.5
95°	147.5	156.3	165.0	170.5	172.9	175.1	177.4	179.6
97.5°	165.7	163.6	161.6	161.7	163.9	166.2	168.3	170.6
100°	260.7	220.6	180.4	160.7	161.5	162.1	162.9	163.5
102.5°	399.7	397.5	395.1	384.3	364.8	345.3	325.8	306.3
105°	516.7	523.2	529.8	534.0	536.0	538.0	539.9	541.9
107.5°	622.0	628.6	635.1	638.9	640.0	641.0	642.2	643.2
110°	689.7	694.9	700.2	704.2	706.7	709.4	711.9	714.5



TEST NUMBER: P333486-830

CATALOG NUMBER: S125DIW-S1270D1560U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	756.6	761.4	766.1	769.4	771.3	773.1	775.0	776.7
115°	858.3	862.9	867.5	869.9	869.9	870.0	870.1	870.2
117.5°	955.6	959.6	963.5	966.1	967.5	968.9	970.3	971.8
120°	1018.8	1023.7	1028.7	1031.3	1031.7	1032.1	1032.5	1032.8
122.5°	1078.3	1083.0	1087.6	1090.0	1090.1	1090.2	1090.4	1090.5
125°	1165.5	1169.4	1173.4	1175.7	1176.4	1177.0	1177.8	1178.5
127.5°	1244.2	1248.3	1252.5	1254.3	1253.9	1253.4	1253.0	1252.5
130°	1296.4	1300.0	1303.6	1305.5	1305.5	1305.6	1305.6	1305.7
132.5°	1344.3	1348.7	1353.0	1355.1	1354.9	1354.7	1354.5	1354.3
135°	1413.7	1417.3	1421.0	1422.7	1422.4	1422.1	1421.8	1421.6
137.5°	1479.5	1483.6	1487.5	1489.3	1489.0	1488.7	1488.3	1488.0
140°	1519.7	1523.8	1528.0	1529.9	1529.3	1528.7	1528.1	1527.6
142.5°	1559.5	1562.7	1565.8	1567.2	1566.6	1566.0	1565.5	1564.8
145°	1617.1	1619.1	1621.1	1621.7	1621.2	1620.5	1619.9	1619.4
147.5°	1667.3	1668.2	1669.1	1668.7	1667.0	1665.3	1663.6	1662.0
150°	1699.6	1700.3	1700.9	1700.2	1697.9	1695.7	1693.6	1691.3
152.5°	1729.2	1729.8	1730.4	1729.7	1727.4	1725.2	1723.0	1720.8
155°	1769.8	1770.8	1771.7	1770.8	1768.4	1765.9	1763.3	1760.8
157.5°	1803.4	1804.4	1805.4	1804.7	1802.1	1799.6	1797.1	1794.6
160°	1824.3	1825.6	1826.8	1826.3	1823.7	1821.2	1818.6	1816.2
162.5°	1843.5	1845.3	1847.0	1846.5	1843.8	1841.0	1838.2	1835.4
165°	1868.1	1870.1	1872.0	1871.6	1869.2	1866.6	1864.1	1861.5
167.5°	1886.8	1889.0	1891.3	1891.0	1888.2	1885.4	1882.5	1879.7
170°	1896.4	1898.9	1901.4	1901.3	1898.5	1895.6	1892.7	1889.9
172.5°	1903.8	1906.1	1908.4	1908.1	1905.3	1902.4	1899.6	1896.8
175°	1911.9	1914.5	1917.0	1916.8	1914.0	1911.2	1908.4	1905.5
177.5°	1915.3	1917.0	1918.8	1918.7	1916.7	1914.7	1912.6	1910.6
180°	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0

(END OF REPORT)