

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: P333480-840

Luminaire Tested: **S125DIW-S1270D1340U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333480-840
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: S125DIW-S1270D1340U840-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10394.4 lumens
Efficiency: N/A
Efficacy: 136.4 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

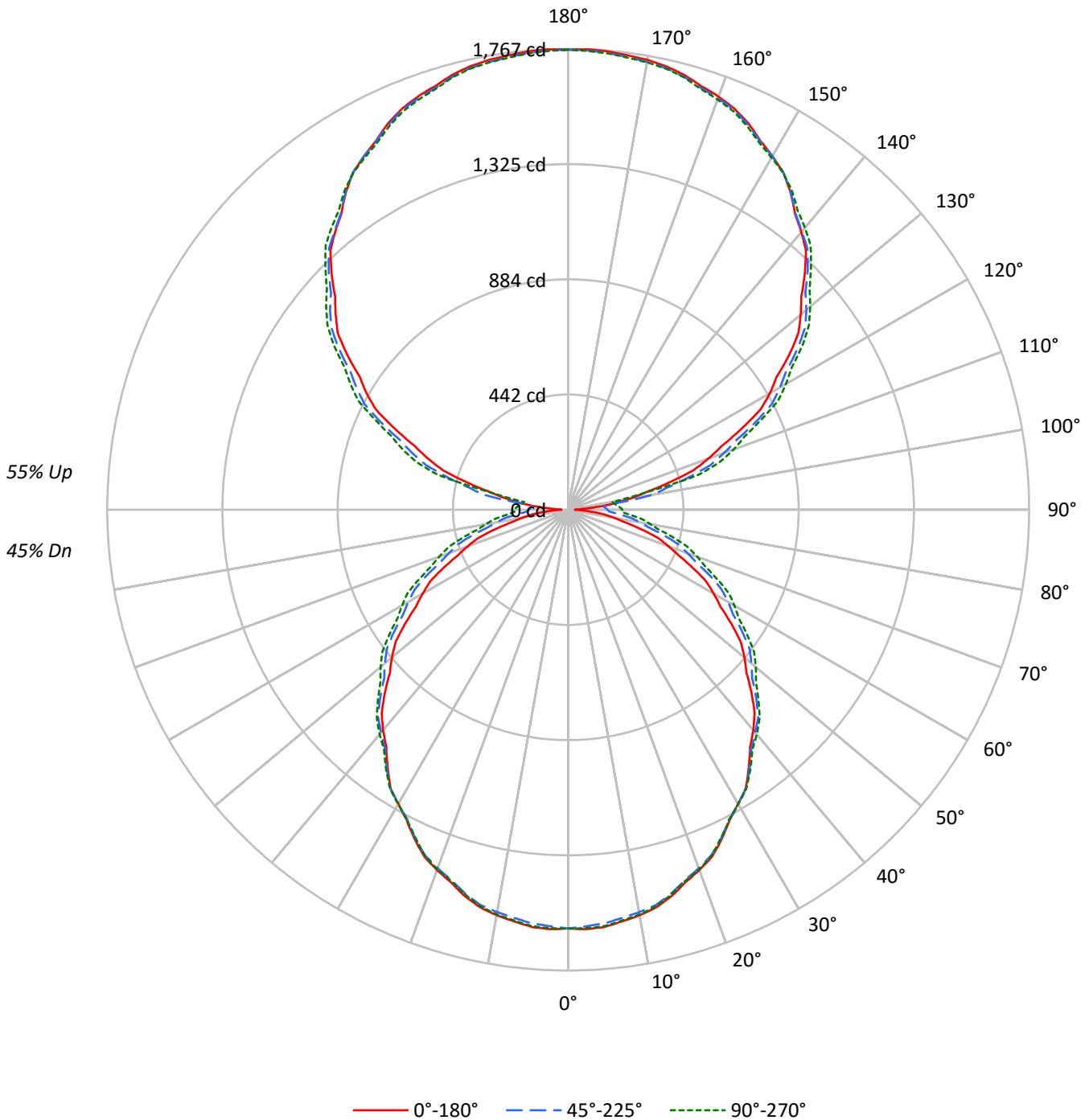
Input Watts (W): 76.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: S125DIW-S1270D1340U840-4F0-1E-UDD-D

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45
1	96	91	87	84	88	84	80	77	70	67	65	56	55	53	44	43	42	36
2	87	79	73	68	79	73	67	63	61	57	53	49	46	44	39	37	35	30
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	32	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	28	25	21
5	66	55	46	40	60	50	43	38	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	22	19	16
7	56	44	36	30	51	41	33	28	34	29	25	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°	10372	10372	10372
5°	10393	10181	10213
10°	10318	9998	9984
15°	10197	9781	9692
20°	10031	9512	9401
25°	9834	9224	9042
30°	9595	8907	8715
35°	9372	8616	8417
40°	9145	8310	8116
45°	8889	8048	7849
50°	8644	7763	7614
55°	8351	7495	7337
60°	8029	7187	7054
65°	7692	6868	6736
70°	7312	6430	6408
75°	6707	6007	6007
80°	5917	5497	5569
85°	5183	5154	5432



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.9	1.5
10°-20°	431.1	4.1
20°-30°	641.1	6.2
30°-40°	759.4	7.3
40°-50°	785.2	7.6
50°-60°	723.3	7.0
60°-70°	584.7	5.6
70°-80°	391.6	3.8
80°-90°	206.7	2.0
90°-100°	178.0	1.7
100°-110°	479.1	4.6
110°-120°	772.8	7.4
120°-130°	951.5	9.2
130°-140°	1003.0	9.6
140°-150°	931.1	9.0
150°-160°	750.9	7.2
160°-170°	485.7	4.7
170°-180°	167.5	1.6
0°-30°	1224.1	11.8
0°-40°	1983.5	19.1
0°-60°	3491.9	33.6
0°-90°	4674.9	45.0
90°-120°	1429.9	13.8
90°-150°	4315.4	41.5
90°-180°	5720.0	55.0
0°-180°	10394.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1606	1606	1606	1606	1606	
5°	1606	1602	1592	1604	1603	152
15°	1534	1534	1524	1533	1527	432
25°	1393	1397	1389	1394	1387	641
35°	1206	1216	1212	1217	1217	755
45°	994	1010	1019	1029	1031	766
55°	764	789	814	831	838	682
65°	526	562	600	623	630	522
75°	290	331	381	411	420	307
85°	87	139	194	227	241	92
90°	26	87	150	191	208	20
95°	95	130	136	175	188	111
105°	399	430	476	506	518	422
115°	731	750	791	813	816	725
125°	1033	1042	1072	1091	1096	922
135°	1283	1290	1298	1315	1316	989
145°	1486	1487	1487	1495	1494	928
155°	1634	1627	1629	1632	1623	753
165°	1725	1717	1718	1725	1716	487
175°	1764	1757	1757	1767	1756	168
180°	1764	1764	1764	1764	1764	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1609.7	1609.2	1608.6	1608.1	1607.5	1606.3	1604.3	1602.4	1600.4	1598.4	1600.4
5°	1606.0	1605.3	1604.6	1603.9	1603.2	1601.6	1599.1	1596.7	1594.3	1591.9	1594.6
7.5°	1591.9	1591.5	1591.2	1590.9	1590.7	1589.3	1586.8	1584.3	1581.8	1579.2	1581.7
10°	1579.2	1579.2	1579.2	1579.2	1579.2	1577.8	1575.0	1572.3	1569.4	1566.6	1569.0
12.5°	1561.6	1561.9	1562.2	1562.5	1562.7	1561.8	1559.5	1557.2	1555.0	1552.8	1554.7
15°	1533.6	1533.9	1534.3	1534.6	1535.0	1533.9	1531.5	1529.0	1526.6	1524.1	1526.2
17.5°	1497.0	1497.7	1498.4	1499.1	1499.9	1498.9	1496.5	1494.1	1491.6	1489.1	1490.8
20°	1470.6	1471.3	1472.0	1472.7	1473.4	1472.5	1470.1	1467.6	1465.1	1462.7	1463.8
22.5°	1440.4	1441.6	1442.9	1444.1	1445.4	1444.6	1441.9	1439.2	1436.4	1433.7	1435.0
25°	1393.4	1394.5	1395.5	1396.5	1397.7	1397.1	1395.0	1392.9	1390.8	1388.7	1390.1
27.5°	1341.2	1342.7	1344.2	1345.7	1347.4	1346.9	1344.5	1342.1	1339.8	1337.4	1338.4
30°	1302.1	1304.2	1306.3	1308.4	1310.5	1310.5	1308.4	1306.3	1304.2	1302.1	1302.8
32.5°	1266.9	1268.7	1270.5	1272.3	1274.1	1274.2	1272.7	1271.2	1269.6	1268.1	1268.8
35°	1206.1	1208.5	1210.9	1213.5	1215.9	1216.6	1215.5	1214.5	1213.5	1212.3	1213.5
37.5°	1145.3	1147.5	1149.7	1152.1	1154.3	1155.2	1154.9	1154.5	1154.2	1153.8	1155.2
40°	1103.7	1106.5	1109.3	1112.2	1114.9	1116.1	1115.8	1115.4	1115.1	1114.8	1116.1
42.5°	1058.3	1062.0	1065.6	1069.2	1073.0	1075.1	1075.9	1076.7	1077.4	1078.2	1079.8
45°	993.5	997.3	1001.2	1005.0	1008.9	1011.7	1013.5	1015.2	1016.9	1018.7	1021.2
47.5°	927.1	930.6	934.2	937.8	941.3	944.6	947.7	950.7	953.6	956.6	960.3
50°	881.7	885.6	889.4	893.2	897.2	901.0	904.8	908.7	912.5	916.4	920.2
52.5°	833.8	838.6	843.2	847.9	852.6	857.3	862.0	866.7	871.3	876.1	880.2
55°	763.7	769.2	774.9	780.4	786.0	791.6	797.2	802.8	808.4	814.1	817.9
57.5°	691.9	698.5	705.3	712.0	718.7	725.3	731.7	738.1	744.6	751.0	755.5
60°	644.0	651.0	657.9	665.0	672.0	678.9	686.0	693.0	699.9	706.9	712.2
62.5°	597.3	604.4	611.4	618.3	625.3	632.7	640.2	647.7	655.3	662.9	668.6
65°	525.8	533.9	542.0	550.1	558.1	566.3	574.7	583.1	591.5	599.9	605.1
67.5°	458.5	466.3	474.0	481.8	489.6	497.8	506.2	514.8	523.3	531.9	538.3
70°	409.4	417.4	425.5	433.5	441.5	450.1	459.2	468.4	477.5	486.6	493.2
72.5°	361.5	369.8	378.2	386.5	394.9	403.9	413.8	423.8	433.7	443.7	450.9
75°	289.7	298.8	307.9	317.0	326.1	336.3	347.4	358.6	369.8	381.0	388.0
77.5°	220.8	231.3	241.8	252.3	262.8	273.4	284.2	294.9	305.7	316.5	324.2
80°	177.9	188.4	198.9	209.4	219.9	231.1	243.0	254.9	266.8	278.7	286.4
82.5°	138.9	150.0	161.0	172.1	183.1	194.7	206.9	219.0	231.3	243.4	250.9
85°	86.6	98.2	109.7	121.3	132.8	144.7	156.9	169.2	181.4	193.7	201.4
87.5°	49.4	61.1	72.7	84.3	96.0	108.1	120.3	132.6	144.9	157.2	165.5
90°	26.5	40.0	53.5	67.1	80.6	94.3	108.3	122.2	136.1	150.1	159.6
92.5°	42.8	51.5	60.3	69.0	77.8	89.1	103.1	117.0	131.0	145.0	154.2
95°	95.0	103.2	111.5	119.7	127.8	132.4	133.3	134.1	135.0	135.8	145.0
97.5°	174.2	183.9	193.7	203.5	213.2	212.9	202.5	192.2	181.8	171.4	170.6
100°	235.7	243.9	252.2	260.3	268.5	278.8	291.2	303.6	315.9	328.3	292.4
102.5°	298.2	306.1	314.0	321.9	329.8	339.5	351.1	362.7	374.4	386.0	384.9
105°	398.6	405.4	412.1	418.9	425.7	434.2	444.7	455.2	465.7	476.3	483.2
107.5°	502.8	507.7	512.4	517.2	521.9	529.6	540.3	550.9	561.6	572.2	579.3
110°	570.7	574.8	579.1	583.2	587.4	594.7	605.1	615.5	625.8	636.2	642.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	635.5	639.5	643.6	647.6	651.8	658.6	668.5	678.4	688.3	698.1	703.4
115°	731.2	735.1	739.0	742.9	746.8	753.5	762.9	772.2	781.6	791.0	796.2
117.5°	830.3	831.8	833.4	835.0	836.5	842.1	851.8	861.5	871.3	881.0	885.4
120°	893.0	893.8	894.5	895.3	896.1	900.9	909.9	918.8	927.7	936.6	942.0
122.5°	947.3	948.9	950.4	952.0	953.6	958.5	966.6	974.8	983.0	991.2	996.3
125°	1032.7	1034.4	1036.0	1037.7	1039.5	1043.8	1050.8	1057.7	1064.8	1071.8	1076.2
127.5°	1113.0	1114.1	1115.2	1116.3	1117.4	1120.7	1126.3	1131.9	1137.4	1143.0	1147.5
130°	1163.2	1164.3	1165.4	1166.5	1167.6	1170.7	1175.9	1181.1	1186.3	1191.5	1195.5
132.5°	1212.1	1213.8	1215.4	1217.0	1218.6	1220.9	1224.2	1227.3	1230.4	1233.6	1238.3
135°	1283.2	1284.6	1286.0	1287.4	1288.8	1290.4	1292.3	1294.1	1296.1	1297.9	1301.8
137.5°	1348.6	1349.8	1351.0	1352.2	1353.4	1354.4	1355.0	1355.7	1356.5	1357.1	1361.3
140°	1390.2	1390.8	1391.3	1391.9	1392.5	1392.8	1392.9	1392.9	1393.0	1393.0	1397.5
142.5°	1428.9	1429.0	1429.0	1429.1	1429.2	1429.4	1429.9	1430.4	1430.9	1431.3	1434.7
145°	1485.6	1485.8	1486.1	1486.3	1486.5	1486.6	1486.6	1486.6	1486.6	1486.6	1488.6
147.5°	1533.7	1533.6	1533.5	1533.4	1533.3	1533.4	1533.7	1534.1	1534.4	1534.8	1535.7
150°	1565.1	1564.5	1564.0	1563.4	1562.8	1562.8	1563.4	1564.0	1564.5	1565.1	1565.7
152.5°	1595.4	1594.2	1592.9	1591.6	1590.3	1589.9	1590.5	1591.1	1591.7	1592.3	1592.9
155°	1634.4	1632.6	1630.9	1629.2	1627.4	1626.9	1627.4	1628.0	1628.6	1629.2	1630.0
157.5°	1664.5	1663.4	1662.3	1661.3	1660.3	1659.8	1659.8	1659.9	1660.0	1660.0	1660.9
160°	1685.4	1683.6	1681.9	1680.1	1678.4	1677.7	1678.0	1678.3	1678.6	1678.9	1680.0
162.5°	1702.1	1700.4	1698.6	1696.9	1695.2	1694.5	1694.8	1695.1	1695.3	1695.6	1697.2
165°	1724.6	1722.8	1721.1	1719.4	1717.7	1716.9	1717.2	1717.5	1717.8	1718.1	1719.8
167.5°	1741.3	1739.6	1737.8	1736.0	1734.1	1733.4	1733.6	1733.9	1734.2	1734.5	1736.7
170°	1750.8	1748.8	1746.7	1744.6	1742.6	1741.7	1742.0	1742.3	1742.6	1742.9	1745.2
172.5°	1757.1	1755.0	1753.0	1750.9	1748.9	1748.2	1748.7	1749.2	1749.7	1750.2	1752.3
175°	1763.8	1762.1	1760.4	1758.6	1756.9	1756.2	1756.5	1756.8	1757.1	1757.3	1759.6
177.5°	1767.0	1765.5	1764.2	1762.8	1761.4	1760.8	1761.1	1761.3	1761.5	1761.7	1763.4
180°	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1602.4	1604.3	1606.3	1607.1	1606.8	1606.6	1606.3	1606.0
5°	1597.4	1600.2	1603.1	1604.3	1603.9	1603.6	1603.2	1602.9
7.5°	1584.1	1586.6	1589.0	1590.0	1589.7	1589.3	1589.0	1588.6
10°	1571.6	1574.0	1576.4	1577.5	1577.1	1576.8	1576.4	1576.1
12.5°	1556.5	1558.4	1560.3	1560.8	1559.9	1559.0	1558.1	1557.2
15°	1528.3	1530.5	1532.5	1532.9	1531.5	1530.0	1528.6	1527.2
17.5°	1492.4	1494.0	1495.6	1496.0	1495.1	1494.3	1493.5	1492.6
20°	1464.8	1465.8	1466.9	1467.4	1467.4	1467.4	1467.4	1467.4
22.5°	1436.4	1437.7	1439.1	1439.3	1438.5	1437.6	1436.7	1435.9
25°	1391.5	1392.9	1394.3	1394.1	1392.4	1390.6	1388.9	1387.2
27.5°	1339.4	1340.3	1341.3	1341.5	1340.8	1340.2	1339.6	1339.0
30°	1303.5	1304.2	1304.9	1305.0	1304.7	1304.3	1304.0	1303.6
32.5°	1269.5	1270.2	1270.9	1271.1	1270.7	1270.4	1270.0	1269.7
35°	1214.5	1215.5	1216.6	1217.1	1217.1	1217.1	1217.1	1217.1
37.5°	1156.6	1158.0	1159.4	1160.0	1159.8	1159.7	1159.6	1159.4
40°	1117.5	1118.9	1120.3	1121.4	1122.1	1122.8	1123.5	1124.2
42.5°	1081.6	1083.3	1084.9	1085.8	1086.0	1086.1	1086.3	1086.4
45°	1023.6	1026.0	1028.4	1029.9	1030.3	1030.6	1031.0	1031.3
47.5°	963.8	967.3	971.0	973.1	973.9	974.6	975.4	976.2
50°	924.0	927.9	931.8	934.2	935.2	936.3	937.4	938.4
52.5°	884.3	888.5	892.5	895.0	895.8	896.6	897.4	898.1
55°	821.7	825.6	829.4	832.0	833.4	834.9	836.3	837.7
57.5°	759.8	764.3	768.7	771.4	772.4	773.5	774.6	775.6
60°	717.4	722.7	727.9	731.0	732.2	733.2	734.3	735.3
62.5°	674.5	680.2	686.1	689.6	690.9	692.4	693.7	695.0
65°	610.4	615.6	620.9	624.2	625.6	627.0	628.4	629.8
67.5°	544.6	551.0	557.3	561.4	563.2	565.0	566.9	568.8
70°	499.8	506.4	513.1	517.5	519.6	521.7	523.8	525.8
72.5°	458.1	465.3	472.5	476.9	478.5	480.0	481.5	483.0
75°	395.1	402.0	409.0	413.4	415.2	416.9	418.7	420.4
77.5°	331.8	339.5	347.3	351.8	353.3	354.6	356.0	357.4
80°	294.1	301.7	309.5	314.1	315.4	316.8	318.2	319.6
82.5°	258.2	265.7	273.1	278.0	280.5	283.1	285.6	288.1
85°	209.0	216.7	224.5	229.7	232.5	235.3	238.1	240.9
87.5°	173.9	182.3	190.6	196.0	198.6	201.3	203.9	206.5
90°	169.1	178.5	188.0	194.4	197.7	201.1	204.4	207.7
92.5°	163.4	172.7	181.9	187.9	190.8	193.6	196.5	199.3
95°	154.2	163.3	172.5	178.2	180.7	183.2	185.6	188.0
97.5°	169.7	168.8	168.0	168.7	171.2	173.5	175.9	178.3
100°	256.4	220.5	184.5	167.0	167.9	168.8	169.8	170.8
102.5°	383.7	382.6	381.5	372.1	354.5	336.8	319.1	301.4
105°	490.2	497.3	504.2	508.8	511.0	513.1	515.2	517.5
107.5°	586.2	593.2	600.2	604.3	605.6	606.9	608.2	609.6
110°	647.8	653.6	659.3	663.6	666.3	669.0	671.9	674.6



TEST NUMBER: P333480-840

CATALOG NUMBER: S125DIW-S1270D1340U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	708.6	714.0	719.2	722.9	724.9	726.9	729.0	731.0
115°	801.2	806.4	811.5	814.3	814.7	815.0	815.4	815.7
117.5°	889.9	894.3	898.8	901.8	903.4	905.0	906.7	908.3
120°	947.4	952.7	958.1	961.1	961.7	962.4	963.0	963.7
122.5°	1001.4	1006.4	1011.6	1014.3	1014.7	1015.1	1015.5	1015.9
125°	1080.7	1085.1	1089.5	1092.2	1093.1	1093.9	1094.8	1095.7
127.5°	1152.1	1156.6	1161.1	1163.4	1163.3	1163.1	1163.0	1162.9
130°	1199.5	1203.6	1207.6	1209.7	1210.0	1210.3	1210.6	1210.9
132.5°	1242.9	1247.7	1252.4	1254.8	1254.9	1254.9	1254.9	1254.9
135°	1305.9	1309.8	1313.7	1315.8	1315.8	1315.8	1315.8	1315.8
137.5°	1365.5	1369.8	1374.0	1376.1	1376.0	1375.9	1375.7	1375.6
140°	1401.9	1406.3	1410.8	1412.8	1412.5	1412.1	1411.8	1411.4
142.5°	1438.1	1441.6	1444.9	1446.4	1446.1	1445.8	1445.4	1445.1
145°	1490.8	1492.8	1494.8	1495.6	1495.3	1495.0	1494.6	1494.3
147.5°	1536.6	1537.5	1538.4	1538.1	1536.6	1535.2	1533.8	1532.3
150°	1566.3	1566.8	1567.4	1566.7	1564.8	1562.8	1560.8	1558.8
152.5°	1593.5	1594.1	1594.6	1593.9	1591.9	1589.8	1587.8	1585.8
155°	1630.9	1631.7	1632.6	1631.9	1629.6	1627.3	1625.0	1622.7
157.5°	1661.9	1662.8	1663.8	1663.0	1660.7	1658.4	1656.1	1653.8
160°	1681.2	1682.3	1683.5	1682.9	1680.6	1678.3	1676.0	1673.6
162.5°	1698.8	1700.5	1702.1	1701.6	1699.1	1696.5	1693.9	1691.4
165°	1721.5	1723.3	1725.1	1724.7	1722.4	1720.1	1717.8	1715.5
167.5°	1738.8	1740.8	1742.9	1742.6	1740.0	1737.5	1734.8	1732.2
170°	1747.6	1749.9	1752.2	1752.1	1749.5	1746.9	1744.2	1741.6
172.5°	1754.4	1756.6	1758.6	1758.4	1755.8	1753.1	1750.5	1747.9
175°	1761.9	1764.2	1766.6	1766.5	1763.8	1761.2	1758.6	1756.0
177.5°	1765.0	1766.7	1768.3	1768.2	1766.3	1764.4	1762.5	1760.7
180°	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8

(END OF REPORT)