

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: P333481-830

Luminaire Tested: **S125DIW-S1270D1340U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333481-830
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-S1270D1340U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9030.1 lumens
Efficiency: N/A
Efficacy: 118.5 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

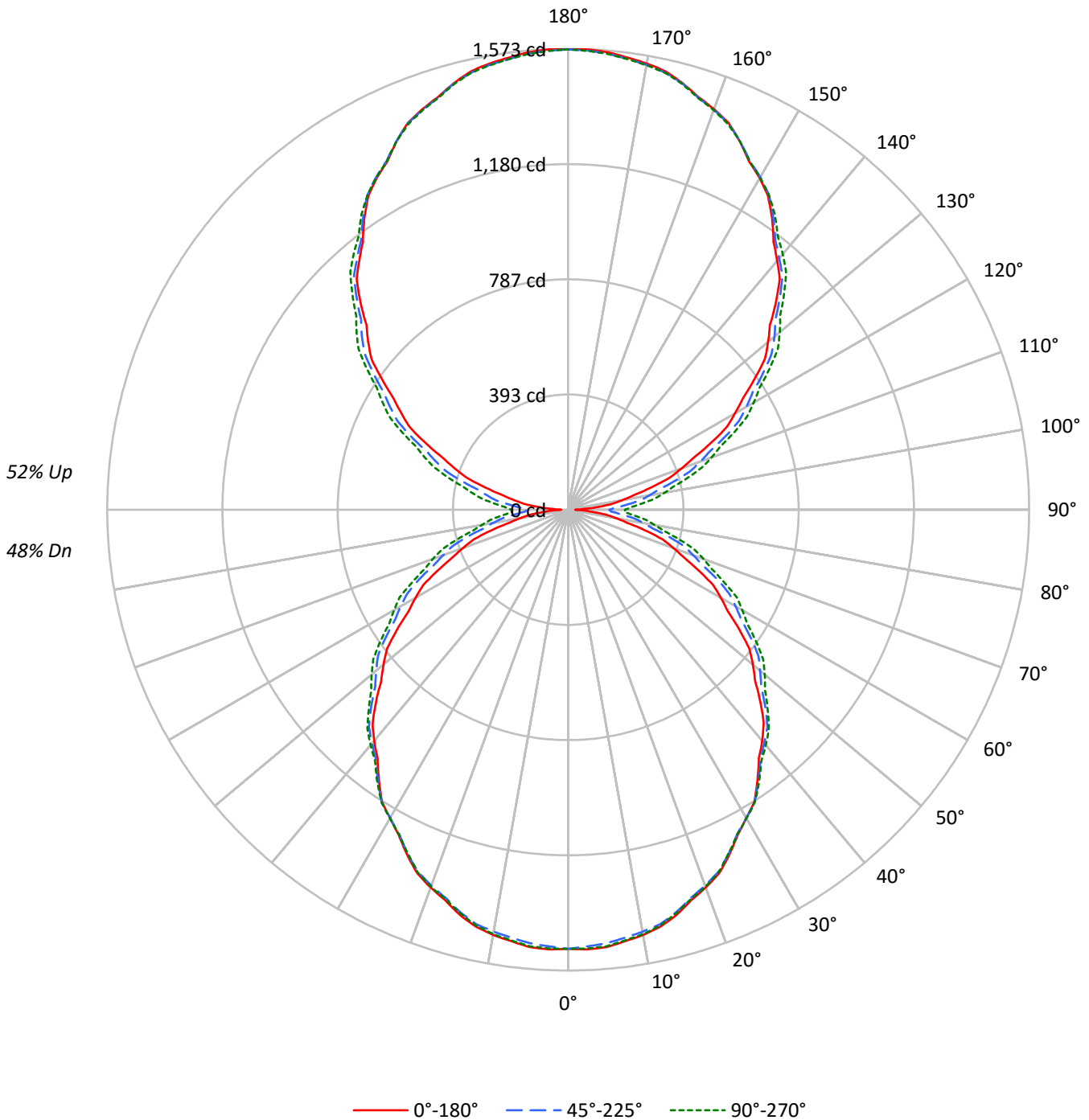
Input Watts (W): 76.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333481-830

CATALOG NUMBER: S125DIW-S1270D1340U830-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333481-830

CATALOG NUMBER: S125DIW-S1270D1340U830-4F0-1E-UDD-D1

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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48
1	97	92	88	84	89	85	81	78	71	69	66	59	57	55	47	46	45	39
2	88	80	74	68	80	74	68	63	62	58	54	51	48	45	41	39	37	32
3	80	70	62	56	73	65	58	53	54	49	45	45	41	38	36	33	31	27
4	73	62	54	47	67	57	50	44	48	43	38	40	36	32	32	29	27	23
5	67	55	47	41	61	51	43	38	43	37	33	36	31	28	29	26	23	20
6	62	49	41	35	56	46	38	33	39	33	29	32	28	24	26	23	20	17
7	57	44	36	31	52	41	34	29	35	29	25	29	25	22	24	21	18	15
8	53	40	32	27	48	37	30	25	32	26	22	27	22	19	22	19	16	14
9	49	37	29	24	45	34	27	23	29	24	20	25	20	17	20	17	14	12
10	46	34	26	21	42	31	25	20	27	22	18	23	18	15	19	15	13	11

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



TEST NUMBER: P333481-830

CATALOG NUMBER: S125DIW-S1270D1340U830-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.7	1.6
10°-20°	402.4	4.5
20°-30°	598.4	6.6
30°-40°	708.8	7.8
40°-50°	732.8	8.1
50°-60°	675.1	7.5
60°-70°	545.7	6.0
70°-80°	365.5	4.0
80°-90°	193.0	2.1
90°-100°	211.6	2.3
100°-110°	389.2	4.3
110°-120°	578.9	6.4
120°-130°	722.5	8.0
130°-140°	789.2	8.7
140°-150°	763.3	8.5
150°-160°	638.9	7.1
160°-170°	424.7	4.7
170°-180°	148.6	1.6
0°-30°	1142.5	12.7
0°-40°	1851.2	20.5
0°-60°	3259.1	36.1
0°-90°	4363.3	48.3
90°-120°	1179.6	13.1
90°-150°	3454.6	38.3
90°-180°	4667.0	51.7
0°-180°	9030.1	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	82	140	178	194	20
95°	99	140	201	241	255	100
105°	292	323	373	408	424	312
115°	536	552	592	616	624	530
125°	775	782	811	832	839	694
135°	1003	1009	1020	1039	1042	773
145°	1213	1217	1220	1227	1230	758
155°	1386	1387	1388	1392	1386	638
165°	1508	1505	1506	1510	1504	425
175°	1567	1563	1562	1569	1561	149
180°	1571	1571	1571	1571	1571	



TEST NUMBER: P333481-830

CATALOG NUMBER: S125DIW-S1270D1340U830-4F0-1E-UDD-D1

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	57.0	67.9	78.7	89.6	100.9	112.3	123.8	135.3	146.8	154.6
90°	24.7	37.3	50.0	62.6	75.2	88.0	101.0	114.0	127.1	140.1	148.9
92.5°	50.7	61.9	73.1	84.4	95.5	107.9	121.7	135.3	149.0	162.8	171.8
95°	98.6	107.6	116.7	125.6	134.7	146.1	159.9	173.8	187.6	201.4	210.5
97.5°	149.4	157.2	165.1	173.0	180.8	192.0	206.4	220.9	235.4	249.9	258.4
100°	187.4	194.2	201.0	207.9	214.8	225.2	239.1	253.2	267.1	281.1	290.4
102.5°	228.2	235.6	243.1	250.5	257.9	267.6	279.6	291.5	303.6	315.6	324.8
105°	292.0	298.6	305.2	311.7	318.3	327.3	338.7	350.2	361.6	373.1	381.2
107.5°	362.6	368.4	374.2	380.0	385.8	394.0	404.7	415.4	426.0	436.7	443.9
110°	411.3	416.6	421.9	427.2	432.4	440.1	450.0	460.0	470.0	479.8	486.9



TEST NUMBER: P333481-830

CATALOG NUMBER: S125DIW-S1270D1340U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	462.1	466.0	469.9	473.7	477.5	484.4	494.4	504.3	514.2	524.1	530.4
115°	535.7	539.1	542.5	545.9	549.2	555.4	564.5	573.5	582.6	591.6	597.2
117.5°	609.6	611.6	613.6	615.6	617.6	622.8	631.3	639.9	648.4	657.0	662.7
120°	656.6	658.9	661.3	663.5	665.9	671.0	678.7	686.5	694.4	702.1	707.7
122.5°	706.2	707.2	708.1	709.1	710.0	714.4	722.5	730.4	738.4	746.3	751.4
125°	775.0	776.2	777.5	778.8	780.1	784.2	791.0	797.8	804.6	811.4	816.1
127.5°	846.8	847.4	848.0	848.6	849.2	852.3	858.0	863.7	869.4	875.1	879.6
130°	890.8	891.8	892.9	893.9	894.9	898.1	903.1	908.2	913.3	918.5	922.7
132.5°	933.7	935.9	938.0	940.2	942.3	945.1	948.5	952.0	955.4	958.8	963.1
135°	1003.1	1004.4	1005.7	1006.9	1008.2	1010.2	1012.8	1015.3	1017.9	1020.4	1024.6
137.5°	1068.3	1069.6	1070.9	1072.2	1073.6	1075.1	1076.8	1078.5	1080.2	1081.9	1086.1
140°	1109.2	1110.5	1111.9	1113.2	1114.7	1115.9	1117.0	1118.1	1119.3	1120.4	1124.5
142.5°	1151.2	1152.1	1153.0	1153.9	1154.7	1155.7	1156.9	1157.9	1159.0	1160.2	1163.6
145°	1213.1	1213.9	1214.7	1215.4	1216.2	1216.9	1217.8	1218.5	1219.4	1220.2	1221.8
147.5°	1268.9	1269.4	1270.1	1270.6	1271.2	1271.9	1272.5	1273.2	1273.8	1274.5	1275.6
150°	1307.0	1306.7	1306.5	1306.2	1305.9	1306.3	1307.4	1308.5	1309.6	1310.7	1310.7
152.5°	1338.3	1338.7	1339.1	1339.4	1339.8	1340.2	1340.7	1341.0	1341.5	1342.0	1342.7
155°	1386.5	1386.5	1386.5	1386.5	1386.5	1386.6	1386.9	1387.1	1387.4	1387.7	1388.7
157.5°	1429.5	1428.9	1428.3	1427.7	1427.1	1426.9	1427.2	1427.5	1427.8	1428.0	1429.1
160°	1454.9	1454.2	1453.3	1452.5	1451.7	1451.4	1451.7	1452.0	1452.2	1452.5	1453.6
162.5°	1477.4	1476.9	1476.2	1475.6	1475.1	1474.8	1474.8	1474.9	1474.9	1475.0	1476.3
165°	1507.5	1506.9	1506.4	1505.9	1505.3	1505.2	1505.4	1505.7	1506.0	1506.3	1507.4
167.5°	1533.0	1531.8	1530.8	1529.7	1528.6	1528.0	1528.0	1528.0	1528.0	1528.0	1529.7
170°	1546.6	1545.6	1544.5	1543.4	1542.3	1541.7	1541.7	1541.7	1541.7	1541.7	1543.4
172.5°	1556.4	1555.3	1554.3	1553.1	1552.1	1551.5	1551.5	1551.5	1551.5	1551.5	1553.1
175°	1567.4	1566.3	1565.3	1564.1	1563.1	1562.5	1562.5	1562.5	1562.5	1562.5	1564.1
177.5°	1573.0	1572.2	1571.3	1570.5	1569.5	1569.1	1568.8	1568.6	1568.4	1568.1	1569.4
180°	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1



TEST NUMBER: P333481-830

CATALOG NUMBER: S125DIW-S1270D1340U830-4F0-1E-UDD-D1

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°	162.3	170.1	177.9	183.0	185.5	187.8	190.3	192.7
90°	157.8	166.6	175.5	181.5	184.6	187.8	190.9	194.0
92.5°	180.9	189.9	198.9	204.9	207.7	210.7	213.6	216.4
95°	219.6	228.7	237.8	243.7	246.6	249.4	252.2	255.1
97.5°	267.1	275.8	284.5	290.0	292.6	295.1	297.7	300.2
100°	299.7	309.1	318.3	324.2	326.7	329.2	331.8	334.2
102.5°	334.0	343.3	352.6	358.5	361.3	364.0	366.7	369.5
105°	389.4	397.6	405.7	411.3	414.4	417.5	420.7	423.7
107.5°	451.2	458.5	465.8	470.4	472.4	474.4	476.3	478.2
110°	493.9	501.0	507.9	512.5	514.4	516.5	518.5	520.6



TEST NUMBER: P333481-830

CATALOG NUMBER: S125DIW-S1270D1340U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	536.7	543.1	549.4	553.5	555.3	557.0	558.8	560.6
115°	602.9	608.4	614.1	617.6	619.3	621.0	622.7	624.4
117.5°	668.5	674.2	680.0	683.4	684.6	685.7	686.8	688.0
120°	713.2	718.8	724.3	727.5	728.4	729.2	730.2	731.0
122.5°	756.5	761.6	766.6	769.7	770.8	771.8	773.0	774.0
125°	820.8	825.5	830.1	833.1	834.5	835.8	837.3	838.6
127.5°	884.2	888.7	893.3	896.3	897.6	899.0	900.3	901.6
130°	927.1	931.4	935.7	938.4	939.4	940.6	941.6	942.7
132.5°	967.3	971.7	976.0	978.5	979.0	979.7	980.2	980.9
135°	1028.9	1033.1	1037.4	1039.8	1040.4	1040.8	1041.4	1042.0
137.5°	1090.2	1094.4	1098.6	1100.7	1100.6	1100.6	1100.5	1100.4
140°	1128.7	1132.8	1137.0	1139.0	1139.0	1138.9	1138.9	1138.8
142.5°	1167.0	1170.4	1173.7	1175.4	1175.4	1175.3	1175.3	1175.2
145°	1223.4	1225.1	1226.7	1227.8	1228.2	1228.8	1229.3	1229.7
147.5°	1276.9	1278.0	1279.1	1279.1	1277.9	1276.6	1275.4	1274.1
150°	1310.7	1310.7	1310.7	1310.5	1310.3	1310.1	1309.9	1309.7
152.5°	1343.2	1343.9	1344.5	1344.4	1343.5	1342.7	1341.7	1340.8
155°	1389.9	1390.9	1392.0	1391.9	1390.5	1389.2	1387.8	1386.5
157.5°	1430.2	1431.3	1432.4	1432.0	1430.2	1428.4	1426.6	1424.8
160°	1454.6	1455.8	1456.8	1456.7	1455.4	1454.0	1452.6	1451.2
162.5°	1477.6	1478.8	1480.2	1480.1	1478.5	1476.9	1475.4	1473.8
165°	1508.4	1509.6	1510.6	1510.3	1508.7	1507.1	1505.4	1503.8
167.5°	1531.3	1533.0	1534.6	1534.6	1532.9	1531.2	1529.5	1527.8
170°	1545.0	1546.6	1548.2	1548.1	1546.2	1544.4	1542.4	1540.5
172.5°	1554.8	1556.4	1558.0	1558.0	1556.3	1554.6	1552.9	1551.2
175°	1565.8	1567.4	1569.1	1568.9	1567.0	1565.1	1563.2	1561.3
177.5°	1570.7	1572.1	1573.4	1573.3	1571.7	1570.2	1568.7	1567.2
180°	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1

(END OF REPORT)