

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: P333734-927

Luminaire Tested: **S125RDIW-S1270D1340U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333734-927
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: S125RDIW-S1270D1340U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8115.0 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

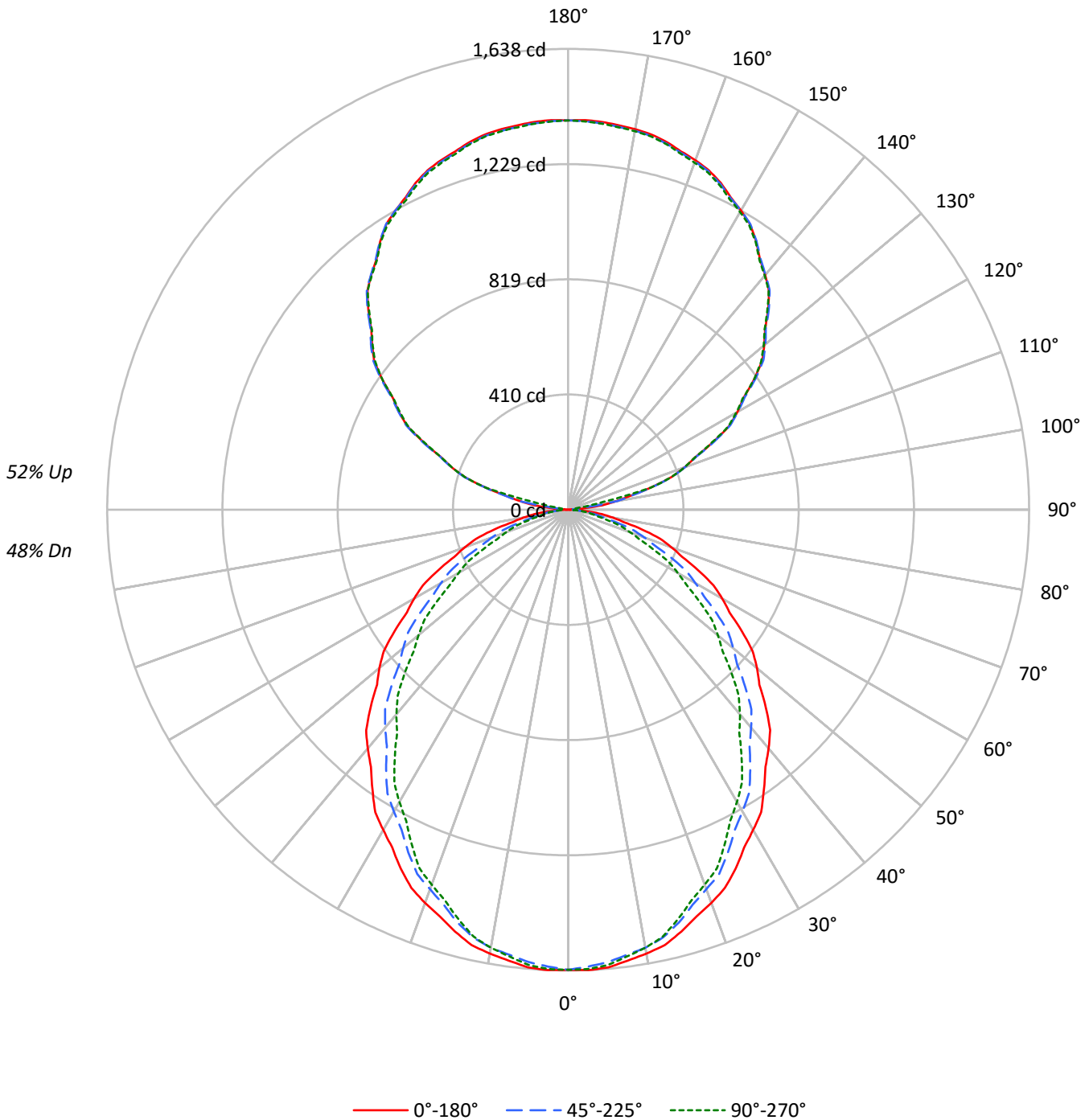
Input Watts (W): 76.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41
2	89	82	76	71	82	75	70	66	64	60	56	53	50	48	42	41	39	34
3	81	72	65	59	74	66	60	55	56	51	48	47	43	40	38	35	33	29
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29	25
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	27	28	25	22	19
7	58	46	38	33	53	43	36	31	37	31	27	31	27	24	25	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18	16
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	18	16	14
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10561	10561	10561
5°	10585	10466	10529
10°	10506	10368	10368
15°	10380	10158	10075
20°	10221	9864	9745
25°	10033	9576	9365
30°	9801	9238	8944
35°	9563	8891	8472
40°	9340	8528	8008
45°	9070	8122	7501
50°	8799	7681	6974
55°	8483	7260	6411
60°	8169	6748	5807
65°	7795	6154	5115
70°	7370	5410	4409
75°	6780	4561	3666
80°	5973	3582	3080
85°	5039	2927	2749



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.8	1.9
10°-20°	429.7	5.3
20°-30°	623.1	7.7
30°-40°	710.2	8.8
40°-50°	692.3	8.5
50°-60°	582.7	7.2
60°-70°	408.5	5.0
70°-80°	210.0	2.6
80°-90°	55.9	0.7
90°-100°	50.3	0.6
100°-110°	309.9	3.8
110°-120°	562.0	6.9
120°-130°	721.3	8.9
130°-140°	775.8	9.6
140°-150°	728.2	9.0
150°-160°	589.1	7.3
160°-170°	381.0	4.7
170°-180°	131.4	1.6
0°-30°	1206.6	14.9
0°-40°	1916.8	23.6
0°-60°	3191.8	39.3
0°-90°	3866.1	47.6
90°-120°	922.2	11.4
90°-150°	3147.5	38.8
90°-180°	4249.0	52.4
0°-180°	8115.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1635	1635	1635	1635	1635	
5°	1633	1627	1614	1626	1624	155
15°	1552	1544	1519	1517	1507	437
25°	1408	1388	1344	1328	1314	648
35°	1213	1182	1128	1093	1074	759
45°	993	955	889	842	821	766
55°	753	712	645	591	569	674
65°	510	467	403	355	335	505
75°	272	234	183	157	147	288
85°	68	47	40	38	37	76
90°	1	9	16	21	25	6
95°	58	53	16	21	22	75
105°	302	305	306	306	305	320
115°	566	571	572	568	562	561
125°	805	812	812	808	805	719
135°	1004	1010	1008	1006	1000	774
145°	1164	1166	1166	1167	1161	728
155°	1282	1276	1278	1280	1273	590
165°	1353	1347	1348	1353	1346	382
175°	1384	1378	1378	1386	1377	132
180°	1384	1384	1384	1384	1384	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3
2.5°	1638.2	1637.6	1636.9	1636.3	1635.6	1634.2	1632.0	1629.8	1627.6	1625.4	1627.6
5°	1632.8	1631.7	1630.6	1629.5	1628.4	1626.4	1623.3	1620.3	1617.3	1614.3	1617.0
7.5°	1616.8	1615.7	1614.7	1613.6	1612.6	1610.3	1606.6	1603.0	1599.4	1595.8	1597.7
10°	1602.0	1601.1	1600.3	1599.5	1598.6	1596.3	1592.4	1588.6	1584.8	1581.0	1581.8
12.5°	1585.2	1584.1	1583.0	1582.0	1581.0	1577.9	1572.7	1567.6	1562.3	1557.2	1557.8
15°	1552.5	1550.9	1549.3	1547.6	1545.9	1542.2	1536.4	1530.7	1525.0	1519.2	1518.9
17.5°	1515.7	1513.2	1510.7	1508.2	1505.6	1500.7	1493.5	1486.2	1479.0	1471.7	1470.4
20°	1487.1	1484.3	1481.5	1478.8	1476.1	1470.3	1461.6	1452.8	1444.0	1435.2	1433.8
22.5°	1455.5	1452.7	1449.9	1447.2	1444.5	1438.5	1429.3	1420.1	1410.8	1401.6	1398.9
25°	1408.0	1403.9	1399.8	1395.7	1391.5	1384.4	1374.3	1364.1	1353.9	1343.8	1340.2
27.5°	1353.7	1348.7	1343.7	1338.7	1333.7	1325.8	1314.9	1304.0	1293.2	1282.3	1277.3
30°	1314.2	1308.9	1303.7	1298.5	1293.3	1284.9	1273.4	1261.9	1250.3	1238.8	1232.5
32.5°	1275.7	1269.6	1263.5	1257.4	1251.3	1242.3	1230.6	1218.9	1207.0	1195.3	1188.4
35°	1212.9	1206.3	1199.7	1193.1	1186.5	1177.0	1164.7	1152.4	1140.0	1127.7	1119.7
37.5°	1151.4	1143.4	1135.4	1127.4	1119.3	1108.9	1096.2	1083.5	1070.7	1058.0	1048.5
40°	1107.9	1099.6	1091.4	1083.2	1075.0	1064.2	1051.1	1037.9	1024.7	1011.5	1001.2
42.5°	1062.5	1054.0	1045.5	1037.0	1028.6	1017.6	1004.0	990.4	976.8	963.1	953.2
45°	993.0	985.1	977.1	969.2	961.2	949.7	934.5	919.5	904.4	889.3	878.3
47.5°	921.1	912.8	904.4	896.0	887.6	875.8	860.5	845.3	830.1	814.9	803.6
50°	875.7	866.6	857.5	848.5	839.5	827.1	811.4	795.8	780.1	764.5	753.0
52.5°	826.2	817.0	807.7	798.4	789.2	777.1	762.4	747.7	732.8	718.1	705.7
55°	753.4	744.7	735.9	727.1	718.3	706.2	690.9	675.5	660.1	644.8	632.4
57.5°	679.8	670.4	661.0	651.6	642.2	630.2	615.4	600.5	585.7	570.8	558.8
60°	632.4	622.7	613.1	603.6	594.0	581.7	566.9	552.1	537.3	522.4	510.4
62.5°	582.0	572.8	563.6	554.4	545.3	533.2	518.2	503.1	488.1	473.0	461.8
65°	510.1	500.7	491.5	482.1	472.8	460.8	446.3	431.7	417.2	402.7	391.7
67.5°	438.7	429.4	420.0	410.7	401.4	389.8	375.8	361.9	347.9	334.0	323.9
70°	390.3	381.0	371.6	362.3	353.0	341.4	327.7	314.0	300.2	286.5	278.1
72.5°	342.9	333.7	324.6	315.5	306.4	295.4	282.6	269.7	256.9	244.1	236.2
75°	271.7	263.5	255.2	247.0	238.8	228.9	217.4	205.9	194.3	182.8	176.7
77.5°	201.1	194.5	187.9	181.3	174.8	166.8	157.6	148.4	139.2	129.9	125.7
80°	160.6	154.0	147.4	140.8	134.2	127.1	119.4	111.7	104.0	96.3	93.9
82.5°	121.0	115.1	109.2	103.2	97.4	91.7	86.4	81.2	75.9	70.7	69.5
85°	68.0	63.0	58.1	53.1	48.2	45.0	43.6	42.3	40.9	39.5	39.2
87.5°	22.9	21.8	20.6	19.4	18.2	17.7	17.8	17.9	18.0	18.1	18.3
90°	1.0	2.9	4.7	6.5	8.3	10.1	11.6	13.2	14.8	16.4	17.6
92.5°	15.8	14.5	13.2	12.0	10.7	10.8	12.2	13.5	15.0	16.4	17.6
95°	58.5	57.8	57.1	56.4	55.7	51.0	42.4	33.7	25.0	16.4	17.6
97.5°	122.1	123.3	124.5	125.7	127.0	119.0	101.9	84.8	67.6	50.5	44.0
100°	171.3	172.0	172.6	173.3	174.0	174.8	175.7	176.7	177.5	178.5	144.5
102.5°	221.3	222.2	223.1	223.9	224.8	225.5	226.1	226.6	227.1	227.7	221.3
105°	301.6	302.5	303.4	304.3	305.2	305.6	305.6	305.6	305.6	305.6	305.6
107.5°	384.8	384.8	384.8	384.8	384.8	385.1	385.6	386.0	386.4	386.9	386.9
110°	439.0	439.0	439.0	439.0	439.0	439.2	439.7	440.1	440.6	441.0	440.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	489.9	490.4	491.0	491.5	492.0	492.5	492.7	493.0	493.3	493.5	492.7
115°	566.2	567.3	568.5	569.6	570.8	571.4	571.6	571.9	572.1	572.4	571.4
117.5°	645.2	645.1	645.1	645.0	645.0	645.4	646.3	647.1	648.0	648.9	647.7
120°	694.3	694.2	694.0	693.7	693.5	693.7	694.3	695.1	695.8	696.4	696.0
122.5°	737.8	738.7	739.6	740.5	741.3	742.0	742.3	742.6	742.9	743.2	742.8
125°	805.2	806.8	808.3	809.9	811.5	812.3	812.3	812.3	812.3	812.3	811.4
127.5°	869.3	870.5	871.6	872.7	873.9	874.4	874.3	874.2	874.0	873.9	873.4
130°	908.7	909.9	911.0	912.2	913.3	914.0	914.3	914.4	914.7	914.9	914.3
132.5°	948.2	949.4	950.8	952.1	953.4	953.9	953.3	952.8	952.4	951.8	951.7
135°	1004.2	1005.5	1006.9	1008.2	1009.6	1010.0	1009.6	1009.2	1008.7	1008.2	1007.8
137.5°	1055.7	1056.8	1058.0	1059.1	1060.3	1060.7	1060.3	1059.9	1059.5	1059.1	1059.2
140°	1089.3	1089.7	1090.2	1090.6	1091.1	1091.2	1091.0	1090.8	1090.5	1090.3	1090.8
142.5°	1119.6	1119.9	1120.1	1120.5	1120.7	1121.0	1121.3	1121.7	1122.0	1122.3	1122.4
145°	1164.1	1164.6	1165.1	1165.5	1165.9	1166.2	1166.2	1166.2	1166.2	1166.2	1166.4
147.5°	1203.1	1203.0	1202.9	1202.8	1202.8	1202.8	1203.1	1203.4	1203.6	1204.0	1204.2
150°	1227.7	1227.2	1226.9	1226.4	1225.9	1225.9	1226.4	1226.9	1227.2	1227.7	1228.2
152.5°	1251.5	1250.5	1249.5	1248.6	1247.5	1247.2	1247.7	1248.2	1248.6	1249.0	1249.5
155°	1282.1	1280.7	1279.4	1278.0	1276.6	1276.2	1276.6	1277.1	1277.6	1278.0	1278.7
157.5°	1305.7	1304.9	1304.0	1303.2	1302.4	1302.0	1302.0	1302.1	1302.2	1302.2	1302.9
160°	1322.1	1320.7	1319.4	1318.0	1316.6	1316.1	1316.3	1316.5	1316.8	1317.0	1317.9
162.5°	1335.2	1333.9	1332.5	1331.1	1329.8	1329.2	1329.4	1329.7	1329.8	1330.1	1331.3
165°	1352.9	1351.5	1350.1	1348.8	1347.4	1346.8	1347.0	1347.3	1347.5	1347.7	1349.1
167.5°	1366.0	1364.6	1363.2	1361.8	1360.3	1359.8	1359.9	1360.2	1360.4	1360.7	1362.3
170°	1373.4	1371.8	1370.2	1368.6	1367.0	1366.3	1366.5	1366.8	1367.0	1367.2	1369.0
172.5°	1378.3	1376.7	1375.1	1373.5	1371.9	1371.3	1371.7	1372.1	1372.5	1372.9	1374.6
175°	1383.6	1382.3	1380.9	1379.5	1378.2	1377.6	1377.8	1378.1	1378.3	1378.5	1380.3
177.5°	1386.1	1385.0	1383.9	1382.8	1381.7	1381.2	1381.5	1381.6	1381.8	1382.0	1383.3
180°	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3
2.5°	1629.8	1632.0	1634.2	1635.1	1635.0	1634.7	1634.5	1634.3
5°	1619.8	1622.5	1625.2	1626.4	1625.8	1625.2	1624.7	1624.1
7.5°	1599.6	1601.6	1603.5	1604.1	1603.5	1602.9	1602.3	1601.7
10°	1582.5	1583.4	1584.2	1584.2	1583.4	1582.5	1581.8	1581.0
12.5°	1558.5	1559.0	1559.6	1559.3	1558.1	1556.8	1555.5	1554.3
15°	1518.6	1518.4	1518.1	1516.7	1514.3	1511.8	1509.3	1506.8
17.5°	1469.0	1467.6	1466.3	1464.6	1462.5	1460.5	1458.5	1456.4
20°	1432.4	1431.1	1429.7	1427.8	1425.3	1422.8	1420.4	1417.9
22.5°	1396.2	1393.5	1390.8	1388.5	1386.5	1384.4	1382.4	1380.4
25°	1336.6	1333.1	1329.5	1326.2	1323.2	1320.2	1317.2	1314.2
27.5°	1272.3	1267.3	1262.3	1258.4	1255.5	1252.5	1249.6	1246.7
30°	1226.2	1219.9	1213.5	1209.2	1206.7	1204.2	1201.7	1199.3
32.5°	1181.4	1174.4	1167.4	1162.4	1159.3	1156.1	1153.0	1149.9
35°	1111.7	1103.7	1095.8	1089.9	1086.1	1082.2	1078.4	1074.5
37.5°	1038.9	1029.4	1019.8	1013.1	1009.4	1005.7	1002.0	998.2
40°	990.7	980.2	969.9	963.0	959.6	956.4	953.1	949.8
42.5°	943.2	933.2	923.2	915.8	910.9	906.1	901.3	896.4
45°	867.3	856.3	845.3	837.8	833.7	829.6	825.5	821.3
47.5°	792.3	781.0	769.7	761.8	757.2	752.7	748.1	743.5
50°	741.5	729.9	718.4	710.6	706.5	702.3	698.2	694.1
52.5°	693.2	680.9	668.4	660.2	656.1	652.0	647.8	643.7
55°	620.0	607.7	595.3	586.9	582.6	578.1	573.8	569.4
57.5°	546.7	534.6	522.5	514.6	510.6	506.8	502.9	499.0
60°	498.3	486.2	474.1	466.0	461.9	457.8	453.7	449.6
62.5°	450.7	439.4	428.3	420.6	416.5	412.3	408.2	404.1
65°	380.7	369.7	358.7	351.2	347.1	342.9	338.8	334.7
67.5°	313.9	303.8	293.8	287.1	283.8	280.5	277.3	273.9
70°	269.5	261.0	252.5	246.6	243.3	240.0	236.7	233.5
72.5°	228.4	220.5	212.6	207.6	205.4	203.3	201.1	198.8
75°	170.7	164.7	158.7	154.6	152.7	150.8	148.9	146.9
77.5°	121.4	117.2	113.0	110.2	108.8	107.3	105.9	104.5
80°	91.4	89.0	86.4	84.9	84.4	83.8	83.3	82.8
82.5°	68.4	67.2	66.1	65.3	65.0	64.6	64.3	64.0
85°	39.0	38.7	38.4	38.2	37.9	37.6	37.3	37.1
87.5°	18.5	18.8	19.0	19.1	19.0	18.9	18.9	18.8
90°	18.7	19.8	21.0	21.9	22.6	23.2	23.9	24.6
92.5°	18.7	19.8	21.0	21.7	22.0	22.3	22.7	23.0
95°	18.7	19.8	21.0	21.5	21.5	21.5	21.5	21.5
97.5°	37.6	31.2	24.7	21.5	21.5	21.5	21.5	21.5
100°	110.5	76.6	42.6	25.2	24.2	23.4	22.4	21.5
102.5°	214.8	208.4	202.0	191.0	175.5	160.0	144.5	129.0
105°	305.6	305.6	305.6	305.5	305.3	305.1	304.8	304.6
107.5°	387.0	387.1	387.1	386.7	386.0	385.4	384.7	384.0
110°	439.7	439.0	438.3	438.1	438.3	438.6	438.8	439.0



TEST NUMBER: P333734-927

CATALOG NUMBER: S125RDIW-S1270D1340U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	491.8	491.0	490.1	489.5	489.2	488.9	488.5	488.2
115°	570.5	569.6	568.7	567.5	566.2	564.8	563.4	562.1
117.5°	646.5	645.3	644.1	643.2	642.6	642.1	641.4	640.9
120°	695.5	695.1	694.6	693.8	692.7	691.5	690.4	689.3
122.5°	742.3	741.8	741.4	740.5	739.2	737.8	736.5	735.2
125°	810.5	809.6	808.7	807.9	807.2	806.5	805.8	805.2
127.5°	872.9	872.4	871.9	870.8	869.1	867.4	865.7	864.0
130°	913.5	912.8	912.2	911.2	910.1	908.9	907.8	906.7
132.5°	951.6	951.4	951.3	950.6	949.5	948.4	947.2	946.1
135°	1007.3	1006.9	1006.4	1005.5	1004.2	1002.7	1001.4	1000.1
137.5°	1059.3	1059.4	1059.5	1058.9	1057.7	1056.5	1055.3	1054.2
140°	1091.2	1091.6	1092.1	1091.6	1090.3	1088.9	1087.6	1086.2
142.5°	1122.4	1122.6	1122.7	1122.0	1120.6	1119.3	1117.9	1116.6
145°	1166.6	1166.9	1167.1	1166.6	1165.1	1163.8	1162.4	1161.1
147.5°	1204.5	1204.8	1205.1	1204.4	1202.7	1201.0	1199.4	1197.8
150°	1228.7	1229.1	1229.5	1228.8	1227.0	1225.2	1223.4	1221.5
152.5°	1250.0	1250.5	1250.9	1250.3	1248.6	1247.1	1245.4	1243.7
155°	1279.4	1280.0	1280.7	1280.2	1278.3	1276.5	1274.7	1272.9
157.5°	1303.7	1304.4	1305.1	1304.6	1302.7	1300.9	1299.1	1297.3
160°	1318.8	1319.7	1320.6	1320.2	1318.3	1316.5	1314.7	1312.9
162.5°	1332.6	1334.0	1335.2	1334.8	1332.8	1330.8	1328.8	1326.8
165°	1350.4	1351.9	1353.2	1353.0	1351.1	1349.3	1347.5	1345.7
167.5°	1364.0	1365.6	1367.2	1367.0	1364.9	1362.9	1360.9	1358.8
170°	1370.9	1372.7	1374.5	1374.4	1372.4	1370.3	1368.3	1366.2
172.5°	1376.3	1377.9	1379.5	1379.3	1377.3	1375.2	1373.2	1371.1
175°	1382.1	1383.9	1385.8	1385.7	1383.6	1381.6	1379.5	1377.4
177.5°	1384.6	1385.8	1387.1	1387.0	1385.5	1384.1	1382.6	1381.2
180°	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6

(END OF REPORT)