

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: P333337-927

Luminaire Tested: **S125DIP-S1270D1205U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333337-927
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: S125DIP-S1270D1205U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7878.9 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

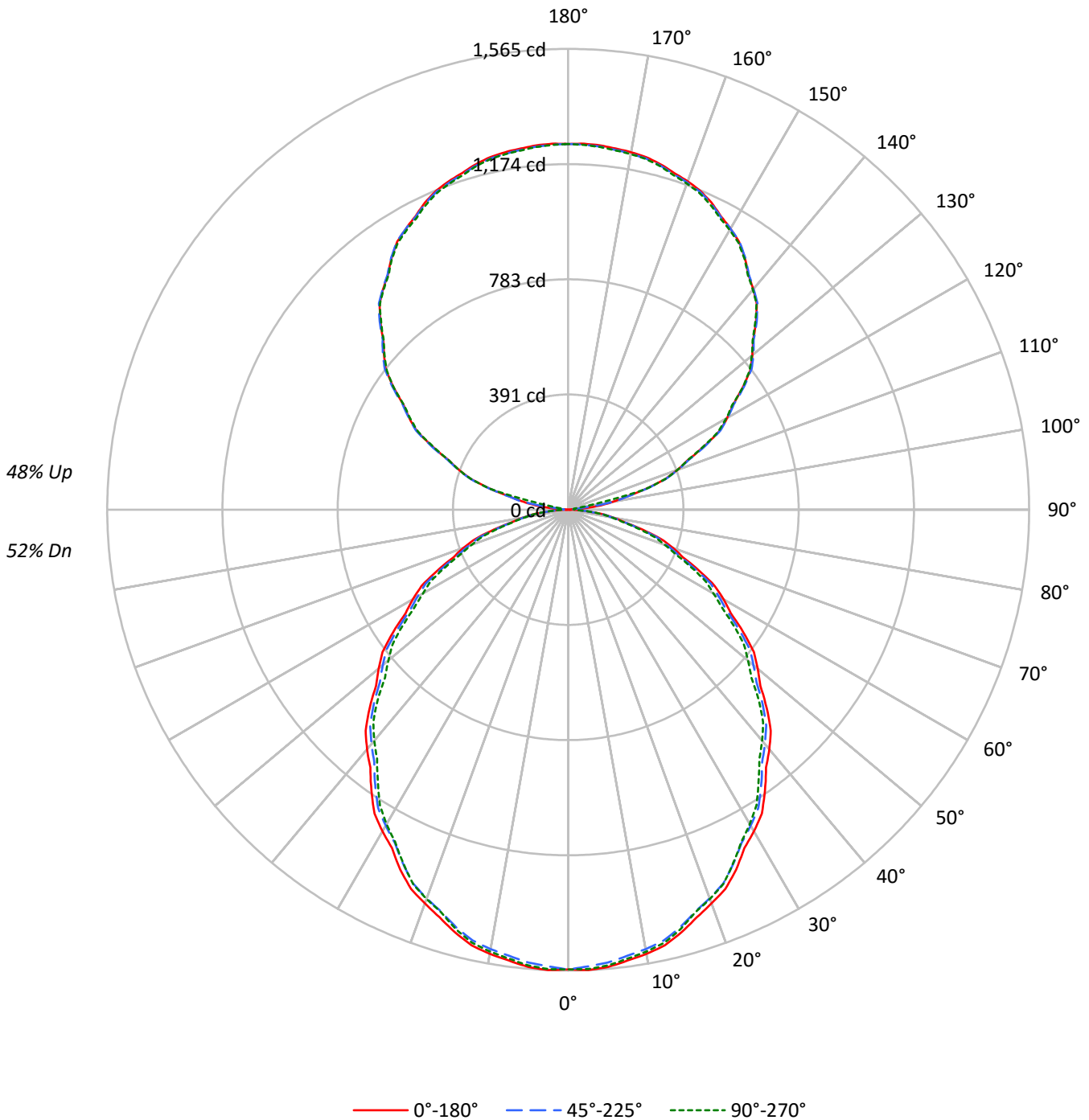
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52
1	98	94	90	86	91	87	83	80	74	71	69	62	60	58	51	50	48	43
2	89	82	76	70	82	76	70	66	65	61	57	54	51	49	45	43	41	36
3	81	72	64	59	75	67	60	55	57	52	48	48	44	41	40	37	35	31
4	74	64	56	50	69	59	52	47	51	45	41	43	39	35	35	32	30	26
5	68	57	48	42	63	53	45	40	45	40	35	38	34	31	32	29	26	23
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	26	23	20
7	58	46	38	32	54	43	36	31	37	31	27	31	27	24	26	23	20	18
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	16
9	50	38	31	25	46	36	29	24	31	25	22	27	22	19	22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	21	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10083	10083	10083
5°	10105	10009	10073
10°	10044	9938	9996
15°	9934	9819	9860
20°	9779	9652	9669
25°	9612	9453	9443
30°	9405	9238	9192
35°	9183	9008	8881
40°	8955	8757	8632
45°	8709	8528	8359
50°	8439	8252	8004
55°	8178	7942	7719
60°	7865	7626	7355
65°	7494	7248	7002
70°	7138	6811	6577
75°	6503	6288	6071
80°	5787	5694	5560
85°	5039	5128	4846



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.2	1.9
10°-20°	415.8	5.3
20°-30°	613.9	7.8
30°-40°	716.4	9.1
40°-50°	719.5	9.1
50°-60°	631.6	8.0
60°-70°	470.6	6.0
70°-80°	269.1	3.4
80°-90°	80.9	1.0
90°-100°	45.1	0.6
100°-110°	278.2	3.5
110°-120°	504.5	6.4
120°-130°	647.4	8.2
130°-140°	696.4	8.8
140°-150°	653.6	8.3
150°-160°	528.7	6.7
160°-170°	342.0	4.3
170°-180°	117.9	1.5
0°-30°	1177.0	14.9
0°-40°	1893.4	24.0
0°-60°	3244.5	41.2
0°-90°	4065.0	51.6
90°-120°	827.8	10.5
90°-150°	2825.2	35.9
90°-180°	3814.0	48.4
0°-180°	7878.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1561	1561	1561	1561	1561	
5°	1559	1556	1544	1554	1554	148
15°	1486	1482	1468	1474	1475	419
25°	1349	1342	1326	1329	1325	620
35°	1165	1159	1142	1136	1126	728
45°	954	948	934	920	915	734
55°	726	722	705	694	686	648
65°	490	487	474	464	458	486
75°	261	258	252	248	243	278
85°	68	69	69	68	65	76
90°	1	8	15	19	22	6
95°	52	48	15	19	19	67
105°	271	274	274	274	274	287
115°	508	513	514	510	504	504
125°	723	729	729	726	723	645
135°	901	906	905	903	898	694
145°	1045	1047	1047	1047	1042	653
155°	1151	1146	1147	1149	1143	530
165°	1214	1209	1210	1215	1208	343
175°	1242	1237	1237	1244	1236	118
180°	1242	1242	1242	1242	1242	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2
2.5°	1565.1	1564.5	1563.8	1563.1	1562.5	1561.1	1558.9	1556.6	1554.5	1552.3	1554.5
5°	1558.7	1558.1	1557.6	1557.0	1556.5	1554.9	1552.1	1549.4	1546.7	1543.9	1546.3
7.5°	1544.4	1543.8	1543.3	1542.7	1542.1	1540.4	1537.4	1534.4	1531.4	1528.4	1530.7
10°	1531.5	1531.0	1530.4	1529.9	1529.3	1527.6	1524.6	1521.5	1518.5	1515.4	1517.7
12.5°	1515.7	1514.7	1513.8	1512.8	1511.8	1509.9	1507.0	1504.3	1501.5	1498.7	1500.5
15°	1485.8	1485.0	1484.2	1483.4	1482.6	1480.6	1477.6	1474.6	1471.6	1468.5	1469.9
17.5°	1451.5	1450.3	1449.1	1447.9	1446.7	1444.5	1441.4	1438.2	1435.1	1431.9	1433.7
20°	1422.8	1422.3	1421.7	1421.2	1420.6	1418.6	1415.0	1411.4	1407.9	1404.3	1406.2
22.5°	1394.2	1393.2	1392.2	1391.2	1390.2	1388.1	1384.7	1381.4	1378.0	1374.7	1375.9
25°	1348.8	1347.3	1346.0	1344.7	1343.2	1340.8	1337.2	1333.6	1330.1	1326.5	1327.1
27.5°	1295.6	1294.8	1294.0	1293.2	1292.4	1290.1	1286.4	1282.7	1279.1	1275.3	1275.5
30°	1261.1	1260.2	1259.4	1258.5	1257.7	1255.3	1251.2	1247.1	1242.9	1238.8	1238.3
32.5°	1223.5	1222.3	1221.0	1219.7	1218.5	1216.0	1212.3	1208.6	1204.9	1201.3	1200.3
35°	1164.7	1163.6	1162.5	1161.4	1160.3	1157.9	1154.0	1150.2	1146.3	1142.5	1141.1
37.5°	1103.7	1102.3	1101.0	1099.5	1098.2	1095.7	1092.1	1088.5	1084.8	1081.2	1079.2
40°	1062.2	1060.8	1059.5	1058.0	1056.7	1054.1	1050.3	1046.4	1042.6	1038.7	1036.3
42.5°	1017.7	1016.6	1015.4	1014.2	1013.1	1010.6	1006.8	1002.9	999.1	995.2	993.0
45°	953.5	952.4	951.3	950.2	949.1	946.9	943.6	940.3	937.1	933.7	930.4
47.5°	884.3	884.4	884.5	884.5	884.6	882.6	878.7	874.7	870.8	866.8	863.5
50°	839.9	839.1	838.2	837.4	836.5	834.5	831.2	827.9	824.7	821.3	817.8
52.5°	794.4	793.8	793.2	792.6	792.0	790.0	786.4	782.9	779.4	775.9	772.8
55°	726.3	725.4	724.6	723.7	722.9	720.6	716.8	713.0	709.1	705.3	702.7
57.5°	654.3	653.9	653.5	653.1	652.6	650.8	647.5	644.3	641.0	637.8	634.6
60°	608.9	607.8	606.7	605.6	604.5	602.5	599.4	596.4	593.4	590.4	587.6
62.5°	561.5	560.6	559.8	558.8	557.9	556.3	553.7	551.0	548.5	545.9	543.0
65°	490.4	489.8	489.3	488.7	488.1	486.3	483.3	480.3	477.3	474.3	471.8
67.5°	421.4	420.3	419.1	418.0	416.8	415.1	412.9	410.6	408.4	406.1	404.0
70°	378.0	376.6	375.2	373.8	372.5	370.5	368.0	365.6	363.1	360.7	359.0
72.5°	330.5	329.5	328.7	327.7	326.8	325.5	323.9	322.3	320.8	319.2	317.3
75°	260.6	260.1	259.5	259.0	258.4	257.5	256.1	254.7	253.3	252.0	251.1
77.5°	196.1	195.9	195.7	195.5	195.3	194.8	194.0	193.2	192.4	191.7	191.2
80°	155.6	155.6	155.6	155.6	155.6	155.3	154.8	154.2	153.7	153.1	152.9
82.5°	120.0	119.6	119.1	118.7	118.3	118.0	117.9	117.8	117.7	117.6	117.1
85°	68.0	68.2	68.4	68.8	69.0	69.2	69.2	69.2	69.2	69.2	68.9
87.5°	26.9	27.2	27.5	27.8	28.2	28.4	28.4	28.5	28.6	28.6	28.8
90°	1.0	2.5	4.2	5.9	7.4	9.0	10.5	11.9	13.3	14.7	15.8
92.5°	14.2	13.1	11.9	10.8	9.6	9.7	10.9	12.2	13.5	14.7	15.8
95°	52.4	51.9	51.3	50.6	50.0	45.9	38.0	30.3	22.5	14.7	15.8
97.5°	109.6	110.7	111.8	112.9	114.0	106.9	91.4	76.0	60.7	45.3	39.5
100°	153.8	154.4	155.0	155.6	156.2	156.9	157.7	158.6	159.4	160.2	129.7
102.5°	198.7	199.5	200.3	201.0	201.8	202.4	202.9	203.4	203.9	204.4	198.6
105°	270.7	271.5	272.3	273.1	273.9	274.3	274.3	274.3	274.3	274.3	274.3
107.5°	345.5	345.5	345.5	345.5	345.5	345.6	346.0	346.4	346.9	347.3	347.3
110°	394.0	394.0	394.0	394.0	394.0	394.3	394.7	395.1	395.5	395.9	395.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	439.7	440.2	440.7	441.2	441.6	442.0	442.3	442.5	442.8	443.0	442.3
115°	508.2	509.2	510.2	511.3	512.3	512.9	513.1	513.3	513.5	513.7	512.9
117.5°	579.1	579.1	579.0	579.0	578.9	579.3	580.1	580.8	581.6	582.4	581.4
120°	623.3	623.1	622.9	622.7	622.5	622.7	623.3	623.9	624.5	625.1	624.7
122.5°	662.3	663.1	663.8	664.6	665.4	666.0	666.2	666.5	666.9	667.1	666.7
125°	722.7	724.1	725.6	727.0	728.4	729.1	729.1	729.1	729.1	729.1	728.3
127.5°	780.4	781.4	782.4	783.4	784.4	784.9	784.7	784.7	784.5	784.4	783.9
130°	815.7	816.7	817.8	818.8	819.8	820.4	820.6	820.9	821.0	821.3	820.6
132.5°	851.0	852.2	853.4	854.6	855.8	856.2	855.7	855.2	854.8	854.4	854.3
135°	901.3	902.5	903.8	905.0	906.3	906.7	906.3	905.9	905.4	905.0	904.6
137.5°	947.5	948.6	949.7	950.7	951.8	952.1	951.8	951.4	951.0	950.7	950.8
140°	977.7	978.2	978.6	979.0	979.4	979.5	979.3	979.1	978.9	978.7	979.1
142.5°	1005.0	1005.2	1005.5	1005.8	1006.0	1006.2	1006.5	1006.8	1007.1	1007.4	1007.5
145°	1045.0	1045.4	1045.8	1046.2	1046.6	1046.8	1046.8	1046.8	1046.8	1046.8	1047.0
147.5°	1079.9	1079.8	1079.7	1079.7	1079.6	1079.7	1079.9	1080.1	1080.5	1080.7	1080.9
150°	1102.0	1101.6	1101.2	1100.8	1100.4	1100.4	1100.8	1101.2	1101.6	1102.0	1102.4
152.5°	1123.4	1122.5	1121.6	1120.7	1119.7	1119.5	1120.0	1120.4	1120.8	1121.2	1121.6
155°	1150.8	1149.6	1148.3	1147.2	1145.9	1145.5	1145.9	1146.3	1146.8	1147.2	1147.8
157.5°	1172.0	1171.2	1170.5	1169.8	1169.0	1168.7	1168.8	1168.8	1168.9	1168.9	1169.5
160°	1186.8	1185.5	1184.3	1183.0	1181.9	1181.3	1181.5	1181.7	1181.9	1182.1	1183.0
162.5°	1198.5	1197.3	1196.0	1194.8	1193.6	1193.1	1193.3	1193.5	1193.7	1193.9	1195.1
165°	1214.3	1213.1	1211.9	1210.7	1209.4	1208.9	1209.1	1209.3	1209.5	1209.7	1211.0
167.5°	1226.1	1224.9	1223.6	1222.3	1221.1	1220.5	1220.8	1220.9	1221.1	1221.4	1222.8
170°	1232.8	1231.4	1229.9	1228.4	1227.0	1226.5	1226.6	1226.9	1227.0	1227.2	1228.9
172.5°	1237.2	1235.7	1234.3	1232.9	1231.4	1230.9	1231.3	1231.7	1232.0	1232.4	1233.9
175°	1242.0	1240.7	1239.5	1238.3	1237.1	1236.5	1236.8	1237.0	1237.2	1237.4	1239.0
177.5°	1244.2	1243.2	1242.2	1241.3	1240.2	1239.8	1240.0	1240.2	1240.3	1240.5	1241.7
180°	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2
2.5°	1556.6	1558.9	1561.1	1562.0	1561.9	1561.6	1561.4	1561.2
5°	1548.8	1551.3	1553.8	1554.9	1554.6	1554.3	1554.0	1553.8
7.5°	1533.1	1535.6	1537.9	1539.1	1538.8	1538.5	1538.3	1537.9
10°	1519.9	1522.1	1524.2	1525.2	1525.0	1524.6	1524.4	1524.2
12.5°	1502.2	1504.0	1505.7	1506.6	1506.5	1506.4	1506.4	1506.3
15°	1471.3	1472.7	1474.0	1474.7	1474.7	1474.7	1474.7	1474.7
17.5°	1435.4	1437.1	1438.8	1438.9	1437.6	1436.2	1434.8	1433.5
20°	1408.2	1410.1	1412.0	1412.3	1410.9	1409.5	1408.2	1406.8
22.5°	1377.2	1378.5	1379.7	1379.9	1379.0	1378.0	1377.1	1376.2
25°	1327.6	1328.2	1328.7	1328.6	1327.8	1326.9	1326.1	1325.2
27.5°	1275.6	1275.7	1275.8	1275.4	1274.6	1273.8	1273.0	1272.2
30°	1237.7	1237.2	1236.6	1236.0	1235.1	1234.3	1233.4	1232.6
32.5°	1199.3	1198.3	1197.3	1196.0	1194.6	1193.1	1191.6	1190.2
35°	1139.7	1138.4	1137.0	1135.2	1133.0	1130.8	1128.6	1126.4
37.5°	1077.1	1075.1	1073.1	1071.4	1070.2	1068.9	1067.6	1066.4
40°	1033.8	1031.3	1028.8	1027.2	1026.4	1025.6	1024.7	1023.9
42.5°	990.8	988.5	986.3	984.5	983.3	982.0	980.7	979.5
45°	927.2	923.8	920.6	918.5	917.7	916.9	916.0	915.2
47.5°	860.1	856.7	853.4	850.8	848.8	846.9	845.0	843.1
50°	814.2	810.6	807.1	804.3	802.4	800.5	798.6	796.6
52.5°	769.6	766.5	763.3	760.7	758.6	756.5	754.3	752.2
55°	700.3	697.8	695.4	693.2	691.3	689.4	687.4	685.5
57.5°	631.4	628.3	625.1	623.0	621.9	620.9	619.8	618.8
60°	584.9	582.2	579.4	577.1	575.1	573.2	571.3	569.4
62.5°	540.0	537.0	534.1	531.9	530.4	528.9	527.4	525.9
65°	469.4	466.8	464.4	462.6	461.5	460.4	459.3	458.2
67.5°	402.0	399.8	397.8	396.4	395.7	395.1	394.4	393.7
70°	357.4	355.7	354.0	352.7	351.6	350.5	349.4	348.3
72.5°	315.4	313.5	311.7	310.2	309.1	308.0	306.9	305.8
75°	250.3	249.5	248.7	247.7	246.6	245.5	244.4	243.3
77.5°	190.7	190.2	189.7	189.1	188.3	187.5	186.8	186.0
80°	152.6	152.3	152.0	151.6	151.1	150.5	150.0	149.5
82.5°	116.6	116.1	115.6	115.3	115.2	115.1	114.9	114.9
85°	68.6	68.4	68.0	67.7	67.1	66.5	66.0	65.4
87.5°	29.1	29.2	29.5	29.4	29.1	28.8	28.4	28.1
90°	16.8	17.8	18.9	19.6	20.3	20.8	21.5	22.1
92.5°	16.8	17.8	18.9	19.5	19.7	20.0	20.4	20.6
95°	16.8	17.8	18.9	19.3	19.3	19.3	19.3	19.3
97.5°	33.7	28.0	22.2	19.3	19.3	19.3	19.3	19.3
100°	99.3	68.8	38.3	22.6	21.8	21.0	20.1	19.3
102.5°	192.8	187.1	181.3	171.5	157.6	143.6	129.8	115.8
105°	274.3	274.3	274.3	274.3	274.0	273.9	273.6	273.5
107.5°	347.4	347.4	347.5	347.1	346.5	345.9	345.3	344.7
110°	394.7	394.0	393.4	393.2	393.4	393.6	393.9	394.0



TEST NUMBER: P333337-927

CATALOG NUMBER: S125DIP-S1270D1205U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	441.5	440.7	439.9	439.3	439.1	438.8	438.6	438.2
115°	512.1	511.3	510.5	509.5	508.2	507.0	505.7	504.5
117.5°	580.3	579.2	578.1	577.3	576.8	576.3	575.8	575.2
120°	624.3	623.9	623.5	622.8	621.8	620.8	619.7	618.7
122.5°	666.3	665.9	665.5	664.6	663.5	662.3	661.2	660.0
125°	727.5	726.7	725.9	725.2	724.5	724.0	723.3	722.7
127.5°	783.5	783.1	782.6	781.6	780.1	778.6	777.1	775.5
130°	820.0	819.4	818.8	817.9	816.9	815.9	814.9	813.9
132.5°	854.1	854.0	853.9	853.3	852.3	851.3	850.2	849.2
135°	904.2	903.8	903.4	902.5	901.3	900.1	898.9	897.6
137.5°	950.9	950.9	951.0	950.5	949.4	948.4	947.3	946.3
140°	979.5	979.9	980.3	979.9	978.7	977.5	976.2	975.0
142.5°	1007.6	1007.7	1007.7	1007.2	1005.9	1004.7	1003.5	1002.3
145°	1047.2	1047.4	1047.6	1047.1	1045.8	1044.7	1043.4	1042.2
147.5°	1081.2	1081.4	1081.6	1081.0	1079.6	1078.1	1076.7	1075.1
150°	1102.9	1103.3	1103.7	1103.0	1101.5	1099.8	1098.1	1096.5
152.5°	1122.0	1122.4	1122.8	1122.3	1120.8	1119.4	1117.8	1116.4
155°	1148.3	1149.0	1149.6	1149.1	1147.5	1145.8	1144.1	1142.6
157.5°	1170.2	1170.8	1171.5	1171.0	1169.3	1167.8	1166.1	1164.4
160°	1183.8	1184.6	1185.4	1185.0	1183.4	1181.7	1180.1	1178.5
162.5°	1196.2	1197.4	1198.5	1198.2	1196.4	1194.5	1192.8	1191.0
165°	1212.2	1213.5	1214.7	1214.4	1212.8	1211.2	1209.5	1207.9
167.5°	1224.3	1225.7	1227.2	1227.1	1225.2	1223.4	1221.5	1219.7
170°	1230.5	1232.2	1233.8	1233.7	1231.8	1230.0	1228.2	1226.3
172.5°	1235.3	1236.8	1238.3	1238.1	1236.3	1234.5	1232.6	1230.7
175°	1240.6	1242.3	1243.9	1243.8	1242.0	1240.2	1238.3	1236.4
177.5°	1242.8	1244.0	1245.1	1245.0	1243.7	1242.4	1241.0	1239.8
180°	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0

(END OF REPORT)