

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: P333321-927

Luminaire Tested: **S125DIP-S1270D810U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333321-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1270D810U927-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6368.1 lumens
Efficiency: N/A
Efficacy: 104.9 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: Semi-Direct

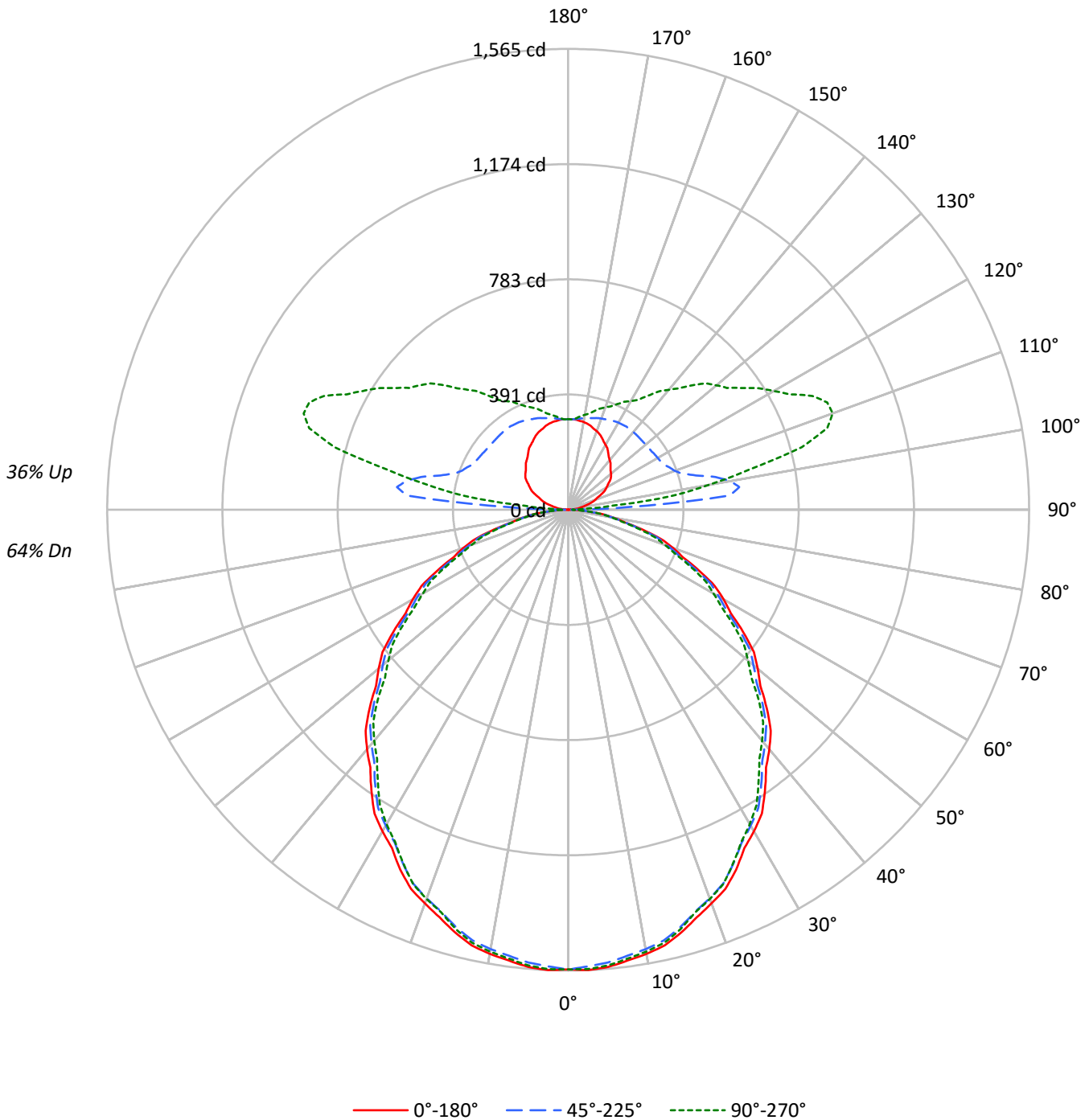
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69	64
1	101	96	92	89	94	91	87	84	80	77	75	70	68	66	61	59	58	54
2	92	84	78	72	86	79	74	69	70	66	62	61	58	55	53	51	49	45
3	84	74	66	60	78	70	63	58	62	56	52	54	50	47	47	44	41	38
4	77	65	57	51	72	62	54	49	55	49	44	48	44	40	42	39	36	33
5	70	58	50	44	66	55	48	42	49	43	38	43	39	35	38	34	31	28
6	65	52	44	38	61	50	42	37	44	38	33	39	34	30	35	31	27	25
7	60	47	39	34	56	45	38	32	40	34	30	36	31	27	32	28	24	22
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22	20
9	52	39	32	27	49	38	30	26	34	28	24	30	25	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18	16

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	2.3
10°-20°	415.8	6.5
20°-30°	613.9	9.6
30°-40°	716.4	11.2
40°-50°	719.5	11.3
50°-60°	631.6	9.9
60°-70°	470.6	7.4
70°-80°	269.1	4.2
80°-90°	80.0	1.3
90°-100°	222.7	3.5
100°-110°	478.7	7.5
110°-120°	449.3	7.1
120°-130°	364.1	5.7
130°-140°	292.2	4.6
140°-150°	220.5	3.5
150°-160°	155.2	2.4
160°-170°	91.5	1.4
170°-180°	29.8	0.5
0°-30°	1177.0	18.5
0°-40°	1893.4	29.7
0°-60°	3244.5	50.9
0°-90°	4064.2	63.8
90°-120°	1150.7	18.1
90°-150°	2027.5	31.8
90°-180°	2304.0	36.2
0°-180°	6368.1	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	6	10	13	14	5
95°	20	60	549	249	146	22
105°	70	98	449	884	821	74
115°	125	151	360	777	914	123
125°	173	203	346	618	720	154
135°	203	244	343	518	598	158
145°	237	271	344	429	472	148
155°	270	290	336	379	396	124
165°	295	303	322	342	347	83
175°	307	307	309	313	312	29
180°	307	307	307	307	307	



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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°	26.8	26.9	27.2	27.4	27.6	27.8	27.7	27.7	27.6	27.6	27.8
90°	0.6	1.3	2.5	3.7	5.0	6.2	6.8	8.1	8.6	9.9	10.5
92.5°	7.5	9.2	14.3	22.0	32.7	50.8	84.6	141.3	202.9	199.7	161.7
95°	20.4	21.1	26.0	32.8	46.4	74.3	140.6	276.9	447.8	548.8	537.0
97.5°	33.9	34.7	38.2	45.0	57.2	77.3	121.1	221.0	399.9	586.1	679.5
100°	43.3	44.6	47.1	53.9	65.7	84.2	120.2	200.7	356.8	559.4	714.2
102.5°	53.8	54.5	56.5	63.8	74.5	92.7	124.6	192.3	324.1	512.2	693.4
105°	70.0	70.0	73.1	79.3	89.2	106.5	133.8	188.9	292.4	449.1	626.9
107.5°	85.9	87.1	90.1	95.1	105.4	121.0	147.4	194.6	279.0	405.6	559.0
110°	97.3	98.5	100.9	106.5	115.8	131.9	157.3	200.1	275.0	385.2	520.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	108.6	109.9	111.9	117.4	126.7	142.4	166.8	207.0	275.0	373.4	491.5
115°	125.1	126.4	128.3	133.8	143.1	158.6	181.5	217.4	276.9	360.5	460.2
117.5°	140.0	141.9	143.9	149.4	159.9	174.9	196.6	229.3	281.0	354.2	441.5
120°	149.9	151.8	154.2	159.8	170.3	185.8	207.5	237.3	284.9	351.2	431.1
122.5°	160.3	161.7	163.7	169.2	180.8	196.2	217.9	246.1	288.4	348.7	422.2
125°	173.4	174.7	177.8	183.3	195.1	211.2	231.6	258.3	294.2	345.6	410.0
127.5°	183.7	185.6	189.6	196.6	209.1	225.2	244.9	269.4	300.8	344.1	398.9
130°	190.1	192.0	196.9	205.0	218.0	234.2	253.3	276.9	304.8	343.2	391.5
132.5°	195.1	197.5	203.4	212.5	225.9	242.1	261.3	283.3	309.2	343.2	385.6
135°	203.2	205.7	213.1	223.0	236.0	252.7	272.0	292.4	315.3	343.2	378.4
137.5°	213.3	215.2	222.1	232.0	244.8	262.0	279.5	299.0	320.8	343.9	372.2
140°	219.3	221.1	228.5	238.4	250.3	267.0	284.9	303.5	323.3	344.4	369.2
142.5°	226.2	227.6	234.5	244.4	255.7	271.4	288.4	306.0	324.8	344.9	366.7
145°	236.6	237.8	244.1	252.7	263.9	278.1	294.2	309.7	326.5	344.4	363.0
147.5°	247.5	248.3	253.6	261.7	271.3	283.8	297.9	312.0	327.0	342.8	359.1
150°	254.0	255.2	259.5	267.6	276.2	286.8	300.4	313.4	327.0	341.3	356.2
152.5°	260.9	261.7	265.5	272.5	280.7	290.3	302.9	314.4	326.5	339.3	352.7
155°	270.1	270.1	273.8	280.0	286.1	294.9	305.4	315.3	325.2	335.7	346.9
157.5°	278.2	278.1	281.1	286.4	291.8	298.4	307.4	315.9	323.6	332.0	341.4
160°	283.7	283.0	285.6	289.9	294.9	300.4	308.5	315.9	322.1	329.5	337.0
162.5°	288.1	287.6	290.0	293.8	297.8	302.4	309.4	315.4	320.6	326.5	333.0
165°	294.9	293.6	295.5	298.6	301.0	304.8	309.7	314.7	318.4	322.1	327.0
167.5°	299.3	298.7	299.8	301.5	303.2	305.6	309.7	313.1	314.9	317.7	321.2
170°	302.3	301.7	302.3	303.5	304.8	306.6	309.7	312.2	313.4	315.3	317.7
172.5°	304.3	303.2	303.7	305.0	305.7	306.6	309.2	311.2	311.4	312.3	314.3
175°	306.6	305.4	306.0	306.6	306.6	306.6	308.5	309.7	309.1	309.1	309.7
177.5°	307.7	306.7	306.7	307.2	306.7	306.7	307.7	308.2	307.2	307.2	307.7
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2



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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°	27.9	28.0	28.2	28.2	27.7	27.3	27.0	26.5
90°	11.2	11.8	12.4	13.6	13.6	13.6	14.3	14.3
92.5°	109.8	79.7	60.0	50.8	42.9	41.4	40.5	39.5
95°	445.4	351.2	275.0	223.0	179.0	160.4	155.5	145.5
97.5°	663.3	597.2	523.0	450.7	412.4	377.7	359.7	351.8
100°	761.8	731.5	667.7	603.3	560.5	515.9	493.1	483.2
102.5°	795.0	813.8	783.2	739.6	693.9	662.1	637.2	629.8
105°	775.5	860.4	887.6	880.8	860.9	840.5	828.1	820.7
107.5°	705.6	818.9	888.8	921.1	931.2	931.1	927.0	922.0
110°	654.1	771.7	859.1	911.7	939.6	951.4	955.8	955.8



TEST NUMBER: P333321-927

CATALOG NUMBER: S125DIP-S1270D810U927-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	613.5	725.2	813.5	875.6	916.3	936.5	947.3	951.8
115°	562.4	658.5	743.3	810.8	859.1	888.8	906.2	914.3
117.5°	529.5	612.2	685.3	747.3	795.6	826.2	843.5	848.4
120°	511.6	586.0	654.1	708.6	754.4	784.2	800.9	805.8
122.5°	498.3	567.1	627.8	678.9	719.8	747.0	763.7	768.2
125°	478.8	542.0	595.9	640.5	675.2	700.5	714.2	720.3
127.5°	459.0	517.9	568.2	610.0	641.4	663.8	676.8	679.5
130°	446.6	501.1	549.4	589.7	620.7	641.1	653.5	657.2
132.5°	434.2	485.2	529.1	567.8	598.8	619.2	630.7	634.9
135°	418.1	460.8	500.5	535.8	563.0	583.4	594.6	598.3
137.5°	404.5	439.0	472.0	501.9	526.4	544.9	555.2	559.4
140°	397.0	426.1	454.6	480.6	503.6	519.7	528.9	532.0
142.5°	390.6	415.3	439.7	462.3	481.8	495.4	504.2	506.8
145°	382.1	401.4	420.6	437.3	452.2	462.7	469.5	472.0
147.5°	374.2	389.8	404.6	417.2	429.0	437.4	441.4	442.5
150°	369.8	383.4	395.1	406.3	415.7	423.0	425.6	426.1
152.5°	364.8	377.0	387.8	396.4	404.3	410.2	412.6	413.3
155°	357.4	367.3	376.0	382.8	389.0	393.3	395.1	395.8
157.5°	350.0	358.1	364.8	370.2	375.0	378.6	380.3	380.2
160°	345.0	351.2	357.4	361.7	366.1	369.2	370.4	369.8
162.5°	339.5	345.2	350.5	354.3	357.7	360.2	360.5	360.4
165°	332.0	336.4	340.1	343.2	345.6	346.9	346.9	346.9
167.5°	324.8	327.6	330.5	332.7	334.0	335.1	334.6	334.5
170°	320.8	322.7	324.6	325.8	327.0	327.6	327.6	327.0
172.5°	316.4	318.2	319.6	320.4	320.6	321.7	320.8	320.1
175°	311.6	311.6	312.8	312.8	312.8	313.4	312.2	311.6
177.5°	308.2	308.7	308.7	308.7	308.2	308.7	307.2	307.2
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2

(END OF REPORT)