

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: P333310-927

Luminaire Tested: **S125DIP-S1270D590U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333310-927
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-S1270D590U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5936.1 lumens
Efficiency: N/A
Efficacy: 107.7 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

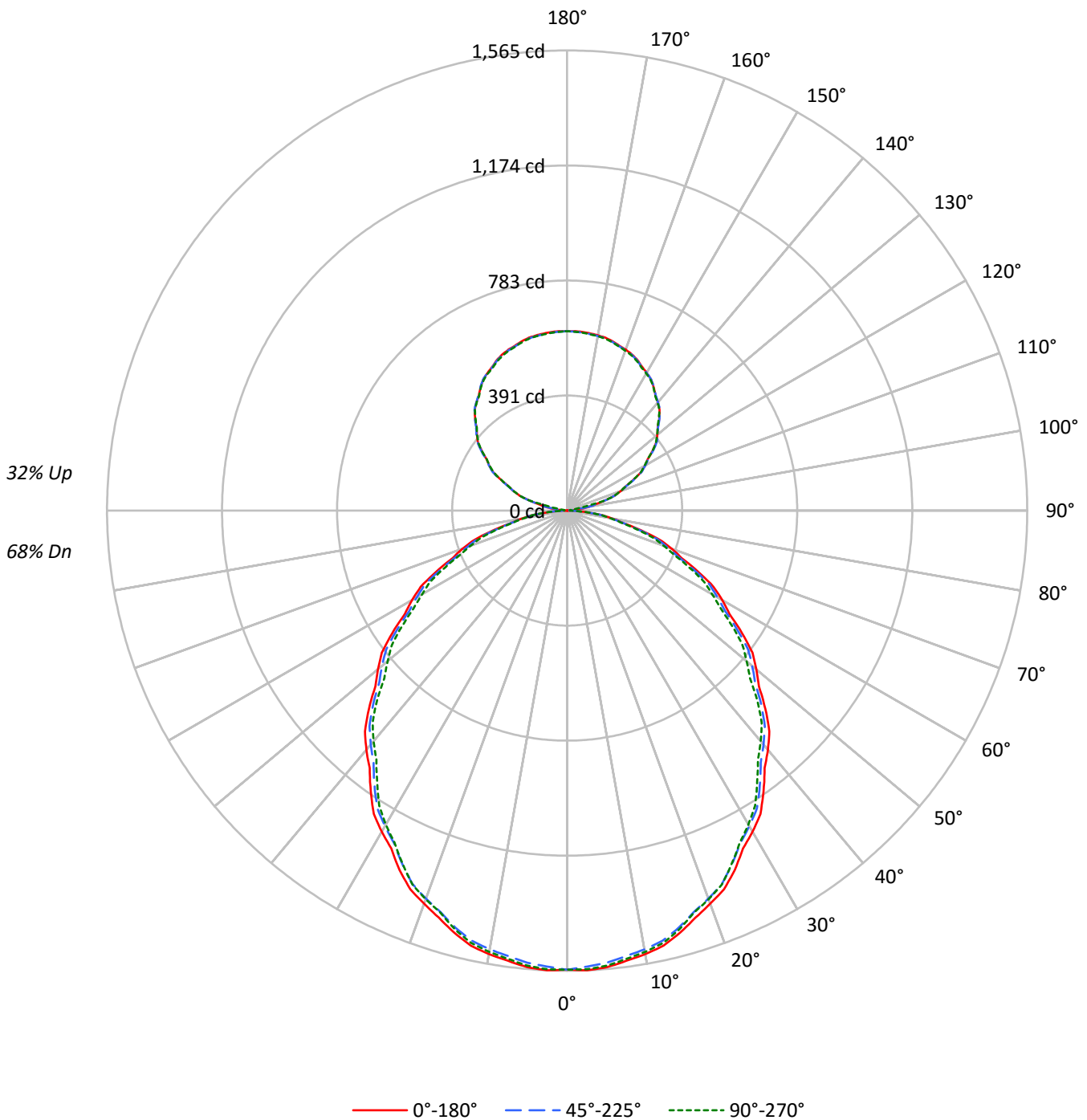
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333310-927

CATALOG NUMBER: S125DIP-S1270D590U927-4F0-1E-UDD-F

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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73	68
1	102	97	93	90	96	92	88	85	82	79	77	73	71	69	64	63	62	57
2	93	85	79	73	87	80	75	70	72	67	64	64	61	58	57	54	52	48
3	85	75	67	61	80	71	64	58	63	58	53	57	52	49	50	47	44	41
4	77	66	58	52	73	63	55	50	56	50	46	50	46	42	45	41	38	35
5	71	59	51	44	67	56	48	43	51	44	39	45	40	36	40	36	33	30
6	66	53	45	39	62	51	43	37	46	39	35	41	36	32	37	32	29	27
7	61	48	40	34	57	46	38	33	41	35	31	37	32	28	34	29	26	24
8	56	44	36	30	53	42	34	29	38	32	27	34	29	25	31	27	23	21
9	53	40	32	27	50	38	31	26	35	29	24	32	26	23	28	24	21	19
10	49	37	29	24	47	35	28	24	32	26	22	29	24	21	26	22	19	17

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



TEST NUMBER: P333310-927

CATALOG NUMBER: S125DIP-S1270D590U927-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.2	2.5
10°-20°	415.8	7.0
20°-30°	613.9	10.3
30°-40°	716.4	12.1
40°-50°	719.5	12.1
50°-60°	631.6	10.6
60°-70°	470.6	7.9
70°-80°	269.1	4.5
80°-90°	79.6	1.3
90°-100°	22.2	0.4
100°-110°	136.6	2.3
110°-120°	247.7	4.2
120°-130°	317.8	5.4
130°-140°	341.9	5.8
140°-150°	320.9	5.4
150°-160°	259.6	4.4
160°-170°	167.9	2.8
170°-180°	57.9	1.0
0°-30°	1177.0	19.8
0°-40°	1893.4	31.9
0°-60°	3244.5	54.7
0°-90°	4063.7	68.5
90°-120°	406.4	6.8
90°-150°	1387.0	23.4
90°-180°	1872.0	31.5
0°-180°	5936.1	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°	0	4	7	10	11	5
95°	26	24	7	9	10	33
105°	133	135	135	135	134	141
115°	250	252	252	250	248	247
125°	355	358	358	356	355	317
135°	442	445	444	443	441	341
145°	513	514	514	514	512	321
155°	565	562	563	564	561	260
165°	596	594	594	596	593	168
175°	610	607	607	611	607	58
180°	610	610	610	610	610	



TEST NUMBER: P333310-927

CATALOG NUMBER: S125DIP-S1270D590U927-4F0-1E-UDD-F

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	27.1	27.3	27.4	27.5	27.4	27.3	27.3	27.2	27.3
90°	0.5	1.3	2.1	2.9	3.6	4.4	5.1	5.9	6.5	7.2	7.8
92.5°	7.0	6.4	5.9	5.3	4.7	4.8	5.4	6.0	6.6	7.2	7.8
95°	25.7	25.4	25.2	24.9	24.6	22.5	18.7	14.9	11.0	7.2	7.8
97.5°	53.8	54.3	54.9	55.4	55.9	52.4	44.9	37.3	29.8	22.3	19.4
100°	75.5	75.8	76.0	76.4	76.7	77.0	77.5	77.9	78.3	78.7	63.7
102.5°	97.5	97.9	98.3	98.7	99.0	99.3	99.6	99.9	100.1	100.4	97.5
105°	132.8	133.2	133.7	134.1	134.5	134.7	134.7	134.7	134.7	134.7	134.7
107.5°	169.6	169.6	169.6	169.6	169.6	169.7	169.8	170.1	170.3	170.5	170.5
110°	193.5	193.5	193.5	193.5	193.5	193.5	193.8	193.9	194.2	194.3	194.1



TEST NUMBER: P333310-927

CATALOG NUMBER: S125DIP-S1270D590U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	215.9	216.1	216.3	216.6	216.8	217.0	217.1	217.2	217.4	217.5	217.1
115°	249.5	250.0	250.5	251.0	251.5	251.8	251.9	252.0	252.1	252.2	251.8
117.5°	284.3	284.2	284.2	284.2	284.2	284.4	284.8	285.2	285.5	285.9	285.4
120°	306.0	305.9	305.8	305.7	305.5	305.7	306.0	306.3	306.6	306.9	306.7
122.5°	325.1	325.5	325.9	326.3	326.7	326.9	327.1	327.3	327.3	327.5	327.3
125°	354.8	355.5	356.2	356.9	357.6	358.0	358.0	358.0	358.0	358.0	357.6
127.5°	383.1	383.6	384.1	384.6	385.1	385.3	385.2	385.2	385.2	385.1	384.8
130°	400.4	400.9	401.5	402.0	402.4	402.7	402.8	403.0	403.1	403.1	402.8
132.5°	417.8	418.4	419.0	419.5	420.1	420.3	420.1	419.9	419.6	419.5	419.4
135°	442.5	443.1	443.7	444.3	444.9	445.1	444.9	444.7	444.5	444.3	444.1
137.5°	465.2	465.7	466.2	466.8	467.2	467.5	467.2	467.1	466.9	466.7	466.8
140°	480.0	480.2	480.4	480.6	480.8	480.9	480.8	480.6	480.5	480.5	480.6
142.5°	493.4	493.5	493.6	493.8	493.8	494.0	494.2	494.2	494.4	494.6	494.6
145°	513.0	513.2	513.4	513.6	513.8	513.9	513.9	513.9	513.9	513.9	514.0
147.5°	530.1	530.1	530.0	530.0	530.0	530.0	530.1	530.3	530.4	530.5	530.7
150°	541.0	540.8	540.6	540.4	540.2	540.2	540.4	540.6	540.8	541.0	541.2
152.5°	551.5	551.0	550.6	550.2	549.7	549.6	549.8	550.0	550.2	550.4	550.6
155°	565.0	564.4	563.8	563.2	562.5	562.4	562.5	562.8	562.9	563.2	563.5
157.5°	575.4	575.0	574.6	574.3	573.9	573.8	573.8	573.8	573.8	573.9	574.2
160°	582.6	582.0	581.4	580.7	580.2	580.0	580.0	580.1	580.2	580.4	580.7
162.5°	588.4	587.8	587.2	586.5	586.0	585.7	585.8	585.9	586.0	586.1	586.7
165°	596.1	595.6	594.9	594.4	593.7	593.5	593.6	593.7	593.8	593.9	594.5
167.5°	601.9	601.3	600.7	600.1	599.4	599.2	599.3	599.4	599.4	599.6	600.3
170°	605.2	604.5	603.8	603.1	602.4	602.1	602.1	602.3	602.4	602.5	603.2
172.5°	607.4	606.7	605.9	605.2	604.5	604.3	604.4	604.7	604.8	605.0	605.7
175°	609.7	609.1	608.5	607.9	607.3	607.0	607.1	607.3	607.4	607.4	608.2
177.5°	610.8	610.3	609.8	609.3	608.9	608.6	608.7	608.8	608.9	609.0	609.6
180°	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7



TEST NUMBER: P333310-927

CATALOG NUMBER: S125DIP-S1270D590U927-4F0-1E-UDD-F

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°	27.3	27.4	27.6	27.4	27.0	26.6	26.3	25.9
90°	8.2	8.7	9.3	9.7	10.0	10.2	10.5	10.9
92.5°	8.2	8.7	9.3	9.6	9.7	9.8	10.0	10.1
95°	8.2	8.7	9.3	9.5	9.5	9.5	9.5	9.5
97.5°	16.6	13.7	10.9	9.5	9.5	9.5	9.5	9.5
100°	48.7	33.7	18.8	11.1	10.7	10.3	9.9	9.5
102.5°	94.7	91.8	89.0	84.2	77.3	70.5	63.7	56.9
105°	134.7	134.7	134.7	134.7	134.5	134.4	134.4	134.2
107.5°	170.6	170.6	170.6	170.4	170.2	169.8	169.5	169.2
110°	193.8	193.5	193.1	193.1	193.1	193.2	193.4	193.5



TEST NUMBER: P333310-927

CATALOG NUMBER: S125DIP-S1270D590U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	216.7	216.3	215.9	215.7	215.6	215.4	215.3	215.2
115°	251.4	251.0	250.6	250.1	249.5	248.9	248.3	247.7
117.5°	284.9	284.3	283.8	283.4	283.2	282.9	282.7	282.4
120°	306.5	306.3	306.1	305.7	305.2	304.8	304.2	303.7
122.5°	327.1	326.9	326.7	326.3	325.7	325.1	324.6	324.0
125°	357.2	356.7	356.3	356.0	355.7	355.4	355.1	354.8
127.5°	384.6	384.4	384.2	383.7	382.9	382.2	381.5	380.7
130°	402.6	402.3	402.0	401.6	401.1	400.5	400.1	399.6
132.5°	419.3	419.2	419.2	418.9	418.4	417.9	417.4	416.9
135°	443.9	443.7	443.5	443.1	442.5	441.9	441.2	440.7
137.5°	466.8	466.8	466.8	466.6	466.1	465.6	465.1	464.5
140°	480.9	481.0	481.3	481.0	480.5	479.8	479.3	478.6
142.5°	494.6	494.6	494.7	494.4	493.8	493.2	492.6	492.0
145°	514.1	514.2	514.3	514.0	513.4	512.9	512.2	511.6
147.5°	530.8	530.9	531.0	530.7	530.0	529.3	528.5	527.8
150°	541.4	541.6	541.8	541.5	540.7	539.9	539.1	538.3
152.5°	550.8	551.0	551.2	551.0	550.2	549.5	548.7	548.0
155°	563.8	564.0	564.4	564.1	563.3	562.5	561.7	560.9
157.5°	574.5	574.8	575.1	574.9	574.1	573.2	572.4	571.6
160°	581.1	581.5	581.9	581.7	580.9	580.1	579.3	578.5
162.5°	587.2	587.8	588.4	588.2	587.3	586.5	585.6	584.6
165°	595.1	595.7	596.3	596.2	595.4	594.6	593.8	592.9
167.5°	601.0	601.7	602.5	602.4	601.5	600.6	599.7	598.7
170°	604.1	604.9	605.7	605.6	604.8	603.8	602.9	602.1
172.5°	606.4	607.2	607.9	607.8	606.9	606.0	605.1	604.2
175°	609.0	609.8	610.7	610.6	609.7	608.8	607.9	607.0
177.5°	610.1	610.7	611.2	611.2	610.5	609.9	609.3	608.6
180°	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7

(END OF REPORT)