

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: P333320-927

Luminaire Tested: **S125DIP-S1270D810U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333320-927  
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: S125DIP-S1270D810U927-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6285.4 lumens  
Efficiency: N/A  
Efficacy: 103.5 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

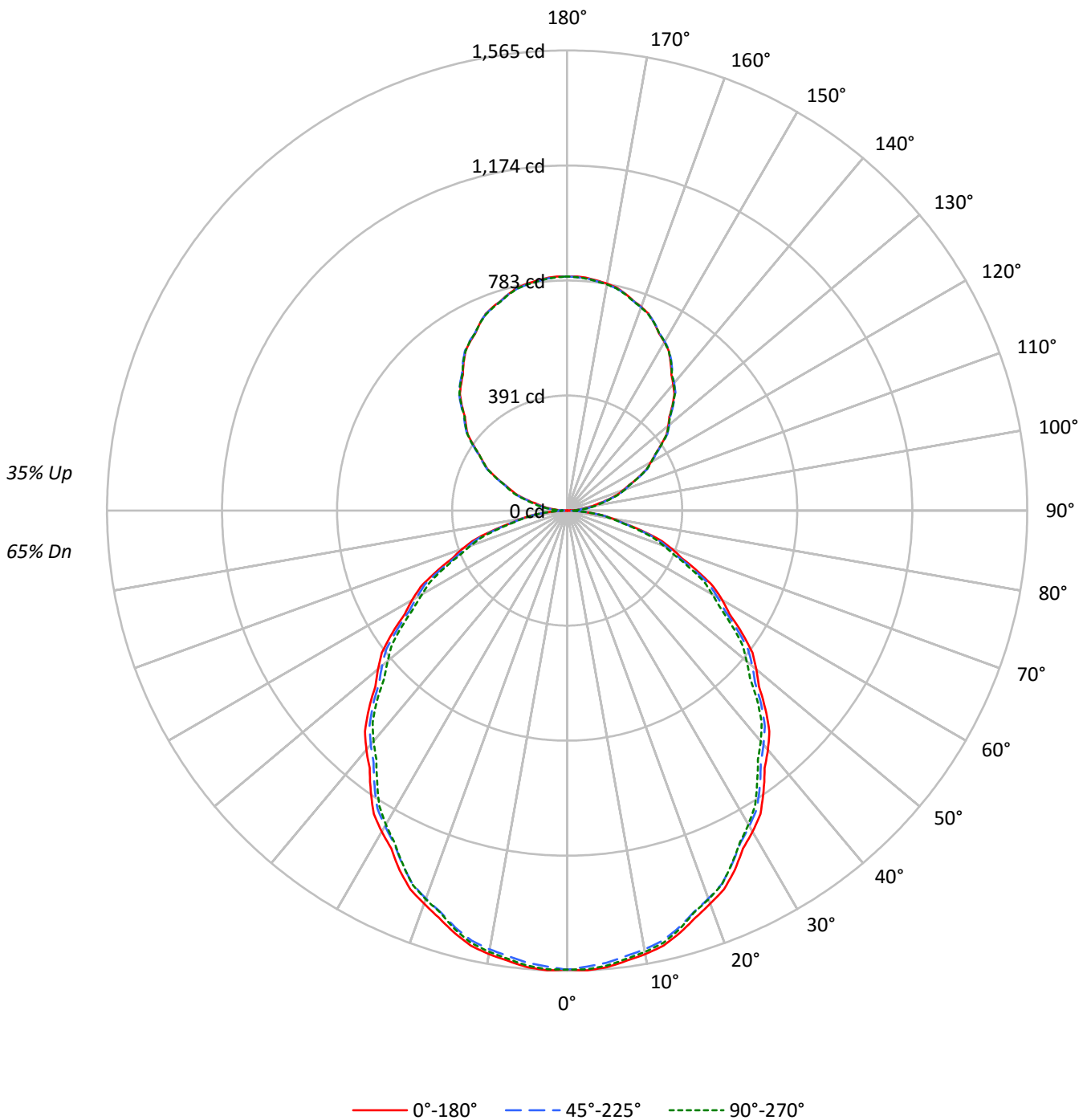
Input Watts (W): 60.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	70	70	70	65
1	101	97	93	89	95	91	87	84	80	78	75	70	68	67	61	60	59	54
2	92	84	78	73	86	79	74	69	70	66	62	62	58	56	54	52	49	45
3	84	74	67	60	78	70	63	58	62	57	52	55	50	47	48	45	42	38
4	77	66	57	51	72	62	55	49	55	49	45	49	44	40	43	39	36	33
5	71	59	50	44	66	55	48	42	49	43	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	25
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25	22
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	22	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	6.6
20°-30°	613.9	9.8
30°-40°	716.4	11.4
40°-50°	719.5	11.4
50°-60°	631.6	10.0
60°-70°	470.6	7.5
70°-80°	269.1	4.3
80°-90°	80.0	1.3
90°-100°	53.3	0.8
100°-110°	157.4	2.5
110°-120°	266.7	4.2
120°-130°	350.9	5.6
130°-140°	393.2	6.3
140°-150°	385.4	6.1
150°-160°	323.7	5.2
160°-170°	215.2	3.4
170°-180°	75.3	1.2
0°-30°	1177.0	18.7
0°-40°	1893.4	30.1
0°-60°	3244.5	51.6
0°-90°	4064.2	64.7
90°-120°	477.4	7.6
90°-150°	1607.0	25.6
90°-180°	2221.0	35.3
0°-180°	6285.4	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	15	6
95°	40	42	48	52	53	43
105°	141	144	148	152	154	151
115°	267	269	271	270	270	264
125°	390	393	394	393	392	349
135°	507	510	511	511	509	390
145°	614	616	618	618	616	384
155°	702	702	703	705	702	323
165°	764	763	763	765	762	215
175°	794	792	792	795	791	75
180°	796	796	796	796	796	



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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	27.0	27.3	27.5	27.6	27.8	27.7	27.7	27.7	27.6	27.8
90°	0.6	1.7	2.9	4.0	5.0	6.0	7.1	8.0	9.0	9.9	10.6
92.5°	15.0	15.8	16.6	17.3	18.1	19.0	20.2	21.4	22.6	23.8	24.7
95°	40.2	40.6	40.8	41.1	41.4	42.2	43.6	44.9	46.3	47.7	48.6
97.5°	66.9	67.0	67.1	67.3	67.3	68.4	70.3	72.2	74.1	76.0	76.8
100°	86.7	86.7	86.7	86.7	86.7	87.6	89.4	91.2	93.0	94.7	96.0
102.5°	108.1	108.6	109.2	109.7	110.3	111.0	111.9	112.8	113.7	114.6	116.0
105°	141.2	142.0	142.6	143.3	144.0	144.7	145.6	146.4	147.2	148.1	148.9
107.5°	177.9	178.6	179.3	180.0	180.7	181.3	182.0	182.6	183.2	183.9	184.3
110°	203.2	203.9	204.5	205.3	206.0	206.5	206.9	207.3	207.7	208.1	208.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	228.9	229.3	229.7	230.0	230.4	230.8	231.3	231.9	232.4	232.9	233.1
115°	267.0	267.5	268.1	268.6	269.2	269.6	269.9	270.1	270.5	270.7	270.5
117.5°	305.1	305.4	305.6	305.9	306.1	306.4	306.7	306.9	307.1	307.4	307.4
120°	328.9	329.6	330.3	331.0	331.7	332.1	332.2	332.4	332.5	332.6	332.6
122.5°	354.7	355.0	355.2	355.5	355.7	356.0	356.3	356.7	357.0	357.4	357.3
125°	389.6	390.5	391.3	392.1	392.9	393.4	393.6	393.7	393.8	394.0	393.7
127.5°	426.8	427.3	427.7	428.2	428.6	429.0	429.1	429.3	429.5	429.7	429.5
130°	449.1	449.8	450.5	451.1	451.9	452.3	452.6	452.9	453.1	453.4	453.3
132.5°	471.4	472.5	473.6	474.8	475.9	476.4	476.4	476.3	476.3	476.3	476.1
135°	506.7	507.6	508.3	509.2	510.0	510.5	510.6	510.8	510.9	511.0	511.0
137.5°	540.0	540.7	541.5	542.3	543.1	543.7	544.0	544.2	544.5	544.9	545.0
140°	561.3	561.9	562.6	563.3	564.0	564.5	564.9	565.4	565.8	566.2	566.5
142.5°	582.6	583.1	583.7	584.2	584.9	585.4	585.9	586.5	586.9	587.5	587.6
145°	613.9	614.4	615.0	615.5	616.1	616.6	617.0	617.3	617.8	618.2	618.2
147.5°	642.9	643.2	643.5	643.8	644.0	644.4	644.8	645.1	645.4	645.7	646.0
150°	662.2	662.0	661.9	661.8	661.6	661.9	662.4	663.0	663.5	664.1	664.1
152.5°	678.0	678.3	678.4	678.7	678.8	679.1	679.2	679.5	679.7	679.9	680.2
155°	702.4	702.4	702.4	702.4	702.4	702.5	702.7	702.8	702.9	703.1	703.6
157.5°	724.3	724.0	723.7	723.3	723.0	722.9	723.1	723.3	723.3	723.5	724.1
160°	737.1	736.7	736.3	735.9	735.5	735.4	735.5	735.6	735.8	735.9	736.5
162.5°	748.5	748.2	747.9	747.7	747.3	747.2	747.2	747.3	747.3	747.3	748.0
165°	763.8	763.5	763.3	763.0	762.7	762.6	762.7	762.9	763.0	763.2	763.7
167.5°	776.7	776.1	775.5	775.0	774.4	774.2	774.2	774.2	774.2	774.2	775.0
170°	783.6	783.1	782.5	782.0	781.4	781.1	781.1	781.1	781.1	781.1	782.0
172.5°	788.5	788.0	787.4	786.9	786.3	786.1	786.1	786.1	786.1	786.1	786.9
175°	794.2	793.6	793.1	792.5	791.9	791.6	791.6	791.6	791.6	791.6	792.5
177.5°	797.0	796.5	796.1	795.7	795.2	795.0	794.9	794.7	794.6	794.5	795.2
180°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0



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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°	28.0	28.1	28.2	28.1	27.7	27.4	27.0	26.7
90°	11.2	12.0	12.7	13.2	13.6	14.0	14.4	14.9
92.5°	25.6	26.5	27.4	28.0	28.4	28.6	28.9	29.2
95°	49.6	50.6	51.6	52.2	52.4	52.8	53.0	53.2
97.5°	77.8	78.7	79.6	80.1	80.2	80.4	80.6	80.8
100°	97.3	98.5	99.7	100.5	100.8	101.0	101.3	101.6
102.5°	117.3	118.7	120.0	120.9	121.3	121.6	122.0	122.4
105°	149.7	150.5	151.4	151.9	152.4	152.8	153.2	153.6
107.5°	184.7	185.1	185.5	185.7	185.7	185.6	185.6	185.6
110°	209.0	209.4	209.8	209.9	209.8	209.6	209.5	209.4





TEST NUMBER: P333320-927

CATALOG NUMBER: S125DIP-S1270D810U927-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	233.3	233.5	233.7	233.7	233.4	233.1	232.9	232.7
115°	270.5	270.3	270.1	270.0	269.9	269.7	269.6	269.5
117.5°	307.6	307.7	307.8	307.6	307.0	306.5	305.9	305.4
120°	332.6	332.6	332.6	332.4	331.8	331.3	330.7	330.2
122.5°	357.2	357.1	357.0	356.7	356.2	355.8	355.4	355.0
125°	393.4	393.2	392.8	392.7	392.5	392.4	392.3	392.1
127.5°	429.4	429.2	429.1	428.9	428.6	428.3	428.1	427.8
130°	453.1	453.0	452.9	452.7	452.4	452.1	451.9	451.5
132.5°	475.9	475.8	475.7	475.4	475.1	474.7	474.3	473.9
135°	511.0	511.0	511.0	510.8	510.2	509.7	509.1	508.6
137.5°	545.2	545.3	545.5	545.3	544.5	543.9	543.2	542.5
140°	566.7	567.0	567.3	567.0	566.4	565.7	565.0	564.4
142.5°	587.8	588.0	588.1	587.9	587.2	586.5	585.8	585.1
145°	618.2	618.2	618.2	618.0	617.6	617.2	616.8	616.3
147.5°	646.3	646.7	647.1	646.7	645.8	644.8	644.0	643.0
150°	664.1	664.1	664.1	663.9	663.6	663.4	663.1	662.8
152.5°	680.6	680.9	681.2	681.1	680.6	680.2	679.7	679.1
155°	704.2	704.7	705.3	705.2	704.5	703.9	703.1	702.4
157.5°	724.6	725.2	725.7	725.6	724.6	723.7	722.8	721.9
160°	737.0	737.5	738.1	738.1	737.4	736.7	735.9	735.3
162.5°	748.6	749.3	750.0	749.9	749.1	748.3	747.5	746.7
165°	764.3	764.9	765.3	765.2	764.4	763.6	762.7	761.9
167.5°	775.9	776.7	777.5	777.4	776.7	775.8	774.9	774.0
170°	782.8	783.6	784.4	784.3	783.4	782.4	781.5	780.5
172.5°	787.7	788.5	789.4	789.4	788.5	787.7	786.8	785.9
175°	793.3	794.2	795.0	794.9	793.9	793.0	792.0	791.1
177.5°	795.8	796.5	797.2	797.1	796.3	795.6	794.8	794.0
180°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0

(END OF REPORT)