

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: P333301-927

Luminaire Tested: **S125DIP-S1270D365U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333301-927  
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-S1270D365U927-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 365 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5223.2 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

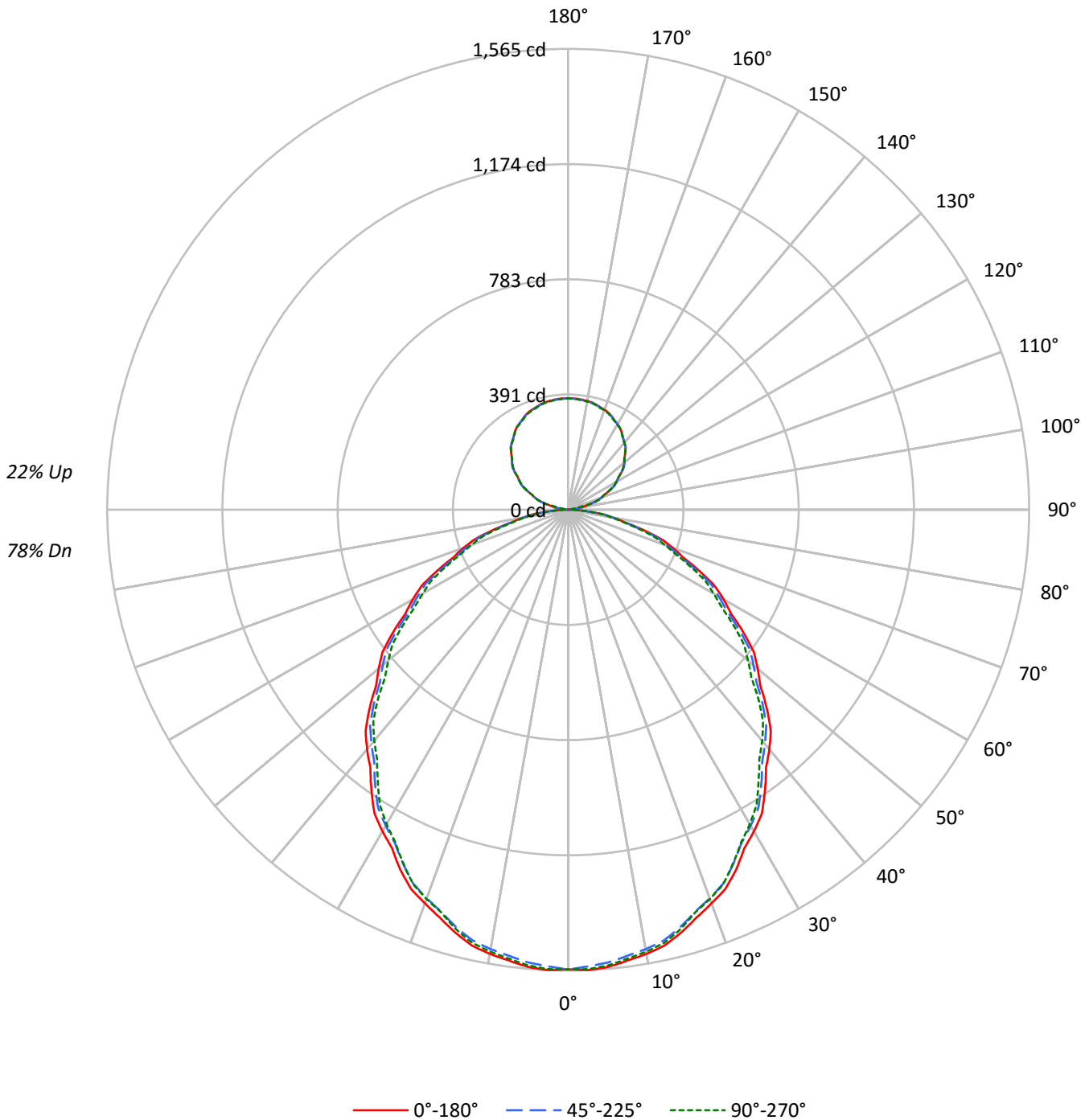
Input Watts (W): 49.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	114	114	114	109	109	109	109	99	99	99	90	90	90	82	82	82	78
1	104	99	95	92	99	95	91	88	87	84	81	79	77	75	72	70	69	65
2	95	87	80	75	90	83	77	72	76	71	67	69	66	62	63	60	58	55
3	86	76	69	62	82	73	66	60	67	61	57	61	57	53	56	52	49	46
4	79	68	59	53	75	65	57	51	60	53	48	55	50	45	50	46	42	40
5	73	60	52	46	69	58	50	44	53	47	42	49	44	39	45	41	37	34
6	67	54	46	40	64	52	44	39	48	42	37	45	39	35	41	36	33	30
7	62	49	41	35	59	47	40	34	44	37	32	41	35	31	38	33	29	27
8	58	45	37	31	55	43	36	30	40	34	29	37	32	27	35	30	26	24
9	54	41	33	28	51	40	32	27	37	31	26	34	29	25	32	27	24	22
10	51	38	30	25	48	37	30	25	34	28	24	32	26	23	30	25	21	20

**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	2.8
10°-20°	415.8	8.0
20°-30°	613.9	11.8
30°-40°	716.4	13.7
40°-50°	719.5	13.8
50°-60°	631.6	12.1
60°-70°	470.6	9.0
70°-80°	269.1	5.2
80°-90°	79.1	1.5
90°-100°	13.7	0.3
100°-110°	84.6	1.6
110°-120°	153.4	2.9
120°-130°	196.9	3.8
130°-140°	211.8	4.1
140°-150°	198.8	3.8
150°-160°	160.8	3.1
160°-170°	104.0	2.0
170°-180°	35.9	0.7
0°-30°	1177.0	22.5
0°-40°	1893.4	36.2
0°-60°	3244.5	62.1
0°-90°	4063.2	77.8
90°-120°	251.8	4.8
90°-150°	859.3	16.5
90°-180°	1160.0	22.2
0°-180°	5223.2	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	3	4	6	7	4
95°	16	15	4	6	6	20
105°	82	83	83	83	83	87
115°	155	156	156	155	153	153
125°	220	222	222	221	220	196
135°	274	276	275	275	273	211
145°	318	318	318	319	317	199
155°	350	348	349	350	348	161
165°	369	368	368	369	367	104
175°	378	376	376	378	376	36
180°	378	378	378	378	378	



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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°	26.7	26.9	26.9	27.0	27.2	27.1	27.0	26.9	26.7	26.6	26.6
90°	0.3	0.8	1.3	1.7	2.3	2.8	3.2	3.6	4.0	4.5	4.8
92.5°	4.3	4.0	3.6	3.2	2.9	2.9	3.3	3.7	4.1	4.5	4.8
95°	15.9	15.8	15.6	15.4	15.2	13.9	11.6	9.2	6.8	4.5	4.8
97.5°	33.4	33.7	34.0	34.3	34.7	32.5	27.8	23.1	18.5	13.8	12.0
100°	46.7	47.0	47.1	47.3	47.5	47.7	48.0	48.2	48.5	48.7	39.5
102.5°	60.4	60.7	60.9	61.2	61.4	61.6	61.7	61.9	62.0	62.2	60.4
105°	82.3	82.5	82.9	83.1	83.3	83.4	83.4	83.4	83.4	83.4	83.4
107.5°	105.0	105.0	105.0	105.0	105.0	105.1	105.3	105.4	105.5	105.6	105.6
110°	119.9	119.9	119.9	119.9	119.9	119.9	120.0	120.2	120.3	120.4	120.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	133.7	133.9	134.0	134.2	134.4	134.4	134.5	134.6	134.7	134.8	134.5
115°	154.6	154.9	155.2	155.5	155.8	156.0	156.1	156.1	156.2	156.2	156.0
117.5°	176.1	176.1	176.1	176.1	176.1	176.2	176.4	176.7	176.9	177.1	176.8
120°	189.6	189.5	189.5	189.4	189.3	189.4	189.6	189.7	190.0	190.1	190.0
122.5°	201.5	201.7	201.9	202.2	202.4	202.6	202.6	202.7	202.8	202.9	202.8
125°	219.8	220.2	220.7	221.1	221.6	221.8	221.8	221.8	221.8	221.8	221.5
127.5°	237.3	237.7	238.0	238.3	238.6	238.8	238.7	238.7	238.6	238.6	238.4
130°	248.1	248.4	248.7	249.1	249.4	249.5	249.6	249.6	249.7	249.8	249.6
132.5°	258.9	259.2	259.6	259.9	260.3	260.4	260.3	260.2	260.0	259.8	259.8
135°	274.2	274.5	274.9	275.3	275.6	275.8	275.6	275.5	275.4	275.3	275.1
137.5°	288.2	288.5	288.8	289.1	289.5	289.6	289.5	289.4	289.2	289.1	289.1
140°	297.4	297.5	297.6	297.8	297.9	297.9	297.9	297.8	297.7	297.7	297.8
142.5°	305.7	305.8	305.9	305.9	305.9	306.0	306.2	306.3	306.3	306.4	306.4
145°	317.8	318.0	318.1	318.2	318.3	318.4	318.4	318.4	318.4	318.4	318.5
147.5°	328.4	328.4	328.4	328.4	328.4	328.4	328.4	328.5	328.6	328.7	328.8
150°	335.2	335.1	334.9	334.8	334.7	334.7	334.8	334.9	335.1	335.2	335.3
152.5°	341.7	341.4	341.1	340.9	340.6	340.5	340.6	340.8	340.9	341.0	341.1
155°	350.1	349.7	349.3	348.9	348.6	348.4	348.6	348.6	348.8	348.9	349.1
157.5°	356.5	356.2	356.0	355.8	355.6	355.5	355.5	355.5	355.5	355.5	355.7
160°	360.9	360.6	360.2	359.8	359.5	359.3	359.3	359.4	359.5	359.6	359.8
162.5°	364.6	364.2	363.8	363.4	363.1	362.9	363.0	363.0	363.1	363.1	363.5
165°	369.3	369.0	368.6	368.2	367.9	367.7	367.7	367.8	367.9	368.0	368.3
167.5°	373.0	372.6	372.2	371.8	371.4	371.2	371.3	371.4	371.5	371.5	371.9
170°	374.9	374.5	374.1	373.7	373.2	373.0	373.1	373.1	373.2	373.3	373.8
172.5°	376.3	375.9	375.4	375.0	374.5	374.4	374.5	374.6	374.7	374.9	375.3
175°	377.7	377.4	377.0	376.6	376.3	376.1	376.1	376.2	376.3	376.4	376.8
177.5°	378.4	378.1	377.8	377.6	377.2	377.1	377.2	377.2	377.2	377.3	377.6
180°	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7



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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°	26.7	26.8	26.9	26.7	26.3	25.8	25.4	25.0
90°	5.1	5.4	5.7	5.9	6.2	6.3	6.5	6.7
92.5°	5.1	5.4	5.7	5.9	6.0	6.1	6.2	6.3
95°	5.1	5.4	5.7	5.9	5.9	5.9	5.9	5.9
97.5°	10.3	8.5	6.7	5.9	5.9	5.9	5.9	5.9
100°	30.2	20.9	11.6	6.9	6.7	6.4	6.1	5.9
102.5°	58.6	56.9	55.1	52.1	47.9	43.7	39.5	35.3
105°	83.4	83.4	83.4	83.4	83.3	83.3	83.3	83.2
107.5°	105.7	105.7	105.7	105.6	105.4	105.2	105.0	104.8
110°	120.0	119.9	119.7	119.6	119.7	119.7	119.8	119.9





TEST NUMBER: P333301-927

CATALOG NUMBER: S125DIP-S1270D365U927-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	134.3	134.0	133.8	133.6	133.6	133.5	133.4	133.3
115°	155.7	155.5	155.3	155.0	154.6	154.2	153.8	153.4
117.5°	176.5	176.2	175.9	175.6	175.5	175.3	175.2	175.0
120°	189.9	189.7	189.6	189.4	189.1	188.8	188.5	188.1
122.5°	202.6	202.6	202.4	202.2	201.8	201.5	201.1	200.7
125°	221.3	221.0	220.8	220.5	220.4	220.2	220.0	219.8
127.5°	238.3	238.1	238.1	237.7	237.3	236.8	236.4	235.9
130°	249.4	249.2	249.1	248.7	248.5	248.2	247.9	247.6
132.5°	259.8	259.8	259.7	259.5	259.2	258.9	258.6	258.3
135°	275.0	274.9	274.7	274.5	274.2	273.8	273.4	273.0
137.5°	289.2	289.2	289.2	289.1	288.8	288.4	288.1	287.8
140°	297.9	298.0	298.2	298.0	297.7	297.3	296.9	296.5
142.5°	306.4	306.5	306.5	306.3	305.9	305.5	305.2	304.8
145°	318.5	318.5	318.6	318.5	318.1	317.7	317.3	317.0
147.5°	328.8	328.9	329.0	328.8	328.4	327.9	327.5	327.0
150°	335.4	335.6	335.6	335.5	335.0	334.5	334.0	333.5
152.5°	341.3	341.4	341.5	341.4	340.9	340.5	340.0	339.5
155°	349.3	349.4	349.7	349.5	349.0	348.5	348.0	347.5
157.5°	355.9	356.1	356.3	356.2	355.7	355.1	354.7	354.2
160°	360.0	360.3	360.5	360.4	359.9	359.4	358.9	358.5
162.5°	363.8	364.2	364.6	364.4	363.8	363.3	362.8	362.3
165°	368.7	369.1	369.5	369.4	368.9	368.4	367.9	367.4
167.5°	372.4	372.8	373.3	373.2	372.6	372.1	371.5	371.0
170°	374.2	374.8	375.3	375.3	374.7	374.1	373.5	373.0
172.5°	375.7	376.2	376.6	376.6	376.0	375.4	374.9	374.3
175°	377.3	377.9	378.3	378.3	377.7	377.2	376.6	376.0
177.5°	378.0	378.3	378.7	378.7	378.3	377.9	377.5	377.1
180°	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7

(END OF REPORT)