

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: P333336-935

Luminaire Tested: **S125DIP-S1270D1205U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333336-935  
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-S1270D1205U935-4F0-1E-UDD-D4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7965.0 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

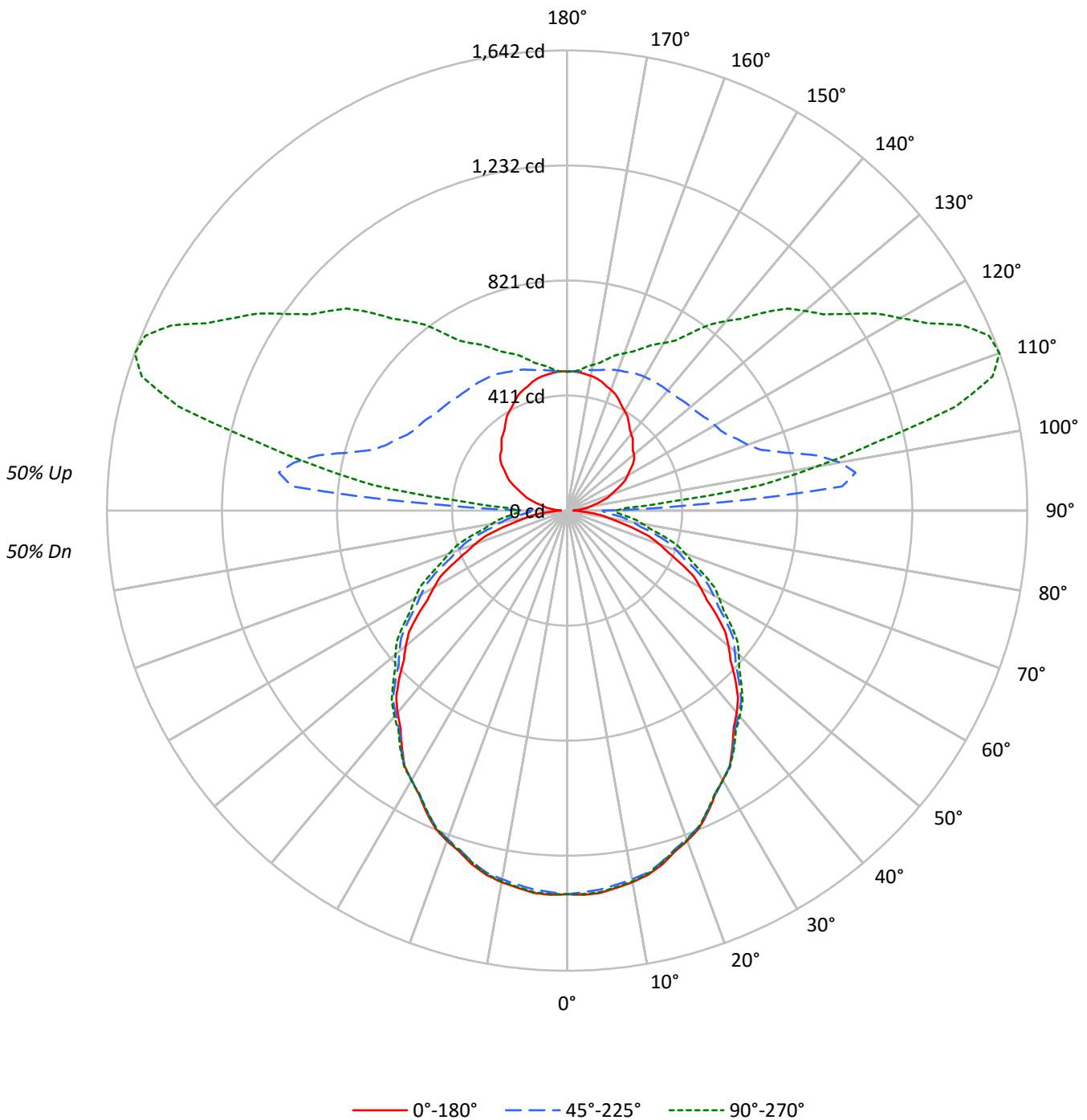
Input Watts (W): 71.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	92	88	84	89	85	82	78	72	69	67	60	58	56	48	47	46	41
2	88	80	74	68	81	74	69	64	63	58	55	52	49	46	42	40	38	33
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	37	34	32	28
4	73	62	54	48	67	57	50	45	49	43	39	41	36	33	33	30	27	24
5	67	55	47	41	62	51	44	38	43	38	33	36	32	28	30	26	24	21
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21	18
7	57	45	36	31	52	41	34	29	35	30	25	30	25	22	25	21	18	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	19	23	19	17	14
9	49	37	29	24	45	34	27	23	30	24	20	25	21	17	21	17	15	13
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	16	14	12

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8843	8843	8843
5°	8860	8680	8707
10°	8797	8525	8512
15°	8694	8339	8263
20°	8552	8110	8015
25°	8384	7865	7709
30°	8181	7595	7431
35°	7991	7346	7176
40°	7797	7085	6920
45°	7579	6861	6693
50°	7370	6618	6491
55°	7119	6390	6255
60°	6846	6128	6014
65°	6558	5855	5742
70°	6233	5481	5463
75°	5719	5122	5121
80°	5046	4687	4749
85°	4423	4393	4630



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.5	1.6
10°-20°	367.5	4.6
20°-30°	546.6	6.9
30°-40°	647.5	8.1
40°-50°	669.4	8.4
50°-60°	616.7	7.7
60°-70°	498.5	6.3
70°-80°	333.8	4.2
80°-90°	175.9	2.2
90°-100°	456.8	5.7
100°-110°	844.8	10.6
110°-120°	773.7	9.7
120°-130°	615.3	7.7
130°-140°	483.8	6.1
140°-150°	358.6	4.5
150°-160°	250.7	3.1
160°-170°	147.8	1.9
170°-180°	48.1	0.6
0°-30°	1043.6	13.1
0°-40°	1691.1	21.2
0°-60°	2977.2	37.4
0°-90°	3985.4	50.0
90°-120°	2075.3	26.1
90°-150°	3533.1	44.4
90°-180°	3980.0	50.0
0°-180°	7965.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1369	1369	1369	1369	1369	
5°	1369	1366	1357	1367	1367	130
15°	1308	1308	1299	1307	1302	368
25°	1188	1191	1184	1189	1183	547
35°	1028	1037	1034	1037	1038	643
45°	847	861	868	877	879	653
55°	651	672	694	708	714	582
65°	448	479	511	531	537	445
75°	247	282	325	351	358	262
85°	74	118	165	194	205	79
90°	22	74	126	161	173	16
95°	50	150	984	529	372	49
105°	125	193	799	1528	1436	132
115°	210	262	635	1331	1561	207
125°	286	334	589	1050	1223	253
135°	331	397	565	864	1001	257
145°	384	438	556	699	774	240
155°	436	469	542	613	639	201
165°	476	489	520	552	560	134
175°	495	495	499	505	503	47
180°	496	496	496	496	496	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2
2.5°	1372.4	1372.0	1371.5	1371.1	1370.5	1369.5	1367.8	1366.1	1364.5	1362.8	1364.5
5°	1369.2	1368.6	1368.0	1367.4	1366.8	1365.5	1363.4	1361.3	1359.3	1357.2	1359.5
7.5°	1357.2	1356.9	1356.7	1356.4	1356.2	1355.0	1352.9	1350.7	1348.6	1346.4	1348.5
10°	1346.4	1346.4	1346.4	1346.4	1346.4	1345.2	1342.8	1340.5	1338.1	1335.7	1337.7
12.5°	1331.4	1331.6	1331.9	1332.1	1332.3	1331.5	1329.6	1327.7	1325.8	1323.9	1325.5
15°	1307.5	1307.8	1308.1	1308.4	1308.7	1307.8	1305.7	1303.6	1301.6	1299.4	1301.2
17.5°	1276.3	1276.9	1277.6	1278.2	1278.8	1278.0	1275.9	1273.8	1271.7	1269.6	1271.0
20°	1253.8	1254.4	1255.0	1255.6	1256.2	1255.4	1253.4	1251.3	1249.1	1247.1	1248.0
22.5°	1228.0	1229.1	1230.2	1231.2	1232.3	1231.7	1229.3	1227.0	1224.7	1222.4	1223.5
25°	1188.0	1189.0	1189.8	1190.7	1191.6	1191.2	1189.4	1187.6	1185.8	1184.0	1185.2
27.5°	1143.5	1144.8	1146.1	1147.4	1148.7	1148.3	1146.3	1144.3	1142.3	1140.2	1141.1
30°	1110.2	1112.0	1113.7	1115.5	1117.3	1117.3	1115.5	1113.7	1112.0	1110.2	1110.8
32.5°	1080.1	1081.7	1083.2	1084.8	1086.3	1086.4	1085.1	1083.8	1082.4	1081.2	1081.8
35°	1028.3	1030.4	1032.4	1034.6	1036.6	1037.2	1036.3	1035.4	1034.6	1033.6	1034.6
37.5°	976.5	978.4	980.2	982.2	984.1	984.9	984.6	984.3	984.0	983.7	984.9
40°	941.0	943.4	945.8	948.2	950.5	951.6	951.3	951.0	950.7	950.5	951.6
42.5°	902.3	905.4	908.5	911.6	914.8	916.6	917.3	918.0	918.6	919.3	920.7
45°	847.1	850.3	853.6	856.9	860.1	862.5	864.1	865.6	867.0	868.5	870.6
47.5°	790.4	793.4	796.5	799.5	802.5	805.4	808.0	810.5	813.0	815.6	818.7
50°	751.7	755.0	758.3	761.6	764.9	768.2	771.5	774.7	778.0	781.3	784.5
52.5°	710.9	715.0	718.9	722.9	726.9	730.9	734.9	738.9	742.9	746.9	750.4
55°	651.1	655.8	660.6	665.4	670.1	674.9	679.7	684.5	689.2	694.1	697.3
57.5°	589.9	595.6	601.3	607.0	612.8	618.4	623.9	629.3	634.8	640.3	644.1
60°	549.1	555.0	560.9	567.0	572.9	578.9	584.9	590.8	596.8	602.7	607.2
62.5°	509.3	515.3	521.2	527.2	533.1	539.4	545.8	552.2	558.7	565.2	570.1
65°	448.3	455.2	462.1	469.0	475.8	482.8	490.0	497.1	504.3	511.4	515.9
67.5°	390.9	397.5	404.2	410.8	417.4	424.4	431.6	438.9	446.2	453.5	458.9
70°	349.0	355.9	362.7	369.6	376.4	383.7	391.5	399.3	407.1	414.8	420.5
72.5°	308.2	315.3	322.4	329.5	336.7	344.4	352.8	361.4	369.8	378.3	384.4
75°	247.0	254.8	262.5	270.3	278.0	286.7	296.2	305.7	315.3	324.9	330.8
77.5°	188.2	197.2	206.1	215.1	224.0	233.1	242.3	251.4	260.6	269.8	276.4
80°	151.7	160.7	169.6	178.6	187.5	197.0	207.2	217.3	227.5	237.6	244.2
82.5°	118.4	127.9	137.2	146.7	156.1	166.0	176.4	186.8	197.2	207.5	213.9
85°	73.9	83.7	93.5	103.4	113.2	123.4	133.8	144.2	154.6	165.1	171.7
87.5°	42.1	51.8	61.7	71.7	81.7	92.0	102.3	112.8	123.1	133.7	140.8
90°	22.5	33.1	44.6	56.1	67.7	79.5	90.7	102.8	113.9	126.1	134.0
92.5°	31.5	43.0	60.2	81.5	107.5	146.3	211.3	313.3	423.2	428.3	373.5
95°	50.5	59.2	75.0	93.8	123.5	177.5	294.6	525.0	811.1	984.4	972.0
97.5°	70.7	78.9	91.4	109.4	136.2	177.0	257.6	428.7	727.4	1037.9	1195.1
100°	84.8	93.1	103.3	120.6	145.9	183.8	251.3	391.0	652.6	989.3	1245.7
102.5°	100.6	107.5	116.5	134.1	157.3	194.1	255.0	373.5	595.7	909.0	1207.6
105°	125.1	129.9	139.7	154.5	175.2	210.1	263.1	361.1	537.1	799.2	1092.3
107.5°	149.1	155.2	164.0	176.3	197.0	228.5	279.7	364.5	509.4	722.5	976.1
110°	166.4	172.0	179.6	192.2	210.8	242.8	292.1	369.5	498.9	685.4	909.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	184.9	189.8	195.8	207.7	225.6	256.2	303.8	376.9	494.9	661.9	858.2
115°	210.2	214.2	219.3	230.4	247.5	277.4	322.2	388.0	491.8	634.6	801.1
117.5°	232.8	237.2	241.8	252.1	270.5	299.1	341.5	401.6	492.4	617.9	764.1
120°	248.8	252.7	257.6	267.5	285.4	314.3	356.2	411.0	495.0	608.9	743.0
122.5°	264.6	267.2	270.8	280.3	299.2	327.8	369.4	421.6	496.5	600.5	724.0
125°	285.5	287.2	291.9	300.6	319.3	348.2	387.1	436.1	500.2	589.1	697.9
127.5°	300.7	303.5	309.5	320.6	340.6	368.9	405.6	450.1	505.7	580.6	673.4
130°	311.2	313.8	321.6	334.2	355.0	383.0	418.1	460.3	509.5	575.8	658.0
132.5°	318.1	321.8	331.4	345.9	367.6	395.3	429.5	468.4	513.4	571.4	644.0
135°	330.8	334.5	346.2	362.0	382.6	410.6	443.7	478.8	517.9	565.0	625.9
137.5°	347.0	349.7	360.7	376.4	396.8	425.1	454.3	486.9	523.1	561.4	610.5
140°	355.5	358.5	370.5	386.5	405.5	432.7	462.0	492.3	524.6	559.0	602.3
142.5°	366.7	368.7	379.6	395.4	413.4	438.7	466.1	494.6	525.1	557.6	595.6
145°	383.5	385.2	394.9	408.6	426.4	449.2	475.2	500.2	527.3	556.2	587.7
147.5°	399.8	401.0	409.6	422.6	438.2	458.4	481.2	503.9	528.2	553.6	580.6
150°	410.2	412.2	419.2	432.2	446.2	463.2	485.2	506.3	528.2	551.2	575.2
152.5°	421.4	422.6	428.8	440.2	453.4	468.8	489.2	507.8	527.4	548.0	569.6
155°	436.2	436.2	442.2	452.2	462.2	476.2	493.2	509.2	525.2	542.3	560.3
157.5°	449.4	449.2	454.0	462.6	471.4	482.0	496.6	510.2	522.6	536.2	551.5
160°	458.2	457.2	461.2	468.2	476.2	485.2	498.3	510.2	520.2	532.3	544.2
162.5°	465.4	464.4	468.4	474.6	481.0	488.4	499.8	509.5	517.8	527.4	537.9
165°	476.2	474.2	477.3	482.2	486.2	492.2	500.2	508.2	514.2	520.2	528.2
167.5°	483.5	482.4	484.2	487.0	489.8	493.6	500.2	505.8	508.6	513.2	518.8
170°	488.2	487.2	488.2	490.3	492.2	495.2	500.2	504.2	506.3	509.2	513.2
172.5°	491.5	489.7	490.6	492.6	493.8	495.2	499.4	502.7	503.0	504.5	507.6
175°	495.2	493.2	494.2	495.2	495.2	495.2	498.3	500.2	499.2	499.2	500.2
177.5°	497.1	495.4	495.4	496.2	495.4	495.4	497.1	497.8	496.2	496.2	497.1
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2
2.5°	1366.1	1367.8	1369.5	1370.2	1369.9	1369.8	1369.5	1369.2
5°	1361.9	1364.3	1366.8	1367.8	1367.4	1367.2	1366.8	1366.6
7.5°	1350.6	1352.7	1354.8	1355.6	1355.4	1355.0	1354.8	1354.4
10°	1339.9	1342.0	1344.0	1345.0	1344.6	1344.4	1344.0	1343.8
12.5°	1327.1	1328.7	1330.3	1330.8	1330.0	1329.2	1328.4	1327.7
15°	1303.0	1304.8	1306.6	1306.9	1305.7	1304.5	1303.3	1302.1
17.5°	1272.4	1273.8	1275.1	1275.5	1274.7	1274.0	1273.3	1272.6
20°	1248.9	1249.7	1250.7	1251.1	1251.1	1251.1	1251.1	1251.1
22.5°	1224.7	1225.8	1226.9	1227.1	1226.4	1225.7	1224.9	1224.3
25°	1186.4	1187.6	1188.8	1188.6	1187.1	1185.6	1184.1	1182.7
27.5°	1141.9	1142.7	1143.6	1143.8	1143.1	1142.6	1142.1	1141.6
30°	1111.4	1112.0	1112.6	1112.7	1112.4	1112.1	1111.8	1111.5
32.5°	1082.4	1083.0	1083.6	1083.7	1083.4	1083.1	1082.8	1082.5
35°	1035.4	1036.3	1037.2	1037.7	1037.7	1037.7	1037.7	1037.7
37.5°	986.1	987.3	988.5	989.0	988.9	988.8	988.7	988.5
40°	952.8	954.0	955.2	956.1	956.7	957.3	957.9	958.5
42.5°	922.1	923.6	925.0	925.7	925.9	926.0	926.2	926.3
45°	872.7	874.8	876.8	878.0	878.4	878.7	879.0	879.3
47.5°	821.7	824.8	827.9	829.7	830.3	831.0	831.6	832.3
50°	787.8	791.1	794.4	796.5	797.4	798.3	799.2	800.0
52.5°	754.0	757.5	761.0	763.1	763.7	764.4	765.1	765.7
55°	700.6	703.9	707.1	709.4	710.6	711.8	713.0	714.2
57.5°	647.8	651.6	655.4	657.7	658.6	659.4	660.4	661.2
60°	611.7	616.1	620.6	623.3	624.2	625.1	626.0	626.9
62.5°	575.1	580.0	585.0	588.0	589.1	590.3	591.4	592.5
65°	520.4	524.9	529.3	532.2	533.4	534.6	535.8	536.9
67.5°	464.3	469.8	475.2	478.6	480.2	481.7	483.4	484.9
70°	426.1	431.8	437.5	441.2	443.0	444.8	446.6	448.3
72.5°	390.5	396.7	402.9	406.6	407.9	409.2	410.5	411.8
75°	336.8	342.8	348.7	352.5	354.0	355.4	357.0	358.4
77.5°	282.9	289.5	296.1	300.0	301.2	302.3	303.5	304.7
80°	250.7	257.3	263.9	267.8	268.9	270.1	271.3	272.5
82.5°	220.2	226.5	232.8	237.0	239.2	241.3	243.5	245.6
85°	178.2	184.8	191.4	195.9	198.2	200.6	203.0	205.3
87.5°	147.8	154.9	162.0	166.8	168.9	171.0	173.2	175.4
90°	141.8	149.6	157.6	164.0	166.1	168.2	171.3	173.3
92.5°	296.3	254.3	229.1	218.7	207.9	207.7	208.4	208.8
95°	830.4	684.9	568.4	488.7	419.8	391.8	386.0	372.0
97.5°	1175.1	1074.7	961.1	848.4	788.6	734.6	707.7	696.9
100°	1329.0	1286.2	1189.5	1089.4	1022.2	951.9	916.7	902.5
102.5°	1377.9	1414.1	1370.7	1304.2	1232.1	1182.7	1144.3	1134.0
105°	1338.3	1481.4	1531.4	1524.3	1494.4	1463.5	1445.6	1435.6
107.5°	1218.9	1407.7	1526.6	1582.8	1600.8	1602.5	1597.7	1591.6
110°	1130.9	1326.6	1473.3	1562.3	1609.4	1630.5	1639.6	1641.7





TEST NUMBER: P333336-935

CATALOG NUMBER: S125DIP-S1270D1205U935-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1060.5	1246.4	1394.5	1498.5	1566.4	1601.1	1620.7	1629.9
115°	971.5	1132.0	1274.4	1387.0	1466.8	1516.7	1546.4	1561.3
117.5°	911.2	1050.0	1173.1	1276.7	1356.8	1408.4	1438.2	1448.3
120°	878.1	1003.2	1118.4	1209.9	1285.6	1335.5	1364.3	1374.1
122.5°	851.7	967.9	1070.7	1156.4	1224.3	1270.1	1298.9	1307.9
125°	813.7	920.6	1012.4	1087.5	1145.0	1187.6	1211.1	1222.6
127.5°	774.9	874.5	960.2	1030.7	1083.2	1121.2	1143.8	1149.9
130°	751.1	843.3	925.6	993.4	1045.0	1079.4	1101.0	1108.5
132.5°	726.9	813.5	888.5	953.8	1005.0	1039.3	1059.0	1067.0
135°	693.8	766.7	834.7	894.3	939.9	974.3	993.9	1001.3
137.5°	666.2	725.6	782.3	833.1	873.7	904.9	922.7	930.5
140°	650.6	700.9	750.1	794.4	832.6	859.8	876.0	882.2
142.5°	637.1	679.7	722.0	760.5	793.1	816.3	831.7	837.1
145°	620.3	652.7	685.3	713.6	738.8	757.0	769.2	774.4
147.5°	605.5	631.1	655.4	676.3	695.9	710.0	717.0	719.3
150°	597.3	619.3	638.3	656.4	671.8	684.1	688.4	689.7
152.5°	589.3	608.9	626.3	640.3	653.0	662.6	666.7	667.8
155°	577.2	593.2	607.3	618.3	628.3	635.2	638.3	639.3
157.5°	565.2	578.4	589.3	597.9	605.6	611.5	614.2	614.1
160°	557.2	567.2	577.2	584.3	591.2	596.2	598.3	597.3
162.5°	548.5	557.7	566.0	572.2	577.6	581.9	582.3	582.0
165°	536.2	543.2	549.2	554.2	558.3	560.3	560.3	560.3
167.5°	524.6	529.3	533.8	537.4	539.4	541.2	540.4	540.3
170°	518.2	521.2	524.3	526.2	528.2	529.3	529.3	528.2
172.5°	511.0	514.0	516.3	517.5	517.8	519.6	518.1	517.0
175°	503.3	503.3	505.2	505.2	505.2	506.3	504.2	503.3
177.5°	497.8	498.6	498.6	498.6	497.8	498.6	496.2	496.2
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2

(END OF REPORT)