

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: P333318-940

Luminaire Tested: **S125DIP-S1270D810U940-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333318-940
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-S1270D810U940-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6987.6 lumens
Efficiency: N/A
Efficacy: 115.1 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

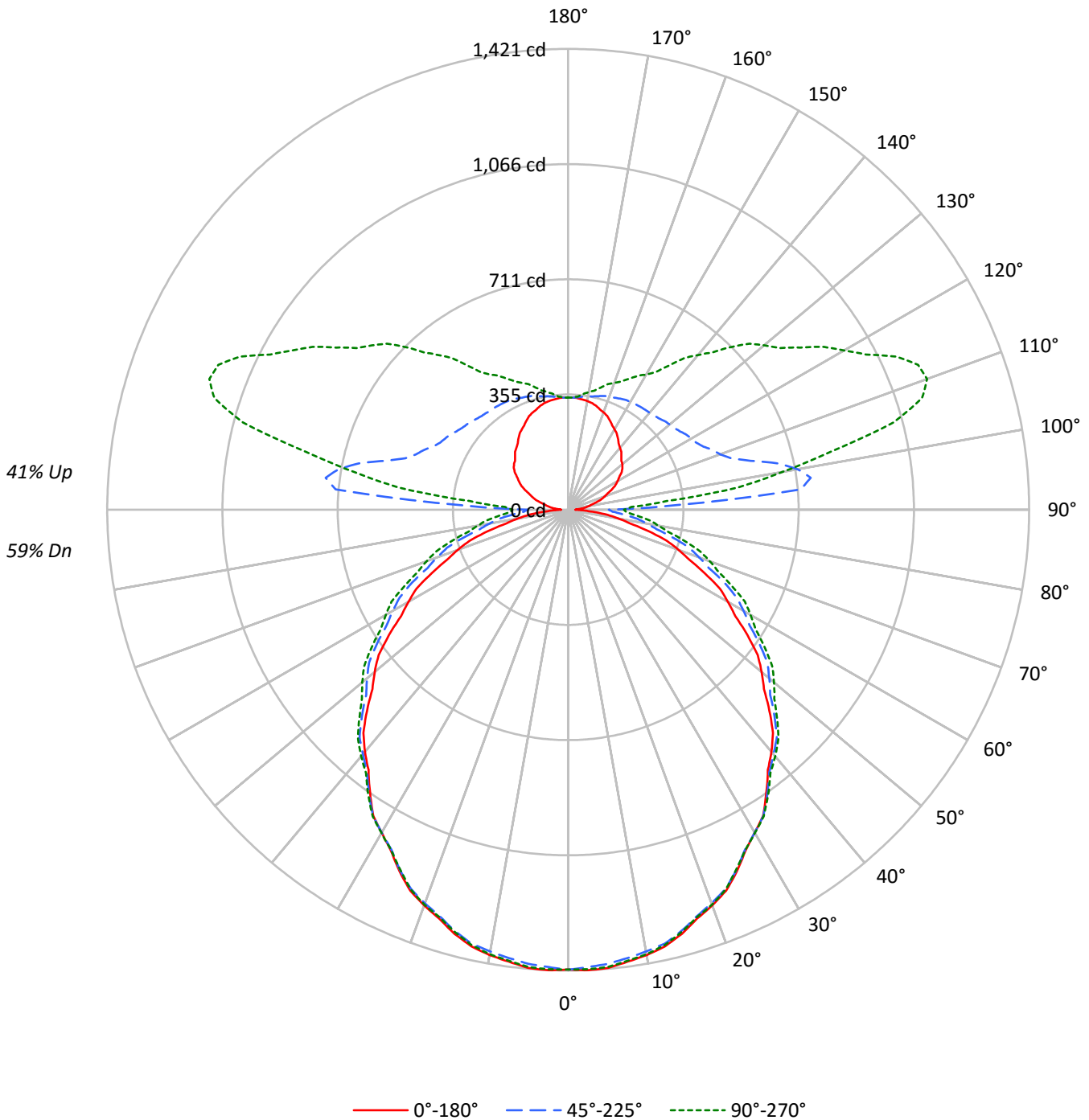
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333318-940

CATALOG NUMBER: S125DIP-S1270D810U940-4F0-1E-UDD-D4

Luminous Intensity Polar Plot





TEST NUMBER: P333318-940

CATALOG NUMBER: S125DIP-S1270D810U940-4F0-1E-UDD-D4

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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	56	54	53	48
2	90	82	75	70	83	76	71	66	66	62	58	57	54	51	48	46	44	39
3	82	72	64	58	76	67	60	54	58	53	48	50	46	42	43	39	37	33
4	75	63	55	49	69	59	52	46	52	46	41	45	40	36	38	34	32	28
5	68	56	48	41	63	53	45	39	46	40	35	40	35	31	34	30	27	24
6	63	50	42	36	59	47	40	34	41	35	31	36	31	27	31	27	24	21
7	58	46	37	31	54	43	35	30	38	31	27	33	28	24	28	24	21	19
8	54	41	33	28	50	39	32	27	34	28	24	30	25	21	26	22	19	17
9	50	38	30	25	47	36	29	24	31	26	21	28	23	19	24	20	17	15
10	47	35	27	22	44	33	26	21	29	23	19	25	21	17	22	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9159	9159	9159
5°	9177	8990	9018
10°	9112	8829	8816
15°	9004	8637	8558
20°	8857	8400	8301
25°	8683	8145	7984
30°	8473	7865	7696
35°	8276	7608	7432
40°	8075	7338	7167
45°	7849	7106	6931
50°	7633	6854	6723
55°	7373	6618	6478
60°	7089	6346	6229
65°	6792	6064	5947
70°	6457	5677	5658
75°	5923	5304	5304
80°	5225	4854	4918
85°	4578	4550	4797



TEST NUMBER: P333318-940

CATALOG NUMBER: S125DIP-S1270D810U940-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.1	1.9
10°-20°	380.7	5.4
20°-30°	566.1	8.1
30°-40°	670.6	9.6
40°-50°	693.3	9.9
50°-60°	638.7	9.1
60°-70°	516.3	7.4
70°-80°	345.7	4.9
80°-90°	181.2	2.6
90°-100°	351.3	5.0
100°-110°	613.0	8.8
110°-120°	555.4	7.9
120°-130°	438.1	6.3
130°-140°	341.2	4.9
140°-150°	250.7	3.6
150°-160°	174.7	2.5
160°-170°	103.0	1.5
170°-180°	33.5	0.5
0°-30°	1080.9	15.5
0°-40°	1751.4	25.1
0°-60°	3083.4	44.1
0°-90°	4126.6	59.1
90°-120°	1519.7	21.7
90°-150°	2549.8	36.5
90°-180°	2861.0	40.9
0°-180°	6987.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1418	1415	1406	1416	1415	134
15°	1354	1355	1346	1353	1348	381
25°	1230	1234	1226	1231	1225	566
35°	1065	1074	1070	1074	1075	666
45°	877	892	900	909	911	677
55°	674	696	719	734	740	603
65°	464	496	530	550	556	461
75°	256	292	336	363	371	271
85°	76	123	171	201	213	81
90°	23	73	125	159	172	16
95°	41	123	719	411	306	39
105°	91	146	582	1099	1038	96
115°	149	189	460	953	1117	147
125°	201	234	421	749	872	178
135°	232	277	397	612	710	180
145°	268	305	388	490	544	167
155°	304	327	378	427	446	140
165°	332	341	363	385	390	93
175°	345	345	348	352	351	33
180°	346	346	346	346	346	



TEST NUMBER: P333318-940

CATALOG NUMBER: S125DIP-S1270D810U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1421.4	1420.9	1420.4	1420.0	1419.4	1418.4	1416.6	1414.9	1413.2	1411.4	1413.2
5°	1418.1	1417.5	1416.8	1416.2	1415.6	1414.3	1412.0	1409.9	1407.7	1405.6	1408.0
7.5°	1405.6	1405.3	1405.1	1404.8	1404.6	1403.4	1401.1	1398.9	1396.7	1394.5	1396.6
10°	1394.5	1394.5	1394.5	1394.5	1394.5	1393.2	1390.7	1388.3	1385.8	1383.3	1385.5
12.5°	1378.9	1379.1	1379.4	1379.7	1379.8	1379.0	1377.1	1375.0	1373.1	1371.1	1372.8
15°	1354.2	1354.4	1354.8	1355.0	1355.4	1354.4	1352.3	1350.1	1348.0	1345.8	1347.6
17.5°	1321.9	1322.5	1323.1	1323.7	1324.4	1323.6	1321.4	1319.3	1317.1	1314.9	1316.3
20°	1298.5	1299.1	1299.8	1300.4	1301.0	1300.2	1298.1	1295.9	1293.7	1291.6	1292.5
22.5°	1271.8	1272.9	1274.1	1275.1	1276.3	1275.6	1273.2	1270.8	1268.4	1266.0	1267.1
25°	1230.4	1231.4	1232.3	1233.1	1234.1	1233.7	1231.8	1229.9	1228.1	1226.2	1227.4
27.5°	1184.3	1185.6	1187.0	1188.3	1189.7	1189.3	1187.2	1185.1	1183.0	1180.9	1181.8
30°	1149.8	1151.6	1153.4	1155.3	1157.2	1157.2	1155.3	1153.4	1151.6	1149.8	1150.4
32.5°	1118.7	1120.3	1121.9	1123.5	1125.1	1125.2	1123.8	1122.5	1121.1	1119.7	1120.3
35°	1065.0	1067.1	1069.3	1071.5	1073.6	1074.2	1073.3	1072.4	1071.5	1070.5	1071.5
37.5°	1011.3	1013.3	1015.2	1017.3	1019.2	1020.0	1019.8	1019.4	1019.1	1018.8	1020.0
40°	974.6	977.0	979.5	982.0	984.4	985.5	985.3	984.9	984.6	984.4	985.5
42.5°	934.5	937.7	940.9	944.1	947.4	949.3	950.0	950.7	951.4	952.1	953.5
45°	877.3	880.7	884.0	887.4	890.8	893.3	894.9	896.4	898.0	899.5	901.7
47.5°	818.6	821.7	824.9	828.0	831.2	834.1	836.8	839.5	842.0	844.7	847.9
50°	778.6	781.9	785.3	788.7	792.2	795.6	799.0	802.4	805.7	809.1	812.5
52.5°	736.3	740.5	744.6	748.7	752.9	757.0	761.2	765.3	769.4	773.6	777.2
55°	674.3	679.2	684.2	689.1	694.0	699.0	703.9	708.9	713.8	718.8	722.2
57.5°	610.9	616.8	622.8	628.7	634.6	640.4	646.1	651.8	657.5	663.2	667.1
60°	568.6	574.8	580.9	587.2	593.3	599.5	605.7	611.9	618.0	624.2	628.8
62.5°	527.4	533.7	539.8	546.0	552.1	558.7	565.3	571.9	578.6	585.3	590.4
65°	464.3	471.4	478.6	485.7	492.8	500.1	507.5	514.9	522.3	529.7	534.3
67.5°	404.8	411.7	418.6	425.4	432.3	439.5	447.0	454.6	462.1	469.7	475.3
70°	361.5	368.5	375.7	382.8	389.9	397.4	405.5	413.6	421.6	429.6	435.5
72.5°	319.2	326.5	333.9	341.3	348.7	356.7	365.4	374.3	383.0	391.8	398.1
75°	255.8	263.9	271.9	279.9	287.9	296.9	306.7	316.6	326.5	336.4	342.6
77.5°	194.9	204.2	213.5	222.7	232.0	241.4	250.9	260.4	269.9	279.5	286.2
80°	157.1	166.4	175.7	184.9	194.2	204.0	214.5	225.1	235.6	246.1	252.9
82.5°	122.6	132.4	142.1	151.9	161.7	171.9	182.7	193.4	204.2	214.9	221.5
85°	76.5	86.7	96.8	107.1	117.3	127.8	138.6	149.4	160.2	171.0	177.8
87.5°	43.5	53.5	63.7	73.8	84.0	94.5	105.1	115.9	126.6	137.3	144.6
90°	22.9	33.5	44.8	56.1	67.3	78.9	90.2	102.1	113.2	125.2	133.0
92.5°	28.5	39.5	54.5	72.3	93.5	123.7	172.5	247.2	327.2	334.3	298.4
95°	41.1	49.8	63.4	79.1	102.5	143.1	228.3	392.2	595.0	719.3	712.7
97.5°	54.6	62.7	73.8	88.7	109.8	141.0	200.5	323.1	534.5	754.2	865.9
100°	64.1	72.0	81.2	95.4	115.1	144.3	194.6	295.1	480.7	718.5	899.4
102.5°	74.7	81.5	89.8	104.0	122.1	150.3	195.9	281.7	439.7	661.1	871.2
105°	91.3	96.2	104.7	116.5	132.7	159.3	199.3	270.5	396.3	581.9	788.3
107.5°	107.5	113.1	120.6	130.5	146.3	170.4	209.0	271.1	375.0	526.4	705.1
110°	119.2	124.3	130.8	140.8	155.0	179.2	216.5	273.2	366.2	499.0	656.9



TEST NUMBER: P333318-940

CATALOG NUMBER: S125DIP-S1270D810U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	132.1	136.3	141.6	150.8	164.3	187.5	223.4	277.1	362.0	481.2	619.8
115°	149.2	152.8	157.0	165.4	178.1	200.5	234.4	282.9	357.8	460.0	577.8
117.5°	164.5	168.0	171.7	179.4	192.7	214.0	246.0	290.4	356.2	446.2	549.7
120°	175.7	178.7	182.4	189.6	202.4	223.8	255.4	296.0	356.7	438.5	533.6
122.5°	186.3	188.2	190.9	197.6	211.0	232.1	263.3	302.0	356.4	431.1	518.9
125°	200.8	201.9	205.0	211.0	223.9	245.0	274.2	310.4	357.0	421.1	498.5
127.5°	211.0	212.8	216.9	224.5	238.4	258.9	286.1	318.7	359.1	413.0	479.2
130°	218.2	220.0	225.2	234.0	248.3	268.5	294.4	325.3	361.0	408.5	467.3
132.5°	222.7	225.2	231.9	242.0	257.2	277.0	301.8	330.0	362.5	404.0	456.1
135°	231.5	234.0	242.0	252.9	267.2	287.0	310.7	335.9	363.8	397.3	441.1
137.5°	242.6	244.5	252.0	263.0	277.1	296.9	317.5	340.6	366.2	393.2	428.6
140°	248.2	250.3	258.7	269.8	283.0	302.0	322.5	343.8	366.4	390.5	421.7
142.5°	256.0	257.3	264.8	275.8	288.2	305.9	325.0	344.8	366.1	388.8	416.3
145°	267.7	268.9	275.4	284.9	297.2	313.1	331.2	348.6	367.5	387.6	410.1
147.5°	278.6	279.5	285.4	294.5	305.4	319.5	335.4	351.2	368.1	385.8	404.7
150°	285.9	287.2	292.1	301.2	310.9	322.8	338.1	352.8	368.1	384.1	400.9
152.5°	293.6	294.5	298.8	306.7	316.0	326.7	340.9	353.9	367.6	381.9	397.0
155°	304.0	304.0	308.2	315.1	322.1	331.9	343.8	354.9	366.0	377.9	390.5
157.5°	313.2	313.1	316.4	322.4	328.5	335.9	346.1	355.6	364.3	373.7	384.3
160°	319.3	318.6	321.5	326.3	331.9	338.1	347.2	355.6	362.6	371.0	379.3
162.5°	324.3	323.7	326.5	330.7	335.2	340.4	348.3	355.0	360.9	367.6	374.8
165°	331.9	330.5	332.6	336.1	338.9	343.0	348.6	354.2	358.4	362.6	368.1
167.5°	336.9	336.2	337.4	339.4	341.3	344.0	348.6	352.5	354.5	357.7	361.6
170°	340.3	339.6	340.3	341.6	343.0	345.1	348.6	351.4	352.8	354.9	357.7
172.5°	342.5	341.3	341.9	343.3	344.1	345.1	348.0	350.3	350.5	351.5	353.7
175°	345.1	343.8	344.5	345.1	345.1	345.1	347.2	348.6	347.9	347.9	348.6
177.5°	346.3	345.3	345.3	345.8	345.3	345.3	346.3	347.0	345.8	345.8	346.3
180°	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8



TEST NUMBER: P333318-940

CATALOG NUMBER: S125DIP-S1270D810U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1414.9	1416.6	1418.4	1419.1	1418.8	1418.6	1418.4	1418.1
5°	1410.5	1413.0	1415.5	1416.6	1416.2	1415.9	1415.6	1415.3
7.5°	1398.7	1401.0	1403.1	1404.0	1403.7	1403.4	1403.1	1402.8
10°	1387.7	1389.8	1392.0	1392.9	1392.6	1392.3	1392.0	1391.7
12.5°	1374.4	1376.1	1377.8	1378.2	1377.4	1376.6	1375.8	1375.0
15°	1349.5	1351.4	1353.2	1353.5	1352.3	1351.0	1349.8	1348.5
17.5°	1317.8	1319.2	1320.6	1321.0	1320.2	1319.5	1318.8	1317.9
20°	1293.4	1294.3	1295.3	1295.7	1295.7	1295.7	1295.7	1295.7
22.5°	1268.4	1269.5	1270.7	1270.9	1270.2	1269.4	1268.6	1267.9
25°	1228.7	1229.9	1231.2	1231.0	1229.5	1227.9	1226.4	1224.9
27.5°	1182.7	1183.5	1184.4	1184.5	1183.9	1183.4	1182.9	1182.3
30°	1151.0	1151.6	1152.3	1152.4	1152.1	1151.7	1151.5	1151.1
32.5°	1121.0	1121.6	1122.2	1122.4	1122.0	1121.8	1121.4	1121.1
35°	1072.4	1073.3	1074.2	1074.7	1074.7	1074.7	1074.7	1074.7
37.5°	1021.3	1022.5	1023.8	1024.3	1024.1	1024.0	1024.0	1023.8
40°	986.8	988.0	989.3	990.2	990.8	991.4	992.0	992.7
42.5°	955.0	956.5	958.0	958.8	958.9	959.0	959.2	959.3
45°	903.8	906.0	908.1	909.4	909.7	910.0	910.3	910.6
47.5°	851.0	854.2	857.4	859.3	860.0	860.6	861.3	862.0
50°	815.9	819.3	822.8	824.9	825.8	826.8	827.7	828.6
52.5°	780.9	784.5	788.1	790.3	790.9	791.7	792.4	793.0
55°	725.6	729.0	732.4	734.7	735.9	737.2	738.4	739.7
57.5°	670.9	674.8	678.8	681.2	682.1	683.0	683.9	684.8
60°	633.5	638.1	642.7	645.5	646.5	647.4	648.4	649.3
62.5°	595.6	600.7	605.8	608.9	610.1	611.4	612.5	613.7
65°	539.0	543.6	548.2	551.2	552.4	553.7	554.9	556.1
67.5°	480.9	486.5	492.1	495.7	497.3	498.9	500.6	502.2
70°	441.3	447.2	453.1	456.9	458.8	460.7	462.5	464.3
72.5°	404.5	410.9	417.2	421.1	422.5	423.8	425.2	426.5
75°	348.8	355.0	361.1	365.1	366.6	368.1	369.7	371.2
77.5°	293.0	299.8	306.7	310.7	311.9	313.1	314.3	315.6
80°	259.7	266.4	273.3	277.3	278.5	279.7	281.0	282.2
82.5°	228.0	234.6	241.1	245.5	247.7	249.9	252.2	254.4
85°	184.6	191.4	198.2	202.9	205.3	207.8	210.3	212.7
87.5°	151.9	159.1	166.3	171.3	173.4	175.6	177.9	180.0
90°	140.8	148.6	156.4	162.4	164.5	166.7	169.6	171.7
92.5°	246.8	219.8	204.5	198.7	191.9	192.4	193.6	194.7
95°	616.4	517.2	438.3	384.1	336.8	318.1	314.7	305.7
97.5°	854.1	786.2	709.3	632.0	591.1	554.2	536.0	529.2
100°	959.6	931.8	866.6	798.2	752.0	703.6	679.7	670.4
102.5°	991.9	1019.2	991.0	946.0	896.4	862.6	836.4	829.9
105°	961.7	1063.5	1100.3	1096.8	1076.7	1055.8	1044.0	1037.9
107.5°	876.3	1009.9	1094.8	1135.1	1148.4	1150.2	1147.5	1143.8
110°	813.3	951.7	1055.9	1119.2	1152.7	1168.1	1175.2	1177.3



TEST NUMBER: P333318-940

CATALOG NUMBER: S125DIP-S1270D810U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	762.7	894.0	999.2	1072.9	1120.9	1145.8	1160.1	1167.2
115°	698.4	812.1	913.1	992.8	1049.1	1084.4	1105.8	1116.7
117.5°	654.1	752.4	840.0	913.4	969.8	1006.6	1028.1	1035.7
120°	629.5	718.5	800.4	865.3	918.7	954.0	974.7	982.1
122.5°	609.5	692.1	765.4	826.3	874.1	906.7	927.4	934.2
125°	580.9	656.8	722.5	775.9	816.5	846.7	863.5	872.0
127.5°	551.3	622.3	683.5	733.7	770.9	797.9	814.2	819.0
130°	533.6	599.2	658.0	706.2	742.6	767.2	782.7	788.5
132.5°	515.2	576.9	630.7	677.2	713.3	737.6	751.7	757.8
135°	489.8	541.9	590.6	633.0	665.3	689.8	703.9	709.6
137.5°	468.7	511.2	552.0	588.2	616.9	639.0	651.8	657.6
140°	456.5	492.7	528.2	559.7	586.7	606.1	617.9	622.6
142.5°	446.0	476.7	507.2	534.7	557.8	574.4	585.5	589.7
145°	433.3	456.5	479.6	499.8	517.8	530.8	539.8	543.8
147.5°	422.2	440.3	457.4	472.2	486.0	496.0	501.1	502.8
150°	416.3	431.6	444.8	457.5	468.3	477.0	480.1	481.1
152.5°	410.6	424.4	436.5	446.2	455.1	461.8	464.7	465.5
155°	402.3	413.5	423.2	430.9	437.8	442.7	444.8	445.5
157.5°	394.0	403.1	410.6	416.7	422.1	426.1	428.1	427.9
160°	388.3	395.3	402.3	407.2	412.1	415.5	417.0	416.3
162.5°	382.2	388.6	394.5	398.8	402.6	405.5	405.8	405.6
165°	373.7	378.6	382.8	386.3	389.1	390.5	390.5	390.5
167.5°	365.6	368.8	372.0	374.5	375.9	377.2	376.7	376.5
170°	361.1	363.3	365.3	366.8	368.1	368.8	368.8	368.1
172.5°	356.1	358.2	359.8	360.6	360.9	362.1	361.1	360.3
175°	350.7	350.7	352.1	352.1	352.1	352.8	351.4	350.7
177.5°	347.0	347.5	347.5	347.5	347.0	347.5	345.8	345.8
180°	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8

(END OF REPORT)