

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: P333318-935

Luminaire Tested: **S125DIP-S1270D810U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333318-935
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-S1270D810U935-4F0-1E-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: 6746.9 lumens
Efficiency: N/A
Efficacy: 111.2 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

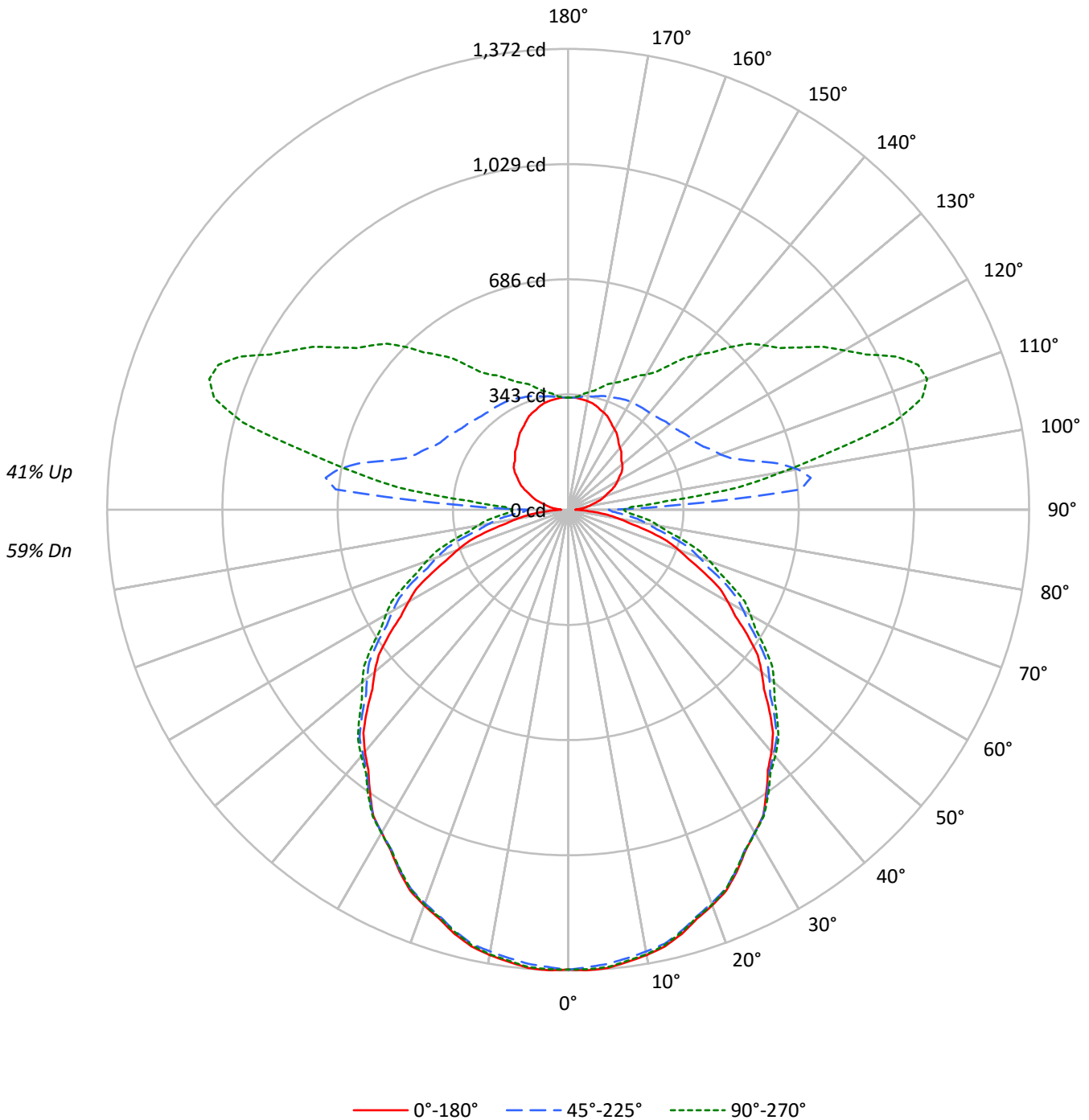
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	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	1.9
10°-20°	367.5	5.4
20°-30°	546.6	8.1
30°-40°	647.5	9.6
40°-50°	669.4	9.9
50°-60°	616.7	9.1
60°-70°	498.5	7.4
70°-80°	333.8	4.9
80°-90°	175.0	2.6
90°-100°	339.2	5.0
100°-110°	591.9	8.8
110°-120°	536.3	7.9
120°-130°	423.0	6.3
130°-140°	329.5	4.9
140°-150°	242.1	3.6
150°-160°	168.7	2.5
160°-170°	99.4	1.5
170°-180°	32.3	0.5
0°-30°	1043.6	15.5
0°-40°	1691.1	25.1
0°-60°	2977.2	44.1
0°-90°	3984.5	59.1
90°-120°	1467.4	21.7
90°-150°	2461.9	36.5
90°-180°	2762.0	40.9
0°-180°	6746.9	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	71	121	154	166	16
95°	40	119	694	397	295	37
105°	88	141	562	1061	1002	93
115°	144	183	444	920	1078	142
125°	194	226	407	723	842	172
135°	224	268	384	591	685	174
145°	258	295	374	473	525	162
155°	294	316	365	412	430	135
165°	320	329	350	371	377	90
175°	333	333	336	340	339	32
180°	334	334	334	334	334	



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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°	42.0	51.7	61.5	71.3	81.1	91.3	101.5	111.9	122.3	132.6	139.7
90°	22.1	32.4	43.2	54.2	65.0	76.2	87.0	98.6	109.3	120.9	128.4
92.5°	27.6	38.1	52.6	69.8	90.2	119.4	166.6	238.7	315.9	322.8	288.1
95°	39.7	48.1	61.2	76.4	98.9	138.2	220.4	378.7	574.5	694.5	688.2
97.5°	52.7	60.5	71.3	85.7	106.0	136.1	193.6	311.9	516.1	728.2	836.0
100°	61.9	69.5	78.4	92.1	111.2	139.3	187.9	284.9	464.2	693.8	868.4
102.5°	72.2	78.7	86.7	100.4	117.9	145.1	189.2	272.0	424.6	638.3	841.2
105°	88.2	92.9	101.1	112.5	128.1	153.9	192.4	261.2	382.6	561.9	761.1
107.5°	103.8	109.2	116.5	126.1	141.3	164.5	201.8	261.7	362.1	508.2	680.8
110°	115.1	120.0	126.3	136.0	149.6	173.1	209.1	263.8	353.6	481.8	634.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	127.5	131.6	136.7	145.6	158.6	181.1	215.7	267.6	349.6	464.6	598.5
115°	144.0	147.5	151.6	159.7	171.9	193.6	226.4	273.1	345.5	444.2	557.9
117.5°	158.9	162.2	165.7	173.2	186.1	206.6	237.5	280.4	344.0	430.8	530.8
120°	169.6	172.5	176.2	183.0	195.4	216.1	246.6	285.8	344.4	423.4	515.2
122.5°	179.9	181.8	184.3	190.8	203.7	224.1	254.3	291.6	344.1	416.3	501.0
125°	193.9	194.9	197.9	203.7	216.2	236.6	264.8	299.7	344.7	406.6	481.3
127.5°	203.7	205.4	209.4	216.8	230.1	249.9	276.2	307.7	346.7	398.7	462.7
130°	210.7	212.4	217.5	225.9	239.8	259.2	284.3	314.1	348.5	394.4	451.2
132.5°	215.0	217.5	223.9	233.7	248.3	267.4	291.4	318.7	350.0	390.1	440.4
135°	223.5	225.9	233.7	244.2	258.0	277.1	300.0	324.3	351.3	383.7	425.9
137.5°	234.3	236.1	243.3	253.9	267.5	286.6	306.6	328.9	353.6	379.7	413.9
140°	239.6	241.7	249.8	260.5	273.3	291.6	311.4	332.0	353.8	377.0	407.2
142.5°	247.2	248.4	255.7	266.3	278.3	295.3	313.8	332.9	353.5	375.4	401.9
145°	258.5	259.6	266.0	275.1	287.0	302.3	319.8	336.6	354.8	374.3	396.0
147.5°	269.0	269.8	275.6	284.4	294.9	308.5	323.8	339.1	355.4	372.6	390.8
150°	276.0	277.3	282.1	290.8	300.2	311.7	326.5	340.6	355.4	370.9	387.1
152.5°	283.5	284.4	288.5	296.2	305.1	315.5	329.2	341.7	354.9	368.8	383.3
155°	293.5	293.5	297.6	304.3	311.0	320.5	331.9	342.7	353.4	364.9	377.0
157.5°	302.4	302.3	305.5	311.3	317.2	324.3	334.2	343.4	351.7	360.8	371.1
160°	308.3	307.6	310.4	315.0	320.5	326.5	335.3	343.4	350.1	358.2	366.3
162.5°	313.1	312.5	315.2	319.3	323.6	328.6	336.3	342.8	348.4	354.9	361.9
165°	320.5	319.1	321.2	324.5	327.2	331.2	336.6	342.0	346.0	350.1	355.4
167.5°	325.3	324.6	325.8	327.7	329.6	332.2	336.6	340.4	342.2	345.3	349.1
170°	328.6	327.9	328.6	329.8	331.2	333.2	336.6	339.3	340.6	342.7	345.3
172.5°	330.7	329.5	330.1	331.5	332.3	333.2	336.0	338.2	338.5	339.4	341.6
175°	333.2	331.9	332.6	333.2	333.2	333.2	335.3	336.6	336.0	336.0	336.6
177.5°	334.4	333.4	333.4	333.9	333.4	333.4	334.4	335.0	333.9	333.9	334.4
180°	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9



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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°	146.6	153.6	160.6	165.4	167.5	169.5	171.8	173.8
90°	136.0	143.4	151.0	156.8	158.9	161.0	163.8	165.8
92.5°	238.3	212.2	197.4	191.8	185.3	185.8	186.9	188.0
95°	595.1	499.4	423.2	370.9	325.2	307.1	303.8	295.2
97.5°	824.7	759.1	684.8	610.3	570.8	535.1	517.5	511.0
100°	926.5	899.7	836.7	770.7	726.1	679.3	656.3	647.3
102.5°	957.8	984.1	956.9	913.4	865.6	832.8	807.6	801.3
105°	928.6	1026.8	1062.4	1059.0	1039.6	1019.4	1008.1	1002.1
107.5°	846.1	975.1	1057.0	1096.1	1108.9	1110.6	1107.9	1104.4
110°	785.3	918.9	1019.5	1080.6	1113.0	1127.9	1134.7	1136.8



TEST NUMBER: P333318-935

CATALOG NUMBER: S125DIP-S1270D810U935-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	736.4	863.2	964.8	1036.0	1082.3	1106.4	1120.2	1127.0
115°	674.3	784.1	881.7	958.6	1013.0	1047.1	1067.7	1078.2
117.5°	631.5	726.5	811.1	881.9	936.4	971.9	992.6	1000.1
120°	607.9	693.7	772.8	835.5	887.1	921.2	941.2	948.3
122.5°	588.5	668.2	739.0	797.8	844.0	875.5	895.4	902.1
125°	560.9	634.2	697.6	749.2	788.4	817.5	833.8	842.0
127.5°	532.4	600.9	660.0	708.4	744.3	770.4	786.2	790.8
130°	515.2	578.6	635.3	681.9	717.0	740.8	755.7	761.3
132.5°	497.5	557.1	609.0	653.8	688.7	712.2	725.8	731.7
135°	472.9	523.2	570.2	611.2	642.4	666.1	679.7	685.2
137.5°	452.5	493.6	533.0	567.9	595.6	617.0	629.4	635.0
140°	440.7	475.7	510.0	540.4	566.5	585.2	596.6	601.2
142.5°	430.7	460.3	489.7	516.3	538.6	554.6	565.3	569.4
145°	418.4	440.7	463.0	482.6	500.0	512.6	521.2	525.0
147.5°	407.7	425.2	441.7	455.9	469.2	478.9	483.8	485.5
150°	401.9	416.7	429.5	441.8	452.2	460.5	463.6	464.5
152.5°	396.5	409.7	421.5	430.8	439.5	445.9	448.7	449.4
155°	388.5	399.2	408.6	416.0	422.8	427.5	429.5	430.2
157.5°	380.4	389.3	396.5	402.3	407.6	411.5	413.4	413.2
160°	375.0	381.7	388.5	393.1	397.9	401.2	402.6	401.9
162.5°	369.0	375.2	380.9	385.0	388.7	391.5	391.8	391.7
165°	360.8	365.6	369.6	373.0	375.7	377.0	377.0	377.0
167.5°	353.0	356.1	359.2	361.6	363.0	364.2	363.7	363.5
170°	348.7	350.8	352.8	354.1	355.4	356.1	356.1	355.4
172.5°	343.9	345.9	347.4	348.2	348.4	349.7	348.6	347.9
175°	338.6	338.6	340.0	340.0	340.0	340.6	339.3	338.6
177.5°	335.0	335.5	335.5	335.5	335.0	335.5	333.9	333.9
180°	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9

(END OF REPORT)