

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: P333309-935

Luminaire Tested: **S125DIP-S1270D590U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333309-935
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-S1270D590U935-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6069.2 lumens
Efficiency: N/A
Efficacy: 110.1 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: Semi-Direct

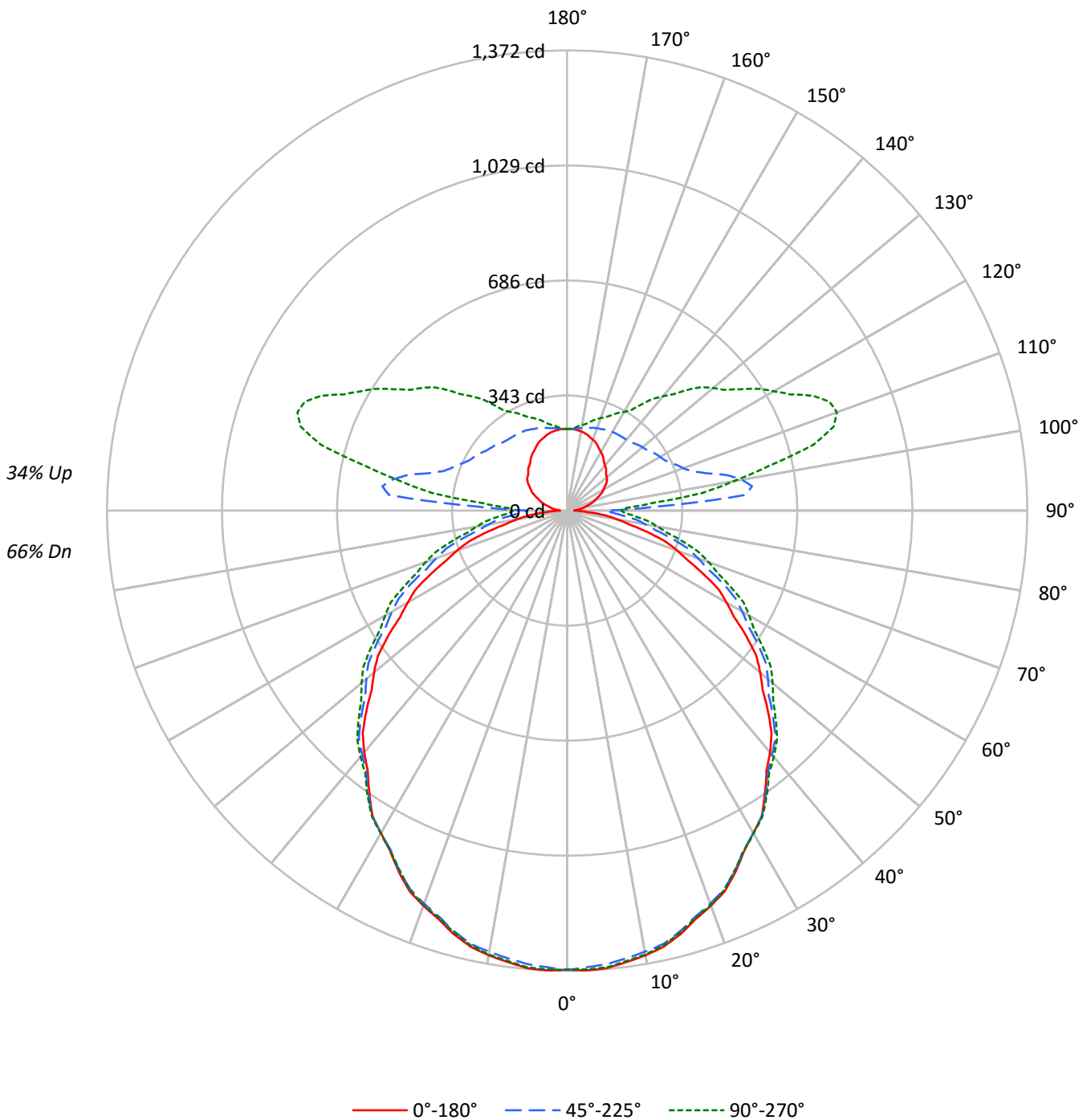
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333309-935

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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	92	92	92	81	81	81	70	70	70	66
1	100	95	91	87	94	90	86	83	79	76	74	70	67	65	61	59	58	53
2	91	83	76	70	85	78	72	67	69	64	60	61	57	54	53	50	48	44
3	83	73	65	58	77	68	61	56	61	55	50	53	49	45	47	43	40	37
4	76	64	56	49	71	60	53	47	54	48	43	47	42	38	41	38	34	31
5	69	57	48	42	65	54	46	40	48	42	37	42	37	33	37	33	30	27
6	64	51	43	36	60	48	41	35	43	37	32	38	33	29	34	30	26	24
7	59	46	38	32	55	44	36	31	39	33	28	35	30	26	31	27	23	21
8	55	42	34	28	52	40	32	27	36	30	25	32	27	23	28	24	21	19
9	51	38	31	25	48	36	29	24	33	27	22	29	24	21	26	22	19	17
10	48	35	28	23	45	34	27	22	30	24	20	27	22	19	24	20	17	15

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



TEST NUMBER: P333309-935

CATALOG NUMBER: S125DIP-S1270D590U935-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.5	2.1
10°-20°	367.5	6.1
20°-30°	546.6	9.0
30°-40°	647.5	10.7
40°-50°	669.4	11.0
50°-60°	616.7	10.2
60°-70°	498.5	8.2
70°-80°	333.8	5.5
80°-90°	174.5	2.9
90°-100°	273.7	4.5
100°-110°	451.2	7.4
110°-120°	404.2	6.7
120°-130°	316.0	5.2
130°-140°	243.6	4.0
140°-150°	177.3	2.9
150°-160°	123.1	2.0
160°-170°	72.5	1.2
170°-180°	23.6	0.4
0°-30°	1043.6	17.2
0°-40°	1691.1	27.9
0°-60°	2977.2	49.1
0°-90°	3984.0	65.6
90°-120°	1129.2	18.6
90°-150°	1866.0	30.7
90°-180°	2085.0	34.4
0°-180°	6069.2	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	69	118	150	162	15
95°	34	101	533	324	252	31
105°	68	112	430	801	761	71
115°	107	138	338	692	810	106
125°	143	167	305	542	630	127
135°	164	196	283	438	509	127
145°	189	215	273	347	386	118
155°	214	230	266	301	314	99
165°	234	240	255	271	275	66
175°	243	243	245	248	247	23
180°	244	244	244	244	244	



TEST NUMBER: P333309-935

CATALOG NUMBER: S125DIP-S1270D590U935-4F0-1E-UDD-D4

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	61.4	71.1	80.8	90.9	101.2	111.5	121.7	132.1	139.1
90°	22.0	32.0	42.5	53.0	63.6	74.4	85.1	96.2	106.9	118.0	125.3
92.5°	25.3	35.4	48.4	63.3	80.6	104.5	141.7	197.1	256.3	264.2	240.6
95°	33.7	41.9	53.6	66.7	85.3	116.3	179.1	297.2	443.0	533.1	530.4
97.5°	42.8	50.3	60.1	72.4	89.1	113.5	158.0	246.9	398.6	556.0	636.4
100°	49.2	56.4	64.7	76.3	91.9	114.5	152.6	225.9	359.3	529.4	658.5
102.5°	56.3	62.7	70.1	81.6	96.0	117.9	152.5	215.4	329.2	487.8	637.4
105°	67.6	72.3	79.6	89.3	101.9	122.5	153.1	205.7	296.7	429.9	576.9
107.5°	78.5	83.6	90.0	98.1	110.3	129.0	158.5	204.5	280.0	389.0	516.5
110°	86.5	91.1	96.6	104.6	115.5	134.3	162.8	205.0	272.8	368.6	481.3



TEST NUMBER: P333309-935

CATALOG NUMBER: S125DIP-S1270D590U935-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	95.6	99.4	103.8	111.1	121.3	139.2	166.7	206.7	268.7	354.8	454.0
115°	107.3	110.3	113.9	120.4	129.8	147.1	173.0	209.2	264.2	338.2	422.7
117.5°	117.7	120.5	123.5	129.3	139.1	155.2	179.8	213.0	261.3	326.7	401.1
120°	125.5	127.9	130.8	136.1	145.3	161.5	185.5	216.0	260.7	320.1	388.5
122.5°	132.8	134.2	136.2	141.0	150.6	166.4	190.2	219.2	259.3	313.8	376.9
125°	142.9	143.6	145.8	149.8	158.9	174.5	196.7	223.8	258.2	305.0	360.8
127.5°	149.7	150.8	153.7	159.0	168.7	183.7	204.2	228.6	258.3	297.6	345.4
130°	154.8	156.0	159.6	165.7	175.7	190.5	209.8	232.6	258.9	293.6	336.0
132.5°	157.6	159.5	164.1	171.3	181.8	196.2	214.6	235.4	259.2	289.3	327.0
135°	163.8	165.5	171.1	178.6	188.6	202.8	220.1	238.4	258.6	282.8	314.7
137.5°	171.6	172.8	178.1	185.7	195.5	209.6	224.5	241.0	259.3	278.6	304.5
140°	175.2	176.7	182.5	190.5	199.8	213.2	227.7	242.7	258.7	275.8	298.7
142.5°	180.7	181.6	186.8	194.4	203.1	215.5	229.0	243.1	258.0	274.0	294.1
145°	189.0	189.7	194.2	200.9	209.4	220.5	233.3	245.6	258.8	273.1	289.3
147.5°	196.2	196.8	201.0	207.4	215.1	225.1	236.3	247.4	259.3	271.8	285.2
150°	201.4	202.3	205.8	212.2	219.0	227.4	238.2	248.5	259.3	270.6	282.4
152.5°	206.9	207.4	210.5	216.1	222.6	230.1	240.1	249.3	258.9	269.1	279.7
155°	214.1	214.1	217.1	222.0	226.9	233.8	242.1	249.9	257.9	266.2	275.0
157.5°	220.6	220.5	222.9	227.1	231.4	236.6	243.8	250.5	256.6	263.2	270.7
160°	225.0	224.5	226.4	229.9	233.8	238.2	244.6	250.5	255.4	261.3	267.2
162.5°	228.5	228.0	230.0	233.0	236.2	239.8	245.4	250.1	254.3	258.9	264.1
165°	233.8	232.8	234.3	236.7	238.7	241.7	245.6	249.5	252.4	255.4	259.3
167.5°	237.3	236.9	237.7	239.1	240.5	242.3	245.6	248.3	249.7	251.9	254.7
170°	239.7	239.2	239.7	240.6	241.7	243.1	245.6	247.5	248.5	249.9	251.9
172.5°	241.3	240.4	240.8	241.9	242.5	243.1	245.2	246.8	246.9	247.6	249.2
175°	243.1	242.1	242.6	243.1	243.1	243.1	244.6	245.6	245.0	245.0	245.6
177.5°	244.0	243.2	243.2	243.6	243.2	243.2	244.0	244.4	243.6	243.6	244.0
180°	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6



TEST NUMBER: P333309-935

CATALOG NUMBER: S125DIP-S1270D590U935-4F0-1E-UDD-D4

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°	145.9	152.9	159.9	164.5	166.7	168.8	170.9	173.0
90°	132.7	140.0	147.3	152.8	154.9	157.0	159.5	161.6
92.5°	206.0	188.8	179.8	176.9	172.7	173.6	175.0	176.3
95°	464.3	396.1	342.3	305.4	272.6	259.9	258.1	252.4
97.5°	629.7	583.7	531.1	477.9	449.5	424.0	411.8	407.6
100°	702.6	684.8	640.4	593.4	561.3	527.7	511.3	505.2
102.5°	724.1	744.9	726.7	696.0	661.6	638.3	620.3	616.2
105°	700.7	774.0	801.5	800.1	786.5	772.4	764.7	760.9
107.5°	638.7	734.4	795.8	825.4	835.1	836.9	835.5	833.4
110°	593.1	692.1	767.0	812.6	836.8	848.2	853.8	855.8



TEST NUMBER: P333309-935

CATALOG NUMBER: S125DIP-S1270D590U935-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	556.1	650.1	725.6	778.5	813.0	831.0	841.7	847.3
115°	509.0	590.6	663.2	720.3	760.4	785.7	801.3	809.5
117.5°	475.9	546.6	609.6	662.3	702.6	729.0	744.7	750.6
120°	457.4	521.4	580.6	627.2	665.3	690.7	705.8	711.4
122.5°	442.0	501.5	554.5	598.2	632.5	655.8	670.9	676.2
125°	420.1	474.9	522.5	560.9	590.0	611.6	623.9	630.3
127.5°	397.4	448.7	492.9	529.1	555.8	575.3	587.2	591.2
130°	383.9	431.4	473.8	508.6	534.6	552.3	563.6	568.1
132.5°	369.8	414.5	453.4	486.9	512.7	530.1	540.4	545.0
135°	350.0	387.8	423.1	453.7	476.9	494.6	504.9	509.4
137.5°	333.6	364.5	394.3	420.3	440.9	456.8	466.1	470.6
140°	324.1	350.4	376.3	399.2	418.5	432.5	441.1	444.7
142.5°	315.8	338.2	360.5	380.3	396.9	409.0	417.2	420.3
145°	306.0	322.7	339.5	354.0	367.0	376.6	383.1	386.3
147.5°	297.7	310.6	322.7	333.2	343.1	350.3	354.0	355.4
150°	293.2	304.0	313.3	322.4	330.0	336.2	338.5	339.2
152.5°	289.3	298.9	307.5	314.4	320.6	325.4	327.4	328.0
155°	283.4	291.3	298.1	303.5	308.4	311.9	313.3	313.8
157.5°	277.5	284.0	289.3	293.5	297.3	300.1	301.5	301.4
160°	273.5	278.4	283.4	286.8	290.2	292.7	293.7	293.2
162.5°	269.2	273.8	277.8	280.9	283.6	285.7	285.9	285.8
165°	263.2	266.7	269.7	272.1	274.1	275.0	275.0	275.0
167.5°	257.5	259.8	262.1	263.8	264.8	265.7	265.3	265.2
170°	254.4	255.9	257.4	258.3	259.3	259.8	259.8	259.3
172.5°	250.9	252.4	253.4	254.0	254.3	255.1	254.3	253.8
175°	247.0	247.0	248.1	248.1	248.1	248.5	247.5	247.0
177.5°	244.4	244.8	244.8	244.8	244.4	244.8	243.6	243.6
180°	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6

(END OF REPORT)