

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: P333308-935

Luminaire Tested: **S125DIP-S1270D590U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333308-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
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-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6003.6 lumens
Efficiency: N/A
Efficacy: 109.0 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

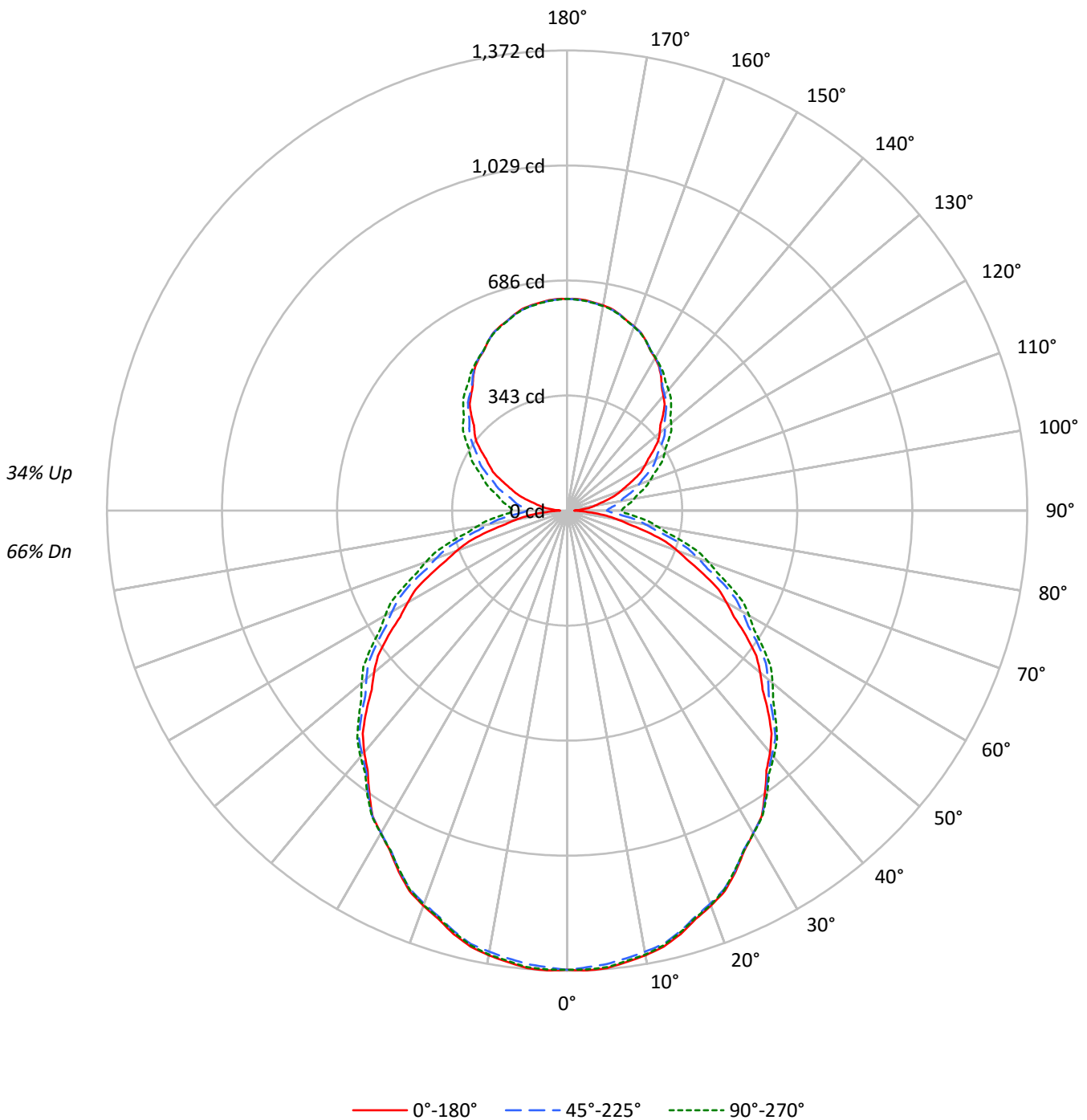
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	100	96	91	87	94	90	86	83	80	77	74	70	68	66	61	60	58	54
2	91	83	76	71	85	78	72	67	69	65	61	61	57	54	53	51	48	44
3	83	73	65	58	78	69	61	56	61	55	50	54	49	45	47	44	41	37
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	42	38	35	32
5	70	57	48	42	65	54	46	40	48	42	37	43	38	33	38	33	30	27
6	64	51	43	37	60	49	41	35	43	37	32	39	33	29	34	30	26	24
7	59	46	38	32	56	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	29	24	21	19
9	51	38	31	25	48	37	29	24	33	27	23	30	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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.5	2.2
10°-20°	367.5	6.1
20°-30°	546.6	9.1
30°-40°	647.5	10.8
40°-50°	669.4	11.2
50°-60°	616.7	10.3
60°-70°	498.5	8.3
70°-80°	333.8	5.6
80°-90°	174.5	2.9
90°-100°	139.4	2.3
100°-110°	196.5	3.3
110°-120°	259.5	4.3
120°-130°	305.5	5.1
130°-140°	323.7	5.4
140°-150°	308.0	5.1
150°-160°	256.7	4.3
160°-170°	170.6	2.8
170°-180°	59.7	1.0
0°-30°	1043.6	17.4
0°-40°	1691.1	28.2
0°-60°	2977.2	49.6
0°-90°	3984.0	66.4
90°-120°	595.3	9.9
90°-150°	1532.6	25.5
90°-180°	2020.0	33.6
0°-180°	6003.6	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	16
95°	49	86	136	168	179	48
105°	124	149	191	220	232	132
115°	220	232	267	290	298	217
125°	314	317	343	363	370	281
135°	404	407	416	433	438	312
145°	488	489	490	497	501	305
155°	557	557	558	559	557	256
165°	606	605	605	607	604	171
175°	630	628	628	630	627	60
180°	631	631	631	631	631	



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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	61.4	71.1	80.8	90.8	101.2	111.5	121.7	132.1	139.1
90°	22.0	32.4	42.8	53.2	63.6	74.3	85.2	96.1	107.0	118.0	125.4
92.5°	31.3	40.6	50.1	59.6	69.0	79.4	90.7	102.0	113.3	124.7	132.0
95°	49.3	57.3	65.3	73.3	81.3	90.9	102.1	113.3	124.6	135.8	143.2
97.5°	68.9	75.9	83.0	90.1	97.1	106.3	117.6	128.9	140.2	151.5	158.5
100°	83.5	89.8	96.1	102.3	108.6	117.2	128.2	139.1	150.1	161.1	168.3
102.5°	99.4	105.6	111.8	118.0	124.2	132.3	142.4	152.4	162.5	172.5	179.6
105°	124.1	129.4	134.7	140.0	145.3	152.8	162.4	172.0	181.6	191.2	197.9
107.5°	151.5	156.1	160.7	165.3	170.0	176.8	185.9	195.0	204.1	213.2	219.4
110°	170.5	174.6	178.7	182.9	187.0	193.4	202.1	210.8	219.5	228.2	234.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	191.0	194.1	197.3	200.4	203.5	209.4	217.9	226.4	235.0	243.5	249.1
115°	219.7	222.3	224.8	227.3	229.9	235.1	243.1	251.1	259.0	267.0	272.2
117.5°	248.7	250.2	251.8	253.4	254.9	259.5	267.0	274.6	282.1	289.6	294.8
120°	267.5	269.0	270.4	271.8	273.3	277.5	284.5	291.4	298.4	305.4	310.5
122.5°	286.9	287.5	288.1	288.7	289.4	293.1	300.0	306.9	313.8	320.7	325.5
125°	314.4	314.7	315.0	315.4	315.7	319.0	325.0	331.1	337.2	343.3	347.8
127.5°	342.4	342.5	342.6	342.7	342.8	345.3	350.3	355.3	360.3	365.4	369.7
130°	360.2	360.4	360.6	360.8	361.1	363.4	367.8	372.2	376.6	381.0	385.1
132.5°	376.8	377.5	378.4	379.3	380.0	382.1	385.3	388.5	391.6	394.8	398.9
135°	404.5	404.8	405.2	405.5	405.9	407.2	409.4	411.6	413.8	415.9	419.8
137.5°	430.5	430.9	431.3	431.7	432.1	432.9	434.2	435.4	436.7	437.9	441.6
140°	446.3	446.9	447.5	448.0	448.5	449.1	449.7	450.4	451.0	451.6	455.1
142.5°	463.2	463.5	463.6	463.9	464.2	464.5	464.9	465.5	465.9	466.4	469.3
145°	488.1	488.3	488.4	488.5	488.6	488.9	489.2	489.6	489.9	490.2	491.7
147.5°	509.7	510.0	510.2	510.5	510.7	510.9	511.2	511.5	511.8	512.0	512.7
150°	525.0	525.0	524.9	524.8	524.6	524.8	525.2	525.6	526.1	526.5	526.5
152.5°	537.6	537.8	538.0	538.1	538.2	538.4	538.6	538.7	538.9	539.2	539.4
155°	557.0	557.0	557.0	557.0	557.0	557.1	557.2	557.2	557.4	557.5	557.9
157.5°	574.3	574.0	573.8	573.6	573.3	573.3	573.3	573.5	573.6	573.7	574.1
160°	584.5	584.2	583.8	583.5	583.2	583.1	583.2	583.3	583.4	583.5	583.9
162.5°	593.6	593.3	593.1	592.8	592.5	592.5	592.5	592.5	592.5	592.5	593.1
165°	605.6	605.4	605.2	604.9	604.8	604.7	604.8	604.9	605.0	605.1	605.5
167.5°	615.9	615.4	614.9	614.5	614.1	613.9	613.9	613.9	613.9	613.9	614.5
170°	621.3	620.9	620.4	620.0	619.6	619.4	619.4	619.4	619.4	619.4	620.0
172.5°	625.3	624.8	624.4	624.0	623.5	623.3	623.3	623.3	623.3	623.3	624.0
175°	629.6	629.2	628.8	628.4	627.9	627.8	627.8	627.8	627.8	627.8	628.4
177.5°	632.0	631.6	631.3	630.9	630.5	630.3	630.3	630.2	630.1	630.0	630.5
180°	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2



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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°	146.0	153.0	160.0	164.5	166.7	168.8	171.0	173.1
90°	132.8	140.2	147.6	152.5	154.9	157.3	159.7	162.1
92.5°	139.3	146.6	154.0	158.9	161.2	163.5	165.8	168.2
95°	150.5	157.8	165.1	170.0	172.3	174.5	176.8	179.2
97.5°	165.5	172.5	179.4	184.0	186.1	188.3	190.5	192.7
100°	175.6	182.8	190.0	194.7	196.7	198.7	200.7	202.7
102.5°	186.7	193.8	200.9	205.4	207.6	209.7	211.7	213.9
105°	204.5	211.1	217.7	222.2	224.6	227.0	229.5	231.9
107.5°	225.7	231.9	238.1	242.1	244.0	245.8	247.6	249.4
110°	240.1	246.1	252.1	256.1	258.0	260.0	262.0	264.0



TEST NUMBER: P333308-935

CATALOG NUMBER: S125DIP-S1270D590U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	254.7	260.2	265.8	269.6	271.5	273.4	275.3	277.1
115°	277.5	282.8	288.0	291.5	293.2	294.9	296.5	298.3
117.5°	300.0	305.1	310.3	313.7	315.2	316.8	318.4	320.0
120°	315.6	320.6	325.6	328.9	330.2	331.6	332.9	334.3
122.5°	330.2	334.9	339.8	342.8	344.2	345.7	347.2	348.5
125°	352.4	357.0	361.4	364.5	365.8	367.2	368.6	370.0
127.5°	374.0	378.3	382.6	385.5	387.0	388.6	390.0	391.6
130°	389.2	393.2	397.3	399.9	401.2	402.5	403.8	405.0
132.5°	402.9	407.0	411.0	413.5	414.5	415.4	416.4	417.3
135°	423.7	427.6	431.4	433.9	435.0	436.0	437.1	438.2
137.5°	445.2	448.9	452.5	454.7	455.4	456.0	456.7	457.3
140°	458.7	462.1	465.6	467.7	468.3	469.0	469.7	470.3
142.5°	472.3	475.2	478.1	479.9	480.5	481.2	481.8	482.5
145°	493.2	494.6	496.2	497.3	498.2	499.0	499.9	500.8
147.5°	513.5	514.2	515.0	515.2	515.1	514.8	514.6	514.4
150°	526.5	526.5	526.5	526.6	526.7	526.8	526.8	526.9
152.5°	539.7	539.9	540.2	540.1	539.8	539.5	539.2	538.8
155°	558.4	558.8	559.2	559.2	558.6	558.1	557.5	557.0
157.5°	574.5	575.0	575.4	575.3	574.5	573.9	573.2	572.4
160°	584.4	584.8	585.2	585.2	584.7	584.1	583.6	583.1
162.5°	593.6	594.1	594.7	594.6	594.0	593.3	592.7	592.0
165°	606.0	606.4	606.9	606.7	606.1	605.5	604.8	604.2
167.5°	615.2	615.9	616.5	616.5	615.8	615.1	614.4	613.8
170°	620.7	621.3	622.0	621.9	621.2	620.4	619.7	618.9
172.5°	624.7	625.3	625.9	625.9	625.3	624.6	623.9	623.2
175°	629.0	629.6	630.3	630.3	629.6	628.8	628.0	627.2
177.5°	631.0	631.5	632.1	632.1	631.5	630.9	630.2	629.6
180°	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2

(END OF REPORT)