

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: P333463-935

Luminaire Tested: **S125DIW-S1270D470U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333463-935
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: S125DIW-S1270D470U935-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5641.4 lumens
Efficiency: N/A
Efficacy: 107.7 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

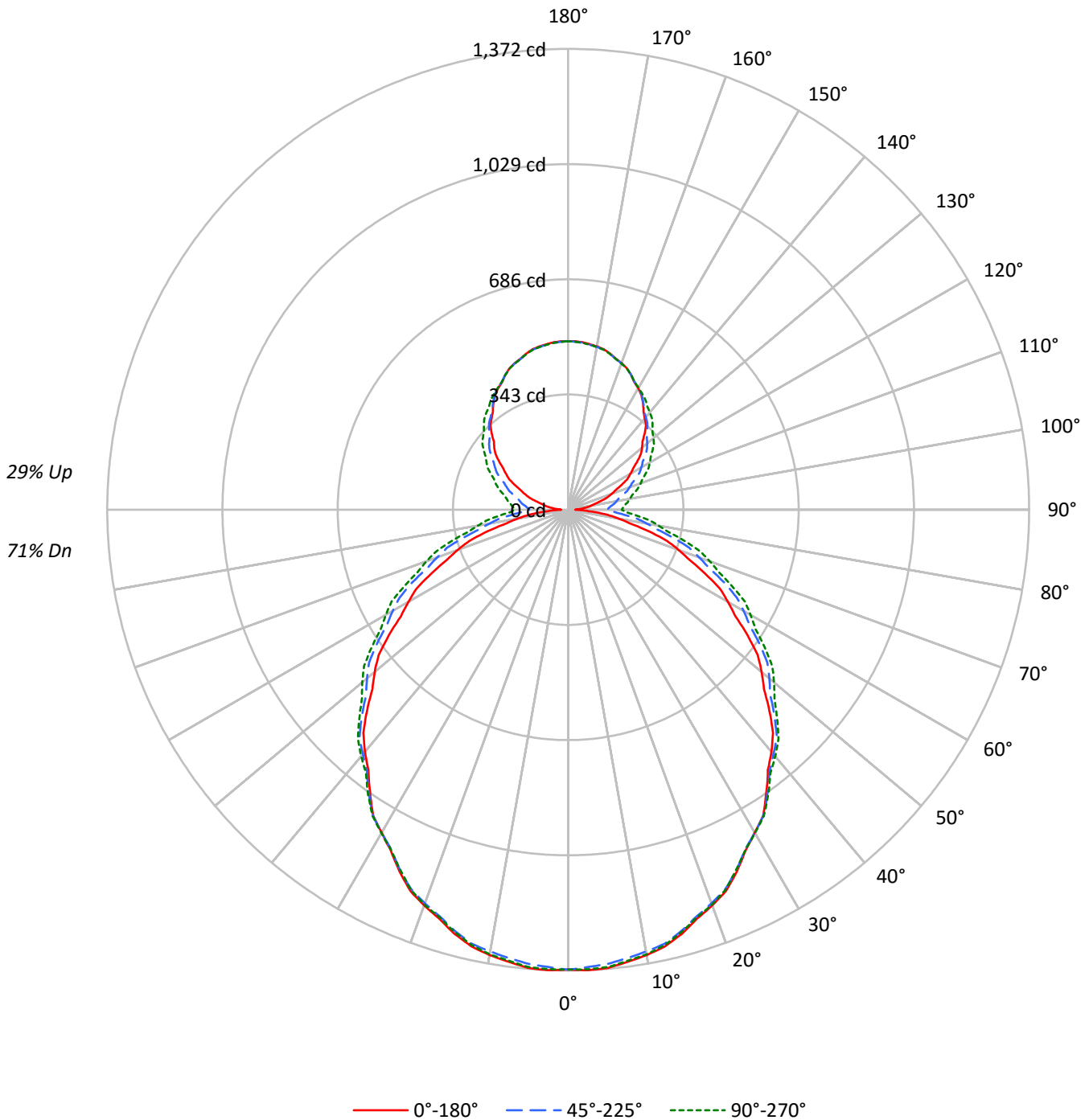
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333463-935

CATALOG NUMBER: S125DIW-S1270D470U935-4F0-1E-UDD-D1

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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71
1	101	96	92	88	96	91	87	84	82	79	76	73	71	68	65	63	61	57
2	92	84	77	71	87	79	73	68	71	66	62	63	60	56	56	53	51	47
3	84	73	65	59	79	69	62	56	62	57	52	56	51	47	50	46	43	39
4	76	65	56	50	72	61	54	48	55	49	44	50	44	40	44	40	37	34
5	70	58	49	42	66	55	47	41	49	43	38	44	39	35	40	35	32	29
6	65	52	43	37	61	49	41	36	45	38	33	40	35	30	36	31	28	25
7	60	47	38	32	56	45	37	31	40	34	29	36	31	27	33	28	25	22
8	56	43	34	29	52	41	33	28	37	30	26	33	28	24	30	26	22	20
9	52	39	31	26	49	37	30	25	34	28	23	31	25	22	28	23	20	18
10	48	36	28	23	46	34	27	22	31	25	21	28	23	20	26	21	18	16

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	2.3
10°-20°	367.5	6.5
20°-30°	546.6	9.7
30°-40°	647.5	11.5
40°-50°	669.4	11.9
50°-60°	616.7	10.9
60°-70°	498.5	8.8
70°-80°	333.8	5.9
80°-90°	174.2	3.1
90°-100°	130.7	2.3
100°-110°	170.8	3.0
110°-120°	216.0	3.8
120°-130°	248.3	4.4
130°-140°	259.6	4.6
140°-150°	245.2	4.3
150°-160°	203.9	3.6
160°-170°	135.6	2.4
170°-180°	47.4	0.8
0°-30°	1043.6	18.5
0°-40°	1691.1	30.0
0°-60°	2977.2	52.8
0°-90°	3983.7	70.6
90°-120°	517.5	9.2
90°-150°	1270.7	22.5
90°-180°	1658.0	29.4
0°-180°	5641.4	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	68	116	148	160	16
95°	43	79	128	159	170	41
105°	101	126	167	195	207	108
115°	176	189	223	246	254	174
125°	251	253	279	299	306	224
135°	322	323	333	349	355	248
145°	388	388	389	396	400	242
155°	443	443	443	444	443	204
165°	481	480	481	482	480	136
175°	500	499	499	501	498	48
180°	501	501	501	501	501	



TEST NUMBER: P333463-935

CATALOG NUMBER: S125DIW-S1270D470U935-4F0-1E-UDD-D1

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°	41.9	51.7	61.3	71.0	80.7	90.7	100.9	111.2	121.5	131.7	138.7
90°	21.9	32.1	42.4	52.6	62.9	73.4	84.0	94.8	105.6	116.3	123.6
92.5°	28.8	38.1	47.4	56.7	66.0	76.3	87.4	98.5	109.6	120.8	127.9
95°	42.8	50.7	58.6	66.6	74.6	84.0	95.1	106.0	117.0	128.0	135.2
97.5°	57.9	65.0	72.1	79.1	86.2	95.2	106.2	117.2	128.1	139.1	145.9
100°	69.4	75.7	82.0	88.2	94.5	102.9	113.6	124.2	134.9	145.6	152.7
102.5°	81.7	87.9	94.0	100.1	106.2	114.3	124.2	134.1	144.0	153.8	160.7
105°	101.1	106.2	111.5	116.7	121.9	129.2	138.7	148.2	157.6	167.1	173.6
107.5°	122.5	127.0	131.6	136.0	140.5	147.2	156.3	165.2	174.2	183.2	189.4
110°	137.4	141.4	145.4	149.5	153.4	159.8	168.4	177.0	185.6	194.2	200.2



TEST NUMBER: P333463-935

CATALOG NUMBER: S125DIW-S1270D470U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	153.6	156.7	159.8	162.9	166.0	171.8	180.2	188.6	197.1	205.5	211.1
115°	176.2	178.7	181.2	183.6	186.0	191.1	199.1	207.1	215.0	222.9	228.2
117.5°	199.0	200.4	202.0	203.5	205.1	209.6	217.1	224.5	232.0	239.5	244.7
120°	214.0	215.2	216.6	217.9	219.2	223.3	230.3	237.3	244.3	251.2	256.2
122.5°	229.1	229.6	230.2	230.8	231.4	235.1	241.9	248.8	255.6	262.5	267.3
125°	250.8	251.1	251.2	251.5	251.8	254.9	260.9	267.0	273.0	279.1	283.7
127.5°	272.9	272.9	272.9	272.9	272.9	275.3	280.3	285.3	290.4	295.4	299.7
130°	287.0	287.1	287.2	287.3	287.5	289.7	294.1	298.4	302.8	307.1	311.3
132.5°	299.9	300.6	301.3	301.9	302.6	304.4	307.6	310.8	314.0	317.2	321.3
135°	321.9	322.1	322.4	322.5	322.8	324.0	326.1	328.3	330.5	332.7	336.6
137.5°	342.5	342.9	343.1	343.4	343.6	344.3	345.5	346.7	347.9	349.1	352.8
140°	354.9	355.3	355.8	356.2	356.6	357.1	357.7	358.3	358.8	359.4	362.8
142.5°	368.3	368.4	368.6	368.7	368.9	369.1	369.5	369.9	370.2	370.7	373.6
145°	388.1	388.1	388.1	388.2	388.2	388.4	388.7	388.9	389.2	389.4	391.0
147.5°	405.0	405.2	405.4	405.5	405.8	406.0	406.1	406.4	406.6	406.8	407.5
150°	417.2	417.1	417.0	416.9	416.8	417.0	417.3	417.7	418.0	418.4	418.4
152.5°	427.1	427.3	427.4	427.5	427.7	427.7	427.9	428.1	428.2	428.3	428.5
155°	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.7	442.8	442.9	443.2
157.5°	456.2	456.1	455.9	455.7	455.5	455.5	455.6	455.6	455.7	455.8	456.2
160°	464.4	464.2	463.8	463.6	463.3	463.2	463.3	463.4	463.5	463.6	464.0
162.5°	471.6	471.4	471.2	471.0	470.8	470.7	470.7	470.7	470.8	470.8	471.2
165°	481.1	481.0	480.8	480.6	480.4	480.4	480.5	480.6	480.7	480.8	481.1
167.5°	489.3	489.0	488.6	488.3	487.9	487.8	487.8	487.8	487.8	487.8	488.3
170°	493.6	493.3	492.9	492.6	492.2	492.1	492.1	492.1	492.1	492.1	492.6
172.5°	496.8	496.5	496.1	495.8	495.4	495.2	495.2	495.2	495.2	495.2	495.8
175°	500.3	499.9	499.6	499.2	498.9	498.7	498.7	498.7	498.7	498.7	499.2
177.5°	502.0	501.8	501.5	501.3	500.9	500.8	500.8	500.7	500.6	500.5	500.9
180°	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4



TEST NUMBER: P333463-935

CATALOG NUMBER: S125DIW-S1270D470U935-4F0-1E-UDD-D1

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°	145.6	152.6	159.5	164.1	166.2	168.3	170.5	172.6
90°	130.9	138.2	145.5	150.3	152.7	155.0	157.4	159.7
92.5°	135.2	142.3	149.6	154.3	156.5	158.9	161.1	163.4
95°	142.4	149.6	156.7	161.4	163.7	166.0	168.2	170.5
97.5°	152.8	159.6	166.4	171.0	173.1	175.2	177.4	179.5
100°	159.7	166.8	173.8	178.3	180.3	182.3	184.2	186.1
102.5°	167.6	174.4	181.3	185.8	187.8	189.9	191.8	193.9
105°	180.0	186.6	193.0	197.4	199.8	202.2	204.5	206.9
107.5°	195.5	201.7	207.8	211.9	213.7	215.5	217.4	219.2
110°	206.0	212.0	217.9	221.9	223.9	225.9	227.9	229.9



TEST NUMBER: P333463-935

CATALOG NUMBER: S125DIW-S1270D470U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	216.6	222.1	227.7	231.4	233.4	235.3	237.3	239.2
115°	233.4	238.8	244.0	247.5	249.2	250.9	252.6	254.3
117.5°	249.9	254.9	260.1	263.6	265.2	266.9	268.5	270.3
120°	261.3	266.4	271.5	274.7	276.1	277.6	279.1	280.5
122.5°	272.0	276.8	281.5	284.6	286.2	287.7	289.2	290.8
125°	288.3	292.8	297.5	300.5	301.9	303.2	304.7	306.1
127.5°	304.0	308.3	312.7	315.6	317.2	318.7	320.3	321.8
130°	315.3	319.4	323.5	326.2	327.5	328.8	330.1	331.5
132.5°	325.4	329.5	333.6	336.1	337.1	338.1	339.1	340.2
135°	340.4	344.3	348.2	350.7	351.9	353.0	354.1	355.2
137.5°	356.4	360.1	363.7	365.8	366.6	367.4	368.2	368.9
140°	366.3	369.7	373.2	375.3	376.1	376.8	377.5	378.3
142.5°	376.4	379.4	382.3	384.1	384.9	385.6	386.4	387.1
145°	392.4	393.9	395.5	396.7	397.6	398.5	399.4	400.4
147.5°	408.1	408.8	409.5	409.8	409.7	409.7	409.7	409.7
150°	418.4	418.4	418.4	418.4	418.5	418.6	418.8	418.9
152.5°	428.8	429.0	429.1	429.1	428.9	428.6	428.3	428.1
155°	443.6	443.9	444.3	444.3	443.8	443.4	443.0	442.6
157.5°	456.5	456.8	457.2	457.1	456.5	455.9	455.4	454.8
160°	464.3	464.7	465.0	464.9	464.5	464.1	463.6	463.2
162.5°	471.7	472.0	472.4	472.4	471.9	471.4	470.9	470.4
165°	481.5	481.8	482.2	482.1	481.6	481.0	480.5	480.0
167.5°	488.8	489.3	489.8	489.8	489.2	488.7	488.2	487.7
170°	493.1	493.6	494.2	494.1	493.5	492.9	492.3	491.7
172.5°	496.3	496.8	497.3	497.3	496.7	496.2	495.7	495.2
175°	499.7	500.3	500.8	500.8	500.2	499.6	498.9	498.3
177.5°	501.4	501.8	502.2	502.1	501.7	501.2	500.7	500.2
180°	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4

(END OF REPORT)