

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: P333450-927

Luminaire Tested: **S125DIW-S1090D1340U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333450-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S1090D1340U927-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7630.4 lumens
Efficiency: N/A
Efficacy: 109.3 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

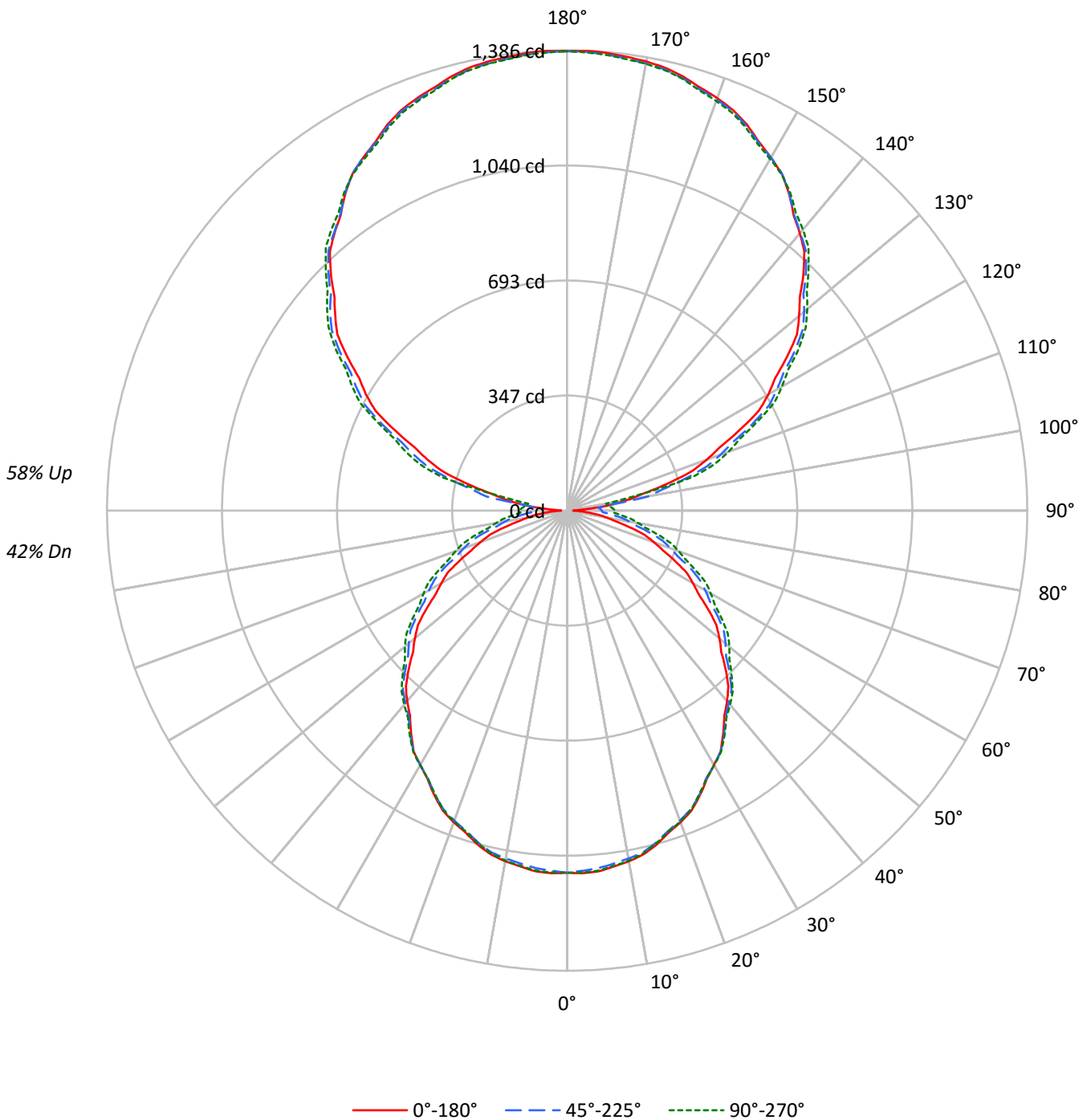
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333450-927

CATALOG NUMBER: S125DIW-S1090D1340U927-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P333450-927

CATALOG NUMBER: S125DIW-S1090D1340U927-4F0-1E-UDD-D

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	105	105	105	105	96	96	96	96	79	79	79		63	63	63		48	48	48	42
1	95	91	87	83	87	83	79	76	68	65	63		54	53	51		42	41	40	34
2	86	79	73	67	79	72	67	62	59	55	52		47	45	42		36	35	33	28
3	79	69	62	56	71	63	57	51	52	47	43		42	38	35		32	30	28	23
4	72	61	53	47	65	56	49	43	46	41	37		37	33	30		29	26	24	20
5	66	54	46	40	60	50	42	37	41	36	31		33	29	26		26	23	21	17
6	61	48	40	34	55	44	37	32	37	31	27		30	26	23		23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24		27	23	20		21	18	16	13
8	52	40	32	26	47	36	29	25	30	25	21		25	21	18		19	16	14	12
9	48	36	29	23	44	33	27	22	28	23	19		23	19	16		18	15	13	11
10	45	33	26	21	41	30	24	20	26	20	17		21	17	14		17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7045	7045	7045
5°	7059	6915	6937
10°	7008	6791	6781
15°	6926	6644	6583
20°	6814	6461	6385
25°	6679	6266	6141
30°	6517	6050	5920
35°	6366	5853	5717
40°	6211	5644	5513
45°	6037	5466	5331
50°	5872	5272	5172
55°	5671	5090	4983
60°	5453	4881	4791
65°	5225	4664	4575
70°	4967	4366	4353
75°	4557	4080	4079
80°	4018	3734	3783
85°	3519	3499	3689



TEST NUMBER: P333450-927

CATALOG NUMBER: S125DIW-S1090D1340U927-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.1	1.4
10°-20°	292.8	3.8
20°-30°	435.5	5.7
30°-40°	515.8	6.8
40°-50°	533.3	7.0
50°-60°	491.3	6.4
60°-70°	397.1	5.2
70°-80°	265.9	3.5
80°-90°	140.8	1.8
90°-100°	127.7	1.7
100°-110°	367.0	4.8
110°-120°	600.3	7.9
120°-130°	743.0	9.7
130°-140°	785.3	10.3
140°-150°	730.1	9.6
150°-160°	589.1	7.7
160°-170°	381.0	5.0
170°-180°	131.4	1.7
0°-30°	831.4	10.9
0°-40°	1347.2	17.7
0°-60°	2371.8	31.1
0°-90°	3175.6	41.6
90°-120°	1094.9	14.3
90°-150°	3353.3	43.9
90°-180°	4455.0	58.4
0°-180°	7630.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1091	1088	1081	1089	1089	103
15°	1042	1042	1035	1041	1037	293
25°	946	949	943	947	942	435
35°	819	826	824	826	827	512
45°	675	686	692	699	700	521
55°	519	536	553	564	569	463
65°	357	382	407	423	428	354
75°	197	225	259	279	286	209
85°	59	94	132	154	164	63
90°	18	61	104	133	144	14
95°	72	96	94	122	131	85
105°	311	333	364	385	392	330
115°	573	586	614	628	630	567
125°	810	816	837	849	852	723
135°	1006	1011	1017	1028	1028	775
145°	1165	1166	1166	1172	1171	728
155°	1282	1276	1278	1280	1273	590
165°	1353	1347	1348	1353	1346	382
175°	1384	1378	1378	1386	1377	132
180°	1384	1384	1384	1384	1384	



TEST NUMBER: P333450-927

CATALOG NUMBER: S125DIW-S1090D1340U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1093.4	1093.0	1092.6	1092.3	1091.9	1091.0	1089.6	1088.3	1087.0	1085.7	1087.0
5°	1090.8	1090.4	1089.9	1089.4	1088.9	1087.8	1086.2	1084.5	1082.8	1081.2	1083.1
7.5°	1081.2	1081.0	1080.8	1080.6	1080.5	1079.5	1077.8	1076.0	1074.4	1072.6	1074.3
10°	1072.6	1072.6	1072.6	1072.6	1072.6	1071.7	1069.8	1067.9	1066.0	1064.1	1065.7
12.5°	1060.7	1060.8	1061.0	1061.2	1061.4	1060.7	1059.2	1057.7	1056.2	1054.6	1056.0
15°	1041.6	1041.9	1042.1	1042.4	1042.6	1041.9	1040.2	1038.6	1036.9	1035.2	1036.6
17.5°	1016.8	1017.2	1017.7	1018.2	1018.7	1018.1	1016.4	1014.8	1013.1	1011.5	1012.6
20°	998.9	999.3	999.8	1000.3	1000.8	1000.1	998.5	996.8	995.1	993.5	994.2
22.5°	978.3	979.1	980.0	980.9	981.8	981.2	979.4	977.6	975.7	973.8	974.7
25°	946.4	947.1	947.8	948.6	949.3	949.0	947.5	946.1	944.7	943.3	944.2
27.5°	910.9	912.0	913.0	914.1	915.1	914.8	913.2	911.6	910.0	908.4	909.0
30°	884.4	885.8	887.2	888.7	890.1	890.1	888.7	887.2	885.8	884.4	884.9
32.5°	860.5	861.7	862.9	864.2	865.4	865.5	864.4	863.4	862.4	861.3	861.8
35°	819.2	820.9	822.5	824.2	825.9	826.3	825.6	824.9	824.2	823.5	824.2
37.5°	777.9	779.4	780.9	782.4	783.9	784.7	784.4	784.2	783.9	783.7	784.7
40°	749.6	751.5	753.4	755.3	757.2	758.1	757.9	757.6	757.4	757.2	758.1
42.5°	718.8	721.4	723.8	726.3	728.7	730.2	730.8	731.3	731.8	732.4	733.5
45°	674.8	677.4	680.0	682.6	685.2	687.1	688.3	689.5	690.7	691.9	693.6
47.5°	629.7	632.1	634.5	636.9	639.4	641.6	643.6	645.7	647.8	649.7	652.2
50°	598.9	601.5	604.1	606.7	609.3	612.0	614.6	617.2	619.8	622.4	625.0
52.5°	566.3	569.6	572.7	575.9	579.1	582.3	585.5	588.7	591.8	595.0	597.9
55°	518.6	522.4	526.2	530.0	533.9	537.7	541.5	545.3	549.1	552.9	555.5
57.5°	469.9	474.4	479.0	483.6	488.1	492.7	497.0	501.4	505.7	510.1	513.1
60°	437.4	442.1	446.9	451.6	456.4	461.1	465.9	470.6	475.4	480.1	483.7
62.5°	405.8	410.5	415.3	420.0	424.8	429.7	434.8	440.0	445.1	450.2	454.2
65°	357.2	362.7	368.1	373.6	379.1	384.6	390.3	396.0	401.7	407.4	411.0
67.5°	311.4	316.7	321.9	327.3	332.5	338.0	343.9	349.7	355.5	361.2	365.6
70°	278.1	283.5	289.0	294.5	299.9	305.7	311.9	318.1	324.2	330.4	334.9
72.5°	245.6	251.2	256.8	262.5	268.2	274.3	281.1	287.9	294.6	301.3	306.3
75°	196.8	203.0	209.1	215.3	221.5	228.4	236.0	243.6	251.2	258.8	263.6
77.5°	150.0	157.1	164.2	171.3	178.5	185.7	193.0	200.3	207.6	214.9	220.1
80°	120.8	127.9	135.1	142.2	149.3	156.9	165.0	173.1	181.2	189.3	194.5
82.5°	94.3	101.8	109.3	116.8	124.4	132.2	140.5	148.8	157.1	165.3	170.4
85°	58.8	66.6	74.5	82.3	90.2	98.2	106.5	114.9	123.2	131.5	136.7
87.5°	33.6	41.5	49.5	57.5	65.4	73.6	82.1	90.5	98.9	107.3	112.9
90°	18.1	27.6	37.0	46.4	55.8	65.4	75.1	84.8	94.4	104.1	110.7
92.5°	31.2	36.9	42.7	48.5	54.3	61.9	71.6	81.3	91.0	100.7	107.1
95°	72.4	77.9	83.3	88.9	94.3	96.8	96.3	95.6	95.1	94.5	100.8
97.5°	134.7	141.5	148.3	155.0	161.8	160.6	151.2	141.9	132.5	123.2	121.8
100°	183.1	188.7	194.4	200.1	205.7	212.9	221.3	229.9	238.4	246.9	217.9
102.5°	232.3	237.7	243.2	248.7	254.1	260.9	268.9	276.8	284.8	292.7	291.1
105°	311.2	315.9	320.6	325.3	330.0	336.0	343.1	350.2	357.4	364.5	369.2
107.5°	393.2	396.4	399.7	402.9	406.1	411.4	418.7	426.0	433.2	440.5	445.3
110°	446.5	449.3	452.2	455.0	457.9	462.9	470.0	477.1	484.2	491.3	495.1



TEST NUMBER: P333450-927

CATALOG NUMBER: S125DIW-S1090D1340U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	497.3	500.2	503.0	505.8	508.7	513.4	520.1	527.0	533.7	540.4	543.8
115°	572.6	575.4	578.2	581.0	583.8	588.4	594.8	601.2	607.6	614.0	617.4
117.5°	650.5	651.6	652.6	653.6	654.7	658.5	665.3	672.0	678.7	685.4	688.2
120°	699.7	700.2	700.7	701.2	701.6	705.0	711.1	717.3	723.4	729.6	733.2
122.5°	742.4	743.5	744.7	746.0	747.2	750.6	756.1	761.8	767.3	772.9	776.3
125°	809.5	810.8	812.1	813.5	814.8	817.9	822.7	827.4	832.2	836.9	839.8
127.5°	872.6	873.5	874.4	875.3	876.2	878.5	882.3	886.1	889.8	893.6	896.6
130°	912.0	912.8	913.8	914.7	915.5	917.8	921.4	924.9	928.4	932.0	934.6
132.5°	950.5	951.7	953.1	954.3	955.6	957.3	959.3	961.4	963.5	965.5	968.7
135°	1006.3	1007.4	1008.5	1009.6	1010.8	1011.9	1013.2	1014.4	1015.6	1016.8	1019.5
137.5°	1057.6	1058.5	1059.5	1060.6	1061.5	1062.2	1062.6	1063.0	1063.4	1063.8	1066.7
140°	1090.4	1090.8	1091.2	1091.7	1092.2	1092.4	1092.4	1092.4	1092.4	1092.4	1095.5
142.5°	1120.7	1120.8	1120.9	1120.9	1121.0	1121.3	1121.7	1122.0	1122.4	1122.8	1125.1
145°	1165.2	1165.5	1165.6	1165.9	1166.1	1166.2	1166.2	1166.2	1166.2	1166.2	1167.6
147.5°	1203.1	1203.0	1202.9	1202.8	1202.8	1202.8	1203.1	1203.4	1203.6	1204.0	1204.6
150°	1227.7	1227.2	1226.9	1226.4	1225.9	1225.9	1226.4	1226.9	1227.2	1227.7	1228.2
152.5°	1251.5	1250.5	1249.5	1248.6	1247.5	1247.2	1247.7	1248.2	1248.6	1249.0	1249.5
155°	1282.1	1280.7	1279.4	1278.0	1276.6	1276.2	1276.6	1277.1	1277.6	1278.0	1278.7
157.5°	1305.7	1304.9	1304.0	1303.2	1302.4	1302.0	1302.0	1302.1	1302.2	1302.2	1302.9
160°	1322.1	1320.7	1319.4	1318.0	1316.6	1316.1	1316.3	1316.5	1316.8	1317.0	1317.9
162.5°	1335.2	1333.9	1332.5	1331.1	1329.8	1329.2	1329.4	1329.7	1329.8	1330.1	1331.3
165°	1352.9	1351.5	1350.1	1348.8	1347.4	1346.8	1347.0	1347.3	1347.5	1347.7	1349.1
167.5°	1366.0	1364.6	1363.2	1361.8	1360.3	1359.8	1359.9	1360.2	1360.4	1360.7	1362.3
170°	1373.4	1371.8	1370.2	1368.6	1367.0	1366.3	1366.5	1366.8	1367.0	1367.2	1369.0
172.5°	1378.3	1376.7	1375.1	1373.5	1371.9	1371.3	1371.7	1372.1	1372.5	1372.9	1374.6
175°	1383.6	1382.3	1380.9	1379.5	1378.2	1377.6	1377.8	1378.1	1378.3	1378.5	1380.3
177.5°	1386.1	1385.0	1383.9	1382.8	1381.7	1381.2	1381.5	1381.6	1381.8	1382.0	1383.3
180°	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6



TEST NUMBER: P333450-927

CATALOG NUMBER: S125DIW-S1090D1340U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1088.3	1089.6	1091.0	1091.5	1091.4	1091.2	1091.0	1090.8
5°	1085.0	1086.9	1088.8	1089.6	1089.4	1089.2	1088.9	1088.7
7.5°	1075.9	1077.6	1079.3	1080.0	1079.7	1079.5	1079.3	1079.0
10°	1067.4	1069.1	1070.7	1071.4	1071.2	1071.0	1070.7	1070.5
12.5°	1057.2	1058.5	1059.8	1060.1	1059.5	1058.9	1058.3	1057.6
15°	1038.1	1039.5	1040.9	1041.2	1040.2	1039.3	1038.3	1037.4
17.5°	1013.7	1014.7	1015.8	1016.1	1015.5	1014.9	1014.4	1013.8
20°	994.9	995.6	996.3	996.7	996.7	996.7	996.7	996.7
22.5°	975.7	976.5	977.4	977.6	977.0	976.4	975.9	975.3
25°	945.2	946.1	947.1	946.9	945.7	944.5	943.3	942.1
27.5°	909.7	910.4	911.0	911.2	910.7	910.3	909.8	909.4
30°	885.3	885.8	886.3	886.5	886.2	886.0	885.7	885.5
32.5°	862.3	862.8	863.2	863.3	863.1	862.8	862.6	862.4
35°	824.9	825.6	826.3	826.6	826.6	826.6	826.6	826.6
37.5°	785.6	786.6	787.5	787.9	787.8	787.7	787.6	787.5
40°	759.1	760.0	761.0	761.7	762.2	762.6	763.1	763.6
42.5°	734.6	735.8	736.9	737.5	737.6	737.7	737.8	737.9
45°	695.2	696.9	698.5	699.5	699.7	700.0	700.2	700.4
47.5°	654.7	657.0	659.5	660.9	661.5	662.0	662.5	663.1
50°	627.6	630.3	632.9	634.5	635.3	636.0	636.7	637.4
52.5°	600.6	603.4	606.3	607.9	608.4	609.0	609.5	610.0
55°	558.1	560.7	563.3	565.1	566.1	567.0	568.0	568.9
57.5°	516.1	519.1	522.1	523.9	524.7	525.4	526.1	526.8
60°	487.3	490.8	494.4	496.5	497.3	498.0	498.7	499.4
62.5°	458.1	462.1	466.0	468.4	469.4	470.2	471.1	472.1
65°	414.5	418.1	421.7	424.0	424.9	425.9	426.8	427.8
67.5°	369.9	374.2	378.6	381.4	382.5	383.8	385.0	386.3
70°	339.5	344.0	348.5	351.5	352.9	354.3	355.8	357.2
72.5°	311.2	316.1	320.9	323.9	325.0	326.0	327.0	328.1
75°	268.3	273.1	277.8	280.7	281.9	283.1	284.3	285.5
77.5°	225.4	230.6	235.8	238.9	239.9	240.8	241.8	242.7
80°	199.7	204.9	210.2	213.3	214.2	215.2	216.1	217.1
82.5°	175.4	180.5	185.4	188.9	190.6	192.3	194.0	195.7
85°	142.0	147.2	152.4	156.0	157.9	159.8	161.7	163.6
87.5°	118.6	124.3	130.0	133.7	135.5	137.4	139.2	140.9
90°	117.3	123.9	130.6	135.0	137.4	139.7	142.0	144.4
92.5°	113.5	119.9	126.4	130.6	132.5	134.5	136.5	138.5
95°	107.2	113.6	119.9	124.0	125.6	127.3	129.0	130.6
97.5°	120.3	118.9	117.4	117.6	119.1	120.7	122.4	124.0
100°	188.9	160.0	131.0	116.8	117.3	117.8	118.4	118.8
102.5°	289.5	287.8	286.2	278.4	264.3	250.3	236.1	222.0
105°	374.0	378.7	383.5	386.6	388.0	389.4	390.9	392.3
107.5°	450.0	454.8	459.5	462.3	463.1	463.9	464.7	465.5
110°	499.0	502.8	506.6	509.5	511.4	513.3	515.2	517.1



TEST NUMBER: P333450-927

CATALOG NUMBER: S125DIW-S1090D1340U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	547.3	550.8	554.2	556.7	558.0	559.4	560.6	562.0
115°	620.8	624.2	627.5	629.2	629.2	629.3	629.4	629.5
117.5°	691.1	694.0	696.8	698.8	699.8	700.8	701.9	702.9
120°	736.7	740.4	743.9	745.8	746.2	746.4	746.7	747.0
122.5°	779.7	783.2	786.5	788.2	788.4	788.5	788.5	788.7
125°	842.7	845.6	848.5	850.2	850.7	851.2	851.7	852.2
127.5°	899.6	902.6	905.6	907.0	906.7	906.3	906.0	905.7
130°	937.3	939.9	942.6	944.0	944.0	944.0	944.0	944.1
132.5°	971.9	975.1	978.3	979.8	979.7	979.5	979.4	979.2
135°	1022.1	1024.7	1027.3	1028.6	1028.4	1028.2	1028.0	1027.9
137.5°	1069.6	1072.5	1075.4	1076.7	1076.5	1076.3	1076.0	1075.8
140°	1098.6	1101.6	1104.7	1106.0	1105.6	1105.2	1104.8	1104.4
142.5°	1127.4	1129.7	1132.0	1133.0	1132.6	1132.1	1131.7	1131.3
145°	1169.0	1170.4	1171.9	1172.4	1172.0	1171.6	1171.1	1170.7
147.5°	1205.2	1205.9	1206.6	1206.3	1205.1	1203.9	1202.6	1201.4
150°	1228.7	1229.1	1229.5	1229.0	1227.4	1225.8	1224.2	1222.7
152.5°	1250.0	1250.5	1250.9	1250.3	1248.7	1247.1	1245.5	1244.0
155°	1279.4	1280.0	1280.7	1280.2	1278.3	1276.5	1274.7	1272.9
157.5°	1303.7	1304.4	1305.1	1304.6	1302.7	1300.9	1299.1	1297.3
160°	1318.8	1319.7	1320.6	1320.2	1318.3	1316.5	1314.7	1312.9
162.5°	1332.6	1334.0	1335.2	1334.8	1332.8	1330.8	1328.8	1326.8
165°	1350.4	1351.9	1353.2	1353.0	1351.1	1349.3	1347.5	1345.7
167.5°	1364.0	1365.6	1367.2	1367.0	1364.9	1362.9	1360.9	1358.8
170°	1370.9	1372.7	1374.5	1374.4	1372.4	1370.3	1368.3	1366.2
172.5°	1376.3	1377.9	1379.5	1379.3	1377.3	1375.2	1373.2	1371.1
175°	1382.1	1383.9	1385.8	1385.7	1383.6	1381.6	1379.5	1377.4
177.5°	1384.6	1385.8	1387.1	1387.0	1385.5	1384.1	1382.6	1381.2
180°	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6

(END OF REPORT)