

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: P333480-927

Luminaire Tested: **S125DIW-S1270D1340U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333480-927  
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-S1270D1340U927-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 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: 8153.8 lumens  
Efficiency: N/A  
Efficacy: 107.0 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: General Diffuse

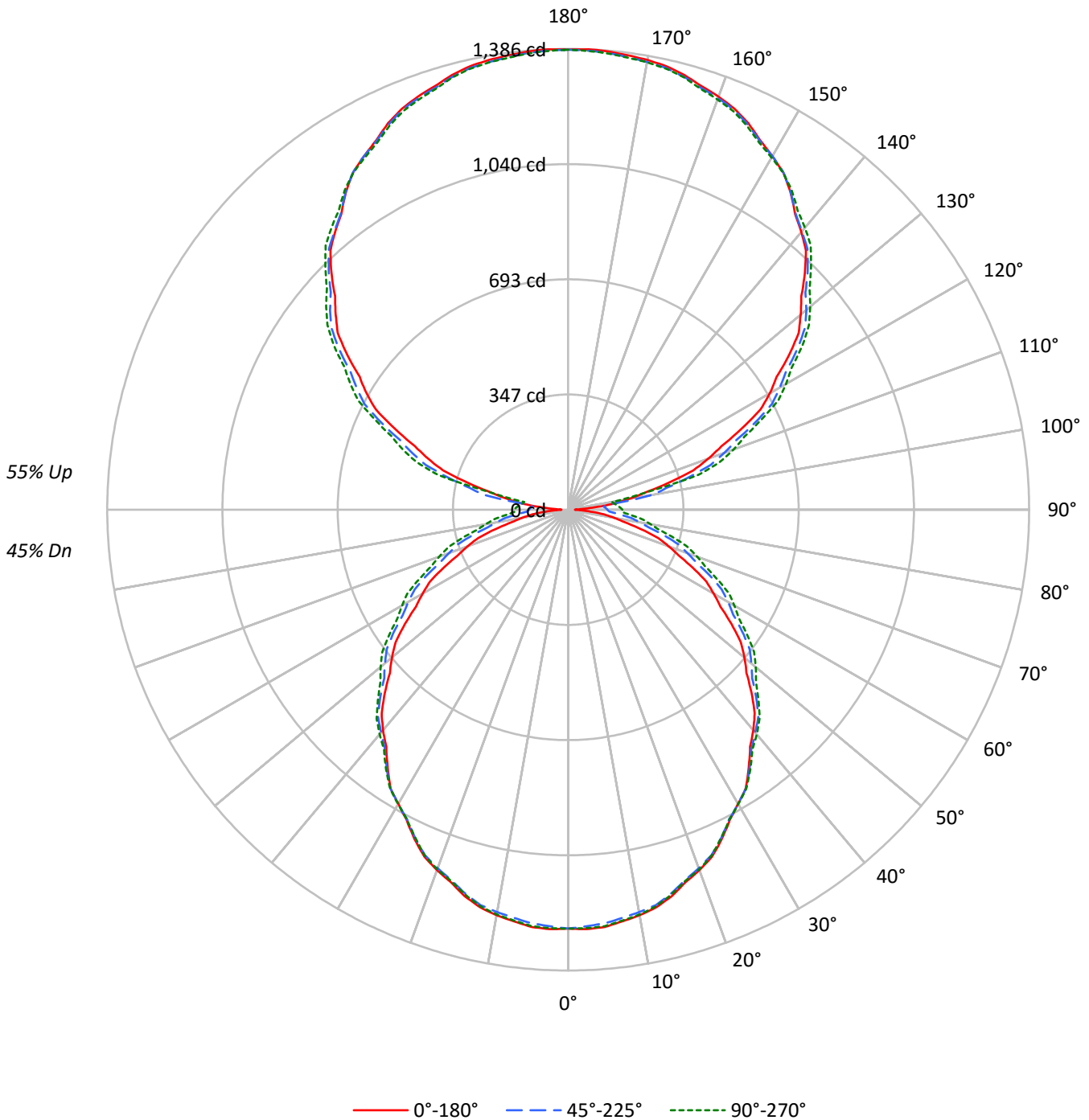
Input Watts (W): 76.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333480-927

CATALOG NUMBER: S125DIW-S1270D1340U927-4F0-1E-UDD-D

### Luminous Intensity Polar Plot





TEST NUMBER: P333480-927

CATALOG NUMBER: S125DIW-S1270D1340U927-4F0-1E-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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45
1	96	91	87	84	88	84	80	77	70	67	65	56	55	53	44	43	42	36
2	87	79	73	68	79	73	67	63	61	57	53	49	46	44	39	37	35	30
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	32	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	28	25	21
5	66	55	46	40	60	50	43	38	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	25	22	19	16
7	56	44	36	30	51	41	33	28	34	29	25	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	21	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	24	19	16	19	16	14	11
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	12	10

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8136	8136	8136
5°	8152	7986	8012
10°	8094	7843	7832
15°	7999	7673	7603
20°	7869	7462	7374
25°	7714	7235	7092
30°	7527	6987	6837
35°	7352	6759	6602
40°	7174	6519	6367
45°	6972	6313	6157
50°	6781	6089	5972
55°	6550	5879	5755
60°	6298	5638	5533
65°	6034	5387	5283
70°	5737	5044	5027
75°	5263	4712	4712
80°	4643	4312	4369
85°	4070	4042	4260



TEST NUMBER: P333480-927

CATALOG NUMBER: S125DIW-S1270D1340U927-4F0-1E-UDD-D

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.1	1.5
10°-20°	338.2	4.1
20°-30°	502.9	6.2
30°-40°	595.7	7.3
40°-50°	615.9	7.6
50°-60°	567.4	7.0
60°-70°	458.6	5.6
70°-80°	307.2	3.8
80°-90°	162.2	2.0
90°-100°	139.7	1.7
100°-110°	375.8	4.6
110°-120°	606.2	7.4
120°-130°	746.4	9.2
130°-140°	786.8	9.6
140°-150°	730.4	9.0
150°-160°	589.1	7.2
160°-170°	381.0	4.7
170°-180°	131.4	1.6
0°-30°	960.2	11.8
0°-40°	1555.9	19.1
0°-60°	2739.2	33.6
0°-90°	3667.2	45.0
90°-120°	1121.6	13.8
90°-150°	3385.2	41.5
90°-180°	4487.0	55.0
0°-180°	8153.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1260	1260	1260	1260	1260	
5°	1260	1257	1249	1258	1257	119
15°	1203	1204	1196	1202	1198	339
25°	1093	1096	1089	1094	1088	503
35°	946	954	951	954	955	592
45°	779	792	799	807	809	601
55°	599	619	639	652	657	535
65°	412	441	471	488	494	409
75°	227	260	299	323	330	241
85°	68	109	152	178	189	72
90°	21	69	118	150	163	16
95°	74	102	106	138	148	87
105°	313	337	374	397	406	331
115°	574	588	620	638	640	568
125°	810	817	841	856	860	723
135°	1007	1012	1018	1031	1032	776
145°	1165	1166	1166	1173	1172	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: P333480-927

CATALOG NUMBER: S125DIW-S1270D1340U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8
2.5°	1262.7	1262.3	1261.9	1261.5	1261.0	1260.0	1258.5	1257.0	1255.5	1253.9	1255.5
5°	1259.8	1259.3	1258.7	1258.1	1257.6	1256.4	1254.4	1252.5	1250.6	1248.7	1250.9
7.5°	1248.7	1248.5	1248.2	1248.0	1247.8	1246.7	1244.8	1242.8	1240.8	1238.8	1240.7
10°	1238.8	1238.8	1238.8	1238.8	1238.8	1237.7	1235.5	1233.3	1231.1	1228.9	1230.8
12.5°	1225.0	1225.2	1225.4	1225.7	1225.8	1225.1	1223.4	1221.5	1219.8	1218.1	1219.6
15°	1203.0	1203.2	1203.6	1203.8	1204.1	1203.2	1201.3	1199.4	1197.5	1195.6	1197.2
17.5°	1174.3	1174.9	1175.4	1176.0	1176.5	1175.8	1173.9	1172.0	1170.1	1168.2	1169.4
20°	1153.6	1154.1	1154.7	1155.2	1155.8	1155.1	1153.2	1151.3	1149.3	1147.4	1148.3
22.5°	1129.9	1130.8	1131.9	1132.8	1133.9	1133.2	1131.1	1128.9	1126.8	1124.7	1125.7
25°	1093.1	1093.9	1094.7	1095.5	1096.4	1096.0	1094.3	1092.7	1091.0	1089.3	1090.4
27.5°	1052.1	1053.3	1054.5	1055.7	1056.9	1056.5	1054.7	1052.8	1051.0	1049.1	1049.9
30°	1021.4	1023.1	1024.7	1026.4	1028.0	1028.0	1026.4	1024.7	1023.1	1021.4	1022.0
32.5°	993.8	995.2	996.6	998.1	999.5	999.6	998.4	997.2	995.9	994.7	995.3
35°	946.1	948.0	949.9	951.9	953.8	954.3	953.5	952.7	951.9	951.0	951.9
37.5°	898.4	900.2	901.9	903.7	905.5	906.2	905.9	905.6	905.4	905.1	906.2
40°	865.8	868.0	870.2	872.4	874.6	875.5	875.3	875.0	874.7	874.5	875.5
42.5°	830.2	833.1	835.9	838.8	841.7	843.4	844.0	844.6	845.2	845.8	847.1
45°	779.3	782.4	785.4	788.4	791.4	793.6	795.0	796.4	797.7	799.1	801.1
47.5°	727.2	730.0	732.8	735.6	738.4	741.0	743.4	745.8	748.1	750.4	753.3
50°	691.7	694.7	697.7	700.7	703.8	706.8	709.8	712.8	715.8	718.8	721.8
52.5°	654.1	657.8	661.5	665.1	668.8	672.5	676.2	679.9	683.5	687.2	690.5
55°	599.0	603.4	607.8	612.2	616.6	621.0	625.3	629.8	634.1	638.6	641.6
57.5°	542.7	548.0	553.3	558.5	563.8	568.9	574.0	579.0	584.1	589.1	592.6
60°	505.2	510.6	516.1	521.7	527.1	532.6	538.1	543.6	549.1	554.5	558.6
62.5°	468.6	474.1	479.6	485.1	490.5	496.3	502.2	508.1	514.0	520.0	524.5
65°	412.5	418.8	425.2	431.5	437.8	444.3	450.8	457.4	464.0	470.6	474.7
67.5°	359.7	365.8	371.9	378.0	384.0	390.5	397.1	403.9	410.5	417.2	422.2
70°	321.2	327.4	333.7	340.1	346.3	353.1	360.2	367.4	374.5	381.7	386.9
72.5°	283.6	290.1	296.7	303.2	309.7	316.9	324.6	332.5	340.2	348.1	353.7
75°	227.3	234.4	241.5	248.7	255.8	263.8	272.5	281.3	290.1	298.9	304.4
77.5°	173.2	181.4	189.6	197.9	206.1	214.4	222.9	231.3	239.8	248.3	254.3
80°	139.6	147.8	156.1	164.3	172.5	181.3	190.6	199.9	209.3	218.6	224.7
82.5°	108.9	117.6	126.3	135.0	143.6	152.7	162.3	171.8	181.4	190.9	196.8
85°	68.0	77.0	86.0	95.1	104.2	113.5	123.1	132.7	142.3	151.9	158.0
87.5°	38.7	47.9	57.0	66.1	75.3	84.8	94.3	104.0	113.7	123.3	129.8
90°	20.8	31.4	42.0	52.6	63.2	74.0	84.9	95.9	106.8	117.7	125.2
92.5°	33.6	40.4	47.3	54.1	61.0	69.9	80.9	91.8	102.7	113.8	121.0
95°	74.5	81.0	87.5	93.9	100.3	103.9	104.6	105.2	105.9	106.5	113.8
97.5°	136.7	144.3	151.9	159.6	167.2	167.0	158.8	150.8	142.6	134.4	133.8
100°	184.9	191.3	197.8	204.2	210.6	218.7	228.5	238.1	247.8	257.5	229.3
102.5°	233.9	240.1	246.3	252.5	258.7	266.3	275.4	284.6	293.7	302.8	301.9
105°	312.7	318.0	323.3	328.6	333.9	340.6	348.9	357.1	365.4	373.6	379.1
107.5°	394.4	398.2	402.0	405.7	409.4	415.4	423.8	432.1	440.5	448.9	454.4
110°	447.7	450.9	454.2	457.5	460.8	466.5	474.7	482.8	490.9	499.1	503.6



TEST NUMBER: P333480-927

CATALOG NUMBER: S125DIW-S1270D1340U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	498.5	501.7	504.9	508.0	511.3	516.7	524.4	532.2	540.0	547.6	551.8
115°	573.6	576.6	579.7	582.7	585.8	591.0	598.4	605.8	613.1	620.5	624.6
117.5°	651.3	652.5	653.8	655.0	656.2	660.6	668.2	675.8	683.5	691.1	694.6
120°	700.5	701.2	701.7	702.3	702.9	706.7	713.8	720.7	727.7	734.7	738.9
122.5°	743.1	744.3	745.5	746.8	748.1	751.9	758.3	764.7	771.1	777.5	781.6
125°	810.1	811.4	812.7	814.0	815.4	818.8	824.3	829.7	835.3	840.7	844.2
127.5°	873.1	873.9	874.8	875.7	876.5	879.2	883.5	887.9	892.2	896.6	900.2
130°	912.4	913.3	914.2	915.0	915.9	918.4	922.4	926.5	930.6	934.7	937.8
132.5°	950.9	952.1	953.4	954.7	955.9	957.7	960.3	962.7	965.2	967.7	971.4
135°	1006.6	1007.7	1008.8	1009.9	1011.0	1012.3	1013.8	1015.2	1016.7	1018.1	1021.2
137.5°	1057.9	1058.8	1059.8	1060.7	1061.7	1062.5	1063.0	1063.5	1064.1	1064.5	1067.9
140°	1090.5	1091.0	1091.4	1091.9	1092.3	1092.6	1092.7	1092.7	1092.7	1092.7	1096.2
142.5°	1120.9	1120.9	1120.9	1121.0	1121.1	1121.3	1121.7	1122.0	1122.4	1122.8	1125.5
145°	1165.4	1165.5	1165.8	1165.9	1166.1	1166.2	1166.2	1166.2	1166.2	1166.2	1167.8
147.5°	1203.1	1203.0	1202.9	1202.8	1202.8	1202.8	1203.1	1203.4	1203.6	1204.0	1204.7
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: P333480-927

CATALOG NUMBER: S125DIW-S1270D1340U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8
2.5°	1257.0	1258.5	1260.0	1260.7	1260.4	1260.3	1260.0	1259.8
5°	1253.1	1255.3	1257.5	1258.5	1258.1	1257.9	1257.6	1257.4
7.5°	1242.6	1244.6	1246.5	1247.3	1247.1	1246.7	1246.5	1246.2
10°	1232.8	1234.7	1236.6	1237.5	1237.2	1236.9	1236.6	1236.4
12.5°	1221.0	1222.5	1224.0	1224.4	1223.7	1223.0	1222.3	1221.5
15°	1198.9	1200.6	1202.1	1202.5	1201.3	1200.2	1199.1	1198.0
17.5°	1170.7	1172.0	1173.2	1173.5	1172.8	1172.2	1171.6	1170.8
20°	1149.1	1149.9	1150.7	1151.1	1151.1	1151.1	1151.1	1151.1
22.5°	1126.8	1127.8	1128.9	1129.0	1128.4	1127.8	1127.0	1126.4
25°	1091.5	1092.7	1093.8	1093.6	1092.3	1090.8	1089.5	1088.1
27.5°	1050.7	1051.4	1052.2	1052.3	1051.8	1051.3	1050.8	1050.4
30°	1022.5	1023.1	1023.7	1023.7	1023.5	1023.2	1022.9	1022.6
32.5°	995.9	996.4	997.0	997.1	996.8	996.6	996.2	996.0
35°	952.7	953.5	954.3	954.7	954.7	954.7	954.7	954.7
37.5°	907.3	908.4	909.5	910.0	909.8	909.7	909.7	909.5
40°	876.6	877.7	878.8	879.6	880.2	880.7	881.3	881.9
42.5°	848.4	849.8	851.0	851.8	851.9	852.0	852.2	852.2
45°	803.0	804.9	806.8	807.9	808.2	808.4	808.7	809.0
47.5°	756.1	758.8	761.7	763.3	764.0	764.5	765.2	765.8
50°	724.8	727.9	730.9	732.8	733.6	734.5	735.3	736.1
52.5°	693.7	697.0	700.1	702.1	702.7	703.3	703.9	704.5
55°	644.6	647.6	650.6	652.7	653.8	654.9	656.0	657.1
57.5°	596.0	599.5	603.0	605.1	605.9	606.7	607.6	608.4
60°	562.8	566.9	571.0	573.5	574.3	575.1	576.0	576.8
62.5°	529.1	533.6	538.2	541.0	542.0	543.1	544.2	545.2
65°	478.8	482.9	487.0	489.6	490.8	491.9	493.0	494.0
67.5°	427.2	432.2	437.2	440.4	441.8	443.2	444.7	446.2
70°	392.1	397.3	402.5	405.9	407.6	409.2	410.9	412.5
72.5°	359.3	365.0	370.7	374.1	375.3	376.5	377.7	378.9
75°	309.9	315.4	320.8	324.3	325.7	327.0	328.4	329.8
77.5°	260.3	266.3	272.4	276.0	277.1	278.1	279.2	280.4
80°	230.7	236.7	242.8	246.4	247.4	248.5	249.6	250.7
82.5°	202.6	208.4	214.2	218.1	220.1	222.0	224.0	226.0
85°	164.0	170.0	176.1	180.2	182.4	184.6	186.8	188.9
87.5°	136.4	143.0	149.5	153.8	155.8	157.9	159.9	162.0
90°	132.6	140.1	147.5	152.5	155.1	157.7	160.3	163.0
92.5°	128.2	135.5	142.7	147.4	149.6	151.9	154.2	156.4
95°	121.0	128.1	135.3	139.8	141.7	143.7	145.6	147.5
97.5°	133.1	132.5	131.8	132.4	134.3	136.1	138.0	139.9
100°	201.1	172.9	144.7	131.0	131.7	132.5	133.2	134.0
102.5°	301.0	300.2	299.3	291.9	278.1	264.2	250.3	236.5
105°	384.5	390.1	395.5	399.1	400.8	402.5	404.2	405.9
107.5°	459.9	465.3	470.8	474.0	475.1	476.1	477.1	478.2
110°	508.2	512.7	517.2	520.5	522.7	524.8	527.0	529.2





TEST NUMBER: P333480-927

CATALOG NUMBER: S125DIW-S1270D1340U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	555.9	560.1	564.2	567.0	568.6	570.2	571.9	573.5
115°	628.5	632.6	636.6	638.7	639.1	639.3	639.6	639.8
117.5°	698.1	701.6	705.0	707.4	708.7	710.0	711.2	712.5
120°	743.1	747.3	751.5	753.9	754.4	754.9	755.4	756.0
122.5°	785.5	789.5	793.5	795.7	796.0	796.3	796.6	796.9
125°	847.7	851.2	854.7	856.7	857.5	858.1	858.8	859.5
127.5°	903.7	907.3	910.9	912.6	912.5	912.4	912.3	912.2
130°	941.0	944.1	947.3	949.0	949.2	949.4	949.7	949.9
132.5°	975.0	978.7	982.5	984.3	984.4	984.4	984.4	984.4
135°	1024.4	1027.5	1030.5	1032.1	1032.1	1032.1	1032.1	1032.1
137.5°	1071.2	1074.5	1077.8	1079.5	1079.4	1079.3	1079.2	1079.1
140°	1099.7	1103.2	1106.7	1108.3	1108.0	1107.7	1107.5	1107.2
142.5°	1128.1	1130.8	1133.5	1134.6	1134.4	1134.2	1133.9	1133.6
145°	1169.4	1171.0	1172.6	1173.2	1173.0	1172.7	1172.4	1172.2
147.5°	1205.4	1206.1	1206.8	1206.6	1205.4	1204.3	1203.2	1202.0
150°	1228.7	1229.1	1229.5	1229.0	1227.5	1225.9	1224.4	1222.8
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)