

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: P332795-927

Luminaire Tested: **S124DIW-S795D1340U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332795-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIW-S795D1340U927-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 795 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: 6818.5 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

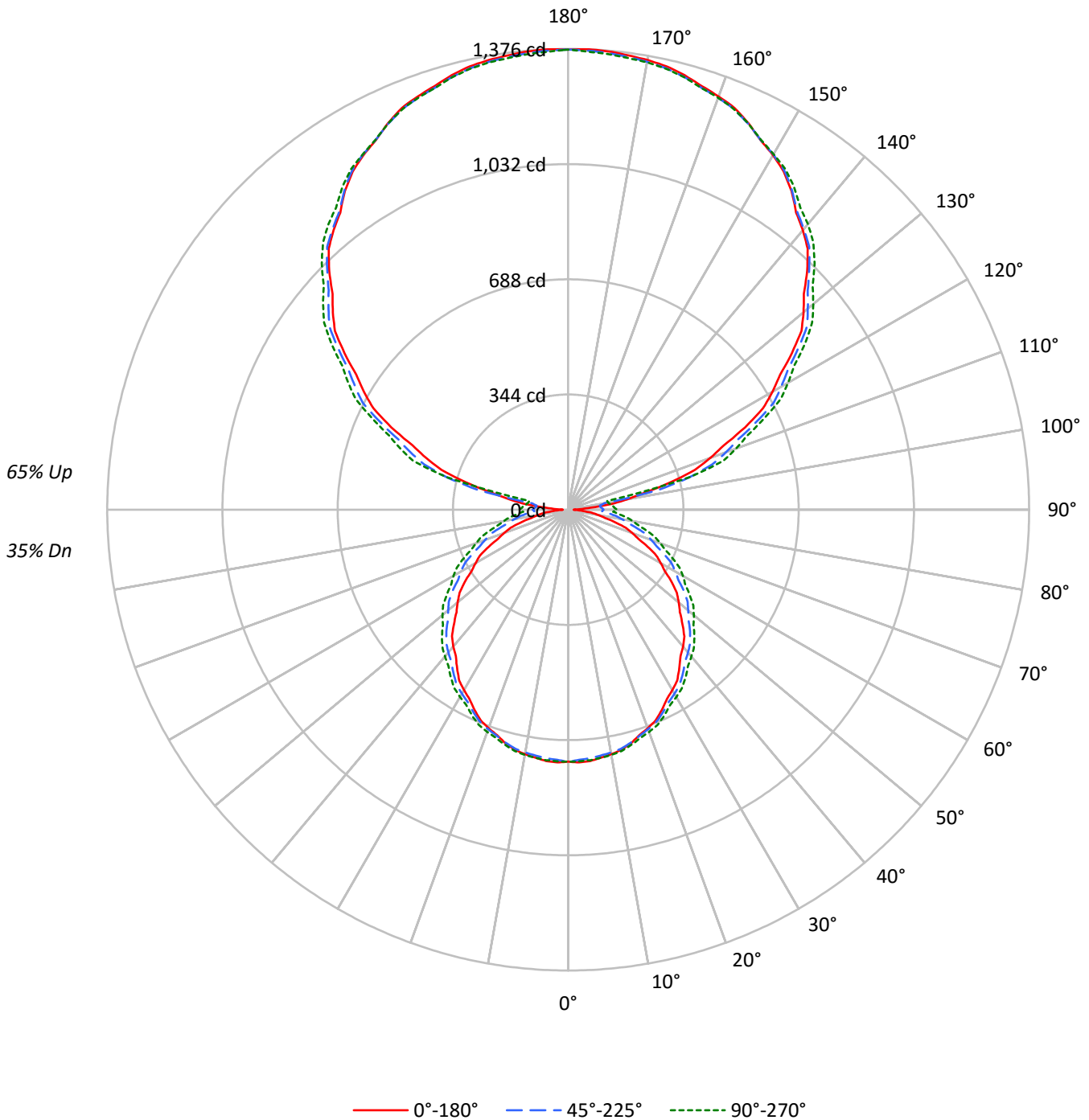
Input Watts (W): 61.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332795-927

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Luminous Intensity Polar Plot





TEST NUMBER: P332795-927

CATALOG NUMBER: S124DIW-S795D1340U927-4F0-1E-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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35
1	94	89	85	81	84	81	77	74	64	62	60	50	48	47	36	35	34	28
2	85	77	71	66	76	70	65	60	56	52	49	43	41	38	31	30	28	23
3	77	68	60	54	69	61	55	50	49	45	41	38	35	32	28	25	24	19
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20	16
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12
7	55	43	35	29	49	39	32	27	31	26	22	24	21	18	18	15	13	11
8	51	38	31	26	46	35	28	24	28	23	20	22	19	16	16	14	12	9
9	47	35	28	23	42	32	25	21	26	21	17	20	17	14	15	13	11	8
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6075	6075	6075
5°	6093	5937	5954
10°	6056	5839	5835
15°	6002	5727	5695
20°	5920	5603	5561
25°	5828	5464	5411
30°	5728	5326	5258
35°	5615	5184	5124
40°	5525	5049	4984
45°	5391	4925	4864
50°	5277	4781	4738
55°	5160	4647	4588
60°	4976	4475	4453
65°	4776	4290	4285
70°	4532	4078	4091
75°	4196	3847	3915
80°	3817	3624	3742
85°	3344	3427	3643



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.3	1.0
10°-20°	204.2	3.0
20°-30°	308.7	4.5
30°-40°	373.5	5.5
40°-50°	394.9	5.8
50°-60°	371.6	5.5
60°-70°	308.3	4.5
70°-80°	216.6	3.2
80°-90°	126.4	1.9
90°-100°	119.7	1.8
100°-110°	353.4	5.2
110°-120°	609.2	8.9
120°-130°	747.9	11.0
130°-140°	787.2	11.5
140°-150°	729.7	10.7
150°-160°	587.0	8.6
160°-170°	378.6	5.6
170°-180°	130.5	1.9
0°-30°	584.1	8.6
0°-40°	957.6	14.0
0°-60°	1724.1	25.3
0°-90°	2375.4	34.8
90°-120°	1082.3	15.9
90°-150°	3347.0	49.1
90°-180°	4443.0	65.2
0°-180°	6818.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	752	752	752	752	752	
5°	753	751	745	751	751	71
15°	722	723	720	728	727	203
25°	661	666	668	677	678	304
35°	578	588	597	608	611	362
45°	482	498	514	528	532	372
55°	378	396	420	437	442	336
65°	261	288	317	337	345	259
75°	145	176	212	234	243	154
85°	45	80	118	142	152	48
90°	17	62	106	135	145	12
95°	68	63	96	124	133	81
105°	317	341	376	403	376	332
115°	582	594	619	639	646	573
125°	815	819	837	856	862	728
135°	1009	1008	1018	1033	1040	777
145°	1162	1164	1164	1170	1176	726
155°	1273	1274	1271	1275	1272	587
165°	1343	1338	1338	1345	1337	379
175°	1374	1368	1369	1377	1366	131
180°	1374	1374	1374	1374	1374	



TEST NUMBER: P332795-927

CATALOG NUMBER: S124DIW-S795D1340U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5
2.5°	755.2	754.7	754.2	753.8	753.4	752.6	751.3	750.1	748.9	747.7	748.8
5°	753.3	752.7	752.2	751.6	751.1	750.1	748.8	747.5	746.2	744.9	746.4
7.5°	746.9	746.6	746.2	745.9	745.5	744.8	743.8	742.7	741.6	740.5	742.2
10°	741.5	741.3	741.2	740.9	740.8	740.2	739.3	738.3	737.4	736.4	738.2
12.5°	734.1	734.0	734.0	734.0	734.0	733.6	733.0	732.3	731.7	731.0	732.6
15°	722.2	722.3	722.5	722.7	722.9	722.7	722.2	721.6	721.0	720.4	722.2
17.5°	705.8	706.3	706.9	707.5	708.1	708.2	708.1	708.1	707.9	707.8	709.6
20°	694.3	694.9	695.5	696.0	696.6	697.0	697.1	697.3	697.5	697.7	699.6
22.5°	681.5	682.2	682.9	683.7	684.4	684.9	685.2	685.6	685.9	686.3	688.1
25°	660.6	661.7	662.9	664.0	665.1	666.0	666.5	667.1	667.7	668.2	670.3
27.5°	637.4	639.0	640.6	642.3	644.0	645.2	646.1	646.9	647.8	648.6	650.5
30°	621.9	623.4	624.9	626.4	627.9	629.2	630.6	631.8	633.2	634.5	636.5
32.5°	605.0	606.8	608.6	610.4	612.2	613.8	615.3	616.7	618.2	619.6	622.0
35°	578.1	580.3	582.6	584.8	587.0	589.1	591.0	592.9	594.7	596.6	599.2
37.5°	550.9	553.5	556.1	558.6	561.3	563.7	566.0	568.3	570.7	573.0	575.7
40°	533.4	535.8	538.2	540.7	543.1	545.7	548.3	550.9	553.5	556.1	559.0
42.5°	513.2	515.9	518.6	521.3	524.1	527.0	530.0	533.1	536.2	539.2	542.4
45°	482.0	485.5	489.1	492.7	496.2	499.8	503.4	506.9	510.4	514.0	517.2
47.5°	452.2	455.8	459.5	463.2	466.8	470.7	474.8	479.0	483.1	487.2	490.5
50°	430.6	434.7	438.8	442.9	447.0	451.1	455.3	459.4	463.5	467.6	471.4
52.5°	409.0	413.1	417.2	421.4	425.5	429.9	434.6	439.3	444.1	448.8	452.5
55°	377.5	381.4	385.4	389.3	393.2	398.0	403.6	409.2	414.9	420.5	424.2
57.5°	342.3	347.1	352.0	356.9	361.7	366.9	372.6	378.1	383.7	389.3	393.7
60°	319.3	324.2	329.1	334.0	338.8	344.4	350.5	356.7	362.9	369.1	373.4
62.5°	297.1	302.5	307.8	313.1	318.4	324.2	330.3	336.5	342.7	348.9	353.2
65°	261.2	267.2	273.2	279.2	285.2	291.4	297.7	304.1	310.5	316.8	321.5
67.5°	226.6	233.1	239.4	245.7	252.2	258.7	265.5	272.4	279.2	286.0	290.7
70°	203.0	209.5	215.8	222.2	228.5	235.3	242.4	249.5	256.6	263.7	268.8
72.5°	180.1	186.6	193.2	199.7	206.2	213.3	220.9	228.4	236.0	243.5	248.4
75°	145.0	151.9	158.8	165.7	172.6	180.1	187.9	195.7	203.7	211.5	216.7
77.5°	112.1	119.4	126.7	134.1	141.4	149.2	157.5	165.7	174.0	182.2	187.5
80°	91.8	99.3	106.8	114.3	121.8	129.7	137.9	146.2	154.4	162.6	168.3
82.5°	71.6	79.4	87.2	95.0	102.7	110.8	119.1	127.3	135.5	143.8	149.5
85°	44.7	52.5	60.4	68.3	76.1	84.3	92.7	101.1	109.6	118.0	123.6
87.5°	25.6	33.7	41.8	50.0	58.1	66.5	75.0	83.6	92.2	100.8	106.5
90°	16.6	26.5	36.6	46.6	56.6	66.5	76.4	86.3	96.2	106.0	112.8
92.5°	25.7	32.6	39.5	46.4	53.2	61.6	71.5	81.4	91.3	101.2	107.8
95°	67.5	65.9	64.3	62.7	61.2	64.3	72.2	80.1	88.0	95.9	102.3
97.5°	129.9	140.1	150.3	160.4	170.6	166.8	148.9	130.9	113.1	95.2	100.3
100°	177.8	186.8	195.7	204.7	213.7	206.0	181.9	157.6	133.5	109.2	110.4
102.5°	232.0	239.3	246.6	253.9	261.2	266.3	269.3	272.4	275.4	278.5	241.5
105°	316.9	321.9	327.1	332.2	337.3	343.9	352.0	360.0	368.1	376.2	382.9
107.5°	397.0	400.8	404.6	408.3	412.1	418.0	426.1	434.2	442.4	450.4	456.1
110°	450.6	453.9	457.2	460.6	463.8	469.4	477.4	485.3	493.2	501.1	505.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	502.6	506.1	509.7	513.3	516.7	522.0	528.9	535.8	542.6	549.5	553.7
115°	582.5	584.9	587.2	589.6	592.0	596.0	601.8	607.6	613.4	619.1	623.7
117.5°	655.3	657.2	659.2	661.1	663.0	667.0	673.1	679.1	685.2	691.3	695.1
120°	703.9	705.4	706.9	708.4	709.9	713.2	718.4	723.6	728.8	734.0	738.2
122.5°	750.0	750.7	751.3	751.9	752.7	755.7	761.1	766.6	772.1	777.4	781.5
125°	815.1	815.8	816.6	817.3	818.0	820.5	824.7	828.9	833.1	837.4	841.6
127.5°	877.4	877.4	877.5	877.5	877.6	879.9	884.6	889.2	893.8	898.5	901.7
130°	917.0	917.0	917.1	917.1	917.2	919.0	922.7	926.4	930.1	933.7	937.4
132.5°	954.0	954.2	954.4	954.7	954.9	956.6	959.9	963.1	966.5	969.7	973.1
135°	1008.6	1008.4	1008.2	1008.0	1007.7	1008.7	1011.0	1013.2	1015.4	1017.6	1021.0
137.5°	1057.7	1057.6	1057.6	1057.5	1057.4	1058.1	1059.8	1061.4	1063.0	1064.7	1067.9
140°	1089.8	1090.1	1090.4	1090.6	1090.9	1091.3	1092.0	1092.7	1093.3	1093.9	1097.0
142.5°	1117.9	1118.7	1119.5	1120.2	1121.0	1121.5	1121.7	1121.8	1122.0	1122.2	1124.8
145°	1161.9	1162.4	1162.9	1163.4	1164.0	1164.2	1164.2	1164.2	1164.2	1164.2	1165.5
147.5°	1197.1	1198.2	1199.3	1200.3	1201.4	1201.9	1201.7	1201.4	1201.2	1200.9	1201.3
150°	1222.6	1223.3	1224.0	1224.7	1225.4	1225.7	1225.5	1225.3	1225.0	1224.8	1224.8
152.5°	1243.3	1244.0	1244.6	1245.3	1246.0	1246.2	1245.8	1245.3	1244.9	1244.5	1244.9
155°	1273.1	1273.3	1273.5	1273.7	1274.0	1273.7	1273.1	1272.4	1271.7	1271.1	1271.9
157.5°	1298.4	1298.2	1298.1	1297.9	1297.8	1297.4	1296.6	1295.8	1295.1	1294.3	1295.5
160°	1313.1	1312.5	1311.8	1311.1	1310.4	1310.0	1309.7	1309.5	1309.2	1309.1	1310.4
162.5°	1326.3	1325.4	1324.6	1323.7	1322.9	1322.3	1322.1	1321.8	1321.6	1321.4	1322.7
165°	1343.0	1341.8	1340.7	1339.5	1338.4	1337.8	1337.8	1337.8	1337.8	1337.8	1339.7
167.5°	1356.1	1354.9	1353.8	1352.6	1351.4	1350.7	1350.6	1350.4	1350.3	1350.1	1352.2
170°	1363.5	1362.2	1360.7	1359.4	1358.0	1357.5	1357.6	1357.9	1358.1	1358.4	1360.2
172.5°	1368.4	1367.1	1365.7	1364.3	1362.9	1362.4	1362.6	1362.9	1363.0	1363.3	1365.1
175°	1373.8	1372.4	1371.0	1369.7	1368.3	1367.7	1367.9	1368.2	1368.4	1368.7	1370.7
177.5°	1376.3	1375.0	1373.6	1372.4	1371.1	1370.6	1371.0	1371.4	1371.7	1372.1	1373.6
180°	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5
2.5°	749.8	750.9	751.9	752.4	752.3	752.1	751.9	751.8
5°	747.9	749.4	750.8	751.5	751.3	751.1	751.0	750.8
7.5°	743.9	745.5	747.3	748.0	747.8	747.6	747.4	747.3
10°	739.8	741.5	743.2	743.9	743.8	743.5	743.4	743.2
12.5°	734.1	735.7	737.2	737.9	737.9	737.8	737.8	737.8
15°	723.8	725.5	727.1	727.9	727.8	727.5	727.4	727.1
17.5°	711.2	713.0	714.7	715.5	715.3	715.2	715.0	714.9
20°	701.4	703.3	705.2	706.2	706.2	706.2	706.2	706.2
22.5°	690.0	691.8	693.7	694.8	695.1	695.4	695.7	696.0
25°	672.3	674.4	676.4	677.6	677.7	677.9	678.1	678.3
27.5°	652.4	654.3	656.3	657.4	657.6	657.8	658.1	658.2
30°	638.6	640.6	642.7	644.0	644.4	644.7	645.1	645.5
32.5°	624.4	626.8	629.1	630.5	630.8	631.2	631.6	632.0
35°	601.8	604.4	607.0	608.6	609.2	609.7	610.4	610.9
37.5°	578.3	581.0	583.6	585.3	585.8	586.5	587.0	587.6
40°	561.7	564.6	567.4	569.1	569.9	570.6	571.4	572.1
42.5°	545.5	548.6	551.7	553.6	554.1	554.8	555.4	556.0
45°	520.4	523.6	526.7	528.8	529.7	530.7	531.6	532.5
47.5°	493.8	497.1	500.4	502.6	503.7	504.9	506.0	507.1
50°	475.2	478.9	482.6	485.1	486.2	487.4	488.5	489.6
52.5°	456.3	460.0	463.7	466.2	467.3	468.4	469.5	470.7
55°	427.9	431.7	435.5	437.9	439.0	440.1	441.2	442.4
57.5°	398.2	402.7	407.1	409.9	410.9	411.9	413.0	414.1
60°	377.7	382.0	386.3	389.2	390.7	392.2	393.7	395.2
62.5°	357.4	361.8	366.1	369.0	370.5	372.0	373.4	374.9
65°	326.2	330.9	335.6	338.7	340.2	341.7	343.1	344.6
67.5°	295.5	300.2	305.0	308.1	309.6	311.0	312.5	313.9
70°	273.9	278.9	284.0	287.2	288.4	289.8	291.0	292.4
72.5°	253.3	258.3	263.2	266.3	267.8	269.3	270.7	272.2
75°	222.0	227.2	232.5	235.9	237.7	239.3	241.0	242.6
77.5°	192.8	198.1	203.4	207.0	208.8	210.6	212.4	214.2
80°	173.9	179.5	185.1	188.6	190.1	191.6	193.1	194.6
82.5°	155.3	161.1	166.8	170.6	172.1	173.8	175.5	177.1
85°	129.2	134.8	140.5	144.2	146.1	147.9	149.8	151.7
87.5°	112.2	117.9	123.6	127.3	129.0	130.8	132.5	134.3
90°	119.6	126.4	133.2	137.6	139.6	141.5	143.5	145.4
92.5°	114.5	121.1	127.8	131.9	133.5	135.1	136.7	138.2
95°	108.8	115.2	121.6	125.8	127.7	129.6	131.5	133.4
97.5°	105.3	110.4	115.4	118.8	120.6	122.5	124.4	126.2
100°	111.6	112.8	113.9	115.3	116.8	118.4	119.9	121.4
102.5°	204.5	167.6	130.6	112.9	114.4	115.9	117.4	118.9
105°	389.7	396.4	403.1	403.1	396.4	389.7	382.9	376.3
107.5°	461.7	467.2	472.9	476.8	479.0	481.3	483.5	485.6
110°	510.7	515.5	520.2	523.7	525.9	528.1	530.2	532.4



TEST NUMBER: P332795-927

CATALOG NUMBER: S124DIW-S795D1340U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	557.7	561.7	565.9	569.0	571.4	573.8	576.2	578.5
115°	628.3	632.9	637.4	640.4	641.7	643.0	644.3	645.6
117.5°	698.9	702.7	706.5	709.2	710.6	711.9	713.4	714.8
120°	742.4	746.6	750.8	753.4	754.5	755.5	756.5	757.6
122.5°	785.5	789.6	793.5	796.0	796.9	797.8	798.7	799.5
125°	845.9	850.1	854.4	857.1	858.5	859.8	861.2	862.5
127.5°	905.0	908.2	911.4	913.6	914.7	915.8	916.9	918.0
130°	941.0	944.5	948.2	950.5	951.6	952.8	953.9	955.0
132.5°	976.6	980.0	983.5	985.7	986.7	987.5	988.5	989.4
135°	1024.5	1028.0	1031.4	1034.0	1035.5	1037.1	1038.7	1040.3
137.5°	1071.2	1074.4	1077.7	1079.7	1080.5	1081.2	1082.0	1082.8
140°	1100.2	1103.3	1106.4	1108.6	1109.7	1110.9	1112.1	1113.2
142.5°	1127.4	1130.0	1132.7	1134.5	1135.3	1136.1	1136.9	1137.8
145°	1166.9	1168.2	1169.6	1170.8	1172.0	1173.2	1174.5	1175.7
147.5°	1201.6	1202.0	1202.3	1202.8	1203.7	1204.5	1205.3	1206.2
150°	1224.8	1224.8	1224.8	1224.9	1225.1	1225.3	1225.6	1225.8
152.5°	1245.2	1245.6	1245.9	1246.1	1245.9	1245.8	1245.7	1245.5
155°	1272.9	1273.7	1274.7	1274.8	1274.1	1273.4	1272.7	1272.1
157.5°	1296.6	1297.8	1299.0	1299.0	1297.8	1296.6	1295.5	1294.3
160°	1311.8	1313.1	1314.5	1314.5	1313.1	1311.8	1310.4	1309.1
162.5°	1324.1	1325.5	1326.8	1326.7	1325.2	1323.7	1322.1	1320.6
165°	1341.5	1343.3	1345.1	1345.0	1343.0	1340.9	1338.9	1336.8
167.5°	1354.2	1356.1	1358.2	1358.0	1355.7	1353.4	1351.2	1348.9
170°	1362.0	1363.8	1365.6	1365.4	1363.2	1360.9	1358.6	1356.3
172.5°	1366.9	1368.8	1370.6	1370.3	1367.8	1365.3	1362.9	1360.4
175°	1372.8	1374.8	1376.9	1376.5	1373.8	1371.0	1368.3	1365.6
177.5°	1375.1	1376.5	1378.0	1377.6	1375.4	1373.2	1371.0	1368.8
180°	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8

(END OF REPORT)