

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: P333281

Luminaire Tested: **S125DIP-S1090D1035U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333281
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-S1090D1035U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7847.5 lumens
Efficiency: N/A
Efficacy: 129.7 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: General Diffuse

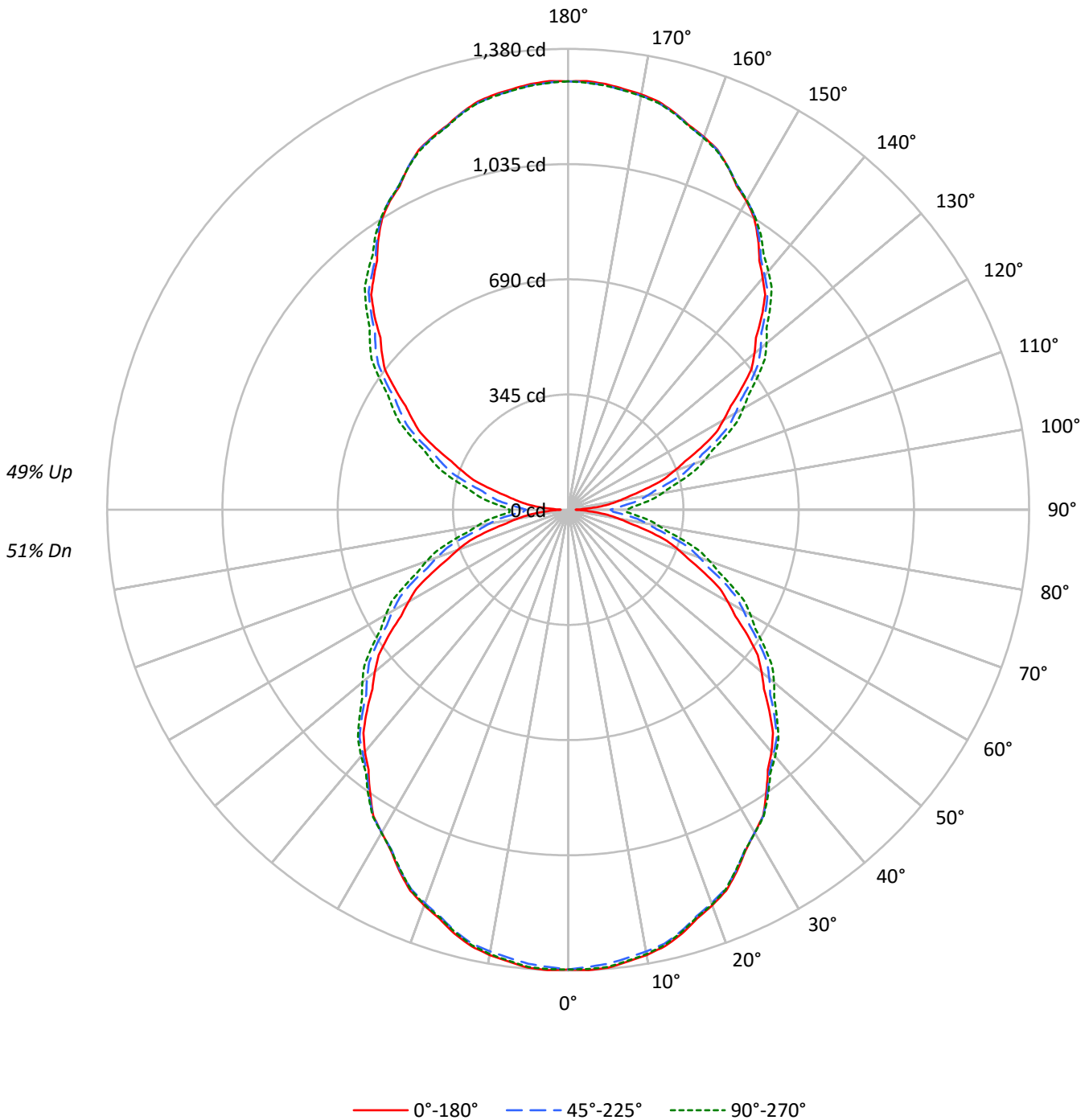
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333281

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333281

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D1

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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	97	93	88	85	90	86	82	79	72	70	67	60	58	57	49	48	47	41
2	88	80	74	69	81	74	69	64	63	59	55	53	49	47	43	41	39	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	33	29
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	34	31	28	24
5	67	55	47	41	62	51	44	38	44	38	34	37	32	29	30	27	24	21
6	62	50	41	35	57	46	39	33	39	34	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	26	22	25	21	19	16
8	53	41	33	27	49	38	31	26	32	27	23	28	23	20	23	19	17	14
9	49	37	29	24	46	34	28	23	30	24	20	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	20	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8893	8893	8893
5°	8911	8729	8756
10°	8847	8573	8560
15°	8743	8387	8310
20°	8601	8156	8061
25°	8432	7909	7752
30°	8227	7637	7473
35°	8036	7388	7217
40°	7841	7125	6959
45°	7621	6900	6730
50°	7412	6656	6528
55°	7159	6425	6290
60°	6883	6162	6048
65°	6596	5888	5775
70°	6269	5512	5495
75°	5751	5151	5149
80°	5072	4712	4775
85°	4441	4417	4657



TEST NUMBER: P333281

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	1.7
10°-20°	369.6	4.7
20°-30°	549.7	7.0
30°-40°	651.1	8.3
40°-50°	673.2	8.6
50°-60°	620.1	7.9
60°-70°	501.3	6.4
70°-80°	335.7	4.3
80°-90°	176.9	2.3
90°-100°	183.6	2.3
100°-110°	325.8	4.2
110°-120°	478.0	6.1
120°-130°	593.0	7.6
130°-140°	645.7	8.2
140°-150°	623.6	7.9
150°-160°	521.7	6.6
160°-170°	346.8	4.4
170°-180°	121.4	1.5
0°-30°	1049.5	13.4
0°-40°	1700.6	21.7
0°-60°	2994.0	38.2
0°-90°	4007.9	51.1
90°-120°	987.4	12.6
90°-150°	2849.7	36.3
90°-180°	3840.0	48.9
0°-180°	7847.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1377	1374	1365	1375	1374	131
15°	1315	1316	1307	1314	1310	370
25°	1195	1198	1191	1195	1189	550
35°	1034	1043	1040	1043	1044	647
45°	852	866	873	882	884	657
55°	655	676	698	712	718	585
65°	451	482	514	534	540	447
75°	248	284	327	353	360	263
85°	74	119	166	195	206	79
90°	23	74	127	161	175	18
95°	82	121	175	211	224	83
105°	240	267	313	345	358	256
115°	438	453	489	511	519	433
125°	633	639	666	685	691	567
135°	819	824	834	851	855	631
145°	991	993	996	1003	1006	619
155°	1132	1132	1133	1137	1132	521
165°	1231	1229	1230	1233	1228	347
175°	1280	1276	1276	1281	1275	122
180°	1283	1283	1283	1283	1283	



TEST NUMBER: P333281

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0
2.5°	1380.2	1379.7	1379.2	1378.8	1378.3	1377.2	1375.5	1373.8	1372.2	1370.5	1372.2
5°	1377.0	1376.4	1375.8	1375.2	1374.6	1373.2	1371.1	1369.0	1366.9	1364.8	1367.2
7.5°	1364.8	1364.6	1364.3	1364.1	1363.9	1362.7	1360.5	1358.3	1356.2	1354.0	1356.1
10°	1354.0	1354.0	1354.0	1354.0	1354.0	1352.8	1350.4	1348.0	1345.6	1343.2	1345.3
12.5°	1338.9	1339.1	1339.4	1339.6	1339.9	1339.0	1337.1	1335.2	1333.3	1331.3	1333.0
15°	1314.9	1315.2	1315.5	1315.8	1316.1	1315.2	1313.1	1311.0	1308.9	1306.8	1308.6
17.5°	1283.5	1284.1	1284.7	1285.3	1285.9	1285.2	1283.1	1281.0	1278.9	1276.8	1278.2
20°	1260.9	1261.5	1262.1	1262.7	1263.3	1262.5	1260.4	1258.3	1256.2	1254.1	1255.0
22.5°	1234.9	1236.0	1237.1	1238.2	1239.3	1238.6	1236.3	1234.0	1231.6	1229.3	1230.4
25°	1194.7	1195.6	1196.5	1197.4	1198.3	1197.9	1196.1	1194.3	1192.5	1190.7	1191.9
27.5°	1149.9	1151.2	1152.5	1153.9	1155.2	1154.8	1152.8	1150.7	1148.7	1146.7	1147.5
30°	1116.4	1118.2	1120.0	1121.8	1123.6	1123.6	1121.8	1120.0	1118.2	1116.4	1117.0
32.5°	1086.2	1087.7	1089.3	1090.9	1092.4	1092.5	1091.2	1089.9	1088.6	1087.3	1087.9
35°	1034.1	1036.2	1038.3	1040.4	1042.5	1043.1	1042.2	1041.3	1040.4	1039.5	1040.4
37.5°	982.0	983.9	985.8	987.7	989.6	990.5	990.2	989.9	989.6	989.3	990.5
40°	946.3	948.7	951.1	953.5	955.9	957.0	956.7	956.4	956.1	955.8	957.0
42.5°	907.4	910.6	913.7	916.8	919.9	921.8	922.5	923.1	923.8	924.5	925.9
45°	851.8	855.1	858.4	861.7	865.0	867.4	868.9	870.4	871.9	873.4	875.5
47.5°	794.9	797.9	801.0	804.0	807.1	809.9	812.5	815.1	817.7	820.2	823.3
50°	756.0	759.3	762.6	765.9	769.2	772.5	775.8	779.1	782.4	785.7	789.0
52.5°	714.9	719.0	723.0	727.0	731.0	735.0	739.1	743.1	747.1	751.1	754.7
55°	654.7	659.5	664.3	669.1	673.9	678.7	683.5	688.3	693.1	697.9	701.2
57.5°	593.2	598.9	604.7	610.5	616.2	621.9	627.4	632.9	638.4	643.9	647.7
60°	552.1	558.1	564.1	570.1	576.1	582.1	588.1	594.1	600.1	606.1	610.6
62.5°	512.2	518.2	524.2	530.2	536.2	542.4	548.9	555.4	561.9	568.3	573.3
65°	450.9	457.8	464.7	471.6	478.5	485.5	492.7	499.9	507.1	514.3	518.8
67.5°	393.1	399.8	406.4	413.1	419.7	426.7	434.1	441.4	448.7	456.0	461.5
70°	351.0	357.9	364.8	371.7	378.6	385.9	393.7	401.5	409.3	417.1	422.8
72.5°	310.0	317.1	324.2	331.4	338.5	346.3	354.9	363.4	371.9	380.4	386.6
75°	248.4	256.2	264.0	271.8	279.6	288.3	297.9	307.5	317.1	326.7	332.7
77.5°	189.3	198.3	207.3	216.3	225.3	234.4	243.6	252.9	262.1	271.3	277.9
80°	152.5	161.5	170.5	179.5	188.5	198.1	208.3	218.5	228.7	238.9	245.5
82.5°	119.1	128.5	138.0	147.5	157.0	166.9	177.4	187.8	198.3	208.7	215.1
85°	74.2	84.1	94.0	103.9	113.8	124.0	134.5	145.0	155.5	166.0	172.6
87.5°	42.3	52.3	62.2	72.2	82.1	92.4	102.9	113.4	123.9	134.4	141.5
90°	22.6	34.0	45.3	56.7	68.1	79.7	91.4	103.2	114.9	126.7	134.7
92.5°	43.6	53.7	63.8	74.0	84.1	95.3	107.7	120.0	132.4	144.7	152.8
95°	82.4	90.7	98.9	107.2	115.4	125.7	138.2	150.6	163.0	175.4	183.6
97.5°	123.8	130.9	138.1	145.3	152.5	162.6	175.5	188.4	201.3	214.2	222.0
100°	154.6	160.9	167.2	173.5	179.8	189.2	201.7	214.2	226.7	239.1	247.4
102.5°	187.9	194.6	201.3	208.0	214.7	223.5	234.3	245.1	255.9	266.8	275.0
105°	239.8	245.7	251.6	257.5	263.4	271.5	281.9	292.2	302.5	312.9	320.2
107.5°	297.3	302.4	307.6	312.8	318.0	325.4	335.1	344.8	354.4	364.1	370.7
110°	336.9	341.6	346.3	351.0	355.7	362.6	371.7	380.8	389.8	398.9	405.3



TEST NUMBER: P333281

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	378.4	381.9	385.4	388.8	392.3	398.5	407.5	416.5	425.5	434.5	440.3
115°	438.4	441.4	444.4	447.4	450.3	456.0	464.2	472.4	480.7	488.9	494.1
117.5°	498.5	500.3	502.1	503.9	505.7	510.4	518.2	526.0	533.8	541.6	546.8
120°	536.9	538.9	540.9	542.9	544.9	549.5	556.6	563.7	570.8	578.0	583.1
122.5°	577.3	578.1	579.0	579.8	580.6	584.6	591.9	599.1	606.3	613.6	618.3
125°	633.4	634.4	635.4	636.5	637.5	641.1	647.3	653.6	659.8	666.0	670.4
127.5°	691.9	692.4	692.8	693.3	693.7	696.6	701.7	706.9	712.1	717.3	721.5
130°	727.9	728.7	729.5	730.3	731.1	733.8	738.5	743.1	747.7	752.4	756.4
132.5°	762.7	764.5	766.2	768.0	769.8	772.2	775.4	778.5	781.7	784.8	788.8
135°	819.4	820.4	821.4	822.4	823.5	825.2	827.5	829.8	832.1	834.4	838.3
137.5°	872.6	873.6	874.7	875.7	876.8	878.1	879.6	881.1	882.6	884.1	887.9
140°	905.9	907.0	908.1	909.2	910.3	911.3	912.3	913.3	914.2	915.2	918.9
142.5°	940.2	940.9	941.6	942.3	943.0	943.8	944.7	945.6	946.5	947.4	950.5
145°	990.7	991.3	991.9	992.5	993.1	993.7	994.4	995.0	995.7	996.4	997.9
147.5°	1036.1	1036.6	1037.1	1037.6	1038.0	1038.6	1039.1	1039.6	1040.1	1040.7	1041.7
150°	1067.2	1067.0	1066.8	1066.6	1066.4	1066.7	1067.6	1068.5	1069.3	1070.2	1070.2
152.5°	1092.8	1093.1	1093.4	1093.7	1094.0	1094.4	1094.7	1095.1	1095.4	1095.8	1096.3
155°	1132.1	1132.1	1132.1	1132.1	1132.1	1132.2	1132.5	1132.7	1132.9	1133.1	1134.0
157.5°	1167.3	1166.8	1166.3	1165.8	1165.3	1165.2	1165.4	1165.6	1165.9	1166.1	1167.0
160°	1188.0	1187.4	1186.7	1186.0	1185.4	1185.2	1185.4	1185.6	1185.8	1186.0	1186.9
162.5°	1206.4	1205.9	1205.4	1204.9	1204.5	1204.2	1204.3	1204.3	1204.4	1204.4	1205.5
165°	1231.0	1230.5	1230.1	1229.6	1229.2	1229.1	1229.3	1229.5	1229.7	1230.0	1230.9
167.5°	1251.7	1250.8	1250.0	1249.1	1248.2	1247.7	1247.7	1247.7	1247.7	1247.7	1249.1
170°	1262.9	1262.0	1261.1	1260.3	1259.4	1258.9	1258.9	1258.9	1258.9	1258.9	1260.3
172.5°	1270.9	1270.0	1269.1	1268.2	1267.4	1266.9	1266.9	1266.9	1266.9	1266.9	1268.2
175°	1279.9	1279.0	1278.1	1277.2	1276.3	1275.9	1275.9	1275.9	1275.9	1275.9	1277.2
177.5°	1284.5	1283.8	1283.1	1282.3	1281.6	1281.2	1281.0	1280.8	1280.7	1280.5	1281.6
180°	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9



TEST NUMBER: P333281

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0
2.5°	1373.8	1375.5	1377.2	1377.9	1377.7	1377.4	1377.2	1377.0
5°	1369.6	1372.0	1374.4	1375.5	1375.2	1374.9	1374.6	1374.3
7.5°	1358.2	1360.3	1362.4	1363.3	1363.0	1362.7	1362.4	1362.1
10°	1347.4	1349.5	1351.6	1352.5	1352.2	1351.9	1351.6	1351.3
12.5°	1334.6	1336.2	1337.8	1338.2	1337.5	1336.7	1335.9	1335.1
15°	1310.4	1312.2	1314.0	1314.3	1313.1	1311.9	1310.7	1309.5
17.5°	1279.6	1280.9	1282.3	1282.6	1281.9	1281.2	1280.5	1279.8
20°	1255.9	1256.8	1257.7	1258.2	1258.2	1258.2	1258.2	1258.2
22.5°	1231.6	1232.7	1233.8	1234.0	1233.3	1232.6	1231.9	1231.2
25°	1193.1	1194.3	1195.5	1195.3	1193.8	1192.3	1190.8	1189.3
27.5°	1148.3	1149.2	1150.0	1150.2	1149.6	1149.1	1148.5	1148.0
30°	1117.6	1118.2	1118.8	1119.0	1118.7	1118.4	1118.1	1117.8
32.5°	1088.5	1089.1	1089.7	1089.8	1089.5	1089.2	1088.9	1088.6
35°	1041.3	1042.2	1043.1	1043.5	1043.5	1043.5	1043.5	1043.5
37.5°	991.7	992.9	994.1	994.6	994.5	994.4	994.2	994.1
40°	958.2	959.4	960.6	961.5	962.1	962.7	963.3	963.9
42.5°	927.3	928.8	930.2	931.0	931.1	931.2	931.4	931.5
45°	877.6	879.7	881.8	883.0	883.3	883.6	883.9	884.2
47.5°	826.4	829.4	832.5	834.3	835.0	835.7	836.3	837.0
50°	792.3	795.6	798.9	801.0	801.9	802.8	803.7	804.6
52.5°	758.2	761.7	765.3	767.4	768.0	768.7	769.4	770.0
55°	704.5	707.8	711.1	713.4	714.6	715.8	717.0	718.2
57.5°	651.5	655.3	659.1	661.4	662.3	663.2	664.1	665.0
60°	615.1	619.6	624.1	626.8	627.7	628.6	629.5	630.4
62.5°	578.3	583.3	588.3	591.3	592.5	593.6	594.7	595.9
65°	523.3	527.8	532.3	535.2	536.4	537.6	538.8	540.0
67.5°	466.9	472.4	477.9	481.4	482.9	484.5	486.0	487.6
70°	428.5	434.2	439.9	443.7	445.5	447.3	449.1	450.9
72.5°	392.8	399.0	405.1	408.9	410.2	411.5	412.8	414.2
75°	338.7	344.7	350.7	354.4	355.9	357.4	358.9	360.4
77.5°	284.5	291.1	297.7	301.6	302.8	304.0	305.2	306.4
80°	252.1	258.7	265.3	269.2	270.4	271.6	272.8	274.0
82.5°	221.4	227.8	234.1	238.4	240.6	242.7	244.9	247.0
85°	179.2	185.8	192.4	196.9	199.3	201.7	204.1	206.5
87.5°	148.7	155.8	162.9	167.6	169.8	172.0	174.3	176.5
90°	142.7	150.7	158.7	164.1	166.9	169.6	172.4	175.2
92.5°	161.0	169.1	177.2	182.6	185.2	187.7	190.3	192.9
95°	191.7	199.9	208.0	213.4	215.9	218.5	221.0	223.6
97.5°	229.7	237.5	245.3	250.3	252.6	254.9	257.2	259.5
100°	255.7	264.0	272.3	277.6	279.8	282.1	284.3	286.6
102.5°	283.2	291.5	299.7	305.0	307.5	309.9	312.3	314.7
105°	327.5	334.8	342.2	347.2	350.0	352.8	355.5	358.3
107.5°	377.3	383.9	390.5	394.7	396.5	398.3	400.2	402.0
110°	411.6	418.0	424.4	428.5	430.4	432.2	434.1	436.0



TEST NUMBER: P333281

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	446.0	451.8	457.6	461.3	463.0	464.7	466.4	468.1
115°	499.3	504.5	509.6	513.0	514.6	516.2	517.8	519.3
117.5°	552.1	557.4	562.7	565.9	567.0	568.2	569.3	570.5
120°	588.2	593.3	598.4	601.4	602.3	603.2	604.1	605.0
122.5°	622.9	627.6	632.3	635.2	636.3	637.4	638.5	639.6
125°	674.7	679.1	683.4	686.2	687.5	688.8	690.1	691.4
127.5°	725.7	730.0	734.2	736.9	738.2	739.5	740.8	742.1
130°	760.3	764.3	768.3	770.8	771.9	772.9	774.0	775.0
132.5°	792.8	796.7	800.7	803.0	803.7	804.3	804.9	805.6
135°	842.2	846.1	850.0	852.3	852.9	853.5	854.1	854.7
137.5°	891.7	895.5	899.3	901.3	901.4	901.4	901.5	901.6
140°	922.7	926.4	930.2	932.1	932.2	932.3	932.4	932.4
142.5°	953.5	956.6	959.7	961.3	961.4	961.5	961.6	961.7
145°	999.4	1000.9	1002.4	1003.4	1003.9	1004.4	1005.0	1005.5
147.5°	1042.7	1043.7	1044.7	1044.8	1043.8	1042.8	1041.8	1040.9
150°	1070.2	1070.2	1070.2	1070.2	1070.0	1069.9	1069.7	1069.6
152.5°	1096.9	1097.4	1097.9	1097.8	1097.1	1096.3	1095.6	1094.9
155°	1134.9	1135.8	1136.7	1136.6	1135.5	1134.3	1133.2	1132.1
157.5°	1167.8	1168.7	1169.6	1169.3	1167.9	1166.4	1164.9	1163.5
160°	1187.8	1188.7	1189.6	1189.5	1188.4	1187.3	1186.2	1185.0
162.5°	1206.5	1207.6	1208.7	1208.6	1207.3	1206.0	1204.7	1203.4
165°	1231.7	1232.6	1233.5	1233.3	1232.0	1230.6	1229.3	1228.0
167.5°	1250.4	1251.7	1253.1	1253.0	1251.7	1250.3	1248.9	1247.5
170°	1261.6	1262.9	1264.2	1264.1	1262.6	1261.0	1259.5	1257.9
172.5°	1269.6	1270.9	1272.2	1272.2	1270.8	1269.5	1268.1	1266.7
175°	1278.6	1279.9	1281.2	1281.1	1279.6	1278.0	1276.4	1274.9
177.5°	1282.6	1283.7	1284.7	1284.7	1283.4	1282.2	1280.9	1279.7
180°	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9

(END OF REPORT)