

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: P333282

Luminaire Tested: **S125DIP-S1090D1035U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333282
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
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-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7980.8 lumens
Efficiency: N/A
Efficacy: 131.9 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

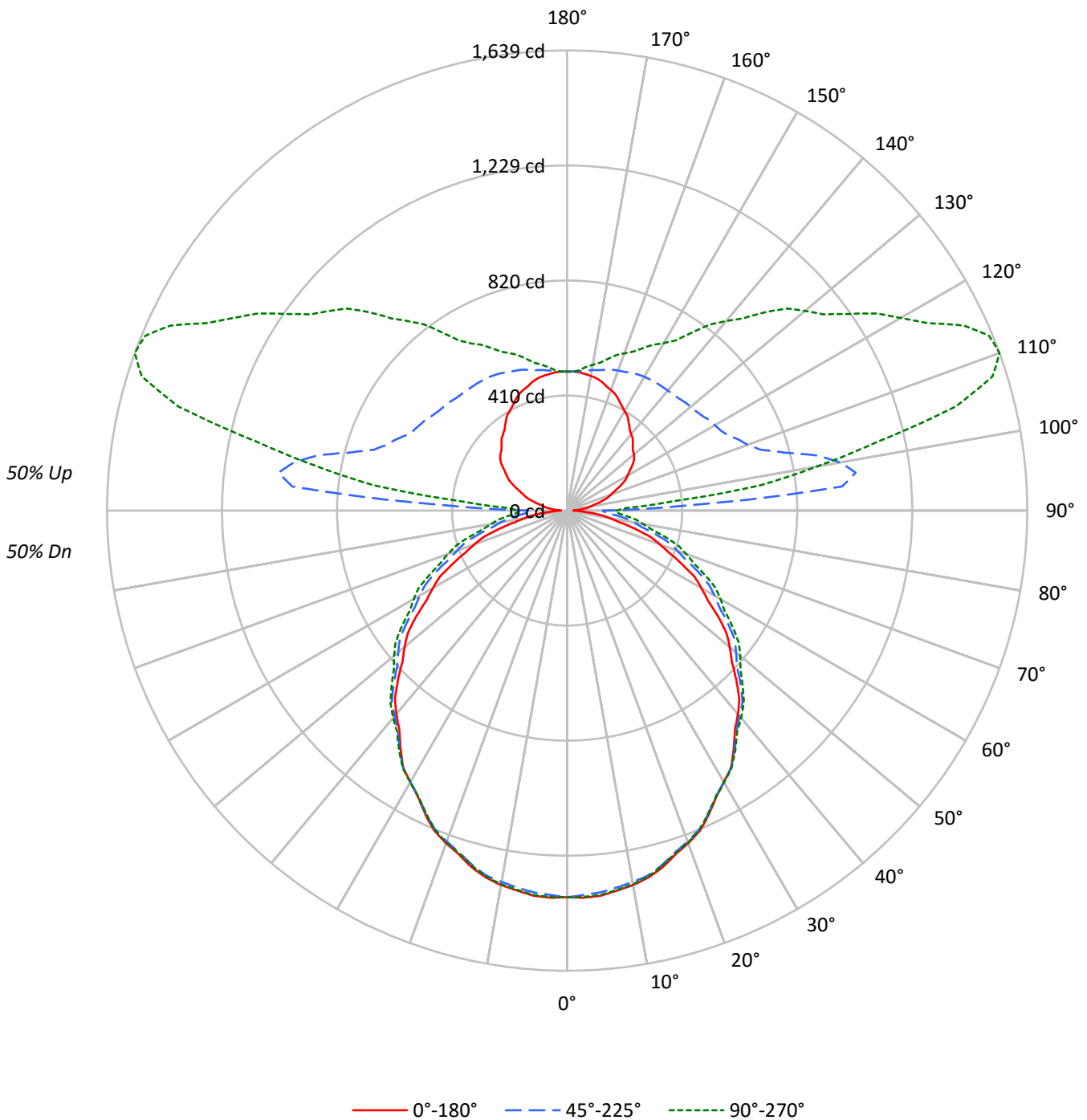
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333282

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D4

Luminous Intensity Polar Plot





TEST NUMBER: P333282

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D4

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	83	83	83	69	69	69	56	56	56	50
1	97	92	88	84	89	85	82	78	72	69	67	60	58	56	49	47	46	41
2	88	80	74	68	81	74	69	64	63	58	55	52	49	46	42	40	38	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	37	35	32	28
4	73	62	54	48	67	57	50	45	49	43	39	41	36	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	33	36	32	29	30	27	24	21
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21	18
7	57	45	36	31	52	41	34	29	35	30	25	30	25	22	25	21	19	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	27	23	30	24	20	25	21	18	21	17	15	13
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	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: P333282

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	1.6
10°-20°	369.6	4.6
20°-30°	549.7	6.9
30°-40°	651.1	8.2
40°-50°	673.2	8.4
50°-60°	620.1	7.8
60°-70°	501.3	6.3
70°-80°	335.7	4.2
80°-90°	176.8	2.2
90°-100°	456.6	5.7
100°-110°	843.6	10.6
110°-120°	772.3	9.7
120°-130°	614.2	7.7
130°-140°	482.9	6.1
140°-150°	357.8	4.5
150°-160°	250.2	3.1
160°-170°	147.4	1.8
170°-180°	48.0	0.6
0°-30°	1049.5	13.2
0°-40°	1700.6	21.3
0°-60°	2994.0	37.5
0°-90°	4007.8	50.2
90°-120°	2072.5	26.0
90°-150°	3527.4	44.2
90°-180°	3973.0	49.8
0°-180°	7980.8	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	162	174	16
95°	50	151	983	528	372	49
105°	125	193	798	1525	1433	132
115°	210	262	634	1328	1558	206
125°	285	333	588	1048	1220	253
135°	330	396	564	863	999	256
145°	383	437	555	698	773	239
155°	435	468	541	611	638	200
165°	475	488	519	551	559	134
175°	494	494	498	504	502	47
180°	495	495	495	495	495	



TEST NUMBER: P333282

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D4

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	52.1	62.1	72.1	82.1	92.4	102.8	113.4	123.8	134.4	141.5
90°	22.6	33.2	44.8	56.4	68.0	79.9	91.1	103.3	114.5	126.7	134.6
92.5°	31.6	43.1	60.4	81.6	107.7	146.5	211.4	313.3	423.0	428.2	373.6
95°	50.5	59.3	75.1	93.9	123.6	177.5	294.6	524.4	810.1	983.0	970.7
97.5°	70.6	78.9	91.5	109.5	136.2	177.0	257.5	428.3	726.4	1036.4	1193.2
100°	84.7	93.0	103.3	120.6	145.9	183.8	251.3	390.6	651.8	987.8	1243.7
102.5°	100.4	107.4	116.5	134.1	157.2	194.0	254.9	373.2	595.0	907.6	1205.6
105°	125.0	129.8	139.5	154.3	175.1	210.0	262.9	360.7	536.4	798.0	1090.5
107.5°	148.9	155.0	163.8	176.1	196.8	228.3	279.4	364.1	508.8	721.4	974.6
110°	166.2	171.8	179.4	192.0	210.5	242.5	291.8	369.1	498.3	684.4	907.7



TEST NUMBER: P333282

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	184.5	189.4	195.5	207.4	225.2	255.9	303.4	376.4	494.2	660.9	856.8
115°	209.8	213.8	218.9	230.0	247.1	277.0	321.7	387.4	491.1	633.6	799.8
117.5°	232.4	236.7	241.3	251.7	270.0	298.6	340.9	401.0	491.6	617.0	762.8
120°	248.3	252.2	257.1	267.0	284.9	313.7	355.6	410.4	494.2	607.9	741.7
122.5°	264.0	266.6	270.3	279.7	298.6	327.1	368.7	420.9	495.7	599.6	722.8
125°	284.9	286.6	291.3	300.0	318.7	347.5	386.4	435.3	499.2	588.1	696.7
127.5°	300.1	302.8	308.9	320.0	339.9	368.1	404.8	449.2	504.7	579.5	672.2
130°	310.5	313.2	320.9	333.6	354.2	382.1	417.3	459.4	508.6	574.6	656.7
132.5°	317.4	321.2	330.7	345.2	366.9	394.4	428.6	467.4	512.4	570.3	642.8
135°	330.1	333.8	345.5	361.2	381.8	409.7	442.7	477.8	516.8	563.8	624.6
137.5°	346.2	349.0	359.9	375.7	396.0	424.1	453.3	485.9	522.0	560.2	609.2
140°	354.7	357.7	369.7	385.7	404.7	431.8	461.0	491.3	523.5	557.7	601.0
142.5°	365.9	367.9	378.8	394.5	412.5	437.7	465.2	493.6	524.0	556.4	594.3
145°	382.7	384.4	394.1	407.7	425.4	448.2	474.2	499.1	526.1	555.0	586.5
147.5°	398.9	400.1	408.7	421.7	437.2	457.4	480.2	502.7	527.1	552.4	579.3
150°	409.3	411.3	418.3	431.3	445.2	462.2	484.2	505.1	527.1	550.0	574.0
152.5°	420.5	421.7	427.9	439.2	452.4	467.8	488.2	506.7	526.3	546.9	568.4
155°	435.2	435.2	441.2	451.2	461.2	475.2	492.1	508.1	524.1	541.1	559.0
157.5°	448.4	448.2	453.0	461.6	470.4	481.0	495.5	509.1	521.5	535.1	550.2
160°	457.2	456.2	460.2	467.2	475.2	484.2	497.1	509.1	519.1	531.1	543.1
162.5°	464.4	463.4	467.4	473.6	480.0	487.4	498.7	508.3	516.7	526.3	536.7
165°	475.2	473.2	476.2	481.2	485.2	491.2	499.1	507.1	513.1	519.1	527.1
167.5°	482.4	481.4	483.2	486.0	488.8	492.5	499.1	504.7	507.5	512.1	517.7
170°	487.2	486.2	487.2	489.2	491.2	494.1	499.1	503.1	505.1	508.1	512.1
172.5°	490.4	488.6	489.6	491.5	492.7	494.1	498.3	501.5	501.9	503.3	506.5
175°	494.1	492.1	493.1	494.1	494.1	494.1	497.1	499.1	498.1	498.1	499.1
177.5°	495.9	494.3	494.3	495.1	494.3	494.3	495.9	496.7	495.1	495.1	495.9
180°	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1



TEST NUMBER: P333282

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D4

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°	148.6	155.7	162.8	167.7	169.8	171.9	174.2	176.3
90°	142.5	150.4	158.3	164.8	166.9	169.0	172.1	174.2
92.5°	296.6	254.7	229.6	219.3	208.6	208.3	209.0	209.5
95°	829.5	684.4	568.2	488.7	419.9	392.0	386.2	372.3
97.5°	1173.3	1073.2	959.9	847.5	787.9	734.0	707.1	696.3
100°	1326.9	1284.3	1187.7	1088.0	1020.9	950.8	915.7	901.5
102.5°	1375.6	1411.8	1368.5	1302.2	1230.3	1181.0	1142.7	1132.5
105°	1336.1	1478.8	1528.8	1521.8	1492.0	1461.2	1443.3	1433.4
107.5°	1216.9	1405.3	1524.0	1580.1	1598.1	1599.8	1595.0	1588.9
110°	1129.0	1324.4	1470.9	1559.6	1606.6	1627.7	1636.8	1638.9



TEST NUMBER: P333282

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1058.7	1244.3	1392.1	1495.9	1563.7	1598.3	1617.8	1627.1
115°	969.9	1130.0	1272.2	1384.6	1464.3	1514.0	1543.7	1558.5
117.5°	909.7	1048.2	1171.1	1274.5	1354.4	1405.9	1435.7	1445.7
120°	876.6	1001.5	1116.4	1207.7	1283.4	1333.1	1361.9	1371.7
122.5°	850.3	966.1	1068.8	1154.4	1222.1	1267.8	1296.6	1305.6
125°	812.3	918.9	1010.6	1085.6	1143.0	1185.4	1208.9	1220.4
127.5°	773.4	872.9	958.4	1028.8	1081.2	1119.1	1141.6	1147.8
130°	749.8	841.8	923.9	991.6	1043.0	1077.5	1098.9	1106.4
132.5°	725.5	811.9	886.8	952.0	1003.2	1037.4	1057.0	1065.1
135°	692.4	765.2	833.0	892.6	938.0	972.5	991.9	999.4
137.5°	664.9	724.1	780.8	831.5	872.0	903.2	920.9	928.7
140°	649.2	699.4	748.6	792.8	830.9	858.1	874.3	880.5
142.5°	635.7	678.2	720.6	758.9	791.5	814.6	830.0	835.4
145°	618.9	651.4	683.8	712.1	737.3	755.5	767.6	772.8
147.5°	604.1	629.8	654.0	674.9	694.4	708.5	715.4	717.8
150°	596.0	617.9	636.9	655.0	670.3	682.6	686.9	688.2
152.5°	588.0	607.5	624.9	638.9	651.6	661.2	665.3	666.3
155°	576.0	592.0	606.0	616.9	626.9	633.9	636.9	637.9
157.5°	564.0	577.2	588.0	596.6	604.4	610.1	612.9	612.7
160°	556.0	566.0	576.0	583.0	590.0	595.0	597.0	596.0
162.5°	547.3	556.4	564.8	571.0	576.4	580.6	581.0	580.8
165°	535.1	542.1	548.1	553.0	557.0	559.0	559.0	559.0
167.5°	523.5	528.1	532.7	536.3	538.3	540.1	539.3	539.1
170°	517.1	520.1	523.1	525.1	527.1	528.1	528.1	527.1
172.5°	509.9	512.9	515.1	516.3	516.7	518.5	516.9	515.9
175°	502.1	502.1	504.1	504.1	504.1	505.1	503.1	502.1
177.5°	496.7	497.5	497.5	497.5	496.7	497.5	495.1	495.1
180°	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1

(END OF REPORT)