

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: P333273

Luminaire Tested: **S125DIP-S1090D810U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333273
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-S1090D810U835-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7175.3 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

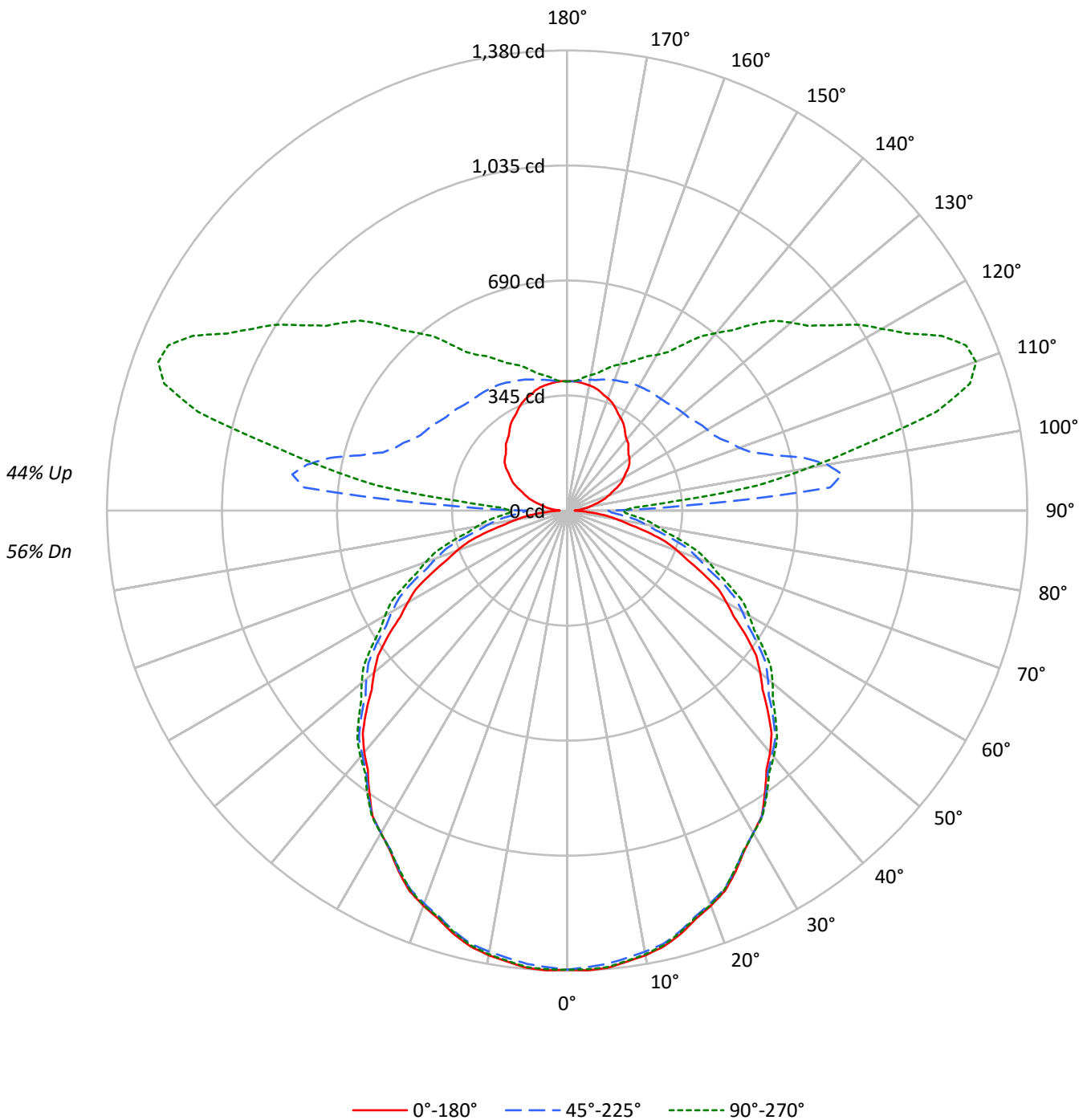
Input Watts (W): 54.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	61	61	61	56
1	98	94	89	85	91	87	83	80	75	72	69	63	61	60	53	52	50	45
2	89	81	75	69	82	76	70	65	65	61	57	55	52	49	46	44	42	37
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	35	31
4	74	63	55	48	68	59	51	45	51	45	40	43	39	35	36	33	30	27
5	68	56	47	41	63	52	45	39	45	39	35	39	34	30	33	29	26	23
6	63	50	42	36	58	47	39	34	41	35	30	35	30	26	29	26	23	20
7	58	45	37	31	54	42	35	30	37	31	26	32	27	23	27	23	20	18
8	54	41	33	28	50	38	31	26	34	28	23	29	24	21	25	21	18	16
9	50	37	30	25	46	35	28	23	31	25	21	27	22	19	23	19	16	14
10	47	34	27	22	43	32	26	21	28	23	19	25	20	17	21	17	15	13

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	1.8
10°-20°	369.6	5.2
20°-30°	549.7	7.7
30°-40°	651.1	9.1
40°-50°	673.2	9.4
50°-60°	620.1	8.6
60°-70°	501.3	7.0
70°-80°	335.7	4.7
80°-90°	176.2	2.5
90°-100°	378.8	5.3
100°-110°	676.3	9.4
110°-120°	615.4	8.6
120°-130°	487.0	6.8
130°-140°	380.8	5.3
140°-150°	280.8	3.9
150°-160°	195.9	2.7
160°-170°	115.5	1.6
170°-180°	37.6	0.5
0°-30°	1049.5	14.6
0°-40°	1700.6	23.7
0°-60°	2994.0	41.7
0°-90°	4007.2	55.8
90°-120°	1670.5	23.3
90°-150°	2819.1	39.3
90°-180°	3168.0	44.2
0°-180°	7175.3	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°	22	72	123	157	169	16
95°	43	130	791	441	321	41
105°	100	158	641	1216	1147	106
115°	166	209	508	1057	1239	163
125°	224	262	467	832	969	199
135°	259	310	444	682	790	201
145°	300	342	435	548	608	188
155°	341	367	424	479	500	157
165°	372	382	407	431	438	105
175°	387	387	390	395	393	37
180°	388	388	388	388	388	



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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	52.0	61.9	71.9	81.8	92.0	102.3	112.8	123.2	133.7	140.8
90°	22.4	32.8	43.9	55.1	66.3	77.7	88.7	100.5	111.4	123.2	130.9
92.5°	29.0	39.9	55.3	73.9	96.2	128.7	181.9	263.9	352.1	358.5	317.1
95°	43.4	51.9	66.0	82.4	107.4	151.6	245.4	427.7	653.7	791.3	783.0
97.5°	58.8	66.7	78.1	93.8	116.3	150.0	215.2	351.1	586.7	831.6	955.8
100°	69.6	77.4	86.9	101.8	122.9	154.3	209.3	320.5	527.2	792.4	994.2
102.5°	81.6	88.4	96.7	111.8	131.2	161.6	211.3	306.1	481.8	728.7	963.4
105°	100.5	105.3	114.0	126.6	143.9	172.7	216.1	294.7	434.3	641.1	871.5
107.5°	118.9	124.5	132.4	142.9	159.9	186.0	227.9	296.2	411.3	579.8	779.3
110°	132.2	137.4	144.1	154.7	170.1	196.4	236.8	299.2	402.2	549.8	725.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	146.6	151.0	156.4	166.3	180.9	206.2	245.1	304.1	398.1	530.5	685.1
115°	166.0	169.7	174.2	183.3	197.1	221.6	258.3	311.5	394.4	507.7	639.0
117.5°	183.5	187.2	191.1	199.5	214.2	237.5	272.2	320.9	393.5	493.3	608.6
120°	196.0	199.2	203.2	211.2	225.4	248.8	283.1	327.5	394.6	485.2	591.1
122.5°	208.0	210.2	213.1	220.5	235.5	258.6	292.6	334.9	394.9	477.7	575.3
125°	224.3	225.6	229.2	235.9	250.5	273.7	305.5	345.1	396.4	467.3	553.5
127.5°	236.0	238.0	242.7	251.3	266.8	289.5	319.2	355.1	399.6	459.3	532.8
130°	244.1	246.1	252.1	262.0	278.1	300.4	328.8	362.7	402.1	454.8	520.0
132.5°	249.3	252.2	259.6	271.0	288.0	309.9	337.4	368.4	404.4	450.4	508.1
135°	259.2	262.0	271.1	283.3	299.4	321.4	347.8	375.7	406.7	444.0	492.4
137.5°	271.7	273.8	282.3	294.6	310.5	332.6	355.7	381.4	409.9	440.0	479.2
140°	278.1	280.5	289.9	302.4	317.2	338.5	361.5	385.2	410.5	437.4	472.0
142.5°	286.9	288.4	296.9	309.2	323.2	342.9	364.4	386.7	410.5	435.9	466.2
145°	300.0	301.3	308.8	319.5	333.2	351.1	371.4	390.9	412.1	434.7	459.7
147.5°	312.4	313.4	320.1	330.3	342.5	358.3	376.1	393.8	412.8	432.7	453.8
150°	320.6	322.1	327.6	337.8	348.7	362.0	379.2	395.6	412.8	430.8	449.6
152.5°	329.3	330.3	335.1	344.0	354.4	366.4	382.3	396.9	412.2	428.3	445.2
155°	340.9	340.9	345.6	353.4	361.2	372.2	385.5	398.0	410.5	423.8	437.9
157.5°	351.2	351.1	354.8	361.5	368.4	376.7	388.1	398.8	408.5	419.1	431.0
160°	358.1	357.3	360.5	365.9	372.2	379.2	389.4	398.8	406.6	416.0	425.4
162.5°	363.7	363.0	366.1	370.9	375.9	381.7	390.6	398.1	404.7	412.2	420.3
165°	372.2	370.6	373.0	376.9	380.0	384.7	390.9	397.2	401.9	406.6	412.8
167.5°	377.8	377.0	378.4	380.6	382.8	385.8	390.9	395.3	397.5	401.1	405.5
170°	381.6	380.8	381.6	383.1	384.7	387.0	390.9	394.1	395.6	398.0	401.1
172.5°	384.1	382.7	383.4	385.0	385.9	387.0	390.3	392.8	393.1	394.2	396.7
175°	387.0	385.5	386.3	387.0	387.0	387.0	389.4	390.9	390.2	390.2	390.9
177.5°	388.4	387.2	387.2	387.8	387.2	387.2	388.4	389.1	387.8	387.8	388.4
180°	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8



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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°	147.8	154.9	161.9	166.8	168.9	171.0	173.2	175.3
90°	138.6	146.3	153.9	160.0	162.1	164.2	167.1	169.2
92.5°	258.2	226.9	208.7	201.5	193.6	193.8	194.8	195.7
95°	673.9	561.7	472.1	410.8	357.4	336.0	331.9	321.4
97.5°	941.6	864.6	777.2	690.1	643.8	602.0	581.4	573.4
100°	1060.7	1028.7	954.5	877.2	825.1	770.6	743.4	732.7
102.5°	1097.8	1127.5	1094.9	1043.8	987.9	949.7	920.1	912.5
105°	1065.2	1178.3	1218.7	1214.2	1191.2	1167.5	1154.0	1146.7
107.5°	970.4	1119.3	1213.5	1258.3	1272.8	1274.5	1271.2	1266.8
110°	900.5	1054.8	1170.7	1241.1	1278.4	1295.3	1302.9	1305.0



TEST NUMBER: P333273

CATALOG NUMBER: S125DIP-S1090D810U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	844.4	990.9	1107.9	1190.0	1243.6	1271.2	1286.9	1294.6
115°	773.4	900.0	1012.5	1101.3	1164.1	1203.5	1227.2	1239.1
117.5°	724.7	834.3	931.7	1013.4	1076.4	1117.3	1141.0	1149.3
120°	697.9	796.8	887.9	960.2	1019.8	1059.2	1082.1	1090.1
122.5°	676.2	768.0	849.5	917.3	970.7	1006.9	1029.8	1037.2
125°	645.1	729.6	802.4	861.9	907.2	940.7	959.4	968.7
127.5°	613.1	692.0	759.9	815.7	857.2	887.2	905.2	910.4
130°	593.7	666.8	731.9	785.6	826.2	853.5	870.6	876.8
132.5°	573.8	642.4	702.0	753.6	794.0	821.1	836.7	843.3
135°	546.4	604.2	658.2	705.4	741.3	768.6	784.2	790.4
137.5°	523.6	570.8	615.9	656.1	688.1	712.8	727.0	733.3
140°	510.5	550.5	589.8	624.9	655.0	676.6	689.5	694.6
142.5°	499.2	533.2	567.0	597.4	623.2	641.6	653.9	658.4
145°	485.4	511.2	536.9	559.4	579.3	593.8	603.6	608.0
147.5°	473.4	493.6	512.7	529.1	544.5	555.7	561.2	563.2
150°	466.8	484.0	498.8	513.1	525.1	534.8	538.2	539.3
152.5°	460.5	475.9	489.5	500.4	510.4	517.9	521.1	521.9
155°	451.2	463.7	474.6	483.2	491.0	496.5	498.8	499.6
157.5°	441.8	452.1	460.5	467.3	473.4	477.9	480.1	479.9
160°	435.5	443.3	451.2	456.6	462.1	466.0	467.6	466.8
162.5°	428.6	435.8	442.4	447.2	451.5	454.7	455.1	454.9
165°	419.1	424.6	429.3	433.2	436.3	437.9	437.9	437.9
167.5°	410.0	413.6	417.2	420.0	421.6	423.0	422.4	422.2
170°	405.0	407.4	409.7	411.3	412.8	413.6	413.6	412.8
172.5°	399.4	401.7	403.5	404.4	404.7	406.1	404.9	404.1
175°	393.3	393.3	394.9	394.9	394.9	395.6	394.1	393.3
177.5°	389.1	389.7	389.7	389.7	389.1	389.7	387.8	387.8
180°	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8

(END OF REPORT)