

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: P333262

Luminaire Tested: **S125DIP-S1090D590U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333262
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: S125DIP-S1090D590U835-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6630.0 lumens
Efficiency: N/A
Efficacy: 135.9 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: Semi-Direct

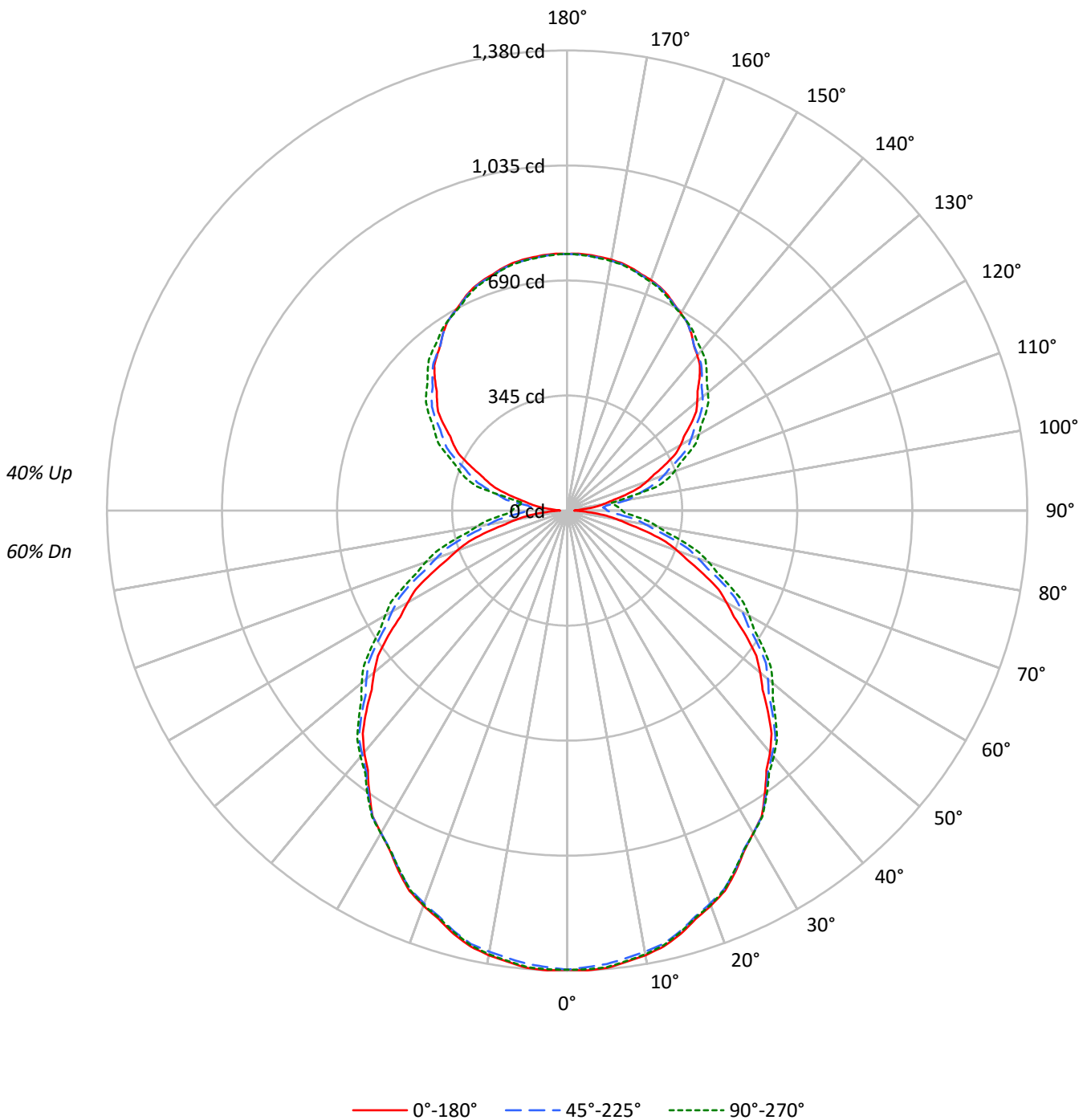
Input Watts (W): 48.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333262

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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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60
1	99	94	90	86	92	88	85	81	77	74	71	66	64	62	57	55	54	49
2	90	82	75	70	84	77	71	66	67	62	58	58	54	51	49	47	45	40
3	82	72	64	58	76	67	60	55	59	53	49	51	47	43	43	40	38	34
4	75	63	55	49	70	59	52	46	52	46	41	45	40	37	39	35	32	29
5	69	56	48	42	64	53	45	40	46	40	36	40	36	32	35	31	28	25
6	63	51	42	36	59	48	40	34	42	36	31	36	31	28	31	28	24	22
7	58	46	37	32	54	43	35	30	38	32	27	33	28	24	29	25	22	19
8	54	41	33	28	51	39	32	27	35	29	24	30	25	22	26	22	19	17
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	24	20	17	15
10	47	35	27	22	44	33	26	21	29	24	20	26	21	18	23	19	16	14

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: P333262

CATALOG NUMBER: S125DIP-S1090D590U835-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	2.0
10°-20°	369.6	5.6
20°-30°	549.7	8.3
30°-40°	651.1	9.8
40°-50°	673.2	10.2
50°-60°	620.1	9.4
60°-70°	501.3	7.6
70°-80°	335.7	5.1
80°-90°	175.7	2.6
90°-100°	125.7	1.9
100°-110°	244.4	3.7
110°-120°	360.9	5.4
120°-130°	428.6	6.5
130°-140°	443.5	6.7
140°-150°	407.5	6.1
150°-160°	327.7	4.9
160°-170°	211.9	3.2
170°-180°	73.1	1.1
0°-30°	1049.5	15.8
0°-40°	1700.6	25.7
0°-60°	2994.0	45.2
0°-90°	4006.6	60.4
90°-120°	731.0	11.0
90°-150°	2010.6	30.3
90°-180°	2623.0	39.6
0°-180°	6630.0	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	70	120	152	165	16
95°	50	83	108	139	150	55
105°	180	205	244	270	280	191
115°	323	337	371	392	398	320
125°	453	457	483	501	507	404
135°	561	564	572	587	591	433
145°	649	649	649	656	658	405
155°	713	710	711	712	708	328
165°	752	749	750	753	748	212
175°	770	766	767	771	766	73
180°	770	770	770	770	770	



TEST NUMBER: P333262

CATALOG NUMBER: S125DIP-S1090D590U835-4F0-1E-UDD-D

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°	42.2	52.0	61.8	71.6	81.4	91.5	101.9	112.3	122.7	133.0	140.1
90°	22.2	32.8	43.4	54.0	64.6	75.5	86.6	97.7	108.7	119.8	127.4
92.5°	28.2	36.4	44.6	52.7	60.9	70.6	81.8	93.1	104.3	115.5	122.8
95°	50.1	57.5	64.9	72.3	79.7	86.1	91.5	96.9	102.3	107.7	114.9
97.5°	83.8	91.5	99.2	106.9	114.6	118.6	119.0	119.3	119.6	119.9	122.6
100°	110.1	116.8	123.5	130.2	136.9	145.2	155.4	165.5	175.6	185.7	173.1
102.5°	136.9	143.2	149.5	155.8	162.1	170.1	179.7	189.4	199.1	208.7	211.2
105°	179.9	185.2	190.5	195.8	201.1	208.3	217.3	226.3	235.3	244.3	250.3
107.5°	224.6	228.7	232.8	236.8	240.9	247.4	256.3	265.2	274.1	283.0	288.9
110°	253.6	257.2	260.8	264.4	268.0	274.2	282.8	291.5	300.1	308.8	314.1



TEST NUMBER: P333262

CATALOG NUMBER: S125DIP-S1090D590U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	281.9	285.1	288.3	291.5	294.7	300.4	308.7	317.0	325.4	333.7	338.6
115°	323.0	325.8	328.5	331.2	334.0	339.3	347.2	355.2	363.1	371.0	375.9
117.5°	365.6	367.0	368.3	369.7	371.0	375.6	383.5	391.4	399.2	407.1	411.5
120°	393.0	393.8	394.6	395.3	396.1	400.1	407.4	414.7	422.0	429.2	434.1
122.5°	416.1	417.0	417.9	418.8	419.7	423.6	430.4	437.3	444.1	450.9	455.5
125°	453.3	453.9	454.4	455.0	455.6	458.9	464.9	470.9	476.9	482.9	487.2
127.5°	487.6	488.0	488.3	488.6	489.0	491.6	496.4	501.3	506.1	510.9	515.1
130°	509.5	509.9	510.2	510.5	510.9	513.2	517.5	521.9	526.2	530.5	534.3
132.5°	530.4	531.1	531.7	532.4	533.1	534.9	537.9	540.8	543.8	546.7	550.9
135°	561.3	561.7	562.2	562.6	563.1	564.3	566.1	567.9	569.8	571.6	575.3
137.5°	589.6	590.0	590.5	590.9	591.3	591.9	592.7	593.5	594.3	595.1	598.7
140°	607.3	607.5	607.8	608.0	608.3	608.5	608.7	608.8	609.0	609.2	612.7
142.5°	624.1	624.1	624.0	623.9	623.8	623.9	624.1	624.3	624.6	624.8	627.7
145°	648.9	648.9	648.8	648.8	648.7	648.7	648.7	648.7	648.7	648.7	650.3
147.5°	669.2	669.2	669.1	669.1	669.0	669.1	669.2	669.4	669.5	669.7	670.3
150°	682.9	682.7	682.4	682.2	681.9	681.9	682.2	682.4	682.7	682.9	683.2
152.5°	696.2	695.6	695.1	694.5	693.9	693.8	694.0	694.3	694.5	694.8	695.1
155°	713.2	712.4	711.7	710.9	710.1	709.9	710.1	710.4	710.6	710.9	711.3
157.5°	726.3	725.8	725.4	724.9	724.5	724.3	724.3	724.3	724.3	724.4	724.8
160°	735.4	734.7	733.9	733.1	732.4	732.1	732.2	732.3	732.4	732.6	733.1
162.5°	742.7	742.0	741.2	740.4	739.7	739.4	739.5	739.6	739.7	739.9	740.6
165°	752.5	751.8	751.0	750.3	749.5	749.2	749.3	749.4	749.6	749.7	750.4
167.5°	759.8	759.1	758.3	757.5	756.7	756.4	756.5	756.6	756.7	756.9	757.8
170°	764.0	763.1	762.2	761.3	760.4	760.0	760.1	760.3	760.4	760.5	761.5
172.5°	766.7	765.8	764.9	764.0	763.1	762.8	763.0	763.3	763.5	763.7	764.6
175°	769.7	768.9	768.1	767.4	766.6	766.3	766.4	766.6	766.7	766.8	767.8
177.5°	771.0	770.4	769.8	769.2	768.6	768.3	768.4	768.5	768.6	768.7	769.5
180°	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7



TEST NUMBER: P333262

CATALOG NUMBER: S125DIP-S1090D590U835-4F0-1E-UDD-D

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°	147.1	154.1	161.1	165.7	167.9	170.1	172.3	174.5
90°	134.9	142.4	150.0	155.0	157.4	159.9	162.4	164.9
92.5°	130.1	137.4	144.7	149.5	151.7	154.0	156.3	158.6
95°	122.1	129.4	136.6	141.3	143.4	145.5	147.6	149.7
97.5°	125.3	128.0	130.8	133.1	135.2	137.2	139.3	141.3
100°	160.5	147.9	135.3	129.7	130.9	132.2	133.5	134.8
102.5°	213.7	216.2	218.7	216.5	209.7	202.9	196.0	189.2
105°	256.3	262.3	268.3	272.3	274.2	276.2	278.2	280.1
107.5°	294.9	300.9	306.8	310.6	312.0	313.5	315.0	316.5
110°	319.4	324.7	330.1	333.8	336.1	338.3	340.5	342.7



TEST NUMBER: P333262

CATALOG NUMBER: S125DIP-S1090D590U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	343.6	348.6	353.6	357.0	359.0	360.9	362.8	364.7
115°	380.8	385.7	390.6	393.5	394.6	395.6	396.7	397.7
117.5°	416.0	420.4	424.9	427.9	429.6	431.3	433.1	434.8
120°	438.9	443.8	448.6	451.6	452.8	454.0	455.1	456.3
122.5°	460.2	464.8	469.4	472.2	473.3	474.3	475.4	476.5
125°	491.5	495.8	500.1	502.8	503.9	505.0	506.2	507.3
127.5°	519.3	523.4	527.6	530.1	530.9	531.7	532.5	533.3
130°	538.2	542.0	545.8	548.1	549.0	549.9	550.7	551.6
132.5°	555.0	559.1	563.2	565.6	566.2	566.9	567.5	568.1
135°	578.9	582.6	586.2	588.4	589.2	589.9	590.6	591.4
137.5°	602.3	605.8	609.4	611.5	612.0	612.6	613.1	613.7
140°	616.3	619.8	623.4	625.4	625.8	626.3	626.7	627.1
142.5°	630.6	633.4	636.3	638.0	638.4	638.8	639.3	639.7
145°	652.0	653.6	655.2	656.2	656.7	657.1	657.6	658.0
147.5°	671.0	671.6	672.2	672.4	672.0	671.6	671.2	670.9
150°	683.4	683.7	683.9	683.7	683.0	682.3	681.6	680.9
152.5°	695.3	695.6	695.8	695.5	694.7	693.8	693.0	692.1
155°	711.7	712.0	712.4	712.1	711.1	710.1	709.1	708.0
157.5°	725.2	725.6	726.0	725.7	724.7	723.6	722.6	721.6
160°	733.6	734.1	734.6	734.3	733.3	732.3	731.3	730.3
162.5°	741.3	742.0	742.7	742.5	741.4	740.3	739.2	738.0
165°	751.2	752.0	752.7	752.6	751.6	750.6	749.6	748.5
167.5°	758.7	759.6	760.5	760.4	759.3	758.1	757.0	755.8
170°	762.6	763.6	764.6	764.5	763.4	762.2	761.1	760.0
172.5°	765.5	766.5	767.4	767.3	766.1	765.0	763.8	762.7
175°	768.8	769.8	770.9	770.8	769.7	768.5	767.4	766.2
177.5°	770.2	770.9	771.6	771.5	770.7	769.9	769.1	768.3
180°	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7

(END OF REPORT)