

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: P333290

Luminaire Tested: **S125DIP-S1090D1205U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333290
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-S1090D1205U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8434.9 lumens
Efficiency: N/A
Efficacy: 129.0 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

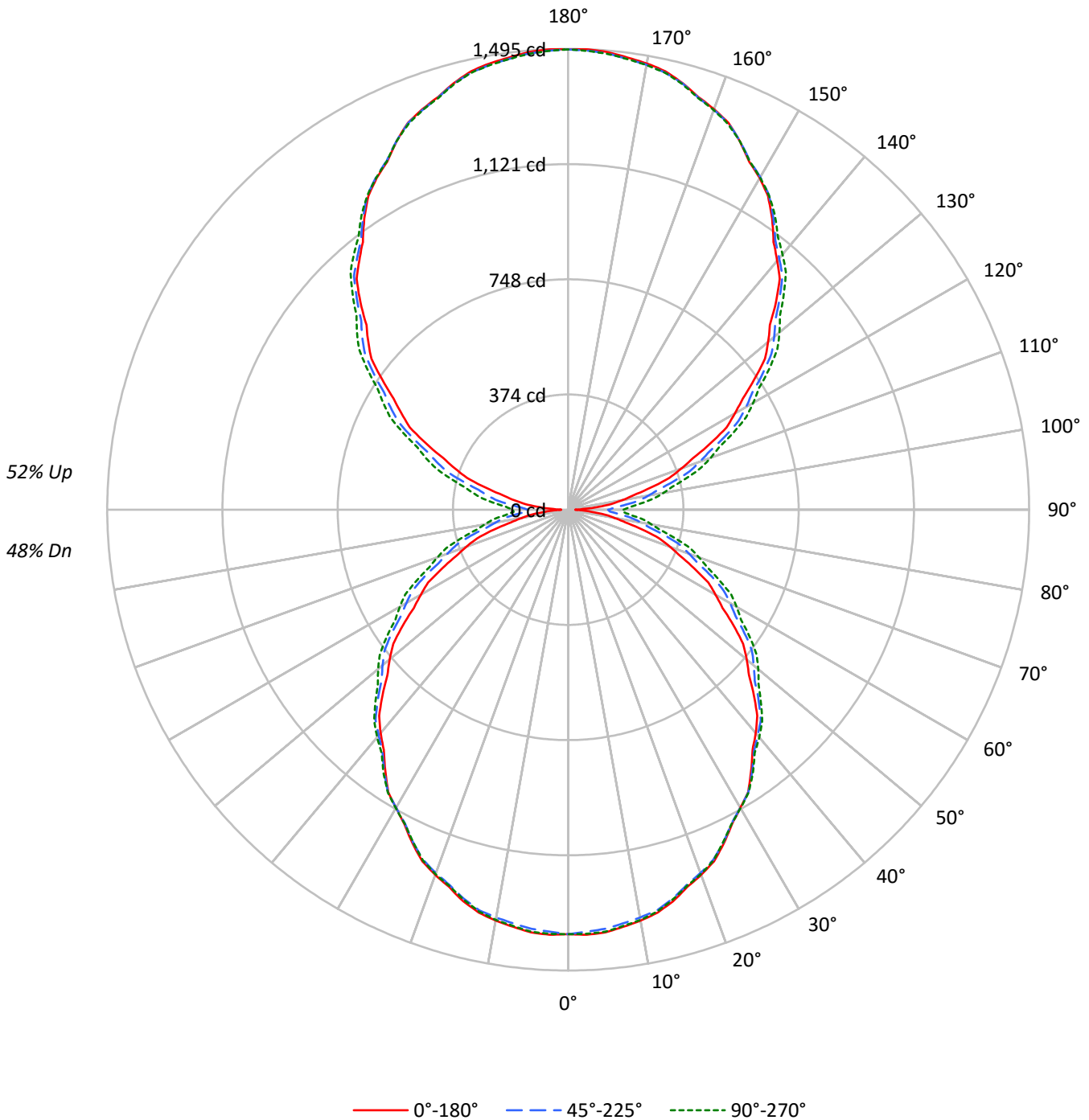
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48
1	97	92	88	84	88	85	81	78	71	68	66	58	56	55	46	45	44	39
2	88	80	73	68	80	73	68	63	62	57	54	51	48	45	40	38	37	32
3	80	70	62	56	73	64	58	52	54	49	45	45	41	38	36	33	31	27
4	73	62	54	47	67	57	50	44	48	42	38	40	35	32	32	29	26	23
5	67	55	47	40	61	51	43	38	43	37	33	35	31	28	28	25	23	19
6	61	49	41	35	56	45	38	33	38	33	28	32	28	24	26	23	20	17
7	57	44	36	31	52	41	34	29	35	29	25	29	25	21	24	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22	26	22	19	22	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	20	17	14	12
10	46	34	26	21	42	31	25	20	27	21	18	22	18	15	18	15	13	11

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	1.5
10°-20°	369.6	4.4
20°-30°	549.7	6.5
30°-40°	651.1	7.7
40°-50°	673.2	8.0
50°-60°	620.1	7.4
60°-70°	501.3	5.9
70°-80°	335.7	4.0
80°-90°	177.4	2.1
90°-100°	197.7	2.3
100°-110°	367.4	4.4
110°-120°	548.5	6.5
120°-130°	685.7	8.1
130°-140°	749.7	8.9
140°-150°	725.4	8.6
150°-160°	607.3	7.2
160°-170°	403.7	4.8
170°-180°	141.3	1.7
0°-30°	1049.5	12.4
0°-40°	1700.6	20.2
0°-60°	2994.0	35.5
0°-90°	4008.3	47.5
90°-120°	1113.6	13.2
90°-150°	3274.4	38.8
90°-180°	4427.0	52.5
0°-180°	8434.9	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	75	129	165	179	19
95°	93	132	188	224	238	94
105°	277	306	352	385	399	296
115°	509	524	560	583	590	503
125°	736	743	770	789	795	659
135°	953	959	970	986	989	735
145°	1153	1156	1160	1166	1168	720
155°	1318	1318	1319	1323	1318	607
165°	1433	1431	1432	1436	1429	404
175°	1490	1485	1485	1491	1484	141
180°	1493	1493	1493	1493	1493	



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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°	42.4	52.4	62.4	72.4	82.4	92.7	103.3	113.8	124.4	134.9	142.1
90°	22.8	34.4	46.1	57.8	69.4	81.3	93.3	105.3	117.3	129.3	137.5
92.5°	47.6	57.9	68.2	78.5	88.9	100.4	113.0	125.7	138.3	151.0	159.4
95°	93.1	101.4	109.7	118.0	126.3	136.9	149.7	162.5	175.2	188.0	196.4
97.5°	141.4	148.7	155.9	163.1	170.3	180.7	194.1	207.5	220.9	234.3	242.3
100°	177.5	183.8	190.1	196.4	202.7	212.4	225.3	238.3	251.2	264.2	272.8
102.5°	216.4	223.3	230.1	237.0	243.8	252.8	263.9	274.9	286.0	297.1	305.6
105°	277.1	283.2	289.3	295.4	301.5	309.8	320.3	330.9	341.4	352.0	359.5
107.5°	344.3	349.6	355.0	360.4	365.8	373.4	383.2	393.0	402.8	412.7	419.4
110°	390.6	395.5	400.4	405.3	410.2	417.2	426.4	435.5	444.7	453.9	460.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	438.9	442.5	446.0	449.6	453.1	459.5	468.6	477.8	486.9	496.1	501.9
115°	508.9	512.1	515.2	518.3	521.5	527.2	535.5	543.8	552.1	560.5	565.6
117.5°	579.2	581.0	582.9	584.7	586.6	591.4	599.2	607.1	614.9	622.8	628.1
120°	623.8	626.0	628.2	630.4	632.6	637.2	644.4	651.6	658.7	665.9	671.0
122.5°	671.1	671.9	672.8	673.7	674.6	678.7	686.0	693.4	700.7	708.0	712.7
125°	736.3	737.6	738.8	740.1	741.3	745.1	751.3	757.6	763.9	770.1	774.4
127.5°	804.7	805.3	805.9	806.4	807.0	809.9	815.1	820.4	825.6	830.8	835.0
130°	846.5	847.5	848.5	849.5	850.5	853.4	858.1	862.8	867.5	872.2	876.2
132.5°	887.3	889.3	891.4	893.5	895.5	898.1	901.3	904.4	907.5	910.7	914.6
135°	953.3	954.5	955.8	957.0	958.3	960.1	962.4	964.8	967.1	969.5	973.4
137.5°	1015.3	1016.5	1017.8	1019.0	1020.3	1021.7	1023.3	1024.9	1026.5	1028.1	1031.9
140°	1054.2	1055.5	1056.7	1058.0	1059.3	1060.5	1061.6	1062.7	1063.7	1064.8	1068.6
142.5°	1094.1	1095.0	1095.8	1096.7	1097.5	1098.5	1099.5	1100.5	1101.6	1102.6	1105.8
145°	1152.9	1153.7	1154.4	1155.1	1155.9	1156.6	1157.4	1158.2	1158.9	1159.7	1161.2
147.5°	1206.0	1206.5	1207.1	1207.7	1208.2	1208.8	1209.5	1210.1	1210.7	1211.3	1212.4
150°	1242.2	1242.0	1241.7	1241.5	1241.2	1241.6	1242.6	1243.6	1244.7	1245.7	1245.7
152.5°	1272.0	1272.3	1272.7	1273.1	1273.4	1273.8	1274.2	1274.6	1275.1	1275.5	1276.1
155°	1317.8	1317.8	1317.8	1317.8	1317.8	1317.9	1318.2	1318.4	1318.7	1318.9	1320.0
157.5°	1358.7	1358.1	1357.5	1357.0	1356.4	1356.2	1356.5	1356.8	1357.0	1357.3	1358.3
160°	1382.8	1382.1	1381.3	1380.5	1379.7	1379.5	1379.7	1380.0	1380.3	1380.5	1381.5
162.5°	1404.2	1403.7	1403.1	1402.5	1401.9	1401.7	1401.7	1401.8	1401.8	1401.9	1403.1
165°	1432.8	1432.3	1431.8	1431.3	1430.7	1430.6	1430.9	1431.1	1431.4	1431.6	1432.7
167.5°	1457.0	1455.9	1454.9	1453.9	1452.8	1452.3	1452.3	1452.3	1452.3	1452.3	1453.9
170°	1470.0	1469.0	1467.9	1466.9	1465.9	1465.3	1465.3	1465.3	1465.3	1465.3	1466.9
172.5°	1479.3	1478.3	1477.2	1476.2	1475.2	1474.6	1474.6	1474.6	1474.6	1474.6	1476.2
175°	1489.7	1488.7	1487.7	1486.6	1485.6	1485.1	1485.1	1485.1	1485.1	1485.1	1486.6
177.5°	1495.1	1494.3	1493.4	1492.6	1491.8	1491.3	1491.1	1490.9	1490.6	1490.4	1491.7
180°	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2



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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°	149.3	156.4	163.6	168.3	170.5	172.8	175.0	177.3
90°	145.7	153.9	162.1	167.6	170.5	173.3	176.2	179.1
92.5°	167.7	176.1	184.5	190.0	192.6	195.3	198.0	200.6
95°	204.8	213.2	221.7	227.2	229.8	232.4	235.0	237.6
97.5°	250.3	258.3	266.3	271.5	273.8	276.2	278.5	280.9
100°	281.4	290.1	298.7	304.2	306.5	308.8	311.1	313.4
102.5°	314.2	322.8	331.4	337.0	339.5	342.0	344.5	347.1
105°	367.1	374.6	382.2	387.4	390.3	393.1	396.0	398.9
107.5°	426.1	432.8	439.5	443.8	445.6	447.4	449.2	451.0
110°	466.8	473.3	479.8	484.0	485.8	487.6	489.5	491.3



TEST NUMBER: P333290

CATALOG NUMBER: S125DIP-S1090D1205U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	507.7	513.5	519.3	523.1	524.7	526.3	528.0	529.6
115°	570.7	575.9	581.0	584.4	585.9	587.5	589.0	590.5
117.5°	633.4	638.7	644.0	647.2	648.2	649.2	650.2	651.2
120°	676.1	681.2	686.3	689.2	690.0	690.7	691.5	692.3
122.5°	717.3	722.0	726.6	729.5	730.4	731.4	732.4	733.4
125°	778.7	783.0	787.2	790.0	791.2	792.5	793.7	795.0
127.5°	839.2	843.4	847.6	850.3	851.5	852.7	853.9	855.2
130°	880.1	884.0	888.0	890.4	891.4	892.4	893.4	894.4
132.5°	918.5	922.5	926.4	928.7	929.2	929.7	930.3	930.8
135°	977.3	981.2	985.1	987.3	987.7	988.2	988.7	989.1
137.5°	1035.8	1039.6	1043.5	1045.4	1045.3	1045.2	1045.1	1045.0
140°	1072.4	1076.3	1080.1	1081.9	1081.8	1081.8	1081.7	1081.6
142.5°	1108.9	1112.0	1115.1	1116.7	1116.6	1116.5	1116.4	1116.3
145°	1162.7	1164.2	1165.7	1166.7	1167.1	1167.5	1168.0	1168.4
147.5°	1213.5	1214.6	1215.7	1215.7	1214.4	1213.2	1212.0	1210.8
150°	1245.7	1245.7	1245.7	1245.6	1245.4	1245.2	1245.0	1244.7
152.5°	1276.7	1277.3	1277.9	1277.8	1276.9	1276.1	1275.2	1274.3
155°	1321.0	1322.0	1323.1	1322.9	1321.6	1320.3	1319.1	1317.8
157.5°	1359.3	1360.4	1361.4	1361.1	1359.4	1357.7	1356.0	1354.3
160°	1382.6	1383.6	1384.6	1384.5	1383.2	1381.9	1380.6	1379.4
162.5°	1404.4	1405.6	1406.9	1406.7	1405.2	1403.7	1402.2	1400.7
165°	1433.7	1434.7	1435.8	1435.5	1434.0	1432.4	1430.9	1429.3
167.5°	1455.4	1457.0	1458.5	1458.5	1456.9	1455.3	1453.7	1452.1
170°	1468.4	1470.0	1471.5	1471.4	1469.6	1467.8	1466.0	1464.2
172.5°	1477.7	1479.3	1480.8	1480.8	1479.2	1477.6	1476.0	1474.4
175°	1488.2	1489.7	1491.3	1491.2	1489.4	1487.6	1485.7	1483.9
177.5°	1492.9	1494.2	1495.4	1495.3	1493.9	1492.4	1491.0	1489.5
180°	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2

(END OF REPORT)