

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: P333445

Luminaire Tested: **S125DIW-S1090D1050U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333445
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: S125DIW-S1090D1050U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7901.0 lumens
Efficiency: N/A
Efficacy: 129.1 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

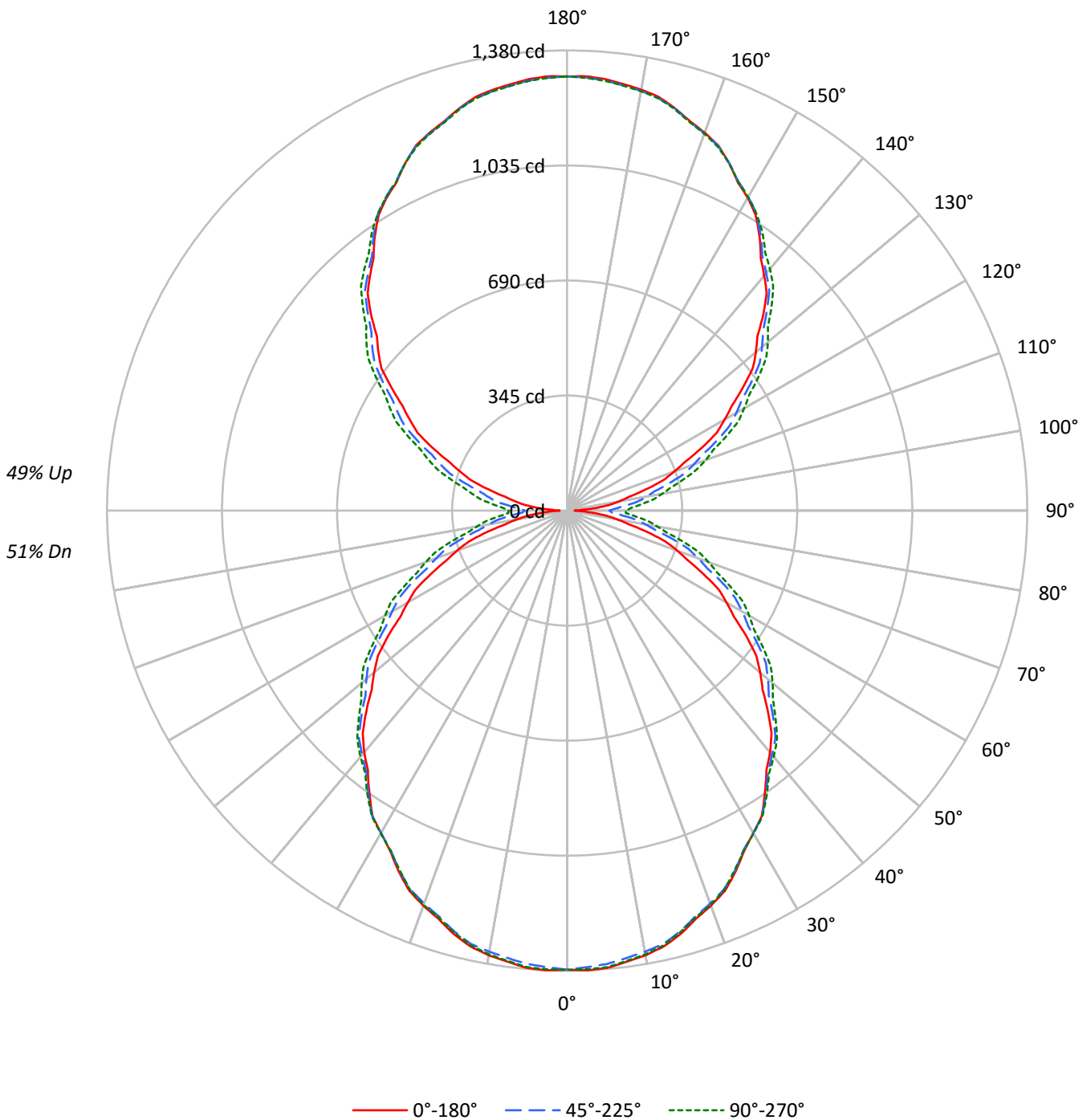
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	97	93	88	85	89	85	82	79	72	70	67	60	58	56	49	48	46	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	47	43	40	39	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	32	28
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	33	37	32	29	30	27	24	21
6	62	49	41	35	57	46	39	33	39	33	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	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	28	23	30	24	20	25	21	18	21	18	15	13
10	46	34	27	22	43	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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	1.6
10°-20°	369.6	4.7
20°-30°	549.7	7.0
30°-40°	651.1	8.2
40°-50°	673.2	8.5
50°-60°	620.1	7.8
60°-70°	501.3	6.3
70°-80°	335.7	4.2
80°-90°	176.9	2.2
90°-100°	184.9	2.3
100°-110°	329.6	4.2
110°-120°	484.5	6.1
120°-130°	601.5	7.6
130°-140°	655.2	8.3
140°-150°	632.8	8.0
150°-160°	529.5	6.7
160°-170°	352.0	4.5
170°-180°	123.2	1.6
0°-30°	1049.5	13.3
0°-40°	1700.6	21.5
0°-60°	2994.0	37.9
0°-90°	4007.9	50.7
90°-120°	998.9	12.6
90°-150°	2888.4	36.6
90°-180°	3893.0	49.3
0°-180°	7901.0	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°	23	74	127	162	176	18
95°	83	122	177	212	225	84
105°	243	271	316	348	362	260
115°	445	460	495	518	526	440
125°	643	649	676	694	701	575
135°	832	837	847	863	867	641
145°	1006	1008	1011	1018	1020	628
155°	1149	1149	1150	1154	1149	529
165°	1249	1247	1248	1252	1246	352
175°	1299	1295	1295	1300	1294	123
180°	1302	1302	1302	1302	1302	



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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	52.3	62.2	72.2	82.2	92.4	102.9	113.4	123.9	134.5	141.6
90°	22.6	34.0	45.4	56.8	68.2	79.8	91.6	103.4	115.1	126.9	134.9
92.5°	44.0	54.1	64.2	74.4	84.5	95.8	108.2	120.5	132.9	145.3	153.4
95°	83.4	91.7	99.9	108.2	116.4	126.8	139.2	151.7	164.1	176.6	184.7
97.5°	125.4	132.6	139.8	147.0	154.2	164.2	177.2	190.1	203.1	216.0	223.8
100°	156.7	163.0	169.3	175.6	181.9	191.3	203.8	216.4	228.9	241.4	249.8
102.5°	190.5	197.2	203.9	210.6	217.4	226.1	237.0	247.8	258.7	269.5	277.8
105°	243.2	249.1	255.0	261.0	266.9	275.0	285.4	295.7	306.1	316.4	323.8
107.5°	301.5	306.7	311.9	317.2	322.4	329.8	339.5	349.2	358.8	368.5	375.1
110°	341.8	346.5	351.3	356.0	360.7	367.6	376.7	385.8	394.8	403.9	410.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	384.0	387.4	390.9	394.3	397.8	404.1	413.1	422.1	431.1	440.1	445.9
115°	444.8	447.8	450.8	453.8	456.8	462.4	470.7	478.9	487.2	495.4	500.6
117.5°	505.9	507.7	509.5	511.2	513.0	517.8	525.6	533.4	541.2	548.9	554.2
120°	544.8	546.8	548.8	550.9	552.9	557.5	564.6	571.7	578.8	586.0	591.1
122.5°	585.9	586.7	587.5	588.3	589.2	593.2	600.4	607.7	614.9	622.2	626.9
125°	642.7	643.8	644.8	645.9	646.9	650.6	656.8	663.0	669.3	675.5	679.8
127.5°	702.2	702.7	703.1	703.6	704.0	706.9	712.1	717.3	722.4	727.6	731.9
130°	738.7	739.5	740.3	741.1	742.0	744.7	749.4	754.0	758.7	763.3	767.3
132.5°	774.1	775.8	777.6	779.4	781.2	783.7	786.8	790.0	793.1	796.3	800.2
135°	831.5	832.6	833.6	834.7	835.8	837.4	839.8	842.1	844.4	846.7	850.6
137.5°	885.6	886.7	887.7	888.8	889.9	891.1	892.7	894.2	895.7	897.2	901.0
140°	919.4	920.5	921.6	922.7	923.9	924.9	925.9	926.9	927.8	928.8	932.6
142.5°	954.2	954.9	955.6	956.3	957.0	957.9	958.8	959.7	960.6	961.5	964.6
145°	1005.5	1006.1	1006.7	1007.3	1007.9	1008.5	1009.2	1009.9	1010.6	1011.2	1012.7
147.5°	1051.6	1052.1	1052.6	1053.0	1053.5	1054.1	1054.6	1055.1	1055.7	1056.2	1057.2
150°	1083.2	1083.0	1082.7	1082.5	1082.3	1082.6	1083.5	1084.4	1085.3	1086.2	1086.2
152.5°	1109.1	1109.4	1109.7	1110.1	1110.4	1110.7	1111.1	1111.4	1111.8	1112.2	1112.7
155°	1149.0	1149.0	1149.0	1149.0	1149.0	1149.1	1149.4	1149.6	1149.8	1150.1	1151.0
157.5°	1184.7	1184.2	1183.7	1183.2	1182.7	1182.6	1182.8	1183.0	1183.3	1183.5	1184.4
160°	1205.8	1205.1	1204.4	1203.8	1203.1	1202.9	1203.1	1203.3	1203.5	1203.8	1204.7
162.5°	1224.4	1223.9	1223.4	1222.9	1222.4	1222.2	1222.3	1222.3	1222.4	1222.4	1223.5
165°	1249.4	1248.9	1248.4	1248.0	1247.5	1247.4	1247.7	1247.9	1248.1	1248.3	1249.2
167.5°	1270.4	1269.5	1268.6	1267.7	1266.8	1266.4	1266.4	1266.4	1266.4	1266.4	1267.7
170°	1281.8	1280.9	1280.0	1279.1	1278.2	1277.7	1277.7	1277.7	1277.7	1277.7	1279.1
172.5°	1289.9	1289.0	1288.1	1287.2	1286.3	1285.8	1285.8	1285.8	1285.8	1285.8	1287.2
175°	1299.0	1298.1	1297.2	1296.3	1295.4	1294.9	1294.9	1294.9	1294.9	1294.9	1296.3
177.5°	1303.7	1302.9	1302.2	1301.5	1300.8	1300.3	1300.1	1300.0	1299.8	1299.6	1300.7
180°	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0



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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°	148.7	155.8	163.0	167.6	169.9	172.1	174.3	176.6
90°	143.0	151.0	159.0	164.4	167.2	170.0	172.7	175.5
92.5°	161.6	169.7	177.9	183.2	185.8	188.4	191.0	193.6
95°	192.9	201.1	209.3	214.6	217.2	219.7	222.3	224.8
97.5°	231.6	239.4	247.2	252.2	254.5	256.8	259.1	261.5
100°	258.1	266.4	274.7	280.0	282.3	284.5	286.8	289.0
102.5°	286.1	294.3	302.6	307.9	310.4	312.8	315.2	317.7
105°	331.1	338.5	345.8	350.9	353.7	356.4	359.2	362.0
107.5°	381.7	388.3	395.0	399.2	401.0	402.8	404.6	406.4
110°	416.7	423.0	429.4	433.5	435.4	437.3	439.2	441.0



TEST NUMBER: P333445

CATALOG NUMBER: S125DIW-S1090D1050U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	451.7	457.4	463.2	466.9	468.6	470.3	472.0	473.7
115°	505.8	511.0	516.1	519.5	521.1	522.7	524.2	525.8
117.5°	559.5	564.8	570.1	573.3	574.4	575.6	576.7	577.8
120°	596.2	601.3	606.4	609.4	610.3	611.2	612.1	613.0
122.5°	631.5	636.2	640.9	643.8	644.9	645.9	647.0	648.1
125°	684.2	688.5	692.9	695.7	697.0	698.2	699.5	700.8
127.5°	736.1	740.3	744.5	747.2	748.5	749.8	751.1	752.4
130°	771.3	775.2	779.2	781.7	782.8	783.8	784.9	785.9
132.5°	804.2	808.2	812.2	814.5	815.1	815.7	816.4	817.0
135°	854.5	858.4	862.3	864.6	865.2	865.8	866.4	867.0
137.5°	904.8	908.6	912.4	914.4	914.5	914.5	914.6	914.7
140°	936.3	940.1	943.8	945.7	945.8	945.9	946.0	946.0
142.5°	967.7	970.8	973.9	975.5	975.5	975.6	975.7	975.8
145°	1014.2	1015.7	1017.2	1018.2	1018.8	1019.3	1019.8	1020.3
147.5°	1058.3	1059.3	1060.3	1060.3	1059.3	1058.3	1057.3	1056.4
150°	1086.2	1086.2	1086.2	1086.1	1086.0	1085.8	1085.7	1085.5
152.5°	1113.2	1113.8	1114.3	1114.2	1113.5	1112.7	1112.0	1111.2
155°	1151.9	1152.8	1153.7	1153.5	1152.4	1151.3	1150.2	1149.0
157.5°	1185.3	1186.2	1187.1	1186.8	1185.3	1183.8	1182.3	1180.9
160°	1205.6	1206.5	1207.4	1207.2	1206.1	1205.0	1203.9	1202.7
162.5°	1224.6	1225.6	1226.7	1226.6	1225.3	1224.0	1222.7	1221.4
165°	1250.1	1251.0	1251.9	1251.7	1250.4	1249.0	1247.7	1246.3
167.5°	1269.1	1270.4	1271.8	1271.8	1270.4	1269.0	1267.6	1266.2
170°	1280.4	1281.8	1283.1	1283.0	1281.4	1279.9	1278.3	1276.7
172.5°	1288.5	1289.9	1291.2	1291.2	1289.8	1288.4	1287.0	1285.6
175°	1297.6	1299.0	1300.4	1300.2	1298.7	1297.1	1295.5	1293.9
177.5°	1301.8	1302.9	1303.9	1303.8	1302.6	1301.3	1300.1	1298.8
180°	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0

(END OF REPORT)