

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: P333294-930

Luminaire Tested: **S125DIP-S1090D1205U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333294-930
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-S1090D1205U930-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

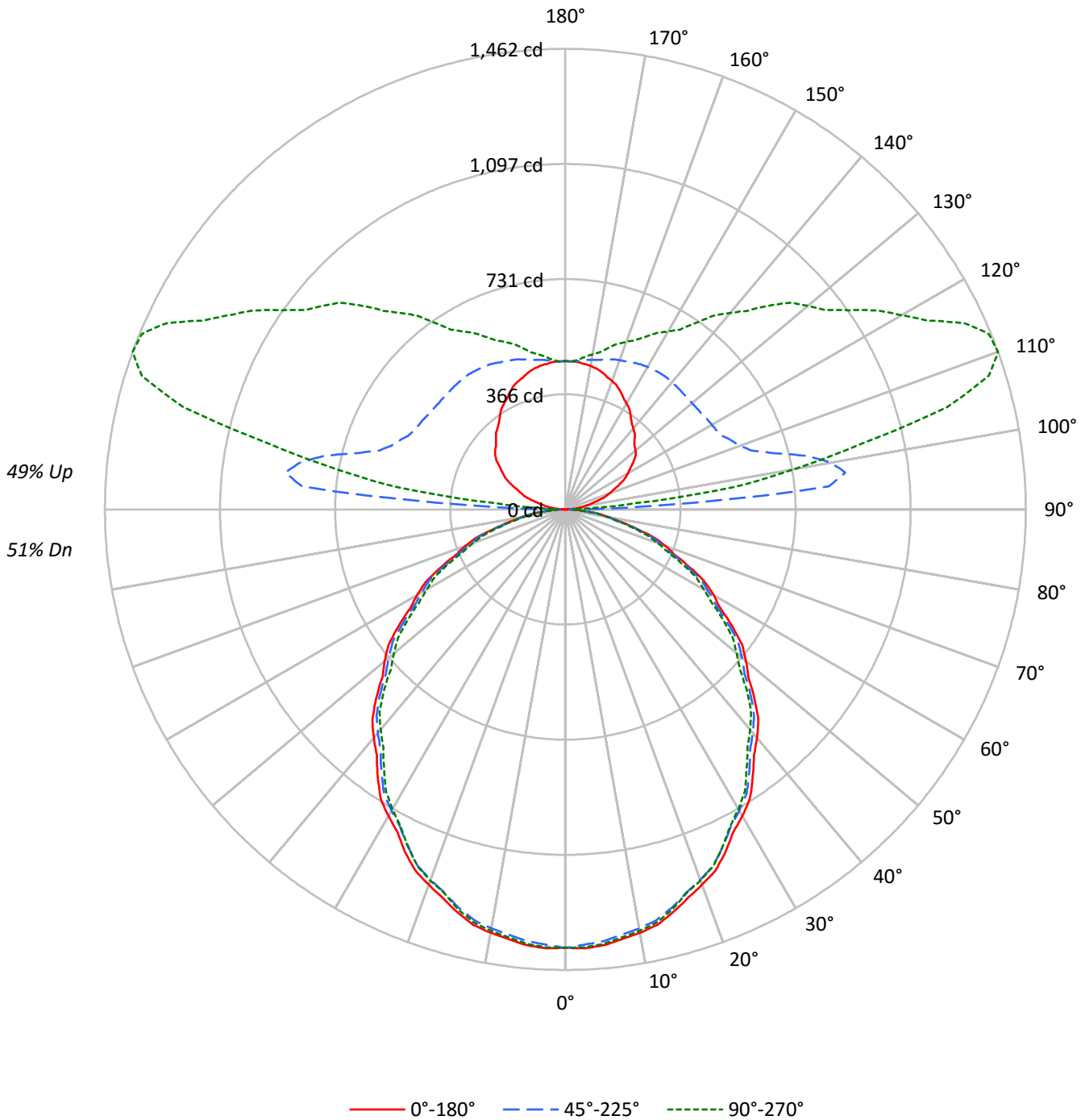
Lumens per Lamp: N/A
Luminaire Lumens: 7146.4 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

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	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	98	94	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	43				
2	89	82	75	70	82	76	70	66	64	60	57	54	51	48	44	42	40	36				
3	81	72	64	58	75	66	60	55	57	52	48	47	44	41	39	36	34	30				
4	74	63	56	49	68	59	52	46	50	45	41	42	38	35	35	32	29	26				
5	68	57	48	42	63	53	45	40	45	39	35	38	34	30	31	28	26	22				
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	28	25	23	20				
7	58	46	38	32	53	43	35	30	37	31	27	31	27	23	26	23	20	17				
8	54	42	34	28	50	39	32	27	33	28	24	29	24	21	24	20	18	16				
9	50	38	30	25	46	35	29	24	31	25	21	26	22	19	22	19	16	14				
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8985	8985	8985
5°	9005	8919	8976
10°	8950	8857	8907
15°	8852	8750	8787
20°	8715	8601	8616
25°	8565	8424	8416
30°	8380	8232	8192
35°	8183	8027	7914
40°	7981	7804	7692
45°	7761	7600	7448
50°	7519	7354	7133
55°	7287	7076	6877
60°	7009	6795	6554
65°	6677	6460	6240
70°	6360	6069	5861
75°	5794	5602	5410
80°	5159	5077	4950
85°	4483	4565	4320



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.2	1.8
10°-20°	370.5	5.2
20°-30°	547.1	7.7
30°-40°	638.4	8.9
40°-50°	641.2	9.0
50°-60°	562.8	7.9
60°-70°	419.4	5.9
70°-80°	239.8	3.4
80°-90°	72.4	1.0
90°-100°	340.6	4.8
100°-110°	732.2	10.2
110°-120°	687.1	9.6
120°-130°	556.9	7.8
130°-140°	446.9	6.3
140°-150°	337.2	4.7
150°-160°	237.4	3.3
160°-170°	139.9	2.0
170°-180°	45.5	0.6
0°-30°	1048.8	14.7
0°-40°	1687.2	23.6
0°-60°	2891.2	40.5
0°-90°	3622.7	50.7
90°-120°	1759.9	24.6
90°-150°	3100.9	43.4
90°-180°	3524.0	49.3
0°-180°	7146.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1391	1391	1391	1391	1391	
5°	1389	1386	1376	1385	1385	132
15°	1324	1320	1309	1314	1314	373
25°	1202	1196	1182	1184	1181	553
35°	1038	1033	1018	1012	1004	649
45°	850	845	832	819	816	655
55°	647	643	628	619	611	578
65°	437	434	423	413	408	433
75°	232	230	224	221	217	248
85°	60	62	62	60	58	68
90°	1	9	15	20	22	5
95°	31	92	839	381	223	33
105°	107	150	687	1352	1255	113
115°	191	231	551	1188	1398	188
125°	265	311	529	945	1102	235
135°	311	374	525	792	915	241
145°	362	414	527	656	722	227
155°	413	444	514	580	605	190
165°	451	463	493	522	530	127
175°	469	469	473	478	476	45
180°	470	470	470	470	470	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2
2.5°	1394.7	1394.2	1393.5	1392.9	1392.4	1391.1	1389.1	1387.2	1385.2	1383.2	1385.2
5°	1389.0	1388.5	1388.0	1387.6	1387.1	1385.6	1383.2	1380.7	1378.3	1375.8	1378.0
7.5°	1376.2	1375.7	1375.2	1374.8	1374.3	1372.6	1369.9	1367.3	1364.6	1361.9	1364.1
10°	1364.8	1364.3	1363.8	1363.3	1362.9	1361.2	1358.5	1355.8	1353.2	1350.5	1352.4
12.5°	1350.7	1349.8	1348.9	1348.0	1347.2	1345.5	1343.0	1340.5	1338.0	1335.5	1337.1
15°	1324.0	1323.3	1322.6	1321.8	1321.1	1319.4	1316.7	1314.0	1311.3	1308.6	1309.9
17.5°	1293.5	1292.4	1291.3	1290.2	1289.2	1287.2	1284.4	1281.7	1278.9	1276.0	1277.6
20°	1268.0	1267.5	1267.0	1266.5	1266.0	1264.1	1260.9	1257.8	1254.6	1251.4	1253.1
22.5°	1242.4	1241.5	1240.6	1239.7	1238.8	1236.9	1234.0	1230.9	1228.0	1225.0	1226.1
25°	1201.9	1200.7	1199.5	1198.2	1197.0	1194.8	1191.6	1188.5	1185.3	1182.1	1182.6
27.5°	1154.5	1153.8	1153.1	1152.3	1151.6	1149.7	1146.3	1143.0	1139.8	1136.5	1136.6
30°	1123.7	1123.0	1122.3	1121.5	1120.8	1118.6	1114.9	1111.3	1107.6	1103.9	1103.4
32.5°	1090.3	1089.2	1088.0	1086.9	1085.8	1083.6	1080.3	1077.0	1073.7	1070.5	1069.6
35°	1037.9	1036.9	1035.9	1034.9	1034.0	1031.8	1028.3	1024.9	1021.5	1018.1	1016.8
37.5°	983.5	982.3	981.0	979.8	978.6	976.4	973.1	970.0	966.7	963.5	961.6
40°	946.6	945.3	944.1	942.9	941.7	939.3	935.9	932.5	929.0	925.6	923.4
42.5°	906.9	905.9	904.9	903.8	902.8	900.6	897.2	893.7	890.3	886.9	884.8
45°	849.7	848.7	847.7	846.8	845.8	843.8	840.9	838.0	835.0	832.1	829.2
47.5°	788.1	788.1	788.1	788.2	788.2	786.5	783.0	779.4	775.9	772.4	769.4
50°	748.4	747.7	747.0	746.2	745.5	743.6	740.7	737.8	734.8	731.9	728.7
52.5°	707.9	707.4	706.9	706.3	705.8	703.9	700.8	697.7	694.6	691.4	688.6
55°	647.2	646.5	645.7	645.0	644.2	642.1	638.7	635.3	631.9	628.4	626.2
57.5°	583.1	582.7	582.4	582.0	581.6	579.9	577.0	574.1	571.3	568.3	565.5
60°	542.6	541.6	540.6	539.6	538.7	536.9	534.2	531.5	528.8	526.1	523.7
62.5°	500.3	499.5	498.8	498.0	497.3	495.7	493.3	491.1	488.8	486.5	483.8
65°	436.9	436.4	435.9	435.5	435.0	433.4	430.7	428.0	425.3	422.7	420.4
67.5°	375.5	374.5	373.5	372.4	371.5	369.9	367.9	365.9	363.9	361.9	360.0
70°	336.8	335.6	334.4	333.1	331.9	330.2	328.0	325.8	323.6	321.4	319.9
72.5°	294.6	293.7	292.9	292.0	291.2	290.1	288.7	287.2	285.8	284.4	282.7
75°	232.2	231.7	231.2	230.7	230.2	229.4	228.2	227.0	225.8	224.5	223.8
77.5°	174.8	174.6	174.4	174.2	174.0	173.6	172.8	172.2	171.5	170.8	170.4
80°	138.7	138.7	138.7	138.7	138.7	138.4	137.9	137.5	137.0	136.5	136.2
82.5°	107.0	106.6	106.2	105.8	105.4	105.2	105.1	105.0	104.8	104.8	104.4
85°	60.5	60.7	61.0	61.2	61.5	61.6	61.6	61.6	61.6	61.6	61.4
87.5°	24.0	24.1	24.5	24.9	25.3	25.6	25.6	25.8	25.8	25.9	26.1
90°	1.0	1.9	3.8	5.7	7.6	9.5	10.4	12.3	13.3	15.2	16.1
92.5°	11.6	14.0	22.0	33.8	50.1	77.7	129.4	216.2	310.4	305.4	247.3
95°	31.2	32.2	39.8	50.2	71.0	113.7	215.1	423.5	684.9	839.4	821.3
97.5°	51.9	53.1	58.4	68.8	87.6	118.2	185.3	338.0	611.6	896.3	1039.3
100°	66.3	68.2	72.0	82.4	100.4	128.8	183.8	307.0	545.7	855.4	1092.3
102.5°	82.3	83.4	86.4	97.6	114.1	141.7	190.6	294.1	495.6	783.4	1060.5
105°	107.0	107.0	111.8	121.2	136.4	163.0	204.6	288.9	447.1	686.8	958.7
107.5°	131.3	133.2	137.7	145.5	161.3	185.1	225.4	297.7	426.6	620.3	854.9
110°	148.7	150.7	154.4	163.0	177.2	201.8	240.6	306.0	420.6	589.2	795.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	166.2	168.0	171.0	179.6	193.8	217.7	255.0	316.6	420.6	571.0	751.8
115°	191.4	193.2	196.1	204.6	218.8	242.6	277.6	332.5	423.5	551.4	703.8
117.5°	214.1	217.0	220.0	228.5	244.6	267.5	300.7	350.7	429.7	541.7	675.2
120°	229.3	232.1	235.9	244.4	260.5	284.2	317.4	362.8	435.8	537.1	659.3
122.5°	245.2	247.3	250.3	258.8	276.5	300.1	333.3	376.5	441.1	533.4	645.7
125°	265.2	267.2	271.9	280.4	298.4	323.0	354.3	395.0	450.0	528.6	627.1
127.5°	281.0	283.8	289.9	300.7	319.8	344.5	374.5	412.1	460.0	526.4	610.1
130°	290.8	293.7	301.3	313.6	333.5	358.1	387.4	423.5	466.1	524.8	598.8
132.5°	298.4	302.0	311.1	325.0	345.6	370.2	399.6	433.3	472.9	524.8	589.6
135°	310.7	314.5	325.9	341.0	360.9	386.5	415.9	447.1	482.2	524.8	578.9
137.5°	326.3	329.1	339.7	354.9	374.4	400.7	427.5	457.4	490.7	525.9	569.2
140°	335.3	338.2	349.6	364.8	382.7	408.3	435.8	464.2	494.5	526.7	564.6
142.5°	345.9	348.1	358.7	373.8	391.1	415.2	441.1	468.0	496.8	527.5	560.8
145°	361.9	363.8	373.2	386.5	403.6	425.3	450.0	473.7	499.3	526.7	555.1
147.5°	378.5	379.7	387.8	400.1	414.9	434.1	455.7	477.1	500.2	524.2	549.3
150°	388.4	390.3	397.0	409.3	422.5	438.6	459.4	479.4	500.2	522.0	544.7
152.5°	399.0	400.1	406.0	416.9	429.3	443.9	463.3	480.9	499.5	518.9	539.4
155°	413.0	413.0	418.7	428.2	437.7	450.9	467.0	482.2	497.3	513.5	530.5
157.5°	425.6	425.3	429.9	438.1	446.4	456.4	470.3	483.1	494.9	507.8	522.2
160°	433.9	432.9	436.8	443.4	450.9	459.4	471.8	483.1	492.6	504.0	515.4
162.5°	440.7	439.8	443.5	449.4	455.5	462.5	473.3	482.4	490.3	499.5	509.3
165°	450.9	449.1	451.9	456.6	460.4	466.1	473.7	481.3	486.9	492.6	500.2
167.5°	457.8	456.8	458.5	461.1	463.8	467.4	473.7	479.0	481.6	486.0	491.3
170°	462.3	461.4	462.3	464.2	466.1	469.0	473.7	477.4	479.4	482.2	486.0
172.5°	465.4	463.7	464.6	466.4	467.6	469.0	472.9	476.0	476.3	477.7	480.7
175°	469.0	467.0	468.0	469.0	469.0	469.0	471.8	473.7	472.7	472.7	473.7
177.5°	470.7	469.1	469.1	469.9	469.1	469.1	470.7	471.4	469.9	469.9	470.7
180°	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2
2.5°	1387.2	1389.1	1391.1	1392.0	1391.8	1391.6	1391.4	1391.2
5°	1380.2	1382.4	1384.6	1385.6	1385.4	1385.1	1384.9	1384.6
7.5°	1366.2	1368.4	1370.5	1371.5	1371.3	1371.0	1370.8	1370.5
10°	1354.4	1356.3	1358.3	1359.2	1358.9	1358.7	1358.5	1358.2
12.5°	1338.6	1340.2	1341.7	1342.6	1342.5	1342.4	1342.4	1342.3
15°	1311.1	1312.3	1313.5	1314.2	1314.2	1314.2	1314.2	1314.2
17.5°	1279.1	1280.6	1282.1	1282.3	1281.1	1279.9	1278.6	1277.4
20°	1254.8	1256.5	1258.3	1258.5	1257.3	1256.1	1254.8	1253.6
22.5°	1227.3	1228.4	1229.5	1229.6	1228.8	1228.0	1227.2	1226.3
25°	1183.1	1183.6	1184.1	1183.9	1183.2	1182.4	1181.7	1181.0
27.5°	1136.7	1136.8	1136.9	1136.6	1135.9	1135.1	1134.4	1133.7
30°	1102.9	1102.4	1102.0	1101.4	1100.7	1099.9	1099.2	1098.5
32.5°	1068.7	1067.8	1067.0	1065.8	1064.5	1063.2	1061.8	1060.5
35°	1015.6	1014.4	1013.2	1011.6	1009.7	1007.7	1005.8	1003.8
37.5°	959.9	958.1	956.3	954.8	953.7	952.5	951.4	950.3
40°	921.2	919.0	916.8	915.3	914.6	913.9	913.1	912.4
42.5°	882.9	880.8	878.9	877.3	876.2	875.1	873.9	872.8
45°	826.2	823.3	820.4	818.5	817.7	817.0	816.3	815.5
47.5°	766.5	763.4	760.5	758.1	756.4	754.7	753.0	751.3
50°	725.5	722.4	719.2	716.7	715.0	713.3	711.6	709.9
52.5°	685.8	683.1	680.3	677.9	676.0	674.1	672.2	670.3
55°	624.0	621.8	619.6	617.7	616.0	614.2	612.5	610.8
57.5°	562.7	559.9	557.0	555.1	554.2	553.3	552.4	551.4
60°	521.2	518.8	516.3	514.2	512.5	510.8	509.1	507.4
62.5°	481.2	478.6	475.9	473.9	472.6	471.3	469.9	468.6
65°	418.2	416.0	413.8	412.2	411.2	410.3	409.3	408.3
67.5°	358.2	356.3	354.4	353.2	352.6	352.0	351.5	350.9
70°	318.5	317.0	315.5	314.3	313.3	312.3	311.4	310.4
72.5°	281.1	279.4	277.8	276.5	275.5	274.5	273.5	272.6
75°	223.1	222.3	221.6	220.7	219.7	218.7	217.8	216.8
77.5°	169.9	169.5	169.1	168.5	167.8	167.1	166.4	165.8
80°	136.0	135.7	135.5	135.1	134.6	134.1	133.6	133.1
82.5°	103.9	103.5	103.1	102.7	102.6	102.6	102.5	102.3
85°	61.1	60.9	60.7	60.3	59.8	59.3	58.8	58.3
87.5°	26.3	26.5	26.7	26.9	26.5	26.1	25.8	25.5
90°	17.0	18.0	18.9	20.9	20.9	20.9	21.8	21.8
92.5°	167.9	121.8	91.7	77.7	65.6	63.3	62.0	60.4
95°	681.1	537.1	420.6	341.0	273.8	245.3	237.8	222.7
97.5°	1014.4	913.5	800.0	689.3	630.7	577.7	550.2	538.1
100°	1165.2	1118.8	1021.2	922.7	857.4	789.1	754.1	738.9
102.5°	1216.0	1244.6	1197.8	1131.1	1061.2	1012.7	974.6	963.3
105°	1186.1	1315.9	1357.6	1347.1	1316.8	1285.6	1266.6	1255.2
107.5°	1079.2	1252.4	1359.4	1408.9	1424.2	1424.1	1417.8	1410.2
110°	1000.4	1180.4	1313.9	1394.5	1437.1	1455.1	1461.8	1461.8



TEST NUMBER: P333294-930

CATALOG NUMBER: S125DIP-S1090D1205U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	938.2	1109.1	1244.2	1339.1	1401.5	1432.4	1448.9	1455.7
115°	860.2	1007.1	1136.8	1240.1	1313.9	1359.4	1385.9	1398.2
117.5°	809.8	936.4	1048.1	1142.9	1216.8	1263.8	1290.1	1297.6
120°	782.5	896.2	1000.4	1083.8	1153.9	1199.3	1224.9	1232.5
122.5°	762.1	867.4	960.3	1038.3	1100.8	1142.5	1168.1	1174.9
125°	732.3	828.9	911.3	979.6	1032.6	1071.5	1092.3	1101.8
127.5°	702.0	792.1	869.1	932.9	981.0	1015.4	1035.1	1039.3
130°	683.1	766.4	840.3	901.9	949.3	980.5	999.5	1005.1
132.5°	664.1	742.2	809.2	868.5	915.9	947.1	964.6	971.0
135°	639.4	704.8	765.5	819.5	861.1	892.4	909.5	915.2
137.5°	618.6	671.5	721.9	767.8	805.0	833.5	849.2	855.4
140°	607.2	651.8	695.4	735.2	770.2	794.8	809.0	813.8
142.5°	597.4	635.1	672.6	707.1	736.9	757.7	771.1	775.1
145°	584.5	613.8	643.3	668.8	691.5	707.7	718.1	721.9
147.5°	572.4	596.2	618.8	638.1	656.2	669.0	675.1	676.8
150°	565.6	586.4	604.4	621.4	635.7	647.0	650.9	651.8
152.5°	558.0	576.6	593.0	606.3	618.2	627.3	631.1	632.1
155°	546.6	561.7	575.0	585.5	594.9	601.5	604.4	605.4
157.5°	535.2	547.7	558.0	566.1	573.5	579.0	581.6	581.5
160°	527.7	537.1	546.6	553.3	559.9	564.6	566.6	565.6
162.5°	519.3	528.1	536.0	541.8	547.0	551.0	551.4	551.1
165°	507.8	514.4	520.1	524.8	528.6	530.5	530.5	530.5
167.5°	496.8	501.2	505.5	508.9	510.8	512.5	511.8	511.6
170°	490.7	493.6	496.4	498.3	500.2	501.2	501.2	500.2
172.5°	483.9	486.7	488.9	490.0	490.3	492.0	490.6	489.6
175°	476.5	476.5	478.4	478.4	478.4	479.4	477.4	476.5
177.5°	471.4	472.1	472.1	472.1	471.4	472.1	469.9	469.9
180°	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9

(END OF REPORT)