

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: P333258-927

Luminaire Tested: **S125DIP-S1090D365U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333258-927
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-S1090D365U927-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4559.6 lumens
Efficiency: N/A
Efficacy: 104.8 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: Semi-Direct

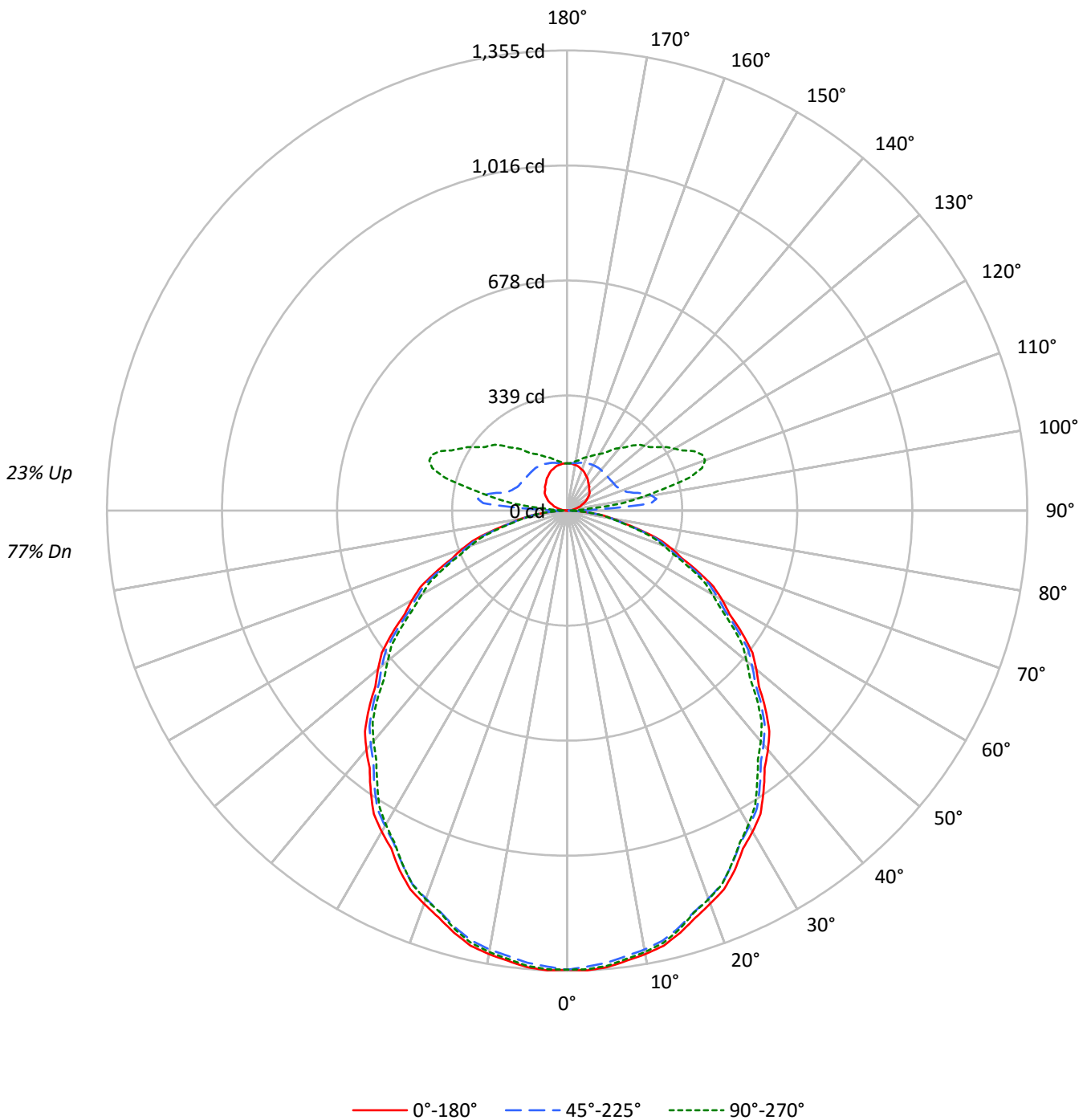
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333258-927

CATALOG NUMBER: S125DIP-S1090D365U927-4F0-1E-UDD-F4

Luminous Intensity Polar Plot





TEST NUMBER: P333258-927

CATALOG NUMBER: S125DIP-S1090D365U927-4F0-1E-UDD-F4

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	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77
1	104	99	95	91	99	95	91	88	86	84	81	79	76	74	72	70	68	65
2	94	87	80	75	90	83	77	72	76	71	67	69	65	62	63	60	57	54
3	86	76	68	62	82	73	66	60	67	61	56	61	56	53	56	52	49	46
4	79	68	59	53	75	65	57	51	59	53	48	54	49	45	50	46	42	39
5	73	60	52	45	69	58	50	44	53	47	42	49	43	39	45	40	37	34
6	67	54	46	40	64	52	44	39	48	41	36	44	39	34	41	36	32	30
7	62	49	41	35	59	47	40	34	44	37	32	40	35	31	37	32	29	27
8	58	45	37	31	55	43	36	30	40	33	29	37	31	27	34	29	26	24
9	54	41	33	28	51	40	32	27	37	30	26	34	29	25	32	27	23	21
10	50	38	30	25	48	37	29	25	34	28	24	32	26	22	29	25	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8730	8730	8730
5°	8749	8666	8722
10°	8697	8605	8655
15°	8602	8501	8538
20°	8467	8357	8372
25°	8322	8185	8177
30°	8143	7999	7959
35°	7950	7799	7689
40°	7754	7583	7474
45°	7541	7384	7237
50°	7306	7145	6931
55°	7080	6875	6683
60°	6810	6603	6368
65°	6487	6276	6062
70°	6180	5897	5695
75°	5629	5445	5255
80°	5013	4932	4813
85°	4357	4439	4194



TEST NUMBER: P333258-927

CATALOG NUMBER: S125DIP-S1090D365U927-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.5	2.8
10°-20°	360.0	7.9
20°-30°	531.6	11.7
30°-40°	620.3	13.6
40°-50°	623.0	13.7
50°-60°	546.9	12.0
60°-70°	407.5	8.9
70°-80°	233.0	5.1
80°-90°	68.6	1.5
90°-100°	100.7	2.2
100°-110°	216.4	4.7
110°-120°	203.1	4.5
120°-130°	164.6	3.6
130°-140°	132.1	2.9
140°-150°	99.7	2.2
150°-160°	70.1	1.5
160°-170°	41.4	0.9
170°-180°	13.5	0.3
0°-30°	1019.1	22.4
0°-40°	1639.4	36.0
0°-60°	2809.2	61.6
0°-90°	3518.2	77.2
90°-120°	520.1	11.4
90°-150°	916.4	20.1
90°-180°	1041.0	22.8
0°-180°	4559.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1352	1352	1352	1352	1352	
5°	1350	1347	1337	1346	1345	128
15°	1286	1283	1272	1277	1277	362
25°	1168	1162	1149	1150	1148	537
35°	1008	1004	989	984	975	631
45°	826	821	808	796	792	636
55°	629	625	611	601	594	561
65°	424	422	411	401	397	421
75°	226	223	218	215	211	241
85°	59	60	60	59	57	66
90°	0	2	4	6	6	4
95°	9	27	248	113	66	10
105°	32	44	203	400	371	33
115°	57	68	163	351	413	56
125°	78	92	156	279	326	70
135°	92	110	155	234	270	71
145°	107	122	156	194	213	67
155°	122	131	152	171	179	56
165°	133	137	146	154	157	38
175°	139	139	140	141	141	13
180°	139	139	139	139	139	



TEST NUMBER: P333258-927

CATALOG NUMBER: S125DIP-S1090D365U927-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1351.8	1351.8	1351.8	1351.8	1351.8	1351.8	1351.8	1351.8	1351.8	1351.8	1351.8
2.5°	1355.2	1354.6	1354.0	1353.4	1352.9	1351.6	1349.7	1347.8	1345.9	1344.0	1345.9
5°	1349.6	1349.2	1348.7	1348.2	1347.7	1346.3	1343.9	1341.6	1339.2	1336.8	1338.9
7.5°	1337.2	1336.7	1336.3	1335.8	1335.3	1333.7	1331.1	1328.5	1325.9	1323.3	1325.4
10°	1326.1	1325.6	1325.2	1324.7	1324.2	1322.6	1320.0	1317.4	1314.8	1312.2	1314.1
12.5°	1312.4	1311.5	1310.7	1309.8	1309.0	1307.3	1304.9	1302.5	1300.1	1297.6	1299.2
15°	1286.5	1285.8	1285.1	1284.4	1283.7	1282.0	1279.4	1276.8	1274.1	1271.5	1272.7
17.5°	1256.8	1255.8	1254.7	1253.6	1252.6	1250.7	1248.0	1245.3	1242.6	1239.8	1241.3
20°	1232.0	1231.5	1231.1	1230.6	1230.1	1228.3	1225.2	1222.1	1219.0	1215.9	1217.6
22.5°	1207.1	1206.3	1205.5	1204.6	1203.7	1201.8	1199.0	1196.0	1193.2	1190.3	1191.4
25°	1167.8	1166.6	1165.5	1164.3	1163.1	1160.9	1157.9	1154.8	1151.7	1148.6	1149.1
27.5°	1121.8	1121.1	1120.4	1119.7	1119.0	1117.1	1113.8	1110.6	1107.5	1104.3	1104.4
30°	1091.9	1091.2	1090.4	1089.7	1089.0	1086.9	1083.3	1079.7	1076.2	1072.6	1072.1
32.5°	1059.4	1058.3	1057.2	1056.1	1055.0	1052.9	1049.6	1046.5	1043.3	1040.1	1039.3
35°	1008.4	1007.5	1006.5	1005.6	1004.6	1002.5	999.2	995.9	992.5	989.2	988.0
37.5°	955.6	954.4	953.2	952.0	950.9	948.7	945.5	942.5	939.3	936.2	934.4
40°	919.7	918.5	917.3	916.2	915.0	912.7	909.3	906.0	902.7	899.4	897.2
42.5°	881.2	880.2	879.2	878.2	877.2	875.0	871.7	868.4	865.1	861.7	859.8
45°	825.6	824.7	823.7	822.8	821.8	819.9	817.1	814.2	811.4	808.5	805.6
47.5°	765.7	765.7	765.8	765.9	765.9	764.2	760.8	757.3	753.9	750.5	747.6
50°	727.2	726.5	725.8	725.1	724.4	722.5	719.7	716.8	714.0	711.1	708.1
52.5°	687.9	687.3	686.8	686.3	685.8	684.0	681.0	677.9	674.9	671.8	669.1
55°	628.8	628.1	627.4	626.7	626.0	623.9	620.6	617.3	613.9	610.6	608.5
57.5°	566.6	566.2	565.9	565.5	565.1	563.5	560.6	557.9	555.1	552.2	549.5
60°	527.2	526.2	525.3	524.3	523.4	521.7	519.0	516.4	513.8	511.2	508.8
62.5°	486.2	485.4	484.7	483.9	483.2	481.6	479.3	477.1	474.9	472.7	470.1
65°	424.5	424.1	423.6	423.1	422.6	421.1	418.5	415.9	413.3	410.7	408.5
67.5°	364.9	363.8	362.9	361.9	360.9	359.4	357.4	355.5	353.6	351.6	349.8
70°	327.3	326.1	324.9	323.7	322.5	320.8	318.7	316.6	314.4	312.3	310.9
72.5°	286.2	285.3	284.6	283.8	283.0	281.9	280.5	279.1	277.7	276.3	274.7
75°	225.6	225.1	224.7	224.2	223.7	222.9	221.7	220.5	219.4	218.2	217.5
77.5°	169.8	169.6	169.4	169.3	169.1	168.7	167.9	167.3	166.7	166.0	165.6
80°	134.8	134.8	134.8	134.8	134.8	134.5	134.0	133.6	133.1	132.6	132.4
82.5°	103.9	103.5	103.2	102.8	102.4	102.2	102.1	102.0	101.9	101.8	101.4
85°	58.8	59.0	59.3	59.5	59.7	59.9	59.9	59.9	59.9	59.9	59.7
87.5°	23.1	23.2	23.3	23.4	23.5	23.5	23.4	23.4	23.2	23.1	23.2
90°	0.3	0.6	1.1	1.7	2.2	2.8	3.1	3.6	3.9	4.5	4.8
92.5°	3.4	4.1	6.5	10.0	14.8	23.0	38.3	63.8	91.7	90.2	73.0
95°	9.3	9.5	11.7	14.8	21.0	33.6	63.5	125.2	202.4	248.0	242.7
97.5°	15.4	15.7	17.3	20.4	25.9	34.9	54.7	99.9	180.8	264.9	307.1
100°	19.6	20.1	21.3	24.3	29.7	38.1	54.3	90.7	161.3	252.8	322.8
102.5°	24.3	24.6	25.5	28.8	33.7	41.9	56.3	86.9	146.5	231.6	313.4
105°	31.6	31.6	33.0	35.8	40.3	48.2	60.4	85.4	132.1	203.0	283.4
107.5°	38.8	39.4	40.7	43.0	47.7	54.7	66.6	87.9	126.1	183.3	252.6
110°	44.0	44.5	45.6	48.2	52.4	59.7	71.1	90.5	124.3	174.1	235.2



TEST NUMBER: P333258-927

CATALOG NUMBER: S125DIP-S1090D365U927-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	49.1	49.7	50.5	53.1	57.3	64.3	75.3	93.6	124.3	168.7	222.2
115°	56.6	57.1	58.0	60.4	64.6	71.7	82.1	98.2	125.2	163.0	208.0
117.5°	63.3	64.1	65.0	67.5	72.3	79.1	88.9	103.6	127.0	160.1	199.6
120°	67.7	68.6	69.7	72.2	77.0	84.0	93.8	107.3	128.8	158.8	194.9
122.5°	72.5	73.0	74.0	76.5	81.7	88.7	98.5	111.2	130.3	157.6	190.8
125°	78.4	79.0	80.3	82.9	88.2	95.5	104.7	116.8	133.0	156.2	185.4
127.5°	83.0	83.9	85.6	88.9	94.5	101.8	110.7	121.8	135.9	155.6	180.3
130°	86.0	86.8	89.0	92.7	98.5	105.8	114.5	125.2	137.8	155.1	177.0
132.5°	88.2	89.3	92.0	96.0	102.1	109.4	118.1	128.1	139.7	155.1	174.3
135°	91.8	92.9	96.3	100.8	106.7	114.2	122.9	132.1	142.5	155.1	171.0
137.5°	96.4	97.3	100.4	104.9	110.7	118.4	126.4	135.1	145.0	155.4	168.2
140°	99.1	100.0	103.3	107.8	113.1	120.6	128.8	137.2	146.2	155.7	166.8
142.5°	102.3	102.8	106.0	110.5	115.6	122.7	130.3	138.3	146.8	155.9	165.7
145°	106.9	107.5	110.3	114.2	119.3	125.7	133.0	140.0	147.5	155.7	164.1
147.5°	111.9	112.2	114.6	118.3	122.6	128.3	134.7	141.0	147.8	155.0	162.3
150°	114.8	115.3	117.3	121.0	124.8	129.6	135.8	141.6	147.8	154.2	161.0
152.5°	118.0	118.3	120.0	123.2	126.9	131.2	136.9	142.1	147.6	153.4	159.4
155°	122.1	122.1	123.7	126.5	129.4	133.2	138.0	142.5	146.9	151.8	156.8
157.5°	125.8	125.7	127.1	129.4	131.9	134.9	138.9	142.8	146.2	150.0	154.3
160°	128.3	127.9	129.0	131.0	133.2	135.8	139.4	142.8	145.6	148.9	152.3
162.5°	130.2	130.0	131.1	132.8	134.6	136.7	139.9	142.6	144.9	147.6	150.5
165°	133.2	132.7	133.6	134.9	136.1	137.8	140.0	142.2	143.9	145.6	147.8
167.5°	135.3	135.0	135.5	136.3	137.0	138.2	140.0	141.6	142.4	143.6	145.2
170°	136.7	136.3	136.7	137.2	137.8	138.6	140.0	141.1	141.6	142.5	143.6
172.5°	137.5	137.0	137.3	137.8	138.2	138.6	139.7	140.7	140.8	141.2	142.0
175°	138.6	138.0	138.3	138.6	138.6	138.6	139.4	140.0	139.7	139.7	140.0
177.5°	139.1	138.6	138.6	138.9	138.6	138.6	139.1	139.3	138.9	138.9	139.1
180°	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9



TEST NUMBER: P333258-927

CATALOG NUMBER: S125DIP-S1090D365U927-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1351.8	1351.8	1351.8	1351.8	1351.8	1351.8	1351.8	1351.8
2.5°	1347.8	1349.7	1351.6	1352.5	1352.3	1352.1	1351.9	1351.8
5°	1341.1	1343.2	1345.4	1346.3	1346.1	1345.8	1345.6	1345.4
7.5°	1327.5	1329.6	1331.7	1332.6	1332.4	1332.1	1331.9	1331.7
10°	1316.0	1317.9	1319.8	1320.6	1320.4	1320.2	1319.9	1319.7
12.5°	1300.7	1302.2	1303.7	1304.5	1304.4	1304.3	1304.3	1304.2
15°	1273.9	1275.1	1276.3	1276.9	1276.9	1276.9	1276.9	1276.9
17.5°	1242.9	1244.3	1245.8	1245.9	1244.8	1243.6	1242.4	1241.2
20°	1219.2	1220.9	1222.6	1222.8	1221.6	1220.4	1219.2	1218.1
22.5°	1192.5	1193.6	1194.6	1194.8	1194.0	1193.2	1192.4	1191.5
25°	1149.5	1150.0	1150.5	1150.3	1149.6	1148.9	1148.2	1147.5
27.5°	1104.5	1104.5	1104.7	1104.4	1103.7	1103.0	1102.2	1101.5
30°	1071.7	1071.2	1070.7	1070.2	1069.4	1068.7	1068.0	1067.3
32.5°	1038.4	1037.5	1036.7	1035.6	1034.4	1033.1	1031.7	1030.5
35°	986.8	985.6	984.4	982.9	981.0	979.1	977.2	975.3
37.5°	932.6	930.9	929.2	927.7	926.6	925.5	924.4	923.4
40°	895.1	892.9	890.8	889.4	888.7	888.0	887.2	886.5
42.5°	857.9	855.9	854.0	852.4	851.4	850.2	849.1	848.0
45°	802.8	799.9	797.1	795.3	794.6	793.8	793.1	792.4
47.5°	744.7	741.8	738.9	736.7	735.0	733.3	731.7	730.0
50°	705.0	701.9	698.8	696.4	694.7	693.1	691.4	689.8
52.5°	666.4	663.7	661.0	658.7	656.8	655.0	653.2	651.3
55°	606.3	604.2	602.1	600.2	598.5	596.8	595.2	593.5
57.5°	546.8	544.0	541.2	539.4	538.5	537.6	536.7	535.8
60°	506.4	504.1	501.7	499.6	498.0	496.3	494.6	493.0
62.5°	467.5	465.0	462.4	460.5	459.2	458.0	456.6	455.3
65°	406.4	404.3	402.1	400.5	399.6	398.6	397.7	396.7
67.5°	348.0	346.2	344.4	343.2	342.6	342.1	341.5	341.0
70°	309.4	308.0	306.6	305.4	304.4	303.5	302.5	301.6
72.5°	273.1	271.5	269.9	268.6	267.7	266.7	265.8	264.8
75°	216.7	216.0	215.3	214.4	213.5	212.5	211.6	210.6
77.5°	165.1	164.7	164.3	163.7	163.0	162.4	161.7	161.1
80°	132.1	131.9	131.7	131.3	130.8	130.3	129.8	129.4
82.5°	100.9	100.5	100.1	99.8	99.7	99.7	99.6	99.4
85°	59.4	59.2	58.9	58.5	58.1	57.6	57.1	56.6
87.5°	23.3	23.3	23.4	23.3	22.9	22.5	22.2	21.8
90°	5.1	5.3	5.6	6.2	6.2	6.2	6.4	6.4
92.5°	49.6	36.0	27.1	23.0	19.4	18.7	18.3	17.8
95°	201.3	158.8	124.3	100.8	80.9	72.5	70.3	65.8
97.5°	299.8	270.0	236.4	203.7	186.4	170.7	162.6	159.0
100°	344.4	330.7	301.8	272.7	253.3	233.2	222.8	218.4
102.5°	359.3	367.8	354.0	334.3	313.6	299.3	288.0	284.7
105°	350.5	388.9	401.2	398.2	389.1	379.9	374.3	371.0
107.5°	318.9	370.1	401.7	416.4	420.9	420.9	419.0	416.8
110°	295.6	348.9	388.3	412.1	424.7	430.0	432.0	432.0



TEST NUMBER: P333258-927

CATALOG NUMBER: S125DIP-S1090D365U927-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	277.3	327.8	367.7	395.8	414.2	423.3	428.2	430.2
115°	254.2	297.6	336.0	366.5	388.3	401.7	409.6	413.2
117.5°	239.3	276.7	309.7	337.8	359.6	373.5	381.3	383.5
120°	231.2	264.8	295.6	320.3	341.0	354.4	362.0	364.2
122.5°	225.2	256.4	283.8	306.8	325.3	337.6	345.2	347.2
125°	216.4	244.9	269.3	289.5	305.1	316.6	322.8	325.6
127.5°	207.5	234.1	256.8	275.7	289.9	300.1	305.9	307.1
130°	201.8	226.5	248.3	266.6	280.5	289.8	295.4	297.1
132.5°	196.2	219.4	239.2	256.7	270.7	279.9	285.0	286.9
135°	189.0	208.3	226.2	242.2	254.5	263.7	268.8	270.5
137.5°	182.8	198.4	213.3	226.9	237.9	246.3	251.0	252.8
140°	179.4	192.6	205.5	217.2	227.6	234.9	239.1	240.5
142.5°	176.6	187.7	198.8	209.0	217.8	223.9	227.9	229.1
145°	172.8	181.4	190.1	197.6	204.4	209.1	212.2	213.3
147.5°	169.1	176.2	182.9	188.6	193.9	197.7	199.5	200.0
150°	167.2	173.3	178.6	183.6	187.8	191.2	192.3	192.6
152.5°	164.9	170.4	175.2	179.2	182.7	185.4	186.5	186.8
155°	161.5	166.0	169.9	173.0	175.8	177.8	178.6	178.9
157.5°	158.2	161.8	164.9	167.3	169.5	171.1	171.9	171.8
160°	156.0	158.8	161.5	163.5	165.5	166.8	167.4	167.2
162.5°	153.4	156.1	158.4	160.2	161.7	162.8	163.0	162.9
165°	150.0	152.0	153.7	155.1	156.2	156.8	156.8	156.8
167.5°	146.8	148.1	149.4	150.4	151.0	151.5	151.2	151.1
170°	145.0	145.8	146.7	147.3	147.8	148.1	148.1	147.8
172.5°	143.0	143.9	144.5	144.8	144.9	145.4	145.0	144.7
175°	140.9	140.9	141.4	141.4	141.4	141.6	141.1	140.9
177.5°	139.3	139.5	139.5	139.5	139.3	139.5	138.9	138.9
180°	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9

(END OF REPORT)