

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: P333258-930

Luminaire Tested: **S125DIP-S1090D365U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333258-930
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-S1090D365U930-4F0-1E-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

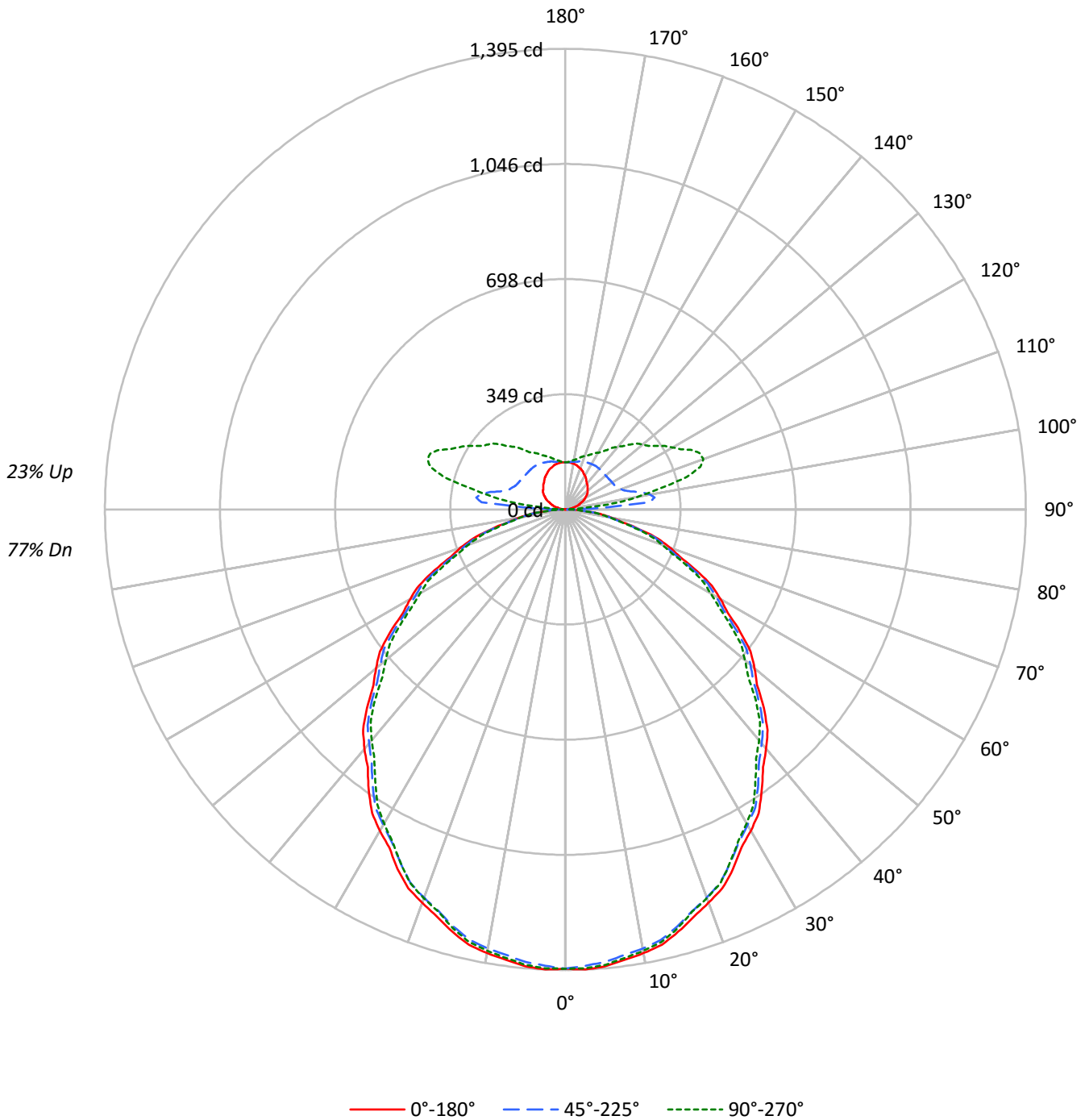
Lumens per Lamp: N/A
Luminaire Lumens: 4692.7 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

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



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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	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°	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	2.8
10°-20°	370.5	7.9
20°-30°	547.1	11.7
30°-40°	638.4	13.6
40°-50°	641.2	13.7
50°-60°	562.8	12.0
60°-70°	419.4	8.9
70°-80°	239.8	5.1
80°-90°	70.6	1.5
90°-100°	103.6	2.2
100°-110°	222.7	4.7
110°-120°	209.0	4.5
120°-130°	169.4	3.6
130°-140°	135.9	2.9
140°-150°	102.6	2.2
150°-160°	72.2	1.5
160°-170°	42.6	0.9
170°-180°	13.8	0.3
0°-30°	1048.8	22.4
0°-40°	1687.2	36.0
0°-60°	2891.2	61.6
0°-90°	3620.9	77.2
90°-120°	535.3	11.4
90°-150°	943.1	20.1
90°-180°	1072.0	22.8
0°-180°	4692.7	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°	0	3	5	6	7	4
95°	10	28	255	116	68	10
105°	32	46	209	411	382	34
115°	58	70	168	362	425	57
125°	81	94	161	288	335	72
135°	94	114	160	241	278	73
145°	110	126	160	200	220	69
155°	126	135	156	176	184	58
165°	137	141	150	159	161	39
175°	143	143	144	146	145	14
180°	143	143	143	143	143	



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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°	23.8	23.9	24.0	24.1	24.2	24.2	24.1	24.1	23.9	23.8	23.9
90°	0.3	0.6	1.1	1.7	2.3	2.9	3.2	3.8	4.0	4.6	4.9
92.5°	3.5	4.2	6.7	10.3	15.2	23.6	39.4	65.7	94.4	92.9	75.2
95°	9.5	9.8	12.1	15.2	21.6	34.6	65.4	128.8	208.3	255.3	249.8
97.5°	15.8	16.1	17.8	21.0	26.7	36.0	56.3	102.8	186.1	272.6	316.1
100°	20.1	20.7	21.9	25.0	30.6	39.2	55.9	93.4	166.0	260.2	332.2
102.5°	25.0	25.4	26.3	29.7	34.7	43.1	58.0	89.4	150.7	238.3	322.5
105°	32.5	32.5	34.0	36.9	41.5	49.6	62.2	87.9	136.0	208.9	291.6
107.5°	39.9	40.5	41.9	44.3	49.1	56.3	68.6	90.5	129.8	188.7	260.0
110°	45.2	45.8	47.0	49.6	53.9	61.4	73.2	93.1	127.9	179.2	242.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	50.5	51.1	52.0	54.6	58.9	66.2	77.5	96.3	127.9	173.7	228.7
115°	58.2	58.8	59.7	62.2	66.5	73.8	84.5	101.1	128.8	167.7	214.1
117.5°	65.1	66.0	66.9	69.5	74.4	81.4	91.5	106.6	130.7	164.8	205.4
120°	69.7	70.6	71.7	74.4	79.2	86.4	96.5	110.4	132.6	163.4	200.6
122.5°	74.6	75.2	76.1	78.8	84.1	91.3	101.3	114.5	134.1	162.2	196.4
125°	80.7	81.3	82.7	85.3	90.7	98.2	107.8	120.2	136.9	160.8	190.8
127.5°	85.4	86.3	88.1	91.5	97.3	104.8	113.9	125.3	139.9	160.1	185.6
130°	88.5	89.4	91.6	95.4	101.4	108.9	117.8	128.8	141.8	159.6	182.1
132.5°	90.7	91.9	94.7	98.8	105.1	112.6	121.6	131.8	143.8	159.6	179.4
135°	94.5	95.6	99.1	103.7	109.8	117.6	126.5	136.0	146.7	159.6	176.0
137.5°	99.2	100.1	103.3	107.9	113.9	121.9	130.0	139.1	149.3	160.0	173.1
140°	102.0	102.9	106.3	111.0	116.4	124.2	132.6	141.2	150.4	160.2	171.7
142.5°	105.3	105.8	109.1	113.7	119.0	126.3	134.1	142.4	151.1	160.5	170.6
145°	110.1	110.6	113.5	117.6	122.8	129.4	136.9	144.1	151.8	160.2	168.8
147.5°	115.1	115.4	118.0	121.7	126.2	132.0	138.6	145.1	152.1	159.5	167.1
150°	118.1	118.7	120.7	124.5	128.5	133.4	139.7	145.8	152.1	158.7	165.7
152.5°	121.4	121.7	123.5	126.8	130.6	135.0	140.9	146.3	151.9	157.8	164.0
155°	125.6	125.6	127.3	130.2	133.1	137.1	142.0	146.7	151.2	156.2	161.3
157.5°	129.5	129.4	130.8	133.2	135.7	138.8	143.0	146.9	150.5	154.4	158.8
160°	132.0	131.7	132.8	134.9	137.1	139.7	143.5	146.9	149.9	153.3	156.8
162.5°	134.0	133.8	134.9	136.7	138.5	140.6	144.0	146.8	149.1	151.9	154.9
165°	137.1	136.6	137.5	138.8	140.1	141.8	144.1	146.3	148.1	149.9	152.1
167.5°	139.3	138.9	139.5	140.2	141.0	142.2	144.1	145.7	146.5	147.8	149.4
170°	140.6	140.3	140.6	141.2	141.8	142.6	144.1	145.2	145.8	146.7	147.8
172.5°	141.5	141.0	141.3	141.9	142.2	142.6	143.8	144.8	144.9	145.3	146.2
175°	142.6	142.0	142.4	142.6	142.6	142.6	143.5	144.1	143.8	143.8	144.1
177.5°	143.2	142.7	142.7	142.9	142.7	142.7	143.2	143.4	142.9	142.9	143.2
180°	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9



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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°	24.0	24.0	24.1	24.0	23.6	23.2	22.8	22.4
90°	5.2	5.5	5.8	6.4	6.4	6.4	6.6	6.6
92.5°	51.0	37.0	27.9	23.6	20.0	19.2	18.8	18.3
95°	207.2	163.4	127.9	103.7	83.2	74.6	72.3	67.8
97.5°	308.5	277.9	243.3	209.6	191.8	175.7	167.4	163.6
100°	354.4	340.3	310.6	280.6	260.7	240.0	229.3	224.8
102.5°	369.8	378.5	364.4	344.1	322.8	308.0	296.4	293.0
105°	360.8	400.2	412.9	409.8	400.5	391.0	385.2	381.8
107.5°	328.2	380.9	413.4	428.5	433.2	433.2	431.2	428.9
110°	304.3	359.1	399.7	424.1	437.1	442.5	444.6	444.6



TEST NUMBER: P333258-930

CATALOG NUMBER: S125DIP-S1090D365U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	285.4	337.4	378.5	407.3	426.2	435.7	440.7	442.8
115°	261.6	306.3	345.8	377.2	399.7	413.4	421.5	425.3
117.5°	246.3	284.8	318.8	347.6	370.1	384.4	392.4	394.7
120°	238.0	272.6	304.3	329.6	351.0	364.8	372.6	374.9
122.5°	231.8	263.8	292.0	315.8	334.8	347.5	355.3	357.3
125°	222.7	252.1	277.2	297.9	314.1	325.9	332.2	335.1
127.5°	213.5	240.9	264.3	283.7	298.4	308.8	314.8	316.1
130°	207.7	233.1	255.6	274.3	288.7	298.2	304.0	305.7
132.5°	201.9	225.8	246.1	264.2	278.6	288.0	293.3	295.3
135°	194.5	214.3	232.8	249.2	262.0	271.4	276.6	278.3
137.5°	188.2	204.2	219.6	233.5	244.8	253.5	258.3	260.2
140°	184.7	198.2	211.5	223.6	234.2	241.7	246.1	247.5
142.5°	181.7	193.1	204.6	215.1	224.1	230.5	234.6	235.8
145°	177.8	186.7	195.7	203.4	210.3	215.2	218.4	219.6
147.5°	174.1	181.3	188.3	194.1	199.6	203.5	205.3	205.9
150°	172.0	178.4	183.8	189.0	193.3	196.8	198.0	198.2
152.5°	169.7	175.4	180.3	184.4	188.0	190.8	191.9	192.2
155°	166.2	170.9	174.9	178.1	180.9	183.0	183.8	184.1
157.5°	162.8	166.6	169.7	172.2	174.5	176.1	176.9	176.8
160°	160.5	163.4	166.2	168.3	170.3	171.7	172.3	172.0
162.5°	157.9	160.6	163.1	164.9	166.4	167.5	167.7	167.6
165°	154.4	156.5	158.2	159.6	160.8	161.3	161.3	161.3
167.5°	151.1	152.5	153.8	154.8	155.4	155.9	155.6	155.6
170°	149.3	150.1	151.0	151.6	152.1	152.5	152.5	152.1
172.5°	147.2	148.1	148.7	149.0	149.1	149.7	149.2	148.9
175°	145.0	145.0	145.5	145.5	145.5	145.8	145.2	145.0
177.5°	143.4	143.6	143.6	143.6	143.4	143.6	142.9	142.9
180°	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9

(END OF REPORT)