

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: P333256-935

Luminaire Tested: **S125DIP-S1090D365U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333256-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1090D365U935-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5084.7 lumens
Efficiency: N/A
Efficacy: 116.9 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

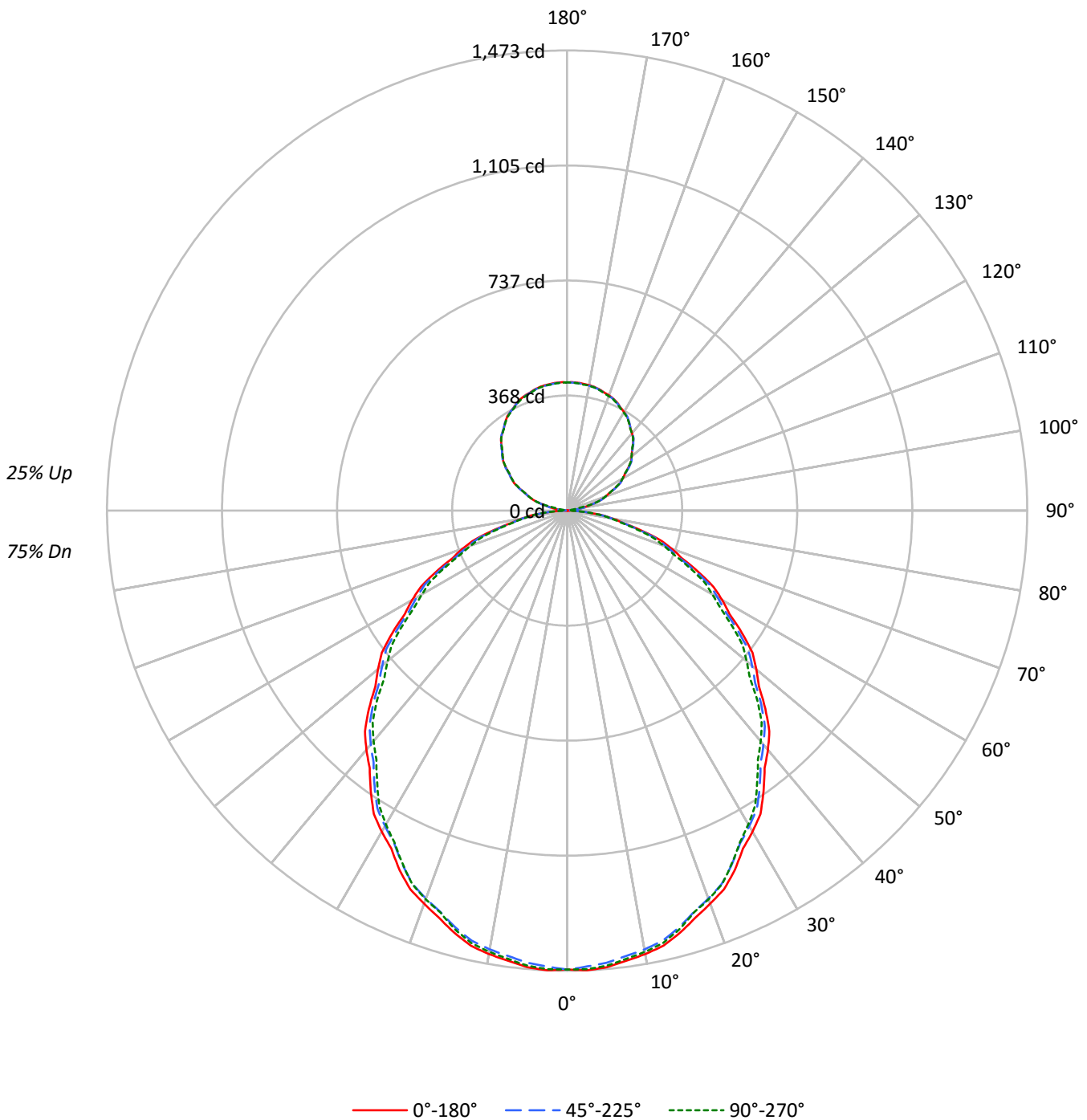
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79
1	103	99	95	91	98	94	91	87	85	83	80	77	75	73	70	68	67
2	94	86	80	74	89	82	77	72	75	70	66	68	64	61	62	59	56
3	86	76	68	62	81	72	65	60	66	60	56	60	56	52	55	51	48
4	79	67	59	53	74	64	57	51	59	52	48	54	48	44	49	45	41
5	72	60	52	45	68	58	50	44	53	46	41	48	43	39	44	39	36
6	67	54	46	39	63	52	44	38	48	41	36	44	38	34	40	35	32
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	36	32	28
8	57	45	36	31	55	43	35	30	40	33	28	36	31	27	33	29	25
9	54	41	33	28	51	39	32	27	36	30	26	34	28	24	31	26	23
10	50	38	30	25	48	36	29	24	34	27	23	31	26	22	29	24	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9489	9489	9489
5°	9510	9419	9479
10°	9452	9353	9406
15°	9349	9240	9279
20°	9203	9082	9099
25°	9045	8896	8888
30°	8850	8694	8651
35°	8642	8476	8358
40°	8427	8241	8123
45°	8195	8026	7867
50°	7941	7766	7533
55°	7696	7473	7264
60°	7401	7177	6921
65°	7051	6820	6589
70°	6717	6409	6190
75°	6119	5916	5712
80°	5449	5359	5229
85°	4735	4824	4565



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.5	2.7
10°-20°	391.3	7.7
20°-30°	577.8	11.4
30°-40°	674.2	13.3
40°-50°	677.1	13.3
50°-60°	594.4	11.7
60°-70°	442.9	8.7
70°-80°	253.2	5.0
80°-90°	74.5	1.5
90°-100°	14.9	0.3
100°-110°	92.0	1.8
110°-120°	166.8	3.3
120°-130°	214.0	4.2
130°-140°	230.2	4.5
140°-150°	216.1	4.2
150°-160°	174.8	3.4
160°-170°	113.0	2.2
170°-180°	39.0	0.8
0°-30°	1107.6	21.8
0°-40°	1781.8	35.0
0°-60°	3053.3	60.0
0°-90°	3823.9	75.2
90°-120°	273.7	5.4
90°-150°	934.0	18.4
90°-180°	1261.0	24.8
0°-180°	5084.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1469	1469	1469	1469	1469	
5°	1467	1464	1453	1463	1462	139
15°	1398	1394	1382	1388	1388	394
25°	1269	1263	1248	1250	1247	584
35°	1096	1091	1075	1069	1060	685
45°	897	892	879	865	861	691
55°	684	679	664	653	645	610
65°	461	458	446	436	431	458
75°	245	243	237	234	229	261
85°	64	65	65	64	62	71
90°	0	3	5	6	7	4
95°	17	16	5	6	6	22
105°	90	91	91	91	90	95
115°	168	169	170	169	167	166
125°	239	241	241	240	239	213
135°	298	300	299	298	297	230
145°	345	346	346	346	344	216
155°	380	379	379	380	378	175
165°	401	400	400	402	399	113
175°	410	409	409	411	409	39
180°	410	410	410	410	410	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2
2.5°	1472.9	1472.3	1471.6	1471.0	1470.4	1469.0	1467.0	1464.9	1462.8	1460.8	1462.8
5°	1466.9	1466.4	1465.9	1465.3	1464.8	1463.3	1460.7	1458.1	1455.5	1452.9	1455.3
7.5°	1453.4	1452.9	1452.3	1451.8	1451.3	1449.6	1446.7	1443.9	1441.1	1438.2	1440.5
10°	1441.3	1440.8	1440.3	1439.8	1439.2	1437.5	1434.7	1431.8	1429.0	1426.2	1428.2
12.5°	1426.4	1425.5	1424.5	1423.6	1422.7	1420.9	1418.2	1415.7	1413.0	1410.3	1412.0
15°	1398.3	1397.5	1396.7	1395.9	1395.2	1393.4	1390.5	1387.7	1384.8	1382.0	1383.3
17.5°	1366.0	1364.9	1363.7	1362.5	1361.4	1359.3	1356.4	1353.5	1350.6	1347.6	1349.2
20°	1339.0	1338.5	1338.0	1337.5	1337.0	1335.0	1331.6	1328.3	1324.9	1321.5	1323.4
22.5°	1312.0	1311.1	1310.2	1309.2	1308.3	1306.2	1303.1	1299.9	1296.8	1293.7	1294.9
25°	1269.3	1268.0	1266.7	1265.4	1264.1	1261.8	1258.4	1255.1	1251.7	1248.4	1248.9
27.5°	1219.3	1218.5	1217.7	1216.9	1216.2	1214.1	1210.6	1207.1	1203.7	1200.2	1200.3
30°	1186.7	1185.9	1185.2	1184.4	1183.6	1181.3	1177.4	1173.5	1169.7	1165.8	1165.3
32.5°	1151.4	1150.2	1149.0	1147.8	1146.7	1144.4	1140.8	1137.4	1133.9	1130.5	1129.5
35°	1096.1	1095.0	1094.0	1093.0	1091.9	1089.6	1086.0	1082.4	1078.7	1075.1	1073.8
37.5°	1038.6	1037.3	1036.0	1034.7	1033.5	1031.1	1027.7	1024.3	1020.9	1017.5	1015.5
40°	999.6	998.3	997.0	995.7	994.5	992.0	988.3	984.7	981.1	977.5	975.2
42.5°	957.8	956.7	955.6	954.5	953.4	951.1	947.4	943.8	940.2	936.6	934.4
45°	897.3	896.3	895.3	894.2	893.2	891.1	888.0	884.9	881.8	878.7	875.6
47.5°	832.2	832.2	832.3	832.4	832.4	830.6	826.9	823.1	819.4	815.7	812.5
50°	790.4	789.6	788.8	788.1	787.3	785.3	782.2	779.1	776.0	772.9	769.6
52.5°	747.6	747.0	746.5	745.9	745.4	743.4	740.1	736.8	733.5	730.1	727.2
55°	683.5	682.7	681.9	681.1	680.4	678.1	674.5	670.9	667.3	663.7	661.3
57.5°	615.8	615.4	615.0	614.6	614.2	612.4	609.3	606.3	603.3	600.2	597.2
60°	573.0	572.0	570.9	569.9	568.9	567.0	564.1	561.3	558.4	555.6	553.0
62.5°	528.4	527.5	526.8	525.9	525.1	523.5	521.0	518.6	516.2	513.8	510.9
65°	461.4	460.9	460.4	459.9	459.3	457.7	454.9	452.0	449.2	446.3	444.0
67.5°	396.6	395.5	394.4	393.3	392.3	390.6	388.5	386.4	384.3	382.2	380.2
70°	355.7	354.4	353.1	351.8	350.5	348.7	346.4	344.1	341.7	339.4	337.9
72.5°	311.1	310.1	309.3	308.4	307.5	306.3	304.9	303.3	301.9	300.3	298.6
75°	245.2	244.7	244.2	243.7	243.1	242.3	241.0	239.7	238.4	237.1	236.3
77.5°	184.6	184.3	184.2	184.0	183.7	183.3	182.5	181.8	181.2	180.4	179.9
80°	146.5	146.5	146.5	146.5	146.5	146.2	145.7	145.2	144.6	144.1	143.9
82.5°	113.0	112.5	112.2	111.8	111.3	111.1	111.0	110.9	110.7	110.6	110.2
85°	63.9	64.1	64.4	64.7	64.9	65.1	65.1	65.1	65.1	65.1	64.8
87.5°	25.1	25.3	25.4	25.5	25.6	25.6	25.5	25.4	25.2	25.1	25.2
90°	0.3	0.9	1.4	1.9	2.5	3.0	3.4	4.0	4.4	4.9	5.2
92.5°	4.6	4.3	4.0	3.5	3.2	3.2	3.6	4.0	4.5	4.9	5.2
95°	17.3	17.1	17.0	16.7	16.5	15.2	12.6	10.0	7.4	4.9	5.2
97.5°	36.2	36.6	36.9	37.3	37.7	35.3	30.2	25.1	20.1	15.0	13.1
100°	50.8	51.1	51.2	51.4	51.7	51.8	52.2	52.4	52.7	53.0	42.9
102.5°	65.7	66.0	66.2	66.5	66.7	66.9	67.1	67.2	67.4	67.6	65.7
105°	89.5	89.7	90.1	90.3	90.6	90.7	90.7	90.7	90.7	90.7	90.7
107.5°	114.2	114.2	114.2	114.2	114.2	114.3	114.4	114.5	114.7	114.8	114.8
110°	130.3	130.3	130.3	130.3	130.3	130.4	130.4	130.6	130.7	130.9	130.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	145.3	145.5	145.7	145.9	146.0	146.1	146.2	146.3	146.4	146.5	146.2
115°	168.0	168.3	168.7	169.0	169.4	169.5	169.6	169.7	169.8	169.8	169.5
117.5°	191.4	191.4	191.4	191.4	191.4	191.5	191.7	192.0	192.3	192.5	192.2
120°	206.0	206.0	206.0	205.9	205.8	205.9	206.0	206.2	206.5	206.6	206.6
122.5°	219.0	219.2	219.5	219.7	220.0	220.2	220.2	220.3	220.4	220.5	220.4
125°	238.9	239.4	239.9	240.3	240.8	241.1	241.1	241.1	241.1	241.1	240.7
127.5°	258.0	258.3	258.6	259.0	259.3	259.5	259.4	259.4	259.3	259.3	259.2
130°	269.7	270.0	270.4	270.7	271.0	271.2	271.3	271.3	271.4	271.5	271.3
132.5°	281.4	281.7	282.1	282.5	282.9	283.0	282.9	282.8	282.6	282.4	282.4
135°	298.0	298.3	298.8	299.2	299.5	299.7	299.5	299.5	299.3	299.2	299.0
137.5°	313.2	313.6	313.9	314.3	314.6	314.8	314.6	314.5	314.4	314.3	314.3
140°	323.2	323.4	323.5	323.6	323.7	323.8	323.7	323.6	323.6	323.6	323.6
142.5°	332.3	332.3	332.4	332.4	332.5	332.6	332.8	332.9	332.9	333.0	333.0
145°	345.4	345.6	345.7	345.9	345.9	346.0	346.0	346.0	346.0	346.0	346.1
147.5°	357.0	357.0	357.0	356.9	356.9	356.9	357.0	357.1	357.1	357.2	357.3
150°	364.3	364.2	364.0	363.9	363.8	363.8	363.9	364.0	364.2	364.3	364.5
152.5°	371.3	371.1	370.7	370.5	370.1	370.1	370.2	370.4	370.5	370.7	370.7
155°	380.5	380.0	379.6	379.2	378.8	378.7	378.8	378.9	379.1	379.2	379.4
157.5°	387.4	387.2	386.9	386.7	386.5	386.3	386.3	386.4	386.4	386.4	386.6
160°	392.3	391.9	391.5	391.1	390.7	390.5	390.5	390.6	390.7	390.8	391.1
162.5°	396.2	395.8	395.4	394.9	394.6	394.4	394.5	394.5	394.6	394.7	395.0
165°	401.4	401.1	400.6	400.2	399.8	399.7	399.7	399.8	399.8	399.9	400.3
167.5°	405.4	404.9	404.5	404.1	403.6	403.5	403.6	403.6	403.7	403.7	404.2
170°	407.5	407.1	406.6	406.1	405.6	405.4	405.5	405.5	405.6	405.7	406.2
172.5°	409.0	408.5	408.0	407.6	407.1	406.9	407.0	407.2	407.3	407.4	407.9
175°	410.5	410.2	409.7	409.3	409.0	408.8	408.8	408.9	409.0	409.1	409.6
177.5°	411.3	411.0	410.6	410.4	410.0	409.8	409.9	410.0	410.0	410.1	410.4
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2
2.5°	1464.9	1467.0	1469.0	1470.0	1469.8	1469.6	1469.4	1469.2
5°	1457.6	1459.9	1462.2	1463.3	1463.0	1462.8	1462.5	1462.2
7.5°	1442.8	1445.1	1447.3	1448.4	1448.1	1447.9	1447.6	1447.3
10°	1430.3	1432.4	1434.4	1435.4	1435.1	1434.9	1434.6	1434.3
12.5°	1413.7	1415.3	1416.9	1417.8	1417.7	1417.6	1417.6	1417.6
15°	1384.6	1385.9	1387.2	1387.8	1387.8	1387.8	1387.8	1387.8
17.5°	1350.8	1352.4	1354.0	1354.2	1352.9	1351.6	1350.3	1349.0
20°	1325.2	1327.0	1328.8	1329.0	1327.7	1326.5	1325.2	1323.9
22.5°	1296.1	1297.3	1298.4	1298.6	1297.7	1296.8	1296.0	1295.0
25°	1249.4	1249.9	1250.4	1250.3	1249.5	1248.7	1247.9	1247.2
27.5°	1200.4	1200.5	1200.7	1200.3	1199.5	1198.8	1198.0	1197.2
30°	1164.8	1164.2	1163.7	1163.1	1162.4	1161.6	1160.8	1160.0
32.5°	1128.6	1127.7	1126.8	1125.6	1124.2	1122.8	1121.4	1120.0
35°	1072.5	1071.3	1070.0	1068.3	1066.3	1064.2	1062.1	1060.1
37.5°	1013.7	1011.8	1009.9	1008.3	1007.1	1005.9	1004.7	1003.6
40°	972.8	970.5	968.2	966.6	965.9	965.1	964.3	963.5
42.5°	932.4	930.2	928.2	926.4	925.3	924.1	922.9	921.7
45°	872.5	869.4	866.3	864.4	863.6	862.8	862.0	861.3
47.5°	809.4	806.2	803.1	800.6	798.8	797.0	795.2	793.4
50°	766.2	762.8	759.5	756.9	755.1	753.3	751.5	749.7
52.5°	724.3	721.3	718.4	715.9	713.9	711.9	709.9	707.8
55°	659.0	656.7	654.4	652.3	650.5	648.7	646.9	645.1
57.5°	594.3	591.2	588.2	586.3	585.3	584.3	583.3	582.3
60°	550.4	547.9	545.3	543.0	541.2	539.4	537.6	535.8
62.5°	508.2	505.4	502.6	500.5	499.1	497.7	496.3	494.9
65°	441.7	439.4	437.0	435.3	434.3	433.3	432.2	431.2
67.5°	378.2	376.3	374.3	373.0	372.4	371.8	371.2	370.6
70°	336.3	334.8	333.2	331.9	330.9	329.8	328.8	327.8
72.5°	296.9	295.1	293.3	292.0	290.9	289.9	288.9	287.8
75°	235.6	234.8	234.0	233.1	232.0	231.0	230.0	228.9
77.5°	179.4	179.0	178.6	178.0	177.2	176.5	175.7	175.0
80°	143.6	143.4	143.1	142.7	142.2	141.6	141.1	140.6
82.5°	109.7	109.3	108.8	108.5	108.4	108.3	108.2	108.1
85°	64.6	64.3	64.1	63.6	63.1	62.6	62.1	61.6
87.5°	25.3	25.3	25.4	25.2	24.9	24.5	24.1	23.8
90°	5.5	5.9	6.2	6.5	6.7	6.9	7.1	7.3
92.5°	5.5	5.9	6.2	6.5	6.5	6.6	6.7	6.8
95°	5.5	5.9	6.2	6.4	6.4	6.4	6.4	6.4
97.5°	11.2	9.2	7.3	6.4	6.4	6.4	6.4	6.4
100°	32.8	22.7	12.7	7.5	7.2	7.0	6.6	6.4
102.5°	63.7	61.8	59.9	56.7	52.1	47.5	42.9	38.3
105°	90.7	90.7	90.7	90.7	90.6	90.5	90.5	90.4
107.5°	114.9	114.9	114.9	114.8	114.6	114.3	114.2	113.9
110°	130.4	130.3	130.1	130.0	130.1	130.1	130.2	130.3



TEST NUMBER: P333256-935

CATALOG NUMBER: S125DIP-S1090D365U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	145.9	145.7	145.4	145.3	145.2	145.1	145.0	144.9
115°	169.3	169.0	168.8	168.4	168.0	167.6	167.2	166.8
117.5°	191.8	191.5	191.1	190.9	190.7	190.5	190.4	190.2
120°	206.4	206.2	206.1	205.9	205.5	205.2	204.8	204.5
122.5°	220.2	220.2	220.0	219.7	219.3	219.0	218.5	218.2
125°	240.5	240.2	240.0	239.7	239.5	239.4	239.1	238.9
127.5°	259.0	258.8	258.7	258.4	257.9	257.4	256.9	256.4
130°	271.0	270.9	270.7	270.4	270.1	269.8	269.4	269.1
132.5°	282.3	282.3	282.2	282.1	281.7	281.4	281.0	280.8
135°	298.9	298.8	298.6	298.3	298.0	297.6	297.1	296.7
137.5°	314.4	314.4	314.4	314.2	313.8	313.5	313.1	312.8
140°	323.8	323.9	324.1	323.9	323.6	323.1	322.7	322.3
142.5°	333.0	333.1	333.1	332.9	332.5	332.1	331.7	331.3
145°	346.2	346.2	346.3	346.1	345.8	345.3	344.9	344.5
147.5°	357.4	357.5	357.6	357.4	356.9	356.4	355.9	355.4
150°	364.5	364.7	364.8	364.6	364.1	363.6	363.0	362.5
152.5°	370.9	371.0	371.2	371.0	370.5	370.1	369.5	369.0
155°	379.6	379.8	380.0	379.9	379.4	378.8	378.2	377.7
157.5°	386.8	387.0	387.3	387.1	386.6	386.0	385.5	385.0
160°	391.3	391.6	391.8	391.8	391.2	390.6	390.1	389.6
162.5°	395.5	395.8	396.2	396.1	395.5	394.9	394.3	393.7
165°	400.7	401.1	401.6	401.5	401.0	400.4	399.8	399.3
167.5°	404.8	405.2	405.7	405.6	405.0	404.4	403.8	403.2
170°	406.7	407.3	407.9	407.9	407.3	406.7	406.0	405.4
172.5°	408.4	408.9	409.3	409.3	408.7	408.0	407.4	406.8
175°	410.1	410.7	411.2	411.2	410.5	409.9	409.3	408.7
177.5°	410.9	411.2	411.6	411.6	411.1	410.7	410.3	409.8
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5

(END OF REPORT)