

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: P333274-935

Luminaire Tested: **S125DIP-S1090D810U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333274-935
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-S1090D810U935-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6614.3 lumens
Efficiency: N/A
Efficacy: 121.6 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

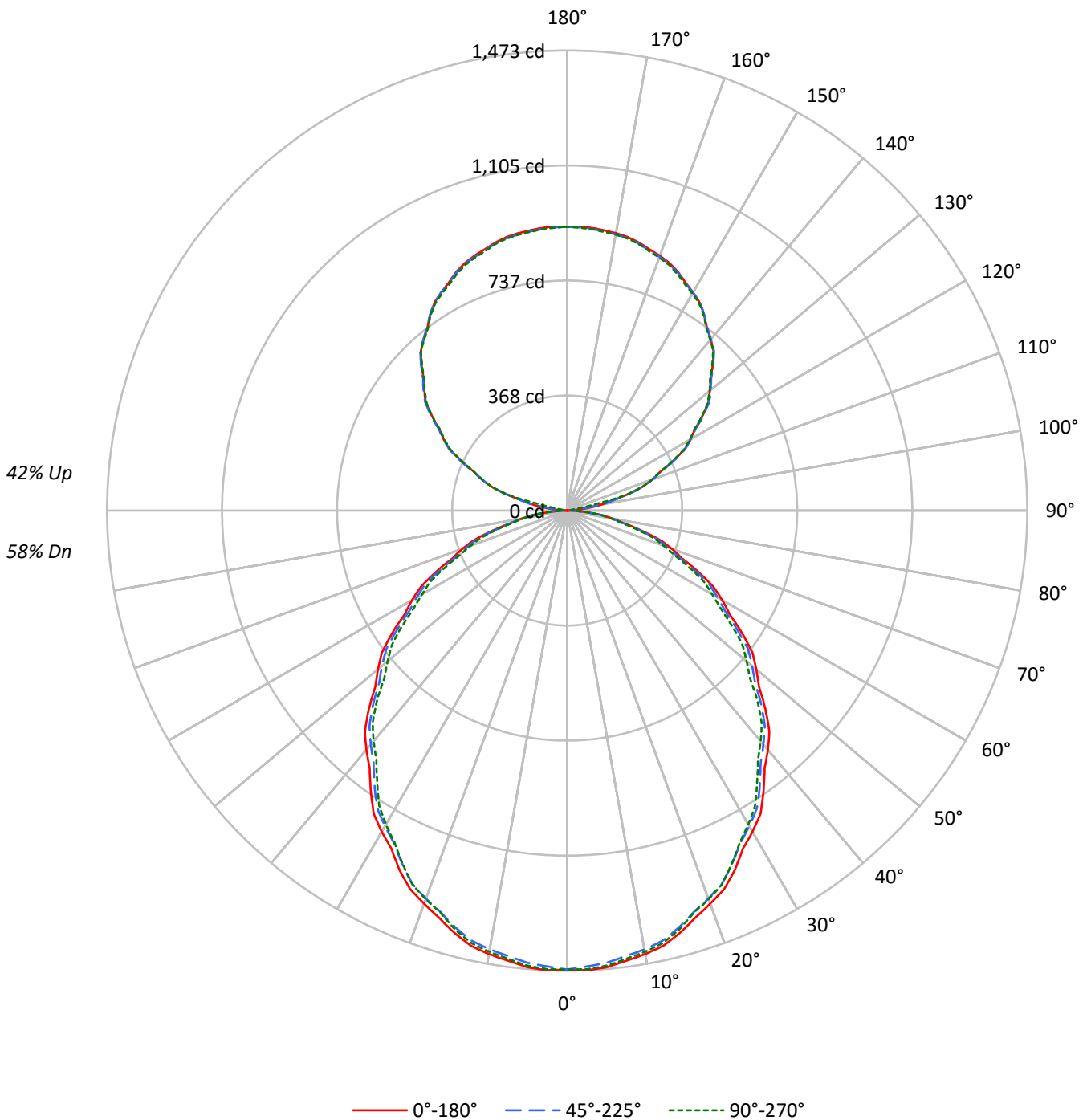
Input Watts (W): 54.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	99	95	91	88	93	89	85	82	77	74	72	66	64	62	56	55	53	49
2	91	83	77	71	84	78	72	67	67	63	60	58	55	52	49	47	45	41
3	83	73	65	59	77	68	62	56	59	54	50	51	47	44	43	41	38	34
4	76	65	57	50	70	60	53	48	53	47	43	46	41	38	39	36	33	29
5	69	58	49	43	64	54	47	41	47	41	37	41	36	33	35	31	29	26
6	64	52	43	38	59	49	41	36	43	37	32	37	32	29	32	28	25	22
7	59	47	39	33	55	44	37	31	39	33	28	34	29	25	29	25	22	20
8	55	42	35	29	51	40	33	28	35	29	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	32	27	23	28	24	20	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	26	22	18	23	19	17	15

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	2.1
10°-20°	391.3	5.9
20°-30°	577.8	8.7
30°-40°	674.2	10.2
40°-50°	677.1	10.2
50°-60°	594.4	9.0
60°-70°	442.9	6.7
70°-80°	253.2	3.8
80°-90°	75.6	1.1
90°-100°	33.0	0.5
100°-110°	203.4	3.1
110°-120°	369.0	5.6
120°-130°	473.5	7.2
130°-140°	509.3	7.7
140°-150°	478.1	7.2
150°-160°	386.7	5.8
160°-170°	250.1	3.8
170°-180°	86.3	1.3
0°-30°	1107.6	16.7
0°-40°	1781.8	26.9
0°-60°	3053.3	46.2
0°-90°	3824.9	57.8
90°-120°	605.4	9.2
90°-150°	2066.3	31.2
90°-180°	2789.0	42.2
0°-180°	6614.3	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°	1	6	11	14	16	5
95°	38	35	11	14	14	49
105°	198	200	201	201	200	210
115°	372	375	376	373	369	368
125°	529	533	533	531	529	472
135°	659	663	662	660	656	508
145°	764	766	766	766	762	478
155°	842	838	839	841	836	388
165°	888	884	885	888	883	251
175°	908	905	905	910	904	86
180°	908	908	908	908	908	



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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°	25.2	25.5	25.7	25.9	26.2	26.3	26.3	26.3	26.3	26.3	26.5
90°	0.7	1.9	3.1	4.3	5.4	6.5	7.7	8.7	9.7	10.8	11.5
92.5°	10.3	9.6	8.7	7.8	7.1	7.1	8.0	9.0	9.8	10.8	11.5
95°	38.4	38.0	37.5	37.0	36.6	33.5	27.8	22.1	16.4	10.8	11.5
97.5°	80.2	80.9	81.7	82.6	83.3	78.2	66.9	55.6	44.3	33.1	28.9
100°	112.4	112.9	113.3	113.8	114.3	114.8	115.4	116.0	116.6	117.2	94.9
102.5°	145.3	145.9	146.5	147.0	147.6	148.0	148.4	148.8	149.1	149.5	145.3
105°	197.9	198.5	199.1	199.8	200.4	200.6	200.6	200.6	200.6	200.6	200.6
107.5°	252.6	252.6	252.6	252.6	252.6	252.8	253.0	253.4	253.7	254.0	254.0
110°	288.2	288.2	288.2	288.2	288.2	288.3	288.6	289.0	289.2	289.6	289.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	321.6	321.9	322.3	322.7	323.0	323.3	323.5	323.6	323.8	324.0	323.5
115°	371.7	372.5	373.2	373.9	374.7	375.1	375.3	375.4	375.6	375.7	375.1
117.5°	423.5	423.5	423.4	423.4	423.4	423.7	424.2	424.8	425.4	425.9	425.2
120°	455.8	455.7	455.6	455.4	455.2	455.4	455.8	456.3	456.8	457.2	456.9
122.5°	484.4	485.0	485.5	486.1	486.6	487.1	487.2	487.5	487.7	487.9	487.6
125°	528.6	529.6	530.6	531.8	532.8	533.3	533.3	533.3	533.3	533.3	532.7
127.5°	570.8	571.4	572.2	573.0	573.7	574.0	573.9	573.9	573.8	573.7	573.3
130°	596.6	597.4	598.1	598.8	599.6	600.0	600.2	600.3	600.5	600.6	600.2
132.5°	622.4	623.3	624.1	625.0	625.9	626.2	625.9	625.5	625.2	624.8	624.7
135°	659.2	660.1	661.0	661.9	662.8	663.1	662.8	662.5	662.2	661.9	661.6
137.5°	693.0	693.8	694.6	695.3	696.1	696.4	696.1	695.9	695.6	695.3	695.3
140°	715.1	715.4	715.7	716.0	716.3	716.4	716.2	716.1	715.9	715.7	716.1
142.5°	735.0	735.2	735.4	735.6	735.7	735.9	736.2	736.3	736.6	736.8	736.8
145°	764.2	764.6	764.8	765.2	765.4	765.6	765.6	765.6	765.6	765.6	765.8
147.5°	789.8	789.8	789.7	789.6	789.6	789.6	789.8	790.0	790.2	790.4	790.6
150°	806.0	805.7	805.4	805.1	804.8	804.8	805.1	805.4	805.7	806.0	806.3
152.5°	821.7	821.0	820.3	819.7	819.0	818.8	819.1	819.4	819.7	820.0	820.3
155°	841.7	840.8	839.9	839.0	838.1	837.8	838.1	838.4	838.7	839.0	839.4
157.5°	857.1	856.6	856.1	855.6	855.0	854.7	854.8	854.8	854.8	854.9	855.3
160°	868.0	867.0	866.2	865.2	864.4	864.0	864.1	864.3	864.4	864.5	865.1
162.5°	876.6	875.6	874.8	873.8	873.0	872.6	872.7	872.9	873.1	873.2	874.0
165°	888.1	887.3	886.3	885.5	884.5	884.2	884.3	884.5	884.6	884.8	885.7
167.5°	896.7	895.9	894.9	894.0	893.0	892.7	892.8	892.9	893.1	893.3	894.3
170°	901.6	900.5	899.5	898.5	897.4	897.0	897.1	897.2	897.4	897.6	898.8
172.5°	904.8	903.8	902.8	901.7	900.6	900.3	900.5	900.8	901.0	901.3	902.4
175°	908.4	907.4	906.5	905.7	904.7	904.4	904.5	904.7	904.8	905.0	906.2
177.5°	910.0	909.2	908.5	907.8	907.1	906.8	906.9	907.0	907.1	907.2	908.1
180°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4



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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°	26.6	26.8	26.9	26.9	26.5	26.2	25.8	25.6
90°	12.3	13.0	13.8	14.4	14.8	15.2	15.7	16.2
92.5°	12.3	13.0	13.8	14.2	14.5	14.6	14.9	15.1
95°	12.3	13.0	13.8	14.1	14.1	14.1	14.1	14.1
97.5°	24.7	20.5	16.3	14.1	14.1	14.1	14.1	14.1
100°	72.6	50.3	28.0	16.5	15.9	15.3	14.7	14.1
102.5°	141.0	136.8	132.6	125.4	115.2	105.0	94.9	84.7
105°	200.6	200.6	200.6	200.6	200.4	200.3	200.1	200.0
107.5°	254.1	254.1	254.1	253.9	253.5	253.0	252.5	252.1
110°	288.6	288.2	287.7	287.6	287.7	287.9	288.0	288.2



TEST NUMBER: P333274-935

CATALOG NUMBER: S125DIP-S1090D810U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	322.9	322.3	321.8	321.3	321.2	320.9	320.7	320.6
115°	374.5	373.9	373.3	372.6	371.7	370.7	369.9	369.0
117.5°	424.4	423.6	422.8	422.2	421.9	421.5	421.1	420.7
120°	456.6	456.3	456.0	455.5	454.7	454.0	453.2	452.5
122.5°	487.3	487.0	486.7	486.1	485.3	484.4	483.5	482.7
125°	532.1	531.5	530.9	530.4	529.9	529.4	529.0	528.6
127.5°	573.0	572.7	572.4	571.6	570.6	569.5	568.3	567.2
130°	599.7	599.3	598.8	598.2	597.4	596.8	596.0	595.2
132.5°	624.7	624.6	624.5	624.1	623.4	622.6	621.8	621.1
135°	661.3	661.0	660.7	660.1	659.2	658.3	657.4	656.5
137.5°	695.4	695.4	695.5	695.2	694.4	693.6	692.8	692.1
140°	716.4	716.7	717.0	716.7	715.7	714.9	713.9	713.1
142.5°	736.9	736.9	737.0	736.6	735.7	734.8	733.9	733.0
145°	765.9	766.0	766.2	765.8	764.9	764.1	763.1	762.2
147.5°	790.7	790.9	791.1	790.7	789.5	788.5	787.4	786.4
150°	806.6	806.9	807.2	806.8	805.6	804.3	803.1	801.9
152.5°	820.6	820.9	821.2	820.8	819.8	818.6	817.6	816.5
155°	839.9	840.3	840.8	840.4	839.2	838.0	836.8	835.6
157.5°	855.8	856.4	856.8	856.4	855.2	854.0	852.8	851.6
160°	865.7	866.3	866.9	866.7	865.5	864.3	863.1	861.9
162.5°	874.9	875.7	876.5	876.3	874.9	873.7	872.4	871.1
165°	886.6	887.4	888.4	888.2	887.0	885.8	884.6	883.4
167.5°	895.4	896.5	897.6	897.4	896.0	894.8	893.4	892.1
170°	899.9	901.1	902.3	902.2	901.0	899.6	898.2	896.9
172.5°	903.4	904.6	905.7	905.5	904.1	902.8	901.5	900.1
175°	907.3	908.5	909.7	909.6	908.4	907.0	905.7	904.3
177.5°	909.0	909.7	910.6	910.6	909.6	908.6	907.7	906.7
180°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4

(END OF REPORT)