

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: P333584-935

Luminaire Tested: **S125RDIP-S1090D365U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333584-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S1090D365U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4727.7 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

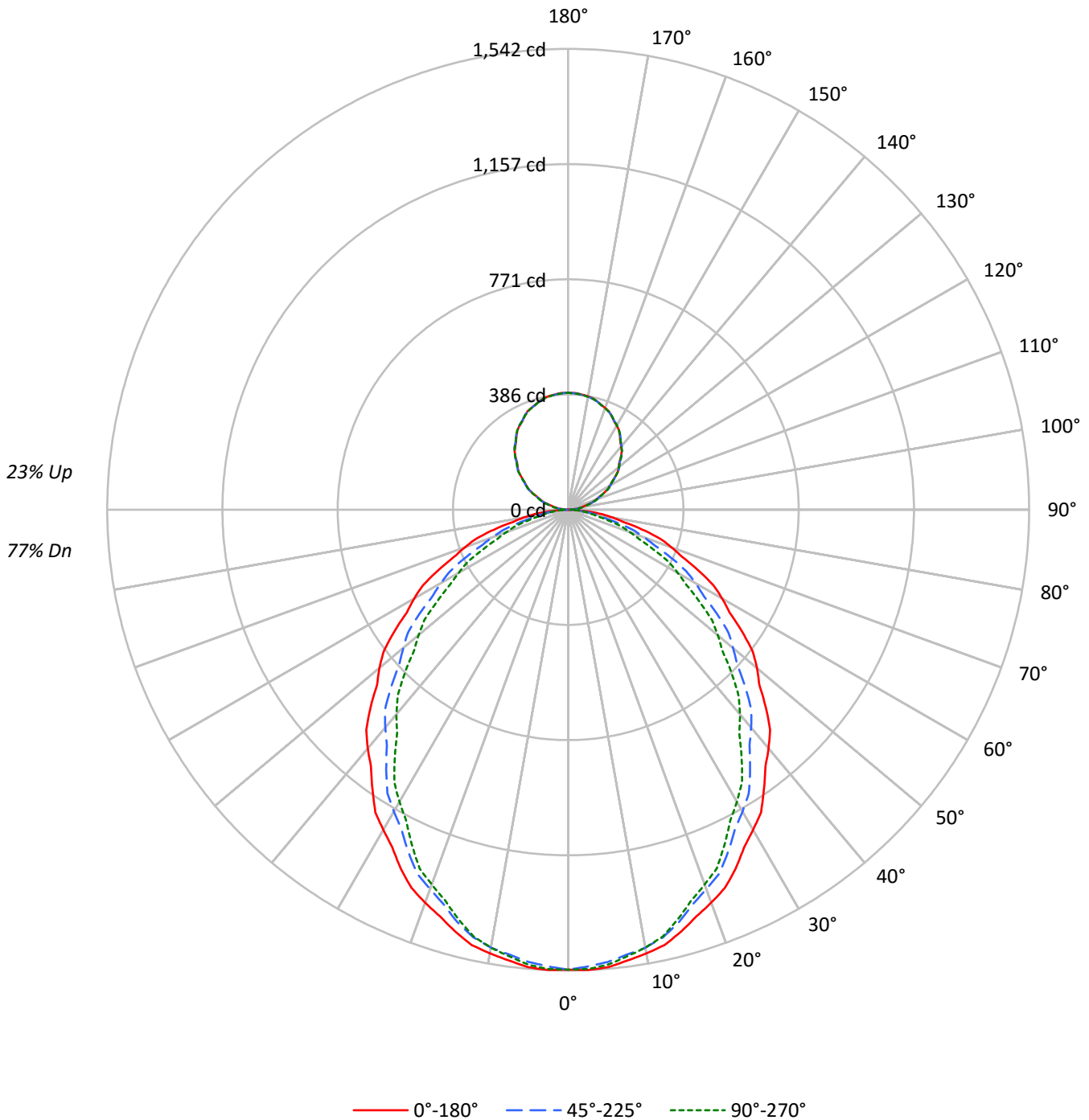
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77
1	104	100	96	92	99	95	92	89	87	84	82	79	77	75	72	71	69	66
2	95	88	81	76	90	84	78	73	77	72	68	70	66	63	64	61	59	55
3	87	77	70	64	83	74	67	62	68	62	58	62	58	54	57	53	50	47
4	80	69	61	54	76	66	59	53	61	54	50	56	51	47	51	47	44	41
5	74	62	53	47	70	59	51	46	54	48	43	50	45	41	46	42	38	36
6	68	56	47	41	65	53	46	40	49	43	38	46	40	36	42	37	34	31
7	63	50	42	36	60	48	41	35	45	38	34	42	36	32	38	34	30	28
8	59	46	38	32	56	44	37	32	41	35	30	38	33	29	35	31	27	25
9	55	42	34	29	52	41	33	29	38	32	27	35	30	26	33	28	25	23
10	51	39	31	26	49	38	31	26	35	29	25	33	27	24	30	26	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9939	9939	9939
5°	9962	9848	9909
10°	9886	9757	9757
15°	9768	9559	9482
20°	9619	9283	9171
25°	9443	9012	8813
30°	9223	8694	8416
35°	8999	8367	7972
40°	8790	8025	7535
45°	8535	7644	7059
50°	8280	7229	6563
55°	7983	6831	6033
60°	7687	6350	5465
65°	7335	5790	4814
70°	6936	5093	4147
75°	6381	4292	3451
80°	5620	3373	2894
85°	4735	2757	2586



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.7	3.1
10°-20°	404.4	8.6
20°-30°	586.4	12.4
30°-40°	668.3	14.1
40°-50°	651.5	13.8
50°-60°	548.4	11.6
60°-70°	384.4	8.1
70°-80°	197.6	4.2
80°-90°	50.8	1.1
90°-100°	26.2	0.6
100°-110°	77.3	1.6
110°-120°	131.0	2.8
120°-130°	172.4	3.6
130°-140°	193.2	4.1
140°-150°	189.3	4.0
150°-160°	159.0	3.4
160°-170°	105.7	2.2
170°-180°	37.0	0.8
0°-30°	1135.5	24.0
0°-40°	1803.9	38.2
0°-60°	3003.7	63.5
0°-90°	3636.5	76.9
90°-120°	234.5	5.0
90°-150°	789.5	16.7
90°-180°	1091.0	23.1
0°-180°	4727.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1539	1539	1539	1539	1539	
5°	1537	1532	1519	1530	1528	146
15°	1461	1453	1430	1428	1418	412
25°	1325	1306	1265	1250	1237	609
35°	1141	1112	1061	1028	1011	714
45°	934	899	837	792	773	721
55°	709	670	607	556	536	634
65°	480	439	379	334	315	475
75°	256	220	172	147	138	271
85°	64	44	37	36	35	72
90°	0	3	5	6	7	4
95°	20	21	23	26	26	21
105°	69	71	73	74	76	74
115°	131	132	133	133	132	130
125°	191	193	194	193	193	171
135°	249	251	251	251	250	192
145°	302	303	304	304	303	188
155°	345	345	345	346	345	159
165°	375	375	375	376	374	106
175°	390	389	389	390	389	37
180°	391	391	391	391	391	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0
2.5°	1541.7	1541.1	1540.5	1539.8	1539.2	1537.9	1535.9	1533.8	1531.7	1529.7	1531.7
5°	1536.6	1535.6	1534.6	1533.5	1532.5	1530.5	1527.7	1524.8	1522.0	1519.1	1521.7
7.5°	1521.5	1520.5	1519.5	1518.5	1517.5	1515.4	1511.9	1508.6	1505.1	1501.8	1503.6
10°	1507.5	1506.8	1506.0	1505.2	1504.4	1502.3	1498.7	1495.0	1491.4	1487.8	1488.6
12.5°	1491.7	1490.7	1489.8	1488.8	1487.8	1484.9	1480.1	1475.2	1470.3	1465.4	1466.0
15°	1461.0	1459.5	1457.9	1456.4	1454.8	1451.4	1446.0	1440.5	1435.1	1429.7	1429.4
17.5°	1426.4	1424.0	1421.7	1419.3	1416.9	1412.3	1405.5	1398.7	1391.8	1385.0	1383.7
20°	1399.5	1396.9	1394.3	1391.7	1389.1	1383.7	1375.4	1367.2	1358.9	1350.7	1349.4
22.5°	1369.7	1367.1	1364.5	1361.9	1359.3	1353.8	1345.1	1336.4	1327.7	1319.0	1316.5
25°	1325.1	1321.2	1317.3	1313.5	1309.6	1302.9	1293.3	1283.8	1274.2	1264.6	1261.3
27.5°	1273.9	1269.2	1264.5	1259.8	1255.1	1247.7	1237.4	1227.2	1216.9	1206.7	1202.0
30°	1236.7	1231.8	1226.9	1222.0	1217.1	1209.2	1198.3	1187.5	1176.6	1165.8	1159.9
32.5°	1200.4	1194.7	1189.0	1183.3	1177.5	1169.2	1158.0	1147.0	1135.9	1124.9	1118.4
35°	1141.4	1135.2	1129.0	1122.8	1116.6	1107.7	1096.1	1084.4	1072.8	1061.2	1053.7
37.5°	1083.5	1076.0	1068.4	1060.9	1053.3	1043.6	1031.6	1019.6	1007.6	995.7	986.6
40°	1042.6	1034.8	1027.1	1019.3	1011.6	1001.5	989.1	976.7	964.3	951.9	942.1
42.5°	999.8	991.9	984.0	975.9	968.0	957.6	944.8	932.0	919.2	906.4	897.0
45°	934.5	927.0	919.5	912.1	904.6	893.7	879.5	865.3	851.1	836.9	826.6
47.5°	866.9	858.9	851.0	843.2	835.3	824.1	809.9	795.5	781.2	766.9	756.2
50°	824.1	815.5	807.0	798.5	790.0	778.3	763.6	748.9	734.2	719.5	708.6
52.5°	777.6	768.9	760.1	751.4	742.7	731.3	717.5	703.5	689.7	675.8	664.1
55°	709.0	700.8	692.5	684.2	676.0	664.6	650.1	635.7	621.2	606.7	595.1
57.5°	639.7	630.9	622.1	613.2	604.4	593.1	579.1	565.2	551.2	537.3	525.9
60°	595.1	586.1	577.0	568.0	559.0	547.4	533.5	519.5	505.6	491.6	480.3
62.5°	547.7	539.1	530.5	521.8	513.2	501.8	487.7	473.5	459.3	445.1	434.6
65°	480.0	471.2	462.4	453.7	444.9	433.7	420.0	406.3	392.6	378.9	368.6
67.5°	412.8	404.1	395.3	386.5	377.7	366.8	353.6	340.5	327.4	314.3	304.9
70°	367.3	358.5	349.7	341.0	332.2	321.3	308.4	295.5	282.6	269.7	261.7
72.5°	322.7	314.1	305.5	297.0	288.3	278.0	266.0	253.8	241.8	229.7	222.3
75°	255.7	248.0	240.2	232.5	224.7	215.4	204.6	193.7	182.9	172.0	166.3
77.5°	189.2	183.0	176.8	170.7	164.5	157.0	148.4	139.7	131.0	122.3	118.3
80°	151.1	144.9	138.7	132.5	126.3	119.6	112.4	105.1	97.9	90.7	88.3
82.5°	113.9	108.3	102.7	97.2	91.6	86.4	81.4	76.4	71.5	66.5	65.4
85°	63.9	59.2	54.6	49.9	45.3	42.4	41.1	39.8	38.5	37.2	36.9
87.5°	21.4	20.1	18.8	17.4	16.1	15.4	15.2	15.2	15.1	14.9	15.0
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°	7.4	7.7	8.1	8.5	8.9	9.4	9.9	10.5	11.1	11.7	12.1
95°	19.8	19.9	20.1	20.1	20.3	20.8	21.4	22.0	22.7	23.4	23.9
97.5°	32.9	32.9	33.0	33.1	33.1	33.6	34.5	35.5	36.3	37.3	37.8
100°	42.6	42.6	42.6	42.6	42.6	43.0	43.9	44.8	45.7	46.6	47.2
102.5°	53.0	53.4	53.6	53.9	54.2	54.5	54.9	55.4	55.9	56.3	57.0
105°	69.4	69.7	70.1	70.4	70.8	71.1	71.5	71.9	72.3	72.8	73.1
107.5°	87.4	87.7	88.1	88.4	88.8	89.1	89.4	89.7	90.0	90.3	90.5
110°	99.8	100.1	100.5	100.8	101.2	101.4	101.6	101.9	102.0	102.3	102.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	112.4	112.6	112.8	113.0	113.1	113.4	113.7	113.9	114.2	114.4	114.5
115°	131.1	131.4	131.7	132.0	132.2	132.4	132.6	132.7	132.9	133.0	132.9
117.5°	149.9	150.0	150.2	150.2	150.4	150.5	150.7	150.8	150.8	151.0	151.0
120°	161.6	162.0	162.3	162.6	162.9	163.2	163.2	163.2	163.3	163.4	163.4
122.5°	174.3	174.4	174.5	174.6	174.7	174.9	175.0	175.2	175.4	175.6	175.6
125°	191.4	191.8	192.3	192.6	193.0	193.3	193.4	193.4	193.5	193.6	193.4
127.5°	209.7	209.9	210.2	210.3	210.6	210.8	210.9	210.9	211.0	211.0	211.0
130°	220.6	220.9	221.3	221.6	222.0	222.2	222.3	222.5	222.7	222.7	222.7
132.5°	231.6	232.1	232.7	233.2	233.8	234.1	234.0	234.0	234.0	233.9	233.8
135°	248.9	249.3	249.8	250.1	250.6	250.8	250.9	250.9	251.0	251.1	251.1
137.5°	265.3	265.6	266.0	266.4	266.8	267.1	267.3	267.3	267.5	267.7	267.8
140°	275.7	276.0	276.4	276.7	277.1	277.3	277.5	277.8	277.9	278.1	278.3
142.5°	286.2	286.5	286.7	287.1	287.3	287.6	287.8	288.1	288.3	288.6	288.7
145°	301.6	301.9	302.1	302.4	302.6	302.9	303.1	303.3	303.5	303.7	303.7
147.5°	315.8	316.0	316.1	316.2	316.4	316.6	316.8	316.9	317.0	317.2	317.4
150°	325.3	325.3	325.2	325.1	325.0	325.1	325.4	325.7	326.0	326.2	326.2
152.5°	333.1	333.2	333.3	333.4	333.5	333.6	333.7	333.8	333.9	334.0	334.2
155°	345.1	345.1	345.1	345.1	345.1	345.1	345.2	345.3	345.3	345.4	345.7
157.5°	355.8	355.7	355.5	355.3	355.2	355.2	355.2	355.3	355.3	355.4	355.7
160°	362.1	362.0	361.7	361.5	361.4	361.3	361.4	361.4	361.4	361.5	361.8
162.5°	367.7	367.6	367.5	367.3	367.1	367.0	367.0	367.1	367.1	367.1	367.5
165°	375.2	375.1	375.0	374.8	374.7	374.6	374.7	374.8	374.9	374.9	375.2
167.5°	381.5	381.3	381.0	380.7	380.5	380.3	380.3	380.3	380.3	380.3	380.7
170°	385.0	384.7	384.4	384.2	383.8	383.7	383.7	383.7	383.7	383.7	384.2
172.5°	387.4	387.1	386.8	386.6	386.3	386.2	386.2	386.2	386.2	386.2	386.6
175°	390.1	389.9	389.6	389.3	389.1	388.9	388.9	388.9	388.9	388.9	389.3
177.5°	391.5	391.3	391.1	390.9	390.6	390.5	390.5	390.5	390.4	390.3	390.6
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0
2.5°	1533.8	1535.9	1537.9	1538.8	1538.6	1538.4	1538.2	1538.0
5°	1524.3	1526.9	1529.5	1530.5	1530.0	1529.5	1529.0	1528.4
7.5°	1505.4	1507.2	1509.0	1509.6	1509.0	1508.5	1507.9	1507.3
10°	1489.4	1490.1	1490.9	1490.9	1490.1	1489.4	1488.6	1487.8
12.5°	1466.6	1467.1	1467.7	1467.4	1466.2	1465.1	1463.9	1462.7
15°	1429.2	1428.9	1428.7	1427.4	1425.0	1422.7	1420.4	1418.1
17.5°	1382.4	1381.1	1379.8	1378.3	1376.3	1374.4	1372.5	1370.6
20°	1348.1	1346.8	1345.5	1343.7	1341.4	1339.0	1336.7	1334.4
22.5°	1314.0	1311.4	1308.9	1306.7	1304.8	1302.9	1300.9	1299.0
25°	1257.9	1254.6	1251.2	1248.1	1245.3	1242.4	1239.6	1236.7
27.5°	1197.3	1192.7	1187.9	1184.2	1181.5	1178.7	1176.0	1173.3
30°	1153.9	1148.0	1142.0	1137.9	1135.6	1133.2	1130.9	1128.6
32.5°	1111.8	1105.2	1098.6	1093.9	1091.0	1088.0	1085.0	1082.1
35°	1046.2	1038.7	1031.2	1025.7	1022.1	1018.5	1014.9	1011.2
37.5°	977.7	968.7	959.7	953.5	949.9	946.4	942.9	939.4
40°	932.3	922.5	912.7	906.2	903.1	900.0	896.9	893.8
42.5°	887.6	878.1	868.7	861.8	857.2	852.7	848.2	843.6
45°	816.2	805.9	795.6	788.4	784.5	780.7	776.8	772.9
47.5°	745.6	734.9	724.4	716.9	712.6	708.3	704.0	699.7
50°	697.8	686.9	676.1	668.7	664.9	661.0	657.1	653.2
52.5°	652.5	640.8	629.0	621.3	617.4	613.5	609.7	605.8
55°	583.5	571.9	560.3	552.3	548.2	544.1	539.9	535.8
57.5°	514.5	503.2	491.8	484.2	480.6	476.9	473.2	469.6
60°	468.9	457.5	446.2	438.6	434.7	430.8	427.0	423.1
62.5°	424.1	413.5	403.0	395.8	391.9	388.1	384.2	380.3
65°	358.3	347.9	337.6	330.5	326.6	322.7	318.8	315.0
67.5°	295.4	285.9	276.5	270.2	267.1	264.0	260.9	257.8
70°	253.7	245.6	237.6	232.0	228.9	225.8	222.7	219.6
72.5°	214.9	207.5	200.1	195.4	193.3	191.2	189.2	187.1
75°	160.7	155.0	149.3	145.5	143.7	141.9	140.1	138.3
77.5°	114.3	110.4	106.3	103.7	102.4	101.0	99.7	98.3
80°	86.0	83.7	81.4	79.9	79.4	78.9	78.4	77.8
82.5°	64.3	63.2	62.2	61.5	61.1	60.8	60.5	60.2
85°	36.7	36.4	36.2	35.9	35.6	35.4	35.1	34.9
87.5°	15.1	15.2	15.2	15.2	15.0	14.8	14.6	14.5
90°	5.5	5.9	6.2	6.5	6.7	6.9	7.1	7.3
92.5°	12.6	13.0	13.4	13.8	13.9	14.0	14.2	14.4
95°	24.4	24.9	25.3	25.7	25.7	25.9	26.0	26.2
97.5°	38.2	38.7	39.1	39.3	39.4	39.5	39.6	39.7
100°	47.8	48.4	49.0	49.3	49.5	49.7	49.8	49.9
102.5°	57.6	58.3	59.0	59.4	59.6	59.8	59.9	60.1
105°	73.5	74.0	74.4	74.6	74.8	75.1	75.3	75.5
107.5°	90.7	90.9	91.1	91.3	91.2	91.2	91.2	91.2
110°	102.6	102.9	103.1	103.1	103.1	103.0	102.9	102.9



TEST NUMBER: P333584-935

CATALOG NUMBER: S125RDIP-S1090D365U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	114.6	114.7	114.8	114.8	114.7	114.5	114.4	114.3
115°	132.9	132.8	132.7	132.7	132.6	132.5	132.4	132.3
117.5°	151.1	151.2	151.2	151.1	150.8	150.6	150.3	150.0
120°	163.4	163.4	163.4	163.2	163.0	162.7	162.5	162.2
122.5°	175.5	175.4	175.4	175.2	175.0	174.8	174.6	174.4
125°	193.3	193.1	193.0	192.9	192.9	192.8	192.7	192.6
127.5°	210.9	210.9	210.8	210.7	210.6	210.4	210.3	210.2
130°	222.7	222.6	222.5	222.4	222.2	222.1	222.0	221.9
132.5°	233.8	233.8	233.7	233.6	233.3	233.2	233.0	232.8
135°	251.1	251.1	251.1	250.9	250.6	250.4	250.1	249.9
137.5°	267.9	267.9	268.0	267.9	267.5	267.2	266.8	266.5
140°	278.4	278.5	278.7	278.6	278.3	277.9	277.6	277.2
142.5°	288.8	288.9	289.0	288.8	288.4	288.1	287.8	287.5
145°	303.7	303.7	303.7	303.6	303.4	303.2	303.0	302.8
147.5°	317.5	317.7	317.9	317.7	317.3	316.8	316.3	315.9
150°	326.2	326.2	326.2	326.1	326.1	325.9	325.7	325.6
152.5°	334.3	334.5	334.7	334.6	334.4	334.2	333.9	333.6
155°	345.9	346.2	346.5	346.5	346.1	345.8	345.4	345.1
157.5°	355.9	356.3	356.5	356.5	356.0	355.5	355.1	354.6
160°	362.1	362.3	362.6	362.6	362.2	361.9	361.5	361.2
162.5°	367.7	368.1	368.4	368.4	368.0	367.6	367.2	366.8
165°	375.5	375.7	376.0	375.9	375.5	375.1	374.7	374.3
167.5°	381.2	381.5	381.9	381.9	381.5	381.1	380.6	380.3
170°	384.5	385.0	385.4	385.3	384.9	384.4	383.9	383.4
172.5°	387.0	387.4	387.8	387.8	387.4	386.9	386.5	386.1
175°	389.7	390.1	390.5	390.5	390.0	389.5	389.1	388.6
177.5°	391.0	391.3	391.6	391.6	391.2	390.8	390.5	390.0
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1

(END OF REPORT)