

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: P333583-935

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333583-935
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: S125RDIP-S1090D365U935-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4897.3 lumens
Efficiency: N/A
Efficacy: 112.6 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

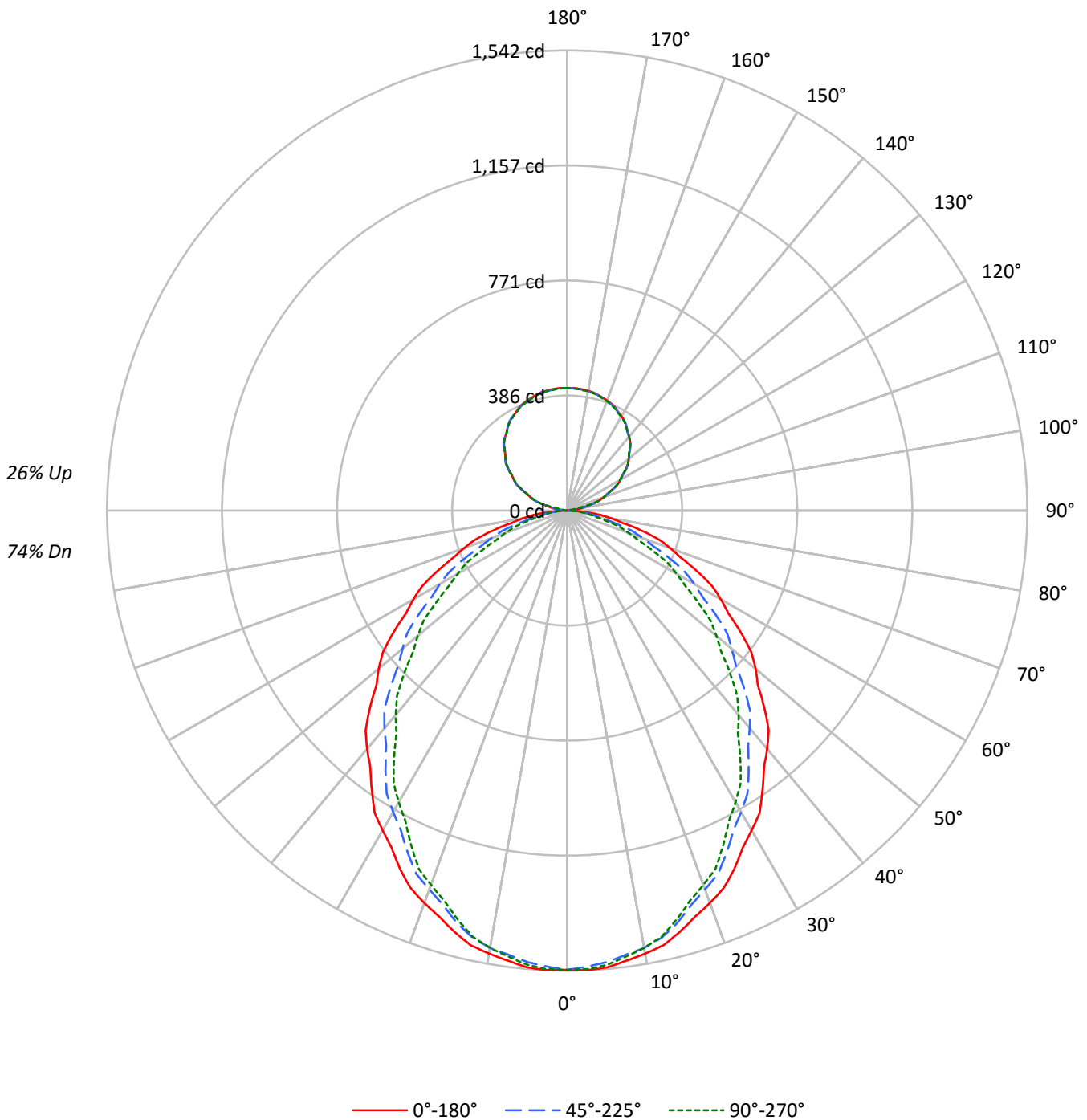
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	113	113	113	107	107	107	107	97	97	97	87	87	87	78	78	78	74
1	104	99	95	92	98	94	91	88	86	83	80	77	75	74	70	68	67	63
2	95	87	81	76	90	83	77	73	75	71	67	68	65	62	62	59	57	53
3	87	77	69	63	82	73	67	61	67	61	57	61	56	53	55	52	49	46
4	79	68	60	54	75	65	58	52	60	54	49	54	49	45	49	46	42	39
5	73	61	53	47	69	59	51	45	54	47	42	49	44	40	45	40	37	34
6	68	55	47	41	64	53	45	40	48	42	37	44	39	35	41	36	33	30
7	63	50	42	36	59	48	40	35	44	38	33	41	35	31	37	33	29	27
8	58	46	38	32	55	44	36	31	40	34	30	37	32	28	34	30	26	24
9	54	42	34	29	52	40	33	28	37	31	27	34	29	25	32	27	24	22
10	51	39	31	26	48	37	30	26	34	28	24	32	27	23	29	25	22	20

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	3.0
10°-20°	404.4	8.3
20°-30°	586.4	12.0
30°-40°	668.3	13.6
40°-50°	651.5	13.3
50°-60°	548.4	11.2
60°-70°	384.4	7.8
70°-80°	197.6	4.0
80°-90°	50.8	1.0
90°-100°	14.9	0.3
100°-110°	92.0	1.9
110°-120°	166.8	3.4
120°-130°	214.0	4.4
130°-140°	230.2	4.7
140°-150°	216.1	4.4
150°-160°	174.8	3.6
160°-170°	113.0	2.3
170°-180°	39.0	0.8
0°-30°	1135.5	23.2
0°-40°	1803.9	36.8
0°-60°	3003.7	61.3
0°-90°	3636.5	74.3
90°-120°	273.7	5.6
90°-150°	934.0	19.1
90°-180°	1261.0	25.7
0°-180°	4897.3	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°	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	



TEST NUMBER: P333583-935

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

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°	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



TEST NUMBER: P333583-935

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

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



TEST NUMBER: P333583-935

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

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°	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: P333583-935

CATALOG NUMBER: S125RDIP-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)