

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

Luminaire Tested: **S125RDIP-S1090D365U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333584
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-S1090D365U835-4F0-1E-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: 5490.9 lumens
Efficiency: N/A
Efficacy: 126.2 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

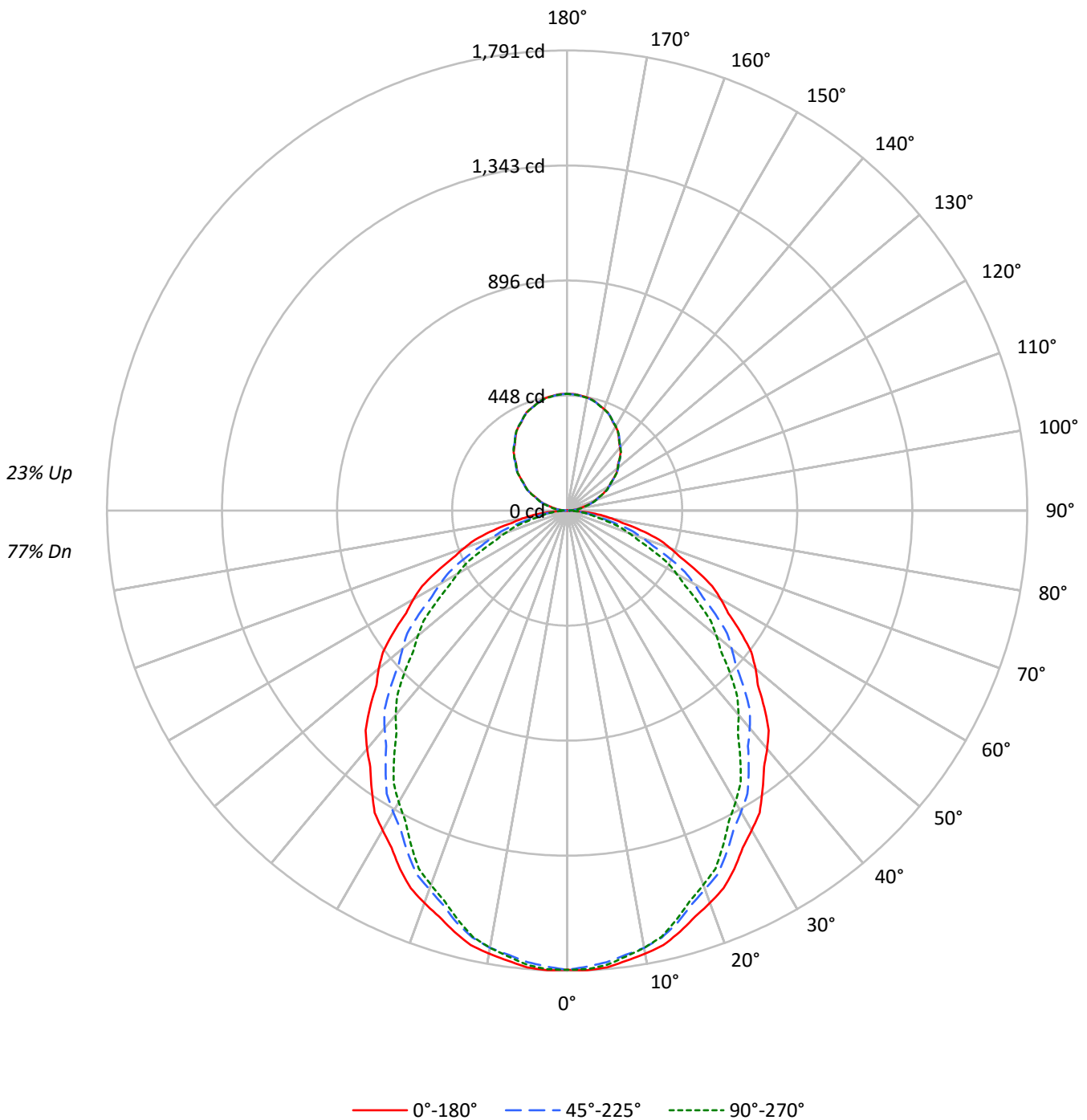
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	11544	11544	11544
5°	11570	11439	11509
10°	11482	11332	11332
15°	11346	11102	11012
20°	11171	10781	10652
25°	10967	10467	10236
30°	10712	10097	9775
35°	10452	9717	9260
40°	10209	9321	8752
45°	9913	8878	8199
50°	9616	8396	7623
55°	9272	7935	7007
60°	8928	7375	6347
65°	8520	6725	5590
70°	8055	5914	4817
75°	7411	4986	4007
80°	6527	3916	3362
85°	5498	3201	3001



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.1	3.1
10°-20°	469.7	8.6
20°-30°	681.1	12.4
30°-40°	776.2	14.1
40°-50°	756.6	13.8
50°-60°	636.9	11.6
60°-70°	446.5	8.1
70°-80°	229.5	4.2
80°-90°	59.0	1.1
90°-100°	30.4	0.6
100°-110°	89.8	1.6
110°-120°	152.1	2.8
120°-130°	200.2	3.6
130°-140°	224.4	4.1
140°-150°	219.9	4.0
150°-160°	184.7	3.4
160°-170°	122.8	2.2
170°-180°	43.0	0.8
0°-30°	1318.9	24.0
0°-40°	2095.1	38.2
0°-60°	3488.6	63.5
0°-90°	4223.5	76.9
90°-120°	272.4	5.0
90°-150°	916.9	16.7
90°-180°	1267.0	23.1
0°-180°	5490.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1787	1787	1787	1787	1787	
5°	1785	1779	1764	1777	1775	169
15°	1697	1688	1660	1659	1647	478
25°	1539	1517	1469	1451	1436	708
35°	1326	1292	1232	1194	1174	830
45°	1085	1044	972	920	898	837
55°	824	778	705	646	622	736
65°	558	510	440	388	366	552
75°	297	256	200	171	161	314
85°	74	51	43	42	40	83
90°	0	3	6	7	8	5
95°	23	24	27	30	30	25
105°	81	82	84	87	88	86
115°	152	154	154	154	154	151
125°	222	224	225	224	224	199
135°	289	291	292	292	290	223
145°	350	352	353	353	352	219
155°	401	401	401	402	401	185
165°	436	435	435	437	435	123
175°	453	452	452	454	451	43
180°	454	454	454	454	454	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4
2.5°	1790.6	1789.9	1789.2	1788.4	1787.7	1786.2	1783.8	1781.4	1779.0	1776.6	1779.0
5°	1784.7	1783.5	1782.3	1781.1	1779.9	1777.6	1774.3	1771.0	1767.7	1764.4	1767.4
7.5°	1767.1	1766.0	1764.8	1763.7	1762.5	1760.0	1756.0	1752.1	1748.1	1744.2	1746.3
10°	1750.9	1750.0	1749.1	1748.2	1747.3	1744.8	1740.6	1736.4	1732.2	1728.0	1728.9
12.5°	1732.5	1731.4	1730.3	1729.1	1728.0	1724.6	1719.0	1713.3	1707.7	1702.0	1702.7
15°	1696.9	1695.1	1693.3	1691.5	1689.7	1685.7	1679.4	1673.1	1666.8	1660.5	1660.2
17.5°	1656.7	1653.9	1651.2	1648.4	1645.6	1640.3	1632.4	1624.5	1616.5	1608.6	1607.1
20°	1625.4	1622.4	1619.4	1616.4	1613.4	1607.1	1597.5	1587.9	1578.3	1568.7	1567.2
22.5°	1590.8	1587.8	1584.8	1581.8	1578.8	1572.3	1562.2	1552.1	1542.0	1531.9	1529.0
25°	1539.0	1534.5	1530.0	1525.5	1521.0	1513.2	1502.1	1491.0	1479.9	1468.8	1464.9
27.5°	1479.6	1474.1	1468.6	1463.2	1457.7	1449.1	1437.2	1425.3	1413.4	1401.5	1396.1
30°	1436.4	1430.7	1425.0	1419.3	1413.6	1404.4	1391.8	1379.2	1366.6	1354.0	1347.1
32.5°	1394.2	1387.6	1380.9	1374.3	1367.6	1357.9	1345.0	1332.2	1319.3	1306.5	1298.9
35°	1325.7	1318.5	1311.3	1304.1	1296.9	1286.5	1273.0	1259.5	1246.0	1232.5	1223.8
37.5°	1258.4	1249.7	1240.9	1232.2	1223.4	1212.1	1198.1	1184.2	1170.3	1156.4	1145.9
40°	1210.9	1201.9	1192.9	1183.9	1174.9	1163.2	1148.8	1134.4	1120.0	1105.6	1094.2
42.5°	1161.2	1152.0	1142.8	1133.5	1124.3	1112.2	1097.3	1082.5	1067.6	1052.7	1041.8
45°	1085.4	1076.7	1068.0	1059.3	1050.6	1038.0	1021.5	1005.0	988.5	972.0	960.0
47.5°	1006.8	997.6	988.4	979.3	970.1	957.2	940.6	923.9	907.3	890.7	878.3
50°	957.1	947.2	937.3	927.4	917.5	904.0	886.9	869.8	852.7	835.6	823.0
52.5°	903.1	893.0	882.8	872.7	862.6	849.4	833.3	817.1	801.0	784.9	771.3
55°	823.5	813.9	804.3	794.7	785.1	771.9	755.1	738.3	721.5	704.7	691.2
57.5°	743.0	732.8	722.5	712.2	702.0	688.8	672.6	656.4	640.2	624.0	610.8
60°	691.2	680.7	670.2	659.7	649.2	635.8	619.6	603.4	587.2	571.0	557.8
62.5°	636.1	626.1	616.1	606.0	596.0	582.8	566.4	549.9	533.5	517.0	504.8
65°	557.5	547.3	537.1	526.9	516.7	503.7	487.8	471.9	456.0	440.1	428.1
67.5°	479.5	469.3	459.1	448.9	438.7	426.0	410.7	395.5	380.3	365.0	354.1
70°	426.6	416.4	406.2	396.0	385.8	373.2	358.2	343.2	328.2	313.2	303.9
72.5°	374.8	364.8	354.8	344.9	334.9	322.9	308.9	294.8	280.8	266.8	258.2
75°	297.0	288.0	279.0	270.0	261.0	250.2	237.6	225.0	212.4	199.8	193.2
77.5°	219.8	212.6	205.4	198.2	191.0	182.3	172.3	162.2	152.1	142.0	137.4
80°	175.5	168.3	161.1	153.9	146.7	138.9	130.5	122.1	113.7	105.3	102.6
82.5°	132.3	125.8	119.3	112.9	106.4	100.3	94.5	88.7	83.0	77.2	76.0
85°	74.2	68.8	63.4	58.0	52.6	49.2	47.7	46.2	44.7	43.2	42.9
87.5°	24.9	23.4	21.8	20.2	18.7	17.9	17.7	17.6	17.5	17.3	17.4
90°	0.4	1.0	1.6	2.2	2.9	3.5	4.0	4.6	5.1	5.7	6.0
92.5°	8.6	9.0	9.4	9.9	10.3	10.9	11.5	12.2	12.9	13.6	14.1
95°	23.0	23.1	23.3	23.4	23.6	24.1	24.9	25.6	26.4	27.2	27.8
97.5°	38.2	38.2	38.3	38.4	38.4	39.0	40.1	41.2	42.2	43.3	43.9
100°	49.5	49.5	49.5	49.5	49.5	50.0	51.0	52.0	53.1	54.1	54.8
102.5°	61.6	62.0	62.3	62.6	62.9	63.3	63.8	64.3	64.9	65.4	66.2
105°	80.6	81.0	81.4	81.8	82.2	82.6	83.1	83.5	84.0	84.5	84.9
107.5°	101.5	101.9	102.3	102.7	103.1	103.5	103.8	104.2	104.5	104.9	105.1
110°	115.9	116.3	116.7	117.1	117.5	117.8	118.0	118.3	118.5	118.8	119.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	130.6	130.8	131.0	131.2	131.4	131.7	132.0	132.3	132.6	132.9	133.0
115°	152.3	152.6	153.0	153.3	153.6	153.8	154.0	154.1	154.3	154.5	154.4
117.5°	174.1	174.2	174.4	174.5	174.7	174.8	175.0	175.1	175.2	175.4	175.4
120°	187.7	188.1	188.5	188.9	189.2	189.5	189.6	189.6	189.7	189.8	189.8
122.5°	202.4	202.5	202.7	202.8	202.9	203.1	203.3	203.5	203.7	203.9	203.9
125°	222.3	222.8	223.3	223.7	224.2	224.5	224.6	224.6	224.7	224.8	224.6
127.5°	243.5	243.8	244.1	244.3	244.6	244.8	244.9	245.0	245.1	245.1	245.1
130°	256.2	256.6	257.0	257.4	257.8	258.1	258.2	258.4	258.6	258.7	258.6
132.5°	269.0	269.6	270.3	270.9	271.5	271.9	271.8	271.8	271.8	271.7	271.6
135°	289.1	289.6	290.1	290.5	291.0	291.3	291.4	291.4	291.5	291.6	291.6
137.5°	308.1	308.5	309.0	309.4	309.9	310.2	310.4	310.5	310.7	310.9	311.0
140°	320.2	320.6	321.0	321.4	321.8	322.1	322.3	322.6	322.8	323.0	323.2
142.5°	332.4	332.7	333.0	333.4	333.7	334.0	334.3	334.6	334.9	335.2	335.3
145°	350.3	350.6	350.9	351.2	351.5	351.8	352.0	352.3	352.5	352.7	352.7
147.5°	366.8	367.0	367.1	367.3	367.5	367.7	367.9	368.1	368.2	368.4	368.6
150°	377.8	377.8	377.7	377.6	377.5	377.6	377.9	378.3	378.6	378.9	378.9
152.5°	386.9	387.0	387.1	387.2	387.3	387.4	387.6	387.7	387.8	387.9	388.1
155°	400.8	400.8	400.8	400.8	400.8	400.8	400.9	401.0	401.1	401.2	401.5
157.5°	413.2	413.1	412.9	412.7	412.6	412.5	412.6	412.7	412.7	412.8	413.1
160°	420.6	420.4	420.1	419.9	419.7	419.6	419.7	419.7	419.8	419.9	420.2
162.5°	427.1	426.9	426.8	426.6	426.4	426.3	426.3	426.4	426.4	426.4	426.8
165°	435.8	435.6	435.5	435.3	435.2	435.1	435.2	435.3	435.4	435.4	435.8
167.5°	443.1	442.8	442.5	442.2	441.9	441.7	441.7	441.7	441.7	441.7	442.2
170°	447.1	446.8	446.5	446.2	445.8	445.7	445.7	445.7	445.7	445.7	446.2
172.5°	449.9	449.6	449.3	449.0	448.7	448.5	448.5	448.5	448.5	448.5	449.0
175°	453.1	452.8	452.5	452.2	451.9	451.7	451.7	451.7	451.7	451.7	452.2
177.5°	454.7	454.5	454.2	454.0	453.7	453.6	453.5	453.5	453.4	453.3	453.7
180°	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4
2.5°	1781.4	1783.8	1786.2	1787.2	1787.0	1786.8	1786.5	1786.3
5°	1770.4	1773.4	1776.4	1777.6	1777.0	1776.4	1775.8	1775.2
7.5°	1748.4	1750.5	1752.6	1753.3	1752.6	1752.0	1751.3	1750.6
10°	1729.8	1730.7	1731.6	1731.6	1730.7	1729.8	1728.9	1728.0
12.5°	1703.4	1704.0	1704.7	1704.3	1702.9	1701.6	1700.2	1698.8
15°	1659.9	1659.6	1659.3	1657.8	1655.1	1652.4	1649.7	1647.0
17.5°	1605.6	1604.1	1602.6	1600.8	1598.5	1596.3	1594.1	1591.9
20°	1565.7	1564.2	1562.7	1560.6	1557.9	1555.2	1552.5	1549.8
22.5°	1526.1	1523.1	1520.2	1517.6	1515.4	1513.2	1510.9	1508.7
25°	1461.0	1457.1	1453.2	1449.6	1446.3	1443.0	1439.7	1436.4
27.5°	1390.6	1385.2	1379.7	1375.4	1372.2	1369.0	1365.8	1362.7
30°	1340.2	1333.3	1326.4	1321.6	1318.9	1316.2	1313.5	1310.8
32.5°	1291.3	1283.6	1276.0	1270.5	1267.1	1263.7	1260.2	1256.8
35°	1215.1	1206.4	1197.7	1191.3	1187.1	1182.9	1178.7	1174.5
37.5°	1135.5	1125.1	1114.6	1107.4	1103.3	1099.2	1095.1	1091.0
40°	1082.8	1071.4	1060.0	1052.5	1048.9	1045.3	1041.7	1038.1
42.5°	1030.9	1019.9	1009.0	1000.9	995.6	990.4	985.1	979.8
45°	948.0	936.0	924.0	915.7	911.2	906.7	902.2	897.7
47.5°	866.0	853.6	841.3	832.6	827.6	822.6	817.7	812.7
50°	810.4	797.8	785.2	776.7	772.2	767.7	763.2	758.7
52.5°	757.8	744.2	730.6	721.6	717.1	712.6	708.1	703.6
55°	677.7	664.2	650.7	641.5	636.7	631.9	627.1	622.3
57.5°	597.6	584.4	571.2	562.4	558.2	553.9	549.6	545.4
60°	544.6	531.4	518.2	509.4	504.9	500.4	495.9	491.4
62.5°	492.6	480.3	468.1	459.7	455.2	450.7	446.2	441.7
65°	416.1	404.1	392.1	383.8	379.3	374.8	370.3	365.8
67.5°	343.1	332.1	321.1	313.8	310.2	306.6	303.0	299.4
70°	294.6	285.3	276.0	269.5	265.9	262.3	258.7	255.1
72.5°	249.6	241.0	232.4	226.9	224.5	222.1	219.7	217.3
75°	186.6	180.0	173.4	169.0	166.9	164.8	162.7	160.6
77.5°	132.8	128.2	123.5	120.4	118.9	117.3	115.8	114.2
80°	99.9	97.2	94.5	92.8	92.2	91.6	91.0	90.4
82.5°	74.7	73.4	72.2	71.4	71.0	70.6	70.3	69.9
85°	42.6	42.3	42.0	41.7	41.4	41.1	40.8	40.5
87.5°	17.5	17.6	17.6	17.6	17.4	17.2	17.0	16.8
90°	6.4	6.8	7.2	7.5	7.8	8.0	8.2	8.5
92.5°	14.6	15.1	15.6	16.0	16.2	16.3	16.5	16.7
95°	28.3	28.9	29.4	29.8	29.9	30.1	30.2	30.4
97.5°	44.4	44.9	45.4	45.7	45.8	45.9	46.0	46.1
100°	55.5	56.2	56.9	57.3	57.5	57.7	57.8	58.0
102.5°	66.9	67.7	68.5	69.0	69.2	69.4	69.6	69.8
105°	85.4	85.9	86.4	86.7	86.9	87.2	87.4	87.7
107.5°	105.4	105.6	105.8	106.0	105.9	105.9	105.9	105.9
110°	119.2	119.5	119.7	119.8	119.7	119.6	119.5	119.5



TEST NUMBER: P333584

CATALOG NUMBER: S125RDIP-S1090D365U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	133.1	133.2	133.3	133.3	133.2	133.0	132.9	132.8
115°	154.3	154.2	154.1	154.1	154.0	153.9	153.8	153.7
117.5°	175.5	175.6	175.6	175.5	175.2	174.9	174.6	174.2
120°	189.8	189.8	189.8	189.6	189.3	189.0	188.7	188.4
122.5°	203.8	203.7	203.7	203.5	203.3	203.0	202.8	202.5
125°	224.5	224.3	224.2	224.0	224.0	223.9	223.8	223.7
127.5°	245.0	244.9	244.8	244.7	244.6	244.4	244.2	244.1
130°	258.6	258.5	258.4	258.3	258.1	258.0	257.8	257.7
132.5°	271.6	271.5	271.4	271.3	271.0	270.8	270.6	270.4
135°	291.6	291.6	291.6	291.4	291.1	290.8	290.5	290.2
137.5°	311.1	311.2	311.3	311.1	310.7	310.3	309.9	309.5
140°	323.4	323.5	323.7	323.6	323.2	322.8	322.4	322.0
142.5°	335.4	335.5	335.6	335.4	335.0	334.6	334.3	333.9
145°	352.7	352.7	352.7	352.6	352.4	352.1	351.9	351.7
147.5°	368.8	369.0	369.2	369.0	368.5	367.9	367.4	366.9
150°	378.9	378.9	378.9	378.8	378.7	378.5	378.3	378.2
152.5°	388.3	388.5	388.7	388.6	388.4	388.1	387.8	387.5
155°	401.8	402.1	402.4	402.4	402.0	401.6	401.2	400.8
157.5°	413.4	413.8	414.1	414.0	413.5	412.9	412.4	411.9
160°	420.5	420.8	421.1	421.1	420.7	420.3	419.9	419.5
162.5°	427.1	427.5	427.9	427.9	427.4	426.9	426.5	426.0
165°	436.1	436.4	436.7	436.6	436.1	435.7	435.2	434.7
167.5°	442.7	443.1	443.6	443.6	443.1	442.6	442.1	441.7
170°	446.6	447.1	447.6	447.5	447.0	446.4	445.9	445.3
172.5°	449.5	449.9	450.4	450.4	449.9	449.4	448.9	448.4
175°	452.6	453.1	453.6	453.5	453.0	452.4	451.9	451.3
177.5°	454.1	454.5	454.8	454.8	454.4	453.9	453.5	453.0
180°	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2

(END OF REPORT)