

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

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333583
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-S1090D365U835-4F0-1E-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: 5687.8 lumens
Efficiency: N/A
Efficacy: 130.8 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

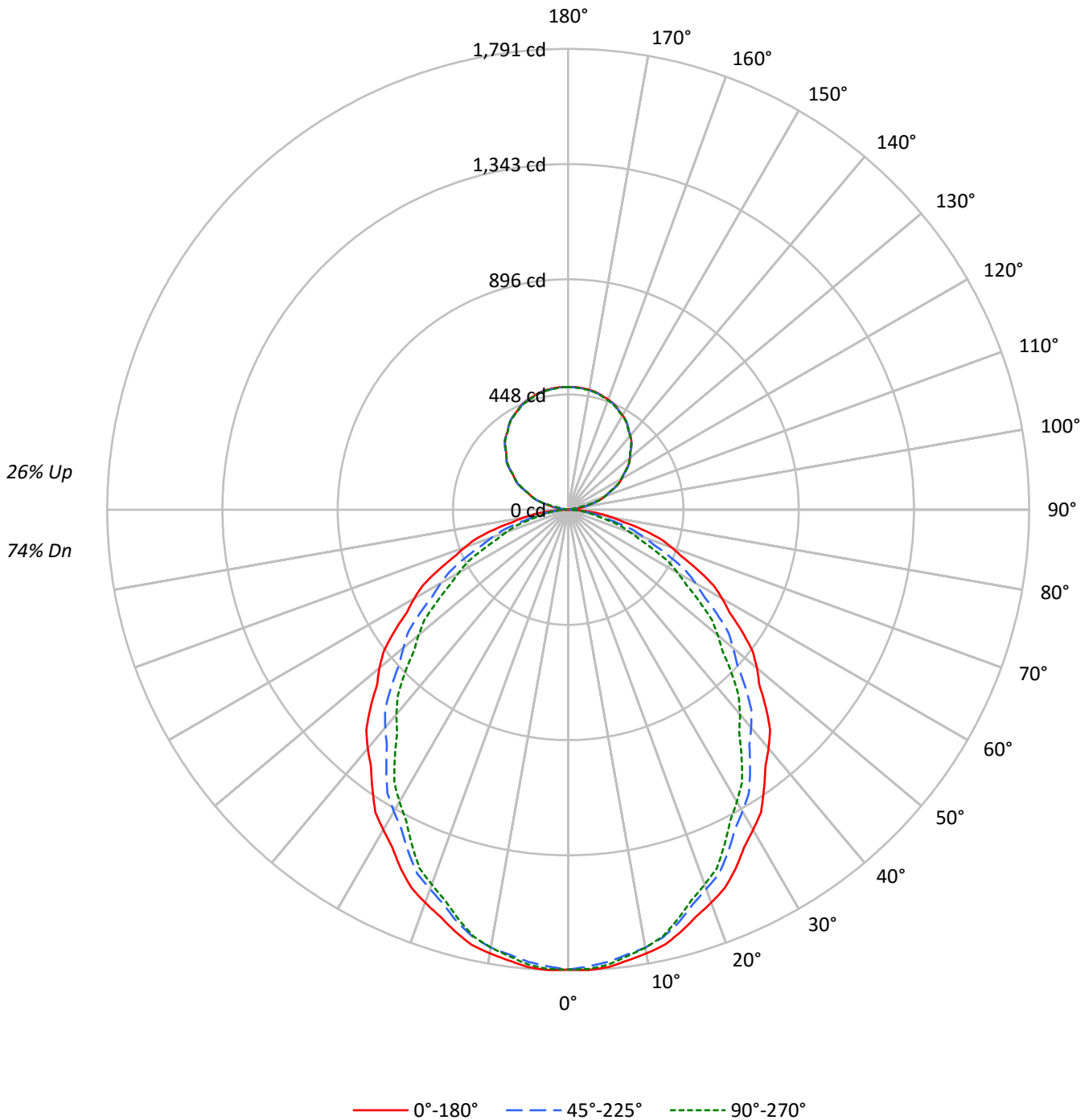
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333583

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

Luminous Intensity Polar Plot





TEST NUMBER: P333583

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

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°	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



TEST NUMBER: P333583

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.1	3.0
10°-20°	469.7	8.3
20°-30°	681.1	12.0
30°-40°	776.2	13.6
40°-50°	756.6	13.3
50°-60°	636.9	11.2
60°-70°	446.5	7.8
70°-80°	229.5	4.0
80°-90°	59.0	1.0
90°-100°	17.3	0.3
100°-110°	106.8	1.9
110°-120°	193.7	3.4
120°-130°	248.6	4.4
130°-140°	267.4	4.7
140°-150°	251.0	4.4
150°-160°	203.0	3.6
160°-170°	131.3	2.3
170°-180°	45.3	0.8
0°-30°	1318.9	23.2
0°-40°	2095.1	36.8
0°-60°	3488.6	61.3
0°-90°	4223.5	74.3
90°-120°	317.8	5.6
90°-150°	1084.7	19.1
90°-180°	1464.0	25.7
0°-180°	5687.8	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	4
95°	20	18	6	7	7	26
105°	104	105	105	105	105	110
115°	195	197	197	196	194	193
125°	278	280	280	279	278	248
135°	346	348	348	347	345	267
145°	401	402	402	402	400	251
155°	442	440	440	441	439	203
165°	466	464	464	466	464	132
175°	477	475	475	478	475	45
180°	477	477	477	477	477	



TEST NUMBER: P333583

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

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°	5.4	5.0	4.6	4.1	3.7	3.7	4.2	4.7	5.2	5.7	6.0
95°	20.1	19.9	19.7	19.4	19.2	17.6	14.6	11.6	8.6	5.7	6.0
97.5°	42.1	42.5	42.9	43.3	43.8	41.0	35.1	29.2	23.3	17.4	15.2
100°	59.0	59.3	59.5	59.7	60.0	60.2	60.6	60.9	61.2	61.5	49.8
102.5°	76.3	76.6	76.9	77.2	77.5	77.7	77.9	78.1	78.3	78.5	76.3
105°	103.9	104.2	104.6	104.9	105.2	105.3	105.3	105.3	105.3	105.3	105.3
107.5°	132.6	132.6	132.6	132.6	132.6	132.7	132.9	133.0	133.2	133.3	133.3
110°	151.3	151.3	151.3	151.3	151.3	151.4	151.5	151.7	151.8	152.0	151.8



TEST NUMBER: P333583

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	168.8	169.0	169.2	169.4	169.6	169.7	169.8	169.9	170.0	170.1	169.8
115°	195.1	195.5	195.9	196.3	196.7	196.9	197.0	197.1	197.2	197.2	196.9
117.5°	222.3	222.3	222.3	222.3	222.3	222.4	222.7	223.0	223.3	223.6	223.2
120°	239.3	239.2	239.2	239.1	239.0	239.1	239.3	239.5	239.8	240.0	239.9
122.5°	254.3	254.6	254.9	255.2	255.5	255.7	255.8	255.9	256.0	256.1	256.0
125°	277.5	278.0	278.6	279.1	279.7	280.0	280.0	280.0	280.0	280.0	279.6
127.5°	299.6	300.0	300.4	300.8	301.2	301.4	301.3	301.3	301.2	301.2	301.0
130°	313.2	313.6	314.0	314.4	314.8	315.0	315.1	315.1	315.2	315.3	315.1
132.5°	326.8	327.2	327.7	328.1	328.6	328.7	328.6	328.4	328.2	328.0	328.0
135°	346.1	346.5	347.0	347.5	347.9	348.1	347.9	347.8	347.6	347.5	347.3
137.5°	363.8	364.2	364.6	365.0	365.4	365.6	365.4	365.3	365.1	365.0	365.0
140°	375.4	375.6	375.7	375.9	376.0	376.1	376.0	375.9	375.8	375.8	375.9
142.5°	385.9	386.0	386.1	386.1	386.2	386.3	386.5	386.6	386.7	386.8	386.8
145°	401.2	401.4	401.5	401.7	401.8	401.9	401.9	401.9	401.9	401.9	402.0
147.5°	414.6	414.6	414.6	414.5	414.5	414.5	414.6	414.7	414.8	414.9	415.0
150°	423.1	423.0	422.8	422.6	422.5	422.5	422.6	422.8	423.0	423.1	423.3
152.5°	431.3	431.0	430.6	430.3	429.9	429.8	430.0	430.2	430.3	430.5	430.6
155°	441.9	441.4	440.9	440.4	440.0	439.8	440.0	440.1	440.3	440.4	440.7
157.5°	450.0	449.7	449.4	449.1	448.9	448.7	448.7	448.8	448.8	448.8	449.0
160°	455.6	455.2	454.7	454.2	453.8	453.6	453.6	453.7	453.8	453.9	454.2
162.5°	460.2	459.7	459.2	458.7	458.3	458.1	458.2	458.2	458.3	458.4	458.8
165°	466.2	465.8	465.3	464.8	464.4	464.2	464.2	464.3	464.4	464.5	464.9
167.5°	470.8	470.3	469.8	469.3	468.8	468.6	468.7	468.8	468.9	468.9	469.5
170°	473.3	472.8	472.2	471.7	471.1	470.9	471.0	471.0	471.1	471.2	471.8
172.5°	475.0	474.5	473.9	473.4	472.8	472.6	472.7	472.9	473.0	473.2	473.7
175°	476.8	476.4	475.9	475.4	475.0	474.8	474.8	474.9	475.0	475.1	475.7
177.5°	477.7	477.3	476.9	476.6	476.2	476.0	476.1	476.2	476.2	476.3	476.7
180°	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8



TEST NUMBER: P333583

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

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°	6.4	6.8	7.2	7.5	7.6	7.7	7.8	7.9
95°	6.4	6.8	7.2	7.4	7.4	7.4	7.4	7.4
97.5°	13.0	10.7	8.5	7.4	7.4	7.4	7.4	7.4
100°	38.1	26.4	14.7	8.7	8.4	8.1	7.7	7.4
102.5°	74.0	71.8	69.6	65.8	60.5	55.2	49.8	44.5
105°	105.3	105.3	105.3	105.3	105.2	105.1	105.1	105.0
107.5°	133.4	133.4	133.4	133.3	133.1	132.8	132.6	132.3
110°	151.5	151.3	151.1	151.0	151.1	151.1	151.2	151.3



TEST NUMBER: P333583

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	169.5	169.2	168.9	168.7	168.6	168.5	168.4	168.3
115°	196.6	196.3	196.0	195.6	195.1	194.7	194.2	193.7
117.5°	222.8	222.4	222.0	221.7	221.5	221.3	221.1	220.9
120°	239.7	239.5	239.4	239.1	238.7	238.3	237.9	237.5
122.5°	255.8	255.7	255.5	255.2	254.7	254.3	253.8	253.4
125°	279.3	279.0	278.7	278.4	278.2	278.0	277.7	277.5
127.5°	300.8	300.6	300.5	300.1	299.5	298.9	298.4	297.8
130°	314.8	314.6	314.4	314.0	313.7	313.3	312.9	312.5
132.5°	327.9	327.9	327.8	327.6	327.2	326.8	326.4	326.1
135°	347.2	347.0	346.8	346.5	346.1	345.6	345.1	344.6
137.5°	365.1	365.1	365.1	364.9	364.5	364.1	363.7	363.3
140°	376.1	376.2	376.4	376.2	375.8	375.3	374.8	374.3
142.5°	386.8	386.9	386.9	386.7	386.2	385.7	385.3	384.8
145°	402.1	402.1	402.2	402.0	401.6	401.1	400.6	400.1
147.5°	415.1	415.2	415.3	415.1	414.5	413.9	413.4	412.8
150°	423.4	423.6	423.7	423.5	422.9	422.3	421.6	421.0
152.5°	430.8	430.9	431.1	430.9	430.3	429.8	429.2	428.6
155°	440.9	441.1	441.4	441.2	440.6	439.9	439.3	438.7
157.5°	449.3	449.5	449.8	449.6	449.0	448.3	447.7	447.1
160°	454.5	454.8	455.1	455.0	454.3	453.7	453.1	452.5
162.5°	459.3	459.7	460.2	460.0	459.3	458.6	458.0	457.3
165°	465.4	465.9	466.4	466.3	465.7	465.0	464.4	463.8
167.5°	470.1	470.6	471.2	471.1	470.4	469.7	469.0	468.3
170°	472.4	473.1	473.7	473.7	473.0	472.3	471.5	470.8
172.5°	474.3	474.9	475.4	475.4	474.7	473.9	473.2	472.5
175°	476.3	477.0	477.6	477.6	476.8	476.1	475.4	474.7
177.5°	477.2	477.6	478.0	478.0	477.5	477.0	476.5	476.0
180°	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8

(END OF REPORT)