

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: P333633-927

Luminaire Tested: **S125RDIP-S1270D1035U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333633-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S1270D1035U927-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6806.9 lumens
Efficiency: N/A
Efficacy: 101.9 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: General Diffuse

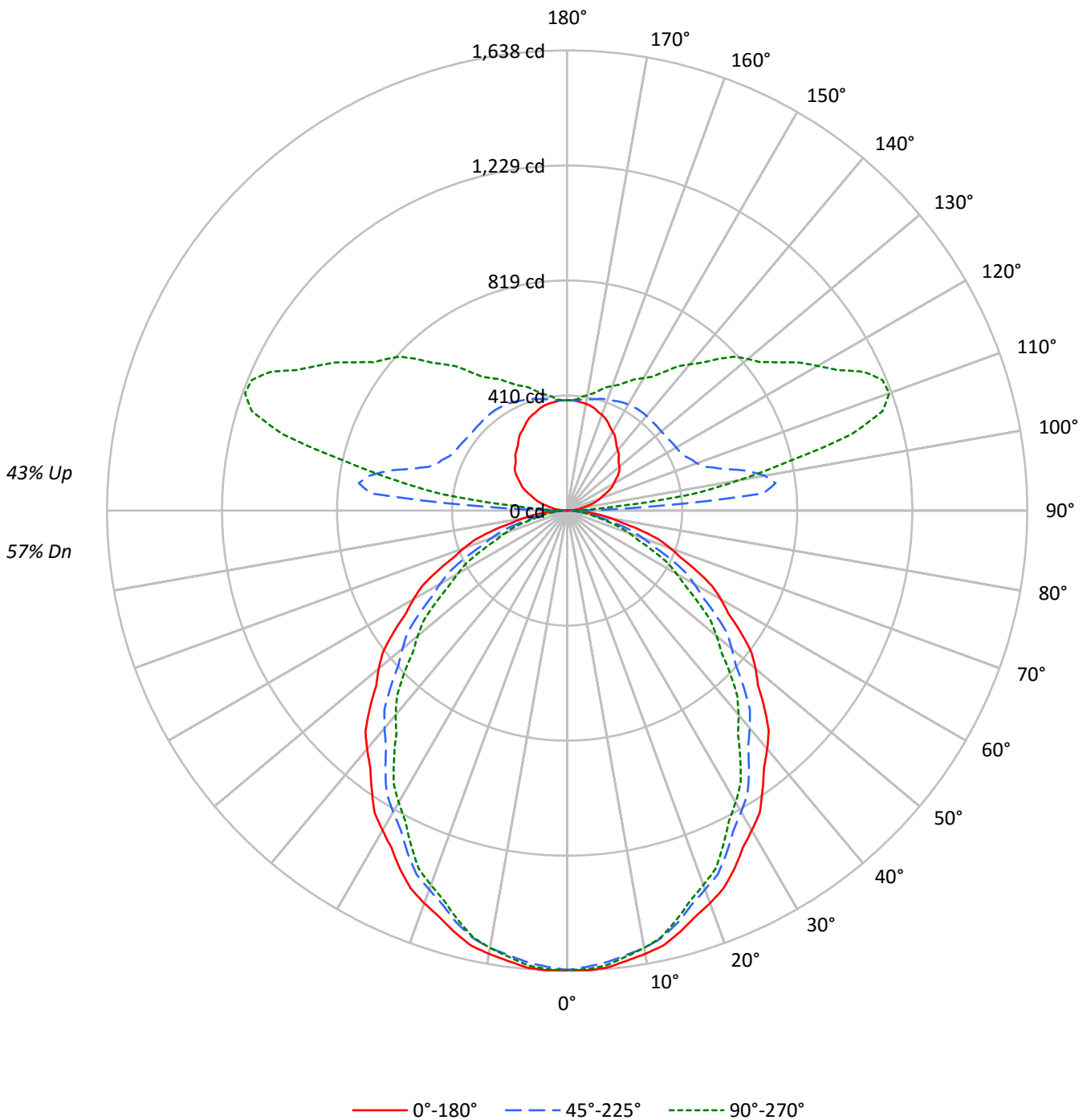
Input Watts (W): 66.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	100	95	91	88	93	89	86	83	77	74	72	66	64	62	56	54	53	48
2	91	83	77	72	84	78	73	68	68	64	60	58	55	52	49	47	45	41
3	83	74	66	60	77	69	62	57	60	55	51	51	48	45	44	41	39	35
4	76	65	57	51	71	61	54	49	53	48	44	46	42	38	39	36	34	30
5	70	58	50	44	65	55	47	42	48	42	38	41	37	33	35	32	29	26
6	65	52	44	39	60	49	42	37	43	37	33	38	33	29	32	29	26	23
7	60	47	39	34	56	45	37	32	39	33	29	34	30	26	29	26	23	21
8	55	43	35	30	52	41	34	29	36	30	26	31	27	23	27	24	21	19
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	17
10	48	36	29	24	45	34	28	23	30	25	21	27	22	19	23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10561	10561	10561
5°	10585	10466	10529
10°	10506	10368	10368
15°	10380	10158	10075
20°	10221	9864	9745
25°	10033	9576	9365
30°	9801	9238	8944
35°	9563	8891	8472
40°	9340	8528	8008
45°	9070	8122	7501
50°	8799	7681	6974
55°	8483	7260	6411
60°	8169	6748	5807
65°	7795	6154	5115
70°	7370	5410	4409
75°	6780	4561	3666
80°	5973	3582	3080
85°	5039	2927	2749



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.8	2.3
10°-20°	429.7	6.3
20°-30°	623.1	9.2
30°-40°	710.2	10.4
40°-50°	692.3	10.2
50°-60°	582.7	8.6
60°-70°	408.5	6.0
70°-80°	210.0	3.1
80°-90°	55.2	0.8
90°-100°	284.3	4.2
100°-110°	611.2	9.0
110°-120°	573.6	8.4
120°-130°	464.9	6.8
130°-140°	373.0	5.5
140°-150°	281.5	4.1
150°-160°	198.2	2.9
160°-170°	116.8	1.7
170°-180°	38.0	0.6
0°-30°	1206.6	17.7
0°-40°	1916.8	28.2
0°-60°	3191.8	46.9
0°-90°	3865.5	56.8
90°-120°	1469.1	21.6
90°-150°	2588.5	38.0
90°-180°	2941.0	43.2
0°-180°	6806.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1635	1635	1635	1635	1635	
5°	1633	1627	1614	1626	1624	155
15°	1552	1544	1519	1517	1507	437
25°	1408	1388	1344	1328	1314	648
35°	1213	1182	1128	1093	1074	759
45°	993	955	889	842	821	766
55°	753	712	645	591	569	674
65°	510	467	403	355	335	505
75°	272	234	183	157	147	288
85°	68	47	40	38	37	76
90°	1	7	13	17	18	5
95°	26	77	701	318	186	28
105°	89	125	573	1129	1048	94
115°	160	193	460	992	1167	157
125°	221	259	441	789	920	196
135°	259	312	438	662	764	201
145°	302	346	440	548	603	189
155°	345	371	429	484	505	159
165°	376	387	411	436	443	106
175°	391	391	395	399	398	37
180°	392	392	392	392	392	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3
2.5°	1638.2	1637.6	1636.9	1636.3	1635.6	1634.2	1632.0	1629.8	1627.6	1625.4	1627.6
5°	1632.8	1631.7	1630.6	1629.5	1628.4	1626.4	1623.3	1620.3	1617.3	1614.3	1617.0
7.5°	1616.8	1615.7	1614.7	1613.6	1612.6	1610.3	1606.6	1603.0	1599.4	1595.8	1597.7
10°	1602.0	1601.1	1600.3	1599.5	1598.6	1596.3	1592.4	1588.6	1584.8	1581.0	1581.8
12.5°	1585.2	1584.1	1583.0	1582.0	1581.0	1577.9	1572.7	1567.6	1562.3	1557.2	1557.8
15°	1552.5	1550.9	1549.3	1547.6	1545.9	1542.2	1536.4	1530.7	1525.0	1519.2	1518.9
17.5°	1515.7	1513.2	1510.7	1508.2	1505.6	1500.7	1493.5	1486.2	1479.0	1471.7	1470.4
20°	1487.1	1484.3	1481.5	1478.8	1476.1	1470.3	1461.6	1452.8	1444.0	1435.2	1433.8
22.5°	1455.5	1452.7	1449.9	1447.2	1444.5	1438.5	1429.3	1420.1	1410.8	1401.6	1398.9
25°	1408.0	1403.9	1399.8	1395.7	1391.5	1384.4	1374.3	1364.1	1353.9	1343.8	1340.2
27.5°	1353.7	1348.7	1343.7	1338.7	1333.7	1325.8	1314.9	1304.0	1293.2	1282.3	1277.3
30°	1314.2	1308.9	1303.7	1298.5	1293.3	1284.9	1273.4	1261.9	1250.3	1238.8	1232.5
32.5°	1275.7	1269.6	1263.5	1257.4	1251.3	1242.3	1230.6	1218.9	1207.0	1195.3	1188.4
35°	1212.9	1206.3	1199.7	1193.1	1186.5	1177.0	1164.7	1152.4	1140.0	1127.7	1119.7
37.5°	1151.4	1143.4	1135.4	1127.4	1119.3	1108.9	1096.2	1083.5	1070.7	1058.0	1048.5
40°	1107.9	1099.6	1091.4	1083.2	1075.0	1064.2	1051.1	1037.9	1024.7	1011.5	1001.2
42.5°	1062.5	1054.0	1045.5	1037.0	1028.6	1017.6	1004.0	990.4	976.8	963.1	953.2
45°	993.0	985.1	977.1	969.2	961.2	949.7	934.5	919.5	904.4	889.3	878.3
47.5°	921.1	912.8	904.4	896.0	887.6	875.8	860.5	845.3	830.1	814.9	803.6
50°	875.7	866.6	857.5	848.5	839.5	827.1	811.4	795.8	780.1	764.5	753.0
52.5°	826.2	817.0	807.7	798.4	789.2	777.1	762.4	747.7	732.8	718.1	705.7
55°	753.4	744.7	735.9	727.1	718.3	706.2	690.9	675.5	660.1	644.8	632.4
57.5°	679.8	670.4	661.0	651.6	642.2	630.2	615.4	600.5	585.7	570.8	558.8
60°	632.4	622.7	613.1	603.6	594.0	581.7	566.9	552.1	537.3	522.4	510.4
62.5°	582.0	572.8	563.6	554.4	545.3	533.2	518.2	503.1	488.1	473.0	461.8
65°	510.1	500.7	491.5	482.1	472.8	460.8	446.3	431.7	417.2	402.7	391.7
67.5°	438.7	429.4	420.0	410.7	401.4	389.8	375.8	361.9	347.9	334.0	323.9
70°	390.3	381.0	371.6	362.3	353.0	341.4	327.7	314.0	300.2	286.5	278.1
72.5°	342.9	333.7	324.6	315.5	306.4	295.4	282.6	269.7	256.9	244.1	236.2
75°	271.7	263.5	255.2	247.0	238.8	228.9	217.4	205.9	194.3	182.8	176.7
77.5°	201.1	194.5	187.9	181.3	174.8	166.8	157.6	148.4	139.2	129.9	125.7
80°	160.6	154.0	147.4	140.8	134.2	127.1	119.4	111.7	104.0	96.3	93.9
82.5°	121.0	115.1	109.2	103.2	97.4	91.7	86.4	81.2	75.9	70.7	69.5
85°	68.0	63.0	58.1	53.1	48.2	45.0	43.6	42.3	40.9	39.5	39.2
87.5°	22.9	21.5	20.3	19.1	17.8	17.3	17.2	17.3	17.3	17.3	17.5
90°	0.8	1.6	3.2	4.8	6.3	7.9	8.7	10.3	11.1	12.7	13.5
92.5°	9.7	11.7	18.4	28.1	41.7	64.9	108.1	180.5	259.0	254.9	206.4
95°	26.1	26.9	33.2	41.9	59.3	94.9	179.5	353.5	571.8	700.7	685.6
97.5°	43.3	44.3	48.7	57.4	73.0	98.7	154.7	282.2	510.6	748.3	867.5
100°	55.4	57.0	60.1	68.8	83.8	107.6	153.4	256.2	455.5	714.1	911.8
102.5°	68.7	69.6	72.1	81.4	95.2	118.3	159.1	245.5	413.8	654.0	885.3
105°	89.4	89.4	93.3	101.2	113.9	136.0	170.8	241.2	373.3	573.3	800.3
107.5°	109.6	111.2	114.9	121.4	134.6	154.6	188.2	248.5	356.2	517.8	713.6
110°	124.1	125.7	128.9	136.0	147.9	168.4	200.9	255.4	351.1	491.9	664.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	138.7	140.3	142.8	150.0	161.8	181.7	212.9	264.3	351.1	476.7	627.6
115°	159.8	161.3	163.7	170.8	182.7	202.5	231.7	277.6	353.5	460.3	587.6
117.5°	178.7	181.1	183.6	190.8	204.2	223.3	251.0	292.8	358.7	452.2	563.7
120°	191.4	193.8	196.9	204.1	217.5	237.3	264.9	302.9	363.8	448.4	550.4
122.5°	204.7	206.4	208.9	216.0	230.8	250.6	278.2	314.3	368.2	445.2	539.0
125°	221.4	223.0	227.0	234.1	249.1	269.7	295.8	329.8	375.7	441.2	523.6
127.5°	234.6	236.9	242.0	251.0	267.0	287.6	312.7	344.0	384.0	439.3	509.3
130°	242.8	245.2	251.5	261.7	278.4	298.9	323.4	353.5	389.1	438.1	499.8
132.5°	249.1	252.1	259.7	271.2	288.5	309.0	333.6	361.7	394.7	438.1	492.2
135°	259.4	262.5	272.0	284.7	301.3	322.7	347.1	373.3	402.5	438.1	483.2
137.5°	272.4	274.7	283.6	296.3	312.5	334.5	356.8	381.8	409.6	439.0	475.2
140°	280.0	282.3	291.8	304.4	319.5	340.9	363.8	387.5	412.8	439.7	471.3
142.5°	288.8	290.6	299.4	312.0	326.5	346.5	368.2	390.6	414.7	440.3	468.2
145°	302.1	303.6	311.6	322.7	336.9	355.1	375.7	395.4	416.8	439.7	463.4
147.5°	316.0	317.0	323.8	334.1	346.3	362.3	380.4	398.2	417.6	437.6	458.5
150°	324.2	325.8	331.4	341.7	352.7	366.1	383.6	400.1	417.6	435.7	454.7
152.5°	333.1	334.1	339.0	347.9	358.4	370.6	386.7	401.4	416.9	433.2	450.3
155°	344.8	344.8	349.5	357.4	365.4	376.4	389.8	402.5	415.2	428.6	442.8
157.5°	355.2	355.1	358.9	365.7	372.6	381.0	392.5	403.3	413.1	423.9	435.9
160°	362.2	361.4	364.6	370.1	376.4	383.6	393.8	403.3	411.2	420.7	430.2
162.5°	367.9	367.1	370.3	375.2	380.2	386.1	395.1	402.7	409.3	416.9	425.2
165°	376.4	374.9	377.2	381.2	384.4	389.1	395.4	401.7	406.5	411.2	417.6
167.5°	382.1	381.4	382.8	385.0	387.2	390.1	395.4	399.8	402.0	405.7	410.1
170°	386.0	385.2	386.0	387.5	389.1	391.4	395.4	398.5	400.1	402.5	405.7
172.5°	388.5	387.1	387.9	389.4	390.3	391.4	394.7	397.3	397.6	398.7	401.2
175°	391.4	389.8	390.6	391.4	391.4	391.4	393.8	395.4	394.6	394.6	395.4
177.5°	392.8	391.6	391.6	392.2	391.6	391.6	392.8	393.5	392.2	392.2	392.8
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3
2.5°	1629.8	1632.0	1634.2	1635.1	1635.0	1634.7	1634.5	1634.3
5°	1619.8	1622.5	1625.2	1626.4	1625.8	1625.2	1624.7	1624.1
7.5°	1599.6	1601.6	1603.5	1604.1	1603.5	1602.9	1602.3	1601.7
10°	1582.5	1583.4	1584.2	1584.2	1583.4	1582.5	1581.8	1581.0
12.5°	1558.5	1559.0	1559.6	1559.3	1558.1	1556.8	1555.5	1554.3
15°	1518.6	1518.4	1518.1	1516.7	1514.3	1511.8	1509.3	1506.8
17.5°	1469.0	1467.6	1466.3	1464.6	1462.5	1460.5	1458.5	1456.4
20°	1432.4	1431.1	1429.7	1427.8	1425.3	1422.8	1420.4	1417.9
22.5°	1396.2	1393.5	1390.8	1388.5	1386.5	1384.4	1382.4	1380.4
25°	1336.6	1333.1	1329.5	1326.2	1323.2	1320.2	1317.2	1314.2
27.5°	1272.3	1267.3	1262.3	1258.4	1255.5	1252.5	1249.6	1246.7
30°	1226.2	1219.9	1213.5	1209.2	1206.7	1204.2	1201.7	1199.3
32.5°	1181.4	1174.4	1167.4	1162.4	1159.3	1156.1	1153.0	1149.9
35°	1111.7	1103.7	1095.8	1089.9	1086.1	1082.2	1078.4	1074.5
37.5°	1038.9	1029.4	1019.8	1013.1	1009.4	1005.7	1002.0	998.2
40°	990.7	980.2	969.9	963.0	959.6	956.4	953.1	949.8
42.5°	943.2	933.2	923.2	915.8	910.9	906.1	901.3	896.4
45°	867.3	856.3	845.3	837.8	833.7	829.6	825.5	821.3
47.5°	792.3	781.0	769.7	761.8	757.2	752.7	748.1	743.5
50°	741.5	729.9	718.4	710.6	706.5	702.3	698.2	694.1
52.5°	693.2	680.9	668.4	660.2	656.1	652.0	647.8	643.7
55°	620.0	607.7	595.3	586.9	582.6	578.1	573.8	569.4
57.5°	546.7	534.6	522.5	514.6	510.6	506.8	502.9	499.0
60°	498.3	486.2	474.1	466.0	461.9	457.8	453.7	449.6
62.5°	450.7	439.4	428.3	420.6	416.5	412.3	408.2	404.1
65°	380.7	369.7	358.7	351.2	347.1	342.9	338.8	334.7
67.5°	313.9	303.8	293.8	287.1	283.8	280.5	277.3	273.9
70°	269.5	261.0	252.5	246.6	243.3	240.0	236.7	233.5
72.5°	228.4	220.5	212.6	207.6	205.4	203.3	201.1	198.8
75°	170.7	164.7	158.7	154.6	152.7	150.8	148.9	146.9
77.5°	121.4	117.2	113.0	110.2	108.8	107.3	105.9	104.5
80°	91.4	89.0	86.4	84.9	84.4	83.8	83.3	82.8
82.5°	68.4	67.2	66.1	65.3	65.0	64.6	64.3	64.0
85°	39.0	38.7	38.4	38.2	37.9	37.6	37.3	37.1
87.5°	17.7	17.8	18.0	18.2	18.0	17.7	17.7	17.5
90°	14.3	15.1	15.8	17.4	17.4	17.4	18.2	18.2
92.5°	140.1	101.7	76.5	64.9	54.7	52.8	51.7	50.5
95°	568.6	448.4	351.1	284.7	228.5	204.9	198.5	185.8
97.5°	846.8	762.5	667.7	575.4	526.6	482.2	459.3	449.2
100°	972.7	934.0	852.5	770.2	715.7	658.8	629.5	616.9
102.5°	1015.1	1038.9	999.9	944.2	885.9	845.4	813.6	804.1
105°	990.1	1098.4	1133.2	1124.5	1099.2	1073.2	1057.3	1047.8
107.5°	900.9	1045.4	1134.8	1176.1	1188.9	1188.7	1183.5	1177.2
110°	835.1	985.3	1096.9	1164.1	1199.7	1214.7	1220.2	1220.2



TEST NUMBER: P333633-927

CATALOG NUMBER: S125RDIP-S1270D1035U927-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	783.2	925.9	1038.6	1117.9	1169.9	1195.7	1209.5	1215.1
115°	718.0	840.7	949.0	1035.1	1096.9	1134.8	1157.0	1167.3
117.5°	676.0	781.6	875.0	954.0	1015.7	1054.9	1076.9	1083.2
120°	653.2	748.1	835.1	904.7	963.2	1001.2	1022.5	1028.9
122.5°	636.1	724.1	801.5	866.7	918.9	953.7	975.1	980.8
125°	611.3	692.0	760.7	817.7	862.0	894.4	911.8	919.7
127.5°	586.0	661.3	725.5	778.8	819.0	847.6	864.0	867.5
130°	570.2	639.8	701.5	752.9	792.4	818.5	834.3	839.1
132.5°	554.4	619.5	675.5	725.0	764.5	790.7	805.2	810.6
135°	533.8	588.4	639.0	684.0	718.8	745.0	759.1	763.9
137.5°	516.4	560.5	602.6	640.9	672.0	695.8	708.9	714.1
140°	506.9	544.1	580.4	613.7	642.9	663.5	675.3	679.3
142.5°	498.7	530.1	561.5	590.3	615.1	632.5	643.7	647.1
145°	487.9	512.5	536.9	558.3	577.3	590.7	599.4	602.6
147.5°	477.8	497.7	516.6	532.7	547.7	558.5	563.6	565.0
150°	472.1	489.5	504.5	518.8	530.6	540.1	543.3	544.1
152.5°	465.8	481.3	495.0	506.1	516.1	523.7	526.8	527.6
155°	456.3	469.0	480.1	488.7	496.6	502.2	504.5	505.3
157.5°	446.8	457.2	465.8	472.6	478.8	483.3	485.5	485.4
160°	440.5	448.4	456.3	461.8	467.4	471.3	472.9	472.1
162.5°	433.6	440.8	447.4	452.3	456.6	459.9	460.3	460.1
165°	423.9	429.4	434.2	438.1	441.2	442.8	442.8	442.8
167.5°	414.7	418.4	422.0	424.8	426.4	427.9	427.2	427.1
170°	409.6	412.0	414.4	416.0	417.6	418.4	418.4	417.6
172.5°	403.9	406.3	408.1	409.0	409.3	410.7	409.5	408.7
175°	397.8	397.8	399.3	399.3	399.3	400.1	398.5	397.8
177.5°	393.5	394.1	394.1	394.1	393.5	394.1	392.2	392.2
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2

(END OF REPORT)