

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: P333626-927

Luminaire Tested: **S125RDIP-S1270D810U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333626-927
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-S1270D810U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6086.2 lumens
Efficiency: N/A
Efficacy: 100.3 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

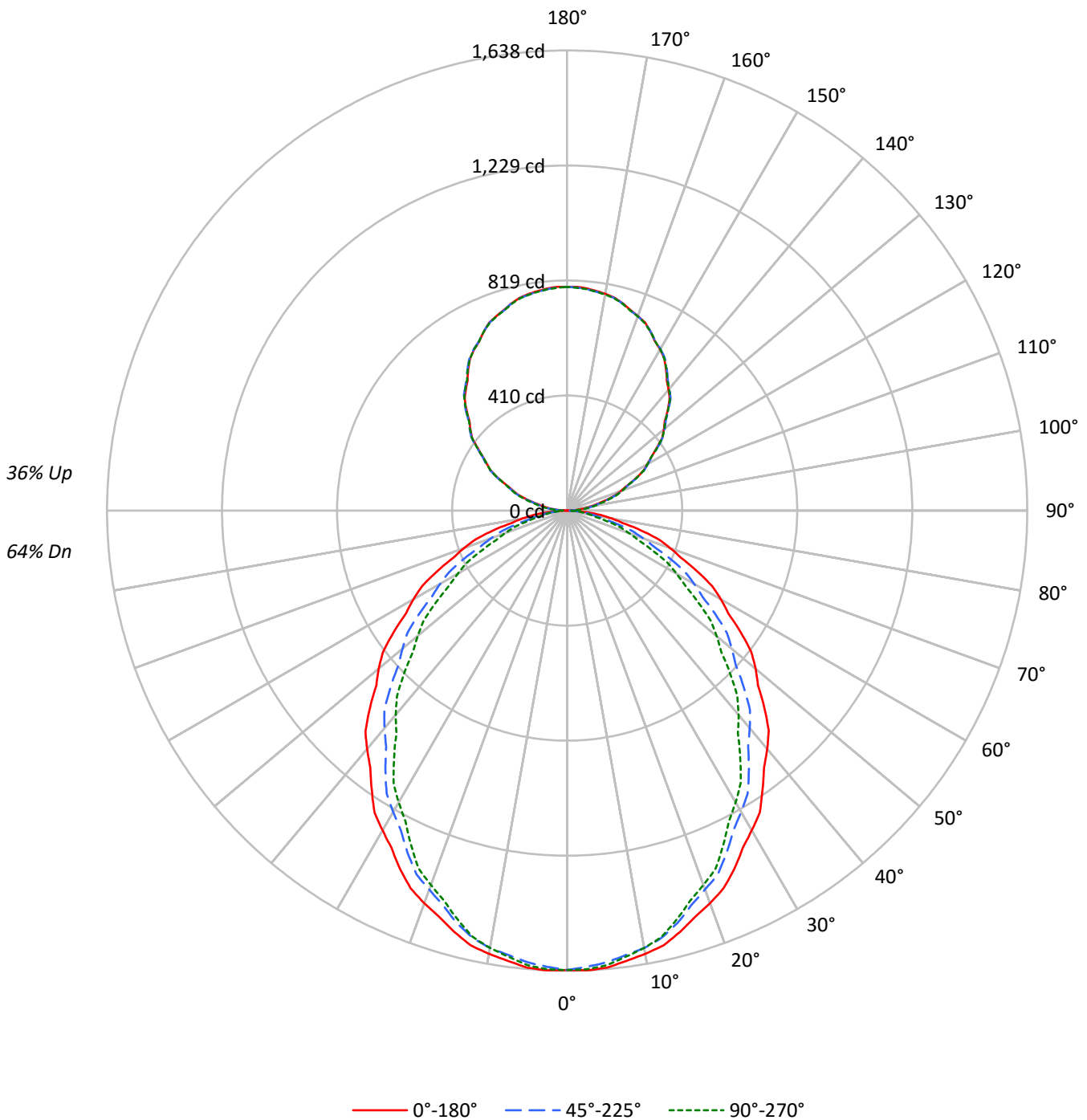
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69	64
1	101	97	93	89	95	91	88	85	80	78	75	70	68	67	61	60	58	54
2	92	85	79	74	86	80	74	70	71	66	63	62	59	56	54	52	50	46
3	84	75	67	62	79	71	64	59	62	57	53	55	51	48	48	45	43	39
4	77	66	58	52	72	63	56	50	56	50	46	49	45	41	43	40	37	34
5	71	59	51	45	67	56	49	43	50	44	40	44	40	36	39	35	32	29
6	66	53	45	39	61	51	43	38	45	39	35	40	35	32	35	32	29	26
7	61	48	40	35	57	46	39	33	41	35	31	37	32	28	32	29	25	23
8	57	44	36	31	53	42	35	30	38	32	27	34	29	25	30	26	23	21
9	53	40	33	28	50	38	31	27	35	29	25	31	26	23	28	24	21	19
10	49	37	30	25	46	35	29	24	32	26	22	29	24	21	26	22	19	17

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	2.5
10°-20°	429.7	7.1
20°-30°	623.1	10.2
30°-40°	710.2	11.7
40°-50°	692.3	11.4
50°-60°	582.7	9.6
60°-70°	408.5	6.7
70°-80°	210.0	3.4
80°-90°	54.8	0.9
90°-100°	53.3	0.9
100°-110°	157.4	2.6
110°-120°	266.7	4.4
120°-130°	350.9	5.8
130°-140°	393.2	6.5
140°-150°	385.4	6.3
150°-160°	323.7	5.3
160°-170°	215.2	3.5
170°-180°	75.3	1.2
0°-30°	1206.6	19.8
0°-40°	1916.8	31.5
0°-60°	3191.8	52.4
0°-90°	3865.0	63.5
90°-120°	477.4	7.8
90°-150°	1607.0	26.4
90°-180°	2221.0	36.5
0°-180°	6086.2	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	6	10	13	15	5
95°	40	42	48	52	53	43
105°	141	144	148	152	154	151
115°	267	269	271	270	270	264
125°	390	393	394	393	392	349
135°	507	510	511	511	509	390
145°	614	616	618	618	616	384
155°	702	702	703	705	702	323
165°	764	763	763	765	762	215
175°	794	792	792	795	791	75
180°	796	796	796	796	796	



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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°	22.8	21.5	20.2	18.9	17.6	16.9	16.9	16.9	16.8	16.8	17.0
90°	0.6	1.7	2.9	4.0	5.0	6.0	7.1	8.0	9.0	9.9	10.6
92.5°	15.0	15.8	16.6	17.3	18.1	19.0	20.2	21.4	22.6	23.8	24.7
95°	40.2	40.6	40.8	41.1	41.4	42.2	43.6	44.9	46.3	47.7	48.6
97.5°	66.9	67.0	67.1	67.3	67.3	68.4	70.3	72.2	74.1	76.0	76.8
100°	86.7	86.7	86.7	86.7	86.7	87.6	89.4	91.2	93.0	94.7	96.0
102.5°	108.1	108.6	109.2	109.7	110.3	111.0	111.9	112.8	113.7	114.6	116.0
105°	141.2	142.0	142.6	143.3	144.0	144.7	145.6	146.4	147.2	148.1	148.9
107.5°	177.9	178.6	179.3	180.0	180.7	181.3	182.0	182.6	183.2	183.9	184.3
110°	203.2	203.9	204.5	205.3	206.0	206.5	206.9	207.3	207.7	208.1	208.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	228.9	229.3	229.7	230.0	230.4	230.8	231.3	231.9	232.4	232.9	233.1
115°	267.0	267.5	268.1	268.6	269.2	269.6	269.9	270.1	270.5	270.7	270.5
117.5°	305.1	305.4	305.6	305.9	306.1	306.4	306.7	306.9	307.1	307.4	307.4
120°	328.9	329.6	330.3	331.0	331.7	332.1	332.2	332.4	332.5	332.6	332.6
122.5°	354.7	355.0	355.2	355.5	355.7	356.0	356.3	356.7	357.0	357.4	357.3
125°	389.6	390.5	391.3	392.1	392.9	393.4	393.6	393.7	393.8	394.0	393.7
127.5°	426.8	427.3	427.7	428.2	428.6	429.0	429.1	429.3	429.5	429.7	429.5
130°	449.1	449.8	450.5	451.1	451.9	452.3	452.6	452.9	453.1	453.4	453.3
132.5°	471.4	472.5	473.6	474.8	475.9	476.4	476.4	476.3	476.3	476.3	476.1
135°	506.7	507.6	508.3	509.2	510.0	510.5	510.6	510.8	510.9	511.0	511.0
137.5°	540.0	540.7	541.5	542.3	543.1	543.7	544.0	544.2	544.5	544.9	545.0
140°	561.3	561.9	562.6	563.3	564.0	564.5	564.9	565.4	565.8	566.2	566.5
142.5°	582.6	583.1	583.7	584.2	584.9	585.4	585.9	586.5	586.9	587.5	587.6
145°	613.9	614.4	615.0	615.5	616.1	616.6	617.0	617.3	617.8	618.2	618.2
147.5°	642.9	643.2	643.5	643.8	644.0	644.4	644.8	645.1	645.4	645.7	646.0
150°	662.2	662.0	661.9	661.8	661.6	661.9	662.4	663.0	663.5	664.1	664.1
152.5°	678.0	678.3	678.4	678.7	678.8	679.1	679.2	679.5	679.7	679.9	680.2
155°	702.4	702.4	702.4	702.4	702.4	702.5	702.7	702.8	702.9	703.1	703.6
157.5°	724.3	724.0	723.7	723.3	723.0	722.9	723.1	723.3	723.3	723.5	724.1
160°	737.1	736.7	736.3	735.9	735.5	735.4	735.5	735.6	735.8	735.9	736.5
162.5°	748.5	748.2	747.9	747.7	747.3	747.2	747.2	747.3	747.3	747.3	748.0
165°	763.8	763.5	763.3	763.0	762.7	762.6	762.7	762.9	763.0	763.2	763.7
167.5°	776.7	776.1	775.5	775.0	774.4	774.2	774.2	774.2	774.2	774.2	775.0
170°	783.6	783.1	782.5	782.0	781.4	781.1	781.1	781.1	781.1	781.1	782.0
172.5°	788.5	788.0	787.4	786.9	786.3	786.1	786.1	786.1	786.1	786.1	786.9
175°	794.2	793.6	793.1	792.5	791.9	791.6	791.6	791.6	791.6	791.6	792.5
177.5°	797.0	796.5	796.1	795.7	795.2	795.0	794.9	794.7	794.6	794.5	795.2
180°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0



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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°	17.1	17.2	17.3	17.3	17.2	17.1	17.0	16.8
90°	11.2	12.0	12.7	13.2	13.6	14.0	14.4	14.9
92.5°	25.6	26.5	27.4	28.0	28.4	28.6	28.9	29.2
95°	49.6	50.6	51.6	52.2	52.4	52.8	53.0	53.2
97.5°	77.8	78.7	79.6	80.1	80.2	80.4	80.6	80.8
100°	97.3	98.5	99.7	100.5	100.8	101.0	101.3	101.6
102.5°	117.3	118.7	120.0	120.9	121.3	121.6	122.0	122.4
105°	149.7	150.5	151.4	151.9	152.4	152.8	153.2	153.6
107.5°	184.7	185.1	185.5	185.7	185.7	185.6	185.6	185.6
110°	209.0	209.4	209.8	209.9	209.8	209.6	209.5	209.4



TEST NUMBER: P333626-927

CATALOG NUMBER: S125RDIP-S1270D810U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	233.3	233.5	233.7	233.7	233.4	233.1	232.9	232.7
115°	270.5	270.3	270.1	270.0	269.9	269.7	269.6	269.5
117.5°	307.6	307.7	307.8	307.6	307.0	306.5	305.9	305.4
120°	332.6	332.6	332.6	332.4	331.8	331.3	330.7	330.2
122.5°	357.2	357.1	357.0	356.7	356.2	355.8	355.4	355.0
125°	393.4	393.2	392.8	392.7	392.5	392.4	392.3	392.1
127.5°	429.4	429.2	429.1	428.9	428.6	428.3	428.1	427.8
130°	453.1	453.0	452.9	452.7	452.4	452.1	451.9	451.5
132.5°	475.9	475.8	475.7	475.4	475.1	474.7	474.3	473.9
135°	511.0	511.0	511.0	510.8	510.2	509.7	509.1	508.6
137.5°	545.2	545.3	545.5	545.3	544.5	543.9	543.2	542.5
140°	566.7	567.0	567.3	567.0	566.4	565.7	565.0	564.4
142.5°	587.8	588.0	588.1	587.9	587.2	586.5	585.8	585.1
145°	618.2	618.2	618.2	618.0	617.6	617.2	616.8	616.3
147.5°	646.3	646.7	647.1	646.7	645.8	644.8	644.0	643.0
150°	664.1	664.1	664.1	663.9	663.6	663.4	663.1	662.8
152.5°	680.6	680.9	681.2	681.1	680.6	680.2	679.7	679.1
155°	704.2	704.7	705.3	705.2	704.5	703.9	703.1	702.4
157.5°	724.6	725.2	725.7	725.6	724.6	723.7	722.8	721.9
160°	737.0	737.5	738.1	738.1	737.4	736.7	735.9	735.3
162.5°	748.6	749.3	750.0	749.9	749.1	748.3	747.5	746.7
165°	764.3	764.9	765.3	765.2	764.4	763.6	762.7	761.9
167.5°	775.9	776.7	777.5	777.4	776.7	775.8	774.9	774.0
170°	782.8	783.6	784.4	784.3	783.4	782.4	781.5	780.5
172.5°	787.7	788.5	789.4	789.4	788.5	787.7	786.8	785.9
175°	793.3	794.2	795.0	794.9	793.9	793.0	792.0	791.1
177.5°	795.8	796.5	797.2	797.1	796.3	795.6	794.8	794.0
180°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0

(END OF REPORT)