

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: P333625-927

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333625-927
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-S1270D810U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6431.4 lumens
Efficiency: N/A
Efficacy: 106.0 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

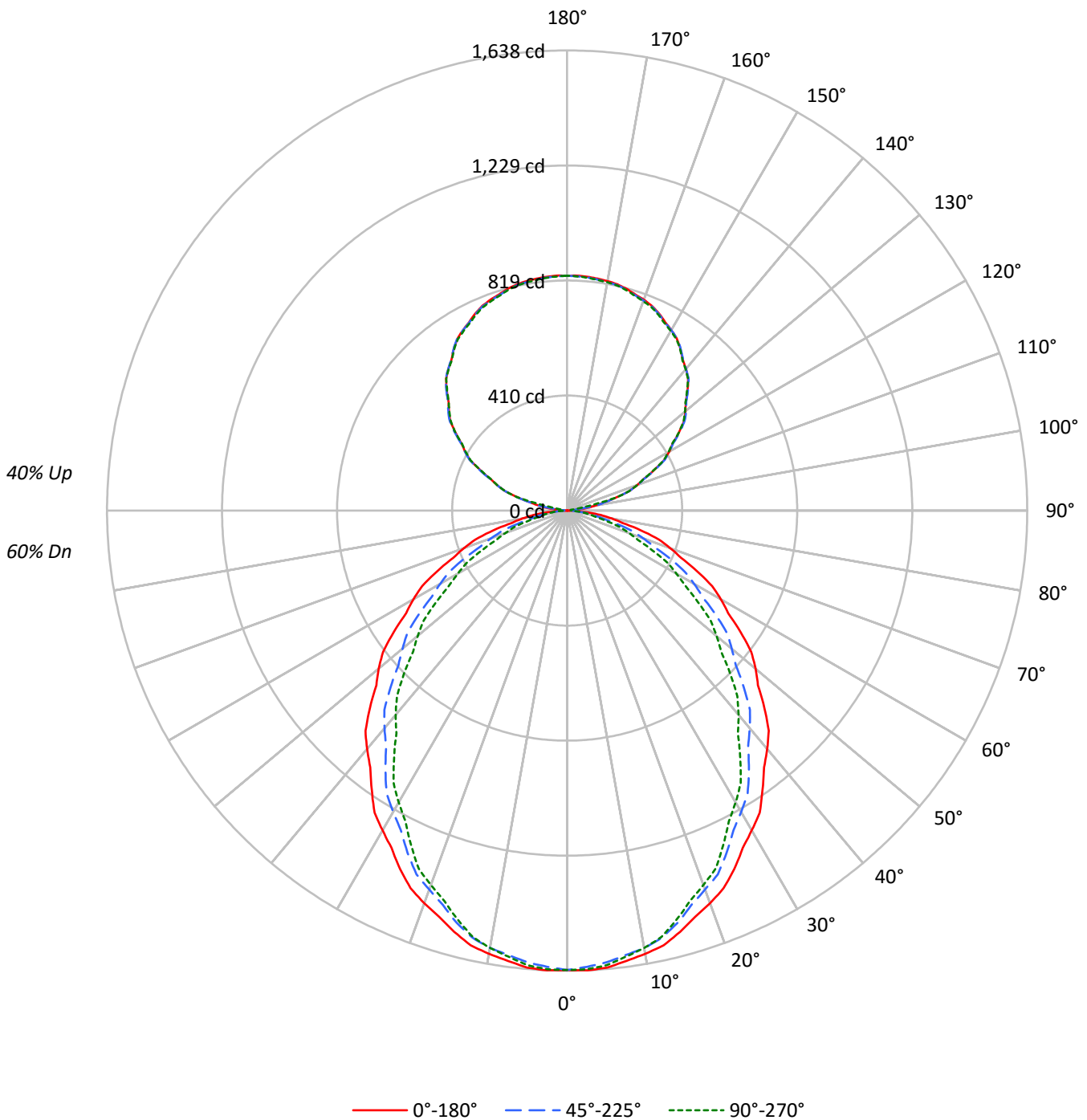
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	102	102	102	89	89	89	77	77	77	65	65	65	60
1	100	96	92	89	94	90	87	84	78	76	74	68	66	64	58	57	56	51
2	92	84	78	73	85	79	74	69	69	65	61	60	57	54	52	49	47	43
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	46	43	41	37
4	77	66	58	52	71	62	55	49	54	49	45	48	43	40	41	38	35	32
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	34	31	28
6	65	53	45	39	61	50	43	37	44	38	34	39	34	30	34	30	27	25
7	60	48	40	34	56	45	38	33	40	34	30	35	31	27	31	27	24	22
8	56	44	36	30	52	41	34	29	37	31	27	32	28	24	28	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	23	20	18
10	49	37	29	25	46	35	28	24	31	26	22	28	23	20	24	21	18	16

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	2.4
10°-20°	429.7	6.7
20°-30°	623.1	9.7
30°-40°	710.2	11.0
40°-50°	692.3	10.8
50°-60°	582.7	9.1
60°-70°	408.5	6.4
70°-80°	210.0	3.3
80°-90°	54.8	0.9
90°-100°	30.4	0.5
100°-110°	187.2	2.9
110°-120°	339.5	5.3
120°-130°	435.7	6.8
130°-140°	468.6	7.3
140°-150°	439.8	6.8
150°-160°	355.8	5.5
160°-170°	230.1	3.6
170°-180°	79.4	1.2
0°-30°	1206.6	18.8
0°-40°	1916.8	29.8
0°-60°	3191.8	49.6
0°-90°	3865.0	60.1
90°-120°	557.0	8.7
90°-150°	1901.1	29.6
90°-180°	2566.0	39.9
0°-180°	6431.4	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°	35	32	10	13	13	45
105°	182	184	185	185	184	193
115°	342	345	346	343	340	339
125°	486	490	491	488	486	434
135°	606	610	609	608	604	467
145°	703	704	704	705	701	440
155°	774	771	772	773	769	357
165°	817	814	814	817	813	231
175°	836	832	833	837	832	80
180°	836	836	836	836	836	



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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°	9.5	8.8	8.0	7.2	6.5	6.5	7.4	8.2	9.0	9.9	10.6
95°	35.3	34.9	34.5	34.1	33.7	30.8	25.6	20.4	15.1	9.9	10.6
97.5°	73.8	74.5	75.2	76.0	76.7	71.9	61.6	51.2	40.8	30.5	26.6
100°	103.5	103.9	104.3	104.7	105.1	105.6	106.2	106.7	107.3	107.8	87.3
102.5°	133.7	134.2	134.8	135.2	135.8	136.2	136.6	136.9	137.2	137.5	133.6
105°	182.1	182.7	183.2	183.8	184.3	184.6	184.6	184.6	184.6	184.6	184.6
107.5°	232.4	232.4	232.4	232.4	232.4	232.6	232.8	233.1	233.4	233.7	233.7
110°	265.1	265.1	265.1	265.1	265.1	265.3	265.5	265.9	266.1	266.4	266.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	295.9	296.2	296.5	296.9	297.2	297.5	297.6	297.8	297.9	298.1	297.6
115°	342.0	342.7	343.3	344.0	344.8	345.2	345.3	345.4	345.5	345.7	345.2
117.5°	389.7	389.7	389.6	389.6	389.6	389.8	390.3	390.9	391.4	391.9	391.2
120°	419.4	419.3	419.1	419.0	418.8	419.0	419.4	419.9	420.3	420.6	420.4
122.5°	445.7	446.2	446.7	447.3	447.7	448.1	448.3	448.5	448.7	448.9	448.6
125°	486.3	487.3	488.2	489.3	490.2	490.7	490.7	490.7	490.7	490.7	490.1
127.5°	525.1	525.8	526.5	527.2	527.8	528.1	528.1	528.0	527.9	527.8	527.5
130°	548.9	549.6	550.2	551.0	551.7	552.1	552.2	552.3	552.5	552.6	552.2
132.5°	572.7	573.5	574.3	575.0	575.9	576.2	575.8	575.5	575.2	574.9	574.8
135°	606.5	607.4	608.2	609.0	609.8	610.1	609.8	609.5	609.3	609.0	608.7
137.5°	637.6	638.3	639.1	639.8	640.5	640.7	640.5	640.2	640.0	639.7	639.8
140°	657.9	658.2	658.5	658.8	659.0	659.1	658.9	658.9	658.7	658.5	658.9
142.5°	676.3	676.4	676.6	676.8	676.9	677.1	677.3	677.5	677.7	677.9	677.9
145°	703.1	703.5	703.7	704.0	704.3	704.4	704.4	704.4	704.4	704.4	704.6
147.5°	726.7	726.7	726.6	726.5	726.5	726.5	726.7	726.8	727.1	727.2	727.4
150°	741.6	741.3	741.0	740.8	740.5	740.5	740.8	741.0	741.3	741.6	741.9
152.5°	756.0	755.3	754.7	754.2	753.5	753.4	753.6	753.9	754.2	754.5	754.7
155°	774.4	773.6	772.8	771.9	771.1	770.8	771.1	771.3	771.7	771.9	772.3
157.5°	788.6	788.1	787.7	787.2	786.6	786.4	786.5	786.5	786.5	786.6	787.0
160°	798.6	797.7	796.9	796.1	795.3	795.0	795.0	795.2	795.4	795.4	796.0
162.5°	806.5	805.6	804.9	804.0	803.2	802.9	803.0	803.1	803.3	803.4	804.1
165°	817.1	816.3	815.5	814.7	813.8	813.5	813.7	813.8	813.9	814.0	814.9
167.5°	825.1	824.3	823.4	822.5	821.7	821.3	821.4	821.6	821.7	821.9	822.8
170°	829.6	828.5	827.6	826.6	825.7	825.3	825.4	825.5	825.7	825.9	827.0
172.5°	832.5	831.6	830.6	829.7	828.6	828.3	828.5	828.8	829.0	829.3	830.3
175°	835.8	834.9	834.1	833.3	832.4	832.1	832.2	832.3	832.5	832.7	833.8
177.5°	837.3	836.5	835.9	835.3	834.6	834.3	834.4	834.5	834.6	834.7	835.5
180°	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8



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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°	11.3	12.0	12.7	13.2	13.6	14.0	14.4	14.9
92.5°	11.3	12.0	12.7	13.1	13.3	13.5	13.7	13.9
95°	11.3	12.0	12.7	13.0	13.0	13.0	13.0	13.0
97.5°	22.7	18.9	15.0	13.0	13.0	13.0	13.0	13.0
100°	66.8	46.3	25.7	15.2	14.7	14.1	13.5	13.0
102.5°	129.8	125.9	122.0	115.4	106.0	96.6	87.3	78.0
105°	184.6	184.6	184.6	184.6	184.4	184.3	184.1	184.0
107.5°	233.8	233.8	233.8	233.6	233.2	232.7	232.3	232.0
110°	265.5	265.1	264.7	264.6	264.7	264.9	265.0	265.1



TEST NUMBER: P333625-927

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	297.1	296.5	296.0	295.6	295.5	295.2	295.1	294.9
115°	344.6	344.0	343.5	342.8	342.0	341.1	340.3	339.5
117.5°	390.5	389.8	389.0	388.5	388.2	387.8	387.5	387.1
120°	420.1	419.9	419.5	419.1	418.4	417.7	417.0	416.3
122.5°	448.4	448.1	447.8	447.3	446.5	445.7	444.9	444.1
125°	489.6	489.0	488.5	488.0	487.6	487.1	486.7	486.3
127.5°	527.2	527.0	526.6	525.9	525.0	523.9	522.9	521.9
130°	551.8	551.4	551.0	550.4	549.7	549.1	548.3	547.6
132.5°	574.7	574.6	574.6	574.2	573.5	572.8	572.1	571.5
135°	608.5	608.2	607.9	607.4	606.5	605.7	604.8	604.0
137.5°	639.8	639.8	639.9	639.6	638.9	638.2	637.5	636.8
140°	659.1	659.4	659.7	659.4	658.5	657.7	656.9	656.1
142.5°	678.0	678.0	678.1	677.7	676.9	676.0	675.3	674.4
145°	704.6	704.8	705.0	704.6	703.8	703.0	702.1	701.3
147.5°	727.5	727.7	727.9	727.5	726.4	725.5	724.5	723.5
150°	742.1	742.4	742.7	742.3	741.2	740.1	738.9	737.8
152.5°	755.0	755.3	755.6	755.2	754.2	753.2	752.3	751.2
155°	772.8	773.2	773.6	773.2	772.1	771.0	769.9	768.8
157.5°	787.4	787.9	788.3	788.0	786.9	785.8	784.7	783.5
160°	796.5	797.1	797.6	797.4	796.3	795.2	794.1	793.0
162.5°	804.9	805.7	806.4	806.3	805.0	803.8	802.6	801.5
165°	815.7	816.5	817.4	817.2	816.1	815.0	813.9	812.8
167.5°	823.9	824.8	825.9	825.7	824.4	823.2	822.0	820.8
170°	828.0	829.1	830.2	830.1	828.9	827.7	826.4	825.2
172.5°	831.2	832.3	833.3	833.1	831.9	830.7	829.4	828.1
175°	834.8	835.9	837.0	836.9	835.8	834.5	833.3	832.0
177.5°	836.3	837.0	837.8	837.8	836.9	836.0	835.1	834.2
180°	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8

(END OF REPORT)