

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: P333619-927

Luminaire Tested: **S125RDIP-S1270D590U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333619-927
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-S1270D590U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5736.9 lumens
Efficiency: N/A
Efficacy: 104.1 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

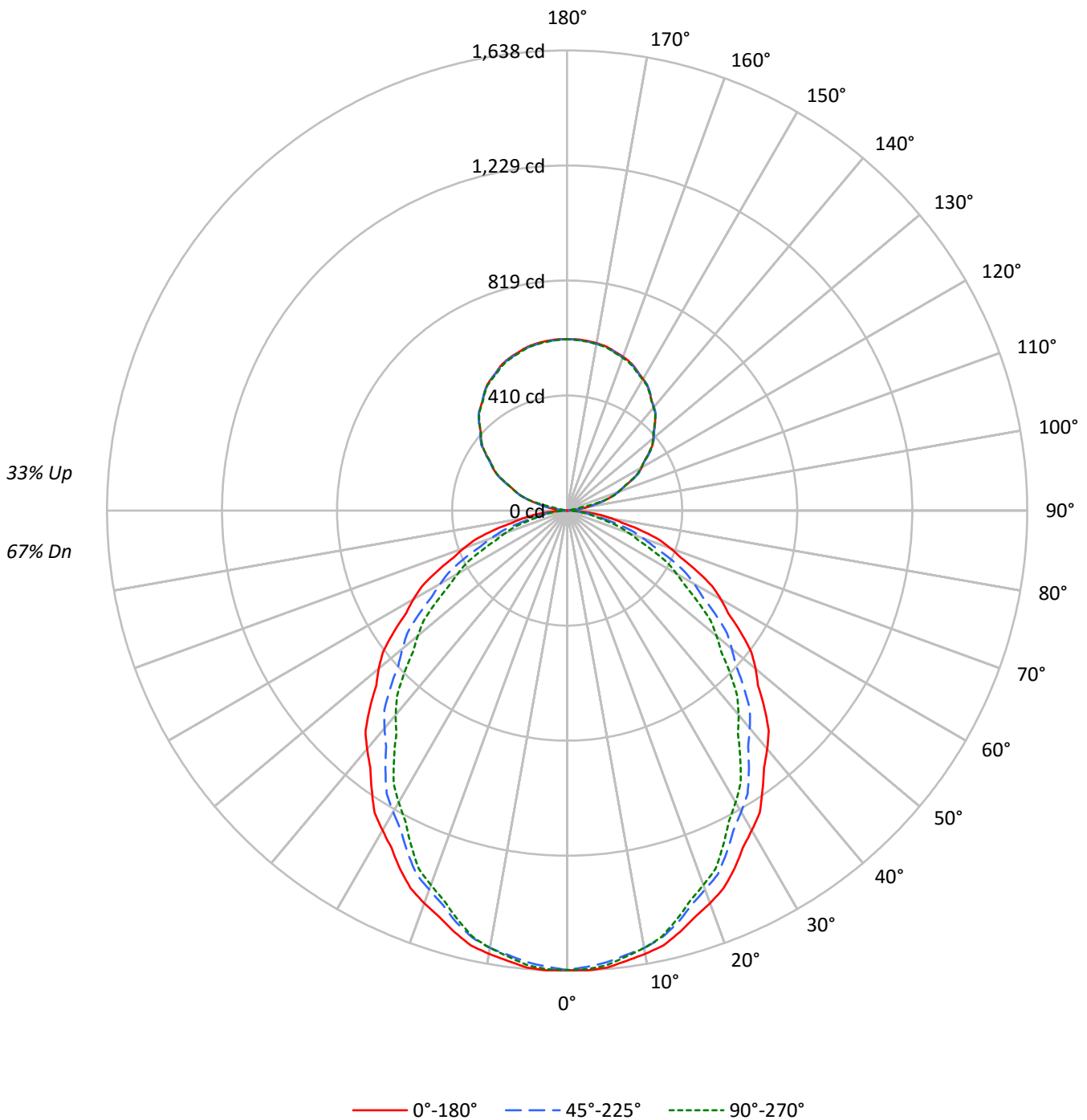
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	102	98	94	90	96	92	89	86	82	80	77	73	71	69	64	63	62	57
2	93	86	79	74	88	81	76	71	72	68	64	64	61	58	57	54	52	49
3	85	76	68	62	80	72	65	60	64	59	54	57	53	50	51	47	45	41
4	78	67	59	53	73	64	56	51	57	51	47	51	46	43	45	42	39	36
5	72	60	52	46	68	57	50	44	51	45	41	46	41	37	41	37	34	31
6	66	54	46	40	62	51	44	38	46	40	36	42	37	33	37	33	30	27
7	61	49	41	35	58	47	39	34	42	36	32	38	33	29	34	30	27	24
8	57	45	37	31	54	43	35	30	39	33	28	35	30	26	31	27	24	22
9	53	41	33	28	50	39	32	27	36	30	25	32	27	24	29	25	22	20
10	50	38	30	25	47	36	29	25	33	27	23	30	25	21	27	23	20	18

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	2.7
10°-20°	429.7	7.5
20°-30°	623.1	10.9
30°-40°	710.2	12.4
40°-50°	692.3	12.1
50°-60°	582.7	10.2
60°-70°	408.5	7.1
70°-80°	210.0	3.7
80°-90°	54.3	0.9
90°-100°	22.2	0.4
100°-110°	136.6	2.4
110°-120°	247.7	4.3
120°-130°	317.8	5.5
130°-140°	341.9	6.0
140°-150°	320.9	5.6
150°-160°	259.6	4.5
160°-170°	167.9	2.9
170°-180°	57.9	1.0
0°-30°	1206.6	21.0
0°-40°	1916.8	33.4
0°-60°	3191.8	55.6
0°-90°	3864.5	67.4
90°-120°	406.4	7.1
90°-150°	1387.0	24.2
90°-180°	1872.0	32.6
0°-180°	5736.9	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°	0	4	7	10	11	4
95°	26	24	7	9	10	33
105°	133	135	135	135	134	141
115°	250	252	252	250	248	247
125°	355	358	358	356	355	317
135°	442	445	444	443	441	341
145°	513	514	514	514	512	321
155°	565	562	563	564	561	260
165°	596	594	594	596	593	168
175°	610	607	607	611	607	58
180°	610	610	610	610	610	



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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	20.0	18.7	17.3	16.6	16.5	16.4	16.3	16.2	16.4
90°	0.5	1.3	2.1	2.9	3.6	4.4	5.1	5.9	6.5	7.2	7.8
92.5°	7.0	6.4	5.9	5.3	4.7	4.8	5.4	6.0	6.6	7.2	7.8
95°	25.7	25.4	25.2	24.9	24.6	22.5	18.7	14.9	11.0	7.2	7.8
97.5°	53.8	54.3	54.9	55.4	55.9	52.4	44.9	37.3	29.8	22.3	19.4
100°	75.5	75.8	76.0	76.4	76.7	77.0	77.5	77.9	78.3	78.7	63.7
102.5°	97.5	97.9	98.3	98.7	99.0	99.3	99.6	99.9	100.1	100.4	97.5
105°	132.8	133.2	133.7	134.1	134.5	134.7	134.7	134.7	134.7	134.7	134.7
107.5°	169.6	169.6	169.6	169.6	169.6	169.7	169.8	170.1	170.3	170.5	170.5
110°	193.5	193.5	193.5	193.5	193.5	193.5	193.8	193.9	194.2	194.3	194.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	215.9	216.1	216.3	216.6	216.8	217.0	217.1	217.2	217.4	217.5	217.1
115°	249.5	250.0	250.5	251.0	251.5	251.8	251.9	252.0	252.1	252.2	251.8
117.5°	284.3	284.2	284.2	284.2	284.2	284.4	284.8	285.2	285.5	285.9	285.4
120°	306.0	305.9	305.8	305.7	305.5	305.7	306.0	306.3	306.6	306.9	306.7
122.5°	325.1	325.5	325.9	326.3	326.7	326.9	327.1	327.3	327.3	327.5	327.3
125°	354.8	355.5	356.2	356.9	357.6	358.0	358.0	358.0	358.0	358.0	357.6
127.5°	383.1	383.6	384.1	384.6	385.1	385.3	385.2	385.2	385.2	385.1	384.8
130°	400.4	400.9	401.5	402.0	402.4	402.7	402.8	403.0	403.1	403.1	402.8
132.5°	417.8	418.4	419.0	419.5	420.1	420.3	420.1	419.9	419.6	419.5	419.4
135°	442.5	443.1	443.7	444.3	444.9	445.1	444.9	444.7	444.5	444.3	444.1
137.5°	465.2	465.7	466.2	466.8	467.2	467.5	467.2	467.1	466.9	466.7	466.8
140°	480.0	480.2	480.4	480.6	480.8	480.9	480.8	480.6	480.5	480.5	480.6
142.5°	493.4	493.5	493.6	493.8	493.8	494.0	494.2	494.2	494.4	494.6	494.6
145°	513.0	513.2	513.4	513.6	513.8	513.9	513.9	513.9	513.9	513.9	514.0
147.5°	530.1	530.1	530.0	530.0	530.0	530.0	530.1	530.3	530.4	530.5	530.7
150°	541.0	540.8	540.6	540.4	540.2	540.2	540.4	540.6	540.8	541.0	541.2
152.5°	551.5	551.0	550.6	550.2	549.7	549.6	549.8	550.0	550.2	550.4	550.6
155°	565.0	564.4	563.8	563.2	562.5	562.4	562.5	562.8	562.9	563.2	563.5
157.5°	575.4	575.0	574.6	574.3	573.9	573.8	573.8	573.8	573.8	573.9	574.2
160°	582.6	582.0	581.4	580.7	580.2	580.0	580.0	580.1	580.2	580.4	580.7
162.5°	588.4	587.8	587.2	586.5	586.0	585.7	585.8	585.9	586.0	586.1	586.7
165°	596.1	595.6	594.9	594.4	593.7	593.5	593.6	593.7	593.8	593.9	594.5
167.5°	601.9	601.3	600.7	600.1	599.4	599.2	599.3	599.4	599.4	599.6	600.3
170°	605.2	604.5	603.8	603.1	602.4	602.1	602.1	602.3	602.4	602.5	603.2
172.5°	607.4	606.7	605.9	605.2	604.5	604.3	604.4	604.7	604.8	605.0	605.7
175°	609.7	609.1	608.5	607.9	607.3	607.0	607.1	607.3	607.4	607.4	608.2
177.5°	610.8	610.3	609.8	609.3	608.9	608.6	608.7	608.8	608.9	609.0	609.6
180°	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7



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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°	16.5	16.6	16.6	16.6	16.5	16.3	16.2	16.0
90°	8.2	8.7	9.3	9.7	10.0	10.2	10.5	10.9
92.5°	8.2	8.7	9.3	9.6	9.7	9.8	10.0	10.1
95°	8.2	8.7	9.3	9.5	9.5	9.5	9.5	9.5
97.5°	16.6	13.7	10.9	9.5	9.5	9.5	9.5	9.5
100°	48.7	33.7	18.8	11.1	10.7	10.3	9.9	9.5
102.5°	94.7	91.8	89.0	84.2	77.3	70.5	63.7	56.9
105°	134.7	134.7	134.7	134.7	134.5	134.4	134.4	134.2
107.5°	170.6	170.6	170.6	170.4	170.2	169.8	169.5	169.2
110°	193.8	193.5	193.1	193.1	193.1	193.2	193.4	193.5



TEST NUMBER: P333619-927

CATALOG NUMBER: S125RDIP-S1270D590U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	216.7	216.3	215.9	215.7	215.6	215.4	215.3	215.2
115°	251.4	251.0	250.6	250.1	249.5	248.9	248.3	247.7
117.5°	284.9	284.3	283.8	283.4	283.2	282.9	282.7	282.4
120°	306.5	306.3	306.1	305.7	305.2	304.8	304.2	303.7
122.5°	327.1	326.9	326.7	326.3	325.7	325.1	324.6	324.0
125°	357.2	356.7	356.3	356.0	355.7	355.4	355.1	354.8
127.5°	384.6	384.4	384.2	383.7	382.9	382.2	381.5	380.7
130°	402.6	402.3	402.0	401.6	401.1	400.5	400.1	399.6
132.5°	419.3	419.2	419.2	418.9	418.4	417.9	417.4	416.9
135°	443.9	443.7	443.5	443.1	442.5	441.9	441.2	440.7
137.5°	466.8	466.8	466.8	466.6	466.1	465.6	465.1	464.5
140°	480.9	481.0	481.3	481.0	480.5	479.8	479.3	478.6
142.5°	494.6	494.6	494.7	494.4	493.8	493.2	492.6	492.0
145°	514.1	514.2	514.3	514.0	513.4	512.9	512.2	511.6
147.5°	530.8	530.9	531.0	530.7	530.0	529.3	528.5	527.8
150°	541.4	541.6	541.8	541.5	540.7	539.9	539.1	538.3
152.5°	550.8	551.0	551.2	551.0	550.2	549.5	548.7	548.0
155°	563.8	564.0	564.4	564.1	563.3	562.5	561.7	560.9
157.5°	574.5	574.8	575.1	574.9	574.1	573.2	572.4	571.6
160°	581.1	581.5	581.9	581.7	580.9	580.1	579.3	578.5
162.5°	587.2	587.8	588.4	588.2	587.3	586.5	585.6	584.6
165°	595.1	595.7	596.3	596.2	595.4	594.6	593.8	592.9
167.5°	601.0	601.7	602.5	602.4	601.5	600.6	599.7	598.7
170°	604.1	604.9	605.7	605.6	604.8	603.8	602.9	602.1
172.5°	606.4	607.2	607.9	607.8	606.9	606.0	605.1	604.2
175°	609.0	609.8	610.7	610.6	609.7	608.8	607.9	607.0
177.5°	610.1	610.7	611.2	611.2	610.5	609.9	609.3	608.6
180°	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7

(END OF REPORT)