

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: P333307

Luminaire Tested: **S125DIP-S1270D590U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333307
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: S125DIP-S1270D590U835-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7290.8 lumens
Efficiency: N/A
Efficacy: 132.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

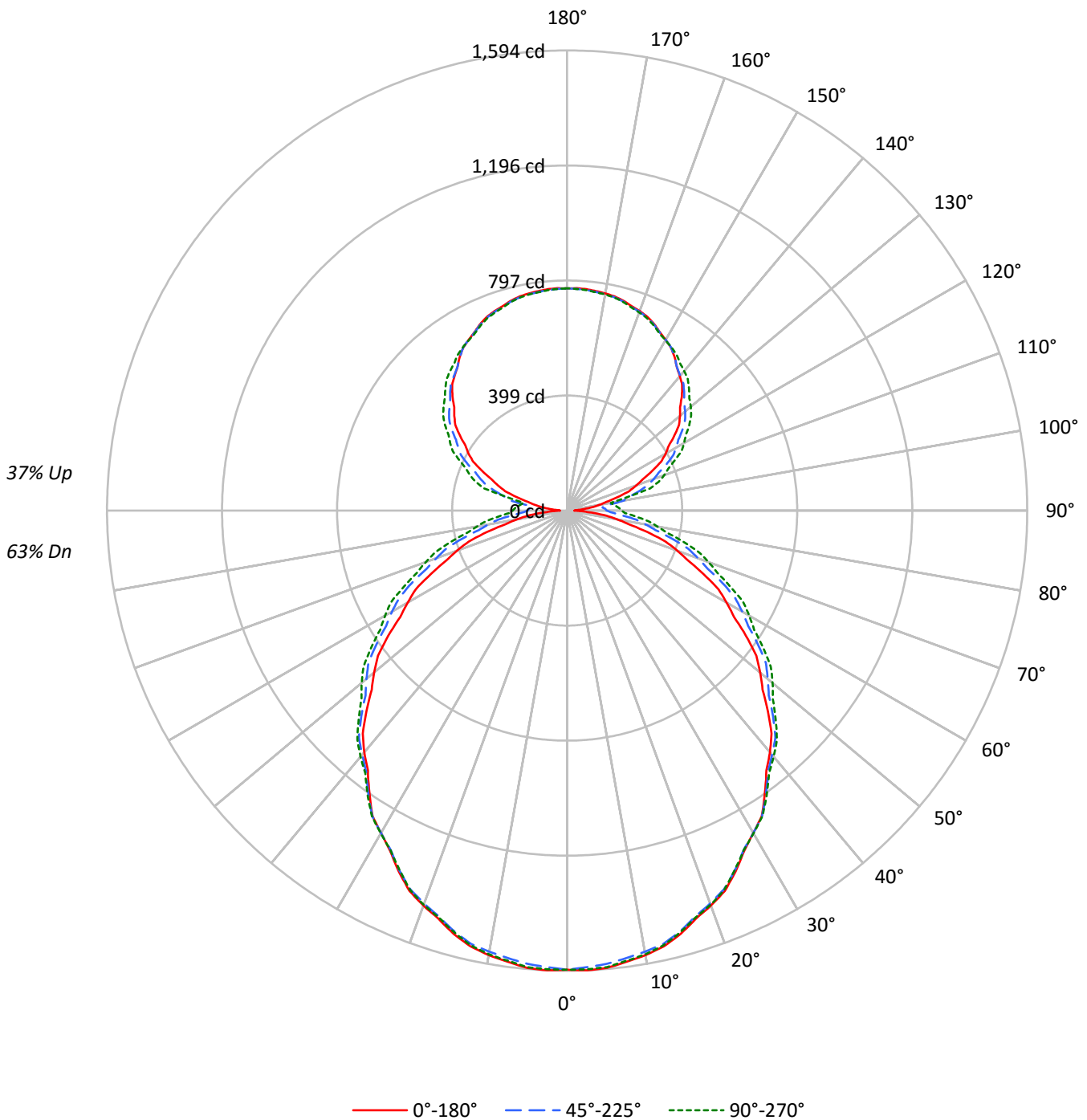
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333307

CATALOG NUMBER: S125DIP-S1270D590U835-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P333307

CATALOG NUMBER: S125DIP-S1270D590U835-4F0-1E-UDD-D

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	68	68	68	63
1	100	95	91	87	93	89	85	82	78	75	73	68	66	64	59	57	56	52
2	91	82	76	70	85	77	72	67	68	63	60	59	56	53	51	49	46	42
3	82	72	64	58	77	68	61	55	60	54	50	52	48	44	45	42	39	35
4	75	64	55	49	70	60	52	47	53	47	42	46	42	38	40	37	33	30
5	69	57	48	42	64	54	46	40	47	41	36	42	37	33	36	32	29	26
6	64	51	42	36	59	48	40	35	43	36	32	38	32	28	33	29	25	23
7	59	46	38	32	55	43	36	30	39	32	28	34	29	25	30	26	23	20
8	55	42	34	28	51	40	32	27	35	29	25	31	26	22	27	23	20	18
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	25	21	18	16
10	48	35	28	23	45	33	26	22	30	24	20	27	22	18	24	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10271	10271	10271
5°	10291	10081	10113
10°	10218	9901	9886
15°	10097	9686	9597
20°	9933	9419	9309
25°	9738	9134	8953
30°	9501	8820	8630
35°	9281	8532	8335
40°	9056	8229	8036
45°	8802	7969	7773
50°	8560	7687	7539
55°	8269	7421	7265
60°	7950	7117	6985
65°	7617	6800	6669
70°	7241	6366	6346
75°	6643	5948	5948
80°	5861	5444	5515
85°	5135	5104	5378



TEST NUMBER: P333307

CATALOG NUMBER: S125DIP-S1270D590U835-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.4	2.1
10°-20°	426.9	5.9
20°-30°	634.8	8.7
30°-40°	752.0	10.3
40°-50°	777.5	10.7
50°-60°	716.2	9.8
60°-70°	579.0	7.9
70°-80°	387.7	5.3
80°-90°	202.7	2.8
90°-100°	140.8	1.9
100°-110°	255.6	3.5
110°-120°	368.4	5.1
120°-130°	432.9	5.9
130°-140°	445.4	6.1
140°-150°	407.9	5.6
150°-160°	327.7	4.5
160°-170°	211.9	2.9
170°-180°	73.1	1.0
0°-30°	1212.1	16.6
0°-40°	1964.1	26.9
0°-60°	3457.8	47.4
0°-90°	4627.2	63.5
90°-120°	764.7	10.5
90°-150°	2050.9	28.1
90°-180°	2664.0	36.5
0°-180°	7290.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1590	1587	1576	1588	1587	151
15°	1519	1519	1509	1518	1512	428
25°	1380	1384	1375	1381	1374	635
35°	1194	1204	1200	1205	1205	747
45°	984	1000	1009	1019	1021	759
55°	756	781	806	823	830	676
65°	521	557	594	616	624	517
75°	287	328	377	407	416	304
85°	86	137	192	225	238	91
90°	26	80	137	174	188	18
95°	53	91	123	159	171	57
105°	182	210	256	286	297	193
115°	324	340	379	404	411	321
125°	454	458	488	510	516	405
135°	562	564	573	592	597	433
145°	649	649	649	657	660	405
155°	713	710	711	712	708	328
165°	752	749	750	753	748	212
175°	770	766	767	771	766	73
180°	770	770	770	770	770	



TEST NUMBER: P333307

CATALOG NUMBER: S125DIP-S1270D590U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3
2.5°	1594.0	1593.5	1592.9	1592.4	1591.8	1590.6	1588.6	1586.7	1584.8	1582.8	1584.8
5°	1590.3	1589.6	1588.9	1588.2	1587.5	1586.0	1583.5	1581.1	1578.7	1576.3	1579.0
7.5°	1576.3	1576.0	1575.7	1575.4	1575.2	1573.8	1571.3	1568.8	1566.3	1563.8	1566.2
10°	1563.8	1563.8	1563.8	1563.8	1563.8	1562.4	1559.6	1556.9	1554.1	1551.3	1553.7
12.5°	1546.3	1546.6	1546.9	1547.2	1547.4	1546.5	1544.3	1542.0	1539.8	1537.6	1539.5
15°	1518.6	1518.9	1519.3	1519.6	1520.0	1518.9	1516.5	1514.1	1511.7	1509.2	1511.3
17.5°	1482.4	1483.1	1483.8	1484.5	1485.2	1484.3	1481.9	1479.5	1477.0	1474.6	1476.2
20°	1456.2	1456.9	1457.6	1458.3	1459.0	1458.1	1455.7	1453.3	1450.8	1448.4	1449.5
22.5°	1426.3	1427.5	1428.8	1430.0	1431.3	1430.5	1427.8	1425.1	1422.4	1419.7	1421.0
25°	1379.8	1380.9	1381.9	1382.9	1384.0	1383.5	1381.4	1379.3	1377.2	1375.1	1376.5
27.5°	1328.1	1329.6	1331.1	1332.6	1334.2	1333.7	1331.4	1329.0	1326.7	1324.3	1325.3
30°	1289.4	1291.5	1293.5	1295.6	1297.7	1297.7	1295.6	1293.5	1291.5	1289.4	1290.1
32.5°	1254.5	1256.3	1258.1	1259.9	1261.7	1261.8	1260.3	1258.8	1257.2	1255.7	1256.4
35°	1194.3	1196.7	1199.1	1201.6	1204.0	1204.7	1203.6	1202.6	1201.6	1200.5	1201.6
37.5°	1134.1	1136.3	1138.5	1140.8	1143.0	1143.9	1143.6	1143.2	1142.9	1142.5	1143.9
40°	1092.9	1095.7	1098.5	1101.3	1104.0	1105.2	1104.9	1104.5	1104.2	1103.9	1105.2
42.5°	1048.0	1051.6	1055.2	1058.8	1062.5	1064.6	1065.4	1066.2	1066.9	1067.7	1069.3
45°	983.8	987.6	991.4	995.2	999.0	1001.8	1003.6	1005.3	1007.0	1008.7	1011.2
47.5°	918.0	921.5	925.1	928.6	932.1	935.4	938.4	941.4	944.3	947.3	950.9
50°	873.1	876.9	880.7	884.5	888.4	892.2	896.0	899.8	903.6	907.4	911.2
52.5°	825.7	830.4	835.0	839.6	844.3	848.9	853.6	858.2	862.8	867.5	871.6
55°	756.2	761.7	767.3	772.8	778.3	783.9	789.4	795.0	800.5	806.1	809.9
57.5°	685.1	691.7	698.4	705.0	711.7	718.2	724.6	730.9	737.3	743.7	748.1
60°	637.7	644.6	651.5	658.5	665.4	672.3	679.3	686.2	693.1	700.0	705.2
62.5°	591.5	598.5	605.4	612.3	619.2	626.5	633.9	641.4	648.9	656.4	662.1
65°	520.7	528.7	536.7	544.7	552.6	560.8	569.1	577.4	585.7	594.0	599.2
67.5°	454.0	461.7	469.4	477.1	484.8	492.9	501.3	509.8	518.2	526.7	533.0
70°	405.4	413.3	421.3	429.3	437.2	445.7	454.7	463.8	472.8	481.8	488.4
72.5°	358.0	366.2	374.5	382.7	391.0	400.0	409.8	419.7	429.5	439.4	446.5
75°	286.9	295.9	304.9	313.9	322.9	333.0	344.0	355.1	366.2	377.3	384.2
77.5°	218.6	229.0	239.4	249.8	260.2	270.7	281.4	292.0	302.7	313.4	321.0
80°	176.2	186.6	197.0	207.4	217.8	228.8	240.6	252.4	264.2	276.0	283.6
82.5°	137.5	148.5	159.4	170.4	181.3	192.8	204.9	216.9	229.0	241.0	248.4
85°	85.8	97.2	108.6	120.1	131.5	143.3	155.4	167.5	179.6	191.8	199.4
87.5°	48.8	60.0	71.3	82.6	93.9	105.5	117.5	129.5	141.4	153.4	161.5
90°	25.5	37.6	49.7	61.8	73.9	86.3	99.0	111.6	124.3	137.0	145.6
92.5°	31.2	40.8	50.3	59.9	69.4	80.6	93.5	106.3	119.1	132.0	140.3
95°	52.8	61.4	70.0	78.7	87.3	95.1	102.1	109.0	116.0	122.9	131.2
97.5°	86.3	95.1	103.9	112.7	121.5	126.8	128.6	130.4	132.3	134.1	137.8
100°	112.4	120.1	127.7	135.4	143.1	152.7	164.3	175.9	187.5	199.1	187.4
102.5°	139.0	146.2	153.4	160.6	167.8	177.0	188.1	199.2	210.3	221.5	224.9
105°	181.8	187.8	193.9	199.9	206.0	214.2	224.6	235.0	245.4	255.8	262.7
107.5°	226.2	230.9	235.7	240.4	245.1	252.5	262.8	273.0	283.2	293.5	300.4
110°	255.1	259.3	263.4	267.6	271.7	278.8	288.7	298.7	308.7	318.6	324.8



TEST NUMBER: P333307

CATALOG NUMBER: S125DIP-S1270D590U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	283.4	287.0	290.7	294.3	297.9	304.5	314.1	323.7	333.3	342.8	348.7
115°	324.3	327.4	330.4	333.5	336.5	342.6	351.8	360.9	370.0	379.2	384.9
117.5°	366.7	368.2	369.8	371.4	372.9	378.2	387.2	396.2	405.2	414.2	419.5
120°	394.1	395.0	395.9	396.8	397.7	402.3	410.7	419.0	427.4	435.7	441.4
122.5°	417.0	418.0	418.9	419.9	420.9	425.3	433.1	441.0	448.9	456.8	462.1
125°	454.1	454.7	455.2	455.7	456.3	460.0	466.9	473.9	480.8	487.7	492.8
127.5°	488.3	488.6	488.8	489.1	489.4	492.4	498.0	503.6	509.2	514.8	519.6
130°	510.2	510.5	510.7	511.0	511.3	514.0	518.9	523.9	528.9	533.9	538.3
132.5°	530.8	531.5	532.2	532.8	533.5	535.6	539.0	542.5	546.0	549.4	554.2
135°	561.7	562.1	562.5	562.9	563.3	564.6	566.8	569.0	571.1	573.3	577.6
137.5°	590.0	590.4	590.8	591.2	591.5	592.2	593.1	594.1	595.0	596.0	600.1
140°	607.5	607.7	608.0	608.2	608.5	608.7	608.9	609.2	609.4	609.6	613.7
142.5°	624.4	624.2	624.1	624.0	623.9	623.9	624.2	624.4	624.7	624.9	628.2
145°	649.1	649.0	648.9	648.8	648.7	648.7	648.7	648.7	648.7	648.7	650.6
147.5°	669.2	669.2	669.1	669.1	669.0	669.1	669.2	669.4	669.5	669.7	670.4
150°	682.9	682.7	682.4	682.2	681.9	681.9	682.2	682.4	682.7	682.9	683.2
152.5°	696.2	695.6	695.1	694.5	693.9	693.8	694.0	694.3	694.5	694.8	695.1
155°	713.2	712.4	711.7	710.9	710.1	709.9	710.1	710.4	710.6	710.9	711.3
157.5°	726.3	725.8	725.4	724.9	724.5	724.3	724.3	724.3	724.3	724.4	724.8
160°	735.4	734.7	733.9	733.1	732.4	732.1	732.2	732.3	732.4	732.6	733.1
162.5°	742.7	742.0	741.2	740.4	739.7	739.4	739.5	739.6	739.7	739.9	740.6
165°	752.5	751.8	751.0	750.3	749.5	749.2	749.3	749.4	749.6	749.7	750.4
167.5°	759.8	759.1	758.3	757.5	756.7	756.4	756.5	756.6	756.7	756.9	757.8
170°	764.0	763.1	762.2	761.3	760.4	760.0	760.1	760.3	760.4	760.5	761.5
172.5°	766.7	765.8	764.9	764.0	763.1	762.8	763.0	763.3	763.5	763.7	764.6
175°	769.7	768.9	768.1	767.4	766.6	766.3	766.4	766.6	766.7	766.8	767.8
177.5°	771.0	770.4	769.8	769.2	768.6	768.3	768.4	768.5	768.6	768.7	769.5
180°	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7



TEST NUMBER: P333307

CATALOG NUMBER: S125DIP-S1270D590U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3
2.5°	1586.7	1588.6	1590.6	1591.4	1591.1	1590.9	1590.6	1590.3
5°	1581.8	1584.6	1587.4	1588.6	1588.2	1587.9	1587.5	1587.2
7.5°	1568.6	1571.1	1573.5	1574.5	1574.2	1573.8	1573.5	1573.1
10°	1556.2	1558.6	1561.0	1562.1	1561.7	1561.4	1561.0	1560.7
12.5°	1541.3	1543.2	1545.1	1545.6	1544.7	1543.8	1542.9	1542.0
15°	1513.4	1515.5	1517.5	1517.9	1516.5	1515.1	1513.7	1512.3
17.5°	1477.8	1479.4	1481.0	1481.4	1480.5	1479.7	1478.9	1478.0
20°	1450.5	1451.5	1452.6	1453.1	1453.1	1453.1	1453.1	1453.1
22.5°	1422.4	1423.7	1425.0	1425.2	1424.4	1423.6	1422.7	1421.9
25°	1377.9	1379.3	1380.7	1380.5	1378.8	1377.0	1375.3	1373.6
27.5°	1326.3	1327.2	1328.2	1328.4	1327.7	1327.1	1326.5	1325.9
30°	1290.8	1291.5	1292.2	1292.3	1292.0	1291.6	1291.3	1290.9
32.5°	1257.1	1257.8	1258.5	1258.7	1258.3	1258.0	1257.6	1257.3
35°	1202.6	1203.6	1204.7	1205.2	1205.2	1205.2	1205.2	1205.2
37.5°	1145.3	1146.7	1148.1	1148.7	1148.5	1148.4	1148.3	1148.1
40°	1106.6	1108.0	1109.4	1110.4	1111.1	1111.8	1112.5	1113.2
42.5°	1071.0	1072.7	1074.3	1075.2	1075.4	1075.5	1075.7	1075.8
45°	1013.6	1016.0	1018.4	1019.8	1020.2	1020.5	1020.9	1021.2
47.5°	954.4	957.9	961.5	963.6	964.4	965.1	965.9	966.7
50°	915.0	918.8	922.7	925.1	926.1	927.2	928.2	929.2
52.5°	875.7	879.8	883.8	886.3	887.0	887.8	888.6	889.3
55°	813.7	817.5	821.3	823.9	825.3	826.7	828.1	829.5
57.5°	752.4	756.8	761.2	763.9	764.9	765.9	767.0	768.0
60°	710.4	715.6	720.8	723.9	725.0	726.0	727.1	728.1
62.5°	667.9	673.6	679.4	682.9	684.2	685.6	686.9	688.2
65°	604.4	609.6	614.8	618.1	619.5	620.9	622.3	623.6
67.5°	539.3	545.6	551.9	555.9	557.7	559.5	561.4	563.2
70°	494.9	501.5	508.1	512.4	514.5	516.6	518.7	520.7
72.5°	453.6	460.8	467.9	472.2	473.8	475.3	476.8	478.3
75°	391.2	398.1	405.0	409.4	411.1	412.8	414.6	416.3
77.5°	328.6	336.2	343.9	348.4	349.8	351.1	352.5	353.9
80°	291.2	298.8	306.5	311.0	312.3	313.7	315.1	316.5
82.5°	255.7	263.1	270.4	275.3	277.8	280.3	282.8	285.3
85°	207.0	214.6	222.3	227.5	230.2	233.0	235.8	238.5
87.5°	169.6	177.7	185.8	191.1	193.6	196.1	198.6	201.1
90°	154.2	162.8	171.4	177.1	179.9	182.7	185.5	188.3
92.5°	148.6	157.0	165.3	170.8	173.4	176.0	178.6	181.2
95°	139.5	147.7	156.0	161.3	163.7	166.2	168.6	171.0
97.5°	141.5	145.2	148.9	151.9	154.3	156.6	159.0	161.3
100°	175.8	164.2	152.6	147.6	149.1	150.7	152.3	153.9
102.5°	228.3	231.7	235.1	233.6	227.0	220.5	214.0	207.4
105°	269.6	276.6	283.5	288.1	290.4	292.7	295.0	297.3
107.5°	307.2	314.1	321.0	325.3	327.1	328.9	330.6	332.4
110°	331.0	337.2	343.4	347.8	350.3	352.9	355.5	358.0



TEST NUMBER: P333307

CATALOG NUMBER: S125DIP-S1270D590U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	354.5	360.3	366.1	370.2	372.4	374.7	376.9	379.2
115°	390.6	396.4	402.1	405.6	406.9	408.2	409.6	410.9
117.5°	424.7	429.9	435.2	438.8	440.8	442.8	444.9	446.9
120°	447.0	452.6	458.3	461.8	463.3	464.7	466.1	467.6
122.5°	467.5	472.8	478.2	481.5	482.9	484.2	485.6	486.9
125°	497.8	502.8	507.9	511.1	512.4	513.8	515.1	516.5
127.5°	524.5	529.3	534.2	537.1	538.2	539.3	540.4	541.4
130°	542.8	547.3	551.7	554.5	555.6	556.7	557.8	558.9
132.5°	559.0	563.7	568.5	571.3	572.1	573.0	573.8	574.6
135°	581.8	586.1	590.3	592.9	593.9	594.9	595.8	596.8
137.5°	604.3	608.4	612.6	615.0	615.7	616.4	617.2	617.9
140°	617.7	621.8	625.9	628.2	628.8	629.5	630.1	630.7
142.5°	631.5	634.8	638.1	640.1	640.7	641.4	642.0	642.6
145°	652.4	654.3	656.1	657.4	658.0	658.6	659.3	659.9
147.5°	671.1	671.8	672.5	672.7	672.4	672.2	671.9	671.6
150°	683.4	683.7	683.9	683.7	683.1	682.4	681.7	681.1
152.5°	695.3	695.6	695.8	695.5	694.7	693.8	693.0	692.1
155°	711.7	712.0	712.4	712.1	711.1	710.1	709.1	708.0
157.5°	725.2	725.6	726.0	725.7	724.7	723.6	722.6	721.6
160°	733.6	734.1	734.6	734.3	733.3	732.3	731.3	730.3
162.5°	741.3	742.0	742.7	742.5	741.4	740.3	739.2	738.0
165°	751.2	752.0	752.7	752.6	751.6	750.6	749.6	748.5
167.5°	758.7	759.6	760.5	760.4	759.3	758.1	757.0	755.8
170°	762.6	763.6	764.6	764.5	763.4	762.2	761.1	760.0
172.5°	765.5	766.5	767.4	767.3	766.1	765.0	763.8	762.7
175°	768.8	769.8	770.9	770.8	769.7	768.5	767.4	766.2
177.5°	770.2	770.9	771.6	771.5	770.7	769.9	769.1	768.3
180°	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7

(END OF REPORT)