

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: P333199

Luminaire Tested: **S125DIP-S610D1205U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333199
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-S610D1205U835-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7218.0 lumens
Efficiency: N/A
Efficacy: 146.1 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-Indirect

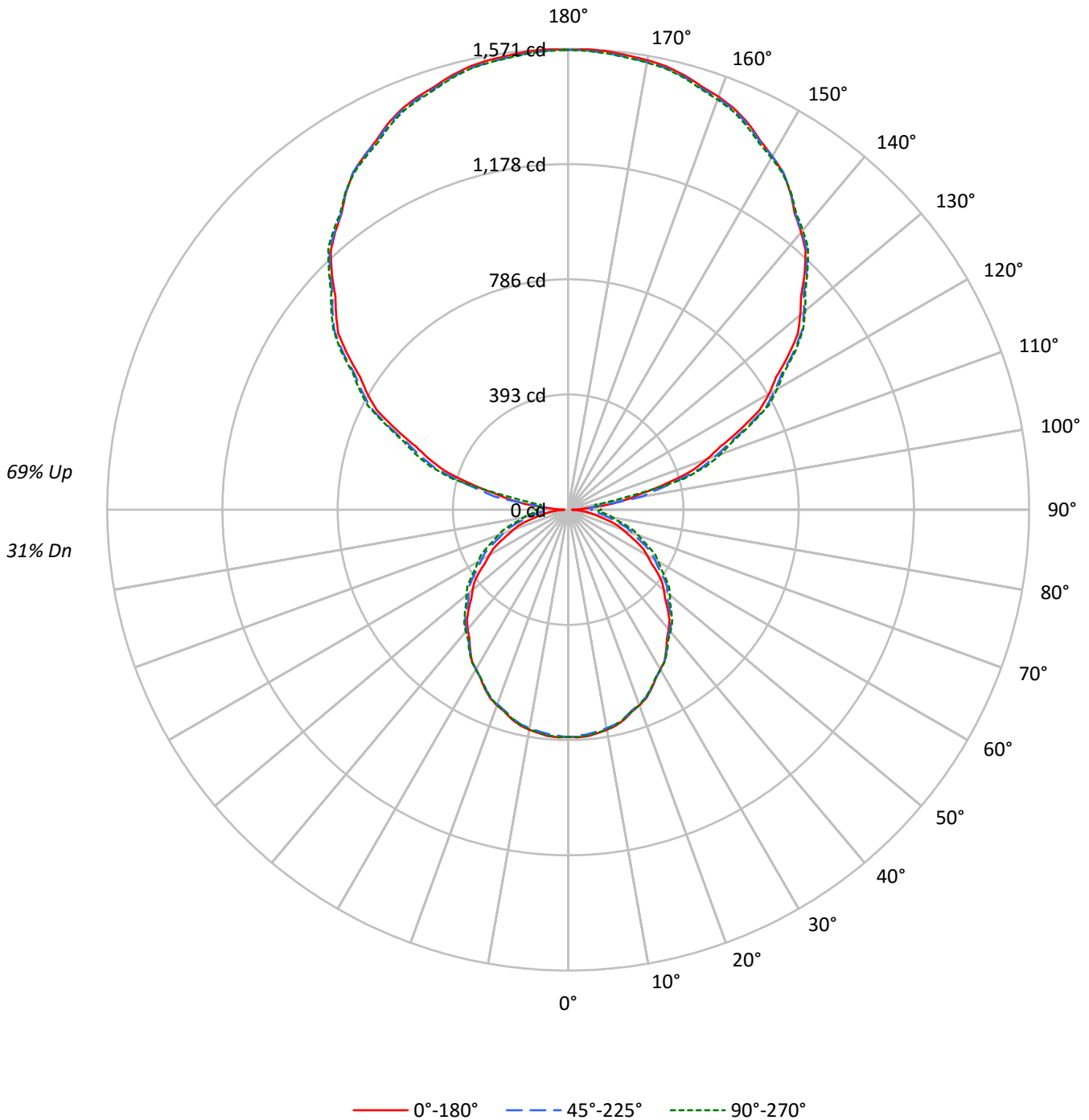
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333199

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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	93	89	85	81	83	80	76	73	63	61	59	48	46	45	34	33	32	25
2	85	77	71	66	76	69	64	60	55	51	48	42	39	37	29	28	26	21
3	77	68	60	55	69	61	55	50	48	44	40	37	34	31	26	24	22	17
4	70	60	52	46	63	54	47	42	43	38	34	32	29	26	23	21	19	15
5	64	53	45	39	58	48	41	36	38	33	29	29	26	23	21	18	17	13
6	59	47	39	34	53	43	36	31	34	29	25	26	23	20	19	16	14	11
7	55	43	35	29	49	39	32	27	31	26	22	24	20	17	17	15	13	10
8	51	38	31	26	45	35	28	24	28	23	19	22	18	15	16	13	11	9
9	47	35	28	23	42	32	25	21	26	21	17	20	16	14	14	12	10	8
10	44	32	25	20	39	29	23	19	23	19	15	18	15	12	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5005	5005	5005
5°	5015	4912	4928
10°	4980	4825	4817
15°	4920	4720	4677
20°	4840	4590	4536
25°	4745	4451	4363
30°	4630	4298	4206
35°	4523	4158	4062
40°	4413	4010	3916
45°	4289	3884	3788
50°	4172	3746	3674
55°	4029	3616	3540
60°	3875	3468	3404
65°	3713	3314	3250
70°	3527	3103	3093
75°	3237	2899	2899
80°	2857	2653	2687
85°	2502	2488	2620



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	1.0
10°-20°	208.0	2.9
20°-30°	309.4	4.3
30°-40°	366.5	5.1
40°-50°	378.9	5.2
50°-60°	349.0	4.8
60°-70°	282.1	3.9
70°-80°	189.0	2.6
80°-90°	101.3	1.4
90°-100°	112.0	1.6
100°-110°	391.7	5.4
110°-120°	664.0	9.2
120°-130°	832.7	11.5
130°-140°	885.8	12.3
140°-150°	826.5	11.5
150°-160°	667.5	9.2
160°-170°	431.7	6.0
170°-180°	148.9	2.1
0°-30°	590.7	8.2
0°-40°	957.1	13.3
0°-60°	1685.1	23.3
0°-90°	2257.4	31.3
90°-120°	1167.6	16.2
90°-150°	3712.6	51.4
90°-180°	4961.0	68.7
0°-180°	7218.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	775	773	768	774	774	73
15°	740	740	736	740	737	208
25°	672	674	670	673	669	309
35°	582	587	585	587	587	364
45°	479	488	492	497	498	370
55°	368	381	393	401	404	329
65°	254	271	290	300	304	252
75°	140	160	184	198	203	148
85°	42	67	94	110	116	45
90°	13	47	81	103	113	11
95°	76	90	74	96	102	92
105°	348	366	388	403	408	369
115°	646	658	678	687	685	640
125°	915	923	938	945	946	817
135°	1139	1145	1148	1155	1153	878
145°	1320	1321	1321	1326	1322	825
155°	1453	1446	1448	1451	1442	669
165°	1533	1526	1527	1533	1525	433
175°	1568	1561	1562	1570	1561	149
180°	1568	1568	1568	1568	1568	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	776.8	776.5	776.3	776.0	775.7	775.1	774.2	773.2	772.3	771.3	772.3
5°	775.0	774.6	774.3	774.0	773.6	772.9	771.7	770.5	769.3	768.1	769.5
7.5°	768.1	768.0	767.9	767.7	767.6	766.9	765.7	764.5	763.3	762.1	763.2
10°	762.1	762.1	762.1	762.1	762.1	761.4	760.0	758.7	757.3	756.0	757.2
12.5°	753.6	753.7	753.8	754.0	754.1	753.6	752.5	751.5	750.4	749.3	750.2
15°	740.0	740.2	740.4	740.5	740.7	740.2	739.0	737.8	736.7	735.5	736.5
17.5°	722.4	722.7	723.1	723.4	723.8	723.3	722.2	721.0	719.8	718.6	719.4
20°	709.6	710.0	710.3	710.7	711.0	710.6	709.4	708.2	707.0	705.8	706.3
22.5°	695.1	695.7	696.3	696.9	697.5	697.1	695.8	694.5	693.2	691.9	692.5
25°	672.4	672.9	673.4	673.9	674.4	674.2	673.2	672.2	671.1	670.1	670.8
27.5°	647.2	647.9	648.7	649.4	650.2	650.0	648.8	647.7	646.5	645.4	645.8
30°	628.3	629.4	630.4	631.4	632.4	632.4	631.4	630.4	629.4	628.3	628.7
32.5°	611.3	612.2	613.1	614.0	614.8	614.9	614.2	613.4	612.7	611.9	612.3
35°	582.0	583.2	584.4	585.5	586.7	587.1	586.6	586.0	585.5	585.0	585.5
37.5°	552.7	553.8	554.8	555.9	557.0	557.4	557.3	557.1	556.9	556.8	557.4
40°	532.6	534.0	535.3	536.7	538.0	538.6	538.4	538.3	538.1	537.9	538.6
42.5°	510.7	512.5	514.2	516.0	517.8	518.8	519.2	519.6	519.9	520.3	521.1
45°	479.4	481.3	483.1	485.0	486.9	488.2	489.1	489.9	490.7	491.6	492.8
47.5°	447.4	449.1	450.8	452.5	454.3	455.8	457.3	458.7	460.2	461.6	463.4
50°	425.5	427.3	429.2	431.1	432.9	434.8	436.6	438.5	440.3	442.2	444.1
52.5°	402.4	404.6	406.9	409.2	411.4	413.7	416.0	418.2	420.5	422.7	424.7
55°	368.5	371.2	373.9	376.6	379.3	382.0	384.7	387.4	390.1	392.8	394.7
57.5°	333.9	337.1	340.3	343.6	346.8	350.0	353.1	356.2	359.3	362.4	364.5
60°	310.8	314.1	317.5	320.9	324.3	327.6	331.0	334.4	337.8	341.1	343.7
62.5°	288.3	291.6	295.0	298.4	301.8	305.3	308.9	312.6	316.2	319.9	322.7
65°	253.8	257.7	261.5	265.4	269.3	273.3	277.3	281.4	285.4	289.5	292.0
67.5°	221.3	225.0	228.7	232.5	236.2	240.2	244.3	248.4	252.5	256.7	259.7
70°	197.5	201.4	205.3	209.2	213.1	217.2	221.6	226.0	230.4	234.8	238.0
72.5°	174.4	178.5	182.5	186.5	190.5	194.9	199.7	204.5	209.3	214.1	217.6
75°	139.8	144.2	148.6	153.0	157.4	162.3	167.7	173.1	178.5	183.9	187.2
77.5°	106.5	111.6	116.7	121.7	126.8	131.9	137.1	142.3	147.5	152.7	156.4
80°	85.9	90.9	96.0	101.1	106.1	111.5	117.3	123.0	128.7	134.5	138.2
82.5°	67.0	72.3	77.7	83.0	88.4	94.0	99.8	105.7	111.6	117.5	121.0
85°	41.8	47.4	52.9	58.5	64.1	69.8	75.7	81.6	87.5	93.5	97.2
87.5°	23.9	29.8	35.6	41.4	47.2	53.2	59.3	65.4	71.5	77.6	81.7
90°	13.3	20.8	28.3	35.7	43.2	50.7	58.3	65.8	73.3	80.9	86.1
92.5°	28.8	32.4	35.9	39.5	43.0	48.6	56.0	63.5	71.0	78.5	83.5
95°	76.1	79.7	83.4	87.0	90.6	90.4	86.3	82.2	78.1	74.1	79.1
97.5°	147.3	152.6	158.0	163.3	168.6	164.4	150.5	136.6	122.7	108.8	105.1
100°	202.4	206.8	211.1	215.4	219.7	225.1	231.5	238.0	244.4	250.8	215.9
102.5°	258.5	262.8	267.1	271.3	275.6	280.6	286.5	292.4	298.3	304.2	300.3
105°	348.5	352.3	356.0	359.7	363.5	367.9	372.9	378.0	383.1	388.1	391.5
107.5°	442.0	444.3	446.6	448.9	451.2	455.0	460.4	465.8	471.1	476.5	479.9
110°	502.7	504.8	506.8	508.8	510.8	514.5	519.7	525.0	530.2	535.4	537.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	560.4	562.6	564.9	567.1	569.3	572.9	577.8	582.7	587.6	592.5	594.6
115°	646.1	648.6	651.0	653.5	656.0	659.5	664.2	668.8	673.5	678.1	680.1
117.5°	734.8	735.5	736.3	737.0	737.7	740.6	745.8	750.9	756.0	761.2	762.7
120°	790.6	790.8	791.1	791.3	791.6	794.0	798.7	803.4	808.0	812.7	815.0
122.5°	839.3	840.5	841.7	842.9	844.1	846.8	850.9	855.0	859.1	863.2	865.5
125°	915.4	917.0	918.6	920.3	921.9	924.4	927.8	931.2	934.5	937.9	939.6
127.5°	987.3	988.5	989.6	990.7	991.8	993.7	996.3	998.9	1001.5	1004.2	1006.1
130°	1032.0	1033.1	1034.2	1035.3	1036.5	1038.3	1041.0	1043.6	1046.2	1048.8	1050.4
132.5°	1076.0	1077.5	1078.9	1080.4	1081.8	1083.2	1084.5	1085.7	1087.0	1088.2	1090.4
135°	1139.3	1140.7	1142.1	1143.4	1144.8	1145.8	1146.5	1147.2	1147.8	1148.5	1150.2
137.5°	1197.5	1198.7	1199.9	1201.1	1202.3	1203.0	1203.1	1203.2	1203.3	1203.4	1205.5
140°	1235.0	1235.5	1236.0	1236.5	1237.1	1237.3	1237.2	1237.1	1237.0	1236.9	1239.3
142.5°	1269.4	1269.6	1269.7	1269.9	1270.1	1270.4	1270.8	1271.2	1271.6	1272.0	1273.7
145°	1319.8	1320.2	1320.5	1320.9	1321.2	1321.4	1321.4	1321.4	1321.4	1321.4	1322.5
147.5°	1363.2	1363.1	1363.0	1362.9	1362.8	1362.9	1363.2	1363.5	1363.9	1364.2	1364.7
150°	1391.1	1390.6	1390.1	1389.6	1389.1	1389.1	1389.6	1390.1	1390.6	1391.1	1391.6
152.5°	1418.1	1417.0	1415.8	1414.7	1413.5	1413.2	1413.8	1414.3	1414.8	1415.3	1415.8
155°	1452.7	1451.2	1449.6	1448.1	1446.5	1446.0	1446.5	1447.0	1447.6	1448.1	1448.9
157.5°	1479.5	1478.5	1477.6	1476.7	1475.7	1475.3	1475.4	1475.4	1475.5	1475.5	1476.3
160°	1498.1	1496.5	1495.0	1493.4	1491.9	1491.2	1491.5	1491.7	1492.0	1492.2	1493.3
162.5°	1512.9	1511.4	1509.8	1508.3	1506.7	1506.1	1506.3	1506.6	1506.9	1507.1	1508.6
165°	1532.9	1531.4	1529.8	1528.3	1526.7	1526.1	1526.3	1526.6	1526.8	1527.1	1528.7
167.5°	1547.8	1546.2	1544.6	1543.0	1541.4	1540.7	1541.0	1541.2	1541.5	1541.8	1543.6
170°	1556.2	1554.4	1552.5	1550.7	1548.9	1548.2	1548.4	1548.7	1548.9	1549.2	1551.3
172.5°	1561.7	1559.9	1558.1	1556.3	1554.5	1553.8	1554.3	1554.8	1555.2	1555.7	1557.6
175°	1567.8	1566.2	1564.7	1563.1	1561.6	1560.9	1561.2	1561.5	1561.7	1562.0	1564.0
177.5°	1570.6	1569.3	1568.1	1566.9	1565.6	1565.1	1565.3	1565.5	1565.7	1565.9	1567.4
180°	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	773.2	774.2	775.1	775.5	775.4	775.3	775.1	775.0
5°	770.8	772.2	773.5	774.1	774.0	773.8	773.6	773.5
7.5°	764.4	765.6	766.8	767.3	767.1	767.0	766.8	766.6
10°	758.4	759.5	760.7	761.2	761.1	760.9	760.7	760.5
12.5°	751.1	752.0	753.0	753.2	752.7	752.3	751.9	751.4
15°	737.5	738.5	739.5	739.7	739.0	738.3	737.7	737.0
17.5°	720.2	720.9	721.7	721.9	721.5	721.1	720.7	720.3
20°	706.9	707.4	707.9	708.1	708.1	708.1	708.1	708.1
22.5°	693.1	693.8	694.4	694.5	694.1	693.7	693.3	692.9
25°	671.5	672.2	672.8	672.8	671.9	671.1	670.2	669.4
27.5°	646.3	646.8	647.3	647.3	647.0	646.7	646.4	646.1
30°	629.0	629.4	629.7	629.8	629.6	629.4	629.3	629.1
32.5°	612.6	612.9	613.3	613.4	613.2	613.0	612.9	612.7
35°	586.0	586.6	587.1	587.3	587.3	587.3	587.3	587.3
37.5°	558.1	558.8	559.5	559.8	559.7	559.6	559.6	559.5
40°	539.3	540.0	540.6	541.1	541.5	541.8	542.2	542.5
42.5°	521.9	522.7	523.5	524.0	524.1	524.1	524.2	524.3
45°	493.9	495.1	496.3	497.0	497.2	497.3	497.5	497.7
47.5°	465.1	466.8	468.5	469.6	470.0	470.3	470.7	471.1
50°	445.9	447.8	449.6	450.8	451.3	451.8	452.3	452.8
52.5°	426.7	428.7	430.7	431.9	432.3	432.6	433.0	433.4
55°	396.5	398.4	400.2	401.5	402.2	402.9	403.5	404.2
57.5°	366.7	368.8	370.9	372.2	372.8	373.3	373.8	374.3
60°	346.2	348.7	351.3	352.8	353.3	353.8	354.3	354.8
62.5°	325.5	328.3	331.1	332.8	333.4	334.1	334.7	335.4
65°	294.5	297.1	299.6	301.2	301.9	302.6	303.2	303.9
67.5°	262.8	265.9	268.9	270.9	271.8	272.7	273.6	274.4
70°	241.2	244.4	247.6	249.7	250.7	251.7	252.8	253.8
72.5°	221.1	224.5	228.0	230.1	230.9	231.6	232.4	233.1
75°	190.6	194.0	197.4	199.5	200.3	201.2	202.0	202.9
77.5°	160.1	163.9	167.6	169.8	170.4	171.1	171.8	172.5
80°	141.9	145.6	149.3	151.5	152.2	152.9	153.6	154.2
82.5°	124.6	128.2	131.8	134.2	135.4	136.6	137.8	139.0
85°	100.9	104.6	108.3	110.8	112.2	113.5	114.9	116.2
87.5°	85.9	90.0	94.1	96.9	98.2	99.5	100.9	102.2
90°	91.2	96.4	101.6	105.2	107.1	109.1	111.0	113.0
92.5°	88.5	93.6	98.6	101.9	103.5	105.0	106.5	108.1
95°	84.1	89.1	94.1	97.2	98.4	99.5	100.7	101.9
97.5°	101.4	97.6	93.9	92.6	93.7	94.9	96.0	97.2
100°	181.0	146.0	111.1	93.6	93.6	93.6	93.6	93.5
102.5°	296.5	292.6	288.7	278.5	262.0	245.4	228.9	212.3
105°	394.9	398.2	401.6	403.8	404.7	405.6	406.5	407.5
107.5°	483.3	486.7	490.1	491.9	492.2	492.5	492.7	493.0
110°	540.3	542.7	545.2	547.1	548.6	550.0	551.4	552.9



TEST NUMBER: P333199

CATALOG NUMBER: S125DIP-S610D1205U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	596.7	598.8	600.9	602.3	603.2	604.0	604.8	605.6
115°	682.1	684.1	686.2	686.9	686.4	685.8	685.3	684.7
117.5°	764.2	765.8	767.3	768.3	768.8	769.2	769.7	770.2
120°	817.4	819.7	822.1	823.1	822.8	822.6	822.3	822.0
122.5°	867.7	869.9	872.1	873.0	872.5	872.0	871.5	871.0
125°	941.3	942.9	944.6	945.5	945.5	945.6	945.7	945.7
127.5°	1008.0	1010.0	1011.9	1012.4	1011.4	1010.5	1009.6	1008.7
130°	1052.0	1053.6	1055.2	1055.8	1055.3	1054.9	1054.4	1054.0
132.5°	1092.6	1094.9	1097.1	1097.9	1097.3	1096.7	1096.1	1095.6
135°	1151.9	1153.5	1155.2	1155.7	1155.0	1154.3	1153.6	1152.9
137.5°	1207.6	1209.7	1211.8	1212.5	1211.8	1211.2	1210.5	1209.8
140°	1241.7	1244.0	1246.4	1247.2	1246.3	1245.4	1244.5	1243.7
142.5°	1275.3	1277.0	1278.7	1279.1	1278.3	1277.4	1276.5	1275.6
145°	1323.6	1324.7	1325.8	1325.9	1325.1	1324.2	1323.3	1322.4
147.5°	1365.3	1365.9	1366.5	1366.0	1364.4	1362.9	1361.3	1359.8
150°	1392.2	1392.7	1393.2	1392.5	1390.6	1388.7	1386.8	1384.9
152.5°	1416.3	1416.9	1417.4	1416.7	1414.9	1413.1	1411.2	1409.4
155°	1449.6	1450.4	1451.2	1450.5	1448.5	1446.4	1444.3	1442.3
157.5°	1477.2	1478.0	1478.8	1478.2	1476.1	1474.1	1472.0	1469.9
160°	1494.3	1495.3	1496.4	1495.9	1493.8	1491.7	1489.7	1487.6
162.5°	1510.0	1511.5	1512.9	1512.5	1510.2	1507.9	1505.7	1503.4
165°	1530.2	1531.8	1533.3	1533.0	1531.0	1528.9	1526.8	1524.8
167.5°	1545.5	1547.3	1549.2	1549.0	1546.6	1544.3	1542.0	1539.7
170°	1553.3	1555.4	1557.5	1557.3	1555.0	1552.7	1550.4	1548.0
172.5°	1559.4	1561.3	1563.1	1562.9	1560.6	1558.3	1555.9	1553.6
175°	1566.1	1568.2	1570.2	1570.1	1567.8	1565.5	1563.1	1560.8
177.5°	1568.8	1570.3	1571.7	1571.6	1570.0	1568.3	1566.6	1565.0
180°	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8

(END OF REPORT)