

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: P333200

Luminaire Tested: **S125DIP-S610D1205U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333200
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: S125DIP-S610D1205U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6570.4 lumens
Efficiency: N/A
Efficacy: 133.0 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

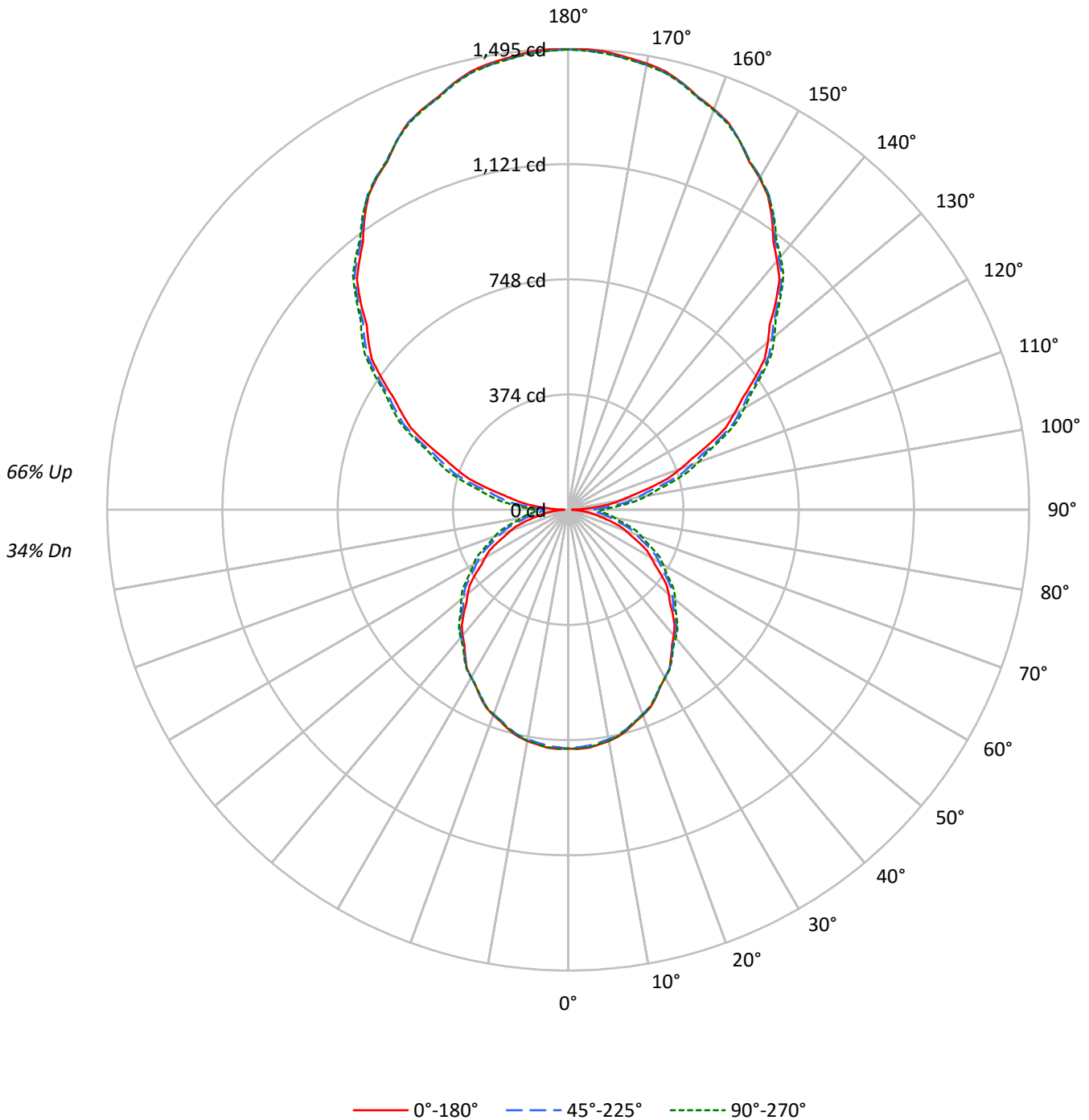
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	93	93	93	93	75	75	75	58	58	58	42	42	42	34
1	94	89	85	82	84	81	77	74	65	62	60	50	48	47	36	35	34	28
2	85	78	71	66	77	70	65	60	56	52	49	43	41	39	31	30	28	23
3	78	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19
4	71	60	52	46	64	54	48	42	44	39	35	34	30	28	25	22	20	16
5	65	53	45	39	58	48	41	36	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	54	43	36	31	35	30	26	27	23	21	20	17	16	12
7	55	43	35	30	49	39	32	27	32	26	23	25	21	18	18	16	14	11
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	17	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	15	13	11	9
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10	8

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	1.1
10°-20°	208.0	3.2
20°-30°	309.4	4.7
30°-40°	366.5	5.6
40°-50°	378.9	5.8
50°-60°	349.0	5.3
60°-70°	282.1	4.3
70°-80°	189.0	2.9
80°-90°	101.3	1.5
90°-100°	155.0	2.4
100°-110°	335.9	5.1
110°-120°	527.4	8.0
120°-130°	673.8	10.3
130°-140°	744.4	11.3
140°-150°	724.4	11.0
150°-160°	607.3	9.2
160°-170°	403.7	6.1
170°-180°	141.3	2.2
0°-30°	590.7	9.0
0°-40°	957.1	14.6
0°-60°	1685.1	25.6
0°-90°	2257.4	34.4
90°-120°	1018.3	15.5
90°-150°	3160.8	48.1
90°-180°	4313.0	65.6
0°-180°	6570.4	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	12
95°	85	108	145	169	177	88
105°	272	290	320	341	350	290
115°	505	516	537	549	553	500
125°	734	741	756	766	769	657
135°	952	958	965	974	974	734
145°	1152	1156	1160	1163	1163	720
155°	1318	1318	1319	1323	1318	607
165°	1433	1431	1432	1436	1429	404
175°	1490	1485	1485	1491	1484	141
180°	1493	1493	1493	1493	1493	



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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°	39.1	45.5	52.0	58.4	64.8	72.1	80.2	88.3	96.4	104.5	109.9
95°	85.4	90.3	95.2	100.1	105.0	111.7	120.0	128.3	136.6	144.9	150.5
97.5°	134.5	138.6	142.8	146.9	151.1	157.7	166.8	175.9	185.0	194.1	199.4
100°	171.0	174.6	178.1	181.7	185.2	191.4	200.1	208.9	217.7	226.4	232.3
102.5°	210.4	214.7	219.0	223.3	227.6	233.3	240.3	247.2	254.2	261.2	267.1
105°	271.8	275.8	279.8	283.8	287.8	293.1	299.7	306.3	312.9	319.5	324.4
107.5°	339.7	343.3	346.8	350.4	354.0	358.8	364.9	370.9	377.0	383.0	387.2
110°	386.5	389.8	393.1	396.4	399.7	404.1	409.7	415.2	420.7	426.2	430.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	434.8	437.1	439.4	441.7	444.0	447.9	453.5	459.1	464.6	470.2	473.6
115°	505.4	507.6	509.8	512.0	514.3	517.8	522.7	527.6	532.5	537.4	540.2
117.5°	576.2	577.5	578.7	579.9	581.2	584.1	588.7	593.4	598.0	602.6	605.7
120°	620.8	622.6	624.4	626.2	628.0	631.0	635.1	639.3	643.4	647.6	650.4
122.5°	668.6	669.3	670.0	670.7	671.4	673.9	678.4	682.8	687.2	691.6	694.2
125°	734.0	735.3	736.7	738.1	739.5	742.0	745.6	749.3	752.9	756.5	758.7
127.5°	802.9	803.6	804.3	805.1	805.8	807.7	810.7	813.8	816.9	820.0	822.2
130°	844.8	845.9	847.0	848.1	849.3	851.3	854.1	857.0	859.9	862.8	864.9
132.5°	886.0	888.1	890.2	892.2	894.3	896.2	897.9	899.7	901.4	903.1	905.2
135°	952.1	953.5	954.8	956.2	957.6	959.0	960.4	961.9	963.3	964.8	967.0
137.5°	1014.2	1015.6	1016.9	1018.3	1019.7	1020.9	1022.1	1023.2	1024.3	1025.5	1027.8
140°	1053.6	1054.9	1056.2	1057.4	1058.7	1059.9	1060.8	1061.7	1062.7	1063.6	1066.0
142.5°	1093.5	1094.5	1095.4	1096.4	1097.3	1098.3	1099.3	1100.4	1101.4	1102.4	1104.3
145°	1152.3	1153.2	1154.1	1154.9	1155.8	1156.6	1157.4	1158.2	1158.9	1159.7	1160.6
147.5°	1206.0	1206.5	1207.1	1207.7	1208.2	1208.8	1209.5	1210.1	1210.7	1211.3	1212.2
150°	1242.2	1242.0	1241.7	1241.5	1241.2	1241.6	1242.6	1243.6	1244.7	1245.7	1245.7
152.5°	1272.0	1272.3	1272.7	1273.1	1273.4	1273.8	1274.2	1274.6	1275.1	1275.5	1276.1
155°	1317.8	1317.8	1317.8	1317.8	1317.8	1317.9	1318.2	1318.4	1318.7	1318.9	1320.0
157.5°	1358.7	1358.1	1357.5	1357.0	1356.4	1356.2	1356.5	1356.8	1357.0	1357.3	1358.3
160°	1382.8	1382.1	1381.3	1380.5	1379.7	1379.5	1379.7	1380.0	1380.3	1380.5	1381.5
162.5°	1404.2	1403.7	1403.1	1402.5	1401.9	1401.7	1401.7	1401.8	1401.8	1401.9	1403.1
165°	1432.8	1432.3	1431.8	1431.3	1430.7	1430.6	1430.9	1431.1	1431.4	1431.6	1432.7
167.5°	1457.0	1455.9	1454.9	1453.9	1452.8	1452.3	1452.3	1452.3	1452.3	1452.3	1453.9
170°	1470.0	1469.0	1467.9	1466.9	1465.9	1465.3	1465.3	1465.3	1465.3	1465.3	1466.9
172.5°	1479.3	1478.3	1477.2	1476.2	1475.2	1474.6	1474.6	1474.6	1474.6	1474.6	1476.2
175°	1489.7	1488.7	1487.7	1486.6	1485.6	1485.1	1485.1	1485.1	1485.1	1485.1	1486.6
177.5°	1495.1	1494.3	1493.4	1492.6	1491.8	1491.3	1491.1	1490.9	1490.6	1490.4	1491.7
180°	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2



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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°	115.4	120.9	126.3	129.9	131.7	133.4	135.2	136.9
95°	156.0	161.5	167.0	170.6	172.3	174.0	175.7	177.4
97.5°	204.6	209.9	215.1	218.5	219.9	221.4	222.9	224.3
100°	238.2	244.0	249.9	253.6	255.1	256.7	258.2	259.7
102.5°	273.1	279.0	284.9	288.8	290.5	292.3	294.0	295.7
105°	329.4	334.3	339.2	342.7	344.6	346.6	348.5	350.5
107.5°	391.3	395.4	399.5	402.1	403.1	404.1	405.1	406.0
110°	434.1	438.1	442.1	444.5	445.5	446.4	447.3	448.2



TEST NUMBER: P333200

CATALOG NUMBER: S125DIP-S610D1205U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	477.1	480.5	483.9	486.0	486.7	487.5	488.2	488.9
115°	543.0	545.8	548.6	550.3	551.1	551.8	552.6	553.4
117.5°	608.7	611.8	614.9	616.5	616.6	616.7	616.8	617.0
120°	653.3	656.2	659.1	660.5	660.5	660.4	660.4	660.4
122.5°	696.7	699.2	701.7	703.1	703.3	703.5	703.7	703.8
125°	760.9	763.1	765.3	766.7	767.2	767.8	768.4	769.0
127.5°	824.5	826.7	828.9	830.3	830.8	831.2	831.7	832.1
130°	867.0	869.1	871.2	872.4	872.7	873.1	873.4	873.7
132.5°	907.3	909.4	911.5	912.6	912.6	912.5	912.5	912.5
135°	969.2	971.4	973.5	974.6	974.4	974.2	974.0	973.8
137.5°	1030.1	1032.4	1034.7	1035.5	1034.9	1034.3	1033.7	1033.1
140°	1068.4	1070.8	1073.1	1074.0	1073.4	1072.8	1072.2	1071.5
142.5°	1106.2	1108.1	1110.0	1110.6	1110.0	1109.4	1108.8	1108.2
145°	1161.4	1162.3	1163.1	1163.5	1163.4	1163.3	1163.2	1163.1
147.5°	1213.1	1214.0	1214.9	1214.6	1213.1	1211.7	1210.2	1208.8
150°	1245.7	1245.7	1245.7	1245.5	1245.2	1244.8	1244.5	1244.2
152.5°	1276.7	1277.3	1277.9	1277.8	1276.9	1276.0	1275.1	1274.2
155°	1321.0	1322.0	1323.1	1322.9	1321.6	1320.3	1319.1	1317.8
157.5°	1359.3	1360.4	1361.4	1361.1	1359.4	1357.7	1356.0	1354.3
160°	1382.6	1383.6	1384.6	1384.5	1383.2	1381.9	1380.6	1379.4
162.5°	1404.4	1405.6	1406.9	1406.7	1405.2	1403.7	1402.2	1400.7
165°	1433.7	1434.7	1435.8	1435.5	1434.0	1432.4	1430.9	1429.3
167.5°	1455.4	1457.0	1458.5	1458.5	1456.9	1455.3	1453.7	1452.1
170°	1468.4	1470.0	1471.5	1471.4	1469.6	1467.8	1466.0	1464.2
172.5°	1477.7	1479.3	1480.8	1480.8	1479.2	1477.6	1476.0	1474.4
175°	1488.2	1489.7	1491.3	1491.2	1489.4	1487.6	1485.7	1483.9
177.5°	1492.9	1494.2	1495.4	1495.3	1493.9	1492.4	1491.0	1489.5
180°	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2

(END OF REPORT)