

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: P333190

Luminaire Tested: **S125DIP-S610D1035U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333190
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-S610D1035U835-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6539.4 lumens
Efficiency: N/A
Efficacy: 147.0 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

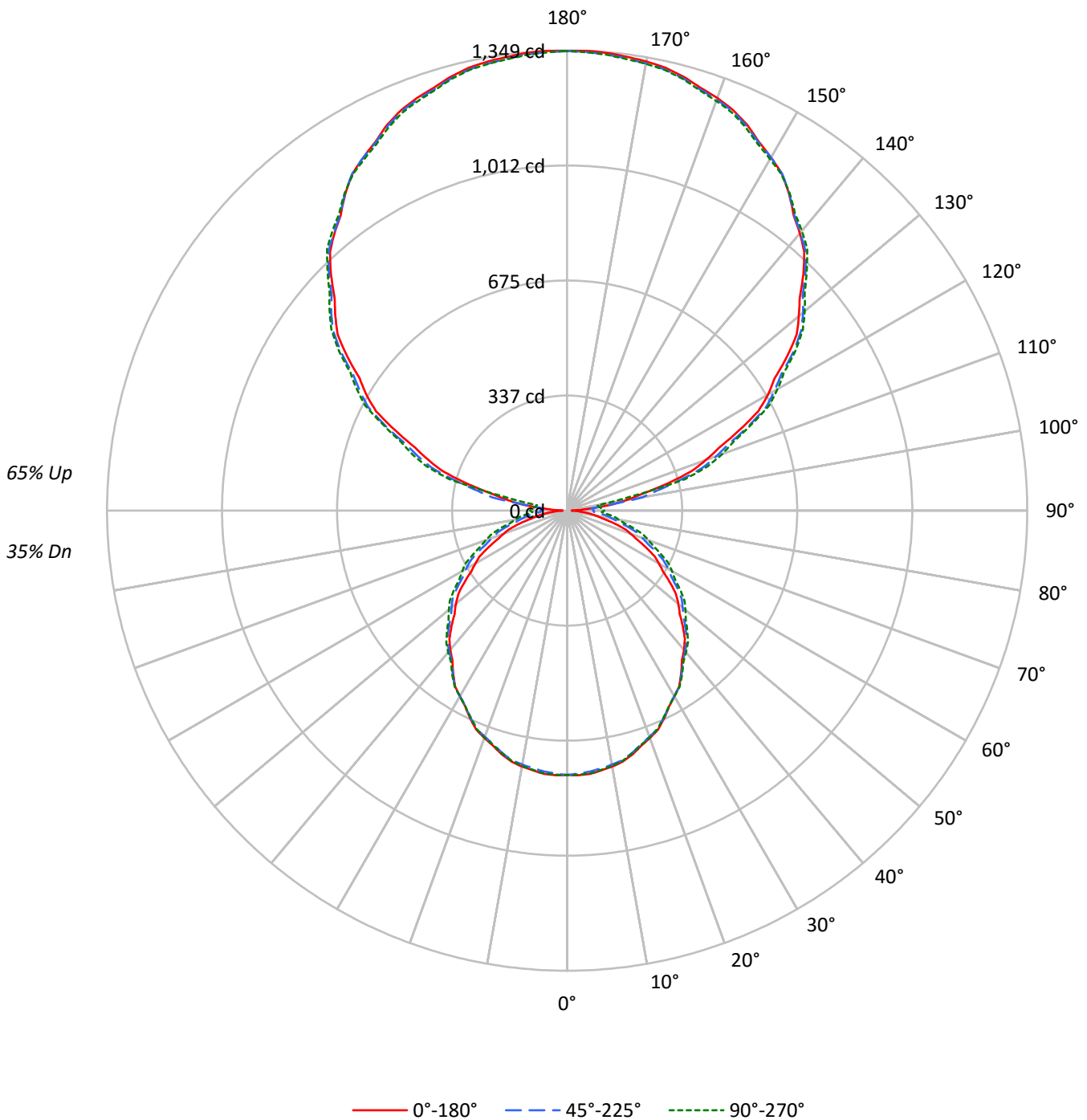
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42	35
1	94	89	85	82	84	81	77	74	65	62	60	50	48	47	36	35	34	28
2	85	78	72	66	77	70	65	61	56	53	49	43	41	39	32	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	21	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	24	21	20	18	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°	100.8	1.5
90°-100°	103.9	1.6
100°-110°	342.2	5.2
110°-120°	574.3	8.8
120°-130°	717.6	11.0
130°-140°	762.0	11.7
140°-150°	710.3	10.9
150°-160°	573.4	8.8
160°-170°	370.9	5.7
170°-180°	127.9	2.0
0°-30°	590.7	9.0
0°-40°	957.1	14.6
0°-60°	1685.1	25.8
0°-90°	2256.9	34.5
90°-120°	1020.4	15.6
90°-150°	3210.2	49.1
90°-180°	4282.0	65.5
0°-180°	6539.4	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	46	78	100	109	10
95°	67	82	71	92	98	80
105°	300	317	339	354	359	318
115°	556	567	587	596	595	551
125°	787	794	808	816	817	702
135°	979	984	988	995	993	754
145°	1134	1135	1135	1140	1137	709
155°	1248	1243	1244	1246	1239	575
165°	1317	1311	1312	1317	1310	372
175°	1347	1341	1342	1349	1341	128
180°	1347	1347	1347	1347	1347	



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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	29.7	35.4	41.2	46.9	52.8	58.9	64.9	71.0	77.0	81.2
90°	13.2	20.3	27.5	34.7	41.9	49.1	56.4	63.7	71.0	78.3	83.3
92.5°	26.3	30.1	33.8	37.6	41.3	46.8	54.1	61.3	68.6	75.8	80.7
95°	66.8	70.5	74.2	78.0	81.7	82.2	79.5	76.8	74.1	71.4	76.3
97.5°	127.8	132.9	138.1	143.2	148.4	145.4	134.2	123.1	111.9	100.8	98.1
100°	175.1	179.3	183.5	187.7	191.9	197.2	203.5	209.8	216.1	222.4	192.8
102.5°	223.2	227.3	231.5	235.6	239.7	244.7	250.5	256.3	262.1	267.9	265.0
105°	300.4	304.0	307.6	311.2	314.7	319.1	324.1	329.2	334.3	339.3	342.7
107.5°	380.6	382.8	385.1	387.4	389.7	393.5	398.8	404.2	409.5	414.8	418.2
110°	432.7	434.7	436.7	438.7	440.8	444.4	449.5	454.7	459.9	465.1	467.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	482.2	484.3	486.5	488.6	490.8	494.3	499.2	504.0	508.9	513.7	516.0
115°	555.7	558.0	560.3	562.6	564.9	568.3	572.9	577.6	582.2	586.8	588.9
117.5°	631.8	632.6	633.3	634.0	634.8	637.6	642.6	647.6	652.6	657.6	659.3
120°	679.8	680.0	680.3	680.6	680.9	683.3	687.9	692.4	697.0	701.5	703.9
122.5°	721.5	722.6	723.6	724.7	725.8	728.4	732.4	736.5	740.6	744.6	746.9
125°	786.8	788.2	789.6	791.0	792.4	794.8	798.1	801.5	804.9	808.3	810.1
127.5°	848.6	849.5	850.5	851.4	852.3	854.1	856.8	859.4	862.0	864.7	866.7
130°	886.9	887.9	888.8	889.7	890.7	892.4	895.0	897.6	900.2	902.8	904.5
132.5°	924.7	925.9	927.2	928.4	929.7	931.0	932.3	933.6	935.0	936.3	938.5
135°	979.0	980.2	981.3	982.5	983.7	984.6	985.4	986.1	986.8	987.6	989.3
137.5°	1029.0	1030.0	1031.0	1032.0	1033.1	1033.7	1033.8	1034.0	1034.2	1034.4	1036.4
140°	1061.1	1061.6	1062.0	1062.5	1062.9	1063.1	1063.0	1063.0	1062.9	1062.9	1065.2
142.5°	1090.7	1090.8	1090.9	1091.1	1091.2	1091.4	1091.8	1092.1	1092.5	1092.8	1094.5
145°	1134.0	1134.3	1134.6	1134.8	1135.1	1135.3	1135.3	1135.3	1135.3	1135.3	1136.3
147.5°	1171.2	1171.1	1171.0	1170.9	1170.8	1170.9	1171.2	1171.5	1171.7	1172.0	1172.5
150°	1195.2	1194.7	1194.3	1193.8	1193.4	1193.4	1193.8	1194.3	1194.7	1195.2	1195.6
152.5°	1218.3	1217.4	1216.4	1215.4	1214.4	1214.2	1214.6	1215.0	1215.5	1215.9	1216.4
155°	1248.1	1246.8	1245.4	1244.1	1242.8	1242.3	1242.8	1243.2	1243.6	1244.1	1244.8
157.5°	1271.0	1270.2	1269.5	1268.7	1267.9	1267.5	1267.5	1267.6	1267.6	1267.7	1268.4
160°	1287.0	1285.7	1284.4	1283.0	1281.7	1281.1	1281.4	1281.6	1281.8	1282.0	1282.9
162.5°	1299.8	1298.5	1297.1	1295.8	1294.5	1293.9	1294.1	1294.4	1294.6	1294.8	1296.1
165°	1317.0	1315.6	1314.3	1313.0	1311.7	1311.1	1311.3	1311.5	1311.8	1312.0	1313.3
167.5°	1329.8	1328.4	1327.0	1325.6	1324.3	1323.7	1323.9	1324.1	1324.3	1324.6	1326.2
170°	1336.9	1335.4	1333.8	1332.3	1330.7	1330.1	1330.3	1330.5	1330.7	1331.0	1332.7
172.5°	1341.7	1340.2	1338.6	1337.1	1335.5	1335.0	1335.3	1335.7	1336.1	1336.5	1338.1
175°	1346.9	1345.6	1344.3	1342.9	1341.6	1341.1	1341.3	1341.5	1341.7	1341.9	1343.7
177.5°	1349.3	1348.3	1347.2	1346.1	1345.1	1344.6	1344.8	1345.0	1345.2	1345.3	1346.6
180°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9



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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°	85.3	89.4	93.5	96.2	97.5	98.8	100.1	101.4
90°	88.3	93.3	98.2	101.7	103.5	105.4	107.2	109.1
92.5°	85.6	90.4	95.3	98.5	99.9	101.4	102.9	104.4
95°	81.1	85.9	90.7	93.7	94.9	96.1	97.3	98.5
97.5°	95.4	92.7	89.9	89.2	90.3	91.5	92.6	93.8
100°	163.3	133.8	104.3	89.6	89.7	89.9	90.0	90.1
102.5°	262.2	259.3	256.5	248.0	233.9	219.9	205.8	191.7
105°	346.1	349.5	352.8	355.0	356.0	356.9	357.9	358.8
107.5°	421.5	424.9	428.3	430.2	430.6	431.0	431.3	431.7
110°	470.1	472.7	475.2	477.2	478.6	480.0	481.4	482.8



TEST NUMBER: P333190

CATALOG NUMBER: S125DIP-S610D1035U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	518.2	520.4	522.7	524.2	525.1	526.0	526.8	527.7
115°	591.1	593.2	595.4	596.3	596.0	595.7	595.3	595.0
117.5°	661.0	662.8	664.5	665.6	666.2	666.8	667.3	667.9
120°	706.4	708.8	711.2	712.4	712.3	712.2	712.1	712.0
122.5°	749.2	751.5	753.8	754.8	754.5	754.2	754.0	753.7
125°	811.9	813.7	815.5	816.5	816.7	816.9	817.0	817.2
127.5°	868.7	870.7	872.7	873.4	872.7	872.1	871.4	870.7
130°	906.2	907.9	909.6	910.3	910.0	909.8	909.5	909.2
132.5°	940.8	943.0	945.2	946.1	945.7	945.3	944.9	944.5
135°	991.1	992.8	994.6	995.2	994.7	994.2	993.7	993.3
137.5°	1038.5	1040.6	1042.7	1043.5	1043.0	1042.5	1042.1	1041.6
140°	1067.5	1069.8	1072.1	1072.9	1072.3	1071.6	1070.9	1070.3
142.5°	1096.2	1097.9	1099.5	1100.0	1099.4	1098.7	1098.1	1097.4
145°	1137.4	1138.5	1139.5	1139.7	1139.1	1138.4	1137.8	1137.1
147.5°	1173.1	1173.6	1174.1	1173.8	1172.5	1171.2	1169.9	1168.6
150°	1196.1	1196.5	1196.9	1196.4	1194.8	1193.1	1191.5	1189.9
152.5°	1216.8	1217.3	1217.7	1217.1	1215.6	1214.0	1212.5	1210.9
155°	1245.4	1246.1	1246.8	1246.2	1244.4	1242.6	1240.9	1239.1
157.5°	1269.1	1269.8	1270.5	1270.0	1268.2	1266.4	1264.6	1262.9
160°	1283.8	1284.7	1285.6	1285.1	1283.4	1281.6	1279.8	1278.0
162.5°	1297.3	1298.5	1299.8	1299.4	1297.5	1295.5	1293.6	1291.6
165°	1314.6	1316.0	1317.3	1317.1	1315.3	1313.5	1311.8	1310.0
167.5°	1327.8	1329.4	1331.0	1330.8	1328.8	1326.8	1324.8	1322.8
170°	1334.5	1336.3	1338.1	1337.9	1335.9	1334.0	1332.0	1330.0
172.5°	1339.7	1341.3	1342.9	1342.7	1340.7	1338.7	1336.7	1334.8
175°	1345.5	1347.3	1349.0	1348.9	1346.9	1344.9	1342.9	1340.9
177.5°	1347.8	1349.1	1350.3	1350.2	1348.8	1347.4	1346.0	1344.5
180°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9

(END OF REPORT)