

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: P333199-935

Luminaire Tested: **S125DIP-S610D1205U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333199-935
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-S610D1205U935-4F0-1E-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: 6214.7 lumens
Efficiency: N/A
Efficacy: 125.8 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

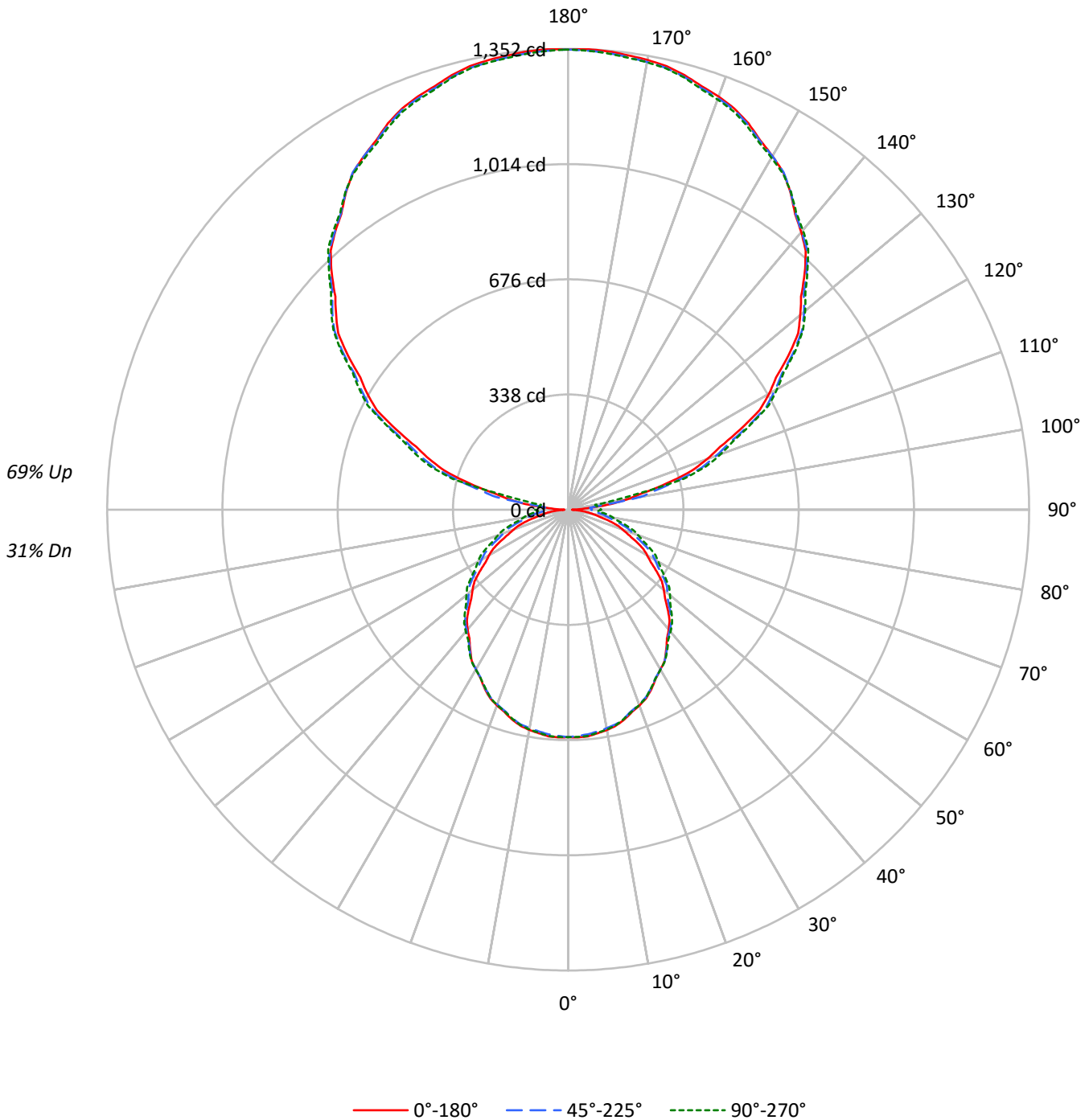
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4310	4310	4310
5°	4318	4229	4243
10°	4288	4154	4148
15°	4236	4064	4027
20°	4168	3952	3906
25°	4086	3833	3757
30°	3987	3701	3622
35°	3894	3580	3497
40°	3800	3452	3372
45°	3693	3344	3261
50°	3592	3225	3163
55°	3469	3114	3048
60°	3336	2986	2931
65°	3196	2854	2799
70°	3036	2672	2663
75°	2788	2496	2496
80°	2461	2284	2314
85°	2155	2142	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.0
10°-20°	179.1	2.9
20°-30°	266.4	4.3
30°-40°	315.5	5.1
40°-50°	326.2	5.2
50°-60°	300.5	4.8
60°-70°	242.9	3.9
70°-80°	162.7	2.6
80°-90°	87.2	1.4
90°-100°	96.4	1.6
100°-110°	337.2	5.4
110°-120°	571.7	9.2
120°-130°	717.0	11.5
130°-140°	762.7	12.3
140°-150°	711.6	11.5
150°-160°	574.7	9.2
160°-170°	371.7	6.0
170°-180°	128.2	2.1
0°-30°	508.6	8.2
0°-40°	824.1	13.3
0°-60°	1450.8	23.3
0°-90°	1943.6	31.3
90°-120°	1005.3	16.2
90°-150°	3196.6	51.4
90°-180°	4271.0	68.7
0°-180°	6214.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	667	666	661	666	666	63
15°	637	638	633	637	635	179
25°	579	581	577	579	576	266
35°	501	505	504	506	506	313
45°	413	420	423	428	428	318
55°	317	328	338	345	348	284
65°	218	234	249	259	262	217
75°	120	138	158	171	175	128
85°	36	58	80	94	100	38
90°	12	40	70	89	97	9
95°	66	78	64	82	88	79
105°	300	315	334	347	351	318
115°	556	566	584	591	590	551
125°	788	795	808	814	814	704
135°	981	986	989	995	993	756
145°	1136	1138	1138	1142	1139	710
155°	1251	1245	1247	1249	1242	576
165°	1320	1314	1315	1320	1313	373
175°	1350	1344	1345	1352	1344	128
180°	1350	1350	1350	1350	1350	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	668.8	668.6	668.4	668.1	667.9	667.4	666.6	665.7	665.0	664.1	665.0
5°	667.3	666.9	666.7	666.4	666.1	665.5	664.4	663.4	662.4	661.3	662.5
7.5°	661.3	661.2	661.2	661.0	660.9	660.3	659.3	658.2	657.2	656.2	657.1
10°	656.2	656.2	656.2	656.2	656.2	655.6	654.4	653.2	652.0	650.9	651.9
12.5°	648.8	648.9	649.0	649.2	649.3	648.8	647.9	647.0	646.1	645.1	645.9
15°	637.1	637.3	637.5	637.6	637.7	637.3	636.3	635.2	634.3	633.3	634.1
17.5°	622.0	622.2	622.6	622.8	623.2	622.8	621.8	620.8	619.7	618.7	619.4
20°	611.0	611.3	611.6	611.9	612.2	611.8	610.8	609.8	608.7	607.7	608.1
22.5°	598.5	599.0	599.5	600.0	600.5	600.2	599.1	598.0	596.8	595.7	596.2
25°	578.9	579.4	579.8	580.2	580.7	580.5	579.6	578.8	577.8	577.0	577.6
27.5°	557.2	557.8	558.5	559.1	559.8	559.6	558.6	557.7	556.6	555.7	556.0
30°	541.0	541.9	542.8	543.6	544.5	544.5	543.6	542.8	541.9	541.0	541.3
32.5°	526.3	527.1	527.9	528.7	529.3	529.4	528.8	528.1	527.5	526.8	527.2
35°	501.1	502.1	503.2	504.1	505.1	505.5	505.1	504.5	504.1	503.7	504.1
37.5°	475.9	476.8	477.7	478.6	479.6	479.9	479.8	479.7	479.5	479.4	479.9
40°	458.6	459.8	460.9	462.1	463.2	463.7	463.6	463.5	463.3	463.1	463.7
42.5°	439.7	441.3	442.7	444.3	445.8	446.7	447.0	447.4	447.6	448.0	448.7
45°	412.8	414.4	415.9	417.6	419.2	420.3	421.1	421.8	422.5	423.3	424.3
47.5°	385.2	386.7	388.1	389.6	391.2	392.4	393.7	394.9	396.2	397.4	399.0
50°	366.4	367.9	369.5	371.2	372.7	374.4	375.9	377.5	379.1	380.7	382.4
52.5°	346.5	348.4	350.3	352.3	354.2	356.2	358.2	360.1	362.1	363.9	365.7
55°	317.3	319.6	321.9	324.3	326.6	328.9	331.2	333.6	335.9	338.2	339.8
57.5°	287.5	290.2	293.0	295.8	298.6	301.4	304.0	306.7	309.4	312.0	313.8
60°	267.6	270.4	273.4	276.3	279.2	282.1	285.0	287.9	290.8	293.7	295.9
62.5°	248.2	251.1	254.0	256.9	259.8	262.9	266.0	269.1	272.2	275.4	277.8
65°	218.5	221.9	225.2	228.5	231.9	235.3	238.8	242.3	245.7	249.3	251.4
67.5°	190.5	193.7	196.9	200.2	203.4	206.8	210.3	213.9	217.4	221.0	223.6
70°	170.0	173.4	176.8	180.1	183.5	187.0	190.8	194.6	198.4	202.2	204.9
72.5°	150.2	153.7	157.1	160.6	164.0	167.8	171.9	176.1	180.2	184.3	187.4
75°	120.4	124.2	127.9	131.7	135.5	139.7	144.4	149.0	153.7	158.3	161.2
77.5°	91.7	96.1	100.5	104.8	109.2	113.6	118.0	122.5	127.0	131.5	134.7
80°	74.0	78.3	82.7	87.0	91.4	96.0	101.0	105.9	110.8	115.8	119.0
82.5°	57.7	62.3	66.9	71.5	76.1	80.9	85.9	91.0	96.1	101.2	104.2
85°	36.0	40.8	45.5	50.4	55.2	60.1	65.2	70.3	75.3	80.5	83.7
87.5°	20.6	25.7	30.7	35.6	40.6	45.8	51.1	56.3	61.6	66.8	70.3
90°	11.5	17.9	24.4	30.7	37.2	43.7	50.2	56.7	63.1	69.7	74.1
92.5°	24.8	27.9	30.9	34.0	37.0	41.8	48.2	54.7	61.1	67.6	71.9
95°	65.5	68.6	71.8	74.9	78.0	77.8	74.3	70.8	67.2	63.8	68.1
97.5°	126.8	131.4	136.0	140.6	145.2	141.5	129.6	117.6	105.6	93.7	90.5
100°	174.3	178.1	181.8	185.5	189.2	193.8	199.3	204.9	210.4	215.9	185.9
102.5°	222.6	226.3	230.0	233.6	237.3	241.6	246.7	251.8	256.8	261.9	258.6
105°	300.1	303.3	306.5	309.7	313.0	316.8	321.1	325.5	329.8	334.2	337.1
107.5°	380.6	382.5	384.5	386.5	388.5	391.8	396.4	401.1	405.6	410.3	413.2
110°	432.8	434.6	436.4	438.1	439.8	443.0	447.5	452.0	456.5	461.0	463.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	482.5	484.4	486.4	488.3	490.2	493.3	497.5	501.7	505.9	510.1	512.0
115°	556.3	558.4	560.5	562.7	564.8	567.8	571.9	575.8	579.9	583.8	585.6
117.5°	632.7	633.3	634.0	634.6	635.2	637.7	642.1	646.5	650.9	655.4	656.7
120°	680.7	680.9	681.1	681.3	681.6	683.6	687.7	691.7	695.7	699.7	701.7
122.5°	722.6	723.7	724.7	725.7	726.8	729.1	732.6	736.2	739.7	743.2	745.2
125°	788.2	789.5	790.9	792.4	793.8	795.9	798.8	801.8	804.6	807.5	809.0
127.5°	850.1	851.1	852.0	853.0	853.9	855.6	857.8	860.1	862.3	864.6	866.3
130°	888.6	889.5	890.4	891.4	892.4	894.0	896.3	898.5	900.8	903.0	904.4
132.5°	926.4	927.7	928.9	930.2	931.4	932.6	933.8	934.8	935.9	936.9	938.8
135°	980.9	982.1	983.3	984.5	985.7	986.5	987.1	987.7	988.3	988.9	990.3
137.5°	1031.0	1032.1	1033.1	1034.1	1035.2	1035.8	1035.9	1036.0	1036.0	1036.1	1037.9
140°	1063.3	1063.8	1064.2	1064.6	1065.1	1065.3	1065.2	1065.1	1065.1	1065.0	1067.0
142.5°	1093.0	1093.1	1093.2	1093.4	1093.6	1093.8	1094.2	1094.5	1094.8	1095.2	1096.7
145°	1136.3	1136.7	1137.0	1137.3	1137.6	1137.7	1137.7	1137.7	1137.7	1137.7	1138.7
147.5°	1173.7	1173.6	1173.5	1173.5	1173.4	1173.5	1173.7	1174.0	1174.3	1174.6	1175.0
150°	1197.7	1197.3	1196.9	1196.4	1196.0	1196.0	1196.4	1196.9	1197.3	1197.7	1198.2
152.5°	1221.0	1220.0	1219.0	1218.1	1217.0	1216.8	1217.3	1217.7	1218.1	1218.6	1219.0
155°	1250.8	1249.5	1248.1	1246.8	1245.4	1245.0	1245.4	1245.9	1246.4	1246.8	1247.5
157.5°	1273.8	1273.0	1272.2	1271.4	1270.6	1270.2	1270.3	1270.3	1270.4	1270.4	1271.1
160°	1289.9	1288.5	1287.2	1285.8	1284.5	1283.9	1284.2	1284.4	1284.6	1284.8	1285.7
162.5°	1302.6	1301.3	1299.9	1298.6	1297.3	1296.8	1296.9	1297.2	1297.4	1297.6	1298.9
165°	1319.8	1318.5	1317.2	1315.9	1314.5	1314.0	1314.1	1314.4	1314.6	1314.8	1316.2
167.5°	1332.7	1331.3	1329.9	1328.5	1327.1	1326.5	1326.8	1327.0	1327.2	1327.5	1329.0
170°	1339.9	1338.3	1336.7	1335.2	1333.6	1333.0	1333.2	1333.4	1333.6	1333.9	1335.7
172.5°	1344.6	1343.1	1341.5	1340.0	1338.4	1337.8	1338.3	1338.7	1339.0	1339.5	1341.1
175°	1349.9	1348.5	1347.2	1345.8	1344.5	1343.9	1344.2	1344.5	1344.6	1344.9	1346.6
177.5°	1352.3	1351.2	1350.1	1349.1	1348.0	1347.6	1347.7	1347.9	1348.1	1348.2	1349.5
180°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	665.7	666.6	667.4	667.7	667.6	667.5	667.4	667.3
5°	663.7	664.9	666.0	666.5	666.4	666.2	666.1	666.0
7.5°	658.1	659.2	660.2	660.6	660.5	660.4	660.2	660.0
10°	653.0	653.9	655.0	655.4	655.3	655.1	655.0	654.8
12.5°	646.7	647.5	648.3	648.5	648.1	647.7	647.4	647.0
15°	635.0	635.8	636.7	636.9	636.3	635.7	635.2	634.6
17.5°	620.1	620.7	621.4	621.6	621.2	620.9	620.5	620.2
20°	608.6	609.1	609.5	609.7	609.7	609.7	609.7	609.7
22.5°	596.8	597.4	597.9	598.0	597.6	597.3	596.9	596.6
25°	578.2	578.8	579.3	579.3	578.5	577.8	577.0	576.4
27.5°	556.5	556.9	557.3	557.3	557.1	556.8	556.6	556.3
30°	541.6	541.9	542.2	542.3	542.1	541.9	541.8	541.7
32.5°	527.4	527.7	528.1	528.1	528.0	527.8	527.7	527.5
35°	504.5	505.1	505.5	505.7	505.7	505.7	505.7	505.7
37.5°	480.5	481.1	481.7	482.0	481.9	481.8	481.8	481.7
40°	464.3	464.9	465.5	465.9	466.2	466.5	466.8	467.1
42.5°	449.4	450.0	450.7	451.2	451.3	451.3	451.3	451.4
45°	425.2	426.3	427.3	427.9	428.1	428.2	428.3	428.5
47.5°	400.5	401.9	403.4	404.3	404.7	404.9	405.3	405.6
50°	383.9	385.6	387.1	388.1	388.6	389.0	389.4	389.9
52.5°	367.4	369.1	370.8	371.9	372.2	372.5	372.8	373.2
55°	341.4	343.0	344.6	345.7	346.3	346.9	347.4	348.0
57.5°	315.7	317.5	319.3	320.5	321.0	321.4	321.8	322.3
60°	298.1	300.2	302.5	303.8	304.2	304.6	305.1	305.5
62.5°	280.3	282.7	285.1	286.5	287.1	287.7	288.2	288.8
65°	253.6	255.8	258.0	259.3	259.9	260.5	261.1	261.7
67.5°	226.3	228.9	231.5	233.2	234.0	234.8	235.6	236.3
70°	207.7	210.4	213.2	215.0	215.9	216.7	217.7	218.5
72.5°	190.4	193.3	196.3	198.1	198.8	199.4	200.1	200.7
75°	164.1	167.0	170.0	171.8	172.5	173.2	173.9	174.7
77.5°	137.8	141.1	144.3	146.2	146.7	147.3	147.9	148.5
80°	122.2	125.4	128.5	130.4	131.0	131.6	132.2	132.8
82.5°	107.3	110.4	113.5	115.5	116.6	117.6	118.6	119.7
85°	86.9	90.1	93.2	95.4	96.6	97.7	98.9	100.0
87.5°	74.0	77.5	81.0	83.4	84.6	85.7	86.9	88.0
90°	78.5	83.0	87.5	90.6	92.2	93.9	95.6	97.3
92.5°	76.2	80.6	84.9	87.7	89.1	90.4	91.7	93.1
95°	72.4	76.7	81.0	83.7	84.7	85.7	86.7	87.7
97.5°	87.3	84.0	80.8	79.7	80.7	81.7	82.7	83.7
100°	155.8	125.7	95.7	80.6	80.6	80.6	80.6	80.5
102.5°	255.3	251.9	248.6	239.8	225.6	211.3	197.1	182.8
105°	340.0	342.9	345.8	347.7	348.4	349.2	350.0	350.9
107.5°	416.1	419.0	422.0	423.5	423.8	424.0	424.2	424.5
110°	465.2	467.3	469.4	471.1	472.3	473.6	474.8	476.0



TEST NUMBER: P333199-935

CATALOG NUMBER: S125DIP-S610D1205U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	513.8	515.6	517.4	518.6	519.4	520.0	520.7	521.4
115°	587.3	589.0	590.8	591.4	591.0	590.5	590.0	589.5
117.5°	658.0	659.4	660.6	661.5	661.9	662.3	662.7	663.1
120°	703.8	705.8	707.8	708.7	708.4	708.3	708.0	707.7
122.5°	747.1	749.0	750.9	751.7	751.2	750.8	750.4	749.9
125°	810.5	811.8	813.3	814.1	814.1	814.2	814.2	814.2
127.5°	867.9	869.6	871.2	871.7	870.8	870.0	869.3	868.5
130°	905.8	907.1	908.5	909.0	908.6	908.3	907.8	907.5
132.5°	940.7	942.7	944.6	945.3	944.8	944.3	943.7	943.3
135°	991.8	993.2	994.6	995.1	994.5	993.9	993.2	992.6
137.5°	1039.7	1041.6	1043.4	1044.0	1043.4	1042.8	1042.2	1041.6
140°	1069.1	1071.1	1073.2	1073.8	1073.1	1072.3	1071.5	1070.8
142.5°	1098.0	1099.5	1101.0	1101.3	1100.6	1099.8	1099.1	1098.3
145°	1139.6	1140.6	1141.5	1141.6	1140.9	1140.1	1139.4	1138.6
147.5°	1175.5	1176.0	1176.6	1176.1	1174.7	1173.5	1172.1	1170.8
150°	1198.7	1199.1	1199.5	1198.9	1197.3	1195.7	1194.0	1192.4
152.5°	1219.4	1220.0	1220.4	1219.8	1218.2	1216.7	1215.0	1213.5
155°	1248.1	1248.8	1249.5	1248.9	1247.2	1245.4	1243.5	1241.8
157.5°	1271.9	1272.6	1273.2	1272.7	1270.9	1269.2	1267.4	1265.6
160°	1286.6	1287.5	1288.4	1288.0	1286.2	1284.4	1282.6	1280.8
162.5°	1300.1	1301.4	1302.6	1302.3	1300.3	1298.3	1296.4	1294.4
165°	1317.5	1318.9	1320.2	1319.9	1318.2	1316.4	1314.6	1312.9
167.5°	1330.7	1332.2	1333.9	1333.7	1331.6	1329.6	1327.7	1325.7
170°	1337.4	1339.2	1341.0	1340.8	1338.9	1336.9	1334.9	1332.8
172.5°	1342.6	1344.3	1345.8	1345.7	1343.7	1341.7	1339.6	1337.6
175°	1348.4	1350.2	1351.9	1351.9	1349.9	1347.9	1345.8	1343.8
177.5°	1350.7	1352.0	1353.2	1353.1	1351.8	1350.3	1348.8	1347.5
180°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9

(END OF REPORT)