

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: P333199-930

Luminaire Tested: **S125DIP-S610D1205U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333199-930
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-S610D1205U930-4F0-1E-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: 5884.9 lumens
Efficiency: N/A
Efficacy: 119.1 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

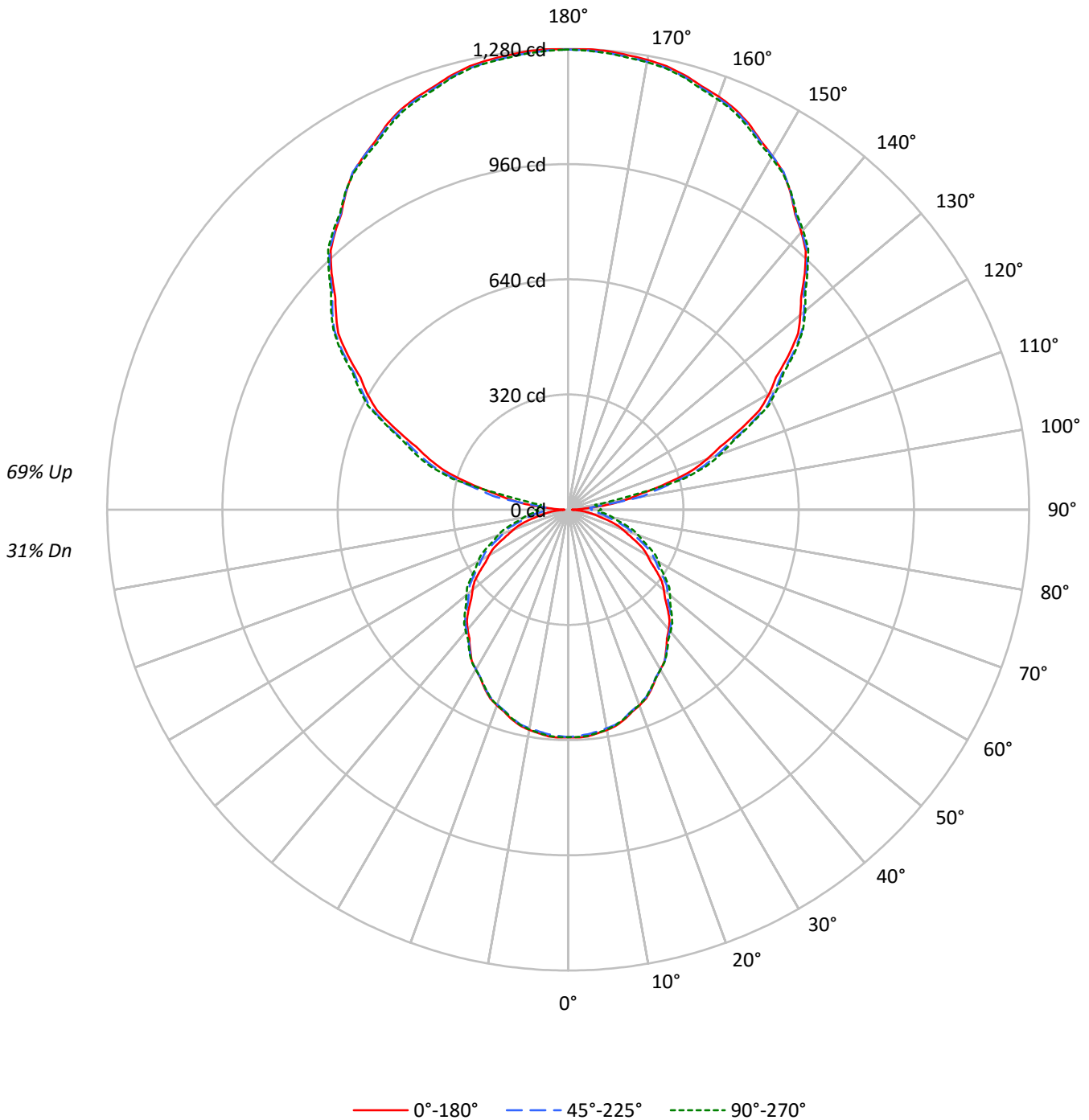
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333199-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P333199-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-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	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°	4081	4081	4081
5°	4089	4005	4018
10°	4060	3934	3927
15°	4011	3849	3813
20°	3946	3742	3698
25°	3869	3629	3558
30°	3775	3505	3429
35°	3687	3390	3311
40°	3598	3269	3193
45°	3497	3166	3089
50°	3401	3054	2996
55°	3285	2948	2886
60°	3159	2827	2775
65°	3027	2702	2650
70°	2876	2529	2521
75°	2639	2363	2363
80°	2328	2164	2190
85°	2041	2028	2136



TEST NUMBER: P333199-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	1.0
10°-20°	169.6	2.9
20°-30°	252.2	4.3
30°-40°	298.8	5.1
40°-50°	308.9	5.2
50°-60°	284.6	4.8
60°-70°	230.0	3.9
70°-80°	154.0	2.6
80°-90°	82.5	1.4
90°-100°	91.3	1.6
100°-110°	319.3	5.4
110°-120°	541.4	9.2
120°-130°	678.9	11.5
130°-140°	722.2	12.3
140°-150°	673.8	11.5
150°-160°	544.2	9.2
160°-170°	351.9	6.0
170°-180°	121.4	2.1
0°-30°	481.6	8.2
0°-40°	780.4	13.3
0°-60°	1373.8	23.3
0°-90°	1840.4	31.3
90°-120°	952.0	16.2
90°-150°	3026.9	51.4
90°-180°	4044.0	68.7
0°-180°	5884.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	632	630	626	631	631	60
15°	603	604	600	603	601	170
25°	548	550	546	548	546	252
35°	474	478	477	479	479	297
45°	391	398	401	405	406	302
55°	300	310	320	327	330	268
65°	207	221	236	245	248	205
75°	114	130	150	162	165	121
85°	34	55	76	89	95	36
90°	11	38	66	84	92	9
95°	62	74	60	78	83	75
105°	284	298	316	328	332	301
115°	527	536	553	560	558	522
125°	746	753	765	770	771	666
135°	929	934	936	942	940	716
145°	1076	1077	1077	1081	1078	673
155°	1184	1179	1181	1183	1176	545
165°	1250	1244	1245	1250	1243	353
175°	1278	1273	1274	1280	1272	122
180°	1278	1278	1278	1278	1278	



TEST NUMBER: P333199-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	633.3	633.1	632.9	632.7	632.4	631.9	631.2	630.4	629.7	628.8	629.7
5°	631.9	631.5	631.3	631.0	630.7	630.1	629.2	628.2	627.2	626.2	627.4
7.5°	626.2	626.1	626.1	625.9	625.8	625.3	624.3	623.3	622.3	621.3	622.2
10°	621.3	621.3	621.3	621.3	621.3	620.8	619.6	618.6	617.4	616.4	617.3
12.5°	614.4	614.5	614.6	614.7	614.8	614.4	613.5	612.7	611.8	610.9	611.6
15°	603.3	603.5	603.6	603.7	603.9	603.5	602.5	601.5	600.6	599.7	600.5
17.5°	589.0	589.2	589.5	589.8	590.1	589.7	588.8	587.8	586.9	585.9	586.5
20°	578.5	578.9	579.1	579.4	579.7	579.4	578.4	577.4	576.4	575.4	575.8
22.5°	566.7	567.2	567.7	568.2	568.7	568.3	567.3	566.2	565.2	564.1	564.6
25°	548.2	548.6	549.0	549.4	549.8	549.7	548.9	548.0	547.1	546.3	546.9
27.5°	527.7	528.2	528.9	529.5	530.1	529.9	529.0	528.1	527.1	526.2	526.5
30°	512.3	513.1	514.0	514.8	515.6	515.6	514.8	514.0	513.1	512.3	512.6
32.5°	498.4	499.1	499.9	500.6	501.2	501.3	500.8	500.1	499.5	498.9	499.2
35°	474.5	475.5	476.5	477.4	478.3	478.7	478.3	477.8	477.4	477.0	477.4
37.5°	450.6	451.5	452.3	453.2	454.1	454.4	454.4	454.2	454.0	454.0	454.4
40°	434.2	435.4	436.4	437.6	438.6	439.1	439.0	438.9	438.7	438.5	439.1
42.5°	416.4	417.8	419.2	420.7	422.2	423.0	423.3	423.6	423.9	424.2	424.9
45°	390.9	392.4	393.9	395.4	397.0	398.0	398.8	399.4	400.1	400.8	401.8
47.5°	364.8	366.2	367.5	368.9	370.4	371.6	372.8	374.0	375.2	376.3	377.8
50°	346.9	348.4	349.9	351.5	352.9	354.5	356.0	357.5	359.0	360.5	362.1
52.5°	328.1	329.9	331.7	333.6	335.4	337.3	339.2	341.0	342.8	344.6	346.3
55°	300.4	302.6	304.8	307.0	309.2	311.4	313.6	315.8	318.0	320.2	321.8
57.5°	272.2	274.8	277.4	280.1	282.7	285.4	287.9	290.4	292.9	295.5	297.2
60°	253.4	256.1	258.9	261.6	264.4	267.1	269.9	272.6	275.4	278.1	280.2
62.5°	235.1	237.7	240.5	243.3	246.1	248.9	251.8	254.9	257.8	260.8	263.1
65°	206.9	210.1	213.2	216.4	219.6	222.8	226.1	229.4	232.7	236.0	238.1
67.5°	180.4	183.4	186.5	189.6	192.6	195.8	199.2	202.5	205.9	209.3	211.7
70°	161.0	164.2	167.4	170.6	173.7	177.1	180.7	184.3	187.8	191.4	194.0
72.5°	142.2	145.5	148.8	152.1	155.3	158.9	162.8	166.7	170.6	174.6	177.4
75°	114.0	117.6	121.2	124.7	128.3	132.3	136.7	141.1	145.5	149.9	152.6
77.5°	86.8	91.0	95.1	99.2	103.4	107.5	111.8	116.0	120.3	124.5	127.5
80°	70.0	74.1	78.3	82.4	86.5	90.9	95.6	100.3	104.9	109.7	112.7
82.5°	54.6	58.9	63.3	67.7	72.1	76.6	81.4	86.2	91.0	95.8	98.7
85°	34.1	38.6	43.1	47.7	52.3	56.9	61.7	66.5	71.3	76.2	79.2
87.5°	19.5	24.3	29.0	33.8	38.5	43.4	48.3	53.3	58.3	63.3	66.6
90°	10.8	17.0	23.1	29.1	35.2	41.3	47.5	53.6	59.8	66.0	70.2
92.5°	23.5	26.4	29.3	32.2	35.1	39.6	45.7	51.8	57.9	64.0	68.1
95°	62.0	65.0	68.0	70.9	73.9	73.7	70.4	67.0	63.7	60.4	64.5
97.5°	120.1	124.4	128.8	133.1	137.5	134.0	122.7	111.4	100.0	88.7	85.7
100°	165.0	168.6	172.1	175.6	179.1	183.5	188.7	194.0	199.3	204.5	176.0
102.5°	210.8	214.3	217.8	221.2	224.7	228.8	233.6	238.4	243.2	248.0	244.8
105°	284.1	287.2	290.2	293.3	296.4	299.9	304.0	308.2	312.3	316.4	319.2
107.5°	360.4	362.2	364.1	366.0	367.9	371.0	375.4	379.8	384.1	388.5	391.3
110°	409.9	411.6	413.2	414.8	416.5	419.5	423.7	428.0	432.3	436.5	438.5



TEST NUMBER: P333199-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	456.9	458.7	460.6	462.4	464.1	467.1	471.1	475.1	479.1	483.1	484.8
115°	526.8	528.8	530.8	532.8	534.8	537.7	541.5	545.3	549.1	552.9	554.5
117.5°	599.1	599.7	600.3	600.9	601.4	603.8	608.1	612.2	616.4	620.6	621.8
120°	644.6	644.7	645.0	645.1	645.4	647.3	651.2	655.0	658.8	662.6	664.5
122.5°	684.3	685.3	686.2	687.2	688.2	690.4	693.7	697.1	700.4	703.8	705.6
125°	746.3	747.6	748.9	750.3	751.6	753.7	756.4	759.2	761.9	764.7	766.1
127.5°	804.9	805.9	806.8	807.7	808.6	810.2	812.3	814.4	816.5	818.7	820.3
130°	841.4	842.3	843.2	844.1	845.1	846.5	848.7	850.8	853.0	855.1	856.4
132.5°	877.3	878.5	879.6	880.8	882.0	883.1	884.2	885.2	886.2	887.2	889.0
135°	928.9	930.0	931.2	932.2	933.4	934.2	934.7	935.3	935.8	936.4	937.8
137.5°	976.3	977.3	978.3	979.3	980.2	980.8	980.9	981.0	981.0	981.1	982.8
140°	1006.9	1007.3	1007.7	1008.1	1008.6	1008.8	1008.7	1008.6	1008.5	1008.4	1010.4
142.5°	1034.9	1035.1	1035.2	1035.3	1035.5	1035.8	1036.1	1036.4	1036.7	1037.1	1038.4
145°	1076.0	1076.4	1076.6	1076.9	1077.2	1077.3	1077.3	1077.3	1077.3	1077.3	1078.2
147.5°	1111.4	1111.3	1111.3	1111.2	1111.1	1111.2	1111.4	1111.7	1112.0	1112.2	1112.6
150°	1134.2	1133.8	1133.3	1132.9	1132.5	1132.5	1132.9	1133.3	1133.8	1134.2	1134.6
152.5°	1156.2	1155.3	1154.3	1153.4	1152.4	1152.2	1152.7	1153.1	1153.5	1153.9	1154.3
155°	1184.4	1183.2	1181.9	1180.6	1179.3	1178.9	1179.3	1179.7	1180.2	1180.6	1181.3
157.5°	1206.2	1205.4	1204.7	1204.0	1203.1	1202.8	1202.9	1202.9	1203.0	1203.0	1203.6
160°	1221.4	1220.1	1218.9	1217.6	1216.3	1215.8	1216.0	1216.2	1216.4	1216.6	1217.5
162.5°	1233.5	1232.2	1230.9	1229.7	1228.4	1227.9	1228.1	1228.3	1228.6	1228.7	1230.0
165°	1249.8	1248.5	1247.2	1246.0	1244.7	1244.2	1244.4	1244.6	1244.8	1245.0	1246.3
167.5°	1261.9	1260.6	1259.3	1258.0	1256.7	1256.1	1256.4	1256.5	1256.8	1257.0	1258.5
170°	1268.8	1267.3	1265.8	1264.3	1262.8	1262.2	1262.4	1262.7	1262.8	1263.1	1264.8
172.5°	1273.3	1271.8	1270.3	1268.9	1267.4	1266.8	1267.2	1267.6	1268.0	1268.4	1269.9
175°	1278.2	1276.9	1275.7	1274.4	1273.2	1272.6	1272.8	1273.1	1273.3	1273.5	1275.1
177.5°	1280.5	1279.4	1278.5	1277.5	1276.4	1276.0	1276.2	1276.4	1276.5	1276.7	1277.9
180°	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2



TEST NUMBER: P333199-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	630.4	631.2	631.9	632.3	632.2	632.1	631.9	631.9
5°	628.4	629.6	630.6	631.1	631.0	630.9	630.7	630.6
7.5°	623.2	624.2	625.2	625.6	625.4	625.3	625.2	625.0
10°	618.3	619.2	620.2	620.6	620.5	620.4	620.2	620.0
12.5°	612.4	613.1	613.9	614.1	613.7	613.3	613.0	612.6
15°	601.3	602.1	602.9	603.1	602.5	601.9	601.4	600.9
17.5°	587.2	587.7	588.4	588.6	588.2	587.9	587.6	587.3
20°	576.3	576.7	577.2	577.3	577.3	577.3	577.3	577.3
22.5°	565.1	565.7	566.1	566.2	565.9	565.6	565.2	564.9
25°	547.5	548.0	548.5	548.5	547.8	547.1	546.4	545.8
27.5°	526.9	527.3	527.7	527.7	527.5	527.3	527.0	526.8
30°	512.8	513.1	513.4	513.5	513.3	513.1	513.1	512.9
32.5°	499.5	499.7	500.0	500.1	499.9	499.8	499.7	499.5
35°	477.8	478.3	478.7	478.8	478.8	478.8	478.8	478.8
37.5°	455.0	455.6	456.2	456.4	456.3	456.2	456.2	456.2
40°	439.7	440.3	440.8	441.2	441.5	441.7	442.1	442.3
42.5°	425.5	426.2	426.8	427.2	427.3	427.3	427.4	427.5
45°	402.7	403.7	404.6	405.2	405.4	405.4	405.6	405.8
47.5°	379.2	380.6	382.0	382.9	383.2	383.4	383.8	384.1
50°	363.5	365.1	366.6	367.5	367.9	368.4	368.8	369.2
52.5°	347.9	349.5	351.1	352.1	352.5	352.7	353.0	353.4
55°	323.3	324.8	326.3	327.3	327.9	328.5	329.0	329.5
57.5°	299.0	300.7	302.4	303.5	303.9	304.4	304.8	305.2
60°	282.3	284.3	286.4	287.6	288.0	288.5	288.9	289.3
62.5°	265.4	267.7	269.9	271.3	271.8	272.4	272.9	273.5
65°	240.1	242.2	244.3	245.6	246.1	246.7	247.2	247.8
67.5°	214.3	216.8	219.2	220.9	221.6	222.3	223.1	223.7
70°	196.7	199.3	201.9	203.6	204.4	205.2	206.1	206.9
72.5°	180.3	183.0	185.9	187.6	188.3	188.8	189.5	190.0
75°	155.4	158.2	160.9	162.7	163.3	164.0	164.7	165.4
77.5°	130.5	133.6	136.6	138.4	138.9	139.5	140.1	140.6
80°	115.7	118.7	121.7	123.5	124.1	124.7	125.2	125.7
82.5°	101.6	104.5	107.5	109.4	110.4	111.4	112.3	113.3
85°	82.3	85.3	88.3	90.3	91.5	92.5	93.7	94.7
87.5°	70.0	73.4	76.7	79.0	80.1	81.1	82.3	83.3
90°	74.4	78.6	82.8	85.8	87.3	88.9	90.5	92.1
92.5°	72.2	76.3	80.4	83.1	84.4	85.6	86.8	88.1
95°	68.6	72.6	76.7	79.2	80.2	81.1	82.1	83.1
97.5°	82.7	79.6	76.6	75.5	76.4	77.4	78.3	79.2
100°	147.6	119.0	90.6	76.3	76.3	76.3	76.3	76.2
102.5°	241.7	238.6	235.4	227.1	213.6	200.1	186.6	173.1
105°	322.0	324.7	327.4	329.2	330.0	330.7	331.4	332.2
107.5°	394.0	396.8	399.6	401.0	401.3	401.5	401.7	401.9
110°	440.5	442.5	444.5	446.1	447.3	448.4	449.6	450.8



TEST NUMBER: P333199-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	486.5	488.2	489.9	491.1	491.8	492.4	493.1	493.7
115°	556.1	557.7	559.5	560.0	559.6	559.1	558.7	558.2
117.5°	623.1	624.4	625.6	626.4	626.8	627.1	627.5	627.9
120°	666.4	668.3	670.3	671.1	670.8	670.7	670.4	670.2
122.5°	707.4	709.2	711.0	711.8	711.3	710.9	710.5	710.1
125°	767.4	768.7	770.1	770.9	770.9	770.9	771.0	771.0
127.5°	821.8	823.5	825.0	825.4	824.6	823.9	823.1	822.4
130°	857.7	859.0	860.3	860.8	860.4	860.1	859.7	859.3
132.5°	890.8	892.7	894.5	895.1	894.6	894.1	893.6	893.2
135°	939.1	940.4	941.8	942.2	941.7	941.1	940.5	940.0
137.5°	984.6	986.3	988.0	988.6	988.0	987.5	986.9	986.3
140°	1012.4	1014.2	1016.2	1016.8	1016.1	1015.4	1014.6	1014.0
142.5°	1039.8	1041.1	1042.5	1042.8	1042.2	1041.5	1040.7	1040.0
145°	1079.1	1080.0	1080.9	1081.0	1080.4	1079.6	1078.9	1078.2
147.5°	1113.1	1113.6	1114.1	1113.7	1112.4	1111.2	1109.9	1108.6
150°	1135.1	1135.5	1135.9	1135.3	1133.8	1132.2	1130.7	1129.1
152.5°	1154.7	1155.2	1155.6	1155.0	1153.6	1152.1	1150.6	1149.1
155°	1181.9	1182.5	1183.2	1182.6	1181.0	1179.2	1177.5	1175.9
157.5°	1204.4	1205.0	1205.7	1205.2	1203.5	1201.8	1200.1	1198.4
160°	1218.3	1219.1	1220.0	1219.6	1217.9	1216.2	1214.6	1212.8
162.5°	1231.1	1232.3	1233.5	1233.1	1231.3	1229.4	1227.6	1225.7
165°	1247.6	1248.9	1250.1	1249.9	1248.2	1246.5	1244.8	1243.2
167.5°	1260.0	1261.5	1263.1	1262.9	1260.9	1259.1	1257.2	1255.3
170°	1266.4	1268.1	1269.8	1269.7	1267.8	1265.9	1264.0	1262.1
172.5°	1271.4	1272.9	1274.4	1274.2	1272.4	1270.5	1268.5	1266.6
175°	1276.8	1278.6	1280.2	1280.1	1278.2	1276.4	1274.4	1272.5
177.5°	1279.0	1280.3	1281.4	1281.3	1280.0	1278.6	1277.2	1275.9
180°	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2

(END OF REPORT)