

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: P333202-927

Luminaire Tested: **S125DIP-S610D1205U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333202-927
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-S610D1205U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5796.2 lumens
Efficiency: N/A
Efficacy: 117.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

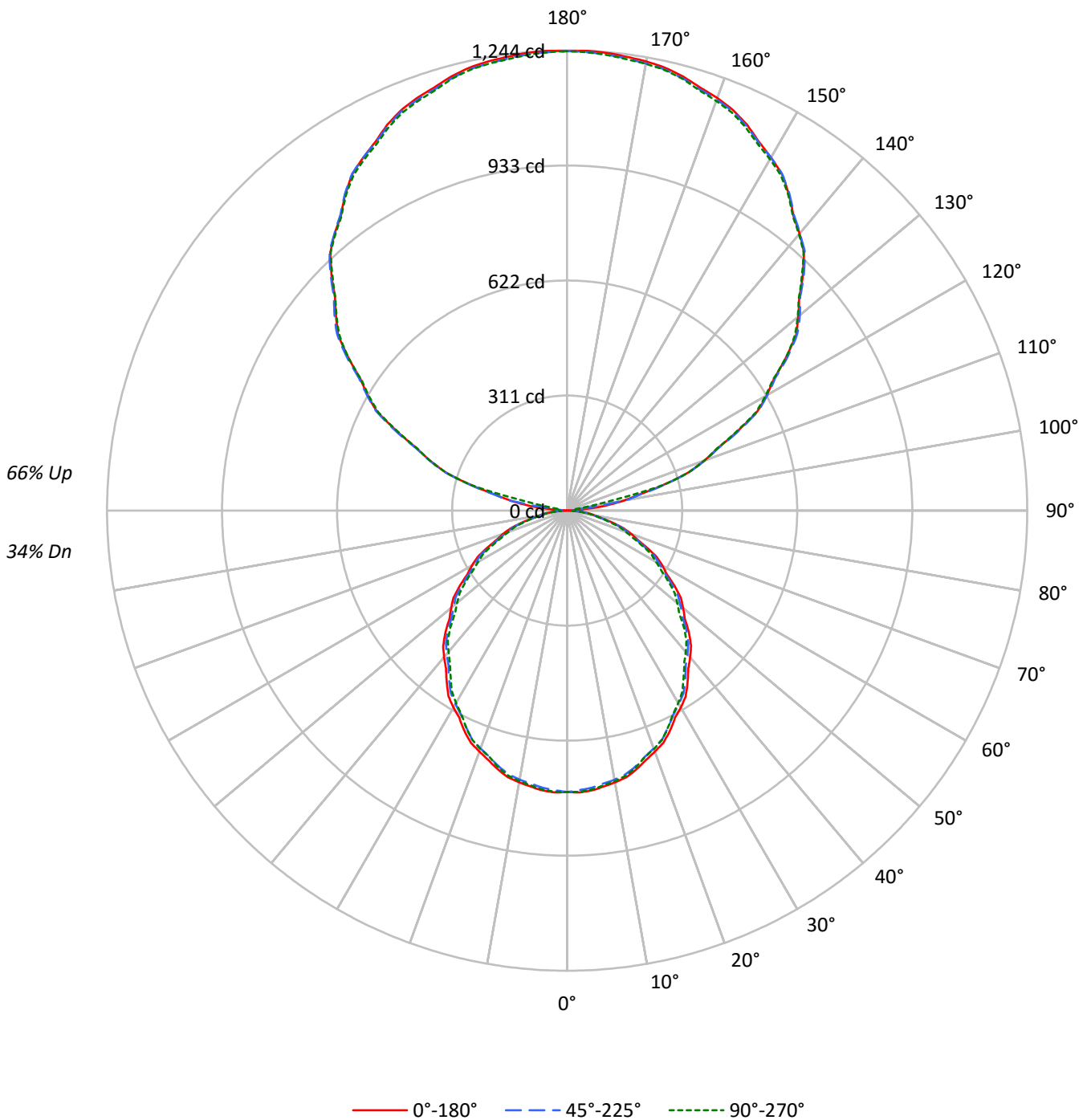
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	57	57	57	42	42	42	34
1	94	90	86	83	85	81	78	75	65	63	61	50	49	48	37	36	35	29
2	86	78	72	67	77	71	66	62	57	53	50	44	42	40	32	31	29	24
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	29	27	25	20
4	71	61	53	47	64	55	49	43	45	40	36	35	31	29	25	23	22	17
5	65	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19	15
6	60	48	41	35	54	44	37	32	36	31	27	28	24	22	21	18	16	13
7	56	44	36	30	50	40	33	28	32	27	24	25	22	19	19	16	15	12
8	51	40	32	27	46	36	29	25	29	24	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12	9
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4914	4914	4914
5°	4924	4877	4909
10°	4894	4844	4871
15°	4841	4785	4805
20°	4766	4704	4712
25°	4684	4606	4603
30°	4583	4502	4480
35°	4475	4389	4328
40°	4364	4268	4207
45°	4244	4156	4074
50°	4112	4022	3900
55°	3985	3869	3762
60°	3834	3716	3584
65°	3651	3533	3412
70°	3478	3320	3206
75°	3169	3064	2959
80°	2819	2775	2708
85°	2453	2497	2364



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	1.2
10°-20°	202.6	3.5
20°-30°	299.2	5.2
30°-40°	349.1	6.0
40°-50°	350.6	6.0
50°-60°	307.8	5.3
60°-70°	229.3	4.0
70°-80°	131.1	2.3
80°-90°	40.7	0.7
90°-100°	45.1	0.8
100°-110°	278.2	4.8
110°-120°	504.5	8.7
120°-130°	647.4	11.2
130°-140°	696.4	12.0
140°-150°	653.6	11.3
150°-160°	528.7	9.1
160°-170°	342.0	5.9
170°-180°	117.9	2.0
0°-30°	573.6	9.9
0°-40°	922.7	15.9
0°-60°	1581.1	27.3
0°-90°	1982.3	34.2
90°-120°	827.8	14.3
90°-150°	2825.2	48.7
90°-180°	3814.0	65.8
0°-180°	5796.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	761	761	761	761	761	
5°	760	758	752	757	757	72
15°	724	722	716	719	719	204
25°	657	654	646	648	646	302
35°	568	565	557	554	549	355
45°	465	462	455	448	446	358
55°	354	352	344	338	334	316
65°	239	237	231	226	223	237
75°	127	126	123	121	119	135
85°	33	34	34	33	32	37
90°	1	8	15	19	22	4
95°	52	48	15	19	19	67
105°	271	274	274	274	274	287
115°	508	513	514	510	504	504
125°	723	729	729	726	723	645
135°	901	906	905	903	898	694
145°	1045	1047	1047	1047	1042	653
155°	1151	1146	1147	1149	1143	530
165°	1214	1209	1210	1215	1208	343
175°	1242	1237	1237	1244	1236	118
180°	1242	1242	1242	1242	1242	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8
2.5°	762.7	762.4	762.1	761.8	761.4	760.7	759.7	758.6	757.6	756.5	757.6
5°	759.6	759.3	759.1	758.8	758.5	757.7	756.4	755.0	753.7	752.3	753.6
7.5°	752.6	752.3	752.1	751.8	751.5	750.7	749.2	747.7	746.2	744.8	745.9
10°	746.3	746.1	745.8	745.5	745.3	744.4	742.9	741.5	740.0	738.6	739.6
12.5°	738.6	738.2	737.7	737.2	736.7	735.8	734.4	733.1	731.7	730.3	731.2
15°	724.1	723.7	723.3	722.9	722.5	721.5	720.1	718.6	717.1	715.7	716.3
17.5°	707.3	706.8	706.2	705.6	705.0	703.9	702.4	700.8	699.3	697.8	698.6
20°	693.4	693.1	692.8	692.6	692.3	691.3	689.6	687.9	686.1	684.4	685.3
22.5°	679.4	678.9	678.4	677.9	677.5	676.4	674.8	673.2	671.5	669.9	670.5
25°	657.3	656.6	655.9	655.3	654.6	653.4	651.6	649.9	648.2	646.4	646.7
27.5°	631.4	631.0	630.6	630.2	629.8	628.7	626.9	625.1	623.3	621.5	621.5
30°	614.5	614.1	613.7	613.3	612.9	611.7	609.7	607.7	605.7	603.7	603.4
32.5°	596.2	595.6	595.0	594.4	593.7	592.6	590.8	589.0	587.2	585.4	584.9
35°	567.6	567.0	566.5	566.0	565.5	564.3	562.4	560.5	558.6	556.7	556.1
37.5°	537.8	537.2	536.5	535.8	535.2	533.9	532.2	530.4	528.6	526.9	525.9
40°	517.6	517.0	516.3	515.6	514.9	513.7	511.8	509.9	508.0	506.2	505.0
42.5°	496.0	495.4	494.8	494.2	493.7	492.5	490.6	488.8	486.9	485.0	483.9
45°	464.7	464.1	463.6	463.0	462.6	461.4	459.9	458.3	456.6	455.0	453.4
47.5°	430.9	430.9	431.0	431.0	431.0	430.1	428.2	426.3	424.4	422.4	420.8
50°	409.3	408.8	408.4	408.1	407.7	406.7	405.0	403.5	401.9	400.3	398.5
52.5°	387.1	386.8	386.6	386.3	386.0	384.9	383.3	381.5	379.9	378.1	376.6
55°	353.9	353.5	353.1	352.7	352.3	351.2	349.3	347.5	345.5	343.6	342.5
57.5°	318.9	318.7	318.5	318.2	318.1	317.1	315.5	313.9	312.4	310.9	309.3
60°	296.8	296.2	295.6	295.1	294.6	293.6	292.2	290.7	289.1	287.7	286.4
62.5°	273.6	273.2	272.7	272.4	271.9	271.1	269.8	268.5	267.3	266.0	264.6
65°	238.9	238.7	238.4	238.1	237.9	237.0	235.5	234.1	232.6	231.2	229.9
67.5°	205.3	204.8	204.2	203.7	203.1	202.3	201.2	200.1	199.0	197.9	196.9
70°	184.2	183.5	182.8	182.2	181.5	180.5	179.4	178.2	177.0	175.8	174.9
72.5°	161.1	160.6	160.2	159.7	159.2	158.6	157.9	157.1	156.3	155.5	154.6
75°	127.0	126.7	126.4	126.2	126.0	125.5	124.8	124.1	123.4	122.8	122.4
77.5°	95.6	95.5	95.4	95.2	95.1	94.9	94.5	94.2	93.8	93.4	93.2
80°	75.8	75.8	75.8	75.8	75.8	75.7	75.4	75.2	74.9	74.6	74.5
82.5°	58.5	58.3	58.1	57.8	57.7	57.5	57.4	57.4	57.4	57.3	57.0
85°	33.1	33.3	33.4	33.5	33.7	33.7	33.7	33.7	33.7	33.7	33.6
87.5°	13.2	13.5	13.9	14.2	14.5	14.7	14.9	15.1	15.3	15.4	15.7
90°	1.0	2.5	4.2	5.9	7.4	9.0	10.5	11.9	13.3	14.7	15.8
92.5°	14.2	13.1	11.9	10.8	9.6	9.7	10.9	12.2	13.5	14.7	15.8
95°	52.4	51.9	51.3	50.6	50.0	45.9	38.0	30.3	22.5	14.7	15.8
97.5°	109.6	110.7	111.8	112.9	114.0	106.9	91.4	76.0	60.7	45.3	39.5
100°	153.8	154.4	155.0	155.6	156.2	156.9	157.7	158.6	159.4	160.2	129.7
102.5°	198.7	199.5	200.3	201.0	201.8	202.4	202.9	203.4	203.9	204.4	198.6
105°	270.7	271.5	272.3	273.1	273.9	274.3	274.3	274.3	274.3	274.3	274.3
107.5°	345.5	345.5	345.5	345.5	345.5	345.6	346.0	346.4	346.9	347.3	347.3
110°	394.0	394.0	394.0	394.0	394.0	394.3	394.7	395.1	395.5	395.9	395.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	439.7	440.2	440.7	441.2	441.6	442.0	442.3	442.5	442.8	443.0	442.3
115°	508.2	509.2	510.2	511.3	512.3	512.9	513.1	513.3	513.5	513.7	512.9
117.5°	579.1	579.1	579.0	579.0	578.9	579.3	580.1	580.8	581.6	582.4	581.4
120°	623.3	623.1	622.9	622.7	622.5	622.7	623.3	623.9	624.5	625.1	624.7
122.5°	662.3	663.1	663.8	664.6	665.4	666.0	666.2	666.5	666.9	667.1	666.7
125°	722.7	724.1	725.6	727.0	728.4	729.1	729.1	729.1	729.1	729.1	728.3
127.5°	780.4	781.4	782.4	783.4	784.4	784.9	784.7	784.7	784.5	784.4	783.9
130°	815.7	816.7	817.8	818.8	819.8	820.4	820.6	820.9	821.0	821.3	820.6
132.5°	851.0	852.2	853.4	854.6	855.8	856.2	855.7	855.2	854.8	854.4	854.3
135°	901.3	902.5	903.8	905.0	906.3	906.7	906.3	905.9	905.4	905.0	904.6
137.5°	947.5	948.6	949.7	950.7	951.8	952.1	951.8	951.4	951.0	950.7	950.8
140°	977.7	978.2	978.6	979.0	979.4	979.5	979.3	979.1	978.9	978.7	979.1
142.5°	1005.0	1005.2	1005.5	1005.8	1006.0	1006.2	1006.5	1006.8	1007.1	1007.4	1007.5
145°	1045.0	1045.4	1045.8	1046.2	1046.6	1046.8	1046.8	1046.8	1046.8	1046.8	1047.0
147.5°	1079.9	1079.8	1079.7	1079.7	1079.6	1079.7	1079.9	1080.1	1080.5	1080.7	1080.9
150°	1102.0	1101.6	1101.2	1100.8	1100.4	1100.4	1100.8	1101.2	1101.6	1102.0	1102.4
152.5°	1123.4	1122.5	1121.6	1120.7	1119.7	1119.5	1120.0	1120.4	1120.8	1121.2	1121.6
155°	1150.8	1149.6	1148.3	1147.2	1145.9	1145.5	1145.9	1146.3	1146.8	1147.2	1147.8
157.5°	1172.0	1171.2	1170.5	1169.8	1169.0	1168.7	1168.8	1168.8	1168.9	1168.9	1169.5
160°	1186.8	1185.5	1184.3	1183.0	1181.9	1181.3	1181.5	1181.7	1181.9	1182.1	1183.0
162.5°	1198.5	1197.3	1196.0	1194.8	1193.6	1193.1	1193.3	1193.5	1193.7	1193.9	1195.1
165°	1214.3	1213.1	1211.9	1210.7	1209.4	1208.9	1209.1	1209.3	1209.5	1209.7	1211.0
167.5°	1226.1	1224.9	1223.6	1222.3	1221.1	1220.5	1220.8	1220.9	1221.1	1221.4	1222.8
170°	1232.8	1231.4	1229.9	1228.4	1227.0	1226.5	1226.6	1226.9	1227.0	1227.2	1228.9
172.5°	1237.2	1235.7	1234.3	1232.9	1231.4	1230.9	1231.3	1231.7	1232.0	1232.4	1233.9
175°	1242.0	1240.7	1239.5	1238.3	1237.1	1236.5	1236.8	1237.0	1237.2	1237.4	1239.0
177.5°	1244.2	1243.2	1242.2	1241.3	1240.2	1239.8	1240.0	1240.2	1240.3	1240.5	1241.7
180°	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8
2.5°	758.6	759.7	760.7	761.2	761.1	761.0	760.9	760.8
5°	754.8	756.0	757.2	757.7	757.6	757.5	757.3	757.2
7.5°	747.1	748.3	749.5	750.0	749.9	749.7	749.6	749.5
10°	740.7	741.7	742.8	743.3	743.1	743.0	742.8	742.8
12.5°	732.1	732.9	733.7	734.2	734.1	734.1	734.1	734.0
15°	717.0	717.6	718.4	718.7	718.7	718.7	718.7	718.7
17.5°	699.5	700.3	701.2	701.2	700.5	699.9	699.3	698.5
20°	686.2	687.1	688.1	688.2	687.5	686.9	686.2	685.6
22.5°	671.1	671.8	672.4	672.5	672.0	671.5	671.1	670.7
25°	647.0	647.2	647.5	647.5	647.1	646.7	646.3	645.9
27.5°	621.6	621.7	621.7	621.5	621.2	620.8	620.4	620.0
30°	603.2	602.9	602.6	602.3	601.9	601.5	601.1	600.7
32.5°	584.5	583.9	583.4	582.9	582.2	581.5	580.7	580.0
35°	555.4	554.8	554.1	553.2	552.2	551.0	550.0	548.9
37.5°	524.9	523.9	522.9	522.1	521.5	520.9	520.3	519.7
40°	503.7	502.6	501.4	500.6	500.2	499.8	499.4	499.0
42.5°	482.8	481.7	480.6	479.7	479.1	478.6	477.9	477.3
45°	451.8	450.2	448.6	447.6	447.2	446.8	446.4	446.0
47.5°	419.1	417.5	415.9	414.6	413.7	412.7	411.8	410.8
50°	396.8	395.1	393.3	392.0	391.0	390.1	389.1	388.2
52.5°	375.0	373.5	372.0	370.7	369.7	368.6	367.6	366.5
55°	341.3	340.1	338.9	337.8	336.8	335.9	335.0	334.1
57.5°	307.7	306.2	304.6	303.6	303.1	302.5	302.1	301.6
60°	285.0	283.7	282.3	281.2	280.3	279.3	278.4	277.5
62.5°	263.2	261.7	260.2	259.2	258.5	257.7	257.0	256.3
65°	228.7	227.5	226.3	225.5	224.9	224.3	223.9	223.3
67.5°	195.9	194.9	193.8	193.1	192.8	192.5	192.2	191.9
70°	174.1	173.3	172.5	171.9	171.3	170.8	170.2	169.8
72.5°	153.7	152.8	151.9	151.1	150.6	150.1	149.6	149.0
75°	122.0	121.6	121.2	120.7	120.2	119.6	119.1	118.6
77.5°	92.9	92.7	92.4	92.1	91.7	91.4	91.0	90.6
80°	74.4	74.2	74.1	73.9	73.6	73.4	73.1	72.8
82.5°	56.8	56.6	56.3	56.2	56.2	56.1	56.0	56.0
85°	33.4	33.3	33.2	33.0	32.7	32.4	32.2	31.9
87.5°	15.8	16.1	16.3	16.3	16.2	16.2	16.1	16.0
90°	16.8	17.8	18.9	19.6	20.3	20.8	21.5	22.1
92.5°	16.8	17.8	18.9	19.5	19.7	20.0	20.4	20.6
95°	16.8	17.8	18.9	19.3	19.3	19.3	19.3	19.3
97.5°	33.7	28.0	22.2	19.3	19.3	19.3	19.3	19.3
100°	99.3	68.8	38.3	22.6	21.8	21.0	20.1	19.3
102.5°	192.8	187.1	181.3	171.5	157.6	143.6	129.8	115.8
105°	274.3	274.3	274.3	274.3	274.0	273.9	273.6	273.5
107.5°	347.4	347.4	347.5	347.1	346.5	345.9	345.3	344.7
110°	394.7	394.0	393.4	393.2	393.4	393.6	393.9	394.0



TEST NUMBER: P333202-927

CATALOG NUMBER: S125DIP-S610D1205U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	441.5	440.7	439.9	439.3	439.1	438.8	438.6	438.2
115°	512.1	511.3	510.5	509.5	508.2	507.0	505.7	504.5
117.5°	580.3	579.2	578.1	577.3	576.8	576.3	575.8	575.2
120°	624.3	623.9	623.5	622.8	621.8	620.8	619.7	618.7
122.5°	666.3	665.9	665.5	664.6	663.5	662.3	661.2	660.0
125°	727.5	726.7	725.9	725.2	724.5	724.0	723.3	722.7
127.5°	783.5	783.1	782.6	781.6	780.1	778.6	777.1	775.5
130°	820.0	819.4	818.8	817.9	816.9	815.9	814.9	813.9
132.5°	854.1	854.0	853.9	853.3	852.3	851.3	850.2	849.2
135°	904.2	903.8	903.4	902.5	901.3	900.1	898.9	897.6
137.5°	950.9	950.9	951.0	950.5	949.4	948.4	947.3	946.3
140°	979.5	979.9	980.3	979.9	978.7	977.5	976.2	975.0
142.5°	1007.6	1007.7	1007.7	1007.2	1005.9	1004.7	1003.5	1002.3
145°	1047.2	1047.4	1047.6	1047.1	1045.8	1044.7	1043.4	1042.2
147.5°	1081.2	1081.4	1081.6	1081.0	1079.6	1078.1	1076.7	1075.1
150°	1102.9	1103.3	1103.7	1103.0	1101.5	1099.8	1098.1	1096.5
152.5°	1122.0	1122.4	1122.8	1122.3	1120.8	1119.4	1117.8	1116.4
155°	1148.3	1149.0	1149.6	1149.1	1147.5	1145.8	1144.1	1142.6
157.5°	1170.2	1170.8	1171.5	1171.0	1169.3	1167.8	1166.1	1164.4
160°	1183.8	1184.6	1185.4	1185.0	1183.4	1181.7	1180.1	1178.5
162.5°	1196.2	1197.4	1198.5	1198.2	1196.4	1194.5	1192.8	1191.0
165°	1212.2	1213.5	1214.7	1214.4	1212.8	1211.2	1209.5	1207.9
167.5°	1224.3	1225.7	1227.2	1227.1	1225.2	1223.4	1221.5	1219.7
170°	1230.5	1232.2	1233.8	1233.7	1231.8	1230.0	1228.2	1226.3
172.5°	1235.3	1236.8	1238.3	1238.1	1236.3	1234.5	1232.6	1230.7
175°	1240.6	1242.3	1243.9	1243.8	1242.0	1240.2	1238.3	1236.4
177.5°	1242.8	1244.0	1245.1	1245.0	1243.7	1242.4	1241.0	1239.8
180°	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0

(END OF REPORT)