

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: P333200-930

Luminaire Tested: **S125DIP-S610D1205U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333200-930  
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-S610D1205U930-4F0-1E-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: 5356.8 lumens  
Efficiency: N/A  
Efficacy: 108.4 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

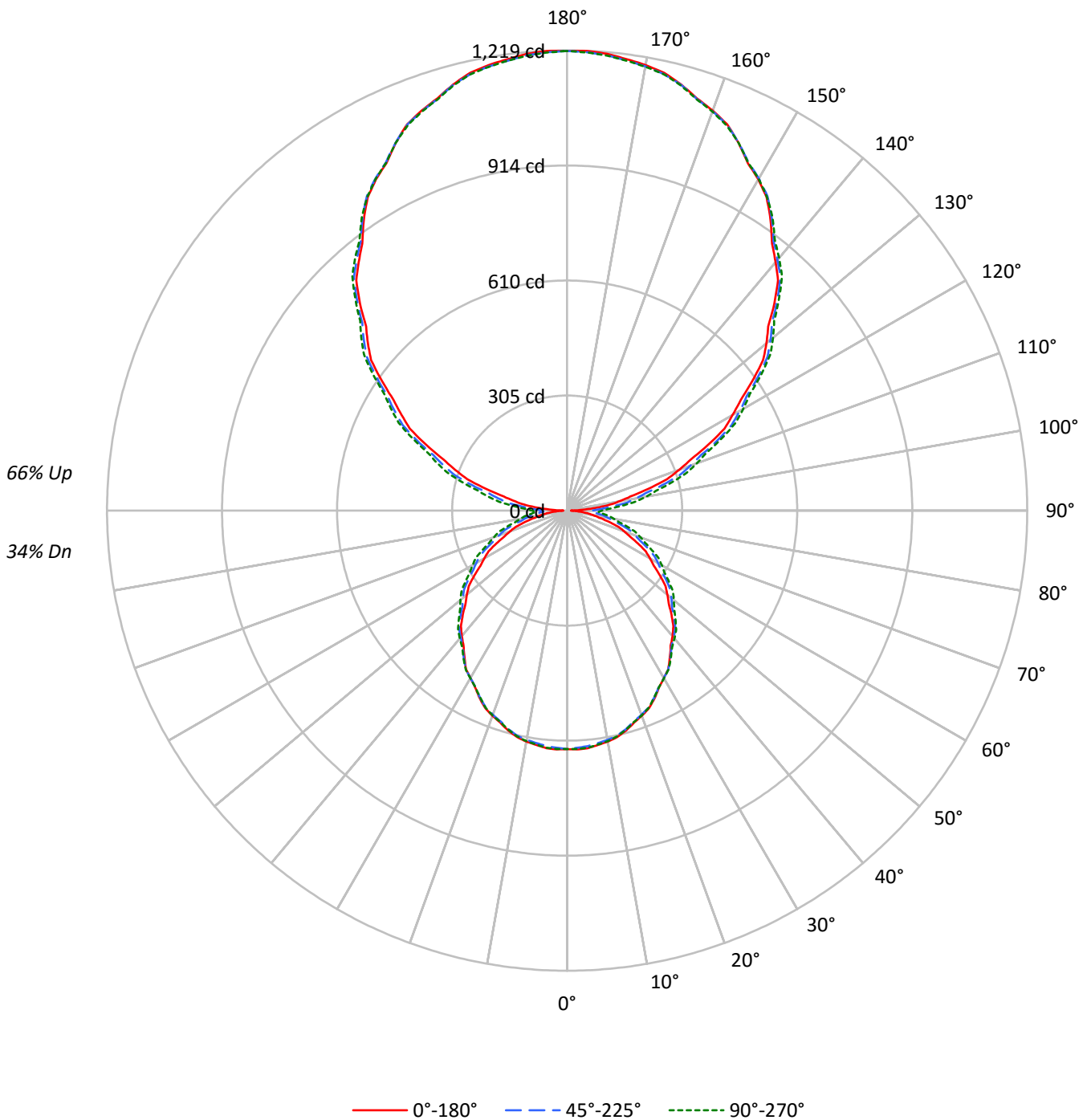
Input Watts (W): 49.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333200-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-D1

### Luminous Intensity Polar Plot





TEST NUMBER: P333200-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-D1

**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	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°	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: P333200-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-D1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.7	1.1
10°-20°	169.6	3.2
20°-30°	252.2	4.7
30°-40°	298.8	5.6
40°-50°	308.9	5.8
50°-60°	284.6	5.3
60°-70°	230.0	4.3
70°-80°	154.0	2.9
80°-90°	82.5	1.5
90°-100°	126.4	2.4
100°-110°	273.8	5.1
110°-120°	430.0	8.0
120°-130°	549.3	10.3
130°-140°	606.9	11.3
140°-150°	590.6	11.0
150°-160°	495.1	9.2
160°-170°	329.1	6.1
170°-180°	115.2	2.2
0°-30°	481.6	9.0
0°-40°	780.4	14.6
0°-60°	1373.8	25.6
0°-90°	1840.4	34.4
90°-120°	830.2	15.5
90°-150°	2577.0	48.1
90°-180°	3516.0	65.6
0°-180°	5356.8	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	10
95°	70	88	118	138	145	72
105°	222	237	260	278	286	237
115°	412	421	438	448	451	407
125°	598	604	617	624	627	536
135°	776	781	787	794	794	598
145°	940	943	946	948	948	587
155°	1074	1074	1075	1079	1074	495
165°	1168	1166	1167	1170	1165	329
175°	1215	1211	1211	1216	1210	115
180°	1217	1217	1217	1217	1217	



TEST NUMBER: P333200-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-D1

**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°	31.9	37.1	42.4	47.6	52.8	58.8	65.4	72.0	78.6	85.2	89.6
95°	69.6	73.6	77.6	81.6	85.6	91.1	97.8	104.6	111.4	118.1	122.7
97.5°	109.7	113.0	116.4	119.8	123.2	128.6	136.0	143.4	150.8	158.2	162.6
100°	139.4	142.4	145.2	148.1	151.0	156.0	163.1	170.3	177.5	184.6	189.4
102.5°	171.5	175.0	178.6	182.1	185.6	190.2	195.9	201.5	207.2	213.0	217.8
105°	221.6	224.9	228.1	231.4	234.6	239.0	244.3	249.7	255.1	260.5	264.5
107.5°	277.0	279.9	282.7	285.7	288.6	292.5	297.5	302.4	307.4	312.3	315.7
110°	315.1	317.8	320.5	323.2	325.9	329.5	334.0	338.5	343.0	347.5	350.7



TEST NUMBER: P333200-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	354.5	356.4	358.2	360.1	362.0	365.2	369.7	374.3	378.8	383.4	386.1
115°	412.1	413.8	415.6	417.4	419.3	422.2	426.2	430.2	434.1	438.1	440.4
117.5°	469.8	470.8	471.8	472.8	473.9	476.2	480.0	483.8	487.5	491.3	493.8
120°	506.1	507.6	509.1	510.5	512.0	514.5	517.8	521.2	524.6	528.0	530.3
122.5°	545.1	545.7	546.3	546.8	547.4	549.4	553.1	556.7	560.3	563.9	566.0
125°	598.4	599.5	600.6	601.8	602.9	605.0	607.9	610.9	613.8	616.8	618.6
127.5°	654.6	655.2	655.7	656.4	657.0	658.5	661.0	663.5	666.0	668.5	670.3
130°	688.8	689.7	690.6	691.5	692.4	694.1	696.3	698.7	701.1	703.4	705.2
132.5°	722.4	724.1	725.8	727.4	729.1	730.7	732.1	733.5	734.9	736.3	738.0
135°	776.2	777.4	778.4	779.6	780.7	781.9	783.0	784.2	785.4	786.6	788.4
137.5°	826.9	828.0	829.1	830.2	831.4	832.3	833.3	834.2	835.1	836.1	838.0
140°	859.0	860.1	861.1	862.1	863.2	864.1	864.9	865.6	866.4	867.2	869.1
142.5°	891.5	892.3	893.1	893.9	894.6	895.4	896.3	897.2	898.0	898.8	900.3
145°	939.5	940.2	940.9	941.6	942.3	943.0	943.6	944.3	944.9	945.5	946.2
147.5°	983.3	983.7	984.1	984.6	985.0	985.5	986.1	986.6	987.1	987.6	988.3
150°	1012.8	1012.6	1012.4	1012.2	1011.9	1012.3	1013.1	1013.9	1014.8	1015.6	1015.6
152.5°	1037.1	1037.3	1037.6	1038.0	1038.2	1038.5	1038.9	1039.2	1039.6	1039.9	1040.4
155°	1074.4	1074.4	1074.4	1074.4	1074.4	1074.5	1074.7	1074.9	1075.1	1075.3	1076.2
157.5°	1107.7	1107.3	1106.8	1106.4	1105.9	1105.7	1106.0	1106.2	1106.4	1106.6	1107.4
160°	1127.4	1126.8	1126.2	1125.5	1124.9	1124.7	1124.9	1125.1	1125.4	1125.5	1126.3
162.5°	1144.8	1144.4	1143.9	1143.5	1143.0	1142.8	1142.8	1142.9	1142.9	1143.0	1143.9
165°	1168.2	1167.8	1167.3	1166.9	1166.4	1166.4	1166.6	1166.8	1167.0	1167.2	1168.1
167.5°	1187.9	1187.0	1186.2	1185.4	1184.5	1184.1	1184.1	1184.1	1184.1	1184.1	1185.4
170°	1198.5	1197.7	1196.8	1196.0	1195.1	1194.7	1194.7	1194.7	1194.7	1194.7	1196.0
172.5°	1206.1	1205.3	1204.4	1203.5	1202.7	1202.2	1202.2	1202.2	1202.2	1202.2	1203.5
175°	1214.6	1213.7	1212.9	1212.0	1211.2	1210.8	1210.8	1210.8	1210.8	1210.8	1212.0
177.5°	1219.0	1218.3	1217.6	1216.9	1216.3	1215.9	1215.7	1215.5	1215.3	1215.1	1216.2
180°	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4



TEST NUMBER: P333200-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-D1

**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°	94.1	98.6	103.0	105.9	107.4	108.8	110.2	111.6
95°	127.2	131.7	136.2	139.1	140.5	141.9	143.2	144.6
97.5°	166.8	171.1	175.4	178.1	179.3	180.5	181.7	182.9
100°	194.2	198.9	203.7	206.8	208.0	209.3	210.5	211.7
102.5°	222.7	227.5	232.3	235.5	236.8	238.3	239.7	241.1
105°	268.6	272.6	276.5	279.4	281.0	282.6	284.1	285.8
107.5°	319.0	322.4	325.7	327.8	328.6	329.5	330.3	331.0
110°	353.9	357.2	360.4	362.4	363.2	363.9	364.7	365.4





TEST NUMBER: P333200-930

CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	389.0	391.8	394.5	396.2	396.8	397.5	398.0	398.6
115°	442.7	445.0	447.3	448.7	449.3	449.9	450.5	451.2
117.5°	496.3	498.8	501.3	502.6	502.7	502.8	502.9	503.0
120°	532.6	535.0	537.4	538.5	538.5	538.4	538.4	538.4
122.5°	568.0	570.1	572.1	573.2	573.4	573.6	573.7	573.8
125°	620.4	622.2	623.9	625.1	625.5	626.0	626.5	627.0
127.5°	672.2	674.0	675.8	676.9	677.4	677.7	678.1	678.4
130°	706.9	708.6	710.3	711.3	711.5	711.8	712.1	712.3
132.5°	739.7	741.4	743.1	744.0	744.0	744.0	744.0	744.0
135°	790.2	792.0	793.7	794.6	794.4	794.3	794.1	793.9
137.5°	839.8	841.7	843.6	844.2	843.8	843.3	842.8	842.3
140°	871.1	873.0	874.9	875.6	875.1	874.7	874.2	873.6
142.5°	901.9	903.4	905.0	905.5	905.0	904.5	904.0	903.5
145°	946.9	947.6	948.3	948.6	948.5	948.4	948.4	948.3
147.5°	989.0	989.8	990.5	990.3	989.0	987.9	986.7	985.5
150°	1015.6	1015.6	1015.6	1015.5	1015.2	1014.9	1014.6	1014.4
152.5°	1040.9	1041.4	1041.9	1041.8	1041.1	1040.3	1039.6	1038.9
155°	1077.0	1077.8	1078.7	1078.6	1077.5	1076.4	1075.5	1074.4
157.5°	1108.2	1109.1	1109.9	1109.7	1108.3	1106.9	1105.5	1104.2
160°	1127.2	1128.0	1128.9	1128.8	1127.7	1126.7	1125.6	1124.6
162.5°	1145.0	1146.0	1147.0	1146.9	1145.7	1144.4	1143.2	1142.0
165°	1168.9	1169.7	1170.6	1170.4	1169.1	1167.8	1166.6	1165.3
167.5°	1186.6	1187.9	1189.1	1189.1	1187.8	1186.5	1185.2	1183.9
170°	1197.2	1198.5	1199.7	1199.6	1198.2	1196.7	1195.2	1193.8
172.5°	1204.8	1206.1	1207.3	1207.3	1206.0	1204.7	1203.4	1202.1
175°	1213.3	1214.6	1215.9	1215.8	1214.3	1212.8	1211.3	1209.8
177.5°	1217.2	1218.2	1219.2	1219.1	1218.0	1216.8	1215.6	1214.4
180°	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4

(END OF REPORT)