

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: P333193-935

Luminaire Tested: **S125DIP-S610D1035U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333193-935
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-S610D1035U935-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5715.4 lumens
Efficiency: N/A
Efficacy: 128.4 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

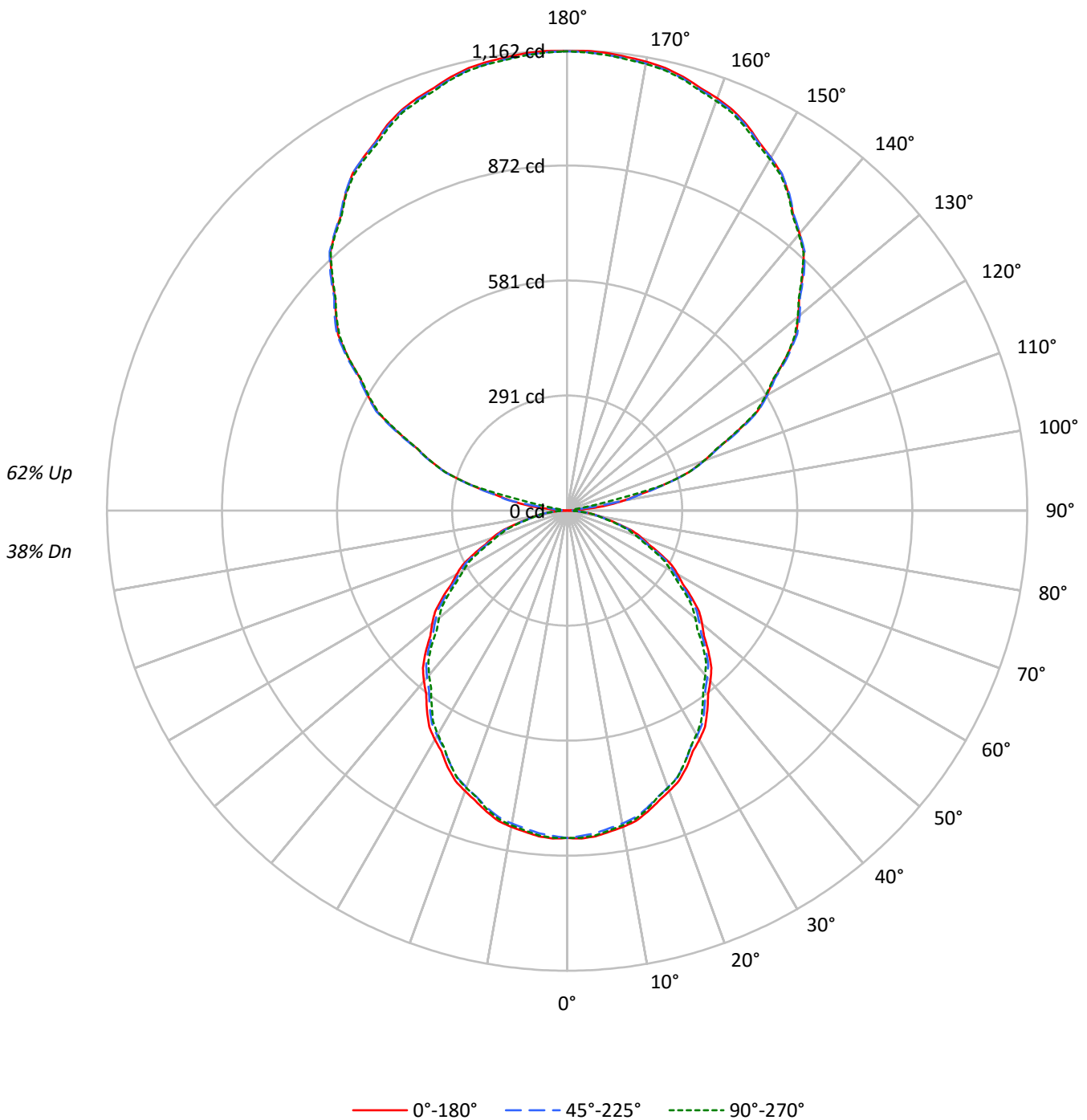
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	95	95	95	95	76	76	76	60	60	60	45	45	45	38
1	95	91	87	83	86	82	79	76	67	65	63	53	51	50	39	39	38	32
2	86	79	73	68	78	72	67	62	59	55	52	46	44	41	35	33	32	26
3	79	70	62	57	71	63	57	52	52	47	43	41	38	35	31	29	27	22
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17
6	61	49	41	35	55	45	38	33	37	32	28	29	26	23	22	20	18	15
7	56	44	36	31	51	40	33	29	33	28	24	27	23	20	20	18	16	13
8	52	40	32	27	47	37	30	25	30	25	21	24	21	18	19	16	14	12
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	10
10	45	33	26	21	41	31	24	20	25	21	17	21	17	14	16	13	12	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5340	5340	5340
5°	5352	5301	5335
10°	5319	5264	5294
15°	5262	5201	5223
20°	5179	5112	5121
25°	5091	5007	5002
30°	4981	4894	4869
35°	4864	4771	4704
40°	4743	4639	4572
45°	4613	4517	4427
50°	4470	4372	4240
55°	4332	4206	4088
60°	4166	4039	3896
65°	3969	3839	3709
70°	3780	3609	3484
75°	3444	3331	3216
80°	3065	3016	2942
85°	2668	2712	2571



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	1.4
10°-20°	220.2	3.9
20°-30°	325.2	5.7
30°-40°	379.4	6.6
40°-50°	381.1	6.7
50°-60°	334.5	5.9
60°-70°	249.3	4.4
70°-80°	142.5	2.5
80°-90°	43.9	0.8
90°-100°	42.2	0.7
100°-110°	259.7	4.5
110°-120°	471.1	8.2
120°-130°	604.6	10.6
130°-140°	650.2	11.4
140°-150°	610.3	10.7
150°-160°	493.7	8.6
160°-170°	319.3	5.6
170°-180°	110.1	1.9
0°-30°	623.4	10.9
0°-40°	1002.8	17.5
0°-60°	1718.4	30.1
0°-90°	2154.1	37.7
90°-120°	772.9	13.5
90°-150°	2638.1	46.2
90°-180°	3561.0	62.3
0°-180°	5715.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	827	827	827	827	827	
5°	826	824	818	823	823	78
15°	787	785	778	781	781	222
25°	714	711	703	704	702	329
35°	617	614	605	602	597	386
45°	505	502	495	487	485	389
55°	385	382	374	368	363	343
65°	260	258	251	246	243	258
75°	138	137	134	131	129	147
85°	36	37	37	36	35	40
90°	1	8	14	18	21	4
95°	49	45	14	18	18	62
105°	253	256	256	256	255	268
115°	475	479	480	476	471	470
125°	675	681	681	678	675	603
135°	842	846	845	843	838	649
145°	976	977	978	978	973	610
155°	1075	1070	1071	1073	1067	495
165°	1134	1129	1130	1134	1128	320
175°	1160	1155	1155	1161	1154	110
180°	1160	1160	1160	1160	1160	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	829.0	828.6	828.3	827.9	827.6	826.8	825.7	824.5	823.4	822.2	823.4
5°	825.6	825.3	825.0	824.7	824.4	823.5	822.1	820.6	819.2	817.7	819.1
7.5°	817.9	817.7	817.4	817.1	816.8	815.9	814.2	812.7	811.1	809.5	810.7
10°	811.1	810.9	810.6	810.3	810.0	809.1	807.4	805.9	804.3	802.7	803.8
12.5°	802.8	802.3	801.8	801.2	800.7	799.7	798.2	796.8	795.2	793.8	794.7
15°	787.0	786.5	786.1	785.7	785.2	784.2	782.6	781.0	779.4	777.8	778.5
17.5°	768.8	768.2	767.5	766.9	766.2	765.1	763.4	761.7	760.1	758.5	759.3
20°	753.6	753.3	753.0	752.8	752.4	751.4	749.5	747.6	745.7	743.8	744.9
22.5°	738.4	737.9	737.4	736.8	736.3	735.2	733.4	731.7	729.9	728.1	728.8
25°	714.4	713.6	712.9	712.2	711.4	710.2	708.3	706.4	704.5	702.6	702.9
27.5°	686.2	685.8	685.4	684.9	684.5	683.3	681.3	679.4	677.4	675.5	675.5
30°	667.9	667.4	667.0	666.6	666.2	664.9	662.7	660.5	658.3	656.2	655.8
32.5°	648.0	647.4	646.7	646.0	645.3	644.0	642.1	640.2	638.2	636.3	635.8
35°	616.9	616.3	615.7	615.2	614.6	613.3	611.2	609.2	607.2	605.1	604.4
37.5°	584.5	583.8	583.2	582.4	581.7	580.3	578.4	576.5	574.5	572.7	571.6
40°	562.6	561.9	561.1	560.4	559.6	558.3	556.3	554.2	552.2	550.2	548.9
42.5°	539.1	538.5	537.8	537.2	536.6	535.3	533.2	531.2	529.2	527.1	526.0
45°	505.1	504.5	503.9	503.3	502.7	501.5	499.8	498.1	496.3	494.6	492.8
47.5°	468.4	468.4	468.5	468.5	468.5	467.4	465.4	463.3	461.2	459.1	457.4
50°	444.9	444.4	443.9	443.5	443.1	442.0	440.2	438.5	436.8	435.1	433.2
52.5°	420.8	420.4	420.2	419.8	419.5	418.4	416.6	414.7	412.8	411.0	409.3
55°	384.7	384.2	383.7	383.3	382.9	381.7	379.6	377.6	375.6	373.5	372.2
57.5°	346.6	346.4	346.1	345.9	345.7	344.7	342.9	341.2	339.5	337.9	336.1
60°	322.5	321.9	321.3	320.7	320.2	319.1	317.5	315.9	314.3	312.7	311.3
62.5°	297.4	297.0	296.4	296.0	295.5	294.6	293.3	291.9	290.5	289.1	287.6
65°	259.7	259.4	259.2	258.8	258.6	257.6	256.0	254.4	252.8	251.2	249.9
67.5°	223.2	222.6	222.0	221.4	220.8	219.9	218.7	217.5	216.3	215.1	214.0
70°	200.2	199.5	198.7	198.0	197.3	196.2	194.9	193.6	192.3	191.1	190.1
72.5°	175.0	174.5	174.1	173.6	173.1	172.4	171.6	170.7	169.9	169.0	168.1
75°	138.0	137.8	137.4	137.2	136.9	136.4	135.6	134.9	134.1	133.5	133.0
77.5°	103.9	103.8	103.7	103.5	103.4	103.1	102.7	102.4	101.9	101.5	101.3
80°	82.4	82.4	82.4	82.4	82.4	82.3	82.0	81.7	81.5	81.1	80.9
82.5°	63.6	63.4	63.1	62.9	62.7	62.5	62.4	62.4	62.3	62.3	62.0
85°	36.0	36.2	36.2	36.4	36.6	36.6	36.6	36.6	36.6	36.6	36.5
87.5°	14.3	14.6	14.9	15.2	15.5	15.8	15.9	16.0	16.2	16.4	16.5
90°	0.9	2.4	3.9	5.4	7.0	8.4	9.7	11.1	12.4	13.8	14.7
92.5°	13.3	12.1	11.1	10.0	9.0	9.0	10.2	11.4	12.6	13.8	14.7
95°	49.0	48.4	47.9	47.3	46.8	42.8	35.6	28.2	21.0	13.8	14.7
97.5°	102.3	103.3	104.4	105.4	106.4	99.8	85.4	71.0	56.7	42.3	36.9
100°	143.5	144.1	144.7	145.3	145.9	146.5	147.3	148.1	148.8	149.6	121.1
102.5°	185.5	186.2	187.0	187.7	188.4	189.0	189.5	189.9	190.4	190.9	185.5
105°	252.7	253.5	254.3	255.0	255.8	256.1	256.1	256.1	256.1	256.1	256.1
107.5°	322.5	322.5	322.5	322.5	322.5	322.7	323.1	323.5	323.9	324.3	324.3
110°	367.9	367.9	367.9	367.9	367.9	368.2	368.5	368.9	369.3	369.6	369.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	410.6	411.0	411.5	412.0	412.4	412.8	413.0	413.2	413.5	413.7	412.9
115°	474.6	475.5	476.5	477.4	478.4	479.0	479.1	479.3	479.5	479.7	479.0
117.5°	540.7	540.7	540.6	540.6	540.6	541.0	541.7	542.3	543.1	543.8	542.9
120°	582.0	581.8	581.6	581.4	581.3	581.4	582.0	582.6	583.2	583.8	583.3
122.5°	618.5	619.1	619.9	620.6	621.4	621.8	622.2	622.4	622.7	622.9	622.5
125°	674.9	676.1	677.5	678.9	680.2	680.9	680.9	680.9	680.9	680.9	680.1
127.5°	728.7	729.6	730.6	731.5	732.5	732.9	732.8	732.7	732.5	732.5	732.0
130°	761.6	762.7	763.6	764.6	765.5	766.0	766.3	766.5	766.6	766.8	766.3
132.5°	794.7	795.8	796.9	798.0	799.1	799.4	799.0	798.7	798.2	797.8	797.6
135°	841.6	842.7	844.0	845.1	846.2	846.6	846.2	845.8	845.4	845.1	844.6
137.5°	884.8	885.8	886.7	887.8	888.7	889.1	888.7	888.4	888.0	887.7	887.8
140°	913.0	913.3	913.8	914.1	914.5	914.6	914.4	914.2	914.0	913.9	914.2
142.5°	938.4	938.7	938.9	939.1	939.4	939.6	939.9	940.1	940.4	940.6	940.7
145°	975.8	976.1	976.5	976.9	977.2	977.5	977.5	977.5	977.5	977.5	977.7
147.5°	1008.4	1008.3	1008.2	1008.1	1008.1	1008.1	1008.4	1008.7	1008.8	1009.1	1009.4
150°	1029.1	1028.6	1028.3	1027.9	1027.5	1027.5	1027.9	1028.3	1028.6	1029.1	1029.4
152.5°	1049.0	1048.2	1047.3	1046.5	1045.6	1045.4	1045.8	1046.1	1046.5	1046.9	1047.3
155°	1074.6	1073.5	1072.3	1071.2	1070.1	1069.6	1070.1	1070.4	1070.7	1071.2	1071.8
157.5°	1094.3	1093.6	1093.0	1092.4	1091.7	1091.3	1091.3	1091.4	1091.4	1091.5	1092.1
160°	1108.1	1107.0	1105.9	1104.7	1103.5	1103.0	1103.3	1103.5	1103.6	1103.8	1104.6
162.5°	1119.1	1118.0	1116.8	1115.7	1114.6	1114.0	1114.2	1114.5	1114.7	1114.8	1115.9
165°	1133.9	1132.7	1131.6	1130.5	1129.4	1128.9	1129.0	1129.2	1129.5	1129.6	1130.8
167.5°	1145.0	1143.8	1142.5	1141.3	1140.2	1139.7	1139.9	1140.1	1140.2	1140.5	1141.9
170°	1151.1	1149.8	1148.4	1147.1	1145.7	1145.2	1145.4	1145.6	1145.7	1146.0	1147.5
172.5°	1155.2	1153.9	1152.5	1151.2	1149.9	1149.4	1149.7	1150.0	1150.4	1150.7	1152.1
175°	1159.7	1158.6	1157.4	1156.2	1155.1	1154.7	1154.9	1155.0	1155.2	1155.4	1156.9
177.5°	1161.7	1160.9	1159.9	1159.0	1158.1	1157.7	1157.9	1158.0	1158.2	1158.3	1159.4
180°	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	824.5	825.7	826.8	827.3	827.2	827.1	827.0	826.9
5°	820.4	821.7	822.9	823.5	823.4	823.3	823.1	822.9
7.5°	812.0	813.3	814.6	815.2	815.0	814.9	814.8	814.6
10°	805.0	806.2	807.4	807.9	807.7	807.5	807.4	807.3
12.5°	795.7	796.6	797.5	798.0	797.9	797.9	797.9	797.8
15°	779.3	780.0	780.8	781.1	781.1	781.1	781.1	781.1
17.5°	760.3	761.1	762.1	762.2	761.4	760.7	760.0	759.2
20°	745.8	746.8	747.9	748.0	747.3	746.6	745.8	745.1
22.5°	729.4	730.1	730.8	730.9	730.4	729.9	729.4	728.9
25°	703.2	703.4	703.8	703.7	703.3	702.8	702.4	702.0
27.5°	675.6	675.7	675.7	675.5	675.1	674.7	674.2	673.8
30°	655.6	655.3	655.0	654.6	654.2	653.8	653.3	652.9
32.5°	635.2	634.6	634.1	633.5	632.7	632.0	631.1	630.3
35°	603.6	603.0	602.2	601.2	600.1	598.9	597.8	596.6
37.5°	570.5	569.5	568.3	567.5	566.8	566.2	565.5	564.8
40°	547.5	546.2	544.9	544.1	543.6	543.2	542.8	542.3
42.5°	524.8	523.6	522.4	521.4	520.7	520.1	519.4	518.8
45°	491.0	489.3	487.6	486.5	486.0	485.6	485.2	484.7
47.5°	455.6	453.7	452.0	450.6	449.6	448.6	447.5	446.5
50°	431.3	429.4	427.5	426.0	425.0	424.0	422.9	422.0
52.5°	407.6	406.0	404.3	402.9	401.8	400.6	399.5	398.4
55°	370.9	369.6	368.3	367.1	366.1	365.1	364.1	363.1
57.5°	334.4	332.8	331.1	329.9	329.4	328.8	328.3	327.8
60°	309.8	308.3	306.9	305.7	304.6	303.6	302.6	301.6
62.5°	286.0	284.5	282.8	281.7	280.9	280.1	279.3	278.5
65°	248.6	247.3	246.0	245.0	244.4	243.8	243.3	242.7
67.5°	212.9	211.8	210.7	209.9	209.6	209.2	208.9	208.5
70°	189.2	188.4	187.5	186.8	186.2	185.6	185.0	184.5
72.5°	167.0	166.1	165.1	164.3	163.7	163.2	162.6	162.0
75°	132.6	132.2	131.7	131.2	130.6	130.0	129.5	128.9
77.5°	101.0	100.7	100.5	100.1	99.7	99.4	98.9	98.5
80°	80.8	80.7	80.5	80.3	80.0	79.7	79.5	79.1
82.5°	61.7	61.5	61.2	61.0	61.0	61.0	60.9	60.9
85°	36.3	36.2	36.1	35.8	35.6	35.2	35.0	34.7
87.5°	16.7	17.0	17.1	17.1	17.0	17.0	16.8	16.7
90°	15.7	16.6	17.6	18.3	18.9	19.5	20.1	20.7
92.5°	15.7	16.6	17.6	18.2	18.4	18.7	19.0	19.3
95°	15.7	16.6	17.6	18.1	18.1	18.1	18.1	18.1
97.5°	31.5	26.2	20.8	18.1	18.1	18.1	18.1	18.1
100°	92.6	64.2	35.7	21.1	20.3	19.5	18.9	18.1
102.5°	180.0	174.7	169.3	160.1	147.1	134.1	121.1	108.1
105°	256.1	256.1	256.1	256.1	255.9	255.7	255.5	255.3
107.5°	324.3	324.4	324.4	324.2	323.6	323.0	322.4	321.8
110°	368.5	367.9	367.4	367.2	367.4	367.6	367.7	367.9



TEST NUMBER: P333193-935

CATALOG NUMBER: S125DIP-S610D1035U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	412.2	411.5	410.8	410.3	410.0	409.7	409.5	409.2
115°	478.2	477.4	476.6	475.7	474.6	473.4	472.3	471.1
117.5°	541.8	540.9	539.8	539.1	538.6	538.1	537.6	537.1
120°	583.0	582.6	582.2	581.5	580.6	579.6	578.7	577.7
122.5°	622.2	621.8	621.4	620.6	619.6	618.5	617.3	616.2
125°	679.3	678.6	677.8	677.2	676.6	676.0	675.5	674.9
127.5°	731.6	731.2	730.7	729.9	728.4	727.0	725.7	724.2
130°	765.7	765.1	764.6	763.8	762.8	761.9	761.0	759.9
132.5°	797.5	797.5	797.3	796.8	795.8	794.9	793.9	793.0
135°	844.3	844.0	843.5	842.7	841.6	840.5	839.3	838.2
137.5°	887.9	887.9	888.0	887.5	886.6	885.5	884.6	883.6
140°	914.6	915.0	915.3	915.0	913.9	912.7	911.5	910.4
142.5°	940.8	940.9	941.0	940.5	939.3	938.1	937.0	935.8
145°	977.8	978.0	978.2	977.8	976.6	975.4	974.3	973.2
147.5°	1009.5	1009.8	1010.0	1009.4	1008.1	1006.7	1005.3	1003.9
150°	1029.8	1030.2	1030.5	1030.0	1028.5	1026.9	1025.4	1023.9
152.5°	1047.7	1048.1	1048.4	1047.9	1046.5	1045.2	1043.8	1042.4
155°	1072.3	1072.9	1073.5	1073.0	1071.4	1069.9	1068.4	1066.9
157.5°	1092.7	1093.3	1093.9	1093.5	1091.9	1090.4	1088.8	1087.4
160°	1105.4	1106.1	1106.9	1106.5	1105.0	1103.5	1101.9	1100.4
162.5°	1117.0	1118.0	1119.1	1118.8	1117.1	1115.4	1113.8	1112.1
165°	1131.9	1133.1	1134.2	1134.0	1132.5	1130.9	1129.5	1127.9
167.5°	1143.2	1144.6	1146.0	1145.8	1144.1	1142.4	1140.7	1138.9
170°	1149.0	1150.6	1152.1	1151.9	1150.2	1148.6	1146.9	1145.1
172.5°	1153.5	1154.9	1156.2	1156.1	1154.3	1152.6	1150.9	1149.3
175°	1158.5	1160.0	1161.5	1161.4	1159.7	1158.0	1156.2	1154.5
177.5°	1160.5	1161.6	1162.6	1162.5	1161.3	1160.1	1158.9	1157.6
180°	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7

(END OF REPORT)