

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: P333193-940

Luminaire Tested: **S125DIP-S610D1035U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333193-940
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-S610D1035U940-4F0-1E-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: 5919.2 lumens
Efficiency: N/A
Efficacy: 133.0 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

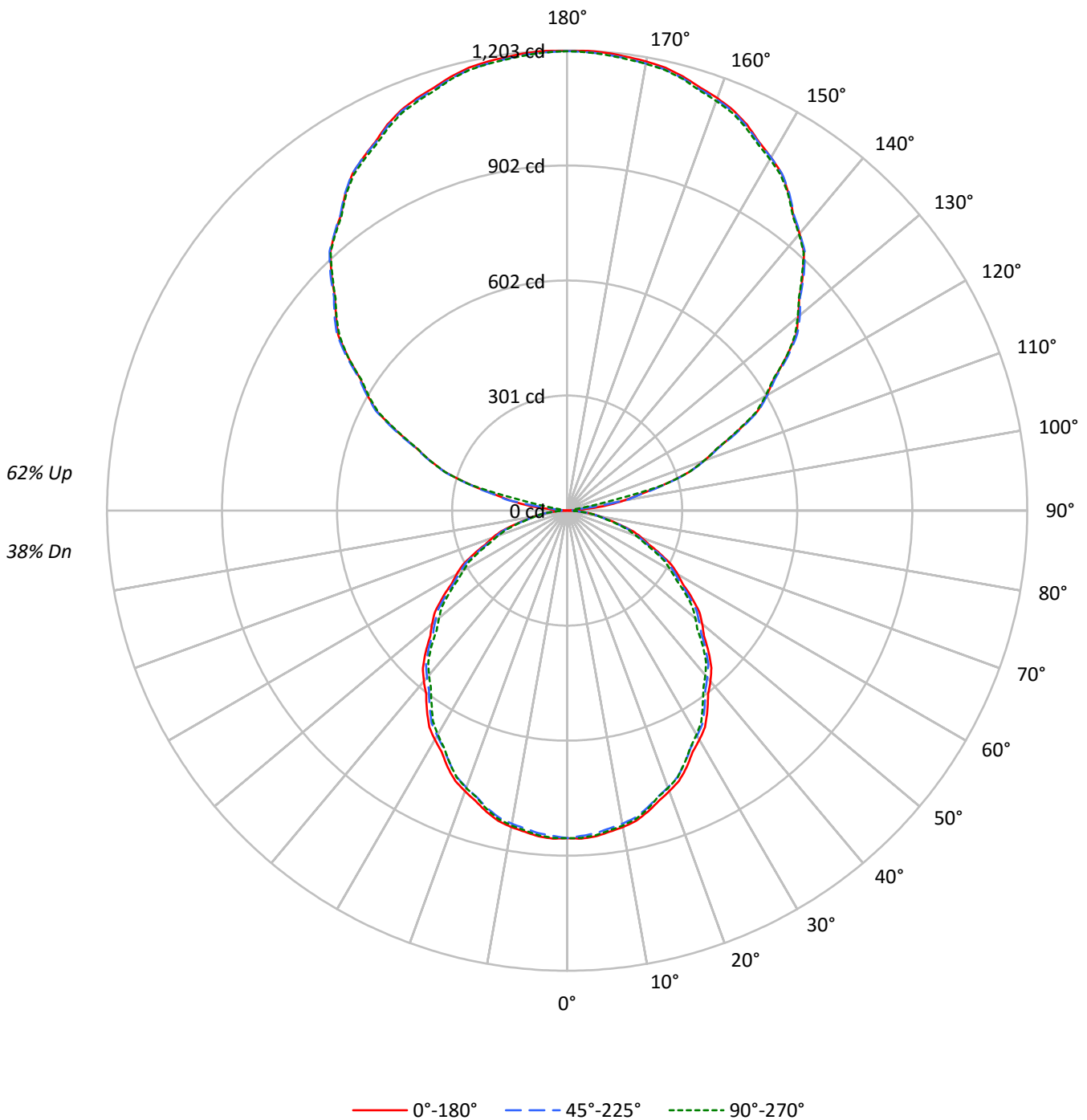
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5531	5531	5531
5°	5544	5490	5525
10°	5509	5452	5483
15°	5449	5386	5409
20°	5364	5294	5304
25°	5273	5185	5181
30°	5158	5068	5043
35°	5037	4941	4872
40°	4912	4804	4736
45°	4778	4678	4585
50°	4629	4527	4391
55°	4486	4355	4234
60°	4314	4184	4035
65°	4109	3976	3842
70°	3914	3737	3609
75°	3566	3449	3331
80°	3172	3124	3046
85°	2764	2808	2660



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.7	1.4
10°-20°	228.1	3.9
20°-30°	336.8	5.7
30°-40°	393.0	6.6
40°-50°	394.7	6.7
50°-60°	346.5	5.9
60°-70°	258.2	4.4
70°-80°	147.6	2.5
80°-90°	45.4	0.8
90°-100°	43.6	0.7
100°-110°	269.0	4.5
110°-120°	487.9	8.2
120°-130°	626.1	10.6
130°-140°	673.4	11.4
140°-150°	632.1	10.7
150°-160°	511.3	8.6
160°-170°	330.7	5.6
170°-180°	114.1	1.9
0°-30°	645.6	10.9
0°-40°	1038.6	17.5
0°-60°	1779.7	30.1
0°-90°	2230.9	37.7
90°-120°	800.5	13.5
90°-150°	2732.2	46.2
90°-180°	3688.0	62.3
0°-180°	5919.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	856	856	856	856	856	
5°	855	853	847	853	852	81
15°	815	813	806	809	809	230
25°	740	736	728	729	727	340
35°	639	636	627	623	618	399
45°	523	520	512	504	502	403
55°	398	396	387	381	376	356
65°	269	267	260	254	251	267
75°	143	142	138	136	134	152
85°	37	38	38	37	36	42
90°	1	8	14	19	21	4
95°	51	46	14	18	19	65
105°	262	265	265	265	264	277
115°	492	496	497	493	488	487
125°	699	705	705	702	699	624
135°	872	877	875	873	868	672
145°	1011	1012	1012	1013	1008	632
155°	1113	1108	1109	1112	1105	513
165°	1174	1169	1170	1175	1168	332
175°	1201	1196	1197	1203	1196	114
180°	1201	1201	1201	1201	1201	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4
2.5°	858.5	858.2	857.8	857.5	857.1	856.3	855.2	853.9	852.7	851.5	852.7
5°	855.1	854.7	854.4	854.1	853.8	852.9	851.4	849.9	848.4	846.9	848.3
7.5°	847.1	846.9	846.6	846.2	846.0	845.0	843.3	841.7	840.0	838.4	839.6
10°	840.1	839.8	839.5	839.2	838.9	837.9	836.2	834.6	832.9	831.3	832.5
12.5°	831.4	830.9	830.4	829.8	829.3	828.2	826.7	825.2	823.6	822.1	823.0
15°	815.0	814.6	814.1	813.7	813.2	812.2	810.6	808.9	807.2	805.6	806.3
17.5°	796.2	795.6	794.9	794.2	793.5	792.4	790.7	788.9	787.2	785.5	786.4
20°	780.5	780.2	779.9	779.6	779.3	778.2	776.2	774.3	772.3	770.3	771.4
22.5°	764.7	764.2	763.7	763.1	762.6	761.4	759.6	757.8	755.9	754.0	754.7
25°	739.9	739.0	738.3	737.6	736.8	735.5	733.5	731.6	729.6	727.6	728.0
27.5°	710.7	710.2	709.8	709.4	708.9	707.7	705.6	703.6	701.6	699.6	699.6
30°	691.7	691.3	690.8	690.4	689.9	688.6	686.3	684.0	681.8	679.6	679.2
32.5°	671.1	670.5	669.8	669.1	668.3	667.0	665.0	663.0	660.9	659.0	658.4
35°	638.9	638.3	637.7	637.1	636.5	635.2	633.0	630.9	628.8	626.7	626.0
37.5°	605.4	604.7	604.0	603.2	602.4	601.0	599.1	597.1	595.0	593.1	592.0
40°	582.6	581.9	581.1	580.4	579.6	578.2	576.1	574.0	571.9	569.8	568.5
42.5°	558.3	557.7	557.0	556.3	555.7	554.4	552.2	550.2	548.0	545.9	544.7
45°	523.1	522.5	521.8	521.2	520.7	519.4	517.6	515.9	514.0	512.2	510.4
47.5°	485.1	485.1	485.2	485.2	485.2	484.1	482.0	479.8	477.7	475.5	473.7
50°	460.7	460.2	459.8	459.3	458.9	457.8	455.9	454.1	452.4	450.6	448.6
52.5°	435.8	435.4	435.2	434.8	434.4	433.3	431.4	429.4	427.6	425.6	423.9
55°	398.4	397.9	397.4	397.0	396.5	395.3	393.2	391.1	389.0	386.8	385.5
57.5°	358.9	358.7	358.5	358.2	358.0	357.0	355.2	353.4	351.6	349.9	348.1
60°	334.0	333.4	332.8	332.2	331.6	330.5	328.9	327.2	325.5	323.9	322.4
62.5°	308.0	307.6	307.0	306.6	306.0	305.1	303.7	302.3	300.9	299.4	297.8
65°	268.9	268.7	268.4	268.0	267.8	266.8	265.1	263.5	261.8	260.2	258.8
67.5°	231.1	230.5	229.9	229.3	228.6	227.7	226.5	225.2	224.0	222.7	221.6
70°	207.3	206.6	205.8	205.1	204.3	203.2	201.9	200.5	199.2	197.9	196.9
72.5°	181.3	180.7	180.3	179.8	179.2	178.5	177.7	176.8	175.9	175.0	174.1
75°	142.9	142.7	142.3	142.0	141.8	141.2	140.4	139.7	138.9	138.2	137.8
77.5°	107.6	107.5	107.4	107.2	107.1	106.8	106.4	106.0	105.6	105.1	104.9
80°	85.3	85.3	85.3	85.3	85.3	85.2	84.9	84.6	84.4	84.0	83.8
82.5°	65.9	65.6	65.4	65.1	64.9	64.7	64.6	64.6	64.6	64.5	64.2
85°	37.3	37.5	37.5	37.7	37.9	37.9	37.9	37.9	37.9	37.9	37.8
87.5°	14.8	15.2	15.4	15.8	16.1	16.3	16.5	16.6	16.8	16.9	17.1
90°	0.9	2.5	4.0	5.6	7.2	8.7	10.1	11.5	12.8	14.3	15.2
92.5°	13.7	12.6	11.5	10.3	9.3	9.4	10.5	11.8	13.0	14.3	15.2
95°	50.7	50.1	49.6	49.0	48.4	44.3	36.8	29.2	21.8	14.3	15.2
97.5°	105.9	107.0	108.1	109.1	110.2	103.3	88.5	73.6	58.7	43.8	38.3
100°	148.6	149.3	149.9	150.4	151.1	151.8	152.6	153.4	154.1	154.9	125.5
102.5°	192.2	192.9	193.7	194.4	195.1	195.7	196.3	196.7	197.2	197.7	192.1
105°	261.7	262.5	263.3	264.1	264.9	265.3	265.3	265.3	265.3	265.3	265.3
107.5°	334.0	334.0	334.0	334.0	334.0	334.2	334.7	335.0	335.5	335.8	335.9
110°	381.0	381.0	381.0	381.0	381.0	381.3	381.7	382.1	382.5	382.8	382.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	425.3	425.7	426.1	426.7	427.1	427.5	427.8	427.9	428.2	428.5	427.7
115°	491.5	492.5	493.5	494.5	495.4	496.1	496.2	496.4	496.6	496.8	496.1
117.5°	560.0	560.0	559.9	559.9	559.9	560.3	561.0	561.7	562.5	563.2	562.2
120°	602.8	602.5	602.4	602.2	602.0	602.2	602.8	603.3	604.0	604.6	604.1
122.5°	640.5	641.2	642.0	642.7	643.5	644.0	644.4	644.6	644.9	645.2	644.7
125°	698.9	700.3	701.7	703.1	704.5	705.2	705.2	705.2	705.2	705.2	704.4
127.5°	754.7	755.6	756.6	757.6	758.6	759.0	758.9	758.8	758.7	758.6	758.1
130°	788.8	789.9	790.9	791.8	792.8	793.4	793.6	793.8	794.0	794.2	793.6
132.5°	823.0	824.2	825.4	826.4	827.6	828.0	827.5	827.2	826.7	826.3	826.1
135°	871.6	872.8	874.1	875.2	876.4	876.8	876.4	876.0	875.6	875.2	874.8
137.5°	916.3	917.4	918.4	919.4	920.4	920.8	920.4	920.1	919.7	919.4	919.4
140°	945.6	945.9	946.4	946.7	947.1	947.3	947.0	946.8	946.6	946.5	946.8
142.5°	971.9	972.1	972.4	972.6	972.9	973.1	973.4	973.7	973.9	974.2	974.3
145°	1010.6	1010.9	1011.3	1011.7	1012.1	1012.4	1012.4	1012.4	1012.4	1012.4	1012.5
147.5°	1044.4	1044.3	1044.2	1044.1	1044.0	1044.1	1044.4	1044.6	1044.8	1045.1	1045.4
150°	1065.8	1065.3	1065.0	1064.5	1064.2	1064.2	1064.5	1065.0	1065.3	1065.8	1066.1
152.5°	1086.4	1085.6	1084.7	1083.8	1082.9	1082.7	1083.1	1083.4	1083.9	1084.2	1084.7
155°	1112.9	1111.8	1110.5	1109.4	1108.2	1107.8	1108.2	1108.6	1108.9	1109.4	1110.0
157.5°	1133.4	1132.7	1132.0	1131.3	1130.6	1130.2	1130.2	1130.3	1130.3	1130.4	1131.0
160°	1147.6	1146.5	1145.3	1144.1	1142.9	1142.4	1142.6	1142.8	1143.0	1143.2	1144.0
162.5°	1159.0	1157.9	1156.6	1155.5	1154.3	1153.8	1154.0	1154.2	1154.4	1154.6	1155.7
165°	1174.4	1173.1	1172.0	1170.8	1169.7	1169.1	1169.3	1169.5	1169.7	1169.9	1171.1
167.5°	1185.8	1184.5	1183.3	1182.1	1180.9	1180.4	1180.5	1180.7	1180.9	1181.2	1182.6
170°	1192.1	1190.8	1189.4	1188.0	1186.6	1186.1	1186.2	1186.4	1186.6	1186.9	1188.4
172.5°	1196.4	1195.1	1193.6	1192.3	1190.9	1190.4	1190.7	1191.1	1191.4	1191.8	1193.2
175°	1201.0	1199.9	1198.7	1197.5	1196.3	1195.9	1196.1	1196.2	1196.4	1196.6	1198.2
177.5°	1203.2	1202.3	1201.3	1200.3	1199.4	1199.0	1199.2	1199.4	1199.5	1199.6	1200.8
180°	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4
2.5°	853.9	855.2	856.3	856.8	856.8	856.6	856.5	856.4
5°	849.6	851.0	852.3	852.9	852.7	852.7	852.5	852.3
7.5°	841.0	842.3	843.6	844.3	844.1	843.9	843.8	843.6
10°	833.7	834.9	836.2	836.7	836.5	836.3	836.2	836.1
12.5°	824.0	825.0	825.9	826.4	826.3	826.3	826.3	826.3
15°	807.1	807.8	808.6	809.0	809.0	809.0	809.0	809.0
17.5°	787.4	788.3	789.3	789.3	788.5	787.8	787.1	786.3
20°	772.4	773.5	774.5	774.7	773.9	773.2	772.4	771.7
22.5°	755.5	756.2	756.9	757.0	756.4	755.9	755.4	754.9
25°	728.3	728.5	728.9	728.8	728.3	727.9	727.5	727.0
27.5°	699.7	699.8	699.8	699.6	699.2	698.7	698.3	697.9
30°	678.9	678.7	678.3	678.0	677.5	677.1	676.6	676.2
32.5°	657.9	657.3	656.7	656.1	655.3	654.5	653.6	652.8
35°	625.2	624.5	623.7	622.7	621.5	620.3	619.1	617.9
37.5°	590.8	589.8	588.6	587.7	587.0	586.4	585.7	585.0
40°	567.0	565.7	564.4	563.5	563.0	562.6	562.1	561.7
42.5°	543.5	542.2	541.0	540.0	539.3	538.7	538.0	537.3
45°	508.5	506.8	505.0	503.8	503.4	502.9	502.5	502.0
47.5°	471.8	469.9	468.1	466.7	465.7	464.6	463.5	462.4
50°	446.7	444.7	442.7	441.2	440.1	439.1	438.0	437.0
52.5°	422.1	420.4	418.7	417.3	416.2	414.9	413.8	412.6
55°	384.1	382.8	381.5	380.2	379.2	378.1	377.1	376.0
57.5°	346.3	344.6	342.9	341.7	341.2	340.5	340.0	339.5
60°	320.8	319.3	317.8	316.6	315.5	314.4	313.3	312.4
62.5°	296.2	294.6	292.9	291.8	291.0	290.1	289.3	288.5
65°	257.4	256.1	254.8	253.8	253.2	252.5	252.0	251.4
67.5°	220.5	219.4	218.2	217.4	217.0	216.7	216.3	216.0
70°	196.0	195.1	194.2	193.5	192.9	192.3	191.6	191.1
72.5°	173.0	172.0	170.9	170.1	169.5	169.0	168.4	167.7
75°	137.3	136.9	136.4	135.9	135.3	134.6	134.1	133.5
77.5°	104.6	104.3	104.1	103.7	103.3	102.9	102.5	102.0
80°	83.7	83.6	83.4	83.2	82.8	82.6	82.3	81.9
82.5°	63.9	63.7	63.4	63.2	63.2	63.1	63.0	63.0
85°	37.6	37.5	37.4	37.1	36.8	36.5	36.2	35.9
87.5°	17.3	17.6	17.7	17.7	17.7	17.6	17.4	17.3
90°	16.2	17.2	18.2	19.0	19.6	20.2	20.8	21.4
92.5°	16.2	17.2	18.2	18.8	19.1	19.4	19.7	20.0
95°	16.2	17.2	18.2	18.7	18.7	18.7	18.7	18.7
97.5°	32.6	27.1	21.5	18.7	18.7	18.7	18.7	18.7
100°	95.9	66.5	37.0	21.8	21.0	20.2	19.5	18.7
102.5°	186.5	180.9	175.3	165.9	152.4	138.9	125.5	112.0
105°	265.3	265.3	265.3	265.2	265.0	264.8	264.7	264.4
107.5°	335.9	336.0	336.0	335.7	335.1	334.6	333.9	333.3
110°	381.7	381.0	380.5	380.3	380.5	380.7	380.8	381.0



TEST NUMBER: P333193-940

CATALOG NUMBER: S125DIP-S610D1035U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	427.0	426.1	425.4	424.9	424.6	424.4	424.1	423.8
115°	495.3	494.5	493.7	492.7	491.5	490.3	489.1	487.9
117.5°	561.2	560.2	559.1	558.3	557.9	557.3	556.8	556.2
120°	603.8	603.3	603.0	602.3	601.3	600.3	599.3	598.3
122.5°	644.4	644.0	643.5	642.7	641.7	640.5	639.4	638.2
125°	703.6	702.8	702.0	701.3	700.7	700.1	699.5	698.9
127.5°	757.7	757.2	756.8	755.9	754.4	753.0	751.5	750.0
130°	793.0	792.4	791.8	791.0	790.1	789.1	788.1	787.0
132.5°	826.0	825.9	825.7	825.2	824.2	823.2	822.2	821.3
135°	874.4	874.1	873.6	872.8	871.6	870.5	869.2	868.1
137.5°	919.5	919.6	919.7	919.2	918.2	917.1	916.1	915.1
140°	947.3	947.6	948.0	947.6	946.5	945.2	944.1	942.9
142.5°	974.4	974.5	974.6	974.0	972.8	971.6	970.4	969.2
145°	1012.7	1012.9	1013.1	1012.6	1011.5	1010.2	1009.1	1007.9
147.5°	1045.5	1045.8	1046.1	1045.4	1044.0	1042.6	1041.2	1039.7
150°	1066.6	1066.9	1067.3	1066.8	1065.1	1063.5	1061.9	1060.4
152.5°	1085.0	1085.5	1085.8	1085.3	1083.9	1082.4	1081.0	1079.6
155°	1110.5	1111.2	1111.8	1111.3	1109.6	1108.0	1106.5	1104.9
157.5°	1131.7	1132.3	1132.9	1132.5	1130.9	1129.3	1127.7	1126.1
160°	1144.8	1145.6	1146.4	1145.9	1144.4	1142.8	1141.2	1139.6
162.5°	1156.8	1157.9	1159.0	1158.7	1157.0	1155.2	1153.5	1151.7
165°	1172.2	1173.5	1174.7	1174.5	1172.9	1171.3	1169.7	1168.1
167.5°	1184.0	1185.4	1186.9	1186.7	1184.9	1183.1	1181.3	1179.6
170°	1190.0	1191.6	1193.2	1193.0	1191.2	1189.5	1187.8	1186.0
172.5°	1194.6	1196.1	1197.5	1197.3	1195.5	1193.7	1191.9	1190.3
175°	1199.8	1201.4	1202.9	1202.8	1201.0	1199.3	1197.5	1195.7
177.5°	1201.8	1203.0	1204.1	1204.0	1202.7	1201.5	1200.2	1198.9
180°	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0

(END OF REPORT)