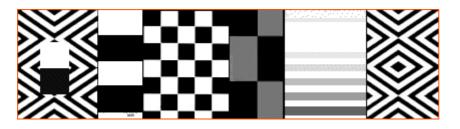
Elcometer 4695 Leneta Test Charts



Elcometer supplies a wide range of Leneta Test Charts, from plain white to those having different patterns of black and white. Made from naturally bright, non-flourescent white paper, these charts contain no optical brighteners that can affect instrumental colour measurements.

Leneta Test Charts are the market standard in today's coatings industry.

Foil Card substrates of steel, aluminium, glass and plastic are also available. Leneta Test Charts are available in boxes & cases.

Chart Type:	Description
Opacity Charts:	Used to test the hiding power of the coating, using large black and white areas
Penopac Charts:	Combine penetration and opacity tests in one chart
Display Charts:	Use diagonal patterns to help demonstrate visibly, the hiding power of a coating
Opacity-Display Charts:	Combine large black and white areas with diagonal patterns
Spreading Rate Charts:	Larger than other charts, used to measure the spreading rate of a coating
Brushout Cards:	Thicker paper is used for the testing of coatings applied with a brush or roller
Duplex Applicator Charts:	Used in conjunction with the Duplex Film Applicator to test two coatings at the same time
Unvarnished Charts:	Semi-porous charts which are ideal for clear coatings and stains
Grey Scale Charts:	A range of strips increasing in contrast - ideal for rating the power of a coating
Spray Monitors:	Self-adhesive charts, usually applied to metal panels for testing sprayed and OEM coatings
Scrub Test Panels:	Used to measure the abrasion of a coating, using the Elcometer 1720 Abrasion and Washability Tester
Metopac Test Panels:	Painted steel panels used to measure the hiding power of powder coatings
Printing Ink Drawdown Charts:	Used for testing ink qualities

Can be used in accordance with AS/NZS 1580.213.1 ASTM D 344 ASTM D 2805 ASTM D 2486

ASTM D 5150 ASTM D 6441 BS 3900-D4 DIN 53162-2

FTMS 141 4121 ISO 2814

Standards in grey have been superceded but are still recognised in some industries.

Elcometer 4695 Opacity Charts

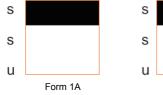
The term "Opacity Chart" refers to charts on which the test pattern is a simple combination of black and white areas, large enough for wider aperture reflectance instruments, as well as for visual opacity and colour observations.



	TECHNICAL SPECIFICATION										
Part Number		Description	Chart Dimens	ions	Box Weight	nt Quantity per Box	Boxes per Case				
Box	Case		mm	inches							
K0004695M003	K0004695M203	Leneta Chart 2A	140 x 254	5½ x 10	2.72kg (6lb)	250	6				
K0004695M004	K0004695M204	Leneta Chart 2C	194 x 260	7% x 10¼	4.08kg (9lb)	250	4				
K0004695M006	K0004695M206	Leneta Chart 3B	194 x 289	7% x 11%	4.08kg (9lb)	250	4				
K0004695M015	K0004695M215	Leneta Chart 5C	194 x 260	7% x 10¼	4.08kg (9lb)	250	4				
K0004695M036	K0004695M236	Leneta Chart 14H	286 x 438	11¼ x 17¼	5kg (11lb)	125	4				
K0004695M037	K0004695M237	Leneta Chart 15H	286 x 438	11¼ x 17¼	5kg (11lb)	125	4				

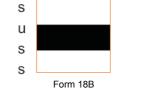
Elcometer 4695 Penopac Charts

These combine the test areas and functions of a PENetration and an OPACity chart and can be considered as universal test charts for research, development and quality control. The choices offered in size and design are responsive to individual laboratory needs and preferences. Form 19BR includes an unsealed black area, but is otherwise equivalent in functionality.











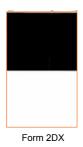
s = sealed u = unsealed

	TECHNICAL SPECIFICATION										
Part Number		Description	Chart Dimensions		Box Weight	Quantity	Boxes				
Box	Case		mm	inches		per Box	per Case				
K0004695M001	K0004695M201	Leneta Chart 1A	140 x 254	5½ x 10	2.72kg (6lb)	250	6				
K0004695M002	K0004695M202	Leneta Chart 1B	194 x 289	7% x 11%	4.08kg (9lb)	250	4				
K0004695M038	K0004695M238	Leneta Chart 18A	140 x 254	5½ x 10	2.72kg (6lb)	250	6				
K0004695M039	K0004695M239	Leneta Chart 18B	194 x 289	7% x 11%	4.08kg (9lb)	250	4				
K0004695M040	K0004695M240	Leneta Chart 19BR	194 x 289	75∕8 x 11¾	4.08kg (9lb)	250	4				

Elcometer 4695 Brushout Cards

Designed for informal brushout applications, the paper stock is almost twice the thickness of regular chart paper to give greater rigidity for more convenient handling - nominal thickness 0.5mm (20 mils).

Brushout Cards are also used widely for drawdowns and colorimetric measurements.





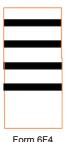




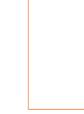
	TECHNICAL SPECIFICATION										
Part Number		Description	Chart Dimensions		Box Weight	Quantity	Boxes				
Box	Case		mm	inches	3 18kg (7lb)	per Box	per Case				
K0004695M005	K0004695M205	Leneta Chart 2DX	98 x 152	3% x 6	3.18kg (7lb)	500	4				
K0004695M016	K0004695M216	Leneta Chart 5DX	98 x 152	37∕8 x 6	3.18kg (7lb)	500	4				
K0004695M017	K0004695M217	Leneta 5DX-GW	98 x 152	3% x 6	3.18kg (7lb)	500	4				
K0004695M102	K0004695M302	Leneta Chart WDX	98 x 152	3% x 6	3.18kg (7lb)	500	4				

Elcometer 4695 Duplex Applicator Charts

Originally made to be used with the Duplex Film Applicator, an instrument designed side-by-side drawdowns, they now serve mostly as generic paint test charts.







Form WF

	TECHNICAL SPECIFICATION											
Part Number		Description	Chart Dimensions		Box Weight	Quantity	Boxes					
Box	Case		mm	inches		per Box	per Case					
K0004695M018	K0004695M218	Leneta Chart 6F4	76 x 184	3 x 7¼	2.27kg (5lb)	500	6					
K0004695M019	K0004695M219	Leneta Chart 6F6	76 x 184	3 x 7¼	2.27kg (5lb)	500	6					
K0004695M103	K0004695M303	Leneta Chart WF	76 x 184	3 x 7¼	2.27kg (5lb)	500	6					

Elcometer 4695 Display Charts/Spreading Rate

These charts employ time-tested, diagonally striped patterns, having a strong visual impact that emphasises variations in film opacity. They are frequently used for hiding power display purposes, by means of drawdowns or brushouts.

Grey strips in Forms 8H-GW and 8K-GW provide reduced substrate contrast for use with low hiding power coatings.

Spreading Rate Charts (Forms 8H and 8H-GW) are accurately 0.1 square meters (approximately one square foot) in area, and are used in brushout hiding tests at specified spreading rates as described in ASTM Method D 344.





Display Chart

Form 8B



Spreading Rate Chart







Form 8K-GW

	TECHNICAL SPECIFICATION										
Part Number		Description	Chart Dimensions		Box Weight	Quantity	Boxes				
Box	Case		mm	inches		per Box	per Case				
K0004695M021	K0004695M221	Leneta Chart 8A	140 x 254	5½ x 10	2.72kg (6lb)	250	6				
K0004695M022	K0004695M222	Leneta Chart 8B	194 x 289	7% x 11%	4.08kg (9lb)	250	4				
K0004695M025	K0004695M225	Leneta Chart 8K	219 x 285	8% x 11¼	5kg (11lb)	250	4				
K0004695M023	K0004695M223	Leneta Chart 8H	286 x 438	11¼ x 17¼	5kg (11lb)	125	4				
K0004695M024	K0004695M224	Leneta Chart 8H-GW	286 x 438	11¼ x 17¼	5kg (11lb)	125	4				
K0004695M026	K0004695M226	Leneta Chart 8K-GW	219 x 285	85∕8 x 11¼	5kg (11lb)	250	4				

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Elcometer 4695 Checkerboard Charts/Spreading Rate Charts

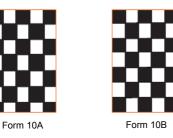
One of the earliest hiding power test surfaces was linoleum with a black and white checkerboard pattern.

This was soon replaced by sealed paperboard charts of which Forms 10H and 10H-BG Spreading Rate Charts are typical examples.

Designed for brushout tests at specified rates, such as in ASTM Method D 344 and Canadian 1-GP-71, they are also used for drawdown applications like their similar counterparts Forms 10A and 10B.

Black and grey squares in Form 10H-BG provide reduced contrast for testing coatings with lower hiding power.

Display Chart









	TECHNICAL SPECIFICATION										
Part Number		Description	Chart Dimensions		Box Weight	Quantity	Boxes				
Box	Case		mm	inches		per Box	per Case				
K0004695M029	K0004695M229	Leneta Chart 10A	140 x 254	5½ x 10	2.72kg (6lb)	250	6				
K0004695M030	K0004695M230	Leneta Chart 10B	194 x 289	7% x 11%	4.08kg (9lb)	250	4				
K0004695M031	K0004695M231	Leneta Chart 10H	286 x 438	11¼ x 17¼	5kg (11lb)	125	4				
K0004695M032	K0004695M232	Leneta Chart 10H-BG	286 x 438	11¼ x 17¼	5kg (11lb)	125	4				

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Elcometer 4695 Opacity-Display Charts/Spreading Rate Charts

Charts of this type combine the large, unbroken areas that are characteristic of Opacity Charts, with the striped design of a Display Chart. The larger areas permit wide aperture photometric measurements and visual colour comparisons, while the striped area is uniquely effective for hiding power comparison and display. Spreading Rate Charts (Forms 12H and 13H) are accurately 0.1 square metres (approximately one square foot) in area, and are designed for brushout application at specified spreading rates.



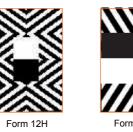






Form 21B





	TECHNICAL SPECIFICATION										
Part Number		Description	Chart Dimensions		Box Weight	Quantity	Boxes				
Box	Case		mm	inches		per Box	per Case				
K0004695M027	K0004695M227	Leneta Chart 9A	140 x 254	5½ x 10	2.72kg (6lb)	250	6				
K0004695M028	K0004695M228	Leneta Chart 9B	194 x 289	7% x 11%	4.08kg (9lb)	250	4				
K0004695M041	K0004695M241	Leneta Chart 21B	194 x 289	7% x 11%	4.08kg (9lb)	250	4				
K0004695M033	K0004695M233	Leneta Chart 12H	286 x 438	11¼ x 17¼	5kg (11lb)	125	4				
K0004695M034	K0004695M234	Leneta Chart 13H	286 x 438	11¼ x 17¼	5kg (11lb)	125	4				

Elcometer 4695 Metopac™ Metal Test Panels

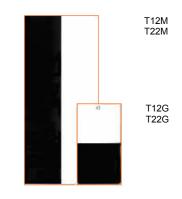
Painted steel panels, used for measuring the hiding power of powder coatings and industrial enamels. Available in half black/half white and all black.

The black surface:

Solvent Resistant, Non bleeding, Reflective - 1% maximum - measured using ASTM Method E1347

White Surface:

Solvent Resistant, Colour Retentive, Reflective, Reflectance - 80% minimum - measured using ASTM Method E1347

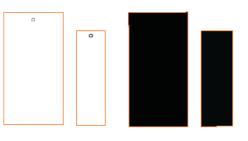


	TECHNICAL SPECIFICATION										
Part Number		Description	Chart Dimensions		Box Weight	Quantity	Boxes				
Box	Case		mm	inches		per Box	per Case				
K0004695M094	K0004695M294	Leneta Panel T12G	76 x 132	3 x 5 ³ / ₁₆	3.63kg (8lb)	125	4				
K0004695M095	K0004695M295	Leneta Panel T12M	132 x 279	5 ³ / ₁₆ x 11	1.81kg (4lb)	50	4				
K0004695M096	K0004695M296	Leneta Panel T22G	76 x 132	3 x 5 ³ / ₁₆	3.63kg (8lb)	125	4				
K0004695M097	K0004695M297	Leneta Panel T22M	132 x 279	5 ³ / ₁₆ x 11	1.81kg (4lb)	50	4				

Elcometer 4695 Plain White & Plain Black Charts

Available in varying thicknesses and size. The Leneta WBX, WDX, WA, and WB cards all come with convenience hole at the top.

W: White, B: Black

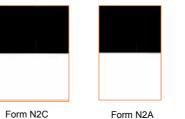


	TECHNICAL SPECIFICATION										
Part Number		Description	Chart Dimen	sions	Box Weight	Quantity	Boxes				
Box	Case		mm	inches		per Box	per Case				
Card thickness	0.5mm										
K0004695M100	K0004695M300	Leneta Chart WBX	194 x 286	7% x 11¼	3.18kg (7lb)	125	4				
K0004695M102	K0004695M302	Leneta Chart WDX	98 x 152	37∕8 x 6	3.18kg (7lb)	500	4				
K0004695M106	K0004695M306	Leneta Chart WHX	286 x 438	11¼ x 17¼	4.54kg (10lb)	75	4				
K0004695M108	K0004695M308	Leneta Chart WKX	219 x 286	8% x 11¼	3.63kg (8lb)	125	4				
Card thickness	0.3mm										
K0004695M098	K0004695M298	Leneta Chart WA	140 x 254	5½ x 10	2.72kg (6lb)	250	6				
K0004695M099	K0004695M299	Leneta Chart WB	194 x 286	7% x 11¼	4.54kg (10lb)	250	4				
K0004695M101	K0004695M301	Leneta Chart WD	98 x 152	37∕8 x 6	4.54kg (10lb)	1000	4				
K0004695M103	K0004695M303	Leneta Chart WF	76 x 184	3 x 7¼	2.27kg (5lb)	500	6				
K0004695M104	K0004695M304	Leneta Chart WG	76 x 140	3 x 5½	3.63kg (8lb)	1000	4				
K0004695M105	K0004695M305	Leneta Chart WH	286 x 438	11¼ x 17¼	5kg (11lb)	125	4				
K0004695M107	K0004695M307	Leneta Chart WK	219 x 286	8% x 11¼	5kg (11lb)	250	4				
K0004695M109	K0004695M309	Leneta Chart WM	140 x 286	5½ x 11¼	2.72kg (6lb)	250	6				
K0004695M049	K0004695M249	Leneta Chart BH	286 x 438	11¼ x 17¼	5kg (11lb)	125	4				
K0004695M050	K0004695M250	Leneta Chart BK	219 x 286	8% x 11¼	5kg (11lb)	250	4				

Elcometer 4695 Unvarnished Test Charts

Unvarnished Test Charts are ideal for testing applications of clear coatings and stains.

The unvarnished (semi-porous) surface simulates wood or unsealed wallboard.







Form N9A

Form NWK

	TECHNICAL SPECIFICATION										
Part Number		Description	Chart Dimensions		Box Weight	Quantity	Boxes				
Box	Case		mm	inches		per Box	per Case				
K0004695M064	K0004695M264	Leneta Chart N2A	140 x 254	5½ x 10	2.72kg (6lb)	250	6				
K0004695M065	K0004695M265	Leneta Chart N2C	194 x 260	75∕8 x 101⁄4	4.08kg (9lb)	250	4				
K0004695M066	K0004695M266	Leneta Chart N9A	140 x 254	5½ x 10	2.72kg (6lb)	250	6				
K0004695M067	K0004695M267	Leneta Chart NWK	219 x 286	85∕8 x 11¼	5kg (11lb)	250	4				
K0004695M110	K0004695M210	Leneta Chart WP-1	140 x 254	5½ x 10	2.72kg (6lb)	250	6				

Elcometer 4695 Grey Scale Charts

These are sealed paint test charts with six stripes on a white field, ranging in shade from very light grey to black. The stripes are numbered 1 to 6, representing uniform steps of increasing contrast. The hiding power of the applied coatings is rated as the number of the darkest stripe that is completely (or almost completely) obscured, at a specified thickness or spread rate. Form CU-1 is used for more practical large-area brush or roller applications as in ASTM D5150. Applications on Form 24B are made with a drawdown blade.

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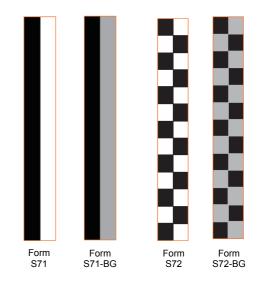


	TECHNICAL SPECIFICATION										
Part Number		Description	Chart Dimensions		Box Weight	Quantity	Boxes				
Box	Case		mm	inches		per Box	per Case				
K0004695M053	-	Leneta Chart CU-1	610 x 946	24 x 37¼	22.68kg (50lb)	100	1				
K0004695M043	K0004695M243	Leneta Chart 24B	194 x 289	7% x 11%	4.08kg (9lb)	250	4				

Elcometer 4695 Spray Strips - Hiding Power for OEM

These are used by industrial coatings laboratories, principally those involved with the automotive industry, to measure the hiding power of spraying enamels. The chart is attached to a steel panel and the test coating sprayed to produce a "wedge" varying from thin at one end to thick at the other.

After drying, a location on the chart of adequate visual hiding or 0.98 contrast ratio is determined, and the film thickness measured electronically on the steel panel adjacent to that location. Conversely, a location of specified thickness is determined on the steel panel and the contrast ratio measured adjacent to that location.



TECHNICAL SPECIFICATION							
Part Number		Description	Chart Dimensions		Box Weight	Quantity	Boxes
Box	Case		mm	inches		per Box	per Case
K0004695M089	K0004695M289	Leneta Strips S71	51 x 279	2 x 11	2.27kg (5lb)	500	4
K0004695M090	K0004695M290	Leneta Strips S71-BG	51 x 279	2 x 11	2.27kg (5lb)	500	4
K0004695M091	K0004695M291	Leneta Strips S71-RG	51 x 279	2 x 11	2.27kg (5lb)	500	4
K0004695M092	K0004695M292	Leneta Strips S72	51 x 279	2 x 11	2.27kg (5lb)	500	4
K0004695M093	K0004695M293	Leneta Strips S72-BG	51 x 279	2 x 11	2.27kg (5lb)	500	4

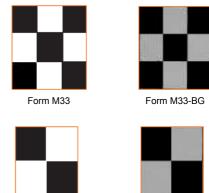
Elcometer 4695 Spray Monitors - Self Adhesive Hiding Power

These are pressure sensitive labels with a hiding power test pattern and a sealed, solvent-resistant surface. They are used primarily with metal panels on which the panel alone provides no visual clue as to the thickness of the applied paint film.

When placed on such a surface the Monitor presents a contrasting feature by which to observe how well the coating hides the surface, thereby facilitating film thickness control. It adheres firmly whether airdried or baked, to present a permanent visual record of film opacity.

Available in Black/White, Black/Grey and also Red/Grey (not shown).

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Form M12

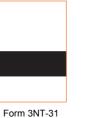
Form M12-BG

TECHNICAL SPECIFICATION							
Part Number		Description	Chart Dimensions		Box Weight	Quantity	Boxes
Box	Case		mm	inches		per Box	per Case
K0004695M059	K0004695M259	Leneta Spray Monitor M33	51 x 51	2 x 2	0.91kg (2lb)	500	4
K0004695M058	K0004695M258	Leneta Spray Monitor M33-BG	51 x 51	2 x 2	0.91kg (2lb)	500	4
K0004695M060	K0004695M260	Leneta Spray Monitor M33-RG	51 x 51	2 x 2	0.91kg (2lb)	500	4
K0004695M056	K0004695M256	Leneta Spray Monitor M12	25 x 25	1 x 1	0.91kg (2lb)	2000	4
K0004695M055	K0004695M255	Leneta Spray Monitor M12-BG	25 x 25	1 x 1	0.91kg (2lb)	2000	4
K0004695M057	K0004695M257	Leneta Spray Monitor M12-RG	25 x 25	1 x 1	0.91kg (2lb)	2000	4
K0004695M061	K0004695M261	Leneta Spray Monitor M71	51 x 279	2 x 11	2.72kg (6lb)	500	4
K0004695M062	K0004695M262	Leneta Spray Monitor M71-BG	51 x 279	2 x 11	2.72kg (6lb)	500	4
K0004695M063	K0004695M263	Leneta Spray Monitor M72	51 x 279	2 x 11	2.72kg (6lb)	500	4
K0004695M079	K0004695M279	Leneta Spray Monitor M72-BG	51 x 279	2 x 11	2.72kg (6lb)	500	4

Elcometer 4695 Printing Ink Drawdown Sheets

Available in different grades of paper, these sheets provide a variety of substrates for testing ink qualities. They are also useful for testing other coatings because of their absorbency and texture range.

* These sheets contain optical brighteners and are a heavier paper weight.



Form 3NT-4

TECHNICAL SPECIFICATION								
Part Number		Description	Chart Dimensions		Box Weight	Quantity	Boxes	
Box	Case		mm	inches		per Box	per Case	
K0004695M010	K0004695M310	Leneta Sheets 3NT	127 x 194	5 x 7%	2.27kg (5lb)	1000	6	
K0004695M116	K0004695M316	Leneta Sheets 3NT-31*	127 x 194	5 x 7%	3.63kg (8lb)	1000	6	
K0004695M117	K0004695M317	Leneta Sheets 3NT-32	127 x 194	5 x 7⁵⁄ଃ	2.72kg (6lb)	500	46	

Elcometer 4695 Scrub Test Panels

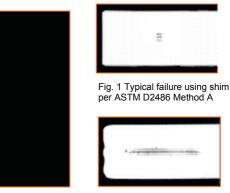
In a typical scrub test, the coating is applied to the Leneta Scrub Test Panel at a specified film thickness, allowed to dry and then subjected to scrubbing with a straight-line scrub tester.

When used in accordance with ASTM D2486, Method A, a 10 mil shim is inserted under the panel to accelerate failure and thereby reduce testing time. The scrub resistance is the number of scrub cycles required to remove the coating to a specified end point.

Alternatively, the loss in weight is determined after a specified number of scrub resistance cycles, with calculation of equivalent loss in film thickness.

These Scrub Test Panels are ideal for use with the Elcometer 1720 Washability & Abrasion Testers

elcometer



Form P121-10N

Fig. 2 Typical failure without

TECHNICAL SPECIFICATION							
Part Number		Description	Chart Dimensions		Quantity	Boxes	
Box	Case			inches	per Box	per Case	
K0004695M068	K0004695M268	Leneta Scrub Test Panel P121-10N	165 x 432	6½ x 17	100	5	
K0004695M069	K0004695M269	Leneta Scrub Test Panel P122-10N	165 x 432	6½ x 17	100	5	

ACCESSORIES				
Description	Part Number			
ASTM Test Foil 250µm (10mils)	KT001720P012			

Related Products



Elcometer 1720

Elcometer 1720 Washability & Abrasion Testers

These robust, reliable and extremely versatile machines have been designed for testing the washability, brushability and resistance of a wide range of materials including paint, lacquers, inks, coatings, leather, wood, plastics, printed material, fabrics etc.



Elcometer 4340

Elcometer 4340 Motorised/Automatic Film Applicator

An essential machine for preparing a wide variety of product samples including paint, varnish, cosmetics, glue, etc, with total consistency and reproducibility on various substrates including contrast charts, sheet steel, plastic foils and glass. All Elcometer 4340 models have 11 pre-set speeds and adjustable stroke length with quick release system.

elcometer

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