



Test results indicated as not accredited are outside the scope of the laboratory's accreditation

No. 1389045.4

(Please quote this number in all correspondence)

CLIENT:

Dalton International Ltd.

PO Box 259041

Botany, Auckland 2163

SAMPLE RECEIVED FROM:

Dalton International Ltd.

Date Received: 1

16.9.21

SAMPLE DESCRIPTION:

Orange vest, size L.

Attn.: Darryl Burn

Client Order No.:

Client Reference:

1 of 7

CONFORMANCE TO NZ TRANSPORT AGENCY SPECIFICATIONS, EDITION 4 OF PART 8 COPTTM, SECTION B, NOVEMBER 2018 (TTMC-W17) & TECHNICAL NOTES 24 JUNE 2019 & 1 JULY 2020

Date Tested: 16/9/2021

Section B3 High Visibility Garments

	Conformance
Background fabric Compliance, Section B3.1.1	Conforms
(this section is not covered in full by IANZ accreditation)	(as stated by SGS report no. SHSL1206121982TX & NZWTA report no. 1386266.9)
Retro-reflectivity, Section B3.1.2	Conforms
(this section is not covered in by IANZ accreditation)	(as stated by SGS report no. SHSL1205111937TX)
Retro-reflectivity, Section B3.1.2 – Orange Red Material for STMS Panel	N/A
(this section is not covered in full by IANZ accreditation)	
Logos, Section B3.2	Conforms
Garment Compliance, Section B3.3	Conforms
Garment Design, Sleeveless Vest Section B3.4.1	Conforms
STMS Sleeveless Vest, Section B3.4.2.1	N/A
MTC Garment Sleeve, Section B3.4.2.2	N/A

"THIS REPORT APPLIES ONLY TO THE SAMPLES TESTED"

Samples and their identifying descriptions have been provided by the client unless otherwise stated. NZWTA Ltd makes no warranty, implied or otherwise as to the source of the tested samples. The above results are designed to provide THE CLIENT WITH GUIDANCE INFORMATION ONLY. This document shall not be reproduced except in full.

L A Greer Signatory C Judan Signatory 17/09/2021





Test results indicated as not accredited are outside the scope of the laboratory's

No. 1389045.4

(Please quote this number in all correspondence)

CLIENT:

SAMPLE RECEIVED FROM:

Date Received:

16.9.21

Dalton International Ltd.

PO Box 259041

Dalton International Ltd.

Botany, Auckland 2163

Client Order No.:

SAMPLE DESCRIPTION:

Orange vest, size L.

Attn.: Darryl Burn

Client Reference:

2 of 7

CONFORMANCE TO NZ TRANSPORT AGENCY SPECIFICATIONS, EDITION 4 OF PART 8 COPTTM, SECTION B, NOVEMBER 2018 (TTMC-W17) & TECHNICAL NOTES 24 JUNE 2019 & 1 JULY 2020

Section B3 High Visibility Garments

Section B3.1.1 Fabric Colour Compliance

Requirement	Results	Conformance
Background material:	See SGS report no. SHSL1206121982TX	Conforms
Fluorescent or non-fluorescent orange-red or yellow to conform to AS/NZS 1906.4:2010, measured both wet and dry, light,	& NZWTA report no. 1386266.9.	(as stated by SGS & NZWTA reports)
perspiration and wash fastness.		

Section B3.1.2 Retro-reflectivity (Note: this section is not covered in full by IANZ accreditation)

Requirement	Results	Conformance
Retro- reflectivity material must comply with specification Class R or Class RF of AS/NZS 1906.4:2010	See SGS report no. SHSL1205111937TX.	Conforms (as stated by SGS report)
STMS panel must comply with the colour specification for Class F background material: (photometric performance – 60 CIL/m2 at entrance angle 5.0°, observation angle 0.2° / plus colour coordinates only (excluding rainfall & luminance factor).	N/A	N/A

Section B3.2 Logos

Requirement	Results	Conformance
Lettering, symbols or logos must be on the	Downer prints: 85mm x 18mm (1530mm²)	Conforms
upper front left of the garment (N/A to STMS)	Printed on the upper left chest.	
The maximum area of any clear plastic	Size: 87mm x 65mm (5655mm ²)	Conforms
pocket is 7500mm ² (100 x 75 mm) (N/A to	Placed on the left chest.	
STMS).		
A technical recognition ID, max 30mmx30mm	N/A	N/A
(900 mm ²⁻⁾ may be added to the wearer's		
upper front right side of the garment.		
A manufacturers label to a maximum size of	N/A	N/A
50 x 20 mm may be sewn or printed on the		
lower sleeve on non-high visibility material.		

"THIS REPORT APPLIES ONLY TO THE SAMPLES TESTED"

Samples and their identifying descriptions have been provided by the client unless otherwise stated. NZWTA Ltd makes no warranty, implied or otherwise as to the source of the tested samples. The above results are designed to provide THE CLIENT WITH GUIDANCE INFORMATION ONLY. This document shall not be reproduced except in full.

L A Greer Signatory

Signatory

17/09/2021





Test results indicated as not accredited are outside the scope of the laboratory's

No. 1389045.4

(Please quote this number in all correspondence)

CLIENT:

SAMPLE RECEIVED FROM:

Date Received:

16.9.21

Dalton International Ltd.

Dalton International Ltd.

PO Box 259041

Botany, Auckland 2163

SAMPLE DESCRIPTION:

Conforms

Attn.: Darryl Burn

Client Order No.:

Orange vest, size L.

Client Reference:

3 of 7

CONFORMANCE TO NZ TRANSPORT AGENCY SPECIFICATIONS, EDITION 4 OF PART 8 COPTTM, SECTION B, NOVEMBER 2018 (TTMC-W17) & TECHNICAL NOTES 24 JUNE 2019 & 1 JULY 2020

Section B3 High Visibility Garments Section B3.3 Garment Compliance

Requirement Results Conformance The tape must be a complete horizontal hoop The tape is a complete horizontal hoop. Conforms at approximately waist level. A break at the There is a break at the front of length front of no more than 25mm is permitted (see 23mm. There are no breaks at the sides also Figure 1 of CoPTTM) (overalls are or in the braces. different). Retro-reflective tapes must be no less than The tape is 50mm wide. Conforms 50 mm wide. Compliance must be achieved for a garment The size submitted is size L. Conforms size designed to fit a body chest Body chest measurement: 126 cm measurement 100-105 cm.

The letters are included on the garment

Garment Design Section B3.4

the garment label.

The letters TTMC-W17 must be included on

Garment Design B3.4.1 Sleeveless vest general requirements – based on AS 4602.1:2011 Amendment 1: 2016 & Amendment 2:2020 with additional requirements.

label.

Requirement	Results	Conformance
The design must include a shirt tail that is 150 ±5mm longer than the front. The shirt tail may be split, provided there is an overlap.	There is a shirt tail on this garment. It is 153mm longer than the front.	Conforms
The minimum qualifying area measurement of background high visibility material for the recognised 100-105 cm test size garment not covered by retro-reflective material or printing must be:	Front – excluding the reflective tapes, black zip front opening, clear plastic pocket and Downer logo prints, the background material area is 0.25 m ² .	Conforms
 Front of garment 0.24 m². Rear of garment including the 150 mm shirt tail 0.30 m². 	Back – excluding the reflective tapes, the background material area is 0.33 m ² .	Conforms
Overall length at front not to exceed 710mm.	Front length is 675mm.	Conforms

"THIS REPORT APPLIES ONLY TO THE SAMPLES TESTED"

Samples and their identifying descriptions have been provided by the client unless otherwise stated. NZWTA Ltd makes no warranty, implied or otherwise as to the source of the tested samples. The above results are designed to provide THE CLIENT WITH GUIDANCE INFORMATION ONLY. This document shall not be reproduced except in full.

L A Greer Signatory

Signatory

17/09/2021





Test results indicated as not accredited are outside the scope of the laboratory's accreditation

No. 1389045.4

(Please quote this number in all correspondence)

Date Received:

CLIENT:

Dalton International Ltd.

PO Box 259041

Botany, Auckland 2163

Attn.: Darryl Burn

Client Order No.:

SAMPLE RECEIVED FROM:

Dalton International Ltd.

SAMPLE DESCRIPTION:

Orange vest, size L.

Client Reference:

4 of 7

16.9.21

CONFORMANCE TO NZ TRANSPORT AGENCY SPECIFICATIONS, EDITION 4 OF PART 8 COPTTM, SECTION B, NOVEMBER 2018 (TTMC-W17) & TECHNICAL NOTES 24 JUNE 2019 & 1 JULY 2020

Section B3 High Visibility Garments

Garment Design - continued B3.4.1 Sleeveless vest

Requirement	Results	Conformance
Background high visibility material must	Background high visibility material	Conforms
encircle the torso from the top, with no other	encircles the torso from the top.	
colour except for:	The exclusions are:	
Specified retro-reflective material	-Specified retro-reflective material	
Permitted front opening	-Permitted front opening	
Permitted logo and technical ID area	-Permitted logo and technical ID area	
A permitted front opening to accommodate a	The garment has a black zip front opening	Conforms
zip fastener or similar closing device may be	that is 7mm wide. The opening is down to	
no wider than 25mm.	the entire front of the garment.	
Zip colour may be black but a colour		
natching the garment colour is preferred.		
Buttons, domes and similar closure devices		
nust match the colour of the garment but		
need not to be compliant.		
Compliant retro-reflective material must be	There are vertical strips placed over the	Conforms
ositioned to comply with the pattern in	shoulders. The strips join up with a hoop	
igures 1:	on the front and the back (front - belt and	
belt and braces (front & back) or cross	braces pattern / back – cross	
configuration at the back.	configuration).	
top and bottom of cross configuration must	Top and bottom of cross configuration is	Conforms
align vertically.	aligned vertically.	
a strip of complying retro-reflective	There is an additional retro-reflective tape	Conforms
material must be located on the back	at the bottom of the garment positioned	
of the garment from side seam to side	53-54mm from the bottom hem.	
seam positioned 50 <u>+</u>5mm from the	The vertical strips are:	Conforms
bottom hem.	front - 275mm apart	
each brace must be spaced 170mm	back - 260mm apart	
Minimum apart at the belt, front and back.	Length from the highest point of the	Conforms
Figure 5 diagrams state that the length from	shoulder to the bottom waist hoop is:	
the highest point of the shoulder to the waist	front - 540mm	
tape must be 530 ±20 mm.	back - 545mm	
STMS only – The optional retroreflective	N/A	N/A
cross configuration on the back of a garment		
s not permitted.		

"THIS REPORT APPLIES ONLY TO THE SAMPLES TESTED"

Samples and their identifying descriptions have been provided by the client unless otherwise stated. NZWTA Ltd makes no warranty, implied or otherwise as to the source of the tested samples. The above results are designed to provide THE CLIENT WITH GUIDANCE INFORMATION ONLY. This document shall not be reproduced except in full.

L A Greer Signatory C Judan Signatory 17/09/2021

New Zealand Wool Testing Authority Ltd

22 Bridge Street, PO Box 12065 Ahuriri, Napier 4144, New Zealand

T+64 6 835 1086, F+64 6 835 6473 Email: testing@nzwta.co.nz





Test results indicated as not accredited are outside the scope of the laboratory's accreditation

No. 1389045.4

(Please quote this number in all correspondence)

CLIENT:

Dalton International Ltd.

PO Box 259041

Botany, Auckland 2163

SAMPLE RECEIVED FROM:

Dalton International Ltd.

Date Received:

16.9.21

SAMPLE DESCRIPTION:

Orange vest, size L.

Attn.: Darryl Burn

Client Order No.:

Client Reference:

5 of 7

CONFORMANCE TO NZ TRANSPORT AGENCY SPECIFICATIONS, EDITION 4 OF PART 8 COPTTM, SECTION B, NOVEMBER 2018 (TTMC-W17) & TECHNICAL NOTES 24 JUNE 2019 & 1 JULY 2020

Section B3 High Visibility Garments

Section B3.4.2.1 STMS

Requirement	Results	Conformance
The background colour must be fluorescent or non-fluorescent yellow to conform with AS/NZS 1906.4:2010.	N/A	N/A
There must be a retro-reflective orange panel on the back and front left as per Fig 2A: Front - 100 x 100mm ±10mm Back - 250 x 130mm ±10mm	N/A	N/A
Lettering must be black. Helvetica Bold Letter Height (front) - 35 ±5mm Letter Height (back) - 85 ±5mm		

Section B3.4.2.2 Optional MTC Garment Sleeve

Requirement	Results	Conformance
The sleeve background colour must be	N/A	N/A
fluorescent or non-fluorescent yellow to conform		
with AS/NZS 1906.4:2010.		
Must have a compliant retro-reflective hoop on the arm above the elbow and between the elbow and the wrist.	N/A	N/A

"THIS REPORT APPLIES ONLY TO THE SAMPLES TESTED"

Samples and their identifying descriptions have been provided by the client unless otherwise stated. NZWTA Ltd makes no warranty, implied or otherwise as to the source of the tested samples. The above results are designed to provide THE CLIENT WITH GUIDANCE INFORMATION 0NLY. This document shall not be reproduced except in full.

L A Greer Signatory C Judan Signatory

17/09/2021

New Zealand Wool Testing Authority Ltd

22 Bridge Street, PO Box 12065 Ahuriri, Napier 4144, New Zealand

T +64 6 835 1086, F +64 6 835 6473 Email: testing@nzwta.co.nz





Test results indicated as not accredited are outside the scope of the laboratory's accreditation

No. 1389045.4

(Please quote this number in all correspondence)

Date Received:

CLIENT:

Dalton International Ltd.

PO Box 259041

Botany, Auckland 2163

Attn.: Darryl Burn

Client Order No.:

SAMPLE RECEIVED FROM:

Dalton International Ltd.

SAMPLE DESCRIPTION:

Orange vest, size L.

Client Reference:

6 of 7

16.9.21

Front



"THIS REPORT APPLIES ONLY TO THE SAMPLES TESTED"

Samples and their identifying descriptions have been provided by the client unless otherwise stated. NZWTA Ltd makes no warranty, implied or otherwise as to the source of the tested samples. The above results are designed to provide THE CLIENT WITH GUIDANCE INFORMATION ONLY. This document shall not be reproduced except in full.

L A Greer Signatory C Judan Signatory

17/09/2021

New Zealand Wool Testing Authority Ltd

22 Bridge Street, PO Box 12065 Ahuriri, Napier 4144, New Zealand

T+64 6 835 1086, F+64 6 835 6473 Email: testing@nzwta.co.nz





Test results indicated as not accredited are outside the scope of the laboratory's

No. 1389045.4

(Please quote this number in all correspondence)

Date Received:

CLIENT:

Dalton International Ltd. PO Box 259041

Botany, Auckland 2163

Attn.: Darryl Burn

Client Order No.:

SAMPLE RECEIVED FROM:

Dalton International Ltd.

SAMPLE DESCRIPTION:

Orange vest, size L.

Client Reference:

7 of 7

16.9.21

Back



"THIS REPORT APPLIES ONLY TO THE SAMPLES TESTED"

Samples and their identifying descriptions have been provided by the client unless otherwise stated. NZWTA Ltd makes no warranty, implied or otherwise as to the source of the tested samples. The above results are designed to provide THE CLIENT WITH GUIDANCE INFORMATION ONLY. This document shall not be reproduced except in full.

L A Greer Signatory

Signatory

17/09/2021

New Zealand Wool Testing Authority Ltd

22 Bridge Street, PO Box 12065

Ahuriri, Napier 4144, New Zealand

T+64 6 835 1086, F+64 6 835 6473 Email: testing@nzwta.co.nz