

TEST REPORT:

Report of Spectacle Testing of
Model MERCURY G2

REPORT TO:

PDS International Pte Ltd
10 Pandan Crescent, #05-03/04 (LL2)
UE TechPark, Singapore 128466

ATTENTION:

Mr. Stuart Seah

REPORT DATE:

August 16, 2011

REPORT TO: PDS International Pte Ltd **PROJECT:** Report of Spectacle
10 Pandan Crescent, #05-03/04 (LL2) Testing of Model
UE TechPark, Singapore 128466 MERCURY G2

ATTENTION: Mr. Stuart Seah **PSI PROJECT NO.:** 0823112-273

DATE: August 16, 2011 **PSI LAB NO.:** SPT-10098-4, Rev. A

Professional Service Industries, Inc. (PSI) has performed testing on the referenced project. The results of our tests are presented in the accompanying revised report.

On June 15, 2011, Professional Service Industries, Inc. (PSI) received twenty-five (25) spectacles, identified as, Model MERCURY G2, from PDS International Pte Ltd. On June 22, 2011, PSI tested these spectacles in general accordance with the ANSI Z87.1-2010 specification.

Spectacle Description: The Model MERCURY G2 Spectacle is an impact-rated spectacle with non-removable clear UV filter plano lenses, hinged temples and detachable sideshields.

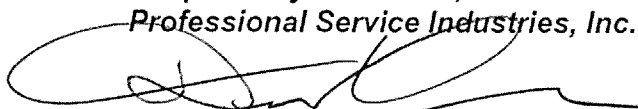
Upon initial testing the Spectacle Model MERCURY G2 was found to comply with the ANSI Z87.1-2010 specification with the exception of markings. On August 16, 2011, Professional Service Industries, Inc. (PSI) received one (1) additional spectacle, identified as, Model MERCURY G2, from PDS International Pte Ltd. This spectacle was found identical to those previously submitted with the exception of revised markings. On August 16, 2011, PSI verified the markings on this spectacle.


Our services for this project were performed in accordance with PSI Proposal No. 823-1041, Rev. B dated January 3, 2011. The proposal included a proposed scope of services, estimated costs, unit rates, and PSI's General Conditions. Authorization to perform this project was in the form of signed acceptance of the aforementioned proposal, acknowledged January 21, 2011.

The results contained in this report are related only to the item(s) tested. The pages of this report (including attachments) shall not be reproduced, except in full, without written approval of PSI. All testing was conducted by and under the continuous, direct supervision of Professional Service Industries, Inc.

Final Conclusion: The PDS International Pte Ltd Model MERCURY G2 **Does Comply** with the ANSI Z87.1-2010 specification for the parameters evaluated and contained in this report.

Respectfully submitted,
Professional Service Industries, Inc.


Denis J. Columbare
Lab Technician, Special Test


Daniel E. John
Manager, Special Test/Electrical



REPORT OF SPECTACLE TESTING - GENERAL REQUIREMENTS

Test/Property	ANSI Z87.1 Paragraph	Location	ANSI Z87.1-2010 Requirement	Test Results	Acceptance
Optical Quality	5.1.1/9.1.2		Free of visible defects	Acceptable	Pass
Transmittance, Luminous	5.1.2/9.2.2		85% Minimum	96.2 %	Pass
Haze	5.1.3/9.3.2		3% max.	0.31 %	Pass
Refractive Power	5.1.4/9.4.3		± 0.06D	0.052 D	Pass
Astigmatism	5.1.4/9.4.3		≤0.06D max.	0.050 D	Pass
Resolving Power	5.1.4/9.4.3		Pattern 20 min.	Pattern 24	Pass
Prismatic Power	5.1.4/9.5.3		≤0.50 Δ	0.125 Δ	Pass
Vertical Prism Imbalance	5.1.4/9.5.3		≤0.25 Δ	0.063 Δ	Pass
Horizontal Prism Imbalance	5.1.4/9.5.3		≤0.25 Δ Base In ≤0.50 Δ Base Out	0.063 Δ Base In	Pass
Drop ball impact	5.2.1/9.6.2		No fracture	Acceptable	Pass
Ignition	5.2.3/9.7.3		Shall not ignite or continue to glow	Acceptable	Pass
Corrosion resistance	5.2.4/9.8.3		Function not impaired	Acceptable	Pass
Minimum Coverage Area	5.2.5	Left, Right	40 mm min. width, 33 mm min. height	Acceptable	Pass
Minimum lens thickness	5.3		No minimum requirement for impact rated spectacles	-----	-----
Marking	5.4/ Table 4A	Frame Front = W Z87-2+ Temple = W Z87-2+ Left Lens = W+U6 Right Lens = W+U6 Sideshields = Z87+	Manufacturer and specification compliance	Acceptable	Pass



REPORT OF SPECTACLE TESTING
 IMPACT PROTECTOR REQUIREMENTS

Test/Property	ANSI Z87.1 Paragraph	Location	ANSI Z87.1-2010 Requirement	Test Results	Acceptance
Lateral Coverage	6.1.3/9.10.3		Continuous lateral coverage from the vertical plane/10 mm posterior/high/low	Acceptable	Pass
High mass impact	6.2.2/9.11.3	Left 1	No piece fully detached from inner surface, no penetration of rear surface, lens retained.	Acceptable	Pass
		Left 2		Acceptable	Pass
		Right 1		Acceptable	Pass
		Right 2		Acceptable	Pass
High velocity impact	6.2.3/9.12.3	Left 90°	No piece fully detached from inner surface, no penetration of rear surface, lens retained. No contact paste on projectile or device.	Acceptable	Pass
		30°		Acceptable	Pass
		90° 10 mm high		Acceptable	Pass
		Right 90°		Acceptable	Pass
		30°		Acceptable	Pass
		90° 10 mm low		Acceptable	Pass
Penetration	6.2.4/9.13.3		No fracture, no penetration of rear surface, lens retained	Acceptable	Pass



REPORT OF SPECTACLE TESTING
 OPTIONAL TRANSMITTANCE ATTRIBUTES

Test/Property	ANSI Z87.1 Paragraph	Location	ANSI Z87.1-2010 Requirement	Test Results	Acceptance
Transmittance, UV Filter					
Far UV (EFUV)	Table 7	Shade = U6	0.01 % maximum	0.01 %	Pass
Near UV (NUV)	Table 7	Shade = U6	0.1% maximum	0.008 %	Pass