



## NIJ-STD-0108.01, Level IIA – Test Report

<b>Client:</b>	<b>Ku Casa Company Inc.</b> Attention: Jason Hsu 1F., NO. 47-2, SEC.5, Roosevelt Rd. Wenshan Dist. Taipei City, Taiwan (R.O.C.) 116
<b>Report date:</b>	<b>26 October 2017</b>
<b>Job number:</b>	000007468B
<b>Test procedure and supporting documentation:</b>	P.O. #KGM001 NIJ-STD-0108.01, Level IIA
<b>Sample receipt, identification information, and disposition:</b>	The sample(s) were received on <b>12 October 2017</b> . Sample item identification and description details are provided on the attached data record(s). The test sample(s) were inspected prior to testing and no anomalies were discovered. Sample(s) will be returned, discarded, or held, per customer instructions.
<b>Test date(s) and location:</b>	Testing commenced on <b>24 October 2017</b> , at the H.P. White Laboratory, Inc. facilities located at 3114 Scarboro Road, Street, Maryland. Testing concluded on <b>24 October 2017</b> .
<b>Report prepared by:</b>	Tiffany Haines, Customer Operations Specialist
<b>Report reviewed by:</b>	Wesley Mason, Manager of Technical Operations - Hard Armor
<b>Revision number and date:</b>	NA
<b>Supplement to report:</b>	NA
<b>Test data transmittal method and storage location:</b>	This test report and test data were transmitted via email in a manner compliant with ISO 17025 requirements. Permanent electronic and hardcopy files are maintained in accordance with HPWLI data storage policy on data storage systems, filed by job number.
<b>Disclaimer:</b>	Testing was performed on sample(s) provided by the client. H.P. White Laboratory, Inc. holds no responsibility for sample selection methods. This report is based on data obtained from testing only the sample(s) submitted, and should NOT be interpreted as an endorsement by H.P. White Laboratory, Inc. of the continuing quality or performance of any other items of the same, or similar, design. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. This testing was performed by H.P. White Laboratory, Inc. to client specification, and the test results are the property of the client, who holds all rights of reproduction or publication of this report and related test data.
<b>Destination control statement:</b>	These items are controlled by the U.S. government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

**Test Procedures**

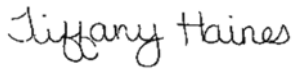
**Ballistic Resistance Testing:** All testing was conducted on an indoor range at ambient conditions, in accordance with your instructions and the general provisions of NIJ-STD-0108.01, Level IIA. Testing was conducted using caliber LRN; 9mm, 124 gr., FMJ; and .357 mag, 158 gr., JSP ammunition. The test sample(s) were positioned 16.5 feet from the muzzle of the barrel to produce zero (0°) degree obliquity impacts. Photoelectric infrared screens were located at 6.5 feet and 9.5 feet which, in conjunction with electronic chronographs, were used to compute bullet velocities at 8.0 feet forward of the muzzle. Penetrations were determined by visual examination of the 0.020-inch-thick 2024-T3 aluminum alloy witness plate, placed 6.0 inches behind and parallel to the test sample(s). Table I provides a summary of information on the attached data record(s).

**Table I: Ballistic Resistance, Summary of Results**

Test Sample			Set-Up			Results		
Sample No.	Thickness (in.) (a)	Weight (lbs.)	Caliber	Obliquity	Shots (b)	Velocity (fps)		Penetrations
						Max	Min	
SAMPLE-MK2(9mm)	0.754	12.34	9mm, FMJ	0°	5	1124	1104	0
SAMPLE-MK2 (.357mag)	0.753	12.32	.357 mag	0°	5	1290	1260	0

(a) Average of four (4) thickness measurements  
 (b) Shot spacing: 4 ON 8" SQUARE-1 in center  
 (c) See individual data record(s) for specific footnotes/remarks

Report prepared by:



Tiffany Haines  
 Customer Operations Specialist

Report reviewed by:



Wesley Mason  
 Manager of Technical Operations – Hard Armor



# H.P. White Laboratory, Inc.

## BALLISTIC RESISTANCE TEST

Client : 6811:YUSHI GLASS

Job No. : 000007468      Test Date : 10/24/17

### TEST PANEL

Manufacturer : YUSHI GLASS

Size : 16 X 16 in.

Thicknesses : 0.752, 0.754, 0.755, 0.756 in.

Avg. Thick : 0.754 in.

Description : TRANSPARENT ARMOR

Sample No. : SAMPLE-MK2 (9mm)

Weight : 12.34 lbs.

Hardness : NA

Plies/Laminates : NA

Date Rec'd. : 10/12/17

Via :

Returned :

### SET-UP

Shot Spacing : 4 ON 8" SQUARE - 1 IN CENTER

Witness Panel : 0.020", 2024-T3 ALUMINUM

Obliquity : 0 deg.

Backing Material : NA

Conditioning : AMBIENT

Primary Vel. Screens : 6.5 ft., 9.5 ft.

Primary Vel. Location : 8.0 ft. From Muzzle

Residual Vel. Screens : NA

Residual Vel. Location : NA

Range to Target : 16.5 ft.

Target to Wit. : 6.0 in.

Range No. : 3

Temp. : 72 F

BP : 29.80 in. Hg

RH : 50%

Barrel No./Gun : R3/ 9mm

Gunner : CHES

Recorder : BONSALL

### AMMUNITION

(1) : 9mm, FMJ, 124 gr.

(2) :

(3) :

(4) :

Lot No. : HPW-23558

Lot No. :

Lot No. :

Lot No. :

### APPLICABLE STANDARDS OR PROCEDURES

(1) : NIJ-STD-0108.01

(2) : LEVEL IIA

(3) : REQUIRED VELOCITY: 1050-1130 FPS.

Shot No.	Ammo.	Time 1 (usec)	Velocity 1 (ft/s)	Time 2 (usec)	Velocity 2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Footnotes
1	1	2717	1104	2717	1104	1104	None	
2	1	2699	1112	2699	1112	1112	None	
3	1	2667	1125	2671	1123	1124	None	
4	1	2712	1106	2712	1106	1106	None	
5	1	2703	1110	2706	1109	1109	None	

<u>REMARKS :</u>	<u>FOOTNOTES :</u>



# H.P. White Laboratory, Inc.

## BALLISTIC RESISTANCE TEST

Client : 6811:YUSHI GLASS

Job No. : 000007468      Test Date : 10/24/17

### TEST PANEL

Manufacturer : YUSHI GLASS

Size : 16 X 16 in.

Thicknesses : 0.751, 0.753, 0.753, 0.754 in.

Avg. Thick : 0.753 in.

Description : TRANSPARENT ARMOR

Sample No. : SAMPLE-MK2 (357mag)

Weight : 12.32 lbs.

Hardness : NA

Plies/Laminates : NA

Date Rec'd. : 10/12/17

Via :

Returned :

### SET-UP

Shot Spacing : 4 ON 8" SQUARE - 1 IN CENTER

Witness Panel : 0.020", 2024-T3 ALUMINUM

Obliquity : 0 deg.

Backing Material : NA

Conditioning : AMBIENT

Primary Vel. Screens : 6.5 ft., 9.5 ft.

Primary Vel. Location : 8.0 ft. From Muzzle

Residual Vel. Screens : NA

Residual Vel. Location : NA

Range to Target : 16.5 ft.

Target to Wit. : 6.0 in.

Range No. : 3

Temp. : 72 F

BP : 29.80 in. Hg

RH : 50%

Barrel No./Gun : R3/ 357 MAG

Gunner : CHES

Recorder : BONSALL

### AMMUNITION

(1) : 357 MAGNUM, JSP, 158 gr.

(2) :

(3) :

(4) :

Lot No. : HPW-1805

Lot No. :

Lot No. :

Lot No. :

### APPLICABLE STANDARDS OR PROCEDURES

(1) : NIJ-STD-0108.01

(2) : LEVEL IIA

(3) : REQUIRED VELOCITY: 1200-1300 FPS.

Shot No.	Ammo.	Time 1 (usec)	Velocity 1 (ft/s)	Time 2 (usec)	Velocity 2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Footnotes
1	1	2352	1276	2357	1273	1274	None	
2	1	2334	1285	2334	1285	1285	None	
3	1	2325	1290	2325	1290	1290	None	
4	1	2379	1261	2383	1259	1260	None	
5	1	2375	1263	2379	1261	1262	None	

<u>REMARKS :</u>	<u>FOOTNOTES :</u>