



TEST REPORT OF THE CONFORMITY OF
PRODUCTION OF A BATCH OF
PROTECTIVE HELMETS
ACCORDING TO THE REGULATION 22.05
ANNEXED TO THE GENEVA AGREEMENT
OF 20 MARCH 1958

Date : 9 FEB. 2018
Reference.No, : SEC-1044
Test Report No, : 20180209-00038-1
Helmet Model Name : X-Spirit III
Helmet ID : 050173-P-010

SHOEI CO., LTD.

IWATE FACTORY

27-1, AZA-NOOKA, TOKUDA
FUZISAWA-CHO, ICHINOSEKI-SHI,
IWATE-KEN 029-3404 JAPAN
TEL: 0191-63-2274
FAX:0191-63-2933

HELMET Type : X-Spirit III

Homologation NO. : 050173-P

Batch NO. : 010

Number of labels : 3200

Production period : 20 DEC. 2017~

Sampling date : 6 FEB. 2018

Sampling Site : IBARAKI Factory (by IBARAKI Factory QC Section)

Reception date : 7 FEB. 2018

Test site : Iwate Factory QC Section Test report NO. 20180209-
Amount : 00038-1

Size	XXL	XL	L	M	S	XS	XXS	Total
Amount	2	0	0	0	2	1	0	5

Summary : The test results are positive

Certified by



H.OIKAWA

QC Section Manager

Test by



Y.FUJIWARA

Engineer

Date : 9 FEB. 2018

The uncertainties are given for a confidence level of 95%

REQUIREMENTS OF E22/05

CLAUSE	7 TESTS	Pass/Fail
7.3	IMPACT ABSORPTION TEST	: Pass
* 7.4	TESTS FOR PROJECTIONS AND SURFACE FRICTION (METHOD B)	: _____
* 7.5	RIGIDITY TESTS	: _____
7.6	DYNAMIC TEST OF THE RETENTION SYSTEM	: Pass
7.7	RETENTION TEST(Roll Off)	: Pass

NOTE: CLAUSE* 7.4&*7.5 are Once(1) per year.

The uncertainties are given for a confidence level of 95%

The list of the test equipment used

Test equipment	Model	Control number
Helmet tester	HSAT-300	Q0302
Retention machine	HSAT-90	Q0307
Roll off machine	ROTM-50	Q0308
Constant temperature oven	DKN912	Q0110
Constant temperature freezer	SP44CRA	Q0102
Constant temperature hygrometry chamber	SE-24CI-A	Q0107
Solvent Conditioning Chamber	-----	Q0105
UV Conditioning Chamber	-----	Q0106
shower Chamber	-----	Q0104
Head forms for impact testing	CADEX AD ENG AD ENG CADEX	E Q0817 J Q0813 M Q0812 O Q0818
Head forms for Roll off testing	UTAC-1638	E Q0806 J Q0806 M Q0806 O Q0806
Accelerometer	228C DW17 228C DW17 228C DW17 228C DW17	E Q0621 J Q0621 M Q0621 O Q0621
Charge amplifier	133 BY37	Q0641
Analog signal processor (IAP unit)	57260-04	Q0639



HELMET TEST DATA

SHOEI CO.,LTD. IWATE FACTORY

1.TEST DATE 2018/02/09
 2.SPECIFICATION ECE R22/05
 3.MODEL X-Spirit III

4.TEST DATA

4.1.SHOCK ABSORPTION TEST

		Site	B	XL	P	R	XR	S
Sample No	1	Anvil	FLAT	FLAT	FLAT	FLAT		FLAT
Condition	SOL+25°C,65	Peak[G]	191	197	204	156		118
Size	S							
H.F.Size	E	Vel.m/s	7.52	7.55	7.58	7.55		5.63
Weight	1342g	HIC	1758	1661	2098	1204		421
Sample No	2	Anvil	KS	KS	KS	KS		FLAT
Condition	SOL+HOT50°C	Peak[G]	139	159	141	127		117
Size	S							
H.F.Size	E	Vel.m/s	7.57	7.63	7.52	7.60		5.58
Weight	1339g	HIC	1092	1244	1086	955		433
Sample No	3	Anvil	FLAT	FLAT	FLAT	FLAT		FLAT
Condition	SOL+COLD20	Peak[G]	184	193	200	170		190
Size	XXL							
H.F.Size	O	Vel.m/s	7.62	7.58	7.63	7.62		5.62
Weight	1497g	HIC	1589	1508	1871	1308		763
Sample No	4	Anvil	KS	KS	KS	KS		FLAT
Condition	SOL+COLD20	Peak[G]	133	162	146	115		179
Size	XXL							
H.F.Size	O	Vel.m/s	7.63	7.63	7.58	7.59		5.62
Weight	1491g	HIC	981	1278	1049	857		755

The uncertainties are given for a confidence level of 95 %

Uncertainty Speed : B,X,P,R:1.3% Acceleration:4.1%

S :1.2%

TESTED BY Y.FUJIWARA

CERTIFIED BY H.OIKAWA

[NOTE]

Batch:050173-P-010

4.2.DYNAMIC TEST OF THE RETENTION SYSTEM

RIGIDITY TESTS

RETENTION TEST(Roll-Off)

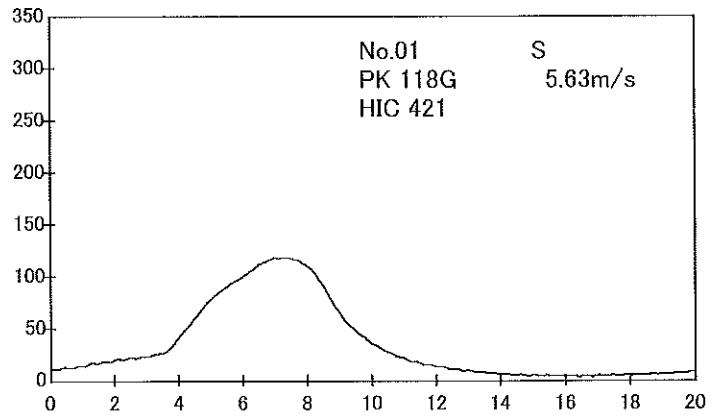
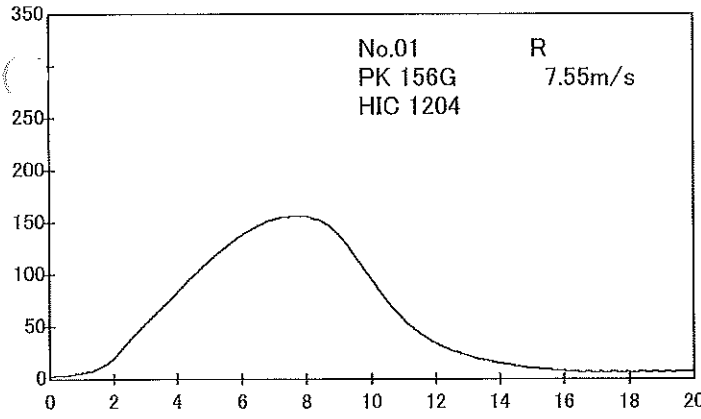
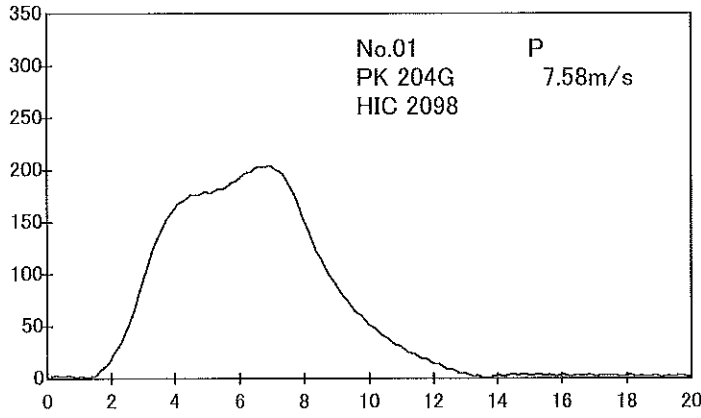
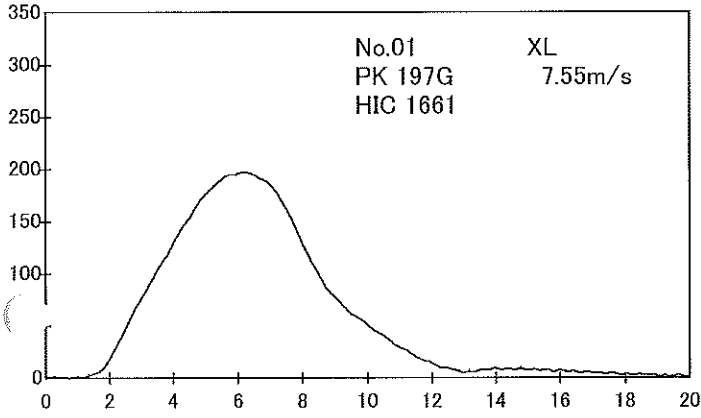
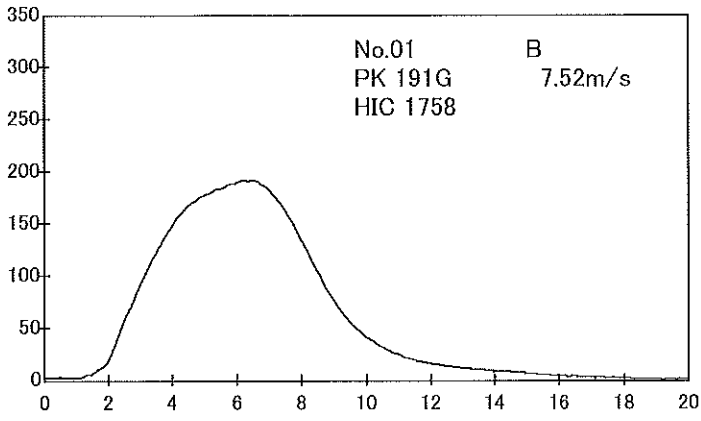
TEST FOR PROJECTIONS AND SURFACE FRICTION(METHOD B)

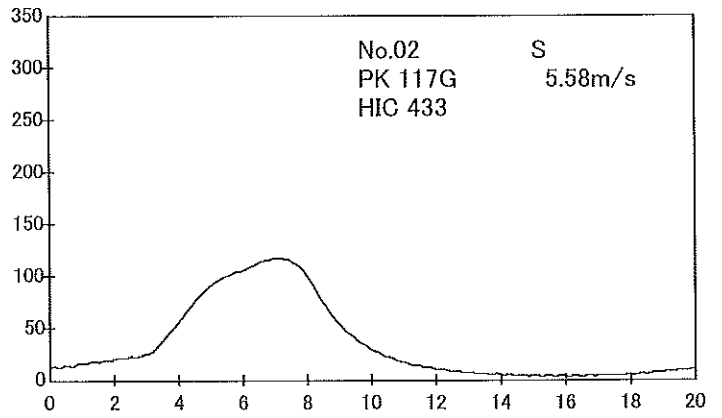
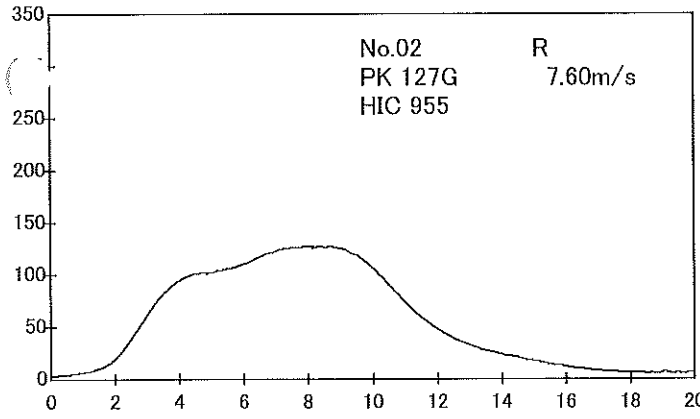
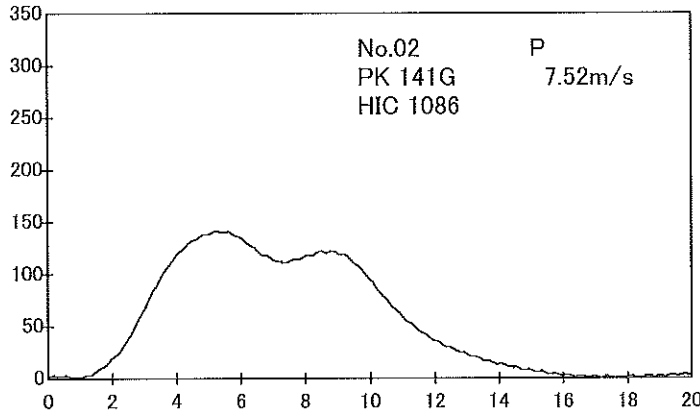
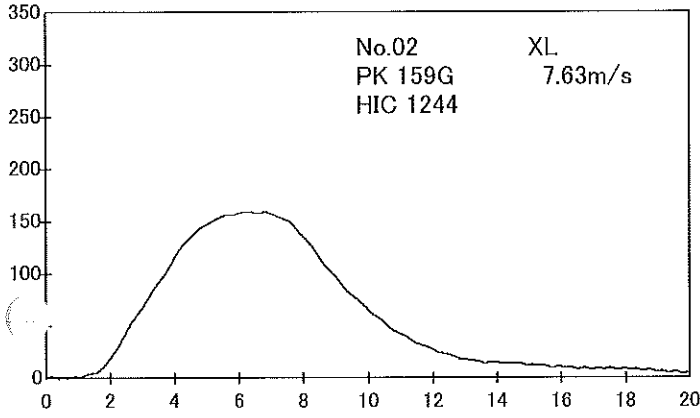
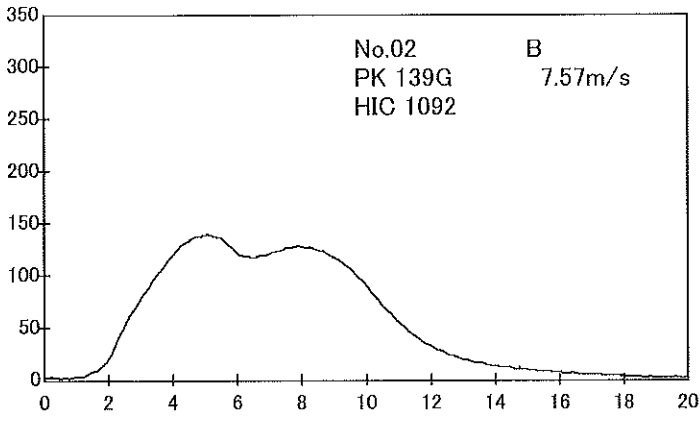
UNIT mm

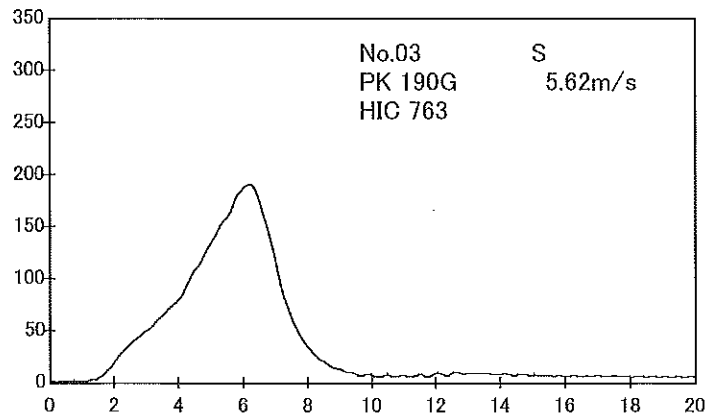
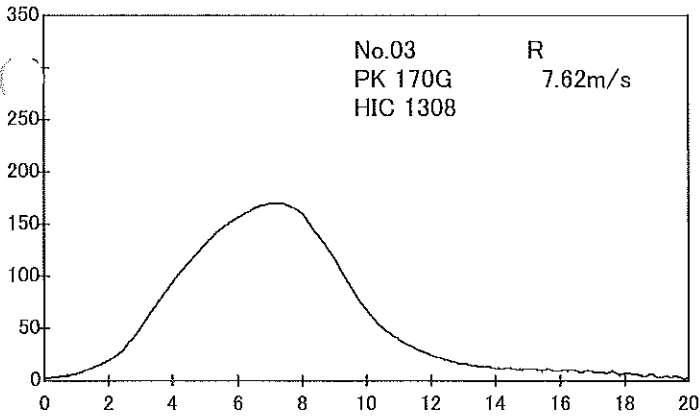
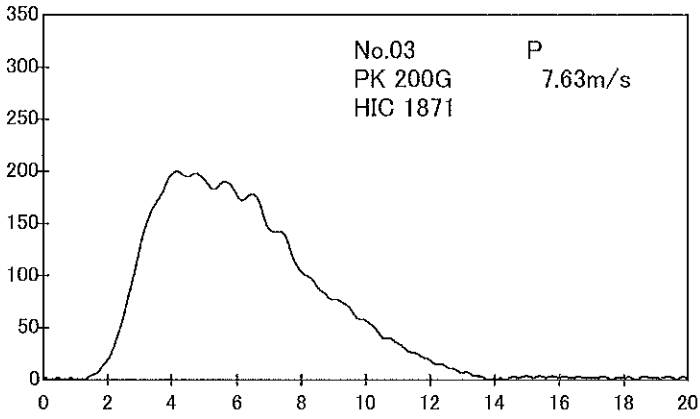
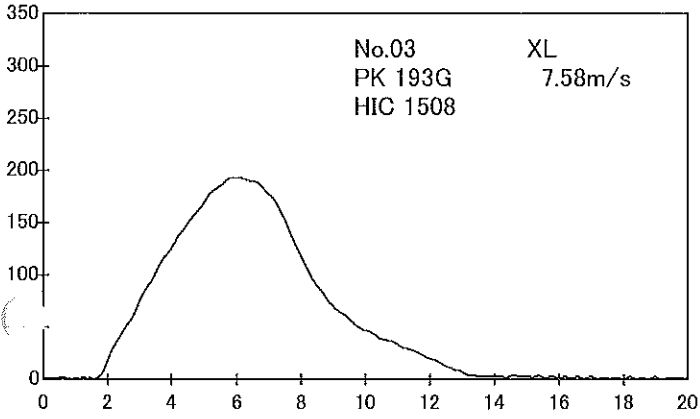
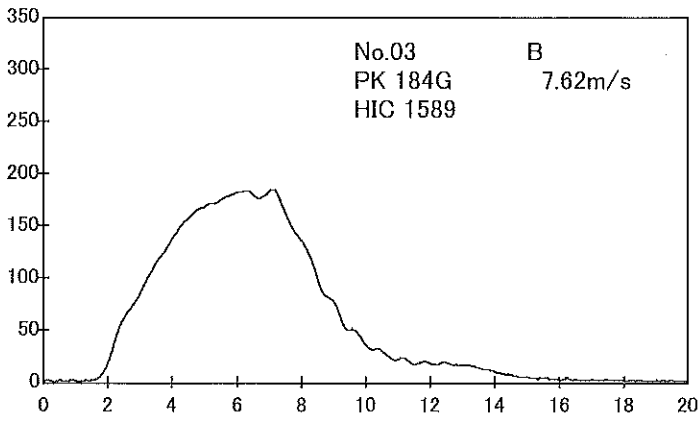
SAMPLE No.	1	2	3	4	5
MODEL	X-SpiritIII	X-SpiritIII	X-SpiritIII	X-SpiritIII	X-SpiritIII
SIZE	55~56cm	55~56cm	63~64cm	63~64cm	53~54cm
HEADFORM	E	E	O	O	E
WEIGHT	1342g	1339g	1497g	1491g	1371g
CONDITIONING (SOLVENT+)	25°C 65%	50°C	-20°C	-20°C	25°C 65%
DYNAMIC TEST OF THE RETENTION SYSTEM Dyn.displ.(mm) Uncertainty:4.9% Res.displ.(mm) Uncertainty:4.1%					24.3 mm 11.0 mm
RIGIDITY TESTS Longitudinal Rigidity Maximum.deformation(≤ 40 mm) Permanent.deformation(≤ 15 mm) Transversal Rigidity Maximum.deformation(≤ 40 mm) Permanent.deformation(≤ 15 mm) Uncertainty:2.1%					
RETENTION TEST(Roll-Off) Measured angle($\leq 30^\circ$) Uncertainty:5.9%					16.5 °
TEST FOR PROJECTIONS AND SURFACE FRICTION (METHOD B) Test of projection Test of outer surface					
E6 LEVEL	050173-P 010-0734	050173-P 010-0733	050173-P 010-0791	050173-P 010-0792	050173-P 010-0636

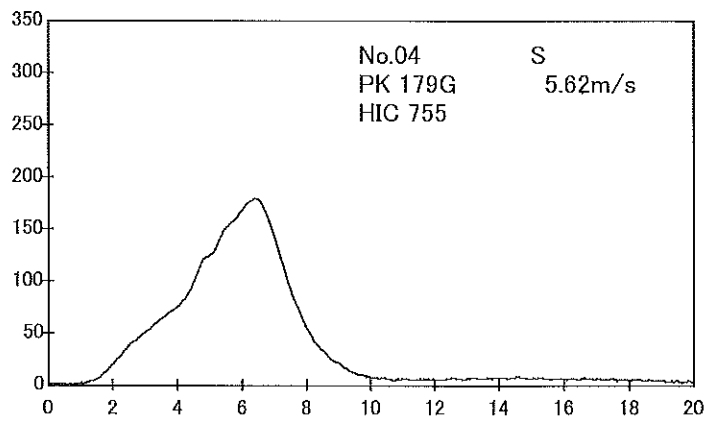
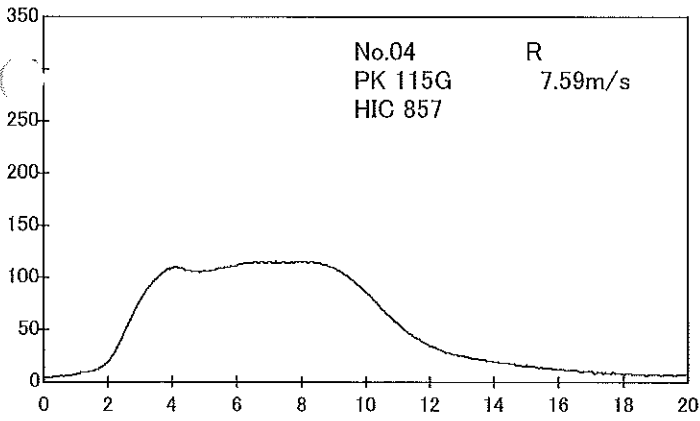
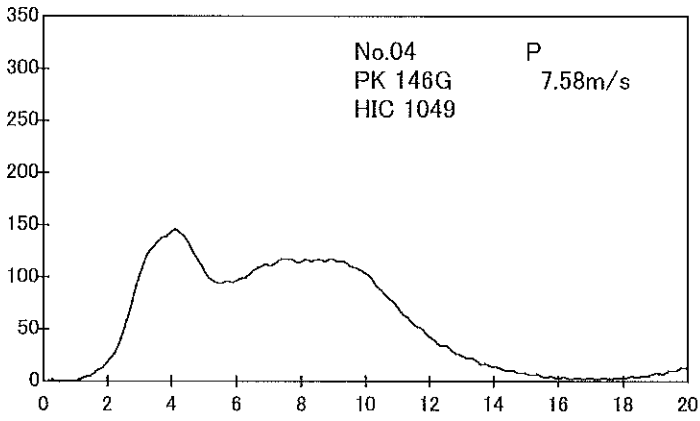
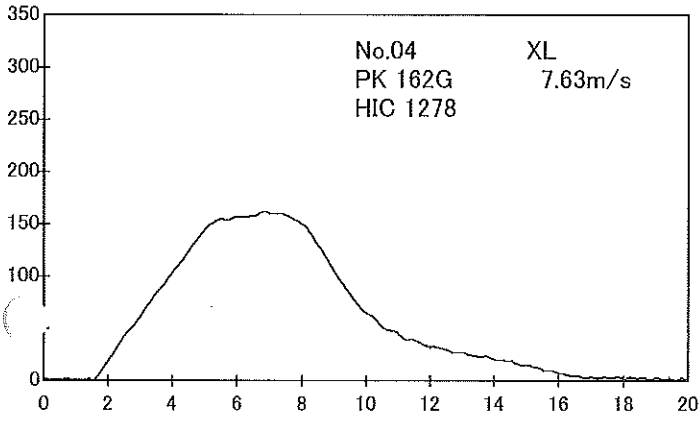
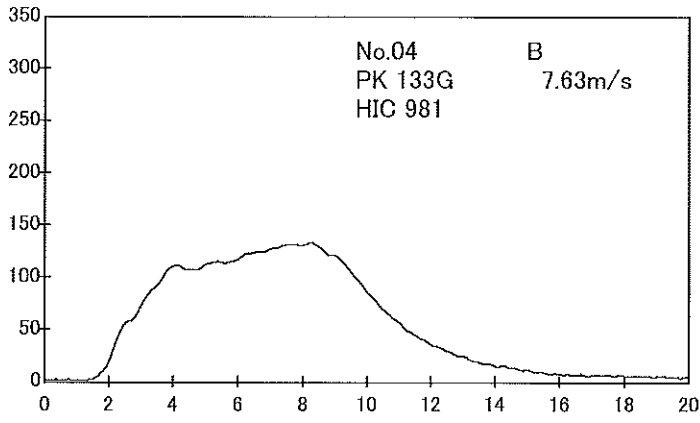
TESTED BY  Y.FUJIWARACERTIFIED BY  H.OIKAWA

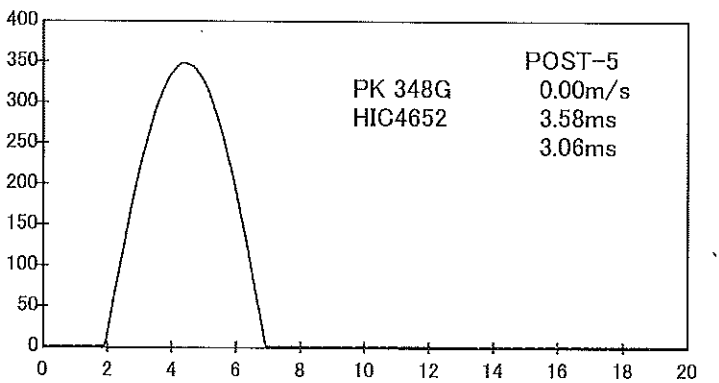
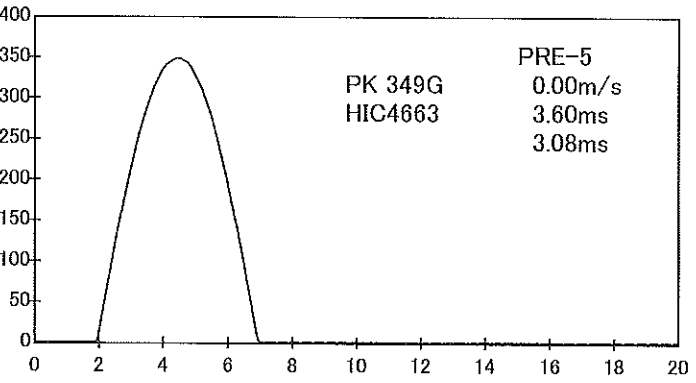
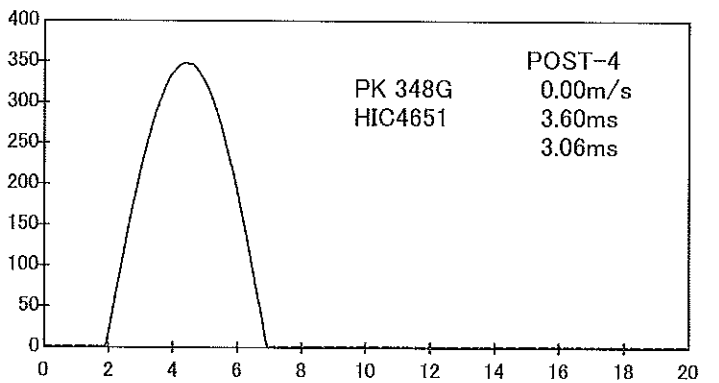
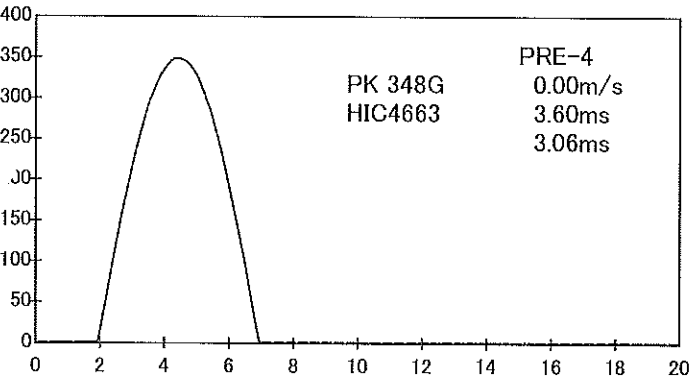
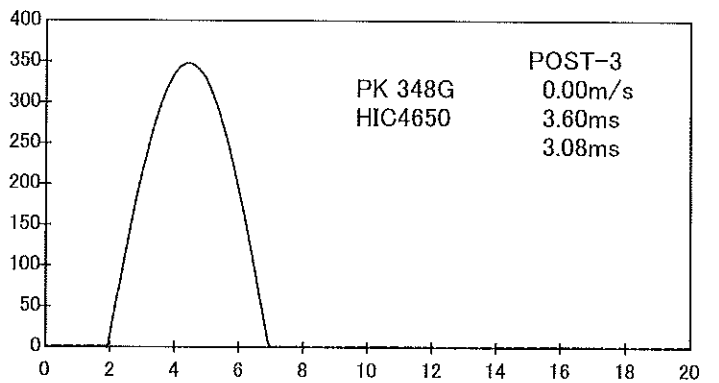
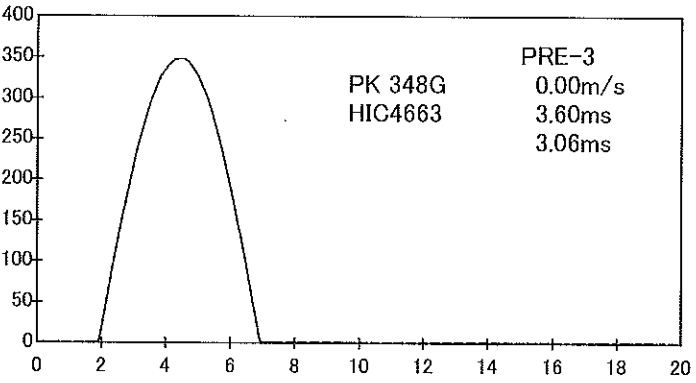
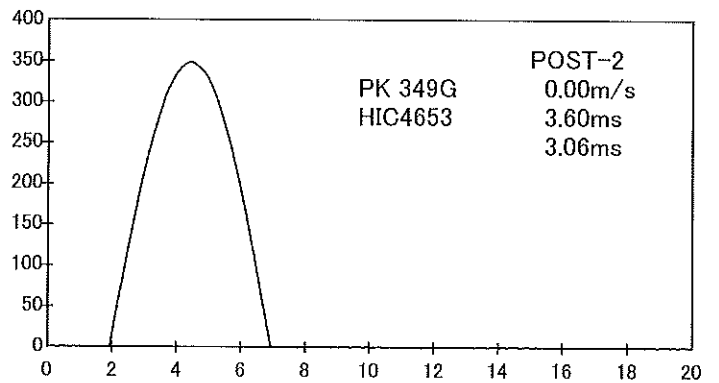
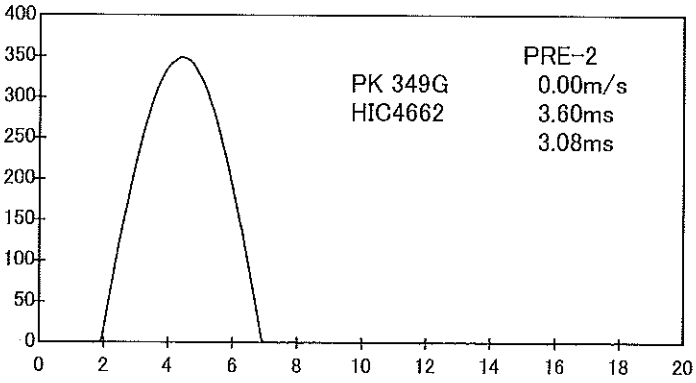
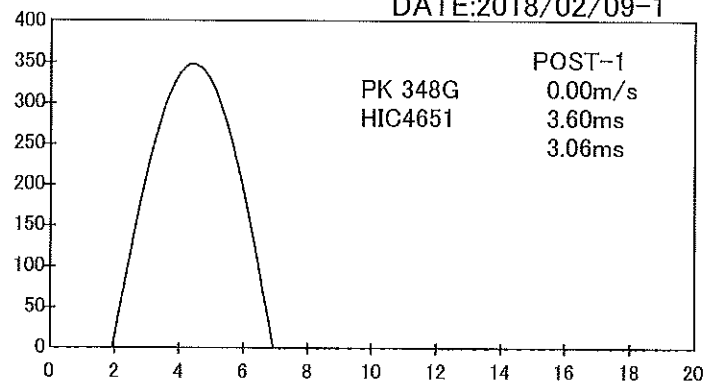
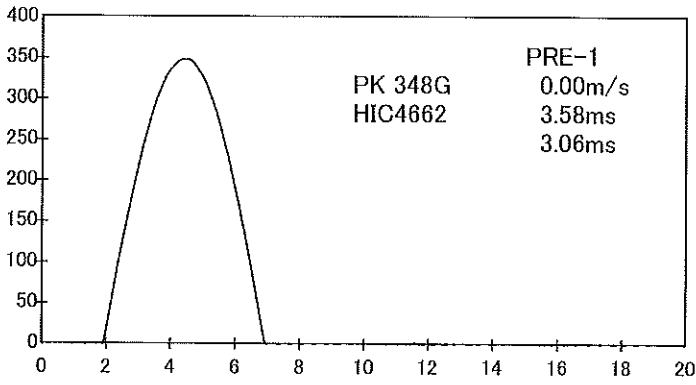
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MEMO: