



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 : 21 MAR. 2017
Reference.No, : SEC-0956
Test Report No, : 20170321-00059-1
Helmet Model Name : HORNET ADV
Helmet ID : 050163-P-006

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 : HORNET ADV

Homologation NO. : 050163-P

Batch NO. : 006

Number of labels : 3200

Production period : 9 DEC. 2016~

Sampling date : 18 MAR. 2017

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

Reception date : 18 MAR. 2017

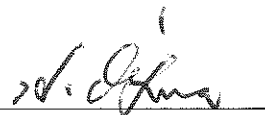
Test site : Iwate Factory QC Section Test report NO. 20170321-

Amount : 00059-1

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

Summary : The test results are positive

Certified by



H.OIKAWA

QC Section Manager

Test by



M. ITO

Engineer

Date : 21 MAR. 2017

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 EB52 228C EB52 228C EB52 228C EB52 | E Q0622 J Q0622 M Q0622 O Q0622 |
| Charge amplifier | 133 BY37 | Q0641 |
| Analog signal processor (IAP unit) | 57260-04 | Q0639 |



HELMET TEST DATA

SHOEI CO.,LTD. IWATE FACTORY

1.TEST DATE 2017/03/21
 2.SPECIFICATION ECE R22/05
 3.MODEL HORNET ADV
 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+HOT50°C | Peak[G] | 179 | 214 | 126 | 179 | | 142 |
| Size | M | | | | | | | |
| H.F.Size | J | Vel.m/s | 7.59 | 7.55 | 7.63 | 7.57 | | 5.62 |
| Weight | 1532g | HIC | 1515 | 1790 | 778 | 1567 | | 329 |
| Sample No | 2 | Anvil | KS | KS | KS | KS | | FLAT |
| Condition | SOL+HOT50°C | Peak[G] | 144 | 171 | 126 | 147 | | 122 |
| Size | M | | | | | | | |
| H.F.Size | J | Vel.m/s | 7.53 | 7.54 | 7.60 | 7.60 | | 5.59 |
| Weight | 1537g | HIC | 957 | 1419 | 1069 | 930 | | 383 |
| Sample No | 3 | Anvil | FLAT | FLAT | FLAT | FLAT | | FLAT |
| Condition | SOL+COLD20°C | Peak[G] | 179 | 189 | 192 | 181 | | 170 |
| Size | XL | | | | | | | |
| H.F.Size | O | Vel.m/s | 7.52 | 7.55 | 7.60 | 7.53 | | 5.60 |
| Weight | 1614g | HIC | 1343 | 1479 | 1824 | 1324 | | 419 |
| Sample No | 4 | Anvil | KS | KS | KS | KS | | FLAT |
| Condition | SOL+25°C65% | Peak[G] | 138 | 160 | 132 | 133 | | 100 |
| Size | XL | | | | | | | |
| H.F.Size | O | Vel.m/s | 7.63 | 7.62 | 7.61 | 7.54 | | 5.58 |
| Weight | 1662g | HIC | 930 | 1250 | 1060 | 882 | | 354 |

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 *M. Ito*
 M.ITO

CERTIFIED BY *H. Oikawa*
 H.OIKAWA

[NOTE]

Batch:050163-P 006

4.2.DYNAMIC TEST OF THE RETENTION SYSTEM

RIGIDITY TESTS

RETENTION TEST(Roll-Off)

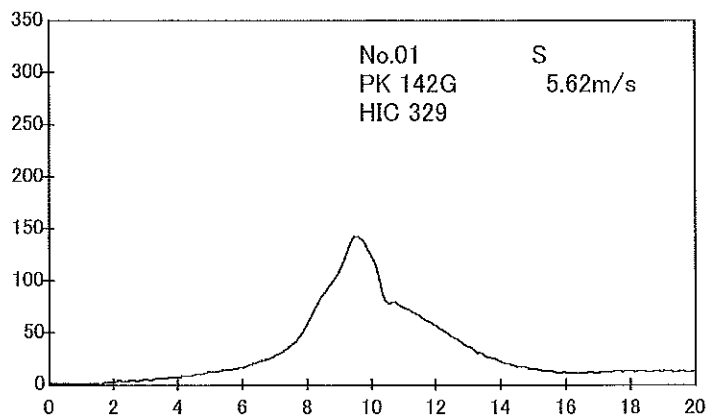
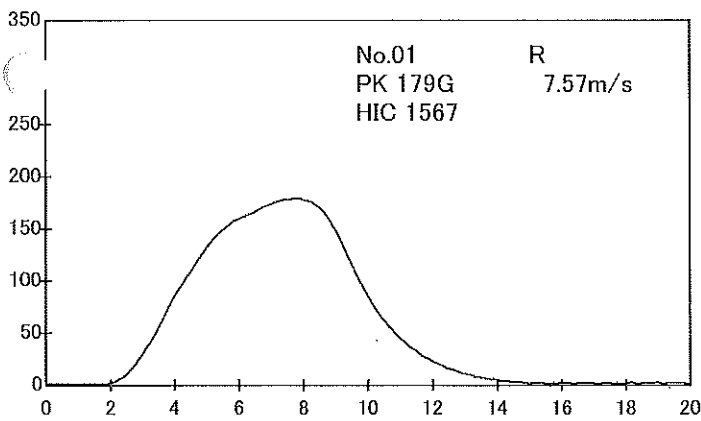
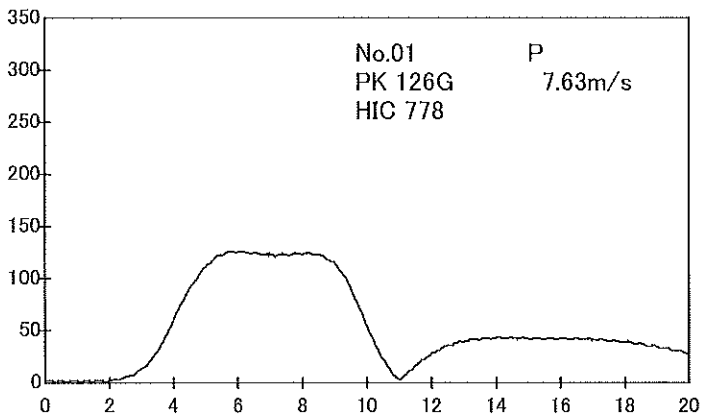
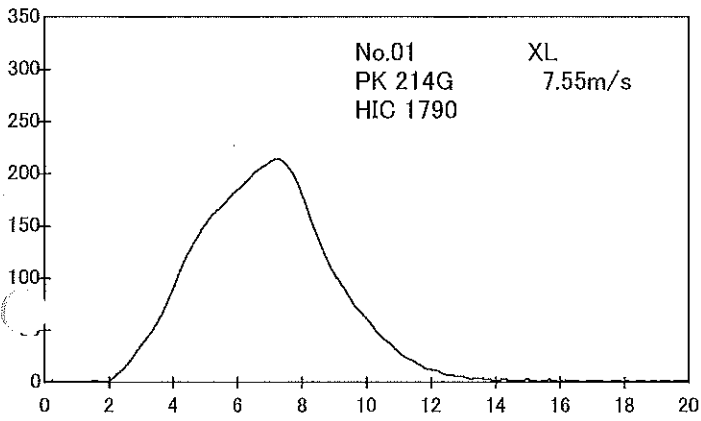
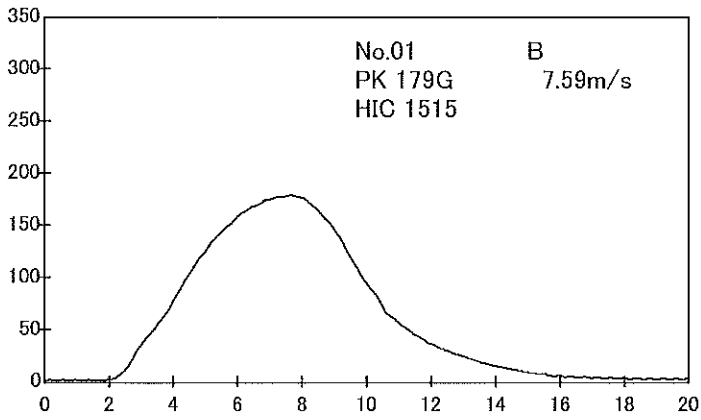
TEST FOR PROJECTIONS AND SURFACE FRICTION(METHOD B)

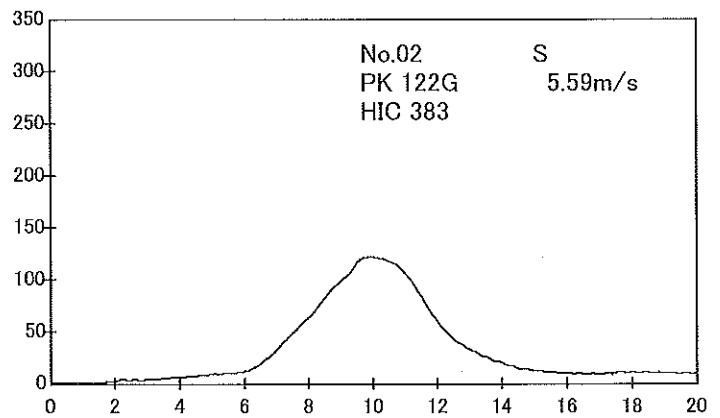
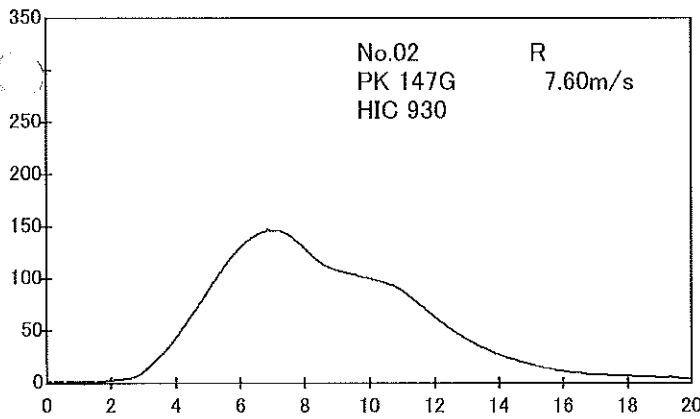
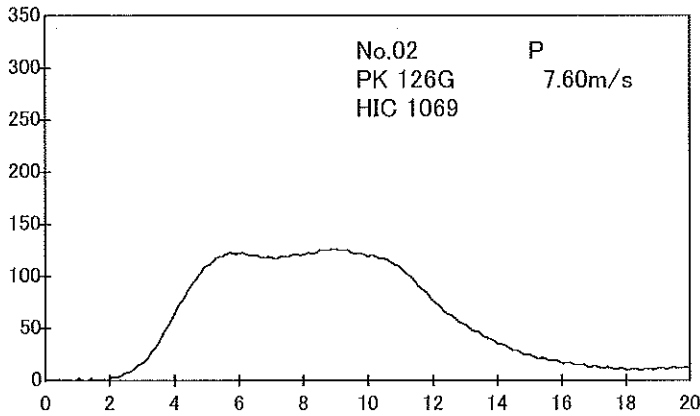
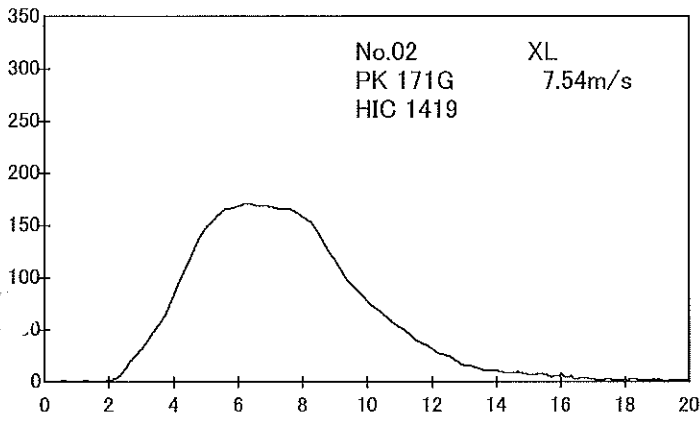
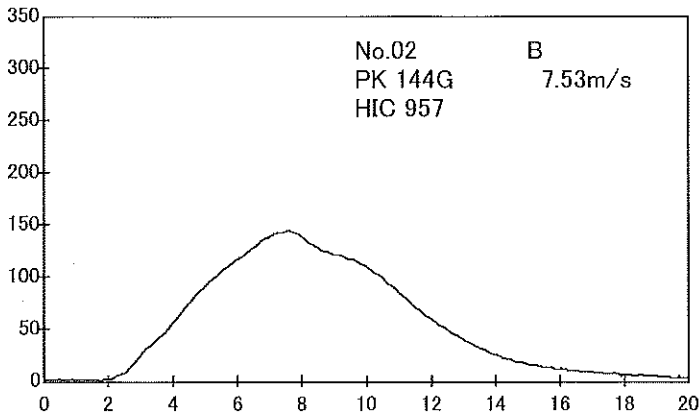
UNIT mm

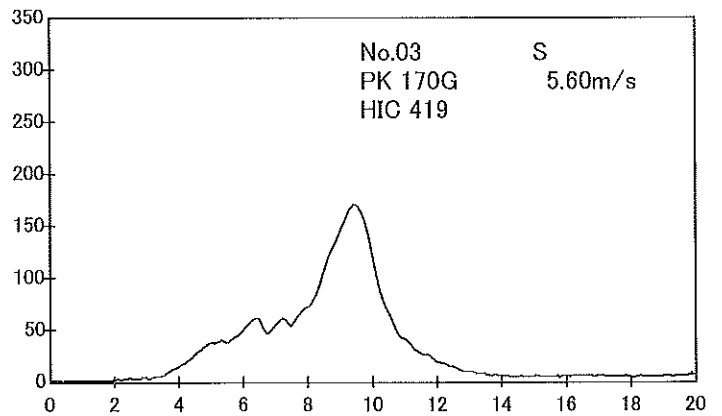
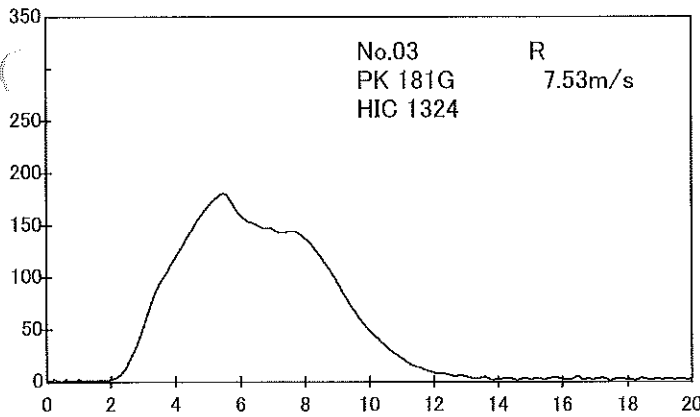
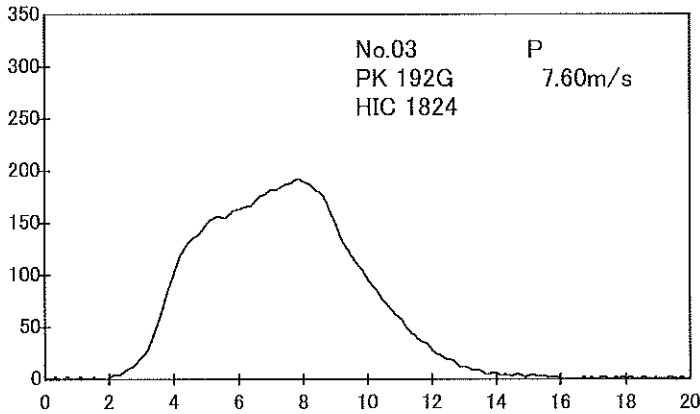
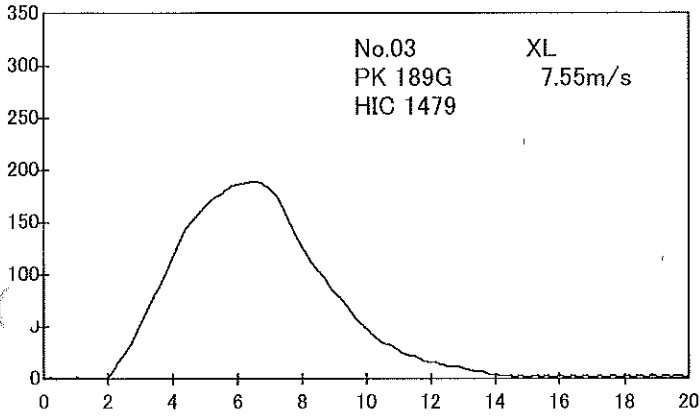
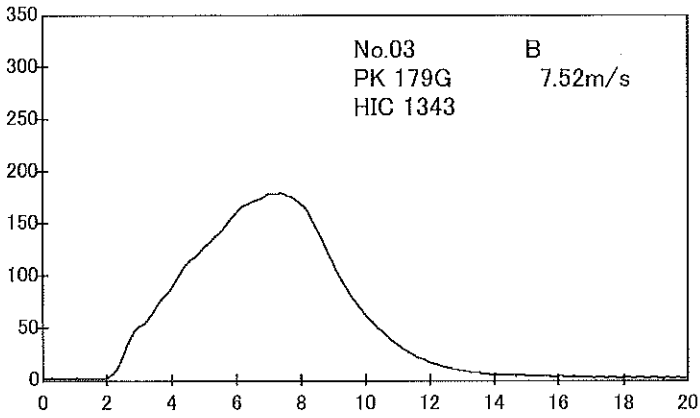
| SAMPLE No. | 1 | 2 | 3 | 4 | 5 |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|
| MODEL | HORNET ADV | HORNET ADV | HORNET ADV | HORNET ADV | HORNET ADV |
| SIZE | 57~58cm | 57~58cm | 61~62cm | 61~62cm | 53~54cm |
| HEADFORM | J | J | O | O | E |
| WEIGHT | 1532g | 1537g | 1614g | 1662g | 1504g |
| CONDITIONING (SOLVENT+) | 50℃ | 50℃ | -20℃ | 25℃65% | 25℃65% |
| DYNAMIC TEST OF THE RETENTION SYSTEM | | | | | |
| Dyn.displ.(mm) Uncertainty:4.9% | | | | | 24.3 mm |
| Res.displ.(mm) Uncertainty:4.1% | | | | | 13.0 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% | | | | | 21 ° |
| TEST FOR PROJECTIONS AND SURFACE FRICTION (METHOD B) | | | | | |
| Test of projection | | | | | |
| Test of outer surface | | | | | |
| E6 LEVEL | 050163-P 006-0829 | 050163-P 006-0749 | 050163-P 006-0969 | 050163-P 006-1009 | 050163-P 006-0648 |

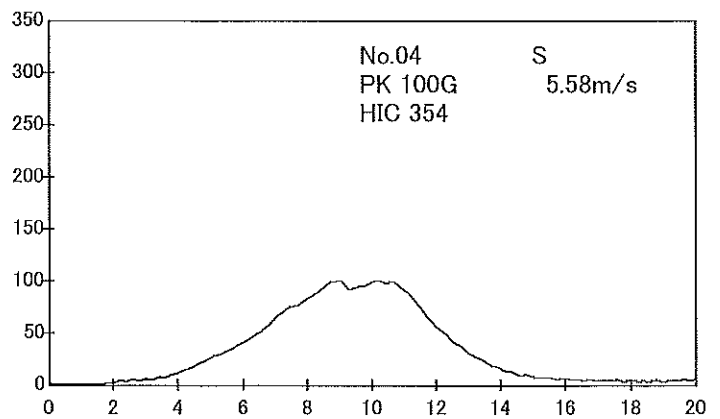
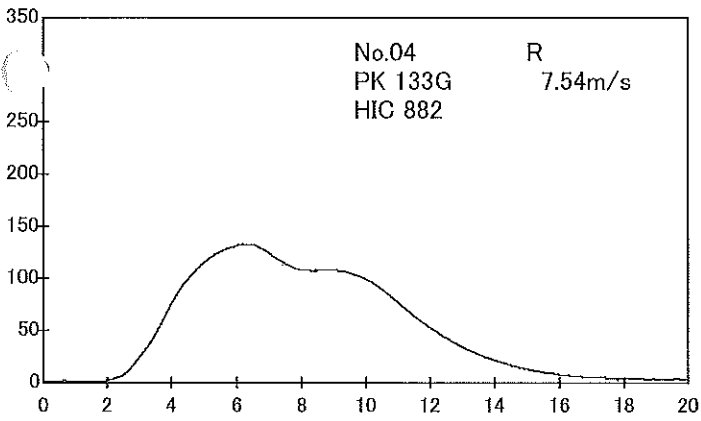
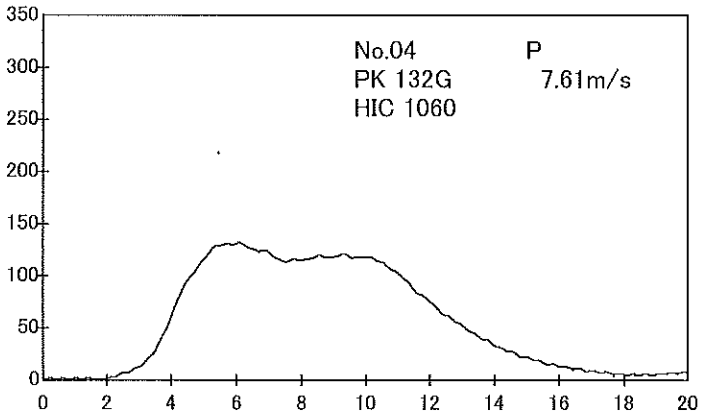
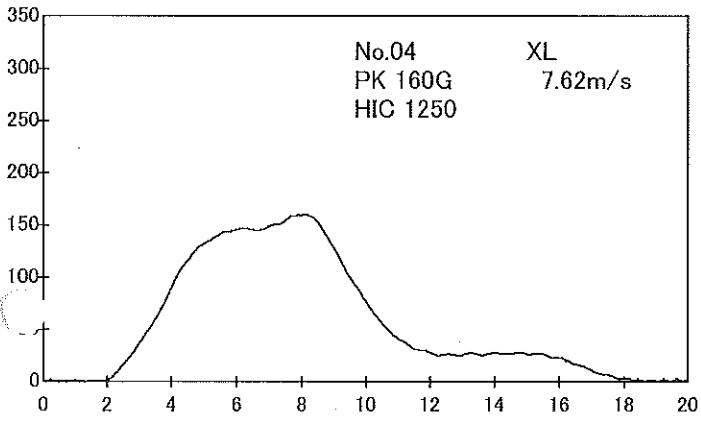
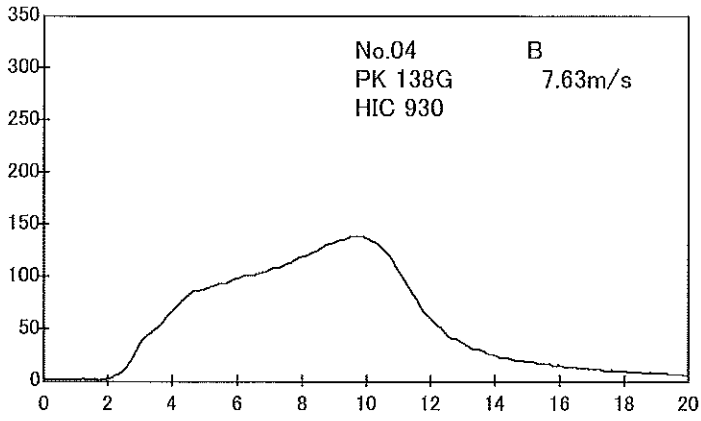
TESTED BY M.ITOCERTIFIED BY H.OIKAWA

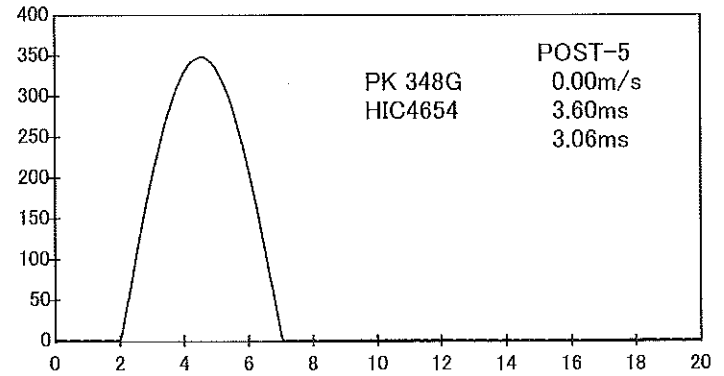
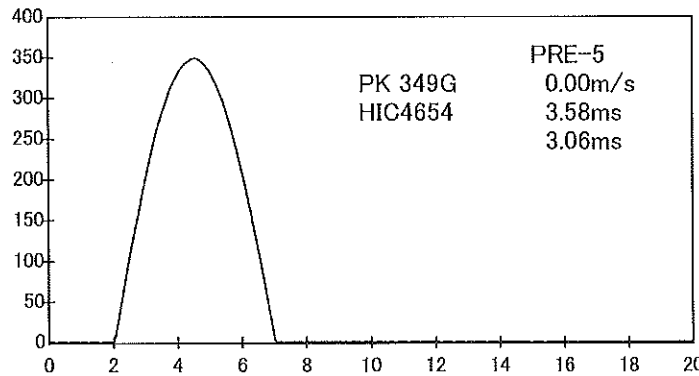
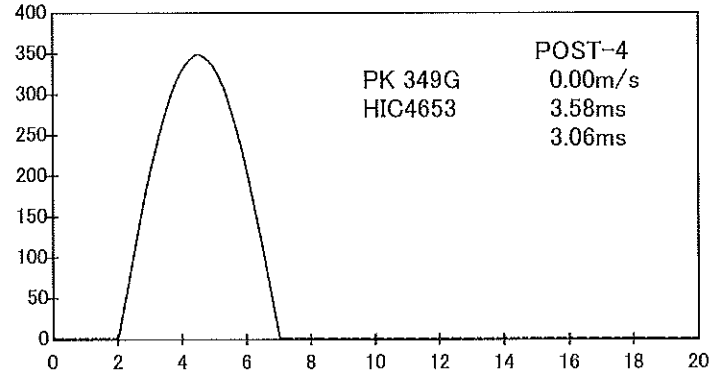
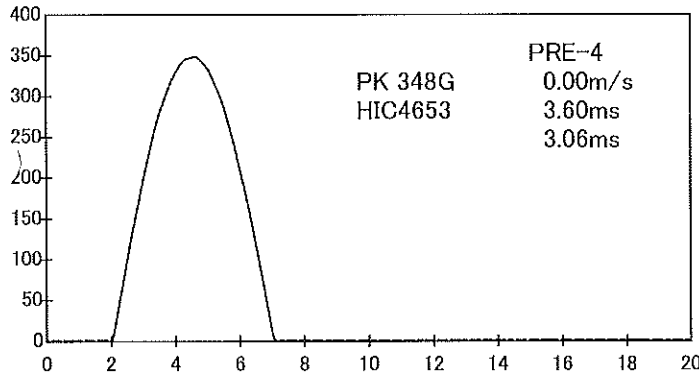
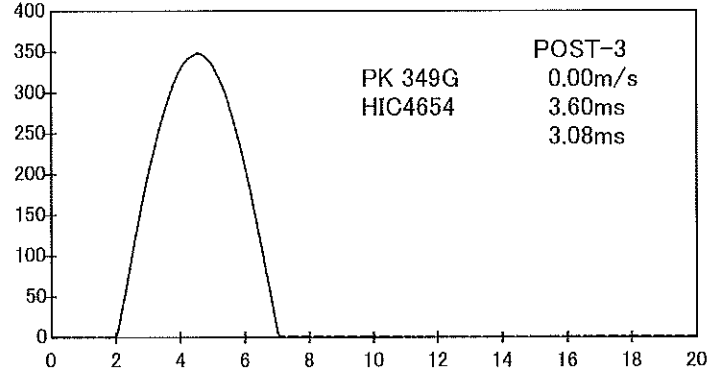
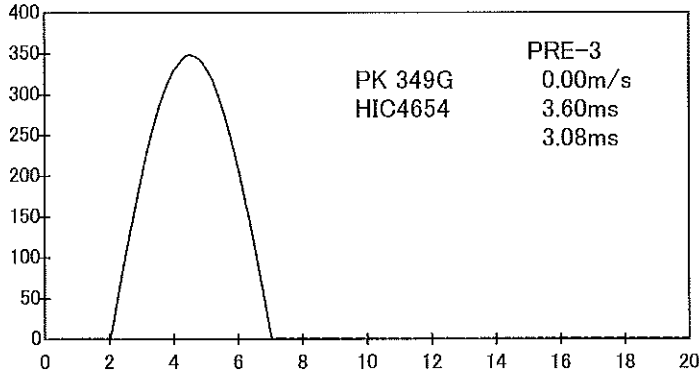
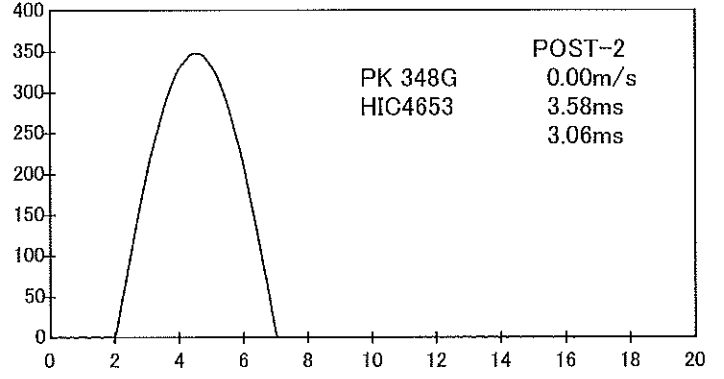
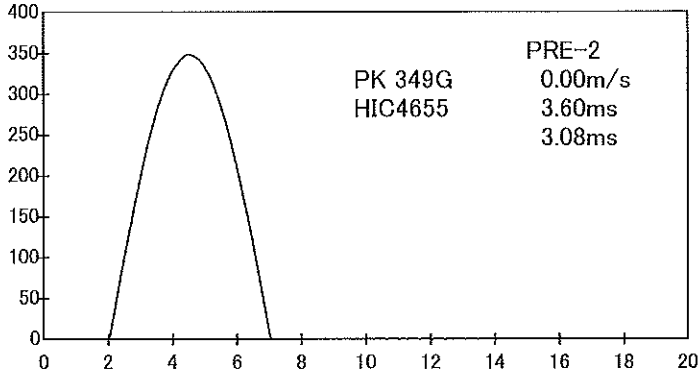
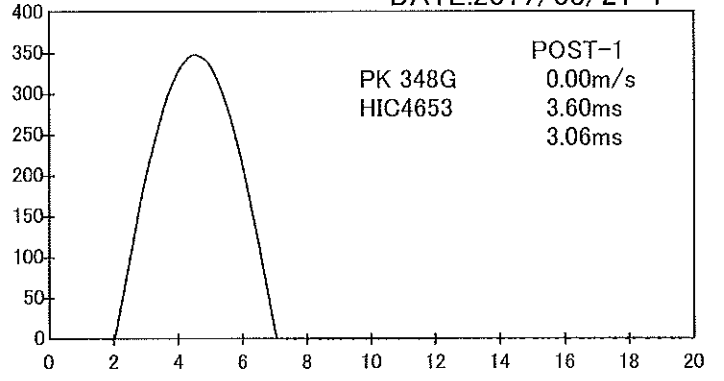
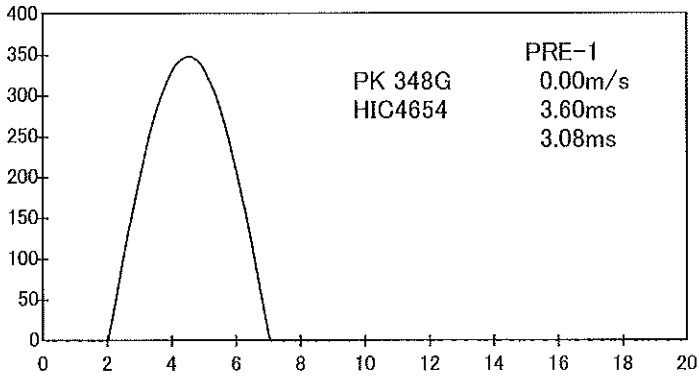
The uncertainties are given for a confidence level of 95 %











MEMO: