



財團法人全國認證基金會
Taiwan Accreditation Foundation

認證證書

(證書編號：L0995-220720)

茲證明

財團法人台灣商品檢測驗證中心

檢定/測試實驗室

桃園市龜山區樂善里文明路 29 巷 8 號

為本會認證之實驗室

認證依據：ISO/IEC 17025：2017；CNS 17025：2018
認證編號：0995
初次認證日期：九十二年五月一日
認證有效期間：一百一十一年八月十日至一百一十四年八月九日止
認證範圍：測試領域，如續頁
特定服務計畫：商品檢驗指定試驗室認證服務計畫

董事長

連錦漳



掃描確認真偽

中華民國一一一年七月二十日

認證編號：0995
實驗室主管：牟萬超

■ 01.01 金屬與合金類材料與製品

工件, 治具, 量規(金屬)

M017 尺寸量測

自訂試驗方法, 文件編號: B00-CD-429

影像量測儀: X 軸: (0 to 300) mm, Y 軸: (0 to 200) mm, Z 軸: (0 to 200) mm, 角度: 0° to 360°

卡尺: 外徑: (0 to 300) mm, 內徑: (0 to 250) mm

外徑測微器: (0 to 25) mm

高度標準器/微比較器/電子測頭: (0 to 300) mm

測長儀: (0 to 300) mm

報告簽署人: 朱國雄; 牟萬超

■ 03.03 水泥、粘土、陶瓷及相關材料

汽車用安全玻璃

M996

1. 厚度

2. 破碎性試驗

3. 耐熱性試驗

4. 耐濕性試驗

CNS 10985

CNS 10986

外徑測微器: (0 to 25) mm

捲尺: (1 to 5) m

報告簽署人: 牟萬超; 葉明海

測試場地: 1. 新竹科學園區園區二路 47 號 205 室

■ 03.03 水泥、粘土、陶瓷及相關材料

強化玻璃

M996

1. 外觀

2. 尺度測定

3. 翹曲

4. 耐衝擊性

5. 破碎性試驗

6. 吊袋式衝擊試驗

CNS 2217



直尺: (100 to 1000) mm
捲尺: (1 to 5) m
外徑測微器: (0 to 25) mm
針盤指示計: (0 to 10) mm

報告簽署人: 牟萬超; 葉明海
測試場地: 1.新竹科學園區園區二路 47 號 205 室

▀ 03.03 水泥、粘土、陶瓷及相關材料

熱處理增強玻璃

M996

- 1.外觀
- 2.翹曲
- 3.表面壓縮應力
- 4.尺度及許可差

CNS 13447

直尺: (100 to 1000) mm
捲尺: (1 to 5) m
外徑側微器: (0 to 25) mm
針盤指示器: (0 to 10) mm
表面應力儀: (0 to 168.83) MPa

報告簽署人: 牟萬超; 葉明海
測試場地: 1.新竹科學園區園區二路 47 號 205 室

▀ 03.03 水泥、粘土、陶瓷及相關材料

膠合玻璃

M996

- 1.外觀
- 2.翹曲
- 3.耐熱性
- 4.耐濕性
- 5.耐衝擊性
- 6.耐貫穿性
- 7.形狀, 尺寸

CNS 1183

直尺: (100 to 1000) mm
捲尺: (1 to 5) m
外徑測微器: (0 to 25) mm
針盤指示計: (0 to 10) mm

報告簽署人: 牟萬超; 葉明海
測試場地: 1.新竹科學園區園區二路 47 號 205 室



■ 03.03 水泥、粘土、陶瓷及相關材料

複層玻璃

M996

1.外觀

2.露點

3.加速耐久性(排除光學薄膜表面輻射率)

4.尺度及許可差

CNS 2541

直尺: (100 to 1000) mm

捲尺: (1 to 5) m

外徑側微器: (0 to 25) mm

露點溫度: (-70 to 0) °C

報告簽署人: 牟萬超; 葉明海

測試場地: 1.新竹科學園區園區二路 47 號 205 室

■ 03.03 水泥、粘土、陶瓷及相關材料

汽車用安全玻璃, 日射熱反射玻璃, 膠合玻璃

O003 耐光性

CNS 10985

CNS 10986

CNS 13032

CNS 1183

可見光穿透率變化

(380 to 780) nm

報告簽署人: 石文奇; 牟萬超; 黎明達

■ 03.03 水泥、粘土、陶瓷及相關材料

高性能節能玻璃

O003 CIE 傷害因子 (300 to 600) nm

皮膚傷害因子 (300 to 400) nm

ISO 9050

報告簽署人: 石文奇; 牟萬超; 陳正男; 黎明達

O004 日光及可見光反射率

ISO 9050

JIS R3106

CNS 12381

(300 to 2500) nm

報告簽署人: 牟萬超; 陳正男; 黎明達



O018 遮蔽係數 (Sc)

ISO 9050

JIS R3106

CNS 12381

內政部建築研究所綠建材解說與評估手冊 (2020 年) 章節 7-4 p.82 to 83 公式說明 自訂方法, 文件編號: B00-PT-029

(300 to 2500) nm

(5.5 to 50) μm

報告簽署人: 石文奇; 牟萬超; 陳正男; 黎明達

O019 熱透射率 (總熱傳導係數, U)

ISO 10292

JIS R3107

(5.5 to 50) μm

報告簽署人: 牟萬超; 陳正男; 黎明達

O019 日光輻射熱取得率 (SHGC)

ISO 10292

JIS R3107

CNS 12381

CNS 13032

(300 to 2500) nm

(5.5 to 50) μm

報告簽署人: 石文奇; 牟萬超; 陳正男; 黎明達

O019 半球輻射率 (ϵ)

ISO 10292

JIS R3107

CNS 12381

CNS 15833

(5.5 to 50) μm

報告簽署人: 石文奇; 牟萬超; 陳正男; 黎明達

■ 03.03 水泥、粘土、陶瓷及相關材料

高性能節能玻璃, 汽車用安全玻璃

O003 日光, 可見光及紫外光穿透率

ISO 9050

JIS R3106

CNS 12381

CNS 10985



CNS 10986
(300 to 2500) nm

報告簽署人: 石文奇; 牟萬超; 陳正男; 黎明達

■ 03.03 水泥、粘土、陶瓷及相關材料

玻璃相關產品

0018 熱性能:

1. 日光輻射熱遮斷性 (1-SHGC)
2. 總熱阻 (1/U)
3. 光學薄膜表面輻射率 (半球放射率, ϵ)

CNS 2541

CNS 12381

CNS 13032

(300 to 2500) nm

(5.5 to 50) μm

報告簽署人: 牟萬超; 陳正男; 黎明達

■ 17.84 量測(計量)儀器

區間平均速率裝置

E997 度量衡器檢定

1. 構造檢視
2. 通行時間檢定
3. 平均速率檢定

BSMI CNMV 205

通行時間檢定: 1 s to 3599 s

平均速率檢定: 30 km/h to 200 km/h (GPS) ; 30 km/h to 100 km/h (Optical Sensor)

僅遊測

報告簽署人: 石文奇; 牟萬超; 黎明達

■ 17.85 量測(計量)儀器

硬質玉米水分計

C997 度量衡器檢定

1. 含水率

BSMI CNMV 59-2

12 % to 24 %

報告簽署人: 石文奇; 牟萬超; 黎明達



■ 17.85 量測(計量)儀器

稻穀水分計

C997 度量衡器檢定

1.含水率

BSMI CNMV 59-1

12 % to 28 %

報告簽署人: 石文奇; 牟萬超; 黎明達

■ 17.86 量測(計量)儀器

感應式線圈測速儀

E997 度量衡器檢定

1.一般規定

2.構造

3.兩組感應線圈間距離

4.感應線圈電感值

5.感應線圈電阻值

6.感應線圈絕緣電阻值

7.速度準確度

8.溫度效應

BSMI CNMV 204

30 km/h to 240 km/h

含遊測

報告簽署人: 石文奇; 牟萬超; 黎明達

■ 17.87 量測(計量)儀器

雷射測速儀

O997 度量衡器檢定

1.一般規定

2.構造

3.瞄準距離準確度

4.雷射脈波重複率

5.雷射光功率

6.速度偵測準確度

BSMI CNMV 203

16 km/h to 300 km/h

報告簽署人: 石文奇; 牟萬超; 黎明達



■ 17.90 量測(計量)儀器

倍頻濾波器噪音計

A997 度量衡器檢定

- 1.構造
- 2.平坦頻率響應
- 3.位準線性度
- 4.相對衰減
- 5.過載指示
- 6.自雜訊

BSMI CNMV 58-2

IEC 61260-1

20 Hz to 20 kHz

報告簽署人: 石文奇; 牟萬超; 黎明達

■ 17.90 量測(計量)儀器

噪音計

A997 度量衡器檢定

- 1.構造
- 2.校正查核頻率的指示
- 3.自雜訊
- 4.聲訊號頻率加權
- 5.電訊號頻率加權
- 6.位準線性度
- 7.位準範圍切換
- 8.猝發音響應
- 9.過載指示
- 10.1 kHz 頻率及時間加權
- 11.長時間穩定性
- 12.高位準穩定性

BSMI CNMV 58-1

CNS 7129

IEC 61672-1

20 Hz to 20 kHz

報告簽署人: 石文奇; 牟萬超; 黎明達

■ 17.91 量測(計量)儀器

呼氣酒精測試器及分析儀

C997 度量衡器檢定

- 1.一般規定
- 2.構造
- 3.準確度與重複性
- 4.排放體積效應



- 5.呼氣流率及注入持續時間效應
- 6.呼氣注入高原持續效應
- 7.呼氣中斷效應
- 8.漂移性測試
- 9.記憶殘差效應
- 10.生理影響量

BSMI CNMV 126

OIML R126

標準酒精濃度測試範圍: 0.000 to 2.000 mg/L

標準酒精濃度 < 0.400 mg/L: 檢定公差: ± 0.020 mg/L

0.400 mg/L \leq 標準酒精濃度 < 2.000 mg/L: 檢定公差: $\pm 5\%$

標準酒精濃度 ≥ 2.000 mg/L: 檢定公差: $\pm (\text{標準酒精濃度}/2-0.9)$ mg/L

標準酒精濃度 < 0.400 mg/L: 重覆性標準差: < 0.007 mg/L

0.400 mg/L \leq 標準酒精濃度 < 2.000 mg/L: 重覆性相對標準差 < 1.67 %

標準酒精濃度 ≥ 2.000 mg/L: 重覆性相對標準差: $(\text{標準酒精濃度}/2-0.9)/3$ mg/L

報告簽署人: 石文奇; 牟萬超; 黎明達

17.92 量測(計量)儀器

雷達測速儀

E997 度量衡器檢定

- 1.一般規定
- 2.構造
- 3.微波發射頻率
- 4.發射天線輻射場型
- 5.微波輻射功率密度
- 6.速度偵測準確度

BSMI CNMV 91

X-Band (8.2 GHz to 12.4 GHz)

Ku-Band (12.4 GHz to 18 GHz)

K-Band (18 GHz to 26.5 GHz)

Ka-Band (26.5 GHz to 40 GHz)

Detection Range: (25 km/h to 199 km/h)

報告簽署人: 石文奇; 牟萬超; 黎明達

17.93 量測(計量)儀器

機車排氣分析儀

C996

- 1.暖機時間測試
- 2.洩漏測試
- 3.採樣流量測試
- 4.零點/跨距調校
- 5.再現性測試



- 6.精確性測試
- 7.反應時間測試
- 8.漂移測試
- 9.資料檢查

環保署-使用中機車排氣分析儀查核標準作業程序

CO: (0 to 9.89) % vol

CO₂: (0 to 16.20) % vol

HC: (0 to 15000) ppm vol

報告簽署人: 石文奇; 牟萬超; 黎明達

■ 17.93 量測(計量)儀器

車輛排氣分析儀

C997 度量衡器檢定

BSMI CNMV 99 (第 1 版)

- 1.外觀, 構造與功能
- 2.儀器熱機功能測試
- 3.反應時間測試
- 4.準確度與再現性測試
- 5.氣密性測試
- 6.HC 殘留查核功能測試
- 7.管路阻塞測試

BSMI CNMV 99 (第 2 版)

- 1.構造
- 2.熱機功能測試
- 3.反應時間測試
- 4.準確度與重複性測試
- 5.氣密性測試
- 6.HC 殘留查核功能測試
- 7.管路阻塞測試

BSMI CNMV 99 (第 1 版)

BSMI CNMV 99 (第 2 版)

CO: (0.4 to 4.4) % vol

CO₂: (5.0 to 15.4) % vol

HC: (80 to 1840) ppm vol

報告簽署人: 石文奇; 牟萬超; 黎明達

■ 17.93 量測(計量)儀器

濾紙反射式煙度計

M996 濾紙反射式煙度計性能試驗

自訂方法, 文件編號: B00-CD-434

交通部路政司汽車委託檢驗實施辦法附表二



- 1.採樣管測試: 採樣管及其附屬管路不得破損, 阻塞或洩漏
 - 2.送紙裝置作動測試: 送紙裝置之作動必須順暢確實
 - 3.準確度測試 (污染度測試): 10 % , 30 % , 50 % , 90 %
 - 4.汲氣體積測試: 最大 500 c.c.
 - 5.汲氣時間測試: 少於 10 秒
- 含遊測

報告簽署人: 朱國雄; 牟萬超

■ 17.97 量測 (計量) 儀器

照度計

O997 度量衡器檢定

- 1.殘餘效應
- 2.反應時間
- 3.疲勞特性
- 4.餘弦效應
- 5.公差測試

BSMI CNMV 200

25 lx to 1500 lx

報告簽署人: 石文奇; 牟萬超; 黎明達

■ 17.99 量測 (計量) 儀器

EMI 測試場地

E026 Site VSWR

CISPR 16-1-4

(1 to 18) GHz

遊測

報告簽署人: 朱國雄; 牟萬超; 陳義仁; 鄭碩仁

■ 17.99 量測 (計量) 儀器

EMI 量測場地

E026 正規化場地衰減

ANSI C 63.4

30 MHz to 1 GHz

遊測

報告簽署人: 朱國雄; 牟萬超; 陳義仁; 鄭碩仁



17.99 量測(計量)儀器

柴油車用不透光式排氣煙度計

M996

- 1.暖機測試
- 2.漂移測試
- 3.重現性測試
- 4.電壓變化之影響測試
- 5.精度測試

環保署-柴油汽車黑煙排放不透光率檢測方法及程序

平均偏差 $\leq (0.01 \text{ to } 0.05) \text{ m}^{-1}$

報告簽署人: 石文奇; 牟萬超; 黎明達

17.99 量測(計量)儀器

側滑試驗器(前後輪定位試驗器)

M996 側滑試驗器(前後輪定位試驗器)性能試驗

自訂方法, 文件編號: B00-CD-433

交通部路政司汽車委託檢驗實施辦法附表二

- 1.始動力測試: 0 kgf to 20 kgf
- 2.五刻度拉力測試: 0 kgf to 20 kgf
- 3.橫滑作動力測試: 0 kgf to 20 kgf
- 4.五刻度位移測試: 0 mm to 25 mm
- 5.突放測試: 0 mm to 25 mm

僅遊測

報告簽署人: 朱國雄; 牟萬超

17.99 量測(計量)儀器

速度表試驗器

M996 速度表試驗器性能試驗

自訂方法, 文件編號: B00-CD-435

- 1.滾筒磨耗限度測試: 0 mm to 500 mm
- 2.準確度測試(速度儀速度): $(40 \pm 1.2) \text{ km/h}$, $(60 \pm 1.8) \text{ km/h}$

僅遊測

報告簽署人: 朱國雄; 牟萬超

17.99 量測(計量)儀器

煞車試驗器

M996 煞車試驗器性能試驗

自訂方法, 文件編號: B00-CD-432

交通部路政司汽車委託檢驗實施辦法附表二



準確度測試(煞車力測試)：(5 to 250) kgf
僅遊測

報告簽署人：朱國雄；牟萬超

■ 18.10 民生用品

太陽眼鏡

M996 安全性試驗

- 1.結構, 濾光鏡材料及表面品質
- 2.濾光鏡最低強度
- 3.眼鏡架變形及濾光鏡保持
- 4.耐點燃性
- 5.資訊及標籤

CNS 15067 Clause 4.1, 4.2, 7.1, 7.2, 9, 12

ISO 12312-1 Clause 4.1, 4.2, 7.1, 7.2, 9, 12

CNS 15971 Clause 6, 9.1, 9.6, 9.9

ISO 12311 Clause 6, 9.1, 9.6, 9.9

報告簽署人：石文奇；牟萬超；陳正男；黎明達

O996 光學特性試驗

- 1.透光率
- 2.球面度及散光度
- 3.稜鏡度差異

CNS 15067 Clause 5.1, 5.2, 5.3 (Except 5.3.3, 5.3.4.1, 5.3.5.3, 5.3.5.4), 6.1, 6.3

CNS 15971 Clause 7.1, 7.2, 7.3, 7.8, 7.10, 8.1, 8.2, 附錄 B 4.3.4.6

ISO 12312-1 Clause 5.1, 5.2, 5.3 (Except 5.3.3, 5.3.4.1, 5.3.5.3, 5.3.5.4), 6.1, 6.3

ISO 12311 Clause 7.1, 7.2, 7.3, 7.8, 7.10, 8.1, 8.2, Annex B 4.3.4.6

280 nm to 780 nm

報告簽署人：石文奇；牟萬超；陳正男；黎明達

■ 18.10 民生用品

隱形眼鏡

O996

- 1.透氧率
- 2.厚度
- 3.穿透率

ISO 18369-2

ISO 18369-3

ISO 18369-4

ANSI Z80.20

1.DK (0 to 154)

2. (0 to 0.40) mm



3. (280 to 780) nm

報告簽署人: 石文奇; 牟萬超; 黎明達

20.21 資訊與通訊

資訊與通訊產品, 家電產品

A001 聲壓測試

ISO 11201

ISO 9296

ECMA 74

頻率: 100 Hz to 10 kHz

聲壓: (15 to 120) dB (A) reference 20 μ Pa

報告簽署人: 石文奇; 牟萬超; 陳正男; 黎明達

測試場地: 1. 新北市汐止區茄苳路 157 號

A001 聲功率測試 (工程級)

ISO 7779

ISO 3744

IEC 60704-1

ISO 9296

ECMA 74

頻率: 100 Hz to 10 kHz

聲功率: (15 to 100) dB (A) reference 1 pW

報告簽署人: 石文奇; 牟萬超; 陳正男; 黎明達

測試場地: 1. 新北市汐止區茄苳路 157 號

A001 聲功率測試 (精密級)

ISO 7779

ISO 3745

頻率: 100 Hz to 10 kHz

聲功率: (15 to 100) dB (A) reference 1 pW

報告簽署人: 石文奇; 牟萬超; 陳正男; 黎明達

測試場地: 1. 新北市汐止區茄苳路 157 號

23.01 兒童產品

玩具產品, 小型電器產品

A001 聲壓位準測試

CNS 4797-3

ISO 8124-1

頻率範圍: 100 Hz to 10 kHz



聲壓位準: (15 to 120) dB (A) reference 20 μ Pa

報告簽署人: 石文奇; 牟萬超; 陳正男; 黎明達

測試場地: 1.桃園市龜山區樂善里文明路 29 巷 8 號; 2.新北市汐止區茄苳路 157 號

商品檢驗指定試驗室認證服務計畫

18.10 民生用品

太陽眼鏡

M996 安全性試驗

- 1.結構, 濾光鏡材料及表面品質
- 2.濾光鏡最低強度
- 3.眼鏡架變形及濾光鏡保持
- 4.耐點燃性
- 5.資訊及標籤

CNS 15067 (106 年 2 月) Clause 4.1, 4.2, 7.1, 7.2, 9, 12

報告簽署人: 石文奇; 黎明達

O996 光學特性試驗

- 1.透光率
- 2.球面度及散光度
- 3.稜鏡度差異

CNS 15067 (106 年 2 月) Clause 5.1, 5.2, 5.3 (Except 5.3.3, 5.3.4.1, 5.3.5.3, 5.3.5.4), 6.1, 6.3

280 nm to 780 nm

報告簽署人: 石文奇; 黎明達

23.01 兒童產品

玩具產品

A001 聲壓位準

CNS 4797-3 (104 年 7 月)

頻率範圍: 100 Hz to 10 kHz

聲壓位準: (15 to 120) dB (A) reference 20 μ Pa

報告簽署人: 陳正男; 黎明達

測試場地: 1.桃園市龜山區樂善里文明路 29 巷 8 號; 2.新北市汐止區茄苳路 157 號

(以下空白)



保存年限	
檔 號	

財團法人全國認證基金會 書函

地 址：300 新竹市北大路九五號二樓
電 話：(03)五三三六三三三
傳 真：(03)五三三八七一七

受文者：財團法人台灣商品檢測驗證中心

速別：普通件

密等及解密條件：普

發文日期：2022年08月08日

發文字號：TAF-L099522004

附件：如文

主旨：貴中心檢定/測試實驗室(認證編號:0995)之實驗室_「測試領域與商品檢驗指定試驗室認證服務計畫」實驗室延展認證申請案，業經評鑑認可，請查照。

- 說明：
- 一、復 貴中心 2022 年 1 月 28 實驗室延展認證申請書。
 - 二、本案經認證決定審查通過，檢附本會 L0995-220720 號中、英文認證證書各一份。
 - 三、貴中心檢定/測試實驗室(認證編號:0995)的認可後監督評鑑訂於 2023 年 2 月辦理。查核重點為：
 1. 文件管制作業依據「文件與資料管制作業程序」(B00-OP-002)執行情形。
 2. 依據「製程管制作業程序」(B00-OP-008)由客戶於委託單 3 聯單之 1、2、3 聯均需由客戶簽名，及委託內容變更之執行情形。
 3. 對量測設備委外校正服務提供者之評估及再評估執行情形。
 4. 噪音計待測件及已測件之有效清晰識別情形。
 - 四、提醒實驗室應依「使用認證標誌與宣稱認可要求(TAF-CNLA-R03)」，正確使用認證標誌與宣稱認可身份，如欲使用「獲認證實驗室 ILAC MRA 組合標記」(Accredited Lab Combined ILAC MRA Mark)於發出報告或相關廣宣品展示(包含陶板)時，除應熟讀相關規定，並應與本會完成簽署本會 2015 年 12 月底公告之「ILAC-MRA 組合標記使用合約書(TAF-CNLA-B03)」第三版後，方可使用。
 - 五、請於兩週內上網填寫「實驗室滿意度問卷調查表」。

正本：財團法人台灣商品檢測驗證中心

副本：經濟部標準檢驗局

財團法人全國認證基金會



財團法人全國認證基金會
Taiwan Accreditation Foundation

Certification Accreditation

(Certificate No : L0995-220720)

This is to certify that

Taiwan Testing and Certification Center Verification/Testing Laboratory

No.8, Ln. 29, Wenming Rd., Leshan Vil., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

is accredited in respect of laboratory

Accreditation Criteria : ISO/IEC 17025:2017 ; CNS 17025:2018

Accreditation Number : 0995

Originally Accredited : May 01, 2003

Effective Period : August 10, 2022 to August 09, 2025

Accredited Scope : Testing Field, see described in the Appendix

Specific Accreditation Program : Accreditation Program for Designated Testing Laboratory
for Commodities Inspection



Scan to verify

Ching-Chang Lien

Ching-Chang Lien
President, Taiwan Accreditation Foundation
July 20, 2022

Accreditation Number : 0995

Laboratory Head : MOU, Wan-Chau

▀ 01. 01 Metals and Alloys Products

Sample, Fixture, Gauge (Metal)

M017 Dimension Measurement

In-house Test Method, Document No.: B00-CD-429

Video Measurement System: X-axis: (0 to 300) mm, Y-axis: (0 to 200) mm, Z-axis: (0 to 200) mm, Angle: 0° to 360°

Caliper: outer diameter: (0 to 300) mm, inner diameter: (0 to 250) mm

Height Master/Mu-Checker/Gage Head: (0 to 300) mm

Measuring Machine: (0 to 300) mm

Approval Signatory: CHU, Kwo-Siung; MOU, Wan-Chau

▀ 03. 03 Cements, Clays, Ceramics and Related Materials

Safety Glazing Materials for Road Vehicles

M996

1.Thickness

2.Crushing Test

3.Heat Resistance

4.Humidity Resistance

CNS 10985

CNS 10986

Outside Micrometer: (0 to 25) mm

Tape: (1 to 5) m

Approval Signatory: MOU, Wan-Chau; YEN, Ming-Hai

Testing Site: 1.Rm. 205, No.47, Yuanqu 2nd Rd., East Dist., Hsinchu City 300, Taiwan (R.O.C.)

▀ 03. 03 Cements, Clays, Ceramics and Related Materials

Tempered Glasses

M996

1.Appearance

2.Scales Measuring

3.Warpage

4.Impact Resistance

5.Crushing Test

6.Impact Test

CNS 2217

Rule: (100 to 1000) mm

Tape: (1 to 5) m

Outside Micrometer: (0 to 25) mm

P2, total 14 pages



Dial Indicator: (0 to 10) mm

Approval Signatory: MOU, Wan-Chau; YEN, Ming-Hai

Testing Site: 1.Rm. 205, No.47, Yuanqu 2nd Rd., East Dist., Hsinchu City 300, Taiwan
(R.O.C.)

▀ 03. 03 Cements, Clays, Ceramics and Related Materials

Laminated Glasses

M996

- 1.Appearance
- 2.Warping Test
- 3.Surface Compressive Stress Test
- 4.Dimension and Dimension Error

CNS 13447

Rule: (100 to 1000) mm

Tape: (1 to 5) m

Outside Micrometer: (0 to 25) mm

Dial Indicator: (0 to 10) mm

GASP System: (0 to 168.83) MPa

Approval Signatory: MOU, Wan-Chau; YEN, Ming-Hai

Testing Site: 1.Rm. 205, No.47, Yuanqu 2nd Rd., East Dist., Hsinchu City 300, Taiwan
(R.O.C.)

M996

- 1.Appearance
- 2.Warpage
- 3.Heat Resistance
- 4.Humidity Resistance
- 5.Impact Resistance
- 6.Penetration Resistance
- 7.Shape, Dimensions

CNS 1183

Rule: (100 to 1000) mm

Tape: (1 to 5) m

Outside Micrometer: (0 to 25) mm

Dial Indicator: (0 to 10) mm

Approval Signatory: MOU, Wan-Chau; YEN, Ming-Hai

Testing Site: 1.Rm. 205, No.47, Yuanqu 2nd Rd., East Dist., Hsinchu City 300, Taiwan
(R.O.C.)

▀ 03. 03 Cements, Clays, Ceramics and Related Materials

Multiple Glasses

M996

- 1.Appearance
- 2.Dew Point Test

P3, total 14 pages



3. Accelerate Durability Tset (Eliminate the surface film emissivity of optical films)

4. Dimension and Dimension Error

CNS 2541

1. Scales Measuring

2. Dew Point Test

CNS 2541

Rule: (100 to 1000) mm

Tape: (1 to 5) m

Outside Micrometer: (0 to 25) mm

Dew Point Temperature: (-70 to 0) °C

Approval Signatory: MOU, Wan-Chau; YEN, Ming-Hai

Testing Site: 1.Rm. 205, No.47, Yuanqu 2nd Rd., East Dist., Hsinchu City 300, Taiwan (R.O.C.)

▀ 03. 03 Cements, Clays, Ceramics and Related Materials

Safety Glazing Materials for Road Vehicles, Solar Reflective Glass, Laminated Glass

0003 Ultraviolet Rays Resistance

CNS 10985

CNS 10986

CNS 13032

CNS 1183

Change in Visible Light Transmittance

(380 to 780) nm

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta

▀ 03. 03 Cements, Clays, Ceramics and Related Materials

High-performance Energy-saving Glass

0003 CIE Damage Factor (300 to 600) nm

Skin Damage Factor (300 to 400) nm

ISO 9050

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta

0004 Solar and Visible Light Reflectance

ISO 9050

JIS R3106

CNS 12381

(300 to 2500) nm

Approval Signatory: MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta



0018 Shading Coefficient (Sc)

ISO 9050

JIS R3106

CNS 12381

Evaluation Manual FOR Green Building Material (2020) of the Institute of Architecture,
Ministry of the Interior, Chapter 7-4 p.82 to 83 Formula Explanation In-house Method,

Document No.: B00-PT-029

(300 to 2500) nm

(5.5 to 50) μm

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta

0019 Thermal Transmittance (Total heat transfer coefficient, U)

ISO 10292

JIS R3107

(5.5 to 50) μm

Approval Signatory: MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta

0019 Solar Heat Gain Coefficient (SHGC)

ISO 10292

JIS R3107

CNS 12381

CNS 13032

(300 to 2500) nm

(5.5 to 50) μm

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta

0019 Corrected Emissivity (ϵ)

ISO 10292

JIS R3107

CNS 12381

CNS 15833

(5.5 to 50) μm

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta

▀ 03. 03 Cements, Clays, Ceramics and Related Materials

High-performance Energy-saving Glass, Safety Glazing Materials for Road Vehicles

0003 Solar, Visible Light and UV Light Transmittance

ISO 9050

JIS R3106

CNS 12381

CNS 10985

CNS 10986

P5, total 14 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix



(300 to 2500) nm

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta

■ 03. 03 Cements, Clays, Ceramics and Related Materials

Glass Related Production

0018 Heat Properties

1.Total solar heat reject coefficient (1-SHGC)

2.Total heat resistance (1/U)

3.The surface emissivity on optical Film (corrected emissivity, ϵ)

CNS 2541

CNS 12381

CNS 13032

(300 to 2500) nm

(5.5 to 50) μm

Approval Signatory: MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta

■ 17. 84 Metrical Instrument

Average Section Control

E997 Legal Metrology Instrument Verification

1.Structural Inspection

2.Travel Time Verification

3.Average Speed Verification

BSMI CNMV 205

Time: 1 s to 3599 s

Average Speed: 30 km/h to 200 km/h (GPS) ; 30 km/h to 100 km/h (Optical Sensor)

On-site Testing only

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta

■ 17. 85 Metrical Instrument

Moisture Meter for Corn

C997 Legal Metrology Instrument Verification

1.Moisture Content

BSMI CNMV 59-2

12 % to 24 %

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta

■ 17. 85 Metrical Instrument

Moisture Meter for Cereal Grains

C997 Legal Metrology Instrument Verification

1.Moisture Content

BSMI CNMV 59-1

12 % to 28 %

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta

P6, total 14 pages



17.86 Metrical Instrument

Inductive Loop Speedmeters

E997 Legal Metrology Instrument Verification

- 1.General requirements
- 2.Construction
- 3.Distance between Two Couples of Inductive Loops
- 4.Loop Inductance
- 5.Loop Resistance
- 6.Loop Insulation Resistance
- 7.Speed Accuracy
- 8.Temperature Effect

BSMI CNMV 204

30 km/h to 240 km/h

On-site Testing included

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta

17.87 Metrical Instrument

Laser Speed-Measuring Device

O997 Legal Metrology Instrument Verification

- 1.General requirements
- 2.Construction Check
- 3.Range Distance Check
- 4.Pulse Repetition Rate Check
- 5.Laser Optical Power Check
- 6.Speed Accuracy Check

BSMI CNMV 203

16 km/h to 300 km/h

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta

17.90 Metrical Instrument

Octave-band and Fractional-octave-band Filters

A997 Legal Metrology Instrument Verification

- 1.Construction
- 2.Tests of Relative Attenuation at Midband Frequency
- 3.Linear Operating Range
- 4.Measurement of Relative Attenuation
- 5.Overload Indicator
- 6.Self-generated Noise

BSMI CNMV 58-2

IEC 61260-1

20 Hz to 20 kHz

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta



17.90 Metrical Instrument

Sound Level Meter

A997 Legal Metrology Instrument Verification

1. Construction and Function Check
 2. Indication at the Calibration Check Frequency
 3. Self-generated Noise
 4. Acoustical Signals for Frequency Weightings
 5. Electrical Signals for Frequency Weightings
 6. Level Linearity
 7. Level Range Control
 8. Toneburst Response
 9. Overload Indication
 10. Frequency and Time Weightings at 1 kHz
 11. Long-term Stability
 12. High-level Stability
- BSMI CNMV 58-1
CNS 7129
IEC 61672-1
20 Hz to 20 kHz

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta

17.91 Metrical Instrument

Evidential Breath Tester/Analyzer

C997 Legal Metrology Instrument Verification

1. General requirements
 2. Structure
 3. Accuracy and Repeatability
 4. Influence of Delivered Volume and Exhalation Duration
 5. Influence of Flowrate and Injection Duration
 6. Influence of Duration of the Plateau during Injection
 7. Influence of an Interruption in the Breath Flow
 8. Drift
 9. Memory Effects
 10. Physiological Influence Quantities
- BSMI CNMV 126
OIML R126
Standard Alcohol Mass Concentration: 0.000 to 2.000 mg/L
Alcohol Mass Concentration < 0.400 mg/L: MPE \pm 0.020 mg/L
0.400 mg/L \leq Alcohol Mass Concentration < 2.000 mg/L: MPE \pm 5 %
Alcohol Mass Concentration \geq 2.000 mg/L: MPE \pm (Alcohol Mass Concentration/2-0.9) mg/L
Alcohol Mass Concentration < 0.400 mg/L: Repeatability STDEV < 0.007 mg/L
0.400 mg/L \leq Alcohol Mass Concentration < 2.000 mg/L: Repeatability Relative STDEV < 1.67 %
Alcohol Mass Concentration \geq 2.000 mg/L: Repeatability Relative STDEV (Alcohol Mass Concentration/2-0.9) /3 mg/L

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta

P8, total 14 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix



17.92 Metrical Instrument

Radar Speed Meter

E997 Legal Metrology Instrument Verification

- 1.General requirements
 - 2.Structure
 - 3.Microwave Transmitter Frequency
 - 4.Radiation Field Type of Transmitting Antenna
 - 5.Density of Microwave Radiation Power
 - 6.Speed Detection Accuracy
- BSMI CNMV 91
X-Band (8.2 GHz to 12.4 GHz)
Ku-Band (12.4 GHz to 18 GHz)
K-Band (18 GHz to 26.5 GHz)
Ka-Band (26.5 GHz to 40 GHz)
Detection Range: (25 km/h to 199 km/h)

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta

17.93 Metrical Instrument

Exhaust emissions analyzer for motorcycles

C996

- 1.Warm-up time test
 - 2.Leak test
 - 3.Sampling flow test
 - 4.Zero/span adjustment
 - 5.Repeatability test
 - 6.Accuracy test
 - 7.Response time test
 - 8.Drift test
 - 9.Inspection of analyzer information
- EPA, R.O.C. (Taiwan) -
Standard operating procedure of exhaust emissions analyzer check for motorcycles in use
CO: (0 to 9.89) % vol
CO₂: (0 to 16.20) % vol
HC: (0 to 15000) ppm vol

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta

17.93 Metrical Instrument

Vehicle Exhaust Emission Analyzer

C997 Legal Metrology Instrument Verification

BSMI CNMV 99 (1st edition)

- 1.Appearance, Structure and Performance
 - 2.Warm-up Test
 - 3.Response Time Test
 - 4.Accuracy and Reproducibility Test
 - 5.Leakage Test
 - 6.HC Residue Test
- P9, total 14 pages



7.Low Flow Test
BSMI CNMV 99 (2nd edition)
1.Structure
2.Warm-up Test
3.Response Time Test
4.Accuracy and Repeatability Test
5.Leakage Test
6.HC Residue Test
7.Low Flow Test
BSMI CNMV 99 (1st edition)
BSMI CNMV 99 (2nd edition)
CO: (0.4 to 4.4) % vol
CO2: (5.0 to 15.4) % vol
HC: (80 to 1840) ppm vol

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta

■ 17. 93 Metrical Instrument

Smoke Tester

M996 Performance Test of Smoke Tester

In-house Method, Document No.: B00-CD-434

DORH, MOTC Provisions on the Commissioned Inspection of Vehicle Attached Table 2

- 1.Pipe Test: no Fracture, Block or Leakage in the Pipe
- 2.Paper Delivery Test: The operation must be sound and smooth.
- 3.Accuracy Test (Pollution Test) : 10 %, 30 %, 50 %, 90 %
- 4.Sample Gas Volume Test: Max 500 c.c.
- 5.Sample Time Test: below 10 s

On-site Testing included

Approval Signatory: CHU, Kwo-Siung; MOU, Wan-Chau

■ 17. 97 Metrical Instrument

Illuminance Meter

O997 Legal Metrology Instrument Verification

- 1.Residue Characteristic
- 2.Response Time
- 3.Fatigue Characteristic
- 4.Angled Incident Light Characteristics
- 5.Accuracy Check

BSMI CNMV 200

25 lx to 1500 lx

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta



17.99 Metrical Instrument

EMI Test Site
E026 Site VSWR
CISPR 16-1-4
(1 to 18) GHz
On-Site Testing

Approval Signatory: CHU, Kwo-Siung; MOU, Wan-Chau; CHEN, Yi-Ren; CHANG, Shuo-Ren

17.99 Metrical Instrument

EMI Testing Site
E026 NSA
ANSI C 63.4
30 MHz to 1 GHz
On-Site Testing

Approval Signatory: CHU, Kwo-Siung; MOU, Wan-Chau; CHEN, Yi-Ren; CHANG, Shuo-Ren

17.99 Metrical Instrument

Smoke Tester
M996
1. Warm-up time test
2. Drift test
3. Reproducibility test
4. Effects of voltage changes test
5. Accuracy test
EPA, R.O.C. (Taiwan) -Method and procedure for detecting opacity of black smoke emissions from diesel vehicles
Error against average $\leq (0.01 \text{ to } 0.05) \text{ m}^{-1}$

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta

17.99 Metrical Instrument

Side Slip Tester (Front and rear wheel alignment tester)
M996 Performance Test of Side Slip Tester (Front and rear wheel alignment tester)
In-house Method, Document No.: B00-CD-433
DORH, MOTC Provisions on the Commissioned Inspection of Vehicle Attached Table 2
1. Initial Force Test: 0 kgf to 20 kgf
2. Tensile Force in 5 Divisions Test: 0 kgf to 20 kgf
3. Dynamic test for lateral sliding: 0 kgf to 20 kgf
4. Shift in 5 Divisions Test: 0 mm to 25 mm
5. Recovery Test: 0 mm to 25 mm
On-site Testing only

Approval Signatory: CHU, Kwo-Siung; MOU, Wan-Chau

P11, total 14 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix



17.99 Metrical Instrument

Speed Meter Tester

M996 Performance Test of Speed Meter Tester

In-house Method, Document No.: B00-CD-435

1. Roller Confines Test: 0 mm to 500 mm

2. Accuracy Test (Speed Meter Speed) : (40±1.2) km/h, (60±1.8) km/h

On-site Testing only

Approval Signatory: CHU, Kwo-Siung; MOU, Wan-Chau

17.99 Metrical Instrument

Brake Tester

M996 Performance Test of Brake Tester

In-house Method, Document No.: B00-CD-432

DORH, MOTC Provisions on the Commissioned Inspection of Vehicle Attached Table 2

Accuracy Test (Brake Test) : (5 to 250) kgf

On-site Testing only

Approval Signatory: CHU, Kwo-Siung; MOU, Wan-Chau

18.10 Commodity

Sunglass

M996 Safety Test

1. Construction, filter material and surface quality

2. Minimum robustness of filters

3. Frame deformation and filter retention

4. Resistance to ignition

5. Information and label

CNS 15067 Clause 4.1, 4.2, 7.1, 7.2, 9, 12

ISO 12312-1 Clause 4.1, 4.2, 7.1, 7.2, 9, 12

CNS 15971 Clause 6, 9.1, 9.6, 9.9

ISO 12311 Clause 6, 9.1, 9.6, 9.9

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta

O996 Optics Characteristic Test

1. Transmittance

2. Spherical and astigmatic power

3. Prism imbalance

CNS 15067 Clause 5.1, 5.2, 5.3 (Except 5.3.3, 5.3.4.1, 5.3.5.3, 5.3.5.4) , 6.1, 6.3

CNS 15971 Clause 7.1, 7.2, 7.3, 7.8, 7.10, 8.1, 8.2, Annex B 4.3.4.6

ISO 12312-1 Clause 5.1, 5.2, 5.3 (Except 5.3.3, 5.3.4.1, 5.3.5.3, 5.3.5.4) , 6.1, 6.3

ISO 12311 Clause 7.1, 7.2, 7.3, 7.8, 7.10, 8.1, 8.2, Annex B 4.3.4.6

280 nm to 780 nm

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta

P12, total 14 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix



18.10 Commodity

Contact lenses

O996

1.Oxygen permeability

2.Thickness

3.Transmittance

ISO 18369-2

ISO 18369-3

ISO 18369-4

ANSI Z80.20

1.DK (0 to 154)

2. (0 to 0.40) mm

3. (280 to 780) nm

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; LI, Ming-Ta

20.21 Information Technology and Communication

IT Products, Electrical Appliance

A001 Sound Pressure Test

ISO 11201

ISO 9296

ECMA 74

Frequency: 100 Hz to 10 kHz

Sound Pressure: (15 to 120) dB (A) reference 20 μ Pa

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta

Testing Site: 1.No.157, Jiadong Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)

A001 Sound Power Level Test (Engineering Method)

ISO 7779

ISO 3744

IEC 60704-1

ISO 9296

ECMA 74

Frequency: 100 Hz to 10 kHz

Sound Power: (15 to 100) dB (A) reference 1 pW

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta

Testing Site: 1.No.157, Jiadong Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)

A001 Sound Power Level Test (Precision Method)

ISO 7779

ISO 3745

Frequency: 100 Hz to 10 kHz

Sound Power: (15 to 100) dB (A) reference 1 pW

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta

Testing Site: 1.No.157, Jiadong Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)

P13, total 14 pages



■ 23. 01 Children's Products

Toy, Small Electrical Production

A001 Sound Pressure Level Test

CNS 4797-3

ISO 8124-1

Frequency Range: 100 Hz to 10 kHz

Sound Pressure Level: (15 to 120) dB (A) reference 20 μ Pa

Approval Signatory: SHIH, Wen-Chi; MOU, Wan-Chau; CHEN, Chengnan; LI, Ming-Ta
Testing Site: 1.No.8, Ln. 29, Wenming Rd., Leshan Vil., Guishan Dist., Taoyuan City 333,
Taiwan (R.O.C.) ; 2.No.157, Jiadong Rd., Xizhi Dist., New Taipei City 221, Taiwan
(R.O.C.)

**Accreditation Program for Designated Testing Laboratory for
Commodities Inspection**

■ 18. 10 Commodity

Sunglass

M996 Safety Test

1.Construction, filter material and surface quality

2.Minimum robustness of filters

3.Frame deformation and filter retention

4.Resistance to ignition

5.Information and label

CNS 15067 (2017-02) Clause 4.1, 4.2, 7.1, 7.2, 9, 12

Approval Signatory: SHIH, Wen-Chi; LI, Ming-Ta

O996 Optics Characteristic Test

1.Transmittance

2.Spherical and astigmatic power

3.Prism imbalance

CNS 15067 (2017-02) Clause 5.1, 5.2, 5.3 (Except 5.3.3, 5.3.4.1, 5.3.5.3, 5.3.5.4) , 6.1, 6.3
280 nm to 780 nm

Approval Signatory: SHIH, Wen-Chi; LI, Ming-Ta

■ 23. 01 Children's Products

Toy

A001 Sound Pressure Level

CNS 4797-3 (2015-07)

Frequency Range: 100 Hz to 10 kHz

Sound Pressure Level: (15 to 120) dB (A) reference 20 μ Pa

Approval Signatory: CHEN, Chengnan; LI, Ming-Ta
Testing Site: 1.No.8, Ln. 29, Wenming Rd., Leshan Vil., Guishan Dist., Taoyuan City 333,
Taiwan (R.O.C.) ; 2.No.157, Jiadong Rd., Xizhi Dist., New Taipei City 221, Taiwan
(R.O.C.)

(Null below)

P14, total 14 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix

