

WORKSHEET G-2W

UNIT WEIGHT MEASURES

REQUIREMENTS: Standardize Thermometric Device			
Standardization Frequency	Last Standardization	Date of Standardization	Next Standardization
12 Months			

GAGELIST ID: _____

ASSET ID: _____

SERIAL NUMBER: _____

MODEL NUMBER/MANUFACTURER: _____

STANDARDIZATION REFERENCE: PROCEDURE A-1; ASTM/AASHTO C29/M231

TRACEABLE MEASURING AND TEST EQUIPMENT USED FOR STANDARDIZATION:

Equipment Name	Serial or ID Number
Balance (0.1lb)	
Thermometer (0.5 °C)	
24" Steel Ruler (0.01")	
1/4" Glass Plate	
Caliper (0.001")	
Feeler Gauge (0.005")	

STANDARDIZATION TABLE:

Capacity of Measure: _____

	Reading 1	Reading 2	Reading 3	Reading 4	Average	Deviation	Allowable Deviation
Top Inside Diameter, in.							
Inside Height, in.							
Height/Diameter Ratio, in.							0.8 to 1.5
Top Rim Planeness, 0.01 in.				YES/NO =			<0.01
Distance Between Plates							
A. Longest Distance - Shortest =		B. Distance Between Two Opposite Points =			$A \div B \times 100 =$		$\leq 0.87 \%$
Top 1/2" Rim Thickness							See Table 2 in C 29
Wall Thickness							See Table 2 in C 29
Bottom Thickness	Overall Height =		Void Height =				See Table 2 in C 29

Top Rim Planeness (0.01"):

Acceptable Not Acceptable

Temperature - Density of Water

°C	lb/ft ³
15.6	62.366
18.3	62.336
21.1	62.301
(23.0)	(62.274)
23.9	62.261
26.7	62.216
29.4	62.116

Volumetric Calibration

1. Mass of Measure + Glass Plate: $W_1 =$	2. Mass of Measure + Glass Plate + Water: $W_2 =$
3. Temperature of Water: $T =$ °C	4. Density of Water from Table 2 @ T: $D =$
5. Mass of Measure + Glass Plate: $W_1 =$	6. Mass of Measure + Glass Plate + Water: $W_2 =$
7. Temperature of Water: $T =$ °C	8. Density of Water from Table 2 @ T: $D =$
9. Volume of Measure: $V = (W - M) \div D$ $V =$	
10. Factor for the measure: $F = D \div (W - M)$ $F =$	

RESULTS:

Equipment Status Upon Receipt: Conforms _____ Nonconforming* _____

* Who Was Notified? _____ Corrective Action _____

Equipment Status After Adjustment: Conforms _____ Nonconforming _____

Standardization Performed By: _____ Standardization By: _____