



# BOYA RANGE CALIBRATION

## JN 20192297.

TEST 49: BOYA  
Ref 10404-2010

Weather: Fine  
Windy.

### BOOKING SHEET FOR BOYA RANGE BARCODE STAFF CALIBRATION

- 1) LEVEL BUBBLE CHECKED? ( Circle one ) YES/NO ADJUSTED? YES/NO
- 2) STAFF BUBBLE CHECKED? ( Circle one ) YES/NO ADJUSTED? YES/NO
- 3) COLLIMATION TEST OF DIGITAL LEVEL

See Boya Range plan for location of collimation test spikes 1-4

Use instrument internal software to calculate and store collimation constants

DATE/TIME	12/5/2020 9:27AM	Temp: 18.1°C 18.6°C		
INSTRUMENT MAKE/MODEL SERIAL #	LEICA LS15 # 702272			
STAFF MAKE/MODEL SERIAL#	INVAR STAFF # 26296			
COLLIMATION DIFFERENCE	-1.2"	Old: -23.9" New: -25.1"		
ACCEPT?/STORE?	YES	Diff: -1.2" Reticle: 1.66897		

#### 4) RANGE OBSERVATION DETAILS

See Boya Range plan for location of Pillar MV 83 and Pins 1-21

Set digital level to record most precise readings with multiple observations, means and standard deviations if possible. Shade instrument unless overcast.

Book field information in these tables to complete documentation for calibration.

Observe a BS on Pin 1, IS on Pins 2-20 and a FS on Pin 21 for 1 complete set for a 4 m staff.

Observe a BS on Pin 1, IS on Pins 2-14 and a FS on Pin 15 for 1 complete set for a 3 m staff.

If instrument can't mean multiple observations, do at least 3 complete sets for redundancy.

DATE/TIME	12/5/2020 TIME: 9:46AM	12/5/2020 TIME: 10:14AM		
TEMPERATURE START/FINISH	ST: 19.7°C, 18.7°C FIN: 18.7°C, 18.3°C	ST: 19.1°C, 18.8°C FIN: 19.2°C, 19.0°C		
INSTRUMENT MAKE/MODEL SERIAL #	LEICA LS15 SN 702272	LEICA LS15 SN 702272.		
STAFF MAKE/MODEL SERIAL#	INVAR STAFF # 26296.	INVAR STAFF # 26296		
#OBS FOR MEAN (minimum 5)	10	10		
NUMBER OF SETS	1	1		

pin # 1-15

pin # 7-21.

I certify that the above observations were made by me at the Boya barcode staff calibration range.

SURVEYOR..... V.UNG.

DATE..... 12/5/2020.

pin 1 100.0000  
pin 21 96.19681.  
Δ 3.80319.