

# **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

WEATHER: FINE & SUNNY.  
LIGHT BREEZE.

Use instrument internal software to calculate and store collimation constants

TEMP: 24.5°C.

DATE/TIME	12/03/2019 TUE. 9:30AM.			
INSTRUMENT MAKE/MODEL SERIAL #	LEICA LS 15 SN 702272			
STAFF MAKE/MODEL SERIAL#	#26296 INVAR STAFF			
COLLIMATION DIFFERENCE	-0.6" OLD -8.1" NEW -8.7"	RETICLE 1.67646		
ACCEPT?/STORE?	YES.			

n=10.

## 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	12/03/2019. TUE. 9:50AM	12/03/2019 TUE. 10:35AM.		
TEMPERATURE START/FINISH	ST: 26.5°C FIN: 27.6°C	ST: 28.3°C FIN: 29.5°C.		
INSTRUMENT MAKE/MODEL SERIAL #	LEICA LS 15 SN 702272	LEICA LS 15. SN 702272.		
STAFF MAKE/MODEL SERIAL#	# 26296.	# 26296.		
#OBS FOR MEAN (minimum 5)	n=10.	n=10.		
NUMBER OF SETS	1	1		

# 1-15.

# 7-21

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

\*PIN 10 is a little damaged.

SURVEYOR..... V. UNG.

DATE..... 12/03/2019

Pin 1 100.00000  
Pin 21 96.19627  
Δ. - 3.80373.