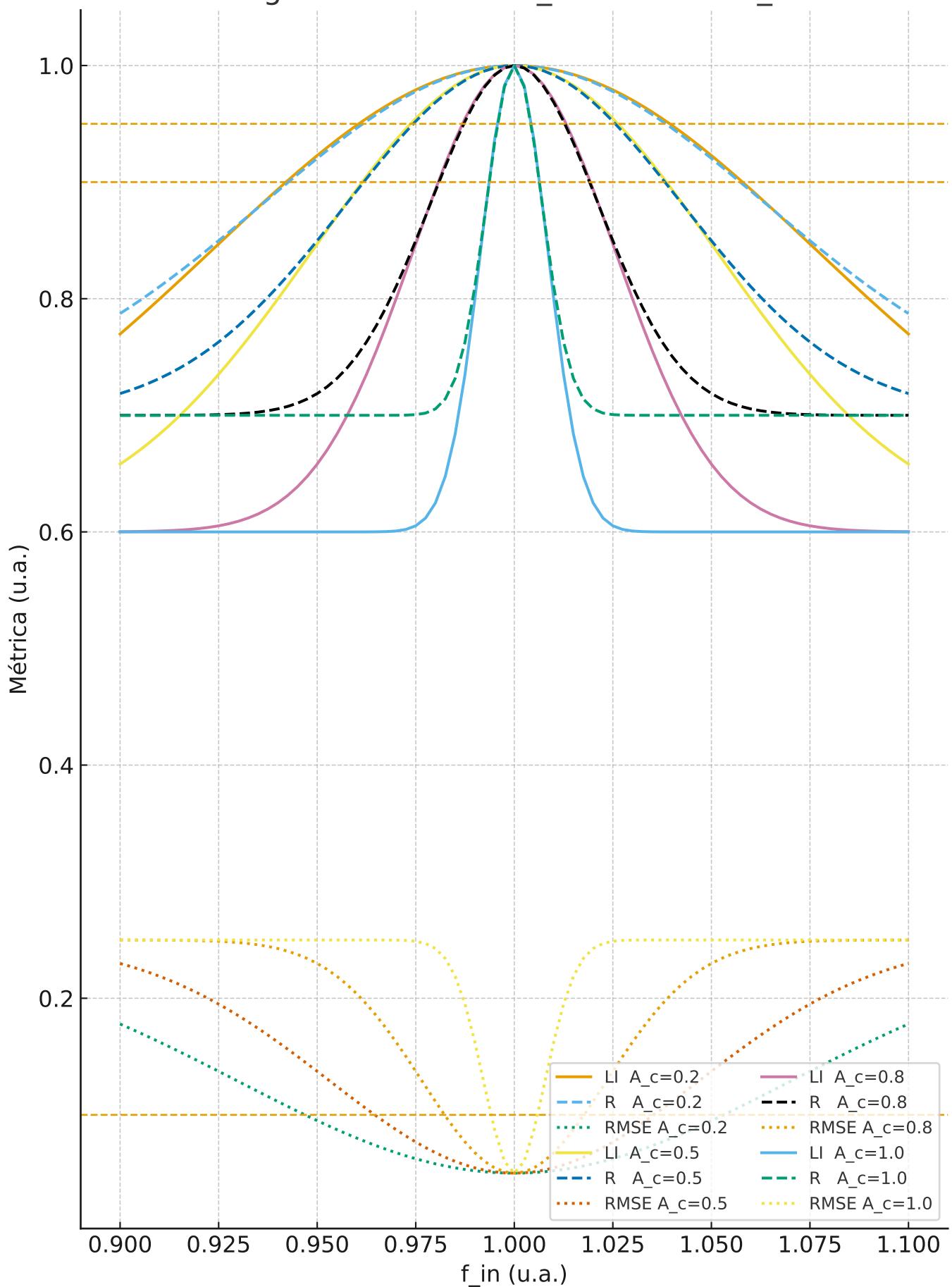


Figura B — KPIs vs  $f_{in}$  en varias  $A_c$



$LI \approx 0.92$

Figura C — Histograma de  $\Delta\phi$  y vector resultante (LI)

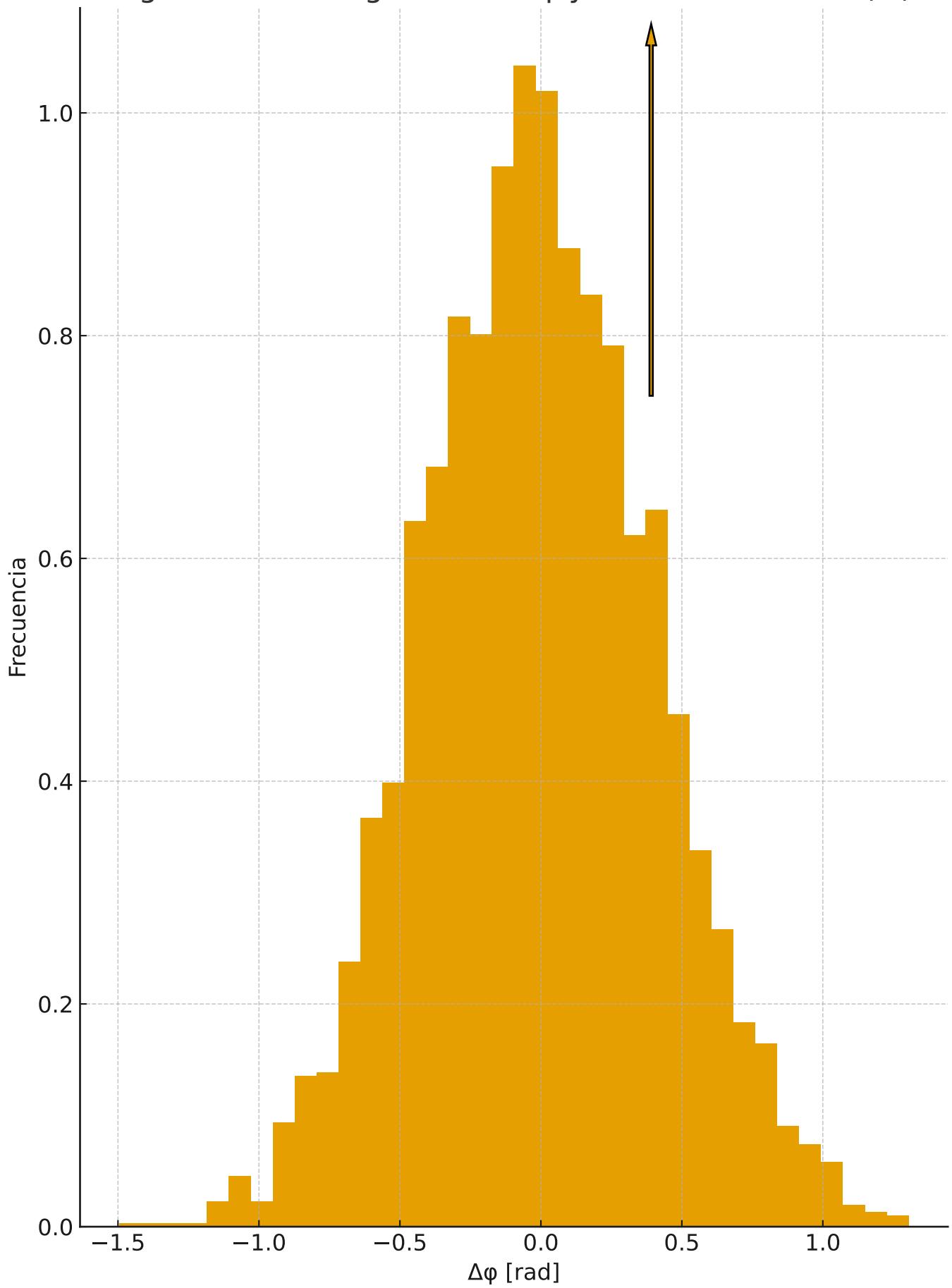


Tabla 1 — Ajuste SL: parámetros e IC95% + residuales

Condición	$\mu_{\text{eff}}$ (IC95%)	c (IC95%)	K (IC95%)	RMSE_SL	Ljung-Box p	Res. blancos?
A_c=0.2	0.115 [0.105, 0.120]	0.053 [0.033, 0.070]	0.030 [0.020, 0.040]	0.105	0.61	Sí
A_c=0.5	0.079 [0.069, 0.090]	0.009 [-0.029, 0.021]	0.021 [0.011, 0.031]	0.080	0.76	Sí
A_c=0.8	0.096 [0.086, 0.106]	0.027 [0.007, 0.047]	0.044 [0.034, 0.054]	0.080	0.41	Sí
A_c=1.0	0.101 [0.091, 0.111]	0.043 [-0.063, -0.041]	0.031 [0.031, 0.051]	0.078	0.74	Sí

Tabla 2 — Reproducibilidad por día / lote / laboratorio

Día	Lote	Lab	Corridas	Cumplen KPIs	Proporción	IC95% (Wilson)
D1	L1	A	15	15	1.00	[0.80,1.00]
	L1	B	14	13	0.93	[0.69,0.99]
D1	L2	A	8	8	1.00	[0.68,1.00]
	L2	B	12	10	0.83	[0.55,0.95]
D2	L1	A	9	8	0.89	[0.56,0.98]
	L1	B	15	15	1.00	[0.80,1.00]
D2	L2	A	9	8	0.89	[0.56,0.98]
	L2	B	14	12	0.86	[0.60,0.96]
D3	L1	A	10	10	1.00	[0.72,1.00]
	L1	B	9	8	0.89	[0.56,0.98]
D3	L2	A	9	9	1.00	[0.70,1.00]
	L2	B	14	12	0.86	[0.60,0.96]

## Anexo — Manifiesto de Corrida, SNR, Control Nulo, Sellos Hash

ID de corrida: \_\_\_\_\_ Fecha/Hora (UTC): \_\_\_\_\_

Operadores: \_\_\_\_\_ Lab: \_\_\_\_\_ Equipo: \_\_\_\_\_

Condiciones fijas: u\_g=\_\_\_\_ T=\_\_\_\_ °C RH=\_\_\_\_ % Blindaje EM: Sí/No Atenuación cruzada: \_\_\_\_ dB

BOM y versión de firmware/software: \_\_\_\_\_

SNR en banda bloqueada: \_\_\_\_ dB Método de cálculo: \_\_\_\_\_

Control nulo: Sí/No Resultado: \_\_\_\_\_

Datos crudos: ruta \_\_\_\_\_ SHA-256: \_\_\_\_\_

Notas y anomalías: \_\_\_\_\_