

HOJA DE CÁLCULO DE INCERTIDUMBRE

Ítem a Diligenciar
Ítem a Reportar

Incertidumbre típica Combinada	
σt[dB]	1.131

Incertidumbre Expandida	
U[dB]	±2.26

1. Incertidumbre debido a la instrumentación

Tipo de Sonómetro	Tipo 1
Modo de Estimación	Recomendado

uSLM	1.000
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El método "Calculado" solo está validado para sonómetros Tipo 1 con la siguiente EQ

$$\delta_i(L) = \delta_{PFE} + \delta_{PFA} + \delta_{LS} + \delta_{RMS} + \delta_{PT} + \delta_{CA} + \delta_{CC} + \delta_{ES} + \delta_{TS} + \delta_{PS} + \delta_{CS}$$

2. Incertidumbre debido a las condiciones de funcionamiento

Escoja la fuente que corresponda

Fuente Evaluada	Plantas Industriales y Otras
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Escoja la repetibilidad que corresponda. Ej: En tráfico n=aforo. En plantas u otras fuentes, n corresponde al # de repeticiones

n	104
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uSource	0.000
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3. Incertidumbre debido a las condiciones meteorológicas y del terreno

¿La superficie del terreno entre la fuente y la posición de medición era dura?

Si

¿Cuál es la cobertura fuente/receptor?

NO REQUIERE RESPUESTA

Casos de Cobertura:
 Situación alta: $hs \geq 1,5 \text{ m}$ y $hr \geq 1,5 \text{ m}$, o $hs < 1,5 \text{ m}$ y $hr \geq 4 \text{ m}$
 Situación baja: $hs < 1,5 \text{ m}$ y $hr \leq 1,5 \text{ m}$

uMet	0.500
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4. Incertidumbre debido al sonido residual

σ0	6.2166
σs	6.5544

Coef	0.6
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uRes	0.1718
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PUNTO	LAEQ_Ord [dB]	LAEQ_Dom [dB]	LD-Ord [dB]	LN-Ord [dB]	LD-Dom [dB]	LN-Dom [dB]	LATITUD	LONGITUD	LD-Ord [dB] Corregido
P1_Patio Taller	63.19	58.86	58.2	56.1	54.2	51.7	4°38'412"	74°11'565"	58.2
P2_Portal America	79.71	78.00	71.6	73.1	69.8	71.4	4°37'447"	74°10'153"	71.6
P3_Villablanca	73.17	73.27	68.1	66.1	68.2	66.2	4°37'202"	74°10'013"	68.1
P4_Kennedy	61.35	67.69	59.6	53	67.2	58.3	4°37'007"	74°09'269"	65.6
P5_Palenque	54.14	54.48	55.2	42	55.3	43	4°36'584"	74°09'042"	58.2
P6_Av. Boyacá	62.93	61.07	61.3	54.5	59.2	52.8	4°37'103"	74°08'252"	64.3
P7_Av. 68	60.32	67.08	60.4	50.2	67.4	56.6	4°36'290"	74°07'431"	63.4
P8_Rosario	60.55	63.26	57.9	52.7	63.5	52.9	4°36'088"	74°07'215"	60.9
P9_NQS	63.85	60.79	61.2	56	58.6	52.7	4°35'495"	74°06'475"	64.2
P10_Santander	70.28	69.73	66.4	62.9	66	62.3	4°35'318"	74°03'194"	69.4
P11_Hospitales	79.53	74.71	76.6	71.8	72.9	66.4	4°35'367"	74°05'142"	76.6
P12_Calle10-11	67.66	65.71	63.7	60.3	63.9	57.4	4°35'544"	74°09'473"	66.7
P13_Calle26	70.27	65.98	66	63	61.4	58.8	4°36'440"	74°04'230"	69
P14_Calle45	76.53	76.83	70.8	69.6	73.4	69.3	4°38'029"	74°04'018"	70.8
P15_Calle52	76.42	75.40	73.7	68.6	70.9	68.2	4°38'320"	74°03'572"	73.7
P16_Calle63	67.65	59.20	69.4	52.5	60.1	47.5	4°39'058"	74°03'590"	72.4
P17_Calle72	66.85	62.77	69	47	63.3	51.9	4°39'236"	74°03'509"	72
P18_Calle76	74.31	69.70	72.5	66	70.2	58.9	4°39'502"	74°03'311"	75.5

LN-Ord [dB] Corregido	LD-Dom [dB] Corregido	LN-Dom [dB] Corregido	K-TONO DomD	K-TONO DomN	K-TONO OrdD	K-TONO OrdN	K-IMP-DomD	K-IMP-DomN	K-IMP-OrdD	K-IMP-OrdN
59.1	57.2	54.7	0	0	0	0	3	3	0	3
73.1	72.8	71.4	0	0	0	0	3	0	0	0
66.1	68.2	69.2	0	0	0	0	0	3	0	0
56	70.2	61.3	0	0	0	0	3	3	6	3
45	58.3	43	0	0	0	0	3	0	3	3
54.5	59.2	52.8	0	0	0	0	0	0	3	0
50.2	70.4	59.6	0	0	0	0	3	3	3	0
55.7	69.5	55.9	0	0	0	0	6	3	3	3
56	61.6	52.7	0	0	0	0	3	0	3	0
65.9	69	68.3	0	0	0	0	3	6	3	3
71.8	72.9	66.4	0	0	0	0	0	0	0	0
60.3	66.9	57.4	0	0	0	0	3	0	3	0
69	64.4	64.8	0	0	0	0	3	6	3	6
75.6	73.4	69.3	0	0	0	6	0	0	0	0
68.6	73.9	68.2	0	0	0	0	3	0	0	0
52.5	63.1	50.5	0	0	0	0	3	3	3	0
50	69.3	51.9	0	0	0	3	6	0	3	3
66	73.2	58.9	0	0	0	0	3	0	3	0

IMP-DomD	IMP-DomN	IMP-OrdD	IMP-OrdN	L90-DomD	L90-DomN	L90-OrdD	L90-OdnN	L50-DomD	L50-DomN	L50-OrdD
58.2	55.2	61.1	60	47	41	46.7	50.9	49.2	44.9	53.5
74.3	74.3	74.3	75.4	60.1	63.4	61.5	65.3	66.3	68.5	68.3
70.6	69.2	70.8	68	63.6	56.2	62.7	56.3	66.7	63.7	66.5
72.3	61.7	65.8	57.5	54.3	48	54	45	58.4	54.2	57.3
59.3	45.3	59.4	45.7	48.2	39.8	49.2	39.3	50.5	41.3	51.8
61.2	55.5	65	57	57	48.1	57.6	50.2	58.6	51.3	59.5
72.2	60.6	65.3	52.1	56.9	52.6	55.2	46.3	59.4	54.9	57.5
73.3	56.5	62.9	55.9	52.6	48.4	52.1	48.7	54.8	50.6	54.7
62.6	54.7	65.6	58.7	51	48.8	54	49	53.8	50.9	56.4
69.3	68.4	70.7	67.6	60.4	47.6	55.1	55.5	63.5	53.2	62.1
75.8	68.7	79	74	64.2	54.8	65.7	60.1	69.2	63.1	73
67.2	60	66.9	62	60.2	50.7	60.3	56.1	62.3	53.6	62.5
64.6	66.6	70.7	70.1	53.9	49.7	60.3	53.8	58.4	52.6	63.4
76.3	71.3	73.2	60.7	58.9	53.5	59.7	45.4	69.7	63.3	68.5
76.2	70.2	75.9	71.1	60	54.5	62.9	58	68.1	62.7	72.3
64	50.6	72.4	55.4	49.1	33.7	61.8	39.1	55.3	36.8	68.8
69.8	54.4	73.9	50.4	50.4	38.3	60.1	30.7	56.8	42.4	64.7
73.6	61.2	75.6	67.6	59.2	43.5	66.5	55.2	65.7	52.1	70.1

L50-OdnN	L10-DomD	L10-DomN	L10-OrdD	L10-OdnN
54.7	57.2	54.1	62.7	58.9
71	73.8	74.7	75.3	76.1
63.3	70.4	68.4	70.6	69.3
50.4	70.5	60.3	62.4	55.5
40.8	56.8	44.2	58.6	43.8
53.1	60.4	54.7	63.6	56.4
48.9	68.5	58.6	62.8	52.8
50.2	62.8	55.3	61.1	54.2
51.2	59.5	53.4	63.2	58.3
58.8	68.8	62.5	69.5	65.8
68.5	77.2	70.1	80.2	75.5
59.1	65.3	58.6	65.9	62.7
58.9	65.9	58.5	69.4	65.1
51.9	76.1	74	74	61.7
65.4	74.2	73	77.1	72.3
43.9	64	43.2	71.7	55.6
38.2	63.1	54.1	70.7	47.4
63.3	73.2	62.1	74.5	69.8