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## REIMS Science Po - Amphithéâtre

### Calcul en INTERIEUR

Circuit num: 1 - Commentaire: Soufflage  
 Coordonnees: X=-1m Y=-2.3m Z=8m

Désignation	Débit	-	63	125	250	500	1000	2000	4000	8000
soufflage CTA13 - Soufflage	100	Lw	74.0	79.0	80.0	85.0	83.0	80.0	71.0	68.0
TROX-Sans tole-1000-300-250		R	2	7	14	19	22	16	10	7
Régénération du silencieux		Rg	0	0	0	0	0	0	0	0
		Tt	72.0	72.0	66.0	66.0	61.0	64.0	61.0	61.0
Coude Rect Guide H=1880mm L=1280mm Qte:1	100	At	2.2	2.9	3	3	3	3	3	3
Regénération coude		Rg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Tt	69.8	69.1	63.0	63.0	58.0	61.0	58.0	58.0
Gaine Rect Lisse H=1880mm L=1280mm Lg:1m	100	At	0.4	0.3	0.2	0.1	0.1	0.1	0	0
Regénération gaine		Rg	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
		Tt	69.4	68.8	62.8	62.9	57.9	60.9	58.0	58.0
Dérivation E=2.406m <sup>2</sup> S:0.300m <sup>2</sup> (D:0.300m <sup>2</sup> )	12	At	5	5	5	5	5	5	5	5
Regénération dérivation		Rg	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0
		Tt	64.4	63.8	57.8	57.9	52.9	55.9	53.0	53.0
Gaine Rect Lisse H=750mm L=400mm Lg:17m	12	At	8.7	7.3	5.8	4.2	3.6	3.1	2.7	2.7
Regénération gaine		Rg	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
		Tt	55.7	56.5	52.0	53.7	49.3	52.8	50.3	50.3
Coude Rect Guide H=750mm L=400mm Qte:2	12	At	1.2	2.6	4.9	5.9	6	6	6	6
Regénération coude		Rg	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		Tt	54.5	53.9	47.1	47.8	43.3	46.8	44.3	44.3
Gaine Rect Lisse H=750mm L=400mm Lg:6.7m	12	At	3.4	2.9	2.3	1.7	1.4	1.2	1.1	1.1
Regénération gaine		Rg	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
		Tt	51.1	51.0	44.8	46.1	41.9	45.6	43.2	43.2

Coude Rect Guide H=750mm L=400mm Qte:1	12	At	0.6	1.3	2.5	3	3	3	3	3
Régénération coude		Rg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Tt	50.5	49.7	42.3	43.1	38.9	42.6	40.2	40.2
Bouche Rect L=750mm l=400mm Q=2 Lnat25	3825	At	6.7	1.6	0.2	0.0	0.0	0.0	0.0	0.0
Grille soufflage Régénération bouche:		Rg	42.2	32.1	24.6	19.2	16.0	14.8	15.0	17.1
		Tt	46.1	48.2	42.2	43.1	38.9	42.6	40.2	40.2
TOTAL CIRCUIT:		T	46.1	48.2	42.2	43.1	38.9	42.6	40.2	40.2

Circuit num: 2 - Commentaire: Reprise  
Coordonnees: X=-4m Y=-3m Z=3.4m

Désignation	Débit	-	63	125	250	500	1000	2000	4000	8000
reprise CTA13 - Reprise	100	Lw	70.0	77.0	76.0	76.0	78.0	76.0	71.0	68.0
TROX-Sans tole-1000-300-250		R	2	7	14	19	22	16	10	7
Régénération du silencieux		Rg	0	0	0	0	0	0	0	0
		Tt	68.0	70.0	62.0	57.0	56.0	60.0	61.0	61.0
Gaine Rect Lisse H=1880mm L=1280mm Lg:0.5m	100	At	0.2	0.2	0.1	0.1	0	0	0	0
Regénération gaine		Rg	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
		Tt	67.8	69.8	61.9	56.9	56.0	60.0	61.0	61.0
Coude Rect Guide H=1880mm L=1280mm Qte:1	100	At	2.2	2.9	3	3	3	3	3	3
Regénération coude		Rg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Tt	65.6	66.9	58.9	53.9	53.0	57.0	58.0	58.0
Plénum absorbant:	100	At	5.3	7.7	10.5	11.2	11.2	11.2	11.2	11.2
Regénération plénum		Rg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Tt	60.3	59.2	48.4	42.7	41.8	45.8	46.8	46.8
Atténuation: Détente - Reprise en vrac absorbant	100	At	10.6	8.4	21	25	30	40	40	40
Regénération atténuation		Rg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Tt	49.7	50.8	27.4	17.8	12.1	6.8	7.6	7.6
Bouche Circ Diam=200mm Q=2 Lnat23	0	At	16.4	10.7	4.7	0.7	0.1	0.0	0.0	0.0
Reprise aux pieds Régénération bouche:		Rg	40.2	30.1	22.6	17.2	14.0	12.8	13.0	15.1
		Tt	41.0	40.5	25.7	20.2	16.1	13.8	14.1	15.8
TOTAL CIRCUIT:		T	41.0	40.5	25.7	20.2	16.1	13.8	14.1	15.8

# Calcul en INTERIEUR

## TABLEAU RECAPITULATIF DES CIRCUITS

Référence	63	125	250	500	1000	2000	4000	8000	dB(A)	dB	dist(m)
Lp circuit 1 - Soufflage	28.6	30.7	24.0	24.3	20.1	23.8	21.4	21.4	29.5	34.8	5.0
Lp sans regen bouche / Lp regen bouche seule	26/25	31/15	24/6	24/0	20/0	24/0	21/0	21/0	30/8	34/25	
Lp circuit 2 - Reprise	37.6	37.1	22.2	16.7	12.6	10.3	10.6	12.3	23.9	40.4	0.6
Lp sans regen bouche / Lp regen bouche seule	30/37	37/27	19/19	14/14	9/11	3/9	4/10	4/12	22/20	38/37	

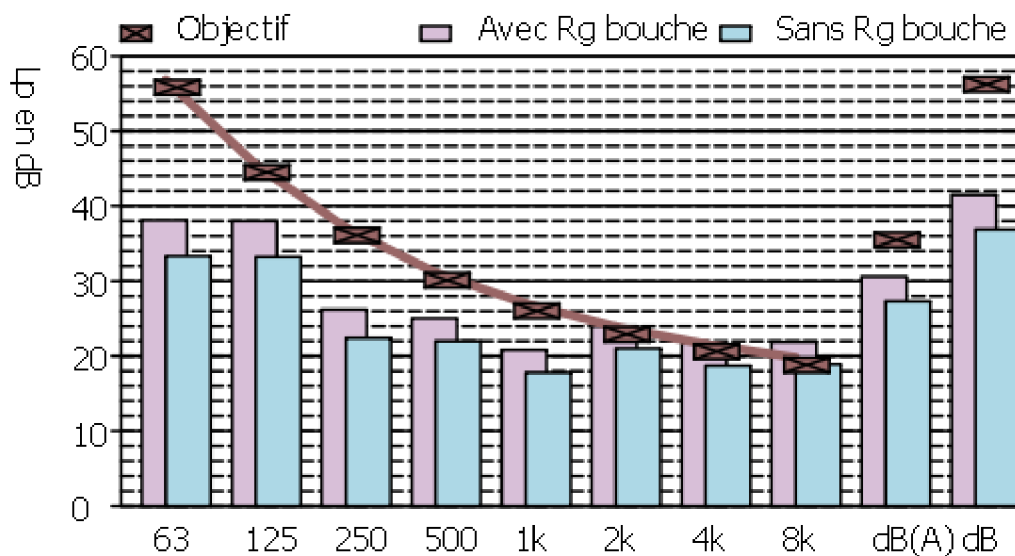
Volume: 2677 m3 --- Surfaces cumulees: 1703.4 m2

X: -4 m --- Y = -3 m --- Z = 4 m

Tr moyen = 1.15 s --- Tr ref moyen = 0.5 s

Objectif NR <= 27 (Nota: global <= 36.4 dB(A))

Référence	63	125	250	500	1000	2000	4000	8000	dB(A)	dB	NR
Lp Total	38.1	38.0	26.2	25.0	20.8	24.0	21.7	21.9	30.6	41.5	30.0
LnT	33.3	33.2	22.4	22.0	17.8	21.0	18.7	18.9	27.3	36.9	27.0
Objectif recherché: NR27	56.8	45.5	37.1	31.1	27.0	23.9	21.6	19.8	36.5	57.2	28.0



Fait le : 21 11 2016

Logiciel: Ventipyth v1011 du 30 juillet 2014