

1 - Paramètres de la Qualification

Id. Rapport Q CF 2248

Date de Qualification : 06/06/2008 10:24 **Intervenant:** JP
Libellé Matériel Contrôlé Site Langon, Bâtiment 4, Conditionnement
Id. Interne Matériel B 4
Procédure Normative : NF X 15- 140 **Date / Heure de début :** 6/6/08 12:15
Nombre d'enregistreurs : 6 **Date / Heure de fin :** 6/6/08 13:37
Intervalle de mesure : 0:01:00 **Nombre de mesures :** 83

Valeur de Consigne : 7 **Unité :** °C
Limite Inférieure : 6 **Mesure affichée :** 7 *(optionnel, sur l'appareil qualifié)*
Limite Supérieure : 8 **Mesure de contrôle :** 7.4 *(optionnel, moyenne du contrôle continu)*

Commentaire

2 - Instruments de Mesure Utilisés

| | Id. Interne | Id. Unique Constructeur | Position | Remarque | Date Etalonnage | Modèle | Incertitude Instrument |
|----|-------------|-------------------------|----------|----------|-----------------|--------|------------------------|
| 1 | 1 | 0000000C5CE641 | P1 | N1 | 19/07/2010 | DS1923 | 0.12 |
| 2 | 2 | 0000000C774441 | P2 | N2 | 19/07/2010 | DS1923 | 0.12 |
| 3 | 3 | 0000000C5EC141 | P3 | N3 | 19/07/2010 | DS1923 | 0.12 |
| 4 | 4 | 0000000C5ED141 | P4 | N4 | 19/07/2010 | DS1923 | 0.12 |
| 5 | 5 | 0000000E6BF241 | P5 | N5 | 19/07/2010 | DS1923 | 0.12 |
| 6 | 6 | 0000000C4C9541 | P6 | N6 | 19/07/2010 | DS1923 | 0.12 |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |

3 - Exploitation des Mesures

| | Position | Stabilité | Moyenne | Ecart Type Exp. | Incertitude Umj | Moyenne + Incertitude | Moyenne - Incertitude | Stabilité Conforme | Moyenne Conforme |
|----|----------|-----------|---------|-----------------|-----------------|-----------------------|-----------------------|--------------------|------------------|
| 1 | P1 | 0.50 | 7.11 | 0.14 | 0.30 | 7.41 | 6.81 | OUI | OUI |
| 2 | P2 | 0.63 | 6.99 | 0.19 | 0.39 | 7.38 | 6.59 | OUI | OUI |
| 3 | P3 | 0.69 | 6.94 | 0.23 | 0.48 | 7.42 | 6.46 | OUI | OUI |
| 4 | P4 | 0.44 | 7.17 | 0.14 | 0.31 | 7.48 | 6.86 | OUI | OUI |
| 5 | P5 | 0.38 | 7.08 | 0.11 | 0.26 | 7.33 | 6.82 | OUI | OUI |
| 6 | P6 | 0.69 | 6.97 | 0.20 | 0.42 | 7.40 | 6.55 | OUI | OUI |
| 7 | | | | | | | | | |
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| | Résultat | Conforme |
|--------------------|----------|----------|
| Stabilité Maximale | 0.69 | OUI |
| Homogénéité | 1.02 | OUI |
| Moyenne Globale | 7.04 | OUI |
| Maximum observé | 7.48 | OUI |
| Minimum Observé | 6.46 | OUI |

| | |
|-----------------------------|-------|
| Incertitude type composée | 0.06 |
| Ecart type répét. Sr | 0.18 |
| Ecart type reprod. SR | 0.20 |
| Incertitude élargie U (k=2) | 0.41 |
| Ecart de Consigne | -0.04 |
| Erreur d'indication | -0.04 |
| Ecart de contrôle | 0.40 |

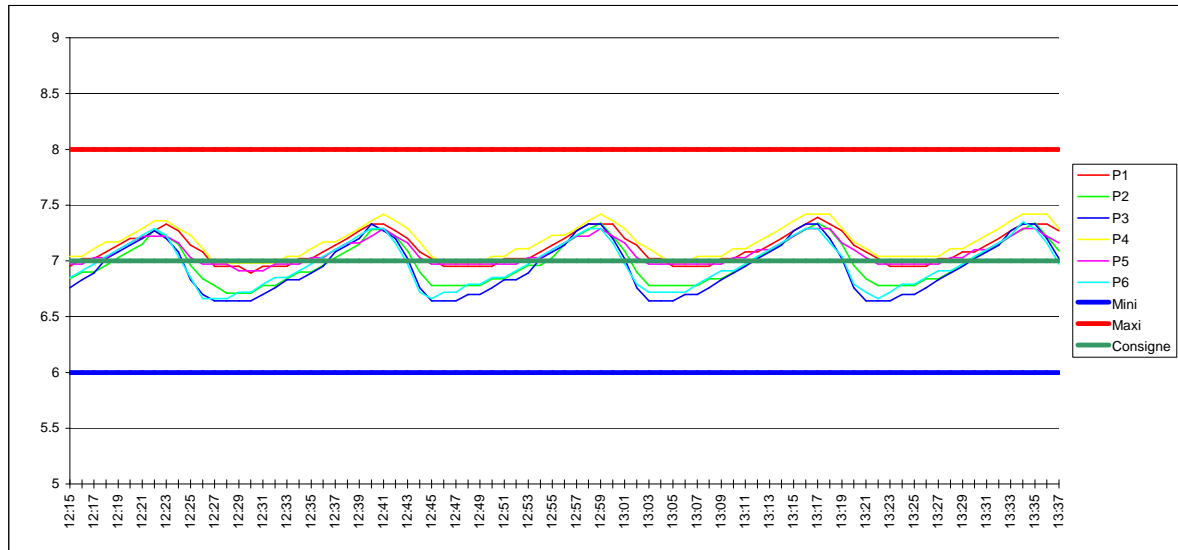
4 - Conclusion

Cette enceinte est conforme aux exigences

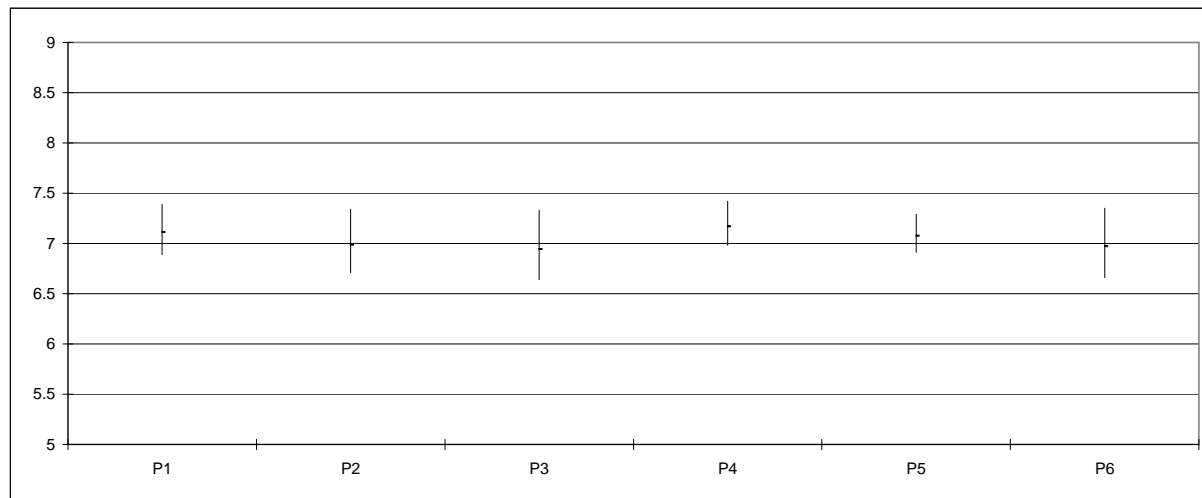
Remarques

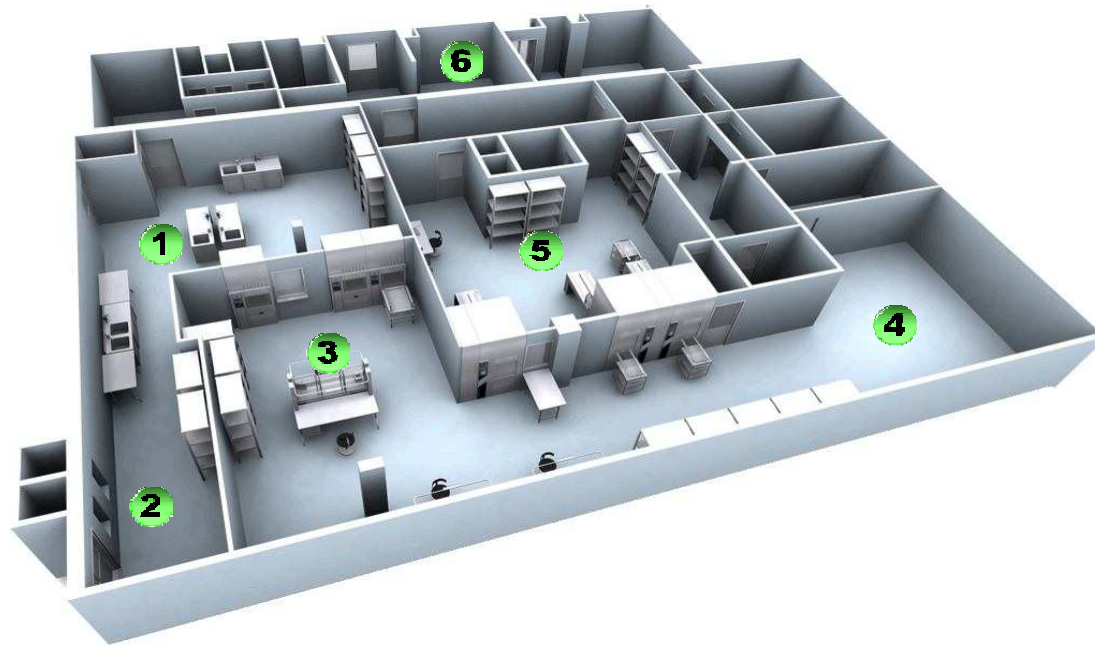
Signature

5 - Représentation Graphique des Mesures



6 - Représentation Graphique des Moyennes et des Ecarti maxi. par Capteur





7 - Liste des Mesures

| Date Heure | P1 1 | P2 2 | P3 3 | P4 4 | P5 5 | P6 6 | | | | | | | | | |
|----------------|---------|---------|---------|---------|---------|---------|--|--|--|--|--|--|--|--|--|
| D 6/6 12:15:01 | 6.95 | 6.84 | 6.76 | 7.04 | 6.97 | 6.85 | | | | | | | | | |
| 6/6 12:16:01 | 7.02 | 6.9 | 6.83 | 7.04 | 6.97 | 6.91 | | | | | | | | | |
| 6/6 12:17:01 | 7.02 | 6.9 | 6.89 | 7.11 | 7.03 | 6.97 | | | | | | | | | |
| 6/6 12:18:01 | 7.08 | 6.96 | 7.02 | 7.17 | 7.03 | 7.04 | | | | | | | | | |
| 6/6 12:19:01 | 7.14 | 7.03 | 7.08 | 7.17 | 7.1 | 7.1 | | | | | | | | | |
| 6/6 12:20:01 | 7.2 | 7.09 | 7.14 | 7.23 | 7.16 | 7.16 | | | | | | | | | |
| 6/6 12:21:01 | 7.2 | 7.15 | 7.2 | 7.29 | 7.22 | 7.23 | | | | | | | | | |
| 6/6 12:22:01 | 7.27 | 7.28 | 7.27 | 7.36 | 7.22 | 7.29 | | | | | | | | | |
| 6/6 12:23:01 | 7.33 | 7.22 | 7.2 | 7.36 | 7.22 | 7.23 | | | | | | | | | |
| 6/6 12:24:01 | 7.27 | 7.15 | 7.08 | 7.29 | 7.16 | 7.04 | | | | | | | | | |
| 6/6 12:25:01 | 7.14 | 6.96 | 6.83 | 7.23 | 7.03 | 6.85 | | | | | | | | | |
| 6/6 12:26:01 | 7.08 | 6.84 | 6.7 | 7.11 | 6.97 | 6.66 | | | | | | | | | |
| 6/6 12:27:01 | 6.95 | 6.78 | 6.64 | 6.98 | 6.97 | 6.66 | | | | | | | | | |
| 6/6 12:28:01 | 6.95 | 6.71 | 6.64 | 6.98 | 6.97 | 6.66 | | | | | | | | | |
| 6/6 12:29:01 | 6.95 | 6.71 | 6.64 | 6.98 | 6.91 | 6.72 | | | | | | | | | |
| 6/6 12:30:01 | 6.89 | 6.71 | 6.64 | 6.98 | 6.91 | 6.72 | | | | | | | | | |
| 6/6 12:31:01 | 6.95 | 6.78 | 6.7 | 6.98 | 6.91 | 6.79 | | | | | | | | | |
| 6/6 12:32:01 | 6.95 | 6.78 | 6.76 | 6.98 | 6.97 | 6.85 | | | | | | | | | |
| 6/6 12:33:01 | 6.95 | 6.84 | 6.83 | 7.04 | 6.97 | 6.85 | | | | | | | | | |
| 6/6 12:34:01 | 7.02 | 6.9 | 6.83 | 7.04 | 6.97 | 6.91 | | | | | | | | | |
| 6/6 12:35:01 | 7.02 | 6.9 | 6.89 | 7.11 | 7.03 | 6.97 | | | | | | | | | |
| 6/6 12:36:01 | 7.08 | 6.96 | 6.95 | 7.17 | 7.03 | 7.04 | | | | | | | | | |
| 6/6 12:37:01 | 7.14 | 7.03 | 7.08 | 7.17 | 7.1 | 7.1 | | | | | | | | | |
| 6/6 12:38:01 | 7.2 | 7.09 | 7.14 | 7.23 | 7.16 | 7.16 | | | | | | | | | |
| 6/6 12:39:01 | 7.27 | 7.15 | 7.2 | 7.29 | 7.16 | 7.23 | | | | | | | | | |
| 6/6 12:40:01 | 7.33 | 7.28 | 7.33 | 7.36 | 7.22 | 7.29 | | | | | | | | | |
| 6/6 12:41:01 | 7.33 | 7.28 | 7.27 | 7.42 | 7.29 | 7.29 | | | | | | | | | |
| 6/6 12:42:01 | 7.27 | 7.22 | 7.2 | 7.36 | 7.22 | 7.16 | | | | | | | | | |
| 6/6 12:43:01 | 7.2 | 7.09 | 7.02 | 7.29 | 7.16 | 6.97 | | | | | | | | | |
| 6/6 12:44:01 | 7.08 | 6.9 | 6.76 | 7.17 | 7.03 | 6.72 | | | | | | | | | |
| 6/6 12:45:01 | 7.02 | 6.78 | 6.64 | 7.04 | 6.97 | 6.66 | | | | | | | | | |
| 6/6 12:46:01 | 6.95 | 6.78 | 6.64 | 6.98 | 6.97 | 6.72 | | | | | | | | | |
| 6/6 12:47:01 | 6.95 | 6.78 | 6.64 | 6.98 | 6.97 | 6.72 | | | | | | | | | |
| 6/6 12:48:01 | 6.95 | 6.78 | 6.7 | 6.98 | 6.97 | 6.79 | | | | | | | | | |
| 6/6 12:49:01 | 6.95 | 6.78 | 6.7 | 6.98 | 6.97 | 6.79 | | | | | | | | | |
| 6/6 12:50:01 | 6.95 | 6.84 | 6.76 | 7.04 | 6.97 | 6.85 | | | | | | | | | |
| 6/6 12:51:01 | 7.02 | 6.84 | 6.83 | 7.04 | 6.97 | 6.85 | | | | | | | | | |
| 6/6 12:52:01 | 7.02 | 6.9 | 6.83 | 7.11 | 6.97 | 6.91 | | | | | | | | | |
| 6/6 12:53:01 | 7.02 | 6.96 | 6.89 | 7.11 | 7.03 | 6.97 | | | | | | | | | |
| 6/6 12:54:01 | 7.08 | 6.96 | 7.02 | 7.17 | 7.03 | 7.04 | | | | | | | | | |
| 6/6 12:55:01 | 7.14 | 7.03 | 7.08 | 7.23 | 7.1 | 7.1 | | | | | | | | | |
| 6/6 12:56:01 | 7.2 | 7.15 | 7.14 | 7.23 | 7.16 | 7.16 | | | | | | | | | |
| 6/6 12:57:01 | 7.27 | 7.22 | 7.27 | 7.29 | 7.22 | 7.23 | | | | | | | | | |
| 6/6 12:58:01 | 7.33 | 7.28 | 7.33 | 7.36 | 7.22 | 7.29 | | | | | | | | | |
| 6/6 12:59:01 | 7.33 | 7.34 | 7.33 | 7.42 | 7.29 | 7.29 | | | | | | | | | |
| 6/6 13:00:01 | 7.33 | 7.22 | 7.2 | 7.36 | 7.22 | 7.16 | | | | | | | | | |
| 6/6 13:01:01 | 7.2 | 7.09 | 7.02 | 7.29 | 7.16 | 6.97 | | | | | | | | | |
| 6/6 13:02:01 | 7.14 | 6.9 | 6.76 | 7.17 | 7.03 | 6.79 | | | | | | | | | |
| 6/6 13:03:01 | 7.02 | 6.78 | 6.64 | 7.11 | 6.97 | 6.72 | | | | | | | | | |
| 6/6 13:04:01 | 7.02 | 6.78 | 6.64 | 7.04 | 6.97 | 6.72 | | | | | | | | | |
| 6/6 13:05:01 | 6.95 | 6.78 | 6.64 | 6.98 | 6.97 | 6.72 | | | | | | | | | |
| 6/6 13:06:01 | 6.95 | 6.78 | 6.7 | 6.98 | 6.97 | 6.72 | | | | | | | | | |
| 6/6 13:07:01 | 6.95 | 6.78 | 6.7 | 7.04 | 6.97 | 6.79 | | | | | | | | | |
| 6/6 13:08:01 | 6.95 | 6.84 | 6.76 | 7.04 | 6.97 | 6.85 | | | | | | | | | |
| 6/6 13:09:01 | 7.02 | 6.84 | 6.83 | 7.04 | 6.97 | 6.91 | | | | | | | | | |
| 6/6 13:10:01 | 7.02 | 6.9 | 6.89 | 7.11 | 7.03 | 6.91 | | | | | | | | | |
| 6/6 13:11:01 | 7.08 | 6.96 | 6.95 | 7.11 | 7.03 | 6.97 | | | | | | | | | |

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| 6/6 13:12:01 | 7.08 | 7.03 | 7.02 | 7.17 | 7.1 | 7.04 |
| 6/6 13:13:01 | 7.14 | 7.09 | 7.08 | 7.23 | 7.1 | 7.1 |
| 6/6 13:14:01 | 7.2 | 7.15 | 7.14 | 7.29 | 7.16 | 7.16 |
| 6/6 13:15:01 | 7.27 | 7.22 | 7.27 | 7.36 | 7.22 | 7.23 |
| 6/6 13:16:01 | 7.33 | 7.28 | 7.33 | 7.42 | 7.29 | 7.29 |
| 6/6 13:17:01 | 7.39 | 7.34 | 7.33 | 7.42 | 7.29 | 7.29 |
| 6/6 13:18:01 | 7.33 | 7.28 | 7.2 | 7.42 | 7.29 | 7.16 |
| 6/6 13:19:01 | 7.27 | 7.15 | 7.02 | 7.29 | 7.16 | 7.04 |
| 6/6 13:20:01 | 7.14 | 6.96 | 6.76 | 7.17 | 7.1 | 6.79 |
| 6/6 13:21:01 | 7.08 | 6.84 | 6.64 | 7.11 | 7.03 | 6.72 |
| 6/6 13:22:01 | 7.02 | 6.78 | 6.64 | 7.04 | 6.97 | 6.66 |
| 6/6 13:23:01 | 6.95 | 6.78 | 6.64 | 7.04 | 6.97 | 6.72 |
| 6/6 13:24:01 | 6.95 | 6.78 | 6.7 | 7.04 | 6.97 | 6.79 |
| 6/6 13:25:01 | 6.95 | 6.78 | 6.7 | 7.04 | 6.97 | 6.79 |
| 6/6 13:26:01 | 6.95 | 6.84 | 6.76 | 7.04 | 6.97 | 6.85 |
| 6/6 13:27:01 | 7.02 | 6.84 | 6.83 | 7.04 | 6.97 | 6.91 |
| 6/6 13:28:01 | 7.02 | 6.9 | 6.89 | 7.11 | 7.03 | 6.91 |
| 6/6 13:29:01 | 7.08 | 6.96 | 6.95 | 7.11 | 7.03 | 6.97 |
| 6/6 13:30:01 | 7.08 | 7.03 | 7.02 | 7.17 | 7.1 | 7.04 |
| 6/6 13:31:01 | 7.14 | 7.09 | 7.08 | 7.23 | 7.1 | 7.1 |
| 6/6 13:32:01 | 7.2 | 7.15 | 7.14 | 7.29 | 7.16 | 7.16 |
| 6/6 13:33:01 | 7.27 | 7.22 | 7.27 | 7.36 | 7.22 | 7.23 |
| 6/6 13:34:01 | 7.33 | 7.28 | 7.33 | 7.42 | 7.29 | 7.35 |
| 6/6 13:35:01 | 7.33 | 7.34 | 7.33 | 7.42 | 7.29 | 7.29 |
| 6/6 13:36:01 | 7.33 | 7.22 | 7.2 | 7.42 | 7.22 | 7.16 |
| 6/6 13:37:01 | 7.27 | 7.09 | 7.02 | 7.29 | 7.16 | 6.97 |

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