

$$-5000 + \boxed{5000} \geq 0$$

$$\sum_{i \in P} x_i (a_{ij} - \min_j) + \alpha_j^{\min} \geq 0$$

$$\sum_{i \in P} x_i (a_{ij} - \max_j) - \alpha_j^{\max} \leq 0$$

35	0.02
100	0.06
65	0.04
55	0
10	0.04

$$\min W_1 \sum_{j \in T} \left(\frac{\alpha_j^{\min}}{\text{ideal}_j - \min_j} + \frac{\alpha_j^{\max}}{\max_j - \text{ideal}_j} \right) + W_2$$

$$490 - \frac{490}{\underbrace{\quad}_{\rightarrow \text{var}_1 = 490}} \leq 0$$

LS :	100	1.5
Goal :	65	1.5
LI :	55	0

Res: 70 1.0

65 1.5

Desvio do Goal = 0

$$\min w_1 \sum \text{desvio_limite} + w_2 \sum \text{desvio_goal}$$

$$w_1 \gg w_2$$

f. objetivo: $w_2 \sum_{j \in T} \left(\frac{\beta_j^{\min} + \beta_j^{\max}}{\min(\text{ideal}_j - \min_j, \max_j - \text{ideal}_j)} \right)$

Restrição: $\sum_{i \in P} x_i (a_{ij} - \text{goal}_j) + \beta_j^{\min} - \beta_j^{\max} = 0$