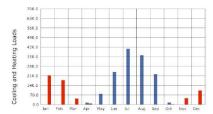
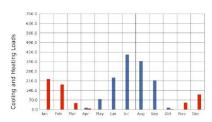


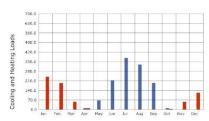
Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.30_0.2(%) CDD:1333 HDD:573



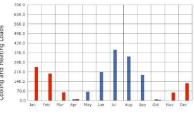
Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.35_0.2(%) CDD:1337 HDD:597



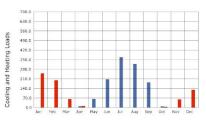
Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.40_0.2(%) CDD:1305 HDD:627



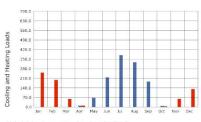
Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.43_0.2(%) CDD:1203 HDD:685



Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.45_0.2(%) CDD:1174 HDD:705



Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.47_0.2(%) CDD:1161 HDD:721

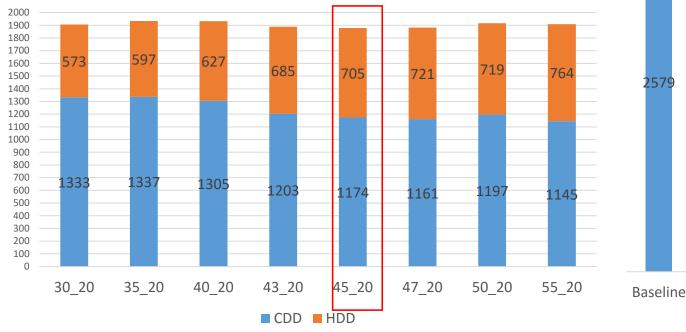


Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.50_0.2(%) CDD:1197 HDD:719 Total:1916



Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.55_0.2(%) CDD:1145 HDD:764 Total:1909

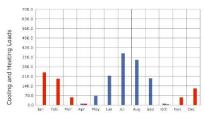
DEGREE DAYS OF DIFFERENT AMOUNT OF PANEL 1



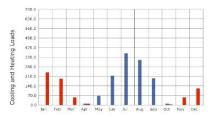


Panel 1: (blue) 45% Panel 2: (magenta) 20% The number of panel 1 is tested from 30% to 55 %, while keep panel 2 number in 20% of all.

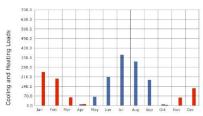
Different combinations show slightly different value of Degree-Day, and the combination, 45% of panel 1, has the best result (total:1897).



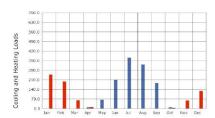
Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.45_0.15(%) CDD:1208 HDD:681



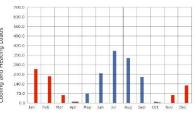
Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.45_0.17(%) CDD:1208 HDD:681



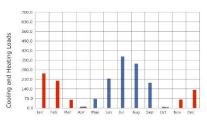
Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.45_0.2(%) CDD:1174 HDD:705



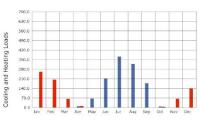
Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.45_0.23(%) CDD:1174 HDD:712 Total:1886



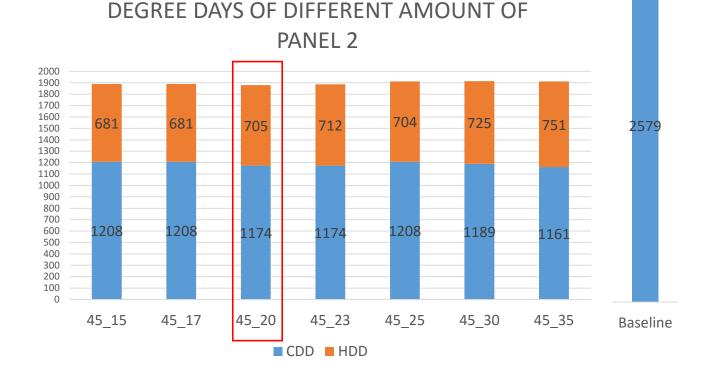
Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.45_0.25(%) CDD:1208 HDD:704 Total:1912

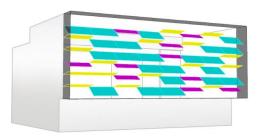


Philadelphia International Ap PA USA TMY: Panel_1 Panel_2:0.45_0.30(%) CDD:1189 HDD:725



Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.45_0.35(%) CDD:1166 HDD:751 Total:1917

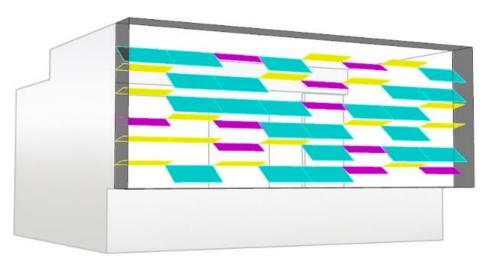




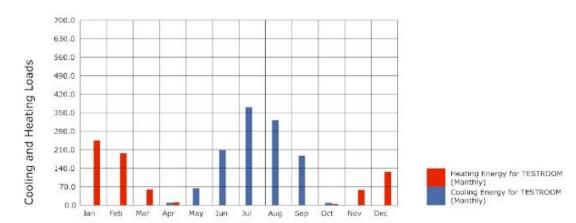
Panel 1: (blue) 45% Panel 2: (magenta) 20%

The number of panel 2 is tested from 15% to 35 %, while keep panel 1 number in 45% of all.

Different combinations show slightly different value of Degree-Day, and the combination, 20% of panel 2, has the best result (total:1879).



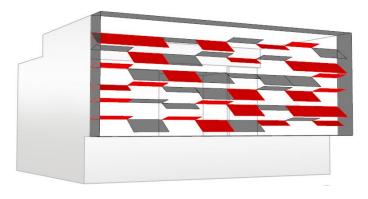
Panel 1: (blue) 45% Panel 2: (magenta) 20% Panel 3: (yellow) 35%



Philadelphia International Ap PA USA TMY3 Panel_1 Panel_2:0.45_0.2(%)

CDD:1174 HDD:705

Total: 1879



Red colored panels indicate panels controlled manually, while the rest are randomly assigned to one of three panels.

New adjustment is based on the design, which provides enough daylight for this interior space without potential glare, while user is working in front of screen.

Changing percentage of panel 1 and panel 2, affects the heating degree days and cooling degree days, and the results shown in previous two slides show the best combination of panel 1 and panel 2 in terms of cooling and heating loads, is 45% and 20%.