

Evaluate and Compare Designs

Use the **Evaluate Design** platform to assess the properties of an experimental design. To compare alternative designs, use the platform **Compare Designs**.

Evaluate Design

Most DOE platforms in JMP provide an Evaluate Design outline to assess a design before making the design table to run the experiment. The platform Evaluate Design shows the same diagnostics for any existing design, and can also be used after an experiment to assess the impact of incorrect settings or lost runs.

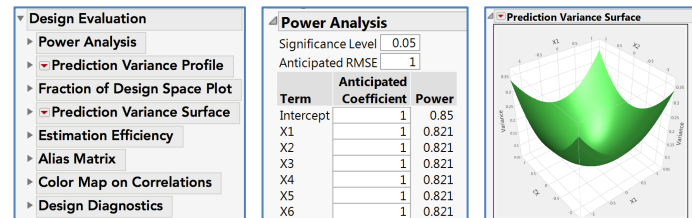
Example: Go to **Help > Sample Index**. From the top red triangle of the dialog box, choose **Open Sample > Scripts**. Open the file Compare Same Run Size.jsl. Click the run script icon in the tool bar.

Two 13-run design tables are constructed: A Definitive Screening Design (DSD) and a Plackett-Burman design.

1. Make Plackett-Burman.jmp the active window, and select **DOE > Design Diagnostics > Evaluate Design**.
2. Select all factors X1-X6 from **Select Columns** and click **X,Factor**. Click **OK**.

The **Design Evaluation** outline provides a number of tools to assess design properties, including:

- Power analysis for exploring effects of given sizes
- Prediction variance profile and surface
- Alias matrix and color map of correlations
- Measures of estimation and design efficiency

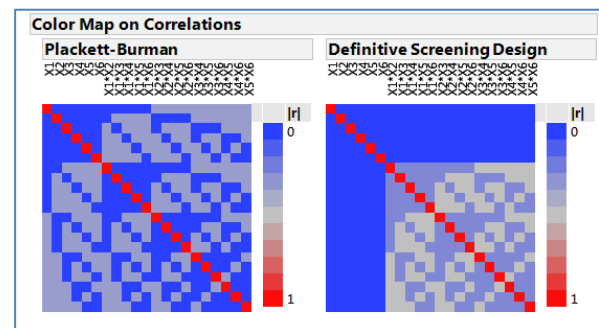


Note: You can also modify the assumed model to further explore aliasing of effects.

Compare Designs

The Compare Designs platform compares two or three designs simultaneously to explore and evaluate their performance. This allows you to select the design that best meets your requirements and budget.

1. With Plackett-Burman.jmp as the active window, select **DOE > Design Diagnostics > Compare Designs**.
2. Select Definitive Screening Design to compare properties of these two designs, and click **OK**.
3. If desired, change the terms in the assumed model and in the alias terms list.
4. Explore the many different performance metrics in the **Design Evaluation** outline including Power, Estimation Efficiency, Correlation between effects, et al.



Visit **Design of Experiments Guide** in **JMP Help** to learn more.