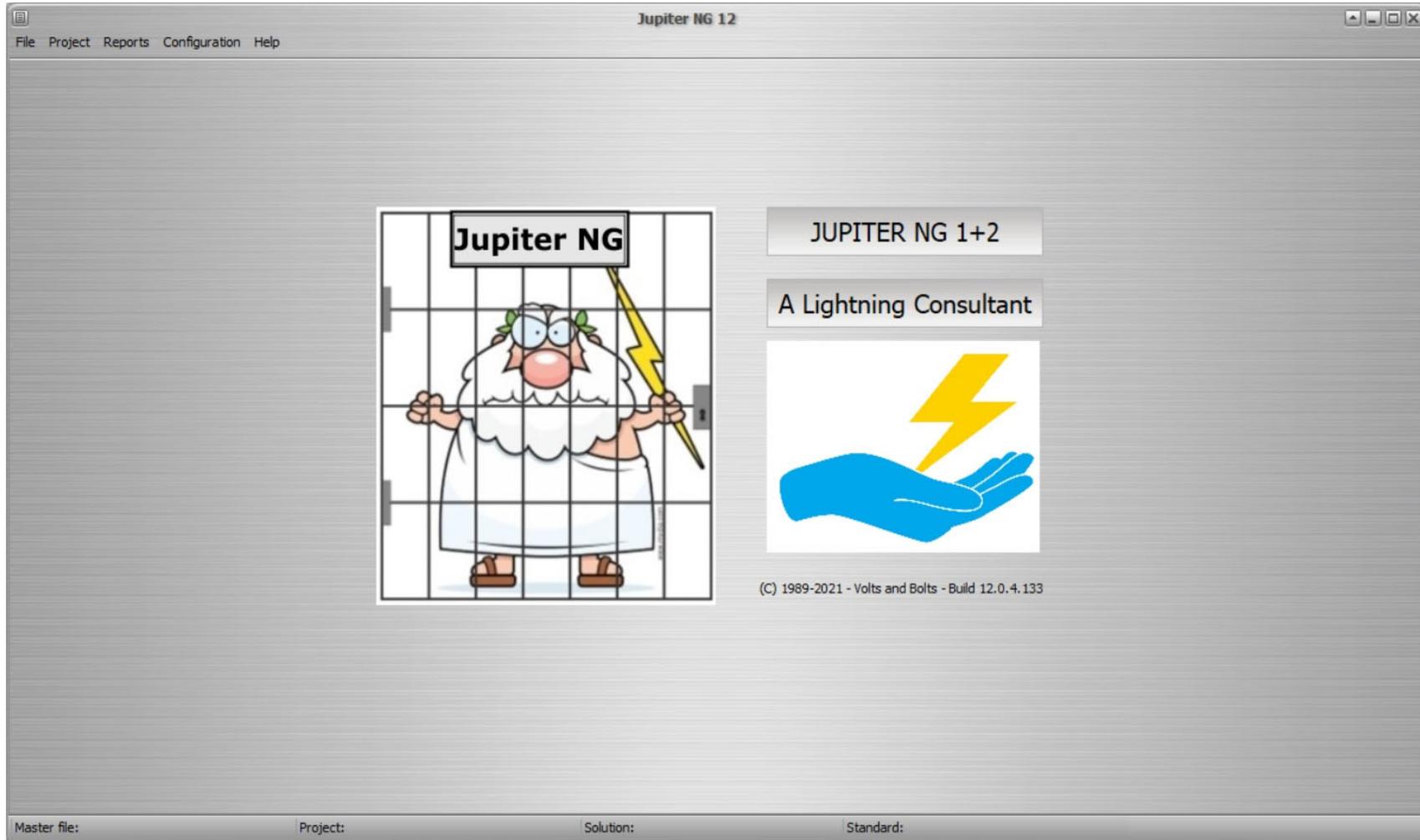


Jupiter NG 1+2



Jupiter NG 1+2

- Analise do risco Foudre segundo IEC 62305-2
- Calculo de R1, R2, R3 e R4
- Comparação entre soluções
- Diferentes versões de relatorios possiveis

Dados estruturais

Dados estruturais completos :

- Imagem da estrutura
- Dados globais do projecto
- Selecionar éd. 1 ou 2
- Seus comentarios

The screenshot displays the Jupiter NG 12 software interface for a project named 'en_hospital_1204.j12'. The interface is organized into several sections:

- Update:** A button to refresh the data.
- Project Information:** Fields for 'date' (15/10/2021), 'customer', 'Structure' (Hospital ed. 2), and 'designer'.
- Sum of people in all zones:** A field showing 1000,00.
- Values:** A field for 'Building and all contents' with a value of R\$ 90.000.000,00.
- Standard:** A dropdown menu set to 'IEC 62305 ed.2'.
- Annual Rates:** Fields for 'interest' (0,04), 'amortization' (0,05), and 'maintenance' (0,01).
- Picture:** A section with 'Load...', 'Delete', and 'Copy' buttons, and a diagram of two building footprints labeled B and C. The diagram shows two orange buildings with a grid of windows. A vertical dimension line labeled 'A' spans the height of the buildings. Horizontal dimension lines labeled 'B' and 'C' indicate the widths of the two buildings.
- Comments:** A large empty text area for user input.

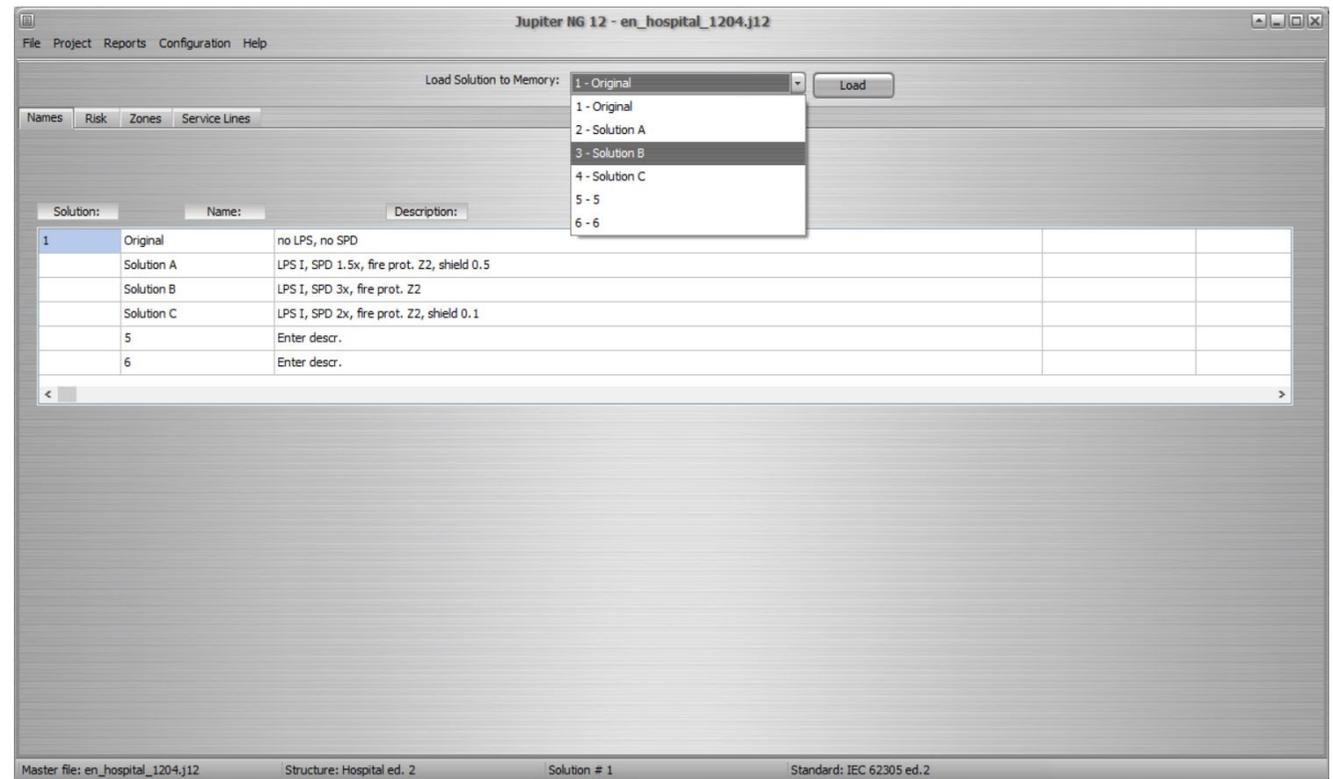
The status bar at the bottom of the window shows: Master file: en_hospital_1204.j12, Structure: Hospital ed. 2, Solution # 1, and Standard: IEC 62305 ed.2.

Dados das soluções

Até 6 soluções para cada estrutura

Cada solução pode conter :

- Até 16 zonas
- Até 16 linhas de serviços
- Combinar não importa que zona a não importa qualquer linha de serviço



Dados de exposição

Neste écran :

Entrar :

- Situação de exposição
- Densidade de descargas
- Dimensões da estrutura

Jupiter:

- Zona de incidência
- area equivalente
- Impactos na é proximos da estrutura

The screenshot shows the Jupiter NG 12 software interface for lightning risk assessment. The window title is "Jupiter NG 12 - en_hospital_1204.j12". The interface is divided into several sections:

- Environment:** A dropdown menu is set to "Isolated structure: no other objects in the vicinity".
- Flash Incidence:** A text input field contains "4,0000" flashes / km² / year.
- Sources for Incidence data:** A section with links for France (www.meteorage.com/solutions/evaluate), World (ghrc.nsstc.nasa.gov/lightning/dataset-info.html), and Brasil (reference to NBR 5419 standard).
- Structure dimensions [m]:** A diagram shows two building footprints labeled B and C. To the right, input fields are: A - Height: 10,00 [m]; B - Width: 50,00 [m]; C - Length: 150,00 [m].
- Incidence:** A text box containing instructions: "After setting the tolerable Risks, we can calculate how many flashes will hit the Location and its surroundings. Choose the appropriate environment - other buildings near the Location, and their relative height. The standard requires the lightning density in flashes/square kilometer/year, you can find the data on the internet links indicated. Then enter the overall dimensions of the structure and click on the 'Update' button to get the expected number of flashes to the structure and on its surroundings each year."
- Update:** A button labeled "Update" is present.
- Results:** Below the "Update" button, three rows of data are shown: Areas: Real: 7500,00 [m²]; Collection (Ad): 22327,43 [m²]; Influence (Am): 985398,16 [m²].
- Strikes:** At the bottom right, two rows of data are shown: Strikes to the structure Nd = 0,08930973 /year; Strikes near the structure Nm = 3,94159265 /year.

The status bar at the bottom of the window displays: "Master file: en_hospital_1204.j12", "Structure: Hospital ed. 2", "Solution # 1 Original", and "Standard: IEC 62305 ed.2".

Dados das linhas de serviços

Neste écran :

Entrar :

- Novas linhas (ou modificar)
- Parâmetros de linhas
- Descrição da linha
- Estrutura adjacente (no caso de existir)

Jupiter:

- Area équivalent
- Zona de influência
- Impactos sobre e na proximidade da linha
- Resultados da estrutura adjacente

The screenshot shows the 'Jupiter NG 12 - en_hospital_1204.j12' application window. The interface is divided into several sections:

- Top Menu:** File, Project, Reports, Configuration, Help.
- Navigation Tabs:** Tolerable, Incidence, Services, Zones, Solutions, Preview.
- Line Selection:** A list on the left shows 'Line:' options: Power original (selected), Telecom original, Power SPD 1.5x, Telecom SPD 1.5x, and Power SPD 3x. Buttons for 'New', 'Edit', 'Copy to new', and 'Delete' are to the right.
- Service Lines Parameters:** A central area with input fields for:
 - Collection Area = 20000,00
 - Influence Area = 2000000,00
 - Adj. Area = 0,00
 - Strikes to service NI = 0,004000
 - Strikes near the service NI = 0,400000
 - Strikes to adj structure Nadj = 0,000000
- Update Button:** A button labeled 'Update' is positioned below the parameters.
- Incidence Tab:** Sub-tabs include SPD, Internal, Injuries, Line Type, Protection cost, and Loss of Services. Fields include:
 - Installation: Buried (dropdown), factor CI: (dropdown)
 - Line type: HV power (with HV/LV transformer) (dropdown), factor CT: (dropdown)
 - Environment: Suburban (dropdown), factor CE: (dropdown)
- Description:** A large text area on the right with a 'Copy' button.
- Right Panel:** Contains a note: 'Jupiter NG can use up to 16 Service lines for each structure. Any one of them can be used by one or more Zones. Please note that, to be used by a Zone calculation, you must click on the button 'Update', above, after changing some parameter and before moving to another Service on the table.'
- Footer:** Master file: en_hospital_1204.j12 | Structure: Hospital ed. 2 | Solution # 1 Original | Standard: IEC 62305 ed.2

Dados e visualização das zonas

Neste écran :

Entrar :

- Novas zonas (ou modificar)
- parâmetros de zona
- Descrição e imagem da zona
- Estrutura adjacente (no caso de existir)

Jupiter:

- Visualização dos riscos da zona



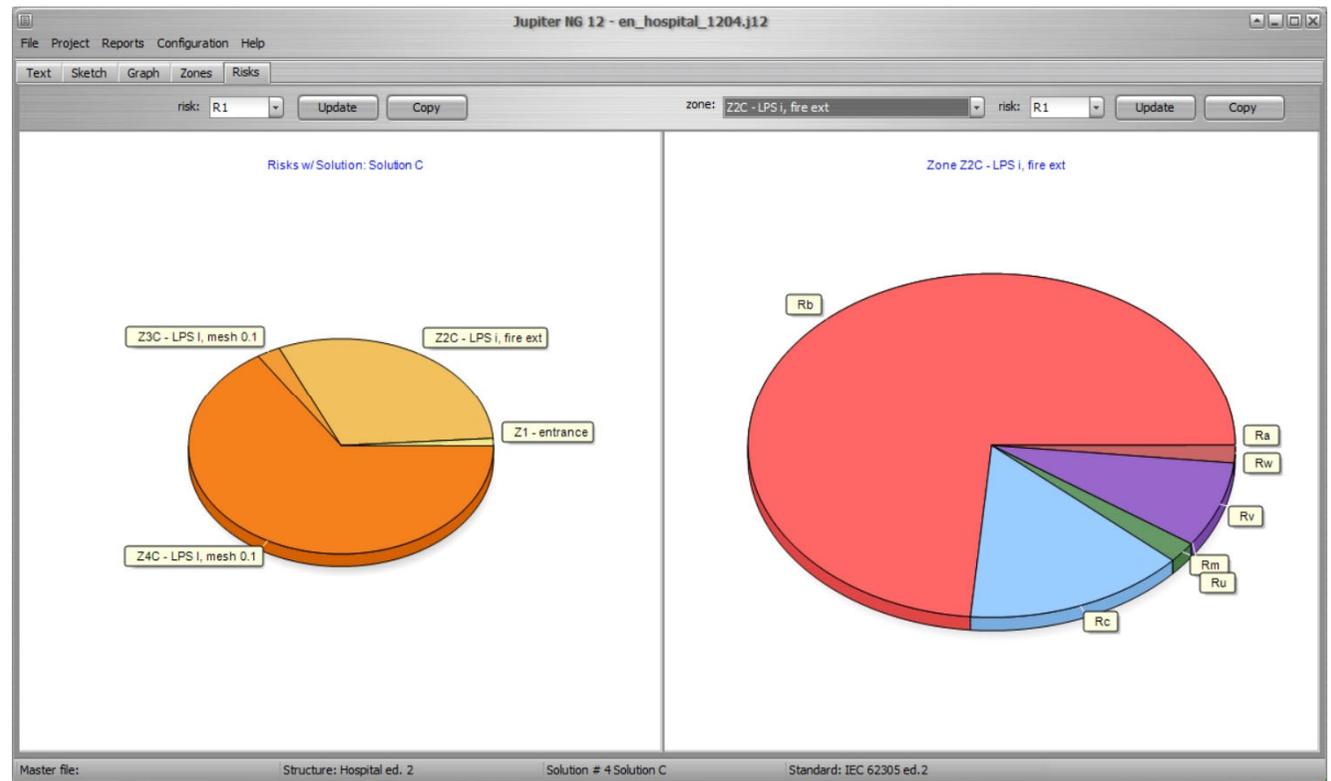
Relatorios da zona

Neste écran :

- Entrar :
- Seleccionar zona
- Seleccionar o grafico
- Seleccionar os riscos

Jupiter:

- Visualização do riscos da zona



Relatorios : soluçao 1

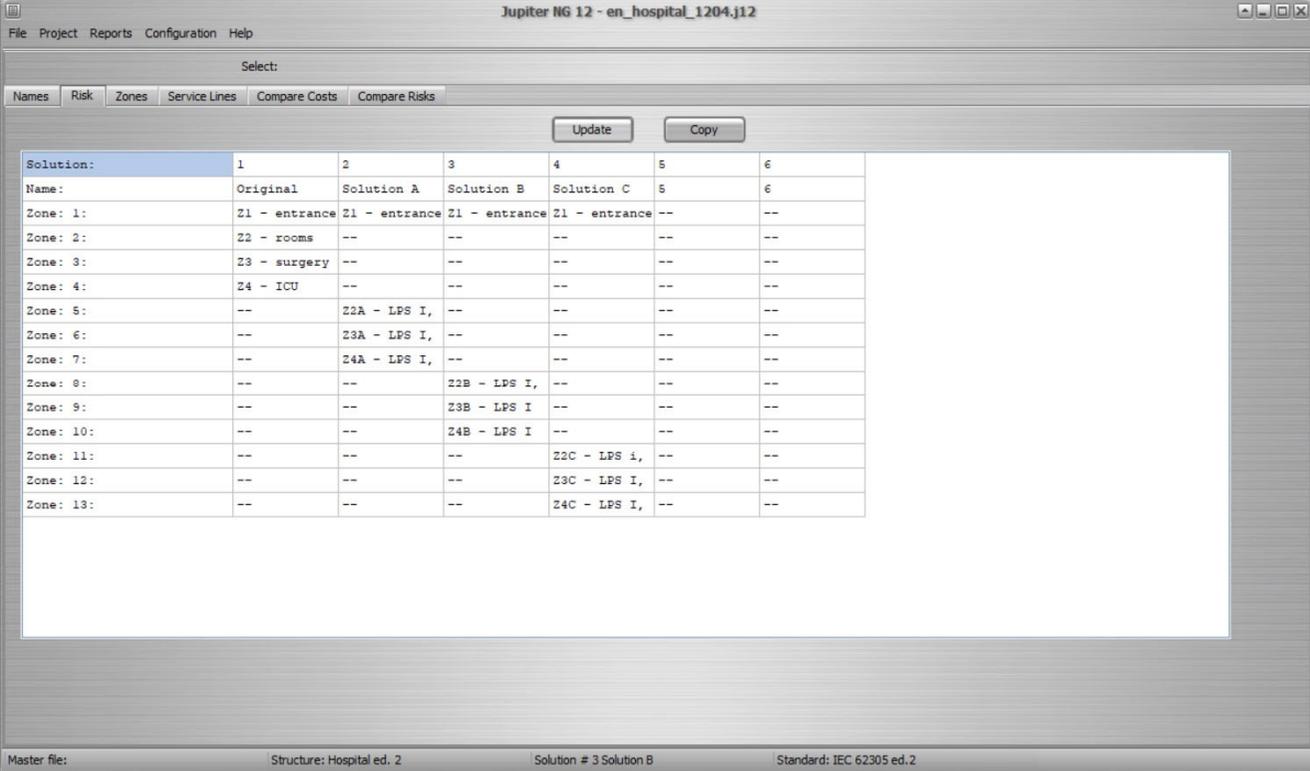
Neste ecran e nos seguintes:

Entrar :

- seleccionar soluções a comparar

Jupiter:

- Zonas de cada soluçao
- Linhas de serviços
- Visualizaçao dos riscos da soluçao
- Riscos comparativos
- Custos comparativos



The screenshot shows the Jupiter NG 12 software interface. The window title is "Jupiter NG 12 - en_hospital_1204.j12". The menu bar includes "File", "Project", "Reports", "Configuration", and "Help". Below the menu bar is a "Select:" section with tabs for "Names", "Risk", "Zones", "Service Lines", "Compare Costs", and "Compare Risks". There are "Update" and "Copy" buttons. The main area contains a table with the following data:

Solution:	1	2	3	4	5	6
Name:	Original	Solution A	Solution B	Solution C	5	6
Zone: 1:	Z1 - entrance	Z1 - entrance	Z1 - entrance	Z1 - entrance	--	--
Zone: 2:	Z2 - rooms	--	--	--	--	--
Zone: 3:	Z3 - surgery	--	--	--	--	--
Zone: 4:	Z4 - ICU	--	--	--	--	--
Zone: 5:	--	Z2A - LPS I,	--	--	--	--
Zone: 6:	--	Z3A - LPS I,	--	--	--	--
Zone: 7:	--	Z4A - LPS I,	--	--	--	--
Zone: 8:	--	--	Z2B - LPS I,	--	--	--
Zone: 9:	--	--	Z3B - LPS I	--	--	--
Zone: 10:	--	--	Z4B - LPS I	--	--	--
Zone: 11:	--	--	--	Z2C - LPS i,	--	--
Zone: 12:	--	--	--	Z3C - LPS I,	--	--
Zone: 13:	--	--	--	Z4C - LPS I,	--	--

The status bar at the bottom shows: "Master file: Structure: Hospital ed. 2 Solution # 3 Solution B Standard: IEC 62305 ed.2"

Relatorios : soluçao 2

Neste ecran e nos seguintes:

Entrar :

- Selecionar soluções a comparar

Jupiter:

- Zonas de cada solução
- Linhas de serviços
- Visualização dos riscos da solução
- Riscos comparativos
- Custos comparativos

Zone:	1	2	3	4	5	6	7	8	9	10
Name:	Z1 - entrance	Z2 - rooms	Z3 - surgery	Z4 - ICU	Z2A - LPS I,	Z3A - LPS I,	Z4A - LPS I,	Z2B - LPS I,	Z3B - LPS I	Z4B
Nz	10	950	35	5	950	35	5	950	35	5
Tz	8760	8760	8760	8760	8760	8760	8760	8760	8760	8760
LPS installed:	Structure not	Structure not	Structure not	Structure not	Structure pro	Str				
Security measures										
Physical damages:	Hospital, hot	Hos								
Internal systems:	Other parts o	Other parts o	Intensive car	Intensive car	Other parts o	Intensive car	Intensive car	Other parts o	Intensive car	Int
Type of surface:	Agricultural,	Asphalt, lino	Asp							
Provisions taken:										
Risk of fire / amount:	explosion / Z	exp								
Special hazard:	no special ha	Difficulty of	Dif							
Cultural value:	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	100
Animals value:	0	0	0	0	0	0	0	0	0	0
Building value:	0	70000000	2000000	1000000	70000000	2000000	1000000	70000000	2000000	100

Relatorios : soluçao 3

Neste ecran e nos seguintes:

Entrar :

- Selecionar soluções a comparar

Jupiter:

- Zonas de cada solução
- Linhas de serviços
- Visualização dos riscos da solução
- Riscos comparativos
- Custos comparativos

The screenshot shows the Jupiter NG 12 software interface with a window titled "Jupiter NG 12 - en_hospital_1204.j12". The interface includes a menu bar (File, Project, Reports, Configuration, Help) and a "Select:" section with tabs for Names, Risk, Zones, Service Lines, Compare Costs, and Compare Risks. Below these are "Clear" and "Update" buttons. The main area is a table with 8 columns representing different solutions and rows for various service parameters.

Service:	1	2	3	4	5	6	7	8
Name:	Power origina	Telecom origi	Power SPD 1.5	Telecom SPD 1	Power SPD 3x	Telecom SPD 3	Power SPD 2x	Telecom SPD 2
Installation:	Buried							
Line type:	HV power (wit	LV power, tel						
Environment:	Suburban							
physical damage LF:	Gas, water,	TV, telecommu						
failure of internal system:	Gas, water,	TV, telecommu						
External line type / Conne:	Shielded buri							
SPD:	No coordinate	No coordinate	Other, lower					
Type of internal wiring:	Unshielded ca							
Withstand voltage Uw:	25	15	25	15	25	15	25	15
Protection level:	No SPD	No SPD	I	I	I	I	I	I
FEB for "Better than I":								
Routing, shielding, bondin:	Shielded aeri							
Line type:	Power line	Telecom line						

At the bottom of the window, the status bar shows: Master file: Structure: Hospital ed. 2 Solution # 3 Solution B Standard: IEC 62305 ed.2

Relatorios : soluçãõ 4

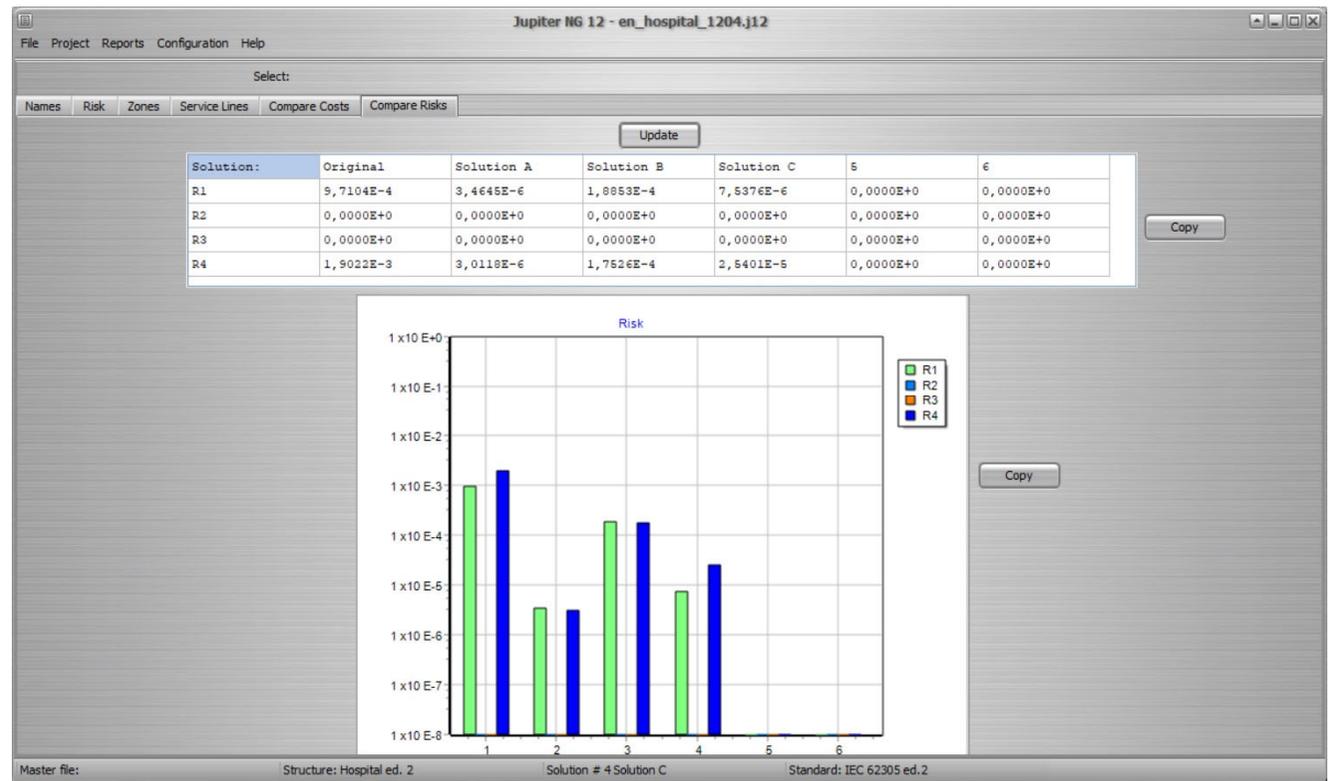
Neste ecran e nos seguintes:

Entrar :

- Selecionar soluções a comparar

Jupiter:

- Zonas de cada solução
- Linhas de serviços
- Visualização dos riscos da solução
- Riscos comparativos
- Custos comparativos



Relatorios : soluções 5

Neste ecran e nos seguintes:

Entrar:

- Selecionar soluções para comparação:

Jupiter:

- Zonas de cada solução
- Linhas de serviços
- Visualização dos riscos da solução
- Riscos comparativos
- Custos comparativos

