initial tests:
shading - october 15th diagram
basic performance/window size/orientation: -
tests showing the higher the better
lightshelf
initial tests:
shading - october 15th diagram
basic performance/window size/orientation: -
tests showing the higher the better
lightshelf
Cholera Treatment Center
Port-au-Price, Haiti

DIVA in Practice

MASS DESIGN GROUP
ARCHITECTURAL DESIGN

LAM PARTNERS
DAYLIGHTING CONSULTANT
cholera

January 12, 2010 earthquake
581,952 cases
7,455 deaths

climate

Mayagüez, Puerto Rico
Rainy Season: Spring
building
7700 square feet
general ward
intensive care ward
administration office
light levels
Daylight Autonomy
500lux
Medical work
Bed-side treatment
Daylight Autonomy
500 lux
Point-in-Time
Illuminance
Summer Solstice
9am
300-2000 lux
Daylight Autonomy
500 lux
Point-in-Time Illuminance
Summer Solstice 9am
300-2000 lux
Daylight Autonomy
500 lux

Sesor Grids - Plan  Sesor Grids - Elevation

Lam Partners
ARCHITECTURAL LIGHTING DESIGN
Point-in-Time Illuminance
Summer Solstice 9am
300-2000 lux
Daylight Autonomy
500 lux

Sesor Grids - Plan
Sesor Grids - Elevation
Point-in-Time Illuminance
Sumer Solstice
9am
300-2000 lux
glare
9am
Intolerable Glare (45%)

10am
Perceptible Glare (39%)

11am
Perceptible Glare (38%)

12pm
Intolerable Glare (45%)

1pm
Imperceptible Glare (34%)

Below: Visualization
Summer Solstice 12pm

Summer Solstice
9am
Disturbing Glare (42%)

Evalglare Analysis
Summer Solstice
12pm & 9am

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ARCHITECTURAL LIGHTING DESIGN
roof assembly & orientation
eastern screen
material studies

Evalglare Analysis
Sumer Solstice
9am

50% Reflectance (No Transparency) 40% Transmission (Glazing) 40% open screen

Perceptible Glare (38%)  Perceptible Glare (39%)  Intolerable Glare (46%)
east screen studies

Summer Solstice (9am, 12pm, 3pm) Illuminance with screens
Evalglare Analysis
Equinox 9am
Evalglare Analysis
Equinox 9am
Point-in-Time Illuminance
Summer Solstice 9am, 12pm, 3pm
300-2000 lux
trough studies

Point-in-Time Illuminance
Summer Solstice 12pm
300-2000 lux
trough studies

Point-in-Time
Illuminance
Summer Solstice
12pm
300-2000 lux
January 12, 2010 - Earthquake hits Haiti

Cholera cases:
- 581,952 reported cases
- 7,455 deaths due to cholera