TAking the Occupant’s well-being into consideration when designing
DAYLIGHT AS A DYNAMIC AND SENSORIAL EXPERIENCE

Ryerson Student Learning Center
Toronto | Snøhetta & Zeidler Partnership

OCULIGHT dynamics

SKY CLEAR
DATE & TIME
9:28, January 13th
LOCATION
Toronto, CA
43.66° N
79.36° W

HEALTH POTENTIAL (mVRs)
DOSE ACHIEVED
CALMING
EXCITING

VISUAL INTEREST (mSC)

SKY OVERCAST

HEALTH POTENTIAL (mVRs)
DOSE ACHIEVED
CALMING
EXCITING
COMFORT

Daylight Glare Probability

Ev [lux] | Vertical illuminance

DGP [-] | Daylight Glare Probability
EMOTION

- calming?
- exciting?
- less exciting?

first unitarian church

serpentine pavilion

- calming threshold
- calming < 6.96
- 6.96 ≤ neutral ≤ 11.75
- exciting > 11.75
- exciting threshold
### Vitality

Vitality describes the non-visual potential of daylight to impact alertness as it accumulates over time. Read more

- **Insufficient daily dose** ($\text{nVr}_D < 4.2$) 16%
- **Intermediate daily dose** ($4.2 \leq \text{nVr}_D \leq 8.4$) 84%
- **Recommended daily dose** ($\text{nVr}_D > 8.4$) 0%

#### Frequency Over Time

<table>
<thead>
<tr>
<th>Date</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 4</td>
<td></td>
</tr>
<tr>
<td>May 6</td>
<td></td>
</tr>
<tr>
<td>Aug 5</td>
<td></td>
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<tr>
<td>Nov 5</td>
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**3XN | DENMARK**

Schuco Headquarters
FUTURE DEVELOPMENTS

spatio-temporal population analytics

from building performance to **occupant performance** in buildings...
FUTURE DEVELOPMENTS

spatio-temporal population analytics

from building performance to **occupant performance** in buildings...

... with in-situ monitoring using **wearable** technology
REVISITING SUSTAINABILITY...

EMOTION

HEALTH

COMFORT

SOCIAL

ECONOMIC

ENVIRONMENTAL
REVISITING SUSTAINABILITY...
REVISITING SUSTAINABILITY...

EMOTION

HEALTH

COMFORT

EQUITY
... BY TAKING THE OCCUPANT’S PERSPECTIVE