

Cadna A[®]



Version 2024 MR 1 (64 Bit) (build: 205.5427)



© DataKustik GmbH

Dongle: L41825

Options: X L

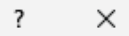
Expiration Date: none

Licensee:

Kajaja Acoustics OÜ, Tallin, Estonia

OK

Configuration of Calculation



| | | | | | | |
|------------|-------------|-----------|-----------|-------------|-----|-------------|
| Reflection | Meteorology | Industry | Road | Railroad | | |
| Standards | General | Partition | Ref. Time | Eval.Param. | DTM | Ground Abs. |

Template:



Open Configuration...

Save Configuration...

Standards / Guidelines:

Industry: CNOSSOS-EU

Road: NMPB-Routes-96

Railroad: SRM II

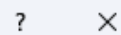
Aircraft:

OK

Cancel

Help

Configuration of Calculation



| | | | | | | |
|------------|-------------|-----------|-----------|-------------|-----|-------------|
| Reflection | Meteorology | Industry | Road | Railroad | | |
| Standards | General | Partition | Ref. Time | Eval.Param. | DTM | Ground Abs. |

Max. Error (dB): Grid Interpolation:

Max. Search Radius (m): Max. Diff. Corners (dB):

Min. Dist Source to Rcvr (m): Max. Diff. Center (dB):

Extrapolate Grid 'under' Buildings Fast Screening

Propagation Coeff. Uncertainty:

Angle Scan Method (exp!!!) Mithra Compatibility

Number of Angle Segments:

Reflection Depth:

OK Cancel Help

Configuration of Calculation

? X

| Reflection | | Meteorology | | Industry | | Road | | Railroad | |
|--|---------|-------------------------------------|---|-------------|--|-------------|--|----------|--|
| Standards | General | Partition | Ref. Time | Eval.Param. | DTM | Ground Abs. | | | |
| Raster Factor: | | <input type="text" value="0.50"/> | Projection of: | | <input checked="" type="checkbox"/> Line Sources | | | | |
| Max. Length of Section (m): | | <input type="text" value="1000.0"/> | | | <input checked="" type="checkbox"/> Area Sources | | | | |
| Min. Length of Section (m): | | <input type="text" value="1.0"/> | <input type="checkbox"/> Projection at Terrain Model | | | | | | |
| Min. Length of Section (%): | | <input type="text" value="0.0"/> | Max Dist. Source-Rcvr (m): | | <input type="text" value="2000.00"/> | | | | |
| <input type="checkbox"/> Partition acc. to RBLärm-92 Proc. 1 | | | Search Radius Source (m): | | <input type="text" value="100.00"/> | | | | |
| | | | Search Radius Receiver (m): | | <input type="text" value="100.00"/> | | | | |
| | | | <input checked="" type="checkbox"/> Min. Lengths are considered by projection | | | | | | |

OK Cancel Help

Configuration of Calculation ? X

| Reflection | | | Meteorology | | | Industry | | | Road | | | Railroad | | | | | | | | |
|------------|--|--|-------------|--|--|-----------|--|--|-----------|--|--|-------------|--|--|-----|--|--|-------------|--|--|
| Standards | | | General | | | Partition | | | Ref. Time | | | Eval.Param. | | | DTM | | | Ground Abs. | | |

Allocation Hours - Periods Day, Evening, Night

| | | | | | | | | | | | | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 00 |
| N | N | N | N | N | N | N | D | D | D | D | D | D | D | D | D | D | D | D | E | E | E | E | N |

Daytime Penalty (dB): Recr. Time Penalty only for:

Evening/Recr. Time Penalty (dB):

(ohne Nutzung)
 KU Kurgebiet
 WR reines Wohngebiet
 WA allg. Wohngebiet
 MI Mischgebiet
 GE Gewerbegebiet

Night-time Penalty (dB):

Configuration of Calculation

? X

| | | | | |
|------------|-------------|-----------|-----------|-------------|
| Reflection | Meteorology | Industry | Road | Railroad |
| Standards | General | Partition | Ref. Time | Eval.Param. |
| | | | DTM | Ground Abs. |

Evaluation Parameters:

| | Type | | Name | Unit | Expression |
|----|------|-------------------------------------|------|--------------------------|-------------------------|
| 1: | Ld | <input checked="" type="checkbox"/> | Ld | <input type="checkbox"/> | <input type="text"/> >> |
| 2: | Le | <input checked="" type="checkbox"/> | Le | <input type="checkbox"/> | <input type="text"/> >> |
| 3: | Ln | <input checked="" type="checkbox"/> | Ln | <input type="checkbox"/> | <input type="text"/> >> |
| 4: | Lden | <input checked="" type="checkbox"/> | Lden | <input type="checkbox"/> | <input type="text"/> >> |

DIN 4109 Version: 2018

OK Cancel Help

Configuration of Calculation

? X

| | | | | | | |
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Standard Height (m):

Model of Terrain:

- Triangulation
 - Explicit Edges Only
 - Obj with "Ground at every point" influence DTM
- Search Contour Lines (Average)
- Search Contour Lines (Local Inclined Plane)

Search Radius for Contour Lines (m):

- Lift 'Sources under Ground' to Ground-Niveau
- Area sources with constant relative height follow terrain

OK Cancel Help

Configuration of Calculation ? X

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|------------|-------------|-----------|-----------|-------------|-----|-------------|
| Standards | General | Partition | Ref. Time | Eval.Param. | DTM | Ground Abs. |

Default Ground Absorption G:

Use map of ground absorption

Resolution (m):

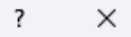
Roads / Parking Lots are reflecting (G==0)

Buildings are reflecting (G==0)

Railways are absorbing (G==1)

OK Cancel Help

Configuration of Calculation



| Standards | General | Partition | Ref. Time | Eval.Param. | DTM | Ground Abs. |
|------------|-------------|-----------|-----------|-------------|-----|-------------|
| Reflection | Meteorology | Industry | Road | Railroad | | |

max. Order of Reflection:

Conditions for Calculation of Reflection:

| | | | |
|---|--------------------------------------|-------------------|--------------------------------------|
| Search Radius Source (m): | <input type="text" value="100.00"/> | Receiver: | <input type="text" value="100.00"/> |
| Max. Distance Source - Receiver (m): | <input type="text" value="1000.00"/> | Interpolate from: | <input type="text" value="1000.00"/> |
| Min. Distance Receiver - Reflector (m): | <input type="text" value="1.00"/> | Interpolate to: | <input type="text" value="1.00"/> |
| Min. Distance Source - Reflector (m): | <input type="text" value="0.10"/> | | |

Configuration of Calculation

Standards General Partition Ref. Time Eval.Param. DTM Ground Abs.

Reflection Meteorology Industry Road Railroad

Temperature (°C):

rel. Humidity (%):

Wind Speed for Dir. (m/s):

Direction of North:

Get from first North Arrow Symbol

Angle (°):

Configuration of Calculation

Standards General Partition Ref. Time Eval.Param. DTM Ground Abs.

Reflection Meteorology Industry Road Railroad

Temperature (°C):

rel. Humidity (%):

Meteorology

Country:

Percentage of 'favorable conditions'

| | 20° | 40° | 60° | 80° | 100° | 120° | 140° | 160° | 180° | 200° | 220° | 240° | 260° | 280° | 300° | 320° | 340° | 360° |
|----------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Day: | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Evening: | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| Night: | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Evening Values = Day Values

Get from first North Arrow Symbol

Angle (°):

Configuration of Calculation

? X

| | | | | | | |
|------------|-------------|-----------|-----------|-------------|-----|-------------|
| Standards | General | Partition | Ref. Time | Eval.Param. | DTM | Ground Abs. |
| Reflection | Meteorology | Industry | Road | Railroad | | |

Calculation acc. to: 2015/996 EU w/o 17534

Lateral Diffraction: none if Distance smaller (m): 1000

Obstacles within Area Src do not shield

Src. in Building/Cylinder do not shield

OK Cancel Help

Configuration of Calculation ? X

| | | | | | | |
|------------|-------------|-----------|-----------|-------------|-----|-------------|
| Standards | General | Partition | Ref. Time | Eval.Param. | DTM | Ground Abs. |
| Reflection | Meteorology | Industry | Road | Railroad | | |

Calculation acc to NMPB

- Calc exactly one Reflection Order
- Use Multiple Reflection Correction
- Calc outer Lanes separately

Emission Calculation: NMPB

Meteorology...

OK Cancel Help

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|------------|-------------|-----------|-----------|-------------|-----|-------------|
| Standards | General | Partition | Ref. Time | Eval.Param. | DTM | Ground Abs. |
| Reflection | Meteorology | Industry | Road | Railroad | | |

Calculation acc. to SRM II (Reken- en Meetvoorschriften Railverkeerslawaai '96)

All Emissions at 0.50 m above railhead

Railway Correction (dB):

Use Non-Standard Reference Time D/E/N = 12/4/8 (see Ref.Time Tab)

Air Absorption acc. to ISO 9613-1

Meteorological Correction Cmet acc. to ISO 9613-2

Other Properties: See Industry.

Receiver Grid X

Receiver Spacing: dx (m):

dy (m):

Receiver Height (m):

Absolute

Exclude Sound Sources

Exclude Buildings

Use Height of Buildings

for all Variants

Cadna A[®]



 DataKustik

Version 2026 (64 Bit) (build: 213.5606)

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License Number: L41825

Options: X L

Expiration Date: none

Customer Number: 27433

Licensee:

Kajaja Acoustics OÜ, Tallin, Estonia



OK