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- -

student / weti-lab-vt10@hs-flensburg.de Calculated: 1/16/2025 4:09 PM/4.0.547

DECIBEL - Main Result

Calculation: Noice_Vestas

ISO 9613-2 German (Interimsverfahren)

The calculation is based on the international norm "ISO 9613-2 Acoustics - Attenuation of sound during propagation outdoors"

Meteorological correction factor, CO: 0.0 dB

Die Immissionsrichtwerte entsprechend TA Lärm sind (Nacht / Tag):

Industriegebiet: 70 / 70 dB(A)

Kerngebiet, Dorf- und Mischgebiet: 45 / 60 dB(A)

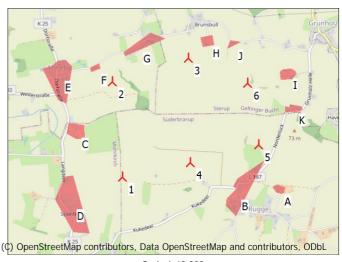
Reines Wohngebiet: 35 / 50 dB(A) Gewerbegebiet: 50 / 65 dB(A)

Allgemeines Wohngebiet, Kleinsiedlungsgebiet: 40 / 55 dB(A)

Kurgebiet, Krankenhaus, Pflegeanstalt: 35 / 45 dB(A)

All coordinates are in

UTM (north)-ETRS89 Zone: 32



New WTG

Scale 1:40,000
Noise sensitive area

WTGs

				WTG	type					Noise o	data					
Easting I	Northing	Z	Row data/Description	Valid	Manufact.	Type-generator	Power,	Rotor	Hub	Creator	Name			Wind	LwA,ref	Uncertainty
							rated	diameter	height					speed		
		[m]					[kW]	[m]	[m]					[m/s]	[dB(A)]	[dB(A)]
1 547,816 6	6,060,703	60.0	01_VESTAS V150-4.5 4500 15	0Yes	VESTAS	V150-4.5-4,500	4,500	150.0	125.0	USER	Level 0 VTL1 PO4-0S & P	O4-0S VTL1-	12-2021	9.0	107.6	0.0 h
2 547,696 6	6,061,714	60.0	02_VESTAS V150-4.5 4500 15	0Yes	VESTAS	V150-4.5-4,500	4,500	150.0	125.0	USER	Level 0 VTL1 PO4-0S & P	O4-0S VTL1-	12-2021	9.0	107.6	0.0 h
3 548,500 6	6,061,972	60.0	03_VESTAS V150-4.5 4500 15	0Yes	VESTAS	V150-4.5-4,500	4,500	150.0	125.0	USER	Level 0 VTL1 PO4-0S & P	O4-0S VTL1-	12-2021	9.0	107.6	0.0 h
4 548,532 6	6,060,864	60.0	04_VESTAS V150-4.5 4500 15	0Yes	VESTAS	V150-4.5-4,500	4,500	150.0	125.0	USER	Level 0 VTL1 PO4-0S & P	O4-0S VTL1-	12-2021	9.0	107.6	0.0 h
5 549,254 6	6,061,058	60.0	05_VESTAS V150-4.5 4500 15	0Yes	VESTAS	V150-4.5-4,500	4,500	150.0	125.0	USER	Level 0 VTL1 PO4-0S & P	O4-0S VTL1-	12-2021	9.0	107.6	0.0 h
6 549,128 6	6,061,708	60.0	06_VESTAS V150-4.5 4500 15	0Yes	VESTAS	V150-4.5-4,500	4,500	150.0	125.0	USER	Level 0 VTL1 PO4-0S & P	O4-0S VTL1-	12-2021	9.0	107.6	0.0 h
h) Generic d	octave di	istril	oution used													

Calculation Results

Sound level

Noi	se sensitive area					Demands	Sound I	evel	Demands fulfilled?
No.	Name	Easting	Northing	Z	Immission	Noise	From	Distance	Noise
		3	3		height		WTGs	to noise	
					Ü			demand	
				[m]	[m]	[dB(A)]	[dB(A)]	[m]	
Α	Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (1)	549,421	6,060,629	53.8	5.0	45.0	45.9	-61	No
В	Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (2)	549,311	6,060,896	60.0	5.0	45.0	52.7	-347	No
С	Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (3)	547,399	6,061,248	60.0	5.0	45.0	45.6	-65	No
D	Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (4)	547,331	6,060,571	70.0	5.0	45.0	44.8	10	Yes
Ε	Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (5)	547,253	6,061,771	60.0	5.0	45.0	45.7	-42	No
F	Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (6)	547,568	6,061,853	60.0	5.0	45.0	52.0	-300	No
G	Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (7)	547,830	6,061,989	60.0	5.0	45.0	49.2	-281	No
Н	Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (8)	548,649	6,062,095	60.0	5.0	45.0	52.2	-378	No
1	Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (9)	549,481	6,061,756	51.1	5.0	45.0	48.0	-186	No
J	Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (10)	548,910	6,062,081	60.0	5.0	45.0	48.6	-291	No
K	Noise sensitive area: German TA Lärm - Rural villages. Mixed areas (12)	549.532	6.061.410	60.0	5.0	45.0	47.7	-210	No

Distances (m)

	WTG					
NSA	1	2	3	4	5	6
Α	1599	2038	1629	916	461	1115
В	1126	1675	1346	517	172	833
С	575	553	1317	1150	1847	1788
D	502	1081	1747	1235	1982	2091
E	986	447	1237	1458	2087	1867
F	1165	189	939	1381	1864	1566
G	1286	305	324	1313	1503	996
Н	1622	1026	193	1236	1160	540
1	1970	1777	979	1302	734	357
J	1760	1268	425	1274	1079	430
K	1856	1848	1145	1139	448	467



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DECIBEL - Detailed results

Calculation: Noice_Vestas Noise calculation model: ISO 9613-2 German (Interimsverfahren) 10.0 m/s **Assumptions**

Calculated L(DW) = LWA,ref + K + Dc - (Adiv + Aatm + Agr + Abar + Amisc) - Cmet (when calculated with ground attenuation, then Dc = Domega)

Sound pressure level at WTG LWA,ref:

K: Pure tone

Dc: Directivity correction

Adiv: the attenuation due to geometrical divergence the attenuation due to atmospheric absorption Aatm:

the attenuation due to ground effect Agr: the attenuation due to a barrier Abar:

Amisc: the attenuation due to miscellaneous other effects

Cmet: Meteorological correction

Calculation Results

Noise sensitive area: A Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (1) Highest noise value

No.	Distance	Sound distance	From WTGsW	ΓG+Uncertainty margi	n LwA,ref	Dc	Adiv	Aatm	Agr	Abar	Amisc	Α
	[m]	[m]	[dB(A)]	[dB]	[dB(A)]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
1	1,607	1,612	31.33	31.33	107.6	0.00	75.15	4.12	-3.00	0.00	0.00	76.27
2	2,038	2,042	28.56	28.56	107.6	0.00	77.20	4.84	-3.00	0.00	0.00	79.04
3	1,629	1,634	31.18	31.18	107.6	0.00	75.26	4.15	-3.00	0.00	0.00	76.42
4	920	929	37.44	37.44	107.6	0.00	70.36	2.80	-3.00	0.00	0.00	70.15
5	461	478	44.28	44.28	107.6	0.00	64.59	1.72	-3.00	0.00	0.00	63.31
6	1,119	1,126	35.36	35.36	107.6	0.00	72.03	3.21	-3.00	0.00	0.00	72.24
Sum				45.93								

Noise sensitive area: B Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (2) Highest noise value

_	,
W	ΓG

No.	Distance	Sound distance	From WTGsW	TG+Uncertainty margi	n LwA,ref	Dc	Adiv	Aatm	Agr	Abar	Amisc	Α
	[m]	[m]	[dB(A)]	[dB]	[dB(A)]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
1	1,507	1,512	32.06	32.06	107.6	0.00	74.59	3.94	-3.00	0.00	0.00	75.53
2	1,810	1,814	29.96	29.96	107.6	0.00	76.17	4.46	-3.00	0.00	0.00	77.63
3	1,347	1,352	33.33	33.33	107.6	0.00	73.62	3.65	-3.00	0.00	0.00	74.27
4	779	788	39.17	39.17	107.6	0.00	68.94	2.49	-3.00	0.00	0.00	68.42
5	172	210	52.25	52.25	107.6	0.00	57.44	0.91	-3.00	0.00	0.00	55.35
6	833	841	38.49	38.49	107.6	0.00	69.50	2.60	-3.00	0.00	0.00	69.11
Sum				52.74								

Noise sensitive area: C Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (3) Highest noise value

WTG

No.	Distance	Sound distance	From WTGsW7	ΓG+Uncertainty marg	in LwA,ref	Dc	Adiv	Aatm	Agr	Abar	Amisc	Α	
	[m]	[m]	[dB(A)]	[dB]	[dB(A)]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	
1	686	696	40.47	40.47	107.6	0.00	67.86	2.27	-3.00	0.00	0.00	67.13	
2	553	566	42.59	42.59	107.6	0.00	66.05	1.95	-3.00	0.00	0.00	65.00	
3	1,317	1,322	33.58	33.58	107.6	0.00	73.43	3.59	-3.00	0.00	0.00	74.02	
4	1,196	1,202	34.64	34.64	107.6	0.00	72.60	3.36	-3.00	0.00	0.00	72.95	
5	1,864	1,868	29.61	29.61	107.6	0.00	76.43	4.55	-3.00	0.00	0.00	77.98	
6	1,788	1,792	30.10	30.10	107.6	0.00	76.07	4.43	-3.00	0.00	0.00	77.49	
Sum				45.61									

Noise sensitive area: D Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (4) Highest noise value

WTG

No.	Distance	Sound distance	From WTGsW	TG+Uncertainty margir	LwA,ref	Dc	Adiv	Aatm	Agr	Abar	Amisc	Α
	[m]	[m]	[dB(A)]	[dB]	[dB(A)]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
1	502	515	43.54	43.54	107.6	0.00	65.24	1.82	-3.00	0.00	0.00	64.06
2	1,201	1,206	34.60	34.60	107.6	0.00	72.63	3.36	-3.00	0.00	0.00	72.99
3	1,825	1,828	29.87	29.87	107.6	0.00	76.24	4.49	-3.00	0.00	0.00	77.73
4	1.236	1.242	34.28	34.28	107.6	0.00	72 88	3 43	-3.00	0.00	0.00	73.31

To be continued on next page...



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DECIBEL - Detailed results

Calculation: Noice_Vestas Noise calculation model: ISO 9613-2 German (Interimsverfahren) 10.0 m/s ...continued from previous page

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WW	1 (7

No.	Distance	Sound distance	From WTGsW	TG+Uncertainty margir	n LwA,ref	Dc	Adiv	Aatm	Agr	Abar	Amisc	Α	
	[m]	[m]	[dB(A)]	[dB]	[dB(A)]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	
5	1,984	1,987	28.88	28.88	107.6	0.00	76.96	4.75	-3.00	0.00	0.00	78.71	
6	2,126	2,129	28.05	28.05	107.6	0.00	77.57	4.97	-3.00	0.00	0.00	79.54	
Sum				44 85									

Noise sensitive area: E Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (5) Highest noise value

WTG

No.	Distance	Sound distance	From WTGsW	ΓG+Uncertainty margi	in LwA,ref	Dc	Adiv	Aatm	Agr	Abar	Amisc	Α
	[m]	[m]	[dB(A)]	[dB]	[dB(A)]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
1	1,208	1,214	34.53	34.53	107.6	0.00	72.68	3.38	-3.00	0.00	0.00	73.06
2	447	463	44.60	44.60	107.6	0.00	64.31	1.68	-3.00	0.00	0.00	62.99
3	1,263	1,269	34.04	34.04	107.6	0.00	73.07	3.49	-3.00	0.00	0.00	73.55
4	1,568	1,573	31.61	31.61	107.6	0.00	74.93	4.05	-3.00	0.00	0.00	75.98
5	2,125	2,128	28.06	28.06	107.6	0.00	77.56	4.97	-3.00	0.00	0.00	79.53
6	1,876	1,880	29.54	29.54	107.6	0.00	76.48	4.57	-3.00	0.00	0.00	78.05
Sum				45.71								

Noise sensitive area: F Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (6) Highest noise value

WTG

No.	Distance	Sound distance	From WTGsW7	ΓG+Uncertainty margi	n LwA,ref	Dc	Adiv	Aatm	Agr	Abar	Amisc	Α
	[m]	[m]	[dB(A)]	[dB]	[dB(A)]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
1	1,176	1,182	34.82	34.82	107.6	0.00	72.46	3.32	-3.00	0.00	0.00	72.77
2	189	224	51.65	51.65	107.6	0.00	57.99	0.96	-3.00	0.00	0.00	55.95
3	939	947	37.23	37.23	107.6	0.00	70.53	2.84	-3.00	0.00	0.00	70.36
4	1,381	1,386	33.05	33.05	107.6	0.00	73.83	3.71	-3.00	0.00	0.00	74.54
5	1,864	1,868	29.62	29.62	107.6	0.00	76.43	4.55	-3.00	0.00	0.00	77.98
6	1,566	1,571	31.63	31.63	107.6	0.00	74.92	4.04	-3.00	0.00	0.00	75.96
Sum				52.01								

Noise sensitive area: G Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (7)

WTG

No.	Distance	Sound distance	From WTGsW	'TG+Uncertainty margi	n LwA,ref	Dc	Adiv	Aatm	Agr	Abar	Amisc	Α
	[m]	[m]	[dB(A)]	[dB]	[dB(A)]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
1	1,286	1,292	33.84	33.84	107.6	0.00	73.22	3.53	-3.00	0.00	0.00	73.75
2	305	328	47.98	47.98	107.6	0.00	61.32	1.29	-3.00	0.00	0.00	59.61
3	670	681	40.70	40.70	107.6	0.00	67.66	2.23	-3.00	0.00	0.00	66.89
4	1,325	1,331	33.51	33.51	107.6	0.00	73.48	3.60	-3.00	0.00	0.00	74.09
5	1,701	1,705	30.68	30.68	107.6	0.00	75.64	4.28	-3.00	0.00	0.00	76.91
6	1,327	1,333	33.49	33.49	107.6	0.00	73.50	3.61	-3.00	0.00	0.00	74.10
Sum				49.17								

Noise sensitive area: H Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (8) Highest noise value

WTG

No.	Distance	Sound distance	From WTGsW	TG+Uncertainty margi	n LwA,ref	Dc	Adiv	Aatm	Agr	Abar	Amisc	Α
	[m]	[m]	[dB(A)]	[dB]	[dB(A)]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
1	1,622	1,627	31.23	31.23	107.6	0.00	75.23	4.14	-3.00	0.00	0.00	76.37
2	1,026	1,033	36.30	36.30	107.6	0.00	71.28	3.02	-3.00	0.00	0.00	71.30
3	193	228	51.48	51.48	107.6	0.00	58.14	0.97	-3.00	0.00	0.00	56.12
4	1,236	1,242	34.28	34.28	107.6	0.00	72.88	3.43	-3.00	0.00	0.00	73.31
5	1,200	1,206	34.60	34.60	107.6	0.00	72.63	3.36	-3.00	0.00	0.00	72.99
6	615	627	41.55	41.55	107.6	0.00	66.94	2.10	-3.00	0.00	0.00	66.04
Sum				52.20								

Noise sensitive area: I Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (9) Highest noise value

WTG

No.	Distance	Sound distance	From WTGsW	TG+Uncertainty marg	in LwA,ref	Dc	Adiv	Aatm	Agr	Abar	Amisc	Α
	[m]	[m]	[dB(A)]	[dB]	[dB(A)]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
1	1,970	1,975	28.96	28.96	107.6	0.00	76.91	4.73	-3.00	0.00	0.00	78.64
2	1,785	1,790	30.12	30.12	107.6	0.00	76.06	4.42	-3.00	0.00	0.00	77.48

To be continued on next page...



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DECIBEL - Detailed results

Calculation: Noice_Vestas Noise calculation model: ISO 9613-2 German (Interimsverfahren) 10.0 m/s ...continued from previous page

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No.	Distance	Sound distance	From WTGsW	TG+Uncertainty margi	n LwA,ref	Dc	Adiv	Aatm	Agr	Abar	Amisc	Α
	[m]	[m]	[dB(A)]	[dB]	[dB(A)]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
3	1,005	1,012	36.51	36.51	107.6	0.00	71.11	2.97	-3.00	0.00	0.00	71.08
4	1,302	1,308	33.70	33.70	107.6	0.00	73.33	3.56	-3.00	0.00	0.00	73.90
5	734	744	39.77	39.77	107.6	0.00	68.44	2.38	-3.00	0.00	0.00	67.82
6	357	379	46.59	46.59	107.6	0.00	62.56	1.44	-3.00	0.00	0.00	61.01
Sum				48.04								

Noise sensitive area: J Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (10) Highest noise value

WTG

No.	Distance	Sound distance	From WTGsW	TG+Uncertainty margi	n LwA,ref	Dc	Adiv	Aatm	Agr	Abar	Amisc	Α
	[m]	[m]	[dB(A)]	[dB]	[dB(A)]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
1	1,760	1,764	30.28	30.28	107.6	0.00	75.93	4.38	-3.00	0.00	0.00	77.31
2	1,268	1,274	33.99	33.99	107.6	0.00	73.10	3.50	-3.00	0.00	0.00	73.60
3	425	442	45.07	45.07	107.6	0.00	63.90	1.62	-3.00	0.00	0.00	62.52
4	1,274	1,280	33.94	33.94	107.6	0.00	73.14	3.51	-3.00	0.00	0.00	73.65
5	1,079	1,085	35.76	35.76	107.6	0.00	71.71	3.12	-3.00	0.00	0.00	71.84
6	431	448	44.94	44.94	107.6	0.00	64.02	1.64	-3.00	0.00	0.00	62.66
Sum				48.64								

Noise sensitive area: K Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (12) Highest noise value

WTG

No.	Distance	Sound distance	From WTGsW	TG+Uncertainty margi	n LwA,ref	Dc	Adiv	Aatm	Agr	Abar	Amisc	Α
	[m]	[m]	[dB(A)]	[dB]	[dB(A)]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
1	1,856	1,860	29.67	29.67	107.6	0.00	76.39	4.54	-3.00	0.00	0.00	77.93
2	1,861	1,864	29.64	29.64	107.6	0.00	76.41	4.55	-3.00	0.00	0.00	77.96
3	1,175	1,180	34.84	34.84	107.6	0.00	72.44	3.31	-3.00	0.00	0.00	72.76
4	1,139	1,145	35.17	35.17	107.6	0.00	72.18	3.24	-3.00	0.00	0.00	72.42
5	448	463	44.60	44.60	107.6	0.00	64.31	1.68	-3.00	0.00	0.00	62.99
6	502	516	43.53	43.53	107.6	0.00	65.25	1.82	-3.00	0.00	0.00	64.07
Sum				47.75								



Project:

Exam_16.01

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student / weti-lab-vt10@hs-flensburg.de calculated: 1/16/2025 4:09 PM/4.0.547

DECIBEL - Assumptions for noise calculation

Calculation: Noice_Vestas Noise calculation model:

ISO 9613-2 German (Interimsverfahren)

Wind speed (at hubheight):

Highest noise value Ground attenuation:

Fixed values, Agr: -3.0, Dc: 0.0
Meteorological coefficient, C0:
Selected option: Fixed value: 0.0 dB
Type of demand in calculation:

1: WTG noise is compared to demand (DK, DE, SE, NL etc.)

Noise values in calculation:

All noise values are mean values (Lwa) (Normal)

Pure tones:

Fixed penalty added to source noise of WTGs with pure tones

WTG catalogue

Height above ground level, when no value in NSA object: 5.0 m; Allow override of model height with height from NSA object

Uncertainty margin:

Uncertainty added to source noise level of the WTGs in the calculation

Deviation from "official" noise demands. Negative is more restrictive, positive is less restrictive.:

0.0 dB(A)

Octave data required

Frequency dependent air absorption

63 125 250 500 1,000 2,000 4.000 8.000 [dB/km] [dB/km] [dB/km] [dB/km] [dB/km] [dB/km]0.10 0.40 1.00 1.90 3.70 9.70 32.80 117.00

All coordinates are in

UTM (north)-ETRS89 Zone: 32

WTG: VESTAS V150-4.5 4500 150.0 !O!

Noise: Level 0 VTL1 - - PO4-0S & PO4-0S VTL1- 12-2021

Source Source/Date Creator Edited

Manufacturer 12/3/2021 USER 8/30/2022 2:53 PM

Based on Document no.: 0067-7057.V04.

Octave data

 Status
 Wind speed (hh)
 LwA,ref Pure tones
 63
 125
 250
 500
 1000
 2000
 4000
 8000

 [m/s]
 [dB(A)]
 [dB]
 [dB]</td

Noise sensitive area: A Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (1)

Predefined calculation standard: Rural villages, Mixed areas Immission height(a.g.l.): Use standard value from calculation model Uncertainty margin: Use default value from calculation model No temporal binning

No temporal binning Noise demand: 45.0 dB(A) No distance demand

Noise sensitive area: B Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (2)

Predefined calculation standard: Rural villages, Mixed areas Immission height(a.g.l.): Use standard value from calculation model Uncertainty margin: Use default value from calculation model No temporal binning Noise demand: 45.0 dB(A) No distance demand

Noise sensitive area: C Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (3)

Predefined calculation standard: Rural villages, Mixed areas Immission height(a.g.l.): Use standard value from calculation model Uncertainty margin: Use default value from calculation model

No temporal binning Noise demand: 45.0 dB(A) No distance demand



Exam_16.01

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DECIBEL - Assumptions for noise calculation

Calculation: Noice_Vestas

Noise sensitive area: D Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (4)

Predefined calculation standard: Rural villages, Mixed areas Immission height(a.g.l.): Use standard value from calculation model Uncertainty margin: Use default value from calculation model

No temporal binning Noise demand: 45.0 dB(A) No distance demand

Noise sensitive area: E Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (5)

Predefined calculation standard: Rural villages, Mixed areas Immission height(a.g.l.): Use standard value from calculation model Uncertainty margin: Use default value from calculation model No temporal binning

Noise demand: 45.0 dB(A) No distance demand

Noise sensitive area: F Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (6)

Predefined calculation standard: Rural villages, Mixed areas Immission height(a.g.l.): Use standard value from calculation model Uncertainty margin: Use default value from calculation model No temporal binning

Noise demand: 45.0 dB(A) No distance demand

Noise sensitive area: G Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (7)

Predefined calculation standard: Rural villages, Mixed areas Immission height(a.g.l.): Use standard value from calculation model Uncertainty margin: Use default value from calculation model

No temporal binning Noise demand: 45.0 dB(A) No distance demand

Noise sensitive area: H Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (8)

Predefined calculation standard: Rural villages, Mixed areas Immission height(a.g.l.): Use standard value from calculation model Uncertainty margin: Use default value from calculation model No temporal binning Noise demand: 45.0 dB(A)

No distance demand

Noise sensitive area: I Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (9)

Predefined calculation standard: Rural villages, Mixed areas Immission height(a.g.l.): Use standard value from calculation model Uncertainty margin: Use default value from calculation model No temporal binning Noise demand: 45.0 dB(A) No distance demand

Noise sensitive area: J Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (10)

Predefined calculation standard: Rural villages, Mixed areas Immission height(a.g.l.): Use standard value from calculation model Uncertainty margin: Use default value from calculation model No temporal binning

Noise demand: 45.0 dB(A) No distance demand

Noise sensitive area: K Noise sensitive area: German TA Lärm - Rural villages, Mixed areas (12)

Predefined calculation standard: Rural villages, Mixed areas Immission height(a.g.l.): Use standard value from calculation model Uncertainty margin: Use default value from calculation model No temporal binning Noise demand: 45.0 dB(A) No distance demand



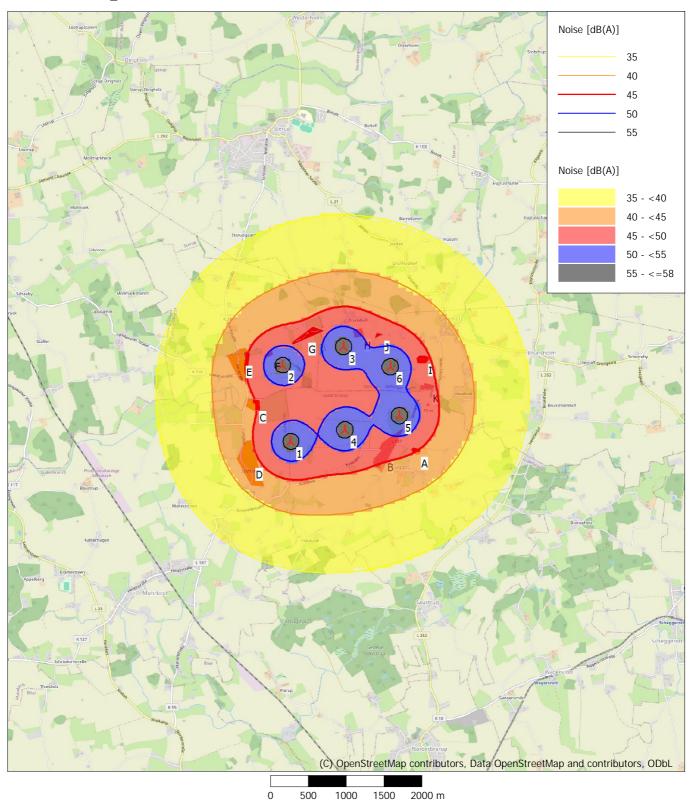
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DECIBEL - Map Highest noise value

Calculation: Noice_Vestas



500 1000 1500 Map: EMD OpenStreetMap , Print scale 1:50,000, Map center UTM (north)-ETRS89 Zone: 32 East: 548,475 North: 6,061,337 Noise sensitive area New WTG

Noise calculation model: ISO 9613-2 German (Interimsverfahren). Wind speed: Highest noise value Height above sea level from active line object

