Table S1 presents the details of the rooms were the tests took place. The measurements 1 – 62 were carried out in the lecture rooms and class rooms in the Energis building, while 63 – 77 in the rooms of the Courthouse (surface area and cubature as given by Majewski et al. [57]).

Table S1. Data of rooms where the tests took place.

No	Surface area, m^2	Cubature, m^3	Window orientation	Testing period/month
1	163.55	474.30	W	8.00-10.00/February
2	163.55	474.30	W	8.00-10.00/February
3	460.03	1357.09	E, S, W	12.00-14.00/February
4	163.55	474.30	W	8.00-10.00/February
5	163.55	474.30	W	12.00-14.00/February
6	460.03	1357.09	E, S, W	12.00-14.00/February
7	460.03	1357.09	E, S, W	14.00-16.00/February
8	460.03	1357.09	E, S, W	16.00-18.00/February
9	58.33	169.16	W	12.00-14.00/March
10	81.75	237.08	E	14.00-16.00/March
11	42.43	123.05	W	16.00-18.00/March
12	56.97	165.21	W	16.00-18.00/March
13	81.75	237.08	E	8.00-10.00/April
14	58.33	169.16	W	16.00-18.00/April
15	163.55	474.30	W	14.00-16.00/April
16	163.55	474.30	W	10.00-12.00/April
17	62.69	181.80	W	10.00-12.00/April
18	62.69	181.80	W	14.00-16.00/April
19	62.69	181.80	W	14.00-16.00/April
20	110.04	319.12	W	14.00-16.00/May
21	46.00	133.40	W	12.00-14.00/May
22	58.33	169.16	W	14.00-16.00/May
23	46.58	135.08	W	14.00-16.00/May
24	58.33	169.16	W	14.00-16.00/May
25	163.55	474.30	W	16.00-18.00/May
26	42.43	123.05	W	10.00-12.00/June
27	62.69	181.80	W	8.00-10.00/June
28	110.04	319.12	W	12.00-14.00/June
29	110.04	319.12	W	14.00-16.00/June
30	92.05	266.95	E	10.00-12.00/July
31	460.03	1357.09	E, S, W	12.00-14.00/January
32	460.03	1357.09	E, S, W	14.00-16.00/January
33	58.33	169.16	W	16.00-18.00/January
34	81.75	237.08	E	14.00-16.00/January
35	92.05	266.95	E	14.00-16.00/January
36	163.55	474.30	W	12.00-14.00/January
37	46.00	133.40	W	12.00-14.00/May
38	92.05	266.95	E	12.00-14.00/May

39	58.33	169.16	W	10.00-12.00/May
40	460.03	1357.09	E, S, W	14.00-16.00/May
41	92.05	266.95	E	14.00-16.00/May
42	57.59	167.01	W	8.00-10.00/May
43	460.03	1357.09	E, S, W	12.00-14.00/May
44	460.03	1357.09	E, S, W	12.00-14.00/May
45	92.05	266.95	E	14.00-16.00/May
46	92.05	266.95	E	14.00-16.00/May
47	92.05	266.95	E	12.00-14.00/May
48	92.05	266.95	E	14.00-16.00/May
49	92.05	266.95	E	12.00-14.00/June
50	163.55	474.30	W	16.00-18.00/June
51	460.03	1357.09	E, S, W	10.00-12.00/June
52	110.04	319.12	W	12.00-14.00/June
53	460.03	1357.09	E, S, W	10.00-12.00/June
54	460.03	1357.09	E, S, W	12.00-14.00/June
55	163.55	474.30	W	10.00-12.00/June
56	62.69	181.80	W	12.00-14.00/June
57	58.33	169.16	W	14.00-16.00/June
58	42.43	123.05	W	12.00-14.00/June
59	46.00	133.40	W	12.00-14.00/June
60	460.03	1357.09	E, S, W	12.00-14.00/June
61	460.03	1357.09	E, S, W	14.00-16.00/June
62	460.03	1357.09	E, S, W	16.00-18.00/June
63	51.85	160.74	E, N	10.00-12.00/January
64	68.68	212.91	W	12.00-14.00/February
65	54.19	167.99	E	8.00-10.00/February
66	37.73	116.96	N	8.00-10.00/February
67	68.95	213.75	E	14.00-16.00/February
68	66.35	205.69	S	14.00-16.00/March
69	77.06	238.89	W	10.00-12.00/March
70	68.52	212.41	W	10.00-12.00/March
71	54.19	167.99	S	14.00-16.00/May
72	63.20	195.92	E	12.00-14.00/May
73	68.68	212.91	E	14.00-16.00/May
74	87.81	272.21	E	12.00-14.00/May
75	68.52	212.41	W	10.00-12.00/July
76	68.77	213.19	E	10.00-12.00/July
77	66.35	205.69	N	12.00-14.00/July

Table S2. Calculation results performed in the SAS software for set-11 according to the RSREG procedure.

Coding coefficients for independent variables		
Factor	Value	Devided by
Constant 1	0.303000	0.261000
Constant 2	-0.036000	0.006000
Constant 3	0.028000	0.022000
Constant 4	0.00001600	0.000008000

Response surface for set-11:

Average response	0.148320
Square root of MSE	0.001916
R-squared	0.9990
Coefficient of variation	1.2919

Regression	DF	Type I sum of squares	R-squared	F-value	Pr.>F
Linear	4	0.045382	0.9787	3090.11	<.0001
Quadratic	4	0.000100	0.0022	6.83	0.0042
Cartesian product	6	0.000845	0.0182	38.35	<.0001
Full model	14	0.046328	0.9990	901.28	<.0001

Rest	DF	Sum of squares	Mean of squares	F-value	Pr.>F
Lack of fit	10	0.000038230	0.000003823	1.31	0.5081
Error	2	0.000005829	0.000002915		
Total error	12	0.000044059	0.000003672		

Factor	DF	Sum of squares	Mean of squares	F-value	Pr.>F
Constant 1	5	0.021524	0.004305	1172.44	<.0001
Constant 2	5	0.004807	0.000961	261.83	<.0001
Constant 3	5	0.014851	0.002970	808.98	<.0001
Constant 4	5	0.002791	0.000558	152.01	<.0001

Table S3. Values of the four factors leading to minimum and maximum values.

Canonical analysis of the response surface based on coded data		
Factor	Encoded critical value	Unencoded critical value
Constant 1	-29.949243	-7.513752
Constant 2	19.669836	0.082019
Constant 3	-461.124150	-10.116731
Constant 4	2974.140224	0.023809
Value predicted at the stationary point: -12.292292		

Eigenvalues	Eigenvectors			
	Constant 1	Constant 2	Constant 3	Constant 4
0.008405	0.786203	-0.611474	-0.089340	-0.001521
0.000886	0.070634	-0.053164	0.982696	0.162769
0.000001301	-0.010452	0.007812	-0.162252	0.986663
-0.010373	0.613829	0.789438	-0.001415	0.000019416

Estimated minimum response range for variable set-11						
coded radius	Estimated response	Standard error	Uncoded factor values			
			Constant 1	Constant 2	Constant 3	Constant 4
0.0	0.140674	0.000951	0.303000	-0.036000	0.028000	0.000016000
0.1	0.133705	0.000945	0.320042	-0.035806	0.029424	0.000016179
0.2	0.126665	0.000936	0.337123	-0.035593	0.030813	0.000016354
0.3	0.119547	0.000927	0.354252	-0.035362	0.032163	0.000016525
0.4	0.112344	0.000921	0.371435	-0.035112	0.033474	0.000016691

0.5	0.105049	0.000923	0.388675	-0.034846	0.034742	0.000016851
0.6	0.097656	0.000942	0.405975	-0.034562	0.035966	0.000017006
0.7	0.090159	0.000982	0.423333	-0.034264	0.037146	0.000017156
0.8	0.082552	0.001051	0.440745	-0.033950	0.038280	0.000017301
0.9	0.074828	0.001152	0.458208	-0.033623	0.039369	0.000017439
1.0	0.066982	0.001287	0.475717	-0.033283	0.040413	0.000017573

Figure S1 presents the ridge analysis of the response surface performed using the SAS RSREG procedure. The upper panel shows the estimated minimum of the discrepancy function (column 2 of Table S3), and the lower panel shows the corresponding coded values of the four constants.

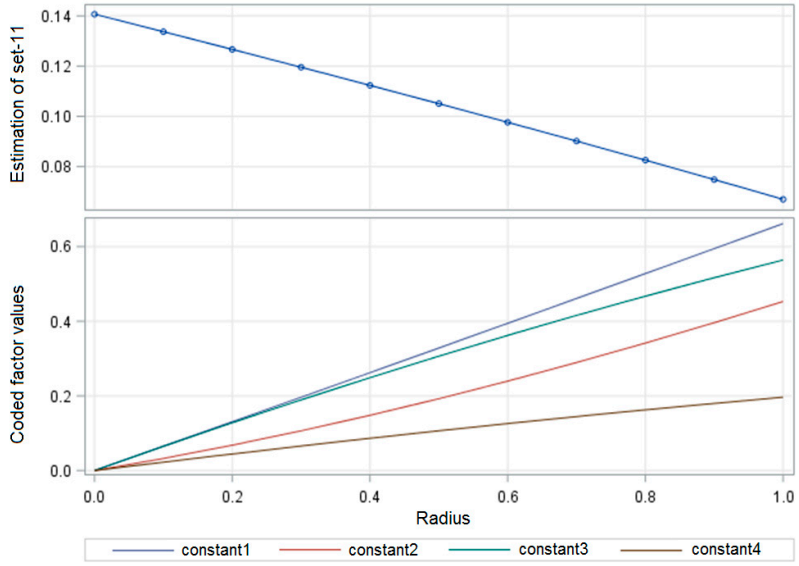


Figure S1. Ridge analysis of the response surface performed using the SAS RSREG procedure

Table S4. Regression analysis results regarding the dependence of PMV on the constants.

Analysis of variance					
Source	DF	Sum of squares	Mean of squares	F-value	Pr.>F
Model	1	68.36049	68.36049	653.55	<.0001
Error	75	7.84490	0.10460		
Adjusted total	76	76.20539			

Square root of MSE	0.3234	R-squared	0.8971
Dependent mean	0.11117	Adjusted R-squared.	0.8957
Coefficient of variation	290.92437		

Evaluation of parameters					
Variable	DF	Evaluation of the parameter	Standard error	t-value	Pr.>|t|
Intercept	1	-0.20543	0.03888	-5.28	<.0001
TSV	1	1.13072	0.04423	25.56	<.0001

Table S5. PMV determination accuracy assessment.

	PMV according to the original equation [9]	PMV according to the modified equation
Mean difference between TSV and PMV	0.2258	0.1716
Standard deviation	0.4030	0.3390
Lower limit of the confidence interval	0.1358	0.0959
Upper limit of the confidence interval	0.3158	0.2473

Table S6. PPD determination accuracy assessment.

	PPD according to the original equation [9]	PPD according to the modified equation
Mean difference between the actual and calculated values	22.46	17.90
Standard deviation	16.4398	14.5801
Lower limit of the confidence interval	18.7880	14.6434
Upper limit of the confidence interval	26.1320	21.1566