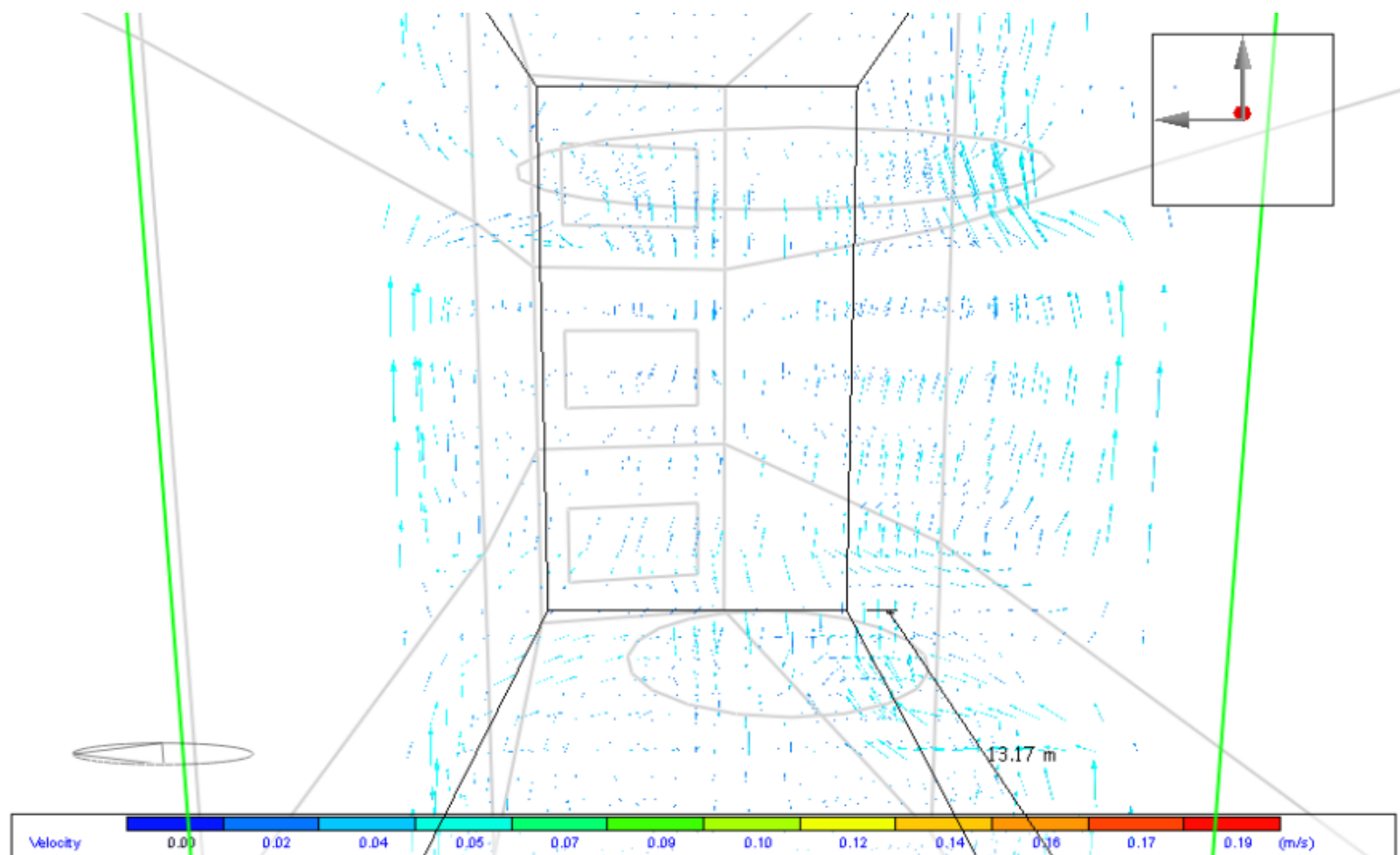
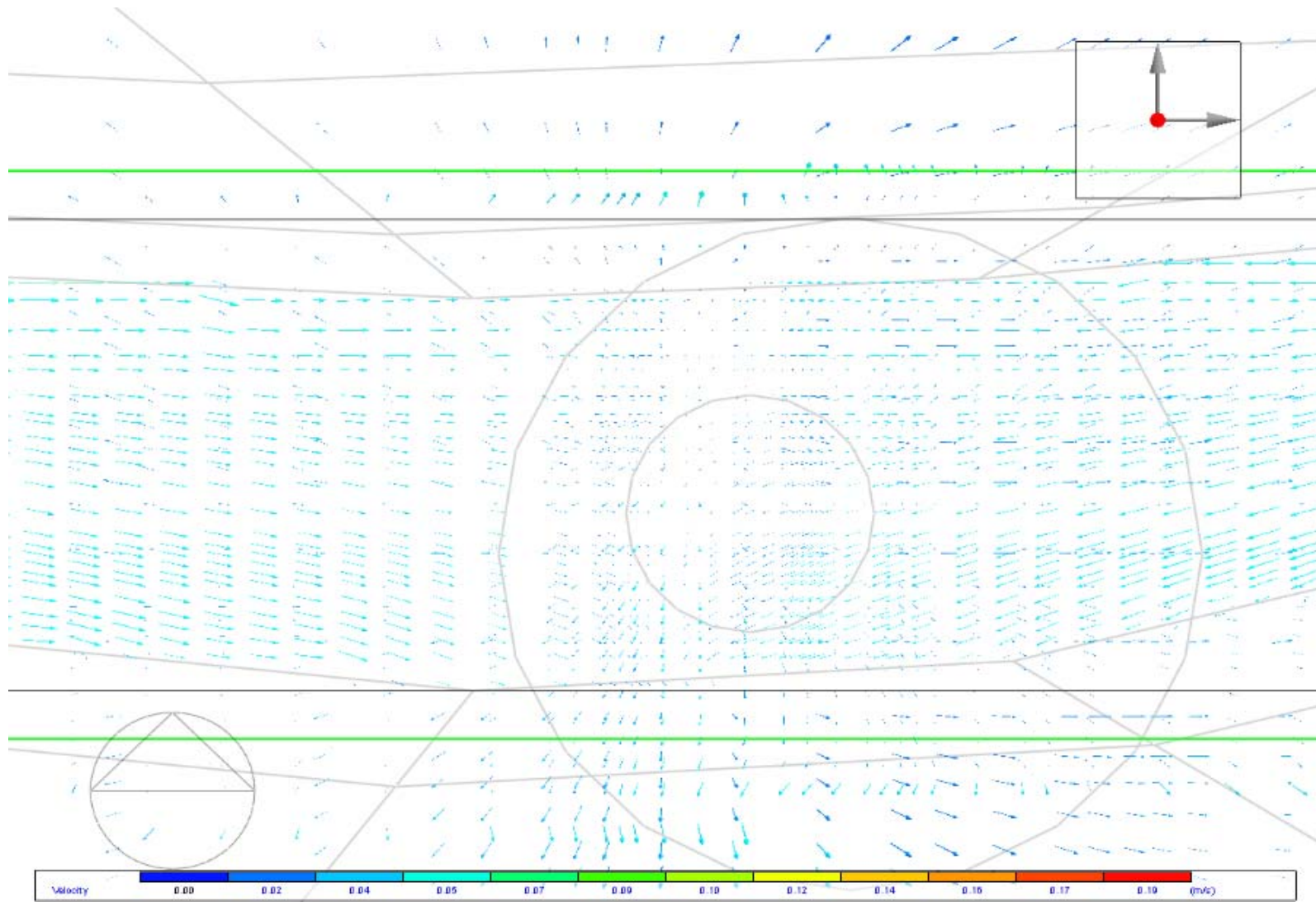


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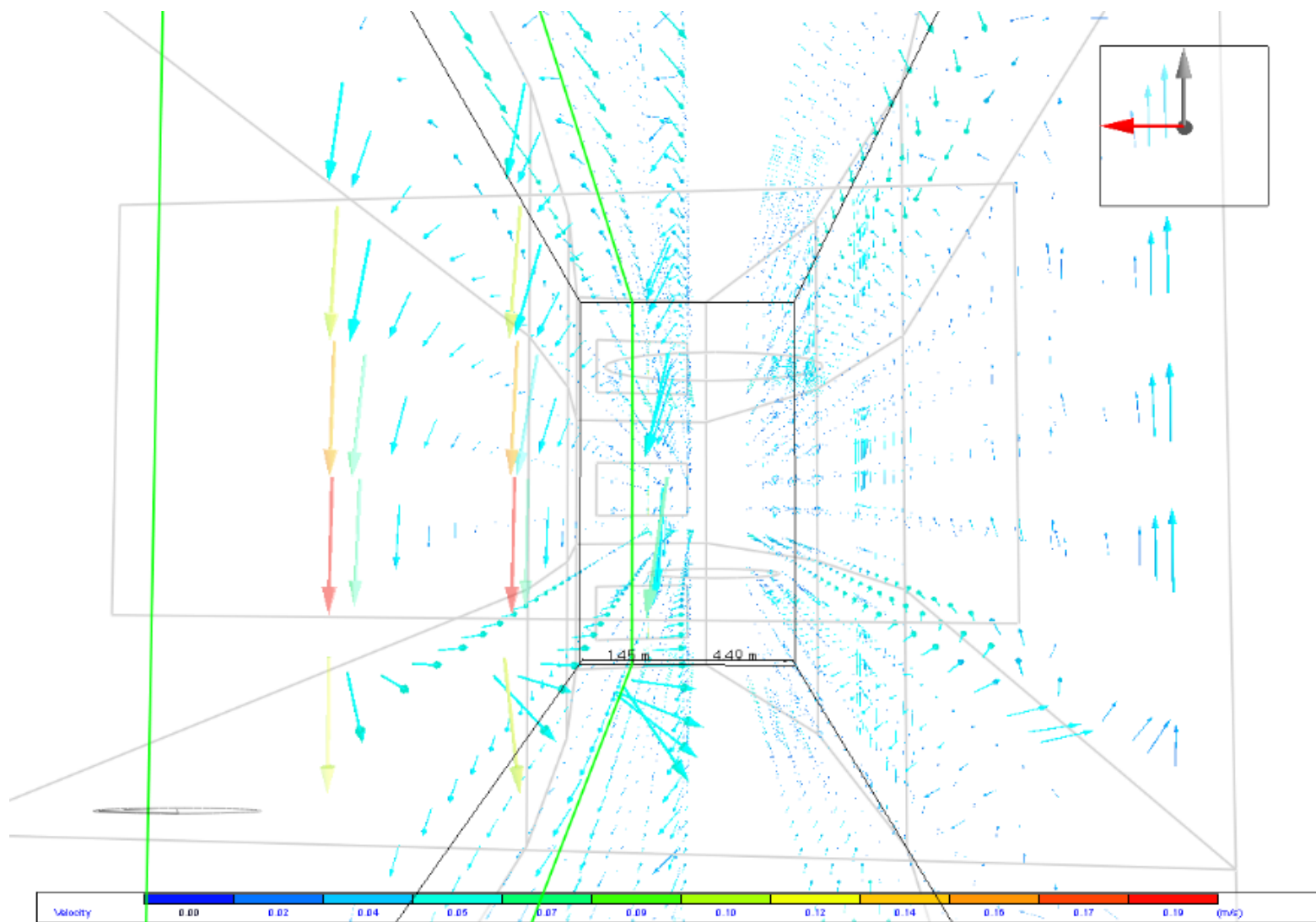
1. 出力結果
1.1 CFD解析結果



CFD解析画面

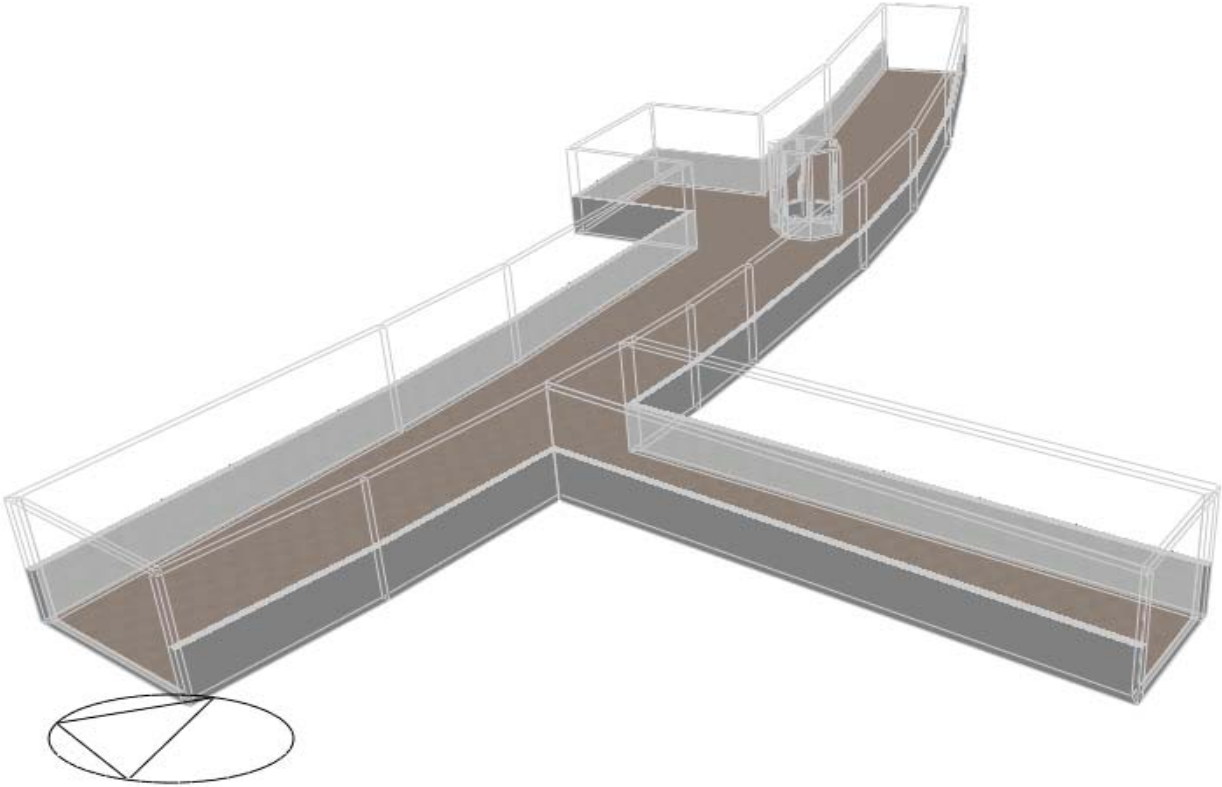


CFD解析画面

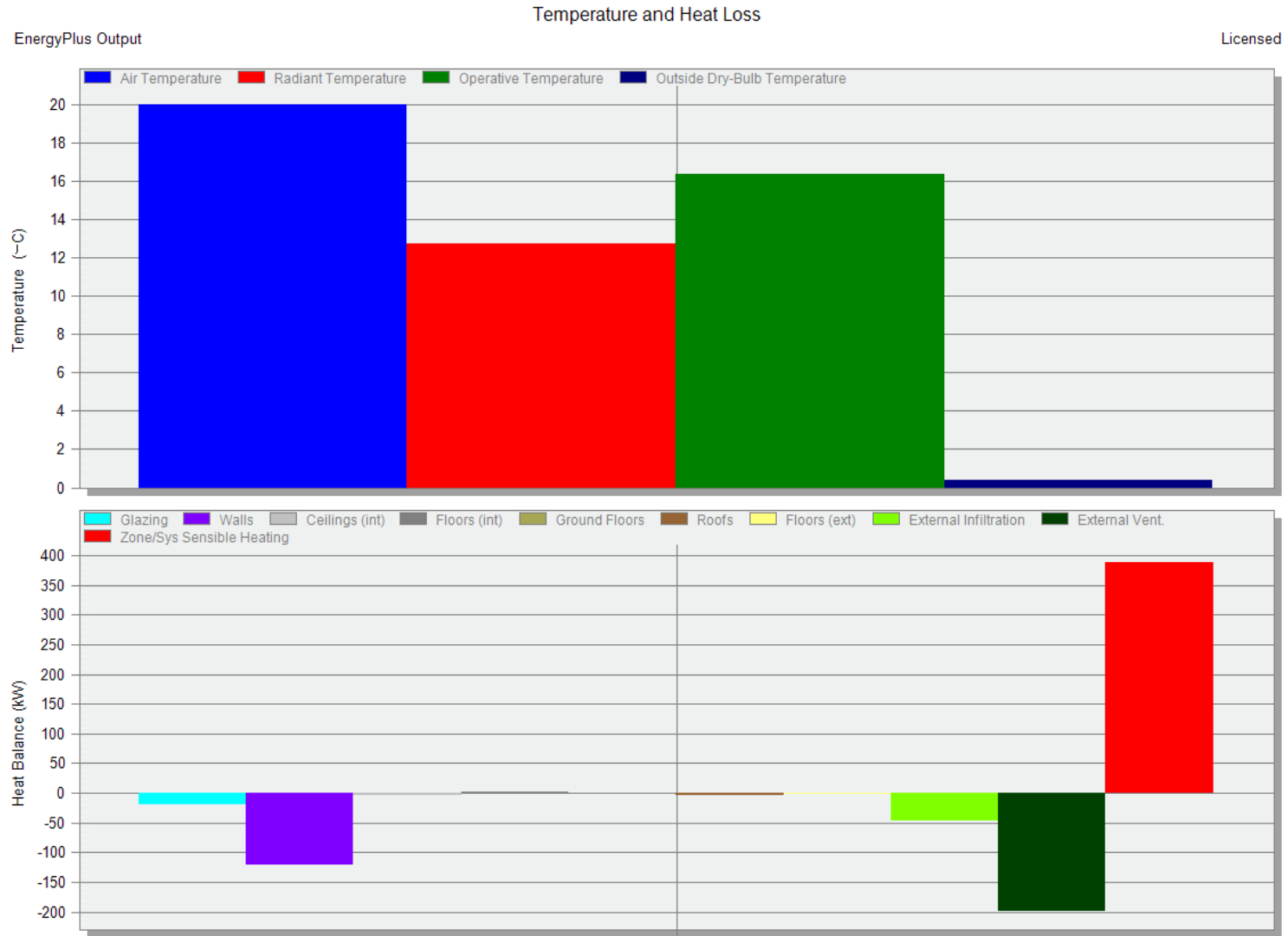


CFD解析画面

1.2 ビジュアル化画面



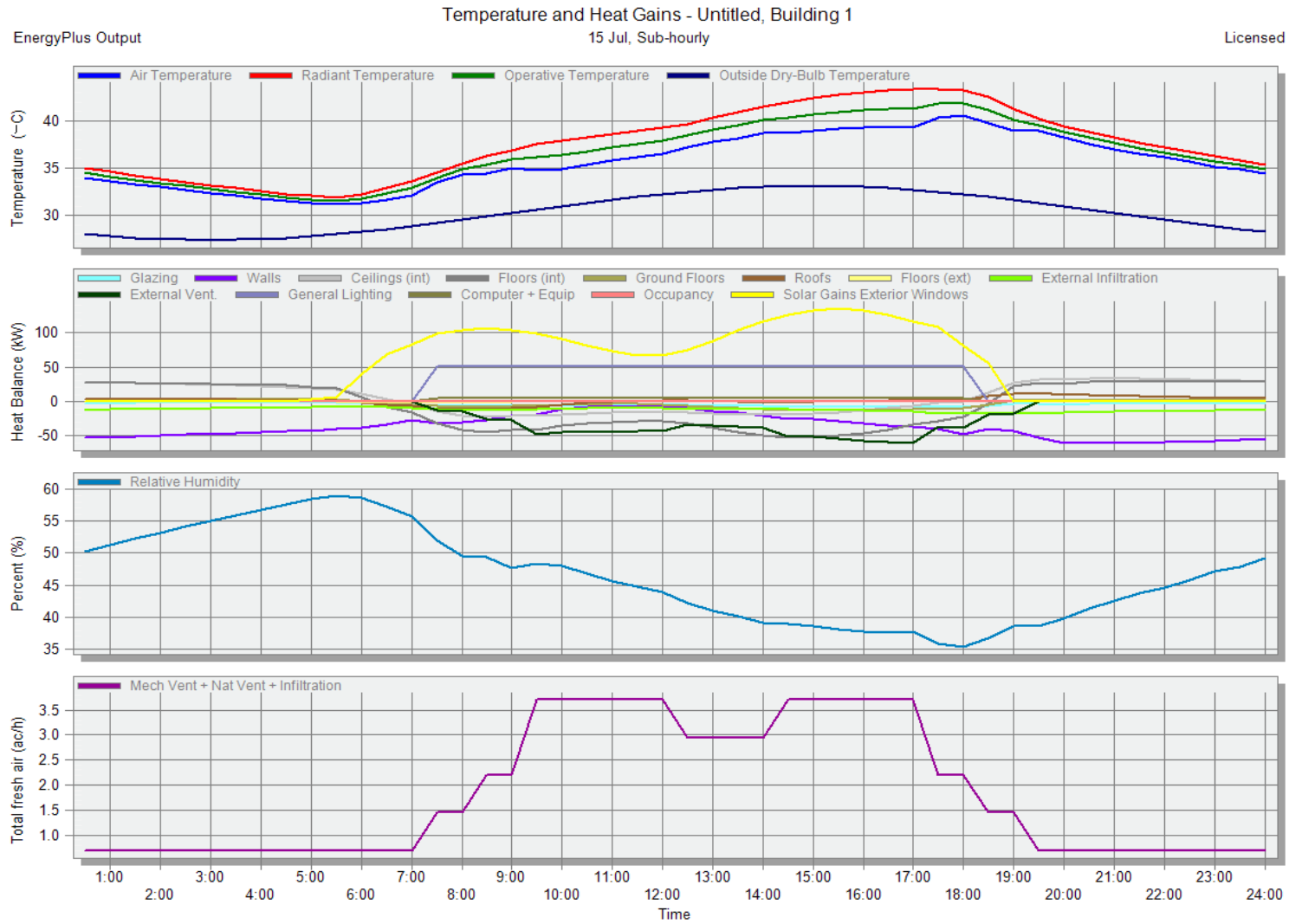
1.3 暖房設計
1.3.1 熱損失分析結果



1.3.2 要約表

Zone	Comfort Temperature (°C)	Steady-State Heat Loss (kW)	Design Capacity(kW)
- Building 1 Total design heat loss = 699.710 (kW)			
- Block 1 Total design heat loss = 198.760 (kW)			
Zone 1	16.25	110.42	198.76
- Block 2 Total design heat loss = 180.000 (kW)			
Zone 1	16.38	100.00	180.00
- Block 3 Total design heat loss = 133.520 (kW)			
Zone 1	16.45	74.18	133.52
- Block 4 Total design heat loss = 187.430 (kW)			
Zone 1	16.39	104.13	187.43

1.4 冷房設計
1.4.1 詳細結果



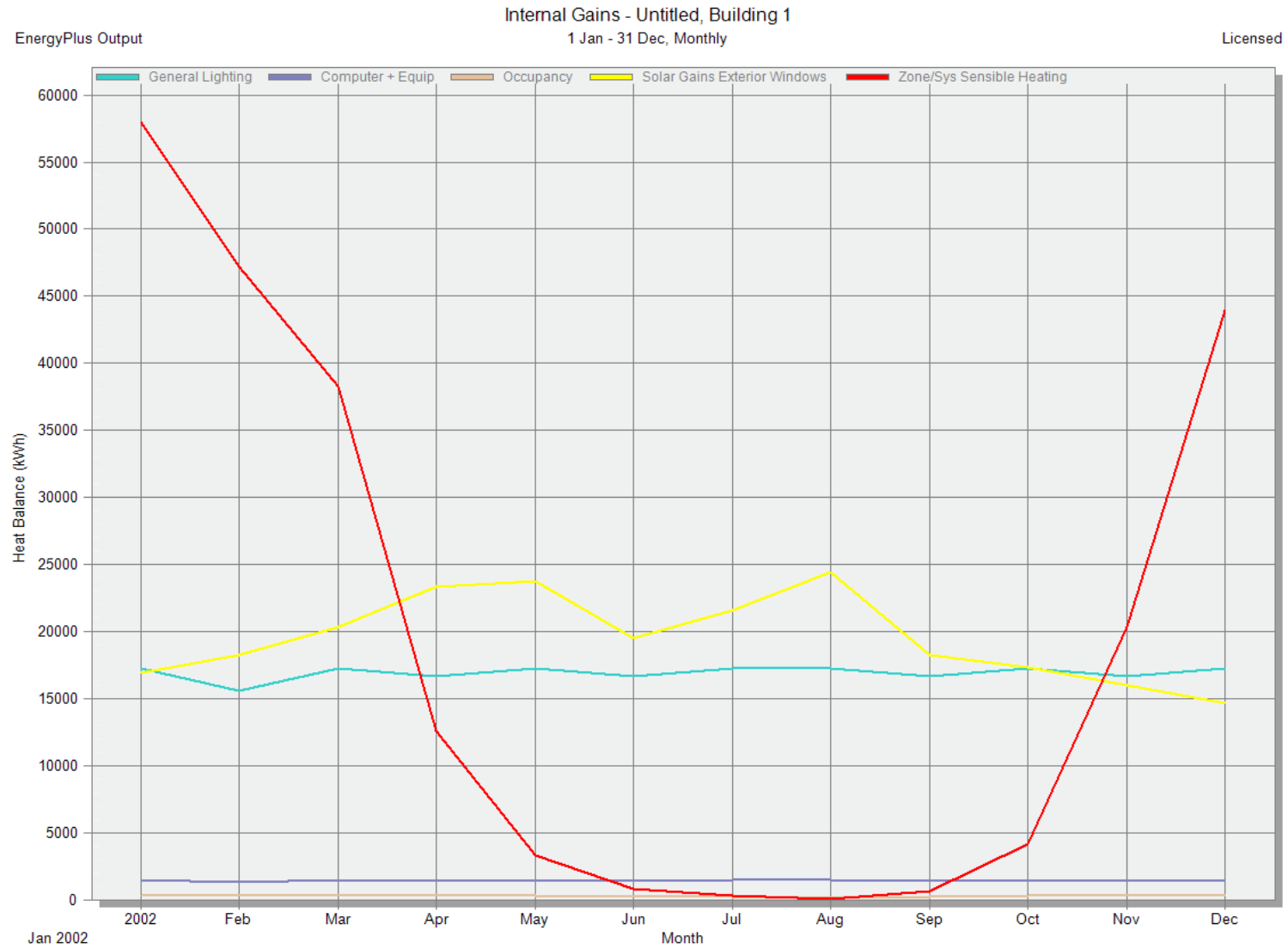
1.4.2 要約表

Building	Block	Zone	Design Capacity (kW)	Design Flow Rate (m ³ /s)	Total Cooling Load (kW)	Sensible (kW)	Latent (kW)	Air Temperature (°C)	Humidity (%)	Time of Max Cooling	Max Op Temp in Day (°C)	Floor Area (m ²)	Volume (m ³)	Flow/Floor Area (l/s-m ²)
Building 1	Block 1	Zone 1	0	0	0	0	0	-	-	-	31.9	478.7	2872.4	0
Building 1	Block 2	Zone 1	0	0	0	0	0	-	-	-	39.2	545.6	2455	0
Building 1	Block 3	Zone 1	0	0	0	0	0	-	-	-	41.3	396.9	1627.3	0
Building 1	Block 4	Zone 1	0	0	0	0	0	-	-	-	43.4	598.6	2454.4	0

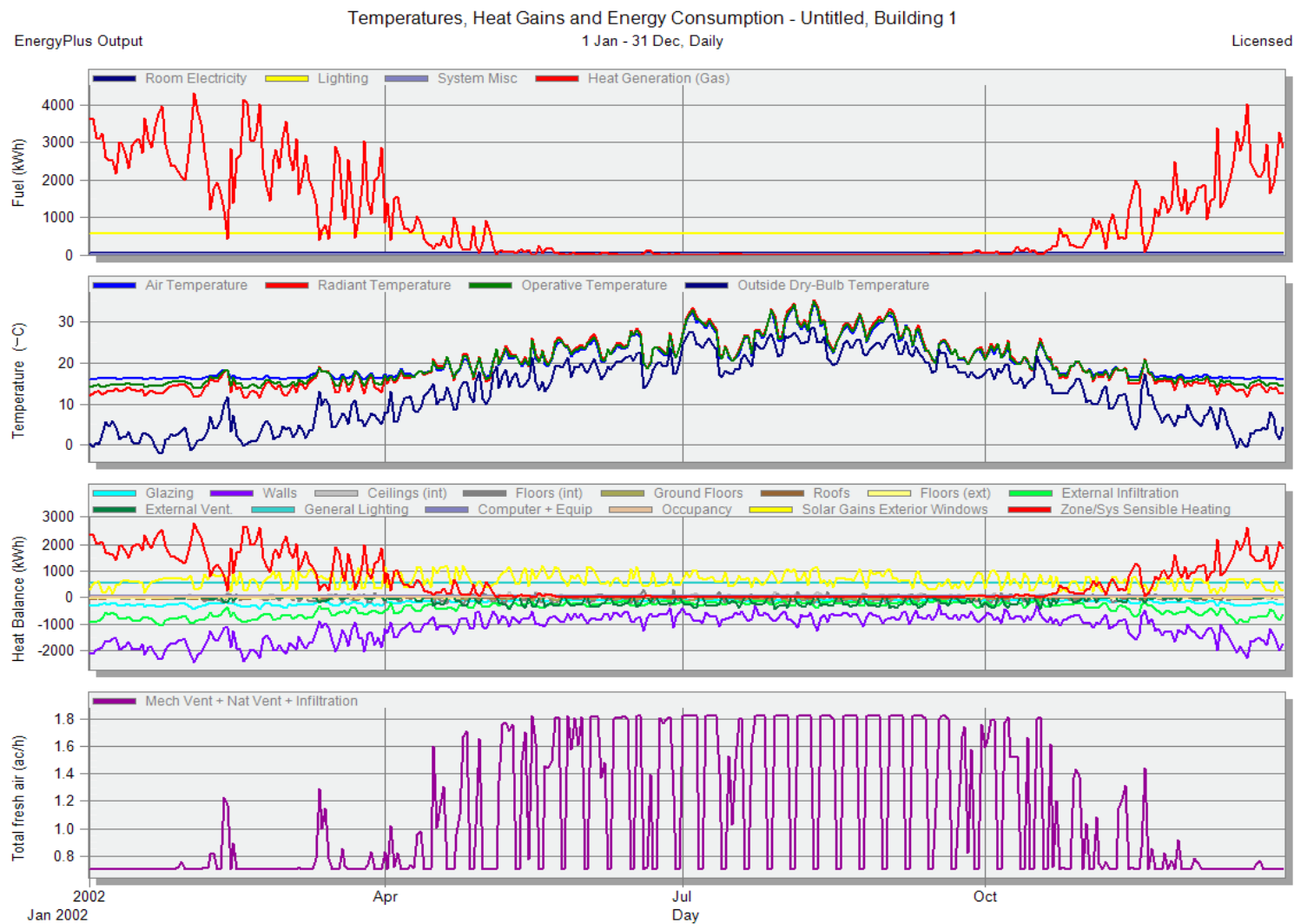
1.5 シミュレーション

1.5.1 詳細結果

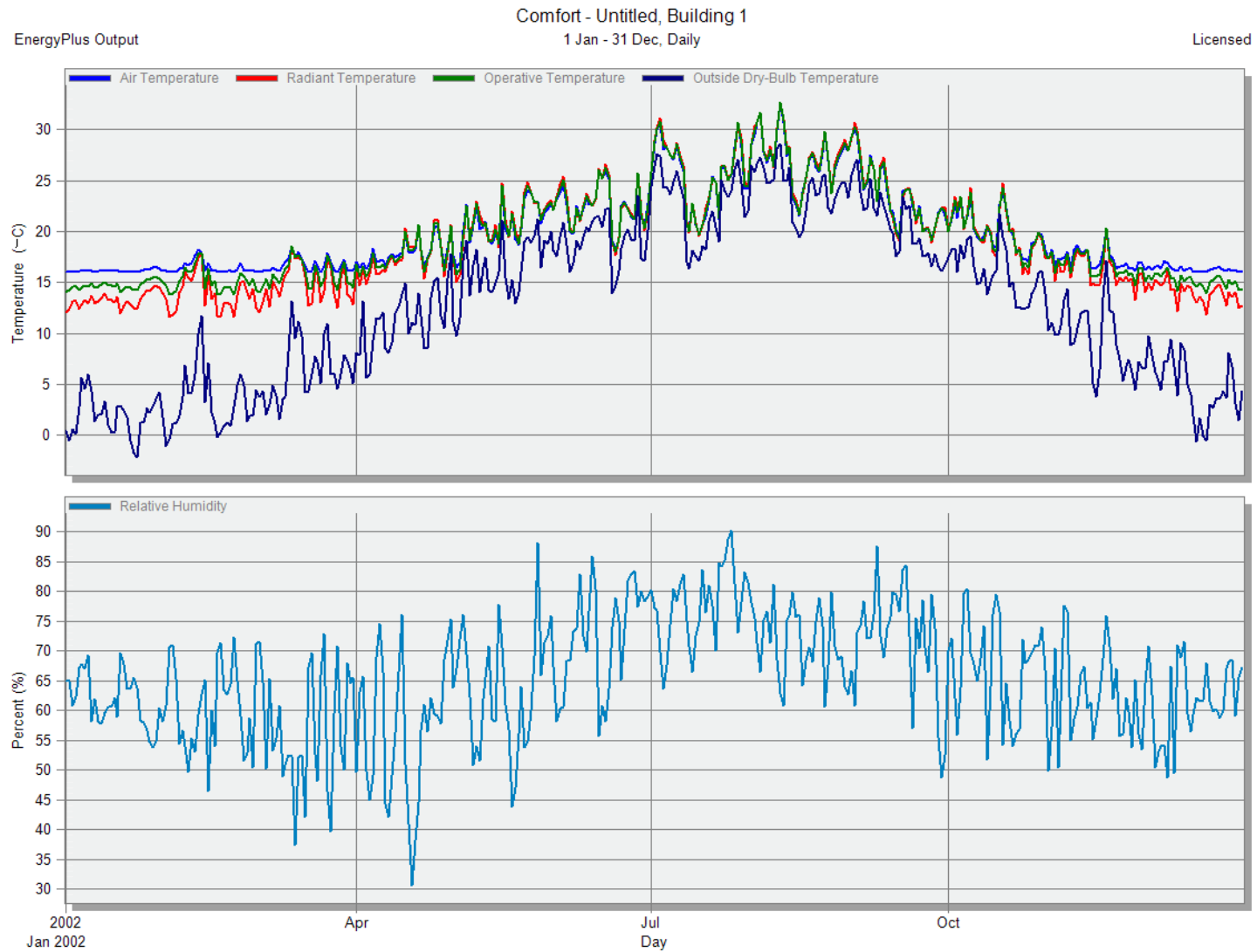
(1) 建物素材と換気口を通じた熱吸収/損失、内部熱吸収、気温と外気乾球気温（年間推移）



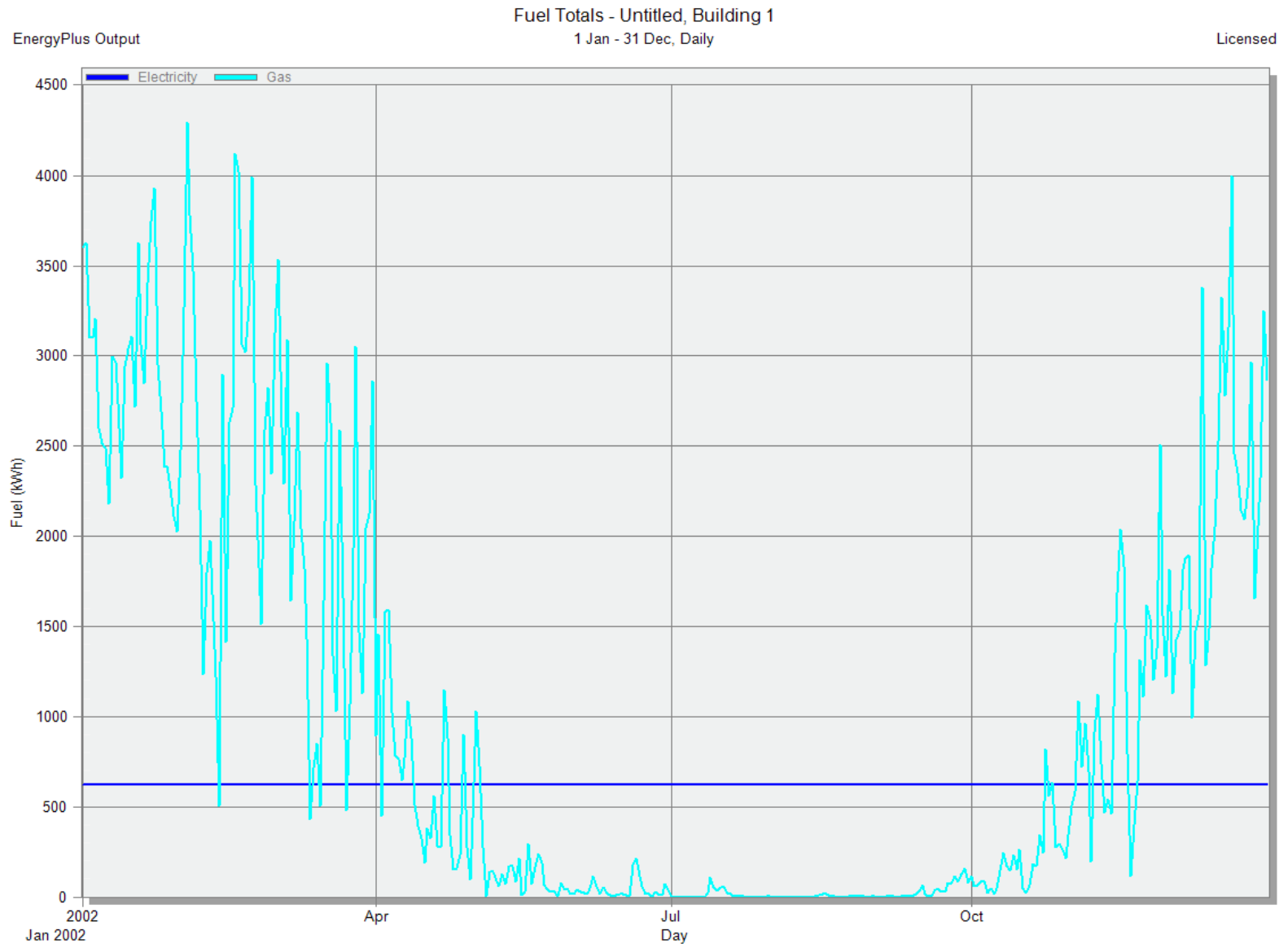
(2) 建物素材と換気口を通じた熱吸収/損失、内部熱吸収、気温と外気乾球気温(年間推移)



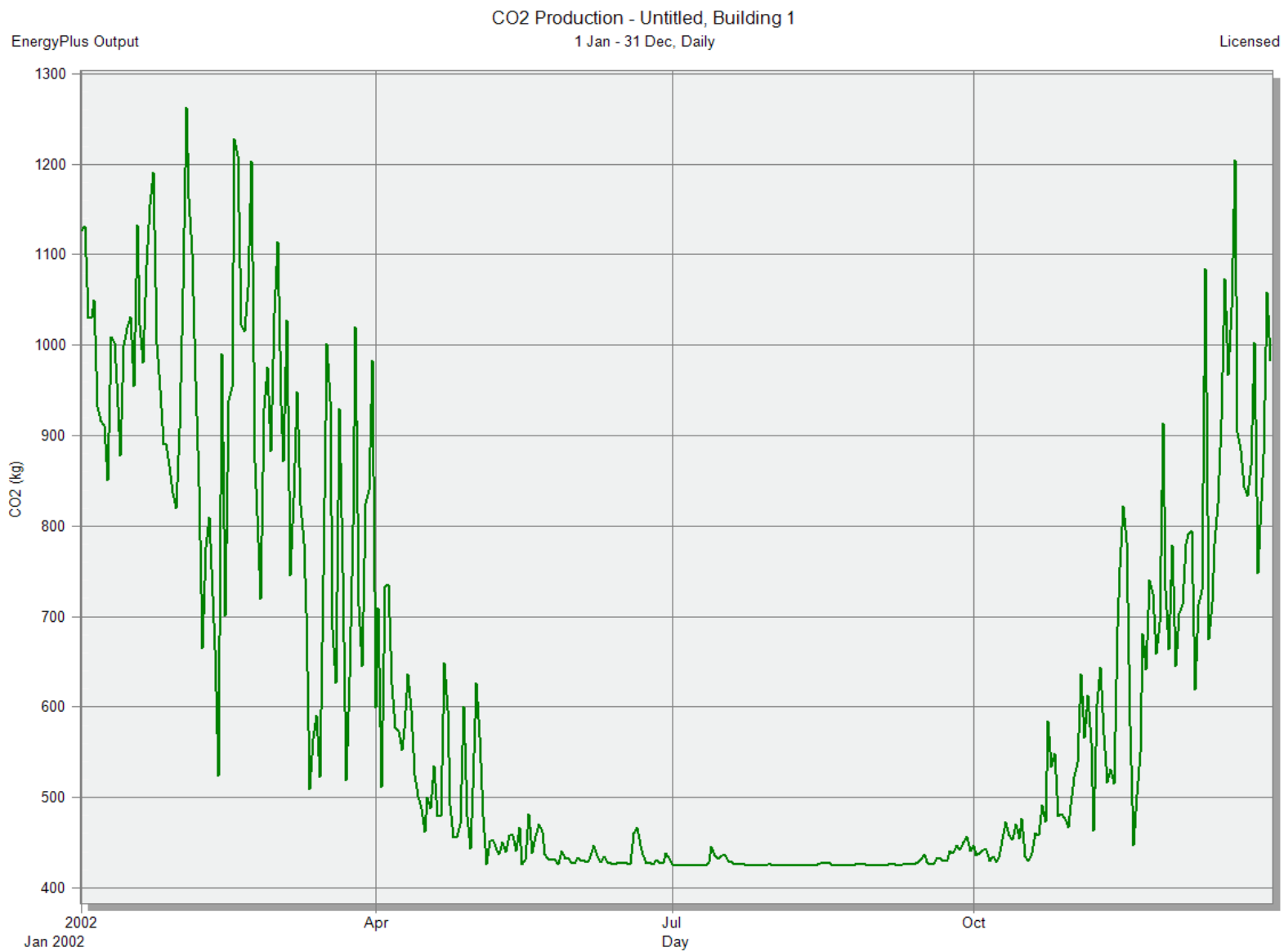
1.5.2 快適解析結果



1.5.3 エネルギー消費量



1.5.4 CO2排出量



1.6 ゾーン別データ

ゾーン		Block 1 - Zone 1									
フロア面積 (m2)		478.729									
体積 (m3)		2872.375									
暖房計算	○										
暖房設定温度 (C)		20									
冷房計算	×										
冷房設定温度 (C)		99									
最大作用温度 (C)		0									
要素	隣接条件	面積 (m2)	フローパス	U値 (W/K-m2)	U値*面積 (W/K)	SROut (m2-K/W)	SRIn (m2-K/W)	方向 (deg E of N)	傾き (deg)	重素材	
隙間風	Outside	N/A	N/A	N/A	724.81	N/A	N/A	N/A	N/A	×	
地上階	Ground	478.729	Project internal floor	3.553	1701.0682	0.01	0.17	0	180	○	
天井	Block 2 - Zone 1	473.116	Project internal floor_Reversed	4.73	2237.7127	0.04	0.1	0	0	○	
壁	Outside	0.043	Uninsulated Semi-exposed wall Lightweight	2.547	0.1085	0.04	0.13	81.66	90	○	
壁	Outside	85.499	Uninsulated Semi-exposed wall Lightweight	2.547	217.7261	0.04	0.13	350.7	90	○	
壁	Outside	57.736	Uninsulated Semi-exposed wall Lightweight	2.547	147.0275	0.04	0.13	355.93	90	○	
壁	Outside	33.98	Uninsulated Semi-exposed wall Lightweight	2.547	86.5314	0.04	0.13	87.69	90	○	
壁	Outside	42.416	Uninsulated Semi-exposed wall Lightweight	2.547	108.0148	0.04	0.13	359.32	90	○	
壁	Outside	34.234	Uninsulated Semi-exposed wall Lightweight	2.547	87.1788	0.04	0.13	270	90	○	
壁	Outside	76.804	Uninsulated Semi-exposed wall Lightweight	2.547	195.5855	0.04	0.13	2.92	90	○	
壁	Outside	36.641	Uninsulated Semi-exposed wall Lightweight	2.547	93.3068	0.04	0.13	7.02	90	○	
壁	Outside	44.05	Uninsulated Semi-exposed wall Lightweight	2.547	112.1748	0.04	0.13	9.39	90	○	
壁	Outside	32.434	Uninsulated Semi-exposed wall Lightweight	2.547	82.5952	0.04	0.13	9.37	90	○	
壁	Outside	0.049	Uninsulated Semi-exposed wall Lightweight	2.547	0.1243	0.04	0.13	283.03	90	○	
壁	Outside	34.449	Uninsulated Semi-exposed wall Lightweight	2.547	87.7258	0.04	0.13	196.8	90	○	
壁	Outside	39.762	Uninsulated Semi-exposed wall Lightweight	2.547	101.256	0.04	0.13	193.14	90	○	
壁	Outside	43.764	Uninsulated Semi-exposed wall Lightweight	2.547	111.4465	0.04	0.13	189.73	90	○	
壁	Outside	23.841	Uninsulated Semi-exposed wall Lightweight	2.547	60.7121	0.04	0.13	183.95	90	○	
壁	Outside	60.501	Uninsulated Semi-exposed wall Lightweight	2.547	154.0682	0.04	0.13	181.95	90	○	
壁	Outside	44.418	Uninsulated Semi-exposed wall Lightweight	2.547	113.1112	0.04	0.13	176.29	90	○	
壁	Outside	60.533	Uninsulated Semi-exposed wall Lightweight	2.547	154.1492	0.04	0.13	169.83	90	○	
壁	Outside	86.852	Uninsulated Semi-exposed wall Lightweight	2.547	221.1731	0.04	0.13	164.6	90	○	

ゾーン Block 2 - Zone 1

フロア面積 (m2) 545.559
 体積 (m3) 2455.015
 暖房計算 ○
 暖房設定温度 (C) 20
 冷房計算 ×
 冷房設定温度 (C) 99
 最大作用温度 (C) 0

要素	隣接条件	面積 (m2)	フロー/バス	U値 (W/K-m2)	U値*面積 (W/K)	SROut (m2-K/W)	SRIn (m2-K/W)	方向 (deg E of N)	傾き (deg)	重素材
隙間風	Outside	N/A	N/A	N/A	619.494	N/A	N/A	N/A	N/A	×
床	Block 1 - Zone 1	473.116	Project internal floor	3.553	1681.1242	0.04	0.17	N/A	0	○
床	Outside	73.217	Project external floor	0.25	18.3239	0.04	0.17	N/A	0	180 ○
天井	Block 3 - Zone 1	401.714	Project internal floor_Reversed	4.73	1899.9982	0.04	0.1	N/A	0	○
Roof	Outside	72.744	Project flat roof	0.249	18.1349	0.04	0.1	N/A	180	○
壁	Outside	0.037	Uninsulated Semi-exposed wall Lightweight	2.547	0.0932	0.04	0.13	N/A	81.66	90 ○
壁	Outside	64.124	Uninsulated Semi-exposed wall Lightweight	2.547	163.2946	0.04	0.13	N/A	350.7	90 ○
壁	Outside	43.302	Uninsulated Semi-exposed wall Lightweight	2.547	110.2708	0.04	0.13	N/A	355.93	90 ○
壁	Outside	25.485	Uninsulated Semi-exposed wall Lightweight	2.547	64.8986	0.04	0.13	N/A	87.69	90 ○
壁	Outside	31.812	Uninsulated Semi-exposed wall Lightweight	2.547	81.011	0.04	0.13	N/A	359.32	90 ○
壁	Outside	25.676	Uninsulated Semi-exposed wall Lightweight	2.547	65.3842	0.04	0.13	N/A	270	90 ○
壁	Outside	57.603	Uninsulated Semi-exposed wall Lightweight	2.547	146.6891	0.04	0.13	N/A	2.92	90 ○
壁	Outside	27.48	Uninsulated Semi-exposed wall Lightweight	2.547	69.9797	0.04	0.13	N/A	7.02	90 ○
壁	Outside	57.363	Uninsulated Semi-exposed wall Lightweight	2.547	146.0779	0.04	0.13	N/A	9.38	90 ○
壁	Outside	0.043	Uninsulated Semi-exposed wall Lightweight	2.547	0.109	0.04	0.13	N/A	283.03	90 ○
壁	Outside	25.837	Uninsulated Semi-exposed wall Lightweight	2.547	65.7942	0.04	0.13	N/A	196.8	90 ○
壁	Outside	31.128	Uninsulated Semi-exposed wall Lightweight	2.547	79.2697	0.04	0.13	N/A	193.14	90 ○
壁	Outside	88.449	Uninsulated Semi-exposed wall Lightweight	2.547	225.2379	0.04	0.13	N/A	280.88	90 ○
壁	Outside	0.034	Uninsulated Semi-exposed wall Lightweight	2.547	0.0873	0.04	0.13	N/A	190.89	90 ○
壁	Outside	88.262	Uninsulated Semi-exposed wall Lightweight	2.547	224.7625	0.04	0.13	N/A	98.64	90 ○
壁	Outside	16.571	Uninsulated Semi-exposed wall Lightweight	2.547	42.1992	0.04	0.13	N/A	187.54	90 ○
壁	Outside	17.906	Uninsulated Semi-exposed wall Lightweight	2.547	45.5981	0.04	0.13	N/A	183.95	90 ○
壁	Outside	45.376	Uninsulated Semi-exposed wall Lightweight	2.547	115.551	0.04	0.13	N/A	181.95	90 ○
壁	Outside	33.313	Uninsulated Semi-exposed wall Lightweight	2.547	84.8334	0.04	0.13	N/A	176.29	90 ○
壁	Outside	45.4	Uninsulated Semi-exposed wall Lightweight	2.547	115.6119	0.04	0.13	N/A	169.83	90 ○
壁	Outside	65.139	Uninsulated Semi-exposed wall Lightweight	2.547	165.8798	0.04	0.13	N/A	164.6	90 ○
壁	Outside	2.937	Uninsulated Semi-exposed wall Lightweight	2.547	7.4794	0.04	0.13	N/A	135.97	90 ○
壁	Outside	2.412	Uninsulated Semi-exposed wall Lightweight	2.547	6.1412	0.04	0.13	N/A	88.49	90 ○
壁	Outside	2.916	Uninsulated Semi-exposed wall Lightweight	2.547	7.4257	0.04	0.13	N/A	38.45	90 ○
壁	Outside	2.983	Uninsulated Semi-exposed wall Lightweight	2.547	7.5958	0.04	0.13	N/A	329.04	90 ○
壁	Outside	3.048	Uninsulated Semi-exposed wall Lightweight	2.547	7.7619	0.04	0.13	N/A	268.83	90 ○
壁	Outside	3.205	Uninsulated Semi-exposed wall Lightweight	2.547	8.1622	0.04	0.13	N/A	211.61	90 ○

ゾーン Block 3 - Zone 1

フロア面積 (m2) 396.912
 体積 (m3) 1627.341
 暖房計算 ○
 暖房設定温度 (C) 20
 冷房計算 ×
 冷房設定温度 (C) 99
 最大作用温度 (C) 0

要素	隣接条件	面積 (m2)	フローパース	U値 (W/K-m2)	U値*面積 (W/K)	SROut (m2-K/W)	SRIn (m2-K/W)	方向 (deg E of N)	傾き (deg)	重素材
隙間風	Outside	N/A	N/A	N/A	410.641	N/A	N/A	N/A	N/A	×
床	Block 2 - Zone 1	401.714	Project internal floor	3.553	1427.4098	0.04	0.17	0	0	○
天井	Block 4 - Zone 1	401.708	Project internal floor_Reversed	4.73	1899.9707	0.04	0.1	0	0	○
壁	Outside	0.035	Uninsulated Semi-exposed wall Lightweight	2.547	0.0891	0.04	0.13	81.66	90	○
壁	Outside	58.424	Uninsulated Semi-exposed wall Lightweight	2.547	148.7796	0.04	0.13	350.7	90	○
壁	Outside	39.453	Uninsulated Semi-exposed wall Lightweight	2.547	100.4689	0.04	0.13	355.93	90	○
壁	Outside	23.22	Uninsulated Semi-exposed wall Lightweight	2.547	59.1299	0.04	0.13	87.69	90	○
壁	Outside	28.985	Uninsulated Semi-exposed wall Lightweight	2.547	73.8102	0.04	0.13	359.32	90	○
壁	Outside	23.393	Uninsulated Semi-exposed wall Lightweight	2.547	59.5722	0.04	0.13	270	90	○
壁	Outside	52.483	Uninsulated Semi-exposed wall Lightweight	2.547	133.6501	0.04	0.13	2.92	90	○
壁	Outside	25.038	Uninsulated Semi-exposed wall Lightweight	2.547	63.7593	0.04	0.13	7.02	90	○
壁	Outside	52.264	Uninsulated Semi-exposed wall Lightweight	2.547	133.0934	0.04	0.13	9.38	90	○
壁	Outside	0.041	Uninsulated Semi-exposed wall Lightweight	2.547	0.1049	0.04	0.13	283.03	90	○
壁	Outside	23.54	Uninsulated Semi-exposed wall Lightweight	2.547	59.9458	0.04	0.13	196.8	90	○
壁	Outside	27.191	Uninsulated Semi-exposed wall Lightweight	2.547	69.2422	0.04	0.13	193.14	90	○
壁	Outside	16.005	Uninsulated Semi-exposed wall Lightweight	2.547	40.7564	0.04	0.13	191.63	90	○
壁	Outside	13.877	Uninsulated Semi-exposed wall Lightweight	2.547	35.3381	0.04	0.13	187.54	90	○
壁	Outside	16.314	Uninsulated Semi-exposed wall Lightweight	2.547	41.545	0.04	0.13	183.95	90	○
壁	Outside	41.342	Uninsulated Semi-exposed wall Lightweight	2.547	105.2798	0.04	0.13	181.95	90	○
壁	Outside	30.352	Uninsulated Semi-exposed wall Lightweight	2.547	77.2928	0.04	0.13	176.29	90	○
壁	Outside	41.364	Uninsulated Semi-exposed wall Lightweight	2.547	105.3353	0.04	0.13	169.83	90	○
壁	Outside	59.349	Uninsulated Semi-exposed wall Lightweight	2.547	151.1349	0.04	0.13	164.6	90	○
壁	Outside	4.276	Uninsulated Semi-exposed wall Lightweight	2.547	10.8893	0.04	0.13	164.56	90	○
壁	Outside	3.743	Uninsulated Semi-exposed wall Lightweight	2.547	9.5309	0.04	0.13	133.64	90	○
壁	Outside	3.784	Uninsulated Semi-exposed wall Lightweight	2.547	9.6353	0.04	0.13	39.81	90	○
壁	Outside	3.946	Uninsulated Semi-exposed wall Lightweight	2.547	10.0489	0.04	0.13	15	90	○
壁	Outside	4.843	Uninsulated Semi-exposed wall Lightweight	2.547	12.3316	0.04	0.13	5.8	90	○
壁	Outside	5.29	Uninsulated Semi-exposed wall Lightweight	2.547	13.472	0.04	0.13	351.01	90	○
壁	Outside	3.838	Uninsulated Semi-exposed wall Lightweight	2.547	9.7744	0.04	0.13	340.07	90	○
壁	Outside	4.53	Uninsulated Semi-exposed wall Lightweight	2.547	11.5346	0.04	0.13	315	90	○
壁	Outside	4.277	Uninsulated Semi-exposed wall Lightweight	2.547	10.8913	0.04	0.13	213.02	90	○
壁	Outside	4.346	Uninsulated Semi-exposed wall Lightweight	2.547	11.0675	0.04	0.13	190.81	90	○
壁	Outside	4.036	Uninsulated Semi-exposed wall Lightweight	2.547	10.2773	0.04	0.13	180	90	○
壁	Outside	4.638	Uninsulated Semi-exposed wall Lightweight	2.547	11.8101	0.04	0.13	171.29	90	○

ゾーン Block 4 - Zone 1

フロア面積 (m2) 598.635
 体積 (m3) 2454.405
 暖房計算 ○
 暖房設定温度 (C) 20
 冷房計算 ×
 冷房設定温度 (C) 99
 最大作用温度 (C) 0

要素	隣接条件	面積 (m2)	フローパズ	U値 (W/K-m2)	U値*面積 (W/K)	SROut (m2-K/W)	SRIn (m2-K/W)	方向 (deg E of N)	傾き (deg)	重素材
隙間風	Outside	N/A	N/A	N/A	619.34	N/A	N/A	N/A	N/A	×
床	Block 3 - Zone 1	401.708	Project internal floor	3.553	1427.3892	0.04	0.17	0	0	○
床	Outside	134.867	Project external floor	0.25	33.7528	0.04	0.17	0	180	○
Roof	Outside	604.205	Project flat roof	0.249	150.6263	0.04	0.1	180	0	○
壁	Outside	0.035	Uninsulated Semi-exposed wall Lightweight	2.547	0.0891	0.04	0.13	81.66	90	○
壁	Outside	58.424	Uninsulated Semi-exposed wall Lightweight	2.547	148.7796	0.04	0.13	350.7	90	○
壁	Outside	39.453	Uninsulated Semi-exposed wall Lightweight	2.547	100.4689	0.04	0.13	355.93	90	○
壁	Outside	23.22	Uninsulated Semi-exposed wall Lightweight	2.547	59.1299	0.04	0.13	87.69	90	○
壁	Outside	28.985	Uninsulated Semi-exposed wall Lightweight	2.547	73.8102	0.04	0.13	359.32	90	○
壁	Outside	23.393	Uninsulated Semi-exposed wall Lightweight	2.547	59.5722	0.04	0.13	270	90	○
壁	Outside	53.861	Uninsulated Semi-exposed wall Lightweight	2.547	137.1595	0.04	0.13	2.92	90	○
壁	Outside	5.185	Uninsulated Semi-exposed wall Lightweight	2.547	13.2046	0.04	0.13	102.5	90	○
壁	Outside	14.083	Uninsulated Semi-exposed wall Lightweight	2.547	35.8629	0.04	0.13	7.85	90	○
壁	Outside	46.451	Uninsulated Semi-exposed wall Lightweight	2.547	118.2904	0.04	0.13	98.97	90	○
壁	Outside	0.026	Uninsulated Semi-exposed wall Lightweight	2.547	0.0657	0.04	0.13	4.57	90	○
壁	Outside	51.335	Uninsulated Semi-exposed wall Lightweight	2.547	130.7274	0.04	0.13	277.87	90	○
壁	Outside	53.473	Uninsulated Semi-exposed wall Lightweight	2.547	136.1711	0.04	0.13	9.38	90	○
壁	Outside	0.041	Uninsulated Semi-exposed wall Lightweight	2.547	0.1049	0.04	0.13	283.03	90	○
壁	Outside	23.54	Uninsulated Semi-exposed wall Lightweight	2.547	59.9458	0.04	0.13	196.8	90	○
壁	Outside	28.369	Uninsulated Semi-exposed wall Lightweight	2.547	72.2428	0.04	0.13	193.14	90	○
壁	Outside	80.436	Uninsulated Semi-exposed wall Lightweight	2.547	204.8337	0.04	0.13	281.25	90	○
壁	Outside	0.033	Uninsulated Semi-exposed wall Lightweight	2.547	0.0845	0.04	0.13	190.62	90	○
壁	Outside	40.601	Uninsulated Semi-exposed wall Lightweight	2.547	103.3911	0.04	0.13	98.41	90	○
壁	Outside	11.766	Uninsulated Semi-exposed wall Lightweight	2.547	29.9626	0.04	0.13	145.95	90	○
壁	Outside	6.312	Uninsulated Semi-exposed wall Lightweight	2.547	16.0748	0.04	0.13	185.91	90	○
壁	Outside	31.508	Uninsulated Semi-exposed wall Lightweight	2.547	80.2369	0.04	0.13	97.14	90	○
壁	Outside	17.488	Uninsulated Semi-exposed wall Lightweight	2.547	44.5344	0.04	0.13	183.95	90	○
壁	Outside	41.342	Uninsulated Semi-exposed wall Lightweight	2.547	105.2798	0.04	0.13	181.95	90	○
壁	Outside	30.352	Uninsulated Semi-exposed wall Lightweight	2.547	77.2928	0.04	0.13	176.29	90	○
壁	Outside	41.364	Uninsulated Semi-exposed wall Lightweight	2.547	105.3353	0.04	0.13	169.83	90	○
壁	Outside	59.349	Uninsulated Semi-exposed wall Lightweight	2.547	151.1349	0.04	0.13	164.6	90	○
壁	Outside	1.841	Uninsulated Semi-exposed wall Lightweight	2.547	4.6892	0.04	0.13	153.05	90	○
壁	Outside	2.028	Uninsulated Semi-exposed wall Lightweight	2.547	5.1651	0.04	0.13	117.87	90	○
壁	Outside	1.847	Uninsulated Semi-exposed wall Lightweight	2.547	4.703	0.04	0.13	92.89	90	○
壁	Outside	2.047	Uninsulated Semi-exposed wall Lightweight	2.547	5.2115	0.04	0.13	74.97	90	○
壁	Outside	1.873	Uninsulated Semi-exposed wall Lightweight	2.547	4.7687	0.04	0.13	47.91	90	○
壁	Outside	1.355	Uninsulated Semi-exposed wall Lightweight	2.547	3.4493	0.04	0.13	10.3	90	○
壁	Outside	1.591	Uninsulated Semi-exposed wall Lightweight	2.547	4.0503	0.04	0.13	341.26	90	○
壁	Outside	1.556	Uninsulated Semi-exposed wall Lightweight	2.547	3.9632	0.04	0.13	300.65	90	○
壁	Outside	2.054	Uninsulated Semi-exposed wall Lightweight	2.547	5.2303	0.04	0.13	279.3	90	○
壁	Outside	2.137	Uninsulated Semi-exposed wall Lightweight	2.547	5.443	0.04	0.13	262.28	90	○
壁	Outside	1.727	Uninsulated Semi-exposed wall Lightweight	2.547	4.3976	0.04	0.13	235.26	90	○
壁	Outside	1.911	Uninsulated Semi-exposed wall Lightweight	2.547	4.8664	0.04	0.13	200.46	90	○

2 建物概要

建物種別	地下鉄駅
建築面積	27725m ²
延床面積	27725m ²
構造規模	RC造、地下6階
所在地	東京、日本

3 シミュレーション基本情報

キーワード	キー	U値 (incl bridging) (W/m2K)	CM (KJ/K)
構造	Project flat roof	0.249	32.614
構造	Project external floor	0.25	6.294
構造	Uninsulated Semi-exposed wall Lightweight	2.547	11.7
構造	Project internal floor_Reversed	4.73	176.4
構造	Project internal floor	3.553	176.4

キーワード	名称	レイヤ	U値 (W/m2K)	Trans Light (VT)	太陽透過合計 (SHGC)	直達日射合計	Frame Mult
サッシ	Project external glazing	2	1.978	0.744	0.687	0.624	0.95

建物 データ	数値
建物 使用フロア面積 (m2)	27725
建物 体積 (m3)	9409.14
建物 外部面積 (m2)	4466.22
建物 外部表面積/体積 (m-1)	0.475

4. 納品物品

- ・ 本報告書
- ・ DesignBuilderデータ

shibuyachika.dsb



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