

§ 6		TAB. 10: Thermal performance / Prestazioni termiche			
Test start [YYYY/MM/DD] Data inizio prova [AAAA/MM/GG]	2011/03/29	Test end [YYYY/MM/DD] Data fine prova [AAAA/MM/GG]	2011/07/30		
Test method / Metodo di prova	6.2 Outdoor – Steady state <input checked="" type="checkbox"/>	6.2 Indoor – Steady state method <input type="checkbox"/>	6.3 Outdoor – quasi-dynamic <input type="checkbox"/>		
Latitude / Latitudine:	44° 52' N	Longitude / Longitudine:	08° 48' E		
Collector tilt / Inclinazione del collettore [°]	0	Collector azimuth / Orientamento azimutale del collettore	N/A		
Orientation of absorber tubes during testing / Orientamento dei tubi del collettore durante la prova				SPIRAL	
Flow rate used for performance testing (average) / Flusso utilizzato per il test (valore medio) [kg·s ⁻¹ ·m ²]:				0.040	

Test results / Risultati di prova

	Condizioni ambientali misurate				Grandezze collettore misurate			Grandezze derivate							
	T _{amb} (T _a) [°C]	Wind speed [m/s]	Global irradiance G [W/m ²]	Net Irradiance G ⁿ [W/m ²]	T _{in} [°C]	T _{out} [°C]	Flow-Rate [l/min]	DeltaT [K]	Mean fluid temp. T _m [°C]	C _f	T _m -T _a [K]	Reduced temp. difference	Actual useful power [W]	Istantaneous efficiency (APERTURE)	Istantaneous efficiency (ABSORBER)
1	28.0	0.84	966.0	765.2	26.10	29.53	9.15	3.43	27.82	4.1790	- 0.18	-0.00024	2186.99	0.75	0.75
2	28.0	0.61	959.0	759.2	26.00	29.43	9.15	3.43	27.72	4.1790	- 0.28	-0.00037	2188.41	0.76	0.76
3	28.3	0.88	968.0	775.6	31.60	34.39	9.16	2.79	32.99	4.1786	4.69	0.00605	1779.74	0.60	0.60
4	28.3	0.48	963.5	761.4	31.60	34.38	9.13	2.78	32.99	4.1786	4.69	0.00616	1767.18	0.61	0.61
5	28.7	0.75	964.0	753.0	38.40	40.50	9.14	2.10	39.45	4.1792	10.75	0.01428	1339.13	0.47	0.47
6	28.7	0.78	941.0	751.6	38.40	40.52	9.13	2.12	39.46	4.1792	10.76	0.01431	1346.33	0.47	0.47
7	26.0	1.52	943.6	764.3	25.30	28.54	9.16	3.24	26.92	4.1792	0.92	0.00120	2066.82	0.71	0.71
8	26.1	1.57	928.8	743.3	25.40	28.62	9.15	3.22	27.01	4.1792	0.91	0.00122	2050.27	0.72	0.72
9	26.4	1.63	937.0	752.4	30.40	33.16	9.13	2.76	31.78	4.1786	5.38	0.00715	1755.68	0.61	0.61
10	26.5	1.44	945.0	744.7	30.40	33.15	9.14	2.75	31.78	4.1786	5.28	0.00708	1751.62	0.62	0.62
11	26.1	1.47	941.8	762.3	36.40	38.47	9.14	2.07	37.43	4.1789	11.33	0.01487	1314.61	0.45	0.45
12	25.9	1.45	919.8	747.3	36.40	38.46	9.15	2.06	37.43	4.1789	11.53	0.01543	1310.30	0.46	0.46
13	27.8	2.82	898.9	736.7	26.10	29.29	9.16	3.19	27.70	4.1790	0.10	-0.00014	2036.04	0.73	0.73
14	27.7	2.83	896.0	719.8	26.00	29.20	9.15	3.20	27.60	4.1790	0.10	-0.00014	2036.16	0.74	0.74
15	27.6	3.08	880.1	714.1	31.80	34.55	9.16	2.75	33.17	4.1786	5.57	0.00781	1752.37	0.64	0.64
16	27.6	2.64	879.3	689.5	31.80	34.51	9.15	2.71	33.16	4.1786	5.56	0.00806	1727.85	0.66	0.66
17	27.9	2.62	868.6	673.0	38.00	40.04	9.15	2.04	39.02	4.1791	11.12	0.01652	1298.36	0.51	0.51
18	27.8	2.39	879.4	709.7	38.00	40.03	9.13	2.03	39.02	4.1791	11.22	0.01580	1292.85	0.48	0.48

Peak power for G ⁿ = 1000 W/m ² and u = 0 m/s / Potenza di picco per G ⁿ = 1000 W/m ² e u = 0 m/s [W]	2812
---	------

POWER OUTPUT per collector unit / Potenza resa per unità di collettore

T _m – T _a = 2 K	Net irradiance G ⁿ		
	G ⁿ = 400 W / m ²	G ⁿ = 700 W / m ²	G ⁿ = 1000 W / m ²
u = 0.0 m/s	1090	1948	2812
u = 1.0 m/s	1054	1902	2759
u = 1.5 m/s	1035	1879	2732
u = 2.0 m/s	1017	1856	2705
u = 2.5 m/s	998	1833	2679
u = 3.0 m/s	980	1809	2652
u = 3.5 m/s	962	1786	2626

Remarks / Osservazioni: