



Summary of EN 12975 Test Results, annex to Solar KEYMARK Certificate						Licence Number		011-7S1717 F							
						Issued		2017-03-03							
Company holding the		Blue Ocean Solar System				Country		China							
Brand (optional)						Website		www.bosolar.com							
Street, street number		8A, Xiixianying North Street Shunyi				E-mail		xiaobo@bosolar.com							
Postal Code / City, province		101300 Beijing				Tel/Fax		86 (029)68513737							
Collector Type (flat plate glazed/un-glazed; evacuate tubular)						Flat plate collector - glazed									
Thermal / photo voltaic hybrid collector? (PVT collector)						No									
Integration in the roof possible ? (manufacturers declaration)						No									
						Power output per collector moduie									
						G = 1000 W/m <sup>2</sup>									
Collector name						Tm-Ta									
						0 K	10 K	30 K	50 K	70 K					
						W	W	W	W	W					
BOSC1						2.12	1 837	1 227	85	2.25	1 577	1 497	1 321	1 125	909
Performance test method						Glazed liquid heating collector - steady state - outdoor									
Performance parameters related to aperture						η <sub>0</sub>	a <sub>1</sub>	a <sub>2</sub>							
Units						-	W/(m <sup>2</sup> K)	W/(m <sup>2</sup> K <sup>2</sup> )							
Test results - Flow rate and fluid see note 1						0.744	3.680	0.012							
Bi-directional incidence angle						Yes <i>Kθ values are obligatory for 50°.</i>									
Incidence angle modifiers Kθ(θT) transversal direction						Angle	10°	20°	30°	40°	50°	60°	70°	80°	90°
						Kθ(θT)	1.00	1.00	0.99	0.97	0.94	0.86	0.72	-	-
Incidence angle modifiers Kθ(θL) longitudinal direction						Angle	10°	20°	30°	40°	50°	60°	70°	80°	90°
						Kθ(θL)	1.00	1.00	0.99	0.97	0.94	0.86	0.72	-	-
Stagnation temperature - Weather conditions see note 2						Tstg		196		°C					
Effective thermal capacity						ceff = C/Ag		4.22		kJ/(m <sup>2</sup> K)					
Max. intende operation temperature - see note 3						Tmax,op		100		°C					
Max. operation pressure - see note 3						pmax,op		1000		kPa					
Pressure drop table - for a collector family, the values shall be for the module with highest ΔP per m <sup>2</sup> aperture area															
Flow rate		kg/(s m <sup>2</sup> )	-	-	-	-	-	-	-	-	-	-	-		
Pressure drop, ΔP		Pa	-	-	-	-	-	-	-	-	-	-	-		
Optional weather data		Location				Link									
Testing Laboratory		Fraunhofer ISE, TestLab Solar Thermal Systems													
Website		www.kollektortest.de													
Test report id. number		ktb-2010-29-k2				Date of test report		2011/06/16							
During the test GDIF/GTOT was always between		0.07	and	0.124											
Comments of testing laboratory:															
All reliability and performance tests were prepared in Fraunhofer ISE, Germany.															
Note 1	Flow rate	0.020	kg/(s m <sup>2</sup> )	Fluid	Water										
Note 2	Irradiance, G = 1000 W/m <sup>2</sup> ; Ambient temperature, Ta=30 °C														
Note 3	Given by manufacturer														
Datasheet version: 4.06, 2014-01-15															

