

ภาคผนวก ก.

ผลการทดลอง

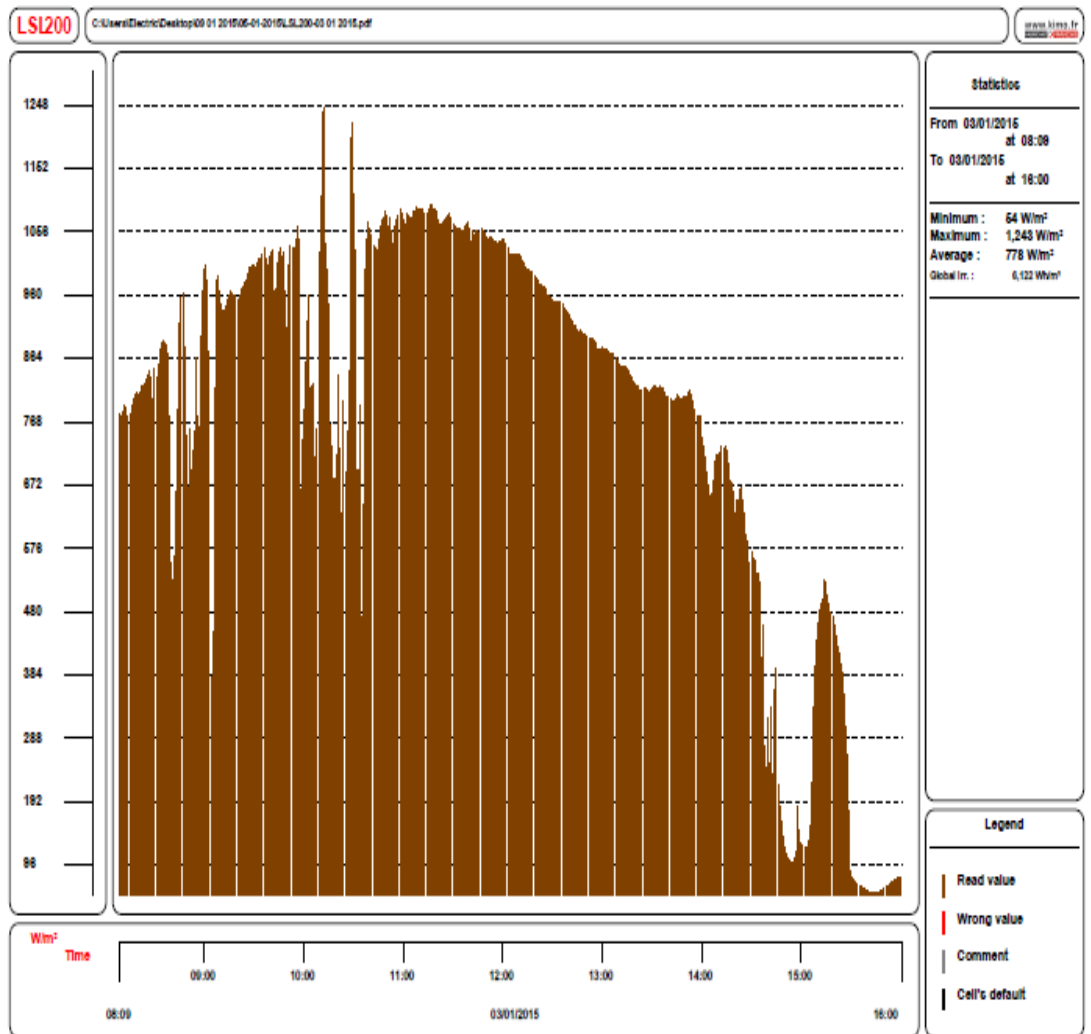
### ก. 1 การเก็บข้อมูลค่าพลังงานแสงอาทิตย์



รูปที่ ก.1.1 เครื่องมือเก็บข้อมูลค่าพลังงานแสงอาทิตย์

ตารางที่ ก.1.1 ผลค่าเฉลี่ยพลังงานแสงอาทิตย์ที่วัดได้ วันที่ 3 มกราคม 2558

|                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Campaign's report</b>                                                                                                                     |
| <b>Device.</b>                                                                                                                               |
| Serial number :                                                                                                                              |
| <b>Collect informations.</b>                                                                                                                 |
| Starting collect : the 03/01/2015<br>at 08:09<br>Ending collect : the 03/01/2015<br>at 16:00                                                 |
| <b>Statistics Globals</b>                                                                                                                    |
| Minimum : 54 W/m <sup>2</sup><br>Maximum : 1,243 W/m <sup>2</sup><br>Average : 778 W/m <sup>2</sup><br>Global Irr. : 6,122 Wh/m <sup>2</sup> |
| <b>Current selection</b>                                                                                                                     |
| From : 03/01/2015<br>at : 08:09<br>To : 03/01/2015<br>at : 16:00                                                                             |
| <b>Statistics</b>                                                                                                                            |
| Minimum : 54 W/m <sup>2</sup><br>Maximum : 1,243 W/m <sup>2</sup><br>Average : 778 W/m <sup>2</sup><br>Global Irr. : 6,122 Wh/m <sup>2</sup> |
| <b>Comment</b>                                                                                                                               |



รูปที่ ก.1.2 พลังงานแสงอาทิตย์ที่วัดได้ วันที่ 3 มกราคม 2558

**ตารางที่ ก.1.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 3 มกราคม 2558

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 03/01/2015 | 08:09 | 778    | 03/01/2015 | 08:35 | 892    |
| 03/01/2015 | 08:10 | 776    | 03/01/2015 | 08:36 | 889    |
| 03/01/2015 | 08:11 | 783    | 03/01/2015 | 08:37 | 883    |
| 03/01/2015 | 08:12 | 794    | 03/01/2015 | 08:38 | 870    |
| 03/01/2015 | 08:13 | 790    | 03/01/2015 | 08:39 | 776    |
| 03/01/2015 | 08:14 | 776    | 03/01/2015 | 08:40 | 554    |
| 03/01/2015 | 08:15 | 780    | 03/01/2015 | 08:41 | 527    |
| 03/01/2015 | 08:16 | 793    | 03/01/2015 | 08:42 | 564    |
| 03/01/2015 | 08:17 | 803    | 03/01/2015 | 08:43 | 661    |
| 03/01/2015 | 08:18 | 810    | 03/01/2015 | 08:44 | 785    |
| 03/01/2015 | 08:19 | 812    | 03/01/2015 | 08:45 | 916    |
| 03/01/2015 | 08:20 | 810    | 03/01/2015 | 08:46 | 957    |
| 03/01/2015 | 08:21 | 811    | 03/01/2015 | 08:47 | 963    |
| 03/01/2015 | 08:22 | 821    | 03/01/2015 | 08:48 | 881    |
| 03/01/2015 | 08:23 | 821    | 03/01/2015 | 08:49 | 746    |
| 03/01/2015 | 08:24 | 825    | 03/01/2015 | 08:50 | 670    |
| 03/01/2015 | 08:25 | 831    | 03/01/2015 | 08:51 | 758    |
| 03/01/2015 | 08:26 | 837    | 03/01/2015 | 08:52 | 695    |
| 03/01/2015 | 08:27 | 845    | 03/01/2015 | 08:53 | 723    |
| 03/01/2015 | 08:28 | 836    | 03/01/2015 | 08:54 | 752    |
| 03/01/2015 | 08:29 | 801    | 03/01/2015 | 08:55 | 863    |
| 03/01/2015 | 08:30 | 849    | 03/01/2015 | 08:56 | 777    |
| 03/01/2015 | 08:31 | 836    | 03/01/2015 | 08:57 | 761    |
| 03/01/2015 | 08:32 | 856    | 03/01/2015 | 08:58 | 898    |
| 03/01/2015 | 08:33 | 879    | 03/01/2015 | 08:59 | 965    |
| 03/01/2015 | 08:34 | 887    | 03/01/2015 | 09:00 | 999    |

**ตารางที่ ก.1.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้ตอนาที่ วันที่ 3 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 03/01/2015 | 09:01 | 1005   | 03/01/2015 | 09:29 | 1004   |
| 03/01/2015 | 09:02 | 983    | 03/01/2015 | 09:30 | 1006   |
| 03/01/2015 | 09:03 | 874    | 03/01/2015 | 09:31 | 1001   |
| 03/01/2015 | 09:04 | 380    | 03/01/2015 | 09:32 | 1007   |
| 03/01/2015 | 09:05 | 448    | 03/01/2015 | 09:33 | 1016   |
| 03/01/2015 | 09:06 | 819    | 03/01/2015 | 09:34 | 1016   |
| 03/01/2015 | 09:07 | 981    | 03/01/2015 | 09:35 | 1023   |
| 03/01/2015 | 09:08 | 988    | 03/01/2015 | 09:36 | 1033   |
| 03/01/2015 | 09:09 | 967    | 03/01/2015 | 09:37 | 1016   |
| 03/01/2015 | 09:10 | 947    | 03/01/2015 | 09:38 | 1006   |
| 03/01/2015 | 09:11 | 937    | 03/01/2015 | 09:39 | 1017   |
| 03/01/2015 | 09:12 | 936    | 03/01/2015 | 09:40 | 1026   |
| 03/01/2015 | 09:13 | 943    | 03/01/2015 | 09:41 | 1029   |
| 03/01/2015 | 09:14 | 952    | 03/01/2015 | 09:42 | 965    |
| 03/01/2015 | 09:15 | 960    | 03/01/2015 | 09:43 | 969    |
| 03/01/2015 | 09:16 | 967    | 03/01/2015 | 09:44 | 1008   |
| 03/01/2015 | 09:17 | 964    | 03/01/2015 | 09:45 | 1026   |
| 03/01/2015 | 09:18 | 960    | 03/01/2015 | 09:46 | 1030   |
| 03/01/2015 | 09:19 | 958    | 03/01/2015 | 09:47 | 1018   |
| 03/01/2015 | 09:20 | 954    | 03/01/2015 | 09:48 | 1026   |
| 03/01/2015 | 09:21 | 959    | 03/01/2015 | 09:49 | 966    |
| 03/01/2015 | 09:22 | 969    | 03/01/2015 | 09:50 | 910    |
| 03/01/2015 | 09:23 | 974    | 03/01/2015 | 09:51 | 1005   |
| 03/01/2015 | 09:24 | 979    | 03/01/2015 | 09:52 | 1034   |
| 03/01/2015 | 09:25 | 983    | 03/01/2015 | 09:53 | 1030   |
| 03/01/2015 | 09:26 | 992    | 03/01/2015 | 09:54 | 1031   |
| 03/01/2015 | 09:27 | 1002   | 03/01/2015 | 09:55 | 1044   |
| 03/01/2015 | 09:28 | 1003   | 03/01/2015 | 09:56 | 1064   |

**ตารางที่ ก.1.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้ตอนาที่ วันที่ 3 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 03/01/2015 | 09:57 | 1046   | 03/01/2015 | 10:25 | 691    |
| 03/01/2015 | 09:58 | 665    | 03/01/2015 | 10:26 | 755    |
| 03/01/2015 | 09:59 | 739    | 03/01/2015 | 10:27 | 844    |
| 03/01/2015 | 10:00 | 785    | 03/01/2015 | 10:28 | 1197   |
| 03/01/2015 | 10:01 | 857    | 03/01/2015 | 10:29 | 1222   |
| 03/01/2015 | 10:02 | 919    | 03/01/2015 | 10:30 | 1112   |
| 03/01/2015 | 10:03 | 958    | 03/01/2015 | 10:31 | 1027   |
| 03/01/2015 | 10:04 | 820    | 03/01/2015 | 10:32 | 696    |
| 03/01/2015 | 10:05 | 821    | 03/01/2015 | 10:33 | 695    |
| 03/01/2015 | 10:06 | 825    | 03/01/2015 | 10:34 | 792    |
| 03/01/2015 | 10:07 | 713    | 03/01/2015 | 10:35 | 473    |
| 03/01/2015 | 10:08 | 758    | 03/01/2015 | 10:36 | 642    |
| 03/01/2015 | 10:09 | 1026   | 03/01/2015 | 10:37 | 999    |
| 03/01/2015 | 10:10 | 1110   | 03/01/2015 | 10:38 | 1043   |
| 03/01/2015 | 10:11 | 1236   | 03/01/2015 | 10:39 | 1070   |
| 03/01/2015 | 10:12 | 1243   | 03/01/2015 | 10:40 | 1062   |
| 03/01/2015 | 10:13 | 1037   | 03/01/2015 | 10:41 | 1051   |
| 03/01/2015 | 10:14 | 998    | 03/01/2015 | 10:42 | 1035   |
| 03/01/2015 | 10:15 | 945    | 03/01/2015 | 10:43 | 1033   |
| 03/01/2015 | 10:16 | 762    | 03/01/2015 | 10:44 | 1028   |
| 03/01/2015 | 10:17 | 731    | 03/01/2015 | 10:45 | 1045   |
| 03/01/2015 | 10:18 | 683    | 03/01/2015 | 10:46 | 1065   |
| 03/01/2015 | 10:19 | 681    | 03/01/2015 | 10:47 | 1075   |
| 03/01/2015 | 10:20 | 716    | 03/01/2015 | 10:48 | 1078   |
| 03/01/2015 | 10:21 | 840    | 03/01/2015 | 10:49 | 1087   |
| 03/01/2015 | 10:22 | 728    | 03/01/2015 | 10:50 | 1082   |
| 03/01/2015 | 10:23 | 629    | 03/01/2015 | 10:51 | 1064   |
| 03/01/2015 | 10:24 | 800    | 03/01/2015 | 10:52 | 1078   |

**ตารางที่ ก.1.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้ตอนาที่ วันที่ 3 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 03/01/2015 | 10:53 | 1057   | 03/01/2015 | 11:21 | 1074   |
| 03/01/2015 | 10:54 | 1037   | 03/01/2015 | 11:22 | 1066   |
| 03/01/2015 | 10:55 | 1063   | 03/01/2015 | 11:23 | 1066   |
| 03/01/2015 | 10:56 | 1074   | 03/01/2015 | 11:24 | 1071   |
| 03/01/2015 | 10:57 | 1081   | 03/01/2015 | 11:25 | 1075   |
| 03/01/2015 | 10:58 | 1089   | 03/01/2015 | 11:26 | 1078   |
| 03/01/2015 | 10:59 | 1083   | 03/01/2015 | 11:27 | 1082   |
| 03/01/2015 | 11:00 | 1073   | 03/01/2015 | 11:28 | 1083   |
| 03/01/2015 | 11:01 | 1066   | 03/01/2015 | 11:29 | 1078   |
| 03/01/2015 | 11:02 | 1084   | 03/01/2015 | 11:30 | 1068   |
| 03/01/2015 | 11:03 | 1081   | 03/01/2015 | 11:31 | 1063   |
| 03/01/2015 | 11:04 | 1078   | 03/01/2015 | 11:32 | 1062   |
| 03/01/2015 | 11:05 | 1078   | 03/01/2015 | 11:33 | 1061   |
| 03/01/2015 | 11:06 | 1087   | 03/01/2015 | 11:34 | 1060   |
| 03/01/2015 | 11:07 | 1088   | 03/01/2015 | 11:35 | 1056   |
| 03/01/2015 | 11:08 | 1093   | 03/01/2015 | 11:36 | 1057   |
| 03/01/2015 | 11:09 | 1090   | 03/01/2015 | 11:37 | 1064   |
| 03/01/2015 | 11:10 | 1089   | 03/01/2015 | 11:38 | 1068   |
| 03/01/2015 | 11:11 | 1091   | 03/01/2015 | 11:39 | 1069   |
| 03/01/2015 | 11:12 | 1089   | 03/01/2015 | 11:40 | 1060   |
| 03/01/2015 | 11:13 | 1085   | 03/01/2015 | 11:41 | 1042   |
| 03/01/2015 | 11:14 | 1085   | 03/01/2015 | 11:42 | 1056   |
| 03/01/2015 | 11:15 | 1091   | 03/01/2015 | 11:43 | 1051   |
| 03/01/2015 | 11:16 | 1098   | 03/01/2015 | 11:44 | 1056   |
| 03/01/2015 | 11:17 | 1097   | 03/01/2015 | 11:45 | 1058   |
| 03/01/2015 | 11:18 | 1089   | 03/01/2015 | 11:46 | 1054   |
| 03/01/2015 | 11:19 | 1090   | 03/01/2015 | 11:47 | 1060   |
| 03/01/2015 | 11:20 | 1088   | 03/01/2015 | 11:48 | 1058   |

**ตารางที่ ก.1.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 3 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 03/01/2015 | 11:49 | 1055   | 03/01/2015 | 12:17 | 996    |
| 03/01/2015 | 11:50 | 1048   | 03/01/2015 | 12:18 | 994    |
| 03/01/2015 | 11:51 | 1044   | 03/01/2015 | 12:19 | 990    |
| 03/01/2015 | 11:52 | 1048   | 03/01/2015 | 12:20 | 984    |
| 03/01/2015 | 11:53 | 1049   | 03/01/2015 | 12:21 | 981    |
| 03/01/2015 | 11:54 | 1046   | 03/01/2015 | 12:22 | 977    |
| 03/01/2015 | 11:55 | 1042   | 03/01/2015 | 12:23 | 975    |
| 03/01/2015 | 11:56 | 1041   | 03/01/2015 | 12:24 | 974    |
| 03/01/2015 | 11:57 | 1039   | 03/01/2015 | 12:25 | 973    |
| 03/01/2015 | 11:58 | 1040   | 03/01/2015 | 12:26 | 969    |
| 03/01/2015 | 11:59 | 1041   | 03/01/2015 | 12:27 | 961    |
| 03/01/2015 | 12:00 | 1043   | 03/01/2015 | 12:28 | 958    |
| 03/01/2015 | 12:01 | 1043   | 03/01/2015 | 12:29 | 956    |
| 03/01/2015 | 12:02 | 1039   | 03/01/2015 | 12:30 | 953    |
| 03/01/2015 | 12:03 | 1032   | 03/01/2015 | 12:31 | 951    |
| 03/01/2015 | 12:04 | 1022   | 03/01/2015 | 12:32 | 950    |
| 03/01/2015 | 12:05 | 1021   | 03/01/2015 | 12:33 | 951    |
| 03/01/2015 | 12:06 | 1021   | 03/01/2015 | 12:34 | 951    |
| 03/01/2015 | 12:07 | 1023   | 03/01/2015 | 12:35 | 949    |
| 03/01/2015 | 12:08 | 1022   | 03/01/2015 | 12:36 | 947    |
| 03/01/2015 | 12:09 | 1022   | 03/01/2015 | 12:37 | 940    |
| 03/01/2015 | 12:10 | 1022   | 03/01/2015 | 12:38 | 937    |
| 03/01/2015 | 12:11 | 1017   | 03/01/2015 | 12:39 | 932    |
| 03/01/2015 | 12:12 | 1013   | 03/01/2015 | 12:40 | 930    |
| 03/01/2015 | 12:13 | 1007   | 03/01/2015 | 12:41 | 925    |
| 03/01/2015 | 12:14 | 1002   | 03/01/2015 | 12:42 | 919    |
| 03/01/2015 | 12:15 | 1000   | 03/01/2015 | 12:43 | 915    |
| 03/01/2015 | 12:16 | 998    | 03/01/2015 | 12:44 | 913    |



**ตารางที่ ก.1.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 3 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 03/01/2015 | 12:45 | 907    | 03/01/2015 | 13:13 | 853    |
| 03/01/2015 | 12:46 | 903    | 03/01/2015 | 13:14 | 851    |
| 03/01/2015 | 12:47 | 906    | 03/01/2015 | 13:15 | 847    |
| 03/01/2015 | 12:48 | 903    | 03/01/2015 | 13:16 | 844    |
| 03/01/2015 | 12:49 | 902    | 03/01/2015 | 13:17 | 840    |
| 03/01/2015 | 12:50 | 899    | 03/01/2015 | 13:18 | 835    |
| 03/01/2015 | 12:51 | 897    | 03/01/2015 | 13:19 | 830    |
| 03/01/2015 | 12:52 | 895    | 03/01/2015 | 13:20 | 826    |
| 03/01/2015 | 12:53 | 895    | 03/01/2015 | 13:21 | 823    |
| 03/01/2015 | 12:54 | 894    | 03/01/2015 | 13:22 | 821    |
| 03/01/2015 | 12:55 | 890    | 03/01/2015 | 13:23 | 817    |
| 03/01/2015 | 12:56 | 886    | 03/01/2015 | 13:24 | 816    |
| 03/01/2015 | 12:57 | 879    | 03/01/2015 | 13:25 | 818    |
| 03/01/2015 | 12:58 | 879    | 03/01/2015 | 13:26 | 818    |
| 03/01/2015 | 12:59 | 877    | 03/01/2015 | 13:27 | 816    |
| 03/01/2015 | 13:00 | 880    | 03/01/2015 | 13:28 | 813    |
| 03/01/2015 | 13:01 | 878    | 03/01/2015 | 13:29 | 814    |
| 03/01/2015 | 13:02 | 878    | 03/01/2015 | 13:30 | 818    |
| 03/01/2015 | 13:03 | 877    | 03/01/2015 | 13:31 | 821    |
| 03/01/2015 | 13:04 | 874    | 03/01/2015 | 13:32 | 821    |
| 03/01/2015 | 13:05 | 872    | 03/01/2015 | 13:33 | 819    |
| 03/01/2015 | 13:06 | 872    | 03/01/2015 | 13:34 | 819    |
| 03/01/2015 | 13:07 | 870    | 03/01/2015 | 13:35 | 821    |
| 03/01/2015 | 13:08 | 866    | 03/01/2015 | 13:36 | 819    |
| 03/01/2015 | 13:09 | 861    | 03/01/2015 | 13:37 | 818    |
| 03/01/2015 | 13:10 | 856    | 03/01/2015 | 13:38 | 813    |
| 03/01/2015 | 13:11 | 852    | 03/01/2015 | 13:39 | 806    |
| 03/01/2015 | 13:12 | 852    | 03/01/2015 | 13:40 | 805    |

**ตารางที่ ก.1.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 3 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 03/01/2015 | 13:41 | 804    | 03/01/2015 | 14:09 | 716    |
| 03/01/2015 | 13:42 | 799    | 03/01/2015 | 14:10 | 717    |
| 03/01/2015 | 13:43 | 799    | 03/01/2015 | 14:11 | 720    |
| 03/01/2015 | 13:44 | 804    | 03/01/2015 | 14:12 | 732    |
| 03/01/2015 | 13:45 | 808    | 03/01/2015 | 14:13 | 728    |
| 03/01/2015 | 13:46 | 807    | 03/01/2015 | 14:14 | 729    |
| 03/01/2015 | 13:47 | 804    | 03/01/2015 | 14:15 | 724    |
| 03/01/2015 | 13:48 | 804    | 03/01/2015 | 14:16 | 705    |
| 03/01/2015 | 13:49 | 807    | 03/01/2015 | 14:17 | 678    |
| 03/01/2015 | 13:50 | 806    | 03/01/2015 | 14:18 | 674    |
| 03/01/2015 | 13:51 | 805    | 03/01/2015 | 14:19 | 662    |
| 03/01/2015 | 13:52 | 813    | 03/01/2015 | 14:20 | 630    |
| 03/01/2015 | 13:53 | 815    | 03/01/2015 | 14:21 | 648    |
| 03/01/2015 | 13:54 | 810    | 03/01/2015 | 14:22 | 648    |
| 03/01/2015 | 13:55 | 799    | 03/01/2015 | 14:23 | 664    |
| 03/01/2015 | 13:56 | 786    | 03/01/2015 | 14:24 | 667    |
| 03/01/2015 | 13:57 | 777    | 03/01/2015 | 14:25 | 649    |
| 03/01/2015 | 13:58 | 776    | 03/01/2015 | 14:26 | 629    |
| 03/01/2015 | 13:59 | 775    | 03/01/2015 | 14:27 | 597    |
| 03/01/2015 | 14:00 | 742    | 03/01/2015 | 14:28 | 586    |
| 03/01/2015 | 14:01 | 731    | 03/01/2015 | 14:29 | 555    |
| 03/01/2015 | 14:02 | 714    | 03/01/2015 | 14:30 | 570    |
| 03/01/2015 | 14:03 | 691    | 03/01/2015 | 14:31 | 562    |
| 03/01/2015 | 14:04 | 672    | 03/01/2015 | 14:32 | 556    |
| 03/01/2015 | 14:05 | 655    | 03/01/2015 | 14:33 | 536    |
| 03/01/2015 | 14:06 | 658    | 03/01/2015 | 14:34 | 537    |
| 03/01/2015 | 14:07 | 678    | 03/01/2015 | 14:35 | 523    |
| 03/01/2015 | 14:08 | 707    | 03/01/2015 | 14:36 | 410    |

**ตารางที่ ก.1.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 3 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 03/01/2015 | 14:37 | 458    | 03/01/2015 | 15:05 | 155    |
| 03/01/2015 | 14:38 | 275    | 03/01/2015 | 15:06 | 220    |
| 03/01/2015 | 14:39 | 244    | 03/01/2015 | 15:07 | 334    |
| 03/01/2015 | 14:40 | 320    | 03/01/2015 | 15:08 | 396    |
| 03/01/2015 | 14:41 | 249    | 03/01/2015 | 15:09 | 437    |
| 03/01/2015 | 14:42 | 335    | 03/01/2015 | 15:10 | 463    |
| 03/01/2015 | 14:43 | 234    | 03/01/2015 | 15:11 | 482    |
| 03/01/2015 | 14:44 | 360    | 03/01/2015 | 15:12 | 491    |
| 03/01/2015 | 14:45 | 394    | 03/01/2015 | 15:13 | 499    |
| 03/01/2015 | 14:46 | 218    | 03/01/2015 | 15:14 | 529    |
| 03/01/2015 | 14:47 | 186    | 03/01/2015 | 15:15 | 523    |
| 03/01/2015 | 14:48 | 161    | 03/01/2015 | 15:16 | 505    |
| 03/01/2015 | 14:49 | 139    | 03/01/2015 | 15:17 | 492    |
| 03/01/2015 | 14:50 | 123    | 03/01/2015 | 15:18 | 480    |
| 03/01/2015 | 14:51 | 112    | 03/01/2015 | 15:19 | 473    |
| 03/01/2015 | 14:52 | 106    | 03/01/2015 | 15:20 | 458    |
| 03/01/2015 | 14:53 | 103    | 03/01/2015 | 15:21 | 443    |
| 03/01/2015 | 14:54 | 101    | 03/01/2015 | 15:22 | 426    |
| 03/01/2015 | 14:55 | 101    | 03/01/2015 | 15:23 | 417    |
| 03/01/2015 | 14:56 | 105    | 03/01/2015 | 15:24 | 401    |
| 03/01/2015 | 14:57 | 115    | 03/01/2015 | 15:25 | 388    |
| 03/01/2015 | 14:58 | 183    | 03/01/2015 | 15:26 | 353    |
| 03/01/2015 | 14:59 | 147    | 03/01/2015 | 15:27 | 306    |
| 03/01/2015 | 15:00 | 129    | 03/01/2015 | 15:28 | 264    |
| 03/01/2015 | 15:01 | 126    | 03/01/2015 | 15:29 | 177    |
| 03/01/2015 | 15:02 | 123    | 03/01/2015 | 15:30 | 88     |
| 03/01/2015 | 15:03 | 123    | 03/01/2015 | 15:31 | 77     |
| 03/01/2015 | 15:04 | 132    | 03/01/2015 | 15:32 | 73     |

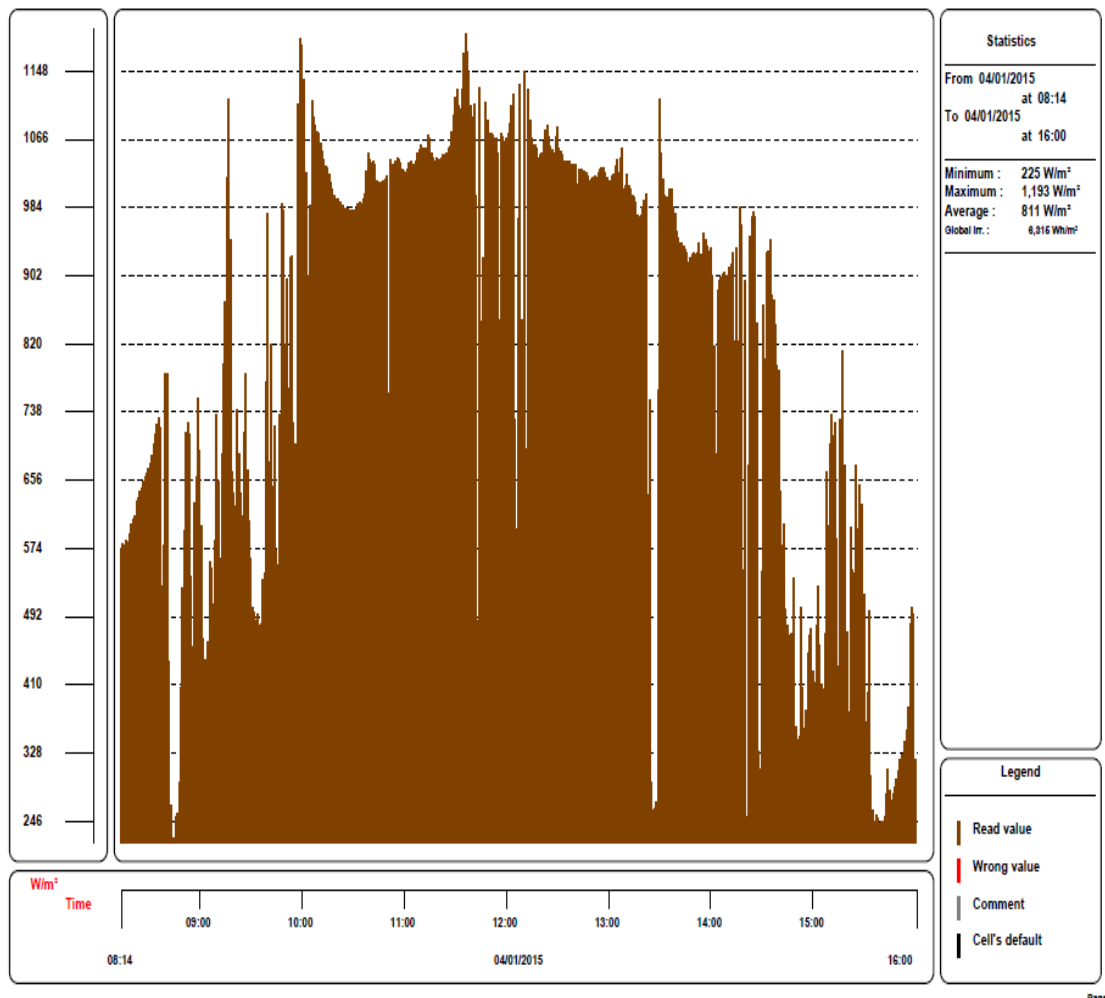
**ตารางที่ ก.1.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 3 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values |
|------------|-------|--------|
| 03/01/2015 | 15:33 | 70     |
| 03/01/2015 | 15:34 | 67     |
| 03/01/2015 | 15:35 | 65     |
| 03/01/2015 | 15:36 | 63     |
| 03/01/2015 | 15:37 | 61     |
| 03/01/2015 | 15:38 | 59     |
| 03/01/2015 | 15:39 | 57     |
| 03/01/2015 | 15:40 | 56     |
| 03/01/2015 | 15:41 | 55     |
| 03/01/2015 | 15:42 | 54     |
| 03/01/2015 | 15:43 | 54     |
| 03/01/2015 | 15:44 | 54     |
| 03/01/2015 | 15:45 | 54     |
| 03/01/2015 | 15:46 | 54     |
| 03/01/2015 | 15:47 | 54     |
| 03/01/2015 | 15:48 | 56     |
| 03/01/2015 | 15:49 | 57     |
| 03/01/2015 | 15:50 | 59     |
| 03/01/2015 | 15:51 | 62     |
| 03/01/2015 | 15:52 | 64     |
| 03/01/2015 | 15:53 | 67     |
| 03/01/2015 | 15:54 | 69     |
| 03/01/2015 | 15:55 | 71     |
| 03/01/2015 | 15:56 | 73     |
| 03/01/2015 | 15:57 | 74     |
| 03/01/2015 | 15:58 | 75     |
| 03/01/2015 | 15:59 | 76     |
| 03/01/2015 | 16:00 | 76     |

## ก.2 การเก็บข้อมูลค่าพลังงานแสงอาทิตย์วันที่สอง

ตารางที่ ก.2.1 ผลค่าเฉลี่ยพลังงานแสงอาทิตย์ที่วัดได้ วันที่ 4 มกราคม 2558

| Campaign's report                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Device.                                                                                                                                       |
| Serial number :                                                                                                                               |
| Collect informations.                                                                                                                         |
| Starting collect : the 04/01/2015<br>at 08:14<br>Ending collect : the 04/01/2015<br>at 16:00                                                  |
| Statistics Globals                                                                                                                            |
| Minimum : 225 W/m <sup>2</sup><br>Maximum : 1,193 W/m <sup>2</sup><br>Average : 811 W/m <sup>2</sup><br>Global Irr. : 6,315 Wh/m <sup>2</sup> |
| Current selection                                                                                                                             |
| From : 04/01/2015<br>at : 08:14<br>To : 04/01/2015<br>at : 16:00                                                                              |
| Statistics                                                                                                                                    |
| Minimum : 225 W/m <sup>2</sup><br>Maximum : 1,193 W/m <sup>2</sup><br>Average : 811 W/m <sup>2</sup><br>Global Irr. : 6,315 Wh/m <sup>2</sup> |
| Comment                                                                                                                                       |



รูปที่ ก.2.1 พลังงานแสงอาทิตย์ที่วัดได้ วันที่ 4 มกราคม 2558

**ตารางที่ ก.2.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 4 มกราคม 2558

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 04/01/2015 | 08:14 | 574    | 04/01/2015 | 08:42 | 438    |
| 04/01/2015 | 08:15 | 580    | 04/01/2015 | 08:43 | 265    |
| 04/01/2015 | 08:16 | 577    | 04/01/2015 | 08:44 | 226    |
| 04/01/2015 | 08:17 | 584    | 04/01/2015 | 08:45 | 225    |
| 04/01/2015 | 08:18 | 582    | 04/01/2015 | 08:46 | 252    |
| 04/01/2015 | 08:19 | 592    | 04/01/2015 | 08:47 | 255    |
| 04/01/2015 | 08:20 | 603    | 04/01/2015 | 08:48 | 293    |
| 04/01/2015 | 08:21 | 610    | 04/01/2015 | 08:49 | 406    |
| 04/01/2015 | 08:22 | 614    | 04/01/2015 | 08:50 | 526    |
| 04/01/2015 | 08:23 | 630    | 04/01/2015 | 08:51 | 596    |
| 04/01/2015 | 08:24 | 635    | 04/01/2015 | 08:52 | 713    |
| 04/01/2015 | 08:25 | 642    | 04/01/2015 | 08:53 | 726    |
| 04/01/2015 | 08:26 | 646    | 04/01/2015 | 08:54 | 712    |
| 04/01/2015 | 08:27 | 655    | 04/01/2015 | 08:55 | 541    |
| 04/01/2015 | 08:28 | 661    | 04/01/2015 | 08:56 | 455    |
| 04/01/2015 | 08:29 | 664    | 04/01/2015 | 08:57 | 628    |
| 04/01/2015 | 08:30 | 671    | 04/01/2015 | 08:58 | 660    |
| 04/01/2015 | 08:31 | 677    | 04/01/2015 | 08:59 | 754    |
| 04/01/2015 | 08:32 | 685    | 04/01/2015 | 09:00 | 691    |
| 04/01/2015 | 08:33 | 700    | 04/01/2015 | 09:01 | 602    |
| 04/01/2015 | 08:34 | 711    | 04/01/2015 | 09:02 | 466    |
| 04/01/2015 | 08:35 | 723    | 04/01/2015 | 09:03 | 441    |
| 04/01/2015 | 08:36 | 732    | 04/01/2015 | 09:04 | 391    |
| 04/01/2015 | 08:37 | 719    | 04/01/2015 | 09:05 | 461    |
| 04/01/2015 | 08:38 | 528    | 04/01/2015 | 09:06 | 558    |
| 04/01/2015 | 08:39 | 578    | 04/01/2015 | 09:07 | 551    |
| 04/01/2015 | 08:40 | 784    | 04/01/2015 | 09:08 | 506    |
| 04/01/2015 | 08:41 | 785    | 04/01/2015 | 09:09 | 583    |

**ตารางที่ ก.2.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 4 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 04/01/2015 | 09:10 | 735    | 04/01/2015 | 09:38 | 544    |
| 04/01/2015 | 09:11 | 654    | 04/01/2015 | 09:39 | 775    |
| 04/01/2015 | 09:12 | 563    | 04/01/2015 | 09:40 | 976    |
| 04/01/2015 | 09:13 | 688    | 04/01/2015 | 09:41 | 678    |
| 04/01/2015 | 09:14 | 796    | 04/01/2015 | 09:42 | 819    |
| 04/01/2015 | 09:15 | 870    | 04/01/2015 | 09:43 | 649    |
| 04/01/2015 | 09:16 | 1020   | 04/01/2015 | 09:44 | 722    |
| 04/01/2015 | 09:17 | 1115   | 04/01/2015 | 09:45 | 571    |
| 04/01/2015 | 09:18 | 946    | 04/01/2015 | 09:46 | 554    |
| 04/01/2015 | 09:19 | 667    | 04/01/2015 | 09:47 | 735    |
| 04/01/2015 | 09:20 | 641    | 04/01/2015 | 09:48 | 988    |
| 04/01/2015 | 09:21 | 624    | 04/01/2015 | 09:49 | 981    |
| 04/01/2015 | 09:22 | 741    | 04/01/2015 | 09:50 | 820    |
| 04/01/2015 | 09:23 | 688    | 04/01/2015 | 09:51 | 898    |
| 04/01/2015 | 09:24 | 641    | 04/01/2015 | 09:52 | 767    |
| 04/01/2015 | 09:25 | 613    | 04/01/2015 | 09:53 | 924    |
| 04/01/2015 | 09:26 | 714    | 04/01/2015 | 09:54 | 926    |
| 04/01/2015 | 09:27 | 784    | 04/01/2015 | 09:55 | 726    |
| 04/01/2015 | 09:28 | 669    | 04/01/2015 | 09:56 | 700    |
| 04/01/2015 | 09:29 | 607    | 04/01/2015 | 09:57 | 628    |
| 04/01/2015 | 09:30 | 562    | 04/01/2015 | 09:58 | 1108   |
| 04/01/2015 | 09:31 | 504    | 04/01/2015 | 09:59 | 1187   |
| 04/01/2015 | 09:32 | 498    | 04/01/2015 | 10:00 | 1179   |
| 04/01/2015 | 09:33 | 487    | 04/01/2015 | 10:01 | 1138   |
| 04/01/2015 | 09:34 | 496    | 04/01/2015 | 10:02 | 960    |
| 04/01/2015 | 09:35 | 482    | 04/01/2015 | 10:03 | 1026   |
| 04/01/2015 | 09:36 | 484    | 04/01/2015 | 10:04 | 903    |
| 04/01/2015 | 09:37 | 537    | 04/01/2015 | 10:05 | 986    |



**ตารางที่ ก.2.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 4 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 04/01/2015 | 10:06 | 1112   | 04/01/2015 | 10:34 | 991    |
| 04/01/2015 | 10:07 | 1093   | 04/01/2015 | 10:35 | 989    |
| 04/01/2015 | 10:08 | 1084   | 04/01/2015 | 10:36 | 994    |
| 04/01/2015 | 10:09 | 1076   | 04/01/2015 | 10:37 | 1000   |
| 04/01/2015 | 10:10 | 1073   | 04/01/2015 | 10:38 | 1028   |
| 04/01/2015 | 10:11 | 1062   | 04/01/2015 | 10:39 | 1050   |
| 04/01/2015 | 10:12 | 1051   | 04/01/2015 | 10:40 | 1042   |
| 04/01/2015 | 10:13 | 1041   | 04/01/2015 | 10:41 | 1038   |
| 04/01/2015 | 10:14 | 1034   | 04/01/2015 | 10:42 | 1040   |
| 04/01/2015 | 10:15 | 1032   | 04/01/2015 | 10:43 | 1035   |
| 04/01/2015 | 10:16 | 1025   | 04/01/2015 | 10:44 | 1017   |
| 04/01/2015 | 10:17 | 1015   | 04/01/2015 | 10:45 | 1014   |
| 04/01/2015 | 10:18 | 1007   | 04/01/2015 | 10:46 | 1015   |
| 04/01/2015 | 10:19 | 999    | 04/01/2015 | 10:47 | 1014   |
| 04/01/2015 | 10:20 | 995    | 04/01/2015 | 10:48 | 1016   |
| 04/01/2015 | 10:21 | 994    | 04/01/2015 | 10:49 | 1019   |
| 04/01/2015 | 10:22 | 991    | 04/01/2015 | 10:50 | 1022   |
| 04/01/2015 | 10:23 | 990    | 04/01/2015 | 10:51 | 761    |
| 04/01/2015 | 10:24 | 986    | 04/01/2015 | 10:52 | 1042   |
| 04/01/2015 | 10:25 | 983    | 04/01/2015 | 10:53 | 1035   |
| 04/01/2015 | 10:26 | 982    | 04/01/2015 | 10:54 | 1035   |
| 04/01/2015 | 10:27 | 982    | 04/01/2015 | 10:55 | 1040   |
| 04/01/2015 | 10:28 | 981    | 04/01/2015 | 10:56 | 1043   |
| 04/01/2015 | 10:29 | 981    | 04/01/2015 | 10:57 | 1041   |
| 04/01/2015 | 10:30 | 981    | 04/01/2015 | 10:58 | 1037   |
| 04/01/2015 | 10:31 | 980    | 04/01/2015 | 10:59 | 1029   |
| 04/01/2015 | 10:32 | 982    | 04/01/2015 | 11:00 | 1028   |
| 04/01/2015 | 10:33 | 989    | 04/01/2015 | 11:01 | 1026   |

**ตารางที่ ก.2.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 4 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 04/01/2015 | 11:02 | 1030   | 04/01/2015 | 11:30 | 1116   |
| 04/01/2015 | 11:03 | 1037   | 04/01/2015 | 11:31 | 1127   |
| 04/01/2015 | 11:04 | 1039   | 04/01/2015 | 11:32 | 1106   |
| 04/01/2015 | 11:05 | 1035   | 04/01/2015 | 11:33 | 1103   |
| 04/01/2015 | 11:06 | 1036   | 04/01/2015 | 11:34 | 1127   |
| 04/01/2015 | 11:07 | 1040   | 04/01/2015 | 11:35 | 1170   |
| 04/01/2015 | 11:08 | 1049   | 04/01/2015 | 11:36 | 1193   |
| 04/01/2015 | 11:09 | 1053   | 04/01/2015 | 11:37 | 1171   |
| 04/01/2015 | 11:10 | 1059   | 04/01/2015 | 11:38 | 1145   |
| 04/01/2015 | 11:11 | 1056   | 04/01/2015 | 11:39 | 1106   |
| 04/01/2015 | 11:12 | 1046   | 04/01/2015 | 11:40 | 1093   |
| 04/01/2015 | 11:13 | 1055   | 04/01/2015 | 11:41 | 1109   |
| 04/01/2015 | 11:14 | 1072   | 04/01/2015 | 11:42 | 998    |
| 04/01/2015 | 11:15 | 1067   | 04/01/2015 | 11:43 | 488    |
| 04/01/2015 | 11:16 | 1050   | 04/01/2015 | 11:44 | 1129   |
| 04/01/2015 | 11:17 | 1044   | 04/01/2015 | 11:45 | 847    |
| 04/01/2015 | 11:18 | 1040   | 04/01/2015 | 11:46 | 923    |
| 04/01/2015 | 11:19 | 1044   | 04/01/2015 | 11:47 | 620    |
| 04/01/2015 | 11:20 | 1041   | 04/01/2015 | 11:48 | 1111   |
| 04/01/2015 | 11:21 | 1042   | 04/01/2015 | 11:49 | 1088   |
| 04/01/2015 | 11:22 | 1044   | 04/01/2015 | 11:50 | 1074   |
| 04/01/2015 | 11:23 | 1047   | 04/01/2015 | 11:51 | 1073   |
| 04/01/2015 | 11:24 | 1047   | 04/01/2015 | 11:52 | 1071   |
| 04/01/2015 | 11:25 | 1049   | 04/01/2015 | 11:53 | 1067   |
| 04/01/2015 | 11:26 | 1055   | 04/01/2015 | 11:54 | 1068   |
| 04/01/2015 | 11:27 | 1058   | 04/01/2015 | 11:55 | 1049   |
| 04/01/2015 | 11:28 | 1076   | 04/01/2015 | 11:56 | 849    |
| 04/01/2015 | 11:29 | 1094   | 04/01/2015 | 11:57 | 1073   |

**ตารางที่ ก.2.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 4 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 04/01/2015 | 11:58 | 1069   | 04/01/2015 | 12:26 | 1057   |
| 04/01/2015 | 11:59 | 1064   | 04/01/2015 | 12:27 | 1053   |
| 04/01/2015 | 12:00 | 1068   | 04/01/2015 | 12:28 | 1050   |
| 04/01/2015 | 12:01 | 1073   | 04/01/2015 | 12:29 | 1070   |
| 04/01/2015 | 12:02 | 1085   | 04/01/2015 | 12:30 | 1081   |
| 04/01/2015 | 12:03 | 1107   | 04/01/2015 | 12:31 | 1055   |
| 04/01/2015 | 12:04 | 1121   | 04/01/2015 | 12:32 | 1052   |
| 04/01/2015 | 12:05 | 730    | 04/01/2015 | 12:33 | 1048   |
| 04/01/2015 | 12:06 | 597    | 04/01/2015 | 12:34 | 1040   |
| 04/01/2015 | 12:07 | 971    | 04/01/2015 | 12:35 | 1037   |
| 04/01/2015 | 12:08 | 1133   | 04/01/2015 | 12:36 | 1039   |
| 04/01/2015 | 12:09 | 850    | 04/01/2015 | 12:37 | 1040   |
| 04/01/2015 | 12:10 | 671    | 04/01/2015 | 12:38 | 1036   |
| 04/01/2015 | 12:11 | 1148   | 04/01/2015 | 12:39 | 1036   |
| 04/01/2015 | 12:12 | 694    | 04/01/2015 | 12:40 | 1032   |
| 04/01/2015 | 12:13 | 1127   | 04/01/2015 | 12:41 | 1036   |
| 04/01/2015 | 12:14 | 1089   | 04/01/2015 | 12:42 | 1013   |
| 04/01/2015 | 12:15 | 1068   | 04/01/2015 | 12:43 | 1030   |
| 04/01/2015 | 12:16 | 1060   | 04/01/2015 | 12:44 | 1029   |
| 04/01/2015 | 12:17 | 1060   | 04/01/2015 | 12:45 | 1028   |
| 04/01/2015 | 12:18 | 1055   | 04/01/2015 | 12:46 | 1028   |
| 04/01/2015 | 12:19 | 1044   | 04/01/2015 | 12:47 | 1026   |
| 04/01/2015 | 12:20 | 1047   | 04/01/2015 | 12:48 | 1022   |
| 04/01/2015 | 12:21 | 1050   | 04/01/2015 | 12:49 | 1017   |
| 04/01/2015 | 12:22 | 1064   | 04/01/2015 | 12:50 | 1019   |
| 04/01/2015 | 12:23 | 1077   | 04/01/2015 | 12:51 | 1020   |
| 04/01/2015 | 12:24 | 1084   | 04/01/2015 | 12:52 | 1023   |
| 04/01/2015 | 12:25 | 1070   | 04/01/2015 | 12:53 | 1021   |

**ตารางที่ ก.2.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 4 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 04/01/2015 | 12:54 | 1026   | 04/01/2015 | 13:22 | 1001   |
| 04/01/2015 | 12:55 | 1029   | 04/01/2015 | 13:23 | 638    |
| 04/01/2015 | 12:56 | 1032   | 04/01/2015 | 13:24 | 752    |
| 04/01/2015 | 12:57 | 1032   | 04/01/2015 | 13:25 | 293    |
| 04/01/2015 | 12:58 | 1027   | 04/01/2015 | 13:26 | 260    |
| 04/01/2015 | 12:59 | 1021   | 04/01/2015 | 13:27 | 262    |
| 04/01/2015 | 13:00 | 1010   | 04/01/2015 | 13:28 | 269    |
| 04/01/2015 | 13:01 | 1016   | 04/01/2015 | 13:29 | 764    |
| 04/01/2015 | 13:02 | 1023   | 04/01/2015 | 13:30 | 1115   |
| 04/01/2015 | 13:03 | 1025   | 04/01/2015 | 13:31 | 1049   |
| 04/01/2015 | 13:04 | 1034   | 04/01/2015 | 13:32 | 1019   |
| 04/01/2015 | 13:05 | 1041   | 04/01/2015 | 13:33 | 999    |
| 04/01/2015 | 13:06 | 1027   | 04/01/2015 | 13:34 | 996    |
| 04/01/2015 | 13:07 | 1043   | 04/01/2015 | 13:35 | 997    |
| 04/01/2015 | 13:08 | 1055   | 04/01/2015 | 13:36 | 1006   |
| 04/01/2015 | 13:09 | 1006   | 04/01/2015 | 13:37 | 1006   |
| 04/01/2015 | 13:10 | 1010   | 04/01/2015 | 13:38 | 985    |
| 04/01/2015 | 13:11 | 1024   | 04/01/2015 | 13:39 | 976    |
| 04/01/2015 | 13:12 | 1011   | 04/01/2015 | 13:40 | 956    |
| 04/01/2015 | 13:13 | 1006   | 04/01/2015 | 13:41 | 947    |
| 04/01/2015 | 13:14 | 999    | 04/01/2015 | 13:42 | 941    |
| 04/01/2015 | 13:15 | 996    | 04/01/2015 | 13:43 | 941    |
| 04/01/2015 | 13:16 | 991    | 04/01/2015 | 13:44 | 937    |
| 04/01/2015 | 13:17 | 974    | 04/01/2015 | 13:45 | 934    |
| 04/01/2015 | 13:18 | 973    | 04/01/2015 | 13:46 | 929    |
| 04/01/2015 | 13:19 | 974    | 04/01/2015 | 13:47 | 917    |
| 04/01/2015 | 13:20 | 984    | 04/01/2015 | 13:48 | 923    |
| 04/01/2015 | 13:21 | 993    | 04/01/2015 | 13:49 | 927    |

**ตารางที่ ก.2.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 4 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 04/01/2015 | 13:50 | 930    | 04/01/2015 | 14:18 | 964    |
| 04/01/2015 | 13:51 | 928    | 04/01/2015 | 14:19 | 549    |
| 04/01/2015 | 13:52 | 930    | 04/01/2015 | 14:20 | 896    |
| 04/01/2015 | 13:53 | 942    | 04/01/2015 | 14:21 | 252    |
| 04/01/2015 | 13:54 | 927    | 04/01/2015 | 14:22 | 674    |
| 04/01/2015 | 13:55 | 821    | 04/01/2015 | 14:23 | 949    |
| 04/01/2015 | 13:56 | 954    | 04/01/2015 | 14:24 | 973    |
| 04/01/2015 | 13:57 | 945    | 04/01/2015 | 14:25 | 978    |
| 04/01/2015 | 13:58 | 937    | 04/01/2015 | 14:26 | 972    |
| 04/01/2015 | 13:59 | 931    | 04/01/2015 | 14:27 | 846    |
| 04/01/2015 | 14:00 | 936    | 04/01/2015 | 14:28 | 331    |
| 04/01/2015 | 14:01 | 902    | 04/01/2015 | 14:29 | 308    |
| 04/01/2015 | 14:02 | 817    | 04/01/2015 | 14:30 | 547    |
| 04/01/2015 | 14:03 | 687    | 04/01/2015 | 14:31 | 867    |
| 04/01/2015 | 14:04 | 884    | 04/01/2015 | 14:32 | 801    |
| 04/01/2015 | 14:05 | 897    | 04/01/2015 | 14:33 | 930    |
| 04/01/2015 | 14:06 | 901    | 04/01/2015 | 14:34 | 931    |
| 04/01/2015 | 14:07 | 904    | 04/01/2015 | 14:35 | 945    |
| 04/01/2015 | 14:08 | 906    | 04/01/2015 | 14:36 | 878    |
| 04/01/2015 | 14:09 | 903    | 04/01/2015 | 14:37 | 873    |
| 04/01/2015 | 14:10 | 901    | 04/01/2015 | 14:38 | 844    |
| 04/01/2015 | 14:11 | 912    | 04/01/2015 | 14:39 | 795    |
| 04/01/2015 | 14:12 | 916    | 04/01/2015 | 14:40 | 788    |
| 04/01/2015 | 14:13 | 930    | 04/01/2015 | 14:41 | 643    |
| 04/01/2015 | 14:14 | 824    | 04/01/2015 | 14:42 | 578    |
| 04/01/2015 | 14:15 | 935    | 04/01/2015 | 14:43 | 603    |
| 04/01/2015 | 14:16 | 824    | 04/01/2015 | 14:44 | 502    |
| 04/01/2015 | 14:17 | 985    | 04/01/2015 | 14:45 | 482    |

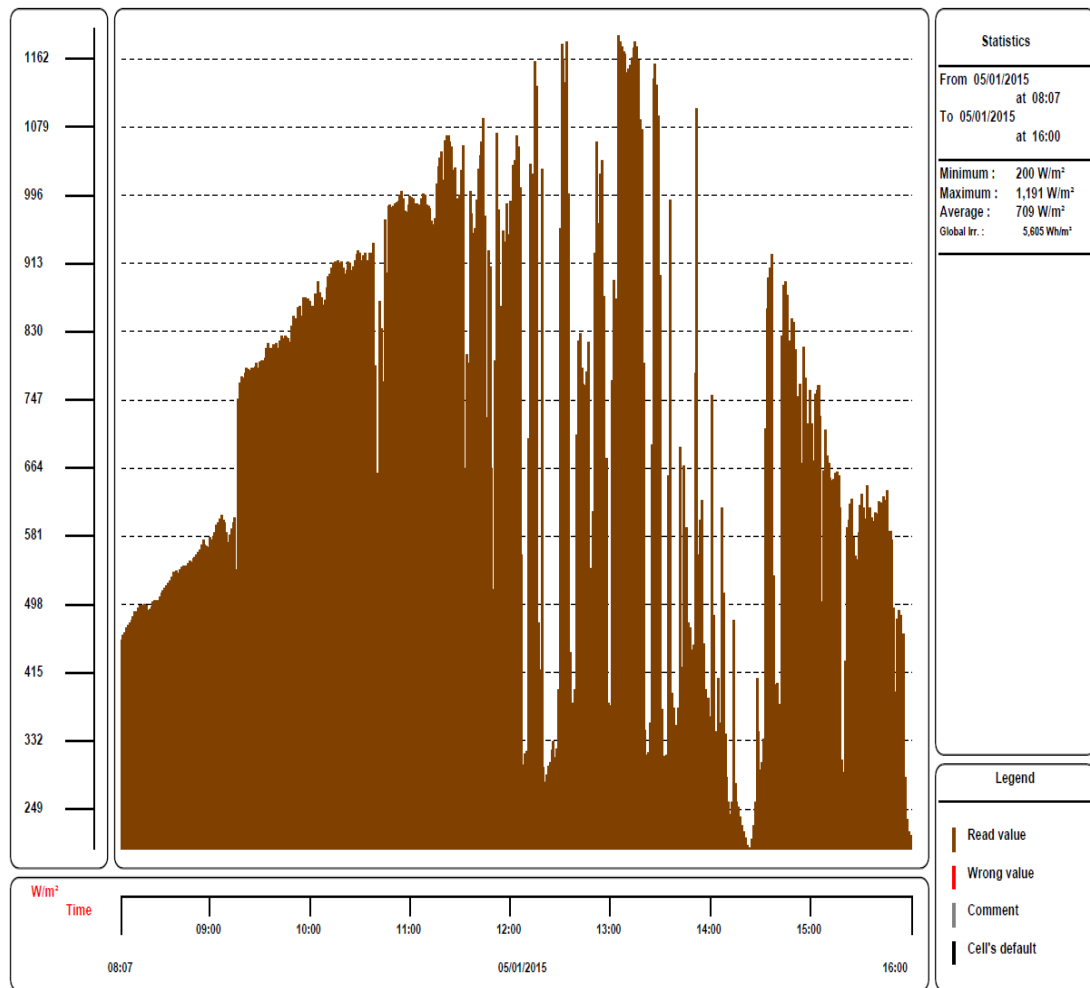
**ตารางที่ ก.2.2** ค่าพลังงานแสงอาทิตย์ที่วัดได้อ่อนาที วันที่ 4 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values |
|------------|-------|--------|
| 04/01/2015 | 15:42 | 252    |
| 04/01/2015 | 15:43 | 279    |
| 04/01/2015 | 15:44 | 308    |
| 04/01/2015 | 15:45 | 282    |
| 04/01/2015 | 15:46 | 272    |
| 04/01/2015 | 15:47 | 278    |
| 04/01/2015 | 15:48 | 287    |
| 04/01/2015 | 15:49 | 297    |
| 04/01/2015 | 15:50 | 306    |
| 04/01/2015 | 15:51 | 320    |
| 04/01/2015 | 15:52 | 327    |
| 04/01/2015 | 15:53 | 324    |
| 04/01/2015 | 15:54 | 342    |
| 04/01/2015 | 15:55 | 356    |
| 04/01/2015 | 15:56 | 383    |
| 04/01/2015 | 15:57 | 484    |
| 04/01/2015 | 15:58 | 504    |
| 04/01/2015 | 15:59 | 495    |
| 04/01/2015 | 16:00 | 320    |

### ก.3 การเก็บข้อมูลค่าพลังงานแสงอาทิตย์วันที่สาม

ตารางที่ ก.3.1 ผลค่าเฉลี่ยพลังงานแสงอาทิตย์ที่วัดได้ วันที่ 5 มกราคม 2558

| Campaign's report                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Device.                                                                                                                                       |
| Serial number :                                                                                                                               |
| Collect informations.                                                                                                                         |
| Starting collect : the 05/01/2015<br>at 08:07<br>Ending collect : the 05/01/2015<br>at 16:00                                                  |
| Statistics Globals                                                                                                                            |
| Minimum : 200 W/m <sup>2</sup><br>Maximum : 1,191 W/m <sup>2</sup><br>Average : 709 W/m <sup>2</sup><br>Global Irr. : 5,605 Wh/m <sup>2</sup> |
| Current selection                                                                                                                             |
| From : 05/01/2015<br>at : 08:07<br>To : 05/01/2015<br>at : 16:00                                                                              |
| Statistics                                                                                                                                    |
| Minimum : 200 W/m <sup>2</sup><br>Maximum : 1,191 W/m <sup>2</sup><br>Average : 709 W/m <sup>2</sup><br>Global Irr. : 5,605 Wh/m <sup>2</sup> |
| Comment                                                                                                                                       |



รูปที่ ก.3.1 พลังงานแสงอาทิตย์ที่วัดได้ วันที่ 5 มกราคม 2558



**ตารางที่ ก.3.2** ผลค่าเฉลี่ยพลังงานแสงอาทิตย์ที่วัดได้ วันที่ 5 มกราคม 2558

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 05/01/2015 | 08:07 | 455    | 05/01/2015 | 08:35 | 523    |
| 05/01/2015 | 08:08 | 460    | 05/01/2015 | 08:36 | 527    |
| 05/01/2015 | 08:09 | 464    | 05/01/2015 | 08:37 | 531    |
| 05/01/2015 | 08:10 | 470    | 05/01/2015 | 08:38 | 537    |
| 05/01/2015 | 08:11 | 473    | 05/01/2015 | 08:39 | 536    |
| 05/01/2015 | 08:12 | 476    | 05/01/2015 | 08:40 | 538    |
| 05/01/2015 | 08:13 | 479    | 05/01/2015 | 08:41 | 536    |
| 05/01/2015 | 08:14 | 483    | 05/01/2015 | 08:42 | 540    |
| 05/01/2015 | 08:15 | 489    | 05/01/2015 | 08:43 | 543    |
| 05/01/2015 | 08:16 | 489    | 05/01/2015 | 08:44 | 545    |
| 05/01/2015 | 08:17 | 494    | 05/01/2015 | 08:45 | 542    |
| 05/01/2015 | 08:18 | 496    | 05/01/2015 | 08:46 | 544    |
| 05/01/2015 | 08:19 | 497    | 05/01/2015 | 08:47 | 548    |
| 05/01/2015 | 08:20 | 496    | 05/01/2015 | 08:48 | 551    |
| 05/01/2015 | 08:21 | 498    | 05/01/2015 | 08:49 | 550    |
| 05/01/2015 | 08:22 | 496    | 05/01/2015 | 08:50 | 554    |
| 05/01/2015 | 08:23 | 491    | 05/01/2015 | 08:51 | 556    |
| 05/01/2015 | 08:24 | 492    | 05/01/2015 | 08:52 | 559    |
| 05/01/2015 | 08:25 | 495    | 05/01/2015 | 08:53 | 562    |
| 05/01/2015 | 08:26 | 501    | 05/01/2015 | 08:54 | 565    |
| 05/01/2015 | 08:27 | 503    | 05/01/2015 | 08:55 | 570    |
| 05/01/2015 | 08:28 | 503    | 05/01/2015 | 08:56 | 576    |
| 05/01/2015 | 08:29 | 503    | 05/01/2015 | 08:57 | 571    |
| 05/01/2015 | 08:30 | 507    | 05/01/2015 | 08:58 | 569    |
| 05/01/2015 | 08:31 | 511    | 05/01/2015 | 08:59 | 568    |
| 05/01/2015 | 08:32 | 515    | 05/01/2015 | 09:00 | 580    |
| 05/01/2015 | 08:33 | 518    | 05/01/2015 | 09:01 | 576    |
| 05/01/2015 | 08:34 | 521    | 05/01/2015 | 09:02 | 581    |

**ตารางที่ ก.3.2** ผลค่าเฉลี่ยพลังงานแสงอาทิตย์ที่วัดได้ วันที่ 5 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 05/01/2015 | 09:03 | 586    | 05/01/2015 | 09:31 | 795    |
| 05/01/2015 | 09:04 | 594    | 05/01/2015 | 09:32 | 794    |
| 05/01/2015 | 09:05 | 597    | 05/01/2015 | 09:33 | 797    |
| 05/01/2015 | 09:06 | 602    | 05/01/2015 | 09:34 | 809    |
| 05/01/2015 | 09:07 | 607    | 05/01/2015 | 09:35 | 816    |
| 05/01/2015 | 09:08 | 600    | 05/01/2015 | 09:36 | 809    |
| 05/01/2015 | 09:09 | 597    | 05/01/2015 | 09:37 | 809    |
| 05/01/2015 | 09:10 | 585    | 05/01/2015 | 09:38 | 814    |
| 05/01/2015 | 09:11 | 574    | 05/01/2015 | 09:39 | 814    |
| 05/01/2015 | 09:12 | 583    | 05/01/2015 | 09:40 | 816    |
| 05/01/2015 | 09:13 | 590    | 05/01/2015 | 09:41 | 810    |
| 05/01/2015 | 09:14 | 597    | 05/01/2015 | 09:42 | 819    |
| 05/01/2015 | 09:15 | 604    | 05/01/2015 | 09:43 | 824    |
| 05/01/2015 | 09:16 | 540    | 05/01/2015 | 09:44 | 821    |
| 05/01/2015 | 09:17 | 748    | 05/01/2015 | 09:45 | 824    |
| 05/01/2015 | 09:18 | 768    | 05/01/2015 | 09:46 | 823    |
| 05/01/2015 | 09:19 | 775    | 05/01/2015 | 09:47 | 821    |
| 05/01/2015 | 09:20 | 774    | 05/01/2015 | 09:48 | 817    |
| 05/01/2015 | 09:21 | 779    | 05/01/2015 | 09:49 | 837    |
| 05/01/2015 | 09:22 | 785    | 05/01/2015 | 09:50 | 848    |
| 05/01/2015 | 09:23 | 784    | 05/01/2015 | 09:51 | 835    |
| 05/01/2015 | 09:24 | 782    | 05/01/2015 | 09:52 | 846    |
| 05/01/2015 | 09:25 | 786    | 05/01/2015 | 09:53 | 859    |
| 05/01/2015 | 09:26 | 785    | 05/01/2015 | 09:54 | 861    |
| 05/01/2015 | 09:27 | 787    | 05/01/2015 | 09:55 | 849    |
| 05/01/2015 | 09:28 | 792    | 05/01/2015 | 09:56 | 872    |
| 05/01/2015 | 09:29 | 786    | 05/01/2015 | 09:57 | 871    |
| 05/01/2015 | 09:30 | 793    | 05/01/2015 | 09:58 | 858    |

**ตารางที่ ก.3.2** ผลค่าเฉลี่ยพลังงานแสงอาทิตย์ที่วัดได้ วันที่ 5 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 05/01/2015 | 09:59 | 869    | 05/01/2015 | 10:27 | 916    |
| 05/01/2015 | 10:00 | 867    | 05/01/2015 | 10:28 | 924    |
| 05/01/2015 | 10:01 | 861    | 05/01/2015 | 10:29 | 929    |
| 05/01/2015 | 10:02 | 860    | 05/01/2015 | 10:30 | 925    |
| 05/01/2015 | 10:03 | 876    | 05/01/2015 | 10:31 | 917    |
| 05/01/2015 | 10:04 | 875    | 05/01/2015 | 10:32 | 923    |
| 05/01/2015 | 10:05 | 891    | 05/01/2015 | 10:33 | 925    |
| 05/01/2015 | 10:06 | 877    | 05/01/2015 | 10:34 | 901    |
| 05/01/2015 | 10:07 | 871    | 05/01/2015 | 10:35 | 916    |
| 05/01/2015 | 10:08 | 862    | 05/01/2015 | 10:36 | 925    |
| 05/01/2015 | 10:09 | 868    | 05/01/2015 | 10:37 | 926    |
| 05/01/2015 | 10:10 | 883    | 05/01/2015 | 10:38 | 937    |
| 05/01/2015 | 10:11 | 897    | 05/01/2015 | 10:39 | 788    |
| 05/01/2015 | 10:12 | 900    | 05/01/2015 | 10:40 | 622    |
| 05/01/2015 | 10:13 | 908    | 05/01/2015 | 10:41 | 658    |
| 05/01/2015 | 10:14 | 913    | 05/01/2015 | 10:42 | 866    |
| 05/01/2015 | 10:15 | 915    | 05/01/2015 | 10:43 | 833    |
| 05/01/2015 | 10:16 | 913    | 05/01/2015 | 10:44 | 769    |
| 05/01/2015 | 10:17 | 916    | 05/01/2015 | 10:45 | 966    |
| 05/01/2015 | 10:18 | 914    | 05/01/2015 | 10:46 | 901    |
| 05/01/2015 | 10:19 | 915    | 05/01/2015 | 10:47 | 982    |
| 05/01/2015 | 10:20 | 907    | 05/01/2015 | 10:48 | 984    |
| 05/01/2015 | 10:21 | 900    | 05/01/2015 | 10:49 | 981    |
| 05/01/2015 | 10:22 | 904    | 05/01/2015 | 10:50 | 983    |
| 05/01/2015 | 10:23 | 915    | 05/01/2015 | 10:51 | 986    |
| 05/01/2015 | 10:24 | 914    | 05/01/2015 | 10:52 | 987    |
| 05/01/2015 | 10:25 | 905    | 05/01/2015 | 10:53 | 988    |
| 05/01/2015 | 10:26 | 909    | 05/01/2015 | 10:54 | 996    |

**ตารางที่ ก.3.2** ผลค่าเฉลี่ยพลังงานแสงอาทิตย์ที่วัดได้ วันที่ 5 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 05/01/2015 | 10:55 | 1001   | 05/01/2015 | 11:23 | 1068   |
| 05/01/2015 | 10:56 | 991    | 05/01/2015 | 11:24 | 1061   |
| 05/01/2015 | 10:57 | 977    | 05/01/2015 | 11:25 | 1055   |
| 05/01/2015 | 10:58 | 975    | 05/01/2015 | 11:26 | 1026   |
| 05/01/2015 | 10:59 | 984    | 05/01/2015 | 11:27 | 1030   |
| 05/01/2015 | 11:00 | 995    | 05/01/2015 | 11:28 | 992    |
| 05/01/2015 | 11:01 | 993    | 05/01/2015 | 11:29 | 975    |
| 05/01/2015 | 11:02 | 992    | 05/01/2015 | 11:30 | 996    |
| 05/01/2015 | 11:03 | 986    | 05/01/2015 | 11:31 | 1027   |
| 05/01/2015 | 11:04 | 986    | 05/01/2015 | 11:32 | 1057   |
| 05/01/2015 | 11:05 | 981    | 05/01/2015 | 11:33 | 664    |
| 05/01/2015 | 11:06 | 984    | 05/01/2015 | 11:34 | 802    |
| 05/01/2015 | 11:07 | 992    | 05/01/2015 | 11:35 | 792    |
| 05/01/2015 | 11:08 | 998    | 05/01/2015 | 11:36 | 1001   |
| 05/01/2015 | 11:09 | 996    | 05/01/2015 | 11:37 | 974    |
| 05/01/2015 | 11:10 | 984    | 05/01/2015 | 11:38 | 949    |
| 05/01/2015 | 11:11 | 982    | 05/01/2015 | 11:39 | 955    |
| 05/01/2015 | 11:12 | 979    | 05/01/2015 | 11:40 | 990    |
| 05/01/2015 | 11:13 | 965    | 05/01/2015 | 11:41 | 1028   |
| 05/01/2015 | 11:14 | 960    | 05/01/2015 | 11:42 | 1045   |
| 05/01/2015 | 11:15 | 968    | 05/01/2015 | 11:43 | 1061   |
| 05/01/2015 | 11:16 | 1010   | 05/01/2015 | 11:44 | 1089   |
| 05/01/2015 | 11:17 | 1031   | 05/01/2015 | 11:45 | 970    |
| 05/01/2015 | 11:18 | 1041   | 05/01/2015 | 11:46 | 725    |
| 05/01/2015 | 11:19 | 1049   | 05/01/2015 | 11:47 | 929    |
| 05/01/2015 | 11:20 | 1014   | 05/01/2015 | 11:48 | 909    |
| 05/01/2015 | 11:21 | 1063   | 05/01/2015 | 11:49 | 664    |
| 05/01/2015 | 11:22 | 1068   | 05/01/2015 | 11:50 | 516    |

**ตารางที่ ก.3.2** ผลค่าเฉลี่ยพลังงานแสงอาทิตย์ที่วัดได้ วันที่ 5 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 05/01/2015 | 11:51 | 794    | 05/01/2015 | 12:19 | 1028   |
| 05/01/2015 | 11:52 | 1071   | 05/01/2015 | 12:20 | 299    |
| 05/01/2015 | 11:53 | 978    | 05/01/2015 | 12:21 | 282    |
| 05/01/2015 | 11:54 | 729    | 05/01/2015 | 12:22 | 290    |
| 05/01/2015 | 11:55 | 860    | 05/01/2015 | 12:23 | 301    |
| 05/01/2015 | 11:56 | 952    | 05/01/2015 | 12:24 | 306    |
| 05/01/2015 | 11:57 | 939    | 05/01/2015 | 12:25 | 320    |
| 05/01/2015 | 11:58 | 986    | 05/01/2015 | 12:26 | 331    |
| 05/01/2015 | 11:59 | 948    | 05/01/2015 | 12:27 | 311    |
| 05/01/2015 | 12:00 | 988    | 05/01/2015 | 12:28 | 322    |
| 05/01/2015 | 12:01 | 974    | 05/01/2015 | 12:29 | 394    |
| 05/01/2015 | 12:02 | 1032   | 05/01/2015 | 12:30 | 955    |
| 05/01/2015 | 12:03 | 1039   | 05/01/2015 | 12:31 | 1179   |
| 05/01/2015 | 12:04 | 1068   | 05/01/2015 | 12:32 | 1162   |
| 05/01/2015 | 12:05 | 1055   | 05/01/2015 | 12:33 | 1133   |
| 05/01/2015 | 12:06 | 1005   | 05/01/2015 | 12:34 | 1183   |
| 05/01/2015 | 12:07 | 559    | 05/01/2015 | 12:35 | 997    |
| 05/01/2015 | 12:08 | 303    | 05/01/2015 | 12:36 | 439    |
| 05/01/2015 | 12:09 | 316    | 05/01/2015 | 12:37 | 356    |
| 05/01/2015 | 12:10 | 319    | 05/01/2015 | 12:38 | 377    |
| 05/01/2015 | 12:11 | 699    | 05/01/2015 | 12:39 | 395    |
| 05/01/2015 | 12:12 | 1034   | 05/01/2015 | 12:40 | 705    |
| 05/01/2015 | 12:13 | 1021   | 05/01/2015 | 12:41 | 819    |
| 05/01/2015 | 12:14 | 355    | 05/01/2015 | 12:42 | 828    |
| 05/01/2015 | 12:15 | 1158   | 05/01/2015 | 12:43 | 785    |
| 05/01/2015 | 12:16 | 1128   | 05/01/2015 | 12:44 | 766    |
| 05/01/2015 | 12:17 | 476    | 05/01/2015 | 12:45 | 764    |
| 05/01/2015 | 12:18 | 418    | 05/01/2015 | 12:46 | 781    |

**ตารางที่ ก.3.2** ผลค่าเฉลี่ยพลังงานแสงอาทิตย์ที่วัดได้ วันที่ 5 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 05/01/2015 | 12:47 | 817    | 05/01/2015 | 13:15 | 1182   |
| 05/01/2015 | 12:48 | 541    | 05/01/2015 | 13:16 | 1177   |
| 05/01/2015 | 12:49 | 400    | 05/01/2015 | 13:17 | 1160   |
| 05/01/2015 | 12:50 | 611    | 05/01/2015 | 13:18 | 1088   |
| 05/01/2015 | 12:51 | 926    | 05/01/2015 | 13:19 | 1076   |
| 05/01/2015 | 12:52 | 1061   | 05/01/2015 | 13:20 | 792    |
| 05/01/2015 | 12:53 | 961    | 05/01/2015 | 13:21 | 344    |
| 05/01/2015 | 12:54 | 1021   | 05/01/2015 | 13:22 | 315    |
| 05/01/2015 | 12:55 | 1038   | 05/01/2015 | 13:23 | 317    |
| 05/01/2015 | 12:56 | 873    | 05/01/2015 | 13:24 | 354    |
| 05/01/2015 | 12:57 | 482    | 05/01/2015 | 13:25 | 692    |
| 05/01/2015 | 12:58 | 676    | 05/01/2015 | 13:26 | 1138   |
| 05/01/2015 | 12:59 | 377    | 05/01/2015 | 13:27 | 1155   |
| 05/01/2015 | 13:00 | 374    | 05/01/2015 | 13:28 | 1130   |
| 05/01/2015 | 13:01 | 771    | 05/01/2015 | 13:29 | 1092   |
| 05/01/2015 | 13:02 | 893    | 05/01/2015 | 13:30 | 898    |
| 05/01/2015 | 13:03 | 347    | 05/01/2015 | 13:31 | 370    |
| 05/01/2015 | 13:04 | 870    | 05/01/2015 | 13:32 | 313    |
| 05/01/2015 | 13:05 | 1191   | 05/01/2015 | 13:33 | 302    |
| 05/01/2015 | 13:06 | 1182   | 05/01/2015 | 13:34 | 314    |
| 05/01/2015 | 13:07 | 1176   | 05/01/2015 | 13:35 | 654    |
| 05/01/2015 | 13:08 | 1170   | 05/01/2015 | 13:36 | 990    |
| 05/01/2015 | 13:09 | 1167   | 05/01/2015 | 13:37 | 390    |
| 05/01/2015 | 13:10 | 1145   | 05/01/2015 | 13:38 | 371    |
| 05/01/2015 | 13:11 | 1149   | 05/01/2015 | 13:39 | 330    |
| 05/01/2015 | 13:12 | 1154   | 05/01/2015 | 13:40 | 351    |
| 05/01/2015 | 13:13 | 1163   | 05/01/2015 | 13:41 | 371    |
| 05/01/2015 | 13:14 | 1175   | 05/01/2015 | 13:42 | 689    |

**ตารางที่ ก.3.2** ผลค่าเฉลี่ยพลังงานแสงอาทิตย์ที่วัดได้ วันที่ 5 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 05/01/2015 | 13:43 | 421    | 05/01/2015 | 14:11 | 258    |
| 05/01/2015 | 13:44 | 666    | 05/01/2015 | 14:12 | 243    |
| 05/01/2015 | 13:45 | 510    | 05/01/2015 | 14:13 | 257    |
| 05/01/2015 | 13:46 | 592    | 05/01/2015 | 14:14 | 478    |
| 05/01/2015 | 13:47 | 476    | 05/01/2015 | 14:15 | 280    |
| 05/01/2015 | 13:48 | 469    | 05/01/2015 | 14:16 | 258    |
| 05/01/2015 | 13:49 | 443    | 05/01/2015 | 14:17 | 251    |
| 05/01/2015 | 13:50 | 449    | 05/01/2015 | 14:18 | 239    |
| 05/01/2015 | 13:51 | 780    | 05/01/2015 | 14:19 | 228    |
| 05/01/2015 | 13:52 | 1102   | 05/01/2015 | 14:20 | 221    |
| 05/01/2015 | 13:53 | 559    | 05/01/2015 | 14:21 | 213    |
| 05/01/2015 | 13:54 | 600    | 05/01/2015 | 14:22 | 205    |
| 05/01/2015 | 13:55 | 624    | 05/01/2015 | 14:23 | 200    |
| 05/01/2015 | 13:56 | 450    | 05/01/2015 | 14:24 | 202    |
| 05/01/2015 | 13:57 | 395    | 05/01/2015 | 14:25 | 212    |
| 05/01/2015 | 13:58 | 365    | 05/01/2015 | 14:26 | 229    |
| 05/01/2015 | 13:59 | 384    | 05/01/2015 | 14:27 | 258    |
| 05/01/2015 | 14:00 | 361    | 05/01/2015 | 14:28 | 408    |
| 05/01/2015 | 14:01 | 753    | 05/01/2015 | 14:29 | 343    |
| 05/01/2015 | 14:02 | 484    | 05/01/2015 | 14:30 | 297    |
| 05/01/2015 | 14:03 | 343    | 05/01/2015 | 14:31 | 305    |
| 05/01/2015 | 14:04 | 330    | 05/01/2015 | 14:32 | 334    |
| 05/01/2015 | 14:05 | 408    | 05/01/2015 | 14:33 | 712    |
| 05/01/2015 | 14:06 | 354    | 05/01/2015 | 14:34 | 857    |
| 05/01/2015 | 14:07 | 616    | 05/01/2015 | 14:35 | 895    |
| 05/01/2015 | 14:08 | 512    | 05/01/2015 | 14:36 | 908    |
| 05/01/2015 | 14:09 | 340    | 05/01/2015 | 14:37 | 924    |
| 05/01/2015 | 14:10 | 288    | 05/01/2015 | 14:38 | 532    |

**ตารางที่ ก.3.2** ผลค่าเฉลี่ยพลังงานแสงอาทิตย์ที่วัดได้ วันที่ 5 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values | Date       | Hour  | Values |
|------------|-------|--------|------------|-------|--------|
| 05/01/2015 | 14:39 | 401    | 05/01/2015 | 15:07 | 501    |
| 05/01/2015 | 14:40 | 402    | 05/01/2015 | 15:08 | 660    |
| 05/01/2015 | 14:41 | 365    | 05/01/2015 | 15:09 | 710    |
| 05/01/2015 | 14:42 | 376    | 05/01/2015 | 15:10 | 678    |
| 05/01/2015 | 14:43 | 825    | 05/01/2015 | 15:11 | 670    |
| 05/01/2015 | 14:44 | 886    | 05/01/2015 | 15:12 | 651    |
| 05/01/2015 | 14:45 | 891    | 05/01/2015 | 15:13 | 648    |
| 05/01/2015 | 14:46 | 875    | 05/01/2015 | 15:14 | 650    |
| 05/01/2015 | 14:47 | 817    | 05/01/2015 | 15:15 | 657    |
| 05/01/2015 | 14:48 | 819    | 05/01/2015 | 15:16 | 659    |
| 05/01/2015 | 14:49 | 845    | 05/01/2015 | 15:17 | 655    |
| 05/01/2015 | 14:50 | 841    | 05/01/2015 | 15:18 | 616    |
| 05/01/2015 | 14:51 | 808    | 05/01/2015 | 15:19 | 308    |
| 05/01/2015 | 14:52 | 751    | 05/01/2015 | 15:20 | 294    |
| 05/01/2015 | 14:53 | 712    | 05/01/2015 | 15:21 | 429    |
| 05/01/2015 | 14:54 | 766    | 05/01/2015 | 15:22 | 592    |
| 05/01/2015 | 14:55 | 670    | 05/01/2015 | 15:23 | 600    |
| 05/01/2015 | 14:56 | 811    | 05/01/2015 | 15:24 | 620    |
| 05/01/2015 | 14:57 | 774    | 05/01/2015 | 15:25 | 626    |
| 05/01/2015 | 14:58 | 718    | 05/01/2015 | 15:26 | 580    |
| 05/01/2015 | 14:59 | 702    | 05/01/2015 | 15:27 | 557    |
| 05/01/2015 | 15:00 | 758    | 05/01/2015 | 15:28 | 552    |
| 05/01/2015 | 15:01 | 718    | 05/01/2015 | 15:29 | 586    |
| 05/01/2015 | 15:02 | 673    | 05/01/2015 | 15:30 | 619    |
| 05/01/2015 | 15:03 | 754    | 05/01/2015 | 15:31 | 632    |
| 05/01/2015 | 15:04 | 758    | 05/01/2015 | 15:32 | 615    |
| 05/01/2015 | 15:05 | 764    | 05/01/2015 | 15:33 | 602    |
| 05/01/2015 | 15:06 | 727    | 05/01/2015 | 15:34 | 642    |



**ตารางที่ ก. 3.2** ผลค่าเฉลี่ยพลังงานแสงอาทิตย์ที่วัดได้ วันที่ 5 มกราคม 2558 (ต่อ)

| Date       | Hour  | Values |
|------------|-------|--------|
| 05/01/2015 | 15:35 | 598    |
| 05/01/2015 | 15:36 | 615    |
| 05/01/2015 | 15:37 | 604    |
| 05/01/2015 | 15:38 | 599    |
| 05/01/2015 | 15:39 | 610    |
| 05/01/2015 | 15:40 | 608    |
| 05/01/2015 | 15:41 | 623    |
| 05/01/2015 | 15:42 | 609    |
| 05/01/2015 | 15:43 | 621    |
| 05/01/2015 | 15:44 | 629    |
| 05/01/2015 | 15:45 | 624    |
| 05/01/2015 | 15:46 | 637    |
| 05/01/2015 | 15:47 | 576    |
| 05/01/2015 | 15:48 | 587    |
| 05/01/2015 | 15:49 | 577    |
| 05/01/2015 | 15:50 | 494    |
| 05/01/2015 | 15:51 | 392    |
| 05/01/2015 | 15:52 | 480    |
| 05/01/2015 | 15:53 | 491    |
| 05/01/2015 | 15:54 | 485    |
| 05/01/2015 | 15:55 | 441    |
| 05/01/2015 | 15:56 | 462    |
| 05/01/2015 | 15:57 | 288    |
| 05/01/2015 | 15:58 | 237    |
| 05/01/2015 | 15:59 | 221    |
| 05/01/2015 | 16:00 | 217    |

#### ก. 4 การเก็บข้อมูลค่าพลังงานไฟฟ้าจากกังหันน้ำผลิตไฟฟ้า



รูปที่ ก.4.1 การเก็บข้อมูลพลังงานไฟฟ้ากังหันน้ำผลิตไฟฟ้า



รูปที่ ก.4.2 เครื่องมือวัดเก็บข้อมูลกังหันน้ำผลิตไฟฟ้า

