非受控文件

Specification of 210*182.3mm mono 16BB TOPCON Bifacial Half-cut Pattern Solar Cell

（210*182.3 ф 272）

Doc.No.： LW-G12R-TBiFi-2083

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Revision Record

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Lightway Energy Technology Co.,Limited		
Product Specification	Product Name	LWM16BB-TBiFi-SE-272
	Document Name	Specification of 210R TOPCON BiFi 16BB Solar Cell
	Document Number	LW-G12R-TBiFi-2083
	Revision Number	A

1.0 Range of Application

This specification is suitable for Lightway Solar 210*182.3mm mono 16BB TOPCON Bifacial solar cells and builds up the character and working condition of solar cells.

2.0 Product List

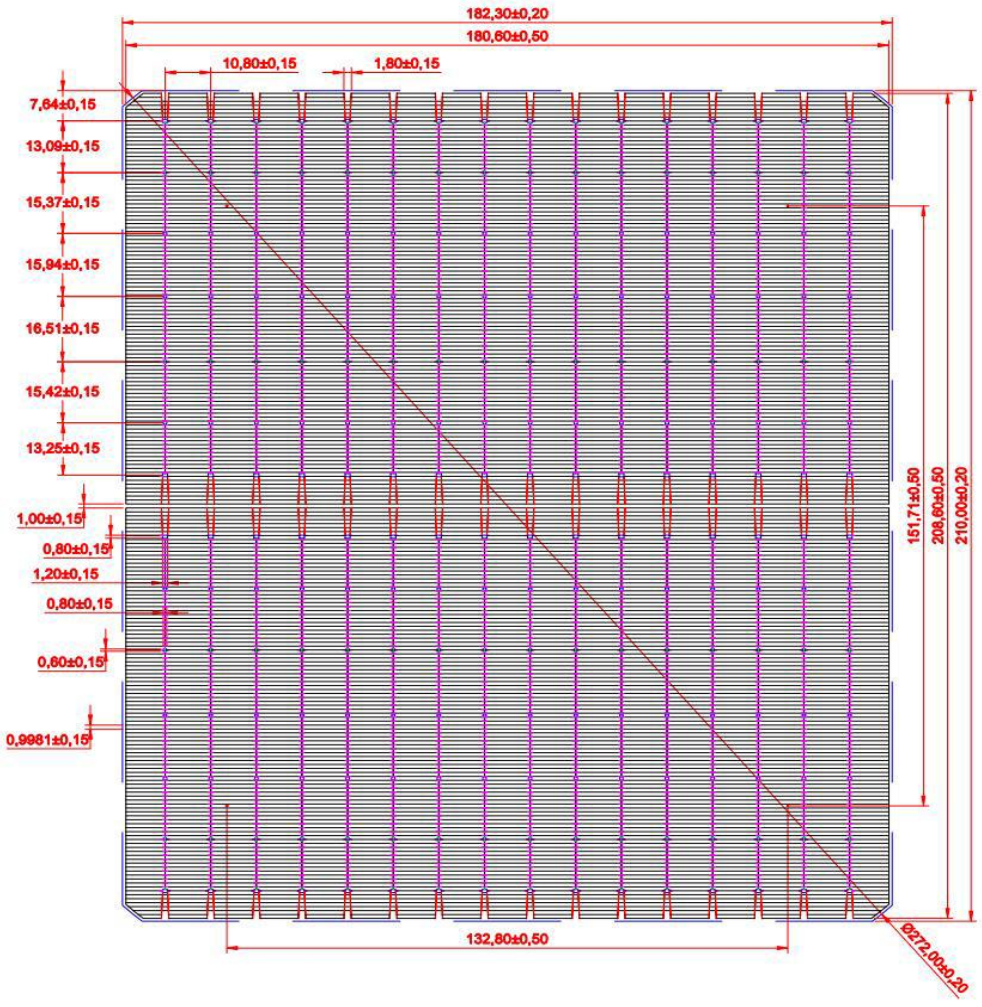
Silicon type	Size	Solar cell thickness
N-Type mono-crystalline	210*182.3±0.20Φ272mm	130±13μm

2.1 Cell Product Number: LWM16BBTBiFi272

3.1 Solar Cell Structure

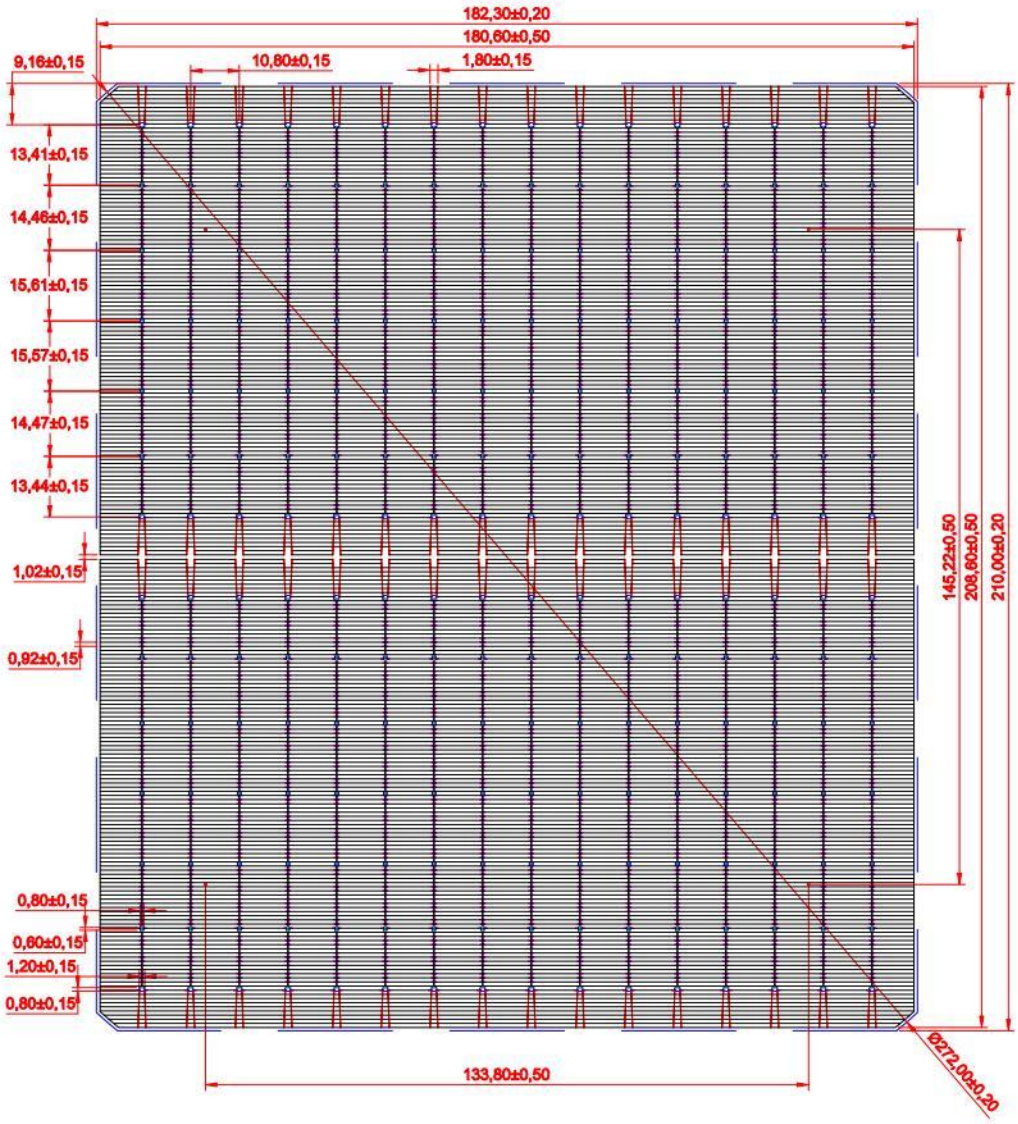
3.1.1 Front electrode pattern

The positive electrode is designed according to the following drawing,the main grid of solar cell consists of sixteen busbars with a spacing of 10.80mm and a width of 0.05mm.



3.1.2 Back electrode pattern

The back electrodes and electric field are designed according to the following drawing.The back grids of solar cells are sixteen sliver-aluminium busbars with a distance of 10.80mm and a width 0.05mm.



Parameter Items			Spec.	Tolerance	Unit
Front side	A	Finger quantity	210	N/A	Line
	B	Width of busbar	0.05	±0.02	mm
	C	Distance between busbars	10.80	±0.15	mm
Back side	A	Finger quantity	228	N/A	Line
	B	Width of busbar	0.05	±0.02	mm
	C	Distance between busbars	10.80	±0.15	mm

3.2 Electrical Performance

3.2.1 Front Efficiency

Eff(%)	Pmpp(W)	Umpp(V)	Impp(A)	Uoc(V)	Isc(A)
25.70%	9.81	0.629	15.601	0.731	16.069
25.60%	9.78	0.628	15.565	0.730	16.051
25.50%	9.74	0.627	15.529	0.729	16.023
25.40%	9.70	0.626	15.493	0.728	15.998
25.30%	9.66	0.625	15.457	0.727	15.979
25.20%	9.62	0.624	15.420	0.726	15.961
25.10%	9.58	0.623	15.384	0.725	15.945
25.00%	9.55	0.622	15.347	0.724	15.923
24.90%	9.51	0.621	15.310	0.723	15.901
24.80%	9.47	0.620	15.274	0.722	15.888
24.70%	9.43	0.619	15.237	0.721	15.886
24.60%	9.39	0.618	15.201	0.720	15.853
24.50%	9.36	0.617	15.164	0.719	15.837

3.2.2 Electrical Characteristic under STC Standard

a: Intensity: 1000W/m²

b: Spectrum: AM 1.5G

c: Temperature: 25℃

3.2.3 Temperature Coefficients

Voc: -0.27 %/℃

Isc: +0.045 %/℃

Pm: -0.33 %/℃

3.2.4 Standard solar cells origin

First-class: Fraunhofer

3.3 Visual inspection

3.3.1 Sampling plan: According to GB/T2828.1-2012

3.3.2 Defect standard and sampling level: Major defect-Level III -QALO.5

3.3.3 Inspection Time: Not less than 800LUX,about 5 seconds

3.3.4 Color classification: A range of solar cell is divided into four grade,from Light Blue to Dark Blue based on solar cells visual standard(solar cell color sample)

4.0 Records

N/A

5.0 Attachments

N/A

Note:The specification can apply to Lightway Energy Technology Co.,Limited,Jiangsu Lightway Energy PV Technology Co.,Limited,Jiangxi Lightway Energy PV Technology Co.,Limited,Shenzhen Lightway Energy Technology Co.,Limited,Lightway Technology Development Limited and other related subordinate companies under Lightway Group.