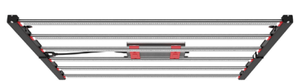
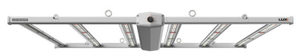
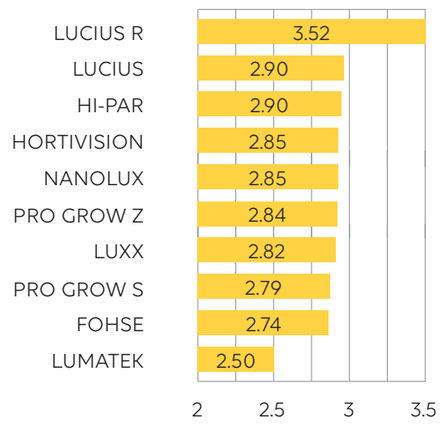
LED MULTI-BAR COMPARISON REPORT

WESTERN ELECTRICAL

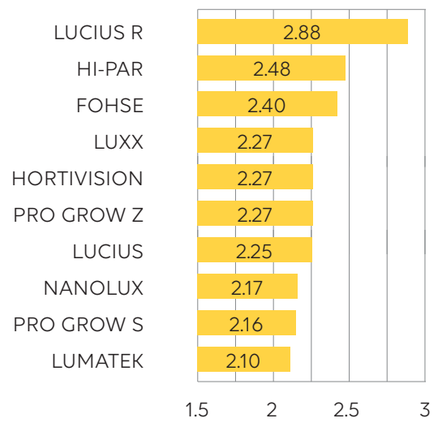
	LUCIUS FLEX R	LUCIUS FLEX	HORTIVISION 630 ILLUMINE LED	NANOLUX LED ZX	LUXX 645 LED PRO	PRO GROW MODEL S	FOHSE 640W ARIES
							
[1]Spectroradiometer Test							
Spectrum:	Full Spectrum + Enhanced Red	Full Spectrum	Full Spectrum	Full Spectrum	Full Spectrum	Full Spectrum	Full Spectrum + Far-Red (Spring)
Power (W):	684	643	646	624	654	623	632
PPF (µmol/s):	2,411	1,864	1,838	1,775	1,843	1,740	1,732
PPF Efficacy (µmol/J):	3.52	2.90	2.85	2.85	2.82	2.79	2.74
CRI (%):	60	90	82	85	87	88	94
CCT (K):	4,000	4,000	3,850	4,100	4,000	3,850	3,400
[2]Coverage Area Test							
[3]Hanging Height (cm):	51	33	32	31	36	31	69
Coverage Dimensions L x W (m):	1.60 x 1.80	1.46 x 1.56	1.48 x 1.53	1.40 x 1.57	1.45 x 1.57	1.44 x 1.50	1.45 x 1.65
Coverage Area (m^2):	2.88	2.27	2.27	2.17	2.27	2.16	2.40
[4]PPFD Test							
Ave PPFD (µmol/s/m^2):	605	485	480	466	480	470	514
Max PPFD (µmol/s/m^2):	1,320	1,050	1,034	1,026	1,071	1,019	2,125
Min PPFD (µmol/s/m^2):	58	55	55	49	60	49	7

Comparison

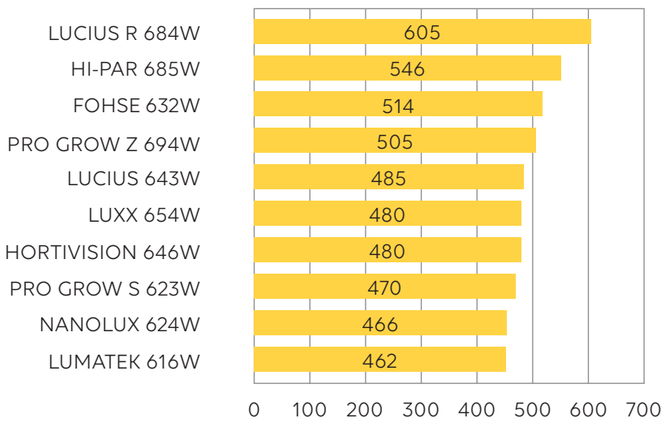
[1]PPF Efficacy (µmol/J)



[2]Coverage Area (m^2)



[4]Average PPFD (µmol/s/m^2)



All tests were conducted and reported by Western Electrical.
To understand methods and technology used, visit westernelectrical.com.au

1. SPECTRORADIOMETER TEST
Conducted in a 2 meter sphere with a spectroradiometer without using any de-rating factor.

2. COVERAGE AREA TEST
Coverage Area to achieve a Maximum PPFD of 1000µmol/s/m^2 and a Minimum PPFD 200µmol/s/m^2.

3. HANGING HEIGHT
Refers to the distance between the plant canopy and the LED.

4. PPFD TEST
PPFD measured from 289 Data points set in a 1.6 x 1.6m area, with a hanging height of 30cm.

NOTE:
This report is for lighting only. Other factors to consider are lifespan, quality, reliability, electrical supply and product features.
Test data has a tolerance of ±3%

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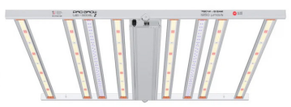
	LUMATEK ZEUS PRO	PRO GROW MODEL	HI-PAR SPECTRO
			
[1]Spectroradiometer Test			
Spectrum:	Full Spectrum	Full Spectrum + UV + Far-Red	Full Spectrum
Power (W):	616	694	685
PPF (µmol/s):	1,540	1,970	1,985
PPF Efficacy (µmol/J):	2.50	2.84	2.90
CRI (%):	74	90	89
CCT (K):	3,650	4,100	3,700
[2]Coverage Area Test			
[3]Hanging Height (cm):	30	39	46
Coverage Dimensions L x W (m):	1.40 x 1.50	1.41 x 1.61	1.55 x 1.60
Coverage Area (m^2):	2.10	2.27	2.48
[4]PPFD Test			
Ave PPFD (µmol/s/m^2):	462	505	546
Max PPFD (µmol/s/m^2):	1,003	1,132	1,237
Min PPFD (µmol/s/m^2):	38	42	50

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This is an evolving report that adds new fixtures regularly.
Check westernelectrical.com.au for the latest report.

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