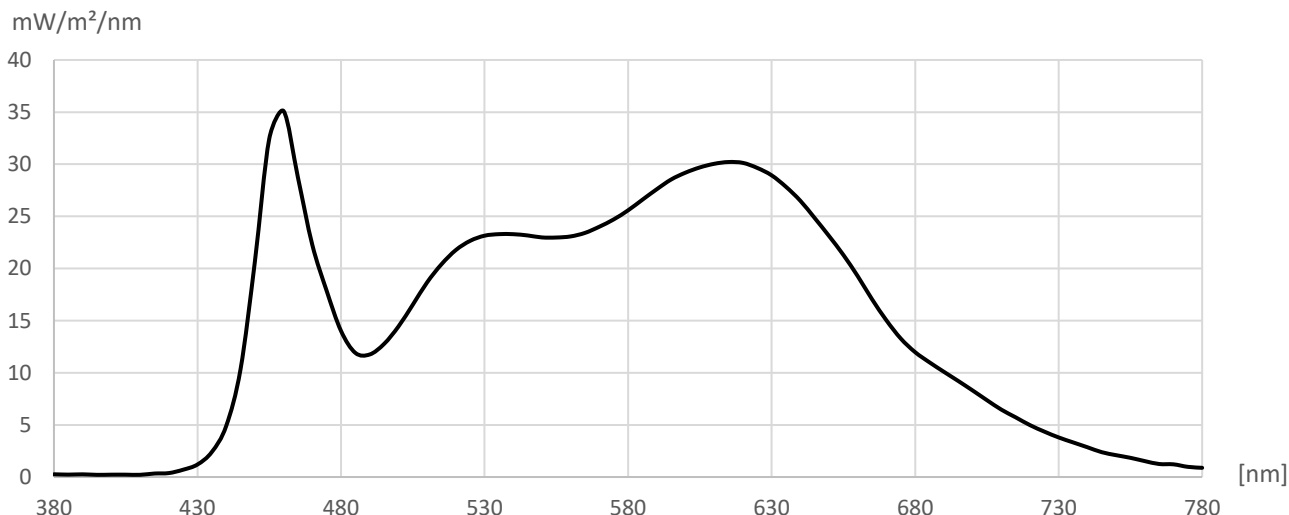


Measurement Protocol



Manufacturer: Flexfire LEDs, Inc.
Type: ClickBright™ Tunable White LED Light Bar
Model: LB-TW3050K

Measurement file: LB-TW3050K.CSV
Date of measurement: 13.08.2024
Time of measurement: 12:08:53



R1 = 97.3	Ra = 94.3	Illuminance	1,743.14 lx	CIE1931
R2 = 98.8	Re = 92.4	Ee	5.919 W/m ²	x = 0.3848
R3 = 98.2	GAI = 76.4	LER	294.5 lm/W	y = 0.3759
R4 = 93.2				
R5 = 94.4	TLCI = 93.0	Correlated Color Temperature (CCT)	3,877 K	CIE1976
R6 = 94.8		Duv	-0.0016	u' = 0.2283
R7 = 91.1	PPFD			v' = 0.5019
R8 = 86.9	[μmol/m ² s]	Saturation	28.20 %	
R9 = 73.6	26.79			CIE1960
R10 = 99.0		Dominant wavelength	580 nm	u = 0.2283
R11 = 96.0		Peak wavelength	459 nm	v = 0.3346
R12 = 69.5				
R13 = 99.4		Flicker frequency	% < 1.0	TM30
R14 = 99.4		Percent Flicker	< 1.0	Rf = 86.6
R15 = 94.2		Flicker index	% < 1.0	Rg = 97.4

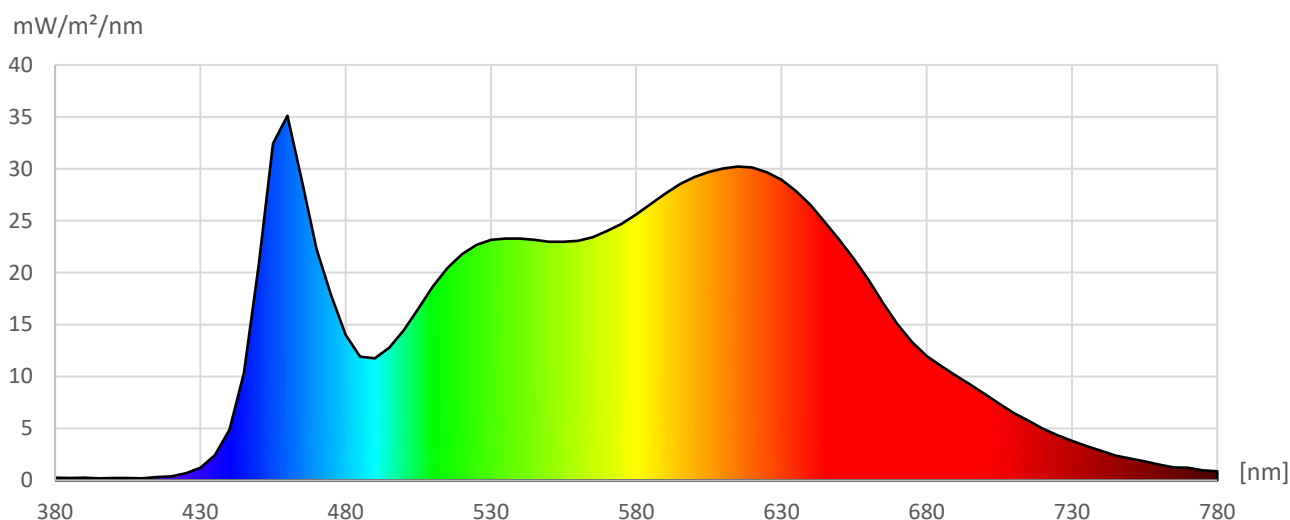
[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm
380	0.26	440	4.89	500	14.43	560	23.08	620	30.13	680	11.97	740	2.86
385	0.23	445	10.34	505	16.52	565	23.41	625	29.65	685	11.00	745	2.39
390	0.26	450	20.66	510	18.67	570	24.01	630	28.94	690	10.09	750	2.09
395	0.21	455	32.44	515	20.40	575	24.71	635	27.84	695	9.21	755	1.84
400	0.22	460	35.10	520	21.77	580	25.58	640	26.50	700	8.31	760	1.53
405	0.23	465	28.72	525	22.65	585	26.60	645	24.84	705	7.37	765	1.25
410	0.21	470	22.27	530	23.14	590	27.60	650	23.12	710	6.47	770	1.22
415	0.33	475	17.86	535	23.29	595	28.53	655	21.30	715	5.73	775	0.98
420	0.38	480	14.02	540	23.29	600	29.19	660	19.27	720	4.98	780	0.88
425	0.70	485	11.91	545	23.17	605	29.69	665	17.04	725	4.36		
430	1.20	490	11.75	550	22.98	610	30.04	670	15.02	730	3.80		
435	2.40	495	12.76	555	22.97	615	30.21	675	13.28	735	3.32		

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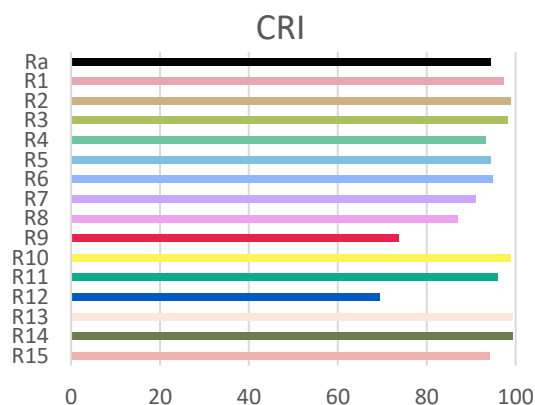
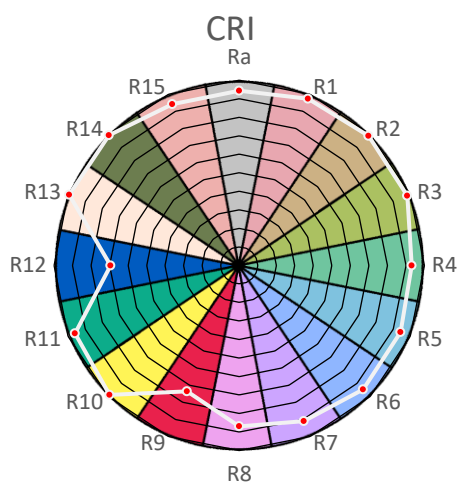
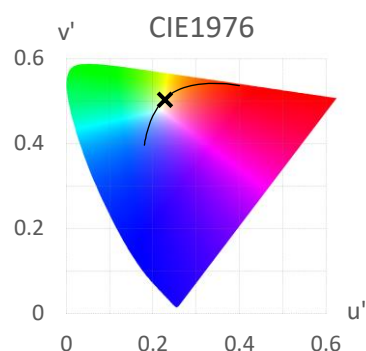
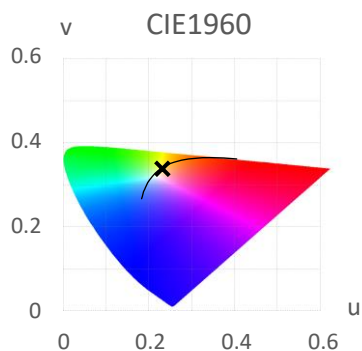
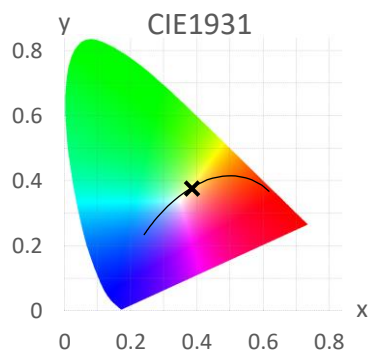
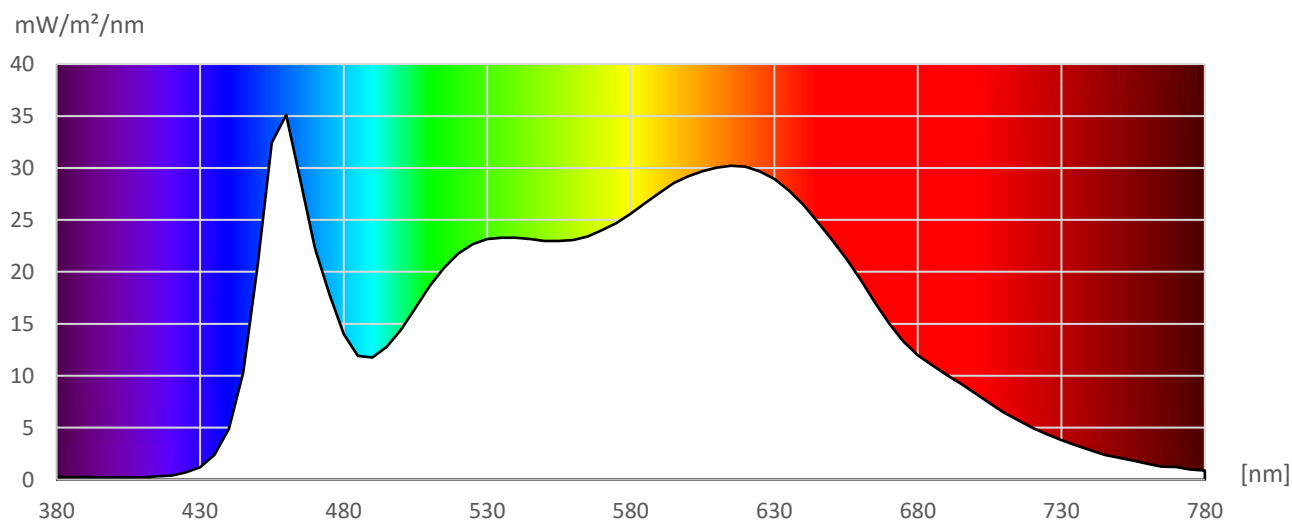
[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm
380	0.26	535	23.29	690	10.09								
385	0.23	540	23.29	695	9.21								
390	0.26	545	23.17	700	8.31								
395	0.21	550	22.98	705	7.37								
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435	2.40	590	27.60	745	2.39								
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485	11.91	640	26.50										
490	11.75	645	24.84										
495	12.76	650	23.12										
500	14.43	655	21.30										
505	16.52	660	19.27										
510	18.67	665	17.04										
515	20.40	670	15.02										
520	21.77	675	13.28										
525	22.65	680	11.97										
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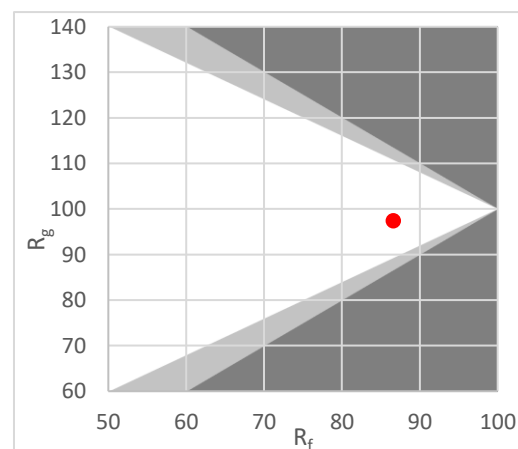
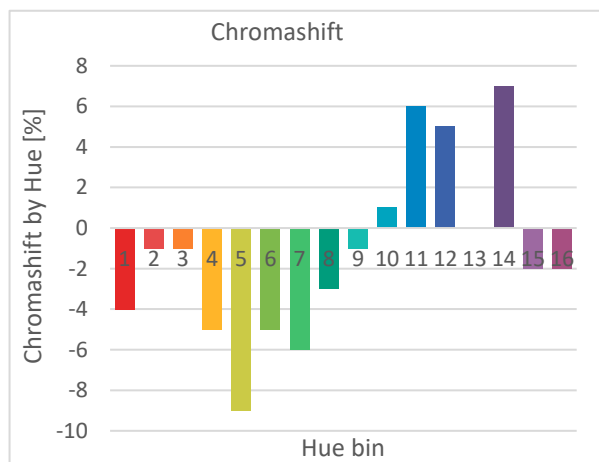
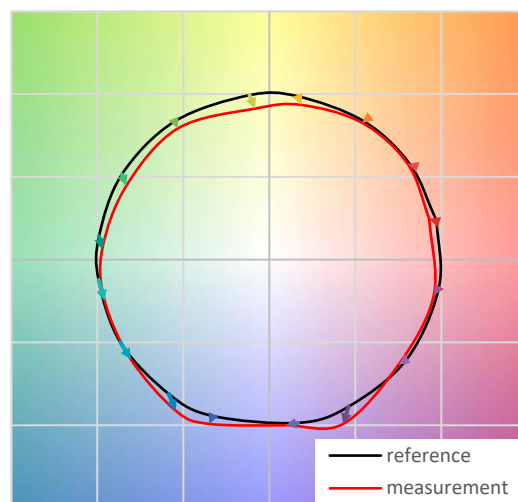
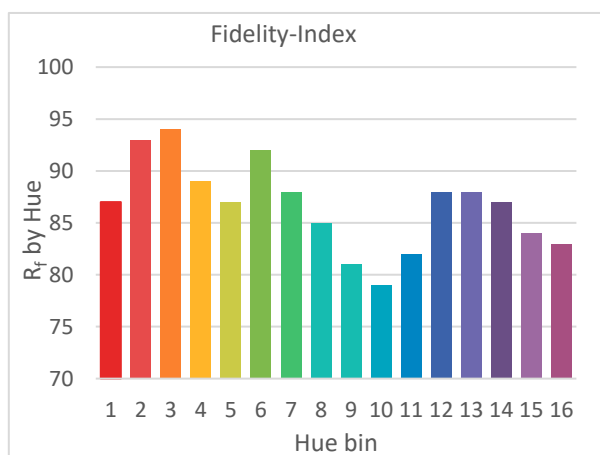
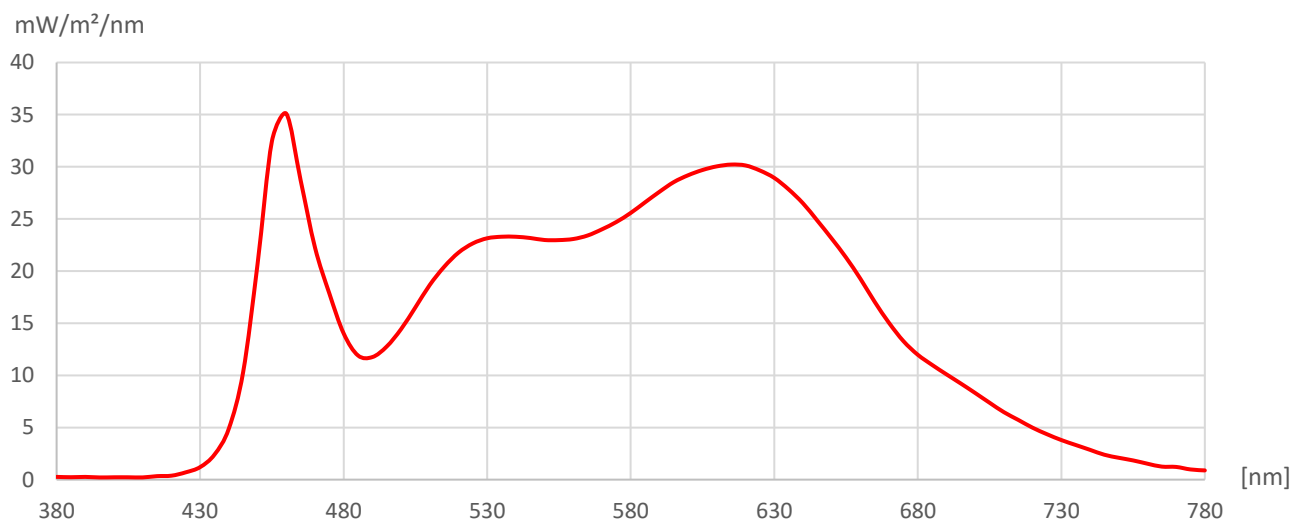


Measurement Protocol



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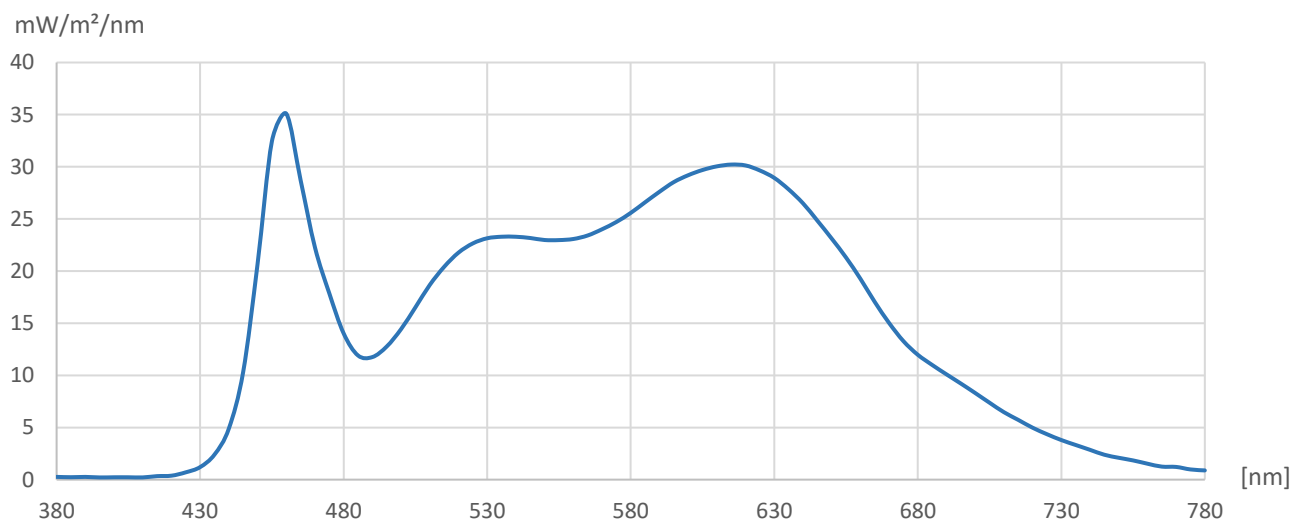


Measurement Protocol



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 Model: LB-TW3050K

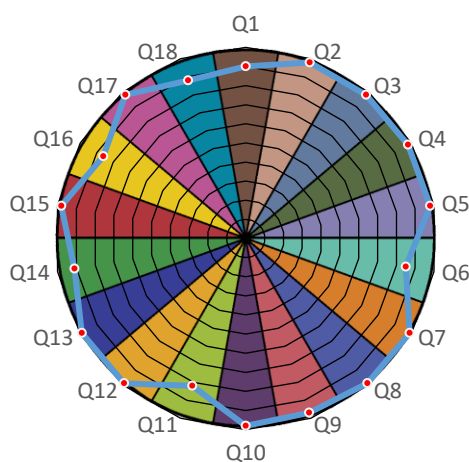
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correlated color temperature (CCT) 3,877 K
 TLCI 93

Reference Spectrum Plank-Daylight Mix

	Lightness	Chroma	Hue
R	2	1	0
R/Y	0	0	-1
Y	0	0	0
Y/G	0	0	0
G	0	0	0
G/C	0	0	0
C	0	0	0
C/B	0	0	-1
B	0	-1	0
B/M	1	0	2
M	1	1	1
M/R	1	1	1



Test Colour	Value	Test Colour	Value	Test Colour	Value
Q1 Dark skin	90	Q7 Orange	99	Q13 Blue	99
Q2 Light skin	98	Q8 Purplish blue	99	Q14 Green	91
Q3 Blue sky	98	Q9 Moderate red	97	Q15 Red	98
Q4 Foliage	98	Q10 Purple	98	Q16 Yellow	86
Q5 Blue flower	98	Q11 Yellow green	82	Q17 Magenta	98
Q6 Bluish green	85	Q12 Orange yellow	99	Q18 Cyan	88