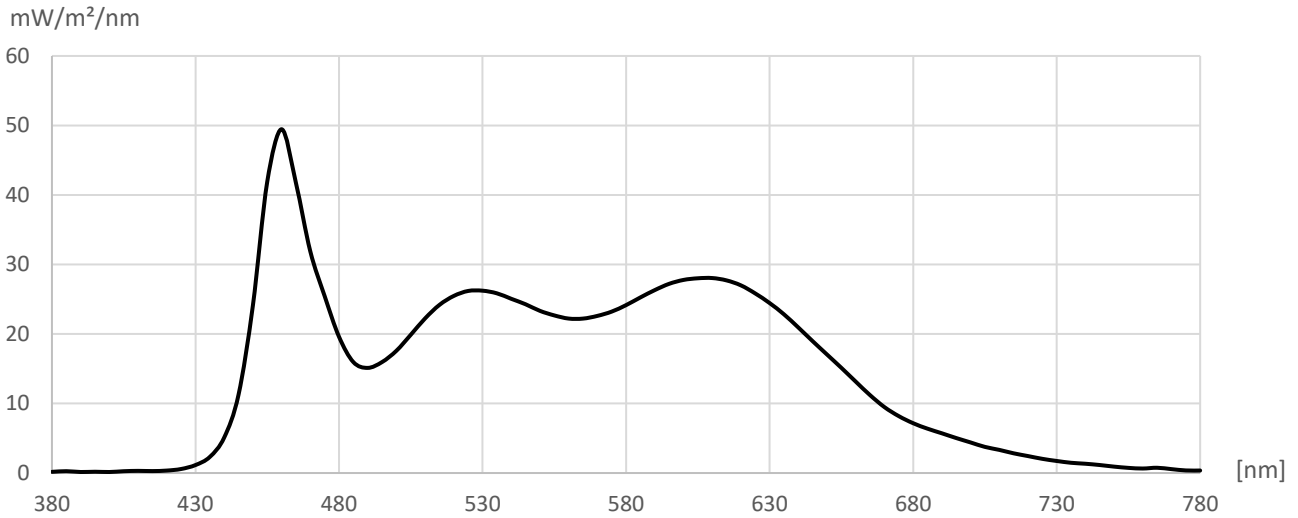


Measurement Protocol



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: 12:09:15



R1 = 96.6	Ra = 91.4	Illuminance	1,761.10 lx	CIE1931
R2 = 96.5	Re = 89.3	Ee	5.794 W/m ²	x = 0.3478
R3 = 95.5	GAI = 84.6	LER	303.9 lm/W	y = 0.3570
R4 = 88.0				
R5 = 92.0	TLCI = 90.0	Correlated Color Temperature (CCT)	4,919 K	CIE1976
R6 = 93.6		Duv	0.0016	u' = 0.2112
R7 = 86.3	PPFD			v' = 0.4876
R8 = 83.0	[μmol/m ² s]	Saturation	11.40 %	
R9 = 68.4	26.17			CIE1960
R10 = 95.4		Dominant wavelength	571 nm	u = 0.2112
R11 = 94.5		Peak wavelength	459 nm	v = 0.3251
R12 = 63.1				
R13 = 97.2		Flicker frequency	% < 1.0	TM30
R14 = 98.1		Percent Flicker	< 1.0	Rf = 82.2
R15 = 91.2		Flicker index	% < 1.0	Rg = 93.8

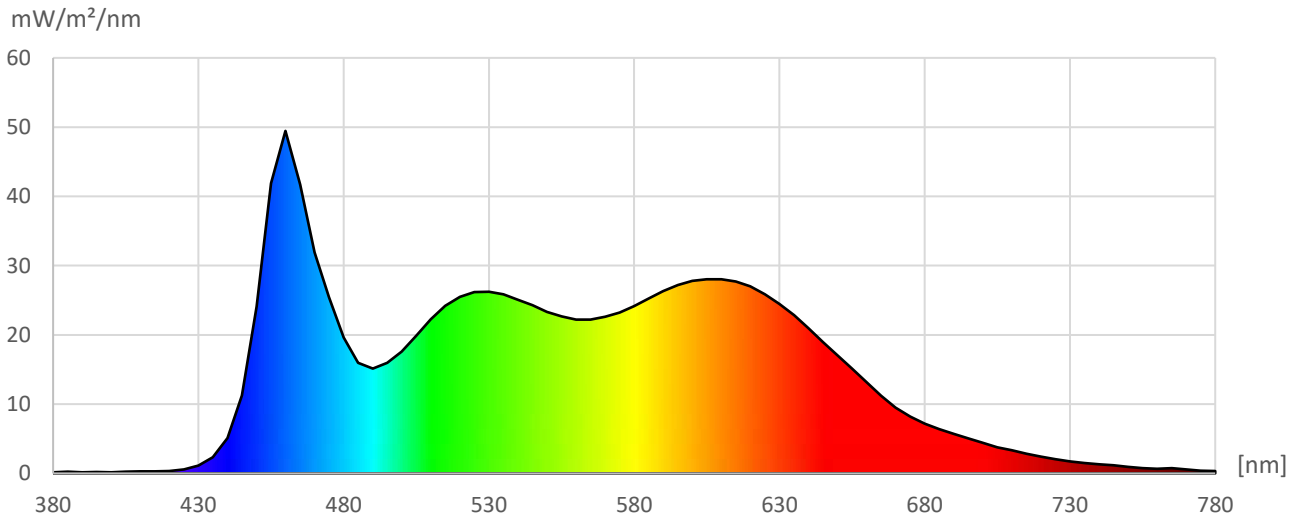
[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm
380	0.17	440	5.10	500	17.59	560	22.22	620	27.00	680	7.17	740	1.33
385	0.26	445	11.27	505	19.89	565	22.21	625	25.84	685	6.38	745	1.15
390	0.15	450	24.10	510	22.25	570	22.60	630	24.45	690	5.72	750	0.92
395	0.18	455	41.91	515	24.19	575	23.22	635	22.83	695	5.03	755	0.74
400	0.15	460	49.46	520	25.48	580	24.16	640	20.94	700	4.40	760	0.65
405	0.26	465	41.73	525	26.19	585	25.26	645	18.96	705	3.76	765	0.75
410	0.31	470	31.89	530	26.23	590	26.32	650	17.05	710	3.33	770	0.56
415	0.28	475	25.45	535	25.85	595	27.22	655	15.13	715	2.84	775	0.37
420	0.35	480	19.61	540	25.06	600	27.78	660	13.15	720	2.44	780	0.36
425	0.58	485	15.96	545	24.28	605	28.02	665	11.20	725	2.04		
430	1.15	490	15.13	550	23.33	610	28.05	670	9.49	730	1.74		
435	2.32	495	15.96	555	22.67	615	27.71	675	8.18	735	1.47		

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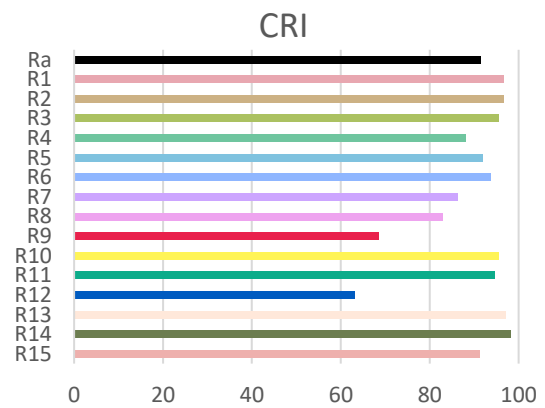
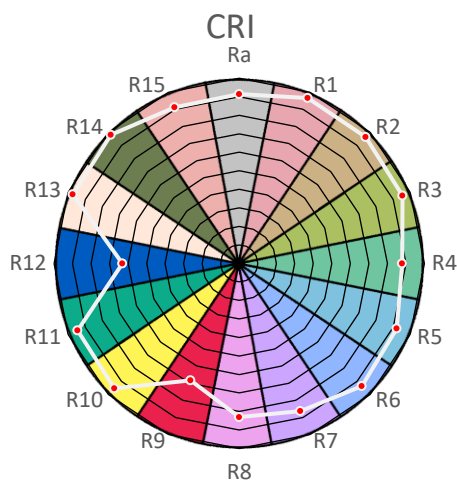
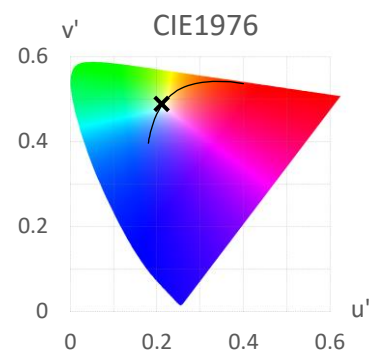
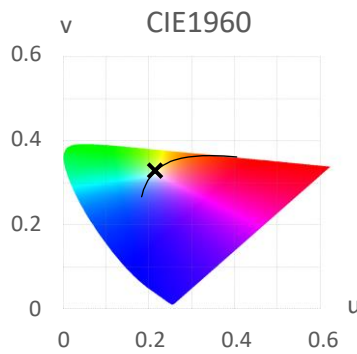
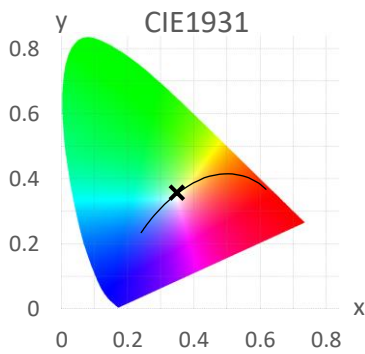
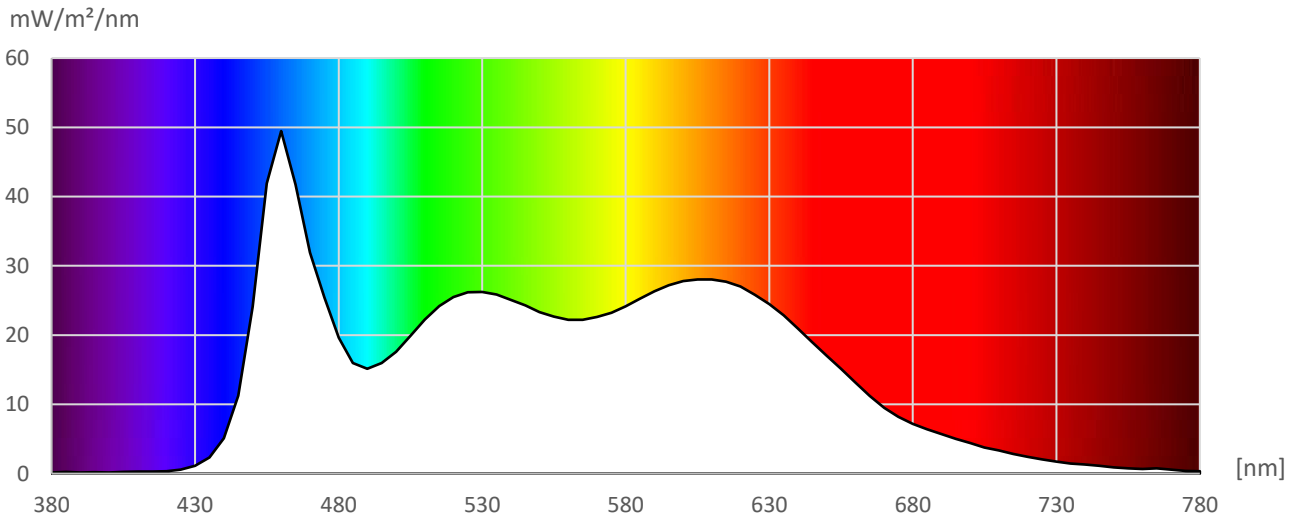
[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm	[nm]	mW/m²/nm
380	0.17	535	25.85	690	5.72								
385	0.26	540	25.06	695	5.03								
390	0.15	545	24.28	700	4.40								
395	0.18	550	23.33	705	3.76								
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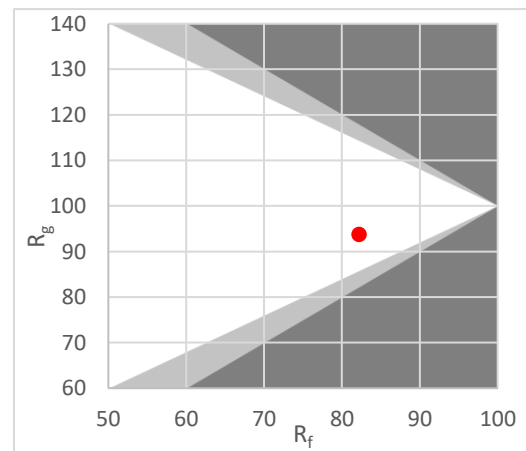
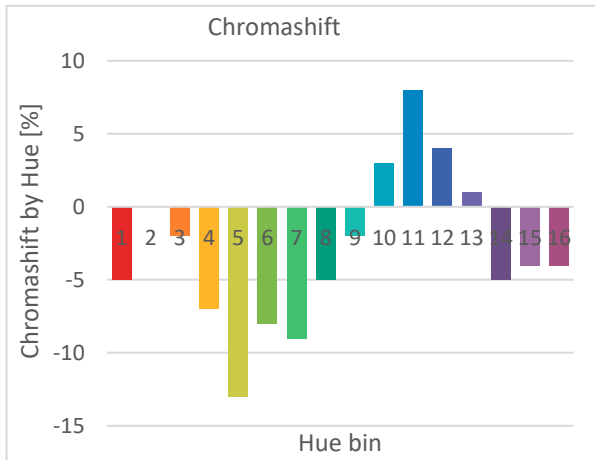
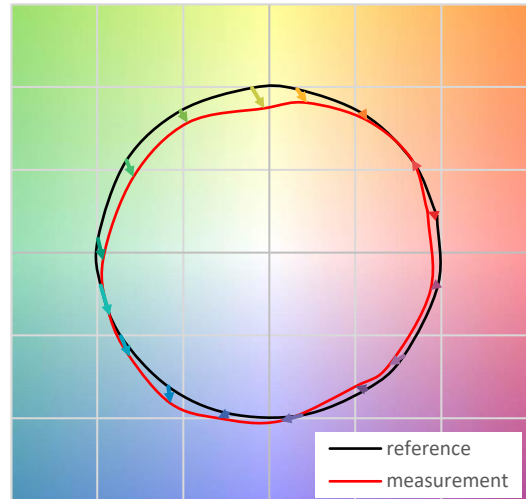
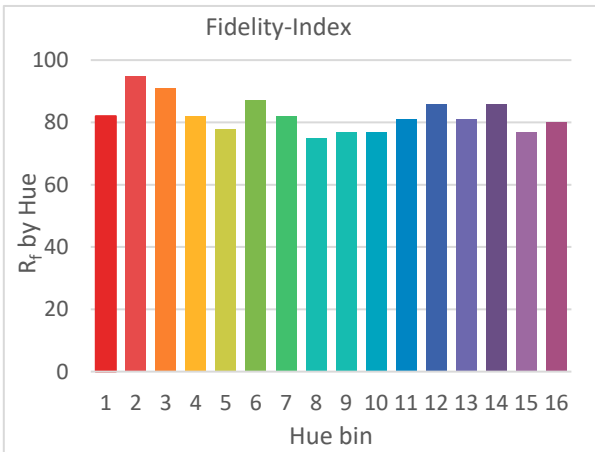
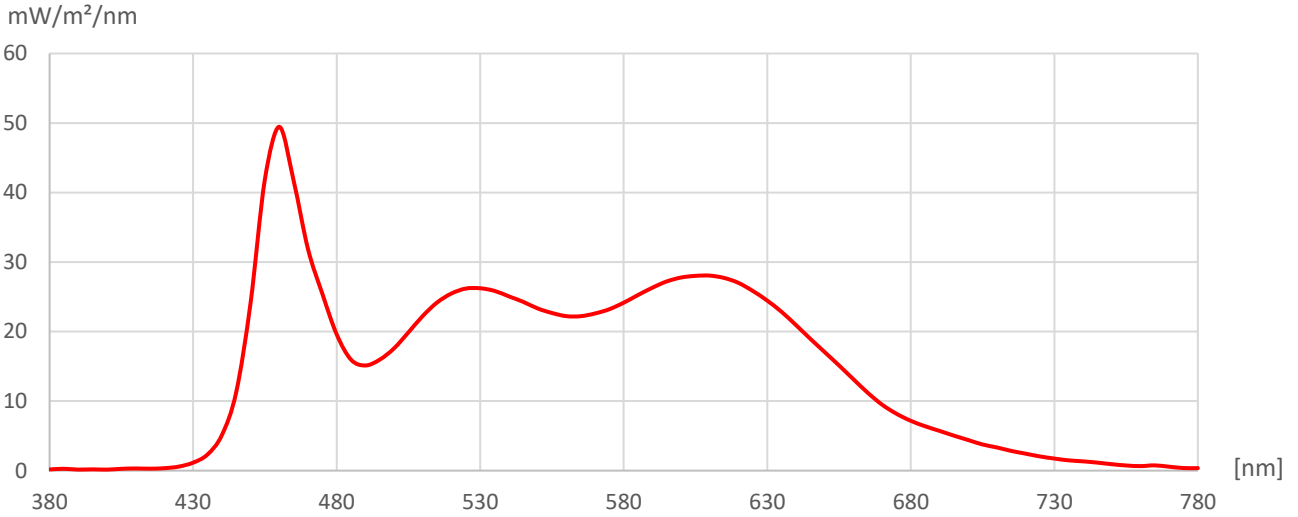


Measurement Protocol



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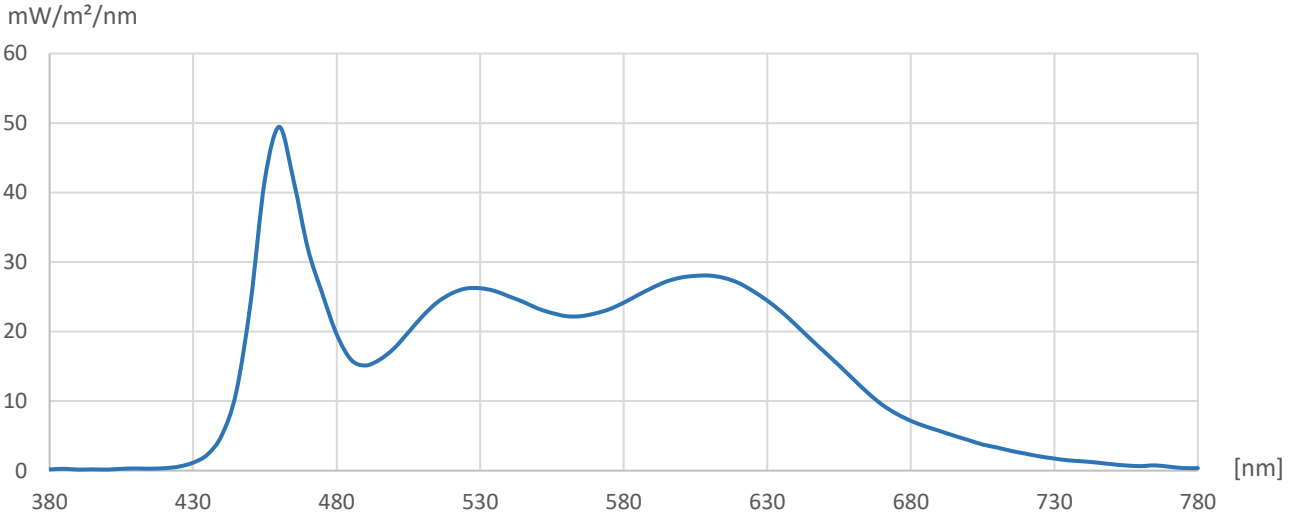


Measurement Protocol



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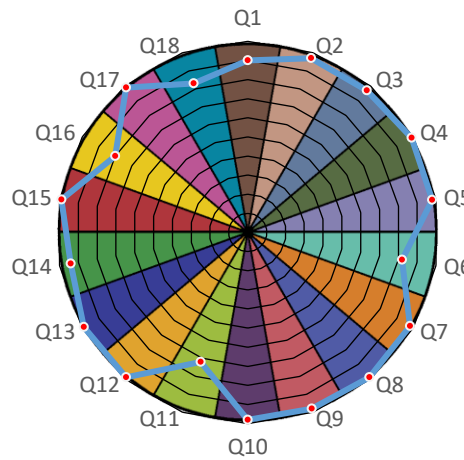
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correlated color temperature (CCT) 4,919 K
 TLCI 90

Reference Spectrum Plank-Daylight Mix

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



Test Colour	Value	Test Colour	Value	Test Colour	Value
Q1 Dark skin	90	Q7 Orange	98	Q13 Blue	99
Q2 Light skin	97	Q8 Purplish blue	99	Q14 Green	94
Q3 Blue sky	97	Q9 Moderate red	98	Q15 Red	99
Q4 Foliage	99	Q10 Purple	98	Q16 Yellow	80
Q5 Blue flower	98	Q11 Yellow green	72	Q17 Magenta	99
Q6 Bluish green	82	Q12 Orange yellow	99	Q18 Cyan	83