

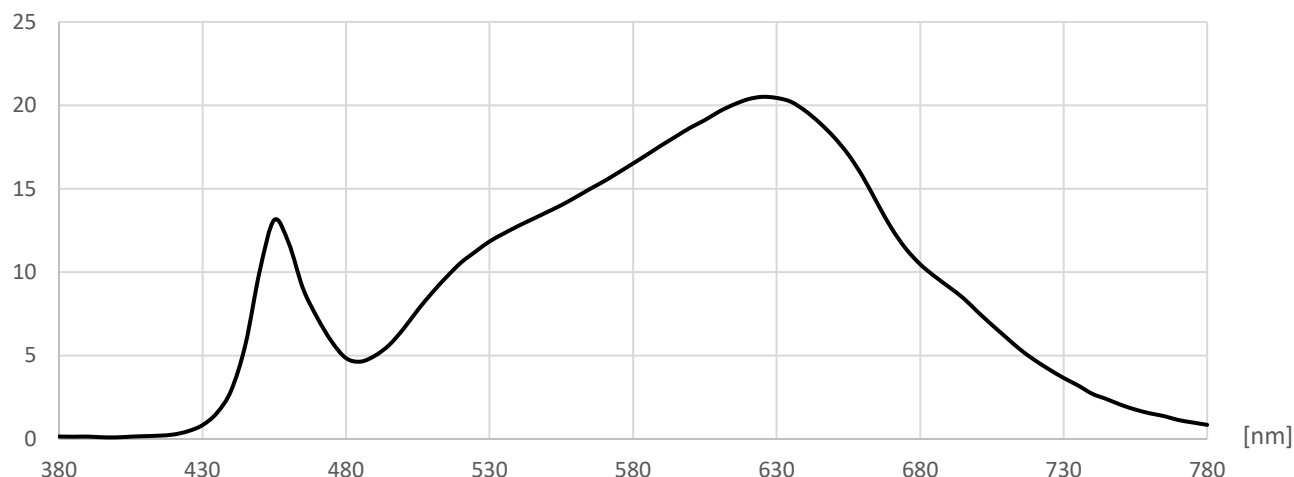
Measurement Protocol



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: 12:12:47

mW/m²/nm



R1 = 93.0	Ra = 92.5	Illuminance	1,041.52 lx	CIE1931
R2 = 96.4	Re = 89.4	Ee	3.669 W/m ²	x = 0.4314
R3 = 97.0	GAI = 60.2	LER	283.9 lm/W	y = 0.3987
R4 = 91.2				
R5 = 91.8	TLCI = 92.0	Correlated Color Temperature (CCT)	3,033 K	CIE1976
R6 = 94.1		Duv	-0.0014	u' = 0.2493
R7 = 92.4	PPFD			v' = 0.5184
R8 = 83.8	[μmol/m ² s]	Saturation	49.10 %	
R9 = 64.4	16.64			CIE1960
R10 = 89.4		Dominant wavelength	582 nm	u = 0.2493
R11 = 90.7		Peak wavelength	627 nm	v = 0.3456
R12 = 74.4				
R13 = 94.1		Flicker frequency	% < 1.0	TM30
R14 = 97.7		Percent Flicker	< 1.0	Rf = 88.7
R15 = 90.4		Flicker index	% < 1.0	Rg = 99.0

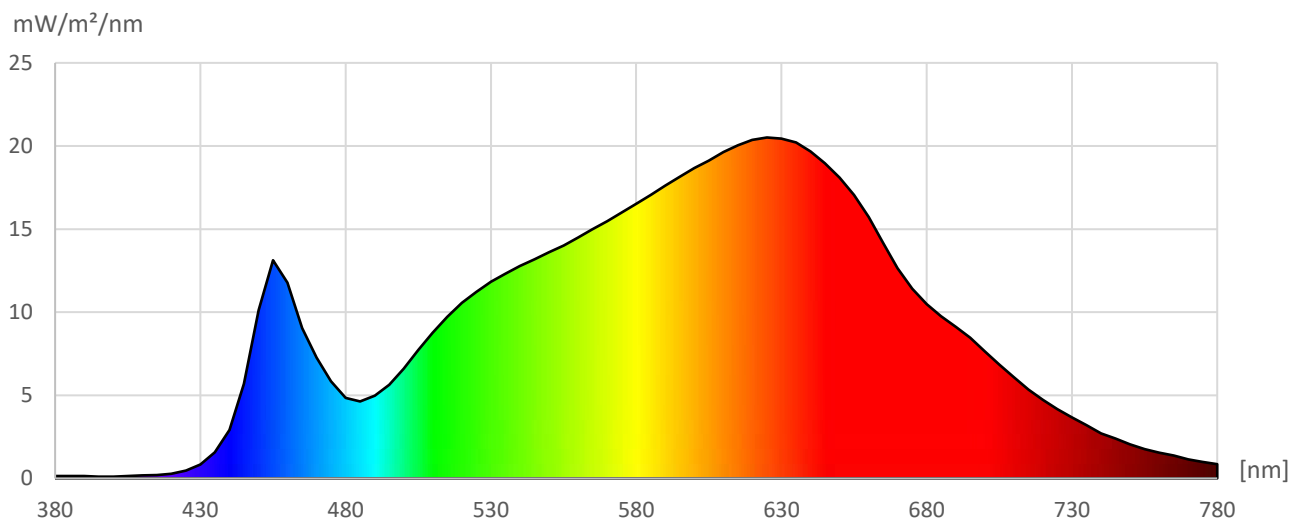
[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm
380	0.15	440	2.92	500	6.60	560	14.49	620	20.36	680	10.48	740	2.71
385	0.14	445	5.69	505	7.73	565	14.99	625	20.51	685	9.76	745	2.39
390	0.15	450	10.11	510	8.77	570	15.46	630	20.45	690	9.12	750	2.05
395	0.10	455	13.13	515	9.71	575	15.98	635	20.21	695	8.45	755	1.76
400	0.10	460	11.77	520	10.57	580	16.52	640	19.67	700	7.63	760	1.54
405	0.14	465	9.03	525	11.22	585	17.06	645	18.95	705	6.84	765	1.37
410	0.17	470	7.27	530	11.84	590	17.62	650	18.09	710	6.09	770	1.14
415	0.20	475	5.84	535	12.32	595	18.14	655	17.05	715	5.35	775	0.99
420	0.27	480	4.85	540	12.77	600	18.67	660	15.73	720	4.72	780	0.85
425	0.47	485	4.64	545	13.18	605	19.11	665	14.16	725	4.17		
430	0.83	490	4.98	550	13.60	610	19.63	670	12.64	730	3.66		
435	1.56	495	5.63	555	14.02	615	20.04	675	11.41	735	3.21		

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: 12:12:47



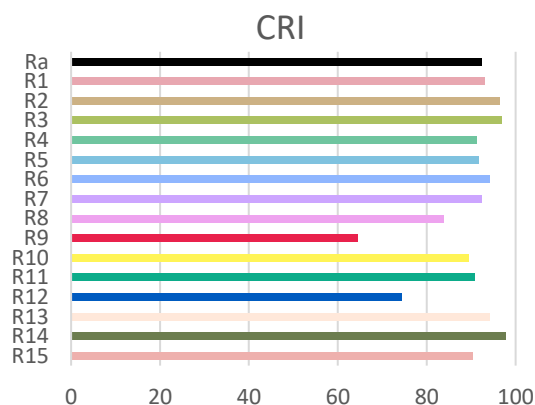
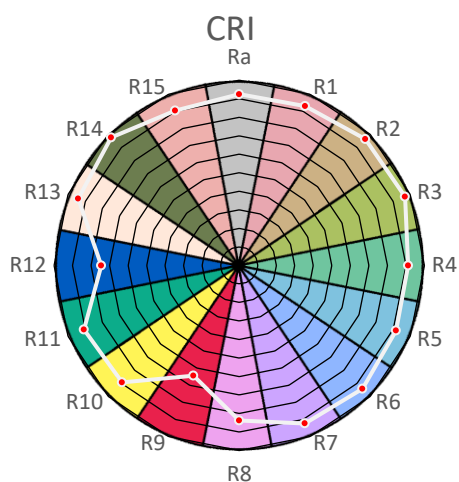
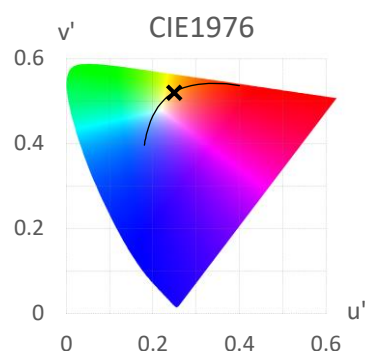
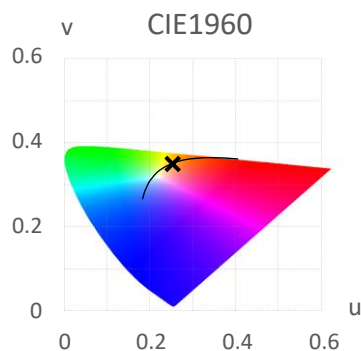
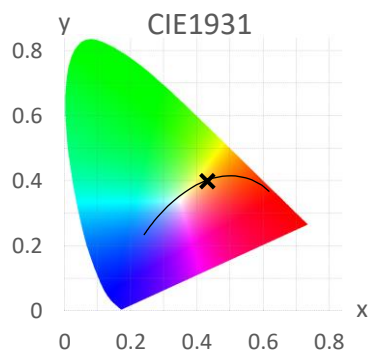
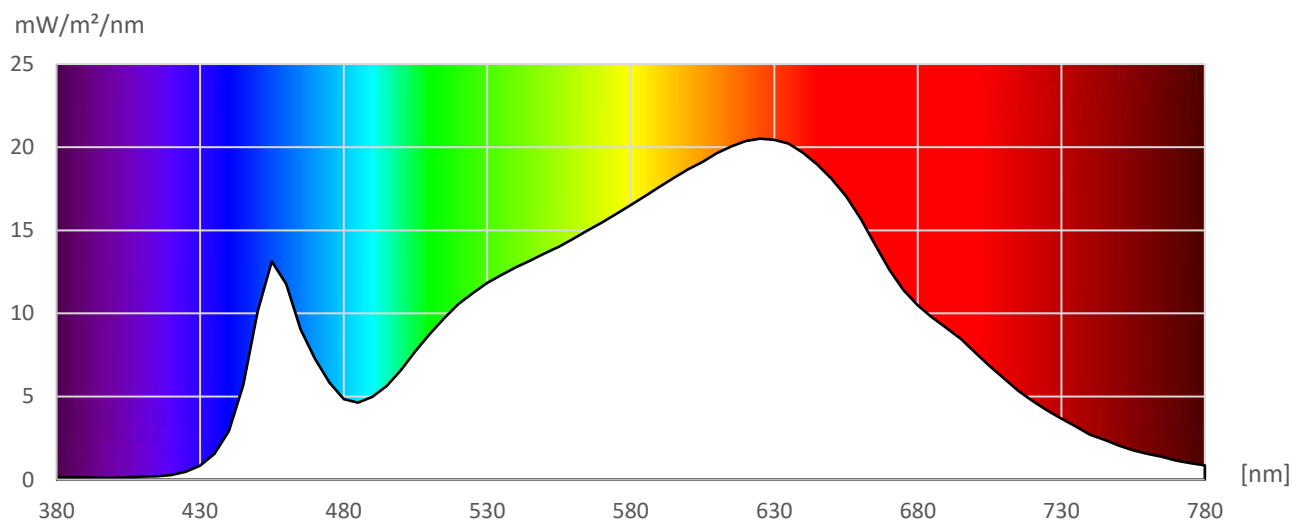
[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm	[nm]	mW/m ² /nm
380	0.15	535	12.32	690	9.12								
385	0.14	540	12.77	695	8.45								
390	0.15	545	13.18	700	7.63								
395	0.10	550	13.60	705	6.84								
400	0.10	555	14.02	710	6.09								
405	0.14	560	14.49	715	5.35								
410	0.17	565	14.99	720	4.72								
415	0.20	570	15.46	725	4.17								
420	0.27	575	15.98	730	3.66								
425	0.47	580	16.52	735	3.21								
430	0.83	585	17.06	740	2.71								
435	1.56	590	17.62	745	2.39								
440	2.92	595	18.14	750	2.05								
445	5.69	600	18.67	755	1.76								
450	10.11	605	19.11	760	1.54								
455	13.13	610	19.63	765	1.37								
460	11.77	615	20.04	770	1.14								
465	9.03	620	20.36	775	0.99								
470	7.27	625	20.51	780	0.85								
475	5.84	630	20.45										
480	4.85	635	20.21										
485	4.64	640	19.67										
490	4.98	645	18.95										
495	5.63	650	18.09										
500	6.60	655	17.05										
505	7.73	660	15.73										
510	8.77	665	14.16										
515	9.71	670	12.64										
520	10.57	675	11.41										
525	11.22	680	10.48										
530	11.84	685	9.76										

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: 12:12:47

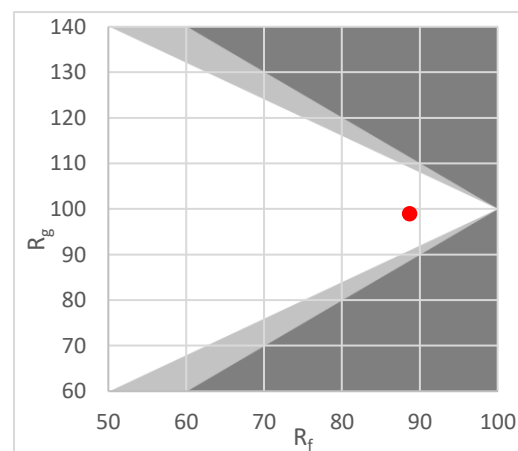
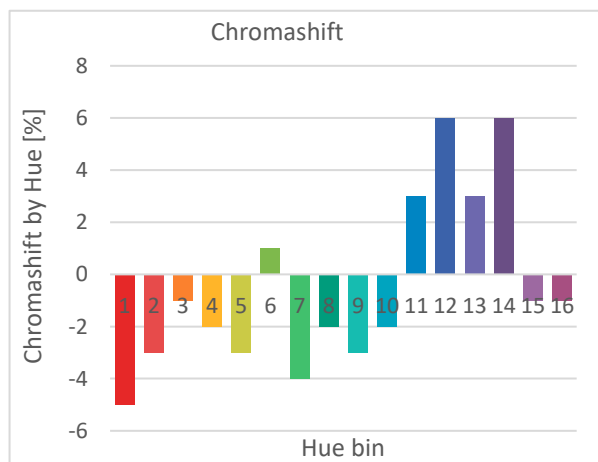
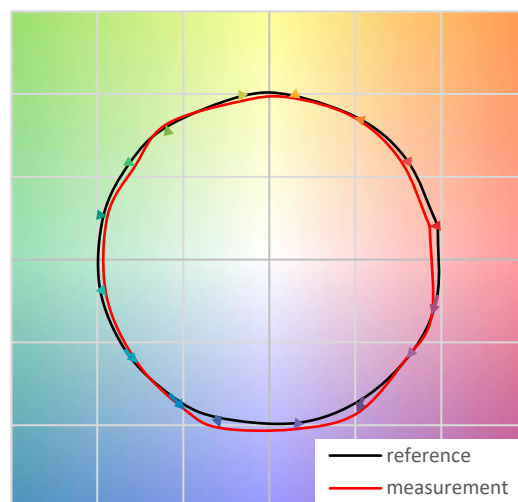
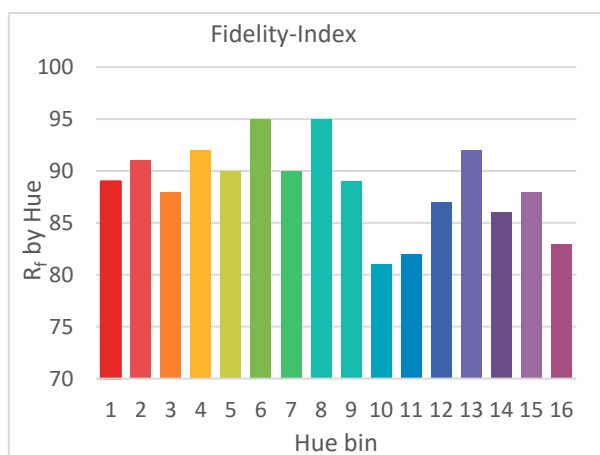
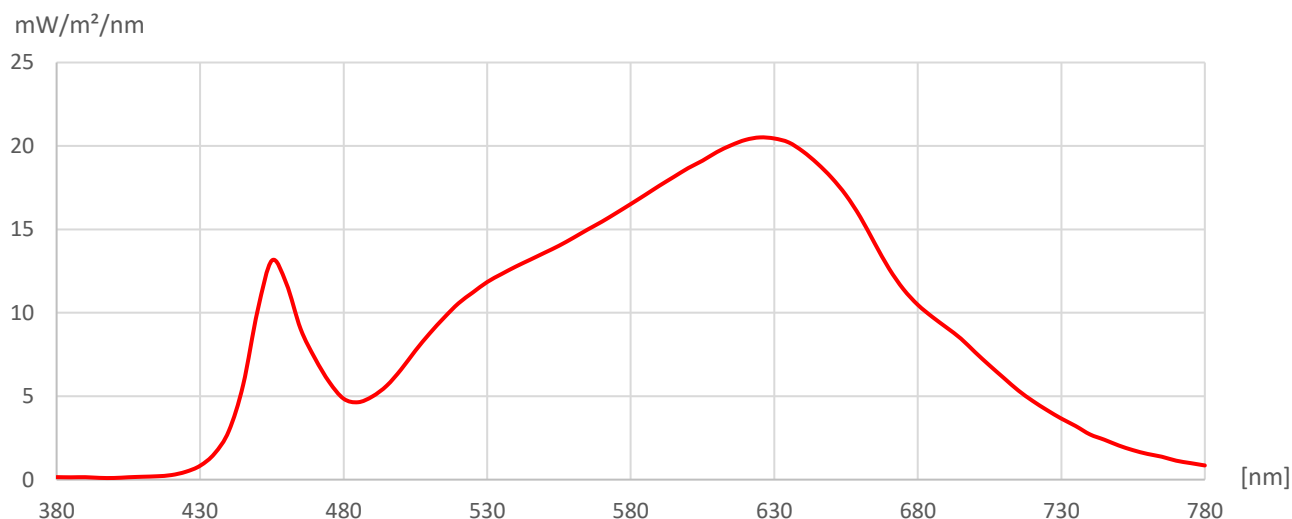


Measurement Protocol



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: 12:12:47

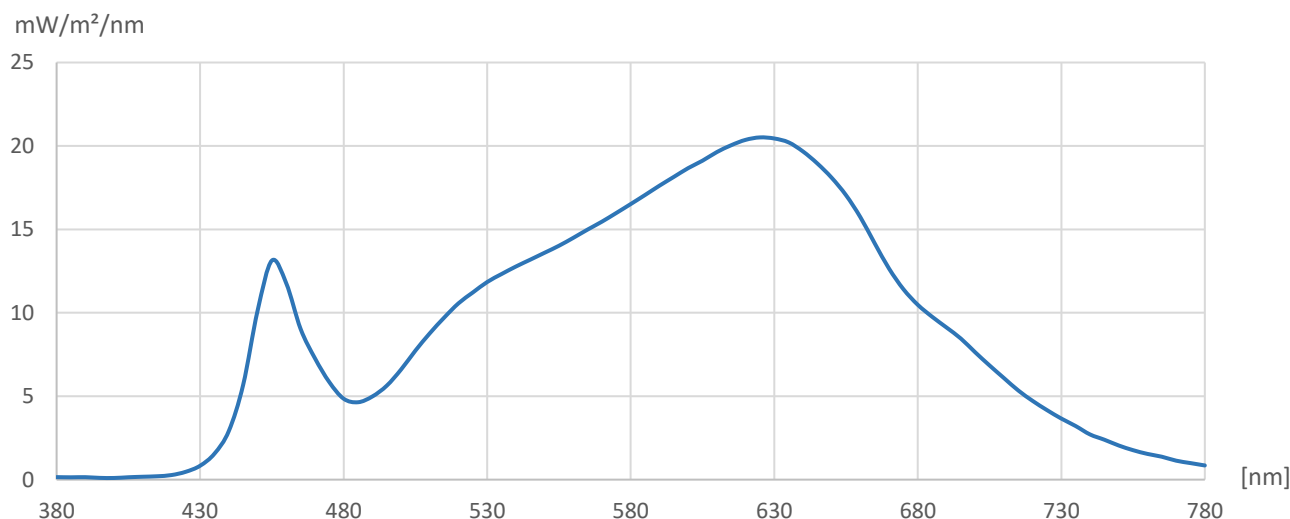


Measurement Protocol



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

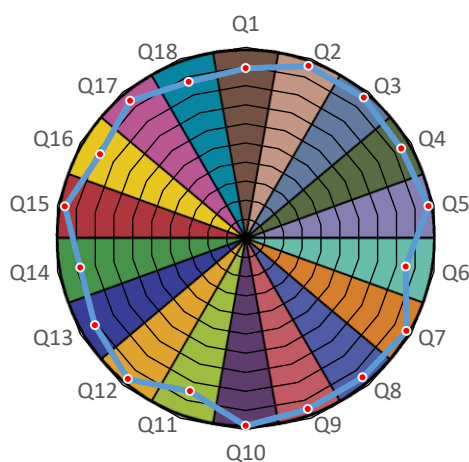
Measurement file: LB-TW3050K.CSV
 Date of measurement: 13.08.2024
 Time of measurement: 12:12:47



correlated color temperature (CCT) 3,033 K
 TLCI 92

Reference Spectrum Plank

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



Test Colour	Value	Test Colour	Value	Test Colour	Value
Q1 Dark skin	89	Q7 Orange	97	Q13 Blue	91
Q2 Light skin	96	Q8 Purplish blue	95	Q14 Green	88
Q3 Blue sky	96	Q9 Moderate red	95	Q15 Red	96
Q4 Foliage	94	Q10 Purple	98	Q16 Yellow	88
Q5 Blue flower	97	Q11 Yellow green	85	Q17 Magenta	94
Q6 Bluish green	85	Q12 Orange yellow	96	Q18 Cyan	87