

**PRODUCT:**  
1-FT 5730 24V LED MODULE

**FEATURES:**  
280 mm x 20 mm x 2.0 mm MCPCB Linear Module  
Integrated SMD connector  
Zhaga compliant  
120° emission angle  
95 min CRI



**DESCRIPTION**  
YUJILEDS® high CRI 5730 LED module provides a convenient PCB solution for high CRI LED applications. Providing 95 CRI, this versatile LED module can be used in a variety of applications demanding high color quality and performance.



ELECTRICAL-OPTICAL CHARACTERISTICS (T <sub>A</sub> = 25 °C)							
PARAMETER	SYMBOL	VALUE			UNIT	TOLERANCE	CONDITION
		MIN.	TYP.	MAX.			
Forward current	I <sub>f</sub>	340	--	380	mA	±0.05	V <sub>f</sub> = 24 V
Luminous flux	Φ <sub>2700K</sub>	700	--	780	lm	--	V <sub>f</sub> = 24 V
	Φ <sub>3200K</sub>	700		780			
	Φ <sub>4000K</sub>	750		840			
	Φ <sub>5000K</sub>	750		840			
	Φ <sub>5600K</sub>	750		840			
	Φ <sub>6500K</sub>	750		840			
Correlated color temperature	CCT <sub>2700K</sub>	2625±75		2775±75	K	--	V <sub>f</sub> = 24 V
	CCT <sub>3200K</sub>	3125±75		3275±75			
	CCT <sub>4000K</sub>	3900±100		4100±100			
	CCT <sub>5000K</sub>	4850±150		5150±150			
	CCT <sub>5600K</sub>	5450±150		5750±150			
	CCT <sub>6500K</sub>	6250±250		6750±250			
Color rendering index	Ra*	95	--	--	--	--	V <sub>f</sub> = 24 V
TCS R9 (CRI Red)	R9	--	90	--	--	--	V <sub>f</sub> = 24 V
Chromaticity coordinates	(X,Y)	--	--	--	--	±0.005	--
Viewing angle	2θ <sub>1/2</sub>		120		Deg	±5	V <sub>f</sub> = 24 V

\*Ra minimum 93 at 6500K.



# YJ-BC-MOD-5730L-24V-G02

## High CRI LED Module

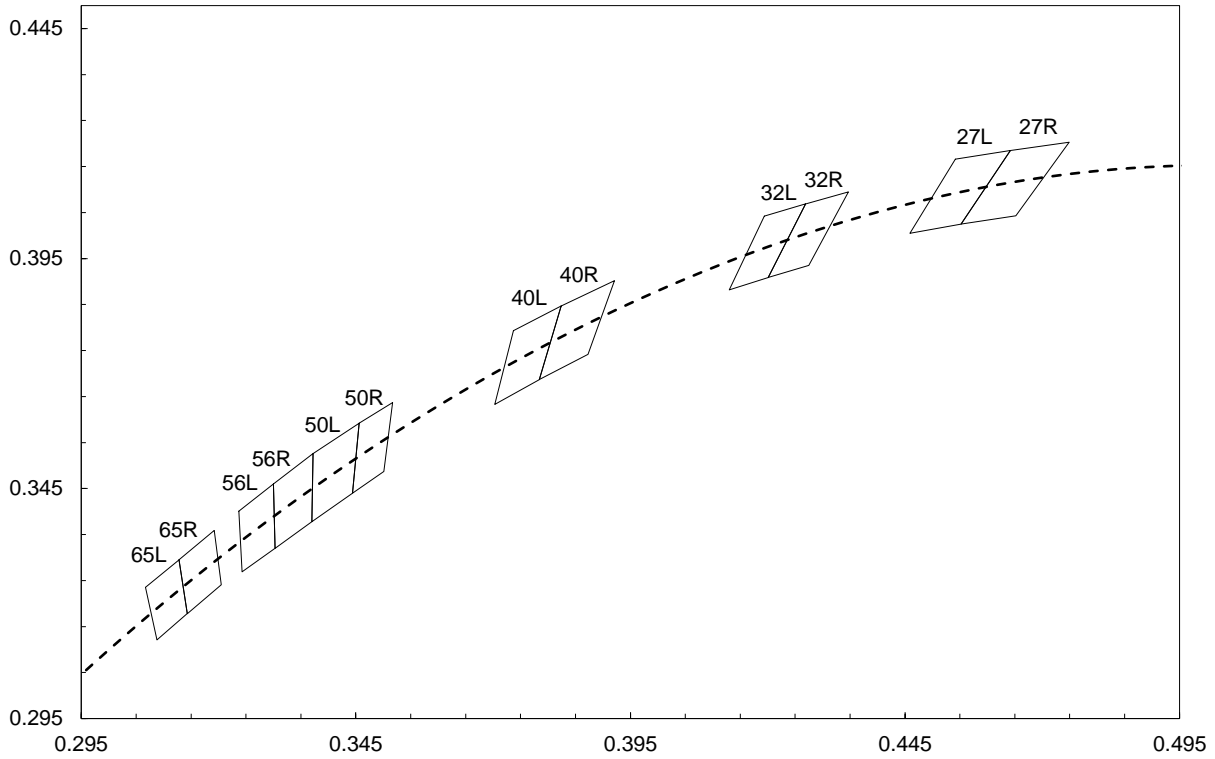
ABSOLUTE MAXIMUM RATING (T <sub>A</sub> = 25 °C)			
PARAMETER	SYMBOL	LIMIT	UNIT
Power Consumption	P <sub>D</sub>	11.3	W
DC Forward Voltage	V <sub>F</sub>	25	V
Junction Temperature	T <sub>j</sub>	125	°C
Case Temperature	T <sub>c</sub>	PENDING	°C
Solder Point Temperature	T <sub>s</sub>	105	°C
Operating Temperature	T <sub>opr</sub>	-45 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-45 ~ +85	°C

ORDERING INFORMATION		
PART NUMBER	CCT	CHROMATICITY BINS
YJ-BC-MOD-5730L-24V-G02-27	2700K ± 150K	27L, 27R
YJ-BC-MOD-5730L-24V-G02-32	3200K ± 150K	32L, 32R
YJ-BC-MOD-5730L-24V-G02-40	4000K ± 200K	40L, 40R
YJ-BC-MOD-5730L-24V-G02-50	5000K ± 300K	50L, 50R
YJ-BC-MOD-5730L-24V-G02-56	5600K ± 300K	56L, 56R
YJ-BC-MOD-5730L-24V-G02-65	6500K ± 500K	65L, 65R
YJ-BC-MOD-5730L-24V-G02-XX	CUSTOM	

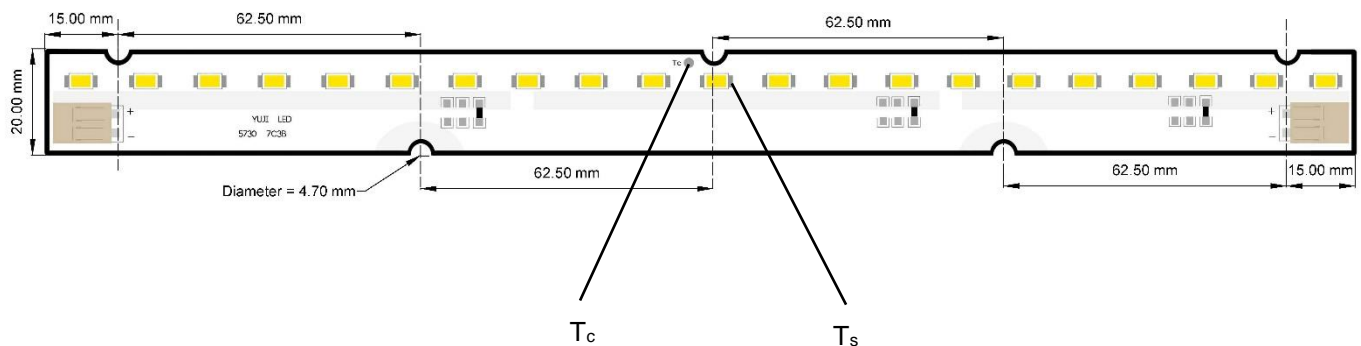
CHROMATICITY BINS & COORDINATES									
CCT	BIN	CIE 1931 COORDINATES							
		X0	Y0	X1	Y1	X2	Y2	X3	Y3
6500K	65L	0.3067	0.3235	0.3088	0.3121	0.3143	0.3178	0.3128	0.3295
	65R	0.3128	0.3295	0.3143	0.3178	0.3205	0.3241	0.3192	0.3359
5600K	56L	0.3237	0.3401	0.3243	0.3269	0.3303	0.3320	0.3300	0.3460
	56R	0.3300	0.3460	0.3303	0.3320	0.3370	0.3378	0.3372	0.3526
5000K	50L	0.3372	0.3526	0.3370	0.3378	0.3444	0.3440	0.3456	0.3592
	50R	0.3456	0.3592	0.3444	0.3440	0.3501	0.3487	0.3517	0.3637
4000K	40L	0.3737	0.3793	0.3703	0.3633	0.3784	0.3687	0.3824	0.3847
	40R	0.3824	0.3847	0.3784	0.3687	0.3873	0.3742	0.3921	0.3902
3200K	32L	0.4194	0.4042	0.4130	0.3882	0.4201	0.3909	0.4269	0.4069
	32R	0.4269	0.4069	0.4201	0.3909	0.4275	0.3935	0.4347	0.4095
2700K	27L	0.4542	0.4166	0.4459	0.4005	0.4552	0.4025	0.4642	0.4185
	27R	0.4642	0.4185	0.4552	0.4025	0.4652	0.4043	0.4749	0.4203

### CHROMATICITY BINS & COORDINATES

#### CIE 1931 COORDINATES



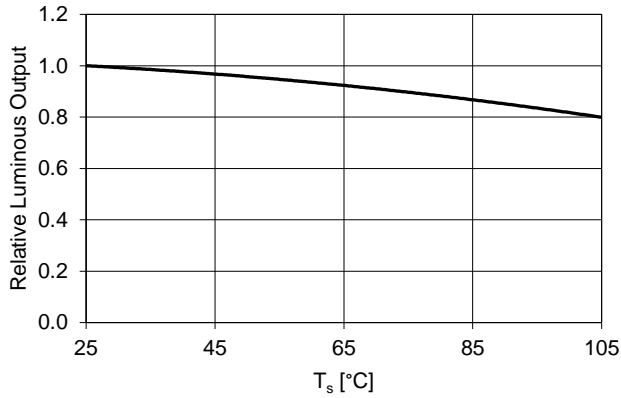
### MODULE LAYOUT



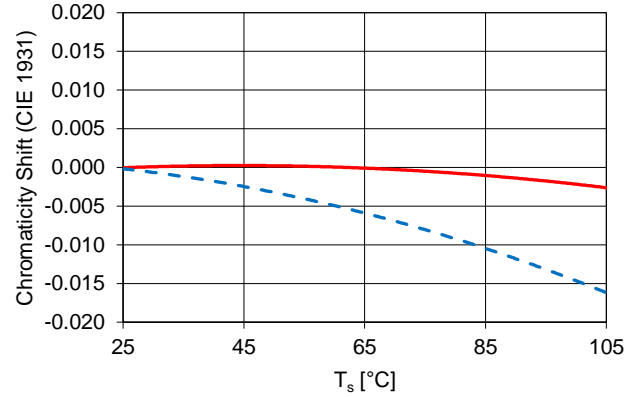
### CHARACTERISTIC CURVES

ALL CHARACTERISTIC CURVES ARE FOR REFERENCE ONLY AND NOT GUARANTEED

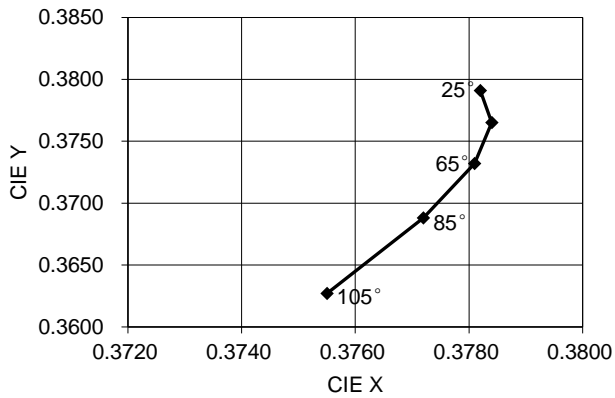
SOLDER POINT TEMPERATURE  
VS RELATIVE LUMINOUS OUTPUT ( $V_F = 24\text{ V}$ )



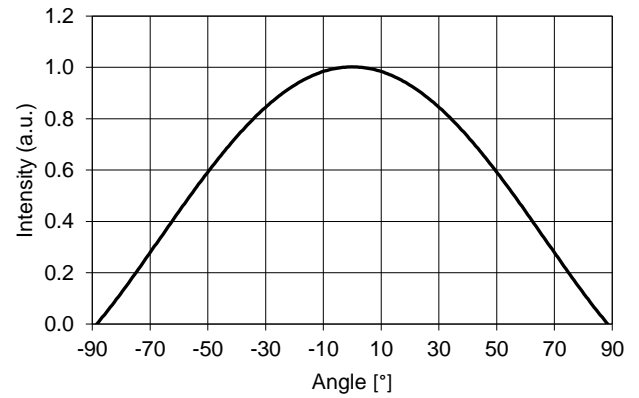
SOLDER POINT TEMPERATURE  
VS CHROMATICITY (4000K,  $I_F = 450\text{ mA}$ )



SOLDER POINT TEMPERATURE  
VS CHROMATICITY (4000K,  $I_F = 450\text{ mA}$ )



TYPICAL SPATIAL DISTRIBUTION  
( $T_A = 25^\circ\text{C}$ ,  $I_F = 450\text{ mA}$ )



### TYPICAL SPECTRAL DISTRIBUTION GRAPHS

