



# KHAMZIN TC

PHOTOMETRY



**AYRTON**  
Digital Lighting





<b>Total Flux</b>	30962 lm (@zoom 128, integrating sphere measurement, Fan mode auto)
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<b>CCT @LED engine</b>	7000 (±500K)
<b>CCT @open</b>	6400 (±500K)
<b>Ra @open</b>	90 (±2)
<b>TLCI</b>	90
<b>TM-30</b>	Rf: 87.6 Rg: 94.0

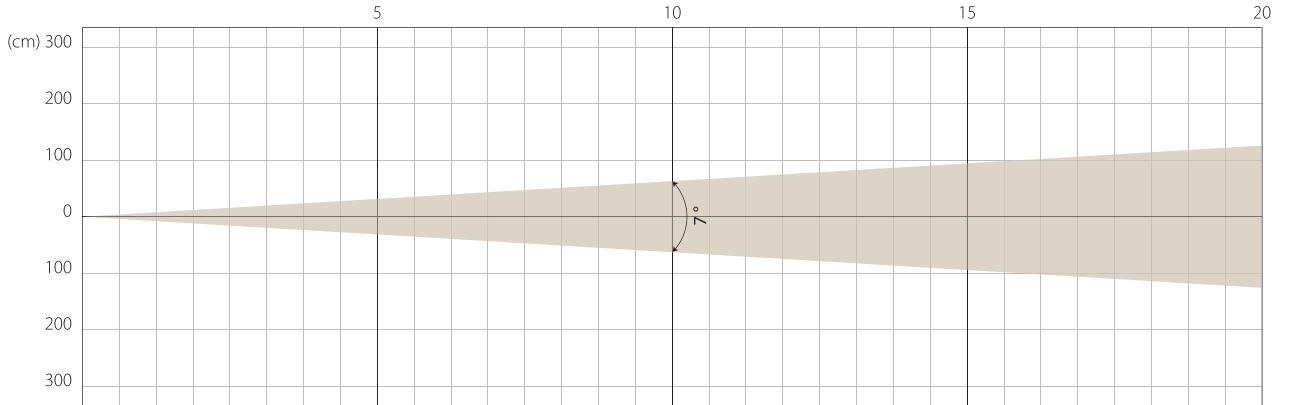
<b>Fan Mode</b>	<b>Noise Level (dBA)</b>	<b>by Goniometer (lm)</b>	<b>by Sphere (lm)</b>
<b>Auto</b>	42.7	25209	30468
<b>Stage</b>	48.3	25965	30962
<b>Silence</b>	35.2	17537	21651
<b>Super Silence</b>	33.8	11758	17113

Note: noise measured @1m distance, static status, ambient 31 dBA.

<b>Voltage / Power</b>	120-240V, 50-60Hz	1150 W
<b>Fixture Dimension / Weight</b>	494 x 778 x 280 mm	39.8 kg
<b>Packing Dimension / Weight</b>	660 x 675 x 560 mm	57 kg

MIN ZOOM

### Beam Opening

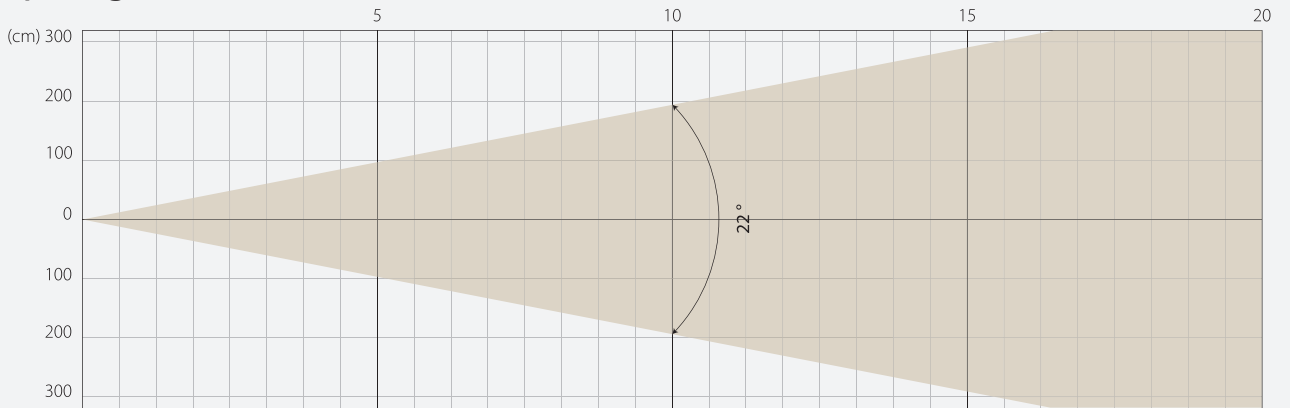


### Intensity

Distance (m)	5		10		15		20	
unit	lux	diameter	lux	diameter	lux	diameter	lux	diameter
White	48209	0,61	12052	1,22	5357	1,83	3013	2,45

MIDDLE ZOOM

### Beam Opening

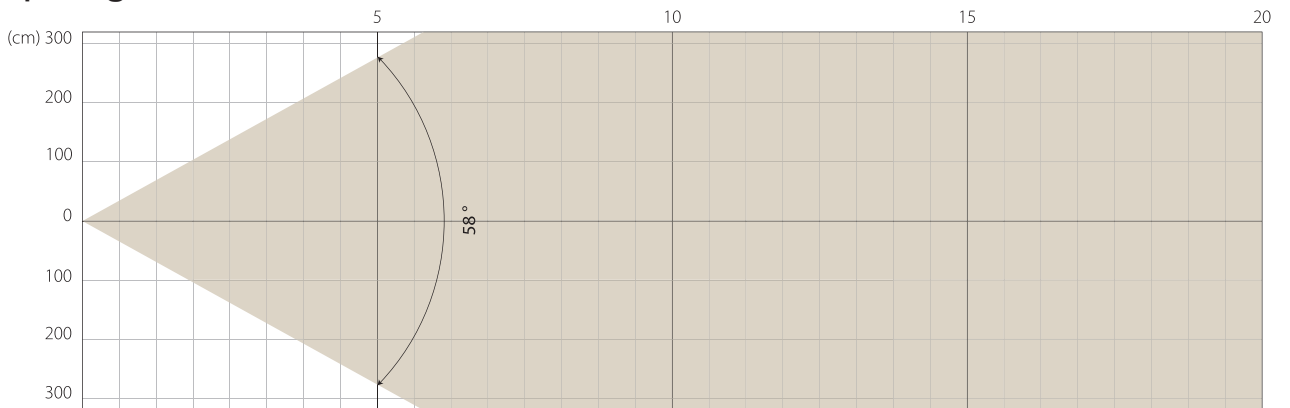


### Intensity

Distance (m)	5		10		15		20	
unit	lux	diameter	lux	diameter	lux	diameter	lux	diameter
White	11291	1,94	2823	3,89	1255	5,83	706	7,78

MAX ZOOM

### Beam Opening



### Intensity

Distance (m)	5		10		15		20	
unit	lux	diameter	lux	diameter	lux	diameter	lux	diameter
White	1933	5,54	483	11,09	215	16,63	121	22,17

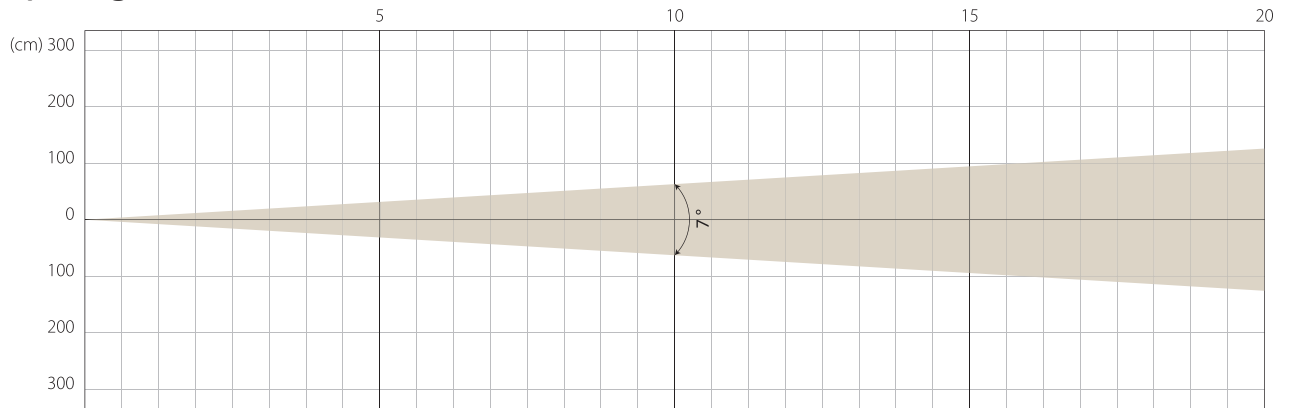
Note: Measurement done with Goniometer

# STAGE MODE

NATIVE CRI GREATER THAN 90

MIN ZOOM

## Beam Opening

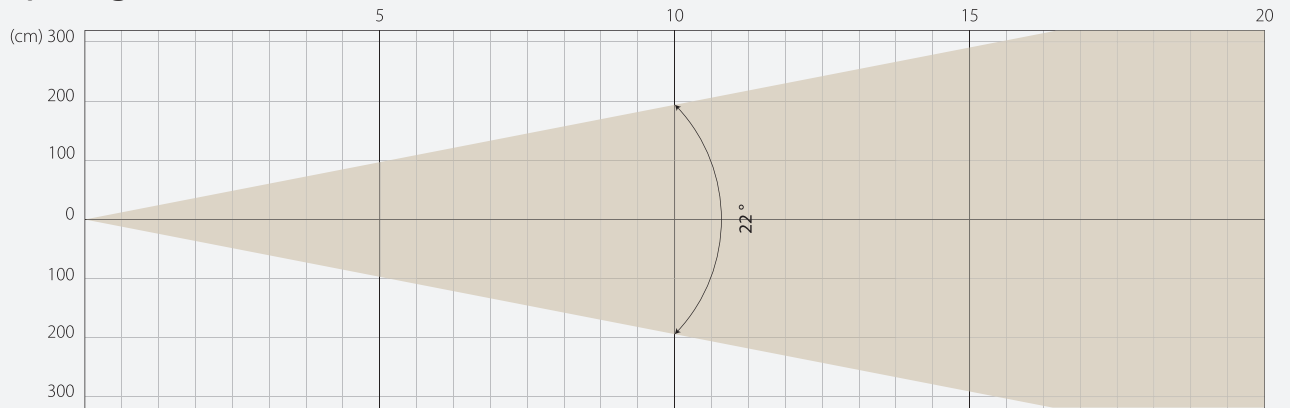


## Intensity

Distance (m)	5		10		15		20	
unit	lux	diameter	lux	diameter	lux	diameter	lux	diameter
White	49466	0,61	12366	1,22	5496	1,83	3092	2,45

MIDDLE ZOOM

## Beam Opening

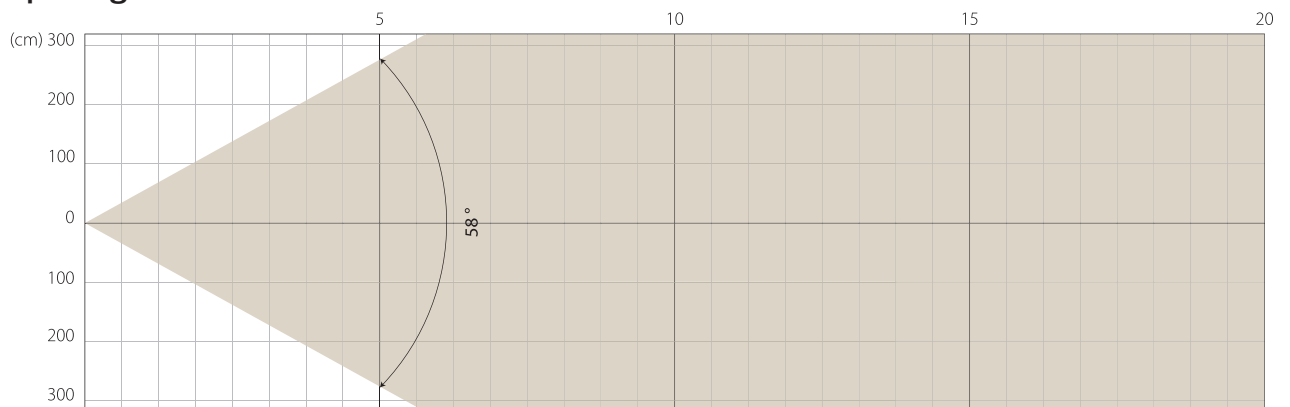


## Intensity

Distance (m)	5		10		15		20	
unit	lux	diameter	lux	diameter	lux	diameter	lux	diameter
White	11597	1,94	2899	3,89	1289	5,83	725	7,78

MAX ZOOM

## Beam Opening



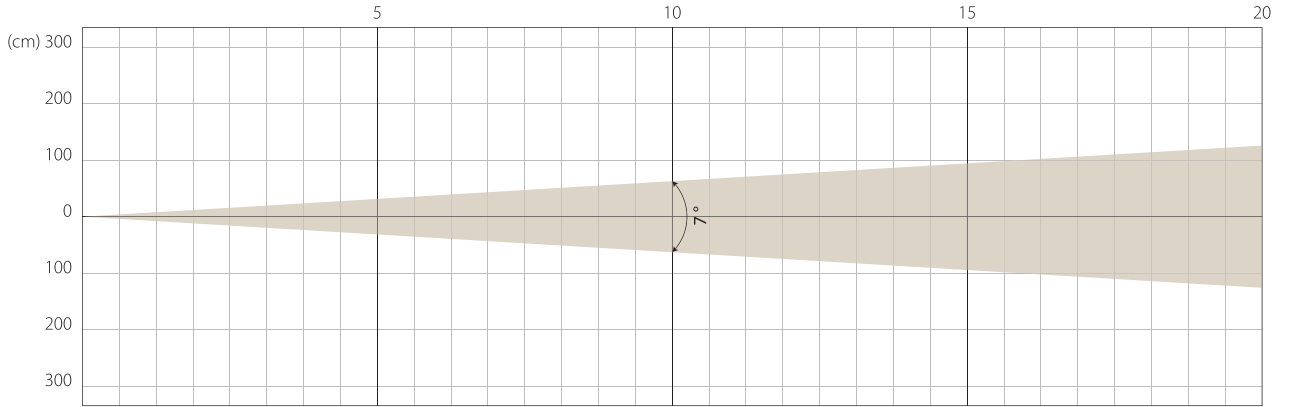
## Intensity

Distance (m)	5		10		15		20	
unit	lux	diameter	lux	diameter	lux	diameter	lux	diameter
White	1992	5,54	498	11,09	221	16,63	124	22,17

Note: Measurement done with Goniometer

MIN ZOOM

## Beam Opening

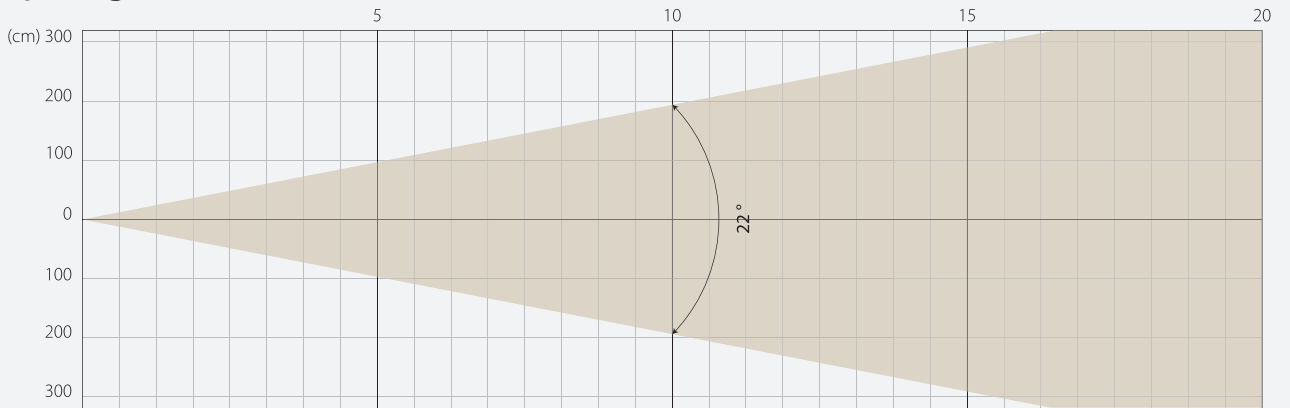


## Intensity

Distance (m)	5		10		15		20	
unit	lux	diameter	lux	diameter	lux	diameter	lux	diameter
White	33574	0,61	8394	1,22	3730	1,83	2098	2,45

MIDDLE ZOOM

## Beam Opening

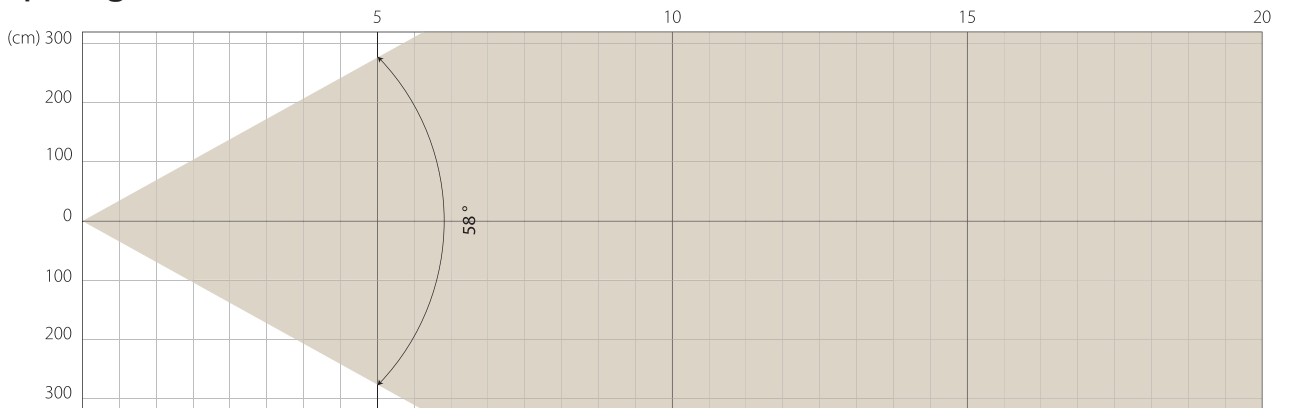


## Intensity

Distance (m)	5		10		15		20	
unit	lux	diameter	lux	diameter	lux	diameter	lux	diameter
White	7848	1,94	1962	3,89	872	5,83	490	7,78

MAX ZOOM

## Beam Opening



## Intensity

Distance (m)	5		10		15		20	
unit	lux	diameter	lux	diameter	lux	diameter	lux	diameter
White	1346	5,54	337	11,09	150	16,63	84	22,17

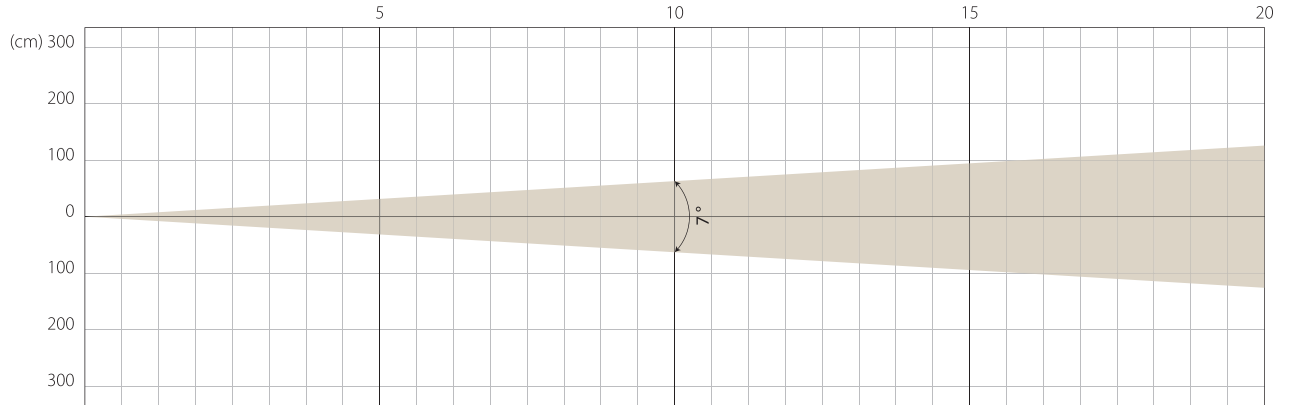
Note: Measurement done with Goniometer

# SUPER SILENCE MODE

NATIVE CRI GREATER THAN 90

MIN ZOOM

## Beam Opening

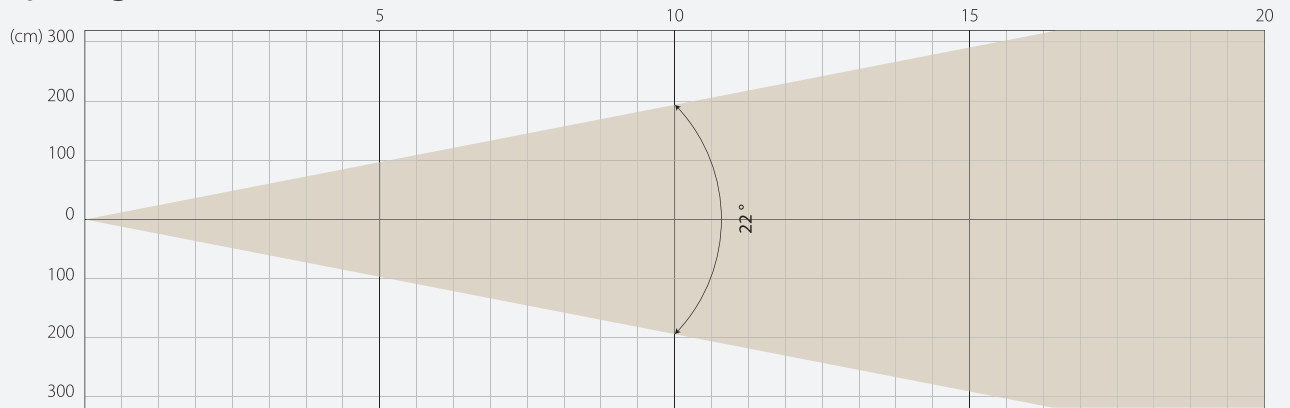


## Intensity

Distance (m)	5		10		15		20	
unit	lux	diameter	lux	diameter	lux	diameter	lux	diameter
White	22224	0,61	5556	1,22	2469	1,83	1389	2,45

MIDDLE ZOOM

## Beam Opening

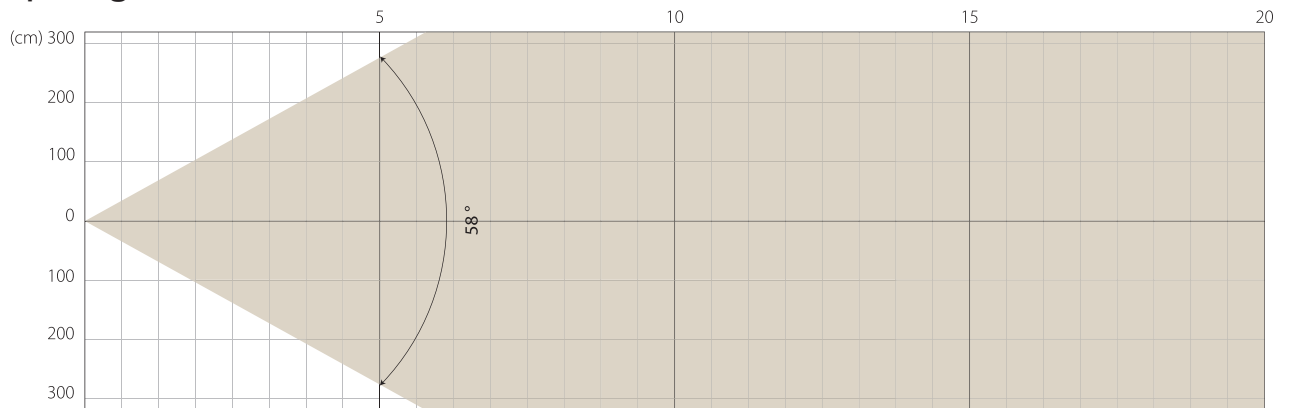


## Intensity

Distance (m)	5		10		15		20	
unit	lux	diameter	lux	diameter	lux	diameter	lux	diameter
White	5223	1,94	1306	3,89	580	5,83	326	7,78

MAX ZOOM

## Beam Opening

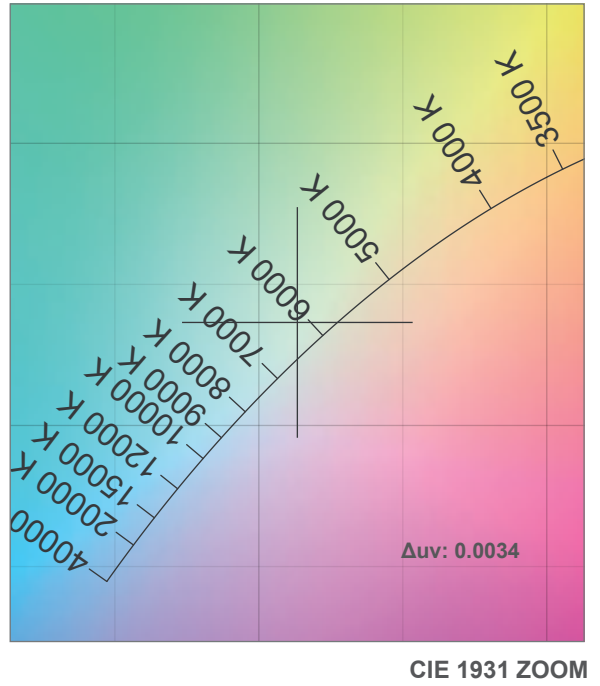
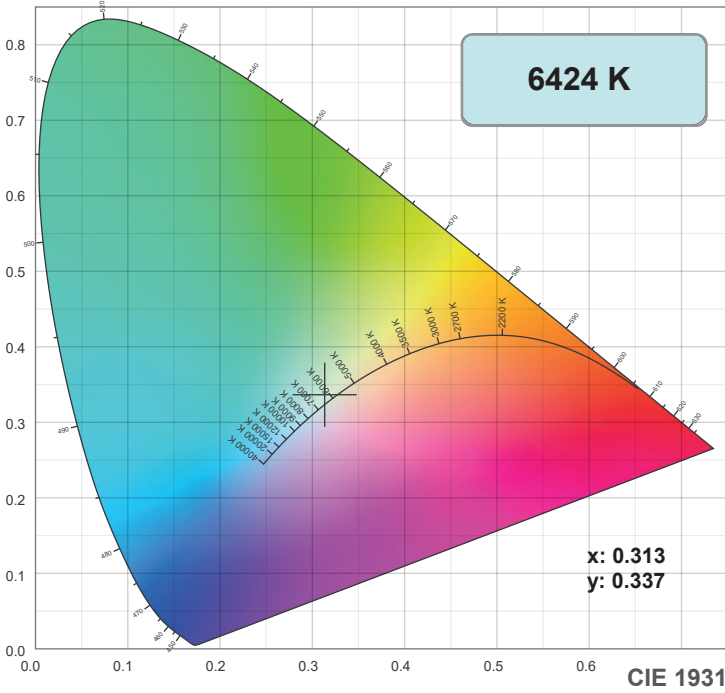


## Intensity

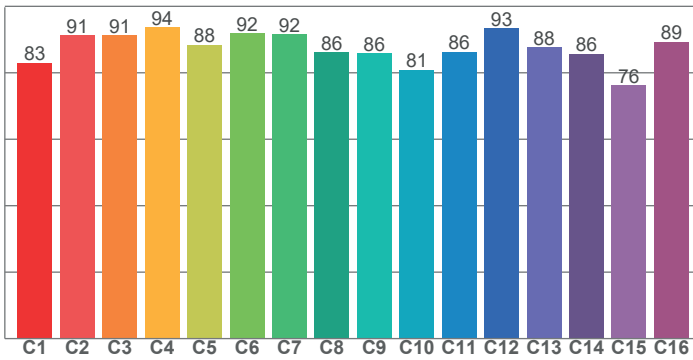
Distance (m)	5		10		15		20	
unit	lux	diameter	lux	diameter	lux	diameter	lux	diameter
White	893	5,54	223	11,09	99	16,63	56	22,17

Note: Measurement done with Goniometer

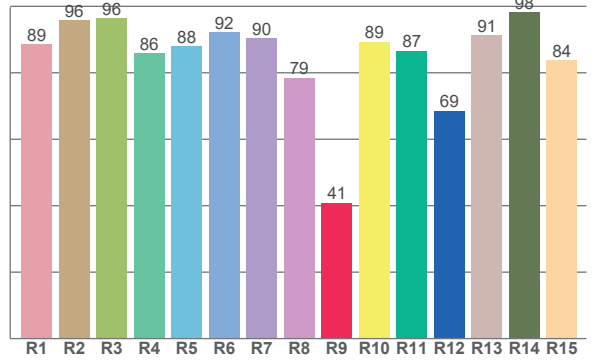
# COLOR DETAILS



TM-30: 87.6



CRI: 89.5 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
88.6	95.7	96.4	85.9	88.0	92.2	90.3	78.5	40.9	89.3	86.6	68.6	91.3	98.2	83.8

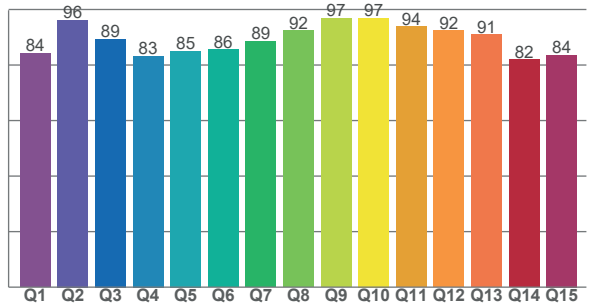
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
82.9	91.3	91.3	93.6	88.4	91.9	91.6	86.2	85.9	80.9	86.3	93.4	87.6	85.7	76.2	89.2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
84.2	96.3	89.4	83.2	85.1	85.6	88.6	92.3	96.9	96.9	93.8	92.3	90.9	82.0	83.7

CQS: 88.3



## Color parameters

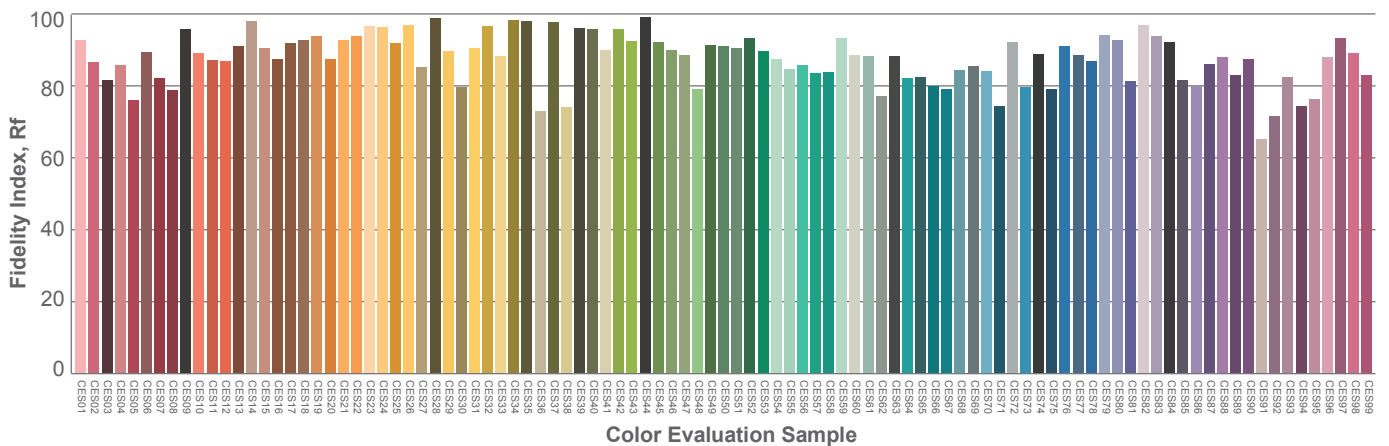
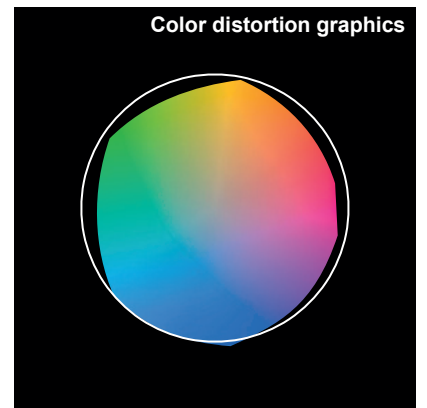
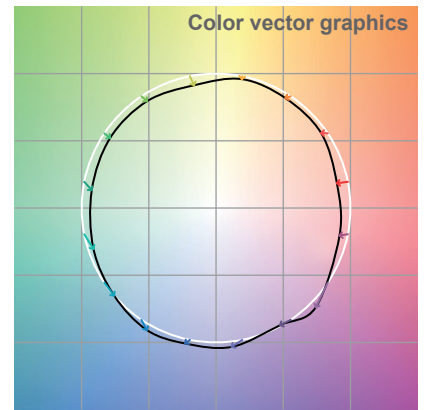
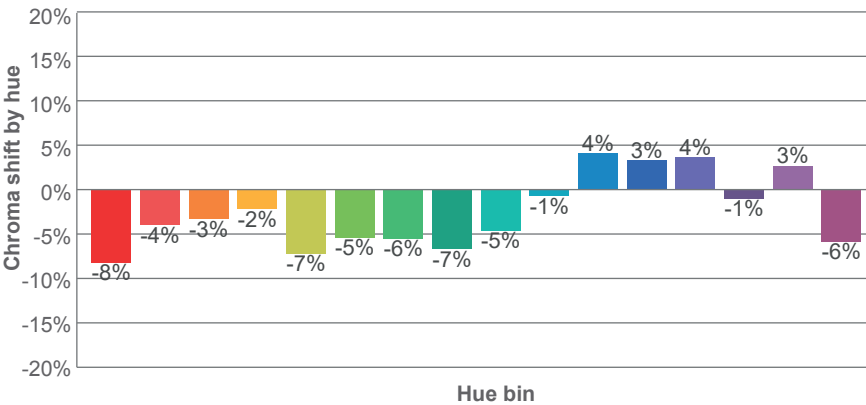
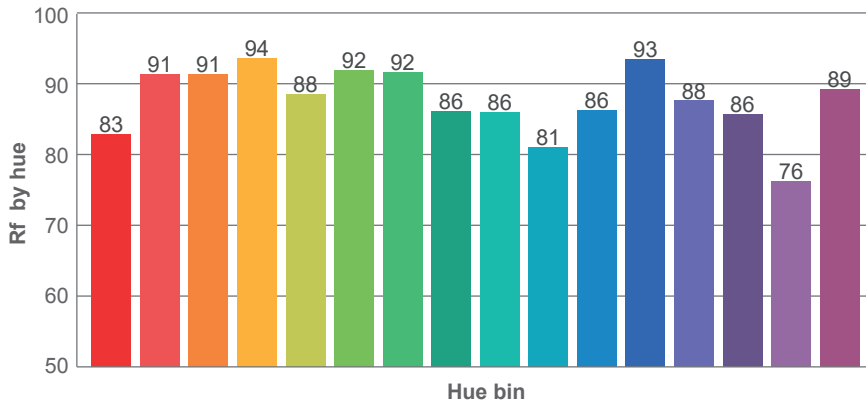
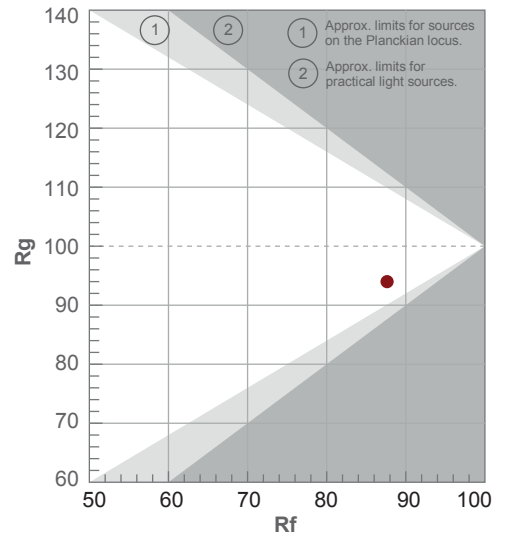
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
6424 K	89.5	40.9	87.6	94.0	88.3	0.313	0.337	0.196	0.315	0.0034

# TM-30 DETAILS

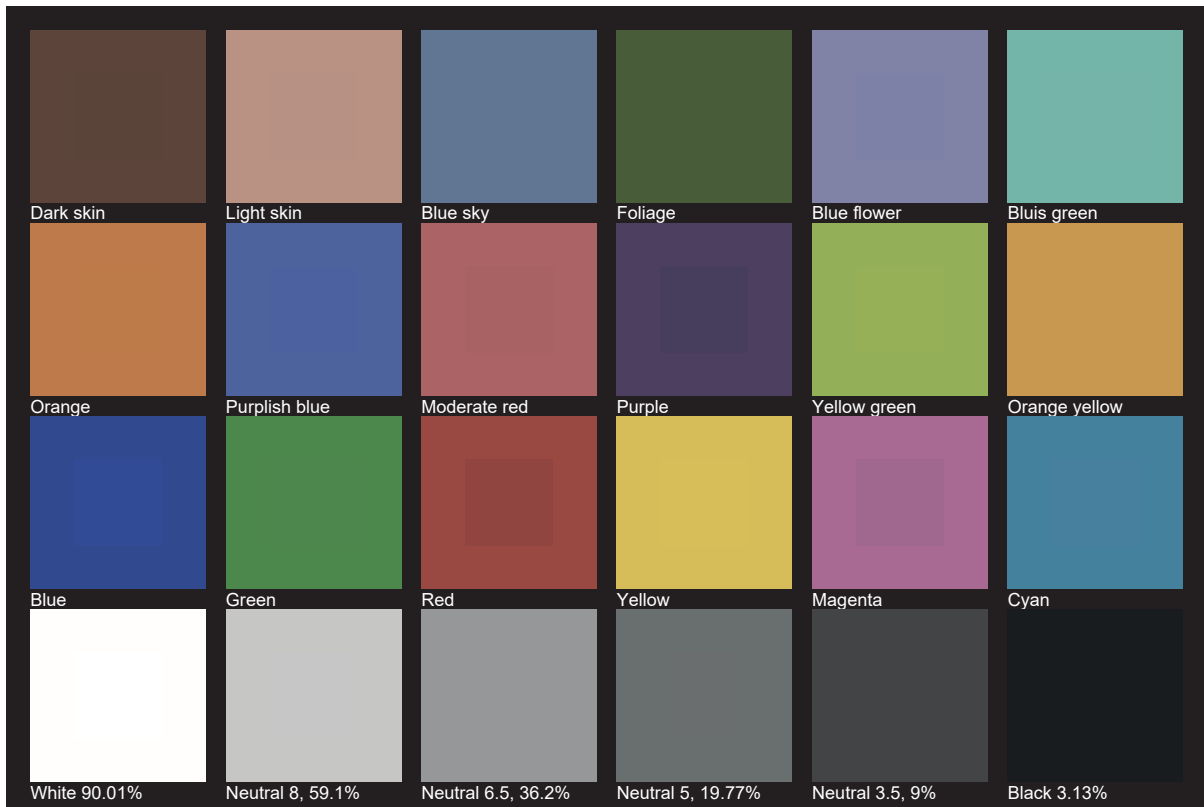
**Rf 87.6**  
Fidelity index Rf

**Rg 94.0**  
Gamut index Rg

Hue Bin	R <sub>f</sub>	Shifts (%)	
		Chroma	Hue
1	83	-8%	1%
2	91	-4%	3%
3	91	-3%	2%
4	94	-2%	0%
5	88	-7%	-2%
6	92	-5%	-1%
7	92	-6%	0%
8	86	-7%	5%
9	86	-5%	12%
10	81	-1%	12%
11	86	4%	8%
12	93	3%	-3%
13	88	4%	-9%
14	86	-1%	-9%
15	76	3%	-20%
16	89	-6%	-2%



# TLCI 90







**AYRTON**

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