

Light efficiency:

49 Lumen/Watt

Light quality:

CRI: 91.9

Color temperature:

2973 K

Output: 1034 lm

Peak: 2960 cd

Power: 21.1 W

PF: 0.99



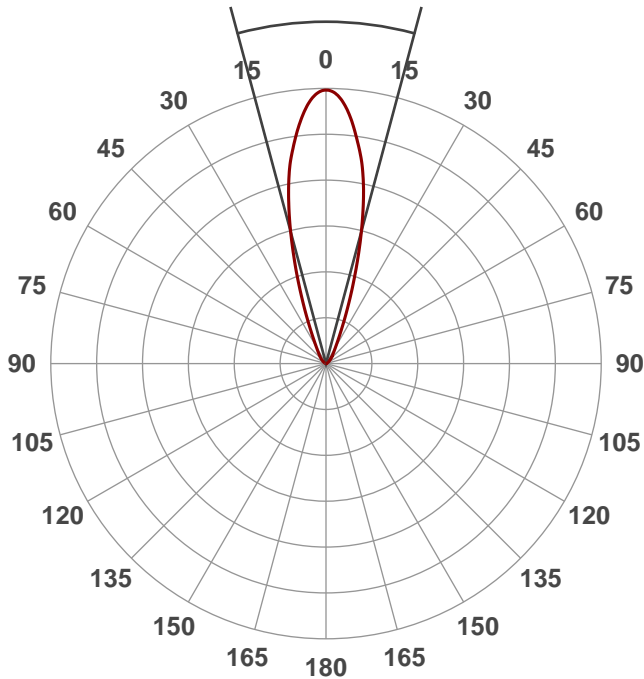
Product name:
4500-LED-CZ20-24-91A

Date and time:
3/3/2017 3:40:17 PM

Item number:
4500-LED-CZ20-24-91A

Beam angle

30°

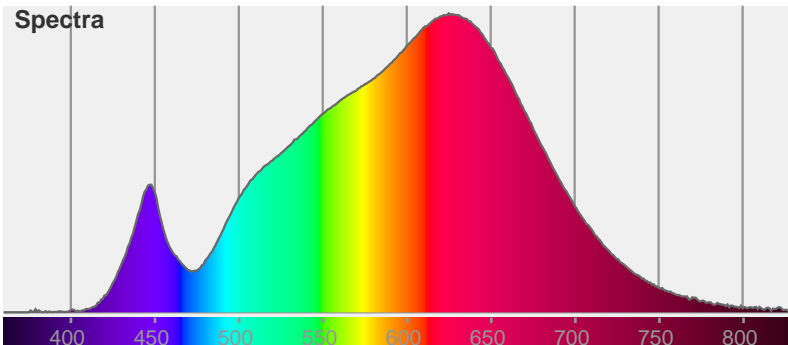


Color



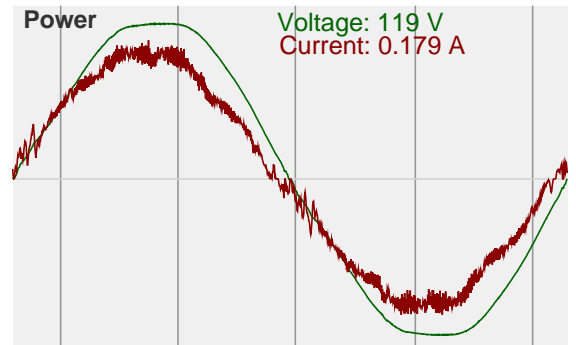
CIE1931
x: 0.443
y: 0.412

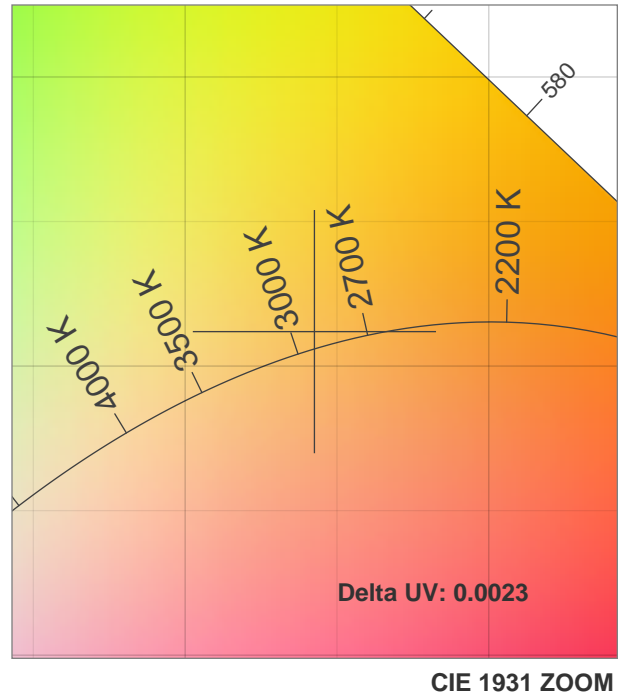
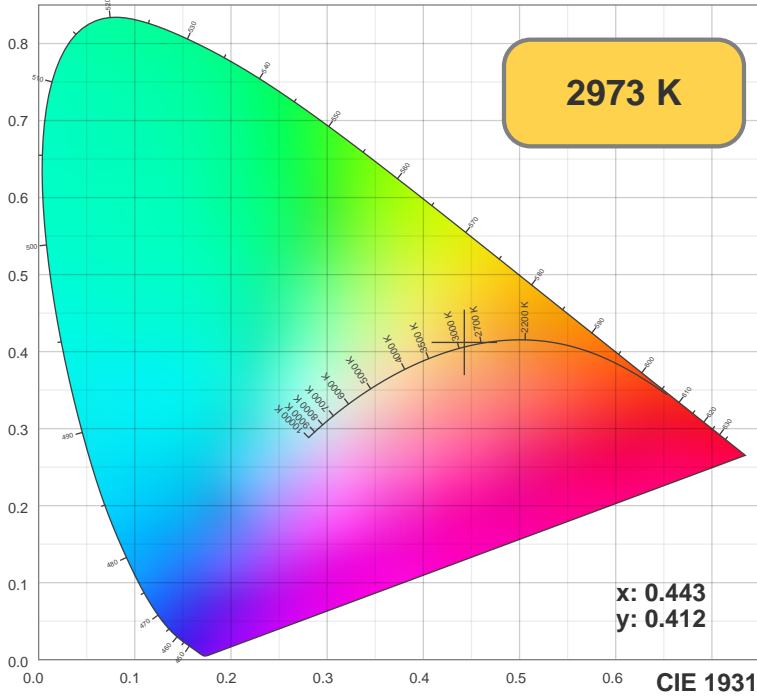
Spectra



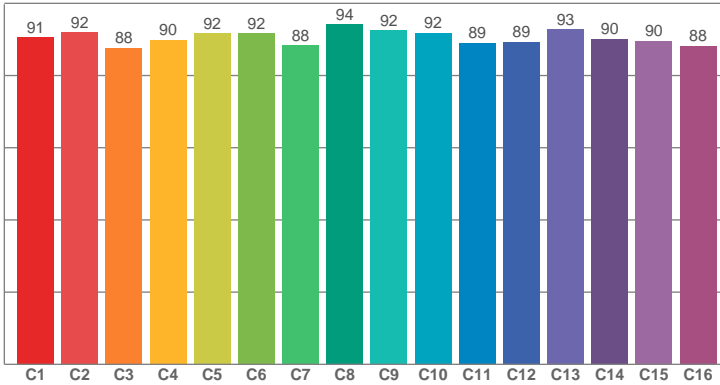
Power

Voltage: 119 V
Current: 0.179 A

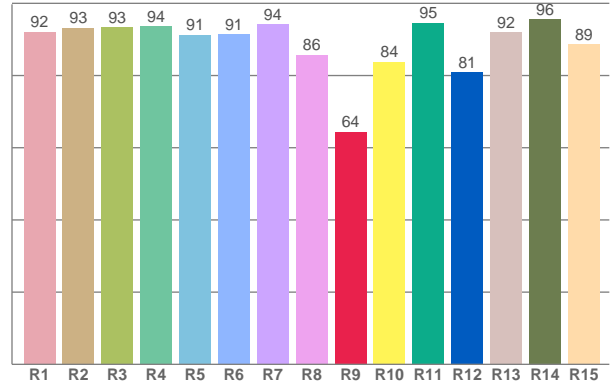




TM30: 90.6



CRI: 91.9 (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
92.12	93.19	93.33	93.67	91.30	91.34	94.26	85.74	64.37	83.74	94.55	80.82	91.93	95.59	88.70

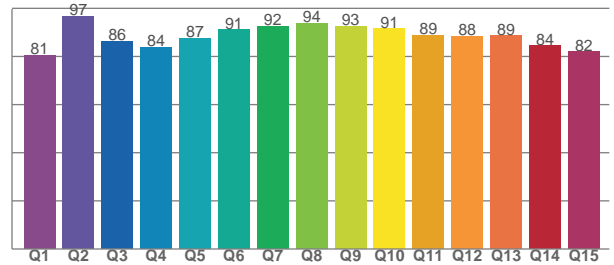
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
90.52	91.91	87.67	89.92	91.60	91.76	88.29	94.18	92.43	91.87	89.02	89.30	92.77	90.11	89.58	88.23

CQS Q values

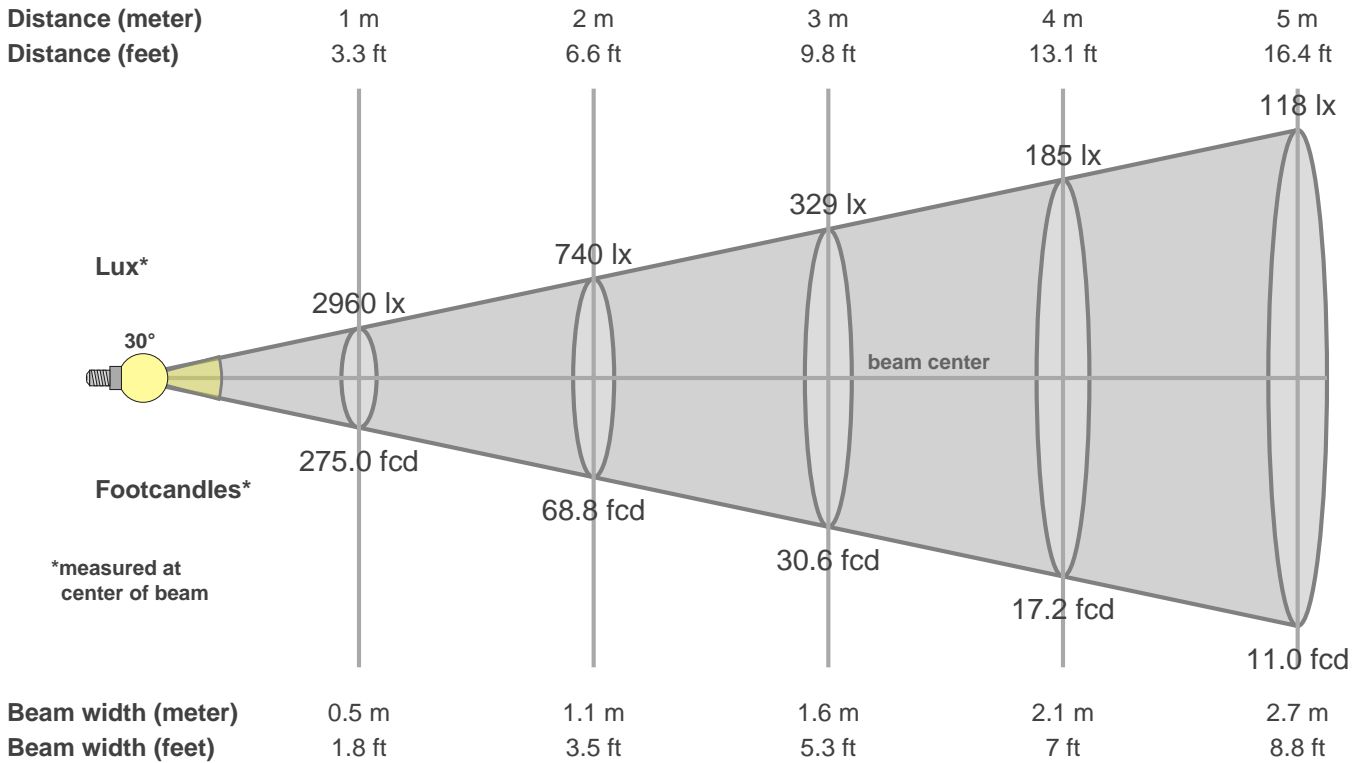
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
80.56	96.54	86.27	83.85	87.40	91.08	92.42	93.77	92.58	91.48	88.71	88.27	88.52	84.37	81.93

CQS: 87.6



Color parameters

CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Duv
2973 K	91.9	64.4	90.6	101.0	87.6	0.4	0.4	0.3	0.4	0.0023



Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2960	2923	2812	2639	2434	2219	1946	1639	1320	1029	775	579	432	330	260	211	177	151	131	114
100%	99%	95%	89%	82%	75%	66%	55%	45%	35%	26%	20%	15%	11%	9%	7%	6%	5%	4%	4%

Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2960	2923	2812	2639	2434	2219	1946	1639	1320	1029	775	579	432	330	260	211	177	151	131	114
100%	99%	95%	89%	82%	75%	66%	55%	45%	35%	26%	20%	15%	11%	9%	7%	6%	5%	4%	4%

Intensities in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2960	2926	2816	2646	2435	2220	1952	1639	1319	1018	771	573	427	326	257	209	175	150	130	114
100%	99%	95%	89%	82%	75%	66%	55%	45%	34%	26%	19%	14%	11%	9%	7%	6%	5%	4%	4%

Intensities in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2960	2926	2816	2646	2435	2220	1952	1639	1319	1018	771	573	427	326	257	209	175	150	130	114
100%	99%	95%	89%	82%	75%	66%	55%	45%	34%	26%	19%	14%	11%	9%	7%	6%	5%	4%	4%

Beam angle 50%	Field angle 10%	Cutoff angle 2.5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30.0°	53.7°	90.0°	97.3%	91.6%