

Photometric Details



SW24-9.0-DRY-27

Product name:
SW24-9.0-DRY-27

Date:
10/24/2019

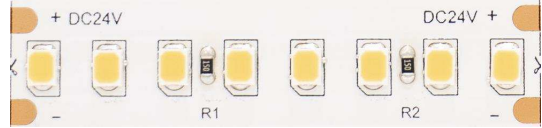
Powering product:
IQ-PH-80-120/24

Output: 1101 lm/ft

Peak: 334 cd

Power: 8.7 W/ft

PF: 1.0



Light efficiency:



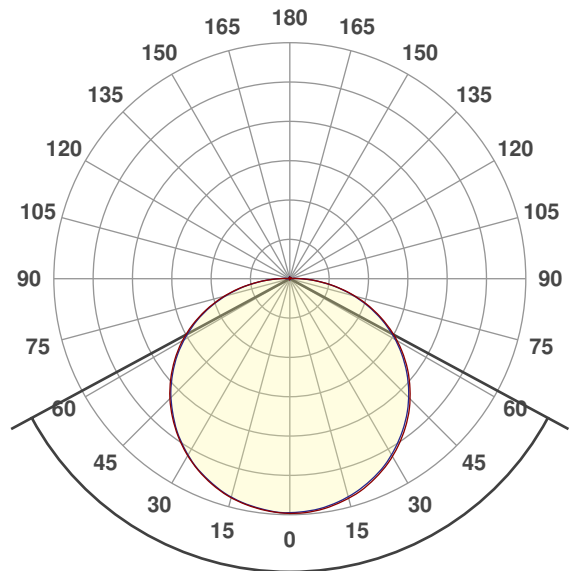
Light quality:



Color temperature:



Beam Angle

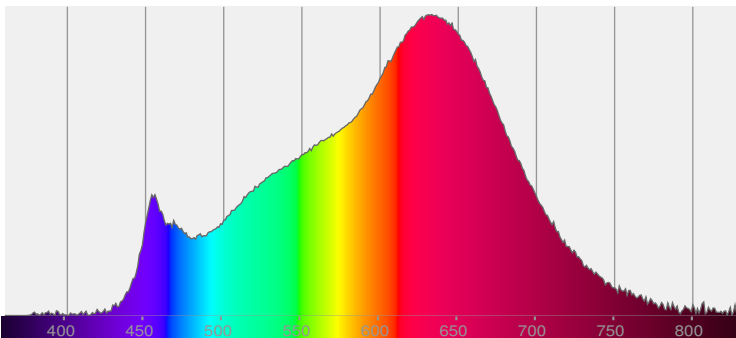


123.3°

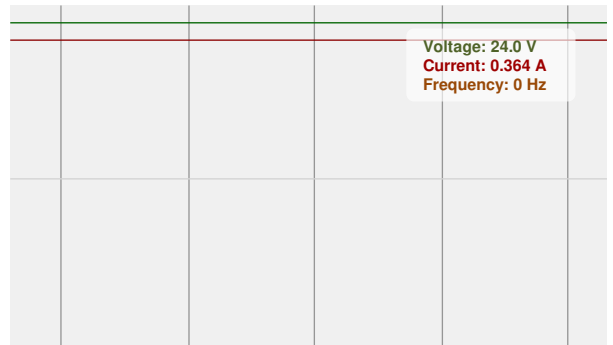
CIE 1931
x: 0.451
y: 0.403



Spectra



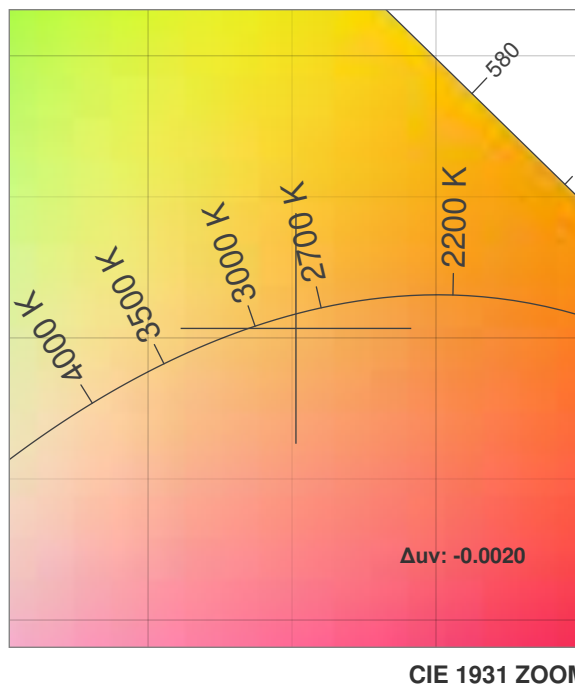
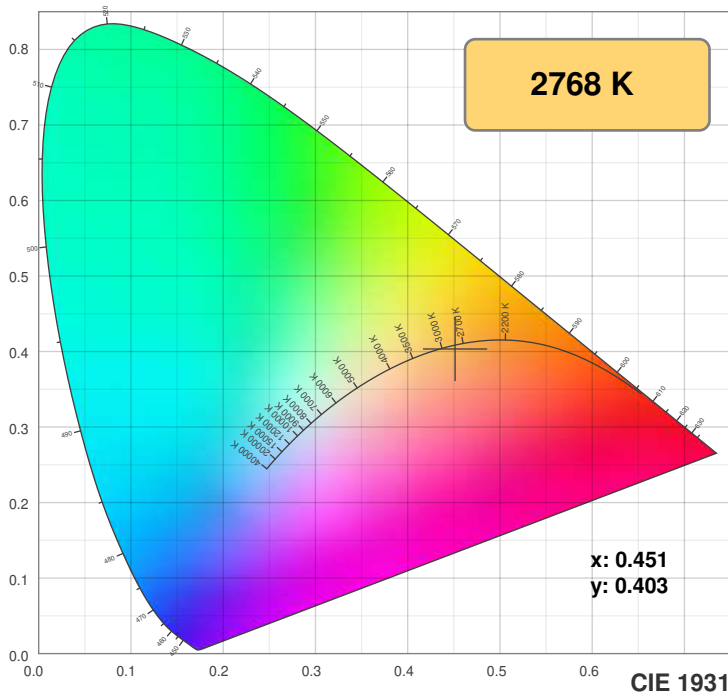
Power



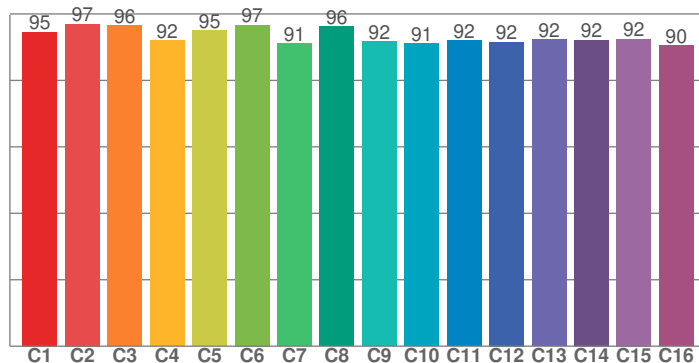
Color Details



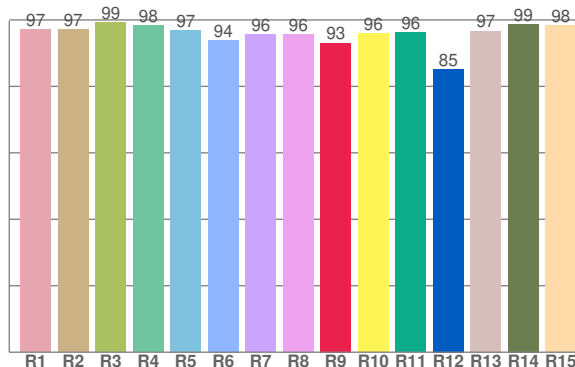
SW24-9.0-DRY-27



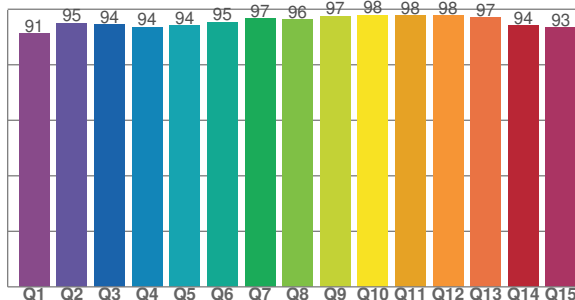
TM30: 93.4



CRI: 96.8 (R1-R8)



CQS: 94.8



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
97.2	97.2	99.3	98.4	96.9	93.9	95.7	95.8	93.1	95.9	96.3	85.3	96.7	98.7	98.4

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
94.6	97.0	96.5	92.0	95.1	96.7	91.0	96.2	91.6	91.1	91.9	91.6	92.4	92.1	92.4	90.4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91.2	95.0	94.5	93.6	94.1	95.3	96.6	96.3	97.4	97.8	97.7	97.7	97.0	94.1	93.4

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
2768 K	96.8	93.1	93.4	99.6	94.8	0.451	0.403	0.260	0.349	-0.0020

TM30 Details

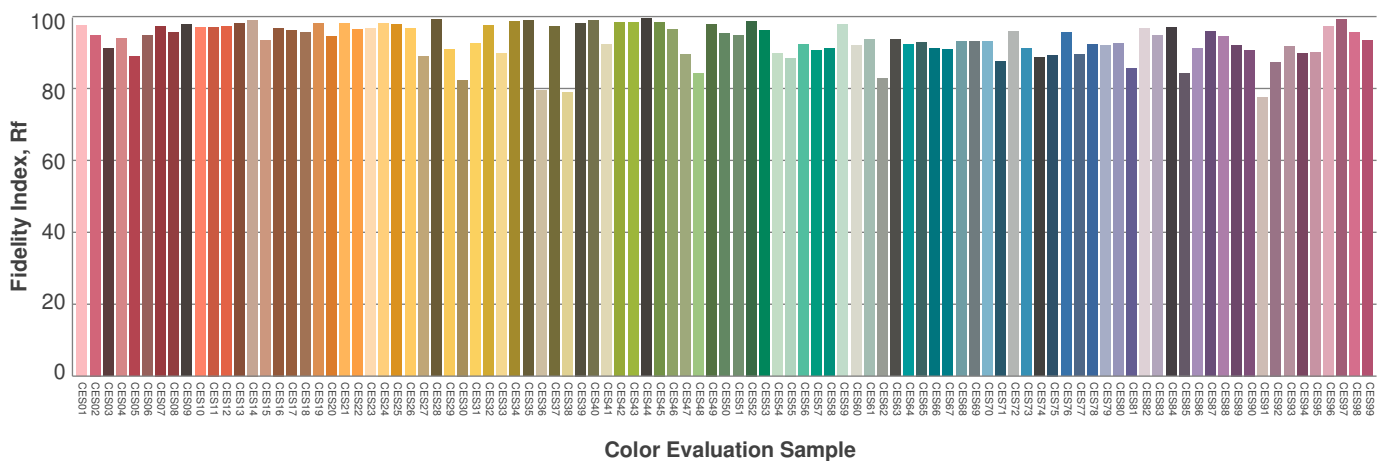
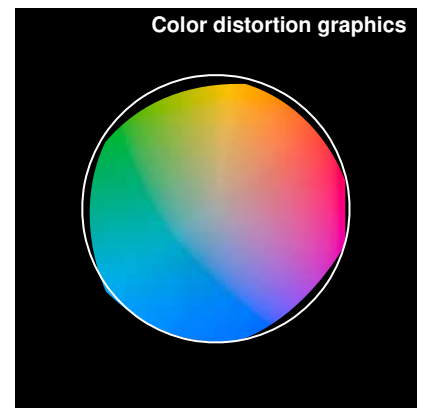
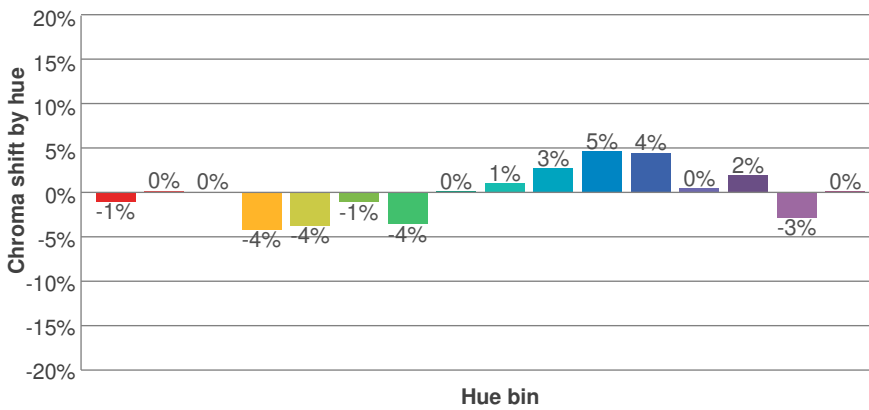
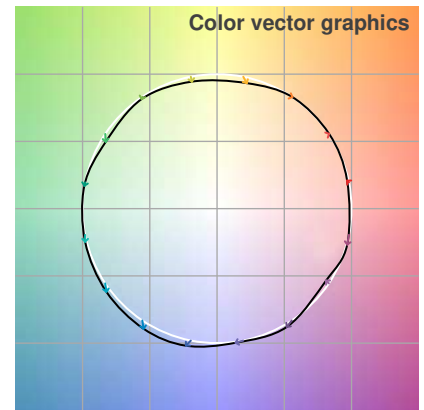
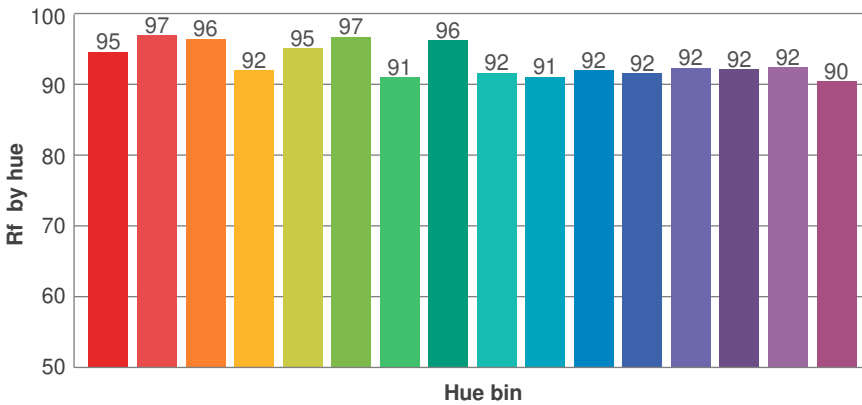
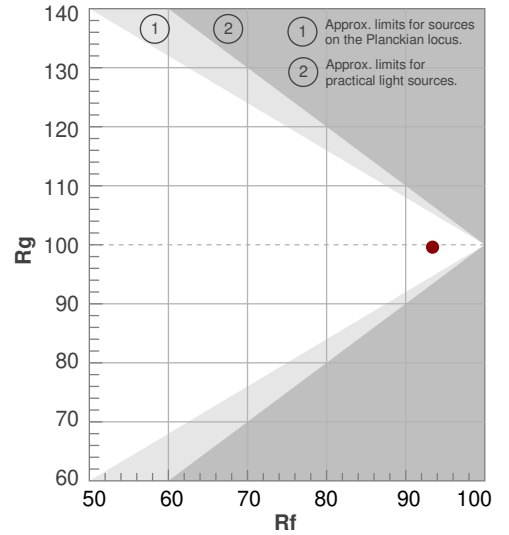


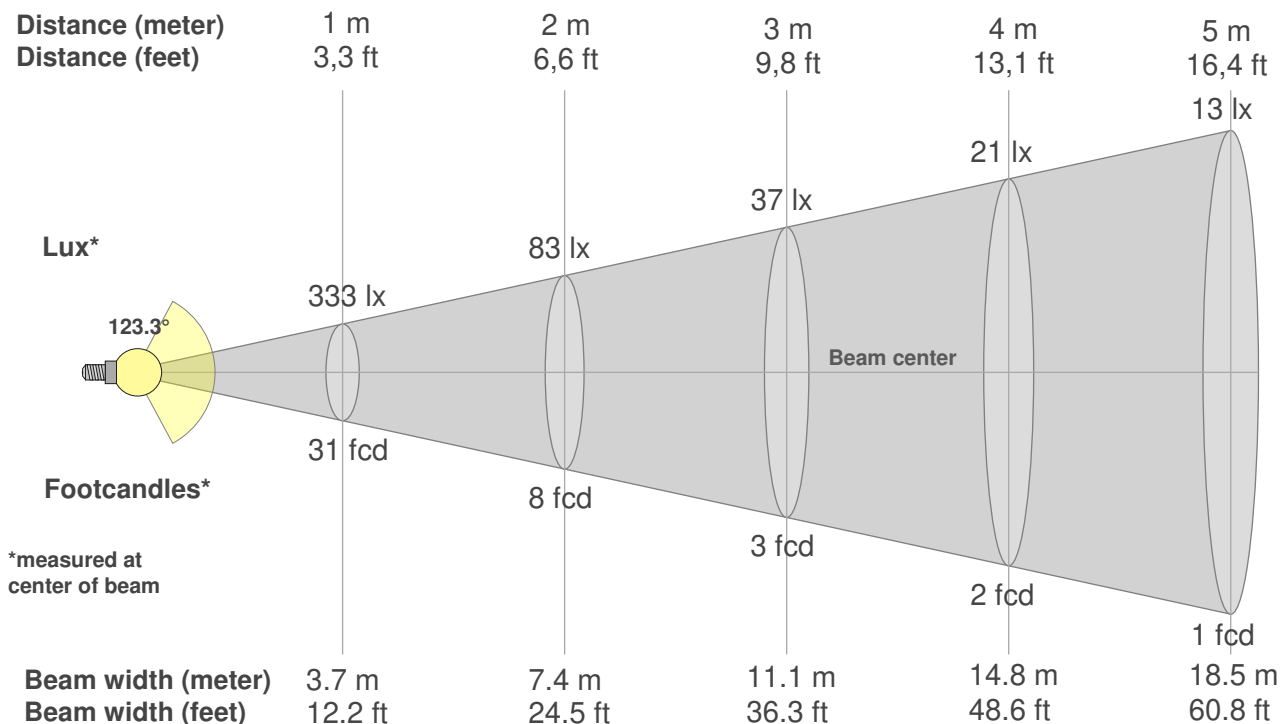
SW24-9.0-DRY-27

Rf 93.4
Fidelity index Rf

Rg 99.6
Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	2%
2	97	0%	0%
3	96	0%	0%
4	92	-4%	-3%
5	95	-4%	0%
6	97	-1%	1%
7	91	-4%	5%
8	96	0%	3%
9	92	1%	5%
10	91	3%	6%
11	92	5%	4%
12	92	4%	-3%
13	92	0%	-6%
14	92	2%	-6%
15	92	-3%	1%
16	90	0%	-7%





Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
333lx	83lx	37lx	21lx	13lx	9lx	7lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx
31fcd	7.7fcd	3.4fcd	1.9fcd	1.2fcd	0.9fcd	0.6fcd	0.5fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
333	333	329	323	315	305	292	277	261	242	222	200	176	151	124	96	68	40	18	4
100%	100%	99%	97%	95%	91%	88%	83%	78%	73%	66%	60%	53%	45%	37%	29%	20%	12%	5%	1%

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
333	331	327	321	313	302	289	274	258	239	219	197	173	148	122	94	66	39	16	3
100%	99%	98%	96%	94%	91%	87%	82%	77%	72%	66%	59%	52%	44%	37%	28%	20%	12%	5%	1%

Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
333	332	328	323	314	304	291	276	259	241	221	200	177	151	125	97	69	40	17	3
100%	100%	99%	97%	94%	91%	87%	83%	78%	72%	66%	60%	53%	45%	37%	29%	21%	12%	5%	1%

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
333	332	328	322	313	303	290	275	258	239	219	197	173	149	122	95	67	39	16	3
100%	99%	98%	96%	94%	91%	87%	82%	77%	72%	66%	59%	52%	45%	37%	28%	20%	12%	5%	1%

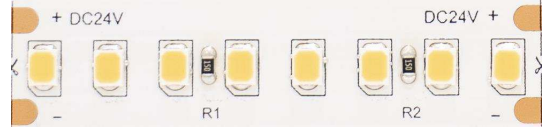
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
123.3°	172.6°	185.6°	72.5%	47.9%

Photometric Details



SW24-9.0-DRY-30

Product name:	SW24-9.0-DRY-30
Date:	10/24/2019
Powering product:	IQ-PH-80-120/24
<hr/>	
Output:	1159 lm/ft
Peak:	349 cd
Power:	8.7 W/ft
PF:	1.0



Light efficiency:



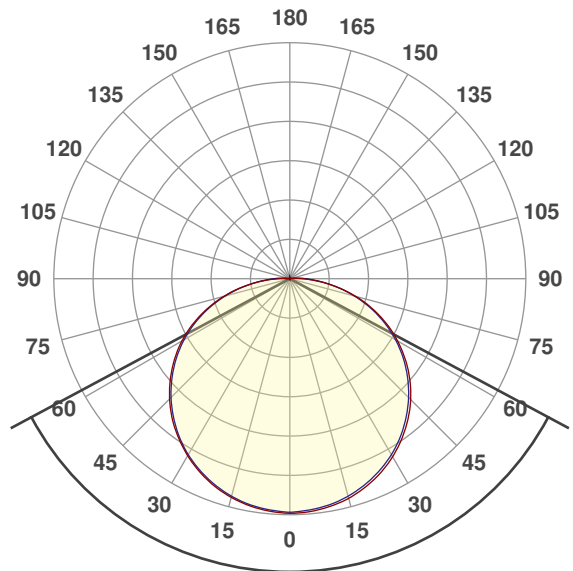
Light quality:



Color temperature:



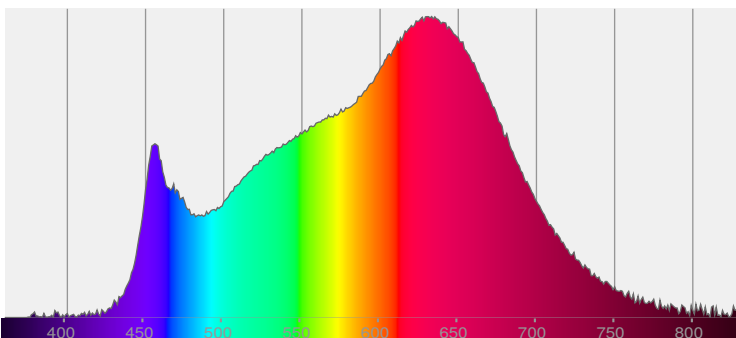
Beam Angle



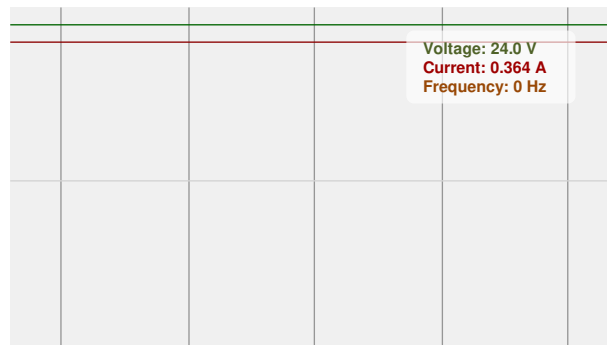
123.6°



Spectra



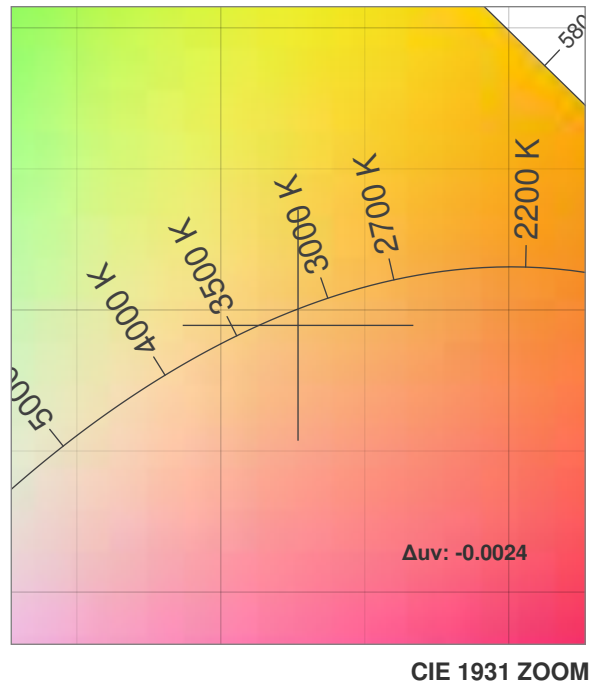
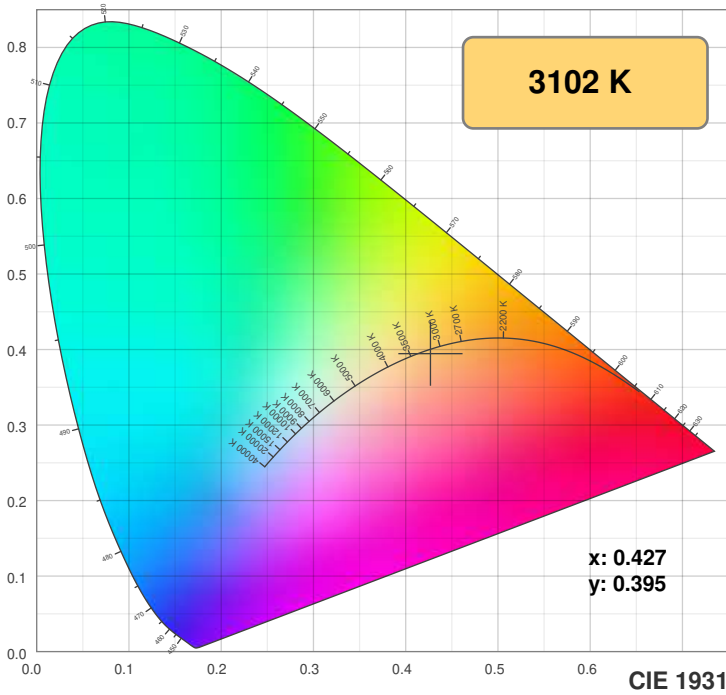
Power



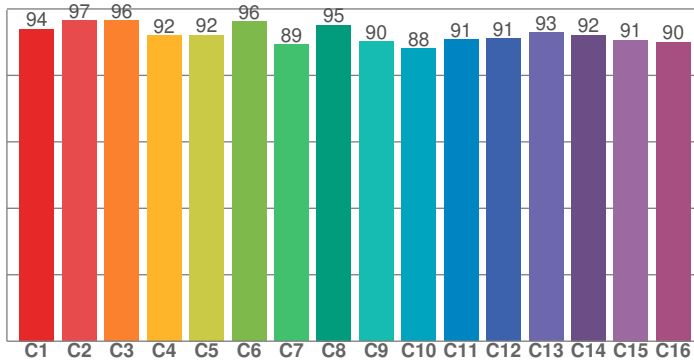
Color Details



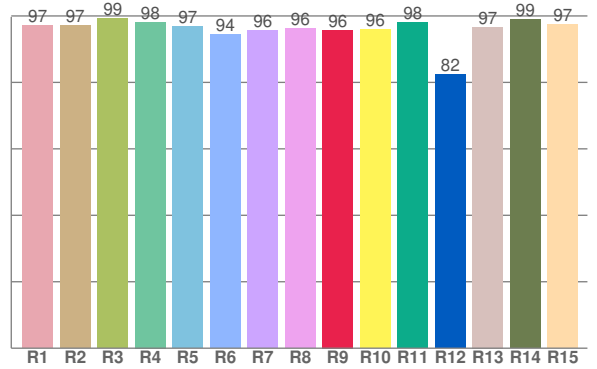
SW24-9.0-DRY-30



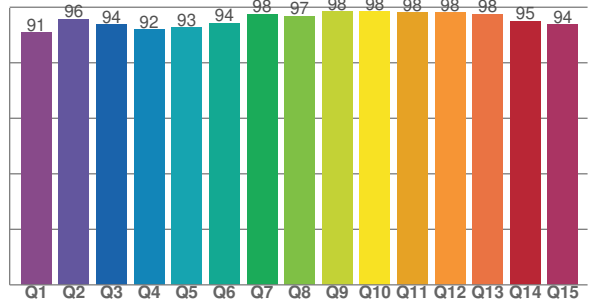
TM30: 92.5



CRI: 96.8 (R1-R8)



CQS: 94.7



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
97.1	97.1	99.2	98.1	96.8	94.4	95.5	96.2	95.8	95.9	98.1	82.3	96.7	99.0	97.3

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
94.0	96.5	96.5	92.1	92.2	96.3	89.3	95.2	90.2	88.0	90.8	91.1	93.0	92.2	90.7	90.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
90.8	95.6	93.7	92.0	92.7	94.3	97.5	96.9	98.4	98.5	98.0	98.0	97.6	95.0	93.8

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
3102 K	96.8	95.8	92.5	99.3	94.7	0.427	0.395	0.248	0.344	-0.0024

TM30 Details

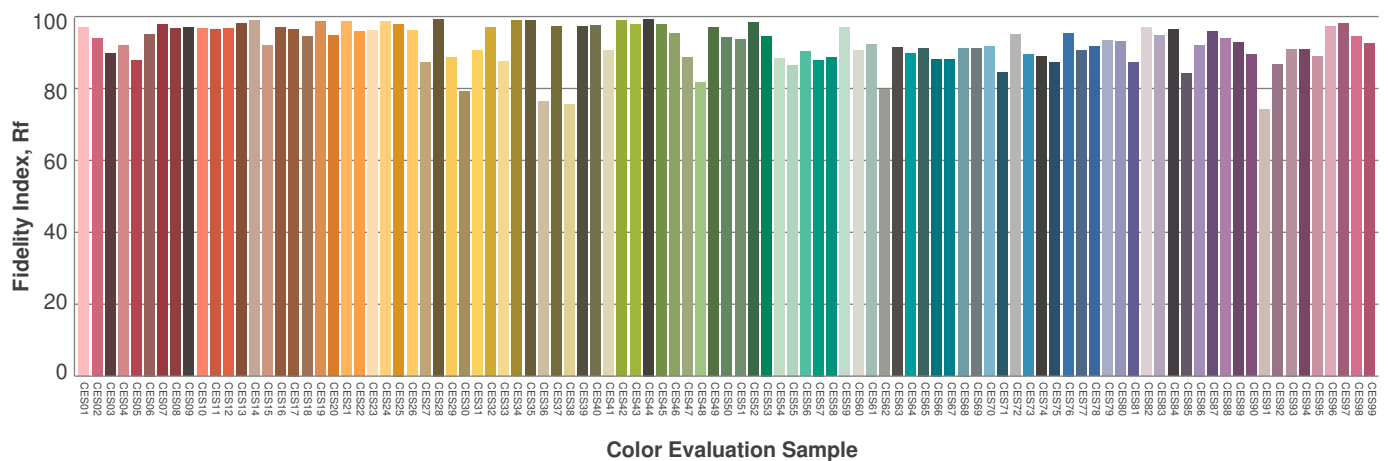
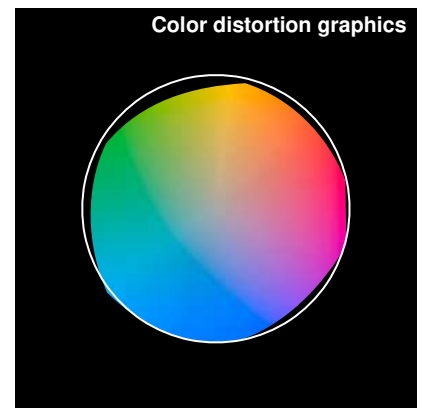
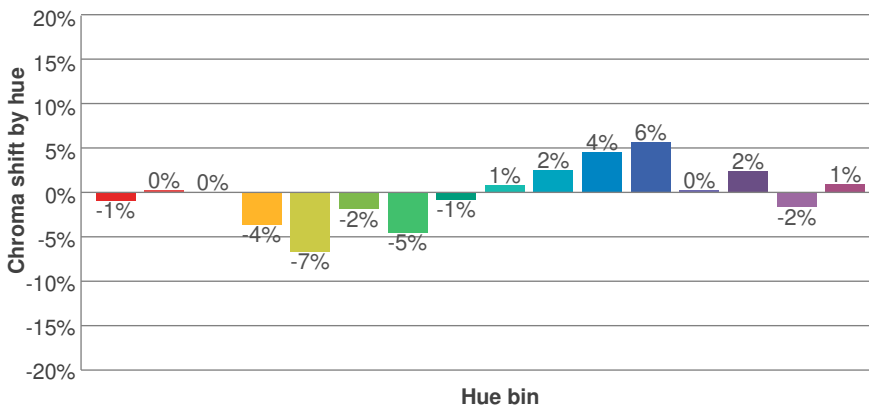
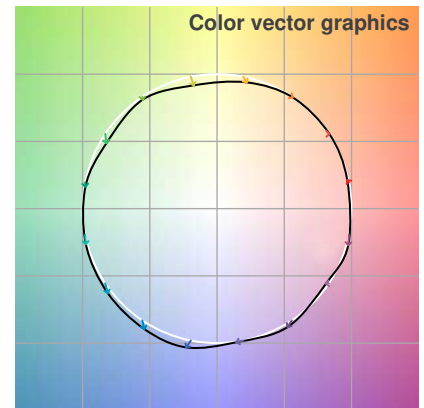
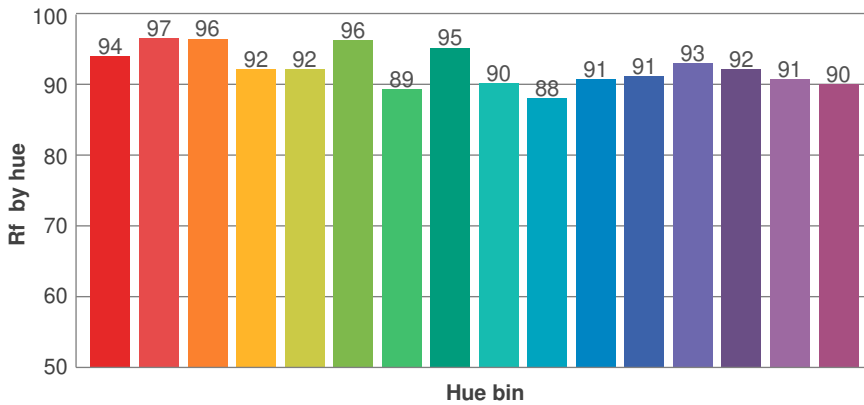
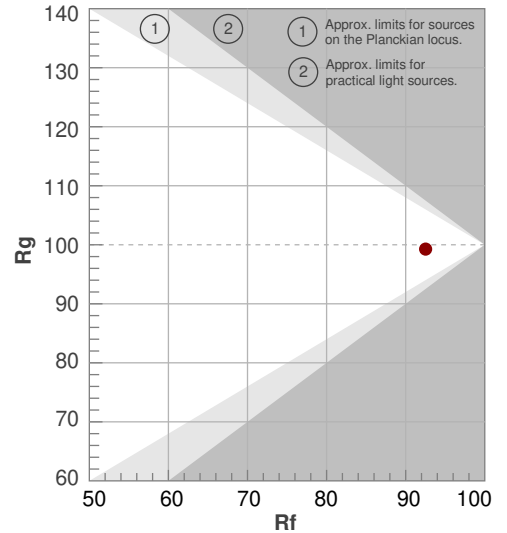


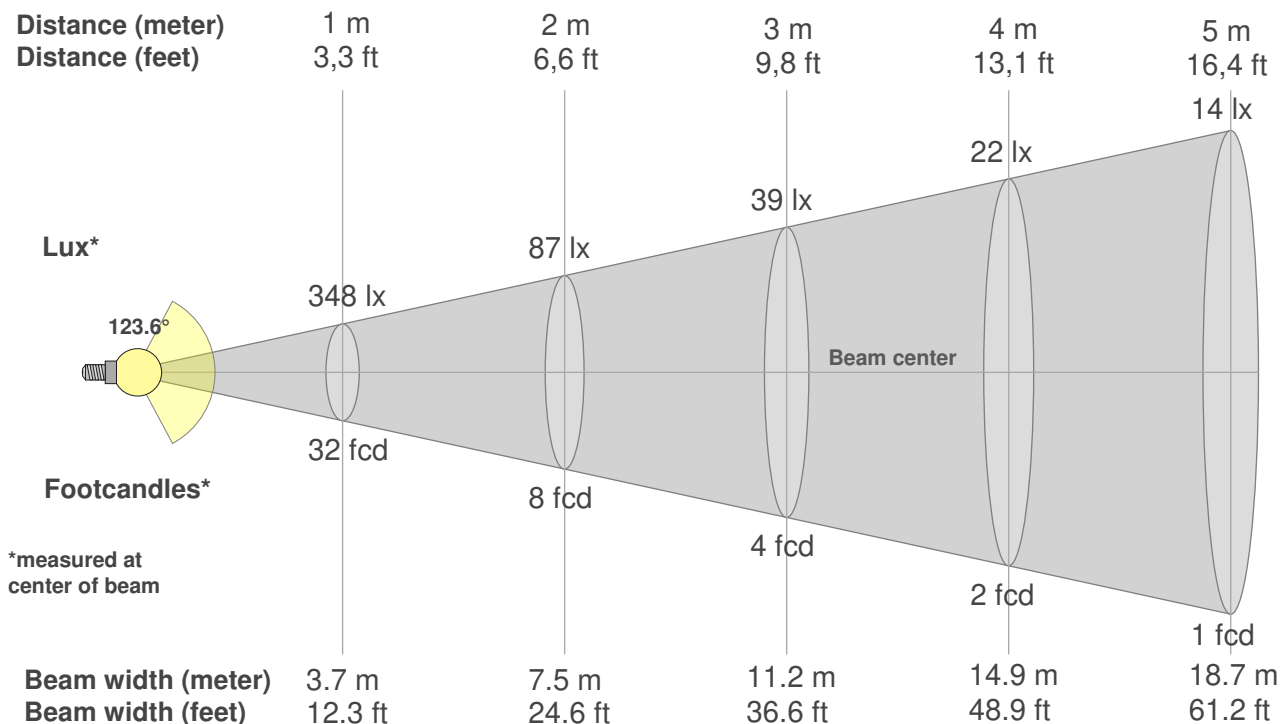
SW24-9.0-DRY-30

Rf 92.5
Fidelity index Rf

Rg 99.3
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	94	-1%	2%
2	97	0%	0%
3	96	0%	-1%
4	92	-4%	-3%
5	92	-7%	-1%
6	96	-2%	1%
7	89	-5%	5%
8	95	-1%	3%
9	90	1%	7%
10	88	2%	7%
11	91	4%	5%
12	91	6%	-2%
13	93	0%	-5%
14	92	2%	-5%
15	91	-2%	-1%
16	90	1%	-8%





Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
348lx	87lx	39lx	22lx	14lx	10lx	7lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx
32.4fcd	8.1fcd	3.6fcd	2fcd	1.3fcd	0.9fcd	0.7fcd	0.5fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
348	348	344	339	330	319	306	291	273	254	233	210	185	159	131	102	72	43	19	5
100%	100%	99%	97%	95%	92%	88%	83%	79%	73%	67%	60%	53%	46%	38%	29%	21%	12%	6%	1%

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
348	345	342	335	326	315	302	287	269	250	229	206	182	156	128	100	71	45	24	11
100%	99%	98%	96%	94%	91%	87%	82%	77%	72%	66%	59%	52%	45%	37%	29%	20%	13%	7%	3%

Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
348	347	343	337	329	317	304	289	272	253	232	210	185	159	131	102	72	43	18	3
100%	100%	99%	97%	94%	91%	87%	83%	78%	73%	67%	60%	53%	46%	38%	29%	21%	12%	5%	1%

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
348	345	342	335	326	315	302	287	269	250	229	206	182	156	128	100	71	45	24	11
100%	99%	98%	96%	94%	91%	87%	82%	77%	72%	66%	59%	52%	45%	37%	29%	20%	13%	7%	3%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
123.6°	173.7°	188.6°	72.1%	47.6%

Photometric Details



SW24-9.0-DRY-35

Product name:
SW24-9.0-DRY-35

Date:
10/24/2019

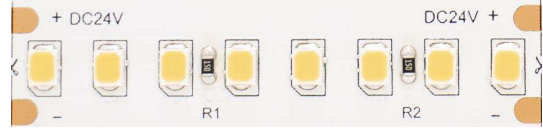
Powering product:
IQ-PH-80-120/24

Output: 1150 lm/ft

Peak: 344 cd

Power: 8.7 W/ft

PF: 1.0



Light efficiency:



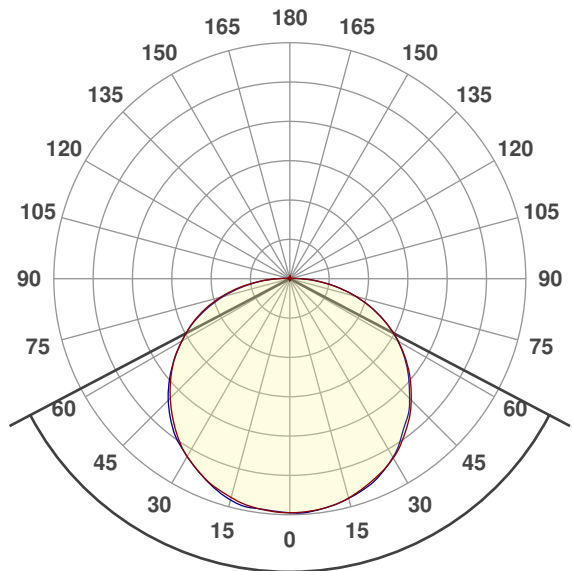
Light quality:



Color temperature:



Beam Angle

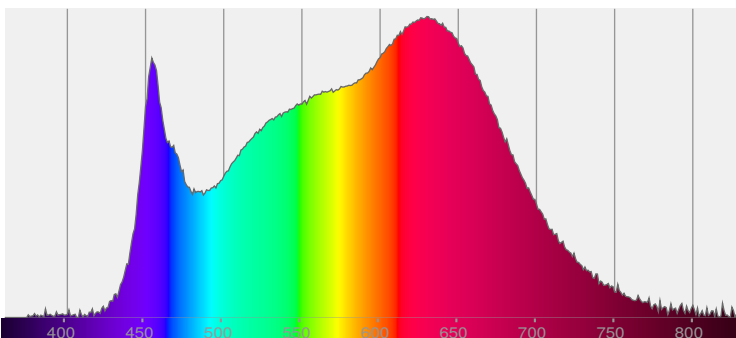


124.5°

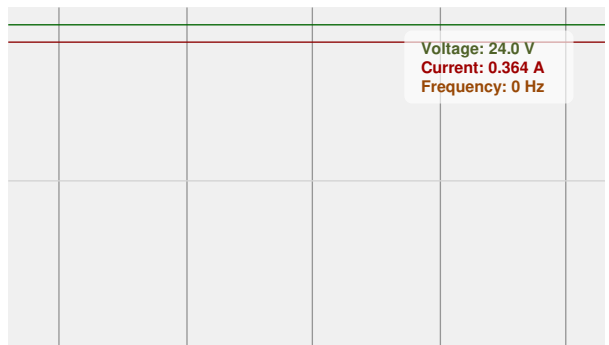
CIE 1931
x: 0.400
y: 0.382



Spectra



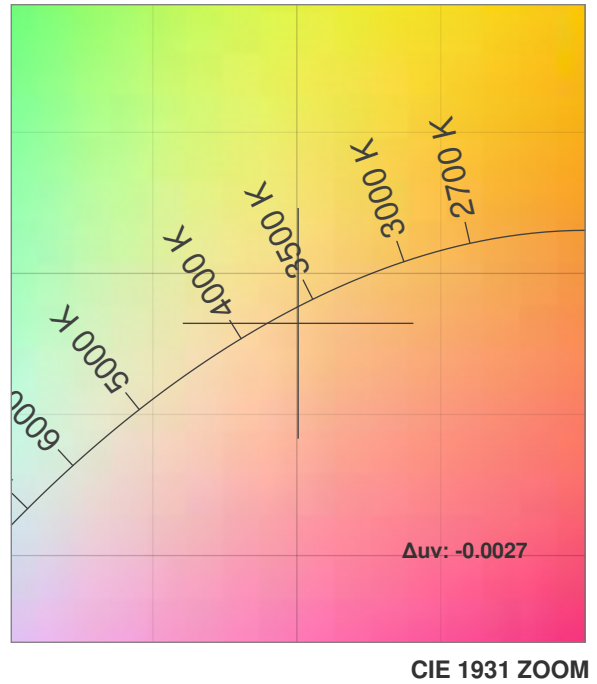
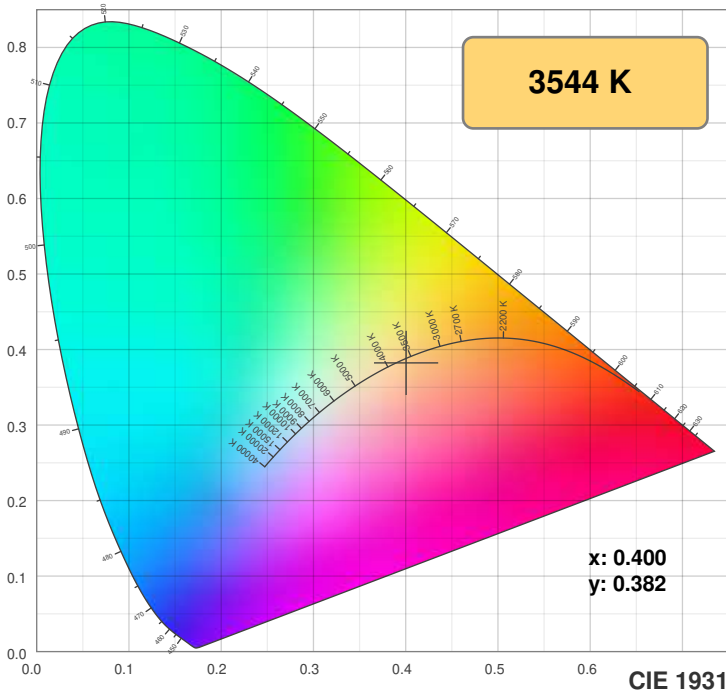
Power



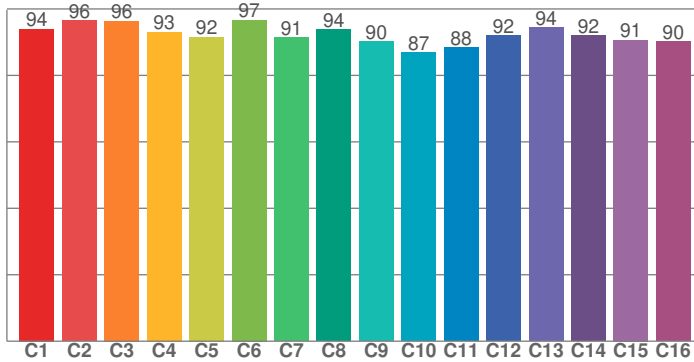
Color Details



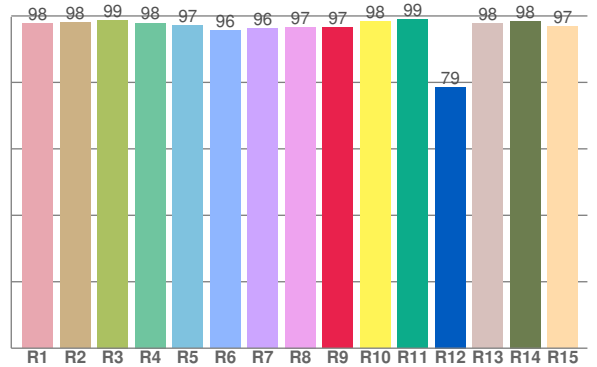
SW24-9.0-DRY-35



TM30: 92.3



CRI: 97.3 (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
97.7	98.0	98.7	97.9	97.2	95.7	96.2	96.6	96.5	98.4	98.8	78.6	97.7	98.5	96.8

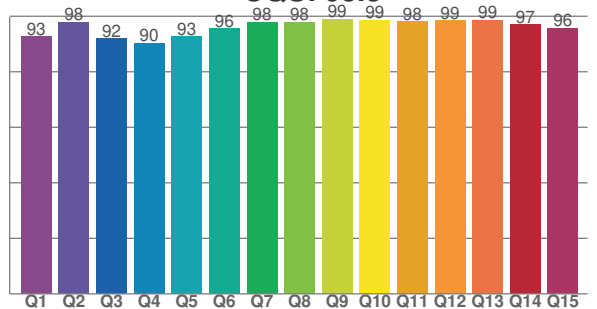
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94.0	96.5	96.4	93.1	91.6	96.7	91.5	93.8	90.1	86.8	88.3	92.0	94.4	92.0	90.7	90.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92.6	97.9	92.0	90.3	92.7	95.6	97.9	98.0	98.9	98.6	98.0	98.5	98.6	97.0	95.7

CQS: 95.3



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
3544 K	97.3	96.5	92.3	99.3	95.3	0.400	0.382	0.236	0.338	-0.0027

TM30 Details

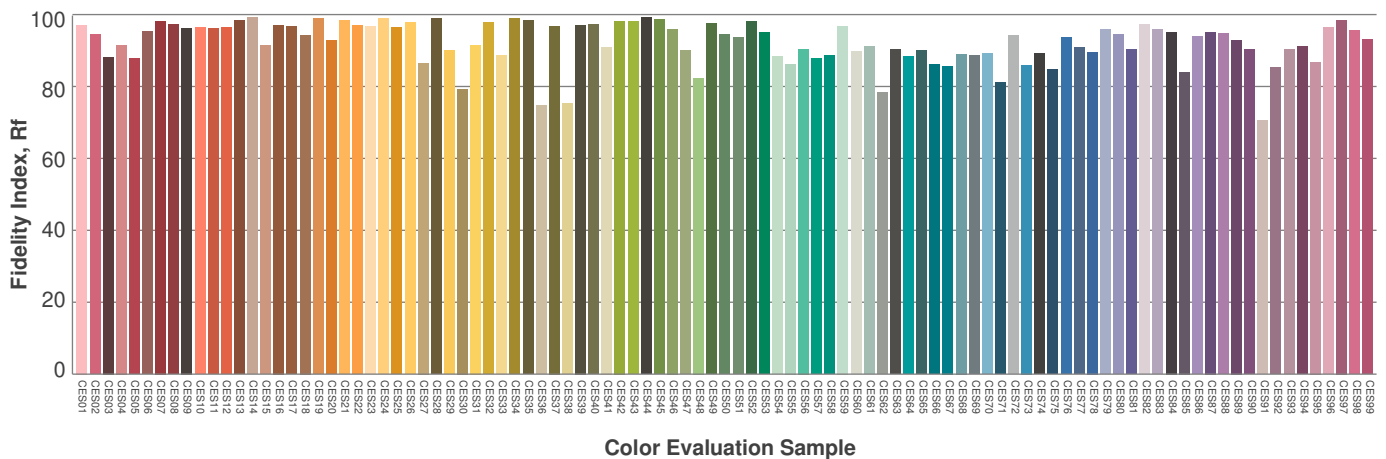
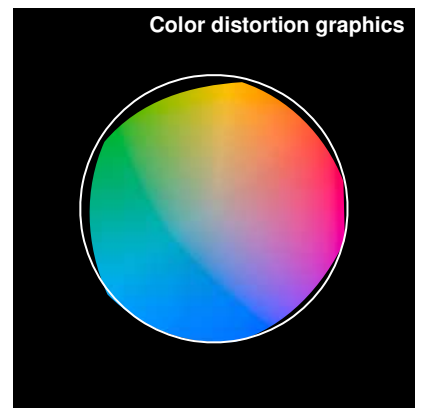
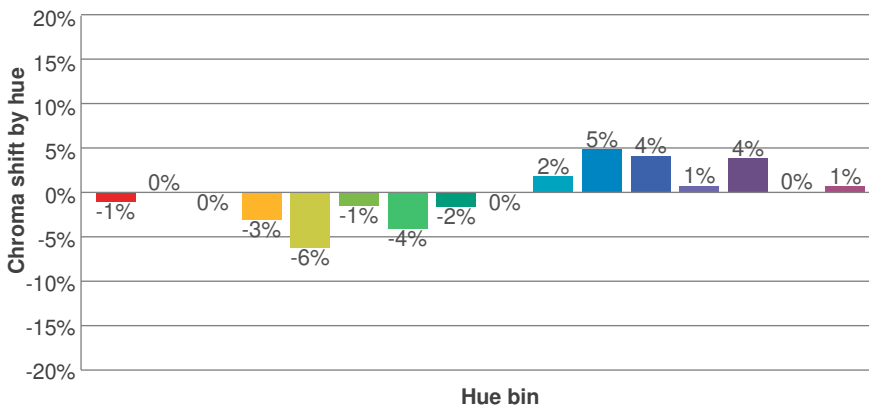
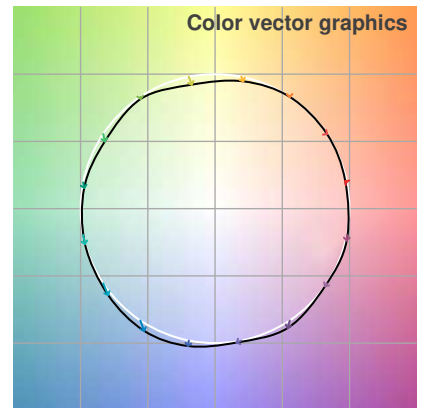
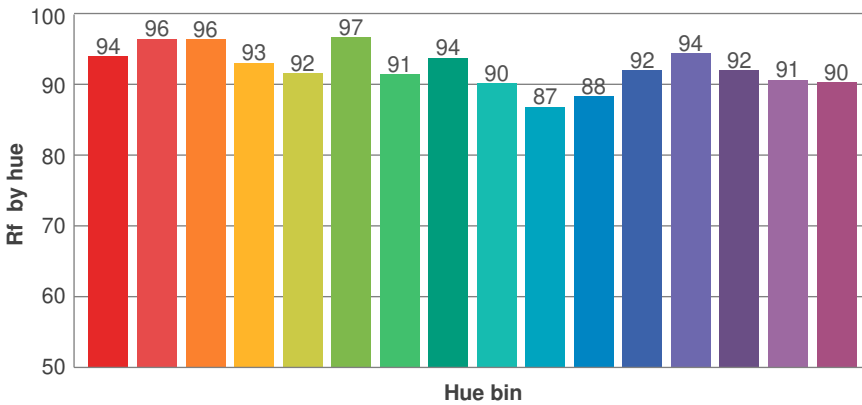
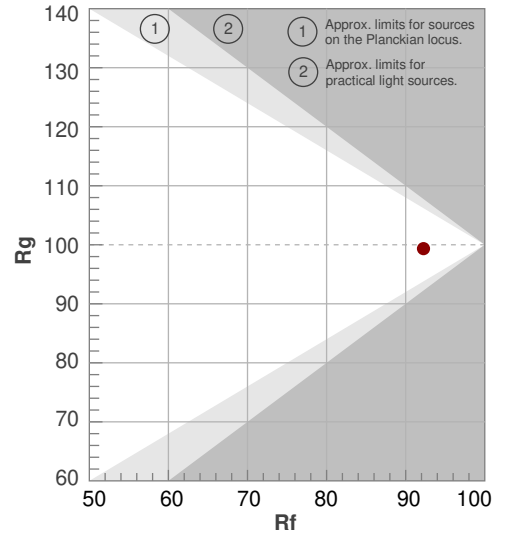


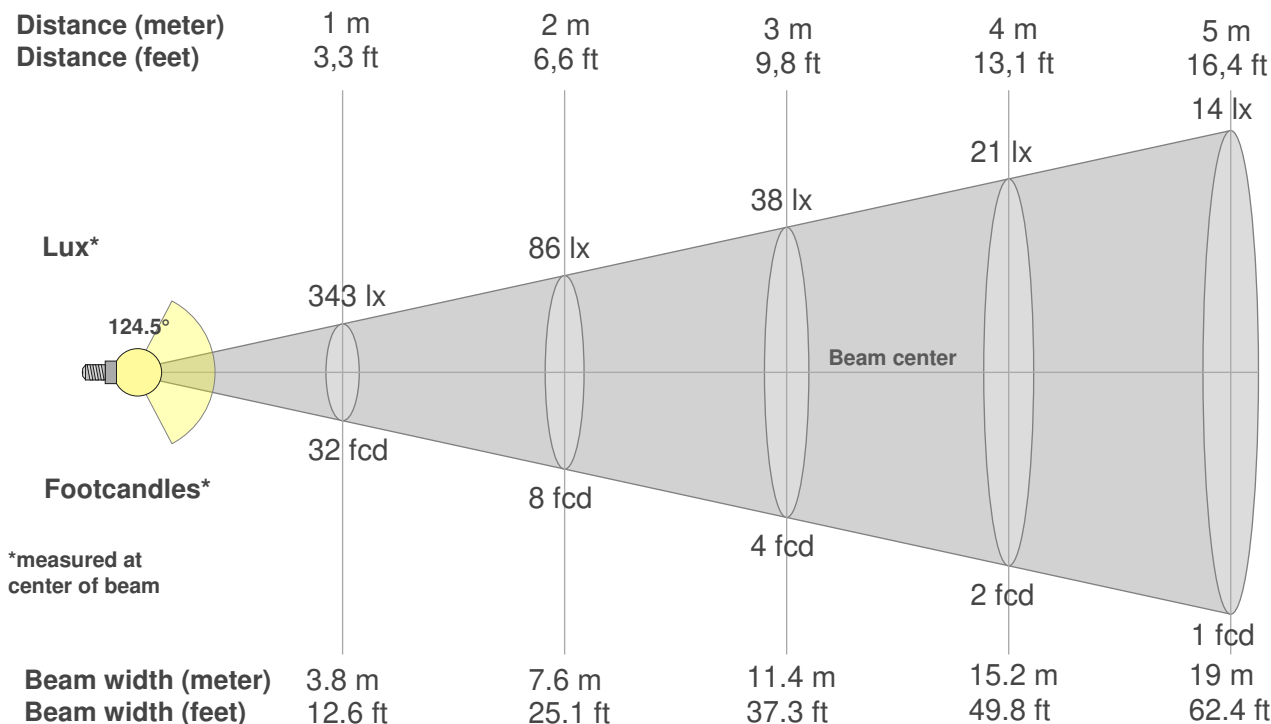
SW24-9.0-DRY-35

Rf 92.3
Fidelity index Rf

Rg 99.3
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	94	-1%	1%
2	96	0%	0%
3	96	0%	0%
4	93	-3%	-2%
5	92	-6%	-1%
6	97	-1%	1%
7	91	-4%	4%
8	94	-2%	4%
9	90	0%	7%
10	87	2%	9%
11	88	5%	7%
12	92	4%	0%
13	94	1%	-4%
14	92	4%	-4%
15	91	0%	-3%
16	90	1%	-4%





Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
343lx	86lx	38lx	21lx	14lx	10lx	7lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx
31.9fcd	8fcd	3.5fcd	2fcd	1.3fcd	0.9fcd	0.7fcd	0.5fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
343	342	339	333	324	314	303	288	271	252	231	208	184	157	130	100	70	41	17	3
100%	100%	99%	97%	94%	92%	88%	84%	79%	73%	67%	61%	54%	46%	38%	29%	20%	12%	5%	1%

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
343	343	339	333	326	316	302	285	267	248	228	206	183	157	129	100	70	41	18	4
100%	100%	99%	97%	95%	92%	88%	83%	78%	72%	66%	60%	53%	46%	38%	29%	20%	12%	5%	1%

Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
343	342	338	332	324	313	301	285	267	248	228	207	183	159	133	105	76	45	20	3
100%	100%	99%	97%	94%	91%	88%	83%	78%	72%	66%	60%	53%	46%	39%	31%	22%	13%	6%	1%

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
343	341	340	335	326	314	301	288	271	252	230	207	183	158	130	101	71	43	19	5
100%	99%	99%	98%	95%	91%	88%	84%	79%	73%	67%	60%	53%	46%	38%	30%	21%	12%	6%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
124.5°	173.2°	186.2°	72.1%	47.6%

Photometric Details



SW24-9.0-DRY-40

Product name:
SW24-9.0-DRY-40

Date:
10/24/2019

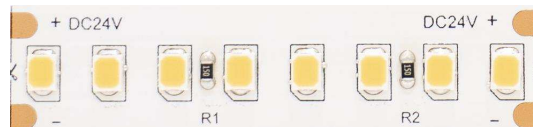
Powering product:
IQ-PH-80-120/24

Output: 1192 lm/ft

Peak: 355 cd

Power: 8.7 W/ft

PF: 1.0



Light efficiency:



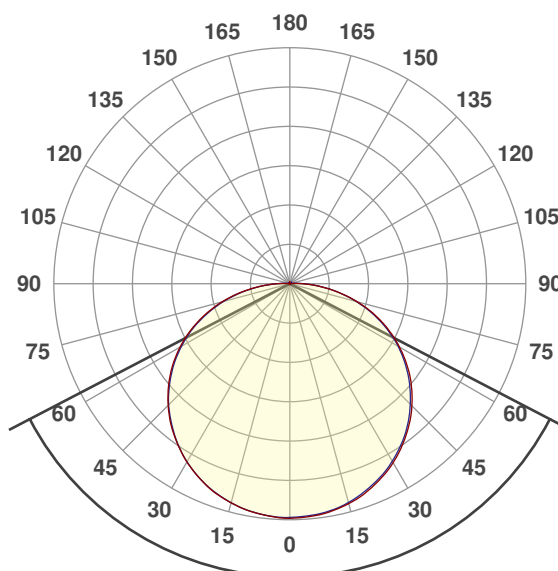
Light quality:



Color temperature:



Beam Angle

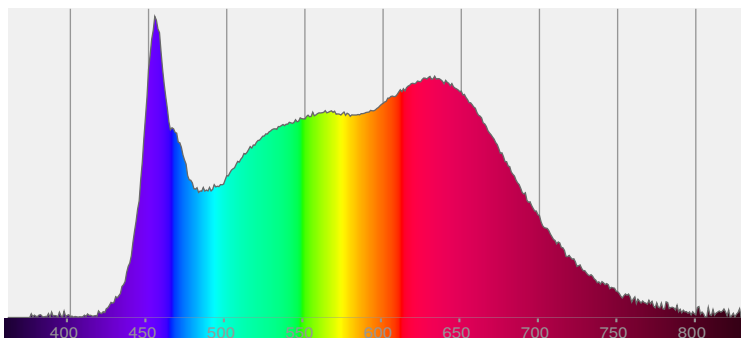


125°

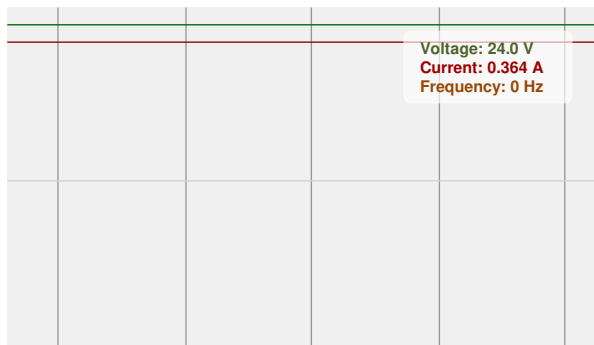


CIE 1931
x: 0.374
y: 0.368

Spectra



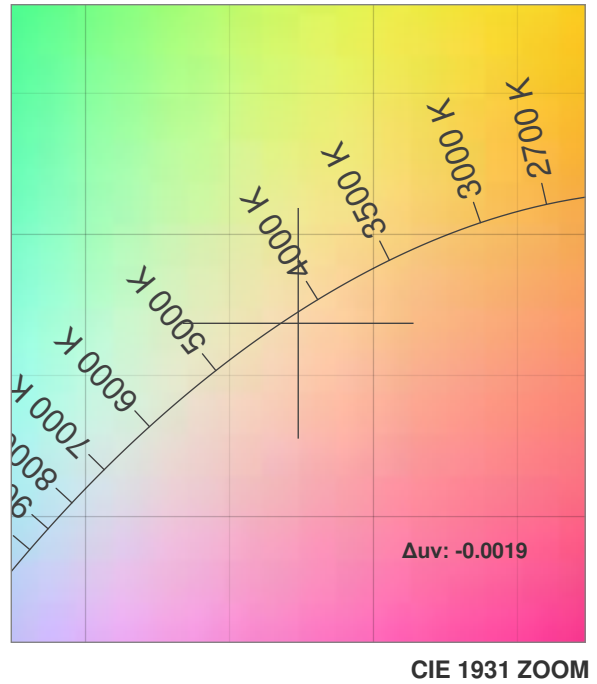
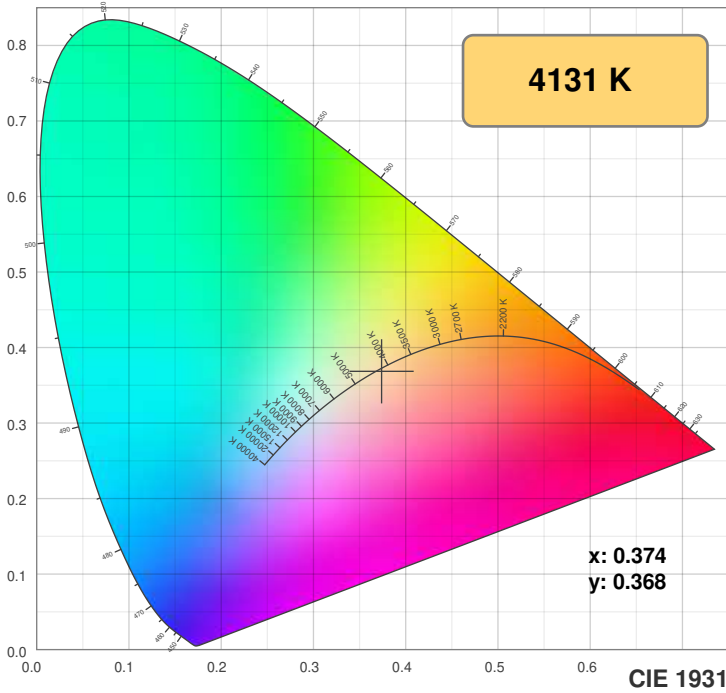
Power



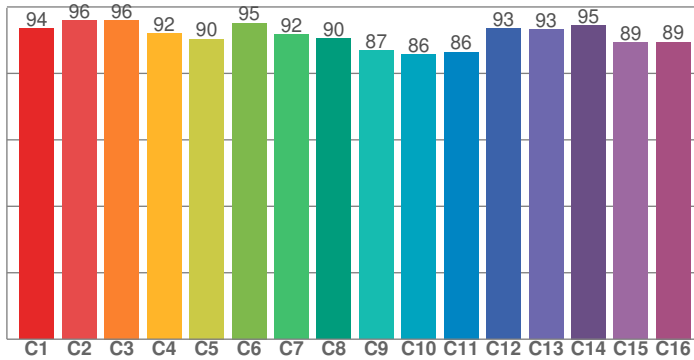
Color Details



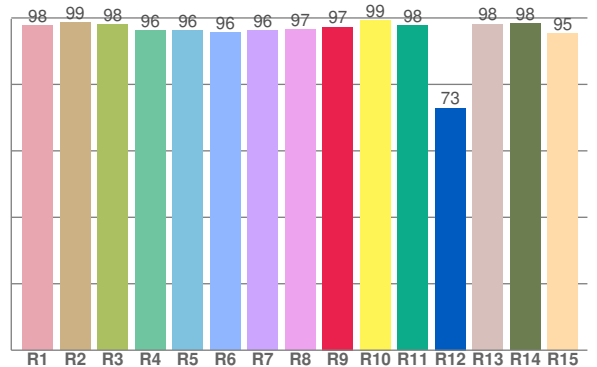
SW24-9.0-DRY-40



TM30: 91.3



CRI: 96.9 (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
97.8	98.6	98.1	96.3	96.2	95.7	96.2	96.5	97.3	99.4	97.7	72.9	98.2	98.2	95.3

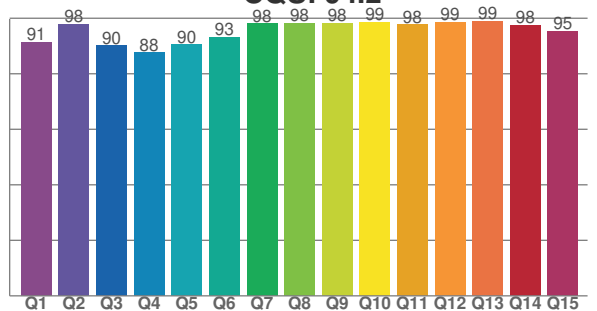
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93.5	95.9	96.0	92.0	90.3	95.2	91.8	90.4	86.9	85.7	86.5	93.5	93.3	94.5	89.4	89.4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91.5	98.0	90.2	87.5	90.5	93.2	98.1	98.2	98.3	98.5	97.7	98.6	99.0	97.6	95.5

CQS: 94.2



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
4131 K	96.9	97.3	91.3	98.9	94.2	0.374	0.368	0.224	0.331	-0.0019

TM30 Details

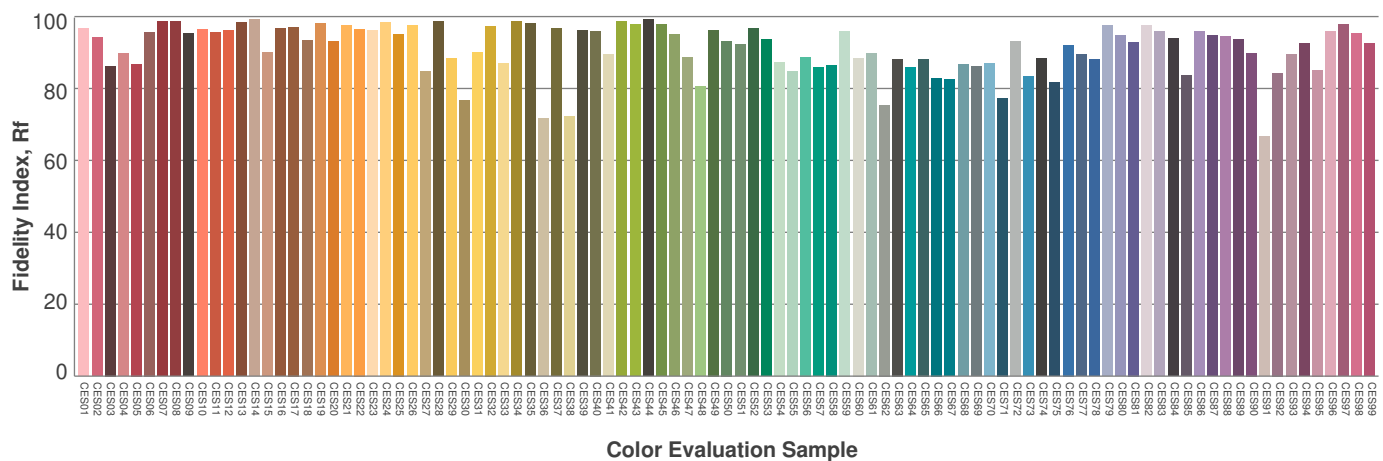
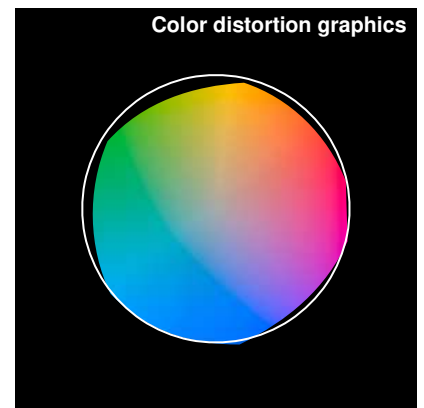
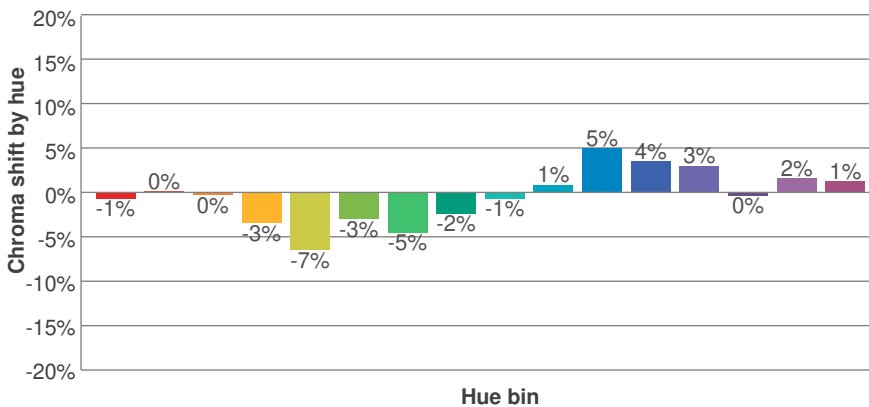
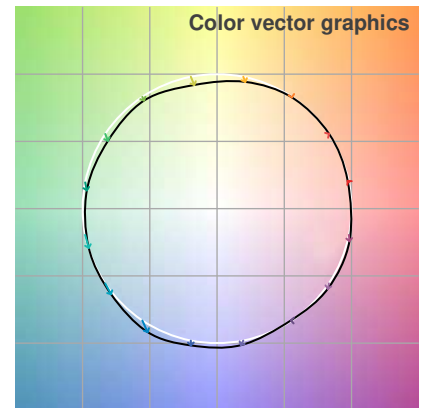
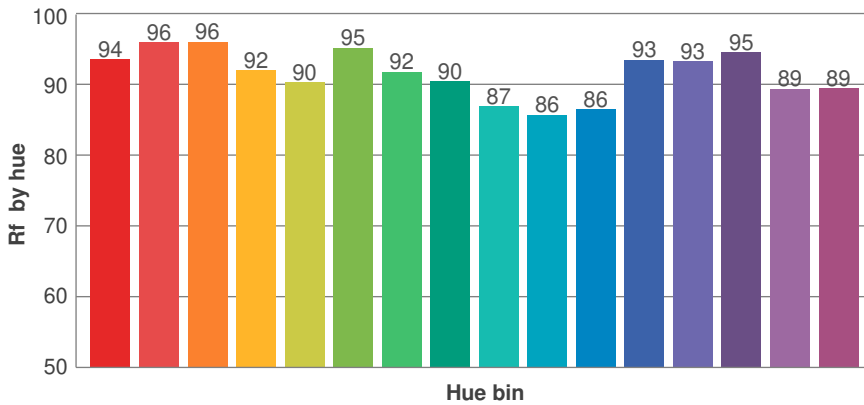
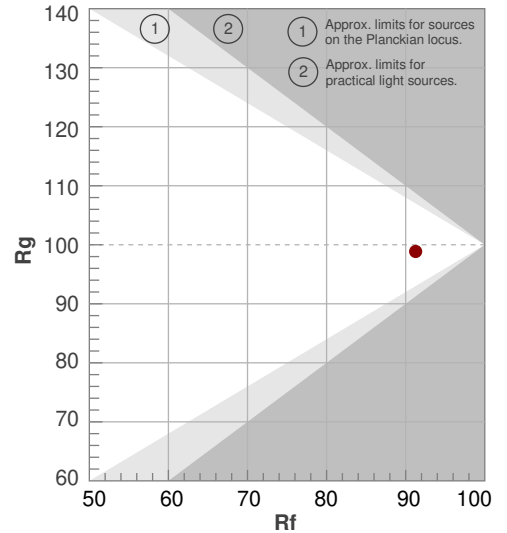


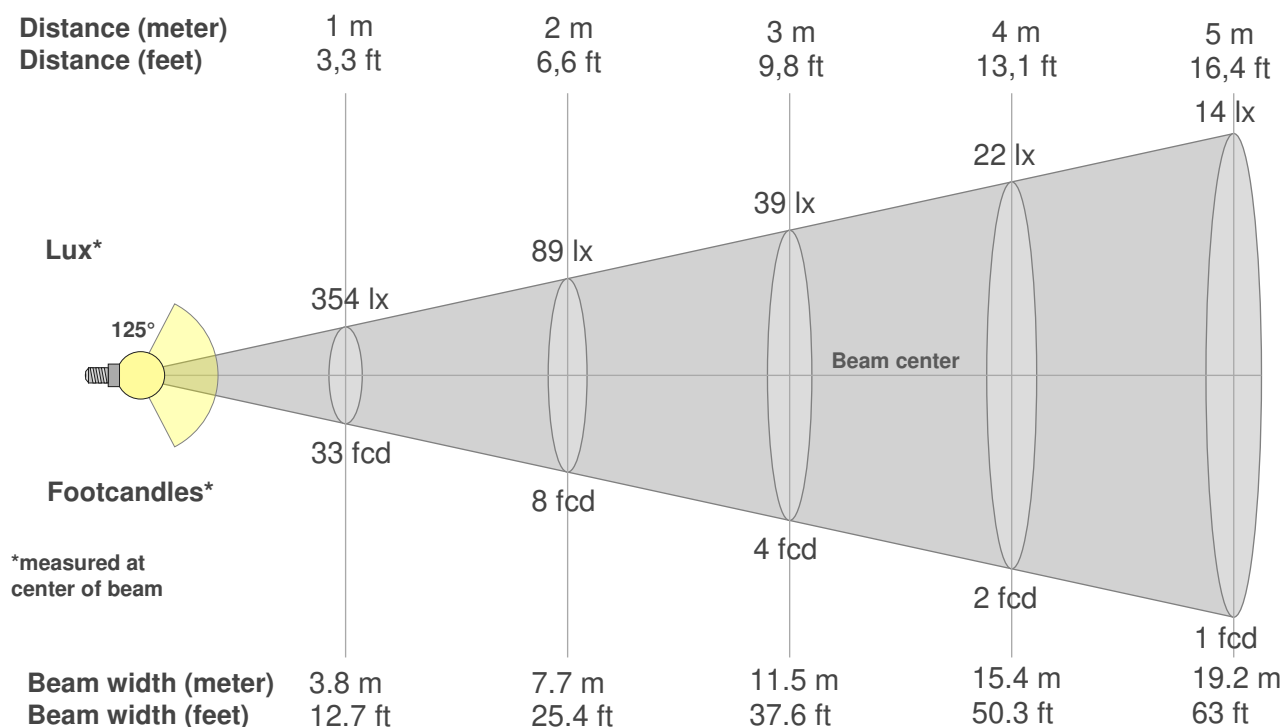
SW24-9.0-DRY-40

Rf 91.3
Fidelity index Rf

Rg 98.9
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	94	-1%	1%
2	96	0%	0%
3	96	0%	0%
4	92	-3%	-2%
5	90	-7%	-1%
6	95	-3%	0%
7	92	-5%	3%
8	90	-2%	6%
9	87	-1%	10%
10	86	1%	9%
11	86	5%	8%
12	93	4%	1%
13	93	3%	-2%
14	95	0%	-1%
15	89	2%	-4%
16	89	1%	-5%





Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
354lx	89lx	39lx	22lx	14lx	10lx	7lx	6lx	4lx	4lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx
32.9fcd	8.2fcd	3.7fcd	2.1fcd	1.3fcd	0.9fcd	0.7fcd	0.5fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
354	354	350	344	336	325	313	297	280	261	240	217	192	165	136	106	75	45	21	5
100%	100%	99%	97%	95%	92%	88%	84%	79%	74%	68%	61%	54%	46%	38%	30%	21%	13%	6%	1%

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
354	352	349	343	334	323	310	295	278	258	237	214	189	162	134	104	74	45	21	6
100%	99%	98%	97%	94%	91%	88%	83%	78%	73%	67%	60%	53%	46%	38%	29%	21%	13%	6%	2%

Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
354	353	349	343	335	324	312	296	280	260	240	217	192	165	136	106	76	46	20	4
100%	100%	99%	97%	95%	92%	88%	84%	79%	74%	68%	61%	54%	47%	38%	30%	21%	13%	6%	1%

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
354	353	349	343	335	324	311	296	278	259	238	215	189	163	134	104	73	44	20	6
100%	100%	99%	97%	94%	91%	88%	83%	78%	73%	67%	61%	53%	46%	38%	29%	21%	12%	6%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
125°	173.6°	186.9°	72.0%	47.4%