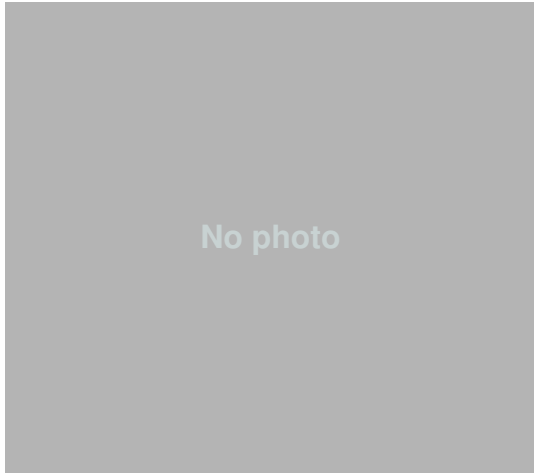


Photometric Details

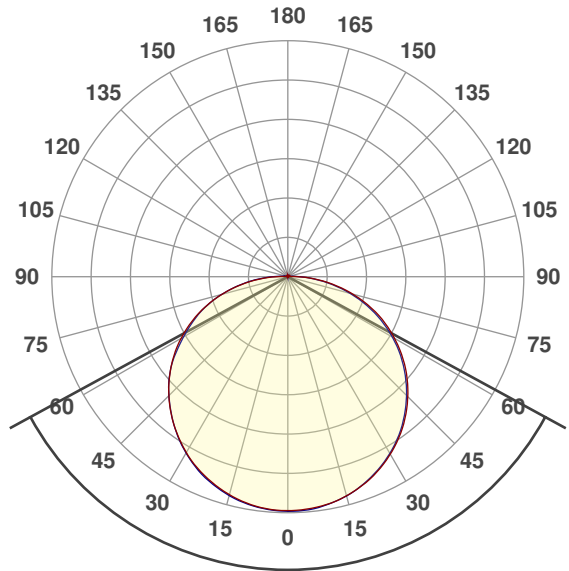


SW24-6.0-DRY-27-HE

Product name:	SW24-6.0-DRY-27-HE
Date:	2/17/2020
Powering product:	IQ-PH-80-120/24
<hr/>	
Output:	710 lm/ft
Peak:	215 cd
Power:	6.0 W/ft
PF:	1.0



Beam Angle



122.8°

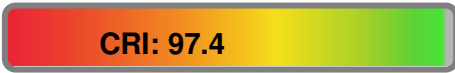
CIE 1931
x: 0.452
y: 0.406



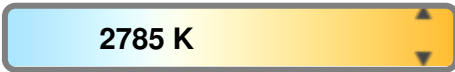
Light efficiency:



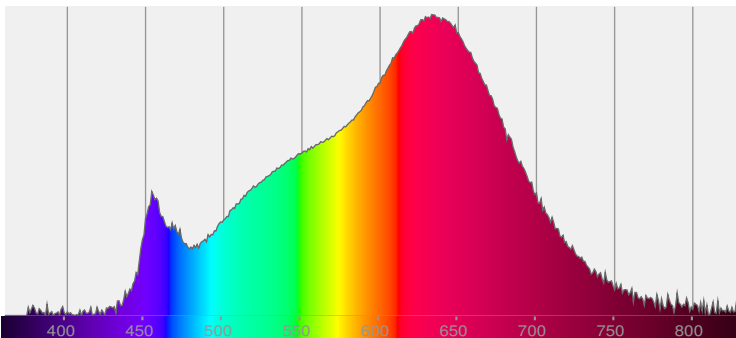
Light quality:



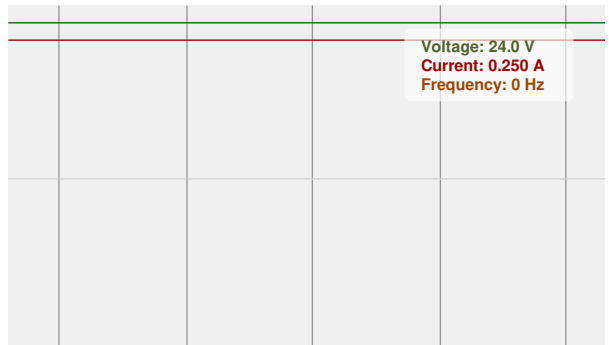
Color temperature:



Spectra



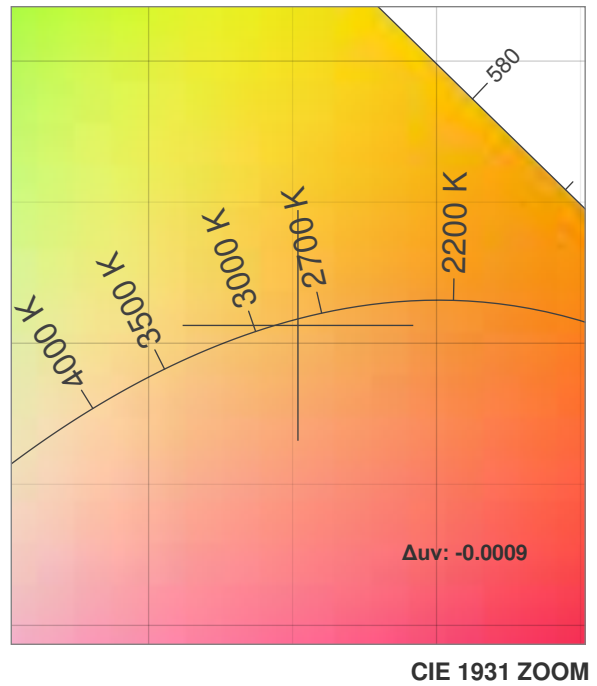
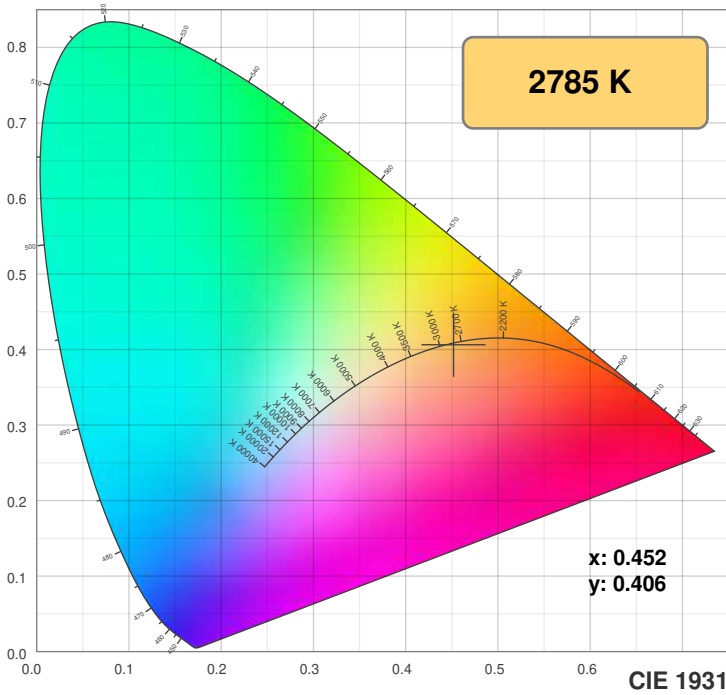
Power



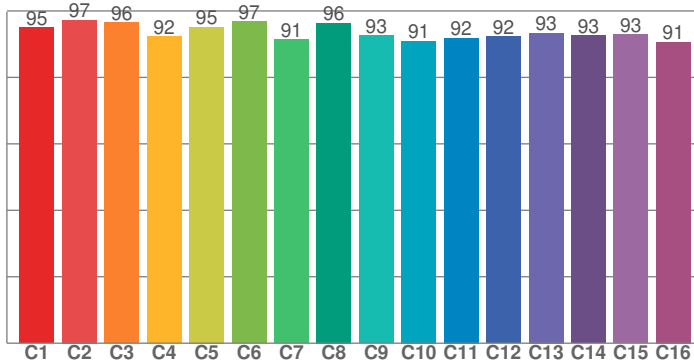
Color Details



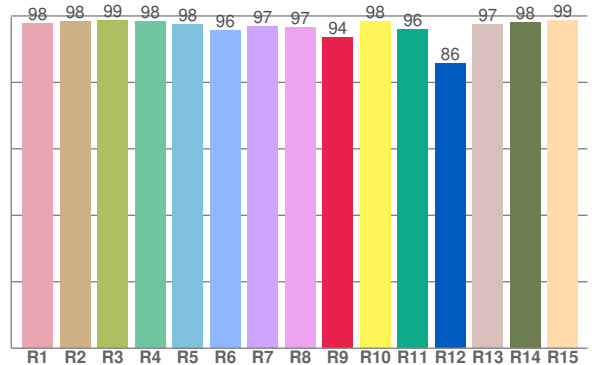
SW24-6.0-DRY-27-HE



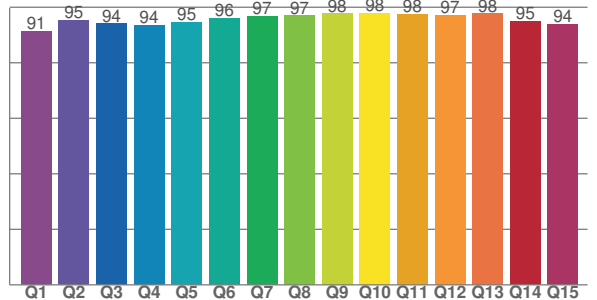
TM30: 93.7



CRI: 97.4 (R1-R8)



CQS: 95.0



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
97.6	98.3	98.6	98.3	97.6	95.6	96.8	96.6	93.5	98.3	96.0	85.7	97.4	97.9	98.5

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
95.0	97.3	96.5	92.4	95.2	96.9	91.5	96.4	92.6	91.0	91.9	92.2	93.3	92.6	92.8	90.6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91.4	95.4	94.1	93.6	94.6	96.0	96.7	97.0	97.7	97.9	97.5	97.2	97.7	95.0	93.9

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
2785 K	97.4	93.5	93.7	99.6	95.0	0.452	0.406	0.259	0.350	-0.0009

TM30 Details

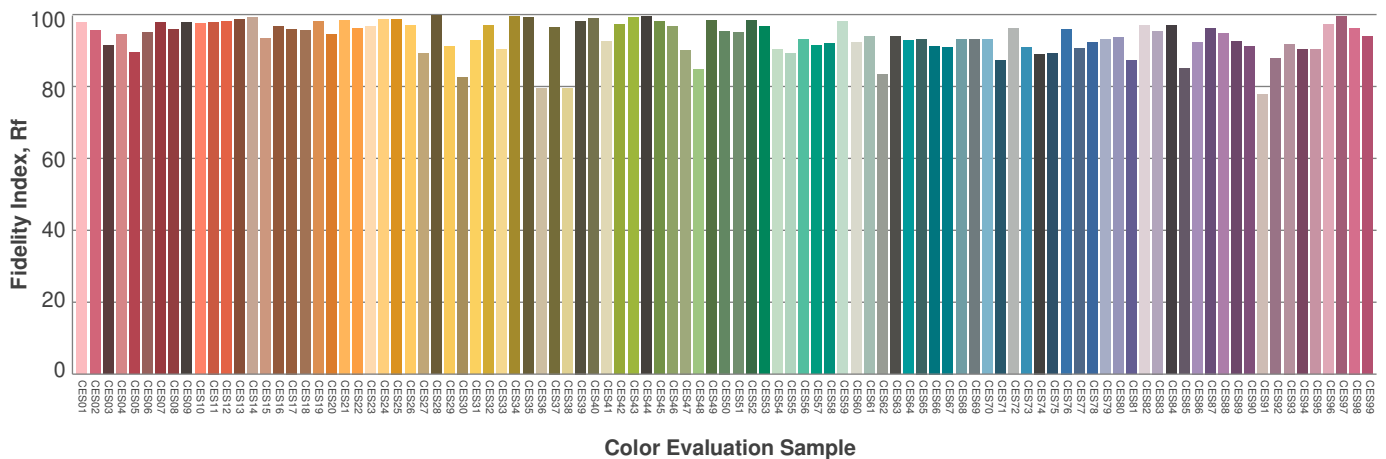
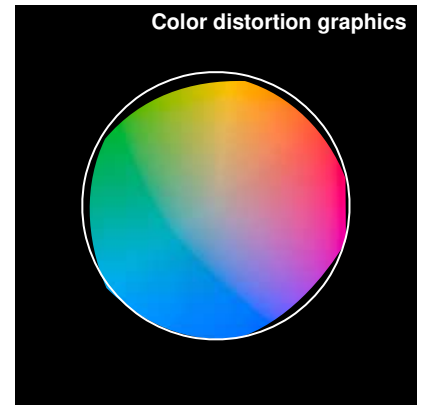
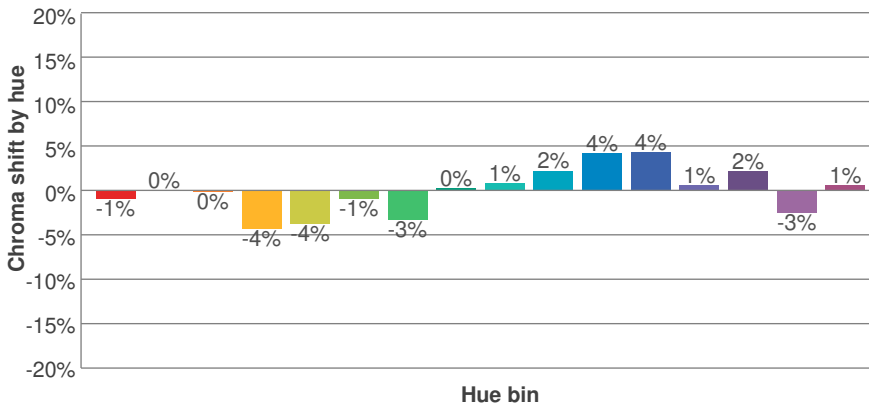
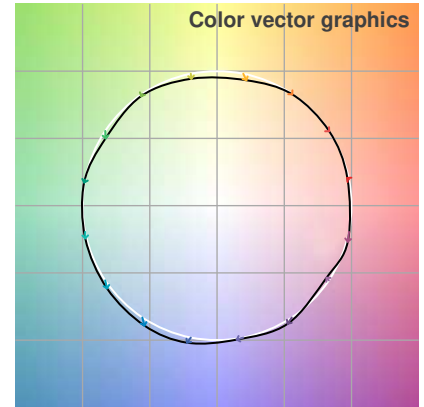
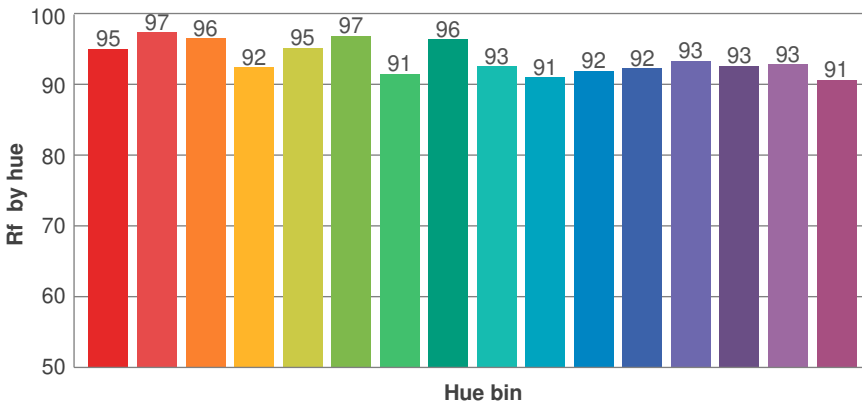
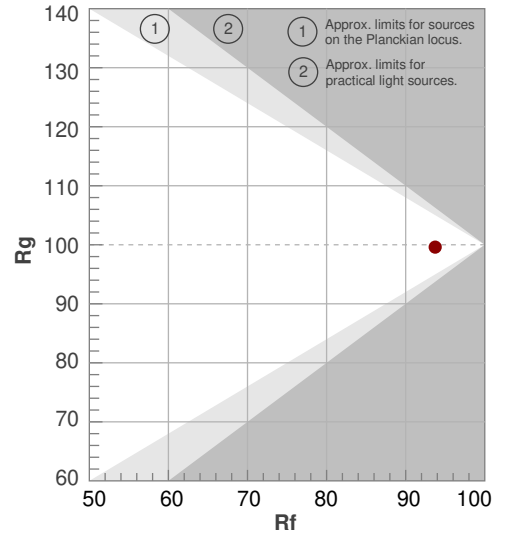


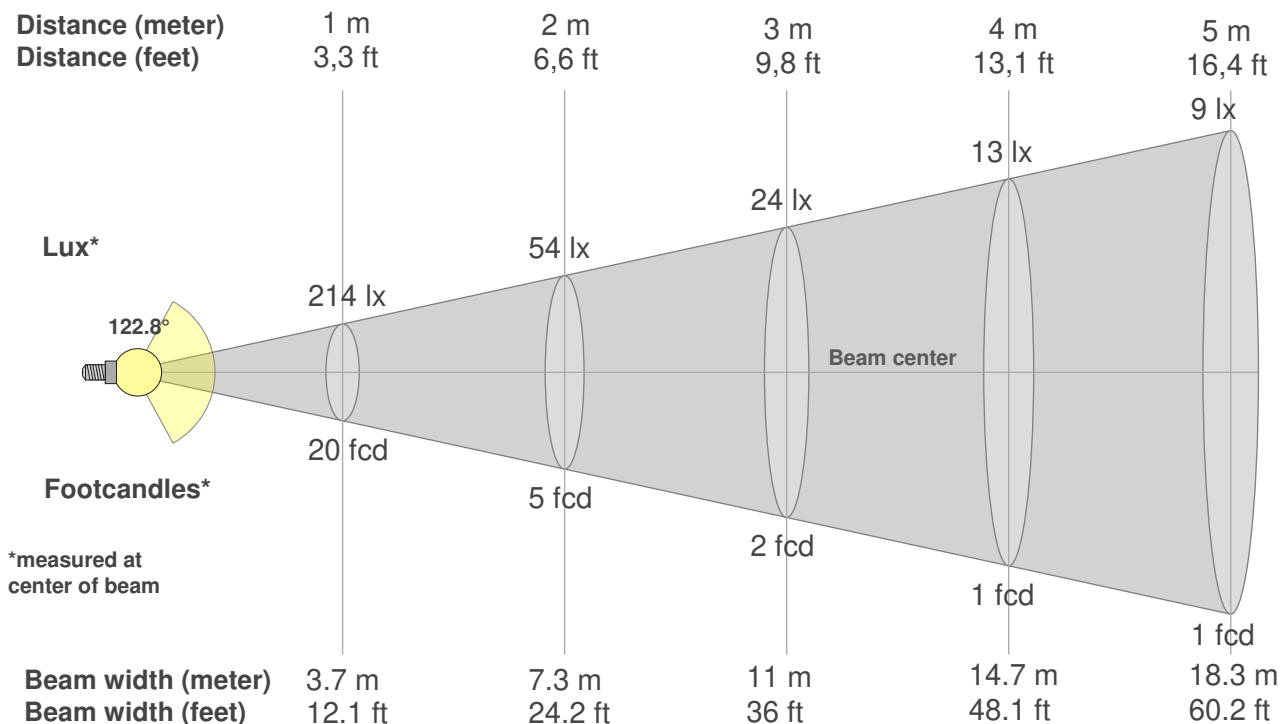
SW24-6.0-DRY-27-HE

Rf 93.7
Fidelity index Rf

Rg 99.6
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	1%
2	97	0%	0%
3	96	0%	-1%
4	92	-4%	-3%
5	95	-4%	0%
6	97	-1%	2%
7	91	-3%	4%
8	96	0%	2%
9	93	1%	5%
10	91	2%	6%
11	92	4%	5%
12	92	4%	-2%
13	93	1%	-5%
14	93	2%	-5%
15	93	-3%	1%
16	91	1%	-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
214lx	54lx	24lx	13lx	9lx	6lx	4lx	3lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx
19.9fcd	5fcd	2.2fcd	1.2fcd	0.8fcd	0.6fcd	0.4fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0fcd

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°
214	213	211	208	203	196	188	178	167	155	142	128	113	97	80	62	43	26	11	3
100%	100%	99%	97%	94%	91%	87%	83%	78%	72%	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°
214	214	212	208	202	195	187	177	166	154	140	126	111	94	77	59	41	25	11	4
100%	100%	99%	97%	94%	91%	87%	83%	77%	72%	65%	59%	52%	44%	36%	28%	19%	11%	5%	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°
214	213	211	207	201	194	186	176	166	154	141	128	113	97	80	63	45	27	12	3
100%	99%	98%	96%	94%	91%	87%	82%	77%	72%	66%	60%	53%	45%	37%	29%	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°
214	214	211	207	202	195	186	177	166	154	141	127	110	95	80	63	45	29	14	5
100%	100%	99%	97%	94%	91%	87%	82%	77%	72%	66%	59%	51%	44%	37%	29%	21%	13%	7%	2%

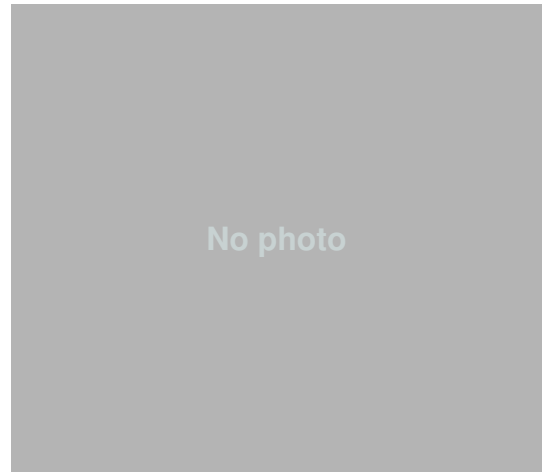
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
122.8°	173.1°	186.9°	72.2%	47.8%

Photometric Details

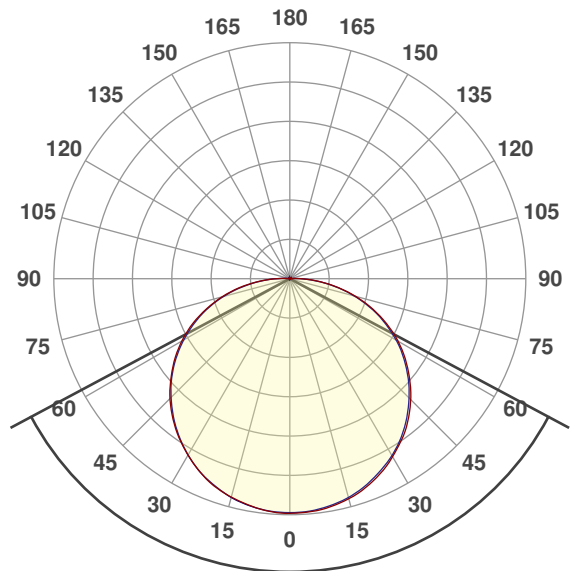


SW24-6.0-DRY-30-HE

Product name:	SW24-6.0-DRY-30-HE
Date:	2/12/2020
Powering product:	IQ-PH-80-120/24
<hr/>	
Output:	781 lm/ft
Peak:	235 cd
Power:	6.0 W/ft
PF:	1.0



Beam Angle



123.8°

CIE 1931
x: 0.427
y: 0.398



Light efficiency:



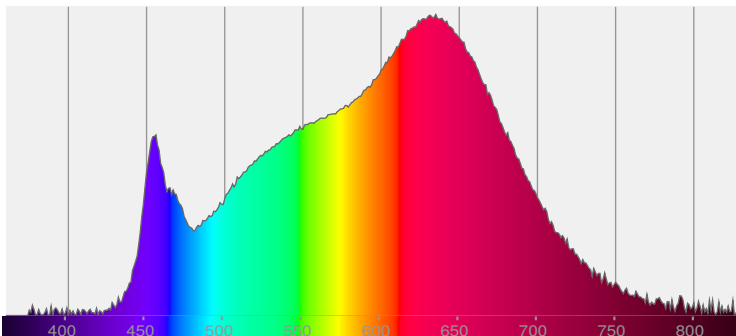
Light quality:



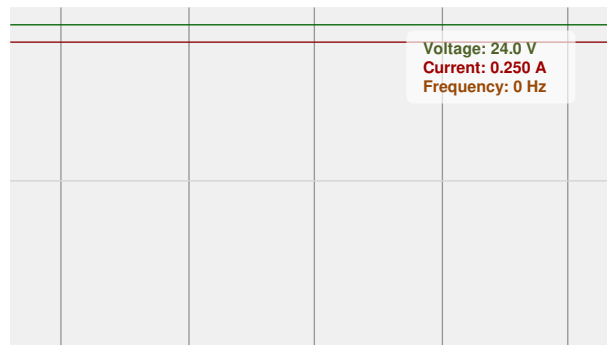
Color temperature:



Spectra



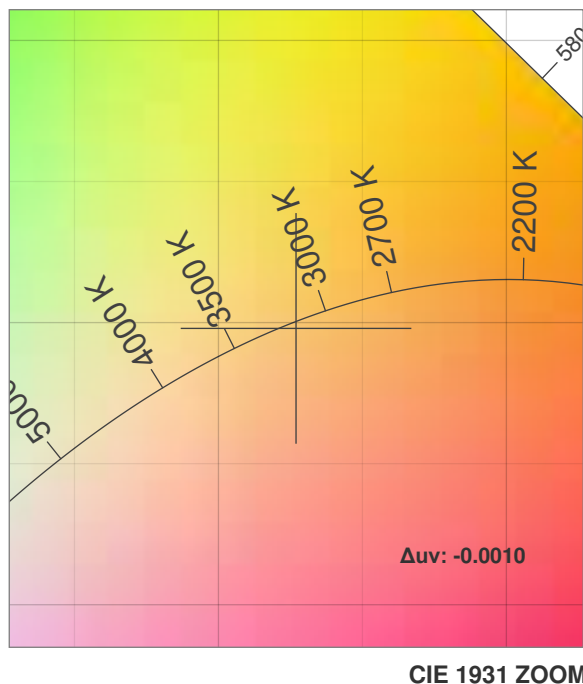
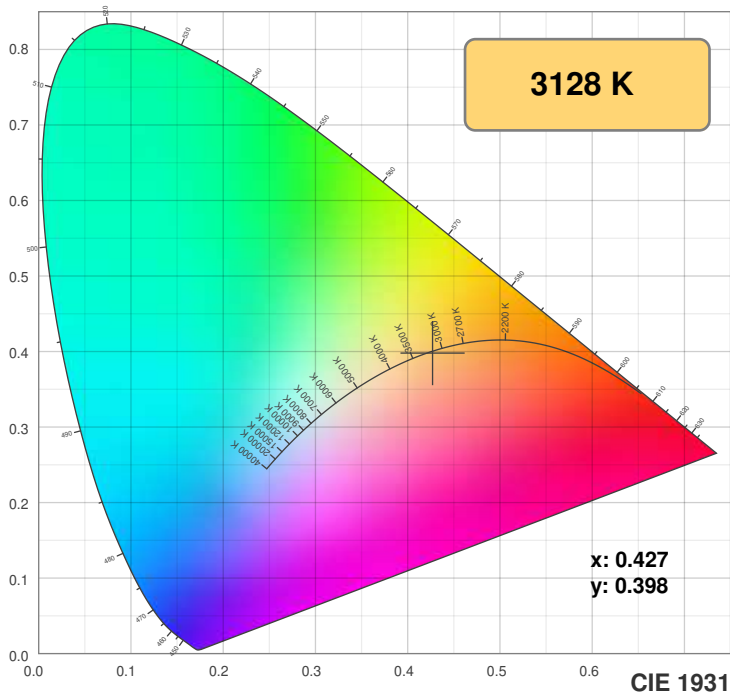
Power



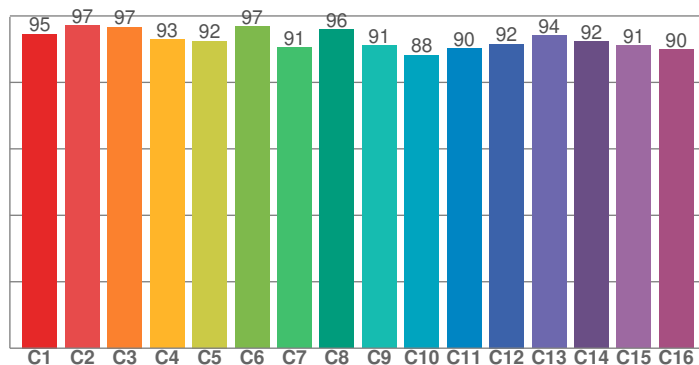
Color Details



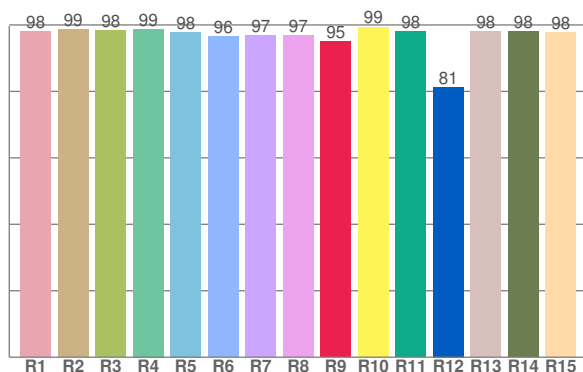
SW24-6.0-DRY-30-HE



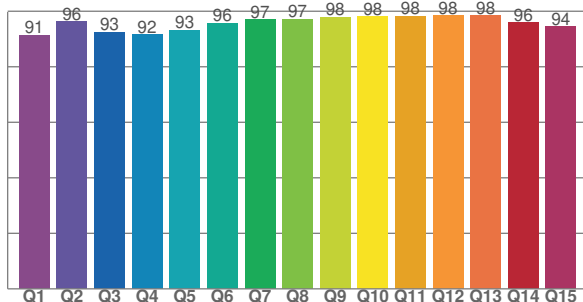
TM30: 93.0



CRI: 97.7 (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
98.1	98.7	98.3	98.8	97.8	96.4	96.9	96.8	95.0	99.4	98.1	81.3	98.0	98.0	97.8

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
94.6	97.1	96.6	92.9	92.5	96.8	90.5	96.0	91.1	88.2	90.2	91.6	94.2	92.4	91.1	89.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91.4	96.3	92.5	91.6	93.3	95.6	96.9	97.3	97.9	98.0	98.2	98.5	98.4	95.9	94.5

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
3128 K	97.7	95.0	93.0	99.6	94.8	0.427	0.398	0.247	0.345	-0.0010

TM30 Details

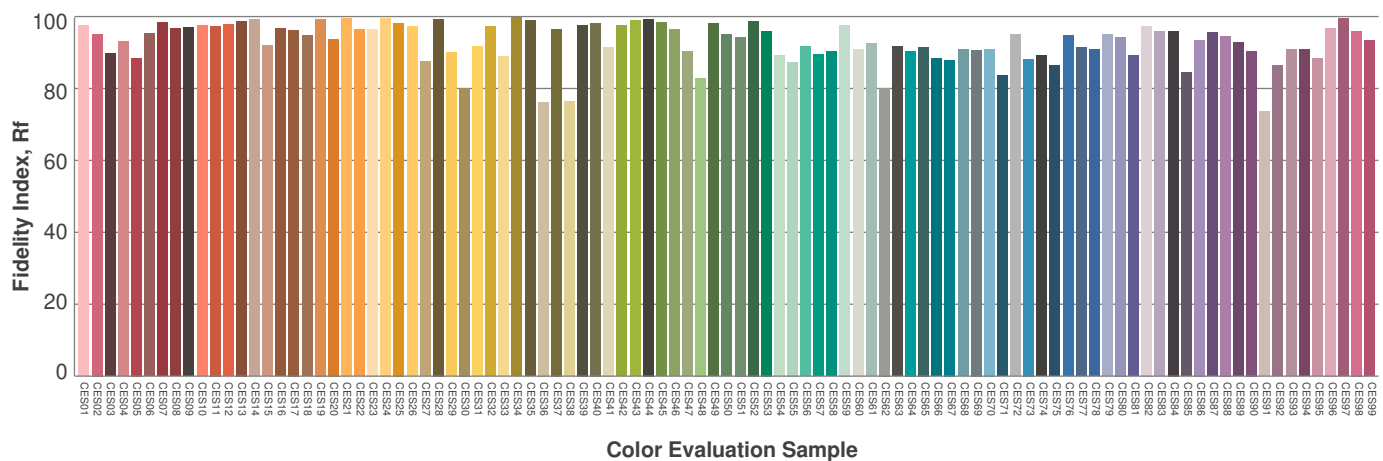
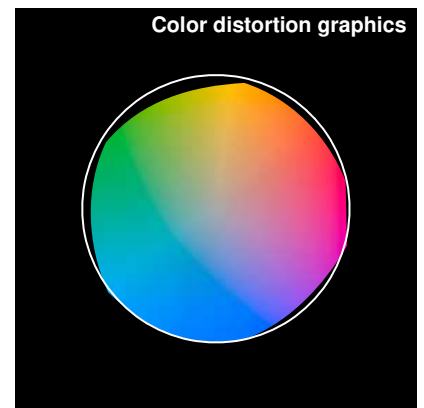
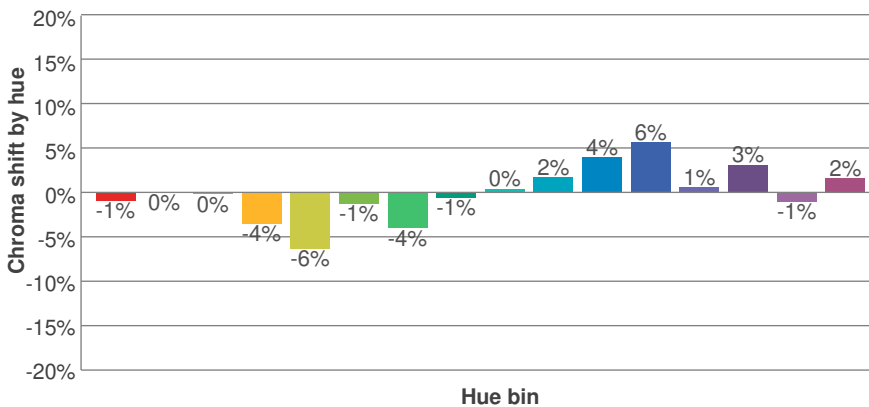
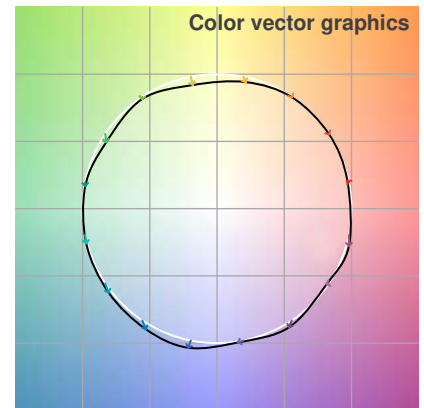
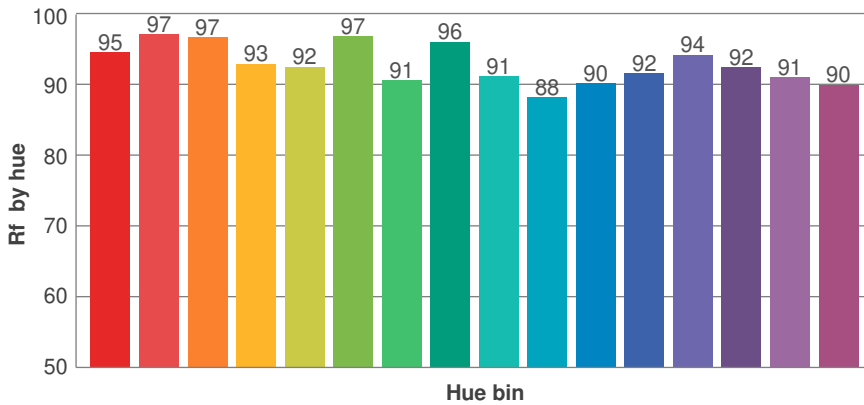
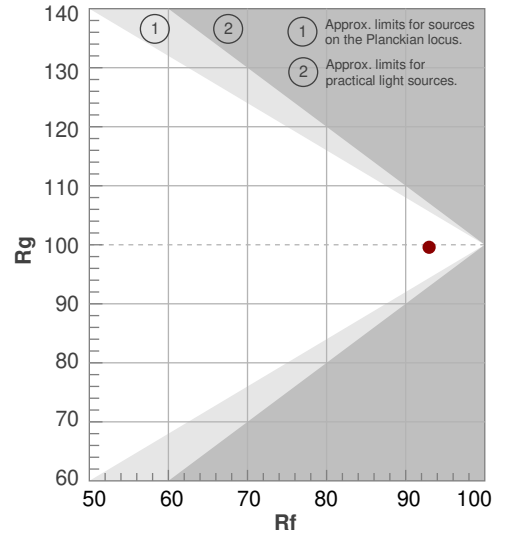


SW24-6.0-DRY-30-HE

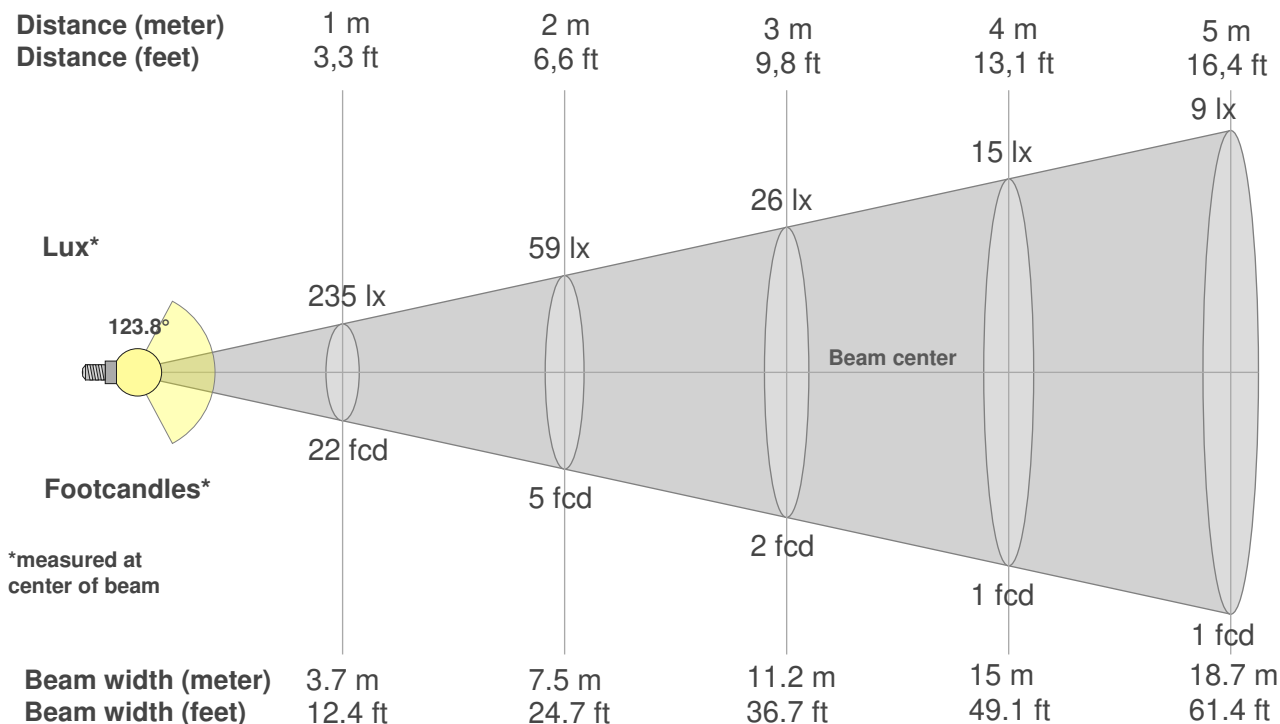
Rf 93.0
Fidelity index Rf

Rg 99.6
Gamut index Rg

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



Color Evaluation Sample



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
235lx	59lx	26lx	15lx	9lx	7lx	5lx	4lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx
21.8fcd	5.5fcd	2.4fcd	1.4fcd	0.9fcd	0.6fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	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°
235	234	232	228	222	215	206	196	184	171	157	142	125	107	88	68	48	28	12	2
100%	100%	99%	97%	95%	92%	88%	83%	79%	73%	67%	60%	53%	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°
235	234	231	227	221	213	205	194	182	169	155	139	123	105	87	67	47	28	12	3
100%	100%	98%	97%	94%	91%	87%	83%	78%	72%	66%	59%	52%	45%	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°
235	234	231	227	221	213	204	194	182	170	156	141	125	108	89	70	51	31	15	3
100%	100%	98%	97%	94%	91%	87%	83%	78%	72%	66%	60%	53%	46%	38%	30%	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°
235	234	231	227	221	213	204	193	181	168	154	139	123	106	88	69	49	30	14	4
100%	100%	98%	97%	94%	91%	87%	82%	77%	72%	66%	59%	52%	45%	37%	29%	21%	13%	6%	2%

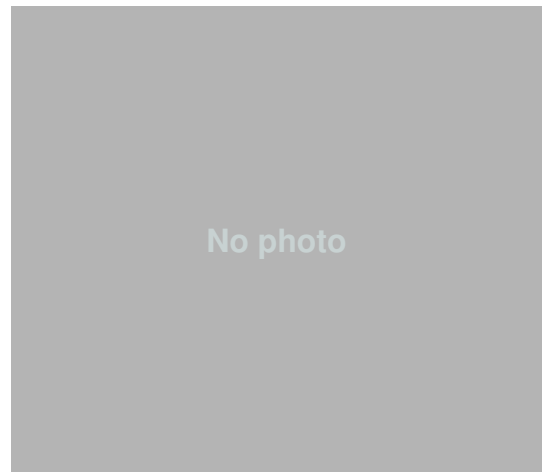
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
123.8°	173.4°	186°	72.1%	47.6%

Photometric Details

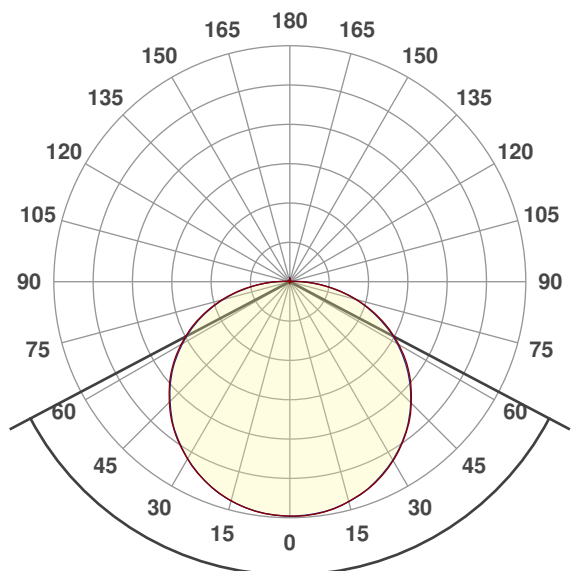


SW24-6.0-DRY-35-HE

Product name:	SW24-6.0-DRY-35-HE
Date:	2/17/2020
Powering product:	IQ-PH-80-120/24
<hr/>	
Output:	794 lm/ft
Peak:	237 cd
Power:	6.0 W/ft
PF:	1.0



Beam Angle



124.4°

CIE 1931
x: 0.401
y: 0.387



Light efficiency:



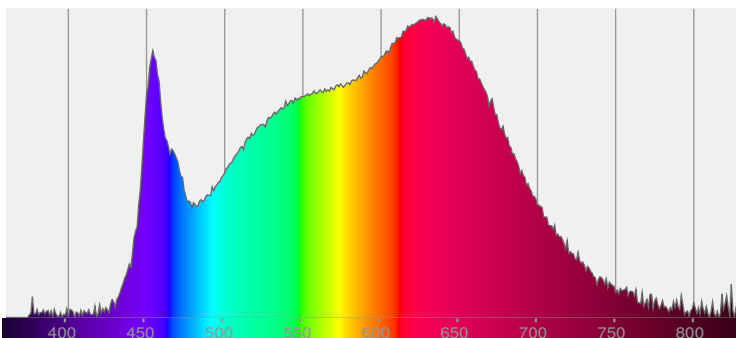
Light quality:



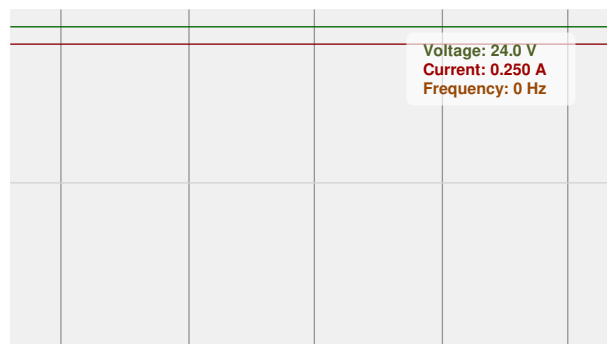
Color temperature:



Spectra



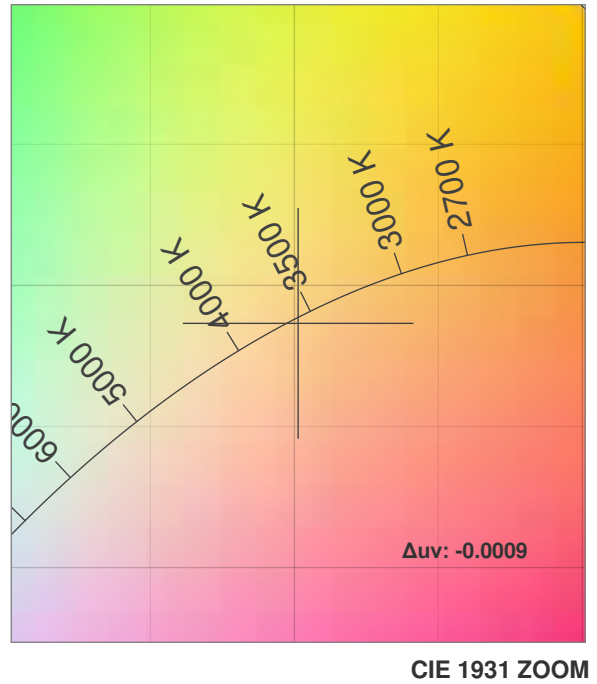
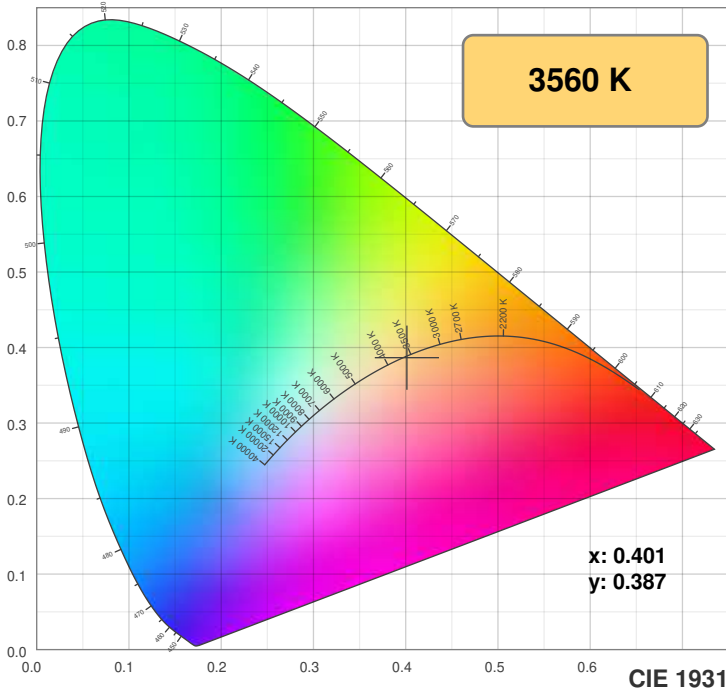
Power



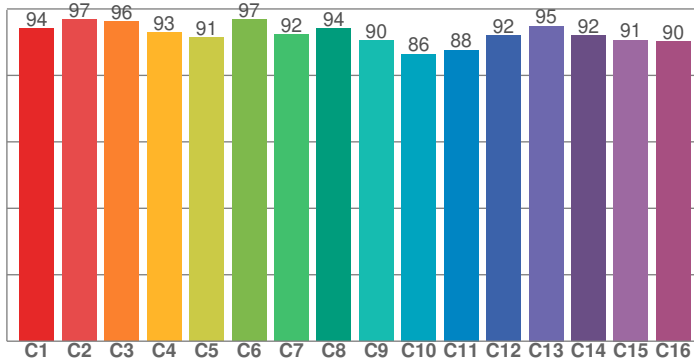
Color Details



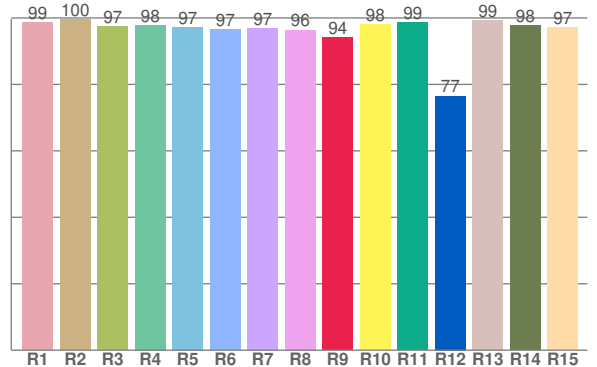
SW24-6.0-DRY-35-HE



TM30: 92.2



CRI: 97.6 (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
98.7	99.6	97.5	97.8	97.3	96.6	96.9	96.4	94.0	98.1	98.6	76.6	99.2	97.7	97.2

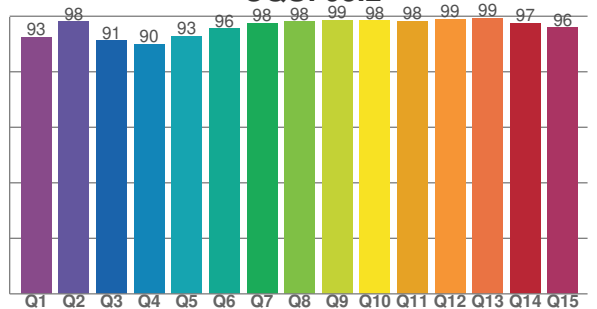
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94.1	96.8	96.2	93.0	91.5	96.8	92.2	94.1	90.4	86.4	87.6	92.0	94.9	92.0	90.6	90.2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92.6	98.0	91.2	89.9	92.8	95.6	97.6	98.1	98.6	98.4	98.2	99.1	99.3	97.5	95.9

CQS: 95.2



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
3560 K	97.6	94.0	92.2	99.2	95.2	0.401	0.387	0.235	0.339	-0.0009

TM30 Details

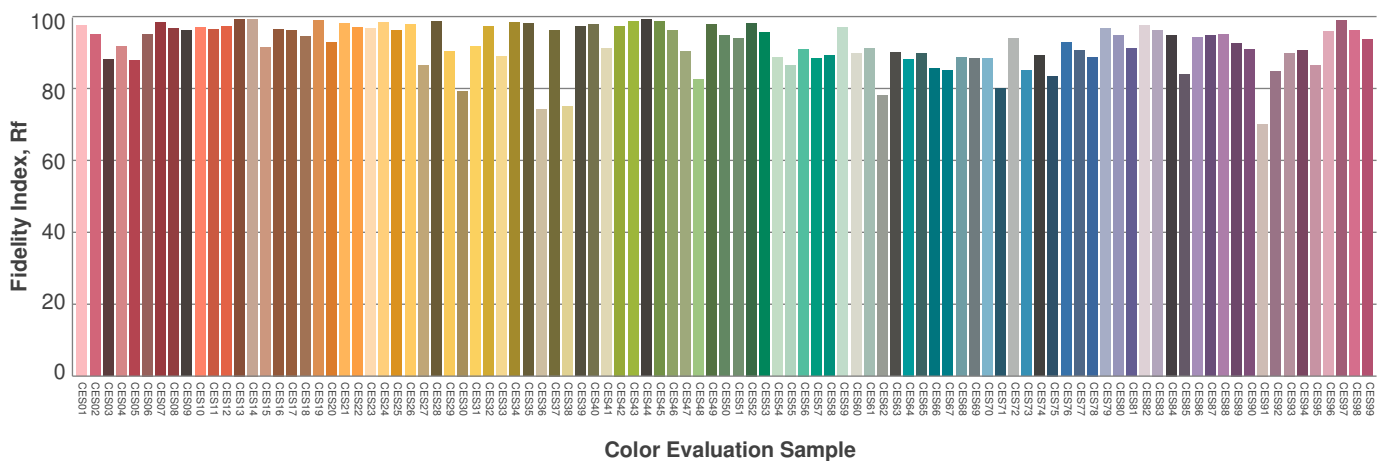
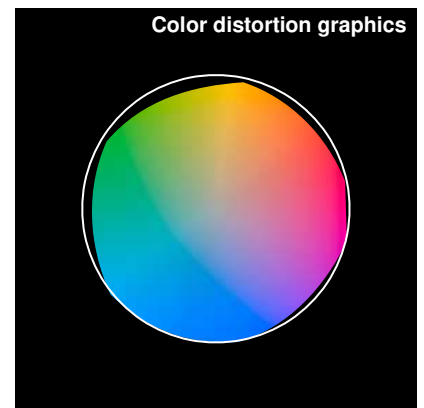
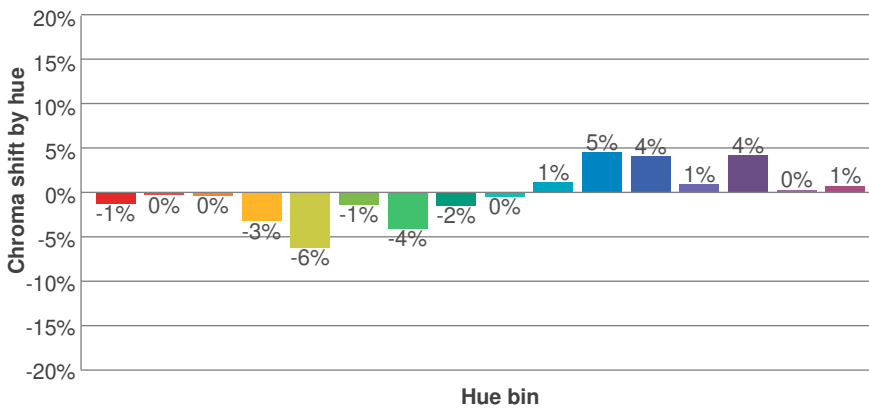
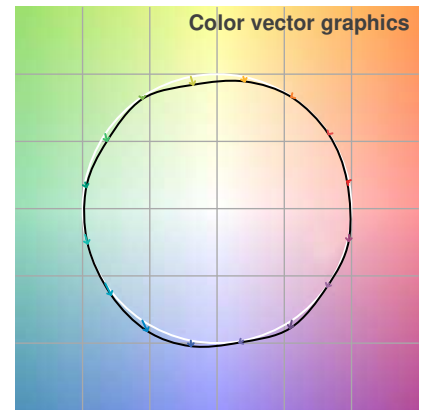
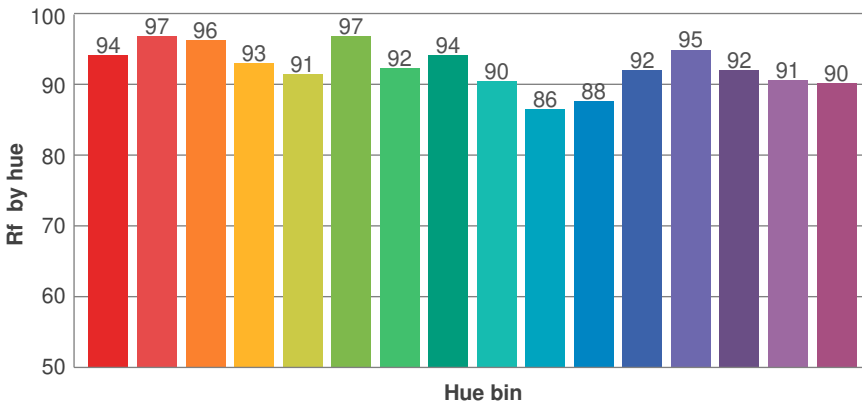
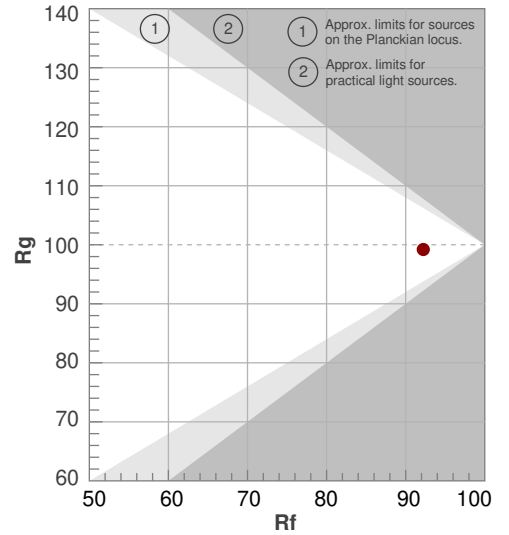


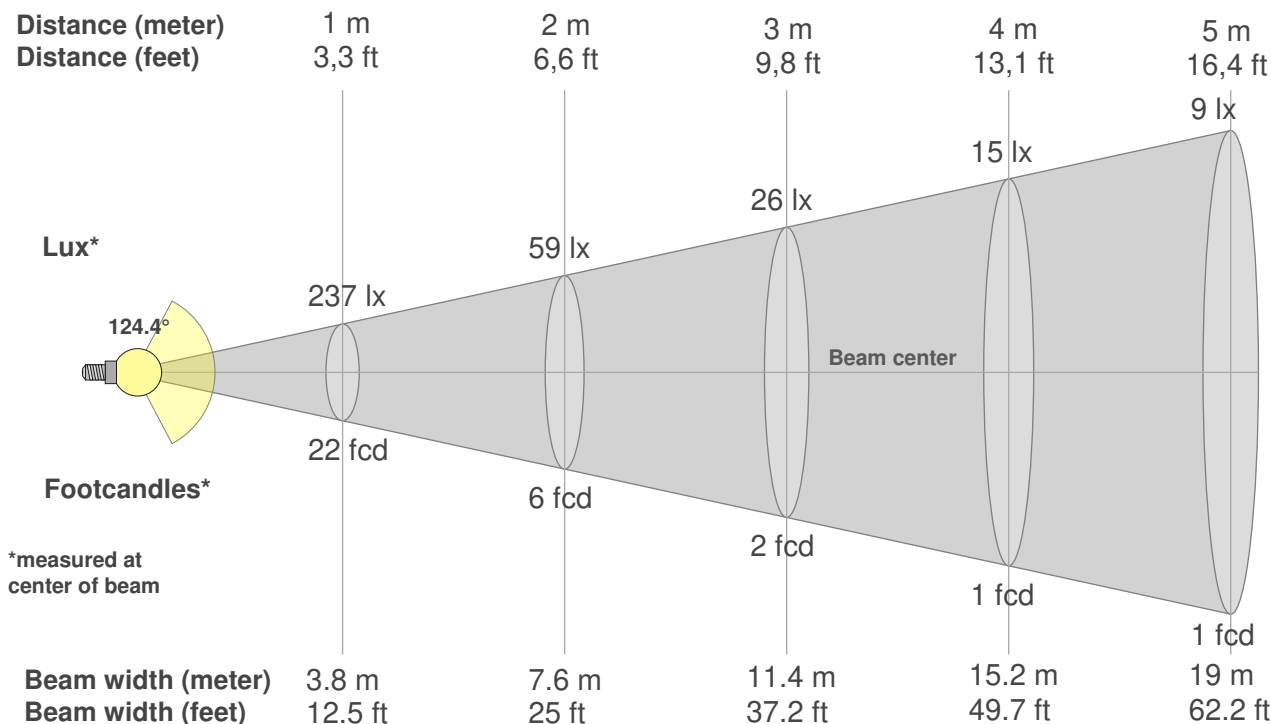
SW24-6.0-DRY-35-HE

Rf 92.2
Fidelity index Rf

Rg 99.2
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	94	-1%	1%
2	97	0%	0%
3	96	0%	0%
4	93	-3%	-2%
5	91	-6%	-1%
6	97	-1%	1%
7	92	-4%	4%
8	94	-2%	3%
9	90	0%	7%
10	86	1%	9%
11	88	5%	7%
12	92	4%	1%
13	95	1%	-3%
14	92	4%	-4%
15	91	0%	-3%
16	90	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
237lx	59lx	26lx	15lx	9lx	7lx	5lx	4lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx
22fcd	5.5fcd	2.4fcd	1.4fcd	0.9fcd	0.6fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	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°
237	236	234	230	224	217	209	198	187	174	159	144	127	109	90	70	49	29	12	2
100%	100%	99%	97%	95%	92%	88%	84%	79%	73%	67%	61%	54%	46%	38%	29%	21%	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°
237	236	234	230	225	217	208	198	186	173	158	142	125	107	88	69	48	29	13	4
100%	100%	99%	97%	95%	92%	88%	83%	79%	73%	67%	60%	53%	45%	37%	29%	20%	12%	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°
237	236	233	229	223	216	207	197	185	172	158	143	127	110	91	71	51	31	14	2
100%	100%	99%	97%	94%	91%	87%	83%	78%	73%	67%	61%	54%	46%	38%	30%	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°
237	236	233	229	223	215	206	196	184	171	157	142	125	108	89	70	50	30	14	4
100%	100%	99%	97%	94%	91%	87%	83%	78%	72%	66%	60%	53%	46%	38%	29%	21%	13%	6%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
124.4°	173.5°	186.6°	71.9%	47.4%

Photometric Details



SW24-6.0-DRY-40-HE

Product name:
SW24-6.0-DRY-40-HE

Date:
2/17/2020

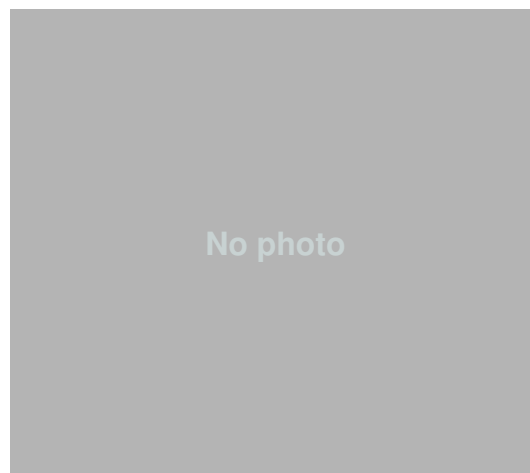
Powering product:
IQ-PH-80-120/24

Output: 779 lm/ft

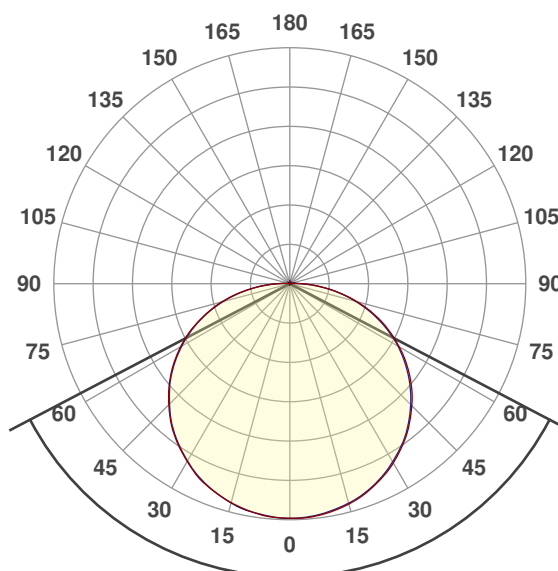
Peak: 233 cd

Power: 6.0 W/ft

PF: 1.0



Beam Angle



124.7°

CIE 1931
x: 0.376
y: 0.375



Light efficiency:



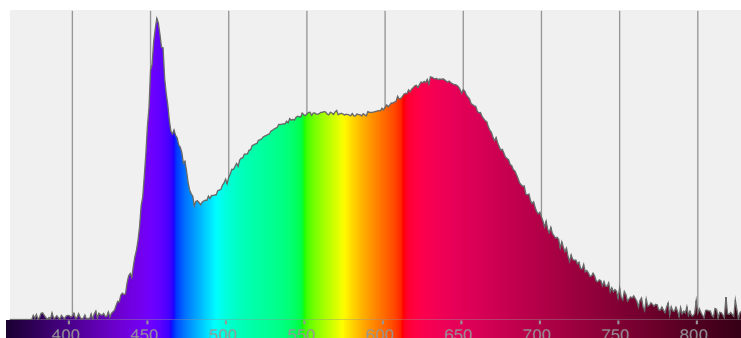
Light quality:



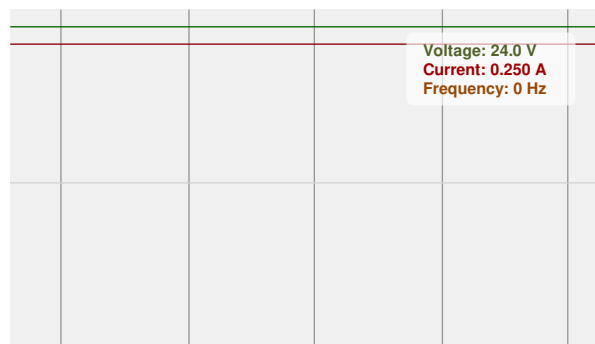
Color temperature:



Spectra



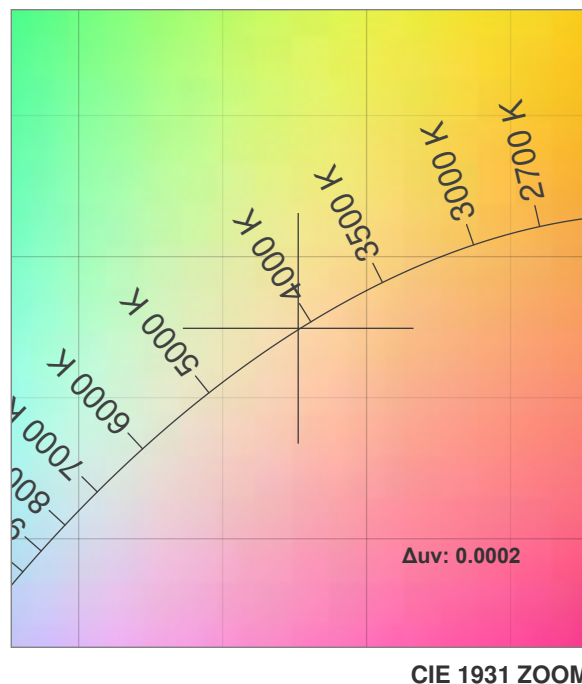
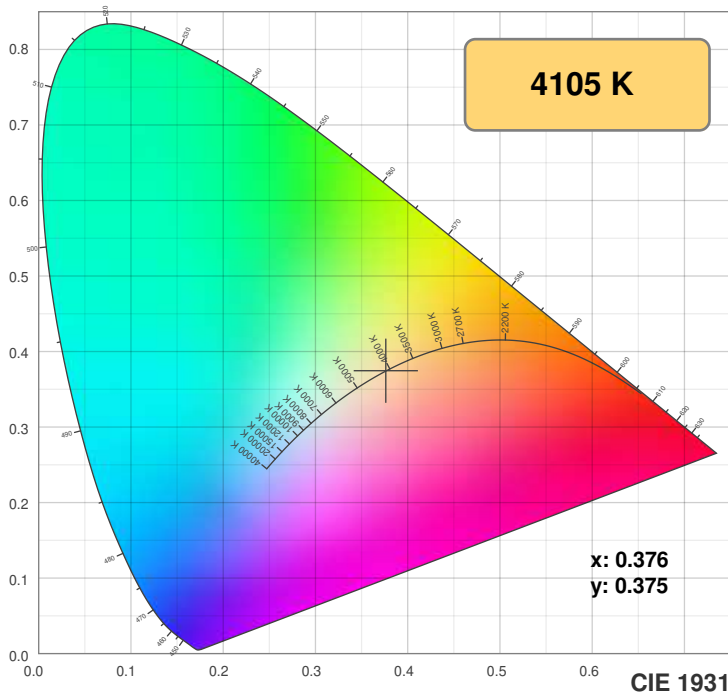
Power



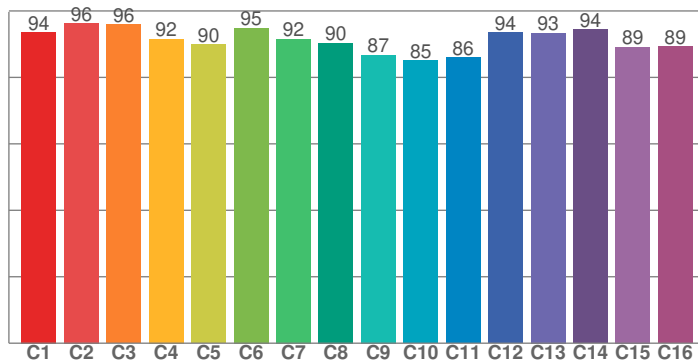
Color Details



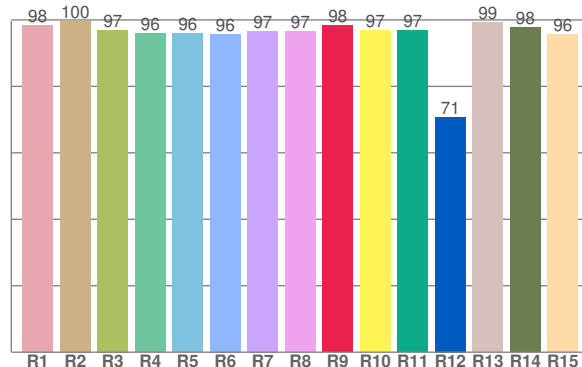
SW24-6.0-DRY-40-HE



TM30: 91.1



CRI: 97.0 (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
98.4	99.7	97.0	95.9	95.9	95.8	96.7	96.6	98.4	96.8	96.9	70.8	99.1	97.7	95.7

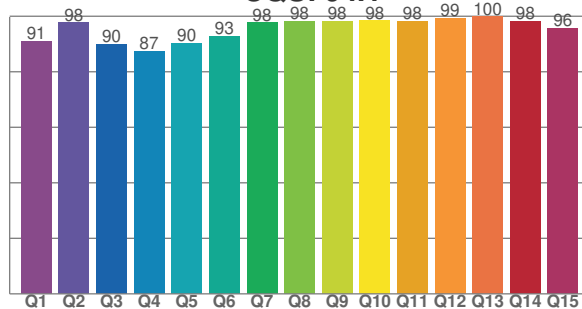
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93.6	96.3	95.9	91.6	89.9	94.9	91.6	90.4	86.8	85.1	86.0	93.6	93.4	94.4	89.2	89.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91.1	97.7	90.0	87.4	90.4	92.8	97.7	98.2	98.3	98.4	98.2	99.4	99.8	98.3	95.7

CQS: 94.1



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
4105 K	97.0	98.4	91.1	98.4	94.1	0.376	0.375	0.223	0.333	0.0002

TM30 Details

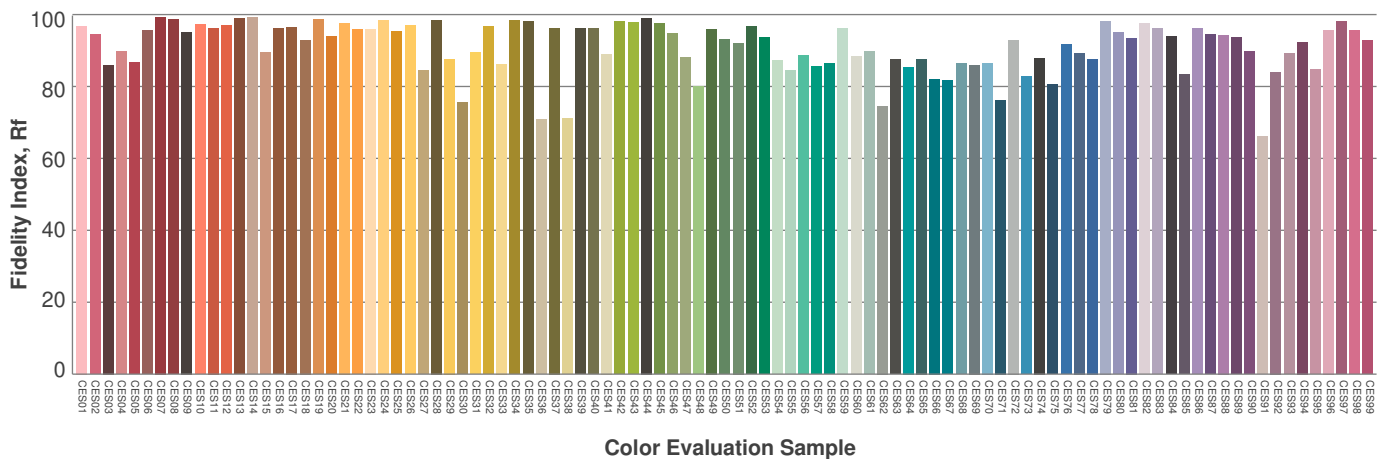
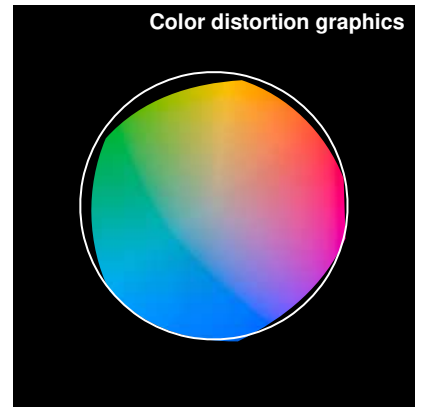
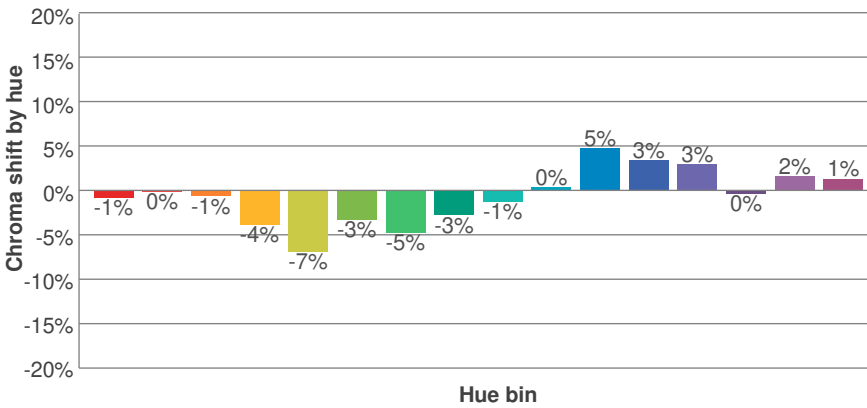
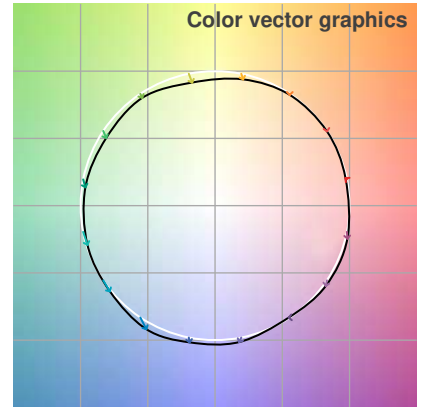
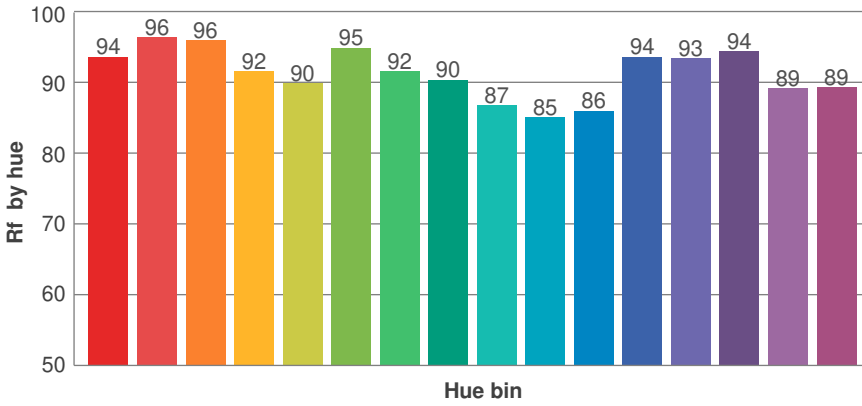
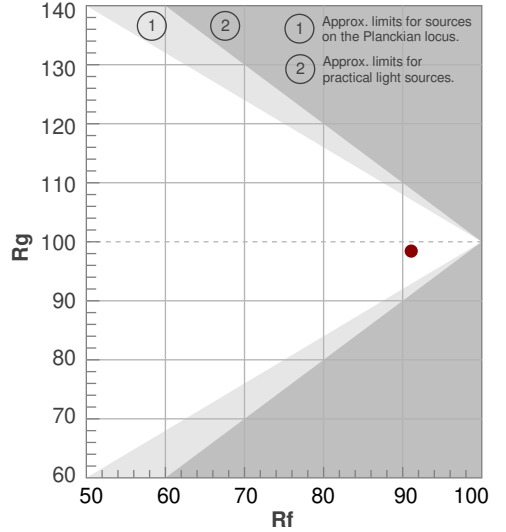


SW24-6.0-DRY-40-HE

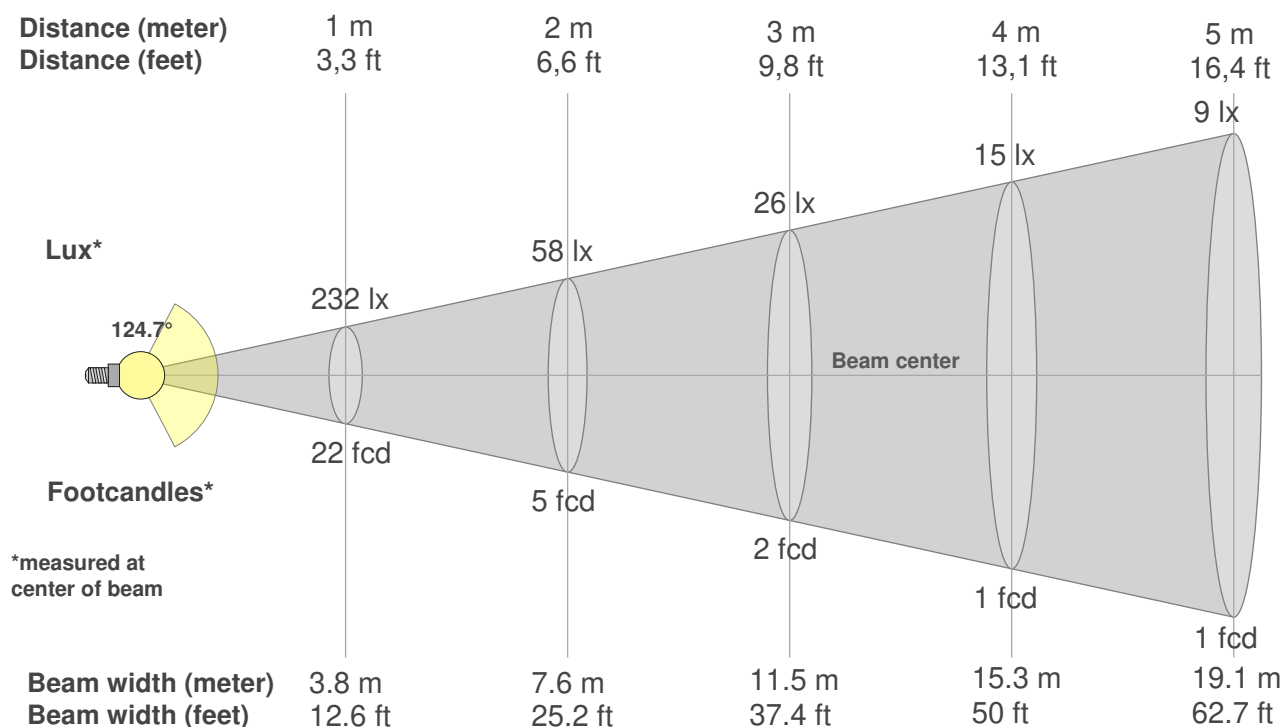
Rf 91.1
Fidelity index Rf

Rg 98.4
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	94	-1%	1%
2	96	0%	0%
3	96	-1%	0%
4	92	-4%	-2%
5	90	-7%	-1%
6	95	-3%	1%
7	92	-5%	3%
8	90	-3%	5%
9	87	-1%	10%
10	85	0%	10%
11	86	5%	9%
12	94	3%	1%
13	93	3%	-2%
14	94	0%	-1%
15	89	2%	-4%
16	89	1%	-5%



Color Evaluation Sample



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
232lx	58lx	26lx	15lx	9lx	6lx	5lx	4lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx
21.6fcd	5.4fcd	2.4fcd	1.3fcd	0.9fcd	0.6fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	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°
232	232	230	226	221	213	205	195	184	171	157	142	125	108	89	69	48	29	12	3
100%	100%	99%	97%	95%	92%	88%	84%	79%	74%	68%	61%	54%	46%	38%	30%	21%	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°
232	231	229	225	220	213	204	194	182	169	155	140	124	106	87	68	48	28	12	2
100%	100%	98%	97%	95%	91%	88%	83%	78%	73%	67%	60%	53%	46%	37%	29%	21%	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°
232	232	229	225	219	213	203	194	183	170	156	141	125	108	89	70	50	30	13	3
100%	100%	98%	97%	94%	92%	88%	83%	79%	73%	67%	61%	54%	46%	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°
232	231	229	225	219	212	203	193	182	169	155	140	124	106	88	68	49	30	13	3
100%	100%	98%	97%	94%	91%	87%	83%	78%	73%	67%	60%	53%	46%	38%	29%	21%	13%	5%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
124.7°	173.3°	185.9°	72.1%	47.5%