

Light efficiency:



Output: 879 lm

Light quality:

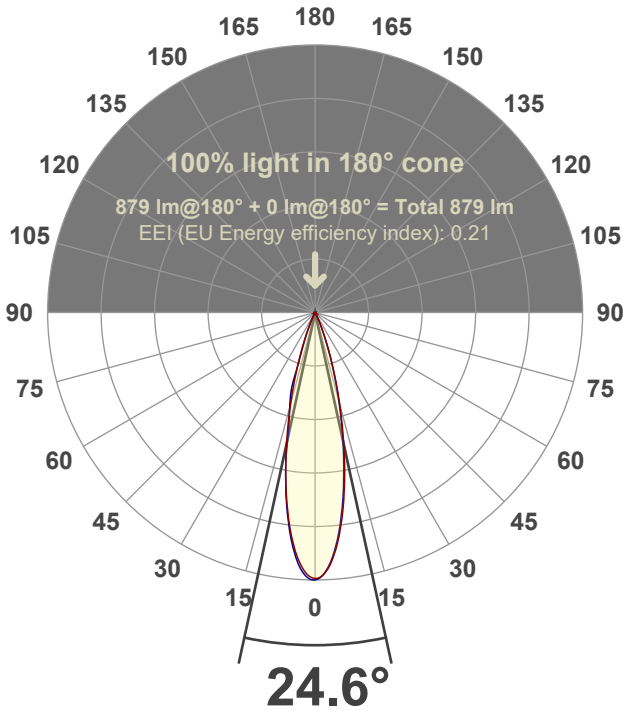


Peak: 4331 cd

Power: 14.2 W



Beam angle



Test number:

GR-F-F-CZ14-30k-NF-SQ-91A-Rev2

Luminaire Model:

Graffiti Flat Square Fixed Downlight-CZ14 30k 24° Optic-Solite

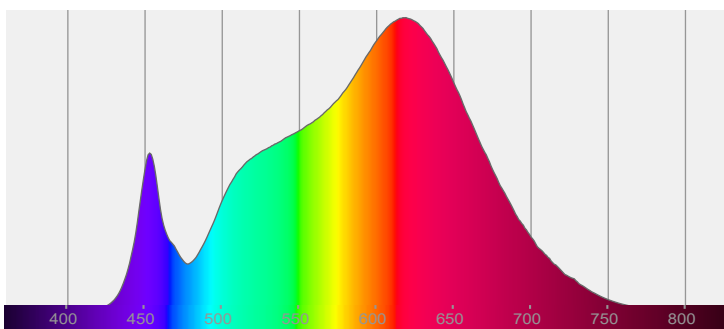
Date and time:

6/30/2022 8:39:39 PM

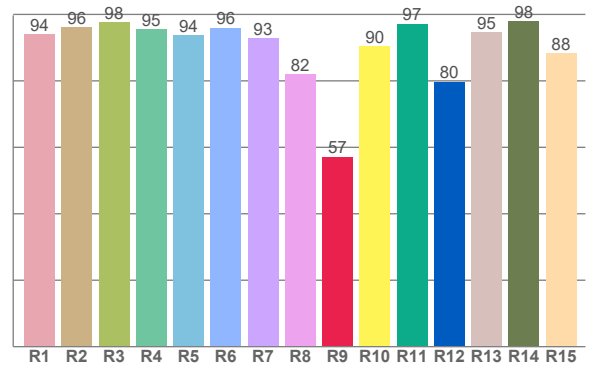
Delivered Lumens

879

Spectra



CRI: 93.4 (R1-R8)



Color parameters

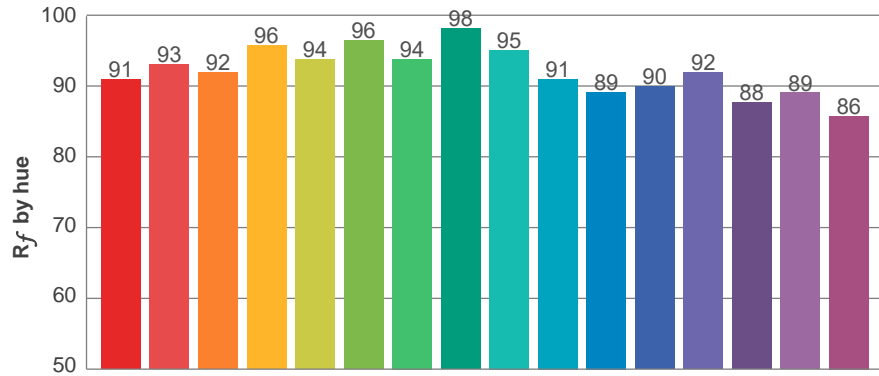
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color divition from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	93.4	57.1	92.2	99.1	91.8	0.439	0.409	0.250	0.349	0.0016

R_f 92.2
Fidelity index R_f

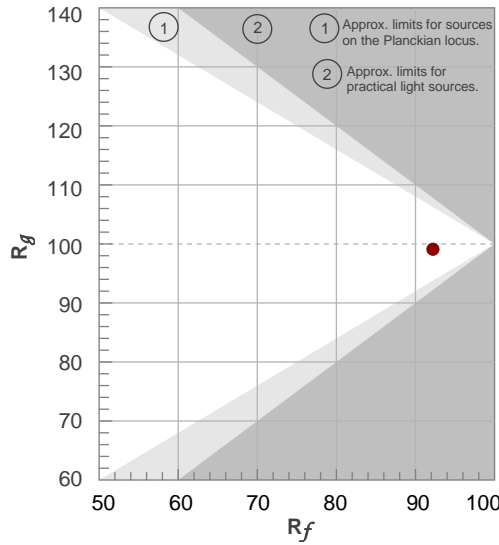
R_g 99.1
Gammut index R_g

TM30: 92.2

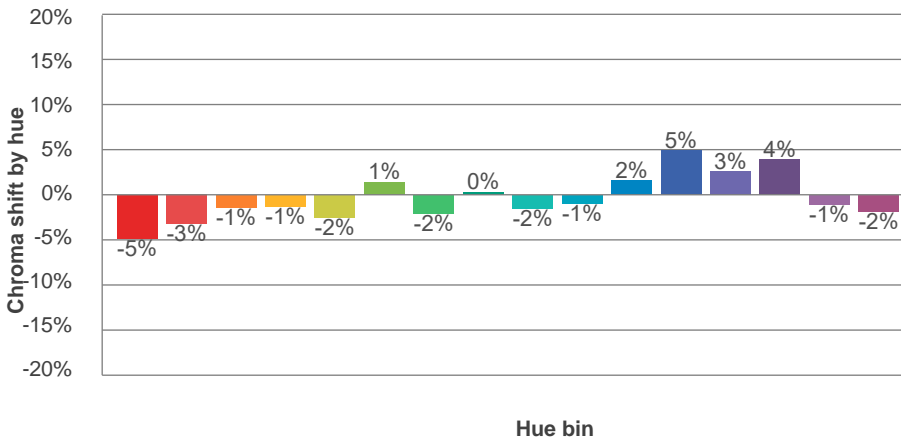
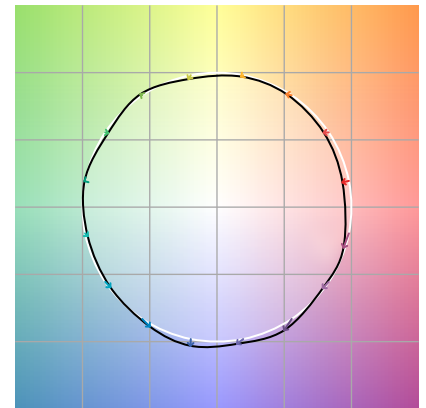
TM-30Color



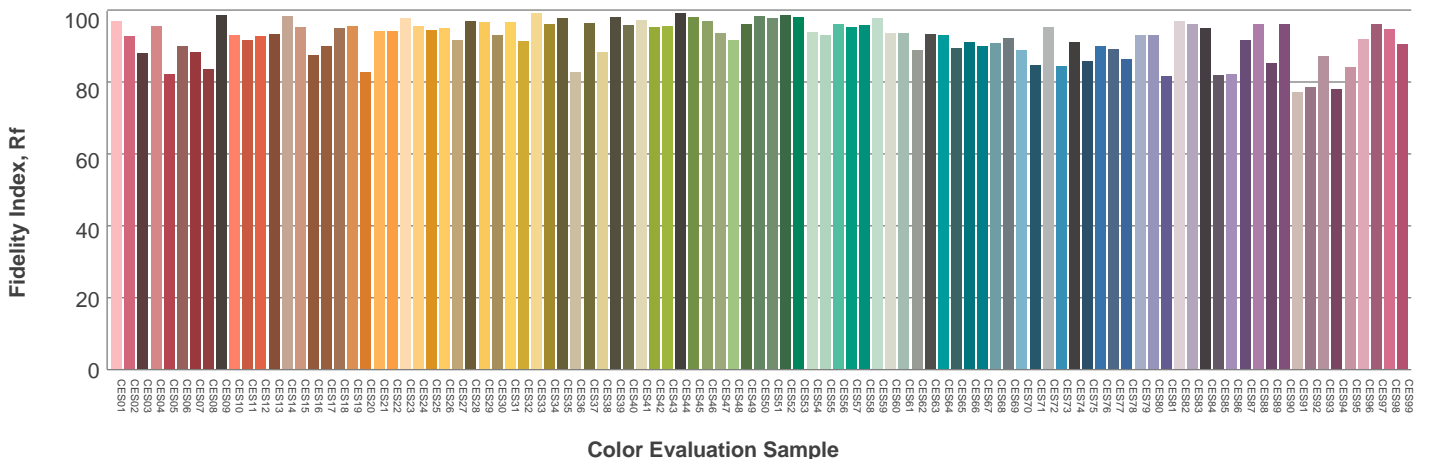
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	1%
5	94	-2%	2%
6	96	1%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-2%	2%
10	91	-1%	5%
11	89	2%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-2%	-11%



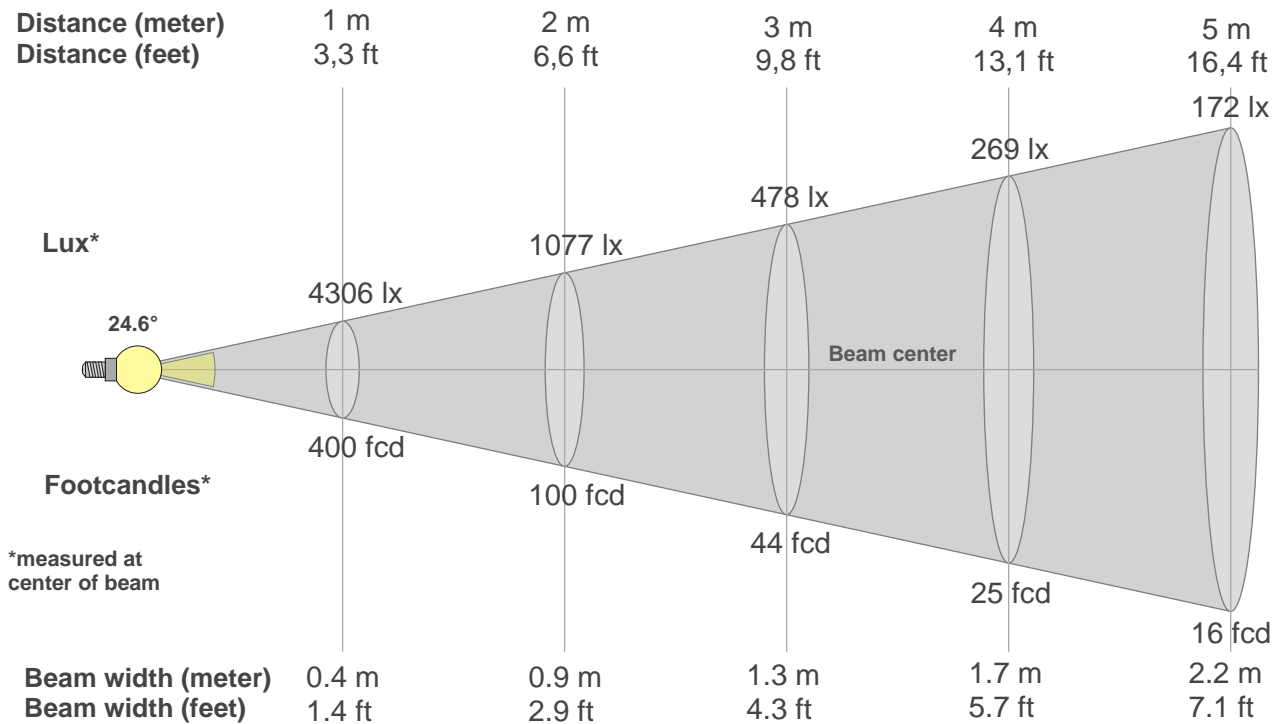
Color vector graphics



Color distortion



Beam details



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
4306lx	1077lx	478lx	269lx	172lx	120lx	88lx	67lx	53lx	43lx	36lx	30lx	25lx	22lx	19lx	17lx	15lx	13lx	12lx	11lx
400.1fcd	100fcd	44.5fcd	25fcd	16fcd	11.1fcd	8.2fcd	6.3fcd	4.9fcd	4fcd	3.3fcd	2.8fcd	2.4fcd	2fcd	1.8fcd	1.6fcd	1.4fcd	1.2fcd	1.1fcd	1fcd

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°
4306	4220	4006	3671	3247	2765	2269	1791	1352	959	647	415	252	147	85	49	32	22	16	13
100%	98%	93%	85%	75%	64%	53%	42%	31%	22%	15%	10%	6%	3%	2%	1%	1%	1%	0%	0%

Intensities in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
4306	4221	3986	3624	3173	2687	2199	1732	1296	928	619	379	212	112	62	38	26	19	15	11
100%	98%	93%	84%	74%	62%	51%	40%	30%	22%	14%	9%	5%	3%	1%	1%	1%	0%	0%	0%

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°
4306	4226	4002	3649	3221	2751	2265	1783	1344	969	657	415	245	145	87	52	33	23	16	13
100%	98%	93%	85%	75%	64%	53%	41%	31%	23%	15%	10%	6%	3%	2%	1%	1%	1%	0%	0%

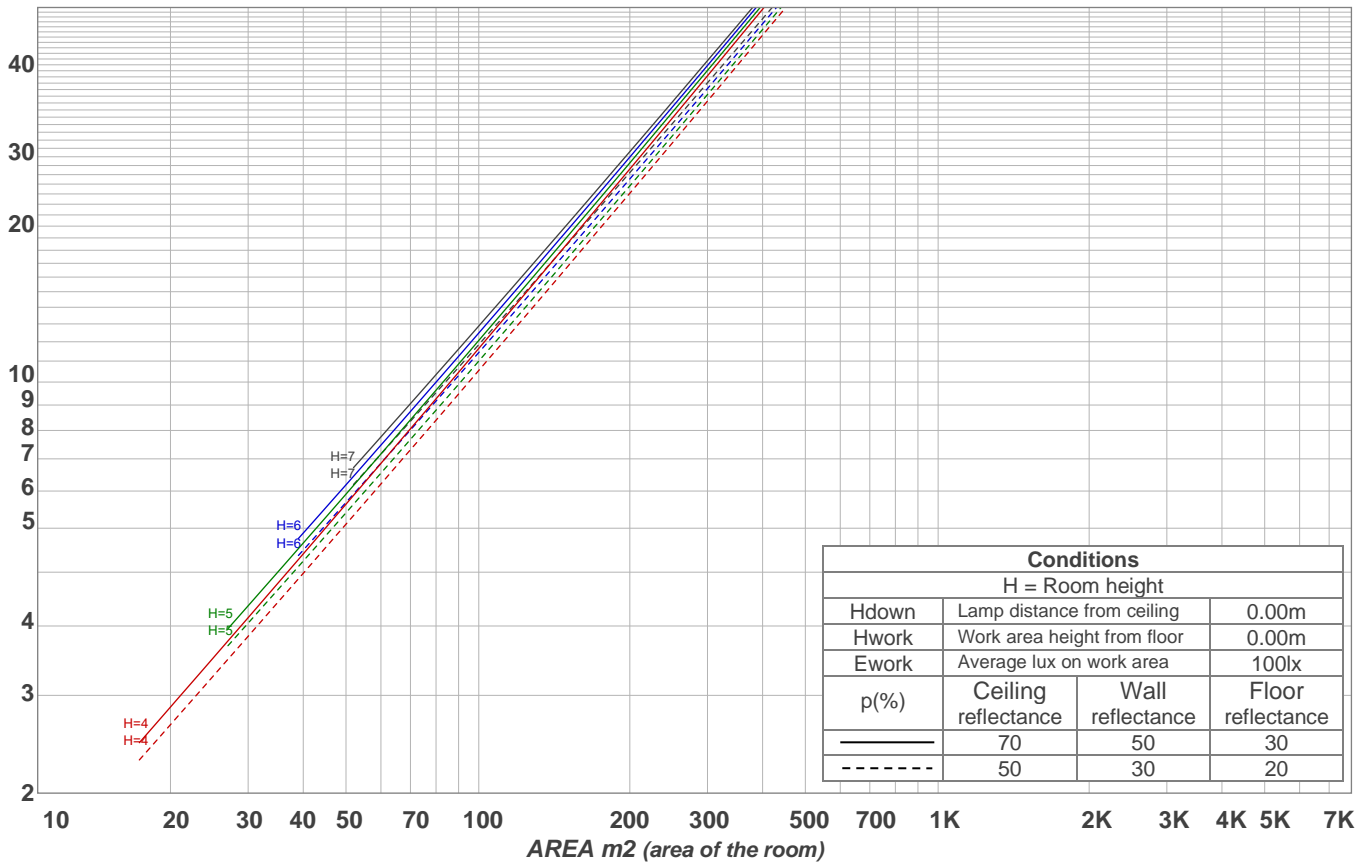
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
4306	4261	4057	3712	3259	2760	2207	1765	1482	965	598	363	203	109	61	38	27	20	15	13
100%	99%	94%	86%	76%	64%	51%	41%	34%	22%	14%	8%	5%	3%	1%	1%	1%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
24.6°	43.2°	53.3°	98.7%	98.1%

LAMPS (number of lamps)
50

Light planning Luminaire budgetary diagram



Luminaire budgetary diagram AREA m2 (area of the room) Coefficients of Utilization

Ceiling reflectance	80				70				50			30			10			0			
Wall reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
RCR	(RCR: Room Cavity Ratio)																				
	Room Values are expressed as percentage of Lumens delivered to the task surface																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96	
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	97	96	95	93	93	93	
3	108	103	100	97	106	102	99	96	99	97	95	97	95	93	95	93	92	91	91	91	
4	105	99	96	93	103	98	95	92	96	93	91	95	92	90	93	91	89	88	88	88	
5	102	96	92	89	100	95	92	89	94	90	88	92	89	87	91	88	87	86	86	86	
6	99	93	89	86	98	92	89	86	91	88	85	90	87	85	89	86	84	83	83	83	
7	97	90	86	84	95	90	86	83	89	85	83	88	85	83	87	84	82	81	81	81	
8	94	88	84	81	93	87	84	81	86	83	81	86	83	80	85	82	80	79	79	79	
9	92	85	82	79	91	85	81	79	84	81	79	84	81	78	83	80	78	77	77	77	
10	90	83	80	77	89	83	79	77	82	79	77	82	79	77	81	78	76	76	76	76	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
332 lm	420 lm	95.3 lm	12.5 lm	4.60 lm	3.12 lm	3.50 lm	3.94 lm	3.75 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm