

Light efficiency:



Output: 1192 lm

Light quality:

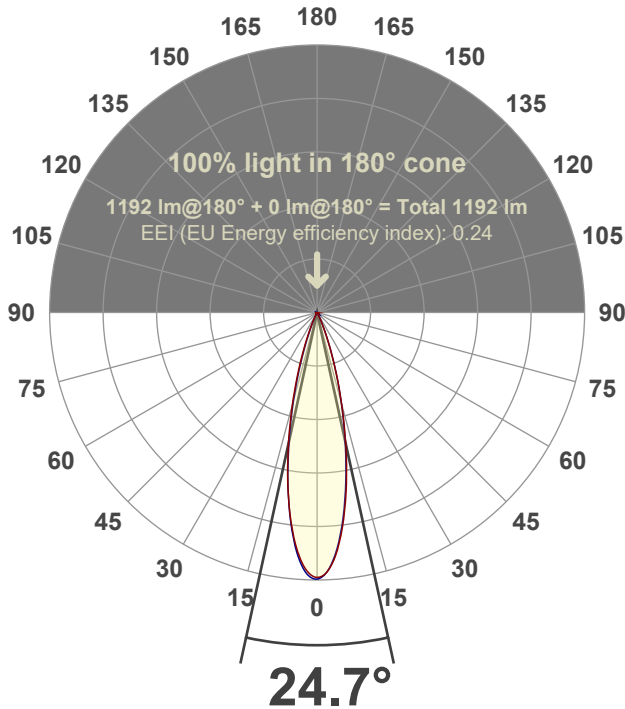


Peak: 5873 cd

Power: 20.8 W



Beam angle



Test number:

GR-F-F-CZ20-30k-NF-SQ-91A-Rev2

Luminaire Model:

Graffiti Flat Square Fixed Downlight-CZ20 30k 24° Optic-Solite

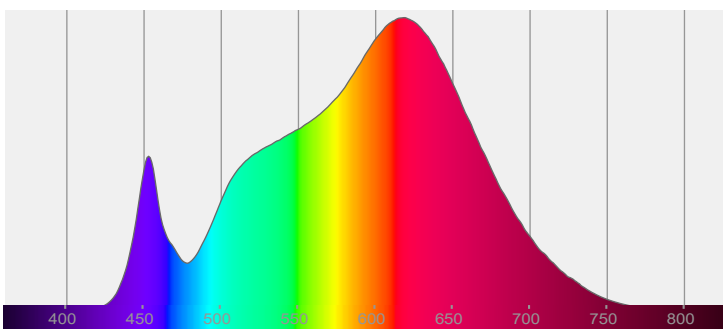
Date and time:

6/30/2022 8:52:38 PM

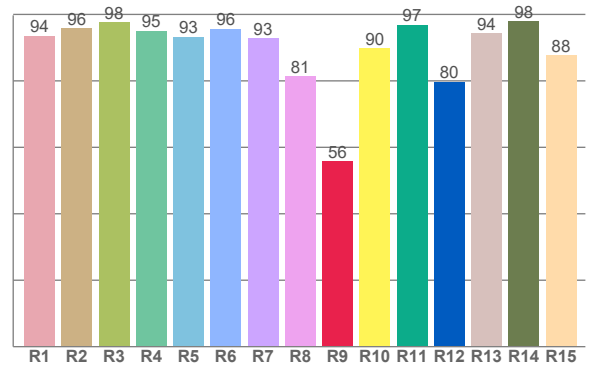
Delivered Lumens

1192

Spectra



CRI: 93.1 (R1-R8)



Color parameters

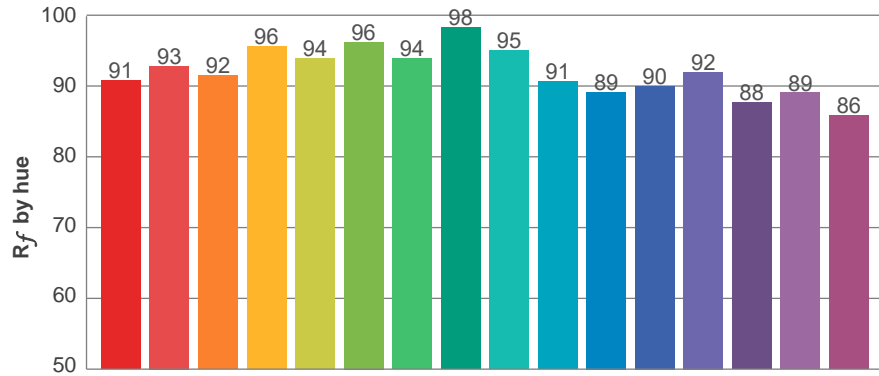
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	93.1	55.8	92.2	99.1	91.6	0.438	0.409	0.249	0.349	0.0016

R_f 92.2
Fidelity index R_f

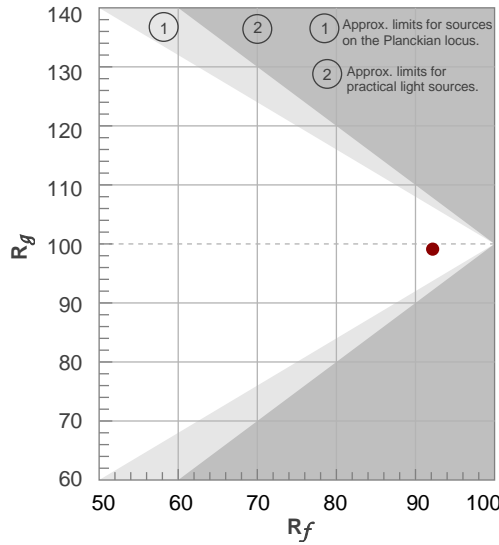
R_g 99.1
Gammut index R_g

TM30: 92.2

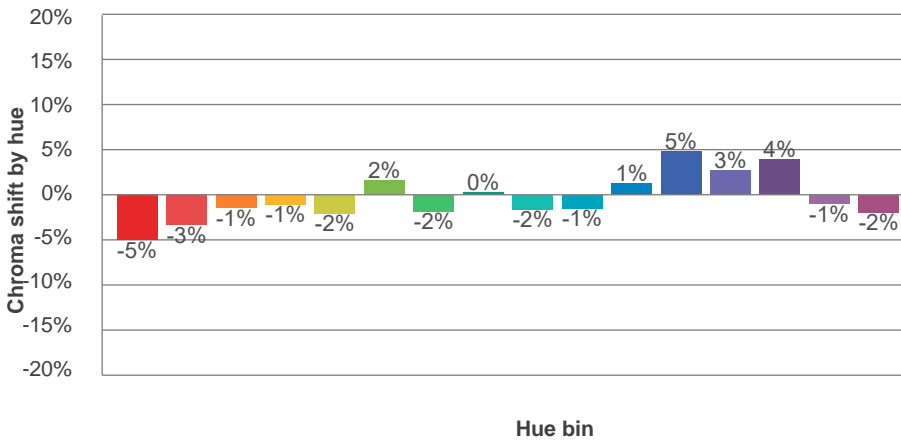
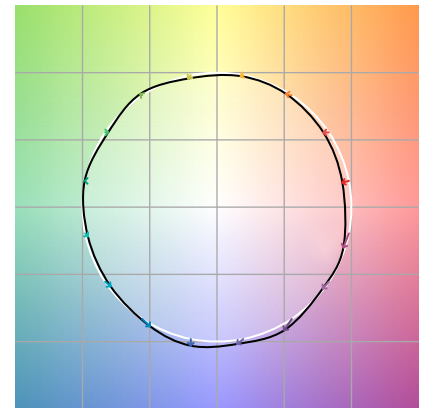
TM-30Color



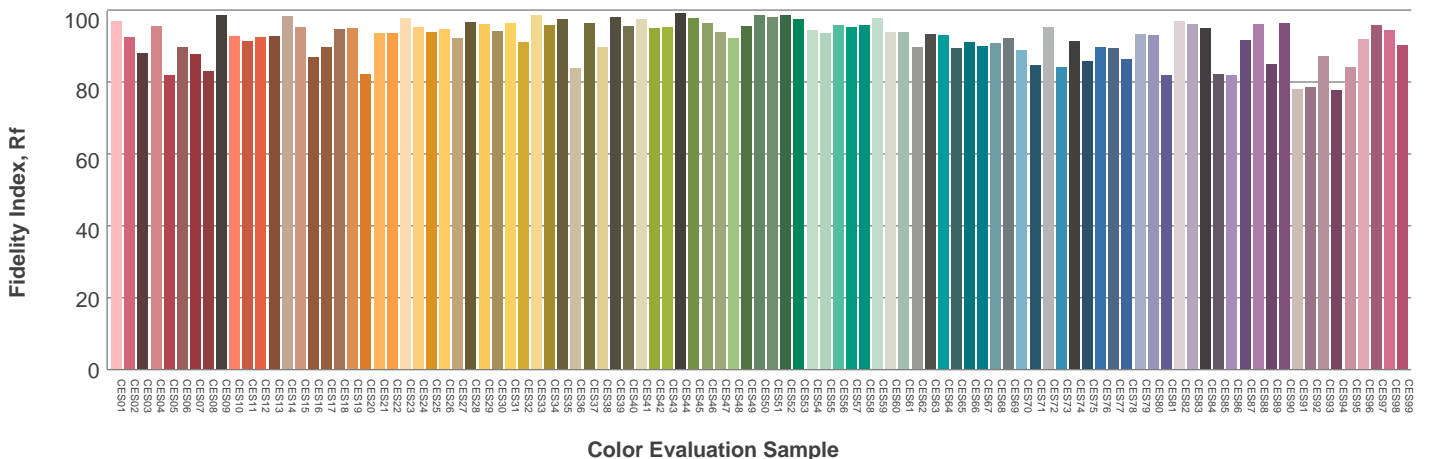
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	2%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-2%	3%
10	91	-1%	5%
11	89	1%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-7%
16	86	-2%	-11%



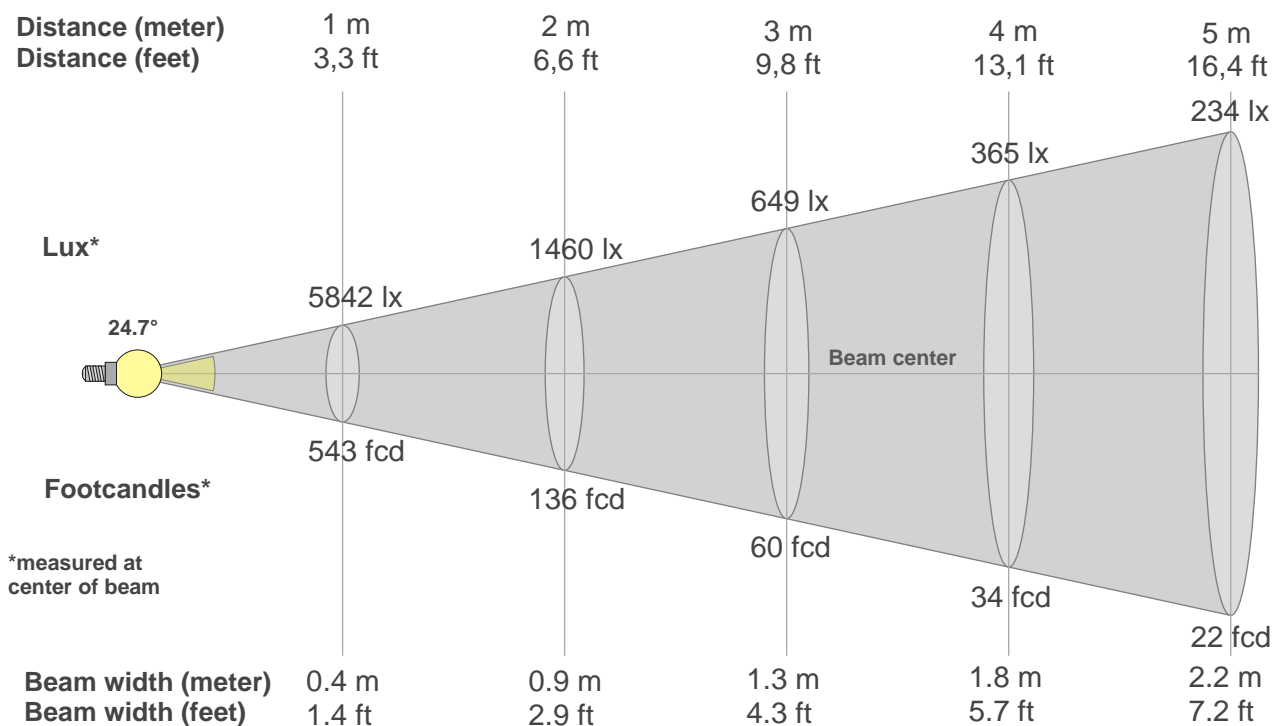
Color vector graphics



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
5842lx	1460lx	649lx	365lx	234lx	162lx	119lx	91lx	72lx	58lx	48lx	41lx	35lx	30lx	26lx	23lx	20lx	18lx	16lx	15lx
542.7fcd	135.7fcd	60.3fcd	33.9fcd	21.7fcd	15.1fcd	11.1fcd	8.5fcd	6.7fcd	5.4fcd	4.5fcd	3.8fcd	3.2fcd	2.8fcd	2.4fcd	2.1fcd	1.9fcd	1.7fcd	1.5fcd	1.4fcd

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°
5842	5736	5425	4950	4373	3737	3074	2414	1824	1312	889	561	333	193	117	71	45	31	23	19
100%	98%	93%	85%	75%	64%	53%	41%	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°
5842	5718	5380	4896	4309	3662	3002	2375	1808	1305	877	539	306	172	96	56	38	28	22	18
100%	98%	92%	84%	74%	63%	51%	41%	31%	22%	15%	9%	5%	3%	2%	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°
5842	5693	5393	4943	4379	3740	3075	2437	1848	1328	893	568	352	212	125	74	47	34	25	20
100%	97%	92%	85%	75%	64%	53%	42%	32%	23%	15%	10%	6%	4%	2%	1%	1%	1%	0%	0%

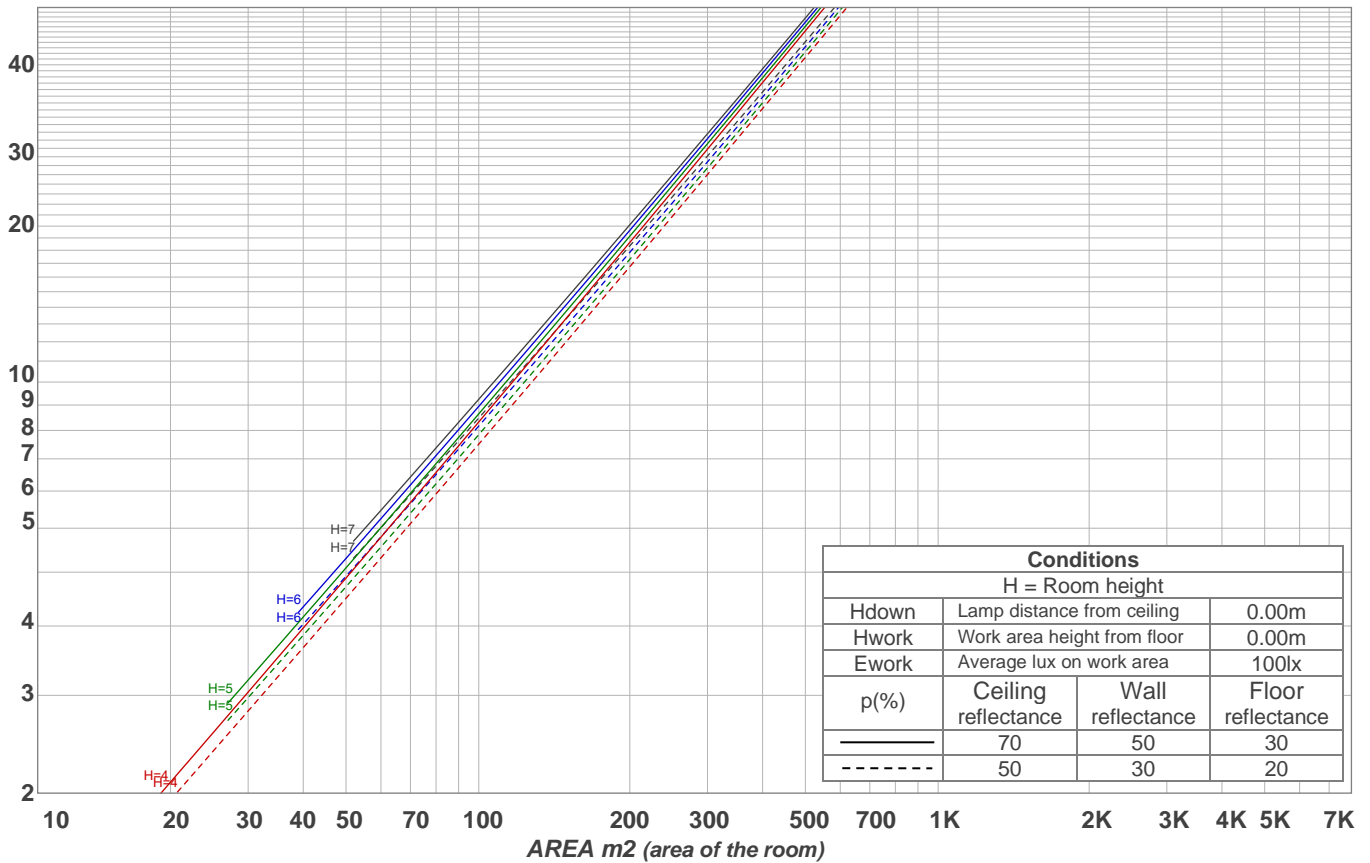
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5842	5767	5457	4981	4384	3713	3005	2342	1736	1206	773	456	252	146	83	51	35	26	20	17
100%	99%	93%	85%	75%	64%	51%	40%	30%	21%	13%	8%	4%	2%	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
24.7°	43.2°	53.5°	98.6%	97.9%

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	112	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96	
2	111	107	104	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	94	97	95	93	95	93	92	90	90	90	
4	105	99	95	92	103	98	95	92	96	93	91	94	92	90	93	91	89	88	88	88	
5	102	96	92	89	100	95	91	89	93	90	88	92	89	87	91	88	86	85	85	85	
6	99	93	89	86	98	92	88	86	91	88	85	90	87	85	88	86	84	83	83	83	
7	96	90	86	83	95	90	86	83	88	85	83	87	84	82	86	84	82	81	81	81	
8	94	88	84	81	93	87	83	81	86	83	80	85	82	80	85	82	80	79	79	79	
9	92	85	81	79	91	85	81	79	84	81	78	83	80	78	83	80	78	77	77	77	
10	89	83	79	77	89	83	79	77	82	79	76	81	78	76	81	78	76	75	75	75	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
447 lm	566 lm	132 lm	17.9 lm	7.10 lm	4.70 lm	5.06 lm	6.10 lm	5.54 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