

Light efficiency:



Output: 1864 lm

Light quality:

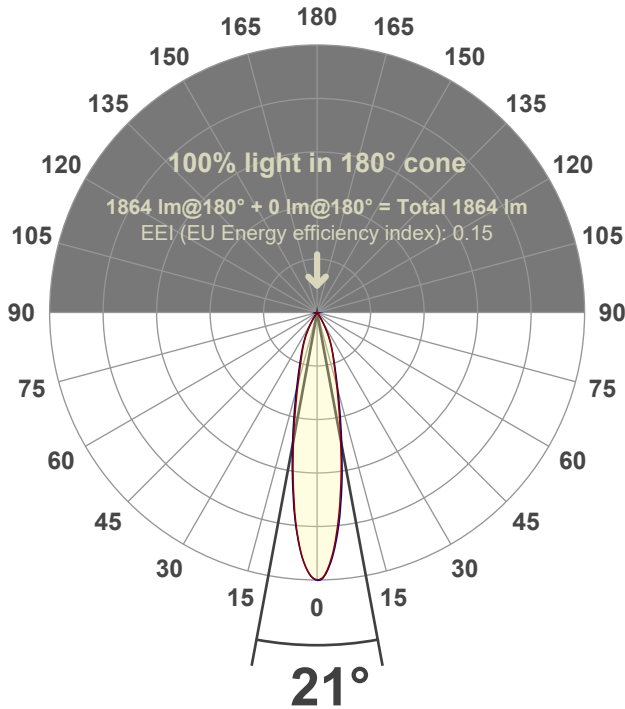


Peak: 8446 cd

Power: 20.7 W



Beam angle



Test number:

GR-O-F-CZ20-30k-SP-SQ-91A-Rev2

Luminaire Model:

Graffiti OpenSquare Fixed Downlight-CZ20 30k 15° Optic-Solite

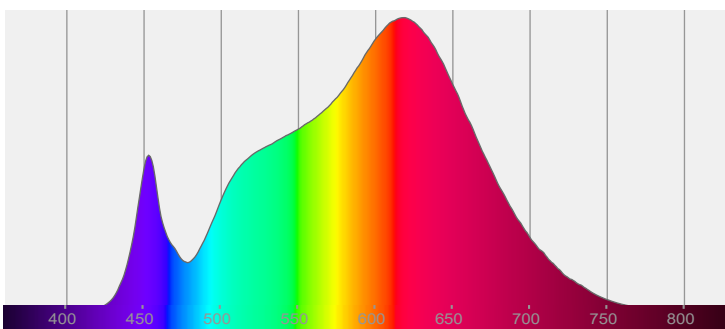
Date and time:

6/30/2022 9:17:10 PM

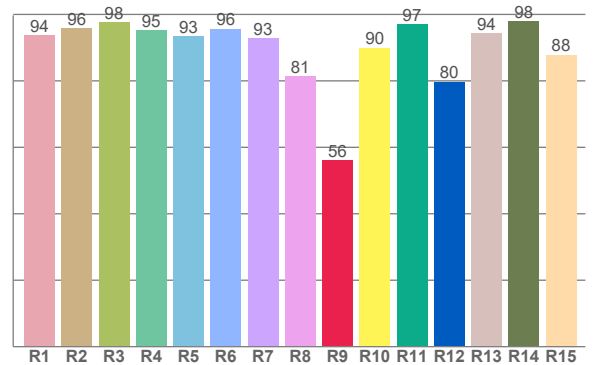
Delivered Lumens

1864

Spectra



CRI: 93.2 (R1-R8)



Color parameters

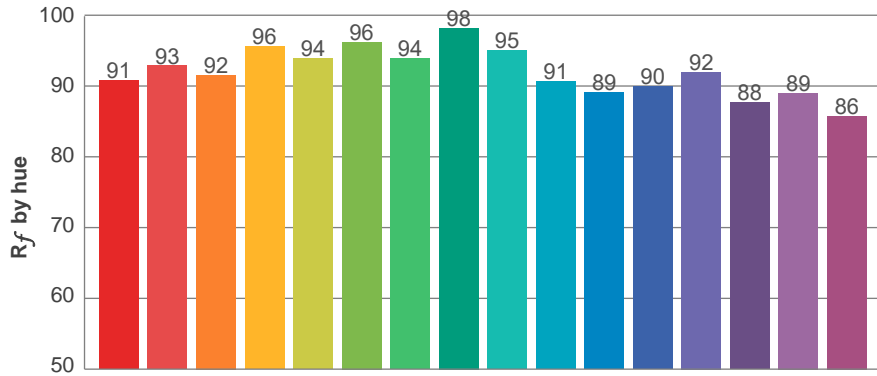
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	93.2	56.0	92.2	99.1	91.6	0.437	0.408	0.249	0.349	0.0016

R_f 92.2
Fidelity index R_f

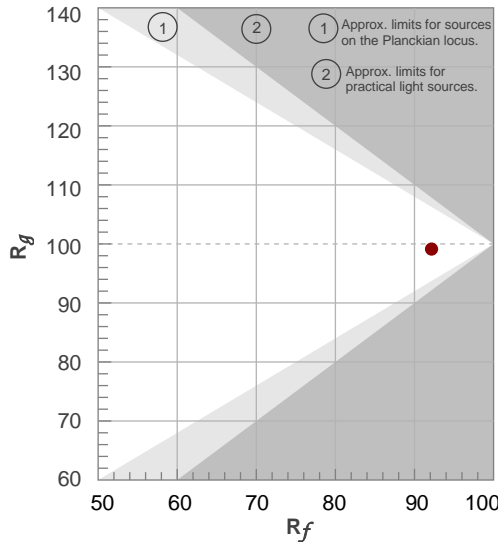
R_g 99.1
Gammut index R_g

TM30: 92.2

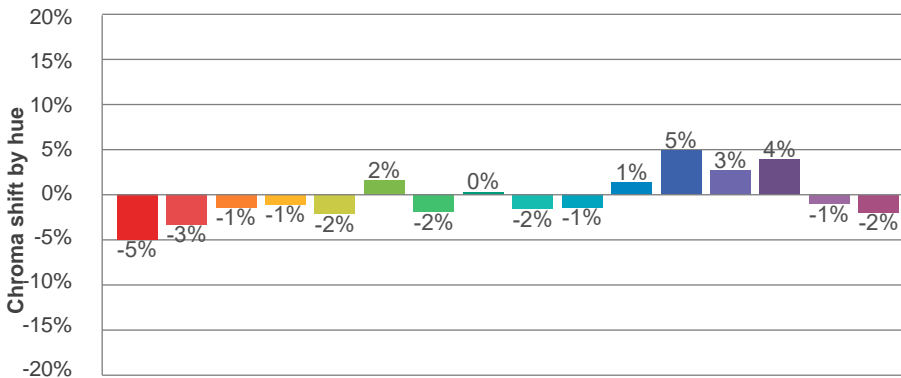
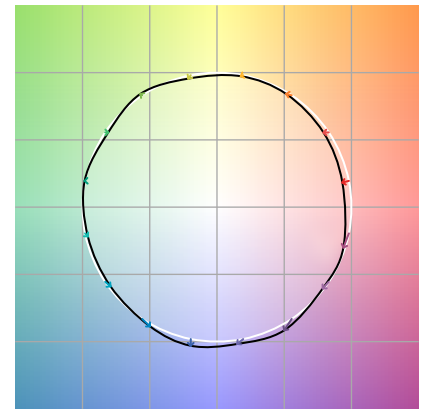
TM-30Color



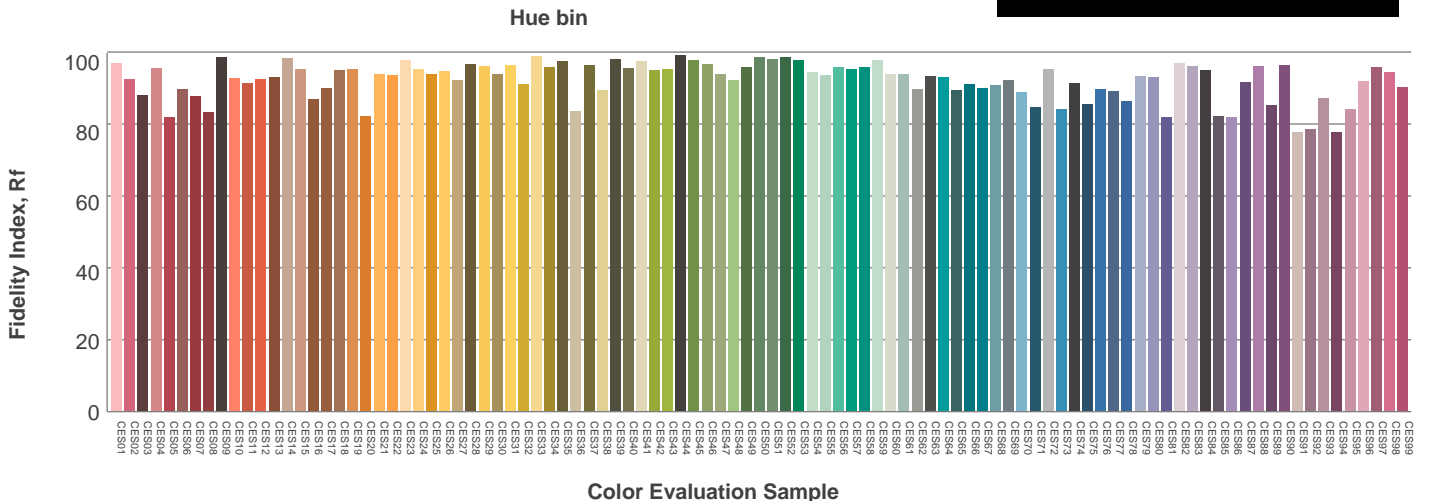
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	2%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-2%	3%
10	91	-1%	5%
11	89	1%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-7%
16	86	-2%	-11%



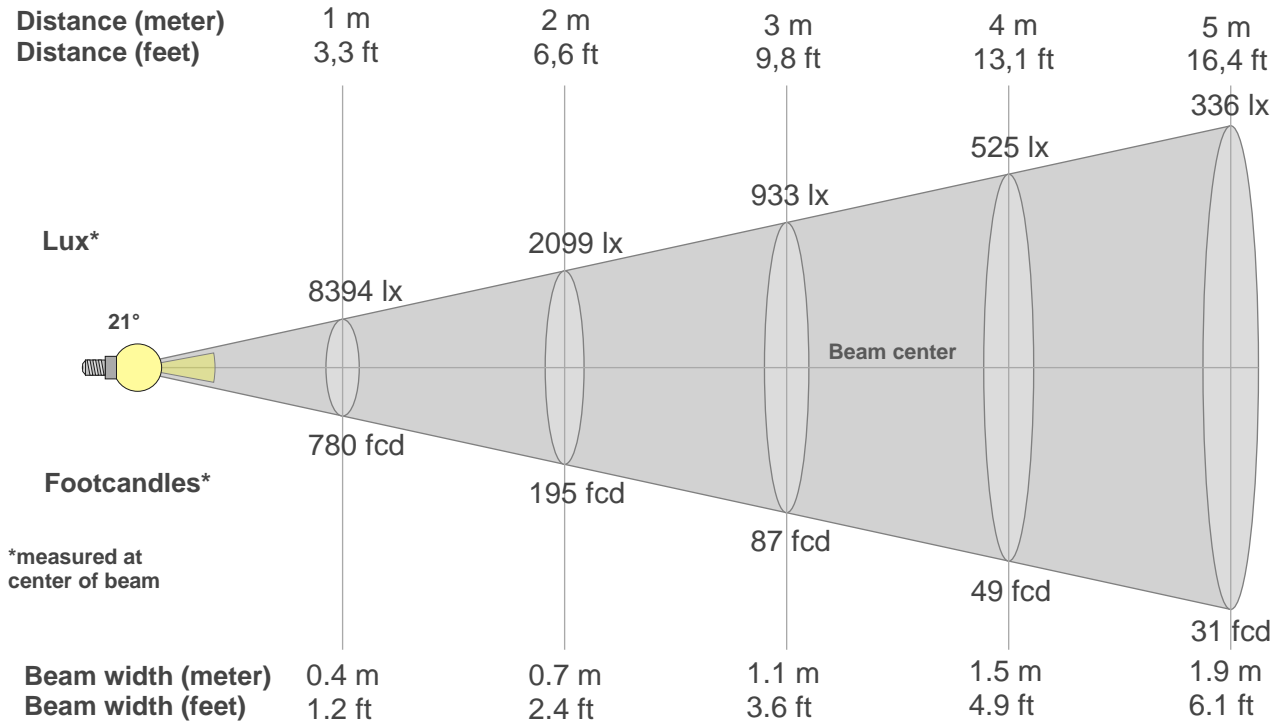
Color vector graphics



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
8394lx	2099lx	933lx	525lx	336lx	233lx	171lx	131lx	104lx	84lx	69lx	58lx	50lx	43lx	37lx	33lx	29lx	26lx	23lx	21lx
779.9fcd	195fcd	86.7fcd	48.7fcd	31.2fcd	21.7fcd	15.9fcd	12.2fcd	9.6fcd	7.8fcd	6.4fcd	5.4fcd	4.6fcd	4fcd	3.5fcd	3fcd	2.7fcd	2.4fcd	2.2fcd	1.9fcd

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°
8394	8174	7507	6525	5440	4387	3473	2739	2179	1774	1497	1273	1069	866	660	461	307	197	120	69
100%	97%	89%	78%	65%	52%	41%	33%	26%	21%	18%	15%	13%	10%	8%	5%	4%	2%	1%	1%

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°
8394	8195	7573	6678	5617	4563	3650	2894	2295	1850	1532	1271	1034	817	618	435	290	191	123	78
100%	98%	90%	80%	67%	54%	43%	34%	27%	22%	18%	15%	12%	10%	7%	5%	3%	2%	1%	1%

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°
8394	8149	7523	6579	5448	4389	3455	2691	2117	1709	1425	1209	1009	808	610	428	279	170	101	60
100%	97%	90%	78%	65%	52%	41%	32%	25%	20%	17%	14%	12%	10%	7%	5%	3%	2%	1%	1%

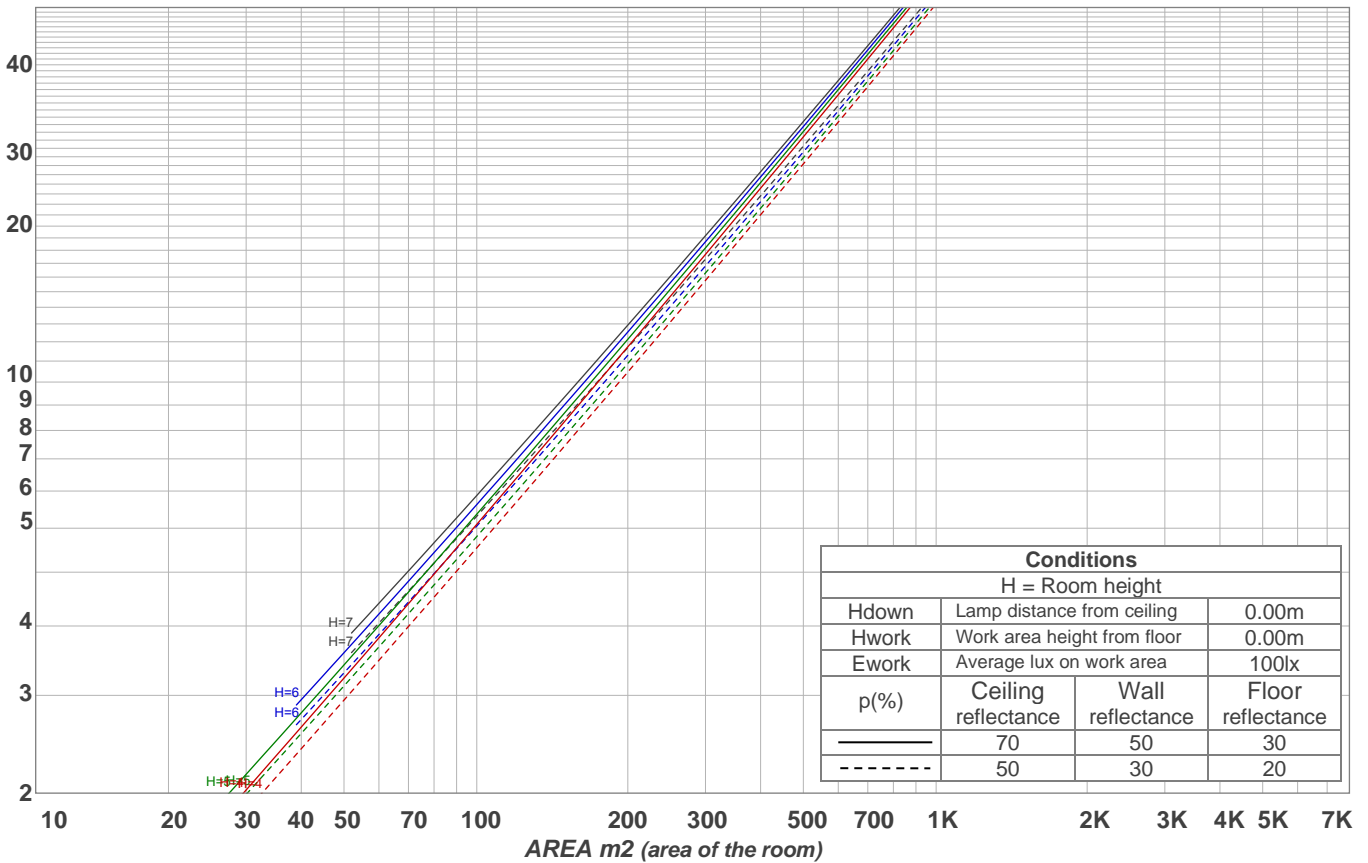
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
8394	8170	7559	6642	5572	4551	3643	2880	2275	1843	1532	1282	1067	869	673	485	338	223	143	92
100%	97%	90%	79%	66%	54%	43%	34%	27%	22%	18%	15%	13%	10%	8%	6%	4%	3%	2%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
21°	52°	67.4°	99.3%	98.7%

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	112	110	108	112	110	108	107	106	105	104	103	101	100	99	98	98	96	96	96	
2	111	107	103	101	108	105	102	100	102	99	97	99	97	95	96	95	93	92	92	92	
3	107	102	98	95	105	100	97	94	98	95	92	96	93	91	93	91	90	88	88	88	
4	103	97	93	90	101	96	92	89	94	91	88	92	89	87	91	88	86	85	85	85	
5	100	93	89	86	98	92	88	85	91	87	84	89	86	84	88	85	83	82	82	82	
6	96	90	85	82	95	89	85	82	88	84	81	86	83	81	85	82	80	79	79	79	
7	93	86	82	79	92	86	82	79	85	81	78	84	80	78	83	80	77	76	76	76	
8	90	83	79	76	89	83	79	76	82	78	75	81	78	75	80	77	75	74	74	74	
9	88	81	76	73	87	80	76	73	79	76	73	79	75	73	78	75	72	71	71	71	
10	85	78	74	71	84	78	74	71	77	73	71	76	73	70	76	73	70	69	69	69	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
590 lm	704 lm	424 lm	112 lm	15.6 lm	5.92 lm	4.40 lm	4.52 lm	3.83 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