

Light efficiency:



Output: 1222 lm

Light quality:

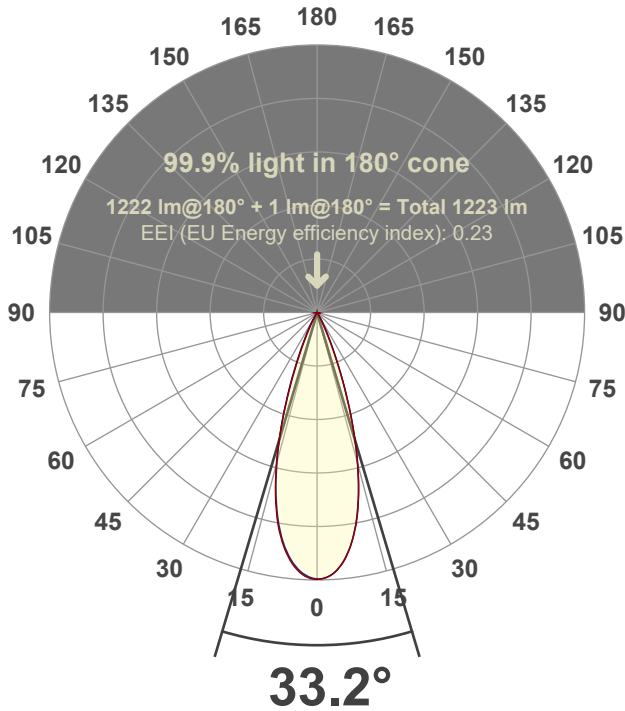


Peak: 3881 cd

Power: 20.7 W



Beam angle



Test number:

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

Luminaire Model:

Graffiti Flat Square Fixed Downlight-CZ20 30k 38° Optic-Solite

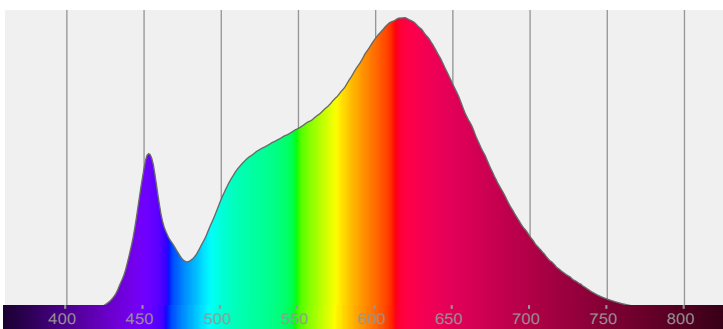
Date and time:

6/30/2022 8:10:50 PM

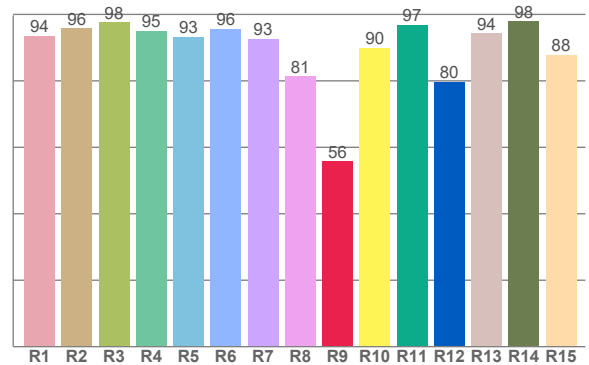
Delivered Lumens

1222

Spectra



CRI: 93.1 (R1-R8)



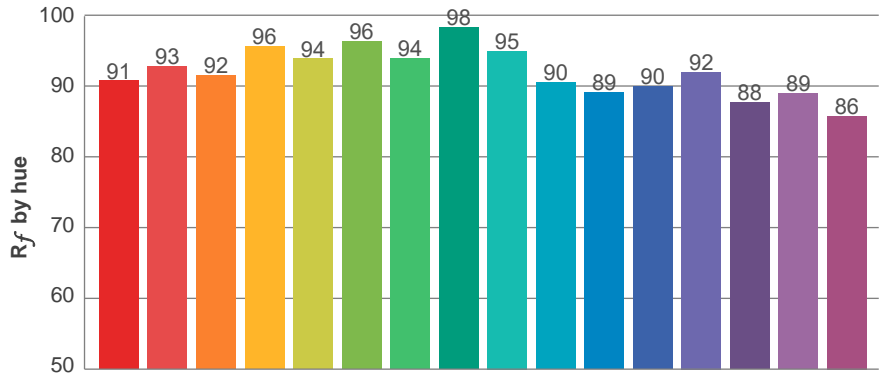
Color parameters

	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	92.1	99.1	91.6	0.437	0.408	0.249	0.349	0.0015

R_f 92.1
Fidelity index R_f

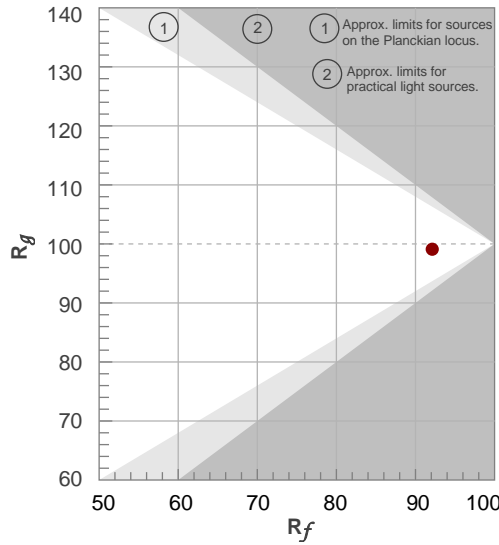
R_g 99.1
Gammut index R_g

TM30: 92.1

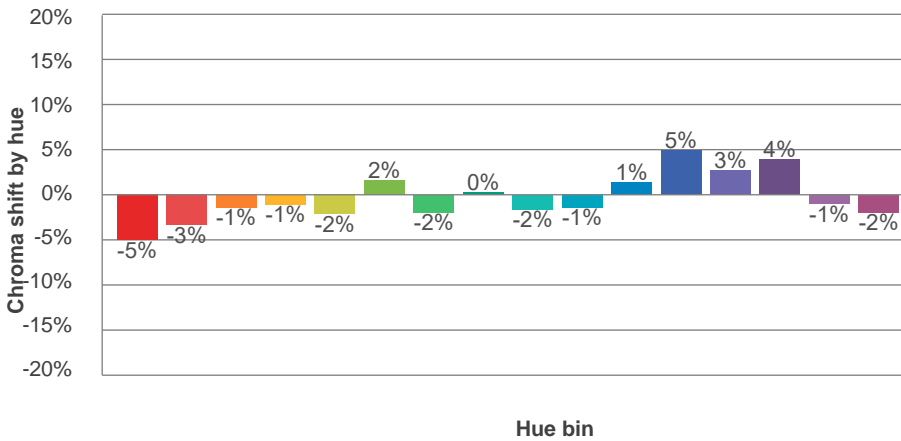
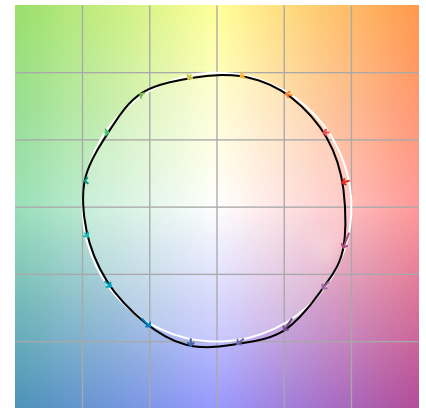


TM-30Color

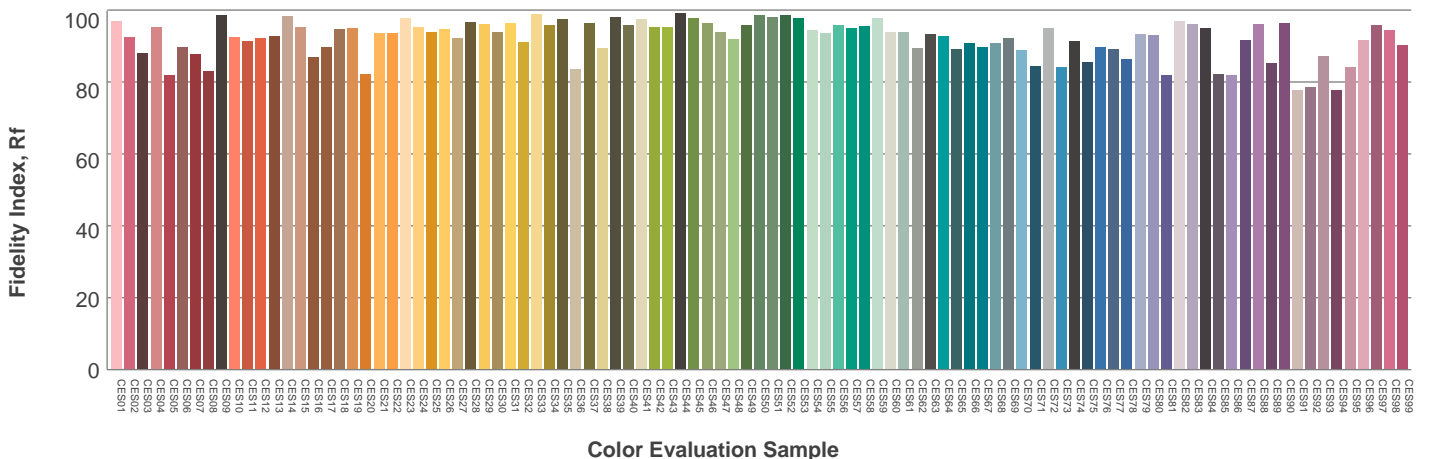
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	2%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-2%	3%
10	90	-1%	5%
11	89	1%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-7%
16	86	-2%	-11%



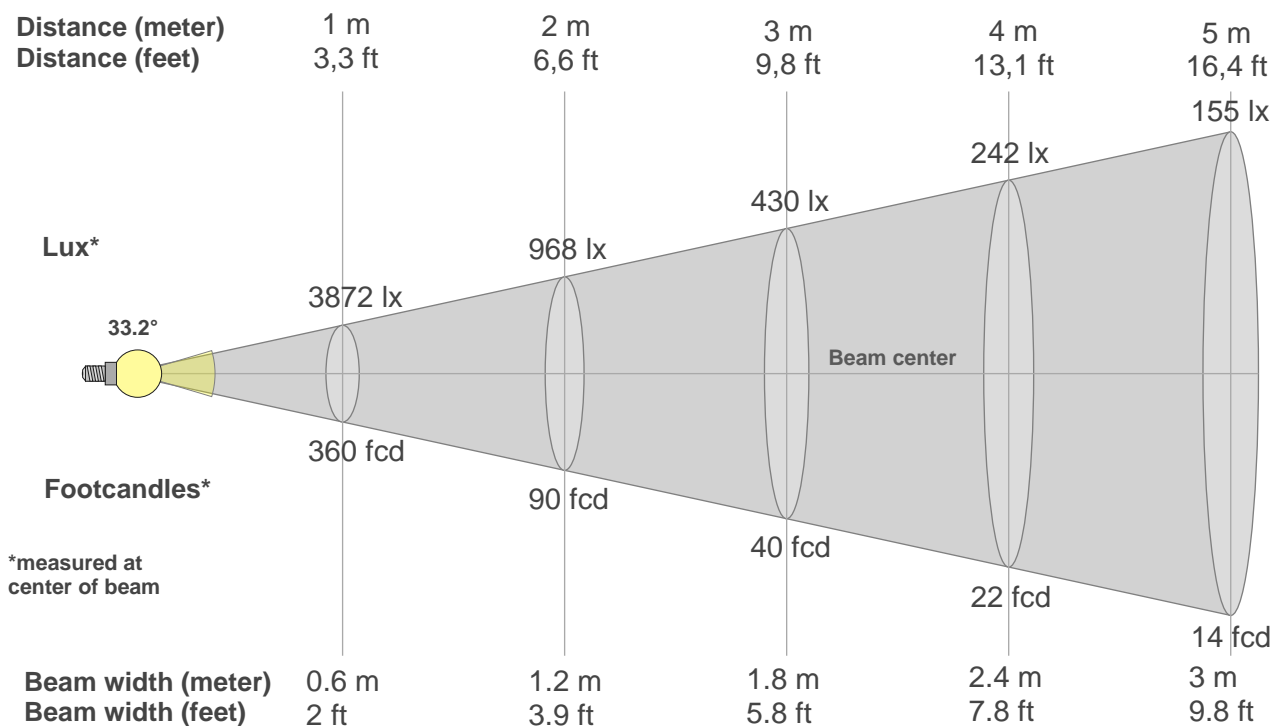
Color vector graphics



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
3872lx	968lx	430lx	242lx	155lx	108lx	79lx	61lx	48lx	39lx	32lx	27lx	23lx	20lx	17lx	15lx	13lx	12lx	11lx	10lx
359.7fcd	89.9fcd	40fcd	22.5fcd	14.4fcd	10fcd	7.3fcd	5.6fcd	4.4fcd	3.6fcd	3fcd	2.5fcd	2.1fcd	1.8fcd	1.6fcd	1.4fcd	1.2fcd	1.1fcd	1fcd	0.9fcd

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°
3872	3852	3784	3647	3445	3187	2869	2493	2076	1626	1192	815	517	305	174	102	64	41	28	20
100%	99%	98%	94%	89%	82%	74%	64%	54%	42%	31%	21%	13%	8%	4%	3%	2%	1%	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°
3872	3850	3776	3643	3444	3179	2856	2479	2062	1624	1203	838	554	349	211	124	74	48	31	22
100%	99%	98%	94%	89%	82%	74%	64%	53%	42%	31%	22%	14%	9%	5%	3%	2%	1%	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°
3872	3851	3773	3641	3452	3197	2874	2497	2076	1625	1176	803	517	316	186	108	64	43	29	21
100%	99%	97%	94%	89%	83%	74%	64%	54%	42%	30%	21%	13%	8%	5%	3%	2%	1%	1%	1%

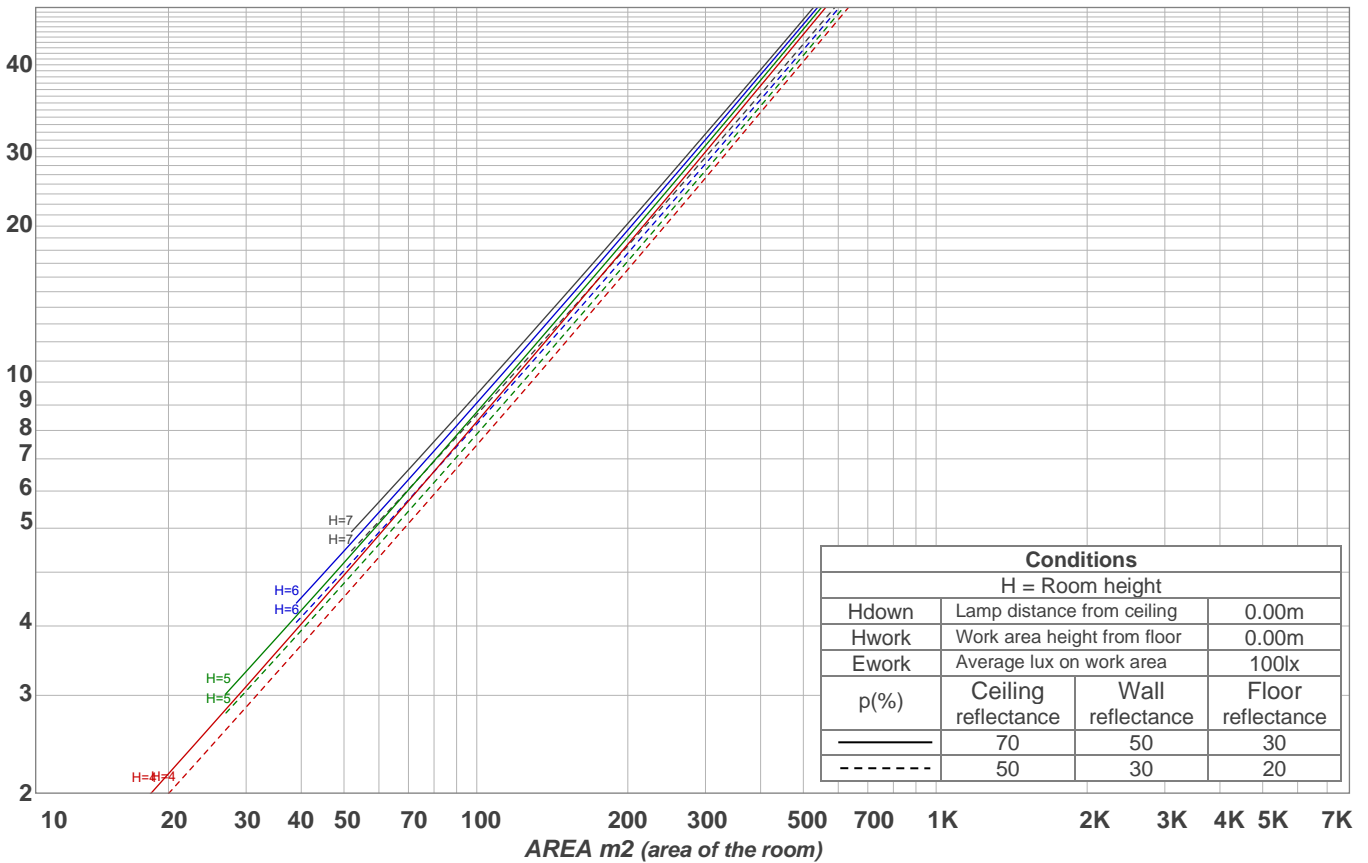
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3872	3836	3755	3621	3421	3162	2845	2473	2059	1630	1217	862	583	377	232	139	89	58	38	26
100%	99%	97%	94%	88%	82%	73%	64%	53%	42%	31%	22%	15%	10%	6%	4%	2%	1%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
33.2°	50.8°	61.7°	98.4%	97.7%

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

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
338 lm	605 lm	218 lm	28.6 lm	7.90 lm	5.34 lm	5.97 lm	6.58 lm	6.02 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