

Light efficiency:



Output: 1134 lm

Light quality:

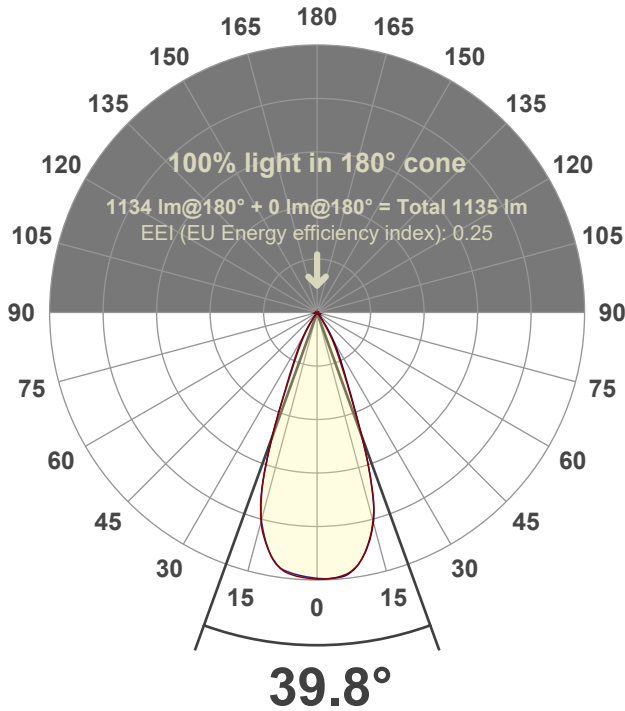


Peak: 2522 cd

Power: 20.8 W



Beam angle



Test number:

GR-F-F-CZ20-30k-WF-SQ-Rev2

Luminaire Model:

Graffiti Flat Square Fixed Downlight-CZ20 30k 60° Optic

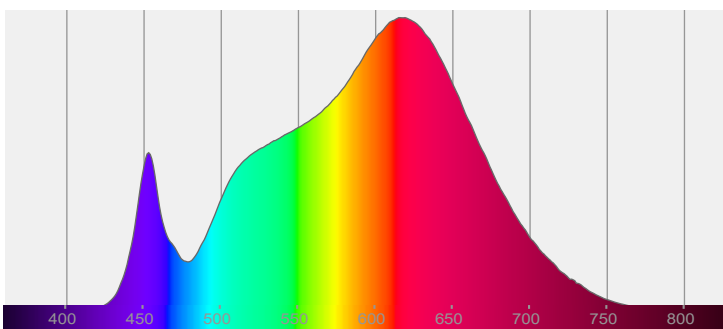
Date and time:

6/30/2022 7:46:54 PM

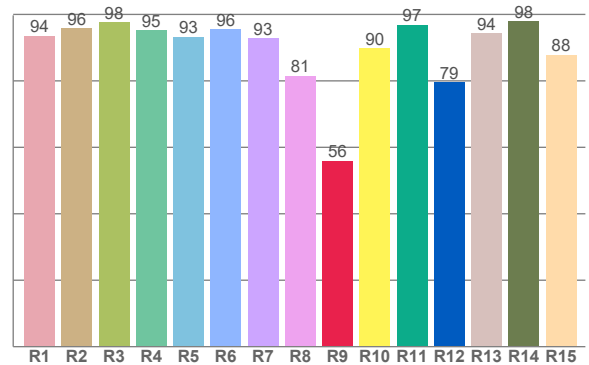
Delivered Lumens

1134

Spectra



CRI: 93.1 (R1-R8)



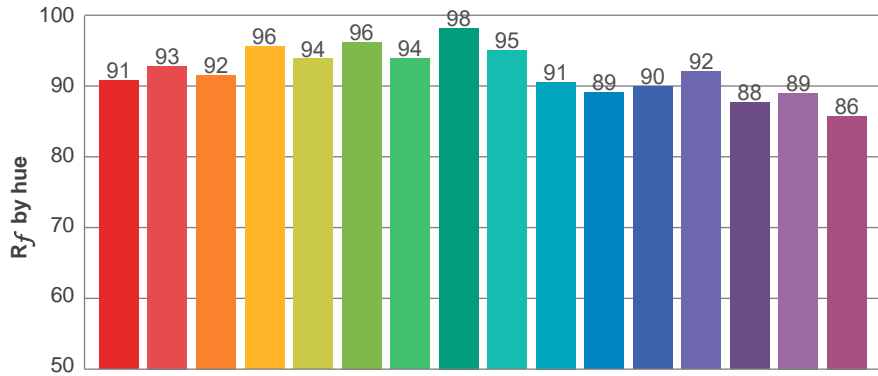
Color parameters

	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	56.0	92.1	99.1	91.6	0.437	0.408	0.249	0.349	0.0016

R_f 92.1
Fidelity index R_f

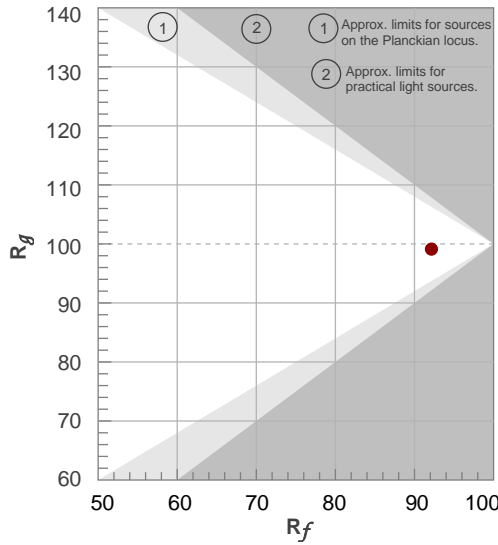
R_g 99.1
Gammut index R_g

TM30: 92.1

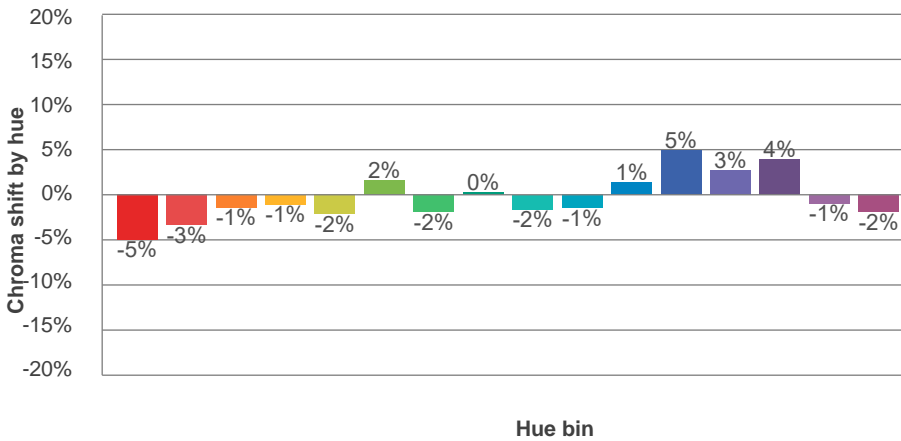
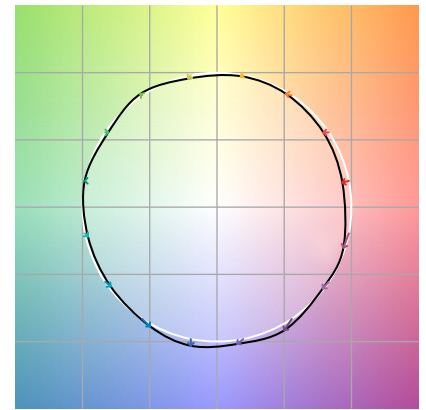


TM-30Color

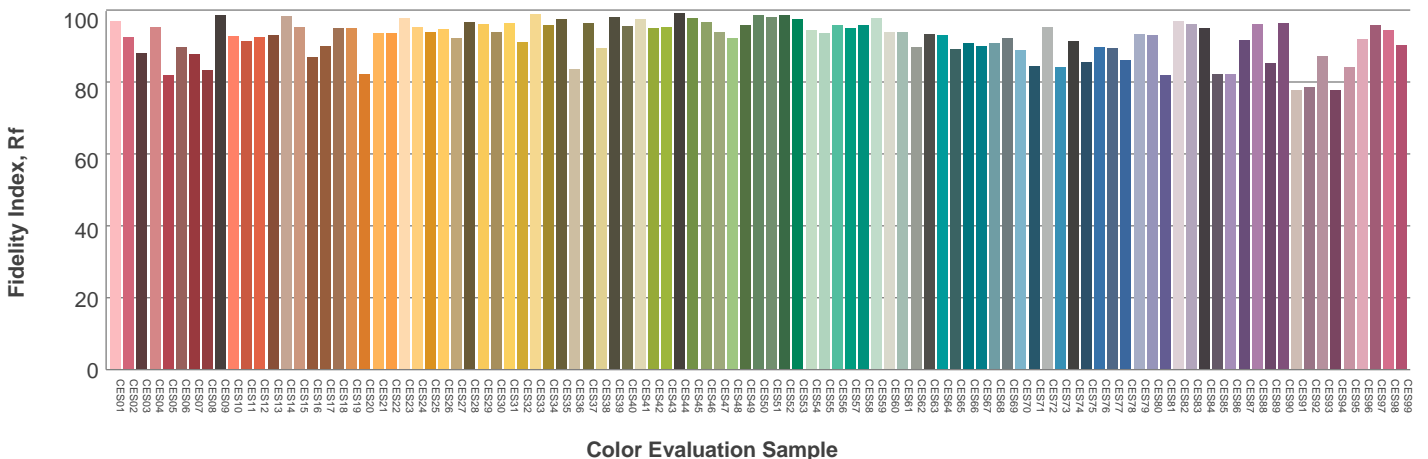
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	2%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-2%	3%
10	91	-1%	5%
11	89	1%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-7%
16	86	-2%	-11%



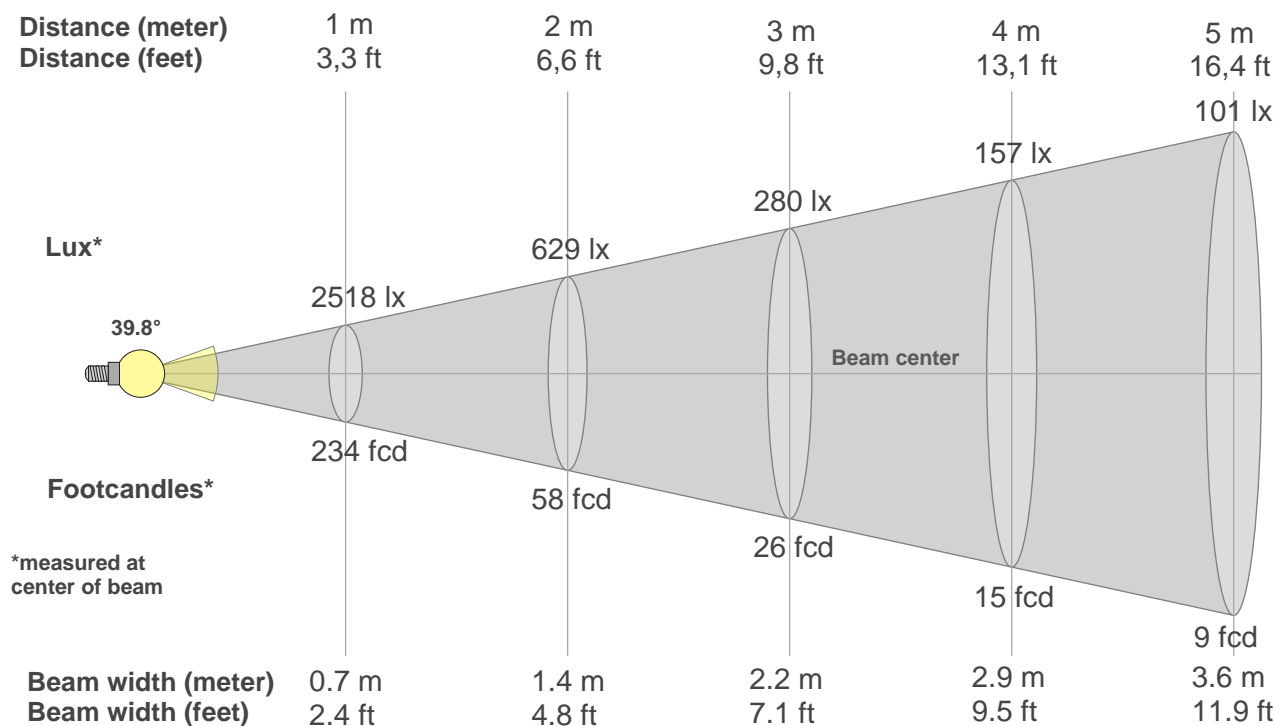
Color vector graphics



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
2518lx	629lx	280lx	157lx	101lx	70lx	51lx	39lx	31lx	25lx	21lx	17lx	15lx	13lx	11lx	10lx	9lx	8lx	7lx	6lx
233.9fcd	58.5fcd	26fcd	14.6fcd	9.4fcd	6.5fcd	4.8fcd	3.7fcd	2.9fcd	2.3fcd	1.9fcd	1.6fcd	1.4fcd	1.2fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.6fcd

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°
2518	2521	2513	2492	2451	2380	2271	2126	1931	1627	1243	863	627	479	365	272	191	122	71	37
100%	100%	100%	99%	97%	95%	90%	84%	77%	65%	49%	34%	25%	19%	15%	11%	8%	5%	3%	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°
2518	2519	2517	2504	2457	2380	2273	2134	1951	1622	1242	909	675	528	418	325	239	161	95	52
100%	100%	100%	99%	98%	95%	90%	85%	77%	64%	49%	36%	27%	21%	17%	13%	10%	6%	4%	2%

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°
2518	2515	2503	2484	2448	2381	2267	2127	1928	1637	1245	870	643	490	377	283	199	130	78	41
100%	100%	99%	99%	97%	95%	90%	85%	77%	65%	49%	35%	26%	19%	15%	11%	8%	5%	3%	2%

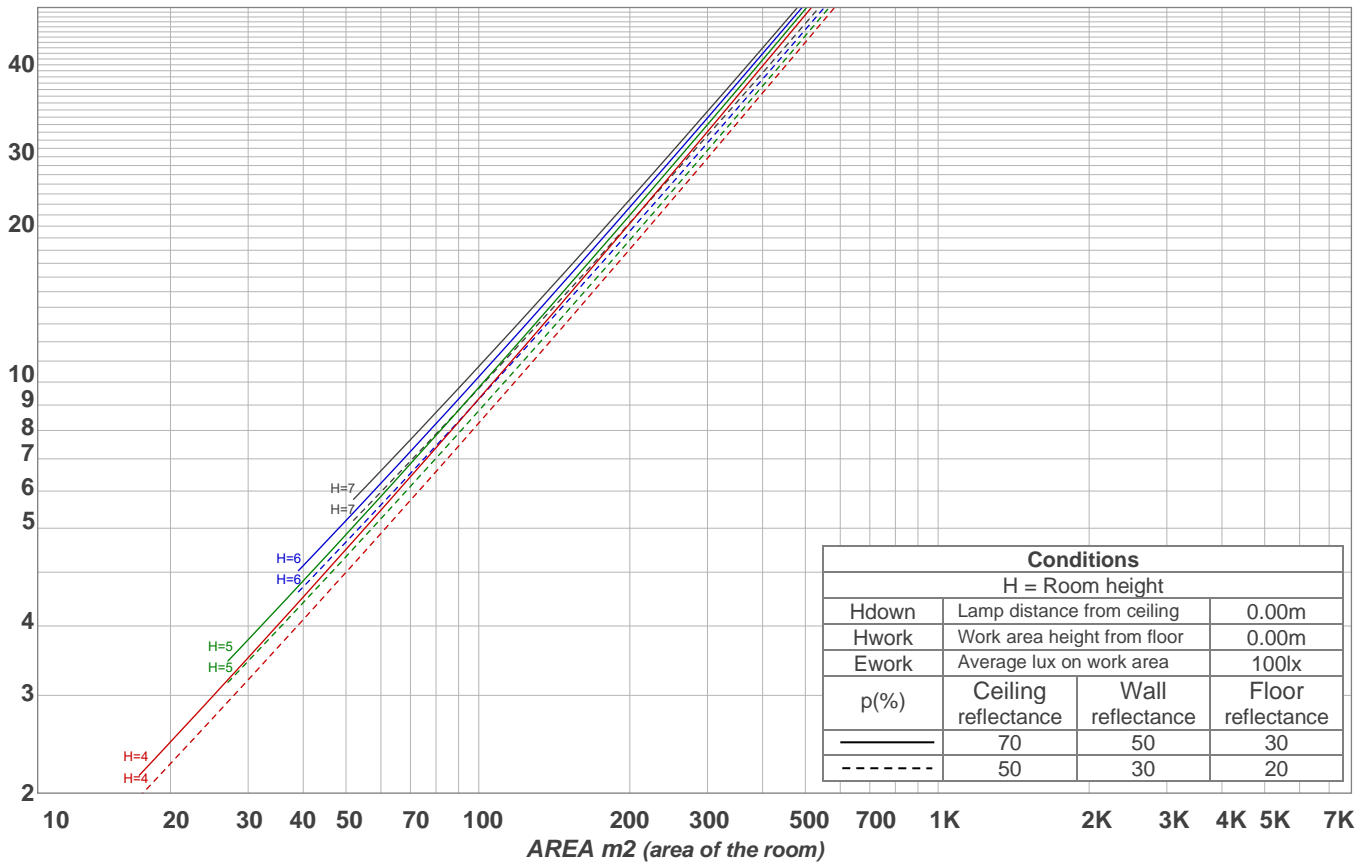
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2518	2503	2490	2473	2442	2370	2259	2112	1924	1642	1241	867	595	434	324	237	164	101	53	25
100%	99%	99%	98%	97%	94%	90%	84%	76%	65%	49%	34%	24%	17%	13%	9%	7%	4%	2%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
39.8°	61.3°	72.9°	99.0%	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	100
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	94	93	92
2	110	106	102	100	108	104	101	99	101	99	96	98	96	94	95	94	92	91	90	89	88
3	106	101	96	93	104	99	96	92	97	94	91	94	92	90	92	90	88	87	86	85	84
4	102	96	91	88	100	95	91	87	93	89	86	91	88	85	89	87	85	83	82	81	80
5	98	92	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80	79	78	77
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	76	75	74	73
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73	72	71	70
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71	70	69	68
9	85	78	73	70	84	77	73	70	76	72	69	76	72	69	75	72	69	68	67	66	65
10	83	75	70	67	82	74	70	67	74	70	67	73	69	67	72	69	67	66	65	64	63

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
235 lm	539 lm	272 lm	69.3 lm	4.80 lm	2.18 lm	2.93 lm	3.78 lm	4.40 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