

Light efficiency:



Output: 931 lm

Light quality:

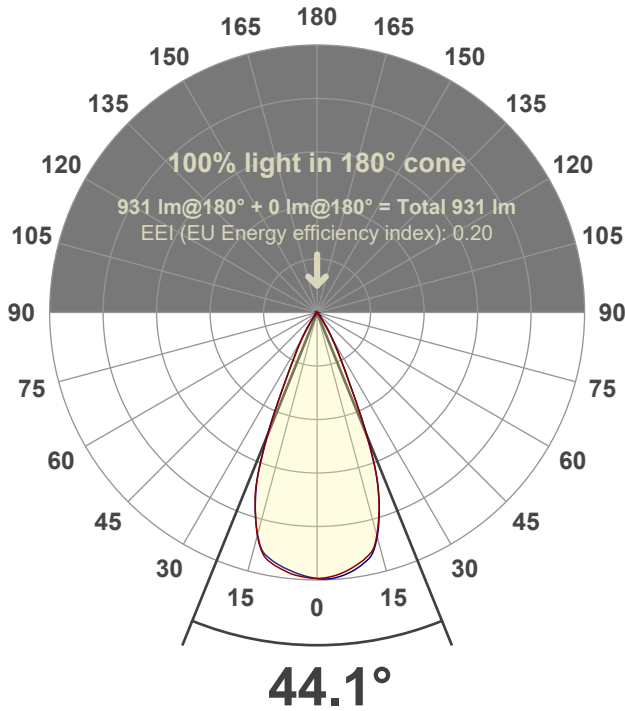


Peak: 1818 cd

Power: 14.2 W



Beam angle



Test number:

GR-F-F-CZ14-30k-WF-RD-Rev2

Luminaire Model:

Graffiti Flat Round Fixed Downlight-CZ14 30k 60° Optic

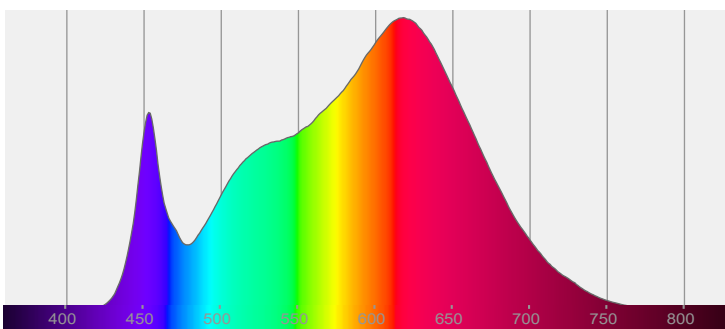
Date and time:

3/9/2022 3:35:55 PM

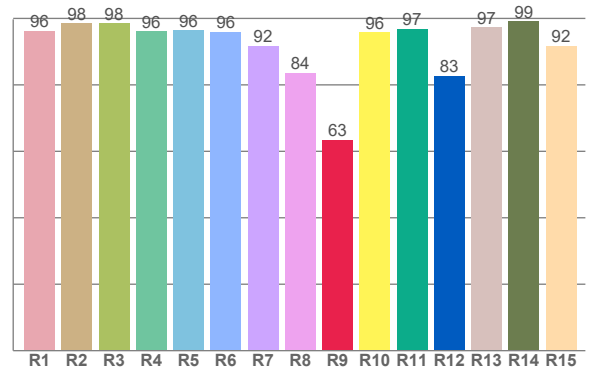
Delivered Lumens

931

Spectra



CRI: 94.6 (R1-R8)



Color parameters

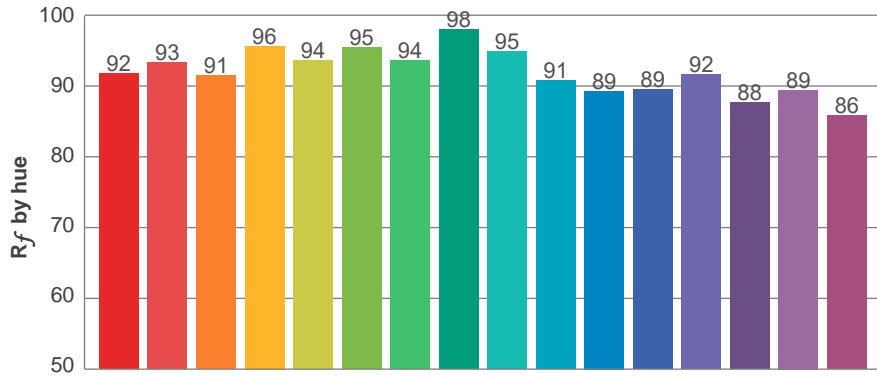
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	94.6	63.4	92.2	100.5	91.9	0.424	0.393	0.247	0.343	-0.0025

R_f 92.2
Fidelity index R_f

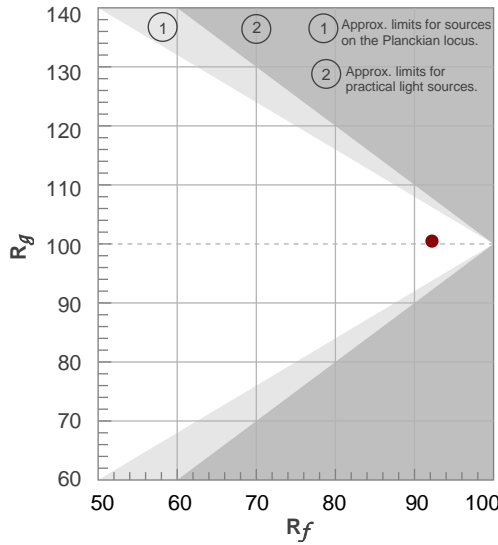
R_g 100.5
Gammut index R_g

TM30: 92.2

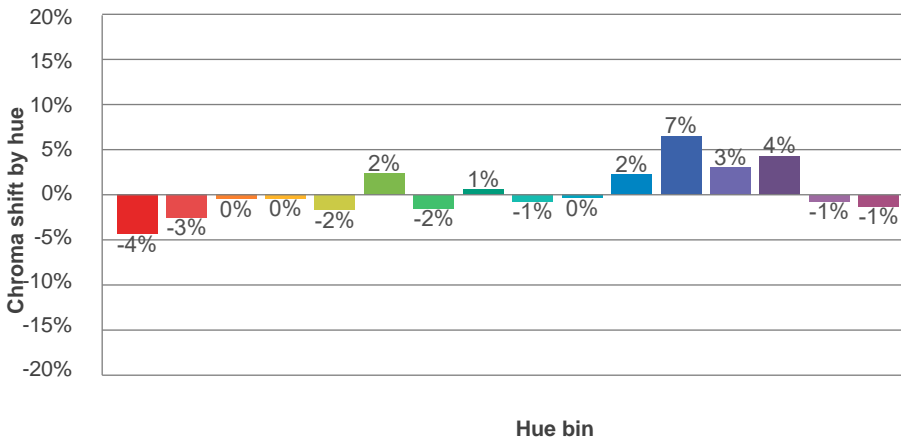
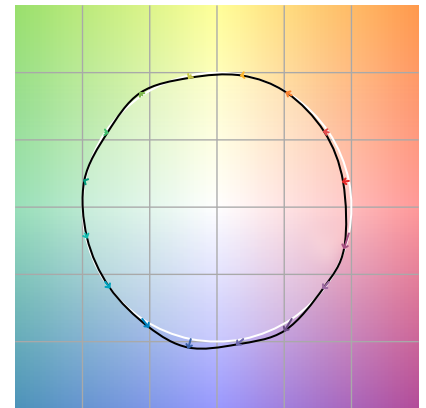
TM-30Color



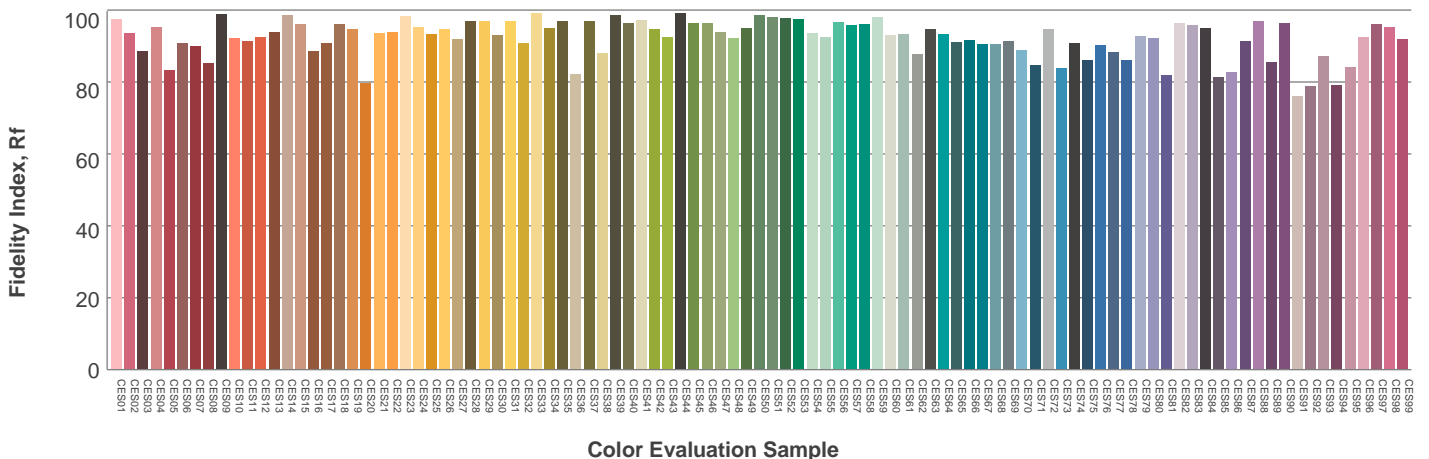
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	0%
2	93	-3%	2%
3	91	0%	4%
4	96	0%	1%
5	94	-2%	2%
6	95	2%	0%
7	94	-2%	-1%
8	98	1%	0%
9	95	-1%	3%
10	91	0%	5%
11	89	2%	7%
12	89	7%	0%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-1%	-11%



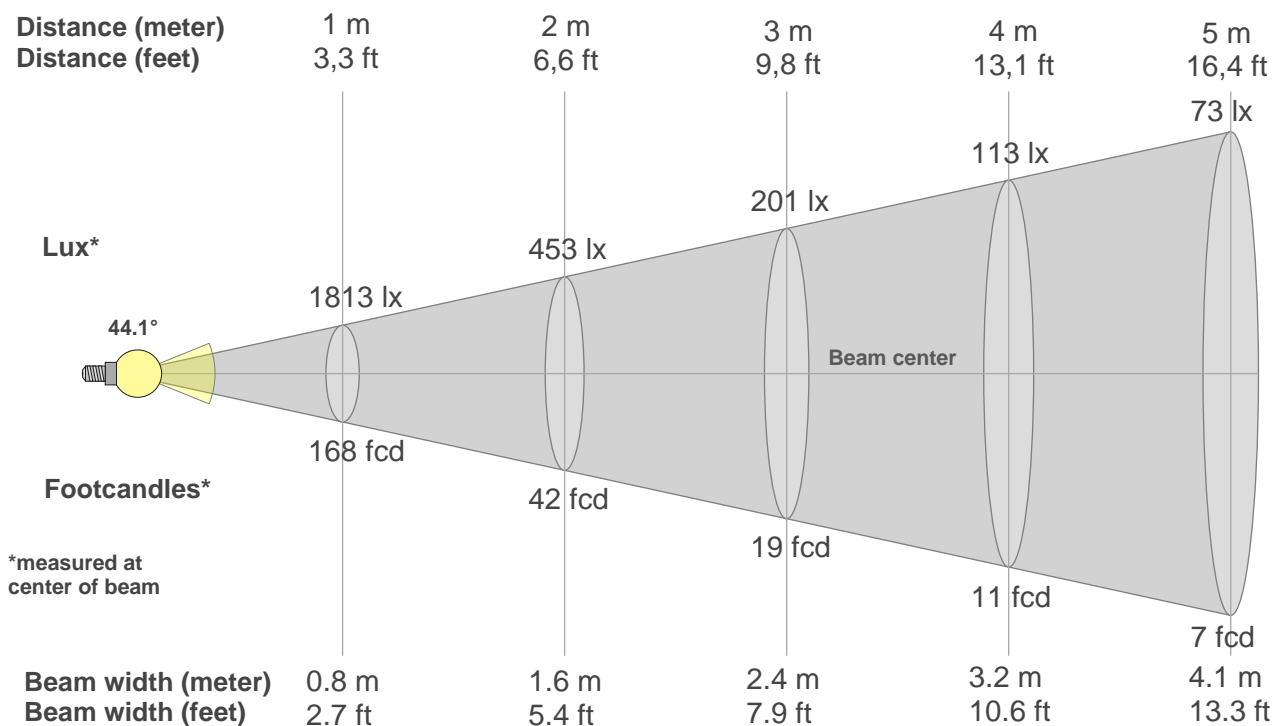
Color vector graphics



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
1813lx	453lx	201lx	113lx	73lx	50lx	37lx	28lx	22lx	18lx	15lx	13lx	11lx	9lx	8lx	7lx	6lx	6lx	5lx	5lx
168.4fcd	42.1fcd	18.7fcd	10.5fcd	6.7fcd	4.7fcd	3.4fcd	2.6fcd	2.1fcd	1.7fcd	1.4fcd	1.2fcd	1fcd	0.9fcd	0.7fcd	0.7fcd	0.6fcd	0.5fcd	0.5fcd	0.4fcd

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°
1813	1809	1797	1779	1755	1726	1688	1627	1512	1368	1179	914	636	421	298	215	154	104	63	34
100%	100%	99%	98%	97%	95%	93%	90%	83%	75%	65%	50%	35%	23%	16%	12%	9%	6%	3%	2%

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°
1813	1817	1812	1798	1777	1748	1708	1633	1518	1370	1188	922	643	443	317	229	161	111	70	40
100%	100%	100%	99%	98%	96%	94%	90%	84%	76%	66%	51%	35%	24%	18%	13%	9%	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°
1813	1809	1800	1787	1766	1742	1704	1625	1508	1364	1183	913	634	436	310	228	164	111	69	38
100%	100%	99%	99%	97%	96%	94%	90%	83%	75%	65%	50%	35%	24%	17%	13%	9%	6%	4%	2%

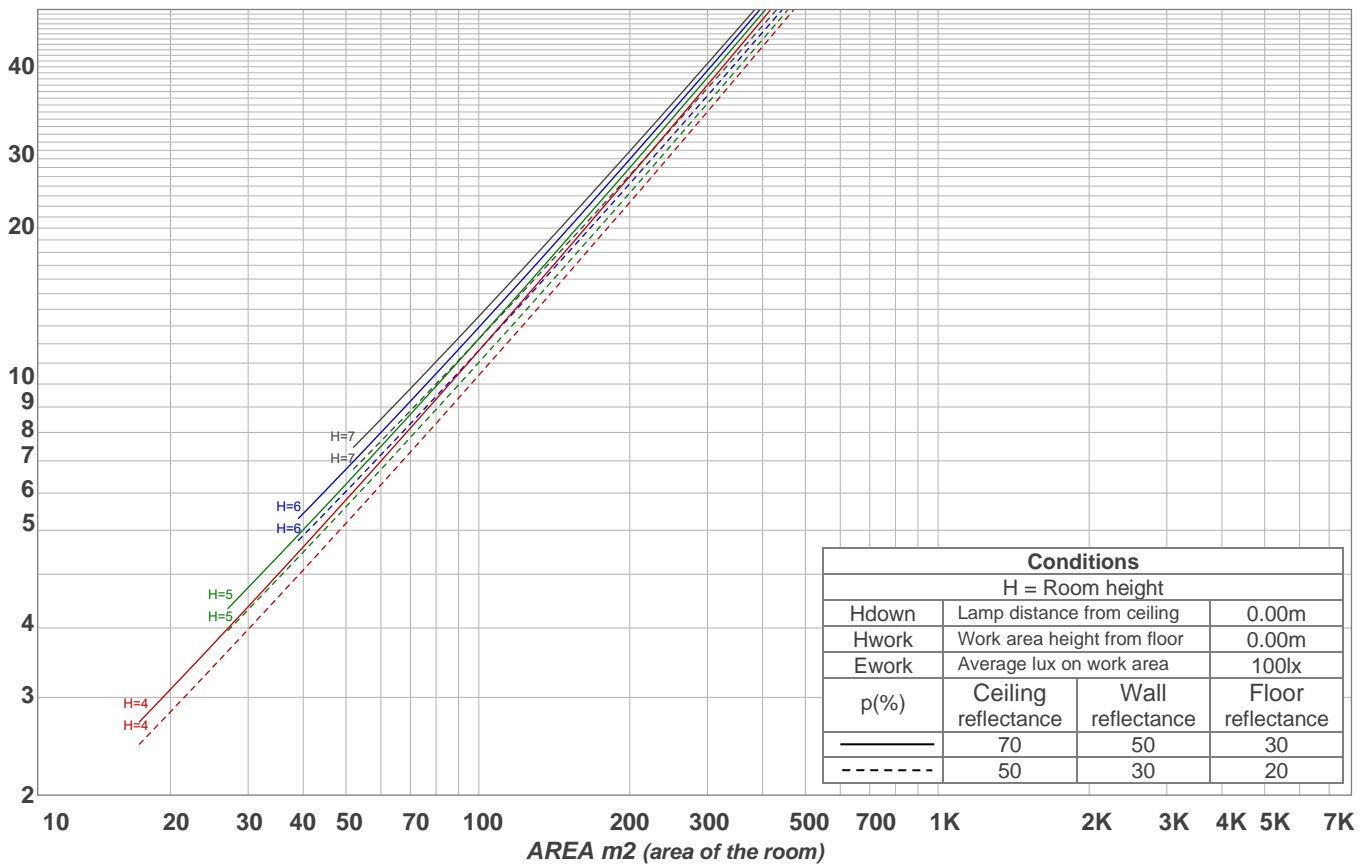
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1813	1802	1788	1769	1748	1722	1685	1618	1506	1366	1183	922	647	436	309	224	159	110	70	39
100%	99%	99%	98%	96%	95%	93%	89%	83%	75%	65%	51%	36%	24%	17%	12%	9%	6%	4%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
44.1°	62.6°	74.8°	99.1%	98.8%

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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	95	
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	94	92	91	91	91	
3	106	100	96	93	104	99	95	92	96	93	90	94	91	89	92	90	88	86	86	86	
4	101	95	91	87	100	94	90	87	92	88	86	90	87	85	88	86	84	82	82	82	
5	98	91	86	82	96	90	85	82	88	84	81	87	83	81	85	82	80	79	79	79	
6	94	87	82	78	93	86	81	78	85	81	77	83	80	77	82	79	77	75	75	75	
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72	72	72	
8	87	79	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69	69	69	
9	84	76	71	68	83	76	71	68	75	71	68	74	70	68	73	70	67	66	66	66	
10	81	73	69	65	80	73	68	65	72	68	65	71	68	65	71	67	65	64	64	64	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
169 lm	427 lm	262 lm	58.9 lm	4.59 lm	1.88 lm	2.27 lm	2.82 lm	3.08 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