

Light efficiency:

104 Lumen/Watt

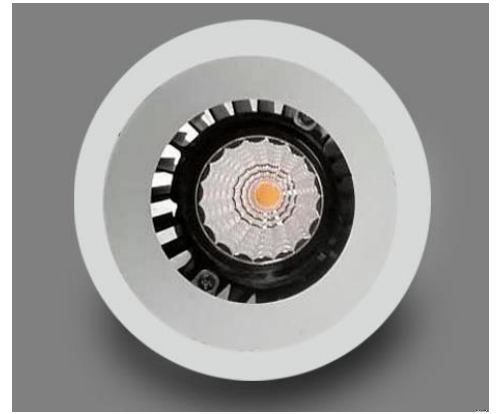
Output: 1468 lm

Light quality:

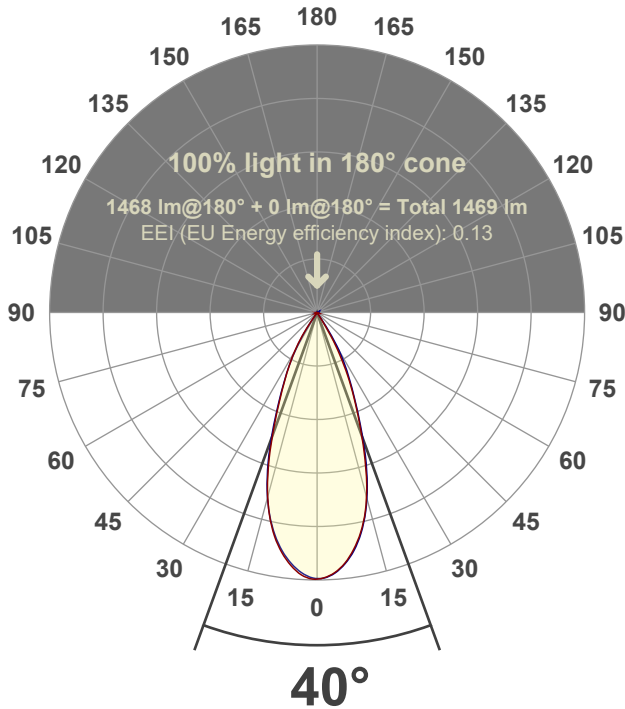
CRI: 94.5

Peak: 3223 cd

Power: 14.1 W



Beam angle



Test number:

GR-O-F-CZ14-30k-FL-RD-Rev2

Luminaire Model:

Graffiti Open Round Fixed Downlight-CZ14 30k 38° Optic

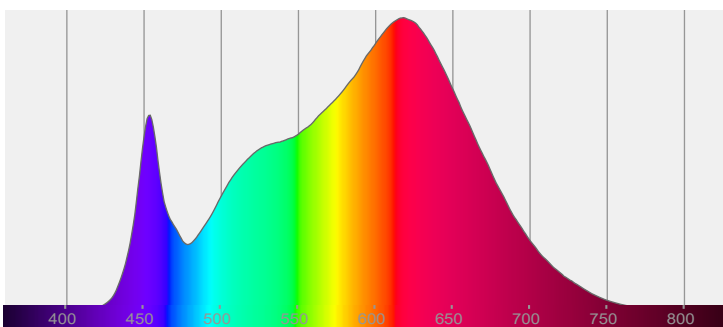
Date and time:

3/2/2022 10:54:00 PM

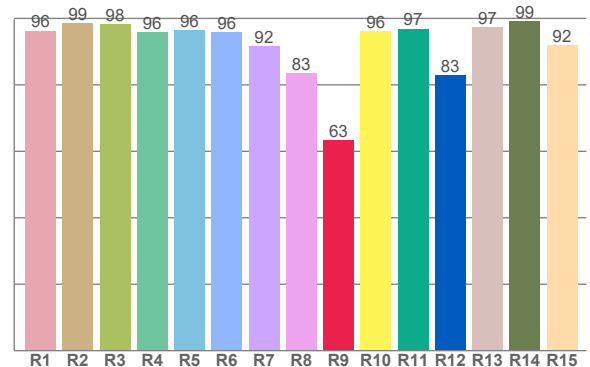
Delivered Lumens

1468

Spectra



CRI: 94.5 (R1-R8)



Color parameters

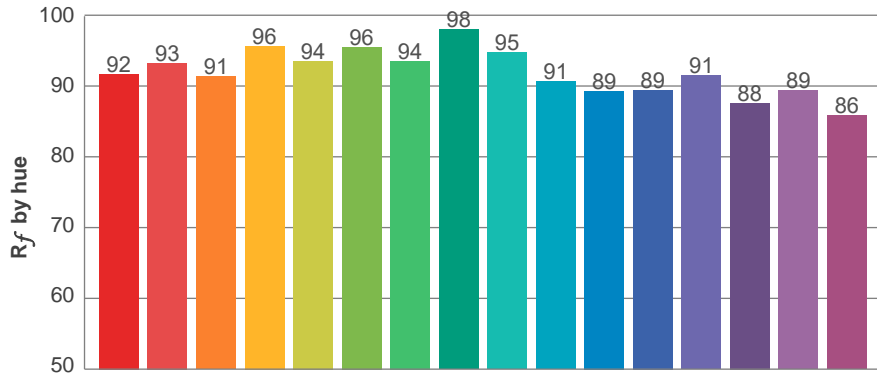
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	94.5	63.3	92.1	100.4	91.8	0.424	0.393	0.247	0.343	-0.0027

R_f 92.1
Fidelity index R_f

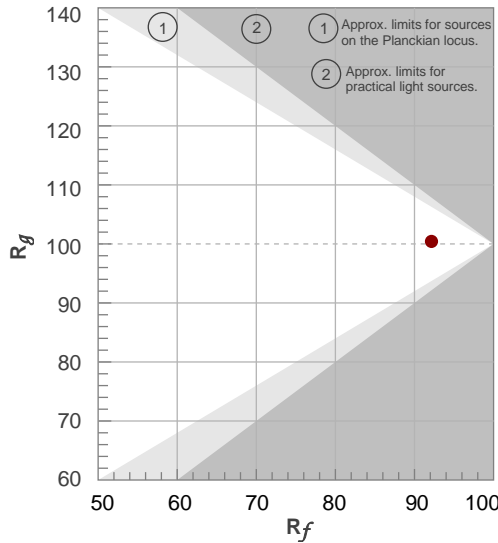
R_g 100.4
Gammut index R_g

TM30: 92.1

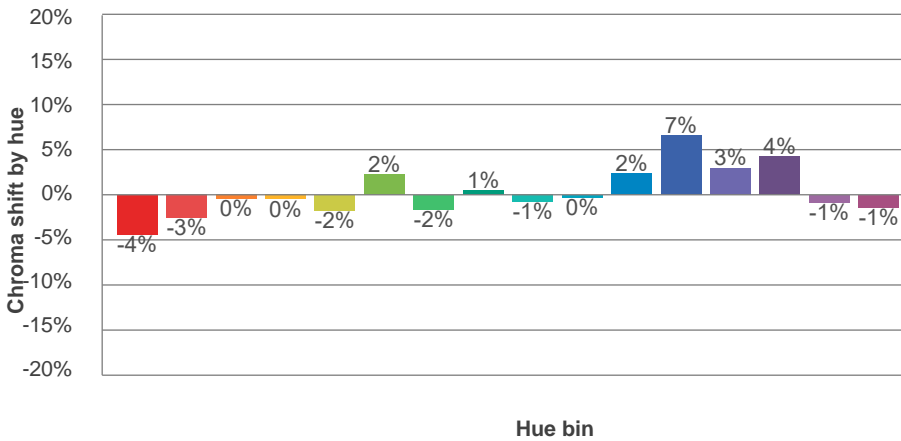
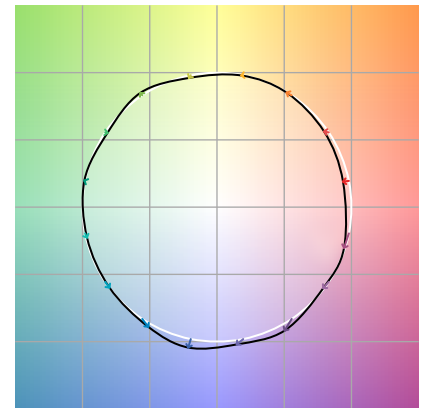
TM-30Color



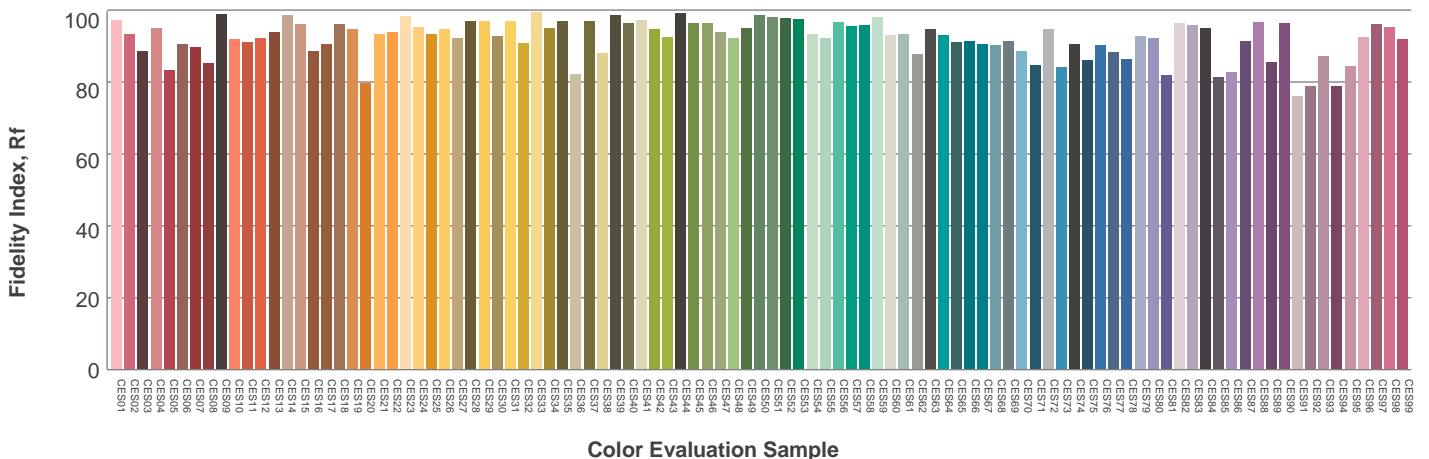
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	0%
2	93	-3%	2%
3	91	0%	4%
4	96	0%	1%
5	94	-2%	2%
6	96	2%	0%
7	94	-2%	-1%
8	98	1%	0%
9	95	-1%	3%
10	91	0%	5%
11	89	2%	7%
12	89	7%	-1%
13	91	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-1%	-11%



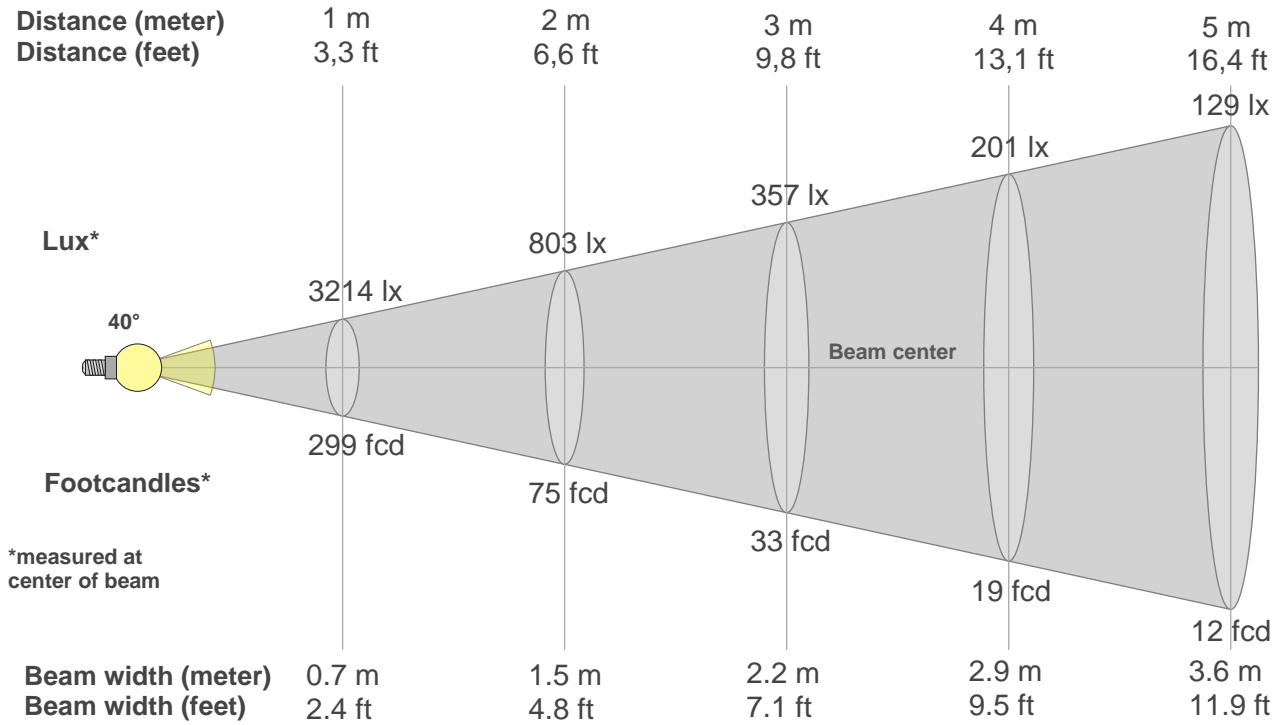
Color vector graphics



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
3214lx	803lx	357lx	201lx	129lx	89lx	66lx	50lx	40lx	32lx	27lx	22lx	19lx	16lx	14lx	13lx	11lx	10lx	9lx	8lx
298.6fcd	74.6fcd	33.2fcd	18.7fcd	11.9fcd	8.3fcd	6.1fcd	4.7fcd	3.7fcd	3fcd	2.5fcd	2.1fcd	1.8fcd	1.5fcd	1.3fcd	1.2fcd	1fcd	0.9fcd	0.8fcd	0.7fcd

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°
3214	3196	3147	3063	2946	2804	2635	2432	2181	1884	1588	1313	1068	847	625	421	227	75	7	4
100%	99%	98%	95%	92%	87%	82%	76%	68%	59%	49%	41%	33%	26%	19%	13%	7%	2%	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°
3214	3200	3155	3071	2960	2821	2650	2446	2204	1925	1628	1344	1098	896	725	549	349	152	18	5
100%	100%	98%	96%	92%	88%	82%	76%	69%	60%	51%	42%	34%	28%	23%	17%	11%	5%	1%	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°
3214	3205	3155	3071	2955	2813	2638	2428	2181	1892	1587	1308	1070	875	715	561	407	244	97	7
100%	100%	98%	96%	92%	88%	82%	76%	68%	59%	49%	41%	33%	27%	22%	17%	13%	8%	3%	0%

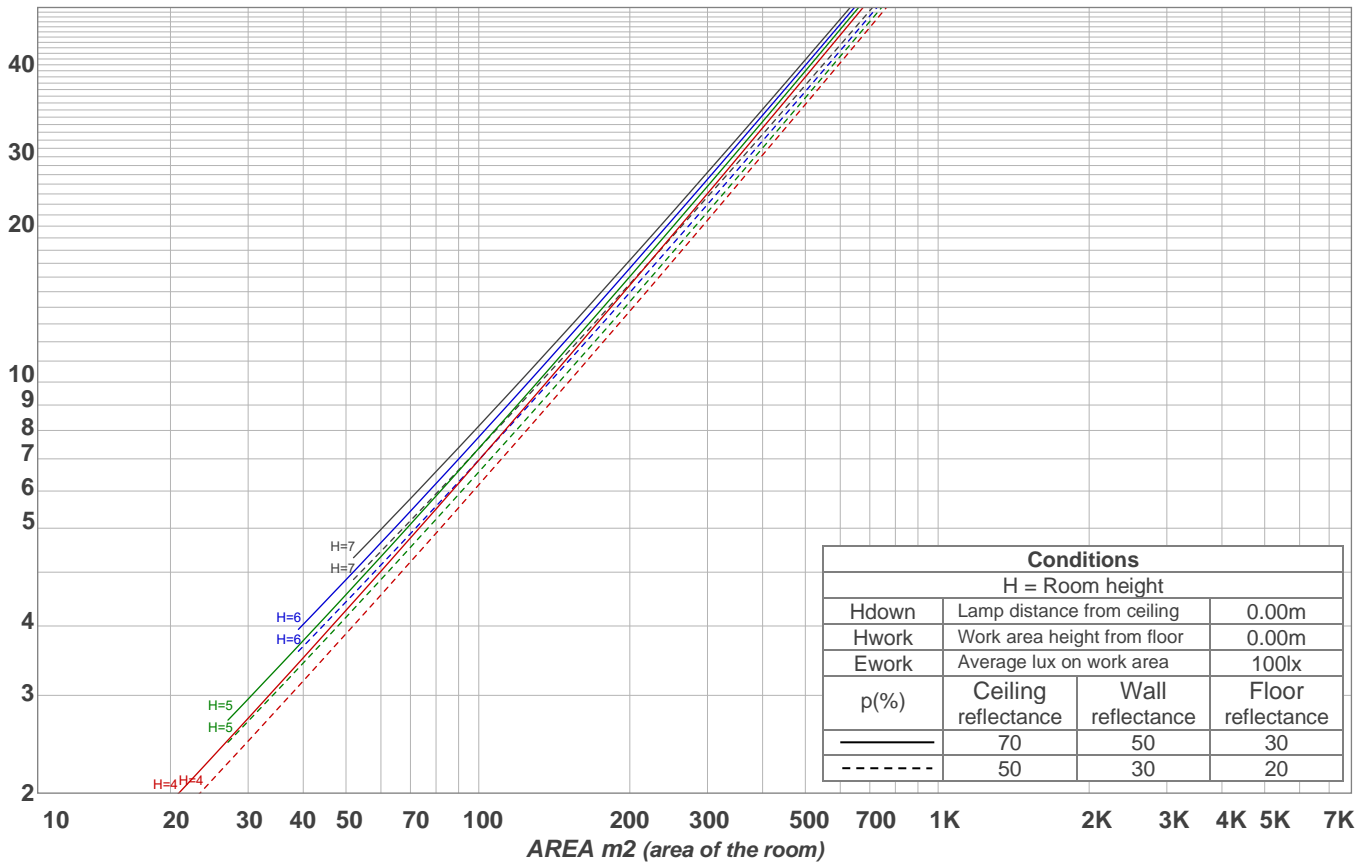
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3214	3185	3128	3044	2932	2792	2624	2427	2197	1926	1628	1344	1095	886	707	528	356	179	44	3
100%	99%	97%	95%	91%	87%	82%	76%	68%	60%	51%	42%	34%	28%	22%	16%	11%	6%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
40°	64.4°	70.1°	99.3%	99.1%

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	91	94	92	89	92	90	88	87	87	87	
4	102	95	91	87	100	94	90	87	92	89	86	90	87	85	89	86	84	83	83	83	
5	98	91	86	83	96	90	86	82	88	85	82	87	84	81	85	83	80	79	79	79	
6	94	87	82	79	93	86	82	78	85	81	78	84	80	77	82	79	77	76	76	76	
7	91	83	78	75	90	83	78	75	81	77	74	80	77	74	79	76	74	72	72	72	
8	88	80	75	72	86	79	75	71	78	74	71	77	74	71	76	73	71	69	69	69	
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67	67	67	
10	82	74	69	66	81	73	69	66	72	68	65	72	68	65	71	68	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°
288 lm	628 lm	449 lm	90.8 lm	1.73 lm	2.30 lm	2.55 lm	3.00 lm	3.76 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