

Light efficiency:



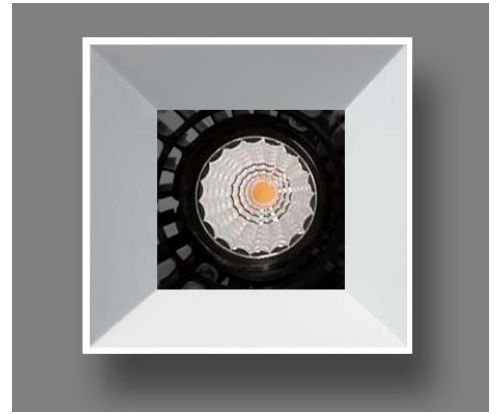
Output: 1336 lm

Light quality:

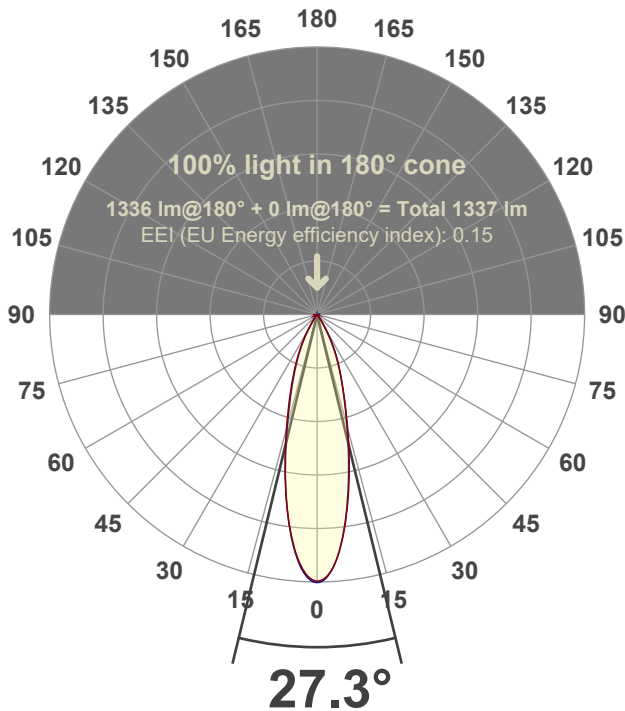


Peak: 4402 cd

Power: 14.2 W



Beam angle



Test number:

GR-O-F-CZ14-30k-NF-SQ-91A-Rev2

Luminaire Model:

Graffiti Open Square Fixed Downlight-CZ14 30k 24° Optic-Solite

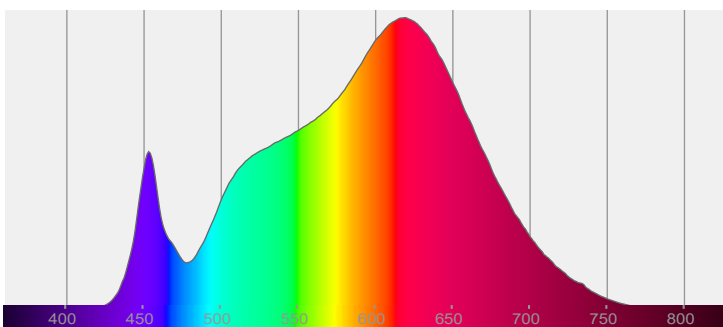
Date and time:

6/30/2022 8:35:37 PM

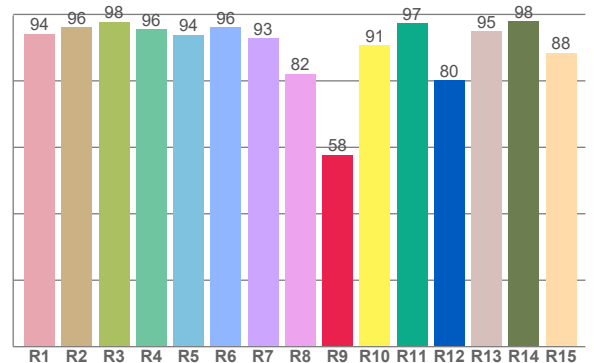
Delivered Lumens

1336

Spectra



CRI: 93.6 (R1-R8)



Color parameters

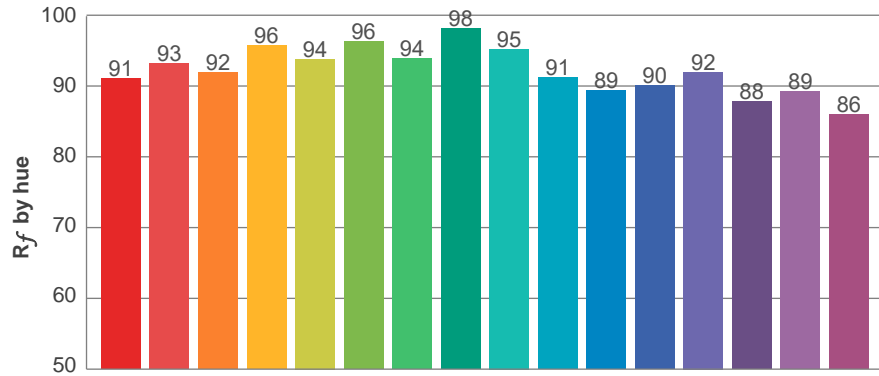
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	93.6	57.7	92.3	99.2	91.9	0.438	0.408	0.250	0.349	0.0014

R_f 92.3
Fidelity index R_f

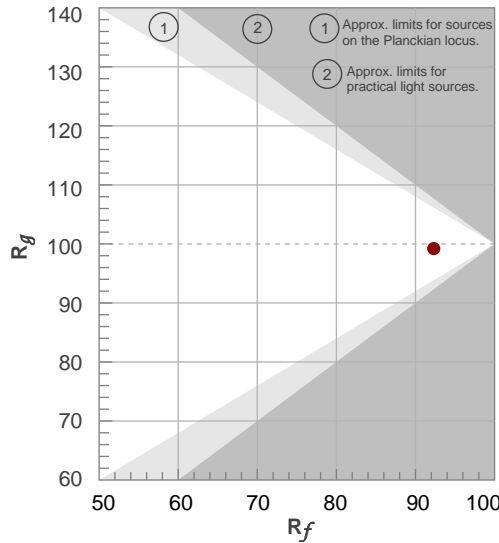
R_g 99.2
Gammut index R_g

TM30: 92.3

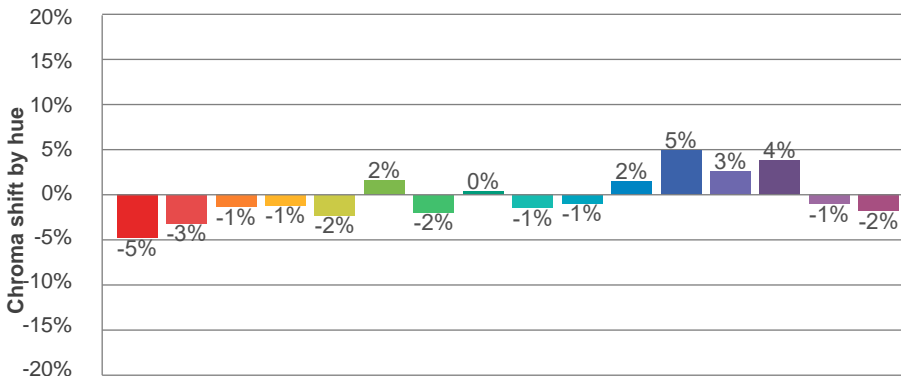
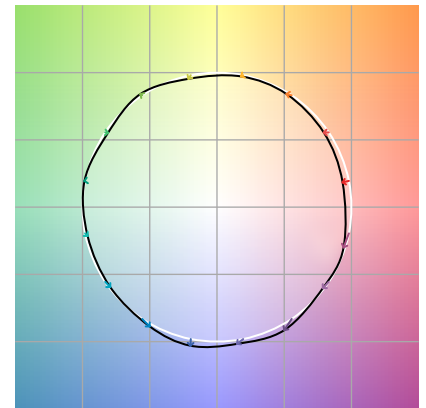
TM-30Color



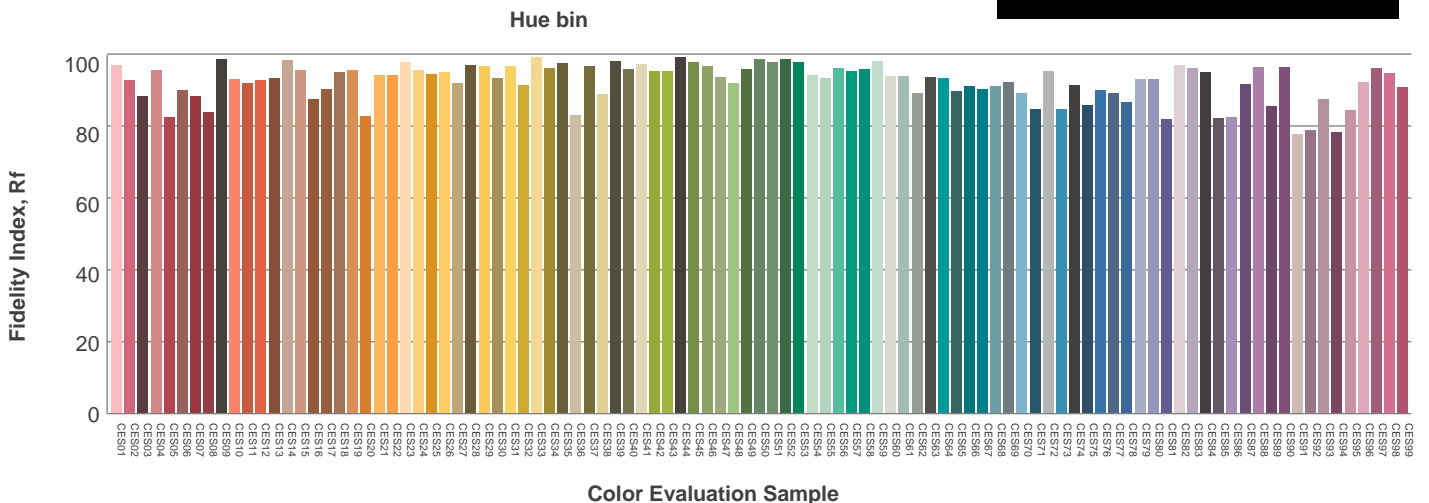
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	1%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-1%	2%
10	91	-1%	5%
11	89	2%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-2%	-11%



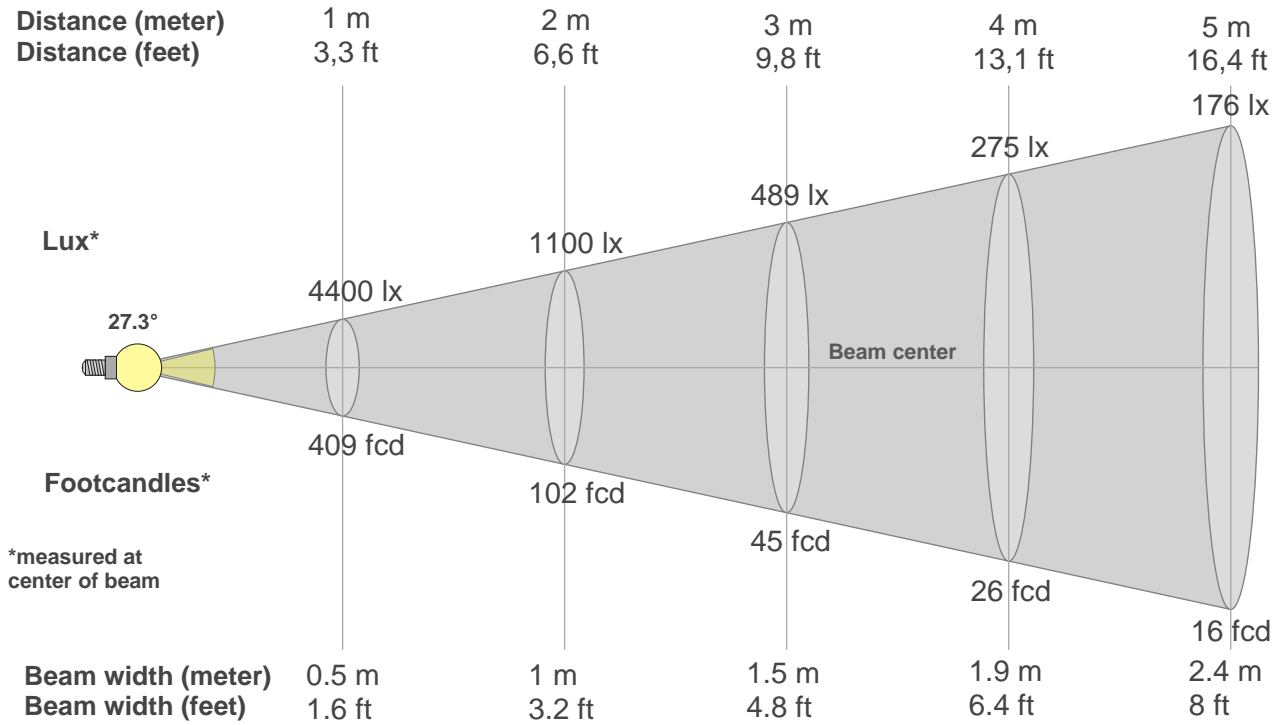
Color vector graphics



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
4400lx	1100lx	489lx	275lx	176lx	122lx	90lx	69lx	54lx	44lx	36lx	31lx	26lx	22lx	20lx	17lx	15lx	14lx	12lx	11lx
408.7fc	102.2fc	45.4fcd	25.5fcd	16.3fcd	11.4fcd	8.3fcd	6.4fcd	5fcd	4.1fcd	3.4fcd	2.8fcd	2.4fcd	2.1fcd	1.8fcd	1.6fcd	1.4fcd	1.3fcd	1.1fcd	1fcd

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°
4400	4324	4118	3802	3414	2991	2560	2148	1785	1478	1220	1000	811	639	480	340	230	150	96	62
100%	98%	94%	86%	78%	68%	58%	49%	41%	34%	28%	23%	18%	15%	11%	8%	5%	3%	2%	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°
4400	4329	4124	3804	3392	2951	2517	2110	1748	1448	1204	1009	836	671	512	363	237	149	92	56
100%	98%	94%	86%	77%	67%	57%	48%	40%	33%	27%	23%	19%	15%	12%	8%	5%	3%	2%	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°
4400	4311	4099	3786	3403	2982	2551	2149	1795	1495	1242	1026	837	664	510	369	253	166	107	69
100%	98%	93%	86%	77%	68%	58%	49%	41%	34%	28%	23%	19%	15%	12%	8%	6%	4%	2%	2%

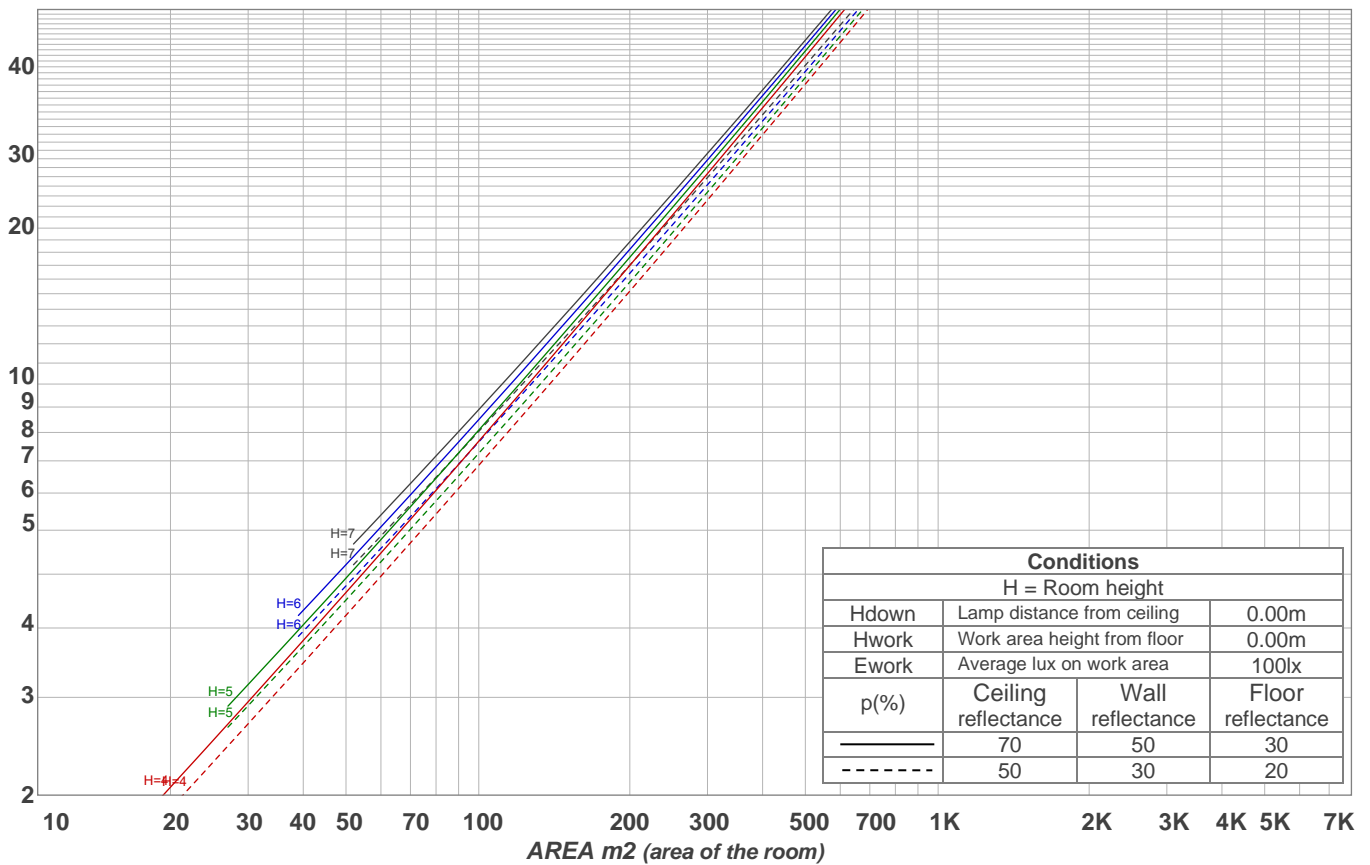
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
4400	4331	4131	3815	3410	2971	2528	2107	1733	1425	1177	972	793	627	471	331	215	133	82	51
100%	98%	94%	87%	78%	68%	57%	48%	39%	32%	27%	22%	18%	14%	11%	8%	5%	3%	2%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
27.3°	57.4°	70.6°	98.9%	98.1%

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

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
346 lm	537 lm	333 lm	86.1 lm	13.5 lm	6.22 lm	5.04 lm	4.82 lm	4.22 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