

Light efficiency:



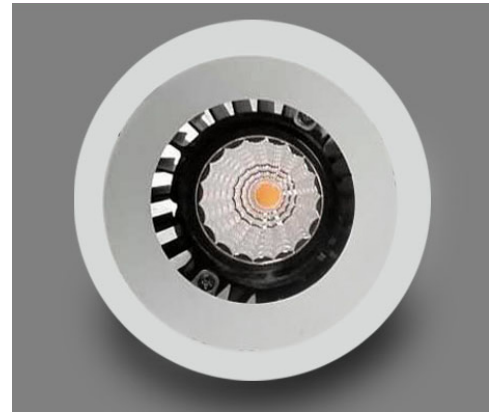
Output: 1812 lm

Light quality:

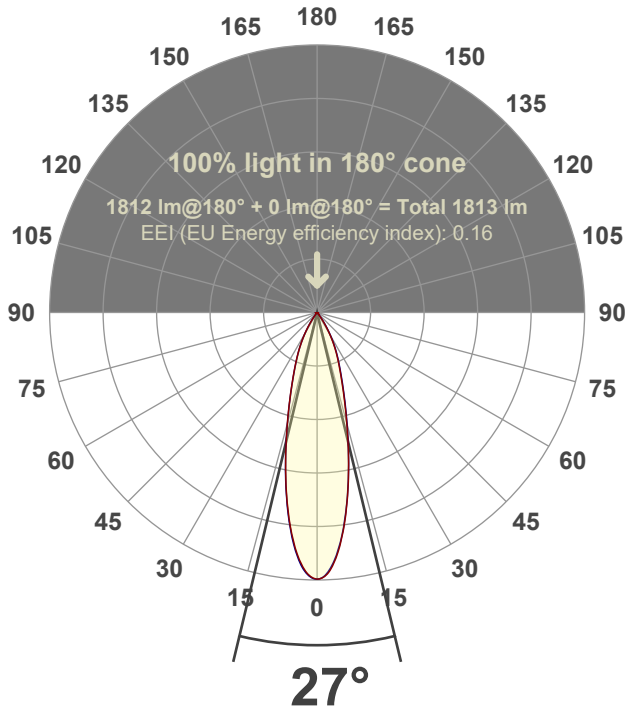


Peak: 5723 cd

Power: 20.7 W



Beam angle



Test number:

GR-O-F-CZ20-30k-NF-RD-91A-Rev2

Luminaire Model:

Graffiti Open Round Fixed Downlight-CZ20 30k 24° Optic-Solite

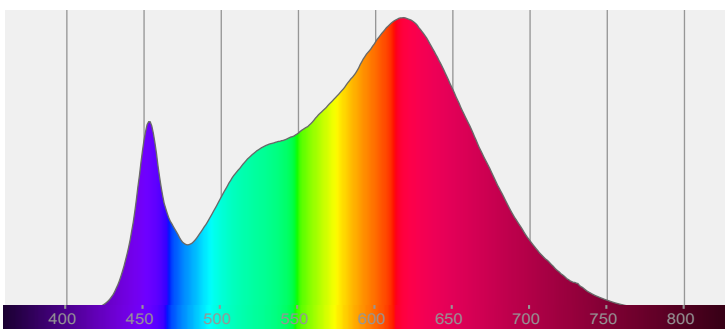
Date and time:

3/2/2022 11:03:47 PM

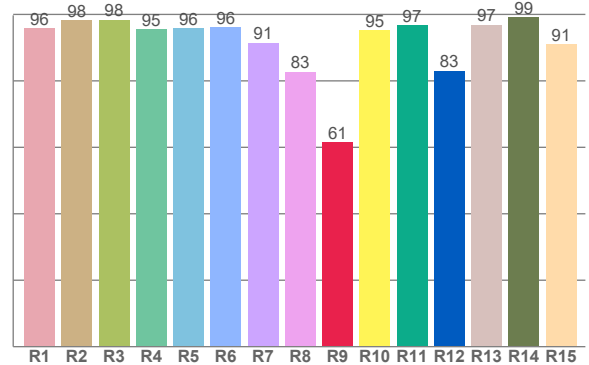
Delivered Lumens

1812

Spectra



CRI: 94.2 (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 <sub>f</sub>	TM30 R <sub>g</sub>	CQS	x	y	u	v	Δuv
	94.2	61.5	92.1	100.4	91.5	0.425	0.394	0.247	0.344	-0.0024

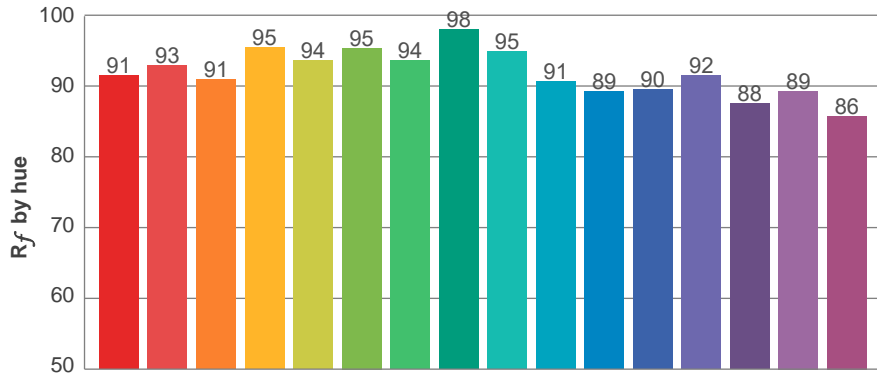
**$R_f$  92.1**  
Fidelity index  $R_f$

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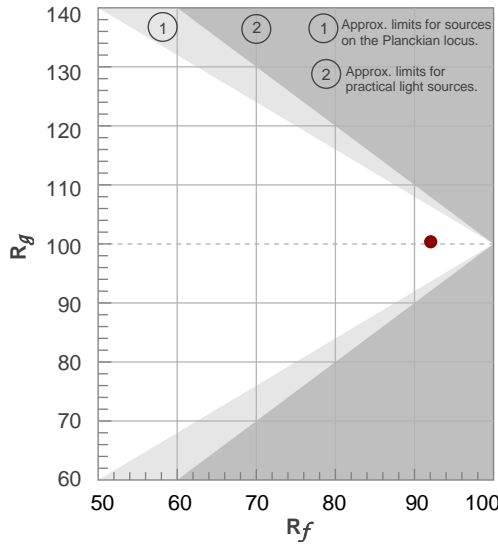
**$R_g$  100.4**  
Gammut index  $R_g$

TM30: 92.1

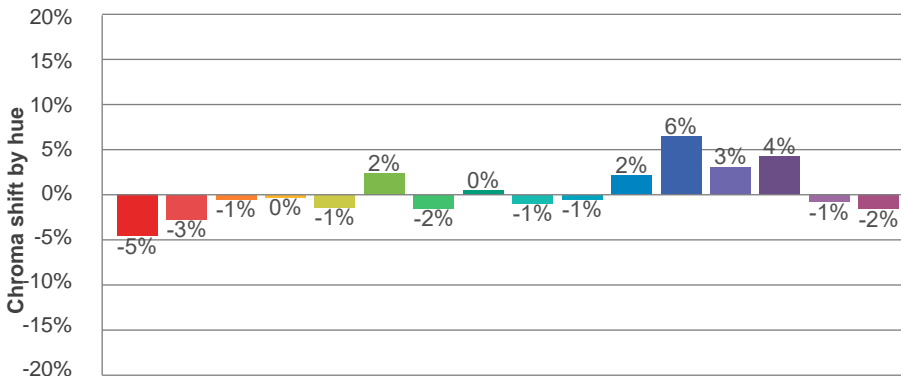
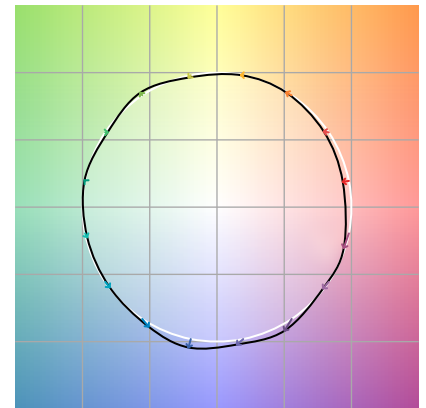
TM-30Color



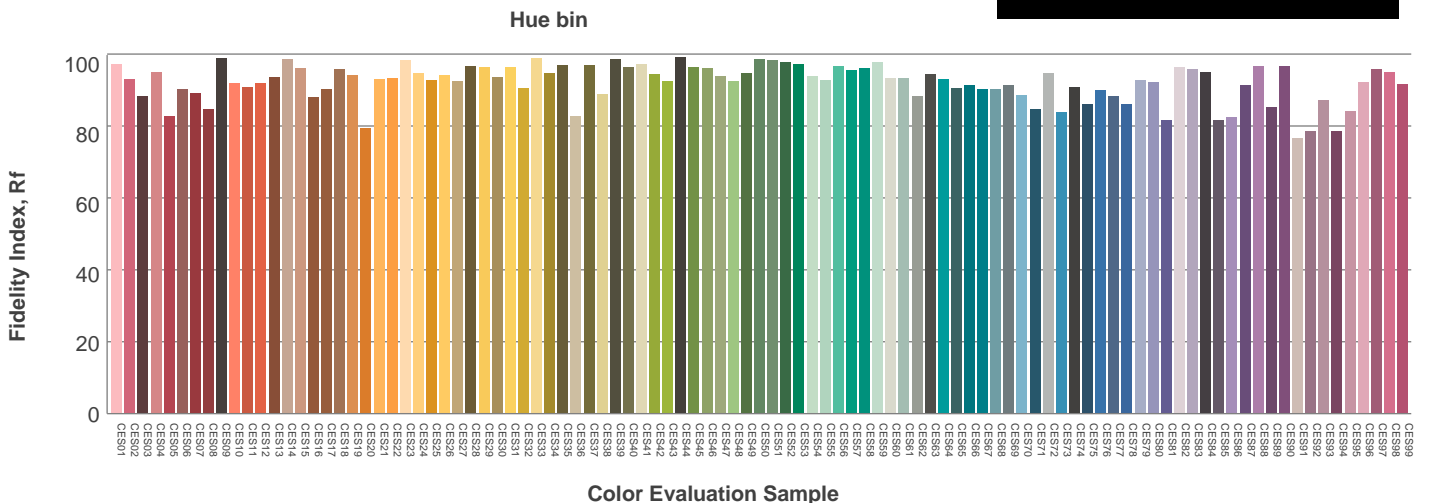
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	3%
3	91	-1%	5%
4	95	0%	2%
5	94	-1%	2%
6	95	2%	0%
7	94	-2%	-1%
8	98	0%	0%
9	95	-1%	3%
10	91	-1%	5%
11	89	2%	7%
12	90	6%	0%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-2%	-11%



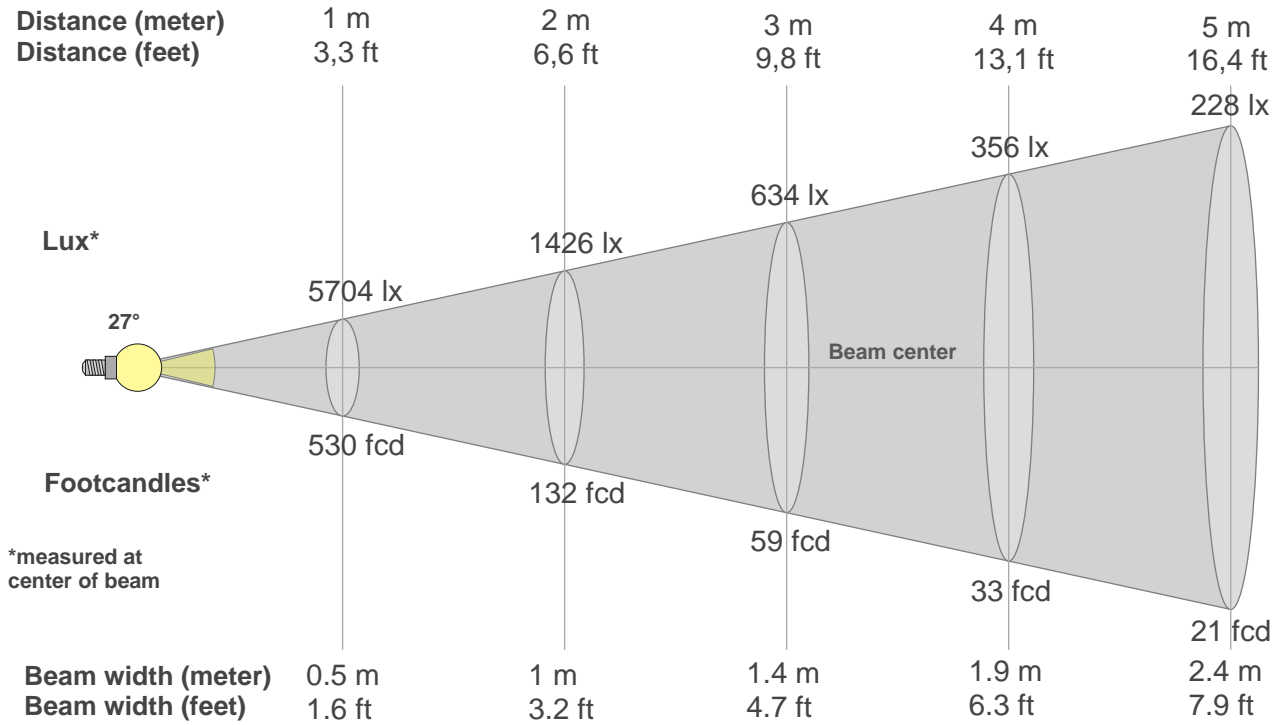
Color vector graphics



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
5704lx	1426lx	634lx	356lx	228lx	158lx	116lx	89lx	70lx	57lx	47lx	40lx	34lx	29lx	25lx	22lx	20lx	18lx	16lx	14lx
529.9fcd	132.5fcd	58.9fcd	33.1fcd	21.2fcd	14.7fcd	10.8fcd	8.3fcd	6.5fcd	5.3fcd	4.4fcd	3.7fcd	3.1fcd	2.7fcd	2.4fcd	2.1fcd	1.8fcd	1.6fcd	1.5fcd	1.3fcd

#### 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°
5704	5615	5335	4916	4401	3832	3264	2732	2266	1873	1553	1300	1104	925	753	589	439	308	208	136
100%	98%	94%	86%	77%	67%	57%	48%	40%	33%	27%	23%	19%	16%	13%	10%	8%	5%	4%	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°
5704	5600	5328	4894	4375	3820	3265	2739	2282	1904	1593	1339	1130	948	777	618	468	335	227	149
100%	98%	93%	86%	77%	67%	57%	48%	40%	33%	28%	23%	20%	17%	14%	11%	8%	6%	4%	3%

#### 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°
5704	5606	5318	4901	4393	3834	3260	2731	2268	1875	1551	1292	1081	898	727	565	417	285	192	128
100%	98%	93%	86%	77%	67%	57%	48%	40%	33%	27%	23%	19%	16%	13%	10%	7%	5%	3%	2%

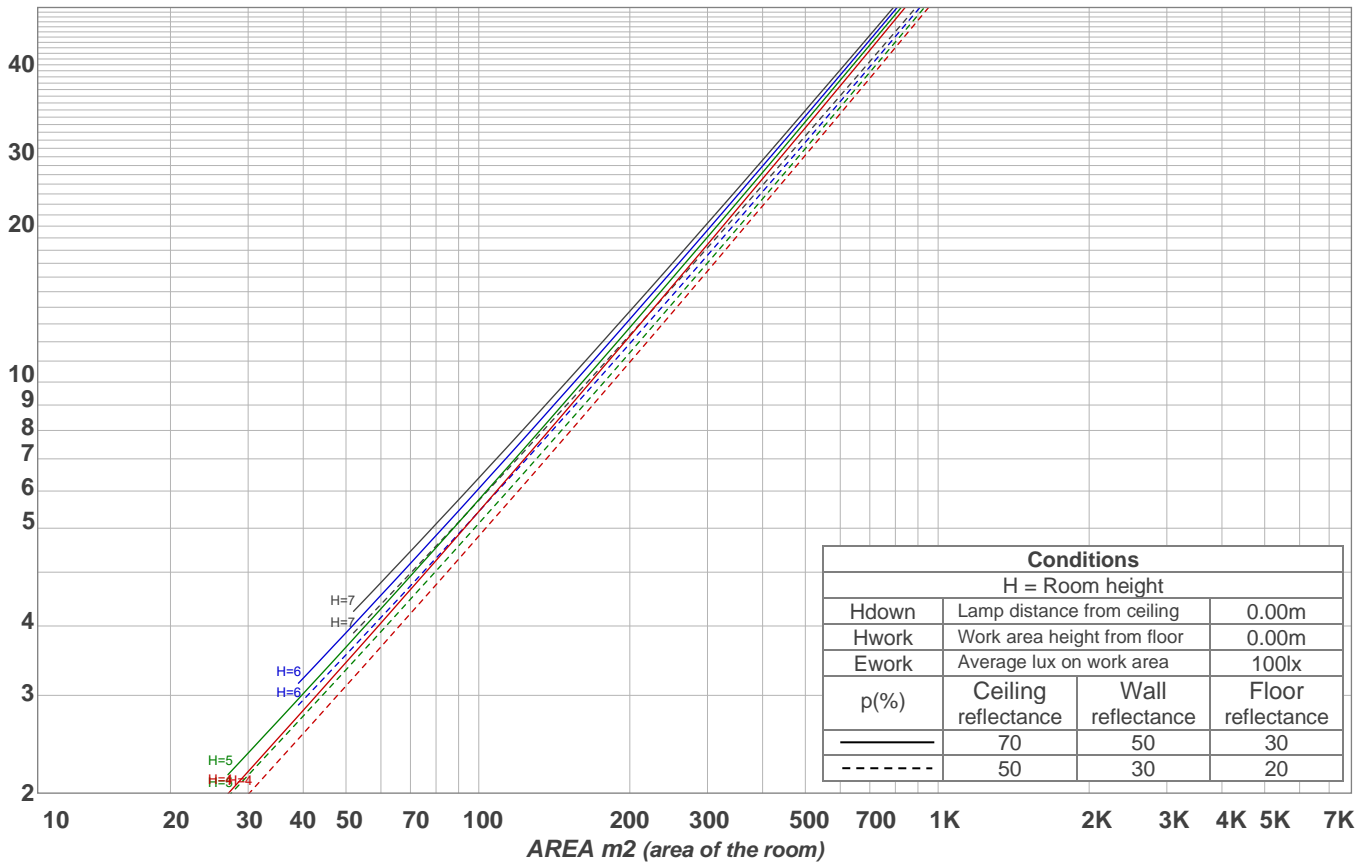
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5704	5606	5353	4945	4422	3848	3276	2734	2250	1849	1535	1282	1071	885	711	548	404	283	188	121
100%	98%	94%	87%	78%	67%	57%	48%	39%	32%	27%	22%	19%	16%	12%	10%	7%	5%	3%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
27°	60.2°	75.3°	99.2%	98.4%

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	91	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	79	75	90	83	78	75	82	78	75	81	77	74	79	76	74	73	73	73	
8	88	80	75	72	87	80	75	72	79	74	71	78	74	71	77	73	71	70	70	70	
9	85	77	72	69	84	77	72	69	76	72	69	75	71	68	74	71	68	67	67	67	
10	82	74	69	66	81	74	69	66	73	69	66	72	69	66	72	68	66	65	65	65	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
448 lm	690 lm	459 lm	168 lm	26.6 lm	6.94 lm	4.77 lm	4.81 lm	4.21 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