

Light efficiency:



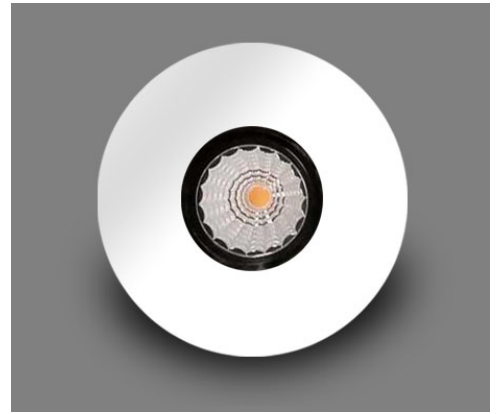
Output: 688 lm

Light quality:

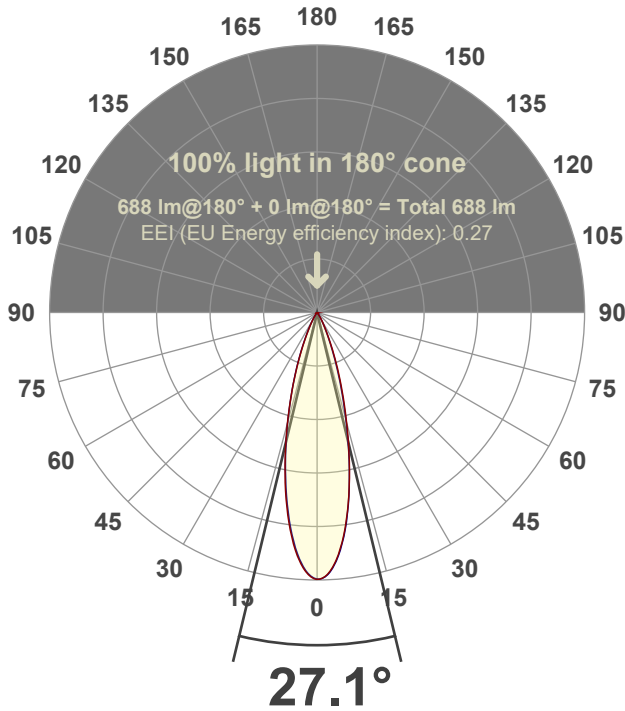


Peak: 2576 cd

Power: 15.0 W



Beam angle



Test number:

GR-F-F-A14-3022-NF-RD-91A-Rev2

Luminaire Model:

Graffiti Flat Round Fixed Downlight-A14-3022 24° Optic-Solite

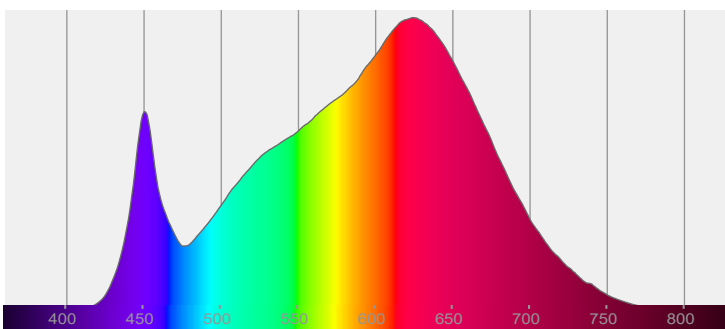
Date and time:

3/24/2022 4:31:20 PM

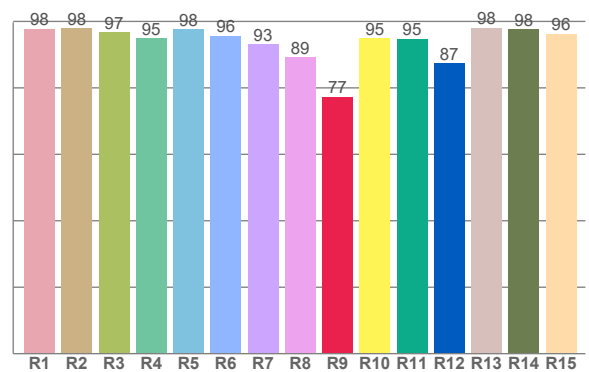
Delivered Lumens

688

Spectra



CRI: 95.4 (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
	95.4	77.3	91.8	103.8	90.7	0.423	0.384	0.250	0.341	-0.0063

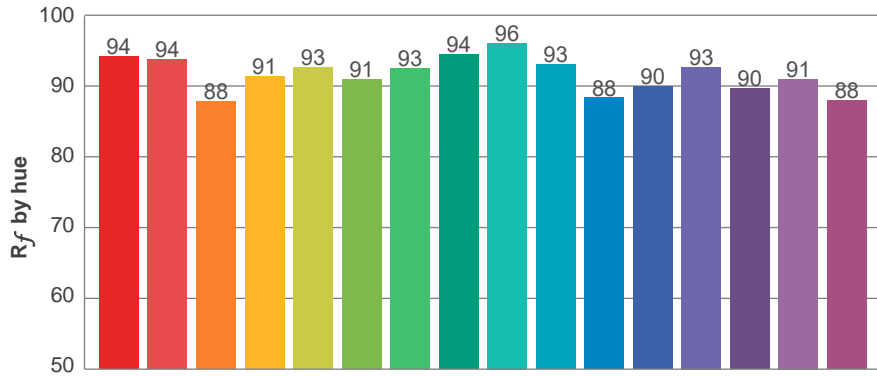
**$R_f$  91.8**  
Fidelity index  $R_f$

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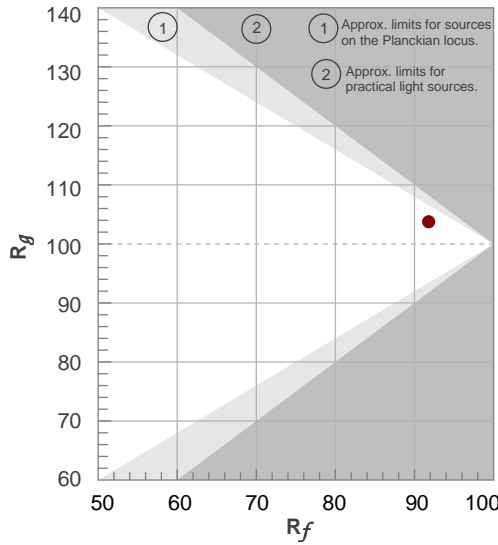
**$R_g$  103.8**  
Gammut index  $R_g$

TM30: 91.8

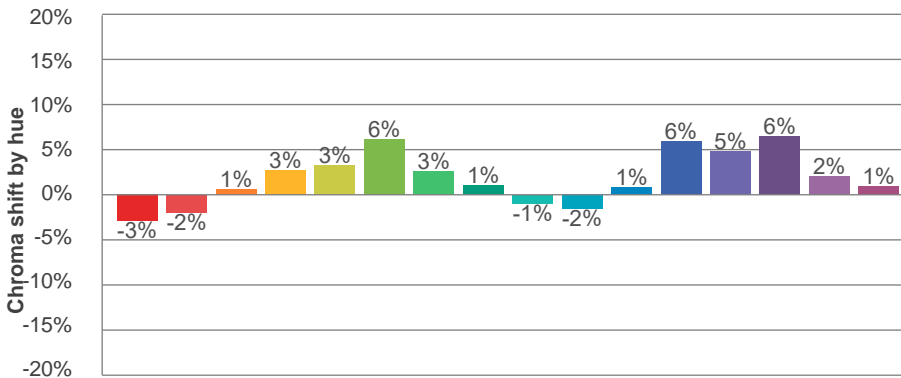
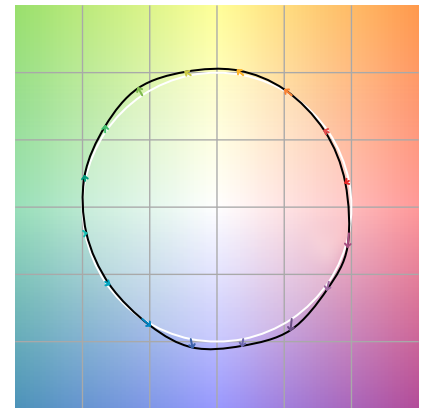
TM-30Color



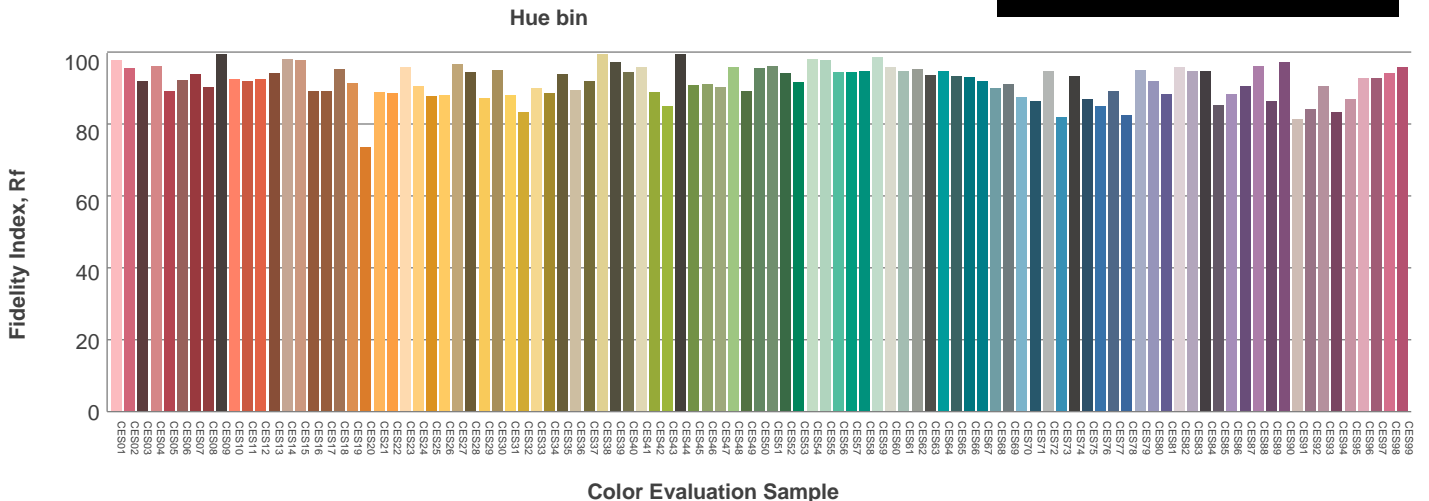
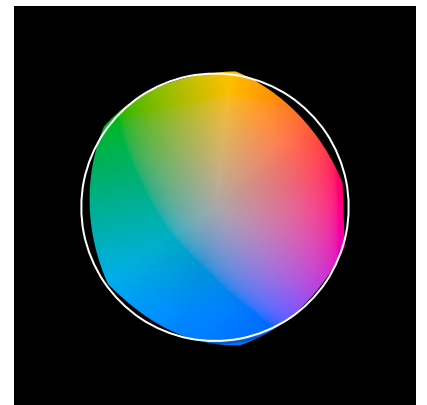
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	94	-3%	-1%
2	94	-2%	3%
3	88	1%	6%
4	91	3%	5%
5	93	3%	3%
6	91	6%	0%
7	93	3%	-4%
8	94	1%	-3%
9	96	-1%	0%
10	93	-2%	3%
11	88	1%	8%
12	90	6%	3%
13	93	5%	-2%
14	90	6%	-5%
15	91	2%	-6%
16	88	1%	-10%



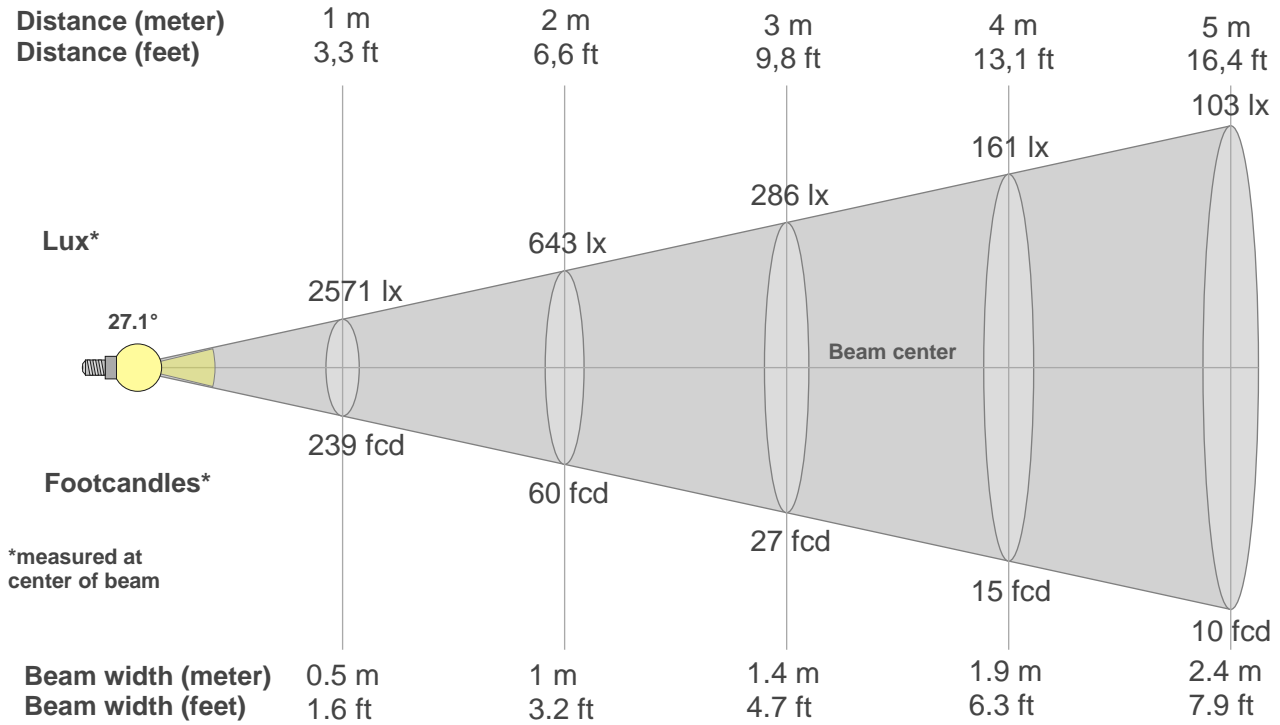
Color vector graphics



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
2571lx	643lx	286lx	161lx	103lx	71lx	52lx	40lx	32lx	26lx	21lx	18lx	15lx	13lx	11lx	10lx	9lx	8lx	7lx	6lx
238.8fcd	59.7fcd	26.5fcd	14.9fcd	9.6fcd	6.6fcd	4.9fcd	3.7fcd	2.9fcd	2.4fcd	2fcd	1.7fcd	1.4fcd	1.2fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.7fcd	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°
2571	2542	2424	2247	2026	1774	1506	1236	992	778	592	435	308	216	155	112	81	59	43	32
100%	99%	94%	87%	79%	69%	59%	48%	39%	30%	23%	17%	12%	8%	6%	4%	3%	2%	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°
2571	2536	2428	2258	2037	1778	1496	1218	964	742	555	400	287	204	144	101	70	49	35	25
100%	99%	94%	88%	79%	69%	58%	47%	37%	29%	22%	16%	11%	8%	6%	4%	3%	2%	1%	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°
2571	2519	2400	2225	2005	1758	1495	1240	1001	784	596	440	317	225	158	111	79	57	42	31
100%	98%	93%	87%	78%	68%	58%	48%	39%	31%	23%	17%	12%	9%	6%	4%	3%	2%	2%	1%

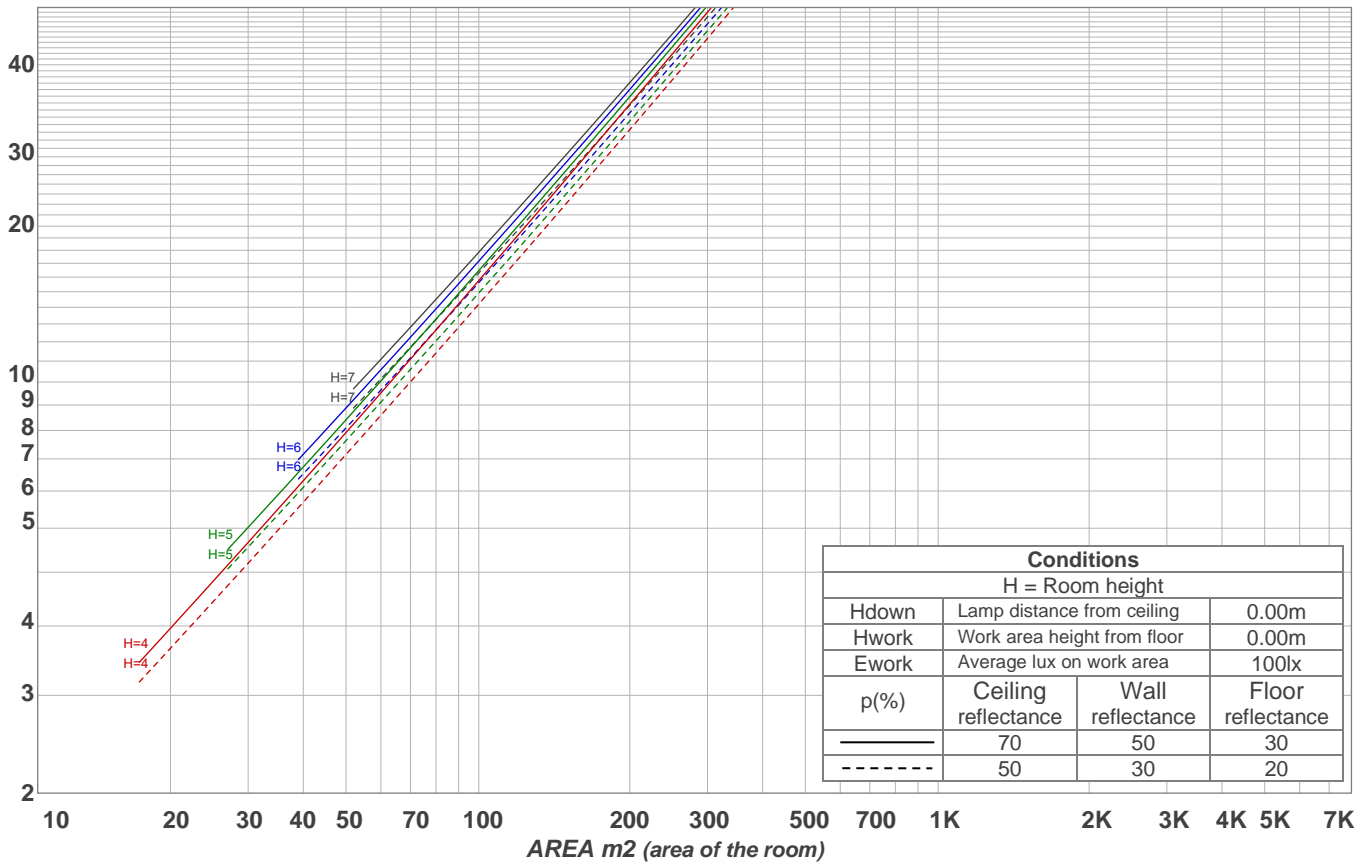
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2571	2517	2386	2201	1978	1731	1474	1225	991	783	603	447	319	226	158	110	76	53	36	25
100%	98%	93%	86%	77%	67%	57%	48%	39%	30%	23%	17%	12%	9%	6%	4%	3%	2%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
27.1°	50.1°	66.1°	98.4%	97.2%

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	105	103	102	101	100	99	98	97	95	95	95	95
2	110	106	103	100	108	105	102	99	101	99	97	99	97	95	96	94	93	91	91	91	91
3	106	101	97	94	105	100	96	93	97	94	92	95	93	91	93	91	89	88	88	88	88
4	103	97	92	89	101	96	92	89	94	90	88	92	89	87	90	88	86	84	84	84	84
5	99	93	88	85	98	92	88	85	90	87	84	89	86	83	87	85	83	81	81	81	81
6	96	89	85	81	95	89	84	81	87	83	81	86	83	80	85	82	80	79	79	79	79
7	93	86	82	78	92	85	81	78	84	81	78	83	80	77	82	79	77	76	76	76	76
8	90	83	79	76	89	83	78	75	82	78	75	81	77	75	80	77	75	74	74	74	74
9	88	80	76	73	87	80	76	73	79	75	73	78	75	72	78	74	72	71	71	71	71
10	85	78	74	71	84	77	73	71	77	73	70	76	73	70	75	72	70	69	69	69	69

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
204 lm	302 lm	127 lm	31.3 lm	8.57 lm	4.85 lm	4.74 lm	3.97 lm	2.55 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