

Light efficiency:



Output: 635 lm

Light quality:

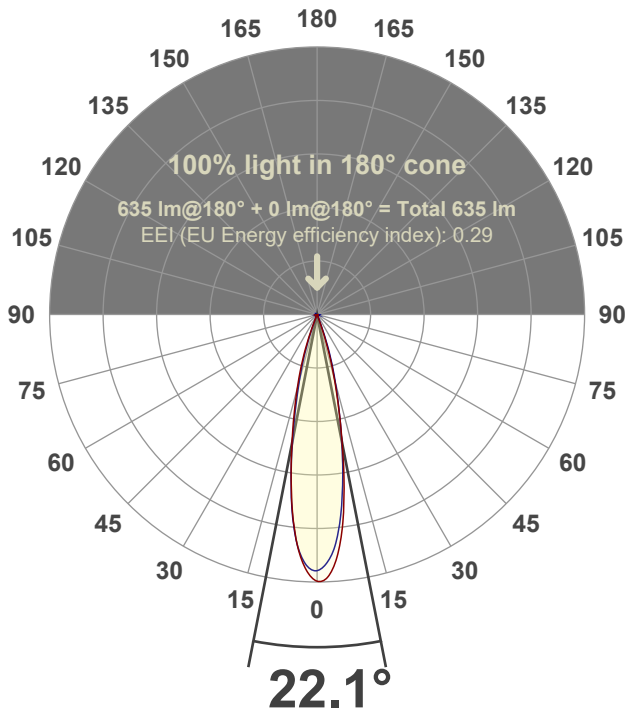


Peak: 4067 cd

Power: 15.0 W



Beam angle



Test number:

GR-F-F-A14-2722-NF-SQ-Rev2

Luminaire Model:

Graffiti Flat Square Fixed Downlight-A14-2722 24° Optic

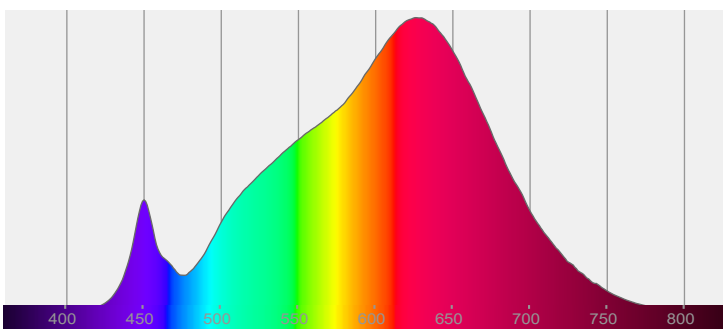
Date and time:

6/30/2022 5:43:06 PM

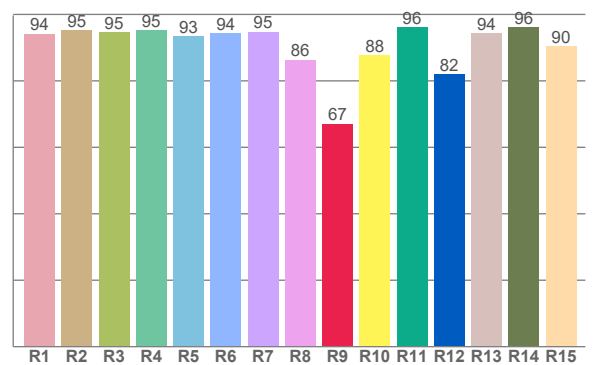
Delivered Lumens

635

Spectra



CRI: 93.5 (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 <sub>f</sub>	TM30 R <sub>g</sub>	CQS	x	y	u	v	Δuv
	93.5	67.0	92.8	100.7	91.5	0.458	0.414	0.260	0.352	0.0015

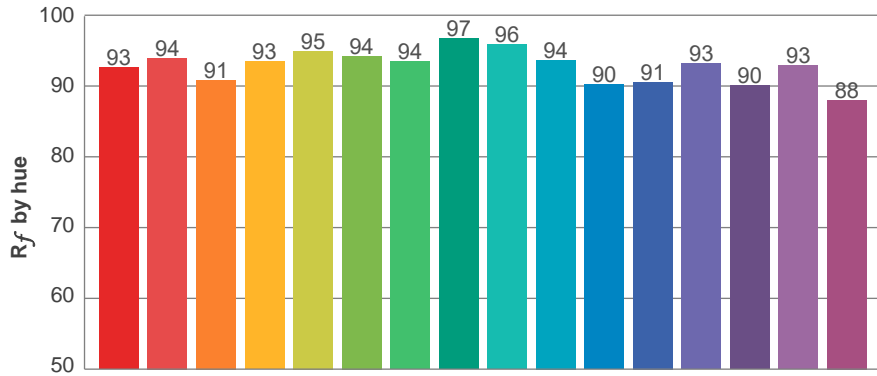
**$R_f$  92.8**  
Fidelity index  $R_f$

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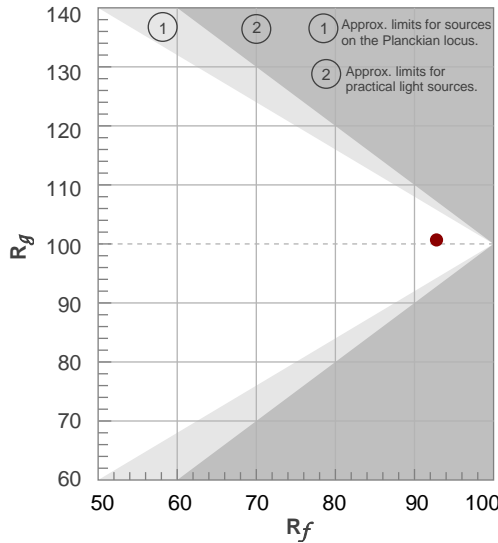
**$R_g$  100.7**  
Gammut index  $R_g$

TM30: 92.8

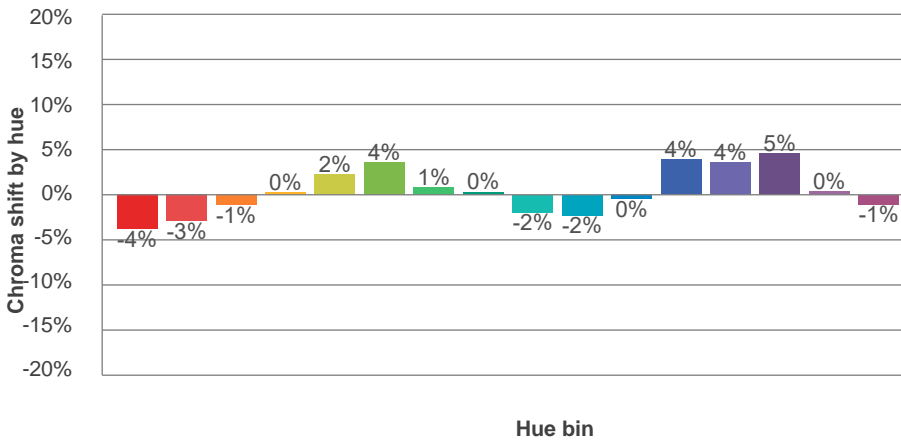
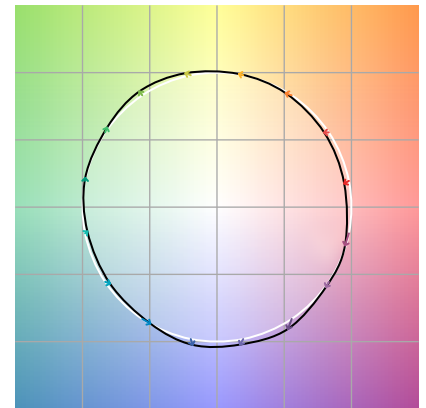
TM-30Color



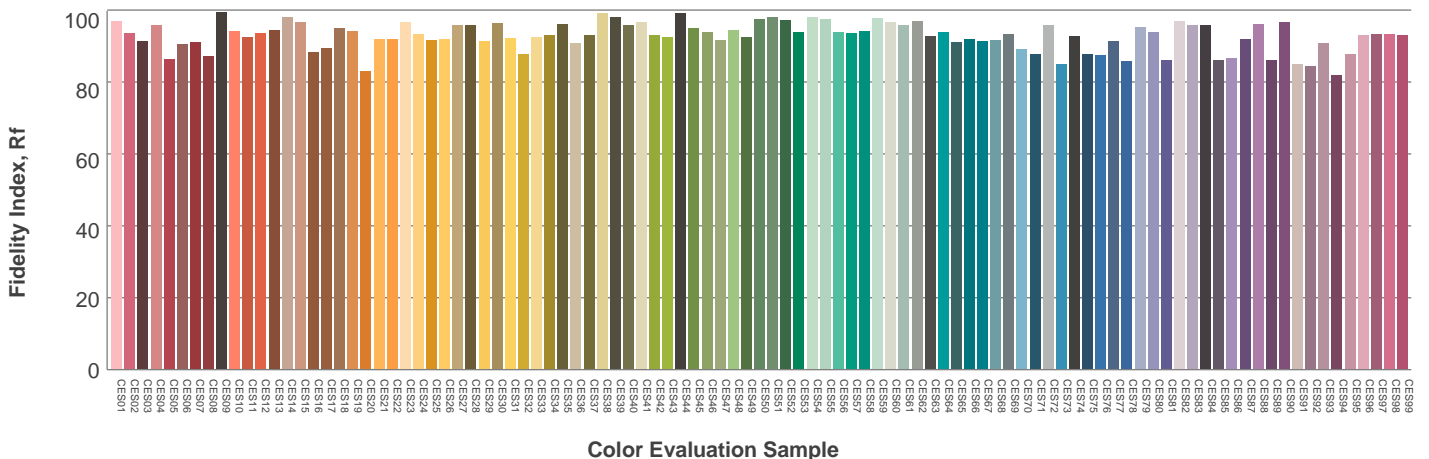
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	93	-4%	-1%
2	94	-3%	2%
3	91	-1%	5%
4	93	0%	3%
5	95	2%	4%
6	94	4%	0%
7	94	1%	-4%
8	97	0%	-2%
9	96	-2%	-1%
10	94	-2%	3%
11	90	0%	7%
12	91	4%	2%
13	93	4%	-3%
14	90	5%	-6%
15	93	0%	-4%
16	88	-1%	-9%



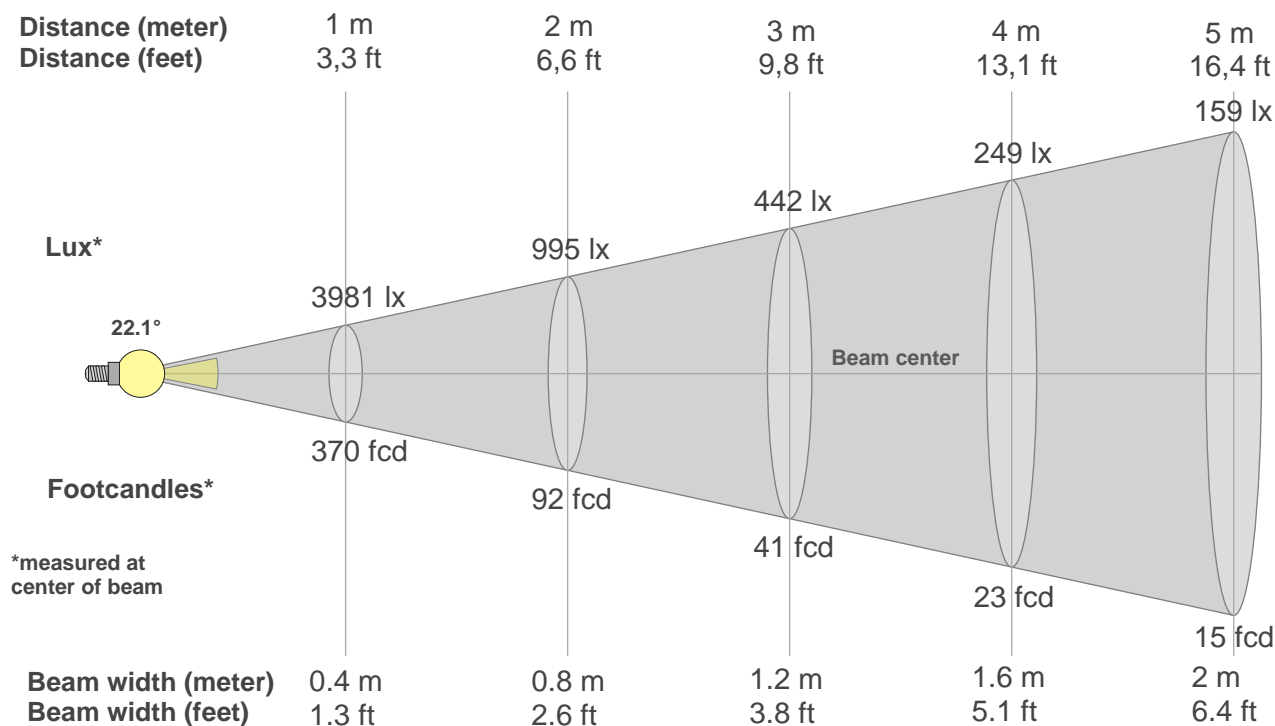
Color vector graphics



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
3981lx	995lx	442lx	249lx	159lx	111lx	81lx	62lx	49lx	40lx	33lx	28lx	24lx	20lx	18lx	16lx	14lx	12lx	11lx	10lx
369.8fcd	92.5fcd	41.1fcd	23.1fcd	14.8fcd	10.3fcd	7.5fcd	5.8fcd	4.6fcd	3.7fcd	3.1fcd	2.6fcd	2.2fcd	1.9fcd	1.6fcd	1.4fcd	1.3fcd	1.1fcd	1fcd	0.9fcd

#### Intensities in 0° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
3981	4042	4018	3925	3800	3647	3431	3214	2926	2634	2336	2034	1743	1495	1248	1044	849	666	496	332
100%	102%	101%	99%	95%	92%	86%	81%	74%	66%	59%	51%	44%	38%	31%	26%	21%	17%	12%	8%

#### Intensities in 90° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
3981	3853	3811	3701	3590	3426	3228	3015	2761	2507	2245	1983	1736	1507	1284	1102	919	758	602	452
100%	97%	96%	93%	90%	86%	81%	76%	69%	63%	56%	50%	44%	38%	32%	28%	23%	19%	15%	11%

#### Intensities in 180° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
3981	4002	3932	3818	3671	3508	3286	3063	2805	2540	2282	2034	1789	1581	1374	1193	1021	855	701	547
100%	101%	99%	96%	92%	88%	83%	77%	70%	64%	57%	51%	45%	40%	35%	30%	26%	21%	18%	14%

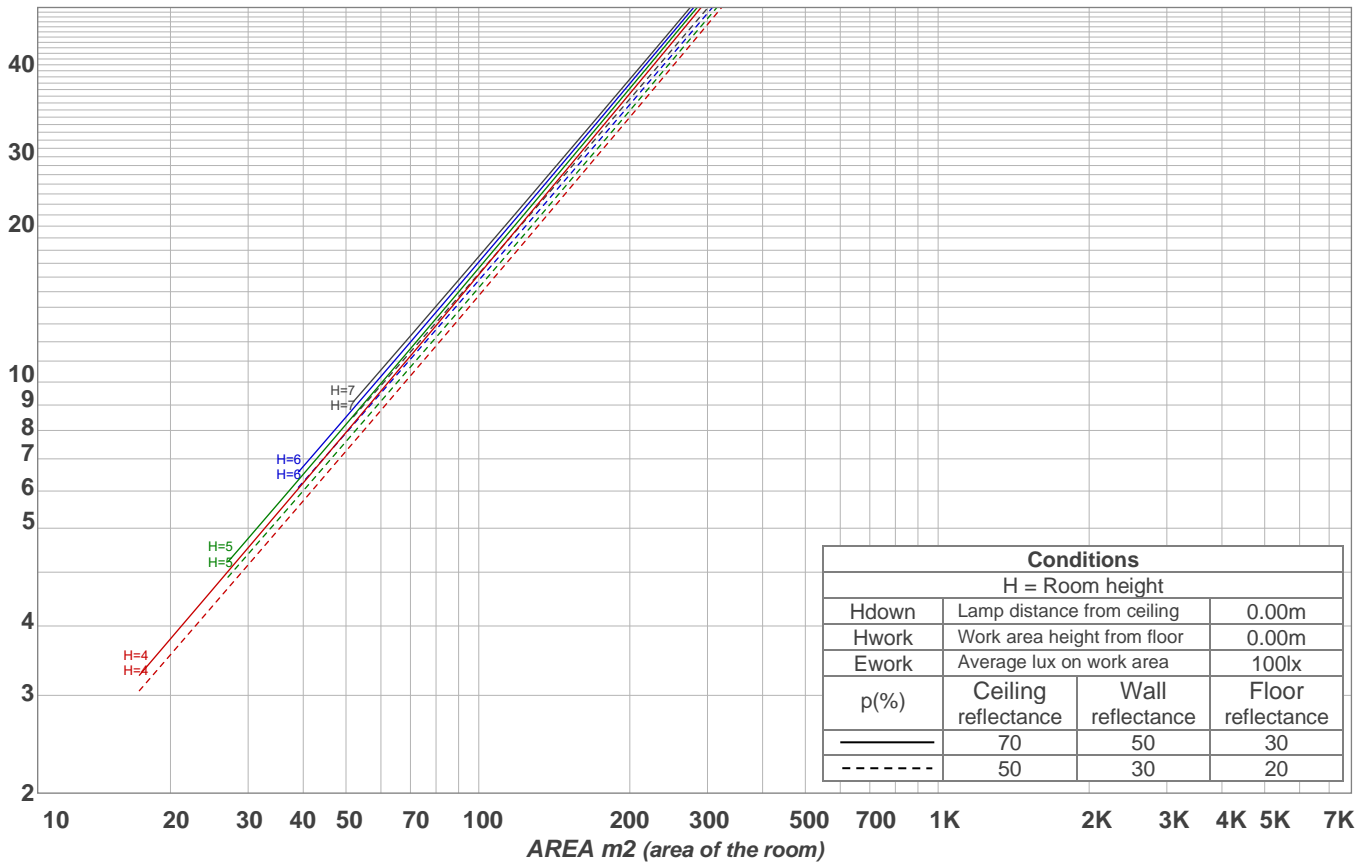
#### Intensities in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
3981	3881	3837	3769	3639	3509	3296	3074	2820	2539	2259	1984	1708	1478	1258	1060	891	722	566	409
100%	98%	96%	95%	91%	88%	83%	77%	71%	64%	57%	50%	43%	37%	32%	27%	22%	18%	14%	10%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
<b>22.1°</b>	<b>38.5°</b>	<b>43.8°</b>	<b>98.5%</b>	<b>97.9%</b>

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	115	113	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97	97	97	
2	112	108	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	94	94	94	
3	109	104	101	98	107	103	100	98	101	98	96	98	96	95	96	95	93	92	92	92	
4	106	101	98	95	104	100	97	94	98	95	93	96	94	92	95	93	91	90	90	90	
5	103	98	95	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88	88	88	
6	101	96	92	89	100	95	91	89	94	91	88	92	90	88	91	89	87	86	86	86	
7	99	93	90	87	98	93	89	87	92	89	86	91	88	86	90	87	86	85	85	85	
8	97	91	88	85	96	91	87	85	90	87	85	89	86	84	88	86	84	83	83	83	
9	95	89	86	83	94	89	85	83	88	85	83	87	85	83	87	84	82	82	82	82	
10	93	87	84	82	92	87	84	82	86	83	81	86	83	81	85	83	81	80	80	80	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
295 lm	300 lm	21.7 lm	3.38 lm	1.97 lm	2.97 lm	3.39 lm	2.86 lm	3.26 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