

Light efficiency:



Output: 919 lm

Light quality:

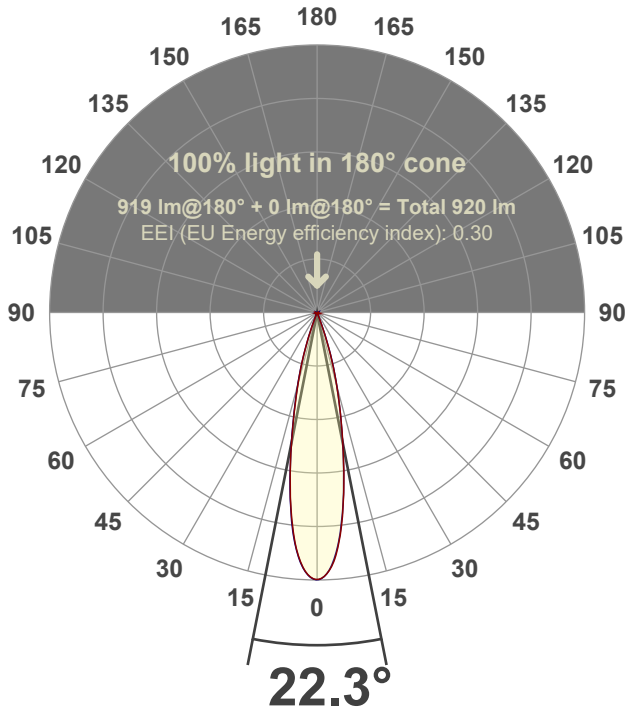


Peak: 5696 cd

Power: 21.3 W



Beam angle



Test number:

GR-F-F-A20-3019-NF-SQ-Rev2

Luminaire Model:

Graffiti Flat Square Fixed Downlight-A20-3019 24° Optic

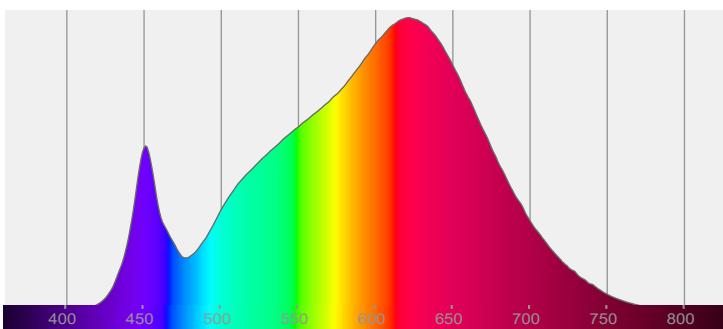
Date and time:

6/21/2022 8:39:43 PM

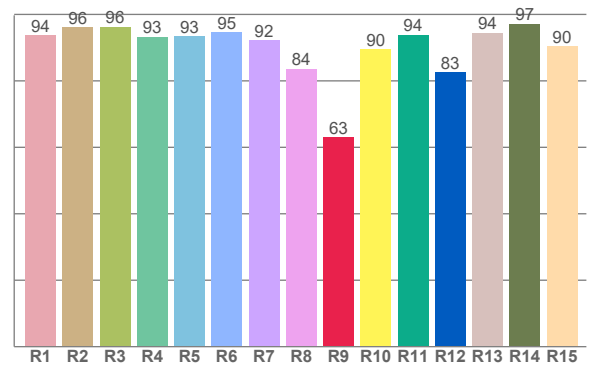
Delivered Lumens

919

Spectra



CRI: 92.9 (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
	92.9	62.9	91.1	101.6	89.9	0.435	0.398	0.252	0.346	-0.0024

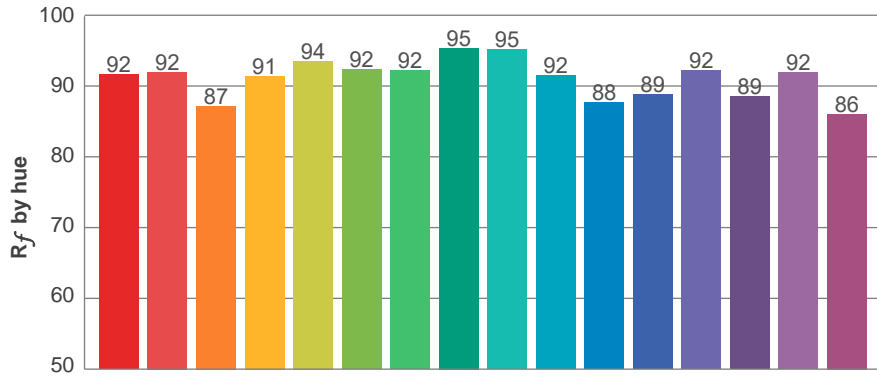
**$R_f$  91.1**  
Fidelity index  $R_f$

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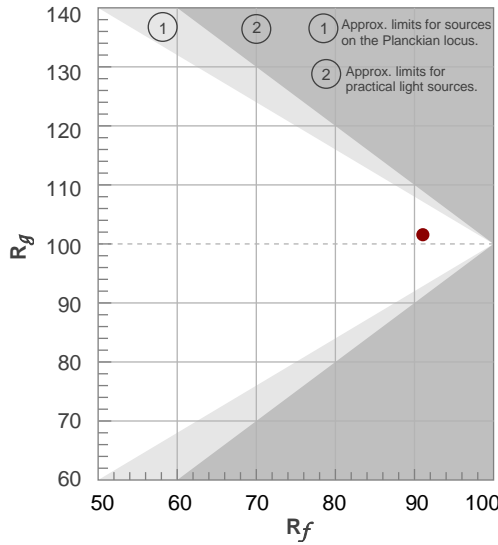
**$R_g$  101.6**  
Gammut index  $R_g$

TM30: 91.1

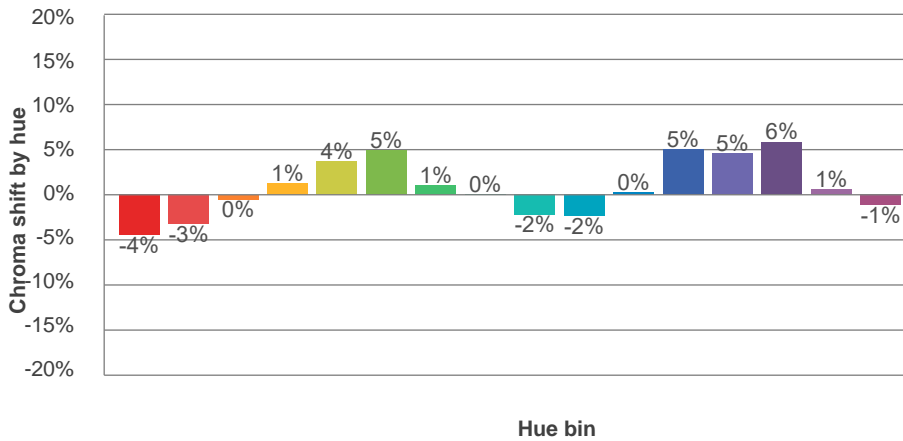
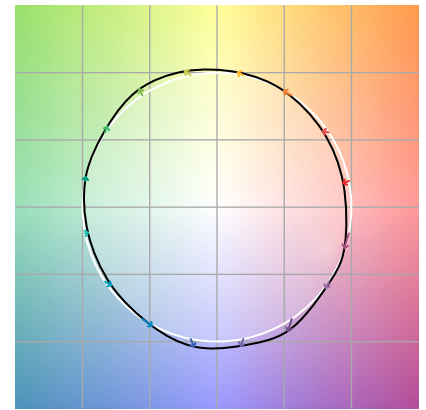
TM-30Color



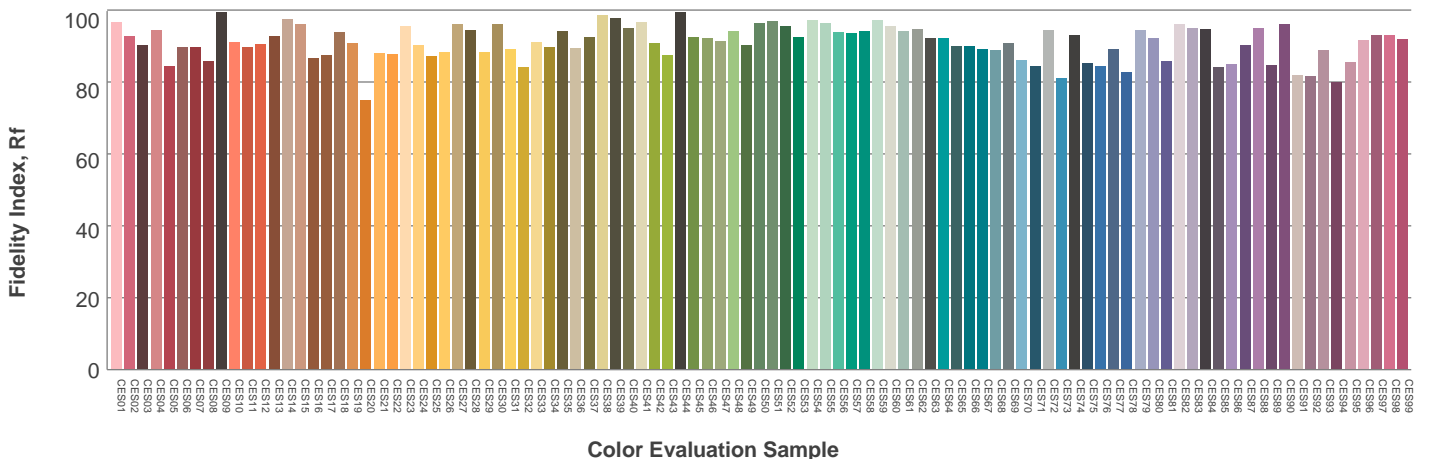
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	92	-3%	3%
3	87	0%	7%
4	91	1%	4%
5	94	4%	4%
6	92	5%	-1%
7	92	1%	-4%
8	95	0%	-3%
9	95	-2%	0%
10	92	-2%	5%
11	88	0%	9%
12	89	5%	3%
13	92	5%	-3%
14	89	6%	-7%
15	92	1%	-5%
16	86	-1%	-11%



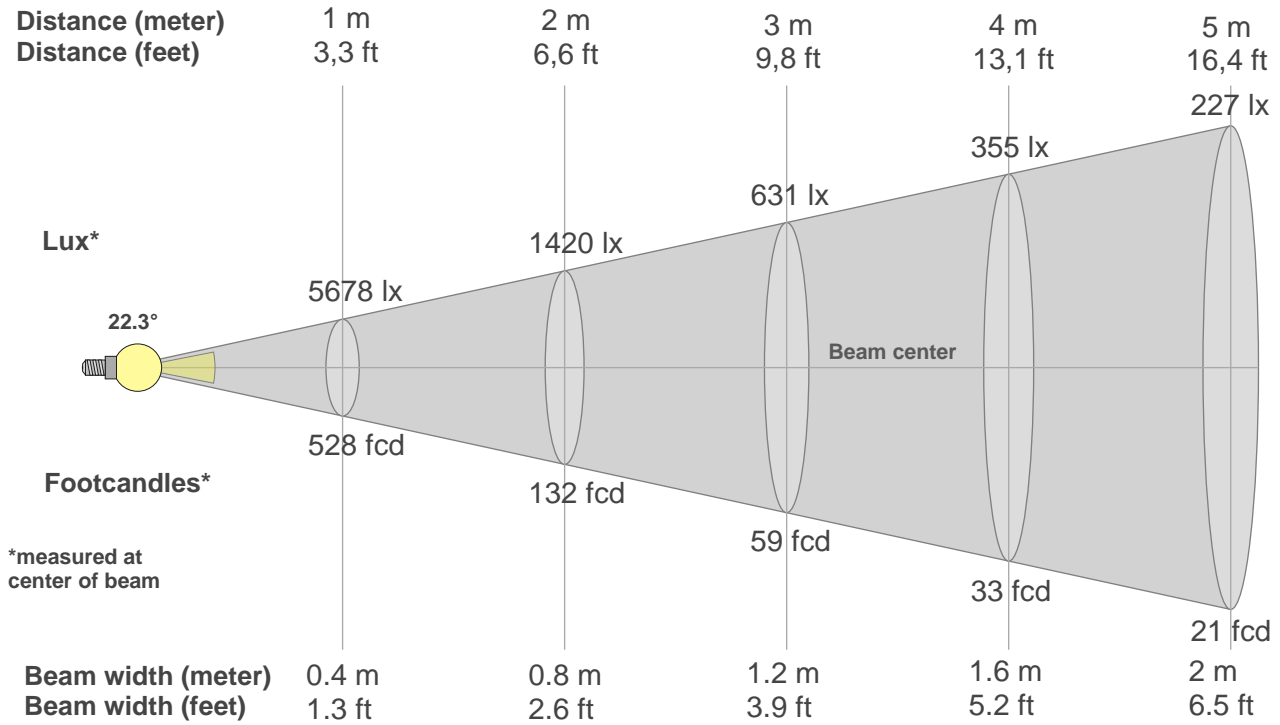
Color vector graphics



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
5678lx	1420lx	631lx	355lx	227lx	158lx	116lx	89lx	70lx	57lx	47lx	39lx	34lx	29lx	25lx	22lx	20lx	18lx	16lx	14lx
527.5fcd	131.9fcd	58.6fcd	33fcd	21.1fcd	14.7fcd	10.8fcd	8.2fcd	6.5fcd	5.3fcd	4.4fcd	3.7fcd	3.1fcd	2.7fcd	2.3fcd	2.1fcd	1.8fcd	1.6fcd	1.5fcd	1.3fcd

#### 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°
5678	5645	5588	5439	5290	5027	4741	4414	4041	3668	3289	2910	2569	2243	1935	1658	1381	1131	881	652
100%	99%	98%	96%	93%	89%	83%	78%	71%	65%	58%	51%	45%	40%	34%	29%	24%	20%	16%	11%

#### 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°
5678	5663	5560	5457	5234	5002	4711	4374	4027	3642	3258	2900	2548	2224	1933	1646	1399	1152	910	669
100%	100%	98%	96%	92%	88%	83%	77%	71%	64%	57%	51%	45%	39%	34%	29%	25%	20%	16%	12%

#### 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°
5678	5658	5570	5475	5264	5053	4758	4426	4075	3685	3294	2910	2527	2189	1883	1591	1349	1107	880	654
100%	100%	98%	96%	93%	89%	84%	78%	72%	65%	58%	51%	44%	39%	33%	28%	24%	20%	15%	12%

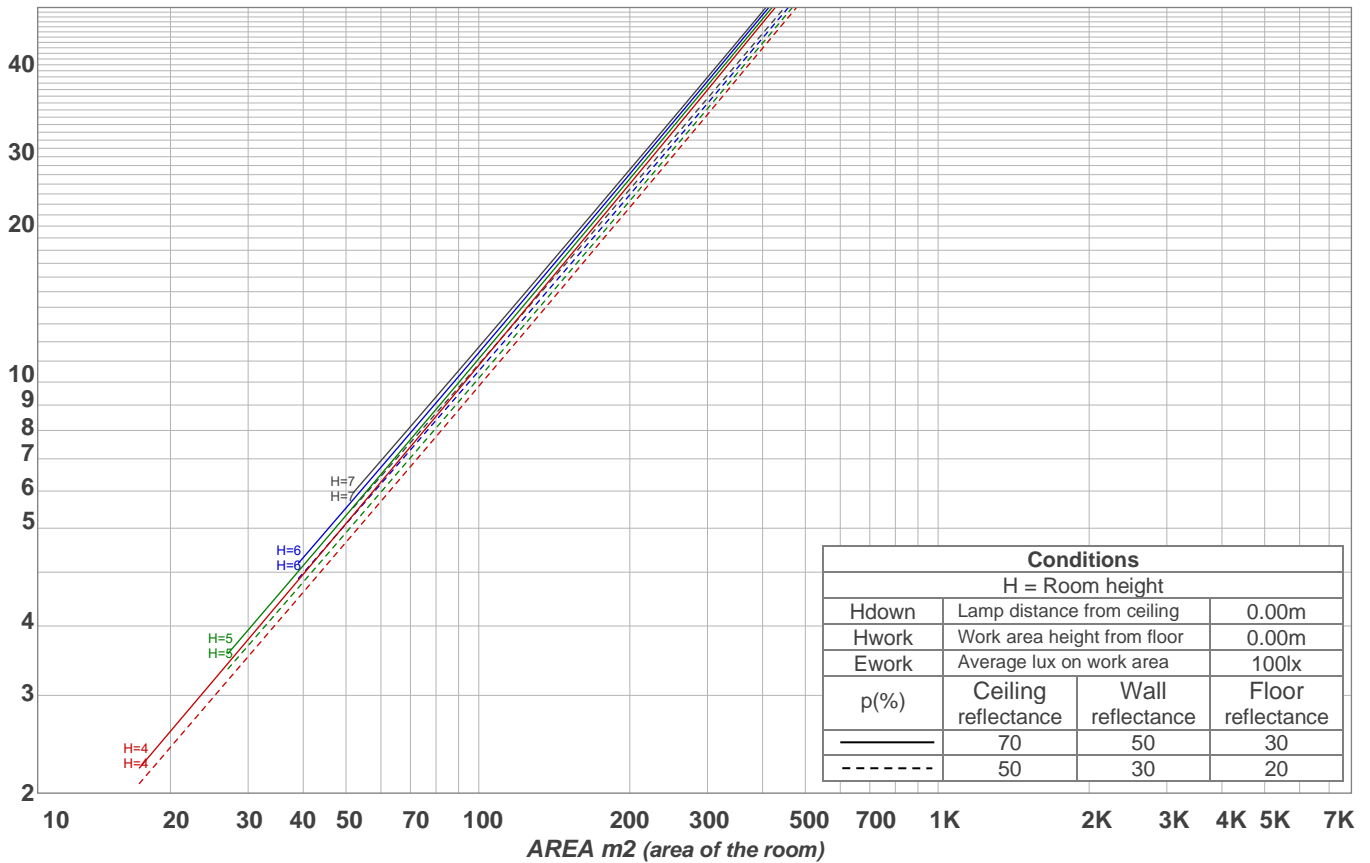
#### Intensities in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
5678	5657	5595	5454	5313	5055	4792	4465	4092	3713	3310	2908	2556	2213	1904	1630	1359	1111	863	649
100%	100%	99%	96%	94%	89%	84%	79%	72%	65%	58%	51%	45%	39%	34%	29%	24%	20%	15%	11%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
<b>22.3°</b>	<b>38.8°</b>	<b>44.1°</b>	<b>98.9%</b>	<b>98.6%</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	103	102	100	99	99	97	97	97	
2	112	109	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95	95	95	
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92	92	92	
4	106	101	98	95	105	100	97	95	98	96	94	97	94	93	95	93	92	90	90	90	
5	104	98	95	92	102	98	94	92	96	93	91	95	92	90	93	91	90	89	89	89	
6	101	96	92	90	100	95	92	89	94	91	89	93	90	88	92	89	88	87	87	87	
7	99	93	90	87	98	93	90	87	92	89	87	91	88	86	90	88	86	85	85	85	
8	97	91	88	85	96	91	88	85	90	87	85	89	87	85	88	86	84	83	83	83	
9	95	89	86	83	94	89	86	83	88	85	83	88	85	83	87	84	83	82	82	82	
10	93	88	84	82	93	87	84	82	87	84	82	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°
424 lm	439 lm	35.1 lm	6.70 lm	2.23 lm	1.91 lm	2.50 lm	3.46 lm	4.03 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