

Light efficiency:



Output: 645 lm

Light quality:

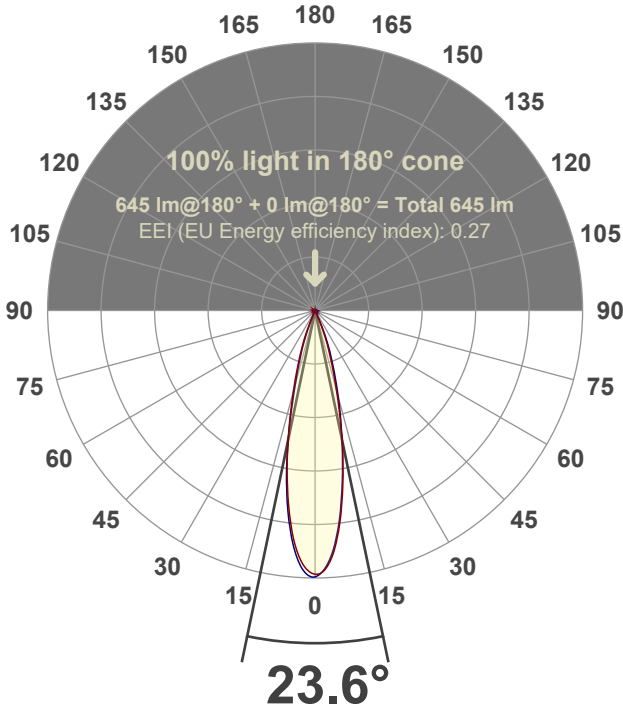


Peak: 3552 cd

Power: 14.7 W



Beam angle



Test number:

GR-F-F-A14-3019-NF-RD-Rev2

Luminaire Model:

Graffiti Flat Round Fixed Downlight-A14-3019 24° Optic

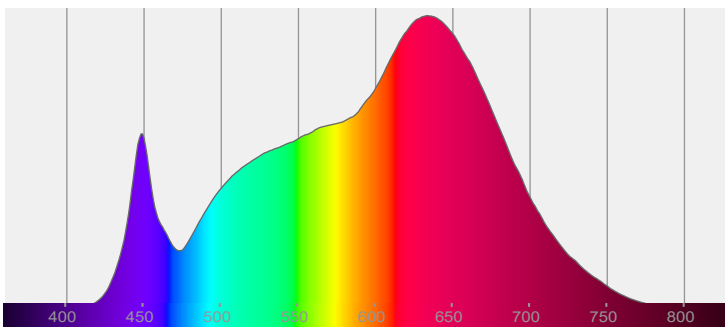
Date and time:

3/24/2022 9:33:24 PM

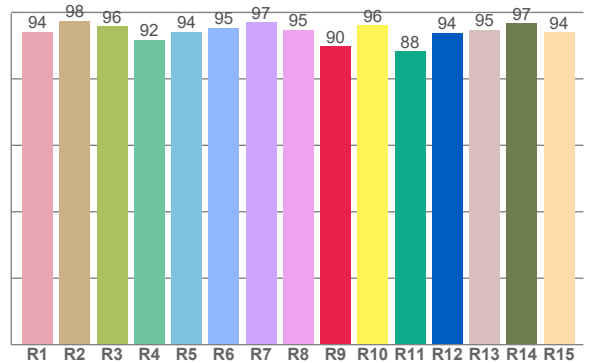
Delivered Lumens

645

Spectra



CRI: 95.1 (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
	95.1	89.7	94.9	105.4	95.1	0.423	0.389	0.248	0.342	-0.0043

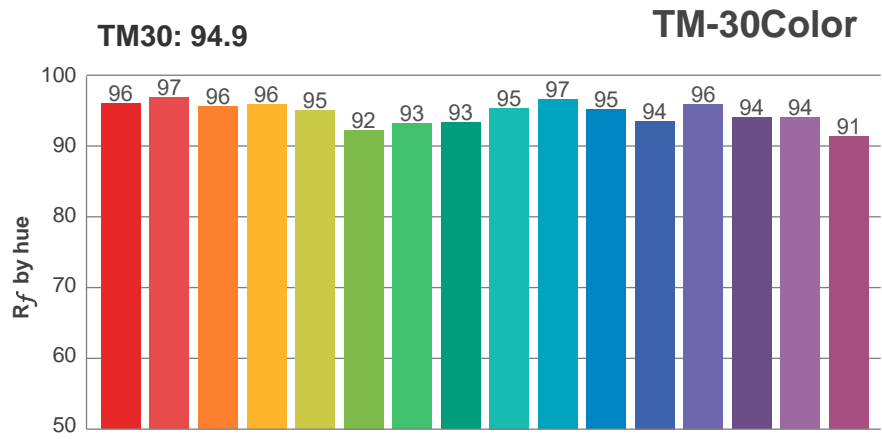
**$R_f$  94.9**

Fidelity index  $R_f$

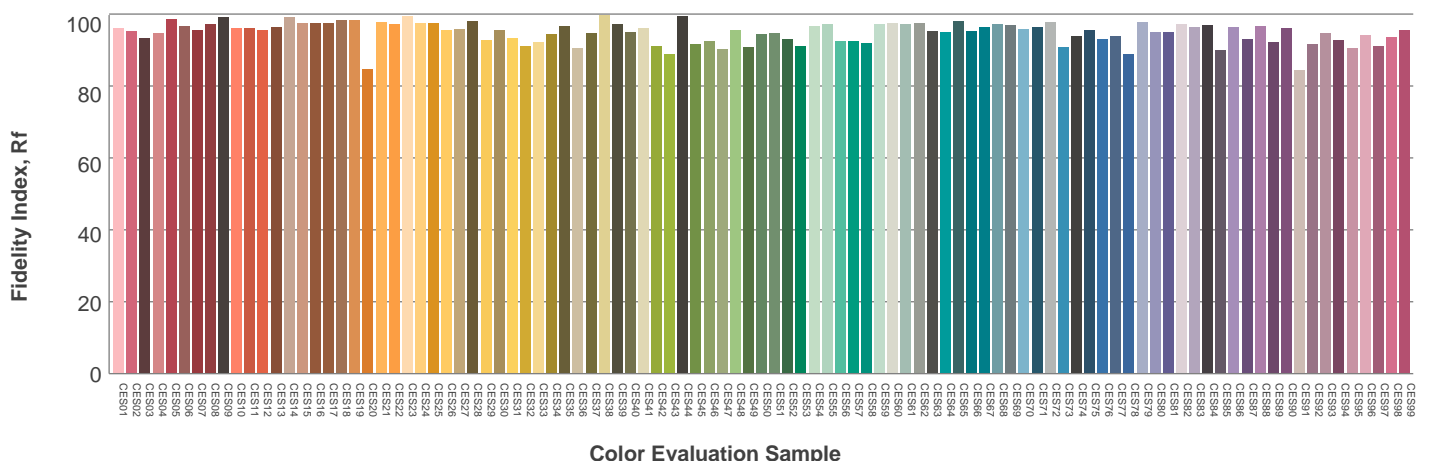
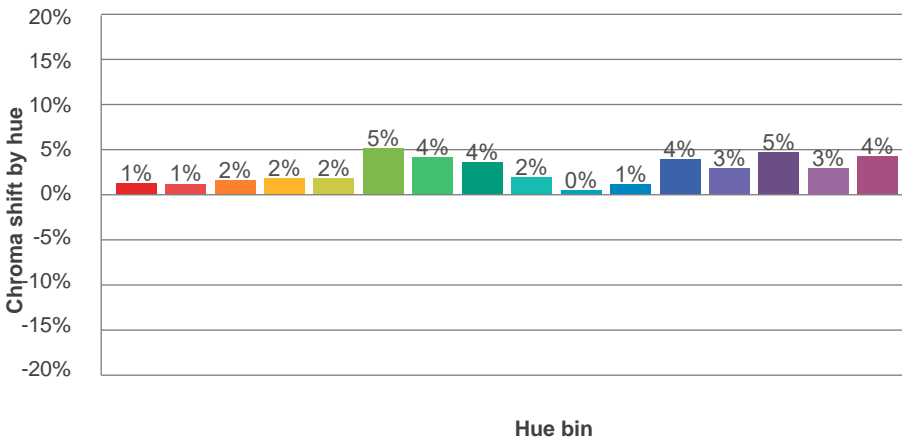
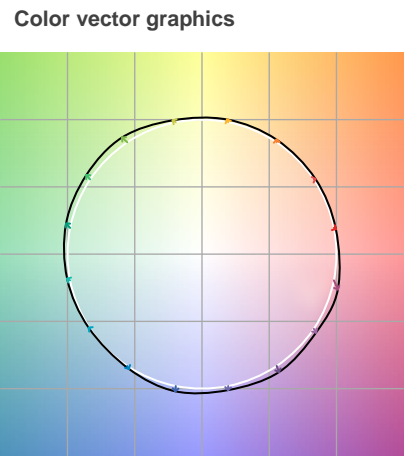
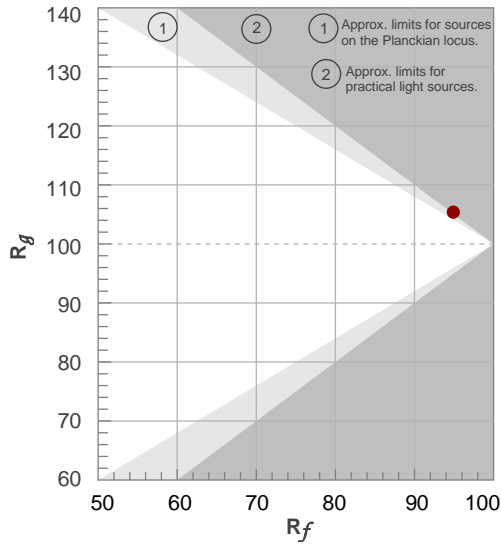
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**$R_g$  105.4**

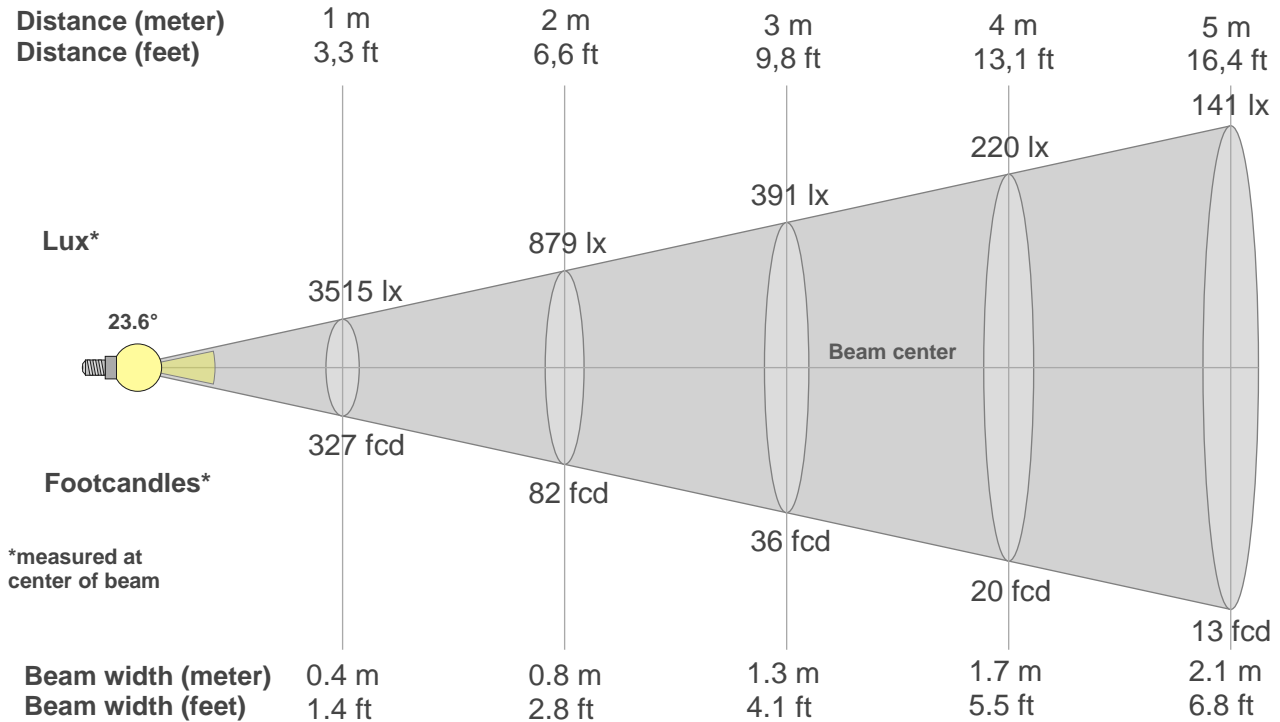
Gammut index  $R_g$



Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	96	1%	-1%
2	97	1%	0%
3	96	2%	1%
4	96	2%	1%
5	95	2%	2%
6	92	5%	1%
7	93	4%	-1%
8	93	4%	-3%
9	95	2%	-2%
10	97	0%	-1%
11	95	1%	2%
12	94	4%	0%
13	96	3%	-1%
14	94	5%	-1%
15	94	3%	-1%
16	91	4%	-6%



### 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
3515lx	879lx	391lx	220lx	141lx	98lx	72lx	55lx	43lx	35lx	29lx	24lx	21lx	18lx	16lx	14lx	12lx	11lx	10lx	9lx
326.5fcd	81.6fcd	36.3fcd	20.4fcd	13.1fcd	9.1fcd	6.7fcd	5.1fcd	4fcd	3.3fcd	2.7fcd	2.3fcd	1.9fcd	1.7fcd	1.5fcd	1.3fcd	1.1fcd	1fcd	0.9fcd	0.8fcd

#### 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°
3515	3462	3272	2958	2571	2151	1723	1300	951	685	471	275	106	16	9	8	7	6	5	4
100%	98%	93%	84%	73%	61%	49%	37%	27%	19%	13%	8%	3%	0%	0%	0%	0%	0%	0%	0%

#### 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°
3515	3447	3237	2914	2524	2115	1724	1368	1051	784	568	370	185	43	13	8	7	6	5	3
100%	98%	92%	83%	72%	60%	49%	39%	30%	22%	16%	11%	5%	1%	0%	0%	0%	0%	0%	0%

#### 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°
3515	3422	3235	2945	2570	2152	1723	1326	986	712	496	306	124	36	10	7	5	5	5	3
100%	97%	92%	84%	73%	61%	49%	38%	28%	20%	14%	9%	4%	1%	0%	0%	0%	0%	0%	0%

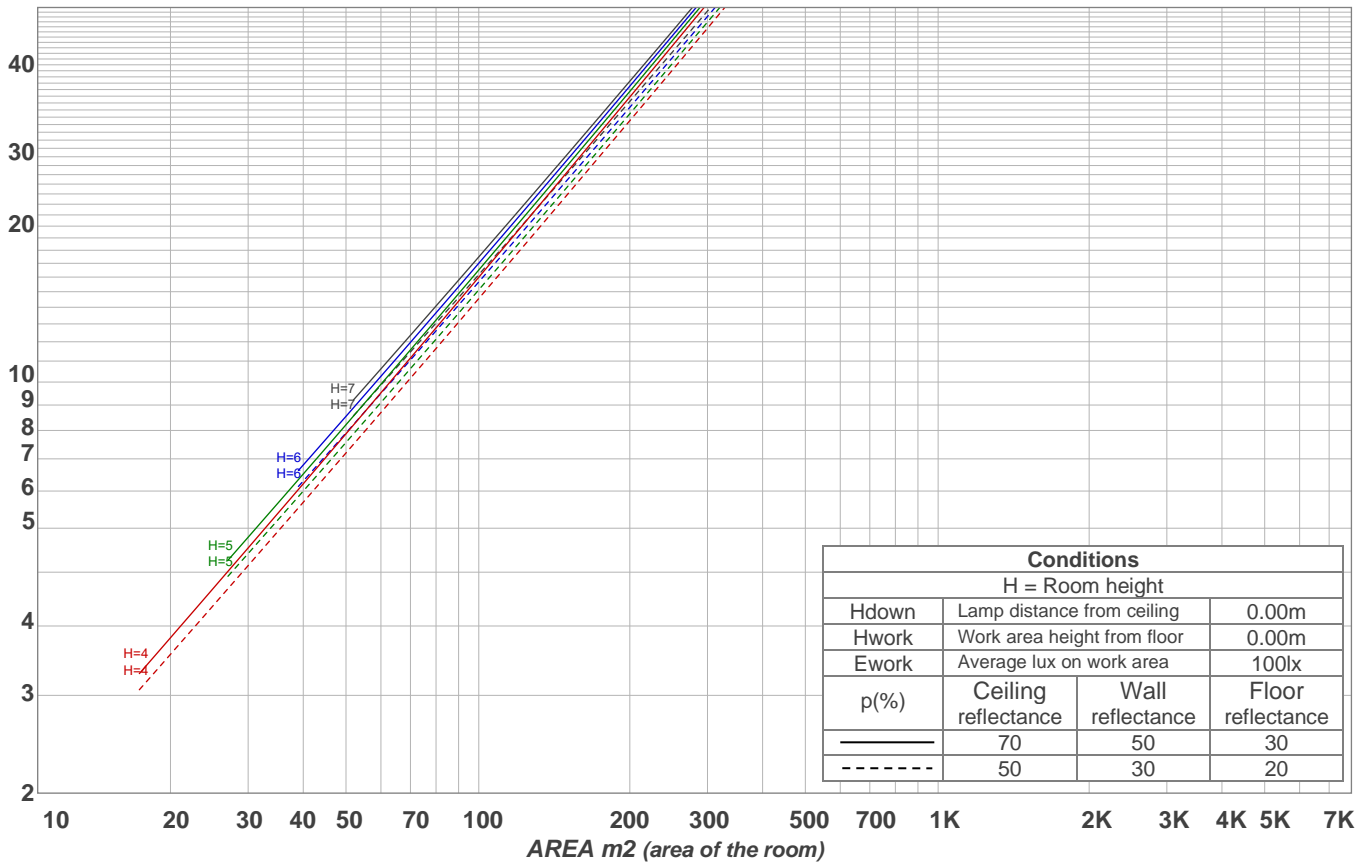
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3515	3483	3306	3017	2640	2198	1705	1251	885	614	405	203	67	18	9	7	6	6	5	5
100%	99%	94%	86%	75%	63%	49%	36%	25%	17%	12%	6%	2%	1%	0%	0%	0%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
23.6°	42.7°	48.9°	99.2%	98.9%

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	105	103	110	107	104	102	104	101	100	101	99	98	98	97	96	94	94	94	
3	109	104	101	98	107	103	100	97	100	98	96	98	96	94	96	94	93	92	92	92	
4	106	101	97	94	104	100	96	94	98	95	93	96	94	92	94	92	91	89	89	89	
5	103	97	94	91	102	97	93	91	95	92	90	94	91	89	92	90	88	87	87	87	
6	100	95	91	88	99	94	90	88	93	90	87	92	89	87	90	88	86	85	85	85	
7	98	92	88	86	97	92	88	85	90	87	85	90	87	85	89	86	84	83	83	83	
8	96	90	86	83	95	89	86	83	88	85	83	88	85	83	87	84	82	82	82	82	
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	83	81	80	80	80	
10	92	86	82	80	91	85	82	79	85	81	79	84	81	79	83	81	79	78	78	78	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
266 lm	313 lm	54.8 lm	3.18 lm	1.28 lm	1.34 lm	1.42 lm	1.78 lm	1.98 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