

Light efficiency:



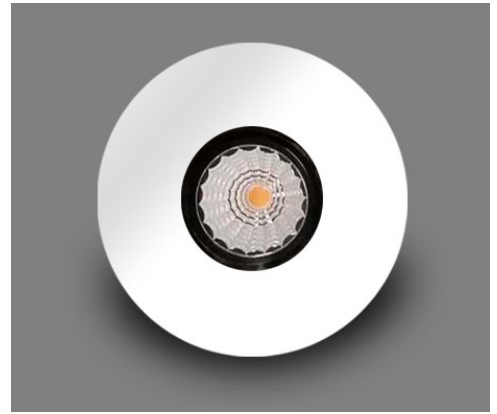
Output: 692 lm

Light quality:

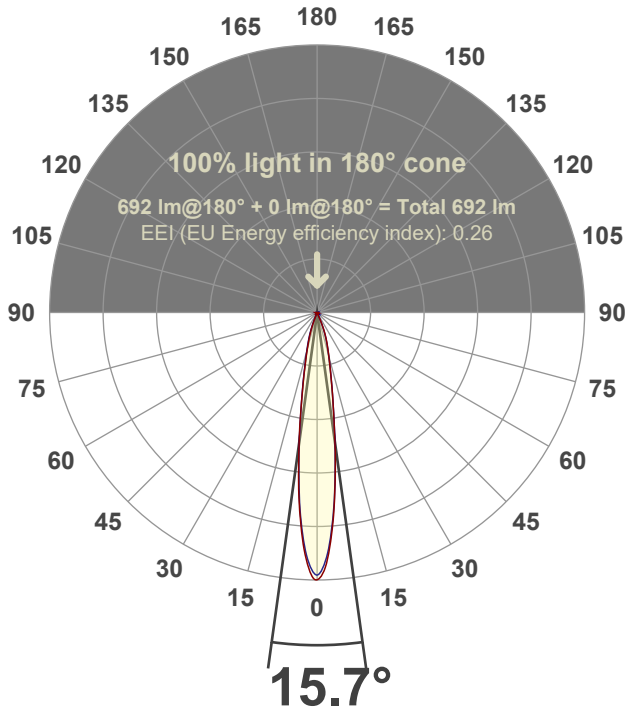


Peak: 6068 cd

Power: 14.6 W



Beam angle



Test number:

GR-F-F-A14-3019-SP-RD-Rev2

Luminaire Model:

Graffiti Flat Round Fixed Downlight-A14-3019 15° Optic

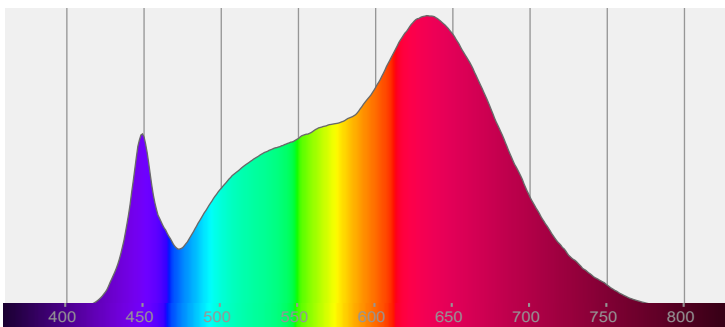
Date and time:

3/24/2022 8:11:20 PM

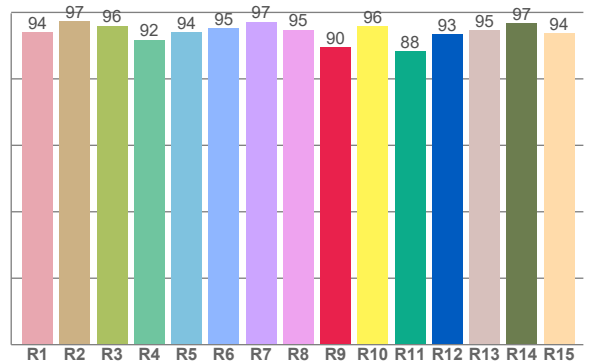
Delivered Lumens

692

Spectra



CRI: 95.0 (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
	95.0	89.5	95.0	105.3	95.1	0.422	0.388	0.248	0.342	-0.0044

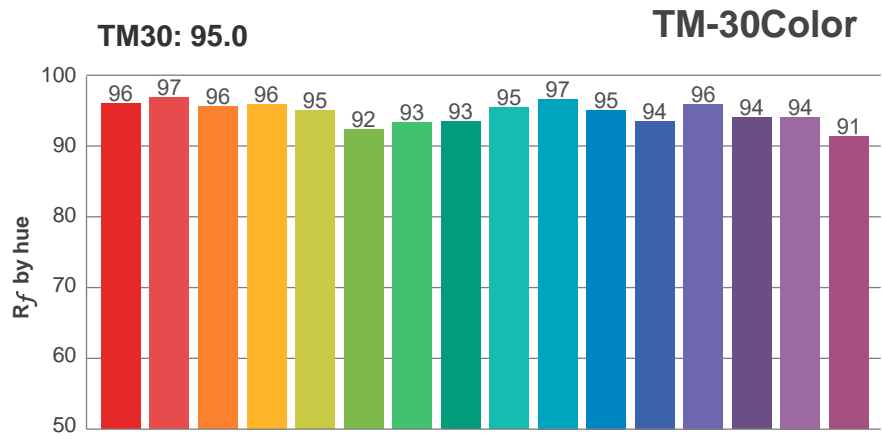
**$R_f$  95.0**

Fidelity index  $R_f$

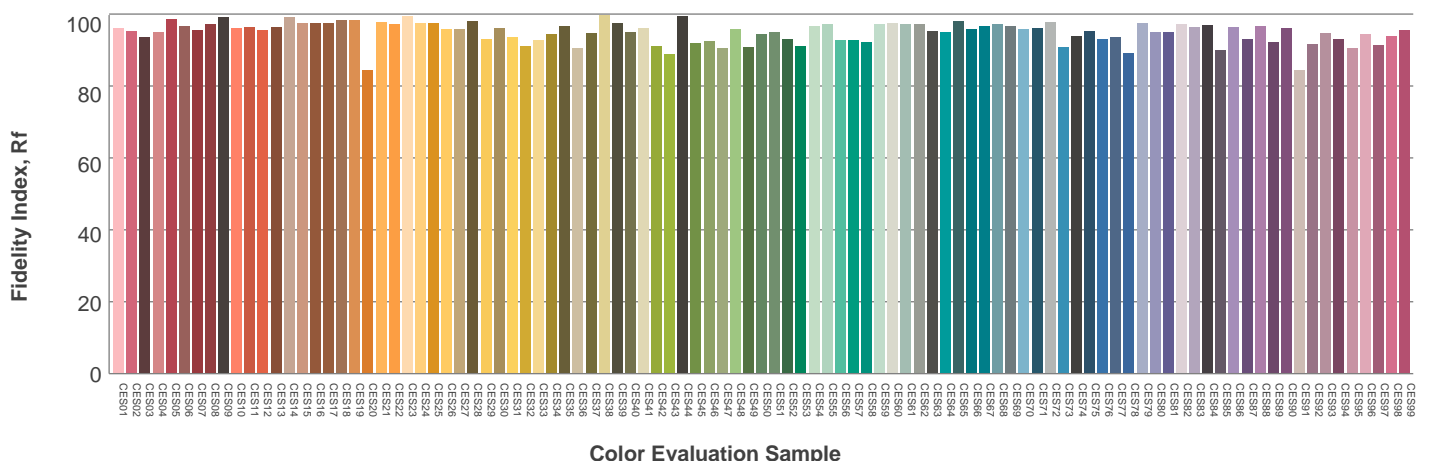
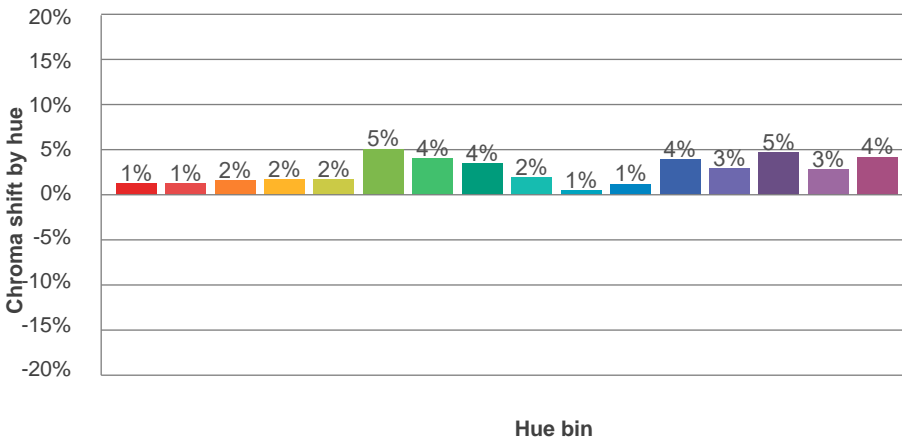
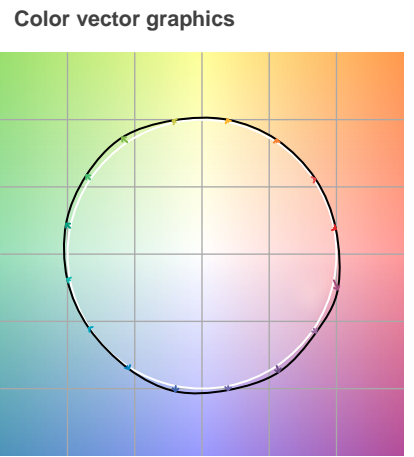
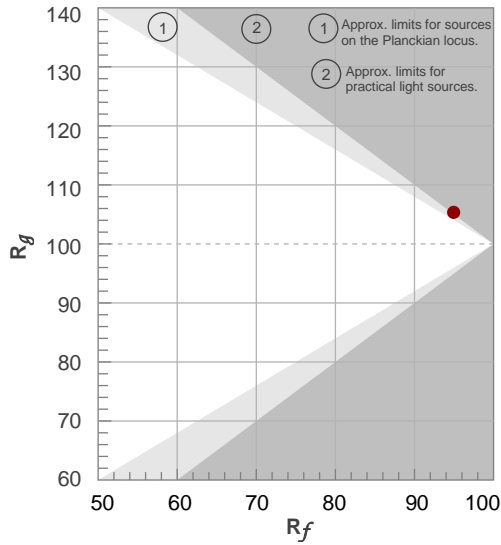
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**$R_g$  105.3**

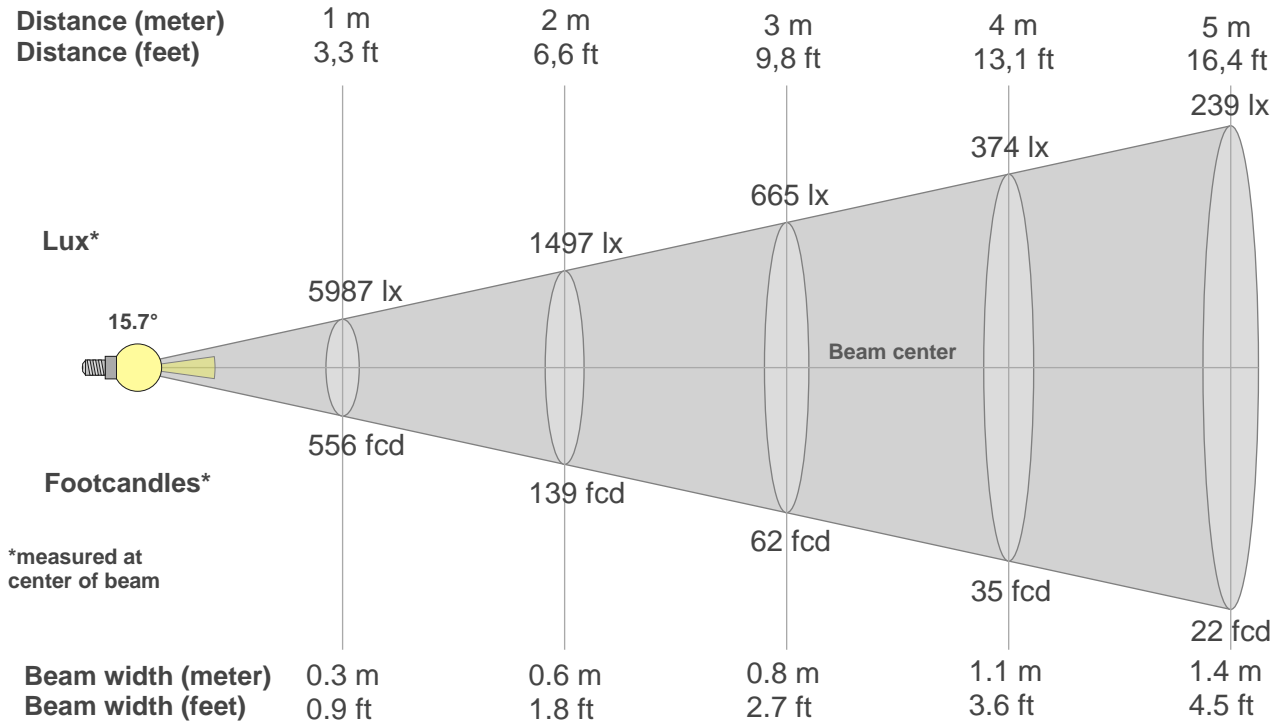
Gammut index  $R_g$



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	1%	-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
5987lx	1497lx	665lx	374lx	239lx	166lx	122lx	94lx	74lx	60lx	49lx	42lx	35lx	31lx	27lx	23lx	21lx	18lx	17lx	15lx
556.2fcd	139.1fcd	61.8fcd	34.8fcd	22.2fcd	15.5fcd	11.4fcd	8.7fcd	6.9fcd	5.6fcd	4.6fcd	3.9fcd	3.3fcd	2.8fcd	2.5fcd	2.2fcd	1.9fcd	1.7fcd	1.5fcd	1.4fcd

#### 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°
5987	5894	5743	5333	4923	4446	3932	3426	2959	2493	2137	1840	1561	1377	1194	1054	936	822	735	647
100%	98%	96%	89%	82%	74%	66%	57%	49%	42%	36%	31%	26%	23%	20%	18%	16%	14%	12%	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°
5987	5780	5582	5268	4838	4407	3901	3395	2934	2517	2101	1838	1575	1361	1194	1027	919	810	708	612
100%	97%	93%	88%	81%	74%	65%	57%	49%	42%	35%	31%	26%	23%	20%	17%	15%	14%	12%	10%

#### 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°
5987	5972	5706	5440	4996	4522	4025	3487	2948	2509	2085	1722	1465	1208	1042	890	755	649	542	445
100%	100%	95%	91%	83%	76%	67%	58%	49%	42%	35%	29%	24%	20%	17%	15%	13%	11%	9%	7%

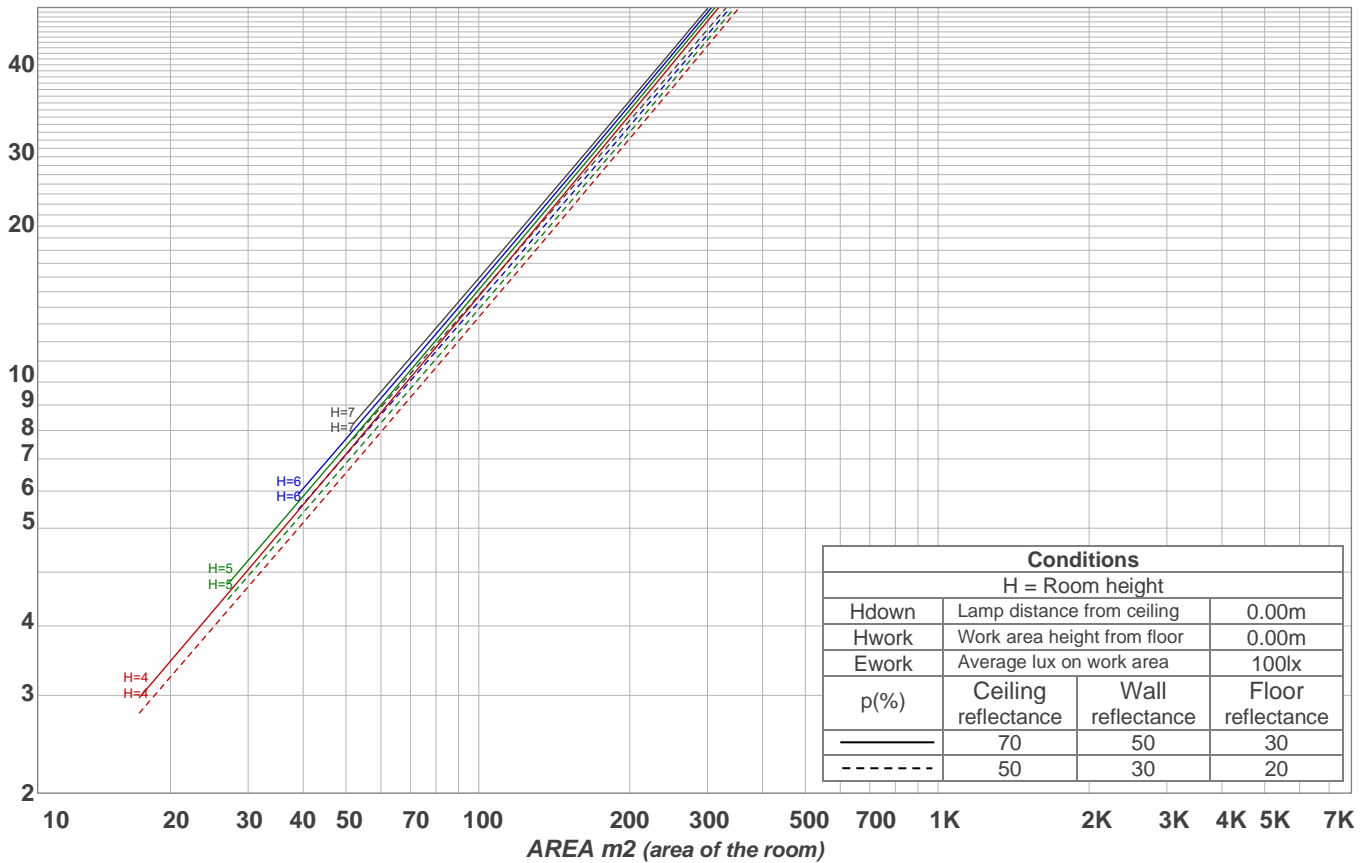
#### Intensities in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
5987	5797	5620	5320	4901	4481	3950	3418	2930	2482	2036	1756	1476	1252	1082	913	803	693	591	496
100%	97%	94%	89%	82%	75%	66%	57%	49%	41%	34%	29%	25%	21%	18%	15%	13%	12%	10%	8%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15.7°	37°	46.8°	98.7%	98.2%

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	
1	115	113	111	110	113	111	109	108	107	106	105	103	102	102	100	99	99	97	97	97	
2	112	108	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	98	96	99	97	95	97	95	94	92	92	92	
4	106	101	98	95	105	100	97	94	98	96	93	97	94	92	95	93	91	90	90	90	
5	104	98	95	92	102	98	94	92	96	93	91	95	92	90	93	91	89	88	88	88	
6	101	96	92	89	100	95	92	89	94	91	89	93	90	88	92	89	88	87	87	87	
7	99	93	90	87	98	93	89	87	92	89	87	91	88	86	90	88	86	85	85	85	
8	97	91	88	85	96	91	87	85	90	87	85	89	87	85	88	86	84	83	83	83	
9	95	89	86	84	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	81	81	81	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
342 lm	280 lm	53.6 lm	2.78 lm	2.10 lm	2.29 lm	2.67 lm	3.08 lm	3.32 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