

Light efficiency:



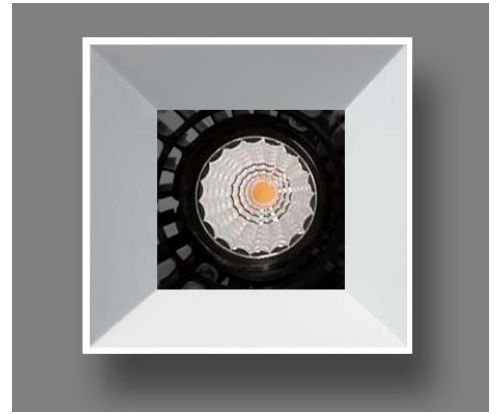
Output: 1493 lm

Light quality:

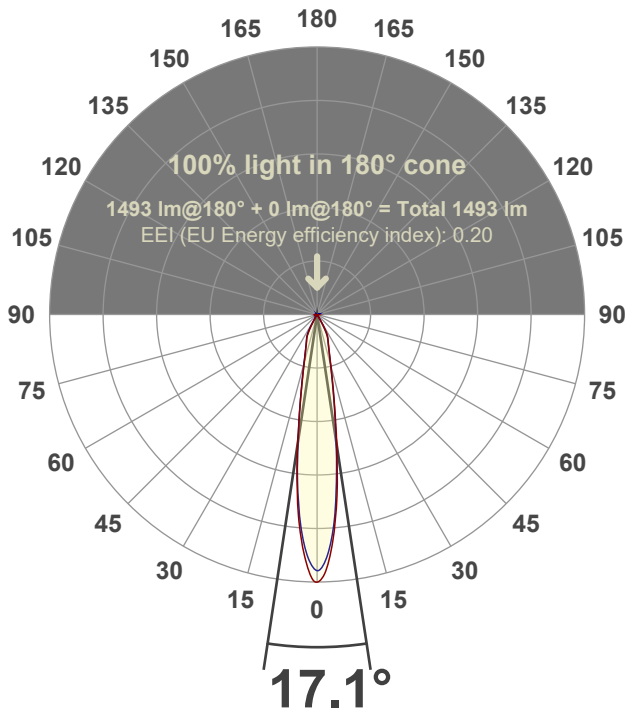


Peak: 9194 cd

Power: 21.2 W



Beam angle



Test number:

GR-O-F-A20-3019-SP-SQ-Rev2

Luminaire Model:

Graffiti Open Square Fixed Downlight-A20-3019 15° Optic

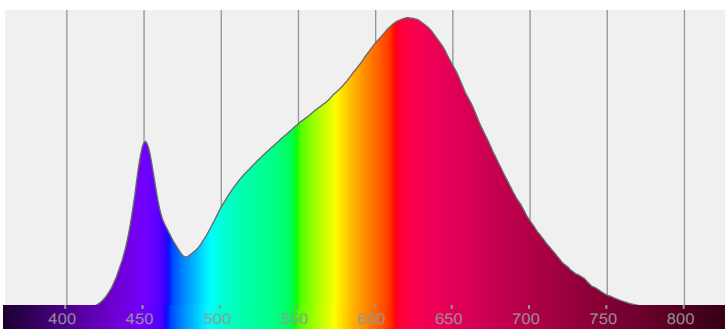
Date and time:

6/21/2022 9:00:01 PM

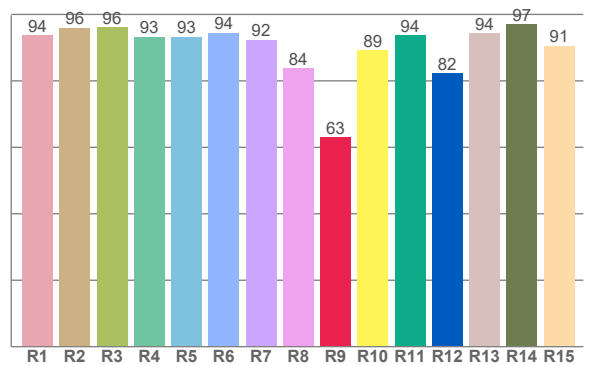
Delivered Lumens

1493

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	63.1	91.0	101.7	89.8	0.433	0.397	0.251	0.345	-0.0025

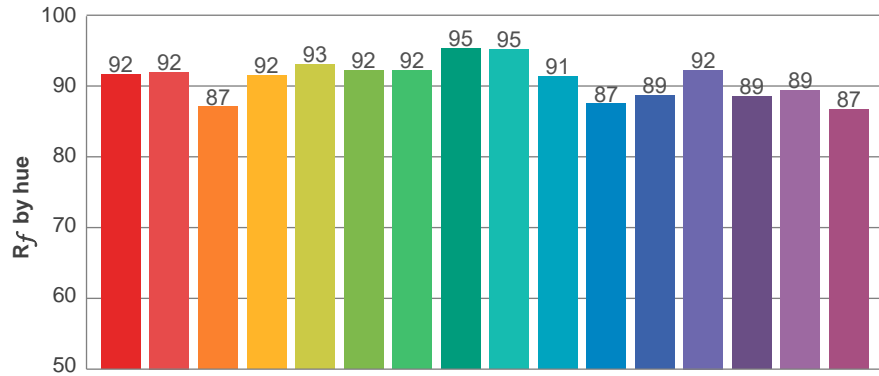
**$R_f$  91.0**  
Fidelity index  $R_f$

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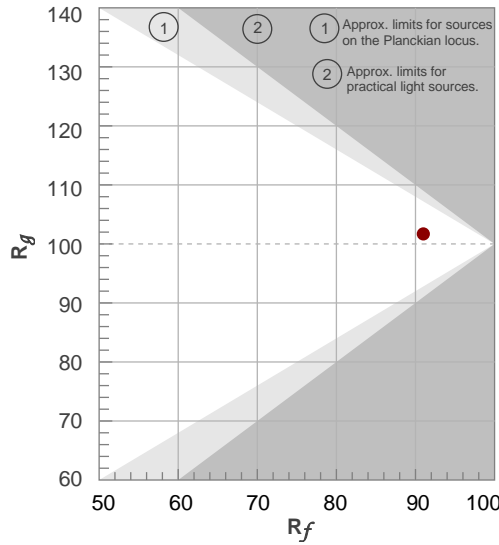
**$R_g$  101.7**  
Gammut index  $R_g$

TM30: 91.0

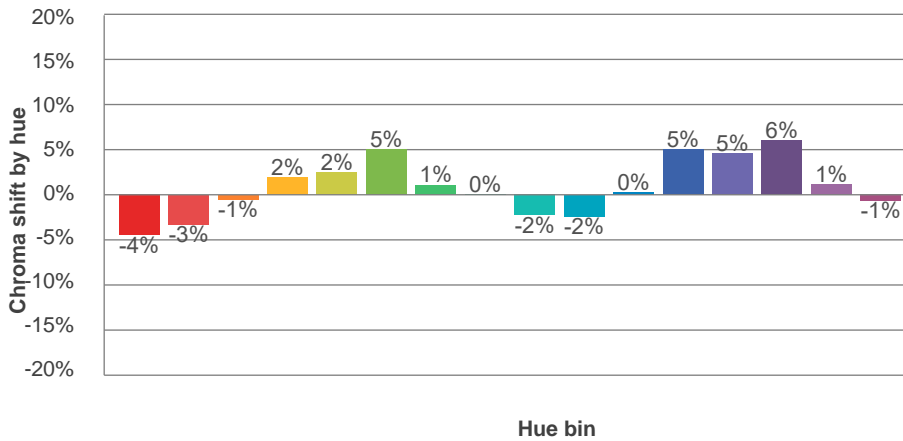
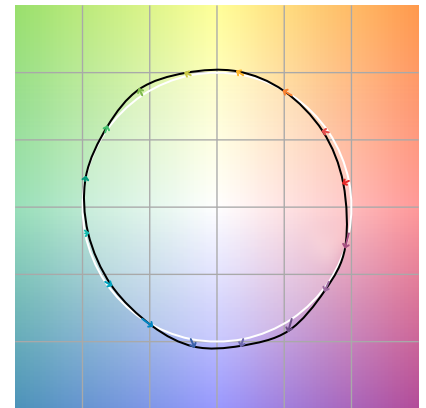
TM-30Color



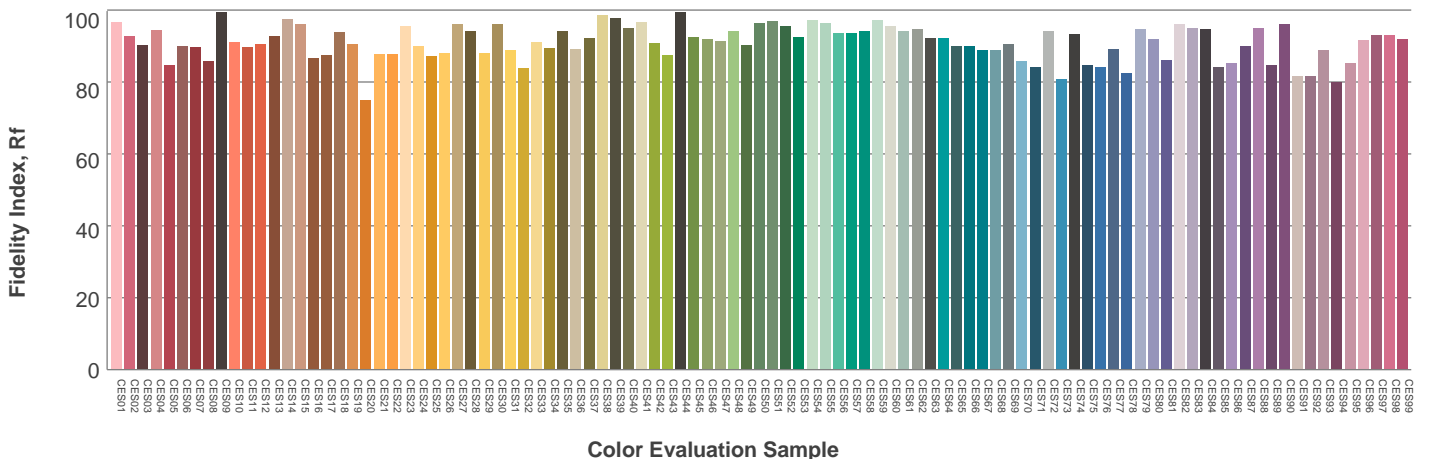
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	92	-3%	3%
3	87	-1%	7%
4	92	2%	5%
5	93	2%	4%
6	92	5%	-1%
7	92	1%	-4%
8	95	0%	-3%
9	95	-2%	0%
10	91	-2%	5%
11	87	0%	9%
12	89	5%	4%
13	92	5%	-3%
14	89	6%	-7%
15	89	1%	-7%
16	87	-1%	-11%



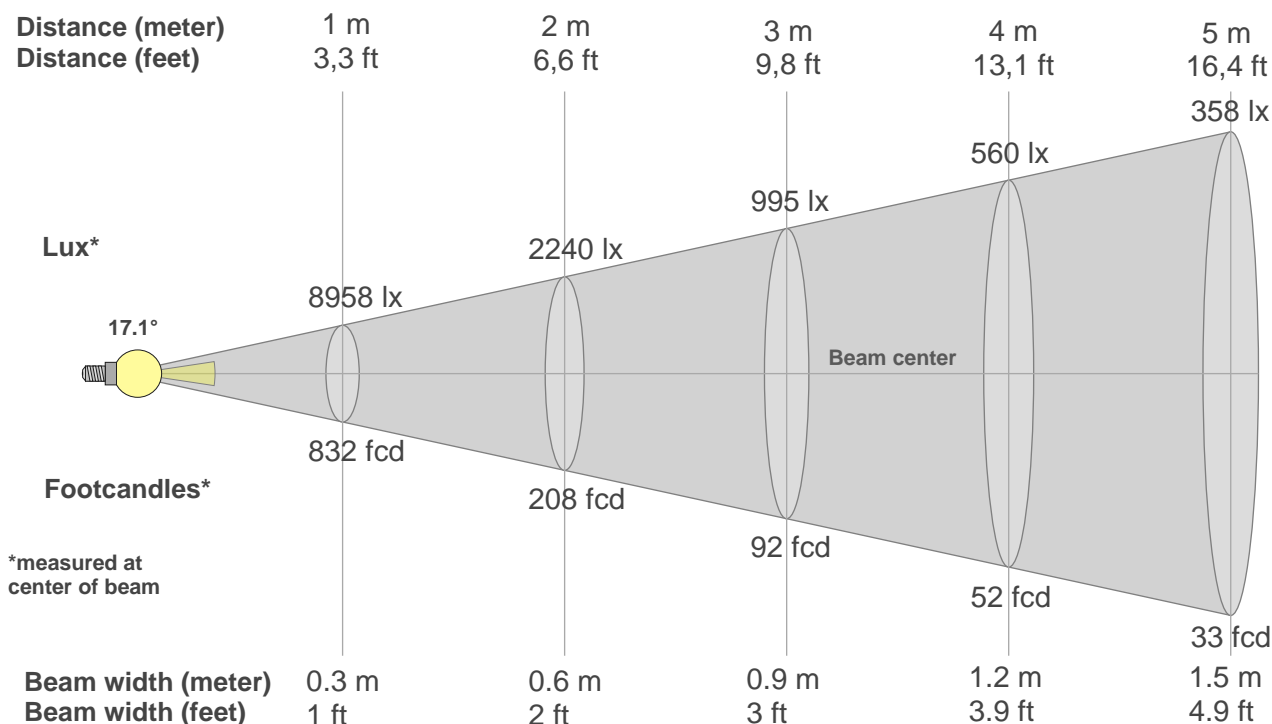
Color vector graphics



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
8958lx	2240lx	995lx	560lx	358lx	249lx	183lx	140lx	111lx	90lx	74lx	62lx	53lx	46lx	40lx	35lx	31lx	28lx	25lx	22lx
832.3fcd	208.1fcd	92.5fcd	52fcd	33.3fcd	23.1fcd	17fcd	13fcd	10.3fcd	8.3fcd	6.9fcd	5.8fcd	4.9fcd	4.2fcd	3.7fcd	3.3fcd	2.9fcd	2.6fcd	2.3fcd	2.1fcd

#### 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°
8958	8779	7812	6475	4992	3720	2771	2114	1667	1375	1178	1034	923	813	652	420	177	36	15	10
100%	98%	87%	72%	56%	42%	31%	24%	19%	15%	13%	12%	10%	9%	7%	5%	2%	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°
8958	8409	7523	6247	4833	3583	2671	2048	1636	1353	1157	1015	894	759	548	307	114	31	14	11
100%	94%	84%	70%	54%	40%	30%	23%	18%	15%	13%	11%	10%	8%	6%	3%	1%	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°
8958	8702	7739	6455	4972	3549	2609	1984	1571	1297	1110	975	867	713	472	232	76	17	13	11
100%	97%	86%	72%	55%	40%	29%	22%	18%	14%	12%	11%	10%	8%	5%	3%	1%	0%	0%	0%

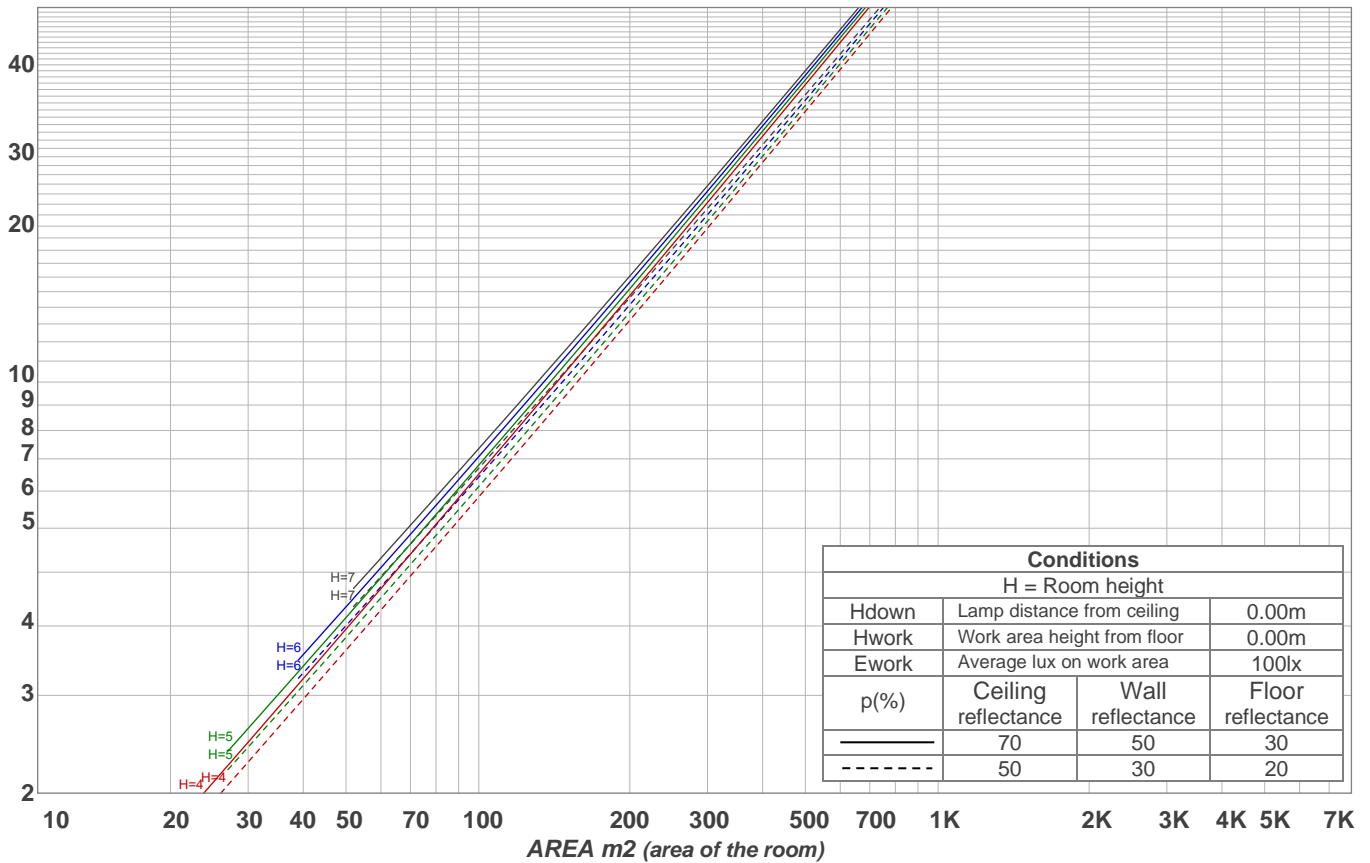
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
8958	8420	7510	6269	4864	3593	2648	2002	1574	1311	1126	990	884	763	579	332	125	39	16	12
100%	94%	84%	70%	54%	40%	30%	22%	18%	15%	13%	11%	10%	9%	6%	4%	1%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
17.1°	47.7°	61.7°	99.2%	98.8%

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
<b>RCR</b>	<b>(RCR: Room Cavity Ratio)</b>																				
	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	109	112	110	109	107	107	105	104	103	102	101	99	99	98	96	96	96	
2	111	107	104	102	109	106	103	100	102	100	98	100	98	96	97	95	94	93	93	93	
3	107	103	99	96	106	101	98	95	99	96	94	96	94	92	94	93	91	90	90	90	
4	104	98	94	91	102	97	94	91	95	92	90	94	91	89	92	90	88	87	87	87	
5	101	95	91	88	99	94	90	87	92	89	86	91	88	86	89	87	85	84	84	84	
6	98	91	87	84	97	91	87	84	89	86	83	88	85	83	87	84	82	81	81	81	
7	95	88	84	81	94	88	84	81	87	83	81	86	83	80	85	82	80	79	79	79	
8	92	86	82	79	91	85	81	78	84	81	78	83	80	78	83	80	78	77	77	77	
9	90	83	79	76	89	83	79	76	82	78	76	81	78	76	81	78	75	75	75	75	
10	88	81	77	74	87	80	77	74	80	76	74	79	76	74	79	76	73	73	73	73	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
554 lm	526 lm	355 lm	36.6 lm	4.85 lm	3.53 lm	3.45 lm	4.26 lm	4.36 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