

Light efficiency:



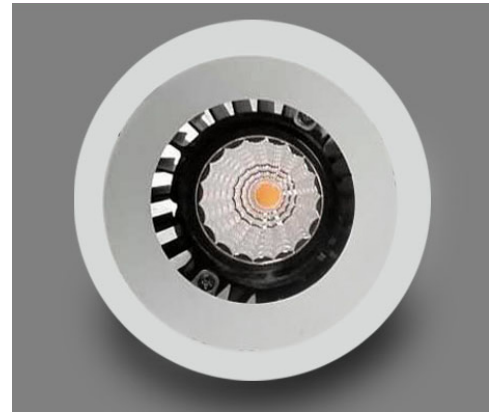
Output: 1602 lm

Light quality:

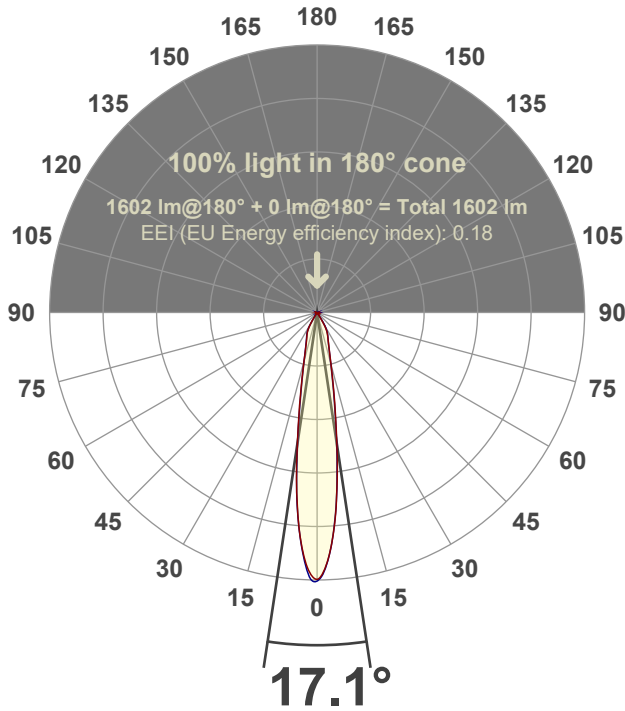


Peak: 9278 cd

Power: 21.3 W



Beam angle



Test number:

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

Luminaire Model:

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

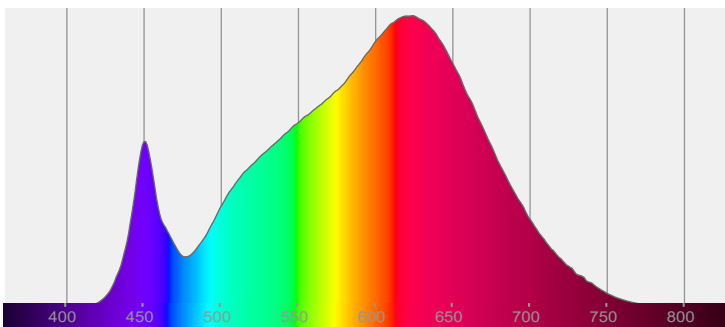
Date and time:

4/28/2022 7:30:07 PM

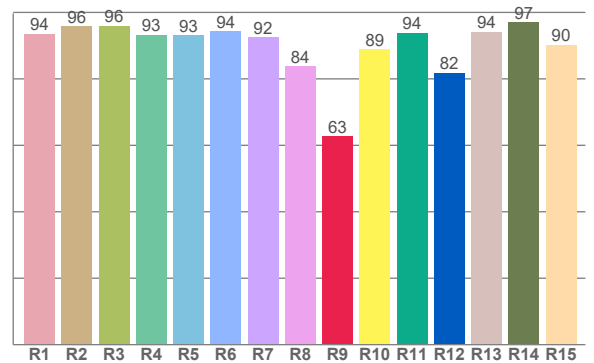
Delivered Lumens

1602

Spectra



CRI: 92.8 (R1-R8)



Color parameters

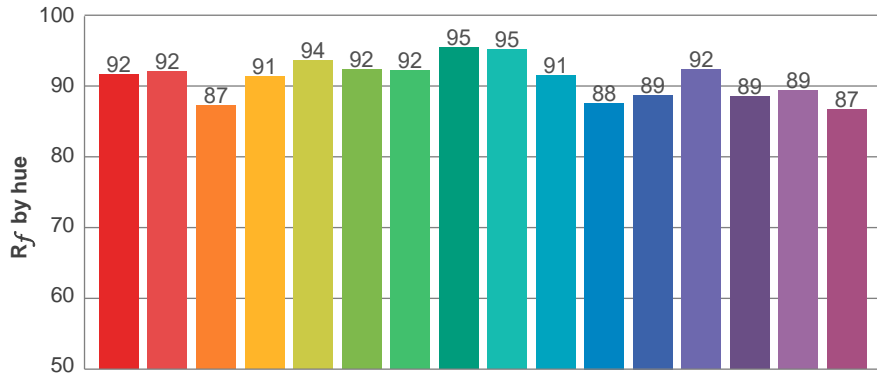
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	92.8	62.7	91.1	101.6	89.9	0.435	0.398	0.252	0.346	-0.0019

R_f 91.1
Fidelity index R_f

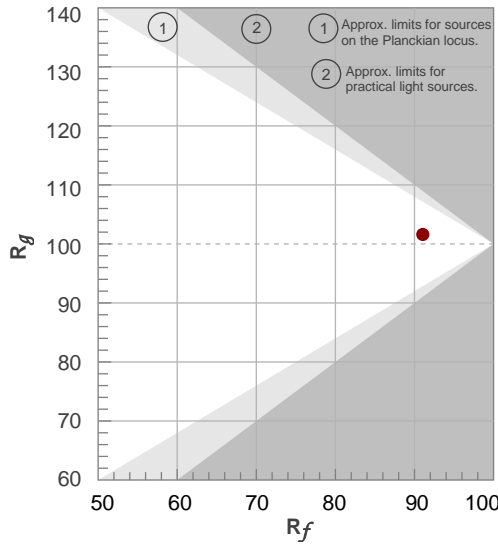
R_g 101.6
Gammut index R_g

TM30: 91.1

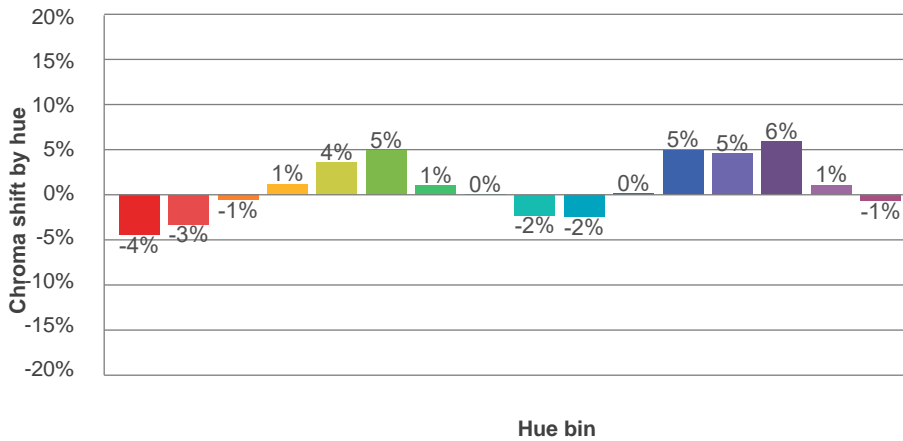
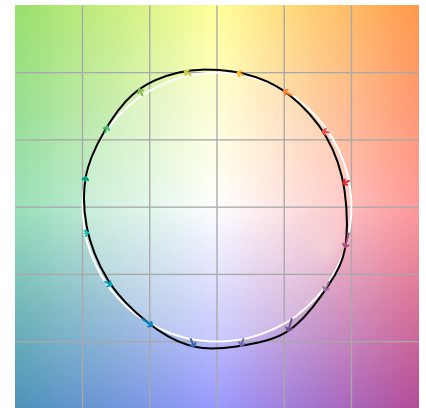
TM-30Color



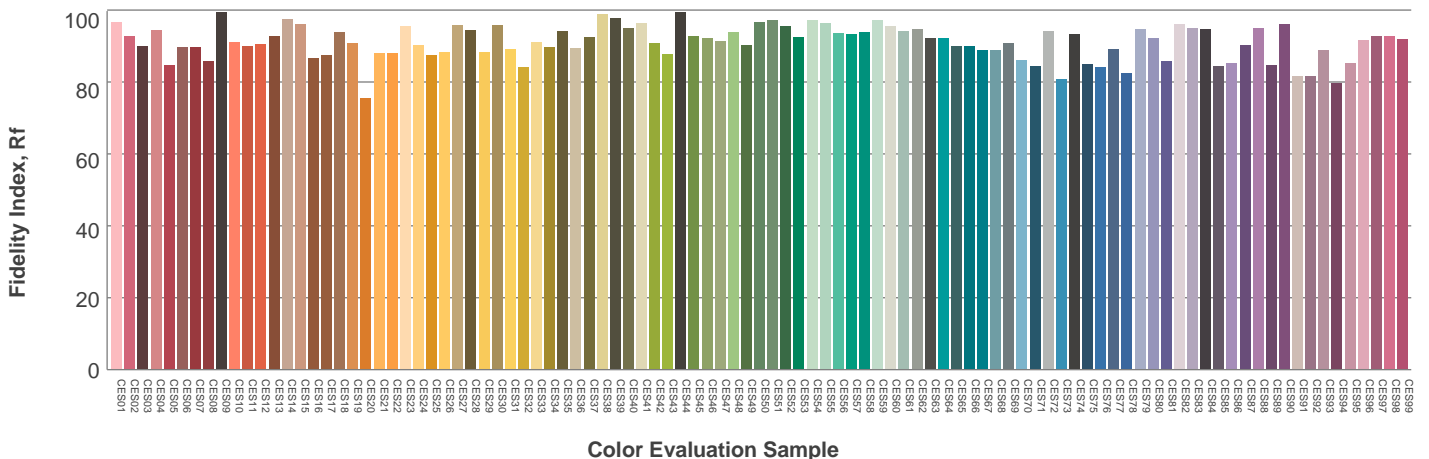
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	92	-3%	3%
3	87	-1%	7%
4	91	1%	4%
5	94	4%	4%
6	92	5%	-1%
7	92	1%	-4%
8	95	0%	-3%
9	95	-2%	0%
10	91	-2%	5%
11	88	0%	9%
12	89	5%	4%
13	92	5%	-3%
14	89	6%	-7%
15	89	1%	-7%
16	87	-1%	-11%



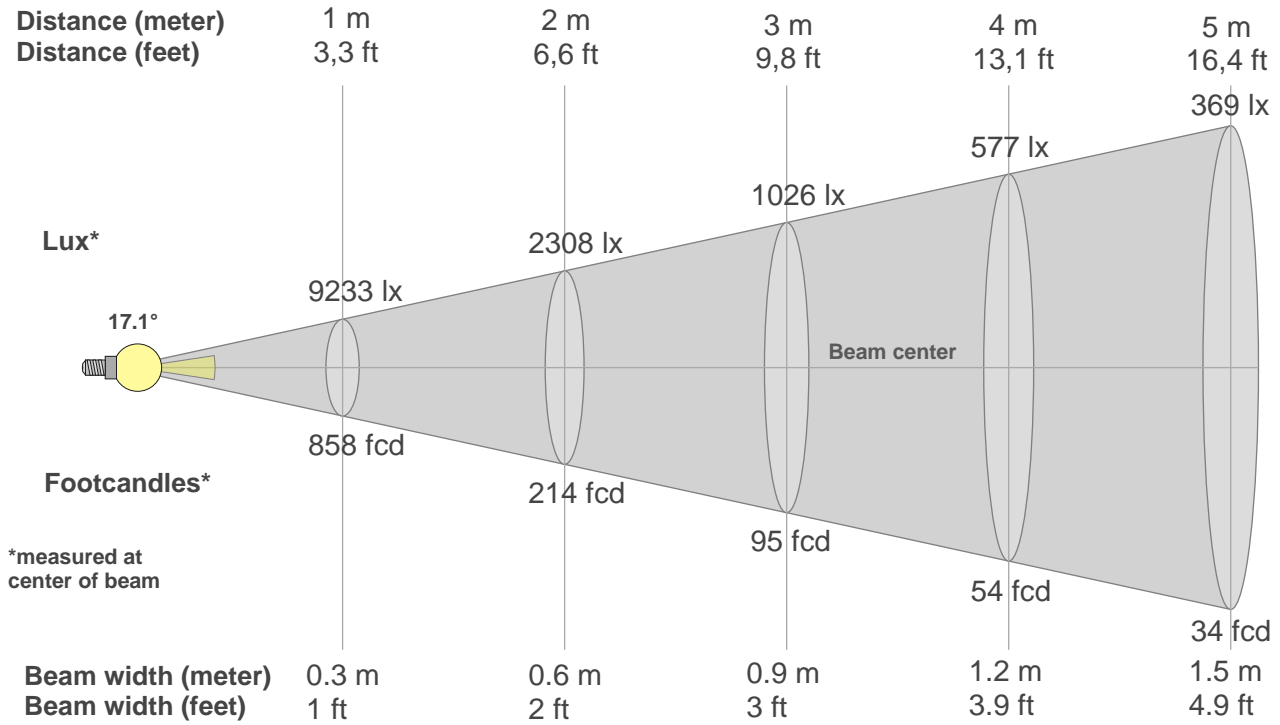
Color vector graphics



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
9233lx	2308lx	1026lx	577lx	369lx	256lx	188lx	144lx	114lx	92lx	76lx	64lx	55lx	47lx	41lx	36lx	32lx	28lx	26lx	23lx
857.8fcd	214.4fcd	95.3fcd	53.6fcd	34.3fcd	23.8fcd	17.5fcd	13.4fcd	10.6fcd	8.6fcd	7.1fcd	6fcd	5.1fcd	4.4fcd	3.8fcd	3.4fcd	3fcd	2.6fcd	2.4fcd	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°
9233	8749	7784	6496	5075	3750	2820	2166	1710	1398	1186	1031	919	818	703	546	346	142	28	6
100%	95%	84%	70%	55%	41%	31%	23%	19%	15%	13%	11%	10%	9%	8%	6%	4%	2%	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°
9233	8764	7794	6477	4968	3713	2777	2117	1669	1368	1172	1034	927	832	731	607	441	222	71	7
100%	95%	84%	70%	54%	40%	30%	23%	18%	15%	13%	11%	10%	9%	8%	7%	5%	2%	1%	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°
9233	8907	7961	6635	5133	3727	2703	2047	1607	1310	1112	974	870	788	676	524	343	161	14	8
100%	96%	86%	72%	56%	40%	29%	22%	17%	14%	12%	11%	9%	9%	7%	6%	4%	2%	0%	0%

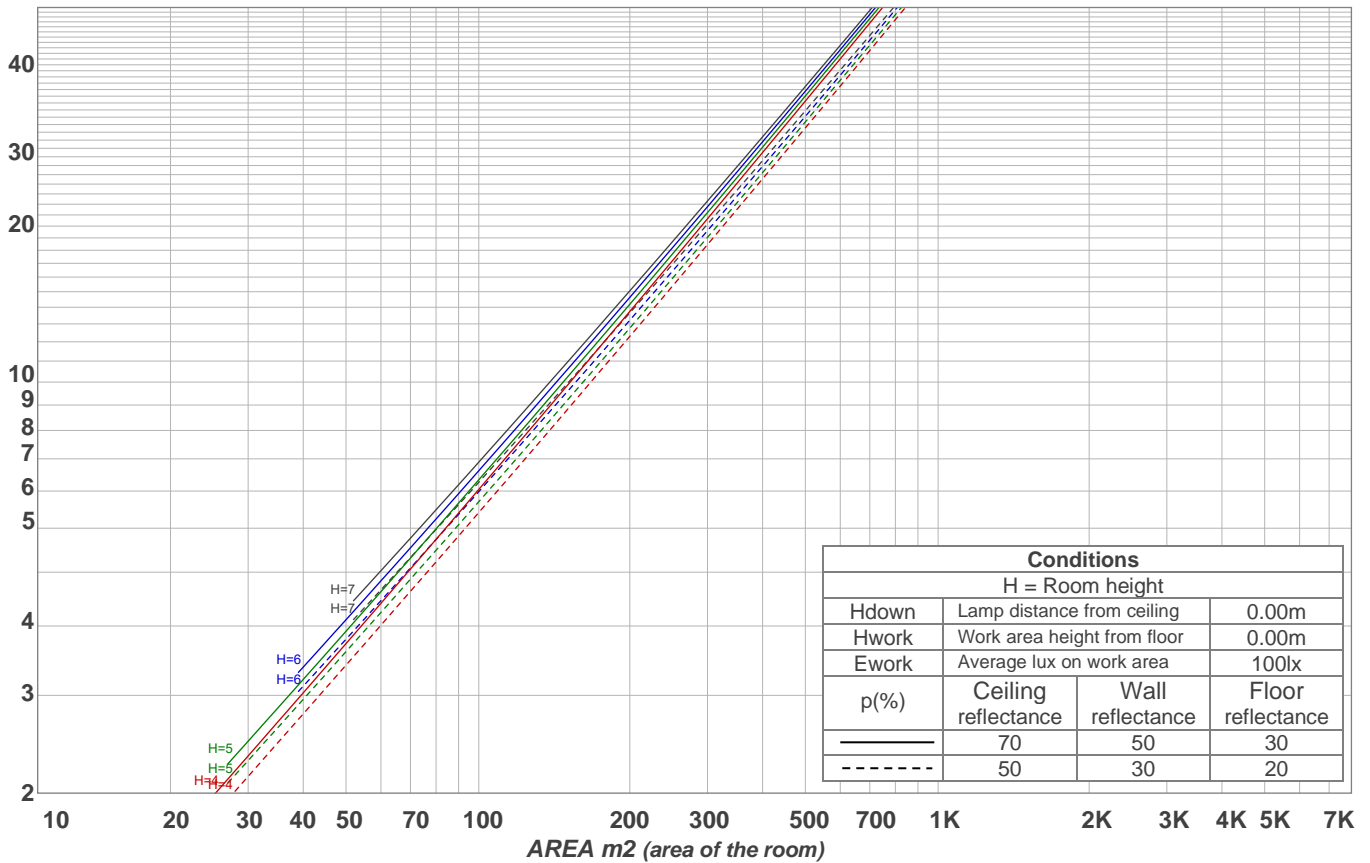
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
9233	8999	8028	6666	5040	3673	2675	2013	1576	1313	1132	998	896	804	695	507	251	78	10	6
100%	97%	87%	72%	55%	40%	29%	22%	17%	14%	12%	11%	10%	9%	8%	5%	3%	1%	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°	66.2°	99.3%	99.1%

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	110	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96	96	96	
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92	92	92	
3	107	102	98	95	105	101	97	95	98	95	93	96	94	92	94	92	90	89	89	89	
4	103	98	94	91	102	97	93	90	95	92	89	93	90	88	91	89	87	86	86	86	
5	100	94	90	87	99	93	89	86	92	88	85	90	87	85	89	86	84	83	83	83	
6	97	91	86	83	96	90	86	83	89	85	82	87	84	82	86	83	81	80	80	80	
7	94	87	83	80	93	87	83	80	86	82	79	85	81	79	84	81	79	78	78	78	
8	91	85	80	77	90	84	80	77	83	79	77	82	79	76	81	78	76	75	75	75	
9	89	82	78	75	88	81	77	75	81	77	74	80	77	74	79	76	74	73	73	73	
10	86	79	75	72	86	79	75	72	78	75	72	78	74	72	77	74	72	71	71	71	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
571 lm	536 lm	388 lm	90.9 lm	2.89 lm	2.57 lm	2.60 lm	3.66 lm	4.33 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