

Light efficiency:



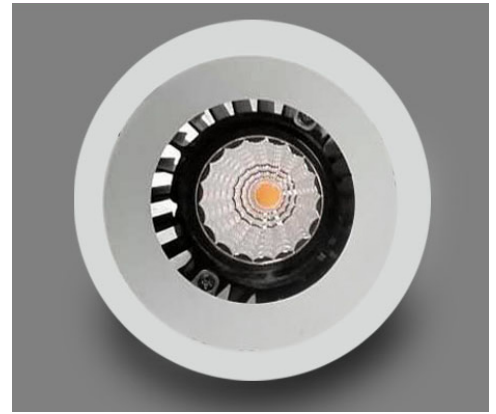
Output: 1947 lm

Light quality:

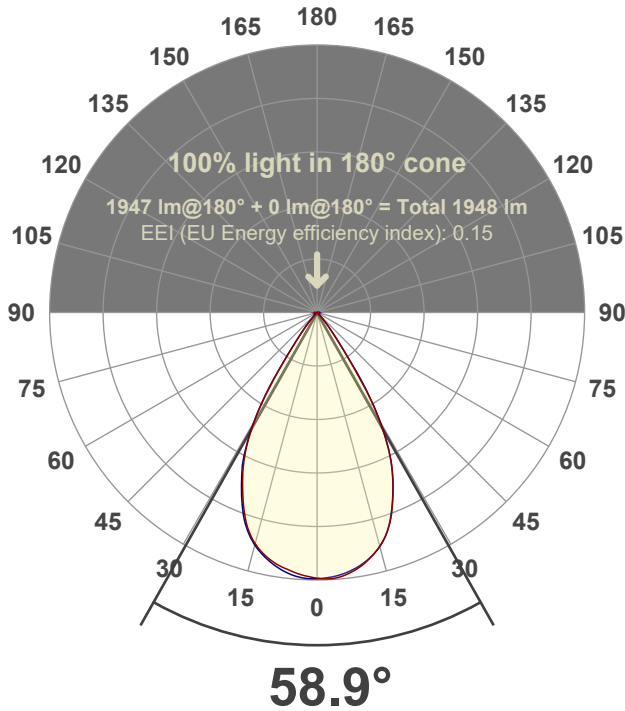


Peak: 2418 cd

Power: 20.8 W



Beam angle



Test number:

GR-O-F-CZ20-30k-WF-RD-Rev2

Luminaire Model:

Graffiti Open Round Fixed Downlight-CZ20 30k 60° Optic

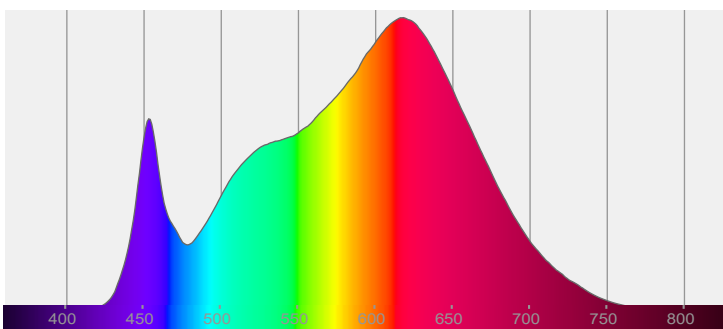
Date and time:

3/2/2022 10:47:07 PM

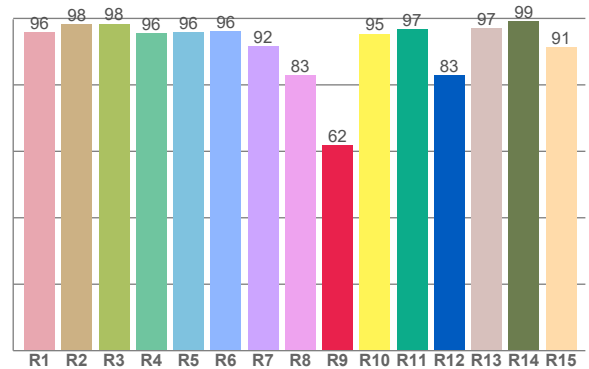
Delivered Lumens

1947

Spectra



CRI: 94.3 (R1-R8)



Color parameters

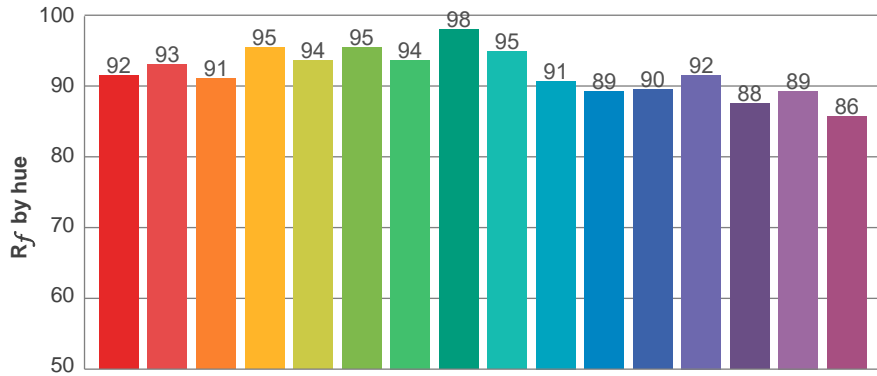
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	94.3	61.8	92.1	100.4	91.6	0.424	0.394	0.247	0.344	-0.0024

R_f 92.1
Fidelity index R_f

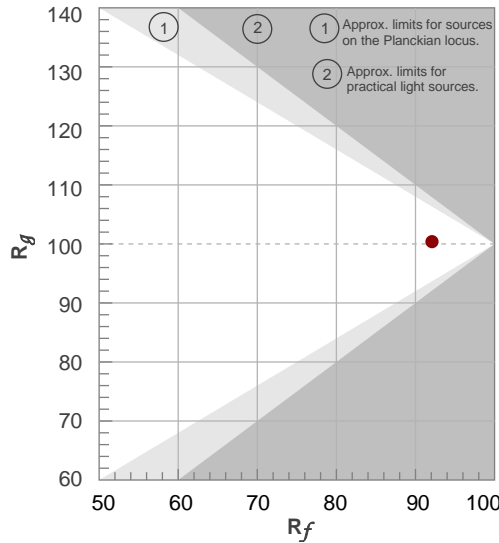
R_g 100.4
Gammut index R_g

TM30: 92.1

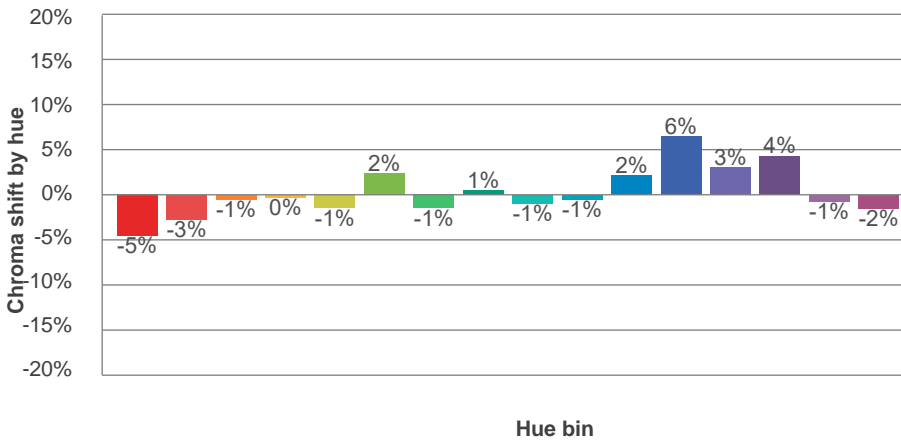
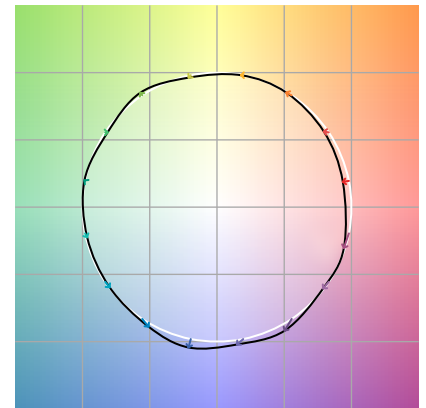
TM-30Color



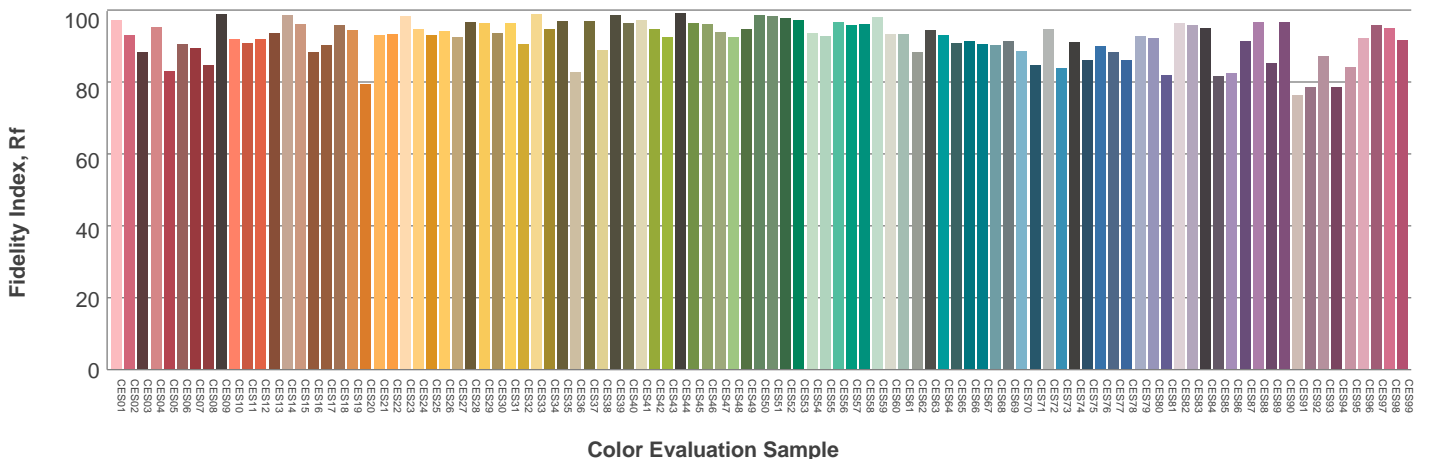
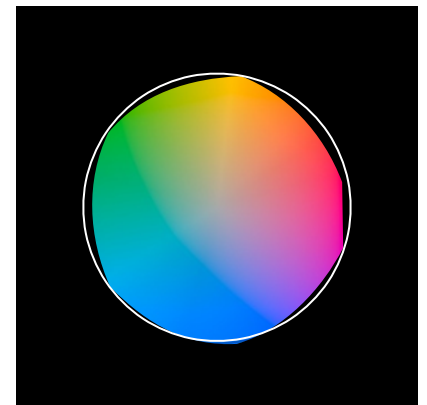
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	92	-5%	0%
2	93	-3%	3%
3	91	-1%	4%
4	95	0%	2%
5	94	-1%	2%
6	95	2%	0%
7	94	-1%	-1%
8	98	1%	0%
9	95	-1%	3%
10	91	-1%	5%
11	89	2%	7%
12	90	6%	0%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-2%	-11%



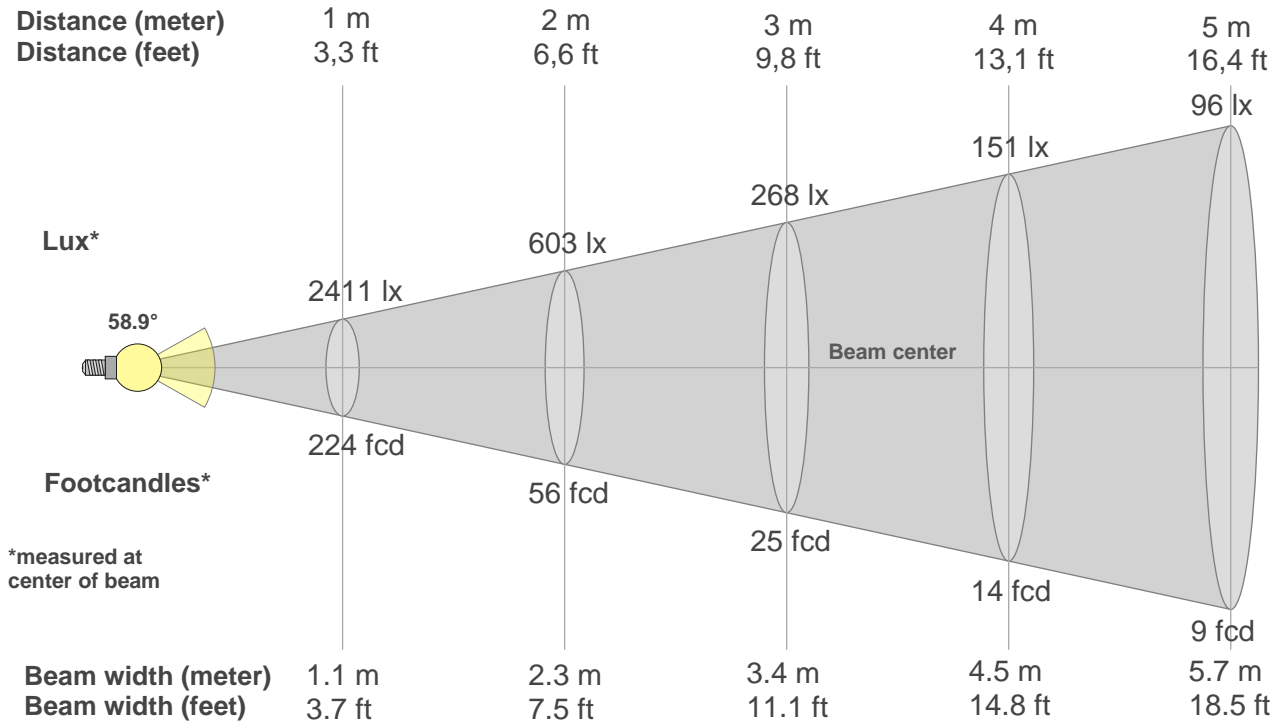
Color vector graphics



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
2411lx	603lx	268lx	151lx	96lx	67lx	49lx	38lx	30lx	24lx	20lx	17lx	14lx	12lx	11lx	9lx	8lx	7lx	7lx	6lx
224fcd	56fcd	24.9fcd	14fcd	9fcd	6.2fcd	4.6fcd	3.5fcd	2.8fcd	2.2fcd	1.9fcd	1.6fcd	1.3fcd	1.1fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.6fcd

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°
2411	2416	2412	2396	2368	2331	2283	2226	2158	2074	1968	1835	1697	1545	1361	1142	891	582	374	244
100%	100%	100%	99%	98%	97%	95%	92%	89%	86%	82%	76%	70%	64%	56%	47%	37%	24%	15%	10%

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°
2411	2408	2396	2378	2353	2320	2279	2229	2161	2071	1958	1830	1693	1545	1366	1151	902	626	367	226
100%	100%	99%	99%	98%	96%	95%	92%	90%	86%	81%	76%	70%	64%	57%	48%	37%	26%	15%	9%

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°
2411	2395	2377	2353	2327	2295	2254	2202	2135	2044	1930	1801	1664	1523	1358	1151	906	629	385	237
100%	99%	99%	98%	97%	95%	93%	91%	89%	85%	80%	75%	69%	63%	56%	48%	38%	26%	16%	10%

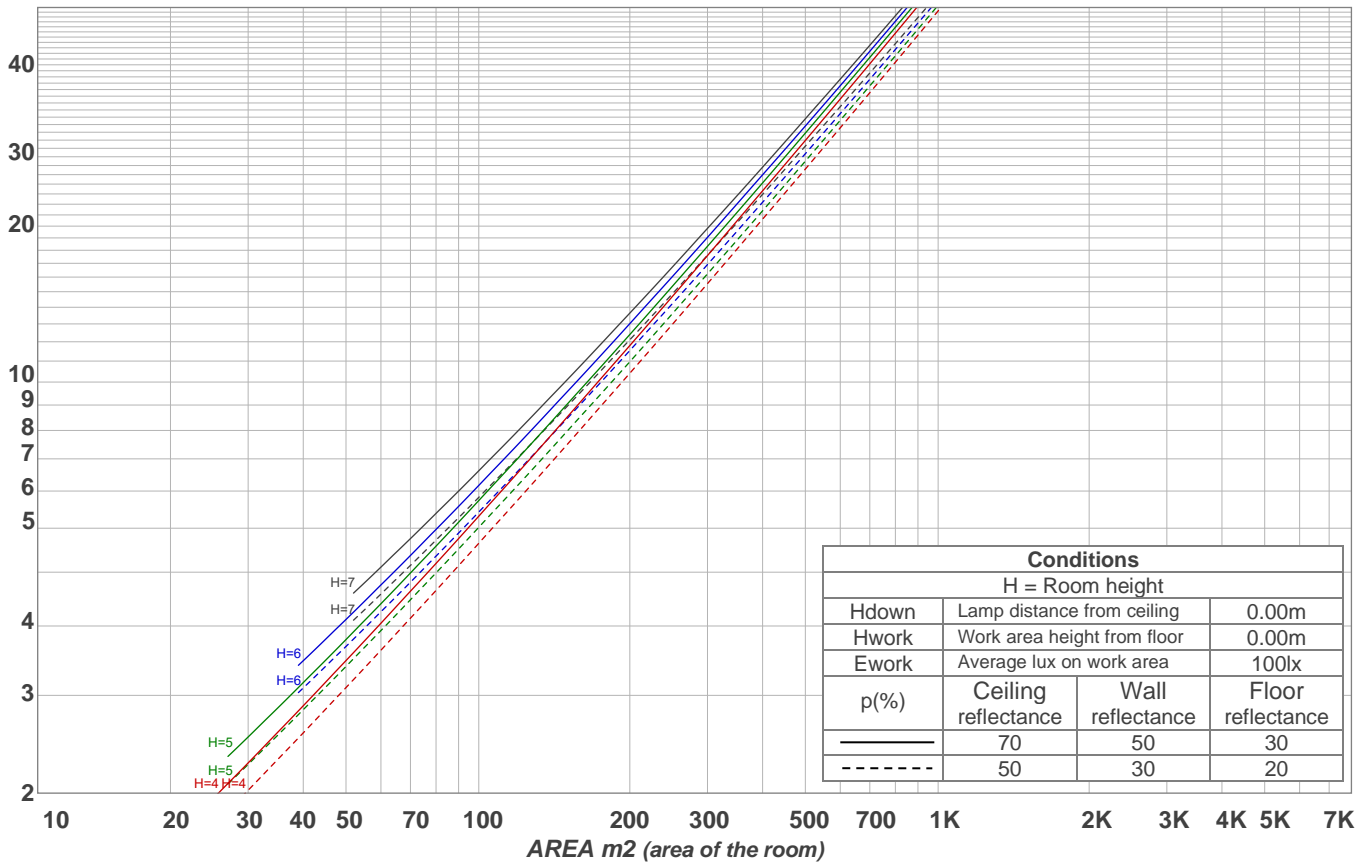
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2411	2413	2403	2383	2354	2316	2270	2214	2146	2060	1955	1828	1690	1547	1365	1147	893	602	372	246
100%	100%	100%	99%	98%	96%	94%	92%	89%	85%	81%	76%	70%	64%	57%	48%	37%	25%	15%	10%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
58.9°	75.9°	87.8°	99.5%	99.0%

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	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	96	96	96	94
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88	88	88	88
3	104	97	93	89	102	96	92	88	94	90	87	91	88	86	89	86	84	83	83	83	83
4	99	92	86	82	97	91	86	82	88	84	81	86	83	80	85	82	79	78	78	78	78
5	94	86	81	77	93	85	80	76	84	79	76	82	78	75	80	77	74	73	73	73	73
6	90	81	76	72	88	81	75	72	79	74	71	78	74	71	77	73	70	69	69	69	69
7	86	77	71	67	84	76	71	67	75	70	67	74	70	66	73	69	66	65	65	65	65
8	82	73	67	63	81	72	67	63	71	66	63	70	66	63	69	65	62	61	61	61	61
9	78	69	63	60	77	69	63	60	68	63	59	67	62	59	66	62	59	58	58	58	58
10	75	66	60	56	74	65	60	56	64	60	56	64	59	56	63	59	56	55	55	55	55

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
226 lm	610 lm	727 lm	332 lm	40.9 lm	2.96 lm	2.56 lm	3.06 lm	3.41 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