

Light efficiency:



Output: 1249 lm

Light quality:

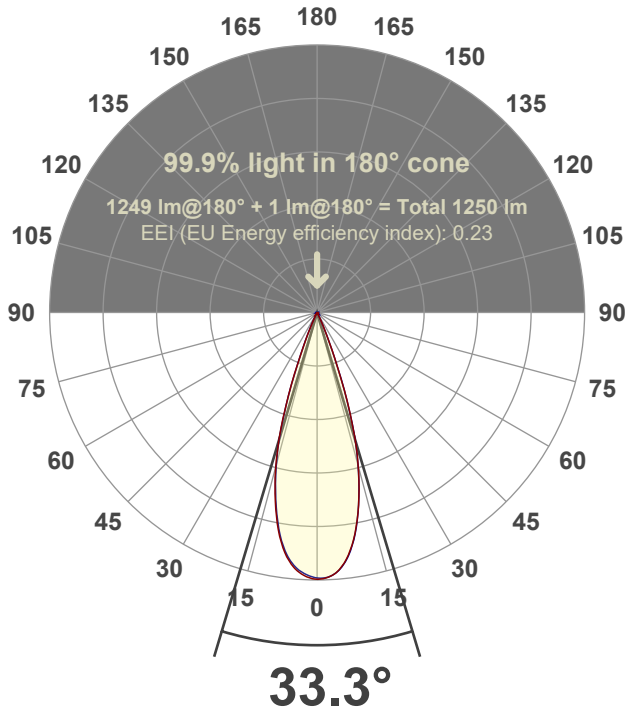


Peak: 4428 cd

Power: 20.7 W



Beam angle



Test number:

GR-F-F-CZ20-30k-FL-SQ-Rev2

Luminaire Model:

Graffiti Flat Square Fixed Downlight-CZ20 30k 38° Optic

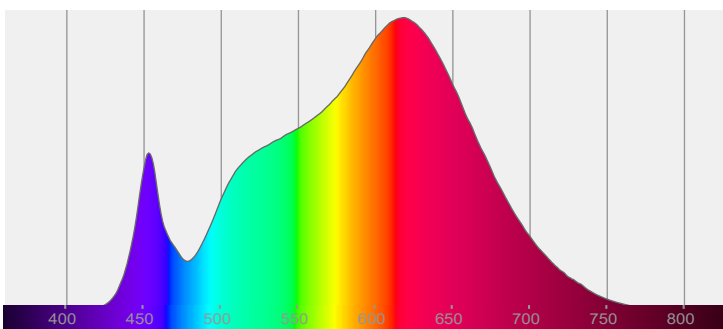
Date and time:

6/30/2022 8:12:48 PM

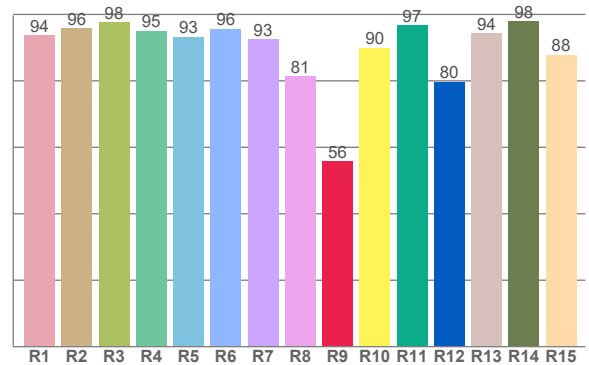
Delivered Lumens

1249

Spectra



CRI: 93.2 (R1-R8)



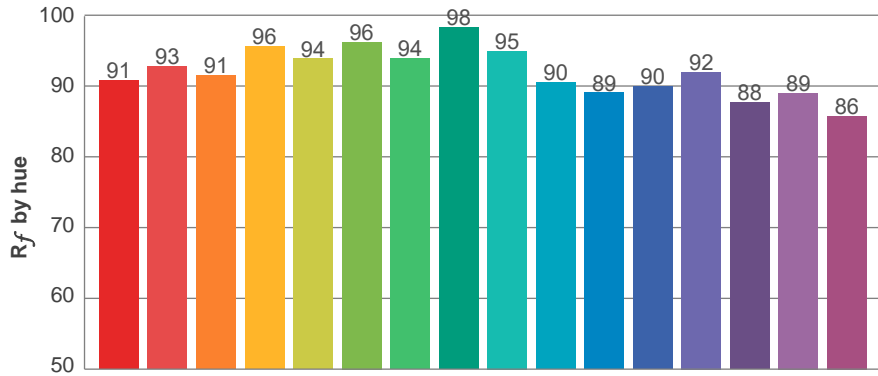
Color parameters

	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
	93.2	55.9	92.1	99.1	91.6	0.436	0.408	0.249	0.348	0.0015

R_f 92.1
Fidelity index R_f

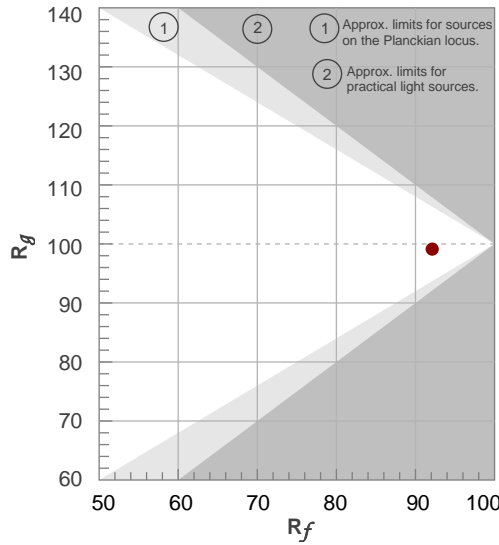
R_g 99.1
Gammut index R_g

TM30: 92.1

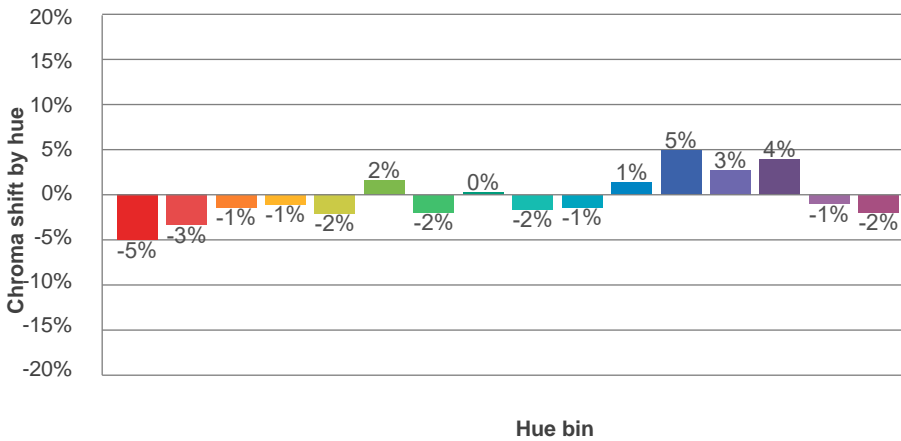
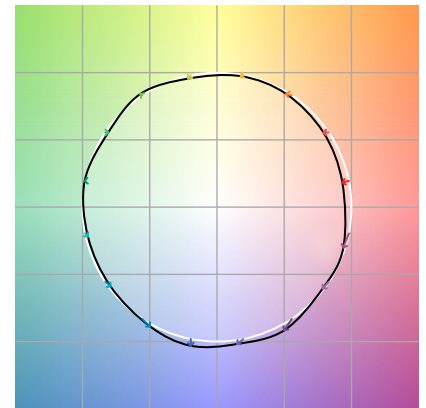


TM-30Color

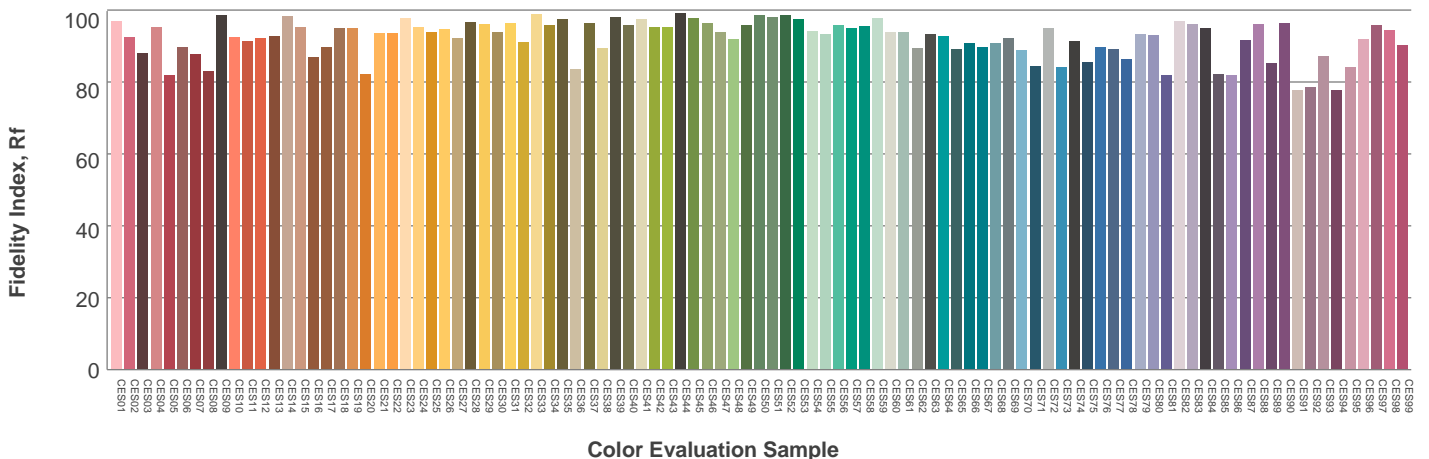
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	91	-1%	4%
4	96	-1%	2%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-2%	3%
10	90	-1%	5%
11	89	1%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-7%
16	86	-2%	-11%



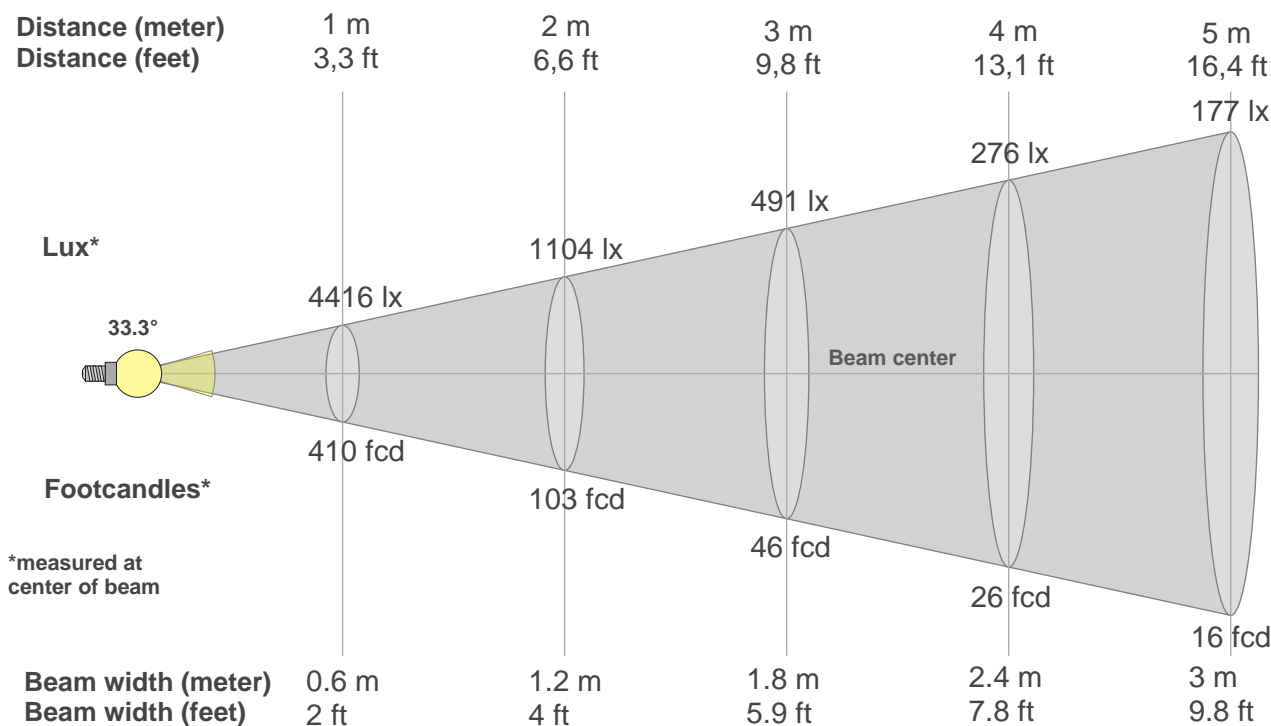
Color vector graphics



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
4416lx	1104lx	491lx	276lx	177lx	123lx	90lx	69lx	55lx	44lx	36lx	31lx	26lx	23lx	20lx	17lx	15lx	14lx	12lx	11lx
410.2fcd	102.6fcd	45.6fcd	25.6fcd	16.4fcd	11.4fcd	8.4fcd	6.4fcd	5.1fcd	4.1fcd	3.4fcd	2.8fcd	2.4fcd	2.1fcd	1.8fcd	1.6fcd	1.4fcd	1.3fcd	1.1fcd	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°
4416	4409	4337	4190	3967	3670	3304	2880	2395	1814	1201	673	329	157	75	35	17	11	8	6
100%	100%	98%	95%	90%	83%	75%	65%	54%	41%	27%	15%	7%	4%	2%	1%	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°
4416	4397	4330	4195	3982	3687	3303	2863	2373	1806	1192	634	305	146	65	28	15	11	9	7
100%	100%	98%	95%	90%	84%	75%	65%	54%	41%	27%	14%	7%	3%	1%	1%	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°
4416	4392	4314	4180	3977	3689	3310	2886	2396	1827	1202	647	341	169	78	33	16	12	9	7
100%	99%	98%	95%	90%	84%	75%	65%	54%	41%	27%	15%	8%	4%	2%	1%	0%	0%	0%	0%

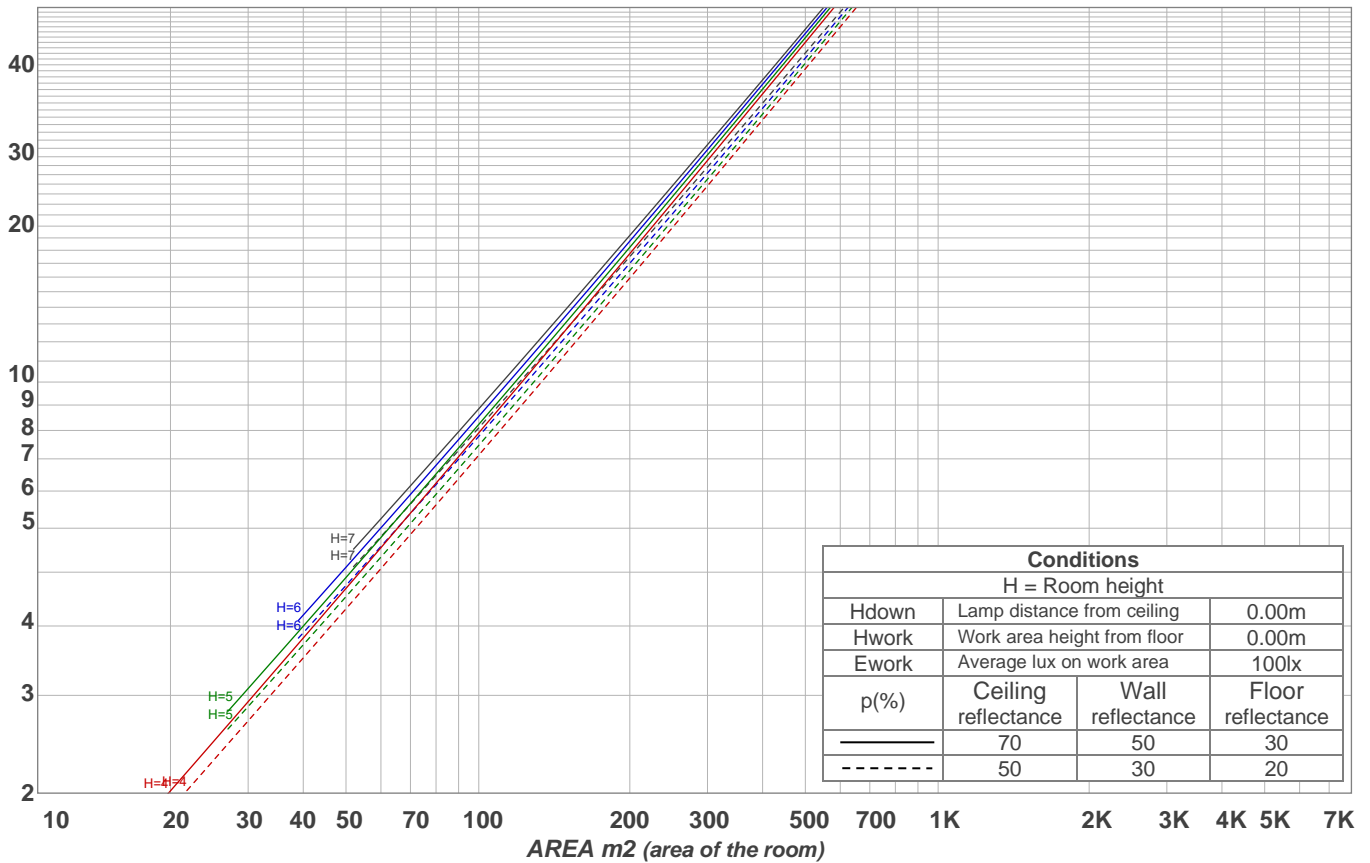
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
4416	4364	4284	4146	3938	3648	3277	2850	2368	1794	1190	662	329	175	86	39	18	12	10	7
100%	99%	97%	94%	89%	83%	74%	65%	54%	41%	27%	15%	7%	4%	2%	1%	0%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
33.3°	46.5°	54°	99.0%	98.7%

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	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96	
2	111	107	104	102	109	106	103	101	103	101	99	100	98	97	97	96	95	93	93	93	
3	108	103	99	97	106	102	98	96	99	97	94	97	95	93	95	93	92	90	90	90	
4	104	99	95	92	103	98	94	92	96	93	91	94	92	90	93	90	89	87	87	87	
5	101	96	92	89	100	95	91	88	93	90	87	92	89	87	90	88	86	85	85	85	
6	99	92	88	85	97	92	88	85	90	87	85	89	86	84	88	86	84	82	82	82	
7	96	90	85	83	95	89	85	82	88	84	82	87	84	82	86	83	81	80	80	80	
8	93	87	83	80	92	86	83	80	85	82	80	85	82	79	84	81	79	78	78	78	
9	91	84	80	78	90	84	80	78	83	80	77	82	79	77	82	79	77	76	76	76	
10	89	82	78	75	88	82	78	75	81	78	75	80	77	75	80	77	75	74	74	74	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
388 lm	691 lm	147 lm	7.21 lm	2.47 lm	2.24 lm	2.96 lm	3.96 lm	4.74 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