

Light efficiency:



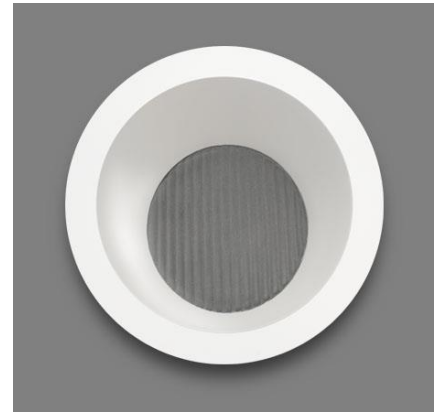
Output: 1102 lm

Light quality:

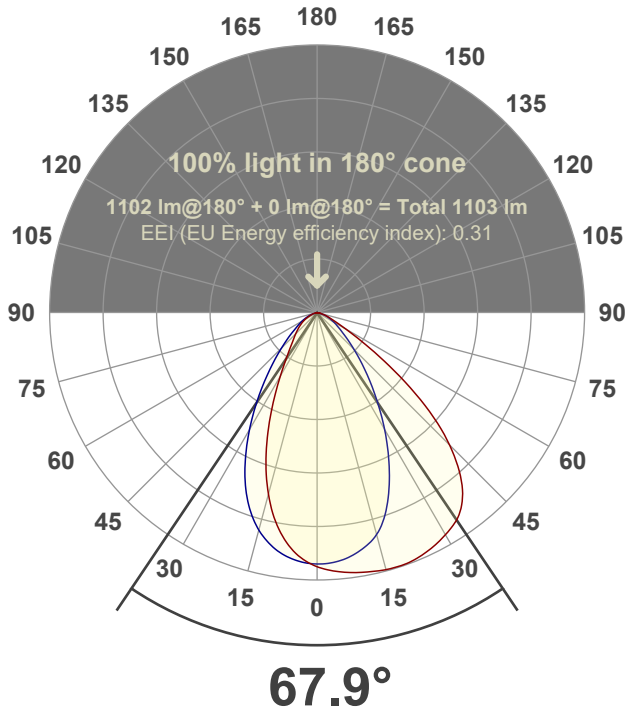


Peak: 806 cd

Power: 20.7 W



Beam angle



Test number:

GR-W-CZ20-30k-RD-Rev2

Luminaire Model:

Graffiti Wallwash Round CZ20-30k

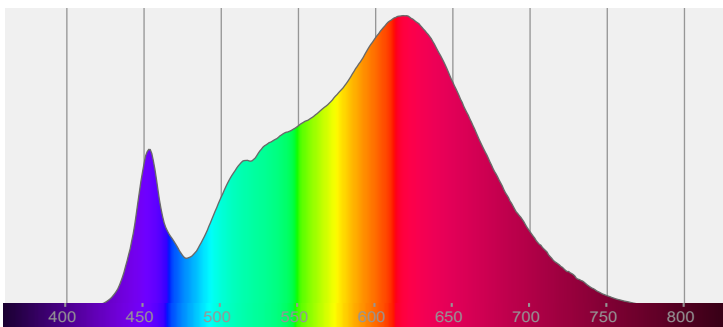
Date and time:

7/7/2022 3:20:23 PM

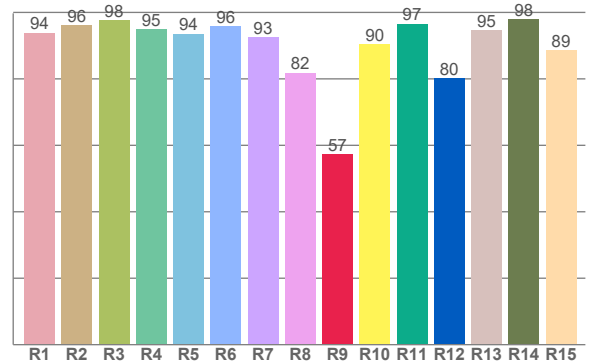
Delivered Lumens

1102

Spectra



CRI: 93.3 (R1-R8)



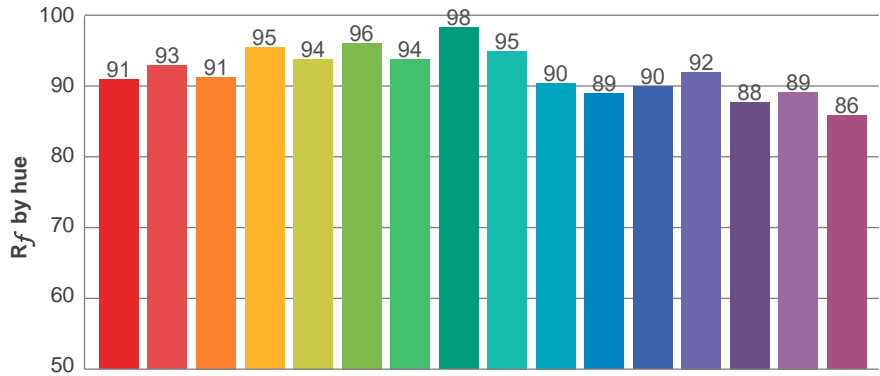
Color parameters

	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 diviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	93.3	57.3	92.1	99.4	91.6	0.436	0.406	0.249	0.348	0.0009

R_f 92.1
Fidelity index R_f

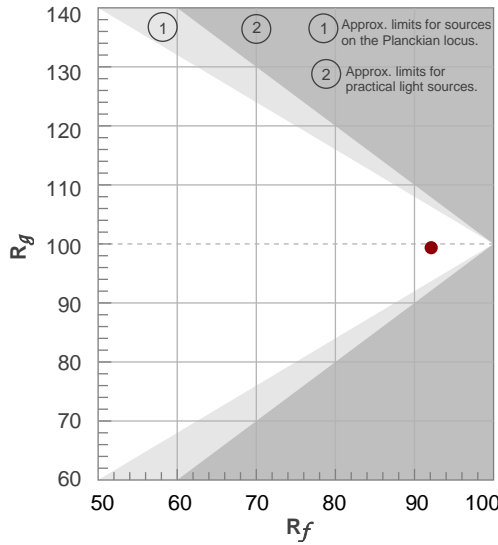
R_g 99.4
Gammut index R_g

TM30: 92.1

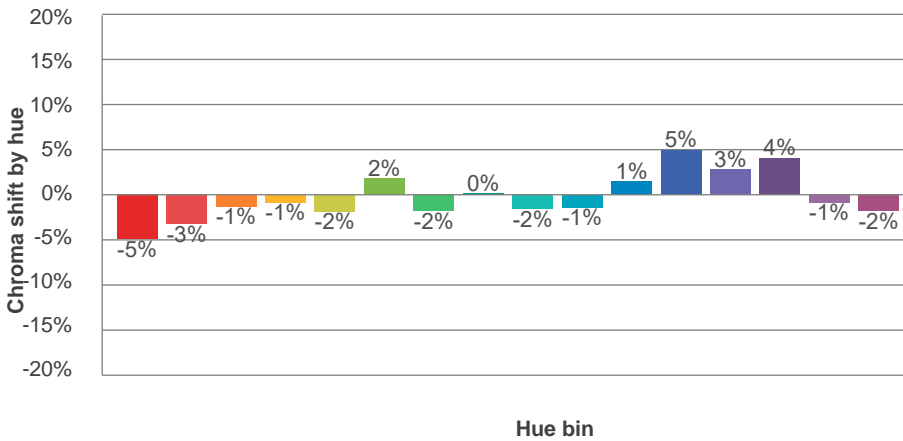
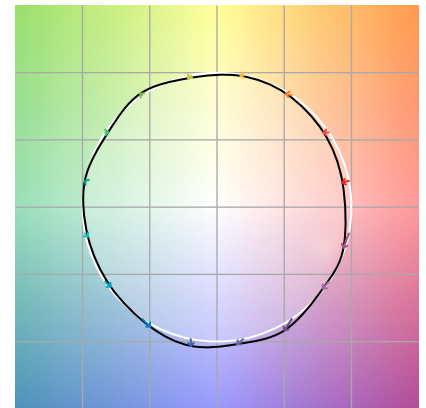


TM-30Color

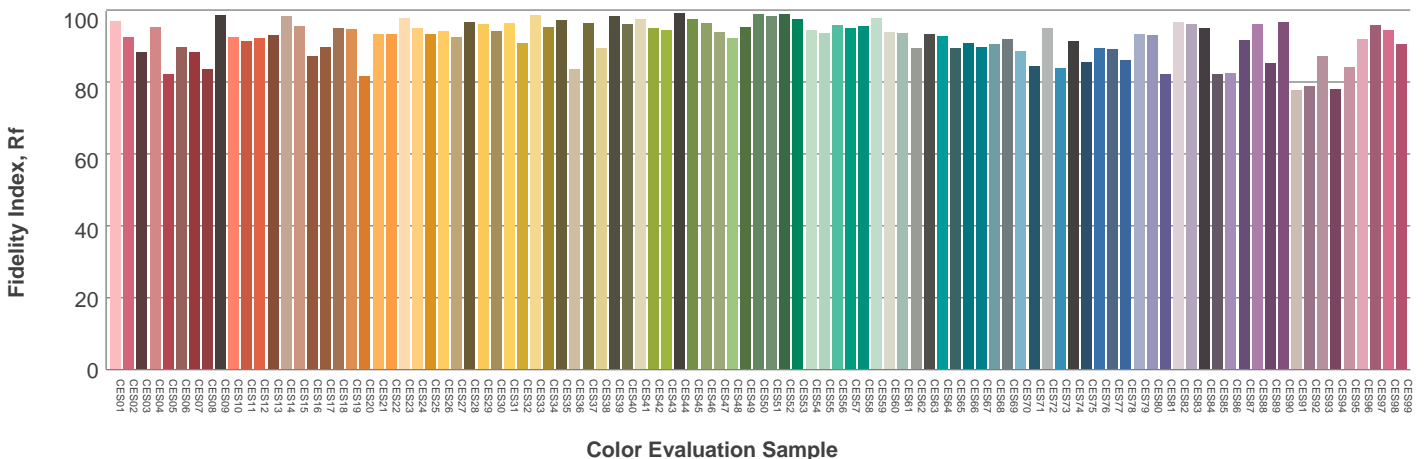
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	91	-1%	4%
4	95	-1%	2%
5	94	-2%	2%
6	96	2%	0%
7	94	-2%	-1%
8	98	0%	0%
9	95	-2%	3%
10	90	-1%	5%
11	89	1%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-7%
16	86	-2%	-11%



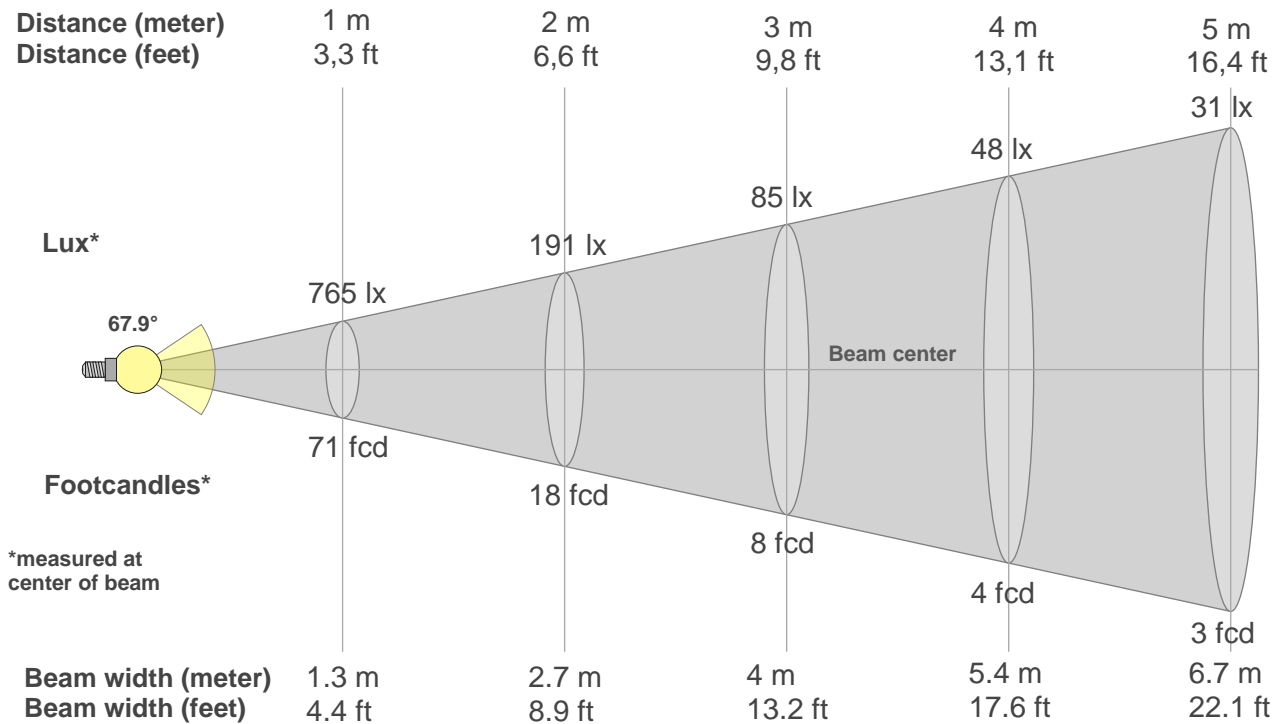
Color vector graphics



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
765lx	191lx	85lx	48lx	31lx	21lx	16lx	12lx	9lx	8lx	6lx	5lx	5lx	4lx	3lx	3lx	3lx	2lx	2lx	2lx
71.1fcd	17.8fcd	7.9fcd	4.4fcd	2.8fcd	2fcd	1.5fcd	1.1fcd	0.9fcd	0.7fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.2fcd

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
765	787	798	805	806	795	777	748	683	569	409	232	111	58	36	22	11	3	0	0
100%	103%	104%	105%	105%	104%	101%	98%	89%	74%	53%	30%	15%	8%	5%	3%	1%	0%	0%	0%

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
765	754	733	695	620	518	411	310	226	161	114	83	62	45	30	17	8	4	2	0
100%	99%	96%	91%	81%	68%	54%	40%	30%	21%	15%	11%	8%	6%	4%	2%	1%	1%	0%	0%

Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
765	732	666	569	452	328	225	157	117	94	75	59	45	32	21	15	10	6	4	0
100%	96%	87%	74%	59%	43%	29%	21%	15%	12%	10%	8%	6%	4%	3%	2%	1%	1%	1%	0%

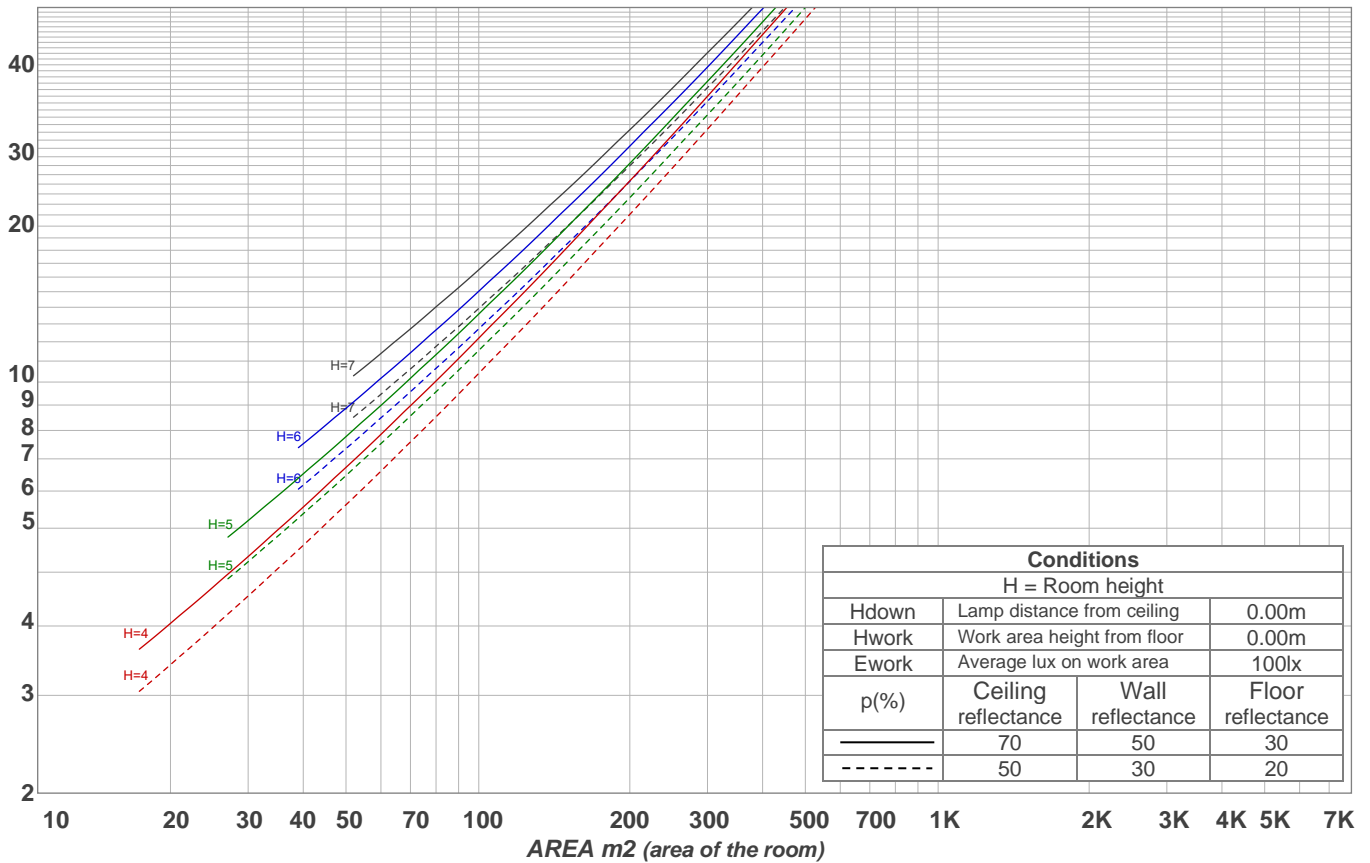
Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
765	752	727	681	611	518	411	309	222	156	110	77	56	39	26	14	6	3	0	0
100%	98%	95%	89%	80%	68%	54%	40%	29%	20%	14%	10%	7%	5%	3%	2%	1%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
67.9°	111.1°	146°	94.0%	77.6%

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	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90	90	90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80	80	80	
3	97	89	83	78	95	87	82	77	85	80	76	82	78	74	80	76	73	71	71	71	
4	91	81	74	69	89	80	73	68	78	72	67	75	71	67	73	69	66	64	64	64	
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58	58	58	
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52	52	52	
7	74	63	56	50	73	62	55	50	61	55	50	59	54	50	58	53	49	48	48	48	
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44	44	44	
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40	40	40	
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37	37	37	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
71.5 lm	193 lm	250 lm	240 lm	183 lm	98.7 lm	43.5 lm	17.8 lm	4.94 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