

Light efficiency:



Output: 933 lm

Light quality:

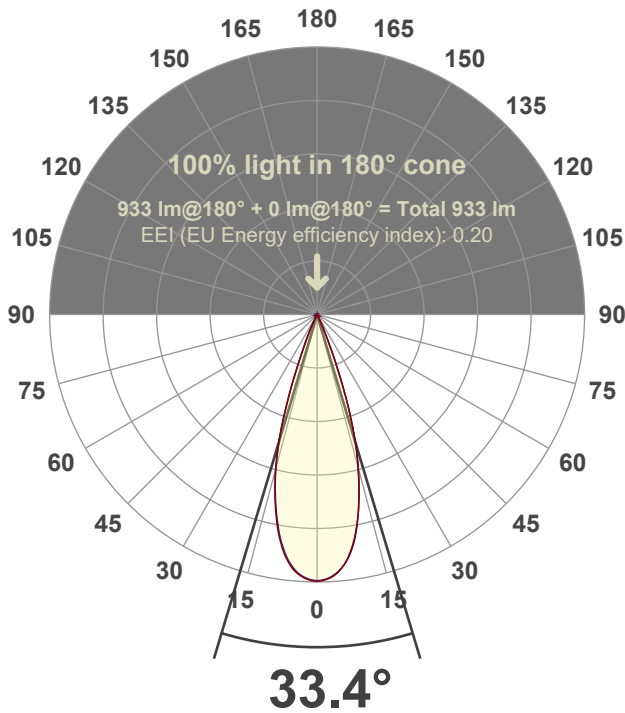


Peak: 3277 cd

Power: 14.2 W



Beam angle



Test number:

GR-F-F-CZ14-30k-FL-SQ-Rev2

Luminaire Model:

Graffiti Flat Square Fixed Downlight-CZ14 30k 38° Optic

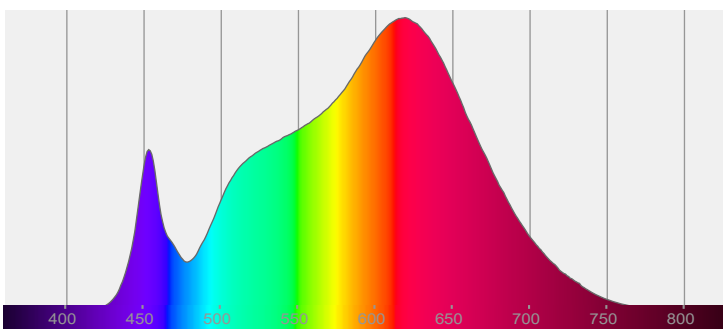
Date and time:

6/30/2022 8:15:54 PM

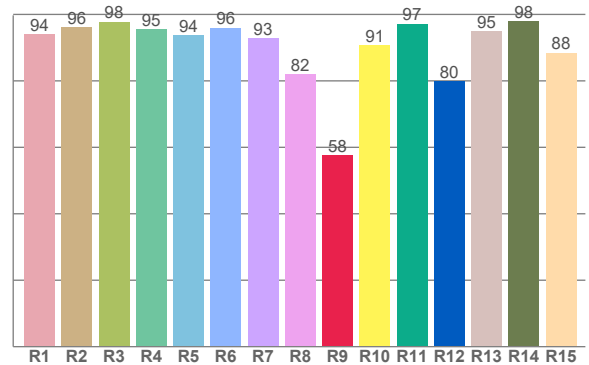
Delivered Lumens

933

Spectra



CRI: 93.5 (R1-R8)



Color parameters

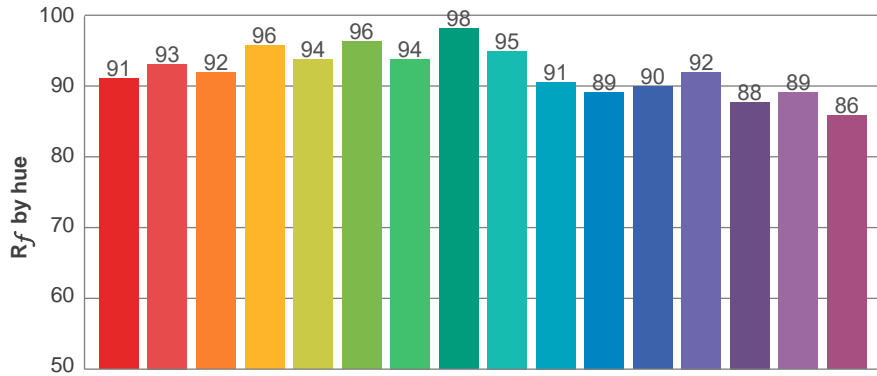
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	93.5	57.5	92.2	99.2	91.8	0.437	0.407	0.249	0.348	0.0013

R_f 92.2
Fidelity index R_f

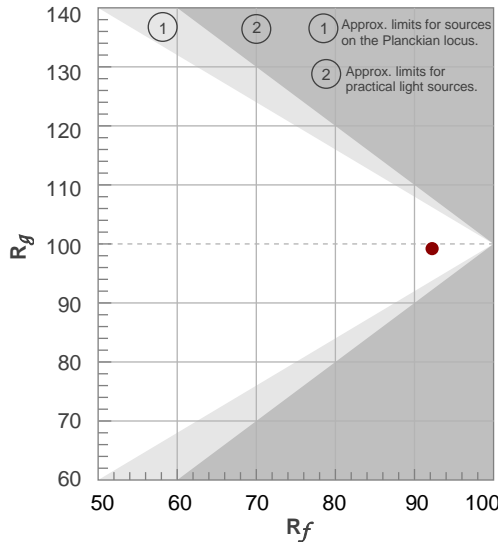
R_g 99.2
Gammut index R_g

TM30: 92.2

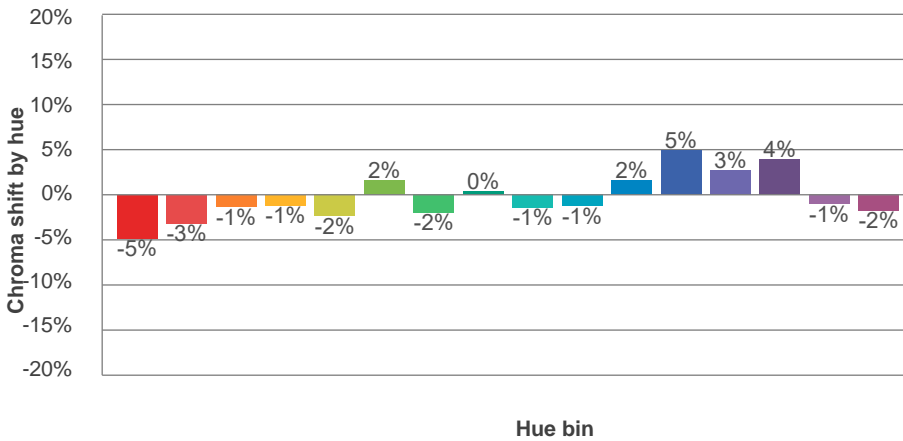
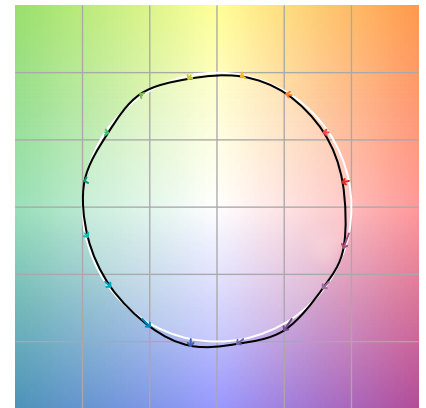
TM-30Color



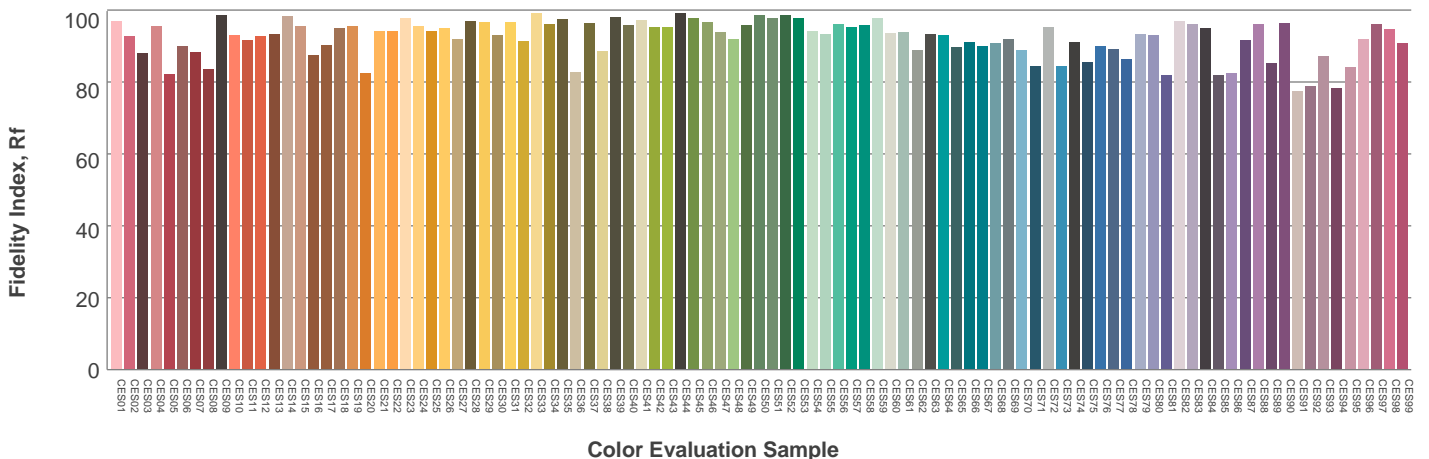
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	1%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-1%	3%
10	91	-1%	5%
11	89	2%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-2%	-11%



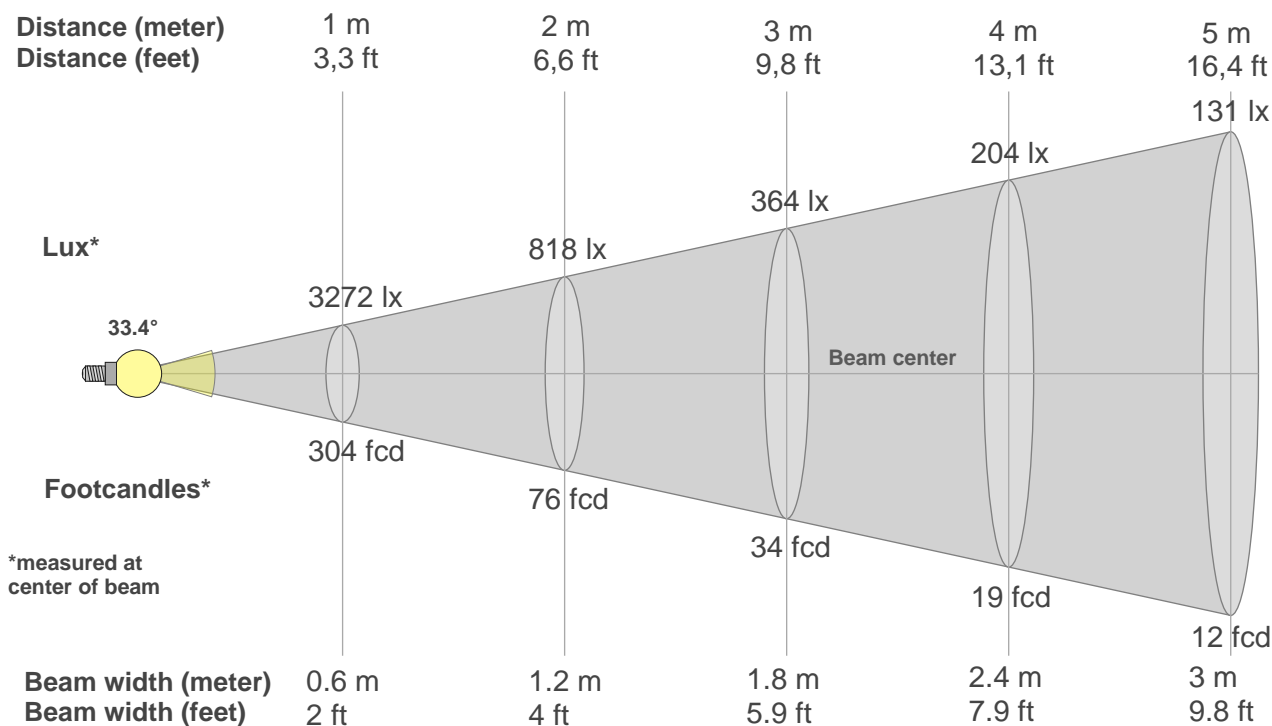
Color vector graphics



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
3272lx	818lx	364lx	204lx	131lx	91lx	67lx	51lx	40lx	33lx	27lx	23lx	19lx	17lx	15lx	13lx	11lx	10lx	9lx	8lx
303.9fcd	76fcd	33.8fcd	19fcd	12.2fcd	8.4fcd	6.2fcd	4.7fcd	3.8fcd	3fcd	2.5fcd	2.1fcd	1.8fcd	1.6fcd	1.4fcd	1.2fcd	1.1fcd	0.9fcd	0.8fcd	0.8fcd

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°
3272	3257	3205	3098	2936	2719	2449	2133	1785	1361	906	514	247	117	54	26	13	8	6	4
100%	100%	98%	95%	90%	83%	75%	65%	55%	42%	28%	16%	8%	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°
3272	3248	3191	3095	2947	2736	2450	2119	1763	1355	908	487	209	98	44	20	11	8	7	6
100%	99%	98%	95%	90%	84%	75%	65%	54%	41%	28%	15%	6%	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°
3272	3254	3198	3102	2950	2729	2452	2140	1782	1366	894	497	261	129	59	24	12	9	8	6
100%	99%	98%	95%	90%	83%	75%	65%	54%	42%	27%	15%	8%	4%	2%	1%	0%	0%	0%	0%

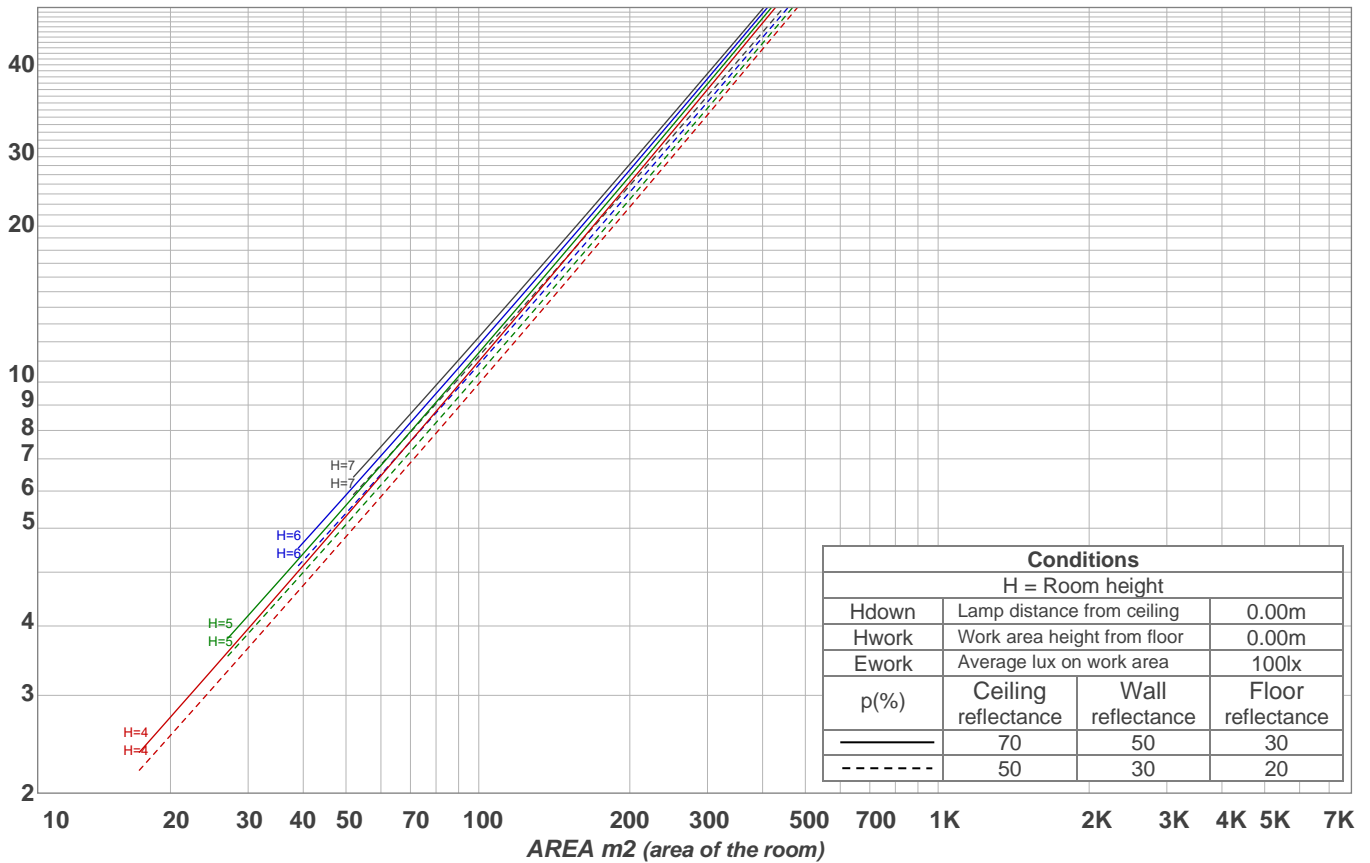
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3272	3247	3188	3080	2919	2702	2433	2129	1767	1335	887	506	274	152	76	35	16	9	7	5
100%	99%	97%	94%	89%	83%	74%	65%	54%	41%	27%	15%	8%	5%	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
33.4°	46.6°	54.2°	98.9%	98.5%

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	112	110	109	107	106	105	104	103	102	101	99	99	98	96	96	96	
2	111	107	104	102	109	106	103	101	103	100	98	100	98	96	97	96	94	93	93	93	
3	108	103	99	96	106	102	98	96	99	96	94	97	95	93	95	93	91	90	90	90	
4	104	99	95	92	103	98	94	91	96	93	90	94	91	89	92	90	88	87	87	87	
5	101	95	91	88	100	95	91	88	93	90	87	91	89	86	90	88	86	85	85	85	
6	98	92	88	85	97	92	88	85	90	87	84	89	86	84	88	85	83	82	82	82	
7	96	89	85	82	95	89	85	82	88	84	82	87	84	81	86	83	81	80	80	80	
8	93	87	83	80	92	86	82	80	85	82	79	84	81	79	84	81	79	78	78	78	
9	91	84	80	77	90	84	80	77	83	79	77	82	79	77	81	79	77	76	76	76	
10	88	82	78	75	88	81	78	75	81	77	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°
288 lm	513 lm	112 lm	5.58 lm	1.94 lm	2.10 lm	2.79 lm	3.45 lm	4.27 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