

Light efficiency:



Output: 1721 lm

Light quality:

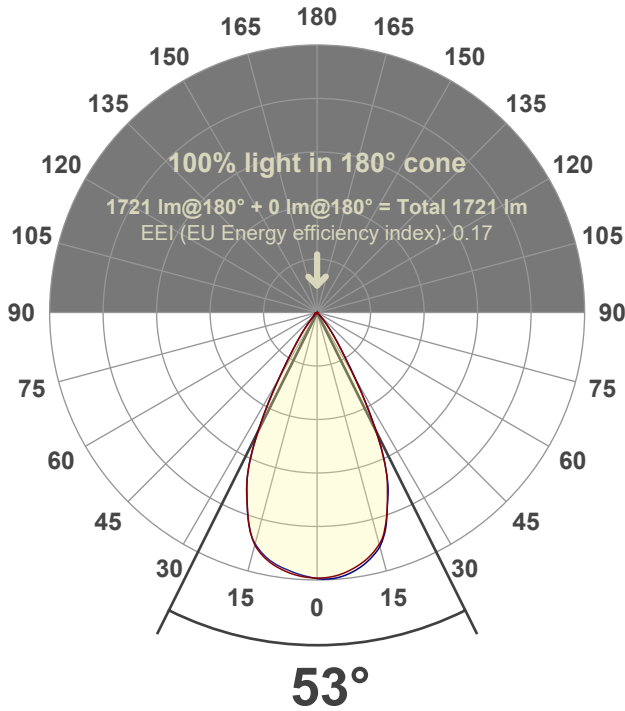


Peak: 2447 cd

Power: 20.7 W



Beam angle



Test number:

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

Luminaire Model:

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

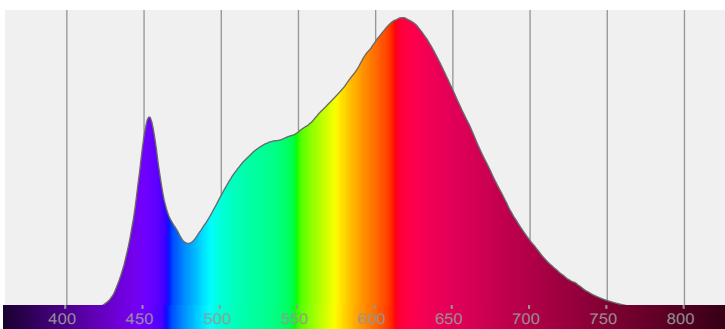
Date and time:

3/9/2022 4:03:56 PM

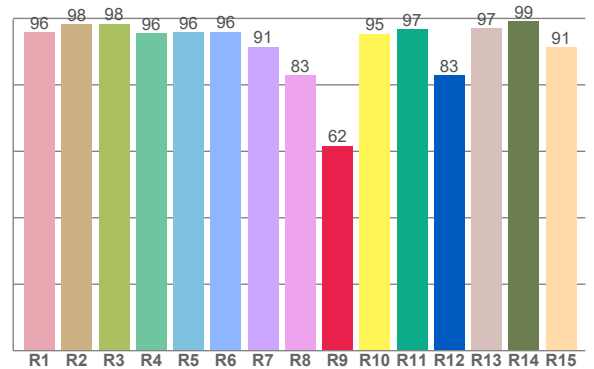
Delivered Lumens

1721

Spectra



CRI: 94.3 (R1-R8)



Color parameters

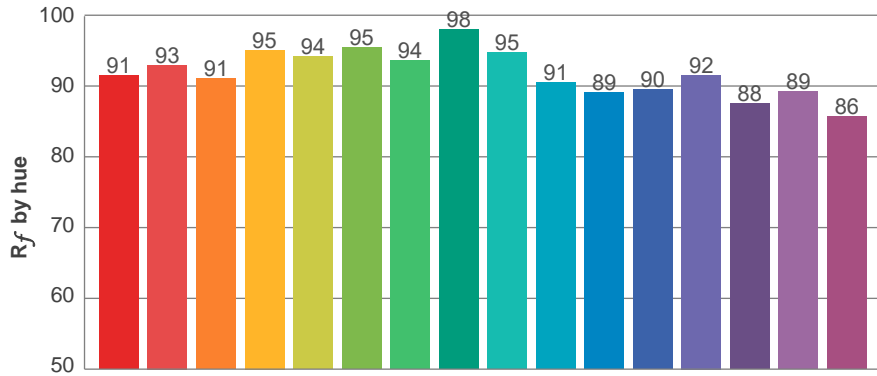
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	94.3	61.6	92.0	100.3	91.6	0.424	0.393	0.247	0.343	-0.0025

R_f 92.0
Fidelity index R_f

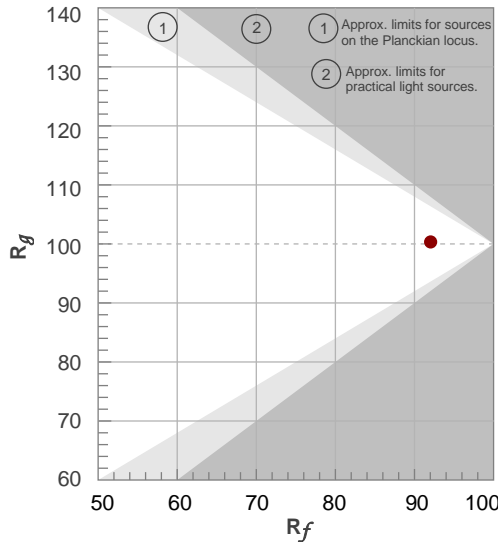
R_g 100.3
Gammut index R_g

TM30: 92.0

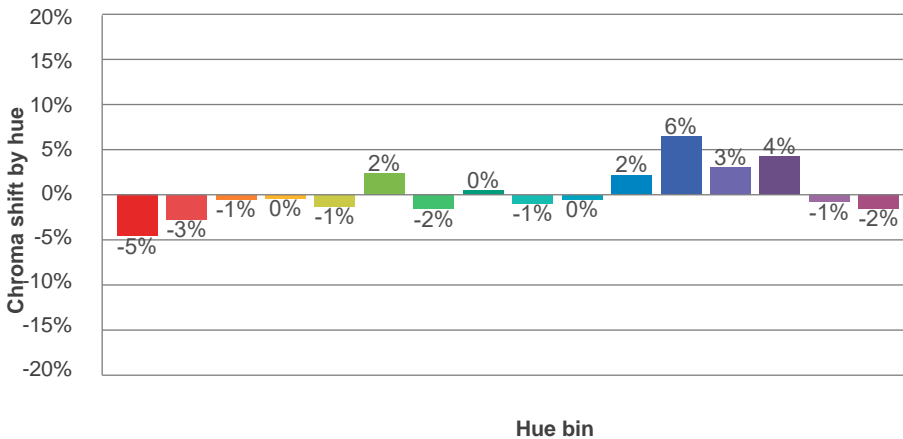
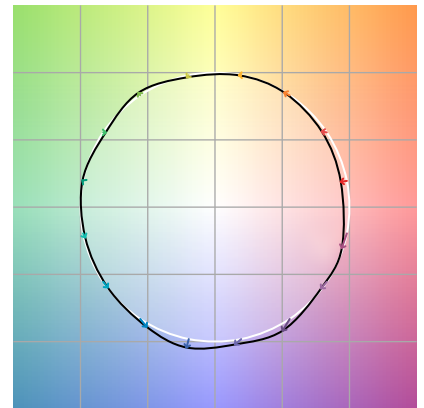
TM-30Color



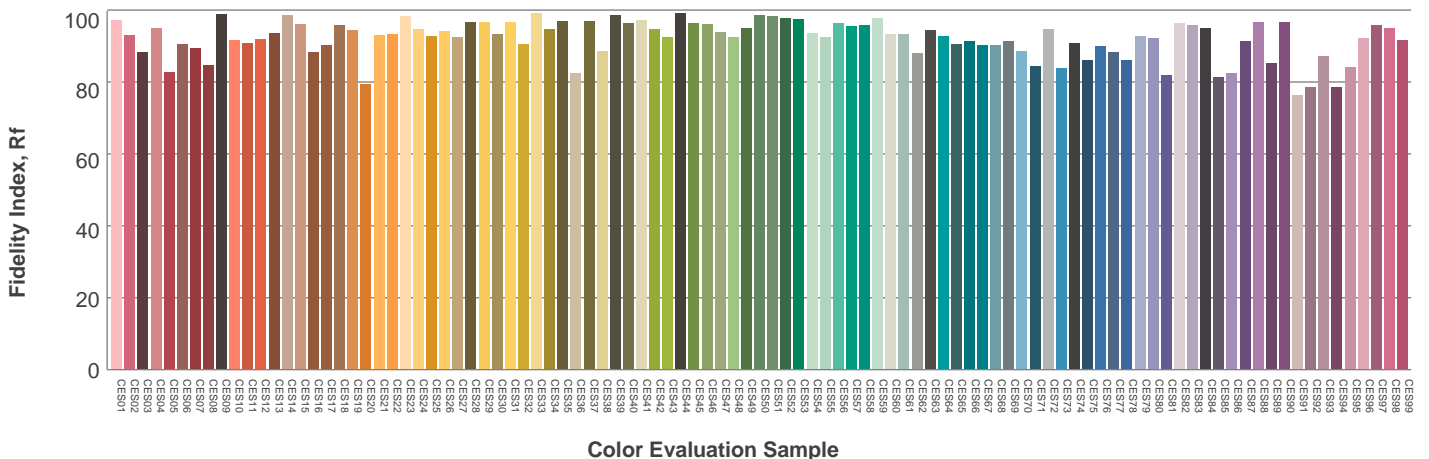
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	3%
3	91	-1%	4%
4	95	0%	2%
5	94	-1%	2%
6	95	2%	0%
7	94	-2%	-1%
8	98	0%	0%
9	95	-1%	3%
10	91	0%	5%
11	89	2%	7%
12	90	6%	0%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-2%	-11%



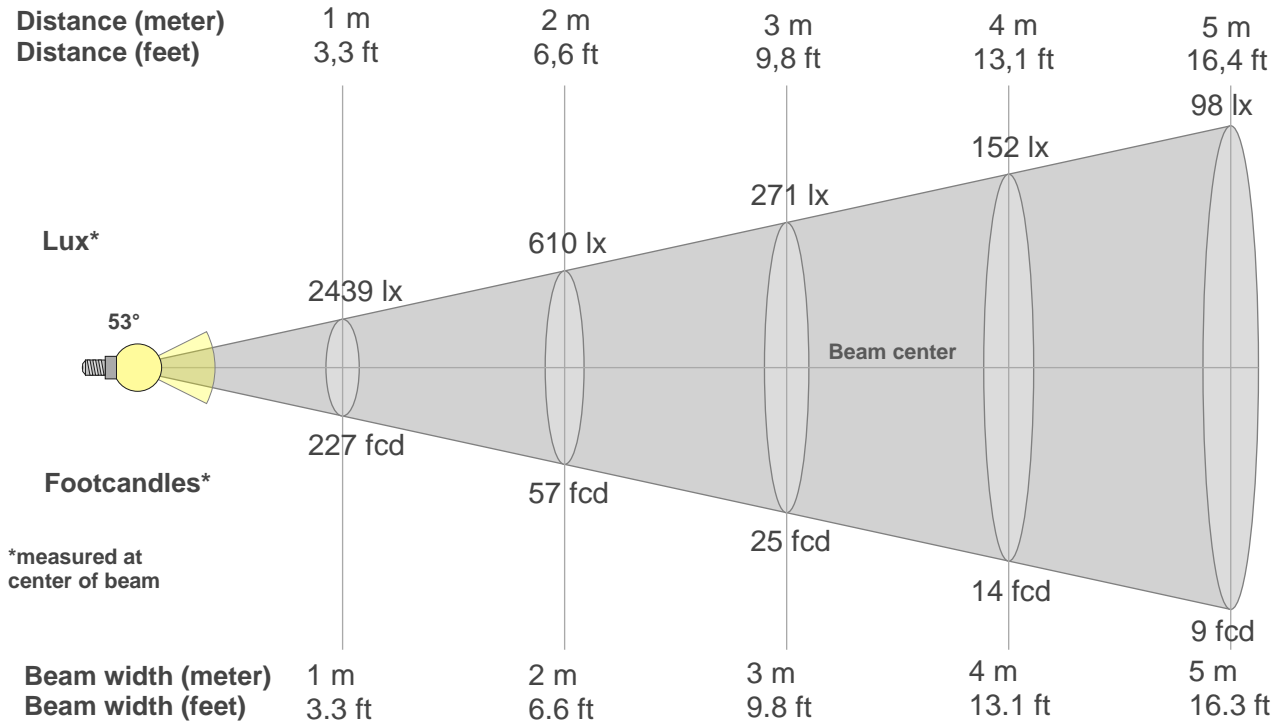
Color vector graphics



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
2439lx	610lx	271lx	152lx	98lx	68lx	50lx	38lx	30lx	24lx	20lx	17lx	14lx	12lx	11lx	10lx	8lx	8lx	7lx	6lx
226.6fcd	56.6fcd	25.2fcd	14.2fcd	9.1fcd	6.3fcd	4.6fcd	3.5fcd	2.8fcd	2.3fcd	1.9fcd	1.6fcd	1.3fcd	1.2fcd	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°
2439	2434	2423	2402	2373	2337	2293	2237	2161	2038	1887	1723	1538	1293	991	718	506	357	256	179
100%	100%	99%	98%	97%	96%	94%	92%	89%	84%	77%	71%	63%	53%	41%	29%	21%	15%	10%	7%

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°
2439	2447	2442	2426	2401	2364	2317	2257	2173	2052	1891	1740	1539	1290	1010	735	506	370	269	192
100%	100%	100%	99%	98%	97%	95%	93%	89%	84%	78%	71%	63%	53%	41%	30%	21%	15%	11%	8%

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°
2439	2432	2421	2404	2379	2347	2302	2242	2156	2035	1882	1728	1538	1289	1004	727	500	364	265	190
100%	100%	99%	99%	98%	96%	94%	92%	88%	83%	77%	71%	63%	53%	41%	30%	20%	15%	11%	8%

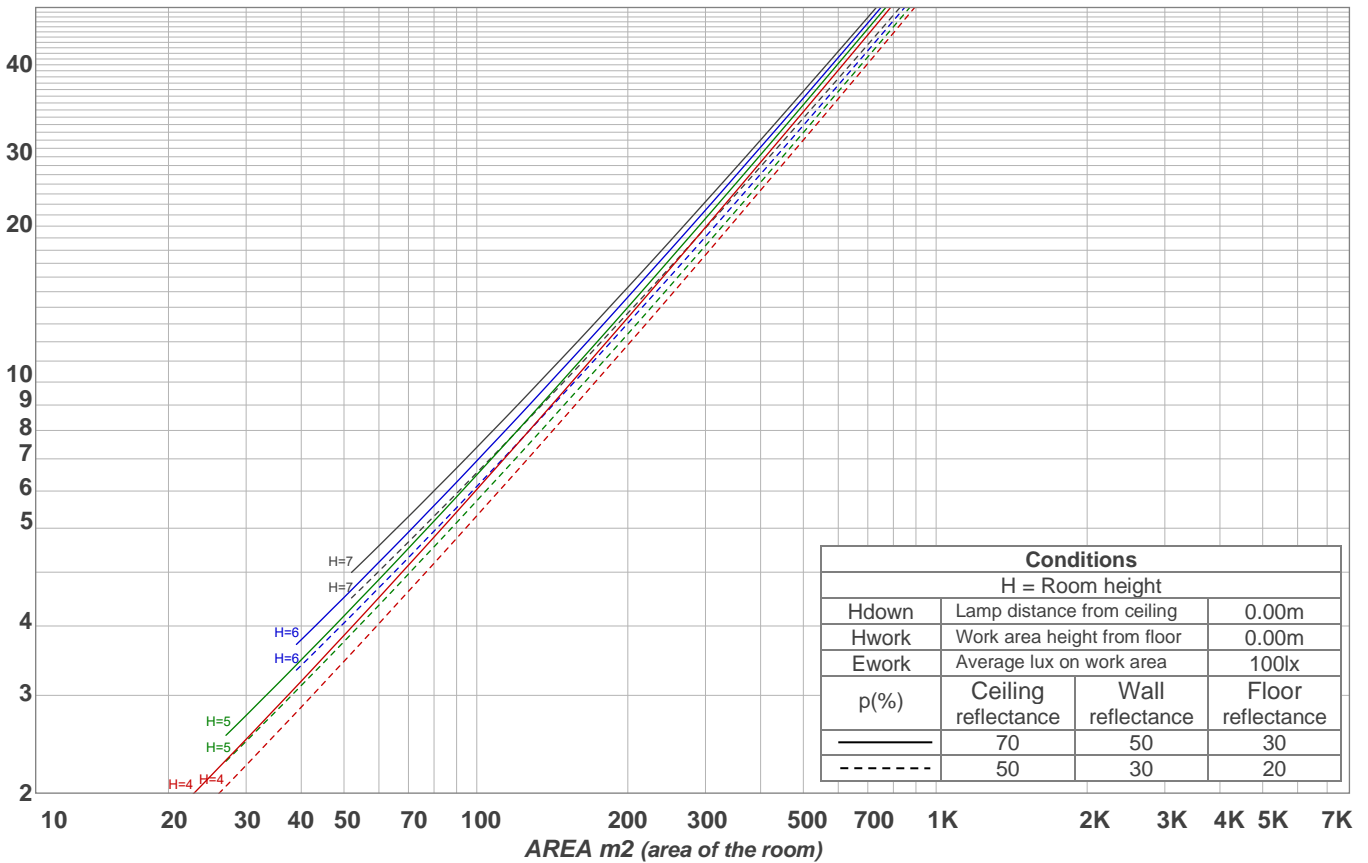
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2439	2426	2408	2385	2360	2329	2287	2231	2155	2029	1878	1719	1536	1290	1011	741	526	373	267	186
100%	99%	99%	98%	97%	96%	94%	91%	88%	83%	77%	70%	63%	53%	41%	30%	22%	15%	11%	8%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
53°	72.9°	87.1°	99.4%	98.6%

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		
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94	94		
2	109	104	101	98	107	103	99	96	100	97	94	97	94	92	94	92	90	89	89		
3	104	98	94	90	102	97	93	89	94	91	88	92	89	87	90	87	85	84	84		
4	99	93	88	84	98	91	87	83	89	85	82	87	84	81	86	83	80	79	79		
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75	75		
6	91	83	77	74	90	82	77	73	81	76	73	79	75	72	78	75	72	71	71		
7	87	79	73	69	86	78	73	69	77	72	69	76	71	68	75	71	68	67	67		
8	83	75	69	66	82	74	69	65	73	68	65	72	68	65	71	67	65	63	63		
9	80	71	66	62	79	71	65	62	70	65	62	69	65	62	68	64	61	60	60		
10	77	68	62	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57	57		

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
228 lm	610 lm	619 lm	210 lm	38.2 lm	4.93 lm	3.60 lm	3.06 lm	3.82 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