

Light efficiency:



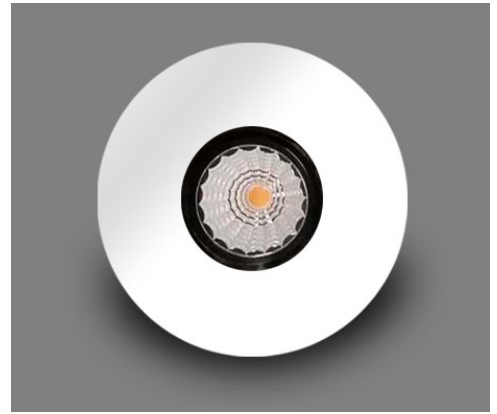
Output: 1007 lm

Light quality:

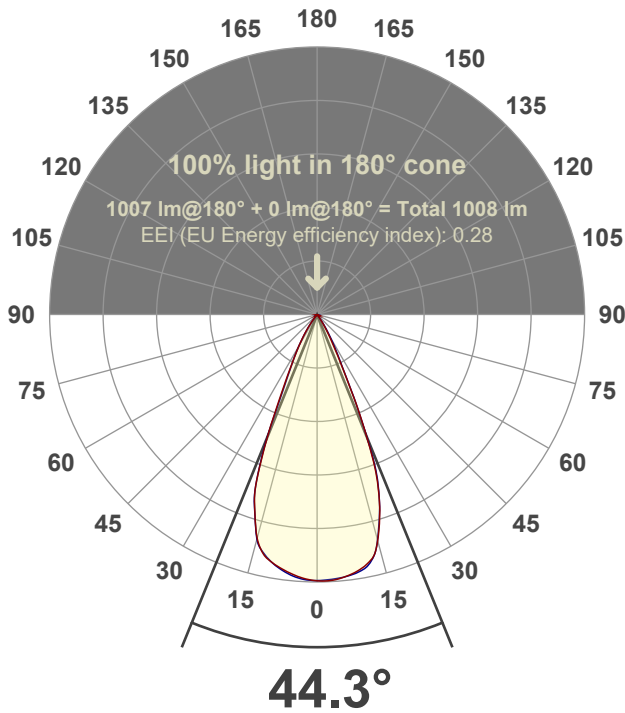


Peak: 1959 cd

Power: 21.3 W



Beam angle



Test number:

GR-F-F-A20-3019-WF-RD-Rev2

Luminaire Model:

Graffiti Flat Round Fixed Downlight-A20-3019 60° Optic

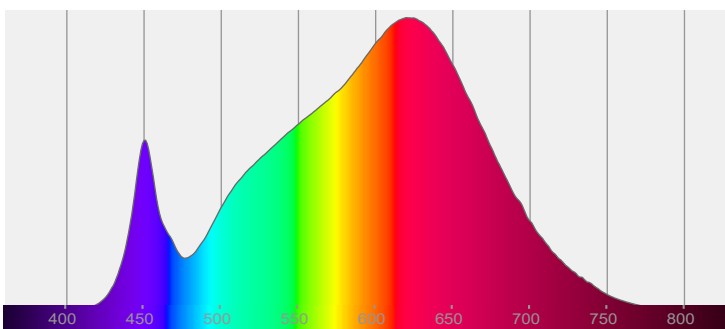
Date and time:

4/28/2022 8:25:09 PM

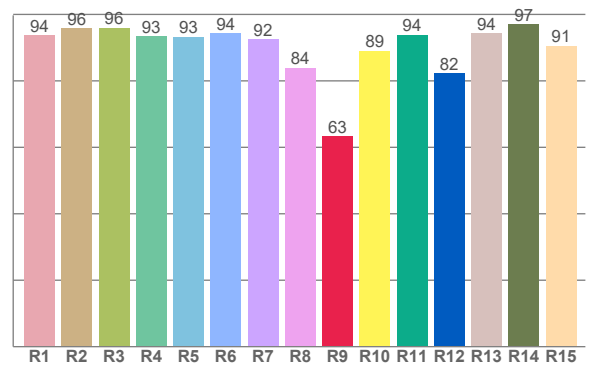
Delivered Lumens

1007

Spectra



CRI: 92.9 (R1-R8)



Color parameters

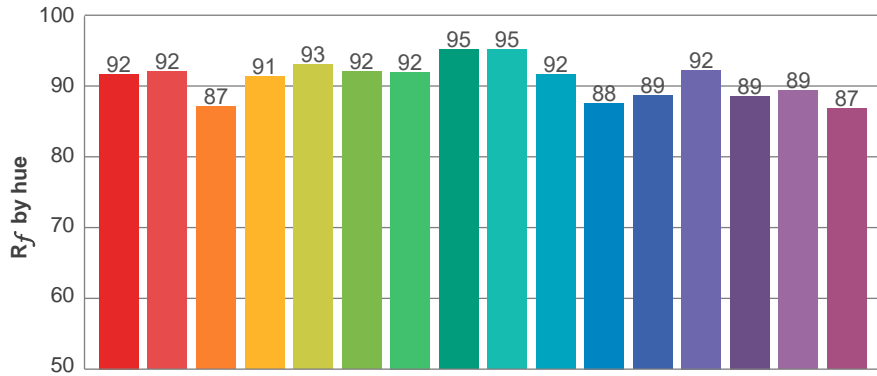
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	92.9	63.2	91.0	101.8	89.9	0.434	0.397	0.251	0.345	-0.0023

R_f 91.0
Fidelity index R_f

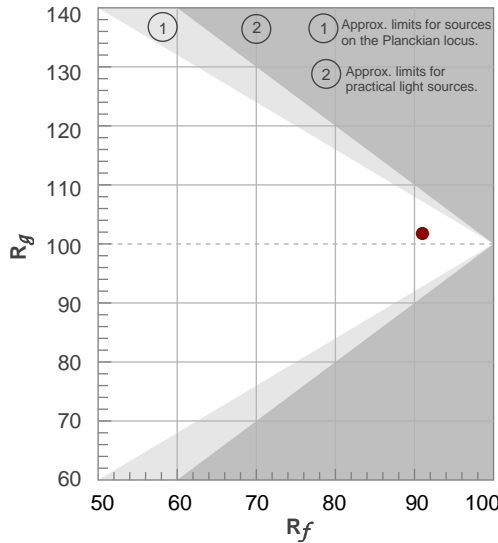
R_g 101.8
Gammut index R_g

TM30: 91.0

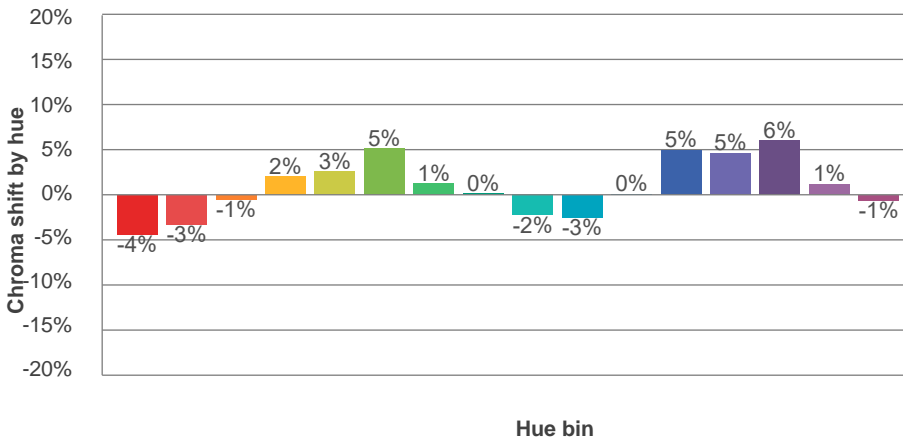
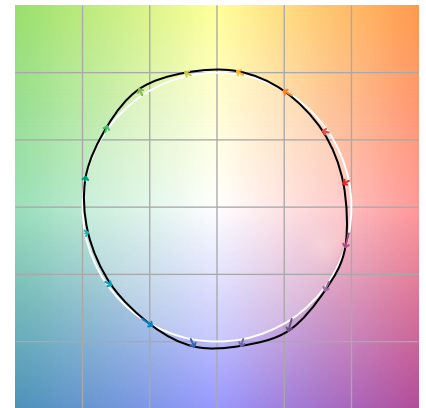
TM-30Color



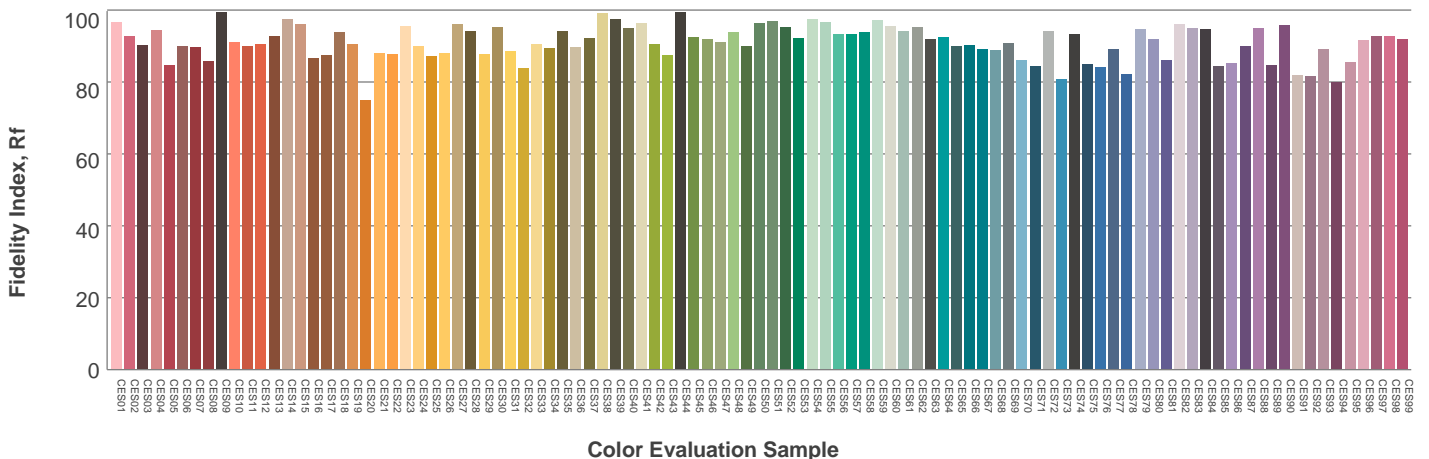
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	92	-3%	3%
3	87	-1%	7%
4	91	2%	5%
5	93	3%	4%
6	92	5%	-1%
7	92	1%	-5%
8	95	0%	-3%
9	95	-2%	0%
10	92	-3%	4%
11	88	0%	9%
12	89	5%	4%
13	92	5%	-3%
14	89	6%	-7%
15	89	1%	-7%
16	87	-1%	-11%



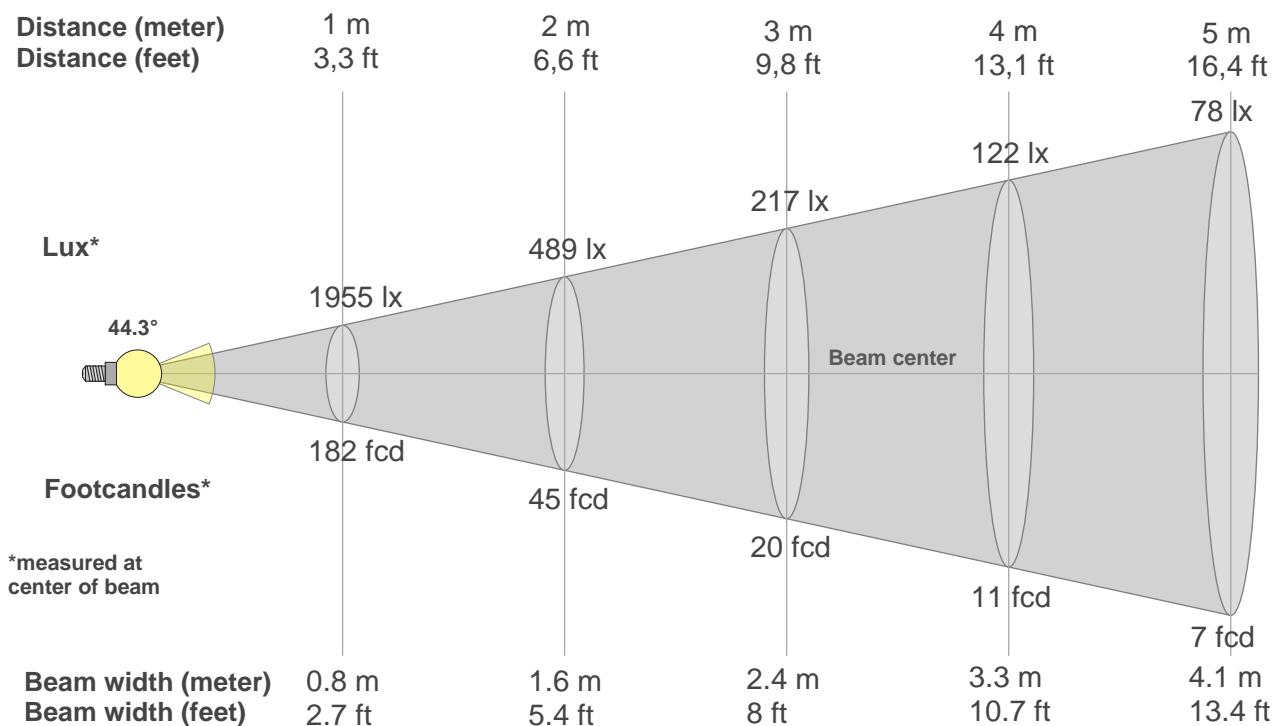
Color vector graphics



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
1955lx	489lx	217lx	122lx	78lx	54lx	40lx	31lx	24lx	20lx	16lx	14lx	12lx	10lx	9lx	8lx	7lx	6lx	5lx	5lx
181.7fcd	45.4fcd	20.2fcd	11.4fcd	7.3fcd	5fcd	3.7fcd	2.8fcd	2.2fcd	1.8fcd	1.5fcd	1.3fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.6fcd	0.5fcd	0.5fcd

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°
1955	1959	1953	1939	1919	1892	1851	1782	1651	1489	1283	999	682	412	260	181	124	80	46	22
100%	100%	100%	99%	98%	97%	95%	91%	84%	76%	66%	51%	35%	21%	13%	9%	6%	4%	2%	1%

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°
1955	1952	1946	1938	1926	1904	1863	1785	1641	1485	1291	1011	679	420	300	215	149	97	58	29
100%	100%	100%	99%	98%	97%	95%	91%	84%	76%	66%	52%	35%	21%	15%	11%	8%	5%	3%	1%

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°
1955	1947	1931	1910	1885	1857	1818	1747	1633	1483	1305	998	707	504	372	281	207	147	99	59
100%	100%	99%	98%	96%	95%	93%	89%	83%	76%	67%	51%	36%	26%	19%	14%	11%	8%	5%	3%

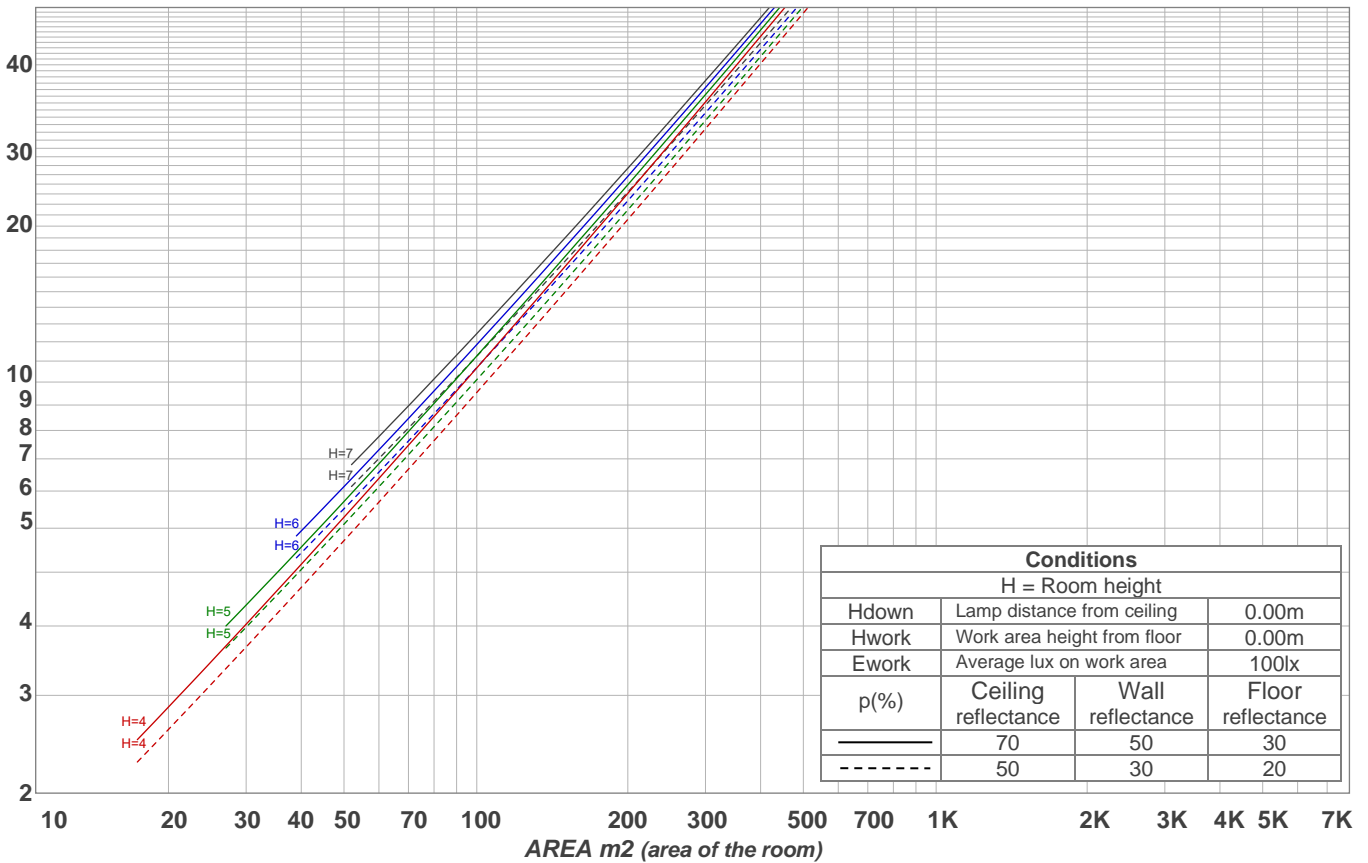
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1955	1952	1941	1921	1893	1859	1813	1751	1635	1485	1300	1010	666	480	366	279	203	140	89	51
100%	100%	99%	98%	97%	95%	93%	90%	84%	76%	66%	52%	34%	25%	19%	14%	10%	7%	5%	3%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
44.3°	62.4°	74.5°	99.1%	98.8%

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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	95	
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	94	92	91	91	91	
3	106	100	96	93	104	99	95	92	96	93	90	94	91	89	92	90	88	86	86	86	
4	101	95	91	87	100	94	90	87	92	88	86	90	87	85	88	86	84	82	82	82	
5	98	91	86	82	96	90	85	82	88	84	81	87	83	81	85	82	80	79	79	79	
6	94	87	82	78	93	86	81	78	85	81	78	83	80	77	82	79	77	75	75	75	
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72	72	72	
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69	69	69	
9	84	76	71	68	83	76	71	68	75	71	68	74	70	68	73	70	67	66	66	66	
10	81	73	69	65	80	73	68	65	72	68	65	72	68	65	71	67	65	64	64	64	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
183 lm	464 lm	281 lm	62.7 lm	5.16 lm	1.99 lm	2.48 lm	3.14 lm	3.55 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