

Light efficiency:



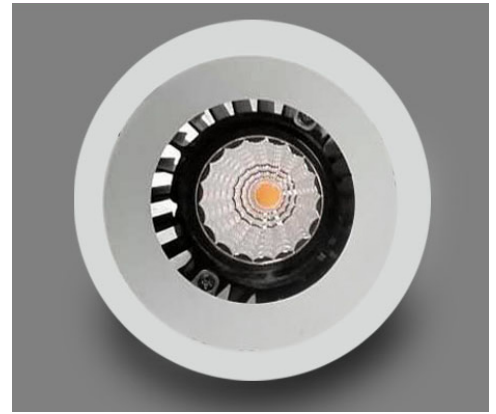
Output: 1508 lm

Light quality:

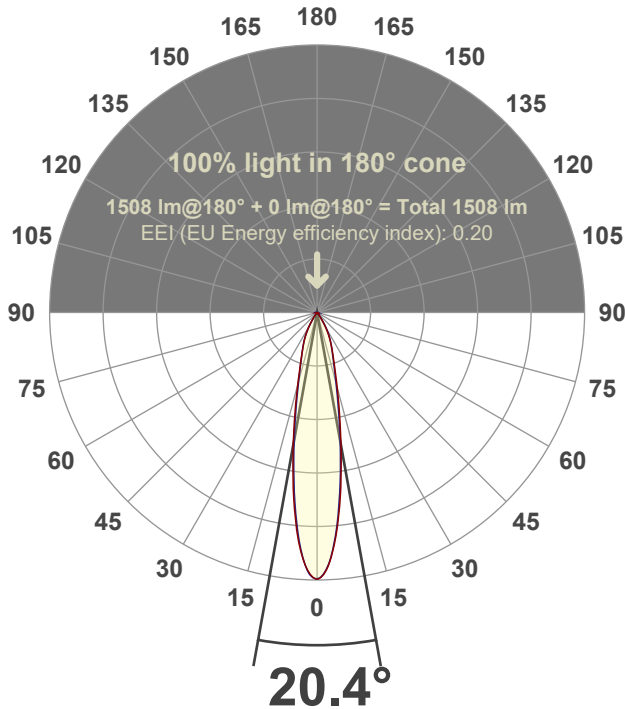


Peak: 6662 cd

Power: 21.3 W



Beam angle



Test number:

GR-O-F-A20-3019-SP-RD-91A-Rev2

Luminaire Model:

Graffiti Open Round Fixed Downlight-A20-3019 15° Optic-Solite

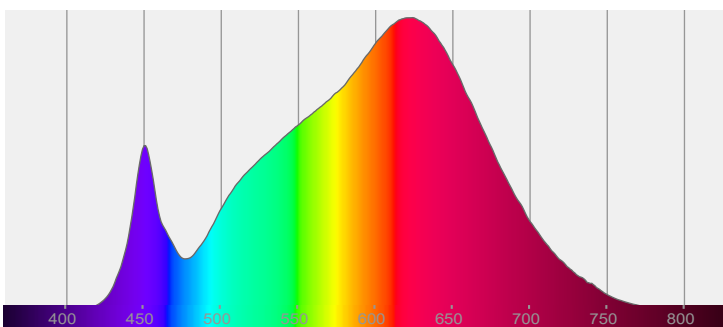
Date and time:

4/28/2022 7:27:02 PM

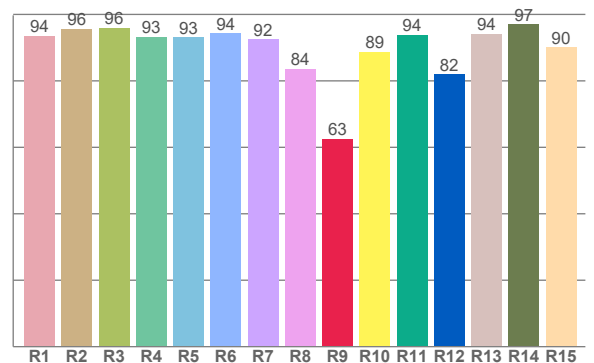
Delivered Lumens

1508

Spectra



CRI: 92.7 (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 <sub>f</sub>	TM30 R <sub>g</sub>	CQS	x	y	u	v	Δuv
	92.7	62.5	91.0	101.5	89.9	0.435	0.399	0.252	0.346	-0.0019

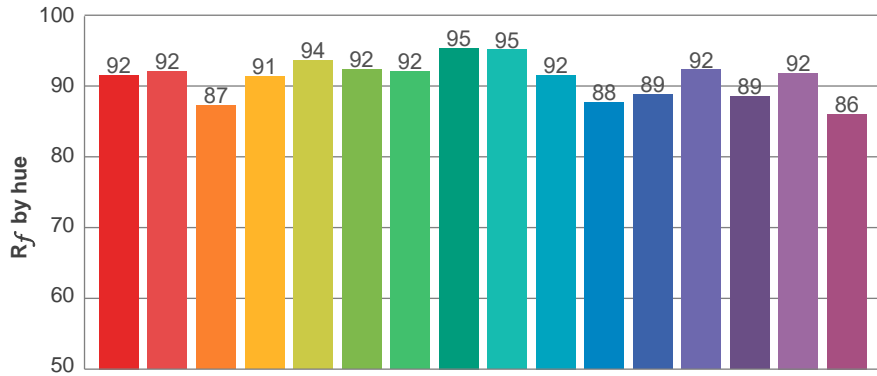
**$R_f$  91.0**  
Fidelity index  $R_f$

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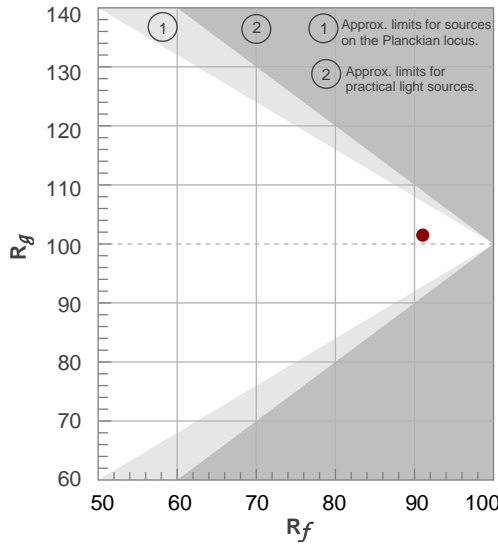
**$R_g$  101.5**  
Gammut index  $R_g$

TM30: 91.0

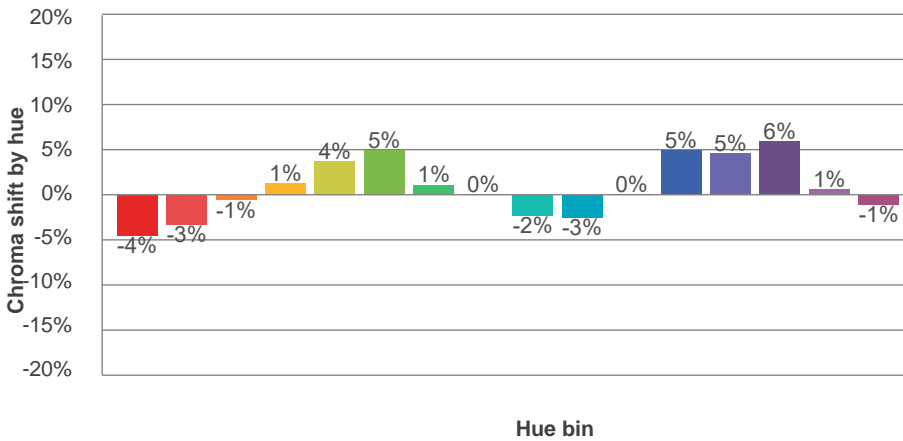
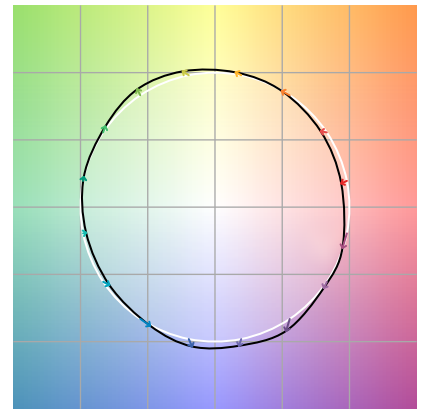
TM-30Color



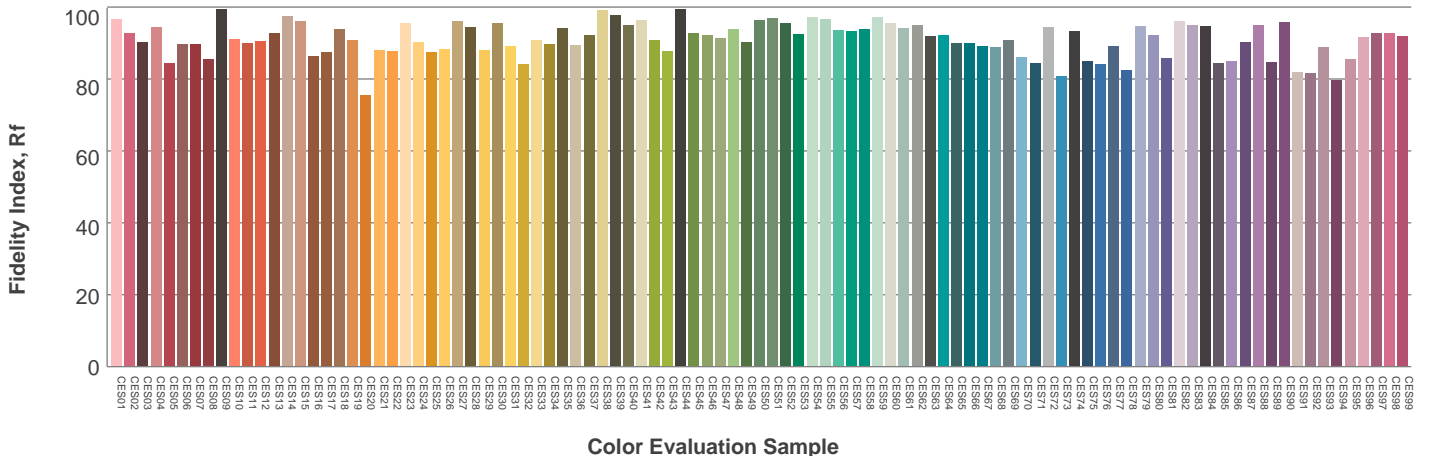
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	92	-3%	3%
3	87	-1%	7%
4	91	1%	4%
5	94	4%	4%
6	92	5%	-1%
7	92	1%	-5%
8	95	0%	-3%
9	95	-2%	0%
10	92	-3%	4%
11	88	0%	9%
12	89	5%	4%
13	92	5%	-3%
14	89	6%	-7%
15	92	1%	-5%
16	86	-1%	-11%



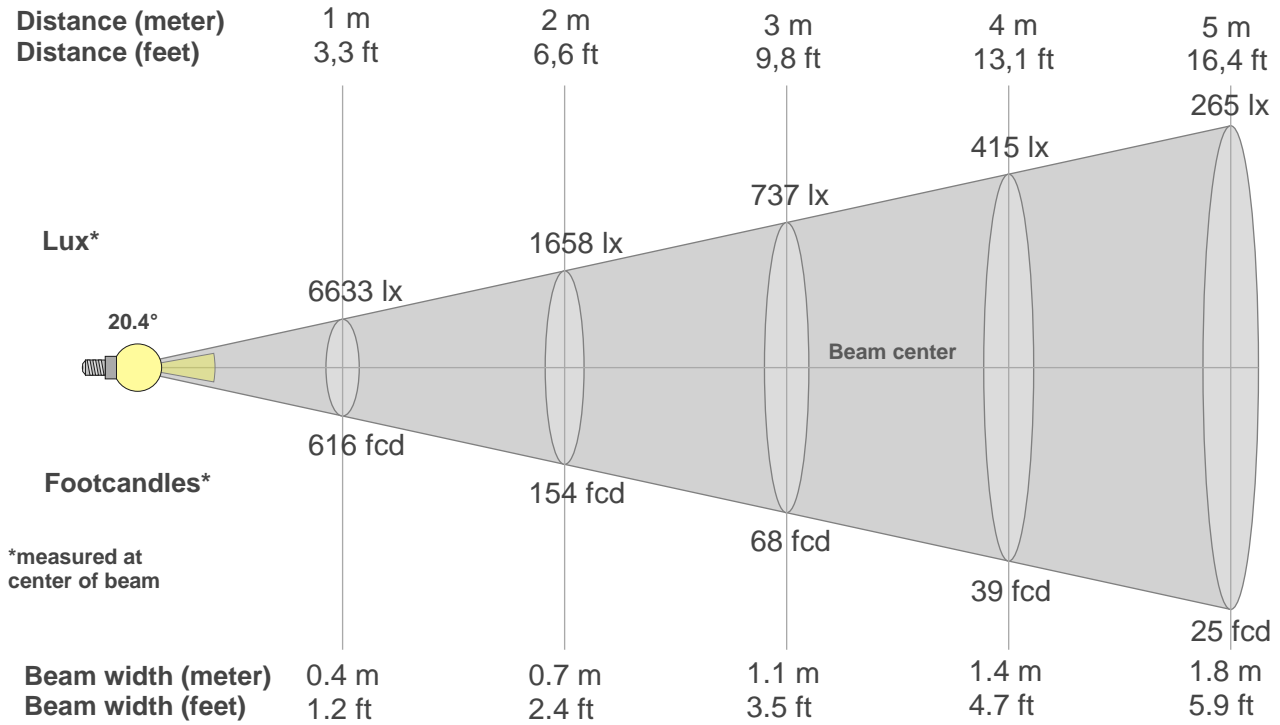
Color vector graphics



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
6633lx	1658lx	737lx	415lx	265lx	184lx	135lx	104lx	82lx	66lx	55lx	46lx	39lx	34lx	29lx	26lx	23lx	20lx	18lx	17lx
616.3fcd	154.1fcd	68.5fcd	38.5fcd	24.7fcd	17.1fcd	12.6fcd	9.6fcd	7.6fcd	6.2fcd	5.1fcd	4.3fcd	3.6fcd	3.1fcd	2.7fcd	2.4fcd	2.1fcd	1.9fcd	1.7fcd	1.5fcd

#### 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°
6634	6417	5865	5126	4297	3469	2750	2197	1763	1437	1197	1014	861	723	587	456	338	236	155	104
100%	97%	88%	77%	65%	52%	41%	33%	27%	22%	18%	15%	13%	11%	9%	7%	5%	4%	2%	2%

#### 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°
6634	6374	5824	5049	4174	3342	2639	2084	1668	1367	1148	985	857	735	613	490	367	256	170	110
100%	96%	88%	76%	63%	50%	40%	31%	25%	21%	17%	15%	13%	11%	9%	7%	6%	4%	3%	2%

#### 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°
6634	6433	5916	5176	4323	3475	2726	2141	1696	1372	1139	963	823	699	573	451	336	237	158	106
100%	97%	89%	78%	65%	52%	41%	32%	26%	21%	17%	15%	12%	11%	9%	7%	5%	4%	2%	2%

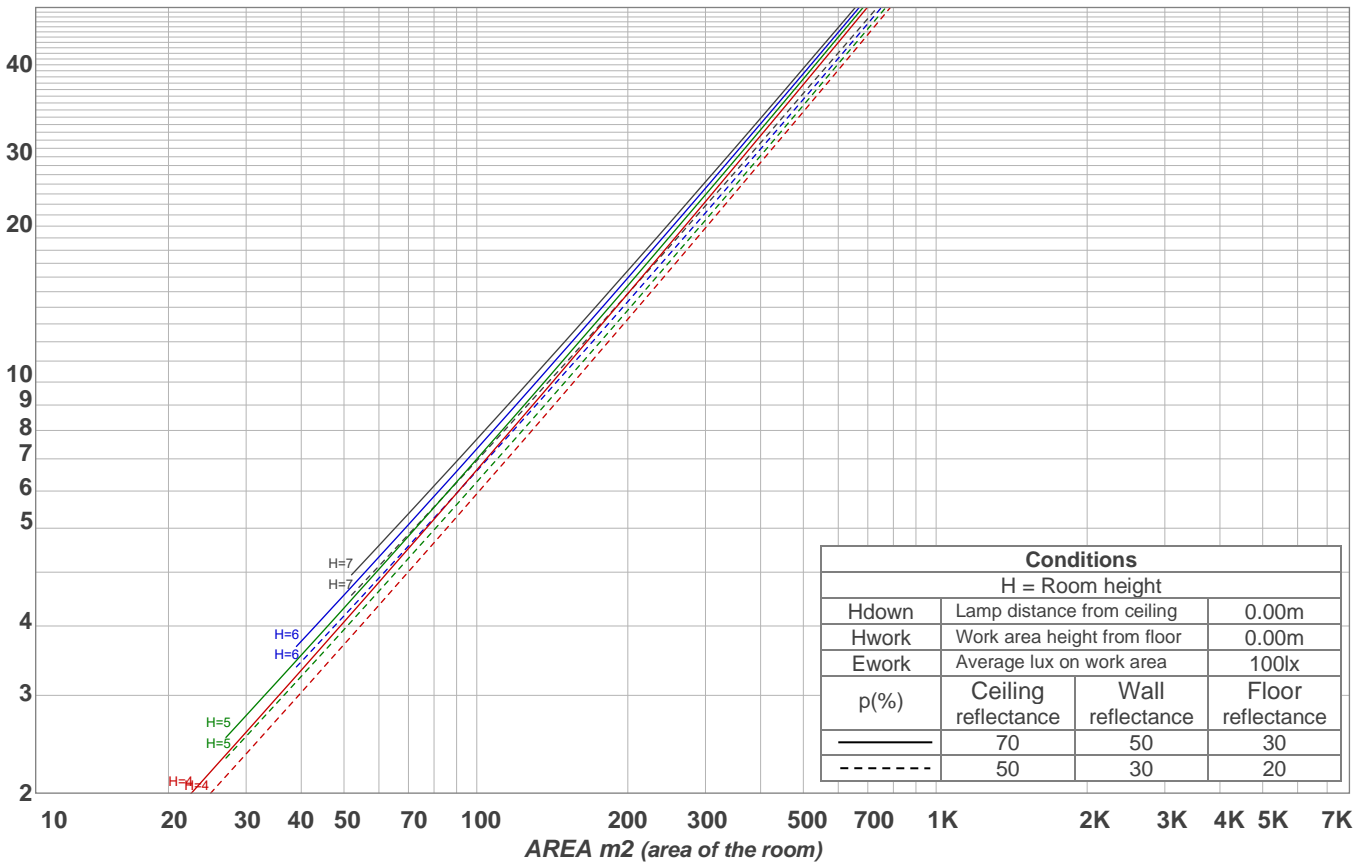
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
6634	6471	5888	5070	4187	3340	2603	2021	1614	1331	1122	962	827	696	560	421	298	199	125	77
100%	98%	89%	76%	63%	50%	39%	30%	24%	20%	17%	14%	12%	10%	8%	6%	4%	3%	2%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
20.4°	53.5°	71.2°	99.2%	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	100	
1	115	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96	96	96	
2	110	106	103	100	108	105	102	99	101	99	97	99	97	95	96	94	93	91	91	91	
3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	88	88	88	
4	102	96	92	89	101	95	91	88	93	90	87	91	89	86	90	87	85	84	84	84	
5	99	92	88	84	97	91	87	84	90	86	83	88	85	83	87	84	82	81	81	81	
6	95	88	84	80	94	88	83	80	86	83	80	85	82	79	84	81	79	78	78	78	
7	92	85	80	77	91	84	80	77	83	79	77	82	79	76	81	78	76	75	75	75	
8	89	82	77	74	88	81	77	74	80	77	74	80	76	73	79	76	73	72	72	72	
9	86	79	75	71	86	79	74	71	78	74	71	77	73	71	76	73	71	70	70	70	
10	84	76	72	69	83	76	72	69	75	71	69	75	71	69	74	71	68	67	67	67	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
455 lm	537 lm	353 lm	128 lm	18.9 lm	4.66 lm	3.74 lm	3.78 lm	3.88 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