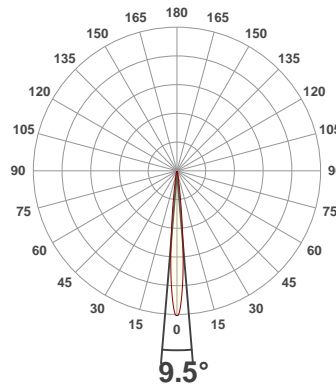
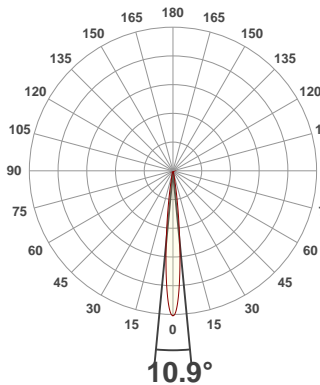




**PRODUCT INFORMATION**

SERIAL NUMBER:	VFR-210603-0022-MS
DATE OF MEASUREMENT:	2021-06-03
SIZE (l x w. x h):	298 mm x 71 mm x 59.5 mm

**ANGULAR DISTRIBUTION AT C0/180 | ANGULAR DISTRIBUTION AT C90/270 | LIGHT OUTPUT DATA**

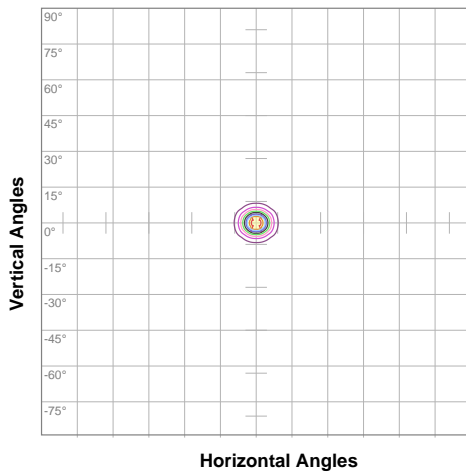


TOTAL LUMEN OUTPUT:	343 lm
EFFICACY:	23 lm/W
PEAK INTENSITY:	6723 cd
COLOR RENDERING INDEX (CRI):	79.3
COLOR TEMPERATURE (CCT):	2143K
FIDELITY INDEX (TM30rf):	81.7
GAMUT INDEX (TM30Rg):	96.9

**BEAM OUTPUT DATA**

BEAM ANGLE (FWHM)   C0/180:	10.9°
BEAM ANGLE (FWHM)   C90/270:	9.5°
FIELD ANGLE (10%)   C0/180:	20.7°
FIELD ANGLE (10%)   C90/270:	18.4°
NUMBER OF PLANES MEASURED:	8

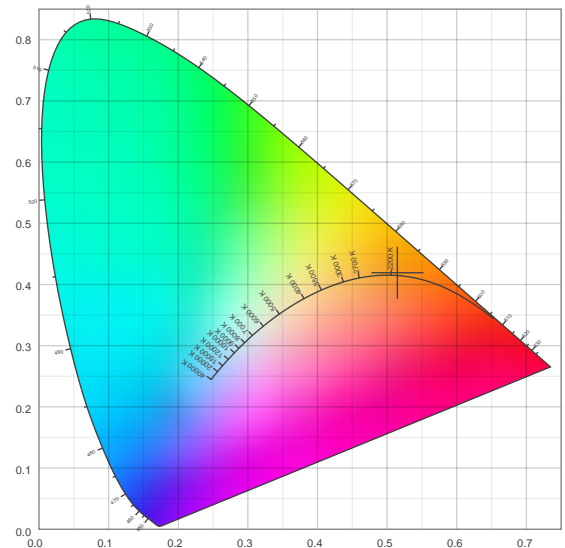
**ISOCANDELA DIAGRAM**



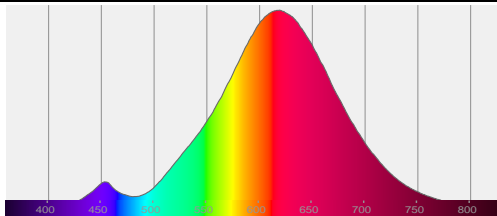
10%	671 cd
20%	1341 cd
30%	2012 cd
40%	2682 cd
50%	3353 cd
60%	4023 cd
70%	4694 cd
80%	5365 cd
90%	6035 cd

INPUT POWER:	15.2 W
POWER FACTOR:	1.0
OPTICAL POWER:	1.22 mW
PEAK WAVELENGTH:	619 nm
DOMINANT WAVELENGTH:	587 nm

**CIE 1931**



**SPECTRAL DISTRIBUTION | CIE 1931 ZOOM**



x: 0.515
y: 0.419
u: 0.294
v: 0.359
Δuv: 0.0014

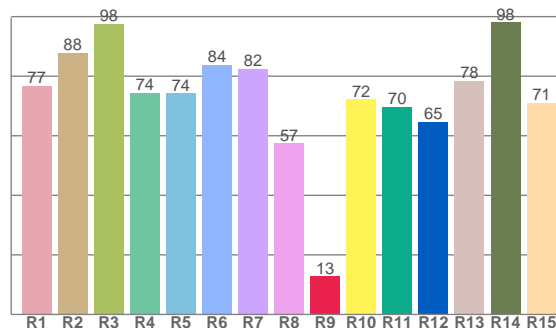
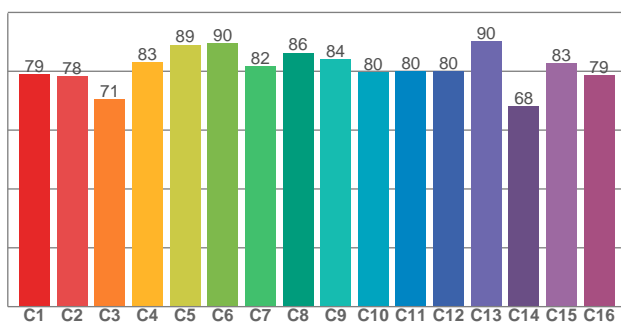
ZONAL LUMEN SUMMARY

0°-10° 232 lm	10°-20° 65.5 lm	20°-30° 28.7 lm	30°-40° 8.83 lm	40°-50° 4.45 lm	50°-60° 3.05 lm	60°-70° 0.470 lm	70°-80° 0.002 lm	80°-90° 0.002 lm
90°-100° 0.002 lm	100°-110° 0.001 lm	110°-120° 0.001 lm	120°-130° 0.001 lm	130°-140° 0.001 lm	140°-150° 0.001 lm	150°-160° 0.001 lm	160°-170° 0.000 lm	170°-180° 0.000 lm

COLOR DETAILS

TM30: 81.7

CRI: 79.3 (R1-R8)



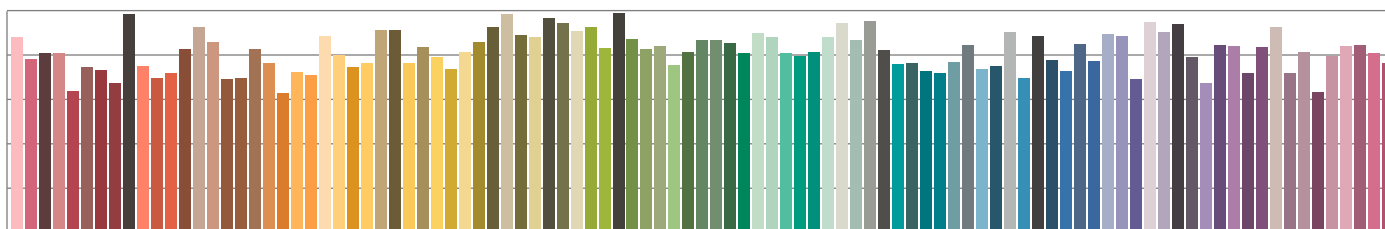
TM30 C values, 16 binned values out of total of 99 C values

CRI R values, only R1-R8 are used to calculate final CRI value

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
79.1	78.4	70.5	82.9	89.0	89.7	81.6	86.3	84.1	79.7	80.1	79.9	90.3	68.1	82.8	78.7

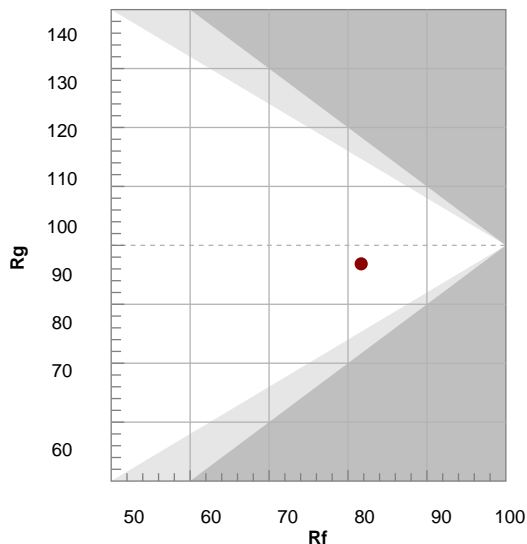
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
76.7	87.9	97.5	74.4	74.3	83.8	82.4	57.4	12.8	72.2	69.6	64.7	78.4	98.1	71.1

TM30 COLOR EVALUATION SAMPLE



TM30 DETAILS

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	79	-11%	-1%
2	78	-10%	8%
3	71	-4%	15%
4	83	4%	12%
5	89	8%	7%
6	90	7%	-3%
7	82	0%	-12%
8	86	-7%	-8%
9	84	-8%	-2%
10	80	-9%	8%
11	80	-3%	13%
12	80	2%	11%
13	90	7%	-6%
14	68	3%	-18%
15	83	0%	-12%
16	79	-9%	-13%



FIDELITY INDEX

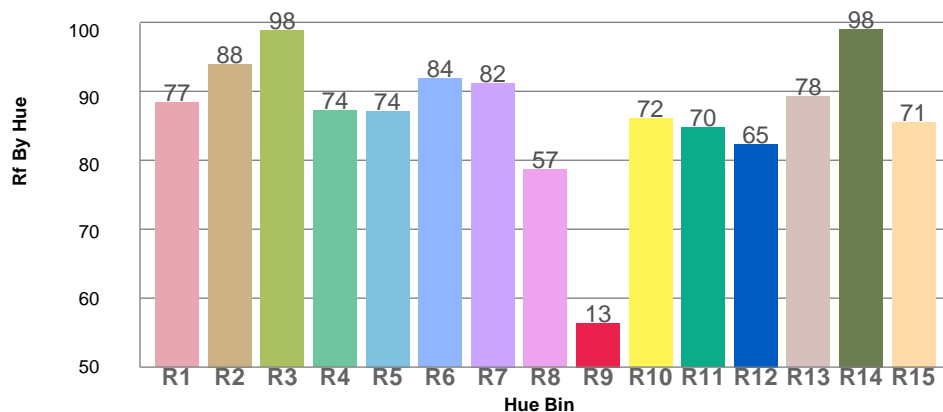
**Rf 81.7**

GAMUT INDEX

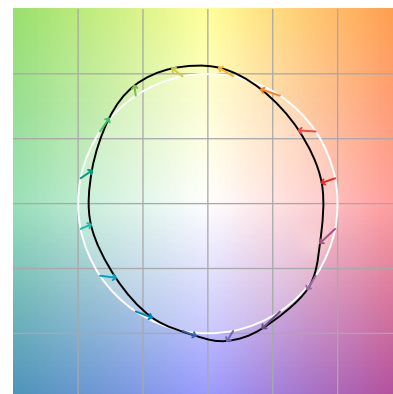
**Rg 96.9**

Approx. limits for sources on the Planckian locus.  
Approx. limits for practical light sources.

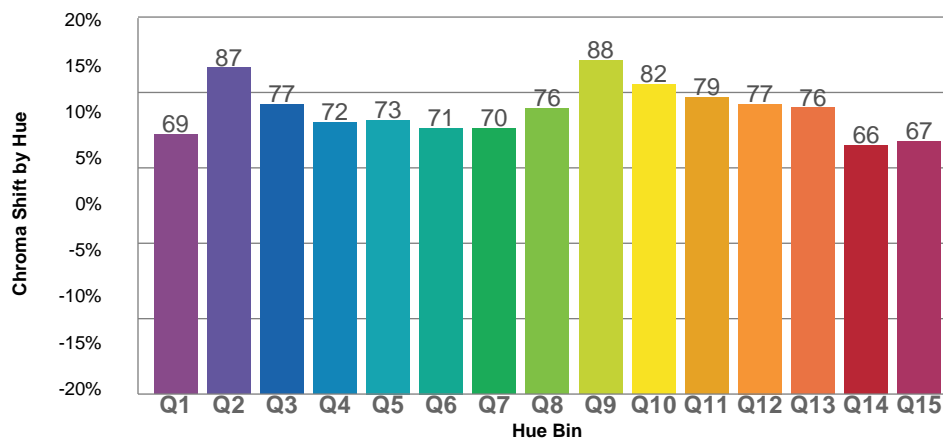
TM30 OVER 50



COLOR VECTOR GRAPHICS



TM30 CHROMA SHIFT



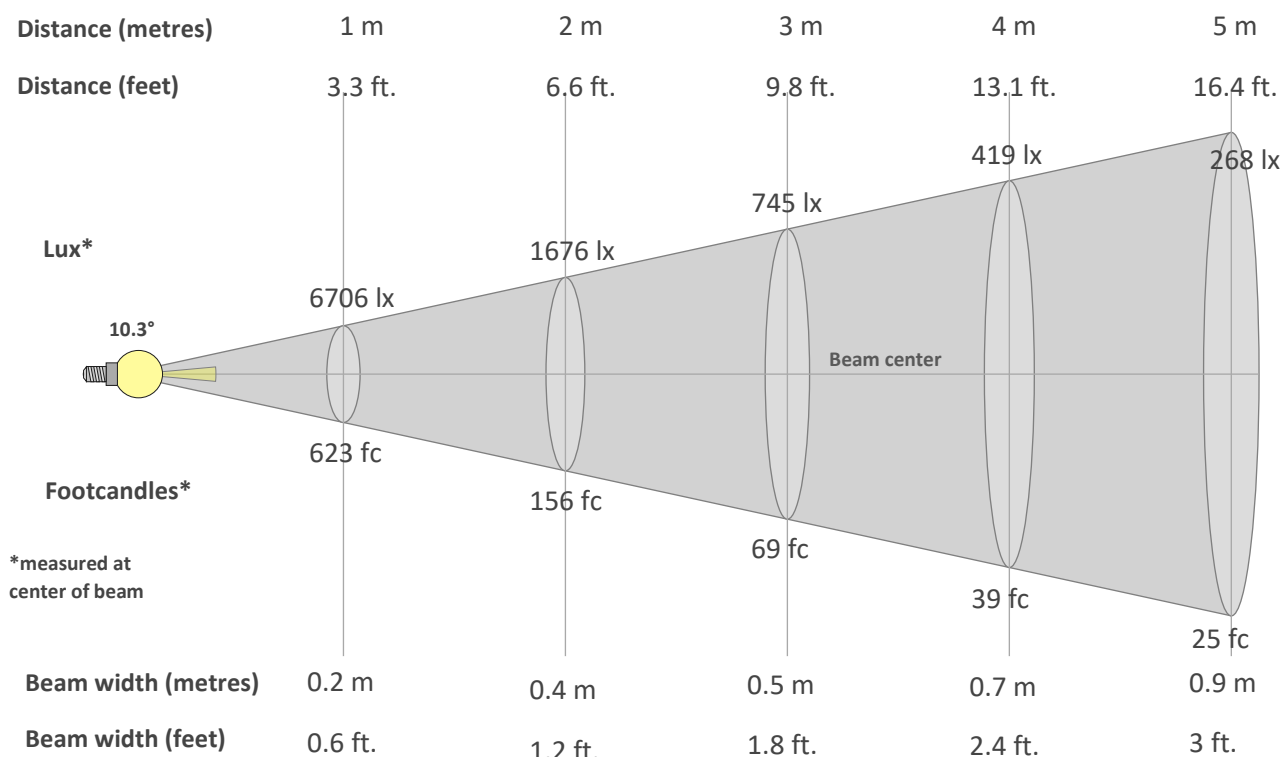
COLOR DISTORTION GRAPHICS



BEAM DETAILS

# STR9-G3-300-CM-20W-DWT-10x10-ELV (2200K)

## PRODUCT PHOTOMETRIC REPORT



### Beam intensity 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
6706lx	1676lx	745lx	419lx	268lx	186lx	137lx	105lx	83lx	67lx	55lx	47lx	40lx	34lx	30lx	26lx	23lx	21lx	19lx	17lx
623fc	155.7fc	69.2fc	38.9fc	24.9fc	17.3fc	12.7fc	9.7fc	7.7fc	6.2fc	5.1fc	4.3fc	3.7fc	3.2fc	2.8fc	2.4fc	2.2fc	1.9fc	1.7fc	1.6fc

### Intensity in 0° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
6706	6563	6126	5448	4621	3751	2911	2170	1557	1087	759	537	394	303	245	207	182	163	148	135
100%	98%	91%	81%	69%	56%	43%	32%	23%	16%	11%	8%	6%	5%	4%	3%	3%	2%	2%	2%

### Intensity in 90° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
6706	6513	5924	5120	4135	3097	2207	1516	1031	717	526	397	308	246	207	180	160	149	140	131
100%	97%	88%	76%	62%	46%	33%	23%	15%	11%	8%	6%	5%	4%	3%	3%	2%	2%	2%	2%

### Intensity in 180° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
6706	6563	6126	5448	4621	3751	2911	2170	1557	1087	759	537	394	303	245	207	182	163	148	135
100%	98%	91%	81%	69%	56%	43%	32%	23%	16%	11%	8%	6%	5%	4%	3%	3%	2%	2%	2%

### Intensity in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
6706	6513	5924	5120	4135	3097	2207	1516	1031	717	526	397	308	246	207	180	160	149	140	131
100%	97%	88%	76%	62%	46%	33%	23%	15%	11%	8%	6%	5%	4%	3%	3%	2%	2%	2%	2%

**GLARE EVALUATION ACCORDING TO UGR**

p Ceiling	70	70	50	50	30	70	70	50	50	30	
p Walls	50	30	50	30	30	50	30	50	30	30	
p Floor	20	20	20	20	20	20	20	20	20	20	
Room size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H 2H	2H	-1.7	-1.4	-1.6	-1.2	-1.0	-0.2	0.1	-0.1	0.3	0.5
	3H	-2.0	-1.5	-1.6	-1.3	-1.2	-0.5	0.0	-0.1	0.2	0.4
	4H	-2.1	-1.6	-1.7	-1.4	-1.2	-0.6	-0.1	-0.2	0.1	0.4
	6H	-2.1	-1.7	-1.8	-1.4	-1.1	-0.6	-0.2	-0.3	0.1	0.5
	8H	-2.1	-1.8	-1.8	-1.4	-1.1	-0.6	-0.2	-0.3	0.1	0.5
	12H	-2.2	-1.8	-1.9	-1.5	-1.1	-0.7	-0.3	-0.3	0.0	0.5
4H 2H	2H	-1.9	-1.5	-1.6	-1.2	-1.0	-0.5	0.0	-0.1	0.2	0.4
	3H	-2.0	-1.7	-1.7	-1.3	-0.9	-0.6	-0.2	-0.2	0.1	0.5
	4H	-2.2	-1.9	-1.8	-1.4	-0.9	-0.7	-0.4	-0.3	0.0	0.5
	6H	-2.3	-1.9	-1.8	-1.6	-1.2	-0.8	-0.4	-0.3	-0.1	0.3
	8H	-2.4	-2.0	-1.8	-1.6	-1.3	-0.9	-0.5	-0.4	-0.2	0.2
	12H	-2.4	-2.1	-1.9	-1.7	-1.3	-1.0	-0.7	-0.5	-0.3	0.2
8H 4H	4H	-2.3	-2.0	-1.8	-1.6	-1.3	-0.9	-0.5	-0.4	-0.2	0.2
	6H	-2.4	-2.2	-1.9	-1.7	-1.2	-1.0	-0.7	-0.5	-0.3	0.2
	8H	-2.4	-2.3	-1.9	-1.7	-1.1	-1.0	-0.8	-0.5	-0.3	0.3
	12H	-2.5	-2.4	-1.9	-1.9	-1.3	-1.0	-0.9	-0.5	-0.4	0.2
12H 4H	4H	-2.4	-2.1	-1.9	-1.7	-1.3	-1.0	-0.7	-0.5	-0.3	0.2
	6H	-2.4	-2.3	-1.9	-1.7	-1.1	-1.0	-0.8	-0.5	-0.3	0.3
	8H	-2.5	-2.4	-1.9	-1.9	-1.3	-1.0	-0.9	-0.5	-0.4	0.2
Variation of the observer position for the luminaire distance S											
S = 1.0H	3.5 / -2.5					3.1 / -2.0					
S = 1.5H	5.7 / -11.8					4.9 / -9.4					
S = 2.0H	7.5 / -27.3					6.7 / -21.1					
CIE 117-1995. Corrected glare indices referring to 343 lm total luminous flux											

**ROAD REPORT**

LCS Table			
BUG rating:		B1 U1 G0	
Forward light	Lumens	Lumens %	
Low(0-30):	162.9	47.5%	
Medium(30-60):	8.2	2.4%	
High(60-80):	0.3	0.1%	
Very high(80-90):	0	0%	
Back light			
Low(0-30):	162.9	47.5%	
Medium(30-60):	8.2	2.4%	
High(60-80):	0.3	0.1%	
Very high(80-90):	0	0%	
Uplight			
Low(90-100):	0	0%	
High(100-180):	0	0%	

