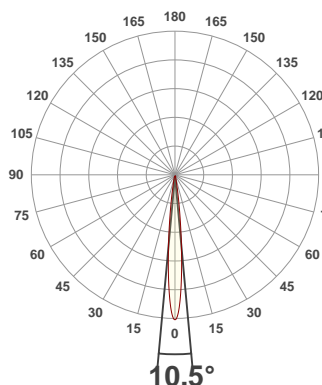


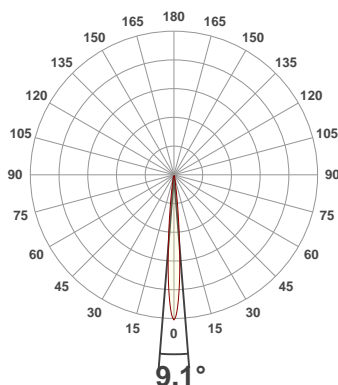
PRODUCT INFORMATION

SERIAL NUMBER:	VFR-210603-0020-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



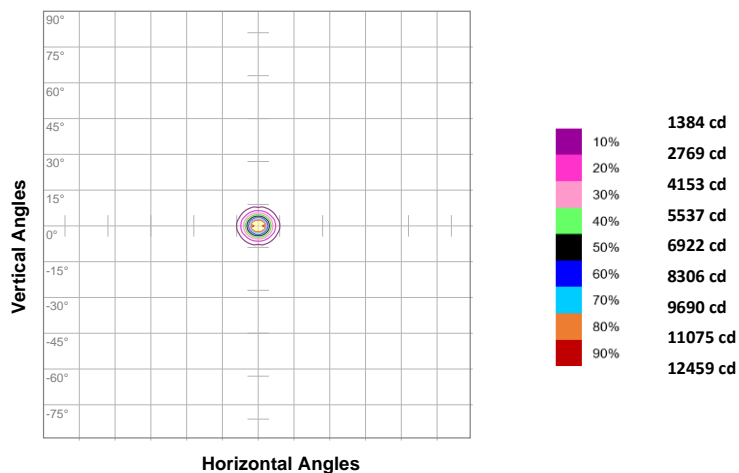
LIGHT OUTPUT DATA

TOTAL LUMEN OUTPUT:	658 lm
EFFICACY:	40 lm/W
PEAK INTENSITY:	13858 cd
COLOR RENDERING INDEX (CRI):	77.2
COLOR TEMPERATURE (CCT):	2984K
FIDELITY INDEX (TM30rf):	79.5
GAMUT INDEX (TM30Rg):	96.6

BEAM OUTPUT DATA

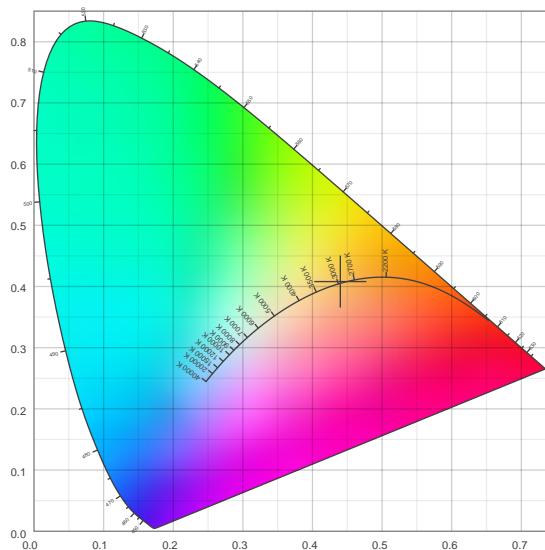
BEAM ANGLE (FWHM) C0/180:	10.5°
BEAM ANGLE (FWHM) C90/270:	9.1°
FIELD ANGLE (10%) C0/180:	20.2°
FIELD ANGLE (10%) C90/270:	17.9°
NUMBER OF PLANES MEASURED:	8

ISOCANDELA DIAGRAM

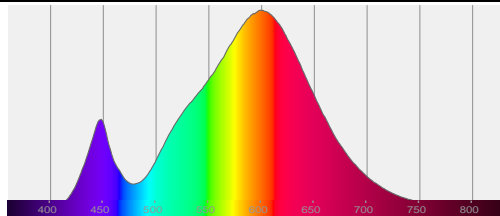


INPUT POWER:	16.6 W
POWER FACTOR:	1.0
OPTICAL POWER:	1.96 mW
PEAK WAVELENGTH:	599 nm
DOMINANT WAVELENGTH:	583 nm

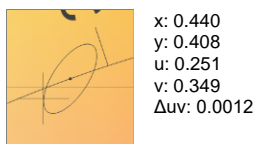
CIE 1931



SPECTRAL DISTRIBUTION



CIE 1931 ZOOM



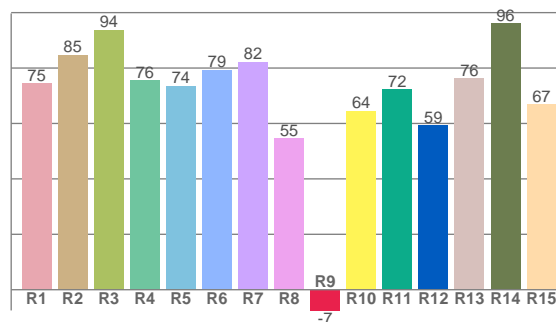
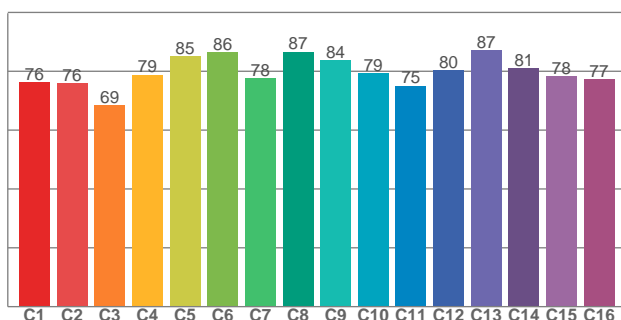
ZONAL LUMEN SUMMARY

0°-10° 444 lm	10°-20° 122 lm	20°-30° 56.2 lm	30°-40° 19.2 lm	40°-50° 8.41 lm	50°-60° 6.09 lm	60°-70° 1.22 lm	70°-80° 0.008 lm	80°-90° 0.003 lm
90°-100° 0.003 lm	100°-110° 0.003 lm	110°-120° 0.003 lm	120°-130° 0.002 lm	130°-140° 0.002 lm	140°-150° 0.002 lm	150°-160° 0.002 lm	160°-170° 0.001 lm	170°-180° 0.000 lm

COLOR DETAILS

TM30: 79.5

CRI: 77.2 (R1-R8)



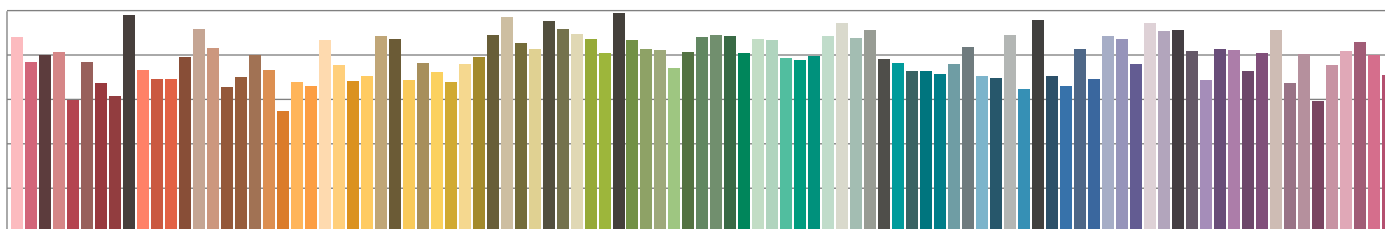
TM30 C values, 16 binned values out of total of 99 C values

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
76.4	75.9	68.5	78.8	85.1	86.4	77.7	86.6	83.7	79.2	75.1	80.5	87.0	81.1	78.4	77.3

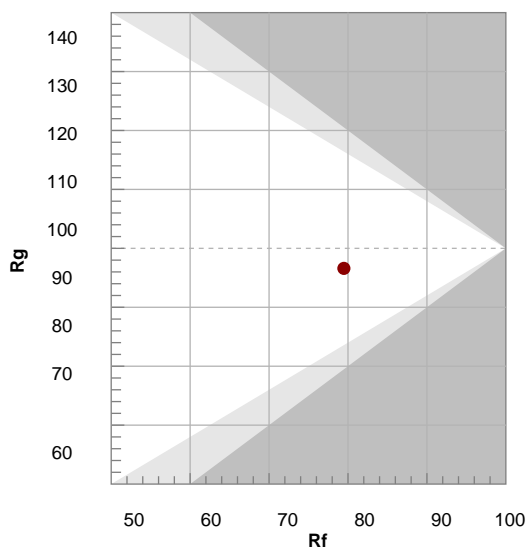
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
74.5	84.7	93.7	75.6	73.6	79.3	82.2	54.5	-7.5	64.5	72.3	59.2	76.3	96.1	66.9

TM30 COLOR EVALUATION SAMPLE



TM30 DETAILS

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	76	-13%	-3%
2	76	-11%	9%
3	69	-4%	16%
4	79	6%	14%
5	85	10%	8%
6	86	8%	-4%
7	78	1%	-14%
8	87	-5%	-7%
9	84	-10%	-2%
10	79	-10%	8%
11	75	-6%	17%
12	80	5%	9%
13	87	8%	-2%
14	81	8%	-13%
15	78	1%	-13%
16	77	-9%	-16%



FIDELITY INDEX

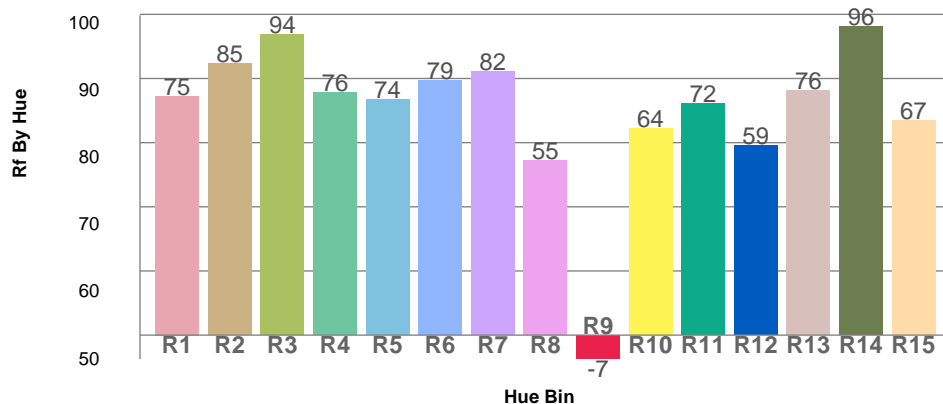
Rf 79.5

GAMUT INDEX

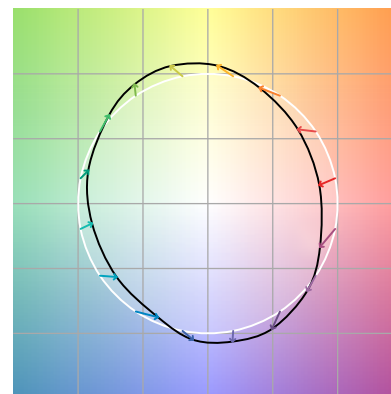
Rg 96.6

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

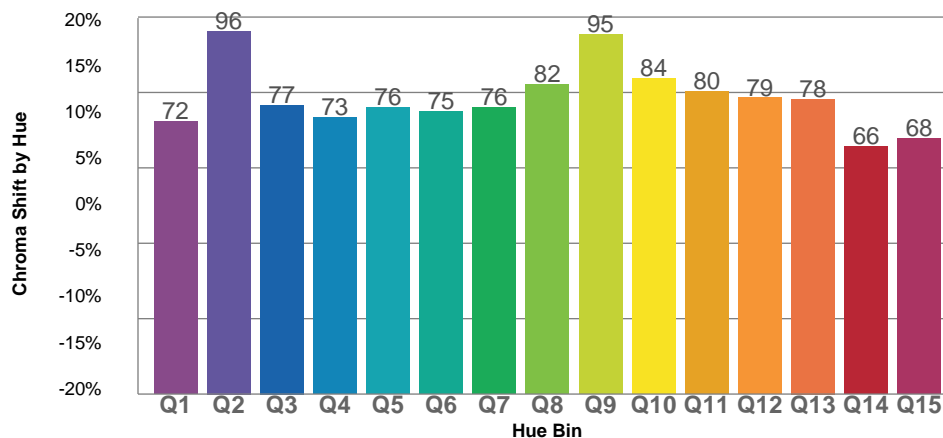
TM30 OVER 50



COLOR VECTOR GRAPHICS



TM30 CHROMA SHIFT



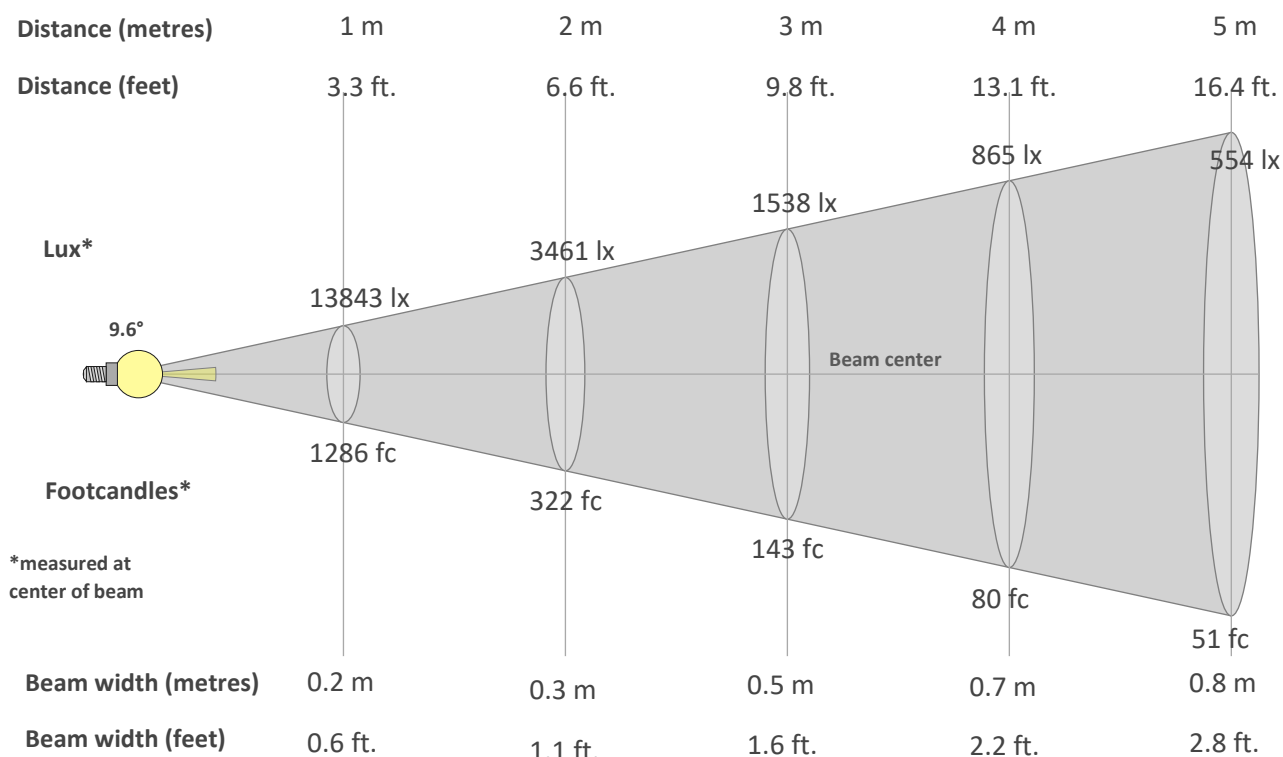
COLOR DISTORTION GRAPHICS



BEAM DETAILS

STR9-G3-300-CM-20W-DWT-10x10-ELV (3000K)

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
13843lx	3461lx	1538lx	865lx	554lx	385lx	283lx	216lx	171lx	138lx	114lx	96lx	82lx	71lx	62lx	54lx	48lx	43lx	38lx	35lx
1286.1fc	321.5fc	142.9fc	80.4fc	51.4fc	35.7fc	26.2fc	20.1fc	15.9fc	12.9fc	10.6fc	8.9fc	7.6fc	6.6fc	5.7fc	5fc	4.5fc	4fc	3.6fc	3.2fc

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°
13.8K	13.5K	12.5K	11.0K	9.2K	7.3K	5.6K	4.1K	2.9K	2.0K	1.4K	1.0K	0.7K	0.6K	0.5K	0.4K	0.3K	0.3K	0.3K	0.3K
100%	97%	90%	79%	66%	53%	40%	30%	21%	15%	10%	7%	5%	4%	3%	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°
13.8K	13.3K	12.0K	10.2K	8.1K	6.0K	4.2K	2.9K	1.9K	1.4K	1.0K	0.8K	0.6K	0.5K	0.4K	0.4K	0.3K	0.3K	0.3K	0.3K
100%	96%	87%	74%	58%	43%	31%	21%	14%	10%	7%	5%	4%	3%	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°
13.8K	13.5K	12.5K	11.0K	9.2K	7.3K	5.6K	4.1K	2.9K	2.0K	1.4K	1.0K	0.7K	0.6K	0.5K	0.4K	0.3K	0.3K	0.3K	0.3K
100%	97%	90%	79%	66%	53%	40%	30%	21%	15%	10%	7%	5%	4%	3%	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°
13.8K	13.3K	12.0K	10.2K	8.1K	6.0K	4.2K	2.9K	1.9K	1.4K	1.0K	0.8K	0.6K	0.5K	0.4K	0.4K	0.3K	0.3K	0.3K	0.3K
100%	96%	87%	74%	58%	43%	31%	21%	14%	10%	7%	5%	4%	3%	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	0.8	1.1	0.8	1.3	1.5	1.8	2.1	1.8	2.2	2.4	
	3H	0.5	1.0	0.8	1.1	1.3	1.5	2.0	1.8	2.1	2.3
	4H	0.4	0.9	0.8	1.1	1.3	1.4	1.9	1.8	2.1	2.3
	6H	0.4	0.8	0.7	1.1	1.4	1.4	1.8	1.7	2.1	2.4
	8H	0.4	0.7	0.7	1.0	1.4	1.3	1.7	1.7	2.0	2.4
	12H	0.3	0.6	0.6	1.0	1.4	1.3	1.6	1.6	2.0	2.4
4H 2H	0.5	1.0	0.9	1.2	1.4	1.4	1.9	1.8	2.1	2.4	
	3H	0.4	0.8	0.7	1.1	1.5	1.4	1.7	1.7	2.1	2.5
	4H	0.3	0.6	0.7	1.0	1.5	1.2	1.6	1.6	2.0	2.5
	6H	0.2	0.6	0.7	0.9	1.2	1.1	1.5	1.6	1.9	2.2
	8H	0.1	0.5	0.6	0.8	1.2	1.1	1.5	1.6	1.8	2.1
	12H	0.0	0.3	0.5	0.7	1.2	1.0	1.3	1.5	1.7	2.1
8H 4H	0.1	0.5	0.6	0.8	1.2	1.1	1.5	1.6	1.8	2.1	
	6H	0.0	0.3	0.5	0.7	1.2	1.0	1.2	1.5	1.7	2.2
	8H	0.0	0.2	0.5	0.7	1.3	1.0	1.2	1.5	1.7	2.3
	12H	-0.1	0.1	0.5	0.6	1.2	0.9	1.1	1.5	1.6	2.2
12H 4H	0.0	0.3	0.5	0.7	1.2	1.0	1.3	1.5	1.7	2.1	
	6H	0.0	0.2	0.5	0.7	1.3	1.0	1.2	1.5	1.7	2.3
	8H	-0.1	0.1	0.5	0.6	1.2	0.9	1.1	1.5	1.6	2.2
Variation of the observer position for the luminaire distance S											
S = 1.0H	3.5 / -2.5					3.3 / -2.6					
S = 1.5H	5.7 / -15.5					5.4 / -9.4					
S = 2.0H	7.5 / -36.8					7.2 / -28.6					
CIE 117-1995. Corrected glare indices referring to 658 lm total luminous flux											

ROAD REPORT

LCS Table			
BUG rating:		B1 U1 G0	
Forward light	Lumens		Lumens %
Low(0-30):	312.6		47.5%
Medium(30-60):	15.9		2.4%
High(60-80):	0.5		0.1%
Very high(80-90):	0		0%
Back light			
Low(0-30):	312.7		47.5%
Medium(30-60):	15.9		2.4%
High(60-80):	0.5		0.1%
Very high(80-90):	0		0%
Uplight			
Low(90-100):	0		0%
High(100-180):	0		0%

