

# LM-79 Test Report

## Relevant Standards

IES LM-79-2008  
IES TM-30-2015  
CIE 13.3-1995  
IESNA TM-15-11  
CIE 117:1995

## Product SKU

LINAIRE® Flex Top Bend Linear Light  
DI-24V-TE-LIN3-27

## Test Conditions

Test Temperature: 26.5 °C  
Luminaire Sample Length: 1000 mm.  
Power Supply: Agilent E3634A DC Power Supply  
Voltage: 24.0 VDC  
Current: 0.608 A  
Power Consumption: 14.6 W

## Test Date

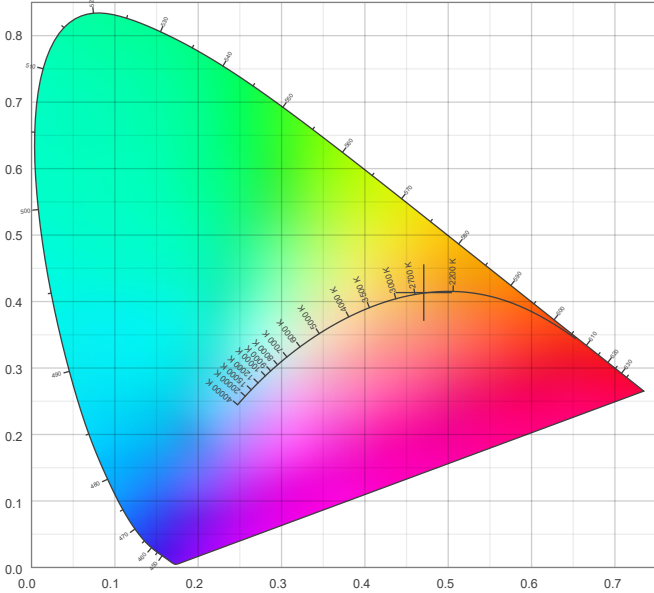
4/16/2025

**Color Details**

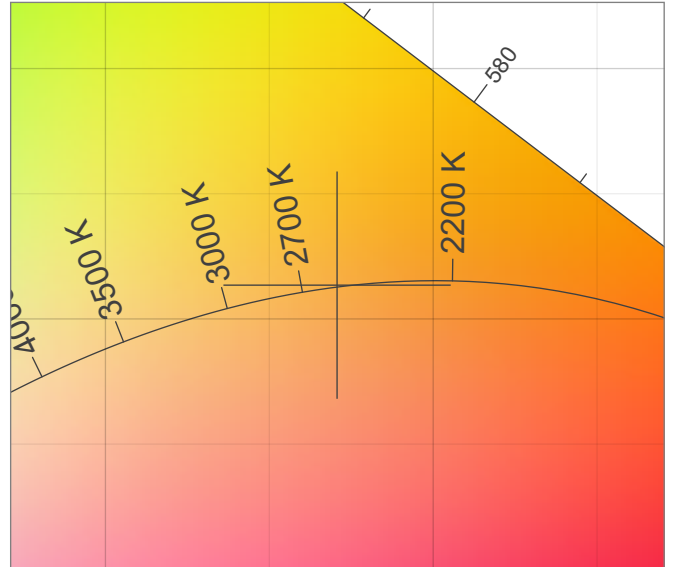
Correlated Color Temperature	CCT = 2580
CIE Test Color Method General Index	CRI = 91.9
CIE Test Color Method Sample Nine Score	R9 = 46.1
IES TM-30-15 Fidelity Index	R <sub>f</sub> = 90.7
IES TM-30-15 Gamut Index	R <sub>g</sub> = 98.6
Luminous Flux	Lm = 1139

Color coordinates CIE 1931	(x;y) = (0.471;0.413)
Color coordinate CIEs 1960	(u;v) = (0.268;0.353)
Color coordinate CIEs 1976	(u';v') = (0.268;0.530)
Color deviation from BBL	Duv = 0.0003
Color Quality Scale (CQS)	CQS = 89.0

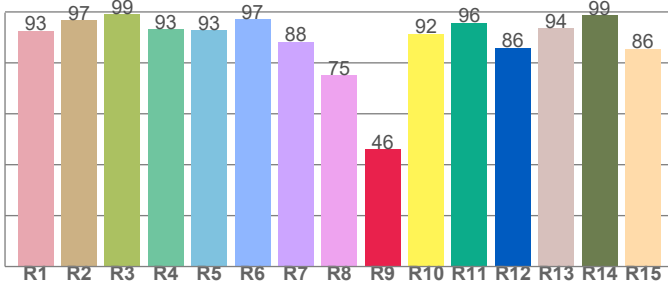
**CIE 1931**



**CIE 1931 – zoomed on Planckian locus**



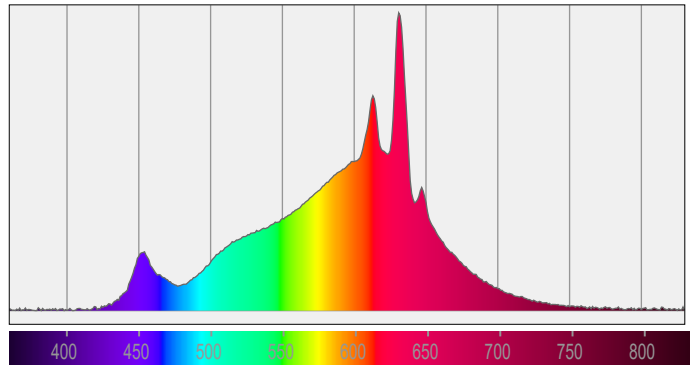
**Color Rendering Index per Reference Color (CIE 1995)**



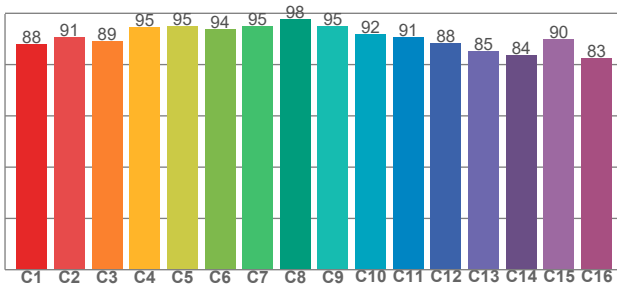
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
92.7	96.8	99.1	93.1	92.7	97.0	88.3	75.2	46.1	91.5	95.8	86.0	93.8	98.8	85.6

**Spectral Power Distribution (SPD) / W/nm – 0-100%**



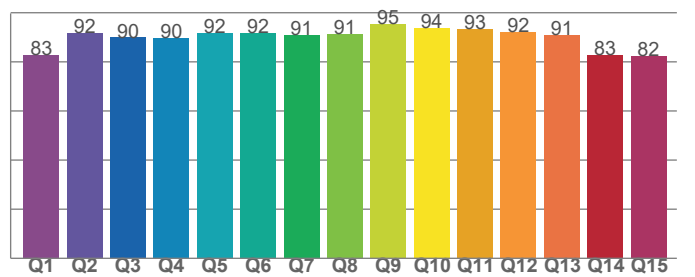
**TM30-18 Rf-Values per Hue Bin**



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

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
87.8	90.6	89.2	94.5	95.1	93.9	94.9	97.7	95.2	92.0	90.7	88.2	85.2	83.7	89.8	82.6

**Color Quality Scale by Reference Color**



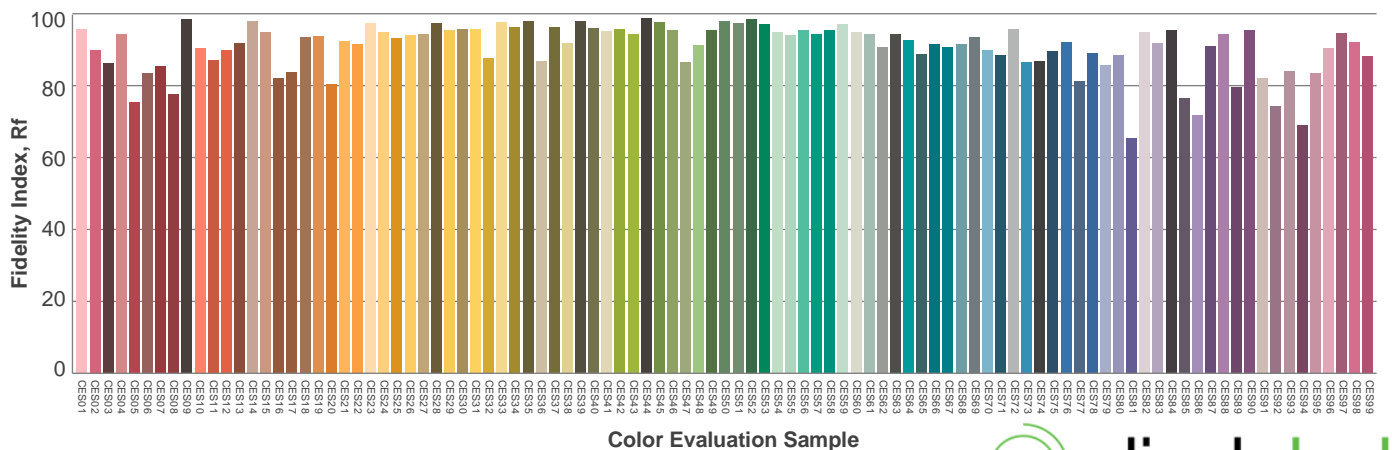
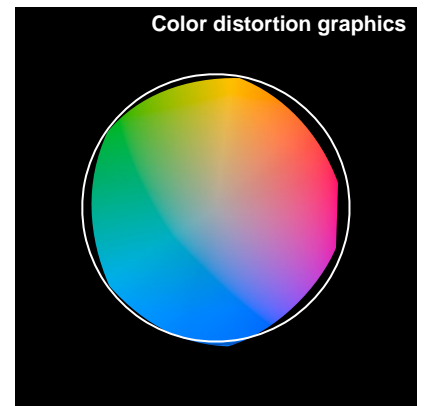
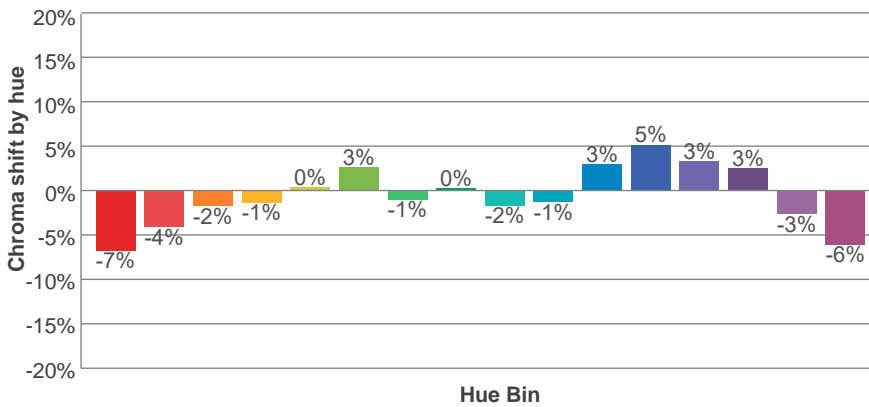
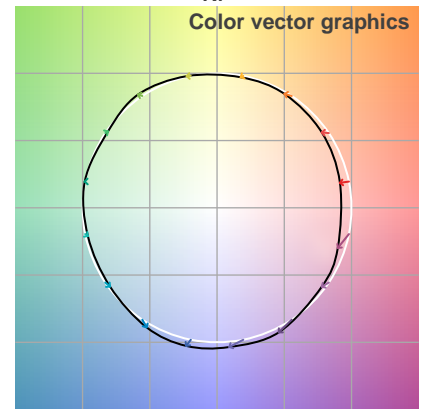
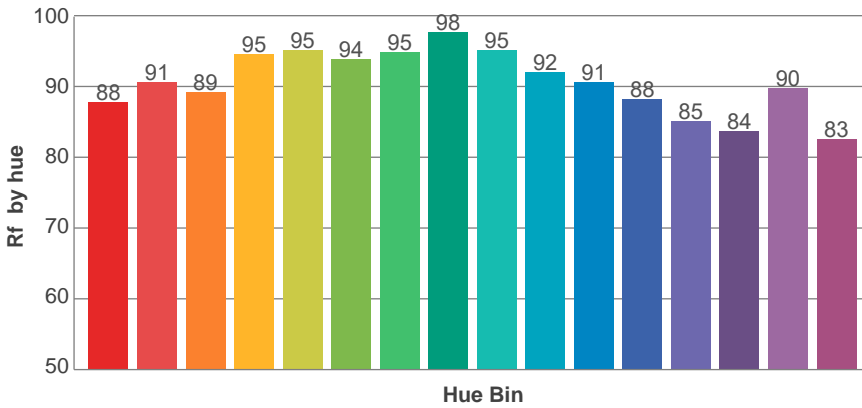
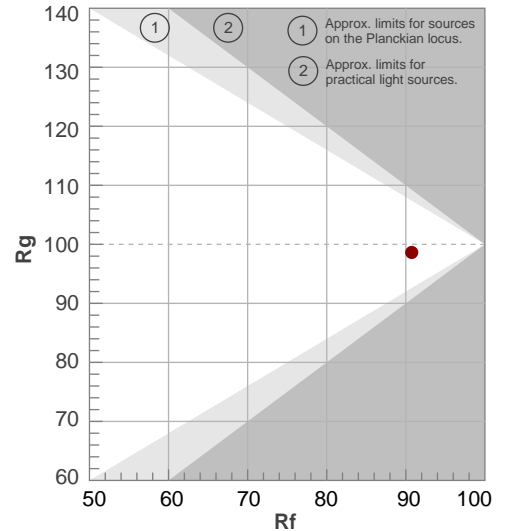
CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
82.9	91.6	89.9	89.8	91.8	91.8	90.8	91.3	95.3	93.7	93.2	92.0	90.9	82.8	82.3

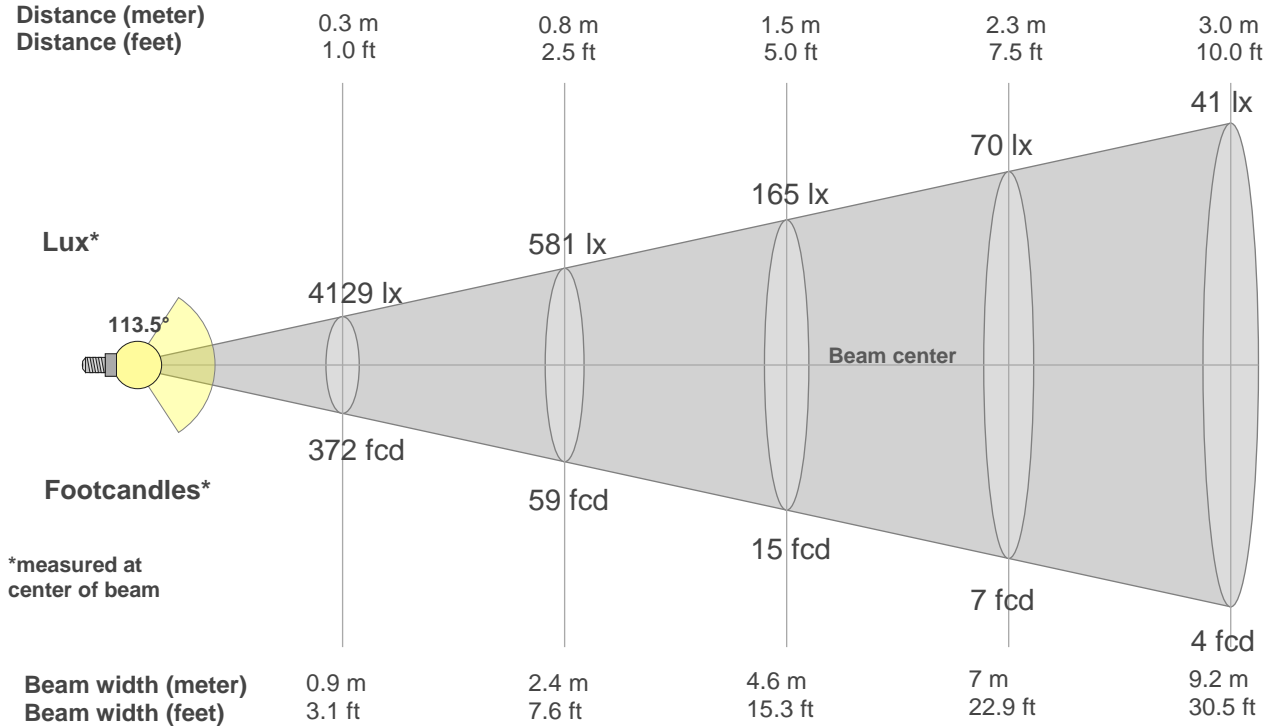
**Rf 90.7**  
Fidelity index Rf

**Rg 98.6**  
Gamut index Rg

Hue Bin	R <sub>f</sub>	Shifts (%)	
		Chroma	Hue
1	88	-7%	0%
2	91	-4%	3%
3	89	-2%	5%
4	95	-1%	2%
5	95	0%	3%
6	94	3%	2%
7	95	-1%	-2%
8	98	0%	0%
9	95	-2%	2%
10	92	-1%	4%
11	91	3%	6%
12	88	5%	-2%
13	85	3%	-11%
14	84	3%	-13%
15	90	-3%	-5%
16	83	-6%	-12%



**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
372lx	93lx	41lx	23lx	15lx	10lx	8lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx
34.5fcd	8.6fcd	3.8fcd	2.2fcd	1.4fcd	1fcd	0.7fcd	0.5fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd

**Intensities in 0° c-plane**

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
372	370	365	357	345	330	313	293	271	247	222	195	168	140	112	84	57	33	15	7
100%	100%	98%	96%	93%	89%	84%	79%	73%	66%	60%	53%	45%	38%	30%	23%	15%	9%	4%	2%

**Intensities in 90° c-plane**

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
372	369	364	356	344	329	312	292	270	246	221	195	168	140	112	85	57	29	10	5
100%	99%	98%	96%	93%	89%	84%	79%	73%	66%	59%	52%	45%	38%	30%	23%	15%	8%	3%	1%

**Intensities in 180° c-plane**

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
372	370	365	357	345	330	313	293	271	247	222	195	168	140	112	84	57	33	15	7
100%	100%	98%	96%	93%	89%	84%	79%	73%	66%	60%	53%	45%	38%	30%	23%	15%	9%	4%	2%

**Intensities in 270° c-plane**

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
372	369	364	356	344	329	312	292	270	246	221	195	168	140	112	85	57	29	10	5
100%	99%	98%	96%	93%	89%	84%	79%	73%	66%	59%	52%	45%	38%	30%	23%	15%	8%	3%	1%

<b>Beam angle 50%</b>	<b>Field angle 10%</b>	<b>Cutoff angle 2,5%</b>	<b>Intensity ratio in 120° cone</b>	<b>Intensity ratio in 90° cone</b>
<b>113.6°</b>	<b>167.8°</b>	<b>183.7°</b>	<b>73.6%</b>	<b>49.9%</b>



**Luminous Intensity Diagram**

Unit: 0-100% of peak intensity

**Main Values**

Output (Total Lumen)	1139 lm
Lumen Up% / Down%	3.25% / 96.75%
Peak Intensity	372 cd
Beam Angle (50%)	113.6°
Beam Angle (90%)	113.5°
Beam Angle (10%)	113.5°

**Cut-off Angle**

Average 2,5%	183.7°
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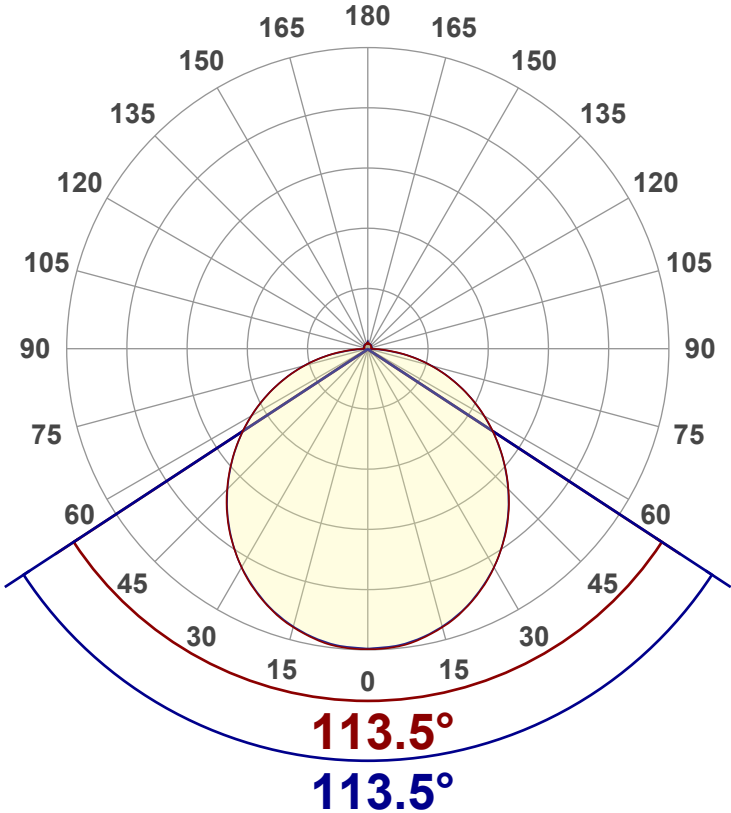
**Field Angle**

Average 10%	167.8°
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**Intensity Ratio**

In 120° cone	73.6%
In 90° cone	49.9%

**C000-C180    C090-C270**



**Zonal Lumen Summary**

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
35.2 lm	101 lm	153 lm	183 lm	191 lm	175 lm	139 lm	89.8 lm	35.2 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
7.34 lm	5.30 lm	5.25 lm	4.92 lm	4.59 lm	3.91 lm	3.06 lm	1.96 lm	0.677 lm



LCS Table

BUG rating:	B1 U2 G1	
<b>Forward light</b>	Lumens	Lumens %
Low(0-30):	144	12.6%
Medium(30-60):	274.4	24.1%
High(60-80):	114.4	10%
Very high(80-90):	17.8	1.6%
<b>Back light</b>		
Low(0-30):	144	12.6%
Medium(30-60):	274.4	24.1%
High(60-80):	114.4	10%
Very high(80-90):	17.8	1.6%
<b>Uplight</b>		
Low(90-100):	7.7	0.7%
High(100-180):	29.7	2.6%

LCS Graph

