aspectLED

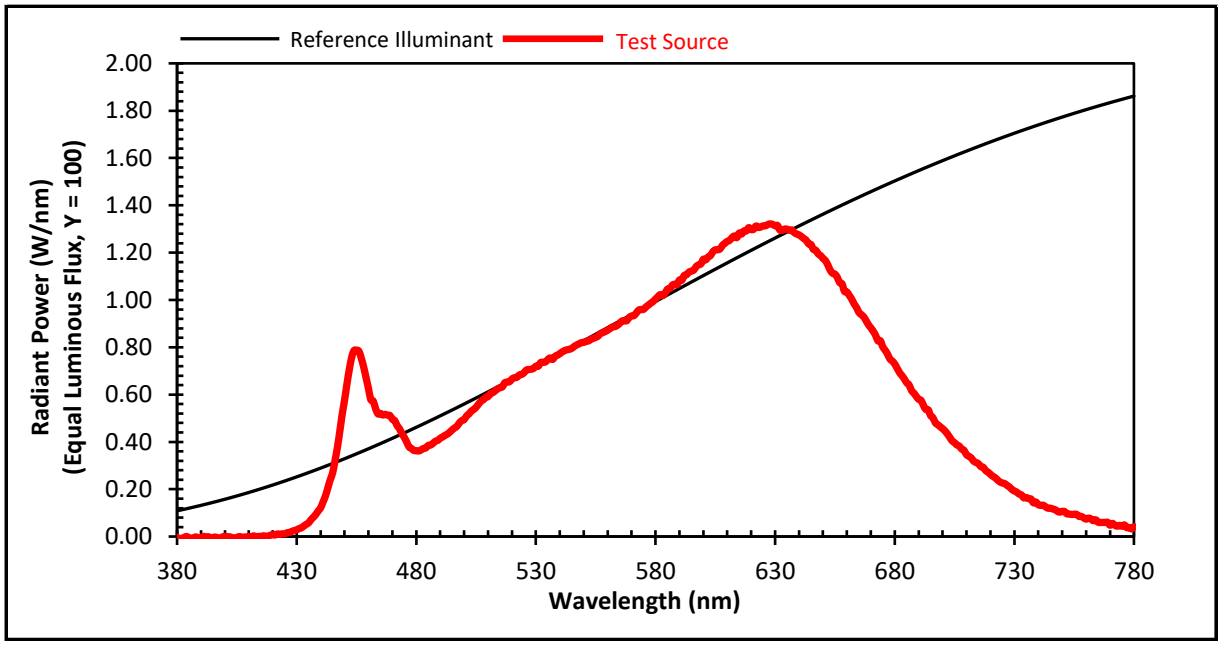
4900 Constellation Dr
St. Paul, MN 55127
888•503•1317

Photometric Measurement Report

Measured via Labsphere's Integral™ Light Measurement Platform

TM-30 Graphical Data via IES TM-30 Basic Calculator Version 2.05

Product	**AL-NF-1616-24 | Element Neon TopFlex**			3/7/25 2:38 PM	
Description	Top Bending Neon - 3000K			Integration Time	301.70
				Scans Averaged	3
Notes	1 meter			Saturation	80.18%
Scan ID	154	Test by	EV	Sphere Geometry	2pi



CCT (K)	Lumens	Watts	Volts (DC)	Amps	Efficacy
3018 K	430.50	6.68	24.00	0.28	64.41

CIE 1931			CIE 1960		CIE 1796	
x	y	Y	u	v	u'	v'
0.44	0.40	0.63	0.25	0.35	0.25	0.52

CRI (Ra)			95.63		
R1	97	R6	97	R11	97
R2	100	R7	93	R12	80
R3	99	R8	88	R13	98
R4	95	R9	76	R14	99
R5	96	R10	98	R15	94

CQS (Qa)			93.79		
VS1	90	VS6	94	VS11	97
VS2	96	VS7	96	VS12	97
VS3	93	VS8	96	VS13	96
VS4	90	VS9	99	VS14	93
VS5	92	VS10	98	VS15	92

Understanding TM-30

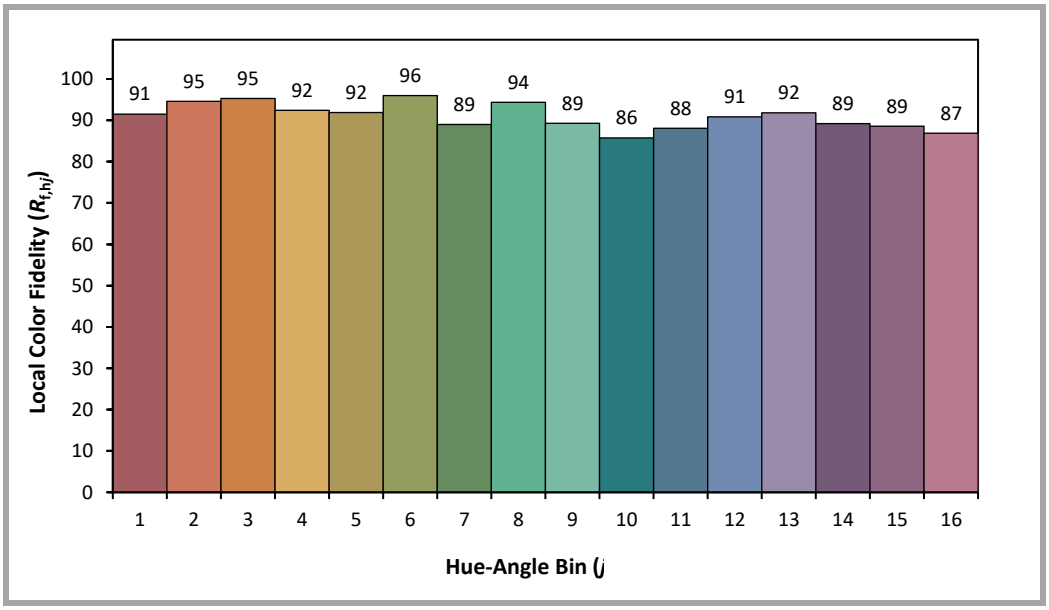
Measure	*Symbol*	*Description*	*Typical Values*
Fidelity Index	Rf	Overall average similarity	70 to 100
Gamut Index	Rg	Overall average saturation (change in chroma) >100 = Oversaturated, <100 = Desaturated	80 to 120
Color Vector Graphic	CVG	Visual representation of hue and saturation changes	n/a
Local Color Fidelity	Rf,hj	Average similarity for a specific hue-angle bin (16 values)	60 to 100
Local Chroma Shift	Rcs,hj	Average relative change in chroma for a specific hue-angle bin (16 values)	-20% to 20%
Local Hue Shift	Rhs,hj	Average change in hue angle (in radians) for a specific hue-angle bin (16 values)	-0.2 to 0.2
Sample Color Fidelity	Rf,ces	Average similarity for a specific color sample (99 values)	60 to 100

TM-30 Measurements

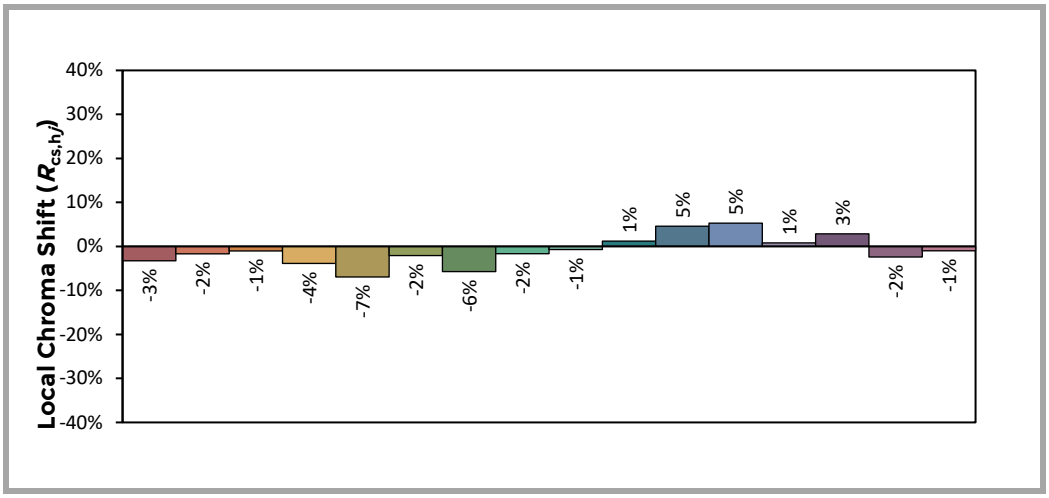
TM-30		
	Rf	91.07
	Rg	97.70

Local Color Fidelity

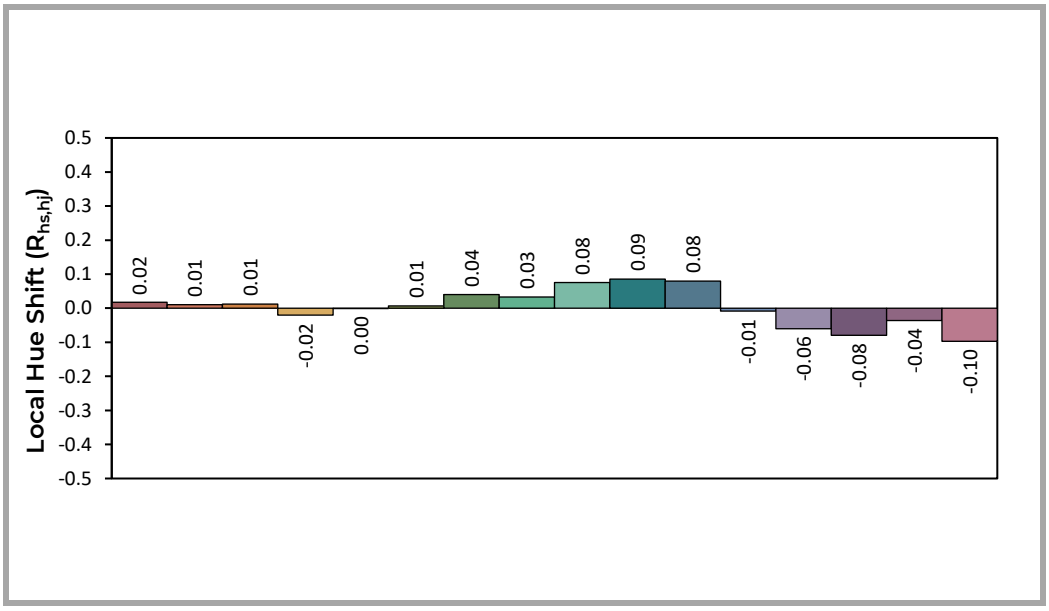
Rf,hj 1	91.4	Rf,hj 5	91.8	Rf,hj 9	89.1	Rf,hj 13	91.8
Rf,hj 2	94.6	Rf,hj 6	95.9	Rf,hj 10	86.2	Rf,hj 14	89.2
Rf,hj 3	95.4	Rf,hj 7	88.8	Rf,hj 11	88.1	Rf,hj 15	88.5
Rf,hj 4	92.3	Rf,hj 8	94.2	Rf,hj 12	90.9	Rf,hj 16	86.9



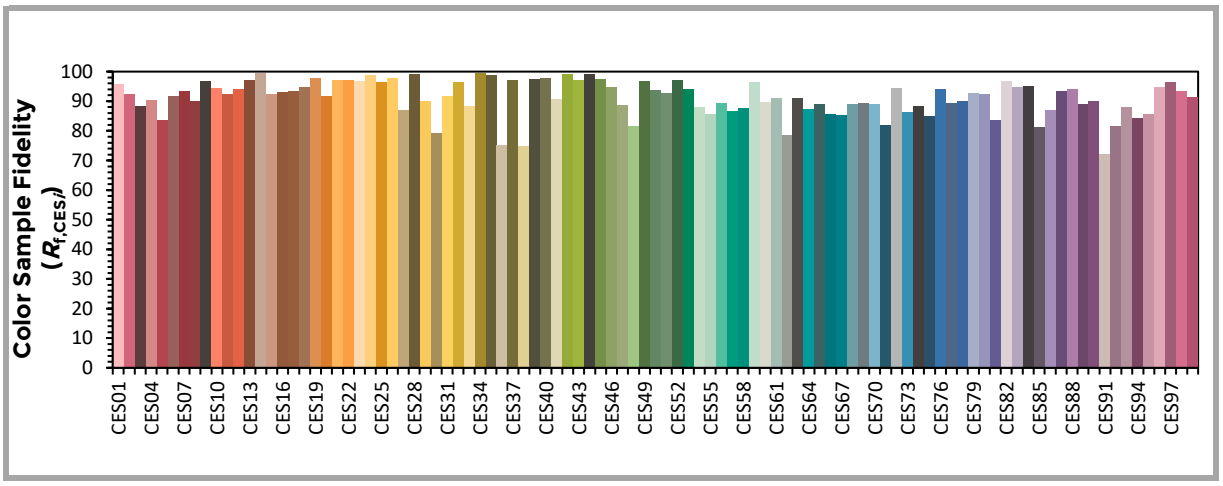
Local Chroma Shift							
Rcs,hj 1	-3.3	Rcs,hj 5	-7.1	Rcs,hj 9	-0.7	Rcs,hj 13	0.7
Rcs,hj 2	-1.7	Rcs,hj 6	-2.2	Rcs,hj 10	1.6	Rcs,hj 14	2.8
Rcs,hj 3	-1.0	Rcs,hj 7	-5.8	Rcs,hj 11	4.6	Rcs,hj 15	-2.5
Rcs,hj 4	-4.0	Rcs,hj 8	-1.7	Rcs,hj 12	5.3	Rcs,hj 16	-1.0



Local Hue Shift							
Rhs,hj 1	0.02	Rhs,hj 5	0.00	Rhs,hj 9	0.07	Rhs,hj 13	-0.06
Rhs,hj 2	0.01	Rhs,hj 6	0.01	Rhs,hj 10	0.09	Rhs,hj 14	-0.08
Rhs,hj 3	0.01	Rhs,hj 7	0.04	Rhs,hj 11	0.08	Rhs,hj 15	-0.04
Rhs,hj 4	-0.02	Rhs,hj 8	0.03	Rhs,hj 12	-0.01	Rhs,hj 16	-0.10

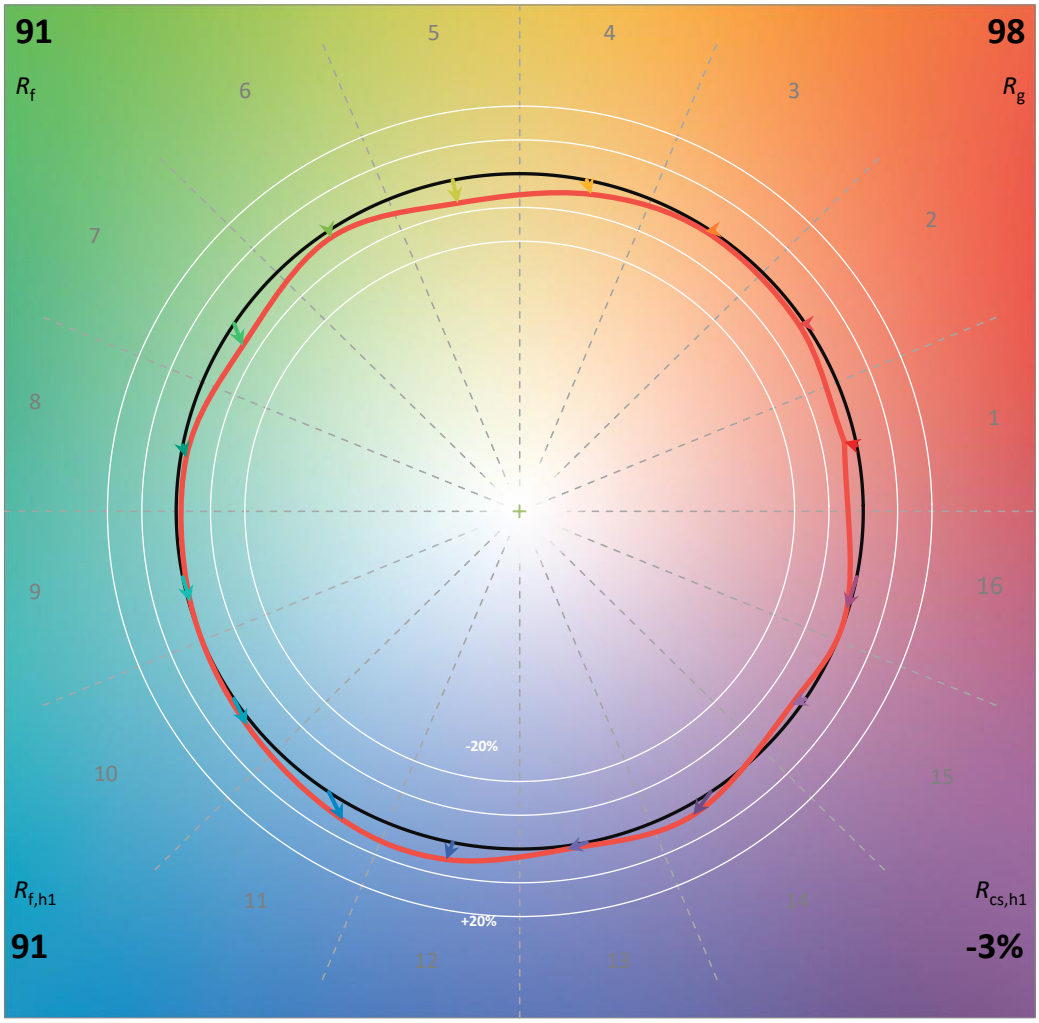


Sample Color Fidelity							
Rf,ces 1	95.7	Rf,ces 26	97.6	Rf,ces 51	92.6	Rf,ces 76	94.1
Rf,ces 2	92.1	Rf,ces 27	87.0	Rf,ces 52	97.1	Rf,ces 77	89.1
Rf,ces 3	88.1	Rf,ces 28	99.1	Rf,ces 53	93.7	Rf,ces 78	90.2
Rf,ces 4	90.1	Rf,ces 29	89.6	Rf,ces 54	87.9	Rf,ces 79	92.7
Rf,ces 5	83.5	Rf,ces 30	78.7	Rf,ces 55	85.5	Rf,ces 80	92.3
Rf,ces 6	91.5	Rf,ces 31	91.3	Rf,ces 56	89.1	Rf,ces 81	83.5
Rf,ces 7	93.4	Rf,ces 32	96.2	Rf,ces 57	86.4	Rf,ces 82	96.7
Rf,ces 8	90.1	Rf,ces 33	87.9	Rf,ces 58	87.3	Rf,ces 83	94.6
Rf,ces 9	96.8	Rf,ces 34	99.5	Rf,ces 59	96.3	Rf,ces 84	95.2
Rf,ces 10	94.4	Rf,ces 35	98.9	Rf,ces 60	89.7	Rf,ces 85	81.3
Rf,ces 11	92.4	Rf,ces 36	74.9	Rf,ces 61	90.9	Rf,ces 86	87.1
Rf,ces 12	93.9	Rf,ces 37	97.2	Rf,ces 62	78.5	Rf,ces 87	93.3
Rf,ces 13	97.3	Rf,ces 38	74.4	Rf,ces 63	90.8	Rf,ces 88	93.8
Rf,ces 14	99.3	Rf,ces 39	97.2	Rf,ces 64	87.3	Rf,ces 89	88.9
Rf,ces 15	92.1	Rf,ces 40	97.6	Rf,ces 65	88.9	Rf,ces 90	89.8
Rf,ces 16	92.9	Rf,ces 41	90.5	Rf,ces 66	85.3	Rf,ces 91	72.2
Rf,ces 17	93.5	Rf,ces 42	98.9	Rf,ces 67	85.0	Rf,ces 92	81.6
Rf,ces 18	94.7	Rf,ces 43	96.9	Rf,ces 68	88.9	Rf,ces 93	88.0
Rf,ces 19	97.8	Rf,ces 44	99.2	Rf,ces 69	89.4	Rf,ces 94	84.5
Rf,ces 20	92.0	Rf,ces 45	97.3	Rf,ces 70	89.1	Rf,ces 95	85.8
Rf,ces 21	97.2	Rf,ces 46	94.6	Rf,ces 71	81.7	Rf,ces 96	94.7
Rf,ces 22	97.0	Rf,ces 47	88.2	Rf,ces 72	94.2	Rf,ces 97	96.2
Rf,ces 23	96.6	Rf,ces 48	81.1	Rf,ces 73	86.4	Rf,ces 98	93.0
Rf,ces 24	98.7	Rf,ces 49	96.4	Rf,ces 74	88.2	Rf,ces 99	91.4
Rf,ces 25	96.4	Rf,ces 50	93.4	Rf,ces 75	85.0		



TM-30 Color Vector Graphic (CVG)

The Color Vector Graphic (CVG) shows a normalized version of the average change in (a', b') coordinates of CAM02-UCS for the CES within each hue-angle bin.



aspectLED

Integral