



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
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Photometric Test Report

Relevant Standards

IES LM-79-2008, ANSI C82.77-10-2014, CIE 13.3-1995
CIE 15-2004, ANSI C78.377-2017, IES TM-30-2018

Prepared For

Enolight Ltd

17-25 Valleywood Dr
Markham, ON L3R 5L9
Canada

Catalog Number

SPK8115F (3000K)

Order Number

14167256

Test Number

14167256.01

Test Date

2022-01-20

Prepared By

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Approved By

Alexa Lambert, Project Handler

The results contained in this report pertain only to the tested sample.

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Laboratory results may not be representative of field performance
Ballast factors have not been applied

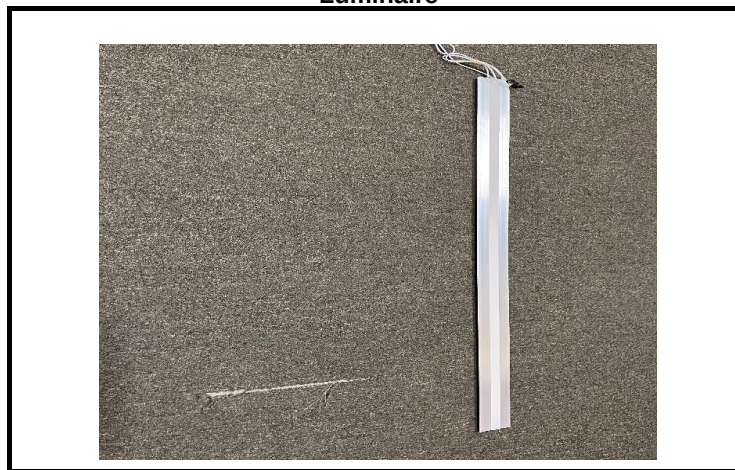
Testing was performed in a 3-meter integrating sphere using the 4π geometry method.

Absorption correction was employed for Sphere measurement



Luminaire Description: Formed aluminum housing, frosted plastic lens enclosure
Lamp: 560 white LEDs
Mounting: Recessed
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Length: 49.00 in.
Luminous Width: 1.000 in.

Summary of Results

Integrating Sphere

Luminous Flux: 1430 Lumens
Efficacy: 50.65 lm/w
CCT: 2701 K
CRI (Ra): 94.2

Distribution

Total Luminaire Output: 1382 Lumens
Luminaire Efficacy: 51.2 lm/w
Maximum Candela: 501 Candela

Electrical Data at 24 VDC

Test Temperature: 25.8 °C
Voltage: 24.00 VDC
Current: 1.176 A
Power: 28.23 W



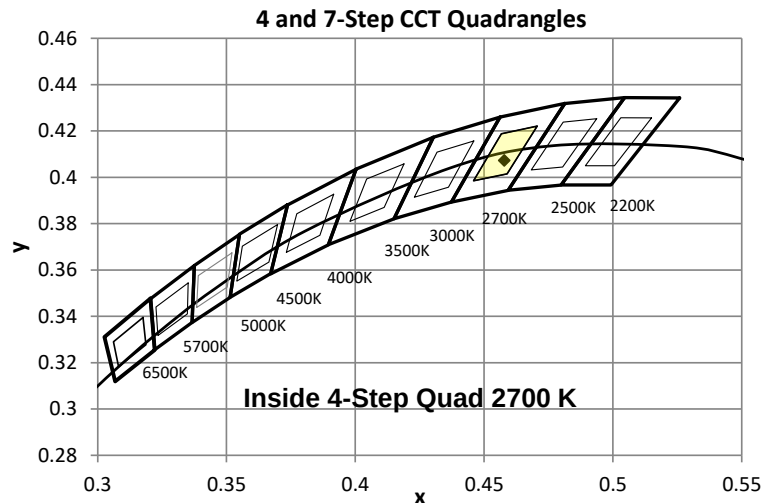
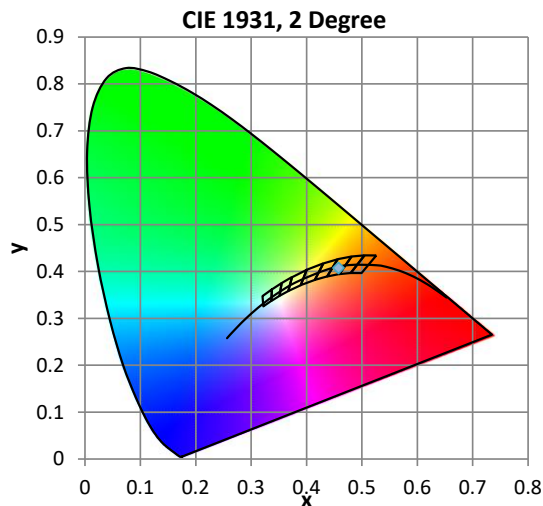
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.8 °C	24.00 VDC	1.176 A	28.23 W	N/A	N/A	N/A

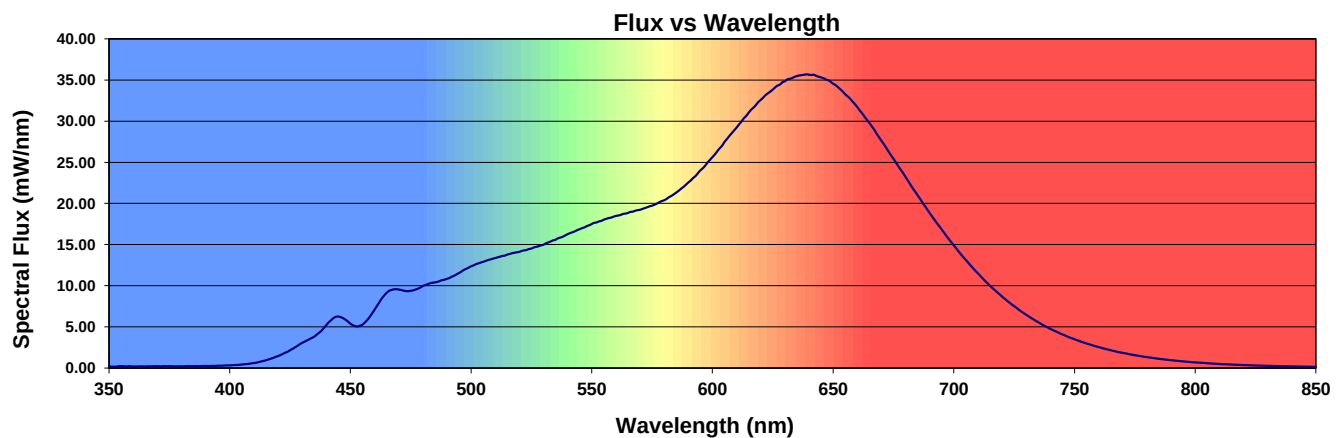
Summary of Results

Total Output:	1430 Lumens	Chromaticity (x):	0.4578
Efficacy:	50.6 lm/w	Chromaticity (y):	0.4073
CCT:	2701 K	Chromaticity (u'):	0.2627
CRI (Ra):	94.2	Chromaticity (v'):	0.5258
CRI (R9):	91.9	TM-30 Rf:	94
Peak Wavelength:	639 nm	TM-30 Rg:	100
Dominant Wavelength:	555 nm	TM-30 Rcs,h1:	1%
S/P Ratio:	1.41	Duv:	-0.0011
M/P Ratio:	0.55	WELL Building Standard v2	



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
94.2	92.9	94.5	98.1	93.0	92.0	89.9	97.2	96.4	91.9	88.8	89.0	83.4	92.6	98.9	94.7





Distribution - Goniophotometer

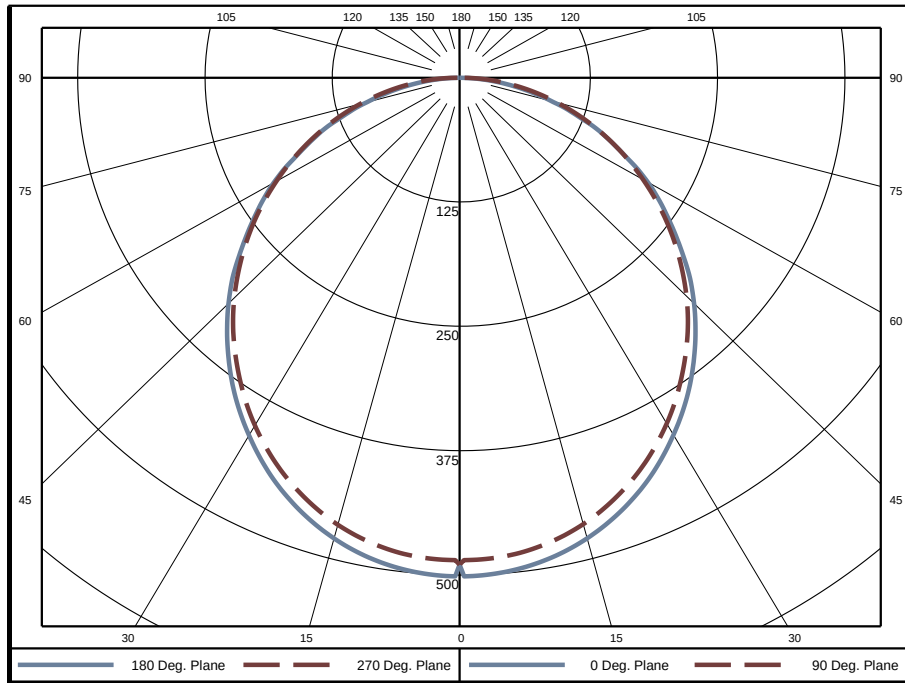
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.0 °C	24.00 VDC	1.125 A	27.00 W	N/A	N/A	N/A

Summary of Results

Spacing Criteria	Total Lumen Output:	1382 Lumens
0-180: 1.26	Luminaire Efficacy:	51.2 lm/w
90-270: 1.22	Maximum Candela:	501 Candela
Corrected UGR (Room Dimension: X=4H, Y=8H, Reflectances: 70/50/20%, S/H: 1)		
Crosswise: 25.7	Endwise: 26	

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	11.7	0.8%	60-65	92.0	6.7%	120-125	0	0.0%
5-10	34.6	2.5%	65-70	77.1	5.6%	125-130	0	0.0%
10-15	56.3	4.1%	70-75	60.4	4.4%	130-135	0	0.0%
15-20	75.9	5.5%	75-80	42.8	3.1%	135-140	0	0.0%
20-25	92.6	6.7%	80-85	25.5	1.8%	140-145	0	0.0%
25-30	105.9	7.7%	85-90	9.3	0.7%	145-150	0	0.0%
30-35	115.4	8.4%	90-95	0	0.0%	150-155	0	0.0%
35-40	121.1	8.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	122.7	8.9%	100-105	0	0.0%	160-165	0	0.0%
45-50	120.3	8.7%	105-110	0	0.0%	165-170	0	0.0%
50-55	114.1	8.3%	110-115	0	0.0%	170-175	0	0.0%
55-60	104.5	7.6%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	614	44.4%
0-60	1075	77.8%
0-90	1382	100.0%
90-180	0	0.0%



Candela Tabulation
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
	0	489.6	489.6	489.6	489.6	489.6	489.6	489.6	489.6	489.6	489.6	489.6	489.6	489.6	489.6	489.6
	5	499.0	489.3	484.7	485.3	483.3	485.3	484.7	489.3	499.0	489.3	484.7	485.3	483.3	485.3	484.7
	10	491.7	482.2	477.6	478.3	476.5	478.3	477.6	482.2	491.7	482.2	477.6	478.3	476.5	478.3	477.6
	15	479.5	470.1	465.6	466.5	464.7	466.5	465.6	470.1	479.5	470.1	465.6	466.5	464.7	466.5	465.6
	20	462.4	453.3	449.3	449.7	447.9	449.7	449.3	453.3	462.4	453.3	449.3	449.7	447.9	449.7	449.3
	25	441.1	432.1	428.4	428.9	427.1	428.9	428.4	432.1	441.1	432.1	428.4	428.9	427.1	428.9	428.4
	30	415.5	406.9	403.9	403.9	402.5	403.9	403.9	406.9	415.5	406.9	403.9	403.9	402.5	403.9	403.9
	35	387.3	378.6	376.8	376.1	374.5	376.1	376.8	378.6	387.3	378.6	376.8	376.1	374.5	376.1	376.8
	40	356.0	348.0	346.5	346.1	344.6	346.1	346.5	348.0	356.0	348.0	346.5	346.1	344.6	346.1	346.5
	45	322.8	315.3	313.8	313.8	312.5	313.8	313.8	315.3	322.8	315.3	313.8	313.8	312.5	313.8	313.8
	50	286.1	280.3	279.2	279.9	278.4	279.9	279.2	280.3	286.1	280.3	279.2	279.9	278.4	279.9	279.2
	55	248.5	243.9	243.7	244.5	243.4	244.5	243.7	243.9	248.5	243.9	243.7	244.5	243.4	244.5	243.7
	60	212.4	207.1	206.9	208.0	207.2	208.0	206.9	207.1	212.4	207.1	206.9	208.0	207.2	208.0	206.9
	65	171.4	169.7	169.7	171.6	171.6	171.6	169.7	169.7	171.4	169.7	169.7	171.6	171.6	171.6	169.7
	70	134.1	132.3	133.2	135.6	135.9	135.6	133.2	132.3	134.1	132.3	133.2	135.6	135.9	135.6	133.2
	75	94.4	95.0	97.4	100.0	100.6	100.0	97.4	95.0	94.4	95.0	97.4	100.0	100.6	100.0	97.4
	80	59.7	60.2	63.3	65.6	66.4	65.6	63.3	60.2	59.7	60.2	63.3	65.6	66.4	65.6	63.3
	85	28.0	29.1	31.6	33.3	34.1	33.3	31.6	29.1	28.0	29.1	31.6	33.3	34.1	33.3	31.6
	90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	160	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	180	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Average Luminance (cd/m²)
Horizontal Angle (Degrees)

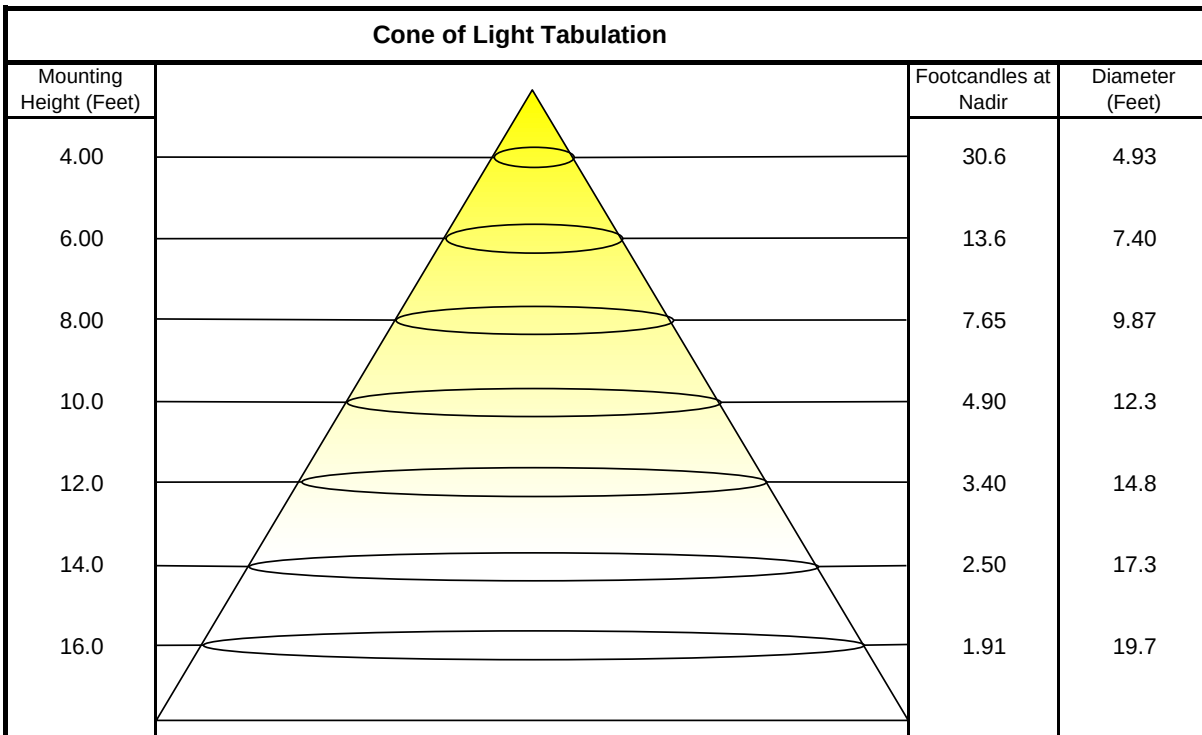
Vertical Angle (Degrees)	0	45	90
	0	15490	15490
	45	14440	14040
	55	13700	13440
	65	12830	12700
	75	11530	11910
	85	10160	11470



Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity 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	0
Room Cavity Ratio (RCR)	** Values are expressed as percent of total lumen output delivered to the task surface **																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

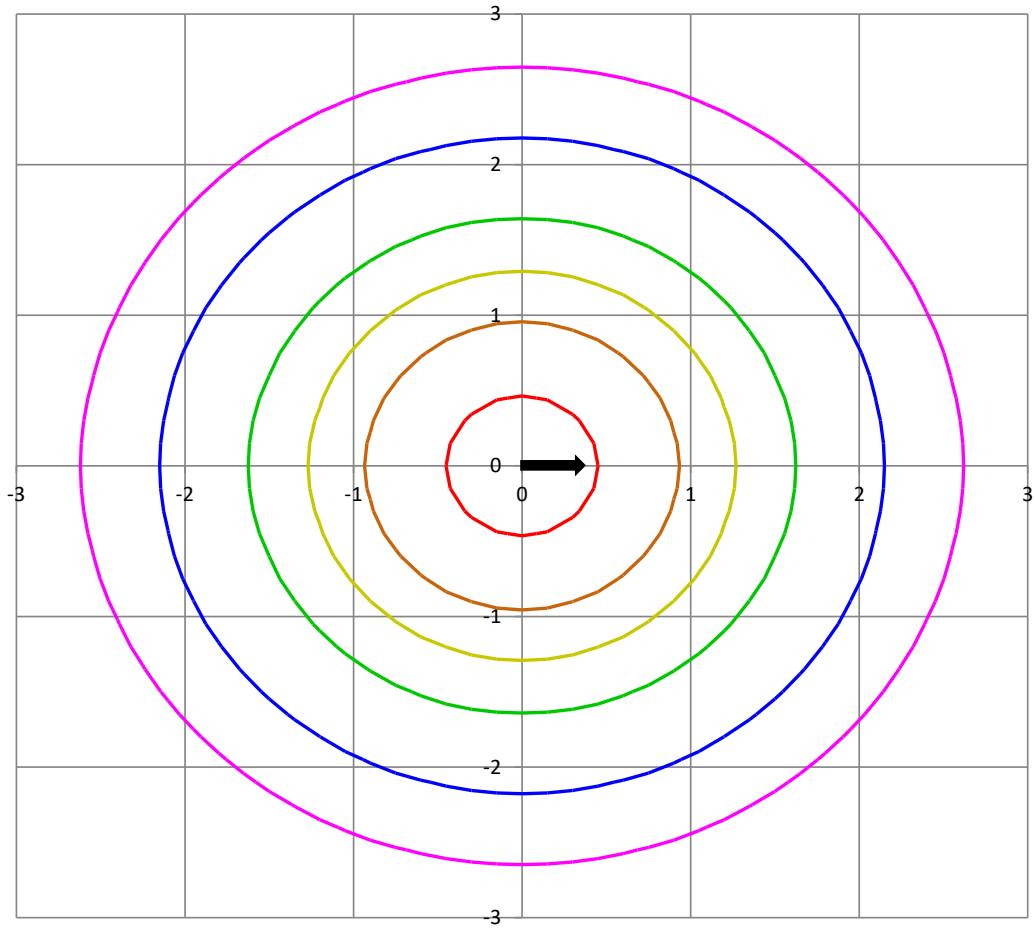
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	489.6 Candela
Central Cone Intensity:	489 Candela
Beam Flux:	969.7 Lumens
Beam Angle (0-180):	111.0 Degrees
Beam Angle (90-270):	109.6 Degrees
Field Angle (0-180):	163.3 Degrees
Field Angle (90-270):	165.3 Degrees



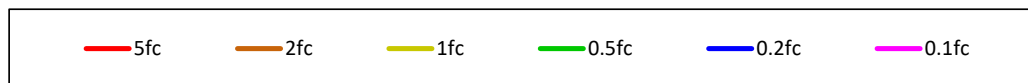


ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height



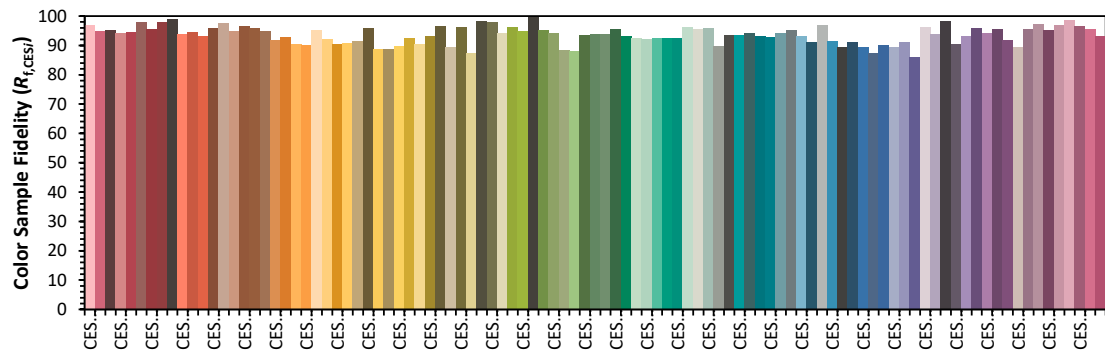
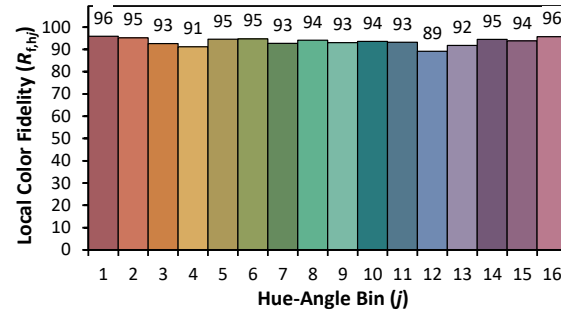
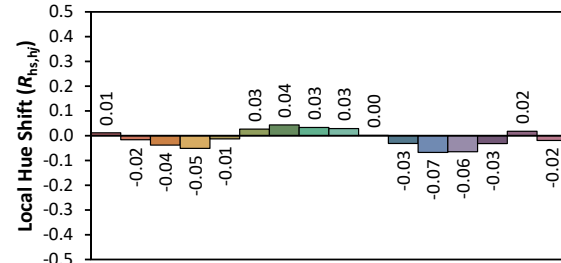
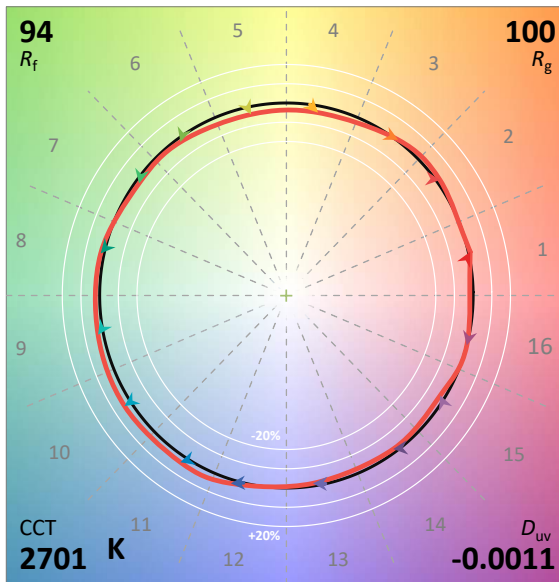
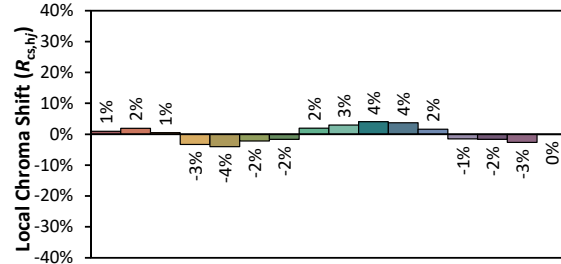
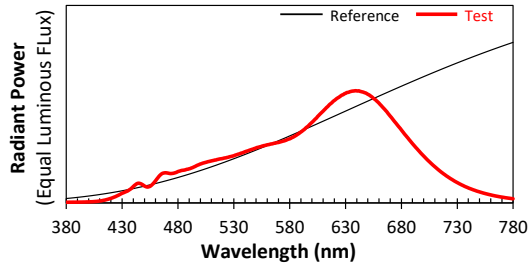
ANSI/IES TM-30-18 Color Rendition Report

Date: 2022-01-20

Manufacturer: Enolight Ltd

Model:

SPK8115F (3000K)



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.4578

y 0.4073

u' 0.2627

v' 0.5258

CIE 13.3-1995
(CRI)

R_a 94

R_g 92

Colors are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00.