

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P1066228

Luminaire Tested: **NVN-SA4D-722-U-T4BC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1066228
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SA4D-722-U-T4BC
Description: Navion AREA AND ROADWAY LUMINAIRE 1200mA 4xLight Square PACKAGE
70CRI 2200K FIXTURE w/ TYPE IV ANGLED BACKLIGHT CONTROL
Light Source: (56) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17797.6 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G4

Input Watts (W): 218.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.97
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

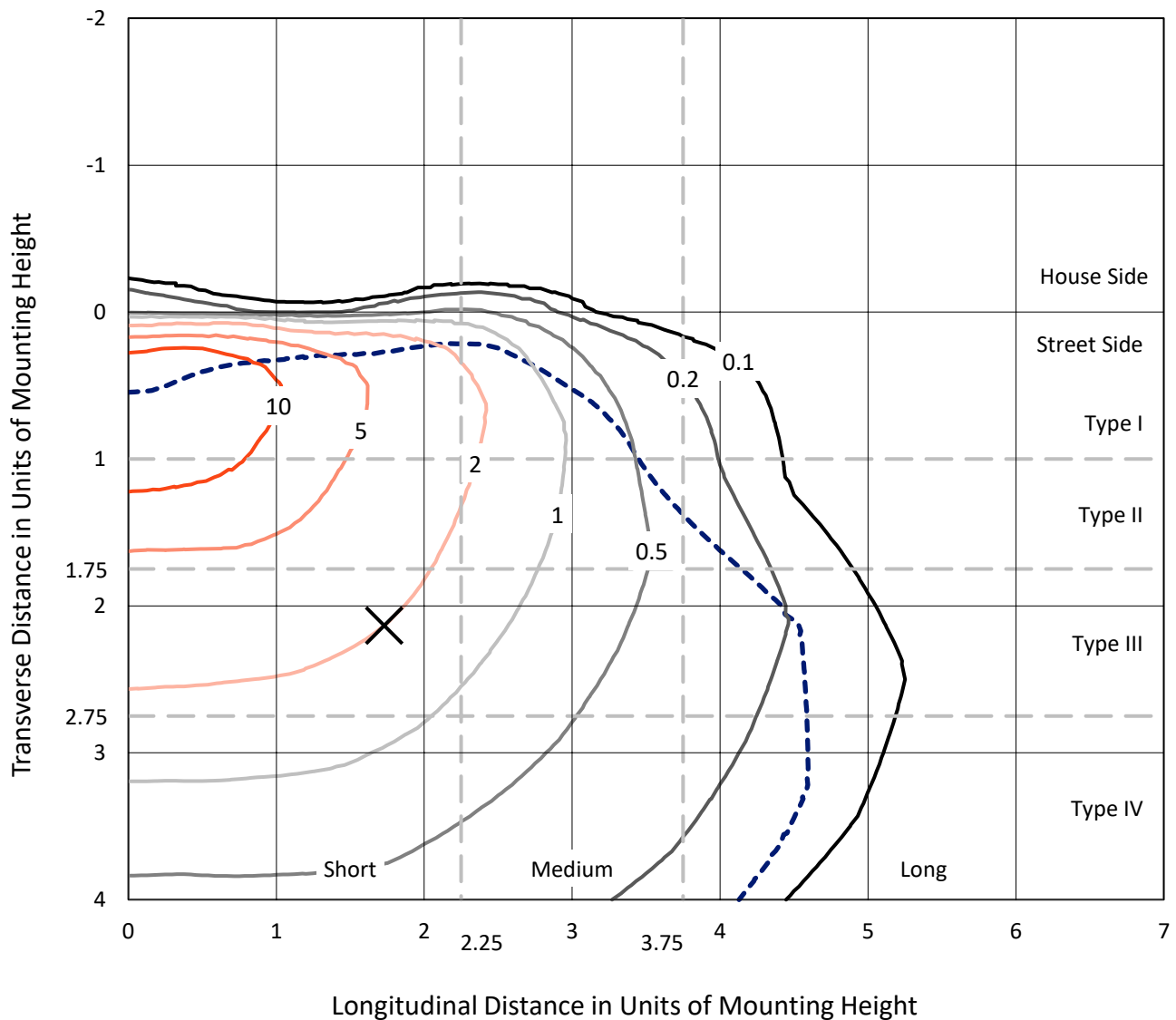


REPORT NUMBER: P1066228

CATALOG NUMBER: NVN-SA4D-722-U-T4BC

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

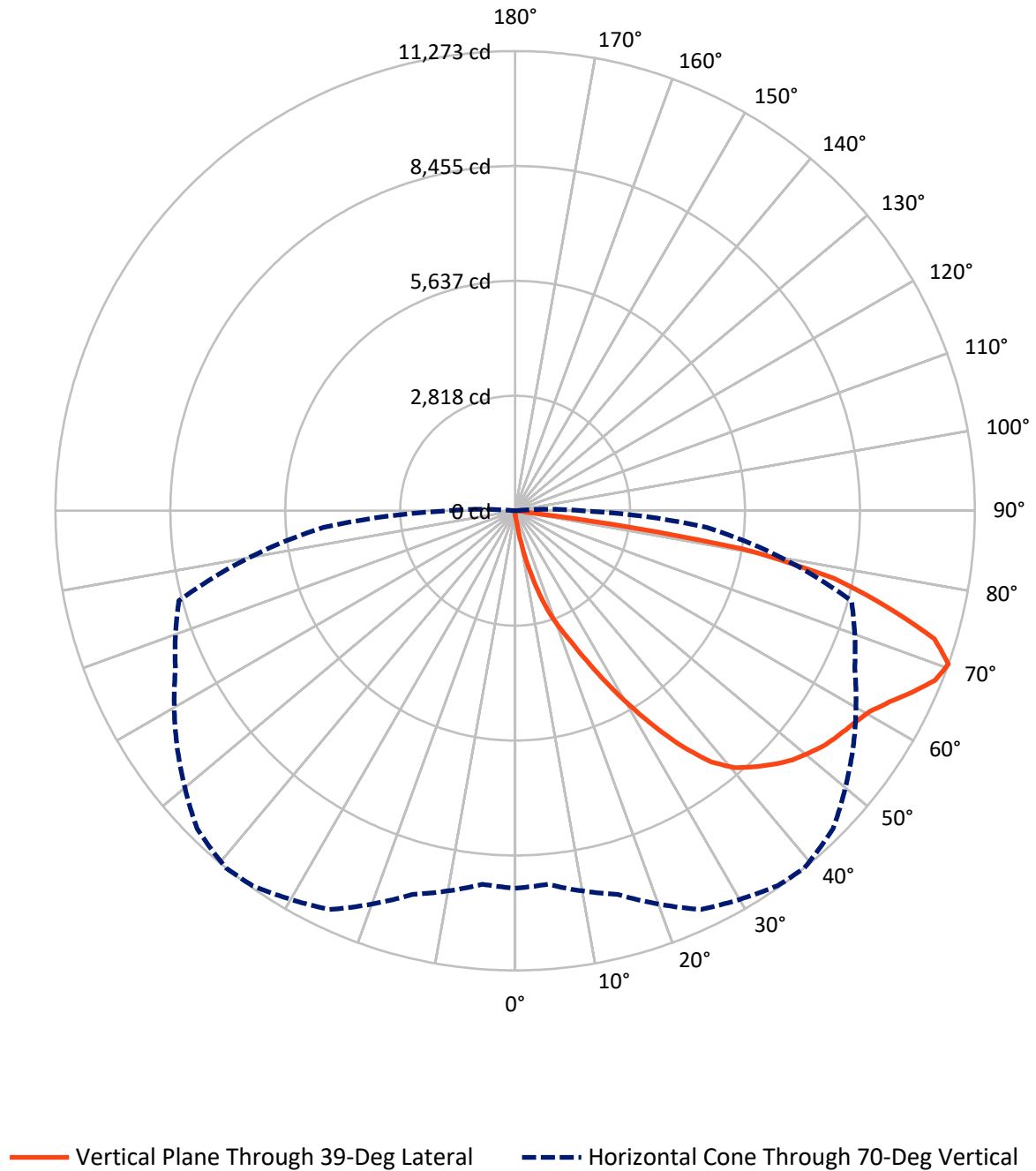


Based on 15 foot mounting height. Maximum calculated value = 19.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P1066228

CATALOG NUMBER: NVN-SA4D-722-U-T4BC

Luminous Intensity Polar Plot



REPORT NUMBER: P1066228

CATALOG NUMBER: NVN-SA4D-722-U-T4BC

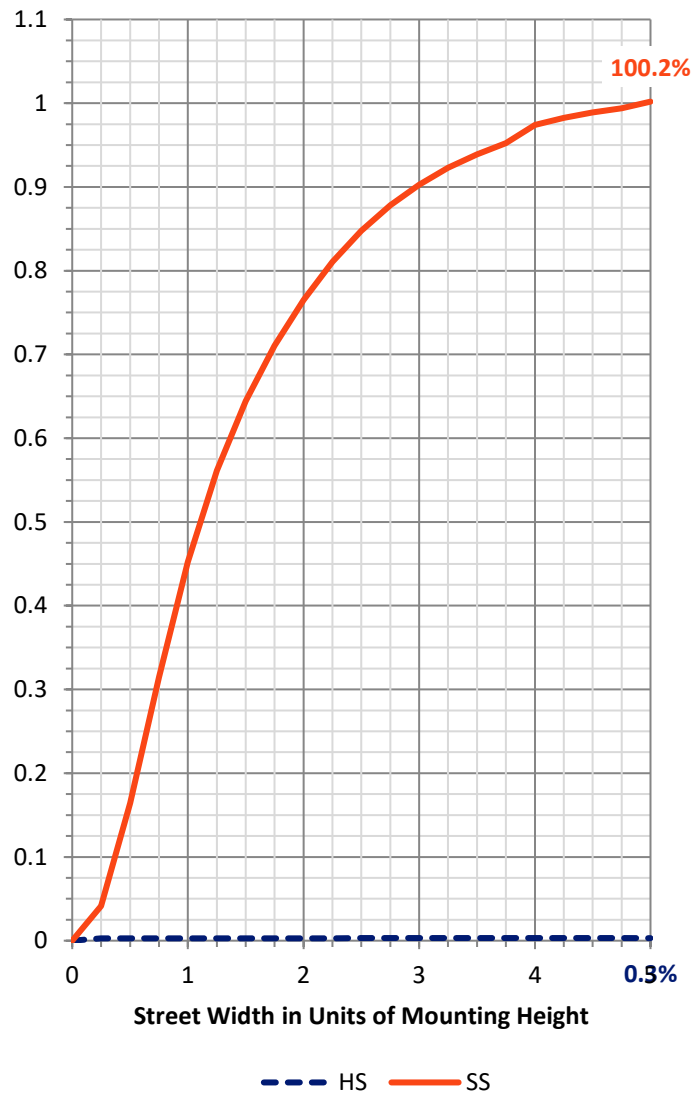
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	54.8	0.0	54.8
	% Fixture	0.3	0.0	0.3
Street Side	Lumens	17742.8	0.0	17742.8
	% Fixture	99.7	0.0	99.7
Total	Lumens	17797.6	0.0	17797.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.7	0.1
10°-20°	218.8	1.2
20°-30°	742.5	4.2
30°-40°	1745.0	9.8
40°-50°	2833.5	15.9
50°-60°	3590.6	20.2
60°-70°	4561.1	25.6
70°-80°	3705.8	20.8
80°-90°	381.6	2.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	17797.6	100.0
0°-180°	17797.6	100.0



REPORT NUMBER: P1066228

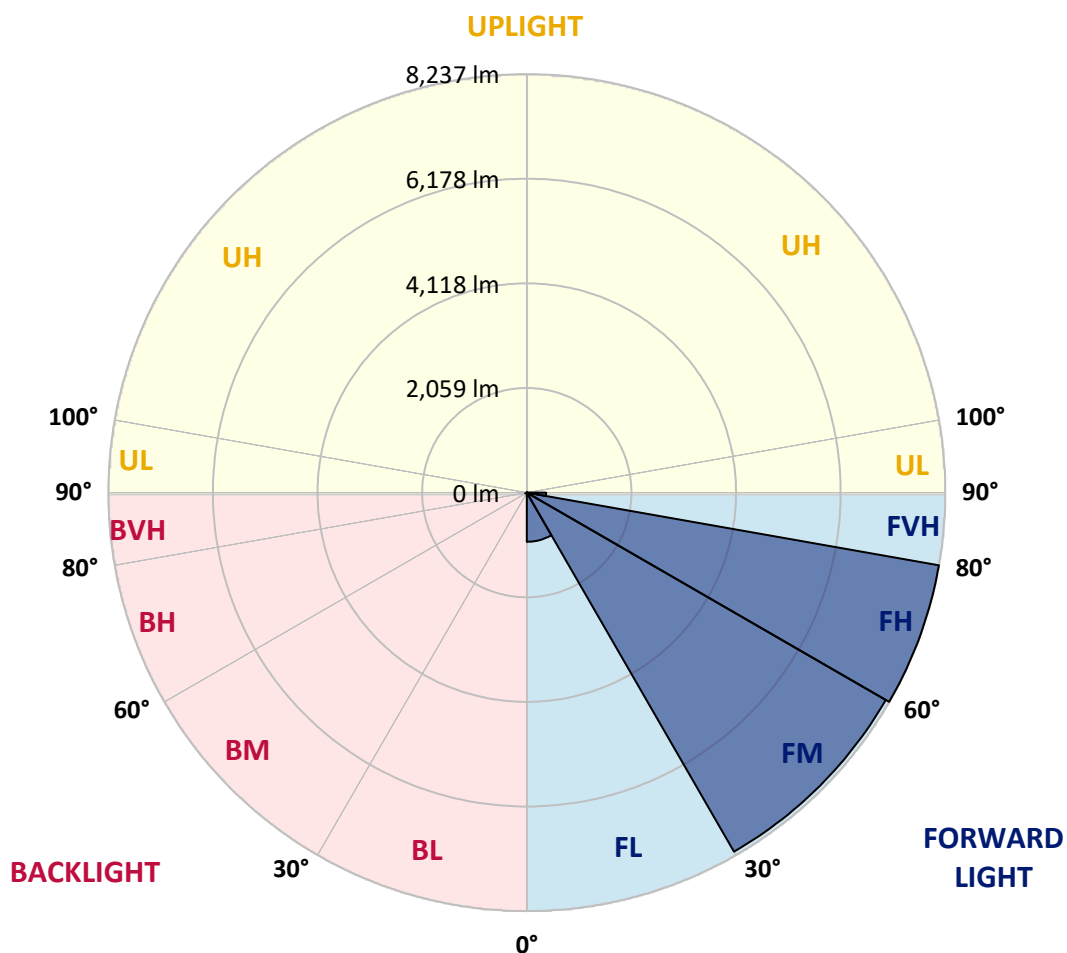
CATALOG NUMBER: NVN-SA4D-722-U-T4BC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	968.2	5.4			
FM	(30°-60°)	8158.6	45.8			
FH	(60°-80°)	8236.8	46.3			G4/12000
FVH	(80°-90°)	379.3	2.1			G3/500
BL	(0°-30°)	11.9	0.1	B0/110		
BM	(30°-60°)	10.5	0.1	B0/220		
BH	(60°-80°)	30.1	0.2	B0/110		G0/110
BVH	(80°-90°)	2.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G4

Type IV Short



REPORT NUMBER: P1066228

CATALOG NUMBER: NVN-SA4D-722-U-T4BC

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
2.5°	125.6	125.6	125.6	120.8	120.8	116.0	116.0	111.1	106.3	106.3	101.5
5°	236.8	241.6	227.1	198.1	178.8	169.1	159.5	135.3	120.8	111.1	101.5
7.5°	647.5	628.2	599.2	502.5	386.6	328.6	280.3	198.1	145.0	116.0	101.5
10°	1362.6	1309.5	1227.3	1096.9	869.8	778.0	604.0	362.4	202.9	130.5	101.5
12.5°	2000.4	2010.1	1908.6	1783.0	1507.6	1353.0	1116.2	681.3	318.9	154.6	101.5
15°	2483.6	2474.0	2435.3	2333.9	2087.4	1937.6	1725.0	1145.2	536.4	193.3	106.3
17.5°	2865.4	2826.7	2812.2	2768.7	2609.3	2527.1	2295.2	1686.4	850.4	260.9	111.1
20°	3247.1	3237.4	3222.9	3174.6	3068.3	3010.3	2831.6	2232.4	1266.0	372.1	120.8
22.5°	3802.8	3749.6	3759.3	3653.0	3566.0	3464.5	3319.6	2812.2	1744.4	531.5	135.3
25°	4455.1	4450.3	4373.0	4324.6	4179.7	4068.5	3875.3	3372.7	2275.9	768.3	149.8
27.5°	5223.4	5170.2	5136.4	5054.3	4904.5	4778.9	4513.1	3928.4	2850.9	1034.0	169.1
30°	6025.5	6025.5	5962.7	5837.1	5692.1	5537.5	5266.9	4513.1	3421.1	1372.3	193.3
32.5°	6962.9	6982.2	6827.6	6639.2	6450.7	6344.4	5991.7	5175.1	3967.1	1758.8	222.3
35°	7871.3	7847.2	7591.1	7383.3	7243.2	7127.2	6827.6	5899.9	4585.6	2208.2	260.9
37.5°	8741.1	8678.3	8253.1	7958.3	7895.5	7818.2	7518.6	6624.7	5199.2	2705.9	309.2
40°	9364.4	9267.8	8828.1	8422.2	8330.4	8286.9	8055.0	7281.8	5846.7	3261.6	372.1
42.5°	9635.0	9523.9	9219.5	8890.9	8687.9	8586.5	8383.5	7818.2	6494.2	3880.1	463.9
45°	9688.2	9601.2	9383.8	9306.4	9031.0	8876.4	8601.0	8199.9	7098.2	4493.8	589.5
47.5°	9494.9	9456.2	9325.8	9490.1	9349.9	9137.3	8803.9	8485.0	7634.6	5237.9	763.5
50°	9021.4	8992.4	9055.2	9485.2	9581.9	9340.3	9026.2	8707.3	8098.4	6006.2	1009.9
52.5°	8383.5	8378.7	8673.4	9359.6	9683.3	9533.5	9243.6	8929.5	8465.7	6750.3	1357.8
55°	7687.7	7769.9	8286.9	9243.6	9741.3	9673.7	9456.2	9127.7	8794.2	7441.3	1918.3
57.5°	7629.7	7595.9	8093.6	9195.3	9775.1	9813.8	9668.8	9335.4	9074.5	8006.6	2667.3
60°	8209.6	8132.3	8320.7	9296.8	9924.9	9992.6	9881.4	9494.9	9354.8	8451.2	3653.0
62.5°	8881.2	8808.7	8905.4	9688.2	10219.7	10316.3	10176.2	9659.2	9581.9	8760.4	4711.2
65°	9417.6	9359.6	9543.2	10272.8	10630.4	10712.6	10615.9	9963.6	9683.3	9011.7	5571.3
67.5°	9504.6	9432.1	9813.8	10664.2	11046.0	11103.9	11026.6	10258.3	9649.5	9031.0	5769.4
70°	9258.1	9195.3	9741.3	10789.9	11224.7	11273.1	11026.6	10118.2	9190.5	8538.2	4716.0
72.5°	8499.5	8547.8	9253.3	10485.4	10978.3	10756.0	10234.2	9412.7	8596.1	7238.3	3309.9
75°	7320.5	7373.6	8311.0	9649.5	9688.2	9417.6	9137.3	8659.0	7692.5	4769.2	2295.2
77.5°	5204.1	5015.6	6416.9	7968.0	7827.8	8001.8	8026.0	7204.5	6441.1	2483.6	1536.6
80°	512.2	434.9	806.9	2285.5	5049.4	5643.8	5875.7	5552.0	4749.9	1111.4	806.9
82.5°	111.1	111.1	120.8	130.5	202.9	304.4	1396.4	3421.1	3068.3	565.3	260.9
85°	62.8	62.8	77.3	91.8	120.8	135.3	159.5	212.6	826.3	202.9	48.3
87.5°	48.3	53.2	62.8	77.3	101.5	111.1	135.3	169.1	207.8	188.4	14.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1066228

CATALOG NUMBER: NVN-SA4D-722-U-T4BC

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
2.5°	101.5	96.6	91.8	87.0	82.1	82.1	77.3	77.3	77.3	77.3	77.3
5°	96.6	91.8	87.0	77.3	72.5	67.6	62.8	62.8	62.8	62.8	62.8
7.5°	96.6	91.8	82.1	72.5	62.8	58.0	53.2	48.3	48.3	53.2	53.2
10°	96.6	87.0	72.5	62.8	53.2	48.3	43.5	38.7	38.7	38.7	38.7
12.5°	91.8	82.1	67.6	58.0	48.3	38.7	29.0	24.2	24.2	24.2	24.2
15°	87.0	77.3	62.8	48.3	33.8	24.2	19.3	14.5	14.5	14.5	14.5
17.5°	87.0	72.5	58.0	43.5	24.2	14.5	9.7	4.8	4.8	4.8	9.7
20°	87.0	72.5	53.2	33.8	14.5	9.7	9.7	4.8	0.0	4.8	4.8
22.5°	87.0	67.6	43.5	24.2	14.5	9.7	4.8	0.0	0.0	0.0	0.0
25°	91.8	67.6	38.7	19.3	9.7	4.8	0.0	0.0	0.0	0.0	0.0
27.5°	91.8	62.8	33.8	14.5	4.8	0.0	0.0	0.0	0.0	0.0	0.0
30°	96.6	62.8	29.0	9.7	4.8	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	96.6	58.0	19.3	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	96.6	53.2	14.5	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	96.6	48.3	14.5	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	101.5	43.5	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	106.3	38.7	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	111.1	33.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	125.6	33.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	145.0	33.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	174.0	33.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	227.1	29.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	328.6	29.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	550.8	29.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	966.4	29.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	1633.2	29.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	2130.9	33.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	1618.7	29.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	773.1	19.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	343.1	19.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	149.8	14.5	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	58.0	9.7	4.8	4.8	4.8	4.8	0.0	0.0	0.0	0.0	0.0
82.5°	24.2	9.7	4.8	4.8	4.8	4.8	4.8	0.0	0.0	0.0	0.0
85°	14.5	9.7	9.7	9.7	4.8	4.8	4.8	0.0	0.0	0.0	0.0
87.5°	9.7	9.7	9.7	9.7	9.7	4.8	4.8	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-2

Test Date: 10/09/2024

Luminaire Tested: GSS-SB1A-722-U-5WQ

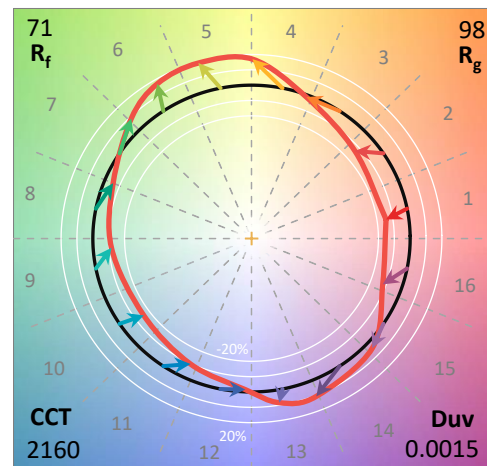
Data in this report applies to families of products including GSS-SB1A-722-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-2
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 10/15/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: McGraw-Edison
 Catalog Number: **GSS-SB1A-722-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI
 2200K CCT 26 LEDS

Spectral Parameters

CCT (K):	2160	CRI (Ra):	71.9		
CIE u':	0.2927	R1:	68.7	R9:	-17.8
CIE v':	0.5388	R2:	82.6	R10:	60.5
Duv:	0.0015	R3:	95.5	R11:	60.2
CIE x:	0.5130	R4:	66.4	R12:	48.2
CIE y:	0.4197	R5:	65.4	R13:	70.7
CIE z:	0.0674	R6:	75.9	R14:	96.8
Peak Wavelength (nm):	609	R7:	77.2	R15:	61.8
Dominant Wavelength (nm):	587	R8:	43.5		
Purity:	79.96089				
Rf:	70.6				
Rg:	97.6				



Test Conditions

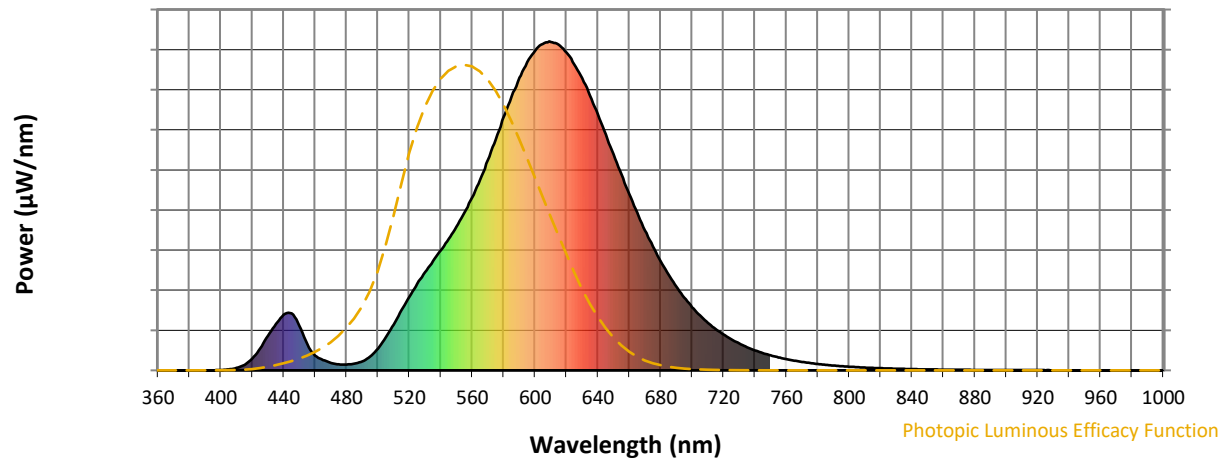
Stabilization Time: 21M
 Operation Time: 1H 21M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-2

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2407-184-2

Photopic Flux vs. Wavelength

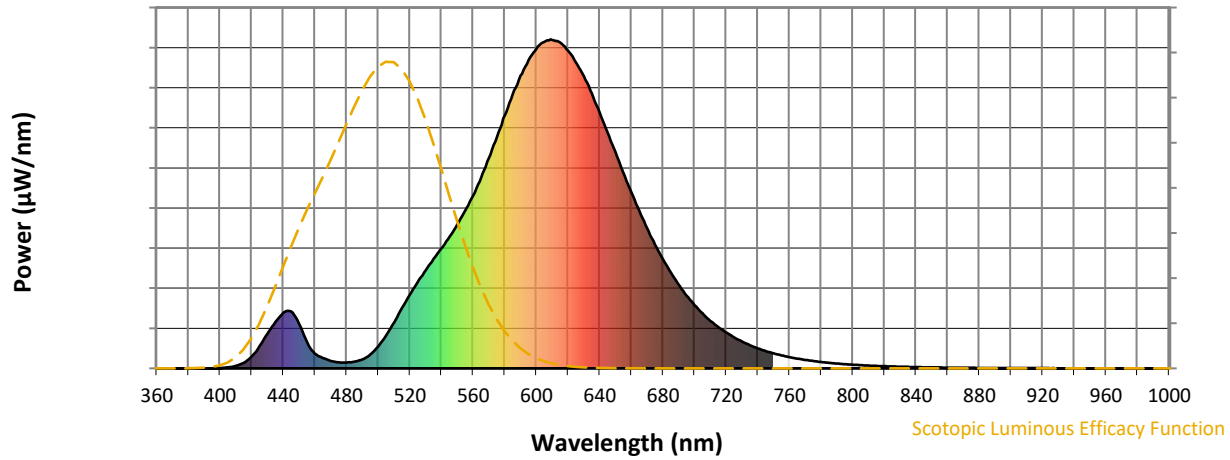


Photopic Lumens: NR

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	27	NR	620	966	NR	750	46	NR	880	1	NR
365	0	NR	495	42	NR	625	930	NR	755	39	NR	885	1	NR
370	0	NR	500	67	NR	630	888	NR	760	34	NR	890	1	NR
375	0	NR	505	101	NR	635	835	NR	765	30	NR	895	1	NR
380	0	NR	510	139	NR	640	778	NR	770	26	NR	900	1	NR
385	0	NR	515	183	NR	645	717	NR	775	22	NR	905	1	NR
390	0	NR	520	224	NR	650	656	NR	780	19	NR	910	1	NR
395	0	NR	525	262	NR	655	595	NR	785	17	NR	915	1	NR
400	1	NR	530	299	NR	660	536	NR	790	15	NR	920	1	NR
405	3	NR	535	332	NR	665	480	NR	795	13	NR	925	1	NR
410	7	NR	540	365	NR	670	425	NR	800	11	NR	930	1	NR
415	17	NR	545	400	NR	675	376	NR	805	10	NR	935	0	NR
420	36	NR	550	437	NR	680	332	NR	810	8	NR	940	0	NR
425	67	NR	555	479	NR	685	291	NR	815	8	NR	945	0	NR
430	105	NR	560	525	NR	690	255	NR	820	7	NR	950	0	NR
435	141	NR	565	579	NR	695	221	NR	825	6	NR	955	0	NR
440	169	NR	570	639	NR	700	192	NR	830	5	NR	960	0	NR
445	173	NR	575	703	NR	705	167	NR	835	4	NR	965	0	NR
450	136	NR	580	769	NR	710	144	NR	840	4	NR	970	0	NR
455	80	NR	585	832	NR	715	125	NR	845	3	NR	975	0	NR
460	45	NR	590	890	NR	720	109	NR	850	3	NR	980	0	NR
465	32	NR	595	937	NR	725	94	NR	855	3	NR	985	0	NR
470	23	NR	600	972	NR	730	81	NR	860	2	NR	990	0	NR
475	18	NR	605	992	NR	735	70	NR	865	2	NR	995	0	NR
480	18	NR	610	998	NR	740	61	NR	870	2	NR	1000	0	NR
485	20	NR	615	990	NR	745	53	NR	875	2	NR			

REPORT NUMBER: SP1-2407-184-2

Scotopic Flux vs. Wavelength



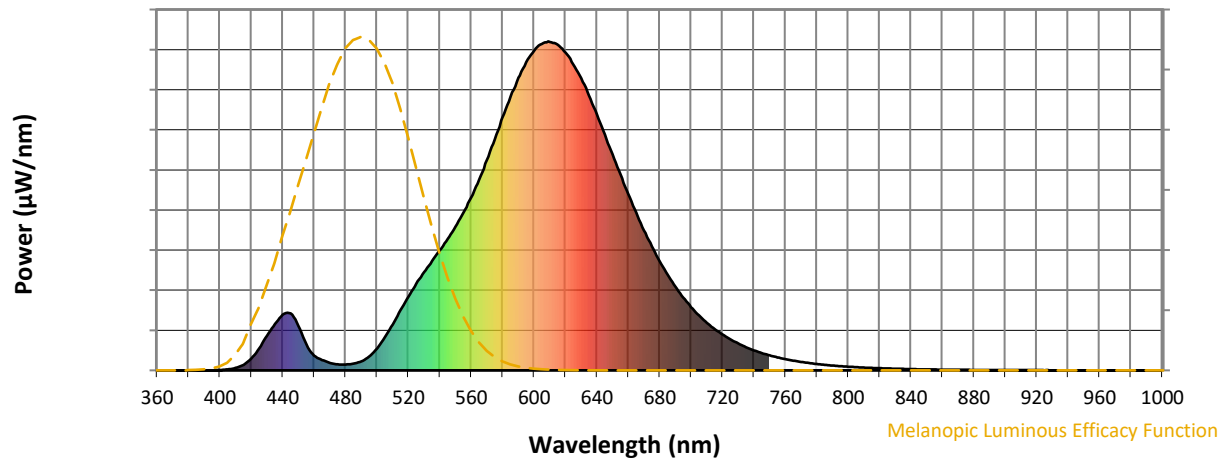
Scotopic Lumens: NR

S/P: 0.8

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	27	NR	620	966	NR	750	46	NR	880	1	NR
365	0	NR	495	42	NR	625	930	NR	755	39	NR	885	1	NR
370	0	NR	500	67	NR	630	888	NR	760	34	NR	890	1	NR
375	0	NR	505	101	NR	635	835	NR	765	30	NR	895	1	NR
380	0	NR	510	139	NR	640	778	NR	770	26	NR	900	1	NR
385	0	NR	515	183	NR	645	717	NR	775	22	NR	905	1	NR
390	0	NR	520	224	NR	650	656	NR	780	19	NR	910	1	NR
395	0	NR	525	262	NR	655	595	NR	785	17	NR	915	1	NR
400	1	NR	530	299	NR	660	536	NR	790	15	NR	920	1	NR
405	3	NR	535	332	NR	665	480	NR	795	13	NR	925	1	NR
410	7	NR	540	365	NR	670	425	NR	800	11	NR	930	1	NR
415	17	NR	545	400	NR	675	376	NR	805	10	NR	935	0	NR
420	36	NR	550	437	NR	680	332	NR	810	8	NR	940	0	NR
425	67	NR	555	479	NR	685	291	NR	815	8	NR	945	0	NR
430	105	NR	560	525	NR	690	255	NR	820	7	NR	950	0	NR
435	141	NR	565	579	NR	695	221	NR	825	6	NR	955	0	NR
440	169	NR	570	639	NR	700	192	NR	830	5	NR	960	0	NR
445	173	NR	575	703	NR	705	167	NR	835	4	NR	965	0	NR
450	136	NR	580	769	NR	710	144	NR	840	4	NR	970	0	NR
455	80	NR	585	832	NR	715	125	NR	845	3	NR	975	0	NR
460	45	NR	590	890	NR	720	109	NR	850	3	NR	980	0	NR
465	32	NR	595	937	NR	725	94	NR	855	3	NR	985	0	NR
470	23	NR	600	972	NR	730	81	NR	860	2	NR	990	0	NR
475	18	NR	605	992	NR	735	70	NR	865	2	NR	995	0	NR
480	18	NR	610	998	NR	740	61	NR	870	2	NR	1000	0	NR
485	20	NR	615	990	NR	745	53	NR	875	2	NR			

REPORT NUMBER: SP1-2407-184-2

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 1.21

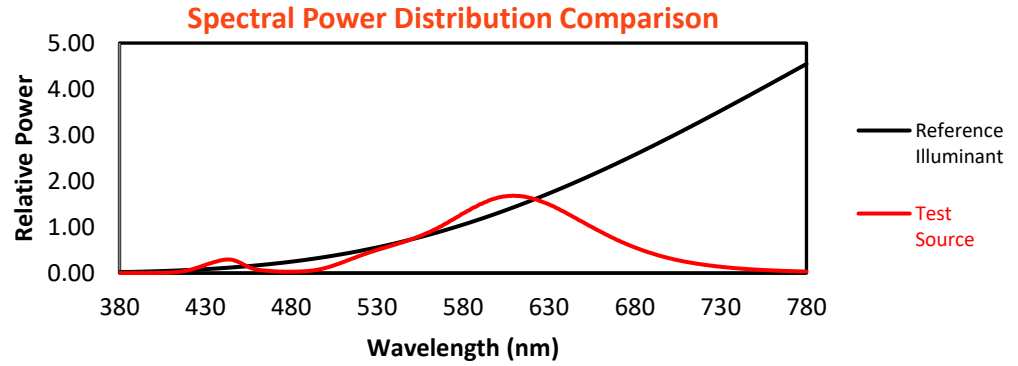
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	27	NR	620	966	NR	750	46	NR	880	1	NR
365	0	NR	495	42	NR	625	930	NR	755	39	NR	885	1	NR
370	0	NR	500	67	NR	630	888	NR	760	34	NR	890	1	NR
375	0	NR	505	101	NR	635	835	NR	765	30	NR	895	1	NR
380	0	NR	510	139	NR	640	778	NR	770	26	NR	900	1	NR
385	0	NR	515	183	NR	645	717	NR	775	22	NR	905	1	NR
390	0	NR	520	224	NR	650	656	NR	780	19	NR	910	1	NR
395	0	NR	525	262	NR	655	595	NR	785	17	NR	915	1	NR
400	1	NR	530	299	NR	660	536	NR	790	15	NR	920	1	NR
405	3	NR	535	332	NR	665	480	NR	795	13	NR	925	1	NR
410	7	NR	540	365	NR	670	425	NR	800	11	NR	930	1	NR
415	17	NR	545	400	NR	675	376	NR	805	10	NR	935	0	NR
420	36	NR	550	437	NR	680	332	NR	810	8	NR	940	0	NR
425	67	NR	555	479	NR	685	291	NR	815	8	NR	945	0	NR
430	105	NR	560	525	NR	690	255	NR	820	7	NR	950	0	NR
435	141	NR	565	579	NR	695	221	NR	825	6	NR	955	0	NR
440	169	NR	570	639	NR	700	192	NR	830	5	NR	960	0	NR
445	173	NR	575	703	NR	705	167	NR	835	4	NR	965	0	NR
450	136	NR	580	769	NR	710	144	NR	840	4	NR	970	0	NR
455	80	NR	585	832	NR	715	125	NR	845	3	NR	975	0	NR
460	45	NR	590	890	NR	720	109	NR	850	3	NR	980	0	NR
465	32	NR	595	937	NR	725	94	NR	855	3	NR	985	0	NR
470	23	NR	600	972	NR	730	81	NR	860	2	NR	990	0	NR
475	18	NR	605	992	NR	735	70	NR	865	2	NR	995	0	NR
480	18	NR	610	998	NR	740	61	NR	870	2	NR	1000	0	NR
485	20	NR	615	990	NR	745	53	NR	875	2	NR			

REPORT NUMBER: SP1-2407-184-2

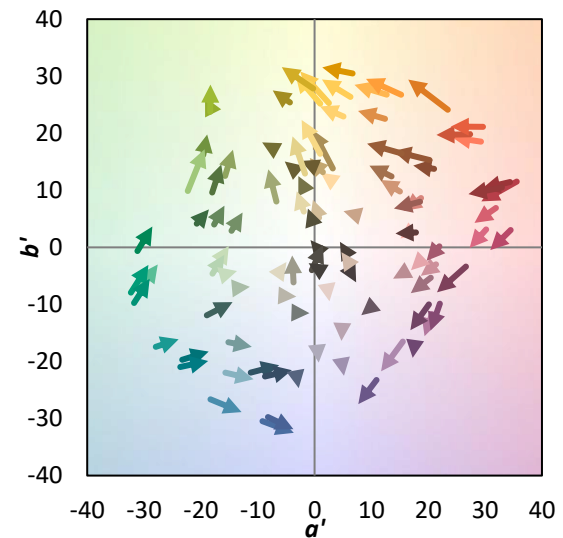
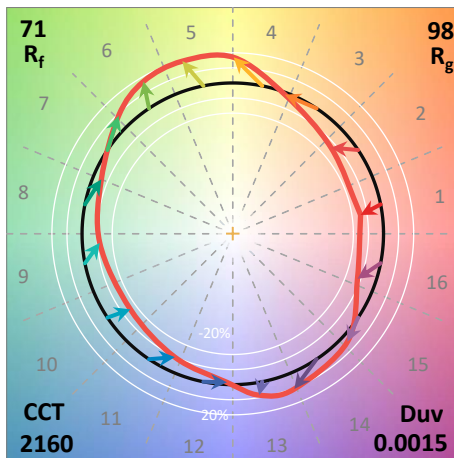
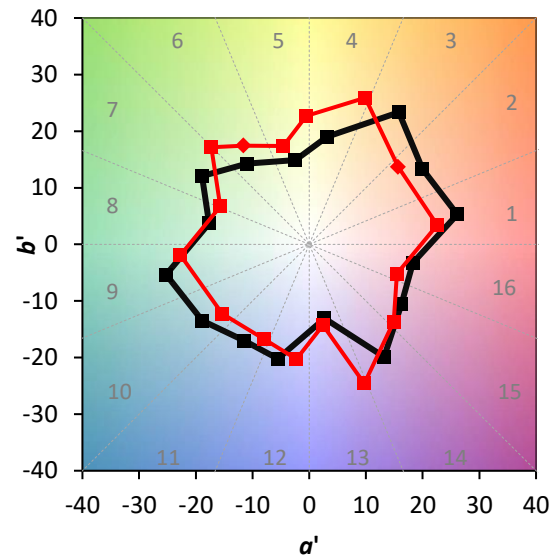
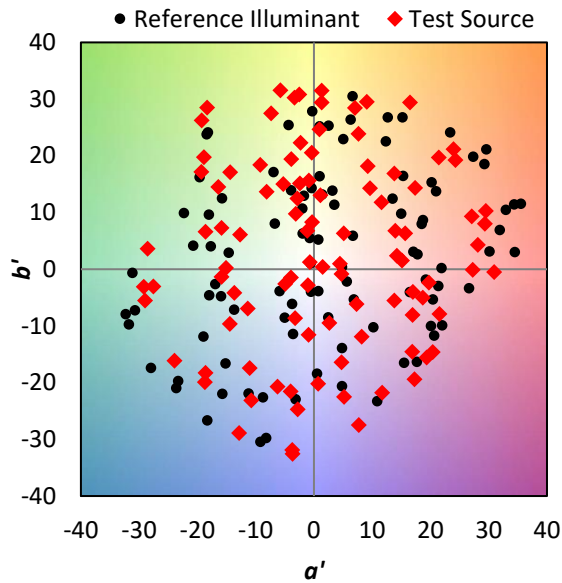
TM-30-18

Summary

$R_f = 70.6$
 $R_g = 97.6$
 $CIE\ R_a = 71.9$
 $R_g = -17.8$

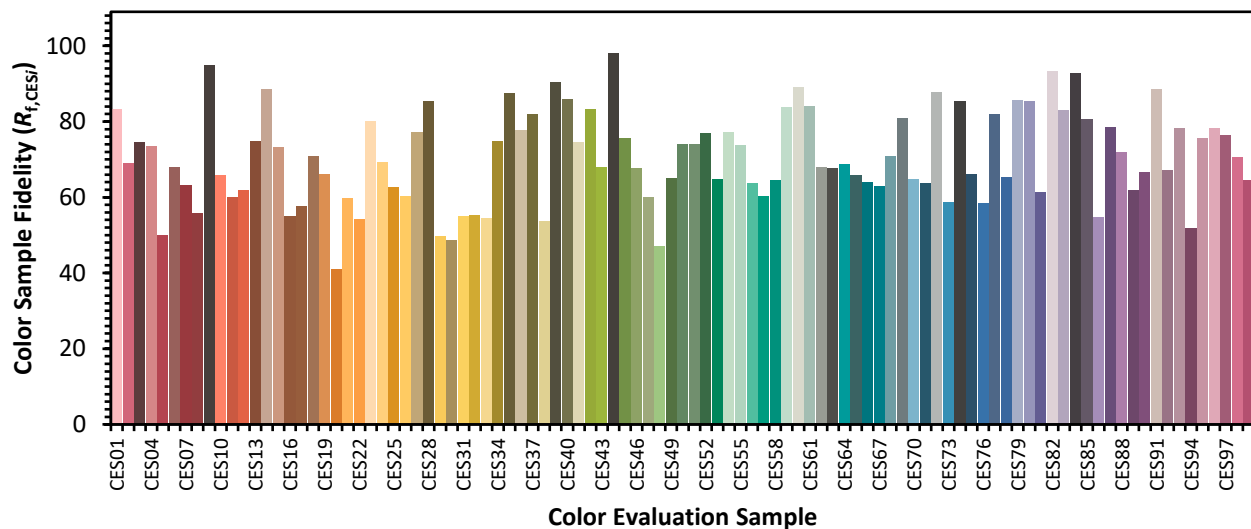


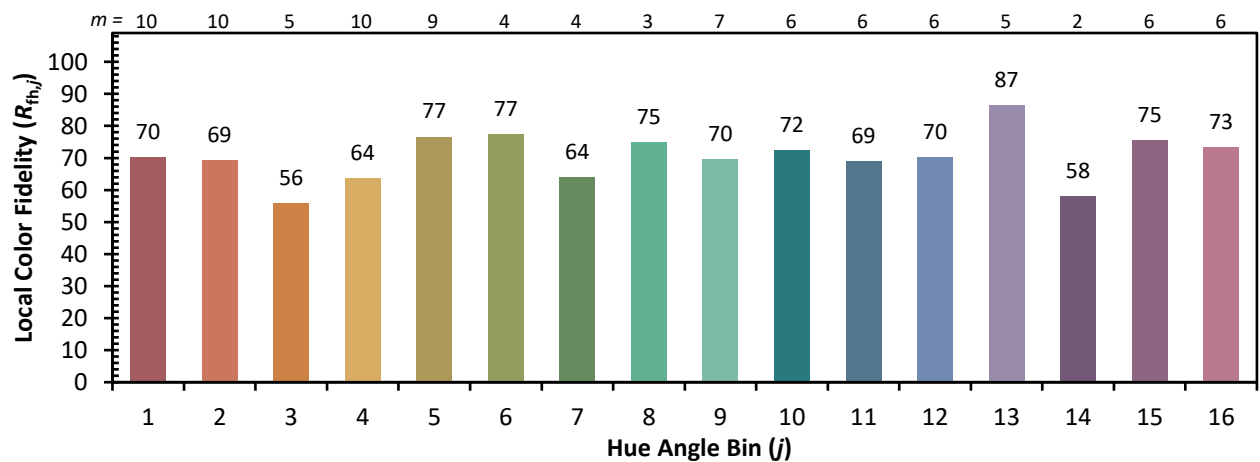
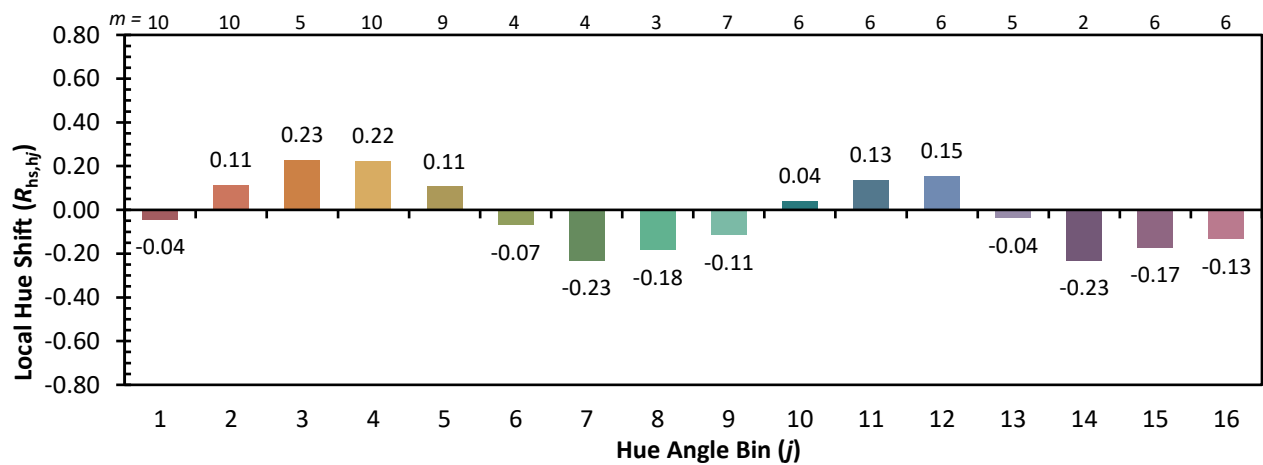
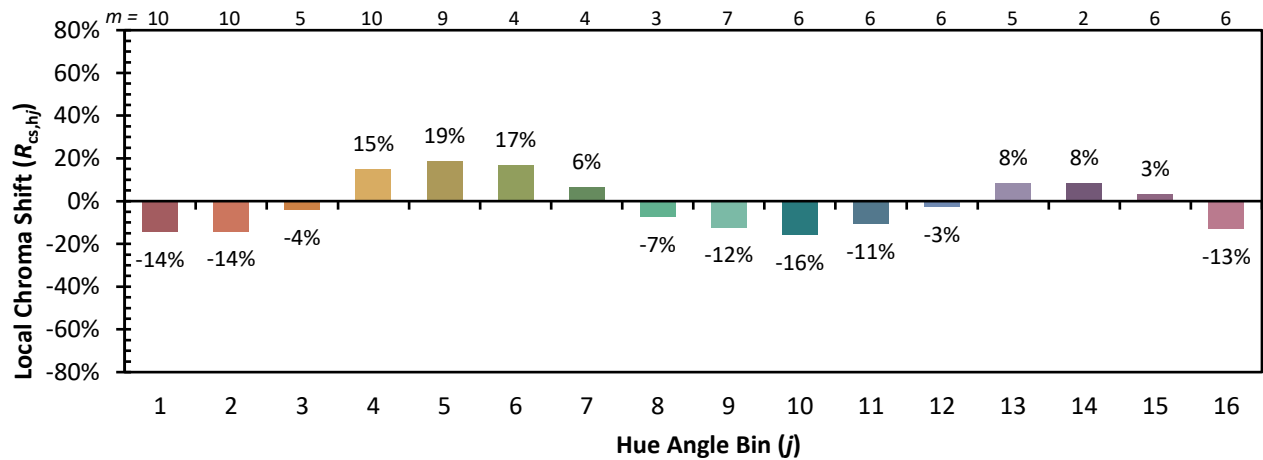
Color Vector Graphics



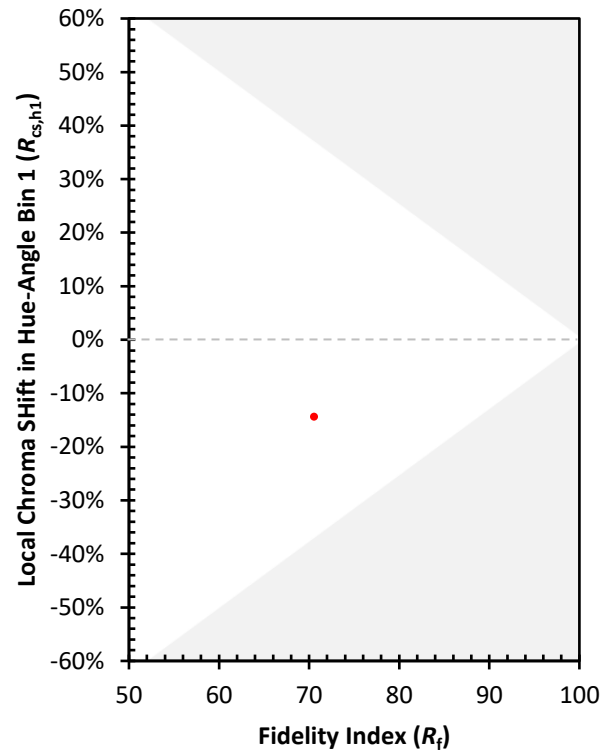
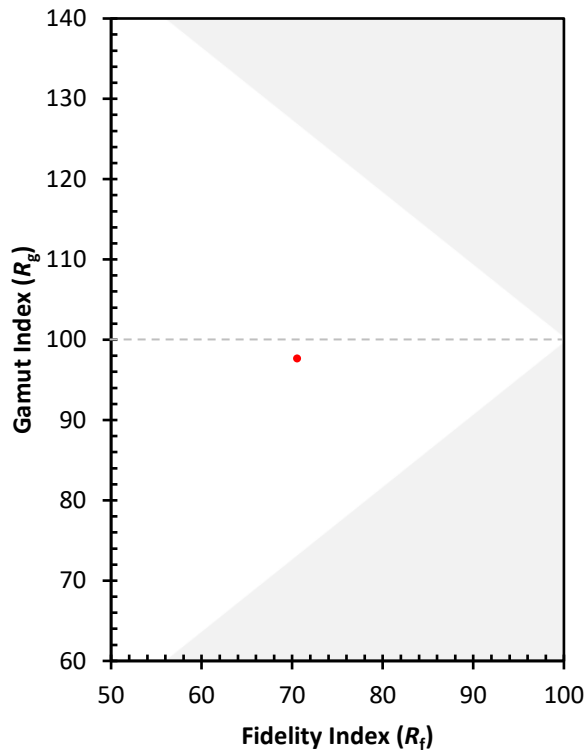
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 87	CES26 = 60	CES51 = 74	CES76 = 58
CES02 = 65	CES27 = 77	CES52 = 77	CES77 = 82
CES03 = 32	CES28 = 85	CES53 = 65	CES78 = 65
CES04 = 72	CES29 = 50	CES54 = 77	CES79 = 86
CES05 = 52	CES30 = 49	CES55 = 74	CES80 = 85
CES06 = 53	CES31 = 55	CES56 = 64	CES81 = 61
CES07 = 44	CES32 = 55	CES57 = 60	CES82 = 93
CES08 = 43	CES33 = 55	CES58 = 64	CES83 = 83
CES09 = 29	CES34 = 75	CES59 = 84	CES84 = 93
CES10 = 79	CES35 = 88	CES60 = 89	CES85 = 81
CES11 = 62	CES36 = 78	CES61 = 84	CES86 = 55
CES12 = 68	CES37 = 82	CES62 = 68	CES87 = 79
CES13 = 45	CES38 = 54	CES63 = 68	CES88 = 72
CES14 = 75	CES39 = 90	CES64 = 69	CES89 = 62
CES15 = 72	CES40 = 86	CES65 = 66	CES90 = 67
CES16 = 49	CES41 = 75	CES66 = 64	CES91 = 89
CES17 = 51	CES42 = 83	CES67 = 63	CES92 = 67
CES18 = 57	CES43 = 68	CES68 = 71	CES93 = 78
CES19 = 74	CES44 = 98	CES69 = 81	CES94 = 52
CES20 = 68	CES45 = 76	CES70 = 65	CES95 = 76
CES21 = 89	CES46 = 68	CES71 = 64	CES96 = 78
CES22 = 81	CES47 = 60	CES72 = 88	CES97 = 76
CES23 = 92	CES48 = 47	CES73 = 59	CES98 = 71
CES24 = 92	CES49 = 65	CES74 = 85	CES99 = 65
CES25 = 74	CES50 = 74	CES75 = 66	



Color Rendition by Hue-Angle Bin


Measure Comparisons



(END OF REPORT)