

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: LUMARK

Report Number: P1067356

Luminaire Tested: **NAV-SA4D-830-U-T2BC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1067356
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA4D-830-U-T2BC
Description: Navion AREA AND ROADWAY LUMINAIRE 1200mA 4xLight Square PACKAGE
80CRI 3000K FIXTURE w/ TYPE II ANGLED BACKLIGHT CONTROL
Light Source: (56) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18986.6 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B0 - U0 - G3

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



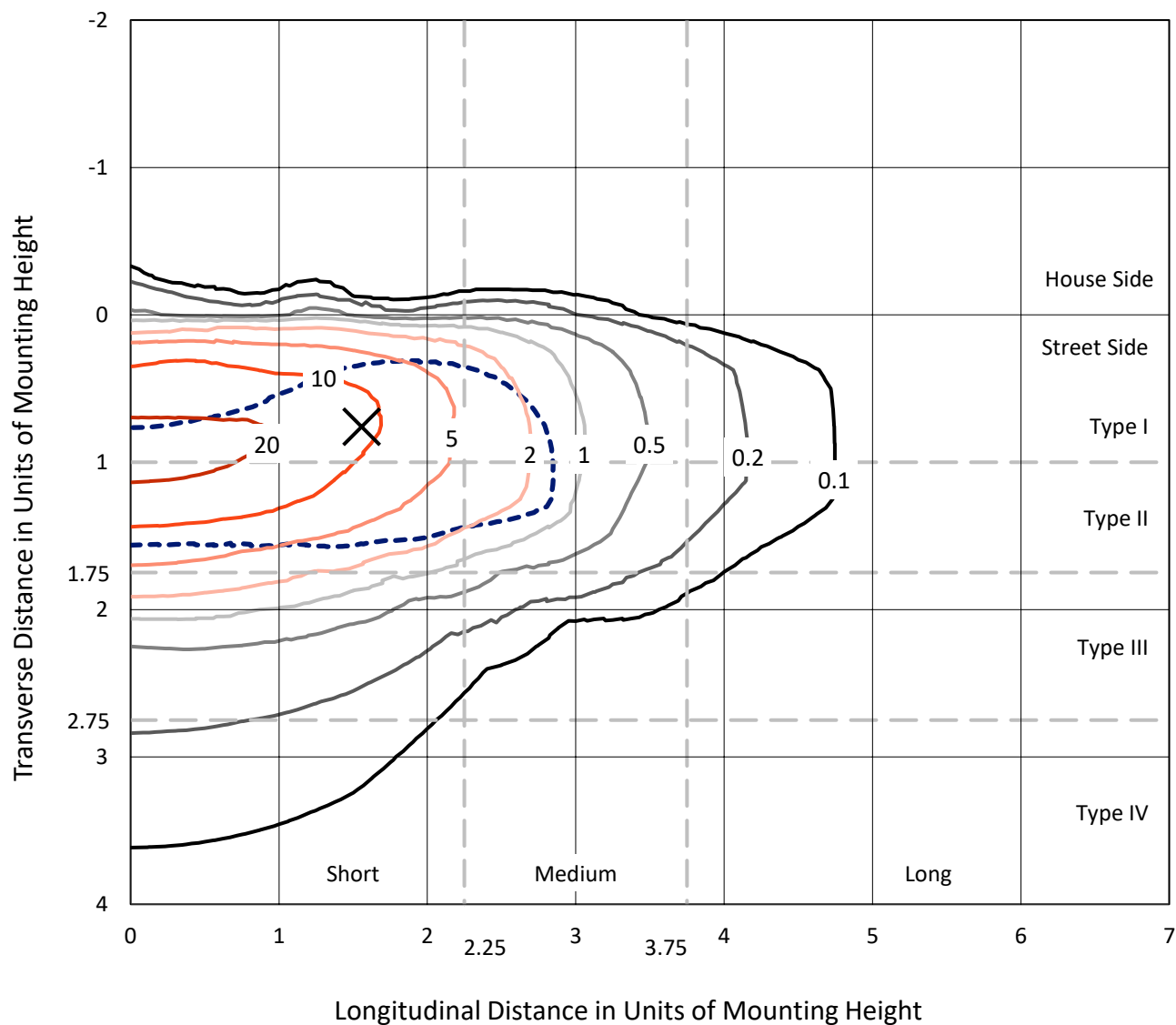
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CATALOG NUMBER: NAV-SA4D-830-U-T2BC

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

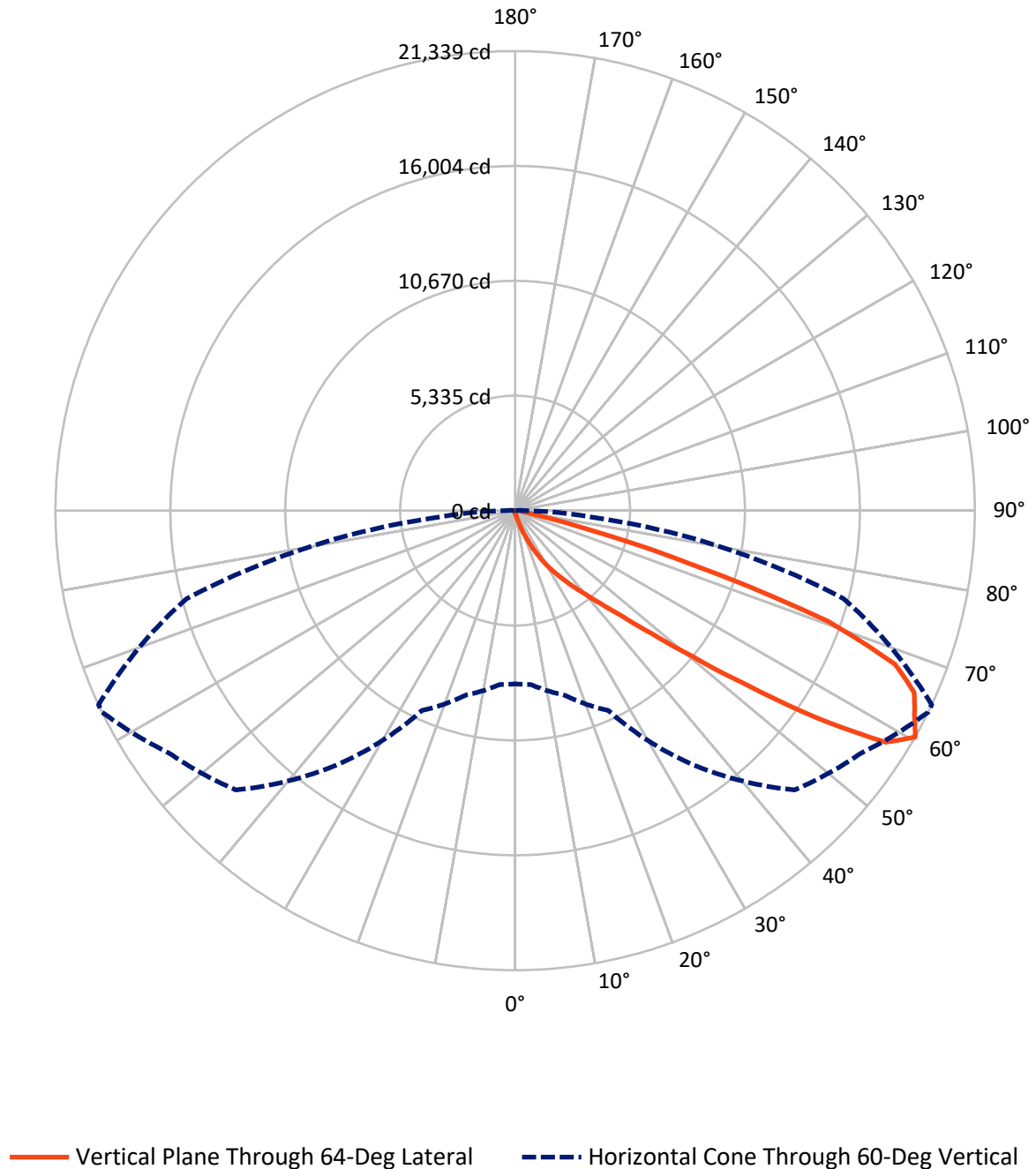


Based on 15 foot mounting height. Maximum calculated value = 27.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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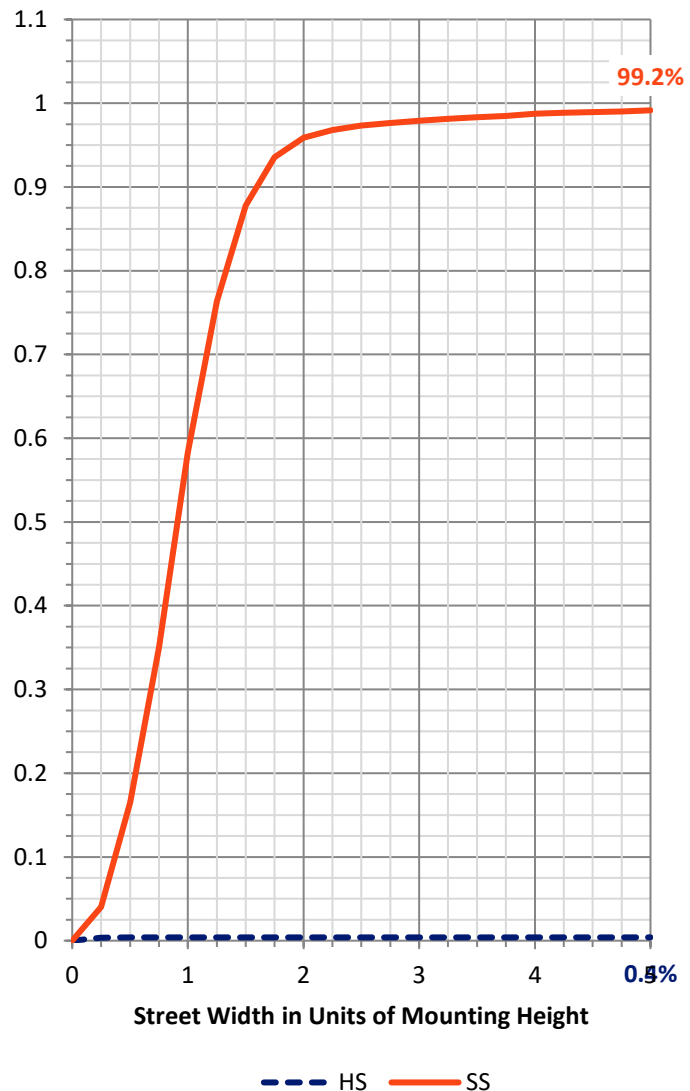
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	77.0	0.0	77.0
	% Fixture	0.4	0.0	0.4
Street Side	Lumens	18909.6	0.0	18909.6
	% Fixture	99.6	0.0	99.6
Total	Lumens	18986.6	0.0	18986.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.9	0.1
10°-20°	186.6	1.0
20°-30°	619.7	3.3
30°-40°	1653.5	8.7
40°-50°	4202.8	22.1
50°-60°	6126.7	32.3
60°-70°	4732.3	24.9
70°-80°	1299.6	6.8
80°-90°	146.7	0.8
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°	18986.6	100.0
0°-180°	18986.6	100.0



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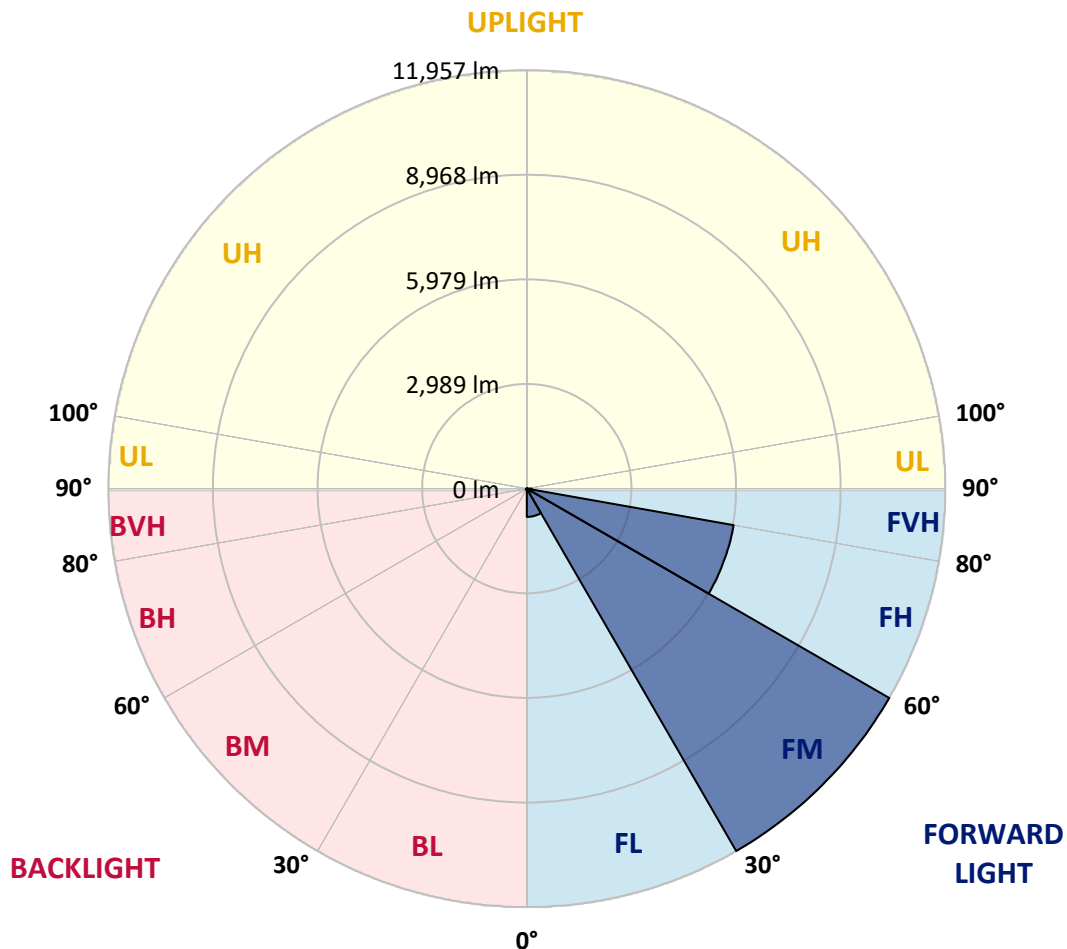
CATALOG NUMBER: NAV-SA4D-830-U-T2BC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	807.9	4.3			
FM	(30°-60°)	11957.4	63.0			
FH	(60°-80°)	6001.1	31.6			G3/7500
FVH	(80°-90°)	143.2	0.8			G2/225
BL	(0°-30°)	17.3	0.1	B0/110		
BM	(30°-60°)	25.5	0.1	B0/220		
BH	(60°-80°)	30.7	0.2	B0/110		G0/110
BVH	(80°-90°)	3.5	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-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4
2.5°	167.2	167.2	167.2	162.0	156.8	156.8	151.6	146.3	146.3	135.9	130.7
5°	256.1	256.1	245.6	235.2	219.5	198.6	177.7	162.0	162.0	146.3	135.9
7.5°	501.7	517.4	470.4	412.9	334.5	282.2	224.7	188.1	182.9	156.8	135.9
10°	1087.1	1076.6	1003.5	862.3	679.4	491.3	313.6	230.0	219.5	167.2	135.9
12.5°	1635.8	1651.5	1573.1	1416.3	1196.8	872.8	538.3	297.9	287.4	182.9	135.9
15°	2106.2	2106.2	2053.9	1975.6	1735.1	1395.4	867.6	444.2	407.7	198.6	130.7
17.5°	2430.2	2425.0	2404.1	2383.2	2242.1	1891.9	1327.5	710.8	627.2	235.2	130.7
20°	2796.1	2780.4	2806.5	2764.7	2655.0	2378.0	1813.5	1055.7	977.3	297.9	130.7
22.5°	3177.6	3193.3	3214.2	3172.4	3052.2	2811.8	2325.7	1500.0	1416.3	412.9	135.9
25°	3663.7	3653.2	3700.2	3663.7	3512.1	3229.9	2806.5	1986.0	1865.8	574.9	146.3
27.5°	4259.5	4238.6	4269.9	4175.8	3977.2	3689.8	3235.1	2482.5	2341.4	825.8	167.2
30°	5048.6	5064.3	4923.2	4813.5	4531.2	4149.7	3710.7	3015.6	2869.3	1123.7	188.1
32.5°	6292.5	6182.8	5963.2	5519.0	5147.9	4661.9	4186.3	3480.7	3350.1	1505.2	219.5
35°	8231.5	8252.4	7771.6	6674.0	5869.2	5304.7	4708.9	3992.9	3898.8	1939.0	261.3
37.5°	10593.8	10536.3	10113.0	8728.0	6924.9	6104.4	5304.7	4552.1	4416.3	2409.3	313.6
40°	13269.7	13029.3	12783.6	11842.9	9125.2	7107.8	6057.3	5200.2	5095.7	2952.9	397.2
42.5°	15412.5	15349.7	15391.6	14999.6	12794.1	8816.8	7055.6	5994.6	5869.2	3627.1	543.5
45°	16468.2	16379.3	16630.2	16922.9	16358.4	12454.4	8665.3	7008.5	6841.3	4421.5	768.3
47.5°	16186.0	16123.2	16661.6	17236.5	17989.0	16672.0	11294.1	8524.2	8236.7	5440.6	1102.8
50°	14795.8	14801.0	15684.2	16755.6	17947.2	18809.6	15187.7	10599.0	10238.4	6794.2	1625.4
52.5°	13442.1	13483.9	14419.5	15982.1	17325.3	19060.4	18605.7	13395.1	12809.7	8388.3	2242.1
55°	12051.9	12072.8	12898.6	15098.9	17032.6	18313.1	20361.8	16996.0	16374.1	10374.3	2843.1
57.5°	10714.0	10714.0	11022.3	12977.0	16713.8	18245.1	20152.7	20288.6	19781.7	12642.5	3287.4
60°	8048.6	8100.8	8869.1	10238.4	14414.2	18344.4	19619.7	21339.1	21339.1	15788.8	3627.1
62.5°	4066.1	4144.5	5100.9	6433.6	9888.2	16975.1	19703.3	20811.3	20894.9	18563.9	4400.6
65°	1907.6	1996.5	2508.6	3449.4	5320.4	11947.4	18835.7	20361.8	20335.7	18036.1	6031.2
67.5°	1369.3	1395.4	1567.9	2012.1	2864.0	5236.8	14377.6	19018.6	19029.1	15323.6	6935.3
70°	1228.2	1228.2	1270.0	1400.7	1724.7	2341.4	6987.6	15402.0	16149.4	11832.4	6428.4
72.5°	1212.5	1202.1	1191.6	1196.8	1165.5	1175.9	2398.9	8696.6	9762.8	8278.5	5127.0
75°	1181.2	1181.2	1170.7	1134.1	930.3	757.8	825.8	3517.3	4066.1	5529.5	3804.8
77.5°	935.5	1029.6	1139.3	1071.4	851.9	569.7	480.8	1019.1	1285.7	3391.9	2759.5
80°	433.8	439.0	433.8	454.7	543.5	407.7	355.4	496.5	501.7	1881.5	1709.0
82.5°	313.6	318.8	303.1	271.8	240.4	219.5	292.7	365.8	392.0	862.3	637.6
85°	94.1	88.8	104.5	141.1	167.2	193.4	245.6	308.4	324.0	318.8	94.1
87.5°	41.8	41.8	52.3	73.2	99.3	146.3	214.3	282.2	287.4	329.3	26.1
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: P1067356

CATALOG NUMBER: NAV-SA4D-830-U-T2BC

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4
2.5°	130.7	125.4	120.2	115.0	109.8	104.5	99.3	99.3	104.5	104.5	104.5
5°	125.4	120.2	109.8	99.3	94.1	88.8	83.6	83.6	88.8	88.8	88.8
7.5°	125.4	115.0	104.5	94.1	83.6	78.4	73.2	73.2	73.2	78.4	78.4
10°	125.4	115.0	99.3	83.6	73.2	67.9	62.7	57.5	62.7	62.7	62.7
12.5°	120.2	109.8	94.1	78.4	62.7	52.3	47.0	47.0	47.0	47.0	47.0
15°	115.0	104.5	88.8	67.9	52.3	41.8	31.4	31.4	31.4	36.6	36.6
17.5°	109.8	99.3	78.4	52.3	36.6	26.1	20.9	20.9	20.9	26.1	26.1
20°	109.8	94.1	67.9	41.8	26.1	15.7	10.5	10.5	10.5	15.7	20.9
22.5°	109.8	94.1	62.7	31.4	15.7	10.5	5.2	5.2	5.2	5.2	5.2
25°	109.8	88.8	57.5	26.1	10.5	5.2	0.0	0.0	5.2	10.5	15.7
27.5°	109.8	83.6	47.0	15.7	10.5	5.2	0.0	5.2	10.5	10.5	10.5
30°	109.8	83.6	41.8	15.7	5.2	0.0	0.0	5.2	10.5	10.5	15.7
32.5°	115.0	78.4	36.6	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	120.2	73.2	31.4	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	130.7	73.2	20.9	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	146.3	78.4	20.9	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	182.9	83.6	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	256.1	104.5	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	376.3	156.8	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	548.8	214.3	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	674.2	214.3	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	669.0	135.9	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	512.2	94.1	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	433.8	67.9	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	522.6	52.3	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	930.3	47.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	1494.7	47.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	1672.4	47.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	1306.6	41.8	5.2	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	716.0	36.6	5.2	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	360.6	26.1	10.5	5.2	5.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	151.6	20.9	10.5	5.2	5.2	5.2	0.0	0.0	0.0	0.0	0.0
82.5°	52.3	20.9	10.5	10.5	5.2	5.2	0.0	0.0	0.0	0.0	0.0
85°	26.1	15.7	15.7	10.5	10.5	5.2	5.2	0.0	0.0	0.0	0.0
87.5°	15.7	15.7	15.7	10.5	10.5	5.2	5.2	0.0	0.0	0.0	5.2
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: SP1-2407-184-9

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-830-U-5WQ

Data in this report applies to families of products including GSS-SB1A-830-U-5WQ

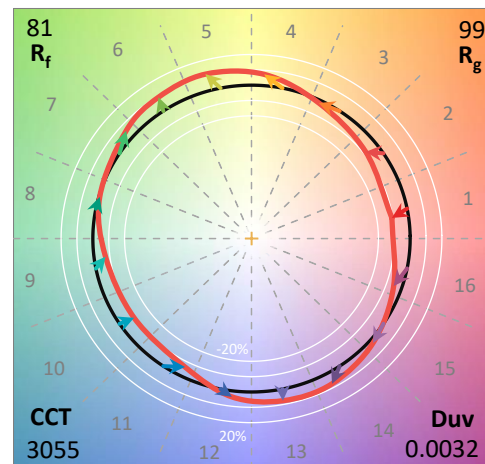
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-9
 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-830-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 3000K CCT 26 LEDS

Spectral Parameters

CCT (K): 3055
 CIE u' : 0.2475
 CIE v' : 0.5247
 Duv: 0.0032
 CIE x: 0.4377
 CIE y: 0.4124
 CIE z: 0.1499
 Peak Wavelength (nm): 604
 Dominant Wavelength (nm): 581
 Purity: 55.16339
 R_f: 81.5
 R_g: 99.2

CRI (Ra): 80.9
 R1: 79.5
 R2: 85.6
 R3: 92.1
 R4: 82.4
 R5: 78.9
 R6: 81.7
 R7: 85.1
 R8: 61.9
 R9: 6.8
 R10: 67.1
 R11: 82.5
 R12: 63.4
 R13: 80.2
 R14: 95.1
 R15: 71.7



Test Conditions

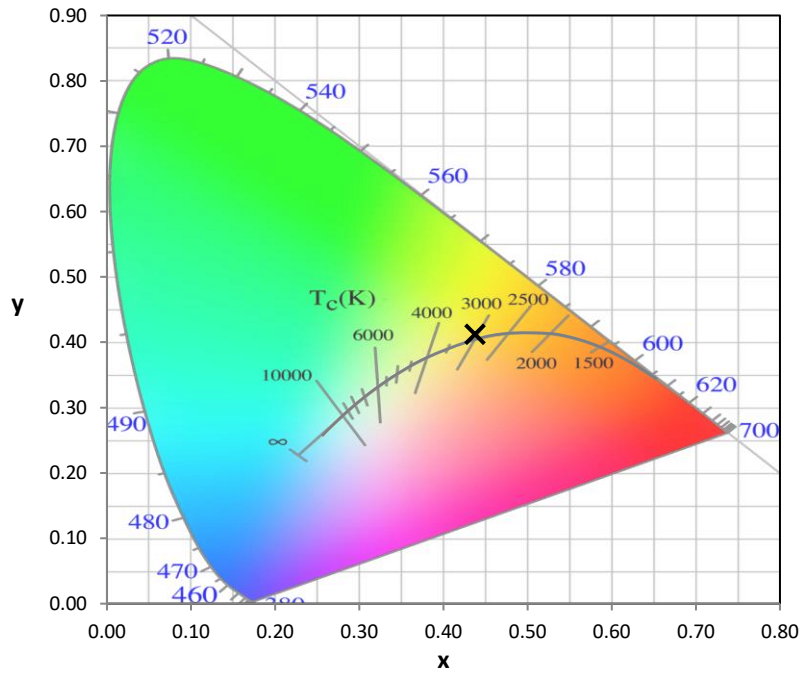
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 25.2

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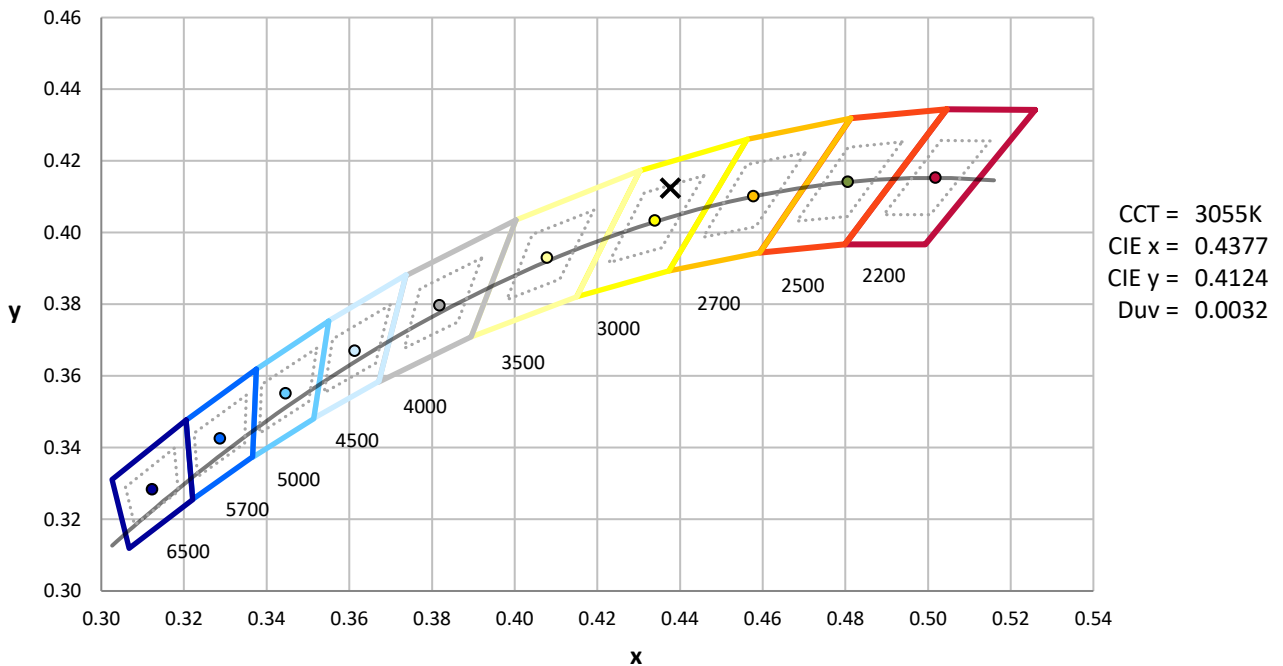
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



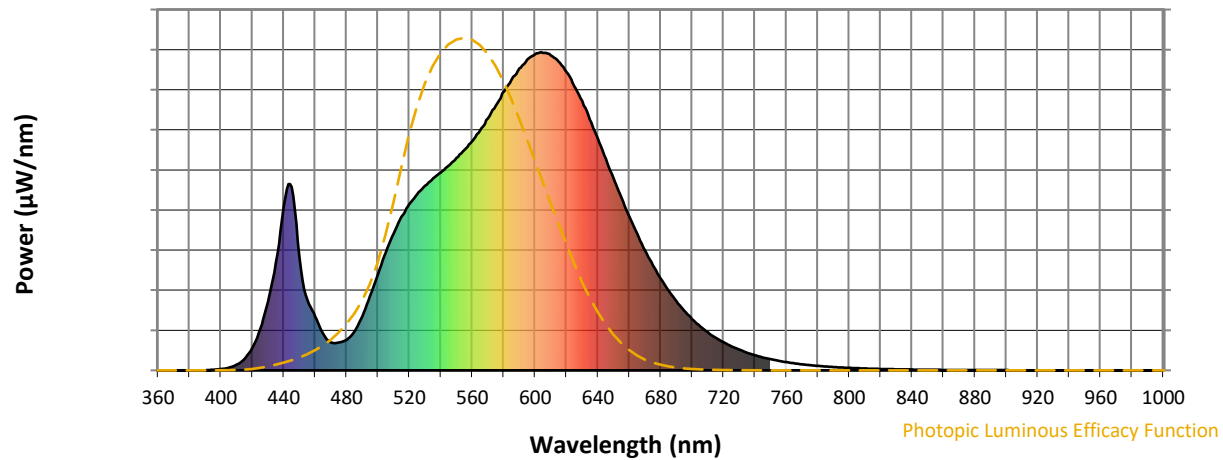
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

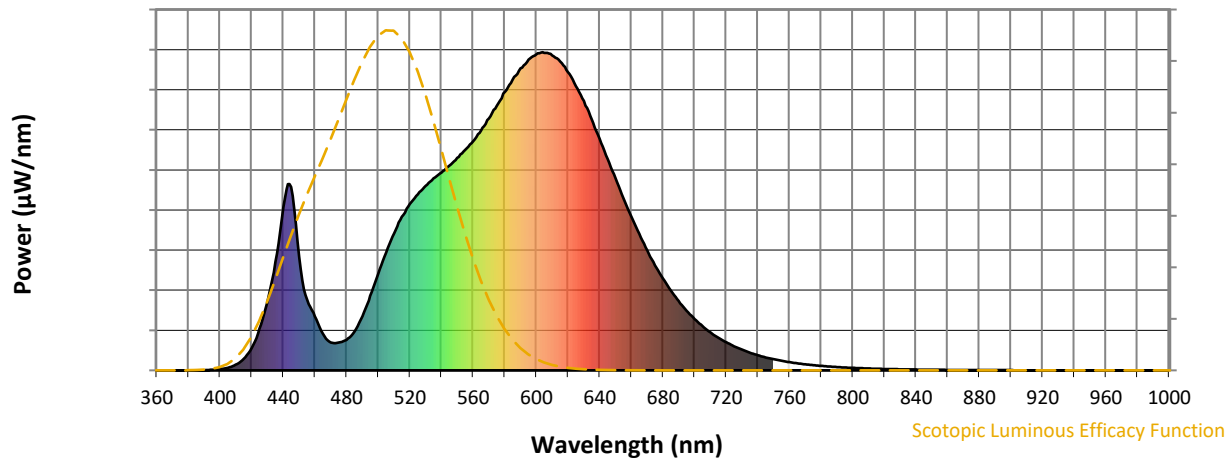


Photopic Lumens: NR

λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)
360	0	NR	490	170	NR	620	938	NR	750	35	NR	880	1	NR
365	0	NR	495	234	NR	625	894	NR	755	30	NR	885	1	NR
370	0	NR	500	302	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	371	NR	635	788	NR	765	22	NR	895	1	NR
380	0	NR	510	431	NR	640	728	NR	770	19	NR	900	1	NR
385	0	NR	515	482	NR	645	665	NR	775	16	NR	905	1	NR
390	0	NR	520	523	NR	650	603	NR	780	14	NR	910	0	NR
395	2	NR	525	553	NR	655	542	NR	785	12	NR	915	0	NR
400	4	NR	530	580	NR	660	484	NR	790	11	NR	920	0	NR
405	8	NR	535	603	NR	665	430	NR	795	9	NR	925	0	NR
410	18	NR	540	622	NR	670	377	NR	800	8	NR	930	0	NR
415	36	NR	545	644	NR	675	330	NR	805	7	NR	935	0	NR
420	71	NR	550	668	NR	680	289	NR	810	6	NR	940	0	NR
425	131	NR	555	693	NR	685	250	NR	815	5	NR	945	0	NR
430	215	NR	560	720	NR	690	218	NR	820	4	NR	950	0	NR
435	341	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	514	NR	570	792	NR	700	161	NR	830	3	NR	960	0	NR
445	576	NR	575	832	NR	705	139	NR	835	3	NR	965	0	NR
450	358	NR	580	875	NR	710	119	NR	840	3	NR	970	0	NR
455	222	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	170	NR	590	950	NR	720	88	NR	850	2	NR	980	0	NR
465	115	NR	595	977	NR	725	76	NR	855	2	NR	985	0	NR
470	88	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	87	NR	605	997	NR	735	56	NR	865	1	NR	995	0	NR
480	96	NR	610	990	NR	740	47	NR	870	1	NR	1000	0	NR
485	122	NR	615	971	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-9

Scotopic Flux vs. Wavelength



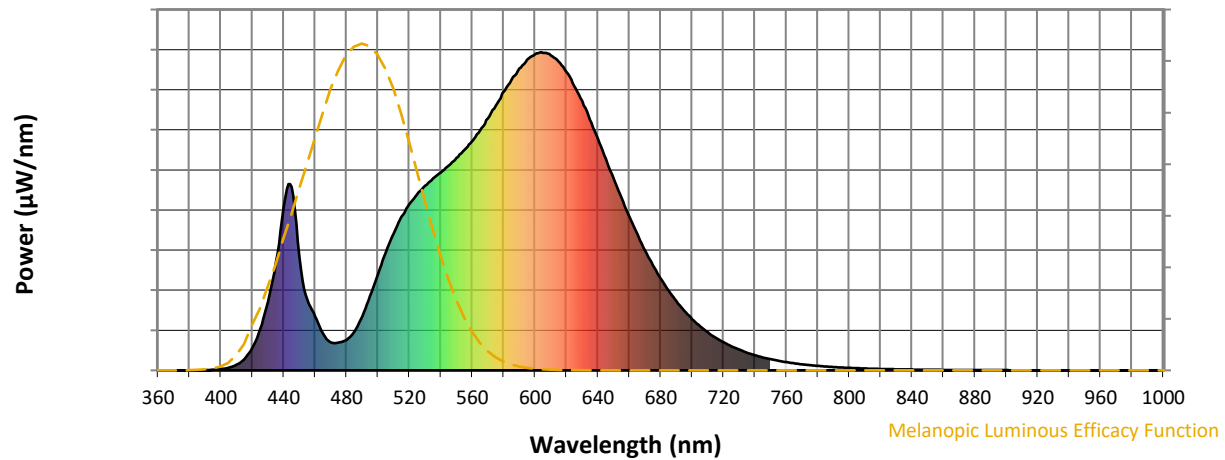
Scotopic Lumens: NR

S/P: 1.28

λ (nm)	Power W [^] /nm	Lumens (Φ/nm)	λ (nm)	Power W [^] /nm	Lumens (Φ/nm)	λ (nm)	Power W [^] /nm	Lumens (Φ/nm)	λ (nm)	Power W [^] /nm	Lumens (Φ/nm)	λ (nm)	Power W [^] /nm	Lumens (Φ/nm)
360	0	NR	490	170	NR	620	938	NR	750	35	NR	880	1	NR
365	0	NR	495	234	NR	625	894	NR	755	30	NR	885	1	NR
370	0	NR	500	302	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	371	NR	635	788	NR	765	22	NR	895	1	NR
380	0	NR	510	431	NR	640	728	NR	770	19	NR	900	1	NR
385	0	NR	515	482	NR	645	665	NR	775	16	NR	905	1	NR
390	0	NR	520	523	NR	650	603	NR	780	14	NR	910	0	NR
395	2	NR	525	553	NR	655	542	NR	785	12	NR	915	0	NR
400	4	NR	530	580	NR	660	484	NR	790	11	NR	920	0	NR
405	8	NR	535	603	NR	665	430	NR	795	9	NR	925	0	NR
410	18	NR	540	622	NR	670	377	NR	800	8	NR	930	0	NR
415	36	NR	545	644	NR	675	330	NR	805	7	NR	935	0	NR
420	71	NR	550	668	NR	680	289	NR	810	6	NR	940	0	NR
425	131	NR	555	693	NR	685	250	NR	815	5	NR	945	0	NR
430	215	NR	560	720	NR	690	218	NR	820	4	NR	950	0	NR
435	341	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	514	NR	570	792	NR	700	161	NR	830	3	NR	960	0	NR
445	576	NR	575	832	NR	705	139	NR	835	3	NR	965	0	NR
450	358	NR	580	875	NR	710	119	NR	840	3	NR	970	0	NR
455	222	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	170	NR	590	950	NR	720	88	NR	850	2	NR	980	0	NR
465	115	NR	595	977	NR	725	76	NR	855	2	NR	985	0	NR
470	88	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	87	NR	605	997	NR	735	56	NR	865	1	NR	995	0	NR
480	96	NR	610	990	NR	740	47	NR	870	1	NR	1000	0	NR
485	122	NR	615	971	NR	745	41	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.33

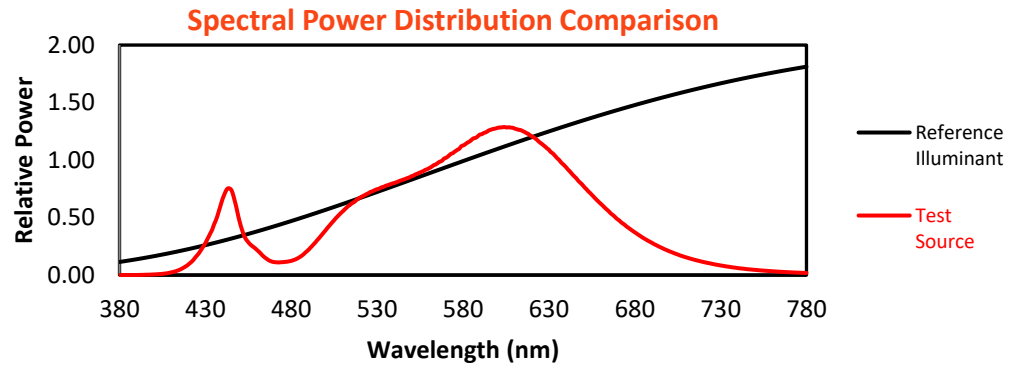
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	170	NR	620	938	NR	750	35	NR	880	1	NR
365	0	NR	495	234	NR	625	894	NR	755	30	NR	885	1	NR
370	0	NR	500	302	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	371	NR	635	788	NR	765	22	NR	895	1	NR
380	0	NR	510	431	NR	640	728	NR	770	19	NR	900	1	NR
385	0	NR	515	482	NR	645	665	NR	775	16	NR	905	1	NR
390	0	NR	520	523	NR	650	603	NR	780	14	NR	910	0	NR
395	2	NR	525	553	NR	655	542	NR	785	12	NR	915	0	NR
400	4	NR	530	580	NR	660	484	NR	790	11	NR	920	0	NR
405	8	NR	535	603	NR	665	430	NR	795	9	NR	925	0	NR
410	18	NR	540	622	NR	670	377	NR	800	8	NR	930	0	NR
415	36	NR	545	644	NR	675	330	NR	805	7	NR	935	0	NR
420	71	NR	550	668	NR	680	289	NR	810	6	NR	940	0	NR
425	131	NR	555	693	NR	685	250	NR	815	5	NR	945	0	NR
430	215	NR	560	720	NR	690	218	NR	820	4	NR	950	0	NR
435	341	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	514	NR	570	792	NR	700	161	NR	830	3	NR	960	0	NR
445	576	NR	575	832	NR	705	139	NR	835	3	NR	965	0	NR
450	358	NR	580	875	NR	710	119	NR	840	3	NR	970	0	NR
455	222	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	170	NR	590	950	NR	720	88	NR	850	2	NR	980	0	NR
465	115	NR	595	977	NR	725	76	NR	855	2	NR	985	0	NR
470	88	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	87	NR	605	997	NR	735	56	NR	865	1	NR	995	0	NR
480	96	NR	610	990	NR	740	47	NR	870	1	NR	1000	0	NR
485	122	NR	615	971	NR	745	41	NR	875	1	NR			

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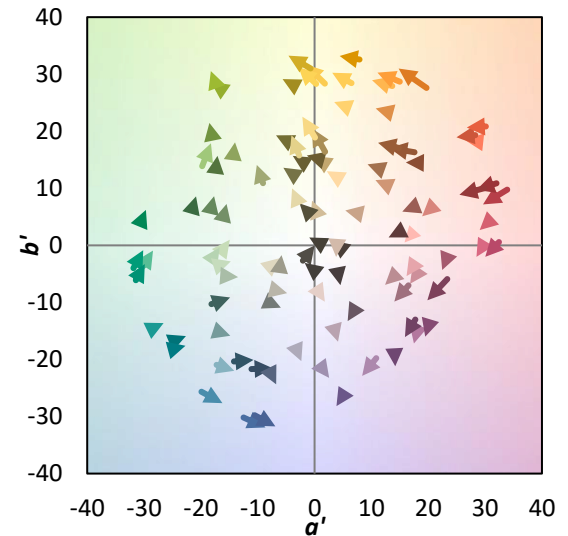
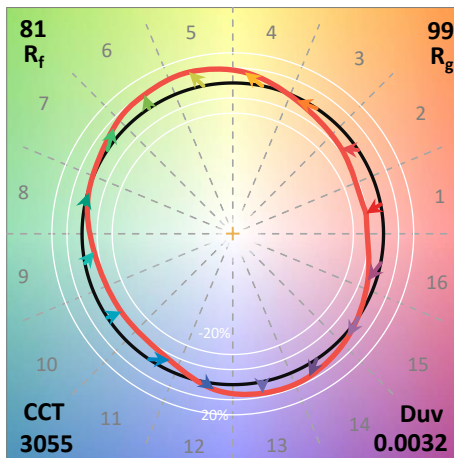
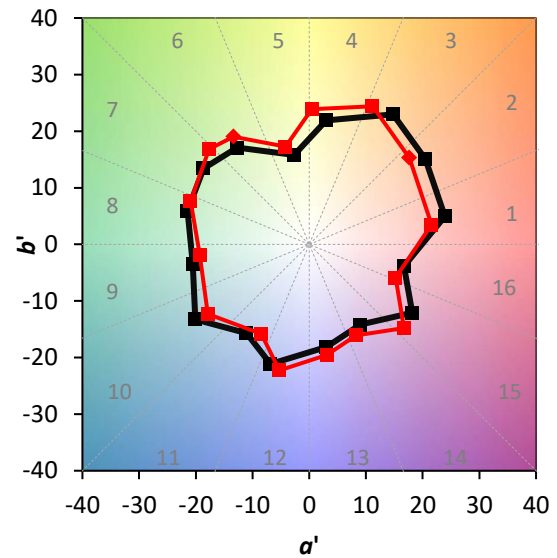
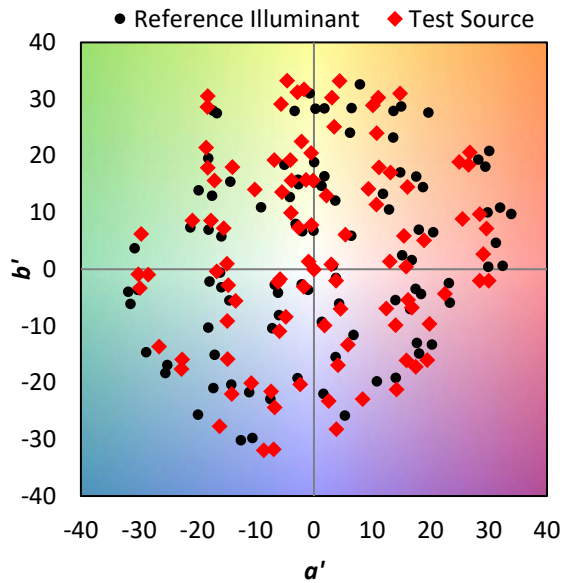
TM-30-18

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 80.9$
 $R_9 = 6.8$

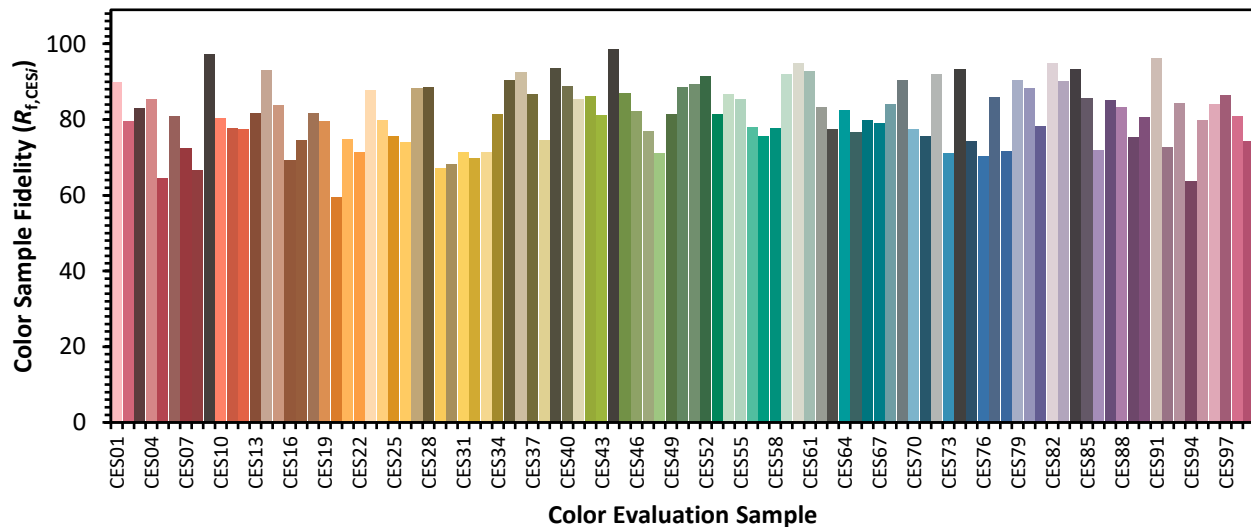


Color Vector Graphics

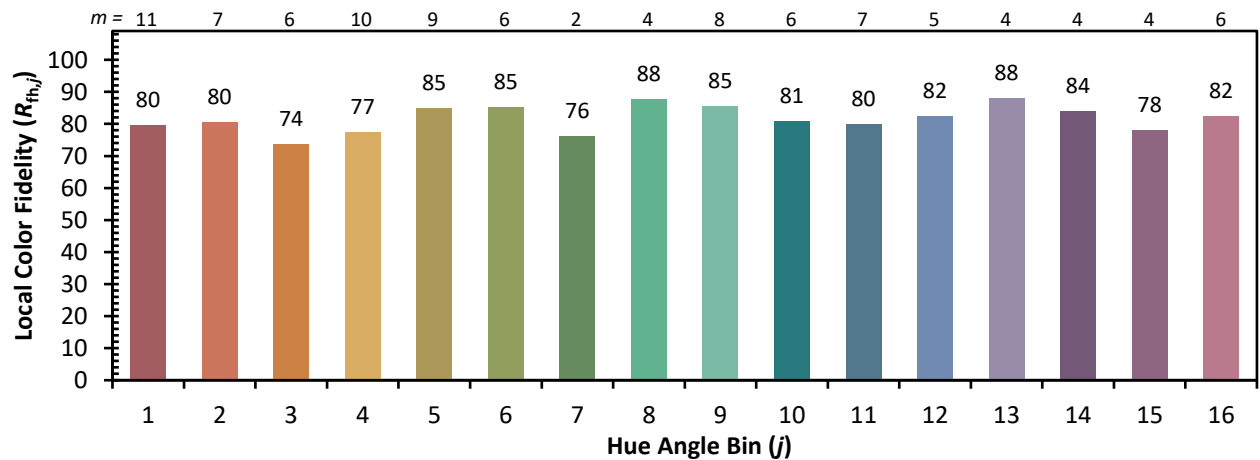
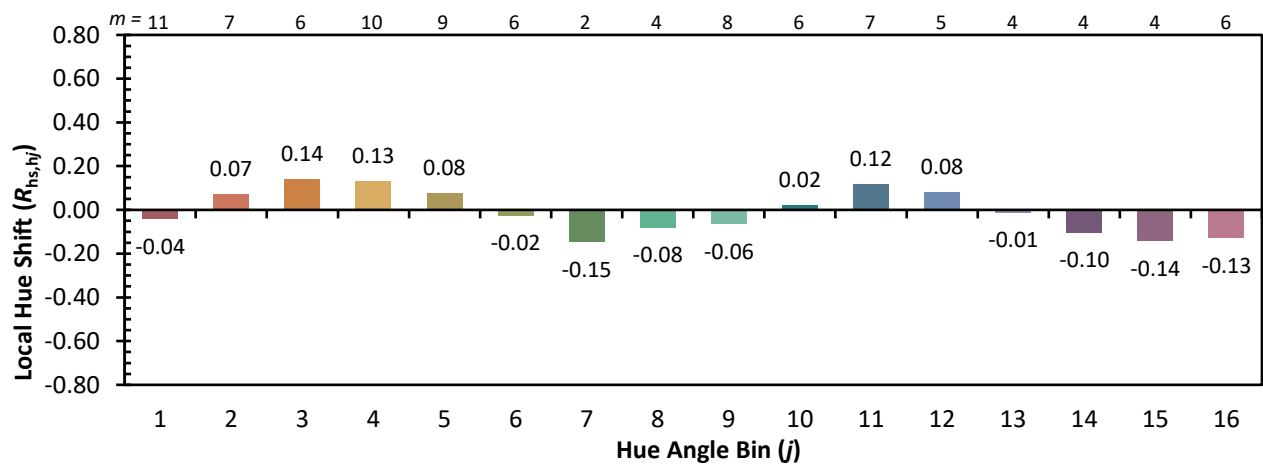
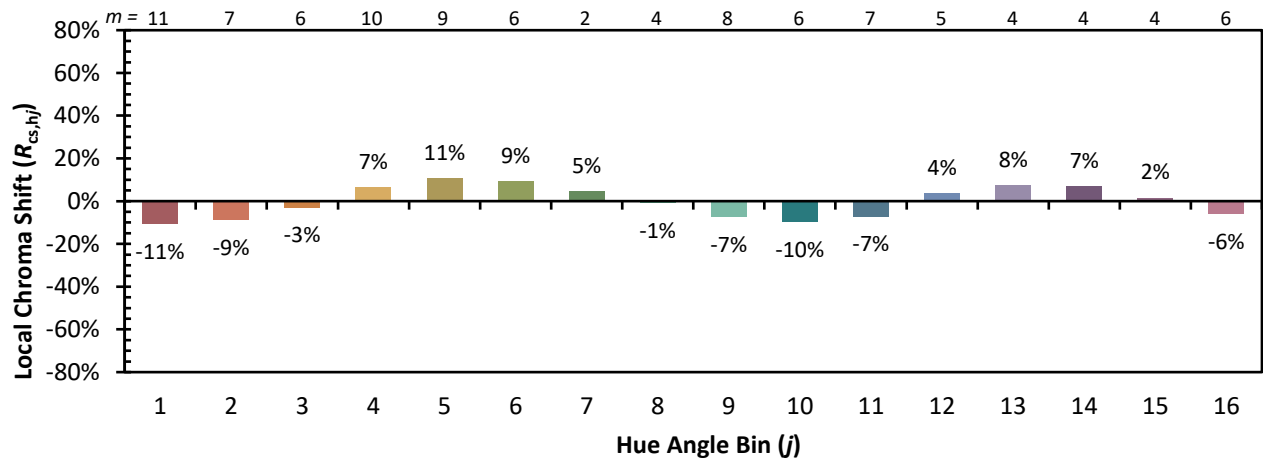


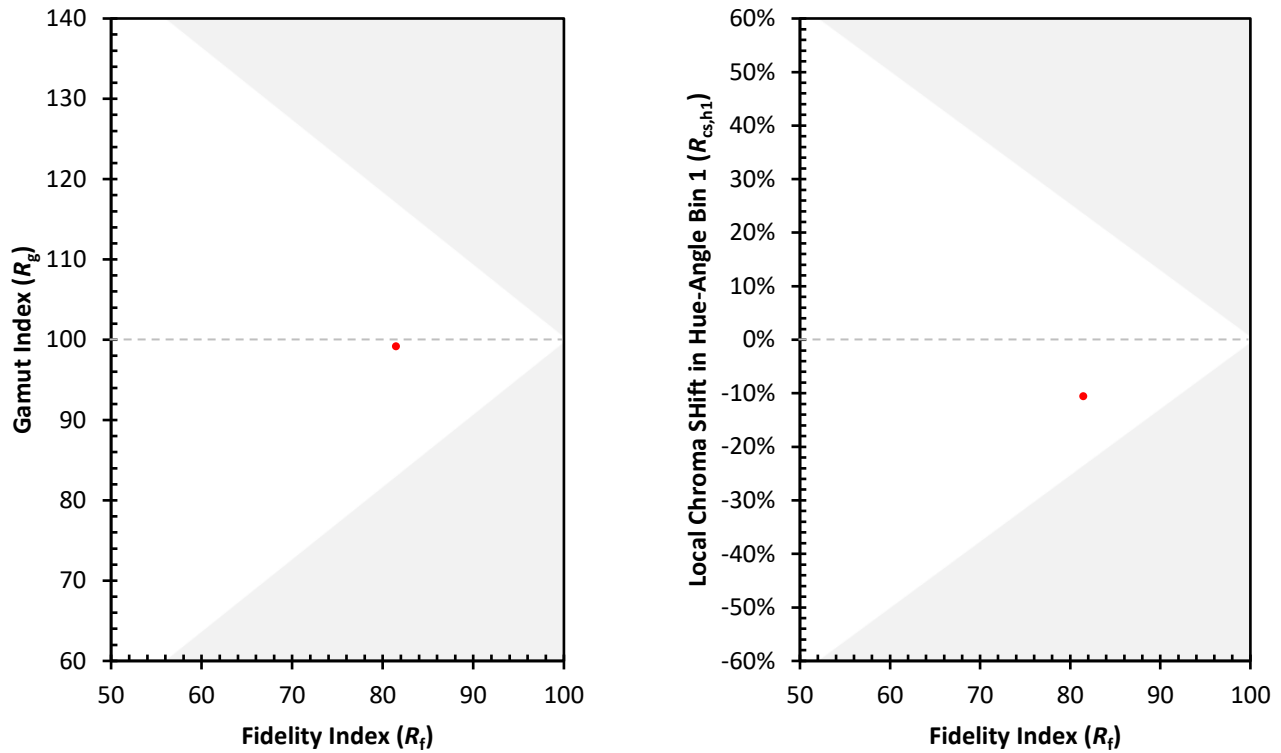
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 91	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 93
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 90	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 77	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



Color Rendition by Hue-Angle Bin



Measure Comparisons


(END OF REPORT)