

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: P1066910

Luminaire Tested: **NAV-SA1B-740-U-T3BC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1066910
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA1B-740-U-T3BC
Description: Navion AREA AND ROADWAY LUMINAIRE 800mA 1xLight Square PACKAGE
70CRI 4000K FIXTURE w/ TYPE III ANGLED BACKLIGHT CONTROL
Light Source: (14) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4834 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G2

Input Watts (W): 37.9
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

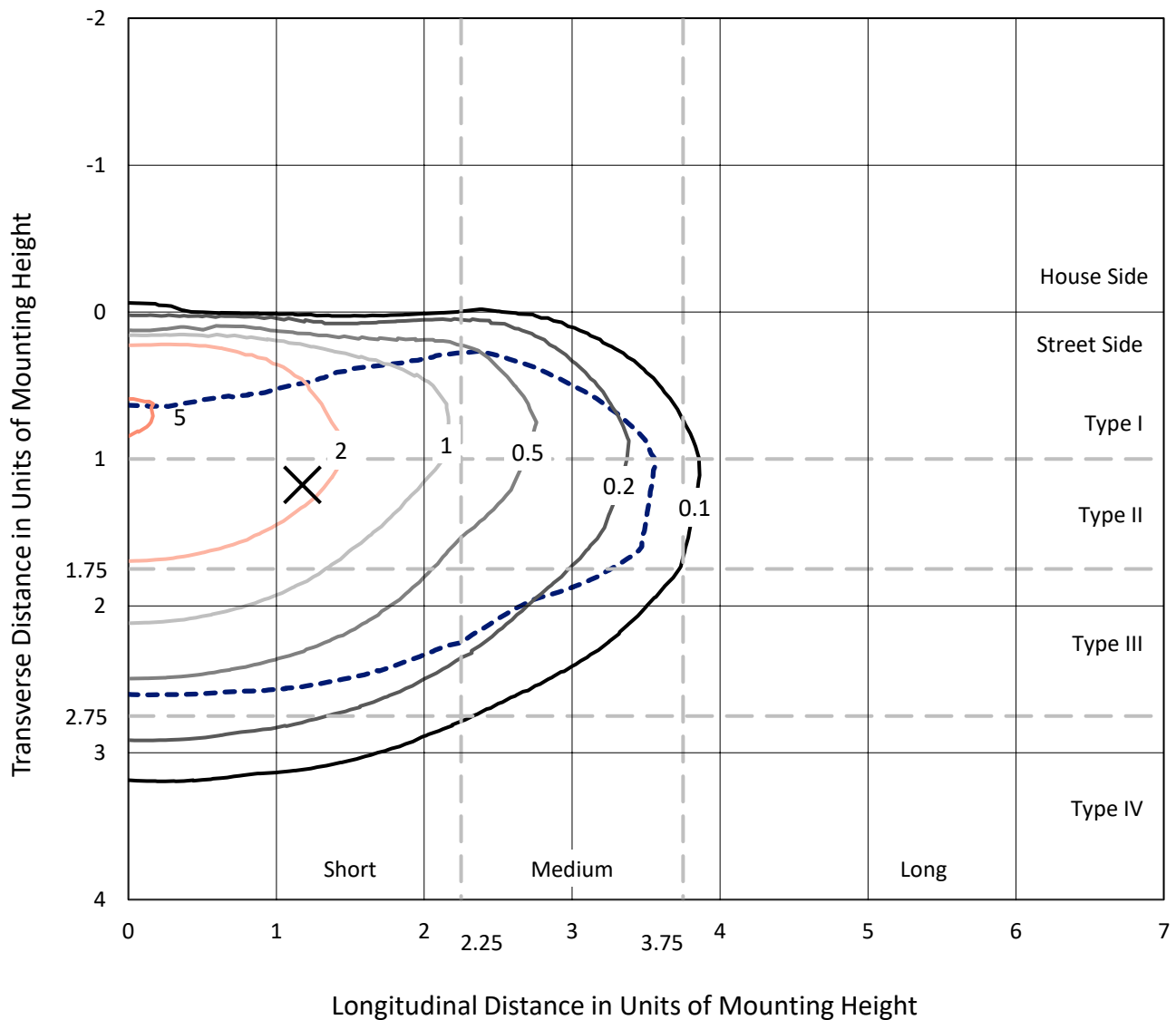


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

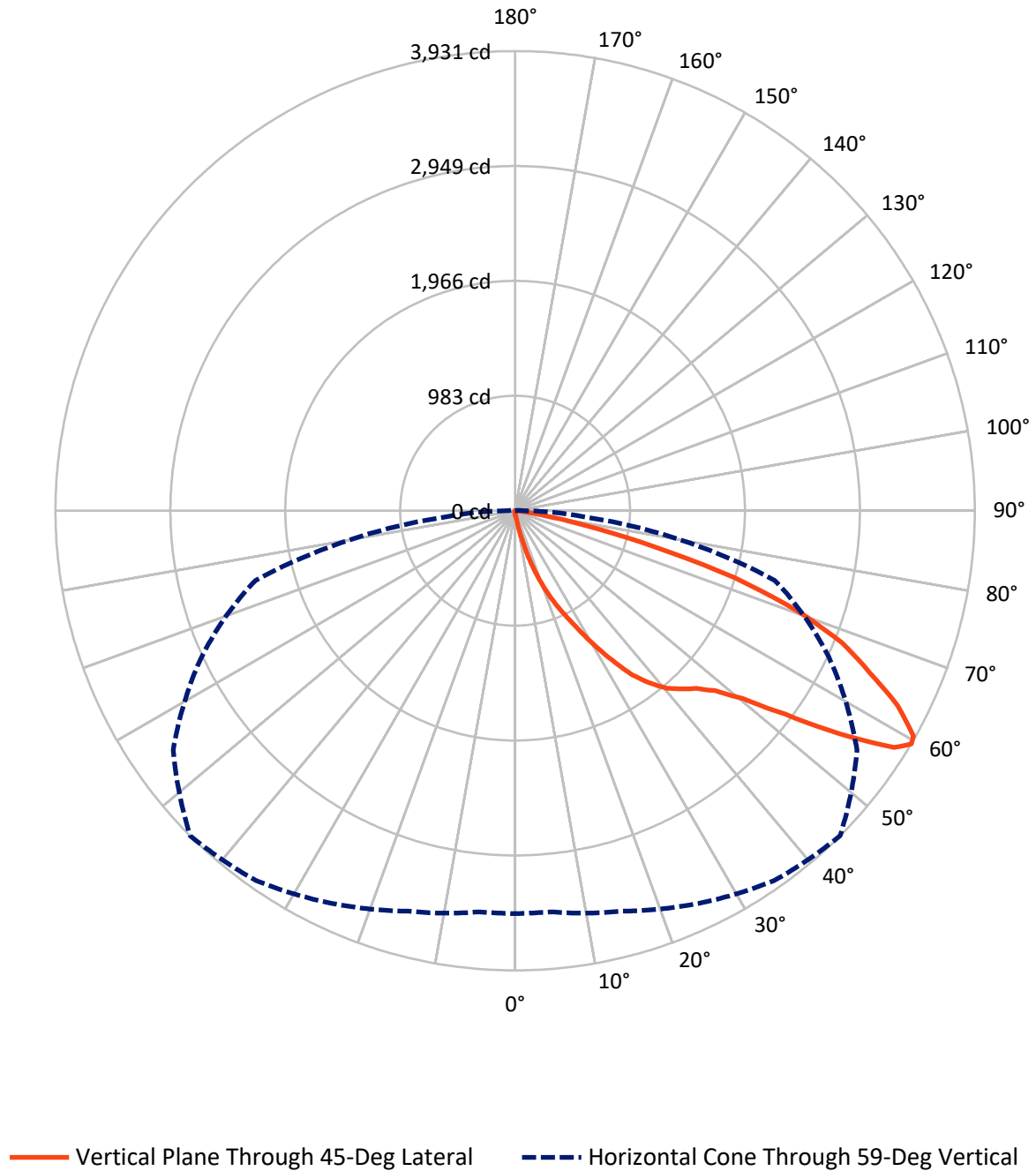


Based on 15 foot mounting height. Maximum calculated value = 5.3 fc
 Type III - Short - N/A

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CATALOG NUMBER: NAV-SA1B-740-U-T3BC

Luminous Intensity Polar Plot



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CATALOG NUMBER: NAV-SA1B-740-U-T3BC

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17.2	0.0	17.2
	% Fixture	0.4	0.0	0.4
Street Side	Lumens	4816.9	0.0	4816.9
	% Fixture	99.6	0.0	99.6
Total	Lumens	4834.0	0.0	4834.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.5	0.1
10°-20°	53.4	1.1
20°-30°	192.0	4.0
30°-40°	446.1	9.2
40°-50°	760.4	15.7
50°-60°	1252.9	25.9
60°-70°	1448.6	30.0
70°-80°	622.4	12.9
80°-90°	53.8	1.1
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°	4834.0	100.0
0°-180°	4834.0	100.0



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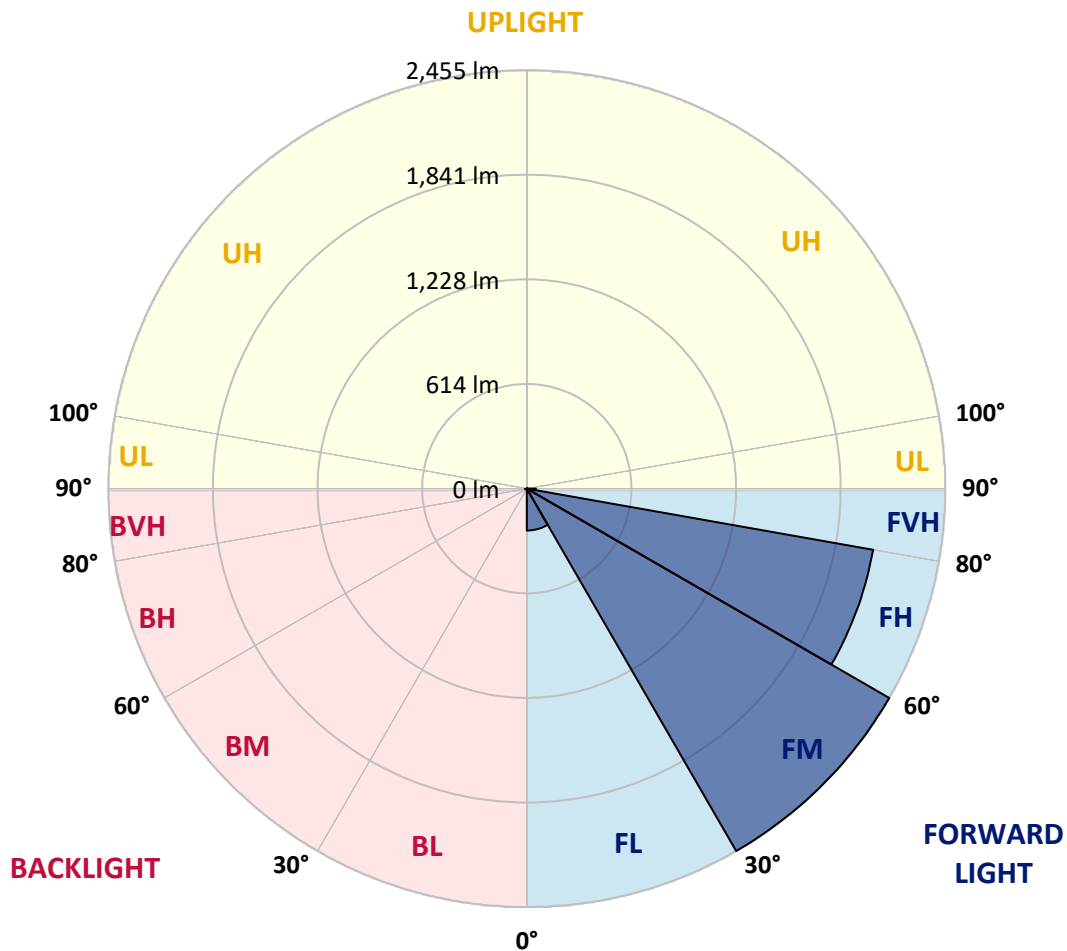
CATALOG NUMBER: NAV-SA1B-740-U-T3BC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	245.7	5.1			
FM	(30°-60°)	2455.2	50.8			
FH	(60°-80°)	2062.9	42.7			G2/5000
FVH	(80°-90°)	53.1	1.1			G1/100
BL	(0°-30°)	4.2	0.1	B0/110		
BM	(30°-60°)	4.2	0.1	B0/220		
BH	(60°-80°)	8.1	0.2	B0/110		G0/110
BVH	(80°-90°)	0.7	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-G2

Type III Short





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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
2.5°	30.9	30.6	28.9	27.6	26.3	25.0	24.1	23.1	23.1	23.4	23.1
5°	30.9	29.6	27.0	24.7	22.8	21.1	19.5	18.2	17.9	17.9	18.2
7.5°	30.6	28.9	25.4	22.4	19.8	17.6	15.9	14.3	14.0	14.3	14.0
10°	30.2	28.3	24.1	20.5	16.9	14.6	12.4	10.7	10.7	10.7	11.1
12.5°	30.2	27.3	22.8	18.5	14.6	12.0	9.8	8.1	7.8	7.8	7.8
15°	29.9	26.7	21.5	16.3	12.4	9.1	7.2	5.5	5.5	5.5	5.5
17.5°	29.3	25.7	19.8	14.3	9.8	6.8	4.9	3.3	3.3	3.9	3.9
20°	28.6	24.7	17.9	11.7	8.1	5.2	3.3	2.0	2.0	2.9	3.3
22.5°	28.9	24.7	16.6	10.4	6.5	3.9	2.6	1.6	1.3	2.3	2.9
25°	29.3	24.1	15.0	9.1	4.9	2.9	2.0	0.7	0.3	0.7	1.0
27.5°	29.3	23.4	13.0	7.2	3.6	2.3	1.0	0.0	0.0	0.0	0.0
30°	28.9	22.4	11.4	5.9	2.6	1.3	0.3	0.0	0.0	0.0	0.0
32.5°	28.6	21.5	10.4	4.6	2.3	0.7	0.0	0.0	0.0	0.0	0.0
35°	28.9	20.2	9.1	3.6	1.3	0.0	0.0	0.0	0.0	0.0	0.7
37.5°	29.9	18.9	7.8	2.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	31.2	17.9	6.5	2.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	33.8	17.9	5.9	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	37.1	17.9	4.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	41.3	18.2	4.2	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	46.5	18.9	3.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	50.4	18.2	3.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	57.2	17.6	3.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	66.3	16.6	3.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59°	75.4	15.3	3.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	85.8	14.6	2.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	141.7	13.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	273.7	12.4	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	442.4	12.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	465.1	12.4	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	309.4	10.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	165.8	9.1	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	89.4	8.5	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	39.3	6.2	1.6	1.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	15.6	4.2	2.0	1.6	1.3	0.7	0.0	0.0	0.0	0.0	0.0
85°	7.5	3.3	2.6	2.3	1.6	1.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	3.3	2.9	2.6	2.3	1.6	0.3	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: SP1-2407-184-1

Test Date: 10/09/2024

Luminaire Tested: GSS-SB1A-740-U-5WQ

Data in this report applies to families of products including GSS-SB1A-740-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-1
 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-740-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI
 4000K CCT 26 LEDS

Spectral Parameters

CCT (K):	3949	CRI (Ra):	70.7		
CIE u':	0.2248	R1:	68.0	R9:	-36.7
CIE v':	0.5053	R2:	76.0	R10:	45.1
Duv:	0.0022	R3:	84.3	R11:	70.7
CIE x:	0.3844	R4:	72.0	R12:	47.1
CIE y:	0.3840	R5:	68.6	R13:	68.5
CIE z:	0.2316	R6:	68.3	R14:	91.1
Peak Wavelength (nm):	440	R7:	77.9	R15:	58.7
Dominant Wavelength (nm):	578	R8:	50.3		
Purity:	30.60026				
Rf:	71.8				
Rg:	96.5				



Test Conditions

Stabilization Time: 34M
 Operation Time: 1H 34M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-1

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 4000K 4-step quadrangle

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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	139	NR	620	607	NR	750	15	NR	880	0	NR
365	0	NR	495	198	NR	625	554	NR	755	13	NR	885	0	NR
370	0	NR	500	267	NR	630	504	NR	760	11	NR	890	0	NR
375	0	NR	505	343	NR	635	452	NR	765	10	NR	895	0	NR
380	0	NR	510	410	NR	640	403	NR	770	8	NR	900	0	NR
385	2	NR	515	470	NR	645	357	NR	775	7	NR	905	0	NR
390	4	NR	520	516	NR	650	314	NR	780	6	NR	910	0	NR
395	7	NR	525	550	NR	655	275	NR	785	5	NR	915	0	NR
400	10	NR	530	578	NR	660	240	NR	790	5	NR	920	0	NR
405	17	NR	535	601	NR	665	208	NR	795	4	NR	925	0	NR
410	35	NR	540	620	NR	670	179	NR	800	4	NR	930	0	NR
415	70	NR	545	641	NR	675	155	NR	805	3	NR	935	0	NR
420	147	NR	550	664	NR	680	133	NR	810	3	NR	940	0	NR
425	285	NR	555	689	NR	685	114	NR	815	2	NR	945	0	NR
430	487	NR	560	715	NR	690	98	NR	820	2	NR	950	0	NR
435	787	NR	565	743	NR	695	84	NR	825	2	NR	955	0	NR
440	1000	NR	570	771	NR	700	72	NR	830	2	NR	960	0	NR
445	783	NR	575	794	NR	705	61	NR	835	1	NR	965	0	NR
450	417	NR	580	811	NR	710	52	NR	840	1	NR	970	0	NR
455	261	NR	585	817	NR	715	45	NR	845	1	NR	975	0	NR
460	167	NR	590	815	NR	720	39	NR	850	1	NR	980	0	NR
465	104	NR	595	801	NR	725	33	NR	855	1	NR	985	0	NR
470	79	NR	600	777	NR	730	28	NR	860	1	NR	990	0	NR
475	73	NR	605	744	NR	735	24	NR	865	1	NR	995	0	NR
480	76	NR	610	704	NR	740	21	NR	870	1	NR	1000	0	NR
485	98	NR	615	657	NR	745	18	NR	875	1	NR			

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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.47

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	139	NR	620	607	NR	750	15	NR	880	0	NR
365	0	NR	495	198	NR	625	554	NR	755	13	NR	885	0	NR
370	0	NR	500	267	NR	630	504	NR	760	11	NR	890	0	NR
375	0	NR	505	343	NR	635	452	NR	765	10	NR	895	0	NR
380	0	NR	510	410	NR	640	403	NR	770	8	NR	900	0	NR
385	2	NR	515	470	NR	645	357	NR	775	7	NR	905	0	NR
390	4	NR	520	516	NR	650	314	NR	780	6	NR	910	0	NR
395	7	NR	525	550	NR	655	275	NR	785	5	NR	915	0	NR
400	10	NR	530	578	NR	660	240	NR	790	5	NR	920	0	NR
405	17	NR	535	601	NR	665	208	NR	795	4	NR	925	0	NR
410	35	NR	540	620	NR	670	179	NR	800	4	NR	930	0	NR
415	70	NR	545	641	NR	675	155	NR	805	3	NR	935	0	NR
420	147	NR	550	664	NR	680	133	NR	810	3	NR	940	0	NR
425	285	NR	555	689	NR	685	114	NR	815	2	NR	945	0	NR
430	487	NR	560	715	NR	690	98	NR	820	2	NR	950	0	NR
435	787	NR	565	743	NR	695	84	NR	825	2	NR	955	0	NR
440	1000	NR	570	771	NR	700	72	NR	830	2	NR	960	0	NR
445	783	NR	575	794	NR	705	61	NR	835	1	NR	965	0	NR
450	417	NR	580	811	NR	710	52	NR	840	1	NR	970	0	NR
455	261	NR	585	817	NR	715	45	NR	845	1	NR	975	0	NR
460	167	NR	590	815	NR	720	39	NR	850	1	NR	980	0	NR
465	104	NR	595	801	NR	725	33	NR	855	1	NR	985	0	NR
470	79	NR	600	777	NR	730	28	NR	860	1	NR	990	0	NR
475	73	NR	605	744	NR	735	24	NR	865	1	NR	995	0	NR
480	76	NR	610	704	NR	740	21	NR	870	1	NR	1000	0	NR
485	98	NR	615	657	NR	745	18	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.78

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	139	NR	620	607	NR	750	15	NR	880	0	NR
365	0	NR	495	198	NR	625	554	NR	755	13	NR	885	0	NR
370	0	NR	500	267	NR	630	504	NR	760	11	NR	890	0	NR
375	0	NR	505	343	NR	635	452	NR	765	10	NR	895	0	NR
380	0	NR	510	410	NR	640	403	NR	770	8	NR	900	0	NR
385	2	NR	515	470	NR	645	357	NR	775	7	NR	905	0	NR
390	4	NR	520	516	NR	650	314	NR	780	6	NR	910	0	NR
395	7	NR	525	550	NR	655	275	NR	785	5	NR	915	0	NR
400	10	NR	530	578	NR	660	240	NR	790	5	NR	920	0	NR
405	17	NR	535	601	NR	665	208	NR	795	4	NR	925	0	NR
410	35	NR	540	620	NR	670	179	NR	800	4	NR	930	0	NR
415	70	NR	545	641	NR	675	155	NR	805	3	NR	935	0	NR
420	147	NR	550	664	NR	680	133	NR	810	3	NR	940	0	NR
425	285	NR	555	689	NR	685	114	NR	815	2	NR	945	0	NR
430	487	NR	560	715	NR	690	98	NR	820	2	NR	950	0	NR
435	787	NR	565	743	NR	695	84	NR	825	2	NR	955	0	NR
440	1000	NR	570	771	NR	700	72	NR	830	2	NR	960	0	NR
445	783	NR	575	794	NR	705	61	NR	835	1	NR	965	0	NR
450	417	NR	580	811	NR	710	52	NR	840	1	NR	970	0	NR
455	261	NR	585	817	NR	715	45	NR	845	1	NR	975	0	NR
460	167	NR	590	815	NR	720	39	NR	850	1	NR	980	0	NR
465	104	NR	595	801	NR	725	33	NR	855	1	NR	985	0	NR
470	79	NR	600	777	NR	730	28	NR	860	1	NR	990	0	NR
475	73	NR	605	744	NR	735	24	NR	865	1	NR	995	0	NR
480	76	NR	610	704	NR	740	21	NR	870	1	NR	1000	0	NR
485	98	NR	615	657	NR	745	18	NR	875	1	NR			

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TM-30-18

Summary

$R_f = 71.8$
 $R_g = 96.5$
 $CIE R_a = 70.7$
 $R_g = -36.7$



Color Vector Graphics



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

CES01 = 85	CES26 = 56	CES51 = 86	CES76 = 48
CES02 = 61	CES27 = 79	CES52 = 88	CES77 = 71
CES03 = 30	CES28 = 80	CES53 = 73	CES78 = 52
CES04 = 70	CES29 = 49	CES54 = 79	CES79 = 79
CES05 = 47	CES30 = 53	CES55 = 77	CES80 = 77
CES06 = 50	CES31 = 55	CES56 = 67	CES81 = 75
CES07 = 40	CES32 = 53	CES57 = 64	CES82 = 90
CES08 = 39	CES33 = 59	CES58 = 67	CES83 = 84
CES09 = 29	CES34 = 67	CES59 = 87	CES84 = 89
CES10 = 74	CES35 = 82	CES60 = 91	CES85 = 86
CES11 = 57	CES36 = 86	CES61 = 87	CES86 = 71
CES12 = 63	CES37 = 76	CES62 = 76	CES87 = 78
CES13 = 42	CES38 = 62	CES63 = 73	CES88 = 76
CES14 = 74	CES39 = 91	CES64 = 71	CES89 = 72
CES15 = 71	CES40 = 84	CES65 = 64	CES90 = 72
CES16 = 46	CES41 = 81	CES66 = 67	CES91 = 97
CES17 = 49	CES42 = 76	CES67 = 65	CES92 = 66
CES18 = 56	CES43 = 71	CES68 = 72	CES93 = 81
CES19 = 72	CES44 = 98	CES69 = 82	CES94 = 55
CES20 = 65	CES45 = 80	CES70 = 61	CES95 = 73
CES21 = 86	CES46 = 76	CES71 = 59	CES96 = 78
CES22 = 78	CES47 = 71	CES72 = 86	CES97 = 83
CES23 = 92	CES48 = 61	CES73 = 52	CES98 = 72
CES24 = 91	CES49 = 76	CES74 = 93	CES99 = 60
CES25 = 72	CES50 = 84	CES75 = 56	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)