

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: McGRAW-EDISON

Report Number: P237534

Luminaire Tested: **CTN-6-3-D-E1-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237534
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-26)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: CTN-6-3-D-E1-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
(6) 70 CRI, 4000K LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28861.1 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 234
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

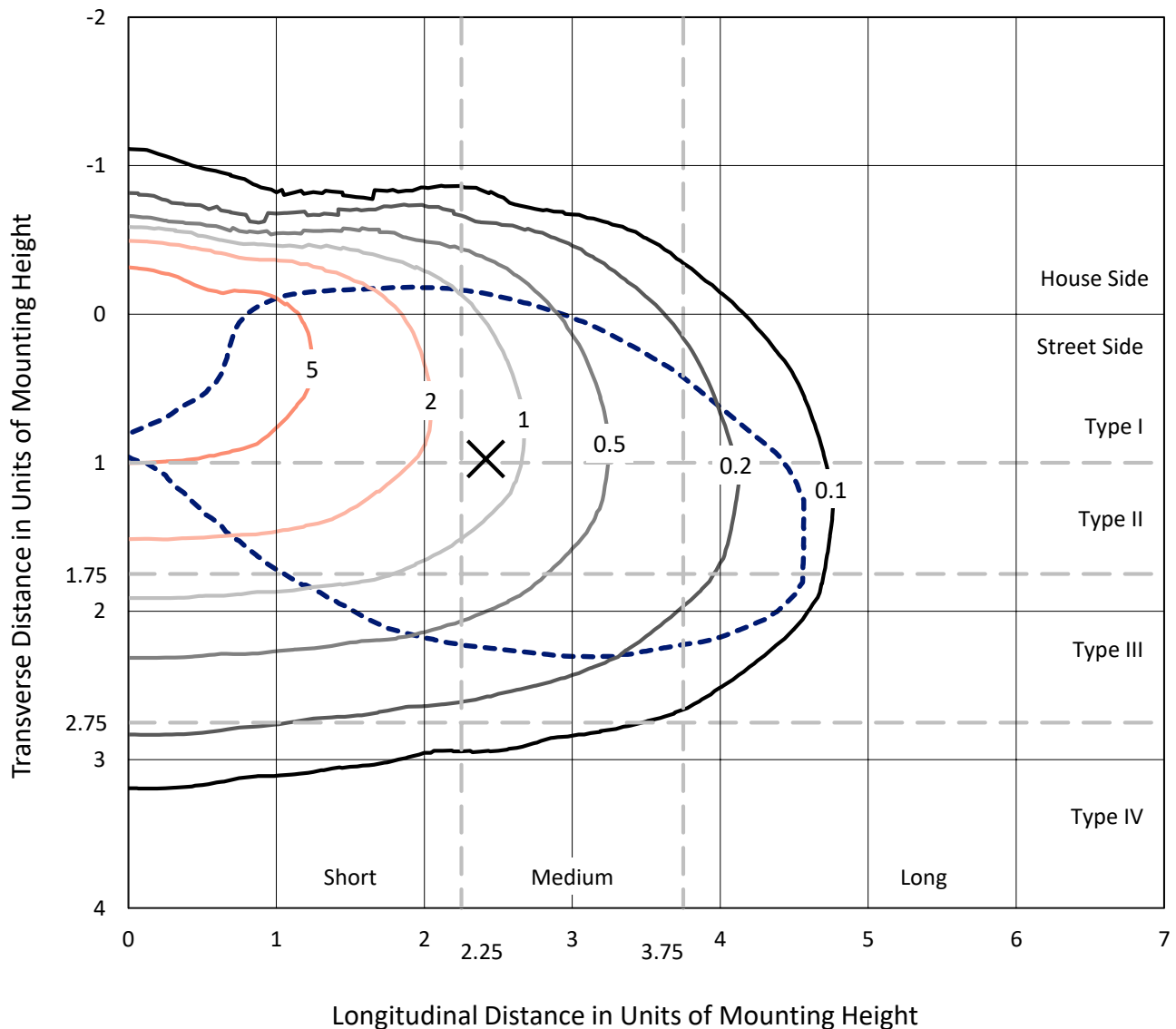


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

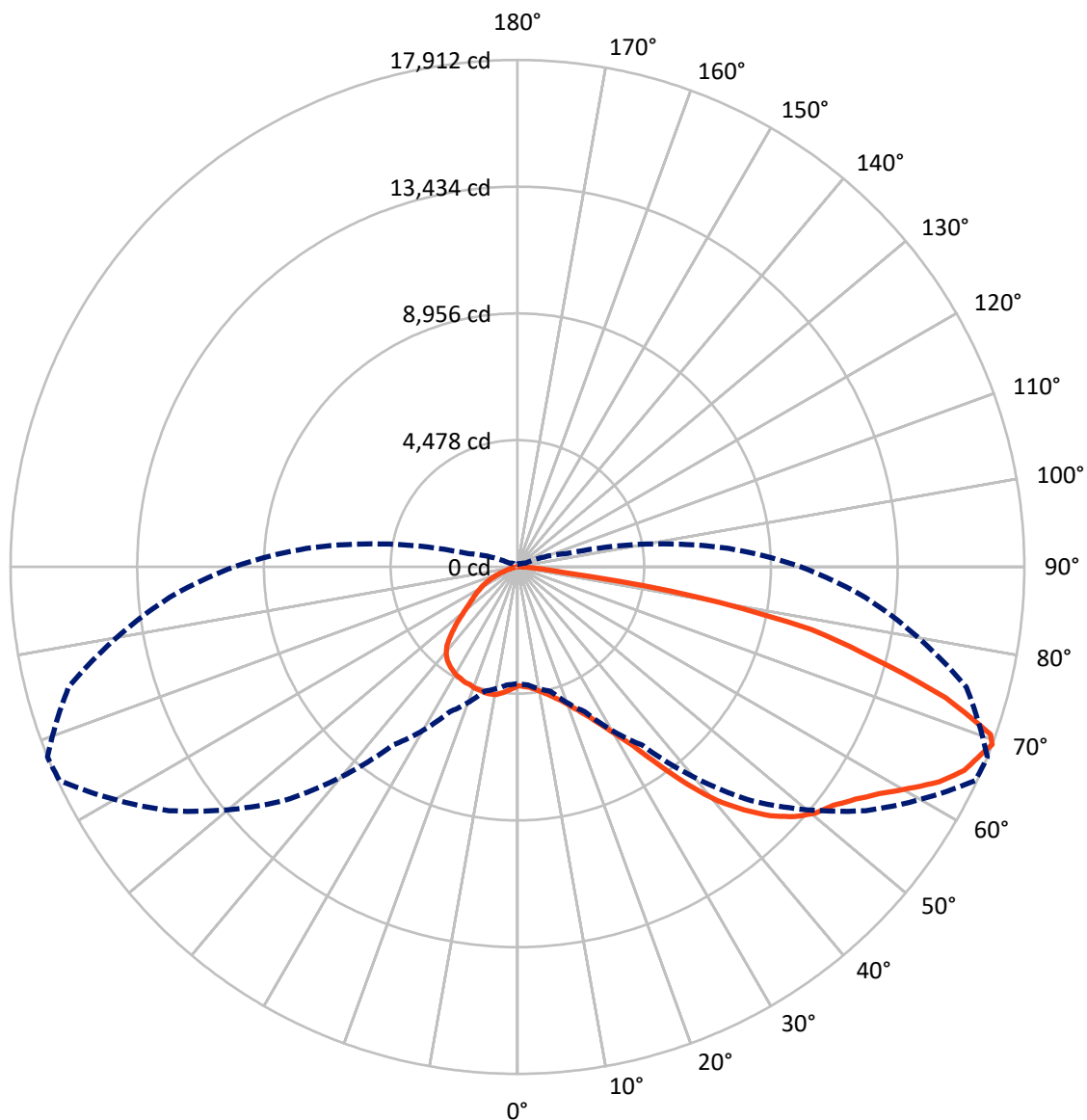


Based on 25 foot mounting height. Maximum calculated value = 8.2 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5179.5	0.0	5179.5
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	23681.5	0.0	23681.5
	% Fixture	82.1	0.0	82.1
Total	Lumens	28861.1	0.0	28861.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.6	1.5
10°-20°	1323.0	4.6
20°-30°	2261.5	7.8
30°-40°	3484.6	12.1
40°-50°	5000.6	17.3
50°-60°	6018.5	20.9
60°-70°	6315.8	21.9
70°-80°	3659.0	12.7
80°-90°	376.5	1.3
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°	28861.1	100.0
0°-180°	28861.1	100.0

Coefficient of Utilization



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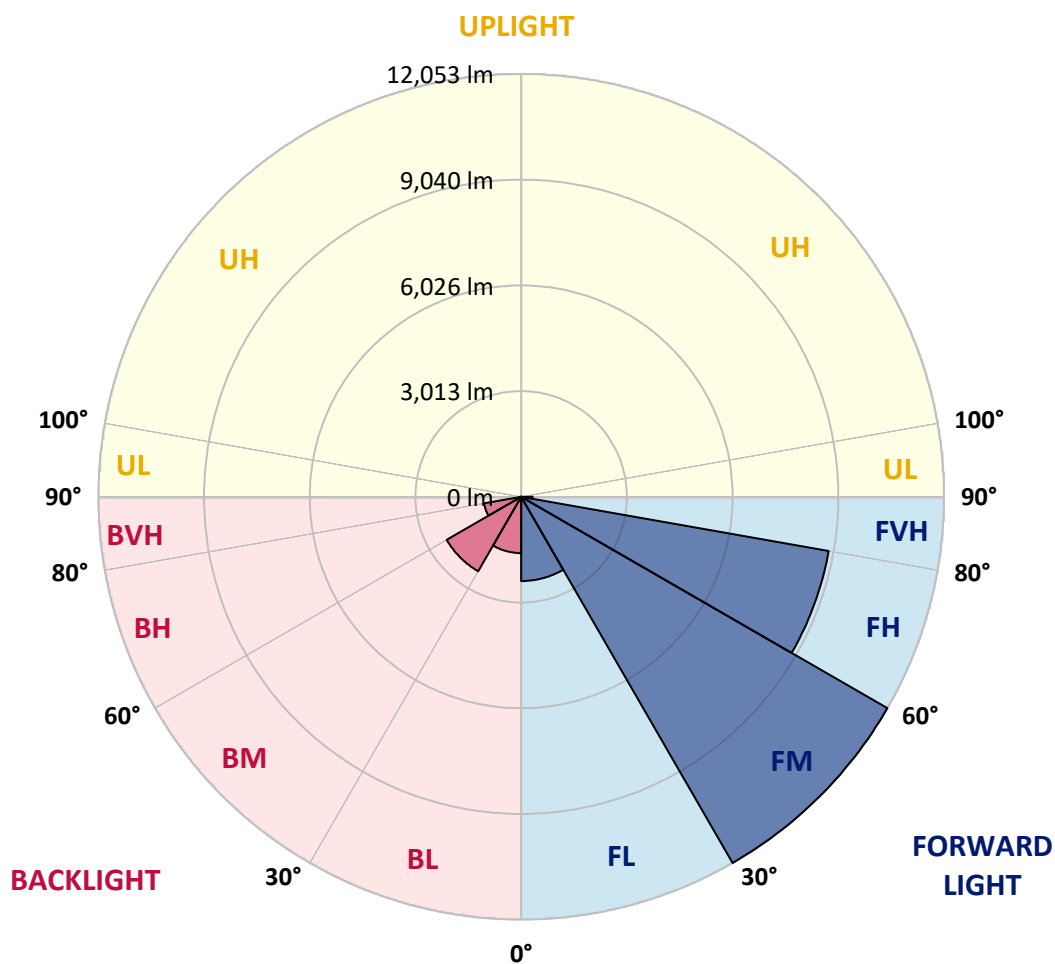
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2401.1	8.3			
FM	(30°-60°)	12052.8	41.8			
FH	(60°-80°)	8900.4	30.8			G4/12000
FVH	(80°-90°)	327.2	1.1			G3/500
BL	(0°-30°)	1604.9	5.6	B3/2500		
BM	(30°-60°)	2451.0	8.5	B2/2500		
BH	(60°-80°)	1074.4	3.7	B3/2500		G3/2500
BVH	(80°-90°)	49.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	4198	4198	4198	4198	4198	4198	4198	4198	4198	4198	4198
2.5°	4245	4211	4215	4242	4162	4196	4175	4219	4226	4205	4224
5°	4329	4300	4299	4326	4237	4263	4230	4260	4269	4247	4280
7.5°	4492	4461	4455	4482	4369	4377	4332	4347	4355	4325	4358
10°	4726	4692	4670	4685	4558	4538	4461	4459	4471	4430	4483
12.5°	4988	4948	4916	4919	4774	4740	4638	4602	4610	4555	4619
15°	5273	5215	5185	5186	5023	4966	4835	4776	4771	4718	4755
17.5°	5616	5569	5531	5511	5338	5225	5069	4992	4964	4929	4910
20°	6019	5960	5920	5913	5701	5551	5344	5242	5209	5180	5095
22.5°	6468	6408	6353	6344	6119	5938	5660	5534	5505	5472	5302
25°	6882	6875	6814	6804	6587	6352	6026	5865	5865	5826	5565
27.5°	7344	7354	7299	7287	7083	6823	6435	6281	6313	6243	5896
30°	7831	7810	7795	7808	7619	7344	6940	6810	6860	6780	6340
32.5°	8267	8251	8261	8311	8175	7921	7574	7493	7541	7591	7136
35°	8612	8578	8704	8814	8775	8534	8255	8426	8558	8786	8309
37.5°	8916	8891	9044	9269	9318	9184	9098	9575	9726	10033	9338
40°	9068	9063	9251	9544	9743	9830	9981	10631	10851	10935	10121
42.5°	9019	9035	9367	9819	10141	10514	10818	11533	11735	11666	10807
45°	8882	8890	9227	9932	10486	11217	11623	12369	12548	12305	11353
47.5°	8692	8695	9051	9854	10768	11853	12317	13037	13182	12839	11746
50°	8435	8440	8865	9756	11011	12374	12860	13555	13667	13218	12086
52.5°	8110	8154	8619	9599	11163	12744	13271	13935	13990	13671	12387
55°	7735	7781	8306	9386	11222	12954	13559	14403	14491	14177	12632
57.5°	7291	7354	7907	9040	11084	13042	13852	14981	15100	14706	12884
60°	6776	6854	7436	8608	10765	13135	14400	15756	15894	15275	13104
62.5°	6238	6288	6814	8019	10254	13207	14990	16711	16723	15774	13226
65°	5518	5571	6042	7275	9487	12978	15288	17381	17345	16165	13185
67.5°	4694	4744	5129	6350	8434	12336	15186	17648	17672	16449	12792
69°	4122	4188	4551	5647	7690	11679	15015	17856	17912	16423	12337
70°	3633	3718	4063	5026	7060	11082	14685	17738	17742	16160	11918
72.5°	2373	2425	2485	3261	5079	8782	12995	15731	15835	14420	10420
75°	1174	1220	1444	1725	2612	5883	10303	12888	13085	12246	8537
77.5°	648	657	736	1130	1354	2660	7042	10274	10619	9980	6131
80°	404	402	420	526	759	1261	2974	5766	6386	5211	2423
82.5°	315	309	310	340	321	594	1238	1679	1694	1504	943
85°	161	182	216	226	190	323	570	663	679	595	491
87.5°	54	55	58	57	51	111	211	246	219	124	168
90°	0	0	0	0	0	0	0	0	0	0	0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4198	4198	4198	4198	4198	4198	4198	4198	4198	4198	4198
2.5°	4253	4244	4262	4303	4269	4300	4269	4373	4361	4354	4374
5°	4312	4311	4340	4406	4403	4458	4428	4531	4516	4514	4532
7.5°	4392	4411	4442	4510	4511	4556	4522	4603	4570	4562	4587
10°	4514	4519	4543	4590	4524	4544	4488	4552	4506	4501	4538
12.5°	4631	4638	4602	4587	4502	4476	4378	4412	4359	4354	4372
15°	4756	4709	4623	4574	4427	4333	4223	4156	4065	4023	4039
17.5°	4886	4795	4634	4515	4318	4181	3962	3848	3713	3644	3631
20°	5028	4900	4661	4485	4208	3938	3671	3410	3256	3185	3166
22.5°	5188	5032	4699	4385	4036	3708	3257	2928	2704	2635	2616
25°	5388	5180	4751	4360	3871	3332	2771	2398	2137	2032	2010
27.5°	5631	5384	4836	4241	3581	2913	2288	1859	1588	1464	1437
30°	5985	5645	4893	4171	3323	2478	1778	1299	1042	951	927
32.5°	6683	6093	5009	4010	2942	1972	1224	797	617	565	545
35°	7720	6937	5176	3819	2514	1403	727	462	371	352	346
37.5°	8665	7770	5499	3525	1952	863	421	296	273	276	276
40°	9378	8389	5876	3137	1324	484	289	246	251	252	251
42.5°	10046	8956	6058	2709	767	321	251	229	233	230	228
45°	10571	9362	6112	2133	420	287	236	213	211	213	215
47.5°	10912	9610	5989	1633	317	267	227	202	197	211	210
50°	11165	9780	5512	1242	309	250	216	189	191	208	206
52.5°	11349	9824	4989	996	295	238	206	183	181	194	195
55°	11495	9706	4663	784	283	226	198	177	167	171	170
57.5°	11586	9571	4291	654	272	213	187	161	146	147	146
60°	11566	9481	3864	536	258	201	172	144	129	125	125
62.5°	11526	9296	3423	467	246	197	154	131	120	116	116
65°	11254	8855	2833	400	234	186	144	126	113	109	109
67.5°	10579	8126	2194	348	225	168	141	123	109	104	104
69°	10009	7478	1802	320	216	160	141	124	107	101	101
70°	9564	6969	1491	303	207	155	141	125	106	99	98
72.5°	8207	5441	828	257	172	141	138	126	101	91	90
75°	6297	3825	493	217	145	129	131	121	93	82	82
77.5°	3935	1757	367	170	118	112	114	107	84	75	75
80°	1344	793	277	131	85	87	94	90	75	68	67
82.5°	736	516	196	91	59	72	72	73	65	60	59
85°	400	269	121	55	42	53	51	55	53	49	48
87.5°	139	92	40	20	17	18	21	28	27	28	29
90°	0	0	0	0	0	0	0	0	0	0	0

LM-79-08: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

STREETWORKS

Report Number: SP1-2104-215-1

Luminaire Tested: CST-CA6-230-740-U-T4

Test Date: 04/20/2021

Test Information

Test Method: LM-79-08
 Report Number: SP1-2104-215-1
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1
 Measurement Geometry: 4π
 Issue Date: 04/20/2021
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: STREETWORKS
 Catalog Number: **CST-CA6-230-740-U-T4**
 Description: STREETWORKS HIGH MAST LUMINAIRE

230W

Spectral Parameters

CCT (K):	3783	CRI (Ra):	75.1		
CIE u':	0.2297	R1:	72.8	R9:	-19.0
CIE v':	0.5046	R2:	81.9	R10:	57.0
Duv:	-0.0008	R3:	89.0	R11:	70.7
CIE x:	0.3897	R4:	74.1	R12:	48.2
CIE y:	0.3804	R5:	72.3	R13:	74.4
CIE z:	0.2299	R6:	74.5	R14:	93.7
Peak Wavelength (nm):	450	R7:	81.7		
Dominant Wavelength (nm):	580	R8:	54.6		
Purity:	31.3				
Rf:	76.5				
Rg:	95.6				



Test Conditions

Stabilization Time: 47M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 25.5/39%
 Sphere Temperature (°C): 24.0

REPORT NUMBER: SP1-2104-215-1

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	1/31/2021	7/31/2021
Power Meter	IN0071	12/1/2020	12/1/2021
AC Power Source	IN0063	12/1/2020	12/1/2021
DC Power Source	IN0208	12/1/2020	12/1/2021
Sphere Thermometer	IN0085	12/1/2020	12/1/2021
Room Thermometer	IN0046	12/1/2020	12/1/2021

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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 7-step quadrangle

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Photopic Flux vs. Wavelength



#####

λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)
360	13329	0.0	490	105235	15.0	620	524343	136.4	750	24224	0.0	880	16135	0.0
365	11697	0.0	495	137678	25.0	625	488932	107.9	755	22376	0.0	885	16876	0.0
370	10917	0.0	500	186689	41.2	630	445400	80.6	760	20109	0.0	890	13554	0.0
375	12548	0.0	505	244611	68.4	635	403534	60.6	765	18097	0.0	895	11525	0.0
380	13932	0.0	510	298987	102.7	640	366414	43.8	770	17366	0.0	900	14656	0.0
385	13265	0.0	515	348170	144.2	645	331272	31.9	775	16226	0.0	905	11999	0.0
390	11808	0.0	520	390427	189.3	650	297360	21.7	780	14803	0.0	910	12965	0.0
395	10395	0.0	525	421211	226.1	655	263291	15.1	785	15199	0.0	915	15939	0.0
400	9348	0.0	530	446063	262.6	660	232931	9.7	790	12989	0.0	920	16238	0.0
405	9479	0.0	535	465110	288.4	665	204719	6.5	795	12106	0.0	925	14419	0.0
410	12414	0.0	540	479189	312.2	670	177096	3.9	800	12942	0.0	930	14788	0.0
415	21574	0.0	545	495864	330.0	675	153254	2.6	805	13253	0.0	935	18619	0.0
420	41448	0.1	550	516625	351.1	680	132874	1.5	810	12808	0.0	940	13995	0.0
425	79385	0.4	555	538555	367.8	685	115378	1.0	815	12903	0.0	945	18047	0.0
430	141845	1.1	560	562412	382.2	690	100157	0.6	820	12621	0.0	950	21418	0.0
435	231290	2.7	565	585835	389.5	695	85561	0.4	825	13903	0.0	955	23138	0.0
440	374482	5.9	570	608681	395.8	700	75396	0.2	830	11870	0.0	960	13665	0.0
445	596715	12.4	575	629563	391.7	705	65658	0.1	835	11069	0.0	965	14793	0.0
450	719656	18.7	580	646820	384.3	710	58172	0.1	840	15291	0.0	970	14396	0.0
455	530438	17.8	585	659231	366.3	715	52563	0.1	845	15125	0.0	975	11155	0.0
460	330446	13.5	590	665630	344.2	720	47085	0.0	850	15336	0.0	980	17987	0.0
465	241999	12.5	595	656228	311.1	725	41741	0.0	855	15791	0.0	985	16185	0.0
470	167096	10.4	600	646946	278.8	730	37415	0.0	860	14660	0.0	990	22120	0.0
475	113791	8.9	605	628643	243.4	735	32125	0.0	865	12528	0.0	995	11943	0.0
480	96126	9.1	610	599057	205.8	740	29322	0.0	870	14089	0.0	1000	16020	0.0
485	94467	11.2	615	565669	170.8	745	26862	0.0	875	11732	0.0			

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Scotopic Flux vs. Wavelength


Scotopic Lumens: 54268.8
S/P: 1.5

λ (nm)	Power ($\mu\text{W/nm}$)	Lumens (Φ/nm)	λ (nm)	Power ($\mu\text{W/nm}$)	Lumens (Φ/nm)	λ (nm)	Power ($\mu\text{W/nm}$)	Lumens (Φ/nm)	λ (nm)	Power ($\mu\text{W/nm}$)	Lumens (Φ/nm)	λ (nm)	Power ($\mu\text{W/nm}$)	Lumens (Φ/nm)
360	13329	0.0	490	105235	162.0	620	524343	6.6	750	24224	0.0	880	16135	0.0
365	11697	0.0	495	137678	222.6	625	488932	4.1	755	22376	0.0	885	16876	0.0
370	10917	0.0	500	186689	312.3	630	445400	2.5	760	20109	0.0	890	13554	0.0
375	12548	0.0	505	244611	415.8	635	403534	1.5	765	18097	0.0	895	11525	0.0
380	13932	0.0	510	298987	506.8	640	366414	0.9	770	17366	0.0	900	14656	0.0
385	13265	0.0	515	348170	577.1	645	331272	0.6	775	16226	0.0	905	11999	0.0
390	11808	0.0	520	390427	620.6	650	297360	0.3	780	14803	0.0	910	12965	0.0
395	10395	0.1	525	421211	630.1	655	263291	0.2	785	15199	0.0	915	15939	0.0
400	9348	0.1	530	446063	615.0	660	232931	0.1	790	12989	0.0	920	16238	0.0
405	9479	0.3	535	465110	579.6	665	204719	0.1	795	12106	0.0	925	14419	0.0
410	12414	0.7	540	479189	529.5	670	177096	0.0	800	12942	0.0	930	14788	0.0
415	21574	2.2	545	495864	475.4	675	153254	0.0	805	13253	0.0	935	18619	0.0
420	41448	6.8	550	516625	422.4	680	132874	0.0	810	12808	0.0	940	13995	0.0
425	79385	19.4	555	538555	368.0	685	115378	0.0	815	12903	0.0	945	18047	0.0
430	141845	48.3	560	562412	314.4	690	100157	0.0	820	12621	0.0	950	21418	0.0
435	231290	103.4	565	585835	262.8	695	85561	0.0	825	13903	0.0	955	23138	0.0
440	374482	209.3	570	608681	214.8	700	75396	0.0	830	11870	0.0	960	13665	0.0
445	596715	399.6	575	629563	171.5	705	65658	0.0	835	11069	0.0	965	14793	0.0
450	719656	557.8	580	646820	133.3	710	58172	0.0	840	15291	0.0	970	14396	0.0
455	530438	463.5	585	659231	100.8	715	52563	0.0	845	15125	0.0	975	11155	0.0
460	330446	319.2	590	665630	74.1	720	47085	0.0	850	15336	0.0	980	17987	0.0
465	241999	255.6	595	656228	52.3	725	41741	0.0	855	15791	0.0	985	16185	0.0
470	167096	192.4	600	646946	36.5	730	37415	0.0	860	14660	0.0	990	22120	0.0
475	113791	142.3	605	628643	24.7	735	32125	0.0	865	12528	0.0	995	11943	0.0
480	96126	129.8	610	599057	16.2	740	29322	0.0	870	14089	0.0	1000	16020	0.0
485	94467	136.9	615	565669	10.5	745	26862	0.0	875	11732	0.0			

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Melanopic Flux vs. Wavelength


Melanopic Lumens: 20938.3 M/P: 0.58

λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)
360	13329	0.0	490	105235	87.6	620	524343	0.4	750	24224	0.0	880	16135	0.0
365	11697	0.0	495	137678	113.7	625	488932	0.3	755	22376	0.0	885	16876	0.0
370	10917	0.0	500	186689	150.1	630	445400	0.2	760	20109	0.0	890	13554	0.0
375	12548	0.0	505	244611	187.7	635	403534	0.1	765	18097	0.0	895	11525	0.0
380	13932	0.0	510	298987	214.7	640	366414	0.1	770	17366	0.0	900	14656	0.0
385	13265	0.0	515	348170	227.5	645	331272	0.0	775	16226	0.0	905	11999	0.0
390	11808	0.0	520	390427	227.3	650	297360	0.0	780	14803	0.0	910	12965	0.0
395	10395	0.1	525	421211	213.6	655	263291	0.0	785	15199	0.0	915	15939	0.0
400	9348	0.1	530	446063	192.8	660	232931	0.0	790	12989	0.0	920	16238	0.0
405	9479	0.2	535	465110	167.4	665	204719	0.0	795	12106	0.0	925	14419	0.0
410	12414	0.5	540	479189	140.2	670	177096	0.0	800	12942	0.0	930	14788	0.0
415	21574	1.4	545	495864	115.2	675	153254	0.0	805	13253	0.0	935	18619	0.0
420	41448	4.7	550	516625	92.7	680	132874	0.0	810	12808	0.0	940	13995	0.0
425	79385	12.4	555	538555	72.6	685	115378	0.0	815	12903	0.0	945	18047	0.0
430	141845	30.0	560	562412	55.5	690	100157	0.0	820	12621	0.0	950	21418	0.0
435	231290	61.7	565	585835	41.1	695	85561	0.0	825	13903	0.0	955	23138	0.0
440	374482	125.1	570	608681	29.7	700	75396	0.0	830	11870	0.0	960	13665	0.0
445	596715	235.4	575	629563	21.0	705	65658	0.0	835	11069	0.0	965	14793	0.0
450	719656	331.6	580	646820	14.5	710	58172	0.0	840	15291	0.0	970	14396	0.0
455	530438	277.9	585	659231	9.8	715	52563	0.0	845	15125	0.0	975	11155	0.0
460	330446	194.7	590	665630	6.5	720	47085	0.0	850	15336	0.0	980	17987	0.0
465	241999	158.1	595	656228	4.2	725	41741	0.0	855	15791	0.0	985	16185	0.0
470	167096	119.6	600	646946	2.7	730	37415	0.0	860	14660	0.0	990	22120	0.0
475	113791	86.9	605	628643	1.7	735	32125	0.0	865	12528	0.0	995	11943	0.0
480	96126	77.2	610	599057	1.1	740	29322	0.0	870	14089	0.0	1000	16020	0.0
485	94467	77.9	615	565669	0.7	745	26862	0.0	875	11732	0.0			

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TM-30-18

Summary

$R_f = 76.5$
 $R_g = 95.6$
 CIE $R_a = 75.1$
 $R_g = -19.0$



Color Vector Graphics



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

CES01 = 86	CES26 = 66	CES51 = 90	CES76 = 56
CES02 = 61	CES27 = 89	CES52 = 89	CES77 = 73
CES03 = 31	CES28 = 83	CES53 = 81	CES78 = 58
CES04 = 70	CES29 = 69	CES54 = 87	CES79 = 84
CES05 = 48	CES30 = 84	CES55 = 86	CES80 = 81
CES06 = 51	CES31 = 72	CES56 = 77	CES81 = 79
CES07 = 40	CES32 = 64	CES57 = 77	CES82 = 92
CES08 = 39	CES33 = 79	CES58 = 77	CES83 = 90
CES09 = 29	CES34 = 73	CES59 = 87	CES84 = 87
CES10 = 74	CES35 = 85	CES60 = 90	CES85 = 78
CES11 = 57	CES36 = 91	CES61 = 84	CES86 = 73
CES12 = 63	CES37 = 81	CES62 = 87	CES87 = 79
CES13 = 42	CES38 = 94	CES63 = 75	CES88 = 83
CES14 = 74	CES39 = 96	CES64 = 69	CES89 = 73
CES15 = 71	CES40 = 91	CES65 = 66	CES90 = 83
CES16 = 47	CES41 = 94	CES66 = 63	CES91 = 76
CES17 = 49	CES42 = 82	CES67 = 60	CES92 = 62
CES18 = 56	CES43 = 78	CES68 = 68	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 76	CES94 = 57
CES20 = 65	CES45 = 86	CES70 = 60	CES95 = 69
CES21 = 86	CES46 = 84	CES71 = 54	CES96 = 79
CES22 = 78	CES47 = 87	CES72 = 85	CES97 = 86
CES23 = 92	CES48 = 80	CES73 = 52	CES98 = 79
CES24 = 91	CES49 = 82	CES74 = 94	CES99 = 69
CES25 = 72	CES50 = 90	CES75 = 56	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)