



Integrating Sphere Test Report

Relevant Standards
IES LM-79-2008
ANSI C78.377-2008, ANSI C82.77
CIE 13.3-1995, CIE 15-2004

Prepared For
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225 DeLiege Quest
Montreal, Canada
H2P 1H4

Catalog Number
LED.4.30.17 / 1814C-9.35.CC.350 / 1141A-H WH

LTL Test Number
25336

Test Date

2011-09-02

Prepared By

Eric Gaudreau, Technician III

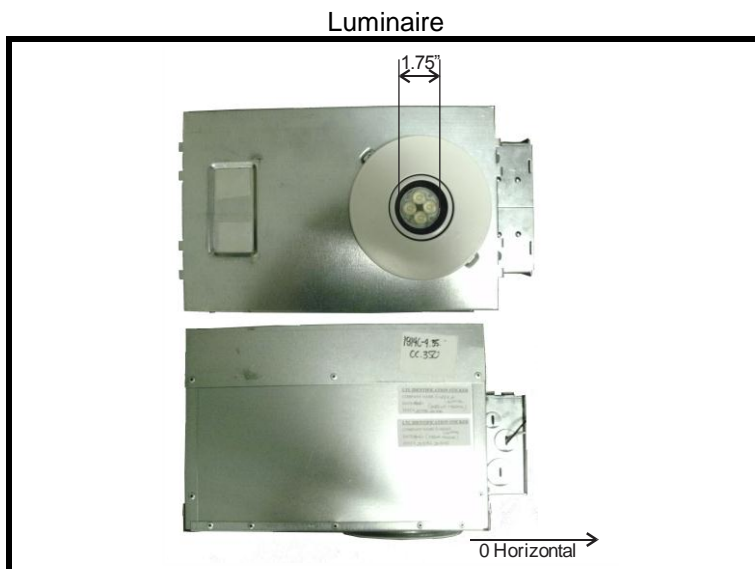
Approved By

Brian Moyer, Engineer

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Formed steel housing, machined aluminum heatsink, machined black enamel lower reflector above formed white enamel steel trim, no enclosure
Catalog Number: LED.4.30.17 / 1814C-9.35.CC.350 / 1141A-H WH
Lamp: Four white LEDs with frosted plastic optics
Mounting: Recessed



Summary of Results

Radiant Flux:	796.3 mW
Luminous Flux:	209.0 Lumens
Luminaire Efficacy:	41.2 Lumens/Watt
CCT:	2838 K
CRI (Ra):	95.4
Chromaticity (x):	0.4485
Chromaticity (y):	0.4074
Chromaticity (u):	0.2566
Chromaticity (v):	0.3496
Duv:	-0.0002

Test Conditions

Test Temperature:	24.6 °C
Voltage:	120.0 VAC
Current:	0.07266 A
Power:	5.068 W
Power Factor:	0.581
Frequency:	60 Hz
Current THD:	104 %

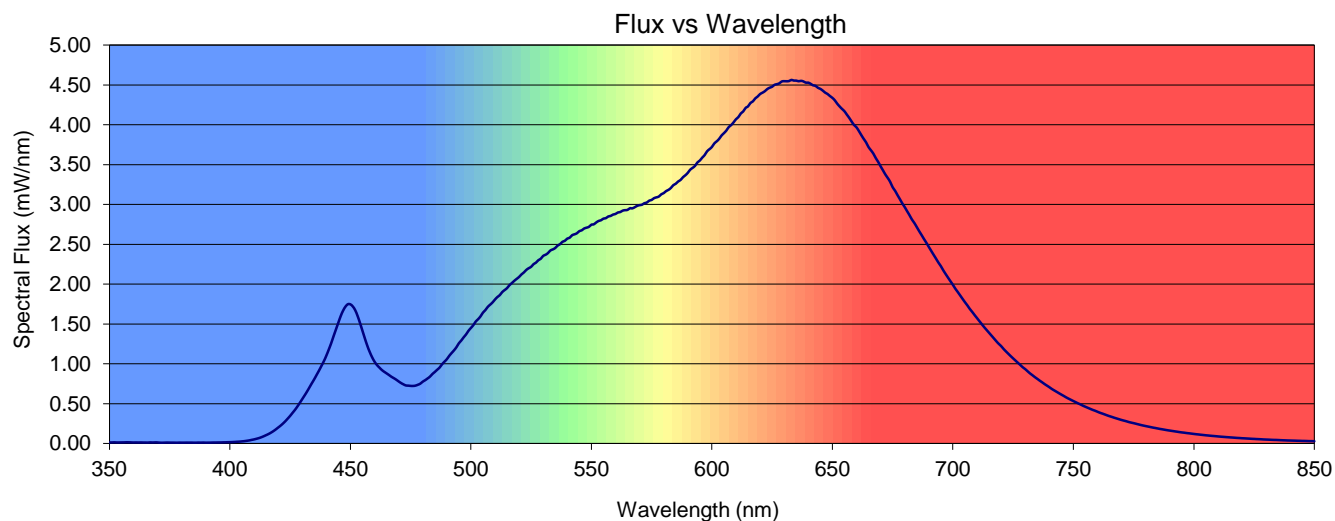
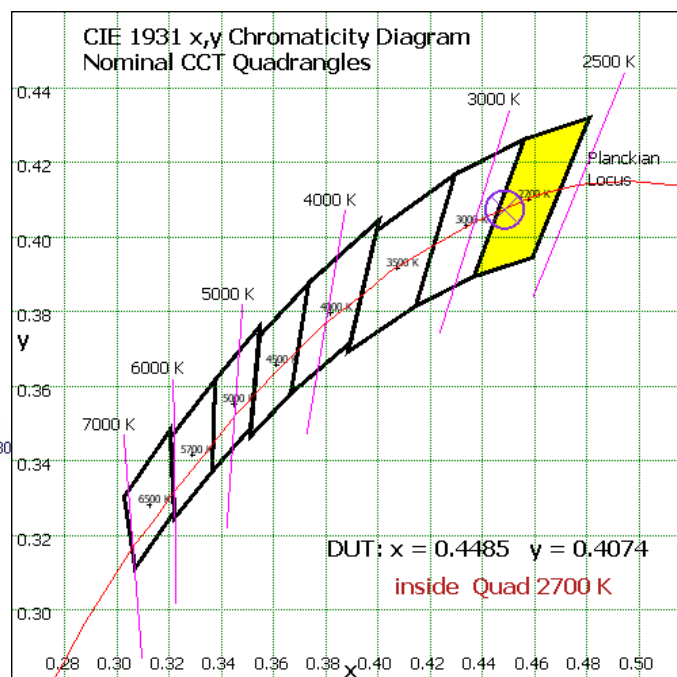
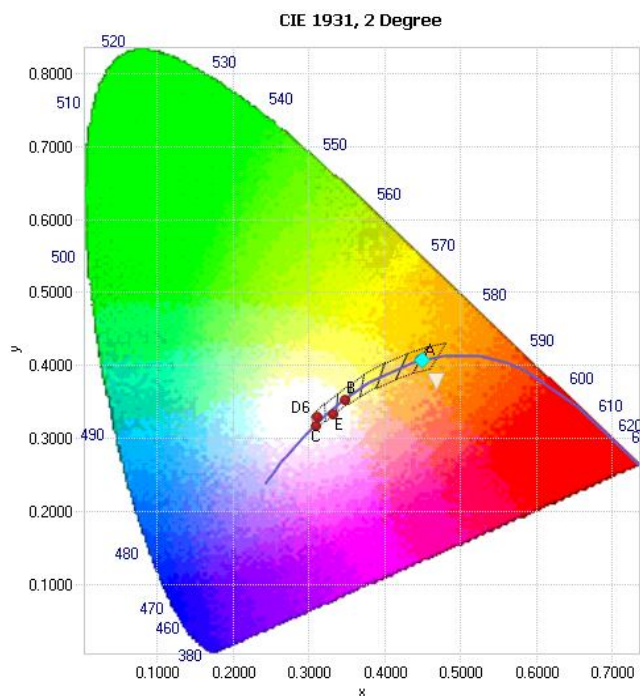
Testing was performed in a Labsphere SLMS7650 two meter integrating sphere using the 4 π geometry method, a Labsphere CDS 1100 spectrometer, and LightMtrX software.
Absorption correction was employed for this measurement.

Chromaticity Coordinates

x	y	u	v	u'	v'	Duv
0.4485	0.4074	0.2566	0.3496	0.2566	0.5244	-0.0002

Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
95.4	97.4	96.4	93.1	95.9	96.2	95.1	96.1	93.4	83.3	89.9	95.9	86.6	97.1	95.1





Spectral Power Distribution

λ (nm)	mW/nm	λ (nm)	mW/nm	λ (nm)	mW/nm	λ (nm)	mW/nm	λ (nm)	mW/nm	λ (nm)	mW/nm	λ (nm)	mW/nm
350	0.0136	422	0.250	494	1.21	566	2.95	638	4.54	710	1.57	782	0.207
351	0.0133	423	0.280	495	1.26	567	2.95	639	4.53	711	1.54	783	0.200
352	0.0148	424	0.313	496	1.29	568	2.97	640	4.53	712	1.50	784	0.195
353	0.0130	425	0.347	497	1.33	569	2.98	641	4.51	713	1.46	785	0.189
354	0.0132	426	0.385	498	1.37	570	2.99	642	4.49	714	1.42	786	0.183
355	0.0138	427	0.422	499	1.41	571	3.00	643	4.49	715	1.39	787	0.178
356	0.0142	428	0.464	500	1.45	572	3.02	644	4.46	716	1.36	788	0.172
357	0.0153	429	0.510	501	1.48	573	3.02	645	4.45	717	1.32	789	0.167
358	0.0152	430	0.556	502	1.53	574	3.05	646	4.43	718	1.28	790	0.162
359	0.0140	431	0.603	503	1.56	575	3.06	647	4.40	719	1.25	791	0.158
360	0.0127	432	0.652	504	1.60	576	3.08	648	4.39	720	1.22	792	0.153
361	0.0133	433	0.703	505	1.64	577	3.09	649	4.36	721	1.19	793	0.148
362	0.0127	434	0.756	506	1.67	578	3.10	650	4.34	722	1.16	794	0.144
363	0.0133	435	0.807	507	1.71	579	3.13	651	4.31	723	1.13	795	0.139
364	0.0124	436	0.862	508	1.74	580	3.14	652	4.26	724	1.10	796	0.136
365	0.0123	437	0.916	509	1.77	581	3.17	653	4.23	725	1.07	797	0.132
366	0.0118	438	0.975	510	1.81	582	3.18	654	4.20	726	1.04	798	0.128
367	0.0140	439	1.03	511	1.84	583	3.21	655	4.17	727	1.01	799	0.124
368	0.0126	440	1.10	512	1.86	584	3.24	656	4.13	728	0.985	800	0.120
369	0.0142	441	1.18	513	1.90	585	3.26	657	4.09	729	0.957	801	0.117
370	0.0134	442	1.26	514	1.93	586	3.29	658	4.04	730	0.934	802	0.113
371	0.0106	443	1.34	515	1.95	587	3.31	659	4.00	731	0.907	803	0.110
372	0.0102	444	1.43	516	1.99	588	3.34	660	3.97	732	0.880	804	0.107
373	0.0110	445	1.52	517	2.01	589	3.37	661	3.92	733	0.858	805	0.103
374	0.0119	446	1.60	518	2.04	590	3.40	662	3.87	734	0.834	806	0.100
375	0.0113	447	1.67	519	2.07	591	3.44	663	3.82	735	0.812	807	0.0972
376	0.0110	448	1.72	520	2.09	592	3.46	664	3.78	736	0.790	808	0.0945
377	0.0108	449	1.75	521	2.12	593	3.48	665	3.72	737	0.769	809	0.0921
378	0.0100	450	1.75	522	2.15	594	3.53	666	3.68	738	0.747	810	0.0891
379	0.0113	451	1.72	523	2.18	595	3.55	667	3.64	739	0.727	811	0.0863
380	0.0108	452	1.67	524	2.20	596	3.59	668	3.58	740	0.708	812	0.0840
381	0.0107	453	1.60	525	2.22	597	3.62	669	3.53	741	0.686	813	0.0815
382	0.0114	454	1.51	526	2.25	598	3.67	670	3.48	742	0.668	814	0.0793
383	0.0109	455	1.42	527	2.27	599	3.69	671	3.43	743	0.650	815	0.0769
384	0.0115	456	1.32	528	2.30	600	3.72	672	3.38	744	0.632	816	0.0749
385	0.0105	457	1.23	529	2.32	601	3.76	673	3.33	745	0.614	817	0.0725
386	0.0104	458	1.15	530	2.35	602	3.79	674	3.28	746	0.597	818	0.0703
387	0.0117	459	1.08	531	2.37	603	3.82	675	3.22	747	0.579	819	0.0686
388	0.0110	460	1.03	532	2.39	604	3.86	676	3.17	748	0.563	820	0.0662
389	0.0119	461	0.986	533	2.42	605	3.89	677	3.12	749	0.548	821	0.0649
390	0.0107	462	0.954	534	2.44	606	3.93	678	3.07	750	0.533	822	0.0629
391	0.0109	463	0.924	535	2.45	607	3.97	679	3.01	751	0.518	823	0.0613
392	0.0114	464	0.901	536	2.48	608	4.00	680	2.97	752	0.503	824	0.0591
393	0.0123	465	0.881	537	2.50	609	4.03	681	2.92	753	0.490	825	0.0577
394	0.0124	466	0.860	538	2.53	610	4.07	682	2.87	754	0.474	826	0.0560
395	0.0131	467	0.838	539	2.54	611	4.10	683	2.81	755	0.461	827	0.0547
396	0.0133	468	0.820	540	2.57	612	4.14	684	2.77	756	0.448	828	0.0528
397	0.0144	469	0.801	541	2.58	613	4.17	685	2.72	757	0.435	829	0.0510
398	0.0149	470	0.780	542	2.61	614	4.21	686	2.67	758	0.422	830	0.0496
399	0.0161	471	0.759	543	2.62	615	4.23	687	2.62	759	0.412	831	0.0486
400	0.0167	472	0.743	544	2.64	616	4.27	688	2.57	760	0.399	832	0.0468
401	0.0181	473	0.729	545	2.66	617	4.29	689	2.52	761	0.386	833	0.0455
402	0.0199	474	0.726	546	2.68	618	4.33	690	2.47	762	0.376	834	0.0447
403	0.0220	475	0.723	547	2.70	619	4.35	691	2.42	763	0.365	835	0.0436
404	0.0237	476	0.722	548	2.71	620	4.39	692	2.37	764	0.354	836	0.0419
405	0.0267	477	0.726	549	2.72	621	4.40	693	2.32	765	0.343	837	0.0406
406	0.0299	478	0.737	550	2.75	622	4.42	694	2.27	766	0.334	838	0.0396
407	0.0343	479	0.751	551	2.75	623	4.45	695	2.23	767	0.323	839	0.0383
408	0.0389	480	0.776	552	2.77	624	4.46	696	2.17	768	0.314	840	0.0376
409	0.0454	481	0.794	553	2.79	625	4.48	697	2.13	769	0.304	841	0.0363
410	0.0515	482	0.816	554	2.80	626	4.50	698	2.08	770	0.295	842	0.0357
411	0.0592	483	0.839	555	2.82	627	4.51	699	2.04	771	0.287	843	0.0344
412	0.0677	484	0.871	556	2.83	628	4.52	700	1.99	772	0.279	844	0.0339
413	0.0783	485	0.897	557	2.85	629	4.54	701	1.94	773	0.270	845	0.0326
414	0.0906	486	0.925	558	2.86	630	4.55	702	1.90	774	0.262	846	0.0321
415	0.105	487	0.952	559	2.87	631	4.55	703	1.86	775	0.256	847	0.0310
416	0.119	488	0.993	560	2.88	632	4.55	704	1.82	776	0.248	848	0.0300
417	0.135	489	1.03	561	2.90	633	4.56	705	1.77	777	0.240	849	0.0298
418	0.155	490	1.06	562	2.90	634	4.55	706	1.73	778	0.232	850	0.0288
419	0.176	491	1.10	563	2.92	635	4.55	707	1.69	779	0.226		
420	0.200	492	1.14	564	2.93	636	4.55	708	1.65	780	0.219		
421	0.224	493	1.17	565	2.93	637	4.55	709	1.61	781	0.213		