



7036 Snowdrift Road Suite 200  
Allentown, PA 18106  
610-774-1300

## Integrating Sphere Test Report

Relevant Standards  
IES LM-79-2008  
ANSI C78.377-2011, ANSI C82.77-2002  
CIE 13.3-1995, CIE 15-2004

Prepared For  
Specialty Lighting Industries, Inc.  
Awi Salomon  
1306 Doris Avenue  
Ocean, NJ 07712

Catalog Number  
601-LED

Order Number  
10047370  
Test Number  
437107

Test Date

2013-12-26

Prepared By

Handwritten signature of Tammy Lacey in black ink.

Tammy Lacey, Administrative Assistant II

Approved By

Handwritten signature of Kyle Spaziani in black ink.

Kyle Spaziani, Project Handler

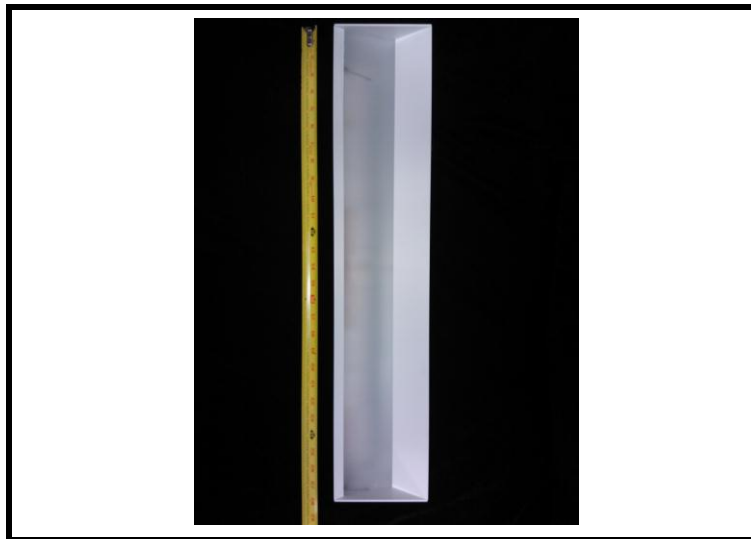
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Luminaire Description: White aluminum housing, white aluminum reflector, frosted plastic enclosure  
Catalog Number: 601-LED  
Lamp: 44 white LEDs  
Mounting: Recessed  
Ballast/Driver: One Philips Advance Xitanium XI075C200V054XPT1

Luminaire



#### Summary of Results

Radiant Flux:	5702 mW
Luminous Flux:	1842 Lumens
Luminaire Efficacy:	65.9 Lumens/Watt
CCT:	3081 K
CRI (Ra):	82.3
Chromaticity (x):	0.4301
Chromaticity (y):	0.3996
Chromaticity (u):	0.2480
Chromaticity (v):	0.3457
Duv:	-0.0014

#### Test Conditions

Test Temperature:	25.4 °C
Voltage:	119.9 VAC
Current:	0.2374 A
Power:	27.95 W
Power Factor:	0.982
Frequency:	60 Hz
Current THD:	17.7 %

Testing was performed in a 2-meter integrating sphere using the 4 $\pi$  geometry method.

Absorption correction was employed for this measurement.

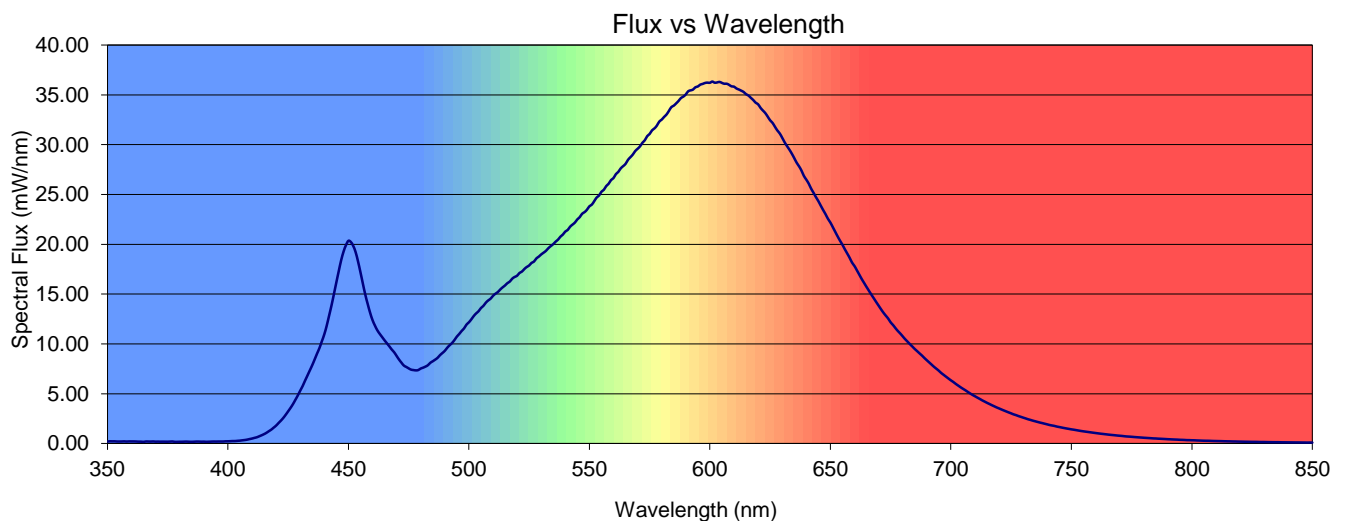
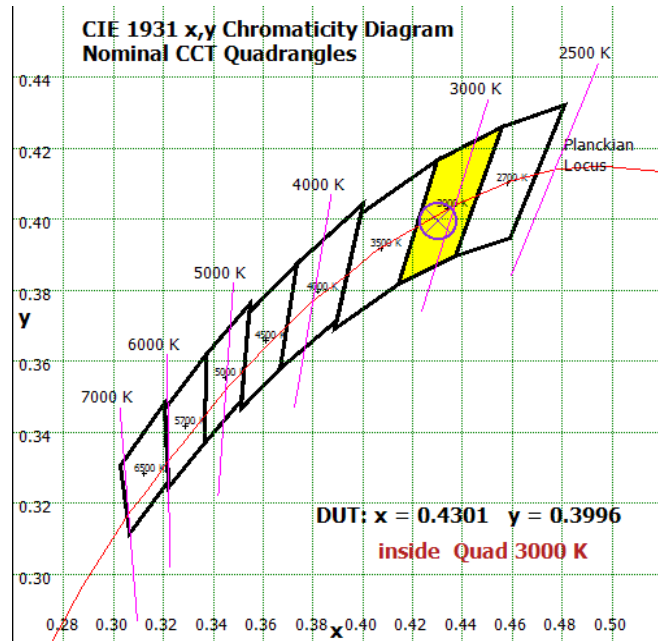
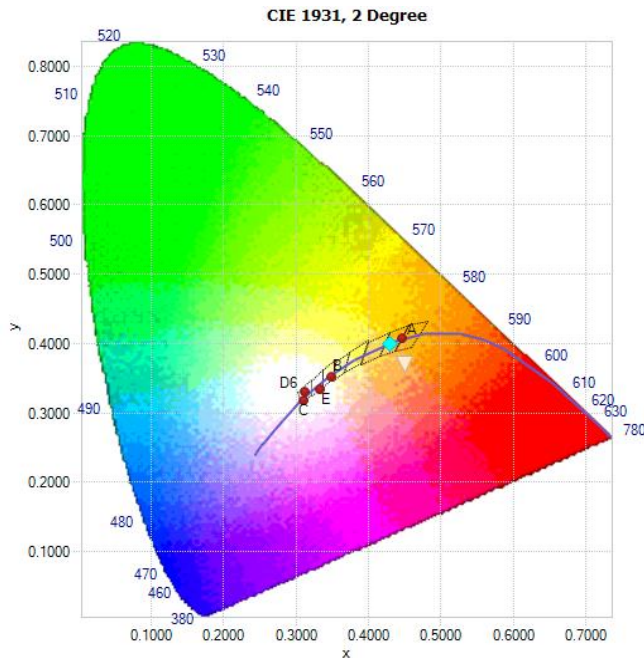


Chromaticity Coordinates

x	y	u	v	u'	v'	Duv
0.4301	0.3996	0.2480	0.3457	0.2480	0.5186	-0.0014

Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
82.3	80.4	90.1	96.5	80.0	80.5	87.2	83.6	60.6	9.6	76.9	78.2	71.4	82.5	98.4





Spectral Power Distribution

$\lambda$ (nm)	mW/nm	$\lambda$ (nm)	mW/nm	$\lambda$ (nm)	mW/nm	$\lambda$ (nm)	mW/nm	$\lambda$ (nm)	mW/nm	$\lambda$ (nm)	mW/nm	$\lambda$ (nm)	mW/nm
350	0.191	422	2.30	494	10.4	566	28.5	638	27.4	710	4.75	782	0.549
351	0.223	423	2.57	495	10.7	567	28.7	639	26.9	711	4.61	783	0.534
352	0.217	424	2.89	496	11.0	568	29.0	640	26.5	712	4.48	784	0.513
353	0.220	425	3.23	497	11.3	569	29.4	641	26.1	713	4.34	785	0.505
354	0.201	426	3.58	498	11.6	570	29.6	642	25.6	714	4.21	786	0.488
355	0.201	427	3.95	499	11.9	571	29.8	643	25.2	715	4.09	787	0.477
356	0.204	428	4.38	500	12.2	572	30.2	644	24.7	716	3.97	788	0.462
357	0.213	429	4.82	501	12.5	573	30.4	645	24.3	717	3.85	789	0.450
358	0.197	430	5.30	502	12.8	574	30.9	646	23.9	718	3.74	790	0.435
359	0.212	431	5.76	503	13.1	575	31.1	647	23.4	719	3.62	791	0.422
360	0.209	432	6.30	504	13.3	576	31.4	648	23.0	720	3.52	792	0.409
361	0.208	433	6.81	505	13.6	577	31.6	649	22.6	721	3.42	793	0.400
362	0.200	434	7.34	506	13.8	578	31.9	650	22.2	722	3.32	794	0.390
363	0.186	435	7.86	507	14.1	579	32.3	651	21.7	723	3.22	795	0.374
364	0.186	436	8.44	508	14.4	580	32.5	652	21.3	724	3.12	796	0.367
365	0.166	437	9.03	509	14.5	581	32.8	653	20.8	725	3.03	797	0.355
366	0.202	438	9.59	510	14.8	582	33.0	654	20.4	726	2.93	798	0.340
367	0.198	439	10.3	511	15.0	583	33.4	655	20.0	727	2.85	799	0.337
368	0.195	440	11.0	512	15.2	584	33.8	656	19.5	728	2.76	800	0.327
369	0.205	441	11.8	513	15.5	585	33.9	657	19.1	729	2.68	801	0.322
370	0.187	442	12.8	514	15.7	586	34.1	658	18.6	730	2.60	802	0.308
371	0.192	443	13.9	515	15.9	587	34.4	659	18.2	731	2.52	803	0.300
372	0.185	444	15.0	516	16.1	588	34.7	660	17.8	732	2.44	804	0.290
373	0.188	445	16.2	517	16.3	589	34.8	661	17.4	733	2.37	805	0.282
374	0.185	446	17.3	518	16.6	590	35.0	662	17.0	734	2.30	806	0.277
375	0.182	447	18.4	519	16.7	591	35.4	663	16.5	735	2.23	807	0.274
376	0.192	448	19.3	520	16.8	592	35.4	664	16.1	736	2.16	808	0.263
377	0.203	449	19.9	521	17.1	593	35.5	665	15.7	737	2.10	809	0.254
378	0.168	450	20.3	522	17.3	594	35.8	666	15.3	738	2.04	810	0.250
379	0.169	451	20.2	523	17.5	595	35.8	667	15.0	739	1.98	811	0.243
380	0.176	452	19.8	524	17.7	596	36.0	668	14.6	740	1.92	812	0.239
381	0.177	453	19.2	525	17.9	597	36.1	669	14.2	741	1.86	813	0.229
382	0.187	454	18.3	526	18.1	598	36.2	670	13.8	742	1.81	814	0.224
383	0.190	455	17.2	527	18.3	599	36.2	671	13.5	743	1.76	815	0.218
384	0.176	456	16.1	528	18.6	600	36.2	672	13.1	744	1.70	816	0.214
385	0.171	457	15.0	529	18.8	601	36.3	673	12.8	745	1.65	817	0.205
386	0.181	458	14.0	530	19.0	602	36.2	674	12.5	746	1.60	818	0.203
387	0.195	459	13.1	531	19.2	603	36.2	675	12.2	747	1.55	819	0.196
388	0.194	460	12.4	532	19.3	604	36.3	676	11.9	748	1.51	820	0.191
389	0.181	461	11.8	533	19.6	605	36.2	677	11.6	749	1.47	821	0.186
390	0.188	462	11.4	534	19.8	606	36.1	678	11.3	750	1.42	822	0.181
391	0.172	463	11.0	535	20.0	607	36.1	679	11.0	751	1.39	823	0.175
392	0.180	464	10.7	536	20.3	608	36.0	680	10.8	752	1.34	824	0.172
393	0.189	465	10.4	537	20.5	609	35.9	681	10.5	753	1.30	825	0.166
394	0.199	466	10.1	538	20.8	610	35.8	682	10.2	754	1.26	826	0.166
395	0.195	467	9.75	539	21.0	611	35.6	683	9.98	755	1.22	827	0.162
396	0.199	468	9.43	540	21.3	612	35.5	684	9.74	756	1.19	828	0.155
397	0.200	469	9.16	541	21.4	613	35.4	685	9.49	757	1.16	829	0.150
398	0.200	470	8.80	542	21.8	614	35.3	686	9.28	758	1.12	830	0.151
399	0.219	471	8.44	543	22.0	615	35.1	687	9.05	759	1.09	831	0.143
400	0.221	472	8.12	544	22.2	616	34.9	688	8.83	760	1.05	832	0.140
401	0.233	473	7.83	545	22.5	617	34.7	689	8.59	761	1.02	833	0.136
402	0.246	474	7.69	546	22.7	618	34.5	690	8.36	762	0.990	834	0.133
403	0.248	475	7.55	547	23.1	619	34.2	691	8.14	763	0.963	835	0.131
404	0.271	476	7.42	548	23.2	620	34.1	692	7.92	764	0.935	836	0.131
405	0.290	477	7.37	549	23.5	621	33.7	693	7.70	765	0.905	837	0.123
406	0.322	478	7.34	550	23.8	622	33.4	694	7.51	766	0.877	838	0.121
407	0.351	479	7.38	551	24.0	623	33.2	695	7.30	767	0.854	839	0.118
408	0.391	480	7.52	552	24.3	624	32.8	696	7.08	768	0.829	840	0.115
409	0.446	481	7.61	553	24.7	625	32.4	697	6.89	769	0.804	841	0.113
410	0.497	482	7.72	554	24.9	626	32.2	698	6.71	770	0.780	842	0.110
411	0.564	483	7.86	555	25.3	627	31.8	699	6.52	771	0.760	843	0.108
412	0.625	484	8.10	556	25.5	628	31.4	700	6.34	772	0.731	844	0.107
413	0.726	485	8.26	557	25.8	629	31.1	701	6.18	773	0.707	845	0.104
414	0.827	486	8.42	558	26.1	630	30.7	702	5.99	774	0.693	846	0.101
415	0.942	487	8.60	559	26.4	631	30.2	703	5.82	775	0.675	847	0.0980
416	1.08	488	8.87	560	26.6	632	29.9	704	5.65	776	0.654	848	0.0948
417	1.24	489	9.08	561	27.0	633	29.5	705	5.50	777	0.635	849	0.0981
418	1.39	490	9.30	562	27.3	634	29.1	706	5.35	778	0.616	850	0.0929
419	1.59	491	9.61	563	27.6	635	28.7	707	5.18	779	0.600		
420	1.80	492	9.86	564	27.8	636	28.2	708	5.03	780	0.580		
421	2.05	493	10.1	565	28.1	637	27.8	709	4.88	781	0.564		