



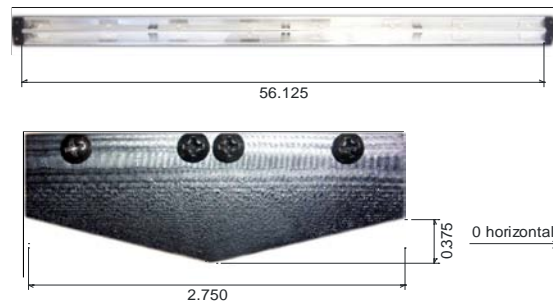
Luminaire Flux and Color Quality Test Report

Test Date: June 8, 2010
LTL Test Number: 19547
Prepared For: Advance Electronic Concepts
Catalog Number: Refrigeration Case Light (RCLF-C-60-3500K)
Luminaire: Extruded aluminum housing with molded plastic endcaps, formed specular patterned reflectors, clear plastic enclosure.

Ballast/Power Supply: One Mean Well PLN-100-36

Measured Luminaire Electrical Values:

Voltage: 120.0 V
Current: 0.1923 A
Watts: 22.18 W
Power Factor: 0.961
Temperature: 24.6 °C



Measured Luminaire Photometric Values:

Radiant Flux: 3730 mW
Luminous Flux: 1146 Lumens
Luminaire Efficacy: 51.7 Lumens per Watt
CCT: 3461 K
CRI (Ra): 83.1
Chromaticity (x): 0.4044
Chromaticity (y): 0.3840
Chromaticity (u'): 0.2379
Chromaticity (v'): 0.5083
Duv: -0.0030

Approved by: *MG*

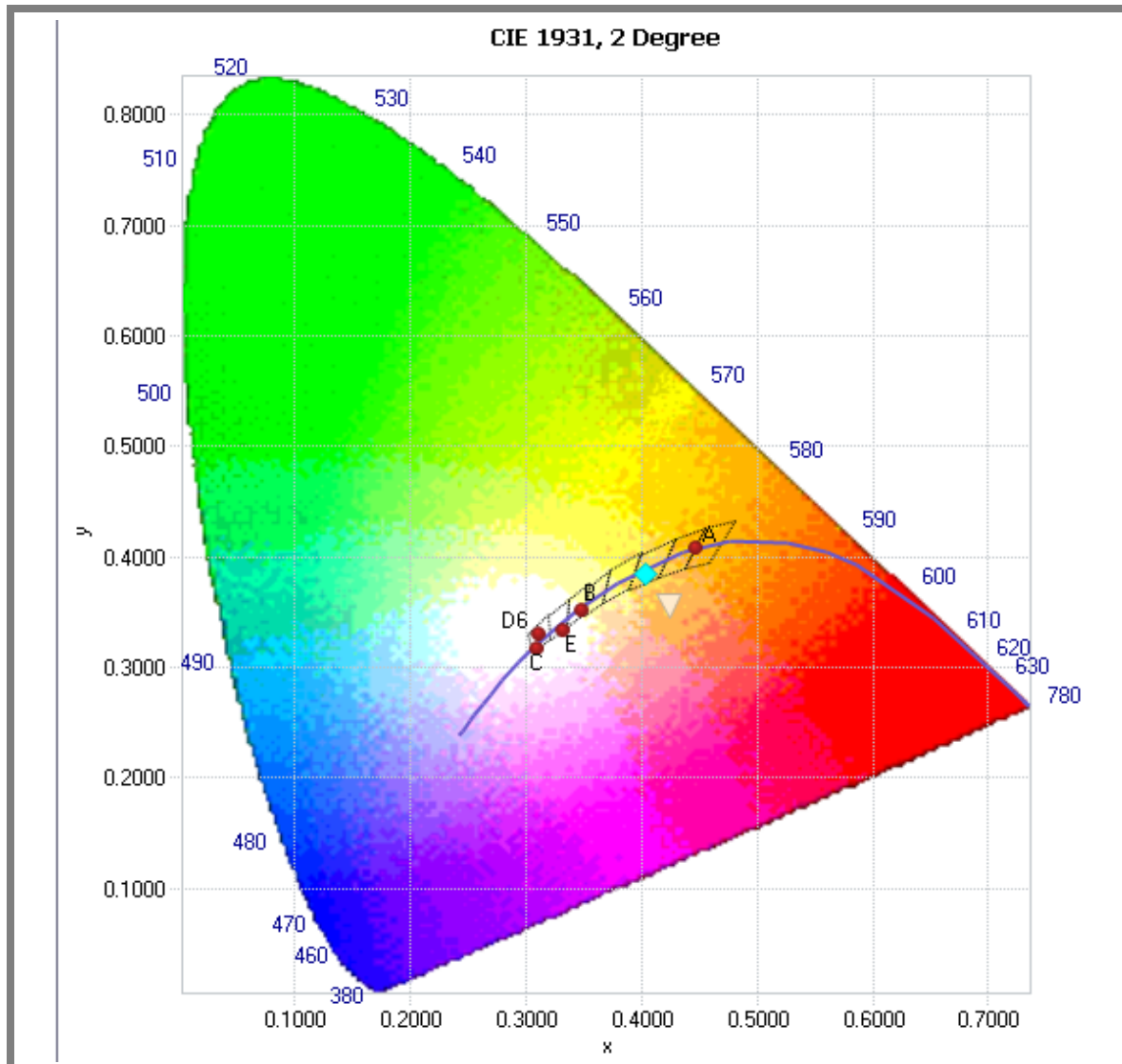
Testing was performed in accordance with IES LM-79-2008



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Chromaticity Coordinates						
x	y	u	v	u'	v'	Duv
0.4044	0.3840	0.2379	0.3389	0.2379	0.5083	-0.0030

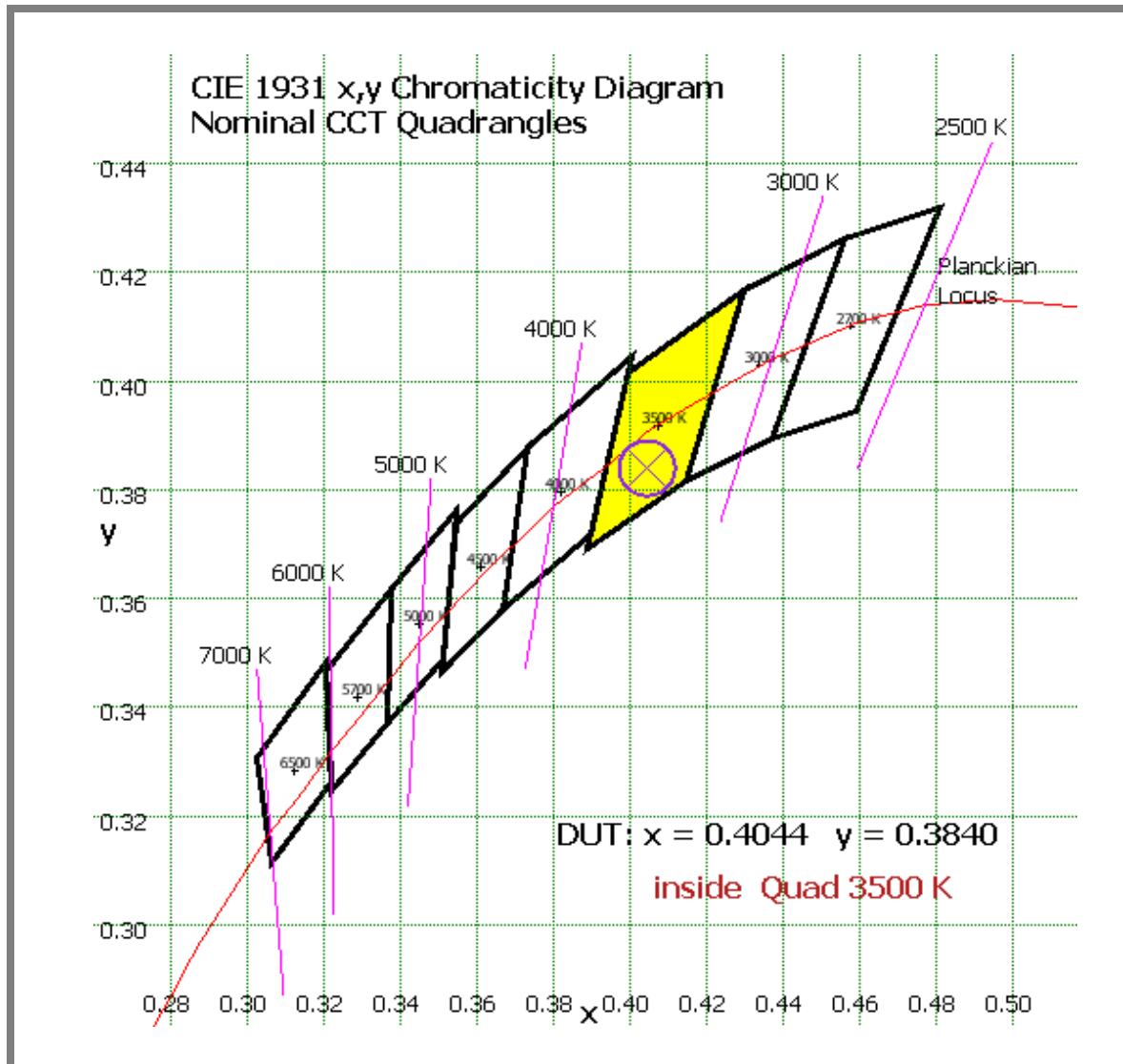




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0.4044	0.3840	0.2379	0.3389	0.2379	0.5083	-0.0030

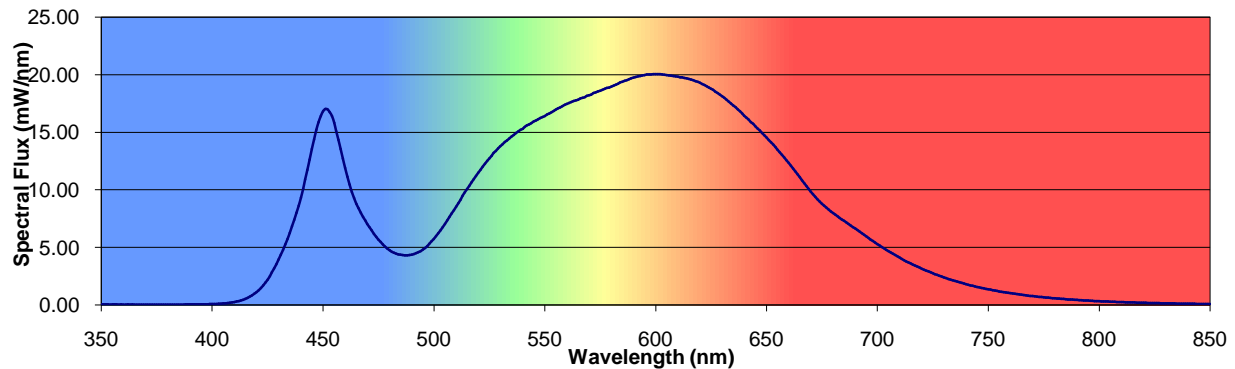




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Spectral Power Distribution									
λ (nm)	mW	λ (nm)	mW	λ (nm)	mW	λ (nm)	mW	λ (nm)	mW
350	0.06	400	0.09	450	16.83	500	5.74	550	16.42
351	0.06	401	0.10	451	17.03	501	5.98	551	16.55
352	0.06	402	0.10	452	16.99	502	6.23	552	16.64
353	0.06	403	0.11	453	16.74	503	6.49	553	16.74
354	0.05	404	0.13	454	16.41	504	6.77	554	16.85
355	0.06	405	0.14	455	15.84	505	7.06	555	16.96
356	0.06	406	0.16	456	15.10	506	7.35	556	17.08
357	0.05	407	0.18	457	14.36	507	7.65	557	17.17
358	0.05	408	0.20	458	13.54	508	7.96	558	17.27
359	0.05	409	0.23	459	12.70	509	8.25	559	17.39
360	0.05	410	0.27	460	11.91	510	8.55	560	17.46
361	0.05	411	0.30	461	11.17	511	8.85	561	17.55
362	0.05	412	0.35	462	10.46	512	9.17	562	17.64
363	0.05	413	0.40	463	9.84	513	9.49	563	17.71
364	0.05	414	0.47	464	9.29	514	9.79	564	17.78
365	0.05	415	0.54	465	8.80	515	10.07	565	17.84
366	0.05	416	0.63	466	8.40	516	10.36	566	17.94
367	0.05	417	0.73	467	8.02	517	10.66	567	18.01
368	0.05	418	0.84	468	7.66	518	10.95	568	18.06
369	0.05	419	0.98	469	7.36	519	11.22	569	18.17
370	0.05	420	1.13	470	7.05	520	11.48	570	18.23
371	0.05	421	1.30	471	6.76	521	11.76	571	18.28
372	0.05	422	1.49	472	6.48	522	12.03	572	18.40
373	0.05	423	1.71	473	6.19	523	12.27	573	18.47
374	0.05	424	1.96	474	5.93	524	12.51	574	18.55
375	0.05	425	2.22	475	5.69	525	12.74	575	18.60
376	0.05	426	2.52	476	5.47	526	12.97	576	18.69
377	0.05	427	2.84	477	5.26	527	13.21	577	18.77
378	0.05	428	3.19	478	5.06	528	13.39	578	18.86
379	0.05	429	3.55	479	4.89	529	13.60	579	18.90
380	0.05	430	3.96	480	4.76	530	13.79	580	18.98
382	0.05	432	4.81	482	4.55	532	14.16	582	19.15
383	0.05	433	5.27	483	4.47	533	14.31	583	19.21
384	0.05	434	5.75	484	4.41	534	14.48	584	19.33
385	0.05	435	6.27	485	4.37	535	14.64	585	19.39
386	0.05	436	6.84	486	4.34	536	14.77	586	19.47
387	0.05	437	7.39	487	4.32	537	14.93	587	19.53
388	0.05	438	8.01	488	4.33	538	15.07	588	19.60
389	0.05	439	8.63	489	4.35	539	15.21	589	19.70
390	0.06	440	9.33	490	4.38	540	15.31	590	19.76
391	0.06	441	10.11	491	4.43	541	15.47	591	19.80
392	0.06	442	10.91	492	4.50	542	15.59	592	19.86
393	0.06	443	11.74	493	4.59	543	15.70	593	19.89
394	0.06	444	12.62	494	4.69	544	15.81	594	19.93
395	0.07	445	13.55	495	4.82	545	15.94	595	19.98
396	0.07	446	14.40	496	4.96	546	16.03	596	20.02
397	0.07	447	15.21	497	5.13	547	16.13	597	20.03
398	0.08	448	15.90	498	5.32	548	16.24	598	20.04
399	0.08	449	16.42	499	5.53	549	16.34	599	20.06





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λ (nm)	mW	λ (nm)	mW	λ (nm)	mW	λ (nm)	mW	λ (nm)	mW	λ (nm)	mW
600	20.05	650	14.56	700	5.30	750	1.37	800	0.34		
601	20.06	651	14.34	701	5.18	751	1.34	801	0.33		
602	20.05	652	14.15	702	5.05	752	1.30	802	0.32		
603	20.03	653	13.94	703	4.93	753	1.26	803	0.31		
604	20.01	654	13.71	704	4.80	754	1.23	804	0.30		
605	19.97	655	13.49	705	4.68	755	1.19	805	0.29		
606	19.95	656	13.28	706	4.56	756	1.16	806	0.29		
607	19.92	657	13.04	707	4.45	757	1.13	807	0.28		
608	19.87	658	12.82	708	4.34	758	1.10	808	0.27		
609	19.85	659	12.59	709	4.23	759	1.06	809	0.26		
610	19.83	660	12.35	710	4.11	760	1.03	810	0.26		
611	19.79	661	12.11	711	4.01	761	1.01	811	0.25		
612	19.77	662	11.85	712	3.91	762	0.98	812	0.24		
613	19.72	663	11.61	713	3.80	763	0.95	813	0.24		
614	19.68	664	11.35	714	3.71	764	0.92	814	0.23		
615	19.64	665	11.10	715	3.61	765	0.90	815	0.23		
616	19.58	666	10.83	716	3.52	766	0.87	816	0.22		
617	19.54	667	10.59	717	3.43	767	0.85	817	0.21		
618	19.45	668	10.34	718	3.34	768	0.82	818	0.21		
619	19.39	669	10.09	719	3.25	769	0.80	819	0.20		
620	19.30	670	9.85	720	3.16	770	0.78	820	0.20		
621	19.19	671	9.62	721	3.08	771	0.76	821	0.19		
622	19.12	672	9.40	722	2.99	772	0.74	822	0.19		
623	18.99	673	9.19	723	2.92	773	0.72	823	0.18		
624	18.89	674	8.99	724	2.84	774	0.70	824	0.18		
625	18.79	675	8.80	725	2.76	775	0.68	825	0.17		
626	18.68	676	8.62	726	2.68	776	0.66	826	0.17		
627	18.54	677	8.45	727	2.61	777	0.64	827	0.16		
628	18.41	678	8.29	728	2.54	778	0.62	828	0.16		
629	18.28	679	8.14	729	2.47	779	0.60	829	0.16		
630	18.15	680	8.00	730	2.40	780	0.59	830	0.15		
632	17.82	682	7.71	732	2.27	782	0.56	832	0.14		
633	17.67	683	7.58	733	2.21	783	0.54	833	0.14		
634	17.51	684	7.44	734	2.15	784	0.53	834	0.14		
635	17.33	685	7.31	735	2.09	785	0.51	835	0.13		
636	17.18	686	7.18	736	2.03	786	0.50	836	0.13		
637	17.00	687	7.05	737	1.98	787	0.48	837	0.13		
638	16.84	688	6.92	738	1.92	788	0.47	838	0.12		
639	16.64	689	6.78	739	1.87	789	0.46	839	0.12		
640	16.44	690	6.65	740	1.82	790	0.45	840	0.12		
641	16.27	691	6.52	741	1.76	791	0.43	841	0.12		
642	16.10	692	6.38	742	1.72	792	0.42	842	0.11		
643	15.89	693	6.24	743	1.67	793	0.41	843	0.11		
644	15.74	694	6.10	744	1.62	794	0.40	844	0.11		
645	15.53	695	5.97	745	1.58	795	0.39	845	0.11		
646	15.33	696	5.83	746	1.53	796	0.38	846	0.10		
647	15.16	697	5.69	747	1.50	797	0.37	847	0.10		
648	14.95	698	5.57	748	1.45	798	0.36	848	0.10		
649	14.76	699	5.44	749	1.41	799	0.35	849	0.09		
								850	0.09		



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Color Rendering Index Detail								
R1	R2	R3	R4	R5	R6	R7	R8	Ra (CRI)
82.7	87.9	89.9	81.9	81.0	81.7	88.1	71.7	83.1

Color Rendering Index Detail (Expanded)								
R9	R10	R11	R12	R13	R14			
29.0	68.9	78.2	59.6	83.6	93.6			

Testing was performed in the LTL two-meter integrating sphere (Labsphere model SLMS7650) using a Labsphere model CDS1100 spectrometer and LightMtrX software.

Testing was performed using the 4π geometry method of measurement.

Absorption correction was employed for this measurement.

Electrical power was supplied to the device under test using a regulated power supply.

The device under test was allowed to reach stability according to appropriate IES standards prior to measurement.