



Report of Test

LLIA001574-009A-R01*

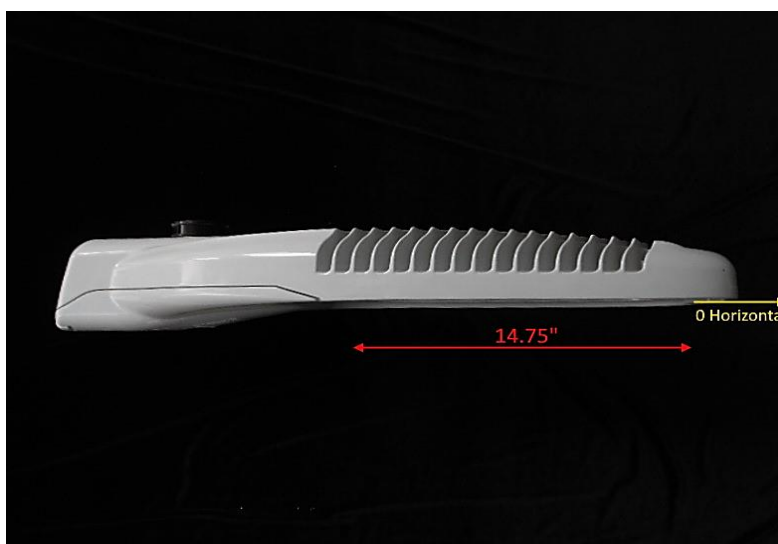
Roadway/Area Light Distribution Photometry Test Report

Catalog Number: NXT-60M-5-X-2ES-7-XX-4-XX-X-XX-X

Pole/arm mounted, grey painted cast aluminum housing and door/driver compartment cover, two circuit boards, two clear plastic lenses with optic below each LED and clear flat glass enclosure.

60 white LEDs

Osram Optotronic OT180/UNV/800C/2DIM/P6 LED driver labeled as 700mA, WH91-5U1-03 surge suppressor



Prepared For:
LED Roadway Lighting
84 Chain Lake Drive
Suite 403
Halifax, Nova Scotia B3S 1A2, Canada

Performance Summary			
Input Voltage	120.0 V	Luminous Flux	16097.8 Lumens
Input Current	1.136 A	Total Efficacy	118.7 Lm/W
Input Power	135.6 W		
Frequency	60.00 Hz	Roadway Throw	Medium
Power Factor	0.995	Roadway Type	Type II
Current THD	4.6 %	IES BUG Rating	B3 - U0 - G3

*This test report supersedes test report LLIA001574-009A

This test report was issued by LightLab International Allentown, LLC without alterations or erasures.

Test date: 11/05/2021

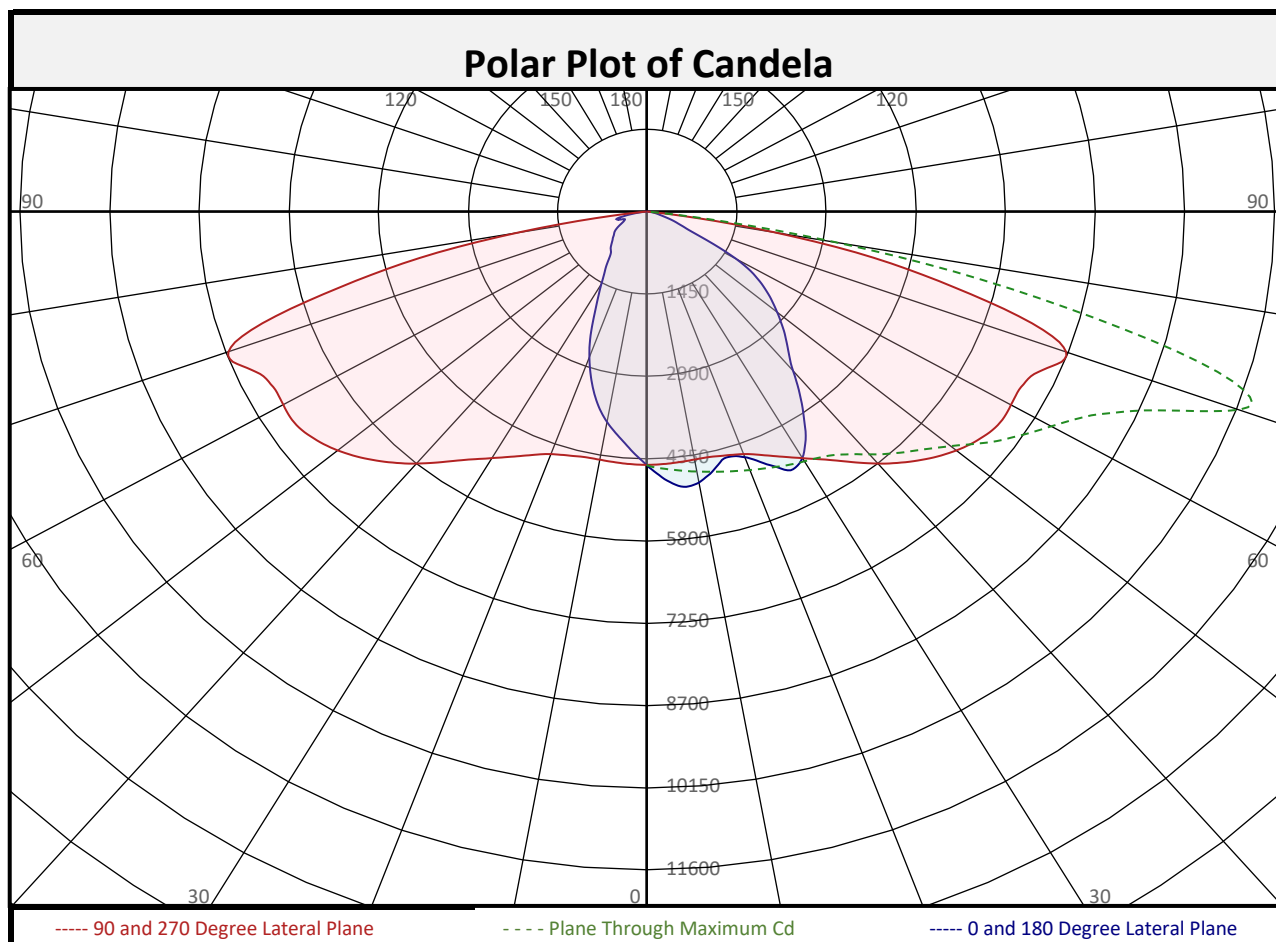
Report date: 11/11/2021

Signed: _____



Report of Test

LLIA001574-009A-R01

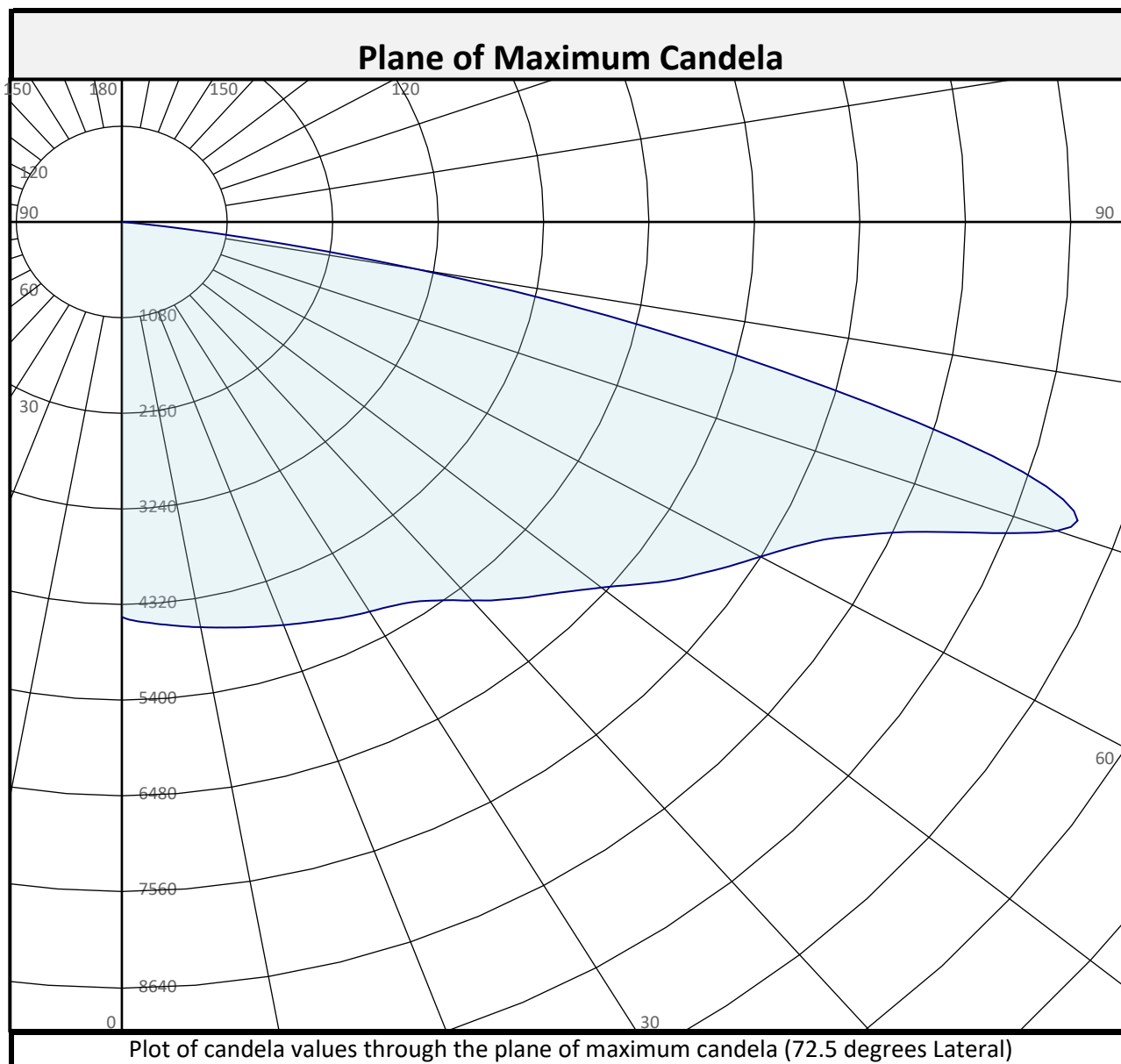


Zonal Flux Summary										
Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total
0-10	423.1	2.6%		90-100	0.0	0.0%		0-20	1615	10.0%
10-20	1192	7.4%		100-110	0.0	0.0%		0-30	3460	21.5%
20-30	1845	11.5%		110-120	0.0	0.0%		0-40	5852	36.4%
30-40	2391	14.9%		120-130	0.0	0.0%		0-60	11558	71.8%
40-50	2755	17.1%		130-140	0.0	0.0%		0-80	15967	99.2%
50-60	2951	18.3%		140-150	0.0	0.0%		10-90	15675	97.4%
60-70	2753	17.1%		150-160	0.0	0.0%		20-50	6992	43.4%
70-80	1656	10.3%		160-170	0.0	0.0%		40-90	10246	63.6%
80-90	130.6	0.8%		170-180	0.0	0.0%		60-90	4540	28.2%
0-90	16098	100.0%		90-180	0.0	0.0%		0-180	16098	100.0%



Report of Test

LLIA001574-009A-R01

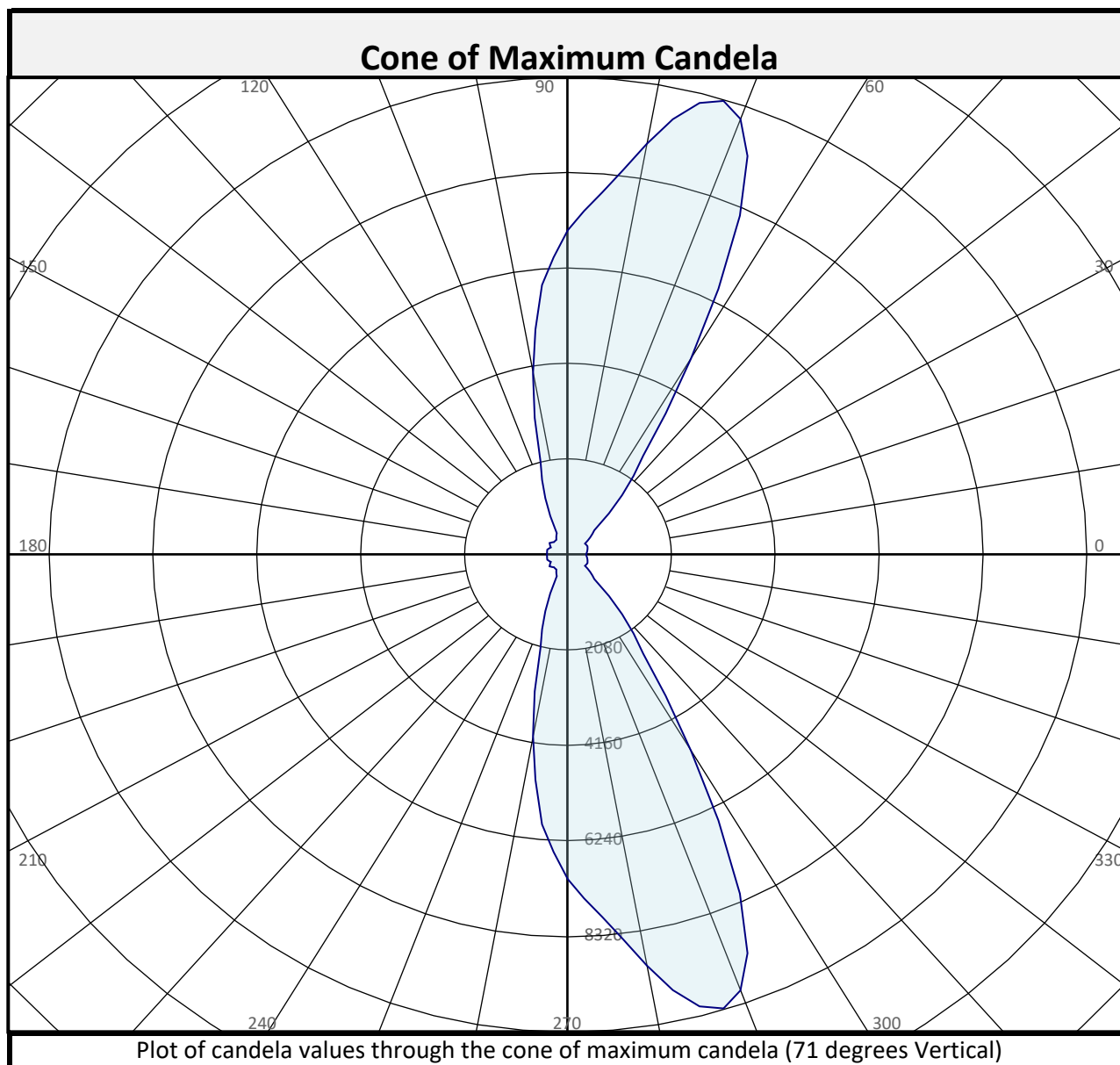


Street and House Side Flux Summary						
	Downward		Upward		Total	
	Lumens	% of Total	Lumens	% of Total	Lumens	% of Total
Street Side	10720.6	66.6%	0.0	0.0%	10720.6	66.6%
House Side	5377.3	33.4%	0.0	0.0%	5377.3	33.4%
Total	16097.8	100.0%	0.0	0.0%	16097.8	100.0%



Report of Test

LLIA001574-009A-R01

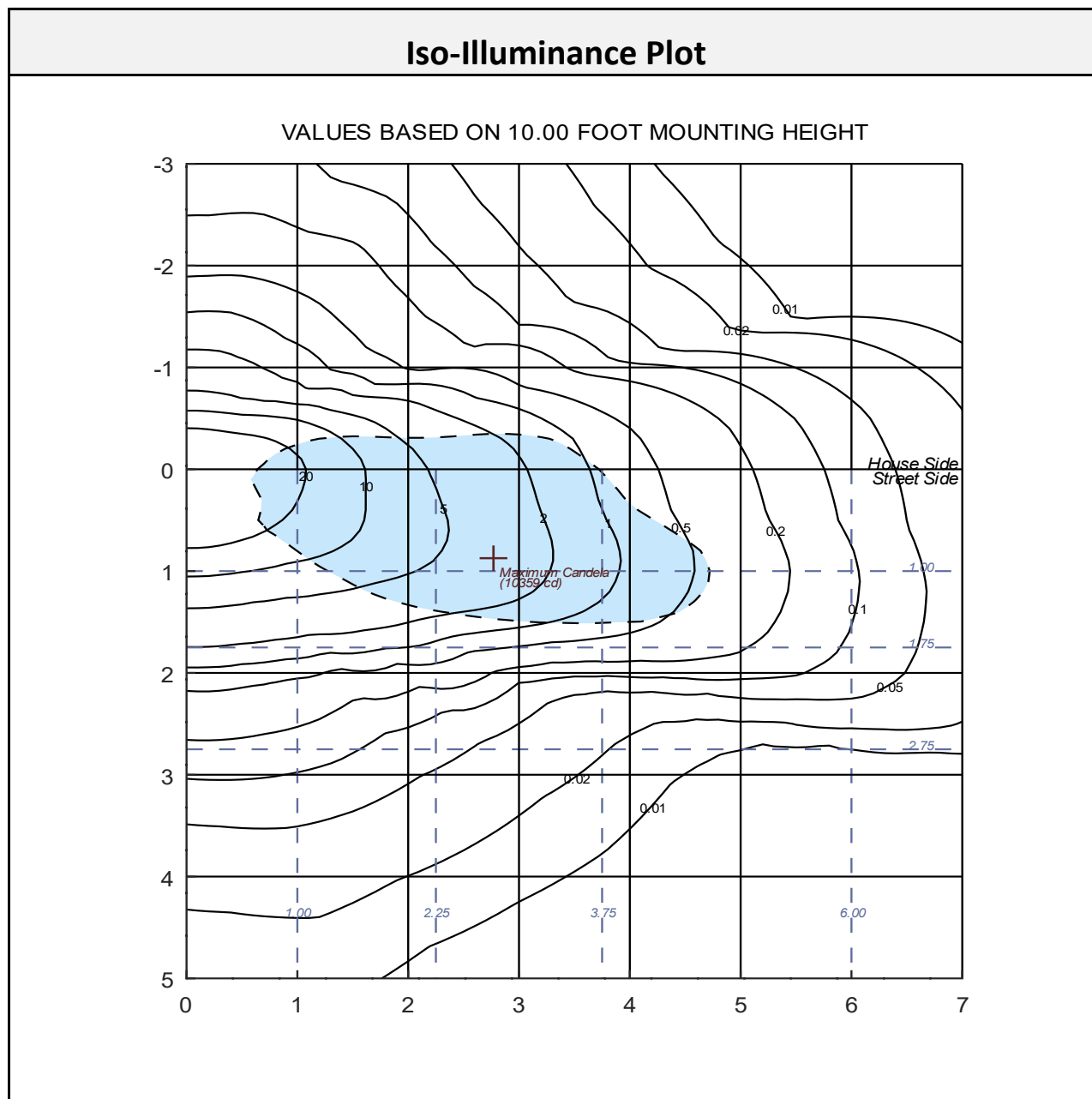


Street and House Side Flux Summary						
	Downward		Upward		Total	
	Lumens	% of Total	Lumens	% of Total	Lumens	% of Total
Street Side	10720.6	66.6%	0.0	0.0%	10720.6	66.6%
House Side	5377.3	33.4%	0.0	0.0%	5377.3	33.4%
Total	16097.8	100.0%	0.0	0.0%	16097.8	100.0%



Report of Test

LLIA001574-009A-R01



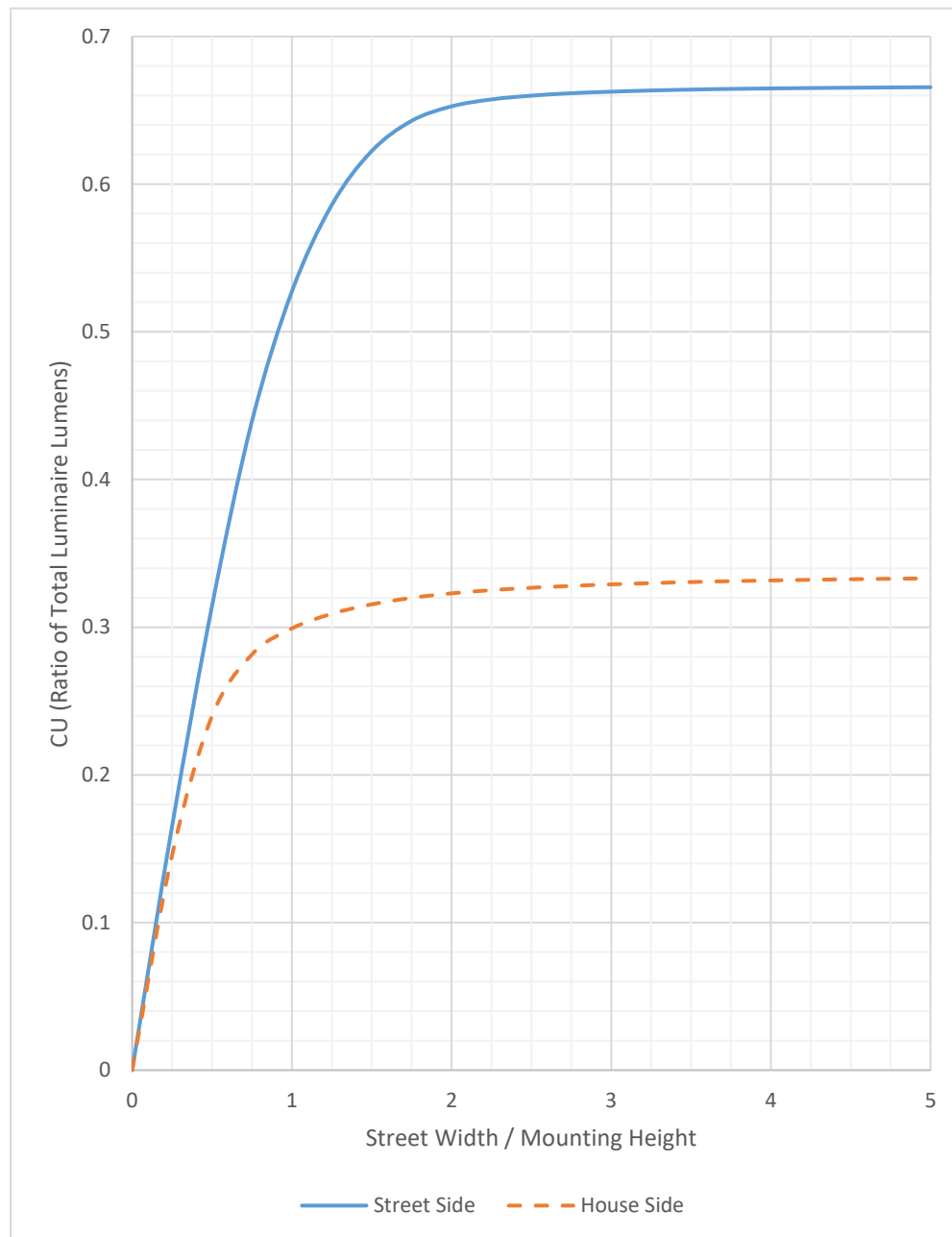
The isofootcandle values shown in the plot above are based on a mounting height of $h = 10.0$ feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the contribution of room reflections.



Report of Test

LLIA001574-009A-R01

Coefficients of Utilization Plot

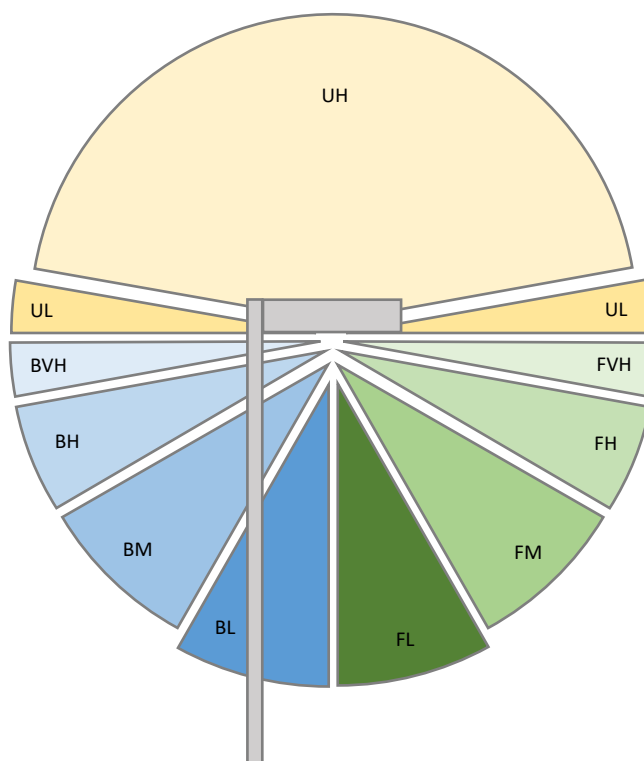




Report of Test

LLIA001574-009A-R01

LCS Tables and Bug Classification



Back Light

BL - Back Low (0°-30°)	1461.7 Lm
BM - Back Mid (30°-60°)	2662.3 Lm
BH - Back High (60°-80°)	1210.4 Lm
BVH - Back Very High (80°-90°)	42.8 Lm

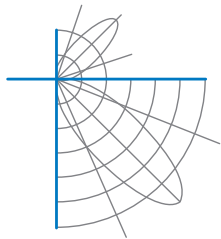
Uplight

UL - Upward Low (90°-100°)	0.0 Lm
UH - Upward High (100°-180°)	0.0 Lm

Forward Light

FL - Forward Low (0°-30°)	1998.4 Lm
FM - Forward Mid (30°-60°)	5435.3 Lm
FH - Forward High (60°-80°)	3199.2 Lm
FVH - Forward Very High (80°-90°)	87.8 Lm

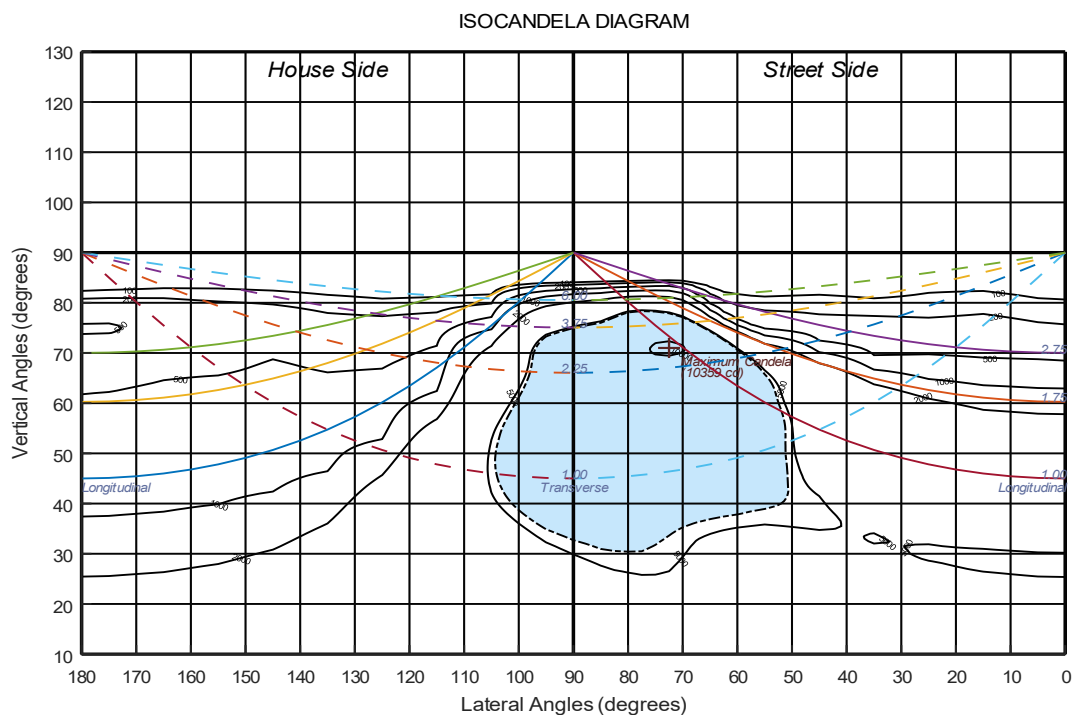
BUG Ratings: B3 - U0 - G3



Report of Test

LLIA001574-009A-R01

Iso-Candela Plot



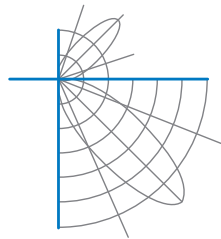


Report of Test

LLIA001574-009A-R01

Luminous Intensity (Candela) Table

		Lateral (C-Plane) Angles														
		0	5	15	25	35	45	55	57.5	60	62.5	65	67.5	70	72.5	75
Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	0	4460	4460	4460	4460	4460	4460	4460	4460	4460	4460	4460	4460	4460	4460	4460
	2.5	4647	4647	4646	4627	4611	4590	4561	4555	4550	4536	4538	4527	4524	4520	4510
	5	4807	4803	4798	4772	4747	4712	4657	4647	4632	4613	4605	4584	4574	4561	4541
	7.5	4890	4888	4885	4865	4841	4799	4736	4727	4707	4688	4671	4646	4625	4603	4577
	10	4848	4849	4853	4857	4860	4849	4803	4789	4766	4747	4726	4701	4675	4646	4617
	12.5	4731	4732	4740	4764	4803	4834	4836	4824	4813	4797	4776	4750	4719	4691	4655
	15	4574	4574	4594	4631	4689	4764	4830	4831	4834	4824	4814	4802	4770	4740	4707
	17.5	4524	4521	4505	4505	4561	4657	4774	4798	4818	4835	4836	4833	4818	4789	4759
	20	4604	4597	4559	4507	4484	4556	4699	4738	4772	4811	4837	4858	4855	4845	4823
	22.5	4771	4763	4692	4598	4509	4504	4636	4680	4729	4776	4824	4868	4889	4899	4894
	25	4966	4957	4886	4762	4607	4528	4604	4648	4704	4762	4819	4879	4923	4957	4972
	27.5	5115	5116	5080	4923	4757	4608	4620	4656	4711	4772	4835	4904	4962	5022	5054
	30	5015	5021	5058	5052	4899	4738	4698	4719	4760	4809	4871	4945	5013	5080	5129
	32.5	4769	4778	4863	4966	5013	4886	4805	4822	4850	4886	4938	4996	5070	5144	5203
	35	4415	4430	4568	4742	4969	5013	4950	4966	4986	5018	5057	5103	5166	5236	5308
	37.5	4053	4083	4235	4462	4808	5089	5104	5123	5157	5185	5221	5261	5322	5385	5457
	40	3676	3703	3899	4165	4581	5051	5235	5271	5313	5358	5396	5450	5511	5580	5656
	42.5	3391	3411	3583	3884	4336	4952	5354	5417	5471	5540	5607	5656	5715	5782	5843
	45	3173	3189	3336	3637	4130	4816	5443	5544	5637	5721	5815	5879	5927	5977	6031
	47.5	2958	2975	3108	3415	3968	4680	5522	5682	5819	5927	6029	6105	6148	6182	6212
	50	2739	2752	2877	3189	3786	4542	5576	5813	5995	6143	6260	6348	6400	6422	6434
	52.5	2527	2541	2649	2941	3553	4418	5648	5948	6194	6382	6526	6629	6690	6714	6699
	55	2297	2310	2419	2708	3295	4323	5698	6055	6366	6607	6790	6915	6990	7012	6979
	57.5	2038	2049	2154	2471	3025	4189	5678	6077	6444	6765	7016	7186	7274	7283	7227
	60	1661	1690	1803	2155	2734	3974	5593	6055	6503	6906	7220	7435	7551	7559	7480
	62.5	1094	1115	1246	1626	2332	3746	5507	6035	6571	7043	7416	7684	7849	7882	7789
	65	703	725	757	955	1579	3281	5307	5978	6696	7289	7752	8070	8276	8372	8307
	67.5	546	564	577	627	779	2224	4709	5558	6540	7512	8276	8788	9033	9151	9155
	70	424	435	457	486	474	1055	3378	4377	5597	7053	8422	9398	9976	10198	10079
	72.5	293	306	340	368	357	497	1551	2430	3659	5274	7116	8676	9600	9935	9805
	75	213	223	261	270	271	305	470	734	1366	2560	4380	6113	7350	7965	8105
	77.5	163	170	207	187	196	205	249	277	351	722	1714	3434	4821	5564	5916
	80	114	119	158	126	123	144	140	151	174	229	464	1255	2469	3075	3304
	82.5	63	68	97	92	65	74	67	69	74	86	139	305	698	947	982
	85	24	26	37	34	24	22	21	21	22	23	27	30	36	34	31
	87.5	3	3	4	4	4	4	5	6	6	6	7	7	7	8	8
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Report of Test

LLIA001574-009A-R01

Luminous Intensity (Candela) Table

		Lateral (C-Plane) Angles														
		77.5	80	82.5	85	90	95	105	115	125	135	145	155	165	175	180
Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	0	4460	4460	4460	4460	4460	4460	4460	4460	4460	4460	4460	4460	4460	4460	4460
	2.5	4501	4495	4490	4477	4454	4442	4407	4374	4345	4324	4303	4291	4283	4280	4280
	5	4525	4513	4500	4483	4448	4419	4351	4296	4244	4201	4155	4128	4111	4100	4093
	7.5	4553	4529	4509	4489	4439	4392	4297	4213	4132	4069	4012	3973	3949	3931	3928
	10	4587	4555	4527	4503	4432	4367	4251	4132	4030	3948	3876	3825	3793	3764	3759
	12.5	4624	4586	4552	4520	4433	4354	4210	4060	3935	3832	3739	3661	3608	3568	3563
	15	4668	4631	4593	4554	4456	4363	4183	4004	3849	3713	3580	3466	3385	3334	3325
	17.5	4718	4680	4638	4598	4491	4387	4174	3963	3766	3575	3395	3235	3125	3063	3052
	20	4784	4743	4702	4660	4542	4429	4180	3934	3681	3424	3183	2979	2840	2766	2756
	22.5	4866	4837	4793	4747	4628	4500	4211	3915	3588	3251	2945	2704	2538	2447	2432
	25	4966	4946	4911	4865	4741	4599	4272	3905	3489	3061	2695	2397	2188	2081	2064
	27.5	5068	5054	5037	4993	4868	4719	4353	3908	3381	2859	2410	2060	1856	1766	1752
	30	5161	5162	5153	5126	5009	4857	4449	3918	3266	2637	2099	1765	1594	1517	1506
	32.5	5255	5272	5277	5267	5166	5015	4561	3930	3142	2378	1815	1530	1378	1311	1301
	35	5372	5411	5423	5431	5348	5189	4676	3933	3008	2107	1581	1326	1211	1161	1152
	37.5	5530	5584	5608	5624	5565	5396	4797	3921	2845	1857	1370	1150	1049	1002	995
	40	5726	5778	5813	5833	5788	5611	4919	3892	2644	1618	1167	993	937	917	914
	42.5	5903	5952	5996	6024	6000	5811	5012	3837	2400	1372	993	912	890	878	877
	45	6076	6121	6158	6196	6197	5988	5077	3740	2090	1122	893	863	843	825	823
	47.5	6249	6292	6327	6367	6380	6132	5107	3569	1733	934	832	813	792	770	767
	50	6445	6466	6499	6532	6541	6265	5090	3293	1366	849	780	761	755	734	727
	52.5	6674	6657	6664	6683	6672	6365	5010	2899	1035	798	731	722	759	702	681
	55	6905	6847	6814	6813	6773	6413	4878	2395	827	752	684	692	729	675	650
	57.5	7125	7017	6941	6914	6821	6377	4644	1854	718	700	637	656	670	626	609
	60	7348	7186	7054	6986	6804	6267	4333	1357	650	642	604	623	616	565	549
	62.5	7624	7417	7224	7094	6790	6131	3925	991	592	583	590	578	552	491	479
	65	8117	7851	7581	7363	6858	6028	3446	769	543	527	560	515	491	434	424
	67.5	8961	8604	8212	7850	7102	6007	2902	641	483	469	525	449	452	397	392
	70	9724	9186	8613	8108	7220	6010	2337	551	418	413	471	392	425	395	390
	72.5	9280	8561	7855	7305	6535	5511	1700	454	359	352	398	355	435	470	477
	75	7822	7145	6358	5785	5152	4318	922	328	282	286	339	331	453	514	516
	77.5	5952	5607	4928	4302	3767	3050	452	223	194	213	276	310	397	412	404
	80	3375	3290	2913	2445	2084	1632	189	133	121	144	188	213	248	255	248
	82.5	942	883	788	655	580	452	67	63	60	74	98	112	121	104	92
	85	26	24	24	23	22	21	19	18	18	20	28	37	24	7	3
	87.5	8	8	8	8	8	7	6	5	4	3	3	2	1	1	1
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Report of Test

LLIA001574-009A-R01

Luminous Intensity (Candela) Table

		Lateral (C-Plane) Angles														
		0	5	15	25	35	45	55	57.5	60	62.5	65	67.5	70	72.5	75
Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	92.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	97.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	102.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	107.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	112.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	117.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	122.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	127.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	132.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	137.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	142.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	147.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	152.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	157.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	162.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	167.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	172.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	177.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Report of Test

LLIA001574-009A-R01

Luminous Intensity (Candela) Table

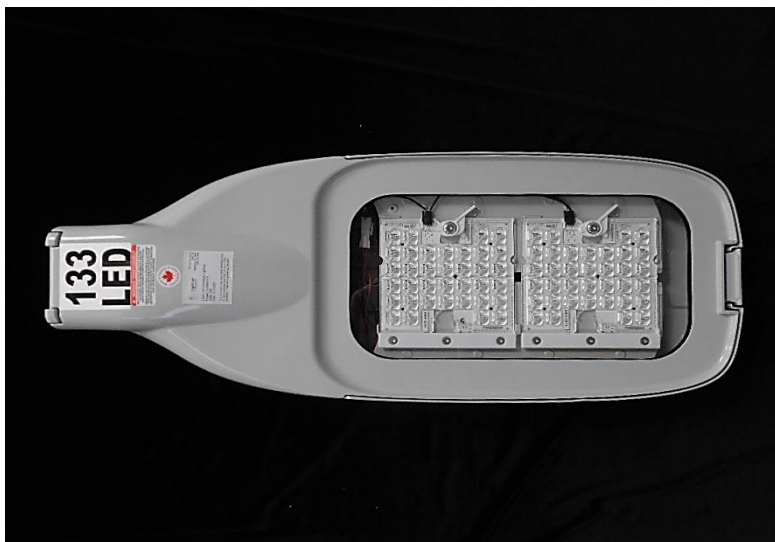
		Lateral (C-Plane) Angles														
		77.5	80	82.5	85	90	95	105	115	125	135	145	155	165	175	180
Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	92.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	97.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	102.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	107.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	112.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	117.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	122.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	127.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	132.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	137.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	142.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	147.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	152.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	157.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	162.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	167.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	172.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	177.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Report of Test

LLIA001574-009A-R01

Additional Pictures of Test Subject





Report of Test

LLIA001574-009A-R01

Test Distance 9.5 m
Ambient Temperature 25.2 °C

Notes

The laboratory has not participated in the selection of samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units.

Tested in accordance with the applicable sections of publications: IES LM-79-19. Format of reports and angular increments based on IES LM-31-95 and LM-10-96.

The device under test emits no detectable uplight, as defined by ANSI/IES LM-31-20. For the purpose of this report, certain non-zero uplight readings, attributable to instrument artifacts, have been assigned a zero value.

The luminous intensity values, and other derived quantities, contained in this report are based on absolute data.

Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

This report is free of erasures and corrections.

Photometric intensity values are reported using the IES C-Type spherical coordinate system as defined in IES LM-75-01.

This report may contain data that are not covered by the NVLAP accreditation. Quantities marked with ‡ are not covered.

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Revision

R01 - 11/11/2021 - Revised Catalog Number and quantity of LEDs



Report of Test

LLIA001574-009B-R01*

Integrating Sphere Report

Catalog Number: NXT-60M-5-X-2ES-7-XX-4-XX-X-XX-X

Pole/arm mounted, grey painted cast aluminum housing and door/driver compartment cover, two circuit boards, two clear plastic lenses with optic below each LED and clear flat glass enclosure.

60 white LEDs

Osram Optotronic OT180/UNV/800C/2DIM/P6 LED driver labeled as 700mA, WH91-5U1-03 surge suppressor



Performance Summary

Voltage	120.0 Vac
Current	1.133 A
Power	135.6 W
Frequency	59.99 Hz
Power Factor	0.997
Current THD	4.6 %
Total Luminous Flux	16087.4 lm
Efficacy	118.6 lm/W
Chromaticity (x,y)	(0.4310, 0.4061)
(u',v')	(0.2459, 0.5213)
Duv	0.0017
CCT	3119 K
CRI (Ra)	73
R9	-27
TM-30: Rf	72
TM-30: Rg	96
TM-30: Rcs,h1	-15

Prepared For:

LED Roadway Lighting

84 Chain Lake Drive

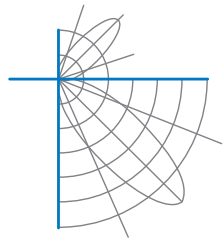
Suite 403

Halifax, Nova Scotia B3S 1A2, Canada

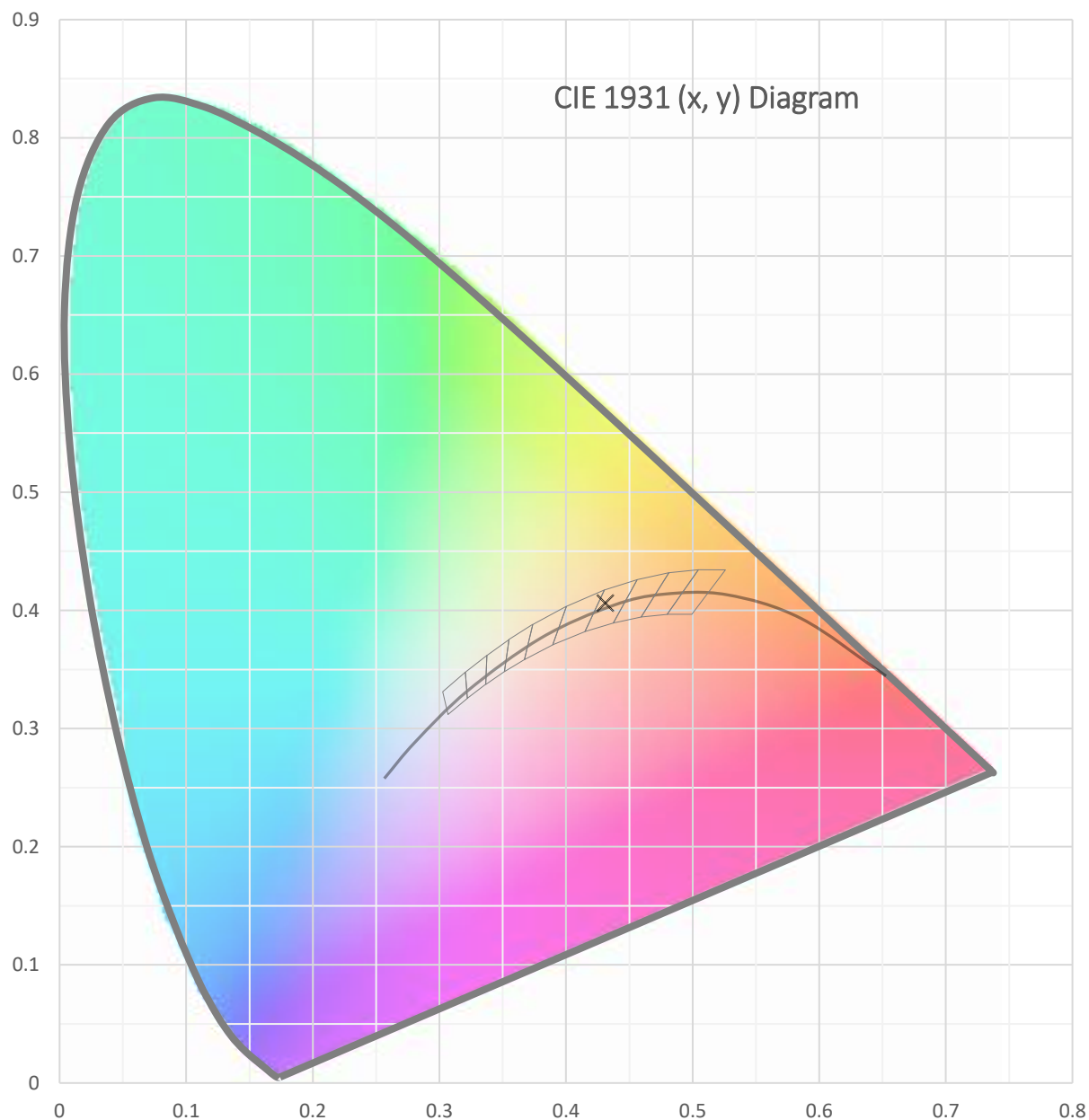
*This test report supersedes test report LLIA001574-009B

Test date: 11/05/2021

Report date: 11/11/2021

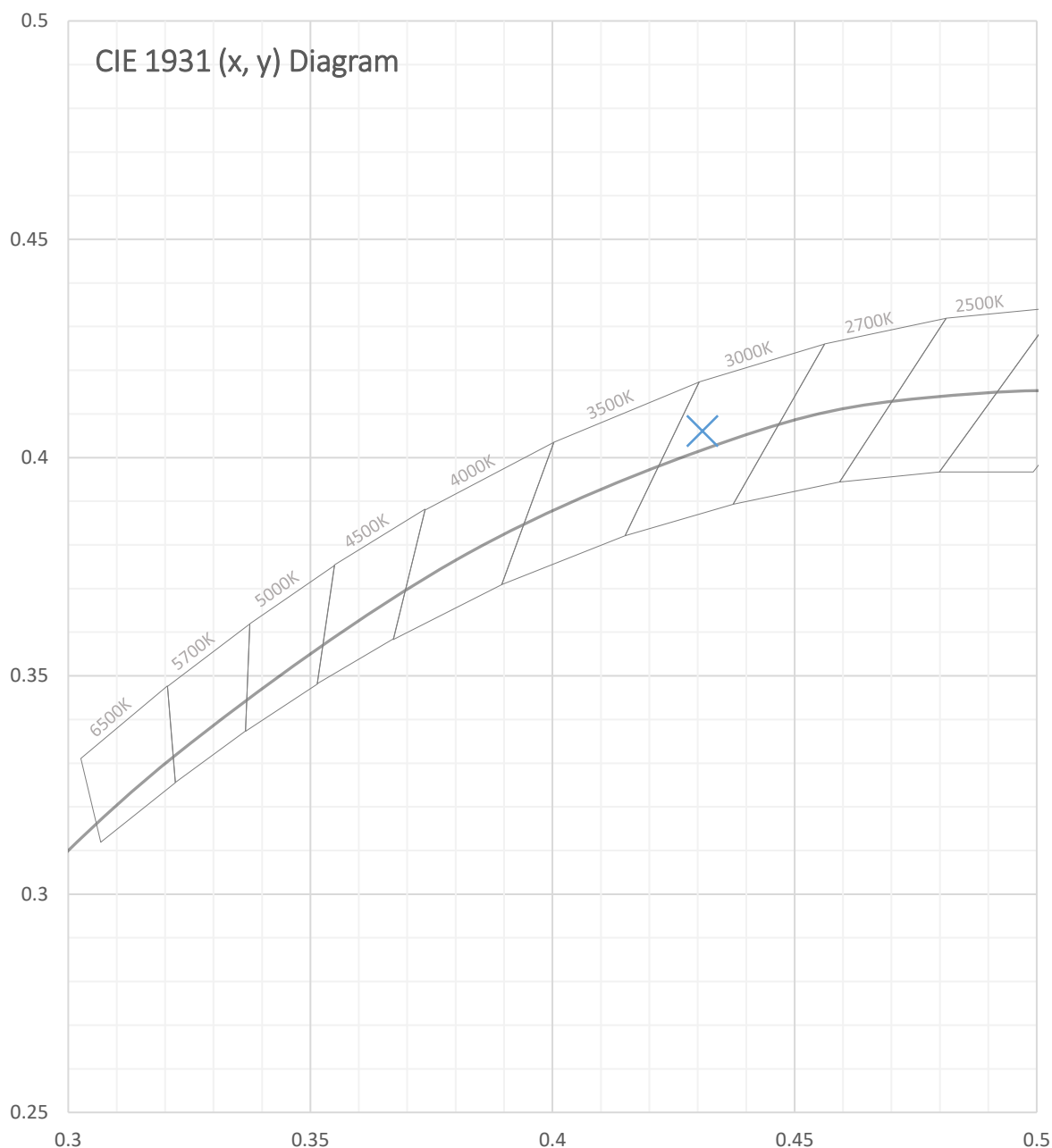


Test Report Number: LLIA001574-009B-R01





Test Report Number: LLIA001574-009B-R01





Test Report Number: LLIA001574-009B-R01

Total Radiant Flux	46.28 W
Total Luminous Flux	16087.4 Lm
Chromaticity CIE 1931 (x, y)	(0.4310, 0.4061)
Chromaticity CIE 1976 (u', v')	(0.2459, 0.5213)
Correlated Color Temperature (CCT)	3119 K
Color Rendering Index (Ra)	73
R1	70
R2	81
R3	91
R4	71
R5	69
R6	73
R7	80
R8	48
R9	-27
R10	55
R11	67
R12	49
R13	71
R14	95
TM-30: Rf	72
TM-30: Rg	96
TM-30: Rcs,h1	-15
Distance from Planckian Locus (Duv)	0.0017
Scotopic/Photopic Ratio $\frac{V(\lambda)}{V_m(\lambda)}$	1.231

Electrical Data

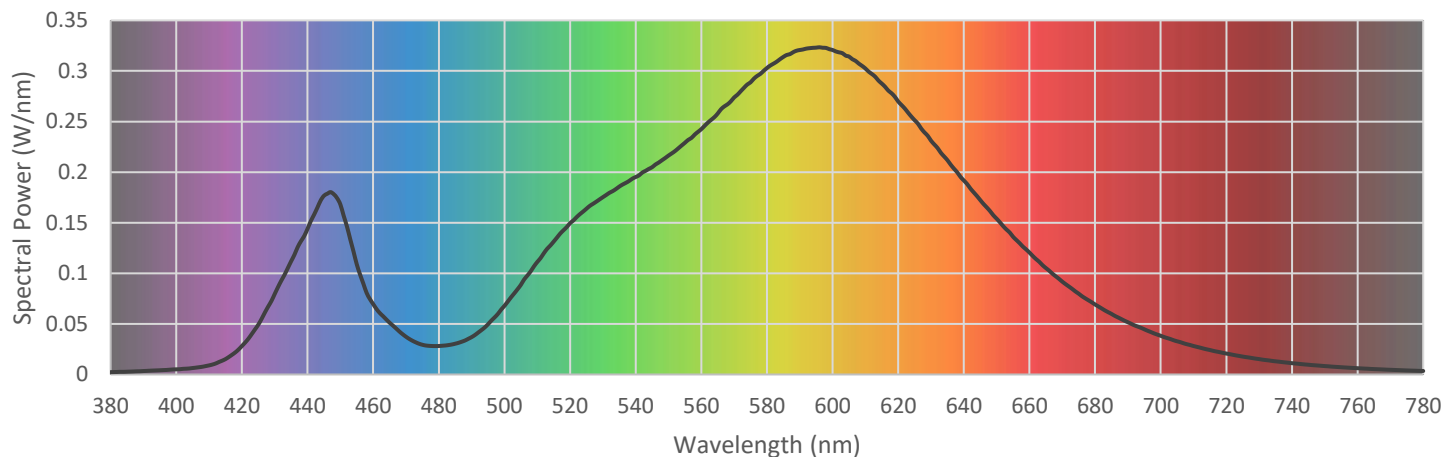
Voltage	120.0 Vac
Current	1.133 A
Power	135.6 W
Frequency	59.99 Hz
Power Factor	0.997
Current THD	4.6 %



Test Report Number: LLIA001574-009B-R01

Summary Spectral Power Distribution (wavelength - nm, spectral power - W/nm)

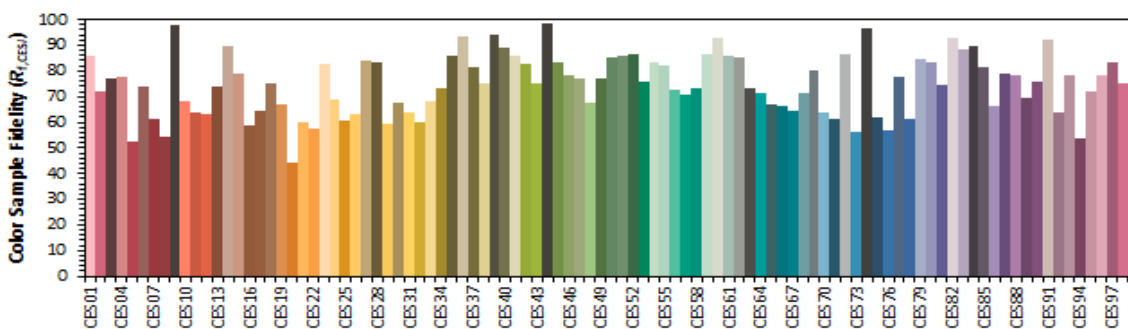
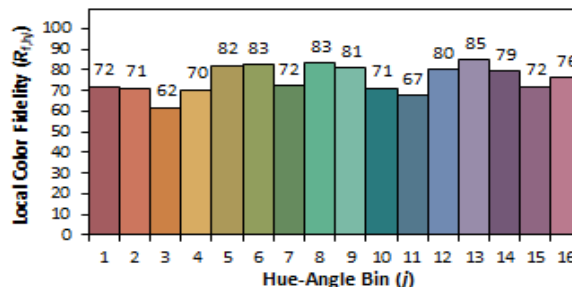
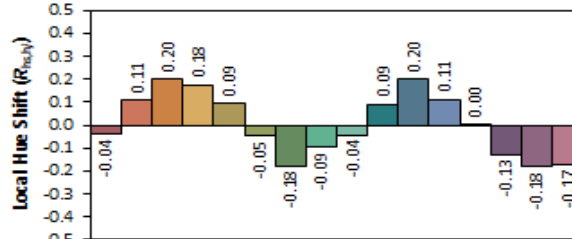
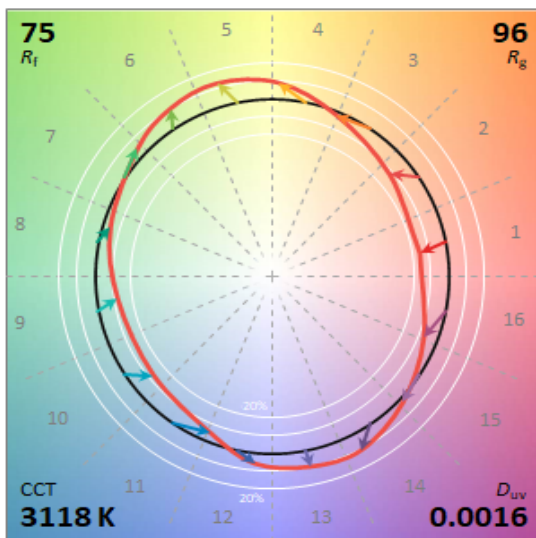
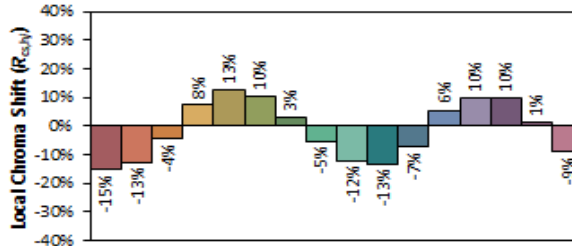
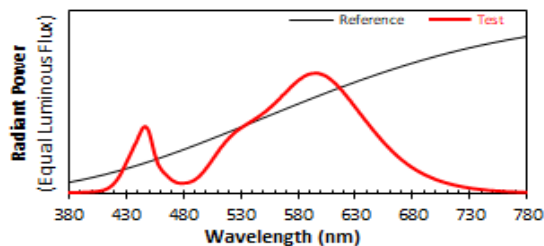
380	0.002322	480	0.028129	580	0.302895	680	0.069153
385	0.002733	485	0.030401	585	0.313877	685	0.059854
390	0.003387	490	0.036925	590	0.320677	690	0.051633
395	0.004162	495	0.049660	595	0.323034	695	0.044631
400	0.005074	500	0.067808	600	0.320720	700	0.038243
405	0.006372	505	0.088593	605	0.314240	705	0.032791
410	0.008982	510	0.111144	610	0.302455	710	0.028118
415	0.015212	515	0.131317	615	0.287515	715	0.024152
420	0.028120	520	0.149538	620	0.269793	720	0.020667
425	0.049282	525	0.163870	625	0.251334	725	0.017667
430	0.079608	530	0.175237	630	0.231096	730	0.015209
435	0.111936	535	0.185705	635	0.211794	735	0.012996
440	0.144057	540	0.195185	640	0.191722	740	0.011142
445	0.176678	545	0.204836	645	0.172400	745	0.009609
450	0.168051	550	0.216367	650	0.153982	750	0.008305
455	0.108839	555	0.229013	655	0.136096	755	0.007163
460	0.069554	560	0.242487	660	0.120491	760	0.006195
465	0.051162	565	0.257929	665	0.105217	765	0.005327
470	0.037284	570	0.273810	670	0.091757	770	0.004616
475	0.029345	575	0.288753	675	0.079857	775	0.003980
						780	0.003454





Test Report Number: LLIA001574-009B-R01

IES TM-30 Details



Notes:

x 0.4310
y 0.4060
u' 0.2459
v' 0.5212

CIE 13.3-1995
(CRI)

R_a 73
R_g -28

Test Report Number: LLIA001574-009B-R01

Test Equipment Configuration: LightLab International Allentown 2m Integrating Sphere
Measurements acquired using a Labsphere CDS 2600 spectroradiometer
Testing was performed using 4π geometry

Test Temperature: 24.7 °C

Test Procedure: Tested in accordance with the applicable sections of:
LM-79-19, LM-78-07, LM-58-13, ANSI/ANSI C78.377-2017, TM-30-18

Significance: The laboratory has not participated in the selection of samples to be tested.
All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units.

Notes: The measurements and other derived quantities contained in this report are based on the absolute data as measured.

Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

This report is free of erasures and corrections

This report may contain data that are not covered by the NVLAP accreditation. Quantities marked with ‡ are not covered.

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Revision: R01 - 11/11/2021 - Revised Catalog Number and quantity of LEDs

Sphere Report Template V2-15



Report of Test

LLIA001574-009C-R01*

Electrical Test Report

Catalog Number: NXT-60M-5-X-2ES-7-XX-4-XX-X-XX-X

Pole/arm mounted, grey painted cast aluminum housing and door/driver compartment cover, two circuit boards, two clear plastic lenses with optic below each LED and clear flat glass enclosure.

60 white LEDs

Osram Optotronic OT180/UNV/800C/2DIM/P6 LED driver labeled as 700mA, WH91-5U1-03 surge suppressor



Performance Summary

Voltage	277.0 Vac
Current	0.5025 A
Power	132.7 W
Frequency	59.99 Hz
Power Factor	0.954
Current THD	10.1 %

Ambient Temperature: 25.3 °C

Prepared For:
LED Roadway Lighting
84 Chain Lake Drive
Suite 403

Halifax, Nova Scotia B3S 1A2, Canada

*This test report supersedes test report LLIA001574-009C

R01 - 11/11/2021 - Revised Catalog Number and quantity of LEDs

Tested in accordance with the applicable sections of IES LM-79-19. The laboratory has not participated in the selection of samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units. Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results. This report is free of erasures and corrections. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

Test date: 11/05/2021

Report date: 11/11/2021

Electrical Report Template V1-3