



Report of Test LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X
Grey painted cast aluminum housing with no lens.
60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.
One Delta Electronics LED driver. Model: USCI-200140GA
Operating at 120v AC and 60 Hz.



Performance Summary

Total Light Output	22787 lm	Min Power Factor	0.96 @ 277 V
Luminaire Power	173.2 W	Max THD(i)*	13.0 % @ 120 V
Luminous Efficacy	131.6 lm/W	0-90° Zonal Flux %	100.0 %
CCT	3100 K	80-90° Zonal Flux %	1.6 %
CIE(x,y) 1931	(0.431, 0.402)	BUG Rating*	B3-U0-G3
CRI	72	Street Classification*	Type III Short

PREPARED FOR : LED Roadway Lighting Ltd, Halifax. NS Canada



LightLab
INTERNATIONAL

LightLab International, LLC
Phoenix AZ 85085

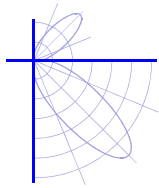


This document is issued in accordance with the accreditation requirements of NVLAP. The laboratory is accredited for compliance with ISO/IEC 17025. The results of the tests, calibrations and/or measurements included in this document are traceable to the SI system of units.

Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X
Grey painted cast aluminum housing with no lens.
60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.
One Delta Electronics LED driver. Model: USCI-200140GA
Operating at 120v AC and 60 Hz.





Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X

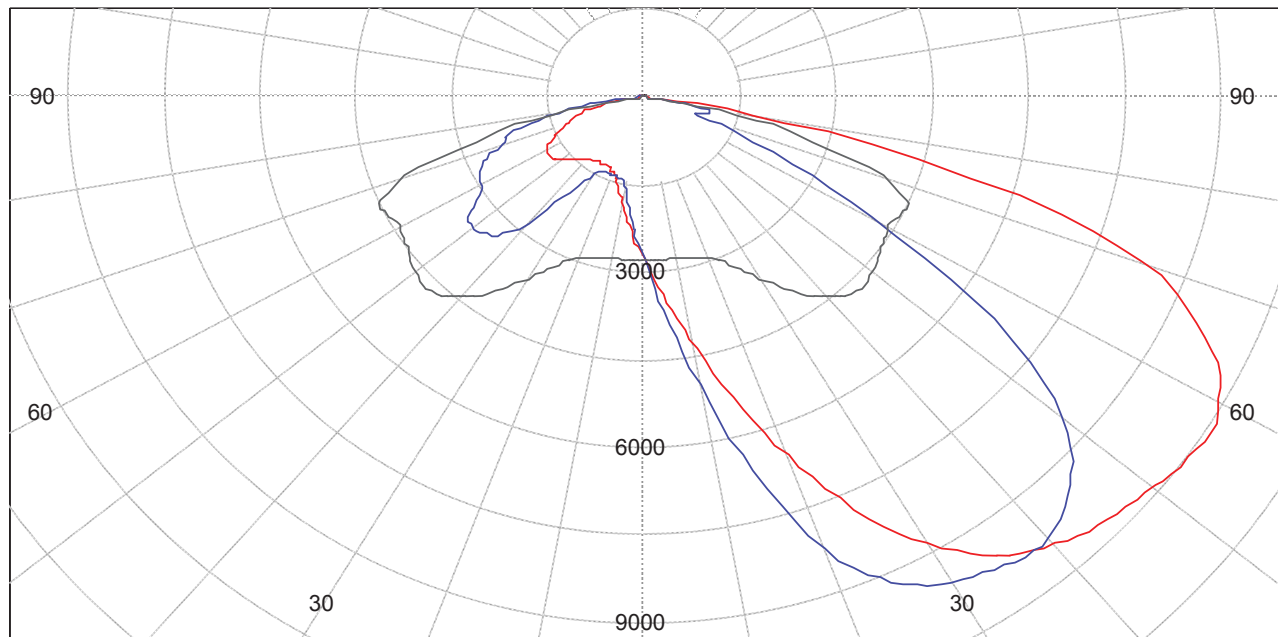
Grey painted cast aluminum housing with no lens.

60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.

One Delta Electronics LED driver. Model: USCI-200140GA

Operating at 120v AC and 60 Hz.

Polar Light Distribution Curves



House side / L270

L90 / 270 - Black, Plane of maximum - Red, L0 / 180 - Blue (cd)

Street side / L90

Percentage Outputs

	Upward	Downward	Total
Street Side	0.0 %	76.8 %	76.8 %
House Side	0.0 %	23.2 %	23.2 %
	0.0 %	100.0 %	100.0 %

Report data based on absolute values as measured.

Signed:

Ryder Tunney
Ryder Tunney
Authorized Signatory

Date of test
Date of report

11-Jan-2019
14-Jan-2019

RT



Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X

Grey painted cast aluminum housing with no lens.

60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.

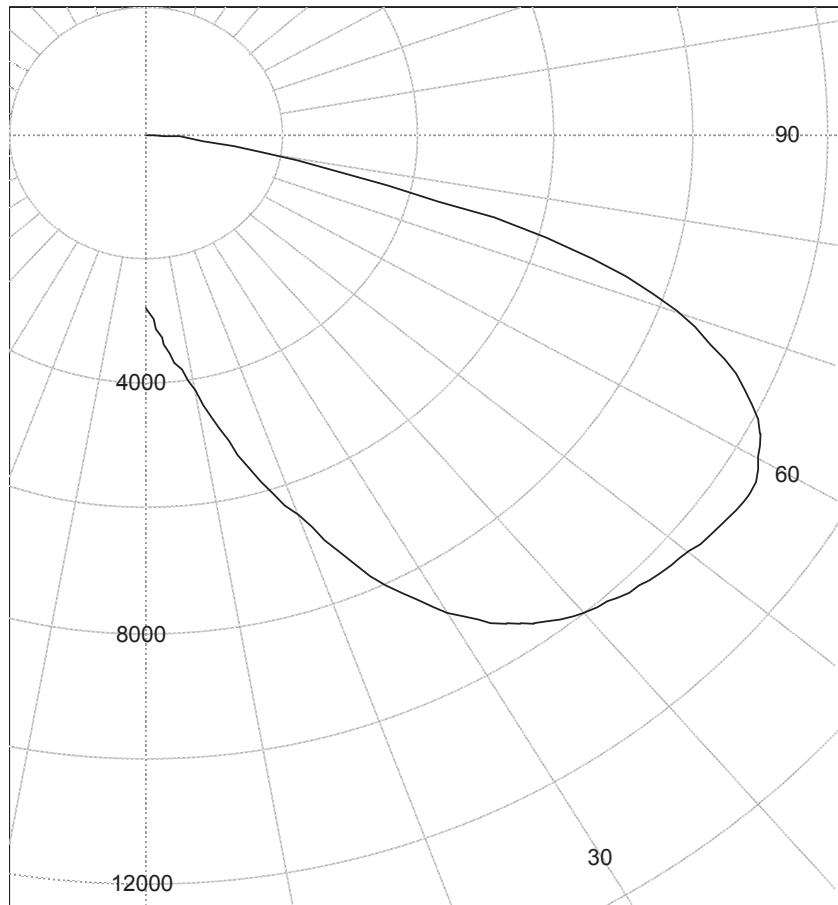
One Delta Electronics LED driver. Model: USCI-200140GA

Operating at 120v AC and 60 Hz.

Intensity in principal plane
(based on overall max intensity)

Vertical Angle (°)	Intensity (L45.0) (cd)
0.0	2770.5
10.0	4190.0
20.0	6518.1
30.0	8848.8
35.0	9585.1
40.0	9992.5
45.0	10233.2
47.5	10319.1
50.0	10392.1
52.5	10470.4
55.0	10542.9
57.5	10535.5
60.0	10364.8
62.5	10113.3
65.0	9681.3
67.5	9078.6
70.0	8260.4
72.5	7119.0
75.0	5282.2
77.5	3276.4
80.0	1742.0
82.5	689.4
85.0	117.5
87.5	14.0
90.0	0.0
92.5	0.0
95.0	0.0
97.5	0.0
100.0	0.0
102.5	0.0
105.0	0.0
120.0	0.0
135.0	0.0
150.0	0.0
165.0	0.0
180.0	0.0

Principal Vertical Plane



Plane of maximum intensity (cd)

House side max intensity
4727.5 cd @ (90.0°, 46.5°)

Street side max intensity
10556.9 cd @ (45.0°, 56.0°)

Coordinates expressed in the C Type coordinate system

Data for the two symmetric halves of the luminaire has been averaged.



Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X

Grey painted cast aluminum housing with no lens.

60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.

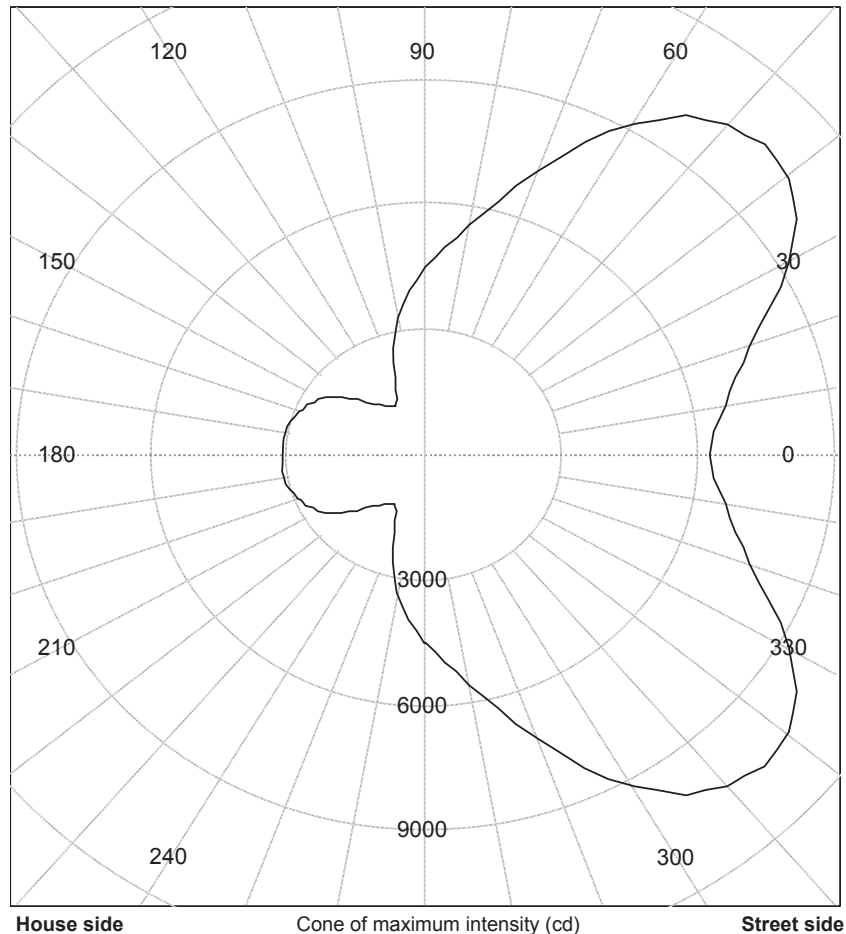
One Delta Electronics LED driver. Model: USCI-200140GA

Operating at 120v AC and 60 Hz.

Intensity in principal cone
(based on overall max intensity)

Lateral Plane (°)	(V56.0) (cd)
0	6243.9
15	7065.6
30	9225.2
40	10399.8
45	10556.9
50	10364.6
55	9940.2
60	9194.8
65	8292.8
70	7280.2
75	6312.9
80	5564.0
85	4997.9
90	4491.6
95	3972.1
100	3349.8
105	2644.9
110	1965.2
115	1462.9
120	1324.0
125	1401.6
130	1585.7
135	1788.9
140	2100.8
150	2697.9
165	3063.3
180	3156.8

Principal Conical Surface



House side max intensity
4727.5 cd @ (90.0°, 46.5°)

Street side max intensity
10556.9 cd @ (45.0°, 56.0°)

Coordinates expressed in the C Type coordinate system
Data for the two symmetric halves of the luminaire has been averaged.



Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X

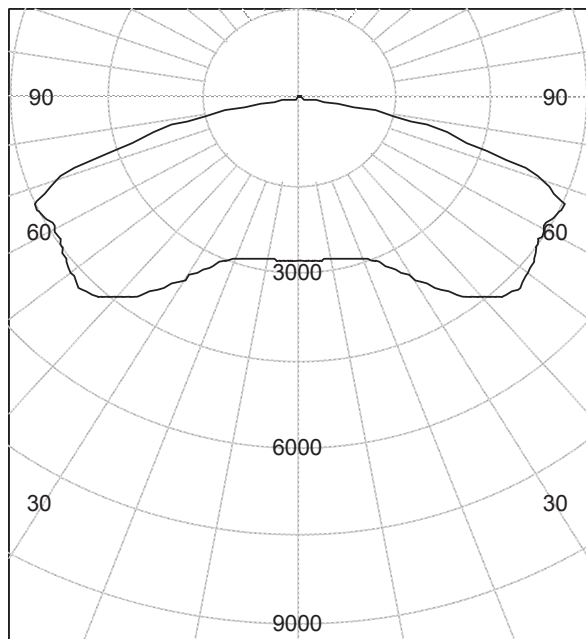
Grey painted cast aluminum housing with no lens.

60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.

One Delta Electronics LED driver. Model: USCI-200140GA

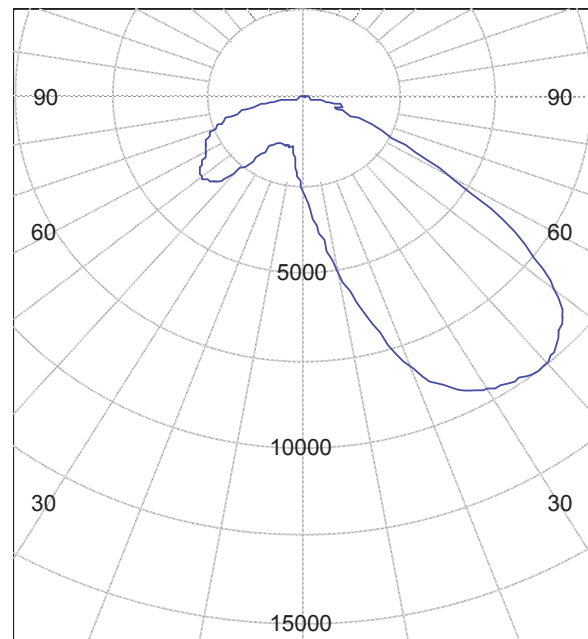
Operating at 120v AC and 60 Hz.

Polar curve through L90 / L270



(L90) (cd) (L270)

Polar curve through L0 / L180



House side (L180) (cd) Street side (L0)



Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X

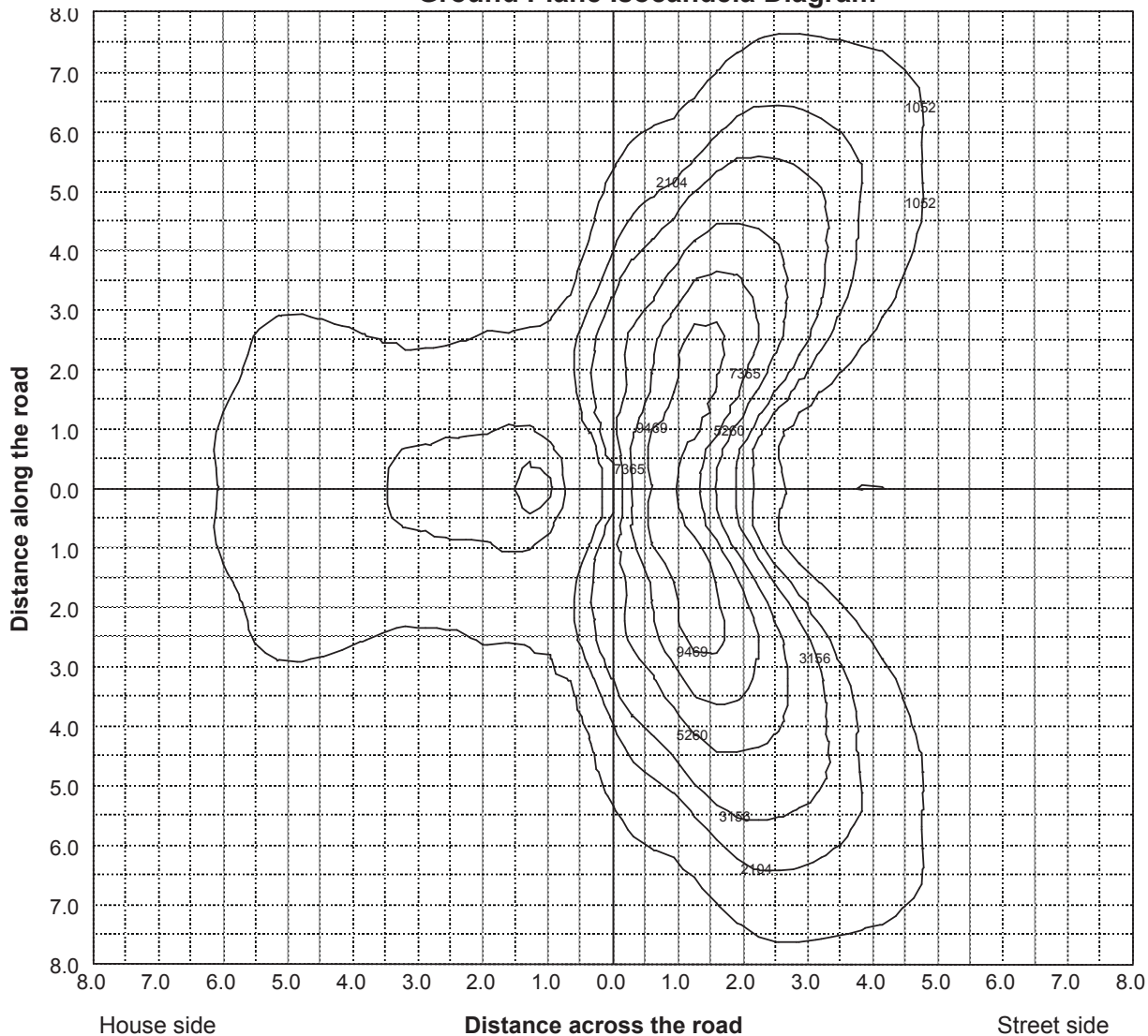
Grey painted cast aluminum housing with no lens.

60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.

One Delta Electronics LED driver. Model: USCI-200140GA

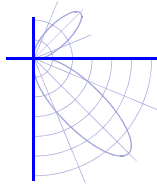
Operating at 120v AC and 60 Hz.

Ground Plane Isocandela Diagram



The isocandela contour units are expressed as cd

Upstream and downstream sides have been averaged.



Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X

Grey painted cast aluminum housing with no lens.

60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.

One Delta Electronics LED driver. Model: USCI-200140GA

Operating at 120v AC and 60 Hz.

Intensity data (cd)

Vertical	L-Plane								
	L0	L15	L30	L40	L45	L50	L55	L60	L65
0.0	2771	2771	2771	2771	2771	2771	2771	2771	2771
10.0	5018	4924	4634	4342	4190	4030	3878	3724	3563
20.0	8242	8084	7559	6896	6518	6100	5649	5182	4735
30.0	9600	9528	9391	9098	8849	8471	7955	7297	6617
35.0	9794	9832	9974	9761	9585	9303	8892	8254	7463
40.0	9849	10017	10255	10126	9993	9745	9366	8783	8004
45.0	9398	9772	10287	10298	10233	9999	9604	9062	8314
47.5	9062	9450	10168	10346	10319	10112	9699	9145	8389
50.0	8507	8958	9981	10380	10392	10209	9793	9182	8400
52.5	7761	8303	9698	10428	10470	10296	9875	9210	8358
55.0	6684	7490	9365	10432	10543	10351	9928	9201	8308
57.5	5447	6371	8949	10300	10535	10376	9949	9196	8278
60.0	4117	4903	8248	10047	10365	10333	9965	9246	8349
62.5	3108	3505	7179	9681	10113	10245	9977	9423	8616
65.0	2213	2328	5785	9090	9681	10077	10032	9794	9110
67.5	1421	1423	4306	8185	9079	9706	10064	10168	9688
70.0	918	897	2891	6864	8260	9211	10012	10355	9948
72.5	866	609	1965	5137	7119	8386	9212	9648	9345
75.0	1056	454	1335	3598	5282	6701	7551	8180	8132
77.5	988	327	892	2142	3276	4421	5669	6164	6158
80.0	647	230	516	1214	1742	2254	3367	3861	3788
82.5	354	150	253	499	689	944	1413	1578	1549
85.0	154	75	88	112	117	140	186	193	163
87.5	17	17	14	13	14	15	17	19	20
90.0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0
95.0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0
100.0	0	0	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0	0	0
105.0	0	0	0	0	0	0	0	0	0
120.0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0



Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X

Grey painted cast aluminum housing with no lens.

60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.

One Delta Electronics LED driver. Model: USCI-200140GA

Operating at 120v AC and 60 Hz.

Intensity data (cd)

Vertical	L-Plane								
	L70	L75	L80	L85	L90	L95	L100	L105	L110
0.0	2771	2771	2771	2771	2771	2771	2771	2771	2771
10.0	3396	3234	3076	2929	2788	2656	2533	2416	2312
20.0	4290	3916	3565	3242	2931	2643	2375	2134	1931
30.0	5901	5235	4624	4097	3589	3072	2560	2124	1811
35.0	6654	5889	5197	4617	4068	3499	2901	2348	1842
40.0	7139	6329	5626	5029	4469	3860	3203	2558	1923
45.0	7424	6561	5829	5239	4708	4092	3376	2672	1976
47.5	7468	6570	5824	5237	4720	4129	3424	2697	1977
50.0	7438	6511	5761	5189	4669	4099	3422	2693	1969
52.5	7372	6415	5673	5113	4596	4044	3393	2673	1957
55.0	7304	6337	5591	5030	4521	3993	3365	2655	1962
57.5	7265	6298	5537	4959	4457	3940	3317	2622	1963
60.0	7339	6351	5550	4945	4419	3874	3235	2543	1879
62.5	7592	6546	5679	5025	4446	3831	3084	2343	1786
65.0	8045	6873	5922	5215	4533	3630	2804	2169	1635
67.5	8501	7131	6134	5385	4375	3350	2565	1949	1416
70.0	8603	6960	5877	4998	3983	2938	2050	1383	1163
72.5	8151	6310	5051	4286	3228	2142	1316	1020	984
75.0	7366	5577	4184	3439	2379	1398	785	833	870
77.5	5716	4318	2930	2337	1634	818	542	647	692
80.0	3595	2592	1539	1288	854	434	440	454	460
82.5	1445	1065	599	549	329	180	218	234	266
85.0	132	93	65	58	55	57	59	69	87
87.5	22	24	26	28	30	32	33	34	35
90.0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0
95.0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0
100.0	0	0	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0	0	0
105.0	0	0	0	0	0	0	0	0	0
120.0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0



Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X

Grey painted cast aluminum housing with no lens.

60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.

One Delta Electronics LED driver. Model: USCI-200140GA

Operating at 120v AC and 60 Hz.

Intensity data (cd)

Vertical	L-Plane								
	L115	L120	L125	L130	L135	L140	L150	L165	L180
0.0	2771	2771	2771	2771	2771	2771	2771	2771	2771
10.0	2217	2126	2040	1964	1894	1833	1732	1641	1614
20.0	1762	1599	1483	1412	1380	1371	1379	1404	1414
30.0	1510	1338	1280	1280	1298	1322	1326	1429	1493
35.0	1464	1320	1295	1325	1337	1315	1335	1809	1972
40.0	1490	1335	1357	1404	1379	1366	1702	2576	2814
45.0	1487	1333	1419	1444	1480	1636	2213	3181	3341
47.5	1474	1322	1425	1475	1587	1766	2436	3309	3443
50.0	1455	1314	1425	1516	1670	1892	2581	3370	3470
52.5	1444	1314	1422	1562	1742	2041	2672	3309	3446
55.0	1456	1322	1410	1586	1782	2107	2709	3170	3267
57.5	1467	1323	1386	1576	1791	2069	2649	2870	3031
60.0	1452	1309	1355	1541	1742	1983	2469	2635	2953
62.5	1401	1276	1315	1491	1630	1863	2223	2546	2908
65.0	1335	1246	1279	1427	1505	1702	2013	2481	2805
67.5	1236	1193	1241	1337	1387	1537	1817	2371	2647
70.0	1113	1120	1190	1240	1267	1362	1647	2187	2363
72.5	1009	1000	1071	1125	1111	1201	1500	2026	2258
75.0	855	855	921	921	948	1029	1364	1856	1966
77.5	636	671	758	744	776	860	1270	1521	1601
80.0	448	492	559	557	612	712	1095	1160	1182
82.5	275	313	365	361	412	512	738	804	814
85.0	107	122	142	150	186	244	381	477	438
87.5	36	36	35	33	37	42	58	102	116
90.0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0
95.0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0
100.0	0	0	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0	0	0
105.0	0	0	0	0	0	0	0	0	0
120.0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0



Test Report No. LLI-19003-2

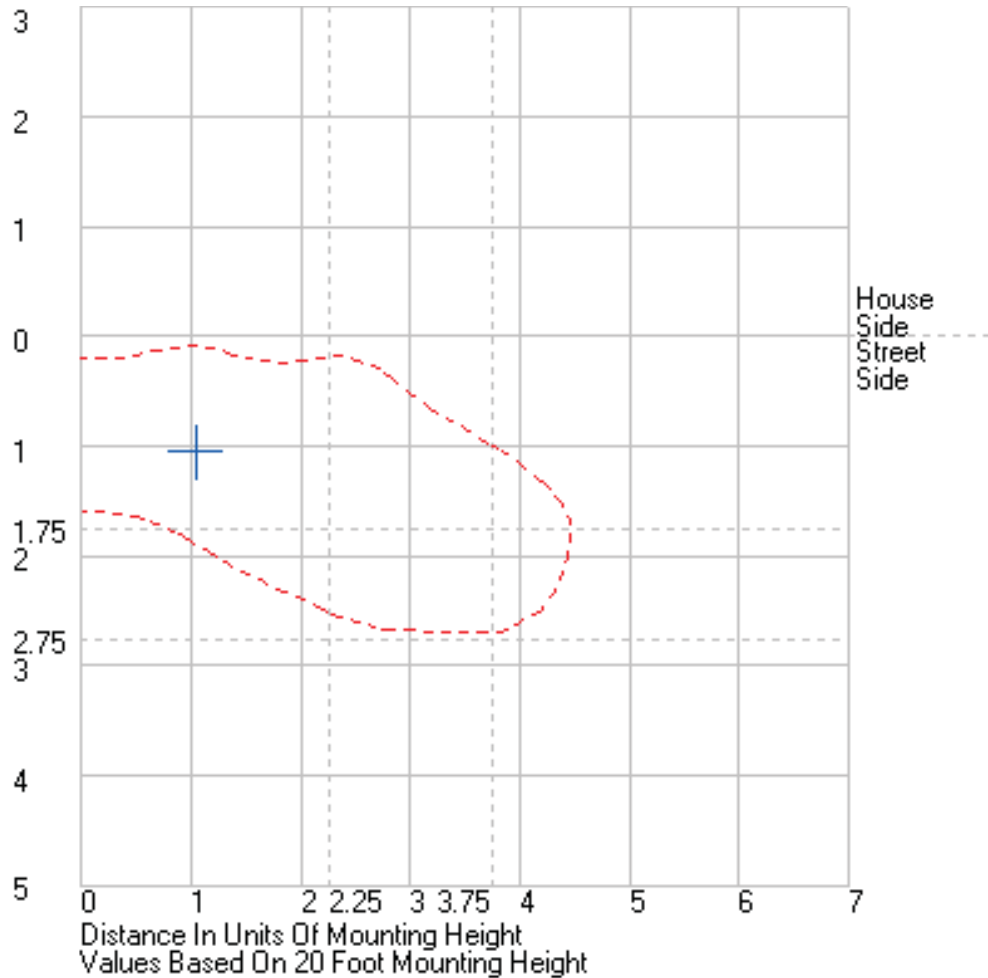
LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X

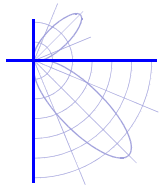
Grey painted cast aluminum housing with no lens.

60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.

One Delta Electronics LED driver. Model: USCI-200140GA

Operating at 120v AC and 60 Hz.





Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X

Grey painted cast aluminum housing with no lens.

60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.

One Delta Electronics LED driver. Model: USCI-200140GA

Operating at 120v AC and 60 Hz.

LM-79 Performance Data

Spectral	CIE 1931 (x, y) ⁽¹⁾	(0.431, 0.402)
	CIE 1976 (u', v') ⁽¹⁾	(0.247, 0.520)
	Correlated Color Temperature (CCT) ⁽¹⁾	3100 K
	Spatial Δ (u', v') Uniformity ⁽²⁾	2.90E-03
	Color Rendering Index (Ra) ⁽¹⁾	72.1
	Special CRI 9 (R ₉) ^{(1),(3)}	-38.9
	Distance from Planckian Locus (Duv) ^{(1),(3)}	1.34E-04
	Scotopic/Photopic Ratio ^{(1),(3)}	1.29

Electrical	Voltage	120.0 V	(Setpoint 1)
	Frequency	60.0 Hz	
	Current	1.461 A	
	Power	173 W	
	Power Factor	0.99	
	Current THD	13 %	
	Voltage	277.0 V	(Setpoint 2)
	Frequency	60.0 Hz	
	Current	0.644 A	
	Power	172 W	
	Power Factor	0.96	
	Current THD	8.0 %	

Performance data in accordance with IESNA LM-79-08. Spectral calculations are for a CIE 2° observer

Photometric and spectral values were measured at Setpoint 1

(1) Value is computed from the weighted average of the spatial measurements

(2) Value is the maximum deviation of the spatial u' and v' measurements from the weighted average

(3) Quantity is in addition to the scope of IESNA LM-79-08



Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X

Grey painted cast aluminum housing with no lens.

60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.

One Delta Electronics LED driver. Model: USCI-200140GA

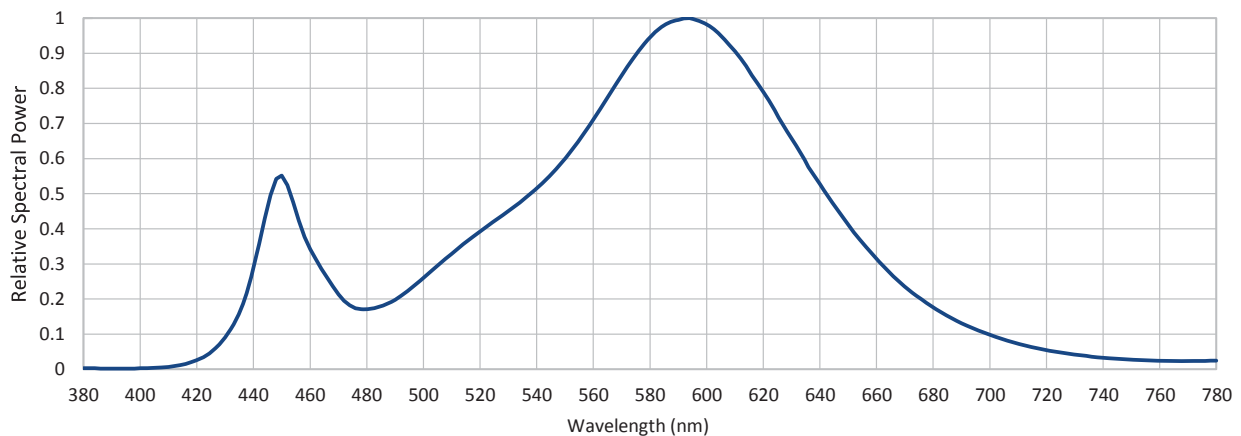
Operating at 120v AC and 60 Hz.

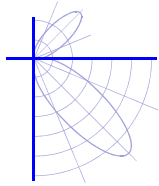
LM-79 Performance Data

Relative spectral power distribution

(Relative to peak = 1, weighted average of spatial measurements)

λ (nm)	Relative Power	λ (nm)	Relative Power	λ (nm)	Relative Power	λ (nm)	Relative Power	λ (nm)	Relative Power
380	0.003	460	0.342	540	0.515	620	0.790	700	0.098
385	0.003	465	0.273	545	0.554	625	0.723	705	0.084
390	0.002	470	0.213	550	0.600	630	0.658	710	0.073
395	0.002	475	0.178	555	0.652	635	0.590	715	0.063
400	0.003	480	0.171	560	0.711	640	0.528	720	0.055
405	0.004	485	0.179	565	0.774	645	0.467	725	0.048
410	0.007	490	0.198	570	0.837	650	0.413	730	0.042
415	0.014	495	0.227	575	0.896	655	0.361	735	0.037
420	0.026	500	0.261	580	0.945	660	0.315	740	0.033
425	0.050	505	0.295	585	0.979	665	0.273	745	0.030
430	0.091	510	0.329	590	0.995	670	0.235	750	0.028
435	0.162	515	0.362	595	0.998	675	0.205	755	0.026
440	0.288	520	0.392	600	0.982	680	0.176	760	0.024
445	0.463	525	0.422	605	0.951	685	0.153	765	0.024
450	0.552	530	0.451	610	0.906	690	0.131	770	0.024
455	0.449	535	0.482	615	0.851	695	0.113	775	0.024
								780	0.025





Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X
Grey painted cast aluminum housing with no lens.
60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.
One Delta Electronics LED driver. Model: USCI-200140GA
Operating at 120v AC and 60 Hz.

LM-79 Performance Data

Spatial measurements

Vert. angle (°)	CIE 1976 (u',v') coordinates	
	Horiz. 0.0° plane	Horiz. ° plane
0.0	(0.246, 0.519)	(0.246, 0.519)
10.0	(0.246, 0.519)	(0.248, 0.520)
20.0	(0.247, 0.520)	(0.247, 0.520)
30.0	(0.248, 0.520)	(0.247, 0.520)
40.0	(0.248, 0.521)	(0.247, 0.520)
50.0	(0.245, 0.518)	(0.247, 0.519)
60.0	(0.248, 0.520)	(0.247, 0.519)
70.0	(0.249, 0.521)	I <= 10% peak
80.0	I <= 10% peak	I <= 10% peak
-	-	-

Spatial measurements

Vert. angle (°)	CIE 1976 (u',v') coordinates	
	Horiz. 0.0° plane	Horiz. ° plane
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Test procedure

All measurements were performed in an environmentally controlled laboratory employing suitable baffling to minimize stray light. The sample was mounted in its normal operating orientation on a rotating mirror goniophotometer and operated from a stabilized supply. The photometric output was monitored and measurements were performed once stability was achieved.

The goniophotometer was used to measure the spatial distribution of both luminous intensity and, in conjunction with a spectroradiometer, spectral irradiance. The distribution locus comprises points in two or more planes (as indicated in the table above) at no more than 10° vertical intervals. The CIE (x,y) coordinates and other derived metrics (CIE (u', v'), CCT and CRI) are calculated from the weighted sum (weighted for intensity and represented solid angle) of the measured spectral irradiances.

Sample Orientation Horizontal Stabilization & total operation time 17.25 / 20.25 hours

Equipment and uncertainties

LightLab International R80A C-gamma rotating mirror goniophotometer with a test distance of 8 m.

Luminous Intensity	± 4 %	Temperature	± 1 °C
Luminous Flux	± 4 %	Luminous Efficacy	± 4.5 %
Horiz., Vert. Angles	± 0.25°		

PhotoResearch PR-670 spectroradiometer (grating with 380 - 780 nm range, 2 nm / pixel, 5 nm bandwidth, incandescent/halogen calibration source). Measured at a distance from the sample deemed >5 times the maximum observed luminous opening dimension.

CIE (x, y) coordinates	± 0.003	CCT	± 100 K
CIE (u', v') coordinates	± 0.002	CRI (Ra)	± 2
Spatial Δ (u', v') uniformity	± 0.001	Scotopic / Photopic Ratio *	± 0.02
Rel. Spectral Irradiance *	± 2 %	R9 *	± 2
Duv *	± 5E-04		

Yokogawa WT210 power meter connected in circuit to the sample electrical supply

Voltage	± 0.5 %	Frequency *	± 0.1 Hz
Current	± 0.5 %	Power	± 0.5 %
Current THD *	± 3 %	Power Factor	± 0.02

This report contains data that are not covered by the NVLAP accreditation. Quantities marked with * are not covered.

Calculator / report version 1.0.10 / 5.9 (14th Dec 2017)

Page 14 of 16



Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X

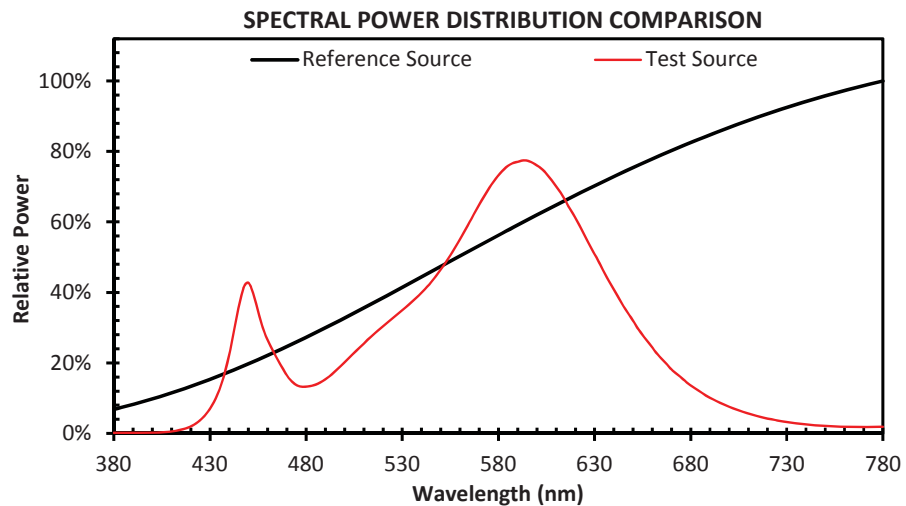
Grey painted cast aluminum housing with no lens.

60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.

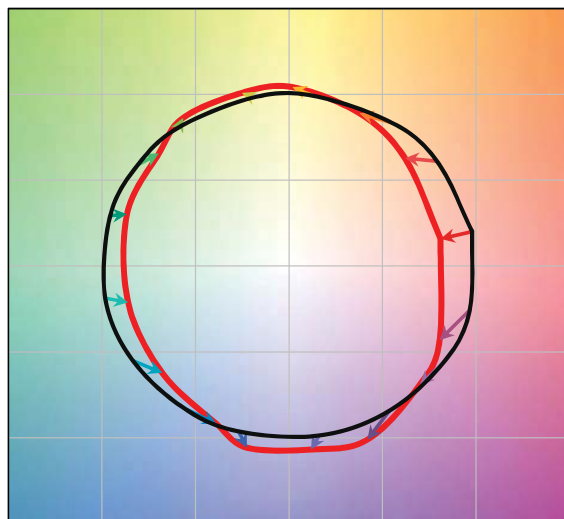
One Delta Electronics LED driver. Model: USCI-200140GA

Operating at 120v AC and 60 Hz.

R_f	74
R_g	92



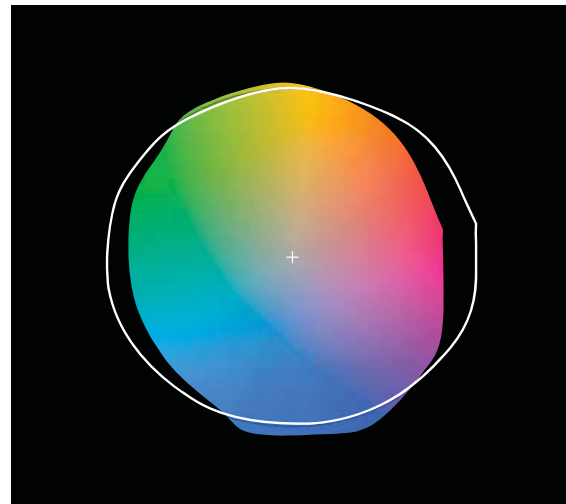
COLOR VECTOR GRAPHIC



— Test Source

→ Series1

COLOR DISTORTION GRAPHIC





Test Report No. LLI-19003-2

LED Roadway Lighting - Roadway luminaire. Product ID: L6 60M 5 X 2ES U X XX 3 XX X X X
Grey painted cast aluminum housing with no lens.
60 LEDs in three 4 x 5 arrays with clear plastic sheets of individual lenses.
One Delta Electronics LED driver. Model: USCI-200140GA
Operating at 120v AC and 60 Hz.

Test Distance 8.0 m
Test 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-79-08 (Sec. 12), IES LM-16-93, IES LM-58-13, CIE 13.3:1995, CIE 15:2004, ANSI C78.377:2015, ANSI C82.77-10:2014.

The luminous intensity values, 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.

Photometric intensity values are reported using the IESNA Type C coordinate system (L, V) as defined in IESNA publication LM-75.

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.