



Report of Test LLI-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX
Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.
16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.
One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.
Operating at 120v AC and 60 Hz.



Performance Summary

Total Light Output	4927 lm	Min Power Factor	0.93 @ 277 V
Luminaire Power	38.0 W	Max THD(i)*	11.0 % @ 277 V
Luminous Efficacy	129.7 lm/W	0-90° Zonal Flux %	100.0 %
CCT	2990 K	80-90° Zonal Flux %	0.6 %
CIE(x,y) 1931	(0.439, 0.406)	BUG Rating*	B1-U0-G1
CRI	71	Street Classification*	Type II Short

PREPARED FOR : LED Roadway Lighting Ltd, 115 Chain Lake Drive, 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-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX

Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.

16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.

One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.

Operating at 120v AC and 60 Hz.

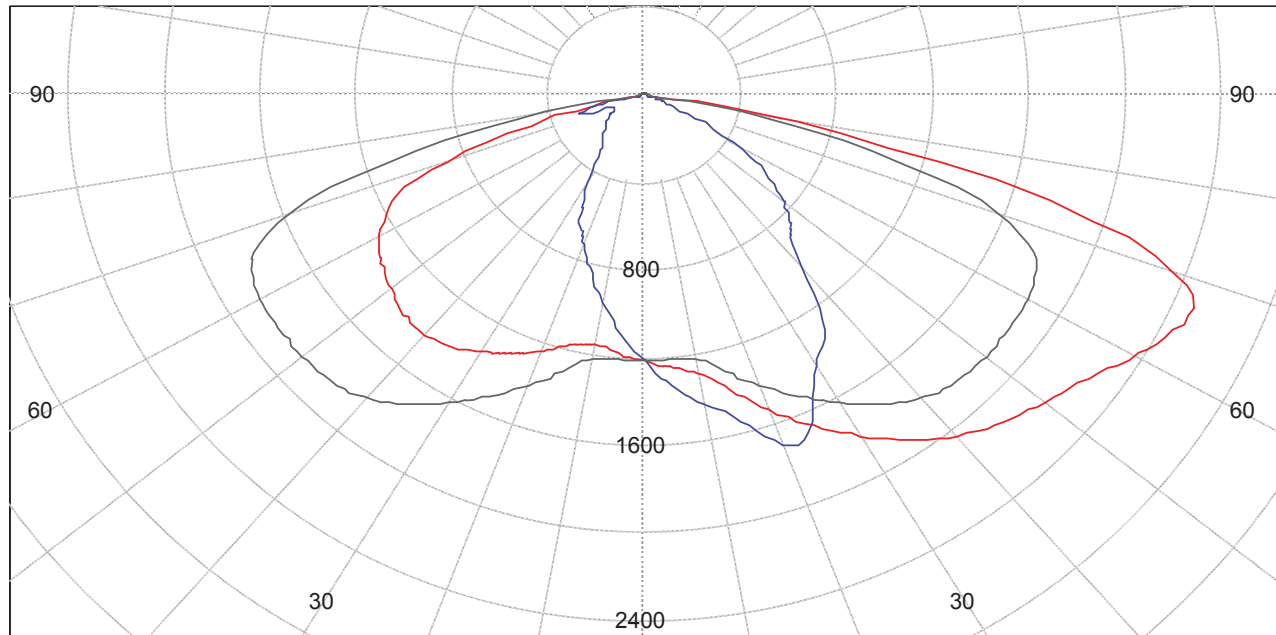




Test Report No. LLI-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX
Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.
16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.
One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.
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 %	67.9 %	67.9 %
House Side	0.0 %	32.1 %	32.1 %
	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

15-Oct-2019
16-Oct-2019



Test Report No. LLI-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX

Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.

16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.

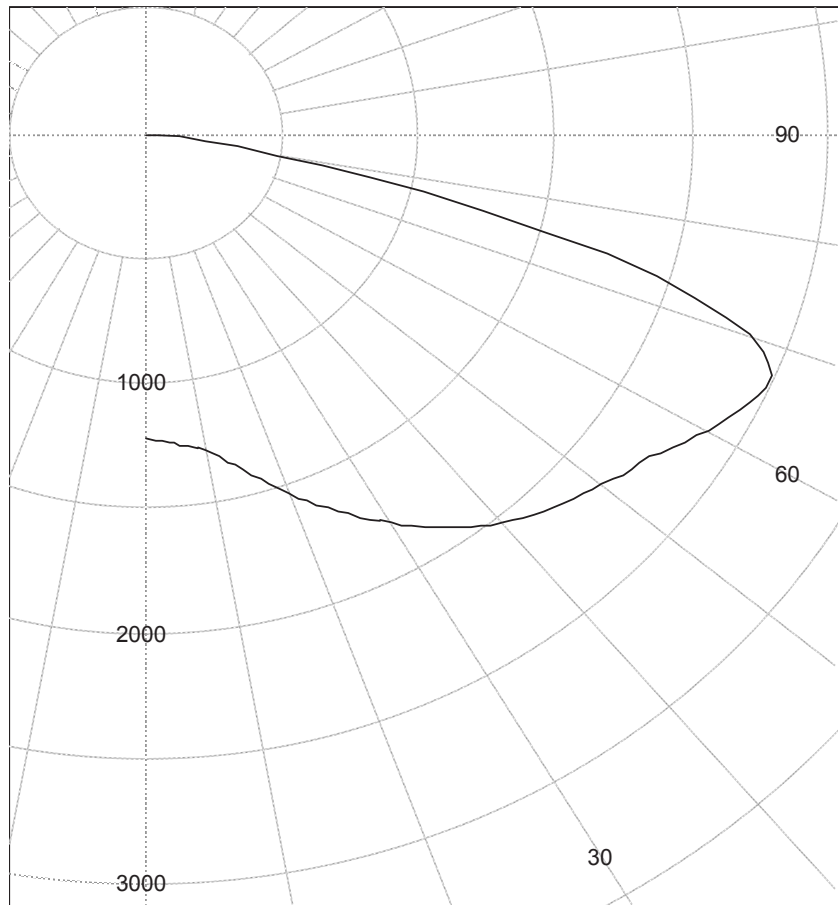
One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.

Operating at 120v AC and 60 Hz.

Intensity in principal plane
(based on overall max intensity)

Vertical Angle (°)	Intensity (cd)
0.0	1218.4
10.0	1288.9
20.0	1531.8
30.0	1797.8
35.0	1923.2
40.0	2034.0
45.0	2113.6
47.5	2147.1
50.0	2182.3
52.5	2218.9
55.0	2255.4
57.5	2316.4
60.0	2373.1
62.5	2426.2
65.0	2477.1
67.5	2475.6
70.0	2350.4
72.5	2044.0
75.0	1519.9
77.5	936.2
80.0	487.2
82.5	171.2
85.0	14.3
87.5	4.1
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
1862.3 cd @ (90.0°, 58.0°)

Street side max intensity
2490.2 cd @ (75.0°, 66.5°)

Coordinates expressed in the C Type coordinate system

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



Test Report No. LLI-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX

Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.

16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.

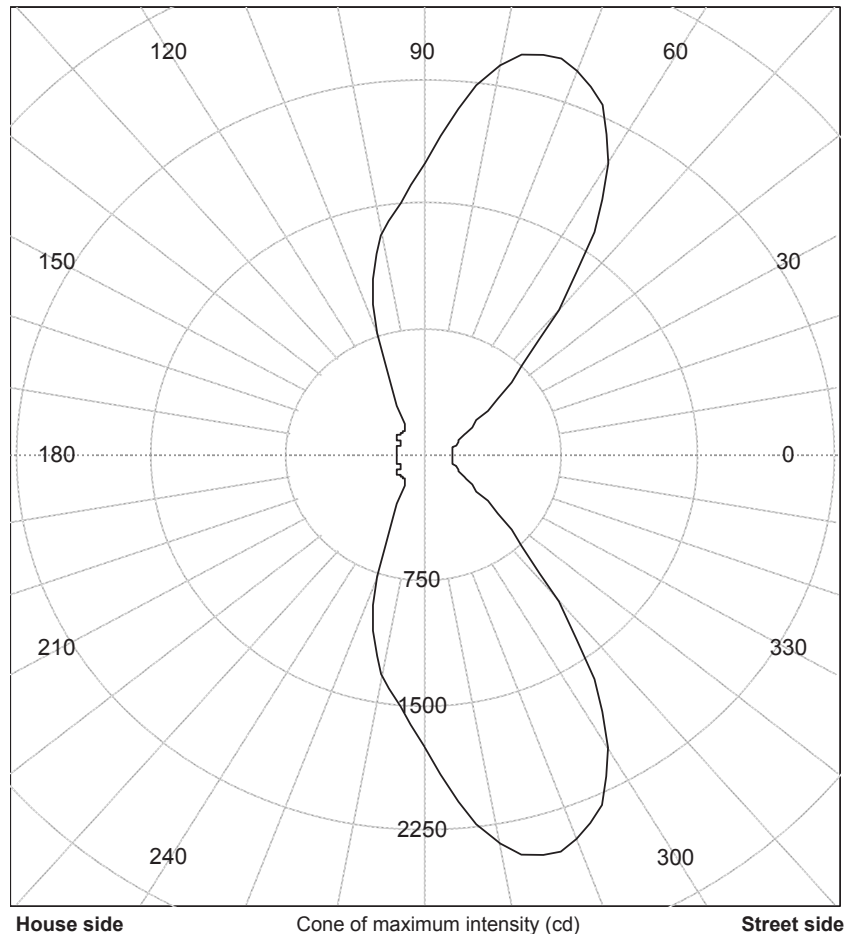
One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.

Operating at 120v AC and 60 Hz.

Intensity in principal cone
(based on overall max intensity)

Lateral Plane (°)	(V66.5) (cd)
0	154.3
15	163.8
30	261.7
40	517.0
45	755.3
50	1136.7
55	1628.5
60	2019.7
65	2312.4
70	2452.5
75	2490.2
80	2371.7
85	2075.1
90	1753.8
95	1515.1
100	1334.3
105	1099.4
110	763.8
115	422.2
120	222.4
125	174.1
130	182.3
135	188.5
140	182.6
150	162.2
165	154.7
180	152.6

Principal Conical Surface



House side max intensity
1862.3 cd @ (90.0°, 58.0°)

Street side max intensity
2490.2 cd @ (75.0°, 66.5°)

Coordinates expressed in the C Type coordinate system

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



Test Report No. LLI-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX

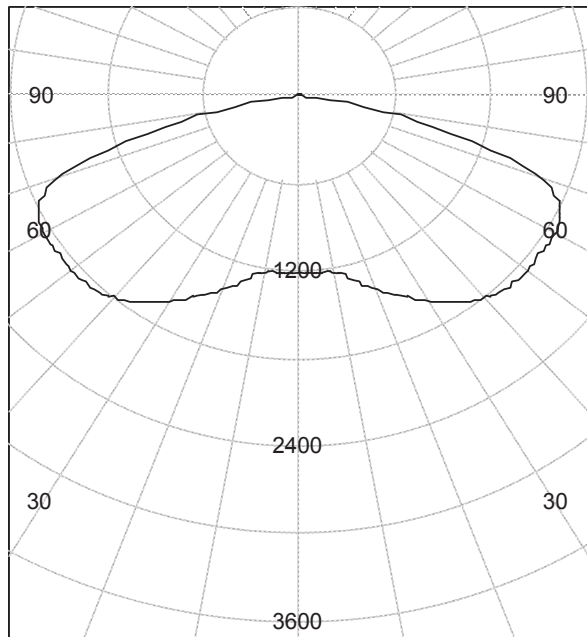
Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.

16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.

One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.

Operating at 120v AC and 60 Hz.

Polar curve through L90 / L270

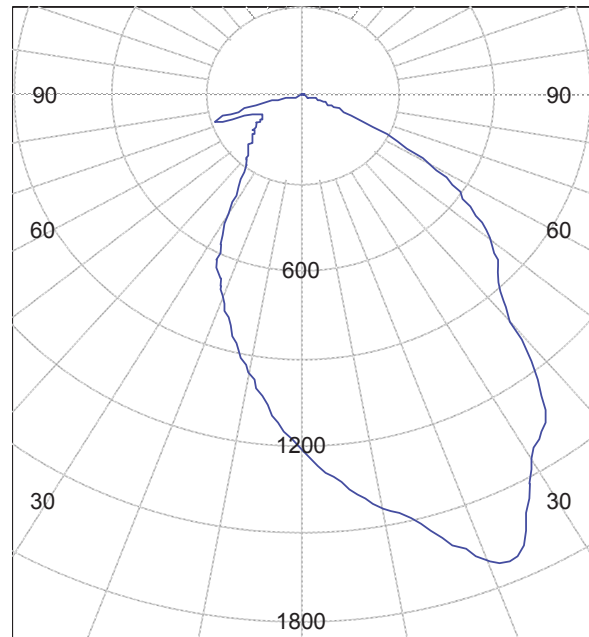


(L90)

(cd)

(L270)

Polar curve through L0 / L180



House side (L180)

(cd)

Street side (L0)



Test Report No. LLI-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX

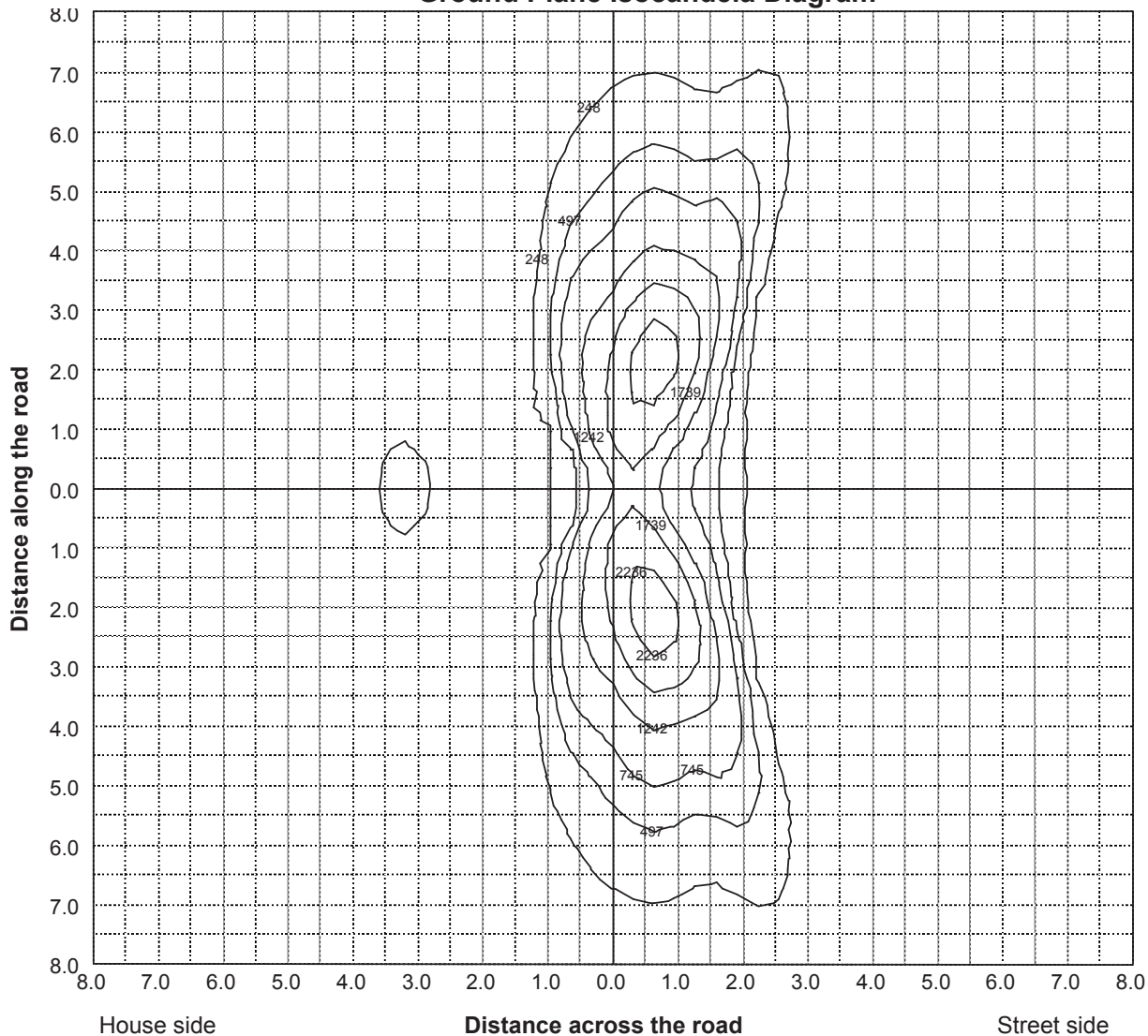
Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.

16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.

One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.

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-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX

Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.

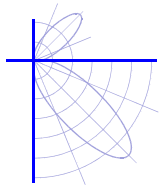
16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.

One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.

Operating at 120v AC and 60 Hz.

Intensity data (cd)

Vertical	L-Plane								
	L0	L15	L30	L40	L45	L50	L55	L60	L65
0.0	1218	1218	1218	1218	1218	1218	1218	1218	1218
10.0	1433	1425	1406	1390	1381	1370	1354	1339	1322
20.0	1698	1682	1642	1621	1606	1598	1594	1592	1580
30.0	1433	1476	1666	1846	1892	1900	1877	1858	1837
35.0	1314	1357	1507	1733	1860	1956	1995	1994	1976
40.0	1011	1133	1380	1612	1752	1909	2034	2098	2101
45.0	860	930	1213	1506	1667	1838	2003	2120	2171
47.5	815	883	1136	1448	1630	1813	1975	2111	2187
50.0	761	829	1072	1387	1589	1784	1948	2098	2199
52.5	691	752	1013	1321	1550	1764	1941	2097	2217
55.0	613	665	930	1244	1506	1737	1930	2098	2227
57.5	545	575	820	1151	1439	1711	1941	2127	2262
60.0	429	471	699	1033	1328	1664	1946	2153	2300
62.5	311	342	544	882	1151	1535	1888	2150	2335
65.0	202	221	361	671	919	1313	1740	2081	2343
67.5	128	139	200	417	642	1004	1523	1966	2267
70.0	90	105	121	198	364	649	1180	1739	2093
72.5	67	84	95	101	156	315	735	1360	1756
75.0	54	66	74	73	76	116	297	852	1345
77.5	43	54	52	57	53	57	79	377	847
80.0	35	42	32	37	36	35	39	122	421
82.5	16	22	16	18	19	19	20	33	129
85.0	6	6	7	7	7	8	8	9	14
87.5	3	3	3	3	4	4	4	4	4
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-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX

Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.

16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.

One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.

Operating at 120v AC and 60 Hz.

Intensity data (cd)

Vertical	L-Plane								
	L70	L75	L80	L85	L90	L95	L100	L105	L110
0.0	1218	1218	1218	1218	1218	1218	1218	1218	1218
10.0	1306	1289	1268	1245	1226	1204	1179	1158	1134
20.0	1562	1532	1495	1457	1413	1363	1308	1244	1174
30.0	1821	1798	1751	1689	1623	1547	1454	1354	1254
35.0	1950	1923	1879	1801	1725	1630	1518	1402	1280
40.0	2074	2034	1981	1896	1806	1693	1560	1425	1289
45.0	2159	2114	2050	1953	1846	1711	1561	1416	1272
47.5	2190	2147	2074	1971	1854	1708	1547	1398	1254
50.0	2224	2182	2105	1991	1862	1704	1531	1375	1224
52.5	2254	2219	2134	2002	1856	1687	1508	1355	1197
55.0	2280	2255	2166	2021	1853	1668	1485	1329	1160
57.5	2330	2316	2216	2053	1861	1660	1471	1309	1118
60.0	2383	2373	2266	2075	1850	1632	1441	1272	1051
62.5	2427	2426	2311	2086	1828	1600	1410	1220	955
65.0	2459	2477	2361	2093	1796	1559	1374	1158	842
67.5	2428	2476	2361	2049	1715	1472	1293	1048	702
70.0	2266	2350	2257	1920	1564	1330	1152	876	521
72.5	1957	2044	1999	1667	1316	1120	953	638	330
75.0	1464	1520	1555	1312	988	848	692	381	169
77.5	1008	936	1007	917	694	564	422	185	80
80.0	614	487	522	525	417	311	190	65	40
82.5	225	171	148	174	149	102	45	19	18
85.0	19	14	11	11	10	9	9	8	8
87.5	4	4	4	4	4	4	4	4	3
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-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX

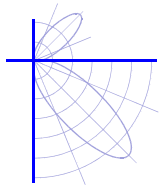
Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.

16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.

One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.

Operating at 120v AC and 60 Hz.

Vertical	Intensity data (cd)								
	L-Plane								
	L115	L120	L125	L130	L135	L140	L150	L165	L180
0.0	1218	1218	1218	1218	1218	1218	1218	1218	1218
10.0	1109	1086	1062	1043	1026	1010	986	965	963
20.0	1106	1042	980	924	874	835	785	744	735
30.0	1152	1054	957	859	767	687	580	496	466
35.0	1159	1044	927	808	687	573	430	343	322
40.0	1159	1023	871	714	550	415	303	275	269
45.0	1127	962	771	548	367	280	258	242	232
47.5	1093	917	693	449	299	255	249	228	215
50.0	1054	855	596	363	260	246	238	219	204
52.5	1009	767	495	298	245	241	228	212	197
55.0	942	655	393	255	236	236	219	204	180
57.5	853	545	314	229	229	229	207	182	161
60.0	743	442	257	215	223	220	194	168	151
62.5	621	346	216	203	213	207	181	161	145
65.0	497	266	187	190	200	193	168	157	145
67.5	370	198	166	176	179	175	158	158	166
70.0	256	150	145	162	158	159	146	187	234
72.5	157	114	123	138	133	136	124	243	287
75.0	95	87	100	104	105	108	132	207	230
77.5	61	63	71	70	72	78	99	156	184
80.0	36	38	39	39	42	45	51	72	98
82.5	17	16	15	14	15	14	10	17	30
85.0	7	6	5	3	3	3	3	2	1
87.5	3	2	2	2	1	1	0	0	0
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-19275-5

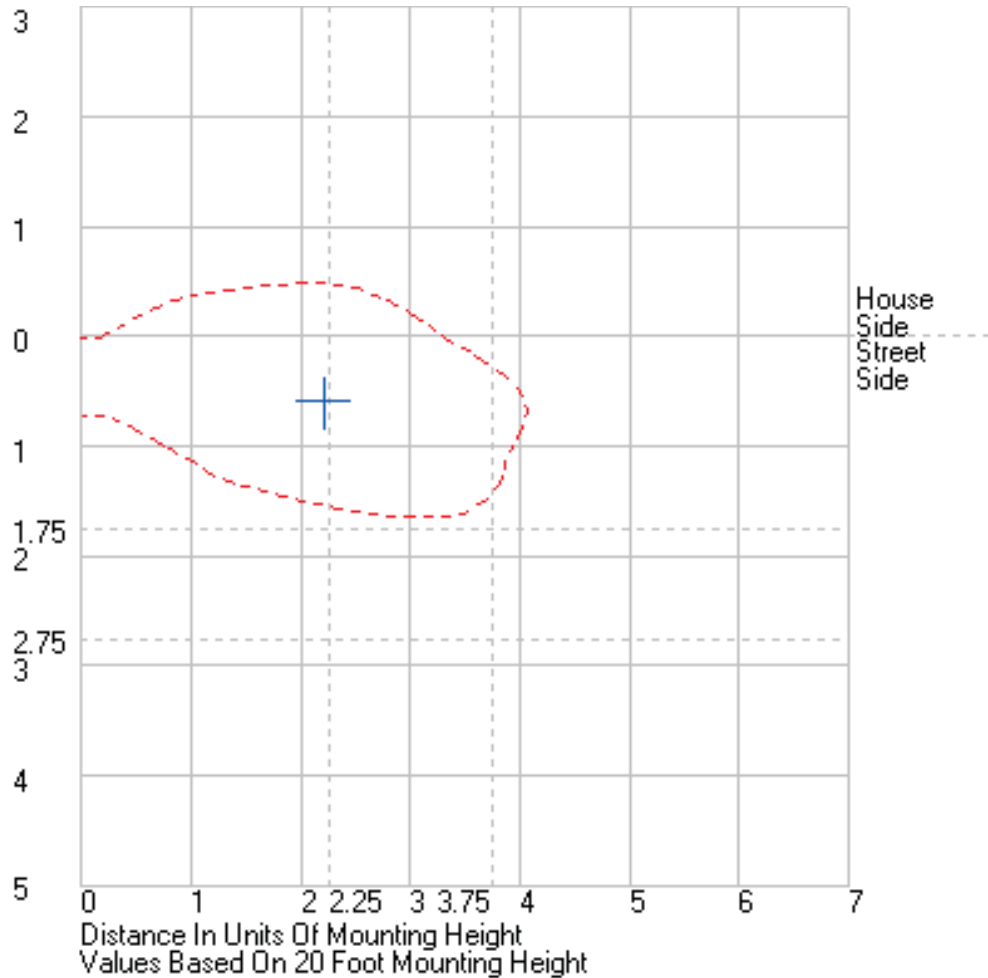
LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX

Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.

16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.

One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.

Operating at 120v AC and 60 Hz.





Test Report No. LLI-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX
Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.
16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.
One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.
Operating at 120v AC and 60 Hz.

LM-79 Performance Data

Spectral	CIE 1931 (x, y) ⁽¹⁾	(0.439, 0.406)
	CIE 1976 (u', v') ⁽¹⁾	(0.251, 0.522)
	Correlated Color Temperature (CCT) ⁽¹⁾	2990 K
	Spatial Δ (u', v') Uniformity ⁽²⁾	2.35E-03
	Color Rendering Index (Ra) ⁽¹⁾	71.1
	Special CRI 9 (R ₉) ^{(1),(3)}	-41.6
	Distance from Planckian Locus (Duv) ^{(1),(3)}	4.92E-04
	Scotopic/Photopic Ratio ^{(1),(3)}	1.22

Electrical	Voltage	120.0 V	(Setpoint 1)
	Frequency	60.0 Hz	
	Current	0.320 A	
	Power	38.0 W	
	Power Factor	0.99	
	Current THD	4.1 %	
	Voltage	277.0 V	(Setpoint 2)
	Frequency	60.0 Hz	
	Current	0.147 A	
	Power	37.6 W	
	Power Factor	0.93	
	Current THD	11 %	

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-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX

Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.

16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.

One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.

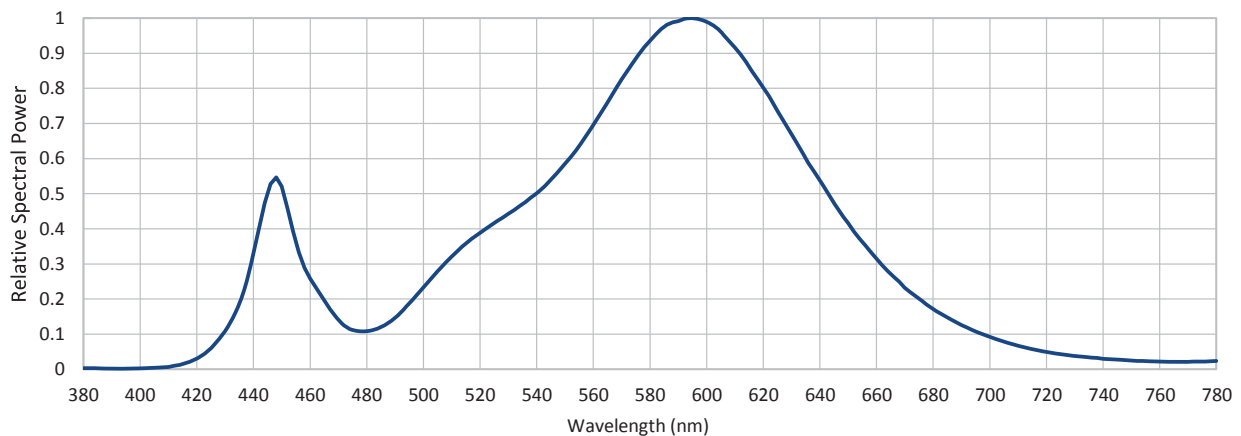
Operating at 120v AC and 60 Hz.

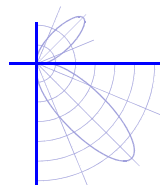
LM-79 Performance Data

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	0.258	540	0.501	620	0.802	700	0.092
385	0.003	465	0.196	545	0.540	625	0.737	705	0.079
390	0.002	470	0.140	550	0.585	630	0.669	710	0.067
395	0.002	475	0.112	555	0.637	635	0.601	715	0.058
400	0.003	480	0.109	560	0.696	640	0.538	720	0.049
405	0.004	485	0.120	565	0.760	645	0.473	725	0.043
410	0.007	490	0.147	570	0.825	650	0.416	730	0.038
415	0.016	495	0.187	575	0.885	655	0.362	735	0.034
420	0.031	500	0.234	580	0.936	660	0.315	740	0.030
425	0.061	505	0.279	585	0.975	665	0.272	745	0.027
430	0.109	510	0.321	590	0.991	670	0.232	750	0.025
435	0.188	515	0.358	595	1.000	675	0.201	755	0.023
440	0.330	520	0.389	600	0.990	680	0.171	760	0.022
445	0.501	525	0.417	605	0.961	685	0.148	765	0.021
450	0.521	530	0.443	610	0.916	690	0.126	770	0.021
455	0.363	535	0.471	615	0.862	695	0.107	775	0.022
								780	0.024





Test Report No. LLI-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX
Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.
16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.
One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.
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	(0.249, 0.521)	(0.250, 0.521)
10.0	(0.250, 0.521)	(0.251, 0.522)
20.0	(0.250, 0.522)	(0.250, 0.520)
30.0	(0.251, 0.522)	(0.252, 0.523)
40.0	(0.251, 0.522)	(0.250, 0.522)
50.0	(0.251, 0.522)	(0.250, 0.523)
60.0	(0.251, 0.523)	(0.251, 0.524)
70.0	(0.252, 0.523)	I <= 10% peak
80.0	(0.250, 0.522)	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 0.5 / 2.5 hours

Equipment and uncertainties

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

Luminous Intensity ± 4 %
Luminous Flux ± 4 %
Horiz., Vert. Angles ± 0.25°

Temperature ± 1 °C
Luminous Efficacy ± 4.5 %

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
CIE (u', v') coordinates ± 0.002
Spatial Δ (u', v') uniformity ± 0.001
Rel. Spectral Irradiance * ± 2 %
Duv * ± 5E-04

CCT ± 100 K
CRI (Ra) ± 2
Scotopic / Photopic Ratio * ± 0.02
R9 * ± 2

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

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



Test Report No. LLI-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX

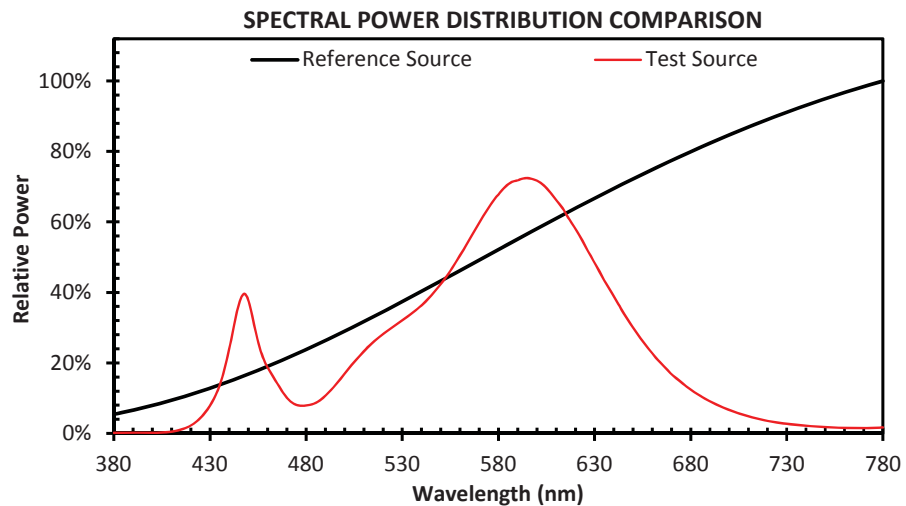
Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.

16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.

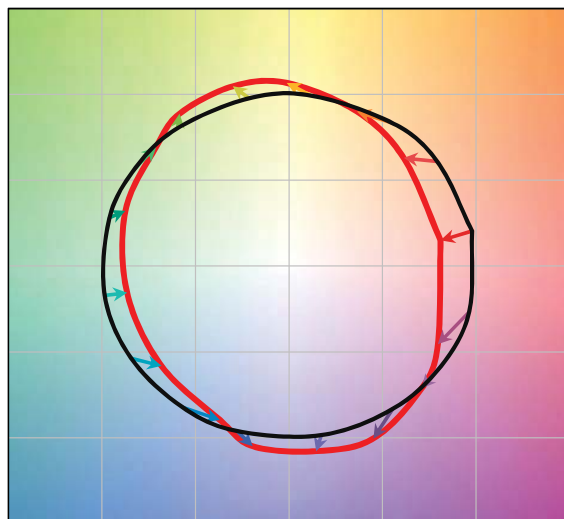
One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.

Operating at 120v AC and 60 Hz.

R_f	72
R_g	93



COLOR VECTOR GRAPHIC

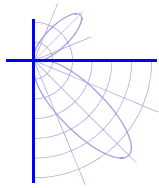


— Test Source

→ Series1

COLOR DISTORTION GRAPHIC





Test Report No. LLI-19275-5

LED Roadway Lighting - Roadway luminaire. Product ID: QB 00 616S X 5 35 X 3G2S XXXX XXXX
Grey cast aluminum top housing and white plastic bottom housing with clear flat glass lens.
16 LEDs in 4 x 4 array with clear plastic sheet of individual lenses.
One Osram Optotronic LED driver. Model: QT50W/UNV/1250C/2DIMLT2/P6 set to 700ma.
Operating at 120v AC and 60 Hz.

Test Distance 8.0 m
Test Temperature 25.3 °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.