

Report of Test LL24638A

Western Power. Product ID: 125 W Mercury Vapour Roadster Body with 42 W LED Lamp.
Cast aluminium body with white and raw finish and black plastic gear cover, overall extents ~ 465 x 275 x 125 mm deep. Clear bowl lens with prismatic ribbing forms luminous volume of 313 x 270 x 75 mm deep.
Specular hammertone reflectors about lamp. One Philips 42 W 9290020065 lamp centred in L/V.
One Tridonic OMB125-05 250V 50Hz magnetic ballast.
Tested at 240 V 50 Hz. Spigot mount in C270 position.



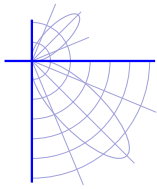
Performance Summary

Luminous Flux	3691 lm
Total Luminaire Power	38.3 W
Luminous Efficacy	96.3 lm / W

Prepared for: Western Power, 363 Wellington Street, Perth, WA 6000.

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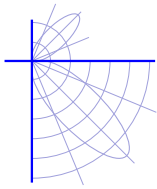




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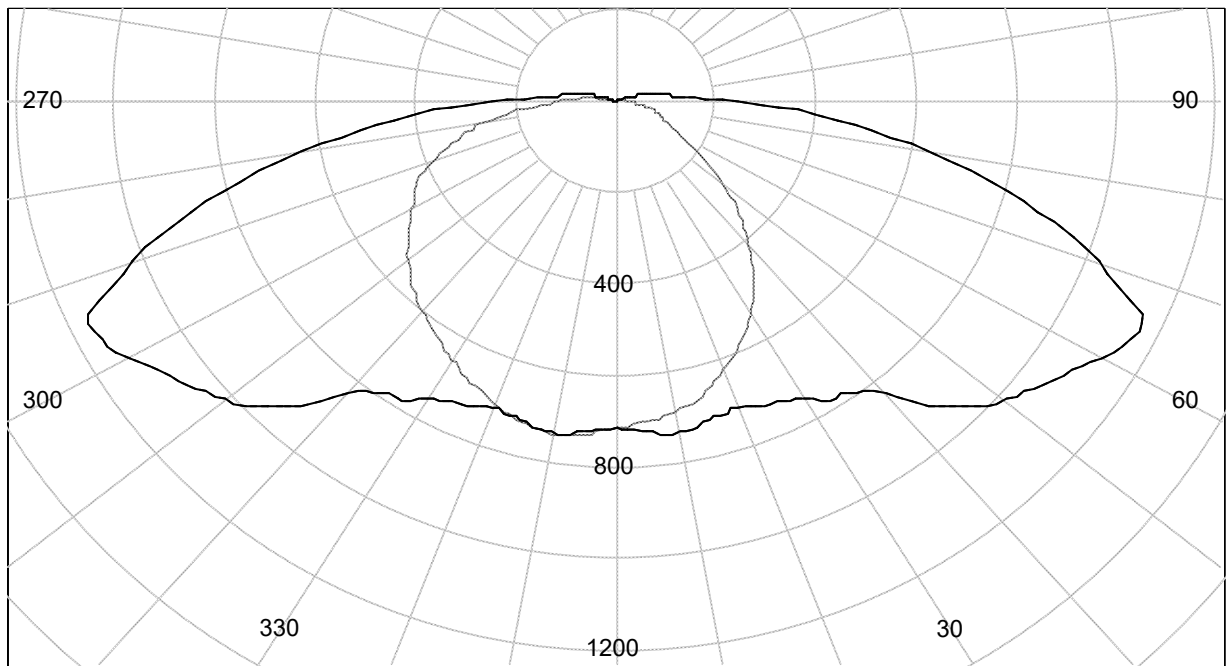
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Polar Light Distribution Curves



Kerbside / Downstream

C0-Solid, Plane of maximum-Dashed, C90-Grey (cd)
C0 aligned towards oncoming traffic

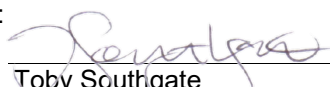
Streetside / Upstream

Street Lantern Summary:

Report data as tested.

	Luminous Flux (lm)		
	Upward	Downward	Total
Street Side	43.3	1647	1691 lm
House Side	63.2	1938	2001 lm
Total Luminous Flux			3691 lm

Certified by:


 Toby Southgate
 Authorised Signatory

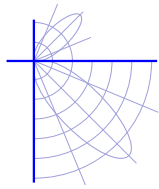
Date of test

5-May-2023

Date of report

05-Jun-2023





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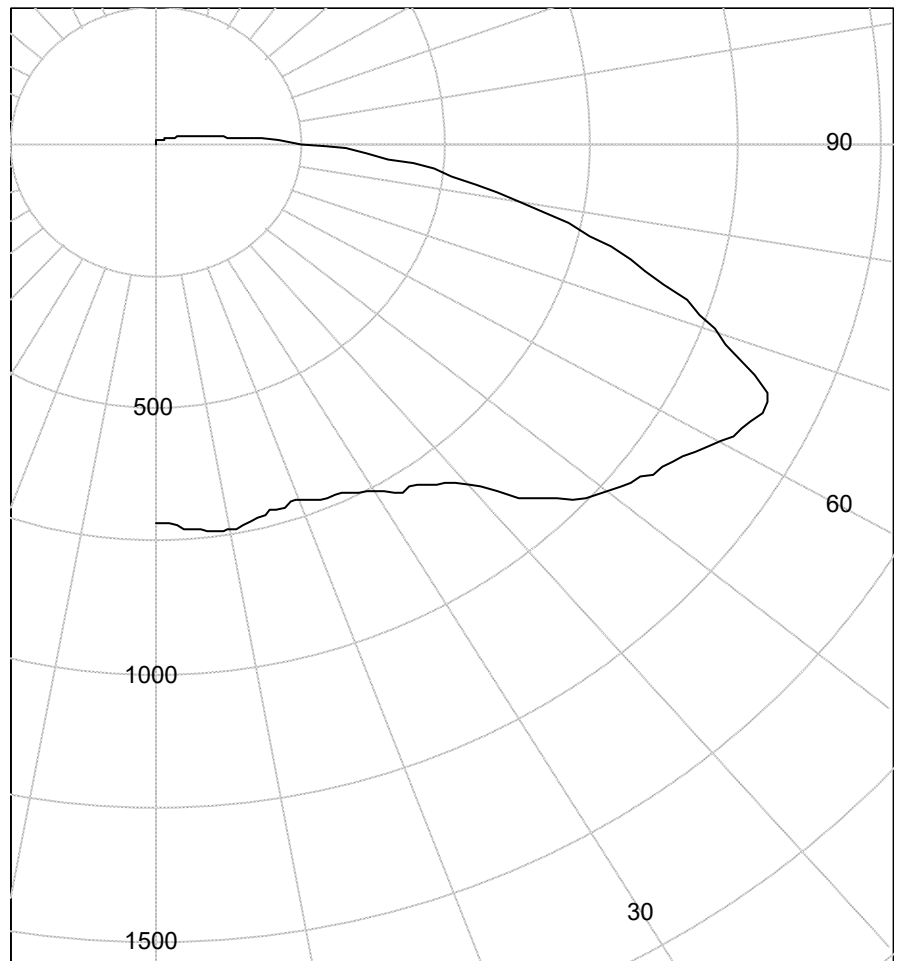
One Tridonic OMB125-05 250V 50Hz magnetic ballast.

Tested at 240 V 50 Hz. Spigot mount in C270 position.

Luminous intensity
in principal plane

Gamma (°)	Intensity (cd)
0.0	715.6
10.0	737.6
20.0	715.4
30.0	751.6
35.0	783.0
40.0	834.9
45.0	941.2
47.5	985.1
50.0	1013
52.5	1038
55.0	1059
57.5	1080
60.0	1109
62.5	1145
65.0	1164
67.5	1130
70.0	1030
72.5	948.8
75.0	850.8
77.5	758.5
80.0	646.4
82.5	532.5
85.0	441.4
87.5	344.6
90.0	244.2
92.5	171.2
95.0	125.5
97.5	102.7
100.0	83.0
102.5	65.9
105.0	49.8
120.0	4.3
135.0	0.0
150.0	0.0
165.0	0.0
180.0	0.0

Principal Vertical Plane

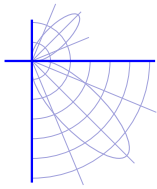


	Maximum luminous intensity
House Side	1166 cd @ (357.5, 65.5)
Street Side	1160 cd @ (0.0, 65.0)

Note: The coordinate pairs in the above table are expressed in degrees and have the format (C plane, Gamma angle).

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





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Specular hammertone reflectors about lamp. One Philips 42 W 9290020065 lamp centred in L/V.

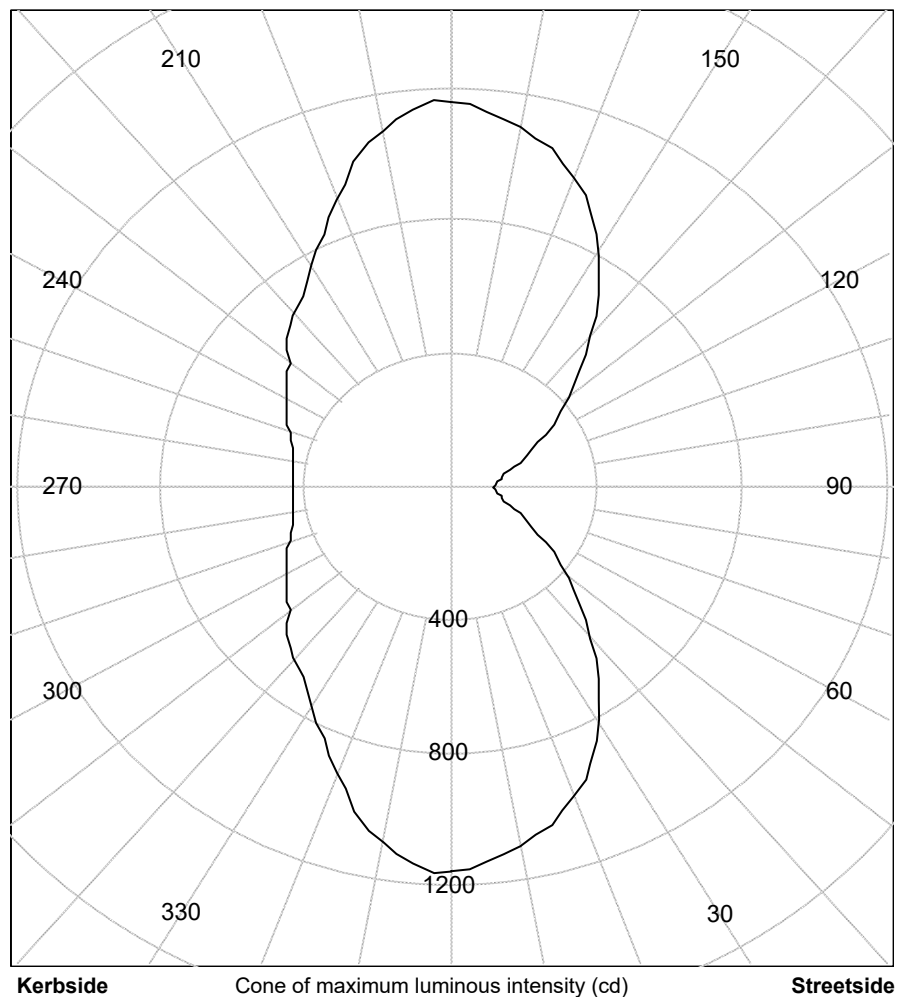
One Tridonic OMB125-05 250V 50Hz magnetic ballast.

Tested at 240 V 50 Hz. Spigot mount in C270 position.

Luminous intensity
in principal cone

C-Plane (°)	Intensity (cd)
90.0	111.9
75.0	145.8
60.0	269.5
50.0	413.9
45.0	498.0
40.0	593.7
35.0	710.6
30.0	821.0
25.0	928.3
20.0	999.1
15.0	1058
10.0	1089
5.0	1121
0.0	1159
355.0	1143
350.0	1093
345.0	1019
340.0	919.3
335.0	835.2
330.0	760.3
325.0	694.5
320.0	666.1
315.0	633.5
310.0	578.8
300.0	519.4
285.0	444.6
270.0	434.4

Principal Conical Surface



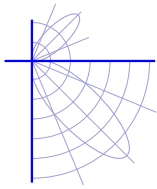
Maximum luminous intensity

House Side 1166 cd @ (357.5, 65.5)

Street Side 1160 cd @ (0.0, 65.0)

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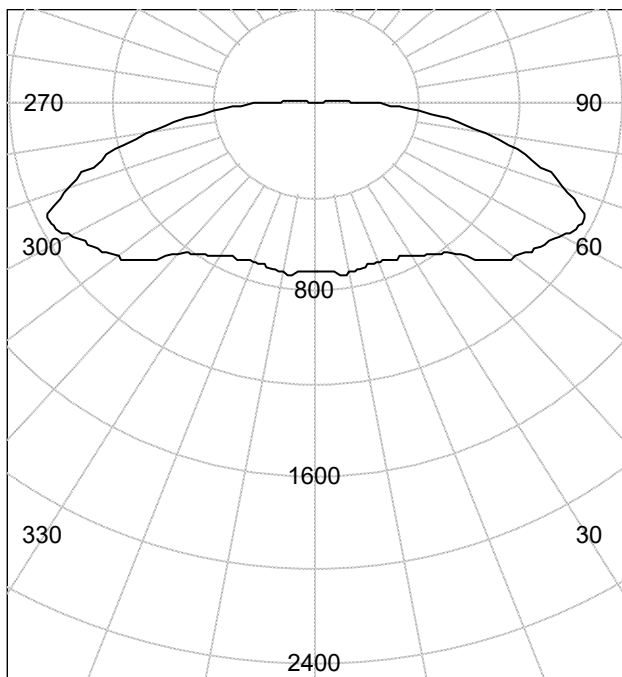
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Tested at 240 V 50 Hz. Spigot mount in C270 position.

Polar curve through CIE C0 / C180

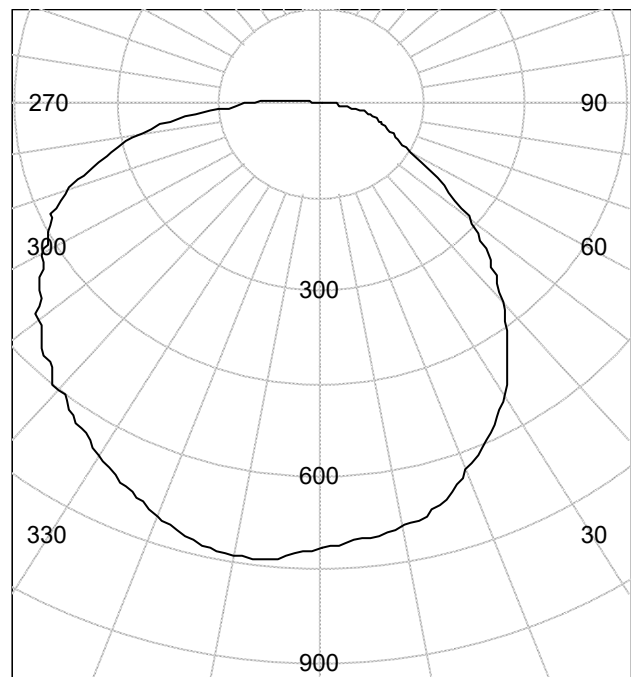


Downstream
(C180)

(cd)

Upstream
(C0)

Polar curve through CIE C90 / C270



Kerbside
(C270)

(cd)

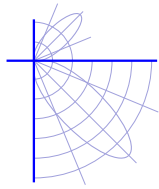
Streetside
(C90)

Performance Parameters

I_{80}	=	634.2	cd
I_{88}	=	327.2	cd
I_{90}	=	250.6	cd
I_{80} / I_{88}	=	1.938	

Note: The intensity values listed (I_{xx}) are all within the C0 half plane, the subscript refers to the gamma angle.





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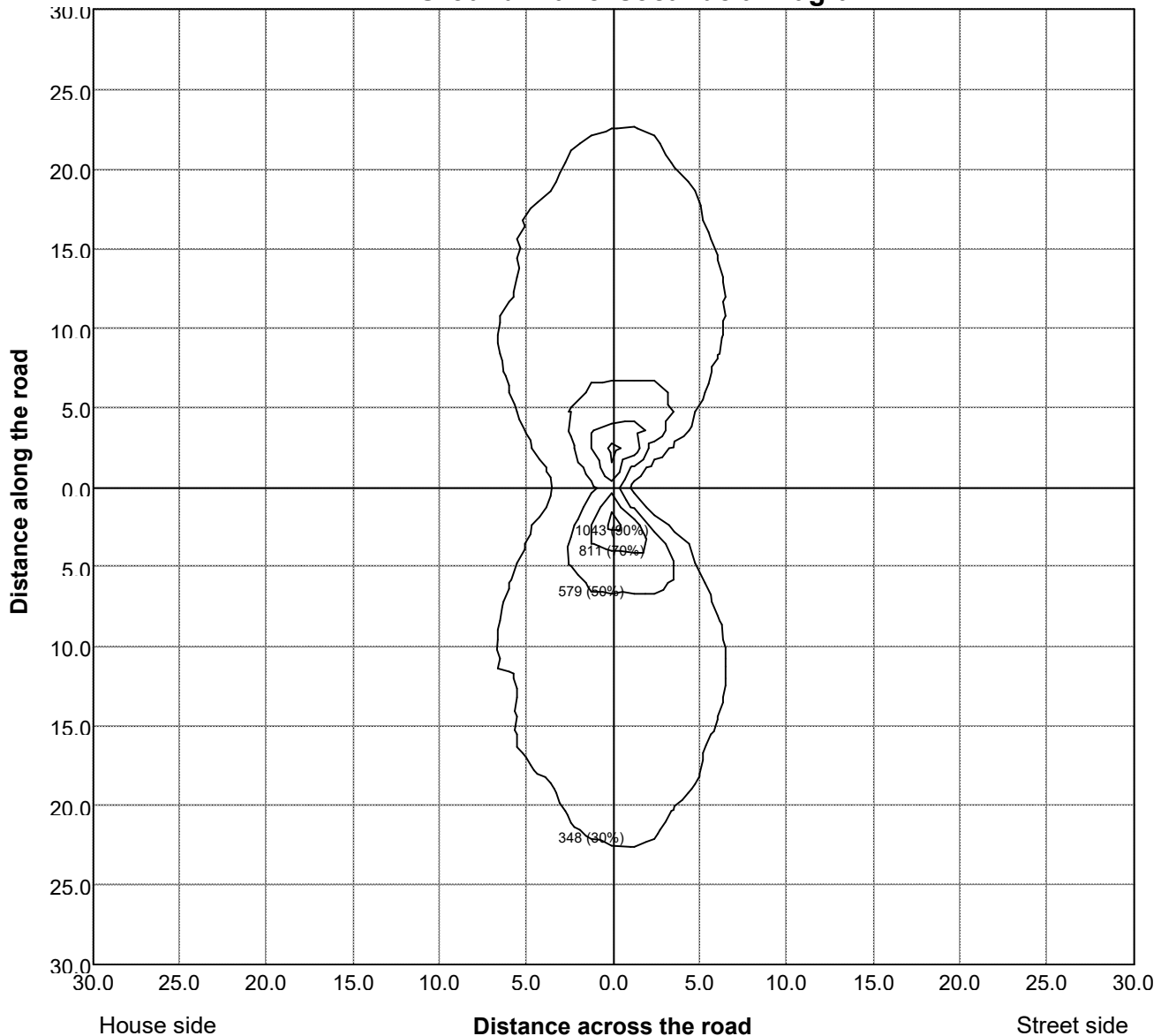
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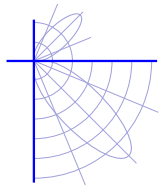
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Tested at 240 V 50 Hz. Spigot mount in C270 position.

Ground Plane Isocandela Diagram



Note: The isocandela levels are based on a mounting height of $H = 10.0$ metres. Grid values show multiples of mounting height.
 The isocandela contours are set to 10%, 20%, 30%, 50%, 70%, 90% of the maximum.
 The isocandela contour units are expressed as candela. Upstream and downstream sides have been averaged.



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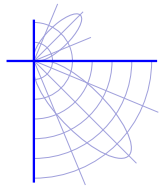
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Kerb side luminous intensity data (cd)

Gamma (°)	C-Plane								
	C270	C285	C300	C310	C315	C320	C325	C330	C335
0.0	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6
10.0	738.6	740.5	742.2	743.8	745.8	746.8	748.4	748.1	746.9
20.0	707.3	713.3	734.0	737.7	734.8	731.3	730.0	728.3	726.0
30.0	652.7	668.2	699.6	703.8	713.5	723.3	735.1	744.8	751.5
35.0	625.1	648.5	677.3	695.2	709.0	725.8	741.4	758.5	770.8
40.0	600.5	621.0	655.9	683.8	699.2	716.4	741.6	768.1	791.4
45.0	573.3	585.7	629.1	664.8	685.2	715.1	751.8	782.9	810.6
47.5	552.9	572.6	617.5	655.6	679.2	717.6	759.6	788.4	832.9
50.0	542.8	551.3	607.6	647.8	670.9	709.8	754.4	800.6	864.5
52.5	518.4	537.0	595.3	635.8	665.2	707.8	755.4	817.7	875.6
55.0	507.8	518.0	582.2	626.3	656.8	710.7	767.9	831.7	876.4
57.5	481.7	499.1	564.5	617.4	655.6	706.0	771.6	818.4	860.1
60.0	470.1	482.0	550.6	606.7	652.7	710.4	766.3	799.8	847.4
62.5	454.6	466.1	537.0	597.1	645.5	699.5	733.8	776.1	828.3
65.0	436.0	447.8	522.1	580.6	637.8	675.7	699.1	764.6	833.7
67.5	417.8	431.7	506.1	564.9	614.4	638.1	681.8	750.6	846.1
70.0	391.8	409.8	479.5	540.9	581.0	614.1	669.5	748.6	845.8
72.5	360.5	379.8	453.4	513.7	547.9	588.7	654.3	729.8	823.4
75.0	325.6	342.7	422.6	477.3	512.4	556.4	617.2	700.9	750.5
77.5	299.1	308.8	386.3	431.4	468.1	516.9	574.5	640.4	670.0
80.0	264.9	270.1	345.3	378.5	413.5	458.6	508.2	551.1	569.0
82.5	229.6	236.2	299.3	325.7	362.4	395.8	431.2	453.7	459.0
85.0	182.2	196.5	246.3	273.5	302.6	323.1	351.0	374.3	370.6
87.5	140.4	145.9	181.8	212.5	229.2	235.8	267.1	271.1	288.5
90.0	114.1	111.9	120.7	140.4	142.0	157.1	179.5	186.5	213.3
92.5	91.4	90.5	83.0	85.5	85.5	102.3	110.8	128.4	136.2
95.0	74.9	70.9	64.1	65.1	64.1	72.2	81.2	91.6	99.7
97.5	57.2	46.2	42.1	48.5	47.8	53.0	58.4	69.8	78.0
100.0	35.5	19.4	25.3	32.3	32.8	37.4	41.4	50.6	58.3
102.5	15.4	10.0	11.3	18.0	21.7	24.6	28.1	34.6	41.1
105.0	7.2	5.4	6.5	10.8	13.3	16.2	18.8	23.0	28.5
120.0	0.0	0.0	0.0	0.0	0.0	0.4	0.9	1.6	2.4
135.0	0.0	0.0	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	0.0	0.0
165.0	0.0	0.0	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	0.0	0.0





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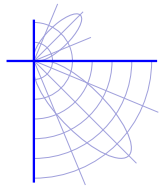
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Tested at 240 V 50 Hz. Spigot mount in C270 position.

Gamma (°)	Kerb side		Luminous intensity data (cd)						Road side	
	C340	C345	C350	C-Plane		C5	C10	C15	C20	
				C355	C0					
0.0	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	
10.0	743.8	741.8	740.5	738.8	737.0	735.0	734.8	735.3	733.7	
20.0	724.5	721.7	718.4	716.9	714.9	713.4	712.1	711.0	711.0	
30.0	753.8	754.5	755.1	752.6	752.0	748.7	740.8	729.2	712.3	
35.0	778.2	780.7	781.1	782.3	784.2	779.5	766.0	747.2	719.5	
40.0	795.2	800.3	816.8	830.9	838.8	837.6	818.5	796.0	753.4	
45.0	835.5	881.6	914.8	936.9	941.9	937.7	922.7	878.8	823.6	
47.5	882.4	918.2	955.4	980.7	990.0	982.0	958.2	909.0	856.0	
50.0	903.9	947.2	981.4	1005	1018	1009	986.1	935.5	864.4	
52.5	918.7	953.1	996.1	1027	1042	1037	1005	946.5	878.1	
55.0	910.6	958.0	1008	1052	1064	1046	1013	959.5	886.5	
57.5	902.2	956.8	1027	1075	1090	1073	1026	969.3	901.5	
60.0	893.4	973.4	1039	1095	1120	1097	1054	1001	922.4	
62.5	906.1	981.9	1069	1132	1150	1119	1081	1026	959.8	
65.0	916.3	1012	1092	1139	1160	1132	1094	1052	993.6	
67.5	935.7	1025	1098	1141	1102	1057	1036	1035	1024	
70.0	933.9	1007	1050	1039	1025	1002	994.3	1026	1016	
72.5	879.5	944.9	946.7	960.9	938.9	921.2	927.8	954.7	971.3	
75.0	810.8	825.4	859.6	854.6	843.2	823.3	830.6	861.9	894.4	
77.5	695.5	724.3	755.5	760.6	747.3	728.4	727.4	776.5	803.6	
80.0	569.1	615.3	644.8	650.3	634.2	620.8	639.5	667.7	686.3	
82.5	474.8	509.0	534.5	534.2	536.0	531.3	535.3	544.5	553.5	
85.0	398.5	416.8	420.3	435.1	444.8	442.2	435.4	430.3	422.1	
87.5	315.3	326.0	330.5	342.6	346.1	346.6	336.1	327.0	301.3	
90.0	228.5	229.9	239.3	245.2	250.6	249.9	241.0	225.1	202.3	
92.5	147.8	153.3	161.2	164.1	169.2	166.1	153.7	139.9	118.4	
95.0	110.1	115.2	119.7	124.6	126.1	123.2	115.0	100.8	85.4	
97.5	86.8	93.5	98.2	101.4	102.6	102.5	92.7	79.9	66.9	
100.0	68.2	75.6	79.1	81.6	83.2	83.9	76.8	63.5	51.4	
102.5	49.4	56.1	61.7	63.7	65.9	66.1	61.2	50.3	39.0	
105.0	34.2	41.3	44.9	48.3	51.2	50.9	47.8	38.9	29.7	
120.0	3.4	4.0	4.3	4.4	4.4	4.1	3.6	3.0	2.2	
135.0	0.0	0.0	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	0.0	0.0	
165.0	0.0	0.0	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	0.0	0.0	





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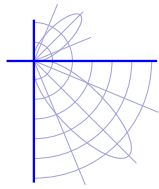
One Tridonic OMB125-05 250V 50Hz magnetic ballast.

Tested at 240 V 50 Hz. Spigot mount in C270 position.

Road side luminous intensity data (cd)

Gamma (°)	C-Plane								
	C25	C30	C35	C40	C45	C50	C60	C75	C90
0.0	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6
10.0	730.4	727.0	722.8	719.2	715.9	713.1	705.4	695.5	690.8
20.0	711.8	708.2	703.9	700.9	694.5	688.1	669.0	641.4	626.0
30.0	694.5	680.5	663.9	649.0	638.2	628.6	603.5	563.1	538.5
35.0	694.9	663.2	640.4	618.2	601.0	585.2	555.5	509.3	480.1
40.0	698.4	646.9	604.6	574.0	547.4	525.9	496.9	450.2	414.9
45.0	762.8	687.0	608.3	541.5	492.8	456.4	421.7	375.9	351.2
47.5	790.7	721.3	635.0	547.8	479.7	431.1	382.2	334.9	315.9
50.0	802.9	733.3	653.9	567.2	483.9	413.7	347.6	298.1	280.2
52.5	802.1	730.3	663.2	586.8	504.6	420.3	318.9	262.7	242.2
55.0	809.8	728.2	663.6	592.6	522.4	444.4	309.9	231.6	208.4
57.5	820.4	731.7	659.7	591.6	523.9	459.6	326.1	207.6	177.3
60.0	840.3	746.3	666.2	590.3	519.5	450.6	328.8	189.7	150.1
62.5	865.6	775.5	681.0	588.7	508.0	430.1	289.4	169.6	131.5
65.0	917.4	813.2	707.9	593.1	499.0	415.9	270.3	149.0	114.4
67.5	955.8	843.8	716.4	600.8	502.2	412.6	267.2	139.2	105.0
70.0	976.0	878.9	739.3	603.7	497.6	404.0	266.2	135.4	98.1
72.5	959.2	887.6	753.7	596.6	483.7	395.8	262.9	132.4	89.7
75.0	908.6	861.1	744.8	582.7	475.9	387.2	258.1	121.9	81.0
77.5	826.8	807.5	709.4	566.6	468.9	379.9	238.1	106.2	71.3
80.0	707.7	682.8	619.4	504.0	415.2	341.1	231.3	94.3	60.2
82.5	553.4	528.5	481.0	385.4	312.7	258.5	212.1	84.6	49.8
85.0	413.3	381.5	341.0	267.4	208.7	188.3	163.8	68.3	39.8
87.5	287.4	249.4	216.5	157.1	115.4	143.8	108.0	50.1	29.4
90.0	175.2	143.4	123.2	66.8	73.6	77.5	67.4	34.8	22.6
92.5	98.2	77.3	56.0	38.4	36.7	32.4	31.8	21.9	18.9
95.0	69.5	52.1	37.8	28.3	24.7	22.2	19.9	17.1	17.4
97.5	53.4	37.9	27.8	21.9	19.1	17.1	15.6	14.9	15.9
100.0	40.7	28.0	21.5	17.8	15.7	14.0	12.9	13.2	15.2
102.5	30.7	21.9	17.1	14.4	12.7	11.7	11.0	11.6	13.4
105.0	22.8	17.2	13.2	11.1	10.1	9.4	9.2	10.0	11.6
120.0	1.6	0.8	0.3	0.1	0.2	0.2	0.3	1.0	1.2
135.0	0.0	0.0	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	0.0	0.0
165.0	0.0	0.0	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	0.0	0.0





Test Report No. LL24638A

Western Power. Product ID: 125 W Mercury Vapour Roadster Body with 42 W LED Lamp.

Cast aluminium body with white and raw finish and black plastic gear cover, overall extents ~ 465 x 275 x 125 mm deep. Clear bowl lens with prismatic ribbing forms luminous volume of 313 x 270 x 75 mm deep.

Specular hammertone reflectors about lamp. One Philips 42 W 9290020065 lamp centred in L/V.

One Tridonic OMB125-05 250V 50Hz magnetic ballast.

Tested at 240 V 50 Hz. Spigot mount in C270 position.

Environment	Photometric distance	8.0 m
	Ambient temperature	24.9 °C

Notes Sampling was not performed. This report is applicable only to the sample that was tested.

The significance of the report is limited to the extent that the sample is representative of the population.

Testing was performed in a laboratory with suitable control of environmental conditions, stray light, electrical supply and stabilisation. The sample was maintained in a fixed orientation for the duration of testing.

The photometric values contained in this report are absolute, they have not been scaled by the luminous flux emitted by the light source .

Prorating values for the use of other light source/driver combinations, or for use in different environmental conditions, may yield erroneous results.

This report is free of erasures and corrections.

Photometric intensity values are reported using the CIE Cgamma coordinate system as described in CIE Publication number 121.

The term "Total luminaire power" may appear in this report, it represents the total electrical power consumption of the device tested.

Procedure LightLab Procedure Test-B3130. Tested in accordance with the applicable sections of CIE Publication Numbers 121 and 34; with reference to Australian Standard AS1680, Part 3.

Measurement uncertainties Measurement uncertainties are available on request.

