



Report of Test

LLIA000794-004

Catalog Number: GTSOL112-G2-ML-BL-NL

White aluminum mounting plate, aluminum heatsink and cooling fan, no enclosure.

One GTSOL112 LED module with 112 white LEDs, 16 groups of 7 LEDs

Two Mean Well HLG-240H-C2100B LED drivers

120.0Vac, 60.00Hz, 1.697A, 200.7W, 0.986PF, 6.3%THD(i)



Performance Summary

Total Light Output	24196 lm
Luminaire Power	200.7 W
Luminous Efficacy	120.6 lm/W

PREPARED FOR : Global Tech LED, 8901 Quality Road, Bonita Springs, FL 34135, USA



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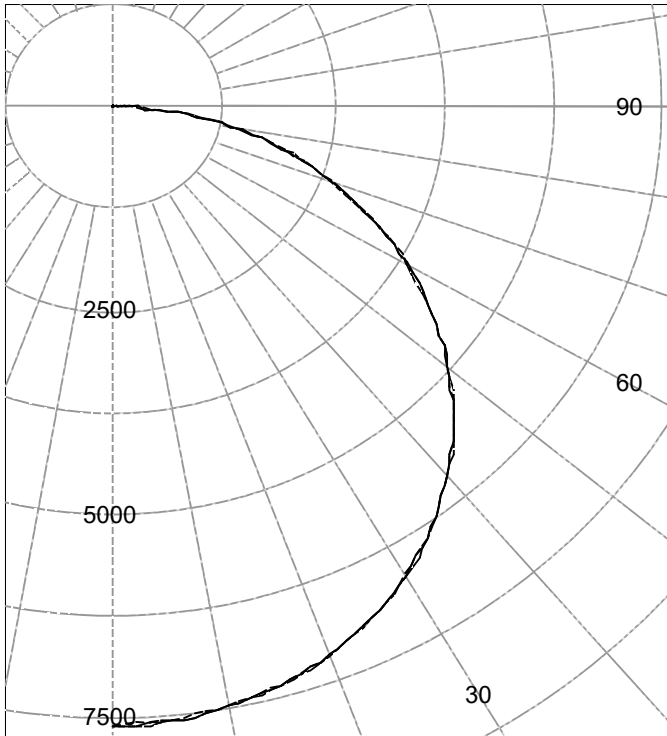
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Legend: C0-Solid, C45-Dashed, C90-Grey (cd)



INTENSITY SUMMARY (cd)

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
0.0	7573	7573	7573	7573	7573	
5.0	7554	7556	7542	7545	7561	718
10.0	7479	7479	7467	7469	7485	
15.0	7351	7354	7342	7343	7358	2075
20.0	7166	7168	7157	7164	7178	
25.0	6929	6934	6923	6928	6939	3196
30.0	6640	6645	6634	6637	6649	
35.0	6294	6302	6291	6293	6307	3940
40.0	5899	5903	5894	5897	5910	
45.0	5451	5458	5448	5454	5459	4207
50.0	4958	4965	4958	4961	4961	
55.0	4422	4428	4423	4424	4417	3952
60.0	3845	3854	3853	3841	3830	
65.0	3234	3251	3250	3236	3225	3207
70.0	2620	2632	2630	2615	2604	
75.0	1964	1976	2004	1993	1990	2096
80.0	1337	1367	1343	1341	1365	
85.0	717	709	716	732	729	795
90.0	110	112	120	115	83	

AVERAGE LUMINANCE (cd / m²)

Gamma	C0	C45	C90
45.0	137677	137595	137889
55.0	137690	137730	137539
65.0	136688	137341	136298
75.0	135561	138317	137343
85.0	146852	146683	149372

ZONAL FLUX AND PERCENTAGES

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	5989	N / A	24.8
0-40	9929	N / A	41.0
0-60	18088	N / A	74.8
0-90	24187	N / A	100.0
40-90	14258	N / A	58.9
60-90	6099	N / A	25.2
90-180	9	N / A	0.0
0-180	24196	N / A	100.0

Total Light Output = 24,196 lm

Spacing Criterion: 0-180 1.3
Spacing Criterion: 90-270 1.3

Signed:

Michael L. Grather
Authorized Signatory

Date of test 16-Jun-2017
Date of report 19-Jun-2017



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Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	7573	7573	7573	7573	7573
2.5	7573	7573	7559	7563	7577
5.0	7554	7556	7542	7545	7561
7.5	7523	7522	7512	7512	7531
10.0	7479	7479	7467	7469	7485
12.5	7420	7423	7410	7412	7427
15.0	7351	7354	7342	7343	7358
17.5	7268	7266	7256	7261	7275
20.0	7166	7168	7157	7164	7178
22.5	7052	7060	7046	7052	7066
25.0	6929	6934	6923	6928	6939
27.5	6791	6796	6785	6789	6799
30.0	6640	6645	6634	6637	6649
32.5	6472	6477	6469	6472	6482
35.0	6294	6302	6291	6293	6307
37.5	6104	6108	6097	6103	6115
40.0	5899	5903	5894	5897	5910
42.5	5682	5687	5677	5682	5692
45.0	5451	5458	5448	5454	5459
47.5	5212	5217	5207	5211	5215
50.0	4958	4965	4958	4961	4961
52.5	4694	4702	4696	4696	4699
55.0	4422	4428	4423	4424	4417
57.5	4138	4146	4143	4137	4123
60.0	3845	3854	3853	3841	3830
62.5	3544	3553	3552	3539	3531
65.0	3234	3251	3250	3236	3225
67.5	2929	2945	2941	2928	2915
70.0	2620	2632	2630	2615	2604
72.5	2294	2309	2314	2299	2299
75.0	1964	1976	2004	1993	1990
77.5	1655	1665	1672	1664	1673
80.0	1337	1367	1343	1341	1365
82.5	1025	1035	1024	1038	1065
85.0	717	709	716	732	729
87.5	408	396	452	442	391
90.0	110	112	120	115	83



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Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	110	112	120	115	83
92.5	2	3	3	4	5
95.0	1	1	1	2	2
97.5	0	0	0	0	0
100.0	0	0	0	0	0
102.5	0	0	0	0	0
105.0	0	0	0	0	0
107.5	0	0	0	0	0
110.0	0	0	0	0	0
112.5	0	0	0	0	0
115.0	0	0	0	0	0
117.5	0	0	0	0	0
120.0	0	0	0	0	0
122.5	0	0	0	0	0
125.0	0	0	0	0	0
127.5	0	0	0	0	0
130.0	0	0	0	0	0
132.5	0	0	0	0	0
135.0	0	0	0	0	0
137.5	0	0	0	0	0
140.0	0	0	0	0	0
142.5	0	0	0	0	0
145.0	0	0	0	0	0
147.5	0	0	0	0	0
150.0	0	0	0	0	0
152.5	0	0	0	0	0
155.0	0	0	0	0	0
157.5	0	0	0	0	0
160.0	0	0	0	0	0
162.5	0	0	0	0	0
165.0	0	0	0	0	0
167.5	0	0	0	0	0
170.0	0	0	0	0	0
172.5	0	0	0	0	0
175.0	0	0	0	0	0
177.5	0	0	0	0	0
180.0	0	0	0	0	0



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Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	102	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	60	51	44	57	50	44	55	48	43	53	47	43	40
6	68	54	45	39	66	53	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27	38	31	27	37	31	26	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	34	28	24	22

For absolute test reports, CUs are expressed as a percentage of total lumen output. Calculations were based on published IES procedures, and are based on the zonal cavity method. Basic assumptions: 1) Room surfaces are lambertian reflectors. 2) Incident flux on each surface is uniformly distributed. 3) The room is spectrally neutral. When luminaires are not evenly distributed throughout the room, or do not exhibit lateral symmetry, CU values may differ from actual performance.

Circle of Light Plot

Height(ft)	Illuminance at Nadir (fc)	Beam Width (across 50% Nadir Illum)	
		0-180	90-270
6.0	210.4	7.81	7.82
8.0	118.3	10.42	10.43
10.0	75.7	13.02	13.04
12.0	52.6	15.63	15.65
14.0	38.6	18.23	18.26
16.0	29.6	20.84	20.87



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Test Distance 9.5 m
Test Temperature 25.6 °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 CIE Gamma coordinate system as defined in CIE publication number 121.

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