



# Report of Test

## LLIA000795-003

Catalog Number: GTSOL112-G2-MH-BR-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, 2.099A, 249.4W, 0.990PF, 5.4%THD(i)



### Performance Summary

Total Light Output	30564 lm
Luminaire Power	249.5 W
Luminous Efficacy	122.5 lm/W

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



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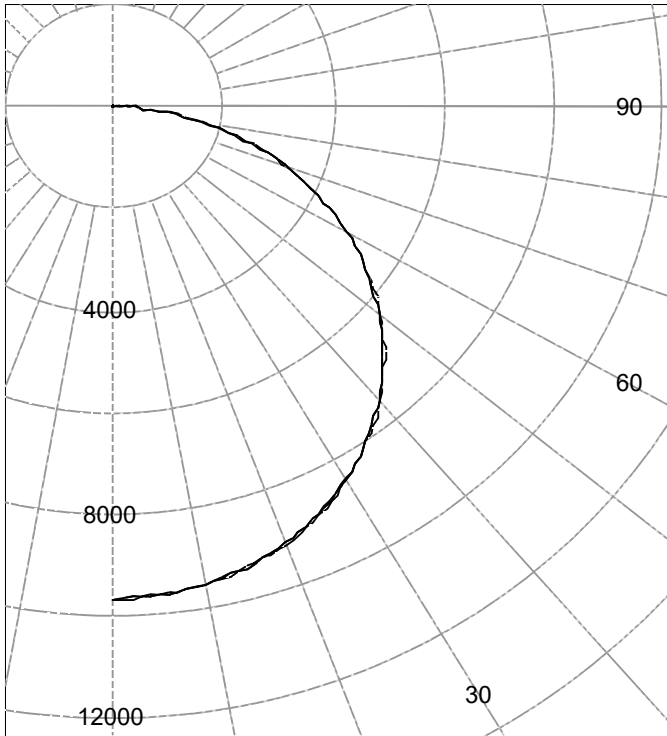
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Legend: C0-Solid, C45-Dashed, C90-Grey (cd)



(Two plane symmetry) C0-C90

**AVERAGE LUMINANCE (cd / m<sup>2</sup>)**

Gamma	C0	C45	C90
45.0	175222	175007	175634
55.0	174702	174647	174980
65.0	172475	172969	172421
75.0	167832	170678	170013
85.0	164687	164010	168424

**INTENSITY SUMMARY (cd)**

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
0.0	9661	9661	9661	9661	9661	916
5.0	9630	9637	9612	9629	9637	
10.0	9534	9540	9514	9529	9544	
15.0	9370	9376	9351	9359	9379	2645
20.0	9134	9138	9113	9131	9143	4071
25.0	8827	8832	8811	8824	8840	
30.0	8453	8461	8442	8456	8474	
35.0	8018	8023	8007	8018	8031	5017
40.0	7507	7517	7500	7513	7524	5353
45.0	6937	6946	6929	6940	6954	
50.0	6301	6313	6299	6309	6321	
55.0	5611	5622	5609	5617	5619	5018
60.0	4875	4879	4870	4872	4861	4046
65.0	4081	4103	4093	4086	4080	
70.0	3283	3293	3285	3277	3269	
75.0	2432	2439	2473	2457	2464	2590
80.0	1614	1643	1628	1619	1639	903
85.0	804	792	800	814	822	
90.0	92	99	110	105	60	

**ZONAL FLUX AND PERCENTAGES**

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	7632	N / A	25.0
0-40	12649	N / A	41.4
0-60	23020	N / A	75.3
0-90	30558	N / A	100.0
40-90	17909	N / A	58.6
60-90	7539	N / A	24.7
90-180	6	N / A	0.0
0-180	30564	N / A	100.0

Total Light Output = 30,564 lm

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

Signed:

Tracy A Silvert  
Authorized Signatory

Date of test 19-Jun-2017  
Date of report 20-Jun-2017



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**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	9661	9661	9661	9661	9661
2.5	9652	9663	9637	9652	9664
5.0	9630	9637	9612	9629	9637
7.5	9587	9596	9572	9585	9600
10.0	9534	9540	9514	9529	9544
12.5	9458	9462	9440	9454	9468
15.0	9370	9376	9351	9359	9379
17.5	9258	9263	9240	9255	9268
20.0	9134	9138	9113	9131	9143
22.5	8989	8995	8973	8984	9004
25.0	8827	8832	8811	8824	8840
27.5	8652	8658	8635	8647	8666
30.0	8453	8461	8442	8456	8474
32.5	8243	8252	8230	8244	8260
35.0	8018	8023	8007	8018	8031
37.5	7772	7780	7763	7775	7784
40.0	7507	7517	7500	7513	7524
42.5	7229	7242	7221	7234	7250
45.0	6937	6946	6929	6940	6954
47.5	6626	6634	6622	6633	6641
50.0	6301	6313	6299	6309	6321
52.5	5966	5973	5963	5968	5980
55.0	5611	5622	5609	5617	5619
57.5	5248	5258	5246	5251	5248
60.0	4875	4879	4870	4872	4861
62.5	4483	4494	4487	4480	4475
65.0	4081	4103	4093	4086	4080
67.5	3684	3703	3691	3687	3677
70.0	3283	3293	3285	3277	3269
72.5	2849	2869	2883	2867	2867
75.0	2432	2439	2473	2457	2464
77.5	2031	2042	2040	2035	2053
80.0	1614	1643	1628	1619	1639
82.5	1206	1215	1194	1202	1252
85.0	804	792	800	814	822
87.5	429	408	453	441	404
90.0	92	99	110	105	60



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**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	92	99	110	105	60
92.5	3	3	3	4	4
95.0	2	2	2	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	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	24	36	29	24	35	29	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	268.4	7.80	7.82
8.0	150.9	10.41	10.42
10.0	96.6	13.01	13.03
12.0	67.1	15.61	15.63
14.0	49.3	18.21	18.24
16.0	37.7	20.81	20.84



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**Test Distance**            9.5 m  
**Test Temperature**       25.5 °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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