

# Report of Test

## LLIA000795-004

Catalog Number: GTSOL112-G2-ML-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, 1.690A, 200.0W, 0.986PF, 5.9%THD(i)



### Performance Summary

Total Light Output	25310 lm
Luminaire Power	199.9 W
Luminous Efficacy	126.6 lm/W

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



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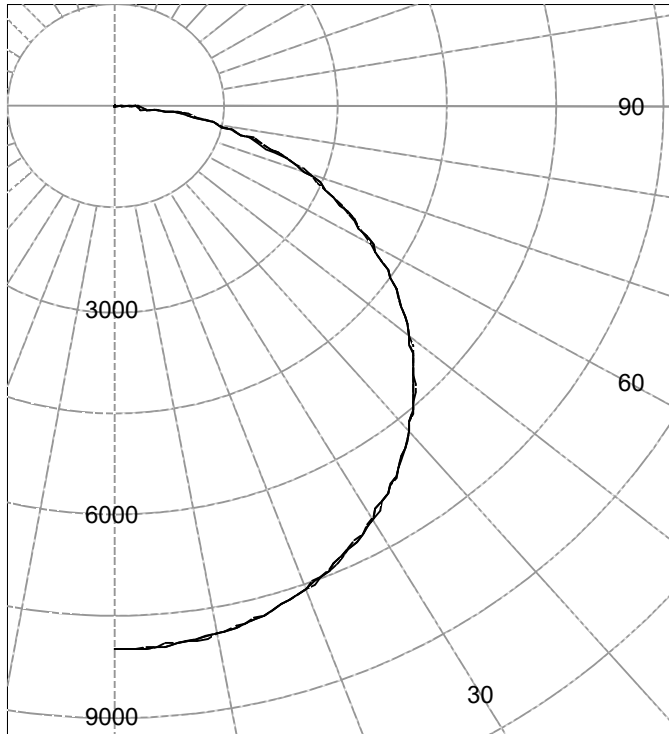
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Legend: C0-Solid, C45-Dashed, C90-Grey (cd)



(Two plane symmetry) C0-C90

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

Gamma	C0	C45	C90
45.0	145084	144868	145399
55.0	144615	144663	144962
65.0	142818	143320	142872
75.0	139066	141464	140865
85.0	136700	136227	140020

**INTENSITY SUMMARY (cd)**

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
0.0	7996	7996	7996	7996	7996	
5.0	7969	7977	7957	7965	7977	758
10.0	7889	7895	7873	7884	7898	
15.0	7755	7760	7737	7748	7760	2189
20.0	7557	7565	7547	7557	7567	
25.0	7310	7313	7296	7306	7318	3370
30.0	7000	7007	6989	7001	7013	
35.0	6638	6641	6626	6639	6650	4154
40.0	6214	6224	6209	6220	6229	
45.0	5744	5749	5735	5748	5756	4432
50.0	5217	5225	5216	5225	5234	
55.0	4644	4654	4646	4652	4655	4155
60.0	4036	4040	4034	4035	4027	
65.0	3379	3396	3391	3384	3381	3351
70.0	2720	2727	2723	2715	2708	
75.0	2015	2019	2050	2037	2041	2146
80.0	1339	1360	1349	1342	1360	
85.0	667	657	665	676	683	750
90.0	78	84	93	89	54	

**ZONAL FLUX AND PERCENTAGES**

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	6317	N / A	25.0
0-40	10471	N / A	41.4
0-60	19058	N / A	75.3
0-90	25305	N / A	100.0
40-90	14834	N / A	58.6
60-90	6246	N / A	24.7
90-180	5	N / A	0.0
0-180	25310	N / A	100.0

**Total Light Output = 25,310 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	7996	7996	7996	7996	7996
2.5	7991	7995	7980	7986	7993
5.0	7969	7977	7957	7965	7977
7.5	7938	7945	7923	7933	7943
10.0	7889	7895	7873	7884	7898
12.5	7832	7834	7815	7824	7836
15.0	7755	7760	7737	7748	7760
17.5	7665	7669	7649	7661	7673
20.0	7557	7565	7547	7557	7567
22.5	7440	7448	7425	7437	7452
25.0	7310	7313	7296	7306	7318
27.5	7161	7166	7148	7161	7170
30.0	7000	7007	6989	7001	7013
32.5	6828	6831	6817	6825	6838
35.0	6638	6641	6626	6639	6650
37.5	6435	6441	6424	6436	6445
40.0	6214	6224	6209	6220	6229
42.5	5984	5994	5979	5991	5998
45.0	5744	5749	5735	5748	5756
47.5	5485	5494	5485	5491	5503
50.0	5217	5225	5216	5225	5234
52.5	4939	4945	4936	4944	4951
55.0	4644	4654	4646	4652	4655
57.5	4348	4353	4347	4349	4345
60.0	4036	4040	4034	4035	4027
62.5	3711	3721	3716	3711	3705
65.0	3379	3396	3391	3384	3381
67.5	3050	3066	3058	3053	3047
70.0	2720	2727	2723	2715	2708
72.5	2361	2376	2388	2375	2375
75.0	2015	2019	2050	2037	2041
77.5	1683	1691	1691	1686	1701
80.0	1339	1360	1349	1342	1360
82.5	1001	1007	991	998	1039
85.0	667	657	665	676	683
87.5	357	339	377	367	337
90.0	78	84	93	89	54



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**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	78	84	93	89	54
92.5	2	2	3	3	3
95.0	1	1	1	1	1
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**

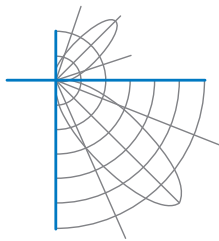
Effective Floor Cavity Reflectance 0.20

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	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	75	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	222.1	7.81	7.82
8.0	124.9	10.41	10.42
10.0	80.0	13.01	13.03
12.0	55.5	15.61	15.63
14.0	40.8	18.22	18.24
16.0	31.2	20.82	20.85



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**Test Distance** 9.5 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 CIE Gamma coordinate system as defined in CIE publication number 121.

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