

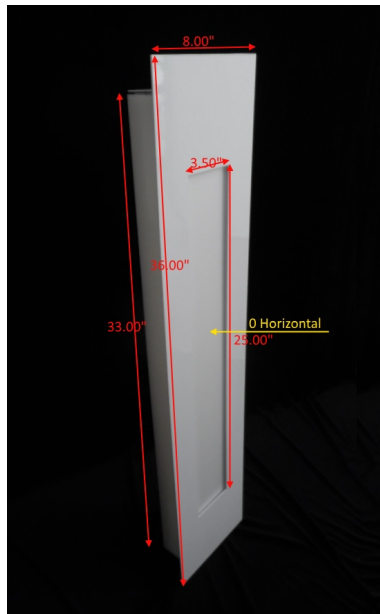


# Report of Test

## LLIA000901-032

Catalog Number: W163601/F11/D61/L406

Wall mounted, formed white enamel aluminum housing, formed white enamel steel enclosure with translucent white plastic side and front enclosure.  
96 white LEDs, two Samsung Electronics LT-M562C G2 3000K-S49 LED boards with 48 LEDs each.  
One Philips Advance Xitanium XI054C150V054BST1 LED driver.  
120.0Vac, 60.00Hz, 0.3347A, 39.20W, 0.976PF, 8.0%THD(i)



### Performance Summary

Total Light Output	3211 lm
Luminaire Power	39.2 W
Luminous Efficacy	81.9 lm/W

**PREPARED FOR : Lumetta, Inc, 33 Minnesota Avenue, Warwick, RI 02888, USA**



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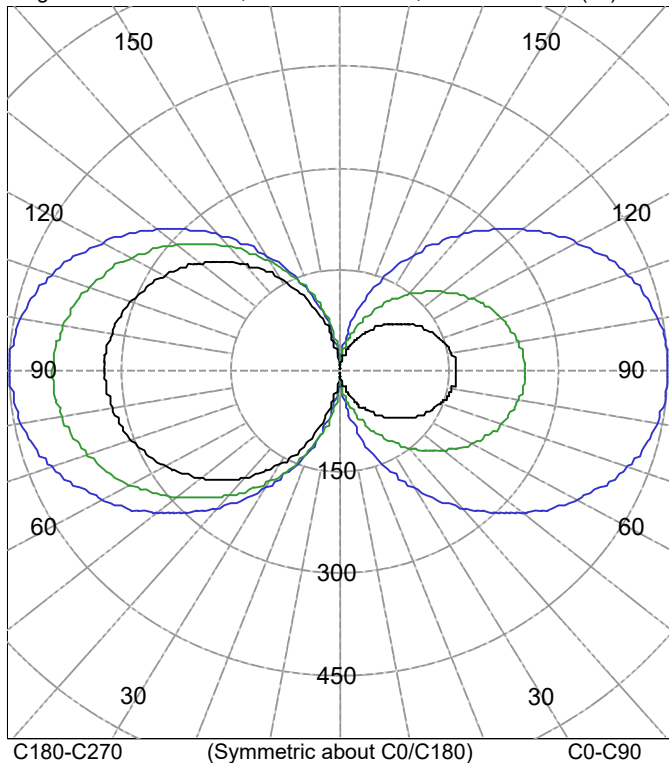
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Legend: C0/C180-Black, C45/C225-Green, C90/C270-Blue (cd)



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

Gamma	C0	C45	C90
45.0	750	1376	6304
55.0	811	1447	6878
65.0	861	1504	7383
75.0	901	1550	7835
85.0	927	1583	8235

**INTENSITY SUMMARY (cd)**

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
0.0	2	2	2	2	2	
5.0	7	10	18	25	27	3
10.0	16	18	37	55	59	
15.0	26	27	54	85	94	23
20.0	38	37	73	116	129	
25.0	50	48	92	147	164	60
30.0	62	59	111	178	199	
35.0	73	70	130	208	234	113
40.0	85	81	149	237	266	
45.0	97	92	167	265	297	175
50.0	108	103	183	290	326	
55.0	119	113	198	314	354	238
60.0	129	122	212	336	378	
65.0	138	130	224	355	400	296
70.0	145	137	234	370	418	
75.0	151	142	242	383	432	340
80.0	155	146	248	393	443	
85.0	158	149	251	398	450	363
90.0	159	150	252	399	452	

**ZONAL FLUX AND PERCENTAGES**

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	86	N / A	2.7
0-40	199	N / A	6.2
0-60	612	N / A	19.0
0-90	1610	N / A	50.1
40-90	1411	N / A	44.0
60-90	999	N / A	31.1
90-180	1601	N / A	49.9
0-180	3211	N / A	100.0

Total Light Output = 3,211 lm

Signed:

Authorized Signatory

Date of test 12-Feb-2018  
Date of report 19-Feb-2018



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**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	2	2	2	2	2
2.5	4	5	8	11	12
5.0	7	10	18	25	27
7.5	11	14	27	40	43
10.0	16	18	37	55	59
12.5	21	22	47	69	76
15.0	26	27	54	85	94
17.5	32	32	63	100	112
20.0	38	37	73	116	129
22.5	44	42	82	132	147
25.0	50	48	92	147	164
27.5	56	53	102	163	182
30.0	62	59	111	178	199
32.5	68	65	121	193	216
35.0	73	70	130	208	234
37.5	79	76	140	223	250
40.0	85	81	149	237	266
42.5	91	87	158	251	282
45.0	97	92	167	265	297
47.5	103	98	175	278	312
50.0	108	103	183	290	326
52.5	114	108	191	303	340
55.0	119	113	198	314	354
57.5	124	117	205	325	366
60.0	129	122	212	336	378
62.5	133	126	218	346	389
65.0	138	130	224	355	400
67.5	141	133	229	363	409
70.0	145	137	234	370	418
72.5	148	140	238	377	426
75.0	151	142	242	383	432
77.5	153	145	245	388	438
80.0	155	146	248	393	443
82.5	157	148	250	396	447
85.0	158	149	251	398	450
87.5	159	150	252	399	451
90.0	159	150	252	399	452



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**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	159	150	252	399	452
92.5	158	149	252	397	452
95.0	157	148	251	395	450
97.5	156	147	249	392	447
100.0	155	146	247	389	443
102.5	153	144	244	385	438
105.0	150	142	241	380	432
107.5	147	139	237	374	426
110.0	144	136	233	367	418
112.5	141	133	228	359	409
115.0	137	129	223	351	399
117.5	133	125	217	342	389
120.0	128	121	211	332	377
122.5	124	117	204	321	365
125.0	119	112	197	310	353
127.5	114	108	190	299	339
130.0	108	103	182	286	325
132.5	103	98	174	274	311
135.0	97	92	165	260	296
137.5	91	87	157	247	280
140.0	86	81	148	233	264
142.5	80	76	138	218	248
145.0	74	70	129	204	231
147.5	67	64	119	189	213
150.0	61	59	110	173	196
152.5	55	53	100	158	178
155.0	49	48	90	142	160
157.5	43	42	80	127	142
160.0	37	37	71	111	124
162.5	32	32	61	96	107
165.0	26	27	53	80	89
167.5	21	22	46	65	72
170.0	16	18	36	52	56
172.5	11	14	27	37	40
175.0	7	9	18	23	25
177.5	4	5	8	10	11
180.0	2	2	2	2	2



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**Intensity data (cd)**

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
0.0	2	2	2	2	2
2.5	12	14	12	7	6
5.0	27	33	31	21	12
7.5	43	52	50	42	22
10.0	59	71	68	62	36
12.5	76	90	84	81	51
15.0	94	109	100	101	67
17.5	112	127	115	115	83
20.0	129	145	130	128	99
22.5	147	164	144	140	114
25.0	164	182	159	151	129
27.5	182	199	173	162	143
30.0	199	217	187	173	157
32.5	216	235	201	184	170
35.0	234	252	215	194	183
37.5	250	269	228	204	195
40.0	266	286	242	214	206
42.5	282	302	255	224	217
45.0	297	317	267	233	227
47.5	312	332	280	242	237
50.0	326	347	291	250	247
52.5	340	361	303	258	255
55.0	354	374	314	266	264
57.5	366	387	324	273	271
60.0	378	399	333	280	278
62.5	389	410	342	286	285
65.0	400	421	351	292	291
67.5	409	430	358	297	296
70.0	418	439	365	302	301
72.5	426	446	372	307	306
75.0	432	453	377	310	309
77.5	438	459	382	314	313
80.0	443	464	386	317	315
82.5	447	468	389	319	317
85.0	450	470	391	320	319
87.5	451	472	392	321	320
90.0	452	473	392	321	321



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**Intensity data (cd)**

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
90.0	452	473	392	321	321
92.5	452	473	391	320	321
95.0	450	471	389	318	320
97.5	447	468	387	317	319
100.0	443	464	384	314	316
102.5	438	459	380	311	314
105.0	432	453	375	308	310
107.5	426	446	370	304	307
110.0	418	438	363	300	302
112.5	409	429	356	295	297
115.0	399	420	349	289	292
117.5	389	409	340	283	286
120.0	377	398	331	277	279
122.5	365	386	321	270	272
125.0	353	373	311	263	264
127.5	339	359	300	255	256
130.0	325	345	289	247	247
132.5	311	330	277	238	237
135.0	296	315	265	230	227
137.5	280	300	253	220	217
140.0	264	283	240	211	206
142.5	248	267	226	201	194
145.0	231	249	213	191	182
147.5	213	232	199	181	169
150.0	196	215	185	170	156
152.5	178	196	171	159	142
155.0	160	178	156	149	128
157.5	142	160	142	138	113
160.0	124	142	128	124	98
162.5	107	123	113	112	82
165.0	89	104	98	97	66
167.5	72	86	82	80	50
170.0	56	67	66	62	35
172.5	40	48	48	42	22
175.0	25	30	29	21	12
177.5	11	12	11	7	6
180.0	2	2	2	2	2



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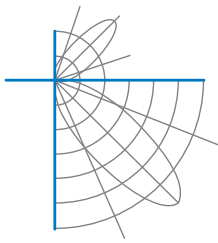
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Coefficients Of Utilization - Zonal Cavity Method																		
Effective Floor Cavity Reflectance 0.20																		
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	92	85	79	74	84	78	73	68	64	60	56	52	49	46	41	38	36	30
2	81	71	63	56	74	65	57	51	53	47	42	42	38	34	32	29	26	21
3	73	61	51	44	66	55	47	40	45	38	33	36	31	26	27	23	20	15
4	66	53	43	35	60	48	39	32	39	32	27	31	25	21	23	19	15	11
5	60	46	36	29	54	42	33	27	34	27	22	27	21	17	20	16	12	9
6	55	41	31	24	50	37	29	22	30	23	18	24	18	14	18	14	10	7
7	50	36	27	21	46	33	25	19	27	20	15	21	16	12	16	12	9	6
8	47	33	24	18	42	30	22	16	24	18	13	19	14	10	14	10	7	5
9	43	30	21	16	39	27	19	14	22	16	12	18	13	9	13	9	6	4
10	40	27	19	14	37	25	17	12	20	14	10	16	11	8	12	8	6	3

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.



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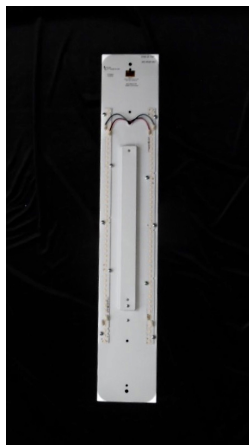
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**Test Distance** 9.5 m  
**Test Temperature** 25.2 °C

**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.

This report may contain data that are not covered by the NVLAP accreditation. Quantities marked with \* are not covered.

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