

# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

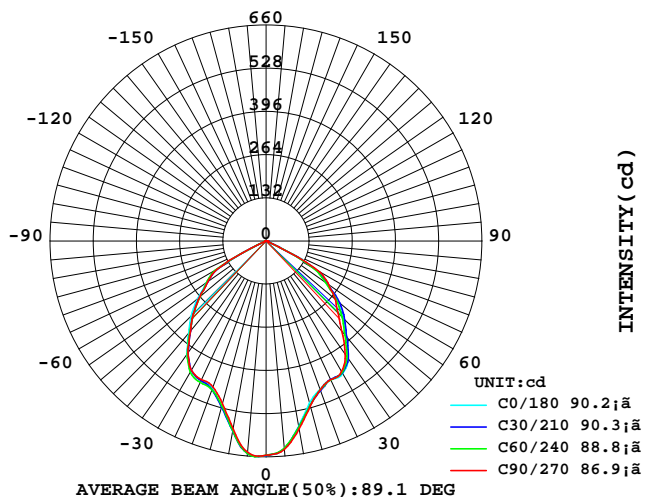
## LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

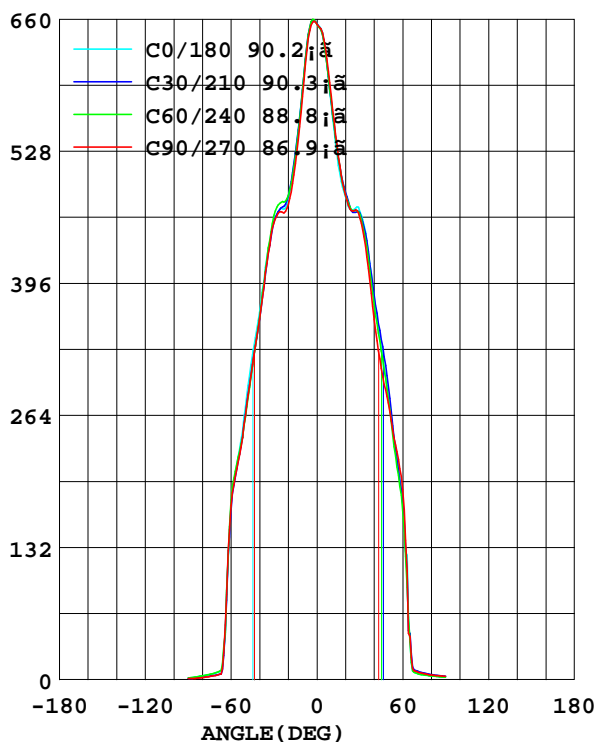
MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706

DATA OF LAMP		I <sub>max</sub> (cd)	660.4	S/MH(C0/180)	1.03
MODEL	SMD	EFFICIENCY(%)	100.0	S/MH(C90/270)	1.03
NOMINAL POWER(W)	14	TOTAL FLUX(lm)	1204.3	Voltage(V)	230.6
RATED VOLTAGE(V)	230	EFFICIENCY(lm/W)	80.9	Current(A)	0.132
NOMINAL FLUX(lm)	1204.4	η up(%)	0.0	Power(W)	14.89
LAMPS QUANTITY	1	η down(%)	100.0	Power Factor(PF)	0.489
TEST VOLTAGE(V)	230.6	Effective Flux(lm)	1204.4	EEI	0.166

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks:

# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

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## Color Temperature Data List

Report number:

MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706

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Test System:HOPOO HPG1600  
Temperature:25.3DEG  
Operators:  
Test Date:10-07-2020

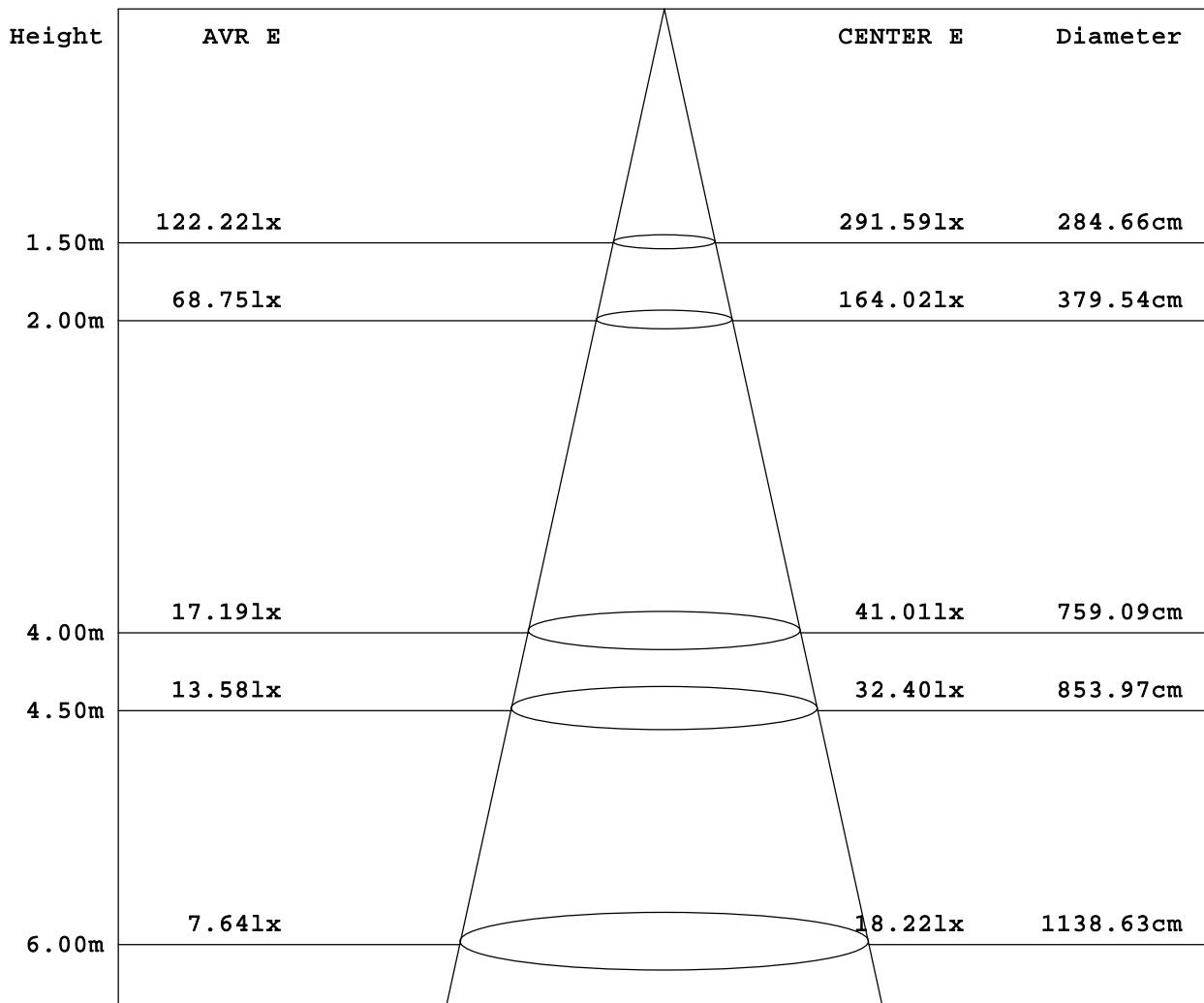
Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:5.150 m  
Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706



Angle: 87.0deg

Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	zone	total
5.0	650.1	652.4	648.9	644.0	639.3	637.5	640.2	643.8	0- 5	15.57	15.57
10.0	590.2	589.2	582.8	578.0	575.7	578.2	583.5	588.6	5- 10	43.89	59.47
15.0	525.9	525.1	515.8	512.7	514.0	521.1	523.1	524.3	10- 15	65.07	124.5
20.0	480.4	483.9	475.1	475.2	483.3	486.4	484.8	482.8	15- 20	82.12	206.6
25.0	471.4	474.3	467.9	465.9	469.1	468.2	468.5	468.1	20- 25	99.18	305.8
30.0	459.6	461.1	456.9	459.6	468.3	465.9	461.7	458.2	25- 30	118.1	424.0
35.0	422.2	418.4	416.3	423.2	438.0	435.7	422.8	424.7	30- 35	131.0	555.0
40.0	367.3	361.4	360.5	369.7	382.1	379.8	359.9	372.1	35- 40	132.5	687.6
45.0	324.8	314.0	315.1	324.5	331.6	334.3	311.4	324.2	40- 45	128.0	815.6
50.0	272.5	263.8	264.2	276.1	283.7	287.5	276.7	277.4	45- 50	120.9	936.6
55.0	222.5	220.3	217.6	225.7	231.5	226.8	234.6	225.6	50- 55	108.2	1045
60.0	176.1	174.8	174.3	178.6	175.9	173.2	190.0	172.3	55- 60	93.82	1139
65.0	29.73	28.21	26.76	30.28	38.00	41.78	43.09	33.55	60- 65	51.45	1190
70.0	6.869	5.874	4.402	5.516	6.153	7.479	7.797	7.704	65- 70	6.023	1196
75.0	5.092	4.336	3.103	4.124	4.667	5.503	5.781	5.529	70- 75	2.919	1199
80.0	3.739	3.076	1.962	2.997	3.819	4.402	4.588	4.336	75- 80	2.241	1201
85.0	2.413	2.082	1.273	2.042	3.023	3.540	3.898	3.527	80- 85	1.732	1203
90.0	1.803	1.458	1.140	1.511	3.129	2.877	3.262	2.957	85- 90	1.317	1204
95.0									90- 95		
100.0									95-100		
105.0									100-105		
110.0									105-110		
115.0									110-115		
120.0									115-120		
125.0									120-125		
130.0									125-130		
135.0									130-135		
140.0									135-140		
145.0									140-145		
150.0									145-150		
155.0									150-155		
160.0									155-160		
165.0									160-165		
170.0									165-170		
175.0									170-175		
180.0									175-180		
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks:

# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

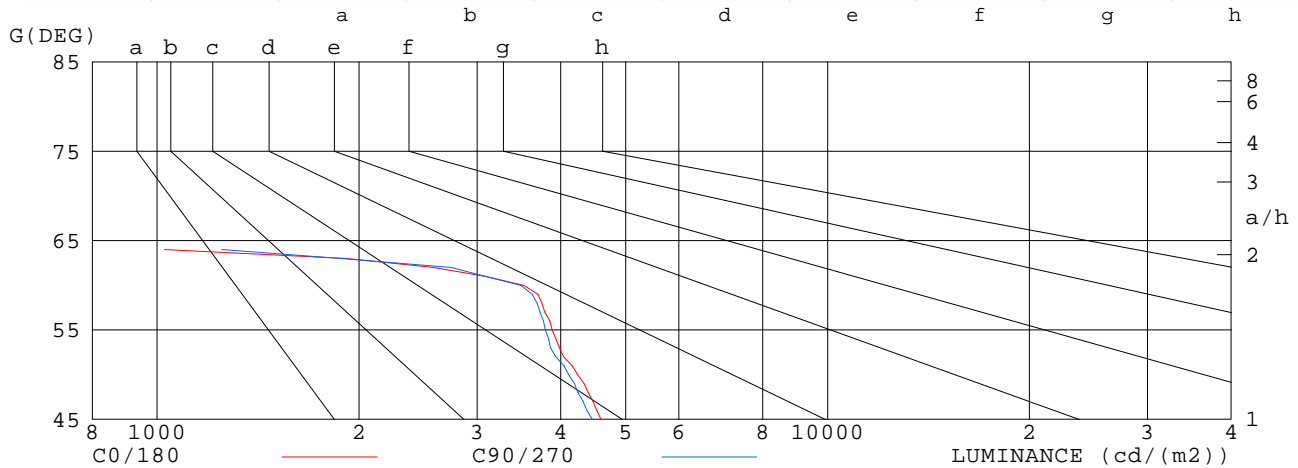
## LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706

### LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
		2000	1000	500	<=300				
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	277	146
80	215	113
75	197	120
70	201	129
65	704	633
60	3523	3487
55	3880	3795
50	4240	4111
45	4594	4457

Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
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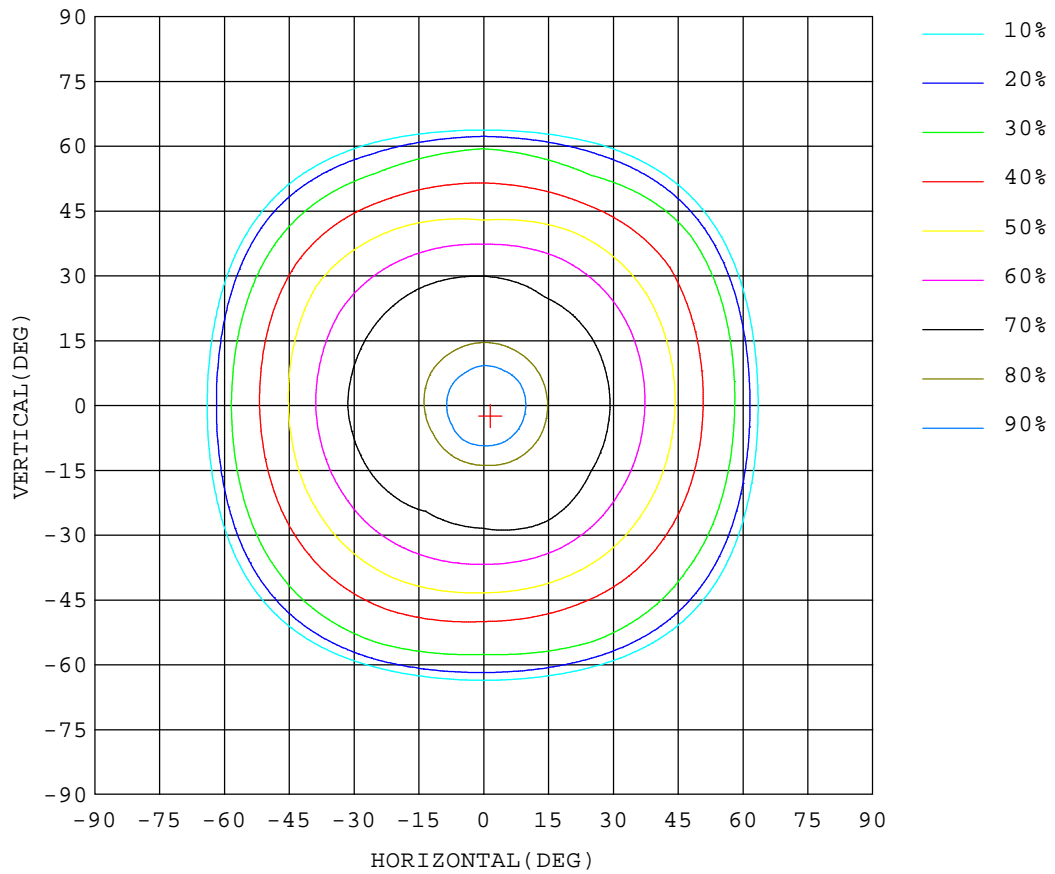
# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

## ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706

UNIT: cd



Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

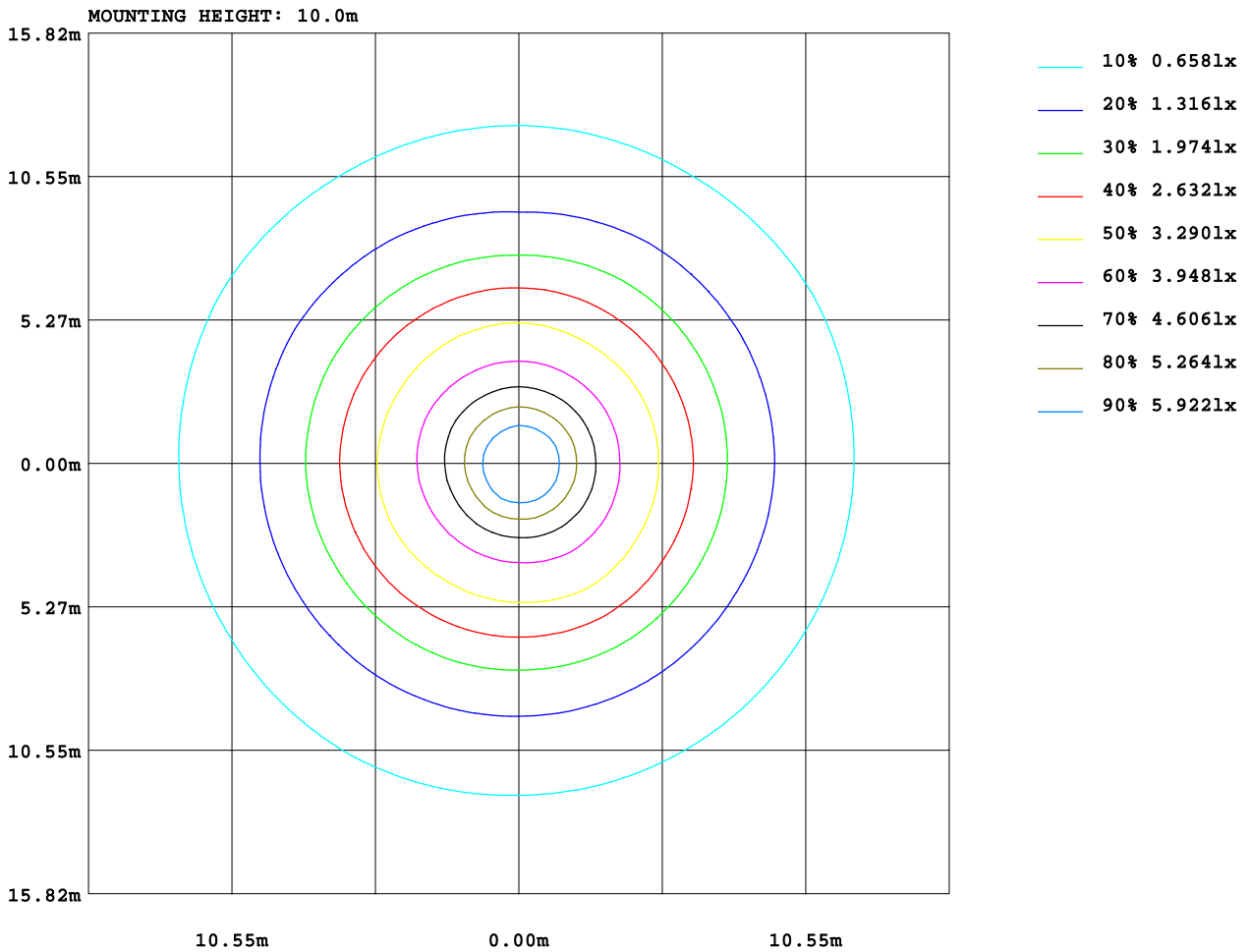
Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks:

# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

## ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706



Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks:

# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

## AREA LUMINOUS FLUX

Report number:

MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706

VERTICAL (DEG)	AREA FLUX DIAGRAM																	UNIT:lm	Φ t	Φ a
	90	80	70	60	50	40	30	20	10	0	10	20	30	40	50	60	70	80	90	
90	0.01	0.03	0.04	0.06	0.07	0.08	0.09	0.10	0.11	0.11	0.10	0.09	0.08	0.07	0.06	0.04	0.02	0.01	1.16	1.16
80	0.01	0.03	0.05	0.08	0.10	0.11	0.12	0.15	0.17	0.17	0.16	0.14	0.11	0.10	0.08	0.05	0.02	0.01	1.66	1.66
70	0.01	0.03	0.06	0.10	0.14	0.22	0.63	1.33	1.87	1.87	1.34	0.64	0.23	0.14	0.10	0.06	0.03	0.01	8.84	8.84
60	0.01	0.03	0.07	0.15	0.80	2.92	4.90	6.27	6.99	6.96	6.20	4.85	2.86	0.71	0.14	0.07	0.03	0.01	44.0	44.0
50	0.01	0.04	0.09	0.68	3.50	5.79	7.66	8.99	9.54	9.50	8.86	7.47	5.72	3.46	0.57	0.08	0.03	0.01	72.0	72.0
40	0.01	0.04	0.13	2.17	5.10	7.71	9.90	11.6	12.6	12.5	11.5	9.70	7.43	5.09	2.05	0.12	0.04	0.01	98.0	98.0
30	0.01	0.04	0.34	3.26	6.18	9.11	11.9	13.6	14.2	14.1	13.4	11.6	8.79	5.96	3.21	0.28	0.04	0.01	116	116
20	0.01	0.04	0.67	3.80	6.84	10.1	12.7	14.1	15.6	15.6	14.1	12.6	9.84	6.59	3.73	0.57	0.04	0.01	127	127
10	0.01	0.04	0.86	4.04	7.14	10.7	12.9	15.1	18.3	18.5	15.2	12.9	10.3	6.92	3.92	0.76	0.04	0.01	138	138
0	0.01	0.04	0.86	4.02	7.09	10.6	12.9	14.9	18.4	18.7	15.2	12.9	10.3	6.87	3.89	0.76	0.04	0.01	138	138
-10	0.01	0.04	0.65	3.77	6.68	9.99	12.7	13.9	15.4	15.5	14.2	12.6	9.67	6.46	3.65	0.56	0.04	0.01	126	126
-20	0.01	0.03	0.31	3.22	5.94	8.80	11.6	13.4	14.0	14.2	13.5	11.4	8.53	5.71	3.12	0.26	0.04	0.01	114	114
-30	0.01	0.03	0.09	2.10	4.95	7.39	9.65	11.4	12.4	12.4	11.3	9.42	7.11	4.79	1.98	0.09	0.03	0.01	95.4	95.4
-40	0.01	0.03	0.06	0.56	3.46	5.73	7.52	8.85	9.48	9.41	8.62	7.22	5.57	3.36	0.51	0.06	0.03	0.01	70.5	70.5
-50	0.01	0.02	0.05	0.08	0.67	2.92	5.05	6.17	6.62	6.59	6.10	4.96	2.83	0.63	0.08	0.05	0.02	0.01	42.8	42.8
-60	0.01	0.02	0.04	0.06	0.10	0.19	0.55	1.21	1.64	1.63	1.19	0.56	0.20	0.11	0.06	0.04	0.02	0.00	7.62	7.62
-70	0.01	0.02	0.03	0.04	0.07	0.10	0.12	0.12	0.10	0.11	0.12	0.13	0.10	0.07	0.04	0.02	0.01	0.00	1.19	1.19
-80	0.01	0.02	0.02	0.02	0.04	0.06	0.06	0.06	0.05	0.05	0.06	0.06	0.06	0.04	0.02	0.02	0.01	0.00	0.65	0.65
-90	0.01	0.02	0.02	0.02	0.04	0.06	0.06	0.06	0.05	0.05	0.06	0.06	0.06	0.04	0.02	0.02	0.01	0.00	0.65	0.65
	-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)				20	30	40	50	60	70	80	90
Φ t	0.15	0.55	4.41	28.2	58.9	92.7	121	142	158	158	142	120	89.8	57.1	27.2	3.87	0.54	0.12	1204	
Φ a	0.15	0.55	4.41	28.2	58.9	92.7	121	142	158	158	142	120	89.8	57.1	27.2	3.87	0.54	0.12		1204

Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks:



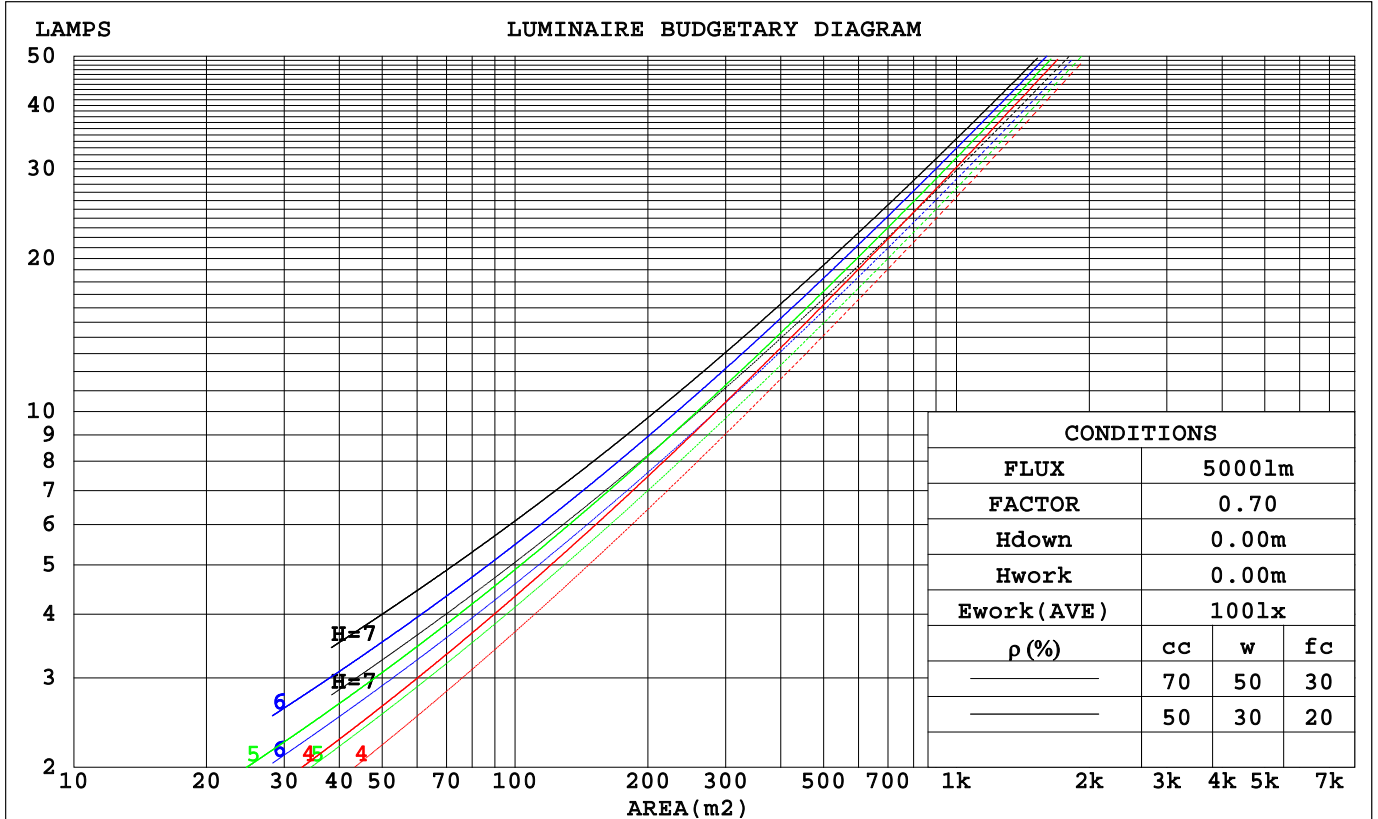
HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.08	1.04	1.01	1.05	1.02	.00	1.01	.99	.97	.97	.95	.94	.94	.92	.91	.89
2.0	.96	.91	.86	.95	.89	.85	.91	.87	.83	.88	.84	.81	.85	.82	.80	.78
3.0	.86	.79	.74	.85	.78	.73	.82	.77	.72	.79	.75	.71	.77	.73	.70	.68
4.0	.78	.70	.64	.76	.69	.64	.74	.68	.63	.72	.66	.62	.70	.65	.61	.59
5.0	.70	.62	.56	.69	.61	.56	.67	.60	.55	.65	.59	.55	.63	.58	.54	.52
6.0	.64	.55	.50	.63	.55	.49	.61	.54	.49	.59	.53	.49	.58	.52	.48	.46
7.0	.58	.50	.44	.57	.50	.44	.56	.49	.44	.54	.48	.44	.53	.47	.43	.41
8.0	.53	.45	.40	.52	.45	.40	.51	.44	.39	.50	.44	.39	.49	.43	.39	.37
9.0	.49	.41	.36	.48	.41	.36	.47	.40	.36	.46	.40	.36	.45	.40	.35	.34
10.0	.45	.38	.33	.45	.38	.33	.44	.37	.33	.43	.37	.33	.42	.36	.32	.31



Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Report number:

MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.239	.136	.043	.232	.132	.042	.219	.126	.040	.207	.119	.038	.196	.114	.037	
2.0	.235	.129	.039	.229	.126	.039	.218	.121	.038	.207	.116	.036	.198	.112	.035	
3.0	.225	.120	.036	.220	.118	.035	.210	.114	.035	.201	.110	.034	.193	.107	.033	
4.0	.214	.111	.033	.209	.110	.032	.201	.106	.032	.193	.103	.031	.185	.101	.031	
5.0	.202	.103	.030	.198	.102	.030	.191	.099	.029	.183	.097	.029	.177	.094	.028	
6.0	.191	.096	.027	.187	.095	.027	.180	.092	.027	.174	.090	.027	.168	.088	.026	
7.0	.180	.089	.025	.177	.088	.025	.171	.086	.025	.165	.085	.025	.160	.083	.024	
8.0	.170	.083	.023	.167	.082	.023	.162	.081	.023	.157	.079	.023	.152	.078	.023	
9.0	.161	.078	.022	.158	.077	.022	.153	.076	.022	.149	.075	.021	.144	.073	.021	
10.0	.153	.073	.020	.150	.073	.020	.146	.071	.020	.142	.070	.020	.138	.069	.020	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.175	.157	.140	.150	.135	.120	.103	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.165	.132	.105	.141	.114	.091	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.156	.114	.081	.134	.098	.070	.092	.068	.049	.053	.040	.029	.017	.013	.009	
4.0	.148	.100	.064	.127	.087	.055	.087	.060	.039	.051	.035	.023	.016	.012	.008	
5.0	.141	.089	.051	.121	.077	.045	.083	.054	.032	.048	.032	.019	.016	.010	.006	
6.0	.135	.081	.042	.116	.070	.037	.080	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.128	.074	.036	.110	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.123	.068	.031	.106	.059	.027	.073	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.117	.063	.027	.101	.055	.023	.070	.039	.017	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.097	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

Uncorrected UGR Table

Report number:

MANUFACTURER:										
Address:										
NAME: 15W					TYPE: MB 0 15			WEIGHT:		
SPECIFICATION:					DIMENSION:			SERIAL No.: LA/YE6L-990706		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	17.3	18.6	17.5	18.8	19.0	17.3	18.6	17.5	18.8	19.0
3H	17.1	18.3	17.3	18.5	18.7	17.1	18.3	17.4	18.5	18.8
4H	17.0	18.1	17.3	18.4	18.6	17.0	18.1	17.3	18.4	18.6
6H	16.9	18.0	17.2	18.2	18.5	16.9	18.0	17.2	18.2	18.5
8H	16.8	17.9	17.2	18.1	18.4	16.8	17.9	17.2	18.1	18.4
12H	16.8	17.8	17.1	18.1	18.4	16.8	17.8	17.1	18.1	18.4
4H 2H	17.3	18.5	17.6	18.7	19.0	17.3	18.5	17.6	18.7	19.0
3H	17.1	18.1	17.5	18.4	18.7	17.2	18.1	17.5	18.4	18.7
4H	17.1	17.9	17.4	18.3	18.6	17.1	18.0	17.4	18.3	18.6
6H	17.0	17.8	17.4	18.1	18.5	17.0	17.8	17.4	18.1	18.5
8H	16.9	17.7	17.3	18.0	18.4	16.9	17.7	17.3	18.0	18.4
12H	16.9	17.6	17.3	17.9	18.3	16.9	17.6	17.3	17.9	18.3
8H 4H	16.9	17.6	17.3	18.0	18.4	16.9	17.7	17.3	18.0	18.4
6H	16.8	17.4	17.3	17.8	18.3	16.9	17.4	17.3	17.8	18.3
8H	16.8	17.3	17.3	17.7	18.2	16.8	17.3	17.3	17.8	18.2
12H	16.8	17.2	17.2	17.7	18.1	16.8	17.2	17.3	17.7	18.1
12H 4H	16.9	17.5	17.3	17.9	18.3	16.9	17.5	17.3	17.9	18.3
6H	16.8	17.3	17.3	17.7	18.2	16.8	17.3	17.3	17.8	18.2
8H	16.8	17.2	17.2	17.7	18.1	16.8	17.2	17.3	17.7	18.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.9 / - 0.8					+ 0.9 / - 0.7				
1.5H	+ 0.9 / - 1.5					+ 1.0 / - 1.4				
2.0H	+ 0.9 / - 5.5					+ 0.7 / - 6.4				

CIE Pub.117 Corrected 1204 lm Total Lamp Luminous Flux. (8log(F/F0) = 0.6)

Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks:

# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

## UTILIZATION FACTORS TABLE

Report number:

MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	64	53	47	63	53	47	62	52	46	41
0.80	74	64	58	74	64	58	72	63	57	51
1.00	84	74	68	82	74	68	80	75	67	61
1.25	90	82	76	89	81	76	87	80	75	69
1.50	95	87	82	94	86	81	91	85	80	74
2.00	101	94	89	99	93	89	96	91	87	80
2.50	104	98	93	102	97	92	98	94	90	83
3.00	107	101	97	105	100	96	101	97	94	86
4.00	109	105	101	107	103	100	103	100	97	89
5.00	111	107	104	109	105	103	105	102	100	91
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

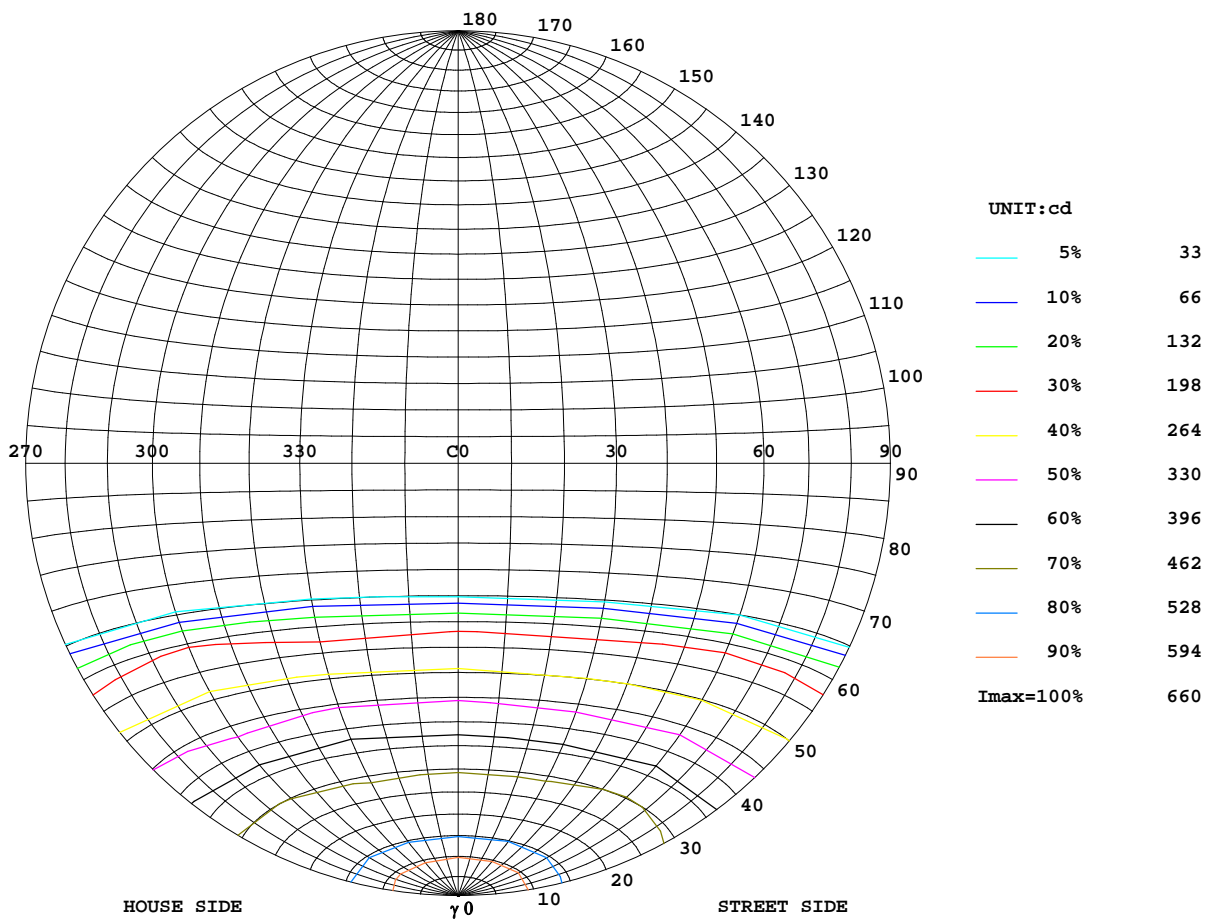
Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks:

# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

## ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706



Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks:

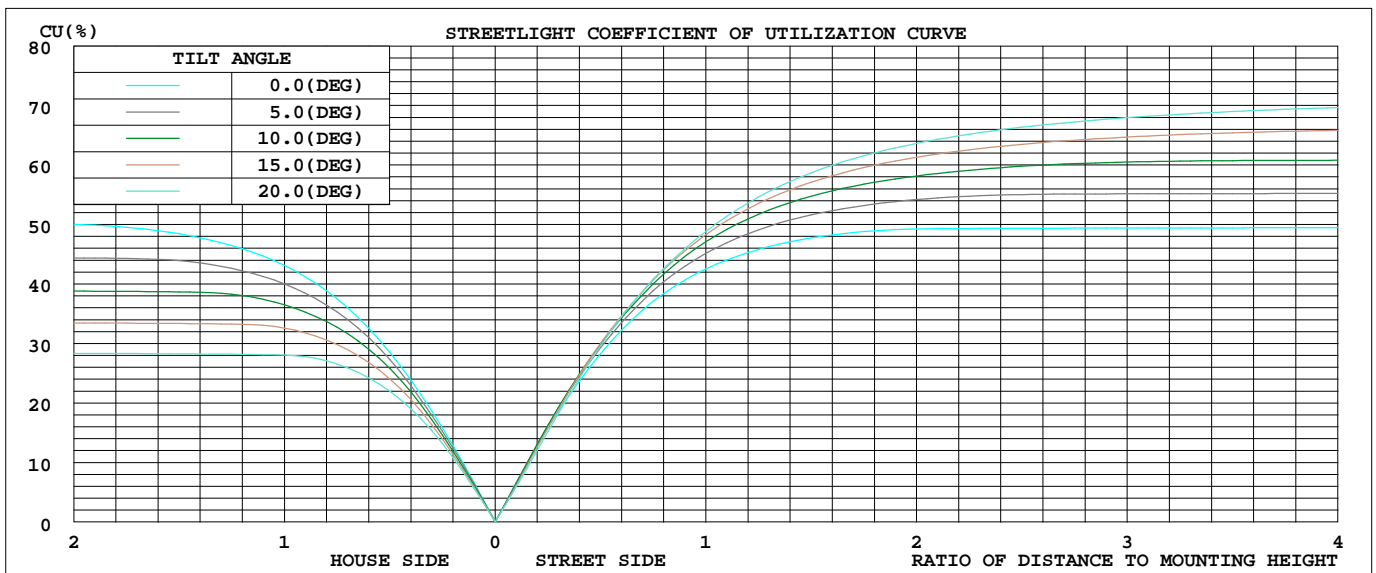
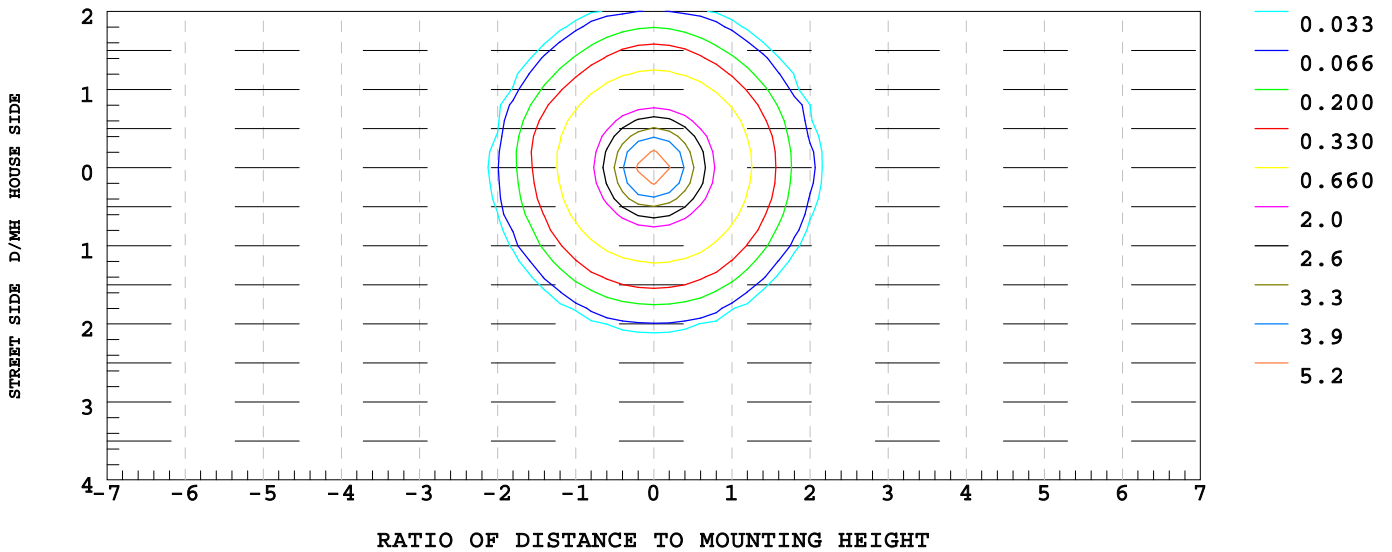
# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

## ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706

ILLUMINANCE AT MH=10 m, Enadir = 6.56 lx



Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

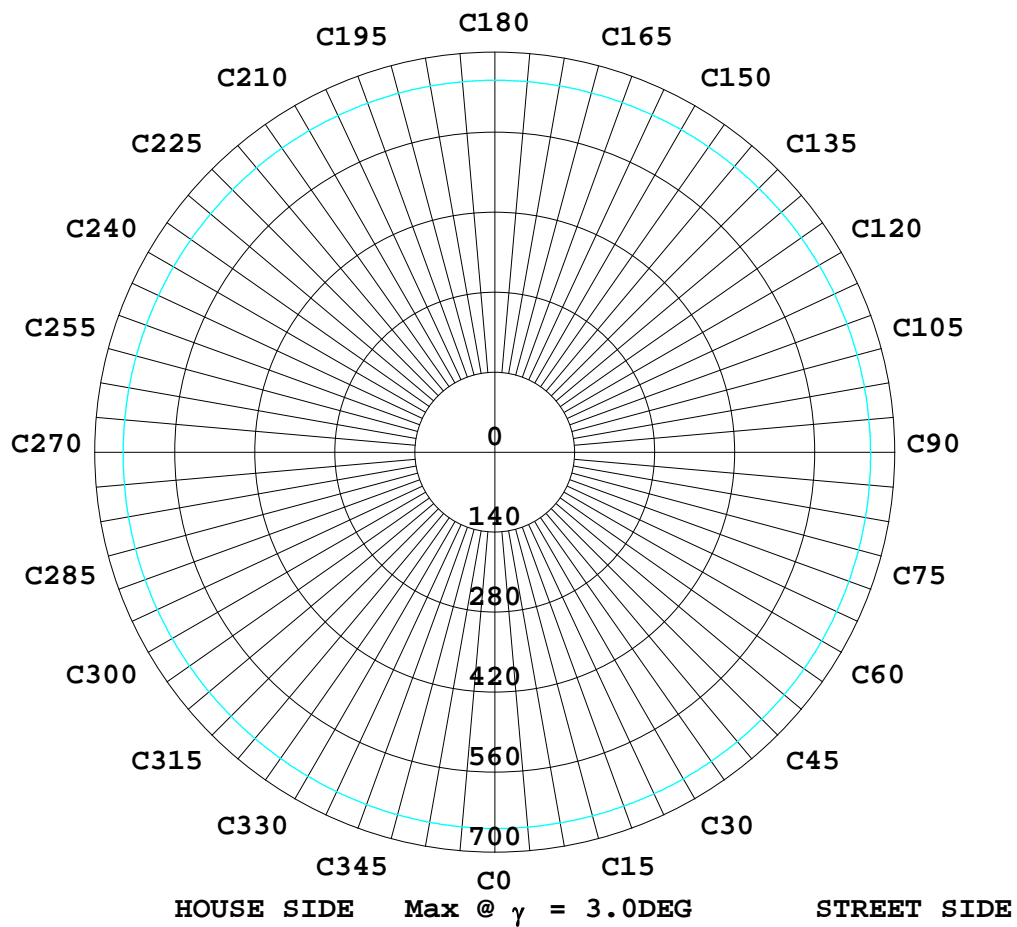
Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 15W	TYPE: MB 0 15	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.: LA/YE6L-990706



Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks:

**HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT**

**LUMINOUS DISTRIBUTION INTENSITY DATA**

Report number:

<b>MANUFACTURER:</b>		
<b>Address:</b>		
<b>NAME:</b> 15W	<b>TYPE:</b> MB 0 15	<b>WEIGHT:</b>
<b>SPECIFICATION:</b>	<b>DIMENSION:</b>	<b>SERIAL No.:</b> LA/YE6L-990706

UNIT: cd

γ (DEG)	C (DEG)											
	0	30	60	90	120	150	180	210	240	270	300	330
0.0	656	656	656	656	655	655	656	656	656	656	655	655
5.0	650	653	652	649	648	640	639	638	637	640	641	647
10.0	590	589	589	583	583	573	576	578	579	584	586	592
15.0	526	527	523	516	514	511	514	521	521	523	523	525
20.0	480	484	484	475	474	476	483	488	485	485	483	483
25.0	471	472	477	468	464	468	469	467	469	469	466	470
30.0	460	458	464	457	457	463	468	467	465	462	458	459
35.0	422	416	420	416	421	426	438	439	433	423	425	424
40.0	367	361	362	361	367	372	382	384	375	360	372	372
45.0	325	315	313	315	323	326	332	340	329	311	323	325
50.0	273	265	263	264	276	277	284	294	281	277	274	281
55.0	223	219	222	218	226	226	232	231	223	235	217	234
60.0	176	170	180	174	182	175	176	178	169	190	169	176
65.0	29.7	24.1	32.2	26.7	32.6	27.9	38.0	45.8	37.6	43.0	35.7	31.3
70.0	6.86	4.58	7.16	4.40	6.55	4.48	6.15	8.67	6.28	7.79	7.58	7.82
75.0	5.09	3.39	5.27	3.10	4.90	3.34	4.66	6.41	4.58	5.78	5.14	5.91
80.0	3.73	2.36	3.79	1.96	3.63	2.36	3.81	5.11	3.68	4.58	3.89	4.77
85.0	2.41	1.53	2.62	1.27	2.59	1.48	3.02	4.11	2.97	3.89	3.07	3.97
90.0	1.80	1.08	1.83	1.14	1.88	1.14	3.12	3.23	2.51	3.26	2.59	3.31

Test System:HOPOO HPG1600  
 Temperature:25.3DEG  
 Operators:  
 Test Date:10-07-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:5.150 m  
 Remarks: