

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

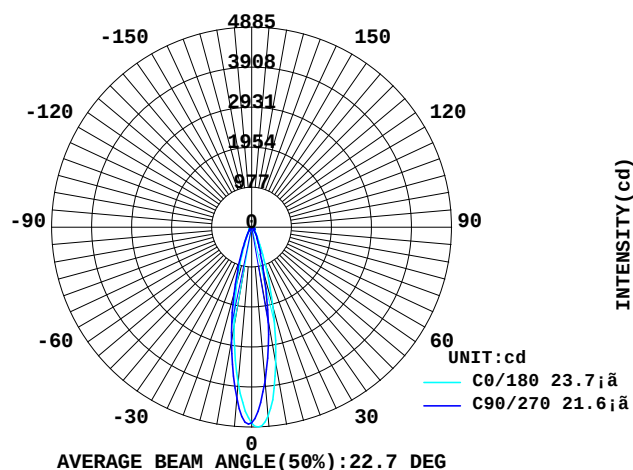
STREETLIGHT PHOTOMETRIC TEST REPORT

Report number:

MANUFACTURER:		
Address:		
NAME: 6W	TYPE: WALLVASHER	WEIGHT:
SPECIFICATION:	DIMENSION: 250*35*65	SERIAL No.: LA/YE6L-990706

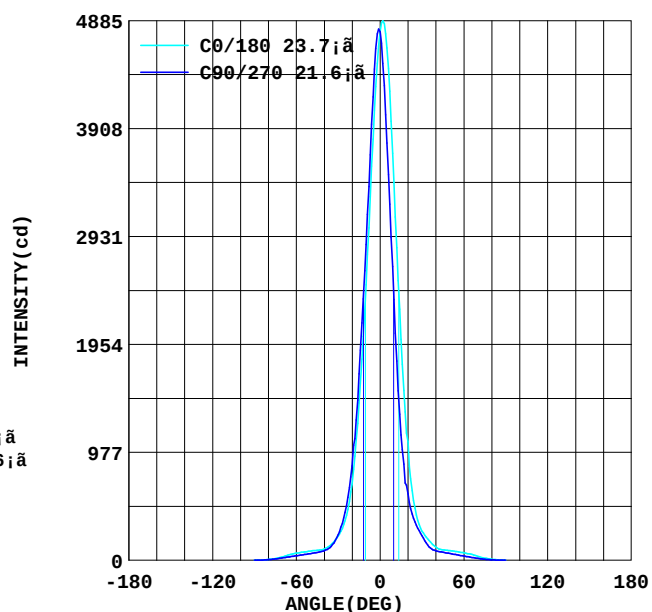
MODEL:	SMD	Imax(cd):	4885	Effective Flux(lm):	1254.1
NOMINAL POWER(W):	24	MAXIMUM(C, γ):	180, 2.0	EEI	0.264
RATED VOLTAGE(V):	230	EFFICIENCY(%):	100.0	Voltage(V)	230.6
NOMINAL FLUX(lm):	1254.1	η street_up(%):	0.0	Current(A)	0.208
TEST FLUX(lm):	1254	η street_down(%):	48.9	Power(W)	24.43
LAMPS QUANTITY:	1	η house_up(%):	0.0	Power Factor	0.509
TOTAL RADIANT(mw):	1254	η house_down(%):	51.1	EEFICIENCY(lm/W)	51.3

INTENSITY DISTRIBUTION DIAGRAM
IN C PLANS



INTENSITY DISTRIBUTION DIAGRAM
IN C PLANS

LUMINOUS INTENSITY DISTRIBUTION



Test System:HOP00 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:

HOP00 GONIOPHOTOMETERS SYSTEM TEST REPORT

Color Temperature Data List

Report number:

MANUFACTURER:		
Address:		
NAME: 6W	TYPE: WALLVASHER	WEIGHT:
SPECIFICATION:	DIMENSION: 250*35*65	SERIAL No.: LA/YE6L-990706

Test System:HOP00 HPG1600
Temperature:25.3DEG
Operators:
Test Date:10-07-2020

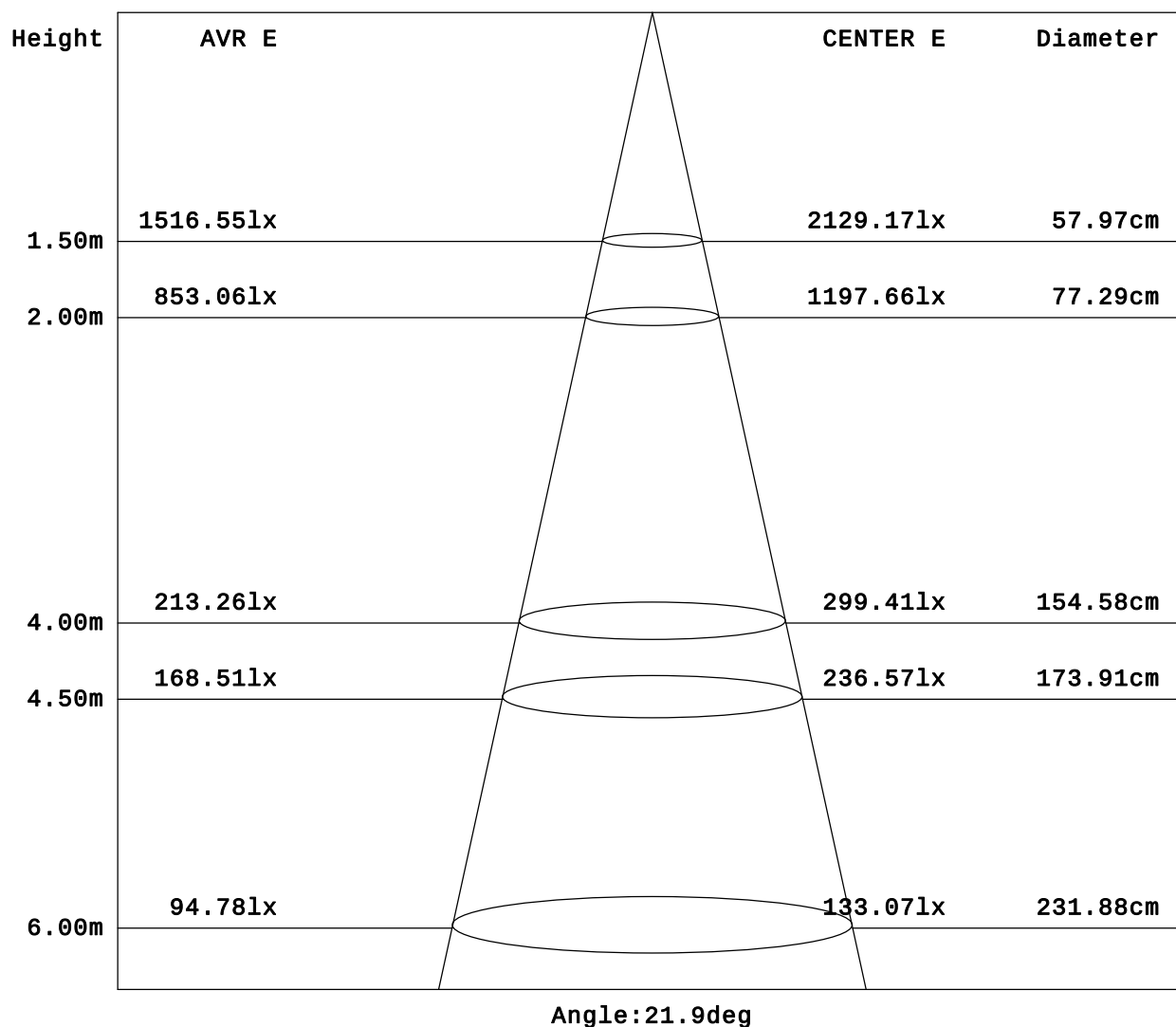
Test Set: 5.0deg/s C-Gamma (TYPE C)
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Test Distance:5.150 m
Remarks:

HOP00 GONIOPHOTOMETERS SYSTEM TEST REPORT

AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER:		
Address:		
NAME: 6W	TYPE: WALLVASHER	WEIGHT:
SPECIFICATION:	DIMENSION: 250*35*65	SERIAL No.: LA/YE6L-990706



Test System:HOP00 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:

HOP00 GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 6W	TYPE: WALLVASHER	WEIGHT:
SPECIFICATION:	DIMENSION: 250*35*65	SERIAL No.: LA/YE6L-990706

γ	C0	C90	C180	C270					γ	zone	total
5.0	3813	4194	4637	3778					0- 5	105.9	105.9
10.0	2495	2857	3418	2360					5- 10	242.4	348.3
15.0	1424	1687	2000	1136					10- 15	249.9	598.2
20.0	684.2	852.6	1074	599.8					15- 20	184.7	782.9
25.0	358.5	433.0	472.2	345.1					20- 25	118.7	901.7
30.0	219.3	232.0	266.0	223.5					25- 30	77.60	979.3
35.0	142.4	127.0	182.0	124.5					30- 35	54.50	1034
40.0	102.0	86.01	118.9	85.93					35- 40	39.26	1073
45.0	90.89	71.15	94.15	73.46					40- 45	32.81	1106
50.0	83.89	60.76	88.08	61.61					45- 50	31.52	1137
55.0	74.58	50.79	78.26	49.83					50- 55	29.77	1167
60.0	64.15	41.26	67.20	38.29					55- 60	26.84	1194
65.0	50.26	31.64	55.51	27.92					60- 65	22.93	1217
70.0	30.18	21.90	36.62	17.82					65- 70	17.30	1234
75.0	16.36	12.70	20.05	9.627					70- 75	10.55	1245
80.0	7.399	6.126	10.02	4.667					75- 80	5.661	1251
85.0	2.784	2.201	3.925	2.201					80- 85	2.524	1253
90.0	1.644	0.743	2.042	1.856					85- 90	1.075	1254
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:HOP00 HPG1600
 Temperature:25.3DEG
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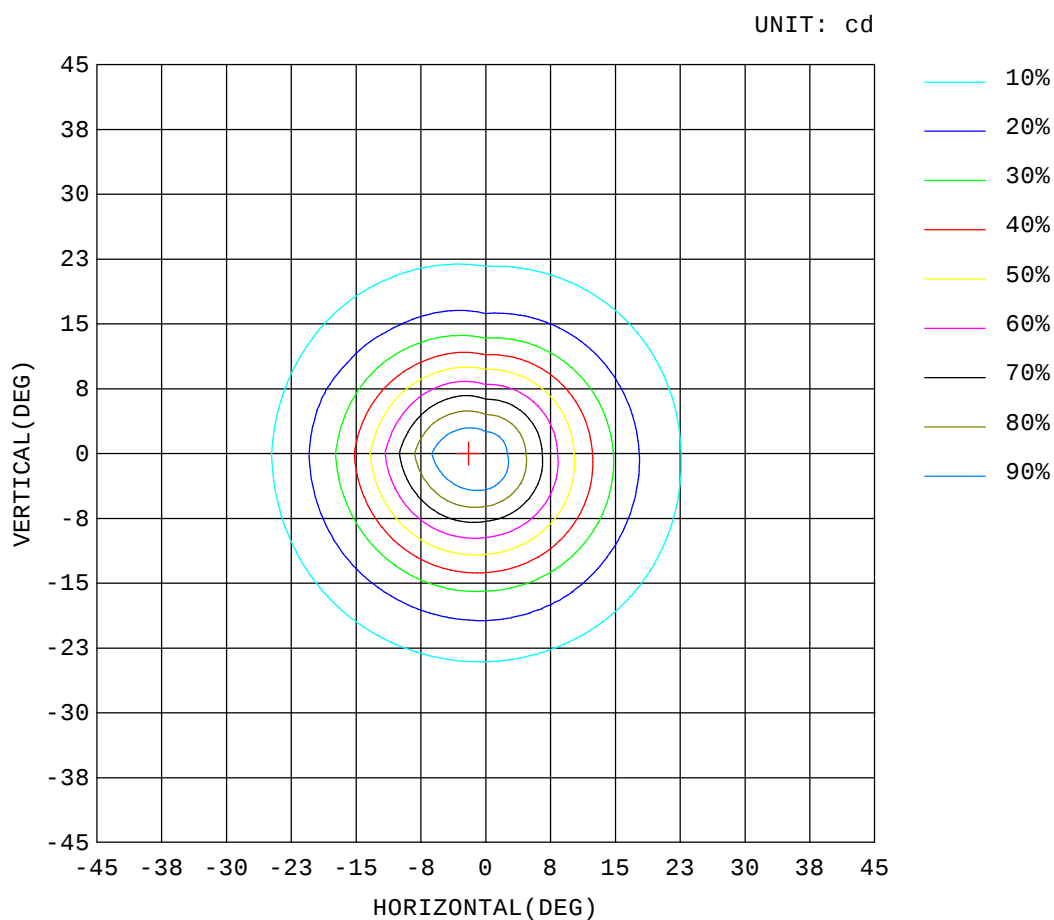
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:5.150 m
 Remarks:

HOP00 GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 6W	TYPE: WALLVASHER	WEIGHT:
SPECIFICATION:	DIMENSION: 250*35*65	SERIAL No.: LA/YE6L-990706



Test System:HOP00 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:

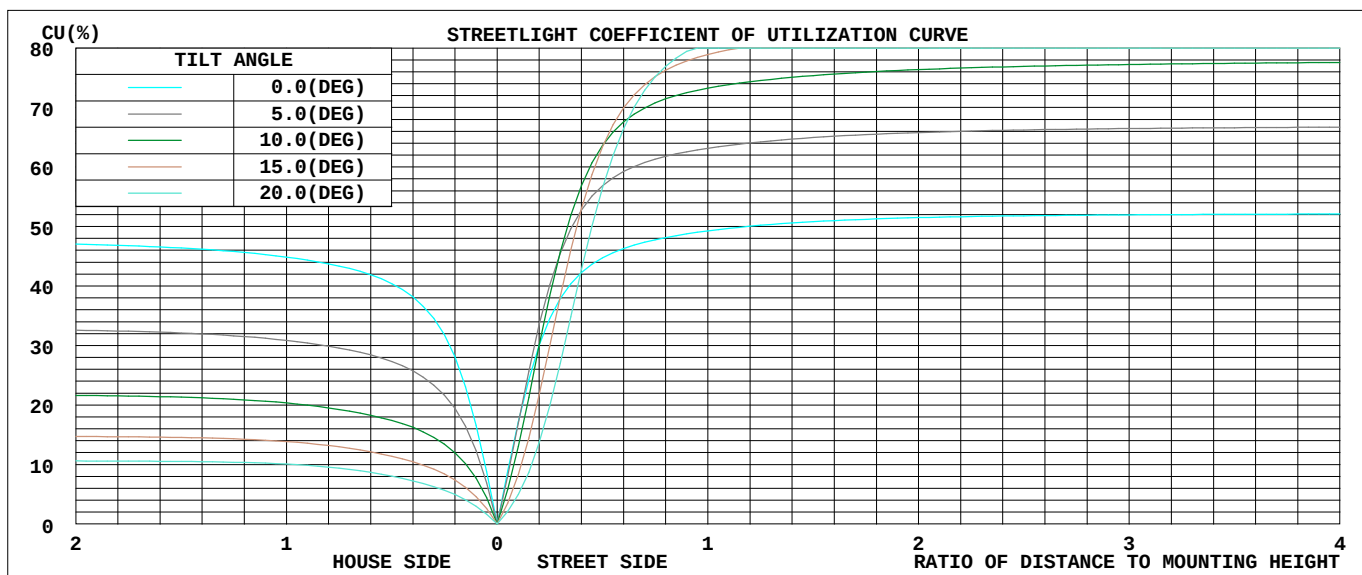
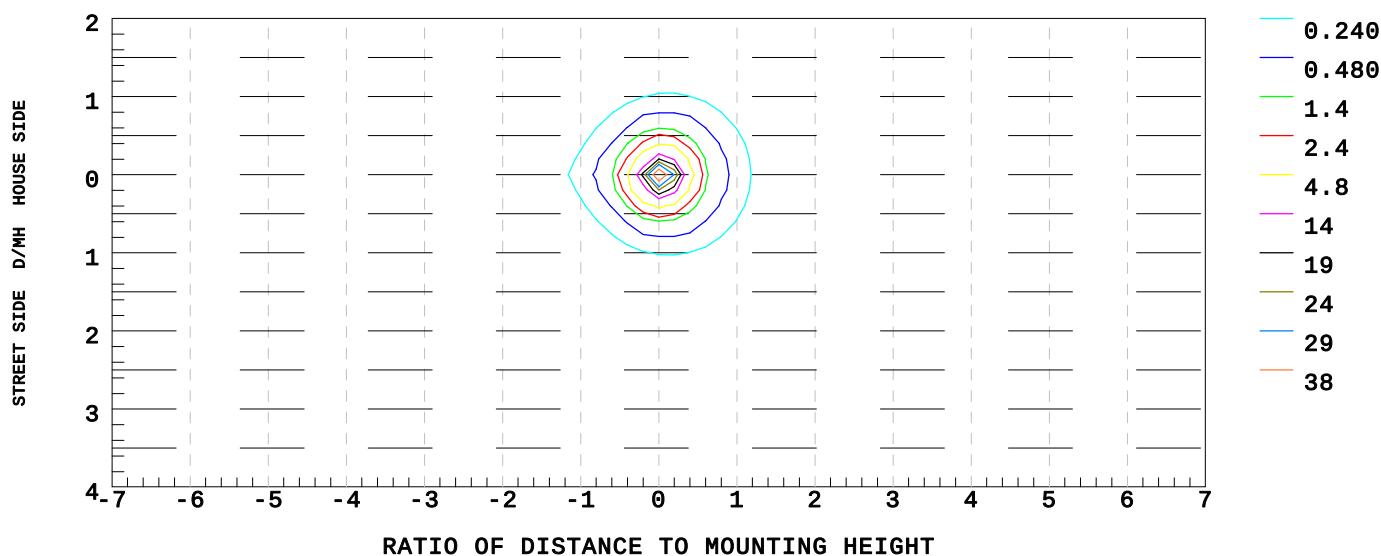
HOP00 GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 6W	TYPE: WALLVASHER	WEIGHT:
SPECIFICATION:	DIMENSION: 250*35*65	SERIAL No.: LA/YE6L-990706

ILLUMINANCE AT MH=10 m, Enadir = 47.91 lx



Test System:HOP00 HPG1600
Temperature:25.3DEG
Operators:
Test Date:10-07-2020

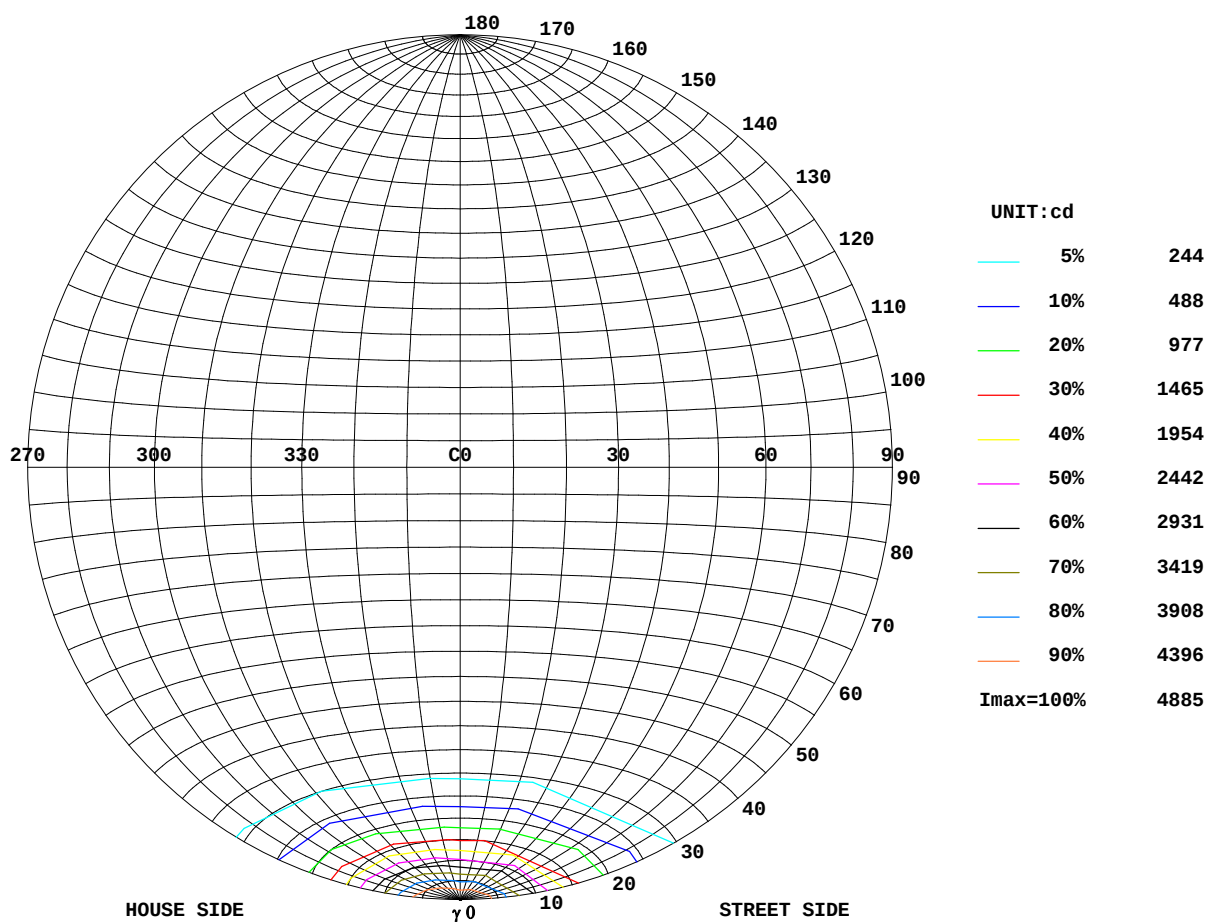
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:5.150 m
Remarks:

HOP00 GONIOPHOTOMETERS SYSTEM TEST REPORT

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Report number:

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Address:		
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SPECIFICATION:	DIMENSION: 250*35*65	SERIAL No.: LA/YE6L-990706



Test System:HOP00 HPG1600
Temperature:25.3DEG
Operators:
Test Date:10-07-2020

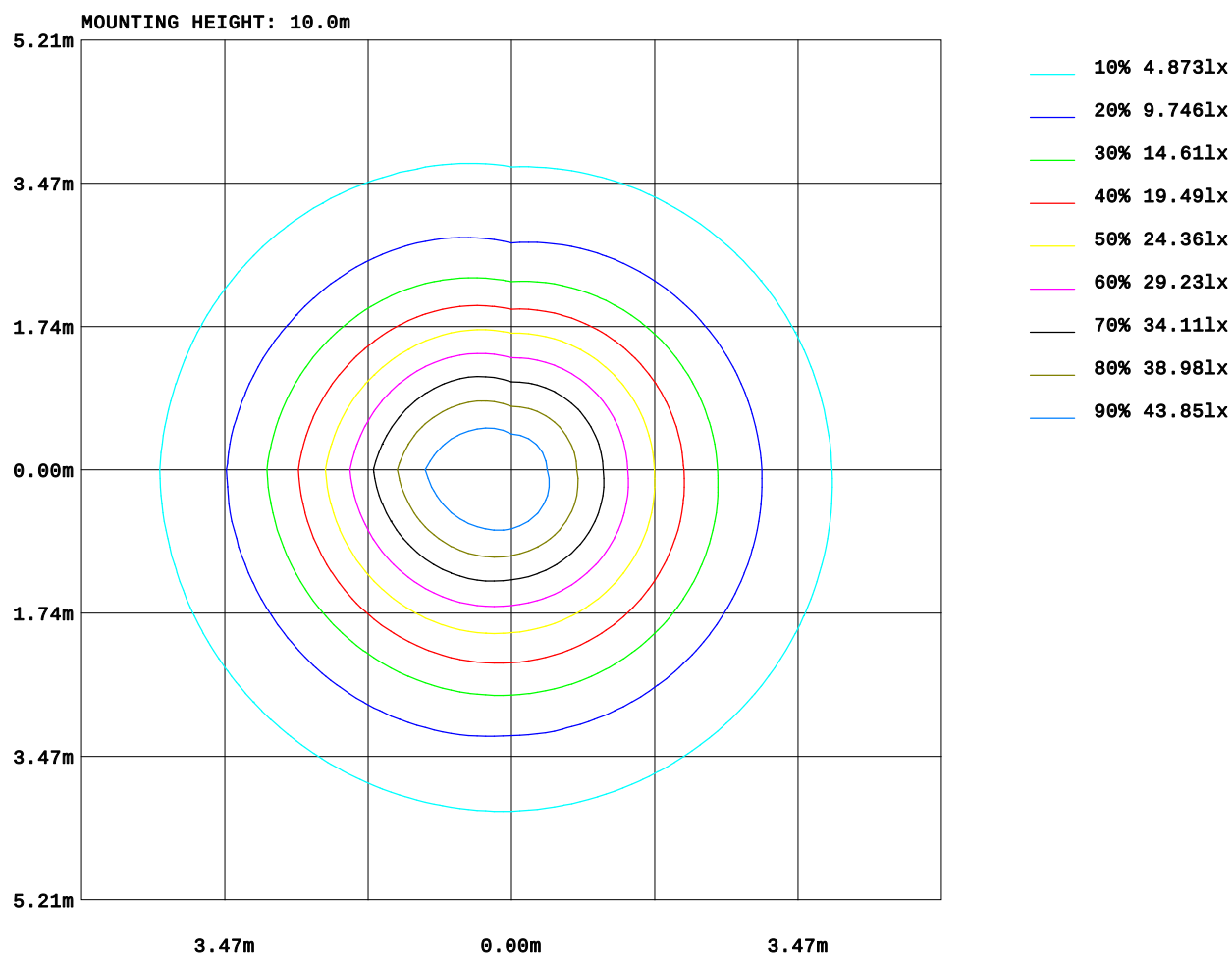
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Humidity:65.0%
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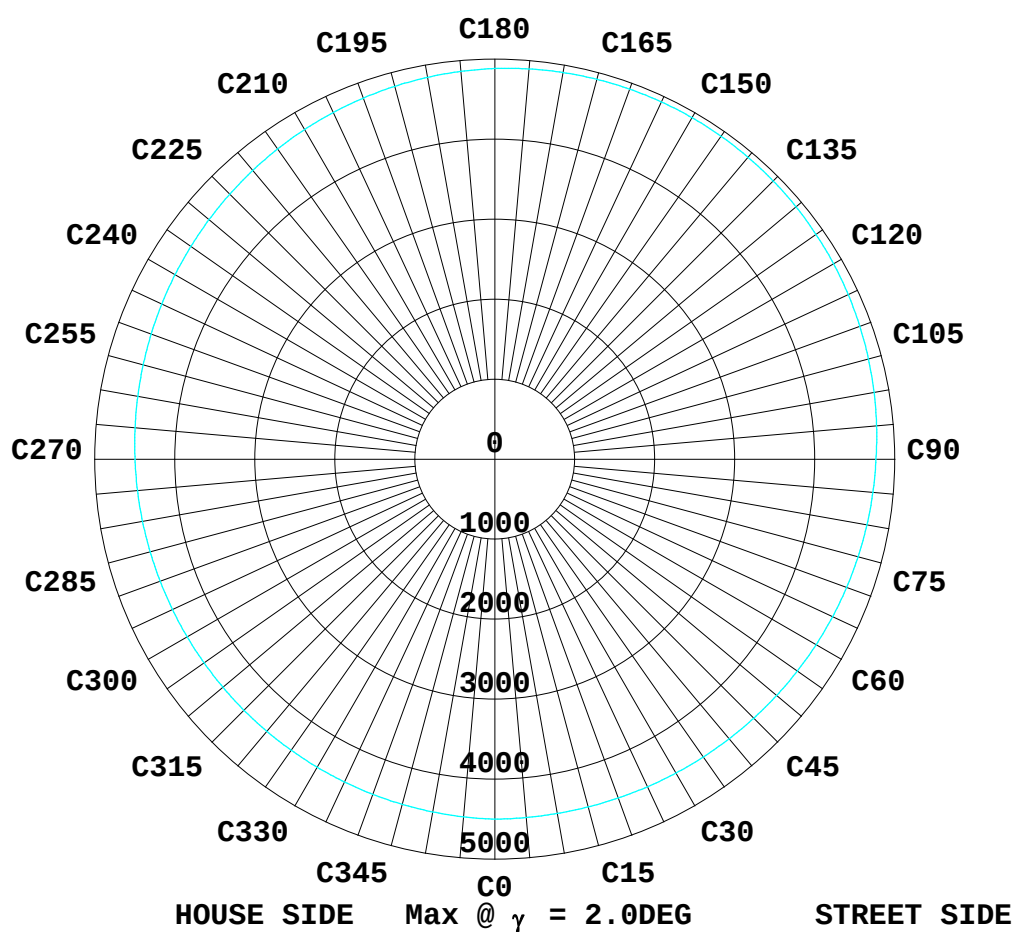
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:5.150 m
Remarks:

HOP00 GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Report number:

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Address:		
NAME: 6W	TYPE: WALLVASHER	WEIGHT:
SPECIFICATION:	DIMENSION: 250*35*65	SERIAL No.: LA/YE6L-990706



Test System:HOP00 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: 6W	TYPE: WALLVASHER	WEIGHT:
SPECIFICATION:	DIMENSION: 250*35*65	SERIAL No.: LA/YE6L-990706

45	AREA FLUX DIAGRAM																		UNIT:lm		Φ t	Φ a			
	0.35	0.40	0.46	0.50	0.54	0.57	0.59	0.61	0.61	0.61	0.60	0.59	0.56	0.53	0.49	0.44	0.39	0.34	9.18	9.18					
40	0.39	0.45	0.51	0.56	0.61	0.67	0.73	0.77	0.78	0.77	0.74	0.70	0.64	0.59	0.55	0.49	0.44	0.38	10.7	10.7					
35	0.43	0.49	0.55	0.64	0.77	0.92	1.09	1.23	1.30	1.28	1.18	1.02	0.84	0.70	0.60	0.54	0.48	0.41	14.4	14.4					
30	0.46	0.52	0.63	0.81	1.07	1.41	1.76	2.02	2.14	2.11	1.94	1.65	1.29	0.95	0.72	0.58	0.51	0.44	21.0	21.0					
25	0.48	0.57	0.76	1.08	1.53	2.10	2.74	3.30	3.50	3.40	3.06	2.49	1.89	1.36	0.93	0.67	0.54	0.47	30.9	30.9					
20	0.50	0.64	0.94	1.41	2.10	3.20	4.76	6.09	6.51	6.21	5.38	4.02	2.73	1.83	1.21	0.79	0.58	0.49	49.4	49.4					
15	0.53	0.73	1.13	1.75	2.88	5.15	8.34	11.6	13.2	12.5	10.0	6.73	4.05	2.38	1.49	0.94	0.63	0.50	84.8	84.8					
VERTICAL (DEG)	0.55	0.82	1.29	2.07	3.86	7.69	13.5	20.3	23.8	22.3	17.0	10.5	5.72	3.00	1.72	1.06	0.68	0.52	137	137					
	0.57	0.88	1.40	2.31	4.71	9.96	18.4	28.2	33.4	30.9	22.6	13.6	7.12	3.47	1.86	1.13	0.71	0.53	182	182					
	0.57	0.88	1.40	2.33	4.79	10.2	18.9	28.9	34.8	32.3	23.3	14.1	7.36	3.55	1.88	1.13	0.72	0.53	188	188					
	0.55	0.82	1.30	2.10	4.04	8.29	14.9	22.3	26.6	25.1	19.0	11.8	6.32	3.18	1.75	1.06	0.68	0.52	151	151					
	0.53	0.73	1.14	1.77	3.05	5.75	9.79	14.3	17.0	16.3	12.7	8.19	4.65	2.55	1.51	0.94	0.63	0.50	102	102					
	0.50	0.64	0.95	1.42	2.18	3.57	5.71	7.92	9.20	8.90	7.21	4.97	3.10	1.91	1.22	0.80	0.58	0.49	61.3	61.3					
	0.48	0.57	0.77	1.09	1.54	2.22	3.13	4.08	4.67	4.57	3.84	2.87	2.01	1.37	0.94	0.67	0.54	0.47	35.8	35.8					
	0.46	0.52	0.62	0.82	1.08	1.42	1.81	2.19	2.42	2.39	2.11	1.71	1.30	0.96	0.72	0.58	0.51	0.44	22.0	22.0					
	0.43	0.49	0.55	0.64	0.77	0.94	1.10	1.24	1.31	1.30	1.19	1.03	0.86	0.71	0.60	0.53	0.47	0.41	14.5	14.5					
	0.39	0.45	0.50	0.55	0.60	0.67	0.74	0.79	0.80	0.79	0.76	0.71	0.64	0.58	0.54	0.49	0.44	0.38	10.8	10.8					
0.35	0.41	0.46	0.50	0.53	0.56	0.58	0.60	0.60	0.59	0.59	0.57	0.55	0.52	0.49	0.44	0.39	0.34	9.07	9.07						
-45	-40	-35	-30	-25	-20	-15	-10	HORIZONTAL(DEG)										10	15	20	25	30	35	40	45
Φ t	8.52	11.0	15.3	22.3	36.7	65.3	109	157	183	173	134	87.5	51.7	30.2	19.2	13.2	9.91	8.14	1254						
Φ a	8.52	11.0	15.3	22.3	36.7	65.3	109	157	183	173	134	87.5	51.7	30.2	19.2	13.2	9.91	8.14		1254					

Test System:HOP00 HPG1600
 Temperature:25.3DEG
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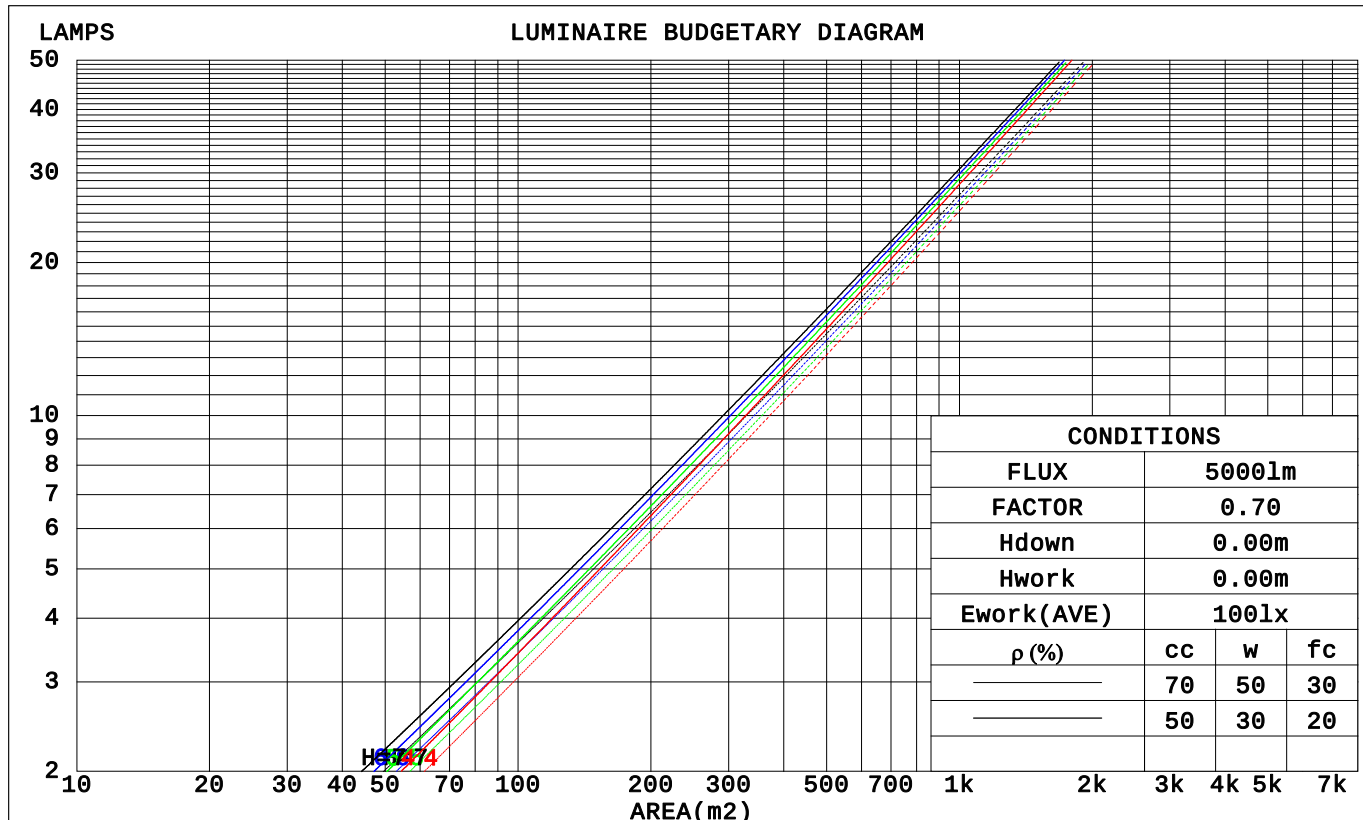
HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 6W	TYPE: WALLVASHER	WEIGHT:
SPECIFICATION:	DIMENSION: 250*35*65	SERIAL No.: LA/YE6L-990706

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fC}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



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HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Report number:

MANUFACTURER:														
Address:														
NAME: 6W							TYPE: WALLVASHER					WEIGHT:		
SPECIFICATION:							DIMENSION: 250*35*65					SERIAL No.: LA/YE6L-990706		

ρ_{CC}	80%			70%			50%			30%			10%			0	
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fC}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.176	.100	.032	.169	.096	.031	.157	.090	.029	.145	.084	.027	.134	.078	.025		
2.0	.165	.091	.028	.160	.088	.027	.149	.083	.026	.139	.078	.024	.130	.074	.023		
3.0	.154	.082	.025	.150	.080	.024	.141	.076	.023	.132	.073	.022	.125	.069	.021		
4.0	.144	.075	.022	.140	.073	.022	.132	.070	.021	.125	.067	.020	.119	.065	.020		
5.0	.135	.069	.020	.132	.068	.020	.125	.065	.019	.119	.063	.019	.113	.060	.018		
6.0	.127	.064	.018	.124	.063	.018	.118	.061	.018	.113	.059	.017	.108	.057	.017		
7.0	.120	.059	.017	.117	.058	.017	.112	.057	.016	.107	.055	.016	.103	.053	.016		
8.0	.113	.055	.016	.111	.055	.015	.106	.053	.015	.102	.052	.015	.098	.050	.015		
9.0	.107	.052	.015	.105	.051	.014	.101	.050	.014	.098	.049	.014	.094	.048	.014		
10.0	.102	.049	.014	.100	.048	.014	.097	.047	.013	.093	.046	.013	.090	.045	.013		

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.155	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.142	.114	.091	.122	.098	.079	.084	.068	.055	.048	.040	.032	.016	.013	.011	
4.0	.131	.099	.074	.112	.085	.064	.077	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.121	.087	.061	.104	.075	.053	.072	.052	.038	.042	.031	.022	.013	.010	.007	
6.0	.113	.077	.052	.097	.067	.045	.067	.047	.032	.039	.028	.019	.013	.009	.006	
7.0	.106	.069	.044	.091	.060	.038	.063	.042	.027	.036	.025	.016	.012	.008	.005	
8.0	.099	.063	.038	.085	.054	.033	.059	.038	.023	.034	.023	.014	.011	.007	.005	
9.0	.093	.057	.033	.080	.050	.029	.056	.035	.020	.032	.021	.012	.011	.007	.004	
10.0	.088	.053	.029	.076	.046	.025	.053	.032	.018	.031	.019	.011	.010	.006	.004	

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 Remarks:

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Uncorrected UGR Table

Report number:

MANUFACTURER:											
Address:											
NAME: 6W					TYPE: WALLVASHER			WEIGHT:			
SPECIFICATION:					DIMENSION: 250*35*65			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	2H	9.7	10.5	9.9	10.7	10.8	8.2	9.1	8.4	9.2	9.4
	3H	10.9	11.7	11.1	11.9	12.1	9.3	10.0	9.5	10.2	10.4
	4H	11.1	11.9	11.4	12.1	12.3	9.5	10.3	9.8	10.5	10.7
	6H	11.2	11.9	11.5	12.2	12.4	9.6	10.4	9.9	10.6	10.8
	8H	11.2	11.9	11.5	12.2	12.4	9.6	10.3	10.0	10.6	10.9
	12H	11.2	11.9	11.5	12.1	12.4	9.6	10.3	10.0	10.6	10.8
4H	2H	10.1	10.9	10.4	11.1	11.3	9.0	9.7	9.2	9.9	10.2
	3H	11.4	12.1	11.7	12.3	12.6	10.1	10.8	10.4	11.0	11.3
	4H	11.7	12.3	12.1	12.6	12.9	10.4	11.0	10.8	11.3	11.6
	6H	11.9	12.4	12.2	12.7	13.1	10.6	11.1	11.0	11.4	11.8
	8H	11.9	12.4	12.3	12.7	13.1	10.6	11.1	11.0	11.4	11.8
	12H	11.9	12.3	12.3	12.7	13.1	10.6	11.1	11.0	11.4	11.8
8H	4H	11.8	12.3	12.1	12.6	13.0	10.5	11.0	10.9	11.4	11.8
	6H	11.9	12.4	12.4	12.8	13.2	10.8	11.2	11.2	11.6	12.0
	8H	12.0	12.4	12.4	12.8	13.2	10.8	11.2	11.2	11.6	12.0
	12H	12.0	12.3	12.5	12.8	13.2	10.8	11.1	11.3	11.6	12.0
12H	4H	11.7	12.2	12.1	12.6	12.9	10.5	11.0	10.9	11.3	11.7
	6H	11.9	12.3	12.4	12.7	13.1	10.7	11.1	11.2	11.5	12.0
	8H	12.0	12.3	12.4	12.7	13.2	10.8	11.1	11.3	11.6	12.0
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.4					
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.4					
2.0H	+ 0.4 / - 0.8					+ 0.3 / - 0.8					

CIE Pub.117 Corrected 1254 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.8)

Test System:HOP00 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: 6W	TYPE: WALLVASHER	WEIGHT:
SPECIFICATION:	DIMENSION: 250*35*65	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) $k(RI) \times RCR = 5$									
$k = 0.60$	83	75	71	82	75	71	81	75	71	67
0.80	90	84	79	90	83	79	88	83	79	75
1.00	95	89	85	95	88	84	93	89	84	79
1.25	100	94	90	99	93	89	97	92	89	84
1.50	103	97	93	102	97	93	99	95	92	87
2.00	106	101	98	105	100	97	102	98	95	90
2.50	108	104	100	107	103	100	103	100	98	91
3.00	110	106	103	108	105	102	105	102	100	93
4.00	113	109	107	111	108	105	107	105	103	95
5.00	114	111	109	112	110	108	108	106	105	97
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

Test System:HOP00 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:

MANUFACTURER:		
Address:		
NAME: 6W	TYPE: WALLVASHER	WEIGHT:
SPECIFICATION:	DIMENSION: 250*35*65	SERIAL No.: LA/YE6L-990706

UNIT: cd

γ (DEG)	C (DEG)			
	0	90	180	270
0.0	4791	4781	4791	4781
5.0	3813	4194	4637	3778
10.0	2495	2857	3418	2360
15.0	1424	1687	2000	1136
20.0	684	853	1074	600
25.0	359	433	472	345
30.0	219	232	266	224
35.0	142	127	182	125
40.0	102	86.0	119	85.9
45.0	90.8	71.1	94.1	73.4
50.0	83.8	60.7	88.0	61.6
55.0	74.5	50.7	78.2	49.8
60.0	64.1	41.2	67.2	38.2
65.0	50.2	31.6	55.5	27.9
70.0	30.1	21.9	36.6	17.8
75.0	16.3	12.7	20.0	9.62
80.0	7.39	6.12	10.0	4.66
85.0	2.78	2.20	3.92	2.20
90.0	1.64	0.74	2.04	1.85

Test System:HOP00 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: