

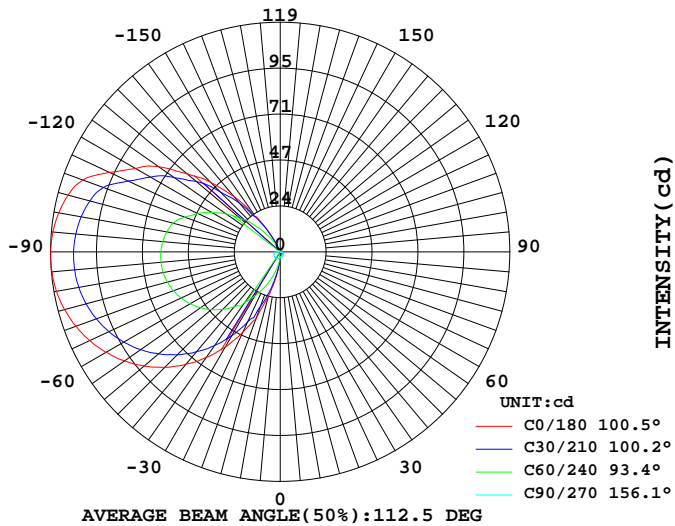
## LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

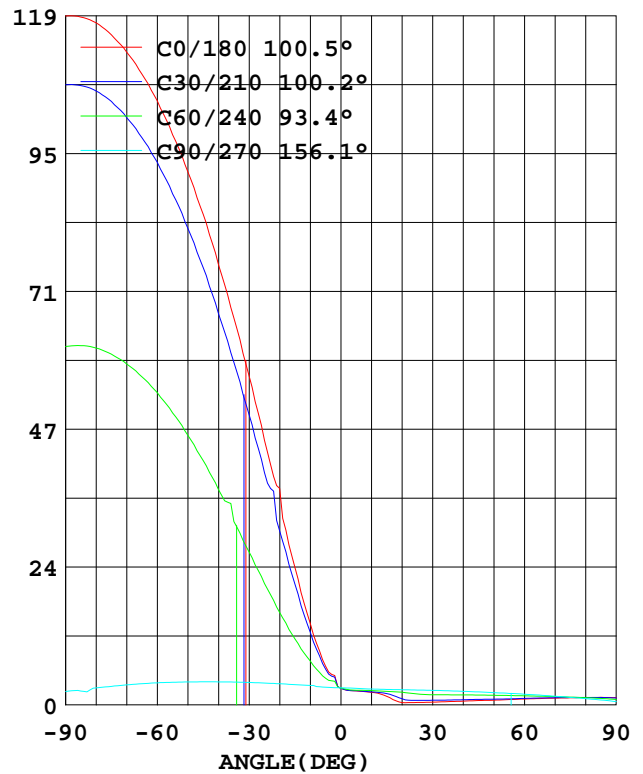
MANUFACTURER:			
Address:			
NAME:		TYPE:	WEIGHT:
SPECIFICATION:	CCT(K): 0	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	118.5	S/MH(C0/180)	7.63
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	1.94
NOMINAL POWER(W)	3	TOTAL FLUX(lm)	308.7	Voltage(V)	12.05
RATED VOLTAGE(V)	12	EFFICIENCY(lm/W)	114.3	Current(A)	0.273
NOMINAL FLUX(lm)	308.7	$\eta$ up(%)	43.9	Power(W)	2.700
LAMPS QUANTITY	1	$\eta$ down(%)	56.1	Power Factor(PF)	0.818
TEST VOLTAGE(V)	12.1	Effective Flux(lm)	30.3	EEI	0.427

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System:HOP00 HP880D  
Temperature:25.3DEG  
Operators:  
Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:1.000 m  
Remarks:

Color Temperature Data List

Report number:

MANUFACTURER:			
Address:			
NAME:		TYPE:	WEIGHT:
SPECIFICATION:	CCT(K): 0	DIMENSION:	SERIAL No.:

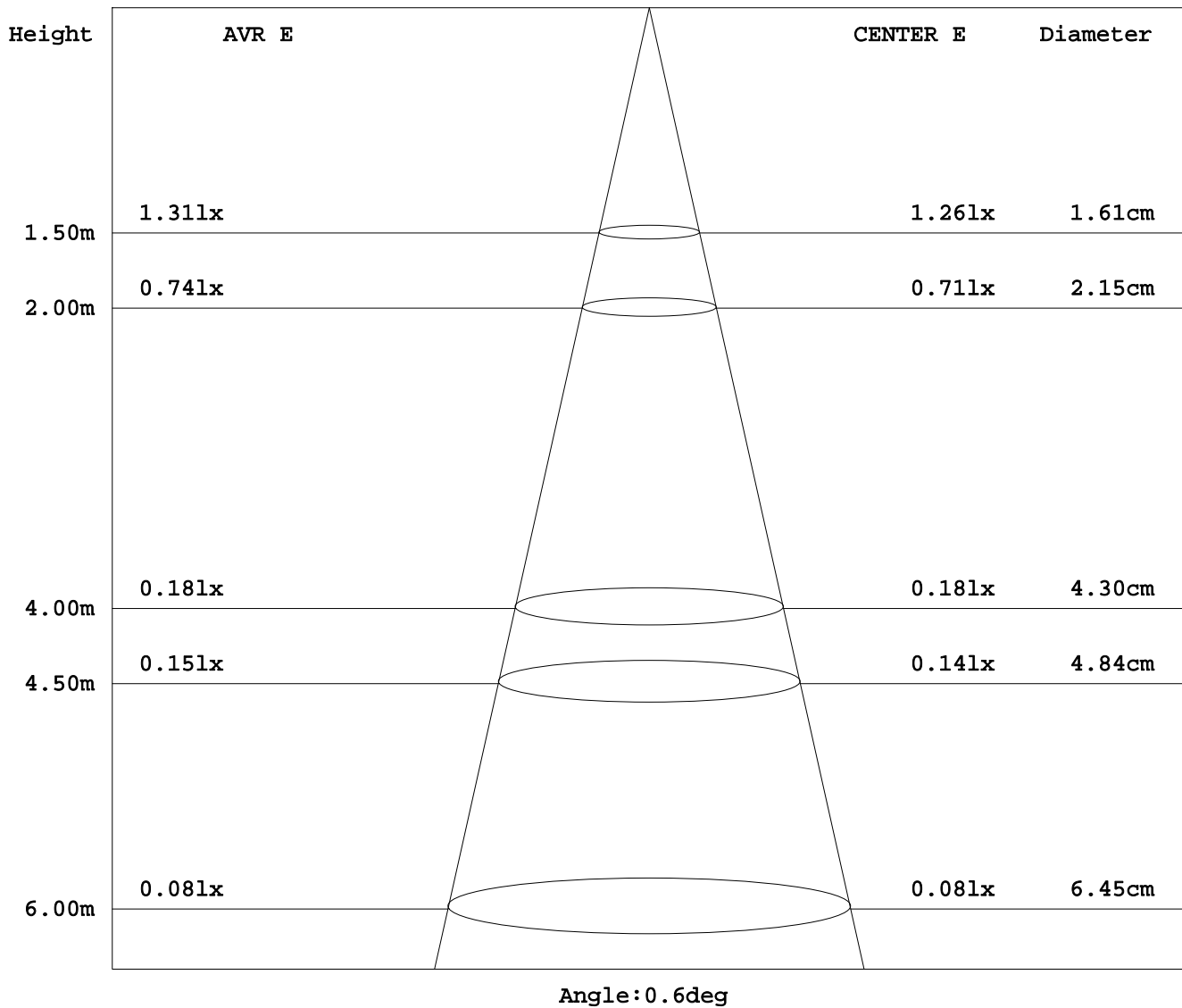
Test System:HOP00 HP880D  
Temperature:25.3DEG  
Operators:  
Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:1.000 m  
Remarks:

## AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER:			
Address:			
NAME:		TYPE:	WEIGHT:
SPECIFICATION:	CCT(K): 0	DIMENSION:	SERIAL No.:



Test System:HOP00 HP880D  
Temperature:25.3DEG  
Operators:  
Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:1.000 m  
Remarks:

# HONGPU GONIOPHOTOMETERS SYSTEM TEST REPORT

## ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME:		TYPE:	WEIGHT:
SPECIFICATION:	CCT(K): 0	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zOne	total
5.0	6.664	5.775	3.045	2.395	2.409	2.330	2.846	4.442	0- 5	0.081	0.081
10.0	14.03	10.75	3.352	2.287	2.167	2.461	2.731	7.184	5- 10	0.332	0.413
15.0	23.58	17.08	3.490	2.150	1.481	2.273	2.658	11.24	10- 15	0.800	1.213
20.0	37.23	24.33	3.636	1.955	0.409	1.972	2.610	16.26	15- 20	1.523	2.736
25.0	45.52	32.50	3.763	1.588	0.414	1.370	2.559	22.16	20- 25	2.549	5.286
30.0	56.61	40.28	3.867	1.425	0.480	1.249	2.503	27.99	25- 30	3.837	9.123
35.0	66.56	47.87	3.929	1.444	0.562	1.239	2.424	35.31	30- 35	5.352	14.47
40.0	75.71	55.29	3.962	1.467	0.655	1.245	2.331	40.09	35- 40	7.025	21.50
45.0	84.34	61.80	3.969	1.467	0.745	1.260	2.231	45.28	40- 45	8.775	30.27
50.0	91.68	67.64	3.944	1.454	0.810	1.270	2.116	50.02	45- 50	10.54	40.81
55.0	98.11	72.86	3.897	1.430	0.910	1.265	1.980	54.37	50- 55	12.26	53.08
60.0	103.9	77.54	3.798	1.381	1.015	1.284	1.845	57.88	55- 60	13.89	66.97
65.0	108.5	81.24	3.649	1.327	1.100	1.305	1.685	60.83	60- 65	15.36	82.33
70.0	112.2	84.19	3.450	1.264	1.171	1.320	1.495	63.24	65- 70	16.63	98.96
75.0	115.2	86.59	3.189	1.179	1.217	1.303	1.293	64.90	70- 75	17.66	116.6
80.0	117.3	88.10	2.924	1.074	1.254	1.278	1.080	66.00	75- 80	18.43	135.0
85.0	118.3	88.83	2.389	0.941	1.295	1.231	0.847	66.61	80- 85	18.91	153.9
90.0	118.5	88.81	2.313	0.765	1.241	1.136	0.569	66.57	85- 90	19.08	173.0
95.0	117.8	88.06	2.153	0.746	1.207	1.024	0.322	65.99	90- 95	18.96	192.0
100.0	116.1	86.55	1.983	0.728	1.181	0.958	0.312	64.86	95-100	18.56	210.5
105.0	113.3	84.05	1.784	0.704	1.152	0.936	0.298	62.91	100-105	17.87	228.4
110.0	108.4	78.90	1.529	0.672	1.112	0.909	0.283	59.26	105-110	16.80	245.2
115.0	97.27	70.44	1.304	0.633	1.058	0.867	0.276	54.06	110-115	15.04	260.3
120.0	86.19	62.80	1.097	0.583	0.998	0.812	0.256	47.97	115-120	12.86	273.1
125.0	76.88	53.06	0.885	0.528	0.920	0.755	0.240	41.50	120-125	10.82	283.9
130.0	62.73	44.40	0.709	0.463	0.823	0.688	0.226	33.42	125-130	8.599	292.5
135.0	50.73	37.53	0.541	0.392	0.723	0.603	0.203	24.76	130-135	6.548	299.1
140.0	37.35	24.28	0.403	0.319	0.611	0.516	0.184	19.30	135-140	4.587	303.7
145.0	22.38	15.37	0.279	0.247	0.486	0.427	0.160	12.46	140-145	2.881	306.6
150.0	11.47	7.416	0.187	0.174	0.356	0.326	0.130	6.101	145-150	1.505	308.1
155.0	0.307	0.113	0.115	0.104	0.234	0.241	0.109	1.645	150-155	0.524	308.6
160.0	0.174	0.027	0.044	0.063	0.123	0.155	0.048	0.384	155-160	0.066	308.7
165.0	0.088	0.012	0.040	0.034	0.048	0.088	0.038	0.102	160-165	0.013	308.7
170.0	0.067	0.020	0.031	0.027	0.014	0.054	0.029	0.072	165-170	0.006	308.7
175.0	0.059	0.022	0.030	0.024	0.006	0.034	0.024	0.062	170-175	0.003	308.7
180.0	0.033	0.032	0.026	0.021	0.013	0.028	0.023	0.044	175-180	0.001	308.7
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPPO HP880D  
Temperature:25.3DEG  
Operators:  
Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:1.000 m  
Remarks:

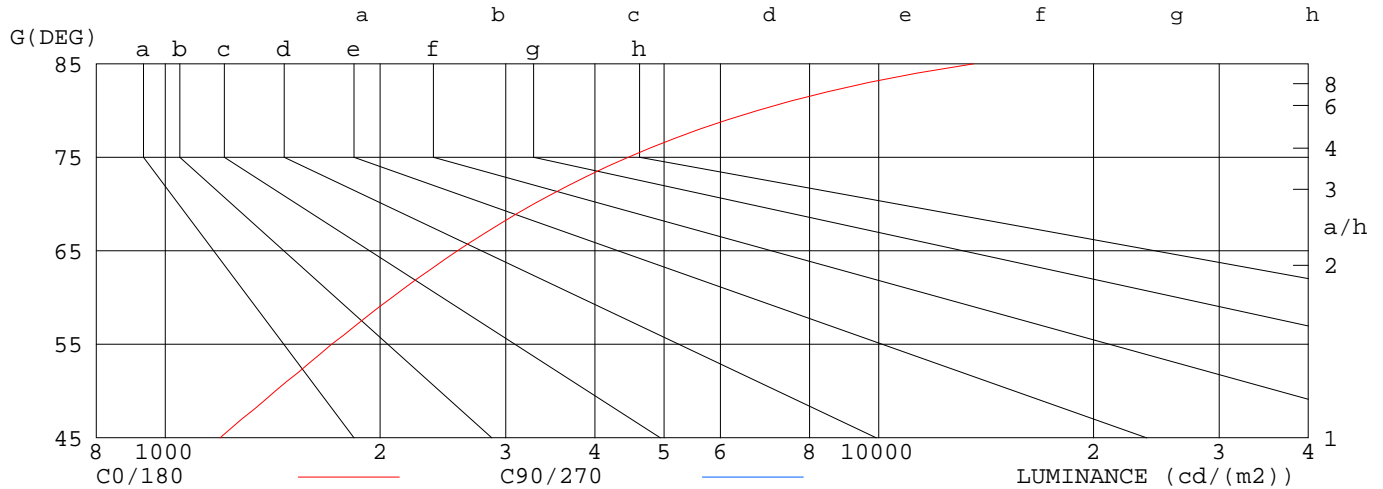
## LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:			
Address:			
NAME:		TYPE:	WEIGHT:
SPECIFICATION:	CCT(K): 0	DIMENSION:	SERIAL No.:

## LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
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	13580	274
80	6757	168
75	4455	123
70	3283	101
65	2567	86
60	2078	76
55	1711	68
50	1426	61
45	1193	56

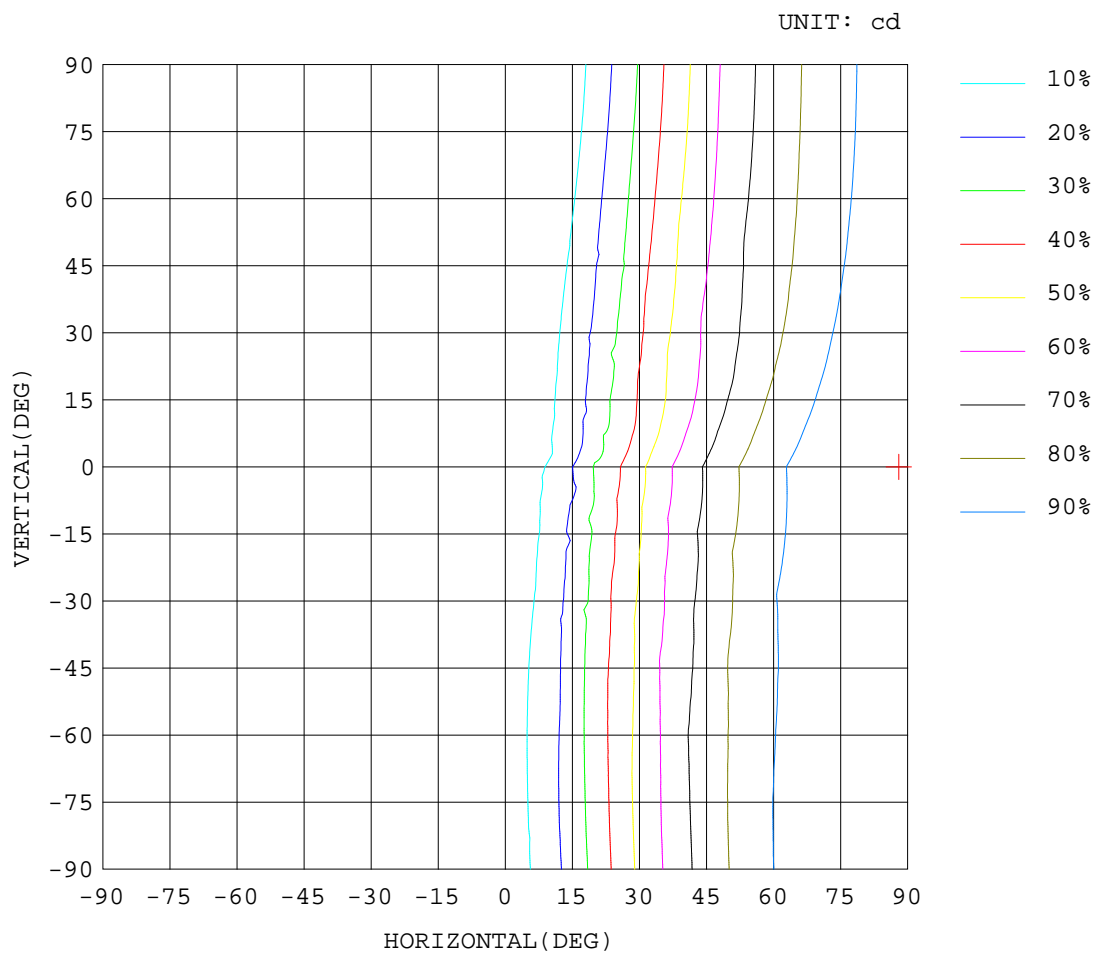
Test System:HOPPO HP880D  
 Temperature:25.3DEG  
 Operators:  
 Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:1.000 m  
 Remarks:

## ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME:		TYPE:	WEIGHT:
SPECIFICATION:	CCT(K): 0	DIMENSION:	SERIAL No.:



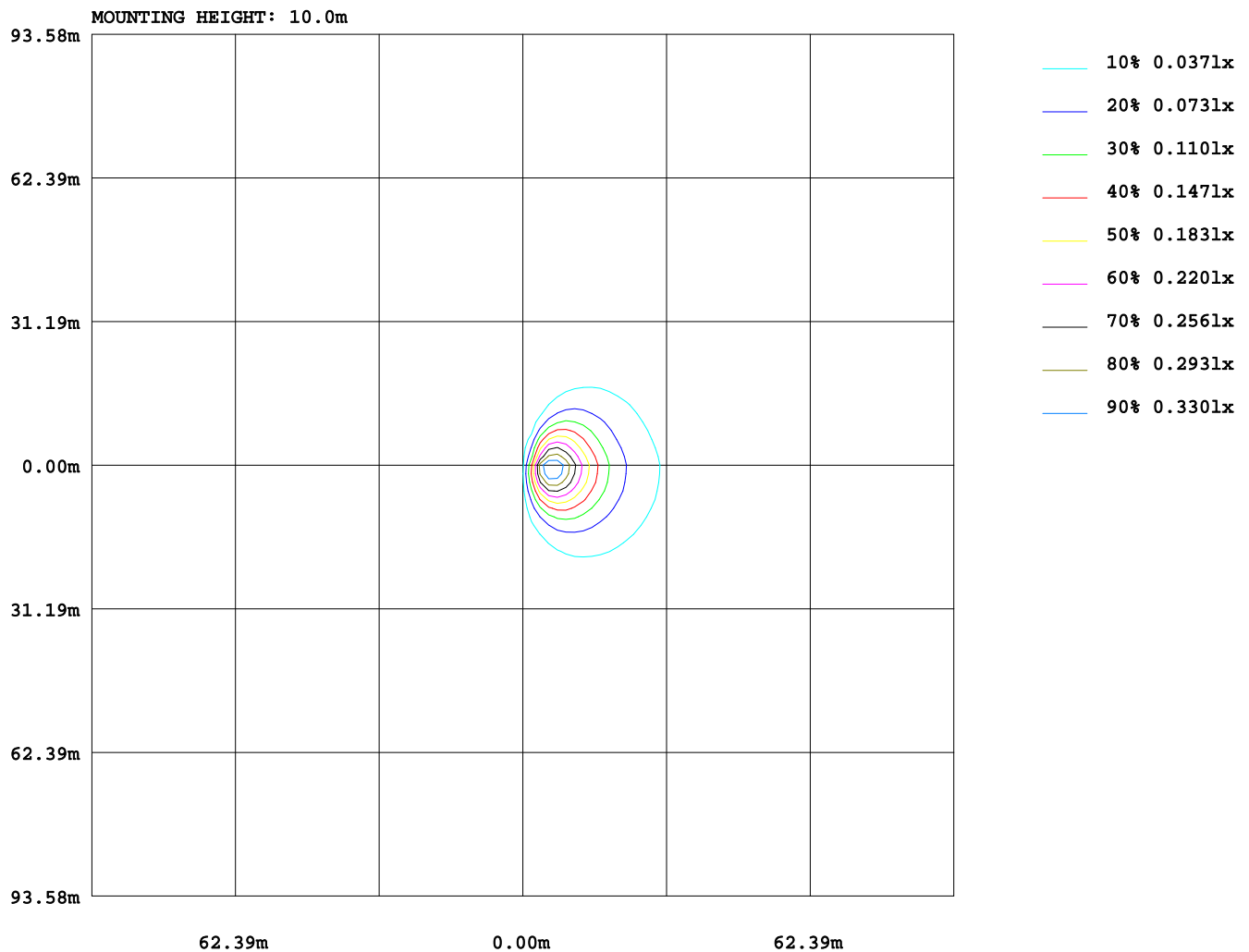
Test System:HOP00 HP880D  
Temperature:25.3DEG  
Operators:  
Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:1.000 m  
Remarks:

## ISOLUX DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME:		TYPE:	WEIGHT:
SPECIFICATION:	CCT(K): 0	DIMENSION:	SERIAL No.:



Test System:HOP00 HP880D  
Temperature:25.3DEG  
Operators:  
Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:1.000 m  
Remarks:

# HONGPU GONIOPHOTOMETERS SYSTEM TEST REPORT

## AREA LUMINOUS FLUX

Report number:

MANUFACTURER:																			
Address:																			
NAME:										TYPE:					WEIGHT:				
SPECIFICATION:					CCT(K): 0					DIMENSION:					SERIAL No.:				

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			
	0.00	0.01	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.08	0.24	0.73	1.16	1.41	1.42	1.20	0.81	0.30	7.55	3.04		
	0.00	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.10	0.27	0.77	1.19	1.43	1.43	1.20	0.81	0.30	7.74	3.20		
	0.00	0.01	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.11	0.31	0.81	1.23	1.45	1.44	1.20	0.81	0.30	7.95	3.38		
	0.00	0.01	0.02	0.02	0.03	0.03	0.04	0.06	0.06	0.12	0.36	0.86	1.27	1.48	1.46	1.21	0.82	0.30	8.16	3.55		
	0.00	0.01	0.02	0.02	0.03	0.03	0.04	0.06	0.07	0.13	0.41	0.90	1.31	1.51	1.47	1.22	0.83	0.30	8.37	3.71		
	0.00	0.01	0.02	0.02	0.02	0.03	0.04	0.06	0.07	0.13	0.46	0.95	1.35	1.54	1.49	1.24	0.84	0.30	8.60	3.88		
	0.00	0.01	0.01	0.02	0.02	0.02	0.03	0.05	0.07	0.15	0.50	1.00	1.40	1.57	1.51	1.27	0.86	0.31	8.83	4.03		
	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.05	0.07	0.17	0.54	1.05	1.43	1.61	1.57	1.31	0.87	0.31	9.11	4.17		
	0.00	0.01	0.01	0.02	0.02	0.01	0.01	0.05	0.07	0.18	0.60	1.14	1.55	1.72	1.65	1.36	0.89	0.31	9.64	4.49		
	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.04	0.07	0.24	0.72	1.28	1.66	1.80	1.70	1.38	0.90	0.31	10.2	4.96		
	0.00	0.01	0.01	0.02	0.02	0.02	0.03	0.05	0.08	0.27	0.77	1.31	1.69	1.83	1.72	1.39	0.90	0.31	10.4	5.16		
-30	0.00	0.01	0.01	0.02	0.02	0.03	0.04	0.06	0.08	0.30	0.81	1.36	1.72	1.84	1.74	1.40	0.91	0.31	10.6	5.33		
-40	0.00	0.01	0.01	0.02	0.02	0.03	0.05	0.06	0.09	0.32	0.85	1.39	1.75	1.87	1.74	1.41	0.91	0.31	10.8	5.49		
-50	0.00	0.01	0.01	0.02	0.03	0.04	0.05	0.06	0.09	0.35	0.86	1.41	1.77	1.88	1.75	1.41	0.91	0.31	10.9	5.58		
-60	0.00	0.01	0.02	0.02	0.03	0.04	0.05	0.05	0.09	0.36	0.88	1.42	1.78	1.89	1.76	1.41	0.92	0.31	11.0	5.63		
-70	0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.09	0.36	0.88	1.42	1.78	1.90	1.76	1.41	0.92	0.31	11.0	5.62		
-80	0.00	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.07	0.35	0.87	1.41	1.77	1.90	1.76	1.41	0.92	0.31	10.9	5.55		
-90	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.06	0.34	0.85	1.39	1.76	1.89	1.75	1.41	0.91	0.31	10.8	5.42		
	-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)					20	30	40	50	60	70	80	90	
Φ t	0.06	0.17	0.27	0.35	0.42	0.50	0.62	0.87	1.26	4.05	11.1	20.6	27.6	30.6	29.1	23.9	15.7	5.53	309			
Φ a	0.00	0.00	0.00	0.00	0.22	0.50	0.62	0.87	1.26	4.05	11.1	20.6	27.6	15.2	0.00	0.00	0.00	0.00		30		

Test System:HOP00 HP880D  
 Temperature:25.3DEG  
 Operators:  
 Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:1.000 m  
 Remarks:

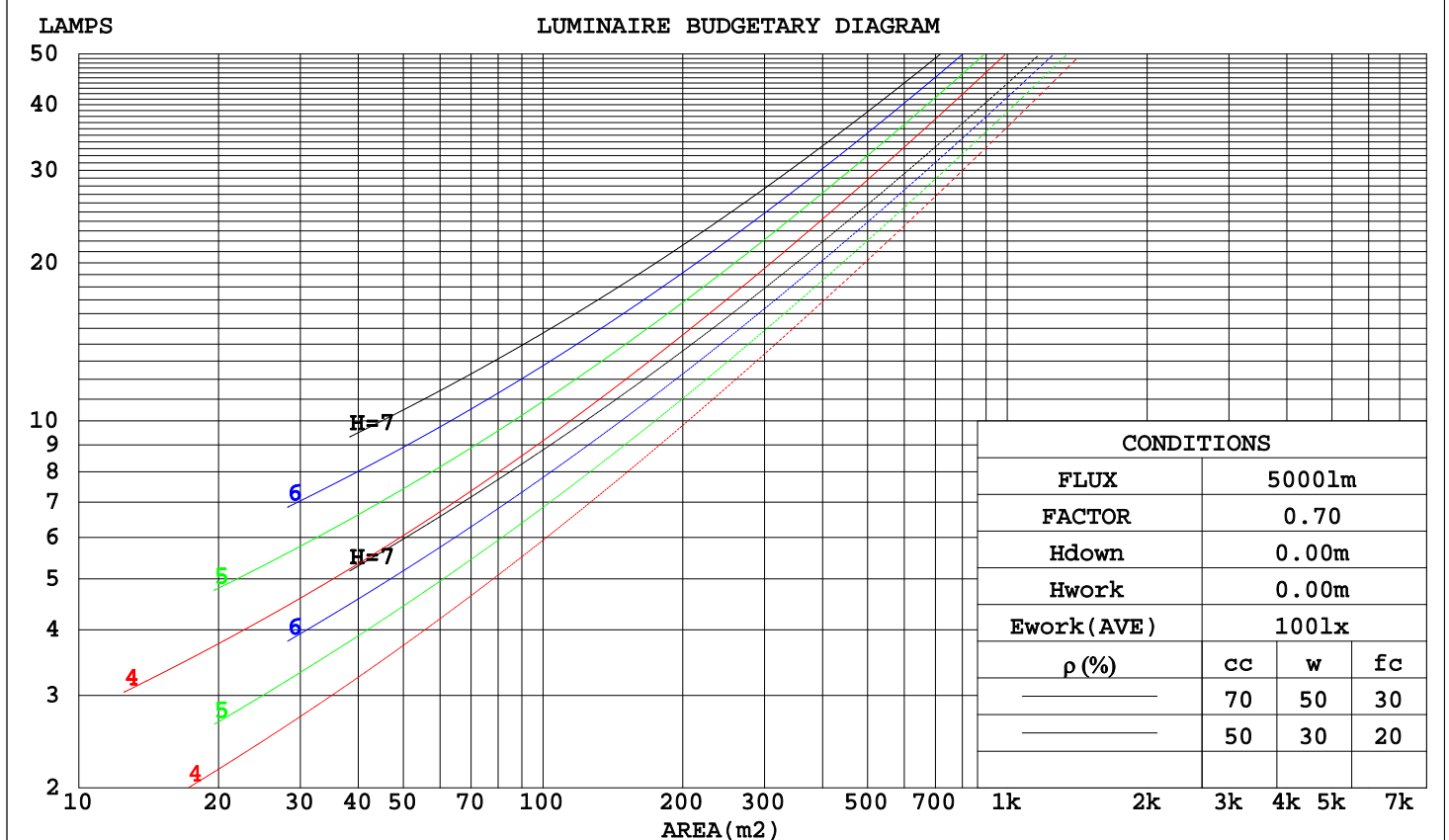


## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:															
Address:															
NAME:								TYPE:				WEIGHT:			
SPECIFICATION:				CCT(K): 0				DIMENSION:				SERIAL No.:			

$\rho_{cc}$	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															



Test System:HOPPO HP880D  
 Temperature:25.3DEG  
 Operators:  
 Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:1.000 m  
 Remarks:

# HONGPU GONIOPHOTOMETERS SYSTEM TEST REPORT

## WEC AND CCEC

Report number:

MANUFACTURER:															
Address:															
NAME:								TYPE:				WEIGHT:			
SPECIFICATION:				CCT(K): 0				DIMENSION:				SERIAL No.:			

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.456	.260	.082	.436	.248	.079	.397	.228	.073	.361	.208	.067	.328	.190	.061	
2.0	.374	.205	.063	.355	.195	.060	.319	.178	.055	.287	.161	.050	.256	.145	.046	
3.0	.322	.171	.051	.305	.163	.049	.272	.147	.045	.242	.133	.041	.214	.119	.037	
4.0	.284	.148	.043	.268	.140	.041	.238	.126	.038	.211	.113	.034	.185	.101	.031	
5.0	.254	.130	.038	.240	.123	.036	.213	.111	.033	.187	.099	.029	.163	.087	.026	
6.0	.230	.116	.033	.217	.110	.032	.192	.098	.029	.169	.088	.026	.147	.077	.023	
7.0	.211	.104	.030	.199	.099	.028	.175	.089	.026	.153	.079	.023	.133	.069	.020	
8.0	.194	.095	.027	.183	.090	.025	.161	.081	.023	.141	.071	.021	.122	.063	.018	
9.0	.180	.087	.024	.169	.083	.023	.149	.074	.021	.130	.065	.019	.113	.057	.017	
10.0	.167	.080	.022	.158	.076	.021	.139	.068	.019	.121	.060	.017	.105	.053	.015	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.525	.525	.525	.449	.449	.449	.306	.306	.306	.176	.176	.176	.056	.056	.056	
1.0	.528	.492	.460	.452	.423	.396	.309	.291	.274	.178	.168	.159	.057	.054	.052	
2.0	.523	.471	.428	.448	.406	.370	.307	.281	.258	.177	.163	.151	.057	.053	.049	
3.0	.516	.456	.409	.442	.394	.354	.304	.273	.248	.175	.160	.146	.056	.052	.048	
4.0	.509	.445	.396	.436	.384	.344	.300	.268	.242	.174	.157	.143	.056	.051	.047	
5.0	.501	.436	.388	.430	.377	.338	.296	.263	.238	.172	.155	.141	.055	.050	.047	
6.0	.493	.429	.382	.424	.371	.333	.293	.260	.235	.170	.153	.140	.055	.050	.046	
7.0	.486	.422	.378	.418	.366	.329	.289	.257	.233	.168	.151	.139	.054	.050	.046	
8.0	.479	.417	.375	.413	.362	.327	.286	.254	.232	.166	.150	.138	.054	.049	.046	
9.0	.473	.413	.372	.407	.358	.325	.282	.252	.230	.164	.149	.137	.053	.049	.046	
10.0	.467	.409	.370	.403	.355	.323	.279	.250	.229	.163	.148	.137	.053	.049	.045	

Test System:HOPPO HP880D  
 Temperature:25.3DEG  
 Operators:  
 Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:1.000 m  
 Remarks:

# HONGPU GONIOPHOTOMETERS SYSTEM TEST REPORT

## UGR Table

Report number:

MANUFACTURER:											
Address:											
NAME:						TYPE:		WEIGHT:			
SPECIFICATION:			CCT(K): 0			DIMENSION:		SERIAL No.:			
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	16.2	17.4	17.0	18.2	19.3	9.2	10.4	10.0	11.2	12.3
	3H	20.0	21.1	20.8	21.9	23.0	10.9	12.0	11.7	12.9	14.0
	4H	22.0	23.1	22.9	24.0	25.1	11.7	12.7	12.5	13.6	14.7
	6H	24.3	25.2	25.1	26.1	27.3	12.3	13.3	13.2	14.2	15.4
	8H	25.5	26.4	26.4	27.3	28.5	12.6	13.6	13.5	14.5	15.6
	12H	26.9	27.8	27.7	28.7	29.9	12.9	13.8	13.7	14.7	15.8
4H	2H	16.8	17.8	17.6	18.7	19.9	13.1	14.2	14.0	15.0	16.2
	3H	20.8	21.7	21.7	22.7	23.8	15.3	16.2	16.2	17.1	18.3
	4H	23.1	23.9	24.0	24.9	26.0	16.4	17.2	17.3	18.1	19.3
	6H	25.6	26.3	26.5	27.3	28.5	17.2	18.0	18.2	18.9	20.1
	8H	26.9	27.6	27.8	28.6	29.8	17.6	18.3	18.5	19.2	20.5
	12H	28.4	29.1	29.3	30.0	31.3	17.9	18.5	18.8	19.5	20.7
8H	4H	23.5	24.2	24.4	25.2	26.4	19.2	19.9	20.1	20.8	22.0
	6H	26.3	26.9	27.2	27.9	29.1	20.7	21.3	21.6	22.3	23.5
	8H	27.9	28.4	28.8	29.4	30.7	21.4	21.9	22.3	22.9	24.2
	12H	29.7	30.1	30.6	31.1	32.4	21.9	22.4	22.9	23.4	24.7
12H	4H	23.5	24.2	24.5	25.2	26.4	20.0	20.7	20.9	21.6	22.9
	6H	26.5	27.0	27.4	28.0	29.3	21.9	22.5	22.9	23.4	24.7
	8H	28.2	28.7	29.1	29.6	30.9	22.9	23.4	23.9	24.4	25.6
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H		+ 0.2 / - 0.3					+ 0.1 / - 0.2				
2.0H		+ 0.3 / - 0.4					+ 0.3 / - 0.3				

CIE Pub.117 Corrected 308.7 lm Total Lamp Luminous Flux.(8log(F/F0) = -4.1)

Test System:HOPPO HP880D  
 Temperature:25.3DEG  
 Operators:  
 Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:1.000 m  
 Remarks:

## UTILIZATION FACTORS TABLE

Report number:

MANUFACTURER:										
Address:										
NAME:					TYPE:			WEIGHT:		
SPECIFICATION:			CCT(K): 0		DIMENSION:			SERIAL No.:		

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) $k(RI) \times RCR = 5$									
$k = 0.60$	34	21	13	32	20	13	30	18	12	5
0.80	42	28	19	40	26	18	36	24	17	7
1.00	50	34	25	47	33	24	41	32	22	11
1.25	57	41	31	53	39	30	46	35	27	14
1.50	62	47	36	58	44	35	50	39	31	16
2.00	70	56	45	65	52	43	56	46	38	21
2.50	75	62	52	70	58	49	60	51	43	24
3.00	80	67	58	74	63	54	63	55	48	28
4.00	85	75	66	79	70	62	68	60	54	32
5.00	89	80	72	82	74	67	71	64	58	35
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004					Suspended			SHRNOM = 1.25		

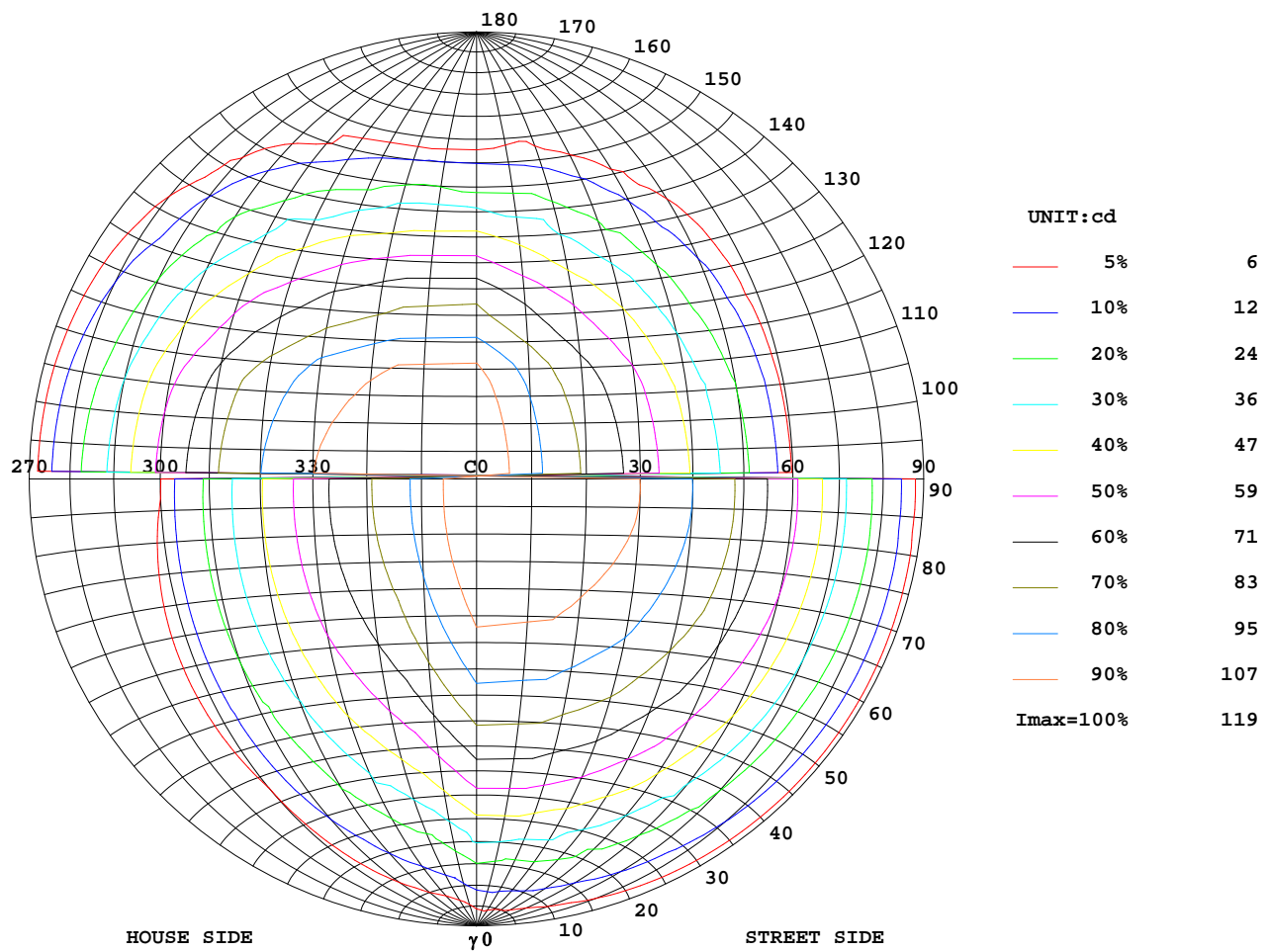
Test System:HOP00 HP880D  
 Temperature:25.3DEG  
 Operators:  
 Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:1.000 m  
 Remarks:

## ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME:		TYPE:	WEIGHT:
SPECIFICATION:	CCT(K): 0	DIMENSION:	SERIAL No.:



Test System:HOP00 HP880D  
Temperature:25.3DEG  
Operators:  
Test Date:06-30-2023

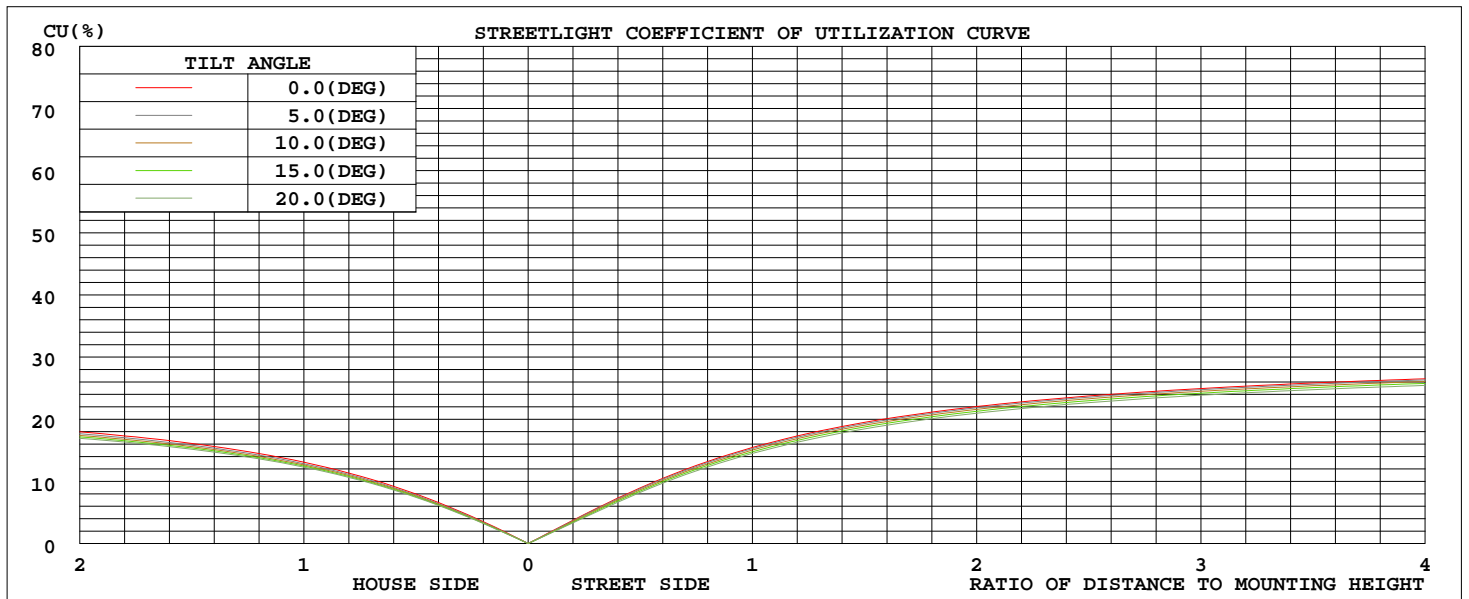
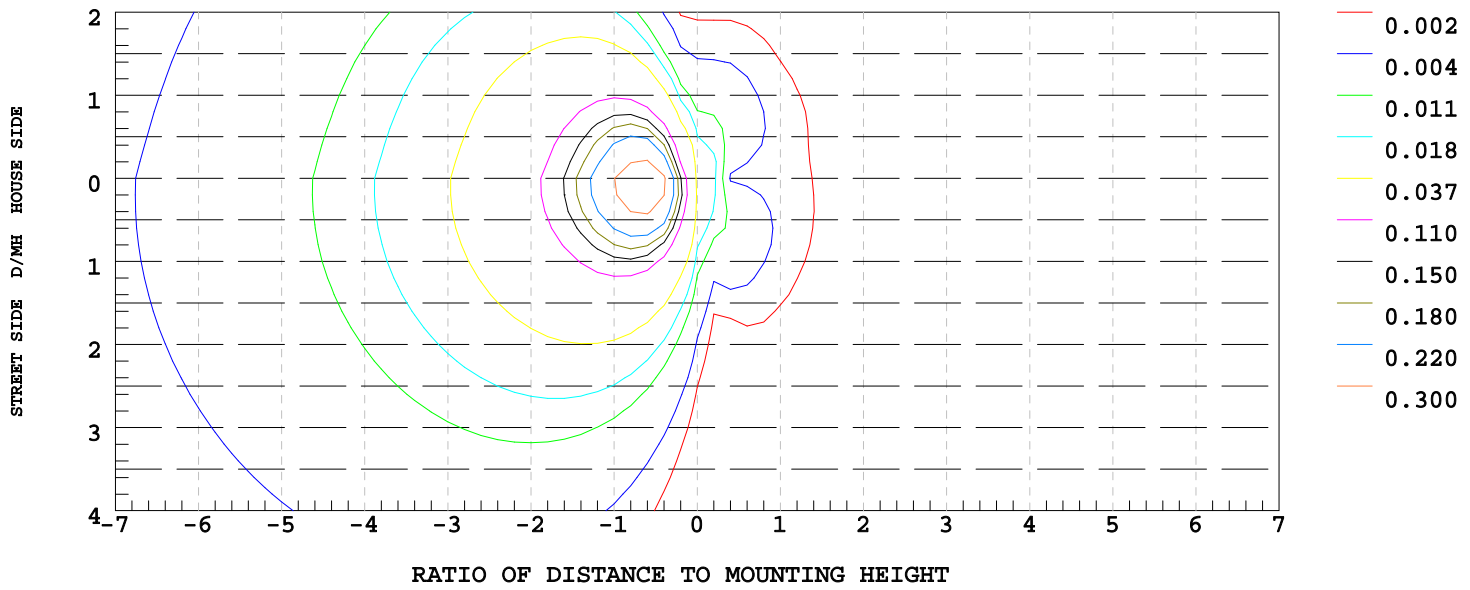
Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:1.000 m  
Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME:		TYPE:	WEIGHT:
SPECIFICATION:	CCT(K): 0	DIMENSION:	SERIAL No.:

ILLUMINANCE AT MH=10 m,Enadir = 0.03 lx



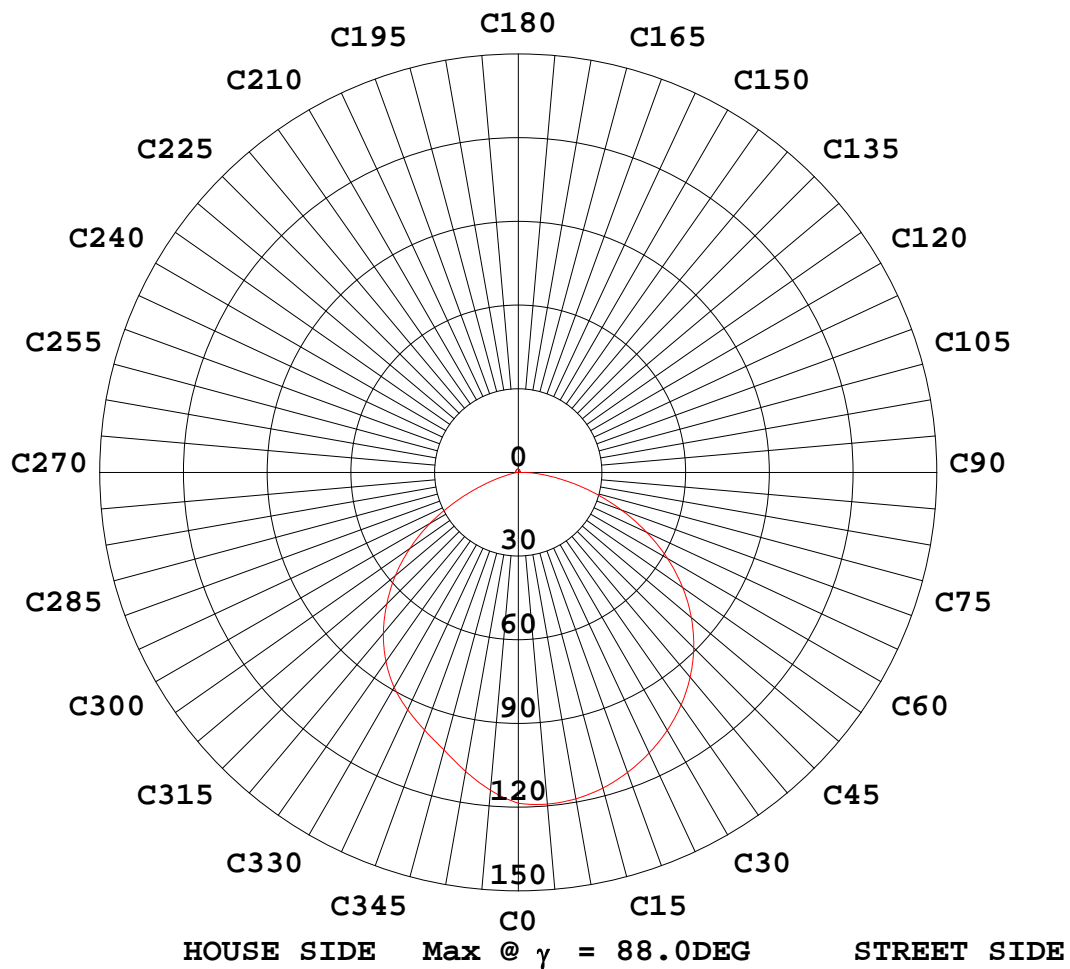
Test System:HOP00 HP880D  
 Temperature:25.3DEG  
 Operators:  
 Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:1.000 m  
 Remarks:

## ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME:		TYPE:	WEIGHT:
SPECIFICATION:	CCT(K): 0	DIMENSION:	SERIAL No.:



Test System:HOP00 HP880D  
Temperature:25.3DEG  
Operators:  
Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:1.000 m  
Remarks:

# HONGPU GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER:															
Address:															
NAME:								TYPE:				WEIGHT:			
SPECIFICATION:				CCT(K): 0				DIMENSION:				SERIAL No.:			

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210
0.0	2.83	3.34	2.85	3.28	2.89	3.13	2.93	2.87	3.00	2.66	2.92	2.54	2.83	3.34	2.85
5.0	6.66	7.11	6.16	5.77	4.59	3.91	3.04	2.65	2.44	2.39	2.44	2.33	2.40	2.37	2.43
10.0	14.0	14.5	12.5	10.7	7.55	5.12	3.35	2.52	2.44	2.28	2.32	2.10	2.16	2.35	2.23
15.0	23.5	23.0	20.7	17.0	11.3	6.77	3.49	2.43	2.39	2.15	2.15	1.48	1.48	2.06	1.94
20.0	37.2	34.4	29.9	24.3	15.8	8.71	3.63	2.37	2.31	1.95	1.67	0.52	0.41	0.93	1.06
25.0	45.5	45.6	39.9	32.5	20.8	10.8	3.76	2.32	2.21	1.58	0.98	0.55	0.41	0.55	0.79
30.0	56.6	56.0	49.9	40.2	26.3	13.0	3.86	2.25	2.07	1.42	0.96	0.62	0.48	0.57	0.80
35.0	66.5	65.7	58.9	47.8	31.5	15.2	3.92	2.19	1.96	1.44	0.99	0.71	0.56	0.62	0.83
40.0	75.7	75.1	67.2	55.2	37.0	17.6	3.96	2.11	1.92	1.46	1.04	0.80	0.65	0.69	0.89
45.0	84.3	83.2	75.1	61.8	42.0	19.7	3.96	2.02	1.88	1.46	1.09	0.87	0.75	0.77	0.95
50.0	91.6	90.4	81.9	67.6	46.3	21.7	3.94	1.91	1.83	1.45	1.12	0.91	0.81	0.83	0.99
55.0	98.1	96.8	87.9	72.8	50.2	23.5	3.89	1.77	1.76	1.43	1.13	0.98	0.91	0.91	1.04
60.0	104	103	93.3	77.5	53.7	25.1	3.79	1.62	1.68	1.38	1.16	1.05	1.01	1.00	1.12
65.0	109	107	97.5	81.2	56.4	26.4	3.64	1.45	1.57	1.32	1.18	1.10	1.10	1.09	1.18
70.0	112	111	101	84.1	58.6	27.3	3.45	1.26	1.44	1.26	1.19	1.14	1.17	1.17	1.23
75.0	115	114	104	86.5	60.3	27.9	3.18	1.04	1.28	1.17	1.18	1.16	1.21	1.22	1.26
80.0	117	116	106	88.1	61.4	28.2	2.92	0.81	1.11	1.07	1.15	1.17	1.25	1.26	1.27
85.0	118	117	107	88.8	61.8	28.2	2.38	0.56	0.92	0.94	1.10	1.16	1.29	1.31	1.27
90.0	119	117	107	88.8	61.6	27.8	2.31	0.34	0.64	0.76	1.01	1.10	1.24	1.27	1.18
95.0	118	116	106	88.0	60.9	27.1	2.15	0.34	0.60	0.75	0.96	1.07	1.20	1.22	1.12
100.0	116	115	104	86.5	59.5	26.1	1.98	0.34	0.58	0.73	0.94	1.05	1.18	1.19	1.09
105.0	113	112	102	84.0	57.2	24.5	1.78	0.34	0.56	0.70	0.92	1.01	1.15	1.17	1.06
110.0	108	108	97.2	78.9	52.4	21.8	1.52	0.33	0.54	0.67	0.88	0.97	1.11	1.13	1.02
115.0	97.2	96.4	86.6	70.4	47.0	19.1	1.30	0.32	0.52	0.63	0.83	0.92	1.05	1.09	0.98
120.0	86.1	84.8	77.2	62.8	40.6	15.9	1.09	0.30	0.49	0.58	0.78	0.85	1.00	1.03	0.92
125.0	76.8	76.3	67.0	53.0	34.1	12.7	0.88	0.28	0.44	0.53	0.72	0.77	0.92	0.96	0.84
130.0	62.7	62.2	56.7	44.4	26.0	9.95	0.71	0.26	0.40	0.46	0.64	0.68	0.82	0.88	0.75
135.0	50.7	50.2	43.7	37.5	20.5	6.90	0.54	0.24	0.35	0.39	0.56	0.58	0.72	0.78	0.66
140.0	37.3	39.0	33.0	24.2	14.2	4.59	0.40	0.21	0.30	0.32	0.46	0.47	0.61	0.68	0.56
145.0	22.3	24.1	21.2	15.3	8.69	2.23	0.28	0.17	0.25	0.25	0.37	0.36	0.49	0.56	0.44
150.0	11.4	11.9	10.7	7.41	0.55	1.02	0.19	0.14	0.19	0.17	0.27	0.24	0.36	0.43	0.33
155.0	0.31	0.16	0.29	0.11	0.18	0.07	0.12	0.08	0.14	0.10	0.17	0.14	0.23	0.30	0.22
160.0	0.17	0.05	0.17	0.03	0.10	0.03	0.04	0.05	0.08	0.06	0.10	0.07	0.12	0.19	0.13
165.0	0.09	0.02	0.09	0.01	0.08	0.03	0.04	0.04	0.06	0.03	0.05	0.03	0.05	0.09	0.06
170.0	0.07	0.02	0.08	0.02	0.06	0.03	0.03	0.03	0.04	0.03	0.04	0.02	0.01	0.05	0.03
175.0	0.06	0.02	0.07	0.02	0.06	0.03	0.03	0.03	0.04	0.02	0.03	0.03	0.01	0.03	0.02
180.0	0.03	0.03	0.05	0.03	0.04	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.01	0.03	0.02

Test System:HOPPO HP880D  
 Temperature:25.3DEG  
 Operators:  
 Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:1.000 m  
 Remarks:



## LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER:			
Address:			
NAME:		TYPE:	WEIGHT:
SPECIFICATION:	CCT(K): 0	DIMENSION:	SERIAL No.:

UNIT: cd

C (DEG)									
γ (DEG)	225	240	255	270	285	300	315	330	345
0.0	3.28	2.89	3.13	2.93	2.87	3.00	2.66	2.92	2.54
5.0	2.33	2.52	2.29	2.84	3.40	3.88	4.44	4.98	5.15
10.0	2.46	2.46	2.55	2.73	3.63	5.32	7.18	9.68	10.6
15.0	2.27	2.33	2.54	2.65	4.02	7.35	11.2	15.9	18.4
20.0	1.97	2.17	2.50	2.61	4.41	9.78	16.2	23.4	27.5
25.0	1.37	1.88	2.44	2.55	4.82	12.6	22.1	31.9	38.0
30.0	1.24	1.74	2.36	2.50	5.25	15.5	27.9	39.9	47.4
35.0	1.23	1.73	2.28	2.42	5.68	18.6	35.3	47.7	56.3
40.0	1.24	1.71	2.23	2.33	6.11	21.8	40.0	55.3	64.9
45.0	1.26	1.70	2.17	2.23	6.46	24.7	45.2	61.9	72.3
50.0	1.27	1.66	2.10	2.11	6.73	27.0	50.0	67.8	78.8
55.0	1.26	1.61	2.00	1.98	6.92	30.2	54.3	73.1	84.8
60.0	1.28	1.56	1.90	1.84	7.01	32.3	57.8	77.5	89.7
65.0	1.30	1.50	1.78	1.68	7.02	34.0	60.8	81.1	93.7
70.0	1.32	1.43	1.64	1.49	6.92	35.4	63.2	84.1	97.2
75.0	1.30	1.34	1.48	1.29	6.73	36.2	64.9	86.3	99.7
80.0	1.27	1.24	1.32	1.08	6.46	36.6	66.0	87.9	102
85.0	1.23	1.10	1.12	0.85	6.08	36.7	66.6	88.8	103
90.0	1.13	0.94	0.90	0.57	5.64	36.3	66.5	89.0	103
95.0	1.02	0.73	0.60	0.32	5.16	35.7	65.9	88.5	103
100.0	0.96	0.71	0.51	0.31	4.81	34.5	64.8	87.3	101
105.0	0.94	0.69	0.50	0.30	4.37	33.3	62.9	85.3	99.3
110.0	0.91	0.66	0.48	0.28	3.81	29.9	59.2	81.8	96.1
115.0	0.87	0.62	0.46	0.28	3.26	26.6	54.0	74.5	88.9
120.0	0.81	0.58	0.43	0.26	2.28	22.6	47.9	67.8	79.8
125.0	0.75	0.53	0.40	0.24	2.16	19.2	41.5	58.9	71.5
130.0	0.69	0.47	0.36	0.23	1.67	14.6	33.4	49.0	59.7
135.0	0.60	0.41	0.32	0.20	1.21	10.9	24.7	40.4	50.7
140.0	0.52	0.35	0.28	0.18	0.83	7.37	19.3	29.3	38.4
145.0	0.43	0.28	0.24	0.16	0.54	4.88	12.4	19.9	23.6
150.0	0.33	0.21	0.19	0.13	0.34	1.80	6.10	10.4	15.7
155.0	0.24	0.15	0.15	0.11	0.21	0.09	1.64	2.90	6.44
160.0	0.16	0.09	0.10	0.05	0.10	0.05	0.38	0.08	0.27
165.0	0.09	0.06	0.07	0.04	0.06	0.03	0.10	0.02	0.14
170.0	0.05	0.04	0.05	0.03	0.05	0.03	0.07	0.01	0.08
175.0	0.03	0.03	0.04	0.02	0.05	0.03	0.06	0.02	0.07
180.0	0.03	0.03	0.03	0.02	0.04	0.04	0.04	0.03	0.05

Test System:HOPPO HP880D  
Temperature:25.3DEG  
Operators:  
Test Date:06-30-2023

Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:1.000 m  
Remarks: