

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

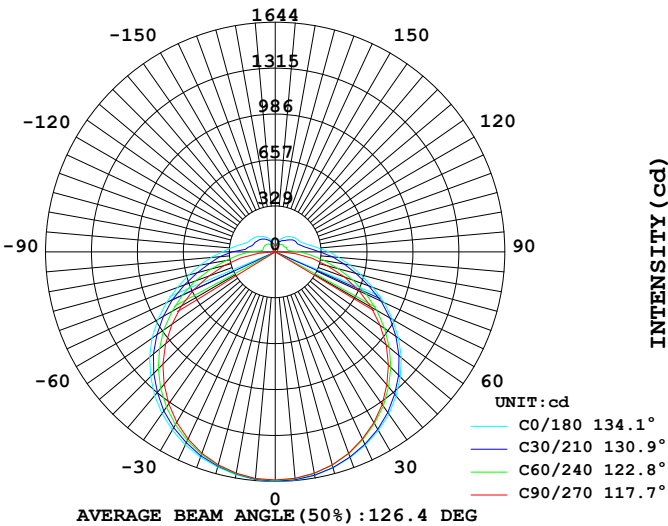
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

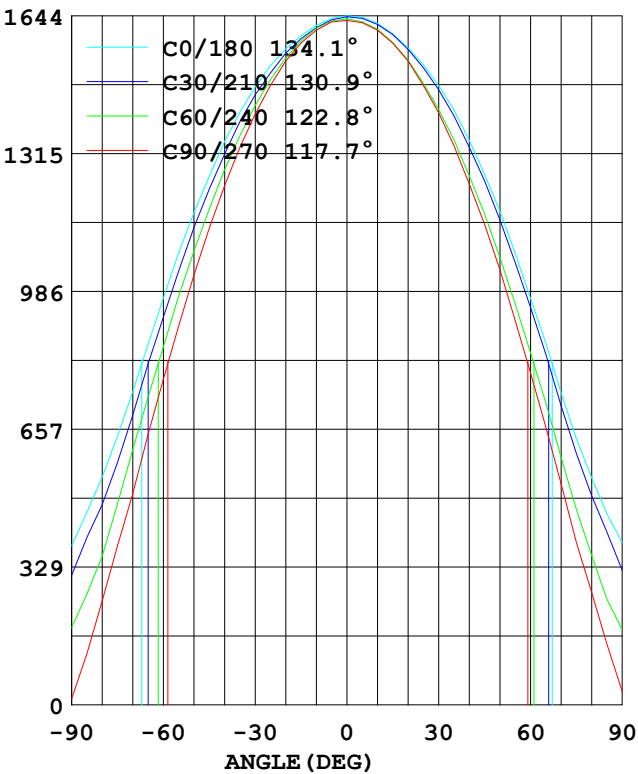
MANUFACTURER:		
Address:		
NAME: 1.5M-50W-5000K	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1500*152*52mm	SERIAL No.:

DATA OF LAMP		Imax(cd)	1644	S/MH(C0/180)	1.34
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	1.28
NOMINAL POWER(W)	52	TOTAL FLUX(lm)	6392.5	Voltage(V)	219.8
RATED VOLTAGE(V)	220	EFFICIENCY(lm/W)	124.7	Current(A)	0.239
NOMINAL FLUX(lm)	6392.5	$\eta$ up(%)	11.5	Power(W)	51.25
LAMPS QUANTITY	1	$\eta$ down(%)	88.5	Power Factor(PF)	0.973
TEST VOLTAGE(V)	219.8	Effective Flux(lm)	5990.5	EEI	0.117

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2022年11月14日

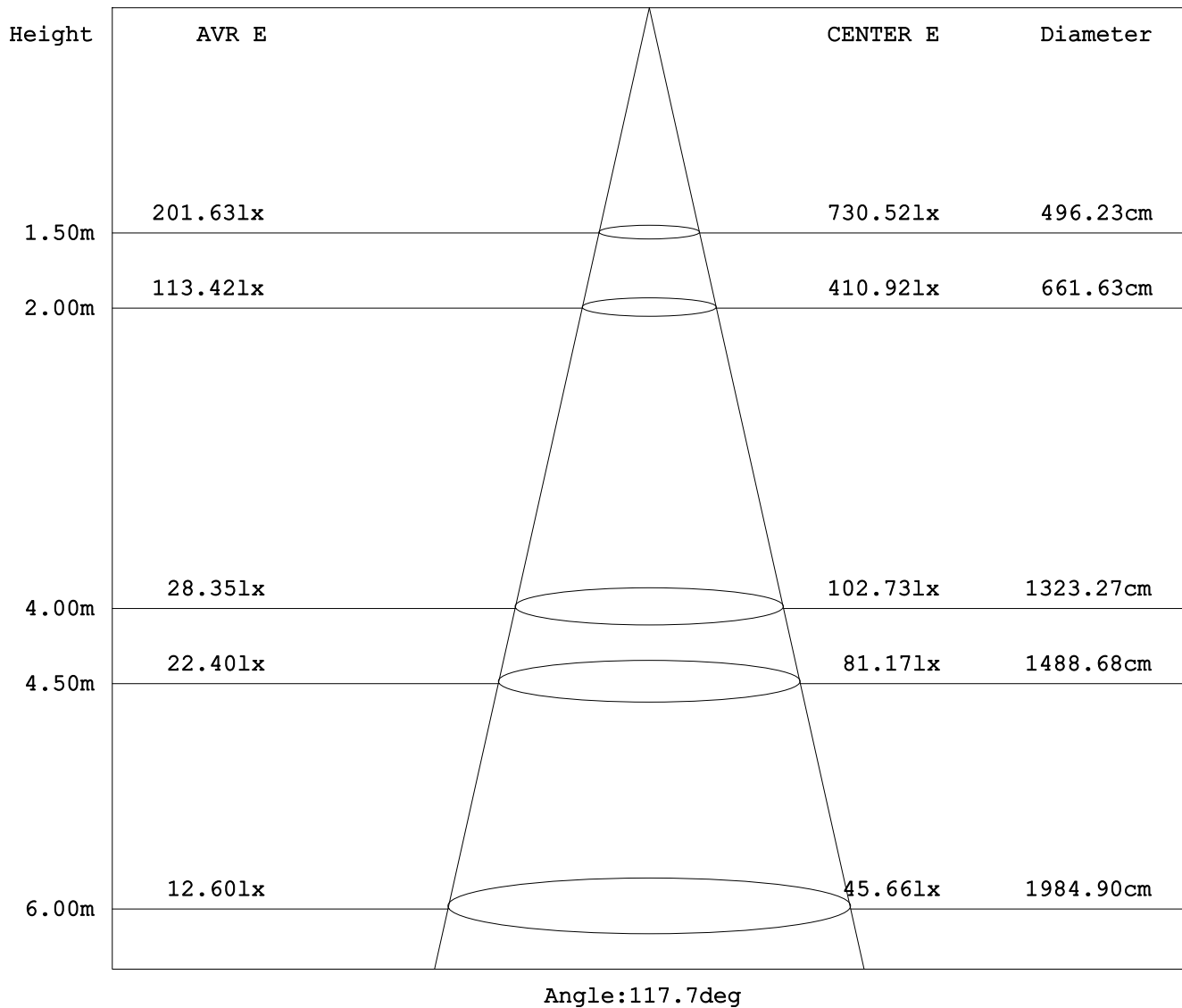
Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks:

# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

## AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER:		
Address:		
NAME: 1.5M-50W-5000K	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1500*152*52mm	SERIAL No.:



Test System: HOPOO HPG1800  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022年11月14日

Test Set: 10.0deg/s C-Gamma (TYPE C)  
 Humidity: 65.0%  
 Test Distance: 11.000 m  
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 1.5M-50W-5000K	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1500*152*52mm	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
10.0	1621	1614	1609	1616	1626	1617	1609	1610	0- 10	155.2	155.2
20.0	1564	1548	1535	1552	1567	1550	1535	1543	10- 20	448.3	603.6
30.0	1474	1442	1409	1446	1477	1444	1412	1438	20- 30	692.2	1296
40.0	1344	1295	1238	1300	1346	1296	1242	1291	30- 40	860.1	2156
50.0	1174	1110	1025	1117	1179	1112	1038	1109	40- 50	930.9	3087
60.0	970.2	889.5	776.8	895.2	970.4	894.4	792.5	890.3	50- 60	895.5	3982
70.0	747.1	650.3	504.2	657.2	744.7	652.7	528.1	650.7	60- 70	761.3	4744
80.0	543.2	416.2	248.4	425.1	542.6	428.1	268.9	427.0	70- 80	557.9	5302
90.0	379.3	246.5	14.76	259.6	386.8	249.5	31.45	247.5	80- 90	353.6	5655
100.0	270.5	143.0	5.445	150.9	262.4	149.4	12.10	151.9	90-100	195.8	5851
110.0	207.3	126.8	10.04	130.0	200.1	129.1	15.73	133.4	100-110	140.0	5991
120.0	189.9	120.5	15.73	116.8	182.4	117.4	19.48	127.0	110-120	117.8	6109
130.0	170.4	110.8	21.41	106.2	164.8	104.4	24.32	115.7	120-130	98.73	6208
140.0	146.2	97.28	27.70	88.45	144.4	88.93	29.88	101.2	130-140	76.09	6284
150.0	117.7	80.52	34.48	75.44	118.7	77.19	37.38	83.73	140-150	53.64	6338
160.0	86.75	64.43	40.89	62.55	90.38	64.25	43.07	66.91	150-160	33.32	6371
170.0	58.32	53.84	46.58	51.18	62.55	51.90	48.03	55.05	160-170	16.72	6388
180.0	52.63	50.09	50.82	50.15	52.39	50.63	51.54	50.15	170-180	4.922	6393
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2022年11月14日

Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks:

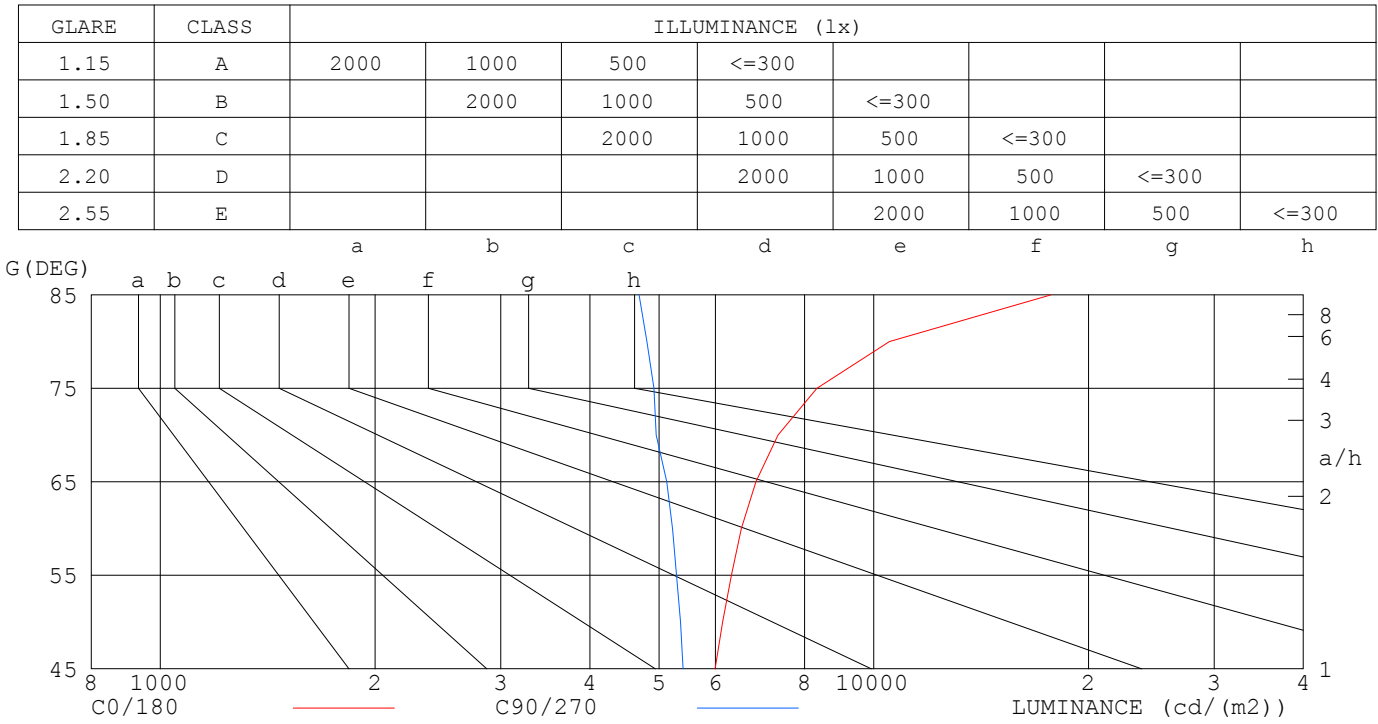
HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:					
Address:					
NAME: 1.5M-50W-5000K		TYPE:		WEIGHT:	
SPECIFICATION:		DIMENSION: 1500*152*52mm		SERIAL No.:	

LUMINANCE LIMITATION CURVES



LUMINANCE cd/ (m2)		
G (DEG)	C0/180	C90/270
85	17722	4689
80	10516	4808
75	8322	4920
70	7342	4955
65	6836	5126
60	6522	5222
55	6317	5290
50	6138	5360
45	5991	5405

Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2022年11月14日

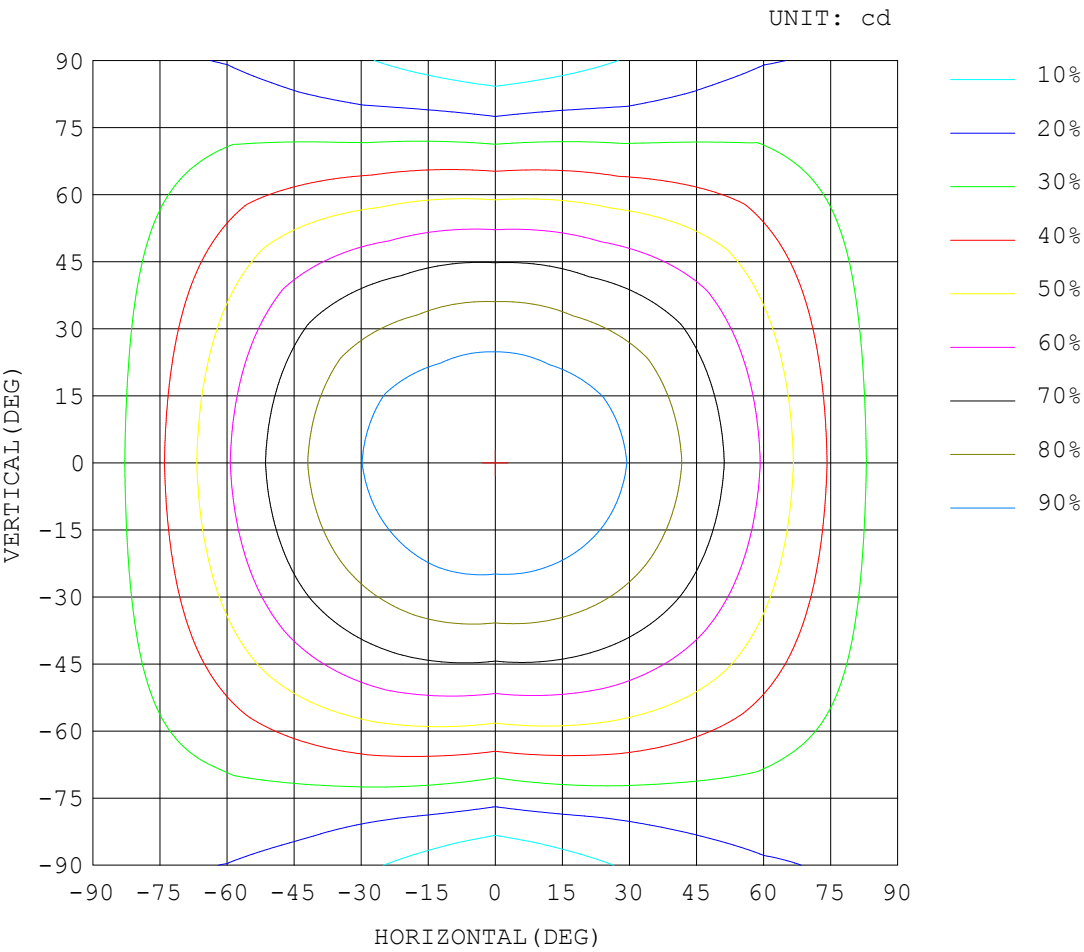
Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 1.5M-50W-5000K	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1500*152*52mm	SERIAL No.:



Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2022年11月14日

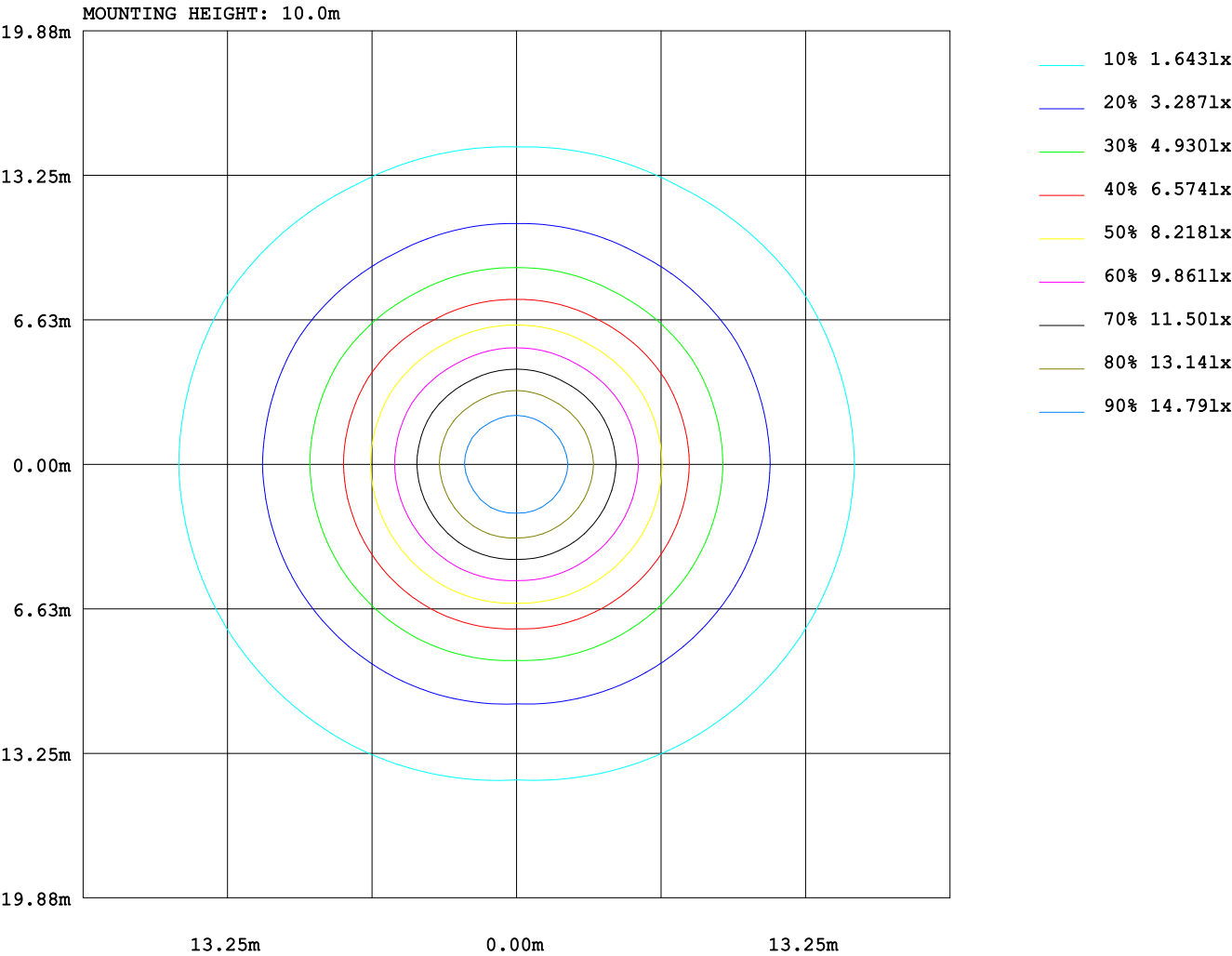
Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 1.5M-50W-5000K	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1500*152*52mm	SERIAL No.:



Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2022年11月14日

Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

AREA LUMINOUS FLUX

Report number:

MANUFACTURER:																			
Address:																			
NAME: 1.5M-50W-5000K										TYPE:					WEIGHT:				
SPECIFICATION:										DIMENSION: 1500*152*52mm					SERIAL No.:				

90 80 70 60 50 40 30  
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Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2022年11月14日

Test Set: 10.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks:

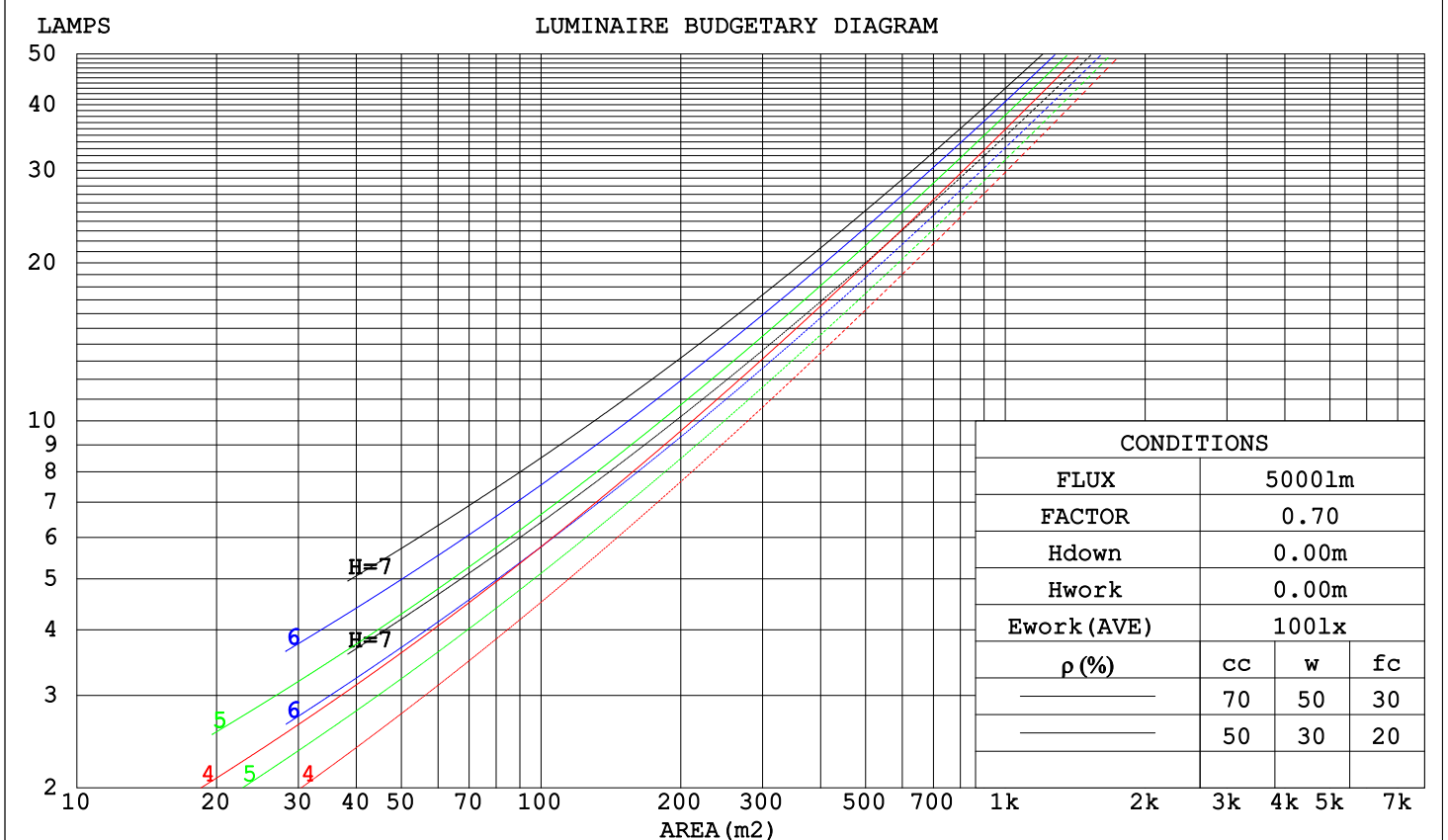
# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:															
Address:															
NAME: 1.5M-50W-5000K								TYPE:				WEIGHT:			
SPECIFICATION:								DIMENSION: 1500*152*52mm				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:HOPOO HPG1800  
 Temperature:25.3DEG  
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Test Set: 10.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:11.000 m  
 Remarks:



# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

## WEC AND CCEC

Report number:

MANUFACTURER:															
Address:															
NAME: 1.5M-50W-5000K								TYPE:				WEIGHT:			
SPECIFICATION:								DIMENSION: 1500*152*52mm				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	.361	.205	.065	.350	.200	.063	.330	.189	.060	.311	.180	.058	.294	.171	.055	
2.0	.320	.176	.054	.311	.171	.053	.293	.163	.051	.276	.155	.048	.261	.148	.047	
3.0	.288	.154	.046	.280	.150	.045	.264	.143	.043	.249	.136	.042	.235	.130	.040	
4.0	.262	.136	.040	.254	.133	.039	.239	.127	.038	.226	.121	.037	.213	.116	.035	
5.0	.239	.122	.035	.232	.119	.035	.219	.114	.034	.207	.109	.032	.195	.104	.031	
6.0	.220	.110	.032	.214	.108	.031	.202	.103	.030	.191	.099	.029	.180	.095	.028	
7.0	.204	.101	.029	.198	.099	.028	.187	.094	.027	.177	.091	.026	.167	.087	.026	
8.0	.189	.092	.026	.184	.091	.026	.174	.087	.025	.165	.083	.024	.156	.080	.023	
9.0	.177	.085	.024	.172	.084	.023	.163	.080	.023	.154	.077	.022	.146	.074	.021	
10.0	.165	.079	.022	.161	.078	.022	.153	.075	.021	.145	.072	.020	.137	.069	.020	

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	.278	.278	.278	.238	.238	.238	.162	.162	.162	.093	.093	.093	.030	.030	.030	
1.0	.272	.244	.219	.233	.210	.188	.159	.144	.130	.092	.083	.076	.029	.027	.025	
2.0	.265	.221	.184	.227	.190	.159	.156	.132	.111	.090	.077	.065	.029	.025	.021	
3.0	.258	.204	.161	.221	.176	.140	.152	.122	.098	.088	.071	.058	.028	.023	.019	
4.0	.250	.191	.146	.215	.165	.127	.148	.115	.090	.085	.067	.053	.027	.022	.017	
5.0	.242	.181	.136	.208	.157	.119	.143	.110	.084	.083	.064	.050	.027	.021	.016	
6.0	.235	.173	.129	.202	.150	.112	.139	.105	.079	.081	.062	.047	.026	.020	.016	
7.0	.228	.167	.123	.196	.144	.108	.136	.101	.076	.079	.060	.045	.025	.020	.015	
8.0	.221	.161	.119	.191	.140	.104	.132	.098	.074	.077	.058	.044	.025	.019	.015	
9.0	.215	.156	.116	.185	.135	.101	.128	.095	.072	.075	.056	.043	.024	.018	.014	
10.0	.209	.152	.114	.181	.132	.099	.125	.093	.070	.073	.055	.042	.024	.018	.014	

Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022年11月14日

Test Set: 10.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:11.000 m  
 Remarks:

# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

## Uncorrected UGR Table

Report number:

MANUFACTURER:											
Address:											
NAME: 1.5M-50W-5000K					TYPE:			WEIGHT:			
SPECIFICATION:					DIMENSION: 1500*152*52mm			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	18.7	20.2	19.2	20.6	21.0	18.0	19.4	18.4	19.8	20.2	
	3H	20.9	22.2	21.3	22.6	23.1	19.6	20.9	20.1	21.4	21.8
	4H	22.0	23.2	22.4	23.7	24.2	20.3	21.6	20.8	22.0	22.5
	6H	23.1	24.3	23.6	24.8	25.3	20.9	22.0	21.4	22.5	23.0
	8H	23.8	25.0	24.3	25.4	26.0	21.1	22.2	21.6	22.7	23.2
	12H	24.6	25.7	25.1	26.2	26.7	21.2	22.3	21.7	22.8	23.3
4H 2H	19.4	20.6	19.8	21.1	21.6	18.8	20.0	19.2	20.5	21.0	
	3H	21.7	22.8	22.2	23.3	23.8	20.6	21.7	21.2	22.2	22.8
	4H	22.9	23.9	23.5	24.5	25.0	21.5	22.5	22.0	23.0	23.6
	6H	24.3	25.2	24.9	25.8	26.4	22.2	23.1	22.8	23.7	24.3
	8H	25.1	25.9	25.7	26.5	27.1	22.5	23.3	23.1	23.9	24.5
	12H	26.0	26.8	26.6	27.3	28.0	22.7	23.5	23.3	24.0	24.7
8H 4H	23.2	24.1	23.8	24.7	25.3	22.0	22.9	22.6	23.4	24.1	
	6H	24.9	25.6	25.5	26.2	26.9	23.0	23.7	23.6	24.3	25.0
	8H	25.9	26.5	26.5	27.1	27.8	23.5	24.1	24.1	24.7	25.4
	12H	27.0	27.6	27.7	28.2	28.9	23.8	24.4	24.5	25.0	25.7
12H 4H	23.3	24.1	23.9	24.6	25.3	22.2	22.9	22.8	23.5	24.2	
	6H	25.0	25.7	25.6	26.3	27.0	23.3	23.9	23.9	24.5	25.2
	8H	26.1	26.7	26.7	27.3	28.0	23.9	24.4	24.5	25.0	25.8
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					

CIE Pub.117 Corrected 6393 lm Total Lamp Luminous Flux. (8log(F/F0) = 6.4)

Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022年11月14日

Test Set: 10.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:11.000 m  
 Remarks:

# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

## UTILIZATION FACTORS TABLE

Report number:

MANUFACTURER:		
Address:		
NAME: 1.5M-50W-5000K	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1500*152*52mm	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) $k(RI) \times RCR = 5$									
$k = 0.60$	51	39	32	50	38	31	48	38	31	24
0.80	60	48	40	59	47	40	57	46	39	31
1.00	68	56	48	67	55	48	64	56	47	38
1.25	76	64	56	73	62	55	70	60	53	44
1.50	81	69	61	78	68	60	74	65	59	49
2.00	88	78	70	85	76	69	80	72	66	56
2.50	92	83	75	89	81	74	84	77	71	60
3.00	96	87	81	93	85	79	87	81	75	64
4.00	100	93	87	97	90	85	91	85	81	68
5.00	103	97	92	99	94	89	93	89	85	72
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

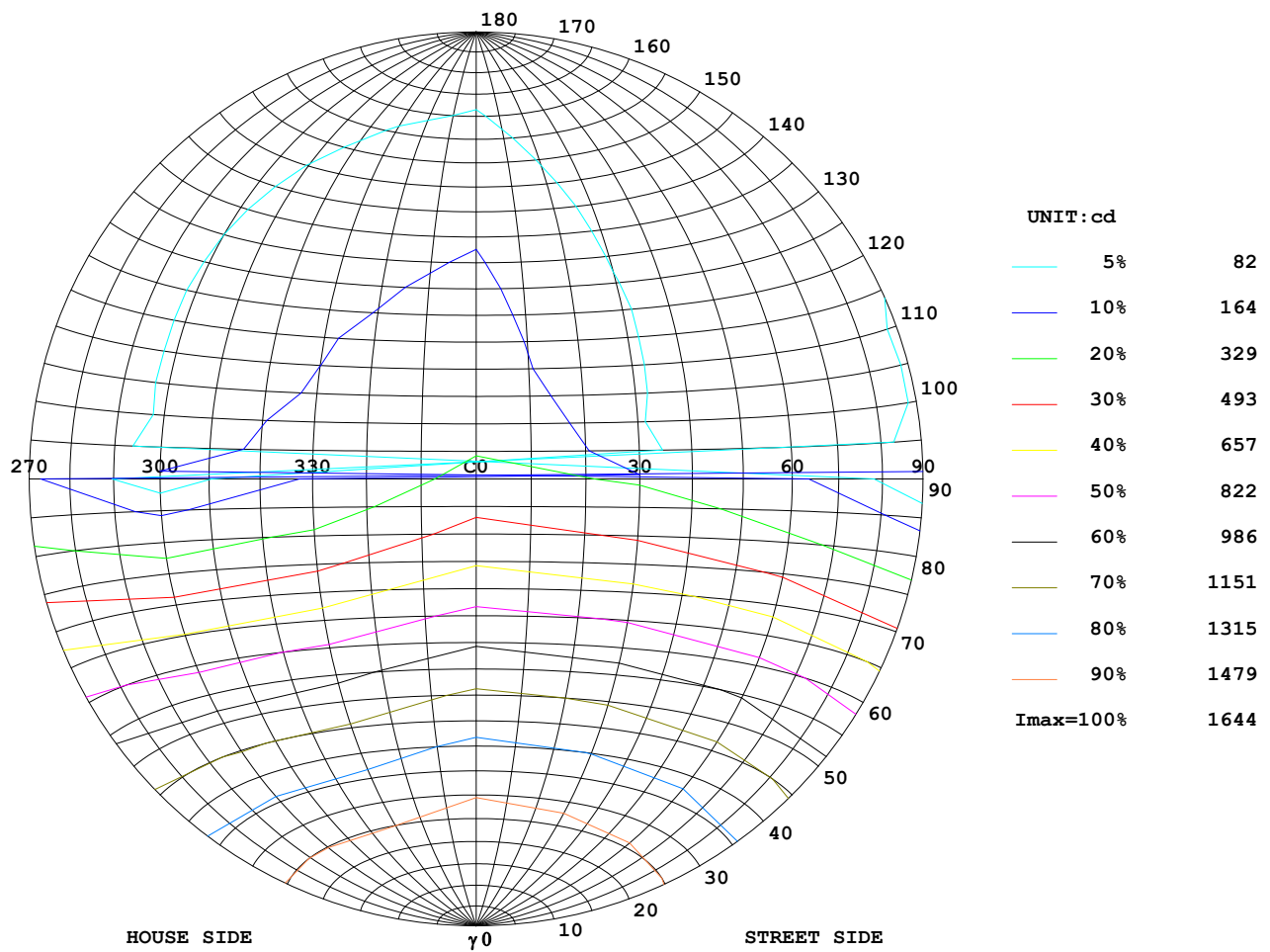
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ISOCANDELA DIAGRAM

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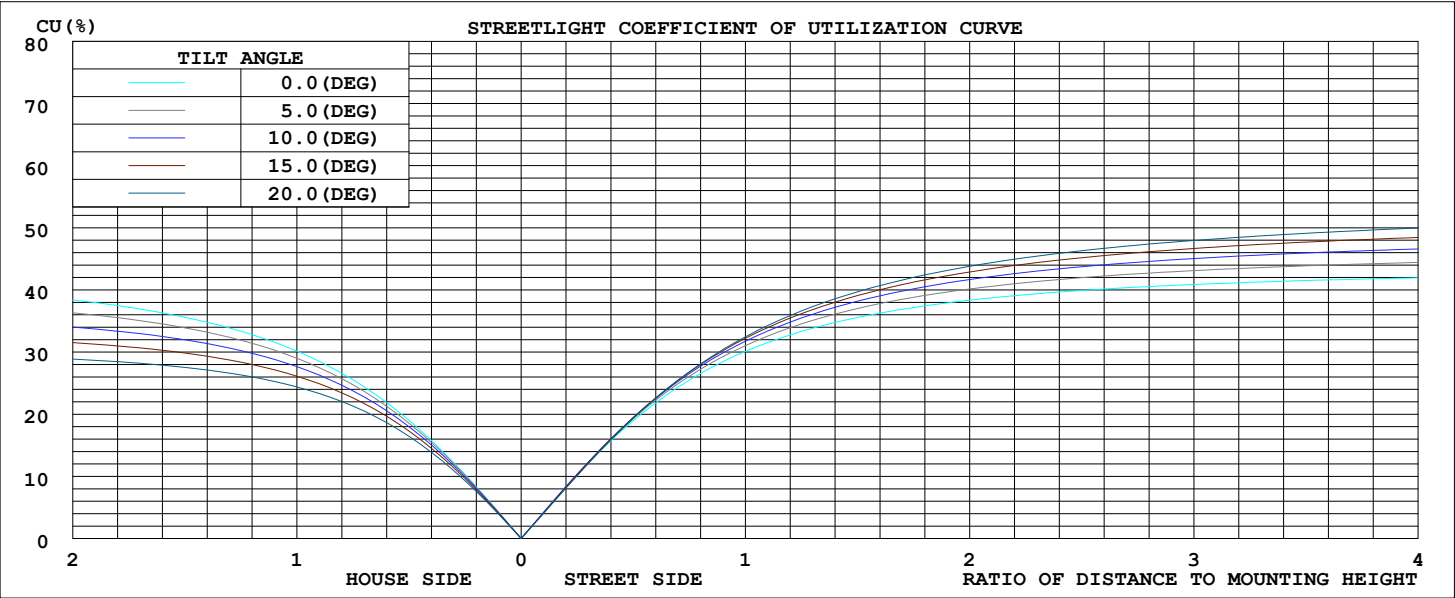
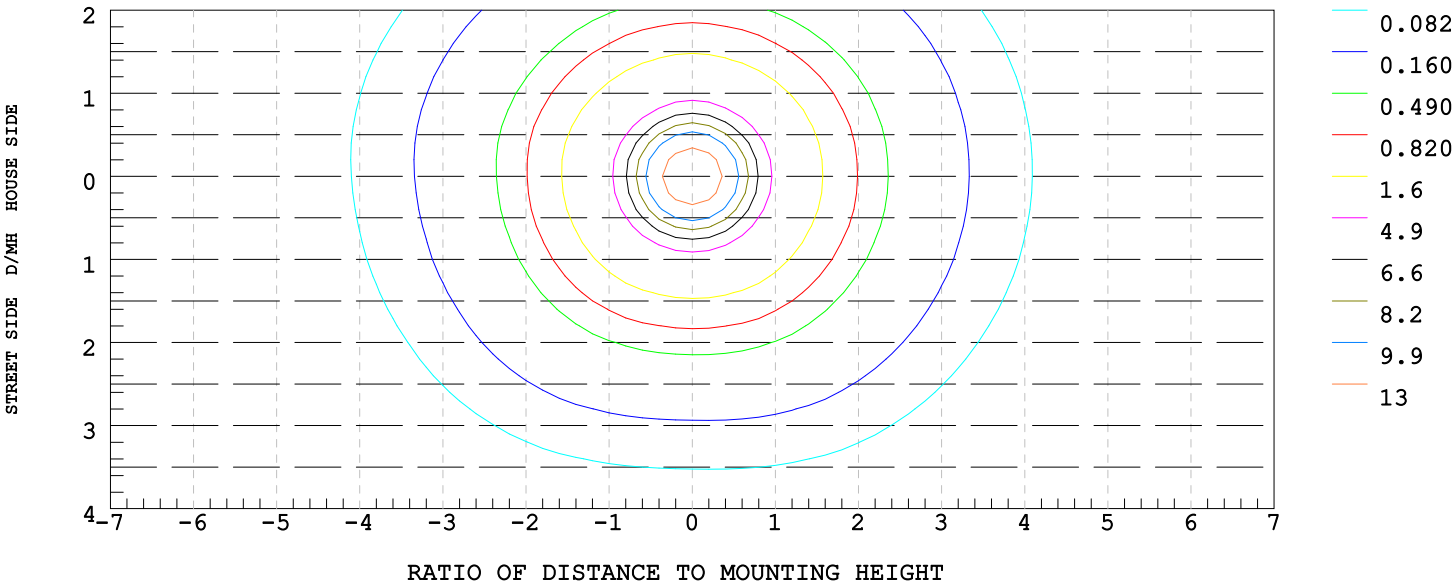
HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 1.5M-50W-5000K	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1500*152*52mm	SERIAL No.:

ILLUMINANCE AT MH=10 m,Enadir = 16.44 lx



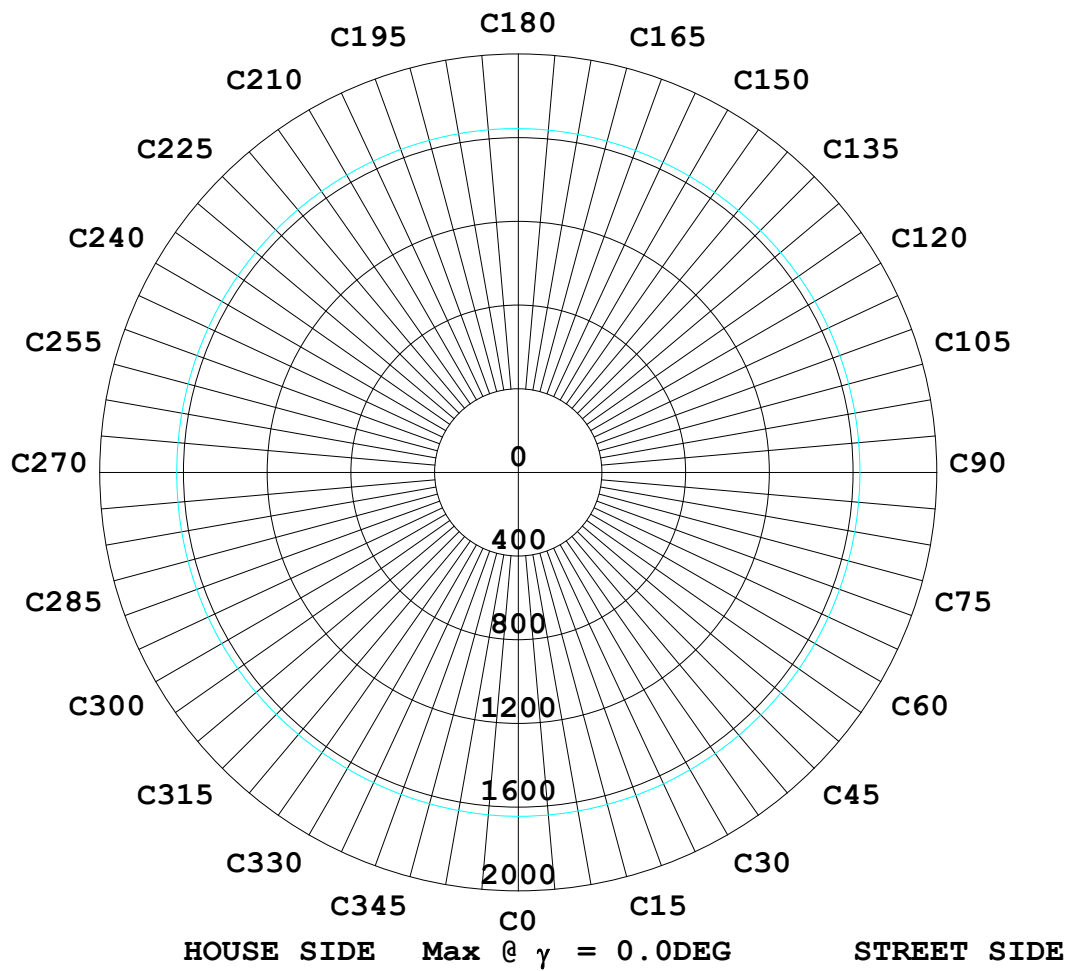
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Temperature:25.3DEG  
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