

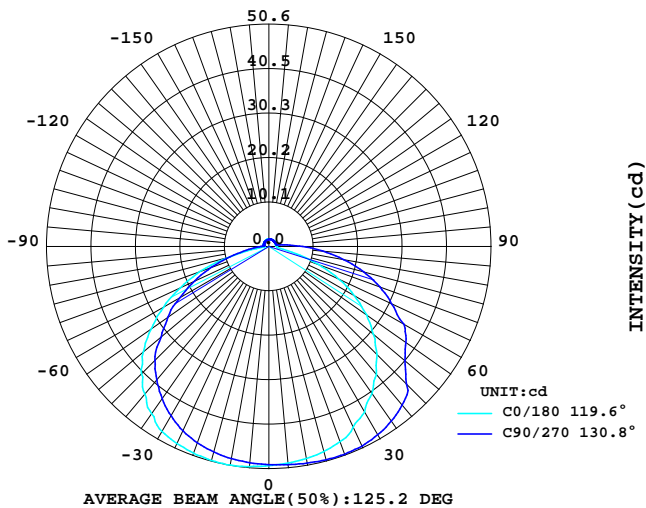
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

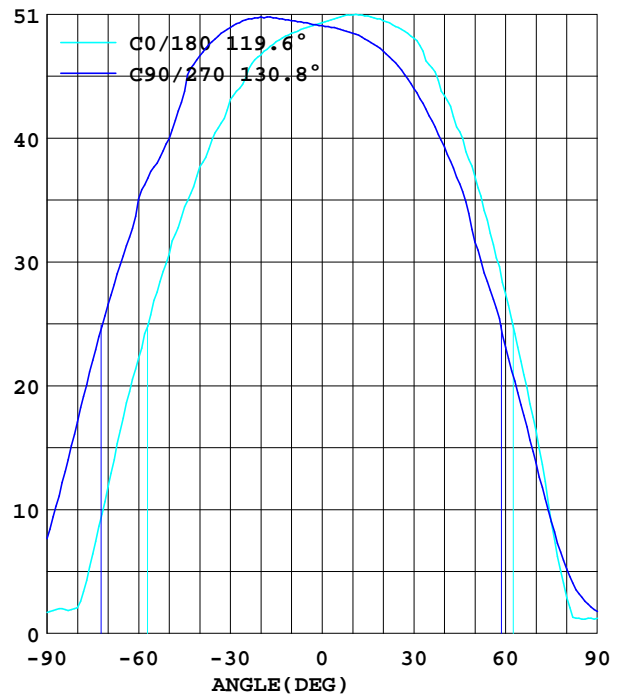
MANUFACTURER:			
Address:			
NAME: 48-RS-5050-24-96-12-X-Y-B		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050/96D	CCT(K): 0	DIMENSION: 1M*0.012M	SERIAL No.: 20211015014

DATA OF LAMP		I _{max} (cd)	50.64	S/MH(C0/180)	1.28
MODEL	5050	EFFICIENCY(%)	100.0	S/MH(C90/270)	1.50
NOMINAL POWER(W)	4	TOTAL FLUX(lm)	186.25	Voltage(V)	24.00
RATED VOLTAGE(V)	24	EFFICIENCY(lm/W)	46.6	Current(A)	0.166
NOMINAL FLUX(lm)	186.3	h up(%)	5.6	Power(W)	4.000
LAMPS QUANTITY	1	h down(%)	94.4	Power Factor(PF)	1.000
TEST VOLTAGE(V)	24.0	Effective Flux(lm)	174.4	EEL	0.198

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2021年10月15日

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.800 m
 Remarks:

Color Temperature Data List

Report number:

MANUFACTURER:			
Address:			
NAME: 48-RS-5050-24-96-12-X-Y-B		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050/96D	CCT(K): 0	DIMENSION: 1M*0.012M	SERIAL No.: 20211015014

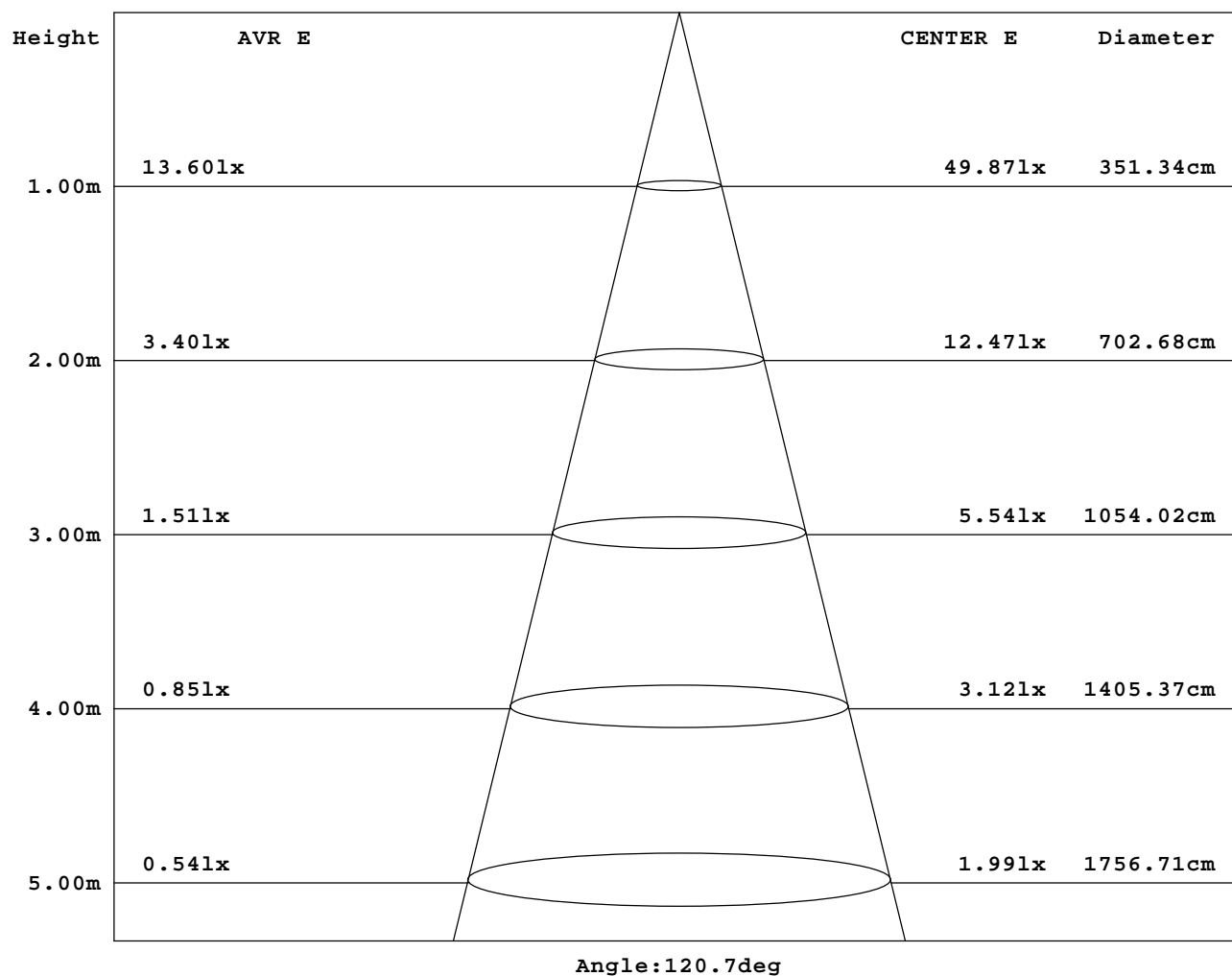
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2021年10月15日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.800 m
Remarks:

AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER:			
Address:			
NAME: 48-RS-5050-24-96-12-X-Y-B		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050/96D	CCT(K): 0	DIMENSION: 1M*0.012M	SERIAL No.: 20211015014



Test System: HOPOO HPG1800
 Temperature: 25.3DEG
 Operators:
 Test Date: 2021年10月15日

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 8.800 m
 Remarks:

GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME: 48-RS-5050-24-96-12-X-Y-B		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050/96D	CCT(K): 0	DIMENSION: 1M*0.012M	SERIAL No.: 20211015014

g	C0	C45	C90	C135	C180	C225	C270	C315	g	Zone	tStal
5.0	49.48	49.48	49.87	50.25	50.25	49.94	49.40	49.48	0- 5	1.189	1.189
10.0	49.01	49.17	50.02	50.56	50.49	50.10	49.01	48.94	5- 10	3.557	4.747
15.0	48.32	48.78	50.25	50.64	50.41	50.18	48.40	48.24	10- 15	5.877	10.62
20.0	47.23	48.24	50.33	50.64	50.02	49.94	47.54	47.23	15- 20	8.102	18.72
25.0	45.37	47.47	50.10	50.33	49.48	49.56	46.30	45.92	20- 25	10.17	28.90
30.0	43.59	46.46	49.48	49.71	48.63	48.86	44.52	44.29	25- 30	12.02	40.92
35.0	40.88	45.30	48.55	48.86	46.46	47.85	42.28	42.28	30- 35	13.58	54.51
40.0	38.10	43.75	47.16	47.70	43.90	46.46	39.72	40.03	35- 40	14.79	69.30
45.0	34.84	41.81	44.29	46.07	40.96	44.60	36.70	37.32	40- 45	15.60	84.91
50.0	30.97	39.49	40.42	44.06	37.32	42.12	31.98	34.07	45- 50	15.85	100.7
55.0	27.18	35.15	38.10	39.80	32.67	39.02	28.03	30.66	50- 55	15.54	116.3
60.0	22.45	29.96	35.46	34.69	27.72	33.22	23.38	24.62	55- 60	14.54	130.8
65.0	17.57	26.25	30.82	30.58	22.22	27.49	18.66	19.74	60- 65	12.90	143.7
70.0	12.00	21.68	26.87	26.01	16.57	21.91	13.93	14.32	65- 70	10.95	154.7
75.0	6.504	16.64	22.30	19.82	9.060	17.26	9.137	9.989	70- 75	8.707	163.4
80.0	2.090	12.15	17.26	15.17	2.942	11.15	5.265	5.730	75- 80	6.030	169.4
85.0	2.013	7.511	12.31	10.06	1.161	6.427	2.942	3.639	80- 85	3.974	173.4
90.0	1.703	3.717	7.744	4.801	1.239	3.329	1.781	2.323	85- 90	2.434	175.8
95.0	1.703	1.626	4.181	1.393	1.239	2.245	1.316	1.858	90- 95	1.381	177.2
100.0	1.703	1.239	2.245	1.161	1.239	1.858	1.239	1.781	95-100	0.934	178.1
105.0	1.626	1.239	1.781	1.161	1.316	1.858	1.239	1.781	100-105	0.809	178.9
110.0	1.626	1.239	1.703	1.239	1.316	1.781	1.316	1.781	105-110	0.788	179.7
115.0	1.626	1.316	1.703	1.239	1.393	1.781	1.316	1.703	110-115	0.766	180.5
120.0	1.626	1.316	1.626	1.239	1.393	1.781	1.393	1.703	115-120	0.733	181.2
125.0	1.626	1.393	1.626	1.316	1.471	1.781	1.393	1.703	120-125	0.703	181.9
130.0	1.703	1.393	1.626	1.316	1.471	1.781	1.471	1.703	125-130	0.672	182.6
135.0	1.703	1.471	1.626	1.393	1.548	1.781	1.471	1.703	130-135	0.635	183.2
140.0	1.703	1.471	1.626	1.393	1.548	1.781	1.471	1.781	135-140	0.588	183.8
145.0	1.703	1.471	1.626	1.471	1.548	1.781	1.471	1.781	140-145	0.533	184.4
150.0	1.703	1.471	1.703	1.471	1.626	1.781	1.548	1.703	145-150	0.476	184.8
155.0	1.703	1.548	1.703	1.471	1.626	1.781	1.548	1.781	150-155	0.414	185.2
160.0	1.703	1.548	1.703	1.471	1.626	1.781	1.548	1.703	155-160	0.343	185.6
165.0	1.703	1.548	1.703	1.548	1.703	1.781	1.548	1.703	160-165	0.271	185.9
170.0	1.703	1.548	1.703	1.548	1.703	1.703	1.548	1.703	165-170	0.195	186.1
175.0	1.703	1.548	1.703	1.548	1.703	1.703	1.626	1.703	170-175	0.118	186.2
180.0	1.703	1.626	1.703	1.548	1.781	1.703	1.626	1.703	175-180	0.040	186.2
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2021年10月15日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.800 m
Remarks:

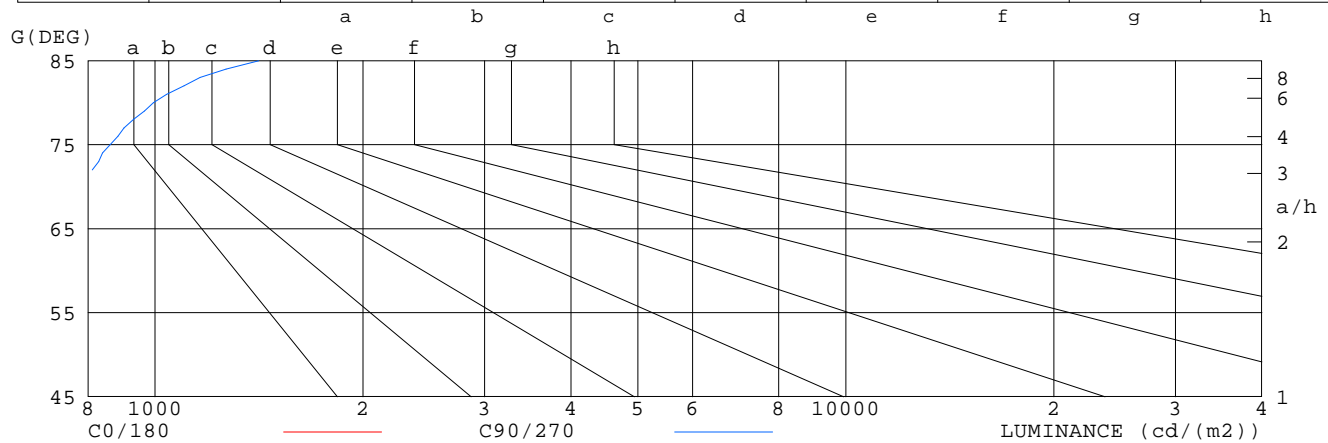
LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:			
Address:			
NAME: 48-RS-5050-24-96-12-X-Y-B		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050/96D	CCT(K): 0	DIMENSION: 1M*0.012M	SERIAL No.: 20211015014

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	231	1413
80	120	994
75	251	862
70	351	786
65	416	729
60	449	709
55	474	664
50	482	629
45	493	626

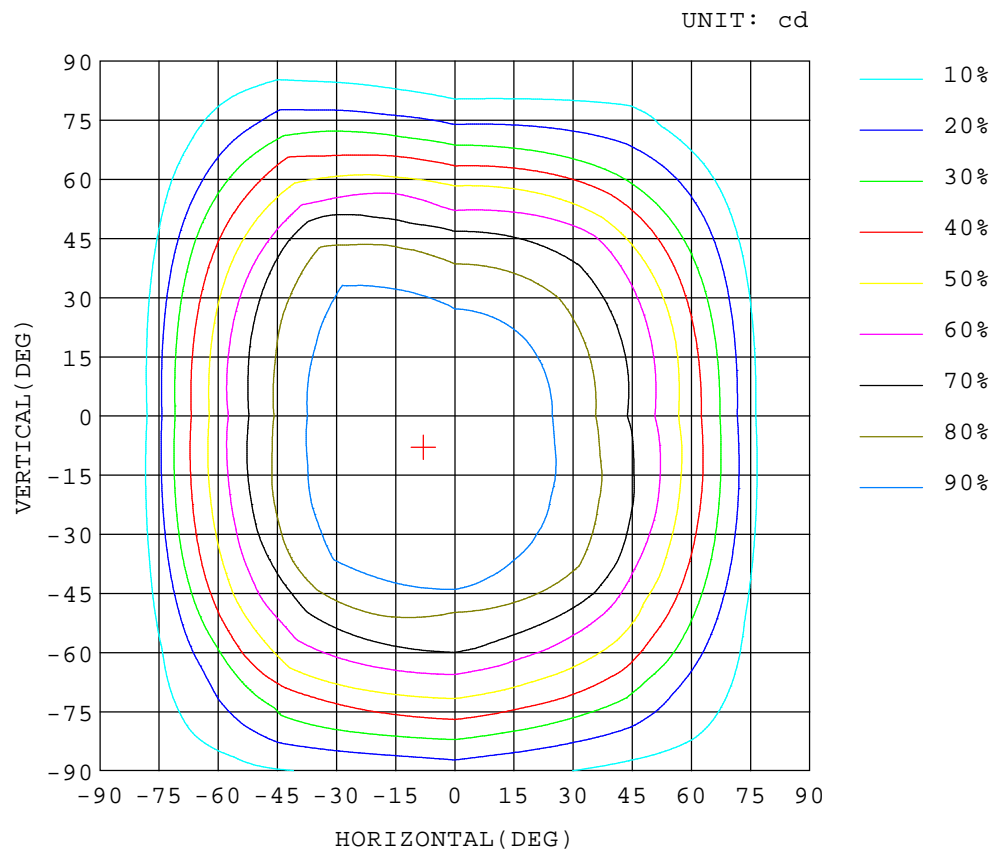
Test System: HOPOO HPG1800
 Temperature: 25.3 DEG
 Operators:
 Test Date: 2021年10月15日

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 8.800 m
 Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME: 48-RS-5050-24-96-12-X-Y-B		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050/96D	CCT(K): 0	DIMENSION: 1M*0.012M	SERIAL No.: 20211015014



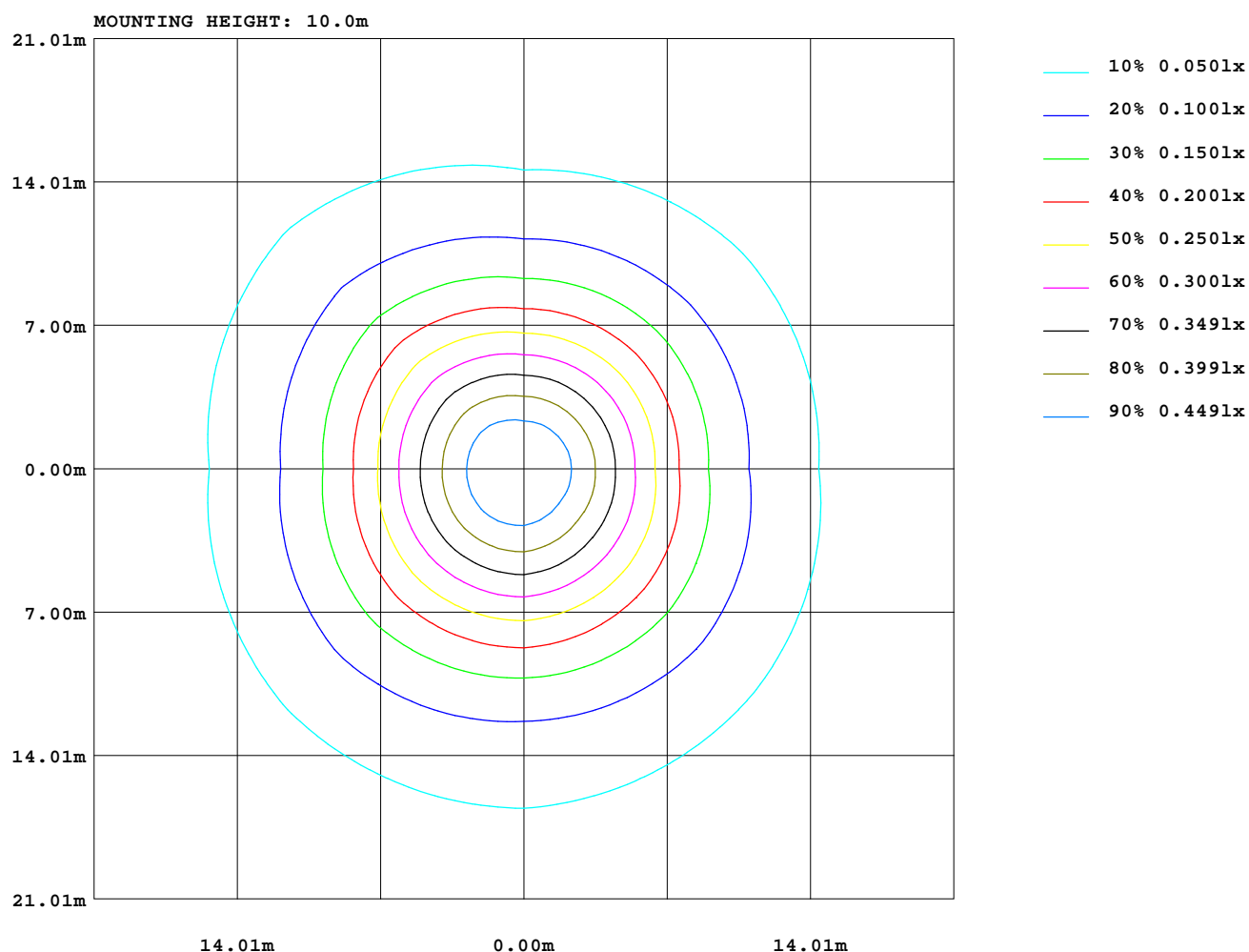
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2021年10月15日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.800 m
Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME: 48-RS-5050-24-96-12-X-Y-B		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050/96D	CCT(K): 0	DIMENSION: 1M*0.012M	SERIAL No.: 20211015014



Test System: HOPOO HPG1800
Temperature: 25.3DEG
Operators:
Test Date: 2021年10月15日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 8.800 m
Remarks:

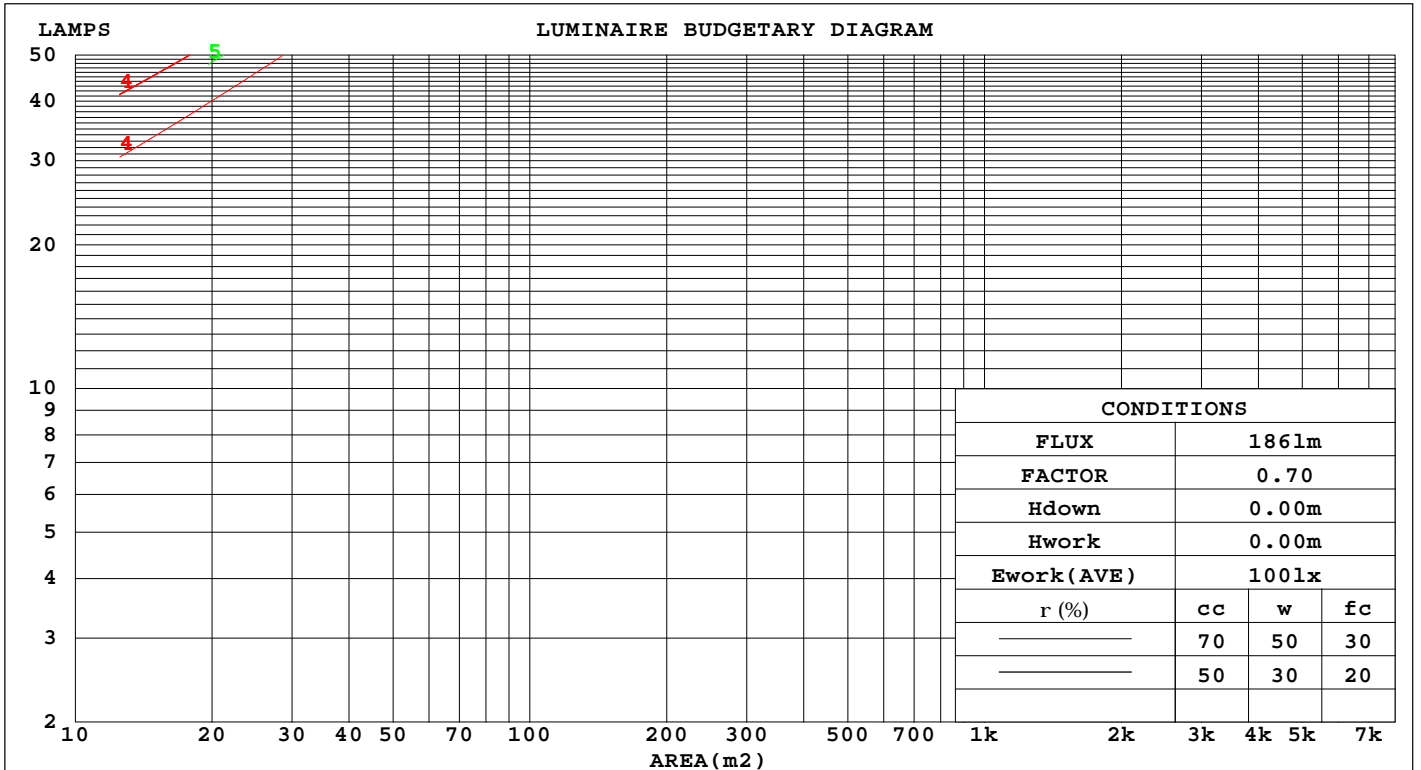
GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME: 48-RS-5050-24-96-12-X-Y-B		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050/96D	CCT(K): 0	DIMENSION: 1M*0.012M	SERIAL No.: 20211015014

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.18	1.18	1.18	1.14	1.14	1.14	1.08	1.08	1.08	1.02	1.02	1.02	.97	.97	.97	.94
1.0	1.01	.96	.92	.98	.94	.90	.93	.89	.86	.88	.85	.83	.84	.81	.79	.77
2.0	.87	.80	.74	.85	.78	.73	.80	.75	.70	.76	.72	.68	.72	.69	.65	.63
3.0	.76	.67	.61	.74	.66	.60	.70	.63	.58	.67	.61	.56	.63	.59	.54	.52
4.0	.67	.58	.51	.65	.57	.50	.62	.55	.49	.59	.53	.47	.56	.51	.46	.44
5.0	.59	.50	.43	.58	.49	.43	.55	.47	.42	.53	.46	.41	.50	.44	.40	.37
6.0	.53	.44	.37	.52	.43	.37	.50	.42	.36	.47	.41	.35	.45	.39	.35	.32
7.0	.48	.39	.33	.47	.38	.32	.45	.37	.32	.43	.36	.31	.41	.35	.30	.28
8.0	.44	.35	.29	.43	.34	.29	.41	.33	.28	.39	.32	.28	.38	.32	.27	.25
9.0	.40	.31	.26	.39	.31	.26	.37	.30	.25	.36	.29	.25	.35	.29	.24	.22
10.0	.37	.29	.23	.36	.28	.23	.35	.28	.23	.33	.27	.22	.32	.26	.22	.20



Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2021年10月15日

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.800 m
 Remarks:

GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Report number:

MANUFACTURER:											
Address:											
NAME: 48-RS-5050-24-96-12-X-Y-B						TYPE: LED Strip			WEIGHT:		
SPECIFICATION: 5050/96D				CCT(K): 0		DIMENSION: 1M*0.012M			SERIAL No.: 20211015014		

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.337	.191	.061	.328	.187	.059	.311	.179	.057	.296	.171	.055	.282	.163	.053	
2.0	.309	.169	.052	.301	.166	.051	.287	.159	.049	.273	.153	.048	.260	.147	.046	
3.0	.283	.150	.045	.276	.148	.044	.262	.142	.043	.250	.137	.042	.239	.132	.041	
4.0	.259	.135	.040	.253	.132	.039	.241	.128	.038	.230	.123	.037	.219	.119	.036	
5.0	.238	.121	.035	.232	.119	.035	.222	.115	.034	.212	.112	.033	.203	.108	.033	
6.0	.220	.110	.032	.215	.108	.031	.205	.105	.031	.196	.102	.030	.188	.099	.029	
7.0	.204	.101	.029	.199	.099	.028	.191	.096	.028	.182	.094	.027	.175	.091	.027	
8.0	.190	.093	.026	.186	.091	.026	.178	.089	.025	.170	.086	.025	.164	.084	.024	
9.0	.177	.086	.024	.174	.085	.024	.167	.082	.023	.160	.080	.023	.153	.078	.023	
10.0	.166	.080	.022	.163	.079	.022	.157	.077	.022	.150	.075	.021	.145	.073	.021	

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.233	.233	.233	.199	.199	.199	.136	.136	.136	.078	.078	.078	.025	.025	.025	
1.0	.225	.199	.175	.193	.171	.151	.132	.117	.104	.076	.068	.061	.024	.022	.020	
2.0	.218	.175	.139	.187	.151	.120	.128	.104	.084	.074	.061	.049	.024	.020	.016	
3.0	.210	.158	.116	.180	.136	.100	.124	.095	.070	.072	.055	.042	.023	.018	.014	
4.0	.203	.145	.100	.174	.125	.087	.120	.087	.061	.069	.051	.036	.022	.017	.012	
5.0	.195	.135	.090	.168	.116	.078	.116	.081	.055	.067	.048	.033	.022	.016	.011	
6.0	.188	.126	.082	.162	.110	.072	.112	.077	.051	.065	.045	.030	.021	.015	.010	
7.0	.181	.120	.077	.156	.104	.067	.108	.073	.047	.063	.043	.028	.020	.014	.009	
8.0	.175	.114	.072	.150	.099	.063	.104	.069	.045	.061	.041	.027	.020	.013	.009	
9.0	.169	.109	.069	.145	.095	.060	.101	.067	.043	.059	.039	.025	.019	.013	.008	
10.0	.163	.105	.066	.140	.091	.058	.097	.064	.041	.057	.038	.025	.018	.012	.008	

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2021年10月15日

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.800 m
 Remarks:

GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR Table

Report number:

MANUFACTURER:											
Address:											
NAME: 48-RS-5050-24-96-12-X-Y-B						TYPE: LED Strip		WEIGHT:			
SPECIFICATION: 5050/96D		CCT(K): 0				DIMENSION: 1M*0.012M			SERIAL No.: 20211015014		
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	10.1	11.6	10.5	11.9	12.3	11.6	13.1	12.0	13.4	13.8
	3H	11.4	12.8	11.8	13.1	13.5	13.8	15.2	14.2	15.5	15.9
	4H	11.8	13.1	12.2	13.5	13.8	14.9	16.2	15.3	16.6	16.9
	6H	11.9	13.1	12.3	13.5	13.9	15.9	17.2	16.4	17.6	18.0
	8H	11.9	13.1	12.3	13.5	13.9	16.4	17.6	16.9	18.0	18.4
	12H	11.9	13.0	12.3	13.4	13.9	17.0	18.1	17.4	18.5	18.9
4H	2H	11.1	12.4	11.5	12.8	13.1	12.2	13.5	12.6	13.9	14.2
	3H	12.6	13.8	13.1	14.2	14.6	14.6	15.7	15.0	16.1	16.6
	4H	13.2	14.2	13.6	14.6	15.1	15.8	16.9	16.3	17.3	17.7
	6H	13.4	14.3	13.9	14.8	15.3	17.0	18.0	17.5	18.4	18.9
	8H	13.4	14.3	13.9	14.8	15.3	17.6	18.5	18.1	19.0	19.5
	12H	13.5	14.3	14.0	14.8	15.3	18.3	19.1	18.8	19.5	20.1
8H	4H	13.8	14.7	14.3	15.2	15.7	16.1	16.9	16.6	17.4	17.9
	6H	14.3	15.1	14.9	15.6	16.1	17.5	18.2	18.0	18.7	19.3
	8H	14.5	15.2	15.1	15.7	16.3	18.2	18.9	18.8	19.4	20.0
	12H	14.7	15.3	15.3	15.8	16.4	19.1	19.6	19.6	20.2	20.8
12H	4H	14.0	14.8	14.5	15.3	15.8	16.1	16.9	16.6	17.4	17.9
	6H	14.6	15.3	15.2	15.8	16.4	17.6	18.2	18.1	18.7	19.3
	8H	14.9	15.5	15.5	16.0	16.6	18.4	18.9	18.9	19.5	20.1
Variations with the observer position at spacings:											
S = 1.0H		+ 0.2 / - 0.2					+ 0.1 / - 0.1				
1.5H		+ 0.2 / - 0.4					+ 0.2 / - 0.2				
2.0H		+ 0.2 / - 0.6					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 186.2 lm Total Lamp Luminous Flux.(8log(F/F0) = -5.8)

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2021年10月15日

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.800 m
 Remarks:

UTILIZATION FACTORS TABLE

Report number:

MANUFACTURER:			
Address:			
NAME: 48-RS-5050-24-96-12-X-Y-B		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050/96D	CCT(K): 0	DIMENSION: 1M*0.012M	SERIAL No.: 20211015014

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) $k(RI) \times RCR = 5$									
$k = 0.60$	53	41	34	52	41	34	51	40	33	26
0.80	63	51	43	62	50	43	60	49	42	35
1.00	71	60	52	70	59	51	67	60	51	43
1.25	79	67	60	77	66	59	74	64	58	50
1.50	84	73	65	82	72	65	78	70	63	55
2.00	91	82	74	89	80	73	84	77	71	62
2.50	95	87	80	93	85	79	88	82	76	66
3.00	99	91	85	96	89	84	91	86	81	71
4.00	103	97	91	100	95	90	95	90	86	76
5.00	106	100	96	103	98	94	97	93	90	79
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

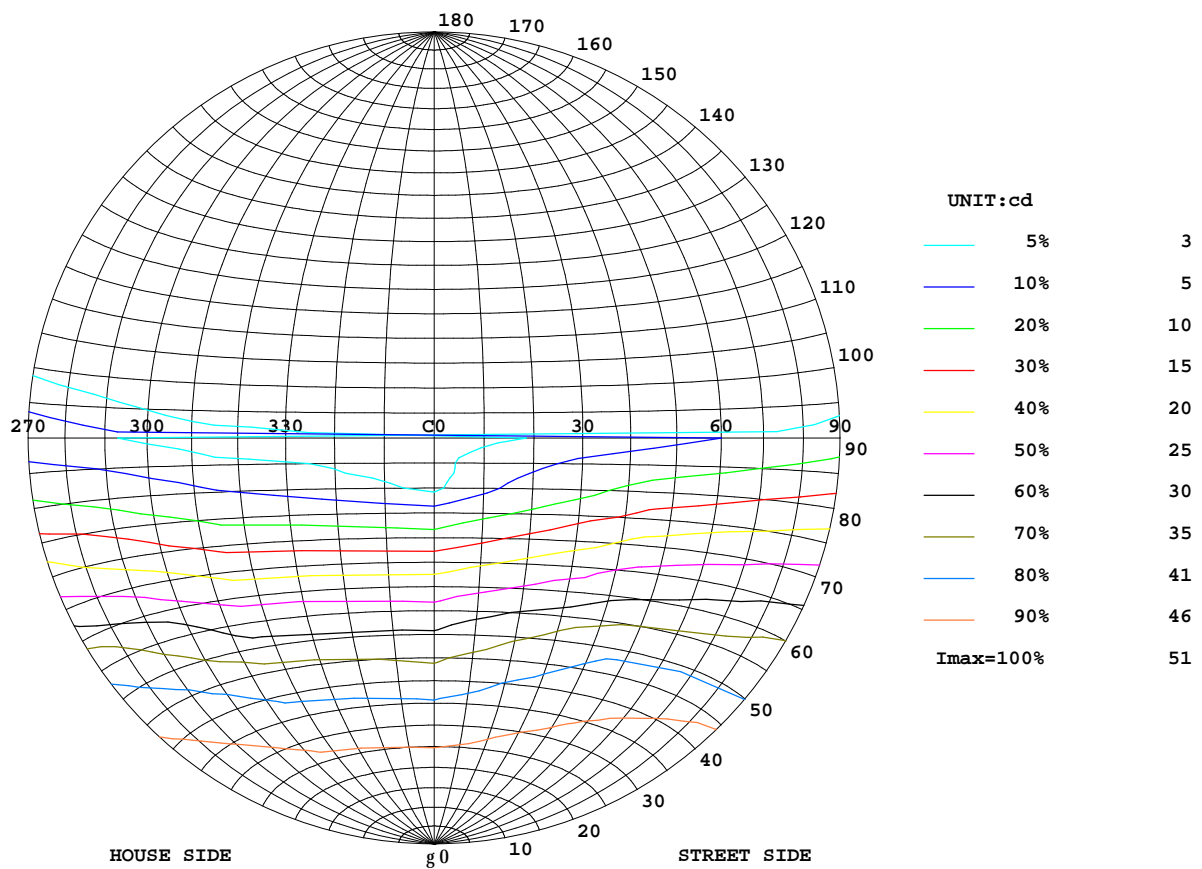
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2021年10月15日

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.800 m
 Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME: 48-RS-5050-24-96-12-X-Y-B		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050/96D	CCT(K): 0	DIMENSION: 1M*0.012M	SERIAL No.: 20211015014



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2021年10月15日

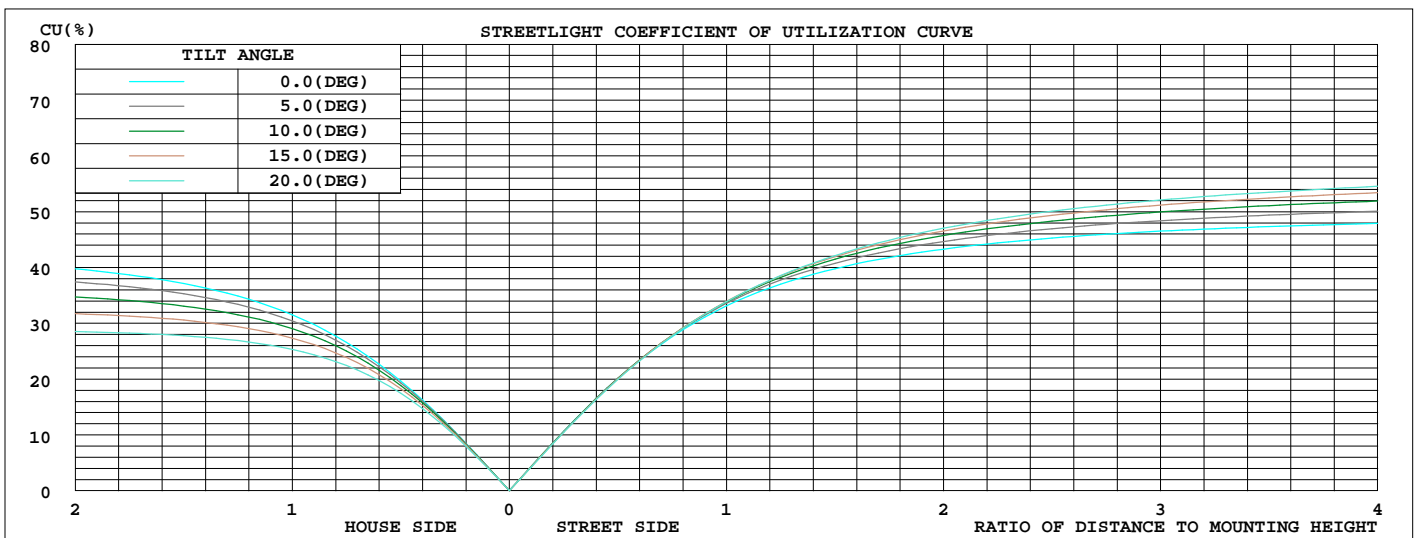
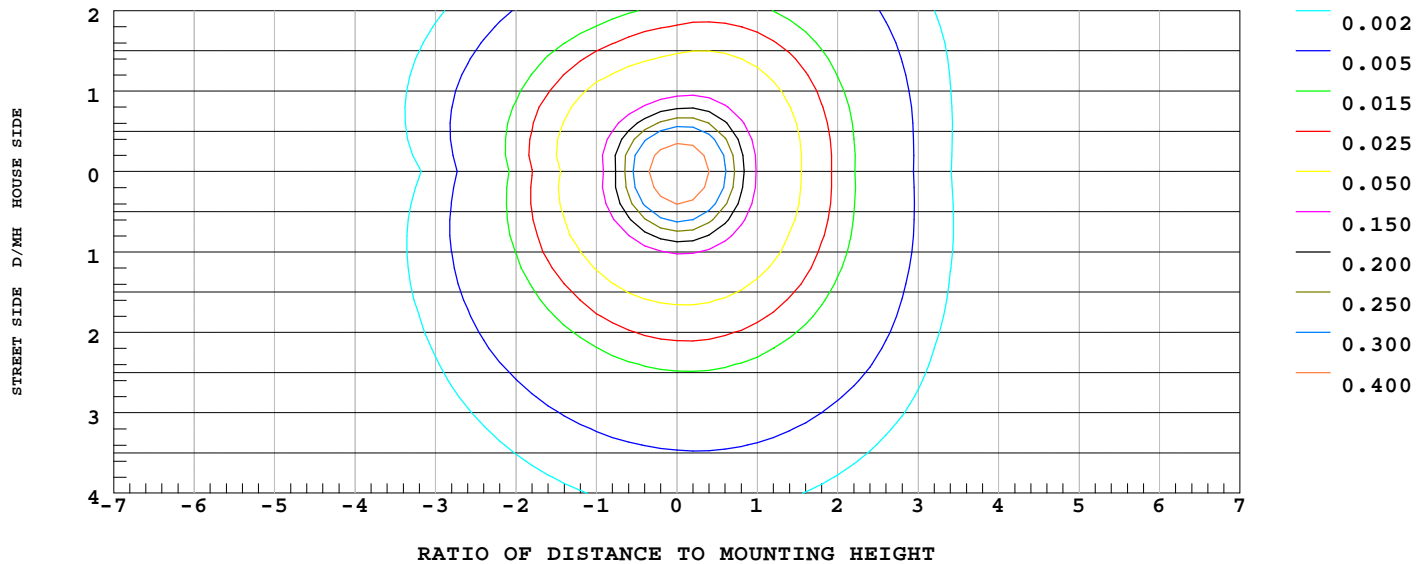
Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.800 m
Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME: 48-RS-5050-24-96-12-X-Y-B		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050/96D	CCT(K): 0	DIMENSION: 1M*0.012M	SERIAL No.: 20211015014

ILLUMINANCE AT MH=10 m, Enadir = 0.50 lx



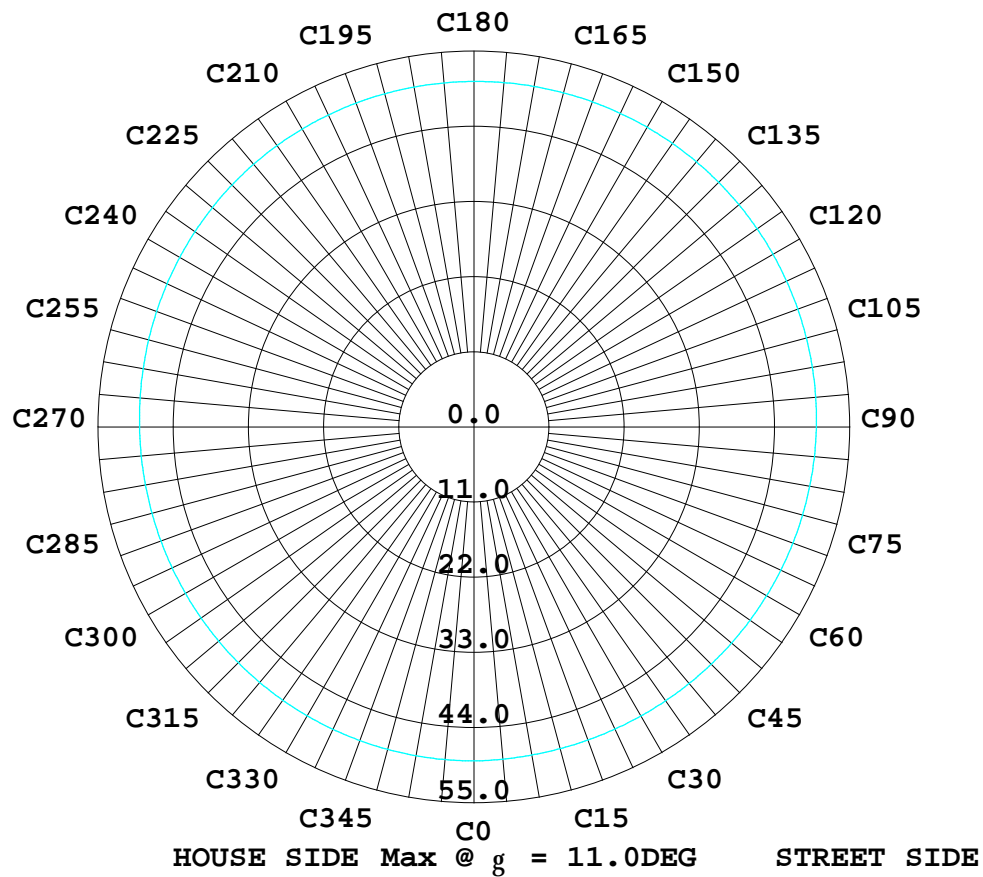
Test System: HOPOO HPG1800
Temperature: 25.3 DEG
Operators:
Test Date: 2021年10月15日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 8.800 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME: 48-RS-5050-24-96-12-X-Y-B		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050/96D	CCT(K): 0	DIMENSION: 1M*0.012M	SERIAL No.: 20211015014



Test System: HOPOO HPG1800
Temperature: 25.3DEG
Operators:
Test Date: 2021年10月15日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 8.800 m
Remarks: