

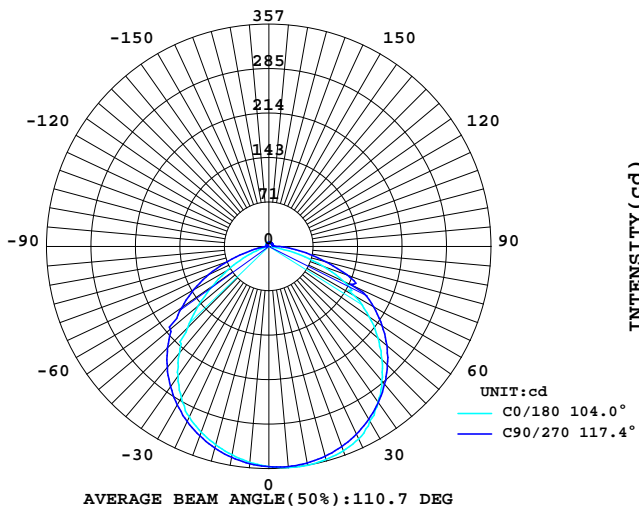
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

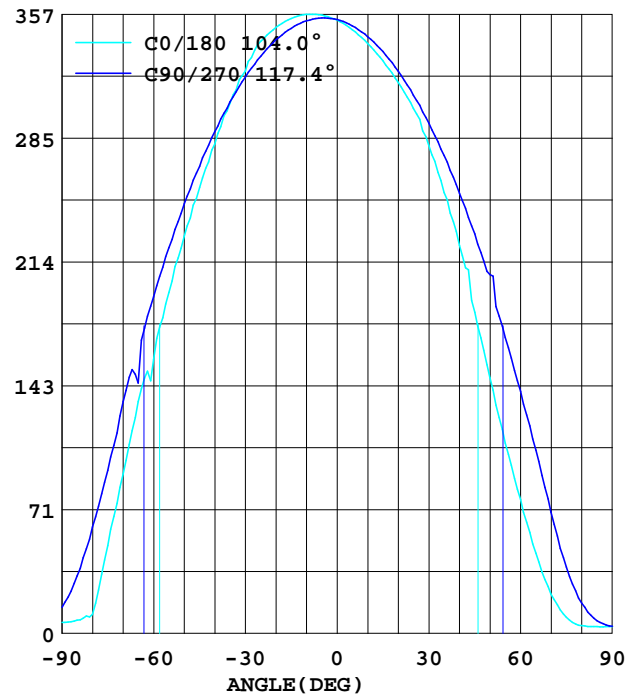
MANUFACTURER:			
Address:			
NAME: 51-RS-5050-24-112-12-X-Y 6000K		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050 112D	CCT(K): 6000	DIMENSION: 1M*0.012M	SERIAL No.: 20211203011

DATA OF LAMP		Imax(cd)	356.7	S/MH(C0/180)	1.35
MODEL	5050	EFFICIENCY(%)	100.0	S/MH(C90/270)	1.35
NOMINAL POWER(W)	9	TOTAL FLUX(lm)	1046.6	Voltage(V)	23.99
RATED VOLTAGE(V)	24	EFFICIENCY(lm/W)	118.8	Current(A)	0.367
NOMINAL FLUX(lm)	1046.7	h up(%)	3.4	Power(W)	8.810
LAMPS QUANTITY	1	h down(%)	96.6	Power Factor(PF)	1.000
TEST VOLTAGE(V)	24.0	Effective Flux(lm)	991.6	EEL	0.115

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2021年12月03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: 51-RS-5050-24-112-12-X-Y 6000K		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050 112D	CCT(K): 6000	DIMENSION: 1M*0.012M	SERIAL No.: 20211203011

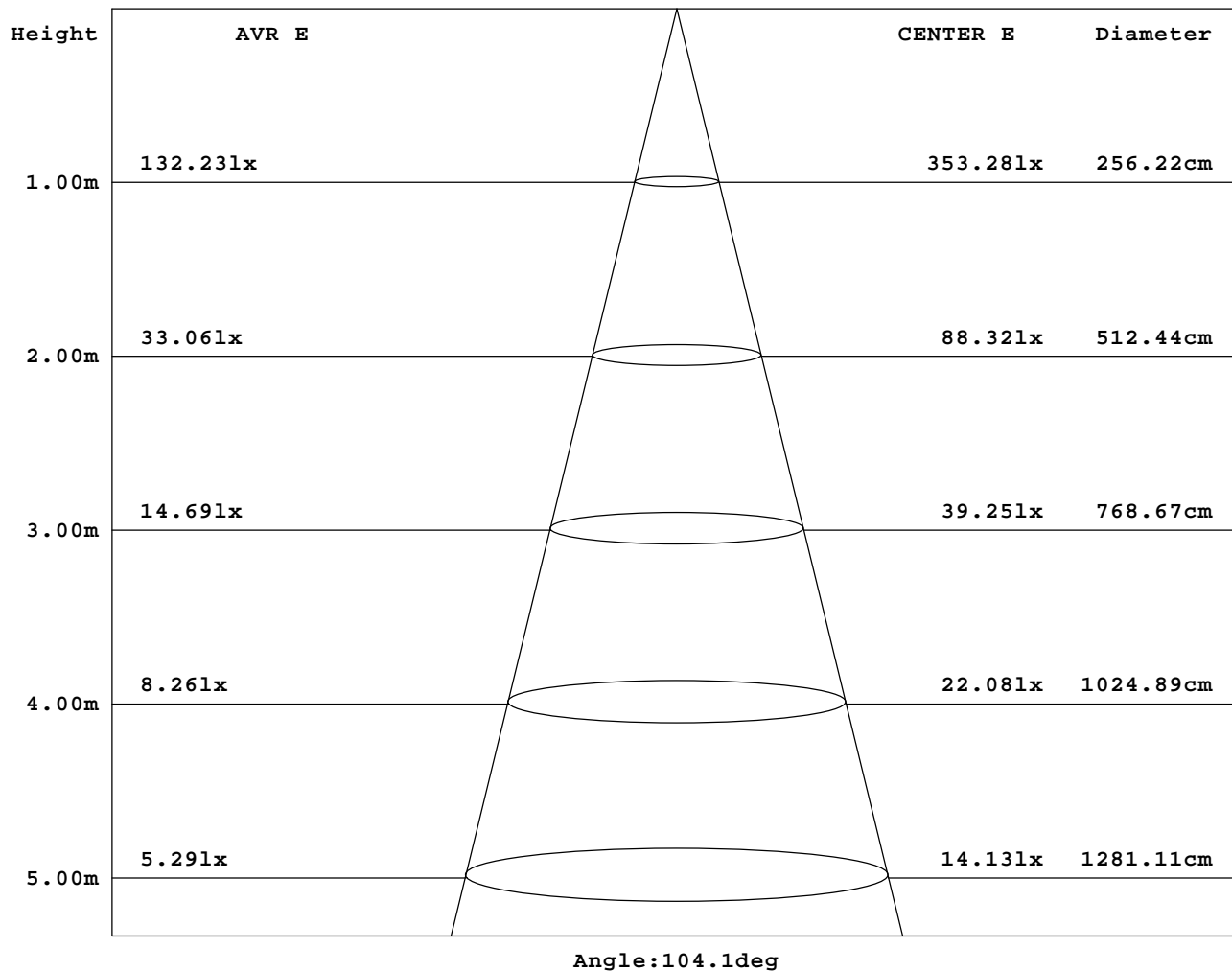
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2021年12月03日

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: 51-RS-5050-24-112-12-X-Y 6000K		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050 112D	CCT(K): 6000	DIMENSION: 1M*0.012M	SERIAL No.: 20211203011



Test System: HOPOO HPG1800
 Temperature: 25.3DEG
 Operators:
 Test Date: 2021年12月03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: 51-RS-5050-24-112-12-X-Y 6000K		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050 112D	CCT(K): 6000	DIMENSION: 1M*0.012M	SERIAL No.: 20211203011

g	C0	C45	C90	C135	C180	C225	C270	C315	g	4one	tBtal
5.0	356.2	356.6	354.5	350.7	347.8	350.0	350.1	354.0	0- 5	8.444	8.444
10.0	356.6	355.9	352.9	345.5	339.8	343.2	343.8	351.8	5- 10	25.08	33.53
15.0	354.2	352.7	348.6	337.5	329.9	333.7	335.3	346.9	10- 15	40.99	74.52
20.0	349.1	346.5	342.0	327.2	317.4	322.4	323.8	339.4	15- 20	55.70	130.2
25.0	341.1	337.8	332.6	314.8	302.4	308.2	309.9	329.0	20- 25	68.75	198.9
30.0	324.0	325.9	320.4	298.9	281.1	291.5	294.1	315.8	25- 30	79.60	278.5
35.0	305.5	311.3	306.2	281.9	254.0	272.4	275.2	300.3	30- 35	87.64	366.2
40.0	281.8	294.5	289.0	261.9	223.5	249.0	253.6	281.4	35- 40	92.71	458.9
45.0	256.9	274.3	269.1	237.8	185.0	222.0	230.2	259.8	40- 45	94.36	553.3
50.0	228.9	251.5	247.4	210.0	147.4	192.0	206.7	236.7	45- 50	92.29	645.6
55.0	196.4	227.0	222.1	175.0	109.6	142.4	170.3	210.1	50- 55	86.64	732.2
60.0	157.7	206.1	193.9	140.2	77.13	127.6	139.4	181.5	55- 60	77.72	809.9
65.0	133.6	166.6	144.1	104.4	46.15	92.92	105.5	153.4	60- 65	65.69	875.6
70.0	91.99	137.3	133.5	70.08	22.61	59.24	69.85	126.7	65- 70	52.84	928.5
75.0	50.64	105.0	94.01	38.79	9.292	32.52	38.25	95.79	70- 75	38.21	966.7
80.0	10.99	67.91	61.33	16.41	4.491	16.72	17.50	61.64	75- 80	23.67	990.4
85.0	7.589	42.74	33.06	6.350	3.872	10.06	7.356	29.04	80- 85	13.34	1004
90.0	6.350	17.03	14.94	4.181	3.949	7.976	4.104	11.15	85- 90	6.870	1011
95.0	6.040	4.259	8.363	3.484	4.104	7.047	3.639	7.201	90- 95	3.674	1014
100.0	5.885	3.097	6.582	3.639	4.336	6.737	3.794	6.737	95-100	2.846	1017
105.0	5.808	3.407	6.272	3.949	4.568	6.659	3.949	6.582	100-105	2.741	1020
110.0	5.730	3.562	6.117	3.949	4.801	6.582	4.181	6.504	105-110	2.697	1023
115.0	5.808	3.717	6.117	4.104	5.033	6.582	4.414	6.427	110-115	2.643	1025
120.0	5.808	3.949	6.117	4.336	5.265	6.582	4.646	6.427	115-120	2.594	1028
125.0	5.885	4.181	6.117	4.568	5.498	6.659	4.878	6.427	120-125	2.520	1030
130.0	5.962	4.414	6.195	4.801	5.730	6.737	5.111	6.504	125-130	2.431	1033
135.0	6.040	4.646	6.272	5.033	5.962	6.814	5.343	6.504	130-135	2.326	1035
140.0	6.195	4.878	6.427	5.265	6.117	6.892	5.498	6.582	135-140	2.191	1037
145.0	6.350	5.188	6.504	5.498	6.350	6.969	5.730	6.737	140-145	2.028	1039
150.0	6.504	5.420	6.659	5.653	6.504	7.047	5.885	6.814	145-150	1.835	1041
155.0	6.659	5.653	6.737	5.808	6.659	7.124	6.040	6.892	150-155	1.613	1043
160.0	6.737	5.808	6.892	5.962	6.737	7.124	6.195	7.047	155-160	1.363	1044
165.0	6.892	6.040	6.969	6.117	6.892	7.124	6.272	7.047	160-165	1.089	1045
170.0	6.969	6.195	7.047	6.195	6.969	7.124	6.350	7.124	165-170	0.795	1046
175.0	7.124	6.272	7.124	6.272	6.969	7.047	6.350	7.124	170-175	0.484	1047
180.0	7.124	6.504	7.047	6.427	7.279	6.969	6.504	6.969	175-180	0.162	1047
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2021年12月03日

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

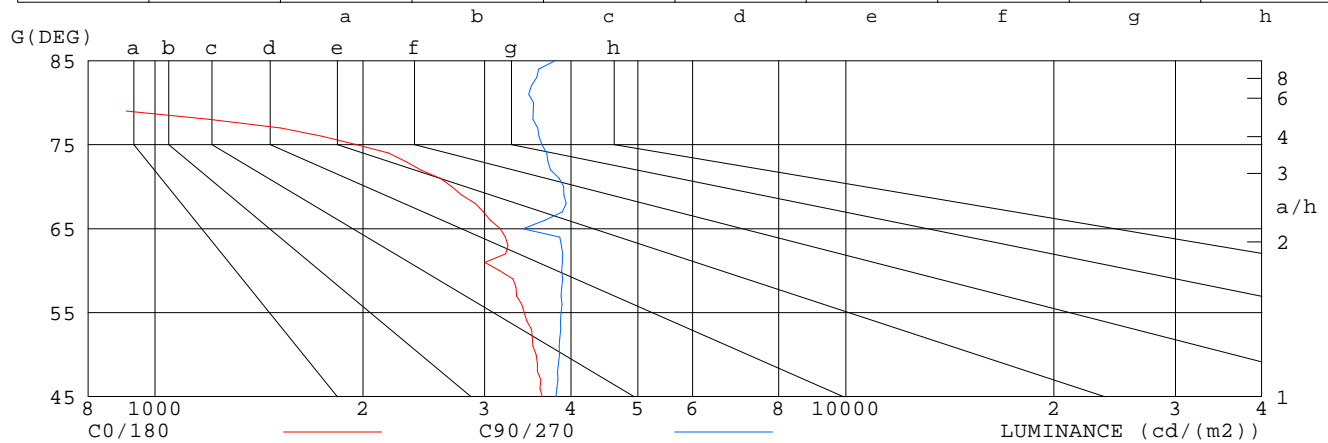
LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:			
Address:			
NAME: 51-RS-5050-24-112-12-X-Y 6000K		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050 112D	CCT(K): 6000	DIMENSION: 1M*0.012M	SERIAL No.: 20211203011

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	871	3794
80	633	3532
75	1957	3632
70	2690	3903
65	3163	3412
60	3155	3878
55	3425	3874
50	3561	3850
45	3634	3807

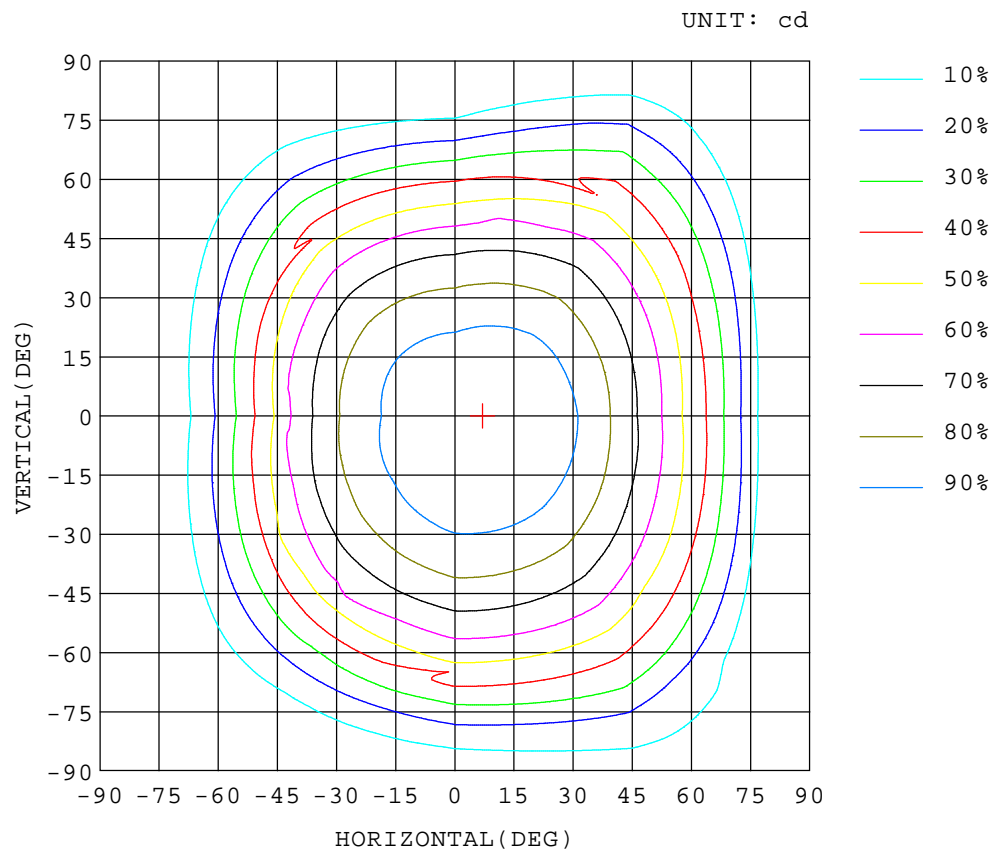
Test System: HOPOO HPG1800
 Temperature: 25.3 DEG
 Operators:
 Test Date: 2021年12月03日

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: 51-RS-5050-24-112-12-X-Y 6000K		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050 112D	CCT(K): 6000	DIMENSION: 1M*0.012M	SERIAL No.: 20211203011



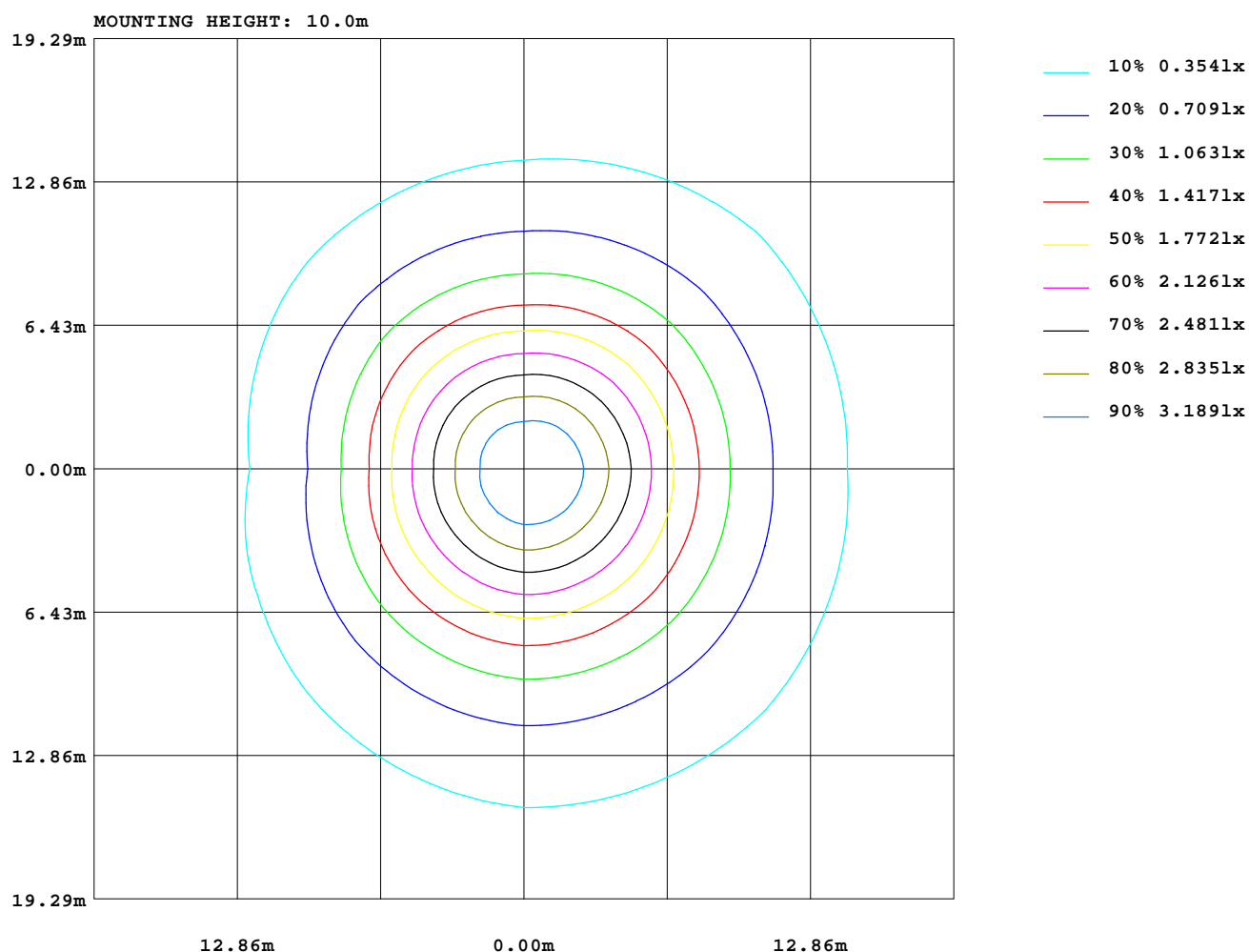
Test System: HOPOO HPG1800
Temperature: 25.3 DEG
Operators:
Test Date: 2021年12月03日

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: 51-RS-5050-24-112-12-X-Y 6000K		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050 112D	CCT(K): 6000	DIMENSION: 1M*0.012M	SERIAL No.: 20211203011



Test System: HOPOO HPG1800
Temperature: 25.3DEG
Operators:
Test Date: 2021年12月03日

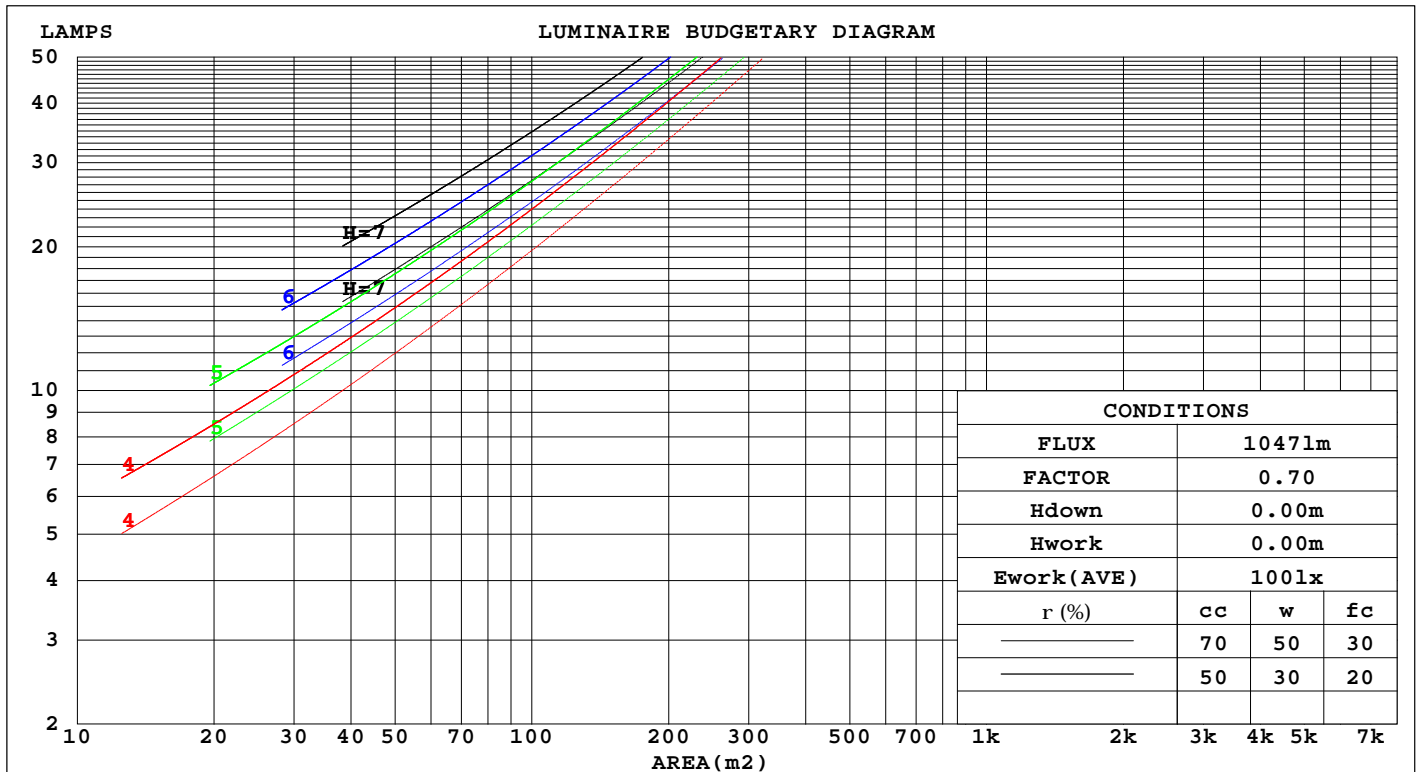
Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 8.800 m
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME: 51-RS-5050-24-112-12-X-Y 6000K		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050 112D	CCT(K): 6000	DIMENSION: 1M*0.012M	SERIAL No.: 20211203011

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	1.15	1.15	1.15	1.09	1.09	1.09	1.04	1.04	1.04	.99	.99	.99	.97
1.0	1.03	.99	.95	1.01	.97	.93	.96	.93	.90	.91	.89	.87	.87	.85	.83	.81
2.0	.90	.83	.78	.88	.82	.77	.84	.79	.74	.80	.76	.72	.77	.73	.70	.68
3.0	.79	.71	.65	.77	.70	.64	.74	.68	.62	.71	.65	.61	.68	.63	.59	.57
4.0	.70	.62	.55	.69	.61	.54	.66	.59	.53	.63	.57	.52	.60	.55	.51	.49
5.0	.63	.54	.47	.61	.53	.47	.59	.52	.46	.57	.50	.45	.54	.49	.44	.42
6.0	.56	.48	.41	.55	.47	.41	.53	.46	.40	.51	.45	.40	.49	.44	.39	.37
7.0	.51	.42	.36	.50	.42	.36	.48	.41	.36	.47	.40	.35	.45	.39	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.44	.37	.32	.43	.36	.31	.41	.35	.31	.29
9.0	.43	.35	.29	.42	.34	.29	.41	.34	.29	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.32	.26	.39	.31	.26	.38	.31	.26	.36	.30	.26	.35	.30	.25	.24



Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2021年12月03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: 51-RS-5050-24-112-12-X-Y 6000K		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050 112D	CCT(K): 6000	DIMENSION: 1M*0.012M	SERIAL No.: 20211203011

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	.304	.173	.055	.296	.169	.054	.280	.161	.051	.266	.154	.049	.254	.147	.047		
2.0	.286	.157	.048	.279	.153	.047	.265	.147	.046	.253	.142	.044	.241	.136	.043		
3.0	.265	.141	.042	.259	.139	.042	.247	.134	.041	.236	.129	.040	.225	.125	.039		
4.0	.245	.127	.037	.239	.125	.037	.229	.121	.036	.219	.118	.035	.210	.114	.035		
5.0	.227	.116	.034	.222	.114	.033	.212	.111	.033	.204	.107	.032	.195	.104	.031		
6.0	.211	.106	.030	.206	.104	.030	.198	.101	.029	.190	.099	.029	.182	.096	.028		
7.0	.197	.097	.028	.192	.096	.027	.185	.093	.027	.177	.091	.026	.171	.089	.026		
8.0	.184	.090	.025	.180	.089	.025	.173	.086	.025	.167	.084	.024	.160	.082	.024		
9.0	.172	.083	.023	.169	.082	.023	.163	.080	.023	.157	.079	.022	.151	.077	.022		
10.0	.162	.078	.022	.159	.077	.021	.153	.075	.021	.148	.073	.021	.143	.072	.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	.217	.217	.217	.185	.185	.185	.126	.126	.126	.073	.073	.073	.023	.023	.023	
1.0	.206	.183	.161	.177	.157	.139	.121	.108	.096	.070	.062	.056	.022	.020	.018	
2.0	.198	.159	.125	.170	.136	.108	.116	.094	.076	.067	.055	.044	.022	.018	.014	
3.0	.190	.141	.102	.163	.122	.088	.112	.085	.062	.065	.049	.036	.021	.016	.012	
4.0	.183	.128	.086	.157	.110	.075	.108	.077	.052	.062	.045	.031	.020	.015	.010	
5.0	.175	.117	.075	.151	.102	.065	.104	.071	.046	.060	.042	.027	.019	.014	.009	
6.0	.168	.109	.067	.145	.095	.058	.100	.066	.041	.058	.039	.024	.019	.013	.008	
7.0	.162	.102	.061	.139	.089	.053	.096	.062	.037	.056	.037	.022	.018	.012	.007	
8.0	.155	.097	.056	.134	.084	.049	.093	.059	.035	.054	.035	.021	.017	.011	.007	
9.0	.149	.092	.053	.129	.080	.046	.089	.056	.033	.052	.033	.019	.017	.011	.006	
10.0	.144	.087	.050	.124	.076	.044	.086	.053	.031	.050	.032	.018	.016	.010	.006	

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2021年12月03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: 51-RS-5050-24-112-12-X-Y 6000K					TYPE: LED Strip			WEIGHT:			
SPECIFICATION: 5050 112D		CCT(K): 6000			DIMENSION: 1M*0.012M			SERIAL No.: 20211203011			
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	17.6	19.1	17.9	19.3	19.6	18.2	19.6	18.5	19.9	20.1
	3H	19.0	20.4	19.4	20.7	21.0	19.9	21.2	20.3	21.5	21.8
	4H	19.4	20.7	19.8	21.0	21.3	20.6	21.9	21.0	22.2	22.6
	6H	19.5	20.7	19.9	21.0	21.4	21.2	22.4	21.6	22.7	23.1
	8H	19.5	20.6	19.9	21.0	21.3	21.4	22.6	21.8	22.9	23.3
	12H	19.4	20.6	19.8	20.9	21.3	21.6	22.7	22.0	23.1	23.4
4H	2H	18.4	19.7	18.8	20.0	20.4	18.8	20.1	19.2	20.4	20.7
	3H	20.1	21.2	20.5	21.5	21.9	20.8	21.9	21.2	22.3	22.7
	4H	20.6	21.6	21.0	22.0	22.4	21.7	22.7	22.1	23.1	23.5
	6H	20.8	21.7	21.2	22.1	22.5	22.4	23.3	22.8	23.7	24.1
	8H	20.8	21.7	21.3	22.1	22.5	22.7	23.5	23.1	23.9	24.4
	12H	20.8	21.6	21.3	22.1	22.5	22.9	23.7	23.4	24.1	24.6
8H	4H	21.1	21.9	21.6	22.4	22.8	22.0	22.8	22.5	23.3	23.7
	6H	21.5	22.2	22.0	22.7	23.2	22.9	23.6	23.4	24.1	24.6
	8H	21.6	22.3	22.2	22.7	23.3	23.3	24.0	23.9	24.4	25.0
	12H	21.7	22.3	22.3	22.8	23.3	23.7	24.2	24.3	24.8	25.3
12H	4H	21.2	21.9	21.6	22.4	22.8	22.0	22.8	22.5	23.2	23.7
	6H	21.7	22.3	22.2	22.8	23.3	23.0	23.6	23.5	24.1	24.6
	8H	21.9	22.5	22.5	23.0	23.5	23.5	24.0	24.1	24.6	25.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.2					+ 0.1 / - 0.2					
1.5H	+ 0.3 / - 0.4					+ 0.2 / - 0.3					
2.0H	+ 0.3 / - 0.7					+ 0.2 / - 0.4					

CIE Pub.117 Corrected 1047 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.2)

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2021年12月03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: 51-RS-5050-24-112-12-X-Y 6000K		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050 112D	CCT(K): 6000	DIMENSION: 1M*0.012M	SERIAL No.: 20211203011

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) $k(RI) \times RCR = 5$									
$k = 0.60$	57	45	38	56	45	38	55	44	38	32
0.80	67	55	48	66	55	48	64	54	47	40
1.00	75	64	57	74	64	57	72	65	56	49
1.25	82	72	65	81	71	64	78	69	63	56
1.50	87	78	71	86	77	70	82	74	69	61
2.00	94	86	79	92	84	78	88	82	77	68
2.50	98	90	84	96	89	83	92	86	81	72
3.00	101	95	89	99	93	88	95	89	85	76
4.00	105	100	95	103	98	93	98	94	90	80
5.00	108	103	99	105	101	97	100	97	93	83
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

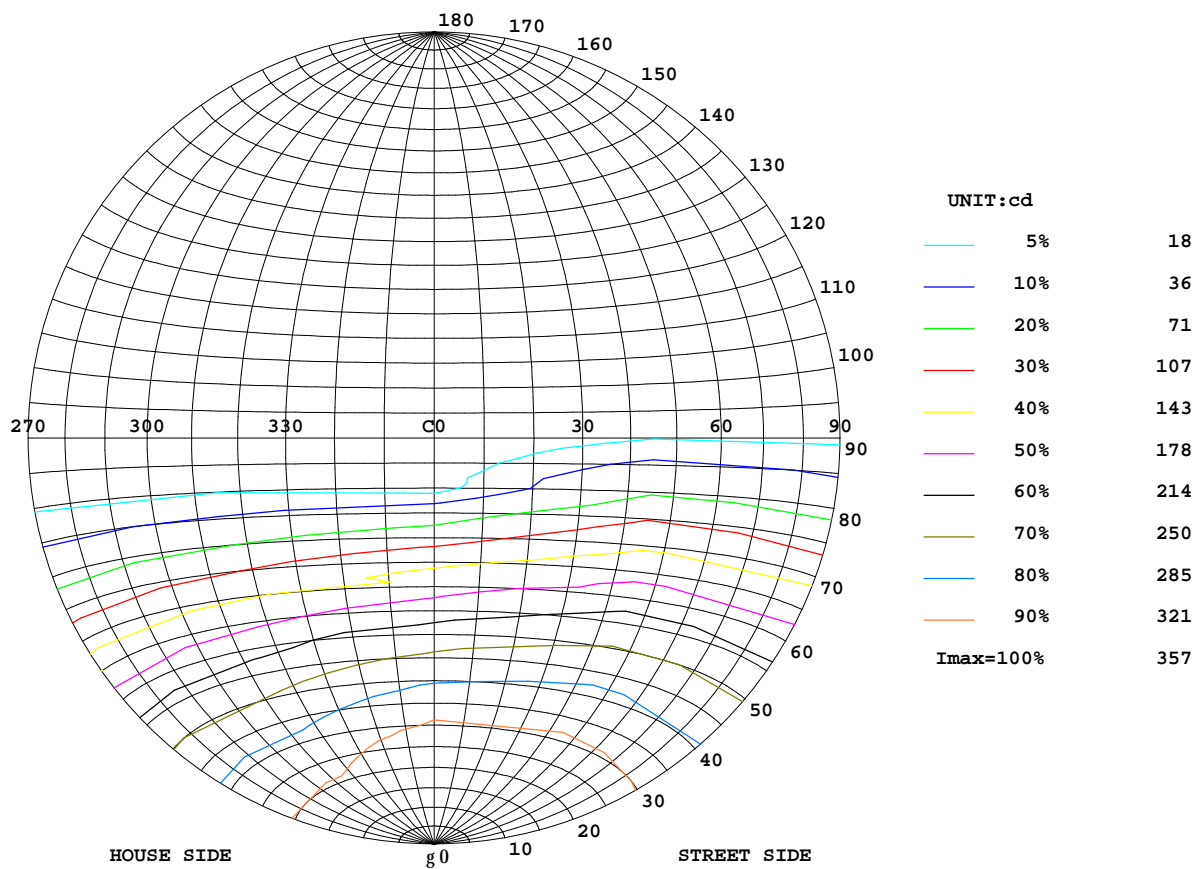
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2021年12月03日

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: 51-RS-5050-24-112-12-X-Y 6000K		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050 112D	CCT(K): 6000	DIMENSION: 1M*0.012M	SERIAL No.: 20211203011



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2021年12月03日

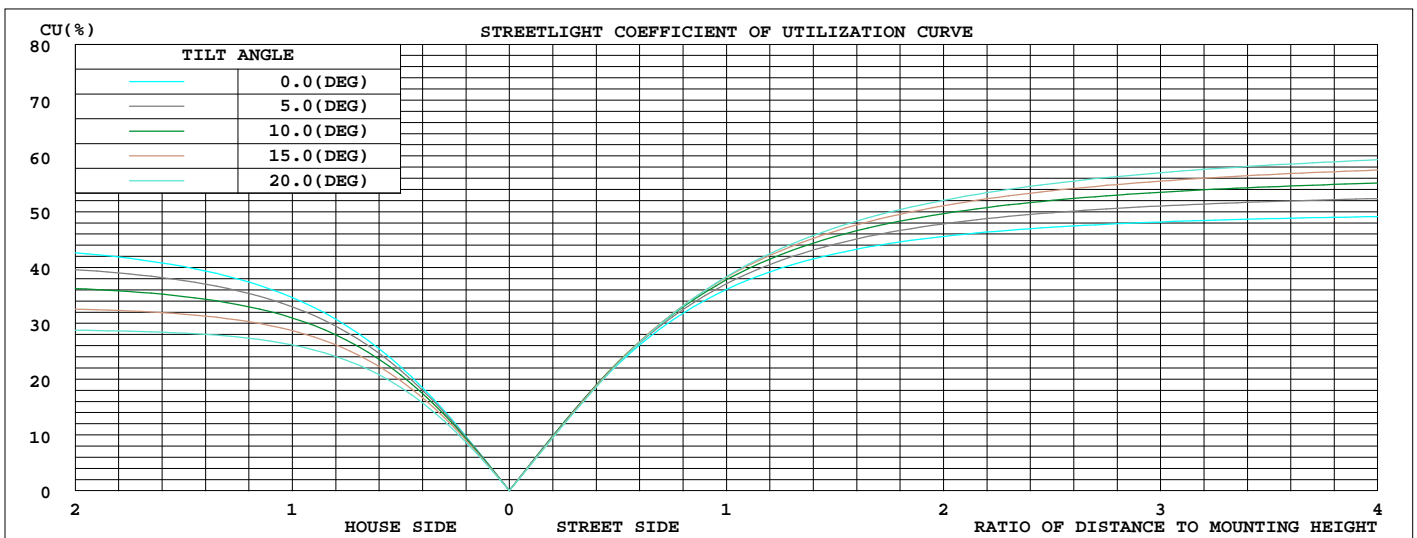
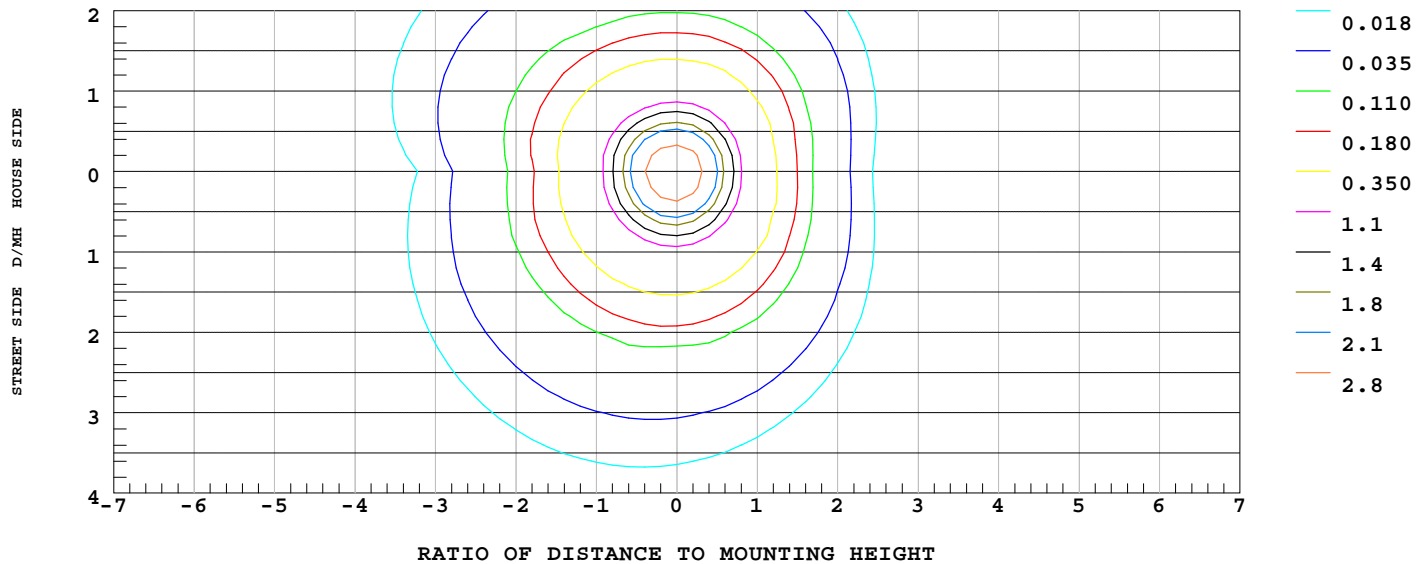
Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.800 m
Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER:			
Address:			
NAME: 51-RS-5050-24-112-12-X-Y 6000K		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050 112D	CCT(K): 6000	DIMENSION: 1M*0.012M	SERIAL No.: 20211203011

ILLUMINANCE AT MH=10 m, Enadir = 3.53 lx



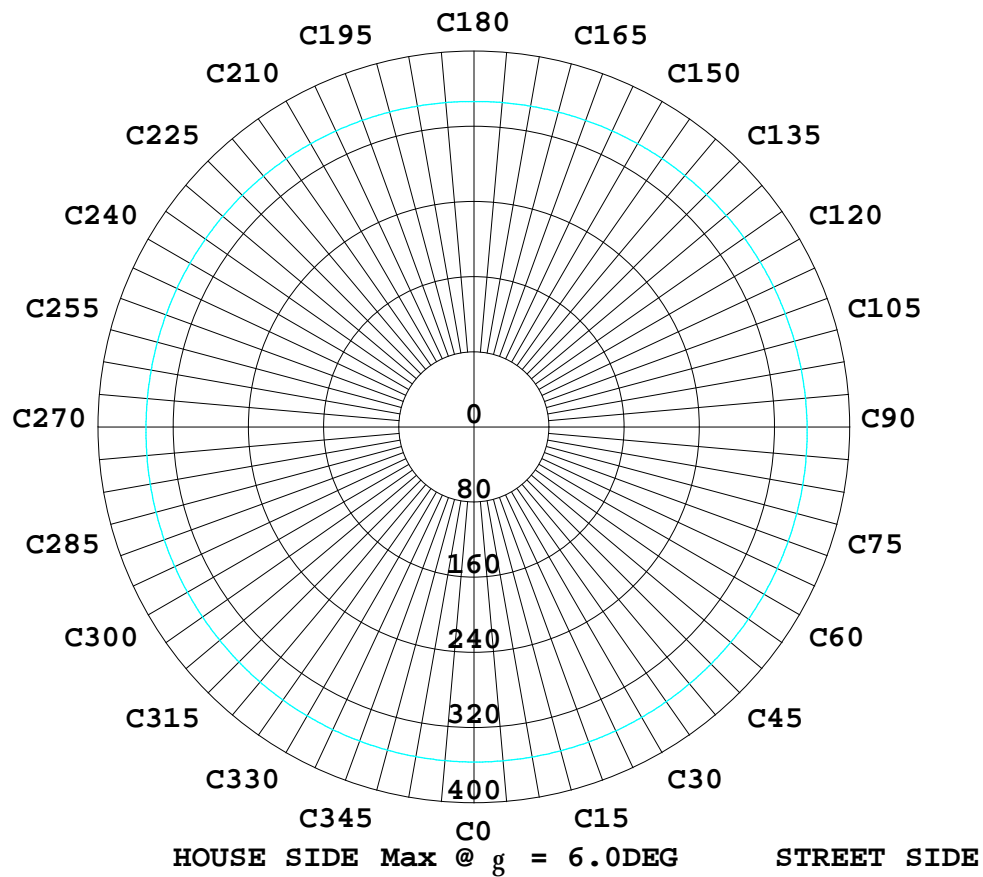
Test System: HOPOO HPG1800
Temperature: 25.3 DEG
Operators:
Test Date: 2021年12月03日

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: 51-RS-5050-24-112-12-X-Y 6000K		TYPE: LED Strip	WEIGHT:
SPECIFICATION: 5050 112D	CCT(K): 6000	DIMENSION: 1M*0.012M	SERIAL No.: 20211203011



Test System: HOPOO HPG1800
Temperature: 25.3DEG
Operators:
Test Date: 2021年12月03日

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