

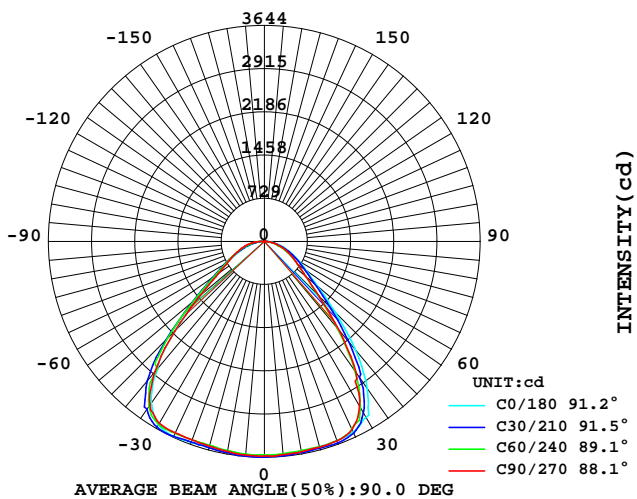
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

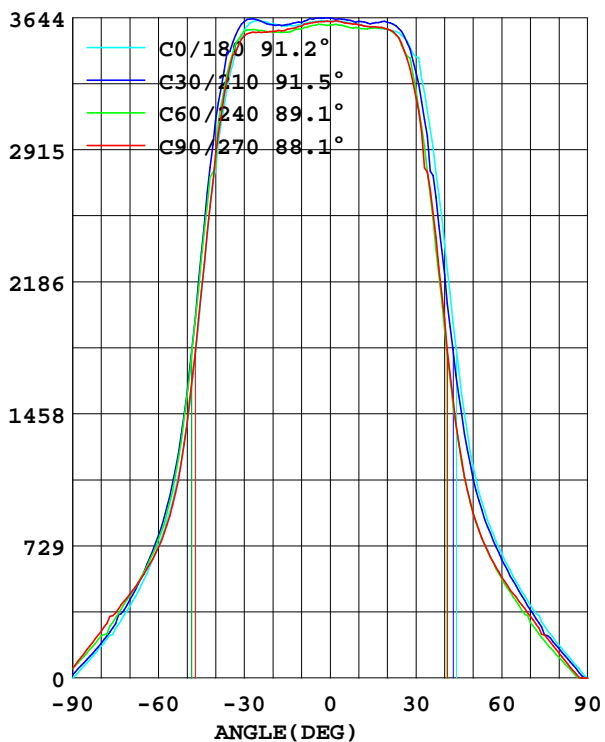
MANUFACTURER:		
Address:		
NAME: 55W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65mm	SERIAL No.:

DATA OF LAMP		I <sub>max</sub> (cd)	3644	S/MH(C0/180)	1.34
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	1.34
NOMINAL POWER(W)	54	TOTAL FLUX(lm)	8088.2	Voltage(V)	219.8
RATED VOLTAGE(V)	220	EFFICIENCY(lm/W)	149.7	Current(A)	0.255
NOMINAL FLUX(lm)	8088.2	h up(%)	0.0	Power(W)	54.04
LAMPS QUANTITY	1	h down(%)	100.0	Power Factor(PF)	0.961
TEST VOLTAGE(V)	219.9	Effective Flux(lm)	7745.1	EEI	0.095

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



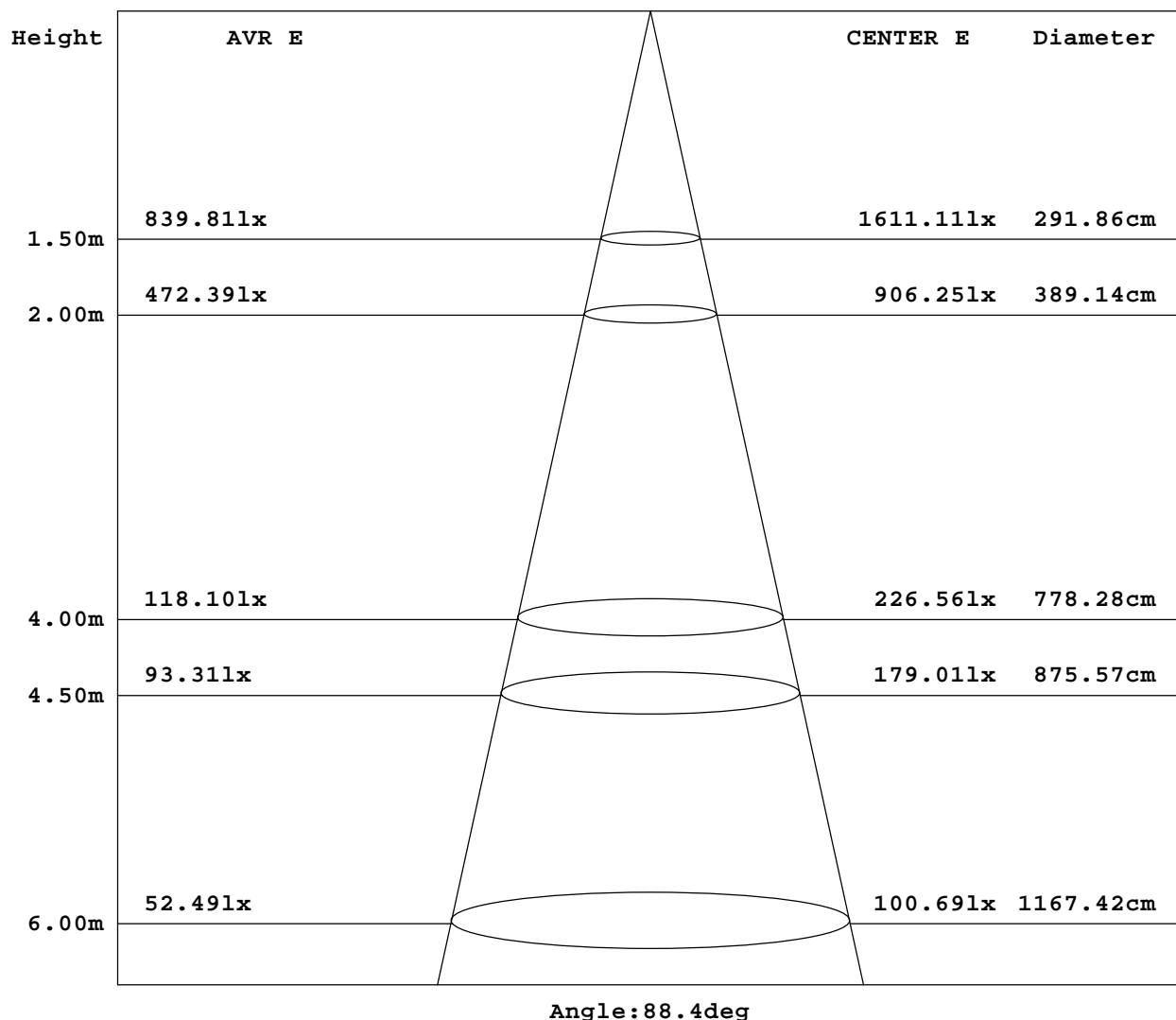
Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2020年05月09日

Test Set: 8.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks:

### AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER:		
Address:		
NAME: 55W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65mm	SERIAL No.:



Test System: HOPOO HPG1800  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2020年05月09日

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity: 65.0%  
 Test Distance: 11.000 m  
 Remarks:

## ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 55W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65mm	SERIAL No.:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	Zone	tStal
5.0	3624	3622	3619	3607	3622	3616	3614	3609	0- 5	86.50	86.50
10.0	3606	3599	3598	3593	3606	3604	3604	3595	5- 10	258.1	344.6
15.0	3599	3585	3579	3570	3589	3600	3594	3582	10- 15	426.1	770.7
20.0	3611	3584	3567	3562	3579	3600	3582	3594	15- 20	590.8	1362
25.0	3629	3601	3563	3570	3547	3530	3504	3584	20- 25	750.9	2113
30.0	3574	3594	3544	3515	3429	3297	3209	3471	25- 30	891.6	3004
35.0	3328	3427	3368	3261	3030	2730	2694	3041	30- 35	972.0	3976
40.0	2799	2944	2884	2692	2388	2072	1978	2416	35- 40	946.9	4923
45.0	2128	2332	2135	2011	1706	1426	1301	1662	40- 45	809.9	5733
50.0	1400	1561	1400	1390	1169	1004	908.2	1116	45- 50	616.3	6350
55.0	970.1	1054	955.1	976.4	869.5	766.0	703.5	815.0	50- 55	459.3	6809
60.0	733.0	775.9	721.8	745.4	690.4	602.7	557.2	616.8	55- 60	360.4	7169
65.0	544.4	586.0	573.4	582.7	533.1	467.4	447.4	460.0	60- 65	291.4	7461
70.0	393.2	440.9	462.0	450.7	399.7	340.5	339.2	324.7	65- 70	231.4	7692
75.0	274.5	315.8	360.2	328.9	287.0	221.5	237.7	217.7	70- 75	174.8	7867
80.0	175.1	211.2	257.6	217.9	181.9	138.1	139.2	127.7	75- 80	121.3	7989
85.0	81.50	119.6	156.0	124.5	86.22	48.04	39.39	43.26	80- 85	71.86	8060
90.0	0	34.73	53.79	34.92	0	0	0	0	85- 90	25.59	8086
95.0	0	0	0	0	0	0	0	0	90- 95	2.198	8088
100.0	0	0	0	0	0	0	0	0	95-100	0	8088
105.0	0	0	0	0	0	0	0	0	100-105	0	8088
110.0	0	0	0	0	0	0	0	0	105-110	0	8088
115.0	0	0	0	0	0	0	0	0	110-115	0	8088
120.0	0	0	0	0	0	0	0	0	115-120	0	8088
125.0	0	0	0	0	0	0	0	0	120-125	0	8088
130.0	0	0	0	0	0	0	0	0	125-130	0	8088
135.0	0	0	0	0	0	0	0	0	130-135	0	8088
140.0	0	0	0	0	0	0	0	0	135-140	0	8088
145.0	0	0	0	0	0	0	0	0	140-145	0	8088
150.0	0	0	0	0	0	0	0	0	145-150	0	8088
155.0	0	0	0	0	0	0	0	0	150-155	0	8088
160.0	0	0	0	0	0	0	0	0	155-160	0	8088
165.0	0	0	0	0	0	0	0	0	160-165	0	8088
170.0	0	0	0	0	0	0	0	0	165-170	0	8088
175.0	0	0	0	0	0	0	0	0	170-175	0	8088
180.0	0	0	0	0	0	0	0	0	175-180	0	8088
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020年05月09日

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:11.000 m  
 Remarks:

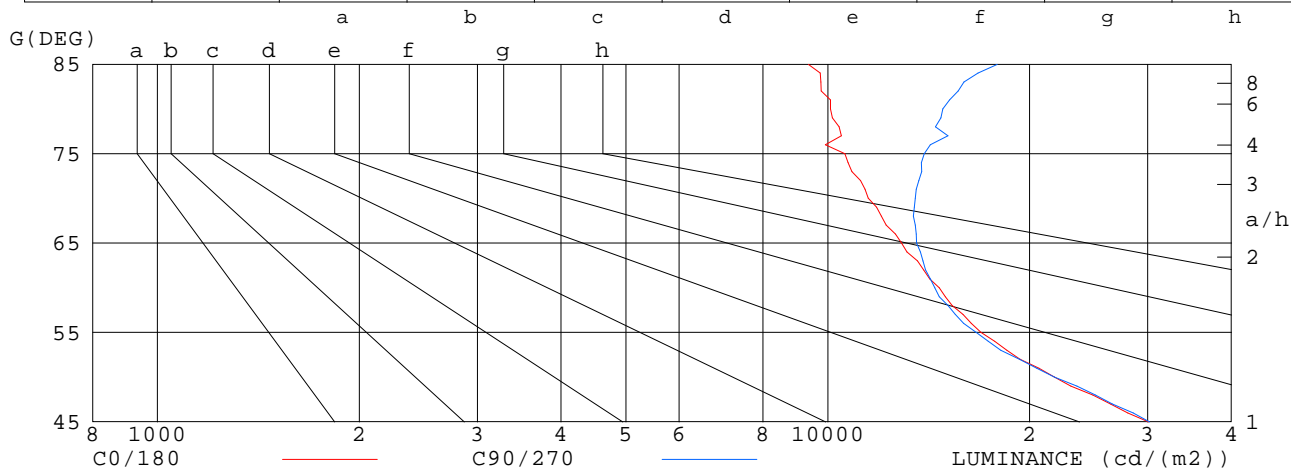
## LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:		
Address:		
NAME: 55W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65mm	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	9352	17904
80	10087	14839
75	10606	13921
70	11496	13509
65	12883	13570
60	14662	14437
55	16914	16652
50	21781	21785
45	30099	30197

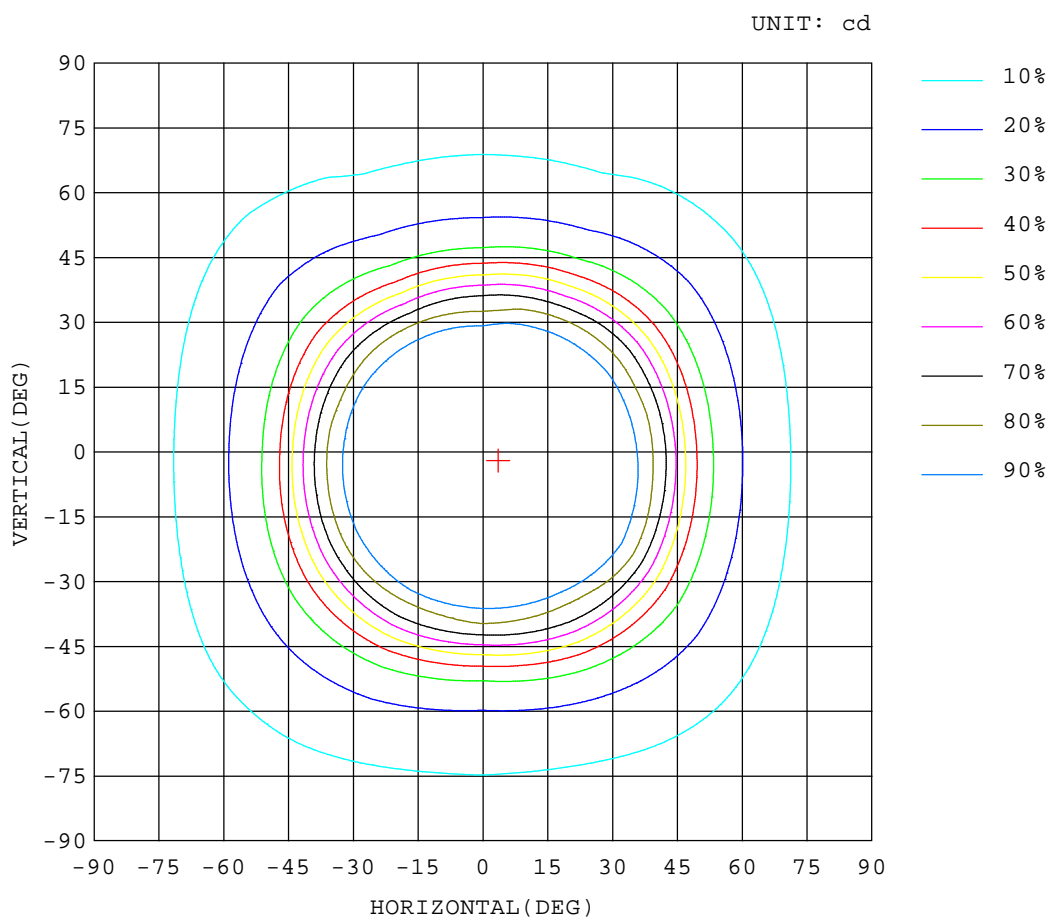
Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2020年05月09日

Test Set: 8.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 55W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65mm	SERIAL No.:



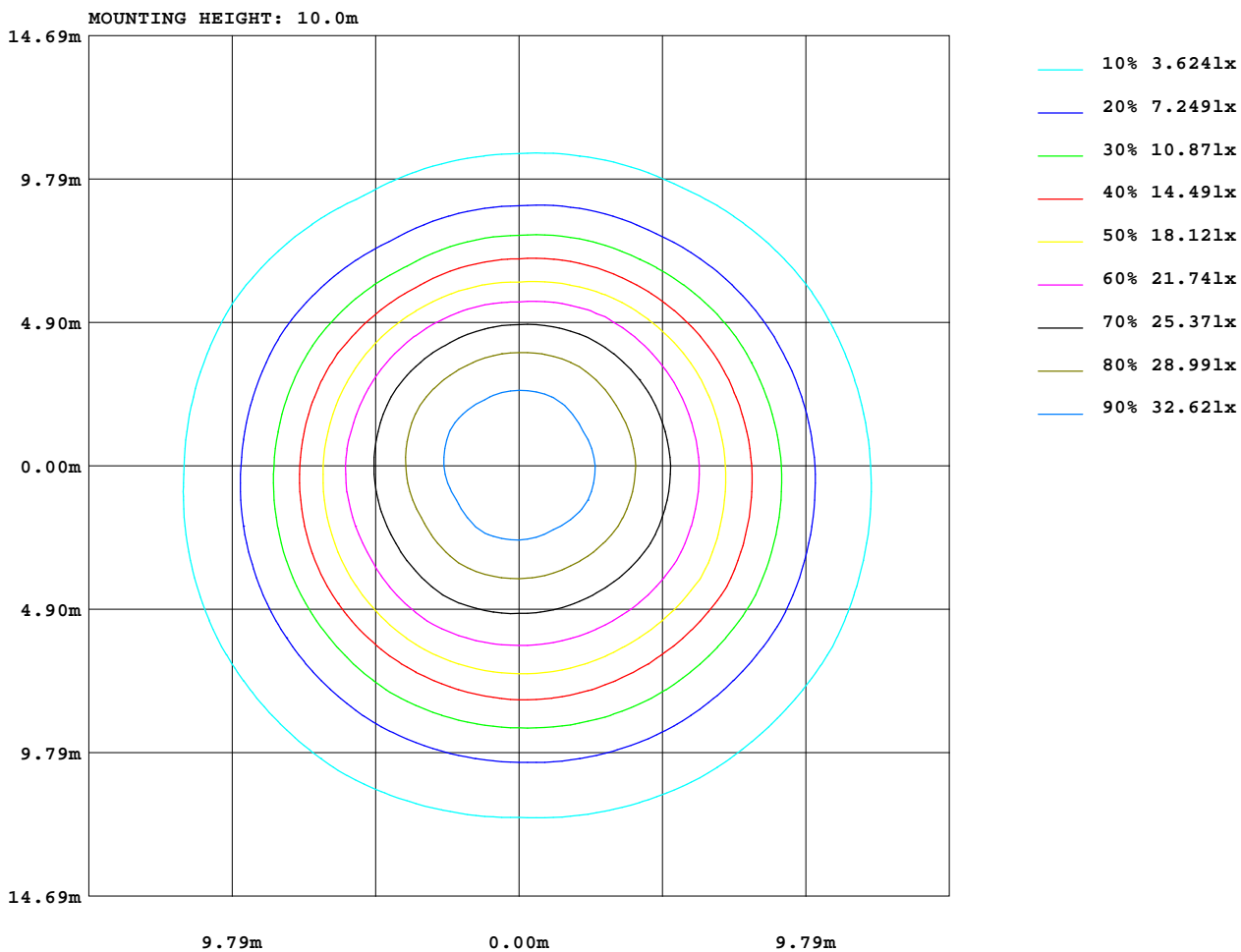
Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2020年05月09日

Test Set: 8.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks:

### ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 55W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65mm	SERIAL No.:



Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2020年05月09日

Test Set: 8.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks:

## AREA LUMINOUS FLUX

Report number:

MANUFACTURER:																			
Address:																			
NAME: 55W										TYPE:					WEIGHT:				
SPECIFICATION:										DIMENSION: 1438*65mm					SERIAL No.:				

VERTICAL (DEG)	AREA FLUX DIAGRAM																		UNIT:lm				Φ t	Φ a
	0.01	0.10	0.27	0.49	0.65	0.73	0.89	1.18	1.40	1.39	1.17	0.87	0.69	0.58	0.41	0.23	0.09	0.02						
90																								
80	0.06	0.46	1.25	2.24	3.21	4.08	5.04	6.17	6.95	6.92	6.08	4.91	3.89	2.98	2.00	1.10	0.42	0.06	57.8	0.00				
70	0.11	0.84	2.23	4.06	6.19	8.29	10.2	12.1	13.3	13.3	12.2	10.2	8.11	5.84	3.75	2.04	0.77	0.11	114	62.6				
60	0.16	1.18	3.18	6.22	9.77	13.2	16.3	19.4	21.3	21.6	20.0	16.9	13.4	9.53	5.79	2.96	1.10	0.15	183	166				
50	0.21	1.51	4.21	8.45	13.7	19.6	26.0	33.7	39.8	41.2	36.9	28.8	21.0	14.0	8.19	3.95	1.42	0.20	304	294				
40	0.25	1.79	5.17	10.6	18.5	30.5	48.0	66.4	78.4	80.5	72.9	55.5	35.0	19.9	10.7	4.97	1.70	0.23	542	535				
30	0.28	2.05	5.97	12.6	24.5	48.1	76.5	96.3	104	105	100	83.9	56.4	28.0	13.3	5.89	1.94	0.26	767	761				
	0.30	2.24	6.58	14.3	31.2	64.0	92.9	105	109	109	105	96.4	72.7	37.4	15.6	6.63	2.13	0.29	872	867				
	0.31	2.34	6.93	15.4	36.3	72.8	97.1	106	109	109	105	99.2	80.2	44.3	17.3	7.09	2.24	0.30	912	908				
	0.31	2.36	7.00	15.7	37.5	74.7	97.0	105	109	109	106	99.7	82.1	46.0	17.7	7.19	2.27	0.30	920	915				
	0.31	2.30	6.76	15.0	34.6	70.2	95.6	105	109	108	106	99.3	79.3	42.0	16.7	6.92	2.20	0.29	899	895				
-30	0.29	2.15	6.25	13.5	28.5	58.2	88.6	104	108	108	105	93.9	68.4	33.6	14.6	6.33	2.06	0.27	842	837				
-40	0.26	1.92	5.53	11.5	21.6	40.6	67.2	88.7	99.0	99.7	91.7	74.2	47.2	24.3	12.2	5.51	1.84	0.25	694	688				
-50	0.23	1.64	4.66	9.38	16.0	25.6	39.5	54.0	63.2	64.5	57.5	43.2	27.7	17.0	9.64	4.57	1.57	0.21	441	433				
-60	0.18	1.32	3.69	7.22	11.8	17.0	22.5	27.1	29.8	30.0	27.7	23.0	17.4	11.9	7.19	3.56	1.26	0.17	243	231				
-70	0.14	0.99	2.66	5.15	8.26	11.6	14.6	16.6	17.6	17.5	16.4	14.3	11.3	8.07	4.97	2.52	0.93	0.13	154	131				
-80	0.08	0.63	1.67	3.14	4.94	6.87	8.67	10.0	10.8	10.8	9.86	8.39	6.60	4.72	2.97	1.56	0.59	0.08	92.5	25.9				
-90	0.03	0.25	0.70	1.33	2.11	2.95	3.70	4.24	4.61	4.60	4.21	3.66	2.89	2.03	1.25	0.64	0.24	0.03	39.5	0.00				
	-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)				20	30	40	50	60	70	80	90				
Φ t	3.51	26.1	74.7	157	310	570	811	961	1035	1042	984	857	635	353	165	73.7	24.8	3.34	8088					
Φ a	0.00	1.82	51.6	136	290	551	791	942	1016	1022	965	837	616	333	144	50.3	1.14	0.00		7745				

Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020年05月09日

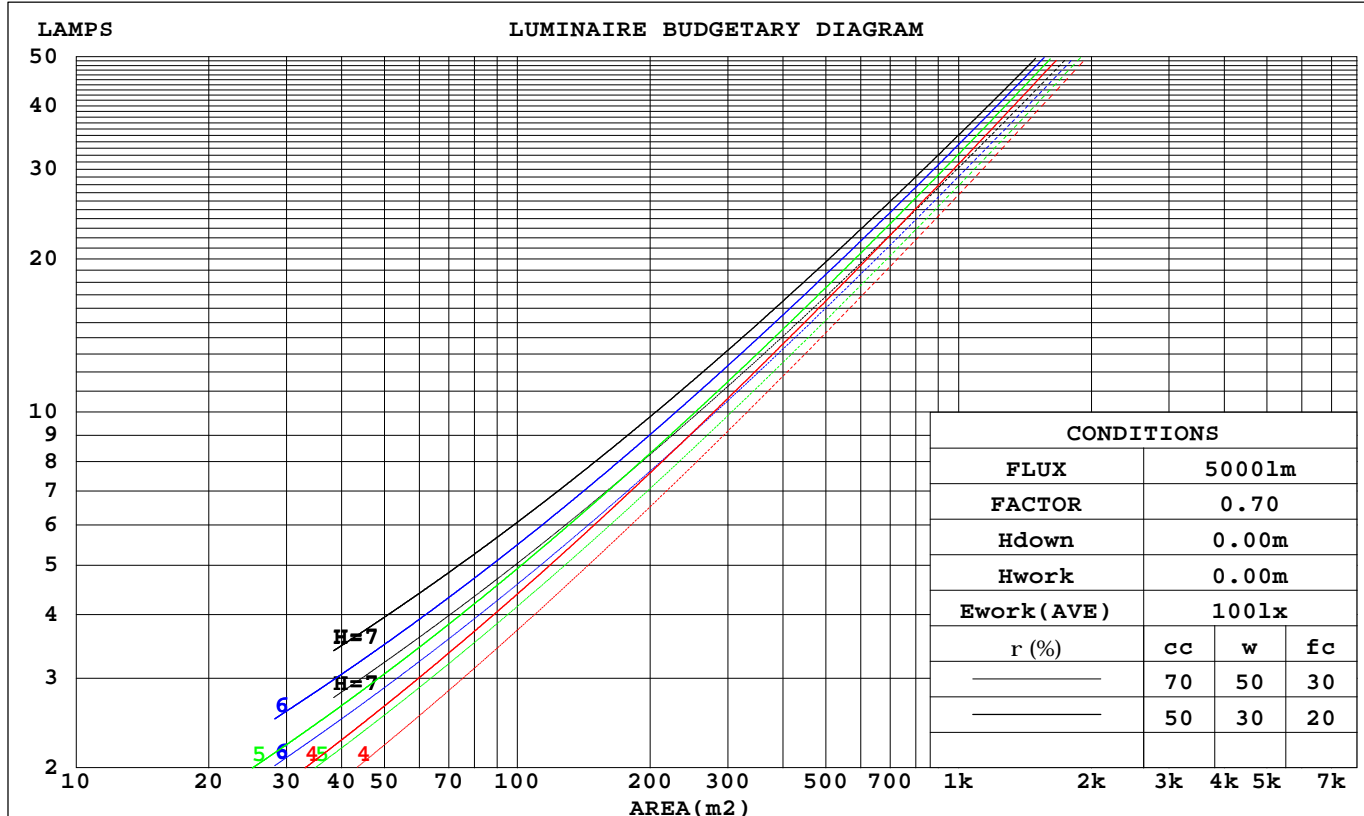
Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:11.000 m  
 Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:															
Address:															
NAME: 55W								TYPE:				WEIGHT:			
SPECIFICATION:								DIMENSION: 1438*65mm				SERIAL No.:			

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															



Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020年05月09日

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:11.000 m  
 Remarks:

## WEC AND CCEC

Report number:

MANUFACTURER:											
Address:											
NAME: 55W						TYPE:				WEIGHT:	
SPECIFICATION:						DIMENSION: 1438*65mm				SERIAL No.:	

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	.260	.148	.047	.253	.145	.046	.240	.138	.044	.228	.132	.042	.217	.126	.041															
2.0	.248	.136	.042	.242	.133	.041	.230	.128	.040	.220	.123	.039	.210	.119	.037															
3.0	.232	.124	.037	.227	.122	.037	.217	.118	.036	.208	.114	.035	.200	.110	.034															
4.0	.218	.113	.033	.213	.111	.033	.204	.108	.032	.196	.105	.032	.189	.102	.031															
5.0	.204	.104	.030	.200	.103	.030	.192	.100	.029	.185	.098	.029	.178	.095	.029															
6.0	.191	.096	.027	.188	.095	.027	.181	.093	.027	.174	.091	.027	.168	.089	.026															
7.0	.180	.089	.025	.177	.088	.025	.171	.086	.025	.165	.084	.025	.159	.083	.024															
8.0	.170	.083	.023	.167	.082	.023	.161	.081	.023	.156	.079	.023	.151	.078	.023															
9.0	.160	.078	.022	.158	.077	.022	.153	.076	.021	.148	.074	.021	.144	.073	.021															
10.0	.152	.073	.020	.150	.072	.020	.145	.071	.020	.141	.070	.020	.137	.069	.020															

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	.191	.191	.191	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.177	.157	.138	.152	.135	.119	.104	.093	.082	.060	.054	.048	.019	.017	.016	
2.0	.167	.132	.104	.143	.114	.090	.098	.079	.062	.056	.046	.037	.018	.015	.012	
3.0	.157	.114	.080	.135	.099	.069	.093	.068	.049	.054	.040	.029	.017	.013	.009	
4.0	.149	.100	.063	.128	.087	.055	.088	.061	.039	.051	.035	.023	.016	.012	.008	
5.0	.142	.090	.051	.122	.078	.045	.084	.054	.032	.049	.032	.019	.016	.010	.006	
6.0	.135	.081	.043	.116	.070	.037	.080	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.129	.074	.036	.111	.064	.031	.076	.045	.022	.044	.027	.013	.014	.009	.004	
8.0	.123	.068	.031	.106	.059	.027	.073	.042	.019	.042	.025	.011	.014	.008	.004	
9.0	.117	.063	.027	.101	.055	.024	.070	.039	.017	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.096	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020年05月09日

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:11.000 m  
 Remarks:

## Uncorrected UGR Table

Report number:

MANUFACTURER:											
Address:											
NAME: 55W					TYPE:			WEIGHT:			
SPECIFICATION:					DIMENSION: 1438*65mm			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	22.9	24.2	23.2	24.4	24.6	22.8	24.2	23.1	24.3	24.5	
	23.5	24.8	23.8	25.0	25.2	23.6	24.8	23.9	25.0	25.3	
	23.8	25.0	24.1	25.2	25.4	24.0	25.2	24.3	25.4	25.7	
	24.0	25.1	24.3	25.4	25.6	24.5	25.6	24.8	25.8	26.1	
	24.1	25.2	24.4	25.4	25.7	24.7	25.8	25.0	26.0	26.3	
	24.2	25.2	24.5	25.5	25.7	24.9	25.9	25.2	26.2	26.5	
4H	2H	23.1	24.3	23.4	24.5	24.8	23.1	24.2	23.4	24.5	24.7
	3H	24.0	25.0	24.3	25.3	25.6	24.1	25.1	24.4	25.4	25.7
	4H	24.4	25.3	24.7	25.6	25.9	24.7	25.6	25.0	25.9	26.2
	6H	24.7	25.5	25.1	25.9	26.3	25.3	26.1	25.7	26.4	26.8
	8H	24.9	25.6	25.3	26.0	26.4	25.6	26.3	26.0	26.7	27.1
	12H	25.0	25.7	25.4	26.1	26.5	25.9	26.5	26.3	26.9	27.3
8H	4H	24.6	25.3	25.0	25.7	26.1	24.8	25.6	25.2	25.9	26.3
	6H	25.1	25.7	25.5	26.1	26.5	25.6	26.2	26.0	26.6	27.0
	8H	25.3	25.8	25.7	26.3	26.7	26.0	26.6	26.5	27.0	27.4
	12H	25.5	25.9	25.9	26.4	26.9	26.4	26.9	26.9	27.3	27.8
12H	4H	24.6	25.3	25.0	25.6	26.0	24.8	25.5	25.2	25.9	26.3
	6H	25.1	25.7	25.6	26.1	26.6	25.6	26.2	26.1	26.6	27.1
	8H	25.4	25.9	25.9	26.3	26.8	26.1	26.6	26.6	27.0	27.5
Variations with the observer position at spacings:											
S = 1.0H	+ 0.7 / - 0.8					+ 0.6 / - 0.6					
1.5H	+ 0.5 / - 0.7					+ 0.4 / - 0.5					
2.0H	+ 1.4 / - 0.9					+ 1.2 / - 0.7					

CIE Pub.117 Corrected 8088 lm Total Lamp Luminous Flux.(8log(F/F0) = 7.3)

Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020年05月09日

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:11.000 m  
 Remarks:

UTILIZATION FACTORS TABLE

Report number:

MANUFACTURER:		
Address:		
NAME: 55W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65mm	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) $k(RI) \times RCR = 5$									
$k = 0.60$	67	57	51	67	57	51	65	57	51	46
0.80	77	67	61	76	67	61	74	66	60	55
1.00	84	75	69	83	75	69	81	76	68	62
1.25	91	82	76	89	81	76	87	80	75	69
1.50	95	87	81	93	86	81	91	84	80	73
2.00	100	93	88	99	92	87	95	90	86	79
2.50	103	97	92	101	96	91	98	93	89	82
3.00	106	100	96	104	99	95	100	96	93	85
4.00	109	104	101	107	103	99	103	99	97	88
5.00	111	107	104	109	105	102	104	102	99	90
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

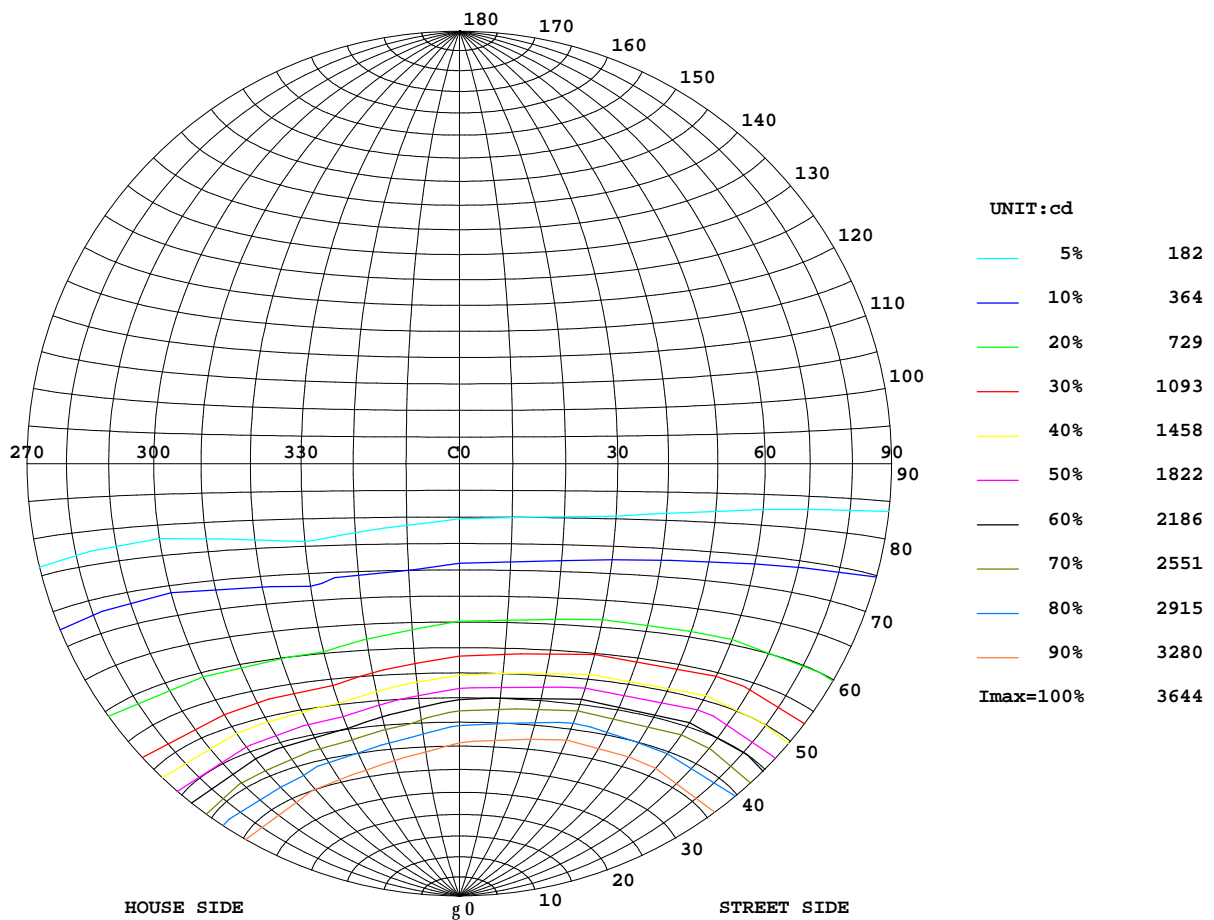
Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020年05月09日

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:11.000 m  
 Remarks:

### ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 55W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65mm	SERIAL No.:



Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2020年05月09日

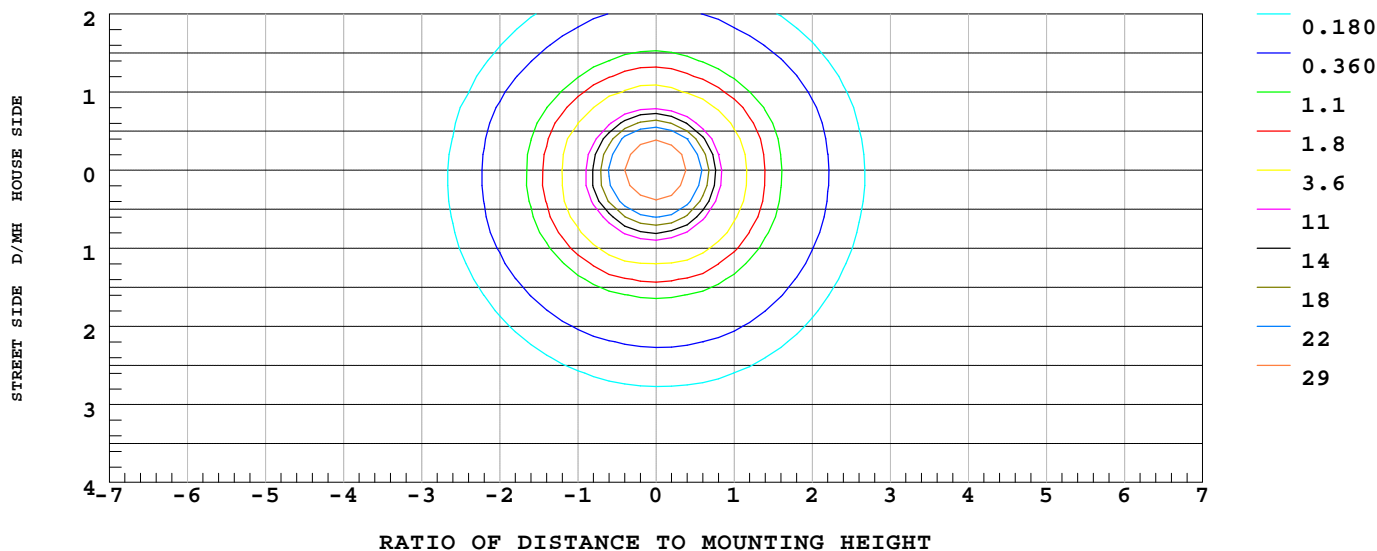
Test Set: 8.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 55W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65mm	SERIAL No.:

ILLUMINANCE AT MH=10 m, Enadir = 36.25 lx



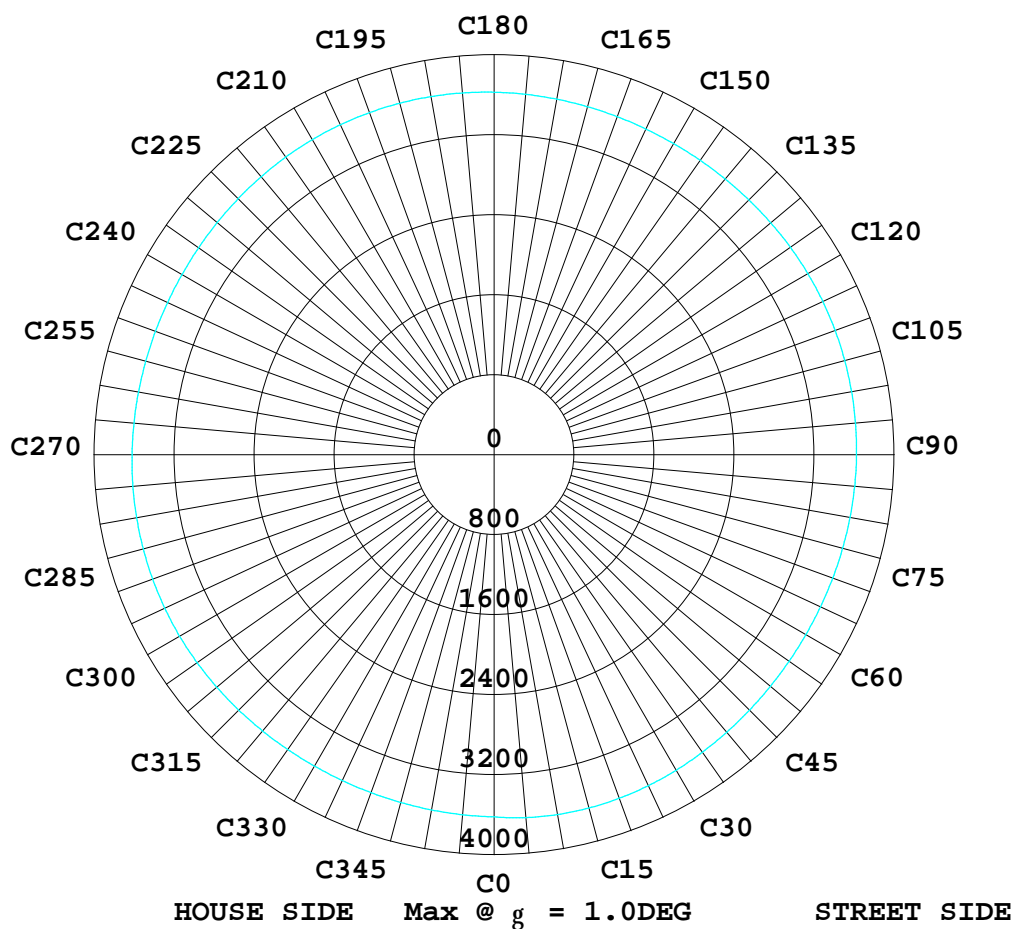
Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2020年05月09日

Test Set: 8.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 55W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65mm	SERIAL No.:



Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2020年05月09日

Test Set: 8.0deg/s    C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks: