

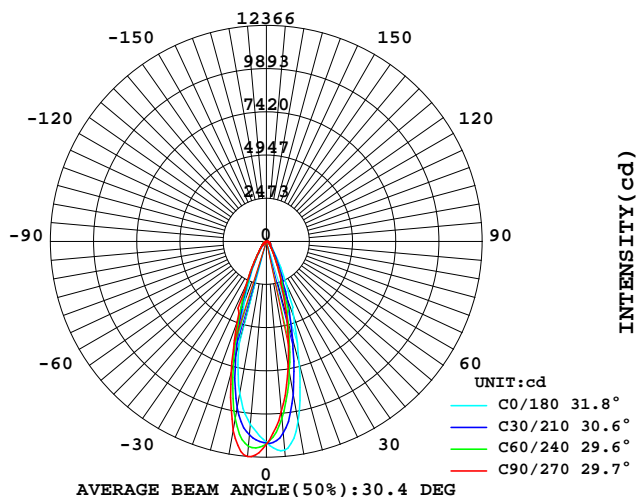
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

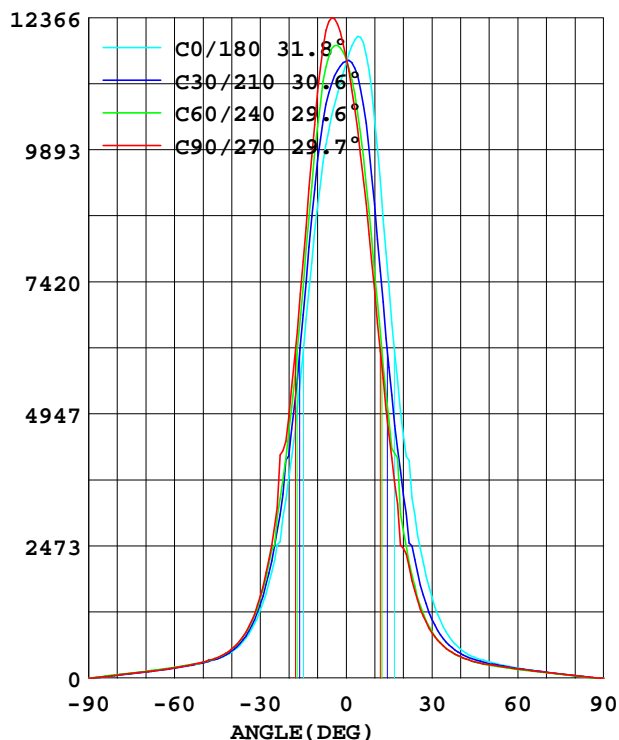
MANUFACTURER:		
Address:		
NAME: 32W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1150*65mm	SERIAL No.:

DATA OF LAMP		I <sub>max</sub> (cd)	12785	S/MH(C0/180)	0.52
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	0.61
NOMINAL POWER(W)	34	TOTAL FLUX(lm)	5098.6	Voltage(V)	218.8
RATED VOLTAGE(V)	218	EFFICIENCY(lm/W)	153.0	Current(A)	0.162
NOMINAL FLUX(lm)	5098.7	h up(%)	0.0	Power(W)	33.32
LAMPS QUANTITY	1	h down(%)	100.0	Power Factor(PF)	0.938
TEST VOLTAGE(V)	218.8	Effective Flux(lm)	3872.3	EEI	0.117

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



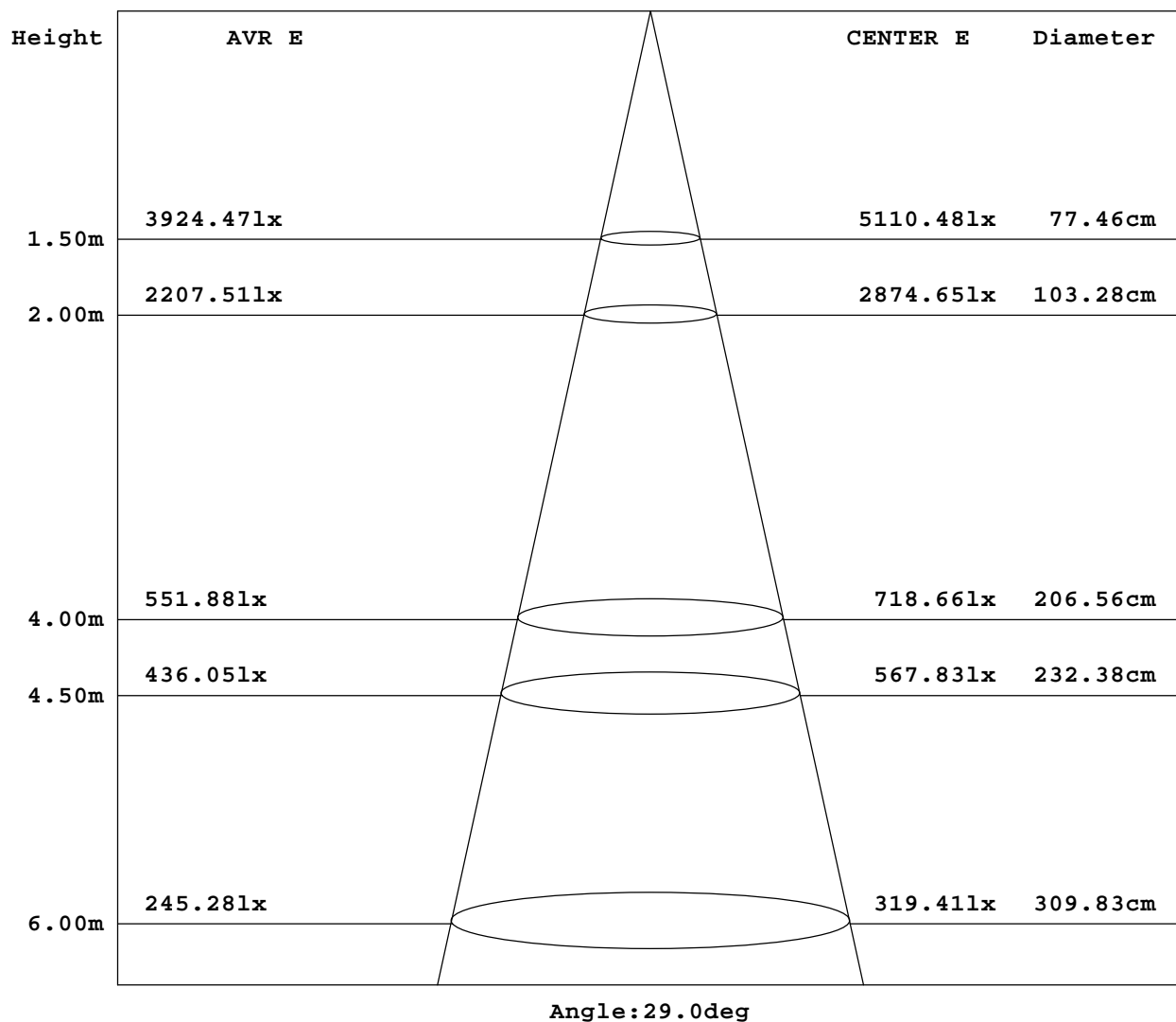
Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2019年08月07日

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: 32W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1150*65mm	SERIAL No.:



Test System: HOPOO HPG1800  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2019年08月07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: 32W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1150*65mm	SERIAL No.:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	Zone	tStal
5.0	1053	1146	1237	1273	1200	1061	979.4	993.7	0- 5	272.4	272.4
10.0	883.8	1001	1099	1166	1045	822.7	727.5	777.1	5- 10	739.1	1012
15.0	608.4	705.8	780.2	833.4	733.4	531.8	455.1	508.7	10- 15	932.1	1944
20.0	374.3	438.1	488.4	533.7	455.5	309.5	243.0	297.0	15- 20	837.5	2781
25.0	220.6	249.5	285.7	322.3	269.1	174.5	146.3	170.2	20- 25	643.4	3425
30.0	127.6	143.3	152.8	182.0	152.7	99.04	84.97	97.71	25- 30	438.9	3864
35.0	74.60	81.45	85.56	99.86	85.88	61.00	54.92	60.46	30- 35	292.0	4156
40.0	48.52	51.89	54.21	60.66	53.63	42.43	39.85	42.32	35- 40	202.7	4359
45.0	35.93	37.08	38.00	41.91	38.56	32.17	30.31	32.48	40- 45	154.7	4513
50.0	28.56	28.88	29.49	31.72	30.12	25.08	25.09	26.02	45- 50	128.2	4642
55.0	23.84	23.69	23.79	25.16	23.80	21.06	20.90	21.53	50- 55	110.3	4752
60.0	19.58	19.17	19.00	19.83	18.77	16.91	17.08	17.67	55- 60	95.26	4847
65.0	15.59	15.25	14.95	15.43	14.46	13.39	13.69	14.10	60- 65	80.08	4927
70.0	11.92	11.92	11.62	11.73	10.73	10.24	10.67	10.80	65- 70	65.19	4993
75.0	8.695	8.773	8.501	8.447	7.630	7.194	7.630	7.678	70- 75	50.19	5043
80.0	5.415	5.639	5.343	5.258	4.472	4.163	4.593	4.587	75- 80	34.67	5077
85.0	2.124	2.457	2.233	2.130	1.314	1.041	1.374	1.362	80- 85	18.21	5096
90.0	0	0	0	0	0	0	0	0	85- 90	3.070	5099
95.0	0	0	0	0	0	0	0	0	90- 95	0	5099
100.0	0	0	0	0	0	0	0	0	95-100	0	5099
105.0	0	0	0	0	0	0	0	0	100-105	0	5099
110.0	0	0	0	0	0	0	0	0	105-110	0	5099
115.0	0	0	0	0	0	0	0	0	110-115	0	5099
120.0	0	0	0	0	0	0	0	0	115-120	0	5099
125.0	0	0	0	0	0	0	0	0	120-125	0	5099
130.0	0	0	0	0	0	0	0	0	125-130	0	5099
135.0	0	0	0	0	0	0	0	0	130-135	0	5099
140.0	0	0	0	0	0	0	0	0	135-140	0	5099
145.0	0	0	0	0	0	0	0	0	140-145	0	5099
150.0	0	0	0	0	0	0	0	0	145-150	0	5099
155.0	0	0	0	0	0	0	0	0	150-155	0	5099
160.0	0	0	0	0	0	0	0	0	155-160	0	5099
165.0	0	0	0	0	0	0	0	0	160-165	0	5099
170.0	0	0	0	0	0	0	0	0	165-170	0	5099
175.0	0	0	0	0	0	0	0	0	170-175	0	5099
180.0	0	0	0	0	0	0	0	0	175-180	0	5099
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm	

Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019年08月07日

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

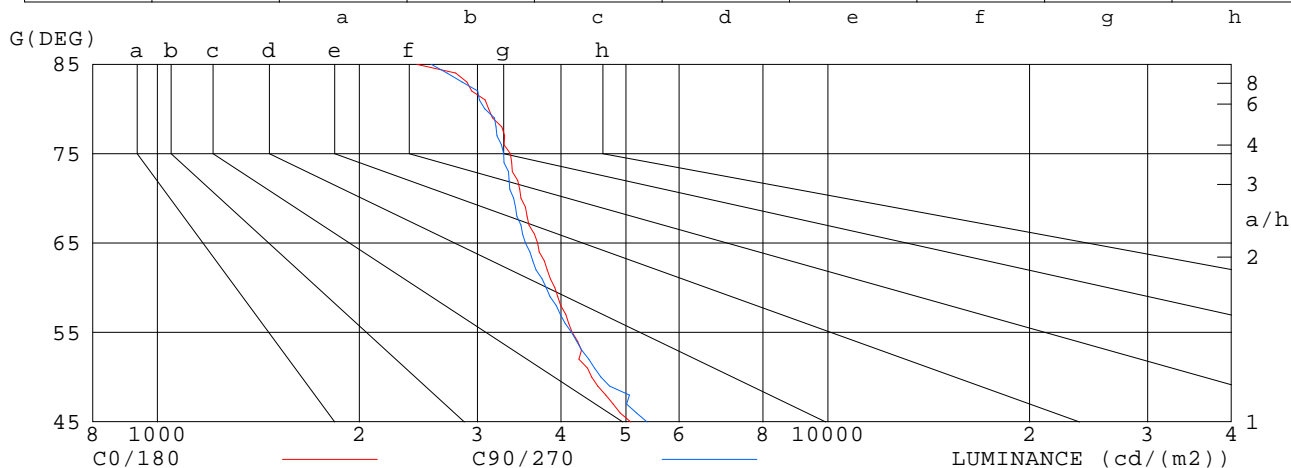
# LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:		
Address:		
NAME: 32W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1150*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	2438	2563
80	3119	3077
75	3360	3285
70	3487	3398
65	3689	3538
60	3917	3801
55	4157	4149
50	4444	4589
45	5082	5374

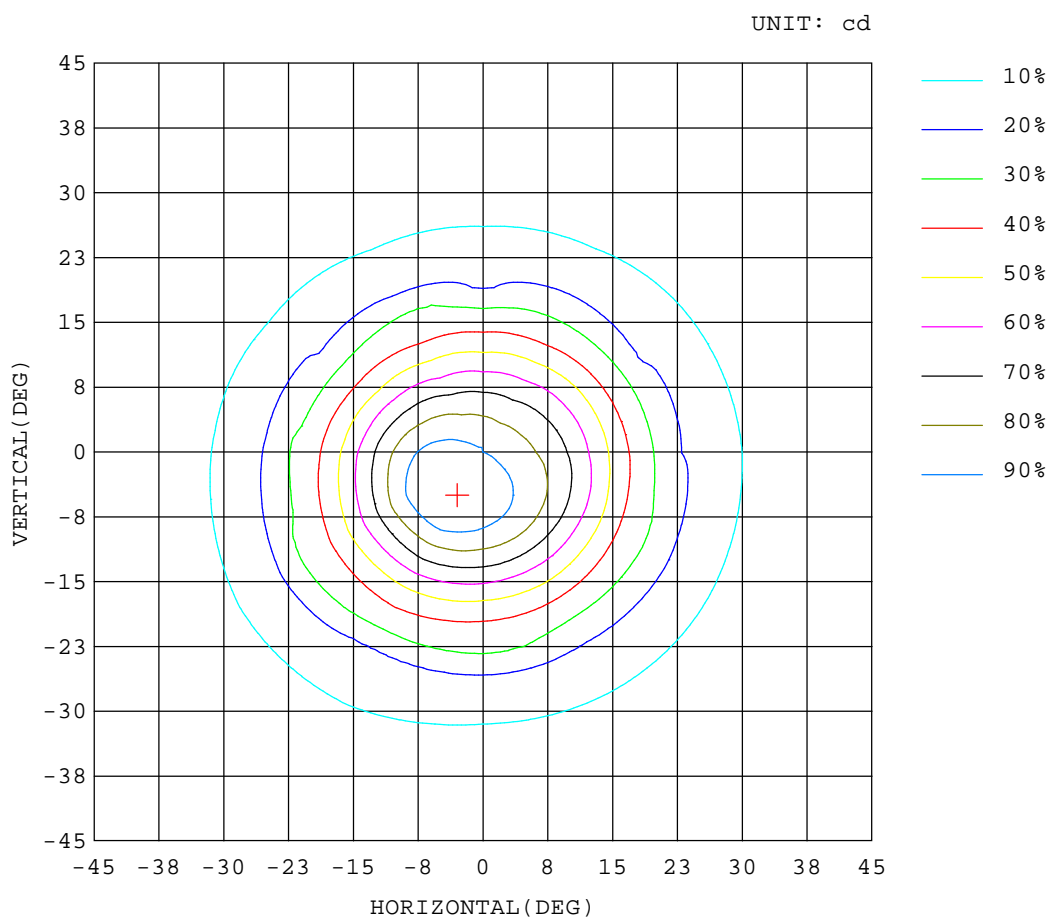
Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2019年08月07日

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: 32W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1150*65mm	SERIAL No.:



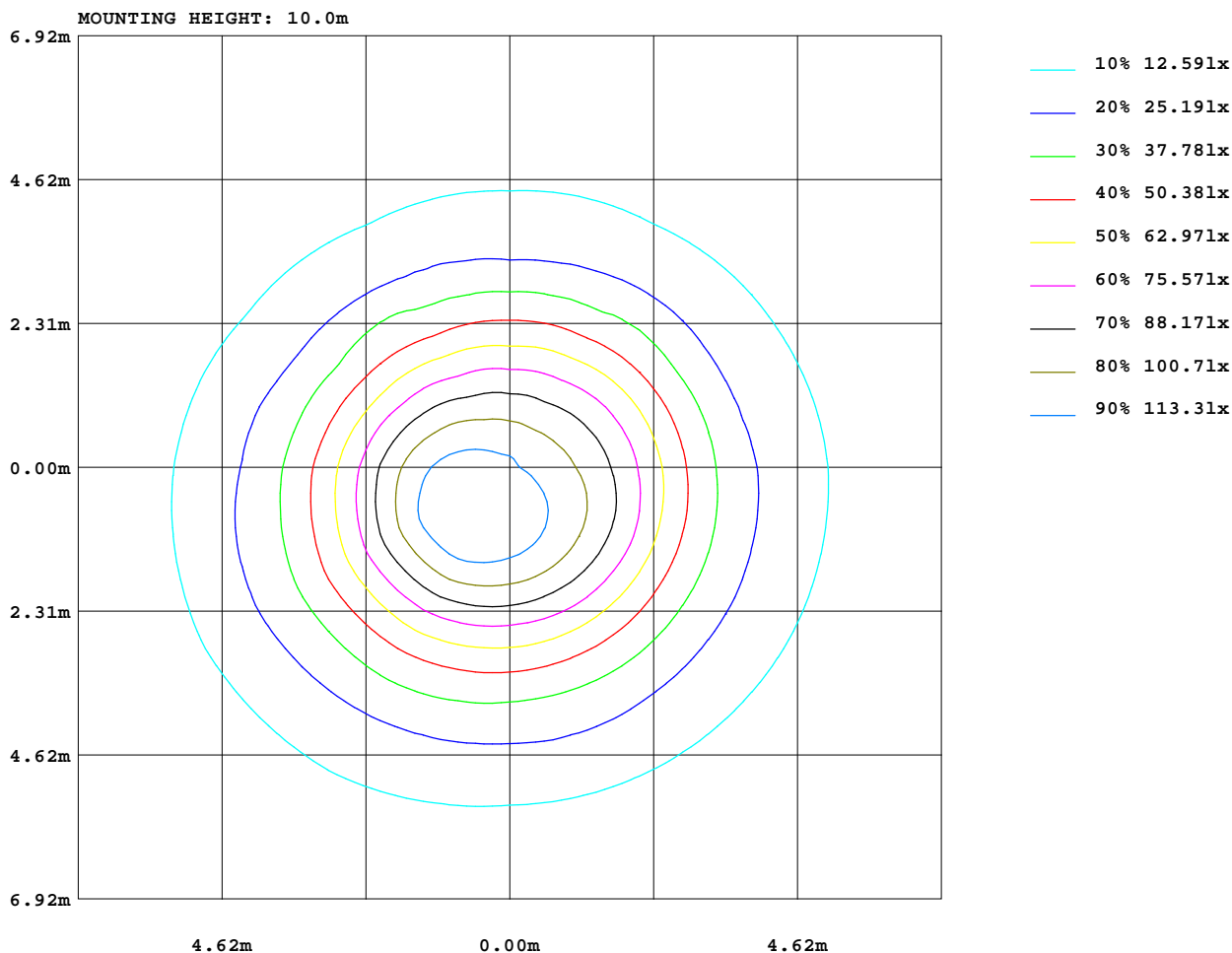
Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2019年08月07日

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: 32W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1150*65mm	SERIAL No.:



Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2019年08月07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: 32W									TYPE:						WEIGHT:		
SPECIFICATION:									DIMENSION: 1150*65mm						SERIAL No.:		

VERTICAL (DEG)	AREA FLUX DIAGRAM																		UNIT:lm			Φ t	Φ a
	1.11	1.33	1.53	1.74	1.93	2.15	2.37	2.53	2.62	2.63	2.56	2.42	2.22	1.97	1.77	1.56	1.36	1.15	35.0	0.00			
45																							
40	1.27	1.52	1.80	2.10	2.41	2.73	3.07	3.36	3.52	3.53	3.38	3.12	2.79	2.48	2.15	1.83	1.55	1.30	43.9	0.00			
35	1.42	1.76	2.15	2.61	3.11	3.65	4.29	4.85	5.17	5.18	4.88	4.34	3.70	3.13	2.62	2.17	1.78	1.45	58.3	0.00			
30	1.59	2.05	2.60	3.33	4.27	5.34	6.53	7.74	8.42	8.44	7.81	6.62	5.37	4.25	3.29	2.57	2.03	1.61	83.9	5.71			
25	1.80	2.37	3.19	4.41	6.18	8.42	10.8	13.3	14.8	14.8	13.4	10.9	8.37	6.08	4.32	3.11	2.31	1.77	131	78.6			
20	2.00	2.76	3.99	5.99	9.18	13.5	18.4	24.1	26.1	25.8	23.2	18.0	13.1	8.87	5.76	3.81	2.64	1.93	210	172			
15	2.19	3.20	5.02	8.24	13.4	20.6	31.1	38.9	44.1	43.8	38.1	29.2	19.0	12.5	7.60	4.63	2.99	2.09	327	297			
	2.37	3.64	6.12	10.8	18.7	30.2	45.2	59.0	65.0	63.7	55.8	41.8	26.7	16.1	9.54	5.46	3.32	2.22	466	440			
	2.50	3.99	7.06	13.1	23.7	39.1	60.4	78.4	83.3	79.0	69.5	52.5	33.2	19.1	11.0	6.09	3.57	2.31	589	564			
	2.55	4.14	7.49	14.1	26.2	43.2	67.9	89.5	94.4	87.6	75.9	56.7	35.4	20.5	11.5	6.27	3.63	2.33	650	627			
	2.51	4.05	7.26	13.6	25.4	41.1	63.5	84.3	91.8	85.9	72.4	52.4	33.1	19.3	10.8	5.93	3.48	2.27	620	595			
	2.40	3.75	6.52	11.9	21.8	34.4	49.5	65.0	72.0	68.6	57.1	41.3	27.3	16.2	9.24	5.25	3.20	2.15	498	473			
-15	2.23	3.34	5.48	9.52	15.8	25.0	35.0	43.7	47.8	46.0	38.9	29.2	19.6	12.2	7.30	4.40	2.85	2.00	351	322			
-20	2.05	2.89	4.39	6.92	10.9	16.0	21.6	27.3	30.2	29.0	24.5	18.5	13.1	8.59	5.49	3.59	2.48	1.84	230	195			
-25	1.85	2.48	3.44	4.94	7.16	10.1	13.1	15.1	16.1	15.6	13.9	11.1	8.30	5.88	4.11	2.92	2.17	1.65	140	93.0			
-30	1.64	2.13	2.75	3.63	4.81	6.24	7.59	8.56	8.89	8.63	7.86	6.68	5.36	4.13	3.15	2.42	1.90	1.48	87.9	10.8			
-35	1.44	1.82	2.27	2.79	3.43	4.11	4.69	5.11	5.24	5.13	4.82	4.30	3.69	3.06	2.51	2.05	1.65	1.33	59.5	0.00			
-40	1.26	1.56	1.89	2.25	2.63	2.96	3.23	3.41	3.46	3.41	3.27	3.04	2.73	2.41	2.06	1.73	1.46	1.19	44.0	0.00			
-45																							
	-45	-40	-35	-30	-25	-20	-15	-10	HORIZONTAL (DEG)				10	15	20	25	30	35	40	45			
Φ t	34.2	48.8	75.0	122	202	309	449	575	623	597	518	393	264	167	104	65.8	44.4	32.1	5099				
Φ a	0.00	0.00	7.54	74.1	162	273	415	542	592	565	485	358	225	124	48.3	0.00	0.00	0.00		3872			

Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019年08月07日

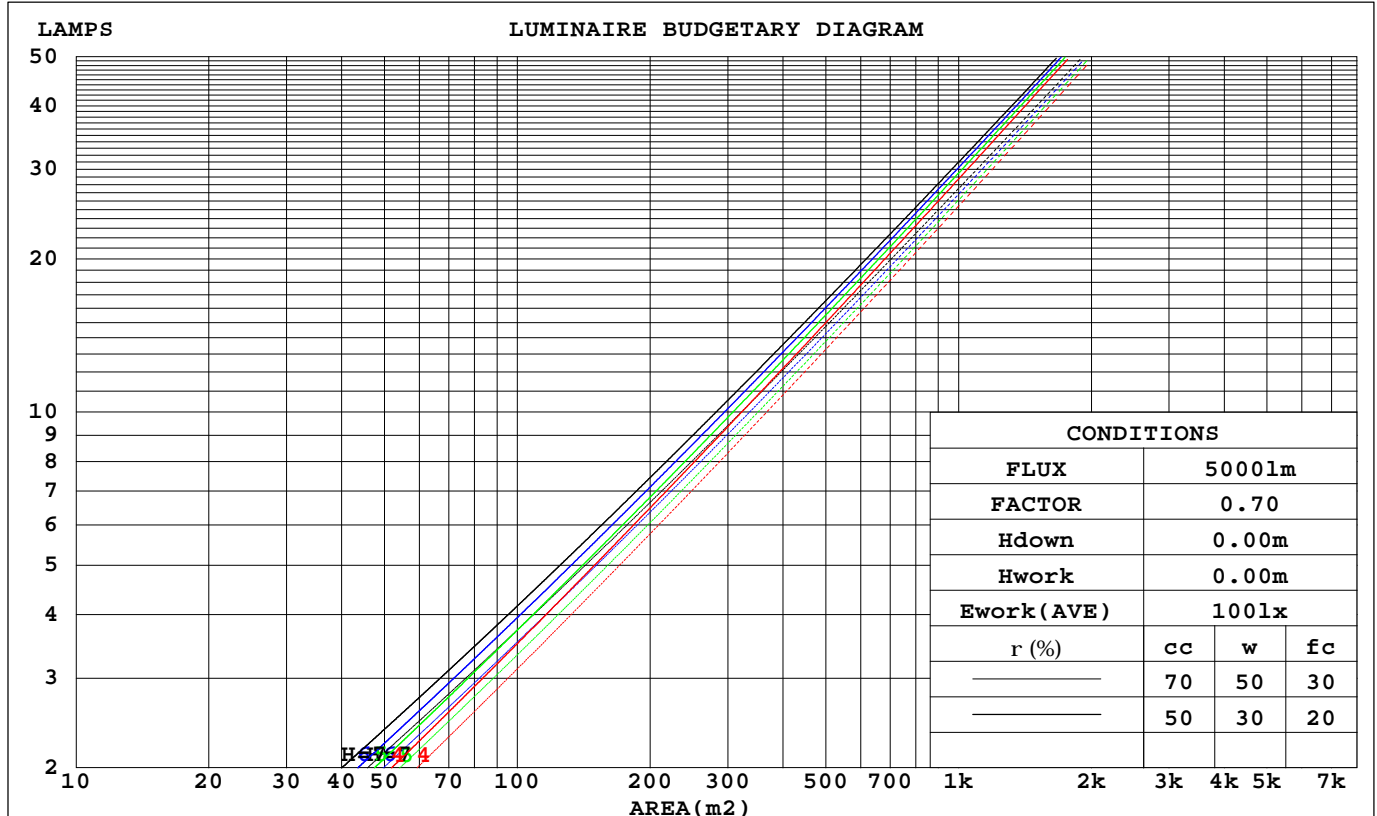
Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:11.000 m  
 Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:															
Address:															
NAME: 32W								TYPE:				WEIGHT:			
SPECIFICATION:								DIMENSION: 1150*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:2019年08月07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: 32W						TYPE:				WEIGHT:	
SPECIFICATION:						DIMENSION: 1150*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															

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.172	.157	.144	.147	.135	.124	.101	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.157	.132	.112	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.089	.123	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.133	.099	.073	.114	.085	.063	.079	.060	.044	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.106	.075	.052	.073	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.116	.078	.050	.099	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.109	.070	.043	.093	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.102	.064	.037	.088	.055	.032	.061	.039	.023	.035	.023	.014	.011	.007	.005	
9.0	.097	.058	.032	.083	.051	.028	.058	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.092	.054	.028	.079	.047	.025	.055	.033	.018	.032	.019	.010	.010	.006	.003	

Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019年08月07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: 32W					TYPE:			WEIGHT:		
SPECIFICATION:					DIMENSION: 1150*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	13.8	14.7	14.0	14.9	15.0	14.1	15.0	14.3	15.2	15.4
	15.0	15.8	15.2	16.0	16.2	15.2	16.1	15.5	16.3	16.5
	15.5	16.3	15.8	16.5	16.8	15.8	16.6	16.0	16.8	17.0
	15.9	16.7	16.2	17.0	17.2	16.2	16.9	16.5	17.2	17.4
	16.1	16.8	16.4	17.1	17.3	16.3	17.1	16.6	17.3	17.6
	16.2	16.9	16.5	17.1	17.4	16.4	17.1	16.7	17.4	17.7
4H 2H	14.3	15.1	14.5	15.3	15.5	14.5	15.3	14.8	15.6	15.8
	15.6	16.3	16.0	16.6	16.9	15.9	16.6	16.2	16.9	17.2
	16.3	16.9	16.6	17.2	17.6	16.6	17.2	16.9	17.5	17.9
	16.9	17.4	17.2	17.8	18.1	17.2	17.8	17.6	18.1	18.4
	17.0	17.6	17.4	17.9	18.3	17.4	17.9	17.8	18.3	18.6
	17.2	17.6	17.6	18.0	18.4	17.5	18.0	17.9	18.4	18.8
8H 4H	16.6	17.1	17.0	17.4	17.8	16.8	17.4	17.2	17.7	18.1
	17.2	17.7	17.7	18.1	18.5	17.6	18.0	18.0	18.4	18.9
	17.5	17.9	17.9	18.3	18.7	17.9	18.3	18.4	18.7	19.2
	17.7	18.0	18.1	18.4	18.9	18.1	18.5	18.6	18.9	19.4
12H 4H	16.6	17.1	17.0	17.4	17.8	16.8	17.3	17.2	17.7	18.1
	17.3	17.7	17.8	18.1	18.6	17.6	18.0	18.1	18.5	18.9
	17.6	17.9	18.1	18.4	18.8	18.0	18.3	18.5	18.8	19.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.4				
1.5H	+ 0.3 / - 0.2					+ 0.4 / - 0.3				
2.0H	+ 0.3 / - 0.2					+ 0.3 / - 0.4				

CIE Pub.117 Corrected 5099 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.7)

Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019年08月07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: 32W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1150*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) $k(RI) \times RCR = 5$									
$k = 0.60$	83	75	71	82	75	71	81	75	71	67
0.80	90	84	79	90	83	79	88	83	79	75
1.00	95	89	85	94	88	84	93	88	84	79
1.25	100	94	90	99	93	89	97	92	88	84
1.50	103	97	93	102	97	93	99	95	92	87
2.00	106	101	98	105	100	97	102	98	95	90
2.50	108	104	100	107	103	99	103	100	98	91
3.00	110	106	103	108	105	102	105	102	100	93
4.00	113	109	107	110	108	105	107	104	103	95
5.00	114	111	109	112	109	107	108	106	104	97
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

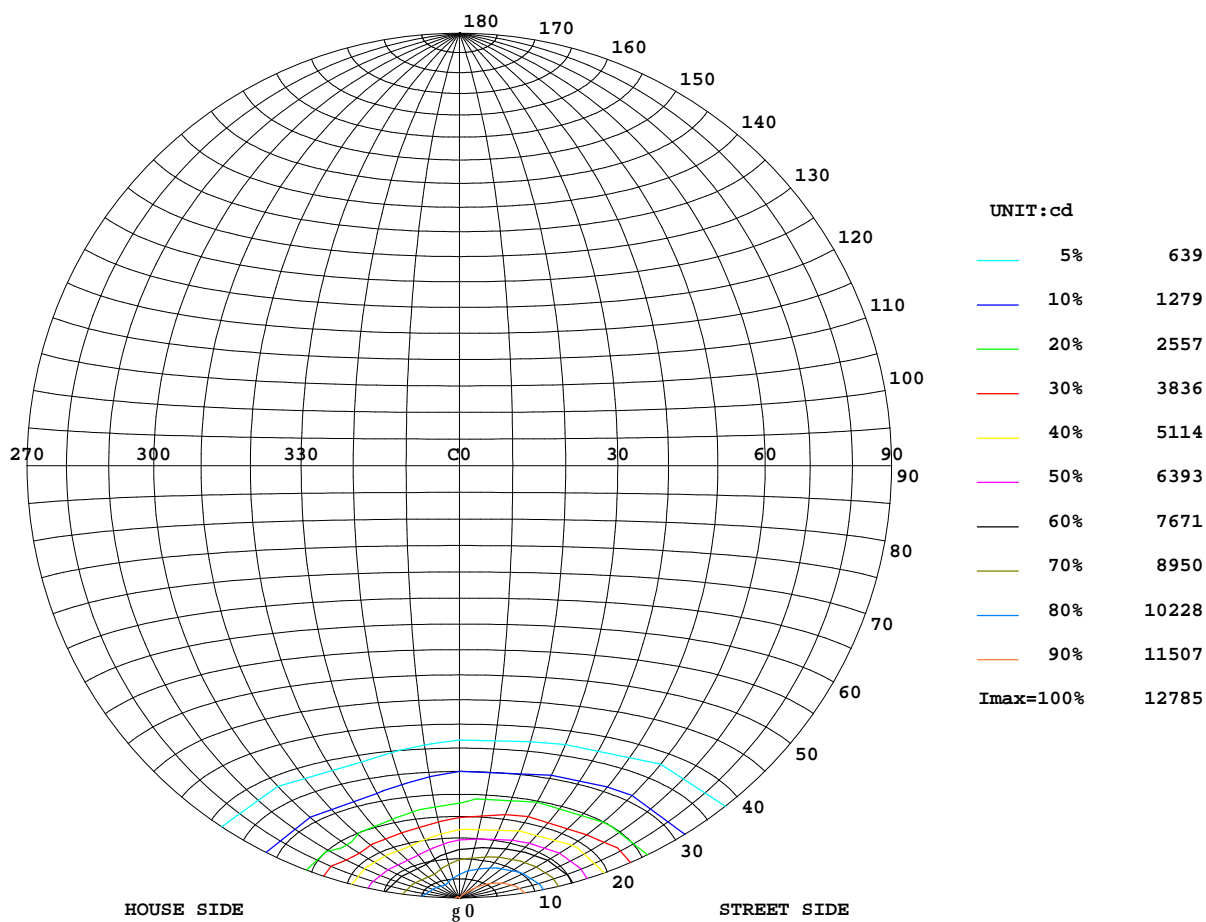
Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019年08月07日

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: 32W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1150*65mm	SERIAL No.:



Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2019年08月07日

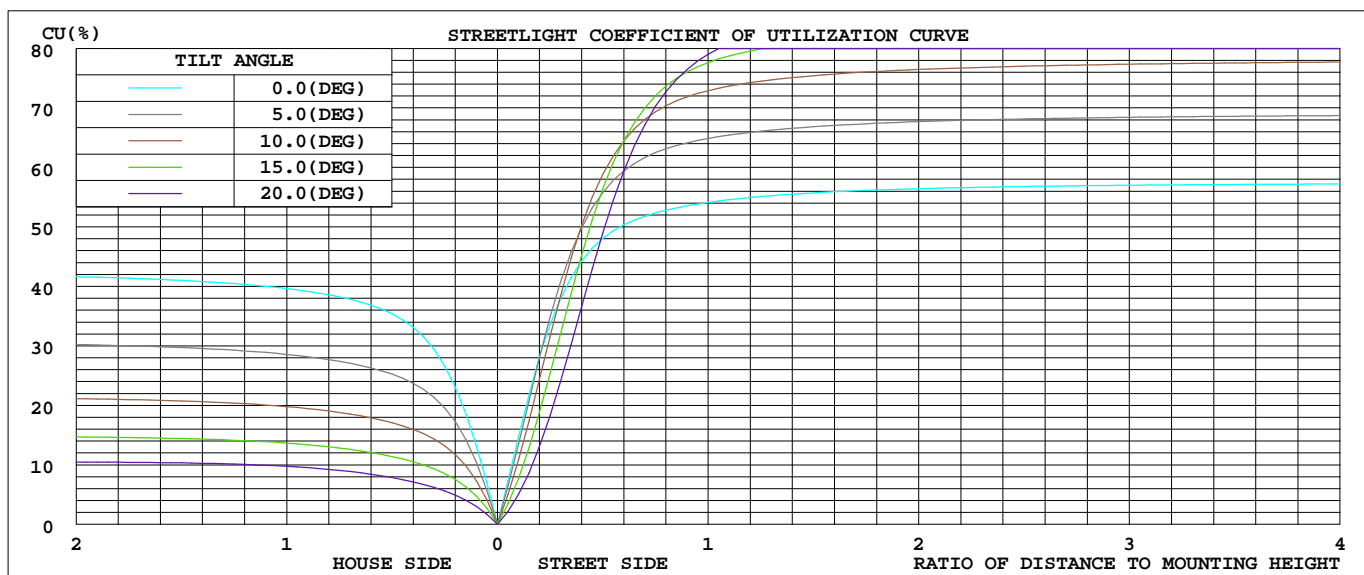
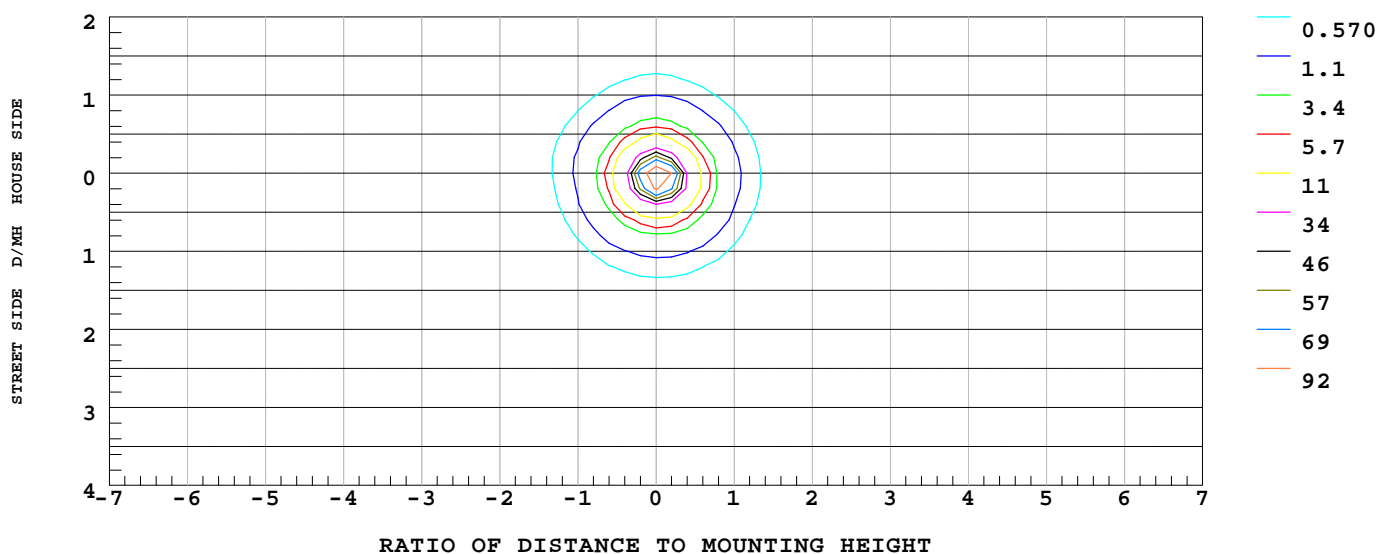
Test Set: 8.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:11.000 m  
Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 32W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1150*65mm	SERIAL No.:

ILLUMINANCE AT MH=10 m, Enadir = 114.99 lx



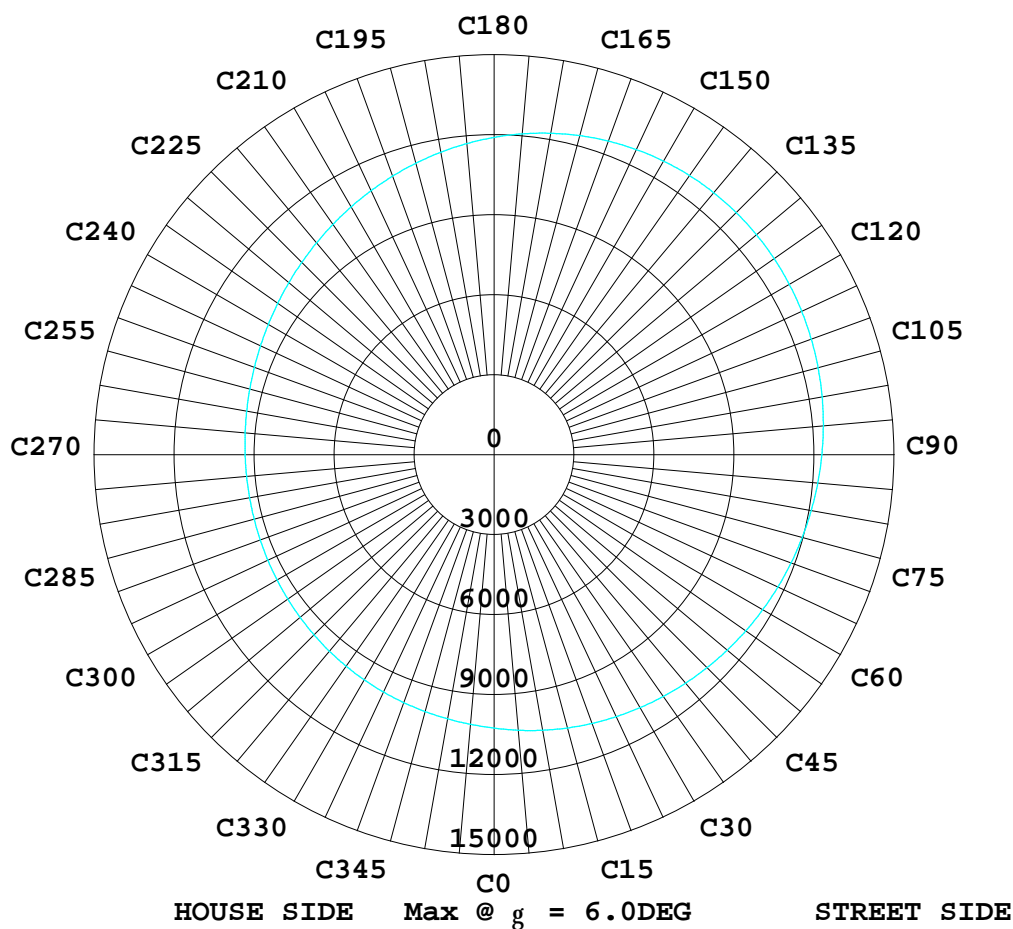
Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2019年08月07日

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: 32W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1150*65mm	SERIAL No.:



Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:2019年08月07日

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