

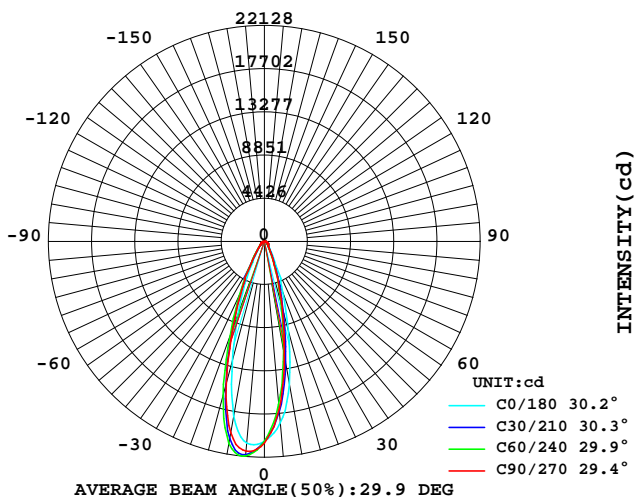
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

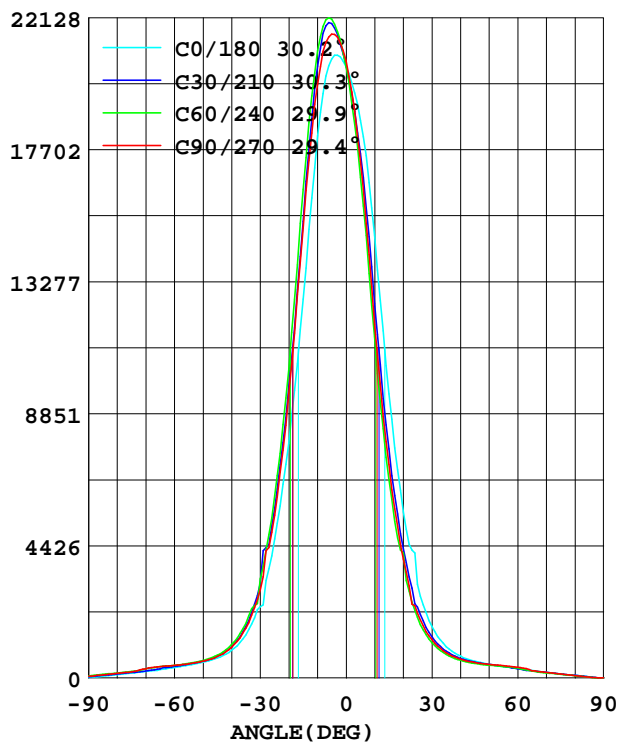
MANUFACTURER:		
Address:		
NAME: 30°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:

DATA OF LAMP		I _{max} (cd)	22128	S/MH(C0/180)	0.57
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	0.61
NOMINAL POWER(W)	64	TOTAL FLUX(lm)	8916.3	Voltage(V)	218.6
RATED VOLTAGE(V)	218	EFFICIENCY(lm/W)	138.5	Current(A)	0.303
NOMINAL FLUX(lm)	8916.4	h up(%)	0.1	Power(W)	64.37
LAMPS QUANTITY	1	h down(%)	99.9	Power Factor(PF)	0.972
TEST VOLTAGE(V)	218.6	Effective Flux(lm)	6660.1	EEI	0.132

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



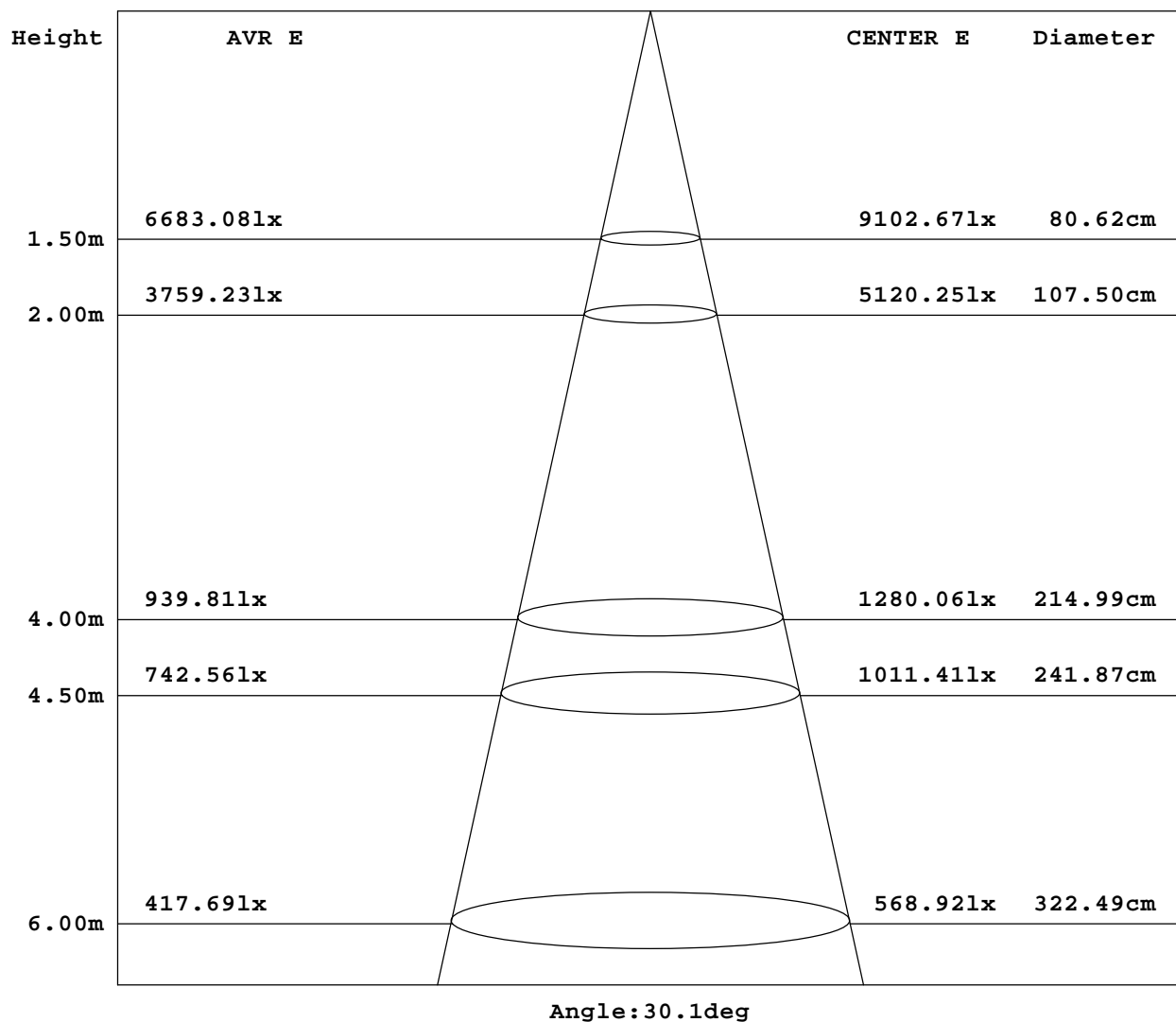
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

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: 30°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:



Test System: HOPOO HPG1800
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019年08月10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: 30°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	Zone	tStal
5.0	2073	2200	2157	2044	1868	1717	1731	1949	0- 5	483.1	483.1
10.0	1817	2076	1989	1762	1484	1198	1185	1539	5- 10	1293	1776
15.0	1269	1584	1508	1231	952.4	715.9	715.0	1003	10- 15	1623	3398
20.0	786.9	1004	954.1	733.4	555.7	426.2	398.1	592.2	15- 20	1455	4853
25.0	465.7	589.6	545.0	440.0	313.3	220.2	216.9	333.2	20- 25	1093	5946
30.0	239.1	324.5	295.9	222.3	173.1	129.0	128.8	187.3	25- 30	738.9	6685
35.0	144.1	178.1	167.2	131.3	104.8	84.17	84.63	111.7	30- 35	482.2	7167
40.0	92.60	108.0	102.1	85.87	73.20	62.40	62.84	75.94	35- 40	339.6	7506
45.0	66.78	74.70	72.03	63.25	56.09	50.93	52.09	58.12	40- 45	262.9	7769
50.0	52.64	57.42	56.13	50.70	45.91	44.08	45.57	47.86	45- 50	223.5	7993
55.0	43.14	47.77	47.24	42.93	38.27	38.72	41.30	40.95	50- 55	200.5	8194
60.0	35.09	40.85	42.10	37.11	31.37	32.35	36.23	34.58	55- 60	181.7	8375
65.0	27.99	34.18	37.90	30.64	24.92	23.38	23.96	25.85	60- 65	158.6	8534
70.0	21.71	27.15	31.10	22.62	18.95	17.69	18.35	19.86	65- 70	128.7	8663
75.0	16.24	20.24	20.91	17.60	13.60	12.94	13.63	14.90	70- 75	99.55	8762
80.0	11.09	15.10	15.33	12.73	8.646	8.041	8.453	10.23	75- 80	73.68	8836
85.0	6.275	10.53	10.48	8.168	3.806	2.856	2.717	5.246	80- 85	48.33	8884
90.0	1.386	5.676	5.379	3.189	0	0.171	0.649	0.975	85- 90	22.84	8907
95.0	0	1.265	0.806	0.766	0	0	0.419	0.134	90- 95	6.314	8913
100.0	0	0.572	0.576	0.433	0	0	0.225	0	95-100	1.795	8915
105.0	0	0.306	0.128	0.252	0	0	0	0	100-105	0.910	8916
110.0	0	0.100	0.068	0	0	0	0	0	105-110	0.295	8916
115.0	0	0.004	0	0	0	0	0	0	110-115	0.030	8916
120.0	0	0	0	0	0	0	0	0	115-120	0.000	8916
125.0	0	0	0	0	0	0	0	0	120-125	0	8916
130.0	0	0	0	0	0	0	0	0	125-130	0	8916
135.0	0	0	0	0	0	0	0	0	130-135	0	8916
140.0	0	0	0	0	0	0	0	0	135-140	0	8916
145.0	0	0	0	0	0	0	0	0	140-145	0	8916
150.0	0	0	0	0	0	0	0	0	145-150	0	8916
155.0	0	0	0	0	0	0	0	0	150-155	0	8916
160.0	0	0	0	0	0	0	0	0	155-160	0	8916
165.0	0	0	0	0	0	0	0	0	160-165	0	8916
170.0	0	0	0	0	0	0	0	0	165-170	0	8916
175.0	0	0	0	0	0	0	0	0	170-175	0	8916
180.0	0	0	0	0	0	0	0	0	175-180	0	8916
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm	

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月10日

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

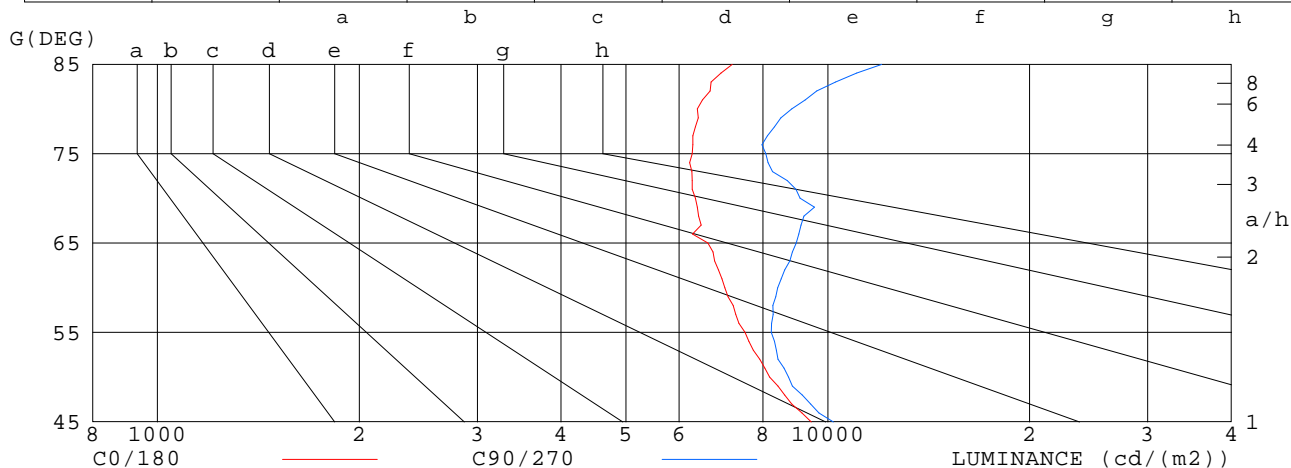
LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:		
Address:		
NAME: 30°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	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	7200	12031
80	6387	8833
75	6277	8081
70	6349	9094
65	6624	8969
60	7019	8421
55	7522	8237
50	8190	8734
45	9445	10188

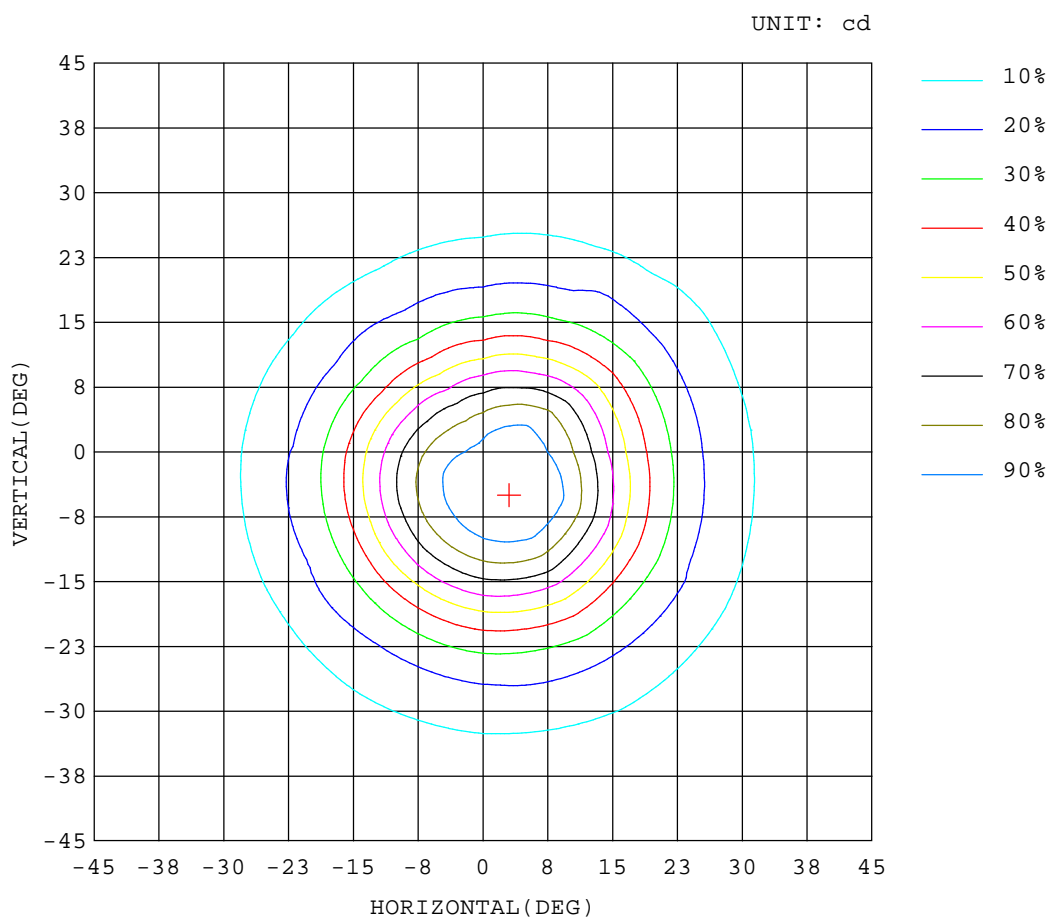
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

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: 30°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:



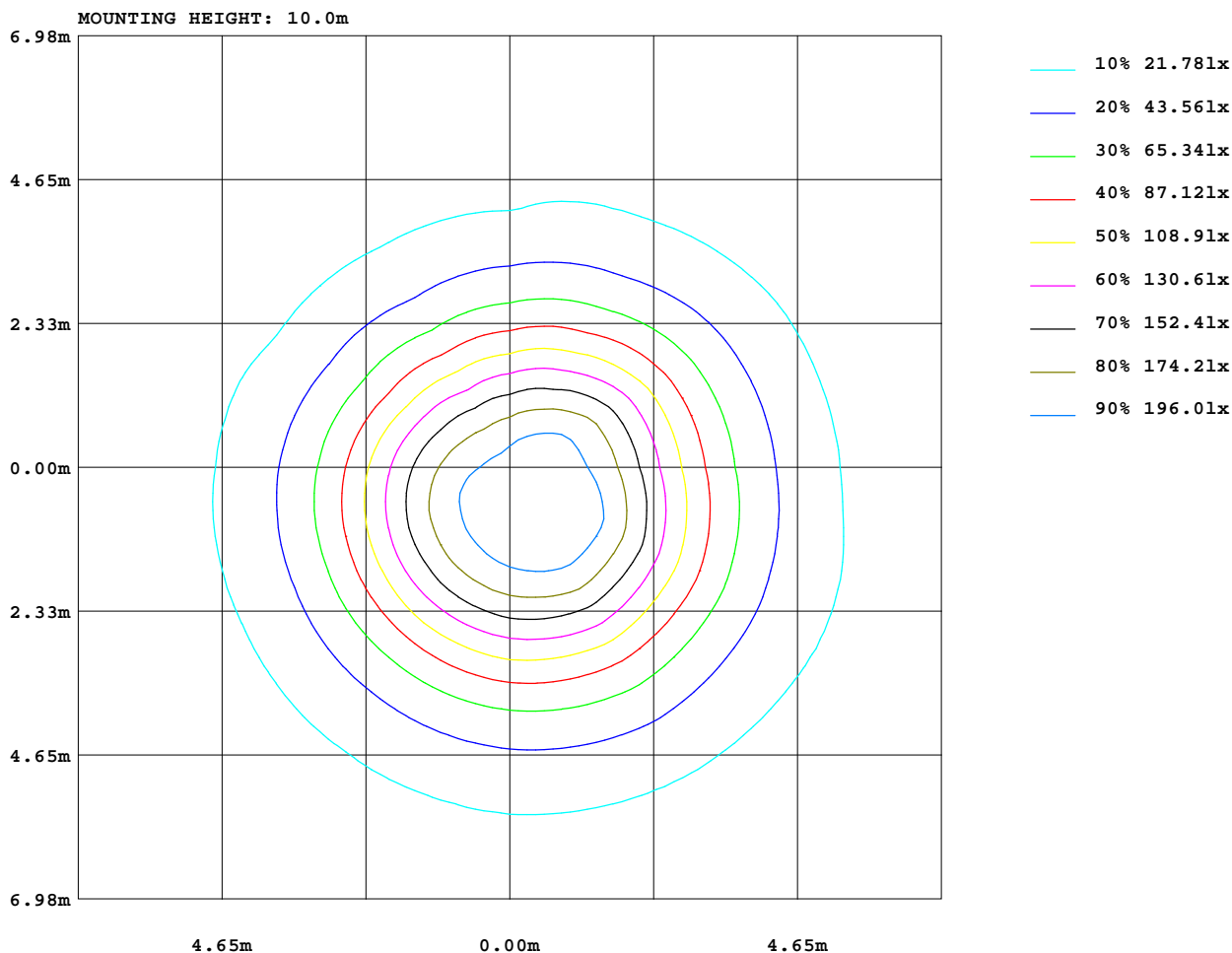
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

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: 30°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10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: 30°64W										TYPE:					WEIGHT:				
SPECIFICATION:										DIMENSION: 576*188mm					SERIAL No.:				

VERTICAL (DEG)	AREA FLUX DIAGRAM																		UNIT:lm			Φ t	Φ a
	2.00	2.39	2.71	3.00	3.26	3.55	3.86	4.11	4.28	4.35	4.29	4.12	3.85	3.54	3.24	2.91	2.55	2.16	60.2	0.00			
45																							
40	2.23	2.62	2.99	3.37	3.75	4.18	4.69	5.14	5.44	5.58	5.51	5.21	4.74	4.27	3.80	3.32	2.86	2.41	72.2	0.00			
35	2.43	2.87	3.36	3.92	4.57	5.29	6.21	7.11	7.74	8.05	7.93	7.31	6.40	5.53	4.66	3.89	3.23	2.66	93.2	0.00			
30	2.61	3.16	3.84	4.74	5.91	7.31	9.04	11.0	12.4	13.1	12.9	11.4	9.62	7.76	6.05	4.70	3.70	2.94	132	0.00			
25	2.81	3.51	4.50	5.97	8.11	10.9	14.3	18.4	21.5	23.4	23.6	20.0	15.6	11.6	8.25	5.85	4.27	3.24	206	109			
20	3.01	3.93	5.36	7.69	11.4	16.9	24.8	33.0	39.5	42.8	41.0	35.6	26.5	17.5	11.5	7.34	4.94	3.55	337	269			
15	3.22	4.39	6.42	10.0	16.1	26.3	40.1	54.0	67.4	74.1	70.1	57.6	41.4	26.0	15.1	9.08	5.66	3.87	531	477			
	3.40	4.83	7.51	12.7	22.8	38.1	60.0	85.1	105	116	110	86.6	57.5	34.7	18.9	10.8	6.35	4.14	786	737			
	3.54	5.17	8.41	15.0	29.1	49.7	81.8	116	139	151	142	109	70.0	41.4	22.0	12.0	6.84	4.33	1006	962			
	3.59	5.31	8.79	16.1	31.7	55.3	93.0	133	156	164	155	120	76.6	44.6	23.7	12.6	7.05	4.41	1112	1068			
	3.55	5.21	8.52	15.4	30.1	52.1	87.9	127	153	162	152	117	74.4	43.2	23.6	12.3	6.92	4.36	1079	1035			
-15	3.43	4.91	7.76	13.4	25.3	42.9	70.5	103	128	136	125	94.1	62.0	37.3	21.4	11.1	6.45	4.18	897	851			
-20	3.24	4.49	6.72	10.9	18.6	32.2	49.5	70.3	87.6	93.3	85.4	66.2	45.0	29.5	16.4	9.39	5.78	3.91	639	587			
-25	3.03	4.03	5.67	8.58	13.4	20.8	31.8	43.3	52.6	55.7	51.6	42.1	30.2	19.1	12.0	7.59	5.04	3.59	411	349			
-30	2.80	3.60	4.79	6.67	9.59	13.7	18.7	25.1	30.3	32.0	29.5	23.9	17.7	12.8	8.74	6.04	4.36	3.27	254	176			
-35	2.58	3.23	4.07	5.26	6.93	9.13	11.7	14.4	16.5	17.0	15.9	14.1	11.5	8.71	6.48	4.88	3.77	2.97	160	34.1			
-40	2.37	2.90	3.52	4.29	5.25	6.39	7.64	8.83	9.72	10.0	9.64	8.74	7.56	6.22	5.02	4.06	3.31	2.71	108	0.00			
-45	2.18	2.63	3.10	3.63	4.21	4.83	5.45	6.00	6.39	6.52	6.36	5.97	5.41	4.77	4.09	3.48	2.95	2.46	80.5	0.00			
	-45	-40	-35	-30	-25	-20	-15	-10	HORIZONTAL (DEG)				10	15	20	25	30	35	40	45			
Φ t	52.1	69.2	98.1	151	251	400	622	866	1042	1116	1049	829	567	359	215	132	86.1	61.2	8916				
Φ a	0.00	0.00	0.00	35.6	168	330	558	808	987	1062	994	772	506	291	132	9.86	0.00	0.00		6660			

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月10日

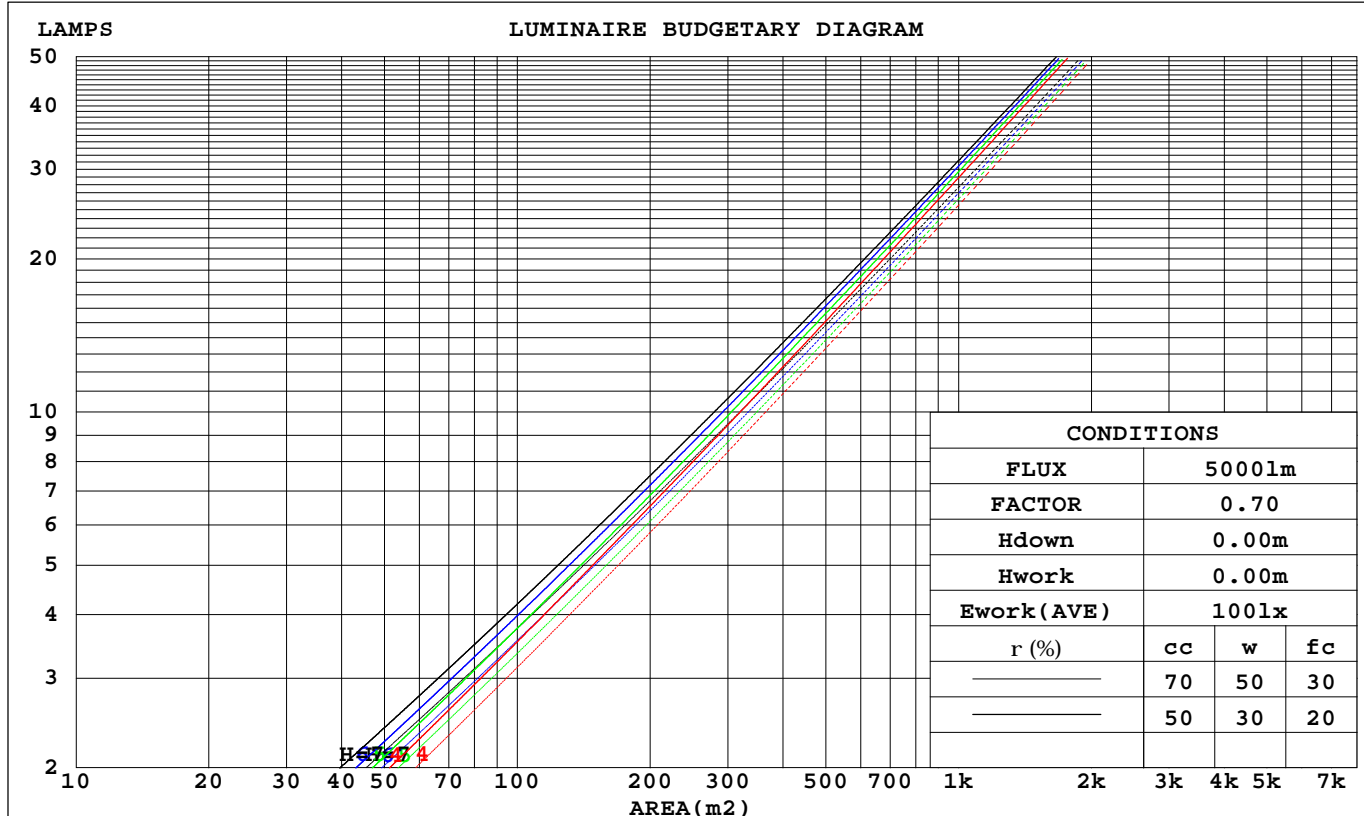
Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:															
Address:															
NAME: 30°64W								TYPE:				WEIGHT:			
SPECIFICATION:								DIMENSION: 576*188mm				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10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: 30°64W						TYPE:			WEIGHT:		
SPECIFICATION:						DIMENSION: 576*188mm			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	.193	.110	.035	.186	.106	.034	.173	.099	.032	.161	.093	.030	.151	.087	.028															
2.0	.179	.098	.030	.174	.096	.029	.163	.091	.028	.153	.086	.027	.144	.081	.026															
3.0	.167	.089	.027	.162	.087	.026	.153	.083	.025	.144	.079	.024	.136	.076	.023															
4.0	.156	.081	.024	.151	.079	.023	.144	.076	.023	.136	.073	.022	.129	.070	.021															
5.0	.146	.074	.022	.142	.073	.021	.135	.070	.021	.129	.068	.020	.123	.066	.020															
6.0	.137	.069	.020	.134	.068	.019	.128	.066	.019	.122	.064	.019	.117	.062	.018															
7.0	.129	.064	.018	.127	.063	.018	.121	.061	.018	.116	.060	.017	.112	.058	.017															
8.0	.122	.060	.017	.120	.059	.017	.115	.058	.016	.111	.056	.016	.107	.055	.016															
9.0	.116	.056	.016	.114	.056	.016	.110	.054	.015	.106	.053	.015	.102	.052	.015															
10.0	.111	.053	.015	.109	.053	.015	.105	.051	.014	.102	.050	.014	.098	.049	.014															

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	.112	.112	.112	.064	.064	.064	.020	.020	.020	
1.0	.173	.158	.144	.148	.136	.124	.101	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.158	.133	.112	.135	.115	.097	.093	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.145	.114	.090	.125	.099	.078	.086	.069	.055	.049	.040	.032	.016	.013	.011	
4.0	.135	.100	.073	.116	.086	.063	.079	.060	.045	.046	.035	.026	.015	.011	.009	
5.0	.125	.088	.061	.108	.076	.053	.074	.053	.037	.043	.031	.022	.014	.010	.007	
6.0	.117	.079	.051	.101	.068	.044	.069	.048	.031	.040	.028	.019	.013	.009	.006	
7.0	.110	.071	.044	.095	.061	.038	.065	.043	.027	.038	.025	.016	.012	.008	.005	
8.0	.104	.065	.038	.089	.056	.033	.062	.039	.023	.036	.023	.014	.012	.008	.005	
9.0	.098	.059	.033	.085	.051	.029	.059	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.093	.055	.029	.080	.047	.025	.056	.033	.018	.032	.020	.011	.011	.006	.004	

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月10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: 30°64W					TYPE:			WEIGHT:			
SPECIFICATION:					DIMENSION: 576*188mm			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	16.6	17.6	16.9	17.7	17.9	17.3	18.2	17.5	18.4	18.6	
	3H	17.7	18.6	18.0	18.8	19.0	18.9	19.8	19.2	20.0	20.2
	4H	18.2	19.1	18.5	19.3	19.5	19.5	20.3	19.8	20.6	20.8
	6H	18.7	19.5	19.0	19.7	20.0	20.1	20.9	20.4	21.1	21.4
	8H	18.9	19.7	19.3	19.9	20.2	20.4	21.1	20.7	21.4	21.7
	12H	19.1	19.8	19.4	20.1	20.4	20.7	21.4	21.0	21.7	22.0
4H 2H	17.2	18.1	17.5	18.3	18.5	17.8	18.6	18.1	18.8	19.1	
	3H	18.5	19.3	18.9	19.5	19.8	19.6	20.3	19.9	20.6	20.9
	4H	19.2	19.9	19.6	20.2	20.5	20.4	21.1	20.7	21.4	21.7
	6H	19.9	20.4	20.2	20.8	21.1	21.2	21.7	21.5	22.1	22.4
	8H	20.1	20.7	20.5	21.0	21.4	21.6	22.1	22.0	22.5	22.8
	12H	20.4	20.9	20.8	21.3	21.7	22.0	22.5	22.4	22.8	23.2
8H 4H	19.6	20.2	20.0	20.5	20.9	20.7	21.2	21.0	21.6	21.9	
	6H	20.5	20.9	20.9	21.3	21.7	21.7	22.1	22.1	22.5	22.9
	8H	20.9	21.3	21.3	21.7	22.2	22.2	22.6	22.7	23.0	23.5
	12H	21.3	21.6	21.7	22.1	22.5	22.8	23.2	23.3	23.6	24.1
12H 4H	19.7	20.2	20.1	20.6	21.0	20.7	21.2	21.1	21.5	21.9	
	6H	20.6	21.0	21.1	21.5	21.9	21.7	22.1	22.2	22.6	23.0
	8H	21.1	21.5	21.6	21.9	22.4	22.4	22.7	22.9	23.2	23.7
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.3					+ 0.2 / - 0.3					
1.5H	+ 0.3 / - 0.2					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					

CIE Pub.117 Corrected 8916 lm Total Lamp Luminous Flux.(8log(F/F0) = 7.6)

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月10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: 30°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	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) $k(RI) \times RCR = 5$									
$k = 0.60$	82	75	70	81	74	70	80	74	70	66
0.80	90	83	78	89	82	78	88	82	78	73
1.00	95	88	84	94	87	83	92	88	83	78
1.25	99	93	89	98	92	88	96	91	87	83
1.50	102	96	92	101	96	92	99	94	91	86
2.00	106	101	97	104	99	96	101	97	94	89
2.50	108	103	99	106	102	99	103	99	97	90
3.00	110	106	102	108	104	101	104	101	99	92
4.00	112	109	106	110	107	105	106	104	102	94
5.00	114	111	109	111	109	107	107	105	104	96
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

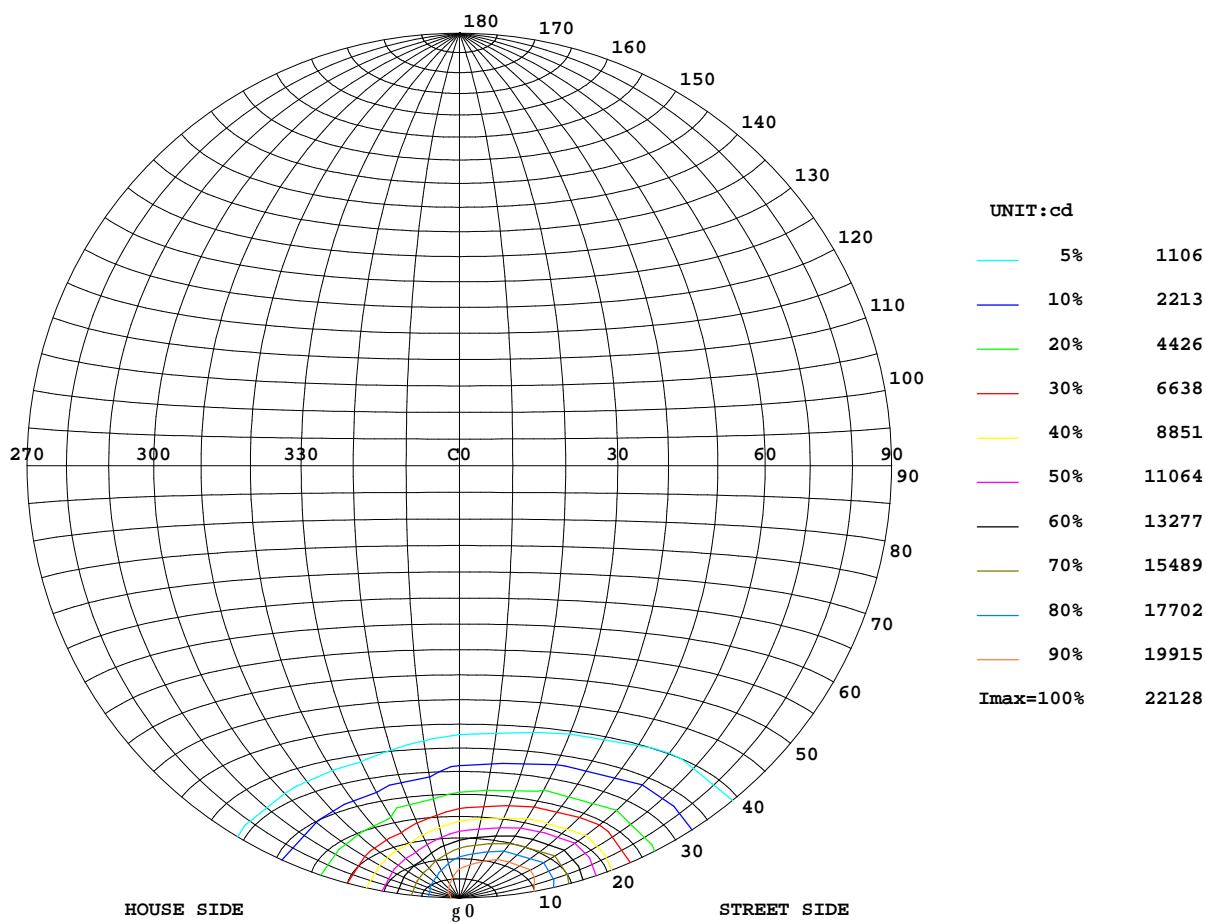
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月10日

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: 30°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

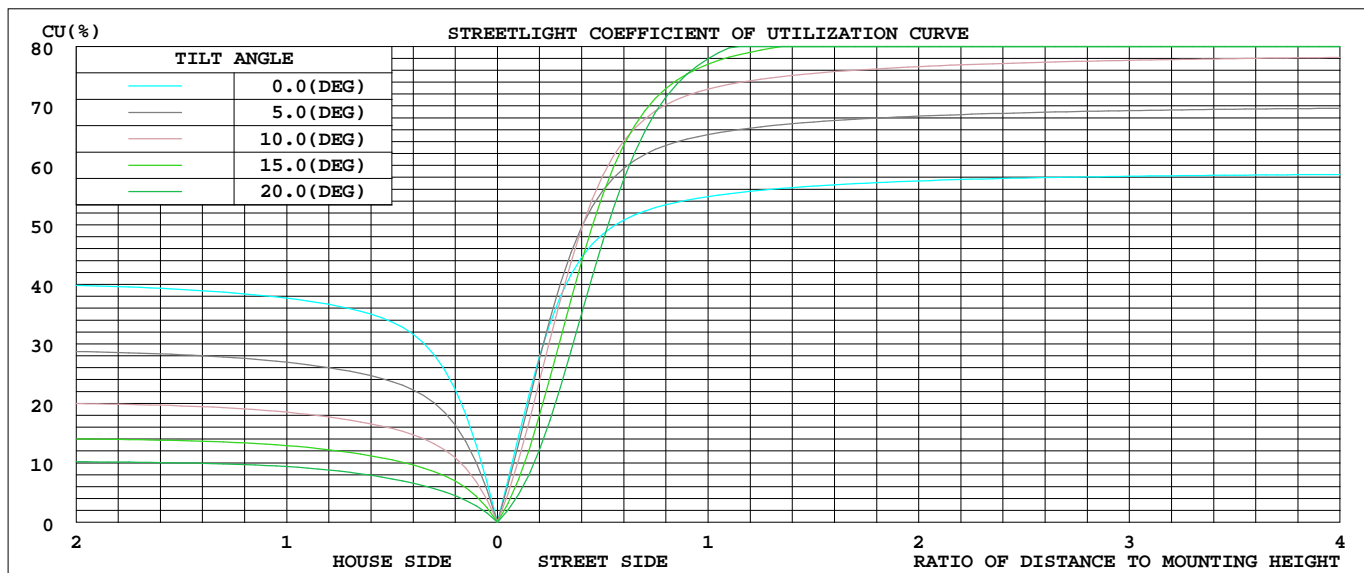
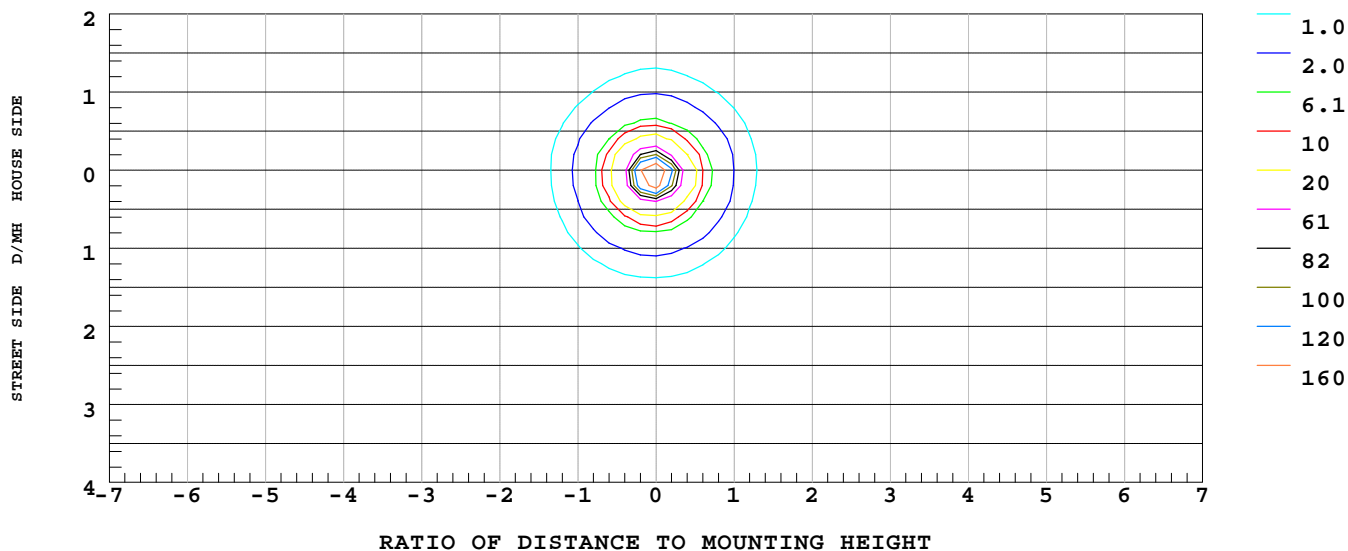
Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 30°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:

ILLUMINANCE AT MH=10 m, Enadir = 204.81 lx



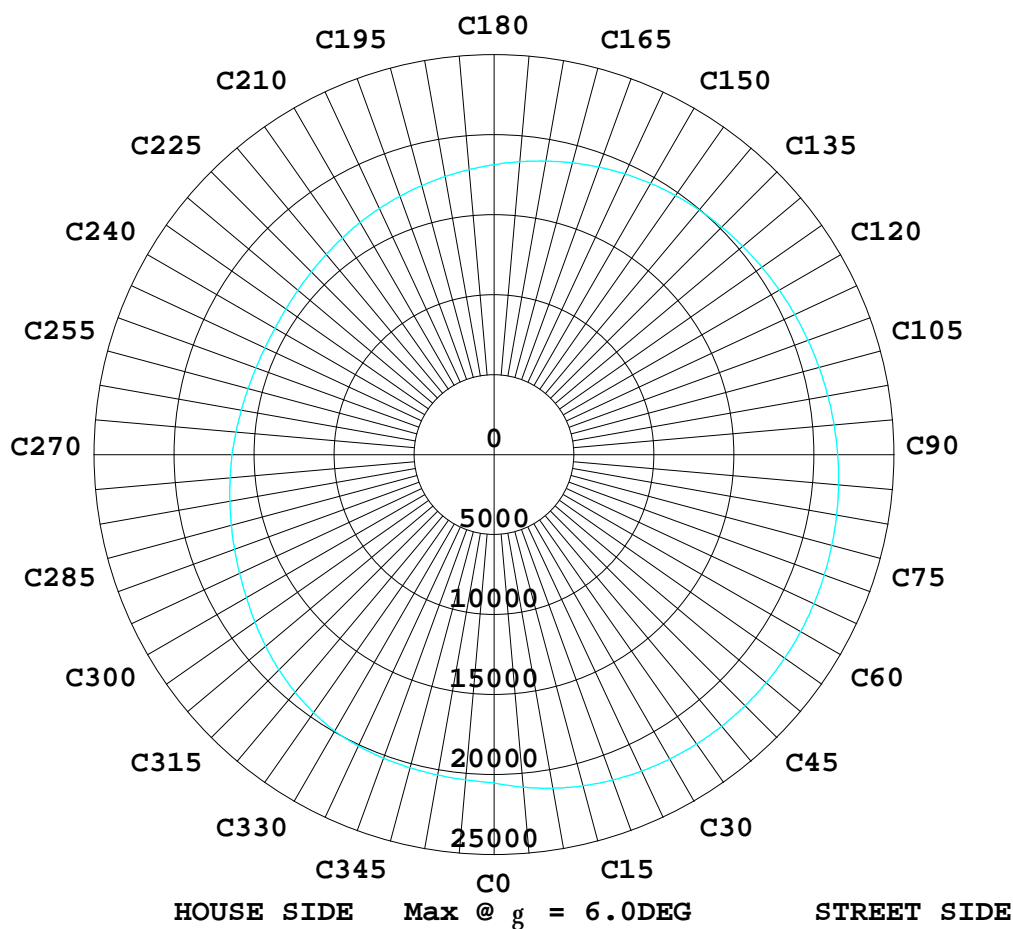
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

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: 30°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

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