

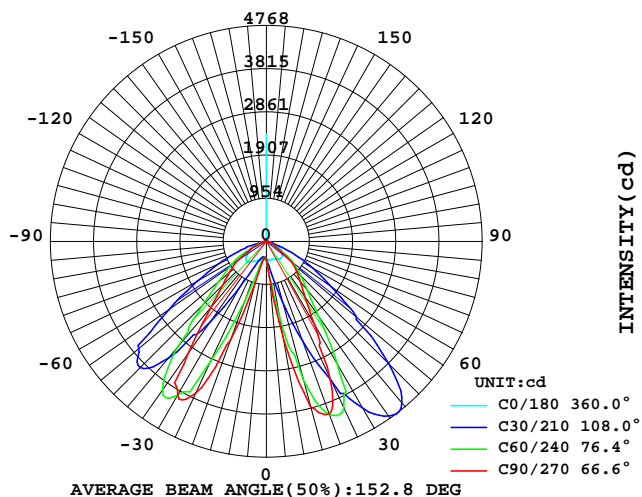
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

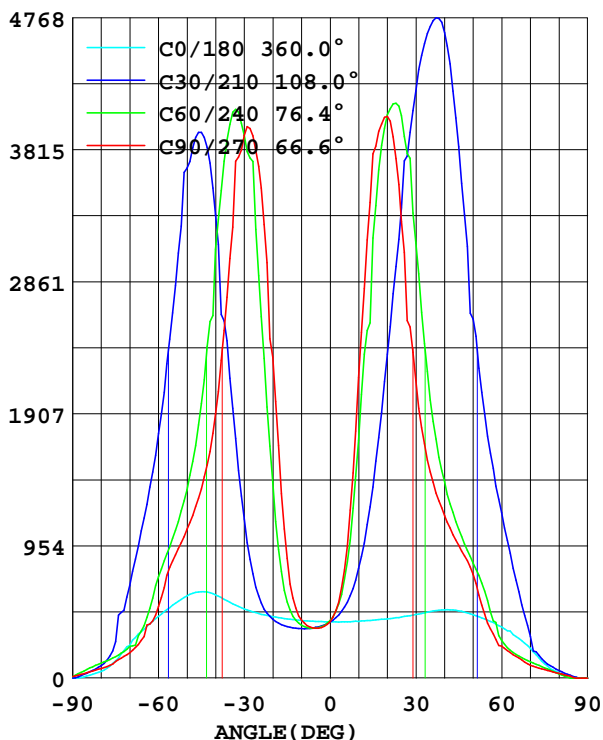
MANUFACTURER:		
Address:		
NAME:	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1150*65mm	SERIAL No.:

DATA OF LAMP		I _{max} (cd)	4768	S/MH(C0/180)	2.00
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	2.25
NOMINAL POWER(W)	44	TOTAL FLUX(lm)	6521.6	Voltage(V)	218.8
RATED VOLTAGE(V)	218	EFFICIENCY(lm/W)	149.8	Current(A)	0.209
NOMINAL FLUX(lm)	6521.6	h up(%)	0.0	Power(W)	43.52
LAMPS QUANTITY	1	h down(%)	100.0	Power Factor(PF)	0.950
TEST VOLTAGE(V)	218.8	Effective Flux(lm)	6001.8	EEI	0.099

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



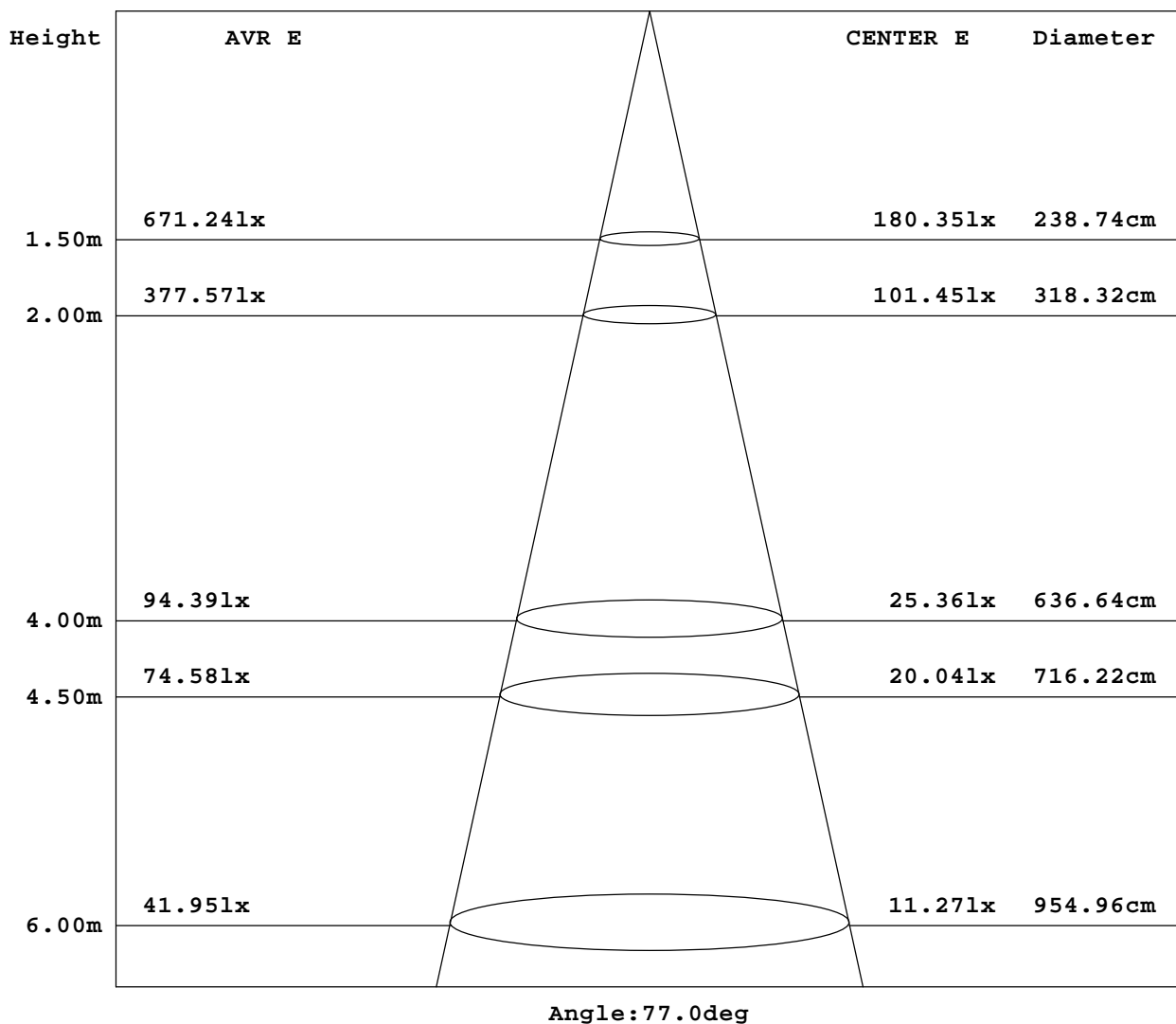
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月09日

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



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

g	C0	C45	C90	C135	C180	C225	C270	C315	g	Zone	tStal
5.0	407.2	362.4	358.3	362.2	406.1	612.5	781.0	625.7	0- 5	10.68	10.68
10.0	415.5	368.4	416.6	372.5	408.0	1253	2170	1312	5- 10	46.88	57.56
15.0	426.7	460.3	864.2	486.1	418.0	2277	3785	2378	10- 15	130.7	188.2
20.0	443.1	918.2	2318	1030	427.3	3202	4054	3288	15- 20	281.5	469.8
25.0	465.3	1748	3694	1958	440.5	3727	3297	3805	20- 25	481.2	951.0
30.0	499.0	2532	3919	2822	458.7	3690	2148	3609	25- 30	671.6	1623
35.0	546.9	3082	3029	3242	479.8	3355	1488	3218	30- 35	789.5	2412
40.0	598.6	3222	1903	3334	492.3	3037	1171	2819	35- 40	846.8	3259
45.0	622.6	2961	1365	3072	485.2	2454	958.5	2172	40- 45	833.3	4093
50.0	593.0	2519	1073	2532	456.9	1710	748.2	1510	45- 50	737.9	4830
55.0	525.5	1823	844.8	1712	418.2	1153	396.8	1014	50- 55	595.0	5425
60.0	444.1	1248	516.5	1130	367.5	733.2	230.8	669.4	55- 60	432.5	5858
65.0	351.9	765.8	300.2	718.8	298.7	438.1	155.9	413.1	60- 65	297.9	6156
70.0	234.8	447.3	181.8	402.7	214.0	207.9	92.03	156.7	65- 70	187.6	6344
75.0	123.8	208.0	119.0	170.1	103.5	96.69	60.20	95.84	70- 75	101.6	6445
80.0	47.14	98.26	68.67	91.06	37.82	41.33	32.86	43.20	75- 80	48.28	6494
85.0	14.71	47.56	37.34	39.70	8.784	5.299	3.460	6.630	80- 85	22.18	6516
90.0	0	5.541	9.268	4.089	0	0	0	0	85- 90	5.654	6521
95.0	0	0	0	0	0	0	0	0	90- 95	0.205	6522
100.0	0	0	0	0	0	0	0	0	95-100	0	6522
105.0	0	0	0	0	0	0	0	0	100-105	0	6522
110.0	0	0	0	0	0	0	0	0	105-110	0	6522
115.0	0	0	0	0	0	0	0	0	110-115	0	6522
120.0	0	0	0	0	0	0	0	0	115-120	0	6522
125.0	0	0	0	0	0	0	0	0	120-125	0	6522
130.0	0	0	0	0	0	0	0	0	125-130	0	6522
135.0	0	0	0	0	0	0	0	0	130-135	0	6522
140.0	0	0	0	0	0	0	0	0	135-140	0	6522
145.0	0	0	0	0	0	0	0	0	140-145	0	6522
150.0	0	0	0	0	0	0	0	0	145-150	0	6522
155.0	0	0	0	0	0	0	0	0	150-155	0	6522
160.0	0	0	0	0	0	0	0	0	155-160	0	6522
165.0	0	0	0	0	0	0	0	0	160-165	0	6522
170.0	0	0	0	0	0	0	0	0	165-170	0	6522
175.0	0	0	0	0	0	0	0	0	170-175	0	6522
180.0	0	0	0	0	0	0	0	0	175-180	0	6522
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月09日

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

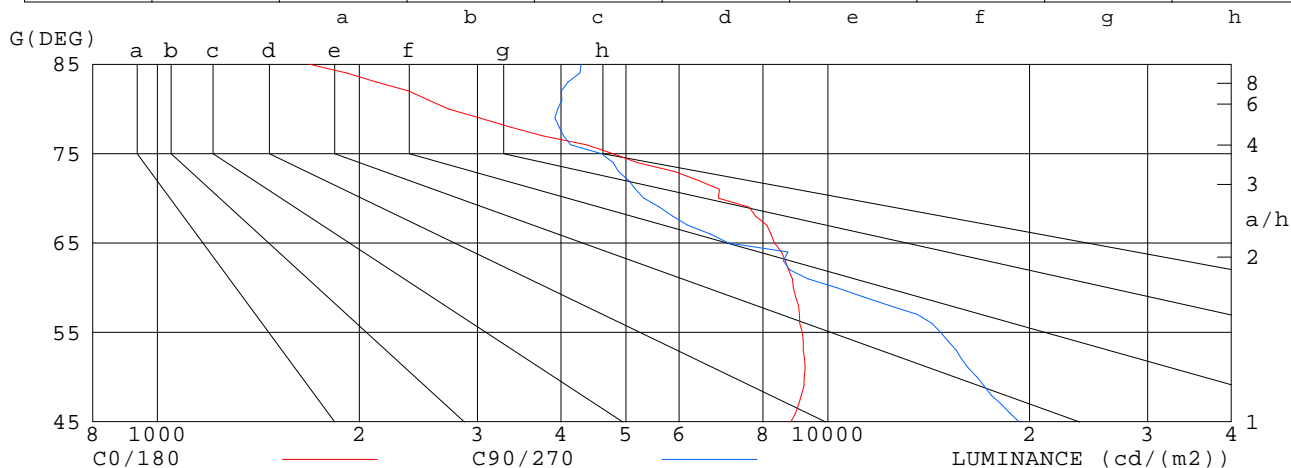
LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:		
Address:		
NAME:	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	1688	4284
80	2715	3955
75	4785	4598
70	6865	5316
65	8328	7105
60	8883	10330
55	9163	14730
50	9227	16700
45	8805	19308

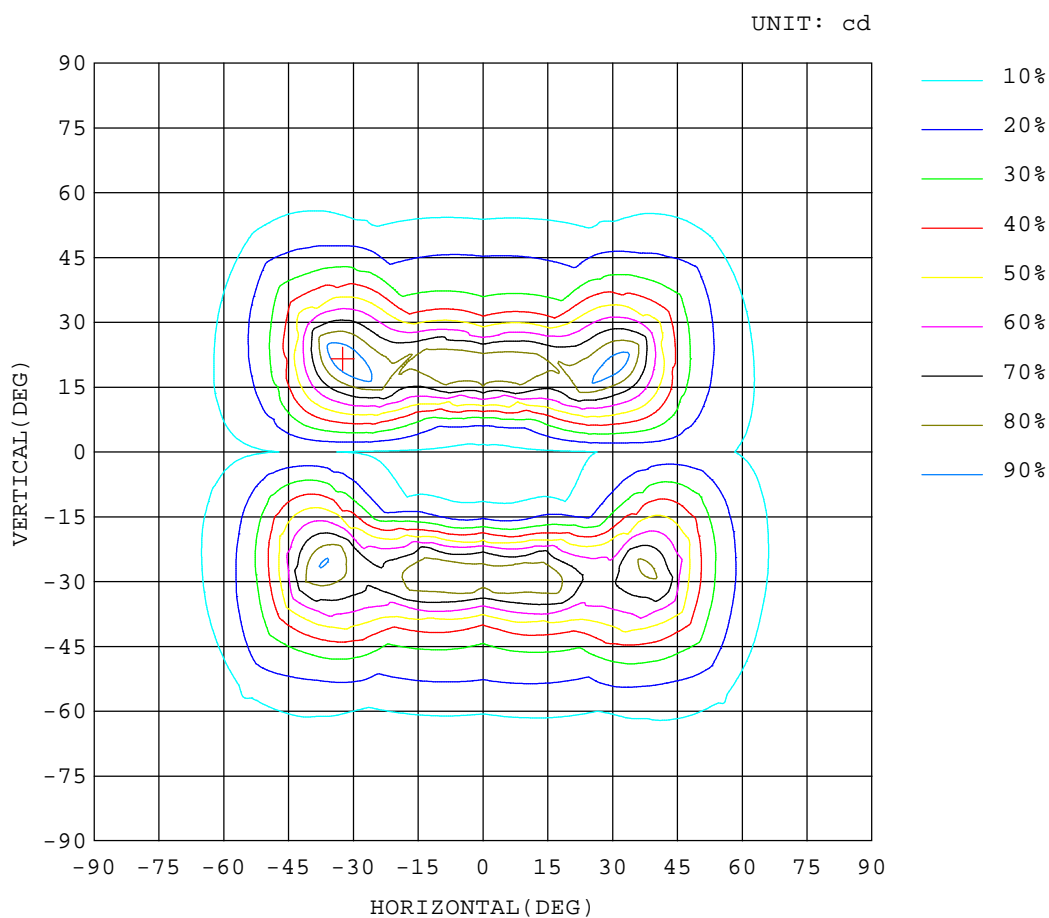
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月09日

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



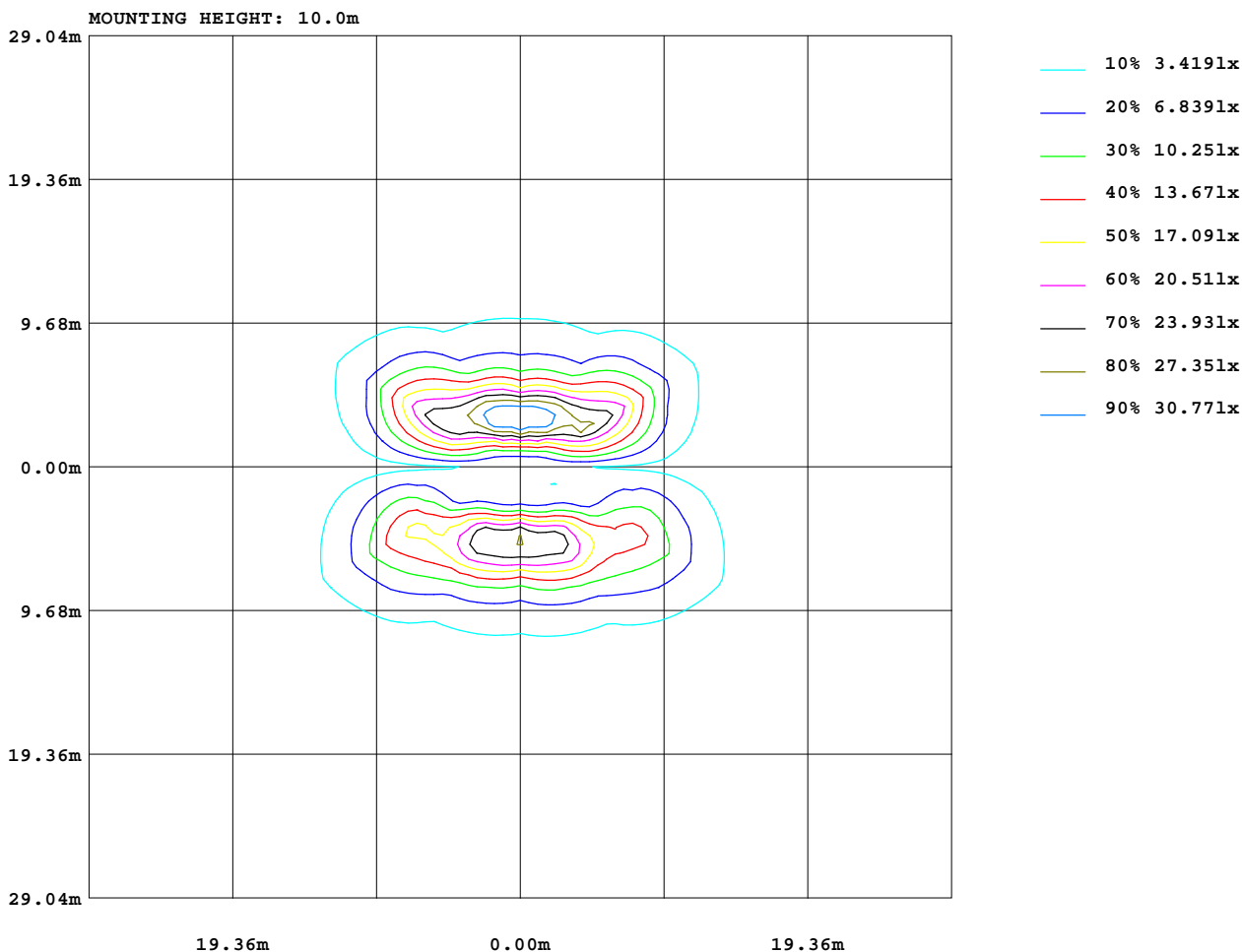
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月09日

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



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

VERTICAL (DEG)	AREA FLUX DIAGRAM																	UNIT:lm	Φ t	Φ a
	0.00	0.00	0.01	0.05	0.08	0.08	0.11	0.20	0.28	0.29	0.23	0.15	0.11	0.10	0.07	0.03	0.00	0.00	1.78	0.00
90	0.00	0.04	0.26	0.65	1.05	1.39	1.64	1.85	1.88	1.90	1.90	1.72	1.46	1.08	0.66	0.29	0.07	0.00	17.9	0.00
80	0.00	0.16	0.71	1.80	3.21	4.35	4.02	4.54	4.81	4.81	4.55	4.03	4.12	2.97	1.75	0.74	0.19	0.01	46.8	0.00
70	0.01	0.29	1.34	4.58	10.1	12.4	10.8	12.7	13.5	13.4	12.4	10.4	11.6	9.32	4.01	1.37	0.33	0.02	129	62.7
60	0.02	0.44	2.34	10.3	22.1	29.7	28.5	27.8	29.6	29.2	27.0	26.5	26.2	19.9	9.54	2.28	0.49	0.04	292	282
50	0.03	0.60	3.75	14.6	37.5	60.2	60.1	48.6	50.2	48.8	45.8	55.2	52.1	32.4	13.7	3.69	0.68	0.05	529	520
40	0.04	0.76	4.71	16.2	46.1	98.1	99.6	98.9	103	101	94.2	95.7	88.5	40.1	15.2	4.80	0.87	0.06	908	900
30	0.05	0.88	4.87	14.6	40.6	82.7	102	95.9	103	103	98.4	103	79.4	37.1	14.3	5.18	1.02	0.06	886	877
20	0.05	0.94	4.32	10.1	22.0	36.5	41.7	33.7	29.2	30.1	36.7	44.0	37.1	22.7	11.2	4.89	1.10	0.07	367	350
10	0.05	1.00	4.69	11.6	23.5	26.0	16.6	12.2	11.4	11.4	11.9	15.1	23.5	24.6	13.6	5.43	1.19	0.07	215	151
0	0.05	1.02	5.95	18.4	47.5	61.7	41.7	36.5	30.7	29.2	32.5	32.7	51.0	46.5	20.6	6.70	1.26	0.07	465	452
-10	0.05	0.92	6.40	21.0	61.2	96.5	88.2	104	104	102	99.0	78.6	84.6	61.4	23.4	7.09	1.18	0.06	940	934
-20	0.04	0.72	5.74	19.6	52.5	78.9	80.7	92.2	95.4	96.2	95.7	79.7	77.1	55.8	21.7	6.46	0.95	0.06	860	854
-30	0.03	0.53	4.01	15.8	31.1	43.8	43.4	44.7	45.4	46.2	47.0	45.2	46.5	34.2	17.1	4.89	0.65	0.04	471	464
-40	0.02	0.37	2.00	8.99	16.6	20.7	21.4	24.3	25.5	25.8	25.2	22.9	22.6	17.8	10.3	2.77	0.44	0.03	248	237
-50	0.01	0.22	0.98	2.97	6.38	8.16	7.87	9.34	9.94	10.1	9.78	8.32	8.85	7.68	4.08	1.16	0.28	0.02	96.2	13.0
-60	0.00	0.09	0.45	1.16	2.12	3.10	3.65	3.82	3.75	3.78	3.90	3.75	3.37	2.36	1.33	0.56	0.14	0.01	37.3	0.00
-70	0.00	0.01	0.07	0.26	0.62	1.06	1.34	1.34	1.25	1.27	1.41	1.44	1.18	0.74	0.37	0.13	0.02	0.00	12.5	0.00
-80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HORIZONTAL (DEG)																				
Φ t	0.46	8.99	52.6	173	425	666	654	653	662	658	648	629	620	417	184	58.5	10.8	0.66	6522	
Φ a	0.00	0.00	16.3	154	408	644	626	615	620	616	609	601	598	400	166	23.4	0.00	0.00		6002

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月09日

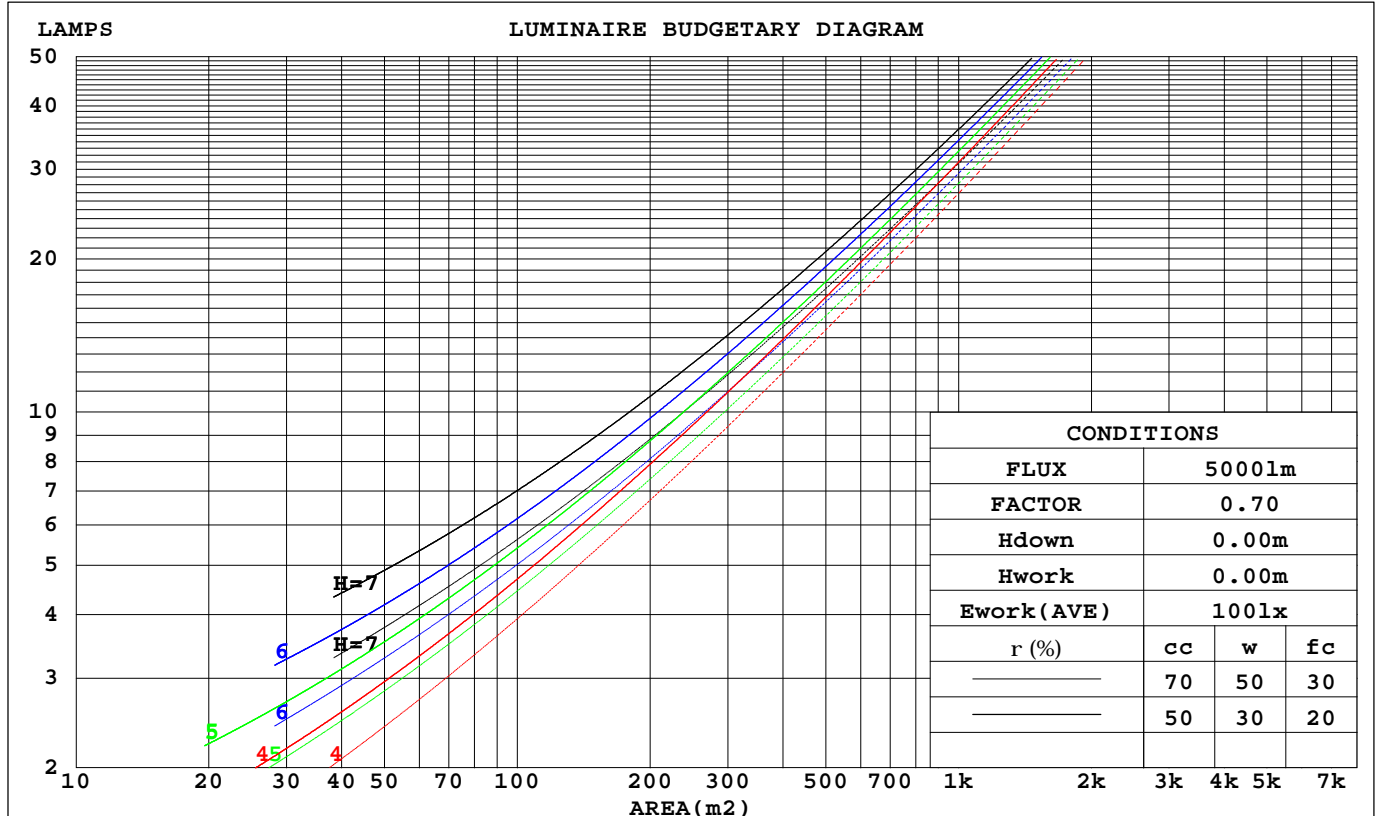
Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:															
Address:															
NAME:								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:						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															Wall Exitance Coefficients(WEC)														
0.0																														
1.0	.266	.151	.048	.259	.148	.047	.246	.141	.045	.234	.135	.043	.223	.129	.042															
2.0	.260	.143	.044	.254	.140	.043	.243	.135	.042	.232	.130	.041	.223	.126	.040															
3.0	.248	.132	.040	.243	.130	.039	.233	.126	.038	.223	.122	.038	.215	.119	.037															
4.0	.234	.122	.036	.229	.120	.035	.220	.117	.035	.212	.114	.034	.204	.111	.034															
5.0	.220	.112	.033	.216	.111	.032	.208	.108	.032	.201	.106	.031	.194	.104	.031															
6.0	.207	.104	.030	.203	.103	.030	.196	.101	.029	.190	.099	.029	.183	.097	.029															
7.0	.195	.096	.027	.192	.095	.027	.185	.094	.027	.179	.092	.027	.174	.090	.027															
8.0	.184	.090	.025	.181	.089	.025	.175	.087	.025	.170	.086	.025	.164	.084	.025															
9.0	.173	.084	.023	.171	.083	.023	.166	.082	.023	.161	.081	.023	.156	.079	.023															
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.152	.076	.022	.148	.075	.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	.191	.191	.191	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.177	.157	.138	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.168	.132	.102	.144	.114	.088	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.160	.114	.077	.137	.098	.067	.094	.068	.047	.054	.040	.028	.018	.013	.009	
4.0	.153	.101	.061	.131	.087	.053	.090	.061	.037	.052	.036	.022	.017	.012	.007	
5.0	.146	.090	.049	.126	.078	.042	.087	.055	.030	.050	.032	.018	.016	.010	.006	
6.0	.140	.082	.040	.120	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08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:						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	25.9	27.4	26.2	27.6	27.8	23.3	24.8	23.6	25.0	25.2	
	3H	26.2	27.6	26.5	27.8	28.0	23.3	24.7	23.6	24.9	25.1
	4H	26.2	27.5	26.5	27.7	28.0	23.3	24.6	23.7	24.9	25.1
	6H	26.1	27.3	26.5	27.6	27.9	23.3	24.5	23.7	24.8	25.1
	8H	26.1	27.2	26.4	27.5	27.8	23.3	24.5	23.6	24.7	25.0
	12H	26.0	27.1	26.4	27.4	27.7	23.3	24.4	23.6	24.7	25.0
4H	2H	26.2	27.4	26.5	27.7	27.9	24.2	25.4	24.5	25.7	25.9
	3H	26.8	27.9	27.1	28.1	28.4	24.3	25.4	24.6	25.6	25.9
	4H	26.8	27.8	27.2	28.1	28.5	24.3	25.3	24.7	25.6	25.9
	6H	26.8	27.7	27.2	28.0	28.4	24.3	25.2	24.7	25.5	25.9
	8H	26.8	27.6	27.2	27.9	28.3	24.3	25.1	24.7	25.5	25.9
	12H	26.7	27.5	27.1	27.8	28.2	24.3	25.1	24.8	25.5	25.9
8H	4H	26.8	27.6	27.2	28.0	28.3	24.4	25.2	24.8	25.6	26.0
	6H	26.8	27.4	27.2	27.8	28.3	24.5	25.2	25.0	25.6	26.0
	8H	26.8	27.3	27.2	27.8	28.2	24.6	25.2	25.0	25.6	26.0
	12H	26.7	27.2	27.2	27.7	28.1	24.6	25.1	25.1	25.6	26.1
12H	4H	26.8	27.5	27.2	27.9	28.3	24.4	25.1	24.8	25.5	25.9
	6H	26.8	27.3	27.2	27.8	28.2	24.5	25.1	25.0	25.5	26.0
	8H	26.7	27.2	27.2	27.7	28.2	24.6	25.1	25.1	25.5	26.0
Variations with the observer position at spacings:											
S = 1.0H	+ 1.3 / - 0.9					+ 1.1 / - 1.5					
1.5H	+ 2.3 / - 4.3					+ 0.9 / - 1.2					
2.0H	+ 2.4 / - 6.2					+ 2.1 / - 2.2					

CIE Pub.117 Corrected 6522 lm Total Lamp Luminous Flux.(8log(F/F0) = 6.5)

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08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:	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) $k(RI) \times RCR = 5$									
$k = 0.60$	60	49	42	59	48	42	58	48	42	35
0.80	71	60	53	70	59	53	68	59	52	46
1.00	80	70	63	79	69	63	77	70	62	56
1.25	87	78	72	86	77	71	83	76	70	64
1.50	92	83	77	91	83	77	88	81	76	69
2.00	99	91	86	97	90	85	94	88	83	76
2.50	102	95	90	100	94	89	96	91	87	80
3.00	105	99	94	103	98	93	99	95	91	83
4.00	108	103	99	106	102	98	102	98	95	87
5.00	110	106	103	108	104	101	103	101	98	89
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

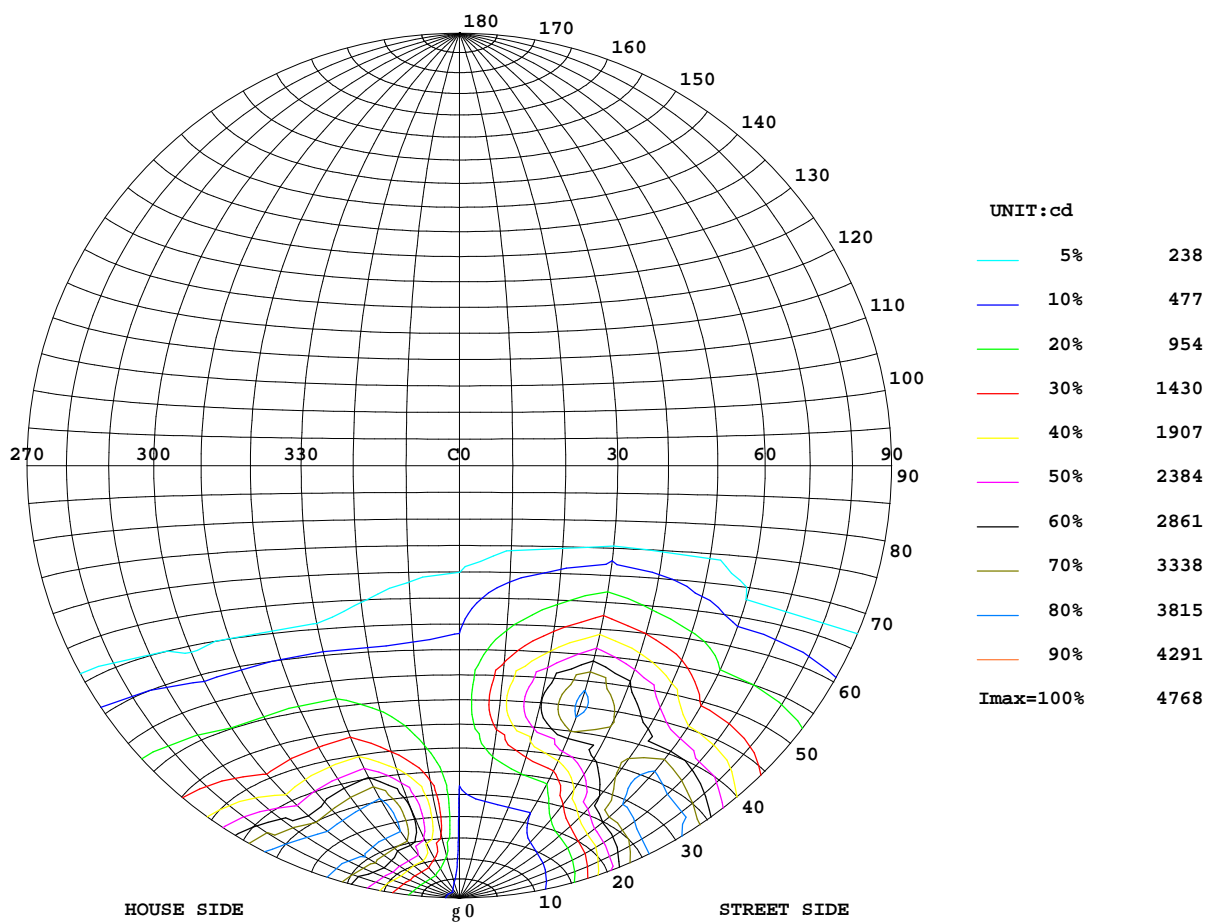
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月09日

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



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月09日

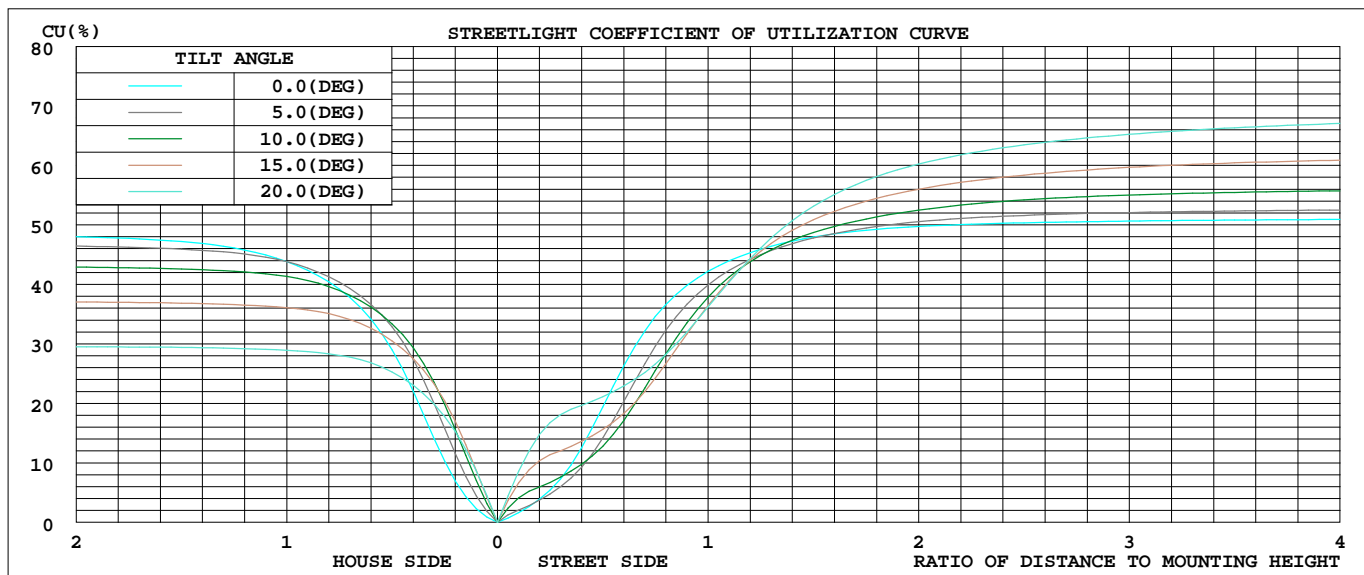
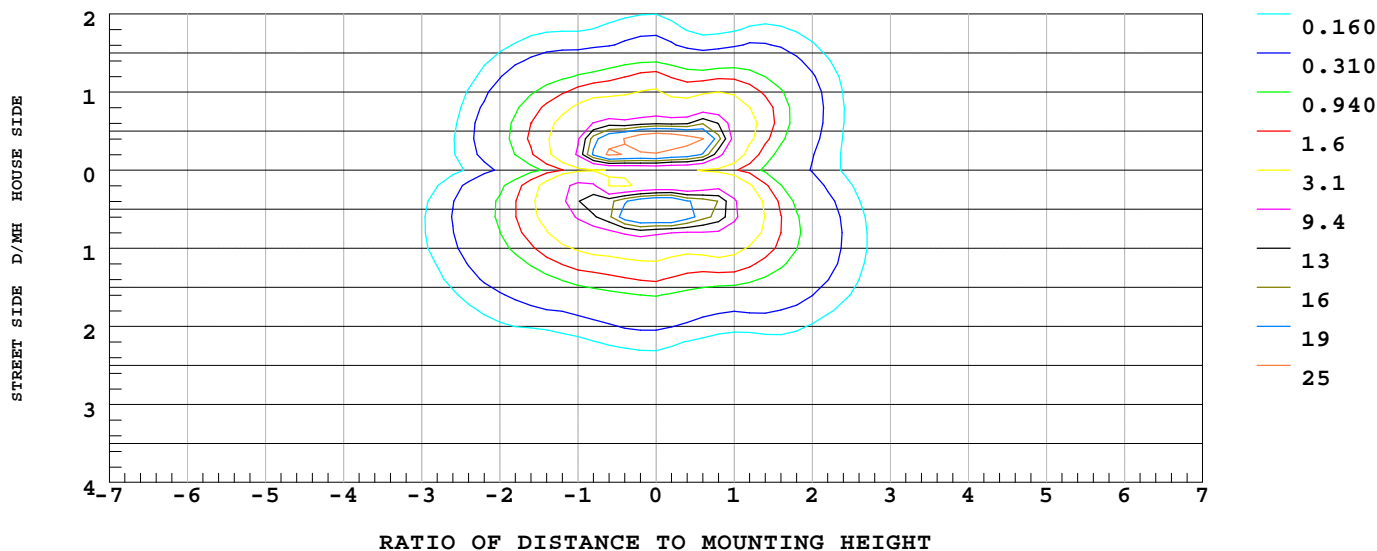
Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

ISOLUX DIAGRAM

Report number:

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

ILLUMINANCE AT MH=10 m,Enadir = 4.06 lx



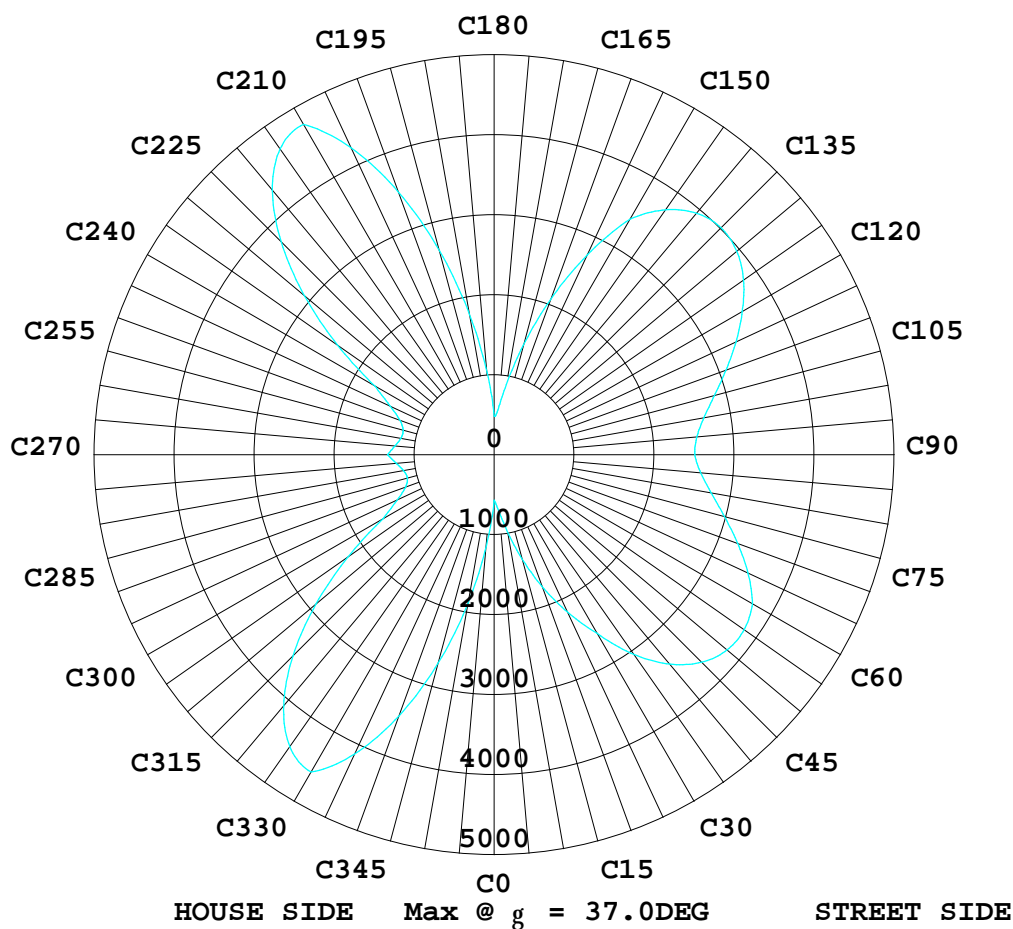
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月09日

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



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月09日

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