

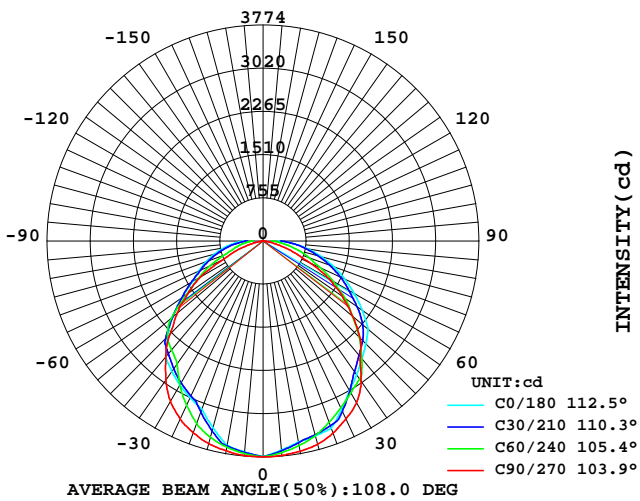
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

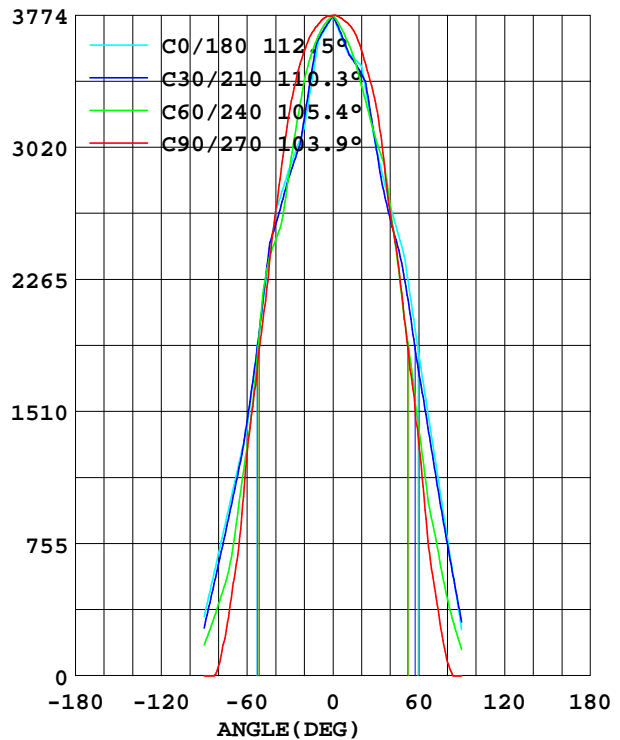
MANUFACTURER:	Address:		
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:	
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001	

DATA OF LAMP		Imax(cd)	3774	S/MH(C0/180)	1.16
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	1.26
NOMINAL POWER(W)	72	TOTAL FLUX(lm)	10313	Voltage(V)	220.8
RATED VOLTAGE(V)	220	EFFICIENCY(lm/W)	144.3	Current(A)	0.326
NOMINAL FLUX(lm)	10312.8	η up(%)	0.0	Power(W)	71.47
LAMPS QUANTITY	1	η down(%)	100.0	Power Factor(PF)	0.990
TEST VOLTAGE(V)	220.9	Effective Flux(lm)	10178.4	EEI	0.096

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



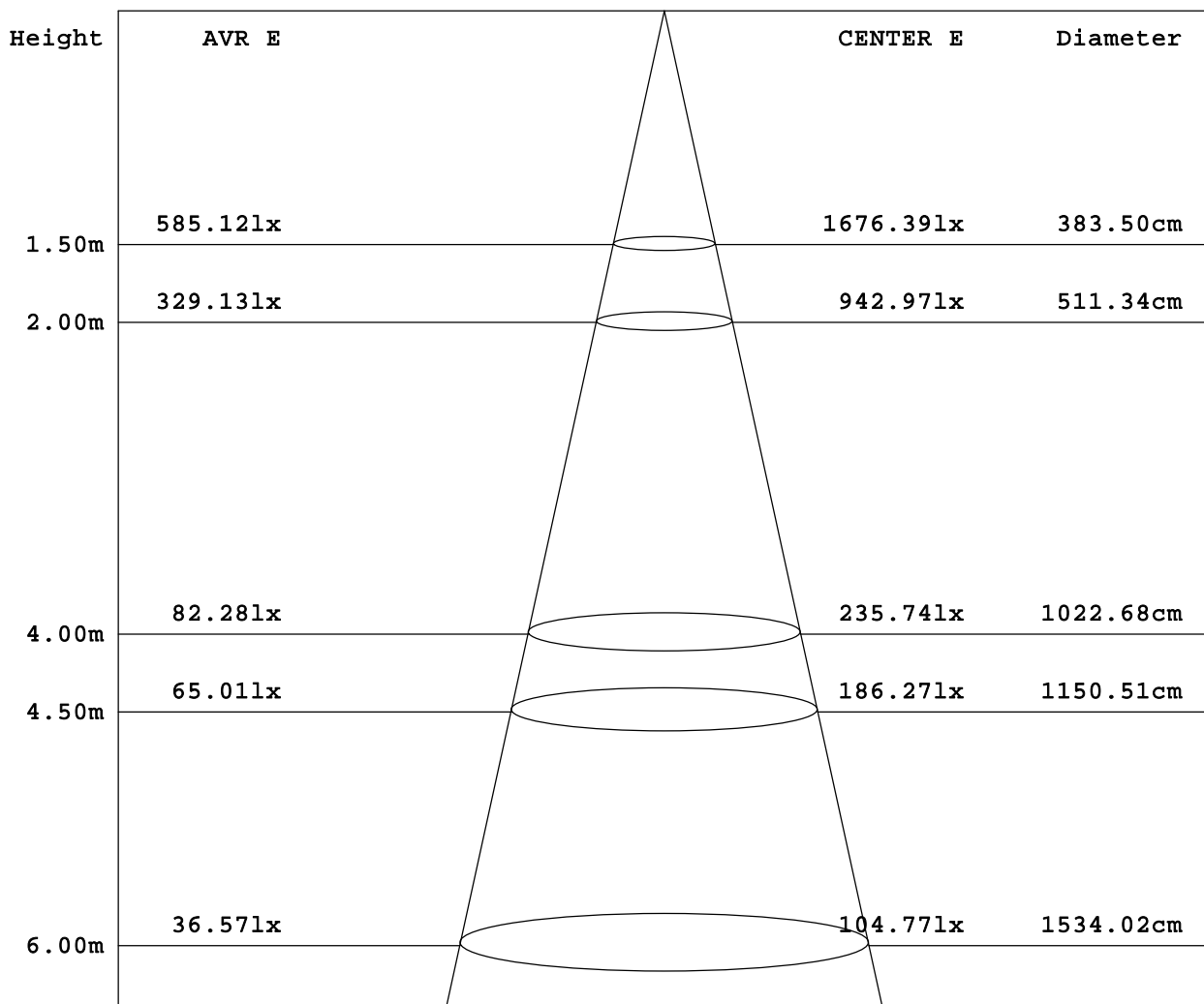
Test System:HOP00 HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER:	Address:	
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001



Angle:103.9deg

Test System:HOPPO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER:		Address:	
NAME: iron + (Helvar 70W)		TYPE:	WEIGHT:
SPECIFICATION:		DIMENSION: 1.5M	SERIAL No.:20180321001

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
5.0	3702	3718	3763	3694	3669	3694	3761	3716	0- 5	89.26	89.26
10.0	3632	3644	3724	3597	3567	3599	3732	3641	5- 10	262.6	351.9
15.0	3381	3517	3668	3484	3526	3493	3680	3524	10- 15	424.4	776.3
20.0	3130	3271	3570	3380	3485	3398	3574	3293	15- 20	567.7	1344
25.0	3020	3026	3433	3251	3253	3276	3429	3050	20- 25	688.0	2032
30.0	2910	2812	3237	3032	3020	3073	3267	2844	25- 30	783.6	2816
35.0	2781	2639	2965	2751	2854	2787	2990	2676	30- 35	854.5	3670
40.0	2652	2483	2653	2474	2687	2493	2647	2506	35- 40	901.1	4571
45.0	2359	2300	2294	2321	2543	2323	2402	2298	40- 45	925.3	5497
50.0	2065	2097	1961	2111	2398	2149	2040	2066	45- 50	914.7	6412
55.0	1741	1693	1611	1823	2119	1850	1696	1722	50- 55	856.6	7268
60.0	1416	1301	1269	1525	1840	1558	1338	1353	55- 60	753.5	8022
65.0	1236	1105	794.1	1189	1577	1220	897.6	1128	60- 65	638.6	8660
70.0	1056	927.4	508.3	942.7	1314	955.3	558.1	943.6	65- 70	527.0	9187
75.0	875.6	759.2	235.2	779.3	1051	784.5	296.0	769.7	70- 75	420.7	9608
80.0	695.4	605.7	51.65	626.7	787.7	627.8	76.44	605.5	75- 80	321.5	9930
85.0	515.3	461.9	0	484.6	524.7	481.3	0	456.2	80- 85	231.2	10161
90.0	335.1	323.6	0	346.9	261.8	335.6	0	312.0	85- 90	151.7	10313
95.0									90- 95		
100.0									95-100		
105.0									100-105		
110.0									105-110		
115.0									110-115		
120.0									115-120		
125.0									120-125		
130.0									125-130		
135.0									130-135		
140.0									135-140		
145.0									140-145		
150.0									145-150		
155.0									150-155		
160.0									155-160		
165.0									160-165		
170.0									165-170		
175.0									170-175		
180.0									175-180		
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

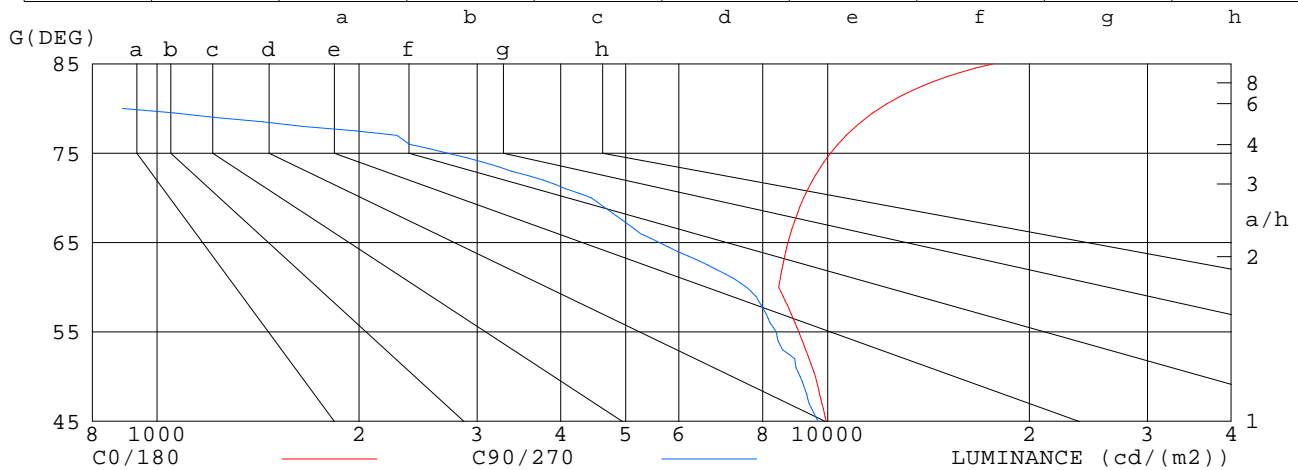
LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:	Address:	
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
		2000	1000	500	<=300				
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	17650	0
80	11955	888
75	10099	2713
70	9214	4437
65	8730	5609
60	8454	7576
55	9059	8383
50	9590	9106
45	9957	9682

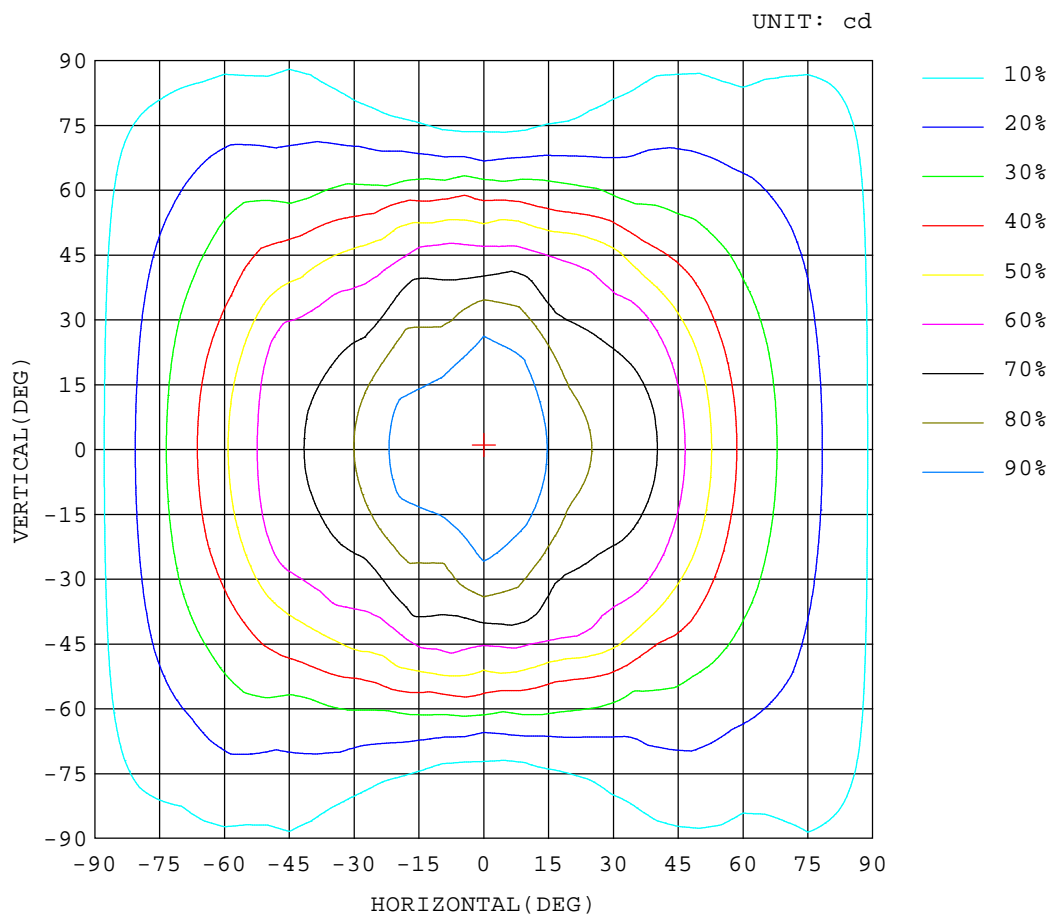
Test System:HOP00 HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:	Address:	
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001



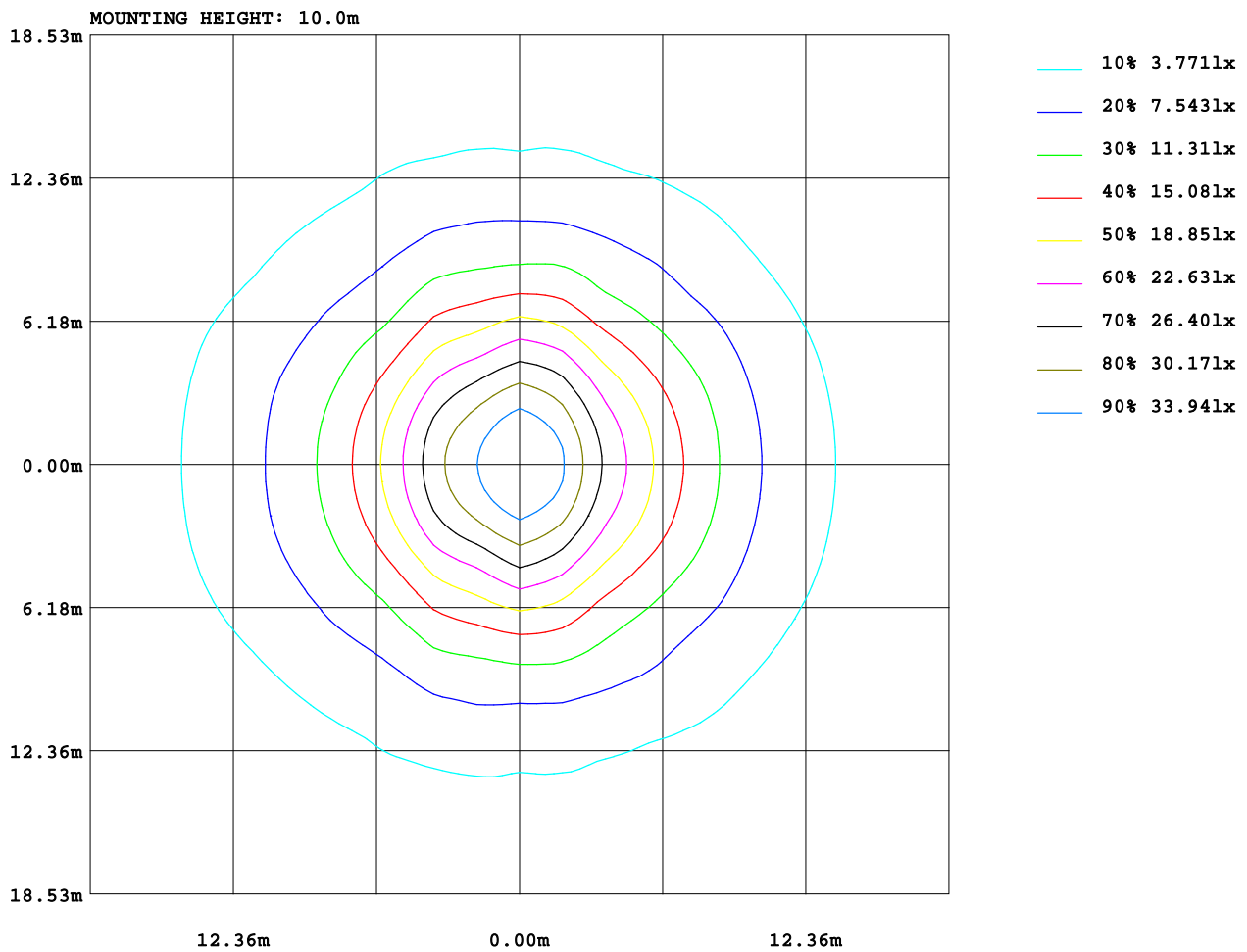
Test System:HOPOO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

ISOLUX DIAGRAM

Report number:

MANUFACTURER:	Address:	
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001



Test System:HOPOO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

AREA LUMINOUS FLUX

Report number:

MANUFACTURER:	Address:					
NAME: iron + (Helvar 70W)	TYPE:			WEIGHT:		
SPECIFICATION:	DIMENSION: 1.5M			SERIAL No.:20180321001		

VERTICAL (DEG)	AREA FLUX DIAGRAM																	UNIT:lm		Φ t	Φ a
	0.77	2.58	4.93	7.17	9.14	8.50	5.66	2.54	0.75	0.74	2.59	6.19	8.73	8.88	6.72	4.87	3.06	0.96	84.8	38.8	
90	0.92	3.62	7.50	11.1	13.8	15.5	14.1	11.9	9.76	9.55	11.5	13.0	14.0	13.4	10.1	6.89	3.80	1.06	172	152	
80	1.07	4.61	10.0	15.6	19.2	23.5	26.1	28.4	29.0	28.1	27.7	24.7	21.6	18.5	13.7	8.85	4.50	1.16	307	307	
70	1.21	5.55	12.4	20.6	26.6	34.7	42.0	49.6	52.8	51.7	46.3	40.1	31.0	24.2	17.3	10.6	5.16	1.25	474	474	
60	1.34	6.43	14.6	25.2	35.5	46.5	56.5	68.2	72.1	72.2	65.8	57.1	43.7	31.1	20.5	12.2	5.75	1.34	637	637	
50	1.44	7.19	16.6	29.2	43.7	56.3	67.5	81.9	87.2	89.1	77.2	66.7	54.3	38.2	23.6	13.6	6.24	1.41	762	762	
40	1.52	7.81	18.4	33.2	50.8	63.3	77.1	91.2	99.0	102	87.8	74.1	62.4	44.6	26.7	14.8	6.63	1.46	863	863	
30	1.58	8.24	19.7	35.9	53.7	68.0	85.0	99.0	107	108	94.9	79.9	66.9	48.7	29.1	15.6	6.89	1.50	931	931	
20	1.61	8.45	20.3	37.0	54.6	70.8	89.1	103	111	112	98.7	82.8	69.0	50.6	30.4	15.9	7.02	1.52	964	964	
10	1.61	8.45	20.3	36.9	54.6	70.6	88.9	103	111	112	98.6	82.7	68.9	50.5	30.3	15.9	7.02	1.52	963	963	
0	1.58	8.23	19.6	35.7	53.3	67.8	84.4	98.3	107	108	94.3	79.6	66.7	48.5	29.0	15.5	6.88	1.50	926	926	
-10	1.53	7.82	18.3	32.9	50.0	63.1	76.2	89.5	97.8	100	86.3	73.2	62.0	44.4	26.6	14.7	6.62	1.46	854	854	
-20	1.45	7.22	16.5	28.9	43.2	56.0	66.8	80.6	86.4	88.2	77.3	66.4	54.3	38.0	23.6	13.7	6.24	1.41	757	757	
-30	1.34	6.47	14.4	24.6	35.2	45.8	55.1	66.5	70.4	70.2	64.6	56.4	43.1	30.5	20.5	12.3	5.77	1.34	625	625	
-40	1.22	5.59	12.2	20.2	26.4	33.6	40.4	47.2	50.3	48.4	43.7	38.2	30.1	24.0	17.1	10.6	5.21	1.26	456	456	
-50	1.08	4.63	9.87	15.5	19.0	22.8	24.9	26.4	26.2	25.3	25.4	23.4	20.9	18.5	13.7	8.78	4.57	1.17	293	292	
-60	0.94	3.62	7.47	11.2	13.7	14.9	13.1	10.6	8.17	7.85	10.0	12.1	13.3	13.4	10.3	6.80	3.86	1.07	163	138	
-70	0.78	2.58	5.01	7.34	9.18	8.07	5.24	2.11	0.43	0.39	1.91	5.29	8.34	8.98	7.08	4.78	3.13	0.97	81.6	38.9	
-80	0.78	2.58	5.01	7.34	9.18	8.07	5.24	2.11	0.43	0.39	1.91	5.29	8.34	8.98	7.08	4.78	3.13	0.97	81.6	38.9	
-90	0.78	2.58	5.01	7.34	9.18	8.07	5.24	2.11	0.43	0.39	1.91	5.29	8.34	8.98	7.08	4.78	3.13	0.97	81.6	38.9	
	23.0	109	249	429	613	771	919	1061	1126	1134	1015	883	740	556	357	207	98.4	23.4	10313		
Φ t	18.8	105	245	425	608	761	905	1048	1116	1123	1002	867	729	551	352	203	96.5	21.0		10178	
Φ a																					

Test System:HOPOO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

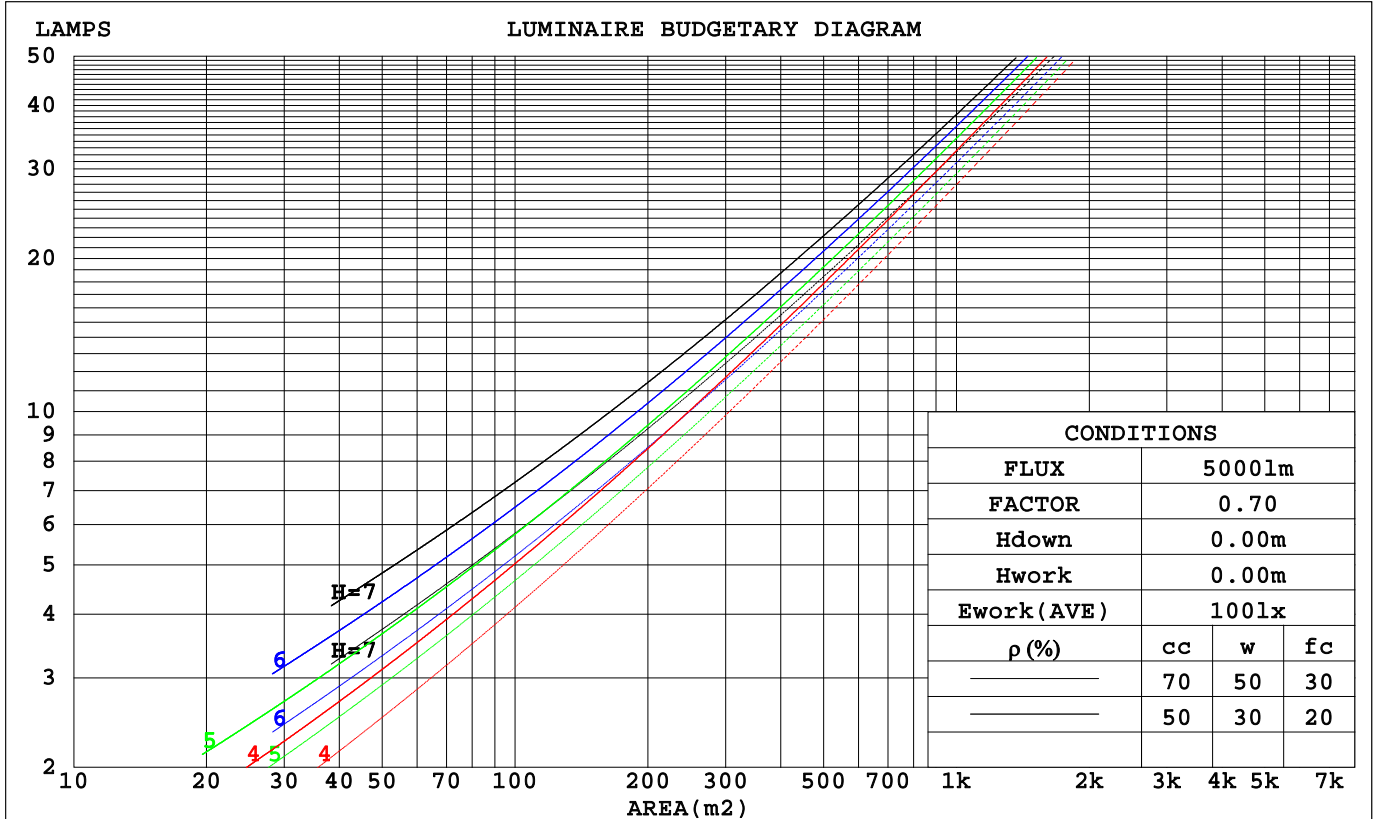
Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:				Address:			
NAME: iron + (Helvar 70W)				TYPE:		WEIGHT:	
SPECIFICATION:				DIMENSION: 1.5M		SERIAL No.:20180321001	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.03	.98	.94	1.01	.97	.93	.96	.93	.90	.92	.90	.87	.89	.87	.84	.82
2.0	.90	.83	.77	.88	.81	.76	.84	.79	.74	.81	.76	.72	.78	.74	.71	.68
3.0	.79	.70	.64	.77	.69	.63	.74	.68	.62	.71	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.68	.60	.54	.66	.59	.53	.64	.57	.52	.61	.56	.51	.49
5.0	.62	.53	.47	.61	.53	.46	.59	.52	.46	.57	.51	.45	.55	.49	.45	.43
6.0	.56	.47	.41	.55	.47	.41	.53	.46	.40	.52	.45	.40	.50	.44	.39	.37
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.40	.35	.46	.40	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.45	.37	.32	.43	.37	.32	.42	.36	.31	.29
9.0	.43	.35	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.28	.27
10.0	.39	.32	.26	.39	.31	.26	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



Test System:HOPOO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

WEC AND CCEC

Report number:

MANUFACTURER:	Address:					
NAME: iron + (Helvar 70W)	TYPE:			WEIGHT:		
SPECIFICATION:	DIMENSION: 1.5M			SERIAL No.:20180321001		

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.327	.186	.059	.320	.182	.058	.306	.176	.056	.294	.170	.054	.283	.164	.053	
2.0	.299	.164	.050	.293	.161	.050	.281	.156	.049	.270	.152	.047	.260	.147	.046	
3.0	.274	.146	.044	.268	.144	.043	.258	.140	.042	.248	.136	.042	.239	.133	.041	
4.0	.251	.131	.038	.246	.129	.038	.237	.126	.038	.229	.123	.037	.221	.120	.037	
5.0	.232	.118	.034	.227	.117	.034	.219	.114	.034	.212	.112	.033	.204	.109	.033	
6.0	.214	.107	.031	.211	.106	.031	.203	.104	.030	.196	.102	.030	.190	.100	.030	
7.0	.199	.099	.028	.196	.098	.028	.189	.096	.028	.183	.094	.027	.178	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.172	.087	.025	.167	.085	.025	
9.0	.174	.084	.024	.171	.084	.023	.166	.082	.023	.161	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.161	.078	.022	.157	.077	.022	.152	.076	.021	.148	.074	.021	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.181	.156	.133	.155	.134	.114	.106	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.173	.132	.097	.148	.114	.084	.102	.079	.059	.059	.046	.034	.019	.015	.011	
3.0	.165	.114	.074	.142	.099	.064	.097	.069	.045	.056	.040	.026	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.050	.093	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.143	.082	.039	.122	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.003	
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:HOPPO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

Uncorrected UGR Table

Report number:

MANUFACTURER:						Address:				
NAME: iron + (Helvar 70W)						TYPE:			WEIGHT:	
SPECIFICATION:						DIMENSION: 1.5M			SERIAL No.:20180321001	
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	20.3	21.9	20.6	22.1	22.3	19.7	21.3	20.0	21.5	21.7
3H	22.1	23.5	22.4	23.8	24.0	20.5	21.9	20.8	22.1	22.4
4H	23.1	24.4	23.4	24.7	24.9	20.6	22.0	20.9	22.2	22.5
6H	24.0	25.3	24.4	25.6	25.9	20.6	21.9	20.9	22.1	22.4
8H	24.5	25.8	24.9	26.0	26.3	20.5	21.8	20.9	22.1	22.4
12H	25.1	26.2	25.4	26.5	26.8	20.5	21.7	20.8	22.0	22.3
4H 2H	20.8	22.2	21.2	22.4	22.7	20.3	21.7	20.7	21.9	22.2
3H	22.9	24.1	23.2	24.4	24.7	21.4	22.6	21.7	22.9	23.2
4H	24.0	25.1	24.4	25.4	25.8	21.7	22.8	22.0	23.1	23.4
6H	25.2	26.2	25.6	26.6	26.9	21.7	22.7	22.1	23.1	23.4
8H	25.9	26.8	26.3	27.1	27.5	21.7	22.6	22.1	23.0	23.4
12H	26.5	27.3	26.9	27.7	28.1	21.7	22.5	22.1	22.9	23.3
8H 4H	24.3	25.3	24.8	25.6	26.0	22.3	23.2	22.8	23.6	24.0
6H	25.8	26.6	26.3	27.0	27.4	22.7	23.5	23.2	23.9	24.3
8H	26.6	27.3	27.1	27.7	28.2	22.8	23.5	23.3	23.9	24.4
12H	27.5	28.1	28.0	28.5	29.0	22.8	23.4	23.3	23.9	24.4
12H 4H	24.4	25.2	24.8	25.6	26.0	22.5	23.4	22.9	23.7	24.1
6H	25.9	26.6	26.4	27.0	27.5	23.1	23.8	23.6	24.2	24.7
8H	26.8	27.4	27.3	27.8	28.3	23.4	24.0	23.9	24.4	24.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.2					+ 0.4 / - 0.2				

CIE Pub.117 Corrected 10313 lm Total Lamp Luminous Flux.(8log(F/F0) = 8.1)

Test System:HOPOO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

UTILIZATION FACTORS TABLE

Report number:

MANUFACTURER:	Address:		
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:	
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001	

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	46	39	57	45	39	55	45	38	32
0.80	67	56	48	66	55	48	64	54	48	41
1.00	76	64	57	74	64	57	72	65	56	49
1.25	83	72	65	81	71	64	78	70	64	56
1.50	88	78	70	86	77	70	83	75	69	61
2.00	94	86	79	92	84	78	89	82	77	69
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	94	89	99	93	88	95	90	85	77
4.00	106	100	95	103	98	93	99	94	91	82
5.00	108	103	99	105	101	97	101	97	94	85
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

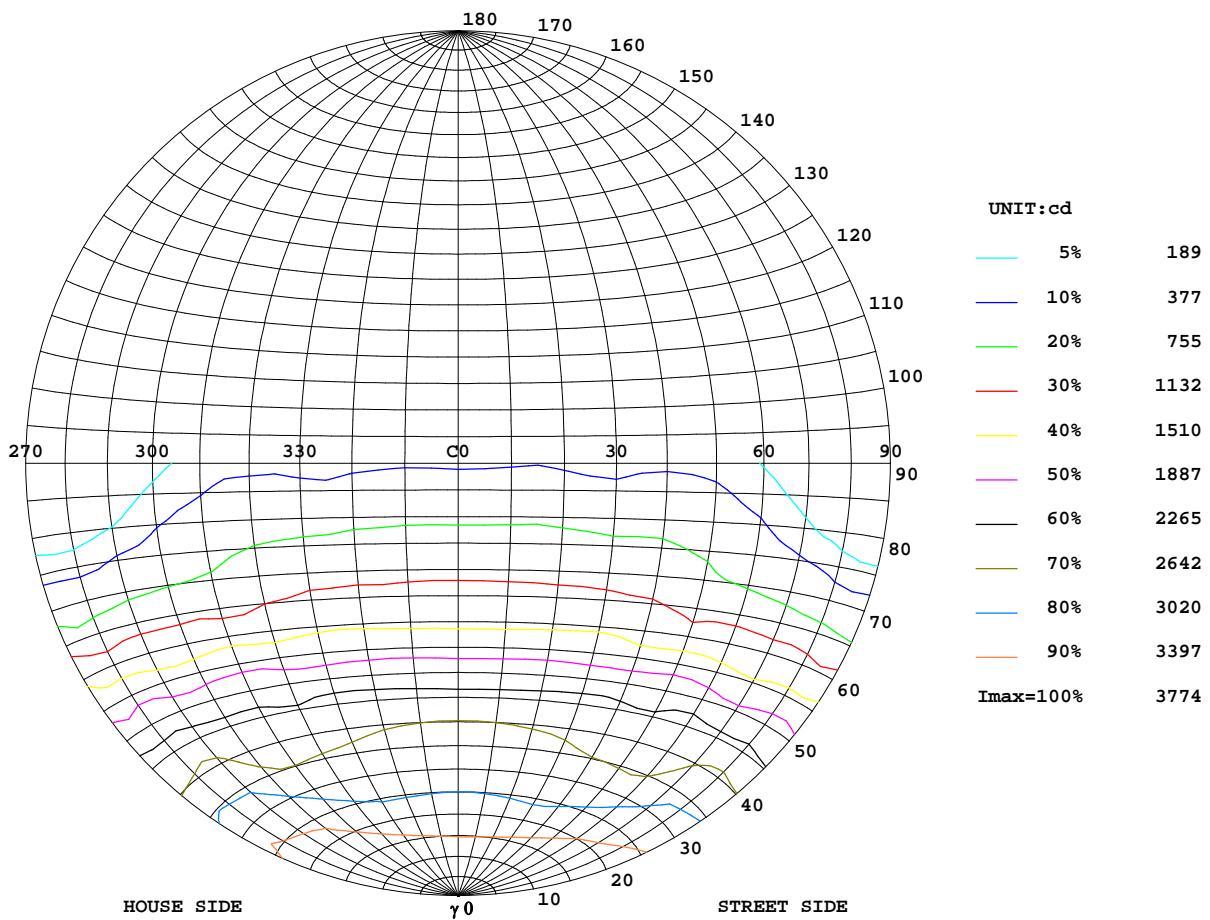
Test System:HOPPO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:	Address:	
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001



Test System:HOP00 HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

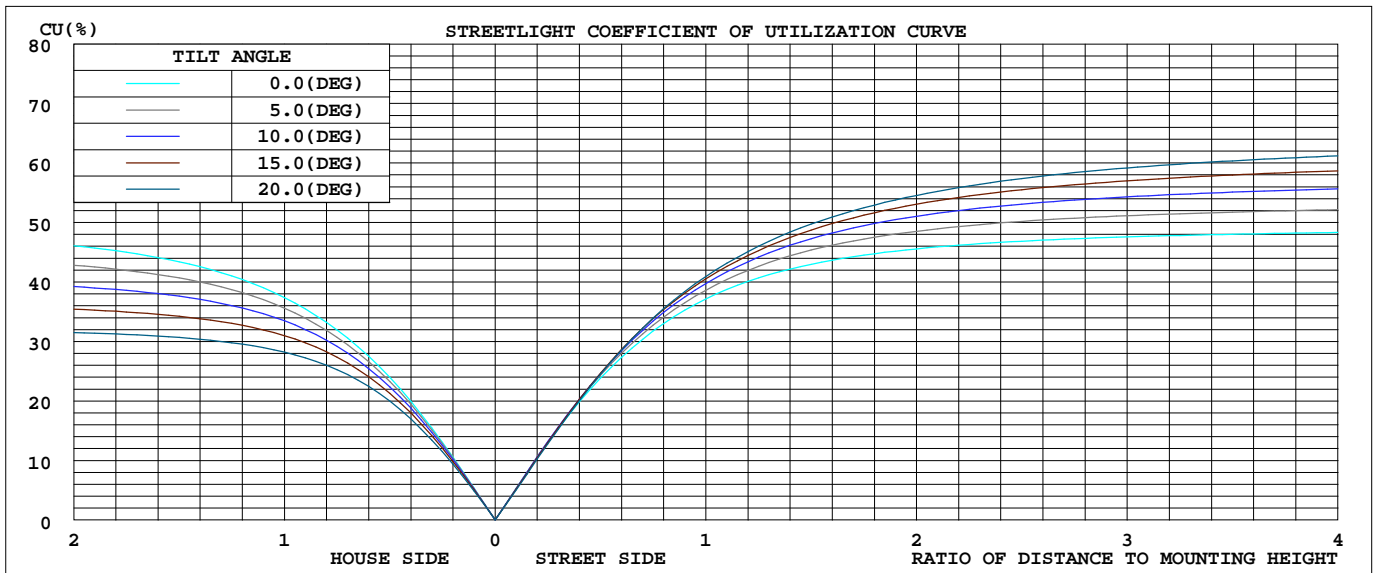
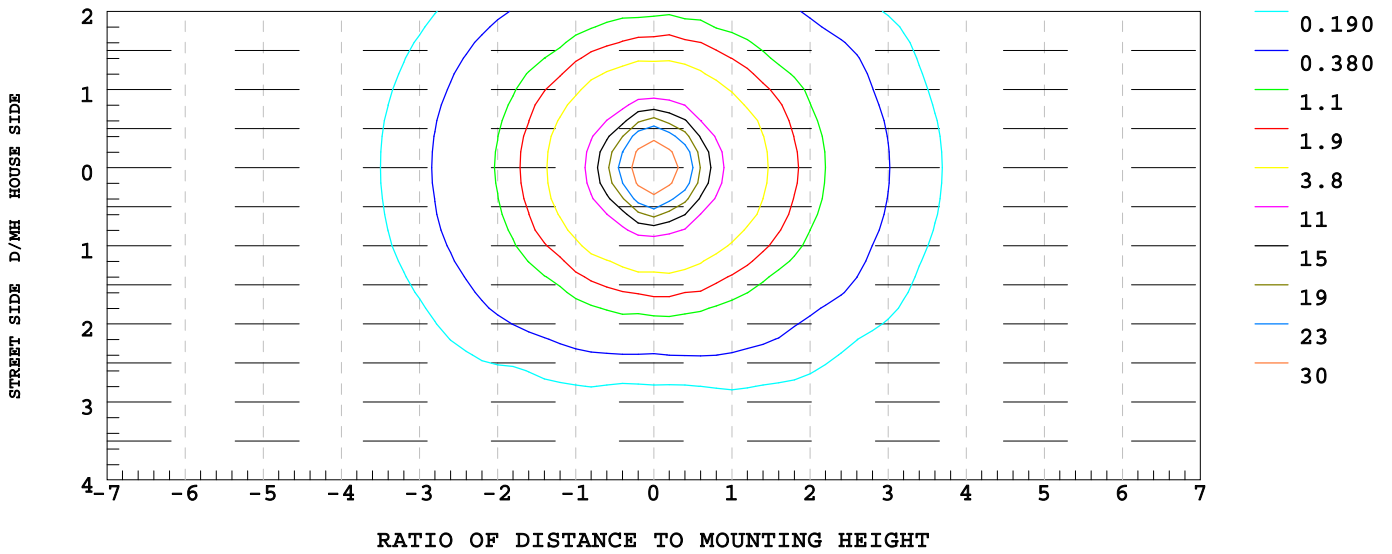
Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

ISOLUX DIAGRAM

Report number:

MANUFACTURER:	Address:	
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001

ILLUMINANCE AT MH=10 m, Enadir = 37.72 lx



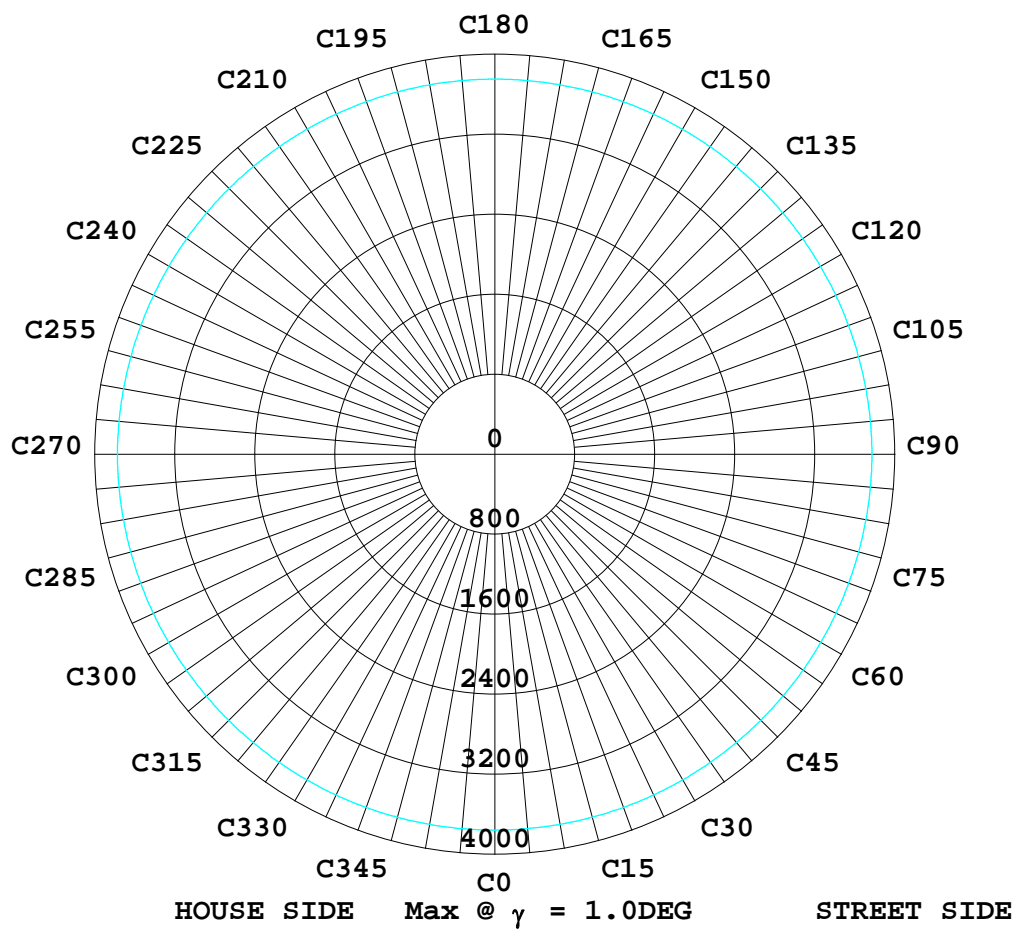
Test System:HOPOO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:	Address:	
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001



Test System:HOP00 HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER:	Address:	
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001

UNIT: cd

γ (DEG)	C(DEG)															
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	
0.0	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	
5.0	3702	3702	3702	3703	3705	3707	3709	3712	3715	3718	3722	3726	3730	3735	3740	
10.0	3632	3631	3632	3633	3635	3636	3637	3639	3641	3644	3648	3653	3659	3667	3675	
15.0	3381	3382	3387	3395	3407	3421	3439	3462	3487	3517	3543	3546	3554	3563	3577	
20.0	3130	3129	3133	3140	3150	3164	3183	3208	3238	3271	3310	3350	3398	3420	3439	
25.0	3020	3019	3015	3009	3002	2994	2988	2982	2990	3026	3063	3109	3167	3236	3289	
30.0	2910	2910	2906	2900	2890	2879	2865	2848	2828	2812	2804	2847	2906	2976	3062	
35.0	2781	2780	2774	2768	2759	2746	2723	2682	2652	2639	2625	2610	2628	2726	2823	
40.0	2652	2650	2641	2631	2617	2601	2577	2534	2499	2483	2475	2466	2489	2535	2619	
45.0	2359	2360	2362	2367	2375	2391	2410	2385	2333	2300	2300	2352	2364	2341	2336	
50.0	2065	2068	2070	2073	2074	2073	2065	2065	2054	2097	2078	2095	2092	1996	1969	
55.0	1741	1742	1744	1751	1754	1748	1736	1712	1704	1693	1718	1704	1636	1567	1543	
60.0	1416	1416	1416	1425	1435	1446	1454	1425	1380	1301	1286	1317	1307	1280	1256	
65.0	1236	1234	1228	1225	1217	1213	1207	1178	1164	1105	1054	1047	1021	978	951	
70.0	1056	1054	1052	1052	1039	1031	1011	992	983	927	870	773	723	676	645	
75.0	876	876	876	880	862	846	820	817	811	759	696	571	533	484	406	
80.0	695	697	701	708	685	660	635	649	646	606	548	455	406	309	230	
85.0	515	518	526	536	508	475	453	484	486	462	420	353	285	194	121	
90.0	335	339	352	365	332	290	272	318	332	324	308	257	174	99.4	43.9	

Test System:HOPOO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER:	Address:	
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001

UNIT: cd

C(DEG)\ γ (DEG)	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145
0.0	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772
5.0	3745	3751	3757	3763	3754	3745	3736	3728	3720	3713	3706	3700	3694	3689	3684
10.0	3685	3697	3710	3724	3704	3686	3669	3653	3639	3626	3615	3605	3597	3590	3583
15.0	3596	3618	3642	3668	3633	3600	3571	3545	3524	3508	3494	3483	3484	3490	3496
20.0	3464	3495	3530	3570	3507	3449	3400	3361	3332	3322	3343	3364	3380	3398	3415
25.0	3317	3348	3387	3433	3347	3268	3197	3134	3120	3144	3174	3212	3251	3286	3282
30.0	3121	3154	3192	3237	3157	3083	3008	2969	2985	3012	3044	3060	3032	3022	3016
35.0	2915	2929	2942	2965	2905	2860	2829	2847	2869	2896	2849	2788	2751	2736	2742
40.0	2688	2711	2670	2653	2609	2584	2604	2659	2702	2627	2561	2501	2474	2519	2569
45.0	2342	2356	2317	2294	2326	2355	2365	2425	2385	2303	2244	2267	2321	2370	2419
50.0	1975	2034	2004	1961	2053	2126	2092	2101	2051	1983	1993	2054	2111	2158	2182
55.0	1573	1631	1620	1611	1693	1702	1674	1749	1758	1711	1713	1776	1823	1860	1915
60.0	1269	1245	1195	1269	1302	1266	1288	1373	1363	1352	1411	1477	1525	1574	1643
65.0	913	883	813	794	879	888	940	983	996	1061	1131	1168	1189	1256	1375
70.0	596	529	500	508	511	551	623	699	751	808	890	905	943	1005	1129
75.0	346	281	238	235	254	287	370	450	508	603	696	749	779	808	903
80.0	154	105	67.0	51.6	69.8	110	177	249	334	422	509	588	627	635	694
85.0	52.2	7.29	0.00	0.00	0.00	12.5	63.4	125	199	269	346	435	485	473	498
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.3	83.0	141	196	288	347	316	310

Test System:HOPOO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER:	Address:	
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001

UNIT: cd

C(DEG)\ γ (DEG)	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220
0.0	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772
5.0	3680	3676	3673	3671	3669	3669	3669	3670	3672	3674	3676	3679	3682	3685	3690
10.0	3578	3574	3570	3567	3566	3565	3567	3567	3569	3571	3574	3577	3580	3585	3591
15.0	3502	3509	3514	3518	3522	3524	3526	3526	3525	3522	3517	3513	3507	3501	3497
20.0	3431	3445	3458	3469	3478	3483	3485	3485	3481	3474	3465	3452	3438	3424	3410
25.0	3271	3262	3256	3254	3251	3252	3253	3255	3258	3264	3269	3275	3283	3294	3299
30.0	3009	3006	3006	3008	3012	3016	3020	3022	3024	3027	3028	3029	3031	3036	3048
35.0	2771	2792	2811	2828	2841	2850	2854	2854	2851	2844	2830	2812	2789	2765	2767
40.0	2610	2633	2648	2664	2677	2685	2687	2687	2684	2672	2651	2628	2612	2590	2545
45.0	2458	2485	2510	2531	2541	2543	2543	2544	2549	2545	2524	2487	2464	2446	2381
50.0	2252	2322	2380	2409	2412	2403	2398	2403	2421	2441	2433	2364	2272	2196	2158
55.0	1995	2071	2111	2127	2125	2120	2119	2123	2135	2151	2158	2113	2009	1906	1882
60.0	1701	1748	1774	1791	1819	1832	1840	1838	1825	1802	1786	1777	1737	1652	1584
65.0	1447	1469	1495	1522	1555	1570	1577	1574	1558	1524	1499	1506	1492	1387	1263
70.0	1207	1225	1240	1268	1297	1308	1314	1311	1296	1266	1252	1258	1240	1132	1013
75.0	977	988	990	1015	1039	1047	1051	1048	1035	1012	1006	1011	987	903	816
80.0	753	757	743	764	782	786	788	786	775	760	760	764	753	691	635
85.0	535	527	498	513	526	525	525	523	516	509	515	520	528	492	465
90.0	320	297	253	263	270	264	262	260	257	259	270	275	306	301	299

Test System:HOPOO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER:	Address:	
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001

UNIT: cd

C(DEG)\ γ (DEG)	225	230	235	240	245	250	255	260	265	270	275	280	285	290	295
0.0	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772
5.0	3694	3700	3706	3712	3719	3727	3735	3743	3752	3761	3755	3749	3743	3738	3733
10.0	3599	3607	3617	3629	3643	3658	3675	3693	3712	3732	3718	3704	3691	3679	3668
15.0	3493	3494	3507	3522	3541	3563	3588	3616	3647	3680	3656	3634	3614	3596	3581
20.0	3398	3387	3379	3372	3387	3413	3445	3483	3526	3574	3547	3523	3502	3483	3467
25.0	3276	3256	3236	3217	3199	3204	3247	3299	3360	3429	3401	3380	3364	3353	3302
30.0	3073	3114	3099	3067	3038	3015	3041	3108	3183	3267	3230	3203	3188	3138	3043
35.0	2787	2825	2892	2945	2912	2881	2855	2891	2934	2990	2975	2971	2960	2848	2748
40.0	2493	2514	2594	2687	2753	2696	2650	2627	2628	2647	2680	2733	2702	2593	2474
45.0	2323	2295	2304	2380	2449	2481	2430	2416	2401	2402	2404	2435	2399	2355	2327
50.0	2149	2092	2058	2040	2099	2160	2143	2155	2110	2040	2082	2095	2059	2059	2084
55.0	1850	1804	1764	1752	1838	1833	1763	1775	1793	1696	1756	1754	1680	1661	1686
60.0	1558	1515	1467	1417	1430	1446	1380	1376	1430	1338	1301	1323	1321	1319	1322
65.0	1220	1207	1194	1103	1034	1037	1029	940	987	898	922	985	1017	1021	1038
70.0	955	933	906	858	795	763	691	633	597	558	583	602	674	705	737
75.0	785	768	718	642	540	492	418	340	305	296	293	334	411	455	510
80.0	628	604	542	441	363	279	205	142	95.2	76.4	94.3	143	193	269	362
85.0	481	449	370	283	215	144	75.7	29.4	0.46	0.00	0.47	28.1	75.5	151	232
90.0	336	302	207	150	88.0	38.7	1.47	0.00	0.00	0.00	0.00	0.00	10.3	62.1	128

Test System:HOPOO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER:	Address:	
NAME: iron + (Helvar 70W)	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1.5M	SERIAL No.:20180321001

UNIT: cd

C(DEG)\ γ (DEG)	300	305	310	315	320	325	330	335	340	345	350	355
0.0	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772	3772
5.0	3728	3724	3720	3716	3713	3711	3709	3708	3706	3705	3704	3703
10.0	3659	3652	3646	3641	3638	3636	3634	3633	3632	3632	3632	3632
15.0	3569	3559	3552	3524	3492	3464	3441	3422	3407	3396	3388	3383
20.0	3442	3388	3337	3293	3255	3223	3196	3174	3158	3145	3138	3133
25.0	3224	3157	3100	3050	3009	2999	3000	3004	3008	3013	3017	3020
30.0	2960	2889	2841	2844	2852	2861	2871	2880	2891	2898	2905	2908
35.0	2657	2646	2661	2676	2690	2708	2732	2750	2760	2769	2776	2780
40.0	2467	2483	2493	2506	2526	2557	2589	2616	2630	2639	2647	2651
45.0	2327	2354	2314	2298	2339	2389	2414	2402	2389	2375	2367	2361
50.0	2114	2095	2079	2066	2051	2081	2079	2080	2082	2078	2072	2067
55.0	1747	1779	1758	1722	1714	1726	1750	1757	1760	1756	1750	1744
60.0	1372	1372	1338	1353	1421	1449	1463	1451	1435	1430	1426	1421
65.0	1056	1043	1070	1128	1161	1204	1208	1217	1214	1226	1235	1238
70.0	771	823	884	944	966	1004	1019	1036	1037	1049	1056	1057
75.0	536	628	715	770	794	813	828	854	860	872	878	877
80.0	426	482	565	606	630	631	637	672	684	697	700	697
85.0	309	366	433	456	473	456	448	490	509	522	522	517
90.0	201	269	312	312	317	284	260	311	333	348	345	336

Test System:HOPPO HPG1900
 Temperature:25.3DEG
 Operators:
 Test Date:2018年03月21日

Test Set: 5.0deg/s B-Beta (TYPE B)
 Humidity:65.0%
 Test Distance:7.000 m
 Remarks: LG 5630 4000K