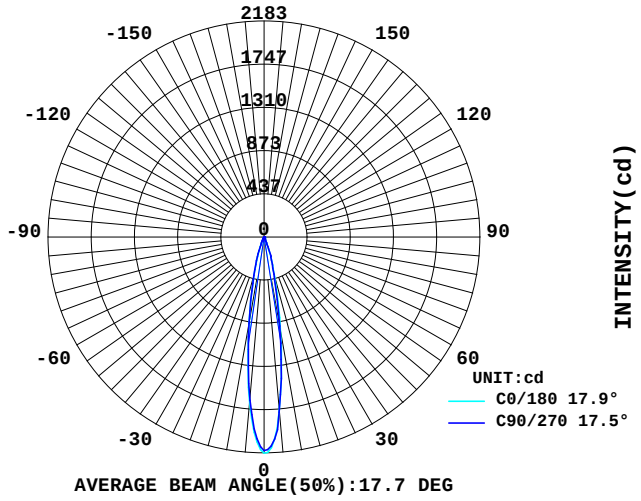
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

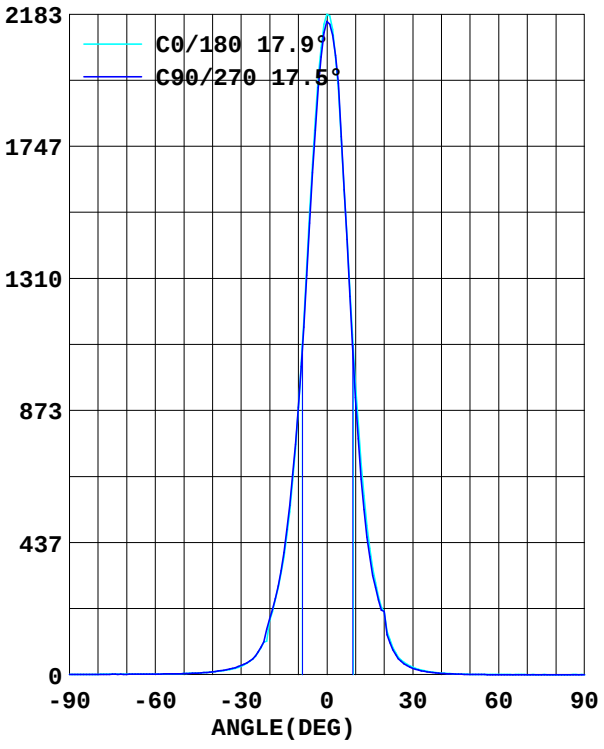
DATA OF LAMP		Imax(cd)	2183	S/MH(C0/180)	0.29
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	0.29
NOMINAL POWER(W)	5	TOTAL FLUX(lm)	303.17	Voltage(V)	23.76
RATED VOLTAGE(V)	24	EFFICIENCY(lm/W)	60.8	Current(A)	0.210
NOMINAL FLUX(lm)	303.2	η up(%)	0.8	Power(W)	4.990
LAMPS QUANTITY	1	η down(%)	99.2	Power Factor(PF)	1.000
TEST VOLTAGE(V)	23.8	Effictive Flux(lm)	246.8	EEI	0.193

LUMINOUS INTENSITY DISTRIBUTION



AVERAGE BEAM ANGLE(50%):17.7 DEG

LUMINOUS INTENSITY DISTRIBUTION



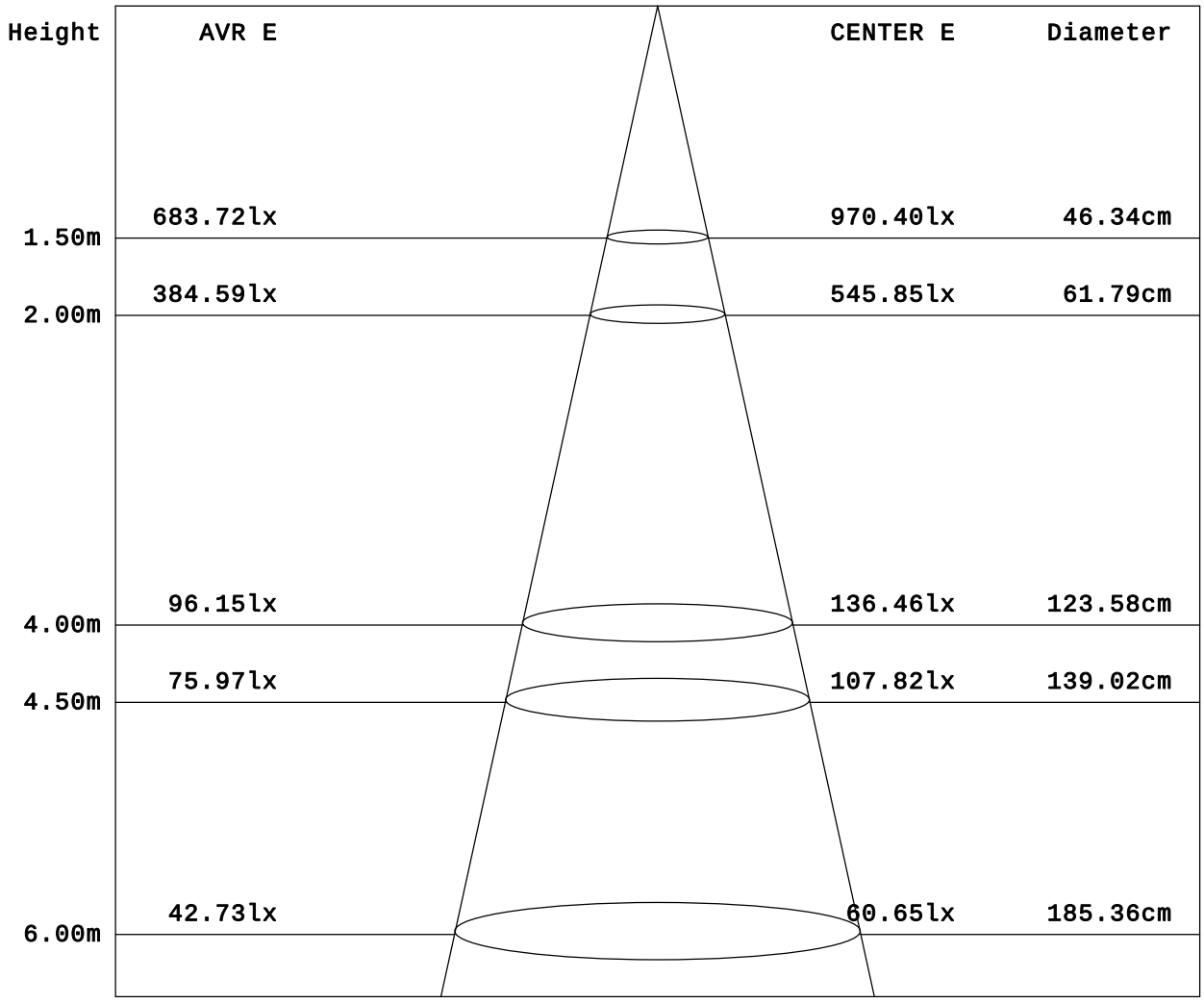
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年07月08日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:



Angle:17.6deg

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

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
5.0	1686	1656	1659	1599	1768	1776	1778	1789	0- 5	46.31	46.31
10.0	882.6	924.9	884.1	865.1	960.8	921.4	916.0	963.7	5- 10	90.17	136.4
15.0	388.9	412.7	403.2	382.5	417.6	386.7	389.5	420.5	10- 15	72.44	208.9
20.0	178.2	208.1	183.5	158.3	207.7	177.6	208.7	194.3	15- 20	45.26	254.1
25.0	61.24	56.83	61.44	53.73	58.14	58.00	52.90	68.06	20- 25	21.84	276.0
30.0	27.48	25.42	29.96	23.83	24.86	25.69	21.01	29.14	25- 30	9.951	285.9
35.0	14.88	12.19	16.46	10.54	10.88	13.36	9.231	15.29	30- 35	5.392	291.3
40.0	8.680	5.924	9.162	4.822	4.960	7.922	4.133	8.955	35- 40	3.169	294.5
45.0	5.442	2.686	5.166	2.135	2.204	4.822	1.791	5.235	40- 45	1.888	296.4
50.0	3.375	0.964	3.375	0.689	0.896	3.168	0.758	3.306	45- 50	1.135	297.5
55.0	2.548	0.207	2.342	0.138	0.344	2.342	0.069	2.411	50- 55	0.701	298.2
60.0	1.928	0	1.791	0	0.207	1.791	0	1.860	55- 60	0.500	298.7
65.0	1.584	0	1.515	0	0	1.446	0	1.446	60- 65	0.405	299.1
70.0	1.377	0	0.964	0	0	1.308	0	1.308	65- 70	0.355	299.5
75.0	1.308	0	1.171	0	0	1.171	0	1.171	70- 75	0.312	299.8
80.0	0.964	0	0.964	0	0	0.827	0	0.964	75- 80	0.295	300.1
85.0	0.964	0	0.896	0	0	0.896	0	0.964	80- 85	0.253	300.3
90.0	0.896	0	0.827	0	0	0.827	0	0.827	85- 90	0.243	300.6
95.0	0.827	0	0.689	0	0.069	0.758	0	0.689	90- 95	0.206	300.8
100.0	0.758	0	0.620	0	0.069	0.482	0	0.689	95-100	0.186	301.0
105.0	0.689	0	0.551	0	0	0.551	0	0.344	100-105	0.164	301.1
110.0	0.551	0	0.413	0	0.069	0.344	0	0.551	105-110	0.140	301.3
115.0	0.344	0	0.413	0	0.069	0.551	0	0.413	110-115	0.130	301.4
120.0	0.413	0	0.482	0	0.138	0.413	0	0.344	115-120	0.116	301.5
125.0	0.482	0	0.413	0	0	0.344	0	0.138	120-125	0.093	301.6
130.0	0.413	0	0.276	0	0.207	0.413	0	0.413	125-130	0.080	301.7
135.0	0.413	0	0.276	0	0.276	0.413	0	0.413	130-135	0.078	301.8
140.0	0.276	0	0.276	0	0.344	0.413	0	0.207	135-140	0.076	301.9
145.0	0.551	0	0.482	0	0.551	0.551	0.138	0.551	140-145	0.088	301.9
150.0	0.551	0.069	0.689	0.276	0.758	0.896	0.413	0.551	145-150	0.130	302.1
155.0	0.827	0.758	0.827	0.689	1.308	1.308	0.827	1.240	150-155	0.198	302.3
160.0	1.308	1.102	1.308	1.171	1.722	1.722	1.240	1.584	155-160	0.247	302.5
165.0	1.722	1.377	1.584	1.377	1.928	1.860	1.377	1.653	160-165	0.250	302.8
170.0	1.791	1.515	1.653	1.377	1.997	1.791	1.584	1.860	165-170	0.198	303.0
175.0	1.791	1.377	1.653	1.377	1.928	1.722	1.515	1.722	170-175	0.118	303.1
180.0	1.722	1.515	1.653	1.446	1.860	1.653	1.515	1.584	175-180	0.039	303.1
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

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

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

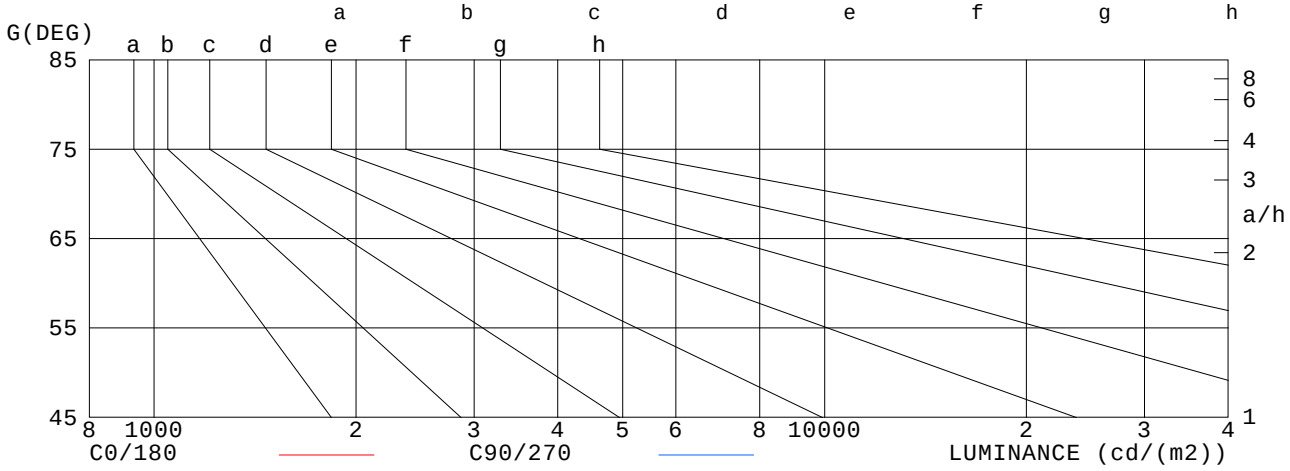
LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	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
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	111	103
80	56	56
75	51	45
70	40	28
65	37	36
60	39	36
55	44	41
50	53	53
45	77	73

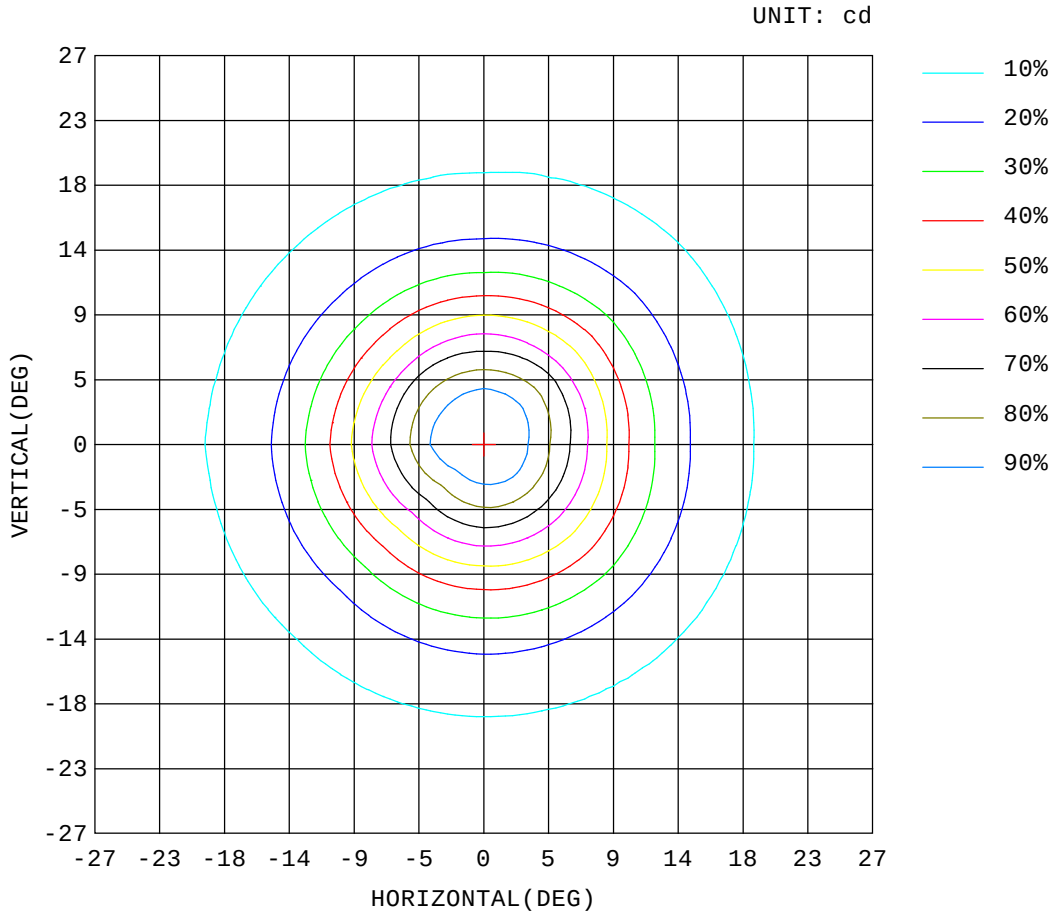
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年07月08日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:



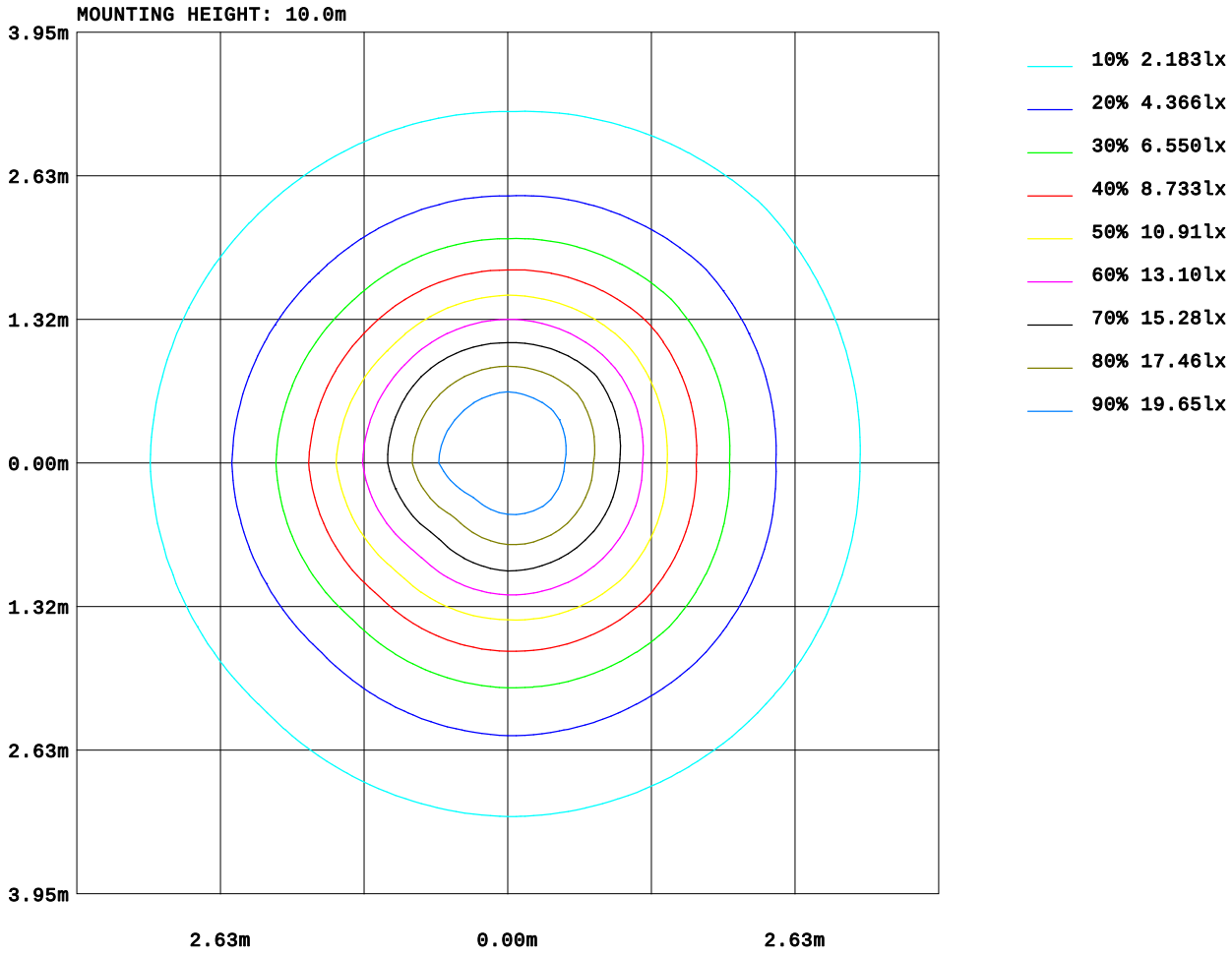
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年07月08日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:



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

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

AREA LUMINOUS FLUX

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

AREA FLUX DIAGRAM — UNIT:lm

VERTICAL(DEG)	-27	-24	-21	-18	-15	-12	-9	-6	6	9	12	15	18	21	24	27	Φ t	Φ a
27	0.03	0.04	0.05	0.06	0.08	0.10	0.11	0.13	0.13	0.14	0.13	0.12	0.11	0.09	0.07	0.06	0.05	0.04	1.54	0.00
24	0.04	0.05	0.07	0.10	0.13	0.16	0.20	0.24	0.26	0.26	0.24	0.21	0.18	0.14	0.11	0.08	0.06	0.05	2.58	0.00
21	0.05	0.07	0.10	0.14	0.21	0.30	0.41	0.50	0.55	0.55	0.51	0.43	0.31	0.23	0.17	0.12	0.08	0.06	4.79	0.62
18	0.06	0.09	0.14	0.22	0.37	0.54	0.67	0.78	0.84	0.85	0.80	0.70	0.57	0.39	0.25	0.16	0.11	0.07	7.63	4.87
15	0.08	0.12	0.20	0.37	0.57	0.77	1.00	1.21	1.36	1.37	1.26	1.05	0.83	0.62	0.38	0.22	0.14	0.09	11.6	9.53
12	0.10	0.16	0.29	0.53	0.77	1.09	1.52	1.97	2.28	2.30	2.04	1.61	1.18	0.82	0.54	0.30	0.18	0.11	17.8	16.0
9	0.11	0.20	0.40	0.66	1.00	1.54	2.26	3.03	3.58	3.60	3.09	2.36	1.59	1.03	0.68	0.38	0.21	0.12	25.8	24.3
	0.12	0.24	0.49	0.78	1.24	2.01	3.04	4.20	4.94	4.95	4.23	3.02	1.98	1.23	0.77	0.45	0.23	0.14	34.1	32.6
	0.13	0.26	0.53	0.85	1.41	2.35	3.59	4.91	5.72	5.69	4.79	3.41	2.20	1.33	0.82	0.49	0.24	0.14	38.9	37.5
	0.13	0.26	0.53	0.85	1.41	2.33	3.51	4.71	5.50	5.56	4.66	3.36	2.18	1.33	0.82	0.48	0.24	0.14	38.0	36.6
	0.12	0.23	0.48	0.77	1.23	1.98	2.90	3.80	4.54	4.62	3.93	2.93	1.96	1.21	0.76	0.45	0.23	0.13	32.3	30.8
-9	0.11	0.19	0.39	0.65	0.99	1.51	2.16	2.82	3.30	3.34	2.94	2.29	1.58	1.01	0.65	0.38	0.20	0.12	24.6	23.0
-12	0.09	0.15	0.28	0.51	0.75	1.07	1.50	1.93	2.21	2.24	2.01	1.60	1.15	0.78	0.53	0.28	0.16	0.10	17.3	15.5
-15	0.07	0.12	0.19	0.34	0.54	0.75	1.00	1.23	1.40	1.41	1.27	1.04	0.80	0.59	0.36	0.20	0.12	0.08	11.5	9.35
-18	0.06	0.09	0.13	0.21	0.34	0.51	0.66	0.78	0.86	0.87	0.80	0.68	0.55	0.38	0.22	0.14	0.09	0.06	7.44	4.68
-21	0.05	0.07	0.09	0.14	0.20	0.29	0.39	0.48	0.54	0.54	0.50	0.42	0.30	0.21	0.14	0.10	0.07	0.05	4.58	0.55
-24	0.03	0.05	0.07	0.09	0.13	0.17	0.21	0.25	0.28	0.28	0.25	0.21	0.17	0.13	0.10	0.07	0.05	0.04	2.57	0.00
-27	0.02	0.03	0.05	0.07	0.08	0.11	0.13	0.14	0.15	0.16	0.14	0.13	0.11	0.09	0.07	0.05	0.04	0.03	1.59	0.00
HORIZONTAL(DEG)																				
Φ t	1.41	2.43	4.50	7.33	11.4	17.5	25.3	33.1	38.4	38.7	33.6	25.6	17.7	11.6	7.45	4.41	2.51	1.55	303	
Φ a	0.00	0.00	0.67	4.65	9.26	15.7	23.5	31.5	36.9	37.2	32.0	23.9	15.9	9.44	4.73	0.46	0.00	0.00		247

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

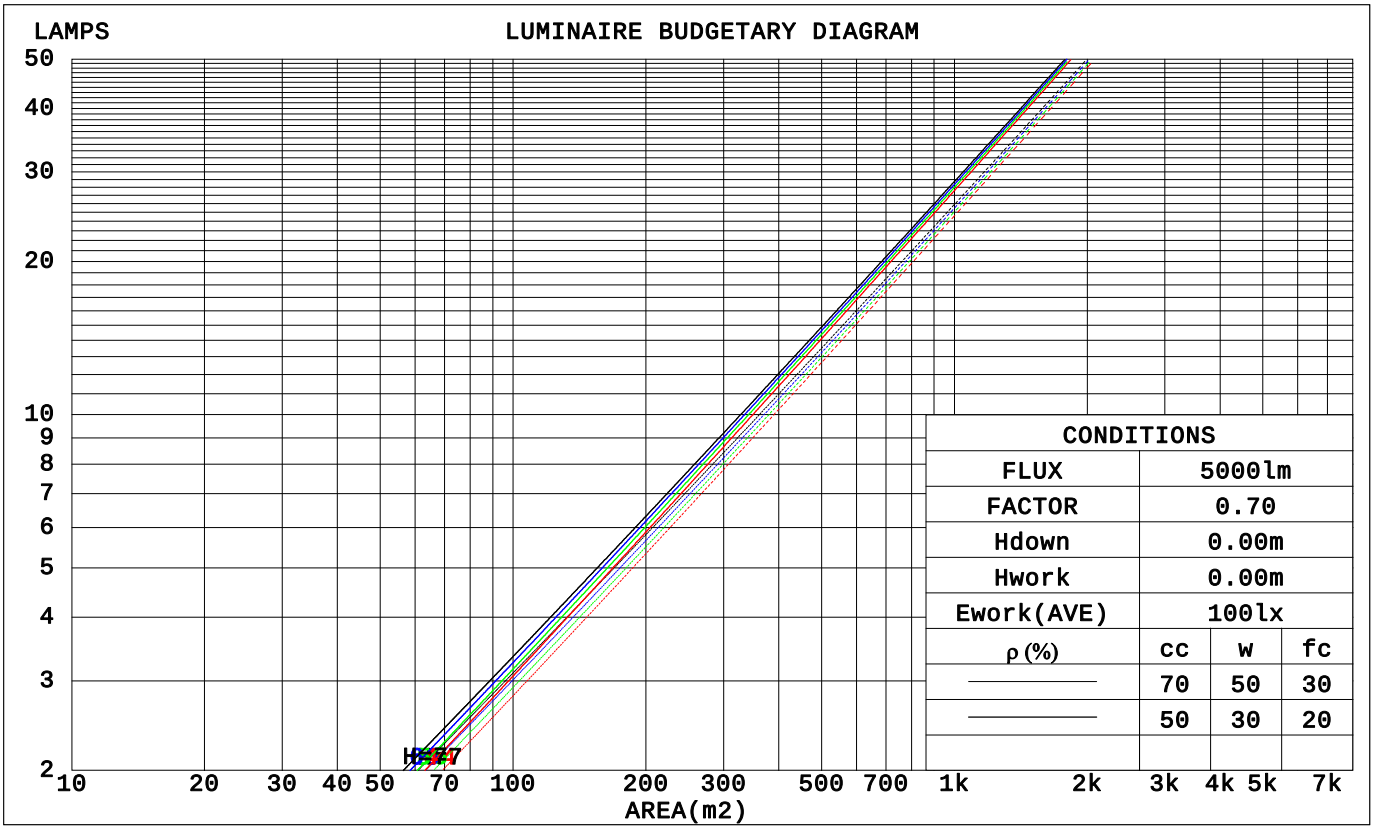
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

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	1.01	1.01	1.01	.99
1.0	1.13	1.11	1.09	1.11	1.09	1.08	1.07	1.05	1.04	1.03	1.02	1.01	.99	.99	.98	.96
2.0	1.08	1.05	1.03	1.06	1.04	1.01	1.03	1.01	.99	.00	.98	.97	.97	.96	.95	.93
3.0	1.04	1.00	.97	1.02	.99	.97	.00	.97	.95	.97	.95	.94	.95	.93	.92	.91
4.0	.00	.96	.93	.99	.95	.93	.97	.94	.92	.95	.93	.91	.93	.91	.90	.88
5.0	.97	.93	.90	.96	.92	.90	.94	.91	.89	.93	.90	.88	.91	.89	.87	.86
6.0	.94	.90	.87	.93	.89	.87	.92	.89	.86	.90	.88	.86	.89	.87	.85	.84
7.0	.91	.87	.85	.91	.87	.84	.89	.86	.84	.88	.86	.83	.87	.85	.83	.82
8.0	.89	.85	.82	.88	.85	.82	.87	.84	.82	.86	.84	.82	.86	.83	.81	.80
9.0	.87	.83	.80	.86	.83	.80	.85	.82	.80	.85	.82	.80	.84	.81	.79	.79
10.0	.85	.81	.79	.84	.81	.78	.84	.80	.78	.83	.80	.78	.82	.80	.78	.77



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

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

WEC AND CCEC

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

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 Coeffcients(WEC)									
0.0																
1.0	.134	.076	.024	.127	.072	.023	.114	.065	.021	.102	.059	.019	.091	.053	.017	
2.0	.122	.067	.021	.117	.064	.020	.106	.059	.018	.096	.054	.017	.087	.049	.016	
3.0	.113	.060	.018	.108	.058	.017	.099	.054	.016	.091	.050	.015	.084	.046	.014	
4.0	.105	.055	.016	.101	.053	.016	.094	.050	.015	.087	.047	.014	.080	.044	.013	
5.0	.098	.050	.015	.095	.049	.014	.089	.046	.014	.083	.044	.013	.077	.041	.012	
6.0	.093	.046	.013	.090	.045	.013	.084	.043	.013	.079	.041	.012	.074	.039	.012	
7.0	.088	.043	.012	.085	.042	.012	.080	.041	.012	.076	.039	.011	.072	.037	.011	
8.0	.083	.041	.011	.081	.040	.011	.077	.038	.011	.073	.037	.011	.069	.035	.010	
9.0	.079	.038	.011	.077	.038	.011	.073	.036	.010	.070	.035	.010	.067	.034	.010	
10.0	.076	.036	.010	.074	.036	.010	.071	.035	.010	.067	.033	.010	.064	.032	.009	

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	.197	.197	.197	.168	.168	.168	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.175	.164	.155	.149	.141	.133	.102	.097	.092	.059	.056	.054	.019	.018	.017	
2.0	.156	.139	.125	.134	.120	.108	.092	.083	.075	.053	.048	.044	.017	.016	.014	
3.0	.141	.120	.103	.121	.103	.089	.083	.072	.063	.048	.042	.037	.015	.014	.012	
4.0	.128	.104	.086	.110	.090	.075	.075	.063	.053	.044	.037	.031	.014	.012	.010	
5.0	.117	.092	.073	.101	.080	.064	.069	.056	.045	.040	.033	.027	.013	.011	.009	
6.0	.108	.082	.063	.093	.071	.055	.064	.050	.039	.037	.029	.023	.012	.010	.008	
7.0	.100	.074	.055	.086	.064	.048	.059	.045	.034	.035	.026	.020	.011	.009	.007	
8.0	.093	.067	.048	.080	.058	.042	.056	.041	.030	.032	.024	.018	.010	.008	.006	
9.0	.087	.061	.043	.075	.053	.038	.052	.037	.027	.030	.022	.016	.010	.007	.005	
10.0	.082	.056	.039	.071	.049	.034	.049	.034	.024	.029	.020	.014	.009	.007	.005	

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

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

Uncorrected UGR Table

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	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	-7.8	-7.2	-7.6	-7.0	-6.8	-7.7	-7.1	-7.5	-6.9	-6.8
3H	-7.0	-6.5	-6.8	-6.3	-6.1	-7.2	-6.6	-7.0	-6.4	-6.2
4H	-6.3	-5.8	-6.0	-5.6	-5.3	-6.6	-6.1	-6.4	-5.9	-5.7
6H	-5.4	-4.9	-5.1	-4.6	-4.4	-5.8	-5.2	-5.5	-5.0	-4.8
8H	-4.9	-4.4	-4.6	-4.1	-3.8	-5.1	-4.6	-4.8	-4.4	-4.1
12H	-4.1	-3.6	-3.8	-3.3	-3.1	-4.3	-3.9	-4.0	-3.6	-3.3
4H 2H	-8.0	-7.4	-7.7	-7.2	-7.0	-7.9	-7.4	-7.6	-7.1	-6.9
3H	-7.2	-6.7	-6.8	-6.4	-6.1	-7.4	-6.9	-7.1	-6.6	-6.3
4H	-6.3	-5.9	-6.0	-5.6	-5.2	-6.7	-6.2	-6.3	-5.9	-5.6
6H	-5.1	-4.7	-4.7	-4.4	-4.0	-5.5	-5.1	-5.2	-4.8	-4.5
8H	-4.4	-4.1	-4.0	-3.7	-3.3	-4.7	-4.4	-4.3	-4.0	-3.6
12H	-3.4	-3.1	-3.0	-2.7	-2.3	-3.7	-3.3	-3.2	-2.9	-2.5
8H 4H	-6.4	-6.1	-6.0	-5.7	-5.3	-6.8	-6.4	-6.4	-6.1	-5.7
6H	-5.1	-4.8	-4.7	-4.4	-4.0	-5.6	-5.3	-5.1	-4.8	-4.4
8H	-4.4	-4.1	-3.9	-3.7	-3.2	-4.6	-4.3	-4.2	-3.9	-3.5
12H	-3.0	-2.8	-2.6	-2.3	-1.9	-3.3	-3.0	-2.8	-2.6	-2.1
12H 4H	-6.5	-6.1	-6.0	-5.7	-5.3	-6.8	-6.5	-6.4	-6.1	-5.7
6H	-5.2	-4.9	-4.7	-4.5	-4.0	-5.6	-5.3	-5.1	-4.9	-4.4
8H	-4.4	-4.2	-3.9	-3.7	-3.2	-4.6	-4.4	-4.2	-4.0	-3.5
Variations with the observer position at spacings:										
S = 1.0H	+ 1.2 / - 1.0					+ 1.3 / - 0.7				
1.5H	+ 2.2 / - 1.4					+ 2.8 / - 1.6				
2.0H	+ 2.0 / - 1.4					+ 2.2 / - 1.3				

CIE Pub.117 Corrected 303.1 lm Total Lamp Luminous Flux.(8log(F/F0) = -4.1)

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

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

UTILIZATION FACTORS TABLE

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	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) x RCR = 5									
k = 0.60	90	84	80	89	84	80	89	83	80	77
0.80	97	91	88	96	91	88	95	90	87	84
1.00	101	96	92	100	95	92	98	95	91	88
1.25	104	99	96	103	99	96	101	98	95	91
1.50	107	102	99	106	102	99	103	100	98	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	96
4.00	114	111	109	112	110	108	108	106	105	98
5.00	115	113	111	113	111	110	109	108	107	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended					SHRNOM = 1.25	

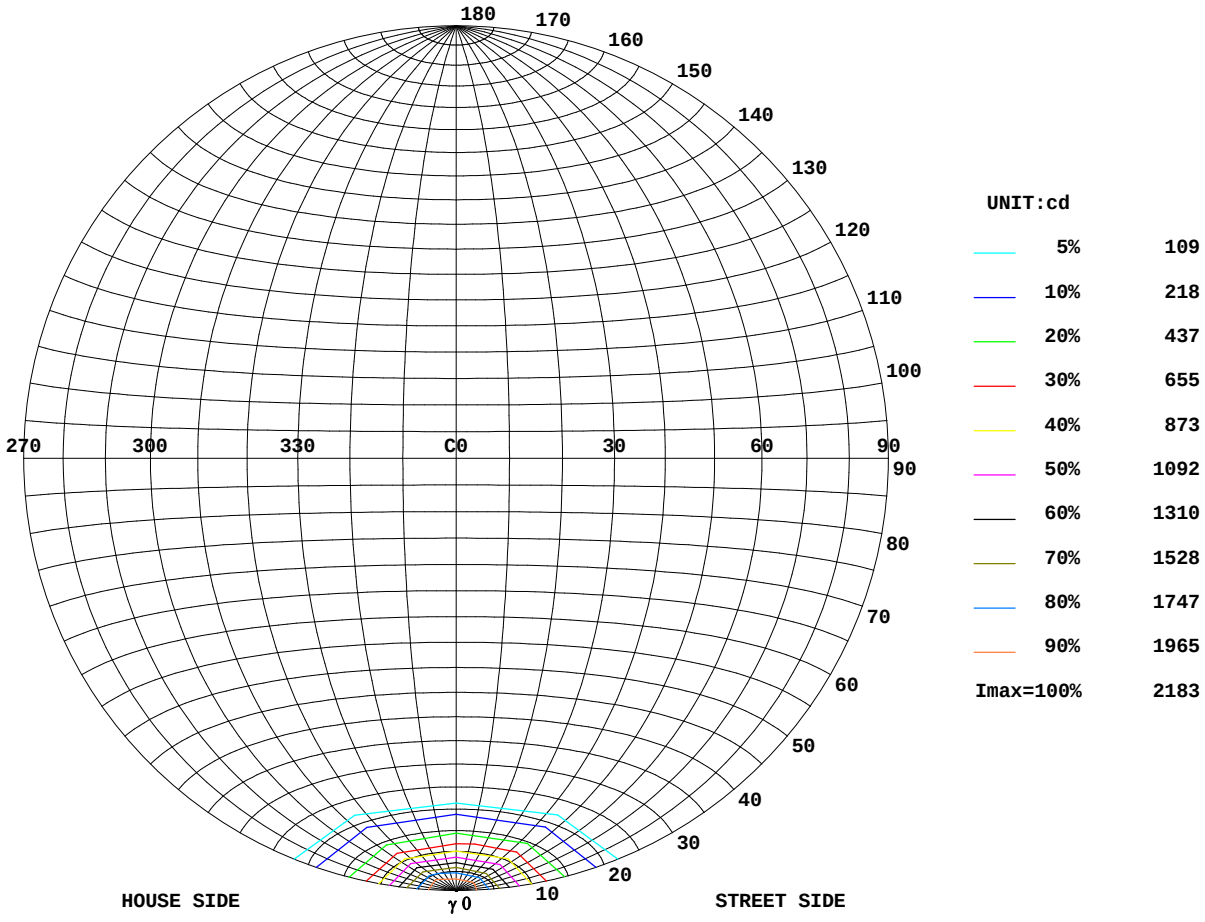
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年07月08日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:



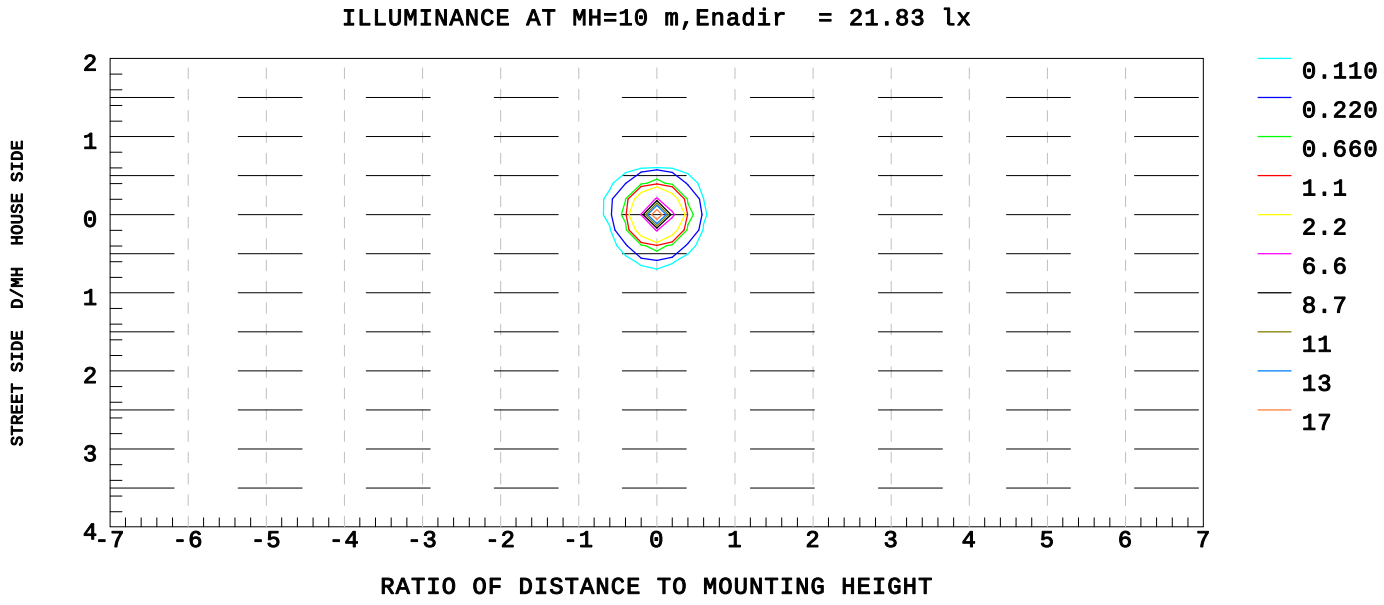
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年07月08日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:





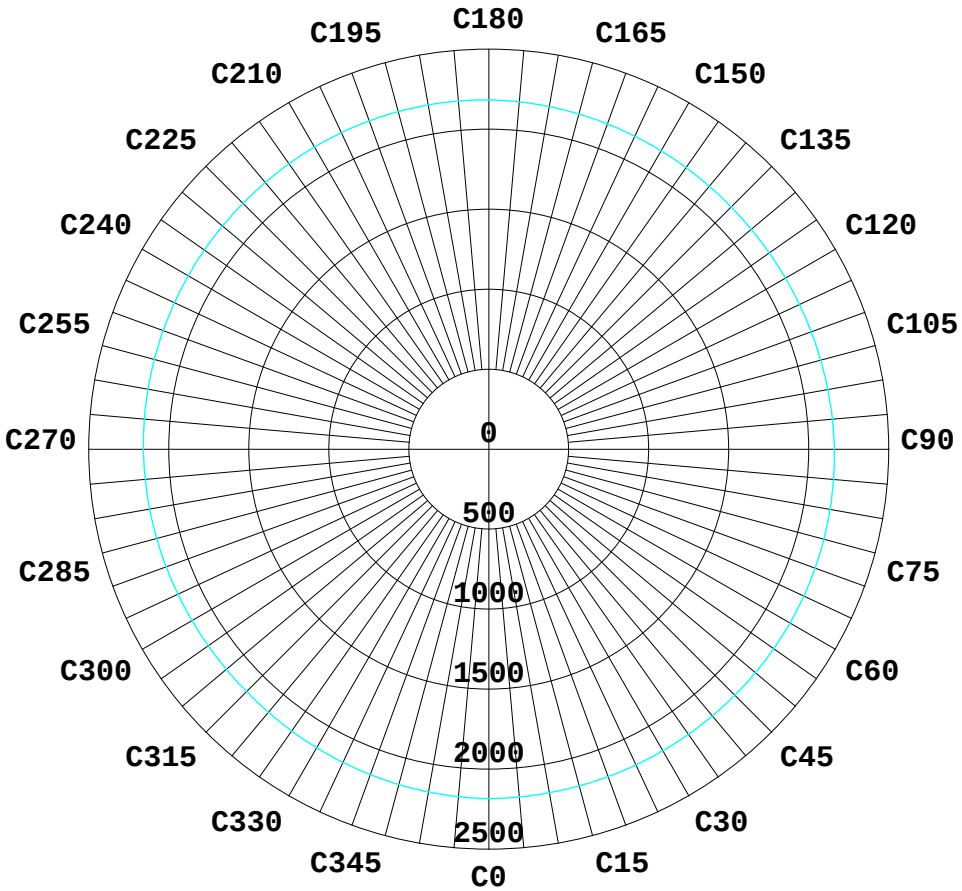
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年07月08日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:



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

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER: Havit Commercial		
Address:		
NAME: HCP-251045	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

UNIT: cd

γ (DEG) \ C(DEG)	0	45	90	135	180	225	270	315
0.0	2183	2174	2159	2142	2183	2174	2159	2142
5.0	1686	1656	1659	1599	1768	1776	1778	1789
10.0	883	925	884	865	961	921	916	964
15.0	389	413	403	383	418	387	390	421
20.0	178	208	184	158	208	178	209	194
25.0	61.2	56.8	61.4	53.7	58.1	58.0	52.9	68.0
30.0	27.4	25.4	29.9	23.8	24.8	25.6	21.0	29.1
35.0	14.8	12.1	16.4	10.5	10.8	13.3	9.23	15.2
40.0	8.68	5.92	9.16	4.82	4.96	7.92	4.13	8.95
45.0	5.44	2.68	5.16	2.13	2.20	4.82	1.79	5.23
50.0	3.37	0.96	3.37	0.69	0.90	3.16	0.76	3.30
55.0	2.54	0.21	2.34	0.14	0.34	2.34	0.07	2.41
60.0	1.92	0.00	1.79	0.00	0.21	1.79	0.00	1.86
65.0	1.58	0.00	1.51	0.00	0.00	1.44	0.00	1.44
70.0	1.37	0.00	0.96	0.00	0.00	1.30	0.00	1.30
75.0	1.30	0.00	1.17	0.00	0.00	1.17	0.00	1.17
80.0	0.96	0.00	0.96	0.00	0.00	0.83	0.00	0.96
85.0	0.96	0.00	0.90	0.00	0.00	0.90	0.00	0.96
90.0	0.90	0.00	0.83	0.00	0.00	0.83	0.00	0.83
95.0	0.83	0.00	0.69	0.00	0.07	0.76	0.00	0.69
100.0	0.76	0.00	0.62	0.00	0.07	0.48	0.00	0.69
105.0	0.69	0.00	0.55	0.00	0.00	0.55	0.00	0.34
110.0	0.55	0.00	0.41	0.00	0.07	0.34	0.00	0.55
115.0	0.34	0.00	0.41	0.00	0.07	0.55	0.00	0.41
120.0	0.41	0.00	0.48	0.00	0.14	0.41	0.00	0.34
125.0	0.48	0.00	0.41	0.00	0.00	0.34	0.00	0.14
130.0	0.41	0.00	0.28	0.00	0.21	0.41	0.00	0.41
135.0	0.41	0.00	0.28	0.00	0.28	0.41	0.00	0.41
140.0	0.28	0.00	0.28	0.00	0.34	0.41	0.00	0.21
145.0	0.55	0.00	0.48	0.00	0.55	0.55	0.14	0.55
150.0	0.55	0.07	0.69	0.28	0.76	0.90	0.41	0.55
155.0	0.83	0.76	0.83	0.69	1.30	1.30	0.83	1.24
160.0	1.30	1.10	1.30	1.17	1.72	1.72	1.24	1.58
165.0	1.72	1.37	1.58	1.37	1.92	1.86	1.37	1.65
170.0	1.79	1.51	1.65	1.37	1.99	1.79	1.58	1.86
175.0	1.79	1.37	1.65	1.37	1.92	1.72	1.51	1.72
180.0	1.72	1.51	1.65	1.44	1.86	1.65	1.51	1.58

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

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.300 m
Remarks: