

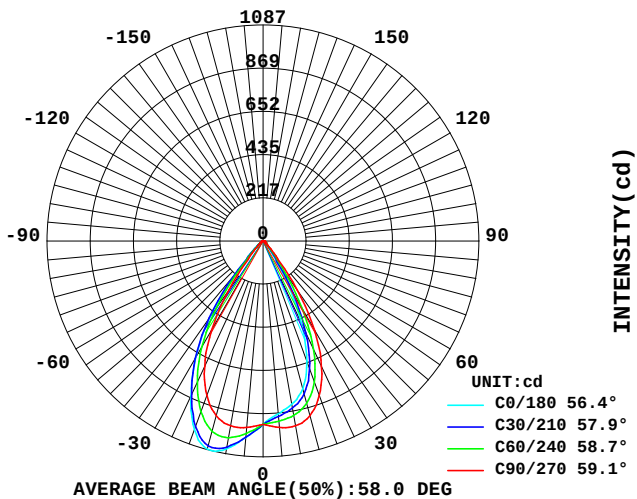
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number: 2022120102

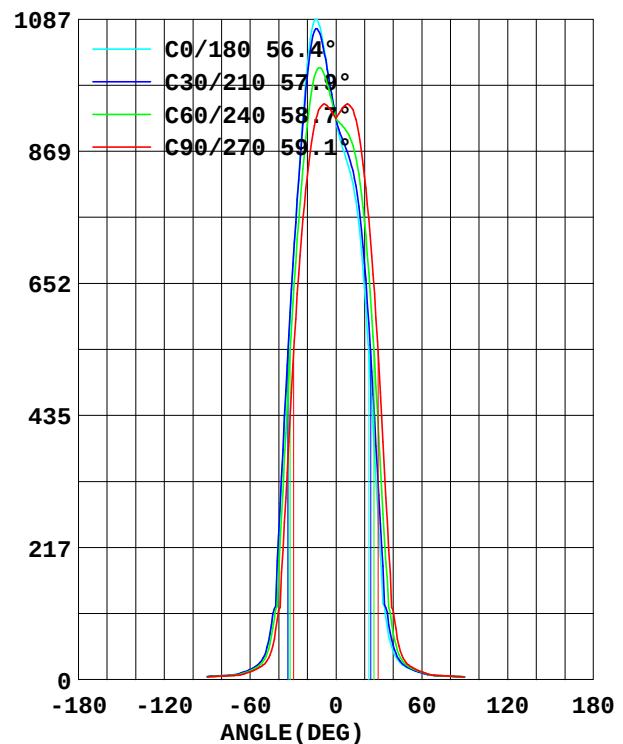
MANUFACTURER: Havit Commercial	Address:	
NAME: HCP-8921224-4K	TYPE:downlight	WEIGHT:0.5KG
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603

DATA OF LAMP		Imax(cd)	1087	S/MH(C0/180)	1.02
MODEL	HCP-8921224-4K	EFFICIENCY(%)	100.0	S/MH(C90/270)	0.92
NOMINAL POWER(W)	12	TOTAL FLUX(lm)	916.76	Voltage(V)	225.6
RATED VOLTAGE(V)	226	EFFICIENCY(lm/W)	79.1	Current(A)	0.057
NOMINAL FLUX(lm)	916.8	h up(%)	0.0	Power(W)	11.59
LAMPS QUANTITY	1	h down(%)	100.0	Power Factor(PF)	0.892
TEST VOLTAGE(V)	225.7	Effective Flux(lm)	842.2	EEI	0.173

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



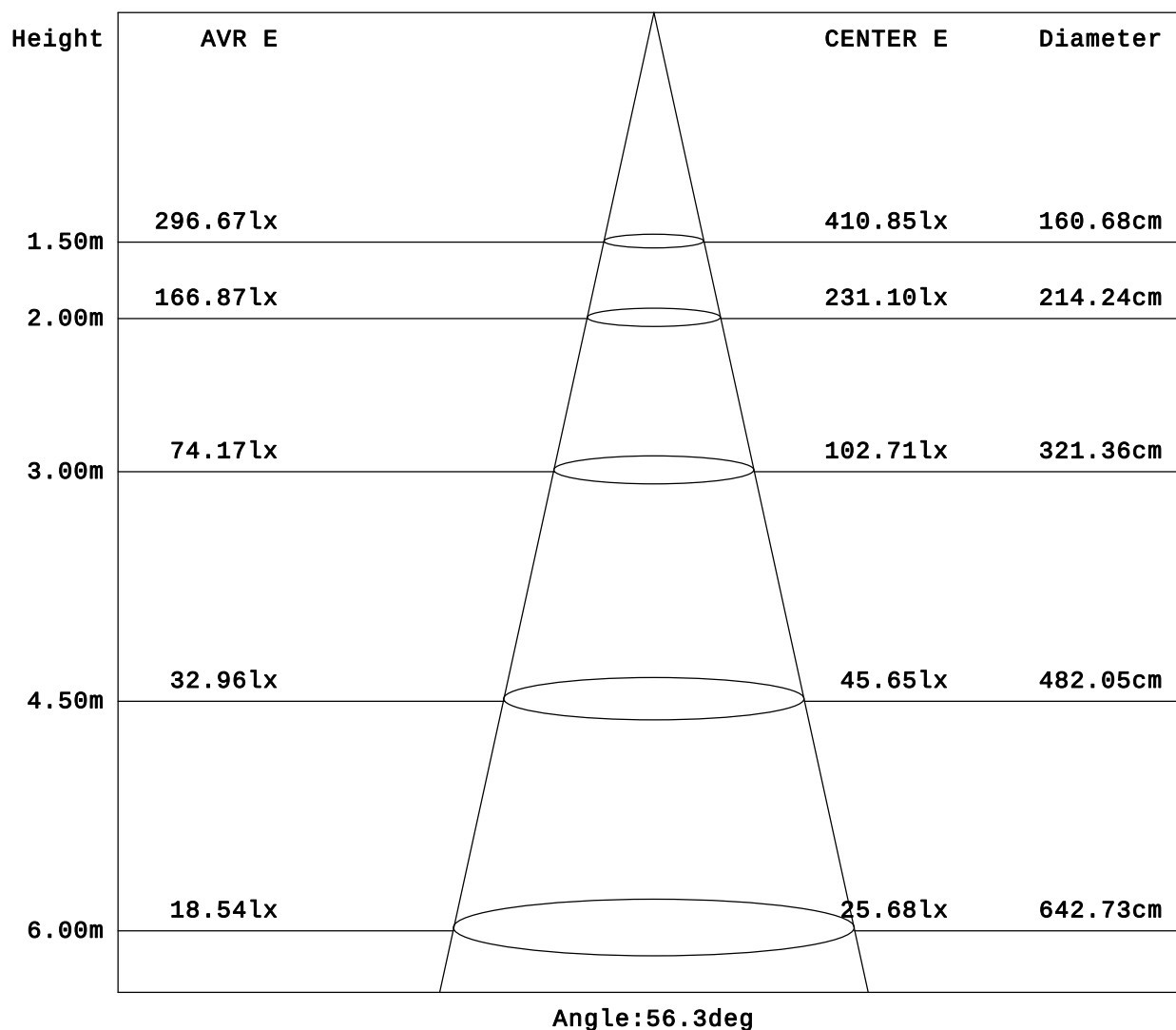
Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks:

AVERAGE AND CENTER E Figure

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:	
NAME: HCP-8921224-4K	TYPE:downlight	WEIGHT:0.5KG
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603



Test System:HOP00 HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022-12-01

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

ZONAL FLUX DIAGRAM

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:	
NAME: HCP-8921224-4K	TYPE:downlight	WEIGHT:0.5KG
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603

g	C0	C45	C90	C135	C180	C225	C270	C315	g	Zone	Total
5.0	991.8	983.8	941.3	894.8	872.7	894.8	941.3	983.8	0- 5	22.30	22.30
10.0	1062	1031	943.9	866.6	834.1	866.6	943.9	1031	5- 10	67.64	89.95
15.0	1085	1030	911.5	813.5	771.3	813.5	911.5	1030	10- 15	111.3	201.2
20.0	1011	951.8	828.4	708.4	644.9	708.4	828.4	951.8	15- 20	144.9	346.2
25.0	858.6	811.2	697.1	535.7	454.4	535.7	697.1	811.2	20- 25	158.6	504.8
30.0	680.5	644.6	519.8	333.2	248.1	333.2	519.8	644.6	25- 30	147.9	652.7
35.0	465.3	432.1	298.8	146.0	102.0	146.0	298.8	432.1	30- 35	114.1	766.9
40.0	232.4	219.4	114.3	57.15	46.71	57.15	114.3	219.4	35- 40	68.80	835.7
45.0	90.23	73.91	47.55	28.03	27.84	28.03	47.55	73.91	40- 45	30.66	866.3
50.0	39.93	31.29	25.72	17.98	19.58	17.98	25.72	31.29	45- 50	14.84	881.2
55.0	23.55	18.68	17.92	12.79	14.46	12.79	17.92	18.68	50- 55	9.213	890.4
60.0	16.51	12.48	12.92	9.216	10.87	9.216	12.92	12.48	55- 60	6.675	897.1
65.0	12.03	8.704	8.575	6.016	7.936	6.016	8.575	8.704	60- 65	4.891	902.0
70.0	8.448	5.824	6.912	4.992	6.784	4.992	6.912	5.824	65- 70	3.637	905.6
75.0	7.040	4.992	6.400	4.608	6.208	4.608	6.400	4.992	70- 75	3.122	908.7
80.0	6.592	4.672	5.760	4.160	5.632	4.160	5.760	4.672	75- 80	2.904	911.6
85.0	6.016	4.224	5.056	3.776	5.056	3.776	5.056	4.224	80- 85	2.653	914.3
90.0	5.248	4.032	4.480	3.712	4.736	3.712	4.480	4.032	85- 90	2.435	916.7
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	

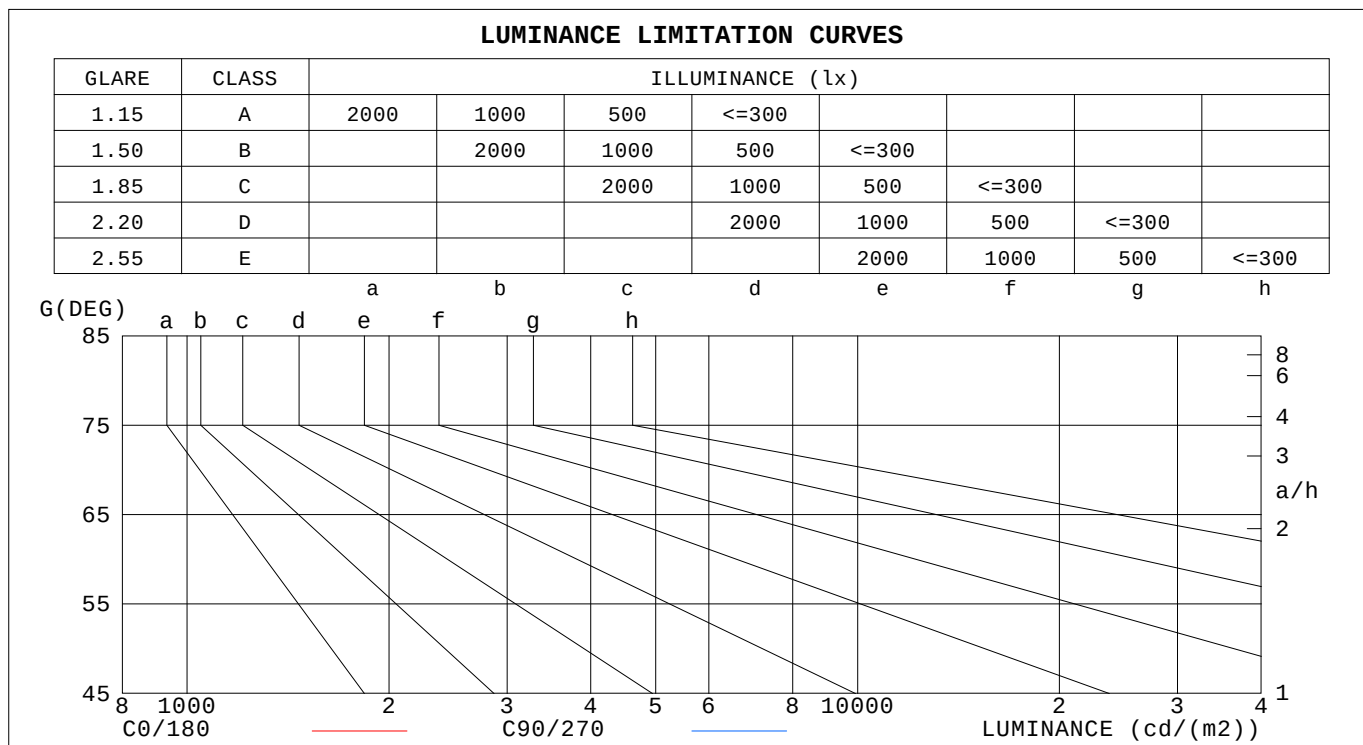
Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks:

LUMINANCE LIMITATION CURVES

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:	
NAME: HCP-8921224-4K	TYPE: downlight	WEIGHT: 0.5KG
SPECIFICATION: HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.: 2013051603



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	345	290
80	190	166
75	136	124
70	124	101
65	142	101
60	165	129
55	205	156
50	311	200
45	638	336

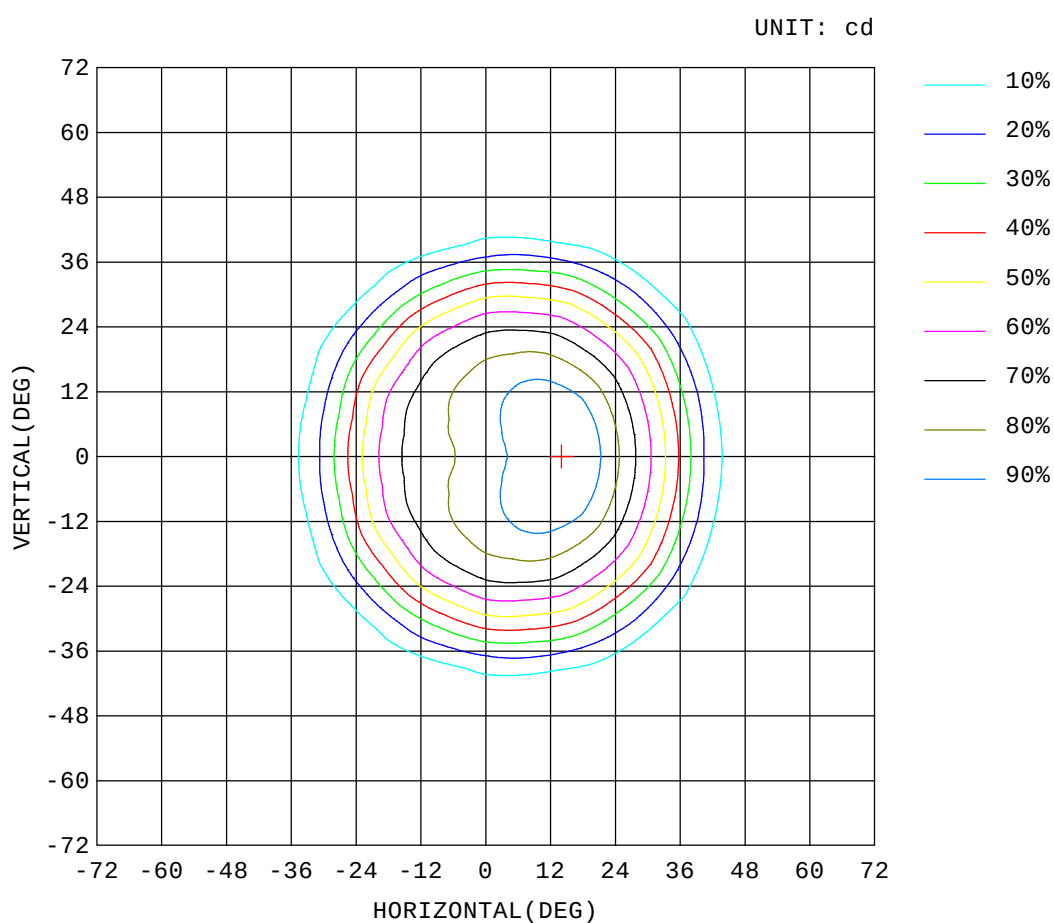
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Temperature:25.3DEG
Operators:
Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:	
NAME: HCP-8921224-4K	TYPE:downlight	WEIGHT:0.5KG
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603



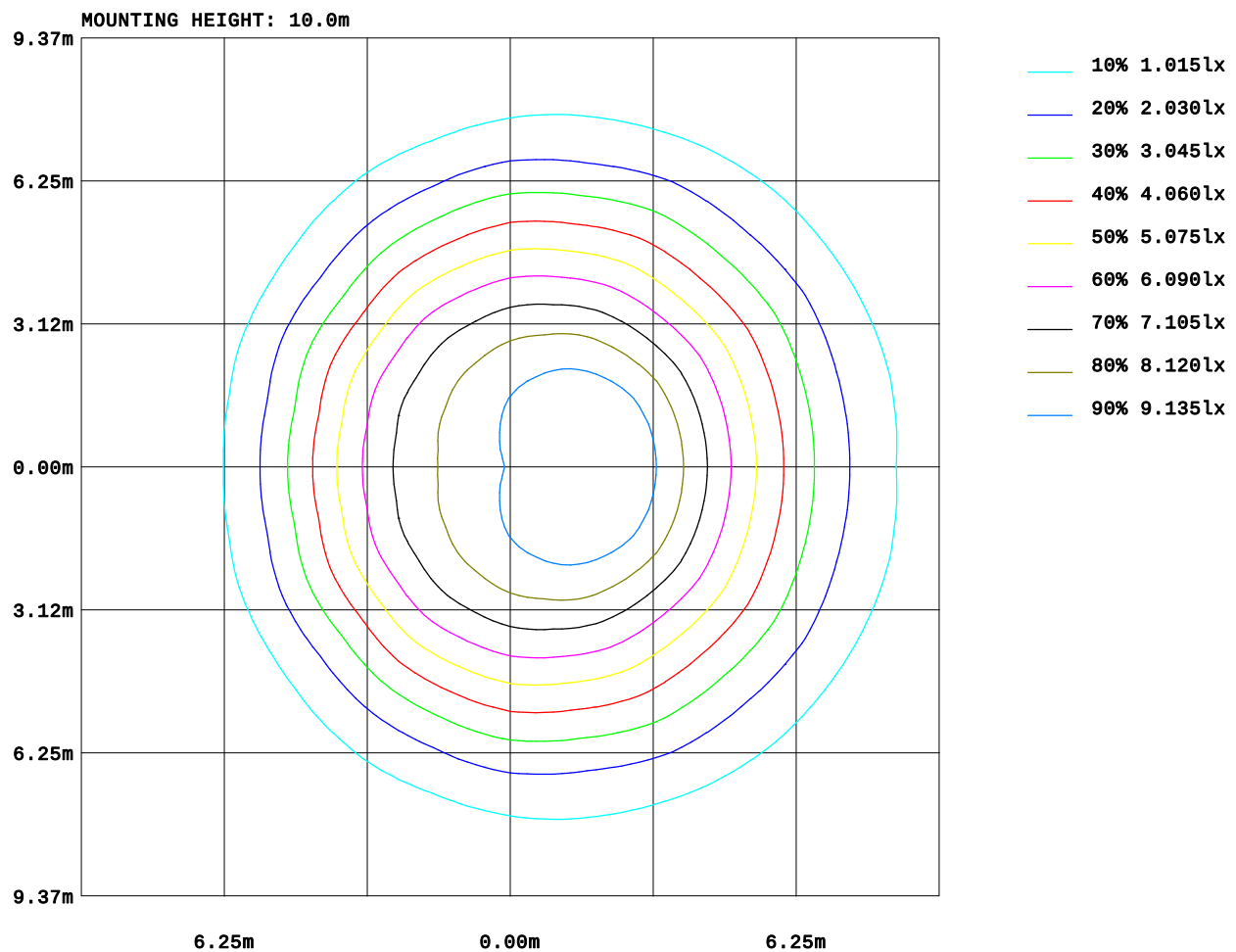
Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks:

ISOLUX DIAGRAM

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:	
NAME: HCP-8921224-4K	TYPE:downlight	WEIGHT:0.5KG
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603



Test System:HOP00 HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks:

AREA LUMINOUS FLUX

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:	
NAME: HCP-8921224-4K	TYPE:downlight	WEIGHT:0.5KG
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603

VERTICAL (DEG)	AREA FLUX DIAGRAM																	UNIT:lm	F t	F a
	0.03	0.05	0.06	0.07	0.09	0.11	0.11	0.11	0.14	0.14	0.11	0.12	0.12	0.10	0.07	0.07	0.06	0.04	1.60	0.00
72	0.03	0.05	0.06	0.07	0.09	0.11	0.11	0.11	0.14	0.14	0.11	0.12	0.12	0.10	0.07	0.07	0.06	0.04	1.60	0.00
64	0.03	0.06	0.07	0.08	0.10	0.16	0.18	0.19	0.23	0.24	0.20	0.20	0.19	0.13	0.10	0.08	0.06	0.04	2.33	0.00
56	0.04	0.06	0.08	0.11	0.15	0.24	0.30	0.33	0.40	0.42	0.37	0.36	0.30	0.20	0.15	0.11	0.07	0.04	3.73	0.00
48	0.04	0.06	0.10	0.16	0.22	0.34	0.53	0.73	1.06	1.20	1.06	0.88	0.55	0.33	0.23	0.15	0.08	0.04	7.75	0.17
40	0.04	0.06	0.12	0.22	0.32	0.59	1.34	2.71	4.38	5.20	4.71	3.20	1.52	0.66	0.35	0.19	0.09	0.04	25.7	19.8
32	0.04	0.07	0.14	0.27	0.52	1.31	3.88	7.61	10.4	11.6	10.9	8.47	4.71	1.59	0.53	0.22	0.10	0.05	62.6	58.6
24	0.04	0.08	0.15	0.31	0.83	2.86	7.55	12.2	15.1	16.3	15.8	13.0	8.74	3.50	0.84	0.26	0.12	0.06	98.0	94.9
16	0.05	0.09	0.18	0.36	1.12	4.58	10.3	14.7	17.2	18.8	19.0	16.4	11.4	5.44	1.24	0.33	0.14	0.07	122	119
8	0.05	0.10	0.20	0.43	1.40	5.54	11.4	15.4	17.3	19.2	20.3	18.0	12.7	6.47	1.55	0.39	0.16	0.07	131	128
0	0.05	0.10	0.20	0.43	1.40	5.54	11.4	15.4	17.3	19.2	20.3	18.0	12.7	6.47	1.55	0.39	0.16	0.07	131	128
-8	0.05	0.09	0.18	0.36	1.12	4.58	10.3	14.7	17.2	18.8	19.0	16.4	11.4	5.44	1.24	0.33	0.14	0.07	122	119
-16	0.04	0.08	0.15	0.31	0.83	2.86	7.55	12.2	15.1	16.3	15.8	13.0	8.74	3.50	0.84	0.26	0.12	0.06	98.0	94.9
-24	0.04	0.07	0.14	0.27	0.52	1.31	3.88	7.61	10.4	11.6	10.9	8.47	4.71	1.59	0.53	0.22	0.10	0.05	62.6	58.6
-32	0.04	0.06	0.12	0.22	0.32	0.59	1.34	2.71	4.38	5.20	4.71	3.20	1.52	0.66	0.35	0.19	0.09	0.04	25.7	19.8
-40	0.04	0.06	0.10	0.16	0.22	0.34	0.53	0.73	1.06	1.20	1.06	0.88	0.55	0.33	0.23	0.15	0.08	0.04	7.75	0.17
-48	0.04	0.06	0.08	0.11	0.15	0.24	0.30	0.33	0.40	0.42	0.37	0.36	0.30	0.20	0.15	0.11	0.07	0.04	3.73	0.00
-56	0.03	0.06	0.07	0.08	0.10	0.16	0.18	0.19	0.23	0.24	0.20	0.20	0.19	0.13	0.10	0.08	0.06	0.04	2.33	0.00
-64	0.03	0.05	0.06	0.07	0.09	0.11	0.11	0.11	0.14	0.14	0.11	0.12	0.12	0.10	0.07	0.07	0.06	0.04	1.60	0.00
-72	0.03	0.05	0.06	0.07	0.09	0.11	0.11	0.11	0.14	0.14	0.11	0.12	0.12	0.10	0.07	0.07	0.06	0.04	1.60	0.00
HORIZONTAL (DEG)																				
F t	0.71	1.24	2.22	3.96	9.54	31.4	71.5	108	133	146	145	122	80.5	36.8	10.1	3.62	1.77	0.89	917	
F a	0.00	0.00	0.00	0.00	1.69	26.0	66.8	104	129	8/133	142	118	76.3	32.1	3.16	0.00	0.00	0.00		842

Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022-12-01

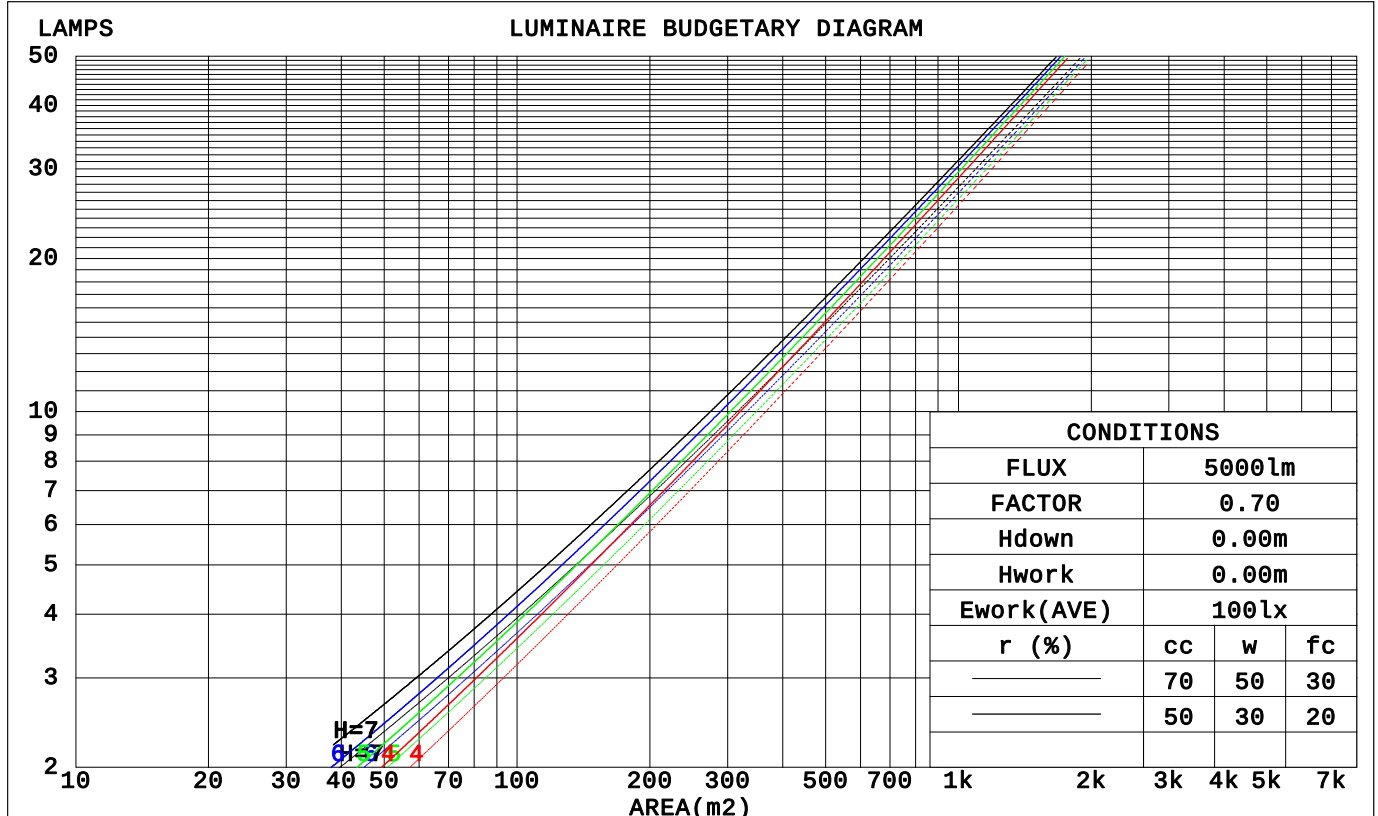
Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:		
NAME: HCP-8921224-4K	TYPE:downlight	WEIGHT:0.5KG	
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603	

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															



Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
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Remarks:

WEC AND CCEC

Report number: 2022120102

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SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603

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/c	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.188	.107	.034	.182	.104	.033	.169	.097	.031	.157	.091	.029	.147	.085	.027	
2.0	.178	.098	.030	.172	.095	.029	.162	.090	.028	.152	.085	.027	.8/133.081	.025		
3.0	.168	.090	.027	.163	.088	.026	.154	.084	.025	.146	.080	.025	.138	.076	.024	
4.0	.160	.083	.024	.155	.081	.024	.147	.078	.023	.140	.075	.023	.133	.072	.022	
5.0	.152	.077	.022	.148	.076	.022	.141	.073	.022	.135	.071	.021	.129	.069	.021	
6.0	.144	.072	.021	.141	.071	.021	.135	.069	.020	.129	.067	.020	.124	.065	.019	
7.0	.138	.068	.019	.135	.067	.019	.129	.065	.019	.124	.064	.019	.120	.062	.018	
8.0	.132	.064	.018	.129	.064	.018	.124	.062	.018	.120	.061	.017	.115	.059	.017	
9.0	.126	.061	.017	.124	.060	.017	.119	.059	.017	.115	.058	.017	.111	.057	.016	
10.0	.121	.058	.016	.119	.057	.016	.115	.056	.016	.111	.055	.016	.108	.054	.016	

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/c	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	.135	.114	.097	.092	.079	.067	.053	.046	.040	.017	.015	.013	
3.0	.145	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.135	.099	.072	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.126	.087	.059	.108	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007	
6.0	.119	.078	.049	.102	.068	.043	.070	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.112	.071	.042	.097	.061	.036	.067	.043	.026	.039	.025	.015	.013	.008	.005	
8.0	.107	.065	.036	.092	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.102	.059	.031	.087	.052	.027	.061	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.097	.055	.027	.084	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks:

Uncorrected UGR Table

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:			
NAME: HCP-8921224-4K	TYPE:downlight		WEIGHT:0.5KG	
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M		SERIAL No.:2013051603	

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	8.5	9.5	8.8	9.7	9.9	6.9	7.9	7.1	8.0	8.2
3H	8.5	9.4	8.7	9.6	9.8	6.8	7.7	7.1	7.9	8.1
4H	8.4	9.3	8.7	9.5	9.7	6.8	7.6	7.1	7.9	8.1
6H	8.4	9.2	8.7	9.5	9.7	6.8	7.6	7.1	7.9	8.1
8H	8.5	9.3	8.8	9.5	9.8	6.9	7.7	7.2	7.9	8.2
12H	8.6	9.3	8.9	9.6	9.9	7.0	7.7	7.3	8.0	8.3
4H 2H	8.3	9.2	8.6	9.4	9.6	6.7	7.5	7.0	7.8	8.0
3H	8.3	9.0	8.6	9.3	9.6	6.7	7.4	7.0	7.7	7.9
4H	8.3	8.9	8.6	9.2	9.6	6.7	7.4	7.0	7.7	8.0
6H	8.4	8.9	8.7	9.3	9.6	6.8	7.4	7.2	7.7	8.1
8H	8.4	9.0	8.8	9.3	9.7	6.9	7.5	7.3	7.8	8.2
12H	8.6	9.1	9.0	9.5	9.9	7.1	7.6	7.5	8.0	8.4
8H 4H	8.2	8.7	8.6	9.1	9.5	6.6	7.2	7.0	7.5	7.9
6H	8.4	8.8	8.8	9.2	9.6	6.9	7.3	7.3	7.7	8.1
8H	8.5	8.9	9.0	9.3	9.8	7.1	7.5	7.5	7.9	8.3
12H	8.8	9.2	9.3	9.6	10.1	7.4	7.8	7.9	8.2	8.7
12H 4H	8.2	8.7	8.6	9.0	9.4	6.6	7.1	7.0	7.5	7.9
6H	8.3	8.7	8.8	9.2	9.6	6.9	7.3	7.3	7.7	8.2
8H	8.6	8.9	9.0	9.3	9.8	7.2	7.5	7.6	8.0	8.4
Variations with the observer position at spacings:										
S = 1.0H	+ 3.0 / - 4.4					+ 2.0 / - 3.2				
1.5H	+ 5.2 / - 4.1					+ 4.0 / - 2.9				
2.0H	+ 3.7 / - 1.4					+ 1.6 / - 0.6				

CIE Pub.117 Corrected 916.7 lm Total Lamp Luminous Flux.(8log(F/F0) = -0.3)

Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks:

UTILIZATION FACTORS TABLE

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:		
NAME: HCP-8921224-4K	TYPE:downlight	WEIGHT:0.5KG	
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603	

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) $k(RI) \times RCR = 5$									
$k = 0.60$	86	79	76	86	79	75	85	79	75	72
0.80	94	87	84	93	87	83	92	87	83	79
1.00	98	92	89	97	92	88	96	92	88	84
1.25	102	97	93	101	96	93	99	95	92	88
1.50	105	100	97	104	99	96	102	98	95	90
2.00	108	103	100	106	102	99	104	100	98	93
2.50	110	106	102	108	104	102	105	102	100	94
3.00	111	108	105	109	106	104	106	104	101	95
4.00	113	110	108	111	109	107	108	106	104	97
5.00	115	112	110	112	110	109	108	107	106	98
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNM = 1.25		

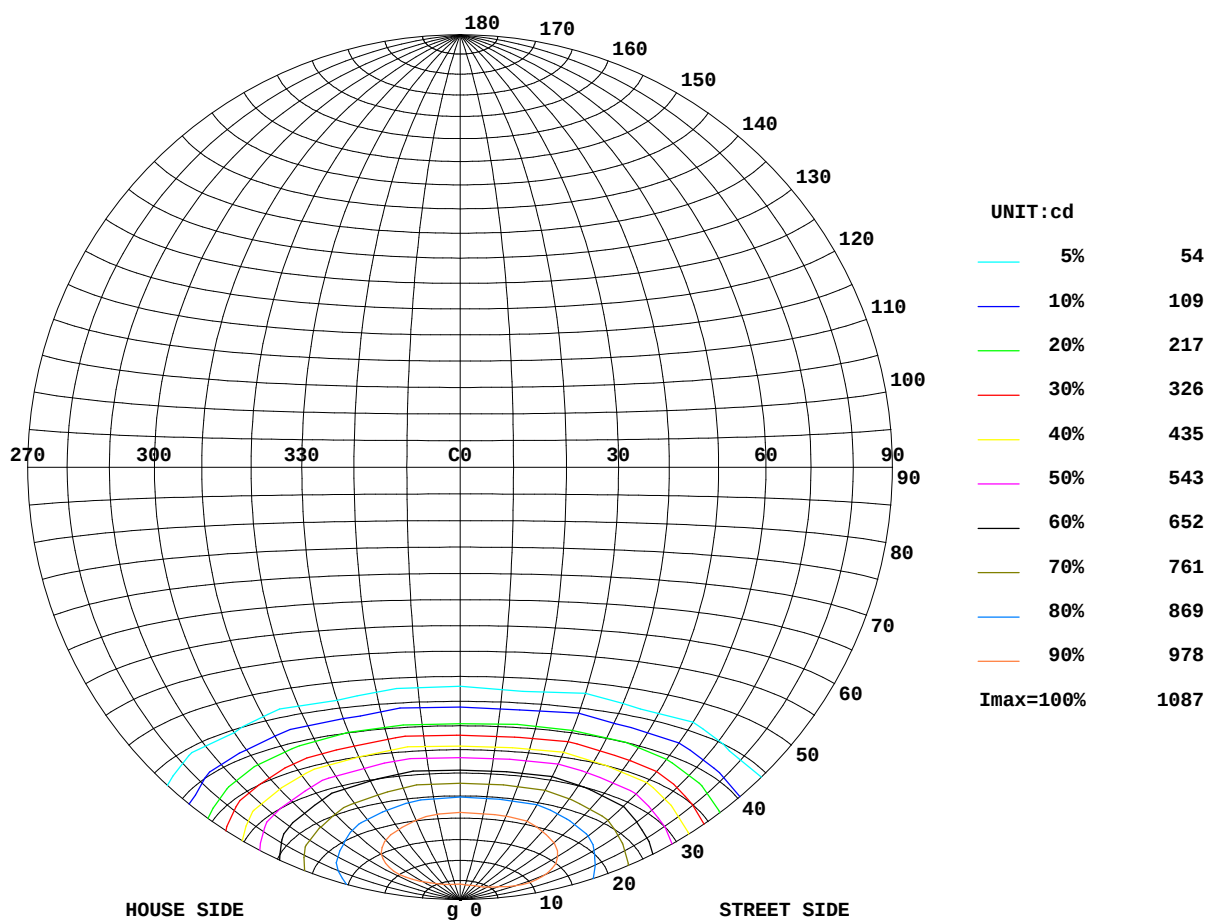
Test System:HOP00 HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks:

ISOCANDELA DIAGRAM

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:	
NAME: HCP-8921224-4K	TYPE:downlight	WEIGHT:0.5KG
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603



Test System:HOP00 HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks:

IES Flood Report

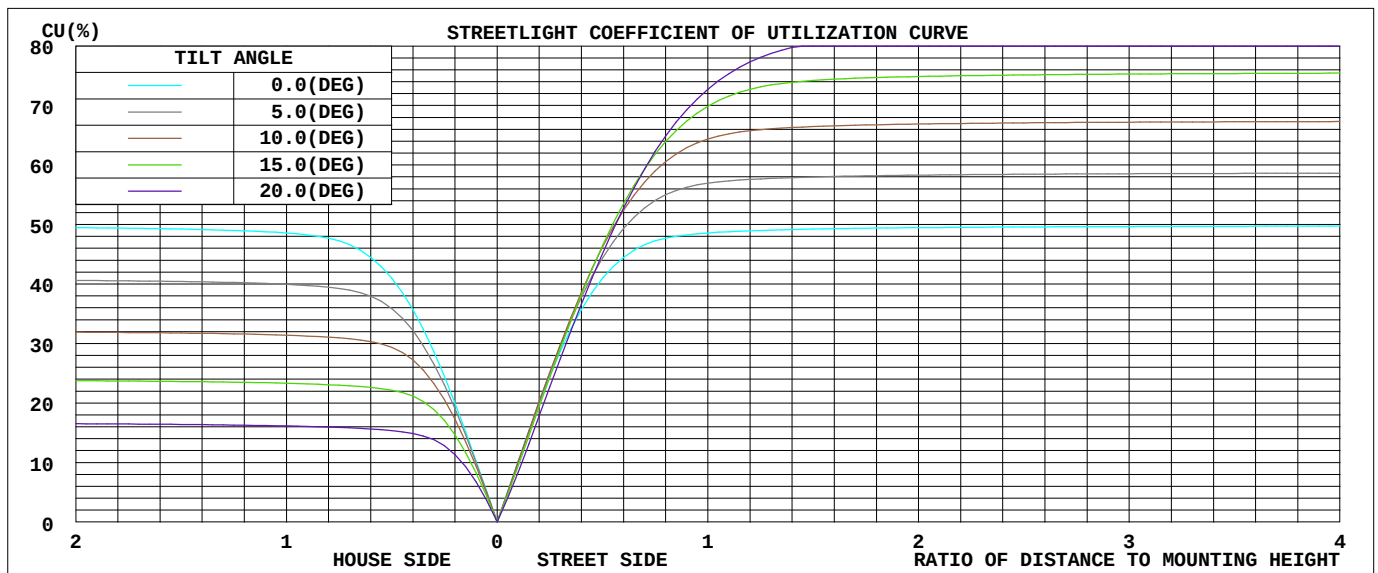
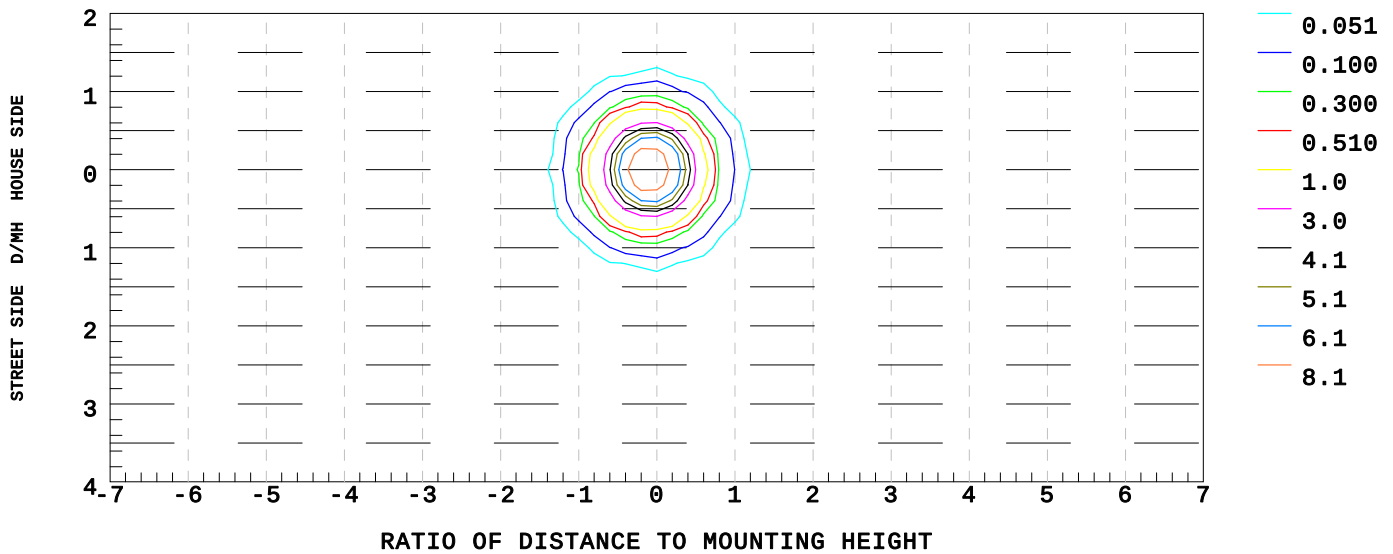
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ISOLUX DIAGRAM

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:	
NAME: HCP-8921224-4K	TYPE:downlight	WEIGHT:0.5KG
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603

ILLUMINANCE AT MH=10 m,Enadir = 9.24 lx



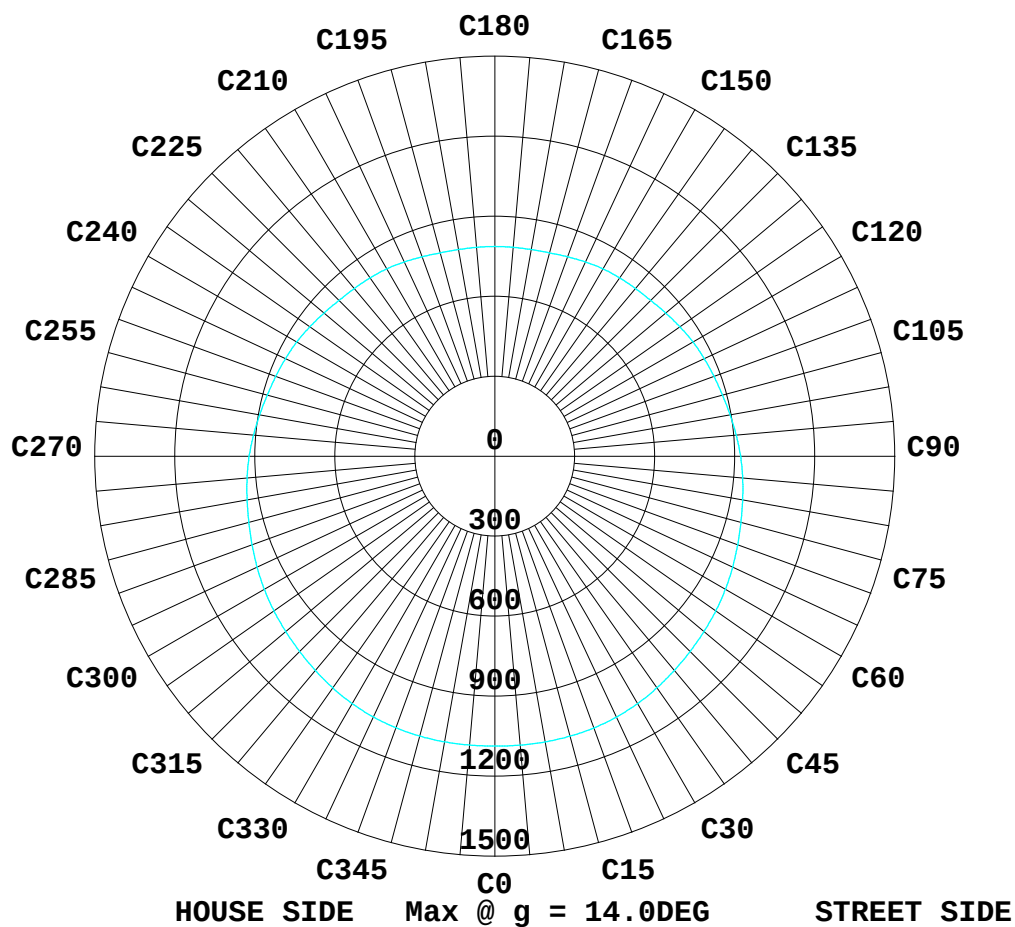
Test System:HOP00 HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks:

ISOCANDELA DIAGRAM

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:	
NAME: HCP-8921224-4K	TYPE:downlight	WEIGHT:0.5KG
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603



Test System:HOP00 HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:	
NAME: HCP-8921224-4K	TYPE:downlight	WEIGHT:0.5KG
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603

UNIT: cd

C(DEG) g (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210
0.0	924	922	924	923	922	922	923	921	922	922	922	921	921	921	922
5.0	992	995	990	984	972	957	941	924	910	895	887	875	873	875	887
10.0	1062	1063	1054	1031	1006	973	944	914	891	867	853	837	834	837	853
15.0	1085	1082	1067	1030	993	946	912	873	847	814	798	774	771	774	798
20.0	1011	1009	993	952	913	862	828	785	755	708	686	648	645	648	686
25.0	859	855	851	811	783	730	697	638	598	536	507	458	454	458	507
30.0	681	680	684	645	620	557	520	447	401	333	303	261	248	261	303
35.0	465	467	476	432	407	338	299	261	193	146	119	102	102	102	119
40.0	232	264	238	219	180	135	114	83.7	76.0	57.1	56.5	44.2	46.7	44.2	56.5
45.0	90.2	83.3	90.9	73.9	72.7	49.2	47.5	36.2	36.6	28.0	30.3	24.2	27.8	24.2	30.3
50.0	39.9	34.7	39.2	31.2	32.9	23.6	25.7	20.2	22.7	17.9	20.5	16.5	19.5	16.5	20.5
55.0	23.5	19.8	23.4	18.6	20.8	15.6	17.9	14.1	16.6	12.7	15.0	11.6	14.4	11.6	15.0
60.0	16.5	13.5	16.5	12.4	14.3	10.6	12.9	9.98	12.3	9.21	11.2	8.44	10.8	8.44	11.2
65.0	12.0	9.47	11.9	8.70	10.3	6.72	8.57	6.27	8.38	6.01	7.93	5.95	7.93	5.95	7.93
70.0	8.44	6.20	8.32	5.82	7.55	5.12	6.91	4.99	6.78	4.99	6.72	5.05	6.78	5.05	6.72
75.0	7.04	5.18	6.91	4.99	6.65	4.80	6.40	4.67	6.20	4.60	6.20	4.73	6.20	4.73	6.20
80.0	6.59	4.92	6.40	4.67	6.08	4.41	5.76	4.22	5.56	4.16	5.50	4.22	5.63	4.22	5.50
85.0	6.01	4.54	5.76	4.22	5.31	3.90	5.05	3.77	4.92	3.77	4.92	3.84	5.05	3.84	4.92
90.0	5.24	4.22	4.99	4.03	4.73	3.77	4.48	3.71	4.41	3.71	4.54	3.90	4.73	3.90	4.54

Test System:HOP00 HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number: 2022120102

MANUFACTURER: Havit Commercial	Address:	
NAME: HCP-8921224-4K	TYPE:downlight	WEIGHT:0.5KG
SPECIFICATION:HCP-8921224-4K	DIMENSION: 0.5M	SERIAL No.:2013051603

UNIT: cd

C(DEG)	225	240	255	270	285	300	315	330	345
g (DEG)									
0.0	922	922	921	923	922	922	923	924	922
5.0	895	910	924	941	957	972	984	990	995
10.0	867	891	914	944	973	1006	1031	1054	1063
15.0	814	847	873	912	946	993	1030	1067	1082
20.0	708	755	785	828	862	913	952	993	1009
25.0	536	598	638	697	730	783	811	851	855
30.0	333	401	447	520	557	620	645	684	680
35.0	146	193	261	299	338	407	432	476	467
40.0	57.1	76.0	83.7	114	135	180	219	238	264
45.0	28.0	36.6	36.2	47.5	49.2	72.7	73.9	90.9	83.3
50.0	17.9	22.7	20.2	25.7	23.6	32.9	31.2	39.2	34.7
55.0	12.7	16.6	14.1	17.9	15.6	20.8	18.6	23.4	19.8
60.0	9.21	12.3	9.98	12.9	10.6	14.3	12.4	16.5	13.5
65.0	6.01	8.38	6.27	8.57	6.72	10.3	8.70	11.9	9.47
70.0	4.99	6.78	4.99	6.91	5.12	7.55	5.82	8.32	6.20
75.0	4.60	6.20	4.67	6.40	4.80	6.65	4.99	6.91	5.18
80.0	4.16	5.56	4.22	5.76	4.41	6.08	4.67	6.40	4.92
85.0	3.77	4.92	3.77	5.05	3.90	5.31	4.22	5.76	4.54
90.0	3.71	4.41	3.71	4.48	3.77	4.73	4.03	4.99	4.22

Test System:HOP00 HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022-12-01

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: