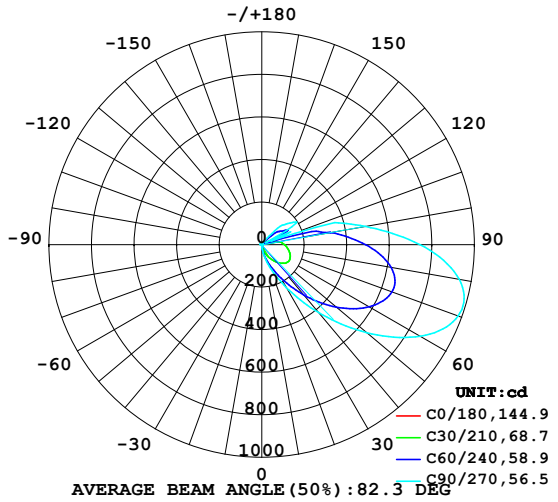
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Tel: 02 9381 8383
E-mail:sales@havitcommercial.com.au

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:219.69V I:0.1569A P:29.769W PF:0.8638 Freq:49.99Hz Lamp Flux:1303x1 lm		
NAME: HCP-2323002 3000K	TYPE:	WEIGHT:
SPEC.: 30W Wall Washer Light 3000K	DIM.:	SERIAL No.:
MFR.: Havit Commercial	SUR.:	Shielding Angle:

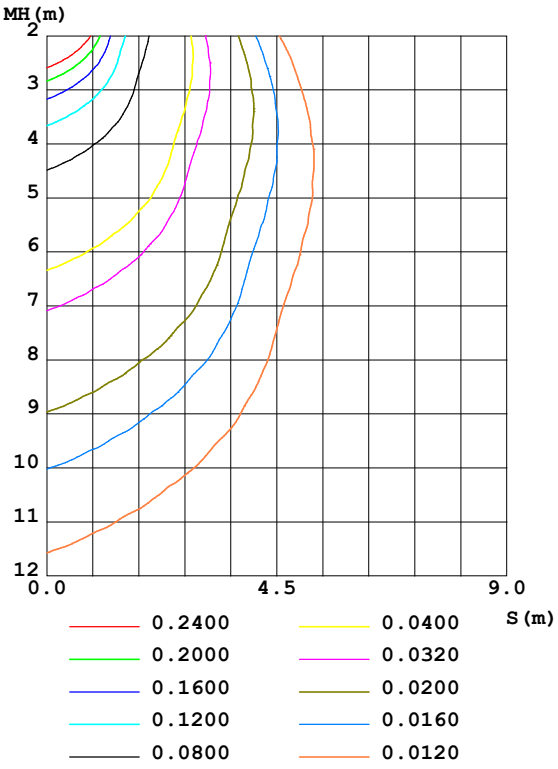
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 43.77 lm/W	
MODEL	HCP-2323002 3000K	Imax(cd)	988.9	S/MH(C0/180)	1.57
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	0.14
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	1303.0	η UP,DN(C0-180)	23.7,75.1
NOMINAL FLUX(lm)	1303	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	0.8,0.4
LAMPS INSIDE	1	η up(%)	24.5	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	240	η down(%)	75.5	CIBSE SHR MAX	1.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):82.3 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks:

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ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1.442	22.08	36.83	18.81	1.740	0.5491	0.4060	0.5914	0- 10	0.5684	0.5684	0.04,0.04
20	1.287	65.74	113.9	62.19	1.759	0.4639	0.4988	0.5528	10- 20	5.937	6.505	0.50,0.50
30	1.087	125.7	234.5	122.3	1.662	0.4793	0.6843	0.6069	20- 30	21.31	27.82	2.14,2.14
40	0.9395	204.4	418.0	202.7	1.639	0.5412	0.8934	0.6223	30- 40	51.99	79.81	6.13,6.13
50	0.8698	286.7	643.9	289.0	1.593	0.7304	1.447	0.9119	40- 50	100.6	180.4	13.8,13.8
60	0.7771	343.1	861.1	352.6	1.465	1.117	2.418	1.345	50- 60	158.7	339.1	26,26
70	0.7075	358.2	982.1	374.8	1.337	1.662	3.836	1.948	60- 70	208.8	547.9	42,42
80	0.6804	324.8	942.8	346.0	1.152	2.377	5.247	2.632	70- 80	229.0	776.9	59.6,59.6
90	0.5845	256.1	742.9	277.7	0.9432	3.119	6.534	3.370	80- 90	206.6	983.5	75.5,75.5
100	0.6609	166.4	495.2	203.5	0.7727	3.753	7.407	3.869	90-100	154.2	1138	87.3,87.3
110	0.6726	36.15	105.7	73.51	0.7424	4.310	8.102	4.318	100-110	83.34	1221	93.7,93.7
120	0.7693	74.85	128.7	94.13	0.7654	4.198	6.840	3.916	110-120	29.54	1250	96,96
130	0.7384	26.25	152.2	39.95	0.6759	3.349	4.901	2.862	120-130	35.35	1286	98.7,98.7
140	0.5878	0.5252	41.30	0.4173	0.4870	2.471	3.655	2.073	130-140	14.64	1300	99.8,99.8
150	0.5257	0.2281	0.2130	0.2628	0.4832	1.960	3.069	1.693	140-150	1.225	1302	99.9,99.9
160	0.5257	6.306	0.4369	3.489	0.4832	1.357	1.955	1.222	150-160	0.5936	1302	99.9,99.9
170	0.5295	1.308	5.242	1.495	0.4677	0.9203	1.093	0.8776	160-170	0.6194	1303	100,100
180	0.4677	0.4600	0.4523	0.4793	0.4677	0.4832	0.4793	0.5064	170-180	0.0801	1303	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks:

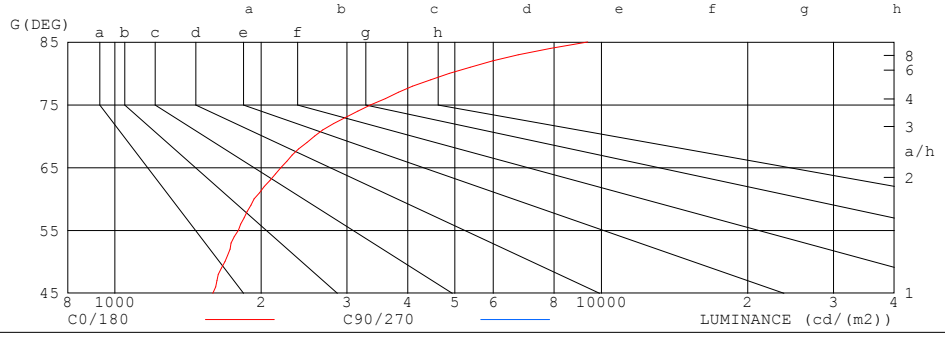
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LUMINANCE LIMITATION CURVES

Test:U:219.69V I:0.1569A P:29.769W PF:0.8638 Freq:49.99Hz Lamp Flux:1303x1 lm		
NAME: HCP-2323002 3000K	**TYPE:**	**WEIGHT:**
SPEC.:	**DIM.:**	**SERIAL No.:**
MFR.: Havit Commercial	**SUR.:**	**Shielding Angle:**

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	9381	12253427
80	4874	6754342
75	3363	4734065
70	2573	3572038
65	2196	2764691
60	1933	2142568
55	1794	1643726
50	1683	1246176
45	1591	929319

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

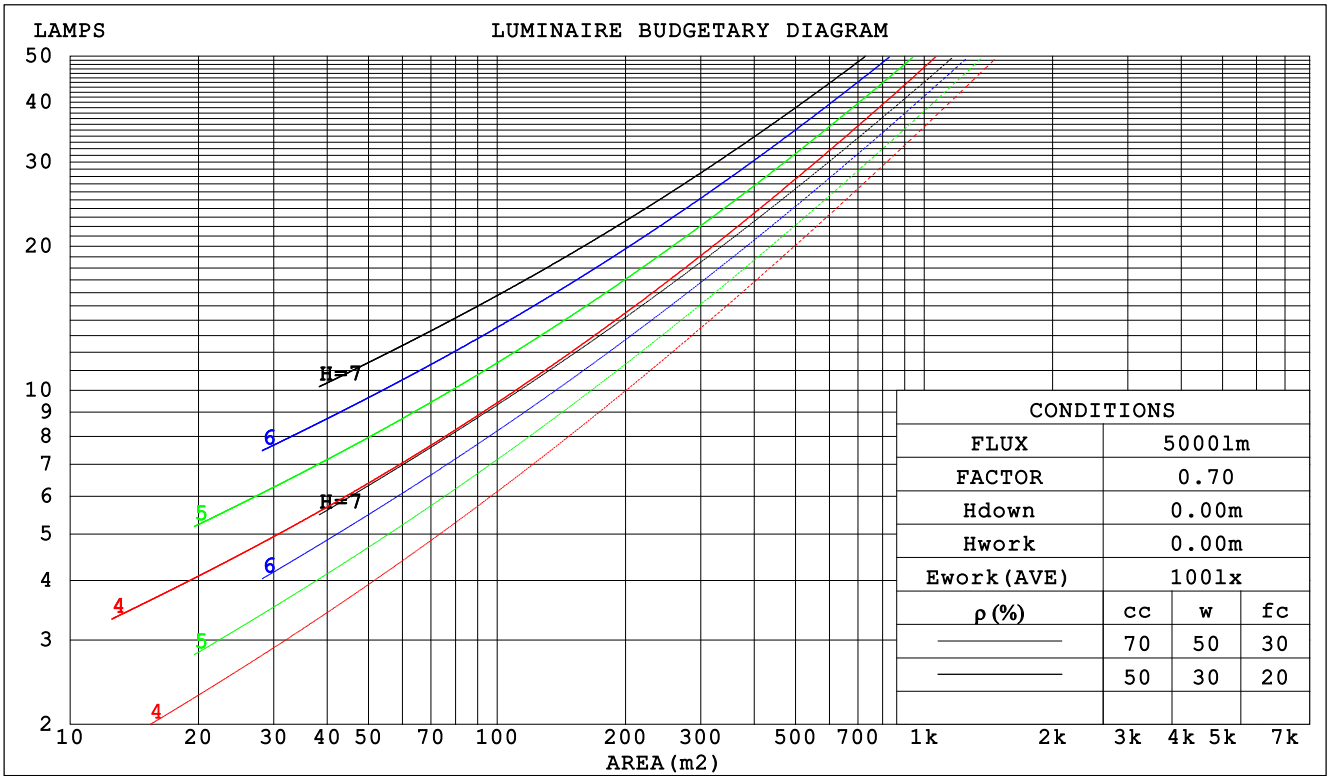
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks:

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CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.69V I:0.1569A P:29.769W PF:0.8638 Freq:49.99Hz Lamp Flux:1303x1 lm		
NAME: HCP-2323002 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Havit Commercial	SUR.:	Shielding Angle:

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	1.13	1.13	1.13	1.08	1.08	1.08	.97	.97	.97	.88	.88	.88	.80	.80	.80	.75
1.0	.86	.79	.72	.81	.75	.69	.72	.67	.62	.64	.60	.56	.56	.53	.50	.45
2.0	.70	.60	.51	.66	.57	.49	.58	.50	.44	.51	.44	.39	.44	.39	.34	.30
3.0	.58	.47	.38	.55	.44	.36	.48	.39	.32	.42	.35	.29	.36	.30	.25	.21
4.0	.50	.38	.30	.47	.36	.28	.41	.32	.25	.35	.28	.22	.30	.24	.19	.15
5.0	.43	.32	.24	.40	.30	.22	.35	.26	.20	.30	.23	.17	.26	.20	.15	.12
6.0	.38	.27	.19	.35	.25	.18	.31	.22	.16	.27	.19	.14	.23	.17	.12	.09
7.0	.33	.23	.16	.31	.22	.15	.27	.19	.13	.24	.17	.11	.20	.14	.10	.07
8.0	.30	.20	.14	.28	.19	.13	.25	.17	.11	.21	.15	.10	.18	.12	.08	.06
9.0	.27	.18	.12	.25	.17	.11	.22	.15	.09	.20	.13	.08	.17	.11	.07	.05
10.0	.25	.16	.10	.23	.15	.09	.20	.13	.08	.18	.12	.07	.15	.10	.06	.04



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks:

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WEC AND CCEC

Test:U:219.69V I:0.1569A P:29.769W PF:0.8638 Freq:49.99Hz Lamp Flux:1303x1 lm		
NAME: HCP-2323002 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Havit Commercial	SUR.:	Shielding Angle:

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	.533	.303	.096	.518	.296	.094	.490	.281	.090	.464	.268	.086	.440	.255	.082	
2.0	.431	.236	.073	.418	.230	.071	.392	.218	.068	.368	.206	.065	.346	.196	.062	
3.0	.367	.195	.058	.354	.190	.057	.331	.179	.054	.309	.169	.052	.289	.160	.049	
4.0	.320	.166	.049	.308	.161	.048	.287	.152	.045	.267	.143	.043	.249	.135	.041	
5.0	.284	.144	.042	.273	.140	.041	.254	.132	.039	.236	.124	.037	.219	.117	.035	
6.0	.255	.128	.037	.245	.124	.036	.228	.117	.034	.211	.110	.032	.195	.103	.031	
7.0	.231	.114	.032	.223	.111	.032	.206	.104	.030	.191	.098	.028	.177	.092	.027	
8.0	.212	.103	.029	.204	.100	.028	.189	.094	.027	.175	.088	.026	.161	.083	.024	
9.0	.195	.094	.026	.188	.092	.026	.174	.086	.024	.161	.081	.023	.149	.076	.022	
10.0	.181	.087	.024	.174	.084	.023	.161	.079	.022	.149	.074	.021	.138	.069	.020	

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	.377	.377	.377	.322	.322	.322	.220	.220	.220	.126	.126	.126	.040	.040	.040	
1.0	.384	.343	.305	.329	.294	.263	.225	.202	.182	.129	.117	.106	.041	.038	.034	
2.0	.380	.321	.271	.326	.276	.234	.223	.191	.163	.129	.111	.096	.041	.036	.031	
3.0	.374	.306	.251	.320	.264	.218	.220	.183	.153	.127	.107	.090	.041	.035	.030	
4.0	.366	.294	.239	.314	.254	.208	.216	.177	.146	.125	.104	.087	.040	.034	.028	
5.0	.357	.285	.231	.307	.246	.201	.211	.172	.142	.122	.101	.084	.039	.033	.028	
6.0	.349	.277	.226	.300	.240	.197	.207	.168	.139	.120	.099	.083	.039	.032	.027	
7.0	.341	.271	.222	.293	.235	.193	.203	.165	.137	.118	.097	.082	.038	.032	.027	
8.0	.333	.266	.219	.287	.230	.191	.198	.162	.135	.115	.095	.081	.037	.031	.027	
9.0	.326	.261	.217	.281	.226	.189	.195	.159	.134	.113	.094	.080	.037	.031	.027	
10.0	.319	.257	.215	.275	.223	.187	.191	.157	.133	.111	.093	.079	.036	.030	.026	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks:

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UGR(Unified Glare Rating) Table

Test:U:219.69V I:0.1569A P:29.769W PF:0.8638 Freq:49.99Hz Lamp Flux:1303x1 lm		
NAME: HCP-2323002 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Havit Commercial	SUR.:	Shielding Angle:

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	27.8	29.4	28.4	30.0	30.7	41.0	42.6	41.6	43.2	44.0
	3H	28.4	29.9	29.1	30.5	31.3	45.5	46.9	46.1	47.6	48.4
	4H	28.6	30.0	29.2	30.6	31.5	47.7	49.1	48.3	49.8	50.6
	6H	28.7	30.0	29.4	30.7	31.5	49.9	51.2	50.6	51.9	52.7
	8H	28.8	30.0	29.4	30.7	31.6	51.0	52.3	51.7	53.0	53.8
	12H	28.8	30.0	29.5	30.7	31.6	52.2	53.5	52.9	54.2	55.0
4H	2H	34.5	35.8	35.1	36.5	37.3	41.2	42.5	41.8	43.2	44.0
	3H	35.3	36.5	36.0	37.3	38.1	45.9	47.1	46.6	47.9	48.7
	4H	35.6	36.7	36.3	37.4	38.3	48.4	49.5	49.1	50.3	51.1
	6H	35.7	36.7	36.4	37.5	38.4	50.9	52.0	51.7	52.7	53.6
	8H	35.7	36.7	36.5	37.5	38.4	52.2	53.2	53.0	54.0	54.9
	12H	35.7	36.6	36.5	37.4	38.3	53.6	54.5	54.4	55.3	56.2
8H	4H	40.1	41.1	40.9	41.9	42.8	48.4	49.4	49.2	50.2	51.1
	6H	40.6	41.5	41.4	42.3	43.2	51.3	52.1	52.0	52.9	53.9
	8H	40.8	41.5	41.5	42.3	43.3	52.8	53.6	53.6	54.4	55.4
	12H	40.8	41.5	41.6	42.3	43.3	54.6	55.2	55.4	56.1	57.0
12H	4H	41.7	42.6	42.5	43.4	44.3	48.4	49.3	49.1	50.1	51.0
	6H	42.6	43.4	43.4	44.2	45.1	51.3	52.0	52.1	52.8	53.8
	8H	42.9	43.6	43.7	44.4	45.4	52.9	53.6	53.7	54.4	55.4

Variations with the observer position at spacings:		
S = 1.0H	+ 0.1 / - 0.1	+ 0.1 / - 0.1
1.5H	+ 0.2 / - 0.1	+ 0.2 / - 0.3
2.0H	+ 0.3 / - 0.3	+ 0.3 / - 0.3

CIE Pub.117, 1303 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.9)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks:

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UTILIZATION FACTORS TABLE

Test:U:219.69V I:0.1569A P:29.769W PF:0.8638 Freq:49.99Hz Lamp Flux:1303x1 lm		
NAME: HCP-2323002 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Havit Commercial	SUR.:	Shielding Angle:

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	35	21	12	34	20	12	32	19	12	4
0.80	43	27	18	41	27	17	38	25	16	7
1.00	50	34	23	48	33	23	44	34	22	11
1.25	57	41	30	54	39	29	50	37	27	16
1.50	63	47	35	60	45	34	54	41	32	20
2.00	71	56	45	68	54	43	61	49	40	26
2.50	77	63	52	73	60	50	66	55	46	31
3.00	81	68	58	77	65	56	69	60	52	36
4.00	87	76	67	83	73	64	75	66	59	42
5.00	91	81	73	87	78	70	78	71	64	46
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended					SHRNOM = 1.25	

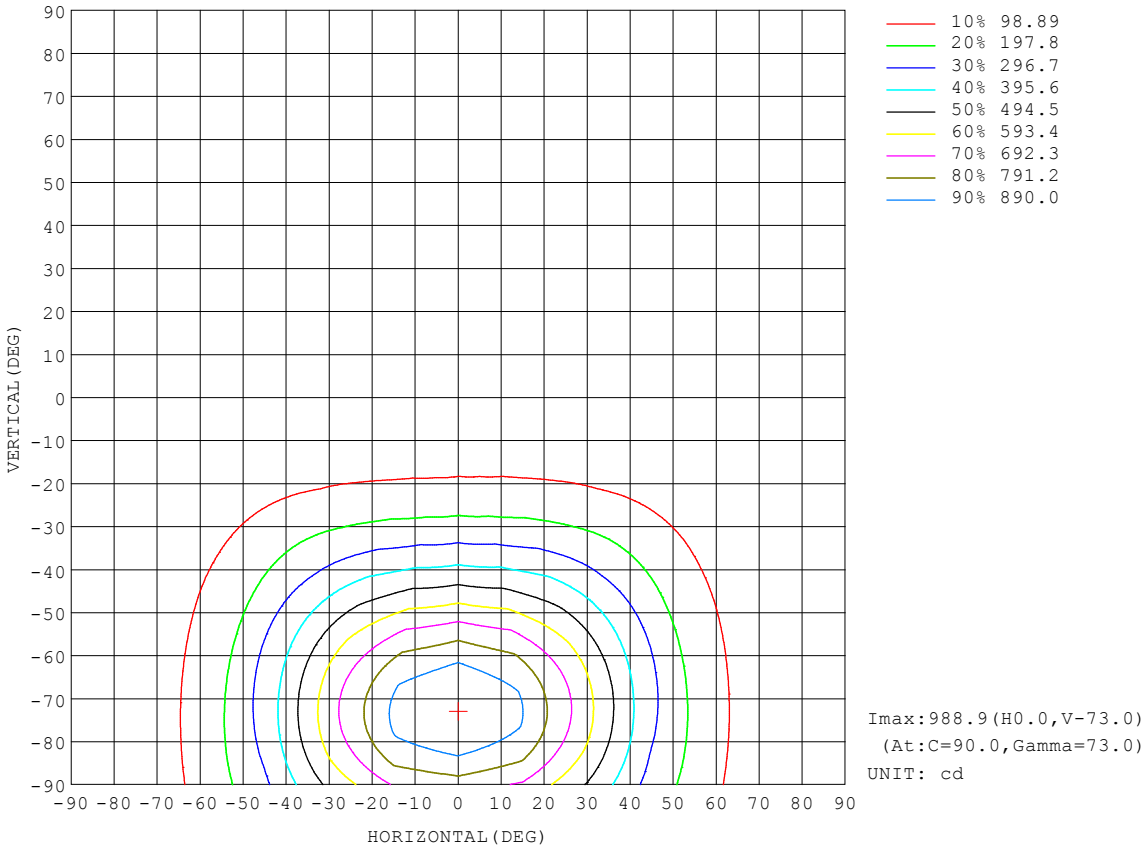
C Range: 0 - 360DEG
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Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

γ Range: 0 - 180DEG
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Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks:

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ISOCANDELA DIAGRAM

Test:U:219.69V I:0.1569A P:29.769W PF:0.8638 Freq:49.99Hz Lamp Flux:1303x1 lm		
NAME: HCP-2323002 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Havit Commercial	SUR.:	Shielding Angle:



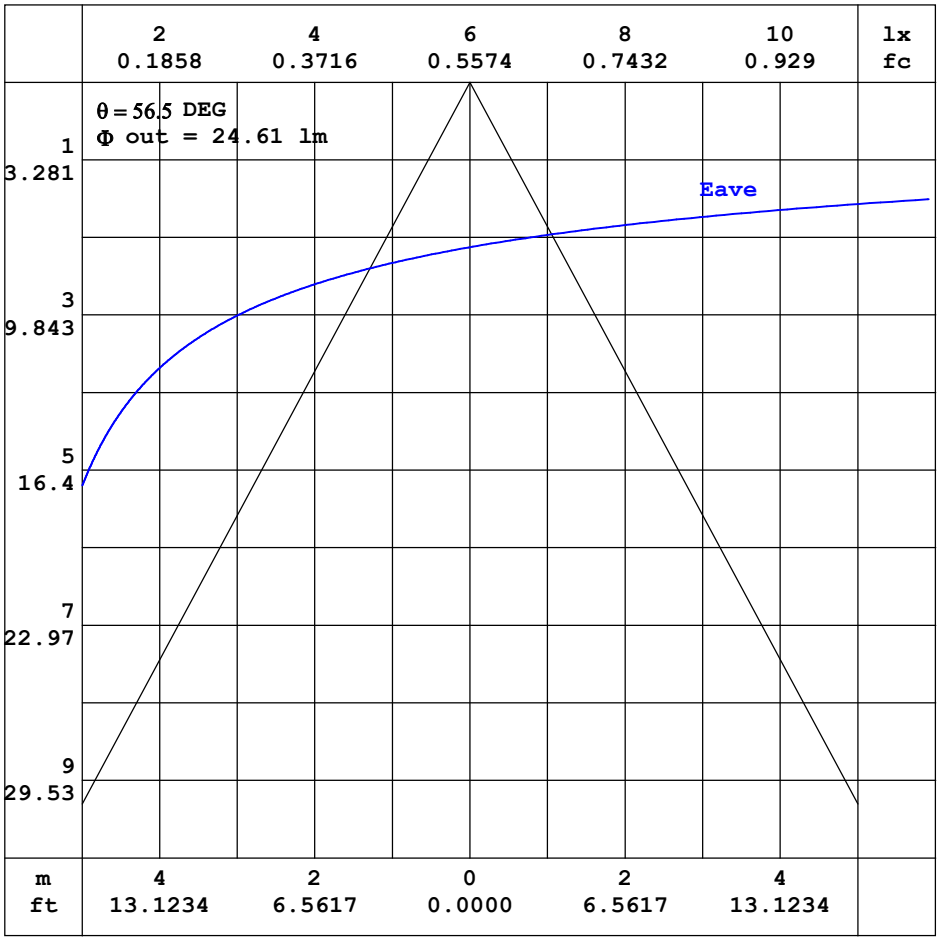
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks:

HAVIT COMMERCIAL
http://www.havitcommercial.com.au
Tel：02 9381 8383
E-mail:sales@havitcommercial.com.au

AAI CURVES

Test:U:219.69V I:0.1569A P:29.769W PF:0.8638 Freq:49.99Hz Lamp Flux:1303x1 lm		
NAME: HCP-2323002 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Havit Commercial	SUR.:	Shielding Angle:



Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

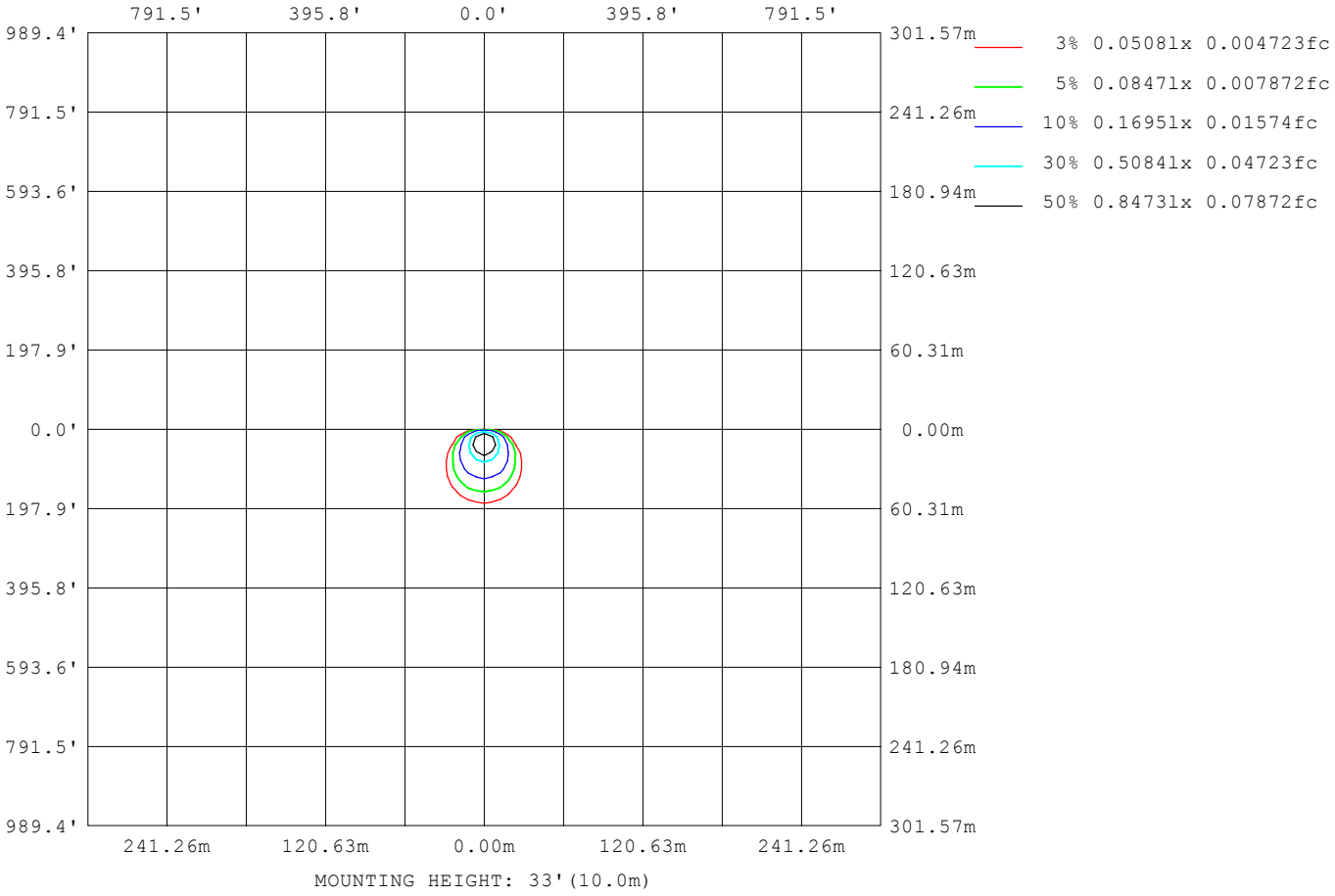
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks:

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ISOLUX DIAGRAM

Test:U:219.69V I:0.1569A P:29.769W PF:0.8638 Freq:49.99Hz Lamp Flux:1303x1 lm		
NAME: HCP-2323002 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Havit Commercial	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:219.69V I:0.1569A P:29.769W PF:0.8638 Freq:49.99Hz Lamp Flux:1303x1 lm		
NAME: HCP-2323002 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Havit Commercial	SUR.:	Shielding Angle:

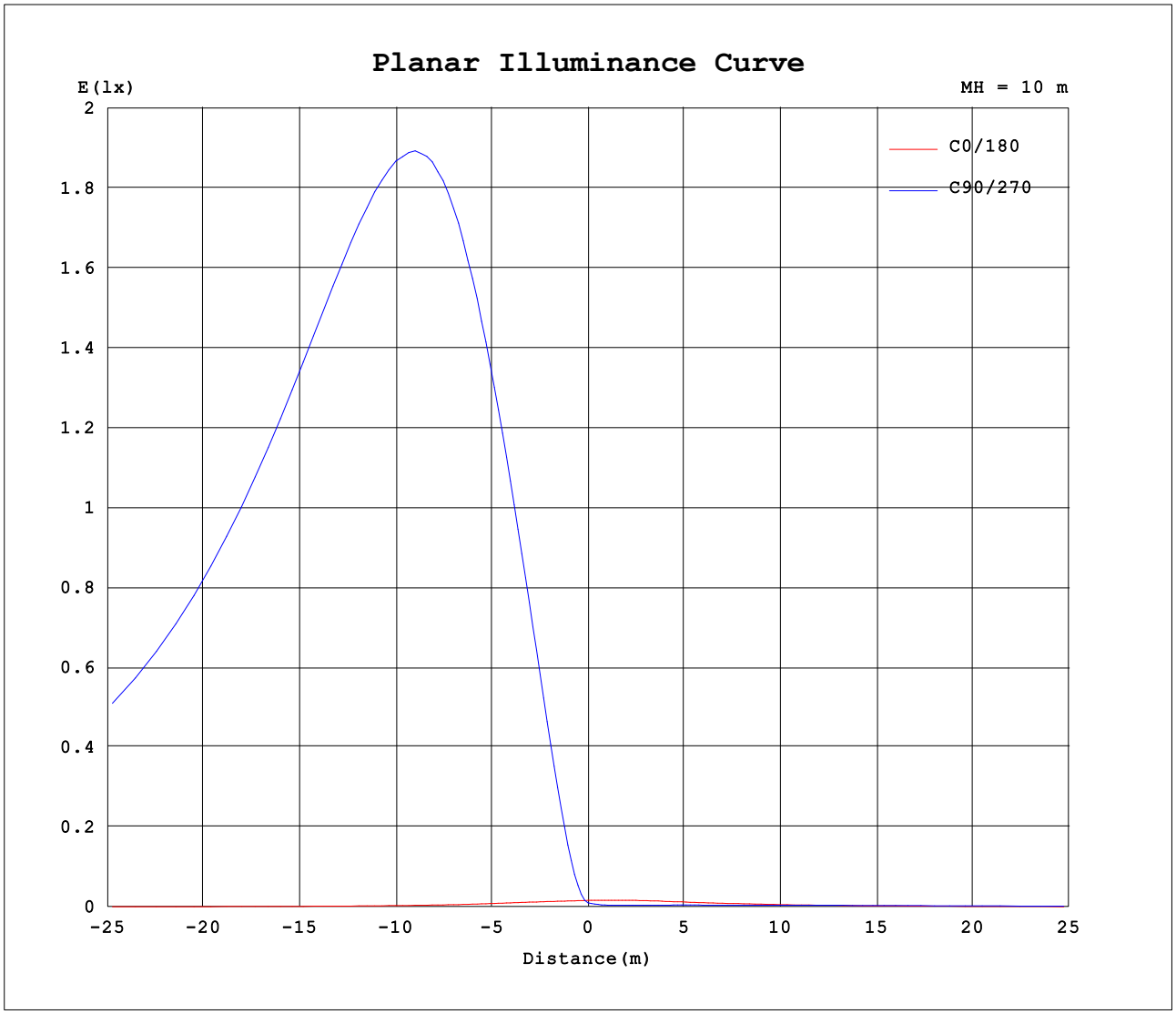
AvgL	cd/m2
L_0~180(65)av	3157
L_0~180(75)av	4636
L_0~180(85)av	12493
L_90~270(65)av	1386871
L_90~270(75)av	2377905
L_90~270(85)av	6168908
L_45(65)av	536976
L_45(75)av	863079
L_45(85)av	2189720

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks:

HAVIT COMMERCIAL
http://www.havitcommercial.com.au
Tel：02 9381 8383
E-mail:sales@havitcommercial.com.au

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.69V I:0.1569A P:29.769W PF:0.8638 Freq:49.99Hz Lamp Flux:1303x1 lm		
NAME: HCP-2323002 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Havit Commercial	SUR.:	Shielding Angle:

Table--1 UNIT: cd

γ (DEG) \ C(DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1.61	1.56	1.50	1.32	1.23	1.09	1.01	0.98	1.01	1.10	1.18	1.29	1.61	1.56	1.50	1.32	1.23	1.09	1.01
5	1.52	2.99	5.49	7.91	10.4	11.3	11.7	10.1	8.42	5.65	3.39	1.69	1.68	1.22	0.92	0.76	0.59	0.53	0.45
10	1.44	5.40	13.3	22.1	30.6	34.9	36.8	33.3	27.7	18.8	10.3	3.50	1.74	1.01	0.68	0.55	0.43	0.42	0.41
15	1.36	8.69	24.5	41.7	58.1	67.3	71.2	65.3	54.8	38.2	21.2	6.62	1.77	0.87	0.59	0.48	0.44	0.41	0.44
20	1.29	13.0	38.1	65.7	91.6	108	114	105	88.1	62.2	35.0	11.0	1.76	0.77	0.51	0.46	0.46	0.44	0.50
25	1.20	18.0	53.6	93.8	132	157	167	154	128	90.3	51.1	16.5	1.72	0.69	0.51	0.46	0.51	0.54	0.60
30	1.09	23.3	70.7	126	181	219	235	216	177	122	68.7	22.6	1.66	0.65	0.51	0.48	0.59	0.61	0.68
35	0.99	28.8	88.7	163	241	296	318	294	237	160	87.4	29.0	1.66	0.63	0.51	0.52	0.63	0.68	0.77
40	0.94	33.9	107	204	311	387	418	385	307	203	107	35.1	1.64	0.61	0.51	0.54	0.69	0.78	0.89
45	0.90	38.1	124	247	384	487	528	485	383	247	125	40.3	1.61	0.58	0.52	0.61	0.84	0.99	1.13
50	0.87	41.1	137	287	457	591	644	591	458	289	140	44.3	1.59	0.56	0.55	0.73	1.06	1.27	1.45
55	0.83	42.9	147	319	526	693	758	695	531	325	151	47.0	1.53	0.55	0.61	0.90	1.32	1.66	1.88
60	0.78	43.6	150	343	585	783	861	789	594	353	156	48.7	1.46	0.55	0.71	1.12	1.66	2.14	2.42
65	0.75	43.6	148	357	628	855	939	864	643	370	155	49.5	1.40	0.55	0.82	1.35	2.09	2.74	3.07
70	0.71	43.0	143	358	651	896	982	908	671	375	151	49.3	1.34	0.61	0.94	1.66	2.61	3.42	3.84
75	0.70	41.2	135	347	649	900	985	915	673	367	144	47.3	1.23	0.61	1.10	2.01	3.17	4.09	4.52
80	0.68	38.8	126	325	617	862	943	881	645	346	136	45.6	1.15	0.66	1.27	2.38	3.68	4.77	5.25
85	0.66	36.4	117	293	561	785	858	805	591	315	126	43.4	1.09	0.73	1.46	2.74	4.21	5.38	5.91
90	0.58	33.7	107	256	488	680	743	701	517	278	117	40.9	0.94	0.78	1.70	3.12	4.71	5.98	6.53
95	0.62	31.2	97.4	219	409	565	616	584	436	239	107	38.5	0.94	0.88	1.94	3.44	5.18	6.53	7.09
100	0.66	28.8	74.4	166	329	454	495	471	356	204	93.9	35.9	0.77	1.03	2.18	3.75	5.52	6.89	7.41
105	0.67	18.0	46.3	61.7	243	358	393	373	287	101	65.2	29.1	0.70	1.16	2.40	4.12	6.09	7.34	7.75
110	0.67	7.44	43.4	36.2	63.7	60.9	106	69.9	75.7	73.5	61.2	15.7	0.74	1.28	2.58	4.31	6.30	7.68	8.10
115	0.74	3.71	42.3	82.7	31.7	65.0	105	72.6	33.2	105	57.0	7.43	0.79	1.35	2.62	4.32	5.88	7.41	7.67
120	0.77	1.68	19.4	74.8	137	151	129	147	147	94.1	38.5	2.84	0.77	1.43	2.67	4.20	5.54	6.54	6.84
125	0.75	3.30	2.30	66.6	111	169	184	174	118	81.9	8.32	1.92	0.74	1.37	2.40	3.99	4.82	5.87	5.93
130	0.74	3.85	0.70	26.2	94.9	141	152	144	100	39.9	1.81	2.85	0.68	1.30	2.14	3.35	4.18	4.80	4.90
135	0.62	3.38	0.56	3.04	34.5	101	122	111	46.3	2.97	0.60	2.61	0.52	1.21	1.90	2.81	3.63	4.23	4.12
140	0.59	2.44	0.39	0.53	3.03	23.5	41.3	28.7	2.13	0.42	0.42	2.55	0.49	1.10	1.73	2.47	3.13	3.60	3.65
145	0.53	2.07	0.25	0.36	0.41	0.36	0.53	0.35	0.35	0.36	0.33	2.47	0.48	1.01	1.52	2.22	2.72	3.02	3.02
150	0.53	1.96	0.43	0.23	0.20	0.18	0.21	0.15	0.27	0.26	0.39	2.98	0.48	1.27	1.38	1.96	2.53	2.68	3.07
155	0.53	1.02	3.24	0.19	0.12	0.06	0.12	0.09	0.18	0.25	3.20	2.19	0.48	0.94	1.32	1.62	1.99	2.54	2.31
160	0.53	0.47	2.74	6.31	2.95	2.47	0.44	1.64	2.19	3.49	3.80	0.71	0.48	0.75	1.02	1.36	1.58	1.82	1.95
165	0.53	0.44	1.34	2.81	6.14	5.62	5.98	6.01	6.64	3.24	2.06	0.61	0.48	0.69	0.89	1.16	1.26	1.37	1.36
170	0.53	0.41	0.32	1.31	3.06	4.94	5.24	5.00	2.20	1.50	0.40	0.51	0.47	0.61	0.73	0.92	1.01	1.11	1.09
175	0.49	0.44	0.36	0.35	0.29	0.30	0.27	0.31	0.31	0.40	0.42	0.55	0.47	0.55	0.61	0.69	0.72	0.77	0.74
180	0.47	0.47	0.44	0.46	0.44	0.46	0.45	0.48	0.46	0.48	0.49	0.55	0.47	0.48	0.48	0.48	0.48	0.48	0.48

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks:

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LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.69V I:0.1569A P:29.769W PF:0.8638 Freq:49.99Hz Lamp Flux:1303x1 lm		
NAME: HCP-2323002 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Havit Commercial	SUR.:	Shielding Angle:

Table--2 UNIT: cd

C(DEG) / γ (DEG)	285	300	315	330	345														
0	0.98	1.01	1.10	1.18	1.29														
5	0.50	0.53	0.70	0.85	1.07														
10	0.43	0.48	0.59	0.68	0.92														
15	0.43	0.49	0.56	0.62	0.79														
20	0.47	0.53	0.55	0.61	0.71														
25	0.60	0.58	0.55	0.61	0.66														
30	0.63	0.64	0.61	0.61	0.64														
35	0.71	0.68	0.61	0.63	0.64														
40	0.86	0.75	0.62	0.63	0.63														
45	1.04	0.95	0.74	0.66	0.63														
50	1.35	1.20	0.91	0.72	0.63														
55	1.77	1.50	1.11	0.83	0.63														
60	2.26	1.87	1.34	0.94	0.67														
65	2.87	2.33	1.63	1.07	0.70														
70	3.56	2.87	1.95	1.21	0.73														
75	4.24	3.39	2.31	1.36	0.85														
80	4.91	3.90	2.63	1.57	0.90														
85	5.53	4.44	3.01	1.76	0.95														
90	6.10	4.88	3.37	1.94	0.99														
95	6.59	5.28	3.69	2.13	1.05														
100	6.88	5.49	3.87	2.33	1.16														
105	7.32	5.99	4.17	2.51	1.24														
110	7.66	6.11	4.32	2.61	1.36														
115	7.39	5.76	4.37	2.65	1.43														
120	6.37	5.28	3.92	2.64	1.52														
125	5.68	4.45	3.63	2.26	1.41														
130	4.51	3.75	2.86	1.92	1.37														
135	3.94	3.25	2.41	1.67	1.22														
140	3.31	2.73	2.07	1.46	1.08														
145	2.78	2.34	1.81	1.34	0.97														
150	2.50	2.21	1.69	1.17	1.24														
155	2.31	1.76	1.39	1.16	0.92														
160	1.79	1.42	1.22	0.94	0.77														
165	1.30	1.16	1.07	0.86	0.73														
170	1.05	0.96	0.88	0.74	0.68														
175	0.75	0.67	0.68	0.61	0.62														
180	0.49	0.49	0.51	0.51	0.55														

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-31

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.120m [K=1.0000]
Remarks: