

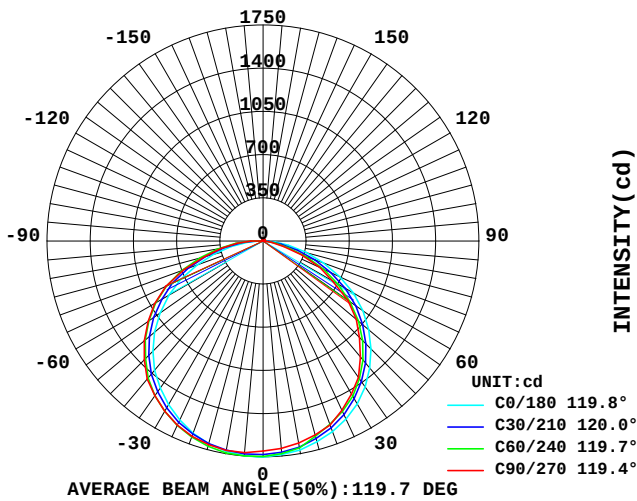
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number: HLRP10231

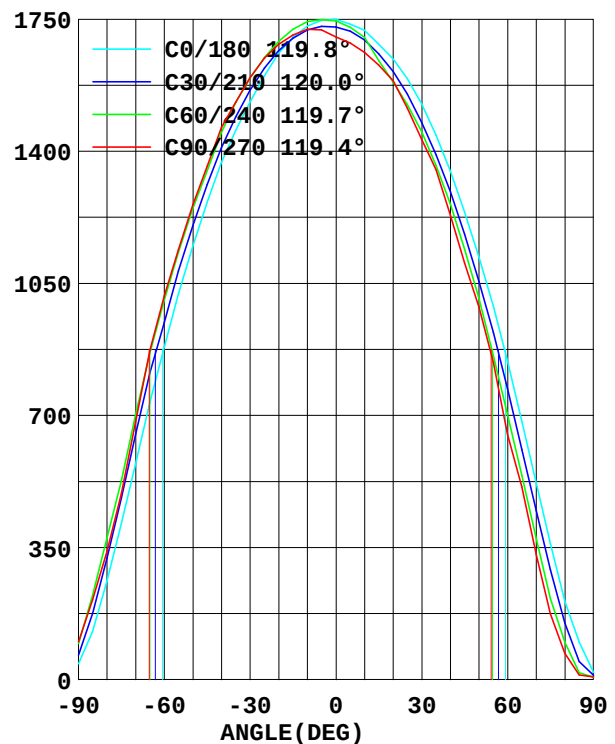
MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825604	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 4000K	DIMENSION: 40mm x 480mm 288LED	COB No.: 01

DATA OF LAMP		Imax(cd)	1750	S/MH(C0/180)	1.30
MODEL	HCP-3825604	EFFICIENCY(%)	100.0	S/MH(C90/270)	1.39
NOMINAL POWER(W)	60	TOTAL FLUX(lm)	5438.3	Voltage(V)	24.00
RATED VOLTAGE(V)	24	EFFICIENCY(lm/W)	91.2	Current(A)	2.486
NOMINAL FLUX(lm)	5438.3	η up(%)	1.8	Power(W)	59.66
LAMPS QUANTITY	1	η down(%)	98.2	Power Factor(PF)	1.000
TEST VOLTAGE(V)	24.0	Effective Flux(lm)	5253.4	EEI	0.155

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



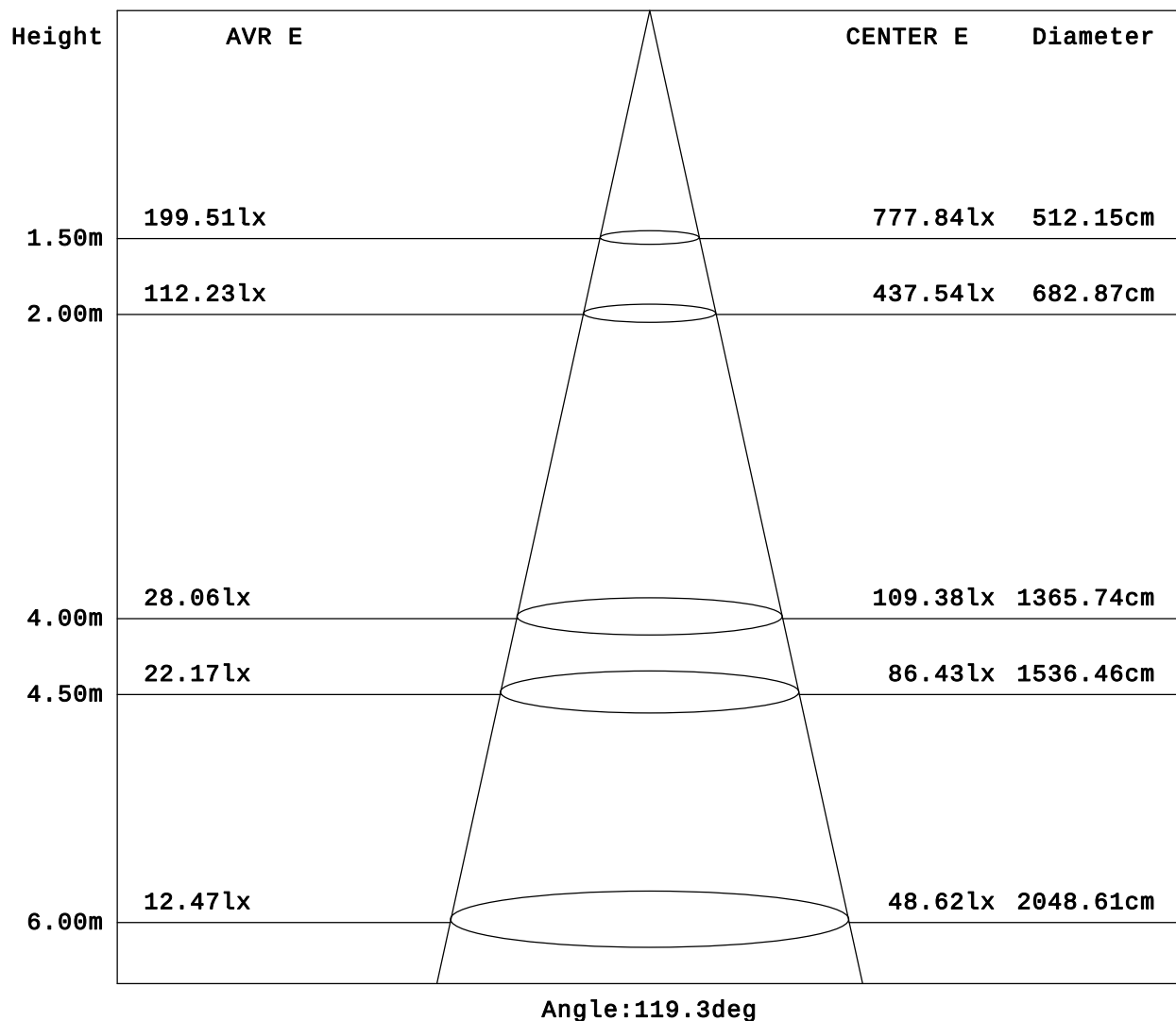
Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:RD
Test Date:10-23-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks: COB IES

AVERAGE AND CENTER E Figure

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825604	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 4000K	DIMENSION: 40mm x 480mm 288LED	COB No.: 01



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Temperature: 25.3DEG
Operators: RD
Test Date: 10-23-2020

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Humidity: 65.0%
Test Distance: 8.000 m
Remarks: COB IES

ZONAL FLUX DIAGRAM

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825604	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 4000K	DIMENSION: 40mm x 480mm 288LED	COB No.: 01

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
10.0	1732	1733	1723	1715	1721	1699	1662	1671	0- 10	163.8	163.8
20.0	1659	1679	1684	1666	1645	1598	1587	1574	10- 20	473.2	637.0
30.0	1531	1579	1595	1573	1526	1464	1432	1431	20- 30	728.9	1366
40.0	1370	1429	1462	1429	1347	1276	1230	1241	30- 40	899.1	2265
50.0	1148	1226	1258	1233	1119	1032	986.6	1003	40- 50	957.0	3222
60.0	881.1	976.2	1017	986.8	844.7	737.1	650.3	710.6	50- 60	888.3	4111
70.0	570.3	674.7	682.0	690.5	520.3	410.7	331.4	387.0	60- 70	691.0	4802
80.0	261.6	348.9	340.0	364.4	208.1	125.2	69.82	110.1	70- 80	398.7	5200
90.0	41.91	80.16	99.45	88.73	19.00	8.800	7.552	7.392	80- 90	138.8	5339
100.0	9.408	8.000	6.784	7.872	7.872	8.927	9.408	9.056	90-100	21.58	5361
110.0	11.39	9.920	9.152	9.888	10.30	11.13	11.77	11.39	100-110	10.05	5371
120.0	13.88	12.28	11.64	12.09	12.86	13.66	14.08	13.95	110-120	11.71	5383
130.0	16.38	14.84	14.33	14.65	15.48	16.12	16.44	16.41	120-130	12.81	5395
140.0	18.49	17.31	16.95	17.08	18.04	18.43	18.68	18.71	130-140	12.97	5408
150.0	20.16	19.52	19.26	19.32	20.03	20.28	20.54	20.54	140-150	11.89	5420
160.0	21.69	21.27	21.12	20.99	21.56	21.72	22.20	21.79	150-160	9.587	5430
170.0	23.23	22.46	22.78	22.30	22.84	22.62	23.29	22.68	160-170	6.262	5436
180.0	23.61	23.07	23.68	23.07	23.55	22.84	23.61	22.84	170-180	2.189	5438
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:RD
Test Date:10-23-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks: COB IES

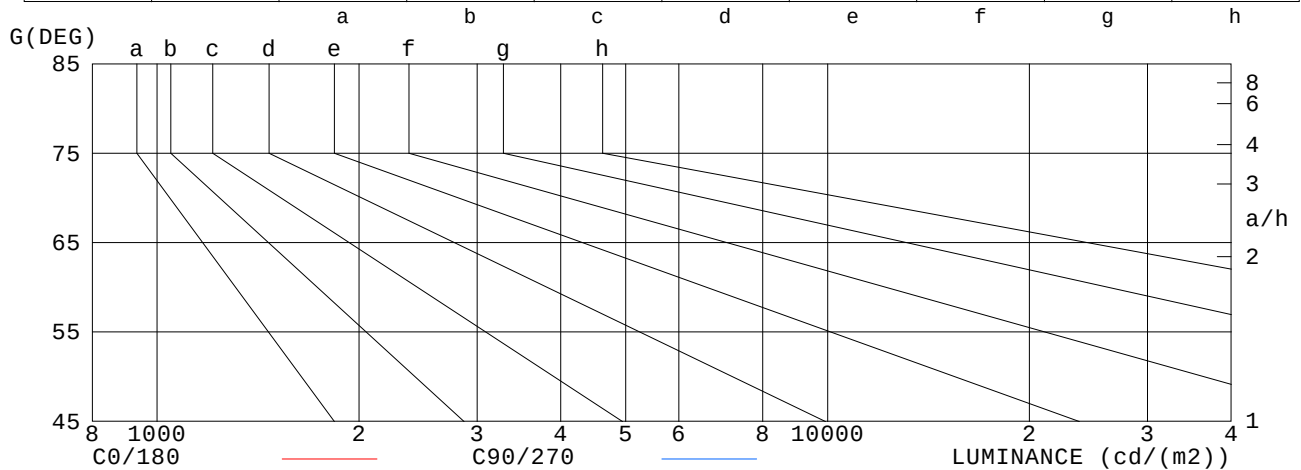
LUMINANCE LIMITATION CURVES

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825604	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 4000K	DIMENSION: 40mm x 480mm 288LED	GENERAL No.: 01

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	183396	303273
80	188381	244817
75	199954	238066
70	208456	249272
65	217501	258067
60	220288	254192
55	222659	248183
50	223302	244622
45	223615	240529

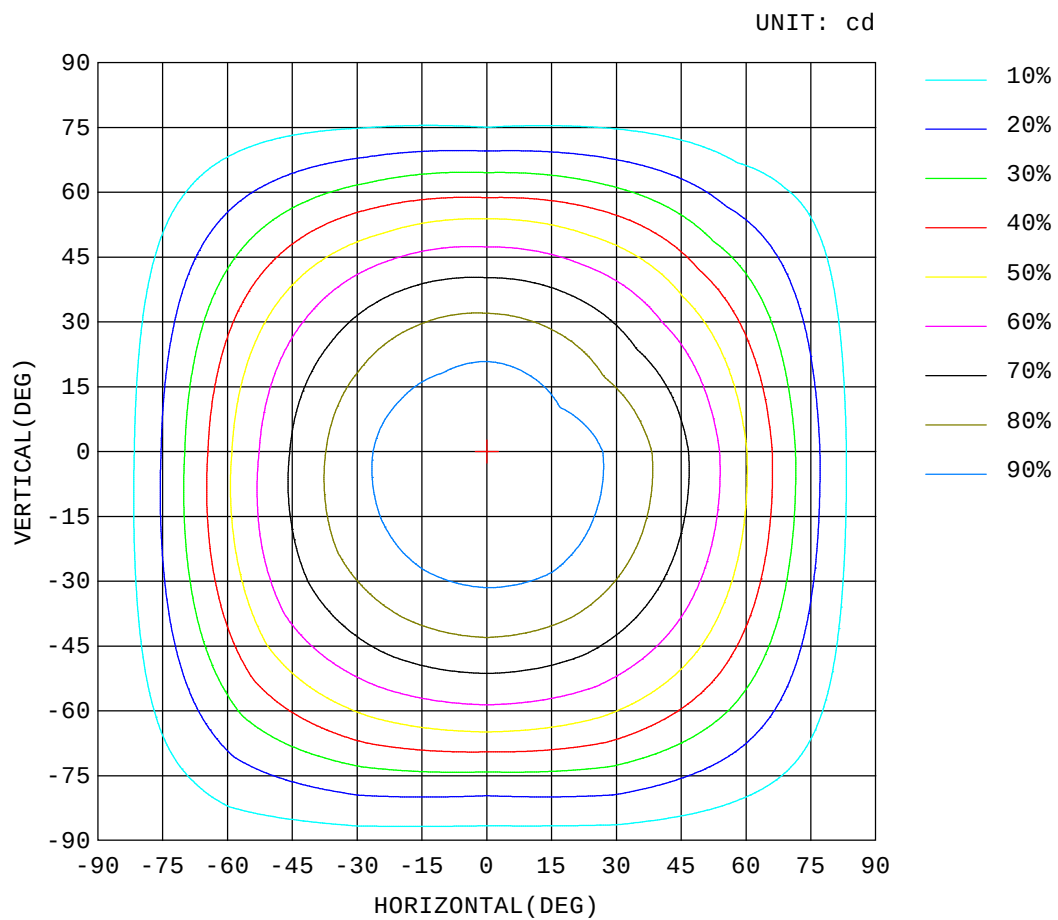
Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:RD
Test Date:10-23-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks: COB IES

ISOCANDELA DIAGRAM

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825604	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 4000K	DIMENSION: 40mm x 480mm 288LED	COB No.: 01



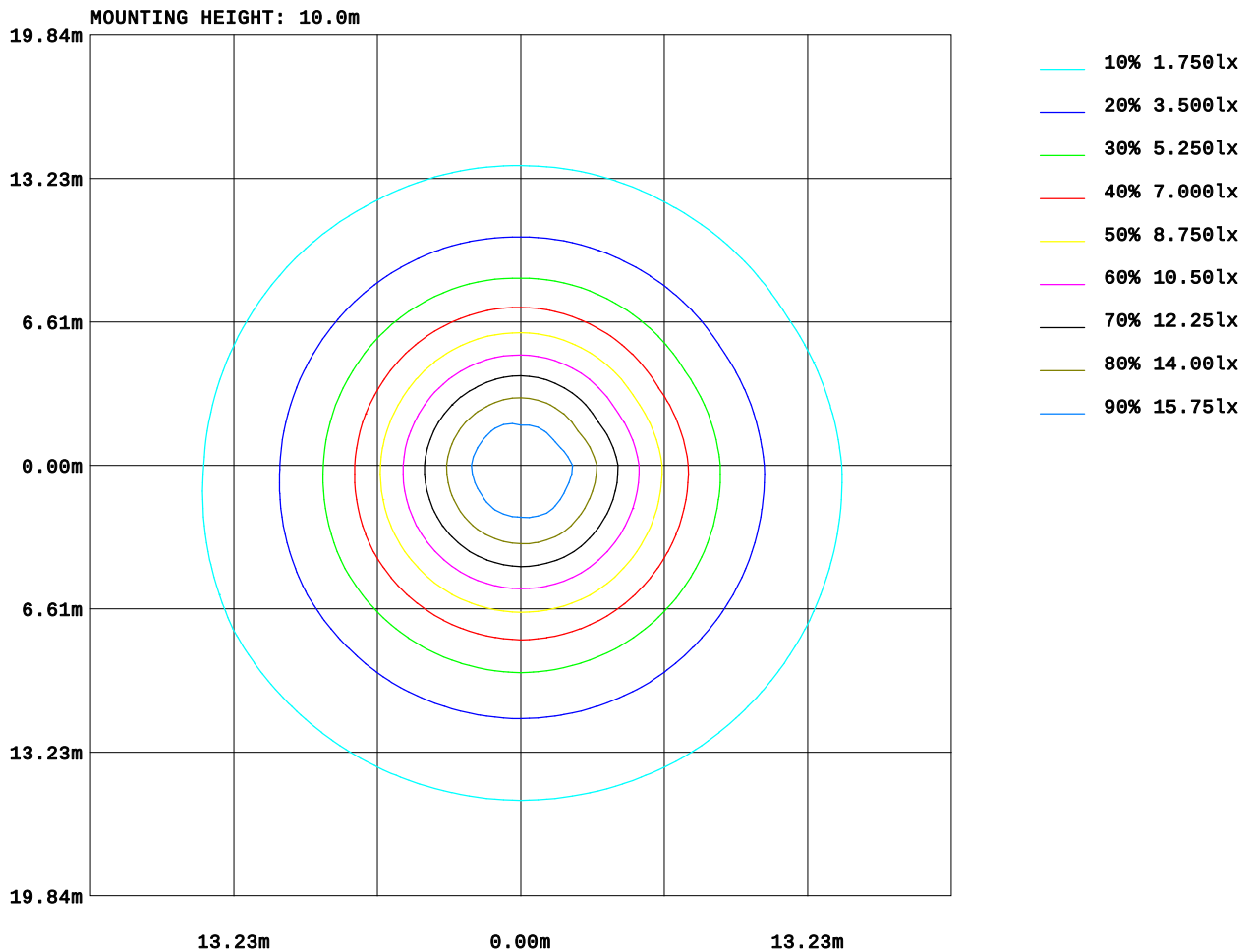
Test System: HOP00 HPG1800
Temperature: 25.3 DEG
Operators: RD
Test Date: 10-23-2020

Test Set: 5.0 deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 8.000 m
Remarks: COB IES

ISOLUX DIAGRAM

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825604	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 4000K	DIMENSION: 40mm x 480mm 288LED	COB No.: 01



Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:RD
Test Date:10-23-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks: COB IES

AREA LUMINOUS FLUX

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825604	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 4000K	DIMENSION: 40mm x 480mm 288LED	COB No.: 01

VERTICAL (DEG)	AREA FLUX DIAGRAM																		UNIT: lm		Φ t	Φ a
	0.07	0.24	0.40	0.52	0.65	0.72	0.78	0.84	0.82	0.81	0.83	0.76	0.66	0.54	0.41	0.38	0.31	0.11	9.83	0.00		
90	0.11	0.49	1.11	2.02	3.12	4.13	5.00	5.65	5.82	5.80	5.62	4.95	3.94	2.78	1.67	1.01	0.56	0.16	53.9	28.7		
80	0.15	0.85	2.29	4.54	7.23	10.0	12.5	14.4	15.2	15.2	14.2	12.2	9.62	6.68	3.97	2.14	0.93	0.20	133	128		
70	0.19	1.26	3.71	7.42	11.9	16.4	20.4	23.5	25.1	25.0	23.3	20.1	15.9	11.1	6.79	3.57	1.38	0.25	218	216		
60	0.24	1.71	5.13	10.2	16.3	22.3	27.7	31.6	33.5	33.3	31.1	27.0	21.7	15.5	9.66	5.06	1.87	0.30	295	294		
50	0.28	2.13	6.42	12.7	20.0	27.2	33.5	38.1	40.5	40.3	37.5	32.7	26.4	19.3	12.3	6.47	2.34	0.35	359	359		
40	0.32	2.49	7.49	14.7	22.9	31.0	38.0	43.0	45.6	45.4	42.4	37.0	30.0	22.4	14.6	7.68	2.75	0.40	409	408		
30	0.34	2.77	8.29	16.1	25.0	33.7	41.1	46.4	49.2	49.0	45.7	40.1	33.1	24.9	16.3	8.64	3.09	0.43	445	444		
20	0.36	2.94	8.78	17.0	26.3	35.4	43.2	48.7	51.7	51.1	48.3	42.9	35.4	26.6	17.4	9.29	3.32	0.46	470	469		
10	0.37	3.02	9.00	17.4	26.8	36.0	43.8	49.3	52.0	52.5	49.7	44.0	36.2	27.2	17.8	9.53	3.40	0.47	479	479		
0	0.37	3.00	8.94	17.3	26.5	35.6	43.2	48.6	51.4	51.7	48.9	43.3	35.7	26.7	17.5	9.36	3.33	0.46	472	472		
-10	0.36	2.87	8.57	16.6	25.6	34.2	41.4	46.7	49.5	49.6	47.0	41.5	34.1	25.5	16.6	8.86	3.15	0.44	453	453		
-20	0.34	2.63	7.87	15.3	23.9	31.6	38.4	43.4	46.0	46.1	43.5	38.4	31.4	23.4	15.3	8.04	2.85	0.40	419	419		
-30	0.30	2.30	6.89	13.6	21.0	28.0	34.1	38.5	40.9	40.9	38.5	34.0	27.7	20.6	13.4	6.93	2.47	0.36	371	370		
-40	0.26	1.90	5.67	11.2	17.3	23.3	28.5	32.2	34.2	34.2	32.2	28.5	23.1	17.0	10.8	5.60	2.01	0.31	309	308		
-50	0.22	1.47	4.28	8.42	12.9	17.5	21.6	24.4	25.9	25.9	24.4	21.5	17.3	12.5	7.96	4.14	1.51	0.26	233	231		
-60	0.17	1.02	2.85	5.45	8.21	11.0	13.3	14.7	15.3	15.2	14.6	13.2	10.8	7.85	5.02	2.65	1.04	0.21	143	140		
-70	0.11	0.60	1.51	2.67	3.86	5.08	6.01	6.47	6.61	6.58	6.40	5.89	4.88	3.57	2.36	1.37	0.63	0.15	64.8	44.5		
-80																						
-90																						
	-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)				20	30	40	50	60	70	80	90		
Φ t	4.56	33.7	99.2	194	300	404	493	557	590	589	555	489	398	295	191	101	36.9	5.71	5438			
Φ a	0.79	28.8	95.0	190	296	400	490	553	586	585	551	485	395	291	186	96.3	32.3	1.96		5253		

Test System: HOP00 HPG1800
Temperature: 25.3 DEG
Operators: RD
Test Date: 10-23-2020

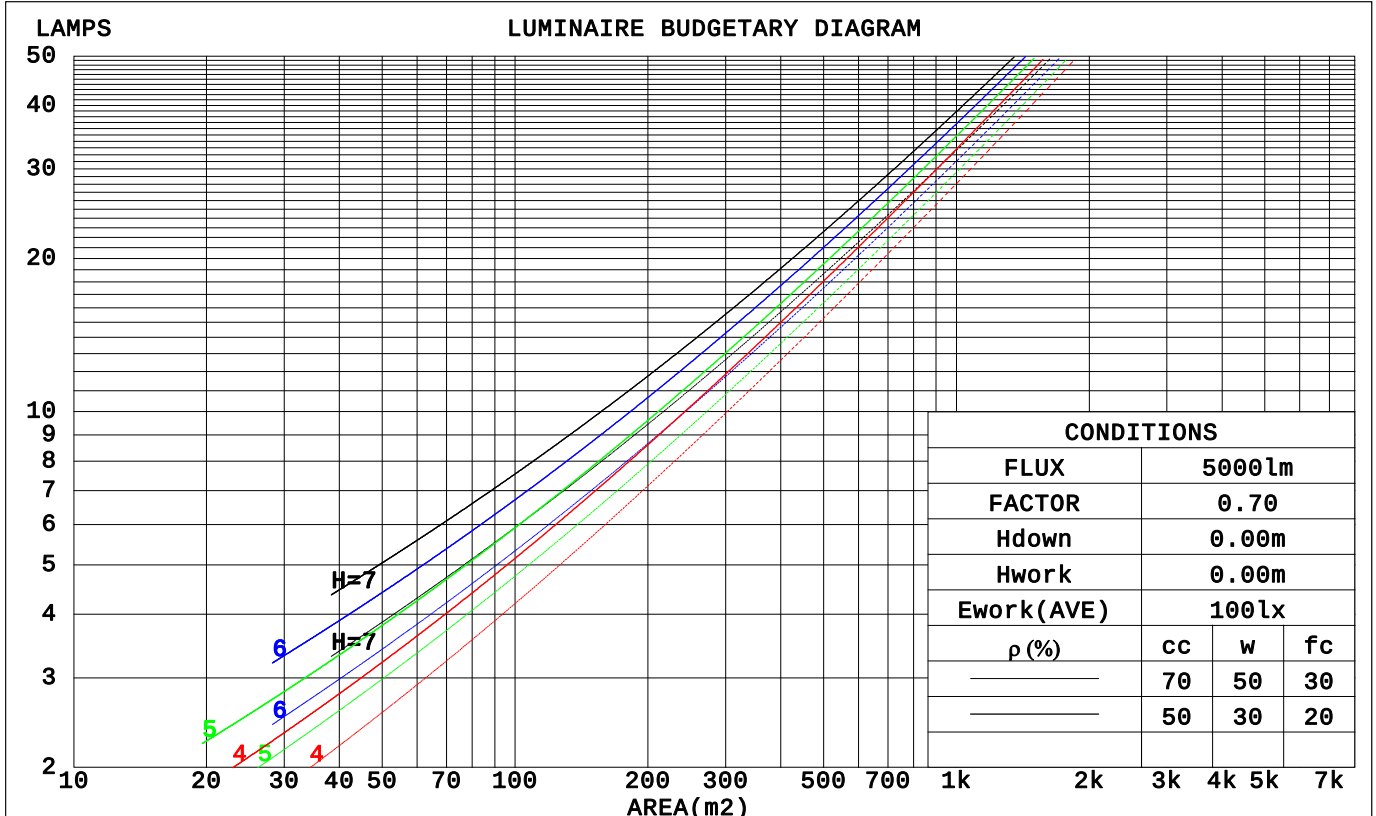
Test Set: 5.0 deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 8.000 m
Remarks: COB IES

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL															
Address:															
NAME: HCP-3825604								TYPE: 2835 CRI95				WEIGHT:			
SPECIFICATION: 4000K								DIMENSION: 40mm x 480mm 288LED				SERIAL No.: 01			

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	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	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	.98
1.0	1.03	.98	.94	1.00	.96	.93	.96	.92	.89	.92	.89	.86	.88	.85	.83	.81
2.0	.89	.82	.76	.87	.81	.75	.83	.78	.73	.80	.75	.71	.76	.73	.69	.67
3.0	.78	.70	.63	.76	.69	.62	.73	.66	.61	.70	.64	.60	.67	.62	.58	.56
4.0	.69	.60	.53	.67	.59	.53	.65	.57	.52	.62	.56	.51	.60	.54	.50	.48
5.0	.61	.52	.45	.60	.52	.45	.58	.50	.44	.56	.49	.44	.54	.48	.43	.41
6.0	.55	.46	.39	.54	.45	.39	.52	.44	.39	.50	.43	.38	.48	.42	.38	.36
7.0	.50	.41	.35	.49	.40	.34	.47	.40	.34	.46	.39	.34	.44	.38	.33	.31
8.0	.45	.37	.31	.45	.36	.31	.43	.36	.30	.42	.35	.30	.40	.34	.30	.28
9.0	.42	.33	.28	.41	.33	.28	.40	.32	.27	.38	.32	.27	.37	.31	.27	.25
10.0	.38	.30	.25	.38	.30	.25	.37	.30	.25	.36	.29	.24	.35	.29	.24	.22



Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:RD
Test Date:10-23-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
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WEC AND CCEC

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL											
Address:											
NAME: HCP-3825604						TYPE: 2835 CRI95			WEIGHT:		
SPECIFICATION: 4000K						DIMENSION: 40mm x 480mm 288LED			SERIAL No.: 01		

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.321	.183	.058	.314	.179	.057	.299	.172	.055	.286	.165	.053	.274	.159	.051		
2.0	.299	.164	.050	.293	.161	.050	.280	.156	.048	.268	.150	.047	.257	.146	.046		
3.0	.276	.147	.044	.270	.144	.043	.258	.140	.043	.248	.136	.042	.238	.132	.041		
4.0	.254	.132	.039	.248	.130	.038	.238	.126	.038	.229	.123	.037	.220	.120	.036		
5.0	.234	.119	.035	.229	.118	.034	.220	.115	.034	.212	.112	.033	.204	.109	.033		
6.0	.217	.109	.031	.212	.107	.031	.204	.105	.030	.197	.102	.030	.190	.100	.030		
7.0	.201	.099	.028	.197	.098	.028	.190	.096	.028	.183	.094	.027	.177	.092	.027		
8.0	.188	.092	.026	.184	.091	.026	.178	.089	.025	.172	.087	.025	.166	.085	.025		
9.0	.176	.085	.024	.173	.084	.024	.167	.082	.023	.161	.081	.023	.156	.079	.023		
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.152	.075	.021	.147	.074	.021		

ρ_{CC}	80%			70%			50%			30%			10%			0	
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)										
0.0	.204	.204	.204	.175	.175	.175	.119	.119	.119	.068	.068	.068	.022	.022	.022		
1.0	.195	.170	.147	.167	.146	.127	.114	.100	.088	.066	.058	.051	.021	.019	.017		
2.0	.187	.146	.111	.160	.126	.096	.110	.087	.067	.063	.051	.039	.020	.016	.013		
3.0	.180	.128	.088	.154	.111	.076	.106	.077	.053	.061	.045	.031	.020	.015	.010		
4.0	.172	.115	.072	.148	.100	.062	.102	.069	.044	.059	.041	.026	.019	.013	.009		
5.0	.165	.105	.061	.141	.091	.053	.097	.063	.037	.056	.037	.022	.018	.012	.007		
6.0	.158	.097	.053	.135	.084	.046	.093	.059	.033	.054	.034	.019	.017	.011	.006		
7.0	.151	.090	.047	.130	.078	.041	.090	.055	.029	.052	.032	.017	.017	.011	.006		
8.0	.144	.084	.043	.124	.073	.037	.086	.051	.026	.050	.030	.016	.016	.010	.005		
9.0	.138	.079	.039	.119	.069	.034	.082	.048	.024	.048	.029	.015	.016	.009	.005		
10.0	.132	.075	.037	.114	.065	.032	.079	.046	.023	.046	.027	.014	.015	.009	.005		

Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:RD
Test Date:10-23-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks: COB IES

Uncorrected UGR Table

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL											
Address:											
NAME: HCP-3825604					TYPE: 2835 CRI95			WEIGHT:			
SPECIFICATION: 4000K					DIMENSION: 40mm x 480mm 288LED			SERIAL No.: 01			
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	2H	32.1	33.6	32.4	33.8	34.1	32.6	34.1	32.9	34.4	34.6
	3H	33.7	35.1	34.0	35.4	35.7	34.4	35.8	34.7	36.1	36.4
	4H	34.4	35.7	34.7	36.0	36.3	35.1	36.5	35.5	36.8	37.1
	6H	34.9	36.1	35.2	36.4	36.7	35.7	37.0	36.1	37.3	37.6
	8H	35.0	36.2	35.4	36.5	36.9	36.0	37.2	36.4	37.5	37.9
	12H	35.1	36.3	35.5	36.6	36.9	36.3	37.4	36.6	37.8	38.1
4H	2H	32.9	34.2	33.2	34.5	34.8	33.3	34.6	33.6	34.9	35.2
	3H	34.7	35.9	35.1	36.2	36.6	35.3	36.4	35.7	36.8	37.1
	4H	35.5	36.6	35.9	36.9	37.3	36.2	37.2	36.6	37.6	38.0
	6H	36.1	37.1	36.6	37.5	37.9	36.9	37.9	37.4	38.3	38.7
	8H	36.3	37.2	36.8	37.6	38.0	37.3	38.2	37.7	38.6	39.0
	12H	36.5	37.3	36.9	37.7	38.2	37.6	38.4	38.1	38.8	39.3
8H	4H	35.9	36.8	36.4	37.2	37.7	36.5	37.4	36.9	37.8	38.2
	6H	36.7	37.5	37.2	37.9	38.4	37.5	38.2	38.0	38.7	39.1
	8H	37.0	37.7	37.5	38.2	38.6	38.0	38.6	38.5	39.1	39.6
	12H	37.3	37.9	37.8	38.3	38.9	38.4	39.0	38.9	39.5	40.0
12H	4H	36.0	36.8	36.4	37.2	37.7	36.5	37.3	37.0	37.8	38.2
	6H	36.9	37.5	37.4	38.0	38.5	37.6	38.2	38.1	38.7	39.2
	8H	37.2	37.8	37.7	38.3	38.8	38.1	38.7	38.6	39.2	39.7
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.4					

CIE Pub.117 Corrected 5438 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.9)

Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:RD
Test Date:10-23-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks: COB IES

UTILIZATION FACTORS TABLE

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL										
Address:										
NAME: HCP-3825604					TYPE: 2835 CRI95			WEIGHT:		
SPECIFICATION: 4000K					DIMENSION: 40mm x 480mm 288LED			SERIAL No.: 01		

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	56	44	37	55	44	37	54	43	36	30
0.80	66	54	46	65	53	46	63	52	46	38
1.00	74	63	55	73	62	55	70	63	54	47
1.25	81	71	63	80	70	63	77	68	62	54
1.50	86	76	69	85	75	68	81	73	67	59
2.00	93	85	78	91	83	77	88	81	75	67
2.50	98	89	83	95	88	82	91	85	80	71
3.00	101	94	88	99	92	87	94	89	84	75
4.00	105	99	94	103	97	93	98	94	90	80
5.00	108	103	98	105	100	97	100	96	93	83
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004					Suspended			SHRNOM = 1.25		

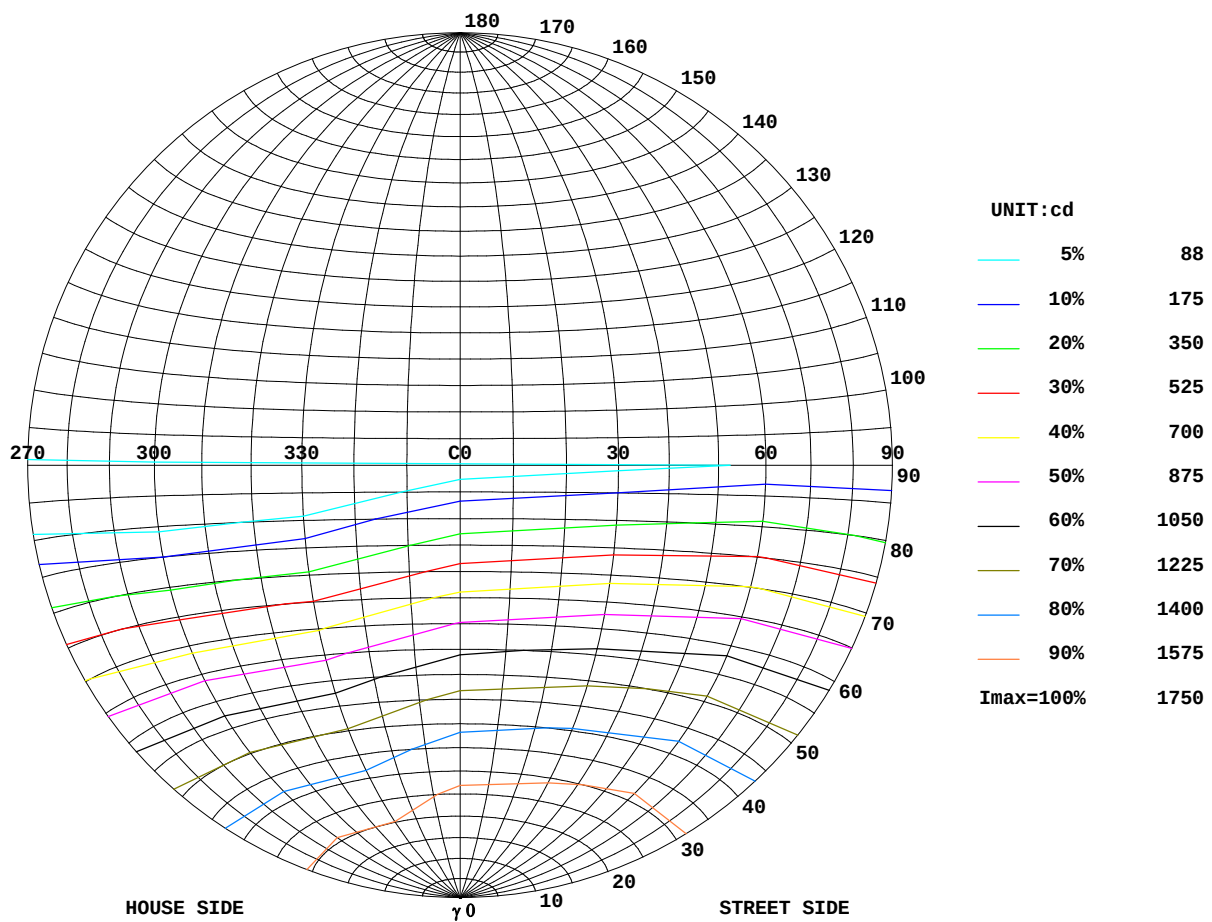
Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:RD
Test Date:10-23-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks: COB IES

ISOCANDELA DIAGRAM

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825604	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 4000K	DIMENSION: 40mm x 480mm 288LED	COB No.: 01



Test System: HOP00 HPG1800
Temperature: 25.3 DEG
Operators: RD
Test Date: 10-23-2020

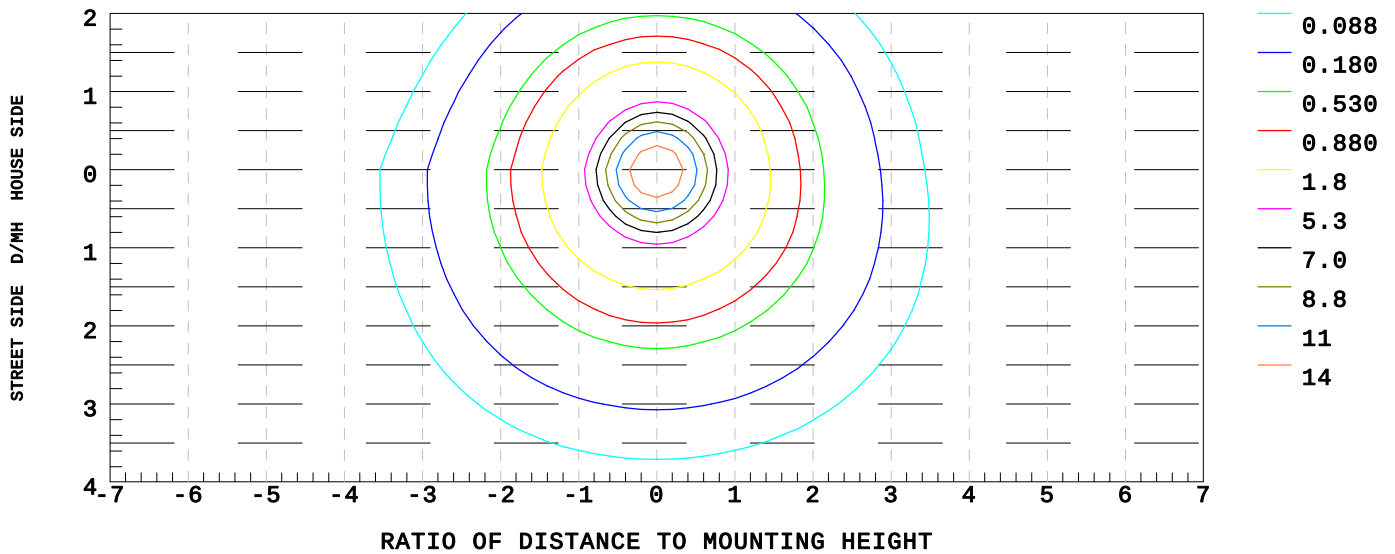
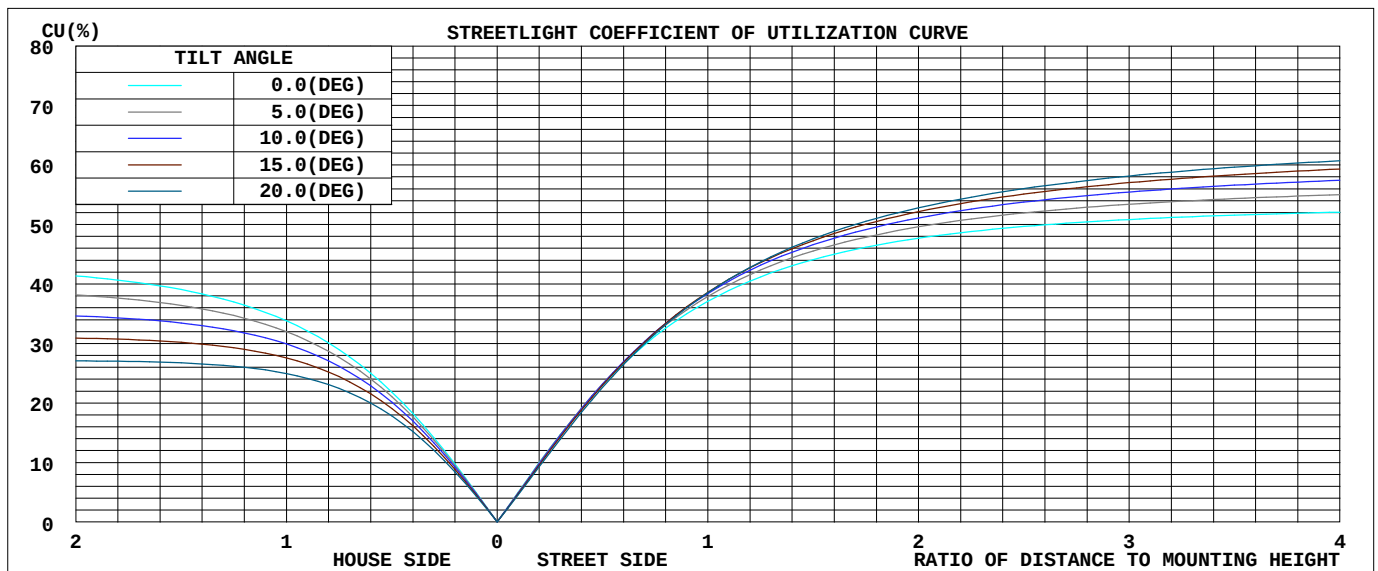
Test Set: 5.0 deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 8.000 m
Remarks: COB IES

ISOLUX DIAGRAM

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825604	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 4000K	DIMENSION: 40mm x 480mm 288LED	COB No.: 01

ILLUMINANCE AT MH=10 m, Enadir = 17.50 lx



Test System: HOP00 HPG1800

Temperature: 25.3 DEG

Operators: RD

Test Date: 10-23-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)

Humidity: 65.0%

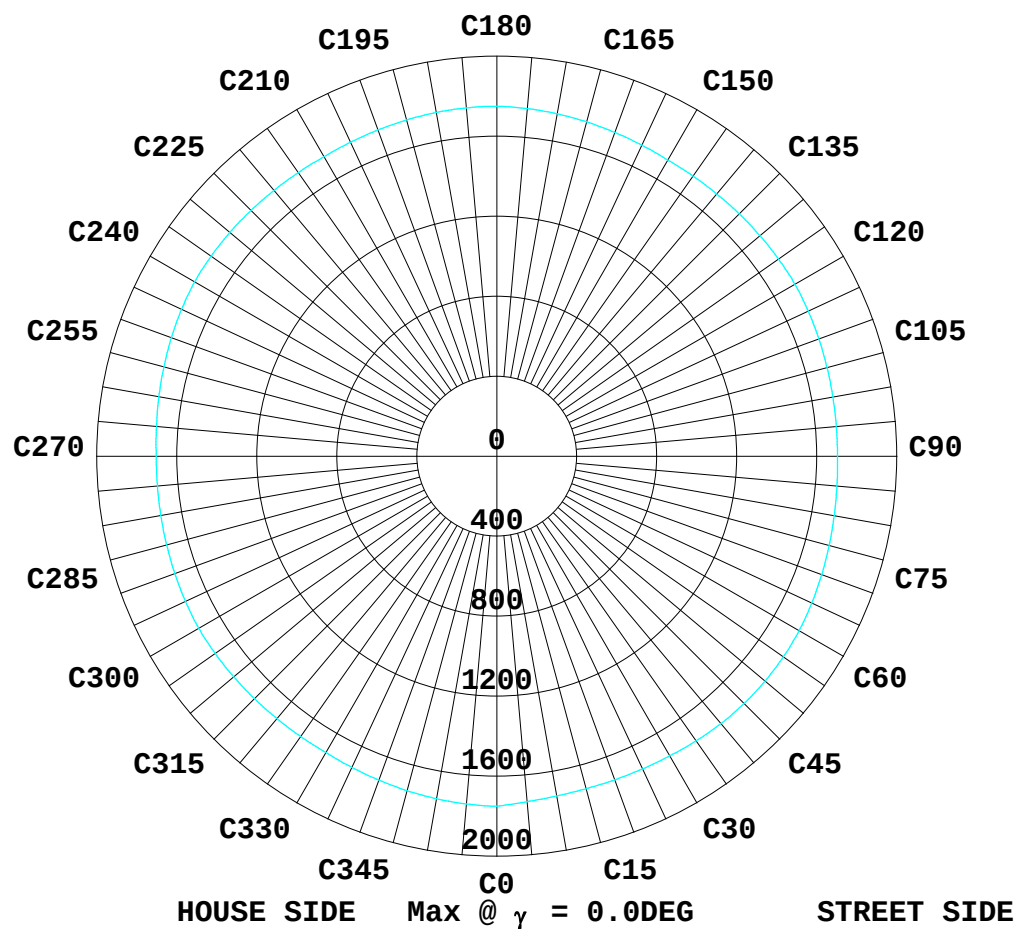
Test Distance: 8.000 m

Remarks: COB IES

ISOCANDELA DIAGRAM

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825604	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 4000K	DIMENSION: 40mm x 480mm 288LED	COB No.: 01



Test System: HOP00 HPG1800
Temperature: 25.3DEG
Operators: RD
Test Date: 10-23-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 8.000 m
Remarks: COB IES

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number: HLRP10231

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825604	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 4000K	DIMENSION: 40mm x 480mm 288LED	COB No.: 01

UNIT: cd

C(DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330
0.0	1750	1730	1745	1703	1721	1711	1750	1730	1745	1703	1721	1711
5.0	1748	1731	1749	1721	1730	1714	1737	1719	1729	1687	1703	1696
10.0	1732	1722	1744	1723	1723	1707	1721	1696	1703	1662	1674	1668
15.0	1703	1700	1723	1708	1705	1688	1684	1658	1640	1629	1631	1627
20.0	1659	1666	1691	1684	1675	1658	1645	1612	1584	1587	1577	1571
25.0	1601	1621	1649	1647	1636	1615	1593	1552	1524	1515	1510	1508
30.0	1531	1562	1595	1595	1585	1561	1526	1476	1452	1432	1431	1432
35.0	1455	1491	1529	1530	1520	1493	1443	1391	1362	1351	1338	1344
40.0	1370	1409	1449	1462	1442	1415	1347	1293	1259	1230	1234	1249
45.0	1265	1312	1349	1361	1352	1322	1239	1181	1141	1104	1116	1147
50.0	1148	1203	1248	1258	1251	1216	1119	1055	1010	987	985	1021
55.0	1022	1083	1132	1139	1131	1113	989	920	858	841	846	884
60.0	881	946	1006	1017	1004	969	845	772	702	650	690	731
65.0	735	813	866	873	868	831	684	609	541	511	529	564
70.0	570	648	701	682	707	674	520	448	374	331	367	407
75.0	414	482	527	493	530	512	361	292	215	174	213	252
80.0	262	322	376	340	377	352	208	151	99.9	69.8	99.9	120
85.0	128	175	224	211	230	201	99.9	48.1	17.8	12.2	16.6	37.5
90.0	41.9	65.2	95.0	99.4	101	76.7	19.0	11.1	6.46	7.55	6.46	8.32
95.0	9.79	15.1	21.3	17.0	23.8	19.9	6.72	8.38	7.55	8.38	7.55	8.44
100.0	9.40	7.68	8.32	6.78	8.32	7.42	7.87	9.21	8.64	9.40	8.76	9.34
105.0	10.4	8.89	9.08	7.87	9.02	8.64	9.08	10.1	9.79	10.4	9.98	10.4
110.0	11.3	9.85	9.98	9.15	9.98	9.79	10.3	11.2	11.0	11.7	11.2	11.5
115.0	12.4	11.0	11.0	10.3	11.0	11.0	11.5	12.4	12.3	12.9	12.5	12.7
120.0	13.8	12.3	12.2	11.6	12.0	12.0	12.8	13.6	13.6	14.0	13.8	14.0
125.0	15.1	13.6	13.4	12.9	13.3	13.3	14.2	14.9	14.9	15.2	15.1	15.2
130.0	16.3	14.9	14.7	14.3	14.5	14.7	15.4	16.0	16.1	16.4	16.4	16.3
135.0	17.6	16.1	16.0	15.6	15.8	16.0	16.8	17.3	17.3	17.6	17.7	17.5
140.0	18.4	17.3	17.2	16.9	16.8	17.2	18.0	18.4	18.3	18.6	18.8	18.5
145.0	19.2	18.4	18.4	18.1	18.1	18.4	19.0	19.4	19.3	19.7	19.9	19.4
150.0	20.1	19.5	19.5	19.2	19.2	19.4	20.0	20.3	20.2	20.5	20.7	20.2
155.0	20.9	20.4	20.4	20.1	20.0	20.3	20.9	21.1	20.9	21.4	21.5	20.9
160.0	21.6	21.3	21.2	21.1	20.8	21.1	21.5	21.8	21.6	22.2	21.9	21.6
165.0	22.3	22.0	21.9	22.0	21.6	21.8	22.3	22.2	22.2	22.7	22.4	22.2
170.0	23.2	22.4	22.5	22.7	22.2	22.3	22.8	22.5	22.6	23.2	22.7	22.6
175.0	23.5	22.7	22.9	23.2	22.7	22.8	23.3	22.8	22.8	23.6	22.9	22.8
180.0	23.6	22.9	23.2	23.6	23.0	23.1	23.5	22.7	22.9	23.6	22.8	22.8

Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:RD
Test Date:10-23-2020

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.000 m
Remarks: COB IES