

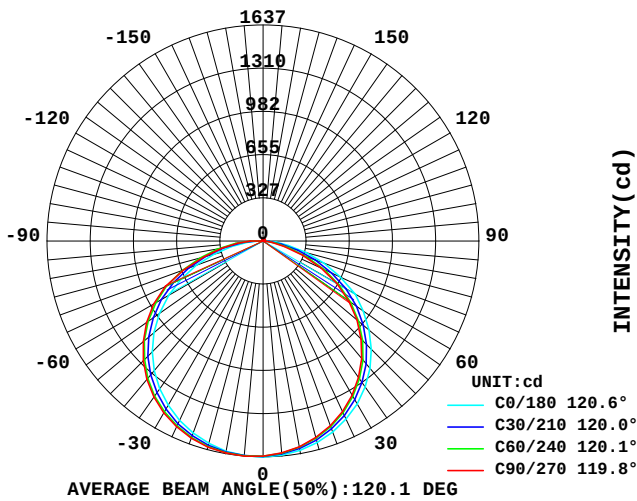
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number: HLRP10233

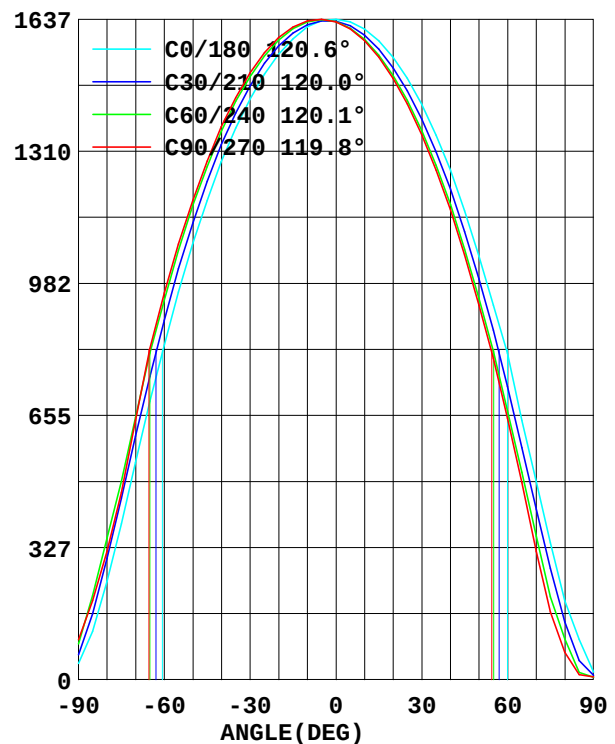
MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825603	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 3000K	DIMENSION: 240mm x 480mm 288LED	SERIAL No.: 01

DATA OF LAMP		Imax(cd)	1637	S/MH(C0/180)	1.31
MODEL	HCP-3825603	EFFICIENCY(%)	100.0	S/MH(C90/270)	1.37
NOMINAL POWER(W)	60	TOTAL FLUX(lm)	5134.8	Voltage(V)	24.00
RATED VOLTAGE(V)	24	EFFICIENCY(lm/W)	85.6	Current(A)	2.500
NOMINAL FLUX(lm)	5134.8	η up(%)	1.8	Power(W)	60.00
LAMPS QUANTITY	1	η down(%)	98.2	Power Factor(PF)	1.000
TEST VOLTAGE(V)	24.0	Effective Flux(lm)	4958.8	EEI	0.165

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



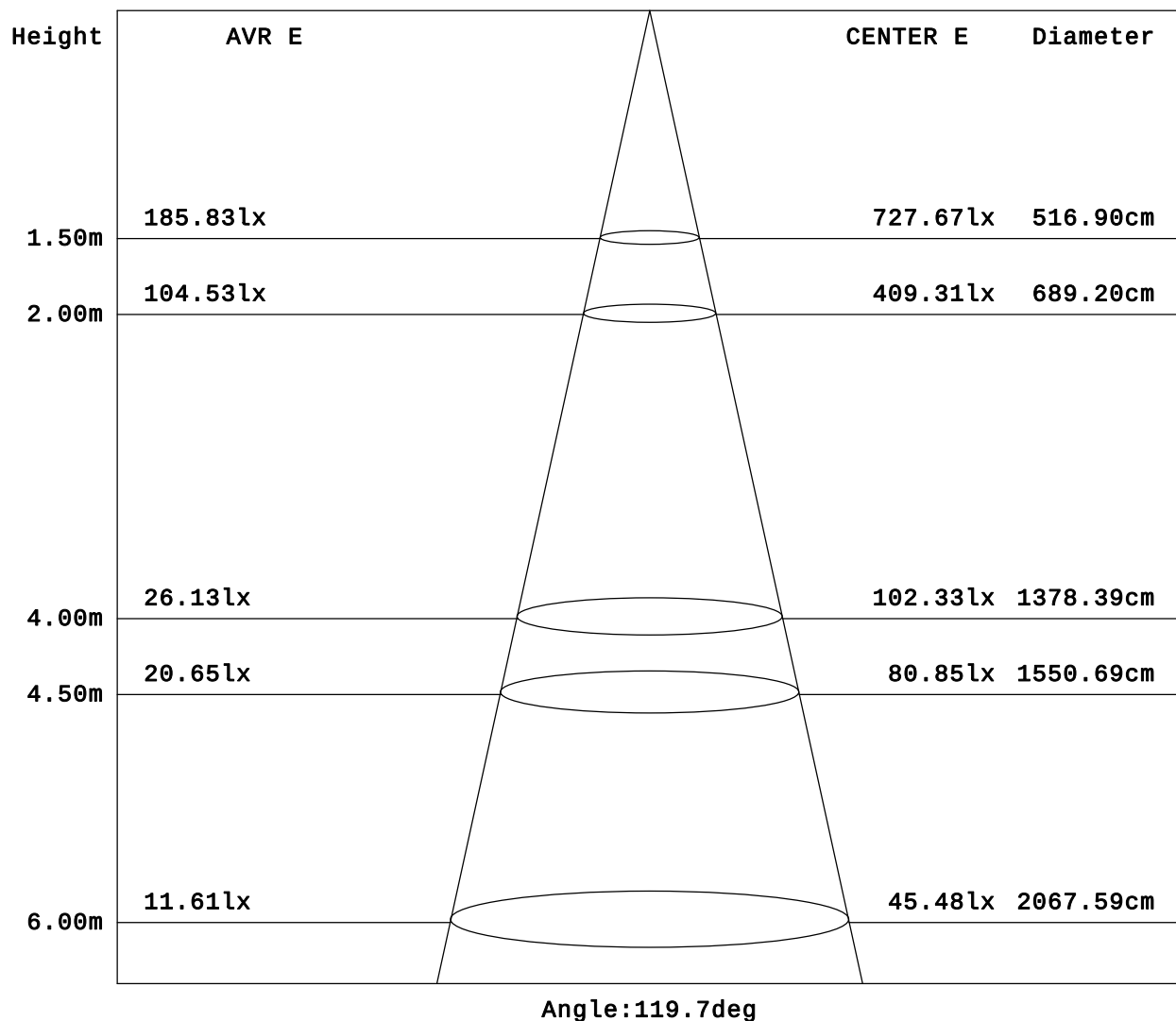
Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:RD
Test Date:10-23-2020

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: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825603	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 3000K	DIMENSION: 240mm x 480mm 288LED	SERIAL 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

ZONAL FLUX DIAGRAM

Report number: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825603	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 3000K	DIMENSION: 240mm x 480mm 288LED	SERIAL No.: 01

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
10.0	1619	1627	1633	1630	1613	1593	1584	1588	0- 10	154.7	154.7
20.0	1550	1578	1591	1585	1542	1507	1490	1497	10- 20	446.8	601.6
30.0	1440	1483	1504	1495	1426	1376	1351	1361	20- 30	688.0	1290
40.0	1284	1343	1371	1358	1263	1197	1164	1181	30- 40	847.9	2138
50.0	1081	1153	1187	1172	1049	968.7	928.2	948.5	40- 50	903.1	3041
60.0	828.7	915.8	958.0	938.7	809.1	696.4	648.3	673.2	50- 60	839.6	3880
70.0	538.3	626.6	642.4	644.5	491.0	388.9	318.0	370.0	60- 70	653.4	4534
80.0	243.5	325.5	317.5	346.5	195.8	122.3	68.03	107.6	70- 80	376.0	4910
90.0	40.12	74.62	99.19	83.64	18.68	8.576	7.104	7.072	80- 90	131.2	5041
100.0	8.896	7.584	6.400	7.488	7.360	8.448	8.896	8.608	90-100	20.47	5062
110.0	10.75	9.440	8.640	9.344	9.664	10.55	11.07	10.81	100-110	9.507	5071
120.0	12.99	11.71	11.07	11.55	12.03	12.92	13.37	13.21	110-120	11.08	5082
130.0	15.29	14.08	13.50	13.88	14.52	15.23	15.68	15.58	120-130	12.13	5094
140.0	17.47	16.44	16.00	16.22	16.83	17.37	17.79	17.69	130-140	12.26	5107
150.0	19.20	18.46	18.17	18.27	18.68	19.10	19.52	19.42	140-150	11.24	5118
160.0	20.60	20.03	19.84	19.84	20.22	20.51	20.99	20.70	150-160	9.055	5127
170.0	21.69	21.21	21.24	21.05	21.44	21.50	21.95	21.56	160-170	5.912	5133
180.0	22.08	21.72	22.08	21.72	22.08	21.75	22.08	21.72	170-180	2.064	5135
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

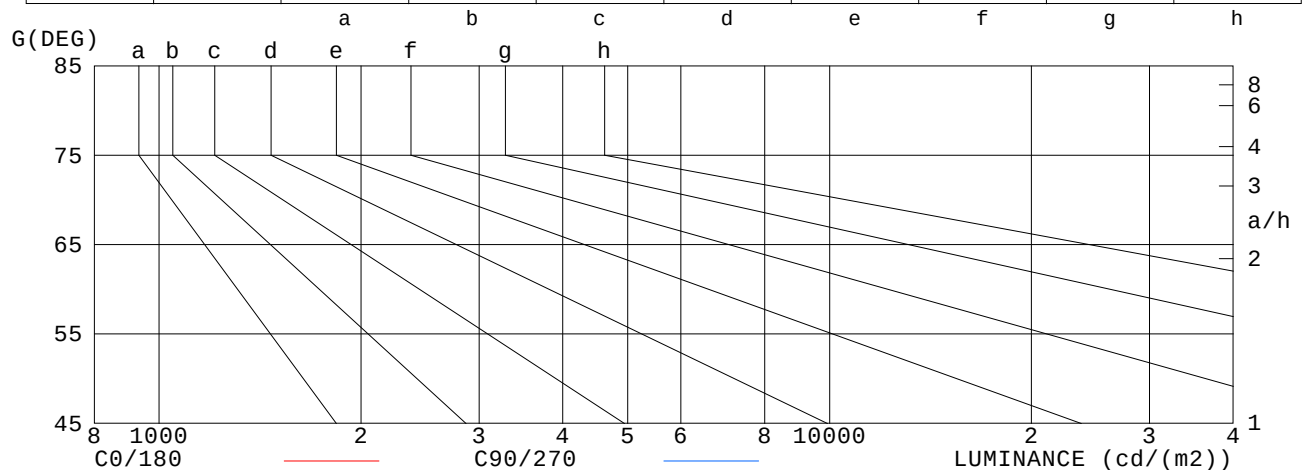
LUMINANCE LIMITATION CURVES

Report number: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825603	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 3000K	DIMENSION: 240mm x 480mm 288LED	SERIAL 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	171739	280876
80	175343	228554
75	186416	223848
70	196737	234793
65	204175	242753
60	207200	239504
55	209311	235323
50	210234	230894
45	209892	227213

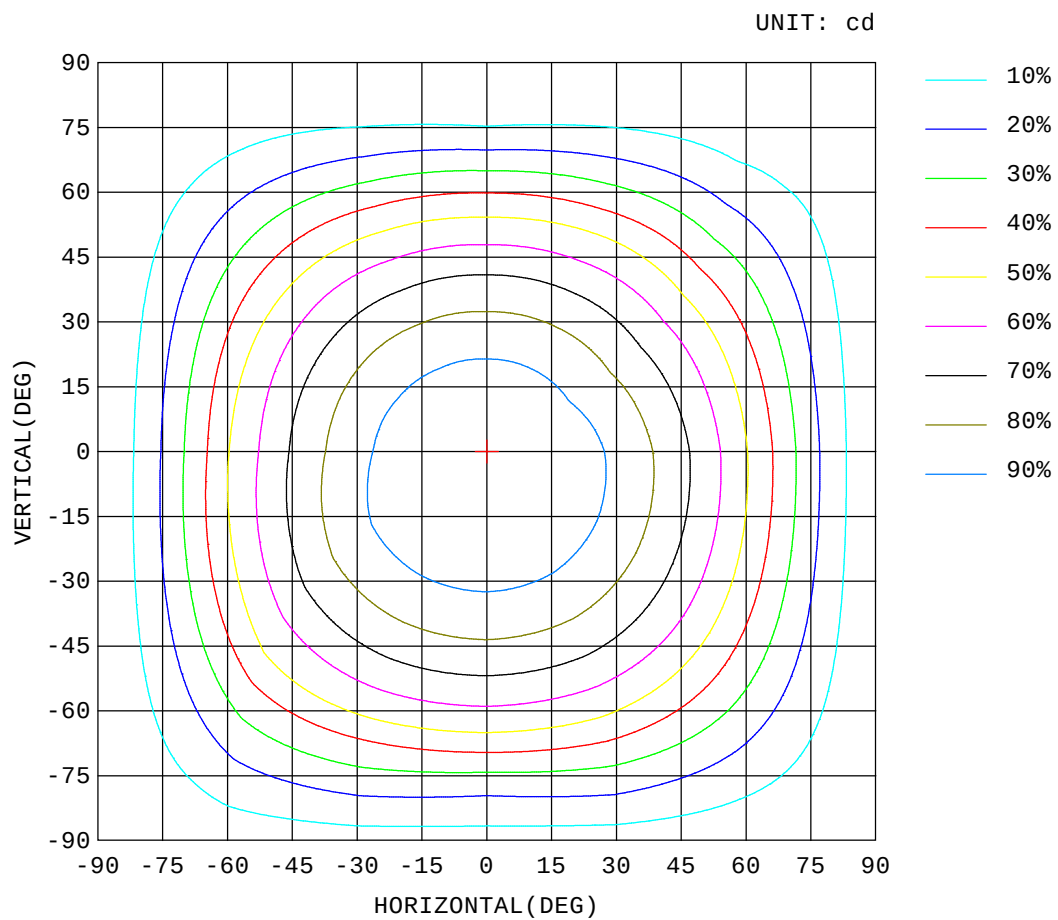
Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:RD
Test Date:10-23-2020

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

ISOCANDELA DIAGRAM

Report number: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825603	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 3000K	DIMENSION: 240mm x 480mm 288LED	SERIAL No.: 01



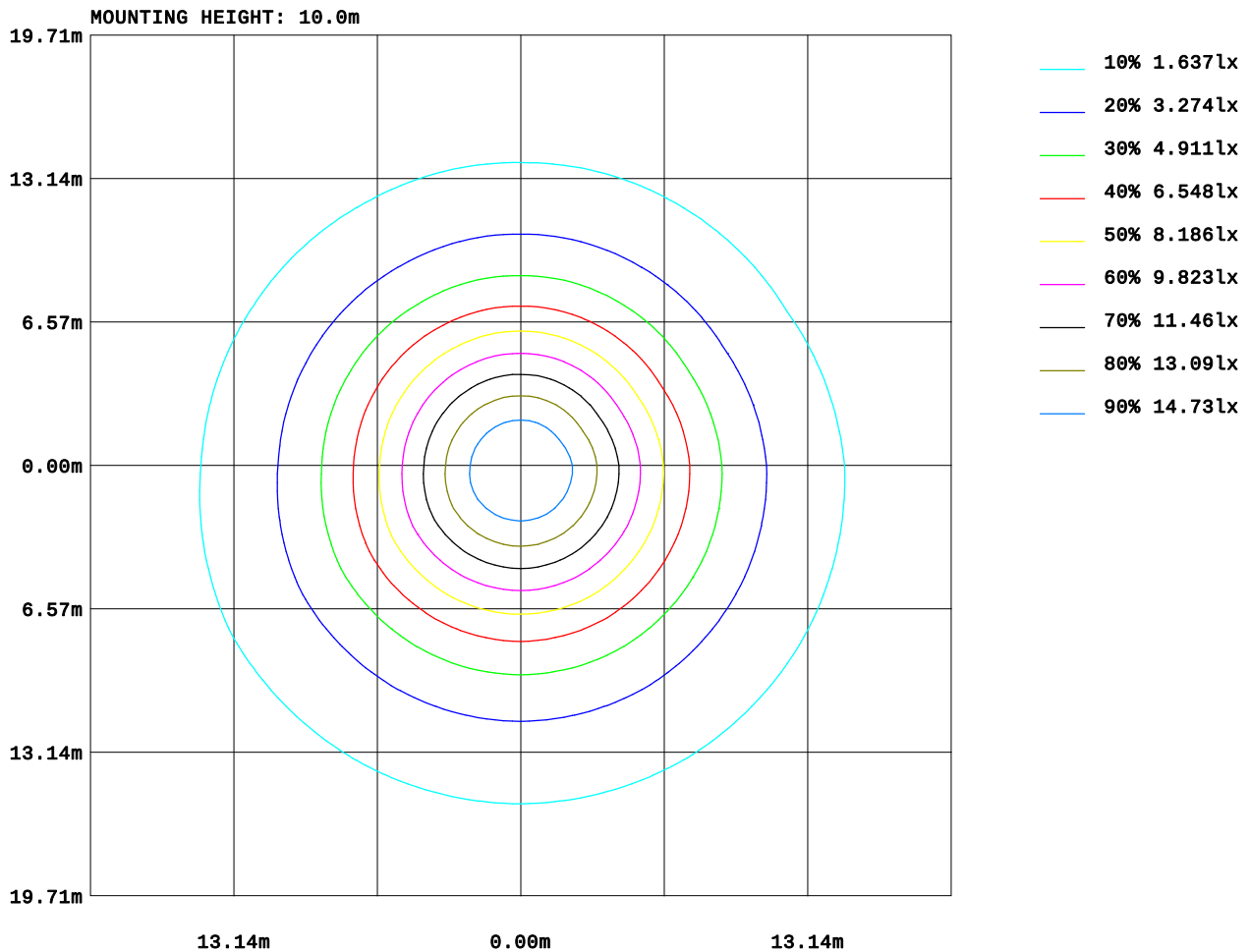
Test System: HOP00 HPG1800
Temperature: 25.3DEG
Operators: RD
Test Date: 10-23-2020

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

ISOLUX DIAGRAM

Report number: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825603	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 3000K	DIMENSION: 240mm x 480mm 288LED	SERIAL 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: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL																			
Address:																			
NAME: HCP-3825603										TYPE: 2835 CRI95					WEIGHT:				
SPECIFICATION: 3000K										DIMENSION: 240mm x 480mm 288LED					SERIAL No.: 01				

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT: lm		Φ t	Φ a
	0.07	0.24	0.39	0.51	0.63	0.71	0.77	0.83	0.89	0.89	0.82	0.76	0.65	0.53	0.40	0.37	0.30	0.11	9.70	0.00
90	0.11	0.49	1.07	1.94	3.01	3.99	4.83	5.44	5.59	5.58	5.41	4.78	3.81	2.69	1.61	0.97	0.53	0.15	52.0	29.5
80	0.15	0.82	2.17	4.30	6.85	9.50	11.9	13.8	14.7	14.6	13.6	11.7	9.19	6.40	3.80	2.03	0.88	0.19	127	122
70	0.19	1.20	3.50	7.00	11.2	15.6	19.4	22.4	23.9	23.9	22.3	19.1	15.1	10.6	6.49	3.38	1.29	0.23	207	206
60	0.23	1.61	4.84	9.64	15.3	21.1	26.0	29.7	31.7	31.6	29.5	25.7	20.6	14.7	9.20	4.80	1.75	0.28	279	278
50	0.27	2.01	6.05	12.0	18.8	25.6	31.4	35.7	38.0	38.0	35.5	31.1	25.0	18.2	11.7	6.13	2.19	0.33	339	338
40	0.31	2.35	7.06	13.9	21.5	29.1	35.7	40.4	43.0	42.9	40.2	35.2	28.5	21.2	13.8	7.26	2.58	0.37	386	385
30	0.33	2.61	7.83	15.2	23.5	31.6	38.7	43.8	46.4	46.4	43.5	38.2	31.4	23.5	15.3	8.14	2.89	0.41	420	420
20	0.35	2.76	8.30	16.0	24.6	33.1	40.5	45.8	48.6	48.5	45.7	40.5	33.3	25.0	16.4	8.74	3.11	0.43	442	442
10	0.36	2.84	8.53	16.4	25.2	33.8	41.3	46.7	49.4	49.3	46.6	41.4	34.1	25.5	16.8	8.95	3.18	0.44	451	451
0	0.36	2.84	8.50	16.4	25.1	33.8	41.1	46.2	48.7	48.7	46.0	40.8	33.5	25.1	16.5	8.77	3.11	0.43	446	446
-10	0.35	2.72	8.17	15.8	24.3	32.6	39.4	44.2	46.8	46.7	44.1	39.0	32.0	23.9	15.6	8.29	2.94	0.41	428	428
-20	0.32	2.50	7.51	14.7	22.6	30.1	36.4	41.0	43.4	43.3	40.9	36.1	29.5	22.0	14.3	7.51	2.66	0.38	396	395
-30	0.29	2.19	6.56	13.1	20.0	26.6	32.3	36.4	38.6	38.6	36.3	32.0	26.1	19.3	12.4	6.48	2.30	0.33	350	350
-40	0.25	1.81	5.40	10.7	16.6	22.2	27.0	30.5	32.4	32.3	30.3	26.7	21.6	15.8	10.1	5.23	1.87	0.29	292	291
-50	0.21	1.40	4.09	8.04	12.1	16.3	20.1	22.9	24.4	24.3	22.8	20.0	16.0	11.6	7.43	3.86	1.41	0.24	218	217
-60	0.16	0.98	2.69	5.18	7.79	10.3	12.4	13.7	14.3	14.3	13.7	12.3	10.0	7.33	4.68	2.47	0.97	0.20	134	131
-70	0.11	0.58	1.42	2.50	3.62	4.76	5.63	6.06	6.19	6.16	5.98	5.49	4.54	3.33	2.20	1.28	0.59	0.14	60.6	41.4
-80	0.07	0.24	0.39	0.51	0.63	0.71	0.77	0.83	0.89	0.89	0.82	0.76	0.65	0.53	0.40	0.37	0.30	0.11	9.70	0.00
-90	0.07	0.24	0.39	0.51	0.63	0.71	0.77	0.83	0.89	0.89	0.82	0.76	0.65	0.53	0.40	0.37	0.30	0.11	9.70	0.00
HORIZONTAL (DEG)																				
Φ t	4.41	31.9	94.1	184	283	381	466	526	558	557	524	461	376	277	179	94.7	34.6	5.35	5135	
Φ a	0.85	27.3	90.1	180	280	378	462	523	554	553	521	458	372	274	175	90.5	30.2	1.83		4959

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

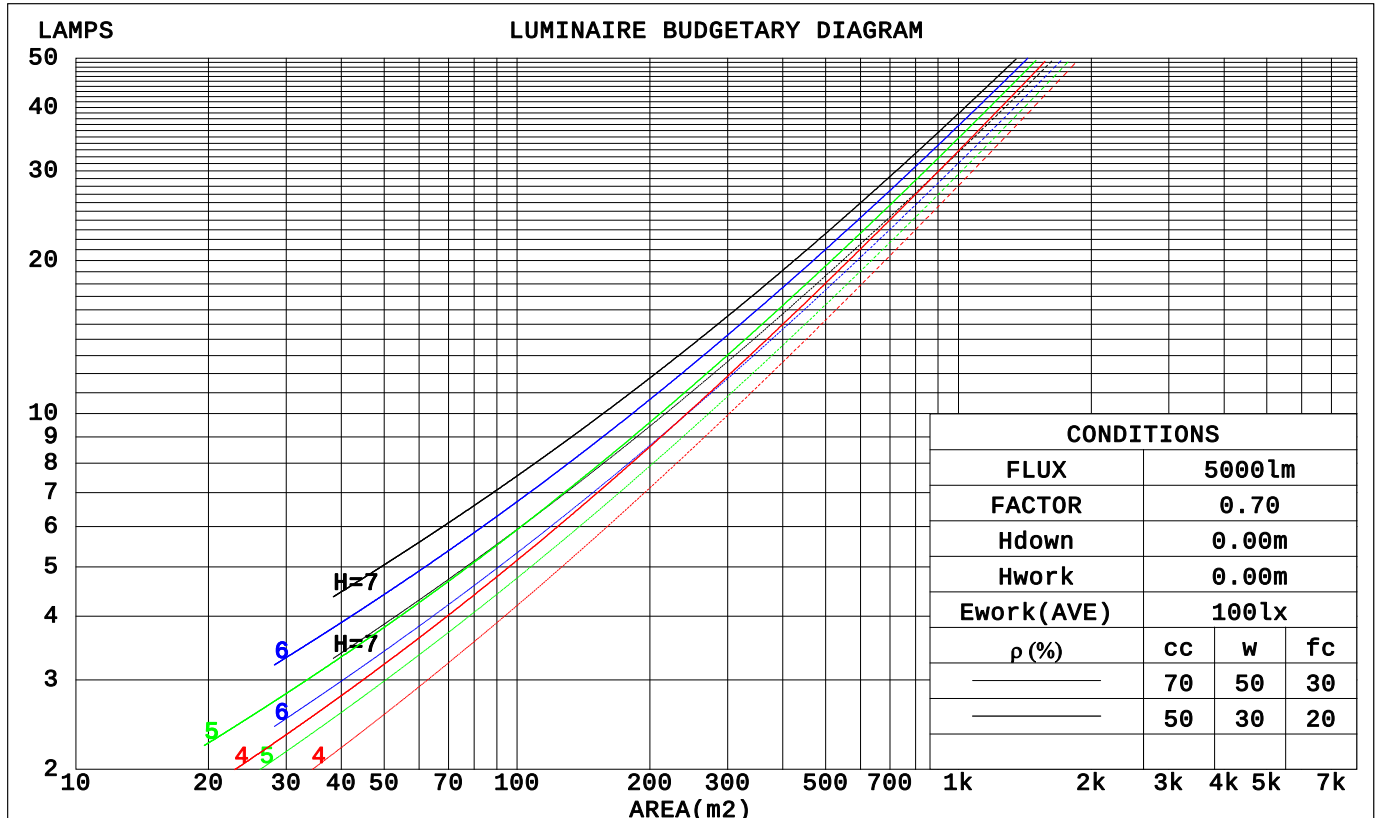
Test Set: 5.0 deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 8.000 m
Remarks: COB IES

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL															
Address:															
NAME: HCP-3825603								TYPE: 2835 CRI95				WEIGHT:			
SPECIFICATION: 3000K								DIMENSION: 240mm 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	.68	.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	.47
5.0	.61	.52	.45	.60	.51	.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%
Test Distance:8.000 m
Remarks: COB IES

WEC AND CCEC

Report number: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL														
Address:														
NAME: HCP-3825603							TYPE: 2835 CRI95					WEIGHT:		
SPECIFICATION: 3000K							DIMENSION: 240mm 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	.129	.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	.142	.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	.027	.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: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL											
Address:											
NAME: HCP-3825603					TYPE: 2835 CRI95			WEIGHT:			
SPECIFICATION: 3000K					DIMENSION: 240mm 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	31.8	33.3	32.1	33.6	33.8	32.4	33.9	32.7	34.1	34.4	
	3H	33.5	34.9	33.8	35.1	35.4	34.2	35.6	34.5	35.8	
	4H	34.1	35.5	34.5	35.7	36.0	34.9	36.2	35.2	36.5	
	6H	34.6	35.9	35.0	36.2	36.5	35.5	36.8	35.9	37.1	
	8H	34.7	35.9	35.1	36.3	36.6	35.7	37.0	36.1	37.3	
	12H	34.8	36.0	35.2	36.3	36.7	36.0	37.2	36.4	37.5	
4H	2H	32.6	33.9	32.9	34.2	34.5	33.0	34.4	33.4	34.7	
	3H	34.4	35.6	34.8	35.9	36.3	35.0	36.2	35.4	36.5	
	4H	35.2	36.3	35.6	36.7	37.0	35.9	37.0	36.3	37.3	
	6H	35.9	36.8	36.3	37.2	37.6	36.7	37.6	37.1	38.0	
	8H	36.0	36.9	36.5	37.3	37.8	37.0	37.9	37.4	38.3	
	12H	36.2	37.0	36.7	37.4	37.9	37.3	38.1	37.8	38.6	
8H	4H	35.7	36.6	36.1	37.0	37.4	36.2	37.1	36.7	37.5	
	6H	36.5	37.2	36.9	37.6	38.1	37.2	38.0	37.7	38.4	
	8H	36.8	37.4	37.2	37.9	38.4	37.7	38.3	38.2	38.8	
	12H	37.0	37.6	37.5	38.1	38.6	38.2	38.7	38.7	39.2	
12H	4H	35.7	36.5	36.2	37.0	37.4	36.3	37.1	36.7	37.5	
	6H	36.6	37.3	37.1	37.7	38.2	37.3	38.0	37.8	38.4	
	8H	37.0	37.5	37.5	38.0	38.5	37.8	38.4	38.4	38.9	
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 5135 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.7)

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: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL										
Address:										
NAME: HCP-3825603					TYPE: 2835 CRI95			WEIGHT:		
SPECIFICATION: 3000K					DIMENSION: 240mm 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		

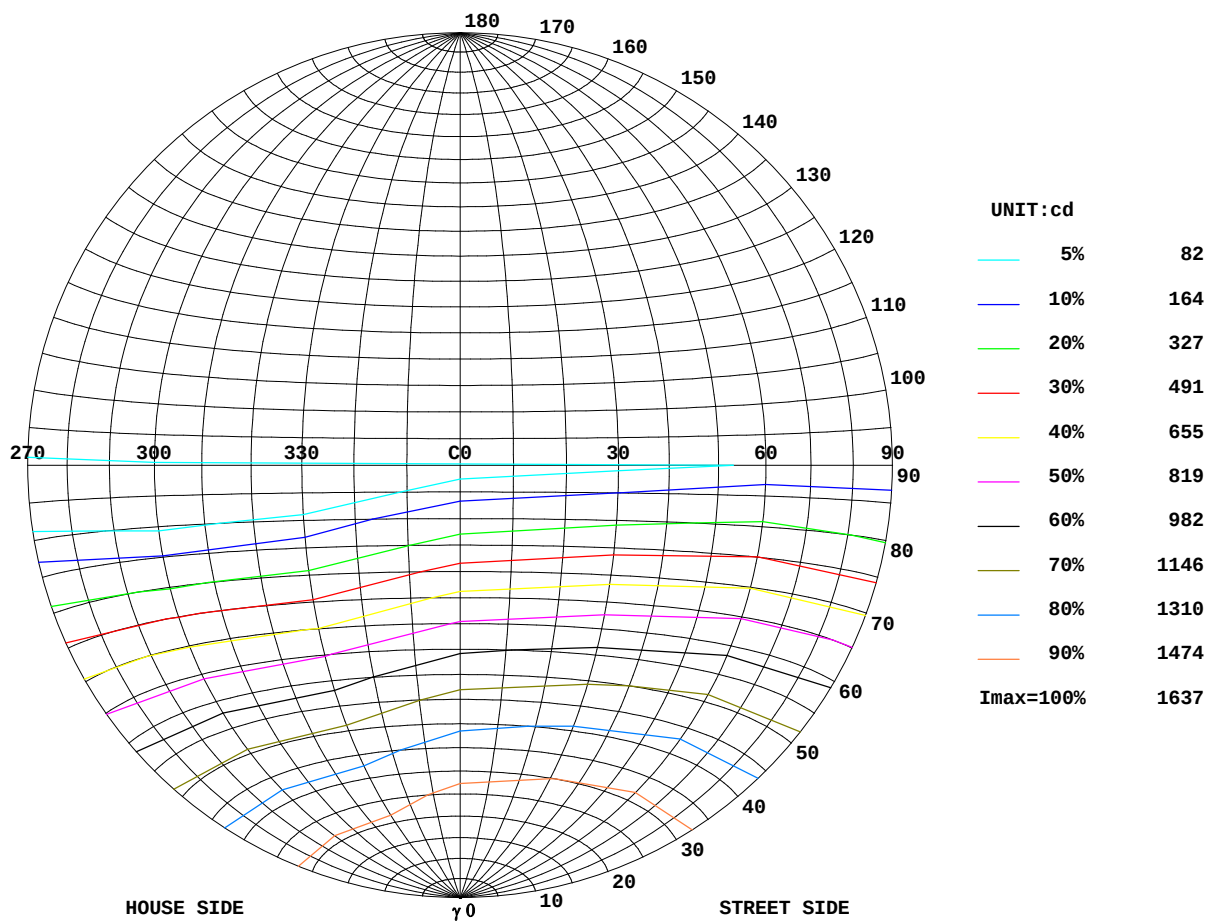
Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:RD
Test Date:10-23-2020

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

ISOCANDELA DIAGRAM

Report number: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825603	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 3000K	DIMENSION: 240mm x 480mm 288LED	SERIAL No.: 01



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

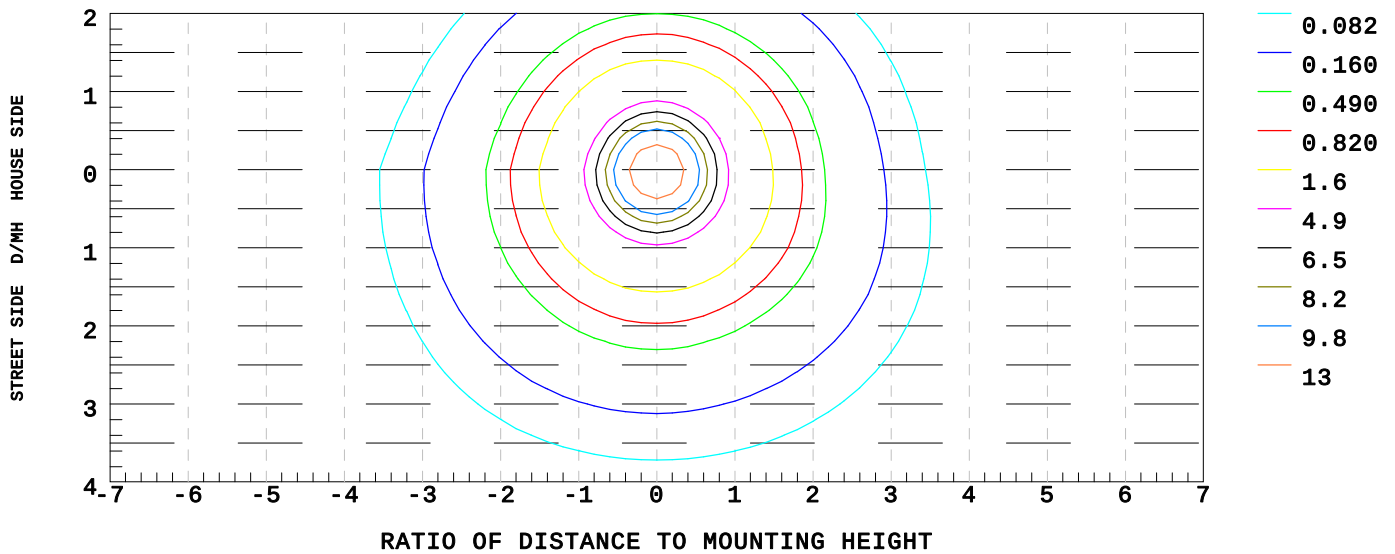
Test Set: 5.0 deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 8.000 m
Remarks: COB IES

ISOLUX DIAGRAM

Report number: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825603	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 3000K	DIMENSION: 240mm x 480mm 288LED	SERIAL No.: 01

ILLUMINANCE AT MH=10 m, Enadir = 16.37 lx



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%

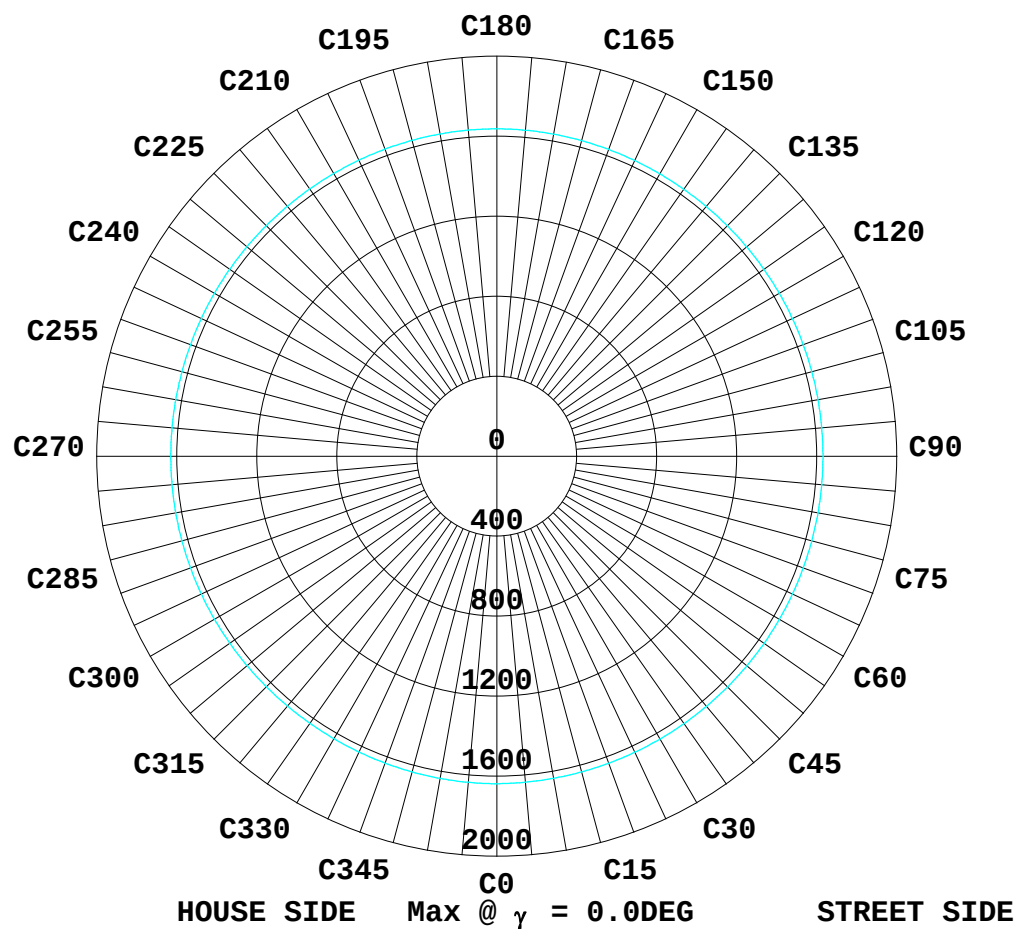
Test Distance:8.000 m

Remarks: COB IES

ISOCANDELA DIAGRAM

Report number: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825603	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 3000K	DIMENSION: 240mm x 480mm 288LED	SERIAL 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: HLRP10233

MANUFACTURER: HAVIT COMMERCIAL		
Address:		
NAME: HCP-3825603	TYPE: 2835 CRI95	WEIGHT:
SPECIFICATION: 3000K	DIMENSION: 240mm x 480mm 288LED	SERIAL No.: 01

UNIT: cd

C(DEG)	0	30	60	90	120	150	180	210	240	270	300	330
γ (DEG)												
0.0	1637	1632	1631	1630	1631	1631	1637	1632	1631	1630	1631	1631
5.0	1633	1633	1636	1637	1637	1634	1630	1621	1615	1613	1614	1615
10.0	1619	1624	1630	1633	1632	1628	1613	1598	1587	1584	1586	1589
15.0	1588	1603	1614	1618	1616	1610	1584	1563	1548	1543	1546	1551
20.0	1550	1571	1586	1591	1589	1581	1542	1516	1498	1490	1494	1500
25.0	1501	1528	1546	1554	1551	1542	1491	1460	1436	1427	1431	1440
30.0	1440	1472	1495	1504	1501	1489	1426	1390	1361	1351	1355	1367
35.0	1367	1404	1434	1443	1438	1425	1350	1308	1275	1263	1268	1285
40.0	1284	1326	1359	1371	1366	1350	1263	1217	1178	1164	1170	1191
45.0	1187	1235	1272	1285	1279	1262	1162	1111	1067	1052	1058	1083
50.0	1081	1131	1175	1187	1183	1162	1049	993	945	928	935	962
55.0	960	1018	1064	1080	1073	1051	928	866	814	796	811	833
60.0	829	891	941	958	951	927	809	727	666	648	655	691
65.0	690	751	810	821	819	811	643	575	514	489	503	539
70.0	538	604	649	642	645	644	491	422	356	318	351	390
75.0	386	450	492	463	498	489	339	276	205	168	204	242
80.0	244	301	350	318	356	337	196	143	102	68.0	99.3	116
85.0	120	163	208	196	215	187	99.2	47.4	17.4	12.2	17.0	36.7
90.0	40.1	61.1	88.1	99.1	93.5	73.7	18.6	11.0	6.14	7.10	6.08	8.06
95.0	9.28	14.4	19.7	15.1	22.4	19.5	6.40	7.93	7.16	7.93	7.16	8.06
100.0	8.89	7.23	7.93	6.40	7.93	7.04	7.36	8.70	8.19	8.89	8.25	8.96
105.0	9.79	8.32	8.64	7.42	8.64	8.12	8.51	9.60	9.34	9.92	9.40	9.98
110.0	10.7	9.40	9.47	8.64	9.47	9.21	9.66	10.6	10.4	11.0	10.6	11.0
115.0	11.8	10.6	10.4	9.85	10.4	10.3	10.8	11.6	11.7	12.2	11.8	12.1
120.0	12.9	11.8	11.5	11.0	11.5	11.5	12.0	12.8	12.9	13.3	13.1	13.3
125.0	14.1	13.0	12.7	12.2	12.6	12.7	13.3	14.0	14.1	14.5	14.3	14.5
130.0	15.2	14.2	13.8	13.5	13.8	13.9	14.5	15.1	15.2	15.6	15.5	15.6
135.0	16.4	15.4	15.1	14.7	14.9	15.2	15.7	16.3	16.3	16.7	16.7	16.7
140.0	17.4	16.5	16.3	16.0	16.0	16.3	16.8	17.3	17.4	17.7	17.7	17.6
145.0	18.3	17.6	17.4	17.1	17.1	17.4	17.7	18.2	18.3	18.7	18.6	18.5
150.0	19.2	18.5	18.3	18.1	18.1	18.4	18.6	19.0	19.1	19.5	19.4	19.3
155.0	19.9	19.3	19.2	19.0	18.9	19.2	19.4	19.8	19.8	20.2	20.1	20.0
160.0	20.6	20.0	19.9	19.8	19.7	19.9	20.2	20.4	20.5	20.9	20.7	20.6
165.0	21.1	20.6	20.6	20.6	20.4	20.6	20.9	21.0	21.0	21.5	21.2	21.1
170.0	21.6	21.1	21.2	21.2	20.9	21.1	21.4	21.4	21.5	21.9	21.6	21.5
175.0	21.9	21.5	21.6	21.7	21.5	21.5	21.8	21.6	21.7	22.1	21.7	21.6
180.0	22.0	21.6	21.8	22.0	21.7	21.6	22.0	21.6	21.8	22.0	21.6	21.7

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