

Indoor Luminaire Photometric Data

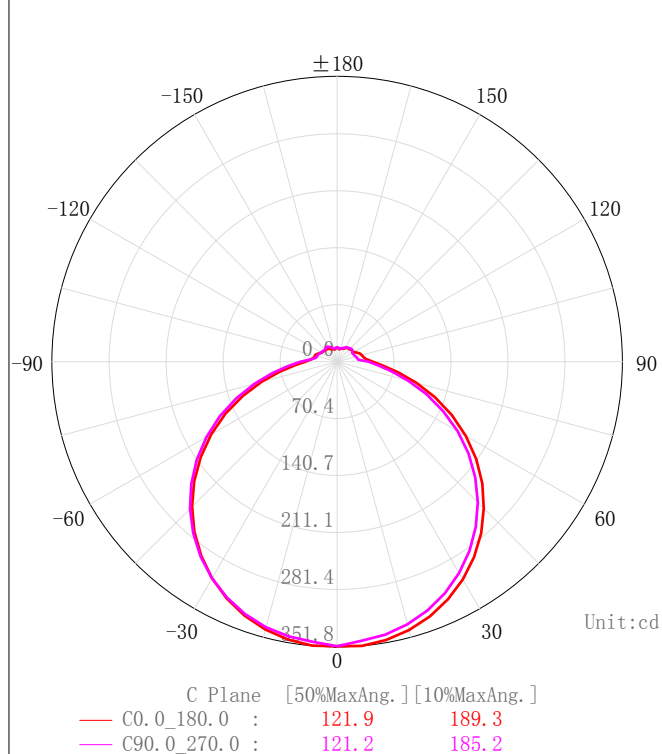
Description Information

Luminary Name: HV5885T-4000K	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Date: 2021/05/15
Manufacture: HAVIT LIGHTING	Shld. Ang(°):	Test Machine: GON-2000
Test Lab: Quality Department	Frequency (Hz):	Lamp CCT (K): Ra:
Lum. Size (W*L*H): 0.050m*0.000m*0.000m	Lum. Area (m2): 0.002	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25
		Humidity (%): 50.0

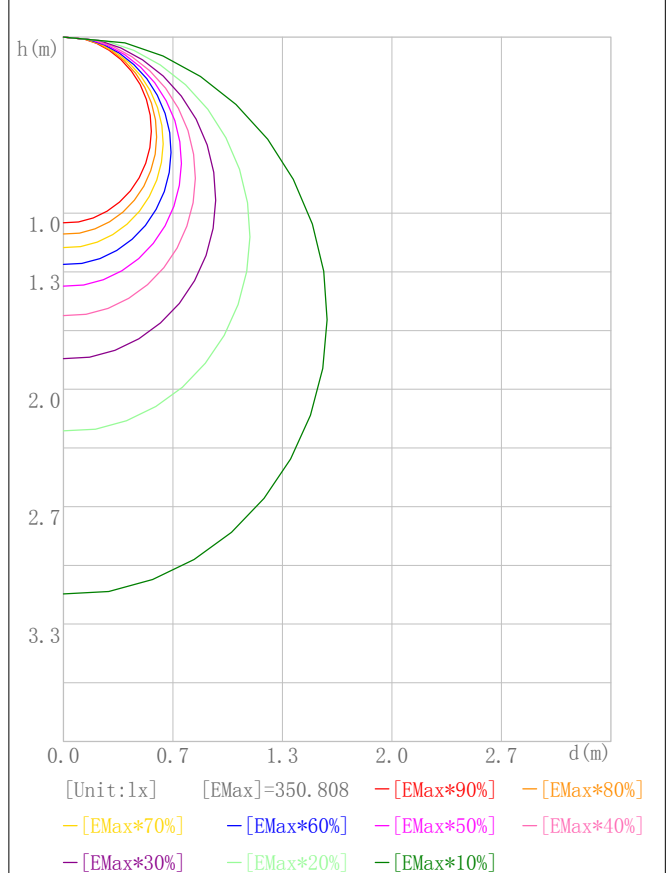
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 1308.290	Luminary Flux(lm): 1308.294	Field Angle(10%Imax): 189.3(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1154.963lm 88.28%
Rated Voltage(V):	Luminary EER(lm/W): 82.751	Up Lumens&Percent: 153.332lm 11.72%
Tested Power(W): 15.810	Max. Candela(cd): 351.756	S/MH: C0_a180=1.309 C90_270=1.293
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=5.0	CIE Type: General Diffuse
Tested Electrics (V, A, pf): 240.2, 0.069, 0.941	Beam Angle(50%Imax): 121.9(°)	ErP Φ use(120°): 834.515lm
Lamp Size(W*L*H): 0.050m*0.000m*0.000m	Left=-60.5°, Right=61.4°	IRF(%): 102.658

C Plane Distribution Diagram



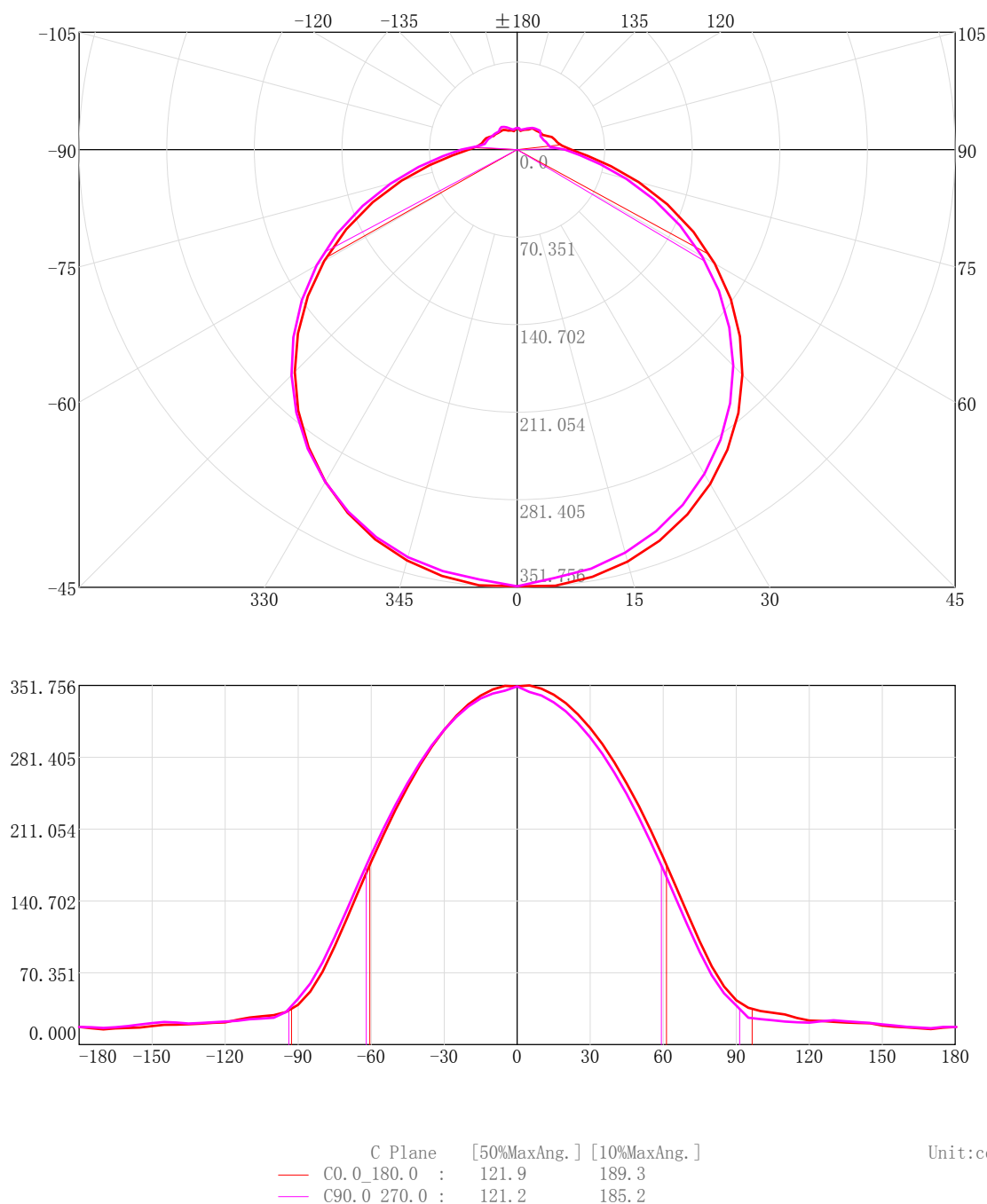
C0 Space ISO Illuminance Curve



2D Plane Light Intensity Distribution Curve

Lum. Name: HV5885T-4000K	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: HAVIT LIGHTING	Test Machine: GON-2000	Test Date: 2021/05/15

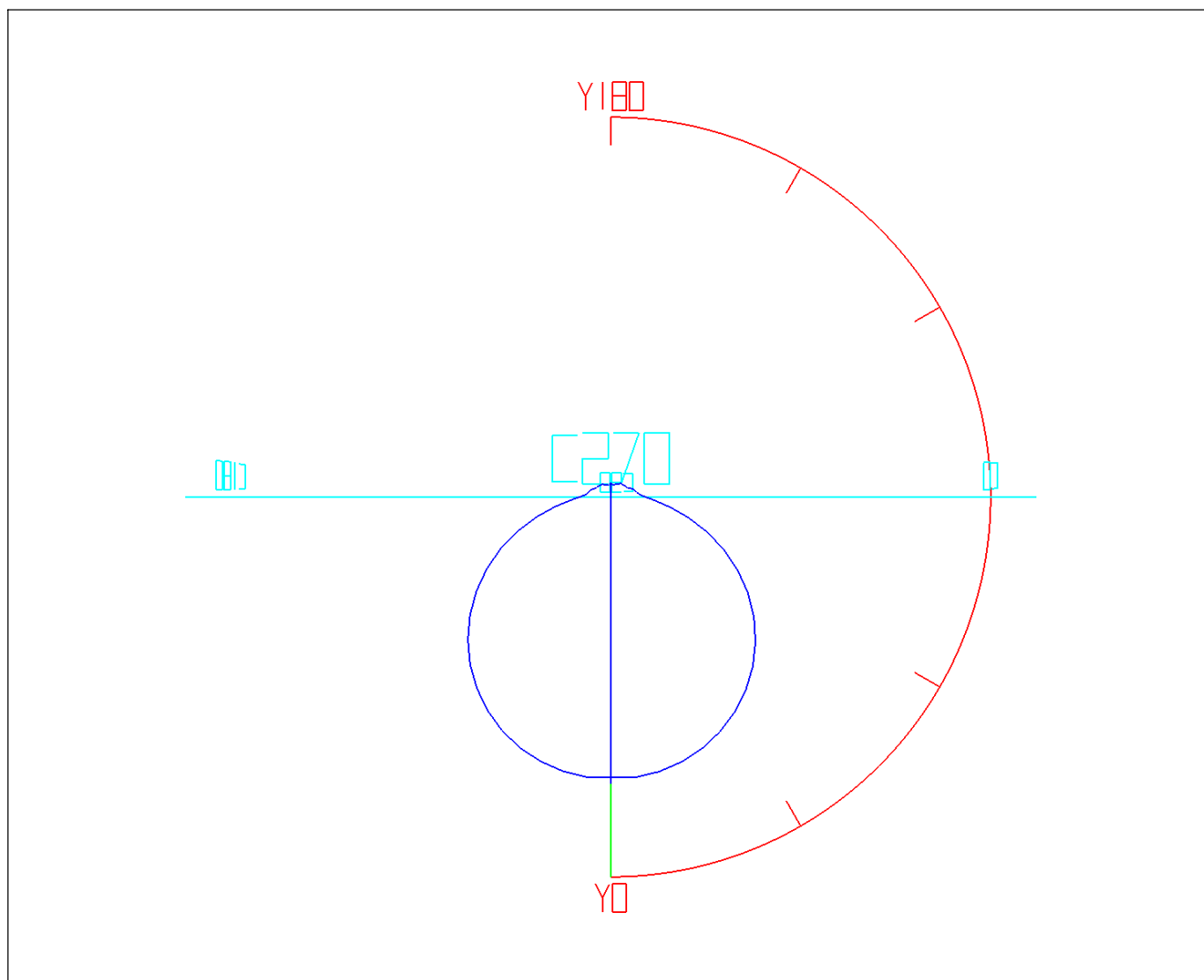
C Plane Distribution Diagram



3D Light Intensity Distribution Modal

Lum. Name: HV5885T-4000K	Lum. Catalog:	Test ID: 01
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Manufacture: HAVIT LIGHTING	Test Machine: GON-2000	Test Date: 2021/05/15

3D Light Intensity Distribution Modal



Curves: 3D Model — Fixture — Vert. HUD — Hori. HUD —
View Angles: Orient:0 Tilt:0 Roll:0 Spin:0

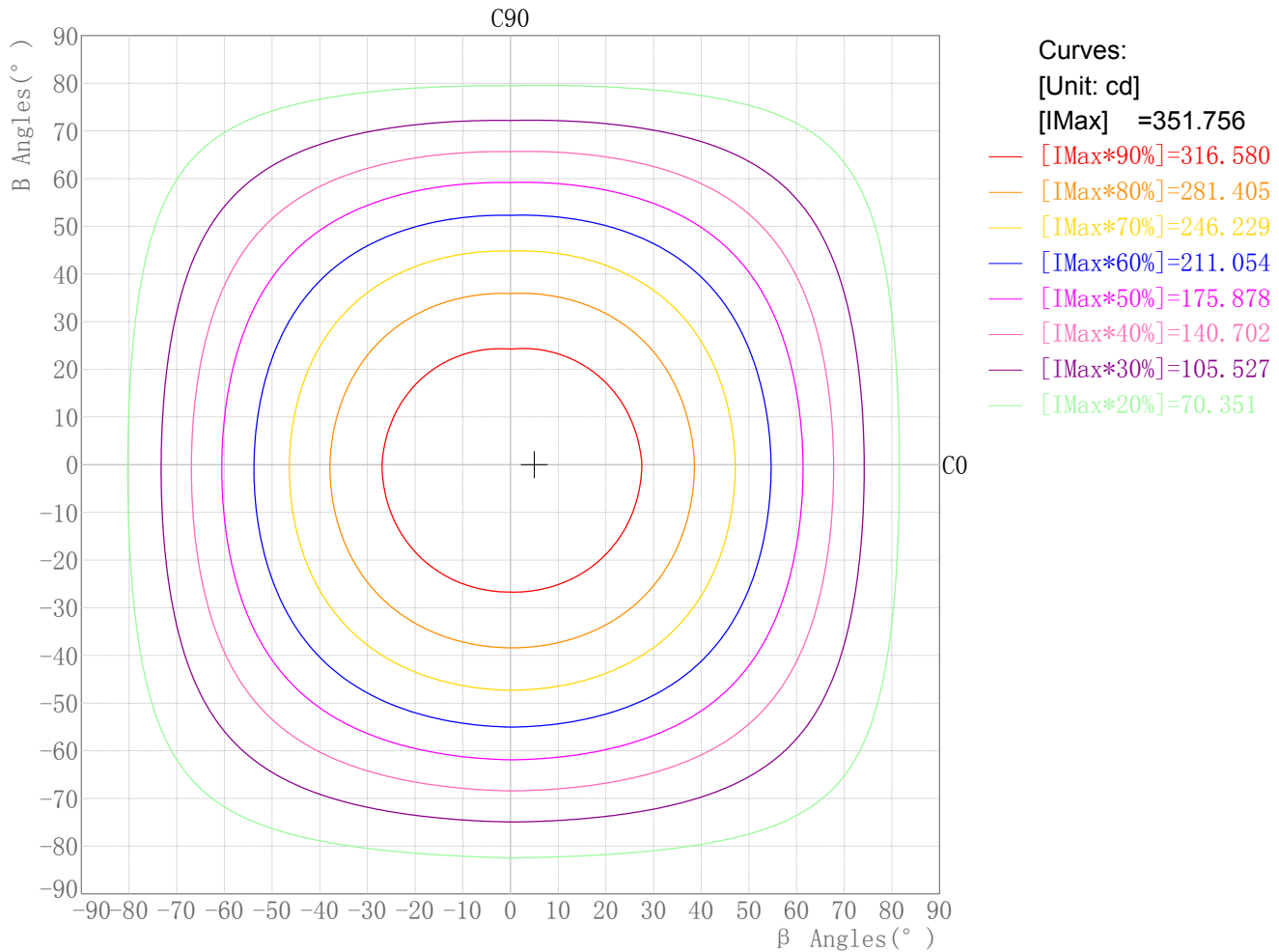
Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	8.36	8.36	0.64	0.64
5.0-10.0	24.84	33.20	1.90	2.54
10.0-15.0	40.64	73.84	3.11	5.64
15.0-20.0	55.29	129.14	4.23	9.87
20.0-25.0	68.34	197.47	5.22	15.09
25.0-30.0	79.36	276.84	6.07	21.16
30.0-35.0	88.05	364.88	6.73	27.89
35.0-40.0	94.10	458.99	7.19	35.08
40.0-45.0	97.29	556.27	7.44	42.52
45.0-50.0	97.51	653.78	7.45	49.97
50.0-55.0	94.79	748.57	7.25	57.22
55.0-60.0	89.17	837.74	6.82	64.03
60.0-65.0	80.89	918.63	6.18	70.22
65.0-70.0	70.40	989.03	5.38	75.60
70.0-75.0	58.42	1047.45	4.46	80.06
75.0-80.0	46.12	1093.57	3.53	83.59
80.0-85.0	35.02	1128.60	2.68	86.26
85.0-90.0	26.37	1154.96	2.02	88.28
90.0-95.0	20.02	1174.99	1.53	89.81
95.0-100.0	16.29	1191.28	1.25	91.06
100.0-105.0	14.83	1206.11	1.13	92.19
105.0-110.0	13.86	1219.97	1.06	93.25
110.0-115.0	12.63	1232.61	0.97	94.22
115.0-120.0	11.28	1243.89	0.86	95.08
120.0-125.0	10.36	1254.25	0.79	95.87
125.0-130.0	9.67	1263.92	0.74	96.61
130.0-135.0	8.77	1272.68	0.67	97.28
135.0-140.0	7.87	1280.55	0.60	97.88
140.0-145.0	7.03	1287.58	0.54	98.42
145.0-150.0	5.95	1293.53	0.45	98.87
150.0-155.0	4.78	1298.31	0.37	99.24
155.0-160.0	3.73	1302.03	0.28	99.52
160.0-165.0	2.78	1304.81	0.21	99.73
165.0-170.0	1.91	1306.72	0.15	99.88
170.0-175.0	1.16	1307.89	0.09	99.97
175.0-180.0	0.41	1308.29	0.03	100.00

Rectangle ISO Lighting Intensity Diagram

Lum. Name: HV5885T-4000K	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: HAVIT LIGHTING	Test Machine: GON-2000	Test Date: 2021/05/15

ISO Lighting Intensity Curve



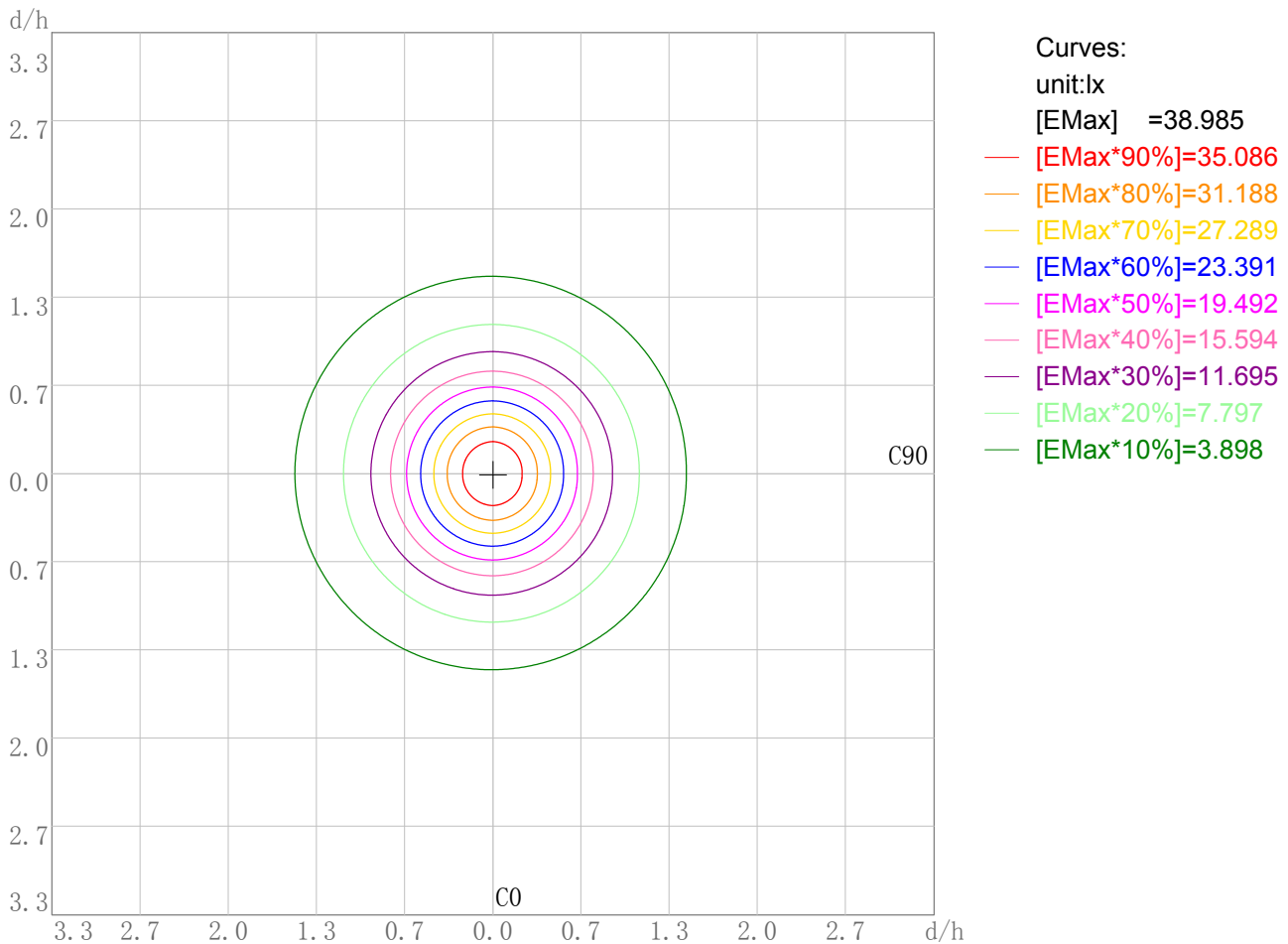
Maximum Light Intensity(cd): 351.76

Maximum Cand.@Angle: H=5.0°,V=0.0°

Plane ISO-Illuminance Diagram

Lum. Name: HV5885T-4000K	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: HAVIT LIGHTING	Test Machine: GON-2000	Test Date: 2021/05/15

Plane ISO-Illuminance Curve

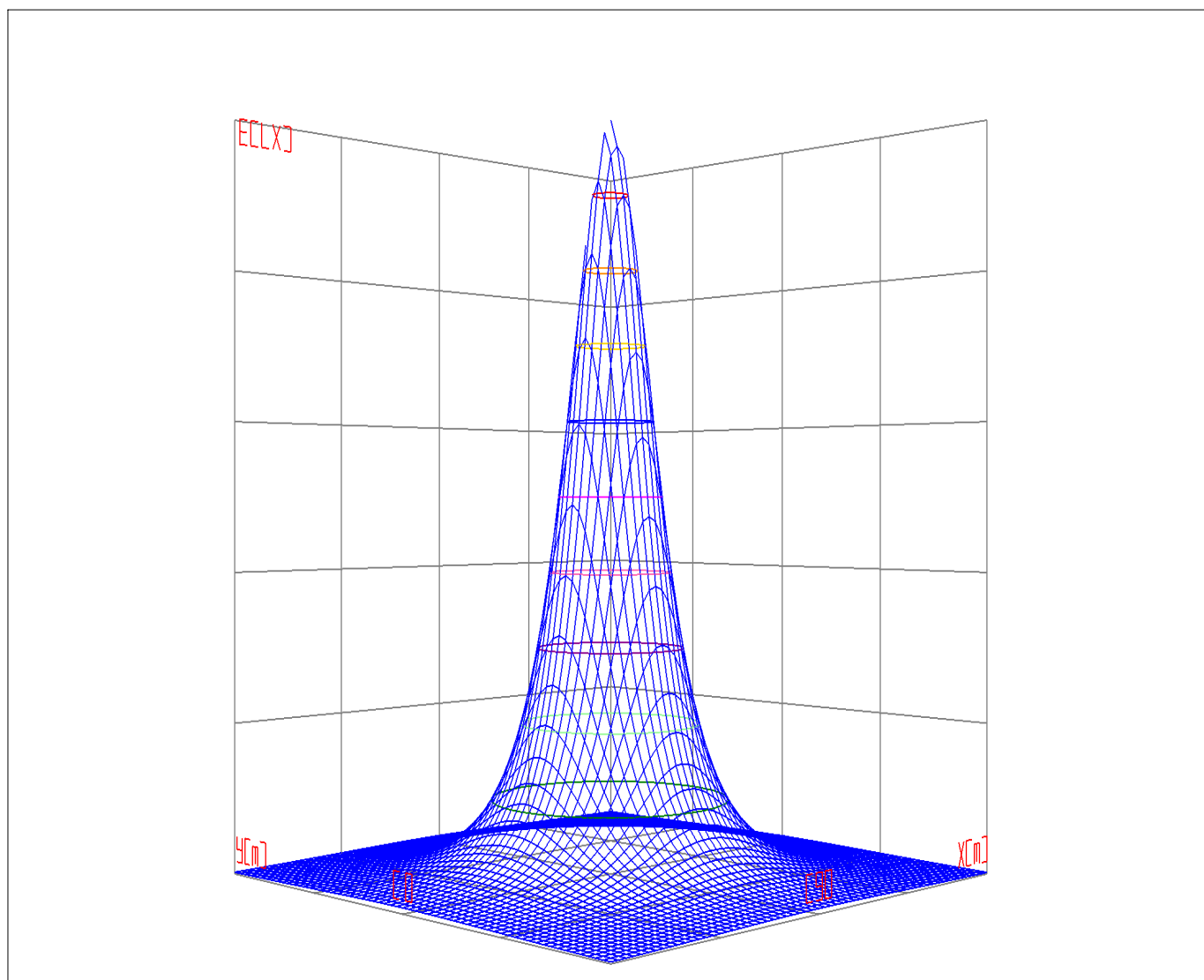


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 38.98
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: HV5885T-4000K	Lum. Catalog:	Test ID: 01
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Manufacture: HAVIT LIGHTING	Test Machine: GON-2000	Test Date: 2021/05/15

3D Plane Illuminance Model

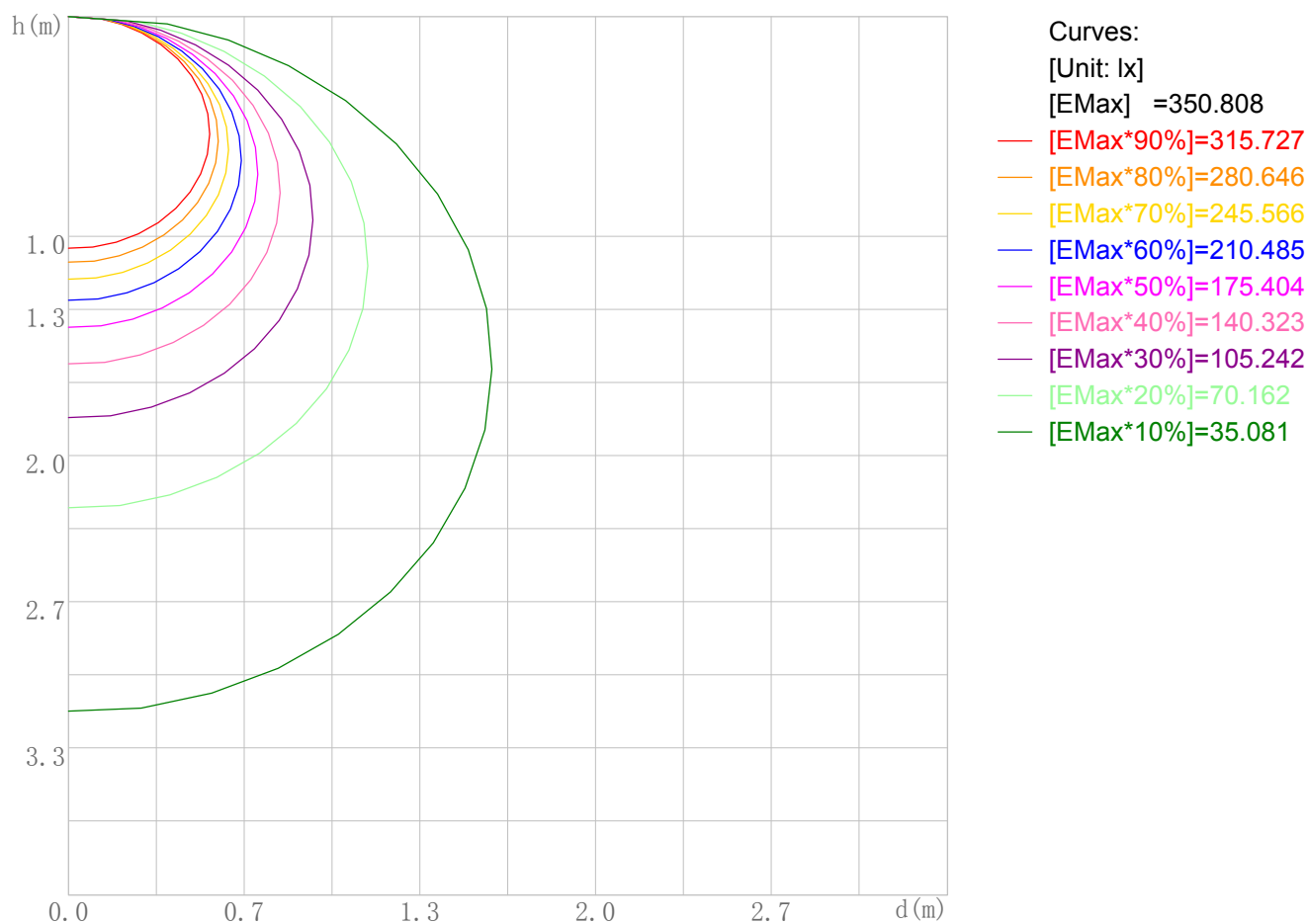


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

Lum. Name: HV5885T-4000K	Lum. Catalog: LED	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: HAVIT LIGHTING	Test Machine: GON-2000	Test Date: 2021/05/15

Space ISO Illuminance Curve

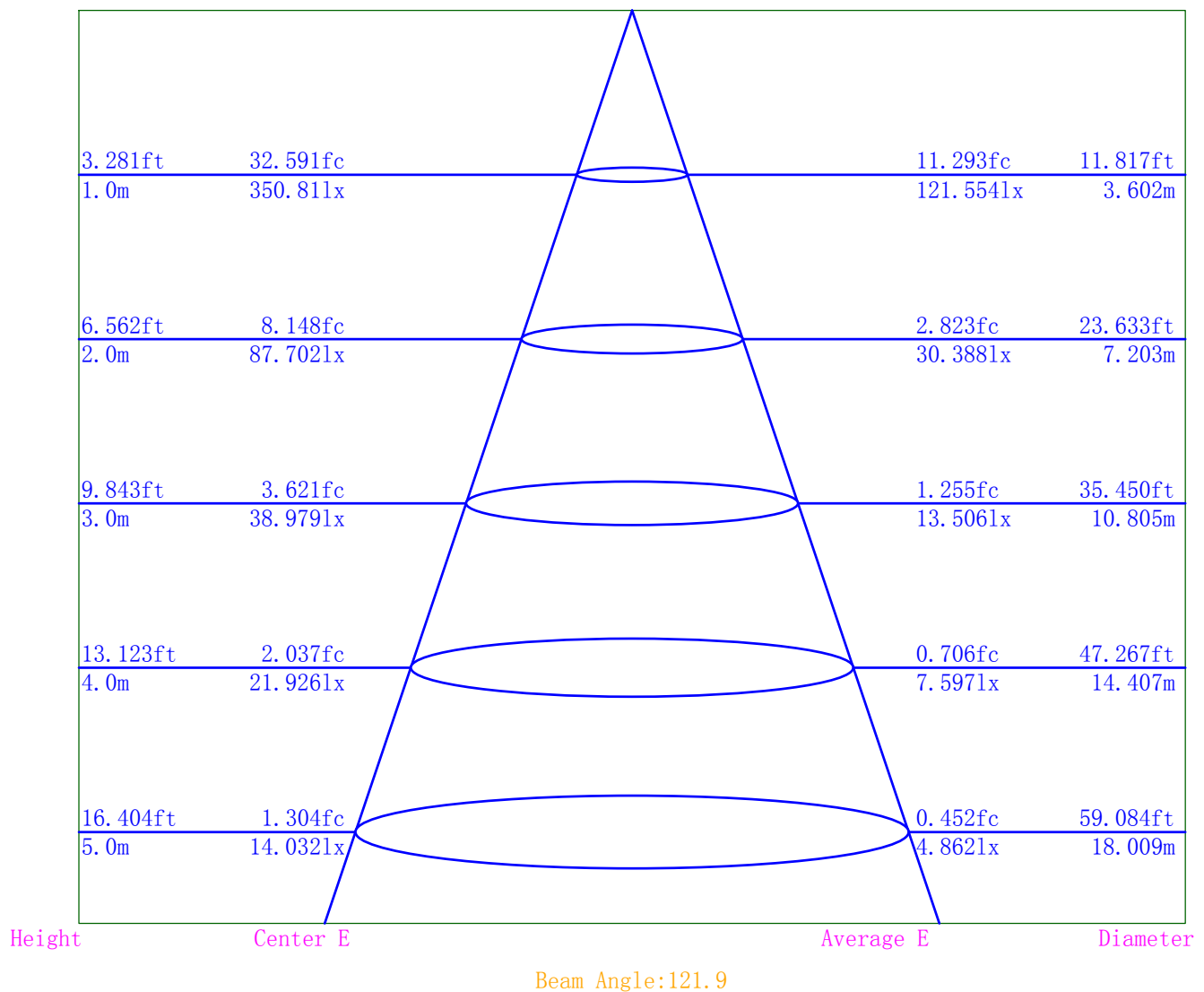


Space Plane Maximum Illuminance and @Angle:350.81lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:351.756cd,0deg

Illuminance-Distance Diagram

Lum. Name: HV5885T-4000K	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: HAVIT LIGHTING	Test Machine: GON-2000	Test Date: 2021/05/15

Illuminance-Distance Curve



Indoor Luminance Limiting Curves

Lum. Name: HV5885T-4000K	Lum. Catalog: LED	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: HAVIT LIGHTING	Test Machine: GON-2000	Test Date: 2021/05/15

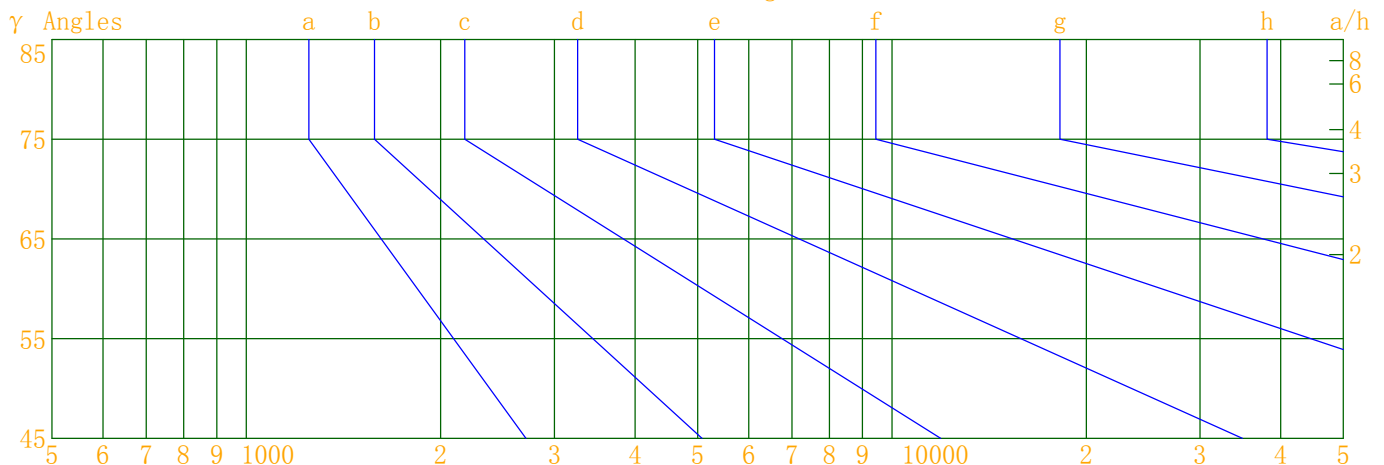
Glare Grade Table

GI	Quality	Using Illuminance							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E	a				2000	1000	500	<=300
			b	c	d	e	f	g	h

Luminance Table

Gama(deg)	45	50	55	60	65	70	75	80	85
C0	184197	185087	185957	186668	188238	191118	199008	224553	332806
C90	176727	176149	175600	174729	173885	174194	178742	199160	294168

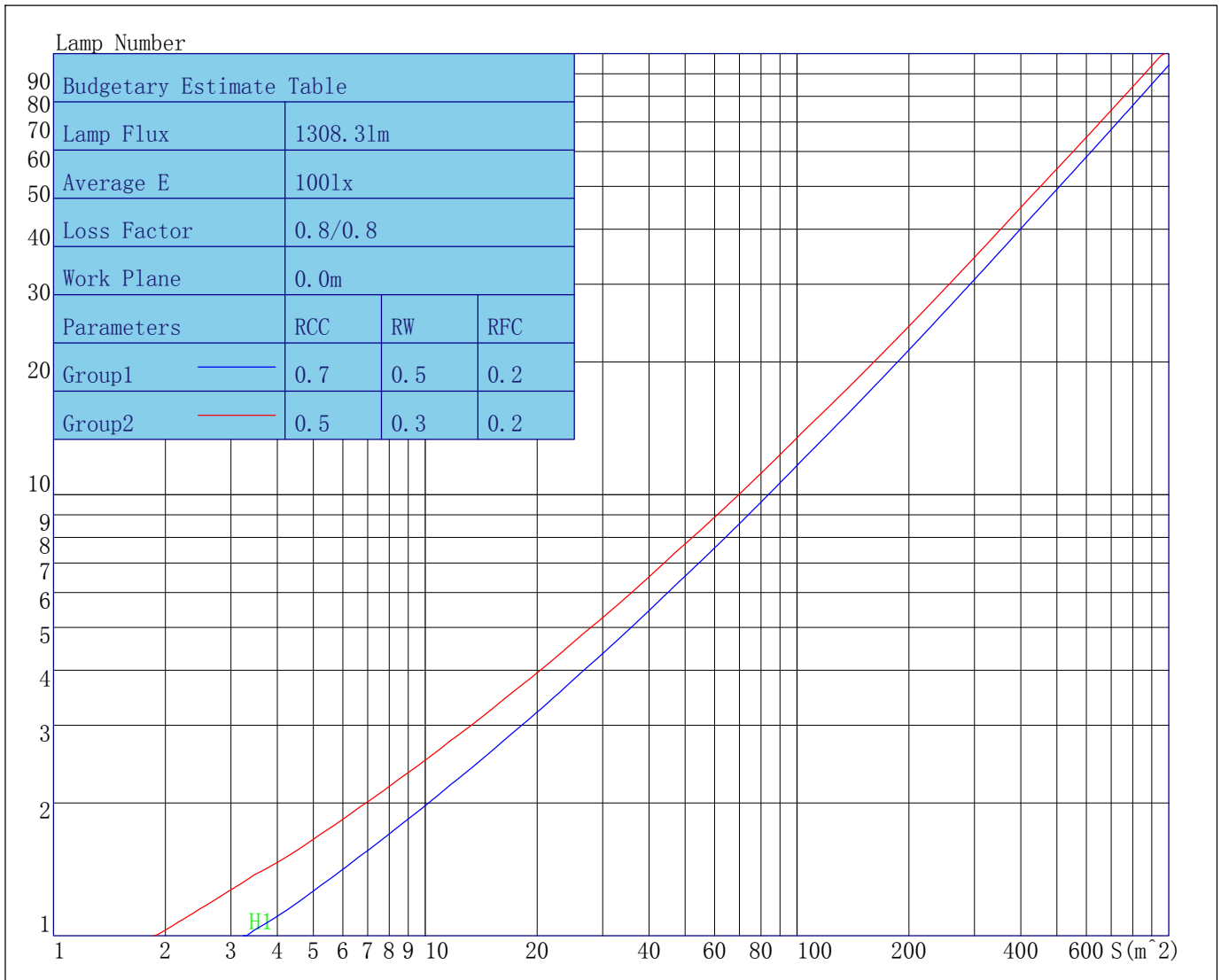
Luminance Limiting Curve



Luminous Size: Length(m)=0.000 Width(m)=-0.050 Height(m)=0.000 Area(m^2)=0.001963
 Luminous Type: Without Luminous Side
 Luminous Curves: C0-C180 Color: — C90-C270 Color: —

Indoor Budgetary Estimate Table

Lum. Name: HV5885T-4000K	Lum. Catalog: LED	Test ID: 01
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Parameters1: Rhocc = 0.7 Rhow = 0.5 Rhofc = 0.2 LLF = 0.8
 Parameters2: Rhocc = 0.5 Rhow = 0.3 Rhofc = 0.2 LLF = 0.8
 Average Illuminance(lx): 100 Cavity Height: H1(m) = 2

Indoor Coefficient of Utilization Table

Lum. Name: HV5885T-4000K	Lum. Catalog:	Test ID: 01
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Manufacture: HAVIT LIGHTING	Test Machine: GON-2000	Test Date: 2021/05/15

Coefficients of Utilization – Zonal Cavity Method																		
Coef.	Effective Floor Cavity Reflectance RFC=0.20																	
RhoCC (%)	80				70				50			30			10			0
RhoW (%)	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	Coefficient of Utilization(%)																	
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	91	91	91	88
1	105	99	94	90	101	96	91	87	89	86	82	83	80	78	78	76	74	71
2	94	86	78	72	91	83	76	70	77	72	67	72	68	64	67	64	60	58
3	86	75	66	59	82	72	64	58	67	61	55	63	58	53	59	54	51	48
4	78	66	57	50	75	64	55	49	60	52	47	56	50	45	52	47	43	40
5	72	58	49	42	69	57	48	42	53	46	40	50	44	39	47	41	37	35
6	66	52	43	37	63	51	42	36	48	40	35	45	39	34	42	37	32	30
7	61	47	38	32	59	46	38	32	43	36	31	41	34	30	39	33	29	26
8	57	43	34	29	55	42	34	28	40	32	27	37	31	26	35	30	26	23
9	53	39	31	26	51	38	31	25	36	29	24	34	28	24	33	27	23	21
10	50	36	28	23	48	35	28	23	34	27	22	32	26	21	30	25	21	19

Unified Glare Rating Table

Lum. Name: HV5885T-4000K	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: HAVIT LIGHTING	Test Machine: GON-2000	Test Date: 2021/05/15

Unified Glare Rating Table

Ceiling RCC	0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
Wall RW	0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
Floor RFC	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Room Size	Vewed crosswise					Vewed endwise				
X=2H Y=2H	29.7	31.2	30.2	31.7	32.3	29.4	30.8	29.9	31.4	32.0
	31.7	33.0	32.2	33.5	34.1	31.3	32.6	31.8	33.1	33.7
	32.6	33.8	33.1	34.4	35.0	32.1	33.4	32.7	33.9	34.6
	33.5	34.6	34.0	35.2	35.8	32.9	34.1	33.5	34.7	35.3
	33.9	35.0	34.5	35.6	36.3	33.3	34.4	33.9	35.0	35.7
	34.4	35.5	35.0	36.0	36.7	33.8	34.9	34.4	35.4	36.1
X=4H Y=2H	30.5	31.8	31.1	32.3	33.0	30.2	31.5	30.8	32.0	32.7
	32.7	33.7	33.3	34.3	35.0	32.3	33.4	32.9	34.0	34.6
	33.7	34.7	34.3	35.3	36.0	33.3	34.3	33.9	34.9	35.6
	34.8	35.6	35.4	36.3	37.0	34.3	35.1	34.9	35.8	36.5
	35.3	36.1	35.9	36.8	37.5	34.8	35.6	35.4	36.2	36.9
	35.9	36.6	36.6	37.3	38.0	35.3	36.1	36.0	36.7	37.4
X=8H Y=4H	34.2	35.0	34.8	35.6	36.3	33.8	34.6	34.4	35.2	35.9
	35.5	36.1	36.1	36.8	37.6	34.9	35.6	35.6	36.3	37.1
	36.1	36.7	36.8	37.4	38.2	35.6	36.2	36.3	36.9	37.6
	36.9	37.5	37.6	38.1	38.9	36.3	36.9	37.0	37.6	38.4
X=12H Y=4H	34.3	35.0	34.9	35.7	36.4	33.8	34.6	34.5	35.2	36.0
	35.6	36.2	36.3	36.9	37.7	35.1	35.7	35.8	36.4	37.2
	36.4	36.9	37.1	37.6	38.4	35.9	36.4	36.5	37.1	37.9
Variations with the objverver position at spacings										
S=1.0H	0.2/-0.2					0.2/-0.2				
S=1.5H	0.4/-0.4					0.4/-0.4				
S=2.0H	0.4/-0.5					0.4/-0.5				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	4.2					4.0				

to the CIE Pub. 117, data has been corrected, refers to the lamp's lumens 8.2flm.

IES Indoor Report
Photometric Filename: HV5885T-4000K.IES



Candela Tabulation

V/H	C0.0	C90.0	C180.0	C270.0
γ 0.0	350.81	350.81	350.81	350.81
γ 5.0	351.76	345.39	351.36	346.67
γ 10.0	348.51	341.89	347.83	343.81
γ 15.0	342.68	335.21	341.71	338.97
γ 20.0	334.33	326.30	333.27	331.25
γ 25.0	323.40	314.82	321.95	320.92
γ 30.0	310.09	300.83	308.17	308.29
γ 35.0	294.31	284.74	291.93	293.28
γ 40.0	276.31	266.06	273.61	275.89
γ 45.0	255.74	245.37	252.55	256.18
γ 50.0	233.60	222.32	229.84	234.58
γ 55.0	209.43	197.76	205.12	211.18
γ 60.0	183.26	171.54	178.89	185.85
γ 65.0	156.20	144.29	151.51	159.47
γ 70.0	128.35	116.98	123.37	132.01
γ 75.0	101.13	90.83	96.04	105.22
γ 80.0	76.56	67.90	71.38	80.46
γ 85.0	56.95	50.34	52.05	59.92
γ 90.0	43.53	38.44	39.03	44.94
γ 95.0	36.21	26.44	31.94	32.00
γ 100.0	32.89	25.00	28.88	26.46
γ 105.0	31.26	23.96	27.79	25.51
γ 110.0	29.61	22.64	26.56	24.83
γ 115.0	26.16	22.04	24.34	23.38
γ 120.0	23.62	21.59	21.81	22.63
γ 125.0	23.27	22.93	21.44	22.01
γ 130.0	22.44	23.87	20.57	21.32
γ 135.0	21.65	22.99	20.00	20.71
γ 140.0	21.27	22.13	19.65	21.63
γ 145.0	20.93	21.25	19.40	22.18
γ 150.0	18.74	19.95	18.17	21.08
γ 155.0	17.69	18.74	16.86	19.70
γ 160.0	17.02	17.58	16.37	18.17
γ 165.0	16.16	16.76	15.93	17.03
γ 170.0	15.30	16.06	15.03	16.39
γ 175.0	16.69	17.36	16.14	17.09
γ 180.0	17.41	17.41	17.41	17.41