

Indoor Luminaire Photometric Data

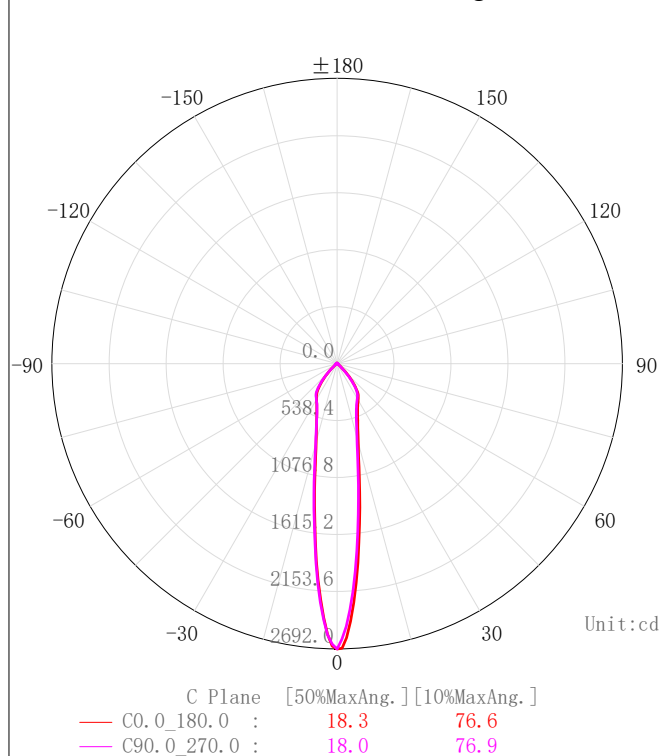
Description Information

Luminary Name: HCP-813024-5000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Date: 2020/09/27
Manufacture: Havit Commercial	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*0.080m	Lum. Area (m2): 0.016	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=1.0	Temp. (°C): 25
		Humidity(%): 50.0

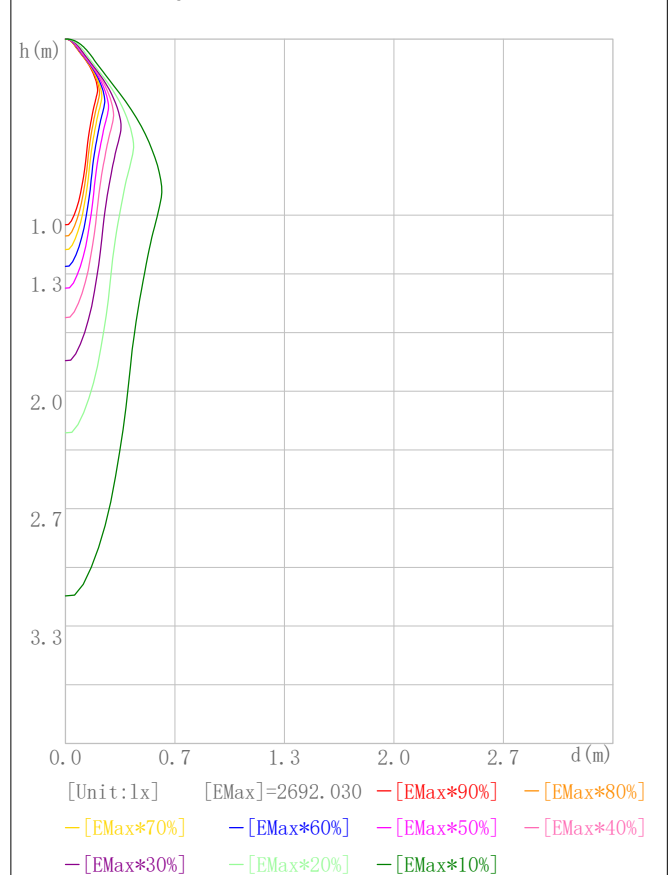
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 941.210	Luminary Flux(lm): 941.206	Field Angle(10%Imax): 76.6(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 928.784lm 98.68%
Rated Voltage(V):	Luminary EER(lm/W): 76.273	Up Lumens&Percent: 12.422lm 1.32%
Tested Power(W): 12.340	Max. Candela(cd): 2692.030	S/MH: C0_a180=0.310 C90_270=0.304
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct
Tested Electrics (V, A, pf): 240.1, 0.054, 0.945	Beam Angle(50%Imax): 18.3(°)	ErP Φ use(90°): 853.286lm
Lamp Size (W*L*H): 0.050m*0.000m*0.080m	Left=-9.1°, Right=9.2°	IRF(%): 606.928

C Plane Distribution Diagram



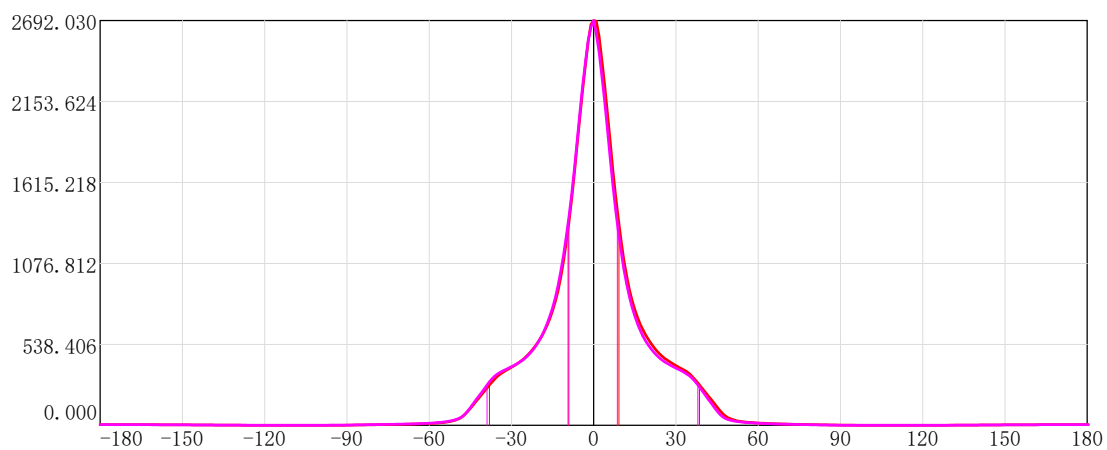
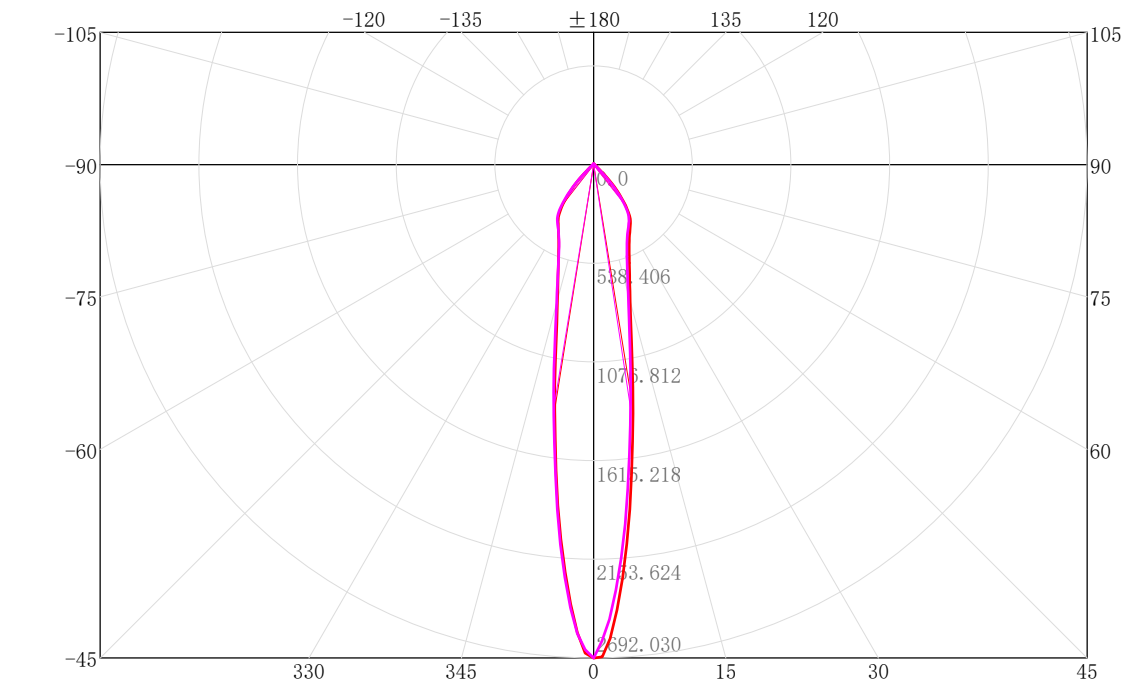
C0 Space ISO Illuminance Curve



2D Plane Light Intensity Distribution Curve

Lum. Name: HCP-813024-5000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Havit Commercial	Test Machine:GON-2000	Test Date: 2020/09/27

C Plane Distribution Diagram



C Plane [50%MaxAng.] [10%MaxAng.]

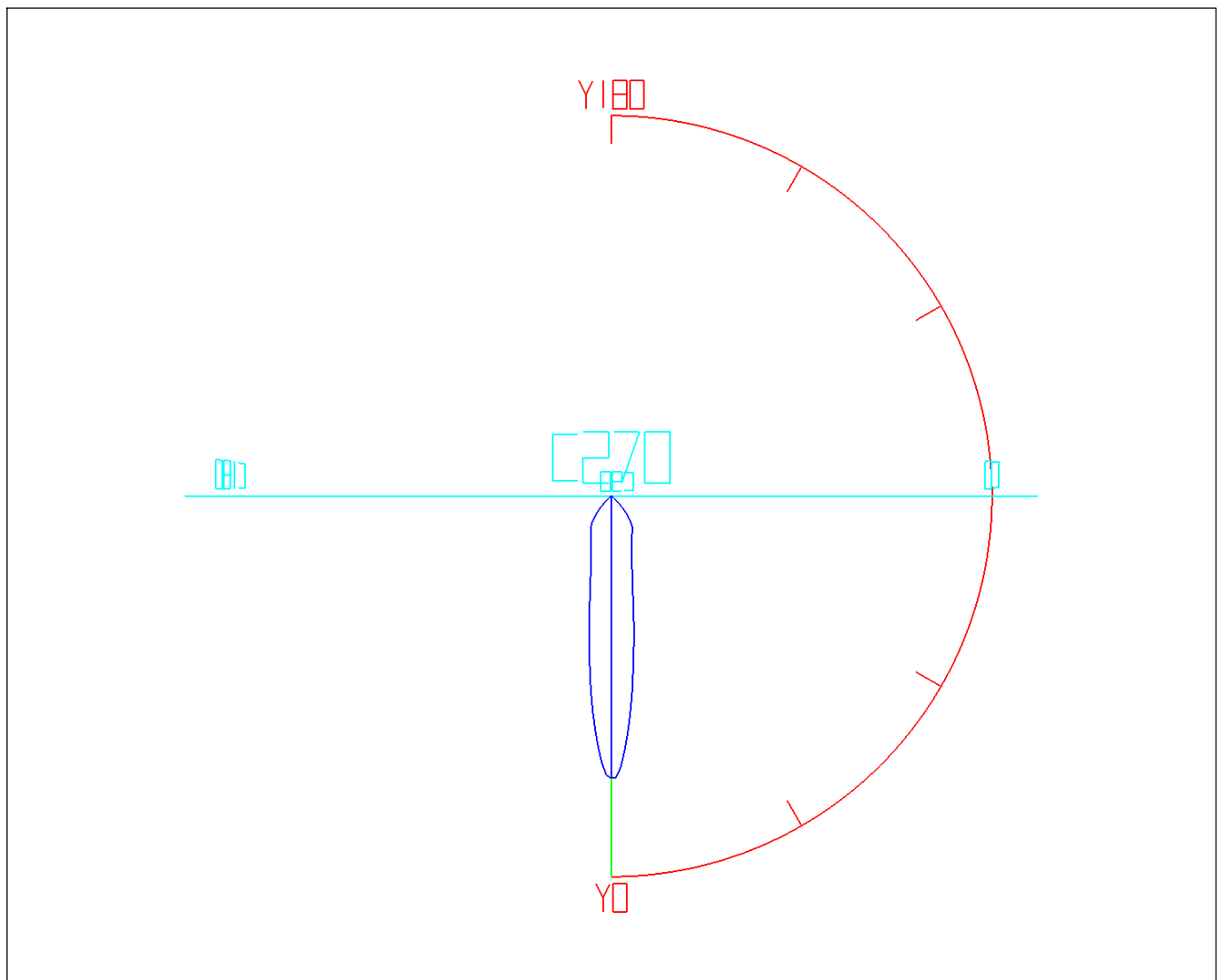
— C0.0_180.0 :	18.3	76.6
— C90.0_270.0 :	18.0	76.9

Unit:cd

3D Light Intensity Distribution Modal

Lum. Name: HCP-813024-5000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Havit Commercial	Test Machine: GON-2000	Test Date: 2020/09/27

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	Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-1.0	2.56	2.56	0.27	0.27	47.0-48.0	5.16	878.76	0.55	93.36
1.0-2.0	7.46	10.01	0.79	1.06	48.0-49.0	4.21	882.96	0.45	93.81
2.0-3.0	11.81	21.83	1.26	2.32	49.0-50.0	3.55	886.51	0.38	94.19
3.0-4.0	15.46	37.29	1.64	3.96	50.0-51.0	3.09	889.60	0.33	94.52
4.0-5.0	18.36	55.65	1.95	5.91	51.0-52.0	2.71	892.31	0.29	94.80
5.0-6.0	20.51	76.16	2.18	8.09	52.0-53.0	2.39	894.70	0.25	95.06
6.0-7.0	21.90	98.06	2.33	10.42	53.0-54.0	2.17	896.87	0.23	95.29
7.0-8.0	22.71	120.77	2.41	12.83	54.0-55.0	2.00	898.87	0.21	95.50
8.0-9.0	23.14	143.91	2.46	15.29	55.0-56.0	1.86	900.73	0.20	95.70
9.0-10.0	23.26	167.18	2.47	17.76	56.0-57.0	1.74	902.47	0.18	95.88
10.0-11.0	23.09	190.27	2.45	20.22	57.0-58.0	1.63	904.10	0.17	96.06
11.0-12.0	22.72	212.99	2.41	22.63	58.0-59.0	1.53	905.63	0.16	96.22
12.0-13.0	22.31	235.30	2.37	25.00	59.0-60.0	1.45	907.08	0.15	96.37
13.0-14.0	21.97	257.27	2.33	27.33	60.0-61.0	1.37	908.44	0.15	96.52
14.0-15.0	21.72	278.99	2.31	29.64	61.0-62.0	1.29	909.74	0.14	96.66
15.0-16.0	21.50	300.48	2.28	31.93	62.0-63.0	1.23	910.97	0.13	96.79
16.0-17.0	21.31	321.80	2.26	34.19	63.0-64.0	1.16	912.13	0.12	96.91
17.0-18.0	21.16	342.95	2.25	36.44	64.0-65.0	1.11	913.24	0.12	97.03
18.0-19.0	21.03	363.98	2.23	38.67	65.0-66.0	1.05	914.29	0.11	97.14
19.0-20.0	20.91	384.90	2.22	40.89	66.0-67.0	1.01	915.30	0.11	97.25
20.0-21.0	20.83	405.72	2.21	43.11	67.0-68.0	0.96	916.26	0.10	97.35
21.0-22.0	20.77	426.49	2.21	45.31	68.0-69.0	0.92	917.18	0.10	97.45
22.0-23.0	20.74	447.23	2.20	47.52	69.0-70.0	0.88	918.06	0.09	97.54
23.0-24.0	20.74	467.96	2.20	49.72	70.0-71.0	0.85	918.91	0.09	97.63
24.0-25.0	20.77	488.73	2.21	51.93	71.0-72.0	0.81	919.72	0.09	97.72
25.0-26.0	20.83	509.56	2.21	54.14	72.0-73.0	0.77	920.49	0.08	97.80
26.0-27.0	20.91	530.47	2.22	56.36	73.0-74.0	0.74	921.23	0.08	97.88
27.0-28.0	21.02	551.49	2.23	58.59	74.0-75.0	0.71	921.94	0.08	97.95
28.0-29.0	21.14	572.63	2.25	60.84	75.0-76.0	0.68	922.62	0.07	98.02
29.0-30.0	21.26	593.89	2.26	63.10	76.0-77.0	0.64	923.26	0.07	98.09
30.0-31.0	21.36	615.25	2.27	65.37	77.0-78.0	0.61	923.88	0.07	98.16
31.0-32.0	21.46	636.71	2.28	67.65	78.0-79.0	0.58	924.46	0.06	98.22
32.0-33.0	21.51	658.22	2.29	69.93	79.0-80.0	0.55	925.01	0.06	98.28
33.0-34.0	21.47	679.68	2.28	72.21	80.0-81.0	0.52	925.53	0.06	98.33
34.0-35.0	21.26	700.94	2.26	74.47	81.0-82.0	0.49	926.02	0.05	98.39
35.0-36.0	20.82	721.76	2.21	76.68	82.0-83.0	0.46	926.48	0.05	98.43
36.0-37.0	20.14	741.90	2.14	78.82	83.0-84.0	0.43	926.91	0.05	98.48
37.0-38.0	19.26	761.15	2.05	80.87	84.0-85.0	0.40	927.31	0.04	98.52
38.0-39.0	18.15	779.31	1.93	82.80	85.0-86.0	0.37	927.68	0.04	98.56
39.0-40.0	16.89	796.20	1.79	84.59	86.0-87.0	0.33	928.01	0.04	98.60
40.0-41.0	15.57	811.77	1.65	86.25	87.0-88.0	0.30	928.31	0.03	98.63
41.0-42.0	14.17	825.94	1.51	87.75	88.0-89.0	0.25	928.57	0.03	98.66
42.0-43.0	12.69	838.63	1.35	89.10	89.0-90.0	0.22	928.78	0.02	98.68
43.0-44.0	11.13	849.76	1.18	90.28	90.0-91.0	0.20	928.99	0.02	98.70
44.0-45.0	9.51	859.27	1.01	91.29	91.0-92.0	0.19	929.18	0.02	98.72
45.0-46.0	7.91	867.17	0.84	92.13	92.0-93.0	0.18	929.36	0.02	98.74
46.0-47.0	6.42	873.59	0.68	92.82	93.0-94.0	0.17	929.52	0.02	98.76

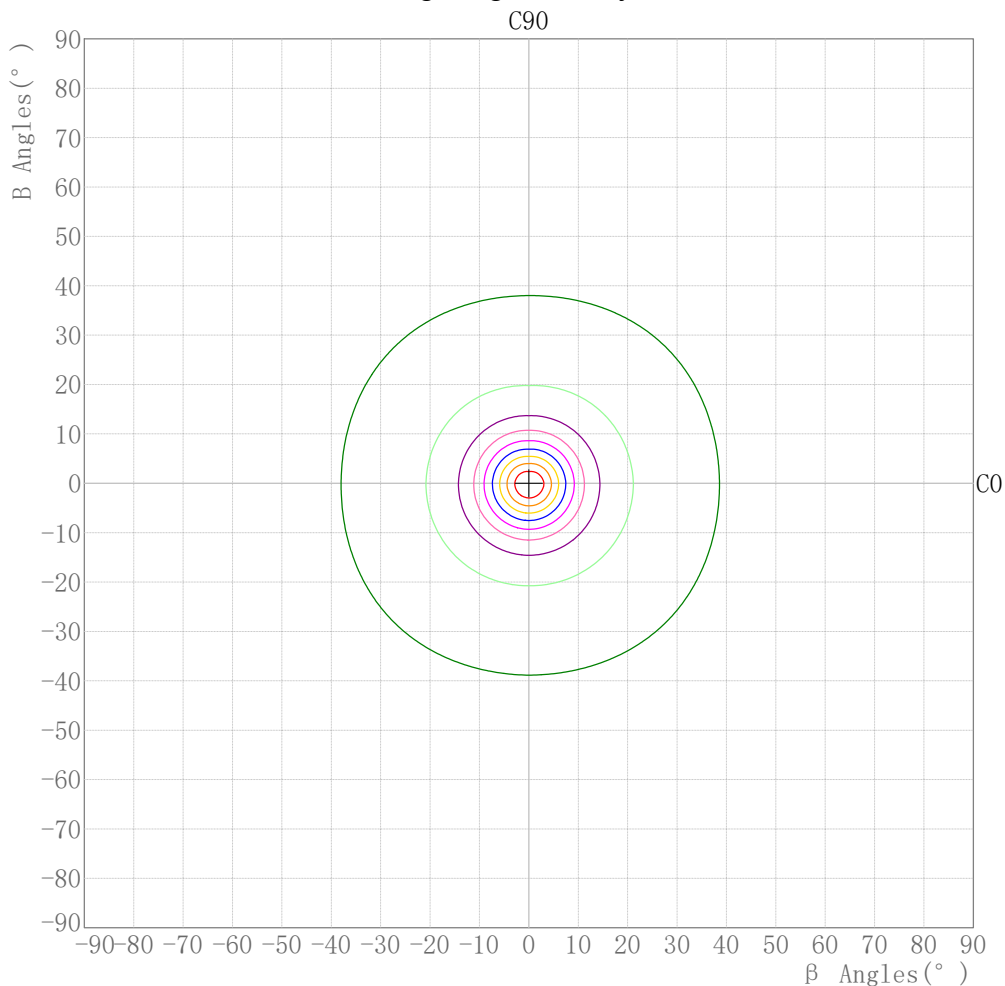
Zonal Flux Tabulation - (Cont.)

Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp	Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
94.0-95.0	0.16	929.69	0.02	98.78	141.0-142.0	0.20	935.58	0.02	99.40
95.0-96.0	0.15	929.84	0.02	98.79	142.0-143.0	0.20	935.79	0.02	99.42
96.0-97.0	0.14	929.98	0.02	98.81	143.0-144.0	0.21	936.00	0.02	99.45
97.0-98.0	0.14	930.12	0.01	98.82	144.0-145.0	0.21	936.21	0.02	99.47
98.0-99.0	0.13	930.25	0.01	98.84	145.0-146.0	0.21	936.42	0.02	99.49
99.0-100.0	0.12	930.37	0.01	98.85	146.0-147.0	0.21	936.64	0.02	99.51
100.0-101.0	0.12	930.49	0.01	98.86	147.0-148.0	0.22	936.85	0.02	99.54
101.0-102.0	0.11	930.60	0.01	98.87	148.0-149.0	0.22	937.07	0.02	99.56
102.0-103.0	0.11	930.71	0.01	98.88	149.0-150.0	0.21	937.28	0.02	99.58
103.0-104.0	0.10	930.81	0.01	98.90	150.0-151.0	0.21	937.49	0.02	99.61
104.0-105.0	0.10	930.91	0.01	98.91	151.0-152.0	0.21	937.71	0.02	99.63
105.0-106.0	0.10	931.01	0.01	98.92	152.0-153.0	0.21	937.92	0.02	99.65
106.0-107.0	0.10	931.11	0.01	98.93	153.0-154.0	0.21	938.12	0.02	99.67
107.0-108.0	0.10	931.20	0.01	98.94	154.0-155.0	0.20	938.33	0.02	99.69
108.0-109.0	0.09	931.30	0.01	98.95	155.0-156.0	0.20	938.52	0.02	99.71
109.0-110.0	0.09	931.39	0.01	98.96	156.0-157.0	0.19	938.72	0.02	99.74
110.0-111.0	0.09	931.49	0.01	98.97	157.0-158.0	0.19	938.91	0.02	99.76
111.0-112.0	0.09	931.58	0.01	98.98	158.0-159.0	0.18	939.09	0.02	99.78
112.0-113.0	0.09	931.67	0.01	98.99	159.0-160.0	0.18	939.27	0.02	99.79
113.0-114.0	0.09	931.77	0.01	99.00	160.0-161.0	0.17	939.45	0.02	99.81
114.0-115.0	0.09	931.86	0.01	99.01	161.0-162.0	0.17	939.62	0.02	99.83
115.0-116.0	0.10	931.96	0.01	99.02	162.0-163.0	0.16	939.78	0.02	99.85
116.0-117.0	0.10	932.05	0.01	99.03	163.0-164.0	0.15	939.93	0.02	99.86
117.0-118.0	0.10	932.15	0.01	99.04	164.0-165.0	0.15	940.08	0.02	99.88
118.0-119.0	0.10	932.25	0.01	99.05	165.0-166.0	0.14	940.22	0.01	99.89
119.0-120.0	0.10	932.35	0.01	99.06	166.0-167.0	0.13	940.35	0.01	99.91
120.0-121.0	0.10	932.46	0.01	99.07	167.0-168.0	0.12	940.47	0.01	99.92
121.0-122.0	0.11	932.57	0.01	99.08	168.0-169.0	0.11	940.59	0.01	99.93
122.0-123.0	0.11	932.68	0.01	99.09	169.0-170.0	0.11	940.69	0.01	99.94
123.0-124.0	0.11	932.79	0.01	99.11	170.0-171.0	0.10	940.79	0.01	99.96
124.0-125.0	0.12	932.91	0.01	99.12	171.0-172.0	0.09	940.87	0.01	99.96
125.0-126.0	0.12	933.03	0.01	99.13	172.0-173.0	0.08	940.95	0.01	99.97
126.0-127.0	0.12	933.15	0.01	99.14	173.0-174.0	0.07	941.02	0.01	99.98
127.0-128.0	0.13	933.28	0.01	99.16	174.0-175.0	0.06	941.08	0.01	99.99
128.0-129.0	0.13	933.41	0.01	99.17	175.0-176.0	0.05	941.12	0.00	99.99
129.0-130.0	0.14	933.54	0.01	99.19	176.0-177.0	0.04	941.16	0.00	99.99
130.0-131.0	0.14	933.69	0.01	99.20	177.0-178.0	0.03	941.19	0.00	100.00
131.0-132.0	0.15	933.83	0.02	99.22	178.0-179.0	0.02	941.20	0.00	100.00
132.0-133.0	0.15	933.98	0.02	99.23	179.0-180.0	0.01	941.21	0.00	100.00
133.0-134.0	0.16	934.14	0.02	99.25					
134.0-135.0	0.16	934.30	0.02	99.27					
135.0-136.0	0.17	934.47	0.02	99.28					
136.0-137.0	0.17	934.64	0.02	99.30					
137.0-138.0	0.18	934.82	0.02	99.32					
138.0-139.0	0.18	935.00	0.02	99.34					
139.0-140.0	0.19	935.19	0.02	99.36					
140.0-141.0	0.19	935.38	0.02	99.38					

Rectangle ISO Lighting Intensity Diagram

Lum. Name: HCP-813024-5000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Havit Commercial	Test Machine: GON-2000	Test Date: 2020/09/27

ISO Lighting Intensity Curve



Curves:

[Unit: cd]

[IMax] = 2692.030

— [IMax*90%]=2422.827

— [IMax*80%]=2153.624

— [IMax*70%]=1884.421

— [IMax*60%]=1615.218

— [IMax*50%]=1346.015

— [IMax*40%]=1076.812

— [IMax*30%]=807.609

— [IMax*20%]=538.406

— [IMax*10%]=269.203

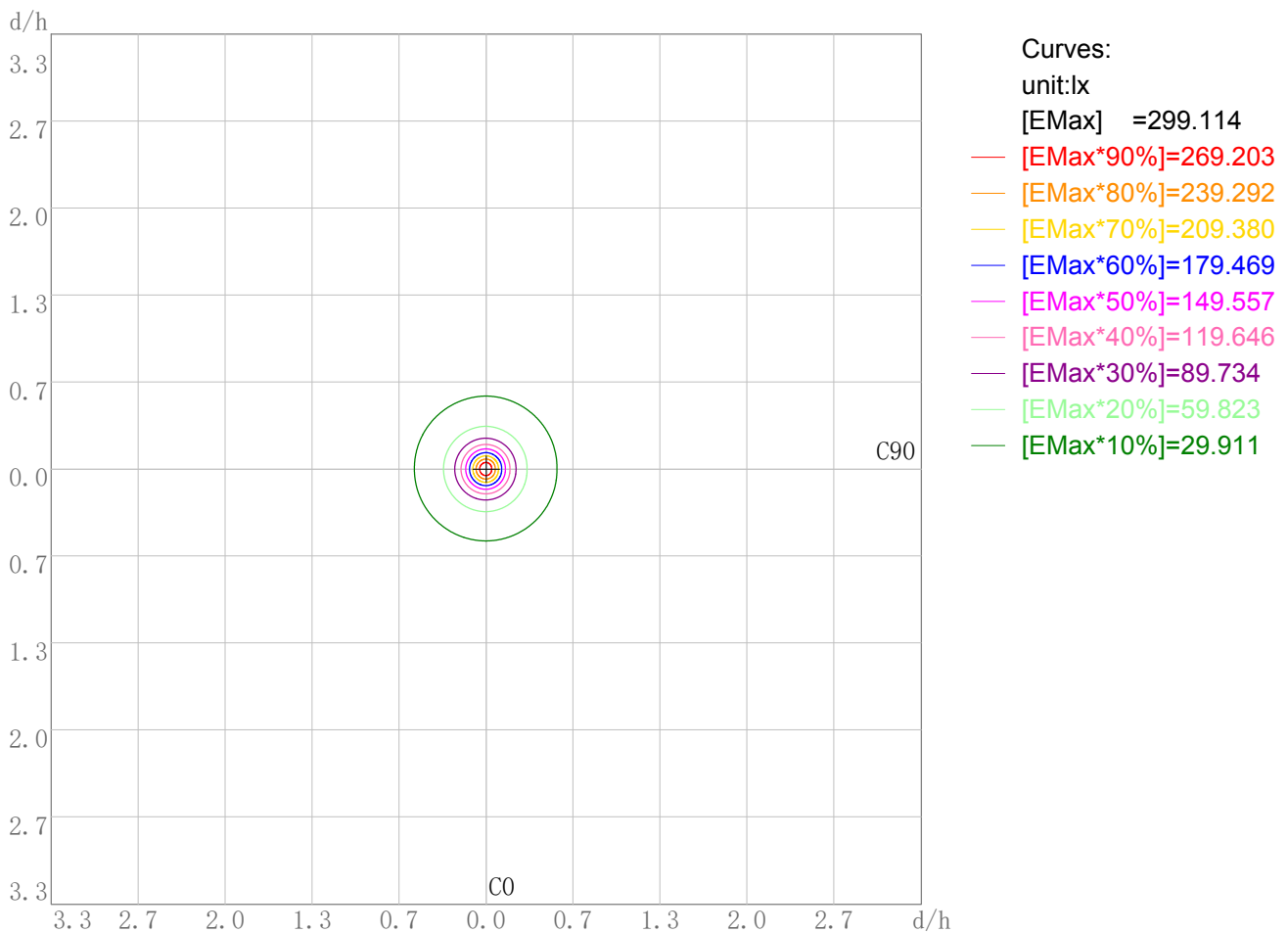
Maximum Light Intensity(cd): 2692.03

Maximum Cand.@Angle: H=0.0°, V=0.0°

Plane ISO-Illuminance Diagram

Lum. Name: HCP-813024-5000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Havit Commercial	Test Machine: GON-2000	Test Date: 2020/09/27

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

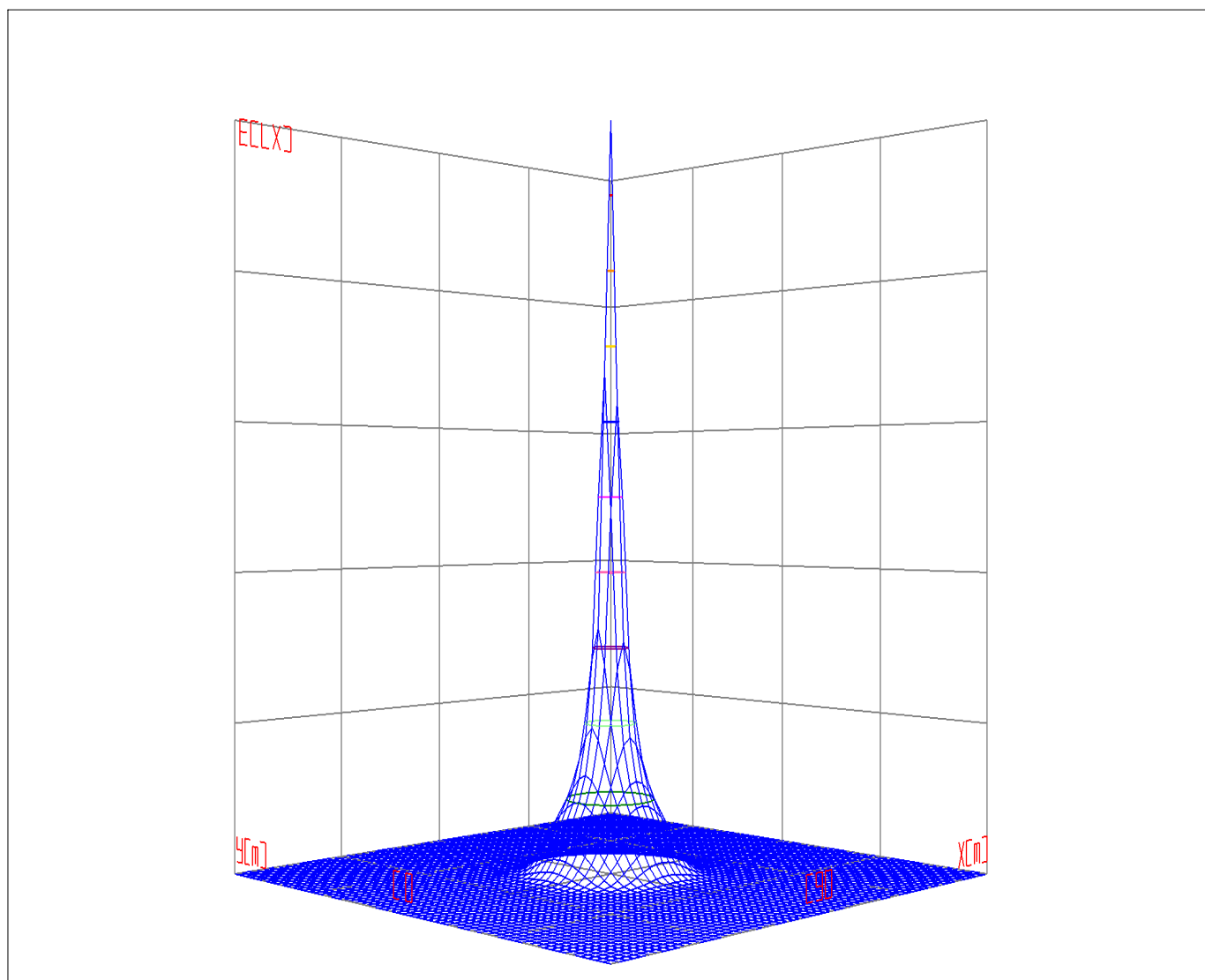
Working Plane Maximum Illuminance(lx): 299.11

Working Plane Maximum Illuminance Position(d/h): H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: HCP-813024-5000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Havit Commercial	Test Machine: GON-2000	Test Date: 2020/09/27

3D Plane Illuminance Modal

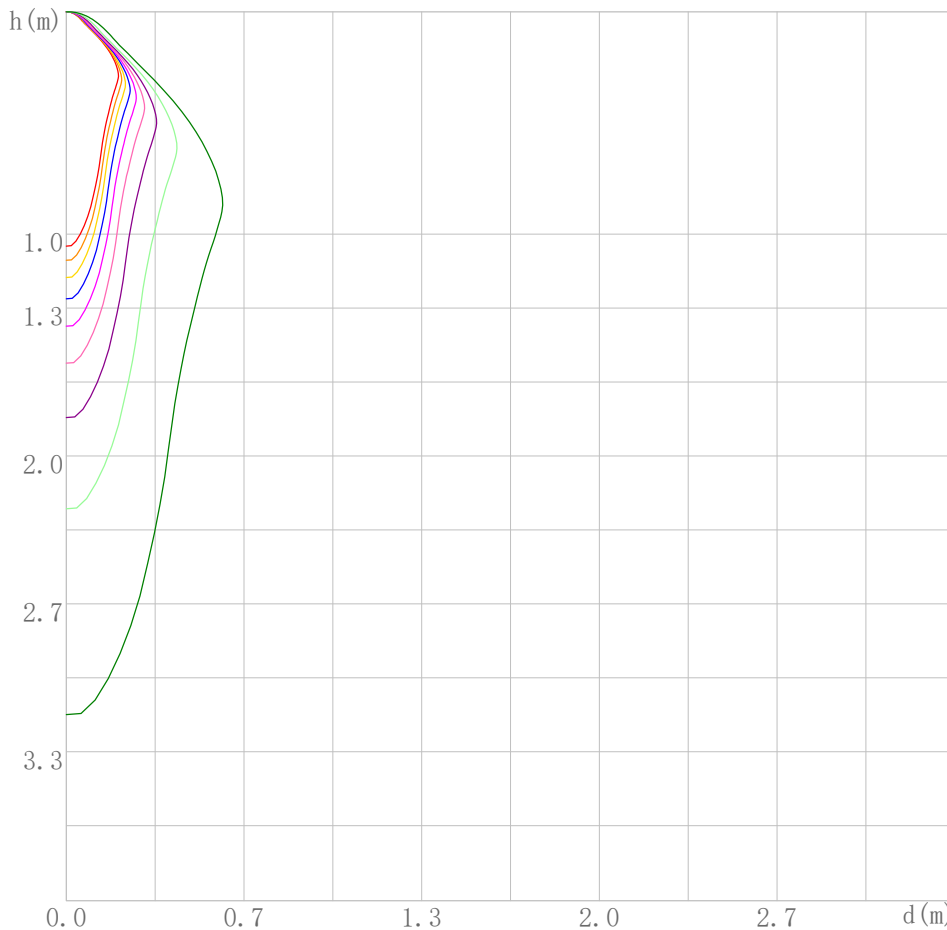


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

Lum. Name: HCP-813024-5000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Havit Commercial	Test Machine: GON-2000	Test Date: 2020/09/27

Space ISO Illuminance Curve



Curves:

[Unit: lx]

[E_{Max}] = 2692.030

— [E_{Max}*90%]=2422.827

— [E_{Max}*80%]=2153.624

— [E_{Max}*70%]=1884.421

— [E_{Max}*60%]=1615.218

— [E_{Max}*50%]=1346.015

— [E_{Max}*40%]=1076.812

— [E_{Max}*30%]=807.609

— [E_{Max}*20%]=538.406

— [E_{Max}*10%]=269.203

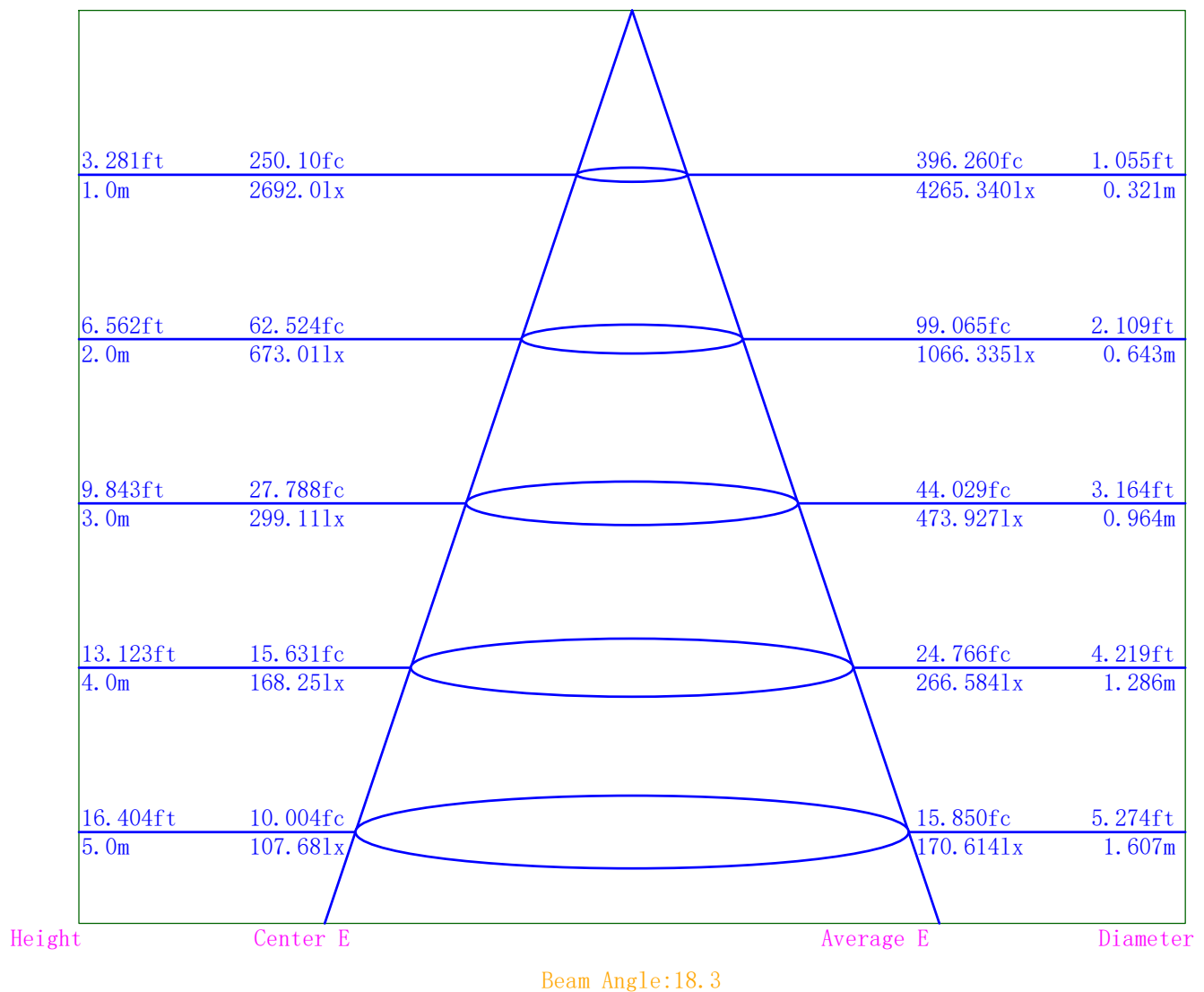
Space Plane Maximum Illuminance and @Angle:2692.03lx,0.0deg

Plane Maximum Lighting Intensity and @Angle:2692.030cd,0deg

Illuminance-Distance Diagram

Lum. Name: HCP-813024-5000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Havit Commercial	Test Machine: GON-2000	Test Date: 2020/09/27

Illuminance-Distance Curve



Indoor Luminance Limiting Curves

Lum. Name: HCP-813024-5000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Havit Commercial	Test Machine: GON-2000	Test Date: 2020/09/27

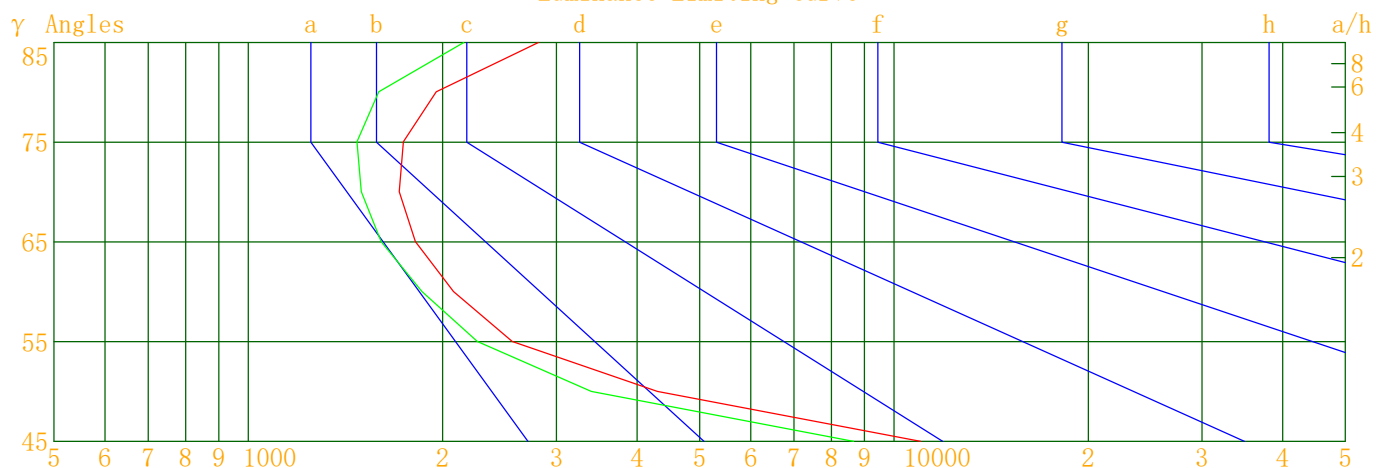
Glare Grade Table

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	10995	4301	2562	2079	1815	1713	1739	1955	2813
C90	8657	3399	2263	1858	1606	1496	1474	1592	2156

Luminance Limiting Curve



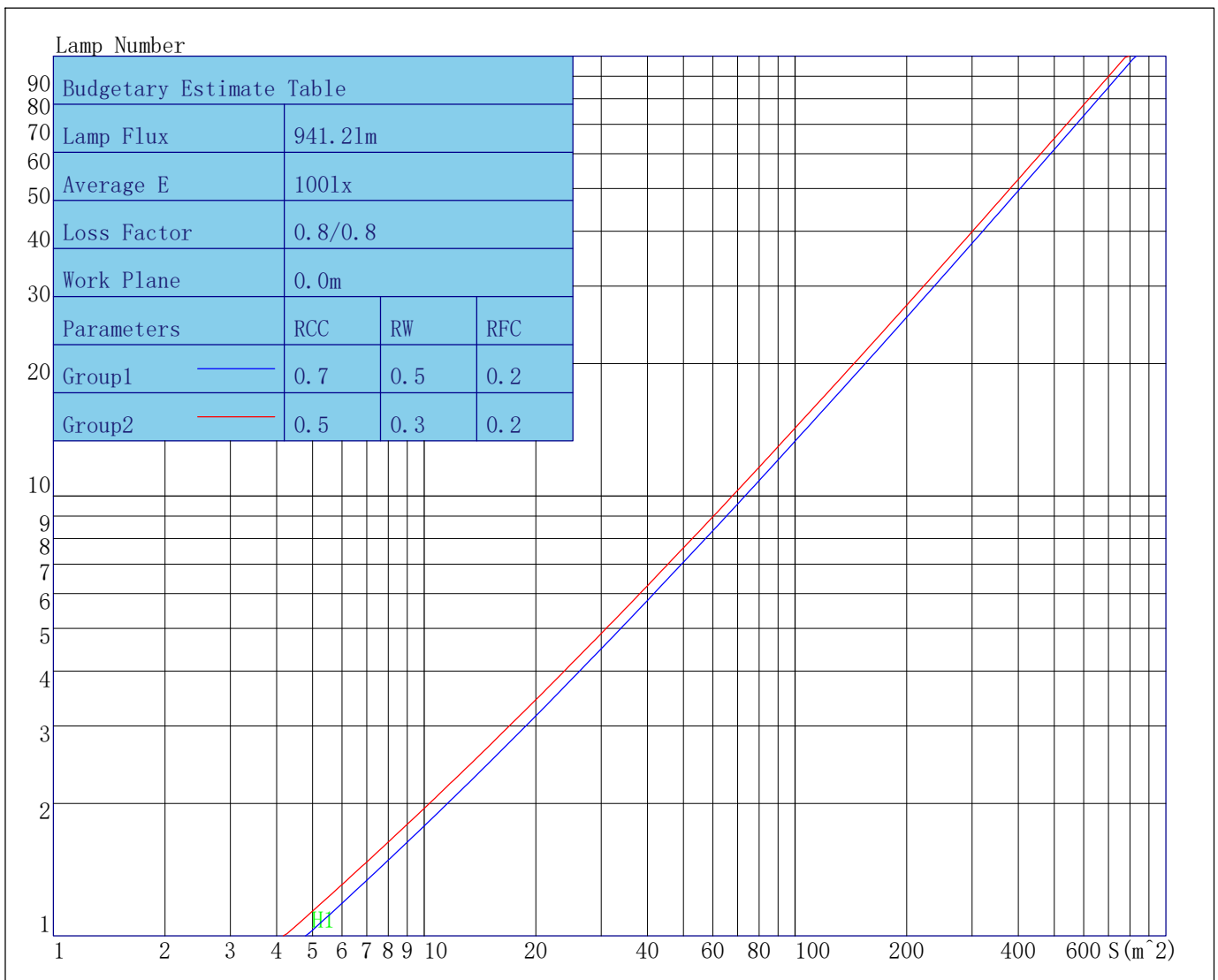
Luminous Size: Length(m)=0.000 Width(m)=-0.050 Height(m)=0.080 Area(m^2)=0.015708

Luminous Type: Without Luminous Side

Luminous Curves: C0-C180 Color: — C90-C270 Color: —

Indoor Budgetary Estimate Table

Lum. Name: HCP-813024-5000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Havit Commercial	Test Machine: GON-2000	Test Date: 2020/09/27



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: HCP-813024-5000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Havit Commercial	Test Machine: GON-2000	Test Date: 2020/09/27

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	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99
1	113	110	107	105	110	108	105	103	103	101	100	99	98	96	96	95	93	92
2	107	102	98	94	105	100	96	93	97	93	91	93	91	89	90	88	87	85
3	101	95	90	86	99	93	89	85	90	86	83	88	85	82	85	83	80	79
4	96	88	83	78	94	87	82	78	85	80	77	83	79	76	81	77	75	73
5	91	83	77	72	90	82	76	72	80	75	71	78	74	71	76	73	70	68
6	87	78	72	67	85	77	71	67	75	70	67	74	69	66	72	68	65	64
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	61	60
8	79	69	63	59	77	69	63	59	67	62	59	66	62	58	65	61	58	57
9	75	66	60	56	74	65	59	56	64	59	55	63	58	55	62	58	55	53
10	72	62	57	53	71	62	56	53	61	56	52	60	55	52	59	55	52	51

Unified Glare Rating Table

Lum. Name: HCP-813024-5000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Havit Commercial	Test Machine: GON-2000	Test Date: 2020/09/27

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	16.5	17.6	16.9	17.9	18.3	16.0	17.1	16.4	17.4	17.8
	16.5	17.4	16.9	17.8	18.2	16.0	16.9	16.4	17.3	17.7
	16.5	17.4	16.9	17.7	18.2	16.0	16.8	16.4	17.2	17.6
	16.5	17.3	17.0	17.7	18.1	16.0	16.8	16.4	17.2	17.6
	16.5	17.3	17.0	17.7	18.1	16.0	16.7	16.4	17.1	17.6
	16.6	17.3	17.0	17.7	18.2	16.0	16.7	16.4	17.1	17.6
X=4H Y=2H	16.3	17.2	16.7	17.6	18.0	15.8	16.7	16.3	17.1	17.5
	16.3	17.0	16.8	17.5	17.9	15.8	16.6	16.3	17.0	17.4
	16.4	17.0	16.8	17.5	17.9	15.9	16.5	16.3	17.0	17.4
	16.5	17.0	17.0	17.5	18.0	15.9	16.5	16.4	17.0	17.5
	16.5	17.1	17.0	17.5	18.0	16.0	16.5	16.5	16.9	17.5
	16.6	17.1	17.1	17.6	18.1	16.0	16.5	16.5	17.0	17.5
X=8H Y=4H	16.3	16.8	16.8	17.3	17.8	15.8	16.3	16.3	16.8	17.3
	16.5	16.9	17.0	17.4	18.0	15.9	16.3	16.4	16.8	17.4
	16.6	17.0	17.1	17.5	18.0	16.0	16.4	16.5	16.9	17.4
	16.8	17.1	17.3	17.6	18.2	16.1	16.5	16.7	17.0	17.6
X=12H Y=4H	16.3	16.7	16.8	17.2	17.7	15.7	16.2	16.3	16.7	17.2
	16.4	16.8	17.0	17.3	17.9	15.9	16.3	16.4	16.8	17.3
	16.6	16.9	17.2	17.5	18.1	16.0	16.3	16.6	16.9	17.5
Variations with the observer position at spacings										
S=1.0H	0.2/−0.2					0.3/−0.3				
S=1.5H	0.4/−0.4					0.5/−0.5				
S=2.0H	0.5/−0.5					0.6/−0.7				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	0.7					0.6				

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

Candela Tabulation

V/H	C0.0	C90.0	C180.0	C270.0
γ 0.0	2692.03	2692.03	2692.03	2692.03
γ 1.0	2685.32	2599.09	2665.16	2646.02
γ 2.0	2586.75	2481.54	2553.89	2560.42
γ 3.0	2432.83	2324.50	2398.92	2419.89
γ 4.0	2260.48	2152.66	2228.75	2256.86
γ 5.0	2077.07	1969.64	2050.27	2079.01
γ 6.0	1891.35	1779.08	1868.88	1892.51
γ 7.0	1696.88	1599.04	1680.39	1708.23
γ 8.0	1527.16	1435.58	1507.58	1539.70
γ 9.0	1374.32	1291.19	1354.42	1390.23
γ 10.0	1233.39	1162.37	1220.37	1257.01
γ 11.0	1102.74	1042.34	1093.90	1133.16
γ 12.0	995.71	940.15	982.13	1021.75
γ 13.0	903.73	856.23	893.08	926.73
γ 14.0	831.36	785.86	822.84	847.21
γ 15.0	770.10	727.48	762.18	780.07
γ 16.0	717.75	676.06	709.20	725.86
γ 17.0	672.34	631.96	664.77	676.19
γ 18.0	635.12	593.67	626.71	632.39
γ 19.0	600.85	560.36	591.77	593.54
γ 20.0	570.34	532.02	561.02	560.84
γ 21.0	542.52	507.07	533.80	531.14
γ 22.0	518.22	485.07	510.27	505.38
γ 23.0	496.25	465.65	488.21	483.72
γ 24.0	477.16	449.20	468.87	464.70
γ 25.0	459.77	434.64	451.45	448.19
γ 26.0	444.82	421.26	435.37	433.57
γ 27.0	431.57	410.31	421.09	420.34
γ 28.0	419.84	400.12	408.76	409.13
γ 29.0	408.63	390.10	397.16	398.93
γ 30.0	397.74	381.00	385.82	390.10
γ 31.0	387.55	372.04	375.19	380.82
γ 32.0	378.25	363.43	365.52	372.82
γ 33.0	368.54	353.31	354.69	364.22
γ 34.0	357.32	341.95	342.90	354.23
γ 35.0	342.31	328.36	327.93	342.74
γ 36.0	323.88	311.97	309.24	328.83
γ 37.0	303.42	291.98	289.76	311.04
γ 38.0	283.02	269.31	269.27	290.03
γ 39.0	259.77	244.35	245.88	265.68
γ 40.0	236.91	219.84	224.02	240.75
γ 41.0	214.49	194.58	202.09	216.33
γ 42.0	191.41	169.33	179.43	192.12
γ 43.0	168.77	144.62	157.48	167.64
γ 44.0	145.40	118.78	134.42	142.52
γ 45.0	122.12	96.15	112.57	117.36
γ 46.0	99.86	74.84	91.25	94.50

Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 47.0	79.99	58.53	72.75	74.07
γ 48.0	63.57	46.82	56.92	58.41
γ 49.0	51.29	39.38	45.49	47.76
γ 50.0	43.43	34.31	38.10	40.79
γ 51.0	37.38	30.19	32.29	35.49
γ 52.0	31.96	26.69	27.45	30.85
γ 53.0	27.87	24.08	24.01	27.32
γ 54.0	25.28	21.98	21.60	24.64
γ 55.0	23.09	20.39	19.66	22.49
γ 56.0	21.37	19.04	17.97	20.61
γ 57.0	19.95	17.83	16.29	19.00
γ 58.0	18.67	16.72	15.13	17.38
γ 59.0	17.45	15.62	14.10	16.13
γ 60.0	16.33	14.59	13.15	15.01
γ 61.0	15.32	13.69	12.32	14.07
γ 62.0	14.40	12.83	11.57	13.24
γ 63.0	13.55	12.02	10.87	12.43
γ 64.0	12.74	11.33	10.22	11.70
γ 65.0	12.05	10.66	9.66	11.07
γ 66.0	11.41	10.04	9.16	10.49
γ 67.0	10.79	9.48	8.70	9.97
γ 68.0	10.25	8.96	8.30	9.51
γ 69.0	9.72	8.50	7.93	9.10
γ 70.0	9.20	8.04	7.59	8.70
γ 71.0	8.73	7.57	7.27	8.34
γ 72.0	8.28	7.14	6.93	8.01
γ 73.0	7.87	6.73	6.63	7.68
γ 74.0	7.46	6.36	6.33	7.36
γ 75.0	7.07	5.99	6.04	7.04
γ 76.0	6.71	5.64	5.73	6.74
γ 77.0	6.34	5.30	5.45	6.43
γ 78.0	5.99	4.97	5.16	6.12
γ 79.0	5.64	4.66	4.87	5.82
γ 80.0	5.33	4.34	4.59	5.51
γ 81.0	5.04	4.06	4.32	5.21
γ 82.0	4.76	3.79	4.05	4.92
γ 83.0	4.49	3.52	3.79	4.61
γ 84.0	4.17	3.24	3.54	4.33
γ 85.0	3.85	2.95	3.28	4.08
γ 86.0	3.46	2.63	3.00	3.79
γ 87.0	3.09	2.30	2.69	3.47
γ 88.0	2.73	1.93	2.35	3.17
γ 89.0	2.31	1.60	1.91	2.60
γ 90.0	2.12	1.45	1.70	2.28
γ 91.0	2.02	1.37	1.58	2.15
γ 92.0	1.92	1.29	1.50	2.04
γ 93.0	1.82	1.21	1.41	1.92

Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 94.0	1.73	1.16	1.32	1.83
γ 95.0	1.65	1.09	1.25	1.73
γ 96.0	1.56	1.03	1.17	1.64
γ 97.0	1.50	0.97	1.11	1.55
γ 98.0	1.43	0.92	1.04	1.48
γ 99.0	1.37	0.88	0.99	1.41
γ 100.0	1.31	0.83	0.95	1.35
γ 101.0	1.26	0.79	0.91	1.29
γ 102.0	1.22	0.77	0.87	1.24
γ 103.0	1.18	0.75	0.85	1.20
γ 104.0	1.14	0.73	0.84	1.17
γ 105.0	1.12	0.71	0.81	1.15
γ 106.0	1.10	0.70	0.80	1.12
γ 107.0	1.07	0.70	0.80	1.10
γ 108.0	1.06	0.69	0.80	1.09
γ 109.0	1.05	0.70	0.81	1.09
γ 110.0	1.04	0.69	0.82	1.08
γ 111.0	1.03	0.71	0.83	1.08
γ 112.0	1.03	0.70	0.84	1.08
γ 113.0	1.03	0.72	0.86	1.10
γ 114.0	1.03	0.73	0.89	1.11
γ 115.0	1.03	0.74	0.92	1.13
γ 116.0	1.04	0.76	0.95	1.15
γ 117.0	1.05	0.77	0.99	1.17
γ 118.0	1.07	0.80	1.02	1.20
γ 119.0	1.08	0.83	1.07	1.23
γ 120.0	1.11	0.86	1.12	1.26
γ 121.0	1.13	0.90	1.16	1.29
γ 122.0	1.17	0.93	1.21	1.34
γ 123.0	1.21	0.99	1.26	1.40
γ 124.0	1.25	1.03	1.31	1.46
γ 125.0	1.30	1.09	1.37	1.49
γ 126.0	1.35	1.15	1.45	1.54
γ 127.0	1.41	1.22	1.51	1.60
γ 128.0	1.48	1.29	1.59	1.66
γ 129.0	1.55	1.37	1.66	1.72
γ 130.0	1.61	1.44	1.74	1.78
γ 131.0	1.70	1.52	1.82	1.87
γ 132.0	1.78	1.61	1.92	1.94
γ 133.0	1.87	1.72	2.02	2.03
γ 134.0	1.97	1.82	2.13	2.13
γ 135.0	2.07	1.93	2.23	2.23
γ 136.0	2.18	2.04	2.36	2.33
γ 137.0	2.28	2.16	2.47	2.45
γ 138.0	2.40	2.29	2.61	2.58
γ 139.0	2.51	2.41	2.74	2.71
γ 140.0	2.64	2.55	2.88	2.83

Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 141.0	2.78	2.68	3.01	2.97
γ 142.0	2.89	2.81	3.14	3.11
γ 143.0	3.03	2.95	3.27	3.24
γ 144.0	3.16	3.09	3.40	3.37
γ 145.0	3.28	3.22	3.52	3.48
γ 146.0	3.41	3.34	3.64	3.60
γ 147.0	3.50	3.44	3.75	3.71
γ 148.0	3.63	3.56	3.86	3.81
γ 149.0	3.73	3.65	3.95	3.91
γ 150.0	3.83	3.75	4.05	3.99
γ 151.0	3.94	3.84	4.15	4.09
γ 152.0	4.05	3.94	4.23	4.16
γ 153.0	4.13	4.03	4.32	4.24
γ 154.0	4.21	4.11	4.40	4.32
γ 155.0	4.31	4.19	4.47	4.38
γ 156.0	4.39	4.27	4.57	4.46
γ 157.0	4.47	4.34	4.64	4.52
γ 158.0	4.55	4.40	4.71	4.59
γ 159.0	4.64	4.49	4.79	4.65
γ 160.0	4.72	4.56	4.86	4.72
γ 161.0	4.78	4.64	4.93	4.79
γ 162.0	4.85	4.72	4.99	4.84
γ 163.0	4.93	4.80	5.06	4.89
γ 164.0	5.00	4.86	5.11	4.94
γ 165.0	5.06	4.93	5.17	5.00
γ 166.0	5.13	5.01	5.24	5.05
γ 167.0	5.18	5.08	5.28	5.10
γ 168.0	5.24	5.13	5.32	5.14
γ 169.0	5.29	5.18	5.37	5.19
γ 170.0	5.33	5.25	5.41	5.24
γ 171.0	5.37	5.28	5.45	5.27
γ 172.0	5.41	5.31	5.47	5.31
γ 173.0	5.43	5.34	5.48	5.35
γ 174.0	5.44	5.36	5.50	5.37
γ 175.0	5.46	5.38	5.52	5.38
γ 176.0	5.47	5.38	5.51	5.39
γ 177.0	5.48	5.40	5.51	5.41
γ 178.0	5.49	5.41	5.51	5.44
γ 179.0	5.50	5.42	5.51	5.44
γ 180.0	5.48	5.48	5.48	5.48