

**Indoor Luminaire Photometric Data**

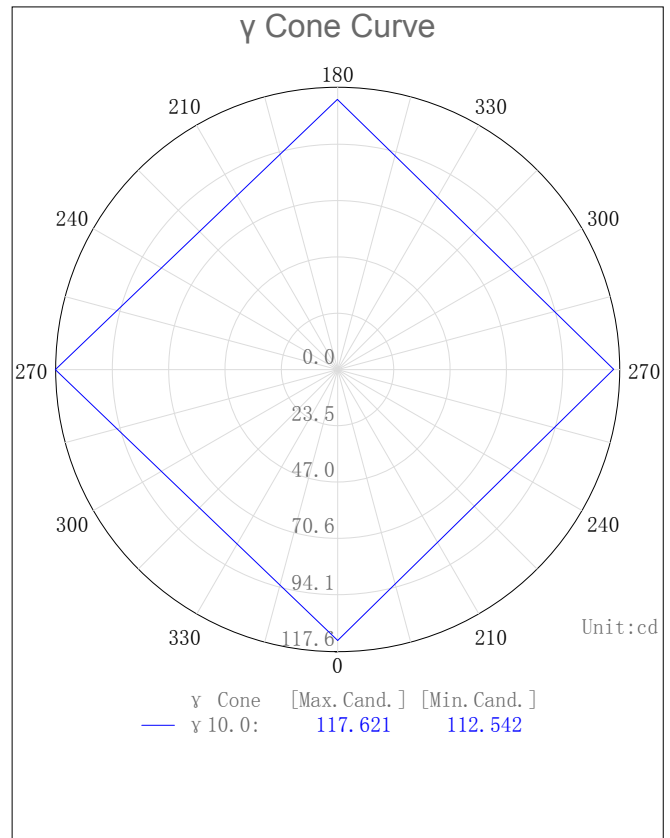
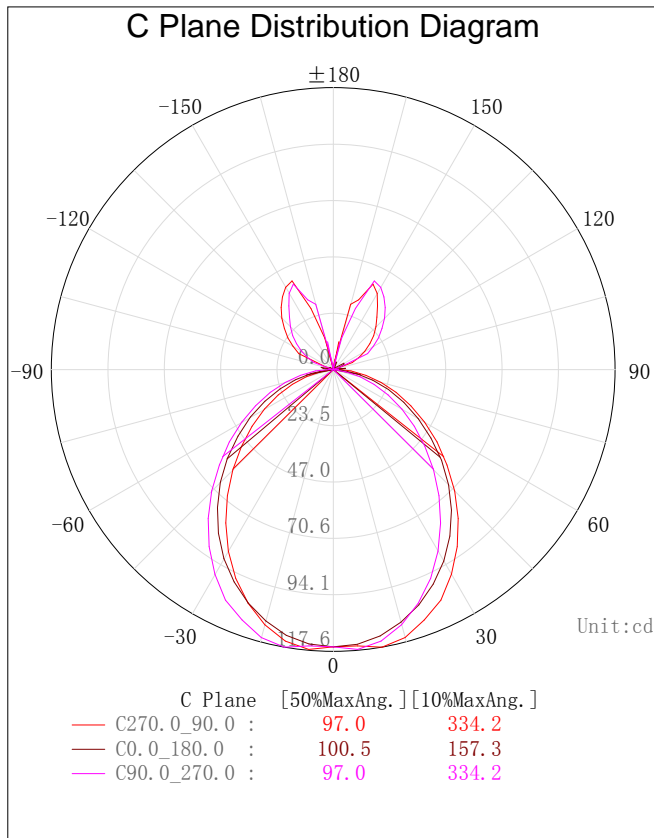
**Description Information**

Lum. Name: A0192LED-BLK	Lum. Catalog:	Test ID:
Lamp Name: 3000K	Lamp Catalog:	Test Date: 2020/10/22
Manufacture:	ShldAngle(°):	Test Machine:GON-2000
Test Lab:	Frequency(Hz):	Lamp CCT(K): Ra:
Lum. Size(W*L*H):0.100m*0.095m*0.040m	Lum. Area(m2):0.013	Lum. W(kg): 2.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25
		Humidity(%):

**Character Parameter**

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 343.540	Luminaire Flux: 343.545lm	Field Angle(10%Imax): 334.2	
Rated Power(W):	Luminaire Efficiency: 100.00%	Down Lumens&Percent: 288.397lm 83.95%	
Rated Voltage(V):	Luminaire EER(lm/W): 40.389	Up Lumens&Percent: 55.148lm 16.05%	
Tested Power(W): 8.506	Max. Cand. (cd): 117.621	S/MH: C0_a180=1.185 C90_270=1.198	
Lamps' Inside: 1	Max Cand@Ang. (°): C=270.0 γ=10.0	CIE Type: General Diffuse	
Tested Electric:U=239.7V, I=0.040A, PF=0.000	Beam Angle(50%Imax): 97.0	ErP Φuse(120°): 231.936lm	
Lamp Size(W*L*H):0.100m*0.095m*0.040m	Left=-45.2 Right=51.7	IRF: 119.726%	

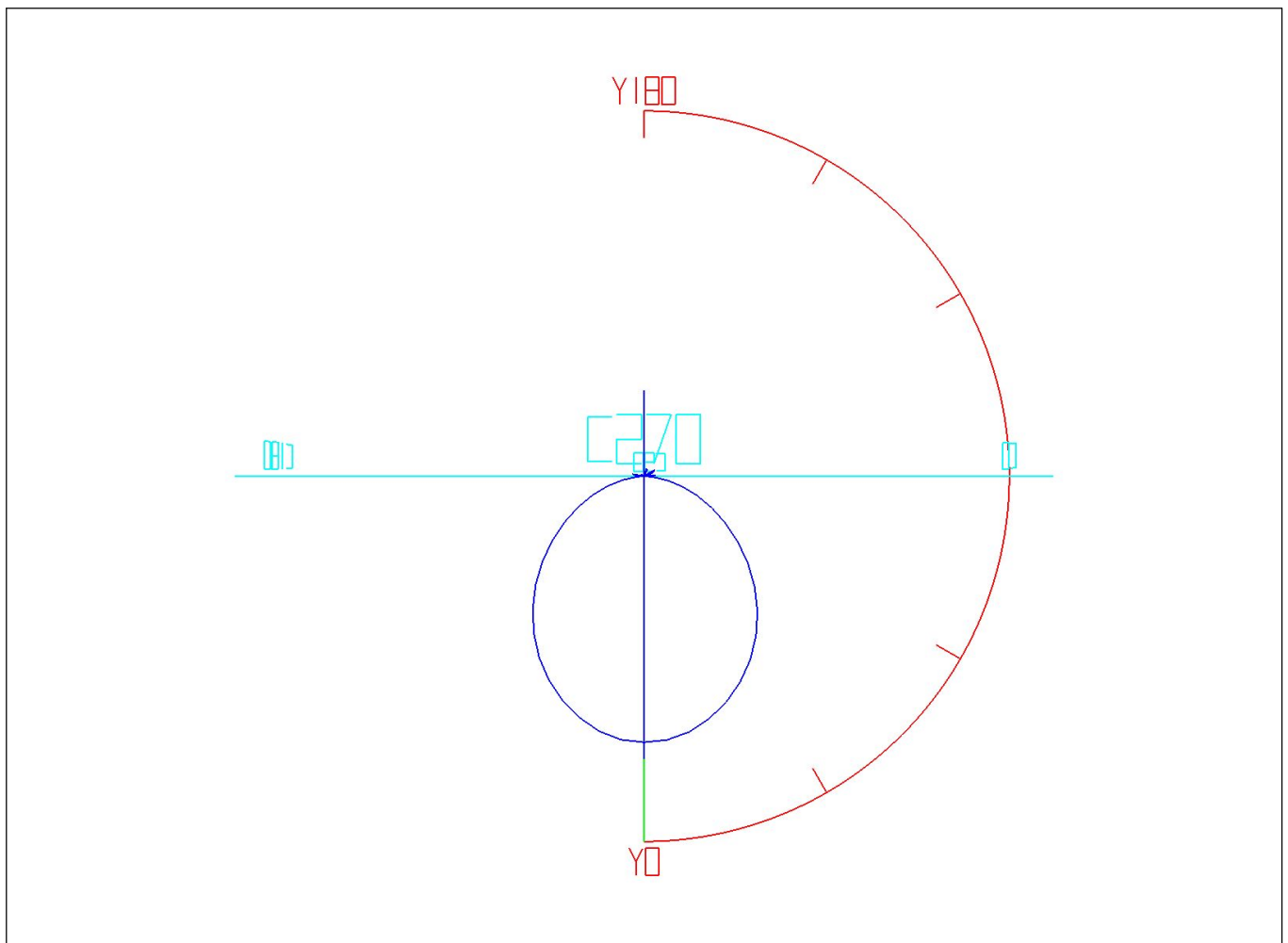
**Lighting Distribution Diagram**



### 3D Light Intensity Distribution Modal

Lum. Name: A0192LED-BLK	Lum. Catalog:	Test ID:
Lamp Name: 3000K	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/10/22

3D Light Intensity Distribution Modal



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

# IES Indoor Report

Photometric Filename:A0192LED-BLK-3K.IES

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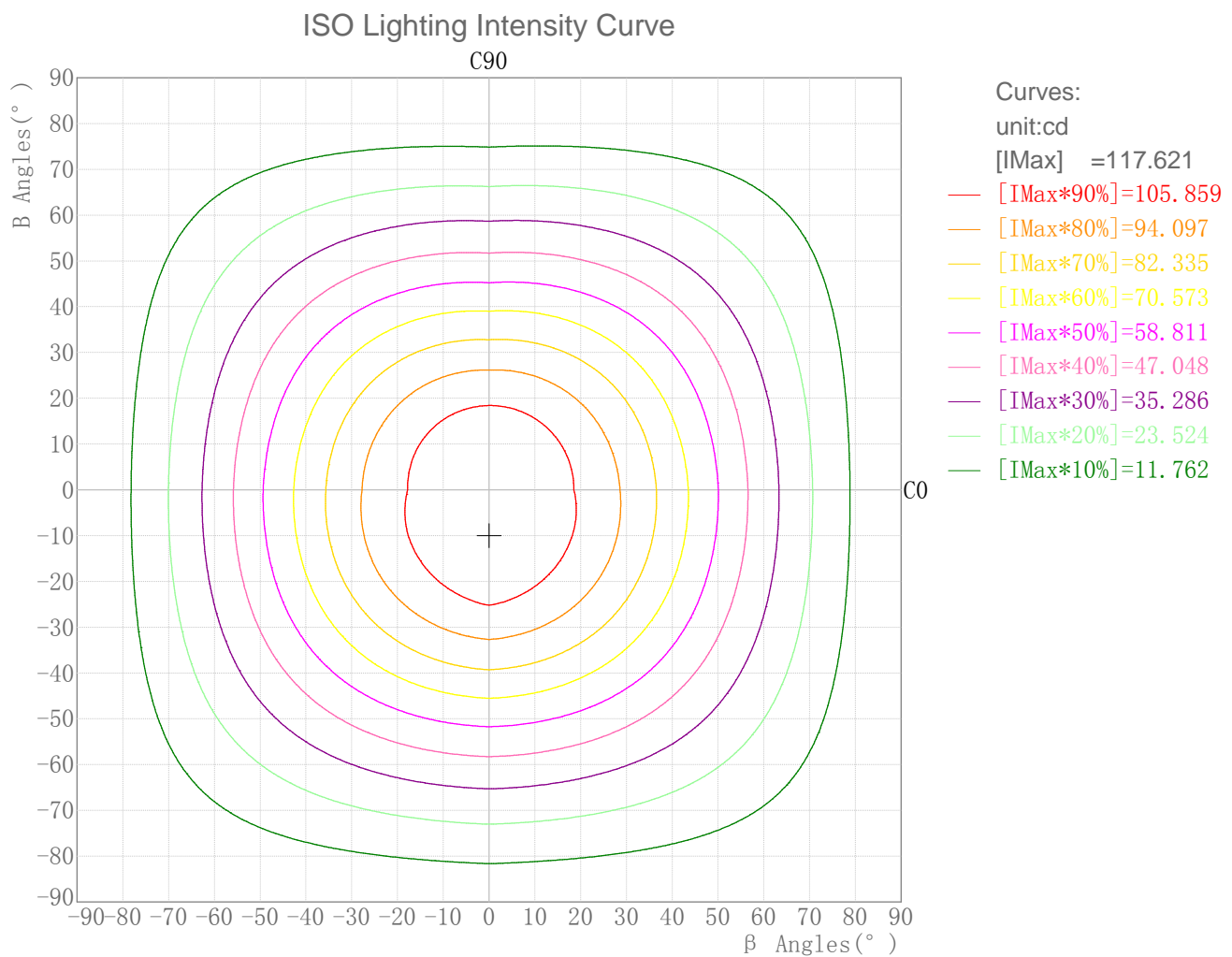
## Zonal Flux Tabulation

Zone ( y )	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	2.77	2.77	0.81	0.81
5.0-10.0	8.24	11.00	2.40	3.20
10.0-15.0	13.37	24.38	3.89	7.10
15.0-20.0	17.86	42.24	5.20	12.30
20.0-25.0	21.55	63.79	6.27	18.57
25.0-30.0	24.30	88.10	7.07	25.64
30.0-35.0	26.00	114.09	7.57	33.21
35.0-40.0	26.62	140.72	7.75	40.96
40.0-45.0	26.24	166.96	7.64	48.60
45.0-50.0	24.95	191.91	7.26	55.86
50.0-55.0	22.89	214.80	6.66	62.52
55.0-60.0	20.23	235.03	5.89	68.41
60.0-65.0	17.18	252.21	5.00	73.41
65.0-70.0	13.87	266.07	4.04	77.45
70.0-75.0	10.43	276.50	3.03	80.49
75.0-80.0	6.97	283.47	2.03	82.51
80.0-85.0	3.62	287.09	1.05	83.57
85.0-90.0	1.31	288.40	0.38	83.95
90.0-95.0	0.97	289.37	0.28	84.23
95.0-100.0	1.07	290.44	0.31	84.54
100.0-105.0	0.57	291.00	0.17	84.71
105.0-110.0	1.15	292.15	0.33	85.04
110.0-115.0	3.12	295.27	0.91	85.95
115.0-120.0	4.57	299.84	1.33	87.28
120.0-125.0	4.89	304.73	1.42	88.70
125.0-130.0	5.05	309.78	1.47	90.17
130.0-135.0	5.32	315.10	1.55	91.72
135.0-140.0	5.50	320.61	1.60	93.32
140.0-145.0	5.53	326.14	1.61	94.93
145.0-150.0	5.44	331.58	1.58	96.52
150.0-155.0	5.11	336.69	1.49	98.01
155.0-160.0	3.81	340.51	1.11	99.12
160.0-165.0	2.17	342.68	0.63	99.75
165.0-170.0	0.76	343.43	0.22	99.97
170.0-175.0	0.09	343.53	0.03	100.00
175.0-180.0	0.02	343.54	0.01	100.00

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**Rectangle ISO Lighting Intensity Diagram**

Lum. Name: A0192LED-BLK	Lum. Catalog:	Test ID:
Lamp Name: 3000K	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/10/22



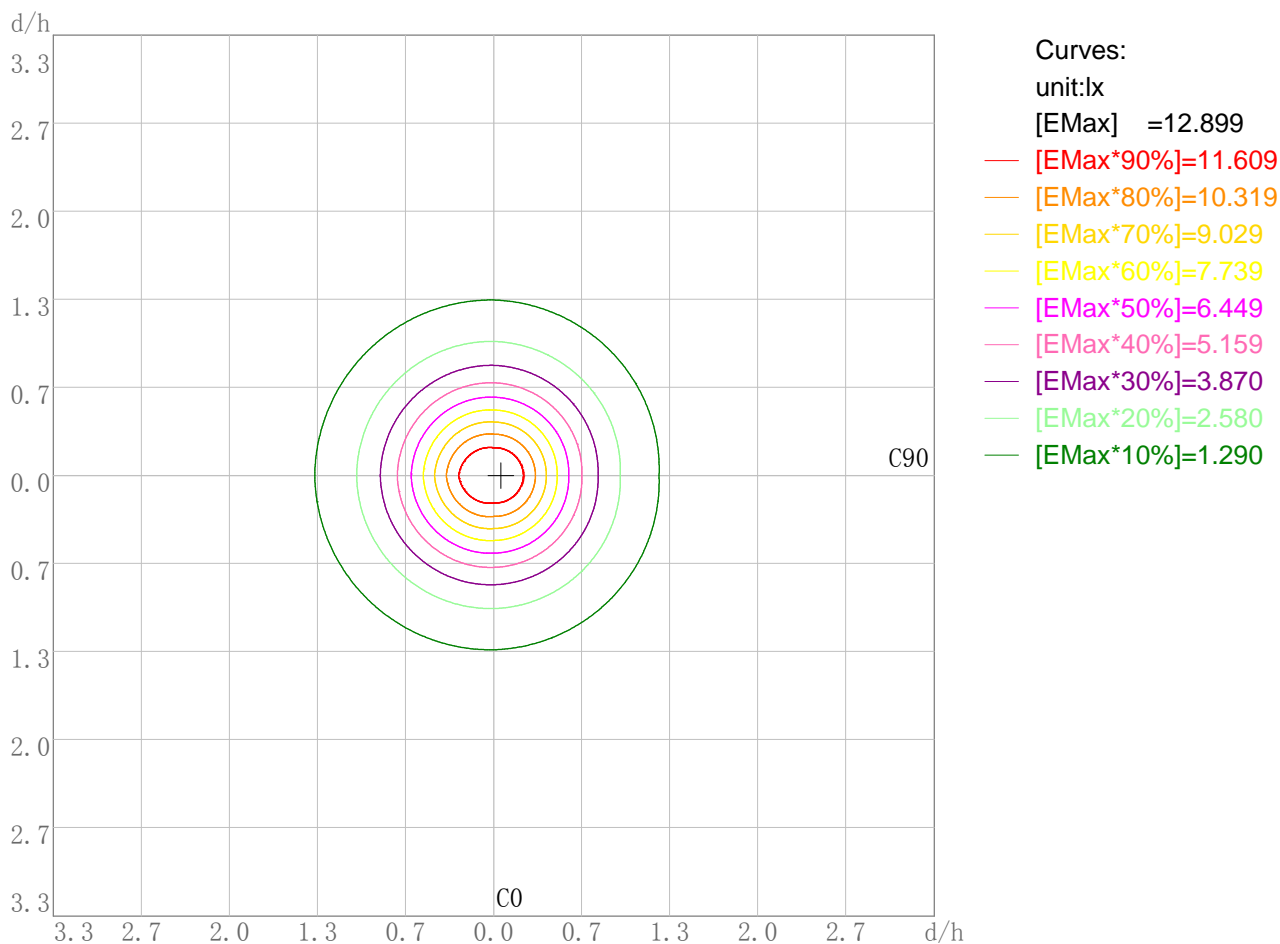
Maximum Light Intensity(cd): 117.62  
Maximum Cand.@Angle: H=-0.0°,V=-10.0°

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**Plane ISO-Illuminance Diagram**

Lum. Name: A0192LED-BLK	Lum. Catalog:	Test ID:
Lamp Name: 3000K	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/10/22

**Plane ISO-Illuminance Curve**



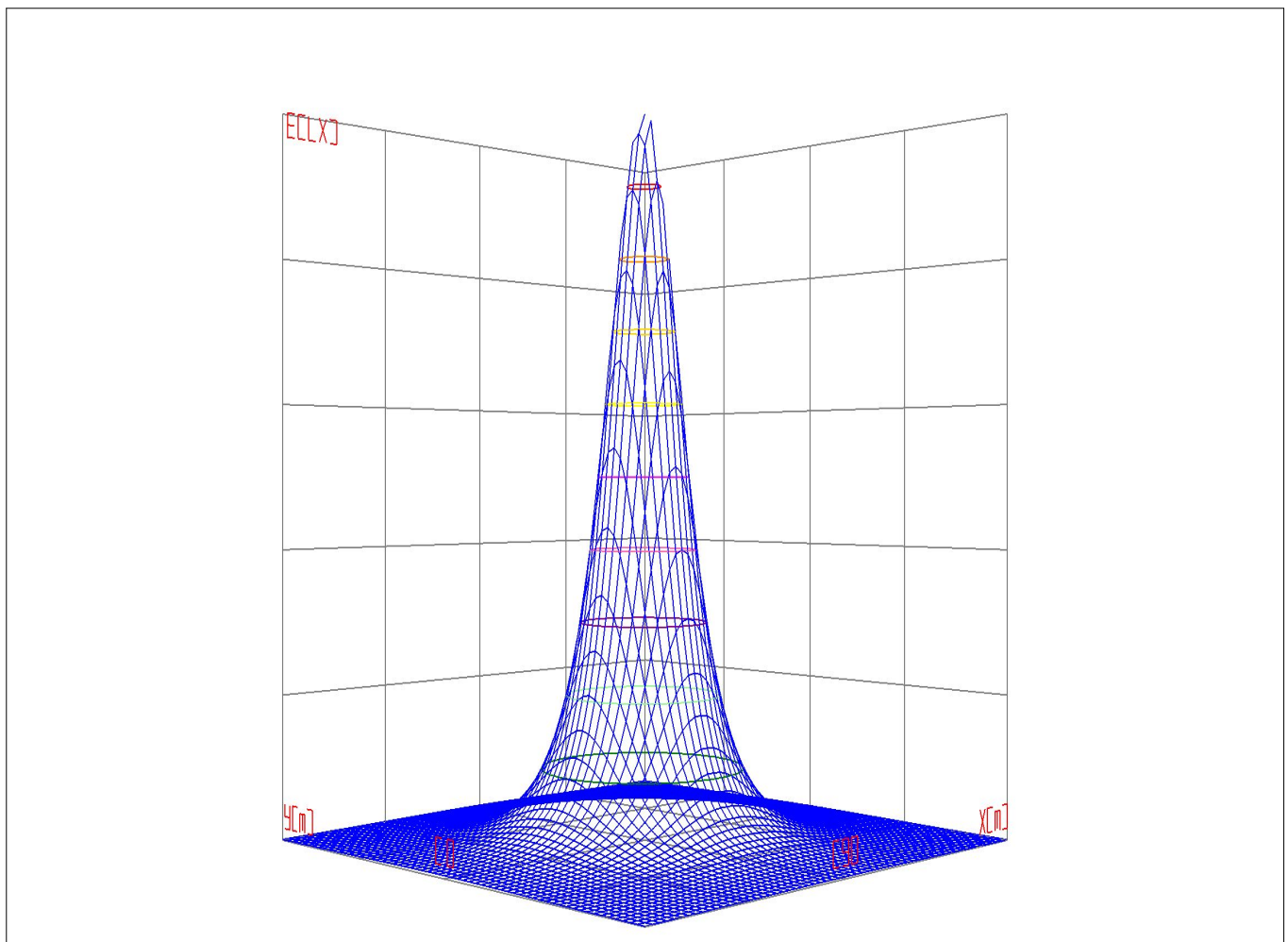
Working Plane Luminaire Mounting Height(m): 3.00  
 Working Plane Maximum Illuminance(lx): 12.90  
 Working Plane Maximum Illuminance Position(d/h):H0.1 V0.0

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### 3D Plane ISO Illuminance Diagram

Lum. Name: A0192LED-BLK	Lum. Catalog:	Test ID:
Lamp Name: 3000K	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/10/22

### 3D Plane Illuminance Modal



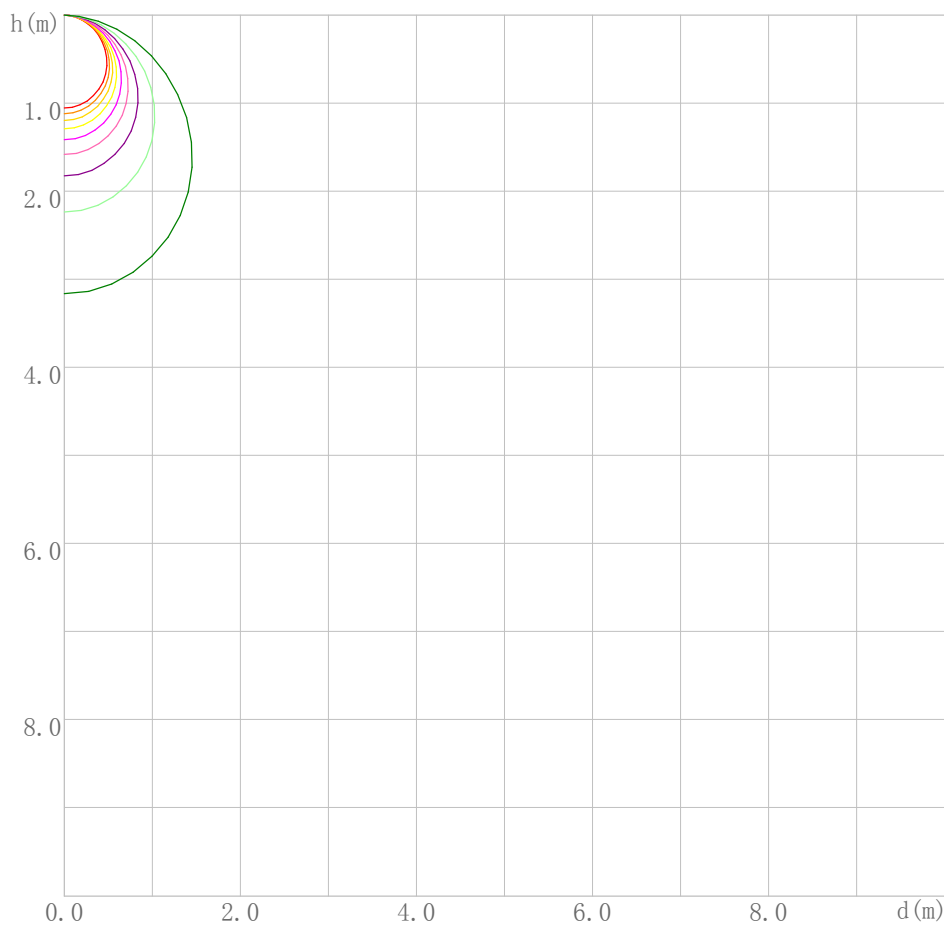
Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —  
View Angles(deg): 0    Height(m): 3.0    Distance(m): 10.0

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### Space ISO Illuminance Diagram

Lum. Name: A0192LED-BLK	Lum. Catalog:	Test ID:
Lamp Name: 3000K	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/10/22

Space ISO Illuminance Curve



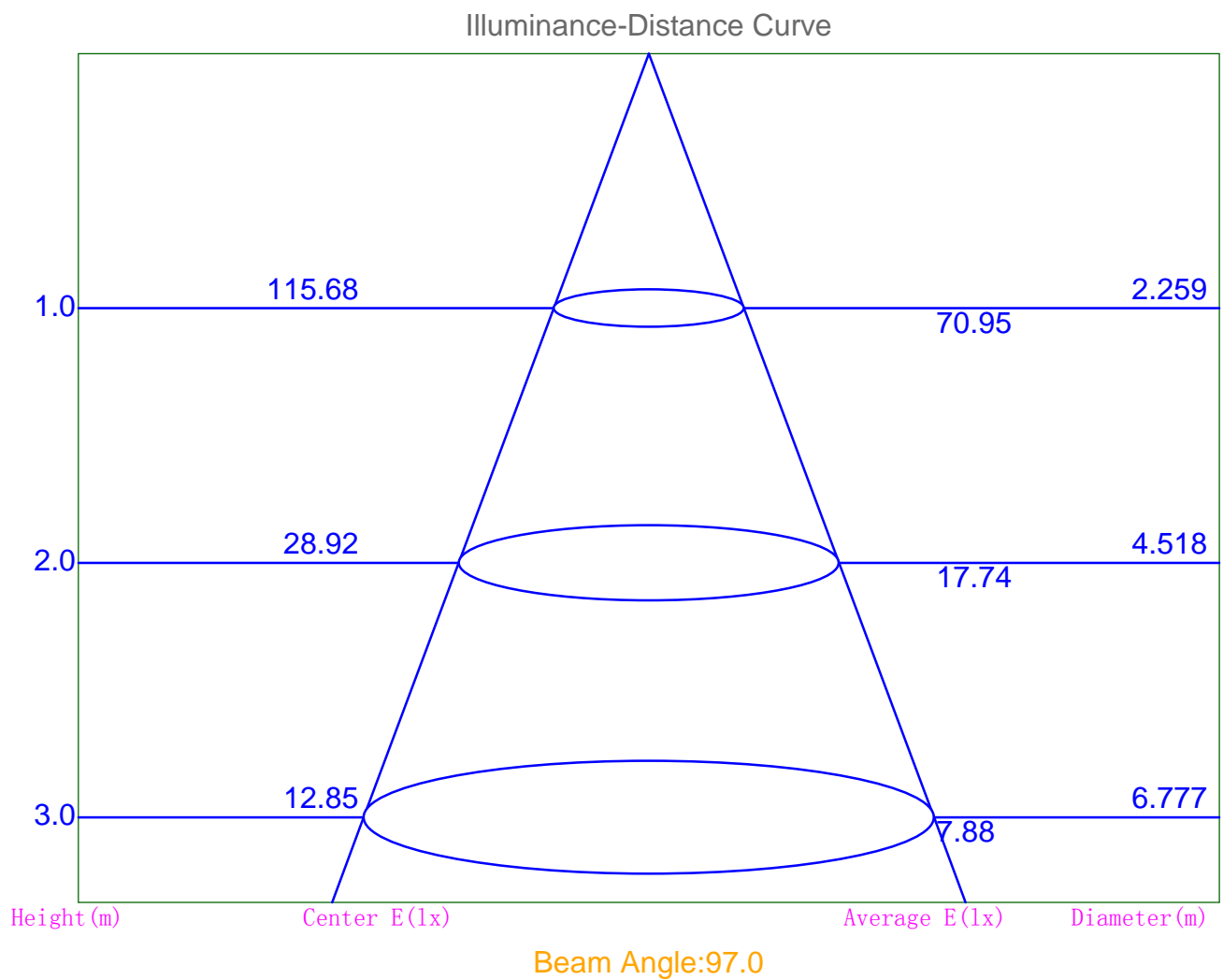
- Curves:  
unit:lx  
[EMax] =115.675
- [EMax\*90%]=104.108
  - [EMax\*80%]=92.540
  - [EMax\*70%]=80.973
  - [EMax\*60%]=69.405
  - [EMax\*50%]=57.838
  - [EMax\*40%]=46.270
  - [EMax\*30%]=34.703
  - [EMax\*20%]=23.135
  - [EMax\*10%]=11.568

Space Plane Maximum Illuminance and @Angle:115.68,0.0deg  
Plane Maximum Lighting Intensity and @Angle:115.675cd,0deg

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### Illuminance-Distance Diagram

Lum. Name: A0192LED-BLK	Lum. Catalog:	Test ID:
Lamp Name: 3000K	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/10/22





**Indoor Luminance Limiting Curves**

Lum. Name: A0192LED-BLK	Lum. Catalog:	Test ID:
Lamp Name: 3000K	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/10/22

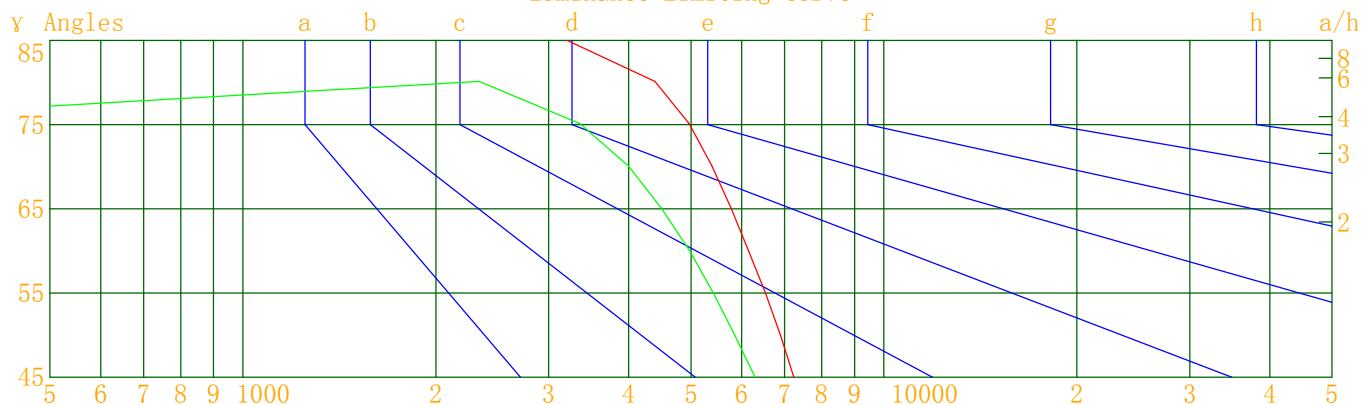
Glare Grade Table

GI	Quality	Using Illuminance							
		a	b	c	d	e	f	g	h
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	7232	6898	6530	6144	5778	5393	4968	4396	3207
C90	6297	5847	5414	4972	4494	3991	3357	2338	186

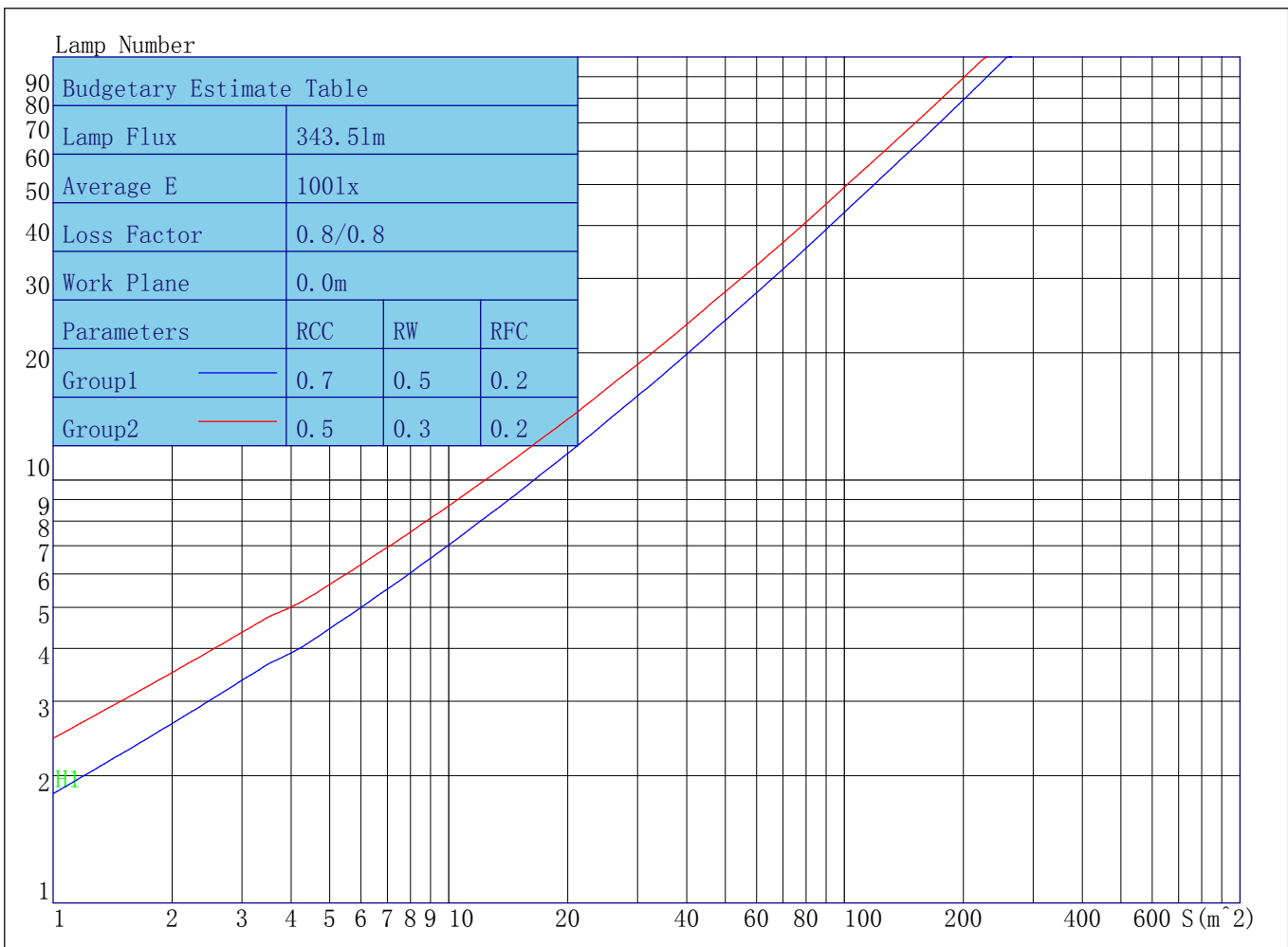
Luminance Limiting Curve



Luminous Size: Length(m)=0.095 Width(m)=0.100 Height(m)=0.040 Area(m^2)=0.013300  
 Luminous Type: Without Luminous Side  
 Luminous Curves: C0-C180 Color: — C90-C270 Color: —

**Indoor Budgetary Estimate Table**

Lum. Name: A0192LED-BLK	Lum. Catalog:	Test ID:
Lamp Name: 3000K	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/10/22



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: A0192LED-BLK	Lum. Catalog:	Test ID:
Lamp Name: 3000K	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/10/22

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	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84
1	106	101	97	93	101	97	94	90	90	87	85	84	81	79	78	76	74	71
2	96	89	82	77	92	85	80	75	79	75	70	74	70	67	68	65	63	60
3	88	78	70	64	84	75	68	63	70	64	60	65	61	57	61	57	54	51
4	81	69	61	55	77	67	59	54	63	56	51	58	53	49	55	50	46	44
5	74	62	54	47	71	60	52	46	56	50	44	53	47	43	49	45	41	38
6	69	56	48	41	66	54	46	41	51	44	39	48	42	38	45	40	36	34
7	64	51	43	37	61	49	42	36	46	40	35	44	38	33	41	36	32	30
8	59	47	38	33	57	45	38	32	43	36	31	40	34	30	38	33	29	27
9	56	43	35	30	53	42	34	29	39	33	28	37	31	27	35	30	26	24
10	52	39	32	27	50	38	31	26	36	30	26	34	29	25	33	27	24	22

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**Unified Glare Rating Table**

Lum. Name: A0192LED-BLK	Lum. Catalog:	Test ID:
Lamp Name: 3000K	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/10/22

**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	34.9	37.8	36.4	39.3	40.8	33.9	36.7	35.3	38.2	39.7
Y=3H	39.0	41.9	40.5	43.3	44.9	37.3	40.1	38.7	41.6	43.1
Y=4H	41.4	43.8	42.9	45.4	46.9	39.2	41.7	40.7	43.2	44.8
Y=6H	42.8	45.2	44.4	46.8	48.4	40.1	42.5	41.6	44.0	45.6
Y=8H	43.3	45.7	44.8	47.2	48.8	40.2	42.6	41.7	44.1	45.7
Y=12H	43.6	46.0	45.1	47.5	49.1	40.2	42.6	41.7	44.1	45.7
X=4H Y=2H	35.9	38.3	37.4	39.8	41.4	35.2	37.6	36.7	39.2	40.7
Y=3H	40.2	42.7	41.7	44.2	45.7	38.8	41.3	40.3	42.8	44.4
Y=4H	40.9	42.3	42.7	44.1	46.0	39.1	40.6	40.9	42.4	44.2
Y=6H	42.7	44.1	44.6	45.9	47.7	40.3	41.7	42.2	43.5	45.3
Y=8H	43.4	44.7	45.3	46.5	48.3	40.6	41.9	42.5	43.7	45.6
Y=12H	42.9	44.0	44.9	45.9	47.8	39.8	40.8	41.7	42.8	44.7
X=8H Y=4H	41.0	42.3	42.9	44.1	46.0	39.4	40.7	41.3	42.5	44.3
Y=6H	42.1	43.1	44.1	45.0	46.9	40.0	40.9	41.9	42.8	44.7
Y=8H	42.4	43.1	44.5	45.1	47.2	39.9	40.6	41.9	42.6	44.6
Y=12H	42.9	43.6	45.0	45.6	47.6	40.0	40.6	42.0	42.6	44.7
X=12H Y=4H	40.1	41.1	42.0	43.1	45.0	38.5	39.6	40.5	41.5	43.4
Y=6H	41.6	42.4	43.7	44.4	46.4	39.5	40.2	41.5	42.2	44.2
Y=8H	42.4	43.1	44.5	45.1	47.1	39.9	40.6	41.9	42.6	44.6
Variations with the objver position at spacings										
S=1.0H	2.7/-1.5					2.8/-0.4				
S=1.5H	-1.5/-20.3					-0.4/-18.5				
S=2.0H	-1.5/-20.3					-0.4/-18.5				

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**IES Indoor Report**  
**Photometric Filename:A0192LED-BLK-3K.IES**

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**Candela Tabulation**

V/H	C0.0	C90.0	C180.0	C270.0
Y 0.0	115.68	115.68	115.68	115.68
Y 5.0	115.08	117.16	114.98	115.68
Y 10.0	112.88	114.99	112.54	117.62
Y 15.0	109.17	110.28	108.58	115.76
Y 20.0	104.49	103.83	103.68	111.21
Y 25.0	98.80	96.07	97.80	106.15
Y 30.0	92.26	87.48	91.08	98.57
Y 35.0	84.87	78.21	83.40	90.25
Y 40.0	76.68	68.67	75.18	81.04
Y 45.0	68.02	59.22	66.54	71.56
Y 50.0	58.97	49.99	57.63	62.00
Y 55.0	49.82	41.30	48.51	52.81
Y 60.0	40.85	33.07	39.78	44.00
Y 65.0	32.48	25.26	31.42	35.75
Y 70.0	24.53	18.16	23.57	27.90
Y 75.0	17.10	11.56	16.06	20.67
Y 80.0	10.15	5.40	9.33	13.88
Y 85.0	3.72	0.22	3.16	7.46
Y 90.0	0.34	2.35	0.00	1.88
Y 95.0	5.15	0.26	3.89	0.36
Y 100.0	0.22	0.28	5.09	0.43
Y 105.0	1.41	0.62	0.00	0.43
Y 110.0	2.87	3.73	0.00	8.52
Y 115.0	4.96	15.77	1.66	11.80
Y 120.0	5.14	19.31	1.38	15.12
Y 125.0	1.40	23.02	0.62	18.68
Y 130.0	0.44	26.66	0.11	21.98
Y 135.0	0.48	30.35	0.07	25.26
Y 140.0	0.40	33.76	0.10	28.43
Y 145.0	0.61	36.90	0.15	32.29
Y 150.0	1.39	39.52	0.28	36.64
Y 155.0	3.20	40.73	0.60	39.27
Y 160.0	3.32	27.00	0.55	30.84
Y 165.0	1.32	13.59	0.51	28.19
Y 170.0	0.85	1.93	0.51	4.10
Y 175.0	0.66	0.52	0.57	1.34
Y 180.0	0.69	0.69	0.69	0.69

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