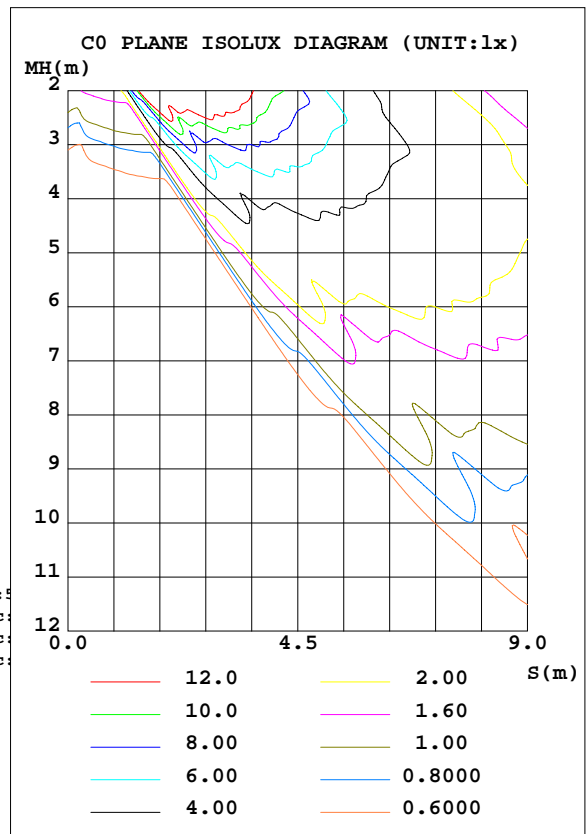
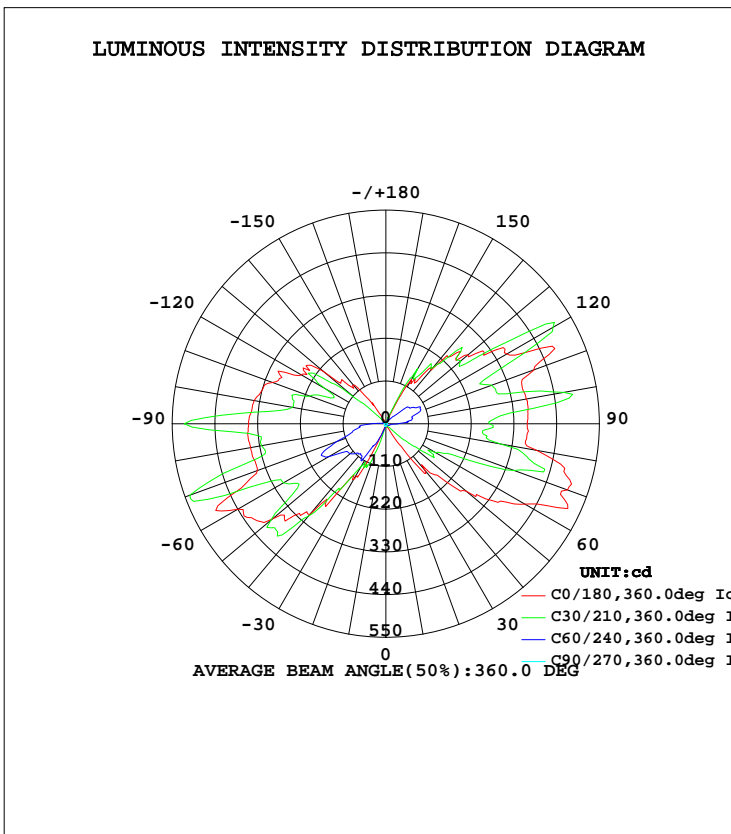


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1583A P:18.55W PF:0.9767 Lamp Flux:1807.84x1 lm		
NAME: ASD-OLCLS-2D18CC-BK/BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 97.45 lm/W			
MODEL	ASD-OLCLS-2D18CC-BK	I <sub>max</sub> (cd)	639.6	S/MH(C0/180)	8.83
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1807.8	η UP, DN(C0-180)	22.6,27.0
NOMINAL FLUX(lm)	1807.84	CIE CLASS	DIFFUSE	η UP, DN(C180-360)	24.7,25.7
LAMPS INSIDE	1	η up(%)	47.3	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	120	η down(%)	52.7	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-03-21

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	7.081	5.044	6.545	18.96	7.986	8.490	6.065	6.191	0- 10	0.7528	0.7528	0.04,0.04
20	9.183	4.664	6.016	128.9	14.79	36.68	5.822	5.181	10- 20	7.274	8.026	0.44,0.44
30	23.67	6.868	5.581	140.0	165.8	141.5	5.419	6.769	20- 30	25.81	33.83	1.87,1.87
40	156.7	8.995	5.307	215.3	305.6	204.4	4.744	8.905	30- 40	56.85	90.69	5.02,5.02
50	269.3	11.61	4.715	339.2	381.8	172.0	4.255	11.78	40- 50	97.55	188.2	10.4,10.4
60	413.7	44.69	4.157	227.2	440.8	239.7	3.758	35.54	50- 60	139.3	327.5	18.1,18.1
70	498.0	148.5	3.710	303.5	352.2	348.2	3.385	127.2	60- 70	184.7	512.2	28.3,28.3
80	394.5	136.4	3.409	233.6	353.6	237.0	3.131	150.3	70- 80	220.1	732.3	40.5,40.5
90	364.2	170.3	3.231	156.4	353.2	197.1	3.419	304.3	80- 90	219.6	951.9	52.7,52.7
100	367.2	307.1	3.687	131.3	344.6	218.9	4.668	282.9	90-100	224.0	1176	65,65
110	405.8	185.3	4.729	172.3	311.2	111.7	5.384	305.3	100-110	197.0	1373	75.9,75.9
120	360.1	196.7	4.047	23.38	251.9	58.46	5.112	268.2	110-120	179.0	1552	85.8,85.8
130	276.3	241.1	4.984	7.646	209.8	9.491	5.129	181.8	120-130	126.5	1678	92.8,92.8
140	180.2	131.2	4.221	5.296	129.8	6.919	5.267	227.1	130-140	74.52	1753	97,97
150	132.0	55.65	5.405	3.771	17.37	3.566	4.588	64.16	140-150	40.16	1793	99.2,99.2
160	6.813	8.829	4.021	4.143	6.189	3.709	4.071	23.35	150-160	12.31	1805	99.9,99.9
170	5.419	5.126	4.163	4.545	5.268	4.074	4.217	5.943	160-170	2.000	1807	100,100
180	6.054	5.473	4.286	6.124	6.054	5.477	4.286	6.127	170-180	0.4745	1808	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

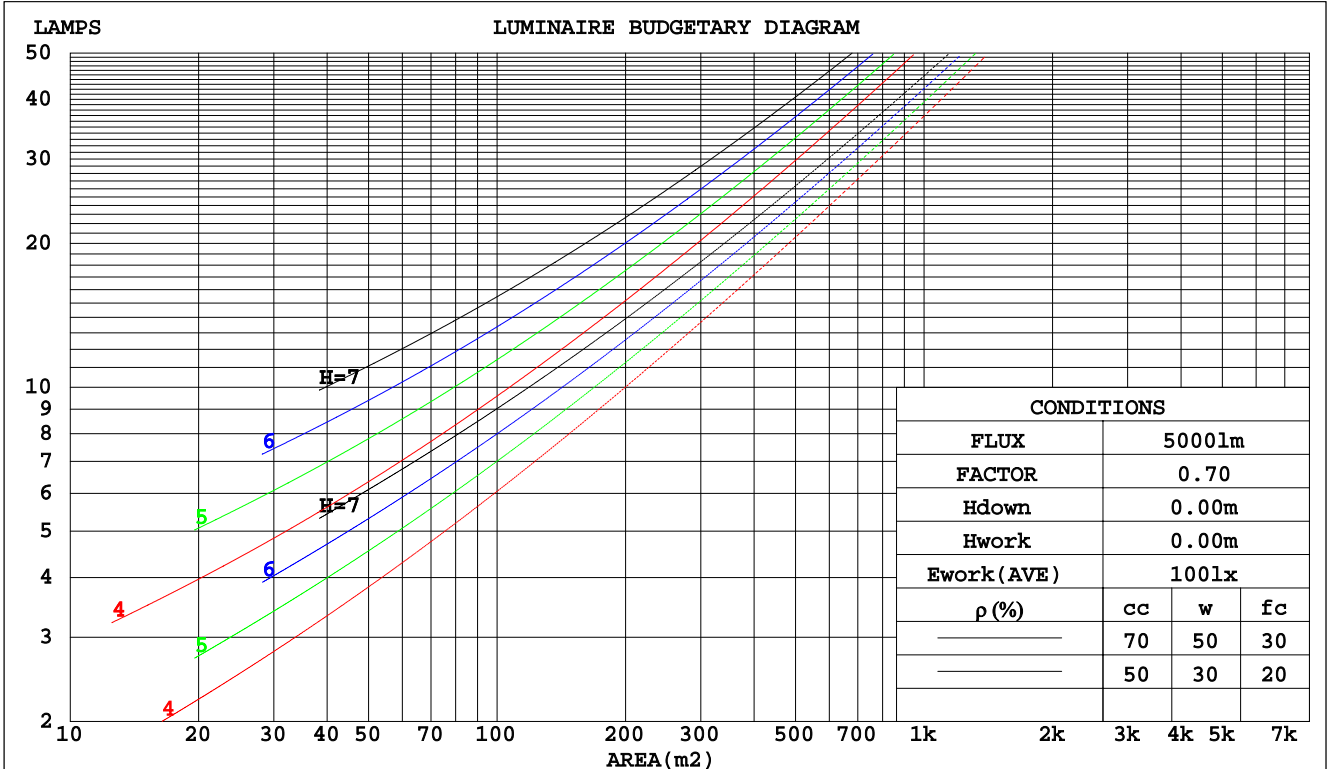
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-03-21

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.1583A P:18.55W PF:0.9767 Lamp Flux:1807.84x1 lm		
NAME: ASD-OLCLS-2D18CC-BK/BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.08	1.08	1.08	.00	.00	.00	.85	.85	.85	.71	.71	.71	.59	.59	.59	.53
1.0	.85	.78	.73	.78	.72	.67	.65	.60	.56	.53	.49	.46	.42	.39	.37	.31
2.0	.70	.62	.54	.64	.56	.50	.53	.47	.41	.42	.38	.33	.33	.29	.26	.21
3.0	.60	.50	.42	.54	.46	.39	.45	.38	.32	.35	.30	.25	.27	.23	.19	.15
4.0	.52	.41	.34	.47	.38	.31	.38	.31	.25	.30	.25	.20	.23	.18	.15	.11
5.0	.45	.35	.28	.41	.32	.25	.33	.26	.21	.26	.21	.16	.20	.15	.12	.08
6.0	.40	.30	.23	.36	.27	.21	.30	.23	.17	.23	.18	.13	.18	.13	.10	.06
7.0	.35	.26	.20	.32	.24	.18	.26	.20	.15	.21	.15	.11	.16	.11	.08	.05
8.0	.32	.23	.17	.29	.21	.15	.24	.17	.12	.19	.14	.10	.14	.10	.07	.04
9.0	.29	.20	.15	.26	.19	.13	.22	.15	.11	.17	.12	.08	.13	.09	.06	.03
10.0	.26	.18	.13	.24	.17	.12	.20	.14	.09	.16	.11	.07	.12	.08	.05	.03



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022-03-21

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity: 65.0%  
 Test Distance: 7.500m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.1583A P:18.55W PF:0.9767 Lamp Flux:1807.84x1 lm		
NAME: ASD-OLCLS-2D18CC-BK/BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.458	.260	.082	.436	.249	.079	.395	.227	.072	.358	.206	.066	.323	.187	.060	
2.0	.375	.205	.063	.355	.195	.060	.317	.176	.055	.283	.159	.050	.251	.142	.045	
3.0	.322	.172	.051	.304	.163	.049	.270	.146	.044	.238	.131	.040	.209	.116	.036	
4.0	.284	.148	.043	.267	.140	.041	.236	.125	.037	.207	.111	.034	.180	.098	.030	
5.0	.254	.129	.037	.239	.123	.036	.210	.109	.032	.183	.097	.029	.158	.085	.025	
6.0	.230	.115	.033	.216	.109	.031	.190	.097	.028	.165	.086	.025	.142	.075	.022	
7.0	.210	.104	.029	.197	.098	.028	.173	.087	.025	.150	.077	.022	.128	.067	.020	
8.0	.193	.095	.027	.182	.089	.025	.159	.079	.023	.137	.070	.020	.117	.060	.018	
9.0	.179	.087	.024	.168	.082	.023	.147	.073	.021	.127	.064	.018	.108	.055	.016	
10.0	.167	.080	.022	.156	.076	.021	.137	.067	.019	.118	.059	.017	.100	.050	.014	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.551	.551	.551	.471	.471	.471	.322	.322	.322	.185	.185	.185	.059	.059	.059	
1.0	.554	.519	.486	.474	.445	.419	.324	.306	.290	.187	.177	.168	.060	.057	.054	
2.0	.549	.498	.454	.471	.428	.393	.322	.296	.274	.186	.172	.161	.060	.056	.052	
3.0	.543	.483	.435	.465	.416	.377	.319	.289	.265	.184	.169	.156	.059	.055	.051	
4.0	.535	.471	.423	.459	.407	.367	.316	.284	.259	.183	.166	.153	.059	.054	.050	
5.0	.527	.463	.415	.453	.400	.361	.312	.280	.255	.181	.164	.151	.058	.054	.050	
6.0	.520	.455	.409	.447	.394	.356	.308	.276	.252	.179	.162	.150	.058	.053	.049	
7.0	.513	.449	.405	.441	.389	.353	.305	.273	.250	.177	.161	.149	.057	.053	.049	
8.0	.506	.444	.402	.436	.385	.350	.301	.270	.248	.175	.160	.148	.057	.052	.049	
9.0	.500	.440	.399	.430	.382	.348	.298	.268	.247	.174	.158	.147	.056	.052	.049	
10.0	.494	.436	.397	.426	.378	.346	.295	.266	.246	.172	.157	.147	.056	.052	.049	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-03-21

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.1583A P:18.55W PF:0.9767 Lamp Flux:1807.84x1 lm										
NAME: ASD-OLCLS-2D18CC-BK/BZ 5000K					TYPE:LED			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: ASD Lighting corp					SUR.:			PROTECTION ANGLE:		
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	16.4	17.5	17.2	18.4	19.6	-7.7	-6.5	-6.9	-5.7	-4.5
3H	21.7	22.8	22.6	23.7	24.9	-5.8	-4.8	-5.0	-3.8	-2.7
4H	24.2	25.2	25.1	26.1	27.3	-4.6	-3.6	-3.8	-2.7	-1.5
6H	26.6	27.6	27.5	28.5	29.7	-3.2	-2.3	-2.3	-1.3	-0.1
8H	27.8	28.7	28.7	29.7	30.9	-2.4	-1.5	-1.5	-0.6	0.6
12H	29.1	30.0	30.0	31.0	32.2	-1.6	-0.7	-0.6	0.3	1.5
4H 2H	16.4	17.4	17.3	18.3	19.5	8.5	9.5	9.3	10.4	11.6
3H	22.5	23.4	23.4	24.4	25.6	9.0	9.9	9.9	10.8	12.0
4H	25.2	26.0	26.1	26.9	28.2	8.9	9.7	9.8	10.6	11.9
6H	27.8	28.6	28.8	29.5	30.8	8.8	9.5	9.7	10.5	11.7
8H	29.4	30.1	30.3	31.1	32.3	8.8	9.4	9.7	10.4	11.7
12H	30.9	31.6	31.9	32.6	33.9	8.8	9.4	9.7	10.4	11.7
8H 4H	25.3	26.0	26.2	26.9	28.2	16.9	17.6	17.8	18.6	19.8
6H	28.3	28.8	29.2	29.8	31.1	16.9	17.5	17.9	18.5	19.8
8H	30.1	30.7	31.1	31.7	33.0	16.9	17.4	17.8	18.4	19.7
12H	32.3	32.7	33.2	33.7	35.1	16.8	17.3	17.8	18.3	19.6
12H 4H	25.2	25.8	26.1	26.8	28.1	18.7	19.3	19.7	20.3	21.6
6H	28.2	28.8	29.2	29.8	31.1	19.2	19.7	20.2	20.7	22.0
8H	30.2	30.7	31.2	31.7	33.0	19.3	19.8	20.3	20.8	22.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.2 / - 0.1				
1.5H	+ 0.4 / - 0.4					+ 0.2 / - 0.2				
2.0H	+ 0.5 / - 0.4					+ 1.1 / - 0.7				

CIE Pub.117 Corrected 1808 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.1)

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-03-21

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

## UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.1583A P:18.55W PF:0.9767 Lamp Flux:1807.84x1 lm		
NAME: ASD-OLCLS-2D18CC-BK/BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

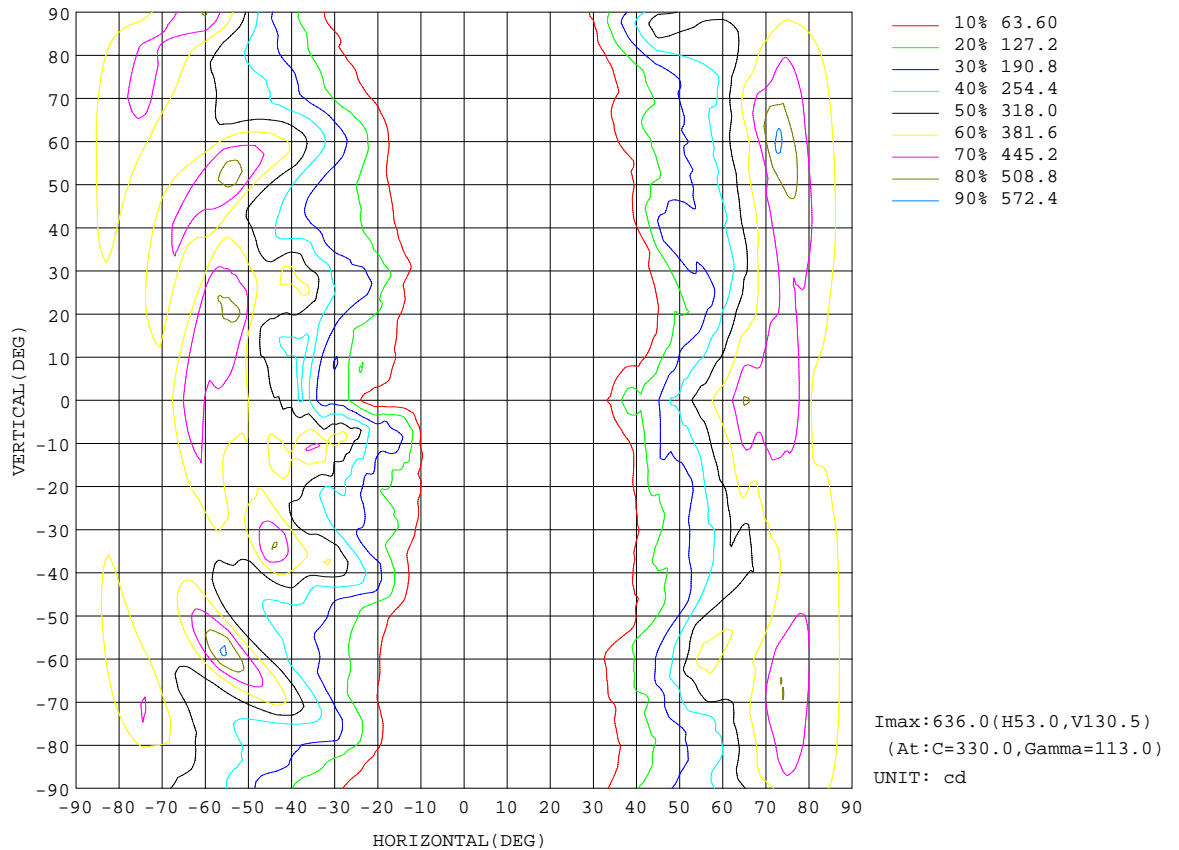
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	33	20	12	31	19	12	28	17	11	3
0.80	41	26	18	39	25	17	34	23	15	6
1.00	48	33	23	45	31	22	39	30	20	8
1.25	55	40	29	51	37	28	44	33	25	11
1.50	61	45	35	56	43	33	48	37	29	14
2.00	69	54	44	64	51	41	54	44	36	18
2.50	74	61	51	68	57	47	58	49	41	22
3.00	78	66	56	72	62	53	61	53	46	25
4.00	84	73	65	78	68	60	66	58	52	29
5.00	88	79	71	81	73	66	69	62	56	32
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-03-21

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.1583A P:18.55W PF:0.9767 Lamp Flux:1807.84x1 lm		
NAME: ASD-OLCLS-2D18CC-BK/BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

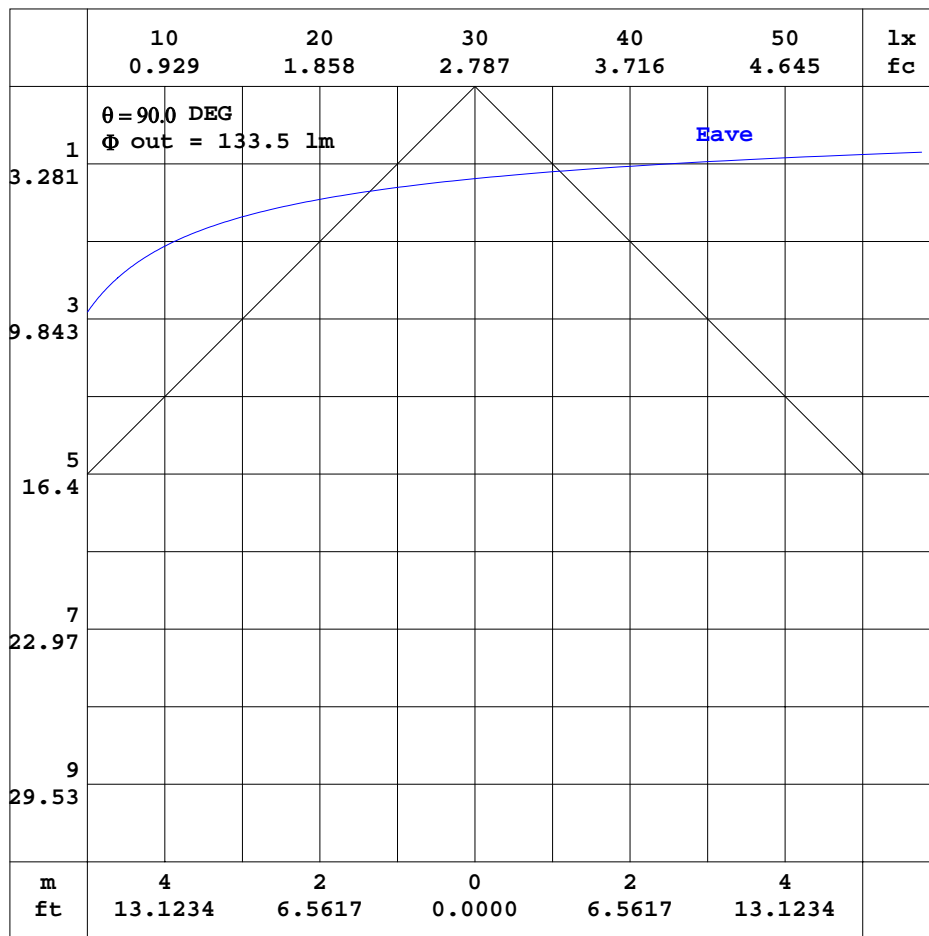


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-03-21

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

AAI CURVES

Test:U:120.0V I:0.1583A P:18.55W PF:0.9767 Lamp Flux:1807.84x1 lm		
NAME: ASD-OLCLS-2D18CC-BK/BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

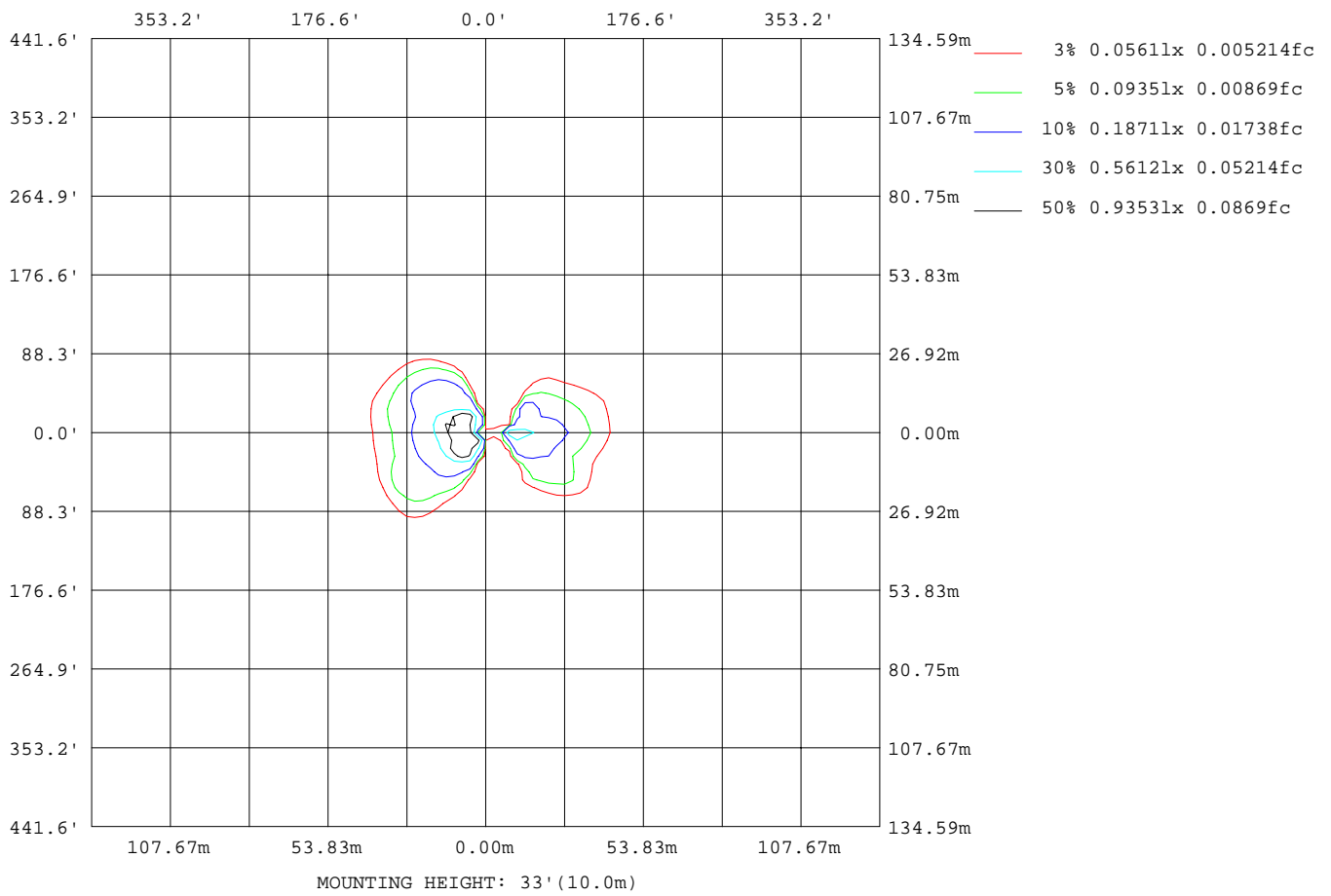
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022-03-21

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity: 65.0%  
 Test Distance: 7.500m [K=1.0000]  
 Remarks:



ISOLUX DIAGRAM

Test:U:120.0V I:0.1583A P:18.55W PF:0.9767 Lamp Flux:1807.84x1 lm		
NAME: ASD-OLCLS-2D18CC-BK/BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-03-21

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:120.0V I:0.1583A P:18.55W PF:0.9767 Lamp Flux:1807.84x1 lm		
NAME: ASD-OLCLS-2D18CC-BK/BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

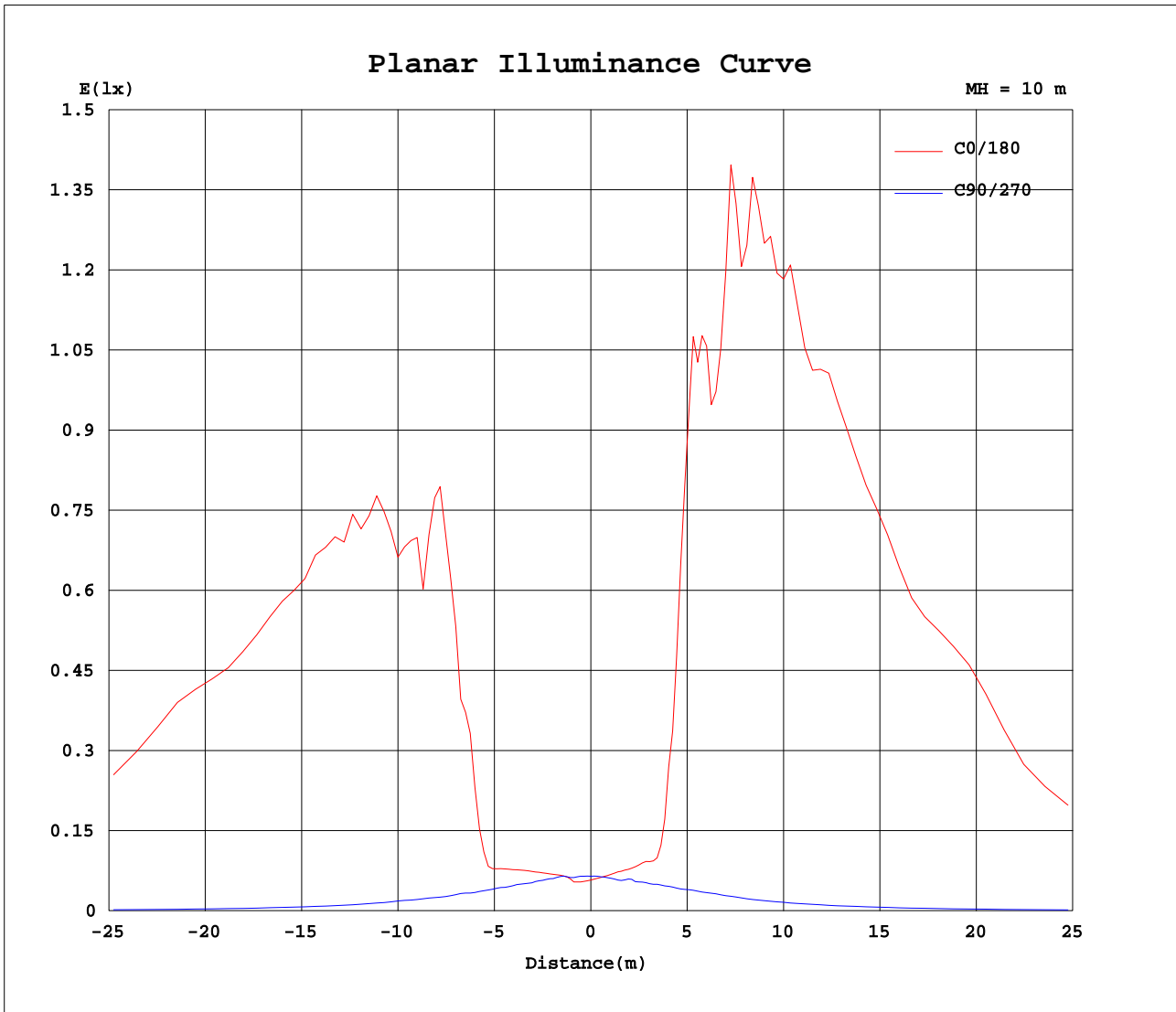
AvgL	cd/m2
L_0~180(65)av	11424
L_0~180(75)av	15966
L_0~180(85)av	41371
L_90~270(65)av	89
L_90~270(75)av	131
L_90~270(85)av	369
L_45(65)av	4901
L_45(75)av	8707
L_45(85)av	24759

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-03-21

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022-03-21

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity: 65.0%  
 Test Distance: 7.500m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.1583A P:18.55W PF:0.9767 Lamp Flux:1807.84x1 lm		
NAME: ASD-OLCLS-2D18CC-BK/BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	5.77	6.92	6.91	6.43	6.76	6.50	6.49	7.14	7.68	8.21	8.66	8.55	5.77	6.92	6.91	6.43	6.76	6.50	6.49
5	5.46	5.93	5.87	5.59	6.14	6.07	6.30	7.75	8.61	9.42	10.2	10.3	6.70	8.15	7.93	7.24	7.63	6.75	6.28
10	7.08	5.37	5.25	5.04	5.74	6.05	6.54	8.42	10.2	19.0	33.3	34.4	7.99	10.1	9.48	8.49	7.72	6.97	6.06
15	8.00	6.64	5.11	4.60	5.03	5.49	6.26	8.24	21.6	73.3	168	138	9.97	21.8	20.8	9.72	9.65	7.38	5.99
20	9.18	7.53	6.66	4.66	4.55	4.99	6.02	8.34	47.8	129	238	193	14.8	101	78.7	36.7	19.0	7.62	5.82
25	10.6	8.73	7.52	6.13	4.20	4.61	5.86	9.29	85.1	134	207	328	87.2	134	115	86.0	48.3	7.43	5.51
30	23.7	10.0	8.72	6.87	4.03	4.29	5.58	10.3	123	140	242	400	166	185	126	141	66.2	7.64	5.42
35	96.9	11.8	9.93	7.83	4.69	4.04	5.51	11.5	130	201	288	453	218	208	210	226	111	7.75	5.18
40	157	49.7	11.4	9.00	5.72	3.82	5.31	11.9	155	215	265	401	306	242	311	204	101	7.54	4.74
45	187	137	25.9	10.2	6.39	3.70	5.20	11.5	226	368	274	424	335	256	394	177	108	7.38	4.50
50	269	166	78.0	11.6	7.20	3.64	4.72	10.2	158	339	442	360	382	328	386	172	120	7.18	4.25
55	353	172	152	15.9	7.97	3.78	4.38	9.73	121	239	487	336	422	519	273	176	125	7.23	4.05
60	414	257	151	44.7	8.89	4.85	4.16	8.11	119	227	281	408	441	512	304	240	170	6.86	3.76
65	517	298	189	136	9.66	5.31	3.92	8.30	133	250	274	349	449	349	387	363	182	6.57	3.59
70	498	290	352	148	10.6	5.69	3.71	7.86	135	303	458	348	352	405	537	348	135	6.20	3.39
75	475	334	396	129	11.3	6.11	3.53	7.22	190	412	469	348	352	425	340	245	92.3	5.72	3.22
80	394	423	300	136	12.4	6.59	3.41	6.81	197	234	274	345	354	347	325	237	75.5	5.41	3.13
85	365	506	250	136	16.4	7.11	3.30	6.15	111	225	288	450	357	468	336	205	67.6	5.09	3.12
90	364	412	267	170	31.8	7.62	3.23	5.69	71.5	156	303	331	353	351	519	197	38.5	4.57	3.42
95	367	358	321	359	58.1	8.21	3.26	5.28	49.4	172	457	312	348	313	343	280	18.2	4.33	4.28
100	367	452	466	307	68.2	8.67	3.69	4.73	20.0	131	354	320	345	340	244	219	8.32	4.00	4.67
105	364	357	299	208	69.5	9.08	4.47	4.37	9.11	186	238	271	331	468	250	148	7.80	3.74	5.02
110	406	480	290	185	93.5	9.52	4.73	3.99	8.31	172	182	250	311	481	209	112	7.61	3.47	5.38
115	473	503	302	173	98.1	9.59	4.38	3.64	7.03	70.1	141	232	303	339	157	84.9	6.62	3.34	5.57
120	360	304	497	197	83.6	8.65	4.05	3.42	6.22	23.4	135	197	252	223	178	58.5	6.13	3.12	5.11
125	308	293	338	329	73.3	6.96	4.94	3.26	5.39	9.34	72.7	187	240	158	228	12.5	5.19	3.00	4.33
130	276	323	252	241	51.7	5.65	4.98	3.20	4.62	7.65	23.6	145	210	154	101	9.49	4.50	3.03	5.13
135	260	293	278	135	27.1	5.16	4.26	3.29	3.13	6.77	9.74	29.9	161	92.1	27.8	7.45	3.34	3.59	5.82
140	180	362	189	131	14.6	4.88	4.22	3.29	3.20	5.30	8.03	10.6	130	29.9	10.1	6.92	3.03	3.65	5.27
145	128	347	157	107	9.49	4.79	5.03	3.37	3.29	3.74	6.29	8.74	75.0	10.4	8.17	4.94	3.22	3.46	4.49
150	132	221	165	55.7	10.5	4.70	5.41	3.61	3.32	3.77	4.62	7.27	17.4	8.75	6.04	3.57	3.27	3.45	4.59
155	23.0	112	59.4	10.3	6.53	4.60	3.98	3.62	3.47	3.88	4.67	5.00	10.6	5.92	4.31	3.73	3.34	3.56	5.00
160	6.81	11.0	12.8	8.83	5.29	4.52	4.02	3.79	3.69	4.14	4.58	5.28	6.19	4.95	4.79	3.71	3.44	3.59	4.07
165	5.92	6.70	5.90	5.36	4.94	4.44	4.07	3.93	4.17	4.26	4.78	5.08	6.18	4.99	4.47	3.86	3.82	3.77	4.16
170	5.42	5.56	5.48	5.13	4.78	4.41	4.16	4.12	4.21	4.54	5.01	5.21	5.27	5.09	4.63	4.07	3.88	3.95	4.22
175	5.35	5.41	5.28	4.87	4.63	4.36	4.23	4.31	4.53	4.88	5.41	5.63	5.29	5.20	4.84	4.33	4.14	4.13	4.29
180	6.05	6.21	6.01	5.47	4.49	4.27	4.29	4.50	5.70	6.12	6.37	6.89	6.05	6.21	6.00	5.48	4.51	4.27	4.29

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-03-21

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

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NAME: ASD-OLCLS-2D18CC-BK/BZ 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C( DEG) γ (DEG)	285	300	315	330	345														
0	7.14	7.68	8.21	8.66	8.55														
5	6.51	6.80	7.17	7.47	7.31														
10	6.23	6.06	6.19	6.39	6.29														
15	5.82	5.53	5.68	5.68	5.65														
20	5.40	5.10	5.18	5.47	6.73														
25	5.00	4.83	5.19	6.97	7.62														
30	4.74	4.75	6.77	7.91	8.79														
35	4.44	5.45	7.72	9.13	10.1														
40	4.15	6.59	8.91	10.3	11.5														
45	3.94	7.25	10.4	12.3	49.2														
50	3.89	7.67	11.8	38.4	105														
55	4.80	8.58	12.4	145	127														
60	5.29	9.82	35.5	229	163														
65	5.75	9.88	79.1	182	223														
70	6.20	10.8	127	215	307														
75	6.47	12.5	116	246	418														
80	6.91	26.0	150	250	551														
85	7.62	45.9	297	261	490														
90	7.93	67.3	304	351	371														
95	8.42	109	254	595	348														
100	9.06	115	283	385	363														
105	9.65	156	252	339	364														
110	10.3	172	305	473	360														
115	8.82	224	434	568	356														
120	7.46	154	268	287	467														
125	6.98	107	221	286	537														
130	6.40	81.7	182	306	320														
135	5.83	56.2	160	452	283														
140	5.34	21.8	227	372	261														
145	5.06	9.86	117	219	228														
150	4.98	18.7	64.2	150	190														
155	4.89	7.19	61.3	104	125														
160	4.82	5.91	23.4	64.5	50.4														
165	4.78	5.46	6.58	10.8	25.4														
170	4.73	5.32	5.94	6.24	6.04														
175	4.65	5.14	5.65	5.83	5.75														
180	4.49	5.71	6.13	6.42	6.98														

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-03-21

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
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