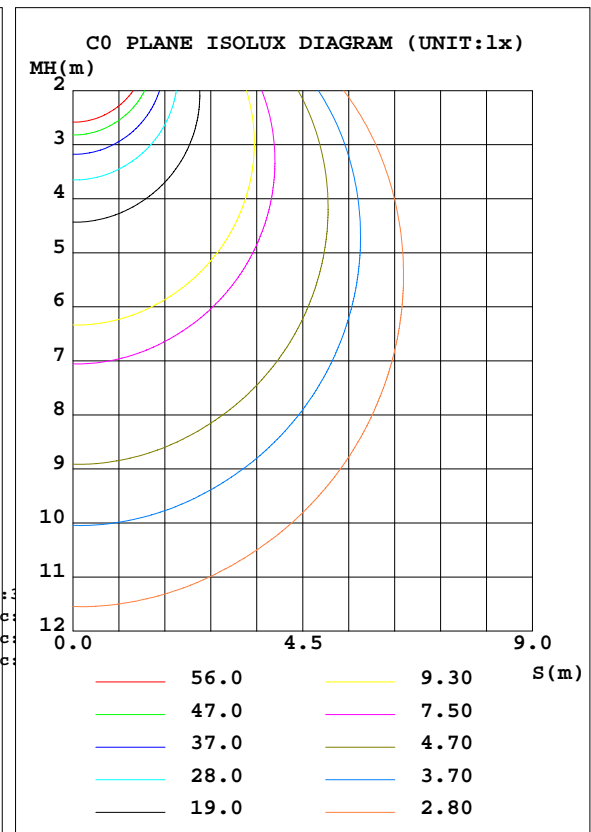
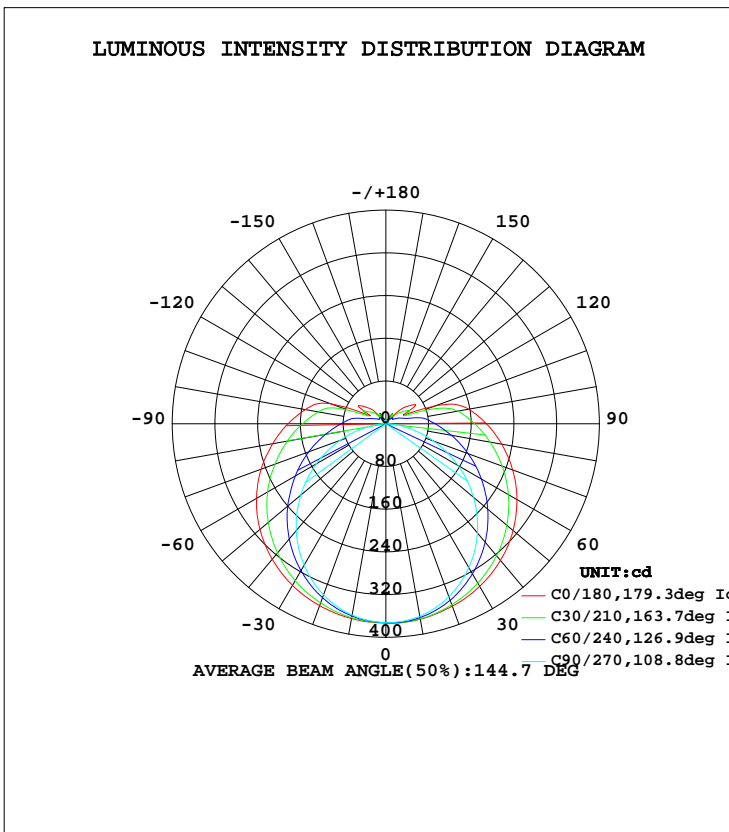


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1832A P:20W PF:0.9356 Lamp Flux:1713.39x1 lm		
NAME: ASD-LVF23-18D20CC-NK 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85,7 lm/W			
MODEL	ASD-LVF23-18D20CC-NK	I <sub>max</sub> (cd)	373.8	S/MH(C0/180)	1.41
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1713.4	η UP, DN(C0-180)	7.9,42.4
NOMINAL FLUX(lm)	1713.39	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	8.0,41.7
LAMPS INSIDE	1	η up(%)	15.9	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down(%)	84.1	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-04-08

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	371.6	370.2	366.0	368.1	370.5	367.0	363.7	367.9	0- 10	35.38	35.38	2.06,2.06
20	363.5	356.8	344.9	353.1	362.5	351.7	341.0	352.0	10- 20	102.2	137.6	8.03,8.03
30	351.6	335.4	311.0	329.5	349.7	328.3	306.0	327.5	20- 30	158.1	295.7	17.3,17.3
40	334.1	307.9	267.0	298.6	331.2	298.7	261.0	297.1	30- 40	197.6	493.3	28.8,28.8
50	311.1	275.2	214.5	262.4	308.0	264.5	207.7	262.1	40- 50	217.8	711.1	41.5,41.5
60	283.5	239.5	156.2	223.0	280.0	228.0	150.6	224.8	50- 60	218.2	929.3	54.2,54.2
70	252.8	201.8	94.98	184.1	248.5	190.8	90.96	187.1	60- 70	201.2	1131	66,66
80	220.5	166.3	38.58	147.2	215.1	155.3	36.10	151.5	70- 80	171.9	1302	76,76
90	188.4	134.5	6.050	115.7	183.3	124.5	6.142	119.8	80- 90	138.4	1441	84.1,84.1
100	157.9	106.8	4.418	90.58	153.4	98.93	5.071	93.06	90-100	109.5	1550	90.5,90.5
110	96.39	41.13	4.479	30.49	109.0	38.35	4.872	36.50	100-110	74.92	1625	94.9,94.9
120	57.01	32.94	4.898	25.96	45.40	30.73	5.080	29.90	110-120	32.56	1658	96.8,96.8
130	50.01	19.46	5.484	16.06	48.65	20.04	5.774	18.40	120-130	25.81	1684	98.3,98.3
140	11.16	21.68	5.599	18.48	16.69	21.48	5.650	18.75	130-140	14.10	1698	99.1,99.1
150	17.11	10.95	5.927	10.43	22.58	11.93	5.788	10.46	140-150	8.348	1706	99.6,99.6
160	8.128	8.025	6.170	9.223	8.733	10.57	5.819	10.35	150-160	4.598	1711	99.8,99.8
170	7.817	5.843	6.077	7.088	9.024	7.710	6.008	7.107	160-170	2.123	1713	100,100
180	6.335	6.470	6.328	6.628	6.343	6.497	6.324	6.628	170-180	0.6361	1713	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

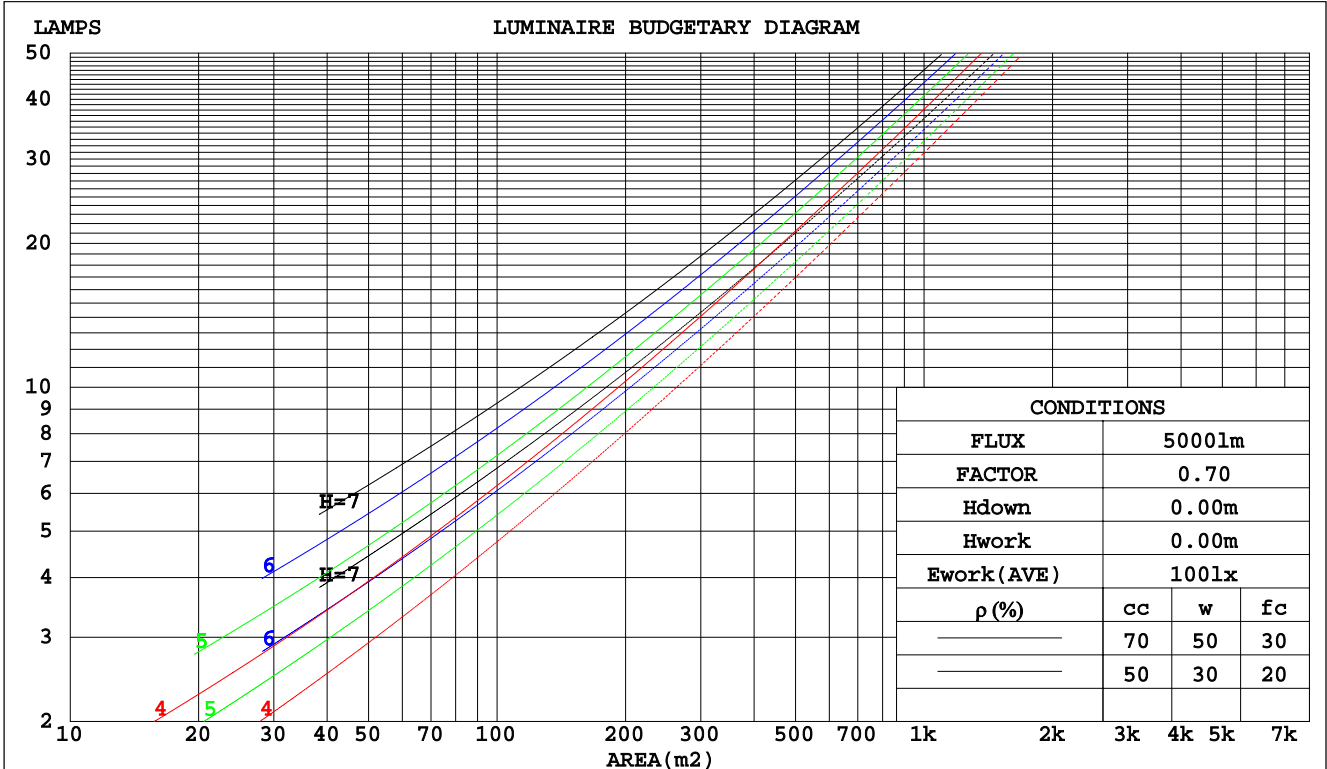
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-04-08

$\gamma$  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:0.1832A P:20W PF:0.9356 Lamp Flux:1713.39x1 lm		
NAME: ASD-LVF23-18D20CC-NK 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.15	1.15	1.15	1.11	1.11	1.11	1.02	1.02	1.02	.95	.95	.95	.87	.87	.87	.84
1.0	.96	.90	.85	.92	.87	.82	.84	.80	.77	.78	.75	.72	.72	.69	.67	.63
2.0	.82	.74	.67	.78	.71	.65	.72	.66	.61	.66	.61	.57	.61	.57	.53	.50
3.0	.71	.62	.54	.68	.59	.53	.63	.55	.50	.58	.52	.47	.53	.48	.44	.41
4.0	.62	.52	.45	.60	.51	.44	.55	.48	.42	.51	.44	.39	.47	.41	.37	.34
5.0	.55	.45	.38	.53	.44	.37	.49	.41	.35	.45	.39	.34	.42	.36	.32	.29
6.0	.49	.40	.33	.47	.39	.32	.44	.36	.31	.41	.34	.29	.38	.32	.28	.25
7.0	.44	.35	.29	.43	.34	.28	.40	.32	.27	.37	.30	.26	.34	.29	.24	.22
8.0	.40	.32	.25	.39	.31	.25	.36	.29	.24	.34	.27	.23	.31	.26	.22	.19
9.0	.37	.28	.23	.36	.28	.22	.33	.26	.21	.31	.25	.20	.29	.23	.19	.17
10.0	.34	.26	.20	.33	.25	.20	.31	.24	.19	.29	.23	.18	.27	.21	.18	.16



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022-04-08

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:0.1832A P:20W PF:0.9356 Lamp Flux:1713.39x1 lm		
NAME: ASD-LVF23-18D20CC-NK 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	.395	.224	.071	.382	.218	.069	.360	.206	.066	.339	.195	.063	.320	.185	.060	
2.0	.340	.186	.057	.329	.181	.056	.308	.171	.053	.289	.162	.051	.272	.154	.048	
3.0	.301	.160	.048	.291	.156	.047	.272	.148	.045	.255	.140	.043	.239	.133	.041	
4.0	.270	.140	.041	.261	.137	.040	.245	.130	.039	.229	.123	.037	.214	.117	.035	
5.0	.245	.125	.036	.237	.122	.035	.222	.116	.034	.208	.110	.033	.195	.104	.031	
6.0	.224	.112	.032	.217	.110	.032	.203	.104	.030	.190	.099	.029	.178	.094	.028	
7.0	.207	.102	.029	.200	.100	.028	.187	.095	.027	.176	.090	.026	.165	.085	.025	
8.0	.192	.094	.026	.185	.091	.026	.174	.087	.025	.163	.083	.024	.153	.078	.023	
9.0	.178	.086	.024	.173	.084	.024	.162	.080	.023	.152	.076	.022	.143	.073	.021	
10.0	.167	.080	.022	.162	.078	.022	.152	.074	.021	.143	.071	.020	.134	.067	.019	

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	.312	.312	.312	.266	.266	.266	.182	.182	.182	.104	.104	.104	.033	.033	.033	
1.0	.308	.278	.250	.264	.238	.215	.180	.164	.149	.104	.095	.086	.033	.031	.028	
2.0	.302	.255	.215	.258	.219	.186	.177	.152	.130	.102	.088	.076	.033	.029	.025	
3.0	.294	.238	.194	.252	.205	.168	.173	.143	.118	.100	.083	.069	.032	.027	.023	
4.0	.286	.226	.179	.246	.195	.156	.169	.136	.110	.098	.080	.065	.031	.026	.021	
5.0	.278	.216	.170	.239	.187	.148	.165	.130	.104	.095	.077	.062	.031	.025	.020	
6.0	.271	.208	.163	.233	.180	.142	.161	.126	.100	.093	.074	.060	.030	.024	.020	
7.0	.264	.201	.157	.227	.174	.137	.157	.122	.097	.091	.072	.058	.029	.024	.019	
8.0	.257	.196	.154	.221	.170	.134	.153	.119	.095	.089	.070	.057	.029	.023	.019	
9.0	.251	.191	.150	.216	.166	.131	.150	.116	.093	.087	.069	.056	.028	.023	.018	
10.0	.245	.187	.148	.211	.162	.129	.146	.114	.092	.085	.067	.055	.028	.022	.018	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-04-08

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:0.1832A P:20W PF:0.9356 Lamp Flux:1713.39x1 lm										
NAME: ASD-LVF23-18D20CC-NK 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	18.2	19.6	18.7	20.1	20.6	15.8	17.2	16.3	17.7	18.2
3H	21.0	22.3	21.5	22.8	23.4	17.3	18.6	17.8	19.1	19.7
4H	22.5	23.8	23.1	24.3	24.9	17.9	19.2	18.5	19.7	20.3
6H	24.2	25.4	24.7	25.9	26.5	18.4	19.6	19.0	20.1	20.7
8H	25.1	26.3	25.7	26.8	27.4	18.6	19.7	19.1	20.2	20.9
12H	26.2	27.3	26.8	27.8	28.5	18.7	19.7	19.2	20.3	21.0
4H 2H	18.8	20.1	19.3	20.6	21.2	17.1	18.3	17.6	18.9	19.5
3H	21.8	22.9	22.4	23.5	24.1	19.0	20.0	19.5	20.6	21.3
4H	23.6	24.6	24.2	25.2	25.8	19.8	20.8	20.4	21.4	22.1
6H	25.5	26.4	26.1	27.0	27.7	20.5	21.4	21.1	22.0	22.7
8H	26.5	27.4	27.2	28.0	28.7	20.7	21.6	21.4	22.2	22.9
12H	27.7	28.5	28.4	29.2	29.9	20.9	21.7	21.6	22.4	23.1
8H 4H	23.9	24.8	24.6	25.4	26.1	21.0	21.9	21.7	22.5	23.2
6H	26.2	26.9	26.8	27.6	28.3	22.2	22.9	22.8	23.6	24.3
8H	27.5	28.1	28.1	28.8	29.6	22.7	23.3	23.4	24.0	24.8
12H	28.9	29.5	29.6	30.2	31.0	23.1	23.7	23.8	24.4	25.2
12H 4H	24.0	24.8	24.6	25.4	26.2	21.4	22.2	22.1	22.9	23.6
6H	26.3	27.0	27.0	27.6	28.4	22.8	23.5	23.5	24.2	24.9
8H	27.7	28.3	28.4	29.0	29.8	23.6	24.1	24.3	24.8	25.6
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	+ 0.3 / - 0.4					+ 0.2 / - 0.4				

CIE Pub.117 Corrected 1713 lm Total Lamp Luminous Flux.(8log(F/F0) = 1.9)

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-04-08

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:0.1832A P:20W PF:0.9356 Lamp Flux:1713.39x1 lm		
NAME: ASD-LVF23-18D20CC-NK 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

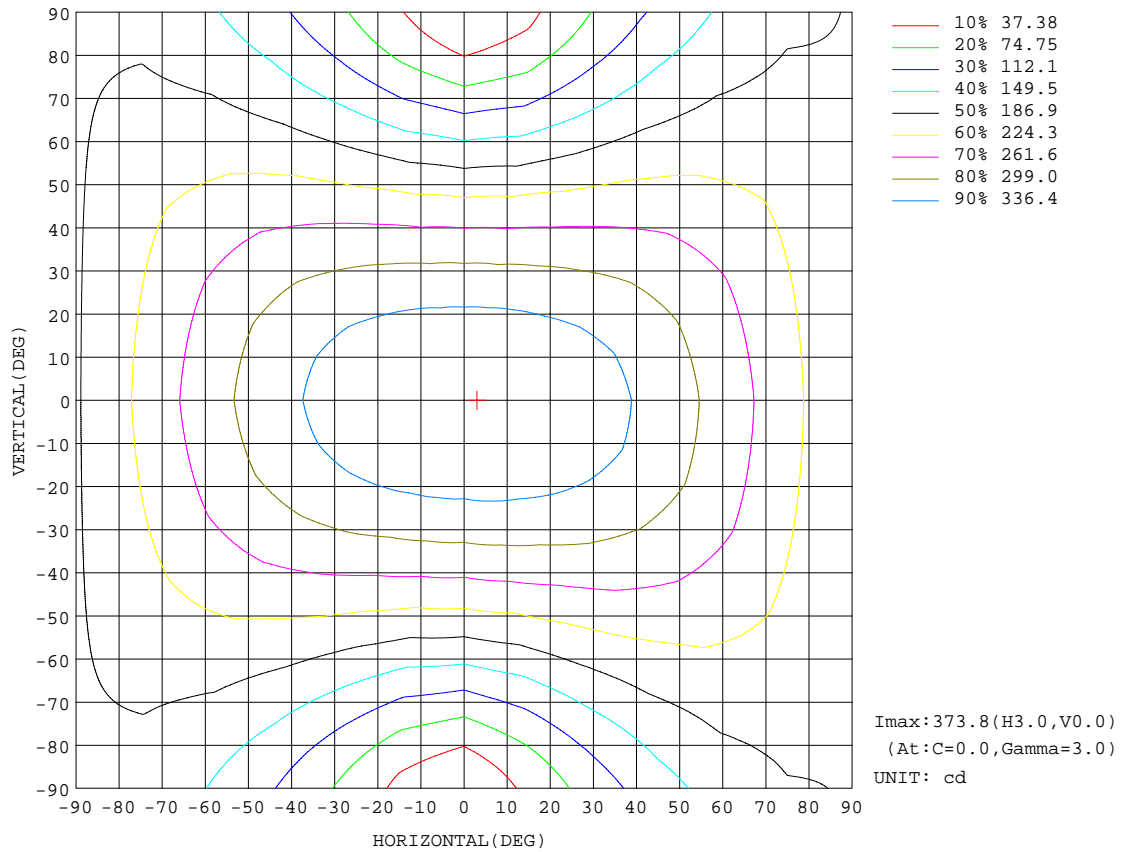
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	48	35	28	47	35	28	45	34	27	21
0.80	57	44	36	56	43	35	53	42	35	27
1.00	65	52	43	63	51	43	60	51	42	33
1.25	72	59	50	69	58	49	65	55	48	39
1.50	77	64	56	74	63	55	70	60	53	43
2.00	84	73	64	81	71	63	76	67	60	49
2.50	88	78	70	85	76	68	79	72	65	53
3.00	92	83	75	89	80	73	83	76	70	57
4.00	97	89	82	93	86	80	87	81	75	62
5.00	100	93	87	96	90	84	89	84	79	65
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:2022-04-08

$\gamma$  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:0.1832A P:20W PF:0.9356 Lamp Flux:1713.39x1 lm		
NAME: ASD-LVF23-18D20CC-NK 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

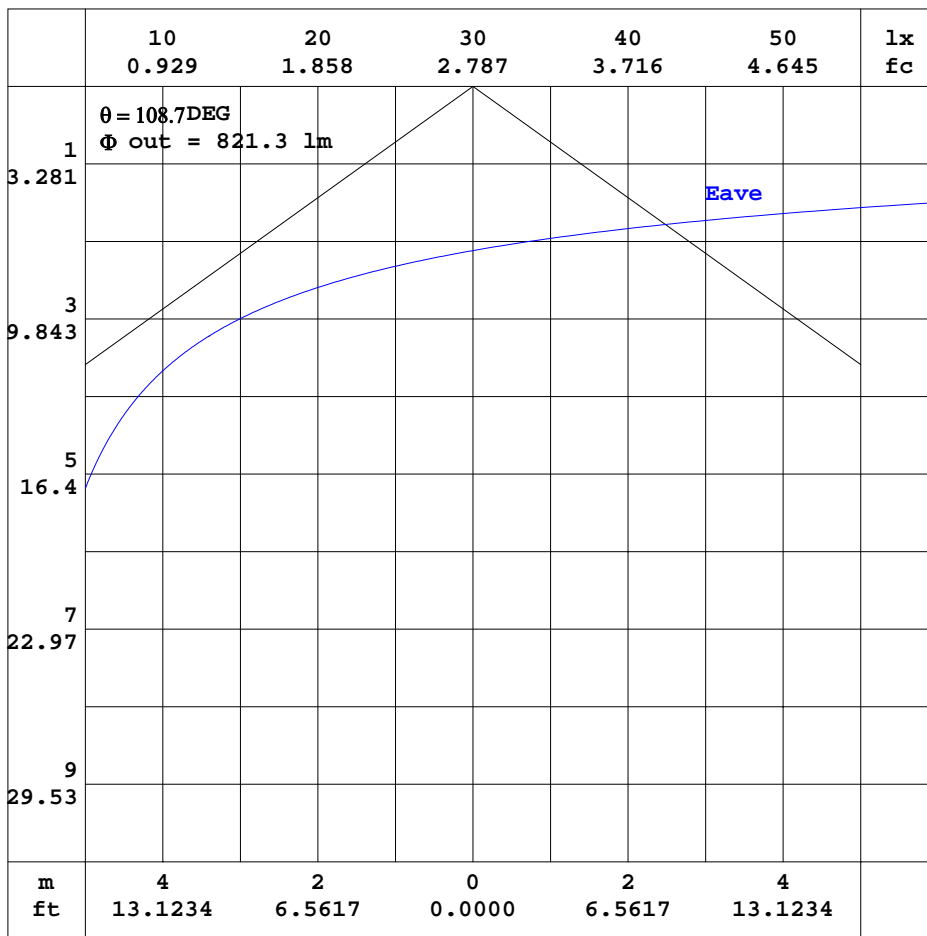


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022-04-08

$\gamma$  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:0.1832A P:20W PF:0.9356 Lamp Flux:1713.39x1 lm		
NAME: ASD-LVF23-18D20CC-NK 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.

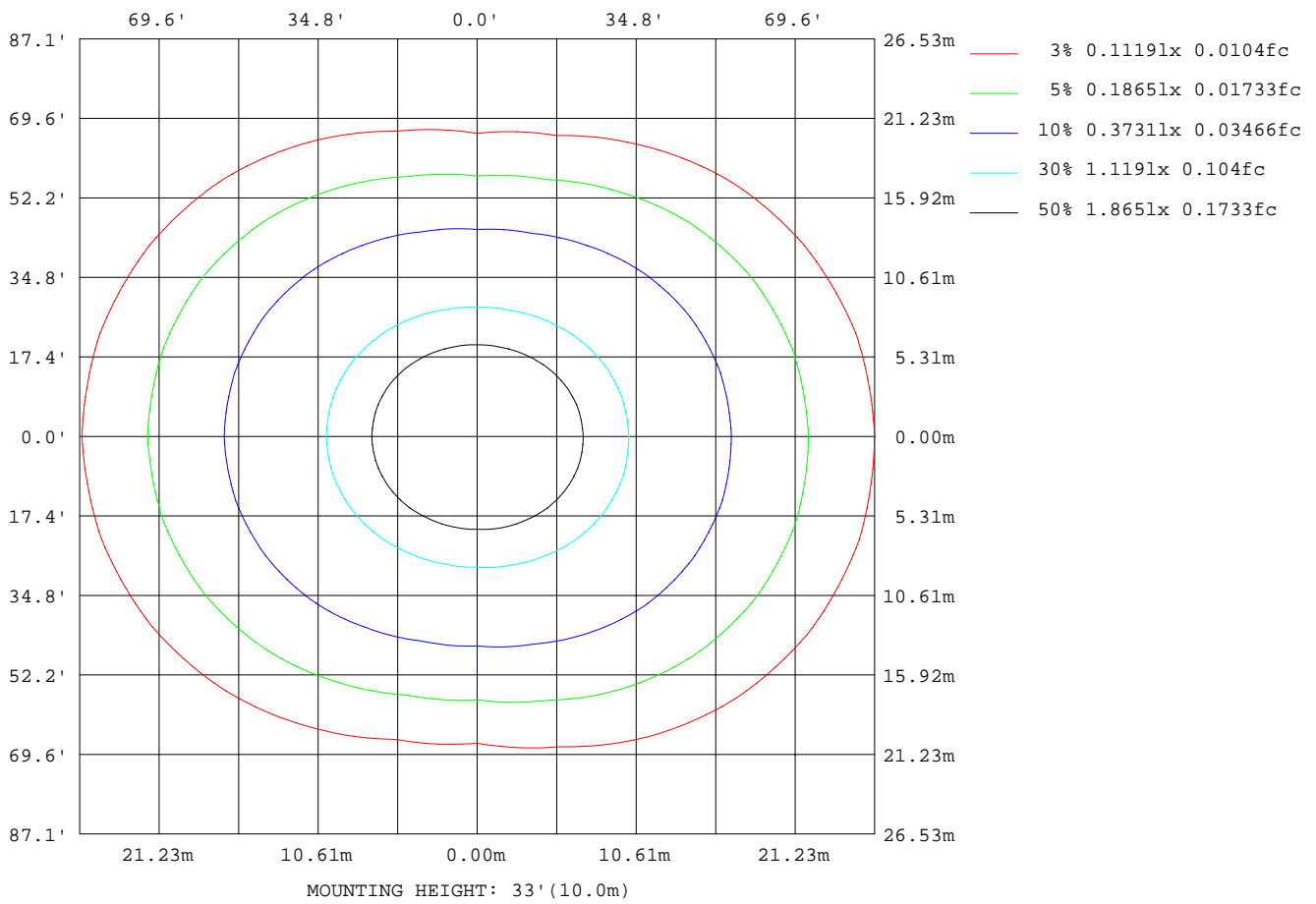
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-04-08

$\gamma$  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:0.1832A P:20W PF:0.9356 Lamp Flux:1713.39x1 lm		
NAME: ASD-LVF23-18D20CC-NK 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:2022-04-08

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:0.1832A P:20W PF:0.9356 Lamp Flux:1713.39x1 lm		
NAME: ASD-LVF23-18D20CC-NK 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

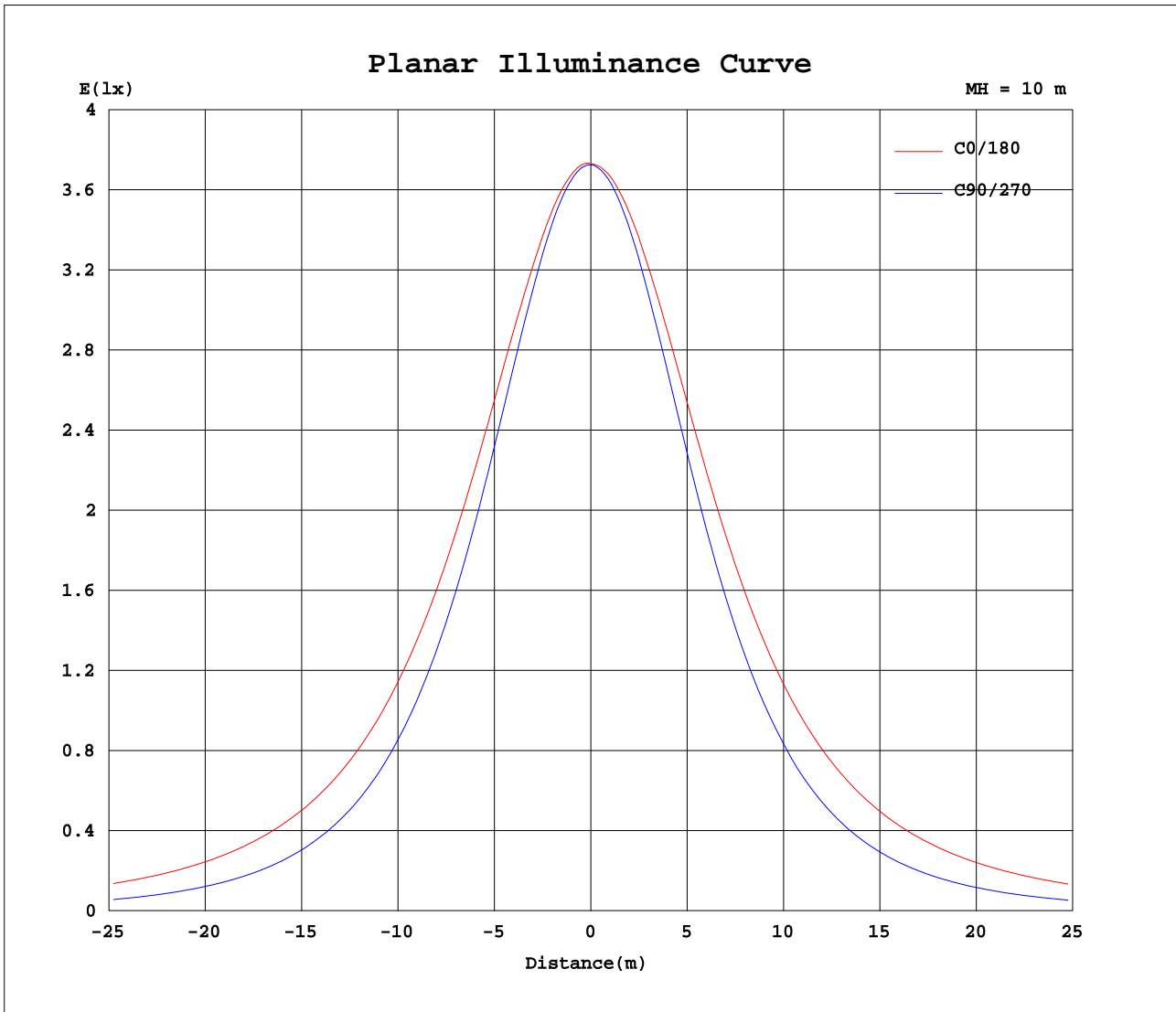
AvgL	cd/m2
L_0~180(65)av	6308
L_0~180(75)av	9048
L_0~180(85)av	23138
L_90~270(65)av	2921
L_90~270(75)av	2470
L_90~270(85)av	1870
L_45(65)av	4962
L_45(75)av	6672
L_45(85)av	15927

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-04-08

$\gamma$  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: 2022-04-08

$\gamma$  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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.1832A P:20W PF:0.9356 Lamp Flux:1713.39x1 lm		
NAME: ASD-LVF23-18D20CC-NK 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	373	373	373	373	373	373	372	373	373	373	373	373	373	373	373	373	373	373	373
5	373	373	373	373	372	372	371	371	371	372	372	372	372	372	372	372	371	371	370
10	372	372	371	370	368	367	366	367	367	368	369	370	370	370	369	367	366	364	364
15	368	368	367	365	362	359	357	358	359	362	364	366	367	366	364	361	358	355	354
20	364	364	361	357	352	348	345	346	349	353	357	361	362	361	357	352	347	342	341
25	358	358	353	347	339	334	329	331	335	342	349	354	357	354	349	341	333	327	325
30	352	351	345	335	324	317	311	313	319	329	339	346	350	347	340	328	318	309	306
35	344	343	334	322	308	297	290	293	301	315	327	337	341	337	328	314	300	289	285
40	334	333	323	308	289	276	267	271	282	299	314	326	331	327	316	299	282	267	261
45	323	322	310	292	270	252	242	246	260	281	300	314	320	315	302	282	261	243	236
50	311	309	296	275	249	226	215	219	238	262	284	301	308	302	288	265	240	218	208
55	298	296	281	258	228	200	186	192	215	244	268	286	295	288	272	246	217	192	180
60	284	281	265	239	206	174	156	164	191	223	251	271	280	273	256	228	196	166	151
65	269	266	249	220	185	148	126	137	169	204	234	255	265	258	239	209	175	140	121
70	253	250	232	202	164	123	95.0	109	147	184	216	239	249	241	221	191	154	115	91.0
75	237	234	215	184	144	98.9	65.5	83.8	125	165	199	221	232	225	204	173	133	91.3	62.3
80	221	216	198	166	125	77.0	38.6	61.0	105	147	182	204	215	209	188	155	115	70.0	36.1
85	204	200	182	150	107	58.4	17.1	41.9	87.6	131	166	188	199	193	172	139	98.2	52.0	15.5
90	188	184	166	134	92.4	44.6	6.05	28.7	73.2	116	150	173	183	177	156	125	84.2	39.5	6.14
95	173	169	152	121	80.1	35.4	5.04	21.0	61.8	102	136	158	168	162	142	111	72.7	31.2	5.34
100	158	154	137	107	65.2	26.5	4.42	14.4	49.0	90.6	122	143	153	148	129	98.9	60.2	23.3	5.07
105	138	134	114	78.1	39.0	16.6	4.46	10.5	28.9	66.4	105	128	139	133	114	76.3	36.6	15.0	4.86
110	96.4	91.7	66.1	41.1	31.2	13.8	4.48	9.25	23.3	30.5	59.1	91.1	109	99.8	73.9	38.3	28.9	12.7	4.87
115	41.7	38.1	38.7	41.1	25.2	11.9	4.62	8.48	17.3	31.4	34.4	33.6	48.0	42.6	36.1	38.4	22.6	11.4	5.01
120	57.0	53.7	50.1	32.9	18.0	10.4	4.90	8.12	13.6	26.0	43.6	49.9	45.4	50.8	48.4	30.7	18.4	10.8	5.08
125	61.8	53.5	40.9	27.8	14.9	9.37	5.21	8.14	13.2	22.9	35.5	48.5	59.3	53.5	39.7	26.5	14.8	10.6	5.30
130	50.0	42.2	31.8	19.5	17.2	9.69	5.48	8.19	14.1	16.1	27.9	39.5	48.7	42.7	33.1	20.0	16.4	10.4	5.77
135	34.0	27.7	16.9	17.2	14.8	7.37	5.40	7.37	13.5	16.6	14.5	29.3	38.8	33.3	24.7	16.2	16.1	9.21	5.75
140	11.2	10.7	14.8	21.7	11.9	6.69	5.60	7.71	10.1	18.5	12.4	9.69	16.7	12.8	15.2	21.5	11.5	8.39	5.65
145	19.8	17.6	21.3	14.4	10.9	7.20	5.77	8.29	9.73	15.8	19.3	16.3	12.4	13.7	22.4	19.6	10.7	8.79	5.89
150	17.1	17.1	12.7	11.0	10.3	6.25	5.93	7.70	10.3	10.4	17.1	19.2	22.6	21.4	19.7	11.9	11.1	8.41	5.79
155	9.24	8.61	9.41	10.1	9.39	5.38	6.03	7.12	9.74	10.7	9.05	9.98	17.0	15.0	10.8	10.4	11.0	6.98	5.75
160	8.13	7.36	7.88	8.02	6.75	5.54	6.17	7.02	8.05	9.22	8.04	7.39	8.73	8.51	9.55	10.6	9.63	6.07	5.82
165	7.59	6.64	6.70	6.18	5.65	5.70	6.07	6.53	7.23	8.67	8.73	7.64	8.16	7.82	8.24	9.54	7.68	6.02	5.92
170	7.82	7.78	6.13	5.84	5.82	5.89	6.08	6.32	6.51	7.09	7.87	8.72	9.02	8.99	8.39	7.71	6.76	5.70	6.01
175	6.82	6.16	6.10	6.01	6.32	6.28	6.30	6.07	6.21	6.33	6.65	7.08	7.45	7.20	6.90	6.16	5.79	5.84	6.03
180	6.34	6.29	6.50	6.47	6.38	6.35	6.33	6.40	6.50	6.63	6.74	6.55	6.34	6.30	6.51	6.50	6.39	6.33	6.32

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-04-08

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:0.1832A P:20W PF:0.9356 Lamp Flux:1713.39x1 lm		
NAME: ASD-LVF23-18D20CC-NK 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	373	373	373	373	373														
5	370	371	372	373	373														
10	364	366	368	370	371														
15	355	358	361	365	367														
20	343	347	352	358	362														
25	327	333	341	349	356														
30	308	317	328	339	348														
35	288	299	313	328	339														
40	265	279	297	316	329														
45	241	258	280	302	317														
50	215	237	262	287	304														
55	188	213	244	271	290														
60	161	191	225	255	276														
65	133	168	206	238	260														
70	106	147	187	220	244														
75	81.4	126	169	204	228														
80	59.3	107	151	187	212														
85	41.1	90.2	135	171	196														
90	29.0	76.2	120	156	180														
95	21.7	65.0	107	141	165														
100	15.0	51.8	93.1	127	150														
105	11.6	32.2	66.8	106	131														
110	10.5	26.0	36.5	64.0	89.8														
115	9.85	20.9	37.6	40.1	40.8														
120	9.23	16.6	29.9	50.5	57.6														
125	9.33	16.4	25.4	38.9	55.6														
130	9.41	15.2	18.4	31.9	41.5														
135	8.56	12.3	22.4	17.2	27.4														
140	8.20	11.5	18.8	18.6	12.3														
145	8.15	10.5	12.6	19.7	22.0														
150	7.88	10.9	10.5	11.8	14.6														
155	7.61	9.96	10.9	9.31	9.03														
160	7.15	8.61	10.4	8.64	8.19														
165	6.82	7.69	8.13	8.95	7.90														
170	6.53	6.82	7.11	7.12	7.67														
175	6.18	6.25	6.41	6.56	6.82														
180	6.40	6.50	6.63	6.72	6.55														

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-04-08

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: