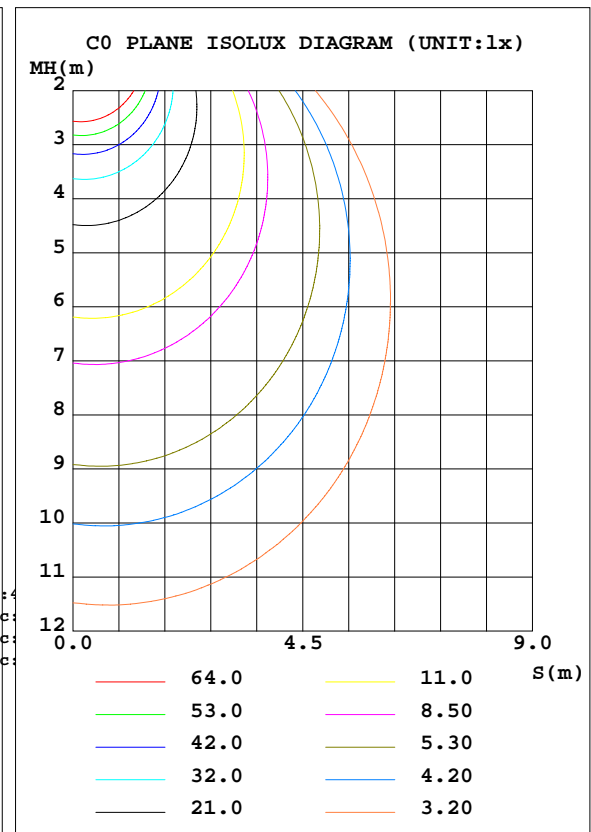
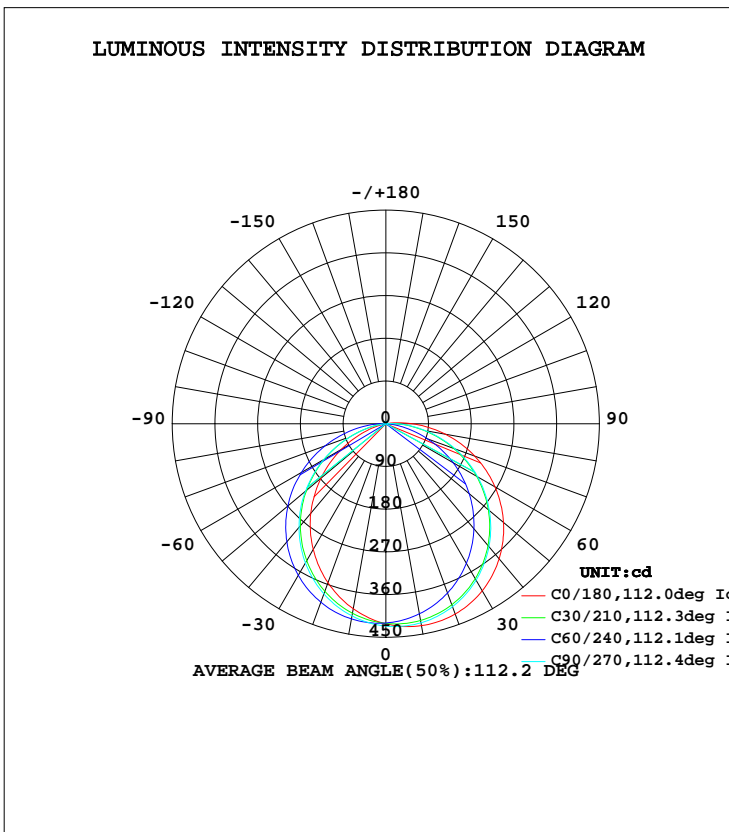


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.9V I:0.1615A P:17.82W PF:0.9198 Lamp Flux:1306x1 lm		
NAME: ASD-MPR-9D18CC-WH/BK 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 73.29 lm/W			
MODEL	ASD-MPR-9D18CC-WH/BK	I <sub>max</sub> (cd)	432.4	S/MH(C0/180)	1.10
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	1.19
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1306	η UP, DN(C0-180)	1.2,52.3
NOMINAL FLUX(lm)	1306	CIE CLASS	DIRECT	η UP, DN(C180-360)	1.1,45.3
LAMPS INSIDE	1	η up(%)	2.4	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	97.6	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-04-13

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	431.9	413.8	425.9	413.0	395.9	410.9	411.1	409.9	0- 10	39.82	39.82	3.19,3.19
20	426.5	393.4	410.3	392.2	356.5	387.4	381.6	385.7	10- 20	114.0	153.8	12.3,12.3
30	406.4	359.0	380.4	358.3	306.0	350.1	338.9	348.0	20- 30	172.7	326.5	26.2,26.2
40	371.4	312.8	338.0	312.8	246.4	301.0	284.7	298.3	30- 40	208.2	534.7	42.9,42.9
50	323.6	256.8	285.1	257.9	178.7	242.6	220.6	238.7	40- 50	215.9	750.6	60.2,60.2
60	265.1	192.2	223.3	194.7	108.6	176.8	151.2	171.8	50- 60	195.1	945.7	75.8,75.8
70	198.9	123.6	155.5	127.9	42.67	106.7	79.54	100.6	60- 70	149.4	1095	87.8,87.8
80	127.4	56.20	84.82	61.59	3.959	40.97	20.08	35.82	70- 80	88.55	1184	94.9,94.9
90	56.32	6.329	24.55	10.38	4.040	3.967	3.963	3.967	80- 90	34.28	1218	97.6,97.6
100	5.231	3.432	3.416	3.451	4.148	4.005	4.052	4.017	90-100	8.029	1226	98.3,98.3
110	3.462	3.532	3.535	3.547	4.260	4.078	4.156	4.094	100-110	4.007	1230	98.6,98.6
120	3.601	3.651	3.670	3.659	4.371	4.155	4.256	4.171	110-120	3.857	1234	98.9,98.9
130	3.751	3.805	3.828	3.801	4.510	4.244	4.387	4.267	120-130	3.593	1237	99.2,99.2
140	3.928	4.021	4.043	4.025	4.664	4.386	4.537	4.398	130-140	3.220	1241	99.5,99.5
150	4.198	4.302	4.332	4.302	4.818	4.548	4.710	4.575	140-150	2.737	1243	99.7,99.7
160	4.521	4.606	4.648	4.599	4.953	4.733	4.884	4.756	150-160	2.123	1246	99.9,99.9
170	4.829	4.868	4.926	4.853	5.076	4.918	5.038	4.930	160-170	1.365	1247	100,100
180	5.076	5.014	5.084	5.007	5.080	5.022	5.091	5.022	170-180	0.4756	1247	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

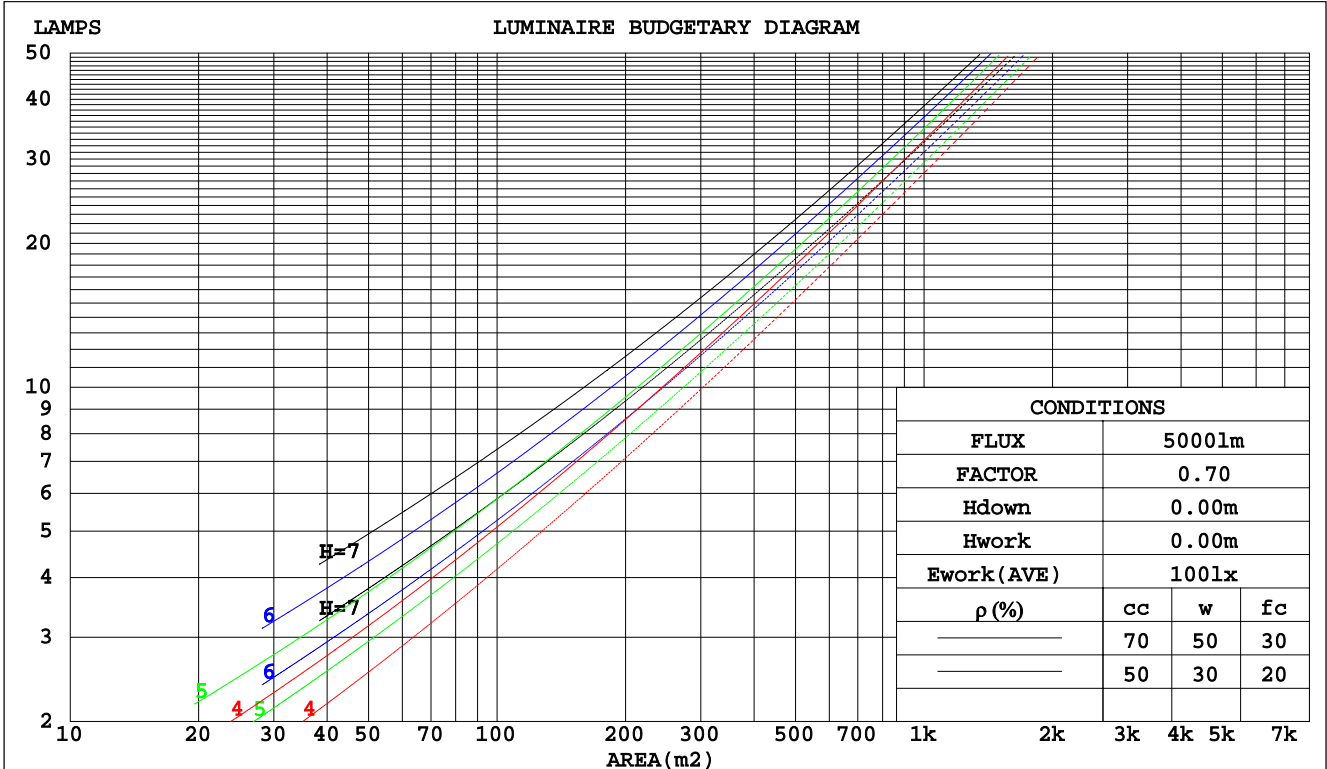
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-04-13

$\gamma$  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:119.9V I:0.1615A P:17.82W PF:0.9198 Lamp Flux:1306x1 lm		
NAME: ASD-MPR-9D18CC-WH/BK 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	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	.00	.00	.00	.98
1.0	1.03	.98	.94	1.00	.96	.93	.96	.92	.89	.91	.89	.86	.87	.85	.83	.81
2.0	.89	.82	.77	.87	.81	.75	.83	.78	.73	.80	.75	.71	.76	.73	.69	.67
3.0	.78	.70	.63	.77	.69	.63	.73	.67	.61	.70	.65	.60	.67	.63	.59	.56
4.0	.69	.60	.54	.68	.60	.53	.65	.58	.52	.62	.56	.51	.60	.55	.50	.48
5.0	.62	.53	.46	.61	.52	.46	.58	.51	.45	.56	.49	.44	.54	.48	.44	.41
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.39	.51	.44	.39	.49	.43	.38	.36
7.0	.50	.42	.35	.50	.41	.35	.48	.40	.35	.46	.39	.34	.45	.39	.34	.32
8.0	.46	.37	.32	.45	.37	.31	.44	.36	.31	.42	.36	.31	.41	.35	.30	.28
9.0	.42	.34	.28	.42	.34	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.26
10.0	.39	.31	.26	.38	.31	.26	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022-04-13

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:119.9V I:0.1615A P:17.82W PF:0.9198 Lamp Flux:1306x1 lm		
NAME: ASD-MPR-9D18CC-WH/BK 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	.319	.182	.057	.311	.178	.056	.297	.170	.054	.283	.163	.052	.271	.157	.051	
2.0	.296	.162	.050	.289	.159	.049	.276	.154	.048	.264	.148	.046	.253	.143	.045	
3.0	.273	.145	.043	.266	.143	.043	.255	.138	.042	.244	.134	.041	.234	.130	.040	
4.0	.251	.130	.038	.245	.128	.038	.235	.125	.037	.225	.121	.037	.217	.118	.036	
5.0	.231	.118	.034	.226	.116	.034	.217	.113	.033	.209	.110	.033	.201	.107	.032	
6.0	.214	.107	.031	.210	.106	.031	.202	.103	.030	.194	.101	.030	.187	.098	.029	
7.0	.199	.098	.028	.195	.097	.028	.188	.095	.027	.181	.093	.027	.175	.091	.027	
8.0	.186	.091	.026	.182	.090	.025	.176	.088	.025	.170	.086	.025	.164	.084	.024	
9.0	.174	.084	.024	.171	.083	.023	.165	.082	.023	.159	.080	.023	.154	.078	.023	
10.0	.164	.078	.022	.161	.078	.022	.155	.076	.021	.150	.075	.021	.145	.073	.021	

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	.208	.208	.208	.178	.178	.178	.122	.122	.122	.070	.070	.070	.022	.022	.022	
1.0	.199	.174	.152	.170	.149	.131	.117	.103	.090	.067	.060	.053	.021	.019	.017	
2.0	.191	.150	.116	.164	.129	.100	.112	.089	.070	.065	.052	.041	.021	.017	.013	
3.0	.183	.133	.092	.157	.114	.080	.108	.079	.056	.062	.046	.033	.020	.015	.011	
4.0	.176	.119	.076	.151	.103	.066	.104	.072	.047	.060	.042	.028	.019	.014	.009	
5.0	.168	.109	.066	.144	.094	.057	.099	.066	.040	.058	.039	.024	.019	.013	.008	
6.0	.161	.101	.058	.138	.087	.050	.095	.061	.035	.055	.036	.021	.018	.012	.007	
7.0	.154	.094	.052	.133	.081	.045	.092	.057	.032	.053	.034	.019	.017	.011	.006	
8.0	.148	.088	.047	.127	.076	.041	.088	.054	.029	.051	.032	.017	.017	.010	.006	
9.0	.142	.083	.044	.122	.072	.038	.084	.051	.027	.049	.030	.016	.016	.010	.005	
10.0	.136	.079	.041	.117	.069	.036	.081	.048	.025	.047	.029	.015	.015	.009	.005	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-04-13

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:119.9V I:0.1615A P:17.82W PF:0.9198 Lamp Flux:1306x1 lm										
NAME: ASD-MPR-9D18CC-WH/BK 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	18.9	20.4	19.2	20.7	20.9	16.9	18.4	17.2	18.6	18.9
3H	21.1	22.5	21.4	22.7	23.0	18.4	19.8	18.7	20.1	20.3
4H	22.1	23.5	22.5	23.7	24.1	19.1	20.4	19.5	20.7	21.0
6H	23.2	24.4	23.5	24.7	25.1	19.8	21.1	20.2	21.4	21.7
8H	23.7	24.9	24.1	25.2	25.5	20.2	21.4	20.6	21.7	22.1
12H	24.2	25.4	24.6	25.7	26.1	20.5	21.7	20.9	22.0	22.4
4H 2H	19.3	20.6	19.6	20.9	21.2	17.7	19.0	18.0	19.3	19.6
3H	21.6	22.8	22.0	23.1	23.5	19.2	20.3	19.6	20.7	21.0
4H	22.9	23.9	23.3	24.3	24.7	19.8	20.9	20.3	21.3	21.6
6H	24.1	25.0	24.5	25.4	25.8	20.5	21.4	20.9	21.8	22.2
8H	24.7	25.6	25.2	26.0	26.4	20.8	21.6	21.2	22.1	22.5
12H	25.4	26.2	25.8	26.6	27.0	21.1	22.0	21.6	22.4	22.8
8H 4H	23.0	23.8	23.4	24.2	24.7	20.3	21.1	20.7	21.6	22.0
6H	24.4	25.1	24.8	25.5	26.0	20.9	21.6	21.4	22.1	22.6
8H	25.1	25.8	25.6	26.2	26.7	21.2	21.8	21.7	22.3	22.8
12H	26.0	26.5	26.5	27.0	27.6	21.5	22.1	22.0	22.6	23.1
12H 4H	22.9	23.7	23.4	24.2	24.6	20.4	21.2	20.9	21.6	22.1
6H	24.4	25.0	24.9	25.5	26.0	21.1	21.7	21.6	22.2	22.7
8H	25.2	25.7	25.7	26.2	26.8	21.4	21.9	21.9	22.4	23.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.4 / - 0.4				
1.5H	+ 0.1 / - 0.2					+ 0.8 / - 0.6				
2.0H	+ 0.2 / - 0.3					+ 1.3 / - 1.0				

CIE Pub.117 Corrected 1247 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.8)

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-04-13

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:119.9V I:0.1615A P:17.82W PF:0.9198 Lamp Flux:1306x1 lm		
NAME: ASD-MPR-9D18CC-WH/BK 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

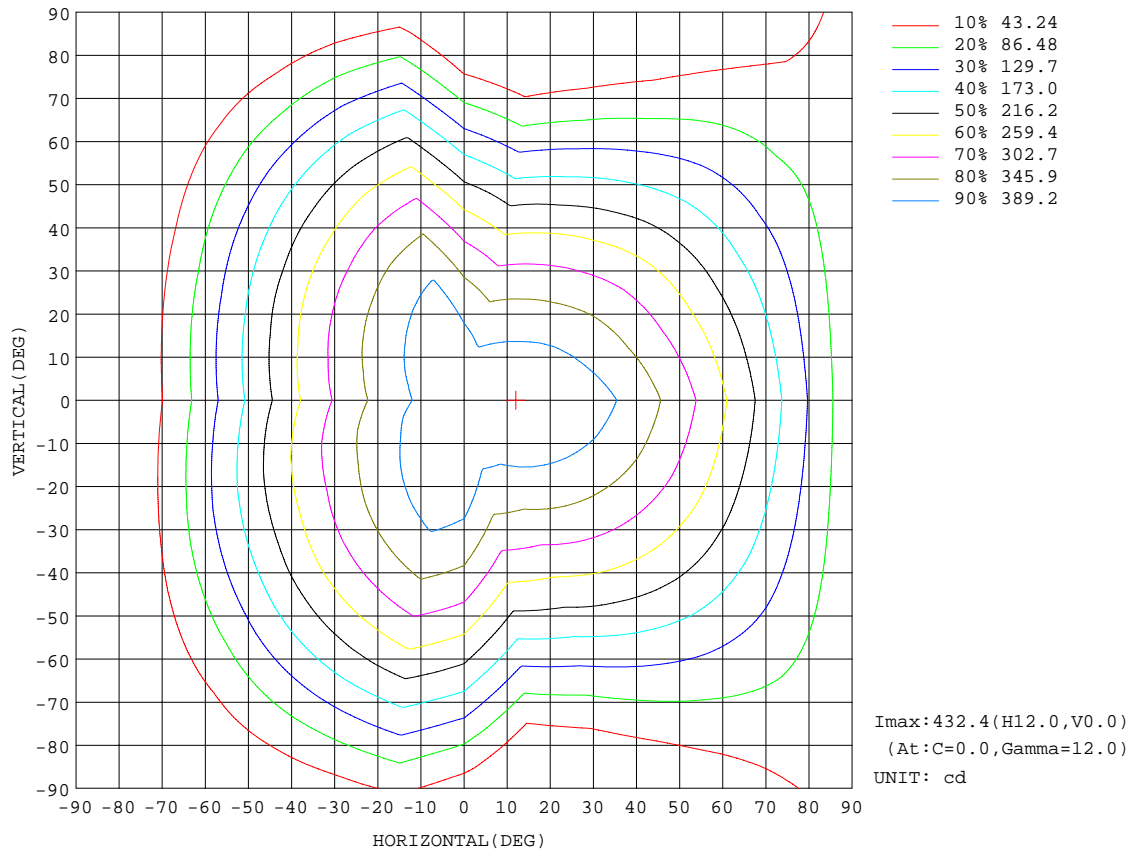
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	45	38	56	44	38	54	44	37	31
0.80	66	55	47	65	54	47	63	53	47	39
1.00	75	63	56	73	63	56	71	64	55	48
1.25	82	71	64	80	70	63	77	69	62	55
1.50	87	77	69	85	76	69	82	74	68	60
2.00	94	85	78	92	83	77	88	81	76	67
2.50	98	90	83	95	88	82	91	85	80	71
3.00	101	94	88	99	92	87	94	89	84	75
4.00	105	99	94	102	97	93	98	93	90	80
5.00	108	102	98	105	100	96	100	96	93	83
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:2022-04-13

$\gamma$  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:119.9V I:0.1615A P:17.82W PF:0.9198 Lamp Flux:1306x1 lm		
NAME: ASD-MPR-9D18CC-WH/BK 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

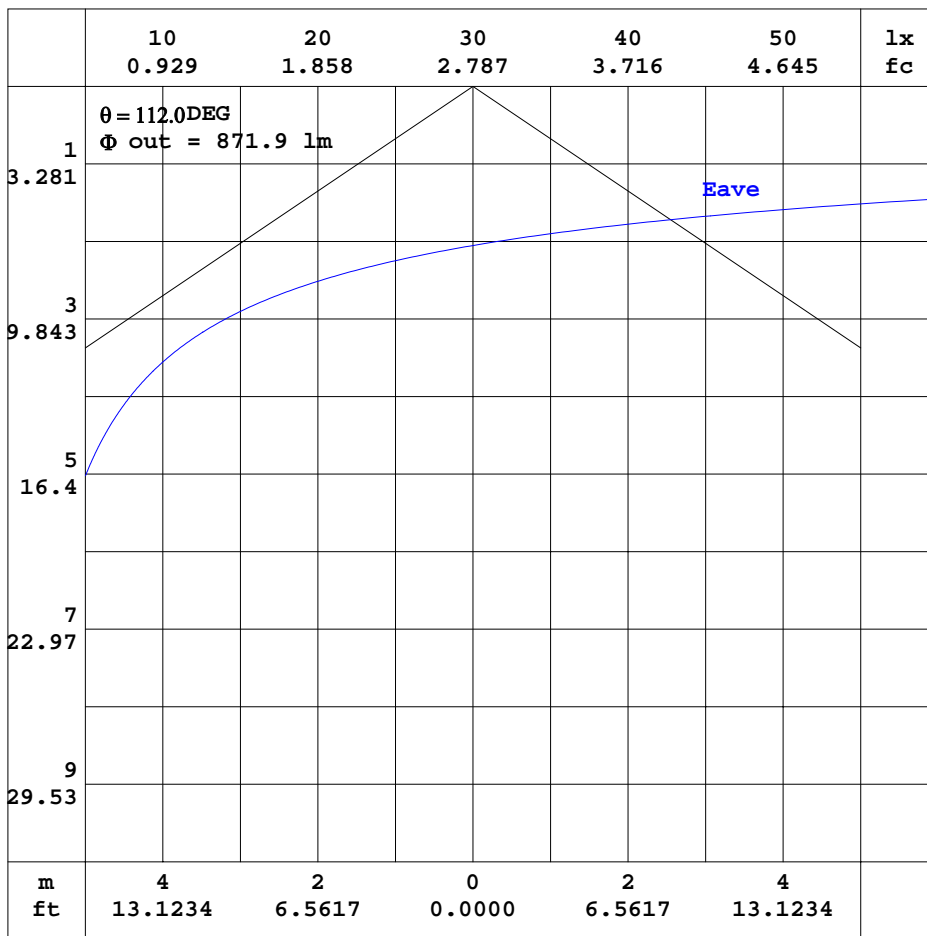


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022-04-13

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:

AAI CURVES

Test:U:119.9V I:0.1615A P:17.82W PF:0.9198 Lamp Flux:1306x1 lm		
NAME: ASD-MPR-9D18CC-WH/BK 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.

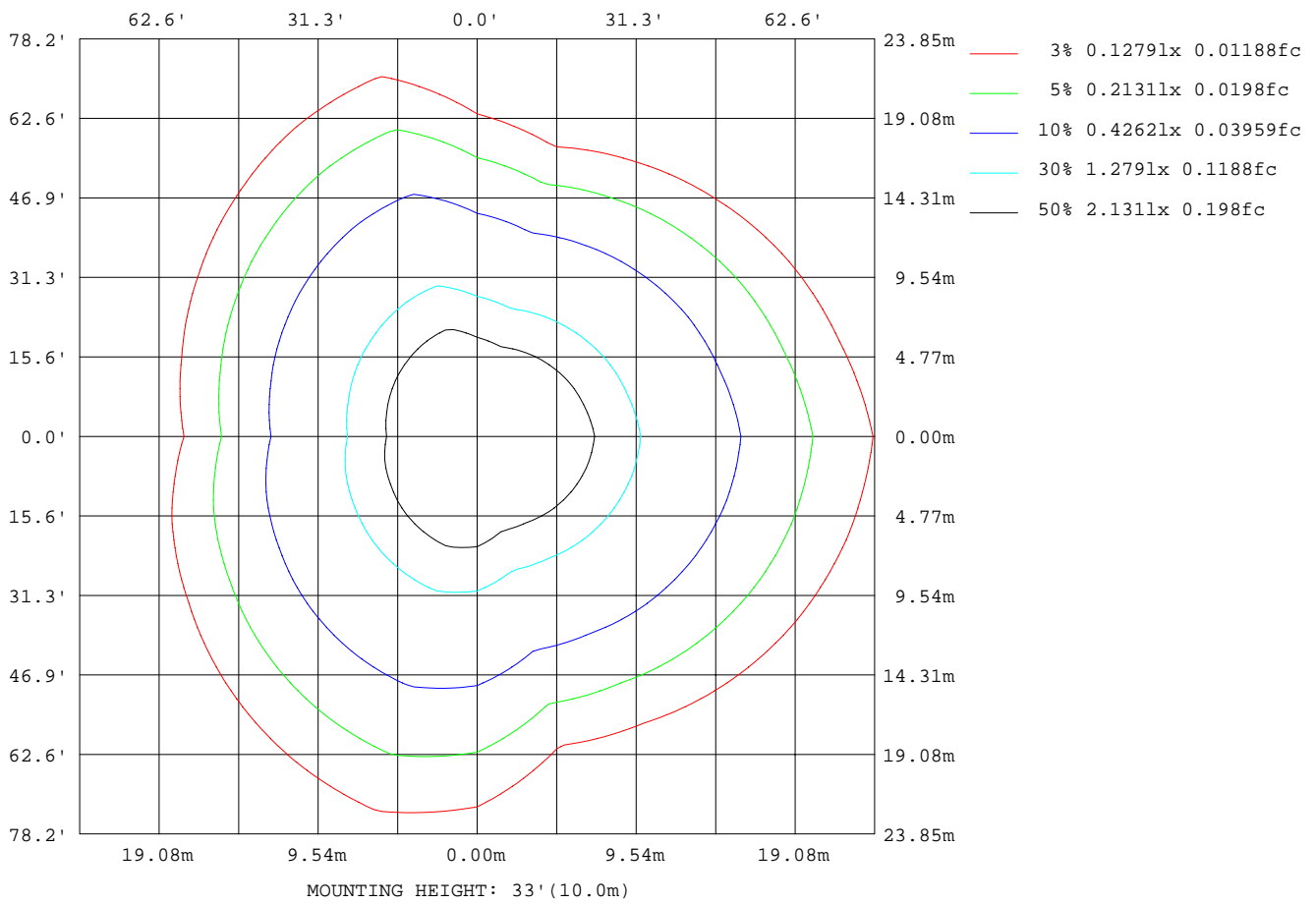
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-04-13

$\gamma$  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:119.9V I:0.1615A P:17.82W PF:0.9198 Lamp Flux:1306x1 lm		
NAME: ASD-MPR-9D18CC-WH/BK 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:2022-04-13

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:119.9V I:0.1615A P:17.82W PF:0.9198 Lamp Flux:1306x1 lm		
NAME: ASD-MPR-9D18CC-WH/BK 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

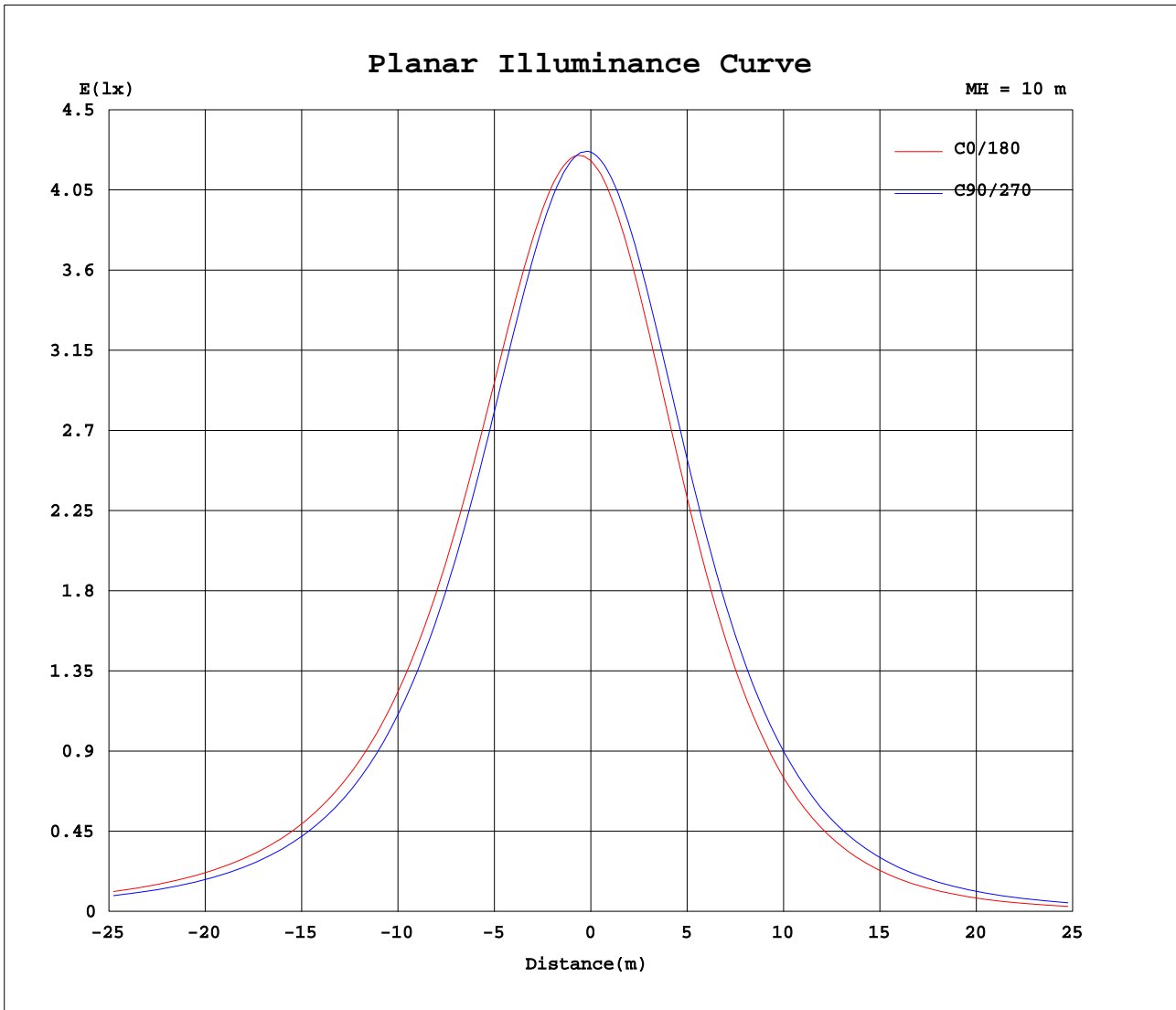
AvgL	cd/m2
L_0~180(65)av	3635
L_0~180(75)av	3497
L_0~180(85)av	5421
L_90~270(65)av	3614
L_90~270(75)av	3234
L_90~270(85)av	3230
L_45(65)av	3542
L_45(75)av	3098
L_45(85)av	2538

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-04-13

$\gamma$  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: 2022-04-13

$\gamma$  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:119.9V I:0.1615A P:17.82W PF:0.9198 Lamp Flux:1306x1 lm		
NAME: ASD-MPR-9D18CC-WH/BK 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	422	421	421	420	420	425	426	419	419	419	420	421	422	421	421	420	420	425	426
5	429	426	423	419	415	418	428	424	421	418	415	414	411	412	415	417	421	428	421
10	432	427	421	414	407	408	426	425	419	413	407	402	396	399	405	411	418	427	411
15	431	424	415	405	395	394	420	423	414	404	395	388	378	384	392	401	411	422	398
20	427	417	406	393	380	377	410	417	405	392	380	370	357	365	376	387	400	413	382
25	418	407	393	378	361	356	397	407	392	377	361	349	333	342	356	370	386	401	362
30	406	393	377	359	340	333	380	394	376	358	339	325	306	318	333	350	369	385	339
35	391	376	357	337	316	307	360	377	357	337	315	299	277	290	308	327	348	366	313
40	371	356	335	313	289	279	338	357	335	313	289	271	246	261	280	301	324	343	285
45	349	332	310	286	260	248	313	334	311	286	261	241	212	229	250	273	298	318	254
50	324	306	282	257	229	215	285	309	284	258	230	208	179	196	217	243	270	290	221
55	295	277	252	225	197	182	255	281	255	227	198	175	144	162	184	211	239	260	186
60	265	246	220	192	163	147	223	251	224	195	165	141	109	126	150	177	205	228	151
65	233	213	187	158	129	112	190	219	192	162	131	106	74.0	90.8	115	142	172	194	115
70	199	178	152	124	93.5	77.1	156	186	158	128	96.5	72.8	42.7	57.8	80.0	107	136	159	79.5
75	164	143	117	88.8	60.6	45.4	120	151	124	94.0	63.9	42.4	17.3	29.0	48.4	71.8	101	123	47.2
80	127	107	81.5	56.2	31.8	19.2	84.8	117	88.9	61.6	35.1	17.4	3.96	7.20	21.6	41.0	67.1	86.6	20.1
85	90.5	72.1	49.3	28.0	9.19	3.37	52.4	82.2	56.7	33.1	12.0	3.41	3.99	3.97	3.95	15.7	36.5	53.1	3.94
90	56.3	40.6	22.0	6.33	3.40	3.42	24.5	50.6	28.6	10.4	3.42	3.45	4.04	4.00	3.97	3.97	12.3	24.8	3.96
95	27.0	15.0	3.44	3.40	3.44	3.47	4.23	19.8	6.81	3.42	3.45	3.50	4.09	4.04	4.00	3.97	3.96	4.22	4.00
100	5.23	3.38	3.41	3.43	3.48	3.53	3.42	3.55	3.42	3.45	3.50	3.56	4.15	4.08	4.04	4.01	3.99	4.27	4.05
105	3.41	3.42	3.45	3.48	3.54	3.60	3.47	3.43	3.46	3.49	3.55	3.62	4.20	4.13	4.07	4.04	4.01	4.01	4.11
110	3.46	3.48	3.50	3.53	3.59	3.67	3.54	3.48	3.51	3.55	3.61	3.69	4.26	4.18	4.12	4.08	4.05	4.06	4.16
115	3.53	3.54	3.56	3.59	3.65	3.74	3.60	3.54	3.56	3.60	3.67	3.76	4.31	4.22	4.16	4.11	4.09	4.10	4.21
120	3.60	3.60	3.62	3.65	3.72	3.82	3.67	3.60	3.62	3.66	3.74	3.84	4.37	4.28	4.21	4.16	4.13	4.16	4.26
125	3.67	3.67	3.68	3.72	3.80	3.91	3.74	3.66	3.68	3.72	3.82	3.94	4.44	4.33	4.25	4.19	4.17	4.21	4.32
130	3.75	3.74	3.76	3.81	3.89	4.02	3.83	3.73	3.76	3.80	3.92	4.04	4.51	4.40	4.30	4.24	4.21	4.26	4.39
135	3.84	3.83	3.85	3.91	4.01	4.14	3.93	3.81	3.84	3.91	4.03	4.16	4.58	4.47	4.37	4.31	4.27	4.32	4.46
140	3.93	3.93	3.96	4.02	4.14	4.28	4.04	3.91	3.95	4.02	4.15	4.29	4.66	4.54	4.44	4.39	4.34	4.39	4.54
145	4.05	4.05	4.09	4.16	4.27	4.41	4.18	4.04	4.08	4.16	4.29	4.43	4.75	4.63	4.53	4.46	4.41	4.47	4.62
150	4.20	4.19	4.24	4.30	4.41	4.55	4.33	4.19	4.22	4.30	4.43	4.56	4.82	4.71	4.61	4.55	4.49	4.56	4.71
155	4.36	4.35	4.40	4.45	4.55	4.70	4.49	4.34	4.38	4.45	4.57	4.69	4.88	4.79	4.69	4.64	4.59	4.66	4.80
160	4.52	4.52	4.56	4.61	4.69	4.83	4.65	4.51	4.53	4.60	4.71	4.82	4.95	4.86	4.79	4.73	4.69	4.76	4.88
165	4.68	4.69	4.71	4.75	4.82	4.95	4.79	4.67	4.69	4.74	4.83	4.93	5.01	4.94	4.88	4.83	4.79	4.87	4.97
170	4.83	4.83	4.84	4.87	4.93	5.03	4.93	4.81	4.83	4.85	4.94	5.01	5.08	5.00	4.95	4.92	4.90	4.97	5.04
175	4.97	4.96	4.95	4.96	5.00	5.09	5.02	4.93	4.93	4.96	5.01	5.08	5.11	5.05	5.00	5.00	4.98	5.05	5.07
180	5.08	5.03	5.01	5.01	5.03	5.10	5.08	5.02	5.00	5.01	5.04	5.10	5.08	5.03	5.02	5.02	5.03	5.11	5.09

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-04-13

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:119.9V I:0.1615A P:17.82W PF:0.9198 Lamp Flux:1306x1 lm		
NAME: ASD-MPR-9D18CC-WH/BK 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	419	419	419	420	421														
5	410	413	416	421	425														
10	397	403	410	418	425														
15	381	390	400	411	421														
20	362	373	386	400	412														
25	339	353	369	386	401														
30	314	330	348	368	385														
35	286	304	324	347	367														
40	256	276	298	323	345														
45	223	245	270	296	320														
50	189	212	239	267	292														
55	154	178	206	236	262														
60	118	143	172	202	230														
65	81.9	107	137	168	196														
70	49.2	72.3	101	133	161														
75	21.6	41.3	66.1	97.3	125														
80	3.95	15.7	35.8	63.3	89.0														
85	3.96	3.95	11.7	33.2	55.4														
90	4.00	3.97	3.97	9.79	26.6														
95	4.04	4.00	3.99	3.97	5.41														
100	4.09	4.04	4.02	4.00	3.98														
105	4.14	4.08	4.05	4.03	4.02														
110	4.19	4.12	4.09	4.07	4.06														
115	4.23	4.16	4.13	4.11	4.11														
120	4.27	4.21	4.17	4.15	4.15														
125	4.34	4.26	4.21	4.19	4.20														
130	4.42	4.32	4.27	4.24	4.25														
135	4.48	4.39	4.33	4.30	4.31														
140	4.56	4.46	4.40	4.37	4.37														
145	4.64	4.54	4.49	4.44	4.45														
150	4.72	4.63	4.58	4.53	4.54														
155	4.81	4.72	4.66	4.63	4.64														
160	4.89	4.80	4.76	4.73	4.74														
165	4.96	4.89	4.85	4.83	4.85														
170	5.01	4.96	4.93	4.94	4.96														
175	5.04	5.00	5.00	5.00	5.06														
180	5.03	5.01	5.02	5.05	5.11														

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-04-13

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: