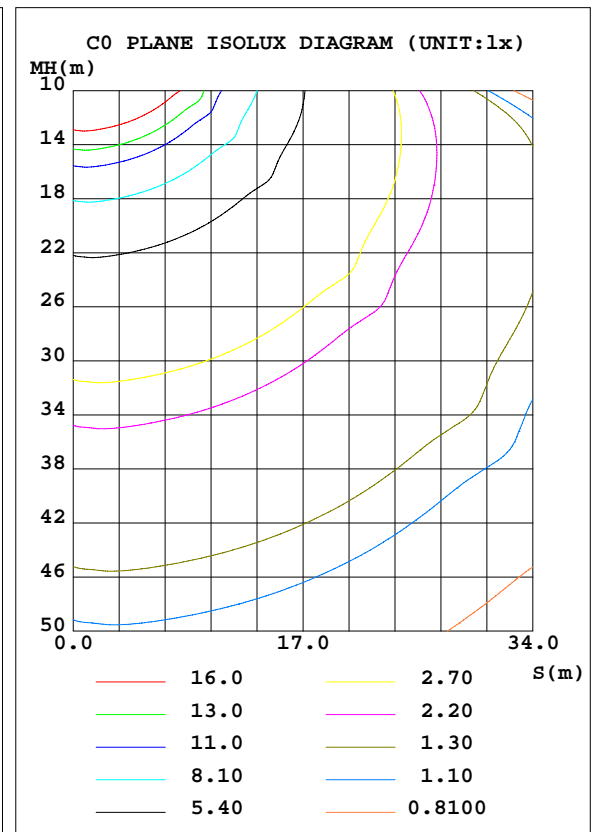
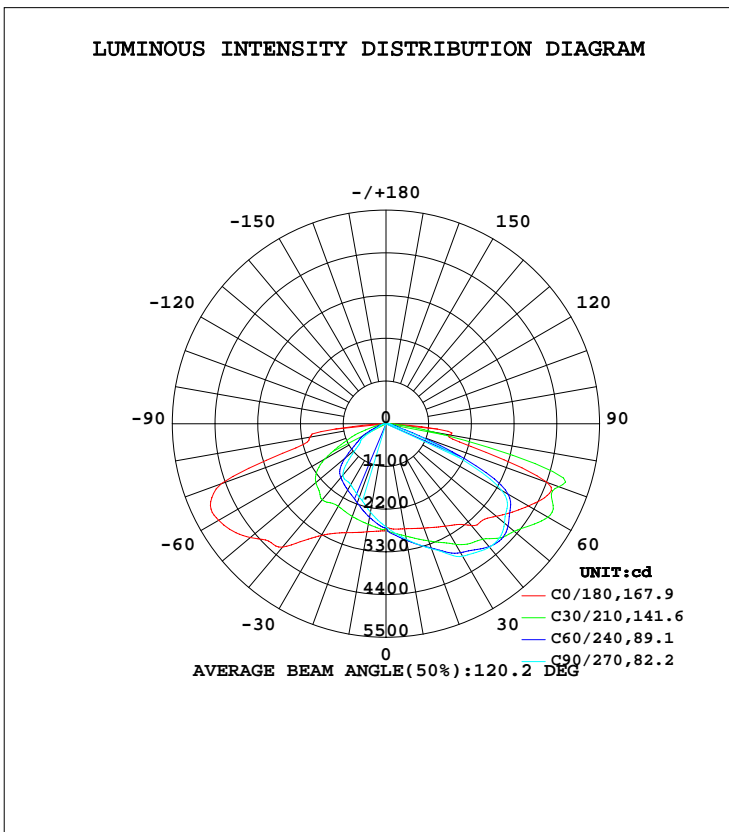


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.00V I:0.8441A P:101.20W PF:0.9991 Freq:60.00Hz Lamp Flux:13400x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-LSB2-100D50B-SF	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 136.88 lm/W			
MODEL ASD-LSB2-100D50B-SF		I _{max} (cd)	6172	S/MH(C0/180)	2.22
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.01
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	13852	η UP, DN(C0-180)	0.1,66.9
NOMINAL FLUX(lm)	13852.4	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.1,32.9
LAMPS INSIDE	1	η up(%)	0.2	CIBSE SHR NOM	1.75
TEST VOLTAGE(V)	120	η down(%)	99.8	CIBSE SHR MAX	1.75



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.1%
 Test Distance: 2.500m [K=1.0469]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	2747	3013	3020	2952	2826	2542	2310	2422	0- 10	259.1	259.1	1.87,1.87
20	2860	3340	3427	3295	2985	2338	2013	2194	10- 20	783.3	1042	7.53,7.53
30	3046	3753	3939	3836	3322	2157	1817	2022	20- 30	1334	2377	17.2,17.2
40	3421	4054	4148	4184	4147	2051	1724	1882	30- 40	1939	4316	31.2,31.2
50	3707	4308	3981	4670	4558	1716	1006	1505	40- 50	2479	6795	49.1,49.1
60	4235	4083	3445	4484	4974	1003	607.1	808.1	50- 60	2764	9559	69,69
70	4412	2193	746.9	3330	4504	428.7	171.3	285.1	60- 70	2599	12158	87.8,87.8
80	1660	282.7	140.2	391.8	1984	124.6	60.43	74.56	70- 80	1367	13525	97.6,97.6
90	75.69	16.54	47.23	76.33	46.32	5.220	0.6650	2.206	80- 90	300.4	13826	99.8,99.8
100	1.925	0.5550	0.2399	0.5981	3.642	2.668	1.650	3.314	90-100	12.12	13838	99.9,99.9
110	2.379	0.7789	0.3970	1.024	3.641	3.160	2.349	3.435	100-110	2.124	13840	99.9,99.9
120	2.887	1.091	0.6705	1.369	3.427	3.334	3.146	3.787	110-120	2.264	13842	99.9,99.9
130	3.436	1.457	1.041	1.584	3.717	4.114	4.120	4.586	120-130	2.472	13845	99.9,99.9
140	3.330	1.886	1.520	1.984	3.785	4.431	4.745	4.628	130-140	2.468	13847	100,100
150	2.881	2.298	2.075	2.284	3.855	4.534	5.045	4.731	140-150	2.121	13849	100,100
160	2.984	2.771	2.752	2.763	4.104	4.539	4.988	4.877	150-160	1.665	13851	100,100
170	3.276	3.295	3.445	3.340	4.097	4.197	4.332	4.445	160-170	1.063	13852	100,100
180	4.071	4.071	4.071	4.071	3.998	3.998	3.998	3.998	170-180	0.3662	13852	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 5505.9 lm

%lum = 39.7%

%lamp = 39.7%

Conical surface Flux(120deg): 9559.5 lm

%lum = 69.0%

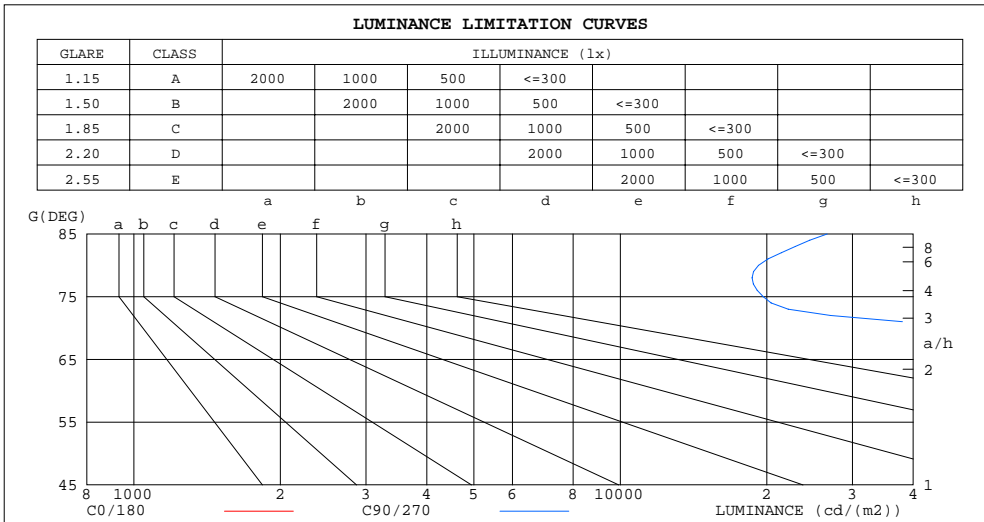
%lamp = 69.0%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.1%
 Test Distance: 2.500m [K=1.0469]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.00V I:0.8441A P:101.20W PF:0.9991 Freq:60.00Hz Lamp Flux:13400x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-LSB2-100D50B-SF	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	253579	26620
80	227550	19226
75	208515	19668
70	307171	51997
65	253885	120115
60	201679	164066
55	164833	157971
50	137330	147473
45	118354	139484

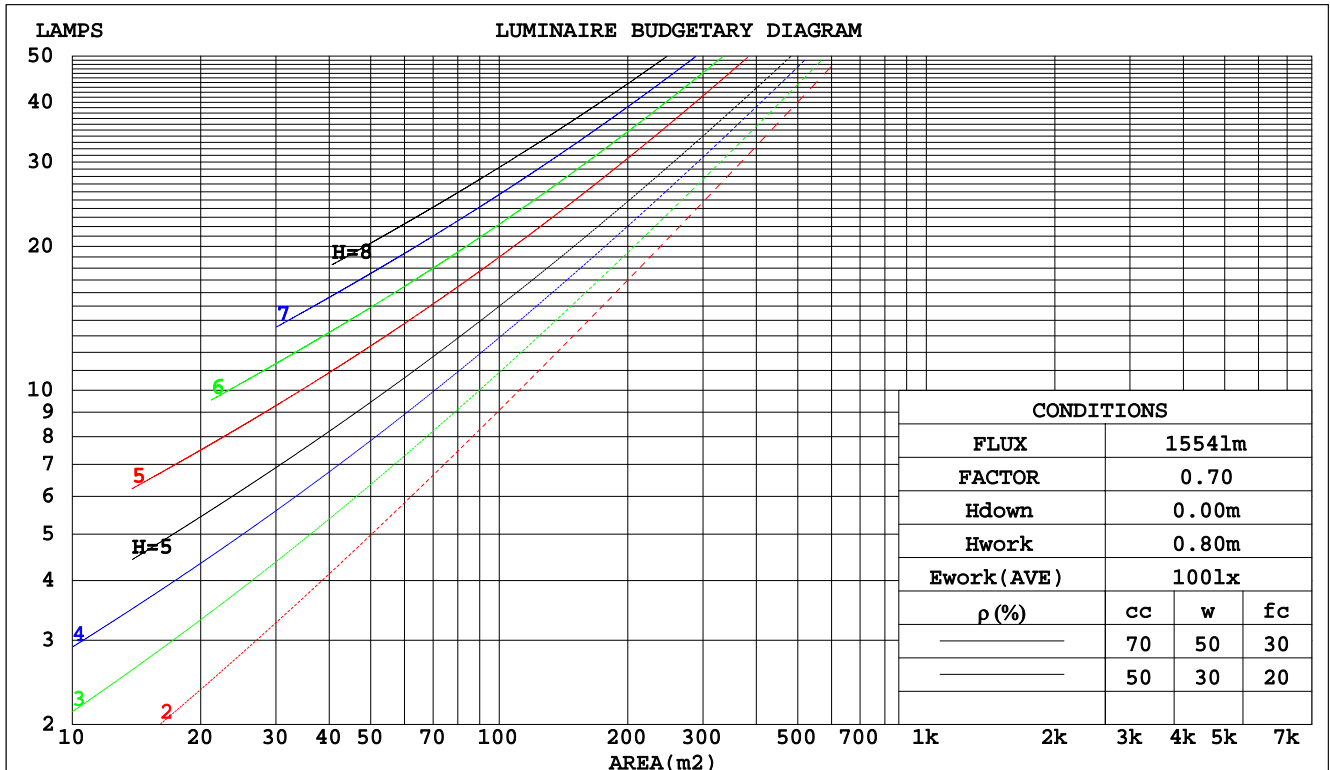
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.1%
 Test Distance: 2.500m [K=1.0469]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.00V I:0.8441A P:101.20W PF:0.9991 Freq:60.00Hz Lamp Flux:13400x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-LSB2-100D50B-SF	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding 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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.02	.97	.92	.99	.95	.91	.95	.91	.88	.91	.88	.85	.87	.85	.82	.80
2.0	.86	.78	.72	.84	.77	.71	.81	.75	.69	.77	.72	.68	.74	.70	.66	.64
3.0	.74	.65	.57	.72	.64	.57	.69	.62	.56	.66	.60	.55	.64	.58	.54	.51
4.0	.64	.54	.47	.63	.54	.46	.60	.52	.46	.58	.51	.45	.55	.49	.44	.42
5.0	.56	.46	.39	.55	.46	.39	.53	.45	.38	.51	.43	.38	.49	.42	.37	.35
6.0	.50	.40	.33	.49	.40	.33	.47	.39	.32	.45	.38	.32	.44	.37	.32	.29
7.0	.45	.35	.28	.44	.35	.28	.42	.34	.28	.41	.33	.28	.39	.33	.27	.25
8.0	.40	.31	.25	.40	.31	.25	.38	.30	.24	.37	.30	.24	.36	.29	.24	.22
9.0	.37	.28	.22	.36	.28	.22	.35	.27	.22	.34	.27	.21	.33	.26	.21	.19
10.0	.34	.25	.19	.33	.25	.19	.32	.24	.19	.31	.24	.19	.30	.24	.19	.17



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.1%
 Test Distance: 2.500m [K=1.0469]
 Remarks:

WEC AND CCEC

Test:U:120.00V I:0.8441A P:101.20W PF:0.9991 Freq:60.00Hz Lamp Flux:13400x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-LSB2-100D50B-SF	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding 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	.353	.200	.064	.345	.197	.063	.332	.190	.061	.319	.184	.059	.308	.178	.057	
2.0	.331	.181	.056	.325	.179	.055	.313	.174	.054	.301	.169	.053	.291	.165	.052	
3.0	.304	.162	.048	.298	.160	.048	.288	.156	.047	.277	.152	.047	.268	.148	.046	
4.0	.278	.145	.043	.273	.143	.042	.263	.140	.042	.254	.137	.041	.246	.134	.041	
5.0	.255	.130	.038	.250	.129	.037	.242	.126	.037	.234	.123	.037	.226	.121	.036	
6.0	.235	.118	.034	.230	.116	.034	.223	.114	.033	.216	.112	.033	.209	.110	.033	
7.0	.217	.107	.030	.213	.106	.030	.206	.104	.030	.200	.102	.030	.194	.101	.030	
8.0	.201	.098	.028	.198	.097	.028	.192	.096	.027	.186	.094	.027	.180	.093	.027	
9.0	.187	.091	.025	.184	.090	.025	.179	.088	.025	.174	.087	.025	.169	.086	.025	
10.0	.175	.084	.023	.173	.083	.023	.168	.082	.023	.163	.081	.023	.158	.080	.023	

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	.192	.192	.192	.164	.164	.164	.112	.112	.112	.064	.064	.064	.021	.021	.021	
1.0	.185	.157	.132	.158	.135	.114	.108	.093	.079	.062	.054	.046	.020	.017	.015	
2.0	.179	.133	.095	.153	.115	.082	.105	.079	.057	.061	.046	.033	.019	.015	.011	
3.0	.173	.116	.071	.148	.100	.062	.102	.070	.043	.059	.041	.025	.019	.013	.008	
4.0	.166	.103	.055	.142	.089	.048	.098	.062	.034	.056	.036	.020	.018	.012	.007	
5.0	.158	.093	.045	.136	.081	.039	.094	.056	.028	.054	.033	.016	.017	.011	.005	
6.0	.151	.085	.038	.130	.074	.033	.089	.051	.023	.052	.030	.014	.017	.010	.005	
7.0	.144	.078	.032	.124	.068	.028	.085	.048	.020	.050	.028	.012	.016	.009	.004	
8.0	.137	.072	.028	.118	.063	.025	.081	.044	.017	.047	.026	.010	.015	.009	.003	
9.0	.130	.068	.025	.112	.059	.022	.078	.041	.016	.045	.024	.009	.015	.008	.003	
10.0	.124	.063	.023	.107	.055	.020	.074	.039	.014	.043	.023	.008	.014	.008	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.1%
 Test Distance: 2.500m [K=1.0469]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.00V I:0.8441A P:101.20W PF:0.9991 Freq:60.00Hz Lamp Flux:13400x1 lm										
NAME: ASD Lighting Corp					TYPE: LED			WEIGHT:		
SPEC.: ASD-LSB2-100D50B-SF					DIM.:			SERIAL No.:		
MFR.: ASD Lighting Corp					SUR.:			Shielding 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	33.4	35.2	33.7	35.5	35.8	31.5	33.3	31.9	33.6	33.9
3H	37.8	39.4	38.1	39.7	40.1	31.9	33.6	32.3	33.9	34.3
4H	38.5	40.1	38.9	40.5	40.8	31.9	33.5	32.3	33.8	34.2
6H	38.8	40.3	39.3	40.7	41.1	31.9	33.3	32.3	33.7	34.1
8H	39.1	40.5	39.5	40.9	41.3	31.9	33.3	32.3	33.7	34.1
12H	39.3	40.6	39.7	41.0	41.4	31.9	33.2	32.3	33.6	34.0
4H 2H	34.0	35.6	34.4	35.9	36.3	33.0	34.5	33.4	34.9	35.3
3H	38.7	40.0	39.1	40.4	40.8	33.5	34.8	33.9	35.2	35.6
4H	39.8	41.0	40.2	41.4	41.8	33.5	34.7	33.9	35.1	35.5
6H	40.1	41.2	40.6	41.6	42.1	33.5	34.5	33.9	35.0	35.4
8H	40.4	41.4	40.8	41.8	42.3	33.5	34.4	33.9	34.9	35.3
12H	40.6	41.5	41.1	42.0	42.4	33.5	34.4	33.9	34.8	35.3
8H 4H	39.8	40.8	40.2	41.2	41.7	34.8	35.8	35.2	36.2	36.7
6H	40.3	41.1	40.7	41.6	42.0	34.7	35.6	35.2	36.1	36.5
8H	40.5	41.3	41.0	41.8	42.3	34.7	35.5	35.2	36.0	36.5
12H	40.8	41.5	41.3	42.0	42.5	34.8	35.4	35.3	35.9	36.5
12H 4H	39.8	40.7	40.3	41.1	41.6	35.1	36.0	35.6	36.5	37.0
6H	40.2	41.0	40.8	41.4	42.0	35.1	35.9	35.6	36.3	36.9
8H	40.5	41.2	41.0	41.7	42.2	35.1	35.8	35.6	36.3	36.8
CIE190: 2010										

CIE190: 2010
Area: 0.042 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.1DEG
Operators: Alan Wang
Test Date: 16 July 2021

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
Humidity: 52.1%
Test Distance: 2.500m [K=1.0469]
Remarks:

UTILIZATION FACTORS TABLE

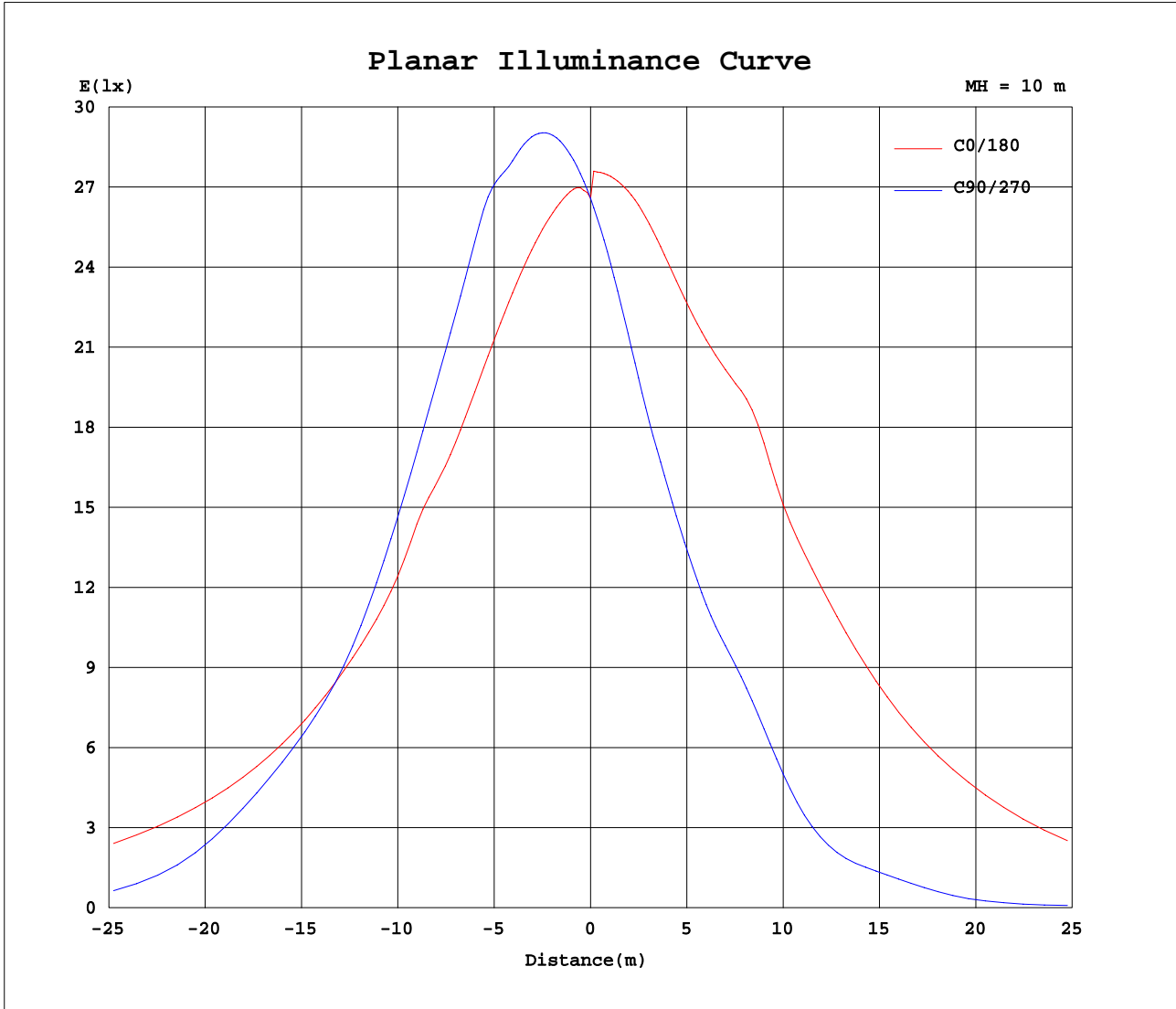
Test:U:120.00V I:0.8441A P:101.20W PF:0.9991 Freq:60.00Hz Lamp Flux:13400x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-LSB2-100D50B-SF	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

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	50	37	29	49	37	29	48	36	29	22
0.80	60	47	38	59	46	38	57	45	38	30
1.00	69	56	48	68	55	47	65	57	47	39
1.25	77	64	56	75	64	56	72	62	55	47
1.50	82	71	62	80	70	62	77	68	61	52
2.00	90	80	73	88	79	72	85	77	70	62
2.50	95	86	79	93	85	78	89	82	76	67
3.00	99	91	85	97	89	84	93	86	81	72
4.00	104	97	92	101	96	91	97	92	88	78
5.00	107	101	97	104	99	95	100	96	92	82
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: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.1%
 Test Distance: 2.500m [K=1.0469]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.1%
 Test Distance: 2.500m [K=1.0469]
 Remarks:

