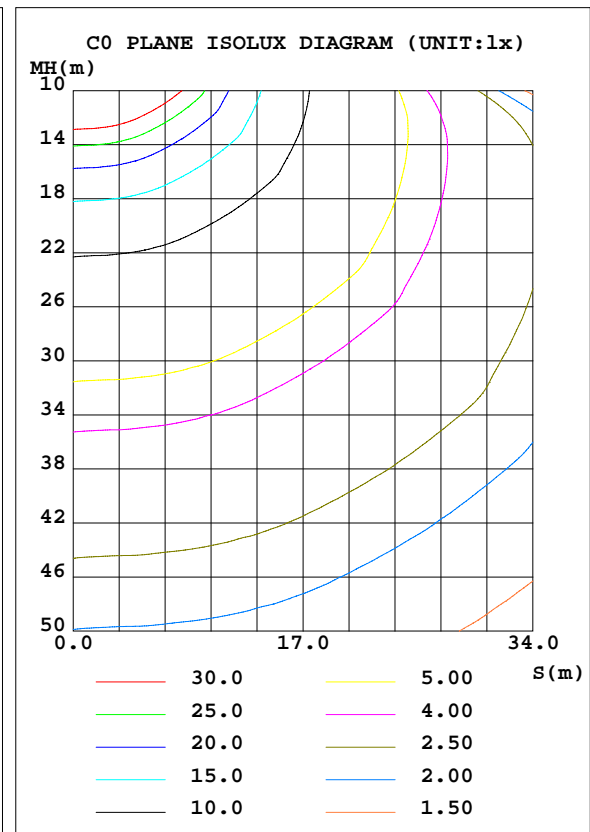
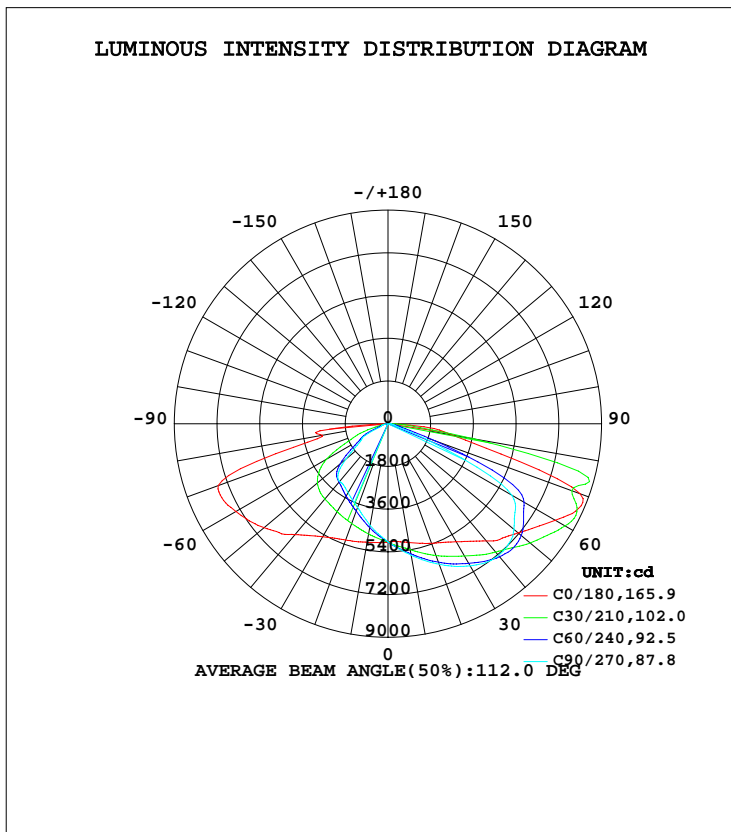


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.00V I:1.5526A P:186.15W PF:0.9991 Freq:60.00Hz Lamp Flux:24420x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-LSB2-185D50W-PRM	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 132.99 lm/W			
MODEL ASD-LSB2-185D50W-PRM		Imax(cd)	10683	S/MH(C0/180)	1.87
NOMINAL POWER(W)	185	LOR(%)	100.0	S/MH(C90/270)	1.01
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	24420	η UP, DN(C0-180)	0.1,66.2
NOMINAL FLUX(lm)	24420	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.1,33.6
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: 25.0DEG
 Operators: Alan Wang
 Test Date: 17 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.2%
 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	508.2	549.0	562.6	542.2	507.5	456.7	435.1	455.9	0- 10	477.2	477.2	1.93,1.93
20	536.4	608.6	629.9	594.1	521.5	415.1	375.3	417.6	10- 20	1437	1914	7.73,7.73
30	574.2	665.8	691.5	645.6	550.0	379.8	335.9	385.9	20- 30	2405	4319	17.4,17.4
40	645.0	722.2	723.7	700.8	610.3	349.6	317.4	361.3	30- 40	3392	7711	31.1,31.1
50	715.9	771.3	693.1	764.7	681.5	301.2	230.7	313.0	40- 50	4336	12047	48.7,48.7
60	813.7	747.6	602.9	751.4	739.6	175.6	128.2	191.4	50- 60	4854	16901	68.3,68.3
70	860.9	569.6	102.7	613.2	760.5	70.41	30.09	80.41	60- 70	4649	21550	87,87
80	276.4	61.54	23.87	70.25	280.4	17.44	13.37	17.09	70- 80	2636	24185	97.7,97.7
90	10.64	5.782	4.685	5.942	7.236	0.5907	0.1105	0.6247	80- 90	528.0	24713	99.8,99.8
100	0.3230	0.0919	0.0545	0.1428	0.7013	0.5133	0.2869	0.5753	90-100	16.76	24730	99.9,99.9
110	0.3990	0.1293	0.0812	0.2212	0.6956	0.5900	0.4206	0.5934	100-110	3.882	24734	99.9,99.9
120	0.4773	0.1806	0.1374	0.2816	0.6516	0.6373	0.5479	0.6306	110-120	4.089	24738	99.9,99.9
130	0.5675	0.2466	0.2106	0.3213	0.7018	0.7832	0.7246	0.7733	120-130	4.435	24742	99.9,99.9
140	0.5395	0.3247	0.3023	0.3906	0.7092	0.8244	0.8435	0.7992	130-140	4.436	24747	100,100
150	0.4888	0.3970	0.4043	0.4350	0.7179	0.8401	0.9043	0.8171	140-150	3.817	24751	100,100
160	0.5247	0.4846	0.5276	0.5197	0.7531	0.8263	0.9223	0.8627	150-160	3.012	24754	100,100
170	0.5837	0.5882	0.6470	0.6189	0.7398	0.7527	0.8043	0.8063	160-170	1.940	24756	100,100
180	0.7091	0.7091	0.7091	0.7091	0.7202	0.7202	0.7202	0.7202	170-180	0.6668	24756	100,100
DEG	LUMINOUS INTENSITY: $\times 10\text{cd}$									UNIT:lm		

Conical surface Flux(90deg): 9779.9 lm

%lum = 39.5%

%lamp = 39.5%

Conical surface Flux(120deg): 16901 lm

%lum = 68.3%

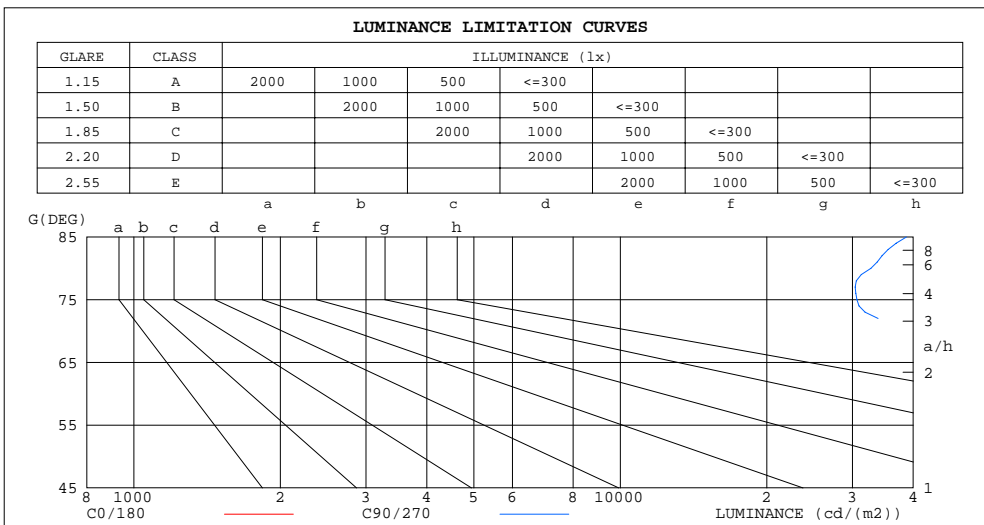
%lamp = 68.3%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 17 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.2%
 Test Distance: 2.500m [K=1.0469]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.00V I:1.5526A P:186.15W PF:0.9991 Freq:60.00Hz Lamp Flux:24420x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-LSB2-185D50W-PRM	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	417730	38745
80	379010	32730
75	453846	30639
70	599279	71506
65	491247	192819
60	387500	287112
55	315485	271199
50	265167	256727
45	229500	241606

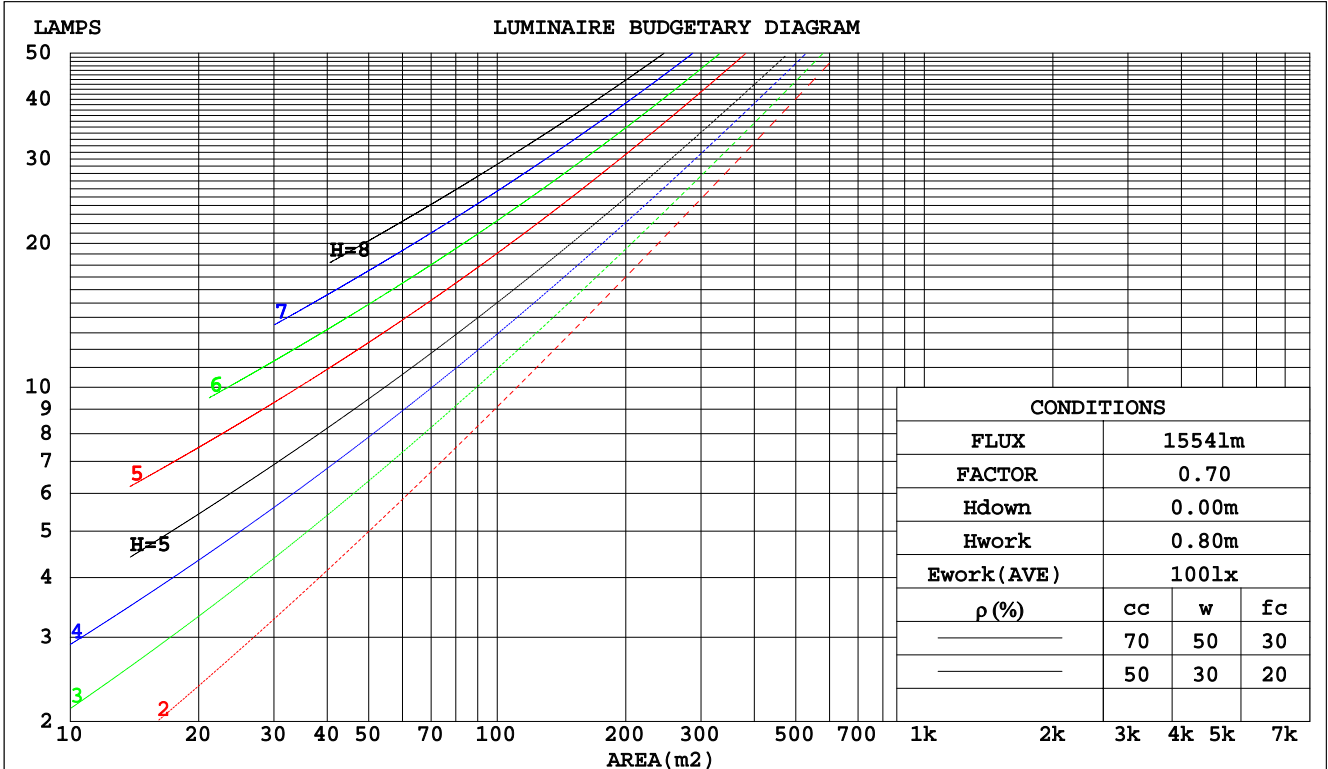
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 17 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.2%
 Test Distance: 2.500m [K=1.0469]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.00V I:1.5526A P:186.15W PF:0.9991 Freq:60.00Hz Lamp Flux:24420x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-LSB2-185D50W-PRM	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	1.01	.97	.92	.99	.95	.91	.95	.91	.88	.91	.88	.85	.87	.85	.82	.80
2.0	.86	.78	.72	.84	.77	.71	.80	.74	.69	.77	.72	.67	.74	.70	.66	.63
3.0	.74	.64	.57	.72	.63	.56	.69	.62	.55	.66	.60	.54	.63	.58	.53	.51
4.0	.64	.54	.47	.63	.53	.46	.60	.52	.45	.57	.50	.45	.55	.49	.44	.42
5.0	.56	.46	.39	.55	.46	.38	.53	.44	.38	.51	.43	.38	.49	.42	.37	.35
6.0	.50	.40	.33	.49	.39	.33	.47	.39	.32	.45	.38	.32	.43	.37	.32	.29
7.0	.45	.35	.28	.44	.35	.28	.42	.34	.28	.41	.33	.28	.39	.32	.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: 25.0DEG
 Operators: Alan Wang
 Test Date: 17 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.2%
 Test Distance: 2.500m [K=1.0469]
 Remarks:

WEC AND CCEC

Test:U:120.00V I:1.5526A P:186.15W PF:0.9991 Freq:60.00Hz Lamp Flux:24420x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-LSB2-185D50W-PRM	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	.355	.202	.064	.348	.199	.063	.334	.192	.061	.322	.186	.060	.310	.180	.058	
2.0	.333	.183	.056	.327	.180	.055	.315	.175	.054	.303	.170	.053	.293	.166	.052	
3.0	.306	.163	.049	.300	.161	.048	.289	.157	.048	.279	.153	.047	.270	.149	.046	
4.0	.279	.145	.043	.274	.143	.042	.264	.140	.042	.255	.137	.041	.247	.134	.041	
5.0	.255	.130	.038	.251	.129	.038	.242	.126	.037	.234	.124	.037	.227	.121	.036	
6.0	.235	.118	.034	.231	.117	.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	.172	.083	.023	.167	.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	.094	.153	.115	.082	.105	.079	.057	.061	.046	.033	.019	.015	.011	
3.0	.173	.116	.071	.148	.100	.061	.102	.069	.043	.059	.041	.025	.019	.013	.008	
4.0	.166	.103	.055	.142	.089	.048	.098	.062	.034	.057	.036	.020	.018	.012	.007	
5.0	.158	.093	.045	.136	.080	.039	.094	.056	.028	.054	.033	.016	.017	.011	.005	
6.0	.151	.085	.037	.130	.073	.033	.089	.051	.023	.052	.030	.014	.017	.010	.005	
7.0	.144	.078	.032	.123	.068	.028	.085	.047	.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	.067	.025	.112	.058	.022	.078	.041	.015	.045	.024	.009	.015	.008	.003	
10.0	.124	.063	.023	.107	.055	.020	.074	.039	.014	.043	.023	.008	.014	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 17 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.2%
 Test Distance: 2.500m [K=1.0469]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.00V I:1.5526A P:186.15W PF:0.9991 Freq:60.00Hz Lamp Flux:24420x1 lm										
NAME: ASD Lighting Corp					TYPE: LED			WEIGHT:		
SPEC.: ASD-LSB2-185D50W-PRM					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	35.4	37.2	35.7	37.5	37.8	33.2	35.1	33.6	35.4	35.7
3H	39.9	41.5	40.3	41.9	42.2	33.6	35.2	33.9	35.5	35.9
4H	41.0	42.6	41.4	42.9	43.3	33.5	35.1	33.9	35.4	35.8
6H	41.4	42.8	41.8	43.2	43.6	33.5	35.0	33.9	35.3	35.7
8H	41.5	42.9	42.0	43.3	43.7	33.5	34.9	33.9	35.3	35.7
12H	41.7	43.1	42.2	43.4	43.9	33.5	34.8	33.9	35.2	35.6
4H 2H	36.1	37.7	36.5	38.0	38.4	34.8	36.3	35.2	36.7	37.0
3H	40.8	42.1	41.2	42.5	42.9	35.1	36.5	35.6	36.9	37.3
4H	42.4	43.6	42.8	44.0	44.4	35.1	36.3	35.5	36.7	37.2
6H	42.9	43.9	43.3	44.4	44.8	35.1	36.2	35.6	36.6	37.1
8H	43.1	44.1	43.6	44.5	45.0	35.1	36.1	35.5	36.5	37.0
12H	43.3	44.2	43.8	44.7	45.2	35.1	36.0	35.6	36.5	36.9
8H 4H	42.5	43.5	42.9	43.9	44.4	36.4	37.4	36.9	37.9	38.3
6H	43.2	44.0	43.7	44.5	45.0	36.4	37.2	36.9	37.7	38.2
8H	43.5	44.2	44.0	44.7	45.2	36.4	37.1	36.9	37.7	38.1
12H	43.8	44.5	44.3	45.0	45.5	36.4	37.1	36.9	37.6	38.1
12H 4H	42.5	43.4	42.9	43.8	44.3	36.9	37.8	37.4	38.3	38.7
6H	43.2	43.9	43.7	44.4	44.9	36.9	37.6	37.4	38.1	38.6
8H	43.5	44.1	44.0	44.6	45.2	36.9	37.5	37.4	38.0	38.6
CIE190: 2010										

CIE190: 2010
Area: 0.042 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: Alan Wang
Test Date: 17 July 2021

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
Humidity: 52.2%
Test Distance: 2.500m [K=1.0469]
Remarks:

UTILIZATION FACTORS TABLE

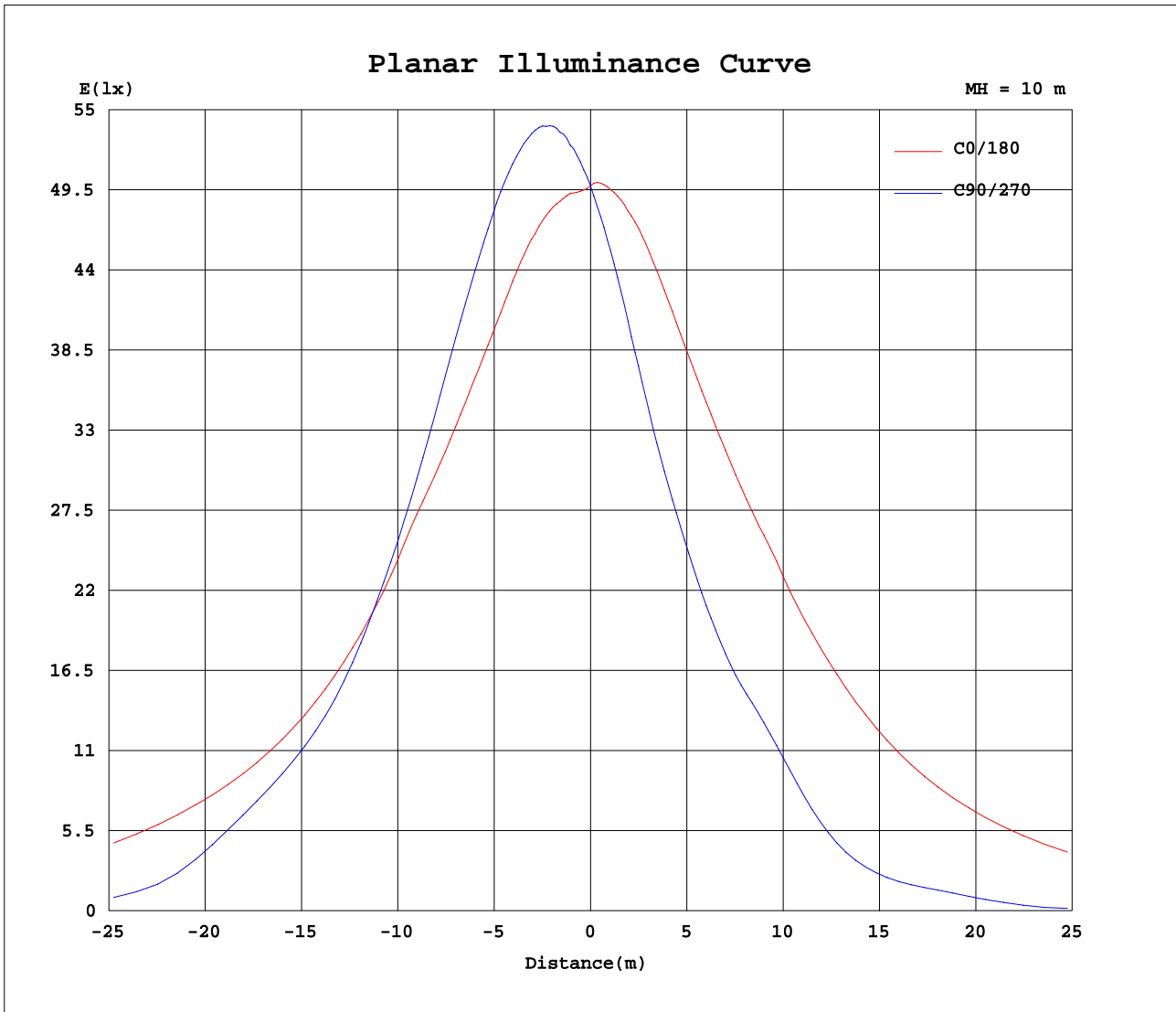
Test:U:120.00V I:1.5526A P:186.15W PF:0.9991 Freq:60.00Hz Lamp Flux:24420x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-LSB2-185D50W-PRM	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

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	47	67	55	47	65	57	47	38
1.25	76	64	56	75	63	55	72	62	55	46
1.50	82	70	62	80	69	62	77	68	61	52
2.00	90	80	72	88	79	72	84	76	70	61
2.50	95	86	79	93	84	78	89	82	76	67
3.00	99	91	84	97	89	83	92	86	81	72
4.00	104	97	92	101	95	90	97	92	88	78
5.00	107	101	97	104	99	95	100	95	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: 25.0DEG
 Operators: Alan Wang
 Test Date: 17 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.2%
 Test Distance: 2.500m [K=1.0469]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 17 July 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 52.2%
 Test Distance: 2.500m [K=1.0469]
 Remarks:

