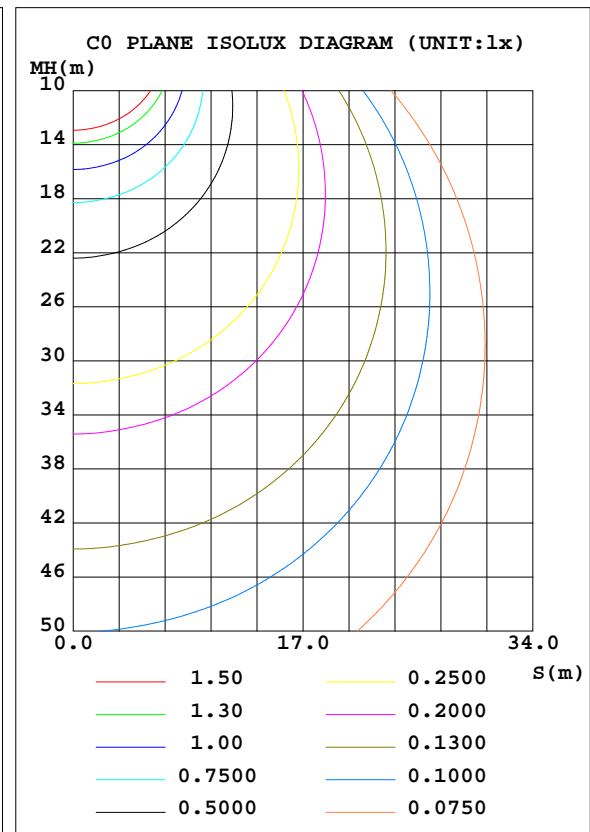
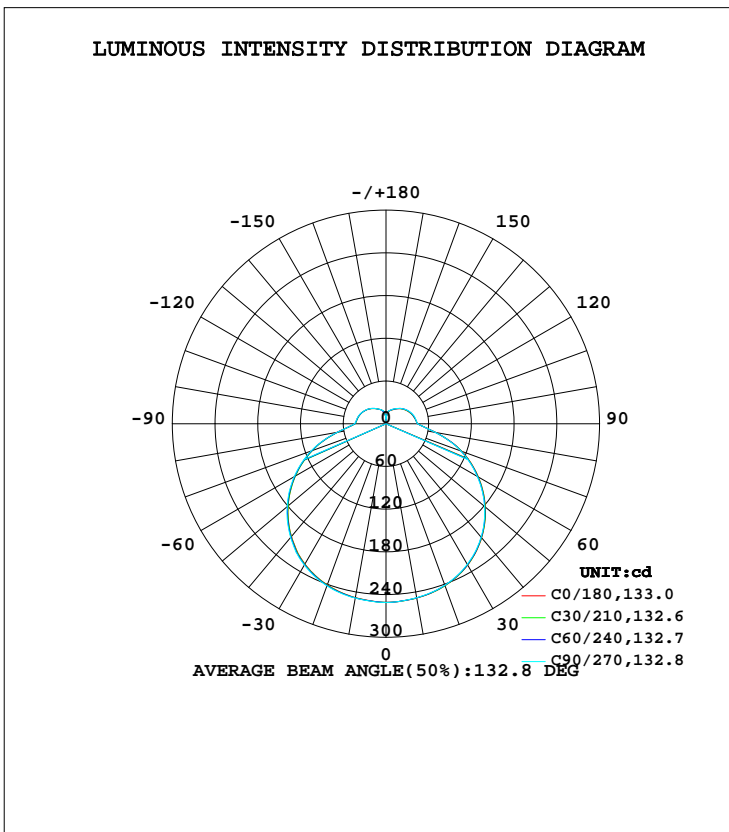


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.00V I:0.1837A P:20.380W PF:0.9245 Freq:60.00Hz Lamp Flux:1138.33x1 lm		
NAME: LED Ceiling light	TYPE: LED	WEIGHT:
SPEC.: ASD-LOFT-FM-12D20BK_5000K	DIM.:	SERIAL No.:
MFR.:ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 55.86 lm/W			
MODEL ASD-LOFT-FM-12D20BK		Imax(cd)	251.0	S/MH(C0/180)	1.35
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.36
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1138.3	η UP, DN(C0-180)	9.5,40.6
NOMINAL FLUX(lm)	1138.33	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	9.4,40.6
LAMPS INSIDE	1	η up(%)	18.8	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down(%)	81.2	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 06 July 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.4%
 Test Distance: 2.500m [K=1.0403]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	248.5	248.4	248.1	247.9	247.9	248.2	248.7	248.8	0- 10	23.81	23.81	2.09,2.09
20	242.2	241.8	241.4	240.9	241.0	241.5	242.3	242.6	10- 20	69.49	93.30	8.2,8.2
30	229.3	228.8	228.2	227.5	227.6	228.3	229.3	229.7	20- 30	108.9	202.2	17.8,17.8
40	208.9	208.6	207.8	207.2	206.6	207.2	208.5	209.0	30- 40	137.3	339.5	29.8,29.8
50	182.1	181.5	180.5	180.3	179.6	179.9	181.3	181.9	40- 50	150.7	490.1	43.1,43.1
60	150.0	149.1	148.2	148.5	147.3	147.3	149.0	150.0	50- 60	147.9	638.0	56,56
70	113.3	112.6	111.7	112.2	110.7	110.3	112.0	113.2	60- 70	129.5	767.5	67.4,67.4
80	70.82	70.64	70.42	70.83	69.79	68.80	69.92	71.11	70- 80	96.53	864.0	75.9,75.9
90	44.74	44.58	44.68	45.12	44.11	43.59	44.39	44.84	80- 90	59.90	923.9	81.2,81.2
100	41.45	41.62	42.10	41.99	41.24	40.89	41.48	41.70	90-100	46.64	970.6	85.3,85.3
110	38.69	39.06	39.78	39.40	38.84	38.65	39.13	38.95	100-110	42.73	1013	89,89
120	35.44	35.96	36.46	36.27	35.75	35.70	36.01	35.76	110-120	37.28	1051	92.3,92.3
130	31.74	32.37	32.51	32.66	32.12	32.15	32.38	32.08	120-130	30.65	1081	95,95
140	27.72	28.13	28.29	28.55	28.11	28.18	28.41	28.00	130-140	23.46	1105	97,97
150	23.72	23.97	24.32	24.49	24.35	24.16	24.37	24.00	140-150	16.45	1121	98.5,98.5
160	20.27	20.62	20.85	20.86	20.91	20.90	20.82	20.65	150-160	10.43	1132	99.4,99.4
170	15.73	17.15	16.79	17.58	17.05	17.22	17.68	17.49	160-170	5.498	1137	99.9,99.9
180	4.005	3.642	3.676	3.841	6.997	6.802	6.781	6.875	170-180	1.262	1138	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 414.13 lm

%lum = 36.4%

%lamp = 36.4%

Conical surface Flux(120deg): 638.01 lm

%lum = 56.0%

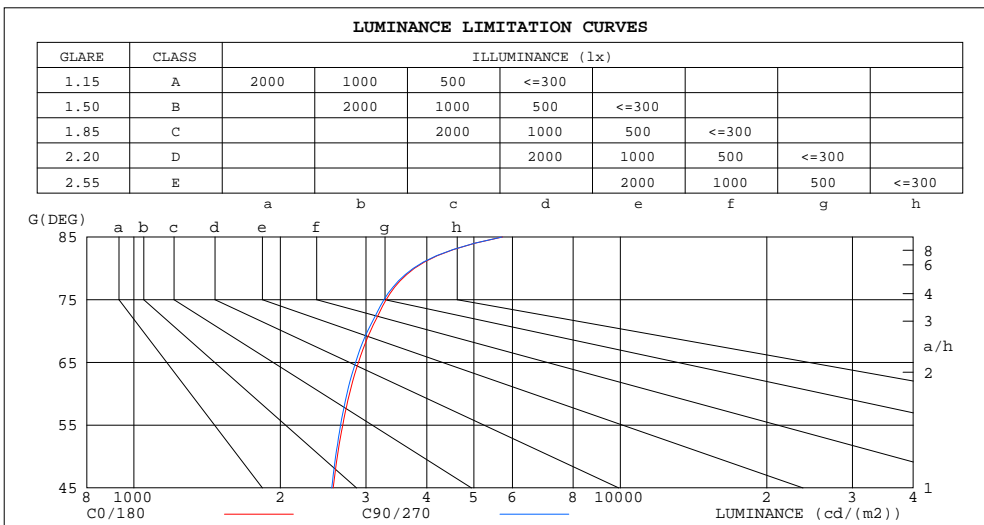
%lamp = 56.0%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 06 July 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.4%
 Test Distance: 2.500m [K=1.0403]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.00V I:0.1837A P:20.380W PF:0.9245 Freq:60.00Hz Lamp Flux:1138.33x1 lm		
NAME: LED Ceiling light	TYPE: LED	WEIGHT:
SPEC.:ASD-LOFT-FM-12D20BK_5000K	DIM.:	SERIAL No.:
MFR.:ASD Lighting Corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	5725	5712
80	3773	3752
75	3301	3267
70	3064	3023
65	2895	2855
60	2775	2741
55	2687	2660
50	2620	2598
45	2568	2551

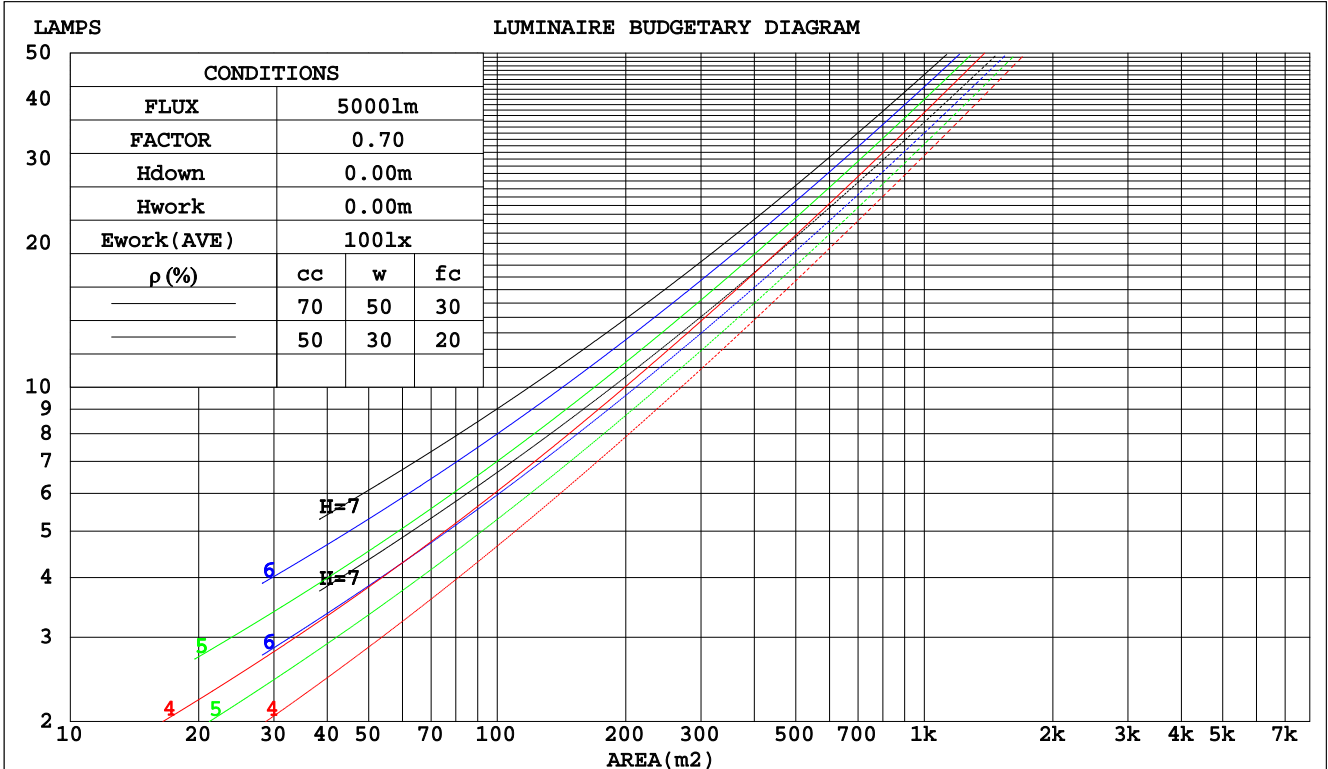
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 06 July 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.4%
 Test Distance: 2.500m [K=1.0403]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.00V I:0.1837A P:20.380W PF:0.9245 Freq:60.00Hz Lamp Flux:1138.33x1 lm		
NAME: LED Ceiling light	TYPE: LED	WEIGHT:
SPEC.: ASD-LOFT-FM-12D20BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding 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																
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.15	1.15	1.15	1.10	1.10	1.10	1.01	1.01	1.01	.92	.92	.92	.85	.85	.85	.81
1.0	.97	.92	.87	.93	.88	.84	.85	.81	.78	.78	.75	.72	.71	.69	.67	.63
2.0	.83	.76	.69	.80	.73	.67	.73	.67	.63	.67	.62	.58	.61	.58	.54	.51
3.0	.72	.64	.57	.69	.61	.55	.63	.57	.51	.58	.53	.48	.53	.49	.45	.42
4.0	.63	.54	.47	.61	.52	.46	.56	.49	.43	.51	.45	.41	.47	.42	.38	.35
5.0	.56	.47	.40	.54	.45	.39	.50	.42	.37	.46	.40	.35	.42	.37	.33	.30
6.0	.50	.41	.35	.48	.40	.34	.45	.37	.32	.41	.35	.30	.38	.33	.28	.26
7.0	.45	.36	.30	.44	.35	.29	.40	.33	.28	.37	.31	.26	.35	.29	.25	.23
8.0	.41	.33	.27	.40	.32	.26	.37	.30	.25	.34	.28	.23	.32	.26	.22	.20
9.0	.38	.29	.24	.36	.29	.23	.34	.27	.22	.31	.25	.21	.29	.24	.20	.18
10.0	.35	.27	.21	.33	.26	.21	.31	.25	.20	.29	.23	.19	.27	.22	.18	.16



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 06 July 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.4%
 Test Distance: 2.500m [K=1.0403]
 Remarks:

WEC AND CCEC

Test:U:120.00V I:0.1837A P:20.380W PF:0.9245 Freq:60.00Hz Lamp Flux:1138.33x1 lm		
NAME: LED Ceiling light	TYPE: LED	WEIGHT:
SPEC.: ASD-LOFT-FM-12D20BK_5000K	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	.358	.204	.064	.345	.197	.063	.321	.184	.059	.299	.172	.055	.278	.161	.052	
2.0	.318	.174	.053	.307	.169	.052	.285	.158	.049	.265	.148	.046	.246	.139	.044	
3.0	.286	.152	.046	.276	.148	.044	.256	.139	.042	.238	.130	.040	.221	.122	.038	
4.0	.260	.135	.040	.250	.131	.039	.232	.123	.037	.216	.116	.035	.200	.109	.033	
5.0	.237	.121	.035	.229	.117	.034	.212	.111	.033	.197	.104	.031	.183	.098	.029	
6.0	.218	.109	.031	.210	.106	.031	.196	.100	.029	.182	.094	.028	.169	.089	.026	
7.0	.202	.100	.028	.195	.097	.028	.181	.092	.026	.168	.086	.025	.156	.081	.024	
8.0	.188	.092	.026	.181	.089	.025	.169	.084	.024	.157	.079	.023	.146	.075	.022	
9.0	.175	.085	.024	.169	.082	.023	.158	.078	.022	.147	.074	.021	.136	.069	.020	
10.0	.164	.079	.022	.158	.077	.021	.148	.072	.020	.138	.068	.019	.128	.064	.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	.334	.334	.334	.285	.285	.285	.195	.195	.195	.112	.112	.112	.036	.036	.036	
1.0	.328	.300	.275	.281	.258	.237	.192	.177	.164	.111	.103	.095	.035	.033	.031	
2.0	.321	.277	.240	.275	.239	.208	.189	.165	.145	.109	.096	.085	.035	.031	.028	
3.0	.314	.261	.218	.269	.225	.189	.185	.156	.133	.107	.091	.078	.034	.030	.026	
4.0	.307	.248	.204	.263	.215	.177	.181	.150	.125	.105	.088	.074	.034	.029	.024	
5.0	.299	.238	.194	.257	.206	.169	.177	.144	.119	.103	.085	.071	.033	.028	.023	
6.0	.292	.231	.187	.251	.200	.162	.173	.140	.115	.100	.082	.068	.032	.027	.023	
7.0	.285	.224	.181	.245	.194	.158	.169	.136	.112	.098	.080	.067	.032	.026	.022	
8.0	.278	.218	.177	.240	.189	.154	.166	.133	.110	.096	.078	.065	.031	.026	.022	
9.0	.272	.214	.174	.235	.185	.152	.163	.130	.108	.095	.077	.064	.031	.025	.021	
10.0	.267	.210	.172	.230	.182	.150	.159	.128	.106	.093	.076	.063	.030	.025	.021	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 06 July 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.4%
 Test Distance: 2.500m [K=1.0403]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.00V I:0.1837A P:20.380W PF:0.9245 Freq:60.00Hz Lamp Flux:1138.33x1 lm										
NAME: LED Ceiling light					TYPE: LED			WEIGHT:		
SPEC.: ASD-LOFT-FM-12D20BK_5000K					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	14.4	15.7	15.0	16.4	17.1	14.3	15.6	14.9	16.3	17.0
3H	16.8	18.0	17.4	18.6	19.4	16.7	17.9	17.3	18.6	19.3
4H	17.9	19.0	18.5	19.7	20.5	17.8	18.9	18.4	19.6	20.4
6H	18.9	20.0	19.5	20.6	21.4	18.8	19.9	19.5	20.6	21.4
8H	19.4	20.4	20.0	21.1	21.9	19.3	20.3	20.0	21.0	21.8
12H	19.9	20.9	20.6	21.6	22.4	19.8	20.8	20.5	21.5	22.4
4H 2H	15.1	16.3	15.8	17.0	17.7	15.1	16.2	15.7	16.9	17.7
3H	17.8	18.8	18.4	19.5	20.3	17.7	18.7	18.4	19.4	20.2
4H	19.0	19.9	19.7	20.6	21.5	19.0	19.9	19.6	20.6	21.4
6H	20.2	21.0	20.9	21.7	22.6	20.2	21.0	20.9	21.7	22.5
8H	20.8	21.5	21.5	22.3	23.1	20.7	21.5	21.5	22.2	23.1
12H	21.4	22.1	22.2	22.9	23.7	21.4	22.1	22.1	22.8	23.7
8H 4H	19.5	20.3	20.2	21.0	21.8	19.5	20.2	20.2	20.9	21.8
6H	20.9	21.6	21.7	22.3	23.2	20.9	21.5	21.6	22.3	23.1
8H	21.7	22.2	22.4	23.0	23.9	21.6	22.2	22.4	23.0	23.8
12H	22.5	23.0	23.3	23.8	24.7	22.5	23.0	23.2	23.8	24.7
12H 4H	19.6	20.3	20.3	21.0	21.9	19.6	20.2	20.3	21.0	21.9
6H	21.1	21.7	21.9	22.4	23.3	21.1	21.6	21.8	22.4	23.3
8H	21.9	22.4	22.7	23.2	24.1	21.9	22.4	22.7	23.2	24.1
CIE190: 2010										

CIE190: 2010
Area: 0.108094 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: Alan Wang
Test Date: 06 July 2023

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
Humidity: 42.4%
Test Distance: 2.500m [K=1.0403]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.00V I:0.1837A P:20.380W PF:0.9245 Freq:60.00Hz Lamp Flux:1138.33x1 lm		
NAME: LED Ceiling light	TYPE: LED	WEIGHT:
SPEC.: ASD-LOFT-FM-12D20BK_5000K	DIM.:	SERIAL No.:
MFR.:ASD Lighting Corp	SUR.:	Shielding Angle:

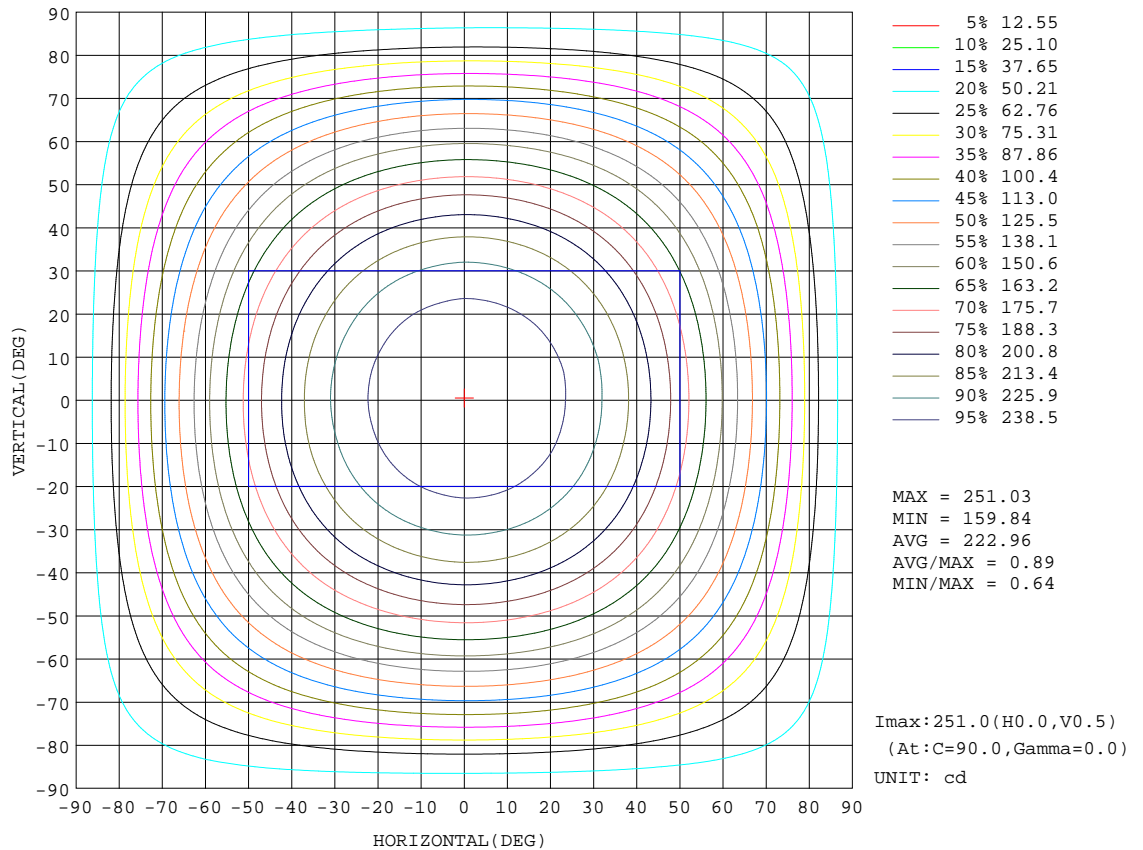
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	48	36	29	47	36	29	45	35	28	21
0.80	58	45	37	56	44	37	53	43	36	28
1.00	66	53	45	64	52	44	60	52	43	34
1.25	73	61	52	70	59	51	66	56	50	40
1.50	78	66	58	75	65	57	70	61	55	44
2.00	85	75	67	82	73	65	76	68	62	50
2.50	90	80	73	86	78	71	80	73	67	54
3.00	93	85	78	90	82	76	83	77	71	58
4.00	98	91	85	94	87	82	87	81	77	62
5.00	101	95	89	97	91	86	89	85	81	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: 25.0DEG
 Operators: Alan Wang
 Test Date: 06 July 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.4%
 Test Distance: 2.500m [K=1.0403]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.00V I:0.1837A P:20.380W PF:0.9245 Freq:60.00Hz Lamp Flux:1138.33x1 lm		
NAME: LED Ceiling light	TYPE: LED	WEIGHT:
SPEC.:ASD-LOFT-FM-12D20BK_5000K	DIM.:	SERIAL No.:
MFR.:ASD Lighting Corp	SUR.:	Shielding Angle:

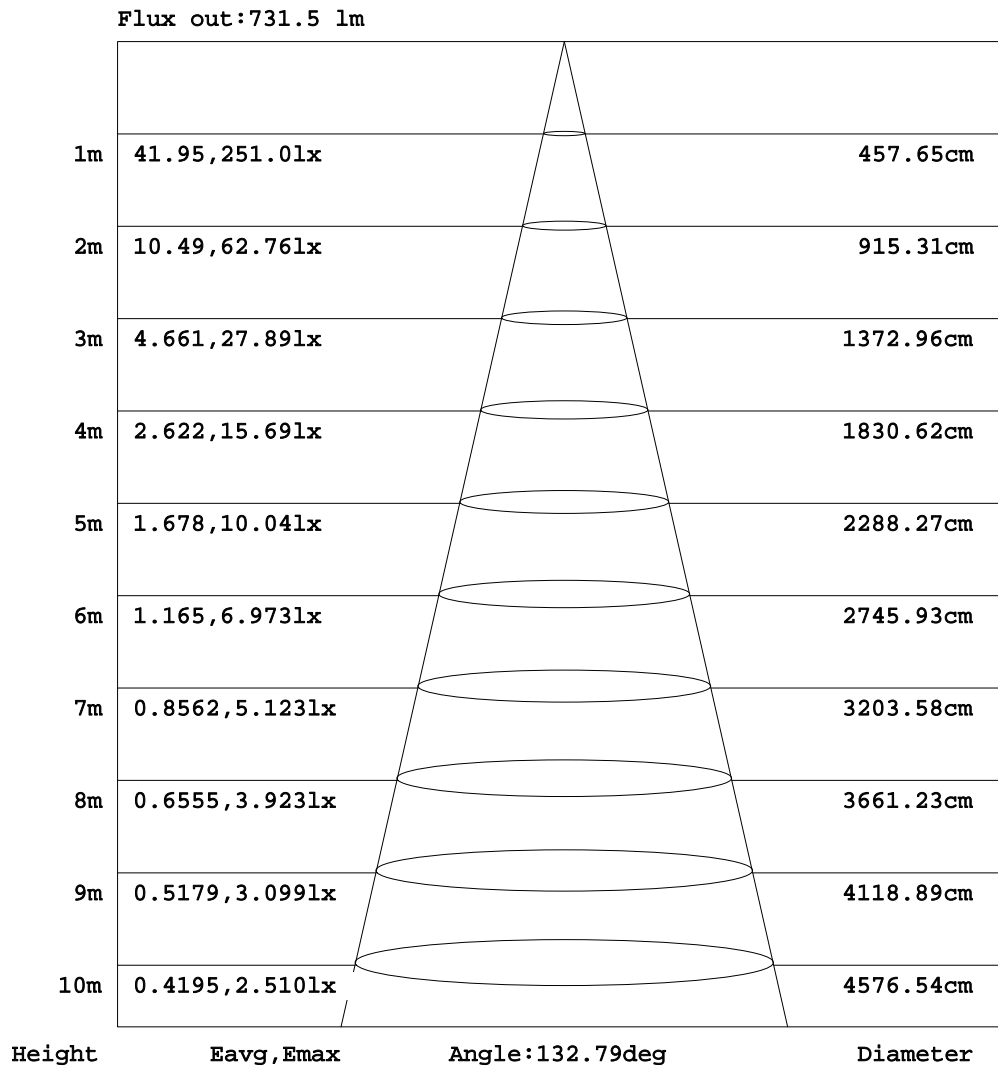


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 06 July 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.4%
 Test Distance: 2.500m [K=1.0403]
 Remarks:

AAI Figure

Test:U:120.00V I:0.1837A P:20.380W PF:0.9245 Freq:60.00Hz Lamp Flux:1138.33x1 lm		
NAME: LED Ceiling light	TYPE: LED	WEIGHT:
SPEC.:ASD-LOFT-FM-12D20BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



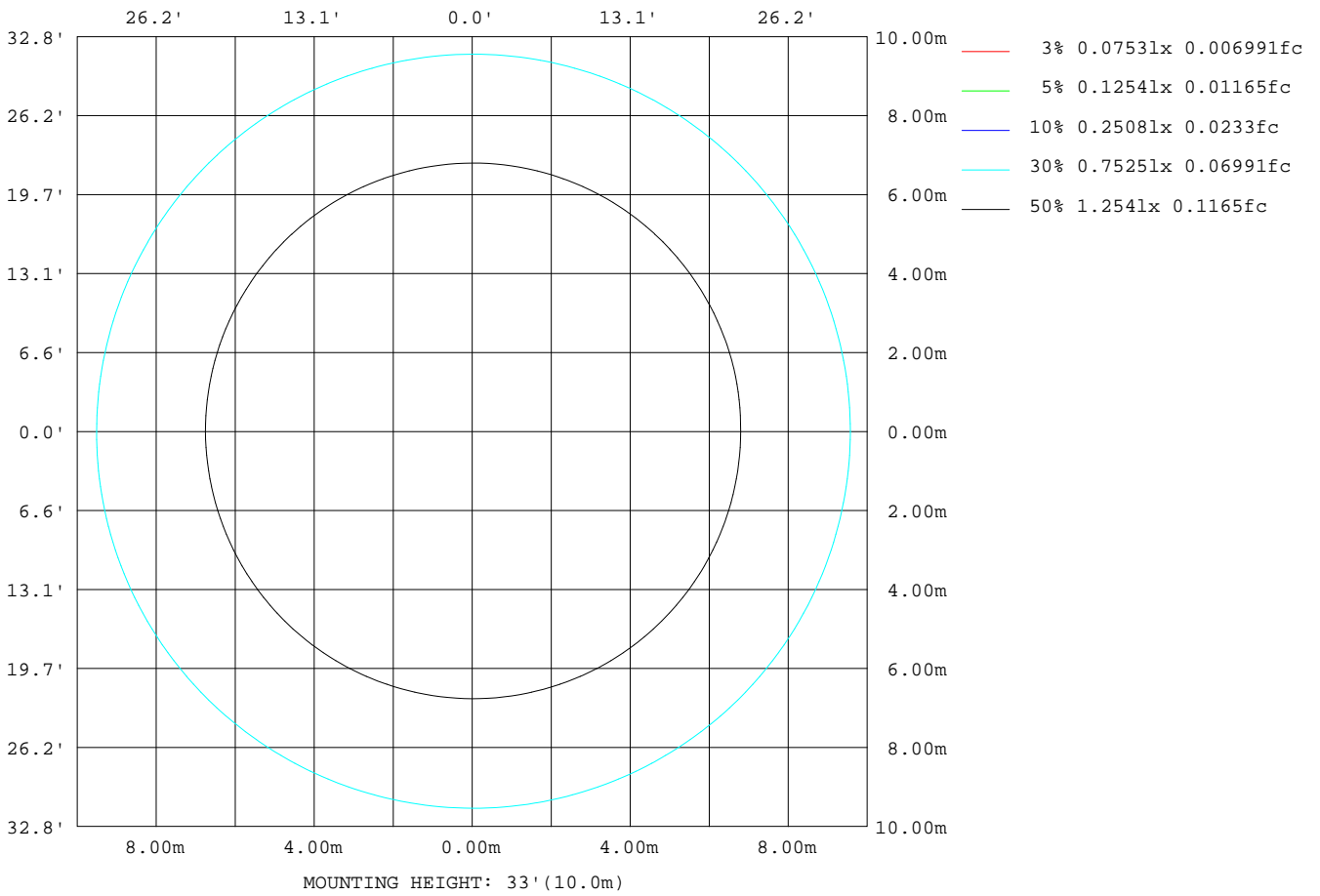
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 06 July 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.4%
 Test Distance: 2.500m [K=1.0403]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.00V I:0.1837A P:20.380W PF:0.9245 Freq:60.00Hz Lamp Flux:1138.33x1 lm		
NAME: LED Ceiling light	TYPE: LED	WEIGHT:
SPEC.:ASD-LOFT-FM-12D20BK_5000K	DIM.:	SERIAL No.:
MFR.:ASD Lighting Corp	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 06 July 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.4%
 Test Distance: 2.500m [K=1.0403]
 Remarks:

LED Avg.L Report

Test:U:120.00V I:0.1837A P:20.380W PF:0.9245 Freq:60.00Hz Lamp Flux:1138.33x1 lm		
NAME: LED Ceiling light	TYPE: LED	WEIGHT:
SPEC.:ASD-LOFT-FM-12D20BK_5000K	DIM.:	SERIAL No.:
MFR.:ASD Lighting Corp	SUR.:	Shielding Angle:

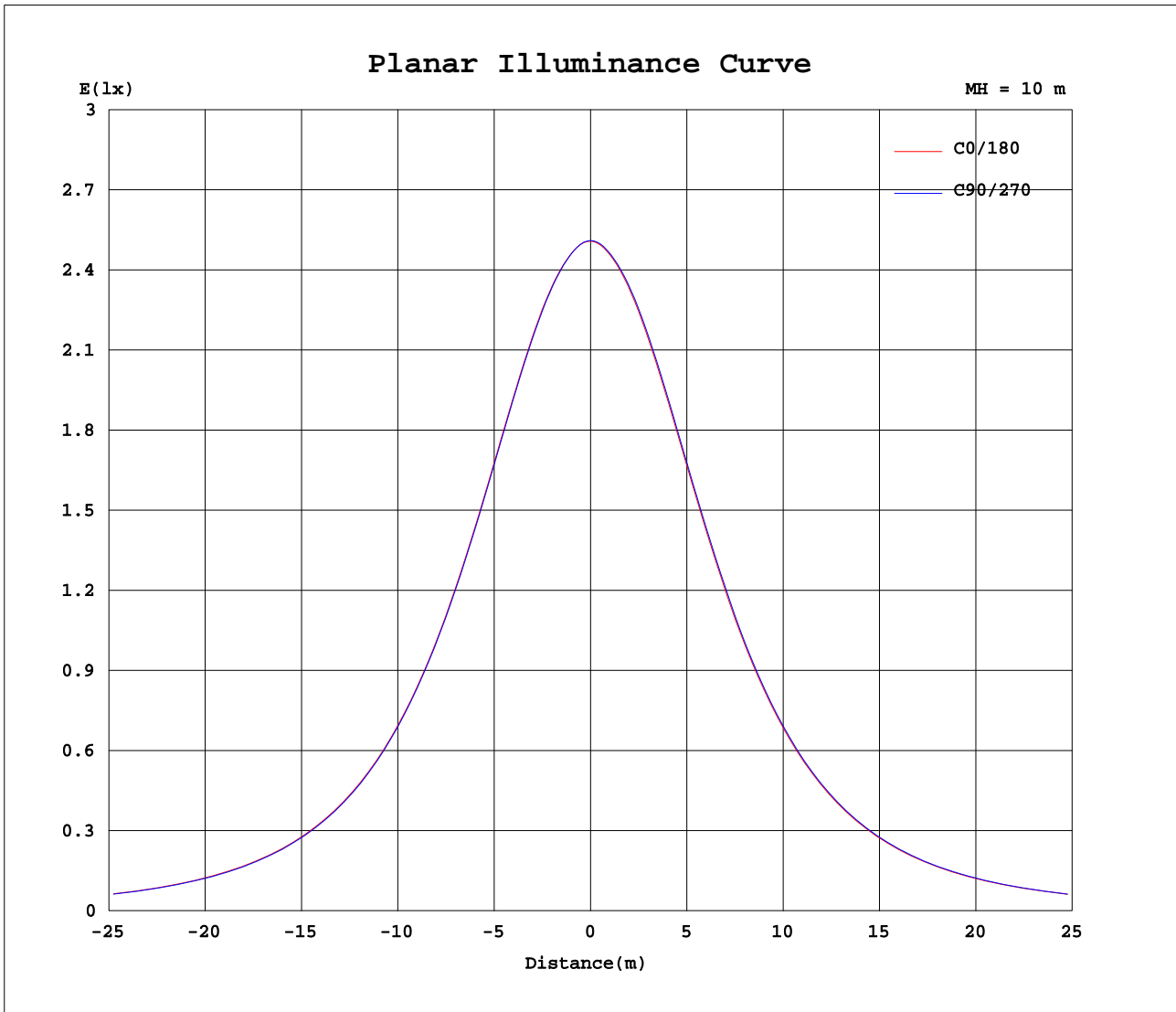
AvgL	cd/m2
L_0~180(65)av	2865
L_0~180(75)av	3272
L_0~180(85)av	5687
L_90~270(65)av	2861
L_90~270(75)av	3264
L_90~270(85)av	5685
L_45(65)av	2866
L_45(75)av	3274
L_45(85)av	5691

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: Alan Wang
Test Date: 06 July 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
Humidity: 42.4%
Test Distance: 2.500m [K=1.0403]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: Alan Wang
Test Date: 06 July 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
Humidity: 42.4%
Test Distance: 2.500m [K=1.0403]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.00V I:0.1837A P:20.380W PF:0.9245 Freq:60.00Hz Lamp Flux:1138.33x1 lm		
NAME: LED Ceiling light	TYPE: LED	WEIGHT:
SPEC.: ASD-LOFT-FM-12D20BK 5000K	DIM.:	SERIAL No.:
MFR.:ASD Lighting Corp	SUR.:	Shielding 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	251	251	251	251	251	251	251	251	251	251	251	251	251	251	251	251	251	251	251
5	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
10	248	249	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	249	249
15	246	246	246	246	246	246	245	245	245	245	245	245	245	245	245	246	246	246	246
20	242	242	242	242	242	241	241	241	241	241	241	241	241	241	241	242	242	242	242
25	237	236	236	236	236	236	236	235	235	235	235	235	235	235	235	236	236	236	237
30	229	229	229	229	229	228	228	228	228	228	227	227	228	228	228	228	229	229	229
35	220	220	220	220	219	219	219	219	218	218	218	218	218	218	218	219	220	220	220
40	209	209	209	209	208	208	208	208	207	207	207	207	207	207	207	207	208	208	208
45	196	196	196	196	196	195	195	195	194	195	194	194	194	194	194	194	195	195	196
50	182	182	182	181	181	181	181	180	180	180	180	180	180	179	179	180	180	181	181
55	167	166	166	166	166	165	165	165	165	165	165	165	164	164	164	164	165	165	166
60	150	150	150	149	149	148	148	148	148	149	148	148	147	147	147	147	148	148	149
65	132	132	132	131	131	131	130	130	131	131	131	130	130	129	129	129	130	130	131
70	113	113	113	113	112	112	112	112	112	112	112	111	111	110	110	110	111	111	112
75	92.4	92.2	92.1	91.9	91.8	91.6	91.4	91.5	91.7	91.9	91.7	91.0	90.7	90.1	89.7	90.0	90.4	90.8	91.2
80	70.8	70.8	70.8	70.6	70.6	70.6	70.4	70.6	70.8	70.8	70.6	70.1	69.8	69.1	68.8	68.8	69.1	69.5	69.9
85	53.9	53.9	53.9	53.8	53.8	53.8	53.8	53.9	54.1	54.2	54.0	53.5	53.2	52.6	52.4	52.4	52.7	53.0	53.3
90	44.7	44.8	44.6	44.6	44.6	44.6	44.7	44.9	45.0	45.1	45.0	44.6	44.1	43.6	43.4	43.6	43.9	44.1	44.4
95	42.8	42.8	42.8	42.8	42.9	42.9	43.1	43.2	43.3	43.2	43.2	42.8	42.4	41.9	41.8	42.0	42.2	42.3	42.6
100	41.4	41.5	41.5	41.6	41.7	42.0	42.1	42.2	42.1	42.0	41.9	41.6	41.2	40.9	40.8	40.9	41.2	41.2	41.5
105	40.1	40.2	40.3	40.4	40.6	41.0	41.2	41.1	40.9	40.8	40.6	40.4	40.1	39.8	39.8	39.9	40.1	40.2	40.4
110	38.7	38.8	38.9	39.1	39.3	39.6	39.8	39.7	39.5	39.4	39.2	39.0	38.8	38.7	38.6	38.7	38.8	38.9	39.1
115	37.1	37.2	37.4	37.6	37.8	38.0	38.3	38.1	37.9	37.9	37.7	37.5	37.4	37.3	37.2	37.3	37.4	37.5	37.6
120	35.4	35.5	35.7	36.0	36.2	36.5	36.5	36.3	36.3	36.3	36.1	35.9	35.8	35.7	35.7	35.7	35.8	35.9	36.0
125	33.6	33.7	33.9	34.2	34.5	34.6	34.5	34.5	34.5	34.5	34.3	34.1	34.0	33.9	33.9	34.0	34.1	34.2	34.2
130	31.7	31.8	32.1	32.4	32.5	32.7	32.5	32.5	32.6	32.7	32.4	32.2	32.1	32.1	32.1	32.1	32.3	32.4	32.4
135	29.8	29.9	30.1	30.4	30.4	30.5	30.4	30.5	30.5	30.7	30.4	30.2	30.1	30.1	30.1	30.2	30.3	30.4	30.4
140	27.7	27.9	28.1	28.1	28.2	28.3	28.3	28.3	28.4	28.6	28.4	28.1	28.1	28.1	28.1	28.2	28.3	28.3	28.4
145	25.6	25.8	25.9	25.9	26.0	26.1	26.2	26.2	26.3	26.4	26.4	26.1	26.1	26.1	26.1	26.1	26.2	26.2	26.3
150	23.7	23.8	23.9	24.0	24.1	24.3	24.3	24.3	24.4	24.5	24.5	24.4	24.4	24.1	24.1	24.2	24.2	24.3	24.4
155	21.9	21.8	21.9	22.2	22.5	22.6	22.7	22.7	22.8	22.7	22.7	22.6	22.5	22.5	22.5	22.4	22.5	22.5	22.7
160	20.3	20.4	20.5	20.6	20.7	20.8	20.9	20.8	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.8
165	18.4	18.9	19.0	19.2	19.2	19.3	19.4	19.4	19.4	19.4	19.5	19.5	19.4	19.4	19.4	19.1	18.8	19.0	19.6
170	15.7	16.5	16.9	17.2	17.3	17.2	16.8	17.2	17.4	17.6	17.4	17.0	17.1	17.1	16.9	17.2	17.9	17.9	17.7
175	11.2	11.3	11.3	11.3	11.6	11.5	11.4	11.4	11.4	11.5	11.6	11.8	11.7	11.7	11.9	11.9	12.2	12.2	12.3
180	4.01	3.90	3.76	3.64	3.64	3.66	3.68	3.70	3.84	3.84	3.74	3.72	7.00	6.87	6.80	6.80	6.80	6.81	6.78

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 06 July 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.4%
 Test Distance: 2.500m [K=1.0403]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.00V I:0.1837A P:20.380W PF:0.9245 Freq:60.00Hz Lamp Flux:1138.33x1 lm		
NAME: LED Ceiling light	TYPE: LED	WEIGHT:
SPEC.:ASD-LOFT-FM-12D20BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	251	251	251	251	251														
5	250	250	250	250	250														
10	249	249	249	249	249														
15	246	246	246	246	247														
20	242	242	243	243	243														
25	237	237	237	237	237														
30	229	230	230	230	230														
35	220	221	221	221	221														
40	209	209	209	209	209														
45	196	196	196	196	196														
50	181	182	182	182	182														
55	166	166	166	167	167														
60	149	150	150	150	150														
65	131	132	132	132	133														
70	112	113	113	113	114														
75	91.5	92.0	92.6	93.0	93.3														
80	70.3	70.7	71.1	71.5	71.6														
85	53.6	53.8	54.0	54.3	54.4														
90	44.6	44.7	44.8	44.9	45.0														
95	42.8	42.9	43.0	43.0	42.9														
100	41.6	41.8	41.7	41.7	41.6														
105	40.5	40.5	40.4	40.3	40.3														
110	39.3	39.1	38.9	38.9	38.8														
115	37.7	37.5	37.4	37.4	37.3														
120	36.0	35.9	35.8	35.7	35.6														
125	34.2	34.1	34.0	33.9	33.8														
130	32.4	32.2	32.1	32.0	31.9														
135	30.4	30.2	30.1	30.0	29.9														
140	28.4	28.1	28.0	27.9	27.8														
145	26.3	26.1	25.9	25.8	25.7														
150	24.3	24.2	24.0	23.8	23.7														
155	22.7	22.5	22.4	22.2	22.1														
160	21.1	20.9	20.7	20.4	20.5														
165	19.8	19.6	19.2	19.1	18.4														
170	17.6	17.7	17.5	17.4	17.1														
175	12.4	12.3	12.0	11.8	11.6														
180	6.79	6.85	6.87	6.92	7.09														

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 06 July 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.4%
 Test Distance: 2.500m [K=1.0403]
 Remarks: