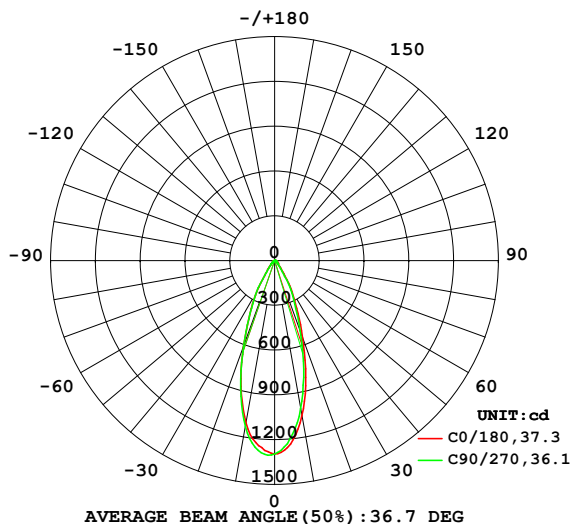


LUMINAIRE PHOTOMETRIC TEST REPORT

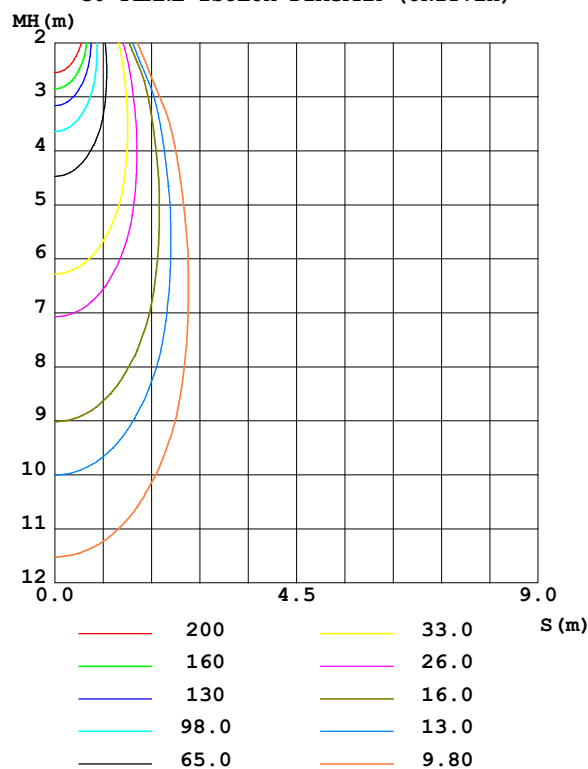
Test:U:119.88V I:0.0841A P:7.4715W PF:0.7414 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:636.437x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85.18 lm/W			
MODEL		I _{max} (cd)	1305	S/MH(C0/180)	0.63
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	0.63
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	636.44	η UP,DN(C0-180)	0.0,47.8
NOMINAL FLUX(lm)	636.437	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,52.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	120	η down (%)	100.0	CIBSE SHR MAX	0.65

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2022-11-23

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity: 65.0%
 Test Distance: 3.090m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

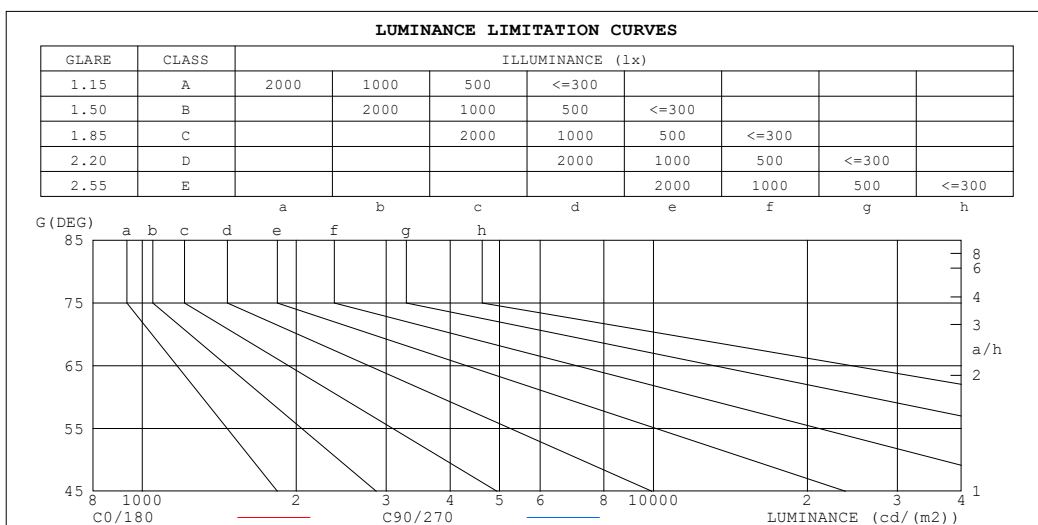
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1054	1018	1007	1049	1106	1126	1131	1104	0- 10	113.0	113.0	17.8,17.8
20	549.1	499.0	505.6	561.0	609.4	625.4	610.9	592.8	10- 20	226.3	339.4	53.3,53.3
30	223.2	203.3	206.5	225.5	240.3	251.1	241.7	238.0	20- 30	169.5	508.9	80,80
40	57.31	52.16	52.52	49.83	54.13	54.57	54.01	54.17	30- 40	70.46	579.3	91,91
50	25.48	24.48	24.46	23.82	24.31	23.81	24.89	24.94	40- 50	27.69	607.0	95.4,95.4
60	12.74	12.28	12.17	12.53	12.73	12.13	12.44	12.80	50- 60	15.85	622.8	97.9,97.9
70	5.619	5.275	5.266	5.604	5.857	5.331	5.415	5.728	60- 70	8.471	631.3	99.2,99.2
80	2.677	2.583	2.594	2.725	2.715	2.550	2.556	2.612	70- 80	3.855	635.2	99.8,99.8
90	0.0356	0.0301	0.0324	0.0344	0.0252	0.0193	0.0175	0.0220	80- 90	1.268	636.4	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-11-23

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:119.88V I:0.0841A P:7.4715W PF:0.7414 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:636.437x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



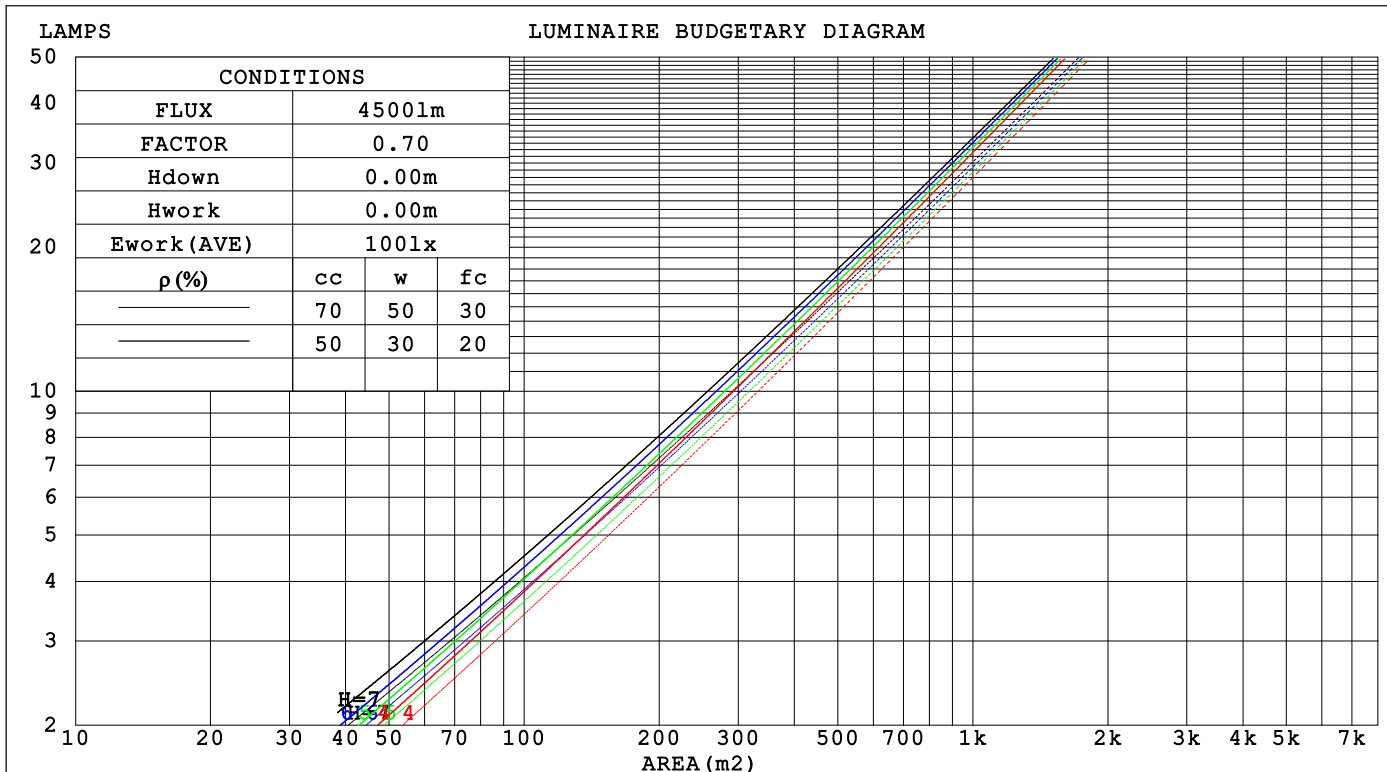
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 2022-11-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity: 65.0%
Test Distance: 3.090m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:119.88V I:0.0841A P:7.4715W PF:0.7414 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:636.437x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	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	1.00
1.0	1.11	1.09	1.06	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.00	.99	.98	.97	.96	.94
2.0	1.04	.00	.97	1.02	.99	.96	.99	.96	.94	.96	.94	.92	.93	.91	.90	.88
3.0	.97	.93	.89	.96	.92	.88	.94	.90	.87	.91	.88	.86	.89	.86	.84	.83
4.0	.92	.87	.83	.91	.86	.82	.89	.85	.81	.87	.83	.80	.85	.82	.79	.78
5.0	.87	.81	.77	.86	.81	.77	.84	.80	.76	.83	.79	.76	.81	.78	.75	.74
6.0	.82	.77	.73	.82	.76	.73	.80	.76	.72	.79	.75	.72	.77	.74	.71	.70
7.0	.78	.73	.69	.78	.72	.69	.76	.72	.68	.75	.71	.68	.74	.70	.68	.66
8.0	.75	.69	.65	.74	.69	.65	.73	.68	.65	.72	.68	.65	.71	.67	.64	.63
9.0	.71	.66	.62	.71	.66	.62	.70	.65	.62	.69	.65	.62	.68	.64	.61	.60
10.0	.68	.63	.59	.68	.63	.59	.67	.62	.59	.66	.62	.59	.65	.62	.59	.58



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-11-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:119.88V I:0.0841A P:7.4715W PF:0.7414 Freq:59.98Hz			UTHDi:0.00% ITHDi:0.00% KDisp:0			Lamp Flux:636.437x1 lm		
NAME: ASD-CD-TS-2D8AC-WH			TYPE:			WEIGHT:		
SPEC.: 5000K 90			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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.173	.098	.031	.166	.095	.030	.153	.088	.028	.142	.082	.026	.131	.076	.025		
2.0	.163	.089	.027	.158	.087	.027	.147	.082	.025	.137	.077	.024	.128	.073	.023		
3.0	.154	.082	.025	.149	.080	.024	.140	.076	.023	.132	.072	.022	.124	.069	.021		
4.0	.145	.075	.022	.141	.074	.022	.134	.071	.021	.126	.068	.020	.120	.065	.020		
5.0	.137	.070	.020	.134	.069	.020	.127	.066	.020	.121	.064	.019	.115	.062	.019		
6.0	.130	.065	.019	.127	.064	.019	.122	.062	.018	.116	.060	.018	.111	.058	.017		
7.0	.124	.061	.017	.121	.060	.017	.116	.059	.017	.111	.057	.017	.107	.056	.016		
8.0	.118	.058	.016	.116	.057	.016	.111	.056	.016	.107	.054	.016	.103	.053	.015		
9.0	.113	.055	.015	.111	.054	.015	.107	.053	.015	.103	.052	.015	.099	.050	.015		
10.0	.108	.052	.014	.106	.051	.014	.103	.050	.014	.099	.049	.014	.096	.048	.014		

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						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020		
1.0	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016		
2.0	.155	.133	.114	.133	.114	.098	.091	.079	.068	.052	.046	.040	.017	.015	.013		
3.0	.142	.114	.091	.122	.098	.079	.084	.068	.055	.048	.040	.033	.016	.013	.011		
4.0	.131	.099	.074	.113	.085	.064	.077	.059	.045	.045	.035	.027	.014	.011	.009		
5.0	.122	.087	.061	.105	.075	.053	.072	.053	.037	.042	.031	.022	.013	.010	.007		
6.0	.114	.077	.051	.098	.067	.045	.068	.047	.031	.039	.028	.019	.013	.009	.006		
7.0	.107	.070	.043	.092	.060	.038	.064	.042	.027	.037	.025	.016	.012	.008	.005		
8.0	.101	.063	.037	.087	.055	.033	.060	.039	.023	.035	.023	.014	.011	.007	.005		
9.0	.096	.058	.032	.083	.050	.028	.057	.035	.020	.033	.021	.012	.011	.007	.004		
10.0	.091	.053	.028	.079	.046	.025	.054	.033	.018	.032	.019	.011	.010	.006	.003		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-11-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.88V I:0.0841A P:7.4715W PF:0.7414 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:636.437x1 lm										
NAME: ASD-CD-TS-2D8AC-WH					TYPE:			WEIGHT:		
SPEC.: 5000K 90					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	5.4	6.3	5.6	6.5	6.6	5.9	6.8	6.1	6.9	7.1
3H	5.7	6.5	6.0	6.7	6.9	6.1	7.0	6.4	7.2	7.4
4H	5.8	6.6	6.1	6.8	7.0	6.2	7.0	6.5	7.2	7.4
6H	5.9	6.6	6.2	6.9	7.1	6.3	7.0	6.6	7.3	7.5
8H	6.0	6.7	6.3	6.9	7.2	6.4	7.1	6.7	7.3	7.6
12H	6.0	6.7	6.4	7.0	7.2	6.4	7.1	6.7	7.3	7.6
4H 2H	5.5	6.3	5.8	6.5	6.7	5.9	6.7	6.2	6.9	7.1
3H	5.9	6.5	6.2	6.8	7.1	6.3	7.0	6.6	7.2	7.5
4H	6.0	6.6	6.4	6.9	7.2	6.4	7.0	6.8	7.3	7.7
6H	6.2	6.8	6.6	7.1	7.4	6.6	7.2	7.0	7.5	7.8
8H	6.3	6.8	6.7	7.2	7.6	6.7	7.2	7.1	7.6	7.9
12H	6.5	6.9	6.9	7.3	7.7	6.8	7.2	7.2	7.6	8.0
8H 4H	6.0	6.5	6.4	6.9	7.2	6.4	6.9	6.8	7.3	7.6
6H	6.3	6.7	6.8	7.1	7.6	6.7	7.1	7.2	7.5	7.9
8H	6.5	6.9	7.0	7.3	7.7	6.9	7.2	7.3	7.7	8.1
12H	6.7	7.0	7.2	7.4	7.9	7.0	7.3	7.4	7.7	8.2
12H 4H	6.0	6.5	6.4	6.8	7.2	6.4	6.9	6.8	7.2	7.6
6H	6.3	6.7	6.8	7.1	7.6	6.7	7.1	7.2	7.5	7.9
8H	6.6	6.9	7.0	7.3	7.8	6.9	7.2	7.4	7.7	8.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.6 / - 1.1					+ 1.1 / - 1.4				
1.5H	+ 2.5 / - 0.9					+ 1.6 / - 1.1				
2.0H	+ 1.5 / - 1.1					+ 1.7 / - 1.1				

CIE Pub.117, 636.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.6)
Area: 0.111111 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-11-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:119.88V I:0.0841A P:7.4715W PF:0.7414 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:636.437x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

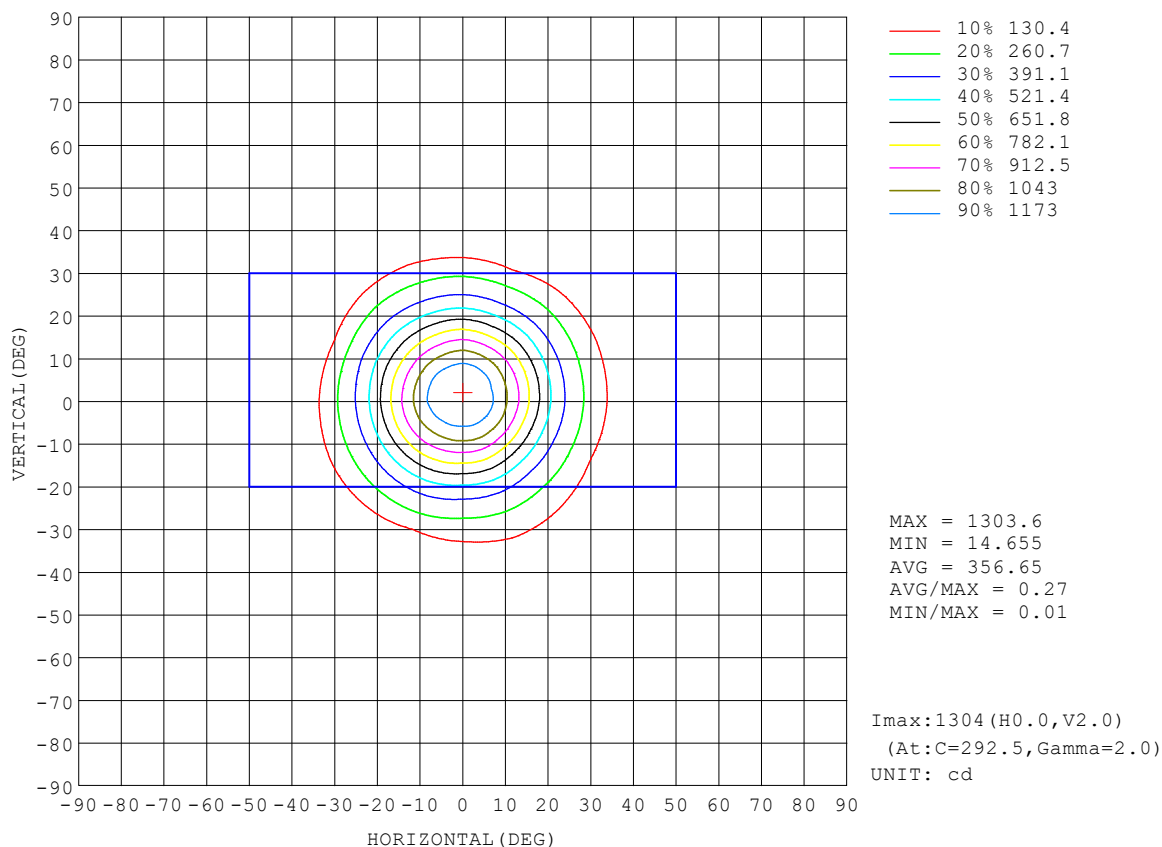
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	79	75	85	79	75	85	79	75	71
0.80	93	87	83	93	87	83	92	86	83	79
1.00	98	92	88	97	92	88	96	92	88	84
1.25	102	97	93	101	96	93	99	95	92	88
1.50	105	100	97	104	99	96	102	98	95	90
2.00	108	104	100	106	102	99	104	100	98	93
2.50	110	106	103	108	104	102	105	102	100	94
3.00	111	108	105	109	106	104	106	104	102	95
4.00	113	111	108	111	109	107	108	106	104	97
5.00	115	112	110	113	111	109	109	107	106	98
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators:
Test Date: 2022-11-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity: 65.0%
Test Distance: 3.090m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:119.88V I:0.0841A P:7.4715W PF:0.7414 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:636.437x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

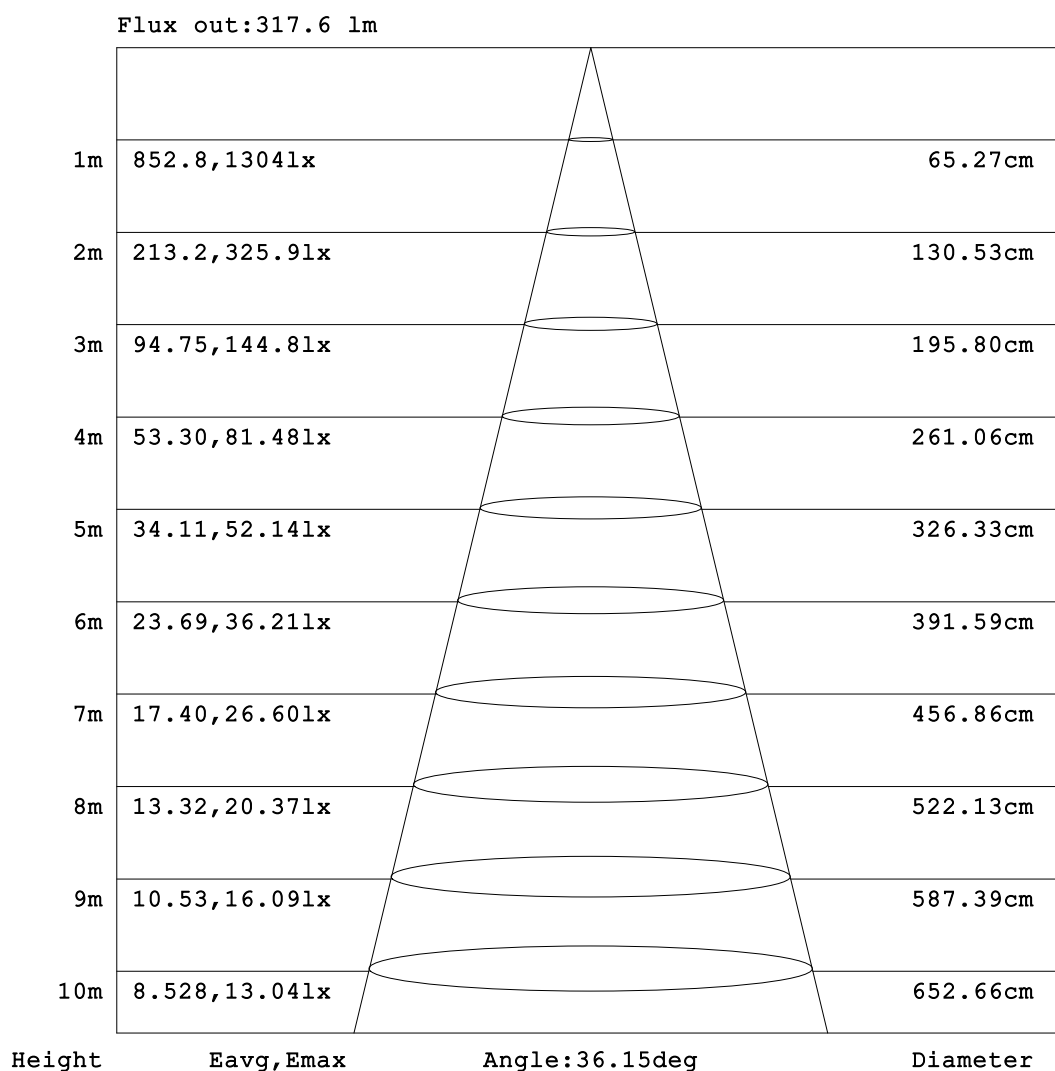


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-11-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

AAI Figure

Test:U:119.88V I:0.0841A P:7.4715W PF:0.7414 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:636.437x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



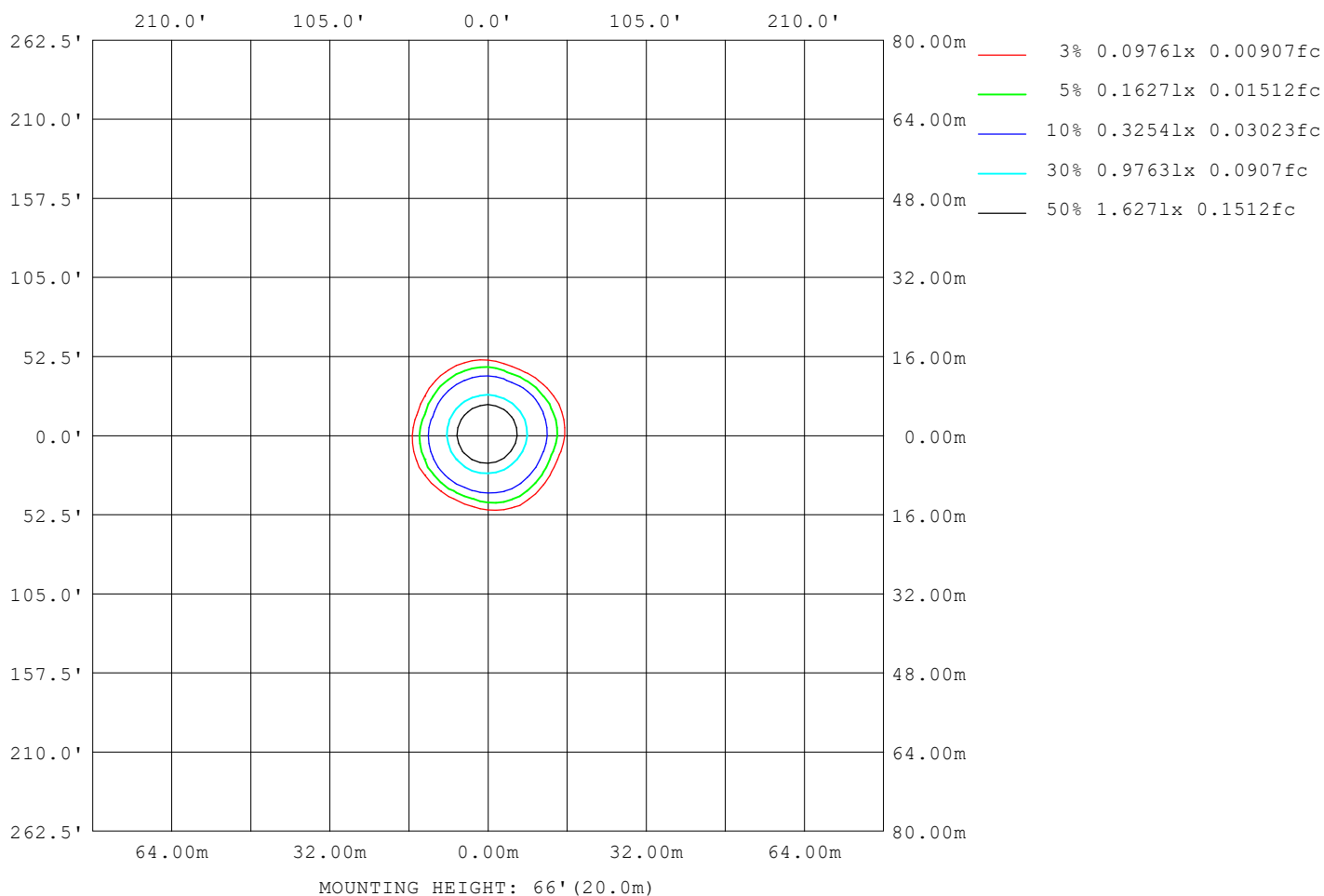
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-11-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test: U:119.88V I:0.0841A P:7.4715W PF:0.7414 Freq:59.98Hz UTHDi: 0.00% ITHDi: 0.00% KDisp: 0 Lamp Flux: 636.437x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:
 Test Date:2022-11-23

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.090m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:119.88V I:0.0841A P:7.4715W PF:0.7414 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:636.437x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

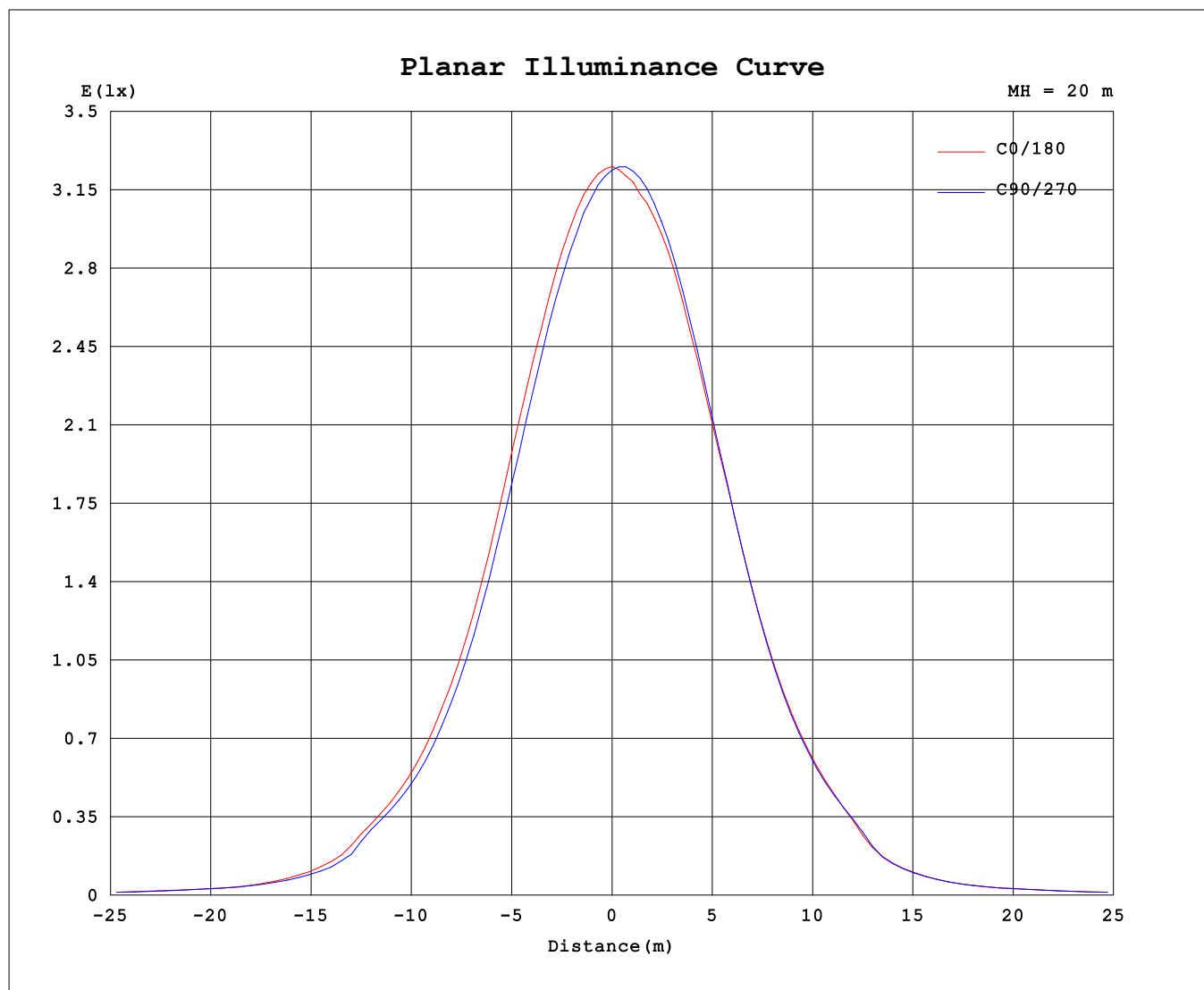
AvgL	cd/m2
L_0~180 (65) av	186
L_0~180 (75) av	125
L_0~180 (85) av	149
L_90~270 (65) av	178
L_90~270 (75) av	116
L_90~270 (85) av	92
L_45 (65) av	181
L_45 (75) av	119
L_45 (85) av	120

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-11-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators:
Test Date: 2022-11-23

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity: 65.0%
Test Distance: 3.090m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

```