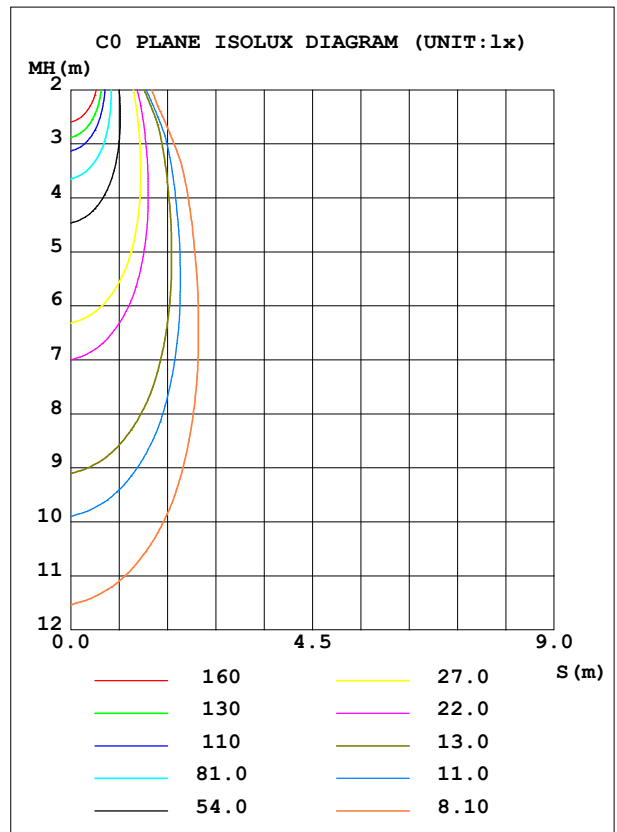
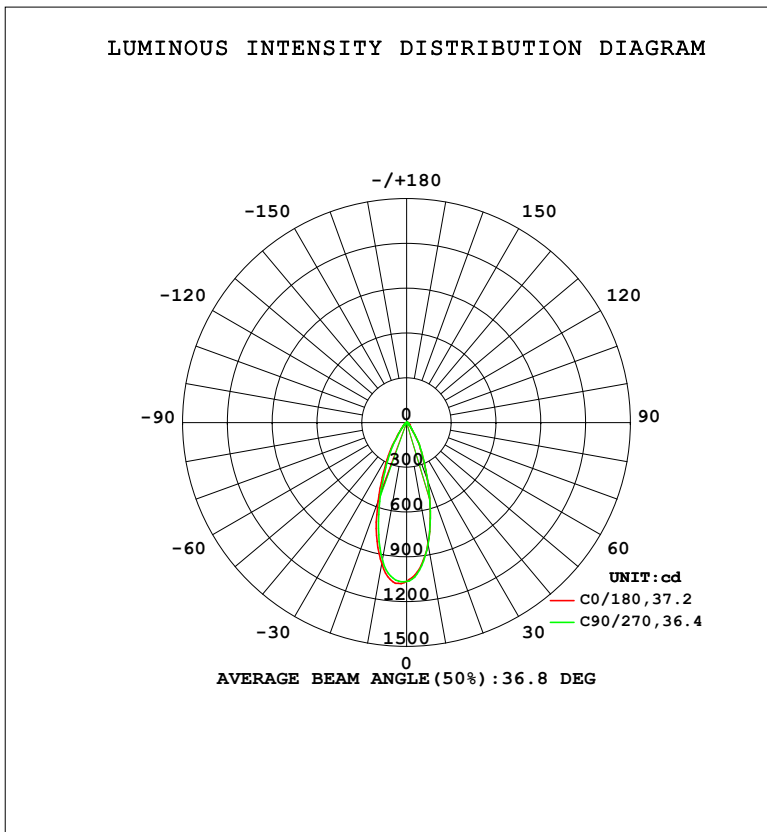


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.78V I:0.0843A P:7.4956W PF:0.7426 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:529x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 2700K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		I _{max} (cd)	1083	S/MH (C0/180)	0.67
NOMINAL POWER (W)	8	LOR (%)	100.0	S/MH (C90/270)	0.64
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	529	η UP, DN (C0-180)	0.0, 47.3
NOMINAL FLUX (lm)	529	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 52.7
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



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:

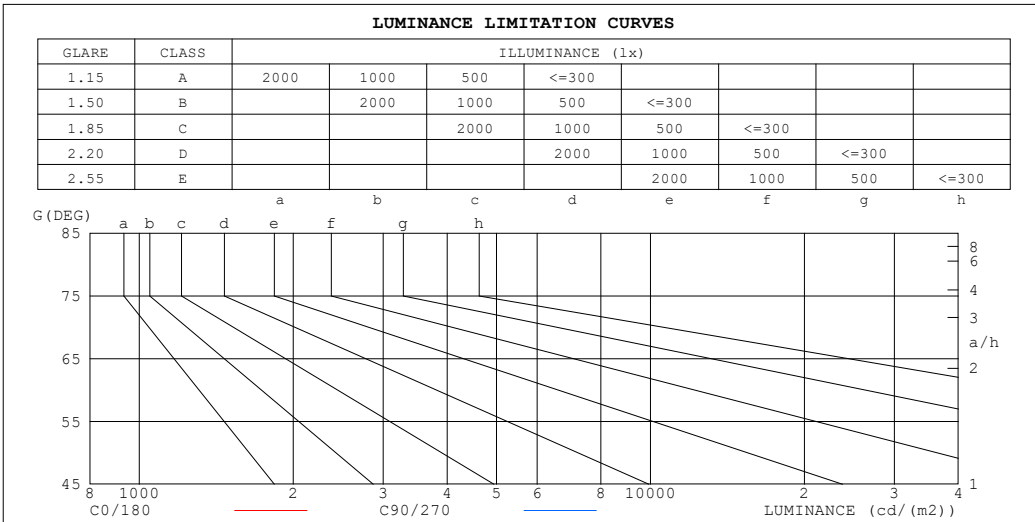
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	826.6	809.0	828.5	896.9	961.5	961.4	936.6	876.0	0- 10	93.32	93.32	17.6,17.6
20	409.8	409.8	414.0	472.6	560.8	540.7	515.7	462.8	10- 20	187.1	280.5	52.8,52.8
30	167.5	164.9	171.8	181.5	230.1	206.2	208.0	187.8	20- 30	141.8	422.2	79.5,79.5
40	48.43	38.38	50.36	38.18	59.69	41.71	53.59	39.18	30- 40	60.00	482.2	90.8,90.8
50	23.68	18.83	22.72	18.65	23.09	18.51	23.65	19.17	40- 50	23.72	506.0	95.3,95.3
60	11.56	9.783	10.49	9.631	11.03	9.852	10.97	10.36	50- 60	13.46	519.4	97.8,97.8
70	5.243	4.194	4.533	4.146	5.028	4.266	4.832	4.617	60- 70	7.216	526.6	99.2,99.2
80	2.355	2.129	2.129	2.093	2.256	2.074	2.250	2.183	70- 80	3.272	529.9	99.8,99.8
90	0.0323	0.0256	0.0277	0.0244	0.0194	0.0193	0.0194	0.0161	80- 90	1.069	531.0	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°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:

LUMINANCE LIMITATION CURVES

Test:U:119.78V I:0.0843A P:7.4956W PF:0.7426 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:529x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 2700K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	141	69
80	124	110
75	117	98
70	140	119
65	172	149
60	211	188
55	263	237
50	336	317
45	420	404

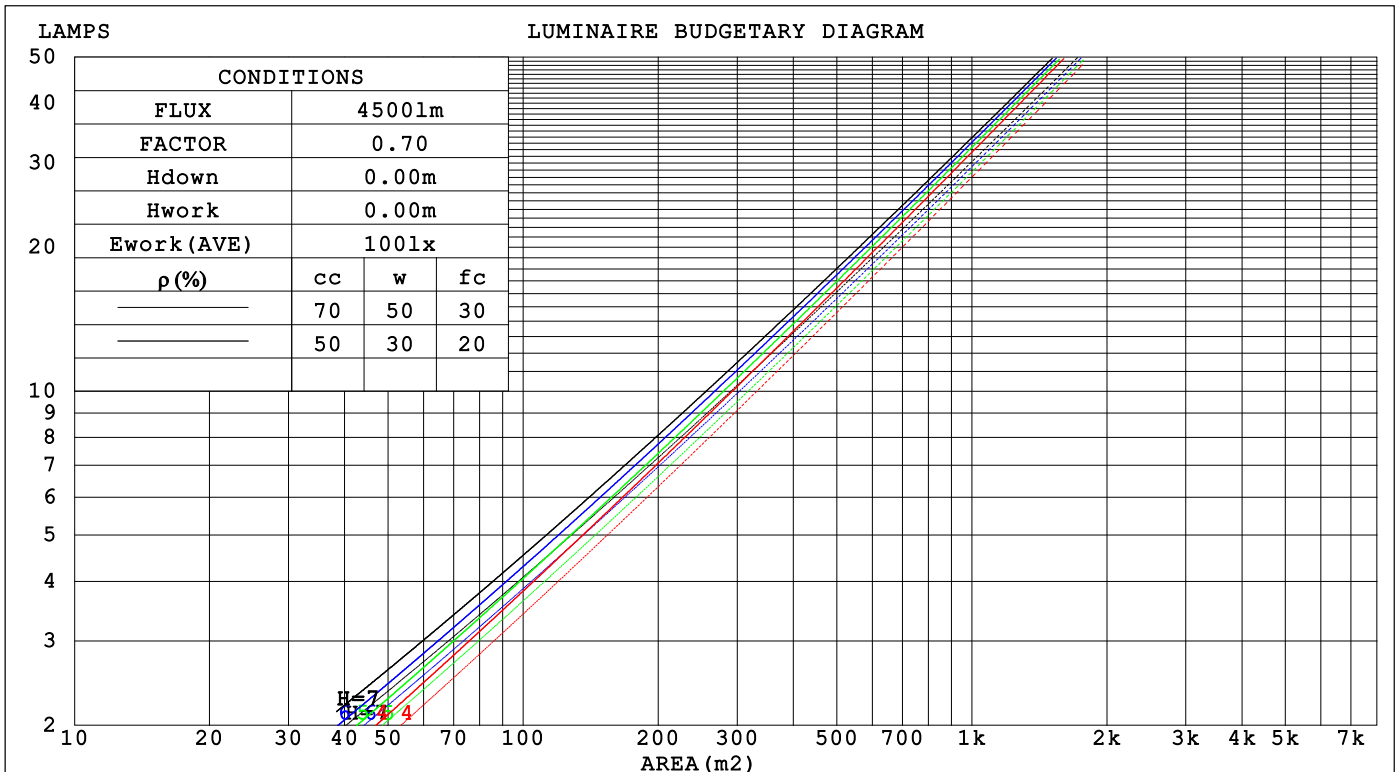
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2022-11-23

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:119.78V I:0.0843A P:7.4956W PF:0.7426 Freq:59.98Hz		
UTHdi:0.00% ITHdi:0.00% KDisp:0 Lamp Flux:529x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 2700K 90	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															
	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	1.01	1.01	.00	.98	.98	.97	.96	.94
2.0	1.04	.00	.97	1.02	.99	.96	.99	.96	.93	.96	.94	.91	.93	.91	.90	.88
3.0	.97	.93	.89	.96	.92	.88	.93	.90	.87	.91	.88	.85	.89	.86	.84	.83
4.0	.92	.87	.83	.91	.86	.82	.88	.84	.81	.87	.83	.80	.85	.82	.79	.78
5.0	.87	.81	.77	.86	.81	.77	.84	.80	.76	.82	.79	.76	.81	.78	.75	.74
6.0	.82	.77	.73	.81	.76	.72	.80	.75	.72	.79	.75	.71	.77	.74	.71	.70
7.0	.78	.73	.69	.77	.72	.68	.76	.71	.68	.75	.71	.68	.74	.70	.67	.66
8.0	.74	.69	.65	.74	.69	.65	.73	.68	.65	.72	.68	.64	.71	.67	.64	.63
9.0	.71	.66	.62	.70	.65	.62	.70	.65	.62	.69	.64	.61	.68	.64	.61	.60
10.0	.68	.63	.59	.67	.62	.59	.67	.62	.59	.66	.62	.59	.65	.61	.58	.57



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:

WEC AND CCEC

Test:U:119.78V I:0.0843A P:7.4956W PF:0.7426 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:529x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 2700K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.173	.099	.031	.167	.095	.030	.154	.088	.028	.143	.082	.026	.132	.076	.025	
2.0	.164	.090	.028	.158	.087	.027	.148	.082	.026	.138	.077	.024	.129	.073	.023	
3.0	.155	.082	.025	.150	.080	.024	.141	.076	.023	.133	.073	.022	.125	.069	.021	
4.0	.146	.076	.022	.142	.074	.022	.134	.071	.021	.127	.068	.021	.120	.065	.020	
5.0	.138	.070	.020	.135	.069	.020	.128	.067	.020	.122	.064	.019	.116	.062	.019	
6.0	.131	.066	.019	.128	.065	.019	.122	.063	.018	.117	.061	.018	.112	.059	.017	
7.0	.125	.062	.017	.122	.061	.017	.117	.059	.017	.112	.057	.017	.107	.056	.016	
8.0	.119	.058	.016	.116	.057	.016	.112	.056	.016	.108	.054	.016	.104	.053	.015	
9.0	.113	.055	.015	.111	.054	.015	.107	.053	.015	.103	.052	.015	.100	.051	.015	
10.0	.109	.052	.014	.107	.052	.014	.103	.050	.014	.100	.049	.014	.096	.048	.014	

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	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	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.142	.114	.091	.122	.098	.079	.084	.068	.055	.048	.040	.032	.016	.013	.011	
4.0	.131	.099	.074	.113	.085	.064	.078	.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	.044	.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	.032	.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	.054	.028	.079	.046	.025	.055	.033	.018	.032	.019	.010	.010	.006	.003	

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:

UGR(Unified Glare Rating) Table

Test:U:119.78V I:0.0843A P:7.4956W PF:0.7426 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:529x1 lm										
NAME: ASD-CD-TS-2D8AC-WH				TYPE:				WEIGHT:		
SPEC.: 2700K 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	5.6	6.5	5.8	6.6	6.8	5.9	6.8	6.1	6.9	7.1
3H	6.0	6.8	6.2	7.0	7.2	6.1	7.0	6.4	7.1	7.3
4H	6.1	6.9	6.4	7.1	7.3	6.2	7.0	6.5	7.2	7.4
6H	6.2	6.9	6.5	7.2	7.4	6.3	7.0	6.6	7.3	7.5
8H	6.3	7.0	6.6	7.3	7.5	6.4	7.1	6.7	7.3	7.6
12H	6.4	7.0	6.7	7.3	7.6	6.4	7.0	6.7	7.3	7.6
4H 2H	5.6	6.4	5.9	6.6	6.9	5.9	6.7	6.2	6.9	7.1
3H	6.1	6.8	6.4	7.1	7.3	6.3	6.9	6.6	7.2	7.5
4H	6.3	6.9	6.7	7.2	7.5	6.4	7.0	6.8	7.3	7.6
6H	6.5	7.1	6.9	7.4	7.8	6.6	7.1	7.0	7.5	7.8
8H	6.7	7.2	7.1	7.5	7.9	6.7	7.2	7.1	7.5	7.9
12H	6.8	7.3	7.2	7.6	8.0	6.7	7.2	7.1	7.6	7.9
8H 4H	6.3	6.8	6.7	7.2	7.5	6.4	6.9	6.8	7.3	7.6
6H	6.6	7.1	7.1	7.4	7.9	6.7	7.1	7.1	7.5	7.9
8H	6.9	7.2	7.3	7.6	8.1	6.9	7.2	7.3	7.6	8.1
12H	7.1	7.4	7.5	7.8	8.3	6.9	7.2	7.4	7.7	8.1
12H 4H	6.3	6.7	6.7	7.1	7.5	6.4	6.8	6.8	7.2	7.6
6H	6.6	7.0	7.1	7.4	7.9	6.7	7.1	7.2	7.5	7.9
8H	6.9	7.2	7.4	7.7	8.1	6.9	7.2	7.4	7.6	8.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.1 / - 0.9					+ 1.0 / - 1.3				
1.5H	+ 1.8 / - 0.8					+ 1.8 / - 1.0				
2.0H	+ 1.8 / - 1.1					+ 1.7 / - 1.1				

CIE Pub.117, 531.0 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -2.2)
 Area: 0.111111 m2

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:

UTILIZATION FACTORS TABLE

Test:U:119.78V I:0.0843A P:7.4956W PF:0.7426 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:529x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 2700K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

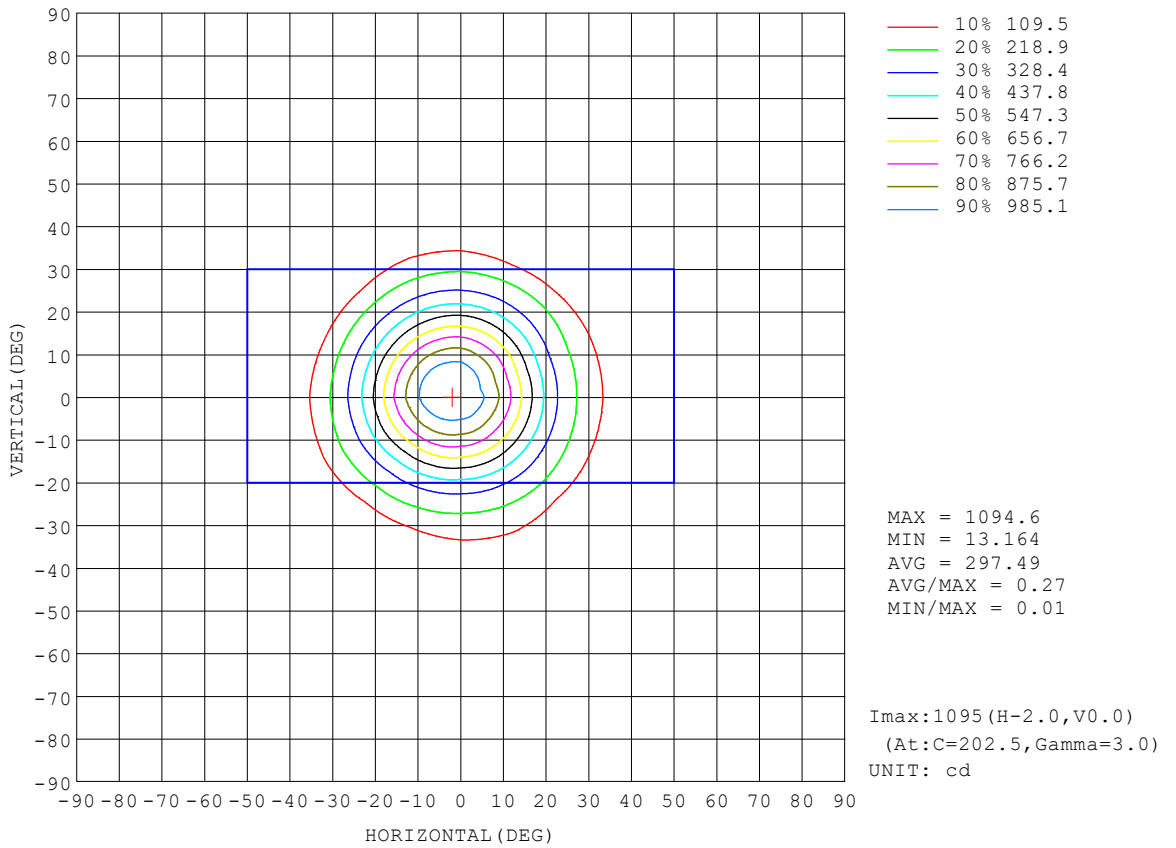
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	79	75	85	79	75	84	79	75	71
0.80	93	87	83	93	87	83	91	86	83	79
1.00	98	92	88	97	92	88	96	92	88	83
1.25	102	97	93	101	96	93	99	95	92	88
1.50	105	100	96	104	99	96	101	98	95	90
2.00	108	103	100	106	102	99	104	100	98	92
2.50	110	106	102	108	104	102	105	102	100	94
3.00	111	108	105	109	106	104	106	104	102	95
4.00	113	110	108	111	109	107	108	106	104	97
5.00	115	112	110	113	110	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:119.78V I:0.0843A P:7.4956W PF:0.7426 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:529x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 2700K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

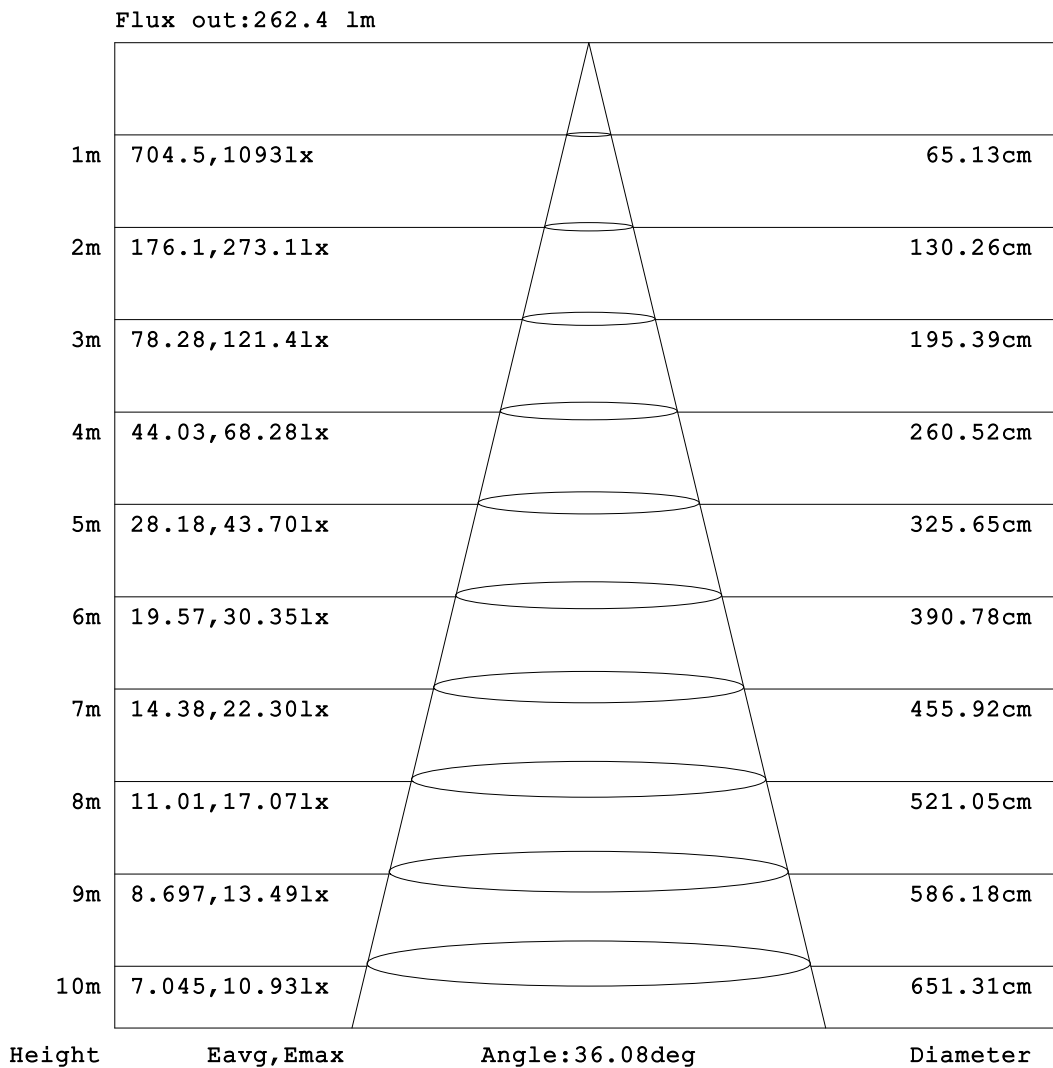


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-11-23

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:

AAI Figure

Test:U:119.78V I:0.0843A P:7.4956W PF:0.7426 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:529x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 2700K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



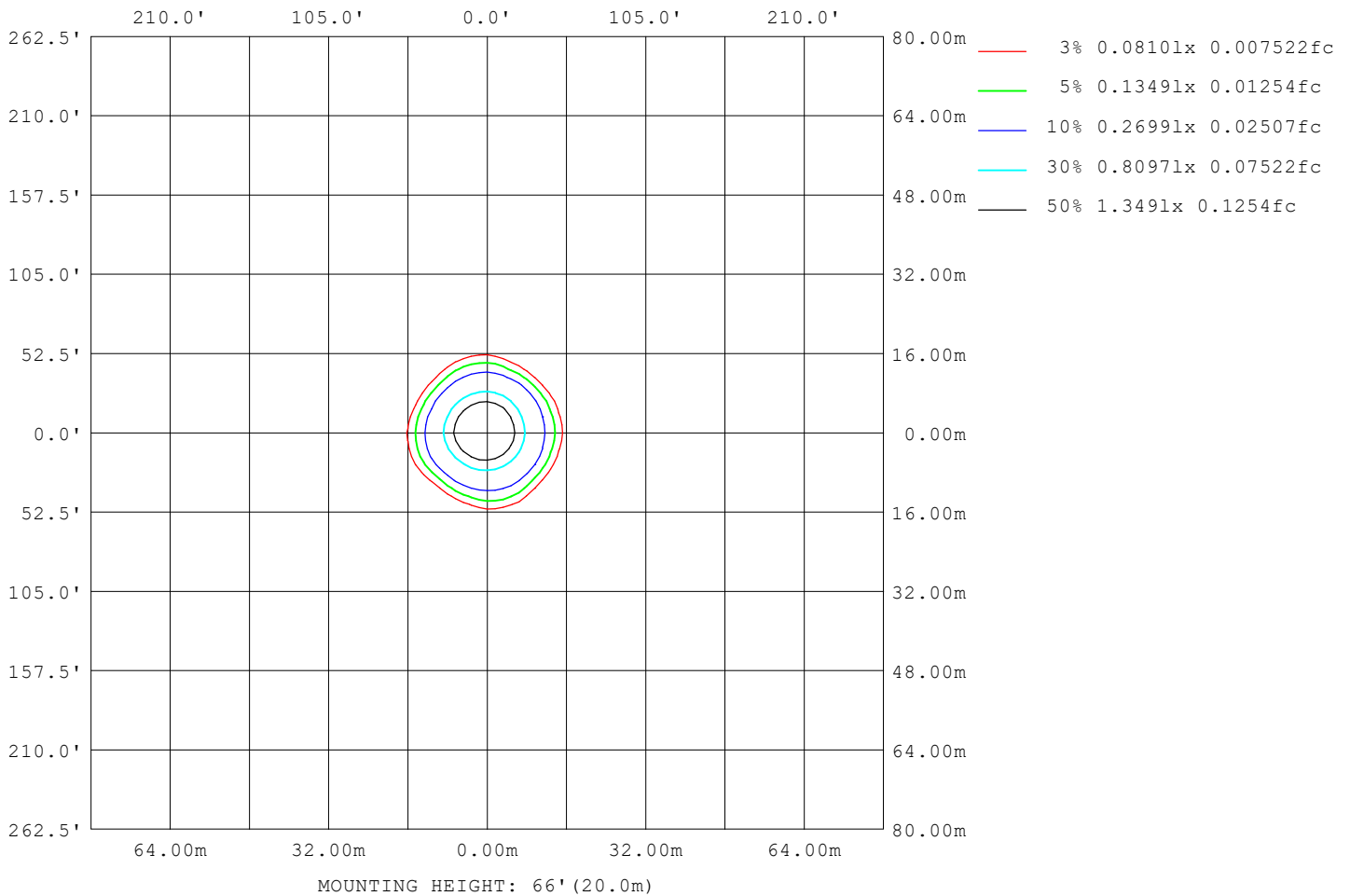
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °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:

ISOLUX DIAGRAM

Test:U:119.78V I:0.0843A P:7.4956W PF:0.7426 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:529x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 2700K 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:

LED Avg.L Report

Test:U:119.78V I:0.0843A P:7.4956W PF:0.7426 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:529x1 lm		
NAME: ASD-CD-TS-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 2700K 90	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

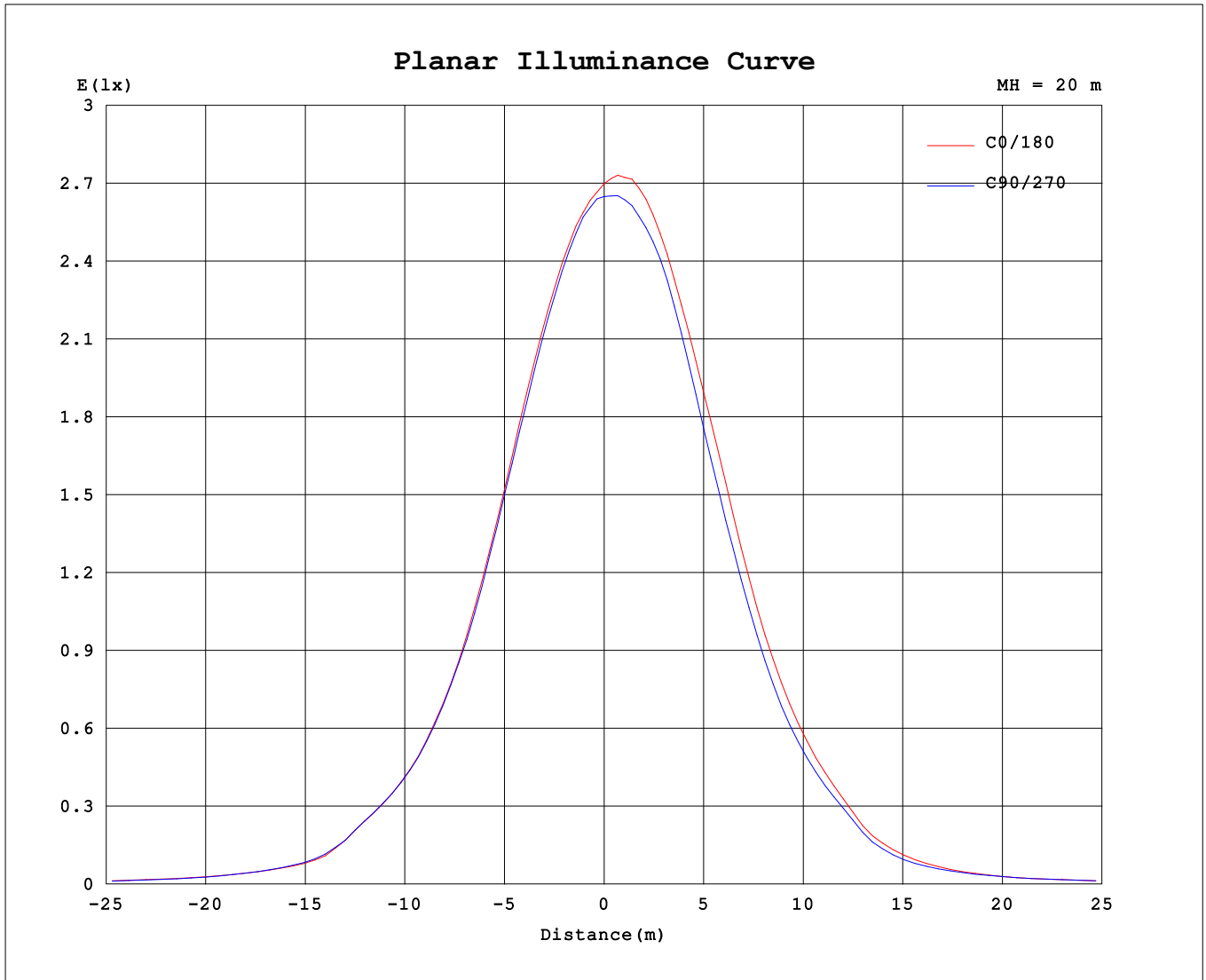
AvgL	cd/m2
L_0~180 (65) av	166
L_0~180 (75) av	113
L_0~180 (85) av	132
L_90~270 (65) av	155
L_90~270 (75) av	101
L_90~270 (85) av	69
L_45 (65) av	144
L_45 (75) av	92
L_45 (85) av	97

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:

