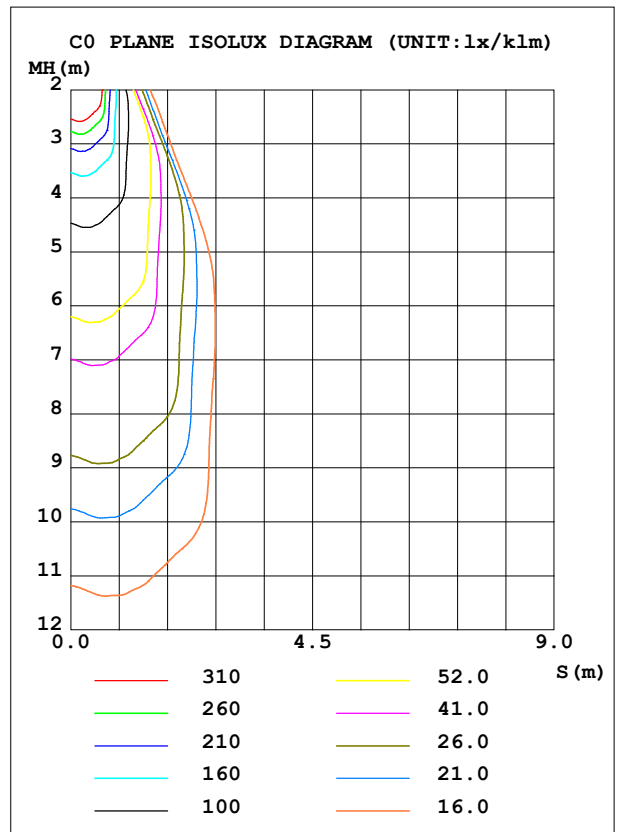
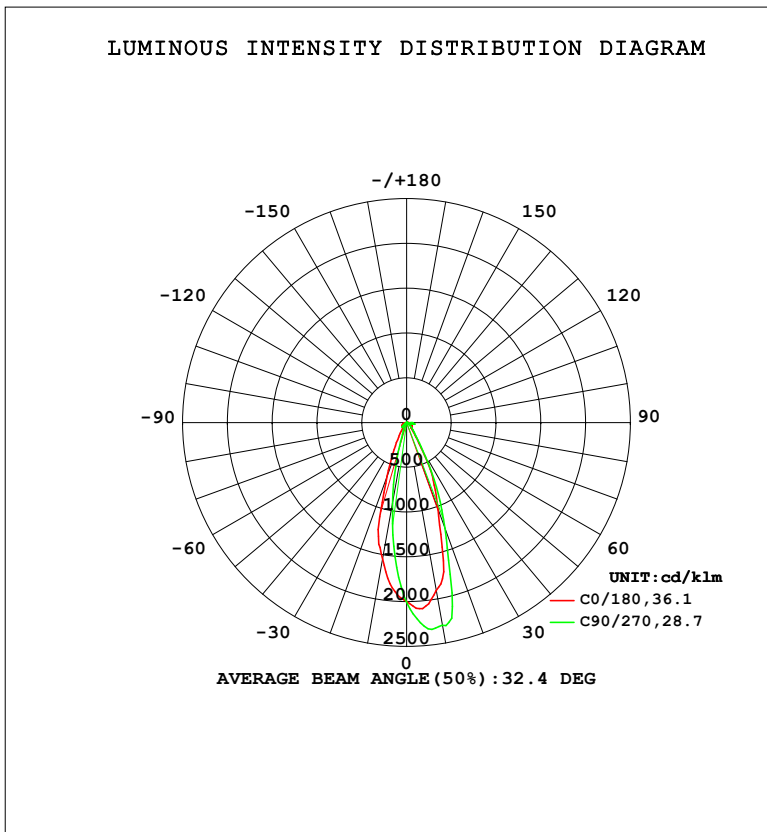


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.85V I:0.0658A P:7.6041W PF:0.9641 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:415.074x1 lm		
NAME: ASD-CD-PWR-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		Imax (cd/klm)	2371	S/MH (C0/180)	0.53
NOMINAL POWER (W)	8	LOR (%)	100.0	S/MH (C90/270)	0.31
RATED VOLTAGE (V)	120.0	TOTAL FLUX (lm/klm)	1000.0	η UP, DN (C0-180)	0.0, 70.2
NOMINAL FLUX (lm)	415.074	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 29.8
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	0.55



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2023-07-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity: 65.0%
 Test Distance: 3.080m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

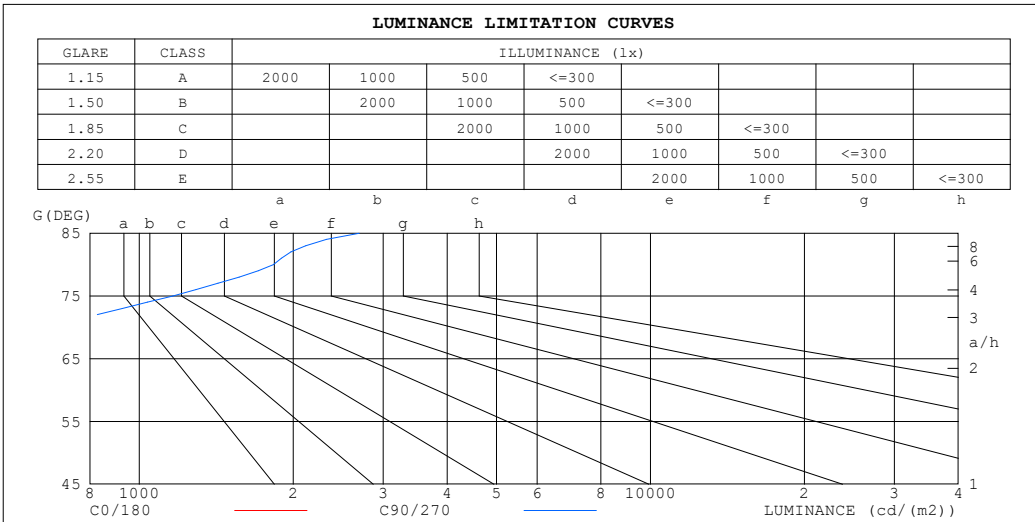
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1907	2283	2297	2070	1546	1045	916.2	1295	0- 10	176.0	176.0	17.6,17.6
20	1029	1179	1261	1168	637.4	208.4	141.7	322.1	10- 20	338.2	514.2	51.4,51.4
30	333.9	327.3	369.8	389.6	165.2	62.31	59.53	80.10	20- 30	209.6	723.9	72.4,72.4
40	87.04	113.5	120.7	102.4	60.96	58.11	58.26	55.77	30- 40	79.15	803.0	80.3,80.3
50	67.84	41.12	39.78	69.44	70.65	52.20	46.73	62.61	40- 50	55.23	858.2	85.8,85.8
60	58.53	36.28	29.98	54.11	56.69	24.83	17.72	41.13	50- 60	40.78	899.0	89.9,89.9
70	52.71	55.60	61.26	55.85	36.95	4.450	3.320	22.23	60- 70	37.29	936.3	93.6,93.6
80	34.91	77.01	85.05	53.36	14.10	1.743	0.9522	3.970	70- 80	39.39	975.7	97.6,97.6
90	7.292	31.07	38.90	20.50	0.2494	0.4276	0.4953	0.3127	80- 90	24.29	1000	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/klm									UNIT:lm/klm		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:119.85V I:0.0658A P:7.6041W PF:0.9641 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:415.074x1 lm		
NAME: ASD-CD-PWR-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	657	2693
80	751	1830
75	724	1163
70	576	669
65	478	413
60	437	224
55	389	163
50	394	231
45	374	423

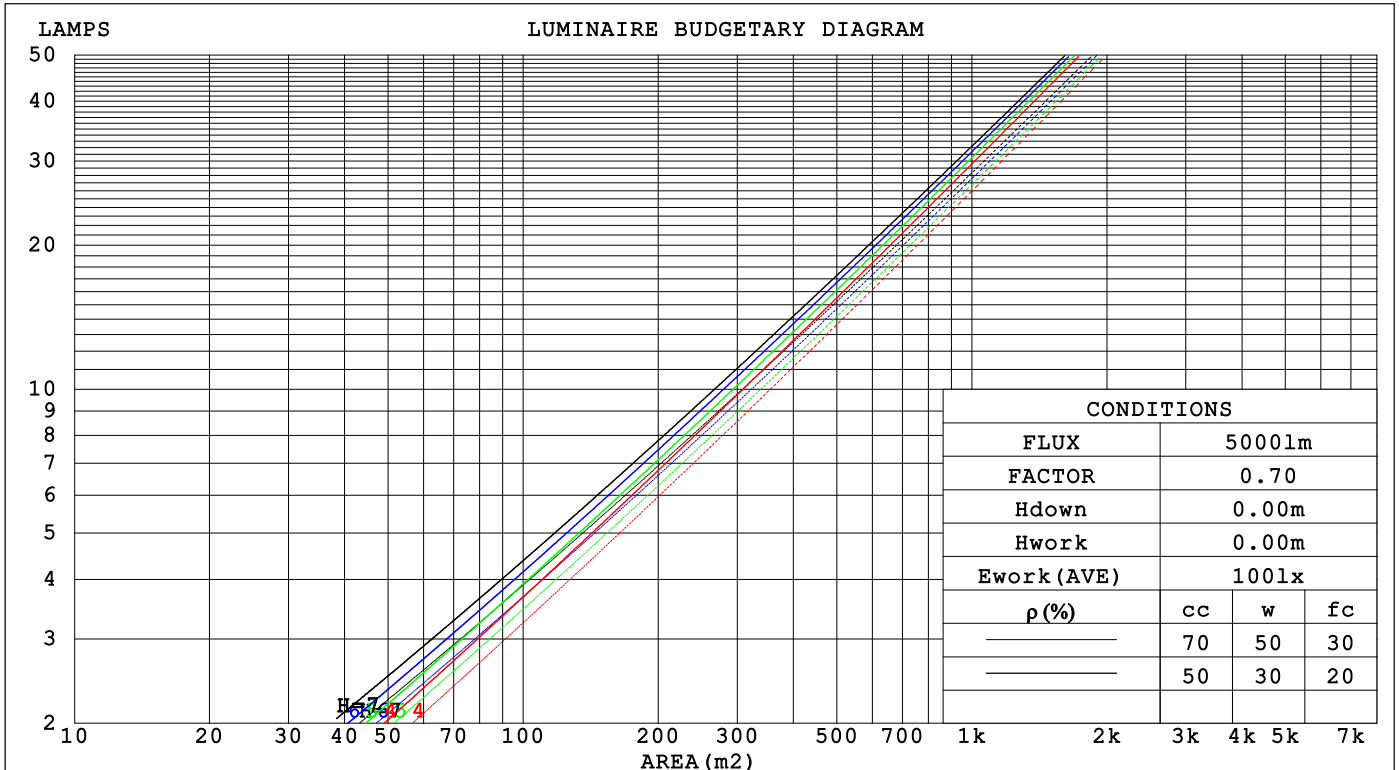
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
 Test Date: 2023-07-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity: 65.0%
 Test Distance: 3.080m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:119.85V I:0.0658A P:7.6041W PF:0.9641 Freq:59.98Hz		
UTHdi:0.00% ITHdi:0.00% KDisp:0 Lamp Flux:415.074x1 lm		
NAME: ASD-CD-PWR-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 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	1.08	1.05	1.02	1.06	1.03	1.01	1.02	.90	.98	.98	.96	.95	.95	.93	.92	.90
2.0	.90	.95	.91	.98	.94	.90	.95	.91	.88	.92	.89	.86	.89	.87	.84	.83
3.0	.93	.87	.83	.92	.86	.82	.89	.85	.81	.86	.83	.80	.84	.81	.78	.77
4.0	.87	.81	.77	.86	.80	.76	.84	.79	.75	.82	.78	.74	.80	.76	.73	.72
5.0	.82	.76	.71	.81	.75	.71	.79	.74	.70	.78	.73	.70	.76	.72	.69	.68
6.0	.78	.72	.67	.77	.71	.67	.75	.70	.66	.74	.69	.66	.73	.69	.66	.64
7.0	.74	.68	.63	.73	.67	.63	.72	.67	.63	.71	.66	.63	.69	.65	.62	.61
8.0	.70	.64	.60	.70	.64	.60	.69	.63	.60	.68	.63	.60	.67	.62	.59	.58
9.0	.67	.61	.57	.67	.61	.57	.66	.61	.57	.65	.60	.57	.64	.60	.57	.55
10.0	.64	.59	.55	.64	.58	.55	.63	.58	.55	.62	.58	.54	.61	.57	.54	.53



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:119.85V I:0.0658A P:7.6041W PF:0.9641 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:415.074x1 lm		
NAME: ASD-CD-PWR-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 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	.224	.127	.040	.217	.124	.039	.204	.117	.037	.192	.111	.036	.182	.105	.034	
2.0	.201	.110	.034	.195	.107	.033	.184	.102	.032	.174	.098	.031	.165	.093	.029	
3.0	.183	.097	.029	.178	.095	.029	.169	.091	.028	.160	.088	.027	.152	.084	.026	
4.0	.168	.087	.026	.164	.086	.025	.156	.083	.025	.148	.080	.024	.141	.077	.023	
5.0	.156	.079	.023	.152	.078	.023	.145	.076	.022	.139	.073	.022	.133	.071	.021	
6.0	.145	.073	.021	.142	.072	.021	.136	.070	.020	.130	.068	.020	.125	.066	.020	
7.0	.137	.067	.019	.134	.067	.019	.128	.065	.019	.123	.063	.018	.119	.062	.018	
8.0	.129	.063	.018	.126	.062	.018	.121	.061	.017	.117	.059	.017	.113	.058	.017	
9.0	.122	.059	.016	.120	.058	.016	.115	.057	.016	.111	.056	.016	.108	.055	.016	
10.0	.116	.055	.015	.114	.055	.015	.110	.054	.015	.106	.053	.015	.103	.052	.015	

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	.174	.157	.141	.149	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.160	.132	.109	.137	.114	.094	.094	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.148	.114	.087	.127	.098	.075	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.137	.099	.070	.117	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.127	.088	.058	.109	.076	.051	.075	.053	.036	.044	.031	.021	.014	.010	.007	
6.0	.119	.078	.049	.102	.068	.043	.071	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.112	.071	.042	.096	.061	.036	.066	.043	.026	.039	.025	.015	.012	.008	.005	
8.0	.105	.064	.036	.091	.056	.031	.063	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.100	.059	.031	.086	.051	.027	.060	.036	.019	.035	.021	.012	.011	.007	.004	
10.0	.095	.054	.028	.082	.047	.024	.057	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.85V I:0.0658A P:7.6041W PF:0.9641 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:415.074x1 lm		
NAME: ASD-CD-PWR-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	9.0	10.0	9.2	10.2	10.3	7.5	8.5	7.7	8.7	8.8
3H	12.0	12.9	12.2	13.1	13.3	11.9	12.8	12.2	13.0	13.2
4H	13.8	14.7	14.1	14.9	15.1	15.1	16.0	15.4	16.2	16.5
6H	15.4	16.3	15.7	16.5	16.7	18.3	19.2	18.6	19.4	19.7
8H	15.8	16.6	16.1	16.9	17.1	19.5	20.3	19.8	20.6	20.8
12H	16.1	16.8	16.4	17.1	17.4	20.5	21.3	20.8	21.5	21.8
4H 2H	9.7	10.6	10.0	10.8	11.0	8.7	9.6	8.9	9.8	10.0
3H	13.2	14.0	13.5	14.3	14.6	13.5	14.3	13.8	14.6	14.8
4H	15.4	16.1	15.7	16.4	16.7	16.9	17.6	17.2	17.9	18.2
6H	17.3	18.0	17.7	18.3	18.7	20.1	20.8	20.5	21.1	21.5
8H	17.8	18.4	18.2	18.8	19.1	21.3	21.9	21.7	22.3	22.6
12H	18.1	18.7	18.6	19.1	19.5	22.3	22.9	22.8	23.3	23.7
8H 4H	16.8	17.4	17.2	17.8	18.2	17.9	18.5	18.3	18.9	19.2
6H	19.0	19.5	19.5	19.9	20.3	21.3	21.8	21.7	22.2	22.6
8H	19.6	20.1	20.1	20.5	20.9	22.6	23.0	23.0	23.4	23.9
12H	20.1	20.5	20.6	21.0	21.4	23.8	24.2	24.2	24.6	25.1
12H 4H	17.3	17.9	17.7	18.2	18.6	18.1	18.7	18.5	19.0	19.4
6H	19.6	20.0	20.0	20.4	20.9	21.5	22.0	21.9	22.4	22.8
8H	20.3	20.7	20.7	21.1	21.6	22.9	23.3	23.3	23.7	24.2

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 0.1 / - 0.1	+ 0.1 / - 0.1
1.5H	+ 0.1 / - 0.1	+ 0.1 / - 0.1
2.0H	+ 0.2 / - 0.2	+ 0.2 / - 0.2

CIE Pub.117, 415.1 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.1)
 Area: 0.111111 m2

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 22.5DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Temperature:25.3°C	Humidity:65.0%
Operators:	Test Distance:3.080m [K=1.0000]
Test Date:2023-07-13	Remarks:

UTILIZATION FACTORS TABLE

Test:U:119.85V I:0.0658A P:7.6041W PF:0.9641 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:415.074x1 lm		
NAME: ASD-CD-PWR-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:	Shielding Angle:

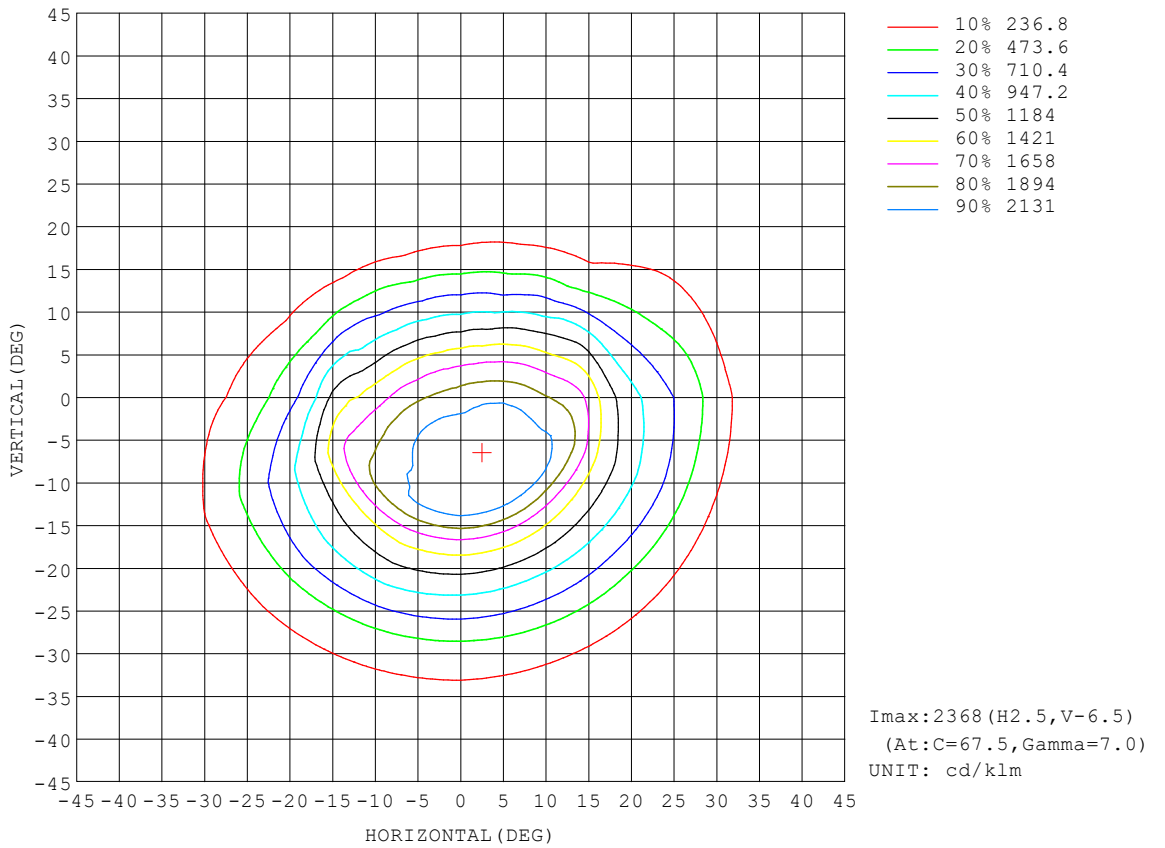
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	80	72	67	79	72	67	78	71	67	63
0.80	87	80	75	87	80	75	85	79	75	70
1.00	92	85	80	91	85	80	90	85	80	75
1.25	97	90	85	96	89	85	94	88	84	79
1.50	100	94	89	99	93	89	96	91	88	82
2.00	104	98	94	102	97	93	99	95	91	85
2.50	106	101	97	104	100	96	101	97	94	87
3.00	108	103	100	106	102	99	103	99	96	89
4.00	111	107	104	109	105	102	105	102	100	92
5.00	112	109	106	110	107	105	106	104	102	94
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:2023-07-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.85V I:0.0658A P:7.6041W PF:0.9641 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:415.074x1 lm		
NAME: ASD-CD-PWR-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:	Shielding Angle:

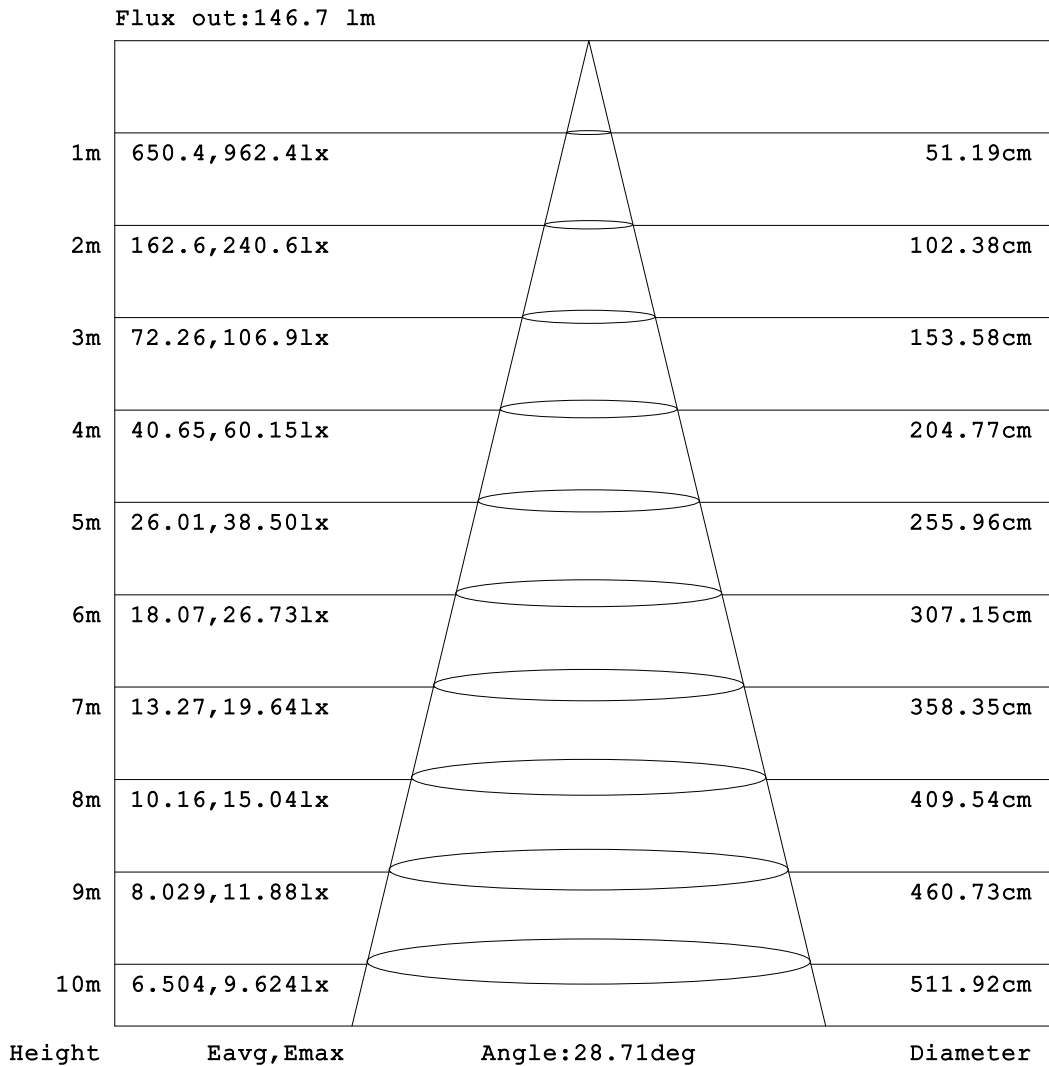


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

AAI Figure

Test:U:119.85V I:0.0658A P:7.6041W PF:0.9641 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:415.074x1 lm		
NAME: ASD-CD-PWR-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:	Shielding Angle:



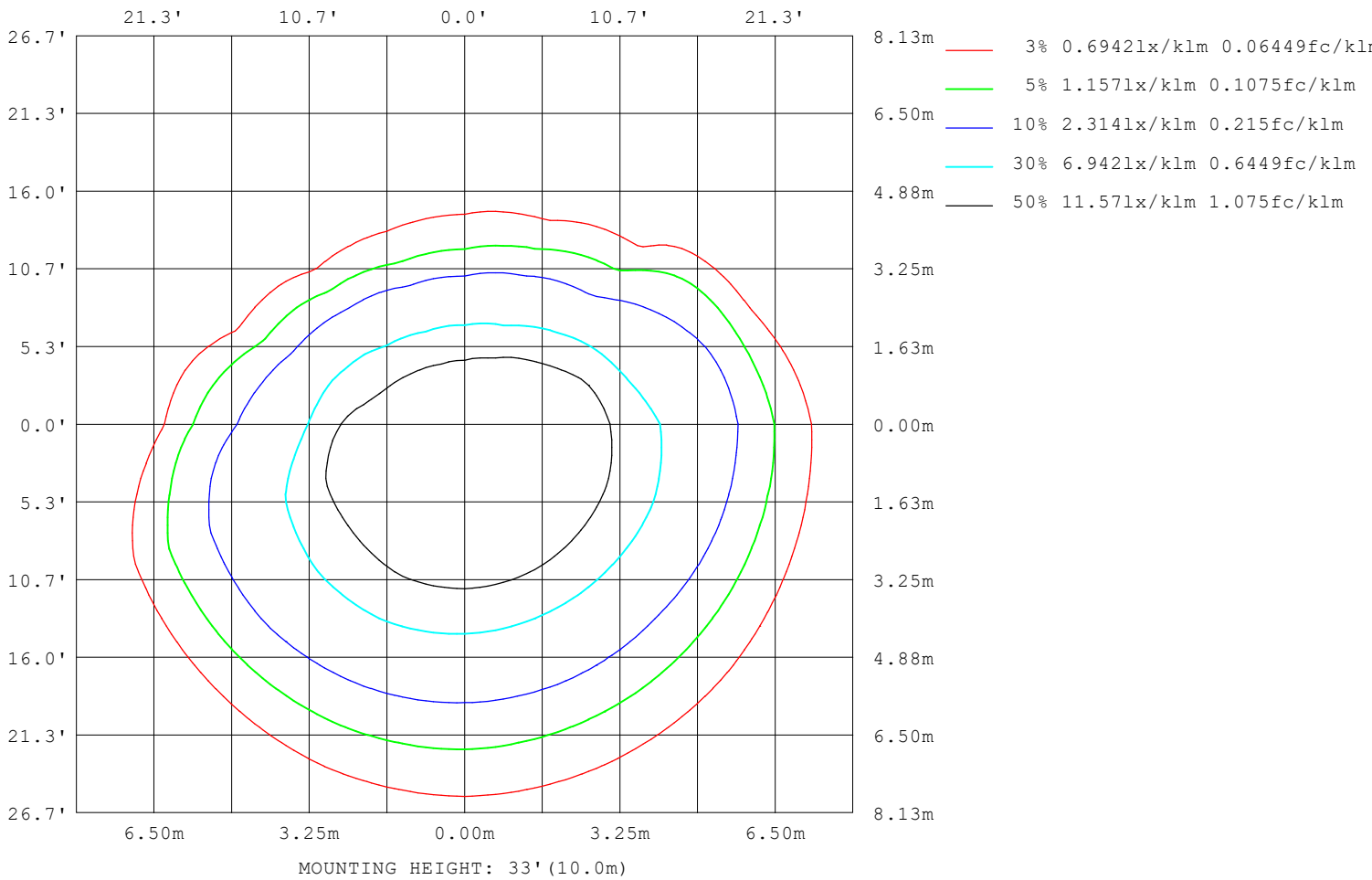
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-07-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:119.85V I:0.0658A P:7.6041W PF:0.9641 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:415.074x1 lm		
NAME: ASD-CD-PWR-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: 2023-07-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity: 65.0%
 Test Distance: 3.080m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:119.85V I:0.0658A P:7.6041W PF:0.9641 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:415.074x1 lm		
NAME: ASD-CD-PWR-2D8AC-WH	TYPE:	WEIGHT:
SPEC.: 5000K 90	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:	Shielding Angle:

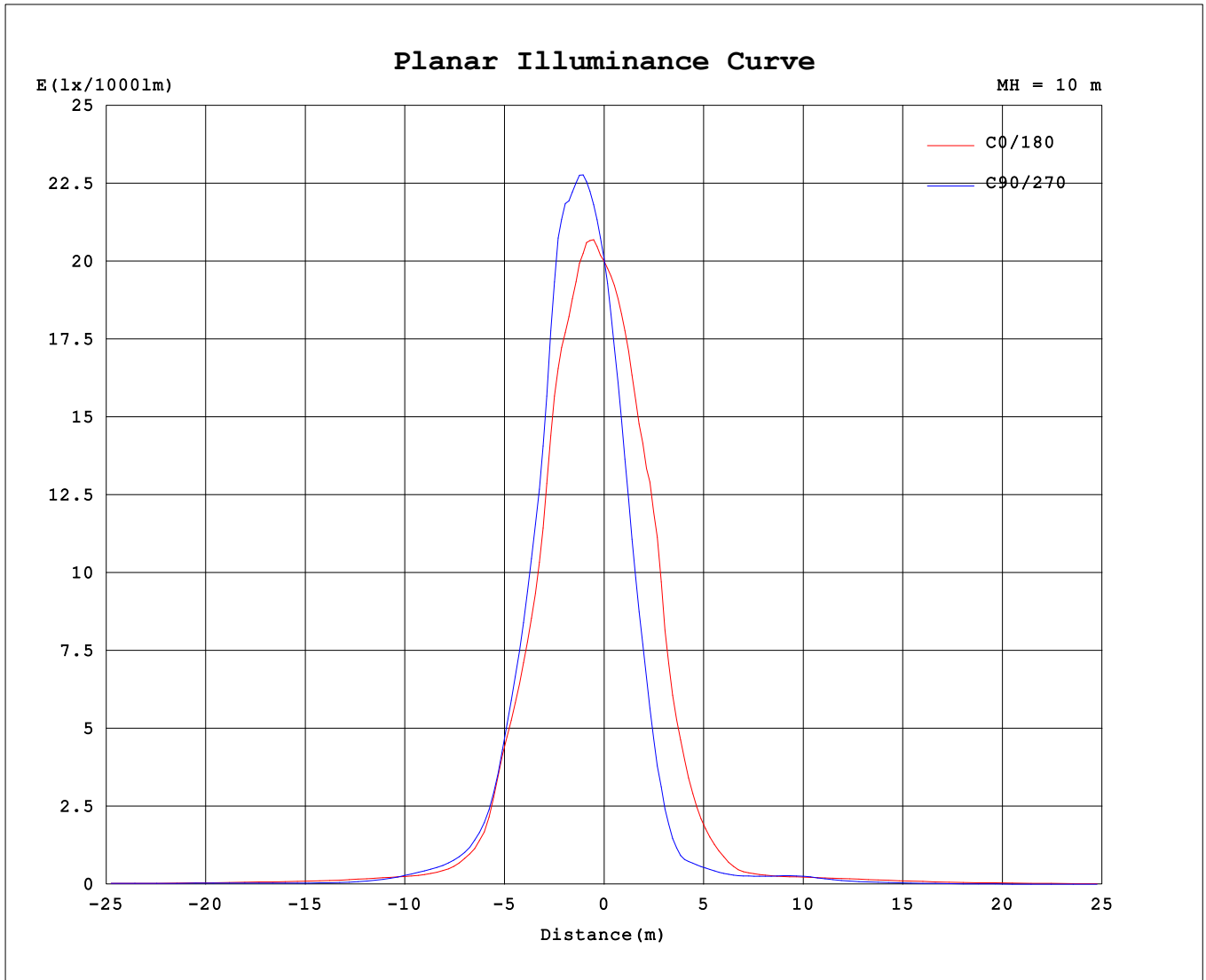
AvgL	cd/m2
L_0~180 (65) av	437
L_0~180 (75) av	559
L_0~180 (85) av	393
L_90~270 (65) av	239
L_90~270 (75) av	594
L_90~270 (85) av	1360
L_45 (65) av	314
L_45 (75) av	525
L_45 (85) av	937

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:
 Test Date:2023-07-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.080m [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: 2023-07-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity: 65.0%
 Test Distance: 3.080m [K=1.0000]
 Remarks:

