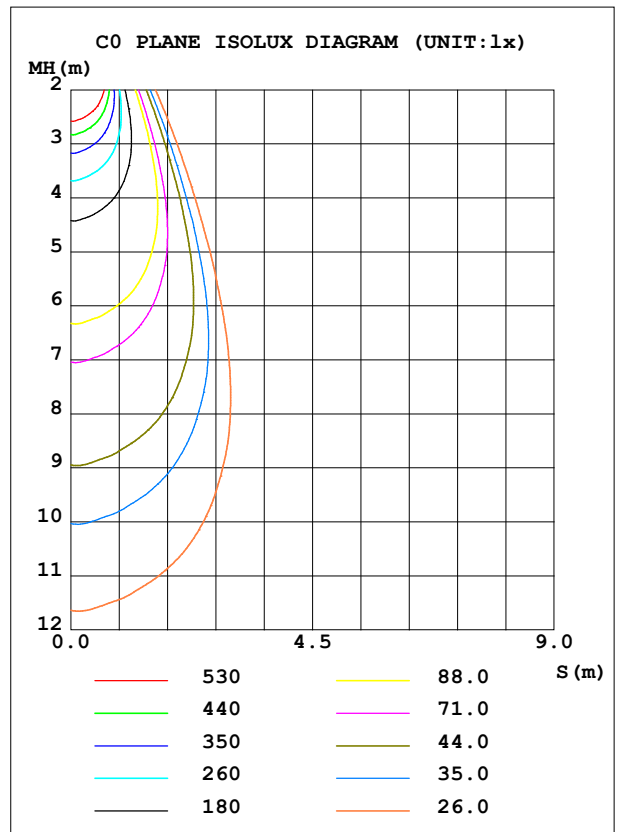
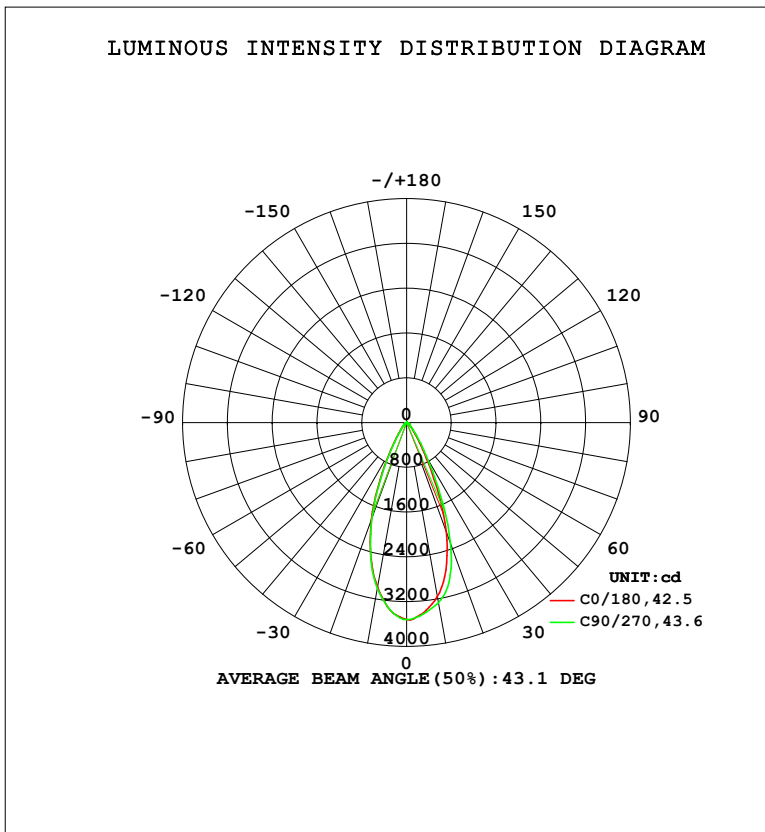


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.73V I:0.1811A P:21.267W PF:0.9809 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1981.62x1 lm		
NAME: ASD-CD-TS-6D24AC-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		Imax (cd)	3532	S/MH (C0/180)	0.65
NOMINAL POWER (W)	24	LOR (%)	100.0	S/MH (C90/270)	0.64
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	1981.6	η UP, DN (C0-180)	0.0, 53.5
NOMINAL FLUX (lm)	1981.62	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 46.5
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	0.70



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2023-04-14

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:

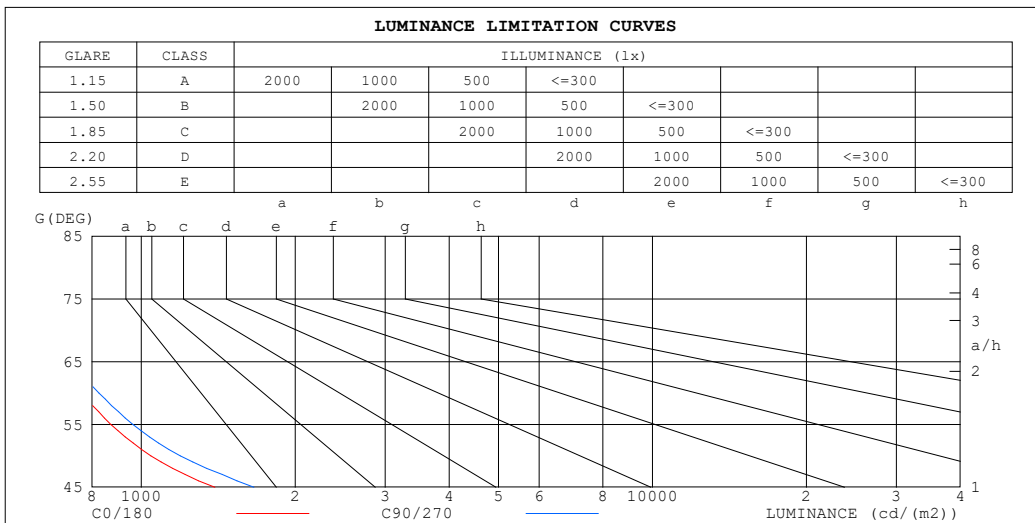
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	3158	3226	3267	3113	2993	2945	3014	3073	0- 10	314.3	314.3	15.9,15.9
20	2078	2250	2294	2037	1841	1759	1815	1949	10- 20	722.8	1037	52.3,52.3
30	644.2	740.7	765.3	658.9	571.4	521.5	541.8	579.2	20- 30	567.1	1604	80.9,80.9
40	176.6	200.2	221.1	180.4	157.8	146.0	148.8	157.5	30- 40	212.1	1816	91.7,91.7
50	74.56	78.96	85.12	74.04	69.94	66.15	68.13	68.32	40- 50	85.97	1902	96,96
60	42.39	38.62	45.93	37.21	41.27	35.00	40.66	35.18	50- 60	48.64	1951	98.4,98.4
70	12.80	8.167	16.88	8.339	15.97	8.426	15.84	8.295	60- 70	24.54	1975	99.7,99.7
80	2.287	2.273	2.411	2.388	2.466	2.517	2.528	2.358	70- 80	5.083	1980	99.9,99.9
90	0.0915	0.0729	0.0966	0.1656	0.0759	0.0700	0.0878	0.0681	80- 90	1.181	1982	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:2023-04-14

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:119.73V I:0.1811A P:21.267W PF:0.9809 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1981.62x1 lm		
NAME: ASD-CD-TS-6D24AC-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	88	115
80	119	125
75	129	149
70	337	444
65	631	691
60	763	827
55	872	963
50	1044	1192
45	1393	1660

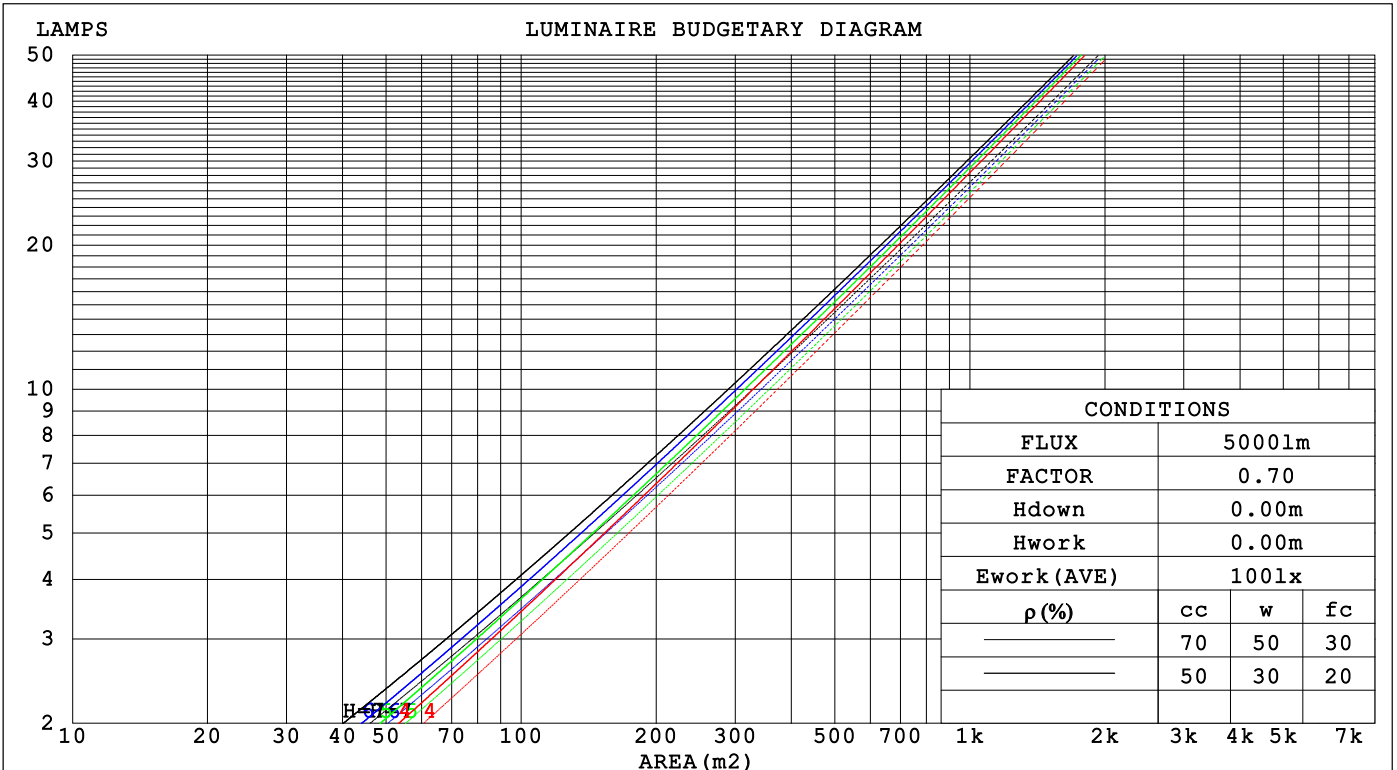
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
 Test Date: 2023-04-14

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:119.73V I:0.1811A P:21.267W PF:0.9809 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1981.62x1 lm		
NAME: ASD-CD-TS-6D24AC-WH	TYPE:	WEIGHT:
SPEC.: 3500K 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	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.00	.99	.98	.97	.96	.94
2.0	1.04	1.00	.97	1.02	.99	.96	.99	.96	.94	.96	.94	.92	.93	.92	.90	.88
3.0	.98	.93	.89	.96	.92	.88	.94	.90	.87	.91	.88	.86	.89	.87	.84	.83
4.0	.92	.87	.83	.91	.86	.82	.89	.85	.81	.87	.83	.80	.85	.82	.80	.78
5.0	.87	.81	.77	.86	.81	.77	.84	.80	.76	.83	.79	.76	.81	.78	.75	.74
6.0	.82	.77	.73	.81	.76	.73	.80	.75	.72	.79	.75	.72	.77	.74	.71	.70
7.0	.78	.73	.69	.77	.72	.68	.76	.72	.68	.75	.71	.68	.74	.70	.67	.66
8.0	.74	.69	.65	.74	.69	.65	.73	.68	.65	.72	.67	.64	.71	.67	.64	.63
9.0	.71	.65	.62	.70	.65	.62	.69	.65	.61	.69	.64	.61	.68	.64	.61	.60
10.0	.68	.62	.59	.67	.62	.59	.66	.62	.59	.66	.61	.58	.65	.61	.58	.57



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-04-14

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:119.73V I:0.1811A P:21.267W PF:0.9809 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1981.62x1 lm		
NAME: ASD-CD-TS-6D24AC-WH	TYPE:	WEIGHT:
SPEC.: 3500K 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	.170	.097	.031	.164	.093	.030	.151	.087	.028	.139	.080	.026	.129	.075	.024	
2.0	.162	.089	.027	.156	.086	.027	.146	.081	.025	.136	.076	.024	.127	.072	.023	
3.0	.153	.081	.024	.148	.079	.024	.139	.076	.023	.131	.072	.022	.124	.068	.021	
4.0	.145	.075	.022	.141	.074	.022	.133	.071	.021	.126	.068	.020	.119	.065	.020	
5.0	.138	.070	.020	.134	.069	.020	.127	.066	.020	.121	.064	.019	.115	.062	.019	
6.0	.131	.066	.019	.128	.064	.019	.122	.062	.018	.116	.060	.018	.111	.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	.055	.016	.104	.053	.015	
9.0	.114	.055	.015	.112	.054	.015	.108	.053	.015	.104	.052	.015	.100	.051	.015	
10.0	.109	.052	.015	.107	.052	.014	.103	.051	.014	.100	.050	.014	.097	.049	.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	.087	.057	.054	.050	.018	.017	.016	
2.0	.155	.133	.114	.133	.114	.098	.091	.079	.069	.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	.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	.047	.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:2023-04-14

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:119.73V I:0.1811A P:21.267W PF:0.9809 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1981.62x1 lm										
NAME: ASD-CD-TS-6D24AC-WH					TYPE:			WEIGHT:		
SPEC.: 3500K 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	6.0	6.9	6.2	7.1	7.2	6.8	7.7	7.0	7.8	8.0
3H	6.2	7.0	6.4	7.2	7.4	6.9	7.7	7.2	7.9	8.1
4H	6.1	6.9	6.4	7.1	7.3	6.9	7.6	7.1	7.9	8.1
6H	6.0	6.8	6.3	7.0	7.2	6.8	7.5	7.1	7.8	8.0
8H	6.0	6.7	6.3	6.9	7.2	6.8	7.5	7.1	7.7	8.0
12H	6.0	6.6	6.3	6.9	7.2	6.7	7.4	7.0	7.7	7.9
4H 2H	6.0	6.8	6.3	7.0	7.2	6.7	7.5	7.0	7.7	7.9
3H	6.2	6.8	6.5	7.1	7.4	6.9	7.6	7.2	7.8	8.1
4H	6.1	6.7	6.5	7.0	7.3	6.8	7.4	7.2	7.7	8.0
6H	6.0	6.6	6.4	6.9	7.3	6.8	7.3	7.1	7.6	8.0
8H	6.0	6.5	6.4	6.9	7.2	6.7	7.2	7.1	7.6	7.9
12H	6.0	6.4	6.4	6.8	7.2	6.7	7.1	7.1	7.5	7.9
8H 4H	6.0	6.5	6.4	6.8	7.2	6.7	7.2	7.1	7.5	7.9
6H	5.9	6.3	6.4	6.7	7.1	6.6	7.0	7.1	7.4	7.8
8H	5.9	6.2	6.3	6.7	7.1	6.6	7.0	7.0	7.4	7.8
12H	5.8	6.2	6.3	6.6	7.1	6.6	6.9	7.0	7.3	7.8
12H 4H	5.9	6.4	6.3	6.8	7.2	6.6	7.1	7.1	7.5	7.9
6H	5.9	6.2	6.3	6.7	7.1	6.6	6.9	7.0	7.4	7.8
8H	5.8	6.1	6.3	6.6	7.1	6.5	6.9	7.0	7.3	7.8
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.4 / - 2.3					+ 1.9 / - 2.6				
1.5H	+ 2.5 / - 1.6					+ 3.2 / - 1.9				
2.0H	+ 2.0 / - 1.8					+ 2.5 / - 2.1				

CIE Pub.117, 1982 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.4)
 Area: 0.111111 m2

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-04-14

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:119.73V I:0.1811A P:21.267W PF:0.9809 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1981.62x1 lm		
NAME: ASD-CD-TS-6D24AC-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:	Shielding Angle:

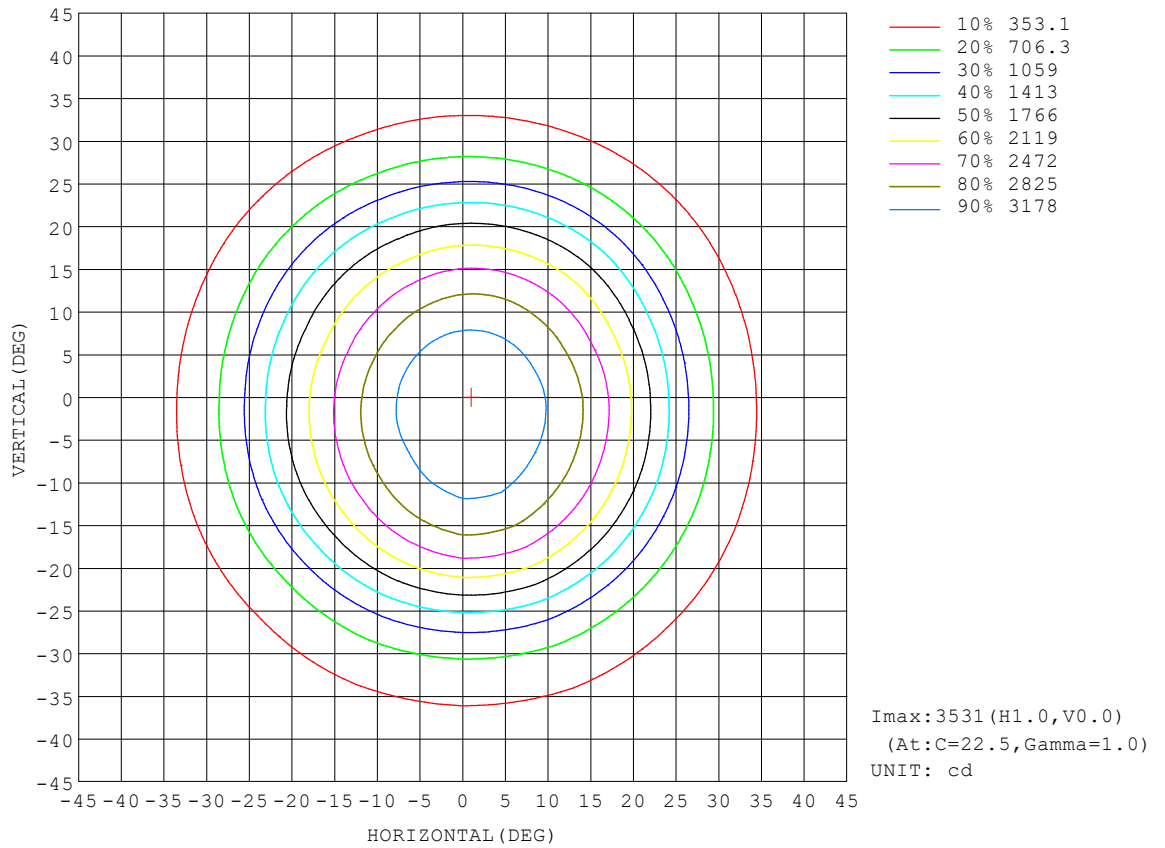
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	80	76	86	80	76	85	79	76	72
0.80	94	88	84	93	87	84	92	87	83	80
1.00	98	93	89	98	92	89	96	92	88	84
1.25	103	97	94	101	97	93	100	95	92	88
1.50	105	100	97	104	100	97	102	98	95	91
2.00	108	104	101	107	103	100	104	101	98	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	109	112	109	107	108	106	104	97
5.00	115	113	111	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:2023-04-14

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:119.73V I:0.1811A P:21.267W PF:0.9809 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1981.62x1 lm		
NAME: ASD-CD-TS-6D24AC-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:	Shielding Angle:

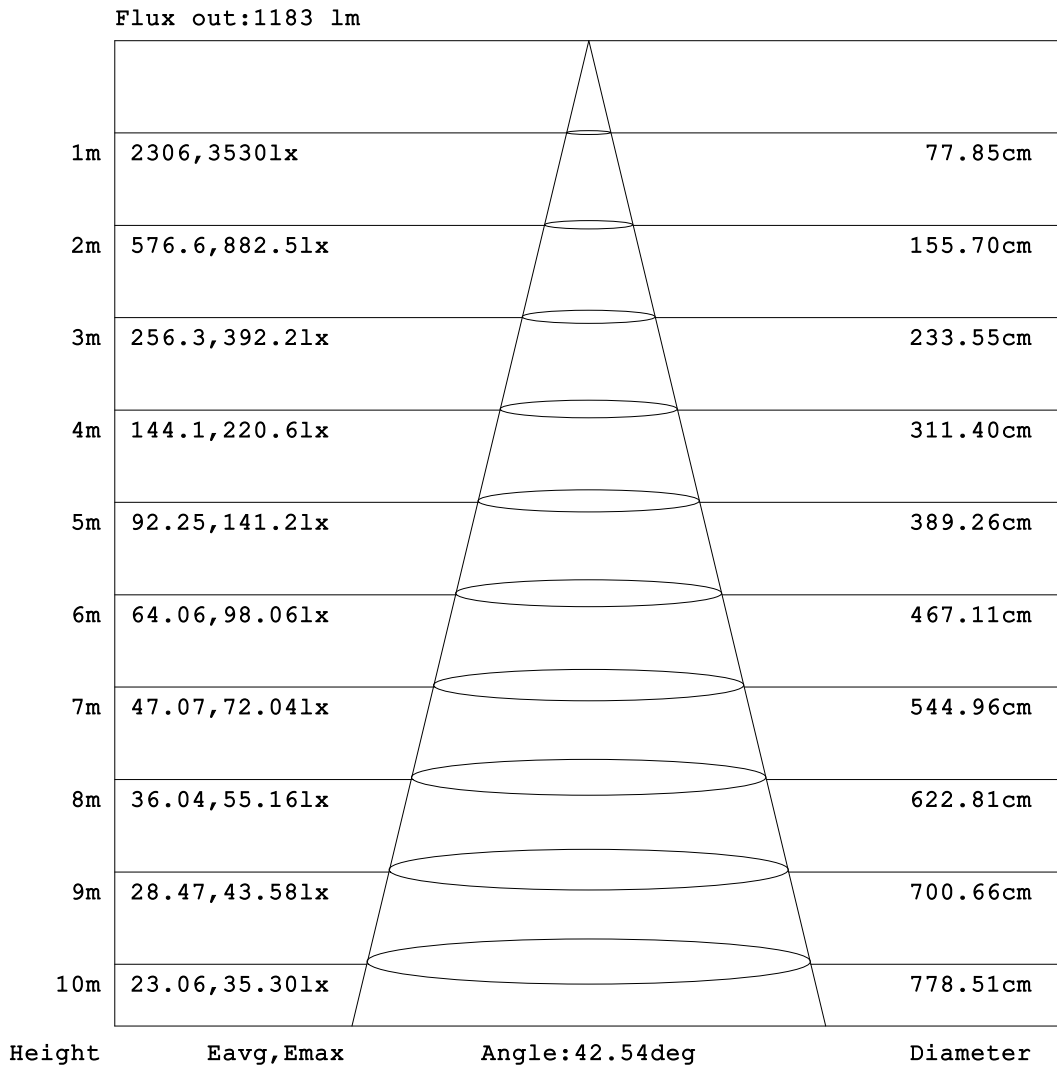


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
 Test Date: 2023-04-14

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:119.73V I:0.1811A P:21.267W PF:0.9809 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1981.62x1 lm		
NAME: ASD-CD-TS-6D24AC-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:	Shielding Angle:



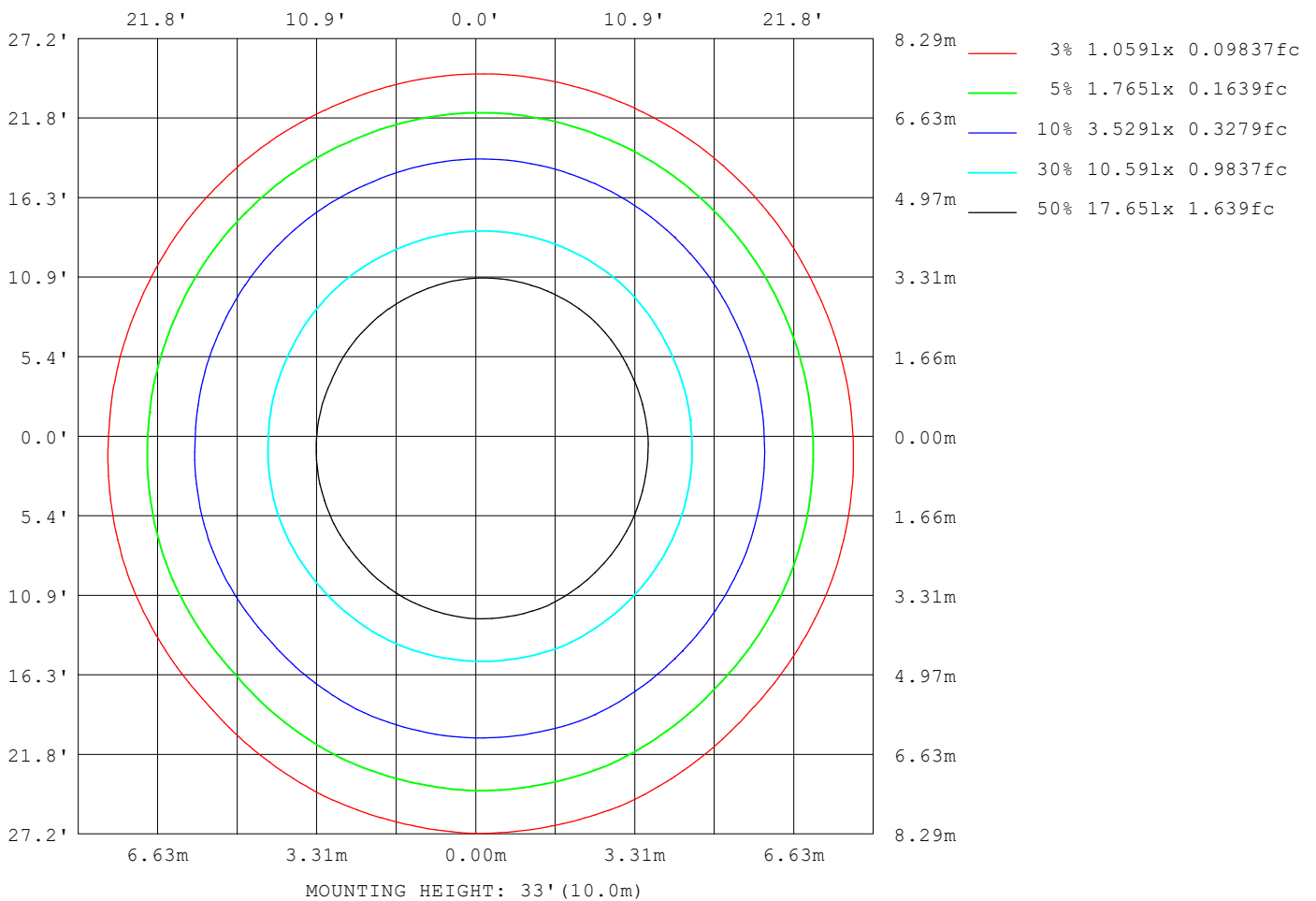
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-04-14

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:119.73V I:0.1811A P:21.267W PF:0.9809 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1981.62x1 lm		
NAME: ASD-CD-TS-6D24AC-WH	TYPE:	WEIGHT:
SPEC.: 3500K 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:2023-04-14

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:119.73V I:0.1811A P:21.267W PF:0.9809 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1981.62x1 lm		
NAME: ASD-CD-TS-6D24AC-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:	Shielding Angle:

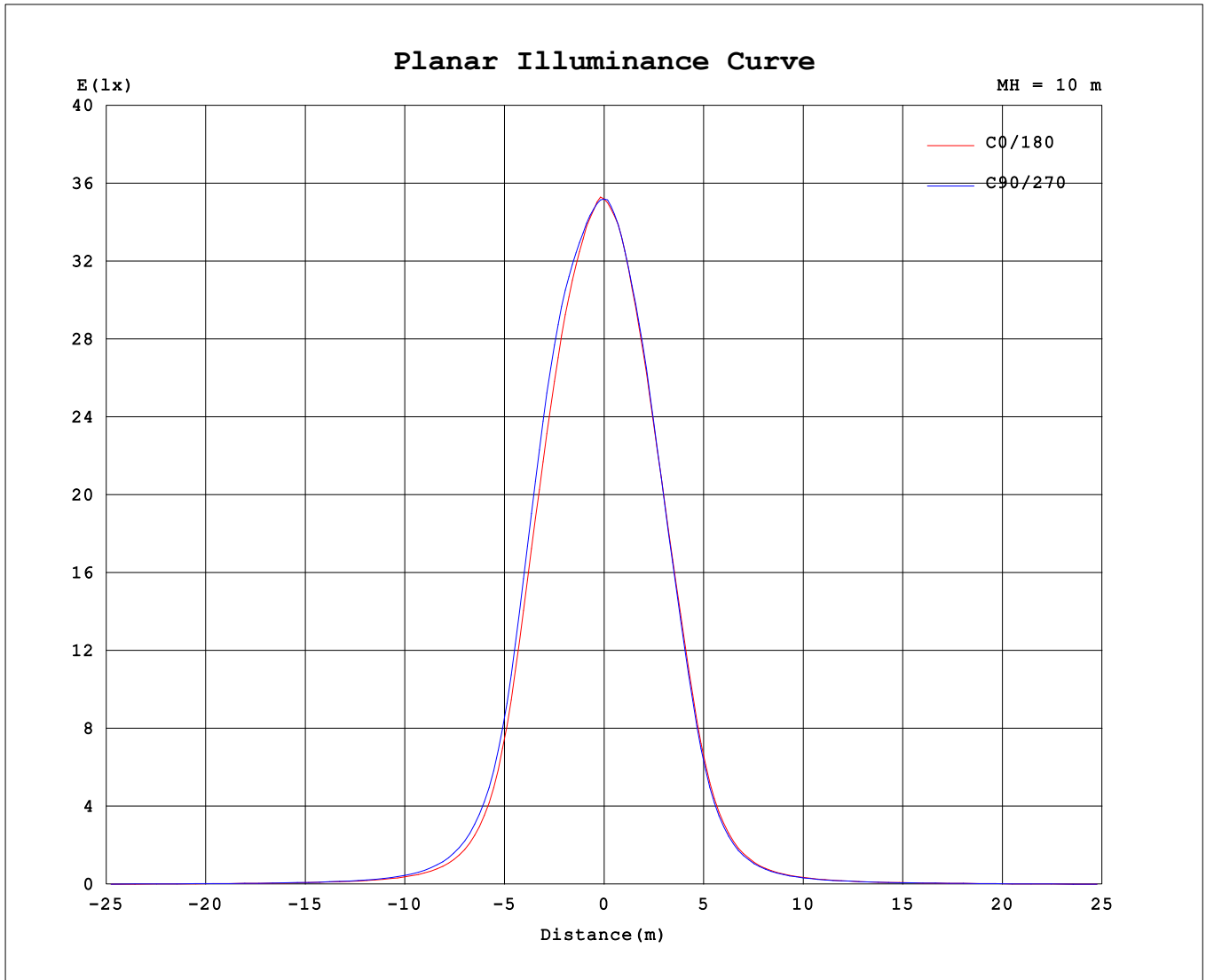
AvgL	cd/m2
L_0~180 (65) av	634
L_0~180 (75) av	138
L_0~180 (85) av	98
L_90~270 (65) av	658
L_90~270 (75) av	154
L_90~270 (85) av	119
L_45 (65) av	439
L_45 (75) av	123
L_45 (85) av	107

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:
 Test Date:2023-04-14

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: 2023-04-14

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table with 3 columns: NAME, TYPE, WEIGHT, SPEC., DIM., SERIAL No., MFR., SUR., Shielding Angle. Test parameters: U:119.73V I:0.1811A P:21.267W PF:0.9809 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1981.62x1 lm

Table--1

UNIT: cd

Large data table with columns for C (DEG) and gamma (DEG) and rows for intensity values. Values range from 3519 down to 0.09.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:2023-04-14

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