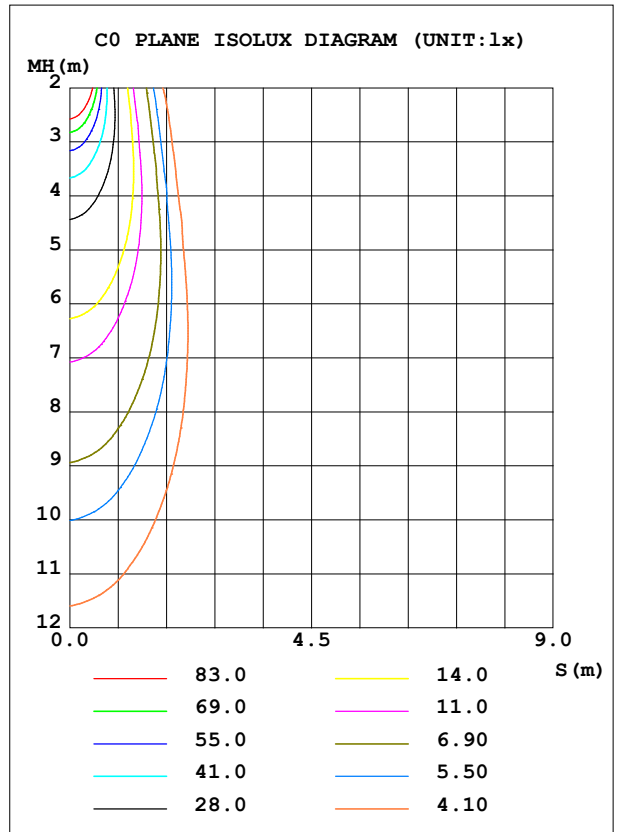
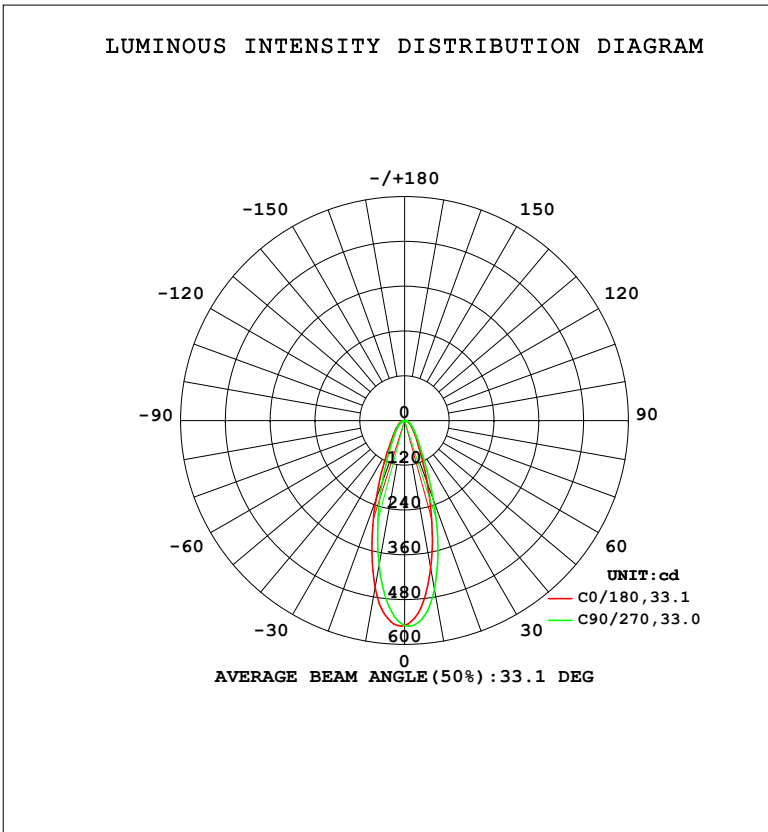


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.90V I:0.0448A P:5.2463W PF:0.9760 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:285.499x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		Imax (cd)	552.0	S/MH (C0/180)	0.58
NOMINAL POWER (W)	5	LOR (%)	100.0	S/MH (C90/270)	0.50
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	285.50	η UP, DN (C0-180)	0.0, 52.5
NOMINAL FLUX (lm)	285.499	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 47.5
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	0.60



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 24.3 °C
 Operators:
 Test Date: 2023-08-19

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:

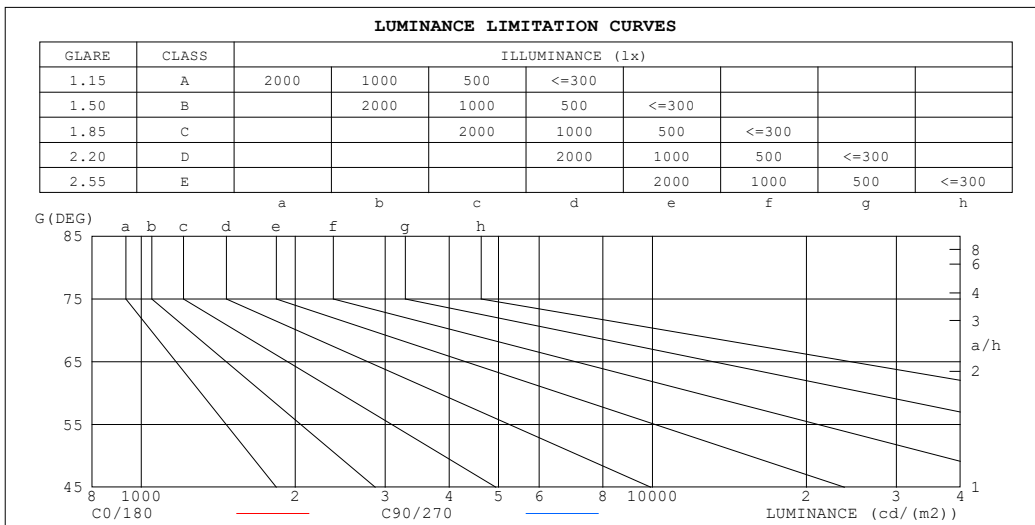
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	402.7	438.3	459.6	464.4	455.2	420.6	394.2	386.3	0- 10	46.45	46.45	16.3,16.3
20	178.0	203.5	225.5	231.7	225.5	204.8	177.3	164.1	10- 20	85.03	131.5	46.1,46.1
30	71.99	78.47	85.12	89.00	87.35	78.95	69.51	66.73	20- 30	57.72	189.2	66.3,66.3
40	39.85	42.29	44.51	45.47	43.21	40.18	37.78	37.15	30- 40	34.96	224.2	78.5,78.5
50	23.85	25.16	26.49	27.40	26.25	24.35	22.92	22.74	40- 50	24.85	249.0	87.2,87.2
60	14.96	15.97	16.81	17.45	16.88	15.72	14.54	14.33	50- 60	17.89	266.9	93.5,93.5
70	7.932	8.663	9.443	9.971	9.954	8.858	7.896	7.515	60- 70	12.05	279.0	97.7,97.7
80	1.004	1.992	3.283	2.595	2.525	3.182	2.381	2.194	70- 80	5.843	284.8	99.8,99.8
90	0.0258	0.0259	0.0274	0.0237	0.0074	0.0100	0.0152	0.0115	80- 90	0.7012	285.5	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:24.3 °C
 Operators:
 Test Date:2023-08-19

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:119.90V I:0.0448A P:5.2463W PF:0.9760 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:285.499x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4	118
80	52	170
75	156	214
70	210	248
65	242	276
60	270	302
55	300	331
50	335	370
45	385	440

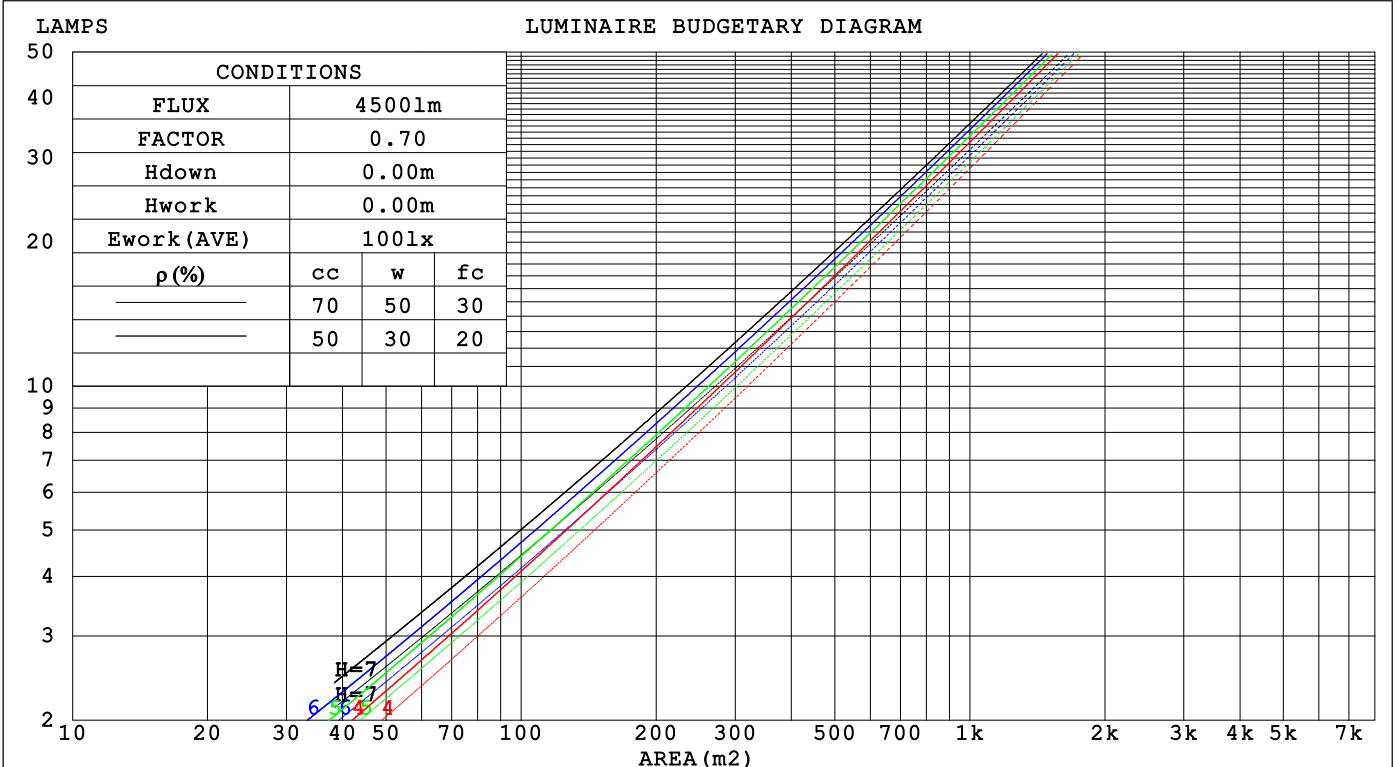
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 24.3 °C
 Operators:
 Test Date: 2023-08-19

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:119.90V I:0.0448A P:5.2463W PF:0.9760 Freq:59.98Hz		
UTHdi:0.00% ITHdi:0.00% KDisp:0 Lamp Flux:285.499x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.:	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 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	1.10	1.07	1.04	1.07	1.05	1.03	1.03	1.01	.99	.90	.98	.96	.96	.95	.94	.92
2.0	1.01	.96	.93	.99	.95	.91	.96	.92	.89	.93	.90	.88	.90	.88	.86	.84
3.0	.93	.88	.84	.92	.87	.83	.89	.85	.81	.87	.83	.80	.84	.81	.79	.77
4.0	.87	.81	.76	.86	.80	.76	.84	.79	.75	.82	.77	.74	.80	.76	.73	.72
5.0	.81	.75	.71	.80	.75	.70	.79	.73	.70	.77	.72	.69	.75	.71	.68	.67
6.0	.76	.70	.66	.76	.70	.65	.74	.69	.65	.73	.68	.65	.71	.67	.64	.63
7.0	.72	.66	.62	.71	.66	.61	.70	.65	.61	.69	.64	.61	.68	.64	.60	.59
8.0	.68	.62	.58	.68	.62	.58	.67	.61	.58	.66	.61	.57	.65	.60	.57	.56
9.0	.65	.59	.55	.64	.59	.55	.63	.58	.55	.63	.58	.54	.62	.57	.54	.53
10.0	.62	.56	.52	.61	.56	.52	.61	.55	.52	.60	.55	.52	.59	.55	.52	.50



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.3°C
 Operators:
 Test Date:2023-08-19

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:119.90V I:0.0448A P:5.2463W PF:0.9760 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:285.499x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.:	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	.201	.115	.036	.195	.111	.035	.182	.104	.033	.170	.098	.032	.159	.092	.030	
2.0	.192	.105	.032	.186	.102	.032	.175	.097	.030	.165	.093	.029	.156	.088	.028	
3.0	.180	.096	.029	.175	.094	.028	.166	.090	.027	.157	.086	.026	.149	.083	.026	
4.0	.169	.088	.026	.165	.086	.025	.157	.083	.025	.149	.080	.024	.142	.077	.024	
5.0	.159	.081	.023	.155	.080	.023	.148	.077	.023	.141	.075	.022	.135	.072	.022	
6.0	.149	.075	.021	.146	.074	.021	.140	.072	.021	.134	.070	.020	.129	.068	.020	
7.0	.141	.070	.020	.138	.069	.020	.133	.067	.019	.127	.065	.019	.123	.064	.019	
8.0	.133	.065	.018	.131	.064	.018	.126	.063	.018	.121	.061	.018	.117	.060	.018	
9.0	.126	.061	.017	.124	.060	.017	.120	.059	.017	.116	.058	.017	.112	.057	.016	
10.0	.120	.058	.016	.118	.057	.016	.114	.056	.016	.111	.055	.016	.107	.054	.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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.049	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.147	.114	.087	.126	.098	.075	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.137	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.128	.088	.058	.110	.076	.050	.076	.053	.036	.044	.031	.021	.014	.010	.007	
6.0	.120	.079	.048	.104	.068	.042	.071	.048	.030	.041	.028	.018	.013	.009	.006	
7.0	.114	.071	.041	.098	.061	.036	.067	.043	.025	.039	.025	.015	.013	.008	.005	
8.0	.107	.065	.035	.092	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.102	.059	.031	.088	.052	.027	.061	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.097	.055	.027	.083	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.3°C
 Operators:
 Test Date:2023-08-19

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:119.90V I:0.0448A P:5.2463W PF:0.9760 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:285.499x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.: 6000K			DIM.:			SERIAL No.:				
MFR.:			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	10.3	11.3	10.5	11.5	11.7	10.8	11.8	11.0	11.9	12.1
3H	11.2	12.2	11.5	12.4	12.6	11.8	12.7	12.1	12.9	13.1
4H	11.5	12.4	11.8	12.6	12.8	12.2	13.1	12.5	13.3	13.5
6H	11.5	12.4	11.8	12.6	12.9	12.4	13.2	12.7	13.5	13.7
8H	11.5	12.3	11.8	12.5	12.8	12.4	13.3	12.8	13.5	13.8
12H	11.4	12.2	11.7	12.5	12.8	12.5	13.2	12.8	13.5	13.8
4H 2H	10.8	11.7	11.0	11.9	12.1	11.1	12.0	11.4	12.3	12.5
3H	11.9	12.6	12.2	12.9	13.2	12.3	13.1	12.7	13.4	13.7
4H	12.2	12.9	12.6	13.2	13.5	12.8	13.5	13.2	13.8	14.2
6H	12.2	12.9	12.6	13.2	13.6	13.1	13.8	13.5	14.1	14.5
8H	12.2	12.8	12.6	13.1	13.5	13.2	13.8	13.6	14.1	14.5
12H	12.1	12.7	12.6	13.1	13.5	13.2	13.8	13.6	14.1	14.5
8H 4H	12.3	12.9	12.7	13.3	13.6	12.9	13.5	13.3	13.9	14.2
6H	12.4	12.9	12.8	13.3	13.7	13.3	13.8	13.7	14.2	14.6
8H	12.3	12.8	12.8	13.2	13.6	13.4	13.8	13.8	14.2	14.7
12H	12.3	12.7	12.8	13.1	13.6	13.4	13.8	13.9	14.2	14.7
12H 4H	12.3	12.8	12.7	13.2	13.6	12.9	13.4	13.3	13.8	14.2
6H	12.4	12.8	12.8	13.2	13.7	13.2	13.7	13.7	14.1	14.5
8H	12.3	12.7	12.8	13.1	13.6	13.4	13.7	13.8	14.2	14.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.4 / - 0.6					+ 0.4 / - 0.5				
1.5H	+ 0.3 / - 0.4					+ 0.3 / - 0.3				
2.0H	+ 0.6 / - 0.7					+ 0.6 / - 0.4				

CIE Pub.117, 285.5 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -4.4)
 Area: 0.111111 m2

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.3°C
 Operators:
 Test Date:2023-08-19

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:

UTILIZATION FACTORS TABLE

Test:U:119.90V I:0.0448A P:5.2463W PF:0.9760 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:285.499x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

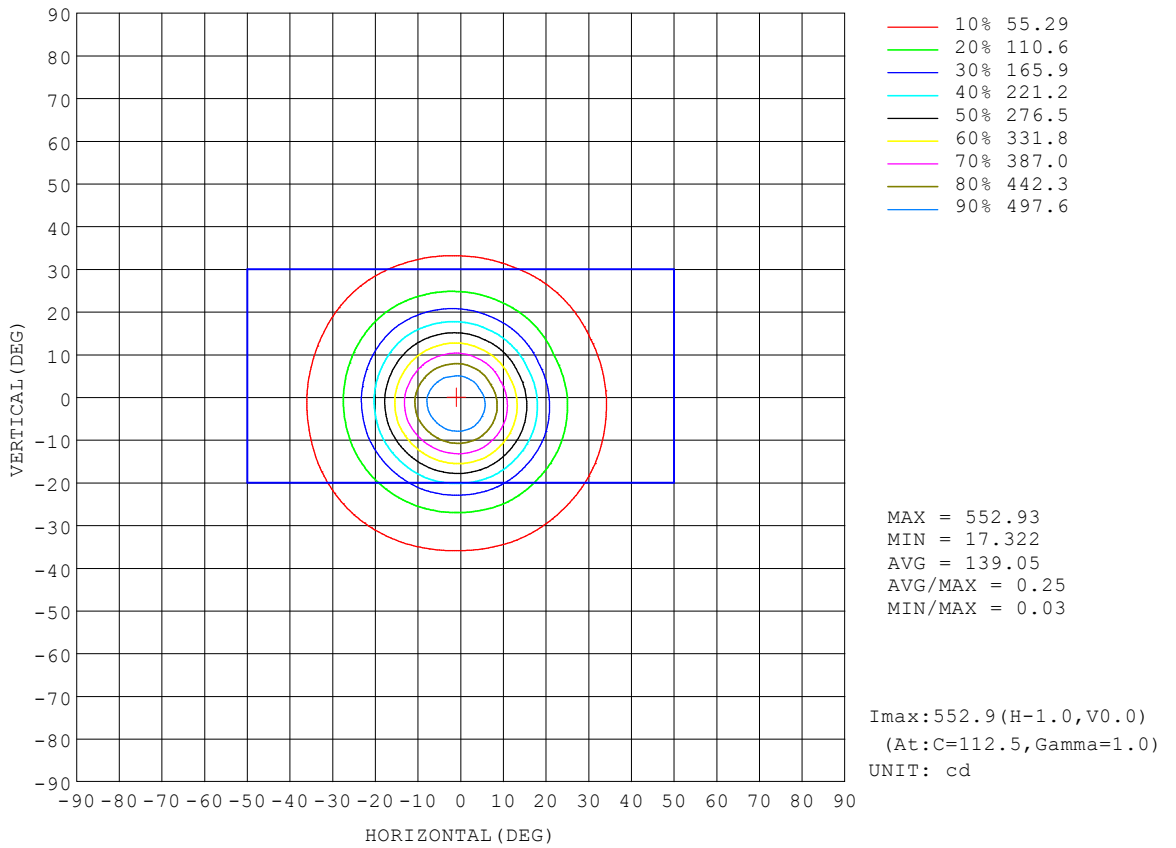
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	78	70	65	78	70	65	77	70	65	61
0.80	87	79	74	86	79	74	84	78	74	69
1.00	92	85	80	91	85	80	90	85	80	75
1.25	97	90	86	96	90	86	94	89	85	80
1.50	101	94	90	99	94	90	97	92	88	83
2.00	105	99	95	103	98	94	100	96	93	87
2.50	107	102	98	105	101	97	102	98	95	89
3.00	109	105	101	107	103	100	104	101	98	91
4.00	112	108	105	110	106	104	106	103	101	94
5.00	113	110	108	111	108	106	107	105	103	95
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:24.3°C
 Operators:
 Test Date:2023-08-19

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:119.90V I:0.0448A P:5.2463W PF:0.9760 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:285.499x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

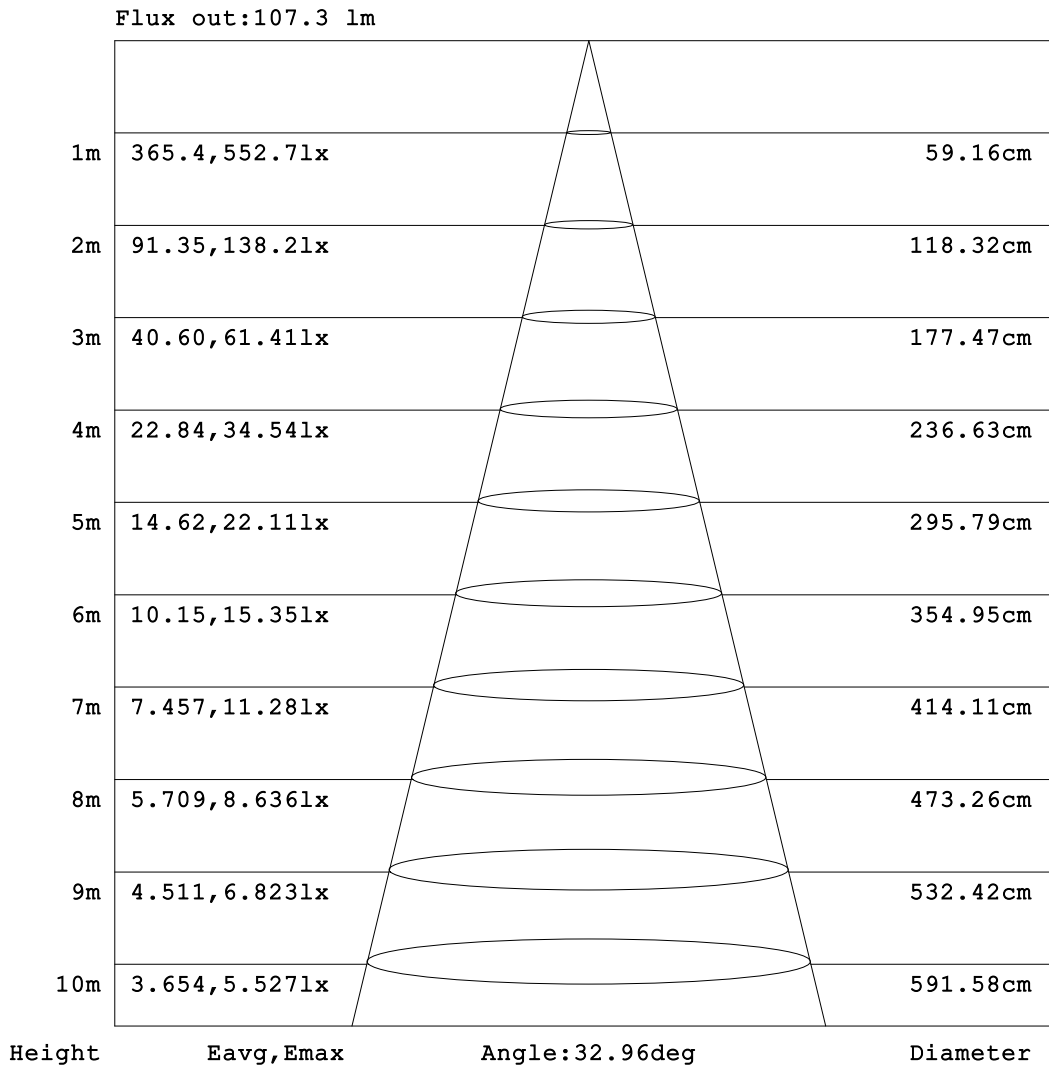


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.3°C
 Operators:
 Test Date:2023-08-19

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:119.90V I:0.0448A P:5.2463W PF:0.9760 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:285.499x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



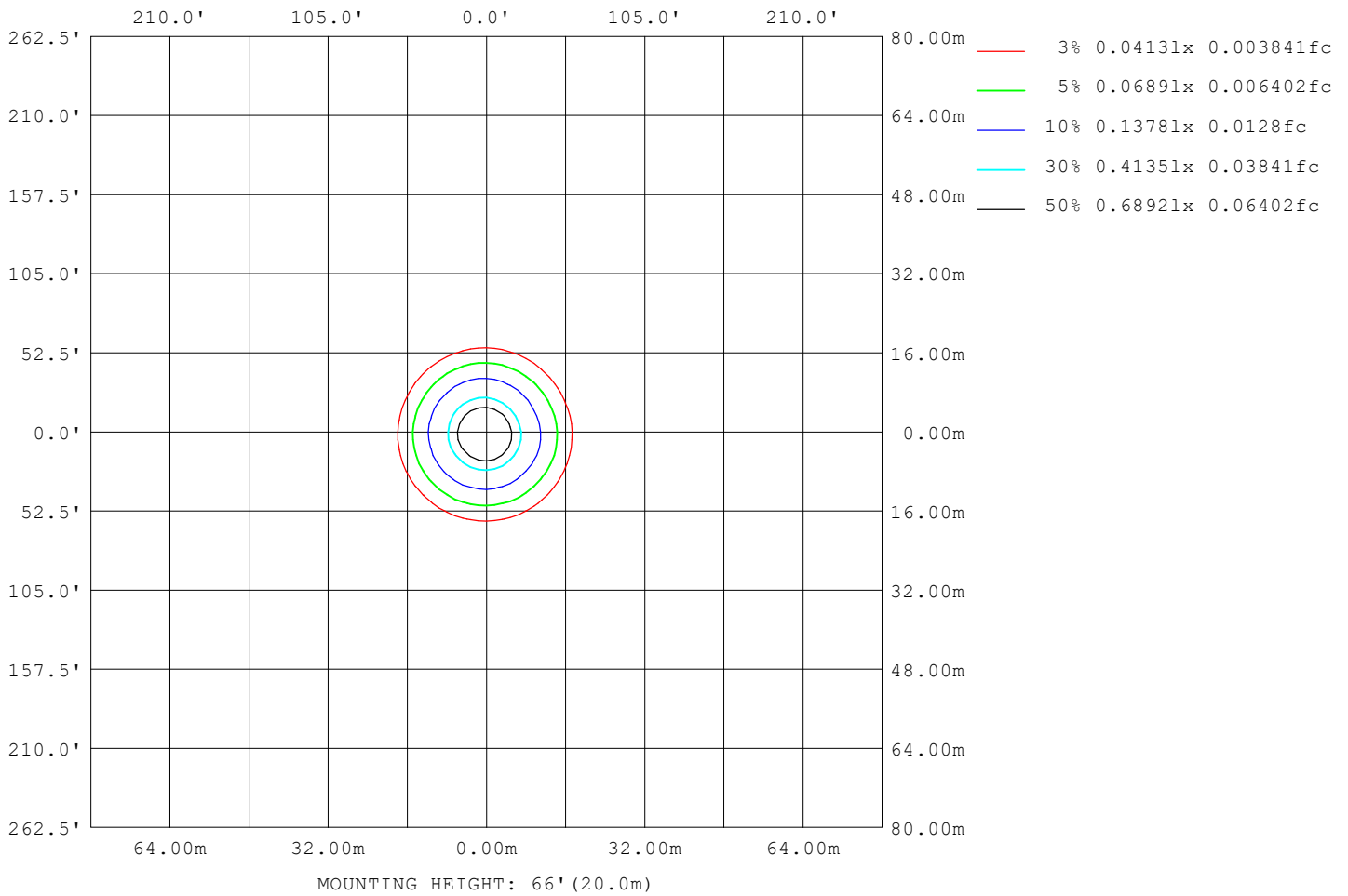
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 24.3 °C
 Operators:
 Test Date: 2023-08-19

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:119.90V I:0.0448A P:5.2463W PF:0.9760 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:285.499x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 24.3°C
 Operators:
 Test Date: 2023-08-19

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:119.90V I:0.0448A P:5.2463W PF:0.9760 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:285.499x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

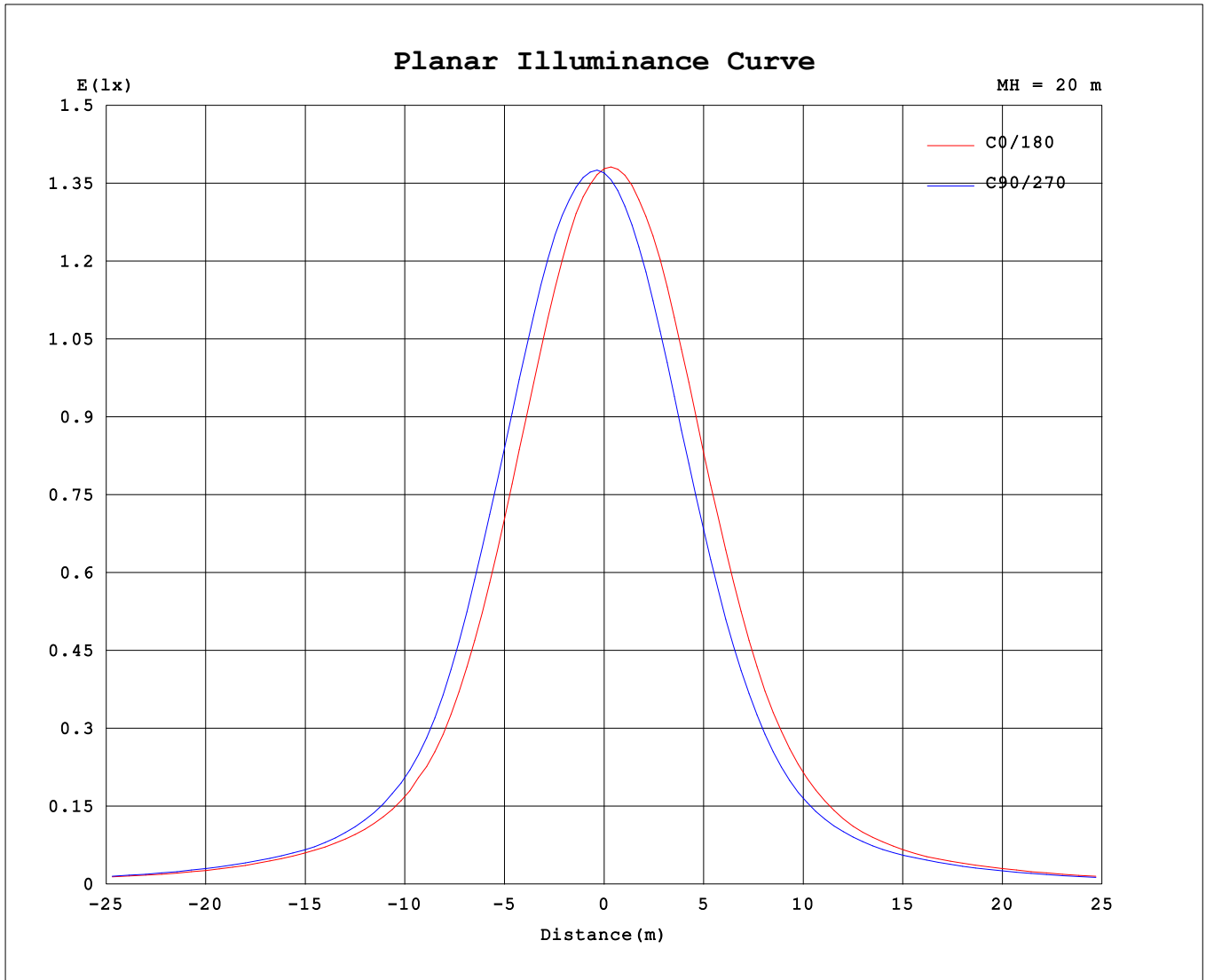
AvgL	cd/m2
L_0~180 (65) av	262
L_0~180 (75) av	192
L_0~180 (85) av	3
L_90~270 (65) av	257
L_90~270 (75) av	192
L_90~270 (85) av	94
L_45 (65) av	259
L_45 (75) av	194
L_45 (85) av	13

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.3℃
 Operators:
 Test Date:2023-08-19

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: 24.3 °C
 Operators:
 Test Date: 2023-08-19

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:

