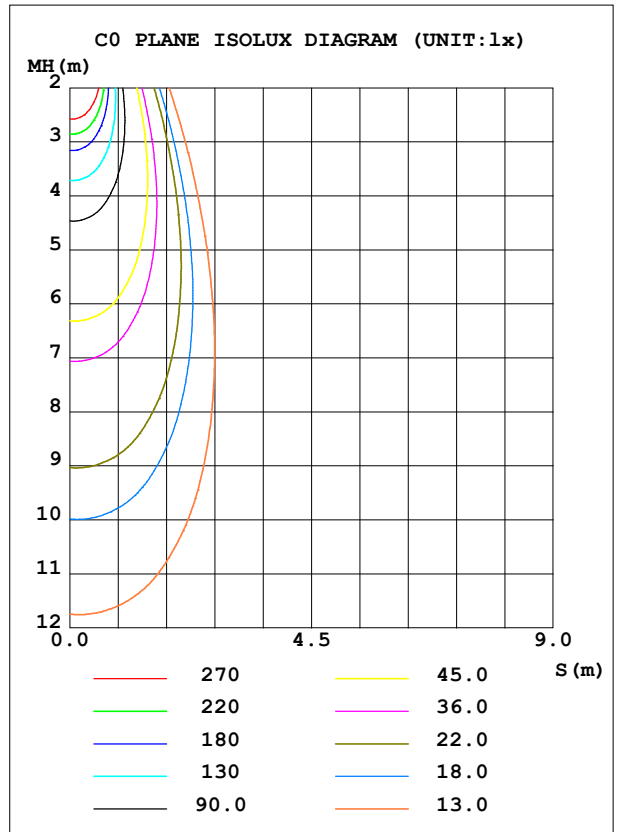
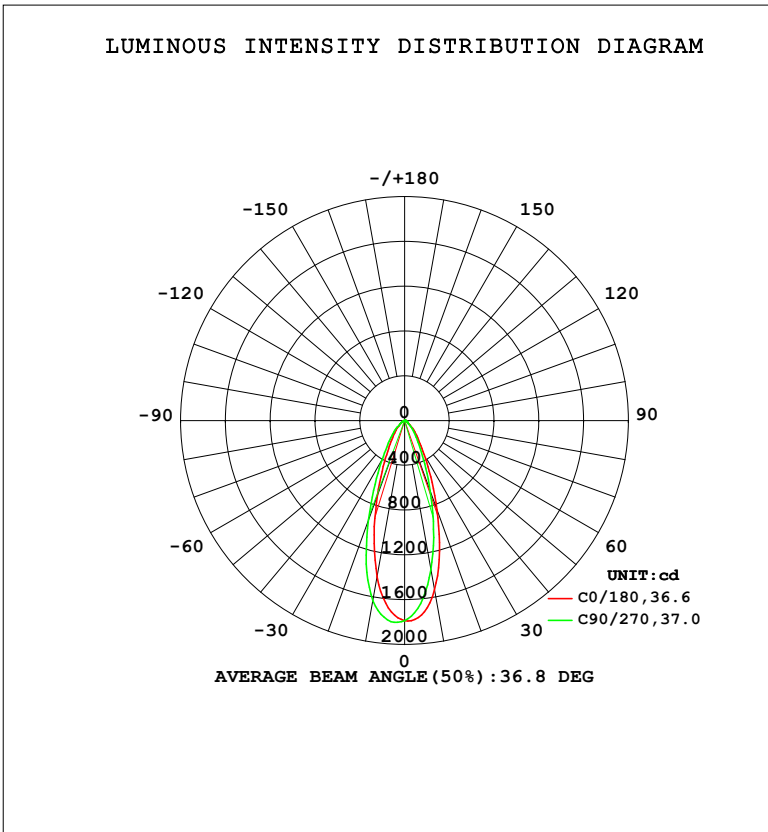


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.66V I:0.0900A P:10.588W PF:0.9832 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:983.053x1 lm		
NAME: LED-2-S11W-5CCTWH-EY-T	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: LTS	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		Imax (cd)	1803	S/MH (C0/180)	0.57
NOMINAL POWER (W)	11	LOR (%)	100.0	S/MH (C90/270)	0.67
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	983.05	η UP, DN (C0-180)	0.0,48.6
NOMINAL FLUX (lm)	983.053	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0,51.4
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: 2022-12-05

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:

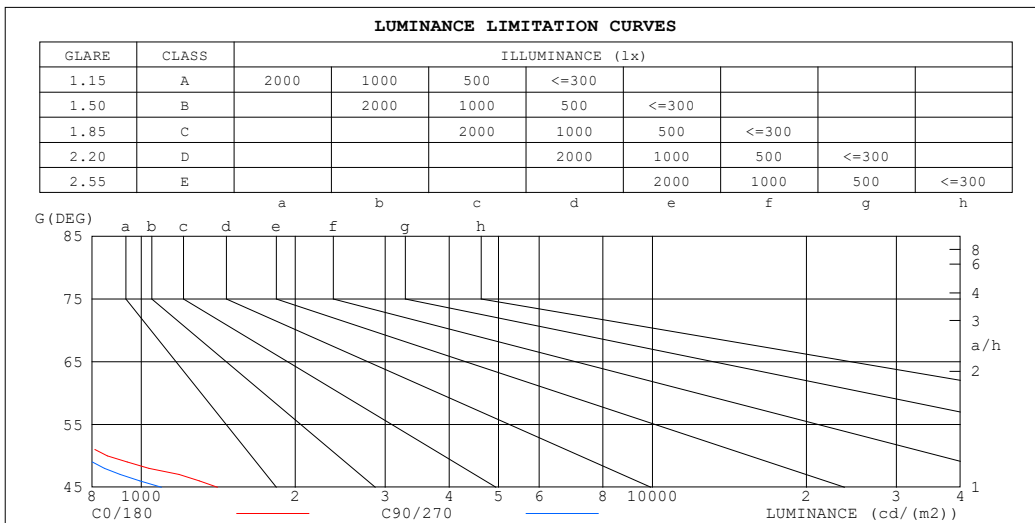
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1537	1473	1354	1455	1416	1473	1636	1538	0- 10	156.2	156.2	15.9,15.9
20	850.5	780.7	675.6	777.3	712.7	763.7	945.2	822.5	10- 20	312.6	468.8	47.7,47.7
30	350.9	319.9	273.1	323.0	290.9	324.1	405.0	341.0	20- 30	237.7	706.5	71.9,71.9
40	156.9	145.6	127.8	144.5	135.8	149.9	180.6	156.4	30- 40	138.2	844.7	85.9,85.9
50	61.04	60.69	54.74	59.18	56.76	58.45	64.28	57.04	40- 50	78.72	923.4	93.9,93.9
60	24.84	24.57	23.50	23.77	24.96	26.38	28.40	24.96	50- 60	35.71	959.1	97.6,97.6
70	8.220	8.392	8.813	8.657	8.395	8.600	9.228	8.390	60- 70	15.52	974.6	99.1,99.1
80	3.859	3.874	3.619	3.659	3.914	4.054	4.293	4.215	70- 80	6.718	981.3	99.8,99.8
90	0.0990	0.0791	0.0874	0.0922	0.0664	0.0634	0.1856	0.3245	80- 90	1.735	983.1	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:2022-12-05

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:119.66V I:0.0900A P:10.588W PF:0.9832 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:983.053x1 lm		
NAME: LED-2-S11W-5CCTWH-EY-T	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: LTS	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	131	105
80	201	186
75	220	227
70	217	230
65	320	301
60	449	420
55	637	550
50	858	760
45	1408	1095

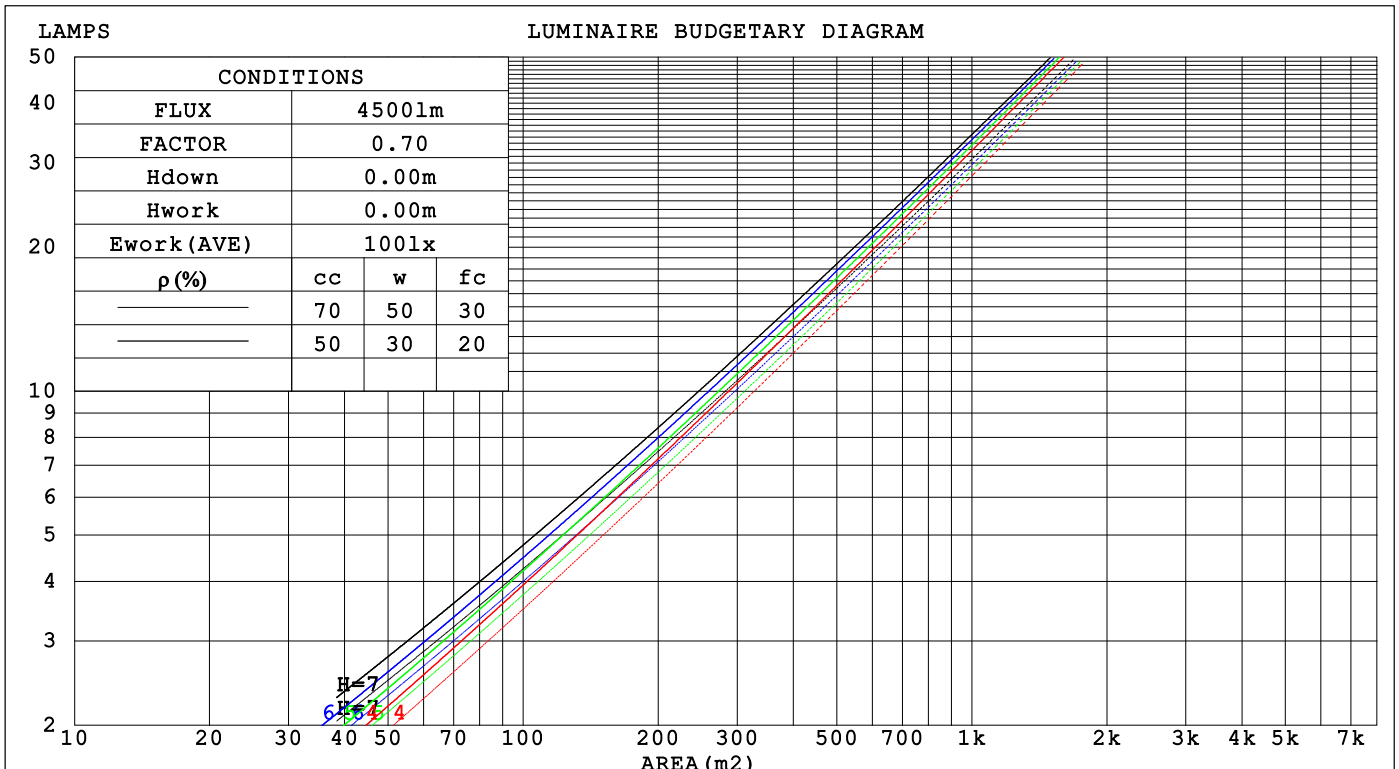
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
 Test Date: 2022-12-05

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:119.66V I:0.0900A P:10.588W PF:0.9832 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:983.053x1 lm		
NAME: LED-2-S11W-5CCTWH-EY-T	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: LTS	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	1.08	1.06	1.08	1.06	1.04	1.04	1.02	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.95	1.01	.97	.94	.98	.95	.92	.95	.92	.90	.92	.90	.88	.87
3.0	.96	.91	.87	.94	.90	.86	.92	.88	.85	.89	.86	.83	.87	.84	.82	.81
4.0	.90	.84	.80	.89	.83	.80	.86	.82	.79	.84	.81	.78	.83	.79	.77	.75
5.0	.84	.79	.74	.83	.78	.74	.82	.77	.73	.80	.76	.73	.78	.75	.72	.71
6.0	.79	.74	.69	.79	.73	.69	.77	.72	.69	.76	.71	.68	.74	.71	.68	.66
7.0	.75	.69	.65	.74	.69	.65	.73	.68	.65	.72	.68	.64	.71	.67	.64	.63
8.0	.71	.65	.61	.71	.65	.61	.70	.65	.61	.69	.64	.61	.68	.64	.61	.59
9.0	.68	.62	.58	.67	.62	.58	.66	.61	.58	.65	.61	.58	.65	.60	.57	.56
10.0	.65	.59	.55	.64	.59	.55	.63	.58	.55	.63	.58	.55	.62	.58	.55	.53



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-12-05

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:119.66V I:0.0900A P:10.588W PF:0.9832 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:983.053x1 lm		
NAME: LED-2-S11W-5CCTWH-EY-T	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: LTS	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	.182	.104	.033	.175	.100	.032	.163	.093	.030	.151	.087	.028	.141	.081	.026	
2.0	.174	.095	.029	.168	.093	.029	.157	.088	.027	.148	.083	.026	.138	.078	.025	
3.0	.164	.087	.026	.160	.085	.026	.150	.082	.025	.142	.078	.024	.134	.074	.023	
4.0	.155	.081	.024	.151	.079	.023	.143	.076	.023	.136	.073	.022	.129	.070	.021	
5.0	.147	.075	.022	.144	.074	.021	.137	.071	.021	.130	.069	.020	.124	.067	.020	
6.0	.140	.070	.020	.136	.069	.020	.130	.067	.019	.125	.065	.019	.120	.063	.019	
7.0	.133	.066	.019	.130	.065	.018	.125	.063	.018	.120	.061	.018	.115	.060	.018	
8.0	.126	.062	.017	.124	.061	.017	.119	.059	.017	.115	.058	.017	.111	.057	.017	
9.0	.120	.058	.016	.118	.058	.016	.114	.056	.016	.110	.055	.016	.106	.054	.016	
10.0	.115	.055	.015	.113	.055	.015	.109	.054	.015	.106	.053	.015	.102	.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	.171	.157	.144	.147	.135	.124	.100	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.156	.132	.112	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.134	.099	.072	.115	.085	.063	.079	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.125	.087	.060	.107	.076	.052	.074	.053	.037	.043	.031	.022	.014	.010	.007	
6.0	.117	.078	.050	.101	.068	.043	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.110	.070	.042	.095	.061	.037	.066	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.104	.064	.036	.090	.056	.032	.062	.039	.022	.036	.023	.013	.012	.008	.004	
9.0	.099	.059	.032	.085	.051	.027	.059	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.094	.054	.028	.081	.047	.024	.056	.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:2022-12-05

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:119.66V I:0.0900A P:10.588W PF:0.9832 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:983.053x1 lm		
NAME: LED-2-S11W-5CCTWH-EY-T	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: LTS	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	8.5	9.5	8.8	9.6	9.8	7.7	8.7	7.9	8.8	9.0
3H	8.6	9.4	8.8	9.6	9.9	7.8	8.7	8.1	8.9	9.1
4H	8.6	9.4	8.9	9.6	9.9	7.9	8.7	8.2	8.9	9.2
6H	8.6	9.4	8.9	9.6	9.9	7.9	8.7	8.2	8.9	9.2
8H	8.6	9.3	8.9	9.6	9.9	7.9	8.7	8.2	8.9	9.2
12H	8.6	9.3	8.9	9.6	9.8	7.9	8.6	8.2	8.9	9.1
4H 2H	8.5	9.3	8.8	9.5	9.8	7.7	8.6	8.0	8.8	9.0
3H	8.6	9.3	8.9	9.6	9.9	7.9	8.6	8.2	8.9	9.2
4H	8.7	9.3	9.0	9.6	9.9	8.1	8.7	8.4	9.0	9.3
6H	8.7	9.3	9.1	9.6	10.0	8.2	8.7	8.5	9.1	9.4
8H	8.7	9.3	9.1	9.6	10.0	8.2	8.7	8.6	9.0	9.4
12H	8.7	9.2	9.1	9.6	10.0	8.1	8.6	8.5	9.0	9.4
8H 4H	8.6	9.2	9.0	9.5	9.9	8.0	8.6	8.4	8.9	9.3
6H	8.7	9.2	9.2	9.6	10.0	8.2	8.6	8.6	9.0	9.4
8H	8.8	9.2	9.2	9.6	10.0	8.2	8.6	8.7	9.0	9.5
12H	8.8	9.1	9.2	9.5	10.0	8.2	8.5	8.7	9.0	9.4
12H 4H	8.6	9.1	9.0	9.4	9.8	8.0	8.5	8.4	8.9	9.2
6H	8.7	9.1	9.2	9.5	10.0	8.2	8.5	8.6	9.0	9.4
8H	8.8	9.1	9.2	9.5	10.0	8.2	8.5	8.7	9.0	9.4

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 1.4 / - 2.3	+ 1.3 / - 2.1
1.5H	+ 2.0 / - 1.9	+ 1.5 / - 1.3
2.0H	+ 3.3 / - 2.3	+ 2.4 / - 1.8

CIE Pub.117, 983.1 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.1)
 Area: 0.111111 m2

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-12-05

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:119.66V I:0.0900A P:10.588W PF:0.9832 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:983.053x1 lm		
NAME: LED-2-S11W-5CCTWH-EY-T	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: LTS	SUR.:	Shielding Angle:

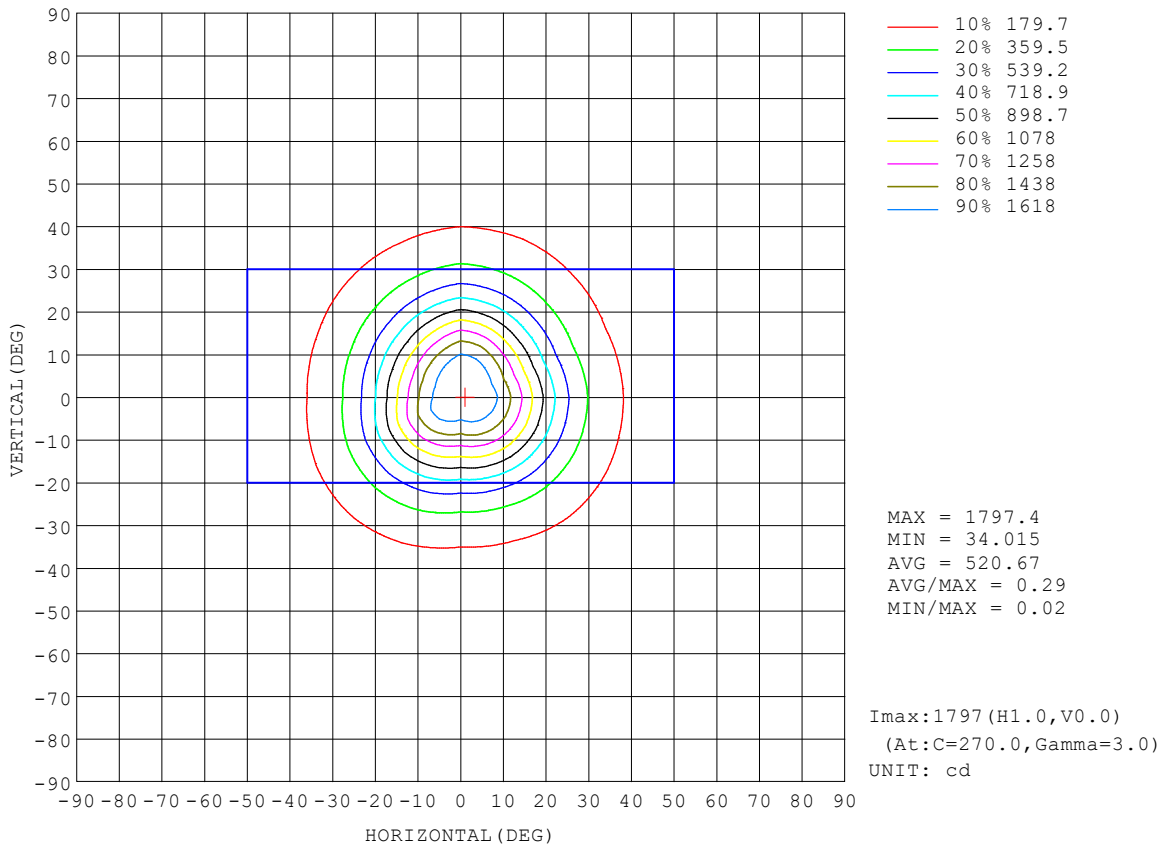
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	83	75	71	82	75	71	81	75	71	67
0.80	91	84	80	90	84	80	89	83	79	75
1.00	96	90	86	95	89	85	93	89	85	80
1.25	101	95	91	99	94	90	97	93	90	85
1.50	104	98	94	102	97	94	100	96	93	88
2.00	107	102	99	105	101	98	103	99	96	91
2.50	109	105	101	107	103	100	104	101	98	92
3.00	111	107	104	109	105	103	105	103	100	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	112	109	112	110	108	108	106	105	97
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:2022-12-05

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:119.66V I:0.0900A P:10.588W PF:0.9832 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:983.053x1 lm		
NAME: LED-2-S11W-5CCTWH-EY-T	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: LTS	SUR.:	Shielding Angle:

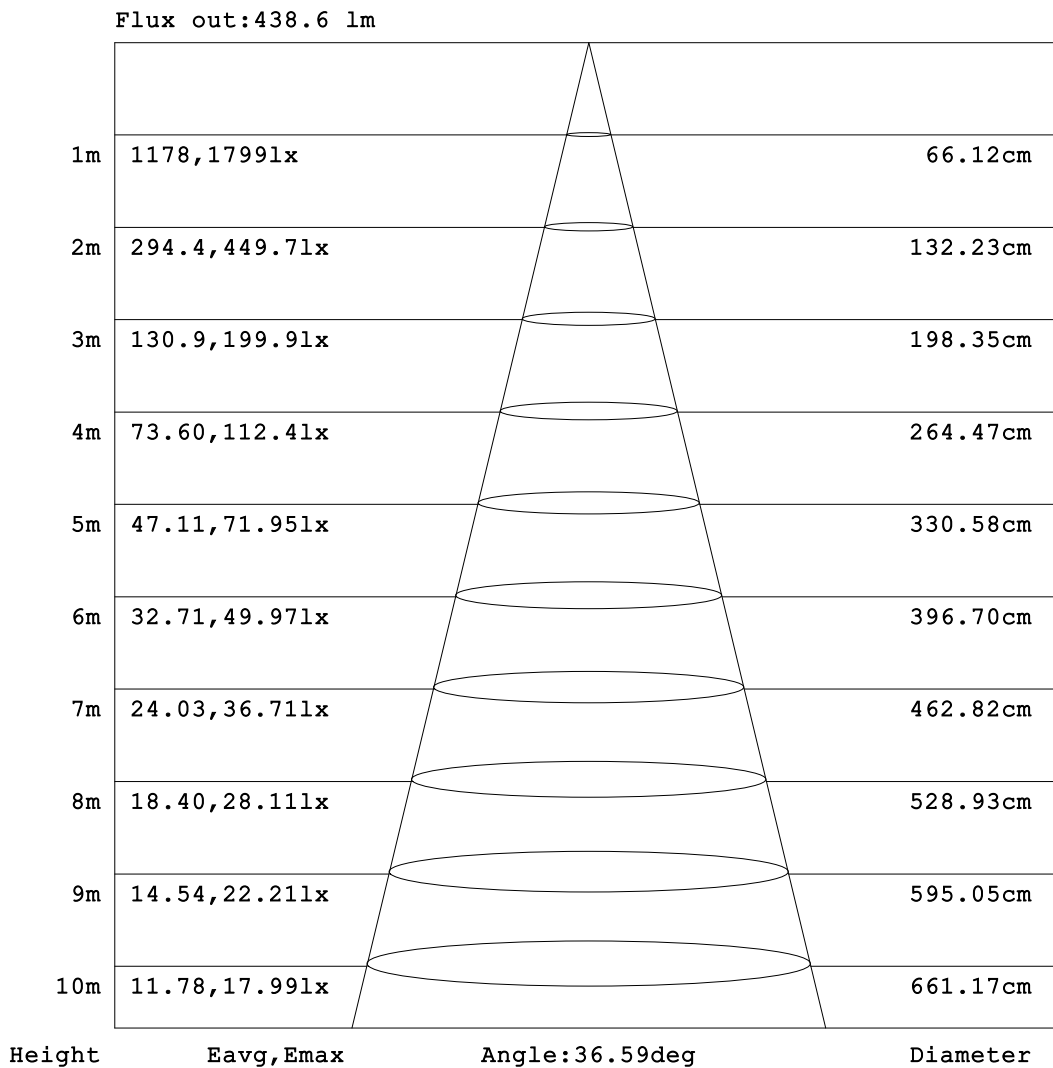


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-12-05

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:119.66V I:0.0900A P:10.588W PF:0.9832 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:983.053x1 lm		
NAME: LED-2-S11W-5CCTWH-EY-T	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: LTS	SUR.:	Shielding Angle:



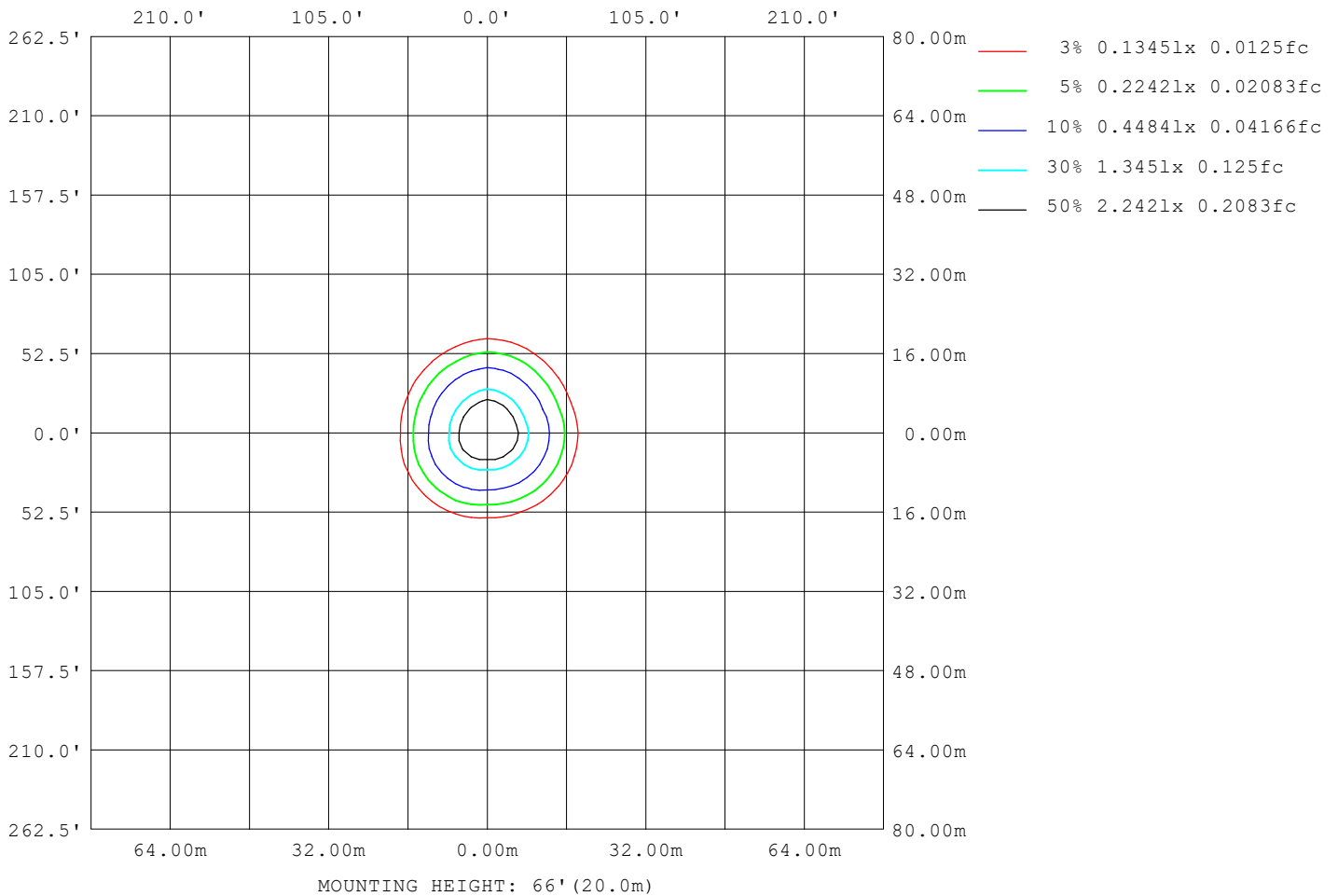
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2022-12-05

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:119.66V I:0.0900A P:10.588W PF:0.9832 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:983.053x1 lm		
NAME: LED-2-S11W-5CCTWH-EY-T	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: LTS	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2022-12-05

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:119.66V I:0.0900A P:10.588W PF:0.9832 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:983.053x1 lm		
NAME: LED-2-S11W-5CCTWH-EY-T	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: LTS	SUR.:	Shielding Angle:

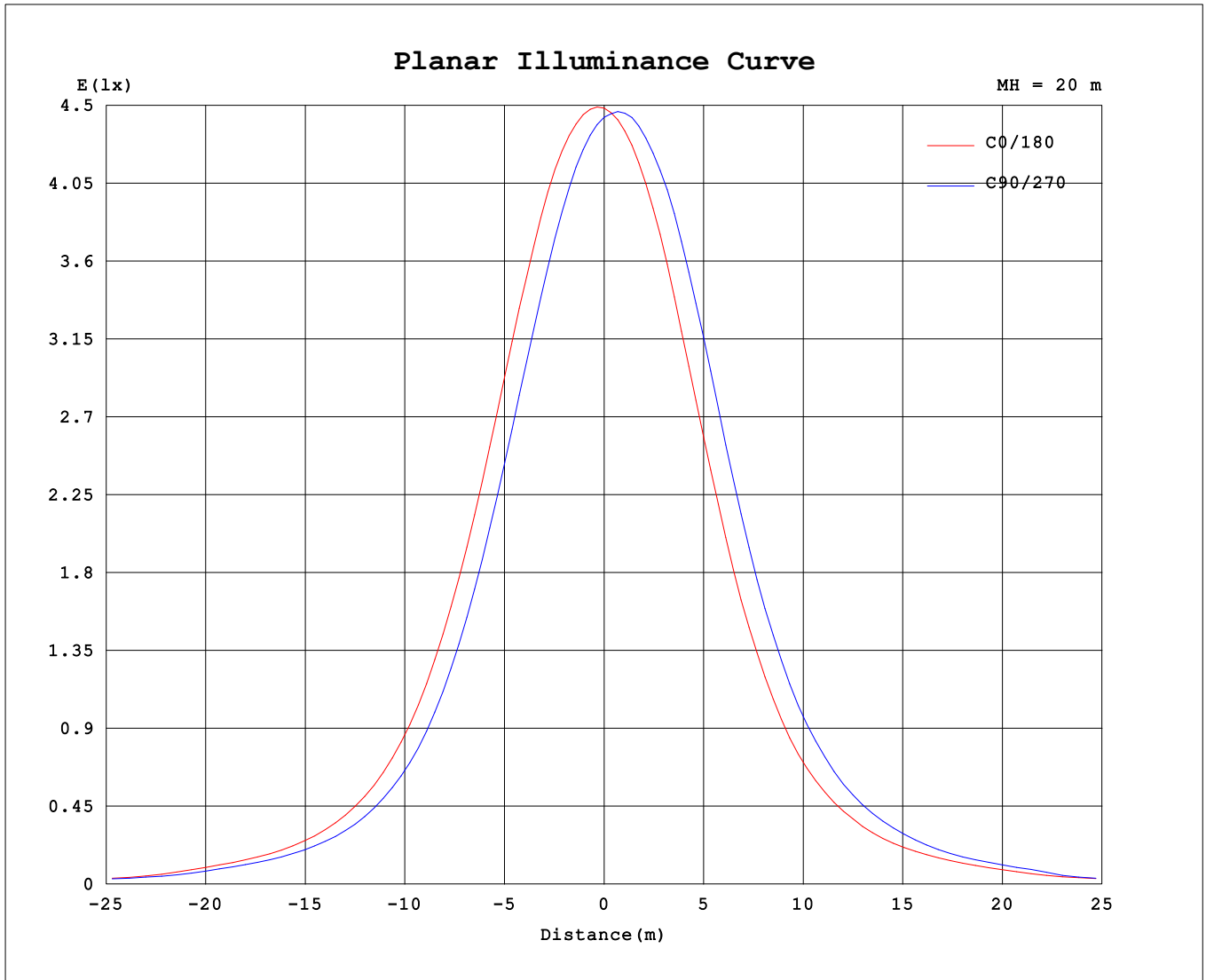
AvgL	cd/m2
L_0~180 (65) av	319
L_0~180 (75) av	224
L_0~180 (85) av	128
L_90~270 (65) av	344
L_90~270 (75) av	226
L_90~270 (85) av	145
L_45 (65) av	319
L_45 (75) av	227
L_45 (85) av	132

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:
 Test Date:2022-12-05

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: 2022-12-05

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:

