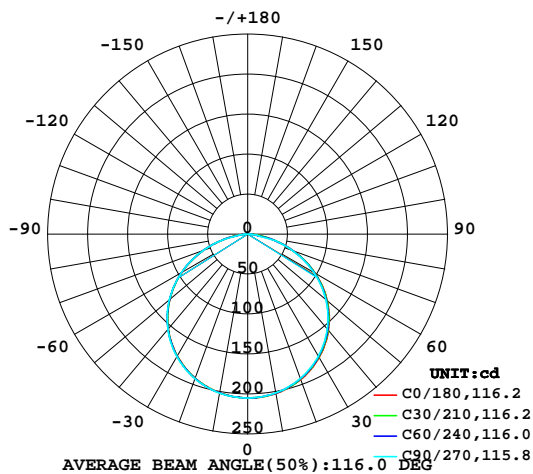


LUMINAIRE PHOTOMETRIC TEST REPORT

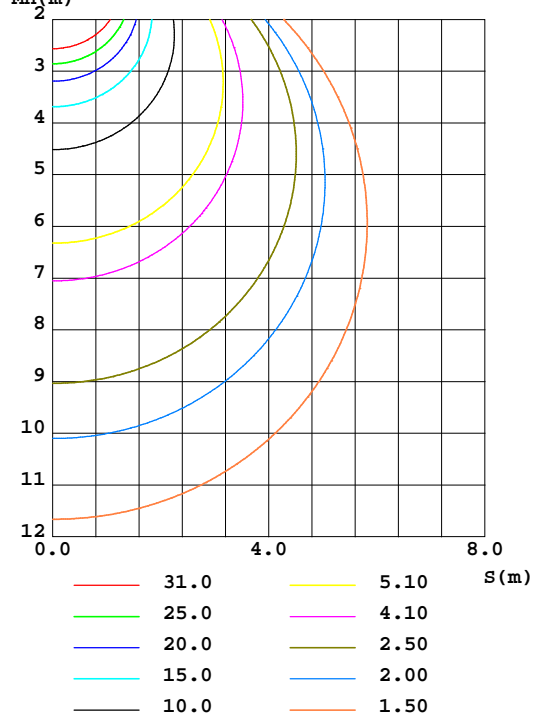
Test:U:12.072V I:0.5400A P:6.5180W PF:1.0000 Freq:50.00Hz Lamp Flux:601.817x1 lm		
NAME: EKF4448PRO	TYPE:	WEIGHT:
SPEC.:LED STRIP LIGHT(12V-2835-60L 4000K)	DIM.:	SERIAL No.:
MFR.:	SUR.:1050*8mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 92.33 lm/W			
MODEL		I _{max} (cd)	205.0	S/MH(C0/180)	1.28
NOMINAL POWER(W)	--	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	--	TOTAL FLUX(lm)	601.82	η UP,DN(C0-180)	0.0,49.8
NOMINAL FLUX(lm)	601.817	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	--	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-05-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:9.000m [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	202.4	202.2	201.7	201.3	201.5	201.6	202.0	202.5	0- 10	19.42	19.42	3.23,3.23
20	193.7	193.3	192.3	191.4	191.9	192.0	192.6	193.7	10- 20	55.91	75.33	12.5,12.5
30	178.6	178.1	176.6	175.4	176.1	176.2	177.0	178.5	20- 30	85.56	160.9	26.7,26.7
40	157.3	156.8	154.9	153.5	154.5	154.5	155.4	157.3	30- 40	104.5	265.4	44.1,44.1
50	130.1	129.7	127.7	126.0	127.3	127.1	128.0	130.2	40- 50	109.9	375.3	62.4,62.4
60	97.28	97.14	95.19	93.35	94.67	94.47	95.16	97.54	50- 60	100.5	475.8	79.1,79.1
70	59.97	60.24	58.77	56.68	58.02	57.73	58.21	60.57	60- 70	76.61	552.4	91.8,91.8
80	22.47	22.27	14.86	19.30	20.96	21.00	16.45	23.33	70- 80	41.49	593.9	98.7,98.7
90	0.2199	0.4442	0.4268	0.3752	0.1840	0.3339	0.9933	1.155	80- 90	7.946	601.8	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		

Conical surface Flux(90deg): 320.58 lm

%lum = 53.3%

%lamp = 53.3%

Conical surface Flux(120deg): 475.77 lm

%lum = 79.1%

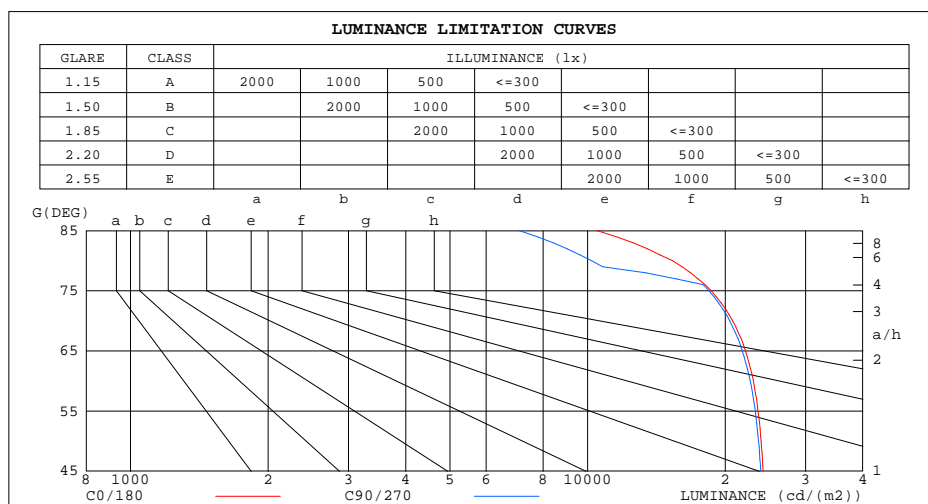
%lamp = 79.1%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-05-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:9.000m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:12.072V I:0.5400A P:6.5180W PF:1.0000 Freq:50.00Hz Lamp Flux:601.817x1 lm		
NAME: EKF4448PRO	TYPE:	WEIGHT:
SPEC.:LED STRIP LIGHT(12V-2835-60L 4000K)	DIM.:	SERIAL No.:
MFR.:	SUR.:1050*8mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(180)	C0/180	C90/270
85	10481	7085
80	15334	10197
75	18626	18427
70	20772	20478
65	22155	21804
60	23051	22688
55	23606	23272
50	23976	23668
45	24201	23924

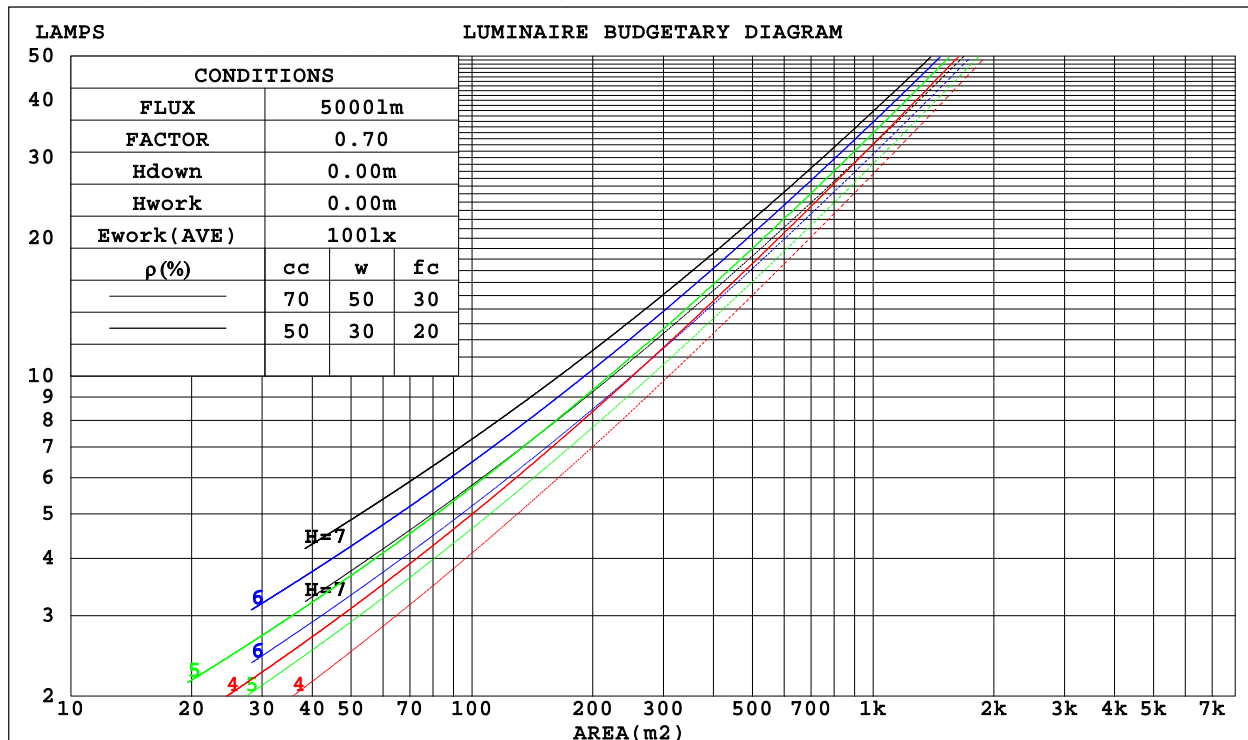
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-05-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:9.000m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:12.072V I:0.5400A P:6.5180W PF:1.0000 Freq:50.00Hz Lamp Flux:601.817x1 lm		
NAME: EKF4448PRO	TYPE:	WEIGHT:
SPEC.:LED STRIP LIGHT(12V-2835-60L 4000K)	DIM.:	SERIAL No.:
MFR.:	SUR.:1050*8mm	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	1.04	.00	.96	1.02	.98	.94	.98	.94	.91	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.82	.77	.85	.80	.75	.82	.77	.74	.79	.75	.72	.70
3.0	.79	.71	.65	.78	.70	.64	.75	.68	.63	.72	.66	.62	.69	.65	.61	.59
4.0	.70	.61	.55	.69	.61	.54	.66	.59	.53	.64	.58	.53	.62	.56	.52	.50
5.0	.63	.54	.47	.61	.53	.47	.59	.52	.46	.57	.51	.46	.56	.50	.45	.43
6.0	.56	.47	.41	.55	.47	.41	.54	.46	.40	.52	.45	.40	.50	.44	.40	.37
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.40	.35	.46	.40	.35	.33
8.0	.46	.38	.32	.46	.38	.32	.44	.37	.32	.43	.36	.31	.42	.36	.31	.29
9.0	.43	.34	.29	.42	.34	.29	.41	.34	.28	.40	.33	.28	.39	.33	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.26	.24



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2022-05-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-3000H_V1 SYSTEM V2.00.411
 Humidity: 65.0%
 Test Distance: 9.000m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:12.072V I:0.5400A P:6.5180W PF:1.0000 Freq:50.00Hz Lamp Flux:601.817x1 lm		
NAME: EKF4448PRO	TYPE:	WEIGHT:
SPEC.:LED STRIP LIGHT(12V-2835-60L 4000K)	DIM.:	SERIAL No.:
MFR.:	SUR.:1050*8mm	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Wall Exitance Coefficients(WEC)															
0.0																
1.0	.305	.174	.055	.298	.170	.054	.285	.164	.052	.273	.157	.050	.262	.152	.049	
2.0	.290	.159	.049	.284	.156	.048	.272	.151	.047	.262	.147	.046	.252	.142	.045	
3.0	.270	.144	.043	.264	.141	.043	.254	.138	.042	.244	.134	.041	.235	.130	.040	
4.0	.249	.130	.038	.245	.128	.038	.235	.125	.037	.227	.122	.037	.219	.119	.036	
5.0	.231	.118	.034	.227	.116	.034	.218	.114	.033	.211	.111	.033	.204	.109	.033	
6.0	.214	.107	.031	.210	.106	.031	.203	.104	.030	.196	.102	.030	.190	.100	.030	
7.0	.199	.099	.028	.196	.098	.028	.189	.096	.028	.183	.094	.027	.178	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.175	.084	.024	.172	.084	.024	.167	.082	.023	.162	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.153	.076	.022	.148	.075	.021	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	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	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.074	.141	.099	.064	.097	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-05-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:9.000m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:12.072V I:0.5400A P:6.5180W PF:1.0000 Freq:50.00Hz Lamp Flux:601.817x1 lm											
NAME: EKF4448PRO					TYPE:			WEIGHT:			
SPEC.:LED STRIP LIGHT(12V-2835-60L 4000K)					DIM.:			SERIAL No.:			
MFR.:					SUR.:1050*8mm			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	24.0	25.5	24.3	25.7	25.9	23.9	25.5	24.2	25.7	25.9	
	3H	25.5	27.0	25.8	27.2	27.4	25.4	26.9	25.7	27.1	27.3
	4H	26.1	27.5	26.4	27.7	28.0	26.0	27.4	26.3	27.6	27.9
	6H	26.5	27.7	26.8	28.0	28.3	26.2	27.5	26.5	27.7	28.0
	8H	26.5	27.8	26.9	28.0	28.3	26.2	27.4	26.6	27.7	28.0
	12H	26.6	27.7	26.9	28.0	28.3	26.2	27.4	26.6	27.7	28.0
4H	2H	24.6	26.0	24.9	26.2	26.5	24.6	25.9	24.9	26.2	26.4
	3H	26.3	27.5	26.7	27.8	28.1	26.3	27.4	26.6	27.7	28.0
	4H	27.0	28.1	27.4	28.4	28.7	26.9	28.0	27.3	28.3	28.7
	6H	27.5	28.4	27.9	28.8	29.1	27.2	28.1	27.6	28.5	28.9
	8H	27.6	28.5	28.0	28.9	29.2	27.2	28.1	27.6	28.5	28.9
	12H	27.7	28.5	28.1	28.9	29.3	27.2	28.0	27.7	28.4	28.8
8H	4H	27.3	28.1	27.7	28.5	28.9	27.2	28.1	27.6	28.4	28.8
	6H	27.8	28.6	28.3	29.0	29.4	27.5	28.3	28.0	28.7	29.1
	8H	28.0	28.7	28.5	29.1	29.6	27.6	28.2	28.1	28.7	29.1
	12H	28.1	28.7	28.6	29.1	29.6	27.6	28.2	28.1	28.6	29.1
12H	4H	27.2	28.1	27.7	28.4	28.8	27.2	28.0	27.6	28.4	28.8
	6H	27.8	28.5	28.3	28.9	29.4	27.5	28.2	28.0	28.6	29.1
	8H	28.1	28.6	28.5	29.1	29.5	27.6	28.2	28.1	28.6	29.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					

CIE Pub.117, 601.8 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -1.8$)
Area: 0.0084 m²

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-05-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:12.072V I:0.5400A P:6.5180W PF:1.0000 Freq:50.00Hz Lamp Flux:601.817x1 lm		
NAME: EKF4448PRO	TYPE:	WEIGHT:
SPEC.:LED STRIP LIGHT(12V-2835-60L 4000K)	DIM.:	SERIAL No.:
MFR.:	SUR.:1050*8mm	Shielding Angle:

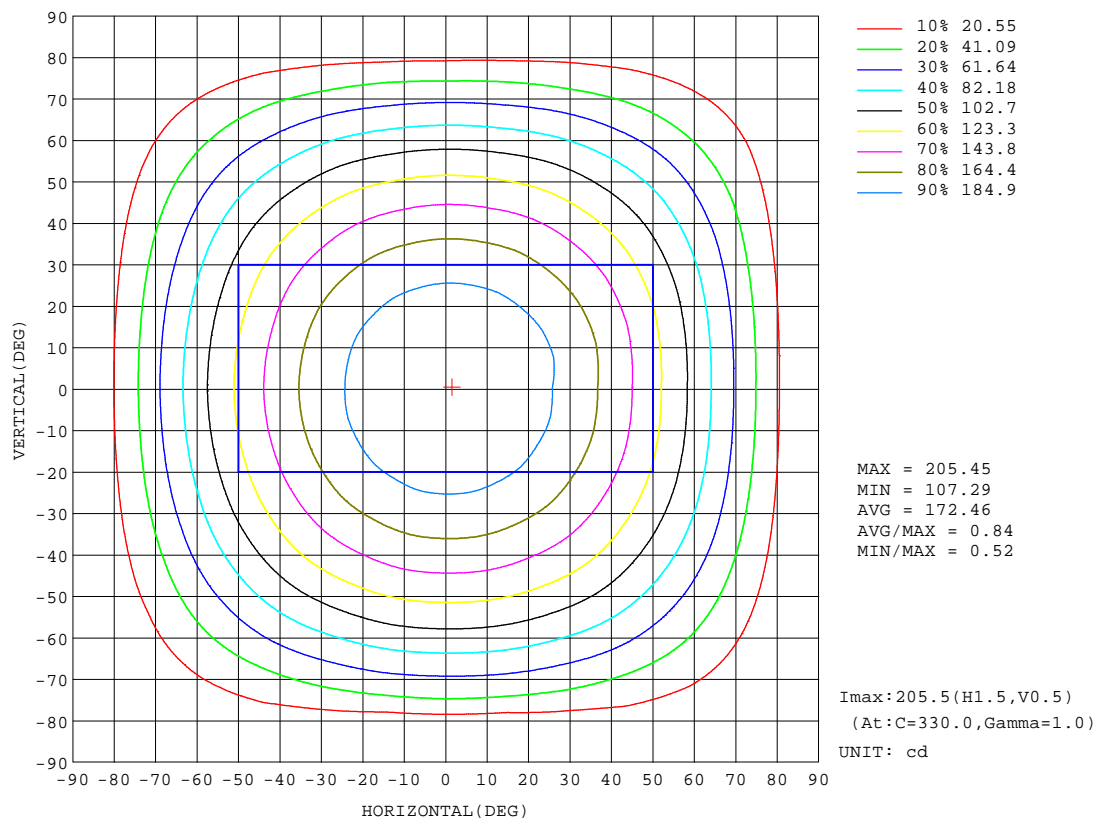
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	45	38	56	45	38	55	45	38	32
0.80	67	56	48	66	55	48	64	54	48	41
1.00	76	65	57	75	64	57	72	65	56	49
1.25	83	72	65	82	72	65	79	70	64	57
1.50	88	78	71	86	77	71	83	75	70	62
2.00	95	86	80	93	85	79	90	83	78	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	96	90	100	94	89	96	91	87	78
4.00	106	101	96	104	99	95	100	96	92	83
5.00	109	104	100	106	102	98	102	98	95	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-05-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:9.000m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:12.072V I:0.5400A P:6.5180W PF:1.0000 Freq:50.00Hz Lamp Flux:601.817x1 lm		
NAME: EKF4448PRO	TYPE:	WEIGHT:
SPEC.:LED STRIP LIGHT(12V-2835-60L 4000K)	DIM.:	SERIAL No.:
MFR.:	SUR.:1050*8mm	Shielding Angle:

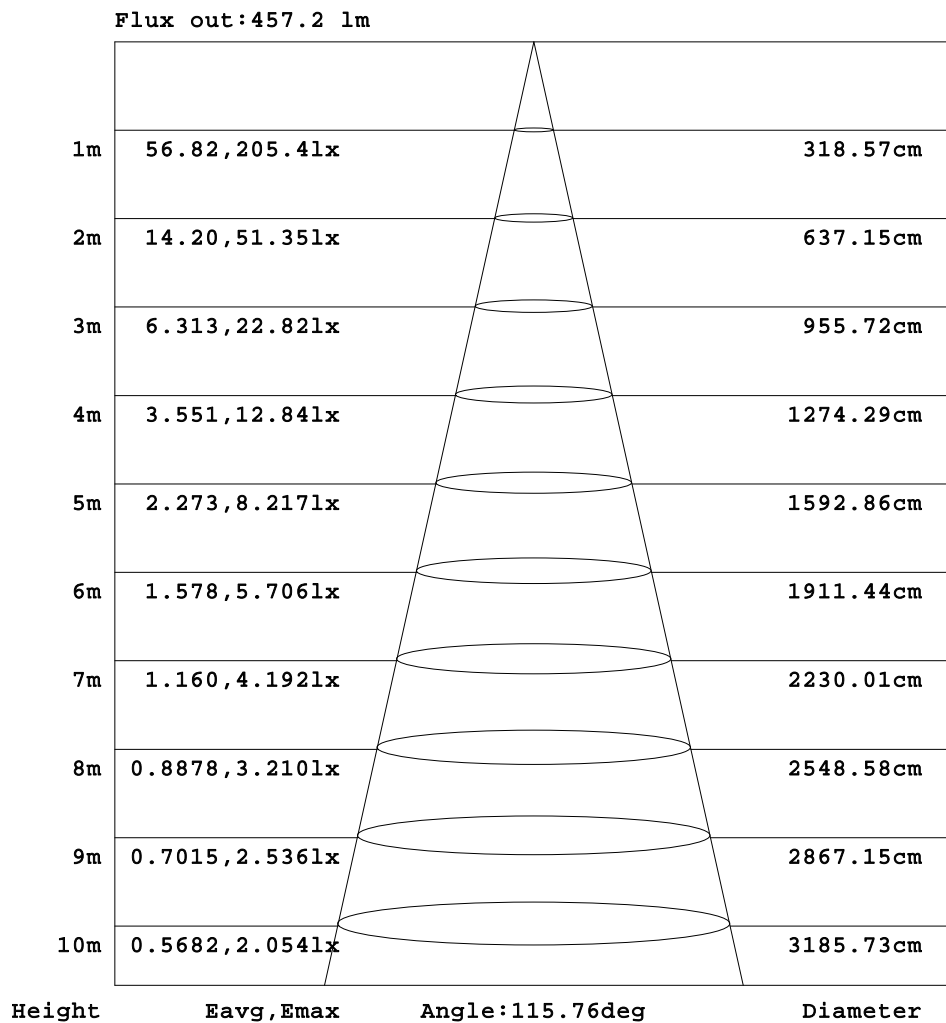


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-05-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

AAI Figure

Test:U:12.072V I:0.5400A P:6.5180W PF:1.0000 Freq:50.00Hz Lamp Flux:601.817x1 lm		
NAME: EKF4448PRO	TYPE:	WEIGHT:
SPEC.:LED STRIP LIGHT(12V-2835-60L 4000K)	DIM.:	SERIAL No.:
MFR.:	SUR.:1050*8mm	Shielding Angle:



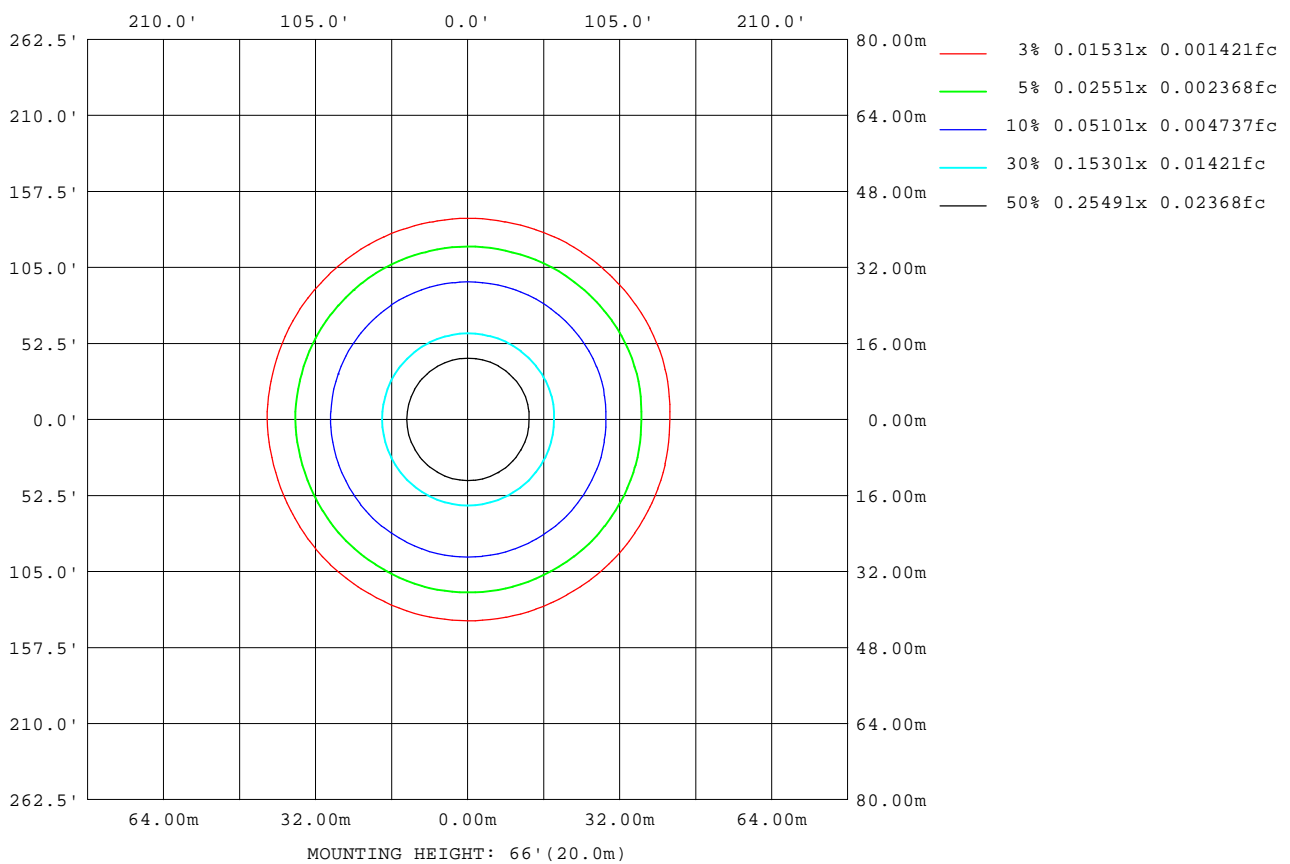
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-05-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:9.000m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:12.072V I:0.5400A P:6.5180W PF:1.0000 Freq:50.00Hz Lamp Flux:601.817x1 lm		
NAME: EKF4448PRO	TYPE:	WEIGHT:
SPEC.:LED STRIP LIGHT(12V-2835-60L 4000K)	DIM.:	SERIAL No.:
MFR.:	SUR.:1050*8mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-05-18

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:12.072V I:0.5400A P:6.5180W PF:1.0000 Freq:50.00Hz Lamp Flux:601.817x1 lm		
NAME: EKF4448PRO	TYPE:	WEIGHT:
SPEC.:LED STRIP LIGHT(12V-2835-60L 4000K)	DIM.:	SERIAL No.:
MFR.:	SUR.:1050*8mm	Shielding Angle:

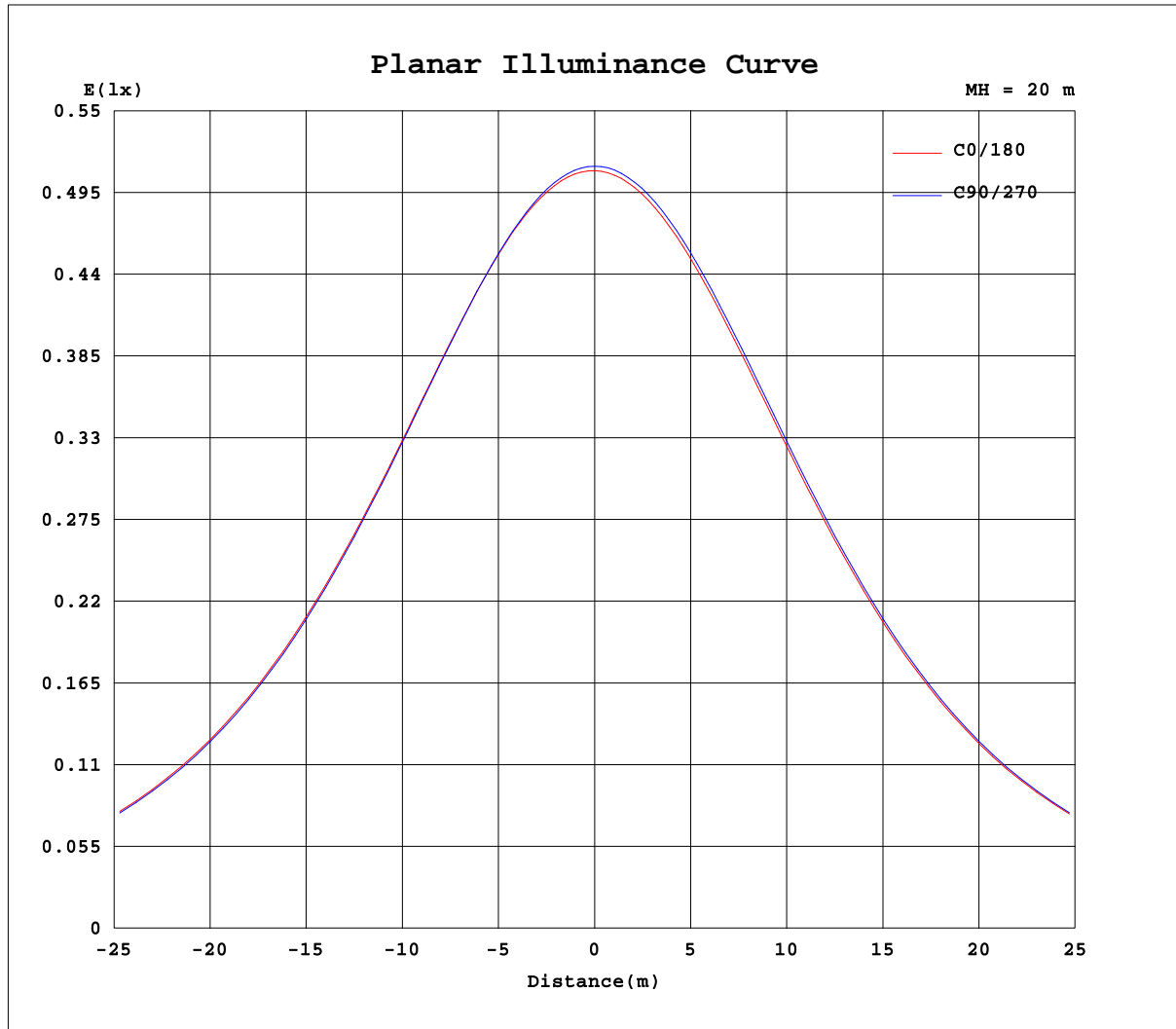
AvgL	cd/m2
L_0~180(65)av	21938
L_0~180(75)av	18173
L_0~180(85)av	10057
L_90~270(65)av	21742
L_90~270(75)av	18031
L_90~270(85)av	7608
L_45(65)av	21857
L_45(75)av	18125
L_45(85)av	7304

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-05-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:9.000m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2022-05-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-3000H_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 9.000m [K=1.0000]
Remarks:

UNIT: cd

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

```

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:12.072V I:0.5400A P:6.5180W PF:1.0000 Freq:50.00Hz Lamp Flux:601.817x1 lm		
NAME: EK F4448PRO	TYPE:	WEIGHT:
SPEC.:LED STRIP LIGHT(12V-2835-60L 4000K)	DIM.:	SERIAL No.:
MFR.:	SUR.:1050*8mm	Shielding Angle:

Table--2

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2022-05-18

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-3000H_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 9.000m [K=1.0000]
Remarks:

```