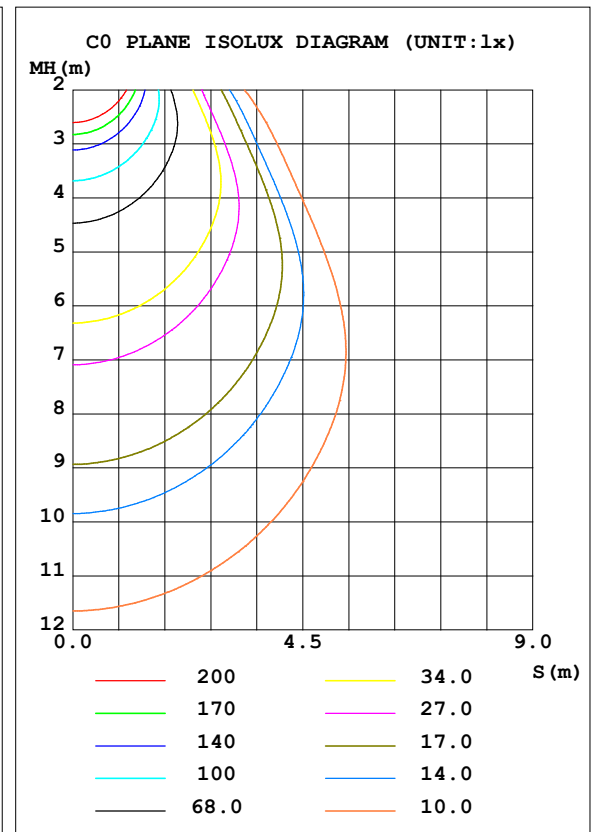
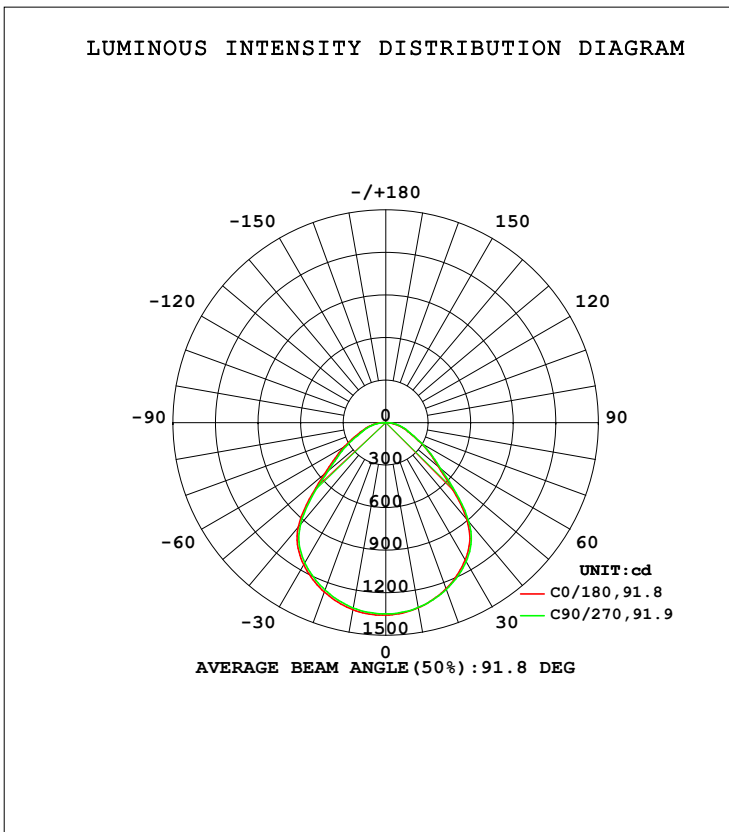


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.14V I:0.1439A P:33.672W PF:0.9747 Freq:50.00Hz Lamp Flux:3090.5x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	UGR19-120/30-CC	Imax (cd)	1358	S/MH (C0/180)	1.23
NOMINAL POWER (W)	30	LOR (%)	100.0	S/MH (C90/270)	1.26
RATED VOLTAGE (V)	240	TOTAL FLUX (lm)	3090.5	<input type="checkbox"/> UP, DN (C0-180)	0.0, 49.2
NOMINAL FLUX (lm)	3090.5	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.0, 50.8
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	240	<input type="checkbox"/> down (%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity: 65.0%
 Test Distance: 8.570m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

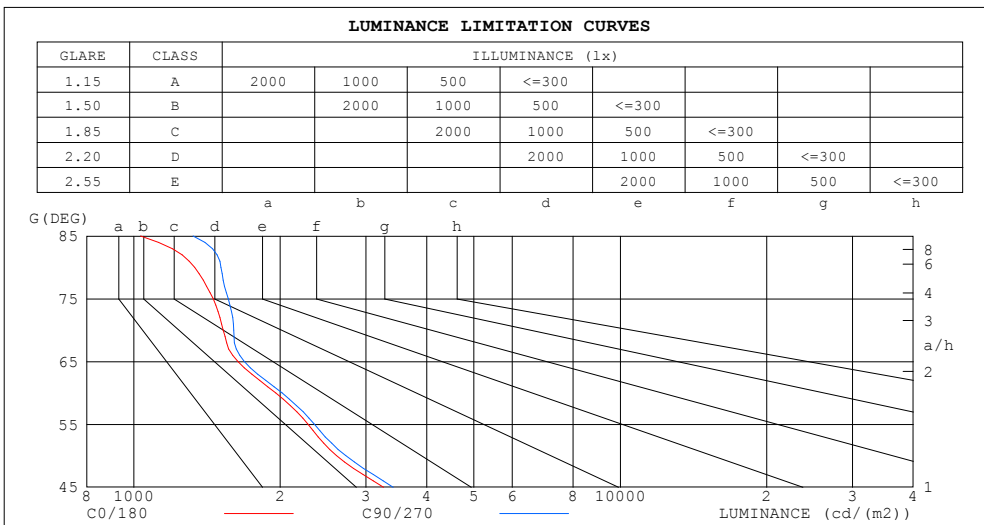
mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	1326	1320	1324	1326	1340	1330	1326	1322	0- 10	127.7	127.7	4.13,4.13
20	1246	1248	1251	1259	1270	1264	1256	1252	10- 20	365.6	493.4	16,16
30	1120	1126	1133	1145	1158	1155	1143	1135	20- 30	554.5	1048	33.9,33.9
40	888.5	896.0	911.4	923.6	959.4	943.7	935.7	913.5	30- 40	652.3	1700	55,55
50	487.4	589.5	509.0	621.1	566.2	646.2	533.8	608.2	40- 50	577.3	2277	73.7,73.7
60	284.0	321.8	292.8	353.8	336.4	376.0	311.5	341.0	50- 60	396.7	2674	86.5,86.5
70	151.5	163.1	159.2	175.3	183.4	185.0	168.1	170.1	60- 70	235.8	2910	94.2,94.2
80	67.26	79.35	76.20	94.47	93.87	102.7	84.80	87.42	70- 80	135.3	3045	98.5,98.5
90	1.525	1.615	0.6564	4.309	8.968	8.608	1.578	2.065	80- 90	45.25	3091	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:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

□ Range: 0 - 90DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:240.14V I:0.1439A P:33.672W PF:0.9747 Freq:50.00Hz Lamp Flux:3090.5x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1033	1325
80	1334	1512
75	1456	1564
70	1526	1604
65	1637	1687
60	1957	2017
55	2282	2351
50	2612	2728
45	3262	3411

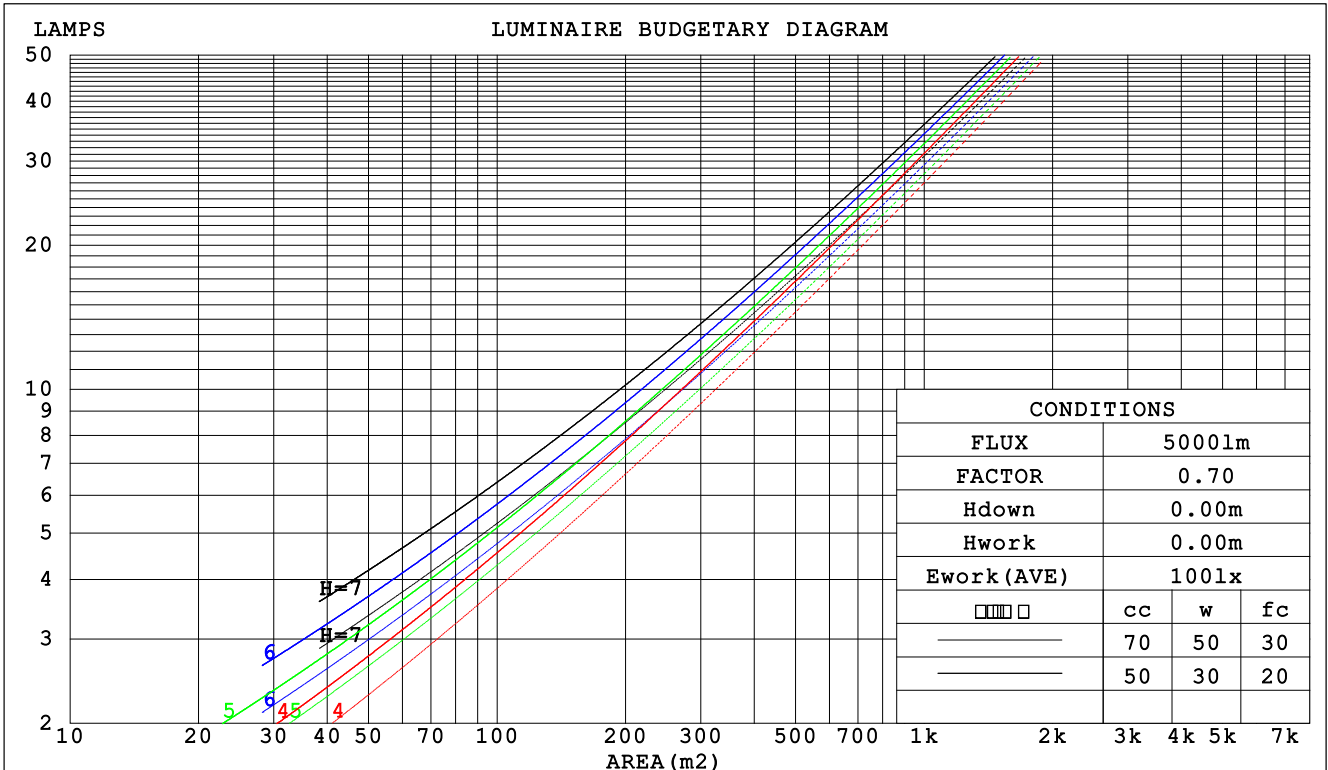
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.14V I:0.1439A P:33.672W PF:0.9747 Freq:50.00Hz Lamp Flux:3090.5x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:

□cc	80%			70%			50%			30%			10%			0
□w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
□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	1.06	1.02	.98	1.03	1.00	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.94	.88	.82	.92	.86	.82	.88	.84	.80	.85	.81	.78	.82	.79	.76	.74
3.0	.84	.76	.70	.82	.75	.70	.79	.73	.68	.76	.71	.67	.74	.70	.66	.64
4.0	.75	.67	.61	.74	.66	.60	.71	.65	.59	.69	.63	.59	.67	.62	.58	.56
5.0	.68	.59	.53	.66	.59	.53	.64	.58	.52	.63	.56	.52	.61	.55	.51	.49
6.0	.61	.53	.47	.60	.53	.47	.59	.52	.46	.57	.51	.46	.55	.50	.46	.44
7.0	.56	.48	.42	.55	.47	.42	.54	.47	.42	.52	.46	.41	.51	.45	.41	.39
8.0	.51	.43	.38	.51	.43	.38	.49	.42	.37	.48	.42	.37	.47	.41	.37	.35
9.0	.47	.39	.34	.47	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.34	.32
10.0	.44	.36	.31	.43	.36	.31	.42	.36	.31	.41	.35	.31	.40	.35	.31	.29



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

□ Range: 0 - 90DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:240.14V I:0.1439A P:33.672W PF:0.9747 Freq:50.00Hz Lamp Flux:3090.5x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:

<input type="checkbox"/> cc	80%			70%			50%			30%			10%			0
<input type="checkbox"/> w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
<input type="checkbox"/> fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.274	.156	.049	.267	.152	.048	.254	.146	.047	.242	.140	.045	.231	.134	.043	
2.0	.260	.142	.044	.254	.140	.043	.242	.135	.042	.232	.130	.041	.222	.126	.040	
3.0	.243	.129	.039	.238	.127	.038	.228	.123	.038	.218	.120	.037	.210	.116	.036	
4.0	.227	.118	.035	.222	.116	.034	.213	.113	.034	.205	.110	.033	.197	.107	.033	
5.0	.212	.108	.031	.208	.107	.031	.200	.104	.031	.192	.102	.030	.186	.099	.030	
6.0	.198	.099	.028	.194	.098	.028	.187	.096	.028	.181	.094	.028	.175	.092	.027	
7.0	.186	.092	.026	.182	.091	.026	.176	.089	.026	.170	.087	.025	.165	.086	.025	
8.0	.175	.085	.024	.172	.084	.024	.166	.083	.024	.161	.081	.023	.156	.080	.023	
9.0	.165	.080	.022	.162	.079	.022	.157	.078	.022	.152	.076	.022	.148	.075	.022	
10.0	.155	.075	.021	.153	.074	.021	.149	.073	.020	.144	.072	.020	.140	.071	.020	

<input type="checkbox"/> cc	80%			70%			50%			30%			10%			0
<input type="checkbox"/> w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
<input type="checkbox"/> fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0																
1.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
2.0	.178	.156	.137	.152	.134	.118	.104	.092	.082	.060	.053	.047	.019	.017	.015	
3.0	.168	.132	.102	.144	.114	.088	.099	.079	.061	.057	.046	.036	.018	.015	.012	
4.0	.159	.114	.078	.137	.098	.068	.094	.068	.047	.054	.040	.028	.017	.013	.009	
5.0	.151	.100	.062	.130	.087	.054	.089	.061	.038	.052	.035	.022	.017	.012	.007	
6.0	.144	.090	.050	.124	.078	.043	.085	.054	.031	.049	.032	.018	.016	.010	.006	
7.0	.137	.081	.041	.118	.070	.036	.081	.049	.026	.047	.029	.015	.015	.009	.005	
8.0	.130	.074	.035	.112	.064	.030	.078	.045	.022	.045	.027	.013	.015	.009	.004	
9.0	.124	.068	.030	.107	.059	.026	.074	.042	.019	.043	.025	.011	.014	.008	.004	
10.0	.119	.064	.026	.102	.055	.023	.071	.039	.016	.041	.023	.010	.013	.008	.003	
10.0	.113	.059	.023	.098	.051	.020	.068	.036	.014	.040	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:240.14V I:0.1439A P:33.672W PF:0.9747 Freq:50.00Hz Lamp Flux:3090.5x1 lm										
NAME: UGR19-120/30-CC					TYPE:30W			WEIGHT:		
SPEC.:3000K					DIM.:			SERIAL No.:1		
MFR.:					SUR.:1.152*0.252			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	15.3	16.7	15.6	16.9	17.1	15.4	16.8	15.7	17.0	17.2
3H	16.0	17.3	16.3	17.5	17.8	16.2	17.5	16.5	17.7	17.9
4H	16.4	17.6	16.7	17.8	18.1	16.5	17.8	16.9	18.0	18.3
6H	16.7	17.8	17.0	18.1	18.3	16.9	18.0	17.2	18.3	18.5
8H	16.7	17.9	17.1	18.1	18.4	17.0	18.1	17.3	18.4	18.7
12H	16.8	17.8	17.1	18.1	18.4	17.1	18.1	17.4	18.4	18.7
4H 2H	15.6	16.9	15.9	17.1	17.4	15.7	16.9	16.0	17.2	17.4
3H	16.6	17.6	16.9	17.9	18.2	16.7	17.7	17.0	18.0	18.3
4H	17.1	18.0	17.4	18.3	18.7	17.2	18.2	17.6	18.5	18.8
6H	17.5	18.3	17.9	18.7	19.0	17.7	18.5	18.1	18.9	19.2
8H	17.6	18.4	18.0	18.8	19.2	17.9	18.7	18.3	19.0	19.4
12H	17.7	18.4	18.1	18.8	19.2	18.0	18.7	18.4	19.1	19.5
8H 4H	17.3	18.1	17.7	18.4	18.8	17.4	18.2	17.8	18.6	18.9
6H	17.8	18.5	18.3	18.9	19.3	18.0	18.7	18.5	19.1	19.5
8H	18.1	18.7	18.5	19.1	19.5	18.3	18.9	18.7	19.3	19.7
12H	18.2	18.7	18.7	19.2	19.6	18.5	19.0	19.0	19.4	19.9
12H 4H	17.3	18.0	17.7	18.4	18.8	17.4	18.1	17.8	18.5	18.9
6H	17.9	18.5	18.4	18.9	19.4	18.1	18.7	18.5	19.1	19.5
8H	18.2	18.7	18.6	19.1	19.6	18.4	18.9	18.9	19.3	19.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.4 / - 0.5				
1.5H	+ 0.2 / - 0.5					+ 0.2 / - 0.4				
2.0H	+ 0.7 / - 0.8					+ 0.7 / - 0.7				

CIE Pub.117, 3091 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 3.9)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.14V I:0.1439A P:33.672W PF:0.9747 Freq:50.00Hz Lamp Flux:3090.5x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:

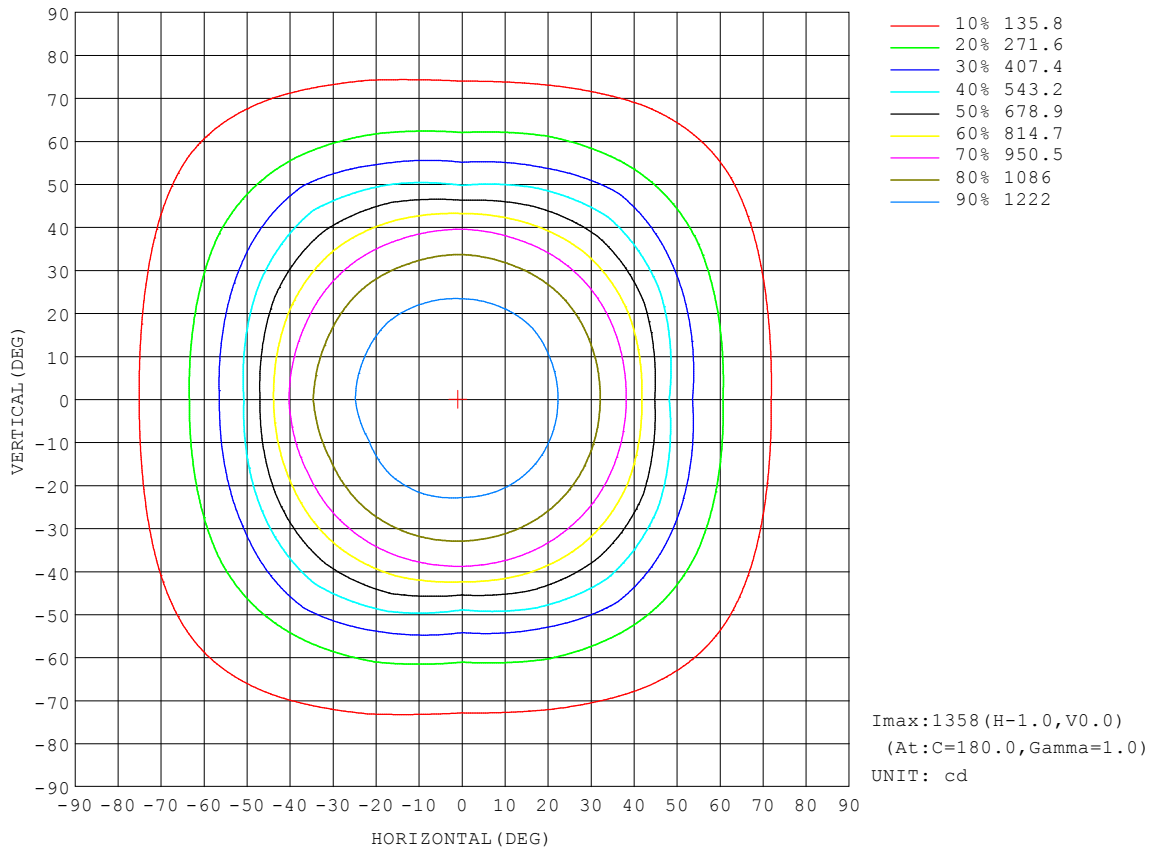
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	63	53	47	63	53	46	62	52	46	40
0.80	73	63	56	73	63	56	71	62	56	50
1.00	82	72	65	80	71	65	78	72	64	58
1.25	88	79	73	87	78	72	84	77	72	65
1.50	93	84	78	91	83	78	88	82	76	70
2.00	99	91	86	97	90	85	94	88	83	76
2.50	102	95	90	100	94	89	96	91	87	79
3.00	105	99	94	103	97	93	99	94	91	83
4.00	108	103	99	106	101	98	102	98	95	87
5.00	110	106	102	108	104	101	103	100	98	89
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:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:240.14V I:0.1439A P:33.672W PF:0.9747 Freq:50.00Hz Lamp Flux:3090.5x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:

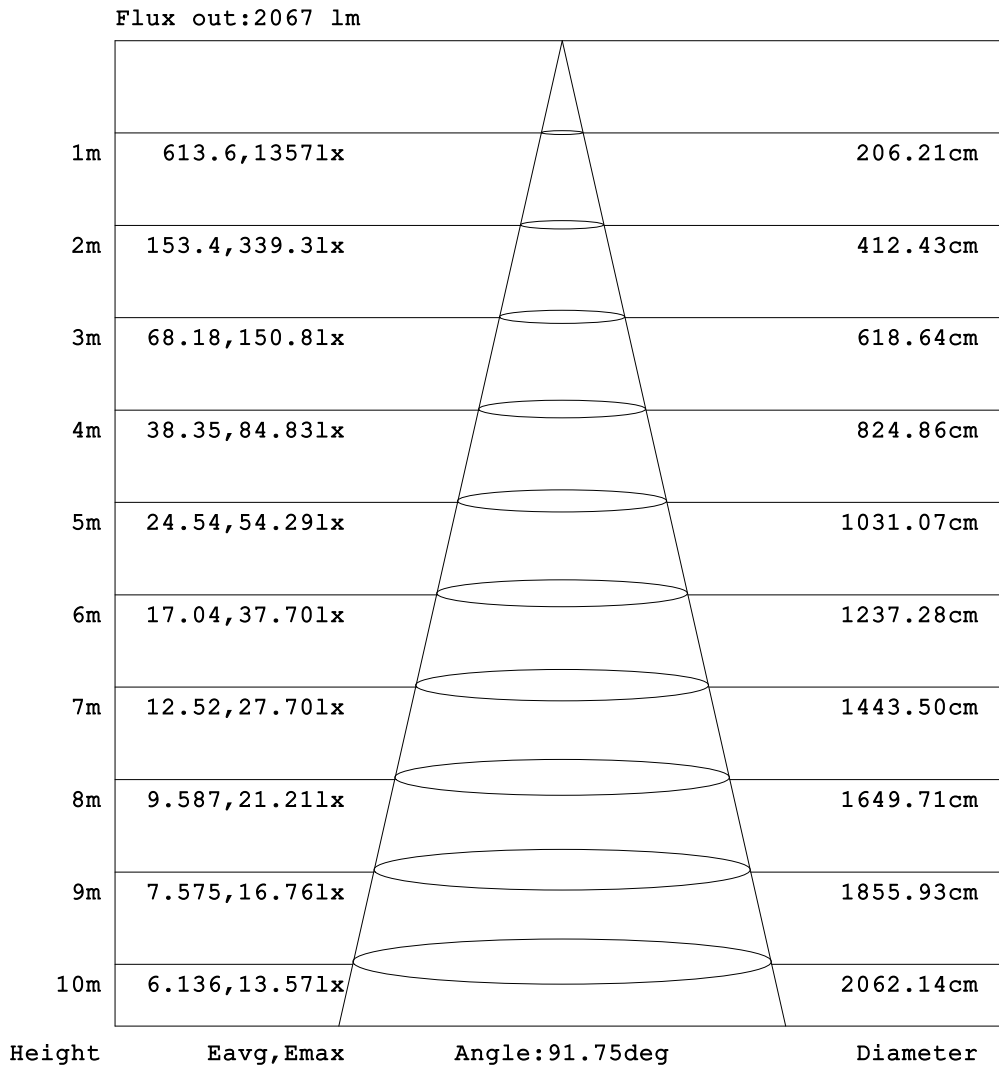


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:8.570m [K=1.0000]
Remarks:

AAI Figure

Test:U:240.14V I:0.1439A P:33.672W PF:0.9747 Freq:50.00Hz Lamp Flux:3090.5x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:



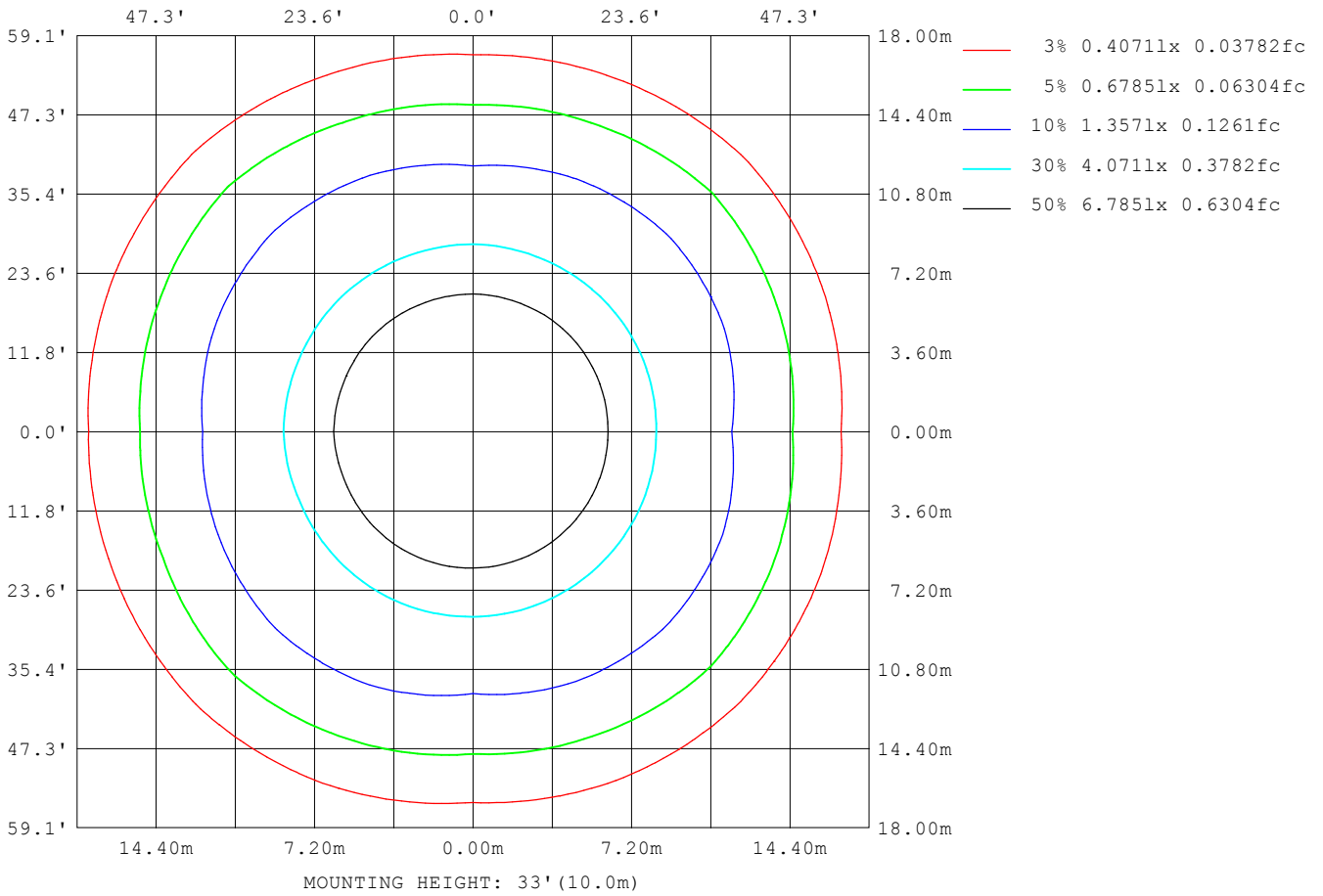
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:240.14V I:0.1439A P:33.672W PF:0.9747 Freq:50.00Hz Lamp Flux:3090.5x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:240.14V I:0.1439A P:33.672W PF:0.9747 Freq:50.00Hz Lamp Flux:3090.5x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:

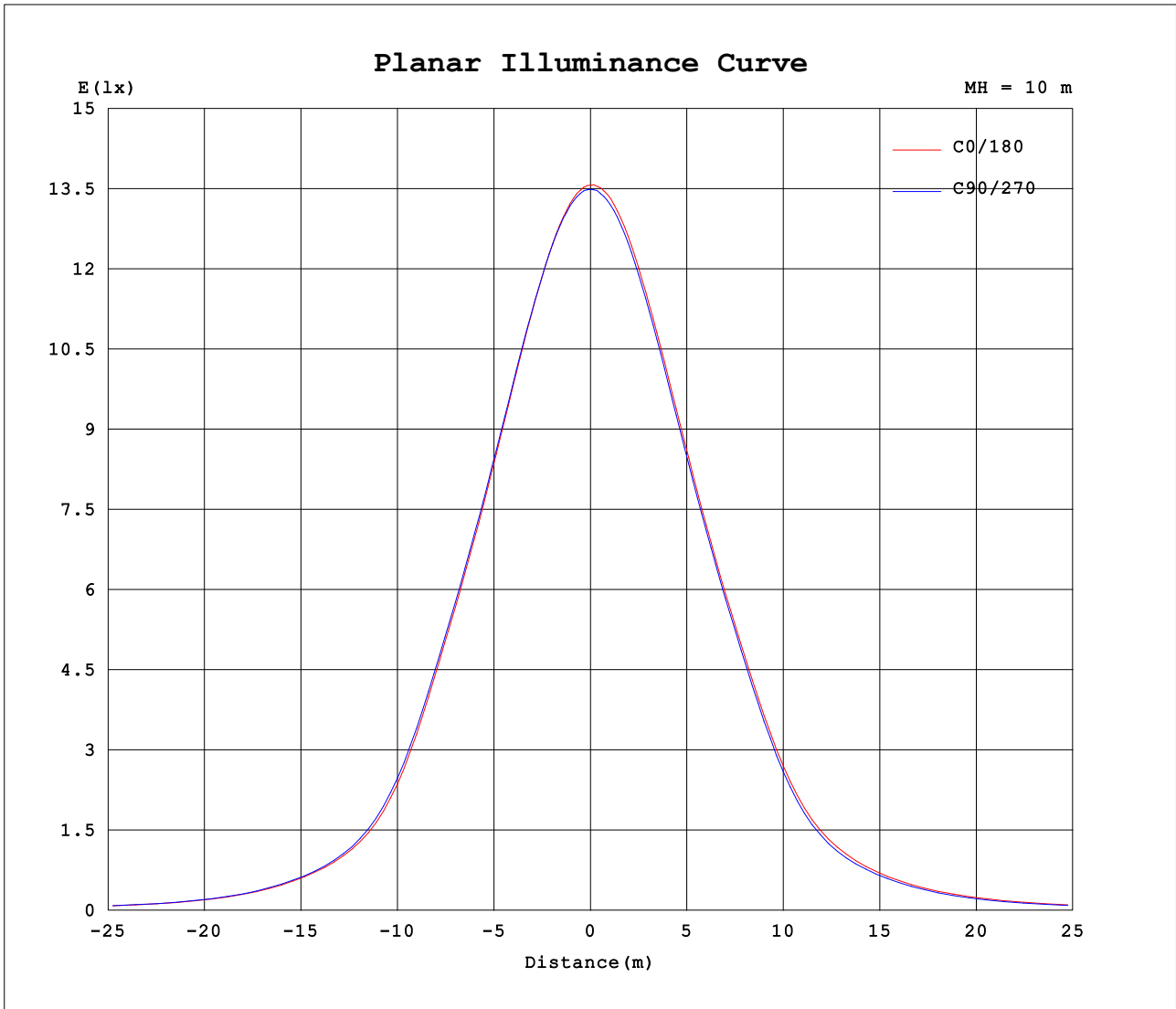
AvgL	cd/m2
L_0~180 (65) av	1818
L_0~180 (75) av	1637
L_0~180 (85) av	1520
L_90~270 (65) av	1744
L_90~270 (75) av	1624
L_90~270 (85) av	1505
L_45 (65) av	1930
L_45 (75) av	1748
L_45 (85) av	1732

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity: 65.0%
 Test Distance: 8.570m [K=1.0000]
 Remarks:

