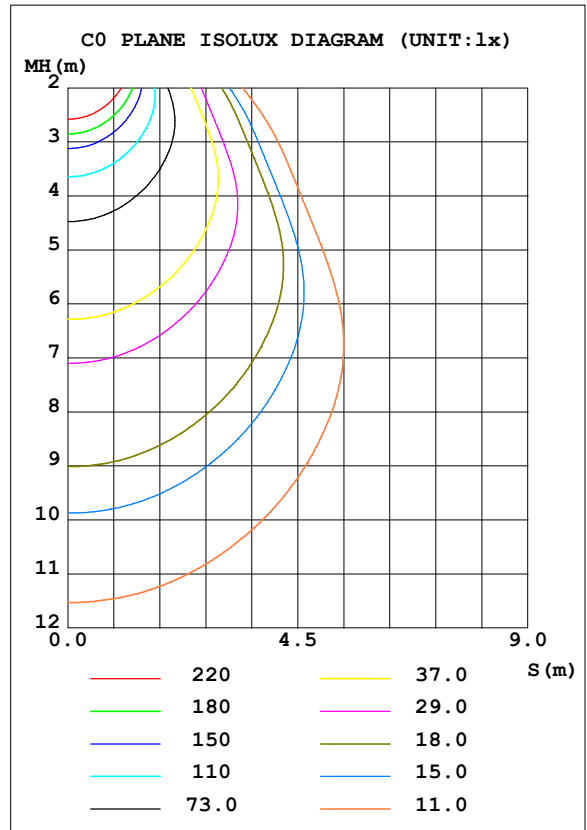
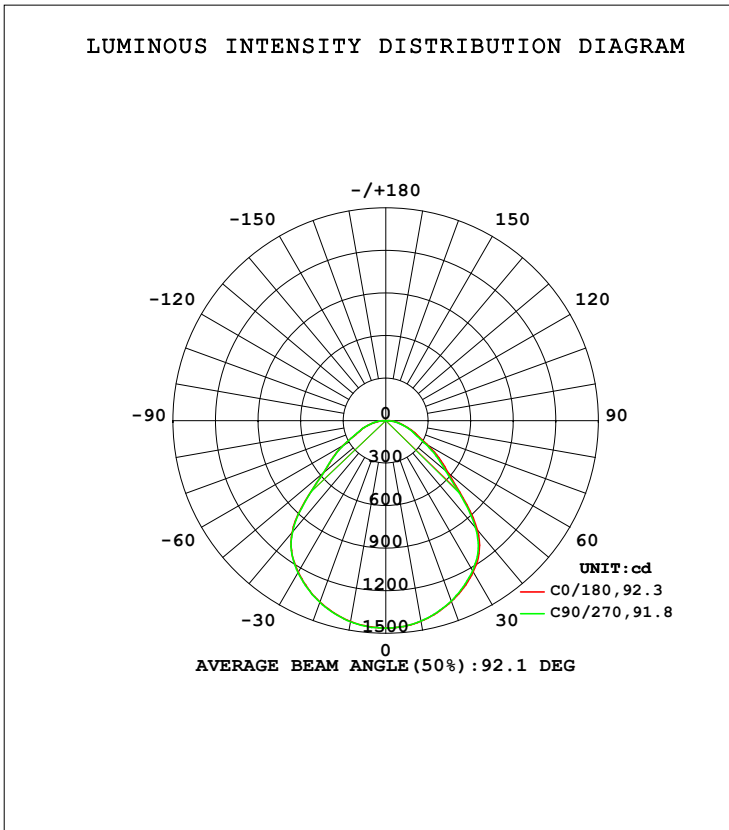


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.25V I:0.1366A P:30.883W PF:0.9819 Freq:50.00Hz Lamp Flux:3362.2x1 lm		
NAME: UGR19-60SQ-CC	TYPE:30W	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:0.553*0.553	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 108.87 lm/W			
MODEL	UGR19-60SQ-CC	I <sub>max</sub> (cd)	1463	S/MH (C0/180)	1.25
NOMINAL POWER (W)	30	LOR (%)	100.0	S/MH (C90/270)	1.26
RATED VOLTAGE (V)	240	TOTAL FLUX (lm)	3362.2	<input type="checkbox"/> UP, DN (C0-180)	0.0, 49.4
NOMINAL FLUX (lm)	3362.2	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.0, 50.6
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:

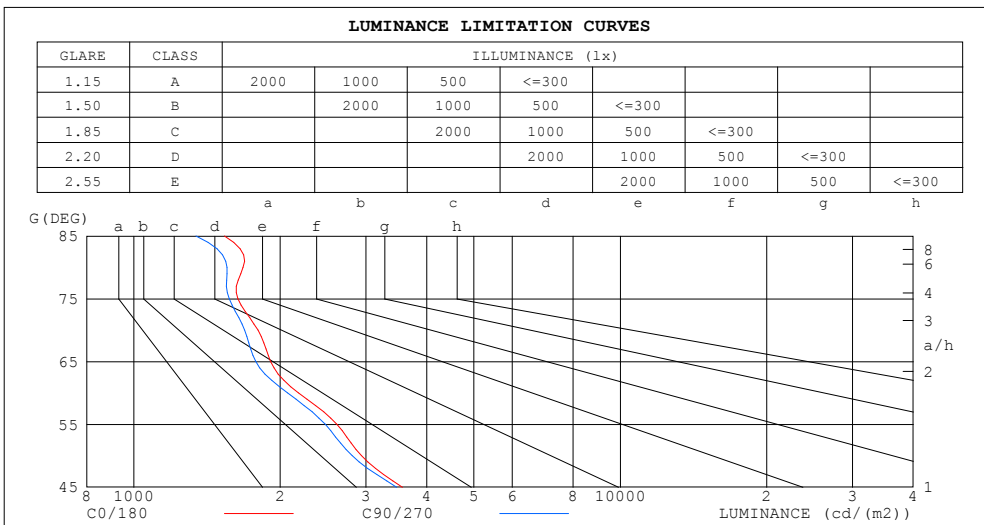
mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	1436	1434	1434	1433	1437	1436	1440	1440	0- 10	138.4	138.4	4.12,4.12
20	1356	1361	1353	1356	1361	1364	1363	1369	10- 20	396.2	534.6	15.9,15.9
30	1232	1234	1223	1228	1234	1241	1238	1249	20- 30	601.2	1136	33.8,33.8
40	1006	997.3	985.3	989.5	1028	1018	1025	1023	30- 40	710.0	1846	54.9,54.9
50	577.5	665.6	552.6	647.8	576.7	676.3	579.5	684.4	40- 50	632.6	2478	73.7,73.7
60	333.5	369.9	316.6	360.4	344.3	388.2	338.7	399.6	50- 60	435.3	2914	86.7,86.7
70	188.3	183.7	176.8	180.1	180.8	189.3	185.3	193.5	60- 70	255.5	3169	94.3,94.3
80	89.11	97.72	82.53	89.32	81.07	96.75	87.58	103.9	70- 80	145.9	3315	98.6,98.6
90	2.150	3.091	1.465	1.085	1.492	2.465	2.577	4.668	80- 90	47.12	3362	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:240.25V I:0.1366A P:30.883W PF:0.9819 Freq:50.00Hz Lamp Flux:3362.2x1 lm		
NAME: UGR19-60SQ-CC	TYPE:30W	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:0.553*0.553	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1536	1343
80	1678	1554
75	1637	1571
70	1801	1690
65	1909	1782
60	2181	2070
55	2615	2474
50	2938	2811
45	3569	3472

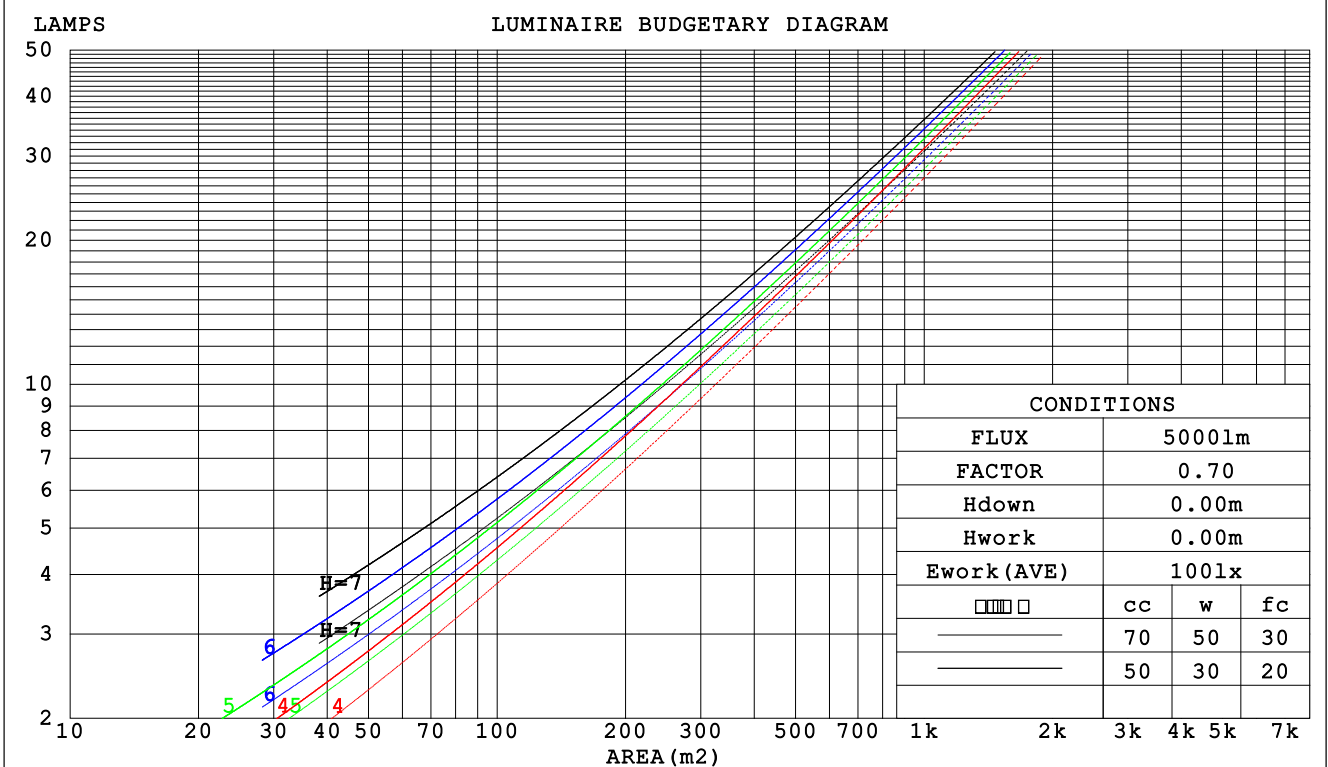
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2022-07-15

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:240.25V I:0.1366A P:30.883W PF:0.9819 Freq:50.00Hz Lamp Flux:3362.2x1 lm		
NAME: UGR19-60SQ-CC	TYPE:30W	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:0.553*0.553	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	.99	1.04	1.00	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.94	.88	.83	.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	.60	.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	.52	.47	.59	.52	.46	.57	.51	.46	.55	.50	.46	.44
7.0	.56	.48	.42	.55	.47	.42	.54	.47	.41	.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	.44	.38	.34	.43	.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:240.25V I:0.1366A P:30.883W PF:0.9819 Freq:50.00Hz Lamp Flux:3362.2x1 lm		
NAME: UGR19-60SQ-CC	TYPE:30W	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:0.553*0.553	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	.273 .155 .049	.266 .152 .048	.253 .145 .046	.241 .139 .045	.230 .133 .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 .037	.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 .085 .024	.166 .083 .024	.161 .081 .024	.156 .080 .023	
9.0	.165 .080 .022	.162 .079 .022	.157 .078 .022	.152 .076 .022	.148 .075 .022	
10.0	.156 .075 .021	.153 .074 .021	.149 .073 .021	.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	.190 .190 .190	.163 .163 .163	.111 .111 .111	.064 .064 .064	.020 .020 .020	
1.0	.178 .156 .137	.152 .134 .118	.104 .092 .082	.060 .053 .048	.019 .017 .015	
2.0	.168 .132 .102	.144 .114 .088	.099 .079 .061	.057 .046 .036	.018 .015 .012	
3.0	.159 .114 .078	.137 .098 .068	.094 .068 .048	.054 .040 .028	.017 .013 .009	
4.0	.151 .100 .062	.130 .087 .054	.089 .061 .038	.052 .035 .022	.017 .012 .007	
5.0	.144 .090 .050	.124 .078 .043	.085 .054 .031	.049 .032 .018	.016 .010 .006	
6.0	.137 .081 .041	.118 .070 .036	.081 .049 .025	.047 .029 .015	.015 .009 .005	
7.0	.130 .074 .035	.112 .064 .030	.078 .045 .022	.045 .027 .013	.015 .009 .004	
8.0	.124 .068 .030	.107 .059 .026	.074 .042 .019	.043 .025 .011	.014 .008 .004	
9.0	.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:240.25V I:0.1366A P:30.883W PF:0.9819 Freq:50.00Hz Lamp Flux:3362.2x1 lm										
NAME: UGR19-60SQ-CC					TYPE:30W			WEIGHT:		
SPEC.:5000K					DIM.:			SERIAL No.:1		
MFR.:					SUR.:0.553*0.553			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	15.9	17.3	16.1	17.5	17.7	15.7	17.1	15.9	17.3	17.5
3H	16.7	18.0	17.0	18.2	18.4	16.4	17.7	16.7	18.0	18.2
4H	17.1	18.3	17.4	18.5	18.8	16.8	18.0	17.1	18.3	18.5
6H	17.4	18.5	17.7	18.8	19.1	17.1	18.3	17.5	18.5	18.8
8H	17.5	18.6	17.9	18.9	19.2	17.3	18.4	17.6	18.6	18.9
12H	17.6	18.7	18.0	19.0	19.3	17.3	18.4	17.7	18.7	19.0
4H 2H	16.2	17.4	16.5	17.7	17.9	16.0	17.2	16.3	17.5	17.7
3H	17.2	18.3	17.6	18.6	18.9	17.0	18.1	17.4	18.4	18.7
4H	17.7	18.7	18.1	19.0	19.4	17.5	18.5	17.9	18.8	19.2
6H	18.2	19.1	18.6	19.4	19.8	18.0	18.9	18.4	19.2	19.6
8H	18.5	19.2	18.9	19.6	20.0	18.2	19.0	18.6	19.4	19.7
12H	18.6	19.3	19.0	19.7	20.1	18.3	19.0	18.7	19.4	19.8
8H 4H	18.0	18.7	18.4	19.1	19.5	17.8	18.6	18.2	18.9	19.3
6H	18.6	19.3	19.1	19.7	20.1	18.4	19.1	18.9	19.5	19.9
8H	18.9	19.5	19.4	19.9	20.4	18.7	19.3	19.2	19.7	20.2
12H	19.2	19.7	19.6	20.1	20.6	18.9	19.4	19.4	19.8	20.3
12H 4H	18.0	18.7	18.4	19.1	19.5	17.8	18.5	18.2	18.9	19.3
6H	18.7	19.3	19.2	19.7	20.2	18.5	19.1	19.0	19.5	20.0
8H	19.1	19.6	19.5	20.0	20.5	18.8	19.3	19.3	19.8	20.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.5				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.5				
2.0H	+ 0.6 / - 0.8					+ 0.6 / - 0.8				

CIE Pub.117, 3362 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 4.2)

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:240.25V I:0.1366A P:30.883W PF:0.9819 Freq:50.00Hz Lamp Flux:3362.2x1 lm		
NAME: UGR19-60SQ-CC	TYPE:30W	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:0.553*0.553	Shielding Angle:

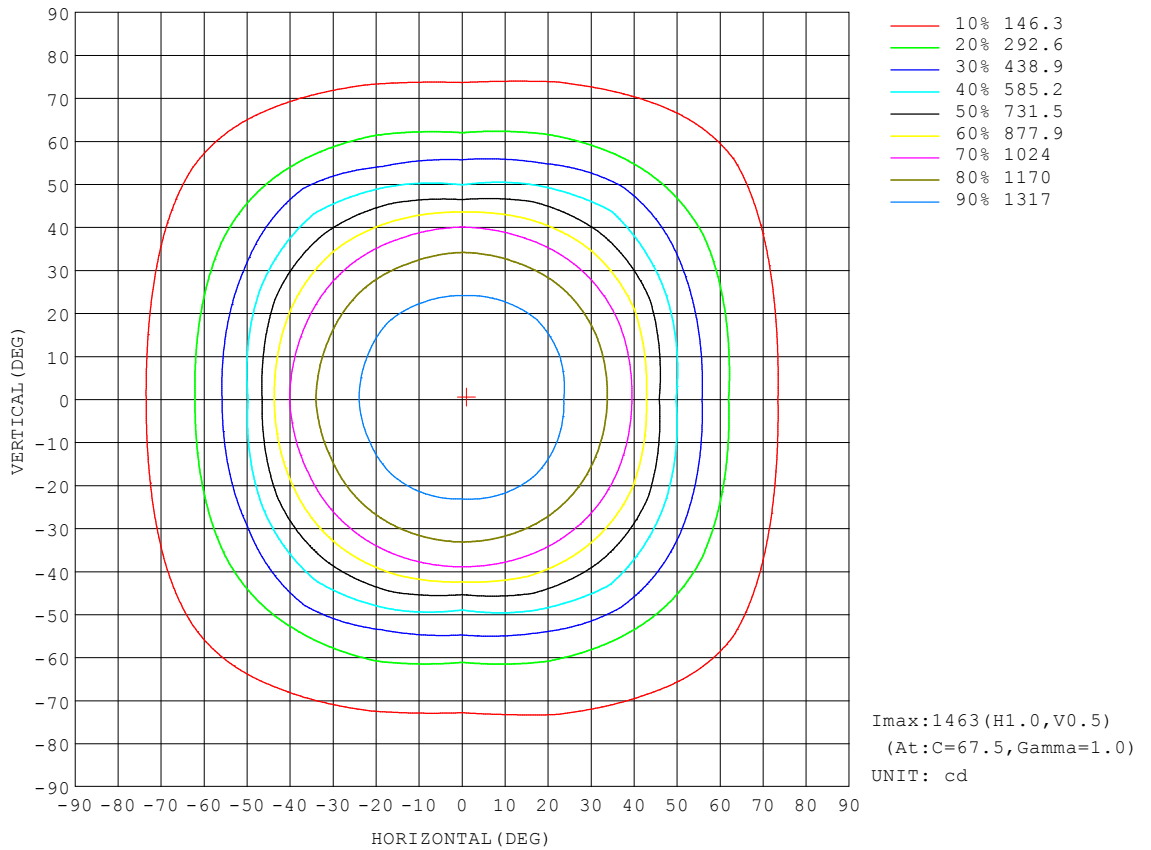
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	63	53	46	63	53	46	62	52	46	40
0.80	73	63	56	72	63	56	71	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	80
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:240.25V I:0.1366A P:30.883W PF:0.9819 Freq:50.00Hz Lamp Flux:3362.2x1 lm		
NAME: UGR19-60SQ-CC	TYPE:30W	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:0.553*0.553	Shielding Angle:



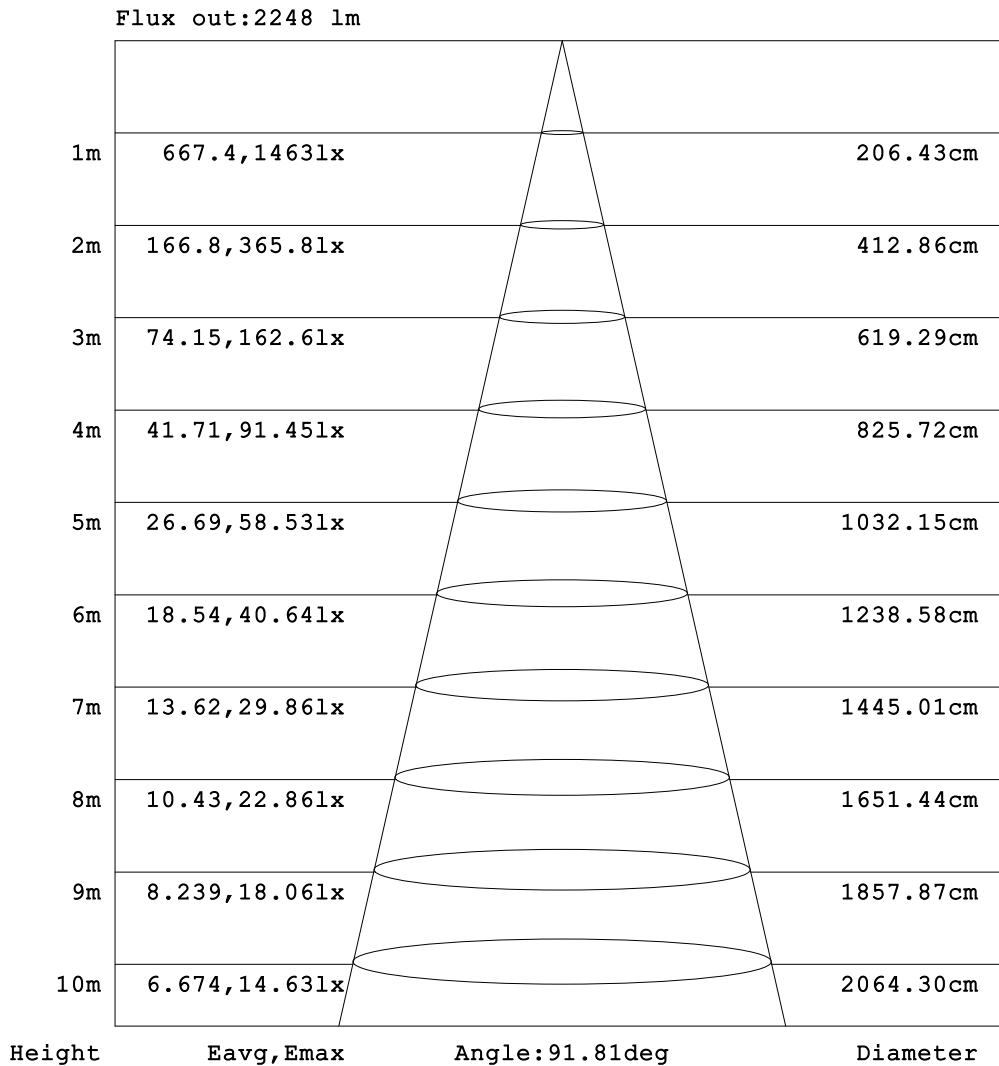
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2022-07-15

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:240.25V I:0.1366A P:30.883W PF:0.9819 Freq:50.00Hz Lamp Flux:3362.2x1 lm		
NAME: UGR19-60SQ-CC	TYPE:30W	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:0.553*0.553	Shielding Angle:



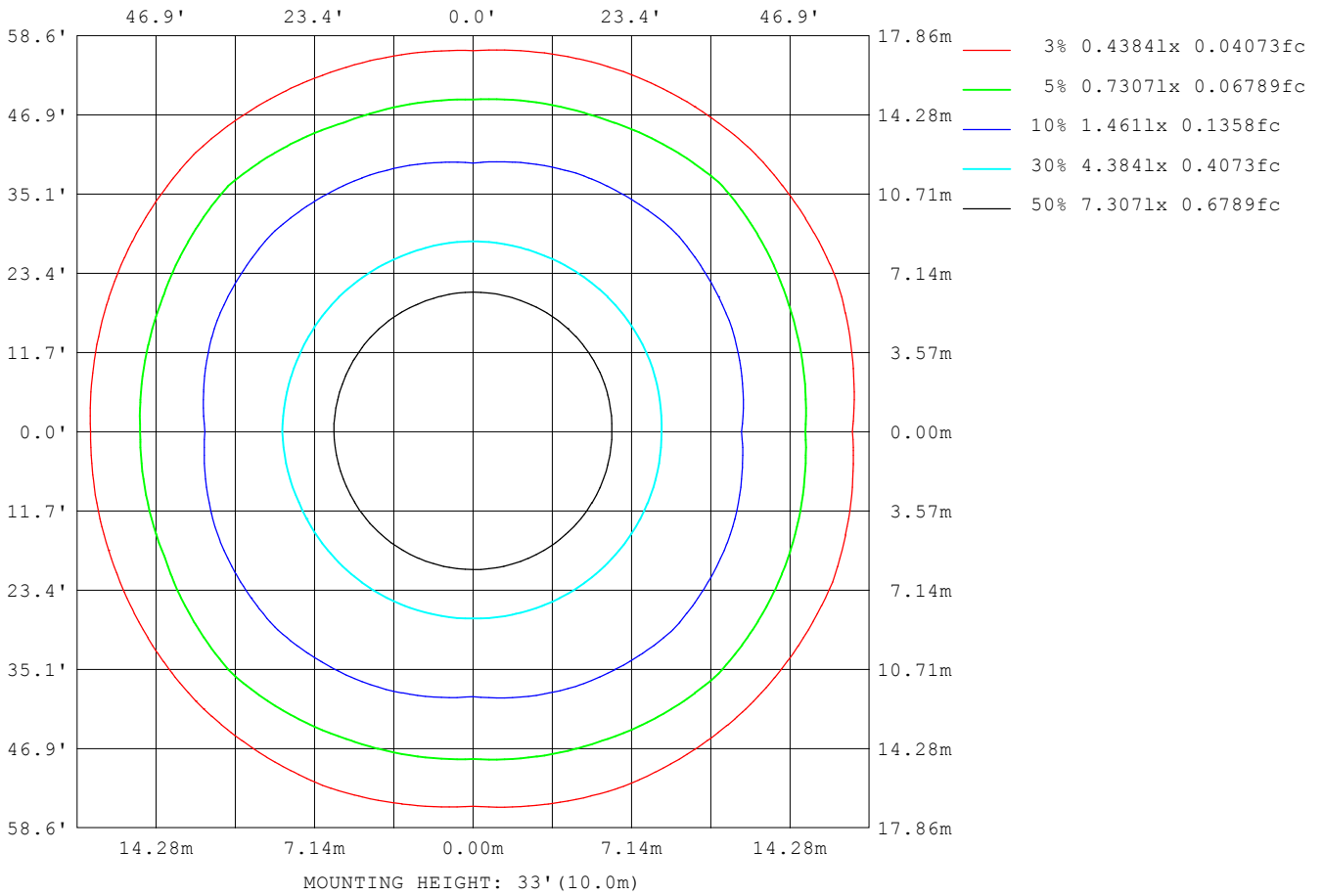
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:240.25V I:0.1366A P:30.883W PF:0.9819 Freq:50.00Hz Lamp Flux:3362.2x1 lm		
NAME: UGR19-60SQ-CC	TYPE:30W	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:0.553*0.553	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:240.25V I:0.1366A P:30.883W PF:0.9819 Freq:50.00Hz Lamp Flux:3362.2x1 lm		
NAME: UGR19-60SQ-CC	TYPE:30W	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:0.553*0.553	Shielding Angle:

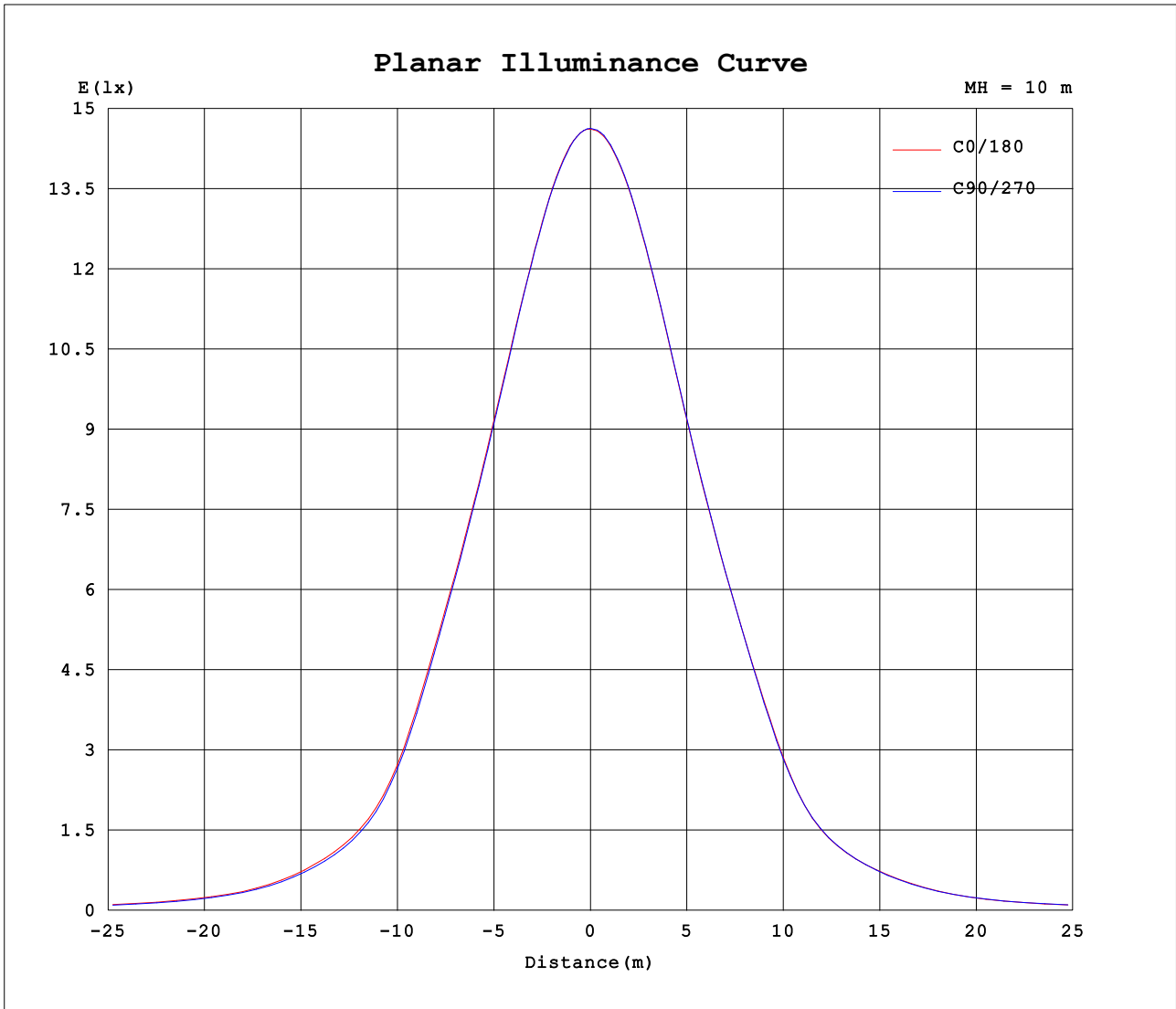
AvgL	cd/m2
L_0~180 (65) av	1867
L_0~180 (75) av	1631
L_0~180 (85) av	1500
L_90~270 (65) av	1816
L_90~270 (75) av	1615
L_90~270 (85) av	1480
L_45 (65) av	1954
L_45 (75) av	1775
L_45 (85) av	1750

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:

