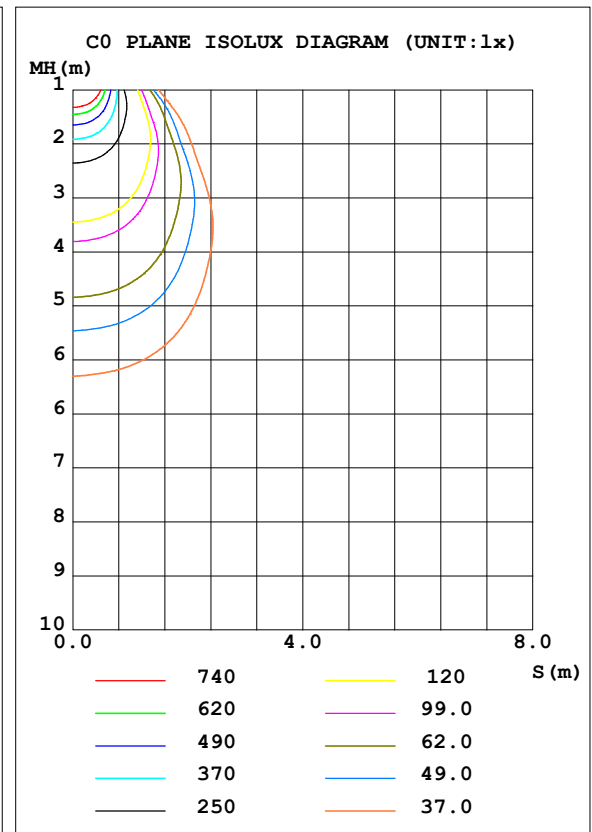
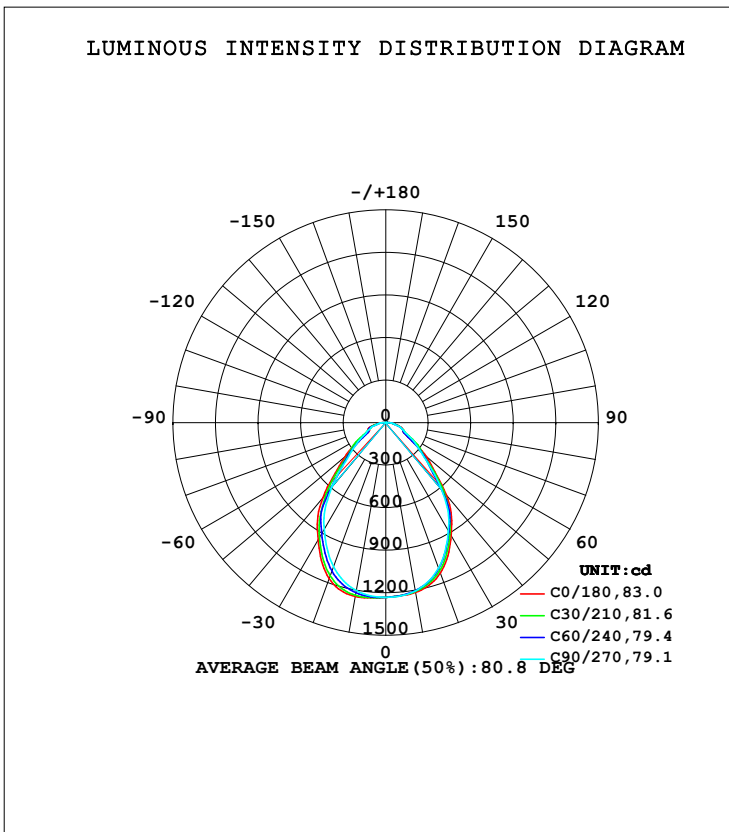


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.50V I:0.0950A P:19.800W PF:0.9430 Freq:50.00Hz Lamp Flux:2290.54x1 lm		
NAME: UGR19-LPE18W-30/60	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 115.68 lm/W			
MODEL		I <sub>max</sub> (cd)	1245	S/MH (C0/180)	1.16
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.08
RATED VOLTAGE (V)		TOTAL FLUX (lm)	2290.5	η UP, DN (C0-180)	0.1, 50.7
NOMINAL FLUX (lm)	2290.54	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.1, 49.2
LAMPS INSIDE	1	η up (%)	0.1	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)		η down (%)	99.9	CIBSE SHR MAX	1.15



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: ZHOU  
 Test Date: 2019-04-19

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity: 65.0%  
 Test Distance: 8.000m [K=1.1555]  
 Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	1216	1206	1205	1229	1244	1227	1202	1202	0- 10	117.0	117.0	5.11,5.11
20	1128	1105	1091	1146	1170	1131	1080	1090	10- 20	332.0	448.9	19.6,19.6
30	922.9	899.8	883.6	940.1	955.8	917.2	869.7	878.5	20- 30	468.5	917.4	40.1,40.1
40	664.0	612.6	613.1	643.8	689.2	607.8	593.4	577.1	30- 40	487.6	1405	61.3,61.3
50	375.1	356.0	329.0	370.2	379.0	352.1	315.6	338.6	40- 50	359.4	1764	77,77
60	157.7	208.3	182.8	225.1	160.3	211.9	179.2	204.7	50- 60	235.4	2000	87.3,87.3
70	123.0	106.6	117.3	114.7	134.4	111.4	114.6	106.9	60- 70	151.4	2151	93.9,93.9
80	69.74	67.68	62.70	69.19	66.76	67.35	57.43	62.32	70- 80	97.31	2248	98.2,98.2
90	2.476	4.347	2.602	9.875	1.689	6.885	1.653	1.876	80- 90	39.06	2287	99.9,99.9
100	3.660	3.651	3.605	3.587	2.747	2.729	2.811	2.866	90-100	2.923	2290	100,100
110	0	0	0	0	0	0	0	0	100-110	0.1725	2291	100,100
120	0	0	0	0	0	0	0	0	110-120	0	2291	100,100
130	0	0	0	0	0	0	0	0	120-130	0	2291	100,100
140	0	0	0	0	0	0	0	0	130-140	0	2291	100,100
150	0	0	0	0	0	0	0	0	140-150	0	2291	100,100
160	0	0	0	0	0	0	0	0	150-160	0	2291	100,100
170	0	0	0	0	0	0	0	0	160-170	0	2291	100,100
180	0	0	0	0	0	0	0	0	170-180	0	2291	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1603.9 lm

%lum = 70.0%

%lamp = 70.0%

Conical surface Flux(120deg): 1999.7 lm

%lum = 87.3%

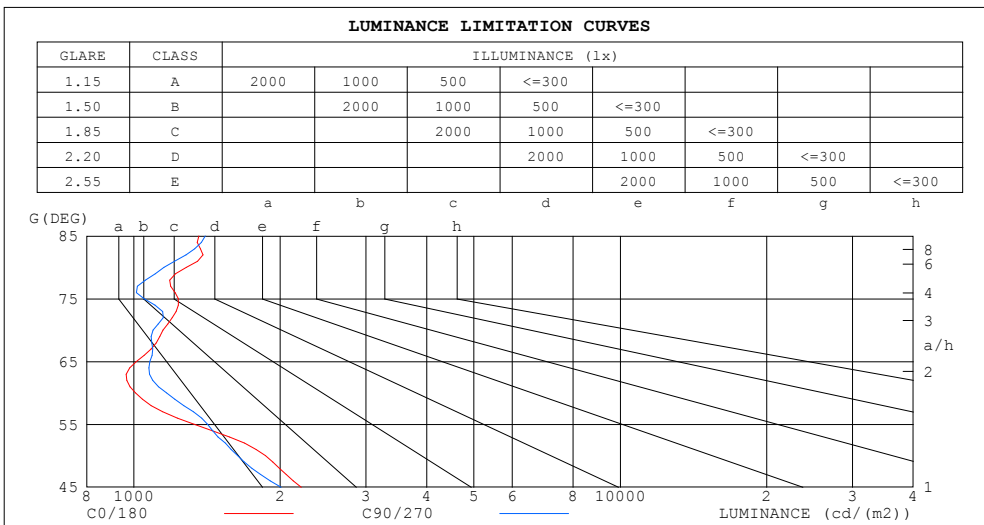
%lamp = 87.3%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZHOU  
 Test Date:2019-04-19

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.1555]  
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.50V I:0.0950A P:19.800W PF:0.9430 Freq:50.00Hz Lamp Flux:2290.54x1 lm		
NAME: UGR19-LPE18W-30/60	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1360	1402
80	1283	1154
75	1235	1050
70	1149	1095
65	1013	1080
60	1008	1168
55	1329	1418
50	1864	1635
45	2210	2008

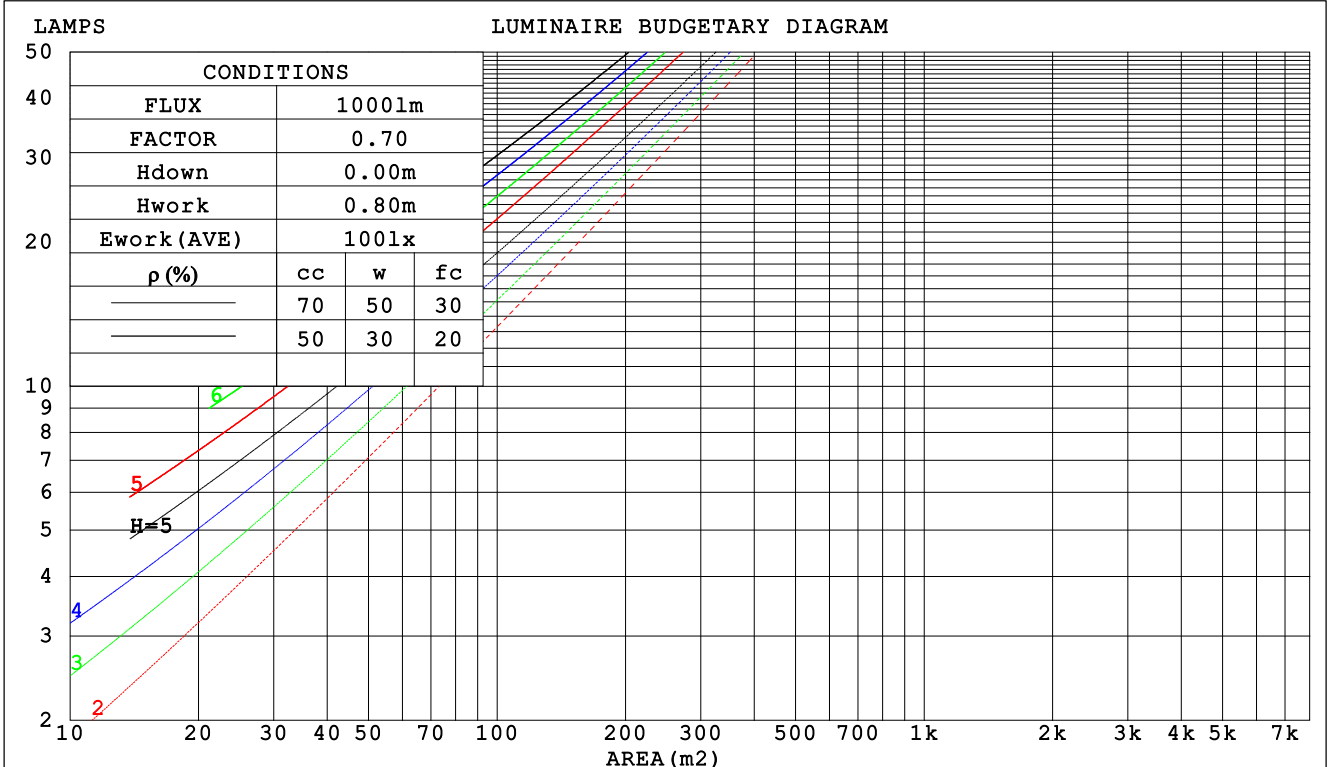
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZHOU  
 Test Date:2019-04-19

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.1555]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.50V I:0.0950A P:19.800W PF:0.9430 Freq:50.00Hz Lamp Flux:2290.54x1 lm		
NAME: UGR19-LPE18W-30/60	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
	ρw	50%	30%	10%	ρw	50%	30%	10%	ρw	50%	30%	10%	ρw	50%	30%	10%
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	.00
1.0	1.06	1.02	.99	1.04	1.01	.98	.90	.97	.94	.96	.94	.92	.92	.90	.89	.87
2.0	.95	.89	.84	.93	.88	.83	.89	.85	.81	.86	.83	.79	.83	.80	.78	.76
3.0	.85	.78	.72	.84	.77	.72	.81	.75	.71	.78	.73	.69	.76	.72	.68	.66
4.0	.77	.69	.63	.76	.69	.63	.73	.67	.62	.71	.66	.61	.69	.64	.61	.59
5.0	.70	.62	.56	.69	.61	.56	.67	.60	.55	.65	.59	.55	.63	.58	.54	.52
6.0	.64	.56	.50	.63	.56	.50	.61	.55	.50	.60	.54	.49	.58	.53	.49	.47
7.0	.59	.51	.45	.58	.50	.45	.56	.50	.45	.55	.49	.45	.54	.48	.44	.42
8.0	.54	.46	.41	.54	.46	.41	.52	.46	.41	.51	.45	.41	.50	.44	.40	.39
9.0	.50	.43	.38	.50	.42	.38	.49	.42	.37	.47	.41	.37	.47	.41	.37	.35
10.0	.47	.39	.35	.46	.39	.35	.45	.39	.34	.44	.38	.34	.43	.38	.34	.32



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZHOU  
 Test Date:2019-04-19

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.1555]  
 Remarks:

WEC AND CCEC

Test:U:220.50V I:0.0950A P:19.800W PF:0.9430 Freq:50.00Hz Lamp Flux:2290.54x1 lm		
NAME: UGR19-LPE18W-30/60	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	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						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.266	.151	.048	.259	.148	.047	.245	.141	.045	.233	.135	.043	.222	.129	.042	
2.0	.249	.137	.042	.243	.134	.041	.232	.129	.040	.222	.124	.039	.212	.120	.038	
3.0	.233	.124	.037	.227	.122	.037	.217	.118	.036	.208	.114	.035	.200	.110	.034	
4.0	.217	.113	.033	.212	.111	.033	.203	.108	.032	.195	.105	.032	.188	.102	.031	
5.0	.202	.103	.030	.198	.102	.030	.190	.099	.029	.183	.097	.029	.176	.094	.028	
6.0	.189	.095	.027	.186	.094	.027	.179	.092	.027	.172	.090	.026	.166	.088	.026	
7.0	.178	.088	.025	.175	.087	.025	.168	.085	.025	.163	.083	.024	.157	.082	.024	
8.0	.167	.082	.023	.165	.081	.023	.159	.079	.023	.154	.078	.022	.149	.077	.022	
9.0	.158	.076	.021	.156	.076	.021	.151	.074	.021	.146	.073	.021	.141	.072	.021	
10.0	.150	.072	.020	.147	.071	.020	.143	.070	.020	.139	.069	.020	.135	.068	.019	

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						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.192	.192	.192	.164	.164	.164	.112	.112	.112	.064	.064	.064	.021	.021	.021	
1.0	.178	.158	.139	.153	.135	.120	.104	.093	.083	.060	.054	.048	.019	.017	.016	
2.0	.168	.133	.104	.144	.115	.090	.098	.079	.063	.057	.046	.037	.018	.015	.012	
3.0	.158	.115	.081	.136	.099	.070	.093	.069	.049	.054	.040	.029	.017	.013	.009	
4.0	.150	.101	.064	.129	.088	.056	.088	.061	.039	.051	.036	.023	.016	.012	.008	
5.0	.142	.091	.052	.122	.078	.046	.084	.055	.032	.049	.032	.019	.016	.010	.006	
6.0	.135	.082	.044	.116	.071	.038	.080	.050	.027	.046	.029	.016	.015	.010	.005	
7.0	.129	.075	.037	.111	.065	.032	.076	.045	.023	.044	.027	.014	.014	.009	.005	
8.0	.123	.069	.032	.105	.060	.028	.073	.042	.020	.042	.025	.012	.014	.008	.004	
9.0	.117	.064	.028	.101	.055	.025	.070	.039	.017	.041	.023	.010	.013	.008	.003	
10.0	.112	.060	.025	.096	.052	.022	.067	.036	.016	.039	.022	.009	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZHOU  
 Test Date:2019-04-19

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.1555]  
 Remarks:

## UGR(Unified Glare Rating) Table

Test:U:220.50V I:0.0950A P:19.800W PF:0.9430 Freq:50.00Hz Lamp Flux:2290.54x1 lm										
NAME: UGR19-LPE18W-30/60					TYPE:			WEIGHT:		
SPEC.:					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	10.5	11.8	10.7	12.0	12.2	10.1	11.4	10.3	11.6	11.8
3H	11.5	12.7	11.8	13.0	13.2	11.1	12.3	11.4	12.6	12.8
4H	12.1	13.2	12.4	13.5	13.7	11.6	12.8	12.0	13.0	13.3
6H	12.5	13.6	12.9	13.9	14.2	12.1	13.2	12.4	13.5	13.7
8H	12.8	13.9	13.1	14.1	14.4	12.4	13.4	12.7	13.7	14.0
12H	13.0	14.0	13.3	14.3	14.6	12.6	13.6	13.0	13.9	14.2
4H 2H	10.8	11.9	11.1	12.2	12.4	10.4	11.6	10.7	11.8	12.1
3H	12.0	13.0	12.4	13.3	13.6	11.7	12.7	12.1	13.0	13.3
4H	12.7	13.7	13.1	14.0	14.3	12.4	13.3	12.8	13.6	13.9
6H	13.4	14.2	13.8	14.6	14.9	13.1	13.9	13.5	14.2	14.6
8H	13.8	14.5	14.2	14.9	15.3	13.4	14.2	13.8	14.5	14.9
12H	14.1	14.8	14.5	15.1	15.5	13.8	14.5	14.2	14.8	15.2
8H 4H	13.0	13.7	13.4	14.1	14.5	12.6	13.4	13.1	13.8	14.1
6H	13.8	14.5	14.3	14.9	15.3	13.5	14.2	14.0	14.6	15.0
8H	14.3	14.9	14.8	15.3	15.7	14.0	14.6	14.5	15.0	15.4
12H	14.7	15.2	15.2	15.7	16.1	14.5	15.0	15.0	15.4	15.9
12H 4H	13.0	13.7	13.4	14.1	14.5	12.7	13.4	13.1	13.8	14.2
6H	13.9	14.5	14.4	14.9	15.3	13.6	14.2	14.1	14.6	15.1
8H	14.4	14.9	14.9	15.4	15.8	14.2	14.7	14.7	15.1	15.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.3 / - 0.5				
1.5H	+ 0.2 / - 0.2					+ 0.3 / - 0.3				
2.0H	+ 0.6 / - 0.8					+ 0.6 / - 0.6				

CIE Pub.117, 2291 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 2.9$ )

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZHOU  
 Test Date:2019-04-19

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.1555]  
 Remarks:

## UTILIZATION FACTORS TABLE

Test:U:220.50V I:0.0950A P:19.800W PF:0.9430 Freq:50.00Hz Lamp Flux:2290.54x1 lm		
NAME: UGR19-LPE18W-30/60	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

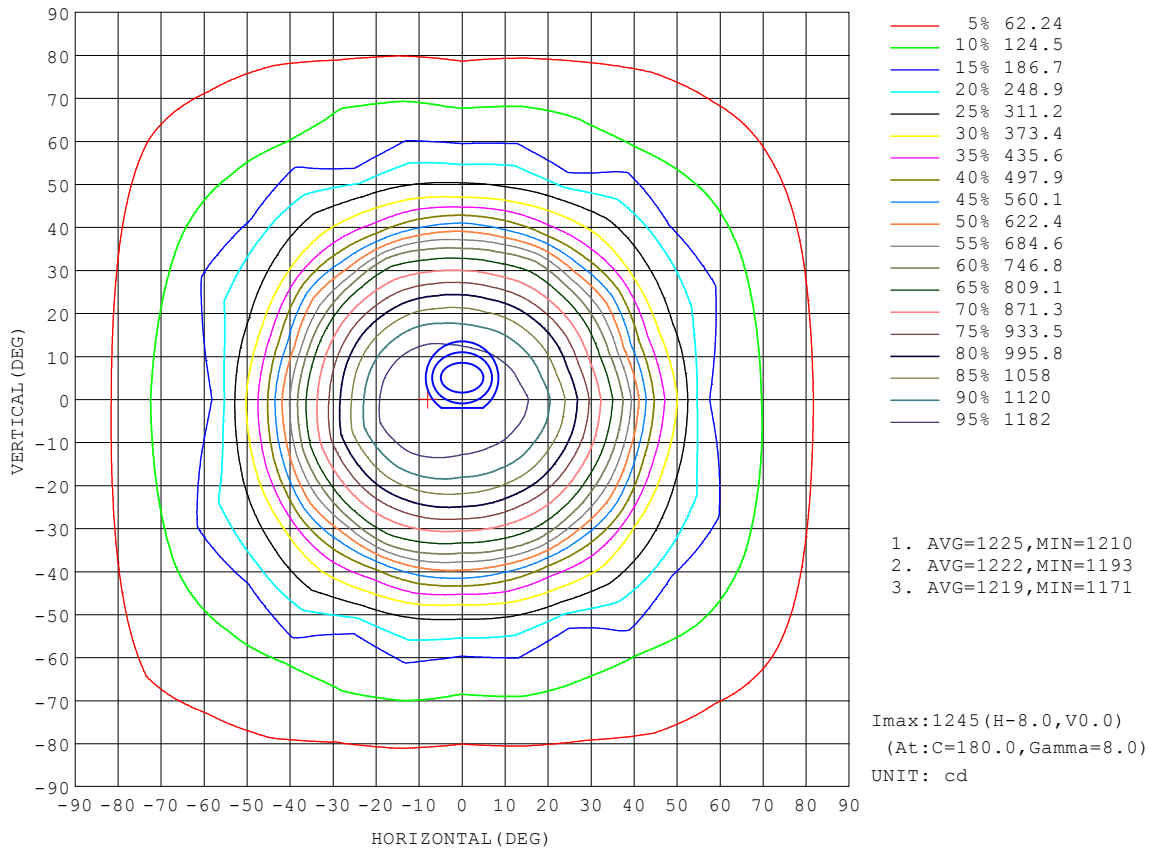
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	68	58	52	67	58	52	66	57	52	46
0.80	77	67	61	76	67	61	74	66	61	55
1.00	84	75	69	83	75	69	81	75	68	62
1.25	90	82	76	89	81	76	87	80	75	69
1.50	95	86	81	93	86	80	90	84	79	73
2.00	100	93	88	98	92	87	95	90	85	78
2.50	103	97	92	101	95	91	97	93	89	81
3.00	106	100	95	104	98	94	100	96	92	84
4.00	109	104	100	106	102	99	102	99	96	88
5.00	111	107	103	108	105	102	104	101	99	90
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:ZHOU  
 Test Date:2019-04-19

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.1555]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.50V I:0.0950A P:19.800W PF:0.9430 Freq:50.00Hz Lamp Flux:2290.54x1 lm		
NAME: UGR19-LPE18W-30/60	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



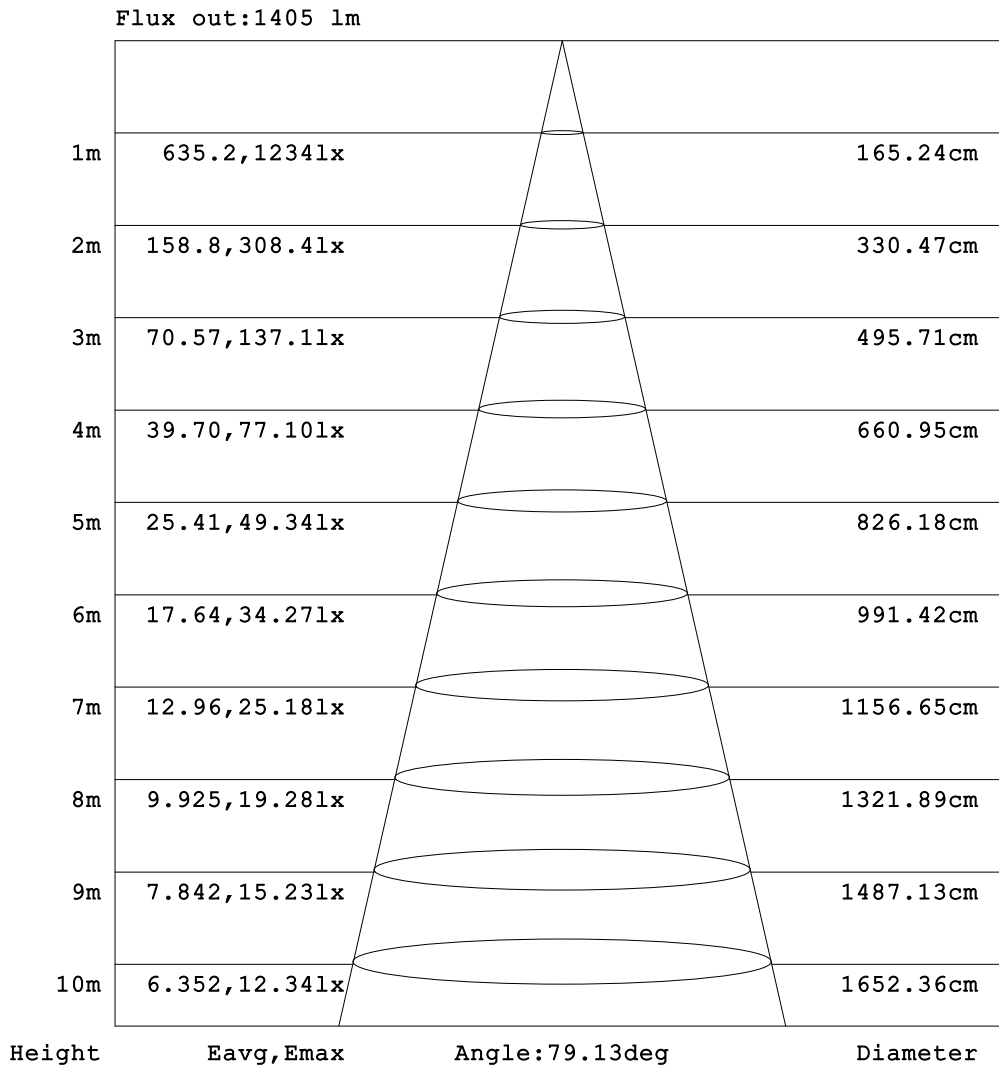
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZHOU  
 Test Date:2019-04-19

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.1555]  
 Remarks:



AAI Figure

Test:U:220.50V I:0.0950A P:19.800W PF:0.9430 Freq:50.00Hz Lamp Flux:2290.54x1 lm		
NAME: UGR19-LPE18W-30/60	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



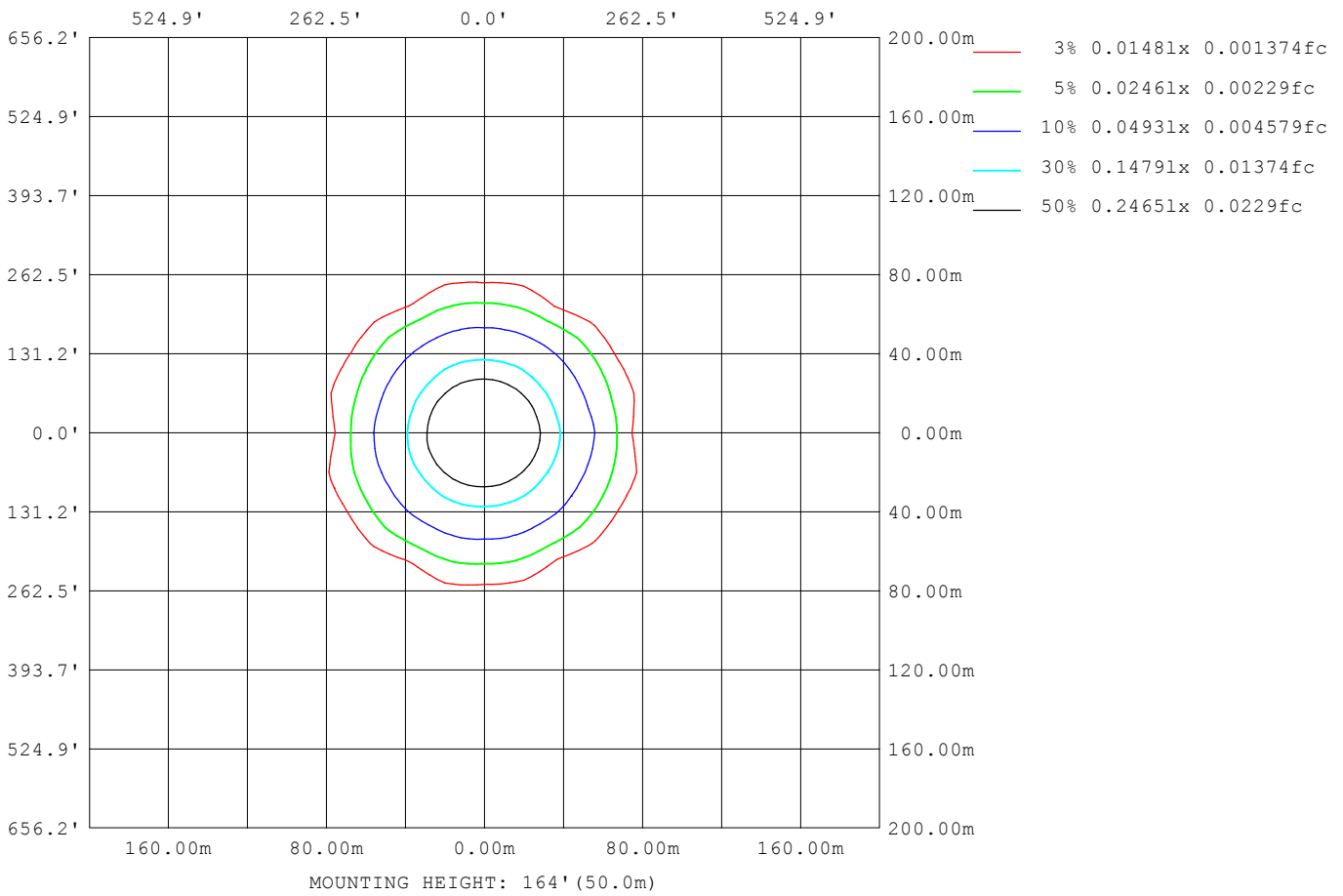
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZHOU  
 Test Date:2019-04-19

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.1555]  
 Remarks:

ISOLUX DIAGRAM

Test:U:220.50V I:0.0950A P:19.800W PF:0.9430 Freq:50.00Hz Lamp Flux:2290.54x1 lm		
NAME: UGR19-LPE18W-30/60	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZHOU  
 Test Date:2019-04-19

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.1555]  
 Remarks:

## LED Avg.L Report

Test:U:220.50V I:0.0950A P:19.800W PF:0.9430 Freq:50.00Hz Lamp Flux:2290.54x1 lm		
NAME: UGR19-LPE18W-30/60	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

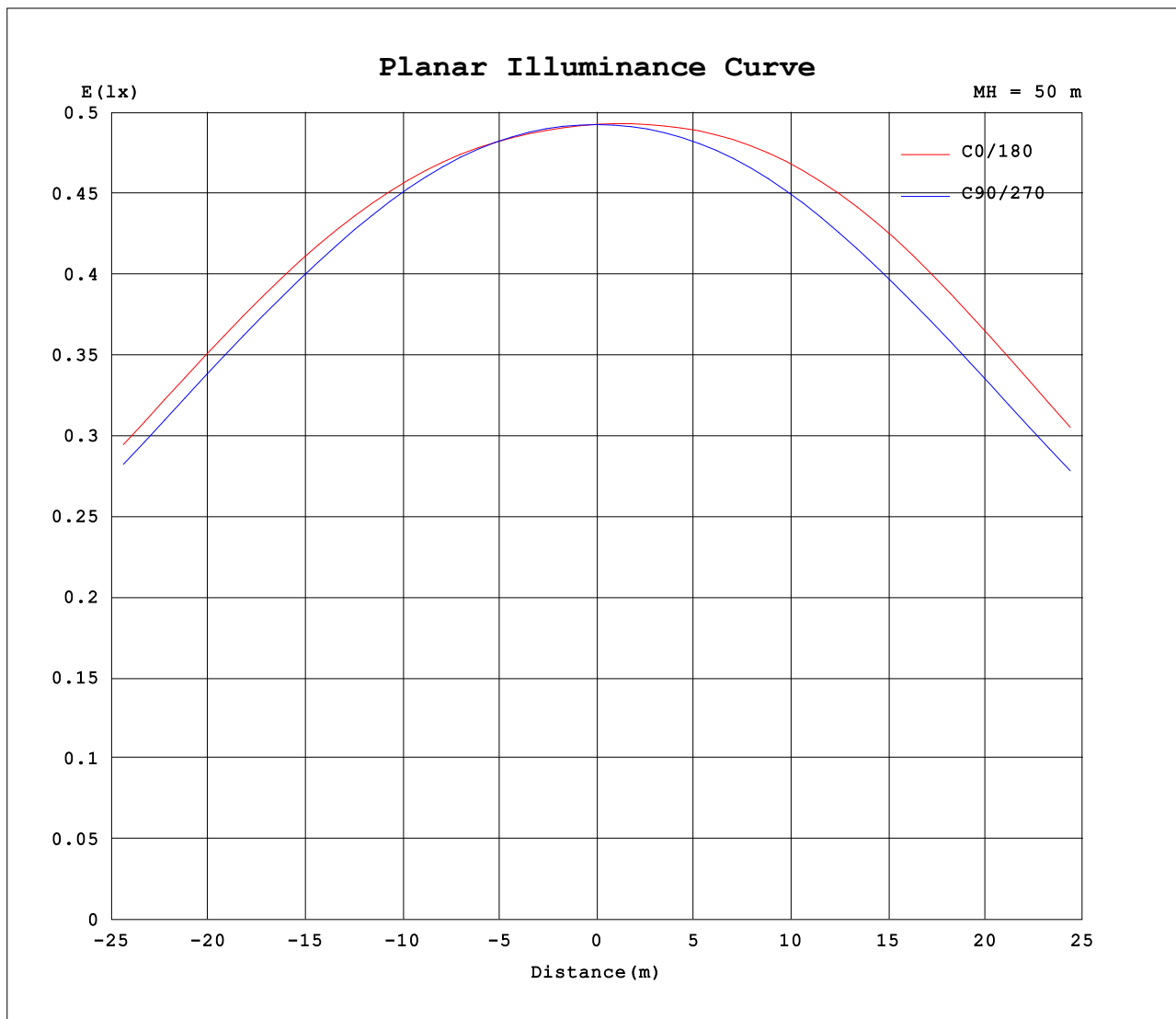
AvgL	cd/m2
L_0~180 (65) av	992
L_0~180 (75) av	1283
L_0~180 (85) av	1344
L_90~270 (65) av	1080
L_90~270 (75) av	1006
L_90~270 (85) av	1298
L_45 (65) av	1190
L_45 (75) av	1141
L_45 (85) av	1356

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZHOU  
 Test Date:2019-04-19

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.1555]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: ZHOU  
 Test Date: 2019-04-19

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity: 65.0%  
 Test Distance: 8.000m [K=1.1555]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.50V I:0.0950A P:19.800W PF:0.9430 Freq:50.00Hz Lamp Flux:2290.54x1 lm		
NAME: UGR19-LPE18W-30/60	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1232	1232	1232	1233	1232	1232	1232	1232	1232	1231	1231	1230	1232	1232	1232	1233	1232	1232	1232
5	1226	1225	1224	1224	1224	1225	1227	1230	1232	1235	1237	1238	1241	1241	1238	1236	1232	1229	1226
10	1216	1213	1209	1206	1203	1203	1205	1212	1220	1229	1237	1242	1244	1242	1236	1227	1218	1208	1202
15	1186	1182	1174	1169	1161	1159	1160	1172	1187	1204	1216	1228	1226	1221	1210	1196	1181	1163	1154
20	1128	1124	1111	1105	1094	1091	1091	1106	1124	1146	1161	1180	1170	1163	1149	1131	1113	1091	1080
25	1036	1032	1019	1011	998	994	994	1011	1030	1054	1071	1092	1074	1066	1053	1032	1015	991	980
30	923	918	906	900	890	885	884	901	920	940	956	976	956	947	936	917	904	881	870
35	810	797	783	780	787	774	768	791	815	820	832	854	841	825	810	794	800	768	749
40	664	640	639	613	608	602	613	630	641	644	681	695	689	645	653	608	602	592	593
45	489	468	470	458	438	451	444	464	457	487	509	514	504	476	480	456	434	439	425
50	375	349	342	356	337	335	329	341	350	370	363	375	379	348	344	352	335	326	316
55	239	274	278	276	224	259	255	271	246	299	292	290	255	276	278	283	233	260	243
60	158	223	189	208	152	195	183	208	164	225	216	247	160	233	200	212	153	196	179
65	134	173	146	154	137	159	143	164	137	175	150	191	128	182	146	157	136	150	143
70	123	129	119	107	118	123	117	129	126	115	124	144	134	131	115	111	126	124	115
75	100	92.1	96.2	90.9	86.3	89.6	85.0	91.1	94.9	101	104	102	108	90.9	101	93.4	85.6	85.2	78.0
80	69.7	67.4	63.2	67.7	65.0	66.4	62.7	68.3	63.6	69.2	71.8	71.8	66.8	69.2	66.5	67.4	63.3	63.1	57.4
85	37.1	42.0	34.4	38.4	36.3	41.7	38.3	43.5	38.5	42.2	38.9	47.7	36.2	38.8	34.3	35.1	33.5	34.6	32.6
90	2.48	3.91	2.58	4.35	3.28	4.04	2.60	4.42	4.47	9.88	6.02	13.1	1.69	1.86	1.79	6.88	1.85	1.87	1.65
95	2.88	2.96	2.86	2.95	2.86	2.89	2.78	2.83	2.75	2.82	2.74	2.80	2.17	2.13	2.16	2.13	2.15	2.14	2.17
100	3.66	3.68	3.65	3.65	3.63	3.63	3.61	3.61	3.53	3.59	3.48	3.50	2.75	2.74	2.76	2.73	2.76	2.75	2.81
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZHOU  
 Test Date:2019-04-19

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.1555]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.50V I:0.0950A P:19.800W PF:0.9430 Freq:50.00Hz Lamp Flux:2290.54x1 lm		
NAME: UGR19-LPE18W-30/60	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	1232	1232	1231	1231	1230														
5	1224	1223	1223	1223	1224														
10	1199	1201	1202	1206	1209														
15	1151	1156	1161	1167	1172														
20	1076	1084	1090	1099	1106														
25	975	985	992	1003	1007														
30	866	876	879	887	892														
35	751	772	754	761	767														
40	573	582	577	609	592														
45	429	422	431	444	438														
50	314	322	339	327	331														
55	251	214	267	263	261														
60	189	146	205	179	209														
65	150	134	143	140	166														
70	117	120	107	114	118														
75	86.3	80.8	84.5	92.0	81.8														
80	60.5	61.6	62.3	56.9	61.7														
85	33.4	30.3	32.3	28.8	33.4														
90	1.86	1.88	1.88	1.84	1.77														
95	2.13	2.22	2.16	2.26	2.25														
100	2.77	2.81	2.87	2.92	2.91														
105	0.00	0.00	0.00	0.00	0.00														
110	0.00	0.00	0.00	0.00	0.00														
115	0.00	0.00	0.00	0.00	0.00														
120	0.00	0.00	0.00	0.00	0.00														
125	0.00	0.00	0.00	0.00	0.00														
130	0.00	0.00	0.00	0.00	0.00														
135	0.00	0.00	0.00	0.00	0.00														
140	0.00	0.00	0.00	0.00	0.00														
145	0.00	0.00	0.00	0.00	0.00														
150	0.00	0.00	0.00	0.00	0.00														
155	0.00	0.00	0.00	0.00	0.00														
160	0.00	0.00	0.00	0.00	0.00														
165	0.00	0.00	0.00	0.00	0.00														
170	0.00	0.00	0.00	0.00	0.00														
175	0.00	0.00	0.00	0.00	0.00														
180	0.00	0.00	0.00	0.00	0.00														

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZHOU  
 Test Date:2019-04-19

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.1555]  
 Remarks: