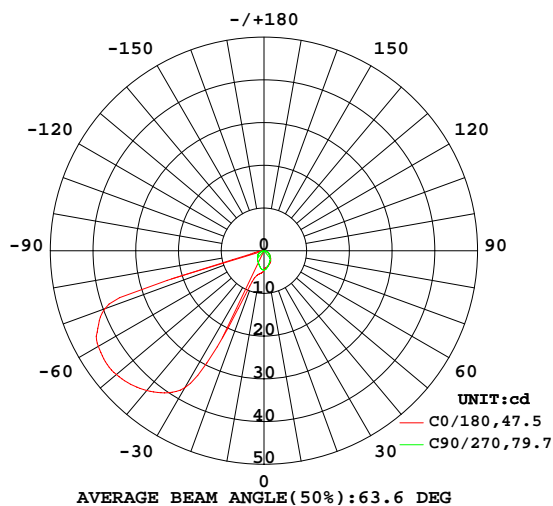


LUMINAIRE PHOTOMETRIC TEST REPORT

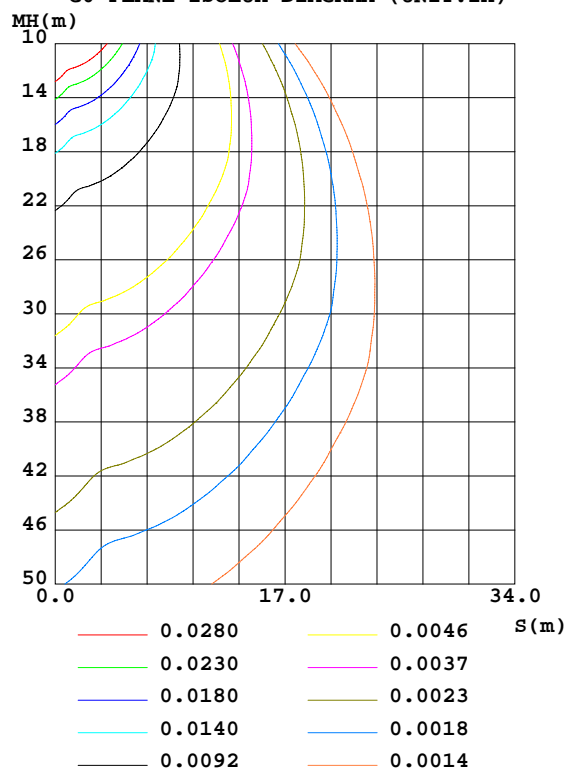
NAME: WL3019 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: VJC Lighting	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 7.26 lm/W
MODEL	WL3019 3000K	Imax(cd)	45.36	S/MH(C0/180)	4.28	
NOMINAL POWER(W)	3	LOR(%)	100.0	S/MH(C90/270)	0.96	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	21.939	η UP,DN(C0-180)	0.3,26.1	
NOMINAL FLUX(lm)	21.9389	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,73.6	
LAMPS INSIDE	1	η up(%)	0.3	CIBSE SHR NOM	0.00	
TEST VOLTAGE(V)	220	η down(%)	99.7	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:huxuanhong
 Test Date:03 March 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.650m [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	3.889	3.782	4.092	4.882	5.456	5.028	4.194	3.781	0- 10	0.4238	0.4238	1.93,1.93
20	3.487	3.359	3.370	4.793	7.093	4.878	3.471	3.368	10- 20	1.209	1.633	7.44,7.44
30	3.045	2.874	2.800	4.391	37.02	4.525	2.870	2.895	20- 30	2.554	4.186	19.1,19.1
40	2.472	2.376	2.187	3.612	42.72	3.763	2.339	2.410	30- 40	3.837	8.023	36.6,36.6
50	1.828	1.813	1.849	2.473	45.10	2.644	1.905	1.876	40- 50	4.104	12.13	55.3,55.3
60	1.215	1.226	1.418	1.606	44.78	1.677	1.491	1.310	50- 60	4.250	16.38	74.6,74.6
70	0.6700	0.7127	0.7948	1.051	39.60	1.128	0.8539	0.7615	60- 70	3.875	20.25	92.3,92.3
80	0.2318	0.2142	0.1998	0.3320	1.645	0.3873	0.2346	0.2594	70- 80	1.497	21.75	99.1,99.1
90	0	0	0	0	0	0	0	0	80- 90	0.1243	21.87	99.7,99.7
100	0	0	0	0	0	0	0	0	90-100	0	21.87	99.7,99.7
110	0.1388	0	0	0	0	0	0	0	100-110	0.0045	21.88	99.7,99.7
120	0.2313	0	0	0	0	0	0	0	110-120	0.0138	21.89	99.8,99.8
130	0.2564	0	0	0	0	0	0	0	120-130	0.0178	21.91	99.9,99.9
140	0.2280	0	0	0	0	0	0	0	130-140	0.0167	21.93	99.9,99.9
150	0.1248	0.0036	0	0	0	0	0	0	140-150	0.0110	21.94	100,100
160	0.0072	0	0	0	0	0	0	0	150-160	0.0021	21.94	100,100
170	0.0036	0	0	0	0	0	0	0	160-170	0.0003	21.94	100,100
180	0	0	0	0	0	0	0	0	170-180	0.0000	21.94	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 10.037 lm

%lum = 45.7%

%lamp = 45.7%

Conical surface Flux(120deg): 16.377 lm

%lum = 74.6%

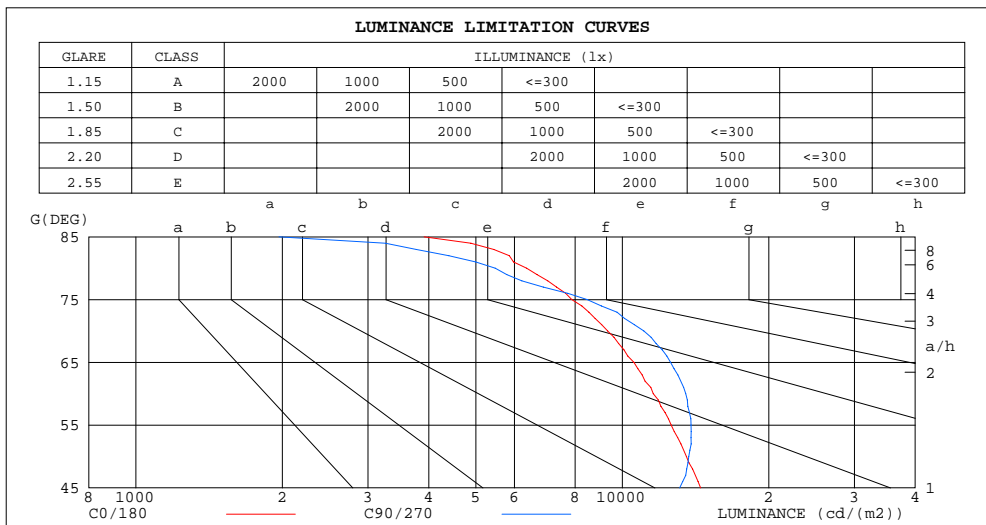
%lamp = 74.6%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:huxuanhong
 Test Date:03 March 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.650m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

NAME: WL3019 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: VJC Lighting	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3915	1969
80	6358	5478
75	7873	8466
70	9329	11066
65	10560	12567
60	11571	13503
55	12600	13840
50	13539	13695
45	14489	13120

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: huxuanhong
Test Date: 03 March 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 7.650m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: WL3019 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: VJC Lighting	SUR.:	Shielding Angle:

pcc	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	.317	.180	.057	.310	.177	.056	.296	.170	.054	.284	.164	.053	.273	.158	.051		
2.0	.307	.168	.052	.300	.165	.051	.288	.160	.050	.277	.155	.049	.267	.151	.048		
3.0	.286	.152	.046	.281	.150	.045	.270	.146	.044	.260	.142	.044	.251	.139	.043		
4.0	.265	.138	.040	.260	.136	.040	.250	.133	.040	.241	.130	.039	.233	.127	.039		
5.0	.245	.125	.036	.240	.123	.036	.232	.121	.036	.224	.118	.035	.216	.116	.035		
6.0	.227	.114	.033	.223	.112	.032	.215	.110	.032	.208	.108	.032	.201	.106	.031		
7.0	.210	.104	.029	.207	.103	.029	.200	.101	.029	.194	.099	.029	.188	.098	.029		
8.0	.196	.096	.027	.193	.095	.027	.187	.093	.027	.181	.092	.026	.176	.090	.026		
9.0	.183	.089	.025	.180	.088	.025	.175	.086	.025	.170	.085	.024	.165	.084	.024		
10.0	.172	.082	.023	.169	.082	.023	.164	.081	.023	.160	.079	.023	.155	.078	.022		

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	.193	.193	.193	.165	.165	.165	.112	.112	.112	.065	.065	.065	.021	.021	.021	
1.0	.183	.158	.136	.157	.136	.117	.107	.094	.081	.062	.054	.047	.020	.017	.015	
2.0	.177	.134	.099	.151	.115	.085	.104	.080	.059	.060	.046	.035	.019	.015	.011	
3.0	.170	.117	.074	.146	.101	.064	.100	.070	.045	.058	.041	.027	.019	.013	.009	
4.0	.163	.104	.058	.140	.090	.051	.096	.062	.036	.056	.037	.021	.018	.012	.007	
5.0	.156	.094	.047	.134	.081	.041	.092	.057	.029	.053	.033	.017	.017	.011	.006	
6.0	.149	.085	.040	.128	.074	.035	.088	.052	.024	.051	.030	.015	.017	.010	.005	
7.0	.142	.079	.034	.122	.068	.030	.085	.048	.021	.049	.028	.012	.016	.009	.004	
8.0	.136	.073	.030	.117	.063	.026	.081	.044	.018	.047	.026	.011	.015	.009	.004	
9.0	.129	.068	.026	.111	.059	.023	.077	.041	.016	.045	.024	.010	.015	.008	.003	
10.0	.123	.064	.024	.106	.055	.021	.074	.039	.015	.043	.023	.009	.014	.008	.003	

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:huxuanhong

Test Date:03 March 2020

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362

Humidity:65.0%

Test Distance:7.650m [K=1.0000]

Remarks:

UGR(Unified Glare Rating) Table

NAME: WL3019 3000K					TYPE:					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:				
MFR.: VJC Lighting					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					31.6	33.2	31.9	33.5	33.7	31.8	33.4	32.1	33.7	33.9
3H					32.8	34.3	33.1	34.5	34.8	33.2	34.7	33.5	34.9	35.2
4H					33.2	34.6	33.5	34.9	35.2	33.6	35.0	33.9	35.2	35.5
6H					33.4	34.8	33.8	35.0	35.3	33.7	35.0	34.0	35.3	35.6
8H					33.5	34.8	33.8	35.1	35.4	33.7	35.0	34.0	35.3	35.6
12H					33.5	34.7	33.8	35.0	35.3	33.6	34.9	34.0	35.2	35.5
4H 2H					32.1	33.5	32.4	33.8	34.1	32.3	33.7	32.6	34.0	34.2
3H					33.5	34.7	33.8	35.0	35.4	33.8	35.0	34.1	35.3	35.6
4H					34.0	35.2	34.4	35.5	35.8	34.2	35.4	34.6	35.7	36.1
6H					34.4	35.4	34.8	35.7	36.1	34.4	35.4	34.8	35.8	36.2
8H					34.4	35.4	34.9	35.8	36.1	34.5	35.4	34.9	35.8	36.2
12H					34.5	35.3	34.9	35.7	36.1	34.4	35.3	34.9	35.7	36.1
8H 4H					34.2	35.1	34.6	35.5	35.9	34.4	35.3	34.8	35.7	36.1
6H					34.6	35.4	35.1	35.8	36.3	34.7	35.4	35.1	35.8	36.3
8H					34.8	35.5	35.2	35.9	36.3	34.7	35.4	35.2	35.8	36.3
12H					34.8	35.4	35.3	35.9	36.3	34.7	35.3	35.2	35.7	36.2
12H 4H					34.2	35.0	34.6	35.4	35.8	34.4	35.2	34.8	35.6	36.1
6H					34.7	35.3	35.1	35.8	36.2	34.7	35.3	35.1	35.8	36.2
8H					34.8	35.4	35.3	35.8	36.3	34.7	35.3	35.2	35.8	36.3
Variations with the observer position at spacings:														
S = 1.0H					+ 0.2 / - 0.3					+ 0.2 / - 0.2				
1.5H					+ 0.2 / - 0.3					+ 0.1 / - 0.2				
2.0H					+ 0.3 / - 0.4					+ 0.4 / - 0.4				

CIE Pub.117, 21.94 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -13.3$)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: huxuanhong
Test Date: 03 March 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 7.650m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: WL3019 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: VJC Lighting	SUR.:	Shielding Angle:

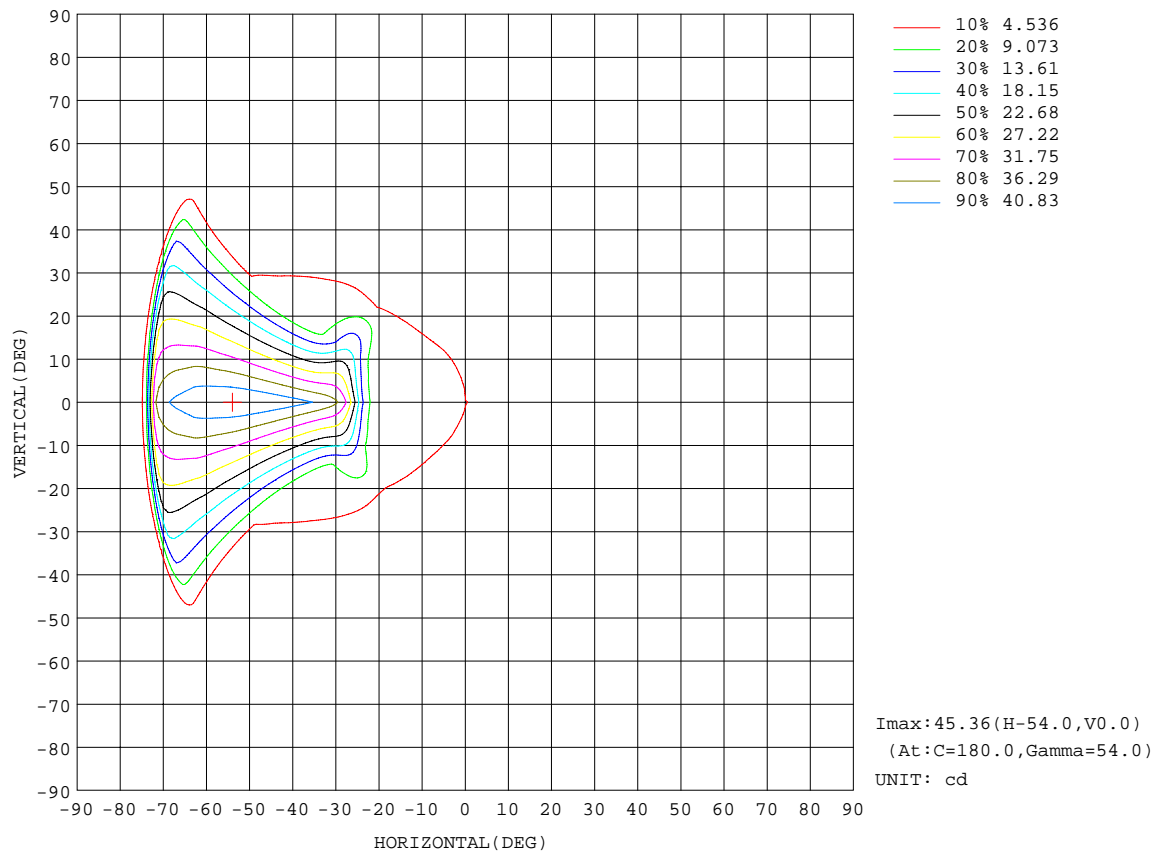
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	53	40	33	52	40	33	51	40	33	26
0.80	63	51	43	62	50	42	60	49	42	35
1.00	72	60	52	71	59	52	68	61	51	44
1.25	80	68	61	78	68	60	75	66	59	51
1.50	85	74	67	83	74	66	80	72	65	57
2.00	93	84	77	91	82	76	87	80	74	66
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	94	88	99	92	87	95	89	85	76
4.00	106	100	95	103	98	94	99	95	91	82
5.00	108	103	99	106	101	98	101	98	95	85
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004										
Suspended										
SHRNM = 1.25										

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:huxuanhong
Test Date:03 March 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.650m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: WL3019 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: VJC Lighting	SUR.:	Shielding Angle:



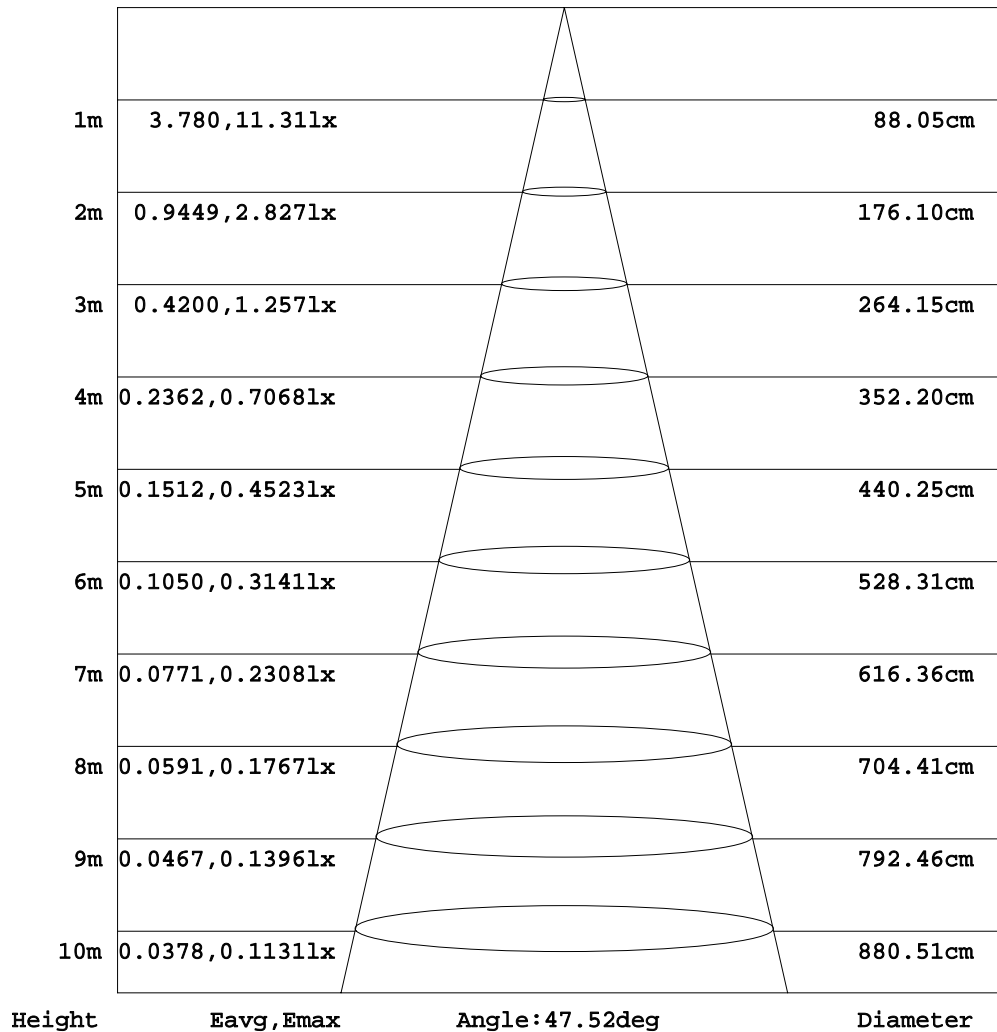
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:huxuanhong
Test Date:03 March 2020

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.650m [K=1.0000]
Remarks:

AAI Figure

NAME: WL3019 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: VJC Lighting	SUR.:	Shielding Angle:

Flux out:2.354 lm

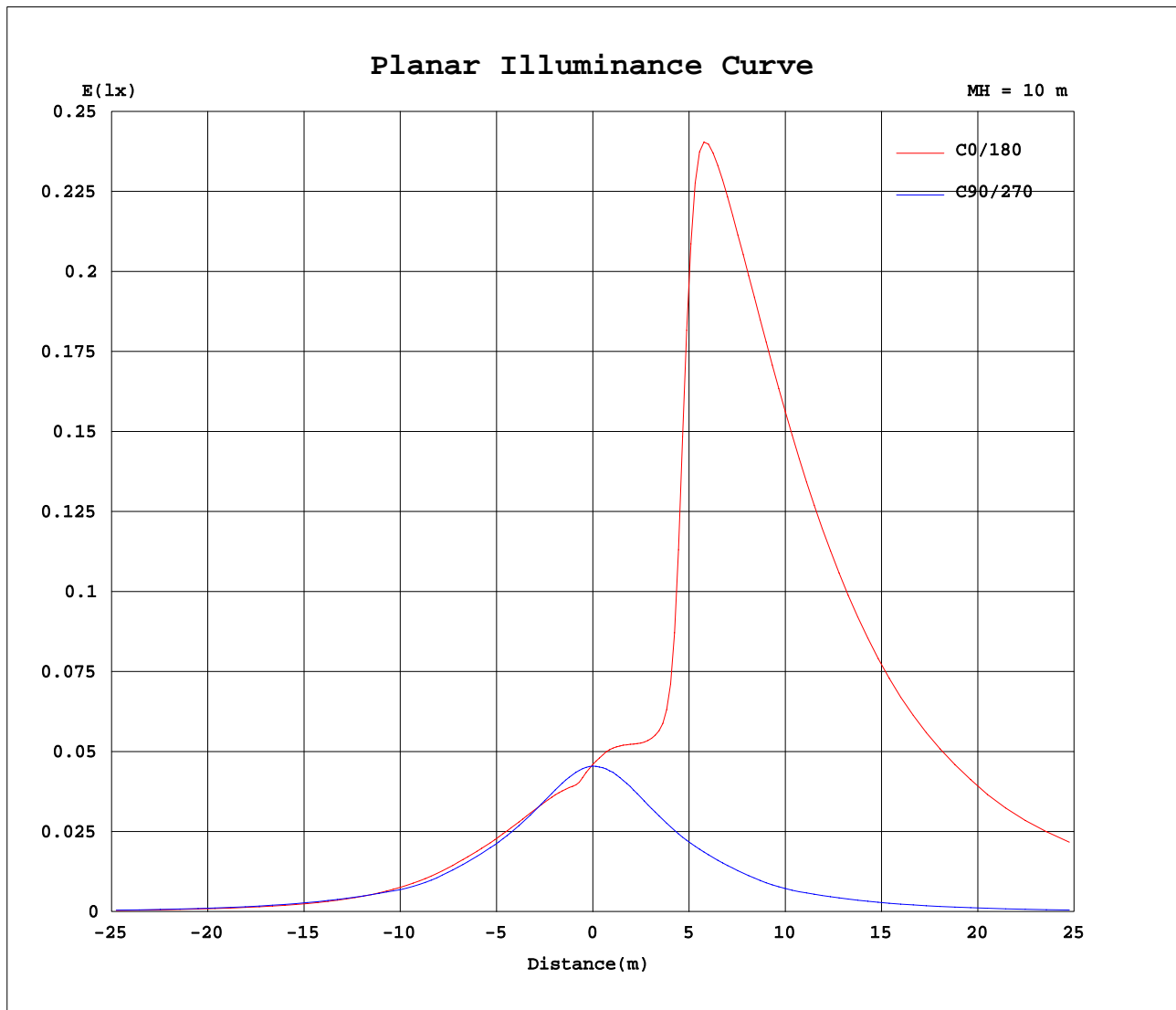


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: huxuanhong
 Test Date: 03 March 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 7.650m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: huxuanhong
Test Date: 03 March 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 7.650m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: WL3019 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: VJC Lighting	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	4.60	4.58	4.59	4.55	4.55	4.54	4.52	4.53	4.60	4.58	4.59	4.55	4.55	4.54	4.52	4.53			
5	4.01	3.97	4.05	4.20	4.40	4.58	4.80	4.96	5.12	5.05	4.91	4.67	4.45	4.25	4.03	3.95			
10	3.89	3.83	3.78	3.77	4.09	4.49	4.88	5.20	5.46	5.33	5.03	4.64	4.19	3.83	3.78	3.82			
15	3.71	3.64	3.59	3.52	3.73	4.27	4.86	5.43	5.88	5.55	4.98	4.43	3.84	3.58	3.60	3.64			
20	3.49	3.41	3.36	3.30	3.37	4.01	4.79	5.94	7.09	6.08	4.88	4.15	3.47	3.36	3.37	3.42			
25	3.27	3.18	3.12	3.07	3.06	3.64	4.65	8.72	19.9	9.97	4.76	3.83	3.13	3.13	3.13	3.19			
30	3.05	2.94	2.87	2.82	2.80	3.24	4.39	13.3	37.0	17.9	4.53	3.43	2.87	2.89	2.89	2.96			
35	2.80	2.71	2.63	2.55	2.53	2.83	4.05	8.00	40.6	10.2	4.18	3.03	2.62	2.64	2.66	2.74			
40	2.47	2.43	2.38	2.26	2.19	2.41	3.61	6.27	42.7	6.87	3.76	2.62	2.34	2.38	2.41	2.45			
45	2.15	2.12	2.10	1.97	1.95	2.01	3.07	5.53	44.2	5.83	3.23	2.18	2.04	2.09	2.15	2.15			
50	1.83	1.82	1.81	1.77	1.85	1.87	2.47	4.98	45.1	5.16	2.64	1.97	1.90	1.88	1.88	1.85			
55	1.52	1.52	1.51	1.54	1.67	1.69	1.88	4.48	45.3	4.62	2.02	1.80	1.73	1.64	1.59	1.57			
60	1.21	1.24	1.23	1.29	1.42	1.47	1.61	3.64	44.8	3.72	1.68	1.58	1.49	1.38	1.31	1.29			
65	0.94	0.97	0.96	1.01	1.12	1.20	1.35	2.61	42.9	2.61	1.43	1.31	1.20	1.11	1.03	1.02			
70	0.67	0.71	0.71	0.72	0.79	0.88	1.05	1.46	39.6	1.50	1.13	0.97	0.85	0.82	0.76	0.77			
75	0.43	0.47	0.46	0.43	0.46	0.53	0.71	0.87	4.12	0.94	0.76	0.62	0.53	0.52	0.51	0.53			
80	0.23	0.24	0.21	0.17	0.20	0.20	0.33	0.48	1.64	0.54	0.39	0.29	0.23	0.25	0.26	0.30			
85	0.07	0.04	0.04	0.01	0.04	0.03	0.07	0.13	0.11	0.18	0.10	0.09	0.06	0.07	0.05	0.07			
90	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			
95	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			
100	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			
105	0.08	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	0.14	0.01	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	0.20	0.03	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	0.23	0.05	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	0.25	0.06	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	0.02			
130	0.26	0.06	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	0.03			
135	0.26	0.06	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	0.04			
140	0.23	0.06	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	0.04			
145	0.19	0.05	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	0.04			
150	0.12	0.02	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	0.04			
155	0.02	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	0.02			
160	0.01	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	0.02			
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	0.01			
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	0.01			
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			
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			

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:huxuanhong

Test Date:03 March 2020

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362

Humidity:65.0%

Test Distance:7.650m [K=1.0000]

Remarks: