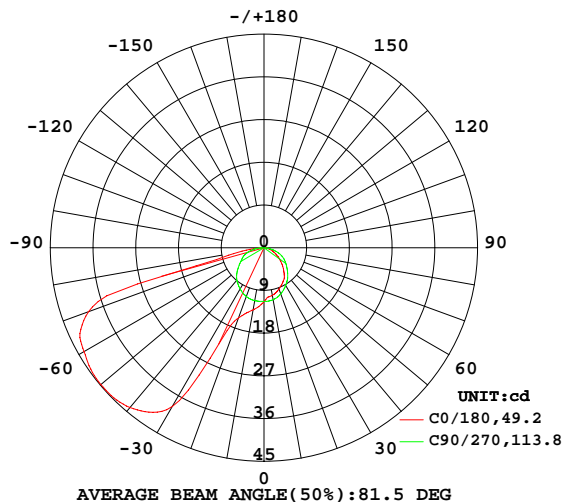


LUMINAIRE PHOTOMETRIC TEST REPORT

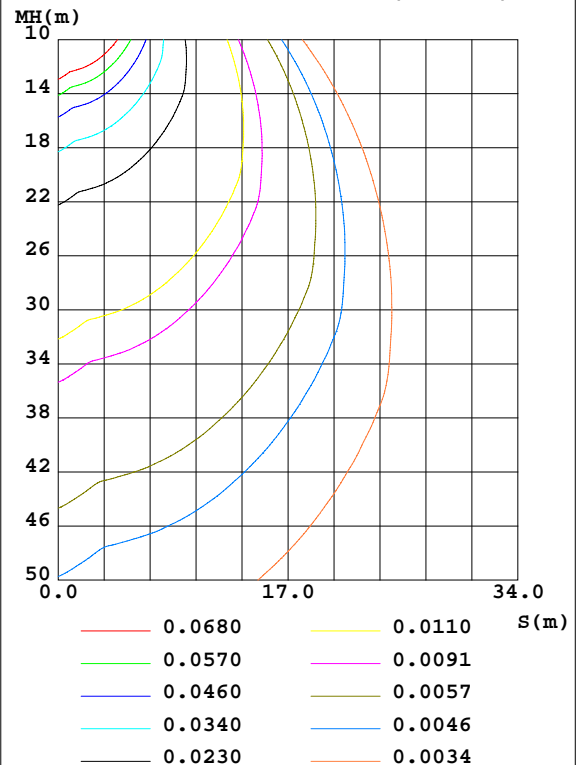
NAME: WL3019 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: VJC Lighting	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 33.55 lm/W			
MODEL	WL3019 3000K	Imax(cd)	44.86	S/MH(C0/180)	3.18
NOMINAL POWER(W)	2	LOR(%)	100.0	S/MH(C90/270)	1.32
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	70.149	η UP,DN(C0-180)	0.4,39.1
NOMINAL FLUX(lm)	70.1486	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.1,60.4
LAMPS INSIDE	1	η up(%)	0.5	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	220	η down(%)	99.5	CIBSE SHR MAX	1.05

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:10 April 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	10.19	10.27	11.12	12.62	13.30	12.80	11.32	10.28	0- 10	1.087	1.087	1.55,1.55
20	9.263	9.513	10.37	13.52	15.73	14.00	10.94	9.696	10- 20	3.277	4.364	6.22,6.22
30	8.135	8.341	9.160	15.35	38.59	16.64	10.05	8.656	20- 30	5.912	10.28	14.6,14.6
40	6.537	7.045	7.808	33.17	43.93	35.93	8.915	7.416	30- 40	10.56	20.84	29.7,29.7
50	4.728	5.301	6.269	33.72	44.85	37.46	7.294	5.877	40- 50	13.78	34.62	49.4,49.4
60	3.135	3.563	4.940	23.54	43.76	34.49	5.600	4.136	50- 60	15.19	49.81	71,71
70	1.800	2.031	3.278	6.572	39.31	10.46	4.278	2.544	60- 70	12.58	62.39	88.9,88.9
80	0.7773	0.7633	1.284	2.289	5.637	3.744	2.337	1.170	70- 80	6.302	68.69	97.9,97.9
90	0.0142	0	0	0.0003	0.0387	0.3998	0.2510	0	80- 90	1.091	69.78	99.5,99.5
100	0.1316	0.0499	0	0	0	0	0	0.0072	90-100	0.0213	69.80	99.5,99.5
110	0.2990	0.1494	0	0	0	0	0	0.0570	100-110	0.0473	69.85	99.6,99.6
120	0.3632	0.2172	0.0071	0	0	0	0	0.1211	110-120	0.0753	69.93	99.7,99.7
130	0.3882	0.2279	0.0284	0	0	0	0.0036	0.1211	120-130	0.0803	70.01	99.8,99.8
140	0.3099	0.1639	0.0427	0	0	0	0.0214	0.1140	130-140	0.0654	70.07	99.9,99.9
150	0.1605	0.1140	0.0463	0	0	0	0.0214	0.1032	140-150	0.0414	70.11	100,100
160	0.0961	0.0855	0.0427	0.0036	0	0.0036	0.0214	0.0712	150-160	0.0209	70.14	100,100
170	0.0783	0.0606	0.0356	0.0036	0.0142	0.0178	0.0214	0.0463	160-170	0.0104	70.15	100,100
180	0.0320	0.0320	0.0320	0.0249	0.0178	0.0214	0.0214	0.0285	170-180	0.0030	70.15	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 27.468 lm

%lum = 39.2%

%lamp = 39.2%

Conical surface Flux(120deg): 49.813 lm

%lum = 71.0%

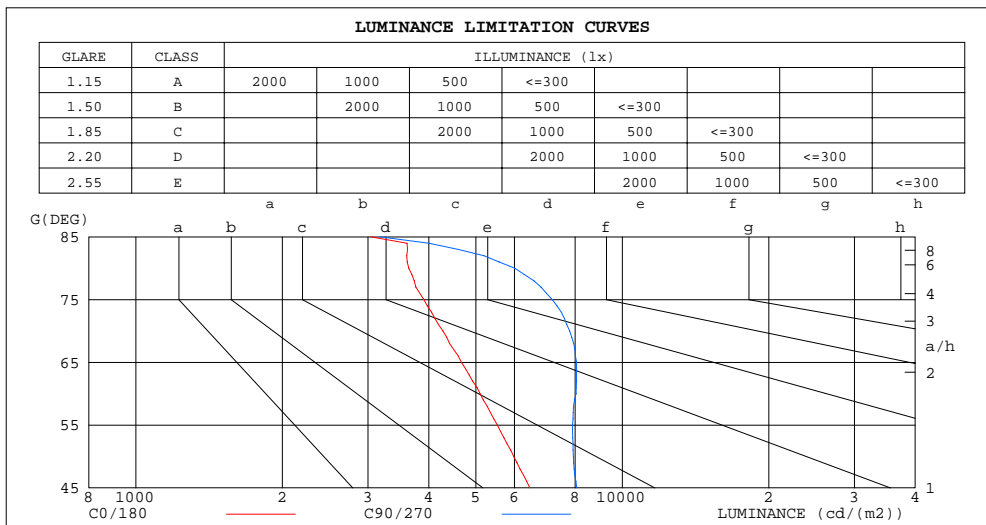
%lamp = 71.0%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:huxuanhong
 Test Date:10 April 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	3039	3176
80	3639	6012
75	3908	7178
70	4278	7792
65	4668	8053
60	5098	8033
55	5535	7902
50	5980	7929
45	6455	8060

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: huxuanhong
 Test Date: 10 April 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	.344	.196	.062	.337	.192	.061	.323	.185	.059	.310	.179	.057	.299	.173	.056		
2.0	.327	.179	.055	.320	.176	.054	.308	.171	.053	.297	.166	.052	.286	.162	.051		
3.0	.302	.161	.048	.296	.159	.048	.285	.155	.047	.275	.151	.046	.266	.147	.046		
4.0	.278	.144	.042	.273	.143	.042	.263	.139	.042	.254	.136	.041	.245	.133	.041		
5.0	.255	.130	.038	.251	.129	.037	.242	.126	.037	.234	.123	.037	.226	.121	.036		
6.0	.235	.118	.034	.231	.117	.034	.223	.115	.033	.216	.112	.033	.209	.110	.033		
7.0	.218	.108	.031	.214	.107	.030	.207	.105	.030	.201	.103	.030	.194	.101	.030		
8.0	.202	.099	.028	.199	.098	.028	.193	.096	.027	.187	.095	.027	.181	.093	.027		
9.0	.189	.091	.025	.186	.090	.025	.180	.089	.025	.175	.088	.025	.170	.086	.025		
10.0	.176	.085	.023	.174	.084	.023	.169	.083	.023	.164	.081	.023	.159	.080	.023		

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	.194	.194	.194	.166	.166	.166	.113	.113	.113	.065	.065	.065	.021	.021	.021		
1.0	.187	.160	.136	.160	.137	.117	.109	.094	.081	.063	.055	.047	.020	.018	.015		
2.0	.181	.136	.098	.155	.117	.085	.106	.081	.059	.061	.047	.035	.020	.015	.011		
3.0	.175	.119	.074	.150	.102	.064	.103	.071	.045	.059	.041	.026	.019	.013	.009		
4.0	.168	.106	.058	.144	.091	.050	.099	.064	.036	.057	.037	.021	.018	.012	.007		
5.0	.161	.096	.048	.138	.083	.041	.095	.058	.029	.055	.034	.017	.018	.011	.006		
6.0	.154	.088	.040	.132	.076	.035	.091	.053	.025	.053	.031	.015	.017	.010	.005		
7.0	.147	.081	.035	.126	.070	.030	.087	.049	.021	.051	.029	.013	.016	.009	.004		
8.0	.140	.075	.031	.120	.065	.027	.083	.046	.019	.048	.027	.011	.016	.009	.004		
9.0	.133	.070	.028	.115	.061	.024	.080	.043	.017	.046	.025	.010	.015	.008	.003		
10.0	.127	.066	.025	.110	.057	.022	.076	.040	.016	.044	.024	.009	.014	.008	.003		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:huxuanhong
Test Date:10 April 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					24.2	25.9	24.5	26.2	26.4	25.8	27.5	26.1	27.7	28.0
3H					25.3	26.9	25.7	27.2	27.4	27.5	29.1	27.8	29.3	29.6
4H					25.8	27.3	26.1	27.5	27.8	28.2	29.7	28.5	29.9	30.2
6H					26.1	27.5	26.5	27.8	28.1	28.6	30.0	29.0	30.3	30.6
8H					26.2	27.6	26.6	27.9	28.2	28.7	30.1	29.1	30.4	30.7
12H					26.3	27.6	26.7	27.9	28.2	28.8	30.1	29.1	30.4	30.7
4H 2H					24.8	26.3	25.2	26.6	26.9	26.1	27.6	26.4	27.9	28.2
3H					26.1	27.4	26.5	27.7	28.1	27.9	29.2	28.3	29.6	29.9
4H					26.7	27.9	27.1	28.2	28.6	28.7	29.9	29.1	30.3	30.6
6H					27.1	28.2	27.5	28.5	28.9	29.3	30.4	29.7	30.7	31.1
8H					27.3	28.3	27.7	28.6	29.0	29.5	30.5	29.9	30.8	31.2
12H					27.4	28.3	27.8	28.7	29.1	29.5	30.4	30.0	30.8	31.3
8H 4H					26.9	27.9	27.4	28.3	28.7	28.8	29.8	29.2	30.2	30.6
6H					27.5	28.3	28.0	28.7	29.2	29.5	30.3	30.0	30.7	31.2
8H					27.8	28.5	28.2	28.9	29.4	29.7	30.4	30.2	30.9	31.3
12H					27.9	28.6	28.4	29.0	29.5	29.8	30.4	30.3	30.9	31.4
12H 4H					27.0	27.9	27.4	28.3	28.7	28.8	29.7	29.2	30.1	30.5
6H					27.6	28.3	28.0	28.7	29.2	29.5	30.2	30.0	30.7	31.1
8H					27.8	28.5	28.3	28.9	29.4	29.7	30.4	30.2	30.8	31.3
Variations with the observer position at spacings:														
S = 1.0H					+ 0.2 / - 0.3					+ 0.1 / - 0.1				
1.5H					+ 0.2 / - 0.3					+ 0.1 / - 0.2				
2.0H					+ 0.3 / - 0.4					+ 0.4 / - 0.6				

CIE Pub.117, 70.15 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -9.2)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: huxuanhong
Test Date: 10 April 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:

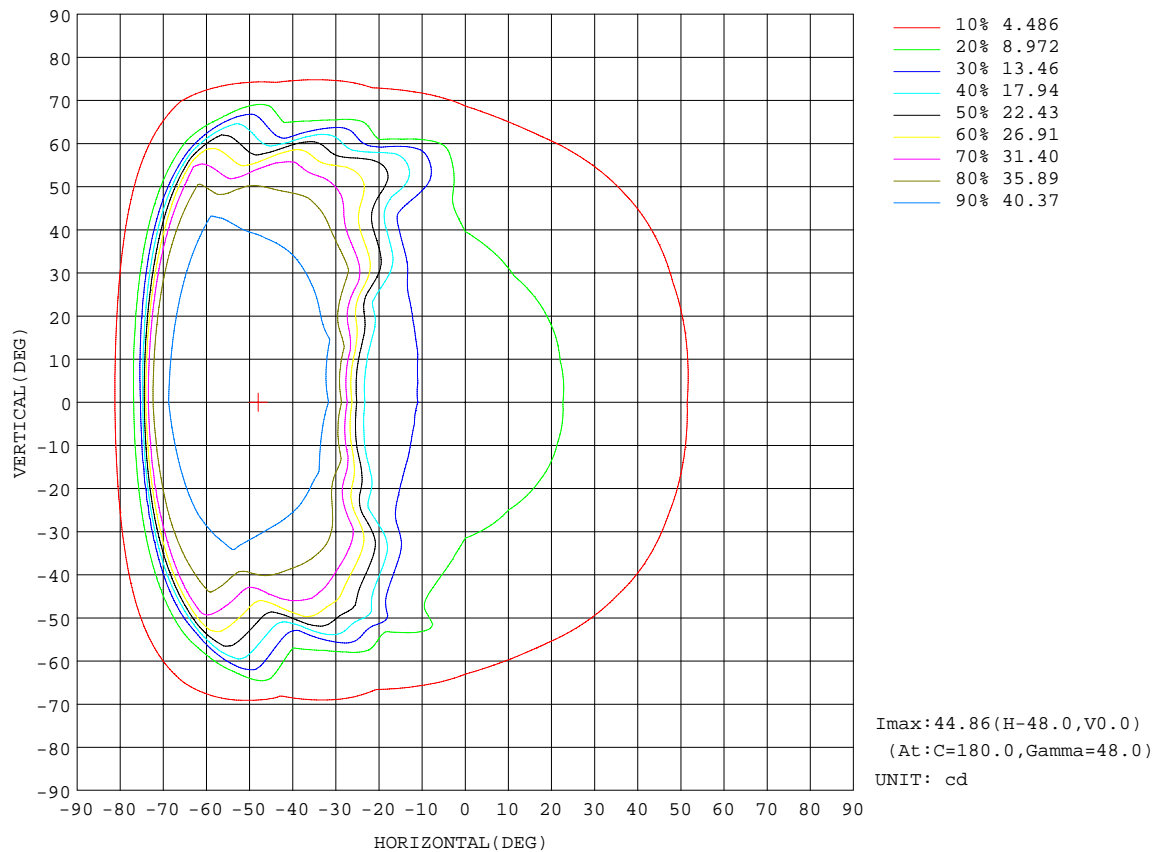
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	49	35	27	48	35	27	46	35	27	20
0.80	59	46	37	58	45	37	56	44	37	29
1.00	69	56	47	67	55	47	65	57	46	38
1.25	77	64	56	75	64	56	72	62	55	46
1.50	82	71	63	80	70	62	77	68	61	52
2.00	91	81	73	89	79	72	85	77	71	62
2.50	95	86	79	93	85	78	89	82	77	67
3.00	99	91	85	97	90	84	93	87	82	73
4.00	104	98	92	102	96	91	97	92	88	79
5.00	107	101	97	104	99	95	100	96	92	82
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:huxuanhong
Test Date:10 April 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:

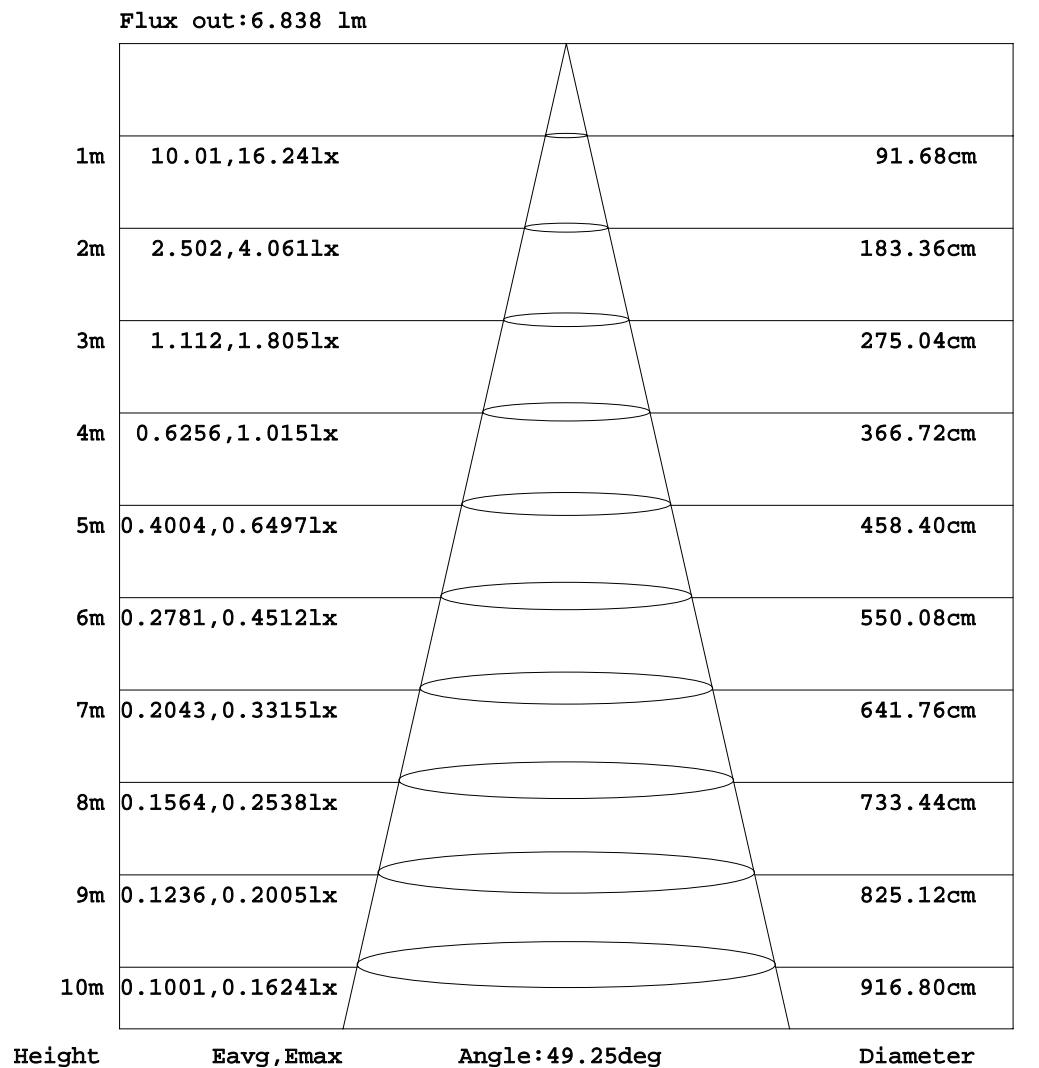


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: huxuanhong
 Test Date: 10 April 2020

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:

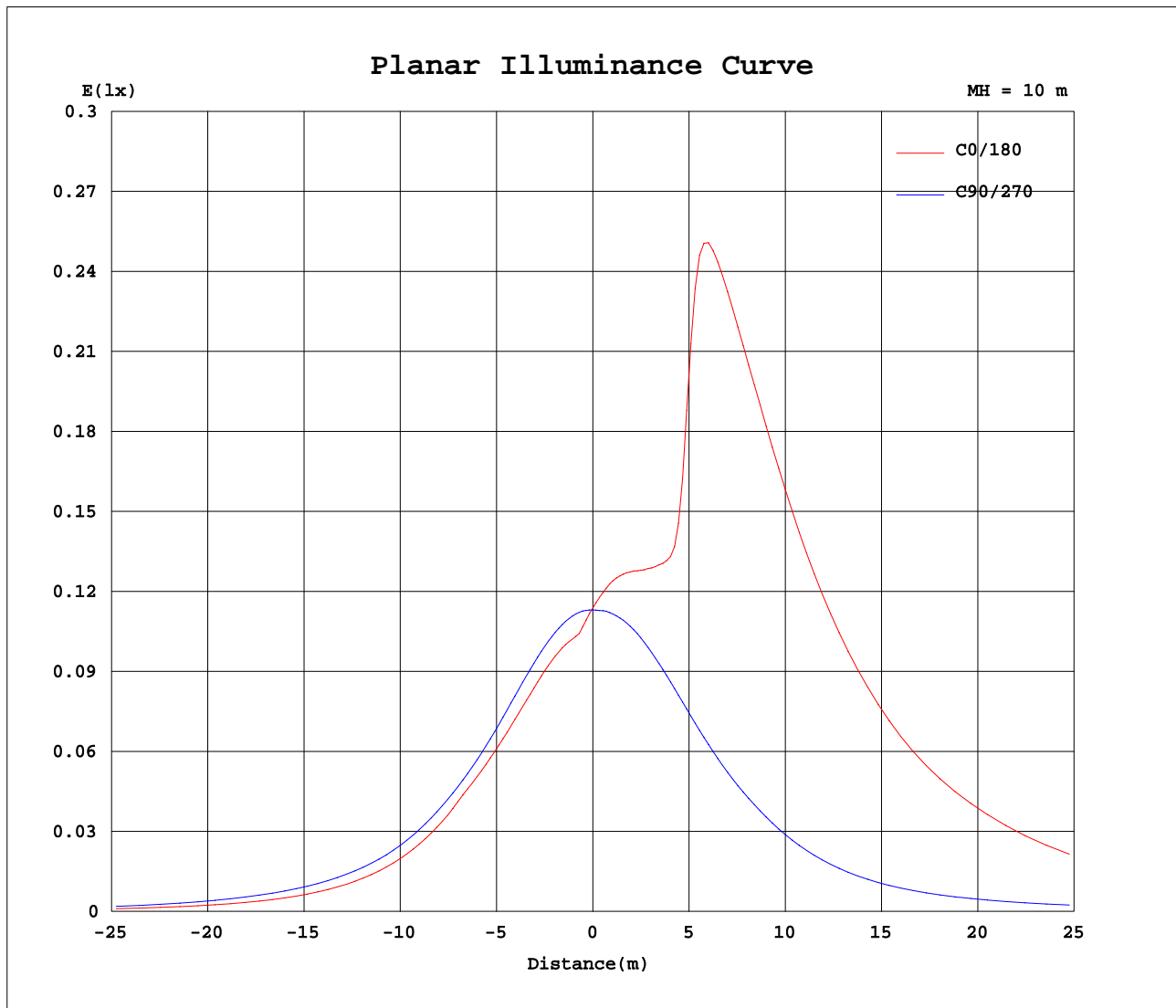


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360 DEG
 C Interval: 22.5 DEG
 Test Speed: HIGH
 Temperature: 25.3 DEG
 Operators: huxuanhong
 Test Date: 10 April 2020

γ Range: 0 - 180 DEG
 γ Interval: 1.0 DEG
 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: 10 April 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(°)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
γ (°)	0	11.4	11.4	11.3	11.3	11.3	11.3	11.3	11.4	11.4	11.3	11.3	11.3	11.3	11.3	11.3			
5	10.4	10.4	10.5	10.9	11.3	11.7	12.0	12.3	12.4	12.3	12.1	11.7	11.3	11.0	10.5	10.4			
10	10.2	10.2	10.3	10.3	11.1	12.0	12.6	13.0	13.3	13.2	12.8	12.2	11.3	10.5	10.3	10.2			
15	9.79	9.84	9.96	10.1	10.8	12.0	13.1	13.8	14.2	14.0	13.4	12.4	11.2	10.3	10.1	9.85			
20	9.26	9.34	9.51	9.67	10.4	12.0	13.5	15.0	15.7	15.3	14.0	12.6	10.9	9.98	9.70	9.38			
25	8.70	8.78	8.95	9.18	9.78	11.8	14.2	17.4	21.8	18.2	14.9	12.6	10.6	9.59	9.22	8.85			
30	8.13	8.20	8.34	8.61	9.16	11.5	15.4	32.6	38.6	34.6	16.6	12.5	10.0	9.10	8.66	8.30			
35	7.50	7.62	7.71	7.98	8.52	11.3	23.3	39.5	42.3	40.7	27.3	12.4	9.50	8.53	8.04	7.73			
40	6.54	6.70	7.05	7.31	7.81	11.0	33.2	41.2	43.9	42.4	35.9	12.6	8.92	7.90	7.42	6.92			
45	5.61	5.78	6.21	6.58	7.01	10.7	34.5	41.9	44.7	43.2	37.3	13.2	8.16	7.22	6.75	6.01			
50	4.73	4.89	5.30	5.81	6.27	11.6	33.7	41.8	44.8	43.4	37.5	18.1	7.29	6.50	5.88	5.14			
55	3.90	4.03	4.41	4.99	5.57	9.39	31.5	41.3	44.6	43.1	36.5	22.7	6.40	5.72	5.00	4.29			
60	3.14	3.24	3.56	4.13	4.94	6.48	23.5	40.5	43.8	42.4	34.5	17.7	5.60	4.91	4.14	3.49			
65	2.43	2.51	2.77	3.29	4.19	5.26	9.16	38.7	42.8	41.6	30.6	7.26	4.99	4.08	3.31	2.75			
70	1.80	1.84	2.03	2.47	3.28	4.10	6.57	34.2	39.3	38.6	10.5	5.65	4.28	3.26	2.54	2.08			
75	1.24	1.25	1.37	1.68	2.29	3.00	4.06	9.51	14.8	30.7	6.69	4.25	3.37	2.44	1.83	1.46			
80	0.78	0.74	0.76	0.92	1.28	1.77	2.29	4.35	5.64	6.25	3.74	2.97	2.34	1.64	1.17	0.92			
85	0.33	0.29	0.22	0.22	0.34	0.55	0.87	1.32	1.24	2.11	1.86	1.64	1.27	0.85	0.56	0.44			
90	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.27	0.40	0.36	0.25	0.08	0.00	0.00			
95	0.07	0.09	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			
100	0.13	0.16	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03		
105	0.23	0.25	0.10	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.09		
110	0.30	0.28	0.15	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.14		
115	0.34	0.31	0.21	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.19		
120	0.36	0.31	0.22	0.12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.22		
125	0.39	0.30	0.22	0.12	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.12	0.22		
130	0.39	0.29	0.23	0.11	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.12	0.23		
135	0.36	0.27	0.21	0.09	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.12	0.20		
140	0.31	0.23	0.16	0.08	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.11	0.18		
145	0.26	0.20	0.14	0.07	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.10	0.17		
150	0.16	0.11	0.11	0.07	0.05	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.10	0.14		
155	0.11	0.10	0.10	0.06	0.04	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.08	0.12		
160	0.10	0.07	0.09	0.05	0.04	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.07	0.11		
165	0.08	0.06	0.06	0.05	0.04	0.02	0.00	0.02	0.01	0.00	0.01	0.00	0.00	0.02	0.05	0.05	0.10		
170	0.08	0.05	0.06	0.03	0.04	0.02	0.00	0.02	0.01	0.00	0.02	0.00	0.00	0.02	0.05	0.05	0.08		
175	0.06	0.04	0.04	0.02	0.04	0.03	0.02	0.03	0.02	0.00	0.02	0.01	0.02	0.04	0.03	0.06			
180	0.03	0.02	0.03	0.02	0.03	0.03	0.02	0.03	0.02	0.01	0.02	0.02	0.02	0.03	0.03	0.04			

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:huxuanhong

Test Date:10 April 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: