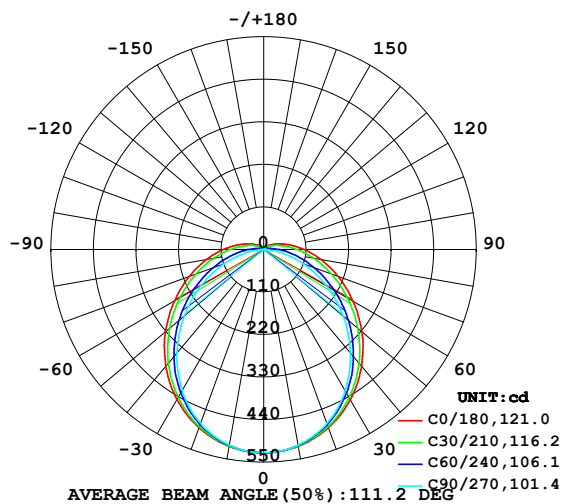


## LUMINAIRE PHOTOMETRIC TEST REPORT

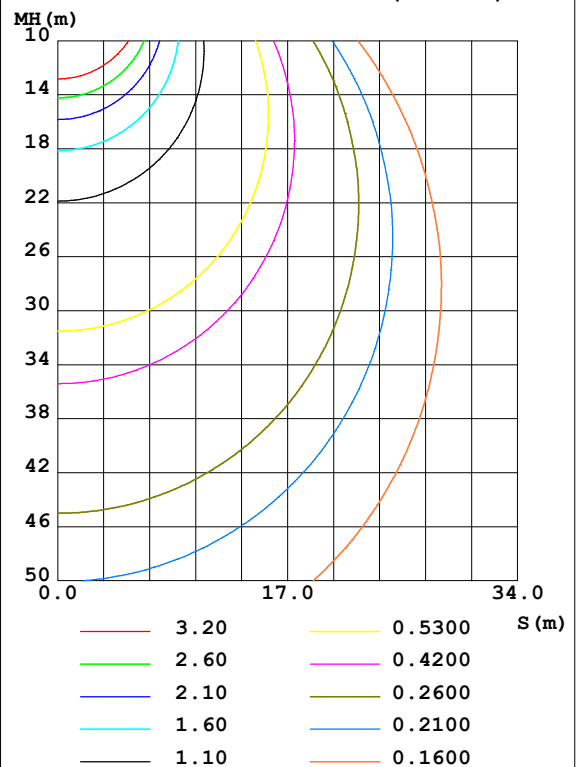
Test:U:230.5V I:0.0465A P:9.956W PF:0.9290 Freq:49.99Hz Lamp Flux:1691.28x1 lm		
NAME: T602-9W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 169.88 lm/W			
MODEL		I <sub>max</sub> (cd)	525.8	S/MH (C0/180)	1.27
NOMINAL POWER (W)	9	LOR (%)	100.0	S/MH (C90/270)	1.20
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	1691.3	η UP, DN (C0-180)	3.5, 46.5
NOMINAL FLUX (lm)	1691.28	CIE CLASS	DIRECT	η UP, DN (C180-360)	3.5, 46.5
LAMPS INSIDE	1	η up (%)	7.1	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	92.9	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2020-06-01

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 53.0%  
 Test Distance: 10.380m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	516.6	515.0	514.0	515.0	516.6	515.0	514.0	515.0	0- 10	49.69	49.69	2.94,2.94
20	490.6	484.3	478.5	484.3	490.6	484.3	478.5	484.3	10- 20	141.7	191.4	11.3,11.3
30	448.3	435.5	421.6	435.5	448.3	435.5	421.6	435.5	20- 30	212.8	404.2	23.9,23.9
40	393.9	373.0	348.9	373.0	393.9	373.0	348.9	373.0	30- 40	253.3	657.5	38.9,38.9
50	331.5	302.5	268.7	302.5	331.5	302.5	268.7	302.5	40- 50	260.3	917.8	54.3,54.3
60	266.2	231.2	187.4	231.2	266.2	231.2	187.4	231.2	50- 60	237.2	1155	68.3,68.3
70	205.1	164.9	109.6	164.9	205.1	164.9	109.6	164.9	60- 70	192.7	1348	79.7,79.7
80	150.2	108.0	40.43	108.0	150.2	108.0	40.43	108.0	70- 80	138.1	1486	87.9,87.9
90	104.5	64.71	0.7965	64.71	104.5	64.71	0.7965	64.71	80- 90	86.17	1572	92.9,92.9
100	68.93	36.35	1.110	36.35	68.93	36.35	1.110	36.35	90-100	50.45	1622	95.9,95.9
110	43.48	20.07	1.634	20.07	43.48	20.07	1.634	20.07	100-110	29.23	1652	97.7,97.7
120	26.45	11.52	2.184	11.52	26.45	11.52	2.184	11.52	110-120	16.59	1668	98.6,98.6
130	15.93	7.637	2.741	7.637	15.93	7.637	2.741	7.637	120-130	9.463	1678	99.2,99.2
140	9.743	6.109	3.337	6.109	9.743	6.109	3.337	6.109	130-140	5.656	1683	99.5,99.5
150	7.027	5.352	3.847	5.352	7.027	5.352	3.847	5.352	140-150	3.671	1687	99.8,99.8
160	5.645	4.903	4.283	4.903	5.645	4.903	4.283	4.903	150-160	2.393	1689	99.9,99.9
170	4.709	4.746	4.558	4.746	4.709	4.746	4.558	4.746	160-170	1.372	1691	100,100
180	4.753	4.738	4.752	4.738	4.753	4.738	4.752	4.738	170-180	0.4512	1691	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 788.78 lm

%lum = 46.6%

%lamp = 46.6%

Conical surface Flux(120deg): 1155 lm

%lum = 68.3%

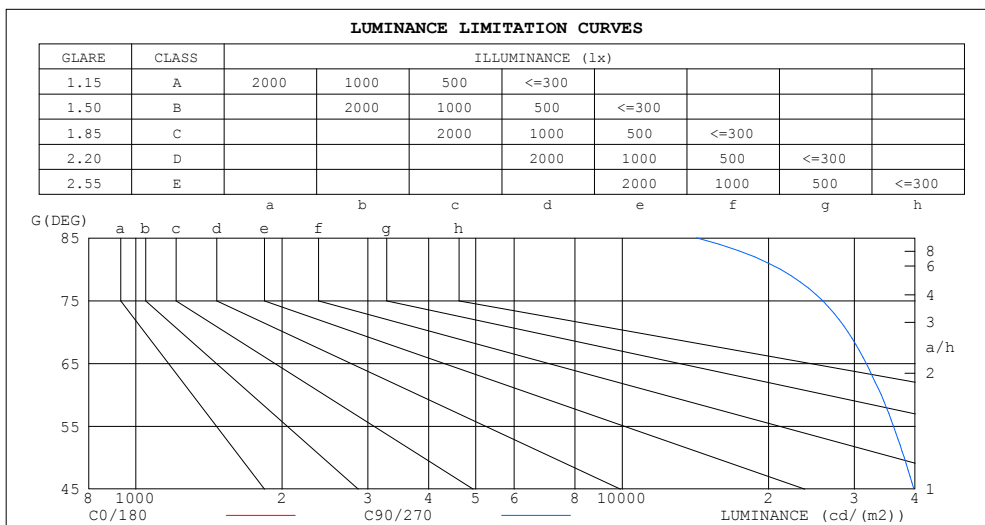
%lamp = 68.3%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2020-06-01

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:53.0%  
 Test Distance:10.380m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:230.5V I:0.0465A P:9.956W PF:0.9290 Freq:49.99Hz Lamp Flux:1691.28x1 lm		
NAME: T602-9W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	131674	14228
80	78752	21169
75	62112	25817
70	54579	29142
65	50645	31751
60	48456	34075
55	47420	36105
50	46949	38004
45	46820	39770

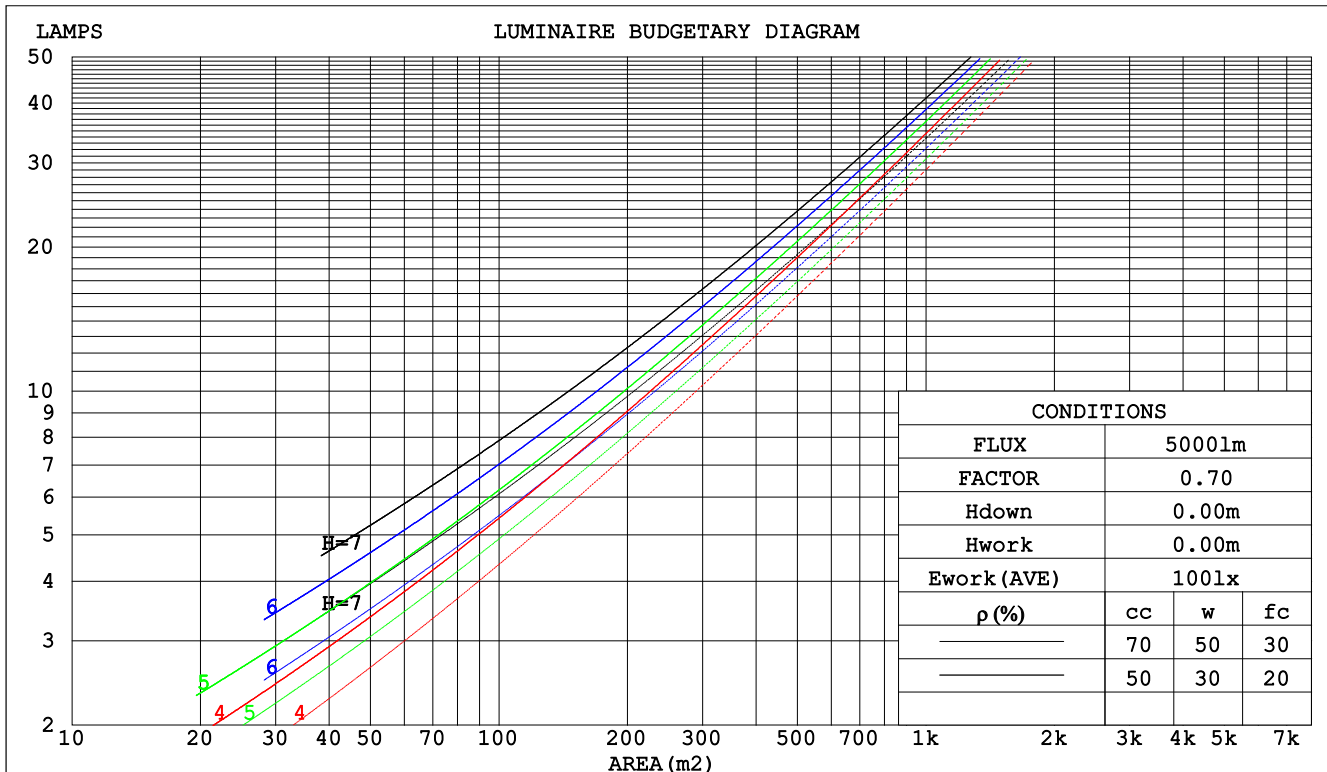
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QC  
Test Date:2020-06-01

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:53.0%  
Test Distance:10.380m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.5V I:0.0465A P:9.956W PF:0.9290 Freq:49.99Hz Lamp Flux:1691.28x1 lm		
NAME: T602-9W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
p <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
p <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.17	1.17	1.17	1.14	1.14	1.14	1.07	1.07	1.07	1.01	1.01	1.01	.96	.96	.96	.93
1.0	1.00	.95	.91	.97	.93	.89	.92	.88	.85	.86	.84	.81	.82	.79	.77	.75
2.0	.87	.79	.73	.84	.77	.72	.79	.74	.69	.75	.70	.66	.71	.67	.64	.61
3.0	.76	.67	.60	.74	.66	.59	.70	.63	.57	.66	.60	.56	.62	.58	.54	.51
4.0	.67	.58	.51	.65	.57	.50	.62	.55	.49	.59	.52	.47	.56	.50	.46	.43
5.0	.60	.51	.44	.58	.50	.43	.55	.48	.42	.53	.46	.41	.50	.44	.40	.38
6.0	.54	.45	.38	.52	.44	.38	.50	.42	.37	.48	.41	.36	.45	.40	.35	.33
7.0	.49	.40	.34	.48	.39	.33	.45	.38	.33	.43	.37	.32	.41	.36	.31	.29
8.0	.44	.36	.30	.43	.35	.30	.42	.34	.29	.40	.33	.28	.38	.32	.28	.26
9.0	.41	.32	.27	.40	.32	.27	.38	.31	.26	.37	.30	.26	.35	.29	.25	.23
10.0	.38	.30	.24	.37	.29	.24	.35	.28	.24	.34	.28	.23	.33	.27	.23	.21



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2020-06-01

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:53.0%  
 Test Distance:10.380m [K=1.0000]  
 Remarks:

# WEC AND CCEC

Test:U:230.5V I:0.0465A P:9.956W PF:0.9290 Freq:49.99Hz Lamp Flux:1691.28x1 lm		
NAME: T602-9W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.348	.198	.063	.339	.193	.061	.322	.184	.059	.305	.176	.057	.291	.168	.054	
2.0	.312	.171	.052	.303	.167	.051	.288	.160	.050	.273	.153	.048	.260	.147	.046	
3.0	.282	.150	.045	.274	.147	.044	.260	.141	.043	.247	.136	.042	.235	.130	.040	
4.0	.256	.133	.039	.250	.131	.039	.237	.126	.038	.226	.121	.037	.215	.117	.036	
5.0	.235	.120	.035	.229	.118	.034	.218	.113	.033	.207	.109	.033	.198	.106	.032	
6.0	.217	.109	.031	.211	.107	.031	.201	.103	.030	.192	.100	.029	.183	.096	.029	
7.0	.201	.099	.028	.196	.098	.028	.187	.094	.027	.178	.091	.027	.170	.088	.026	
8.0	.187	.091	.026	.183	.090	.025	.174	.087	.025	.166	.084	.024	.159	.082	.024	
9.0	.175	.085	.024	.171	.083	.023	.163	.081	.023	.156	.078	.022	.149	.076	.022	
10.0	.164	.079	.022	.160	.077	.022	.153	.075	.021	.147	.073	.021	.141	.071	.020	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.244	.244	.244	.209	.209	.209	.142	.142	.142	.082	.082	.082	.026	.026	.026	
1.0	.237	.210	.185	.203	.180	.160	.139	.124	.110	.080	.072	.064	.026	.023	.021	
2.0	.229	.186	.150	.196	.160	.130	.135	.111	.091	.078	.065	.053	.025	.021	.017	
3.0	.222	.169	.127	.190	.146	.111	.130	.101	.078	.075	.059	.046	.024	.019	.015	
4.0	.214	.156	.112	.183	.135	.098	.126	.094	.069	.073	.055	.041	.023	.018	.013	
5.0	.206	.146	.102	.177	.126	.089	.122	.088	.062	.071	.052	.037	.023	.017	.012	
6.0	.199	.138	.094	.171	.119	.082	.118	.084	.058	.068	.049	.034	.022	.016	.011	
7.0	.192	.131	.089	.165	.114	.077	.114	.080	.055	.066	.047	.033	.021	.015	.011	
8.0	.185	.125	.084	.159	.109	.073	.110	.076	.052	.064	.045	.031	.021	.015	.010	
9.0	.179	.120	.081	.154	.105	.071	.107	.073	.050	.062	.043	.030	.020	.014	.010	
10.0	.173	.116	.078	.149	.101	.068	.104	.071	.049	.060	.042	.029	.020	.014	.010	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QC  
Test Date:2020-06-01

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:53.0%  
Test Distance:10.380m [K=1.0000]  
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.5V I:0.0465A P:9.956W PF:0.9290 Freq:49.99Hz Lamp Flux:1691.28x1 lm										
NAME: T602-9W					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: ERVAN					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	25.6	24.5	25.9	26.3	22.7	24.2	23.1	24.5	24.8
3H	26.3	27.7	26.7	28.0	28.4	24.0	25.3	24.4	25.7	26.1
4H	27.4	28.7	27.9	29.1	29.5	24.5	25.8	24.9	26.1	26.5
6H	28.7	29.9	29.1	30.3	30.7	24.8	26.0	25.2	26.4	26.8
8H	29.3	30.5	29.8	30.9	31.3	24.9	26.0	25.3	26.5	26.9
12H	30.1	31.2	30.5	31.6	32.1	24.9	26.0	25.4	26.4	26.9
4H 2H	24.7	26.0	25.1	26.3	26.7	23.6	24.8	24.0	25.2	25.6
3H	27.1	28.2	27.5	28.6	29.1	25.1	26.2	25.5	26.6	27.1
4H	28.4	29.4	28.9	29.9	30.4	25.7	26.8	26.2	27.2	27.7
6H	29.8	30.8	30.3	31.2	31.7	26.2	27.1	26.7	27.6	28.1
8H	30.6	31.5	31.1	32.0	32.5	26.3	27.2	26.8	27.7	28.2
12H	31.5	32.3	32.1	32.8	33.4	26.4	27.2	26.9	27.7	28.3
8H 4H	28.7	29.5	29.2	30.0	30.6	26.4	27.3	27.0	27.8	28.3
6H	30.4	31.1	30.9	31.6	32.2	27.2	27.9	27.7	28.4	29.0
8H	31.4	32.0	31.9	32.6	33.2	27.5	28.1	28.0	28.7	29.3
12H	32.5	33.1	33.1	33.7	34.3	27.7	28.2	28.2	28.8	29.4
12H 4H	28.7	29.5	29.2	30.0	30.5	26.7	27.5	27.2	28.0	28.5
6H	30.5	31.1	31.0	31.7	32.3	27.6	28.2	28.1	28.8	29.4
8H	31.6	32.1	32.2	32.7	33.3	28.0	28.5	28.6	29.1	29.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 1691 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 1.8$ )

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QC  
Test Date:2020-06-01

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:53.0%  
Test Distance:10.380m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:230.5V I:0.0465A P:9.956W PF:0.9290 Freq:49.99Hz Lamp Flux:1691.28x1 lm		
NAME: T602-9W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

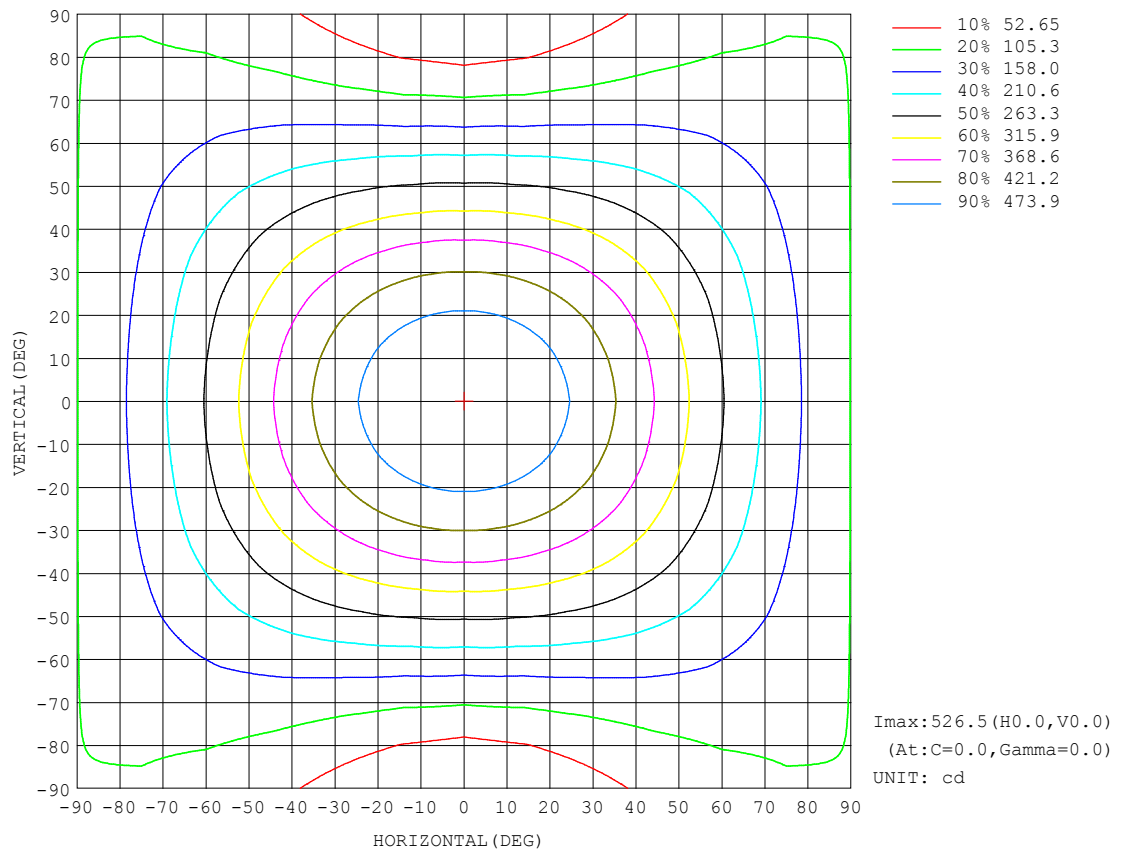
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	54	42	35	53	42	35	52	41	35	28
0.80	64	51	44	62	51	44	60	50	43	36
1.00	72	60	52	70	59	52	67	60	51	43
1.25	78	67	59	77	66	59	73	64	58	50
1.50	83	73	65	81	71	64	78	69	63	54
2.00	90	81	73	88	79	72	84	76	70	61
2.50	94	85	79	92	84	77	87	80	75	65
3.00	98	90	83	95	88	82	90	84	79	69
4.00	102	95	90	99	93	88	94	89	85	74
5.00	105	99	94	102	96	92	96	92	88	77
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: QC  
 Test Date: 2020-06-01

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 53.0%  
 Test Distance: 10.380m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

Test:U:230.5V I:0.0465A P:9.956W PF:0.9290 Freq:49.99Hz Lamp Flux:1691.28x1 lm		
NAME: T602-9W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:



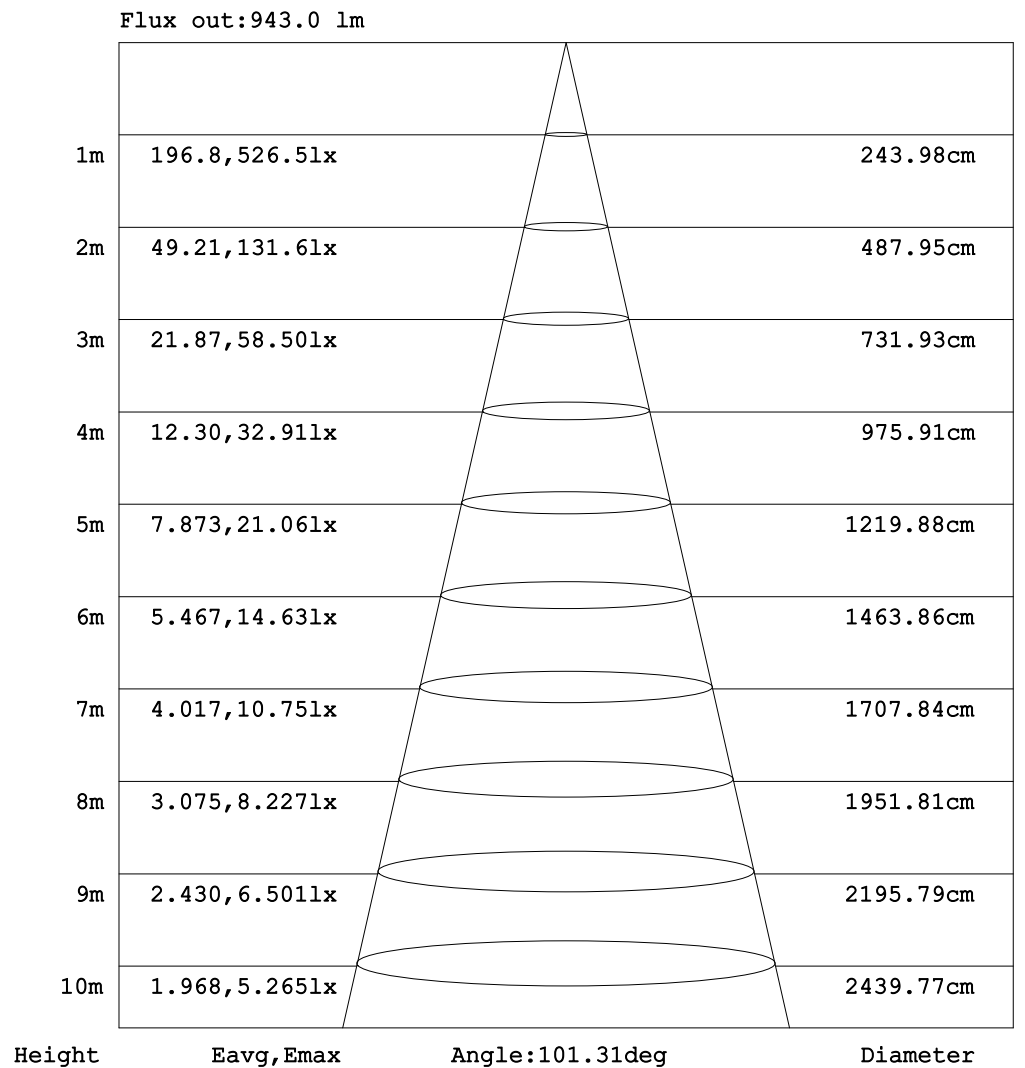
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QC  
Test Date:2020-06-01

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:53.0%  
Test Distance:10.380m [K=1.0000]  
Remarks:



## AAI Figure

Test:U:230.5V I:0.0465A P:9.956W PF:0.9290 Freq:49.99Hz Lamp Flux:1691.28x1 lm		
NAME: T602-9W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:



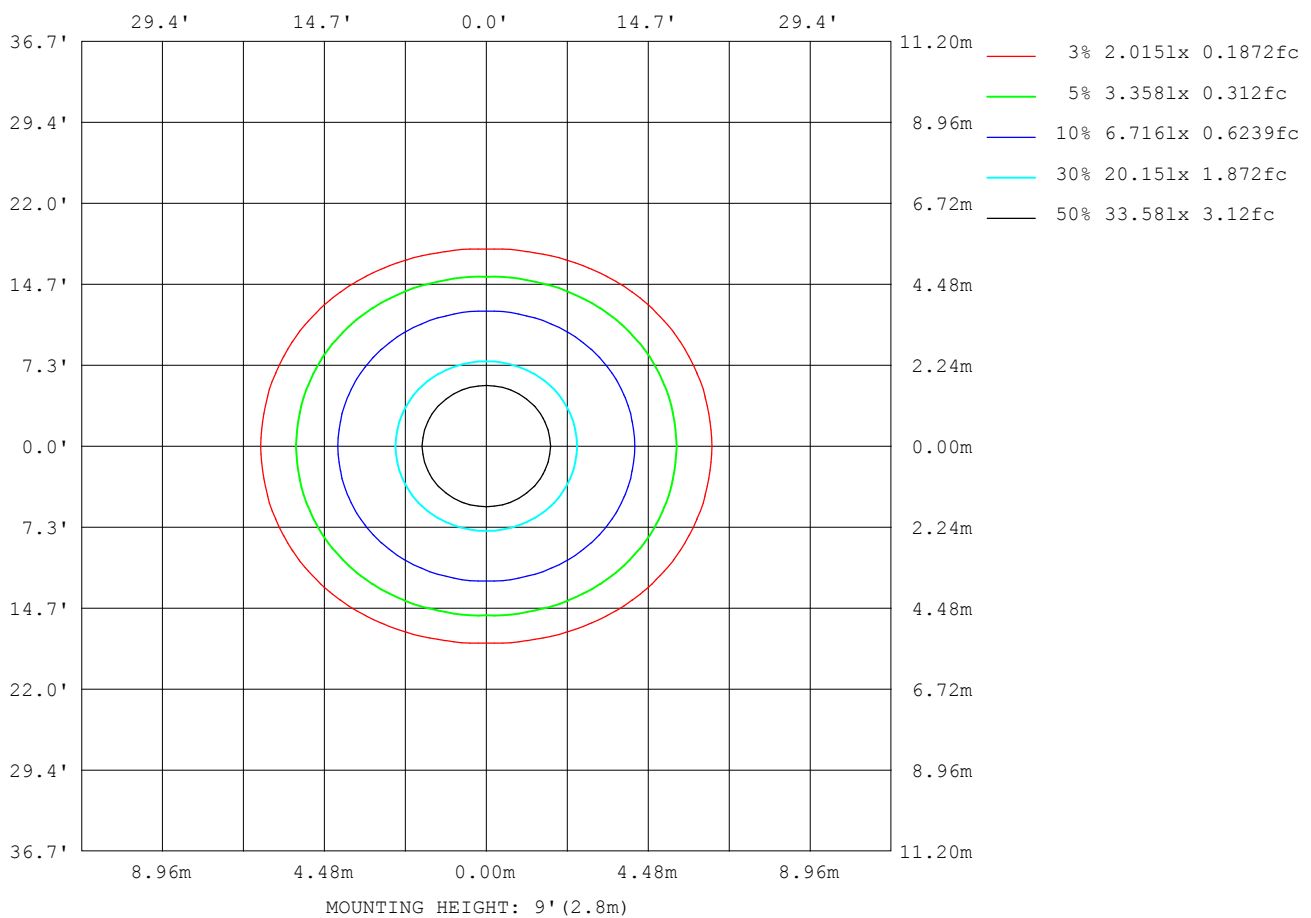
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2020-06-01

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:53.0%  
 Test Distance:10.380m [K=1.0000]  
 Remarks:

# ISOLUX DIAGRAM

Test:U:230.5V I:0.0465A P:9.956W PF:0.9290 Freq:49.99Hz Lamp Flux:1691.28x1 lm		
NAME: T602-9W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2020-06-01

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:53.0%  
 Test Distance:10.380m [K=1.0000]  
 Remarks:

## LED Avg.L Report

Test:U:230.5V I:0.0465A P:9.956W PF:0.9290 Freq:49.99Hz Lamp Flux:1691.28x1 lm		
NAME: T602-9W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

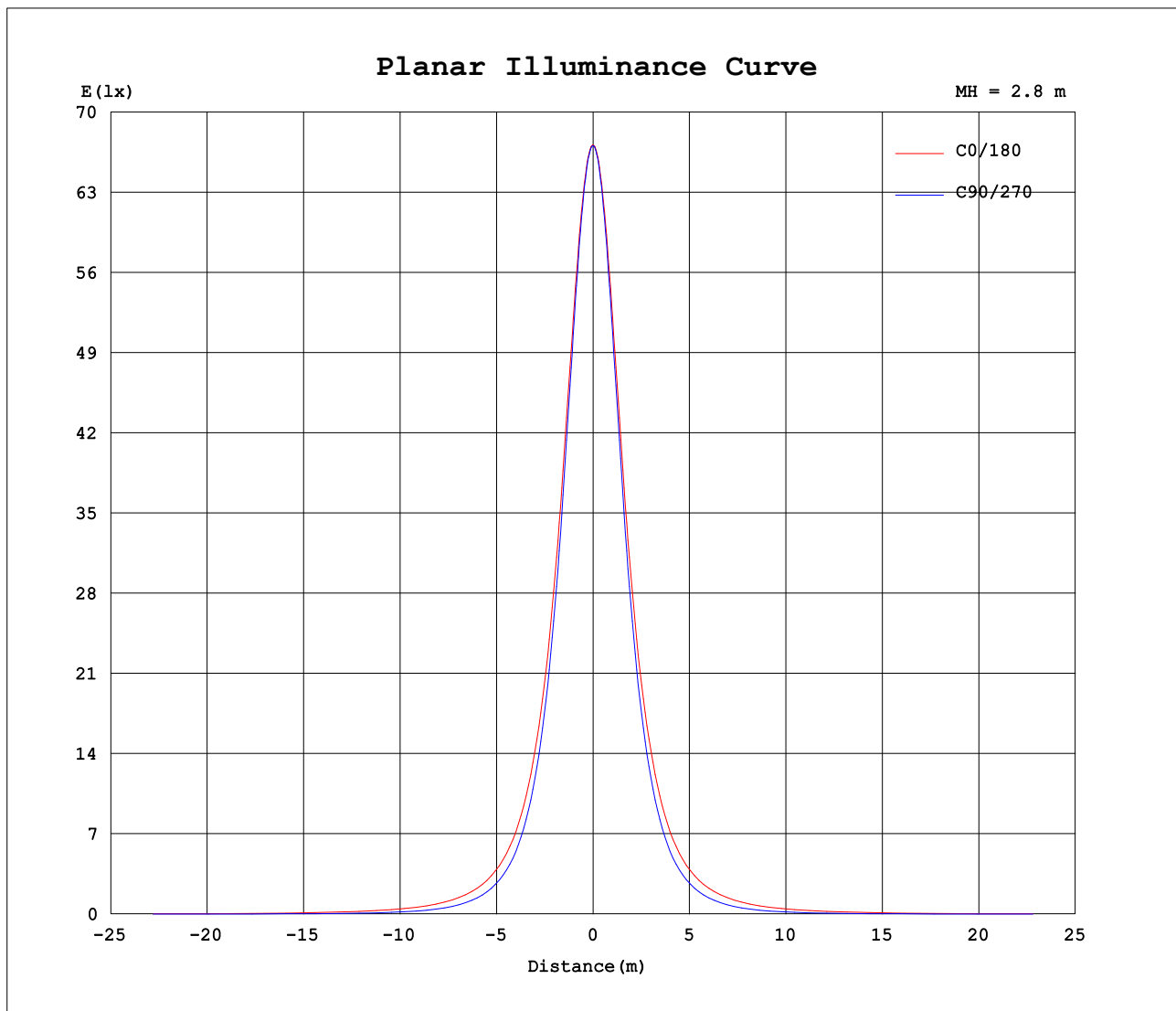
AvgL	cd/m2
L_0~180 (65) av	50578
L_0~180 (75) av	62030
L_0~180 (85) av	131500
L_90~270 (65) av	31750
L_90~270 (75) av	25817
L_90~270 (85) av	14227
L_45 (65) av	42390
L_45 (75) av	47464
L_45 (85) av	88156

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2020-06-01

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:53.0%  
 Test Distance:10.380m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QC  
Test Date: 2020-06-01

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 53.0%  
Test Distance: 10.380m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.5V I:0.0465A P:9.956W PF:0.9290 Freq:49.99Hz Lamp Flux:1691.28x1 lm		
NAME: T602-9W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	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	526	526	526	526	526	526	526	526	526	526	526	526	526	526	526	526	526	526	526
5	523	523	523	523	523	523	523	523	523	523	523	523	523	523	523	523	523	523	523
10	517	516	516	515	515	514	514	514	515	515	516	516	517	516	516	515	515	514	514
15	506	505	504	502	501	499	499	499	501	502	504	505	506	505	504	502	501	499	499
20	491	490	488	484	481	479	479	479	481	484	488	490	491	490	488	484	481	479	479
25	472	470	467	462	458	454	453	454	458	462	467	470	472	470	467	462	458	454	453
30	448	446	442	436	429	423	422	423	429	436	442	446	448	446	442	436	429	423	422
35	423	420	414	406	397	389	386	389	397	406	414	420	423	420	414	406	397	389	386
40	394	391	384	373	361	352	349	352	361	373	384	391	394	391	384	373	361	352	349
45	364	360	351	338	324	314	309	314	324	338	351	360	364	360	351	338	324	314	309
50	332	328	317	303	286	274	269	274	286	303	317	328	332	328	317	303	286	274	269
55	299	295	284	267	248	233	228	233	248	267	284	295	299	295	284	267	248	233	228
60	266	262	250	231	210	194	187	194	210	231	250	262	266	262	250	231	210	194	187
65	235	231	218	197	174	155	148	155	174	197	218	231	235	231	218	197	174	155	148
70	205	201	187	165	139	118	110	118	139	165	187	201	205	201	187	165	139	118	110
75	177	172	158	135	108	83.8	73.5	83.8	108	135	158	172	177	172	158	135	108	83.8	73.5
80	150	146	131	108	80.1	53.4	40.4	53.4	80.1	108	131	146	150	146	131	108	80.1	53.4	40.4
85	126	121	107	84.5	56.6	29.2	13.6	29.2	56.6	84.5	107	121	126	121	107	84.5	56.6	29.2	13.6
90	104	99.9	86.4	64.7	38.5	13.8	0.80	13.8	38.5	64.7	86.4	99.9	104	99.9	86.4	64.7	38.5	13.8	0.80
95	85.4	81.2	68.6	48.8	25.7	6.63	0.90	6.63	25.7	48.8	68.6	81.2	85.4	81.2	68.6	48.8	25.7	6.63	0.90
100	68.9	65.1	53.7	36.3	17.3	3.97	1.11	3.97	17.3	36.3	53.7	65.1	68.9	65.1	53.7	36.3	17.3	3.97	1.11
105	55.1	51.6	41.7	27.0	12.0	2.96	1.35	2.96	12.0	27.0	41.7	51.6	55.1	51.6	41.7	27.0	12.0	2.96	1.35
110	43.5	40.5	32.2	20.1	8.82	2.73	1.63	2.73	8.82	20.1	32.2	40.5	43.5	40.5	32.2	20.1	8.82	2.73	1.63
115	34.0	31.6	24.6	15.2	6.81	2.72	1.90	2.72	6.81	15.2	24.6	31.6	34.0	31.6	24.6	15.2	6.81	2.72	1.90
120	26.4	24.4	18.9	11.5	5.69	2.87	2.18	2.87	5.69	11.5	18.9	24.4	26.4	24.4	18.9	11.5	5.69	2.87	2.18
125	20.5	18.8	14.5	9.27	5.13	3.05	2.46	3.05	5.13	9.27	14.5	18.8	20.5	18.8	14.5	9.27	5.13	3.05	2.46
130	15.9	14.6	11.4	7.64	4.78	3.25	2.74	3.25	4.78	7.64	11.4	14.6	15.9	14.6	11.4	7.64	4.78	3.25	2.74
135	12.3	11.4	9.23	6.69	4.69	3.40	3.04	3.40	4.69	6.69	9.23	11.4	12.3	11.4	9.23	6.69	4.69	3.40	3.04
140	9.74	9.35	7.92	6.11	4.61	3.65	3.34	3.65	4.61	6.11	7.92	9.35	9.74	9.35	7.92	6.11	4.61	3.65	3.34
145	8.22	7.85	6.87	5.65	4.60	3.88	3.59	3.88	4.60	5.65	6.87	7.85	8.22	7.85	6.87	5.65	4.60	3.88	3.59
150	7.03	6.77	6.18	5.35	4.50	4.09	3.85	4.09	4.50	5.35	6.18	6.77	7.03	6.77	6.18	5.35	4.50	4.09	3.85
155	6.21	6.04	5.70	5.16	4.58	4.29	4.08	4.29	4.58	5.16	5.70	6.04	6.21	6.04	5.70	5.16	4.58	4.29	4.08
160	5.64	5.52	5.33	4.90	4.65	4.46	4.28	4.46	4.65	4.90	5.33	5.52	5.64	5.52	5.33	4.90	4.65	4.46	4.28
165	5.20	5.06	4.98	4.81	4.68	4.56	4.43	4.56	4.68	4.81	4.98	5.06	5.20	5.06	4.98	4.81	4.68	4.56	4.43
170	4.71	4.82	4.82	4.75	4.70	4.63	4.56	4.63	4.70	4.75	4.82	4.82	4.71	4.82	4.82	4.75	4.70	4.63	4.56
175	4.71	4.69	4.76	4.70	4.72	4.80	4.68	4.80	4.72	4.70	4.76	4.69	4.71	4.69	4.76	4.70	4.72	4.80	4.68
180	4.75	4.68	4.72	4.74	4.80	4.86	4.75	4.86	4.80	4.74	4.72	4.68	4.75	4.68	4.72	4.74	4.80	4.86	4.75

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QC  
Test Date:2020-06-01

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:53.0%  
Test Distance:10.380m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.5V I:0.0465A P:9.956W PF:0.9290 Freq:49.99Hz Lamp Flux:1691.28x1 lm		
NAME: T602-9W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	526	526	526	526	526														
5	523	523	523	523	523														
10	514	515	515	516	516														
15	499	501	502	504	505														
20	479	481	484	488	490														
25	454	458	462	467	470														
30	423	429	436	442	446														
35	389	397	406	414	420														
40	352	361	373	384	391														
45	314	324	338	351	360														
50	274	286	303	317	328														
55	233	248	267	284	295														
60	194	210	231	250	262														
65	155	174	197	218	231														
70	118	139	165	187	201														
75	83.8	108	135	158	172														
80	53.4	80.1	108	131	146														
85	29.2	56.6	84.5	107	121														
90	13.8	38.5	64.7	86.4	99.9														
95	6.63	25.7	48.8	68.6	81.2														
100	3.97	17.3	36.3	53.7	65.1														
105	2.96	12.0	27.0	41.7	51.6														
110	2.73	8.82	20.1	32.2	40.5														
115	2.72	6.81	15.2	24.6	31.6														
120	2.87	5.69	11.5	18.9	24.4														
125	3.05	5.13	9.27	14.5	18.8														
130	3.25	4.78	7.64	11.4	14.6														
135	3.40	4.69	6.69	9.23	11.4														
140	3.65	4.61	6.11	7.92	9.35														
145	3.88	4.60	5.65	6.87	7.85														
150	4.09	4.50	5.35	6.18	6.77														
155	4.29	4.58	5.16	5.70	6.04														
160	4.46	4.65	4.90	5.33	5.52														
165	4.56	4.68	4.81	4.98	5.06														
170	4.63	4.70	4.75	4.82	4.82														
175	4.80	4.72	4.70	4.76	4.69														
180	4.86	4.80	4.74	4.72	4.68														

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2020-06-01

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:53.0%  
 Test Distance:10.380m [K=1.0000]  
 Remarks:

Photometric Data Table [cd]

G/C	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0	135.0
0.0	525.8	525.8	525.8	525.8	525.8	525.8	525.8	525.8	525.8	525.8
3.0	525.0	524.9	524.9	524.7	525.1	524.7	524.8	524.7	525.1	524.7
6.0	522.7	522.6	522.4	521.9	521.6	521.6	521.6	521.6	521.6	521.9
9.0	518.6	518.3	517.7	517.3	516.6	516.3	516.2	516.3	516.6	517.3
12.0	512.8	512.4	511.6	510.5	509.9	508.9	508.6	508.9	509.9	510.5
15.0	505.8	505.2	504.1	502.2	500.6	499.3	499.2	499.3	500.6	502.2
18.0	497.3	496.4	494.6	492.0	489.8	488.0	487.3	488.0	489.8	492.0
21.0	487.0	486.3	484.0	480.4	477.1	474.7	473.9	474.7	477.1	480.4
24.0	475.7	474.0	471.3	466.8	462.7	459.5	458.2	459.5	462.7	466.8
27.0	462.5	460.7	457.1	451.6	446.2	442.4	440.9	442.4	446.2	451.6
30.0	448.3	446.3	442.0	435.5	428.7	423.4	421.6	423.4	428.7	435.5
33.0	433.2	430.8	425.7	417.9	409.9	403.2	400.6	403.2	409.9	417.9
36.0	416.9	414.3	408.3	399.3	390.0	382.0	379.2	382.0	390.0	399.3
39.0	399.7	396.8	390.1	379.8	368.5	359.9	356.6	359.9	368.5	379.8
42.0	381.9	378.9	371.0	358.9	346.5	337.1	333.3	337.1	346.5	358.9
45.0	363.7	360.1	351.4	338.0	324.4	313.5	309.3	313.5	324.4	338.0
48.0	345.2	341.0	331.0	316.9	301.6	289.7	285.0	289.7	301.6	316.9
51.0	324.7	321.1	310.8	295.5	278.7	265.6	260.5	265.6	278.7	295.5
54.0	305.3	301.5	290.6	273.9	255.9	241.5	236.0	241.5	255.9	273.9
57.0	286.0	282.1	270.4	252.6	233.0	217.5	211.7	217.5	233.0	252.6
60.0	266.2	262.5	250.0	231.2	210.3	193.6	187.4	193.6	210.3	231.2
63.0	247.4	243.4	230.4	210.5	188.3	170.4	163.2	170.4	188.3	210.5
66.0	229.0	224.9	211.4	190.5	167.1	147.4	139.9	147.4	167.1	190.5
69.0	210.9	206.6	192.7	171.2	146.3	125.4	117.1	125.4	146.3	171.2
72.0	193.5	189.0	174.9	152.7	126.5	104.1	94.89	104.1	126.5	152.7
75.0	176.6	172.2	157.8	135.1	107.9	83.84	73.50	83.84	107.9	135.1
78.0	160.5	156.0	141.6	118.3	90.70	64.99	53.14	64.99	90.70	118.3
81.0	145.1	140.6	126.1	103.0	74.97	47.95	34.37	47.95	74.97	103.0
84.0	130.6	126.2	111.7	88.91	60.90	33.42	18.21	33.42	60.90	88.91
87.0	117.2	112.4	98.49	76.14	48.76	21.92	6.183	21.92	48.76	76.14
90.0	104.5	99.92	86.36	64.71	38.51	13.81	0.7965	13.81	38.51	64.71
93.0	92.74	88.34	75.33	54.70	30.22	8.734	0.8315	8.734	30.22	54.70
96.0	81.91	77.75	65.38	46.02	23.69	5.861	0.9416	5.861	23.69	46.02
99.0	72.04	68.12	56.47	38.57	18.68	4.304	1.077	4.304	18.68	38.57
102.0	63.10	59.42	48.61	32.29	14.89	3.412	1.209	3.412	14.89	32.29
105.0	55.07	51.64	41.72	27.01	12.05	2.962	1.351	2.962	12.05	27.01
108.0	47.83	44.71	35.71	22.65	9.903	2.778	1.521	2.778	9.903	22.65
111.0	41.42	38.58	30.52	18.90	8.330	2.714	1.677	2.714	8.330	18.90
114.0	35.73	33.21	25.96	16.02	7.090	2.688	1.850	2.688	7.090	16.02
117.0	30.76	28.50	22.08	13.69	6.271	2.774	2.016	2.774	6.271	13.69
120.0	26.45	24.37	18.89	11.52	5.686	2.868	2.184	2.868	5.686	11.52
123.0	22.70	20.90	16.11	10.15	5.307	2.978	2.349	2.978	5.307	10.15
126.0	19.49	17.86	13.86	8.862	5.034	3.105	2.516	3.105	5.034	8.862
129.0	16.75	15.35	12.03	7.892	4.820	3.224	2.689	3.224	4.820	7.892
132.0	14.41	13.25	10.40	7.240	4.749	3.285	2.866	3.285	4.749	7.240
135.0	12.31	11.39	9.232	6.686	4.685	3.398	3.041	3.398	4.685	6.686
138.0	10.71	10.05	8.400	6.305	4.616	3.550	3.228	3.550	4.616	6.305
141.0	9.388	9.037	7.699	5.968	4.613	3.695	3.393	3.695	4.613	5.968
144.0	8.506	8.129	7.066	5.718	4.602	3.829	3.551	3.829	4.602	5.718
147.0	7.675	7.368	6.565	5.520	4.614	3.961	3.693	3.961	4.614	5.520
150.0	7.027	6.768	6.184	5.352	4.497	4.087	3.847	4.087	4.497	5.352
153.0	6.505	6.303	5.872	5.222	4.539	4.211	3.990	4.211	4.539	5.222
156.0	6.076	5.925	5.621	5.106	4.600	4.332	4.129	4.332	4.600	5.106
159.0	5.743	5.613	5.404	4.914	4.646	4.435	4.250	4.435	4.646	4.914
162.0	5.475	5.353	5.124	4.870	4.673	4.517	4.352	4.517	4.673	4.870
165.0	5.198	5.055	4.985	4.813	4.680	4.559	4.426	4.559	4.680	4.813
168.0	4.741	4.892	4.880	4.771	4.693	4.603	4.503	4.603	4.693	4.771
171.0	4.716	4.793	4.814	4.747	4.719	4.653	4.587	4.653	4.719	4.747
174.0	4.709	4.707	4.772	4.753	4.713	4.766	4.657	4.766	4.713	4.753
177.0	4.676	4.604	4.668	4.683	4.759	4.823	4.711	4.823	4.759	4.683
180.0	4.753	4.685	4.717	4.738	4.805	4.865	4.752	4.865	4.805	4.738
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	525.8	525.8	525.8	525.8	525.8	525.8	525.8	525.8	525.8	525.8
3.0	524.9	524.9	525.0	524.9	524.9	524.7	525.1	524.7	524.8	524.7
6.0	522.4	522.6	522.7	522.6	522.4	521.9	521.6	521.6	521.6	521.6
9.0	517.7	518.3	518.6	518.3	517.7	517.3	516.6	516.3	516.2	516.3
12.0	511.6	512.4	512.8	512.4	511.6	510.5	509.9	508.9	508.6	508.9
15.0	504.1	505.2	505.8	505.2	504.1	502.2	500.6	499.3	499.2	499.3
18.0	494.6	496.4	497.3	496.4	494.6	492.0	489.8	488.0	487.3	488.0
21.0	484.0	486.3	487.0	486.3	484.0	480.4	477.1	474.7	473.9	474.7
24.0	471.3	474.0	475.7	474.0	471.3	466.8	462.7	459.5	458.2	459.5
27.0	457.1	460.7	462.5	460.7	457.1	451.6	446.2	442.4	440.9	442.4
30.0	442.0	446.3	448.3	446.3	442.0	435.5	428.7	423.4	421.6	423.4

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2020-06-01

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 53.0%  
 Test Distance: 10.380m [K=1.0000]  
 Remarks:

Photometric Data Table [cd]

33.0	425.7	430.8	433.2	430.8	425.7	417.9	409.9	403.2	400.6	403.2
36.0	408.3	414.3	416.9	414.3	408.3	399.3	390.0	382.0	379.2	382.0
39.0	390.1	396.8	399.7	396.8	390.1	379.8	368.5	359.9	356.6	359.9
42.0	371.0	378.9	381.9	378.9	371.0	358.9	346.5	337.1	333.3	337.1
45.0	351.4	360.1	363.7	360.1	351.4	338.0	324.4	313.5	309.3	313.5
48.0	331.0	341.0	345.2	341.0	331.0	316.9	301.6	289.7	285.0	289.7
51.0	310.8	321.1	324.7	321.1	310.8	295.5	278.7	265.6	260.5	265.6
54.0	290.6	301.5	305.3	301.5	290.6	273.9	255.9	241.5	236.0	241.5
57.0	270.4	282.1	286.0	282.1	270.4	252.6	233.0	217.5	211.7	217.5
60.0	250.0	262.5	266.2	262.5	250.0	231.2	210.3	193.6	187.4	193.6
63.0	230.4	243.4	247.4	243.4	230.4	210.5	188.3	170.4	163.2	170.4
66.0	211.4	224.9	229.0	224.9	211.4	190.5	167.1	147.4	139.9	147.4
69.0	192.7	206.6	210.9	206.6	192.7	171.2	146.3	125.4	117.1	125.4
72.0	174.9	189.0	193.5	189.0	174.9	152.7	126.5	104.1	94.89	104.1
75.0	157.8	172.2	176.6	172.2	157.8	135.1	107.9	83.84	73.50	83.84
78.0	141.6	156.0	160.5	156.0	141.6	118.3	90.70	64.99	53.14	64.99
81.0	126.1	140.6	145.1	140.6	126.1	103.0	74.97	47.95	34.37	47.95
84.0	111.7	126.2	130.6	126.2	111.7	88.91	60.90	33.42	18.21	33.42
87.0	98.49	112.4	117.2	112.4	98.49	76.14	48.76	21.92	6.183	21.92
90.0	86.36	99.92	104.5	99.92	86.36	64.71	38.51	13.81	0.7965	13.81
93.0	75.33	88.34	92.74	88.34	75.33	54.70	30.22	8.734	0.8315	8.734
96.0	65.38	77.75	81.91	77.75	65.38	46.02	23.69	5.861	0.9416	5.861
99.0	56.47	68.12	72.04	68.12	56.47	38.57	18.68	4.304	1.077	4.304
102.0	48.61	59.42	63.10	59.42	48.61	32.29	14.89	3.412	1.209	3.412
105.0	41.72	51.64	55.07	51.64	41.72	27.01	12.05	2.962	1.351	2.962
108.0	35.71	44.71	47.83	44.71	35.71	22.65	9.903	2.778	1.521	2.778
111.0	30.52	38.58	41.42	38.58	30.52	18.90	8.330	2.714	1.677	2.714
114.0	25.96	33.21	35.73	33.21	25.96	16.02	7.090	2.688	1.850	2.688
117.0	22.08	28.50	30.76	28.50	22.08	13.69	6.271	2.774	2.016	2.774
120.0	18.89	24.37	26.45	24.37	18.89	11.52	5.686	2.868	2.184	2.868
123.0	16.11	20.90	22.70	20.90	16.11	10.15	5.307	2.978	2.349	2.978
126.0	13.86	17.86	19.49	17.86	13.86	8.862	5.034	3.105	2.516	3.105
129.0	12.03	15.35	16.75	15.35	12.03	7.892	4.820	3.224	2.689	3.224
132.0	10.40	13.25	14.41	13.25	10.40	7.240	4.749	3.285	2.866	3.285
135.0	9.232	11.39	12.31	11.39	9.232	6.686	4.685	3.398	3.041	3.398
138.0	8.400	10.05	10.71	10.05	8.400	6.305	4.616	3.550	3.228	3.550
141.0	7.699	9.037	9.388	9.037	7.699	5.968	4.613	3.695	3.393	3.695
144.0	7.066	8.129	8.506	8.129	7.066	5.718	4.602	3.829	3.551	3.829
147.0	6.565	7.368	7.675	7.368	6.565	5.520	4.614	3.961	3.693	3.961
150.0	6.184	6.768	7.027	6.768	6.184	5.352	4.497	4.087	3.847	4.087
153.0	5.872	6.303	6.505	6.303	5.872	5.222	4.539	4.211	3.990	4.211
156.0	5.621	5.925	6.076	5.925	5.621	5.106	4.600	4.332	4.129	4.332
159.0	5.404	5.613	5.743	5.613	5.404	4.914	4.646	4.435	4.250	4.435
162.0	5.124	5.353	5.475	5.353	5.124	4.870	4.673	4.517	4.352	4.517
165.0	4.985	5.055	5.198	5.055	4.985	4.813	4.680	4.559	4.426	4.559
168.0	4.880	4.892	4.741	4.892	4.880	4.771	4.693	4.603	4.503	4.603
171.0	4.814	4.793	4.716	4.793	4.814	4.747	4.719	4.653	4.587	4.653
174.0	4.772	4.707	4.709	4.707	4.772	4.753	4.713	4.766	4.657	4.766
177.0	4.668	4.604	4.676	4.604	4.668	4.683	4.759	4.823	4.711	4.823
180.0	4.717	4.685	4.753	4.685	4.717	4.738	4.805	4.865	4.752	4.865
G/C	300.0	315.0	330.0	345.0						
0.0	525.8	525.8	525.8	525.8						
3.0	525.1	524.7	524.9	524.9						
6.0	521.6	521.9	522.4	522.6						
9.0	516.6	517.3	517.7	518.3						
12.0	509.9	510.5	511.6	512.4						
15.0	500.6	502.2	504.1	505.2						
18.0	489.8	492.0	494.6	496.4						
21.0	477.1	480.4	484.0	486.3						
24.0	462.7	466.8	471.3	474.0						
27.0	446.2	451.6	457.1	460.7						
30.0	428.7	435.5	442.0	446.3						
33.0	409.9	417.9	425.7	430.8						
36.0	390.0	399.3	408.3	414.3						
39.0	368.5	379.8	390.1	396.8						
42.0	346.5	358.9	371.0	378.9						
45.0	324.4	338.0	351.4	360.1						
48.0	301.6	316.9	331.0	341.0						
51.0	278.7	295.5	310.8	321.1						
54.0	255.9	273.9	290.6	301.5						
57.0	233.0	252.6	270.4	282.1						
60.0	210.3	231.2	250.0	262.5						
63.0	188.3	210.5	230.4	243.4						
66.0	167.1	190.5	211.4	224.9						

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2020-06-01

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 53.0%  
 Test Distance: 10.380m [K=1.0000]  
 Remarks:



## Photometric Data Table [cd]

69.0	146.3	171.2	192.7	206.6
72.0	126.5	152.7	174.9	189.0
75.0	107.9	135.1	157.8	172.2
78.0	90.70	118.3	141.6	156.0
81.0	74.97	103.0	126.1	140.6
84.0	60.90	88.91	111.7	126.2
87.0	48.76	76.14	98.49	112.4
90.0	38.51	64.71	86.36	99.92
93.0	30.22	54.70	75.33	88.34
96.0	23.69	46.02	65.38	77.75
99.0	18.68	38.57	56.47	68.12
102.0	14.89	32.29	48.61	59.42
105.0	12.05	27.01	41.72	51.64
108.0	9.903	22.65	35.71	44.71
111.0	8.330	18.90	30.52	38.58
114.0	7.090	16.02	25.96	33.21
117.0	6.271	13.69	22.08	28.50
120.0	5.686	11.52	18.89	24.37
123.0	5.307	10.15	16.11	20.90
126.0	5.034	8.862	13.86	17.86
129.0	4.820	7.892	12.03	15.35
132.0	4.749	7.240	10.40	13.25
135.0	4.685	6.686	9.232	11.39
138.0	4.616	6.305	8.400	10.05
141.0	4.613	5.968	7.699	9.037
144.0	4.602	5.718	7.066	8.129
147.0	4.614	5.520	6.565	7.368
150.0	4.497	5.352	6.184	6.768
153.0	4.539	5.222	5.872	6.303
156.0	4.600	5.106	5.621	5.925
159.0	4.646	4.914	5.404	5.613
162.0	4.673	4.870	5.124	5.353
165.0	4.680	4.813	4.985	5.055
168.0	4.693	4.771	4.880	4.892
171.0	4.719	4.747	4.814	4.793
174.0	4.713	4.753	4.772	4.707
177.0	4.759	4.683	4.668	4.604
180.0	4.805	4.738	4.717	4.685

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2020-06-01

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 53.0%  
 Test Distance: 10.380m [K=1.0000]  
 Remarks: