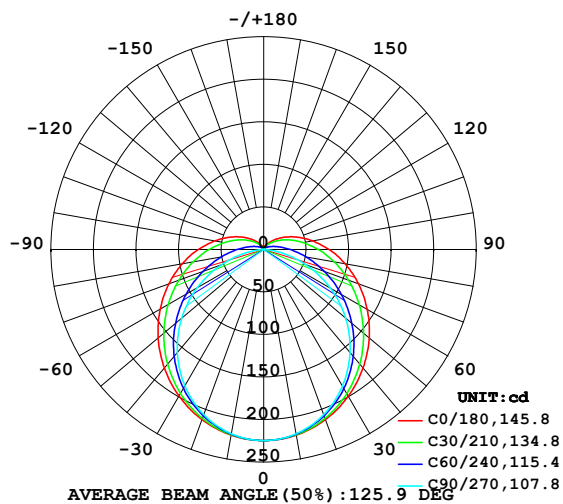


## LUMINAIRE PHOTOMETRIC TEST REPORT

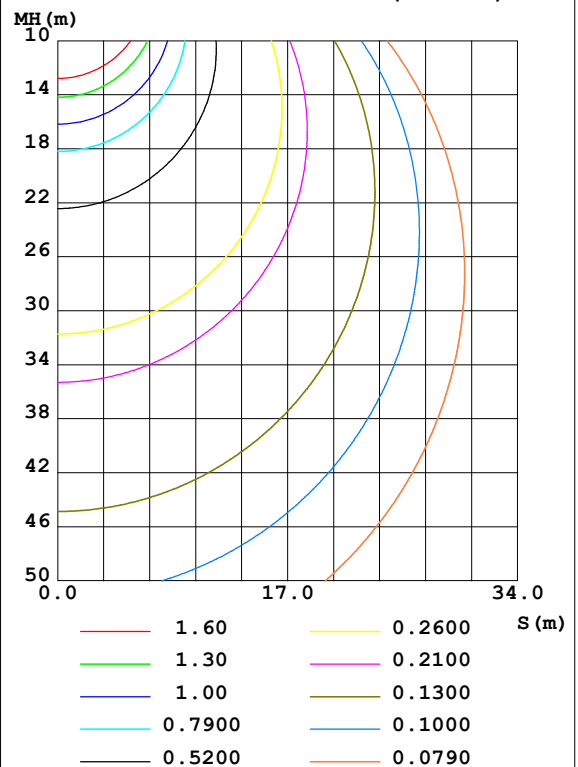
Test:U:230.4V I:0.0918A P:20.36W PF:0.9624 Freq:49.99Hz Lamp Flux:882.647x1 lm		
NAME: TI60LP-CC-20-0600K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: TUBI	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 43.36 lm/W			
MODEL		I <sub>max</sub> (cd)	224.6	S/MH (C0/180)	1.32
NOMINAL POWER (W)	20	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	882.65	η UP, DN (C0-180)	6.3, 43.7
NOMINAL FLUX (lm)	882.647	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	6.3, 43.7
LAMPS INSIDE	1	η up (%)	12.6	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	230	η down (%)	87.4	CIBSE SHR MAX	1.50

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: 2021-09-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 53.0%  
 Test Distance: 10.530m [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	221.6	220.8	220.0	220.8	221.6	220.8	220.0	220.8	0- 10	21.26	21.26	2.41,2.41
20	212.8	209.6	206.5	209.6	212.8	209.6	206.5	209.6	10- 20	61.01	82.27	9.32,9.32
30	199.2	192.1	185.3	192.1	199.2	192.1	185.3	192.1	20- 30	93.00	175.3	19.9,19.9
40	181.8	169.8	158.0	169.8	181.8	169.8	158.0	169.8	30- 40	113.8	289.0	32.7,32.7
50	162.0	144.6	125.8	144.6	162.0	144.6	125.8	144.6	40- 50	121.7	410.8	46.5,46.5
60	140.5	118.3	90.31	118.3	140.5	118.3	90.31	118.3	50- 60	117.3	528.1	59.8,59.8
70	118.7	92.71	53.01	92.71	118.7	92.71	53.01	92.71	60- 70	102.7	630.8	71.5,71.5
80	97.19	69.37	18.05	69.37	97.19	69.37	18.05	69.37	70- 80	81.57	712.3	80.7,80.7
90	76.93	49.83	0.4919	49.83	76.93	49.83	0.4919	49.83	80- 90	59.48	771.8	87.4,87.4
100	58.61	34.35	0.6798	34.35	58.61	34.35	0.6798	34.35	90-100	42.13	813.9	92.2,92.2
110	42.67	22.54	0.8917	22.54	42.67	22.54	0.8917	22.54	100-110	28.67	842.6	95.5,95.5
120	29.37	14.35	1.100	14.35	29.37	14.35	1.100	14.35	110-120	18.31	860.9	97.5,97.5
130	18.80	8.758	1.341	8.758	18.80	8.758	1.341	8.758	120-130	10.84	871.8	98.8,98.8
140	10.99	5.068	1.575	5.068	10.99	5.068	1.575	5.068	130-140	5.851	877.6	99.4,99.4
150	5.858	3.107	1.773	3.107	5.858	3.107	1.773	3.107	140-150	2.861	880.5	99.8,99.8
160	3.098	2.288	1.951	2.288	3.098	2.288	1.951	2.288	150-160	1.345	881.8	99.9,99.9
170	2.136	2.072	2.055	2.072	2.136	2.072	2.055	2.072	160-170	0.6286	882.4	100,100
180	2.120	2.094	2.107	2.094	2.120	2.094	2.107	2.094	170-180	0.1991	882.6	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 349.71 lm

%lum = 39.6%

%lamp = 39.6%

Conical surface Flux(120deg): 528.09 lm

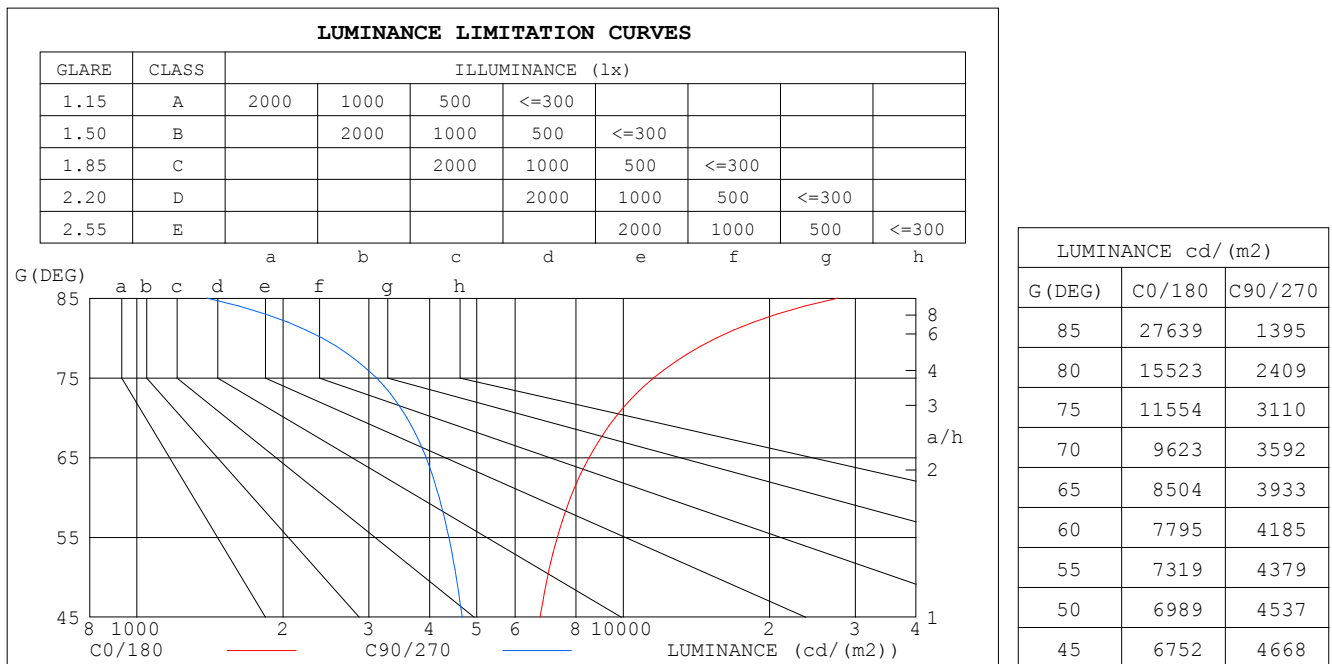
%lum = 59.8%

%lamp = 59.8%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2021-09-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:53.0%  
 Test Distance:10.530m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

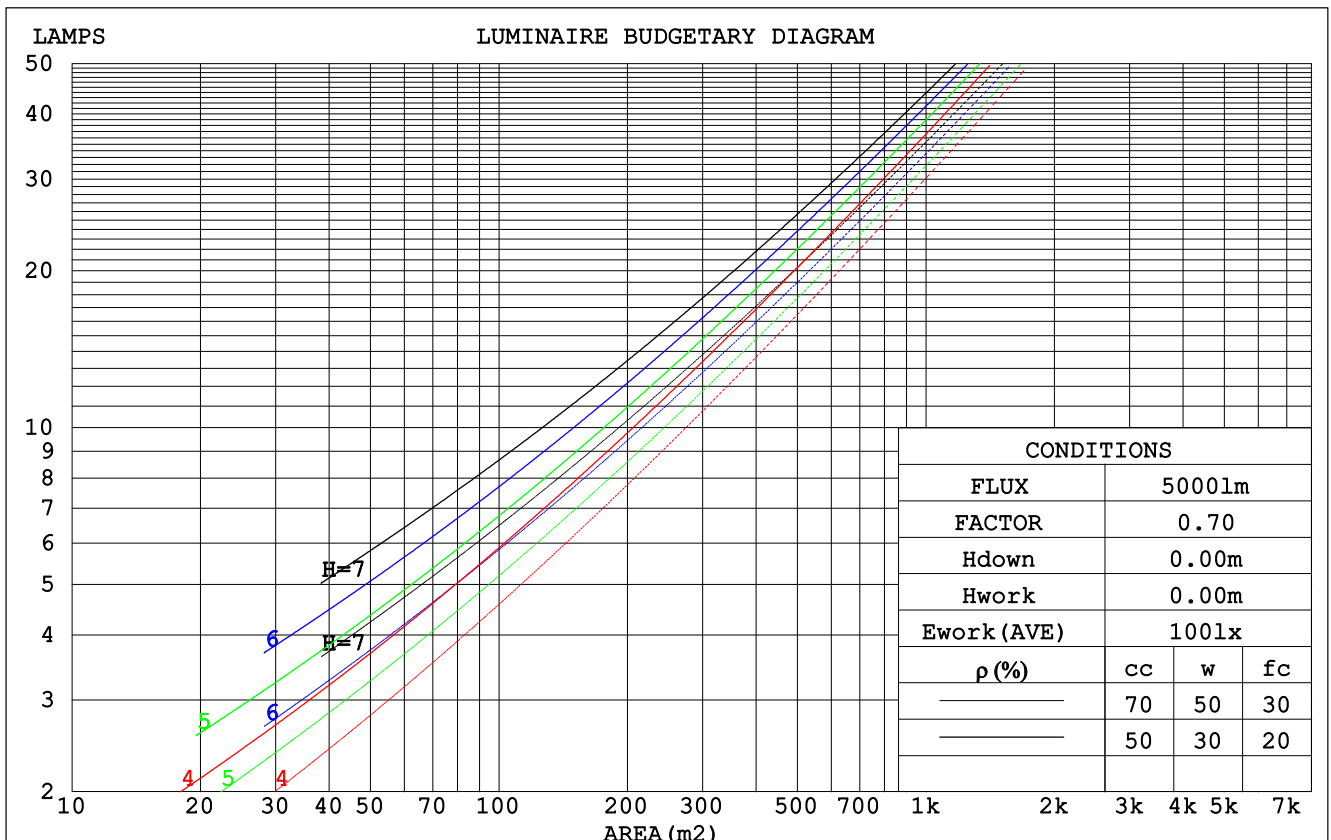


C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QC  
Test Date: 2021-09-17

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 53.0%  
Test Distance: 10.530m [K=1.0000]  
Remarks:

### CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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	1.16	1.16	1.16	1.12	1.12	1.12	1.04	1.04	1.04	.97	.97	.97	.91	.91	.91	.87
1.0	.97	.92	.88	.94	.89	.85	.87	.83	.80	.81	.78	.75	.76	.73	.71	.68
2.0	.84	.76	.69	.81	.74	.68	.75	.69	.64	.70	.65	.61	.65	.61	.58	.55
3.0	.73	.64	.57	.70	.62	.55	.65	.58	.53	.61	.55	.50	.57	.52	.48	.45
4.0	.64	.55	.47	.62	.53	.46	.58	.50	.44	.54	.48	.42	.50	.45	.41	.38
5.0	.57	.47	.40	.55	.46	.40	.51	.44	.38	.48	.42	.37	.45	.39	.35	.32
6.0	.51	.42	.35	.49	.41	.34	.46	.39	.33	.43	.37	.32	.41	.35	.31	.28
7.0	.46	.37	.31	.45	.36	.30	.42	.35	.29	.39	.33	.28	.37	.31	.27	.25
8.0	.42	.33	.27	.41	.33	.27	.38	.31	.26	.36	.30	.25	.34	.28	.24	.22
9.0	.38	.30	.24	.37	.29	.24	.35	.28	.23	.33	.27	.22	.31	.26	.22	.20
10.0	.35	.27	.22	.34	.27	.22	.33	.26	.21	.31	.25	.20	.29	.24	.20	.18



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2021-09-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 53.0%  
 Test Distance: 10.530m [K=1.0000]  
 Remarks:

WEC AND CCEC

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	.375	.213	.067	.363	.207	.066	.343	.197	.063	.324	.187	.060	.306	.178	.057	
2.0	.328	.180	.055	.318	.175	.054	.299	.166	.052	.282	.158	.050	.266	.150	.047	
3.0	.293	.156	.047	.284	.152	.046	.267	.145	.044	.251	.138	.042	.237	.131	.041	
4.0	.264	.137	.040	.256	.134	.040	.241	.128	.038	.227	.122	.037	.214	.116	.035	
5.0	.241	.123	.036	.234	.120	.035	.220	.115	.034	.207	.109	.033	.195	.104	.031	
6.0	.221	.111	.032	.215	.108	.031	.202	.104	.030	.191	.099	.029	.180	.095	.028	
7.0	.204	.101	.029	.198	.099	.028	.187	.095	.027	.176	.090	.026	.166	.086	.025	
8.0	.190	.093	.026	.184	.091	.026	.174	.087	.025	.164	.083	.024	.155	.080	.023	
9.0	.177	.086	.024	.172	.084	.024	.162	.080	.023	.154	.077	.022	.145	.074	.021	
10.0	.166	.079	.022	.161	.078	.022	.152	.075	.021	.144	.072	.020	.136	.069	.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	.286	.286	.286	.245	.245	.245	.167	.167	.167	.096	.096	.096	.031	.031	.031		
1.0	.281	.252	.226	.241	.216	.194	.165	.149	.134	.095	.086	.078	.030	.028	.025		
2.0	.274	.229	.191	.235	.197	.165	.161	.136	.115	.093	.079	.067	.030	.026	.022		
3.0	.266	.212	.169	.228	.183	.146	.157	.127	.103	.091	.074	.060	.029	.024	.020		
4.0	.259	.199	.154	.222	.172	.134	.153	.120	.094	.088	.070	.056	.028	.023	.018		
5.0	.251	.189	.144	.216	.164	.125	.148	.114	.088	.086	.067	.052	.028	.022	.017		
6.0	.243	.181	.137	.209	.157	.119	.144	.110	.084	.084	.065	.050	.027	.021	.017		
7.0	.236	.175	.131	.203	.151	.115	.140	.106	.081	.082	.063	.048	.026	.020	.016		
8.0	.230	.169	.127	.198	.147	.111	.137	.103	.079	.080	.061	.047	.026	.020	.016		
9.0	.223	.164	.124	.192	.142	.108	.133	.100	.077	.078	.059	.046	.025	.019	.015		
10.0	.218	.160	.122	.188	.139	.106	.130	.098	.075	.076	.058	.045	.025	.019	.015		

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QC  
Test Date:2021-09-17

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:53.0%  
Test Distance:10.530m [K=1.0000]  
Remarks:

UGR(Unified Glare Rating) Table

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	19.5	20.9	19.9	21.3	21.8	17.2	18.6	17.6	19.1	19.5
3H	22.1	23.4	22.5	23.8	24.3	18.6	19.9	19.1	20.4	20.9
4H	23.5	24.8	24.0	25.3	25.8	19.1	20.3	19.6	20.8	21.3
6H	25.1	26.3	25.7	26.8	27.4	19.4	20.6	19.9	21.1	21.6
8H	26.0	27.2	26.6	27.7	28.3	19.5	20.6	20.0	21.1	21.7
12H	27.1	28.2	27.6	28.7	29.3	19.5	20.6	20.0	21.1	21.7
4H 2H	19.9	21.2	20.4	21.7	22.2	18.3	19.5	18.7	20.0	20.5
3H	22.8	23.9	23.3	24.4	24.9	19.9	21.0	20.4	21.5	22.1
4H	24.4	25.4	24.9	25.9	26.5	20.6	21.6	21.2	22.2	22.8
6H	26.2	27.1	26.8	27.7	28.3	21.1	22.0	21.7	22.6	23.2
8H	27.2	28.1	27.8	28.6	29.3	21.2	22.1	21.8	22.7	23.3
12H	28.4	29.2	29.0	29.8	30.5	21.3	22.1	21.9	22.7	23.3
8H 4H	24.6	25.5	25.2	26.1	26.7	21.6	22.4	22.2	23.0	23.7
6H	26.7	27.4	27.4	28.1	28.8	22.5	23.2	23.1	23.8	24.5
8H	27.9	28.6	28.6	29.2	29.9	22.8	23.4	23.4	24.1	24.8
12H	29.4	29.9	30.0	30.6	31.3	23.0	23.6	23.7	24.2	25.0
12H 4H	24.7	25.4	25.3	26.0	26.7	21.9	22.7	22.5	23.3	24.0
6H	26.8	27.5	27.5	28.1	28.8	23.0	23.7	23.7	24.3	25.0
8H	28.1	28.7	28.8	29.3	30.1	23.5	24.1	24.2	24.8	25.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 882.6 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.4)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QC  
Test Date:2021-09-17

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:53.0%  
Test Distance:10.530m [K=1.0000]  
Remarks:

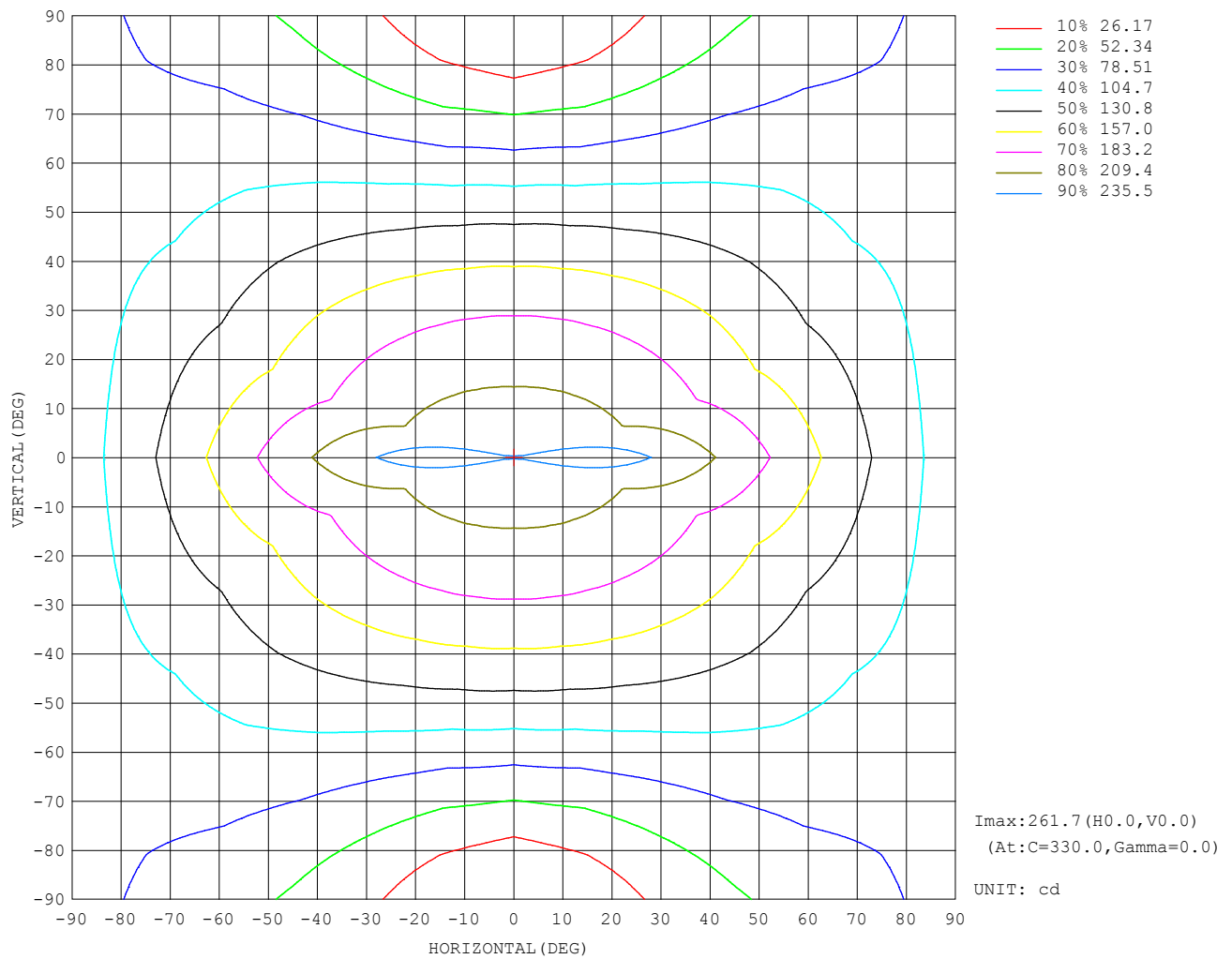
## UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	50	38	31	49	38	31	48	37	30	24
0.80	60	47	39	58	46	39	56	45	38	30
1.00	67	55	47	66	54	46	63	55	45	37
1.25	74	62	54	72	61	53	69	59	52	43
1.50	79	68	59	77	66	58	73	64	57	47
2.00	87	76	68	84	74	67	79	71	64	54
2.50	91	81	73	88	79	72	82	75	69	58
3.00	95	86	79	91	83	77	86	79	74	62
4.00	99	92	85	96	89	83	89	84	79	66
5.00	102	95	90	98	93	87	92	87	83	70
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: 2021-09-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 53.0%  
 Test Distance: 10.530m [K=1.0000]  
 Remarks:

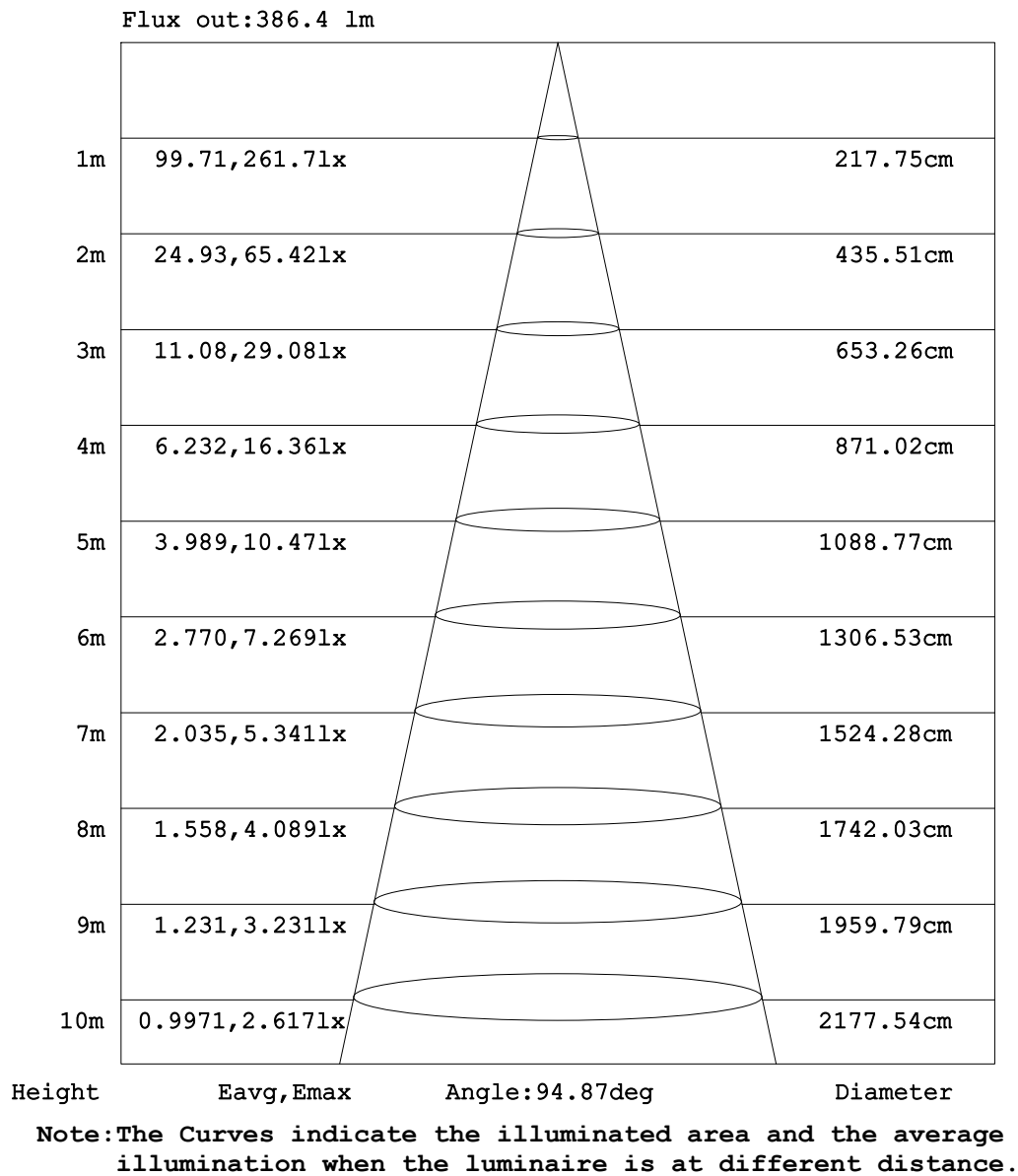
## ISOCANDELA DIAGRAM



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QC  
Test Date: 2021-09-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 53.0%  
Test Distance: 10.530m [K=1.0000]  
Remarks:

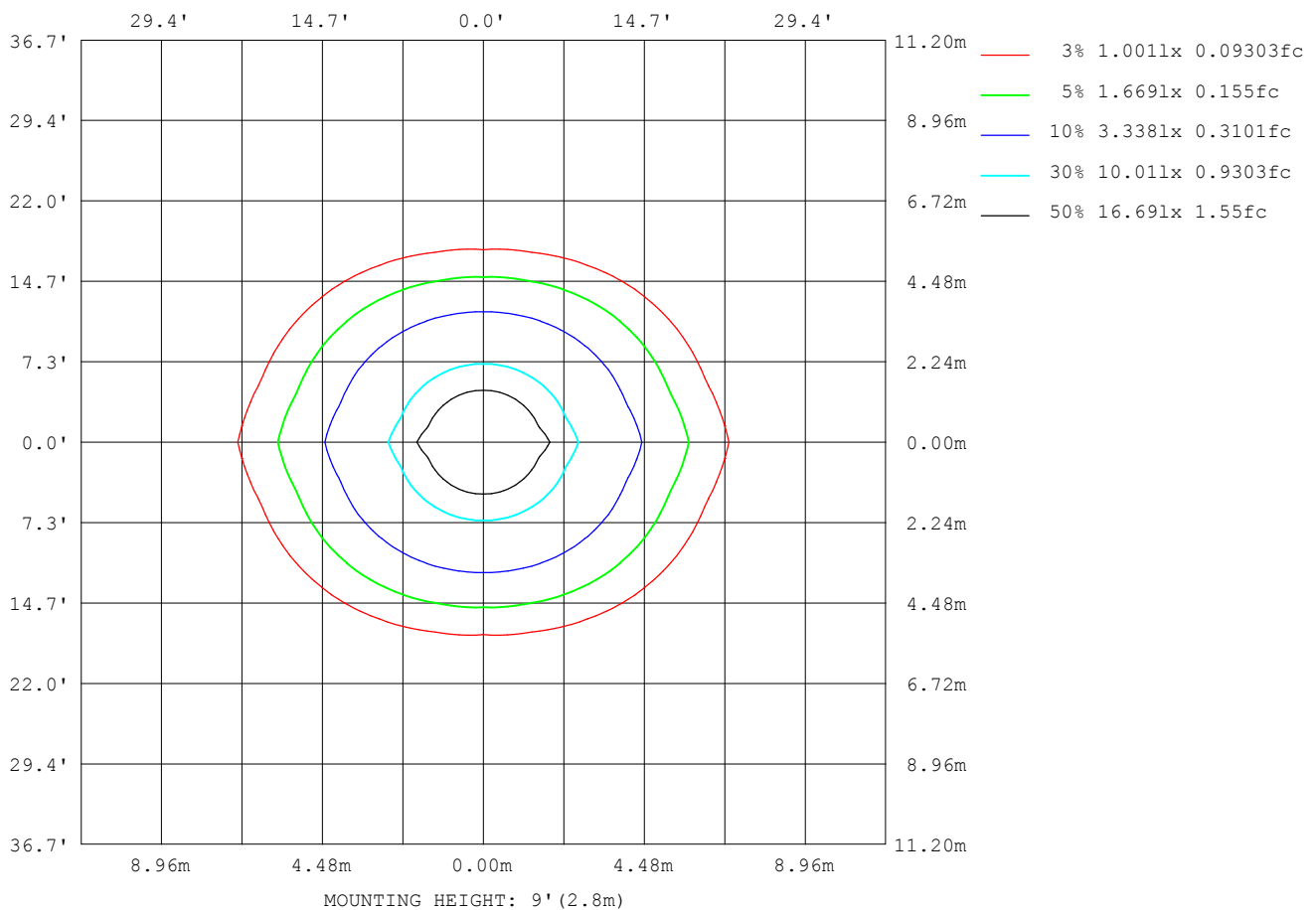
AAI Figure



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2021-09-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:53.0%  
 Test Distance:10.530m [K=1.0000]  
 Remarks:

## ISOLUX DIAGRAM



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QC  
Test Date: 2021-09-17

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 53.0%  
Test Distance: 10.530m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:230.4V I:0.0918A P:20.36W PF:0.9624 Freq:49.99Hz Lamp Flux:882.647x1 lm		
NAME: TI60LP-CC-20-0600K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: TUBI	SUR.:	Shielding Angle:

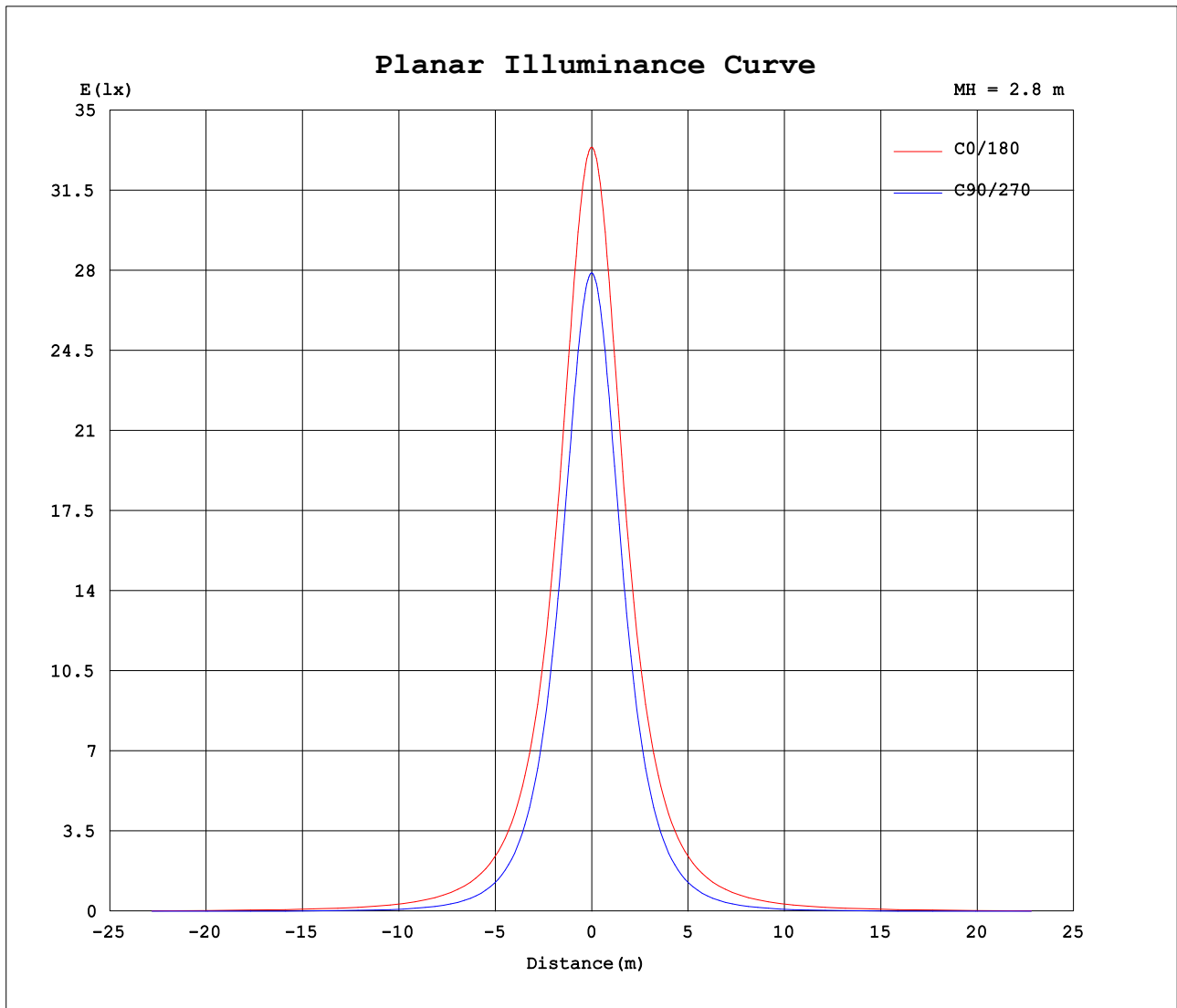
AvgL	cd/m2
L_0~180 (65) av	7301
L_0~180 (75) av	9919
L_0~180 (85) av	23727
L_90~270 (65) av	4041
L_90~270 (75) av	3195
L_90~270 (85) av	1433
L_45 (65) av	5933
L_45 (75) av	7421
L_45 (85) av	16132

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2021-09-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:53.0%  
 Test Distance:10.530m [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: 2021-09-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 53.0%  
Test Distance: 10.530m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

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	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225
5	224	224	224	224	224	224	223	224	224	224	224	224	224	224	224	224	224	224	223
10	222	221	221	221	220	220	220	220	220	221	221	221	222	221	221	221	220	220	220
15	218	218	217	216	215	215	214	215	215	216	217	218	218	218	217	216	215	215	214
20	213	212	211	210	208	207	207	207	208	210	211	212	213	212	211	210	208	207	207
25	207	206	204	202	199	197	197	197	199	202	204	206	207	206	204	202	199	197	197
30	199	198	196	192	189	186	185	186	189	192	196	198	199	198	196	192	189	186	185
35	191	190	186	181	177	174	172	174	177	181	186	190	191	190	186	181	177	174	172
40	182	180	176	170	164	160	158	160	164	170	176	180	182	180	176	170	164	160	158
45	172	170	165	157	150	144	142	144	150	157	165	170	172	170	165	157	150	144	142
50	162	160	153	145	135	128	126	128	135	145	153	160	162	160	153	145	135	128	126
55	151	149	142	131	120	112	108	112	120	131	142	149	151	149	142	131	120	112	108
60	141	138	130	118	105	94.6	90.3	94.6	105	118	130	138	141	138	130	118	105	94.6	90.3
65	130	126	118	105	90.5	77.2	71.7	77.2	90.5	105	118	126	130	126	118	105	90.5	77.2	71.7
70	119	115	106	92.7	76.2	60.3	53.0	60.3	76.2	92.7	106	115	119	115	106	92.7	76.2	60.3	53.0
75	108	104	95.0	80.7	62.6	44.2	34.7	44.2	62.6	80.7	95.0	104	108	104	95.0	80.7	62.6	44.2	34.7
80	97.2	93.7	84.2	69.4	50.4	29.8	18.0	29.8	50.4	69.4	84.2	93.7	97.2	93.7	84.2	69.4	50.4	29.8	18.0
85	86.9	83.4	74.0	59.1	39.7	18.5	5.25	18.5	39.7	59.1	74.0	83.4	86.9	83.4	74.0	59.1	39.7	18.5	5.25
90	76.9	73.5	64.3	49.8	31.2	11.3	0.49	11.3	31.2	49.8	64.3	73.5	76.9	73.5	64.3	49.8	31.2	11.3	0.49
95	67.5	64.2	55.4	41.6	24.3	7.13	0.56	7.13	24.3	41.6	55.4	64.2	67.5	64.2	55.4	41.6	24.3	7.13	0.56
100	58.6	55.5	47.2	34.3	18.7	4.68	0.68	4.68	18.7	34.3	47.2	55.5	58.6	55.5	47.2	34.3	18.7	4.68	0.68
105	50.3	47.5	39.8	28.1	14.4	3.32	0.79	3.32	14.4	28.1	39.8	47.5	50.3	47.5	39.8	28.1	14.4	3.32	0.79
110	42.7	40.1	33.1	22.5	11.0	2.54	0.89	2.54	11.0	22.5	33.1	40.1	42.7	40.1	33.1	22.5	11.0	2.54	0.89
115	35.7	33.4	27.2	18.1	8.49	2.11	1.00	2.11	8.49	18.1	27.2	33.4	35.7	33.4	27.2	18.1	8.49	2.11	1.00
120	29.4	27.4	21.8	14.3	6.62	1.86	1.10	1.86	6.62	14.3	21.8	27.4	29.4	27.4	21.8	14.3	6.62	1.86	1.10
125	23.8	22.0	17.5	11.3	5.23	1.74	1.22	1.74	5.23	11.3	17.5	22.0	23.8	22.0	17.5	11.3	5.23	1.74	1.22
130	18.8	17.4	13.7	8.76	4.13	1.69	1.34	1.69	4.13	8.76	13.7	17.4	18.8	17.4	13.7	8.76	4.13	1.69	1.34
135	14.6	13.4	10.6	6.71	3.32	1.69	1.45	1.69	3.32	6.71	10.6	13.4	14.6	13.4	10.6	6.71	3.32	1.69	1.45
140	11.0	9.87	7.94	5.07	2.79	1.73	1.58	1.73	2.79	5.07	7.94	9.87	11.0	9.87	7.94	5.07	2.79	1.73	1.58
145	8.12	7.46	5.86	3.91	2.44	1.78	1.68	1.78	2.44	3.91	5.86	7.46	8.12	7.46	5.86	3.91	2.44	1.78	1.68
150	5.86	5.43	4.26	3.11	2.23	1.84	1.77	1.84	2.23	3.11	4.26	5.43	5.86	5.43	4.26	3.11	2.23	1.84	1.77
155	4.21	3.92	3.26	2.59	2.11	1.91	1.87	1.91	2.11	2.59	3.26	3.92	4.21	3.92	3.26	2.59	2.11	1.91	1.87
160	3.10	2.93	2.61	2.29	2.06	1.97	1.95	1.97	2.06	2.29	2.61	2.93	3.10	2.93	2.61	2.29	2.06	1.97	1.95
165	2.43	2.37	2.25	2.12	2.04	2.02	2.00	2.02	2.04	2.12	2.25	2.37	2.43	2.37	2.25	2.12	2.04	2.02	2.00
170	2.14	2.12	2.09	2.07	2.06	2.06	2.05	2.06	2.06	2.07	2.09	2.12	2.14	2.12	2.09	2.07	2.06	2.06	2.05
175	2.10	2.09	2.07	2.08	2.10	2.11	2.08	2.11	2.10	2.08	2.07	2.09	2.10	2.09	2.07	2.08	2.10	2.11	2.08
180	2.12	2.11	2.09	2.09	2.13	2.13	2.11	2.13	2.13	2.09	2.09	2.11	2.12	2.11	2.09	2.09	2.13	2.13	2.11

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2021-09-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:53.0%  
 Test Distance:10.530m [K=1.0000]  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	225	225	225	225	225														
5	224	224	224	224	224														
10	220	220	221	221	221														
15	215	215	216	217	218														
20	207	208	210	211	212														
25	197	199	202	204	206														
30	186	189	192	196	198														
35	174	177	181	186	190														
40	160	164	170	176	180														
45	144	150	157	165	170														
50	128	135	145	153	160														
55	112	120	131	142	149														
60	94.6	105	118	130	138														
65	77.2	90.5	105	118	126														
70	60.3	76.2	92.7	106	115														
75	44.2	62.6	80.7	95.0	104														
80	29.8	50.4	69.4	84.2	93.7														
85	18.5	39.7	59.1	74.0	83.4														
90	11.3	31.2	49.8	64.3	73.5														
95	7.13	24.3	41.6	55.4	64.2														
100	4.68	18.7	34.3	47.2	55.5														
105	3.32	14.4	28.1	39.8	47.5														
110	2.54	11.0	22.5	33.1	40.1														
115	2.11	8.49	18.1	27.2	33.4														
120	1.86	6.62	14.3	21.8	27.4														
125	1.74	5.23	11.3	17.5	22.0														
130	1.69	4.13	8.76	13.7	17.4														
135	1.69	3.32	6.71	10.6	13.4														
140	1.73	2.79	5.07	7.94	9.87														
145	1.78	2.44	3.91	5.86	7.46														
150	1.84	2.23	3.11	4.26	5.43														
155	1.91	2.11	2.59	3.26	3.92														
160	1.97	2.06	2.29	2.61	2.93														
165	2.02	2.04	2.12	2.25	2.37														
170	2.06	2.06	2.07	2.09	2.12														
175	2.11	2.10	2.08	2.07	2.09														
180	2.13	2.13	2.09	2.09	2.11														

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2021-09-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 53.0%  
 Test Distance: 10.530m [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	224.6	224.6	224.6	224.6	224.6	224.6	224.6	224.6	224.6	224.6
3.0	224.4	224.4	224.3	224.3	224.2	224.2	224.2	224.2	224.2	224.3
6.0	223.6	223.5	223.4	223.3	223.1	223.0	223.0	223.0	223.1	223.3
9.0	222.2	222.1	221.8	221.5	221.2	221.0	220.9	221.0	221.2	221.5
12.0	220.3	220.1	219.7	219.1	218.5	218.2	217.9	218.2	218.5	219.1
15.0	217.9	217.6	216.9	216.1	215.2	214.6	214.3	214.6	215.2	216.1
18.0	215.0	214.6	213.7	212.4	211.1	210.2	209.9	210.2	211.1	212.4
21.0	211.6	211.1	209.8	208.1	206.4	205.2	204.7	205.2	206.4	208.1
24.0	207.9	207.2	205.5	203.3	201.1	199.5	198.9	199.5	201.1	203.3
27.0	203.7	202.9	200.7	197.9	195.1	193.2	192.4	193.2	195.1	197.9
30.0	199.2	198.1	195.6	192.1	188.7	186.2	185.3	186.2	188.7	192.1
33.0	194.3	193.1	190.0	185.9	181.7	178.8	177.7	178.8	181.7	185.9
36.0	189.2	187.7	184.1	179.2	174.3	170.9	169.6	170.9	174.3	179.2
39.0	183.7	182.1	177.9	172.2	166.5	162.4	160.9	162.4	166.5	172.2
42.0	178.0	176.2	171.5	165.0	158.4	153.6	151.9	153.6	158.4	165.0
45.0	172.1	170.1	164.8	157.5	150.0	144.4	142.4	144.4	150.0	157.5
48.0	166.1	163.8	158.0	149.8	141.3	135.0	132.6	135.0	141.3	149.8
51.0	159.9	157.4	151.0	142.0	132.4	125.1	122.4	125.1	132.4	142.0
54.0	153.5	150.9	144.0	134.1	123.5	115.1	112.0	115.1	123.5	134.1
57.0	147.1	144.2	136.8	126.2	114.4	104.9	101.2	104.9	114.4	126.2
60.0	140.5	137.6	129.7	118.3	105.4	94.56	90.31	94.56	105.4	118.3
63.0	134.0	130.9	122.6	110.5	96.44	84.18	79.20	84.18	96.44	110.5
66.0	127.4	124.2	115.6	102.8	87.60	73.83	68.00	73.83	87.60	102.8
69.0	120.8	117.5	108.6	95.19	78.97	63.59	56.76	63.59	78.97	95.19
72.0	114.3	110.9	101.7	87.80	70.62	53.67	45.59	53.67	70.62	87.80
75.0	107.8	104.3	95.02	80.67	62.64	44.17	34.73	44.17	62.64	80.67
78.0	101.4	97.89	88.49	73.79	55.11	35.30	24.41	35.30	55.11	73.79
81.0	95.08	91.58	82.12	67.19	48.06	27.28	15.05	27.28	48.06	67.19
84.0	88.89	85.39	75.96	61.01	41.68	20.44	7.322	20.44	41.68	61.01
87.0	82.84	79.37	70.03	55.24	36.11	15.05	2.086	15.05	36.11	55.24
90.0	76.93	73.52	64.35	49.83	31.21	11.33	0.4919	11.33	31.21	49.83
93.0	71.22	67.88	58.89	44.76	26.87	8.548	0.5385	8.548	26.87	44.76
96.0	65.67	62.44	53.71	40.06	23.03	6.520	0.5834	6.520	23.03	40.06
99.0	60.34	57.22	48.81	35.72	19.71	5.069	0.6503	5.069	19.71	35.72
102.0	55.21	52.23	44.16	31.73	16.83	4.036	0.7061	4.036	16.83	31.73
105.0	50.31	47.46	39.79	28.08	14.38	3.316	0.7876	3.316	14.38	28.08
108.0	45.65	42.95	35.70	24.76	12.20	2.782	0.8476	2.782	12.20	24.76
111.0	41.22	38.68	31.89	21.56	10.42	2.428	0.9033	2.428	10.42	21.56
114.0	37.02	34.65	28.36	18.91	8.933	2.180	0.9734	2.180	8.933	18.91
117.0	33.07	30.88	24.88	16.49	7.677	1.990	1.037	1.990	7.677	16.49
120.0	29.37	27.36	21.76	14.35	6.621	1.864	1.100	1.864	6.621	14.35
123.0	25.91	24.09	19.14	12.42	5.735	1.785	1.178	1.785	5.735	12.42
126.0	22.70	21.06	16.66	10.72	4.990	1.715	1.241	1.715	4.990	10.72
129.0	19.73	18.27	14.39	9.222	4.327	1.693	1.319	1.693	4.327	9.222
132.0	17.01	15.74	12.35	7.887	3.772	1.683	1.382	1.683	3.772	7.887
135.0	14.56	13.45	10.55	6.708	3.322	1.691	1.453	1.691	3.322	6.708
138.0	12.33	11.40	8.928	5.674	2.982	1.706	1.535	1.706	2.982	5.674
141.0	10.36	9.142	7.482	4.794	2.705	1.739	1.590	1.739	2.705	4.794
144.0	8.640	7.920	6.228	4.110	2.501	1.770	1.657	1.770	2.501	4.110
147.0	7.133	6.589	5.182	3.551	2.345	1.795	1.709	1.795	2.345	3.551
150.0	5.858	5.428	4.263	3.107	2.229	1.837	1.773	1.837	2.229	3.107
153.0	4.802	4.439	3.620	2.767	2.149	1.882	1.832	1.882	2.149	2.767
156.0	3.949	3.690	3.100	2.518	2.096	1.921	1.880	1.921	2.096	2.518
159.0	3.278	3.088	2.711	2.333	2.070	1.960	1.932	1.960	2.070	2.333
162.0	2.784	2.657	2.436	2.210	2.050	1.995	1.977	1.995	2.050	2.210
165.0	2.427	2.366	2.248	2.125	2.040	2.017	2.003	2.017	2.040	2.125
168.0	2.210	2.195	2.142	2.084	2.053	2.047	2.021	2.047	2.053	2.084
171.0	2.120	2.103	2.075	2.071	2.070	2.069	2.051	2.069	2.070	2.071
174.0	2.092	2.085	2.067	2.083	2.083	2.105	2.070	2.105	2.083	2.083
177.0	2.105	2.087	2.080	2.084	2.107	2.121	2.096	2.121	2.107	2.084
180.0	2.120	2.107	2.091	2.094	2.127	2.134	2.107	2.134	2.127	2.094
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	224.6	224.6	224.6	224.6	224.6	224.6	224.6	224.6	224.6	224.6
3.0	224.3	224.4	224.4	224.4	224.3	224.3	224.2	224.2	224.2	224.2
6.0	223.4	223.5	223.6	223.5	223.4	223.3	223.1	223.0	223.0	223.0
9.0	221.8	222.1	222.2	222.1	221.8	221.5	221.2	221.0	220.9	221.0
12.0	219.7	220.1	220.3	220.1	219.7	219.1	218.5	218.2	217.9	218.2
15.0	216.9	217.6	217.9	217.6	216.9	216.1	215.2	214.6	214.3	214.6
18.0	213.7	214.6	215.0	214.6	213.7	212.4	211.1	210.2	209.9	210.2
21.0	209.8	211.1	211.6	211.1	209.8	208.1	206.4	205.2	204.7	205.2
24.0	205.5	207.2	207.9	207.2	205.5	203.3	201.1	199.5	198.9	199.5
27.0	200.7	202.9	203.7	202.9	200.7	197.9	195.1	193.2	192.4	193.2
30.0	195.6	198.1	199.2	198.1	195.6	192.1	188.7	186.2	185.3	186.2

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QC  
Test Date:2021-09-17

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:53.0%  
Test Distance:10.530m [K=1.0000]  
Remarks:

## Photometric Data Table [cd]

33.0	190.0	193.1	194.3	193.1	190.0	185.9	181.7	178.8	177.7	178.8
36.0	184.1	187.7	189.2	187.7	184.1	179.2	174.3	170.9	169.6	170.9
39.0	177.9	182.1	183.7	182.1	177.9	172.2	166.5	162.4	160.9	162.4
42.0	171.5	176.2	178.0	176.2	171.5	165.0	158.4	153.6	151.9	153.6
45.0	164.8	170.1	172.1	170.1	164.8	157.5	150.0	144.4	142.4	144.4
48.0	158.0	163.8	166.1	163.8	158.0	149.8	141.3	135.0	132.6	135.0
51.0	151.0	157.4	159.9	157.4	151.0	142.0	132.4	125.1	122.4	125.1
54.0	144.0	150.9	153.5	150.9	144.0	134.1	123.5	115.1	112.0	115.1
57.0	136.8	144.2	147.1	144.2	136.8	126.2	114.4	104.9	101.2	104.9
60.0	129.7	137.6	140.5	137.6	129.7	118.3	105.4	94.56	90.31	94.56
63.0	122.6	130.9	134.0	130.9	122.6	110.5	96.44	84.18	79.20	84.18
66.0	115.6	124.2	127.4	124.2	115.6	102.8	87.60	73.83	68.00	73.83
69.0	108.6	117.5	120.8	117.5	108.6	95.19	78.97	63.59	56.76	63.59
72.0	101.7	110.9	114.3	110.9	101.7	87.80	70.62	53.67	45.59	53.67
75.0	95.02	104.3	107.8	104.3	95.02	80.67	62.64	44.17	34.73	44.17
78.0	88.49	97.89	101.4	97.89	88.49	73.79	55.11	35.30	24.41	35.30
81.0	82.12	91.58	95.08	91.58	82.12	67.19	48.06	27.28	15.05	27.28
84.0	75.96	85.39	88.89	85.39	75.96	61.01	41.68	20.44	7.322	20.44
87.0	70.03	79.37	82.84	79.37	70.03	55.24	36.11	15.05	2.086	15.05
90.0	64.35	73.52	76.93	73.52	64.35	49.83	31.21	11.33	0.4919	11.33
93.0	58.89	67.88	71.22	67.88	58.89	44.76	26.87	8.548	0.5385	8.548
96.0	53.71	62.44	65.67	62.44	53.71	40.06	23.03	6.520	0.5834	6.520
99.0	48.81	57.22	60.34	57.22	48.81	35.72	19.71	5.069	0.6503	5.069
102.0	44.16	52.23	55.21	52.23	44.16	31.73	16.83	4.036	0.7061	4.036
105.0	39.79	47.46	50.31	47.46	39.79	28.08	14.38	3.316	0.7876	3.316
108.0	35.70	42.95	45.65	42.95	35.70	24.76	12.20	2.782	0.8476	2.782
111.0	31.89	38.68	41.22	38.68	31.89	21.56	10.42	2.428	0.9033	2.428
114.0	28.36	34.65	37.02	34.65	28.36	18.91	8.933	2.180	0.9734	2.180
117.0	24.88	30.88	33.07	30.88	24.88	16.49	7.677	1.990	1.037	1.990
120.0	21.76	27.36	29.37	27.36	21.76	14.35	6.621	1.864	1.100	1.864
123.0	19.14	24.09	25.91	24.09	19.14	12.42	5.735	1.785	1.178	1.785
126.0	16.66	21.06	22.70	21.06	16.66	10.72	4.990	1.715	1.241	1.715
129.0	14.39	18.27	19.73	18.27	14.39	9.222	4.327	1.693	1.319	1.693
132.0	12.35	15.74	17.01	15.74	12.35	7.887	3.772	1.683	1.382	1.683
135.0	10.55	13.45	14.56	13.45	10.55	6.708	3.322	1.691	1.453	1.691
138.0	8.928	11.40	12.33	11.40	8.928	5.674	2.982	1.706	1.535	1.706
141.0	7.482	9.142	10.36	9.142	7.482	4.794	2.705	1.739	1.590	1.739
144.0	6.228	7.920	8.640	7.920	6.228	4.110	2.501	1.770	1.657	1.770
147.0	5.182	6.589	7.133	6.589	5.182	3.551	2.345	1.795	1.709	1.795
150.0	4.263	5.428	5.858	5.428	4.263	3.107	2.229	1.837	1.773	1.837
153.0	3.620	4.439	4.802	4.439	3.620	2.767	2.149	1.882	1.832	1.882
156.0	3.100	3.690	3.949	3.690	3.100	2.518	2.096	1.921	1.880	1.921
159.0	2.711	3.088	3.278	3.088	2.711	2.333	2.070	1.960	1.932	1.960
162.0	2.436	2.657	2.784	2.657	2.436	2.210	2.050	1.995	1.977	1.995
165.0	2.248	2.366	2.427	2.366	2.248	2.125	2.040	2.017	2.003	2.017
168.0	2.142	2.195	2.210	2.195	2.142	2.084	2.053	2.047	2.021	2.047
171.0	2.075	2.103	2.120	2.103	2.075	2.071	2.070	2.069	2.051	2.069
174.0	2.067	2.085	2.092	2.085	2.067	2.083	2.083	2.105	2.070	2.105
177.0	2.080	2.087	2.105	2.087	2.080	2.084	2.107	2.121	2.096	2.121
180.0	2.091	2.107	2.120	2.107	2.091	2.094	2.127	2.134	2.107	2.134
G/C	300.0	315.0	330.0	345.0						
0.0	224.6	224.6	224.6	224.6						
3.0	224.2	224.3	224.3	224.4						
6.0	223.1	223.3	223.4	223.5						
9.0	221.2	221.5	221.8	222.1						
12.0	218.5	219.1	219.7	220.1						
15.0	215.2	216.1	216.9	217.6						
18.0	211.1	212.4	213.7	214.6						
21.0	206.4	208.1	209.8	211.1						
24.0	201.1	203.3	205.5	207.2						
27.0	195.1	197.9	200.7	202.9						
30.0	188.7	192.1	195.6	198.1						
33.0	181.7	185.9	190.0	193.1						
36.0	174.3	179.2	184.1	187.7						
39.0	166.5	172.2	177.9	182.1						
42.0	158.4	165.0	171.5	176.2						
45.0	150.0	157.5	164.8	170.1						
48.0	141.3	149.8	158.0	163.8						
51.0	132.4	142.0	151.0	157.4						
54.0	123.5	134.1	144.0	150.9						
57.0	114.4	126.2	136.8	144.2						
60.0	105.4	118.3	129.7	137.6						
63.0	96.44	110.5	122.6	130.9						
66.0	87.60	102.8	115.6	124.2						

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2021-09-17

v Range: 0 - 180DEG  
 v Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 53.0%  
 Test Distance: 10.530m [K=1.0000]  
 Remarks:

## Photometric Data Table [cd]

69.0	78.97	95.19	108.6	117.5
72.0	70.62	87.80	101.7	110.9
75.0	62.64	80.67	95.02	104.3
78.0	55.11	73.79	88.49	97.89
81.0	48.06	67.19	82.12	91.58
84.0	41.68	61.01	75.96	85.39
87.0	36.11	55.24	70.03	79.37
90.0	31.21	49.83	64.35	73.52
93.0	26.87	44.76	58.89	67.88
96.0	23.03	40.06	53.71	62.44
99.0	19.71	35.72	48.81	57.22
102.0	16.83	31.73	44.16	52.23
105.0	14.38	28.08	39.79	47.46
108.0	12.20	24.76	35.70	42.95
111.0	10.42	21.56	31.89	38.68
114.0	8.933	18.91	28.36	34.65
117.0	7.677	16.49	24.88	30.88
120.0	6.621	14.35	21.76	27.36
123.0	5.735	12.42	19.14	24.09
126.0	4.990	10.72	16.66	21.06
129.0	4.327	9.222	14.39	18.27
132.0	3.772	7.887	12.35	15.74
135.0	3.322	6.708	10.55	13.45
138.0	2.982	5.674	8.928	11.40
141.0	2.705	4.794	7.482	9.142
144.0	2.501	4.110	6.228	7.920
147.0	2.345	3.551	5.182	6.589
150.0	2.229	3.107	4.263	5.428
153.0	2.149	2.767	3.620	4.439
156.0	2.096	2.518	3.100	3.690
159.0	2.070	2.333	2.711	3.088
162.0	2.050	2.210	2.436	2.657
165.0	2.040	2.125	2.248	2.366
168.0	2.053	2.084	2.142	2.195
171.0	2.070	2.071	2.075	2.103
174.0	2.083	2.083	2.067	2.085
177.0	2.107	2.084	2.080	2.087
180.0	2.127	2.094	2.091	2.107

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2021-09-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 53.0%  
 Test Distance: 10.530m [K=1.0000]  
 Remarks: