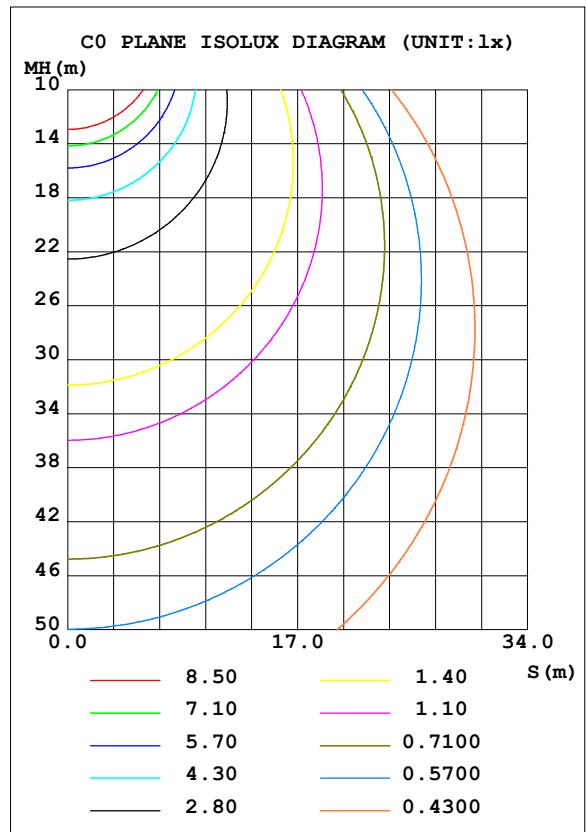
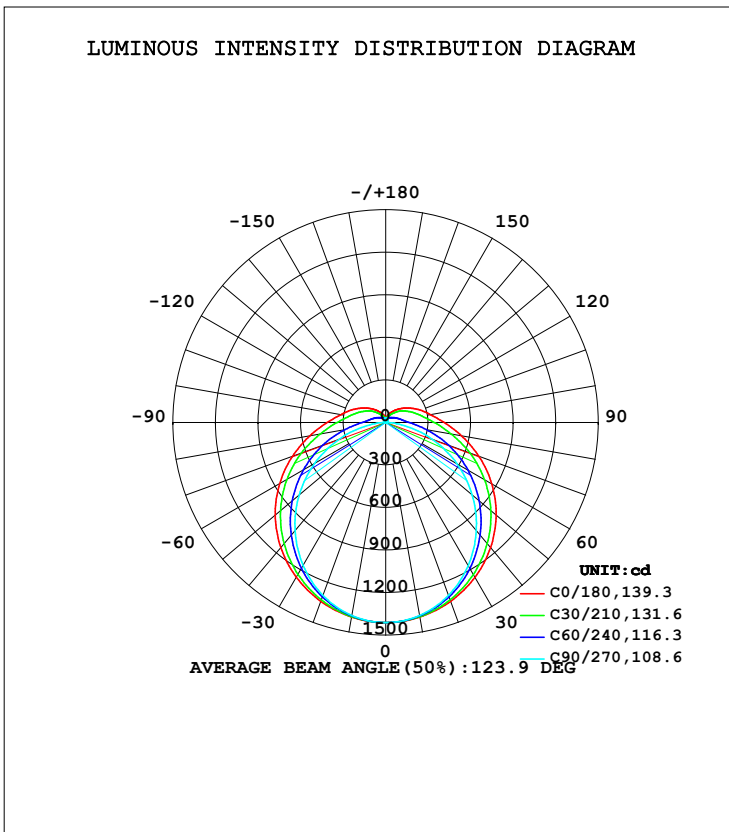


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.5V I:0.1482A P:32.51W PF:0.9520 Freq:49.99Hz Lamp Flux:5513.15x1 lm		
NAME: TB33-32-1200K-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 169.59 lm/W			
MODEL		I <sub>max</sub> (cd)	1411	S/MH (C0/180)	1.33
NOMINAL POWER (W)	32	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	5513.1	η UP, DN (C0-180)	6.8, 43.2
NOMINAL FLUX (lm)	5513.15	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	6.8, 43.2
LAMPS INSIDE	1	η up (%)	13.6	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	230	η down (%)	86.4	CIBSE SHR MAX	1.50



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2021-11-22

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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1393	1388	1382	1388	1393	1388	1382	1388	0- 10	133.6	133.6	2.42,2.42
20	1342	1319	1297	1319	1342	1319	1297	1319	10- 20	383.6	517.2	9.38,9.38
30	1261	1213	1165	1213	1261	1213	1165	1213	20- 30	586.0	1103	20,20
40	1151	1077	995.2	1077	1151	1077	995.2	1077	30- 40	718.4	1822	33,33
50	1017	917.1	797.4	917.1	1017	917.1	797.4	917.1	40- 50	769.0	2591	47,47
60	864.3	741.4	580.0	741.4	864.3	741.4	580.0	741.4	50- 60	737.0	3328	60.4,60.4
70	700.0	559.9	351.3	559.9	700.0	559.9	351.3	559.9	60- 70	632.5	3960	71.8,71.8
80	542.1	387.6	135.8	387.6	542.1	387.6	135.8	387.6	70- 80	479.1	4439	80.5,80.5
90	412.9	263.7	4.612	263.7	412.9	263.7	4.612	263.7	80- 90	324.2	4763	86.4,86.4
100	322.8	195.4	7.339	195.4	322.8	195.4	7.339	195.4	90-100	227.1	4990	90.5,90.5
110	258.9	152.0	9.137	152.0	258.9	152.0	9.137	152.0	100-110	171.4	5162	93.6,93.6
120	203.8	119.3	12.27	119.3	203.8	119.3	12.27	119.3	110-120	127.8	5290	95.9,95.9
130	157.5	87.44	15.58	87.44	157.5	87.44	15.58	87.44	120-130	90.73	5380	97.6,97.6
140	118.7	65.51	18.73	65.51	118.7	65.51	18.73	65.51	130-140	60.59	5441	98.7,98.7
150	86.25	49.96	22.89	49.96	86.25	49.96	22.89	49.96	140-150	37.66	5479	99.4,99.4
160	60.06	38.79	27.54	38.79	60.06	38.79	27.54	38.79	150-160	21.18	5500	99.8,99.8
170	39.47	32.91	31.01	32.91	39.47	32.91	31.01	32.91	160-170	10.30	5510	99.9,99.9
180	23.93	32.20	33.21	32.20	23.93	32.20	33.21	32.20	170-180	2.974	5513	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 2205 lm

%lum = 40.0%  
%lamp = 40.0%

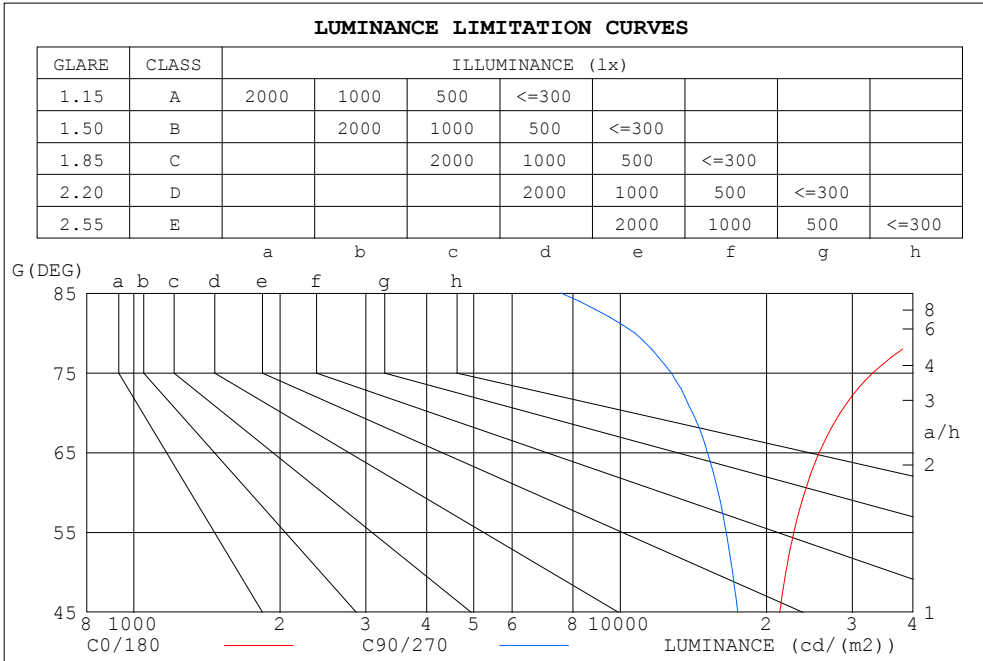
Conical surface Flux(120deg): 3327.6 lm

%lum = 60.4%  
%lamp = 60.4%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QC  
Test Date:2021-11-22

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:

LUMINANCE LIMITATION CURVES



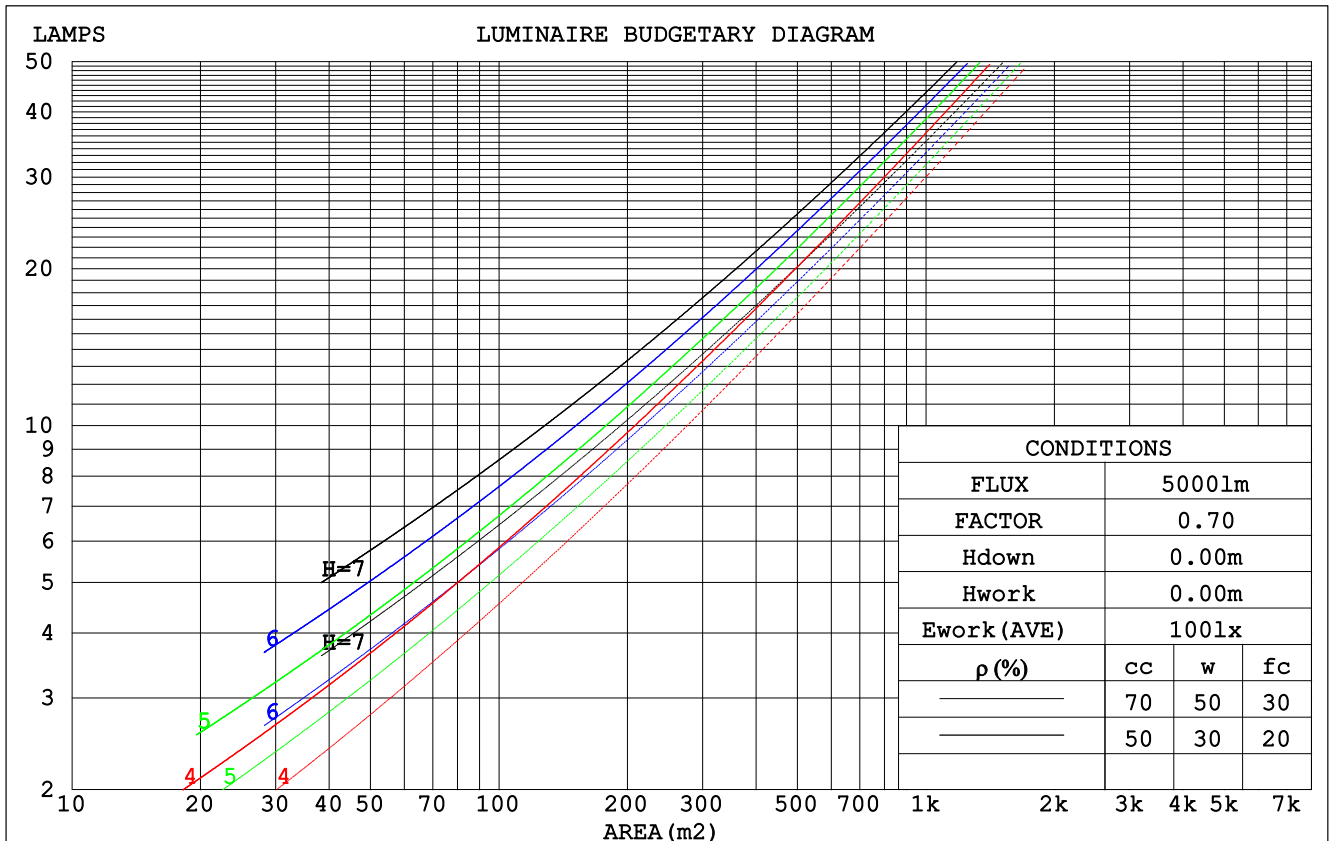
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	75143	7561
80	43233	10733
75	33077	12724
70	28340	14094
65	25654	15108
60	23938	15916
55	22755	16521
50	21911	17021
45	21286	17451

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2021-11-22

$\gamma$  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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	.96	.96	.96	.90	.90	.90	.86
1.0	.98	.93	.88	.94	.90	.86	.87	.84	.80	.81	.78	.75	.75	.73	.71	.68
2.0	.84	.77	.70	.81	.74	.68	.75	.70	.65	.70	.65	.61	.65	.61	.58	.55
3.0	.73	.64	.57	.71	.63	.56	.66	.59	.53	.61	.55	.51	.57	.52	.48	.45
4.0	.65	.55	.48	.62	.54	.47	.58	.51	.45	.54	.48	.43	.50	.45	.41	.38
5.0	.57	.48	.41	.55	.47	.40	.52	.44	.39	.48	.42	.37	.45	.40	.35	.33
6.0	.51	.42	.36	.50	.41	.35	.47	.39	.33	.44	.37	.32	.41	.35	.31	.28
7.0	.46	.37	.31	.45	.37	.31	.42	.35	.29	.40	.33	.28	.37	.31	.27	.25
8.0	.42	.34	.28	.41	.33	.27	.39	.31	.26	.36	.30	.25	.34	.28	.24	.22
9.0	.39	.30	.25	.38	.30	.24	.35	.28	.23	.33	.27	.23	.31	.26	.22	.20
10.0	.36	.28	.22	.35	.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:2021-11-22

$\gamma$  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:

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	.363	.206	.065	.352	.201	.064	.330	.190	.061	.311	.179	.058	.293	.170	.055	
2.0	.321	.176	.054	.311	.171	.053	.291	.162	.050	.274	.154	.048	.257	.146	.046	
3.0	.288	.153	.046	.279	.149	.045	.262	.142	.043	.246	.135	.041	.231	.128	.040	
4.0	.261	.136	.040	.253	.132	.039	.237	.126	.038	.223	.120	.036	.209	.114	.035	
5.0	.238	.121	.035	.231	.119	.035	.217	.113	.033	.204	.107	.032	.191	.102	.031	
6.0	.219	.110	.031	.212	.107	.031	.200	.102	.030	.188	.097	.029	.176	.093	.028	
7.0	.203	.100	.028	.196	.098	.028	.185	.093	.027	.174	.089	.026	.164	.085	.025	
8.0	.188	.092	.026	.183	.090	.025	.172	.086	.025	.162	.082	.024	.153	.078	.023	
9.0	.176	.085	.024	.171	.083	.023	.161	.080	.023	.152	.076	.022	.143	.073	.021	
10.0	.165	.079	.022	.160	.077	.022	.151	.074	.021	.142	.071	.020	.134	.068	.019	

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	.294	.294	.294	.251	.251	.251	.172	.172	.172	.099	.099	.099	.032	.032	.032	
1.0	.288	.260	.235	.247	.223	.202	.169	.154	.140	.097	.089	.081	.031	.029	.026	
2.0	.281	.237	.200	.241	.204	.173	.165	.141	.120	.095	.082	.071	.031	.027	.023	
3.0	.274	.220	.177	.235	.190	.154	.161	.132	.108	.093	.077	.064	.030	.025	.021	
4.0	.266	.207	.163	.228	.179	.141	.157	.125	.100	.091	.073	.059	.029	.024	.019	
5.0	.258	.197	.153	.222	.171	.133	.153	.119	.094	.089	.070	.056	.029	.023	.018	
6.0	.251	.189	.145	.216	.164	.126	.149	.115	.089	.086	.068	.053	.028	.022	.018	
7.0	.244	.183	.140	.210	.158	.122	.145	.111	.086	.084	.065	.051	.027	.021	.017	
8.0	.237	.177	.136	.204	.154	.118	.141	.108	.084	.082	.064	.050	.027	.021	.017	
9.0	.231	.172	.133	.199	.150	.116	.138	.105	.082	.080	.062	.049	.026	.020	.016	
10.0	.225	.168	.130	.194	.146	.113	.135	.103	.081	.079	.061	.048	.025	.020	.016	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2021-11-22

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	17.3	18.7	17.7	19.1	19.6	15.6	17.0	16.0	17.4	17.9
3H	19.6	20.9	20.1	21.4	21.9	17.0	18.3	17.5	18.8	19.3
4H	20.9	22.1	21.4	22.6	23.1	17.6	18.8	18.1	19.3	19.8
6H	22.3	23.4	22.8	23.9	24.5	17.9	19.1	18.4	19.6	20.2
8H	23.0	24.1	23.5	24.6	25.2	18.0	19.1	18.6	19.7	20.2
12H	23.9	25.0	24.4	25.5	26.1	18.1	19.1	18.6	19.7	20.3
4H 2H	17.8	19.0	18.3	19.5	20.1	16.5	17.8	17.0	18.3	18.8
3H	20.4	21.5	20.9	22.0	22.6	18.2	19.3	18.8	19.8	20.4
4H	21.8	22.8	22.4	23.4	24.0	18.9	19.9	19.5	20.5	21.1
6H	23.4	24.3	24.0	24.9	25.5	19.5	20.3	20.1	20.9	21.6
8H	24.3	25.1	24.9	25.7	26.4	19.6	20.4	20.2	21.0	21.7
12H	25.3	26.1	25.9	26.7	27.4	19.7	20.5	20.3	21.1	21.8
8H 4H	22.1	23.0	22.7	23.6	24.2	19.8	20.6	20.4	21.2	21.8
6H	24.0	24.7	24.6	25.3	26.0	20.6	21.3	21.2	21.9	22.6
8H	25.1	25.7	25.8	26.4	27.1	20.9	21.6	21.6	22.2	22.9
12H	26.4	26.9	27.0	27.6	28.3	21.2	21.7	21.8	22.4	23.1
12H 4H	22.1	22.9	22.8	23.5	24.2	20.0	20.8	20.6	21.4	22.1
6H	24.1	24.7	24.8	25.4	26.1	21.0	21.7	21.7	22.3	23.0
8H	25.3	25.8	26.0	26.5	27.3	21.5	22.1	22.2	22.7	23.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 5513 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 5.9)

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2021-11-22

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:

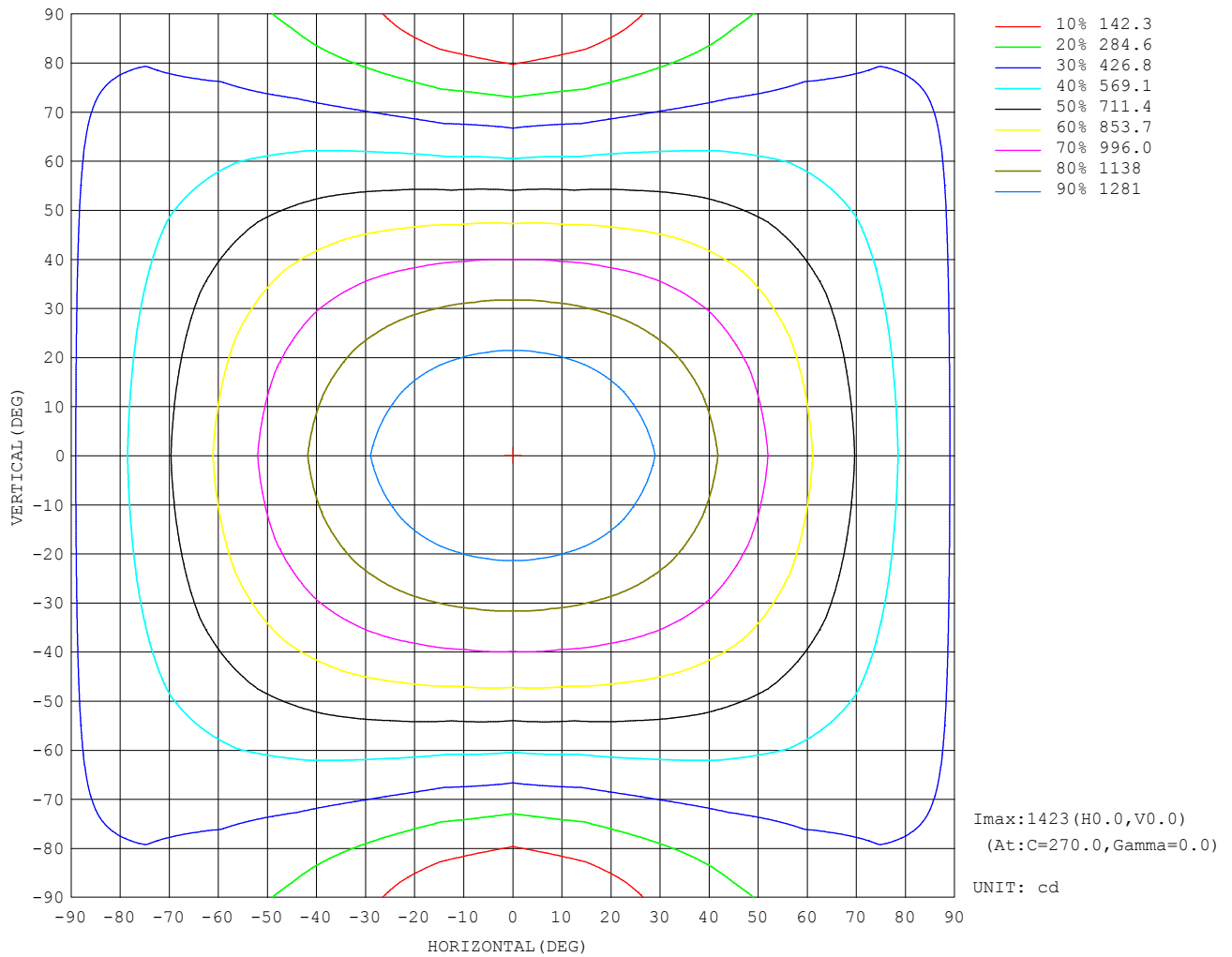
UTILIZATION FACTORS TABLE

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	47	39	56	45	38	31
1.00	68	55	47	66	54	47	63	55	46	37
1.25	75	63	55	73	61	54	69	59	52	43
1.50	80	68	60	77	67	59	73	64	57	48
2.00	87	77	69	84	75	67	79	71	65	54
2.50	91	82	74	88	80	73	83	75	70	58
3.00	95	86	79	92	84	78	86	79	74	62
4.00	99	92	86	96	89	84	89	84	80	67
5.00	102	96	90	99	93	88	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: 2021-11-22

$\gamma$  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:

ISOCANDELA DIAGRAM

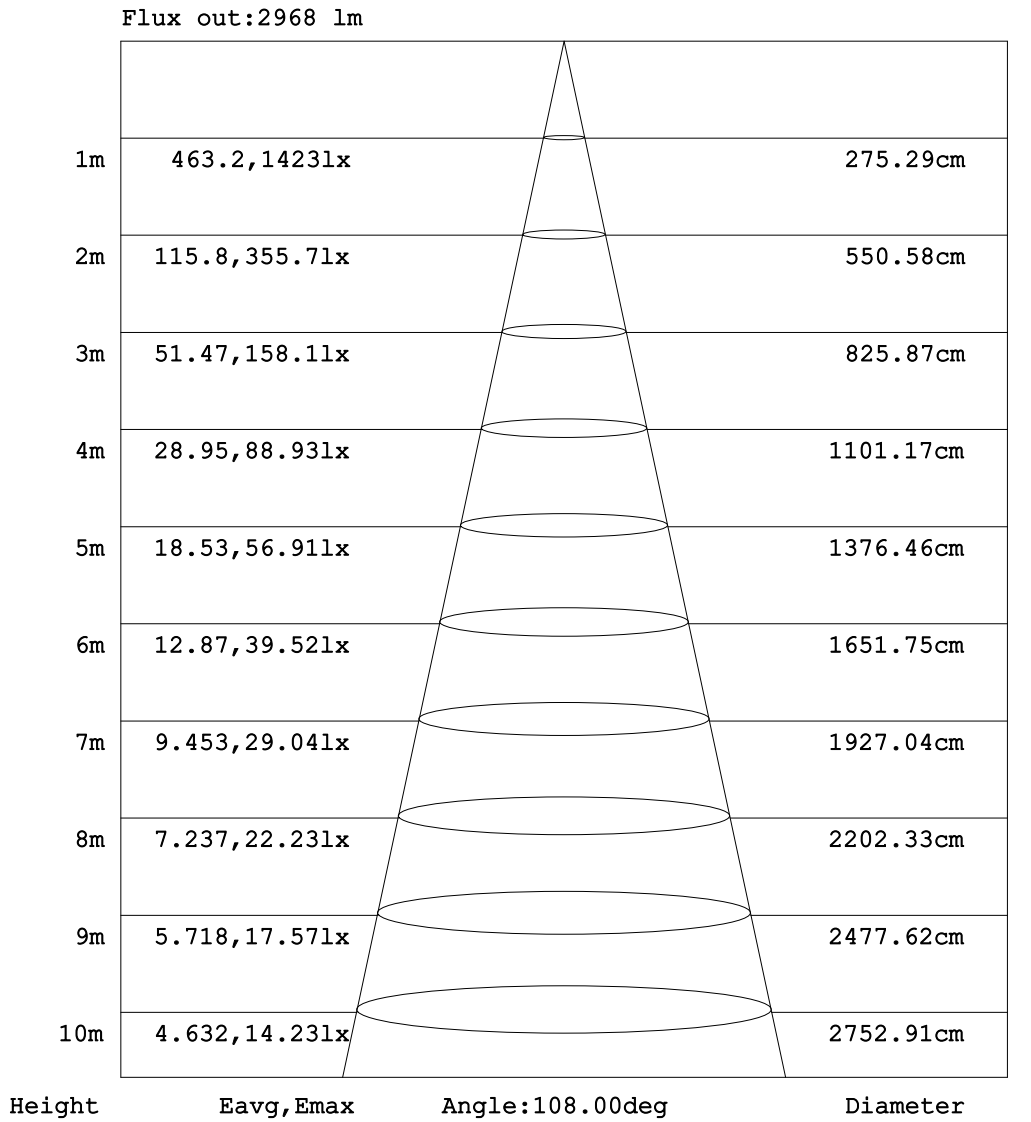


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2021-11-22

$\gamma$  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

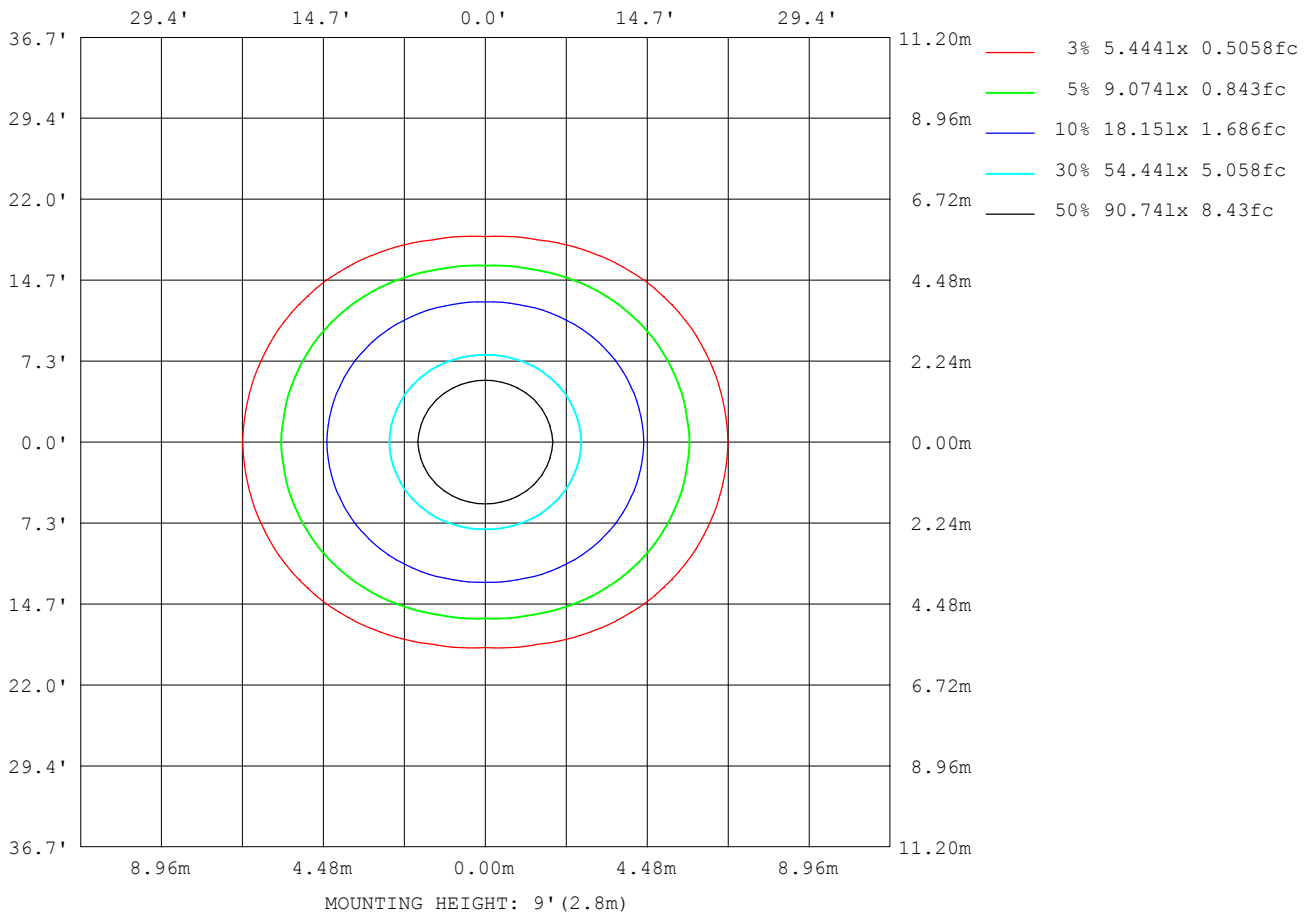


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2021-11-22

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: 2021-11-22

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:230.5V I:0.1482A P:32.51W PF:0.9520 Freq:49.99Hz Lamp Flux:5513.15x1 lm		
NAME: TB33-32-1200K-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

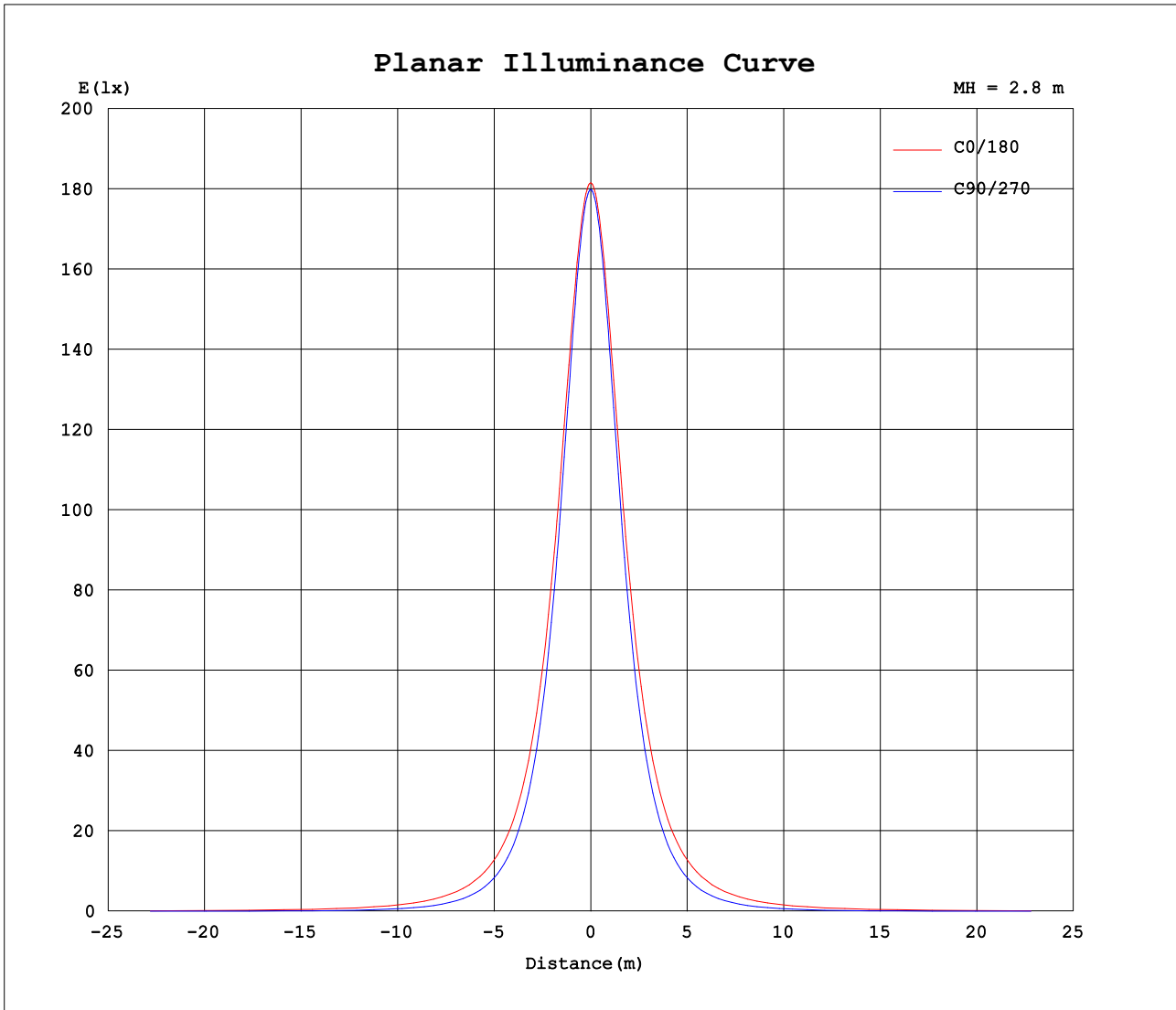
AvgL	cd/m2
L_0~180 (65) av	25448
L_0~180 (75) av	32811
L_0~180 (85) av	74539
L_90~270 (65) av	15125
L_90~270 (75) av	12738
L_90~270 (85) av	7569
L_45 (65) av	21145
L_45 (75) av	24974
L_45 (85) av	50057

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2021-11-22

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:2021-11-22

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--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	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411
5	1407	1407	1406	1405	1405	1404	1404	1404	1405	1405	1406	1407	1407	1407	1406	1405	1405	1404	1404
10	1393	1393	1391	1388	1385	1383	1382	1383	1385	1388	1391	1393	1393	1393	1391	1388	1385	1383	1382
15	1371	1370	1365	1359	1352	1348	1346	1348	1352	1359	1365	1370	1371	1370	1365	1359	1352	1348	1346
20	1342	1339	1331	1319	1308	1300	1297	1300	1308	1319	1331	1339	1342	1339	1331	1319	1308	1300	1297
25	1305	1300	1288	1271	1253	1241	1237	1241	1253	1271	1288	1300	1305	1300	1288	1271	1253	1241	1237
30	1261	1254	1237	1213	1189	1171	1165	1171	1189	1213	1237	1254	1261	1254	1237	1213	1189	1171	1165
35	1209	1202	1179	1148	1117	1093	1084	1093	1117	1148	1179	1202	1209	1202	1179	1148	1117	1093	1084
40	1151	1142	1115	1077	1037	1006	995	1006	1037	1077	1115	1142	1151	1142	1115	1077	1037	1006	995
45	1087	1076	1044	999	951	913	899	913	951	999	1044	1076	1087	1076	1044	999	951	913	899
50	1017	1004	968	917	861	815	797	815	861	917	968	1004	1017	1004	968	917	861	815	797
55	943	928	888	831	766	712	691	712	766	831	888	928	943	928	888	831	766	712	691
60	864	849	805	741	670	606	580	606	670	741	805	849	864	849	805	741	670	606	580
65	783	766	719	651	571	498	465	498	571	651	719	766	783	766	719	651	571	498	465
70	700	682	633	560	473	391	351	391	473	560	633	682	700	682	633	560	473	391	351
75	618	600	548	471	378	288	240	288	378	471	548	600	618	600	548	471	378	288	240
80	542	523	469	388	291	193	136	193	291	388	469	523	542	523	469	388	291	193	136
85	473	454	400	318	217	113	48.0	113	217	318	400	454	473	454	400	318	217	113	48.0
90	413	395	343	264	166	65.1	4.61	65.1	166	264	343	395	413	395	343	264	166	65.1	4.61
95	363	346	298	224	136	49.6	8.39	49.6	136	224	298	346	363	346	298	224	136	49.6	8.39
100	323	307	263	195	116	41.7	7.34	41.7	116	195	263	307	323	307	263	195	116	41.7	7.34
105	289	275	234	173	101	37.2	7.82	37.2	101	173	234	275	289	275	234	173	101	37.2	7.82
110	259	245	208	152	89.0	34.3	9.14	34.3	89.0	152	208	245	259	245	208	152	89.0	34.3	9.14
115	231	218	184	135	78.6	32.4	10.6	32.4	78.6	135	184	218	231	218	184	135	78.6	32.4	10.6
120	204	193	163	119	68.8	30.3	12.3	30.3	68.8	119	163	193	204	193	163	119	68.8	30.3	12.3
125	180	170	144	102	61.3	29.0	13.9	29.0	61.3	102	144	170	180	170	144	102	61.3	29.0	13.9
130	158	149	126	87.4	54.7	28.4	15.6	28.4	54.7	87.4	126	149	158	149	126	87.4	54.7	28.4	15.6
135	137	130	106	76.0	49.5	27.7	17.2	27.7	49.5	76.0	106	130	137	130	106	76.0	49.5	27.7	17.2
140	119	113	87.9	65.5	44.8	27.5	18.7	27.5	44.8	65.5	87.9	113	119	113	87.9	65.5	44.8	27.5	18.7
145	102	96.0	74.1	57.7	40.7	27.5	20.5	27.5	40.7	57.7	74.1	96.0	102	96.0	74.1	57.7	40.7	27.5	20.5
150	86.3	78.6	62.2	50.0	37.5	27.8	22.9	27.8	37.5	50.0	62.2	78.6	86.3	78.6	62.2	50.0	37.5	27.8	22.9
155	72.4	61.4	52.4	43.5	35.7	28.4	25.3	28.4	35.7	43.5	52.4	61.4	72.4	61.4	52.4	43.5	35.7	28.4	25.3
160	60.1	49.4	43.7	38.8	34.8	29.0	27.5	29.0	34.8	38.8	43.7	49.4	60.1	49.4	43.7	38.8	34.8	29.0	27.5
165	47.8	39.7	36.6	36.4	33.0	29.6	29.4	29.6	33.0	36.4	36.6	39.7	47.8	39.7	36.6	36.4	33.0	29.6	29.4
170	39.5	32.5	32.7	32.9	31.8	31.0	31.0	31.0	31.8	32.9	32.7	32.5	39.5	32.5	32.7	32.9	31.8	31.0	31.0
175	25.4	27.0	30.2	31.1	32.1	32.4	32.3	32.4	32.1	31.1	30.2	27.0	25.4	27.0	30.2	31.1	32.1	32.4	32.3
180	23.9	27.8	30.7	32.2	32.9	33.2	33.2	33.2	32.9	32.2	30.7	27.8	23.9	27.8	30.7	32.2	32.9	33.2	33.2

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2021-11-22

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	1411	1411	1411	1411	1411															
5	1404	1405	1405	1406	1407															
10	1383	1385	1388	1391	1393															
15	1348	1352	1359	1365	1370															
20	1300	1308	1319	1331	1339															
25	1241	1253	1271	1288	1300															
30	1171	1189	1213	1237	1254															
35	1093	1117	1148	1179	1202															
40	1006	1037	1077	1115	1142															
45	913	951	999	1044	1076															
50	815	861	917	968	1004															
55	712	766	831	888	928															
60	606	670	741	805	849															
65	498	571	651	719	766															
70	391	473	560	633	682															
75	288	378	471	548	600															
80	193	291	388	469	523															
85	113	217	318	400	454															
90	65.1	166	264	343	395															
95	49.6	136	224	298	346															
100	41.7	116	195	263	307															
105	37.2	101	173	234	275															
110	34.3	89.0	152	208	245															
115	32.4	78.6	135	184	218															
120	30.3	68.8	119	163	193															
125	29.0	61.3	102	144	170															
130	28.4	54.7	87.4	126	149															
135	27.7	49.5	76.0	106	130															
140	27.5	44.8	65.5	87.9	113															
145	27.5	40.7	57.7	74.1	96.0															
150	27.8	37.5	50.0	62.2	78.6															
155	28.4	35.7	43.5	52.4	61.4															
160	29.0	34.8	38.8	43.7	49.4															
165	29.6	33.0	36.4	36.6	39.7															
170	31.0	31.8	32.9	32.7	32.5															
175	32.4	32.1	31.1	30.2	27.0															
180	33.2	32.9	32.2	30.7	27.8															

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2021-11-22

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	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411
3.0	1410	1410	1409	1409	1409	1409	1409	1409	1409	1409
6.0	1405	1405	1404	1403	1402	1401	1401	1401	1402	1403
9.0	1397	1396	1394	1392	1390	1388	1388	1388	1390	1392
12.0	1385	1384	1381	1377	1373	1370	1369	1370	1373	1377
15.0	1371	1370	1365	1359	1352	1348	1346	1348	1352	1359
18.0	1355	1352	1345	1336	1327	1321	1318	1321	1327	1336
21.0	1335	1332	1323	1310	1298	1289	1286	1289	1298	1310
24.0	1313	1308	1297	1281	1265	1254	1250	1254	1265	1281
27.0	1288	1283	1268	1249	1229	1214	1209	1214	1229	1249
30.0	1261	1254	1237	1213	1189	1171	1165	1171	1189	1213
33.0	1231	1223	1203	1175	1146	1125	1117	1125	1146	1175
36.0	1198	1190	1167	1134	1101	1076	1067	1076	1101	1134
39.0	1163	1154	1128	1092	1053	1024	1013	1024	1053	1092
42.0	1126	1116	1087	1046	1003	969.7	957.6	969.7	1003	1046
45.0	1087	1076	1044	999.4	951.1	913.2	899.3	913.2	951.1	999.4
48.0	1046	1033	999.3	950.6	897.6	854.9	838.8	854.9	897.6	950.6
51.0	1003	989.4	952.6	900.1	842.3	794.6	776.3	794.6	842.3	900.1
54.0	957.9	943.7	904.6	848.3	785.7	733.0	712.4	733.0	785.7	848.3
57.0	911.7	896.8	855.1	795.3	727.9	670.2	647.0	670.2	727.9	795.3
60.0	864.3	848.6	804.8	741.4	669.6	606.3	580.0	606.3	669.6	741.4
63.0	815.9	799.5	753.6	687.1	610.7	541.7	511.8	541.7	610.7	687.1
66.0	766.7	749.4	702.0	632.4	551.5	477.1	443.1	477.1	551.5	632.4
69.0	716.6	699.0	650.0	578.0	492.9	412.4	374.5	412.4	492.9	578.0
72.0	666.7	648.8	598.5	523.8	434.9	348.5	306.1	348.5	434.9	523.8
75.0	618.2	599.8	548.1	470.6	378.0	287.7	240.0	287.7	378.0	470.6
78.0	571.9	552.9	499.9	419.6	324.6	230.0	175.9	230.0	324.6	419.6
81.0	527.6	508.6	454.3	372.1	274.7	175.4	115.4	175.4	274.7	372.1
84.0	486.3	466.8	413.1	330.3	230.2	127.8	62.73	127.8	230.2	330.3
87.0	447.3	429.3	375.4	294.1	193.0	88.55	24.37	88.55	193.0	294.1
90.0	412.9	394.9	342.7	263.7	165.8	65.11	4.612	65.11	165.8	263.7
93.0	381.9	364.1	314.1	238.0	145.9	54.08	6.144	54.08	145.9	238.0
96.0	354.6	337.6	289.9	217.7	131.2	47.66	8.738	47.66	131.2	217.7
99.0	330.4	314.2	268.9	200.4	119.8	42.95	8.469	42.95	119.8	200.4
102.0	308.7	293.5	250.6	186.0	109.9	39.38	7.386	39.38	109.9	186.0
105.0	289.3	274.8	233.9	172.8	101.5	37.17	7.816	37.17	101.5	172.8
108.0	270.8	257.1	218.3	159.8	93.94	35.07	8.570	35.07	93.94	159.8
111.0	253.1	239.8	203.2	148.7	86.86	33.95	9.385	33.95	86.86	148.7
114.0	236.0	223.6	189.2	138.6	80.99	32.84	10.25	32.84	80.99	138.6
117.0	219.7	208.0	174.7	129.3	74.55	31.49	11.27	31.49	74.55	129.3
120.0	203.8	193.2	163.2	119.3	68.77	30.34	12.27	30.34	68.77	119.3
123.0	188.9	179.4	151.7	108.7	64.28	29.52	13.26	29.52	64.28	108.7
126.0	175.0	165.3	140.8	98.82	59.86	28.82	14.27	28.82	59.86	98.82
129.0	161.8	152.7	129.6	90.08	55.89	28.49	15.26	28.49	55.89	90.08
132.0	149.3	141.3	117.1	82.45	52.60	28.09	16.24	28.09	52.60	82.45
135.0	137.3	130.1	105.6	76.03	49.52	27.74	17.19	27.74	49.52	76.03
138.0	126.0	119.4	95.02	69.85	46.59	27.58	18.14	27.58	46.59	69.85
141.0	115.2	109.4	84.69	64.12	43.88	27.50	19.03	27.50	43.88	64.12
144.0	105.0	99.55	76.64	59.35	41.40	27.54	20.13	27.54	41.40	59.35
147.0	95.32	88.69	69.06	54.49	39.30	27.56	21.45	27.56	39.30	54.49
150.0	86.25	78.57	62.17	49.96	37.52	27.77	22.89	27.77	37.52	49.96
153.0	77.78	68.29	56.32	45.79	36.20	28.12	24.32	28.12	36.20	45.79
156.0	69.86	58.38	50.61	42.46	35.57	28.51	25.75	28.51	35.57	42.46
159.0	62.43	51.44	45.40	39.64	35.18	28.88	27.11	28.88	35.18	39.64
162.0	54.83	45.61	40.52	37.57	33.98	29.24	28.33	29.24	33.98	37.57
165.0	47.81	39.74	36.61	36.41	33.02	29.57	29.42	29.57	33.02	36.41
168.0	42.70	35.80	34.81	34.09	32.22	30.20	30.42	30.20	32.22	34.09
171.0	36.99	30.62	31.99	32.44	31.54	31.34	31.32	31.34	31.54	32.44
174.0	27.22	27.75	30.59	31.27	31.68	32.27	32.12	32.27	31.68	31.27
177.0	23.55	26.63	30.30	31.92	32.49	32.77	32.75	32.77	32.49	31.92
180.0	23.93	27.77	30.71	32.20	32.86	33.20	33.21	33.20	32.86	32.20
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411
3.0	1409	1410	1410	1410	1409	1409	1409	1409	1409	1409
6.0	1404	1405	1405	1405	1404	1403	1402	1401	1401	1401
9.0	1394	1396	1397	1396	1394	1392	1390	1388	1388	1388
12.0	1381	1384	1385	1384	1381	1377	1373	1370	1369	1370
15.0	1365	1370	1371	1370	1365	1359	1352	1348	1346	1348
18.0	1345	1352	1355	1352	1345	1336	1327	1321	1318	1321
21.0	1323	1332	1335	1332	1323	1310	1298	1289	1286	1289
24.0	1297	1308	1313	1297	1281	1265	1254	1250	1254	1265
27.0	1268	1283	1288	1268	1249	1229	1214	1209	1214	1229
30.0	1237	1254	1261	1237	1213	1189	1171	1165	1171	1189

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2021-11-22

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	1203	1223	1231	1223	1203	1175	1146	1125	1117	1125
36.0	1167	1190	1198	1190	1167	1134	1101	1076	1067	1076
39.0	1128	1154	1163	1154	1128	1092	1053	1024	1013	1024
42.0	1087	1116	1126	1116	1087	1046	1003	969.7	957.6	969.7
45.0	1044	1076	1087	1076	1044	999.4	951.1	913.2	899.3	913.2
48.0	999.3	1033	1046	1033	999.3	950.6	897.6	854.9	838.8	854.9
51.0	952.6	989.4	1003	989.4	952.6	900.1	842.3	794.6	776.3	794.6
54.0	904.6	943.7	957.9	943.7	904.6	848.3	785.7	733.0	712.4	733.0
57.0	855.1	896.8	911.7	896.8	855.1	795.3	727.9	670.2	647.0	670.2
60.0	804.8	848.6	864.3	848.6	804.8	741.4	669.6	606.3	580.0	606.3
63.0	753.6	799.5	815.9	799.5	753.6	687.1	610.7	541.7	511.8	541.7
66.0	702.0	749.4	766.7	749.4	702.0	632.4	551.5	477.1	443.1	477.1
69.0	650.0	699.0	716.6	699.0	650.0	578.0	492.9	412.4	374.5	412.4
72.0	598.5	648.8	666.7	648.8	598.5	523.8	434.9	348.5	306.1	348.5
75.0	548.1	599.8	618.2	599.8	548.1	470.6	378.0	287.7	240.0	287.7
78.0	499.9	552.9	571.9	552.9	499.9	419.6	324.6	230.0	175.9	230.0
81.0	454.3	508.6	527.6	508.6	454.3	372.1	274.7	175.4	115.4	175.4
84.0	413.1	466.8	486.3	466.8	413.1	330.3	230.2	127.8	62.73	127.8
87.0	375.4	429.3	447.3	429.3	375.4	294.1	193.0	88.55	24.37	88.55
90.0	342.7	394.9	412.9	394.9	342.7	263.7	165.8	65.11	4.612	65.11
93.0	314.1	364.1	381.9	364.1	314.1	238.0	145.9	54.08	6.144	54.08
96.0	289.9	337.6	354.6	337.6	289.9	217.7	131.2	47.66	8.738	47.66
99.0	268.9	314.2	330.4	314.2	268.9	200.4	119.8	42.95	8.469	42.95
102.0	250.6	293.5	308.7	293.5	250.6	186.0	109.9	39.38	7.386	39.38
105.0	233.9	274.8	289.3	274.8	233.9	172.8	101.5	37.17	7.816	37.17
108.0	218.3	257.1	270.8	257.1	218.3	159.8	93.94	35.07	8.570	35.07
111.0	203.2	239.8	253.1	239.8	203.2	148.7	86.86	33.95	9.385	33.95
114.0	189.2	223.6	236.0	223.6	189.2	138.6	80.99	32.84	10.25	32.84
117.0	174.7	208.0	219.7	208.0	174.7	129.3	74.55	31.49	11.27	31.49
120.0	163.2	193.2	203.8	193.2	163.2	119.3	68.77	30.34	12.27	30.34
123.0	151.7	179.4	188.9	179.4	151.7	108.7	64.28	29.52	13.26	29.52
126.0	140.8	165.3	175.0	165.3	140.8	98.82	59.86	28.82	14.27	28.82
129.0	129.6	152.7	161.8	152.7	129.6	90.08	55.89	28.49	15.26	28.49
132.0	117.1	141.3	149.3	141.3	117.1	82.45	52.60	28.09	16.24	28.09
135.0	105.6	130.1	137.3	130.1	105.6	76.03	49.52	27.74	17.19	27.74
138.0	95.02	119.4	126.0	119.4	95.02	69.85	46.59	27.58	18.14	27.58
141.0	84.69	109.4	115.2	109.4	84.69	64.12	43.88	27.50	19.03	27.50
144.0	76.64	99.55	105.0	99.55	76.64	59.35	41.40	27.54	20.13	27.54
147.0	69.06	88.69	95.32	88.69	69.06	54.49	39.30	27.56	21.45	27.56
150.0	62.17	78.57	86.25	78.57	62.17	49.96	37.52	27.77	22.89	27.77
153.0	56.32	68.29	77.78	68.29	56.32	45.79	36.20	28.12	24.32	28.12
156.0	50.61	58.38	69.86	58.38	50.61	42.46	35.57	28.51	25.75	28.51
159.0	45.40	51.44	62.43	51.44	45.40	39.64	35.18	28.88	27.11	28.88
162.0	40.52	45.61	54.83	45.61	40.52	37.57	33.98	29.24	28.33	29.24
165.0	36.61	39.74	47.81	39.74	36.61	36.41	33.02	29.57	29.42	29.57
168.0	34.81	35.80	42.70	35.80	34.81	34.09	32.22	30.20	30.42	30.20
171.0	31.99	30.62	36.99	30.62	31.99	32.44	31.54	31.34	31.32	31.34
174.0	30.59	27.75	27.22	27.75	30.59	31.27	31.68	32.27	32.12	32.27
177.0	30.30	26.63	23.55	26.63	30.30	31.92	32.49	32.77	32.75	32.77
180.0	30.71	27.77	23.93	27.77	30.71	32.20	32.86	33.20	33.21	33.20
G/C	300.0	315.0	330.0	345.0						
0.0	1411	1411	1411	1411						
3.0	1409	1409	1409	1410						
6.0	1402	1403	1404	1405						
9.0	1390	1392	1394	1396						
12.0	1373	1377	1381	1384						
15.0	1352	1359	1365	1370						
18.0	1327	1336	1345	1352						
21.0	1298	1310	1323	1332						
24.0	1265	1281	1297	1308						
27.0	1229	1249	1268	1283						
30.0	1189	1213	1237	1254						
33.0	1146	1175	1203	1223						
36.0	1101	1134	1167	1190						
39.0	1053	1092	1128	1154						
42.0	1003	1046	1087	1116						
45.0	951.1	999.4	1044	1076						
48.0	897.6	950.6	999.3	1033						
51.0	842.3	900.1	952.6	989.4						
54.0	785.7	848.3	904.6	943.7						
57.0	727.9	795.3	855.1	896.8						
60.0	669.6	741.4	804.8	848.6						
63.0	610.7	687.1	753.6	799.5						
66.0	551.5	632.4	702.0	749.4						

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2021-11-22

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]

69.0	492.9	578.0	650.0	699.0
72.0	434.9	523.8	598.5	648.8
75.0	378.0	470.6	548.1	599.8
78.0	324.6	419.6	499.9	552.9
81.0	274.7	372.1	454.3	508.6
84.0	230.2	330.3	413.1	466.8
87.0	193.0	294.1	375.4	429.3
90.0	165.8	263.7	342.7	394.9
93.0	145.9	238.0	314.1	364.1
96.0	131.2	217.7	289.9	337.6
99.0	119.8	200.4	268.9	314.2
102.0	109.9	186.0	250.6	293.5
105.0	101.5	172.8	233.9	274.8
108.0	93.94	159.8	218.3	257.1
111.0	86.86	148.7	203.2	239.8
114.0	80.99	138.6	189.2	223.6
117.0	74.55	129.3	174.7	208.0
120.0	68.77	119.3	163.2	193.2
123.0	64.28	108.7	151.7	179.4
126.0	59.86	98.82	140.8	165.3
129.0	55.89	90.08	129.6	152.7
132.0	52.60	82.45	117.1	141.3
135.0	49.52	76.03	105.6	130.1
138.0	46.59	69.85	95.02	119.4
141.0	43.88	64.12	84.69	109.4
144.0	41.40	59.35	76.64	99.55
147.0	39.30	54.49	69.06	88.69
150.0	37.52	49.96	62.17	78.57
153.0	36.20	45.79	56.32	68.29
156.0	35.57	42.46	50.61	58.38
159.0	35.18	39.64	45.40	51.44
162.0	33.98	37.57	40.52	45.61
165.0	33.02	36.41	36.61	39.74
168.0	32.22	34.09	34.81	35.80
171.0	31.54	32.44	31.99	30.62
174.0	31.68	31.27	30.59	27.75
177.0	32.49	31.92	30.30	26.63
180.0	32.86	32.20	30.71	27.77

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:QC  
 Test Date:2021-11-22

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: