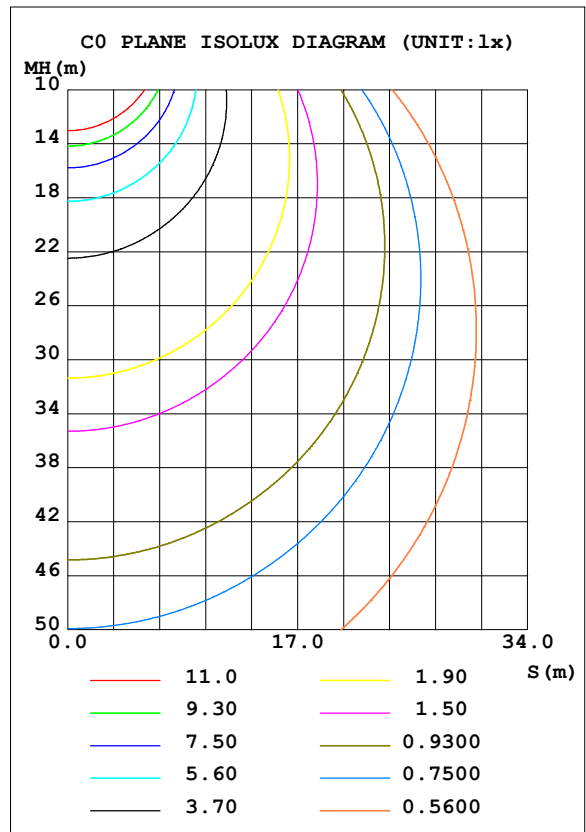
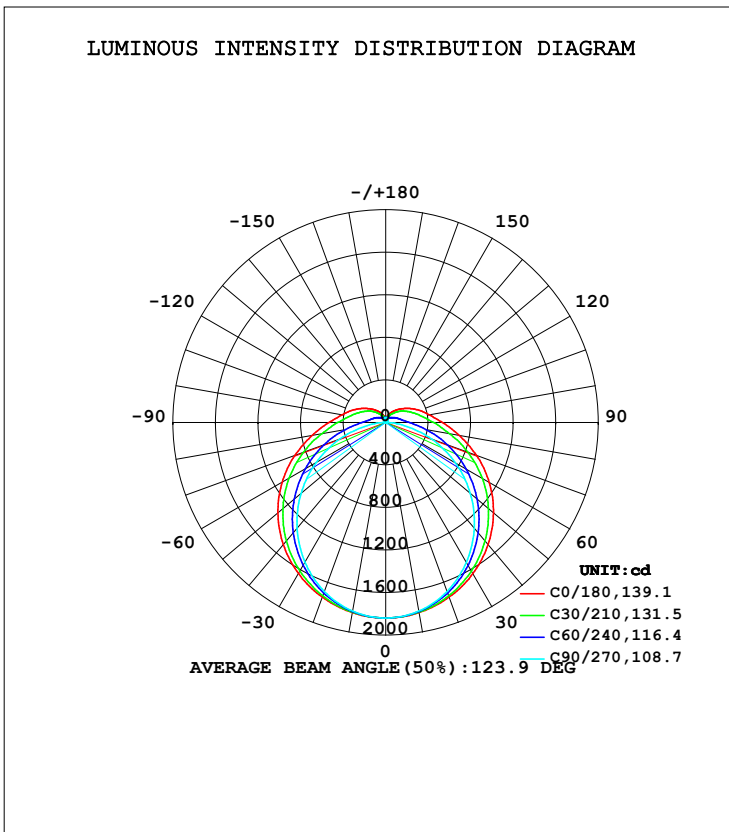


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.5V I:0.1967A P:43.89W PF:0.9682 Freq:49.99Hz Lamp Flux:7208.1x1 lm		
NAME: TB33-45-1200K-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 164.23 lm/W			
MODEL		Imax (cd)	1839	S/MH (C0/180)	1.33
NOMINAL POWER (W)	45	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	7208.1	$\eta$ UP, DN (C0-180)	6.9, 43.1
NOMINAL FLUX (lm)	7208.1	CIE CLASS	SEMI-D.	$\eta$ UP, DN (C180-360)	6.9, 43.1
LAMPS INSIDE	1	$\eta$ up (%)	13.8	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	230	$\eta$ down (%)	86.2	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

$\gamma$  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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1816	1809	1801	1809	1816	1809	1801	1809	0- 10	174.1	174.1	2.42,2.42
20	1747	1722	1691	1722	1747	1722	1691	1722	10- 20	500.1	674.2	9.35,9.35
30	1641	1584	1519	1584	1641	1584	1519	1584	20- 30	764.1	1438	20,20
40	1498	1406	1297	1406	1498	1406	1297	1406	30- 40	936.9	2375	33,33
50	1324	1198	1039	1198	1324	1198	1039	1198	40- 50	1003	3378	46.9,46.9
60	1125	968.6	755.9	968.6	1125	968.6	755.9	968.6	50- 60	961.6	4340	60.2,60.2
70	910.2	731.3	462.5	731.3	910.2	731.3	462.5	731.3	60- 70	825.3	5165	71.7,71.7
80	701.0	515.0	179.5	515.0	701.0	515.0	179.5	515.0	70- 80	625.7	5791	80.3,80.3
90	534.8	355.2	6.171	355.2	534.8	355.2	6.171	355.2	80- 90	425.9	6217	86.2,86.2
100	419.1	259.1	9.368	259.1	419.1	259.1	9.368	259.1	90-100	300.1	6517	90.4,90.4
110	336.8	202.9	12.25	202.9	336.8	202.9	12.25	202.9	100-110	225.8	6743	93.5,93.5
120	264.7	159.6	16.85	159.6	264.7	159.6	16.85	159.6	110-120	169.0	6912	95.9,95.9
130	203.5	116.2	21.55	116.2	203.5	116.2	21.55	116.2	120-130	120.0	7032	97.6,97.6
140	153.3	86.33	25.89	86.33	153.3	86.33	25.89	86.33	130-140	80.03	7112	98.7,98.7
150	111.3	64.87	31.47	64.87	111.3	64.87	31.47	64.87	140-150	49.72	7161	99.4,99.4
160	77.39	53.66	37.92	53.66	77.39	53.66	37.92	53.66	150-160	28.30	7190	99.7,99.7
170	48.91	47.28	42.84	47.28	48.91	47.28	42.84	47.28	160-170	14.19	7204	99.9,99.9
180	30.50	43.45	45.80	43.45	30.50	43.45	45.80	43.45	170-180	4.137	7208	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 2875.4 lm

%lum = 39.9%  
%lamp = 39.9%

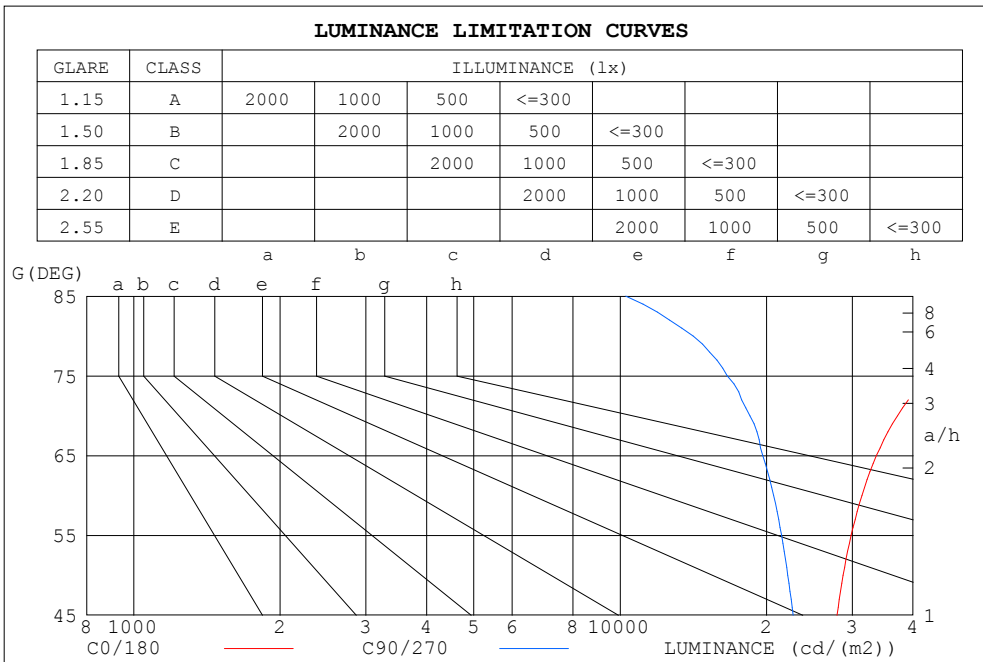
Conical surface Flux(120deg): 4340 lm

%lum = 60.2%  
%lamp = 60.2%

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:

LUMINANCE LIMITATION CURVES



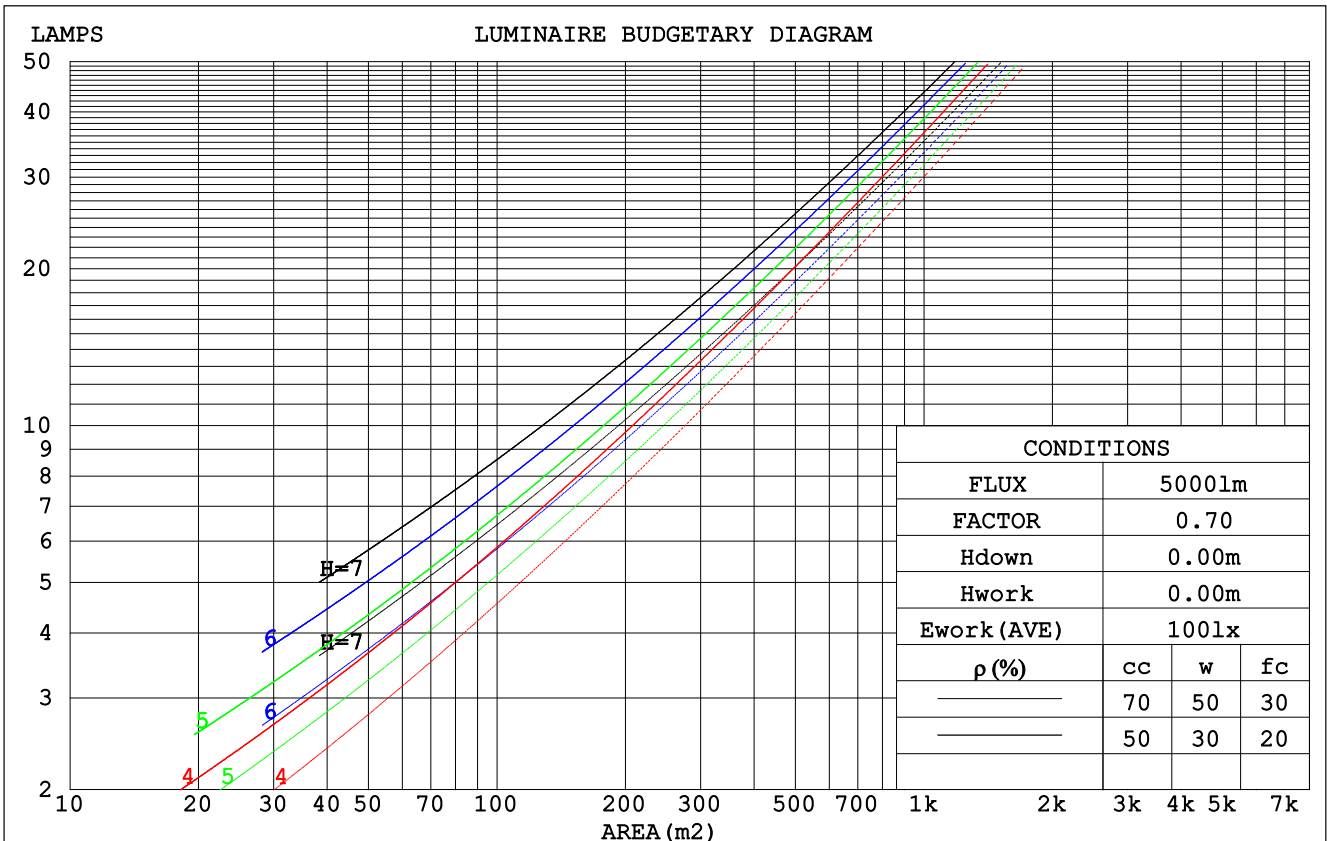
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	98008	10272
80	56337	14138
75	43238	16597
70	37139	18494
65	33645	19638
60	31402	20676
55	29849	21472
50	28735	22113
45	27914	22676

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	1.11	1.11	1.11	1.03	1.03	1.03	.96	.96	.96	.89	.89	.89	.86
1.0	.98	.93	.88	.94	.90	.85	.87	.84	.80	.81	.78	.75	.75	.73	.71	.68
2.0	.84	.77	.70	.81	.74	.68	.75	.69	.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	.64	.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	.38	.48	.42	.37	.45	.40	.35	.33
6.0	.51	.42	.36	.50	.41	.35	.46	.39	.33	.43	.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	.38	.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	.207	.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	.261	.142	.043	.245	.135	.041	.231	.128	.040	
4.0	.261	.136	.040	.253	.132	.039	.237	.126	.038	.223	.119	.036	.209	.114	.035	
5.0	.238	.121	.035	.231	.118	.035	.217	.113	.033	.203	.107	.032	.191	.102	.031	
6.0	.219	.110	.031	.212	.107	.031	.199	.102	.030	.187	.097	.029	.176	.093	.028	
7.0	.203	.100	.028	.196	.098	.028	.185	.093	.027	.174	.089	.026	.163	.085	.025	
8.0	.188	.092	.026	.183	.090	.025	.172	.086	.025	.162	.082	.024	.152	.078	.023	
9.0	.176	.085	.024	.171	.083	.023	.161	.079	.023	.151	.076	.022	.143	.072	.021	
10.0	.165	.079	.022	.160	.077	.022	.151	.074	.021	.142	.071	.020	.134	.067	.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	.295	.295	.295	.252	.252	.252	.172	.172	.172	.099	.099	.099	.032	.032	.032	
1.0	.290	.261	.236	.248	.224	.203	.170	.154	.140	.098	.089	.082	.031	.029	.026	
2.0	.282	.238	.201	.242	.205	.174	.166	.142	.121	.096	.082	.071	.031	.027	.023	
3.0	.275	.221	.179	.236	.191	.155	.162	.133	.109	.093	.077	.064	.030	.025	.021	
4.0	.267	.209	.164	.229	.180	.142	.158	.126	.100	.091	.074	.059	.029	.024	.020	
5.0	.260	.199	.154	.223	.172	.134	.154	.120	.094	.089	.071	.056	.029	.023	.018	
6.0	.252	.191	.146	.217	.165	.128	.150	.116	.090	.087	.068	.054	.028	.022	.018	
7.0	.245	.184	.141	.211	.159	.123	.146	.112	.087	.085	.066	.052	.027	.022	.017	
8.0	.239	.178	.137	.205	.155	.119	.142	.109	.085	.083	.064	.050	.027	.021	.017	
9.0	.232	.174	.134	.200	.151	.117	.139	.106	.083	.081	.063	.049	.026	.021	.016	
10.0	.227	.169	.131	.195	.147	.115	.136	.103	.081	.079	.061	.049	.026	.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	15.5	16.9	16.0	17.4	17.9
3H	19.6	20.9	20.1	21.4	21.9	17.0	18.3	17.5	18.7	19.3
4H	20.9	22.1	21.4	22.6	23.1	17.5	18.8	18.0	19.3	19.8
6H	22.2	23.4	22.8	23.9	24.5	17.9	19.1	18.4	19.6	20.1
8H	23.0	24.1	23.5	24.6	25.2	18.0	19.1	18.5	19.6	20.2
12H	23.9	24.9	24.4	25.5	26.1	18.0	19.1	18.6	19.7	20.2
4H 2H	17.8	19.0	18.3	19.5	20.1	16.5	17.7	17.0	18.2	18.8
3H	20.4	21.5	20.9	22.0	22.6	18.2	19.3	18.7	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	19.4	20.3	20.0	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	22.9	22.7	23.5	24.2	19.7	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	25.7	26.3	27.1	20.9	21.5	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	20.7	20.6	21.4	22.1
6H	24.1	24.7	24.7	25.3	26.1	21.0	21.7	21.7	22.3	23.0
8H	25.3	25.8	25.9	26.5	27.2	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, 7208 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 6.9)

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:

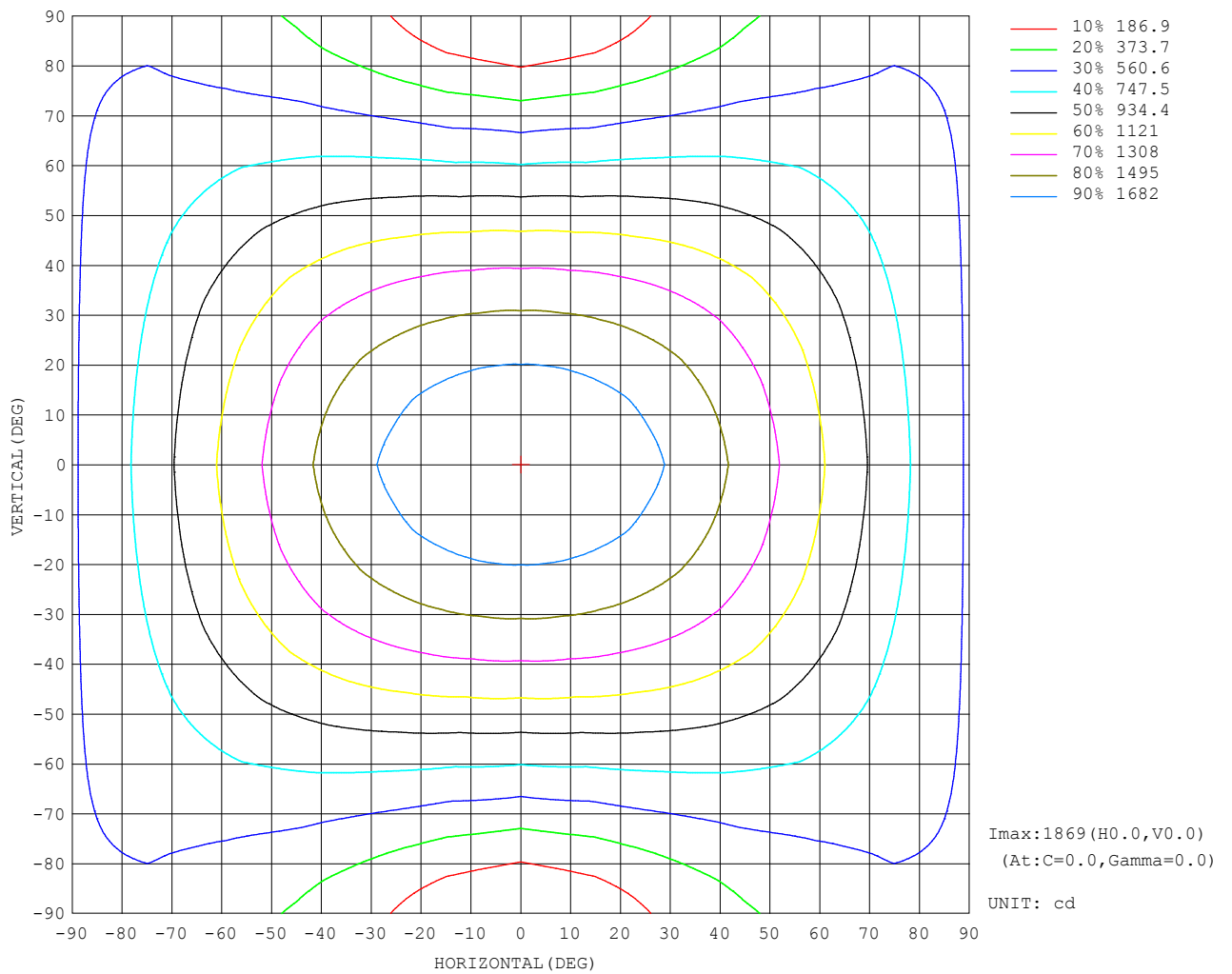
UTILIZATION FACTORS TABLE

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	46	39	56	45	38	31
1.00	68	55	47	66	54	47	63	55	46	37
1.25	75	63	54	72	61	54	69	59	52	43
1.50	80	68	60	77	67	59	73	64	57	47
2.00	87	76	69	84	75	67	79	71	65	54
2.50	91	82	74	88	79	73	82	75	70	58
3.00	95	86	79	92	84	77	85	79	74	62
4.00	99	92	86	96	89	84	89	84	79	66
5.00	102	96	90	98	93	88	92	87	83	69
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

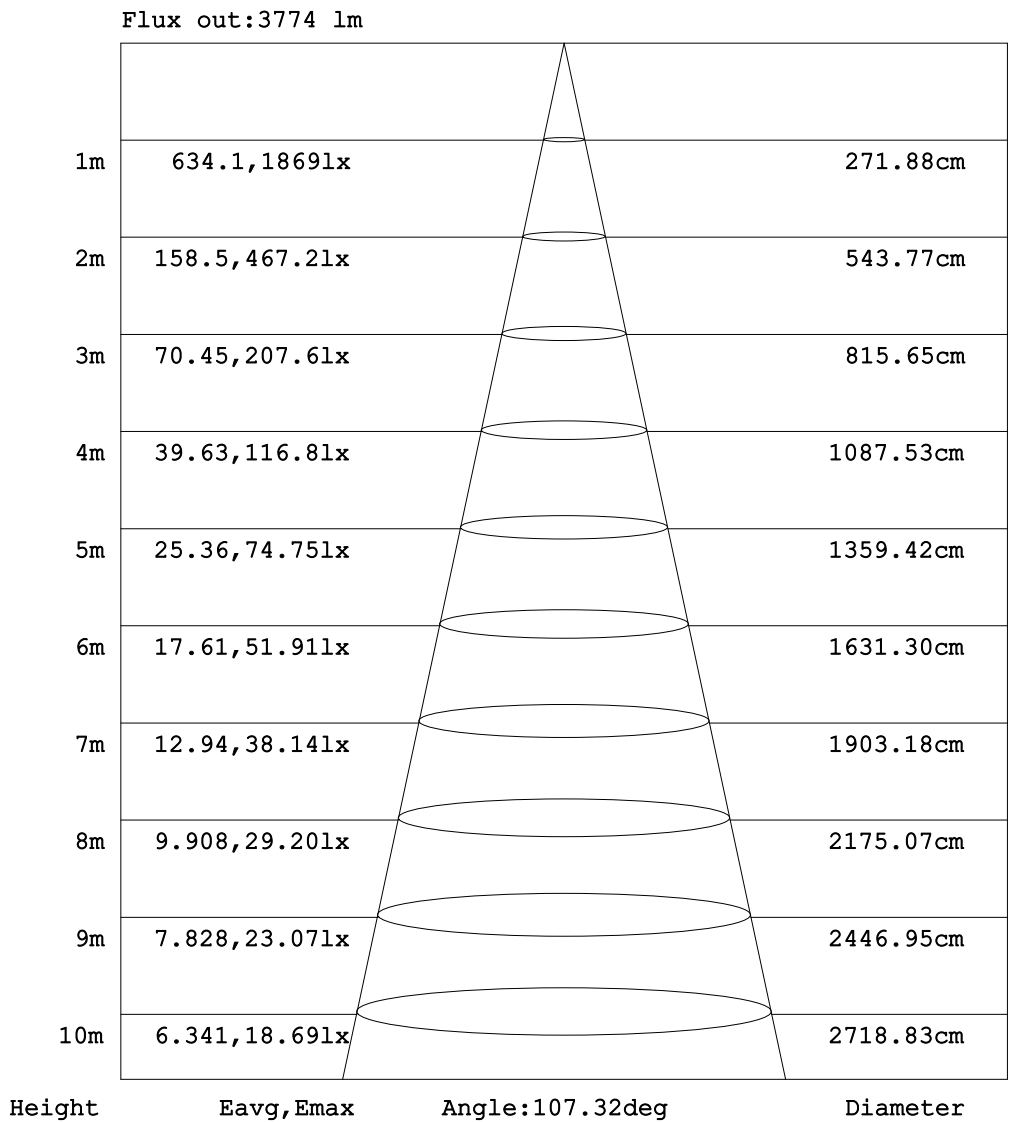


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2021-11-22

$\gamma$  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

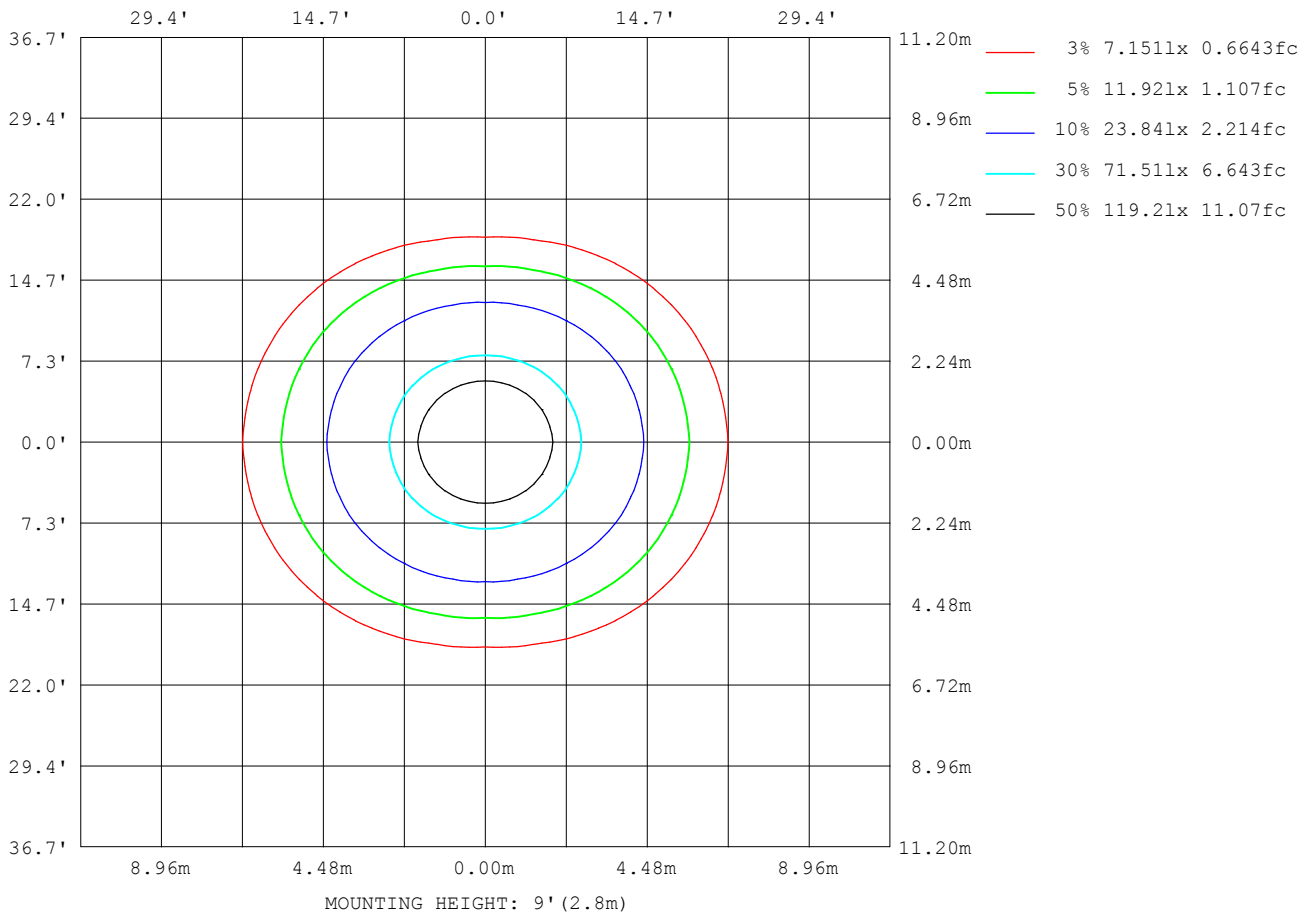


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1967A P:43.89W PF:0.9682 Freq:49.99Hz Lamp Flux:7208.1x1 lm		
NAME: TB33-45-1200K-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

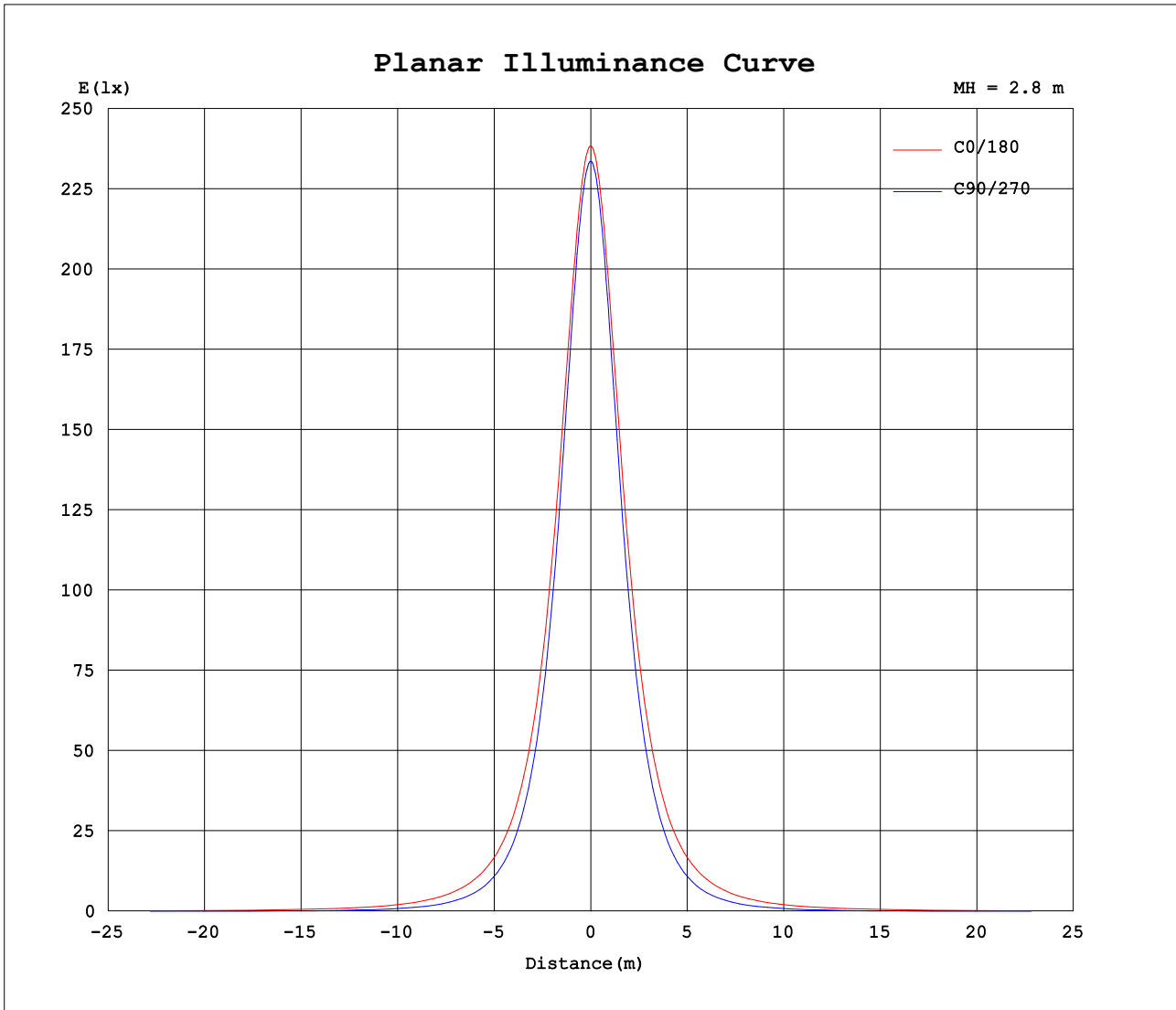
AvgL	cd/m2
L_0~180 (65) av	33117
L_0~180 (75) av	42559
L_0~180 (85) av	96469
L_90~270 (65) av	19722
L_90~270 (75) av	16669
L_90~270 (85) av	10317
L_45 (65) av	27627
L_45 (75) av	32722
L_45 (85) av	66258

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

$\gamma$  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:

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	1839	1839	1839	1839	1839	1839	1839	1839	1839	1839	1839	1839	1839	1839	1839	1839	1839	1839	1839
5	1833	1833	1833	1832	1831	1830	1830	1830	1831	1832	1833	1833	1833	1833	1833	1832	1831	1830	1830
10	1816	1815	1812	1809	1805	1802	1801	1802	1805	1809	1812	1815	1816	1815	1812	1809	1805	1802	1801
15	1786	1786	1780	1772	1763	1757	1755	1757	1763	1772	1780	1786	1786	1786	1780	1772	1763	1757	1755
20	1747	1745	1735	1722	1706	1695	1691	1695	1706	1722	1735	1745	1747	1745	1735	1722	1706	1695	1691
25	1699	1695	1679	1659	1635	1618	1612	1618	1635	1659	1679	1695	1699	1695	1679	1659	1635	1618	1612
30	1641	1635	1613	1584	1552	1527	1519	1527	1552	1584	1613	1635	1641	1635	1613	1584	1552	1527	1519
35	1574	1566	1537	1499	1457	1425	1413	1425	1457	1499	1537	1566	1574	1566	1537	1499	1457	1425	1413
40	1498	1488	1453	1406	1353	1313	1297	1313	1353	1406	1453	1488	1498	1488	1453	1406	1353	1313	1297
45	1414	1403	1361	1305	1241	1192	1172	1192	1241	1305	1361	1403	1414	1403	1361	1305	1241	1192	1172
50	1324	1309	1263	1198	1123	1063	1039	1063	1123	1198	1263	1309	1324	1309	1263	1198	1123	1063	1039
55	1227	1210	1158	1085	1000	929	900	929	1000	1085	1158	1210	1227	1210	1158	1085	1000	929	900
60	1125	1105	1049	969	874	791	756	791	874	969	1049	1105	1125	1105	1049	969	874	791	756
65	1019	997	937	850	746	650	607	650	746	850	937	997	1019	997	937	850	746	650	607
70	910	887	824	731	619	514	462	514	619	731	824	887	910	887	824	731	619	514	462
75	802	775	716	617	496	380	314	380	496	617	716	775	802	775	716	617	496	380	314
80	701	674	609	515	383	251	180	251	383	515	609	674	701	674	609	515	383	251	180
85	612	595	522	420	287	146	65.5	146	287	420	522	595	612	595	522	420	287	146	65.5
90	535	520	452	355	223	87.1	6.17	87.1	223	355	452	520	535	520	452	355	223	87.1	6.17
95	470	455	390	300	181	64.7	11.1	64.7	181	300	390	455	470	455	390	300	181	64.7	11.1
100	419	404	345	259	153	54.8	9.37	54.8	153	259	345	404	419	404	345	259	153	54.8	9.37
105	376	360	306	228	135	49.3	10.3	49.3	135	228	306	360	376	360	306	228	135	49.3	10.3
110	337	321	273	203	120	46.5	12.2	46.5	120	203	273	321	337	321	273	203	120	46.5	12.2
115	299	286	243	181	106	43.5	14.4	43.5	106	181	243	286	299	286	243	181	106	43.5	14.4
120	265	254	215	160	93.0	40.4	16.9	40.4	93.0	160	215	254	265	254	215	160	93.0	40.4	16.9
125	233	224	190	136	81.9	38.5	19.2	38.5	81.9	136	190	224	233	224	190	136	81.9	38.5	19.2
130	204	197	165	116	72.3	37.7	21.6	37.7	72.3	116	165	197	204	197	165	116	72.3	37.7	21.6
135	177	171	140	101	65.0	37.7	23.8	37.7	65.0	101	140	171	177	171	140	101	65.0	37.7	23.8
140	153	149	116	86.3	58.4	37.7	25.9	37.7	58.4	86.3	116	149	153	149	116	86.3	58.4	37.7	25.9
145	131	127	97.6	75.2	53.1	37.6	28.2	37.6	53.1	75.2	97.6	127	131	127	97.6	75.2	53.1	37.6	28.2
150	111	104	82.1	64.9	49.3	38.9	31.5	38.9	49.3	64.9	82.1	104	111	104	82.1	64.9	49.3	38.9	31.5
155	93.4	81.0	69.3	56.6	49.5	40.5	34.8	40.5	49.5	56.6	69.3	81.0	93.4	81.0	69.3	56.6	49.5	40.5	34.8
160	77.4	65.8	57.7	53.7	48.4	42.3	37.9	42.3	48.4	53.7	57.7	65.8	77.4	65.8	57.7	53.7	48.4	42.3	37.9
165	62.0	54.3	50.1	50.5	47.4	43.7	40.6	43.7	47.4	50.5	50.1	54.3	62.0	54.3	50.1	50.5	47.4	43.7	40.6
170	48.9	43.4	44.4	47.3	46.5	44.5	42.8	44.5	46.5	47.3	44.4	43.4	48.9	43.4	44.4	47.3	46.5	44.5	42.8
175	32.0	37.4	42.2	45.5	45.5	44.6	44.6	44.6	45.5	45.5	42.2	37.4	32.0	37.4	42.2	45.5	45.5	44.6	44.6
180	30.5	36.3	40.4	43.5	44.3	45.6	45.8	45.6	44.3	43.5	40.4	36.3	30.5	36.3	40.4	43.5	44.3	45.6	45.8

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345															
0	1839	1839	1839	1839	1839															
5	1830	1831	1832	1833	1833															
10	1802	1805	1809	1812	1815															
15	1757	1763	1772	1780	1786															
20	1695	1706	1722	1735	1745															
25	1618	1635	1659	1679	1695															
30	1527	1552	1584	1613	1635															
35	1425	1457	1499	1537	1566															
40	1313	1353	1406	1453	1488															
45	1192	1241	1305	1361	1403															
50	1063	1123	1198	1263	1309															
55	929	1000	1085	1158	1210															
60	791	874	969	1049	1105															
65	650	746	850	937	997															
70	514	619	731	824	887															
75	380	496	617	716	775															
80	251	383	515	609	674															
85	146	287	420	522	595															
90	87.1	223	355	452	520															
95	64.7	181	300	390	455															
100	54.8	153	259	345	404															
105	49.3	135	228	306	360															
110	46.5	120	203	273	321															
115	43.5	106	181	243	286															
120	40.4	93.0	160	215	254															
125	38.5	81.9	136	190	224															
130	37.7	72.3	116	165	197															
135	37.7	65.0	101	140	171															
140	37.7	58.4	86.3	116	149															
145	37.6	53.1	75.2	97.6	127															
150	38.9	49.3	64.9	82.1	104															
155	40.5	49.5	56.6	69.3	81.0															
160	42.3	48.4	53.7	57.7	65.8															
165	43.7	47.4	50.5	50.1	54.3															
170	44.5	46.5	47.3	44.4	43.4															
175	44.6	45.5	45.5	42.2	37.4															
180	45.6	44.3	43.5	40.4	36.3															

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	1839	1839	1839	1839	1839	1839	1839	1839	1839	1839
3.0	1837	1837	1837	1837	1836	1836	1836	1836	1836	1837
6.0	1831	1831	1830	1828	1827	1826	1826	1826	1827	1828
9.0	1820	1820	1818	1815	1812	1809	1808	1809	1812	1815
12.0	1805	1805	1801	1796	1790	1786	1785	1786	1790	1796
15.0	1786	1786	1780	1772	1763	1757	1755	1757	1763	1772
18.0	1764	1763	1754	1743	1731	1722	1718	1722	1731	1743
21.0	1738	1736	1724	1710	1693	1681	1676	1681	1693	1710
24.0	1710	1706	1691	1672	1651	1634	1629	1634	1651	1672
27.0	1677	1672	1654	1630	1603	1583	1576	1583	1603	1630
30.0	1641	1635	1613	1584	1552	1527	1519	1527	1552	1584
33.0	1602	1595	1569	1534	1496	1467	1457	1467	1496	1534
36.0	1560	1551	1521	1481	1437	1403	1391	1403	1437	1481
39.0	1514	1505	1471	1425	1375	1336	1321	1336	1375	1425
42.0	1466	1455	1417	1366	1309	1265	1248	1265	1309	1366
45.0	1414	1403	1361	1305	1241	1192	1172	1192	1241	1305
48.0	1361	1348	1303	1241	1171	1115	1093	1115	1171	1241
51.0	1305	1290	1242	1175	1099	1037	1012	1037	1099	1175
54.0	1247	1230	1179	1108	1025	956.7	929.0	956.7	1025	1108
57.0	1187	1168	1115	1039	950.0	874.7	843.5	874.7	950.0	1039
60.0	1125	1105	1049	968.6	874.0	791.2	755.9	791.2	874.0	968.6
63.0	1062	1040	981.9	897.7	797.1	706.6	666.9	706.6	797.1	897.7
66.0	997.5	975.5	914.2	826.1	720.1	622.9	578.0	622.9	720.1	826.1
69.0	932.0	909.8	846.1	754.8	644.2	540.4	493.7	540.4	644.2	754.8
72.0	866.3	840.9	779.5	684.4	569.6	460.2	401.5	460.2	569.6	684.4
75.0	801.9	774.7	716.2	616.5	496.4	379.5	314.1	379.5	496.4	616.5
78.0	739.9	711.9	651.2	554.8	425.0	300.6	232.1	300.6	425.0	554.8
81.0	682.1	657.1	588.7	494.6	362.1	227.6	153.1	227.6	362.1	494.6
84.0	628.9	610.8	537.2	436.4	305.5	164.0	85.17	164.0	305.5	436.4
87.0	579.8	564.9	493.8	392.5	256.6	117.5	32.80	117.5	256.6	392.5
90.0	534.8	519.8	452.2	355.2	223.1	87.05	6.171	87.05	223.1	355.2
93.0	494.5	479.5	411.9	320.2	196.3	71.37	8.055	71.37	196.3	320.2
96.0	459.0	444.3	381.6	291.5	174.1	62.15	11.41	62.15	174.1	291.5
99.0	428.7	413.6	353.5	266.6	157.7	56.28	10.47	56.28	157.7	266.6
102.0	401.1	385.7	328.8	245.5	145.1	52.17	9.297	52.17	145.1	245.5
105.0	376.4	360.1	306.4	228.2	134.5	49.31	10.31	49.31	134.5	228.2
108.0	352.5	336.4	285.8	212.8	125.3	47.45	11.43	47.45	125.3	212.8
111.0	329.1	314.2	266.4	198.2	116.9	45.95	12.69	45.95	116.9	198.2
114.0	306.7	293.1	248.2	184.7	109.0	44.12	13.98	44.12	109.0	184.7
117.0	285.1	273.0	231.3	172.8	100.3	42.17	15.40	42.17	100.3	172.8
120.0	264.7	253.8	214.8	159.6	92.98	40.45	16.85	40.45	92.98	159.6
123.0	245.4	235.7	199.9	145.4	86.10	39.23	18.30	39.23	86.10	145.4
126.0	226.8	218.1	185.6	131.6	79.88	38.29	19.72	38.29	79.88	131.6
129.0	209.0	201.8	170.8	119.6	73.96	37.86	21.11	37.86	73.96	119.6
132.0	192.8	186.4	154.9	109.7	69.24	37.41	22.48	37.41	69.24	109.7
135.0	177.3	171.4	139.6	100.8	64.95	37.71	23.79	37.71	64.95	100.8
138.0	162.7	157.5	125.0	92.14	60.92	37.69	25.07	37.69	60.92	92.14
141.0	148.7	144.4	111.6	84.19	57.22	37.66	26.28	37.66	57.22	84.19
144.0	135.6	131.7	100.9	77.42	53.87	37.55	27.70	37.55	53.87	77.42
147.0	123.0	117.9	91.14	70.90	51.32	38.01	29.51	38.01	51.32	70.90
150.0	111.3	104.1	82.14	64.87	49.33	38.86	31.47	38.86	49.33	64.87
153.0	100.3	90.02	74.47	59.33	49.86	39.85	33.47	39.85	49.86	59.33
156.0	90.07	76.92	66.84	55.40	49.33	40.84	35.43	40.84	49.33	55.40
159.0	80.45	68.41	59.90	53.50	48.65	41.95	37.33	41.95	48.65	53.50
162.0	70.44	60.74	53.79	52.48	47.90	42.86	39.05	42.86	47.90	52.48
165.0	61.97	54.26	50.09	50.51	47.40	43.68	40.58	43.68	47.40	50.51
168.0	53.58	47.84	46.47	48.48	46.83	44.38	42.00	44.38	46.83	48.48
171.0	46.22	41.53	43.47	46.82	46.42	44.44	43.25	44.44	46.42	46.82
174.0	35.97	38.16	42.51	45.77	45.98	44.47	44.34	44.47	45.98	45.77
177.0	30.76	36.44	41.36	44.21	44.57	45.06	45.21	45.06	44.57	44.21
180.0	30.50	36.33	40.38	43.45	44.29	45.62	45.80	45.62	44.29	43.45
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	1839	1839	1839	1839	1839	1839	1839	1839	1839	1839
3.0	1837	1837	1837	1837	1837	1837	1836	1836	1836	1836
6.0	1830	1831	1831	1831	1830	1828	1827	1826	1826	1826
9.0	1818	1820	1820	1820	1818	1815	1812	1809	1808	1809
12.0	1801	1805	1805	1805	1801	1796	1790	1786	1785	1786
15.0	1780	1786	1786	1786	1780	1772	1763	1757	1755	1757
18.0	1754	1763	1764	1763	1754	1743	1731	1722	1718	1722
21.0	1724	1736	1738	1736	1724	1710	1693	1681	1676	1681
24.0	1691	1706	1710	1706	1691	1672	1651	1634	1629	1634
27.0	1654	1672	1677	1672	1654	1630	1603	1583	1576	1583
30.0	1613	1635	1641	1635	1613	1584	1552	1527	1519	1527

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

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]

33.0	1569	1595	1602	1595	1569	1534	1496	1467	1457	1467
36.0	1521	1551	1560	1551	1521	1481	1437	1403	1391	1403
39.0	1471	1505	1514	1505	1471	1425	1375	1336	1321	1336
42.0	1417	1455	1466	1455	1417	1366	1309	1265	1248	1265
45.0	1361	1403	1414	1403	1361	1305	1241	1192	1172	1192
48.0	1303	1348	1361	1348	1303	1241	1171	1115	1093	1115
51.0	1242	1290	1305	1290	1242	1175	1099	1037	1012	1037
54.0	1179	1230	1247	1230	1179	1108	1025	956.7	929.0	956.7
57.0	1115	1168	1187	1168	1115	1039	950.0	874.7	843.5	874.7
60.0	1049	1105	1125	1105	1049	968.6	874.0	791.2	755.9	791.2
63.0	981.9	1040	1062	1040	981.9	897.7	797.1	706.6	666.9	706.6
66.0	914.2	975.5	997.5	975.5	914.2	826.1	720.1	622.9	578.0	622.9
69.0	846.1	909.8	932.0	909.8	846.1	754.8	644.2	540.4	493.7	540.4
72.0	779.5	840.9	866.3	840.9	779.5	684.4	569.6	460.2	401.5	460.2
75.0	716.2	774.7	801.9	774.7	716.2	616.5	496.4	379.5	314.1	379.5
78.0	651.2	711.9	739.9	711.9	651.2	554.8	425.0	300.6	232.1	300.6
81.0	588.7	657.1	682.1	657.1	588.7	494.6	362.1	227.6	153.1	227.6
84.0	537.2	610.8	628.9	610.8	537.2	436.4	305.5	164.0	85.17	164.0
87.0	493.8	564.9	579.8	564.9	493.8	392.5	256.6	117.5	32.80	117.5
90.0	452.2	519.8	534.8	519.8	452.2	355.2	223.1	87.05	6.171	87.05
93.0	411.9	479.5	494.5	479.5	411.9	320.2	196.3	71.37	8.055	71.37
96.0	381.6	444.3	459.0	444.3	381.6	291.5	174.1	62.15	11.41	62.15
99.0	353.5	413.6	428.7	413.6	353.5	266.6	157.7	56.28	10.47	56.28
102.0	328.8	385.7	401.1	385.7	328.8	245.5	145.1	52.17	9.297	52.17
105.0	306.4	360.1	376.4	360.1	306.4	228.2	134.5	49.31	10.31	49.31
108.0	285.8	336.4	352.5	336.4	285.8	212.8	125.3	47.45	11.43	47.45
111.0	266.4	314.2	329.1	314.2	266.4	198.2	116.9	45.95	12.69	45.95
114.0	248.2	293.1	306.7	293.1	248.2	184.7	109.0	44.12	13.98	44.12
117.0	231.3	273.0	285.1	273.0	231.3	172.8	100.3	42.17	15.40	42.17
120.0	214.8	253.8	264.7	253.8	214.8	159.6	92.98	40.45	16.85	40.45
123.0	199.9	235.7	245.4	235.7	199.9	145.4	86.10	39.23	18.30	39.23
126.0	185.6	218.1	226.8	218.1	185.6	131.6	79.88	38.29	19.72	38.29
129.0	170.8	201.8	209.0	201.8	170.8	119.6	73.96	37.86	21.11	37.86
132.0	154.9	186.4	192.8	186.4	154.9	109.7	69.24	37.41	22.48	37.41
135.0	139.6	171.4	177.3	171.4	139.6	100.8	64.95	37.71	23.79	37.71
138.0	125.0	157.5	162.7	157.5	125.0	92.14	60.92	37.69	25.07	37.69
141.0	111.6	144.4	148.7	144.4	111.6	84.19	57.22	37.66	26.28	37.66
144.0	100.9	131.7	135.6	131.7	100.9	77.42	53.87	37.55	27.70	37.55
147.0	91.14	117.9	123.0	117.9	91.14	70.90	51.32	38.01	29.51	38.01
150.0	82.14	104.1	111.3	104.1	82.14	64.87	49.33	38.86	31.47	38.86
153.0	74.47	90.02	100.3	90.02	74.47	59.33	49.86	39.85	33.47	39.85
156.0	66.84	76.92	90.07	76.92	66.84	55.40	49.33	40.84	35.43	40.84
159.0	59.90	68.41	80.45	68.41	59.90	53.50	48.65	41.95	37.33	41.95
162.0	53.79	60.74	70.44	60.74	53.79	52.48	47.90	42.86	39.05	42.86
165.0	50.09	54.26	61.97	54.26	50.09	50.51	47.40	43.68	40.58	43.68
168.0	46.47	47.84	53.58	47.84	46.47	48.48	46.83	44.38	42.00	44.38
171.0	43.47	41.53	46.22	41.53	43.47	46.82	46.42	44.44	43.25	44.44
174.0	42.51	38.16	35.97	38.16	42.51	45.77	45.98	44.47	44.34	44.47
177.0	41.36	36.44	30.76	36.44	41.36	44.21	44.57	45.06	45.21	45.06
180.0	40.38	36.33	30.50	36.33	40.38	43.45	44.29	45.62	45.80	45.62
G/C	300.0	315.0	330.0	345.0						
0.0	1839	1839	1839	1839						
3.0	1836	1837	1837	1837						
6.0	1827	1828	1830	1831						
9.0	1812	1815	1818	1820						
12.0	1790	1796	1801	1805						
15.0	1763	1772	1780	1786						
18.0	1731	1743	1754	1763						
21.0	1693	1710	1724	1736						
24.0	1651	1672	1691	1706						
27.0	1603	1630	1654	1672						
30.0	1552	1584	1613	1635						
33.0	1496	1534	1569	1595						
36.0	1437	1481	1521	1551						
39.0	1375	1425	1471	1505						
42.0	1309	1366	1417	1455						
45.0	1241	1305	1361	1403						
48.0	1171	1241	1303	1348						
51.0	1099	1175	1242	1290						
54.0	1025	1108	1179	1230						
57.0	950.0	1039	1115	1168						
60.0	874.0	968.6	1049	1105						
63.0	797.1	897.7	981.9	1040						
66.0	720.1	826.1	914.2	975.5						

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	644.2	754.8	846.1	909.8
72.0	569.6	684.4	779.5	840.9
75.0	496.4	616.5	716.2	774.7
78.0	425.0	554.8	651.2	711.9
81.0	362.1	494.6	588.7	657.1
84.0	305.5	436.4	537.2	610.8
87.0	256.6	392.5	493.8	564.9
90.0	223.1	355.2	452.2	519.8
93.0	196.3	320.2	411.9	479.5
96.0	174.1	291.5	381.6	444.3
99.0	157.7	266.6	353.5	413.6
102.0	145.1	245.5	328.8	385.7
105.0	134.5	228.2	306.4	360.1
108.0	125.3	212.8	285.8	336.4
111.0	116.9	198.2	266.4	314.2
114.0	109.0	184.7	248.2	293.1
117.0	100.3	172.8	231.3	273.0
120.0	92.98	159.6	214.8	253.8
123.0	86.10	145.4	199.9	235.7
126.0	79.88	131.6	185.6	218.1
129.0	73.96	119.6	170.8	201.8
132.0	69.24	109.7	154.9	186.4
135.0	64.95	100.8	139.6	171.4
138.0	60.92	92.14	125.0	157.5
141.0	57.22	84.19	111.6	144.4
144.0	53.87	77.42	100.9	131.7
147.0	51.32	70.90	91.14	117.9
150.0	49.33	64.87	82.14	104.1
153.0	49.86	59.33	74.47	90.02
156.0	49.33	55.40	66.84	76.92
159.0	48.65	53.50	59.90	68.41
162.0	47.90	52.48	53.79	60.74
165.0	47.40	50.51	50.09	54.26
168.0	46.83	48.48	46.47	47.84
171.0	46.42	46.82	43.47	41.53
174.0	45.98	45.77	42.51	38.16
177.0	44.57	44.21	41.36	36.44
180.0	44.29	43.45	40.38	36.33

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: