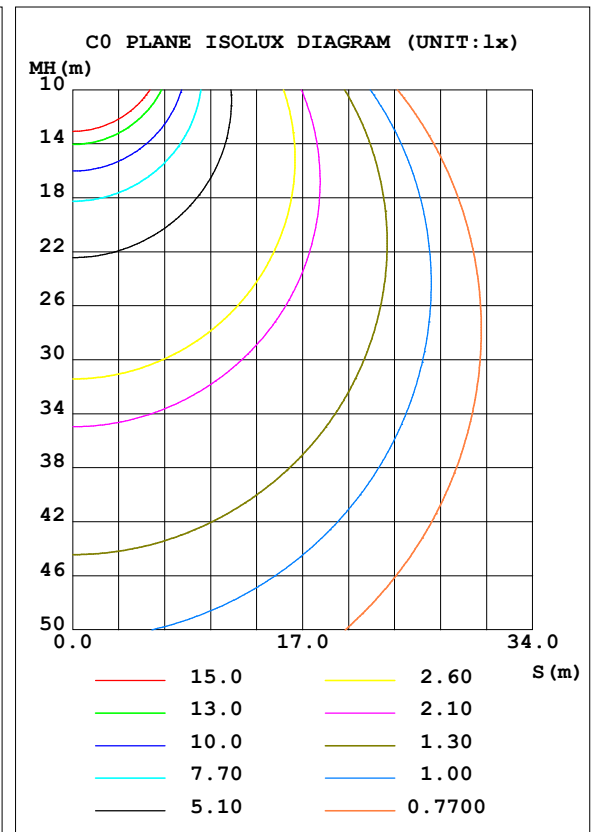
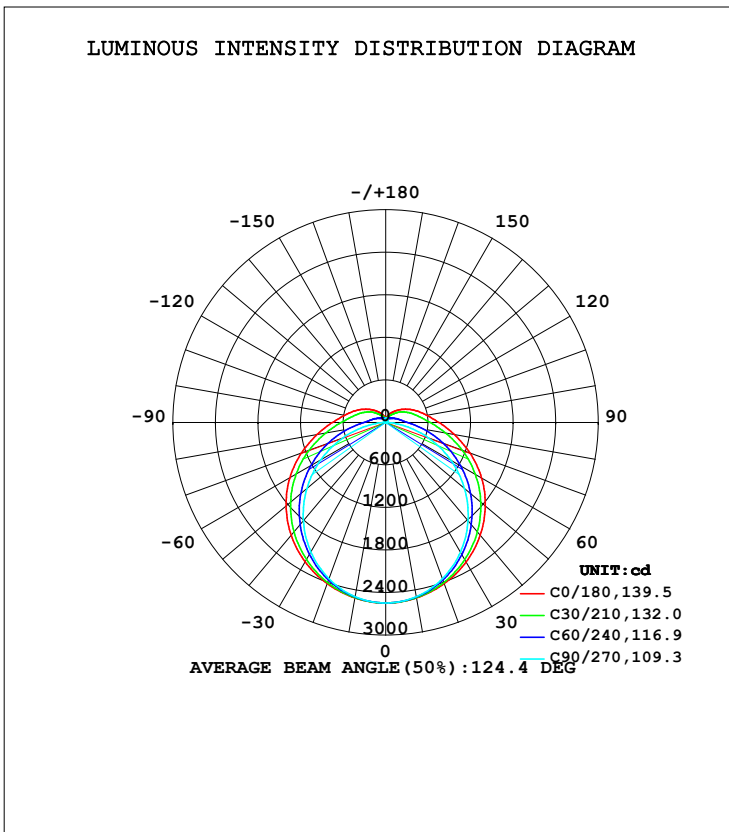


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.4V I:0.2660A P:59.96W PF:0.9782 Freq:49.99Hz Lamp Flux:10012.4x1 lm		
NAME: TB33-60-1500K-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 166.98 lm/W			
MODEL		I <sub>max</sub> (cd)	2547	S/MH (C0/180)	1.33
NOMINAL POWER (W)	60	LOR (%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	10012	η UP, DN (C0-180)	6.9, 43.1
NOMINAL FLUX (lm)	10012.4	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	6.9, 43.1
LAMPS INSIDE	1	η up (%)	13.7	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	230	η down (%)	86.3	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	2513	2505	2496	2505	2513	2505	2496	2505	0- 10	241.1	241.1	2.41,2.41
20	2419	2383	2346	2383	2419	2383	2346	2383	10- 20	692.6	933.7	9.33,9.33
30	2272	2193	2111	2193	2272	2193	2111	2193	20- 30	1058	1992	19.9,19.9
40	2075	1949	1808	1949	2075	1949	1808	1949	30- 40	1299	3291	32.9,32.9
50	1835	1663	1453	1663	1835	1663	1453	1663	40- 50	1393	4684	46.8,46.8
60	1561	1348	1060	1348	1561	1348	1060	1348	50- 60	1337	6021	60.1,60.1
70	1266	1021	646.6	1021	1266	1021	646.6	1021	60- 70	1150	7171	71.6,71.6
80	981.8	711.2	249.7	711.2	981.8	711.2	249.7	711.2	70- 80	874.3	8045	80.4,80.4
90	752.1	484.9	9.642	484.9	752.1	484.9	9.642	484.9	80- 90	593.7	8639	86.3,86.3
100	591.7	360.9	13.68	360.9	591.7	360.9	13.68	360.9	90-100	417.3	9056	90.5,90.5
110	475.5	280.4	15.27	280.4	475.5	280.4	15.27	280.4	100-110	315.7	9372	93.6,93.6
120	375.1	210.8	21.48	210.8	375.1	210.8	21.48	210.8	110-120	234.1	9606	95.9,95.9
130	289.1	155.1	27.98	155.1	289.1	155.1	27.98	155.1	120-130	164.8	9771	97.6,97.6
140	217.2	117.5	35.49	117.5	217.2	117.5	35.49	117.5	130-140	109.1	9880	98.7,98.7
150	156.7	90.70	44.69	90.70	156.7	90.70	44.69	90.70	140-150	68.57	9948	99.4,99.4
160	108.4	73.78	52.88	73.78	108.4	73.78	52.88	73.78	150-160	38.99	9987	99.8,99.8
170	71.82	62.29	58.68	62.29	71.82	62.29	58.68	62.29	160-170	19.25	10007	99.9,99.9
180	42.63	60.49	62.12	60.49	42.63	60.49	62.12	60.49	170-180	5.677	10012	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 3985.2 lm

%lum = 39.8%  
 %lamp = 39.8%

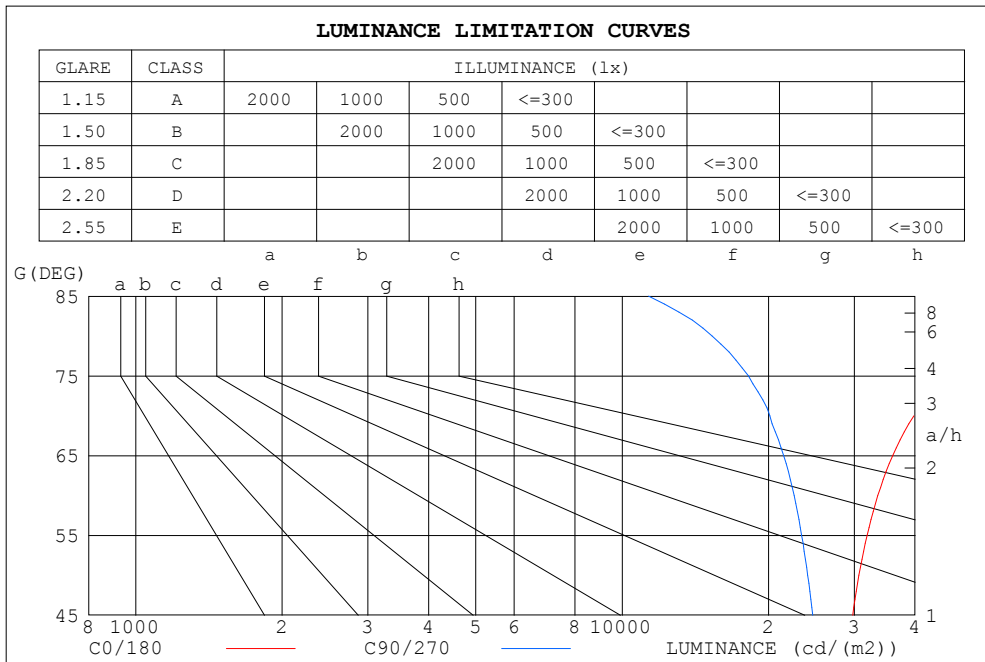
Conical surface Flux(120deg): 6020.9 lm

%lum = 60.1%  
 %lamp = 60.1%

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



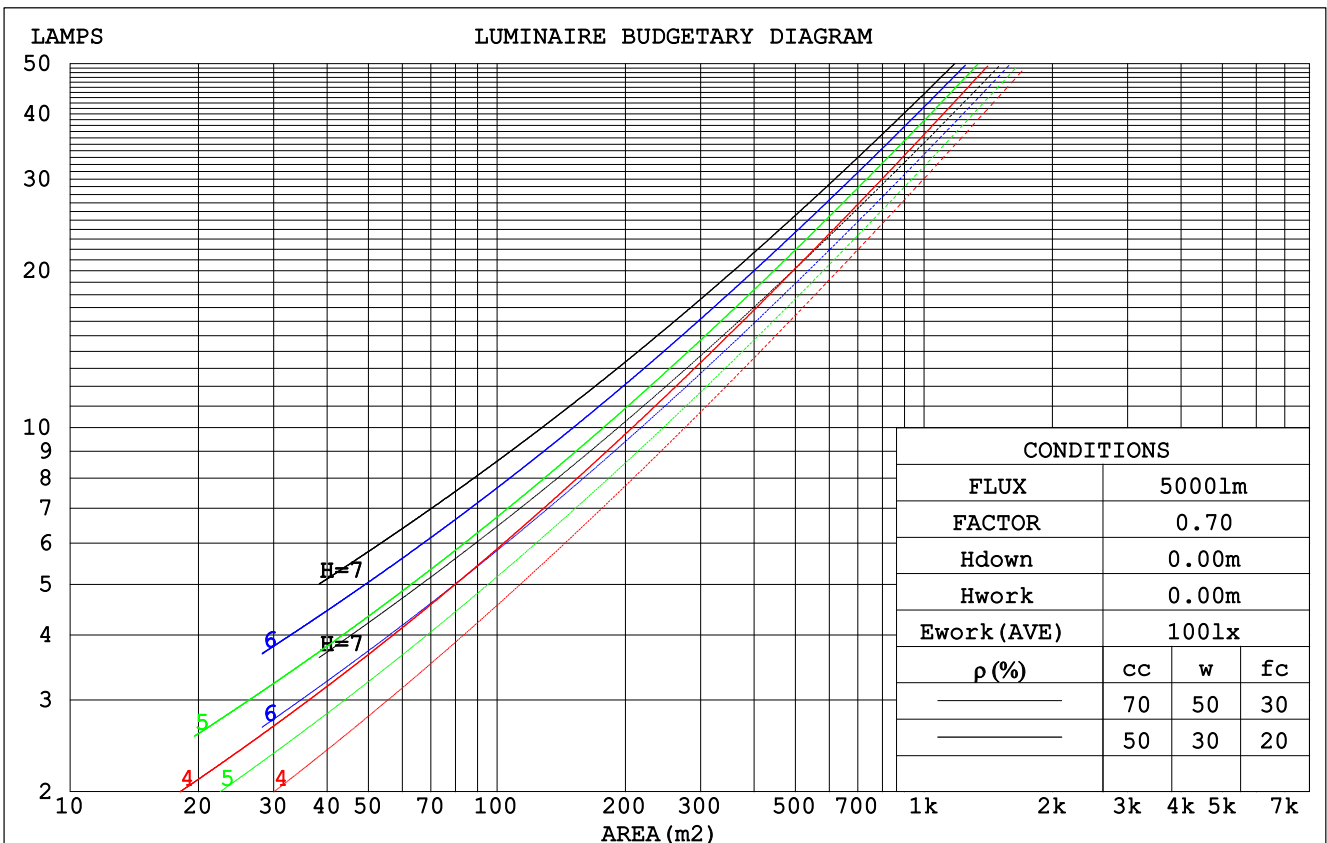
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	105780	11334
80	60743	15309
75	46473	18176
70	39775	20126
65	35983	21488
60	33551	22574
55	31880	23393
50	30667	24065
45	29775	24635

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	.76	.70	.81	.74	.68	.75	.69	.65	.70	.65	.61	.65	.61	.58	.55
3.0	.73	.64	.57	.71	.62	.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	.39	.35	.33
6.0	.51	.42	.35	.50	.41	.35	.46	.39	.33	.43	.37	.32	.41	.35	.31	.28
7.0	.46	.37	.31	.45	.36	.31	.42	.35	.29	.39	.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	.37	.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	.364	.207	.066	.352	.201	.064	.331	.190	.061	.312	.180	.058	.293	.170	.055	
2.0	.321	.176	.054	.311	.171	.053	.292	.162	.050	.274	.154	.048	.258	.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	.239	.122	.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	.197	.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	.152	.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	.295	.295	.295	.252	.252	.252	.172	.172	.172	.099	.099	.099	.032	.032	.032	
1.0	.289	.261	.235	.248	.224	.203	.169	.154	.140	.097	.089	.082	.031	.029	.026	
2.0	.282	.238	.201	.242	.205	.173	.166	.142	.121	.096	.082	.071	.031	.027	.023	
3.0	.275	.221	.178	.235	.191	.155	.162	.132	.108	.093	.077	.064	.030	.025	.021	
4.0	.267	.208	.164	.229	.180	.142	.158	.125	.100	.091	.073	.059	.029	.024	.019	
5.0	.259	.198	.153	.223	.172	.133	.153	.120	.094	.089	.070	.056	.029	.023	.018	
6.0	.252	.190	.146	.217	.165	.127	.149	.115	.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	.238	.178	.137	.205	.154	.119	.142	.108	.085	.083	.064	.050	.027	.021	.017	
9.0	.232	.173	.133	.200	.150	.116	.139	.106	.083	.081	.062	.049	.026	.020	.016	
10.0	.226	.169	.131	.195	.147	.114	.135	.103	.081	.079	.061	.048	.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	16.4	17.8	16.8	18.2	18.7	14.7	16.1	15.2	16.6	17.0
3H	18.7	20.0	19.2	20.5	21.0	16.2	17.4	16.6	17.9	18.4
4H	20.0	21.2	20.5	21.7	22.2	16.7	17.9	17.2	18.4	19.0
6H	21.4	22.5	21.9	23.0	23.6	17.1	18.3	17.6	18.8	19.3
8H	22.1	23.2	22.6	23.7	24.3	17.2	18.3	17.7	18.8	19.4
12H	23.0	24.1	23.5	24.6	25.2	17.2	18.3	17.8	18.8	19.4
4H 2H	16.9	18.1	17.4	18.6	19.2	15.7	16.9	16.2	17.4	17.9
3H	19.5	20.6	20.0	21.1	21.7	17.4	18.4	17.9	19.0	19.6
4H	20.9	21.9	21.5	22.5	23.1	18.1	19.1	18.7	19.6	20.3
6H	22.5	23.4	23.1	24.0	24.7	18.6	19.5	19.2	20.1	20.8
8H	23.4	24.2	24.0	24.8	25.5	18.8	19.6	19.4	20.2	20.9
12H	24.4	25.2	25.1	25.8	26.5	18.9	19.7	19.5	20.3	21.0
8H 4H	21.2	22.1	21.9	22.7	23.3	18.9	19.7	19.5	20.3	21.0
6H	23.1	23.8	23.8	24.4	25.2	19.8	20.5	20.4	21.1	21.8
8H	24.2	24.8	24.9	25.5	26.2	20.1	20.7	20.8	21.4	22.1
12H	25.5	26.0	26.2	26.7	27.5	20.4	20.9	21.0	21.6	22.3
12H 4H	21.3	22.0	21.9	22.6	23.3	19.2	19.9	19.8	20.5	21.2
6H	23.2	23.8	23.9	24.5	25.2	20.2	20.8	20.9	21.5	22.2
8H	24.4	25.0	25.1	25.6	26.4	20.7	21.2	21.4	21.9	22.7
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					+ 0.2 / - 0.4				

CIE Pub.117, 10012 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 8.0)

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:

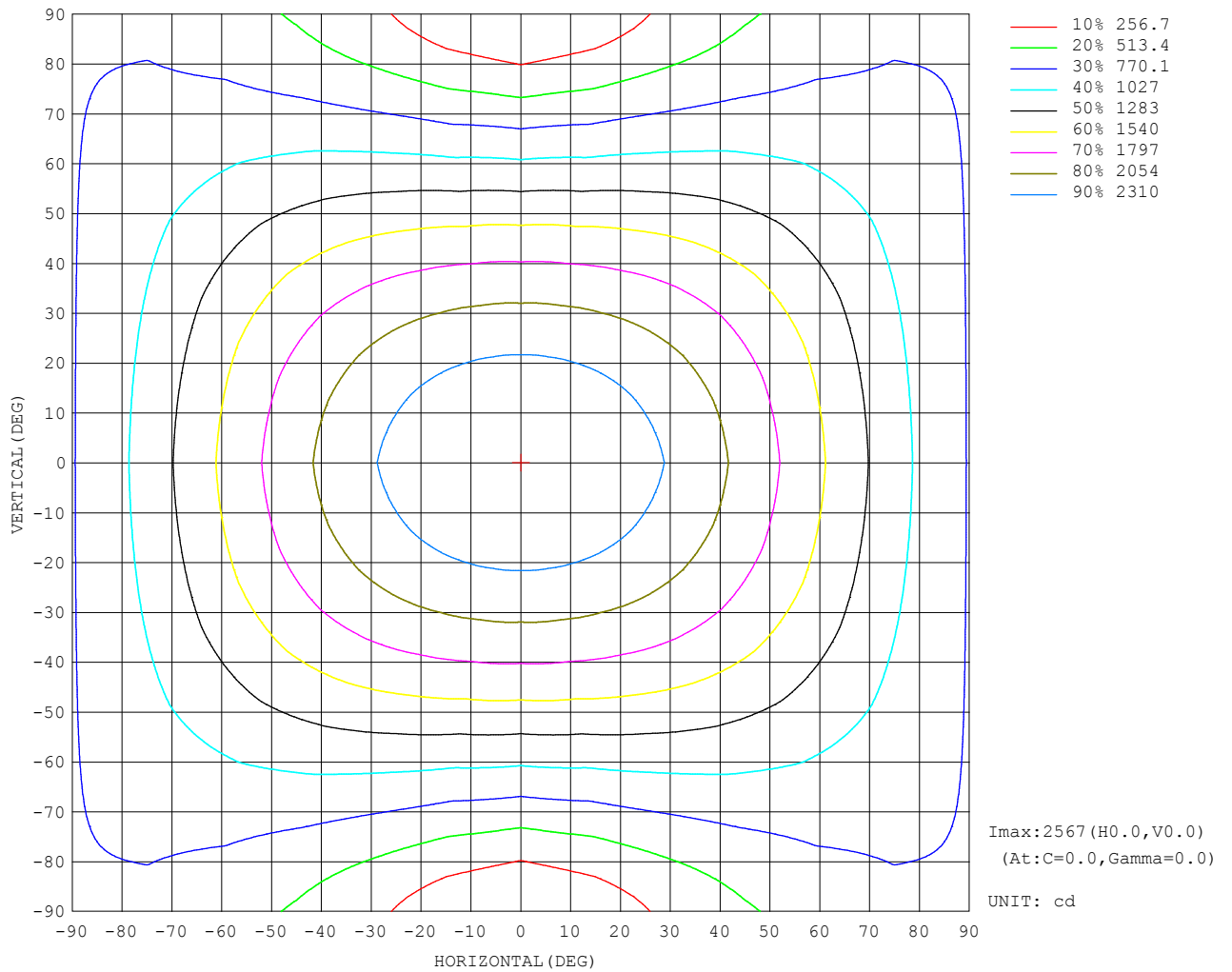
UTILIZATION FACTORS TABLE

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

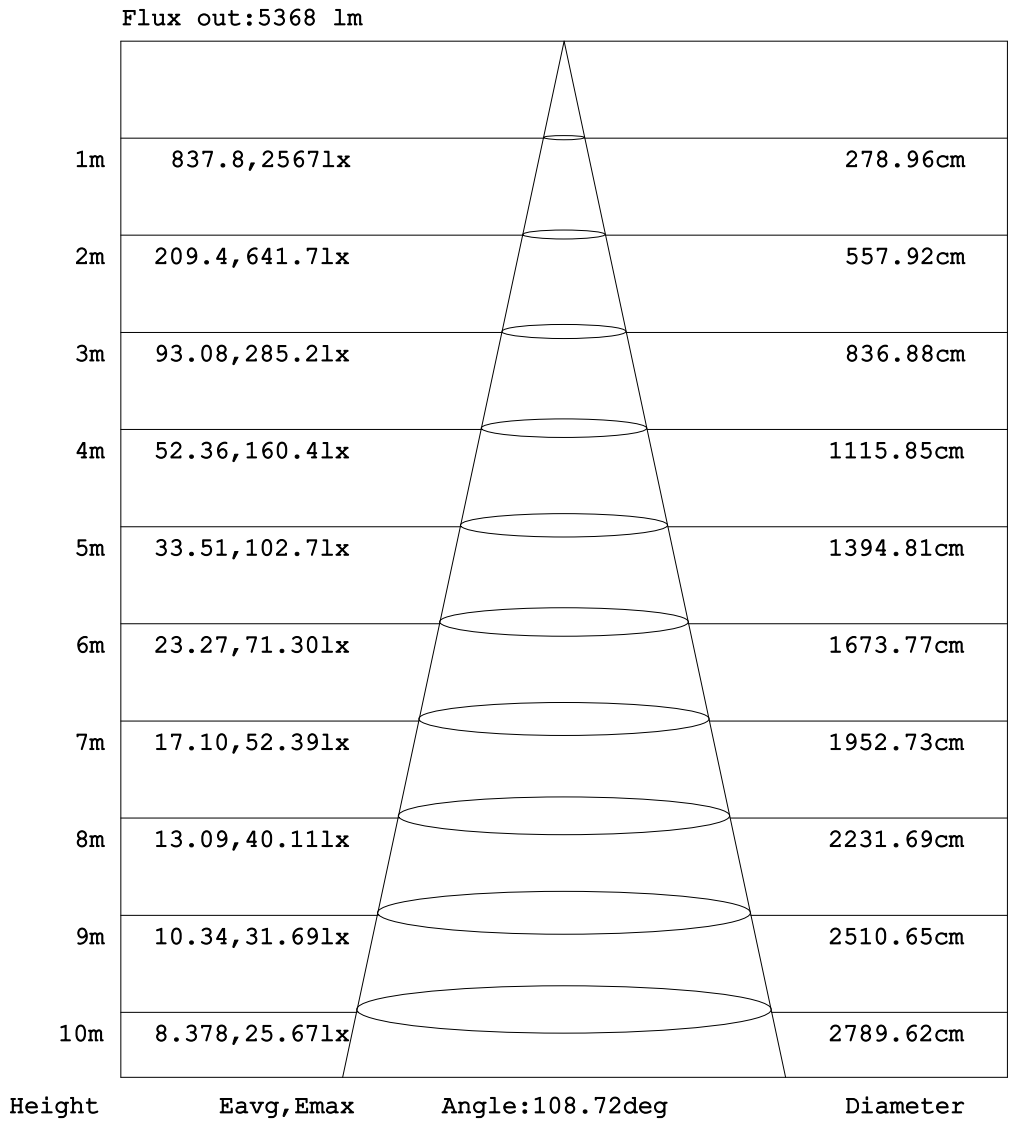


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2021-11-22

$\gamma$  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

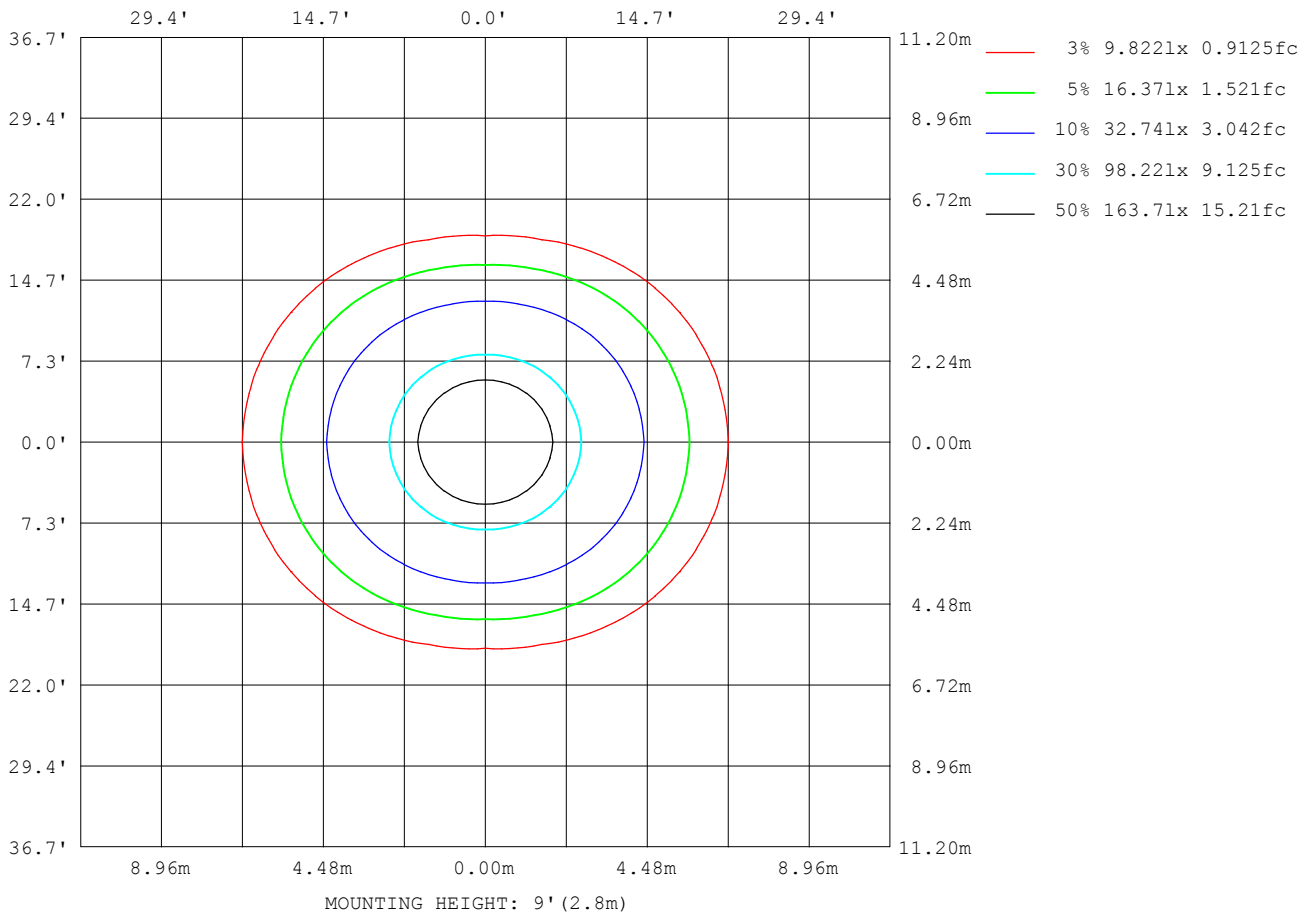


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:230.4V I:0.2660A P:59.96W PF:0.9782 Freq:49.99Hz Lamp Flux:10012.4x1 lm		
NAME: TB33-60-1500K-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

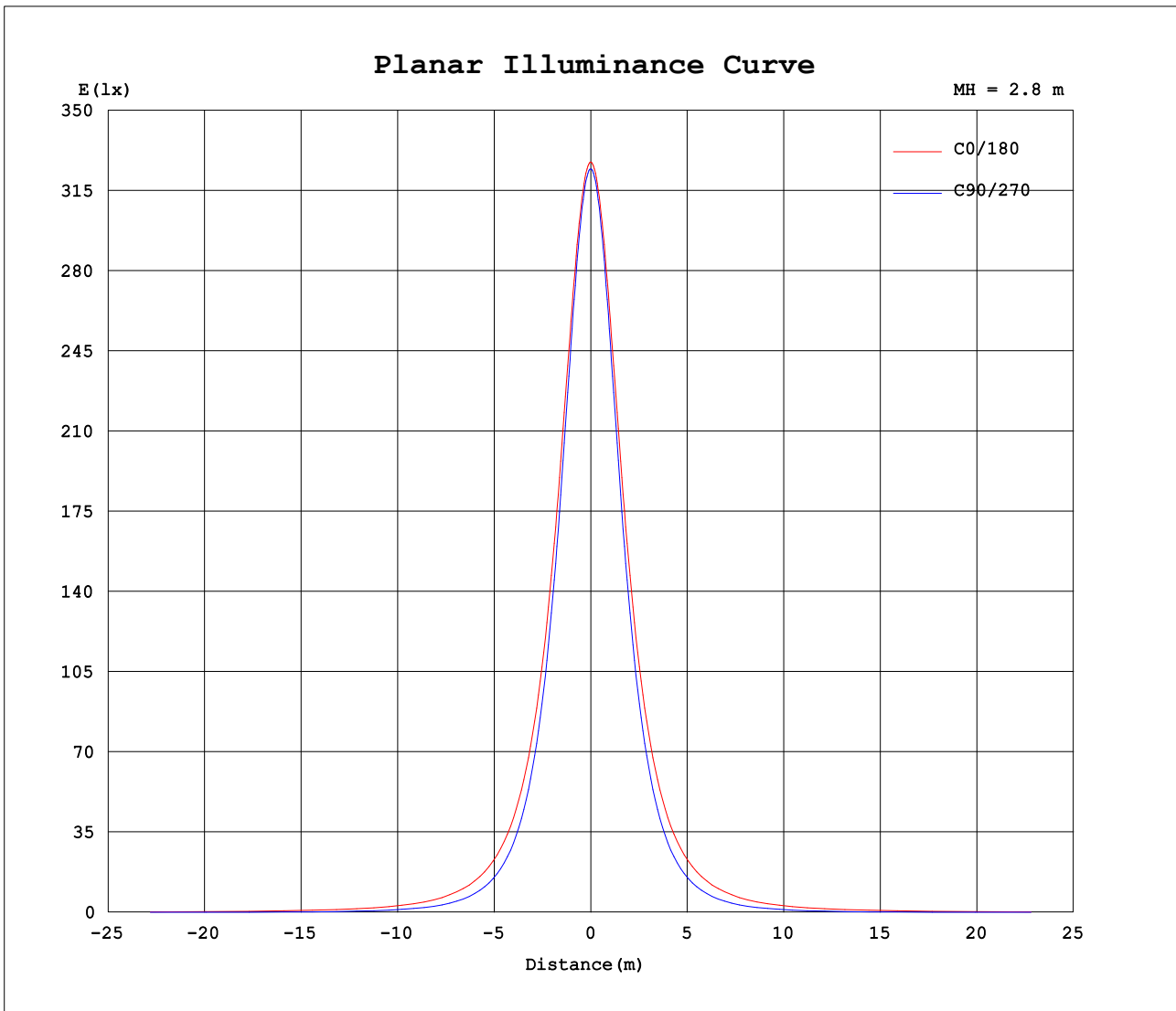
AvgL	cd/m2
L_0~180 (65) av	35706
L_0~180 (75) av	46115
L_0~180 (85) av	104965
L_90~270 (65) av	21519
L_90~270 (75) av	18202
L_90~270 (85) av	11350
L_45 (65) av	29882
L_45 (75) av	35417
L_45 (85) av	71439

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

$\gamma$  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	2547	2547	2547	2547	2547	2547	2547	2547	2547	2547	2547	2547	2547	2547	2547	2547	2547	2547	2547
5	2539	2538	2538	2537	2535	2535	2534	2535	2535	2537	2538	2538	2539	2538	2538	2537	2535	2535	2534
10	2513	2513	2510	2505	2500	2497	2496	2497	2500	2505	2510	2513	2513	2513	2510	2505	2500	2497	2496
15	2473	2471	2464	2453	2443	2435	2432	2435	2443	2453	2464	2471	2473	2471	2464	2453	2443	2435	2432
20	2419	2414	2402	2383	2364	2351	2346	2351	2364	2383	2402	2414	2419	2414	2402	2383	2364	2351	2346
25	2352	2344	2324	2296	2266	2246	2238	2246	2266	2296	2324	2344	2352	2344	2324	2296	2266	2246	2238
30	2272	2262	2233	2193	2152	2122	2111	2122	2152	2193	2233	2262	2272	2262	2233	2193	2152	2122	2111
35	2179	2166	2130	2077	2022	1982	1967	1982	2022	2077	2130	2166	2179	2166	2130	2077	2022	1982	1967
40	2075	2058	2014	1949	1879	1827	1808	1827	1879	1949	2014	2058	2075	2058	2014	1949	1879	1827	1808
45	1960	1940	1887	1810	1726	1660	1636	1660	1726	1810	1887	1940	1960	1940	1887	1810	1726	1660	1636
50	1835	1813	1752	1663	1564	1484	1453	1484	1564	1663	1752	1813	1835	1813	1752	1663	1564	1484	1453
55	1702	1677	1608	1508	1394	1298	1260	1298	1394	1508	1608	1677	1702	1677	1608	1508	1394	1298	1260
60	1561	1535	1459	1348	1220	1107	1060	1107	1220	1348	1459	1535	1561	1535	1459	1348	1220	1107	1060
65	1415	1386	1305	1185	1043	911	853	911	1043	1185	1305	1386	1415	1386	1305	1185	1043	911	853
70	1266	1236	1150	1021	866	718	647	718	866	1021	1150	1236	1266	1236	1150	1021	866	718	647
75	1120	1088	997	860	696	531	442	531	696	860	997	1088	1120	1088	997	860	696	531	442
80	982	950	856	711	537	357	250	357	537	711	856	950	982	950	856	711	537	357	250
85	858	826	731	584	401	210	92.8	210	401	584	731	826	858	826	731	584	401	210	92.8
90	752	721	629	485	307	121	9.64	121	307	485	629	721	752	721	629	485	307	121	9.64
95	664	635	548	414	251	90.3	13.0	90.3	251	414	548	635	664	635	548	414	251	90.3	13.0
100	592	564	484	361	215	75.5	13.7	75.5	215	361	484	564	592	564	484	361	215	75.5	13.7
105	531	505	432	319	187	67.4	13.2	67.4	187	319	432	505	531	505	432	319	187	67.4	13.2
110	475	452	385	280	164	62.0	15.3	62.0	164	280	385	452	475	452	385	280	164	62.0	15.3
115	424	403	341	249	139	56.7	18.2	56.7	139	249	341	403	424	403	341	249	139	56.7	18.2
120	375	357	300	211	123	53.5	21.5	53.5	123	211	300	357	375	357	300	211	123	53.5	21.5
125	330	314	265	180	109	51.6	24.8	51.6	109	180	265	314	330	314	265	180	109	51.6	24.8
130	289	275	223	155	97.4	50.5	28.0	50.5	97.4	155	223	275	289	275	223	155	97.4	50.5	28.0
135	252	238	185	135	88.1	49.5	31.1	49.5	88.1	135	185	238	252	238	185	135	88.1	49.5	31.1
140	217	207	155	117	79.8	50.1	35.5	50.1	79.8	117	155	207	217	207	155	117	79.8	50.1	35.5
145	185	176	133	103	75.1	52.4	40.2	52.4	75.1	103	133	176	185	176	133	103	75.1	52.4	40.2
150	157	139	114	90.7	71.0	53.4	44.7	53.4	71.0	90.7	114	139	157	139	114	90.7	71.0	53.4	44.7
155	132	108	96.2	82.2	66.8	54.5	49.0	54.5	66.8	82.2	96.2	108	132	108	96.2	82.2	66.8	54.5	49.0
160	108	88.5	80.5	73.8	65.8	55.6	52.9	55.6	65.8	73.8	80.5	88.5	108	88.5	80.5	73.8	65.8	55.6	52.9
165	87.4	71.3	69.3	68.7	62.5	57.9	56.1	57.9	62.5	68.7	69.3	71.3	87.4	71.3	69.3	68.7	62.5	57.9	56.1
170	71.8	61.2	62.9	62.3	60.2	59.5	58.7	59.5	60.2	62.3	62.9	61.2	71.8	61.2	62.9	62.3	60.2	59.5	58.7
175	46.4	52.6	58.9	60.7	61.1	61.0	60.8	61.0	61.1	60.7	58.9	52.6	46.4	52.6	58.9	60.7	61.1	61.0	60.8
180	42.6	53.7	58.2	60.5	61.3	62.1	62.1	62.1	61.3	60.5	58.2	53.7	42.6	53.7	58.2	60.5	61.3	62.1	62.1

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	2547	2547	2547	2547	2547															
5	2535	2535	2537	2538	2538															
10	2497	2500	2505	2510	2513															
15	2435	2443	2453	2464	2471															
20	2351	2364	2383	2402	2414															
25	2246	2266	2296	2324	2344															
30	2122	2152	2193	2233	2262															
35	1982	2022	2077	2130	2166															
40	1827	1879	1949	2014	2058															
45	1660	1726	1810	1887	1940															
50	1484	1564	1663	1752	1813															
55	1298	1394	1508	1608	1677															
60	1107	1220	1348	1459	1535															
65	911	1043	1185	1305	1386															
70	718	866	1021	1150	1236															
75	531	696	860	997	1088															
80	357	537	711	856	950															
85	210	401	584	731	826															
90	121	307	485	629	721															
95	90.3	251	414	548	635															
100	75.5	215	361	484	564															
105	67.4	187	319	432	505															
110	62.0	164	280	385	452															
115	56.7	139	249	341	403															
120	53.5	123	211	300	357															
125	51.6	109	180	265	314															
130	50.5	97.4	155	223	275															
135	49.5	88.1	135	185	238															
140	50.1	79.8	117	155	207															
145	52.4	75.1	103	133	176															
150	53.4	71.0	90.7	114	139															
155	54.5	66.8	82.2	96.2	108															
160	55.6	65.8	73.8	80.5	88.5															
165	57.9	62.5	68.7	69.3	71.3															
170	59.5	60.2	62.3	62.9	61.2															
175	61.0	61.1	60.7	58.9	52.6															
180	62.1	61.3	60.5	58.2	53.7															

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	2547	2547	2547	2547	2547	2547	2547	2547	2547	2547
3.0	2544	2544	2544	2543	2543	2543	2543	2543	2543	2543
6.0	2535	2535	2534	2532	2530	2529	2529	2529	2530	2532
9.0	2520	2519	2517	2513	2509	2506	2506	2506	2509	2513
12.0	2499	2498	2494	2487	2480	2475	2473	2475	2480	2487
15.0	2473	2471	2464	2453	2443	2435	2432	2435	2443	2453
18.0	2442	2439	2428	2413	2398	2387	2383	2387	2398	2413
21.0	2406	2401	2387	2366	2346	2332	2326	2332	2346	2366
24.0	2366	2359	2341	2314	2287	2269	2261	2269	2287	2314
27.0	2322	2313	2289	2256	2222	2199	2190	2199	2222	2256
30.0	2272	2262	2233	2193	2152	2122	2111	2122	2152	2193
33.0	2218	2206	2173	2125	2076	2040	2027	2040	2076	2125
36.0	2159	2146	2107	2052	1994	1952	1936	1952	1994	2052
39.0	2097	2081	2038	1975	1909	1859	1841	1859	1909	1975
42.0	2030	2012	1964	1894	1819	1762	1741	1762	1819	1894
45.0	1960	1940	1887	1810	1726	1660	1636	1660	1726	1810
48.0	1886	1865	1807	1722	1630	1556	1528	1556	1630	1722
51.0	1809	1787	1723	1632	1531	1447	1415	1447	1531	1632
54.0	1729	1705	1638	1539	1429	1336	1300	1336	1429	1539
57.0	1647	1621	1549	1445	1325	1222	1181	1222	1325	1445
60.0	1561	1535	1459	1348	1220	1107	1060	1107	1220	1348
63.0	1474	1446	1367	1250	1114	990.2	936.6	990.2	1114	1250
66.0	1386	1357	1274	1152	1008	872.2	810.9	872.2	1008	1152
69.0	1296	1266	1181	1053	901.1	754.6	684.7	754.6	901.1	1053
72.0	1207	1176	1088	955.4	797.1	641.9	564.5	641.9	797.1	955.4
75.0	1120	1088	997.3	859.8	695.8	530.9	441.9	530.9	695.8	859.8
78.0	1036	1004	910.7	768.5	598.3	424.3	324.1	424.3	598.3	768.5
81.0	956.0	923.5	829.5	683.9	507.2	324.6	215.5	324.6	507.2	683.9
84.0	881.2	849.2	754.5	607.3	424.7	236.3	120.0	236.3	424.7	607.3
87.0	813.6	781.6	687.6	541.2	357.2	164.4	49.10	164.4	357.2	541.2
90.0	752.1	720.8	628.7	484.9	307.1	120.6	9.642	120.6	307.1	484.9
93.0	697.0	666.8	577.7	439.5	270.4	99.38	10.89	99.38	270.4	439.5
96.0	648.7	619.7	534.3	402.3	242.6	86.60	13.24	86.60	242.6	402.3
99.0	605.3	577.5	495.7	370.3	221.2	77.80	13.48	77.80	221.2	370.3
102.0	566.2	539.6	461.6	343.7	202.4	71.65	13.59	71.65	202.4	343.7
105.0	530.8	505.3	431.6	319.3	186.8	67.36	13.15	67.36	186.8	319.3
108.0	497.7	472.8	403.9	296.7	172.8	64.44	14.21	64.44	172.8	296.7
111.0	464.5	442.4	376.1	274.5	158.5	60.73	15.82	60.73	158.5	274.5
114.0	433.5	412.9	349.2	255.2	144.0	57.58	17.56	57.58	144.0	255.2
117.0	403.7	384.0	324.7	233.2	131.9	55.27	19.48	55.27	131.9	233.2
120.0	375.1	356.6	299.8	210.8	122.7	53.50	21.48	53.50	122.7	210.8
123.0	347.8	330.7	279.8	191.4	114.1	52.20	23.52	52.20	114.1	191.4
126.0	321.8	306.2	257.3	173.9	106.5	51.36	25.50	51.36	106.5	173.9
129.0	297.0	282.2	231.8	159.4	99.41	50.67	27.37	50.67	99.41	159.4
132.0	273.7	259.7	206.8	146.8	93.53	50.05	29.23	50.05	93.53	146.8
135.0	251.6	237.6	185.2	135.4	88.13	49.52	31.12	49.52	88.13	135.4
138.0	230.6	219.5	166.3	124.0	83.03	49.36	33.61	49.36	83.03	124.0
141.0	210.4	200.6	150.0	114.5	78.40	50.57	36.44	50.57	78.40	114.5
144.0	191.2	182.2	136.9	105.6	75.86	52.00	39.25	52.00	75.86	105.6
147.0	173.4	160.6	125.4	97.10	73.46	52.91	42.01	52.91	73.46	97.10
150.0	156.7	138.6	114.4	90.70	71.02	53.44	44.69	53.44	71.02	90.70
153.0	141.3	118.9	103.3	85.42	68.50	54.11	47.30	54.11	68.50	85.42
156.0	126.8	103.5	92.88	80.47	66.16	54.68	49.76	54.68	66.16	80.47
159.0	113.2	92.15	83.35	75.42	66.17	55.30	52.14	55.30	66.17	75.42
162.0	98.63	81.46	75.58	70.47	64.38	56.31	54.27	56.31	64.38	70.47
165.0	87.42	71.32	69.35	68.72	62.50	57.94	56.11	57.94	62.50	68.72
168.0	77.20	64.48	66.76	64.58	60.91	58.99	57.73	58.99	60.91	64.58
171.0	67.82	58.48	61.55	61.30	60.54	59.80	59.15	59.80	60.54	61.30
174.0	55.95	53.29	58.48	60.58	61.12	60.74	60.43	60.74	61.12	60.58
177.0	44.96	52.97	58.44	60.40	61.15	61.56	61.42	61.56	61.15	60.40
180.0	42.63	53.65	58.17	60.49	61.28	62.12	62.12	62.12	61.28	60.49
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	2547	2547	2547	2547	2547	2547	2547	2547	2547	2547
3.0	2544	2544	2544	2544	2544	2543	2543	2543	2543	2543
6.0	2534	2535	2535	2535	2534	2532	2530	2529	2529	2529
9.0	2517	2519	2520	2519	2517	2513	2509	2506	2506	2506
12.0	2494	2498	2499	2498	2494	2487	2480	2475	2473	2475
15.0	2464	2471	2473	2464	2453	2443	2435	2432	2435	2443
18.0	2428	2439	2442	2439	2428	2413	2398	2387	2383	2387
21.0	2387	2401	2406	2401	2387	2366	2346	2332	2326	2332
24.0	2341	2359	2366	2359	2341	2314	2287	2269	2261	2269
27.0	2289	2313	2322	2313	2289	2256	2222	2199	2190	2199
30.0	2233	2262	2272	2262	2233	2193	2152	2122	2111	2122

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	2173	2206	2218	2206	2173	2125	2076	2040	2027	2040
36.0	2107	2146	2159	2146	2107	2052	1994	1952	1936	1952
39.0	2038	2081	2097	2081	2038	1975	1909	1859	1841	1859
42.0	1964	2012	2030	2012	1964	1894	1819	1762	1741	1762
45.0	1887	1940	1960	1940	1887	1810	1726	1660	1636	1660
48.0	1807	1865	1886	1865	1807	1722	1630	1556	1528	1556
51.0	1723	1787	1809	1787	1723	1632	1531	1447	1415	1447
54.0	1638	1705	1729	1705	1638	1539	1429	1336	1300	1336
57.0	1549	1621	1647	1621	1549	1445	1325	1222	1181	1222
60.0	1459	1535	1561	1535	1459	1348	1220	1107	1060	1107
63.0	1367	1446	1474	1446	1367	1250	1114	990.2	936.6	990.2
66.0	1274	1357	1386	1357	1274	1152	1008	872.2	810.9	872.2
69.0	1181	1266	1296	1266	1181	1053	901.1	754.6	684.7	754.6
72.0	1088	1176	1207	1176	1088	955.4	797.1	641.9	564.5	641.9
75.0	997.3	1088	1120	1088	997.3	859.8	695.8	530.9	441.9	530.9
78.0	910.7	1004	1036	1004	910.7	768.5	598.3	424.3	324.1	424.3
81.0	829.5	923.5	956.0	923.5	829.5	683.9	507.2	324.6	215.5	324.6
84.0	754.5	849.2	881.2	849.2	754.5	607.3	424.7	236.3	120.0	236.3
87.0	687.6	781.6	813.6	781.6	687.6	541.2	357.2	164.4	49.10	164.4
90.0	628.7	720.8	752.1	720.8	628.7	484.9	307.1	120.6	9.642	120.6
93.0	577.7	666.8	697.0	666.8	577.7	439.5	270.4	99.38	10.89	99.38
96.0	534.3	619.7	648.7	619.7	534.3	402.3	242.6	86.60	13.24	86.60
99.0	495.7	577.5	605.3	577.5	495.7	370.3	221.2	77.80	13.48	77.80
102.0	461.6	539.6	566.2	539.6	461.6	343.7	202.4	71.65	13.59	71.65
105.0	431.6	505.3	530.8	505.3	431.6	319.3	186.8	67.36	13.15	67.36
108.0	403.9	472.8	497.7	472.8	403.9	296.7	172.8	64.44	14.21	64.44
111.0	376.1	442.4	464.5	442.4	376.1	274.5	158.5	60.73	15.82	60.73
114.0	349.2	412.9	433.5	412.9	349.2	255.2	144.0	57.58	17.56	57.58
117.0	324.7	384.0	403.7	384.0	324.7	233.2	131.9	55.27	19.48	55.27
120.0	299.8	356.6	375.1	356.6	299.8	210.8	122.7	53.50	21.48	53.50
123.0	279.8	330.7	347.8	330.7	279.8	191.4	114.1	52.20	23.52	52.20
126.0	257.3	306.2	321.8	306.2	257.3	173.9	106.5	51.36	25.50	51.36
129.0	231.8	282.2	297.0	282.2	231.8	159.4	99.41	50.67	27.37	50.67
132.0	206.8	259.7	273.7	259.7	206.8	146.8	93.53	50.05	29.23	50.05
135.0	185.2	237.6	251.6	237.6	185.2	135.4	88.13	49.52	31.12	49.52
138.0	166.3	219.5	230.6	219.5	166.3	124.0	83.03	49.36	33.61	49.36
141.0	150.0	200.6	210.4	200.6	150.0	114.5	78.40	50.57	36.44	50.57
144.0	136.9	182.2	191.2	182.2	136.9	105.6	75.86	52.00	39.25	52.00
147.0	125.4	160.6	173.4	160.6	125.4	97.10	73.46	52.91	42.01	52.91
150.0	114.4	138.6	156.7	138.6	114.4	90.70	71.02	53.44	44.69	53.44
153.0	103.3	118.9	141.3	118.9	103.3	85.42	68.50	54.11	47.30	54.11
156.0	92.88	103.5	126.8	103.5	92.88	80.47	66.16	54.68	49.76	54.68
159.0	83.35	92.15	113.2	92.15	83.35	75.42	66.17	55.30	52.14	55.30
162.0	75.58	81.46	98.63	81.46	75.58	70.47	64.38	56.31	54.27	56.31
165.0	69.35	71.32	87.42	71.32	69.35	68.72	62.50	57.94	56.11	57.94
168.0	66.76	64.48	77.20	64.48	66.76	64.58	60.91	58.99	57.73	58.99
171.0	61.55	58.48	67.82	58.48	61.55	61.30	60.54	59.80	59.15	59.80
174.0	58.48	53.29	55.95	53.29	58.48	60.58	61.12	60.74	60.43	60.74
177.0	58.44	52.97	44.96	52.97	58.44	60.40	61.15	61.56	61.42	61.56
180.0	58.17	53.65	42.63	53.65	58.17	60.49	61.28	62.12	62.12	62.12
G/C	300.0	315.0	330.0	345.0						
0.0	2547	2547	2547	2547						
3.0	2543	2543	2544	2544						
6.0	2530	2532	2534	2535						
9.0	2509	2513	2517	2519						
12.0	2480	2487	2494	2498						
15.0	2443	2453	2464	2471						
18.0	2398	2413	2428	2439						
21.0	2346	2366	2387	2401						
24.0	2287	2314	2341	2359						
27.0	2222	2256	2289	2313						
30.0	2152	2193	2233	2262						
33.0	2076	2125	2173	2206						
36.0	1994	2052	2107	2146						
39.0	1909	1975	2038	2081						
42.0	1819	1894	1964	2012						
45.0	1726	1810	1887	1940						
48.0	1630	1722	1807	1865						
51.0	1531	1632	1723	1787						
54.0	1429	1539	1638	1705						
57.0	1325	1445	1549	1621						
60.0	1220	1348	1459	1535						
63.0	1114	1250	1367	1446						
66.0	1008	1152	1274	1357						

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	901.1	1053	1181	1266
72.0	797.1	955.4	1088	1176
75.0	695.8	859.8	997.3	1088
78.0	598.3	768.5	910.7	1004
81.0	507.2	683.9	829.5	923.5
84.0	424.7	607.3	754.5	849.2
87.0	357.2	541.2	687.6	781.6
90.0	307.1	484.9	628.7	720.8
93.0	270.4	439.5	577.7	666.8
96.0	242.6	402.3	534.3	619.7
99.0	221.2	370.3	495.7	577.5
102.0	202.4	343.7	461.6	539.6
105.0	186.8	319.3	431.6	505.3
108.0	172.8	296.7	403.9	472.8
111.0	158.5	274.5	376.1	442.4
114.0	144.0	255.2	349.2	412.9
117.0	131.9	233.2	324.7	384.0
120.0	122.7	210.8	299.8	356.6
123.0	114.1	191.4	279.8	330.7
126.0	106.5	173.9	257.3	306.2
129.0	99.41	159.4	231.8	282.2
132.0	93.53	146.8	206.8	259.7
135.0	88.13	135.4	185.2	237.6
138.0	83.03	124.0	166.3	219.5
141.0	78.40	114.5	150.0	200.6
144.0	75.86	105.6	136.9	182.2
147.0	73.46	97.10	125.4	160.6
150.0	71.02	90.70	114.4	138.6
153.0	68.50	85.42	103.3	118.9
156.0	66.16	80.47	92.88	103.5
159.0	66.17	75.42	83.35	92.15
162.0	64.38	70.47	75.58	81.46
165.0	62.50	68.72	69.35	71.32
168.0	60.91	64.58	66.76	64.48
171.0	60.54	61.30	61.55	58.48
174.0	61.12	60.58	58.48	53.29
177.0	61.15	60.40	58.44	52.97
180.0	61.28	60.49	58.17	53.65

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: