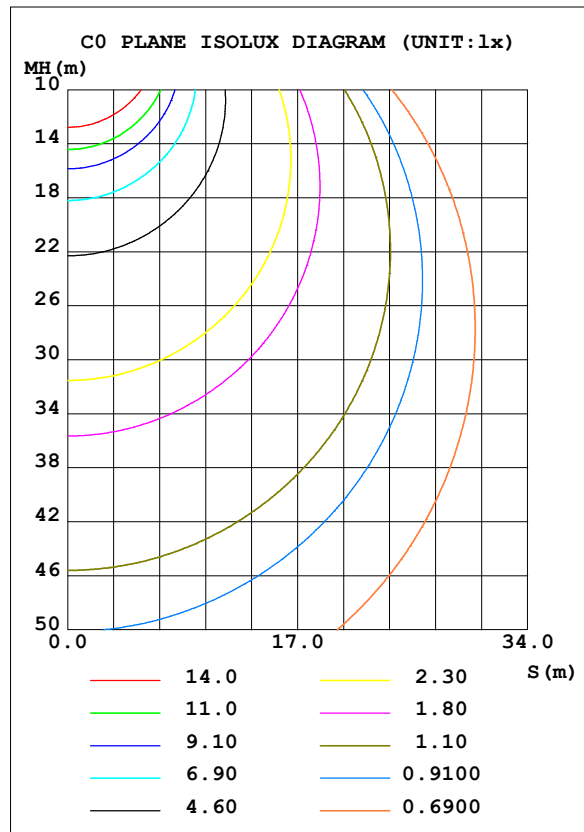
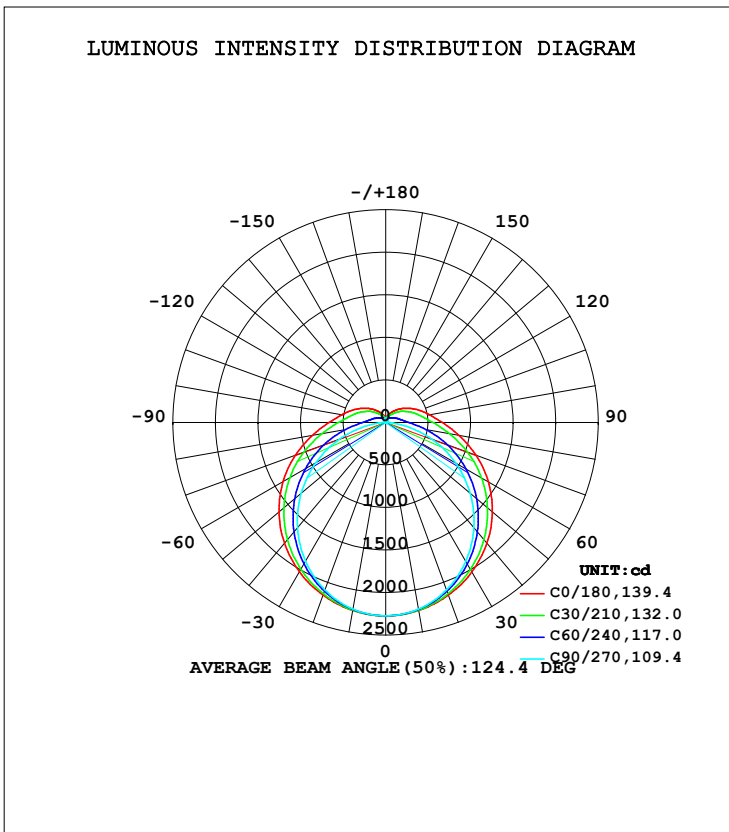


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.4V I:0.2348A P:52.72W PF:0.9742 Freq:49.99Hz Lamp Flux:8925.63x1 lm		
NAME: TB33-53-1500K-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 169.32 lm/W			
MODEL		Imax (cd)	2273	S/MH (C0/180)	1.33
NOMINAL POWER (W)	53	LOR (%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	8925.6	$\eta$ UP, DN (C0-180)	6.8, 43.2
NOMINAL FLUX (lm)	8925.63	CIE CLASS	SEMI-D.	$\eta$ UP, DN (C180-360)	6.8, 43.2
LAMPS INSIDE	1	$\eta$ up (%)	13.7	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	230	$\eta$ 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

$\gamma$  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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2244	2236	2227	2236	2244	2236	2227	2236	0- 10	215.2	215.2	2.41,2.41
20	2159	2127	2094	2127	2159	2127	2094	2127	10- 20	618.2	833.4	9.34,9.34
30	2028	1957	1884	1957	2028	1957	1884	1957	20- 30	944.7	1778	19.9,19.9
40	1852	1739	1614	1739	1852	1739	1614	1739	30- 40	1159	2937	32.9,32.9
50	1638	1484	1297	1484	1638	1484	1297	1484	40- 50	1243	4180	46.8,46.8
60	1394	1203	947.0	1203	1394	1203	947.0	1203	50- 60	1194	5374	60.2,60.2
70	1129	910.6	579.9	910.6	1129	910.6	579.9	910.6	60- 70	1027	6401	71.7,71.7
80	872.6	631.7	223.5	631.7	872.6	631.7	223.5	631.7	70- 80	779.1	7180	80.4,80.4
90	667.1	429.4	9.373	429.4	667.1	429.4	9.373	429.4	80- 90	526.7	7707	86.3,86.3
100	525.2	320.8	12.53	320.8	525.2	320.8	12.53	320.8	90-100	369.4	8076	90.5,90.5
110	422.7	247.9	13.98	247.9	422.7	247.9	13.98	247.9	100-110	280.1	8356	93.6,93.6
120	333.7	187.3	19.25	187.3	333.7	187.3	19.25	187.3	110-120	207.9	8564	96,96
130	257.4	138.9	24.78	138.9	257.4	138.9	24.78	138.9	120-130	146.4	8711	97.6,97.6
140	192.6	105.5	31.24	105.5	192.6	105.5	31.24	105.5	130-140	96.93	8808	98.7,98.7
150	139.4	81.48	39.19	81.48	139.4	81.48	39.19	81.48	140-150	61.09	8869	99.4,99.4
160	94.34	66.07	46.30	66.07	94.34	66.07	46.30	66.07	150-160	34.75	8904	99.8,99.8
170	62.46	54.49	51.32	54.49	62.46	54.49	51.32	54.49	160-170	17.05	8921	99.9,99.9
180	37.59	53.14	54.29	53.14	37.59	53.14	54.29	53.14	170-180	5.009	8926	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 3556.9 lm

%lum = 39.9%  
%lamp = 39.9%

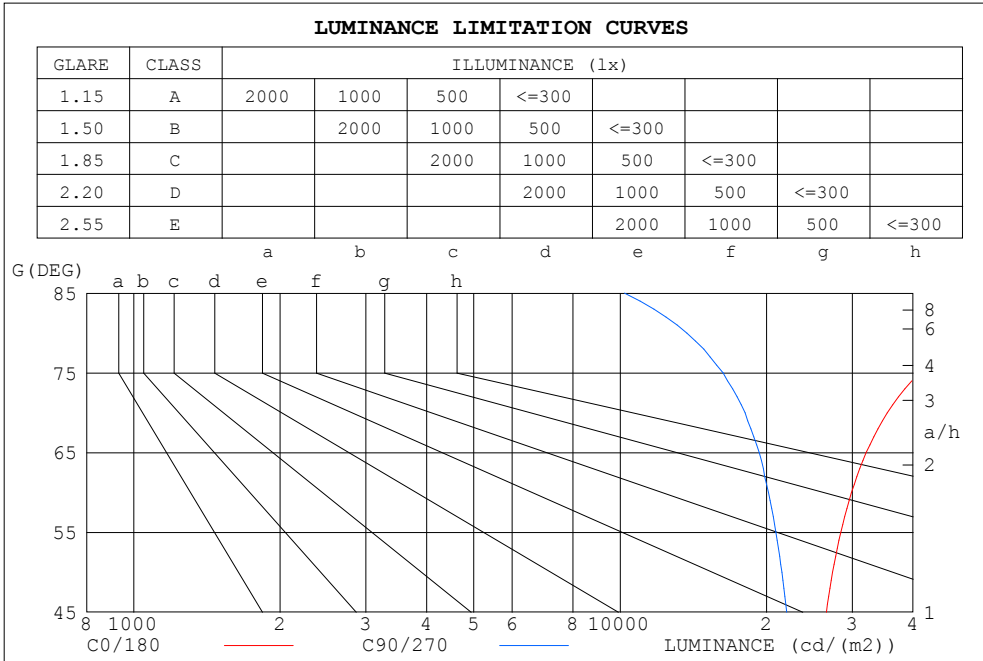
Conical surface Flux(120deg): 5374.1 lm

%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

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



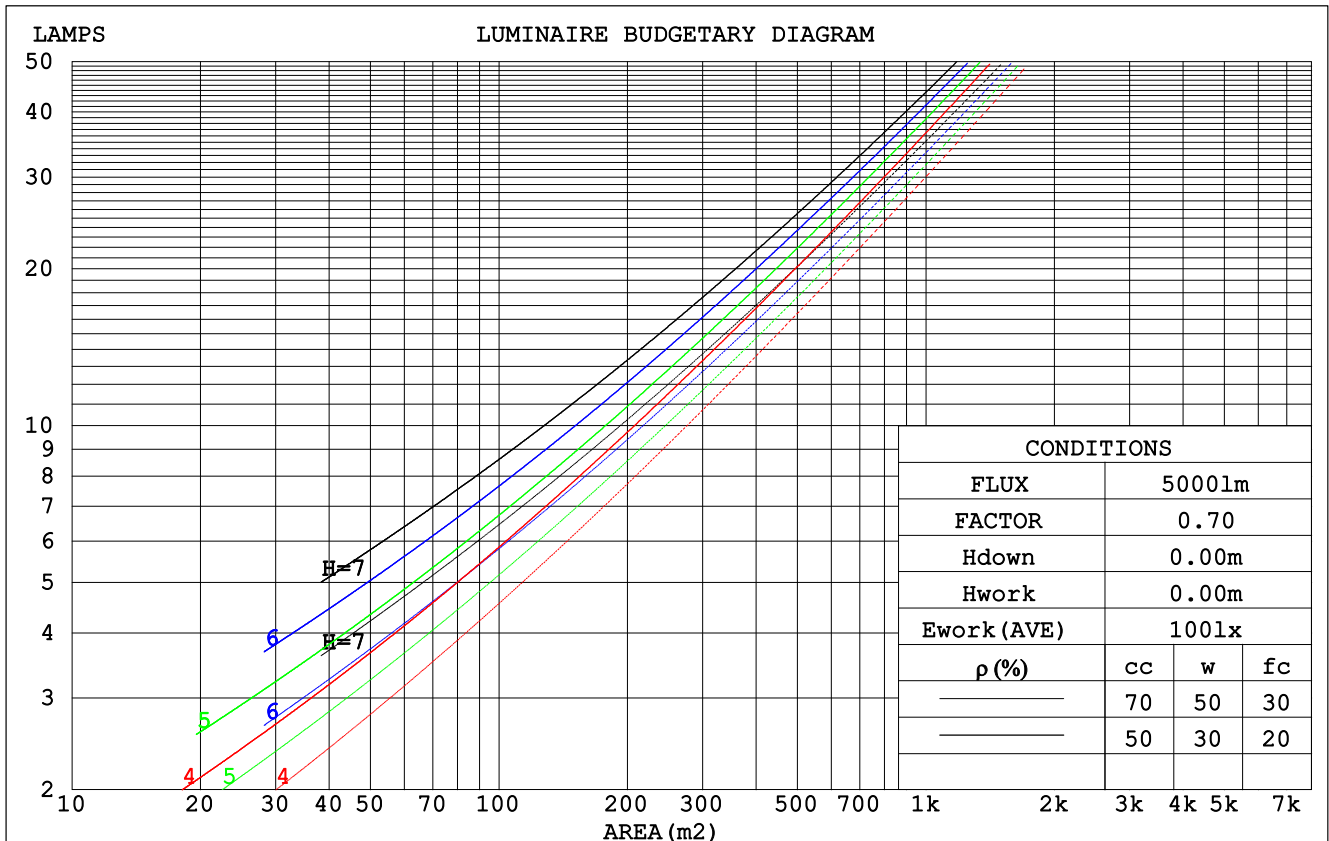
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	93813	10210
80	53903	13707
75	41296	16268
70	35412	18059
65	32052	19318
60	29898	20174
55	28407	20908
50	27333	21500
45	26539	22007

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	.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	.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	.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	.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	.363	.207	.065	.352	.201	.064	.331	.190	.061	.311	.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	.108	.032	.192	.102	.031	
6.0	.219	.110	.031	.212	.107	.031	.200	.102	.030	.188	.098	.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	.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	.295	.295	.295	.252	.252	.252	.172	.172	.172	.099	.099	.099	.032	.032	.032	
1.0	.289	.261	.235	.247	.224	.202	.169	.154	.140	.097	.089	.081	.031	.029	.026	
2.0	.282	.237	.200	.241	.204	.173	.165	.141	.121	.095	.082	.071	.031	.027	.023	
3.0	.274	.221	.178	.235	.190	.154	.161	.132	.108	.093	.077	.064	.030	.025	.021	
4.0	.266	.208	.163	.229	.180	.142	.157	.125	.100	.091	.073	.059	.029	.024	.019	
5.0	.259	.198	.153	.222	.171	.133	.153	.120	.094	.089	.070	.056	.029	.023	.018	
6.0	.251	.190	.146	.216	.164	.127	.149	.115	.090	.087	.068	.053	.028	.022	.018	
7.0	.244	.183	.140	.210	.159	.122	.145	.111	.087	.084	.066	.052	.027	.021	.017	
8.0	.238	.178	.136	.205	.154	.119	.142	.108	.084	.082	.064	.050	.027	.021	.017	
9.0	.232	.173	.133	.200	.150	.116	.138	.105	.082	.081	.062	.049	.026	.020	.016	
10.0	.226	.169	.130	.195	.146	.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	17.5	16.7	17.9	18.5
4H	20.0	21.2	20.5	21.7	22.2	16.7	18.0	17.2	18.5	19.0
6H	21.3	22.5	21.9	23.0	23.6	17.1	18.3	17.6	18.8	19.4
8H	22.1	23.2	22.6	23.7	24.3	17.2	18.3	17.8	18.9	19.4
12H	23.0	24.0	23.5	24.6	25.2	17.3	18.3	17.8	18.9	19.5
4H 2H	16.9	18.1	17.4	18.6	19.2	15.7	16.9	16.2	17.4	18.0
3H	19.5	20.6	20.0	21.1	21.7	17.4	18.5	17.9	19.0	19.6
4H	20.9	21.9	21.5	22.5	23.1	18.1	19.1	18.7	19.7	20.3
6H	22.5	23.4	23.1	24.0	24.6	18.7	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	25.0	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	19.8	19.5	20.4	21.0
6H	23.1	23.8	23.7	24.4	25.1	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	26.1	26.7	27.4	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	24.9	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 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 8926 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 7.6)

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:

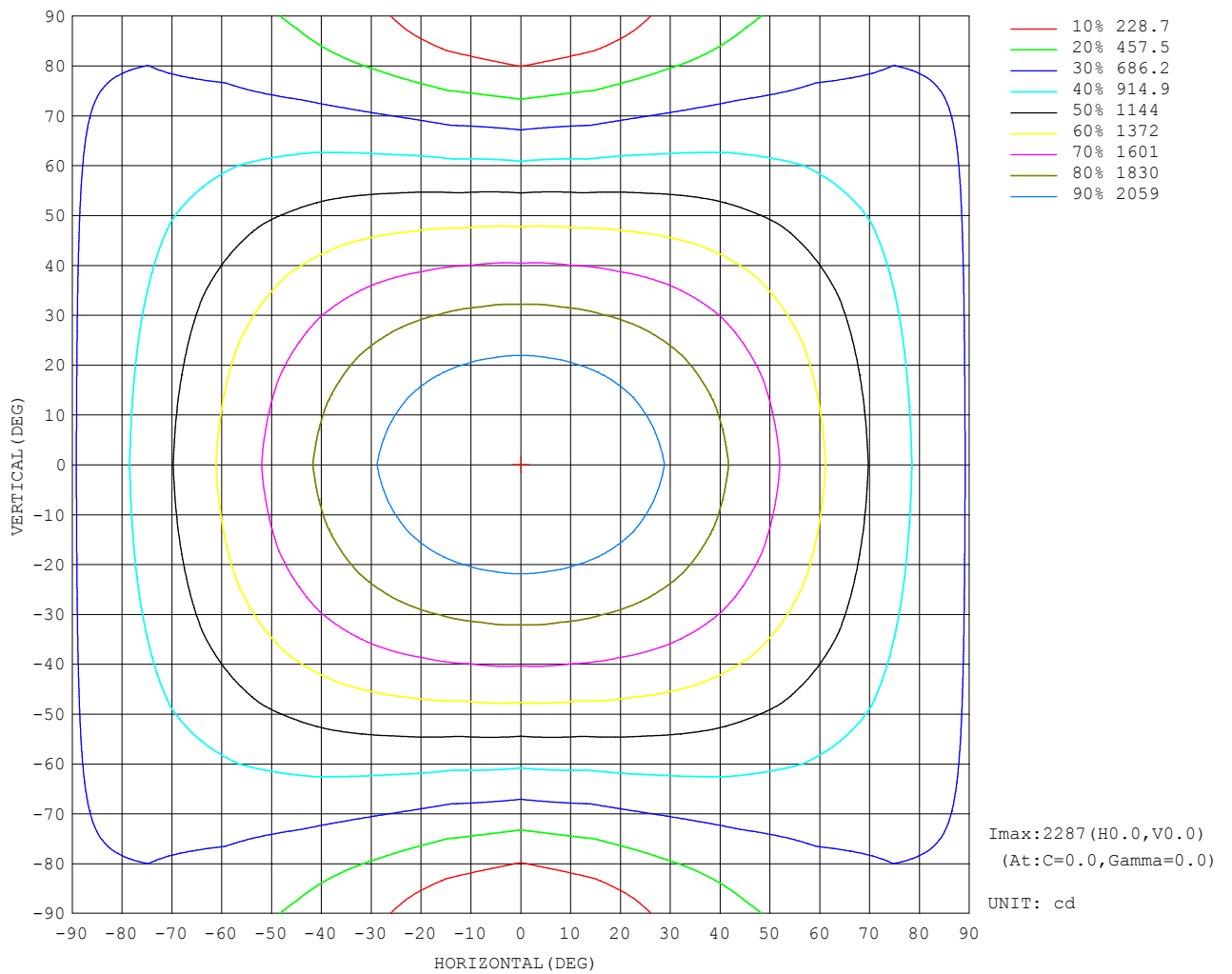
UTILIZATION FACTORS TABLE

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

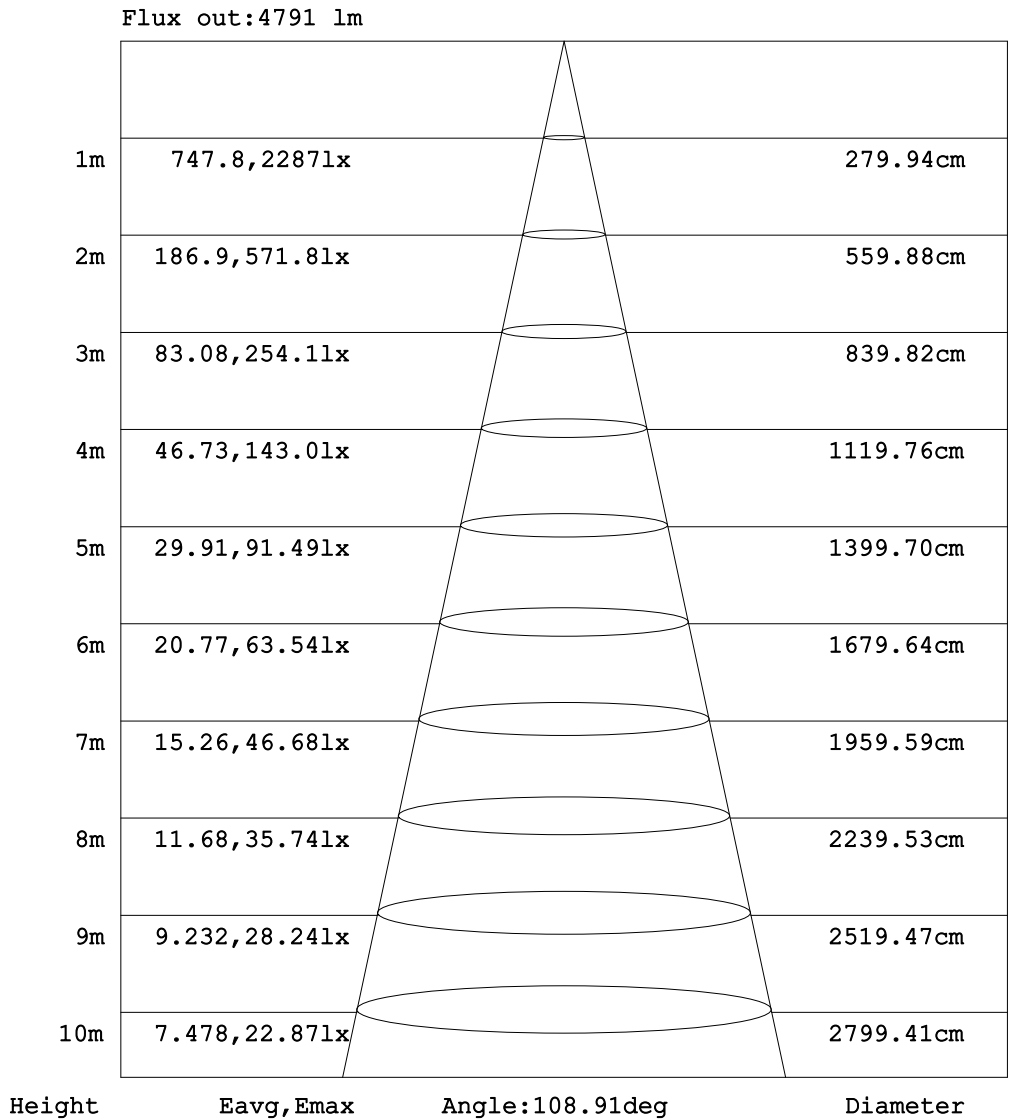


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QC  
 Test Date: 2021-11-22

$\gamma$  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

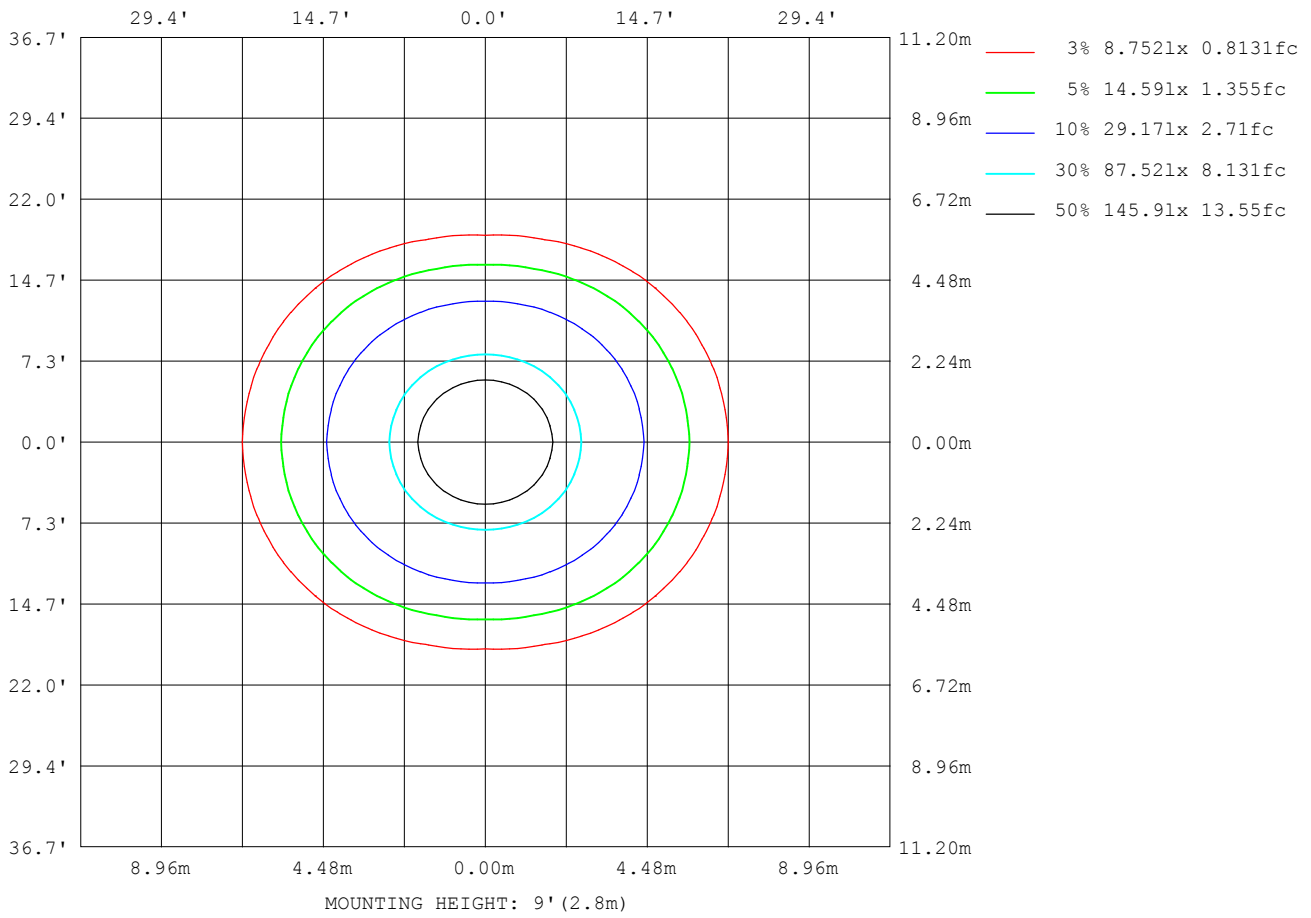


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.2348A P:52.72W PF:0.9742 Freq:49.99Hz Lamp Flux:8925.63x1 lm		
NAME: TB33-53-1500K-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

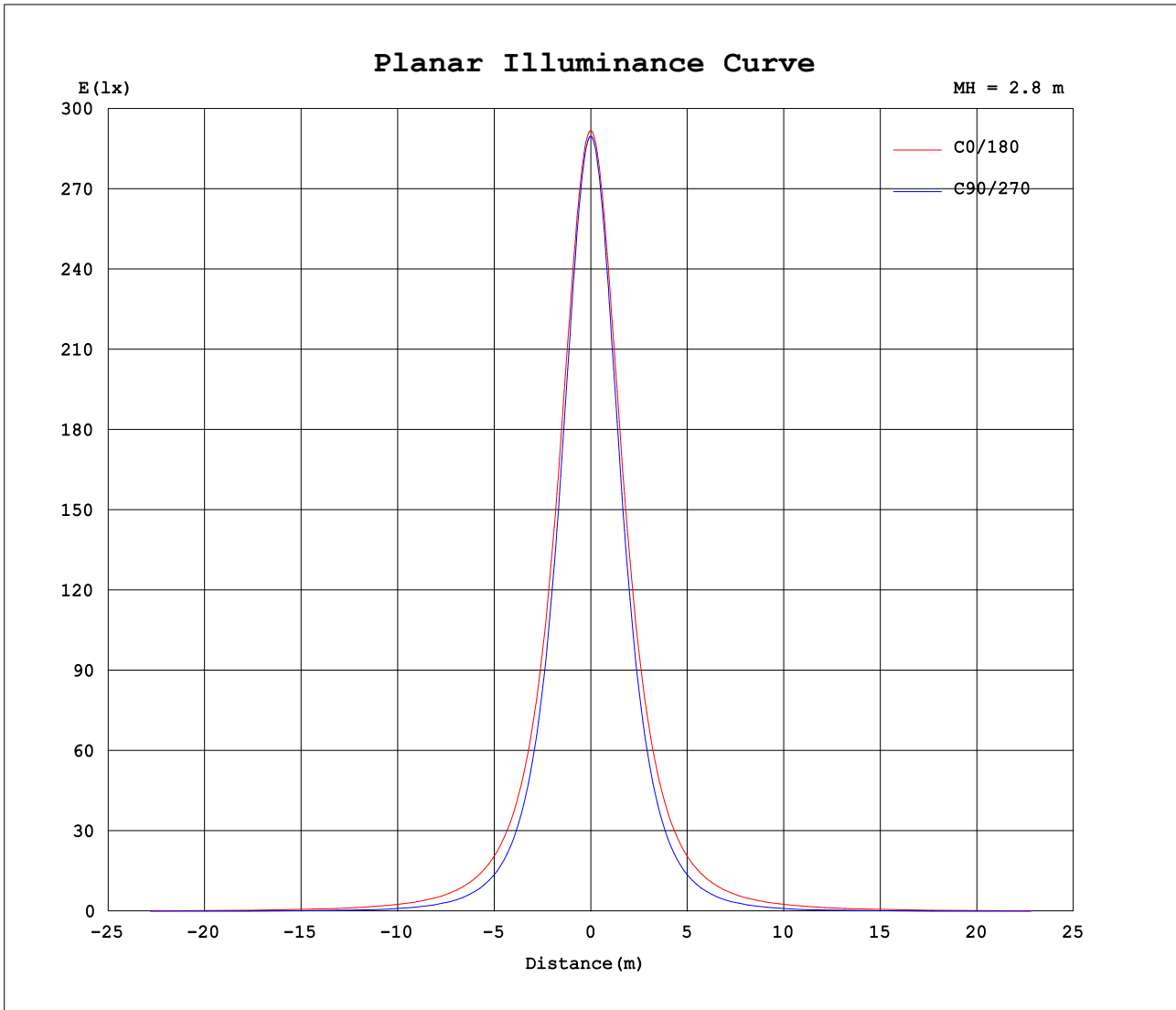
AvgL	cd/m2
L_0~180 (65) av	31855
L_0~180 (75) av	41043
L_0~180 (85) av	93238
L_90~270 (65) av	19336
L_90~270 (75) av	16283
L_90~270 (85) av	10219
L_45 (65) av	26665
L_45 (75) av	31553
L_45 (85) av	63320

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	2273	2273	2273	2273	2273	2273	2273	2273	2273	2273	2273	2273	2273	2273	2273	2273	2273	2273	2273
5	2266	2265	2265	2264	2263	2262	2262	2262	2263	2264	2265	2265	2266	2265	2265	2264	2263	2262	2262
10	2244	2242	2240	2236	2232	2228	2227	2228	2232	2236	2240	2242	2244	2242	2240	2236	2232	2228	2227
15	2207	2205	2199	2190	2180	2174	2171	2174	2180	2190	2199	2205	2207	2205	2199	2190	2180	2174	2171
20	2159	2154	2143	2127	2110	2098	2094	2098	2110	2127	2143	2154	2159	2154	2143	2127	2110	2098	2094
25	2099	2092	2074	2049	2023	2005	1998	2005	2023	2049	2074	2092	2099	2092	2074	2049	2023	2005	1998
30	2028	2019	1993	1957	1920	1894	1884	1894	1920	1957	1993	2019	2028	2019	1993	1957	1920	1894	1884
35	1946	1933	1901	1854	1805	1769	1756	1769	1805	1854	1901	1933	1946	1933	1901	1854	1805	1769	1756
40	1852	1837	1797	1739	1677	1631	1614	1631	1677	1739	1797	1837	1852	1837	1797	1739	1677	1631	1614
45	1749	1732	1684	1616	1541	1482	1461	1482	1541	1616	1684	1732	1749	1732	1684	1616	1541	1482	1461
50	1638	1618	1563	1484	1396	1324	1297	1324	1396	1484	1563	1618	1638	1618	1563	1484	1396	1324	1297
55	1519	1497	1435	1346	1245	1159	1126	1159	1245	1346	1435	1497	1519	1497	1435	1346	1245	1159	1126
60	1394	1370	1302	1203	1089	989	947	989	1089	1203	1302	1370	1394	1370	1302	1203	1089	989	947
65	1263	1237	1164	1057	931	818	766	818	931	1057	1164	1237	1263	1237	1164	1057	931	818	766
70	1129	1102	1025	911	775	643	580	643	775	911	1025	1102	1129	1102	1025	911	775	643	580
75	996	968	887	766	622	475	395	475	622	766	887	968	996	968	887	766	622	475	395
80	873	843	760	632	478	319	223	319	478	632	760	843	873	843	760	632	478	319	223
85	762	733	648	518	355	187	83.5	187	355	518	648	733	762	733	648	518	355	187	83.5
90	667	639	556	429	272	107	9.37	107	272	429	556	639	667	639	556	429	272	107	9.37
95	588	562	485	366	223	79.7	11.5	79.7	223	366	485	562	588	562	485	366	223	79.7	11.5
100	525	501	429	321	187	67.2	12.5	67.2	187	321	429	501	525	501	429	321	187	67.2	12.5
105	472	449	383	284	165	60.4	11.8	60.4	165	284	383	449	472	449	383	284	165	60.4	11.8
110	423	402	342	248	146	55.6	14.0	55.6	146	248	342	402	423	402	342	248	146	55.6	14.0
115	377	358	302	220	125	50.9	16.5	50.9	125	220	302	358	377	358	302	220	125	50.9	16.5
120	334	317	265	187	110	48.0	19.2	48.0	110	187	265	317	334	317	265	187	110	48.0	19.2
125	294	280	234	160	97.7	46.5	22.0	46.5	97.7	160	234	280	294	280	234	160	97.7	46.5	22.0
130	257	241	198	139	87.4	45.3	24.8	45.3	87.4	139	198	241	257	241	198	139	87.4	45.3	24.8
135	224	210	165	121	79.0	44.5	27.4	44.5	79.0	121	165	210	224	210	165	121	79.0	44.5	27.4
140	193	182	139	105	71.7	44.5	31.2	44.5	71.7	105	139	182	193	182	139	105	71.7	44.5	31.2
145	165	155	119	92.2	67.4	45.8	35.3	45.8	67.4	92.2	119	155	165	155	119	92.2	67.4	45.8	35.3
150	139	123	103	81.5	63.7	47.0	39.2	47.0	63.7	81.5	103	123	139	123	103	81.5	63.7	47.0	39.2
155	117	96.5	86.4	73.7	59.8	47.8	42.9	47.8	59.8	73.7	86.4	96.5	117	96.5	86.4	73.7	59.8	47.8	42.9
160	94.3	79.5	72.4	66.1	57.0	49.7	46.3	49.7	57.0	66.1	72.4	79.5	94.3	79.5	72.4	66.1	57.0	49.7	46.3
165	78.2	64.3	62.2	59.1	54.6	51.1	49.1	51.1	54.6	59.1	62.2	64.3	78.2	64.3	62.2	59.1	54.6	51.1	49.1
170	62.5	53.5	55.4	54.5	54.1	52.1	51.3	52.1	54.1	54.5	55.4	53.5	62.5	53.5	55.4	54.5	54.1	52.1	51.3
175	42.0	48.0	52.4	53.5	53.6	53.4	53.1	53.4	53.6	53.5	52.4	48.0	42.0	48.0	52.4	53.5	53.6	53.4	53.1
180	37.6	47.8	51.4	53.1	53.8	54.4	54.3	54.4	53.8	53.1	51.4	47.8	37.6	47.8	51.4	53.1	53.8	54.4	54.3

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345															
0	2273	2273	2273	2273	2273															
5	2262	2263	2264	2265	2265															
10	2228	2232	2236	2240	2242															
15	2174	2180	2190	2199	2205															
20	2098	2110	2127	2143	2154															
25	2005	2023	2049	2074	2092															
30	1894	1920	1957	1993	2019															
35	1769	1805	1854	1901	1933															
40	1631	1677	1739	1797	1837															
45	1482	1541	1616	1684	1732															
50	1324	1396	1484	1563	1618															
55	1159	1245	1346	1435	1497															
60	989	1089	1203	1302	1370															
65	818	931	1057	1164	1237															
70	643	775	911	1025	1102															
75	475	622	766	887	968															
80	319	478	632	760	843															
85	187	355	518	648	733															
90	107	272	429	556	639															
95	79.7	223	366	485	562															
100	67.2	187	321	429	501															
105	60.4	165	284	383	449															
110	55.6	146	248	342	402															
115	50.9	125	220	302	358															
120	48.0	110	187	265	317															
125	46.5	97.7	160	234	280															
130	45.3	87.4	139	198	241															
135	44.5	79.0	121	165	210															
140	44.5	71.7	105	139	182															
145	45.8	67.4	92.2	119	155															
150	47.0	63.7	81.5	103	123															
155	47.8	59.8	73.7	86.4	96.5															
160	49.7	57.0	66.1	72.4	79.5															
165	51.1	54.6	59.1	62.2	64.3															
170	52.1	54.1	54.5	55.4	53.5															
175	53.4	53.6	53.5	52.4	48.0															
180	54.4	53.8	53.1	51.4	47.8															

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	2273	2273	2273	2273	2273	2273	2273	2273	2273	2273
3.0	2271	2270	2270	2270	2269	2269	2269	2269	2269	2270
6.0	2263	2262	2261	2260	2258	2257	2257	2257	2258	2260
9.0	2249	2248	2246	2243	2240	2237	2236	2237	2240	2243
12.0	2231	2229	2225	2220	2213	2209	2207	2209	2213	2220
15.0	2207	2205	2199	2190	2180	2174	2171	2174	2180	2190
18.0	2180	2176	2167	2154	2141	2131	2127	2131	2141	2154
21.0	2148	2143	2130	2112	2094	2081	2076	2081	2094	2112
24.0	2112	2106	2089	2065	2042	2025	2018	2025	2042	2065
27.0	2072	2064	2043	2013	1984	1962	1954	1962	1984	2013
30.0	2028	2019	1993	1957	1920	1894	1884	1894	1920	1957
33.0	1980	1969	1939	1896	1852	1820	1809	1820	1852	1896
36.0	1928	1915	1881	1832	1780	1742	1728	1742	1780	1832
39.0	1872	1857	1819	1763	1704	1659	1643	1659	1704	1763
42.0	1812	1796	1753	1691	1624	1573	1554	1573	1624	1691
45.0	1749	1732	1684	1616	1541	1482	1461	1482	1541	1616
48.0	1683	1664	1613	1538	1455	1388	1364	1388	1455	1538
51.0	1615	1594	1538	1457	1367	1292	1264	1292	1367	1457
54.0	1543	1522	1461	1374	1276	1193	1161	1193	1276	1374
57.0	1470	1447	1383	1289	1183	1092	1055	1092	1183	1289
60.0	1394	1370	1302	1203	1089	988.7	947.0	988.7	1089	1203
63.0	1316	1291	1220	1116	994.9	884.9	839.2	884.9	994.9	1116
66.0	1236	1210	1137	1028	900.1	783.0	728.9	783.0	900.1	1028
69.0	1156	1129	1053	939.8	806.8	677.0	615.4	677.0	806.8	939.8
72.0	1075	1048	969.2	852.1	713.0	574.7	504.7	574.7	713.0	852.1
75.0	996.4	968.0	887.3	766.0	622.1	474.6	395.3	474.6	622.1	766.0
78.0	920.7	891.9	808.9	683.5	533.7	378.2	290.1	378.2	533.7	683.5
81.0	849.2	819.9	735.7	607.0	451.1	289.6	192.4	289.6	451.1	607.0
84.0	782.9	753.7	668.9	538.5	376.1	210.7	107.9	210.7	376.1	538.5
87.0	722.3	693.3	609.2	478.7	316.5	145.6	43.72	145.6	316.5	478.7
90.0	667.1	638.8	556.4	429.4	272.1	107.0	9.373	107.0	272.1	429.4
93.0	617.7	590.4	510.8	388.5	239.3	88.43	9.589	88.43	239.3	388.5
96.0	574.7	548.6	472.3	355.6	215.7	76.90	11.86	76.90	215.7	355.6
99.0	537.0	512.0	438.8	328.8	195.0	69.17	12.46	69.17	195.0	328.8
102.0	503.2	479.0	410.0	305.7	177.8	64.06	12.38	64.06	177.8	305.7
105.0	472.1	449.1	383.0	283.9	165.5	60.44	11.85	60.44	165.5	283.9
108.0	441.7	420.9	358.1	258.5	153.6	57.79	12.97	57.79	153.6	258.5
111.0	413.3	392.7	334.1	242.3	141.7	54.36	14.45	54.36	141.7	242.3
114.0	385.8	366.6	311.1	226.3	128.6	51.65	15.98	51.65	128.6	226.3
117.0	359.2	341.2	284.7	207.5	118.2	49.56	17.61	49.56	118.2	207.5
120.0	333.7	317.1	264.9	187.3	110.0	48.01	19.25	48.01	110.0	187.3
123.0	309.5	294.2	245.3	170.8	102.3	46.92	20.92	46.92	102.3	170.8
126.0	286.3	272.2	228.2	155.4	95.43	46.25	22.61	46.25	95.43	155.4
129.0	264.4	247.8	205.5	142.7	89.21	45.52	24.24	45.52	89.21	142.7
132.0	243.6	227.7	183.7	131.5	83.88	44.94	25.85	44.94	83.88	131.5
135.0	223.9	210.3	165.0	121.4	79.03	44.48	27.44	44.48	79.03	121.4
138.0	205.0	192.1	148.3	111.0	74.49	44.29	29.62	44.29	74.49	111.0
141.0	186.8	177.9	134.3	102.8	70.44	44.71	32.05	44.71	70.44	102.8
144.0	170.2	161.3	122.8	94.75	68.17	45.59	34.48	45.59	68.17	94.75
147.0	154.4	142.6	111.8	87.23	65.91	46.30	36.87	46.30	65.91	87.23
150.0	139.4	123.3	102.6	81.48	63.66	47.01	39.19	47.01	63.66	81.48
153.0	125.6	106.1	92.57	76.81	61.37	47.43	41.45	47.43	61.37	76.81
156.0	112.5	93.04	83.38	72.18	59.02	48.05	43.58	48.05	59.02	72.18
159.0	99.07	82.76	74.89	67.59	57.28	49.23	45.64	49.23	57.28	67.59
162.0	87.47	73.04	67.96	63.02	56.46	50.38	47.48	50.38	56.46	63.02
165.0	78.23	64.28	62.16	59.14	54.64	51.07	49.08	51.07	54.64	59.14
168.0	68.12	57.03	57.52	56.69	53.76	51.68	50.48	51.68	53.76	56.69
171.0	59.45	51.55	54.02	53.93	53.97	52.35	51.71	52.35	53.97	53.93
174.0	48.44	48.27	52.85	53.72	53.63	53.16	52.83	53.16	53.63	53.72
177.0	39.52	47.45	51.67	53.12	53.60	53.83	53.68	53.83	53.60	53.12
180.0	37.59	47.75	51.39	53.14	53.78	54.37	54.29	54.37	53.78	53.14
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	2273	2273	2273	2273	2273	2273	2273	2273	2273	2273
3.0	2270	2270	2271	2270	2270	2270	2269	2269	2269	2269
6.0	2261	2262	2263	2262	2261	2260	2258	2257	2257	2257
9.0	2246	2248	2249	2248	2246	2243	2240	2237	2236	2237
12.0	2225	2229	2231	2229	2225	2220	2213	2209	2207	2209
15.0	2199	2205	2207	2205	2199	2190	2180	2174	2171	2174
18.0	2167	2176	2180	2176	2167	2154	2141	2131	2127	2131
21.0	2130	2143	2148	2143	2130	2112	2094	2081	2076	2081
24.0	2089	2106	2112	2106	2089	2065	2042	2025	2018	2025
27.0	2043	2064	2072	2064	2043	2013	1984	1962	1954	1962
30.0	1993	2019	2028	2019	1993	1957	1920	1894	1884	1894

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	1939	1969	1980	1969	1939	1896	1852	1820	1809	1820
36.0	1881	1915	1928	1915	1881	1832	1780	1742	1728	1742
39.0	1819	1857	1872	1857	1819	1763	1704	1659	1643	1659
42.0	1753	1796	1812	1796	1753	1691	1624	1573	1554	1573
45.0	1684	1732	1749	1732	1684	1616	1541	1482	1461	1482
48.0	1613	1664	1683	1664	1613	1538	1455	1388	1364	1388
51.0	1538	1594	1615	1594	1538	1457	1367	1292	1264	1292
54.0	1461	1522	1543	1522	1461	1374	1276	1193	1161	1193
57.0	1383	1447	1470	1447	1383	1289	1183	1092	1055	1092
60.0	1302	1370	1394	1370	1302	1203	1089	988.7	947.0	988.7
63.0	1220	1291	1316	1291	1220	1116	994.9	884.9	839.2	884.9
66.0	1137	1210	1236	1210	1137	1028	900.1	783.0	728.9	783.0
69.0	1053	1129	1156	1129	1053	939.8	806.8	677.0	615.4	677.0
72.0	969.2	1048	1075	1048	969.2	852.1	713.0	574.7	504.7	574.7
75.0	887.3	968.0	996.4	968.0	887.3	766.0	622.1	474.6	395.3	474.6
78.0	808.9	891.9	920.7	891.9	808.9	683.5	533.7	378.2	290.1	378.2
81.0	735.7	819.9	849.2	819.9	735.7	607.0	451.1	289.6	192.4	289.6
84.0	668.9	753.7	782.9	753.7	668.9	538.5	376.1	210.7	107.9	210.7
87.0	609.2	693.3	722.3	693.3	609.2	478.7	316.5	145.6	43.72	145.6
90.0	556.4	638.8	667.1	638.8	556.4	429.4	272.1	107.0	9.373	107.0
93.0	510.8	590.4	617.7	590.4	510.8	388.5	239.3	88.43	9.589	88.43
96.0	472.3	548.6	574.7	548.6	472.3	355.6	215.7	76.90	11.86	76.90
99.0	438.8	512.0	537.0	512.0	438.8	328.8	195.0	69.17	12.46	69.17
102.0	410.0	479.0	503.2	479.0	410.0	305.7	177.8	64.06	12.38	64.06
105.0	383.0	449.1	472.1	449.1	383.0	283.9	165.5	60.44	11.85	60.44
108.0	358.1	420.9	441.7	420.9	358.1	258.5	153.6	57.79	12.97	57.79
111.0	334.1	392.7	413.3	392.7	334.1	242.3	141.7	54.36	14.45	54.36
114.0	311.1	366.6	385.8	366.6	311.1	226.3	128.6	51.65	15.98	51.65
117.0	284.7	341.2	359.2	341.2	284.7	207.5	118.2	49.56	17.61	49.56
120.0	264.9	317.1	333.7	317.1	264.9	187.3	110.0	48.01	19.25	48.01
123.0	245.3	294.2	309.5	294.2	245.3	170.8	102.3	46.92	20.92	46.92
126.0	228.2	272.2	286.3	272.2	228.2	155.4	95.43	46.25	22.61	46.25
129.0	205.5	247.8	264.4	247.8	205.5	142.7	89.21	45.52	24.24	45.52
132.0	183.7	227.7	243.6	227.7	183.7	131.5	83.88	44.94	25.85	44.94
135.0	165.0	210.3	223.9	210.3	165.0	121.4	79.03	44.48	27.44	44.48
138.0	148.3	192.1	205.0	192.1	148.3	111.0	74.49	44.29	29.62	44.29
141.0	134.3	177.9	186.8	177.9	134.3	102.8	70.44	44.71	32.05	44.71
144.0	122.8	161.3	170.2	161.3	122.8	94.75	68.17	45.59	34.48	45.59
147.0	111.8	142.6	154.4	142.6	111.8	87.23	65.91	46.30	36.87	46.30
150.0	102.6	123.3	139.4	123.3	102.6	81.48	63.66	47.01	39.19	47.01
153.0	92.57	106.1	125.6	106.1	92.57	76.81	61.37	47.43	41.45	47.43
156.0	83.38	93.04	112.5	93.04	83.38	72.18	59.02	48.05	43.58	48.05
159.0	74.89	82.76	99.07	82.76	74.89	67.59	57.28	49.23	45.64	49.23
162.0	67.96	73.04	87.47	73.04	67.96	63.02	56.46	50.38	47.48	50.38
165.0	62.16	64.28	78.23	64.28	62.16	59.14	54.64	51.07	49.08	51.07
168.0	57.52	57.03	68.12	57.03	57.52	56.69	53.76	51.68	50.48	51.68
171.0	54.02	51.55	59.45	51.55	54.02	53.93	53.97	52.35	51.71	52.35
174.0	52.85	48.27	48.44	48.27	52.85	53.72	53.63	53.16	52.83	53.16
177.0	51.67	47.45	39.52	47.45	51.67	53.12	53.60	53.83	53.68	53.83
180.0	51.39	47.75	37.59	47.75	51.39	53.14	53.78	54.37	54.29	54.37
G/C	300.0	315.0	330.0	345.0						
0.0	2273	2273	2273	2273						
3.0	2269	2270	2270	2270						
6.0	2258	2260	2261	2262						
9.0	2240	2243	2246	2248						
12.0	2213	2220	2225	2229						
15.0	2180	2190	2199	2205						
18.0	2141	2154	2167	2176						
21.0	2094	2112	2130	2143						
24.0	2042	2065	2089	2106						
27.0	1984	2013	2043	2064						
30.0	1920	1957	1993	2019						
33.0	1852	1896	1939	1969						
36.0	1780	1832	1881	1915						
39.0	1704	1763	1819	1857						
42.0	1624	1691	1753	1796						
45.0	1541	1616	1684	1732						
48.0	1455	1538	1613	1664						
51.0	1367	1457	1538	1594						
54.0	1276	1374	1461	1522						
57.0	1183	1289	1383	1447						
60.0	1089	1203	1302	1370						
63.0	994.9	1116	1220	1291						
66.0	900.1	1028	1137	1210						

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	806.8	939.8	1053	1129
72.0	713.0	852.1	969.2	1048
75.0	622.1	766.0	887.3	968.0
78.0	533.7	683.5	808.9	891.9
81.0	451.1	607.0	735.7	819.9
84.0	376.1	538.5	668.9	753.7
87.0	316.5	478.7	609.2	693.3
90.0	272.1	429.4	556.4	638.8
93.0	239.3	388.5	510.8	590.4
96.0	215.7	355.6	472.3	548.6
99.0	195.0	328.8	438.8	512.0
102.0	177.8	305.7	410.0	479.0
105.0	165.5	283.9	383.0	449.1
108.0	153.6	258.5	358.1	420.9
111.0	141.7	242.3	334.1	392.7
114.0	128.6	226.3	311.1	366.6
117.0	118.2	207.5	284.7	341.2
120.0	110.0	187.3	264.9	317.1
123.0	102.3	170.8	245.3	294.2
126.0	95.43	155.4	228.2	272.2
129.0	89.21	142.7	205.5	247.8
132.0	83.88	131.5	183.7	227.7
135.0	79.03	121.4	165.0	210.3
138.0	74.49	111.0	148.3	192.1
141.0	70.44	102.8	134.3	177.9
144.0	68.17	94.75	122.8	161.3
147.0	65.91	87.23	111.8	142.6
150.0	63.66	81.48	102.6	123.3
153.0	61.37	76.81	92.57	106.1
156.0	59.02	72.18	83.38	93.04
159.0	57.28	67.59	74.89	82.76
162.0	56.46	63.02	67.96	73.04
165.0	54.64	59.14	62.16	64.28
168.0	53.76	56.69	57.52	57.03
171.0	53.97	53.93	54.02	51.55
174.0	53.63	53.72	52.85	48.27
177.0	53.60	53.12	51.67	47.45
180.0	53.78	53.14	51.39	47.75

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: