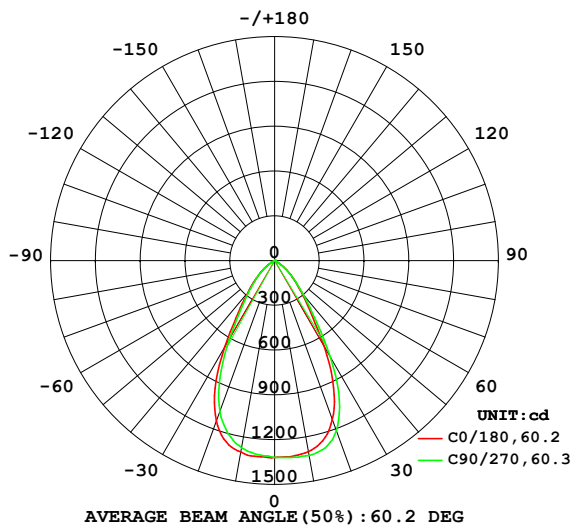


LUMINAIRE PHOTOMETRIC TEST REPORT

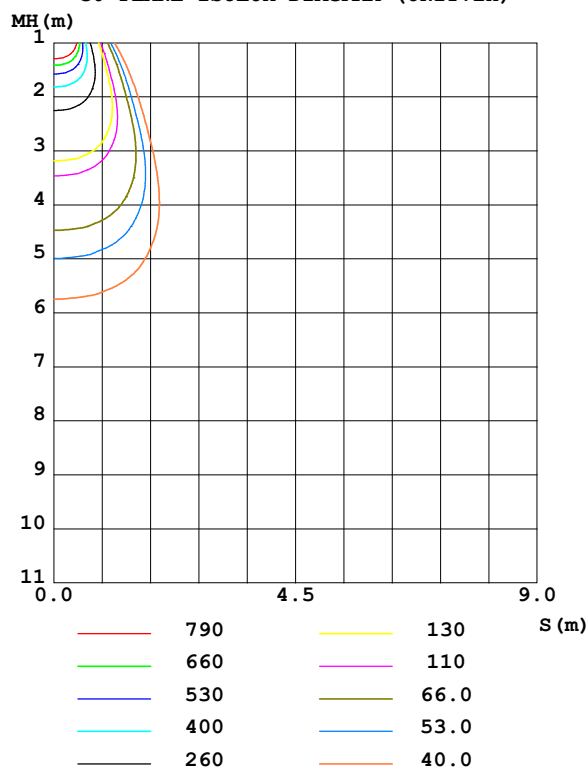
Test:U:230.35V I:0.0523A P:9.8309W PF:0.8163 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1394.82x1 lm		
NAME: 136-133_4000K_10W	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.: 0.0715	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 141.88 lm/W
MODEL	136-133_4000K_10W	I _{max} (cd)	1330	S/MH (C0/180)	0.89	
NOMINAL POWER (W)	10	LOR (%)	100.0	S/MH (C90/270)	0.93	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	1394.8	η UP, DN (C0-180)	0.0, 48.2	
NOMINAL FLUX (lm)	1394.82	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.8	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	0.90	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators: DAMIN
Test Date: 2023-08-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity: 65.0%
Test Distance: 9.640m [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	1303	1290	1275	1284	1299	1315	1326	1325	0- 10	125.3	125.3	8.98,8.98
20	1142	1102	1073	1092	1133	1182	1213	1195	10- 20	349.7	475.0	34.1,34.1
30	668.9	627.4	604.7	626.2	664.8	709.5	745.8	724.5	20- 30	424.7	899.6	64.5,64.5
40	282.8	268.7	263.8	273.2	283.9	292.3	305.1	301.1	30- 40	274.7	1174	84.2,84.2
50	119.2	116.3	116.0	121.1	124.3	124.4	127.9	124.0	40- 50	148.8	1323	94.9,94.9
60	23.22	22.61	19.30	22.33	23.34	23.21	20.87	23.27	50- 60	58.24	1381	99,99
70	3.759	3.696	3.592	3.677	3.830	3.811	3.743	3.703	60- 70	8.796	1390	99.7,99.7
80	2.414	2.297	2.218	2.243	2.391	2.390	2.320	2.337	70- 80	3.131	1393	99.9,99.9
90	0.0326	0.0267	0.0266	0.0238	0.0315	0.0296	0.0237	0.0297	80- 90	1.567	1395	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1260.8 lm

%lum = 90.4%

%lamp = 90.4%

Conical surface Flux(120deg): 1381.3 lm

%lum = 99.0%

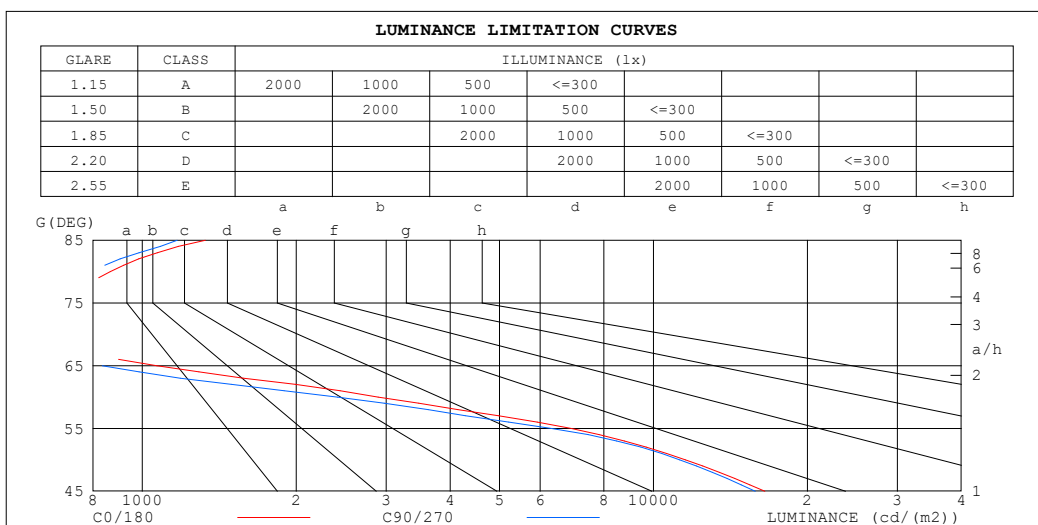
%lamp = 99.0%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:2023-08-23

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
 Humidity:65.0%
 Test Distance:9.640m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.35V I:0.0523A P:9.8309W PF:0.8163 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1394.82x1 lm		
NAME: 136-133_4000K_10W	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.: 0.0715	Shielding Angle:



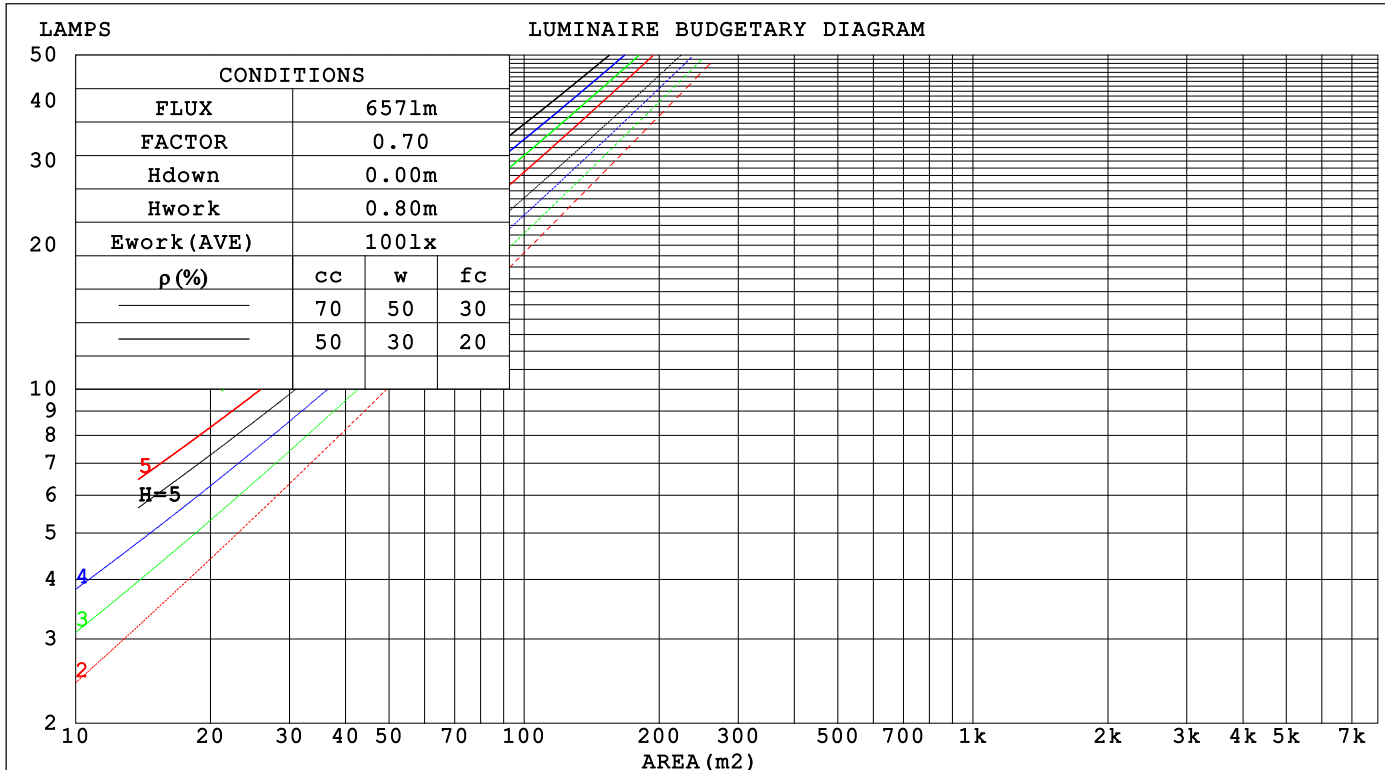
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2023-08-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity: 65.0%
Test Distance: 9.640m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.35V I:0.0523A P:9.8309W PF:0.8163 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1394.82x1 lm		
NAME: 136-133_4000K_10W	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.: 0.0715	Shielding Angle:

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															Coefficients of Utilization(CU)														
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00														
1.0	1.10	1.07	1.05	1.08	1.06	1.03	1.04	1.02	1.00	1.00	.99	.97	.97	.96	.94	.93														
2.0	1.02	.97	.94	.90	.96	.93	.97	.93	.91	.94	.91	.89	.91	.89	.87	.85														
3.0	.94	.89	.85	.93	.88	.84	.90	.86	.83	.88	.84	.81	.85	.82	.80	.78														
4.0	.87	.81	.77	.86	.81	.76	.84	.79	.75	.82	.78	.75	.80	.77	.74	.72														
5.0	.81	.75	.70	.80	.74	.70	.78	.73	.69	.77	.72	.69	.75	.71	.68	.67														
6.0	.76	.69	.65	.75	.69	.65	.73	.68	.64	.72	.67	.64	.71	.66	.63	.62														
7.0	.71	.64	.60	.70	.64	.60	.69	.63	.59	.68	.63	.59	.66	.62	.59	.57														
8.0	.66	.60	.56	.66	.60	.56	.65	.59	.55	.64	.59	.55	.63	.58	.55	.53														
9.0	.62	.56	.52	.62	.56	.52	.61	.55	.52	.60	.55	.51	.59	.55	.51	.50														
10.0	.59	.53	.49	.58	.52	.49	.58	.52	.48	.57	.52	.48	.56	.51	.48	.47														



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-08-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.35V I:0.0523A P:9.8309W PF:0.8163 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1394.82x1 lm		
NAME: 136-133_4000K_10W	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.: 0.0715	Shielding Angle:

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	.190	.108	.034	.183	.105	.033	.171	.098	.031	.159	.092	.029	.148	.086	.028		
2.0	.183	.100	.031	.178	.098	.030	.167	.093	.029	.157	.088	.028	.148	.084	.026		
3.0	.175	.093	.028	.170	.091	.027	.161	.087	.027	.153	.084	.026	.145	.080	.025		
4.0	.167	.087	.026	.163	.085	.025	.155	.082	.025	.147	.079	.024	.140	.076	.023		
5.0	.159	.081	.023	.155	.080	.023	.148	.077	.023	.142	.075	.022	.136	.073	.022		
6.0	.152	.076	.022	.148	.075	.022	.142	.073	.021	.136	.071	.021	.131	.069	.020		
7.0	.145	.071	.020	.142	.071	.020	.136	.069	.020	.131	.067	.020	.126	.066	.019		
8.0	.138	.067	.019	.135	.067	.019	.130	.065	.019	.126	.064	.018	.122	.062	.018		
9.0	.132	.064	.018	.130	.063	.018	.125	.062	.018	.121	.061	.017	.117	.059	.017		
10.0	.126	.061	.017	.124	.060	.017	.120	.059	.017	.116	.058	.016	.113	.057	.016		

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020		
1.0	.172	.157	.144	.147	.135	.124	.101	.093	.086	.058	.054	.050	.019	.017	.016		
2.0	.158	.132	.111	.135	.114	.096	.093	.079	.067	.053	.046	.039	.017	.015	.013		
3.0	.146	.114	.088	.125	.098	.076	.086	.068	.053	.050	.040	.031	.016	.013	.010		
4.0	.137	.099	.071	.117	.086	.061	.081	.060	.043	.047	.035	.026	.015	.011	.008		
5.0	.128	.088	.058	.110	.076	.050	.076	.053	.035	.044	.031	.021	.014	.010	.007		
6.0	.121	.079	.048	.104	.068	.042	.072	.048	.030	.042	.028	.018	.013	.009	.006		
7.0	.115	.071	.041	.099	.062	.035	.068	.043	.025	.040	.026	.015	.013	.008	.005		
8.0	.109	.065	.035	.094	.056	.030	.065	.040	.022	.038	.023	.013	.012	.008	.004		
9.0	.104	.060	.030	.090	.052	.026	.062	.037	.019	.036	.022	.011	.012	.007	.004		
10.0	.100	.056	.026	.086	.048	.023	.060	.034	.016	.035	.020	.010	.011	.007	.003		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-08-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.35V I:0.0523A P:9.8309W PF:0.8163 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1394.82x1 lm										
NAME: 136-133_4000K_10W					TYPE: 10W			WEIGHT:		
SPEC.: 4000K					DIM.:			SERIAL No.:		
MFR.: Tronix Lighting					SUR.: 0.0715			Shielding Angle:		
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	17.7	18.7	17.9	18.9	19.1	17.4	18.5	17.7	18.6	18.8
3H	17.5	18.5	17.8	18.7	18.9	17.3	18.2	17.5	18.4	18.6
4H	17.5	18.4	17.7	18.6	18.8	17.2	18.1	17.5	18.3	18.5
6H	17.4	18.2	17.7	18.5	18.7	17.1	17.9	17.4	18.2	18.4
8H	17.3	18.1	17.7	18.4	18.7	17.1	17.9	17.4	18.1	18.4
12H	17.3	18.1	17.6	18.3	18.6	17.0	17.8	17.4	18.1	18.4
4H 2H	17.5	18.4	17.8	18.6	18.9	17.3	18.1	17.5	18.4	18.6
3H	17.3	18.1	17.7	18.4	18.7	17.1	17.9	17.4	18.1	18.4
4H	17.3	18.0	17.6	18.3	18.6	17.0	17.7	17.4	18.0	18.3
6H	17.2	17.8	17.6	18.1	18.5	16.9	17.5	17.3	17.9	18.2
8H	17.2	17.7	17.6	18.1	18.4	16.9	17.5	17.3	17.8	18.2
12H	17.1	17.6	17.5	18.0	18.4	16.9	17.4	17.3	17.8	18.1
8H 4H	17.1	17.7	17.5	18.0	18.4	16.9	17.4	17.3	17.8	18.2
6H	17.1	17.5	17.5	17.9	18.3	16.8	17.3	17.2	17.7	18.1
8H	17.0	17.4	17.5	17.9	18.3	16.8	17.2	17.2	17.6	18.0
12H	17.0	17.4	17.5	17.8	18.3	16.8	17.1	17.2	17.5	18.0
12H 4H	17.1	17.6	17.5	18.0	18.4	16.8	17.3	17.2	17.7	18.1
6H	17.0	17.4	17.5	17.8	18.3	16.8	17.2	17.2	17.6	18.0
8H	17.0	17.3	17.5	17.8	18.3	16.7	17.1	17.2	17.5	18.0
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.2 / - 5.2					+ 2.1 / - 5.7				
1.5H	+ 2.6 / - 3.4					+ 2.2 / - 3.5				
2.0H	+ 4.4 / - 8.7					+ 4.3 / - 9.0				

CIE Pub.117, 1395 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.2)
Area: 0.01606 m2

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-08-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.35V I:0.0523A P:9.8309W PF:0.8163 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1394.82x1 lm		
NAME: 136-133_4000K_10W	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.: 0.0715	Shielding Angle:

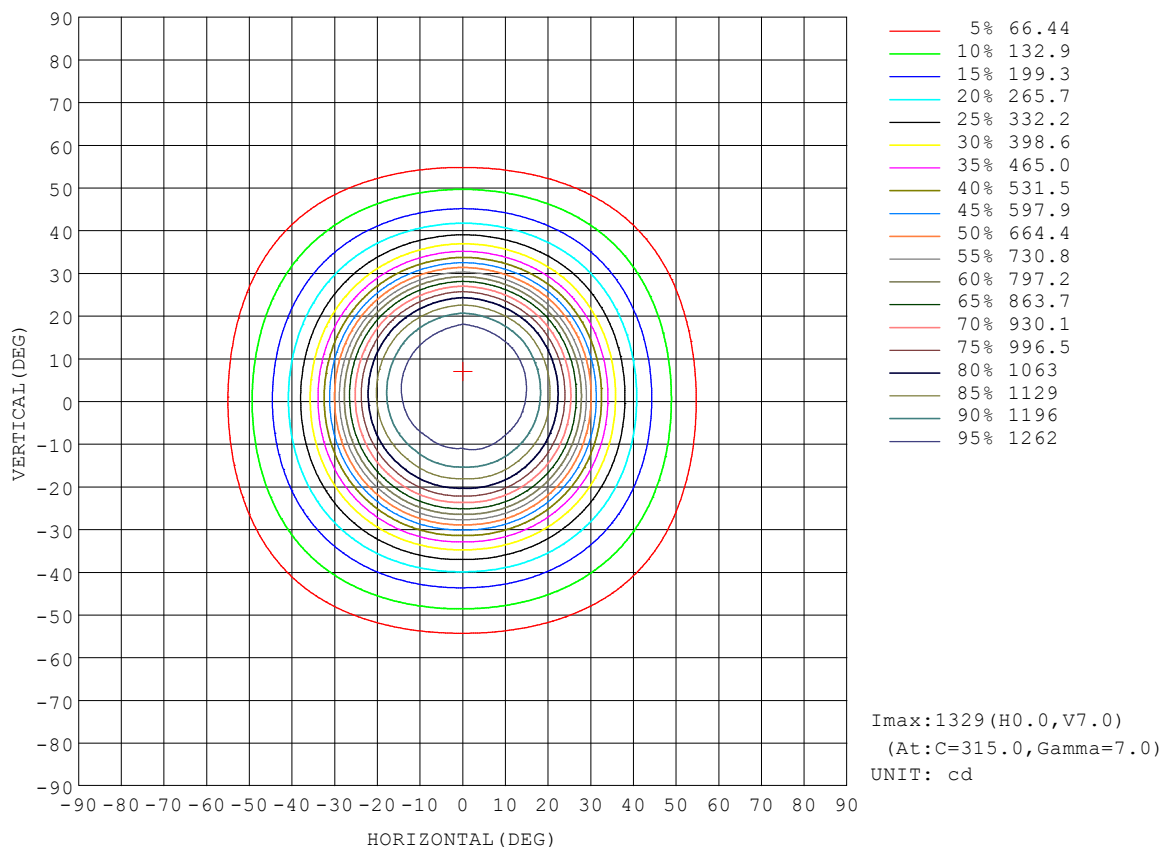
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	81	74	69	81	74	69	80	73	69	65
0.80	90	83	78	89	83	78	88	82	78	74
1.00	96	89	85	95	89	85	93	89	84	80
1.25	100	94	90	99	94	90	97	93	89	85
1.50	103	98	94	102	97	94	100	96	93	88
2.00	107	102	99	105	101	98	103	99	96	91
2.50	109	105	101	107	103	100	104	101	98	92
3.00	111	107	104	109	105	103	105	103	100	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	111	109	112	110	108	108	106	105	97
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators: DAMIN
Test Date: 2023-08-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity: 65.0%
Test Distance: 9.640m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.35V I:0.0523A P:9.8309W PF:0.8163 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1394.82x1 lm		
NAME: 136-133_4000K_10W	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.: 0.0715	Shielding Angle:

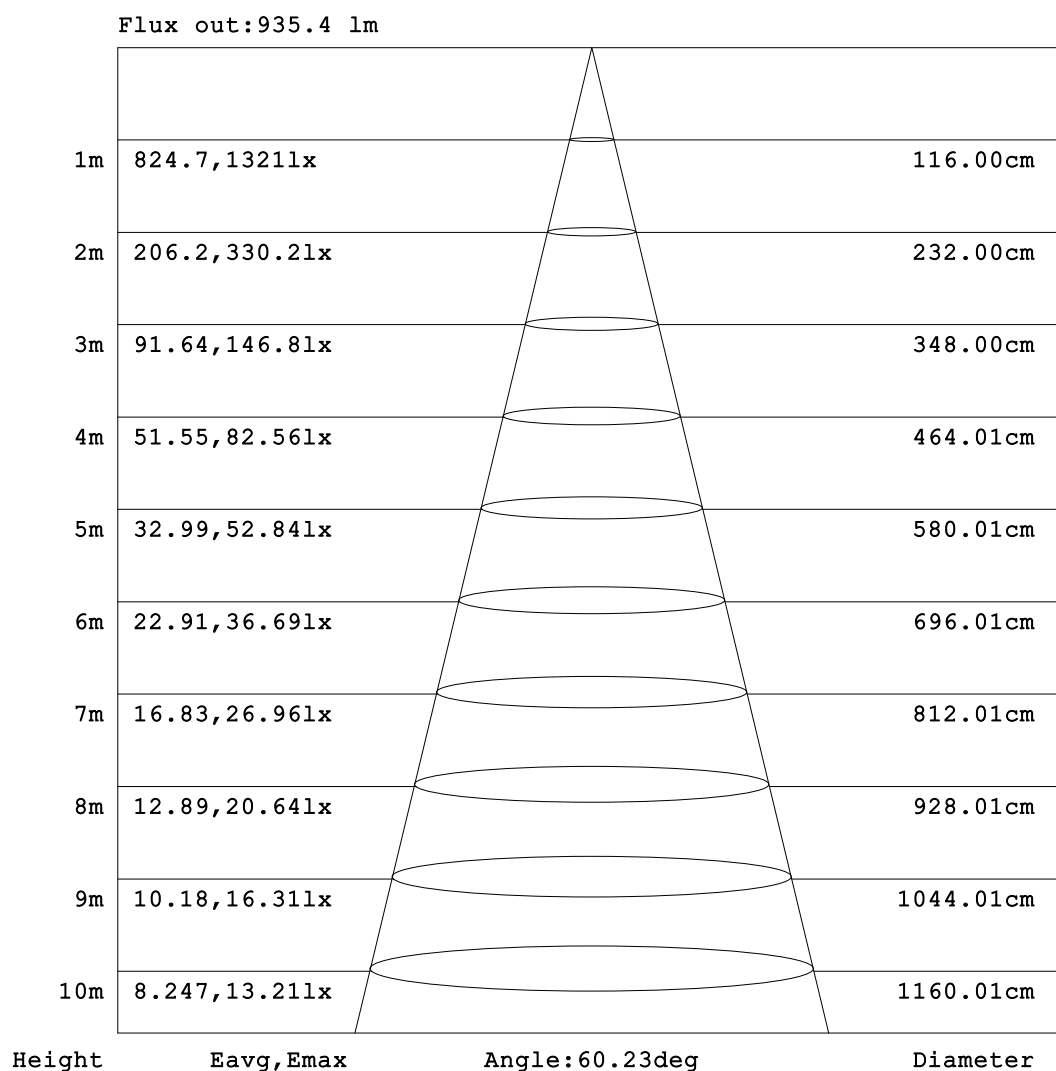


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-08-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.35V I:0.0523A P:9.8309W PF:0.8163 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1394.82x1 lm		
NAME: 136-133_4000K_10W	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.: 0.0715	Shielding Angle:



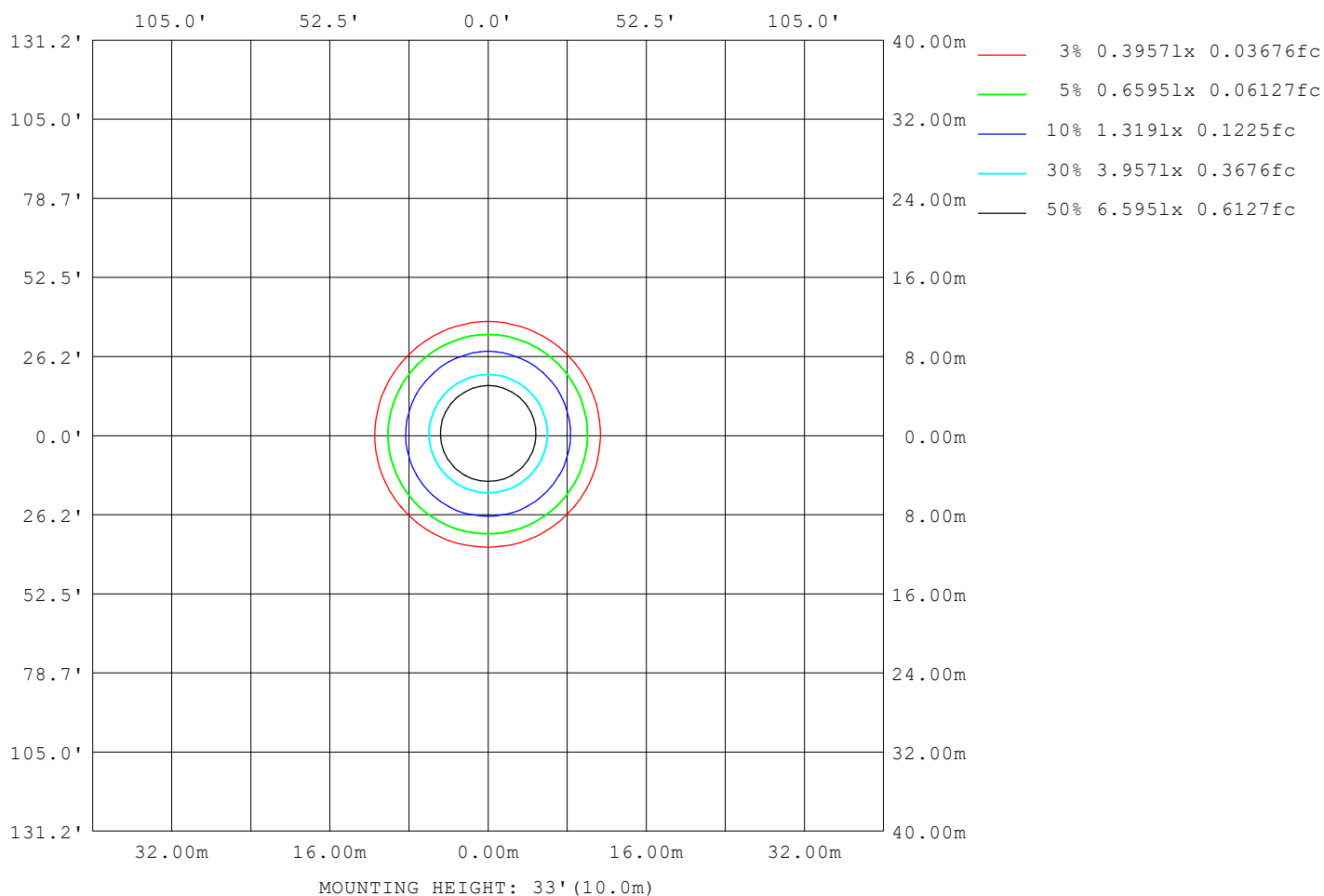
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: DAMIN
 Test Date: 2023-08-23

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.456
 Humidity: 65.0%
 Test Distance: 9.640m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.35V I:0.0523A P:9.8309W PF:0.8163 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1394.82x1 lm		
NAME: 136-133_4000K_10W	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.: 0.0715	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-08-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.35V I:0.0523A P:9.8309W PF:0.8163 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1394.82x1 lm		
NAME: 136-133_4000K_10W	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.: 0.0715	Shielding Angle:

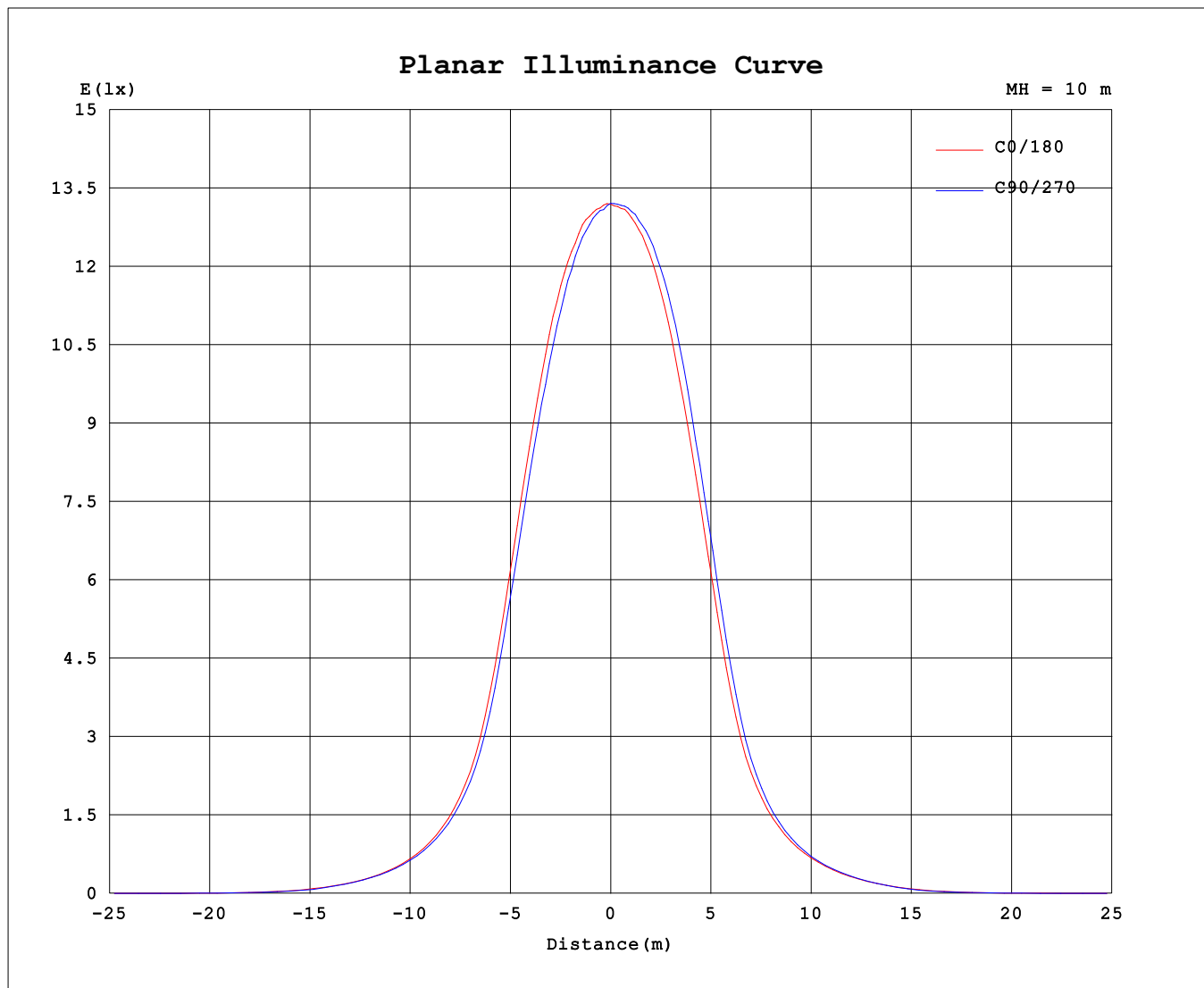
AvgL	cd/m2
L_0~180 (65) av	1080
L_0~180 (75) av	724
L_0~180 (85) av	1320
L_90~270 (65) av	881
L_90~270 (75) av	691
L_90~270 (85) av	1222
L_45 (65) av	1051
L_45 (75) av	705
L_45 (85) av	1252

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-08-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators: DAMIN
Test Date: 2023-08-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity: 65.0%
Test Distance: 9.640m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

```