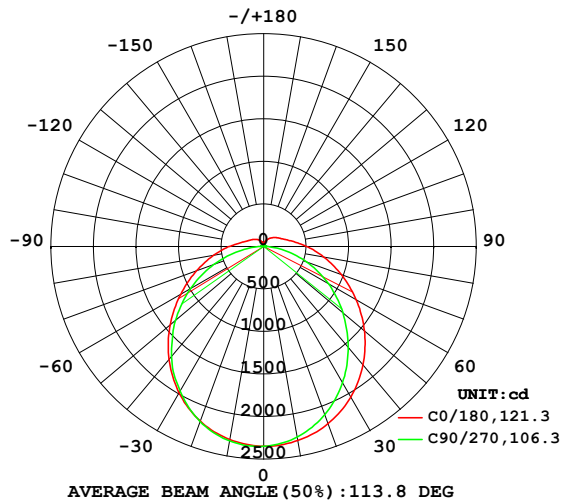


LUMINAIRE PHOTOMETRIC TEST REPORT

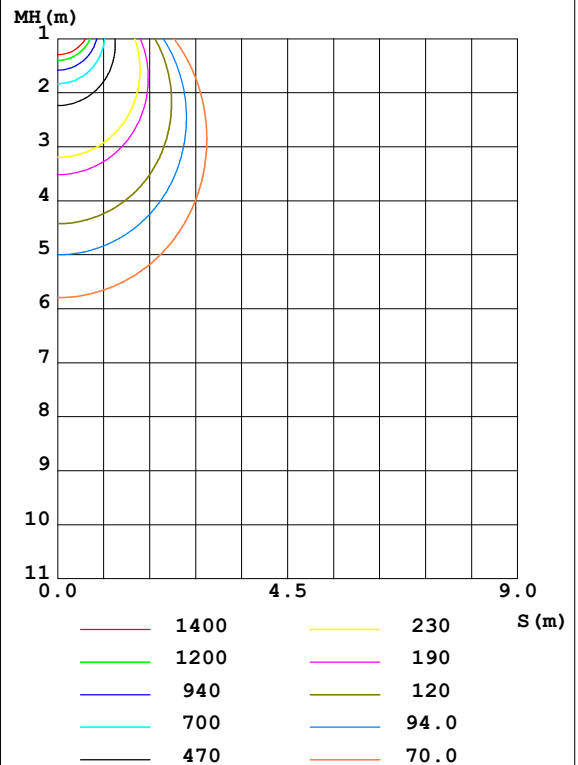
Test:U:230.21V I:0.2388A P:52.213W PF:0.9498 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7848.26x1 lm		
NAME: 950-078_5700K	TYPE: 55W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 150.31 lm/W			
MODEL	950-078_5700K	I _{max} (cd)	2352	S/MH(C0/180)	1.26
NOMINAL POWER(W)	55	LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	7848.3	η UP,DN(C0-180)	5.0,45.6
NOMINAL FLUX(lm)	7848.26	CIE CLASS	DIRECT	η UP,DN(C180-360)	4.1,45.3
LAMPS INSIDE	1	η up(%)	9.1	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	90.9	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-05-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:8.692m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

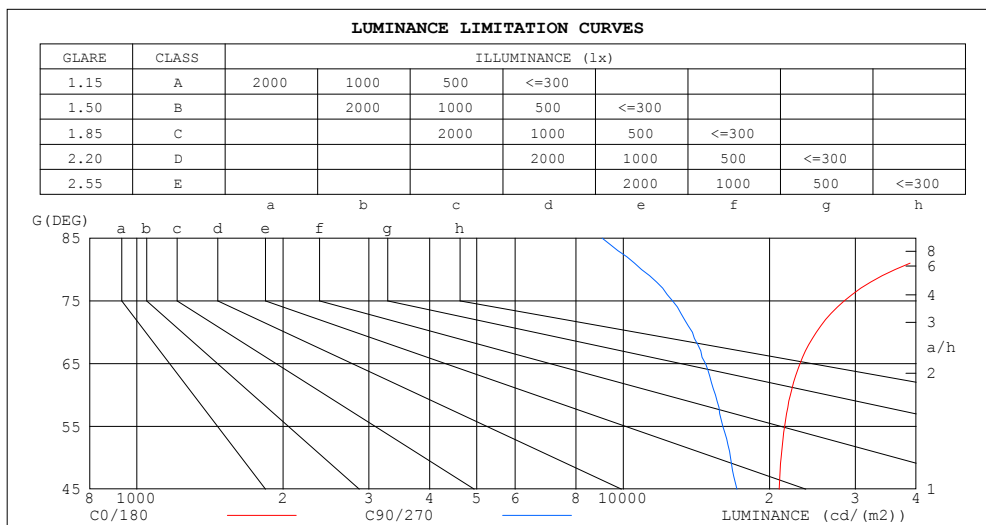
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	2316	2274	2304	2321					0- 10	222.0	222.0	2.83,2.83
20	2216	2103	2184	2189					10- 20	634.5	856.5	10.9,10.9
30	2046	1852	1989	1965					20- 30	957.0	1813	23.1,23.1
40	1816	1547	1732	1687					30- 40	1149	2962	37.7,37.7
50	1547	1219	1436	1357					40- 50	1192	4154	52.9,52.9
60	1257	883.0	1129	995.1					50- 60	1099	5253	66.9,66.9
70	972.4	541.6	841.3	626.0					60- 70	895.5	6148	78.3,78.3
80	717.1	216.2	595.9	267.1					70- 80	627.2	6775	86.3,86.3
90	506.2	9.588	404.6	9.844					80- 90	359.8	7135	90.9,90.9
100	351.4	23.13	273.0	35.13					90-100	222.8	7358	93.8,93.8
110	254.6	22.88	200.1	27.83					100-110	154.8	7513	95.7,95.7
120	203.4	23.90	163.5	20.33					110-120	113.1	7626	97.2,97.2
130	165.7	24.60	133.5	18.79					120-130	84.49	7710	98.2,98.2
140	132.1	25.68	106.2	18.97					130-140	60.61	7771	99,99
150	100.9	25.87	80.93	20.88					140-150	40.34	7811	99.5,99.5
160	72.16	25.30	54.99	22.76					150-160	23.38	7835	99.8,99.8
170	45.05	25.73	30.89	24.62					160-170	10.81	7846	100,100
180	20.70	25.84	20.68	26.02					170-180	2.635	7848	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-05-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:8.692m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.21V I:0.2388A P:52.213W PF:0.9498 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7848.26x1 lm		
NAME: 950-078_5700K	TYPE: 55W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	60940	9056
80	36242	10917
75	28475	12642
70	24952	13885
65	23097	14765
60	22067	15484
55	21471	16032
50	21117	16628
45	20914	17135

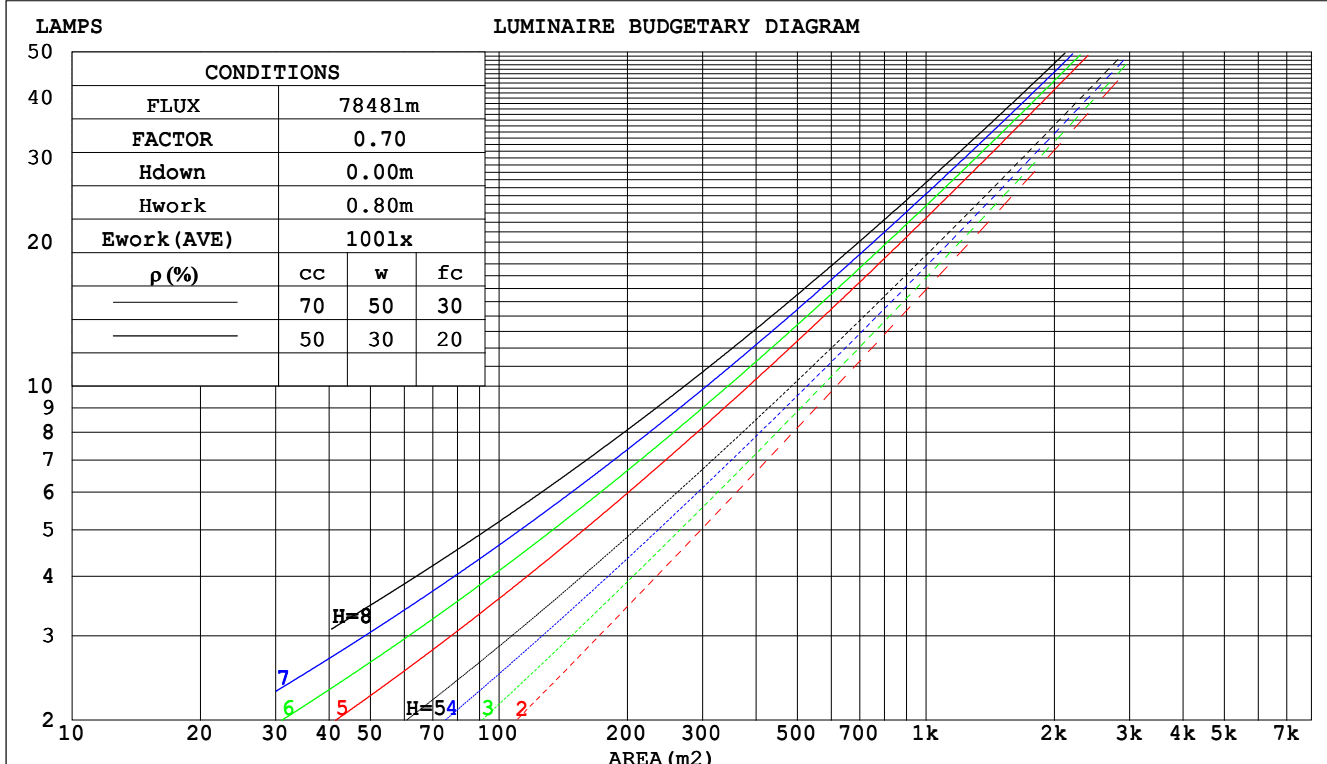
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-05-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:8.692m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.21V I:0.2388A P:52.213W PF:0.9498 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7848.26x1 lm					
NAME: 950-078_5700K		TYPE: 55W		WEIGHT:	
SPEC.: 5700K		DIM.:		SERIAL No.: #1	
MFR.: Tronix Lighting		SUR.: 0.114		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	1.17	1.17	1.17	1.13	1.13	1.13	1.06	1.06	1.06	.00	.00	.00	.94	.94	.94	.91
1.0	.00	.95	.91	.97	.92	.89	.91	.87	.84	.85	.82	.80	.80	.78	.76	.73
2.0	.86	.79	.73	.84	.77	.71	.79	.73	.68	.74	.69	.65	.70	.66	.63	.60
3.0	.76	.67	.60	.73	.65	.59	.69	.62	.57	.65	.59	.55	.61	.57	.53	.50
4.0	.67	.58	.51	.65	.56	.50	.61	.54	.48	.58	.52	.47	.55	.49	.45	.43
5.0	.60	.50	.44	.58	.49	.43	.55	.47	.42	.52	.45	.40	.49	.43	.39	.37
6.0	.53	.44	.38	.52	.44	.37	.49	.42	.36	.47	.40	.35	.44	.39	.34	.32
7.0	.48	.40	.33	.47	.39	.33	.45	.37	.32	.43	.36	.31	.40	.35	.30	.28
8.0	.44	.36	.30	.43	.35	.29	.41	.34	.29	.39	.33	.28	.37	.31	.27	.25
9.0	.40	.32	.27	.40	.32	.26	.38	.31	.26	.36	.30	.25	.34	.29	.24	.23
10.0	.37	.29	.24	.36	.29	.24	.35	.28	.23	.33	.27	.23	.32	.26	.22	.20



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-05-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:8.692m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.21V I:0.2388A P:52.213W PF:0.9498 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7848.26x1 lm		
NAME: 950-078_5700K	TYPE: 55W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	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	.343	.195	.062	.333	.190	.060	.315	.181	.058	.298	.172	.055	.282	.163	.053		
2.0	.309	.169	.052	.300	.165	.051	.283	.158	.049	.268	.150	.047	.254	.144	.045		
3.0	.280	.149	.045	.272	.146	.044	.257	.139	.042	.243	.133	.041	.231	.128	.040		
4.0	.255	.133	.039	.248	.130	.038	.235	.125	.037	.222	.119	.036	.211	.115	.035		
5.0	.234	.119	.035	.228	.117	.034	.216	.112	.033	.204	.108	.032	.194	.104	.031		
6.0	.216	.108	.031	.210	.106	.031	.199	.102	.030	.189	.098	.029	.180	.095	.028		
7.0	.200	.099	.028	.195	.097	.028	.185	.094	.027	.176	.090	.026	.167	.087	.026		
8.0	.186	.091	.026	.182	.089	.025	.173	.086	.025	.164	.083	.024	.156	.080	.023		
9.0	.174	.084	.024	.170	.083	.023	.162	.080	.023	.154	.077	.022	.147	.074	.022		
10.0	.164	.078	.022	.160	.077	.022	.152	.074	.021	.145	.072	.020	.138	.069	.020		

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	.260	.260	.260	.222	.222	.222	.151	.151	.151	.087	.087	.087	.028	.028	.028	
1.0	.252	.226	.202	.216	.194	.173	.148	.133	.120	.085	.077	.070	.027	.025	.023	
2.0	.245	.202	.166	.210	.174	.144	.144	.120	.100	.083	.070	.059	.027	.023	.019	
3.0	.237	.185	.144	.203	.160	.124	.140	.111	.087	.081	.065	.051	.026	.021	.017	
4.0	.229	.172	.128	.197	.149	.111	.135	.104	.079	.078	.061	.046	.025	.020	.015	
5.0	.222	.162	.118	.190	.140	.102	.131	.098	.072	.076	.057	.043	.024	.019	.014	
6.0	.214	.154	.110	.184	.133	.096	.127	.093	.068	.074	.055	.040	.024	.018	.013	
7.0	.208	.147	.105	.179	.127	.091	.123	.089	.065	.072	.053	.038	.023	.017	.013	
8.0	.201	.141	.100	.173	.123	.087	.120	.086	.062	.070	.051	.037	.023	.017	.012	
9.0	.195	.136	.097	.168	.118	.085	.116	.083	.060	.068	.049	.036	.022	.016	.012	
10.0	.189	.132	.094	.163	.115	.082	.113	.081	.059	.066	.048	.035	.021	.016	.012	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-05-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:8.692m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.21V I:0.2388A P:52.213W PF:0.9498 Freq:49.99Hz UTHdi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7848.26x1 lm											
NAME: 950-078_5700K					TYPE: 55W			WEIGHT:			
SPEC.: 5700K					DIM.:			SERIAL No.: #1			
MFR.: Tronix Lighting					SUR.: 0.114			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	23.1	24.5	23.5	24.8	25.2	21.8	23.2	22.2	23.6	24.0	
	3H	25.2	26.5	25.6	26.9	27.3	23.3	24.6	23.7	25.0	25.4
	4H	26.3	27.6	26.8	28.0	28.4	23.8	25.1	24.3	25.5	25.9
	6H	27.6	28.7	28.0	29.2	29.7	24.2	25.4	24.7	25.8	26.3
	8H	28.2	29.4	28.7	29.8	30.3	24.3	25.5	24.8	25.9	26.4
	12H	29.0	30.1	29.5	30.6	31.1	24.4	25.5	24.9	26.0	26.5
4H	2H	23.6	24.8	24.0	25.2	25.7	22.6	23.9	23.1	24.3	24.7
	3H	25.9	27.0	26.4	27.5	28.0	24.3	25.4	24.8	25.9	26.4
	4H	27.2	28.2	27.7	28.7	29.2	25.1	26.1	25.6	26.5	27.1
	6H	28.6	29.5	29.2	30.0	30.6	25.6	26.5	26.2	27.0	27.6
	8H	29.4	30.3	30.0	30.8	31.4	25.8	26.6	26.4	27.2	27.7
	12H	30.4	31.1	30.9	31.7	32.3	25.9	26.7	26.5	27.2	27.8
8H	4H	27.5	28.3	28.0	28.8	29.4	25.6	26.5	26.2	27.0	27.6
	6H	29.1	29.8	29.7	30.4	31.0	26.5	27.2	27.1	27.7	28.4
	8H	30.1	30.7	30.7	31.3	32.0	26.8	27.4	27.4	28.0	28.7
	12H	31.3	31.8	31.9	32.4	33.1	27.1	27.6	27.7	28.2	28.9
12H	4H	27.5	28.3	28.1	28.8	29.4	25.8	26.6	26.4	27.1	27.7
	6H	29.2	29.8	29.8	30.4	31.1	26.8	27.4	27.4	28.0	28.6
	8H	30.3	30.8	30.9	31.4	32.1	27.2	27.8	27.8	28.4	29.0
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					

CIE Pub.117, 7848 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 7.2$)
Area: 0.114 m²

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-05-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:8.692m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.21V I:0.2388A P:52.213W PF:0.9498 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7848.26x1 lm		
NAME: 950-078_5700K	TYPE: 55W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:

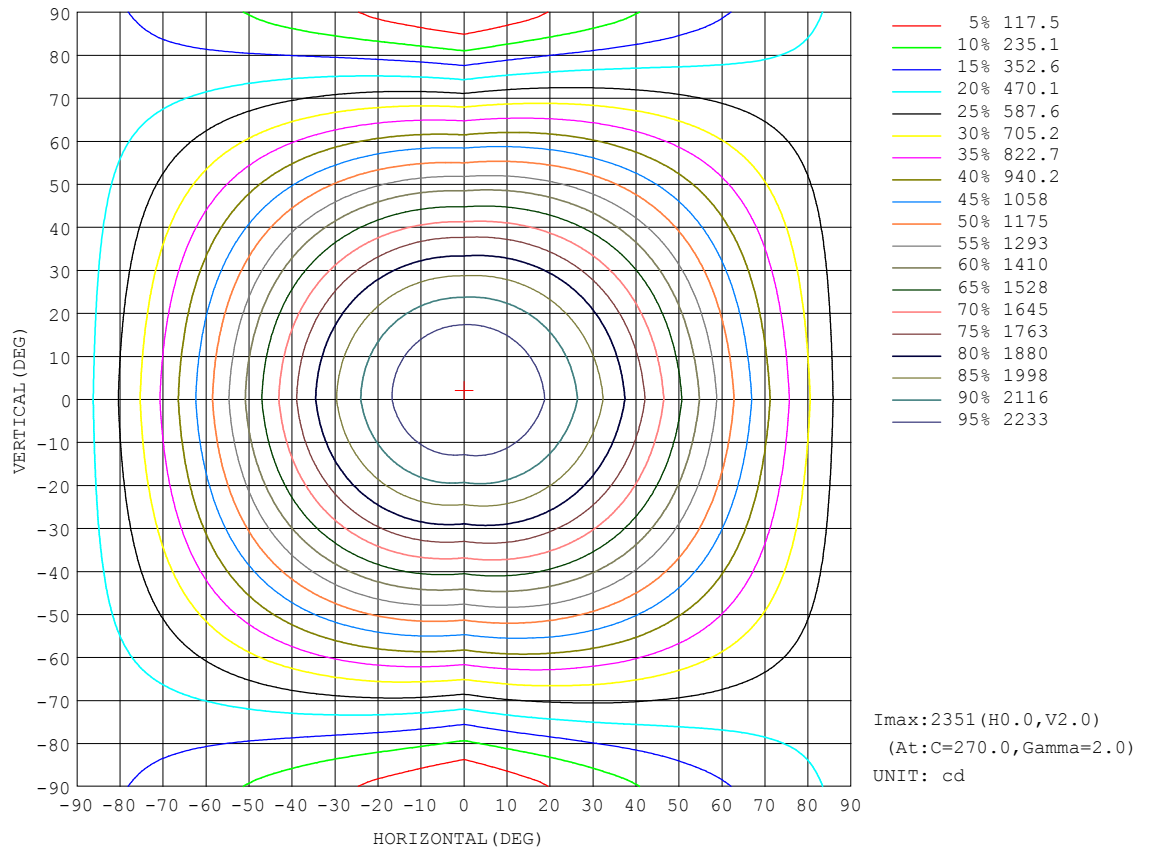
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	53	41	34	52	41	34	51	40	34	27
0.80	63	51	43	62	50	43	59	49	42	35
1.00	71	59	51	69	58	51	66	59	50	42
1.25	78	66	59	76	65	58	72	63	57	48
1.50	83	72	64	81	71	63	77	68	62	53
2.00	90	80	73	87	78	72	83	75	70	60
2.50	94	85	78	91	83	77	86	80	74	64
3.00	97	89	83	95	87	82	89	83	78	68
4.00	102	95	89	99	93	88	93	88	84	72
5.00	104	99	94	101	96	92	95	91	87	75
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNM = 1.25		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2021-05-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.446
Humidity: 65.0%
Test Distance: 8.692m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.21V I:0.2388A P:52.213W PF:0.9498 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7848.26x1 lm		
NAME: 950-078_5700K	TYPE: 55W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:

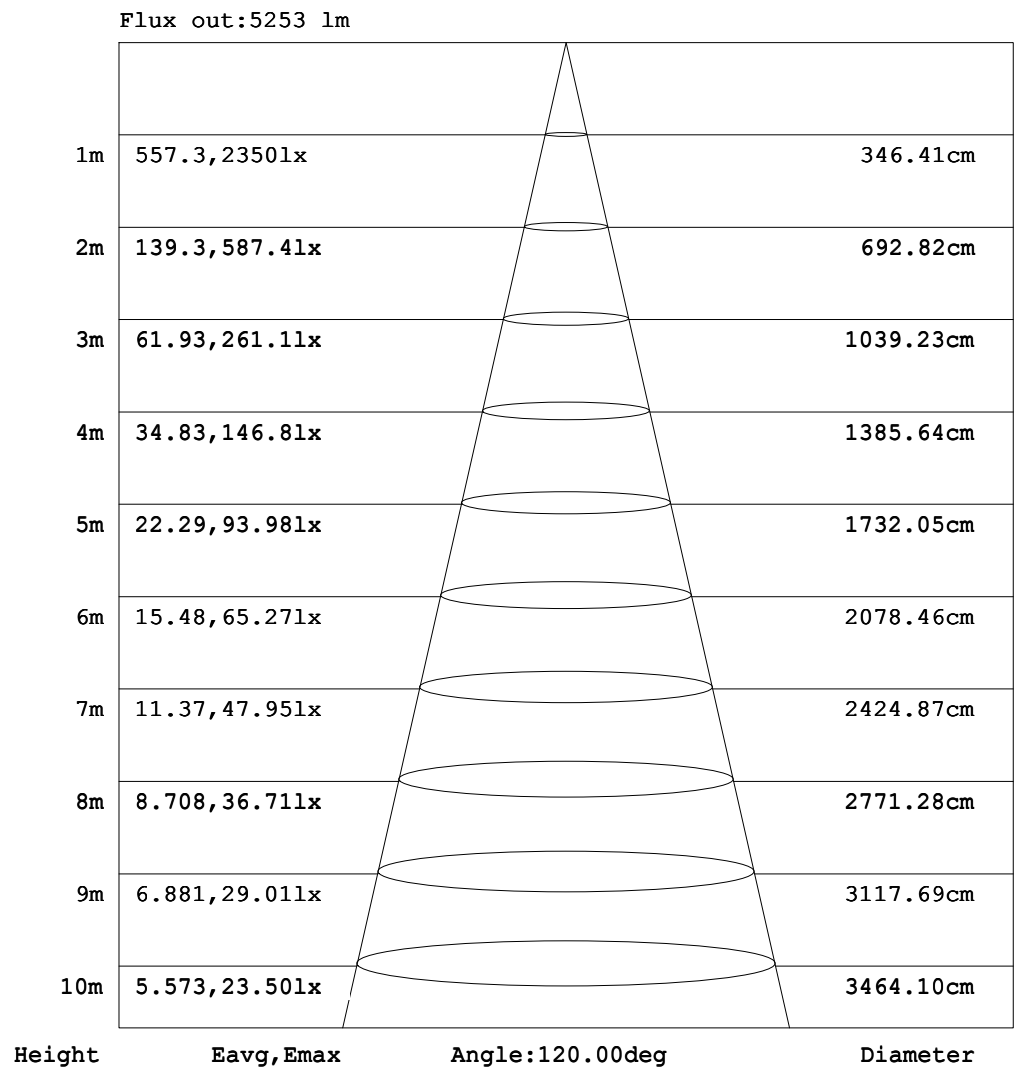


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-05-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:8.692m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.21V I:0.2388A P:52.213W PF:0.9498 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7848.26x1 lm		
NAME: 950-078_5700K	TYPE: 55W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:



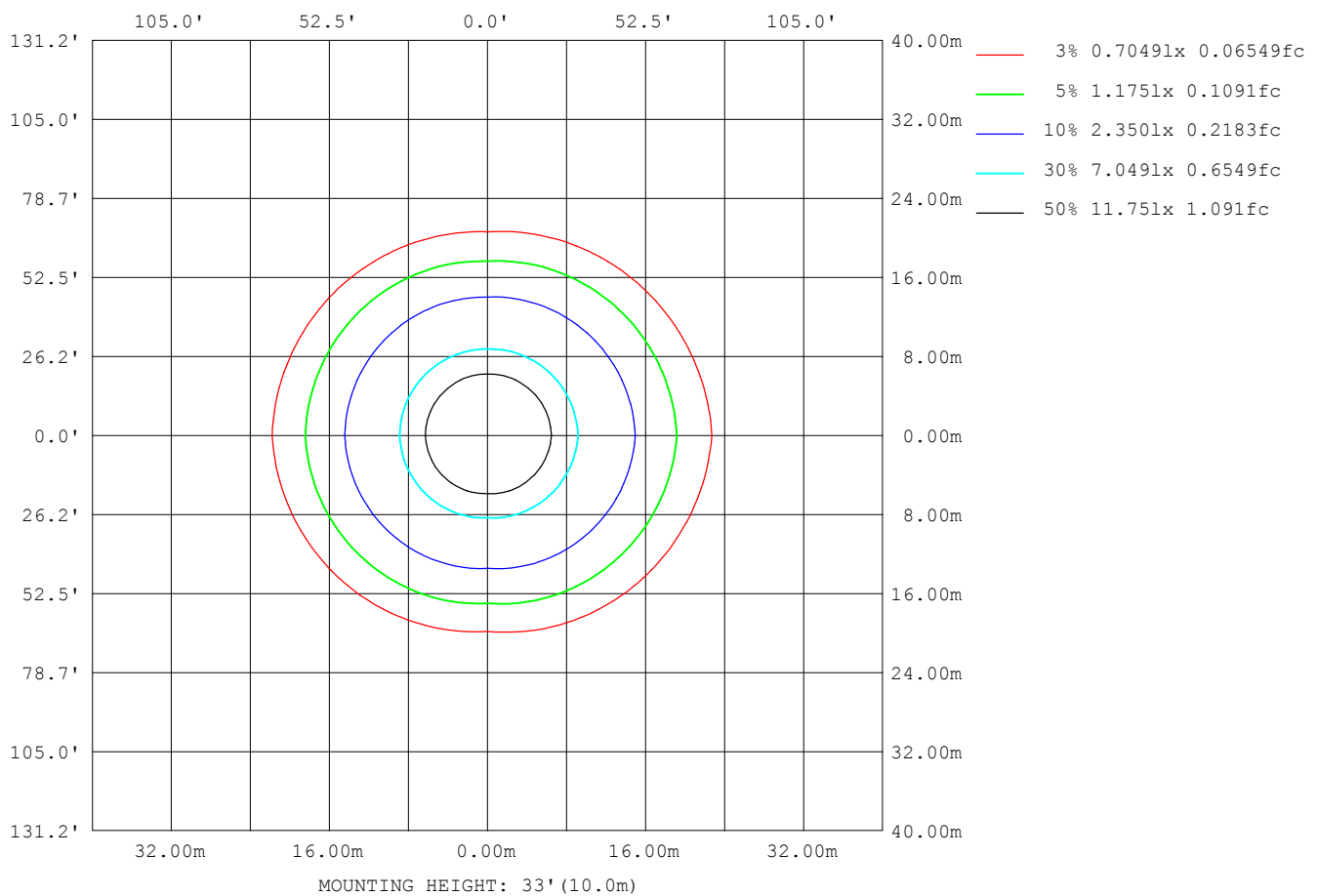
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-05-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.446
 Humidity:65.0%
 Test Distance:8.692m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test: U:230.21V I:0.2388A P:52.213W PF:0.9498 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux: 7848.26x1 lm		
NAME: 950-078_5700K	TYPE: 55W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-05-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:8.692m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.21V I:0.2388A P:52.213W PF:0.9498 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7848.26x1 lm		
NAME: 950-078_5700K	TYPE: 55W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:

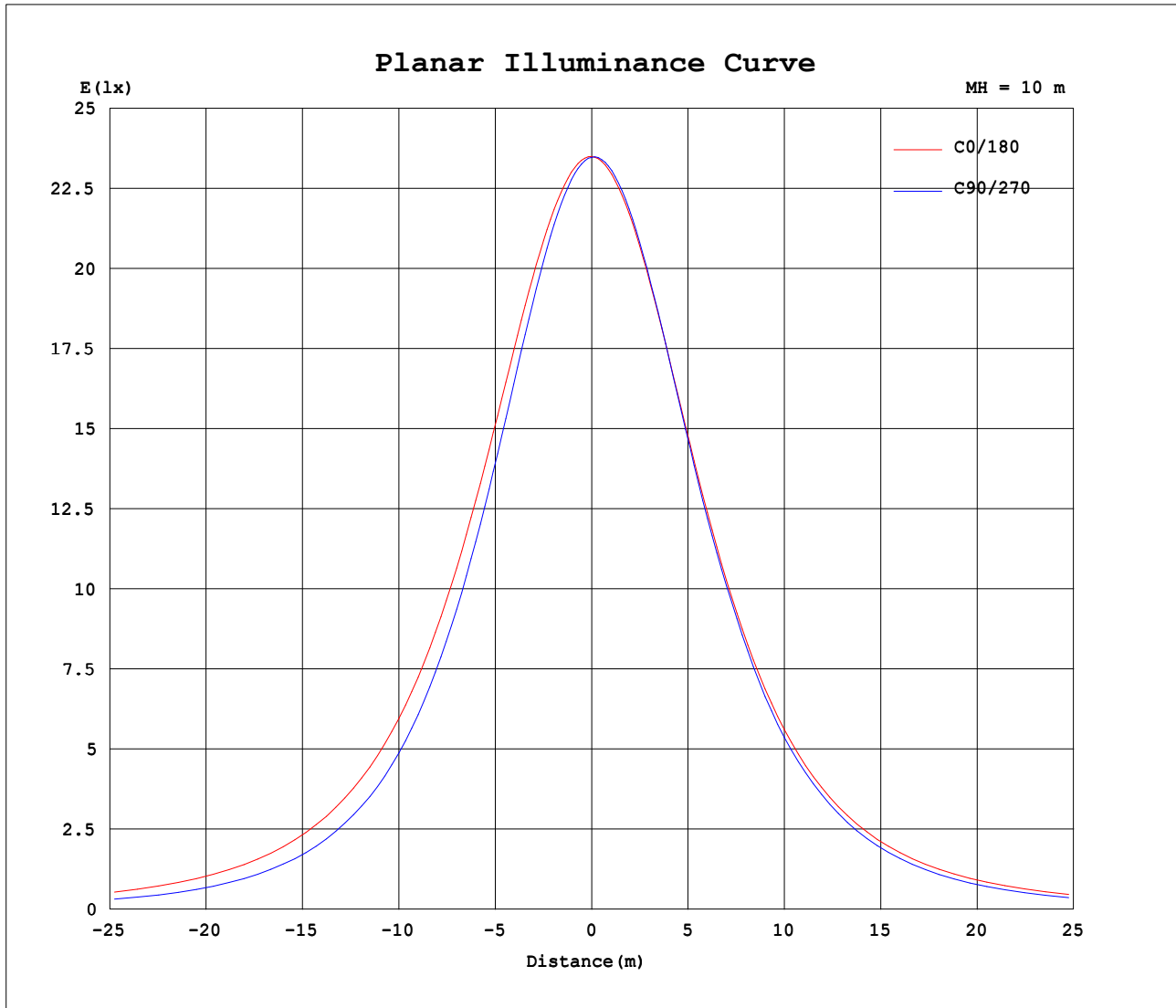
AvgL	cd/m2
L_0~180 (65) av	21722
L_0~180 (75) av	26310
L_0~180 (85) av	55254
L_90~270 (65) av	15806
L_90~270 (75) av	13845
L_90~270 (85) av	10199
L_45 (65) av	17941
L_45 (75) av	18387
L_45 (85) av	26750

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-05-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:8.692m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2021-05-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.446
 Humidity: 65.0%
 Test Distance: 8.692m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.21V I:0.2388A P:52.213W PF:0.9498 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7848.26x1 lm		
NAME: 950-078_5700K	TYPE: 55W	WEIGHT:
SPEC.: 5700K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	2349	2349	2349	2349															
5	2341	2324	2336	2348															
10	2316	2274	2304	2321															
15	2274	2200	2254	2268															
20	2216	2103	2184	2189															
25	2140	1986	2096	2087															
30	2046	1852	1989	1965															
35	1938	1705	1867	1839															
40	1816	1547	1732	1687															
45	1685	1382	1587	1518															
50	1547	1219	1436	1357															
55	1403	1049	1282	1173															
60	1257	883	1129	995															
65	1112	712	981	811															
70	972	542	841	626															
75	840	373	713	444															
80	717	216	596	267															
85	605	90.0	493	113															
90	506	9.59	405	9.84															
95	421	36.8	331	36.3															
100	351	23.1	273	35.1															
105	296	22.7	230	30.6															
110	255	22.9	200	27.8															
115	225	23.4	180	24.4															
120	203	23.9	163	20.3															
125	184	24.2	148	18.8															
130	166	24.6	133	18.8															
135	148	25.4	120	18.5															
140	132	25.7	106	19.0															
145	116	26.1	93.3	19.9															
150	101	25.9	80.9	20.9															
155	85.8	25.5	65.3	22.0															
160	72.2	25.3	55.0	22.8															
165	58.8	25.5	41.3	23.7															
170	45.1	25.7	30.9	24.6															
175	24.4	25.9	23.1	25.4															
180	20.7	25.8	20.7	26.0															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-05-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
γ Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:8.692m [K=1.0000]
Remarks: