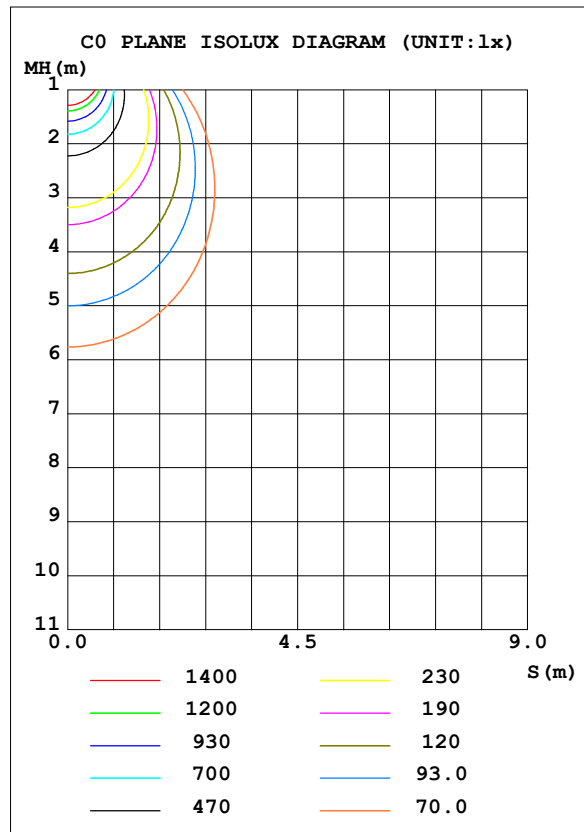
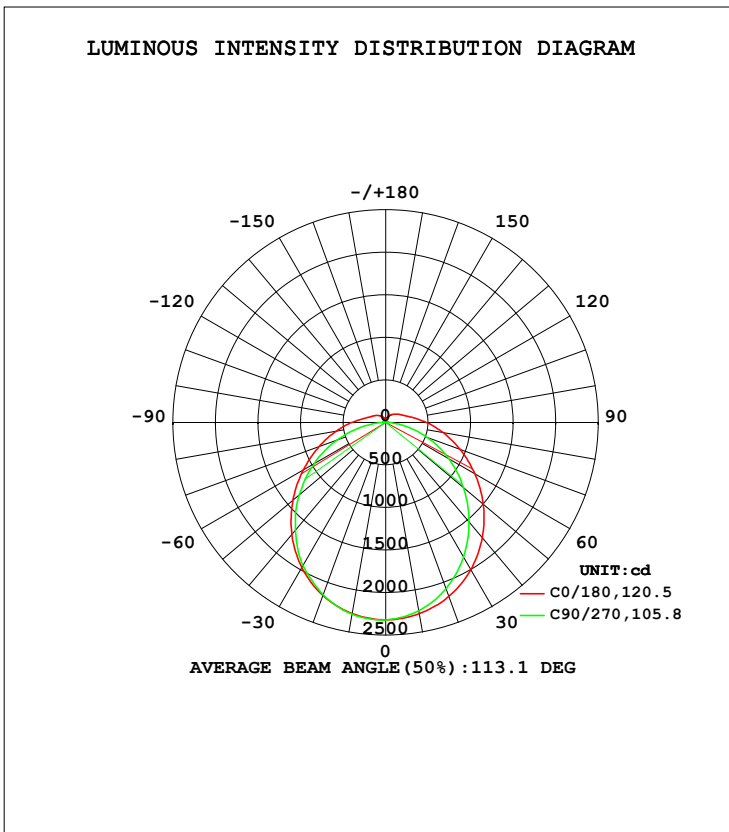


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.20V I:0.2376A P:52.102W PF:0.9527 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7687.32x1 lm		
NAME: 950-078_3000K	TYPE: 55W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 147.54 lm/W			
MODEL	950-078_3000K	I _{max} (cd)	2322	S/MH (C0/180)	1.26
NOMINAL POWER (W)	55	LOR (%)	100.0	S/MH (C90/270)	1.25
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	7687.3	η UP, DN (C0-180)	4.9, 45.4
NOMINAL FLUX (lm)	7687.32	CIE CLASS	DIRECT	η UP, DN (C180-360)	4.1, 45.7
LAMPS INSIDE	1	η up (%)	9.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	91.0	CIBSE SHR MAX	1.35



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:

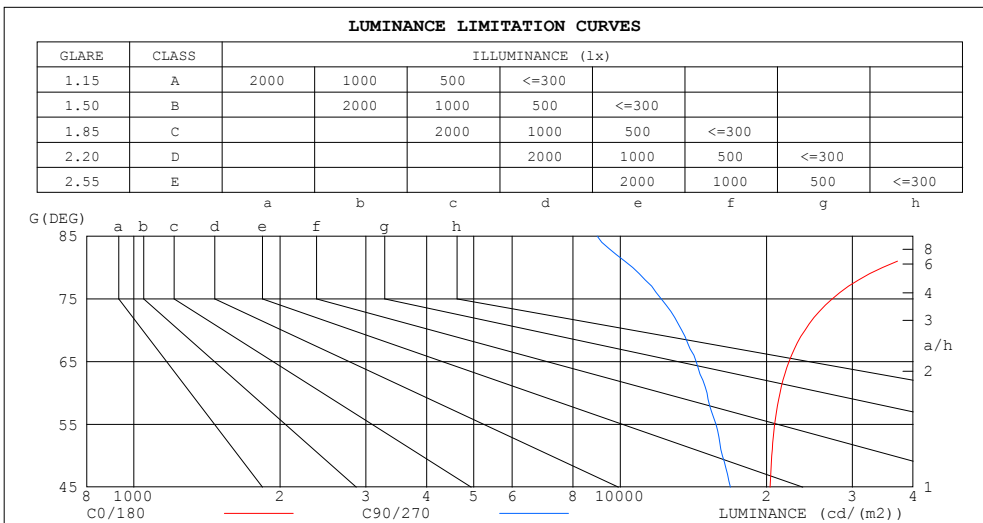
γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	2281	2247	2280	2289				0- 10	219.2	219.2	2.85,2.85
20	2175	2078	2164	2154				10- 20	626.0	845.2	11,11
30	2000	1829	1971	1946				20- 30	943.3	1789	23.3,23.3
40	1768	1526	1717	1652				30- 40	1131	2919	38,38
50	1498	1193	1424	1325				40- 50	1171	4090	53.2,53.2
60	1211	861.7	1119	971.7				50- 60	1075	5165	67.2,67.2
70	932.3	523.4	834.5	609.5				60- 70	873.6	6039	78.6,78.6
80	683.7	210.5	590.8	256.2				70- 80	609.0	6648	86.5,86.5
90	480.1	9.301	400.6	9.813				80- 90	349.8	6997	91,91
100	332.0	22.96	269.7	33.90				90-100	216.0	7213	93.8,93.8
110	240.5	22.78	196.9	27.81				100-110	149.8	7363	95.8,95.8
120	192.4	23.45	160.6	20.18				110-120	109.2	7472	97.2,97.2
130	157.0	23.73	131.1	18.44				120-130	81.57	7554	98.3,98.3
140	125.4	24.74	104.3	18.52				130-140	58.57	7613	99,99
150	96.36	24.72	78.75	20.43				140-150	38.95	7652	99.5,99.5
160	69.17	24.45	54.07	22.18				150-160	22.71	7674	99.8,99.8
170	43.09	24.97	30.62	23.89				160-170	10.49	7685	100,100
180	20.60	25.09	20.65	25.22				170-180	2.560	7687	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:230.20V I:0.2376A P:52.102W PF:0.9527 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7687.32x1 lm		
NAME: 950-078_3000K	TYPE: 55W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	58046	8968
80	34624	10609
75	27289	12156
70	23970	13391
65	22240	14328
60	21307	15079
55	20786	15749
50	20492	16236
45	20345	16856

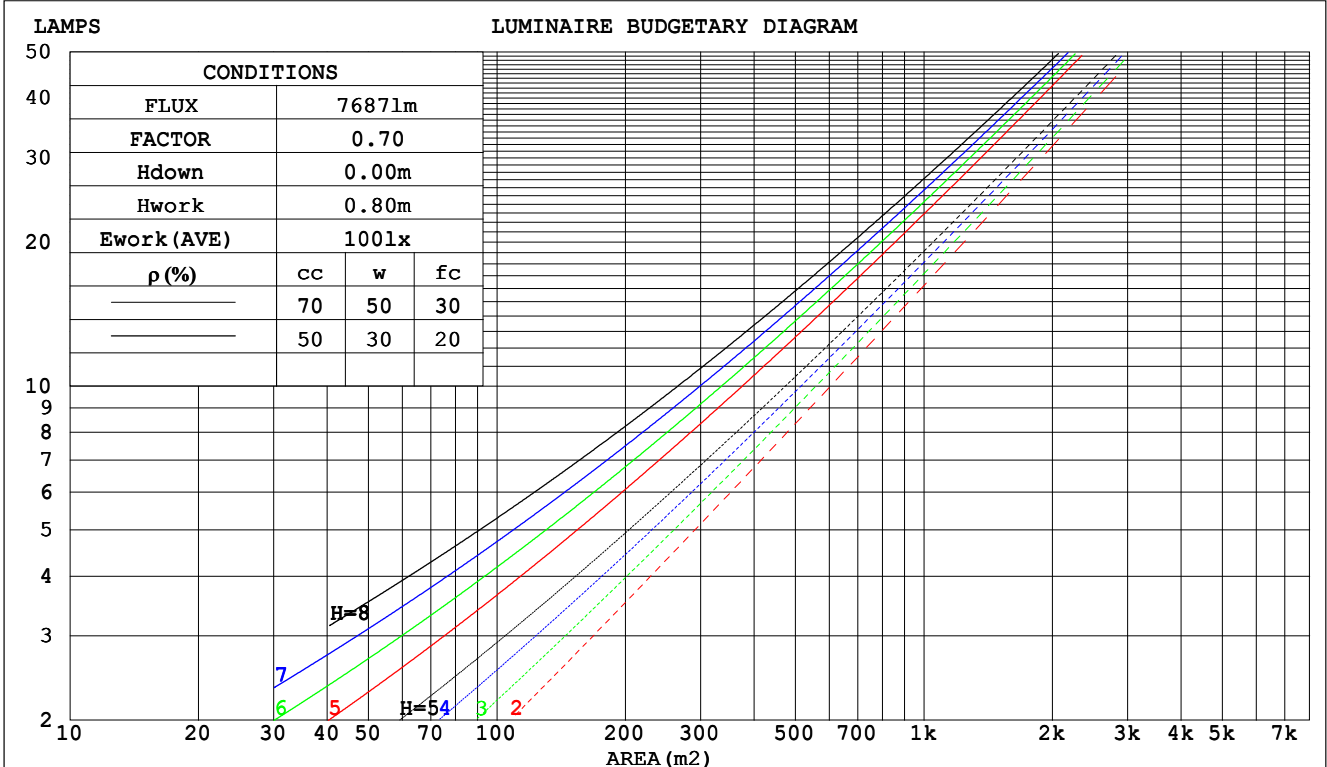
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-05-11

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:230.20V I:0.2376A P:52.102W PF:0.9527 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7687.32x1 lm		
NAME: 950-078_3000K	TYPE: 55W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	1.00	.95	.91	.97	.93	.89	.91	.87	.84	.85	.83	.80	.80	.78	.76	.73
2.0	.87	.79	.73	.84	.77	.72	.79	.73	.69	.74	.70	.66	.70	.66	.63	.60
3.0	.76	.67	.60	.73	.66	.59	.69	.63	.57	.65	.60	.55	.61	.57	.53	.50
4.0	.67	.58	.51	.65	.57	.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	.44	.39	.37
6.0	.54	.45	.38	.52	.44	.37	.49	.42	.36	.47	.40	.35	.45	.39	.34	.32
7.0	.49	.40	.33	.47	.39	.33	.45	.38	.32	.43	.36	.31	.41	.35	.30	.28
8.0	.44	.36	.30	.43	.35	.29	.41	.34	.29	.39	.33	.28	.37	.32	.27	.25
9.0	.41	.32	.27	.40	.32	.26	.38	.31	.26	.36	.30	.25	.34	.29	.25	.23
10.0	.37	.29	.24	.37	.29	.24	.35	.28	.23	.33	.27	.23	.32	.26	.22	.21



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:230.20V I:0.2376A P:52.102W PF:0.9527 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7687.32x1 lm		
NAME: 950-078_3000K	TYPE: 55W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.342	.195	.062	.332	.190	.060	.314	.180	.058	.297	.171	.055	.281	.163	.053	
2.0	.308	.169	.052	.299	.165	.051	.283	.157	.049	.268	.150	.047	.253	.143	.045	
3.0	.280	.149	.045	.272	.145	.044	.257	.139	.042	.243	.133	.041	.230	.127	.039	
4.0	.255	.132	.039	.248	.130	.038	.234	.124	.037	.222	.119	.036	.211	.114	.035	
5.0	.234	.119	.035	.228	.117	.034	.215	.112	.033	.204	.108	.032	.194	.104	.031	
6.0	.216	.108	.031	.210	.106	.031	.199	.102	.030	.189	.098	.029	.179	.094	.028	
7.0	.200	.099	.028	.195	.097	.028	.185	.093	.027	.176	.090	.026	.167	.087	.025	
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	.163	.078	.022	.160	.077	.021	.152	.074	.021	.145	.072	.020	.138	.069	.020	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.259	.259	.259	.221	.221	.221	.151	.151	.151	.087	.087	.087	.028	.028	.028	
1.0	.252	.225	.201	.215	.193	.173	.147	.133	.119	.085	.077	.069	.027	.025	.022	
2.0	.244	.201	.165	.209	.173	.143	.143	.120	.100	.083	.070	.058	.026	.023	.019	
3.0	.236	.184	.143	.202	.159	.124	.139	.110	.087	.080	.064	.051	.026	.021	.017	
4.0	.228	.171	.128	.196	.148	.111	.135	.103	.078	.078	.060	.046	.025	.020	.015	
5.0	.221	.161	.117	.190	.139	.102	.131	.097	.072	.076	.057	.043	.024	.019	.014	
6.0	.214	.153	.109	.184	.132	.095	.127	.093	.067	.073	.055	.040	.024	.018	.013	
7.0	.207	.146	.104	.178	.127	.090	.123	.089	.064	.071	.052	.038	.023	.017	.013	
8.0	.200	.140	.099	.172	.122	.087	.119	.086	.062	.069	.050	.037	.022	.017	.012	
9.0	.194	.136	.096	.167	.118	.084	.116	.083	.060	.067	.049	.036	.022	.016	.012	
10.0	.188	.131	.094	.162	.114	.082	.113	.080	.058	.066	.047	.035	.021	.016	.011	

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:230.20V I:0.2376A P:52.102W PF:0.9527 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7687.32x1 lm										
NAME: 950-078_3000K			TYPE: 55W			WEIGHT:				
SPEC.: 3000K			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	22.9	24.3	23.3	24.7	25.1	21.7	23.1	22.1	23.5	23.9
3H	25.0	26.3	25.5	26.7	27.2	23.1	24.5	23.6	24.8	25.3
4H	26.2	27.4	26.6	27.8	28.3	23.7	24.9	24.1	25.4	25.8
6H	27.4	28.5	27.8	29.0	29.4	24.1	25.3	24.5	25.7	26.2
8H	28.0	29.2	28.5	29.6	30.1	24.2	25.3	24.7	25.8	26.3
12H	28.8	29.9	29.3	30.4	30.9	24.3	25.4	24.7	25.8	26.3
4H 2H	23.4	24.7	23.9	25.1	25.5	22.5	23.8	22.9	24.2	24.6
3H	25.7	26.8	26.2	27.3	27.8	24.2	25.3	24.7	25.7	26.2
4H	27.0	28.0	27.5	28.5	29.0	24.9	25.9	25.4	26.4	26.9
6H	28.4	29.3	29.0	29.8	30.4	25.5	26.4	26.0	26.9	27.4
8H	29.2	30.1	29.8	30.6	31.2	25.6	26.5	26.2	27.0	27.6
12H	30.1	30.9	30.7	31.4	32.0	25.8	26.5	26.3	27.1	27.7
8H 4H	27.3	28.1	27.8	28.7	29.2	25.5	26.3	26.0	26.8	27.4
6H	28.9	29.6	29.5	30.2	30.8	26.3	27.0	26.9	27.6	28.2
8H	29.9	30.5	30.5	31.1	31.7	26.6	27.3	27.2	27.8	28.5
12H	31.0	31.6	31.6	32.2	32.8	26.9	27.5	27.5	28.1	28.7
12H 4H	27.3	28.1	27.9	28.6	29.2	25.6	26.4	26.2	26.9	27.5
6H	29.0	29.6	29.6	30.2	30.9	26.6	27.2	27.2	27.8	28.4
8H	30.0	30.6	30.7	31.2	31.9	27.0	27.6	27.6	28.2	28.8
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, 7687 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 7.1)
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:230.20V I:0.2376A P:52.102W PF:0.9527 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7687.32x1 lm		
NAME: 950-078_3000K	TYPE: 55W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:

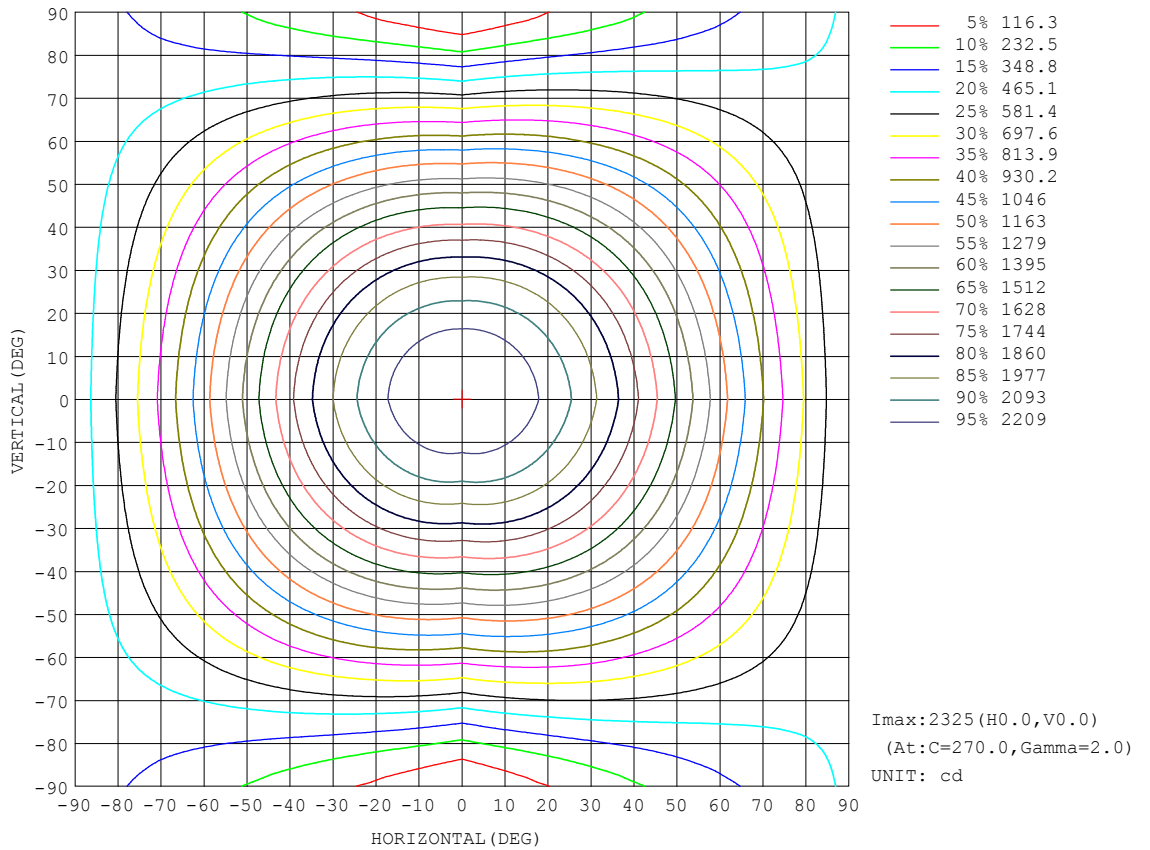
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	53	42	35	52	41	34	51	40	34	27
0.80	63	51	43	62	50	43	59	49	42	35
1.00	71	59	51	69	58	51	67	59	50	42
1.25	78	67	59	76	66	58	73	64	57	49
1.50	83	72	64	81	71	64	77	68	62	53
2.00	90	80	73	87	79	72	83	76	70	60
2.50	94	85	78	91	83	77	86	80	74	64
3.00	98	90	83	95	87	82	89	83	79	68
4.00	102	95	90	99	93	88	93	88	84	72
5.00	105	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
 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:230.20V I:0.2376A P:52.102W PF:0.9527 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7687.32x1 lm		
NAME: 950-078_3000K	TYPE: 55W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:

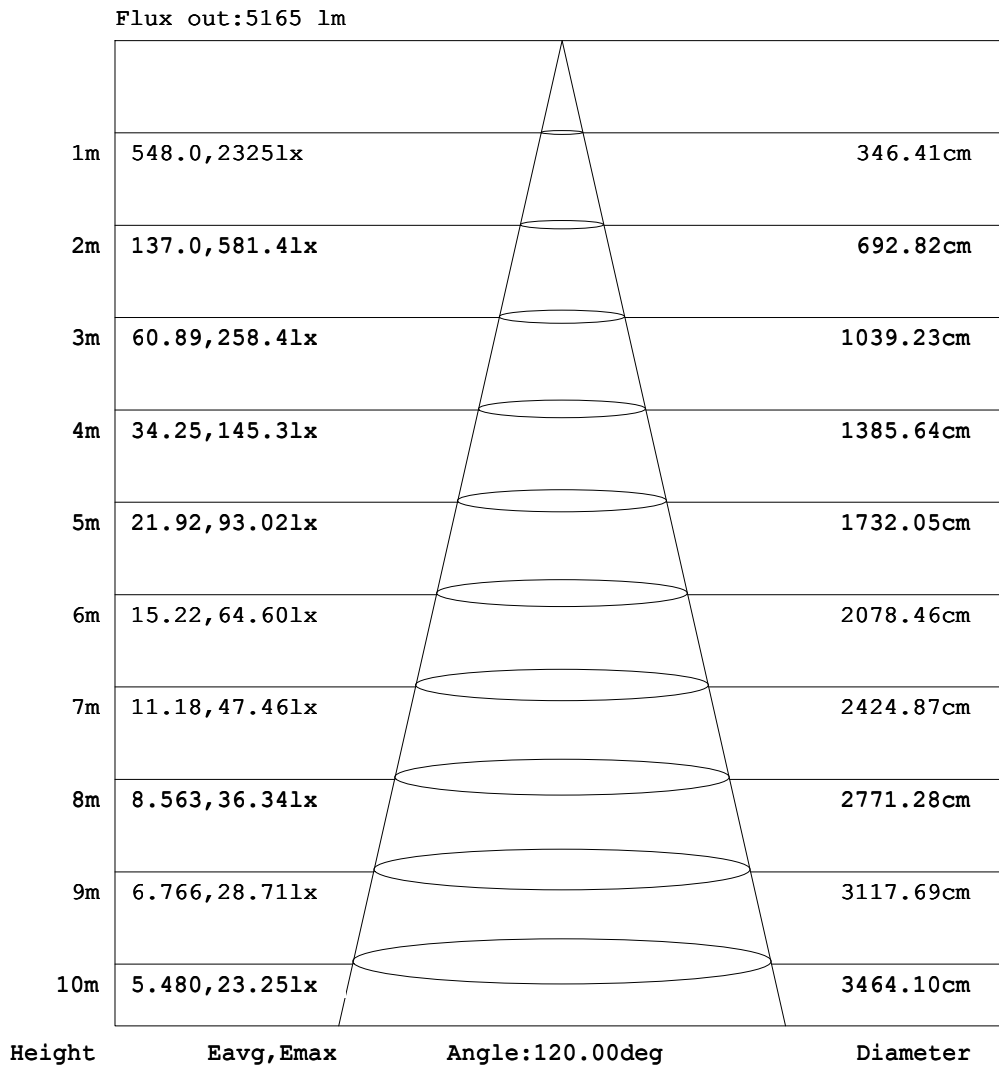


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-05-11

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:230.20V I:0.2376A P:52.102W PF:0.9527 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7687.32x1 lm		
NAME: 950-078_3000K	TYPE: 55W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:



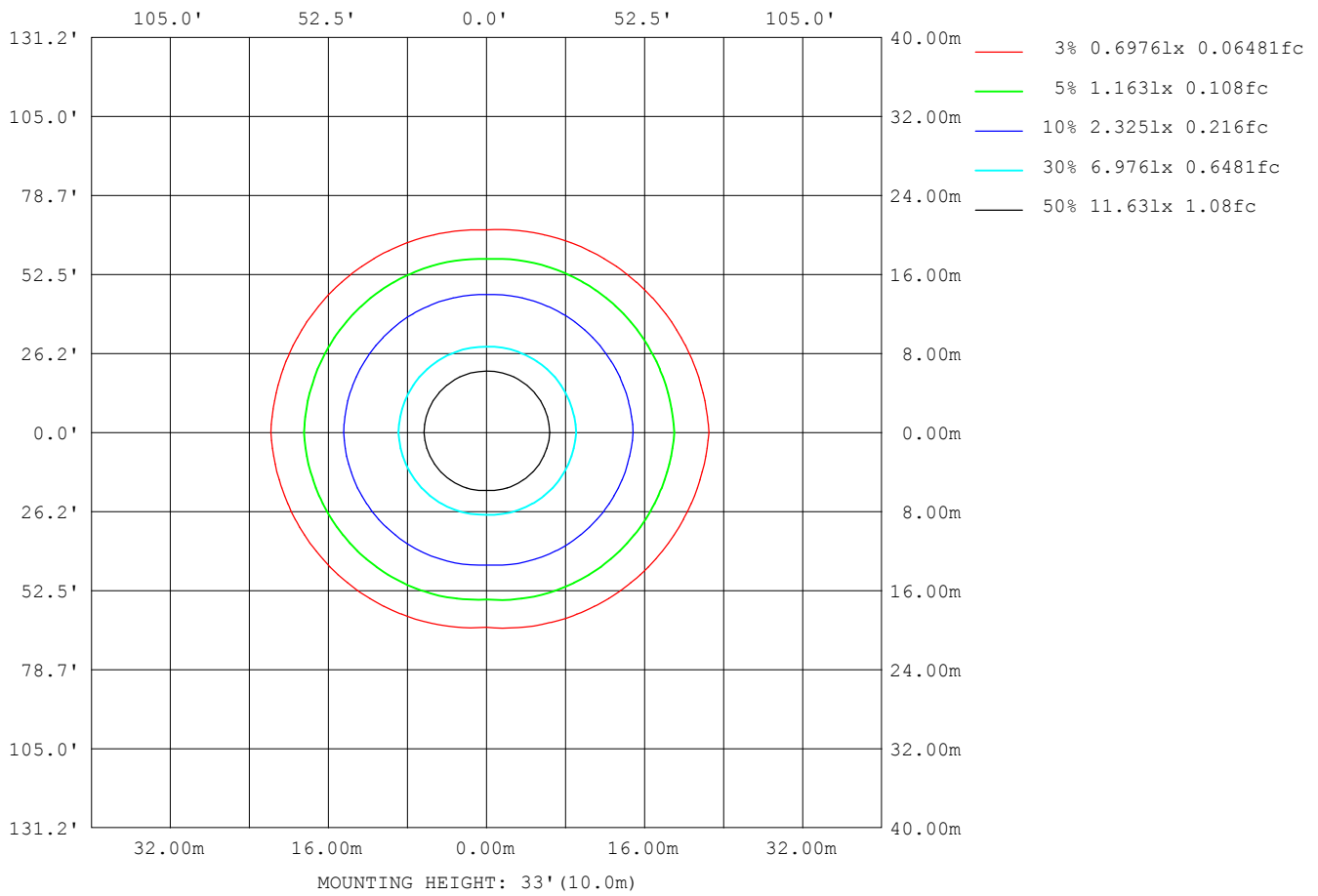
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:230.20V I:0.2376A P:52.102W PF:0.9527 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7687.32x1 lm		
NAME: 950-078_3000K	TYPE: 55W	WEIGHT:
SPEC.: 3000K	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:230.20V I:0.2376A P:52.102W PF:0.9527 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7687.32x1 lm		
NAME: 950-078_3000K	TYPE: 55W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: #1
MFR.: Tronix Lighting	SUR.: 0.114	Shielding Angle:

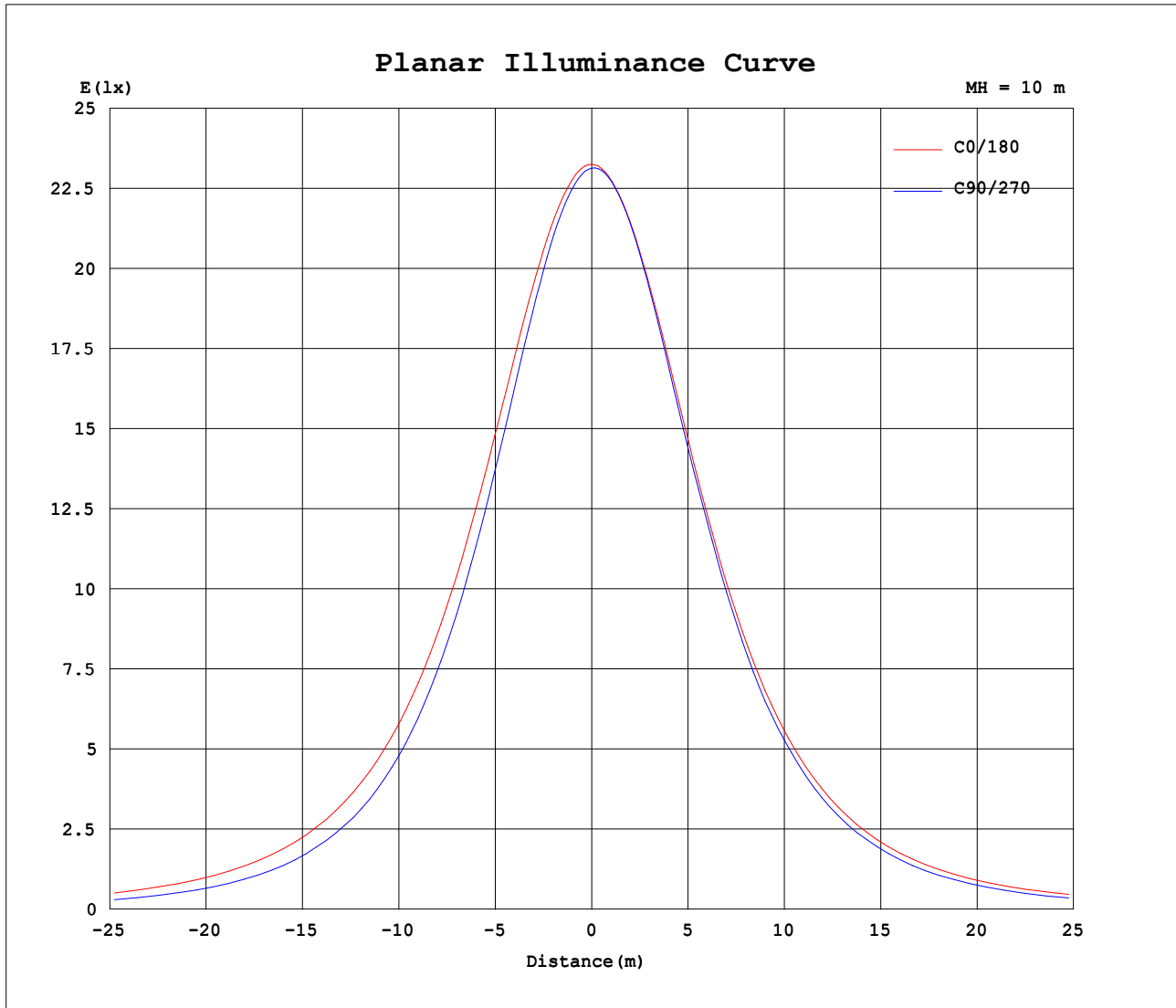
AvgL	cd/m2
L_0~180 (65) av	21189
L_0~180 (75) av	25592
L_0~180 (85) av	53543
L_90~270 (65) av	15389
L_90~270 (75) av	13353
L_90~270 (85) av	9978
L_45 (65) av	17508
L_45 (75) av	17854
L_45 (85) av	26091

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:230.20V I:0.2376A P:52.102W PF:0.9527 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:7687.32x1 lm		
NAME: 950-078_3000K	TYPE: 55W	WEIGHT:
SPEC.: 3000K	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	2320	2320	2320	2320															
5	2310	2295	2309	2317															
10	2281	2247	2280	2289															
15	2237	2173	2232	2233															
20	2175	2078	2164	2154															
25	2096	1962	2076	2052															
30	2000	1829	1971	1946															
35	1890	1682	1850	1808															
40	1768	1526	1717	1652															
45	1636	1362	1574	1500															
50	1498	1193	1424	1325															
55	1356	1032	1271	1155															
60	1211	862	1119	972															
65	1069	692	973	791															
70	932	523	834	610															
75	803	360	707	428															
80	684	211	591	256															
85	575	89.3	489	109															
90	480	9.30	401	9.81															
95	399	35.7	327	36.4															
100	332	23.0	270	33.9															
105	279	23.0	227	31.2															
110	240	22.8	197	27.8															
115	213	23.2	177	24.5															
120	192	23.5	161	20.2															
125	174	23.8	145	18.8															
130	157	23.7	131	18.4															
135	141	24.4	117	18.0															
140	125	24.7	104	18.5															
145	111	24.8	91.5	19.3															
150	96.4	24.7	78.8	20.4															
155	82.6	24.5	66.0	21.2															
160	69.2	24.5	54.1	22.2															
165	56.0	24.7	40.9	23.1															
170	43.1	25.0	30.6	23.9															
175	24.1	25.1	22.9	24.7															
180	20.6	25.1	20.7	25.2															

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: