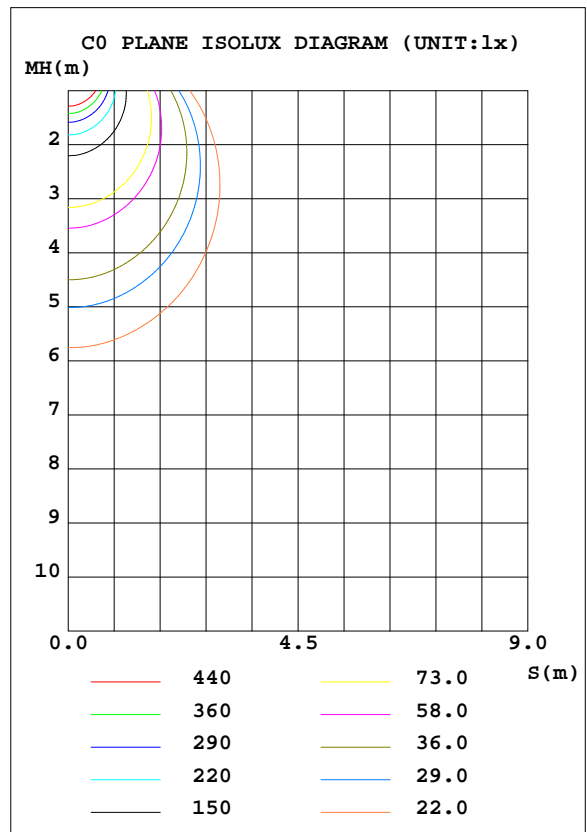
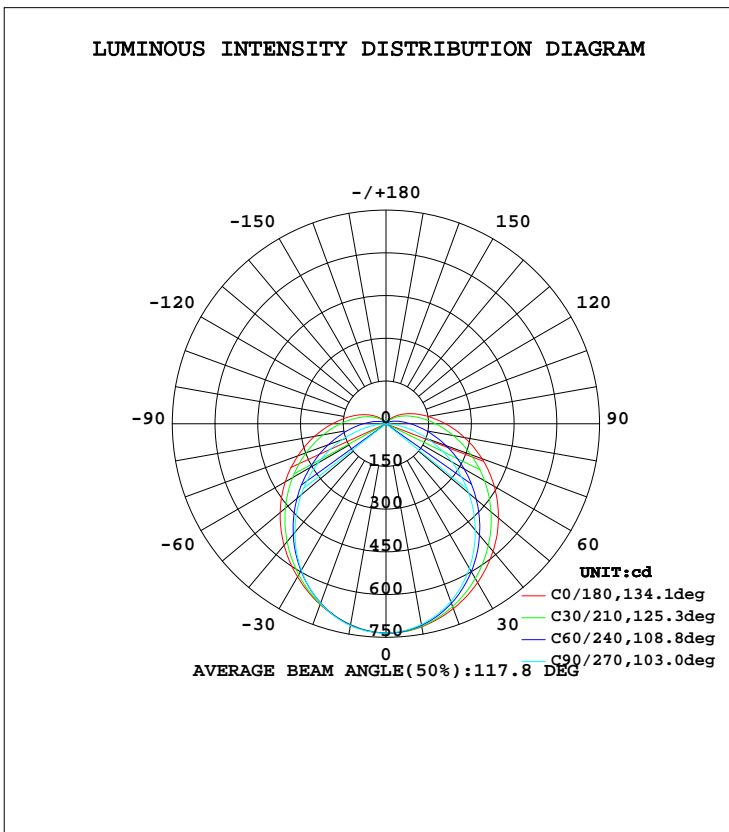


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.0V I:0.0900A P:20.30W PF:0.9310 Lamp Flux:2611.63x1 lm		
NAME: 950-082	TYPE:19W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.: Tronix Lighting	SUR.:1.23X0.085	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 128.65 lm/W			
MODEL	950-082	I <sub>max</sub> (cd)	735.3	S/MH(C0/180)	1.31
NOMINAL POWER(W)	19	LOR(%)	100.0	S/MH(C90/270)	1.19
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	2611.6	η UP, DN(C0-180)	5.1, 44.8
NOMINAL FLUX(lm)	2611.63	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	5.1, 45.0
LAMPS INSIDE	1	η up(%)	10.2	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	240.0	η down(%)	89.8	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-07-24

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φlum,lamp
10	723.7	720.2	715.8	714.7	716.5	717.5	719.3	723.1	0- 10	69.39	69.39	2.66,2.66
20	690.7	677.3	664.4	665.9	675.8	671.8	671.1	683.1	10- 20	197.4	266.8	10.2,10.2
30	643.5	613.4	585.5	597.0	620.7	604.7	594.4	622.1	20- 30	297.1	563.9	21.6,21.6
40	584.7	535.0	487.7	515.0	556.8	523.5	497.5	545.7	30- 40	357.7	921.6	35.3,35.3
50	515.4	447.8	379.5	426.4	485.2	434.5	388.8	459.8	40- 50	375.9	1298	49.7,49.7
60	438.7	358.0	266.6	337.0	408.6	343.3	275.8	369.5	50- 60	354.6	1652	63.3,63.3
70	358.7	270.6	157.1	251.6	329.3	256.8	163.1	282.1	60- 70	302.3	1954	74.8,74.8
80	280.0	192.4	58.13	176.7	254.4	180.2	61.78	202.7	70- 80	231.5	2186	83.7,83.7
90	209.1	130.1	4.895	118.2	188.7	119.5	5.073	137.7	80- 90	159.9	2346	89.8,89.8
100	149.9	85.13	4.637	76.75	135.3	77.12	4.517	90.14	90-100	106.5	2452	93.9,93.9
110	103.4	53.84	5.211	48.27	93.14	48.24	4.905	55.33	100-110	68.49	2521	96.5,96.5
120	67.45	32.11	5.947	28.96	60.48	28.79	5.598	33.12	110-120	40.99	2562	98.1,98.1
130	40.51	17.55	6.872	17.11	36.07	17.05	6.720	17.24	120-130	22.55	2584	99,99
140	21.05	11.04	7.935	10.99	18.53	10.92	7.934	10.60	130-140	11.73	2596	99.4,99.4
150	10.86	9.587	9.113	10.28	11.16	10.27	9.106	9.644	140-150	6.591	2603	99.7,99.7
160	10.76	10.16	10.16	10.81	11.11	10.78	10.17	10.22	150-160	4.733	2608	99.8,99.8
170	11.02	10.71	10.88	11.10	11.41	11.06	10.87	10.70	160-170	3.040	2611	100,100
180	11.10	11.13	11.14	11.13	11.07	11.13	11.19	11.13	170-180	1.051	2612	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

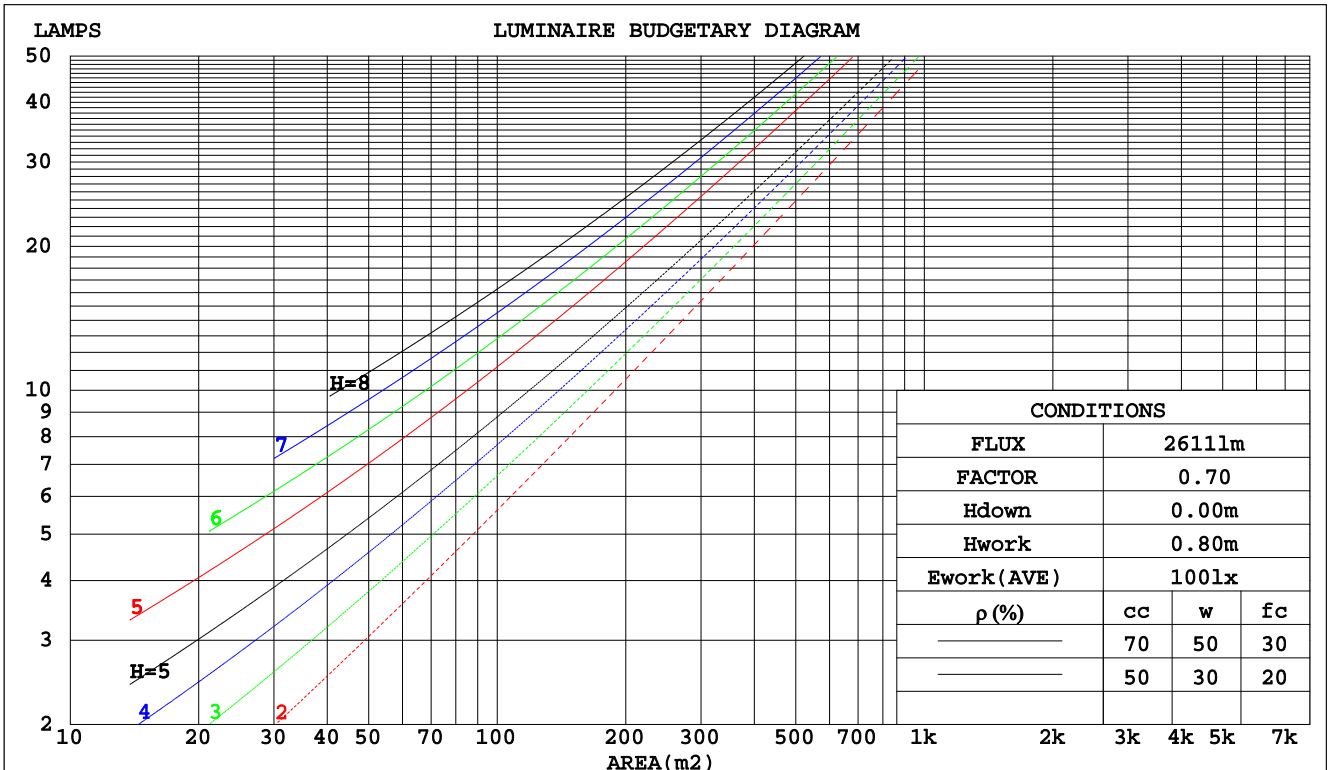
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-07-24

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.0V I:0.0900A P:20.30W PF:0.9310 Lamp Flux:2611.63x1 lm		
NAME: 950-082	TYPE:19W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.: Tronix Lighting	SUR.:1.23X0.085	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																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	1.05	1.05	1.05	.99	.99	.99	.93	.93	.93	.90
1.0	.99	.94	.89	.95	.91	.87	.89	.85	.82	.83	.80	.78	.78	.76	.73	.71
2.0	.85	.77	.71	.82	.75	.69	.77	.71	.66	.72	.67	.63	.67	.64	.60	.57
3.0	.74	.65	.58	.72	.64	.57	.67	.60	.55	.63	.57	.52	.59	.54	.50	.48
4.0	.65	.56	.49	.63	.55	.48	.59	.52	.46	.56	.50	.44	.52	.47	.43	.40
5.0	.58	.49	.42	.56	.48	.41	.53	.45	.40	.50	.43	.38	.47	.41	.37	.35
6.0	.52	.43	.36	.51	.42	.36	.48	.40	.35	.45	.39	.33	.43	.37	.32	.30
7.0	.47	.38	.32	.46	.37	.31	.43	.36	.31	.41	.35	.30	.39	.33	.29	.26
8.0	.43	.34	.28	.42	.34	.28	.40	.32	.27	.38	.31	.26	.36	.30	.26	.24
9.0	.39	.31	.25	.38	.30	.25	.36	.29	.24	.35	.28	.24	.33	.27	.23	.21
10.0	.36	.28	.23	.35	.28	.23	.34	.27	.22	.32	.26	.22	.31	.25	.21	.19



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2019-07-24

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity: 65.0%  
 Test Distance: 9.443m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:240.0V I:0.0900A P:20.30W PF:0.9310 Lamp Flux:2611.63x1 lm		
NAME: 950-082	TYPE:19W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.: Tronix Lighting	SUR.:1.23X0.085	PROTECTION 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	.365	.207	.066	.354	.202	.064	.335	.192	.061	.317	.183	.059	.301	.174	.056	
2.0	.322	.176	.054	.312	.172	.053	.295	.164	.051	.279	.157	.049	.264	.149	.047	
3.0	.288	.154	.046	.280	.150	.045	.265	.143	.044	.250	.137	.042	.237	.131	.041	
4.0	.261	.136	.040	.254	.133	.039	.240	.127	.038	.227	.122	.037	.215	.117	.036	
5.0	.239	.122	.035	.232	.119	.035	.219	.114	.034	.208	.110	.033	.197	.105	.032	
6.0	.219	.110	.031	.213	.108	.031	.202	.103	.030	.191	.099	.029	.181	.095	.028	
7.0	.203	.100	.028	.197	.098	.028	.187	.095	.027	.177	.091	.026	.168	.087	.026	
8.0	.189	.092	.026	.184	.090	.026	.174	.087	.025	.165	.084	.024	.157	.081	.023	
9.0	.176	.085	.024	.171	.084	.023	.163	.081	.023	.155	.078	.022	.147	.075	.022	
10.0	.165	.079	.022	.161	.078	.022	.153	.075	.021	.145	.072	.021	.138	.070	.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	.268	.268	.268	.229	.229	.229	.156	.156	.156	.090	.090	.090	.029	.029	.029	
1.0	.262	.234	.208	.224	.201	.179	.153	.138	.124	.088	.080	.072	.028	.026	.023	
2.0	.255	.210	.173	.218	.181	.150	.150	.125	.104	.086	.073	.061	.028	.024	.020	
3.0	.247	.194	.151	.212	.167	.131	.145	.116	.092	.084	.068	.054	.027	.022	.018	
4.0	.239	.181	.136	.205	.156	.118	.141	.109	.083	.082	.064	.049	.026	.021	.016	
5.0	.232	.171	.126	.199	.148	.109	.137	.103	.077	.079	.061	.046	.026	.020	.015	
6.0	.224	.163	.118	.193	.141	.103	.133	.099	.073	.077	.058	.043	.025	.019	.014	
7.0	.217	.156	.113	.187	.135	.098	.129	.095	.070	.075	.056	.041	.024	.018	.014	
8.0	.210	.150	.109	.181	.130	.095	.125	.091	.067	.073	.054	.040	.024	.018	.013	
9.0	.204	.145	.105	.176	.126	.092	.122	.089	.065	.071	.052	.039	.023	.017	.013	
10.0	.198	.141	.103	.171	.122	.090	.119	.086	.064	.069	.051	.038	.022	.017	.013	

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-07-24

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

Uncorrected UGR Table

Test:U:240.0V I:0.0900A P:20.30W PF:0.9310 Lamp Flux:2611.63x1 lm										
NAME: 950-082					TYPE:19W			WEIGHT:		
DIM.:					SPEC.:5000K			SERIAL No.:1		
MFR.: Tronix Lighting					SUR.:1.23X0.085			PROTECTION 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	19.7	21.2	20.1	21.5	21.9	17.8	19.3	18.2	19.6	20.1
3H	22.1	23.4	22.5	23.8	24.3	19.2	20.6	19.7	21.0	21.4
4H	23.4	24.7	23.8	25.1	25.6	19.8	21.0	20.2	21.5	21.9
6H	24.8	26.0	25.3	26.4	26.9	20.1	21.3	20.6	21.8	22.3
8H	25.6	26.7	26.0	27.2	27.7	20.2	21.4	20.7	21.9	22.4
12H	26.4	27.6	26.9	28.0	28.6	20.3	21.4	20.8	21.9	22.4
4H 2H	20.2	21.5	20.7	21.9	22.4	18.8	20.1	19.3	20.5	21.0
3H	22.9	24.0	23.4	24.5	25.0	20.5	21.6	21.0	22.1	22.6
4H	24.3	25.4	24.9	25.9	26.4	21.2	22.2	21.7	22.7	23.3
6H	26.0	26.9	26.5	27.4	28.0	21.8	22.7	22.3	23.2	23.8
8H	26.9	27.7	27.4	28.3	28.9	22.0	22.8	22.5	23.4	24.0
12H	27.9	28.7	28.5	29.2	29.9	22.1	22.9	22.7	23.4	24.1
8H 4H	24.6	25.5	25.2	26.1	26.7	22.1	22.9	22.6	23.5	24.1
6H	26.6	27.3	27.2	27.9	28.5	23.0	23.7	23.6	24.3	24.9
8H	27.7	28.3	28.3	28.9	29.6	23.4	24.0	24.0	24.6	25.3
12H	28.9	29.5	29.6	30.1	30.8	23.7	24.2	24.3	24.9	25.5
12H 4H	24.7	25.5	25.2	26.0	26.6	22.4	23.1	22.9	23.7	24.3
6H	26.7	27.3	27.3	27.9	28.6	23.5	24.1	24.1	24.7	25.4
8H	27.9	28.4	28.5	29.1	29.7	24.0	24.6	24.6	25.2	25.9
Variations with the observer position at spacings:										
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 Corrected 2612 lm Total Lamp Luminous Flux.(8log(F/F0) = 3.3)

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-07-24

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.0V I:0.0900A P:20.30W PF:0.9310 Lamp Flux:2611.63x1 lm		
NAME: 950-082	TYPE:19W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.: Tronix Lighting	SUR.:1.23X0.085	PROTECTION ANGLE:

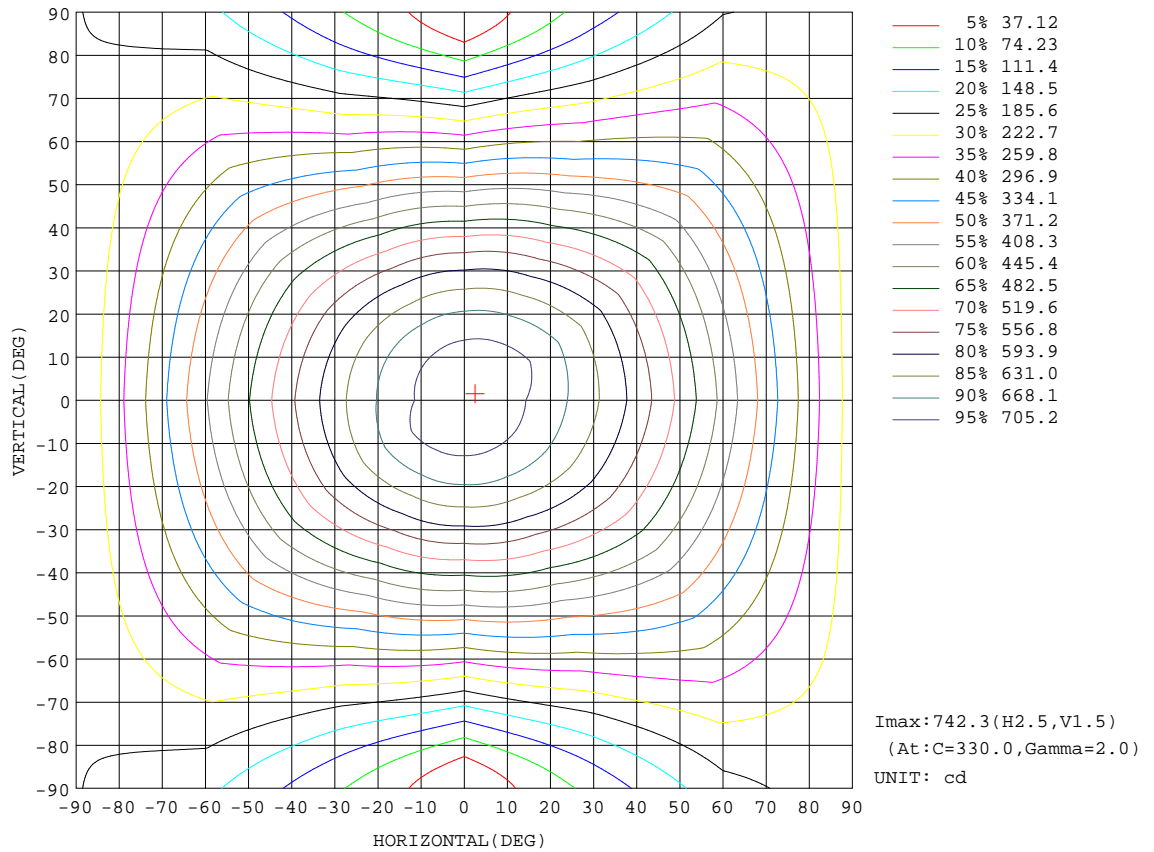
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	52	40	33	51	39	32	49	39	32	26
0.80	61	49	41	60	48	41	58	47	40	33
1.00	69	57	49	68	56	48	65	57	48	40
1.25	76	64	56	74	63	55	71	61	54	46
1.50	81	70	62	79	68	61	75	66	59	50
2.00	88	78	70	86	76	69	81	73	67	57
2.50	92	83	76	90	81	74	84	77	72	61
3.00	96	87	81	93	85	79	87	81	76	65
4.00	100	93	87	97	91	85	91	86	81	69
5.00	103	97	92	100	94	89	94	89	85	73
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-07-24

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:240.0V I:0.0900A P:20.30W PF:0.9310 Lamp Flux:2611.63x1 lm		
NAME: 950-082	TYPE:19W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.: Tronix Lighting	SUR.:1.23X0.085	PROTECTION ANGLE:

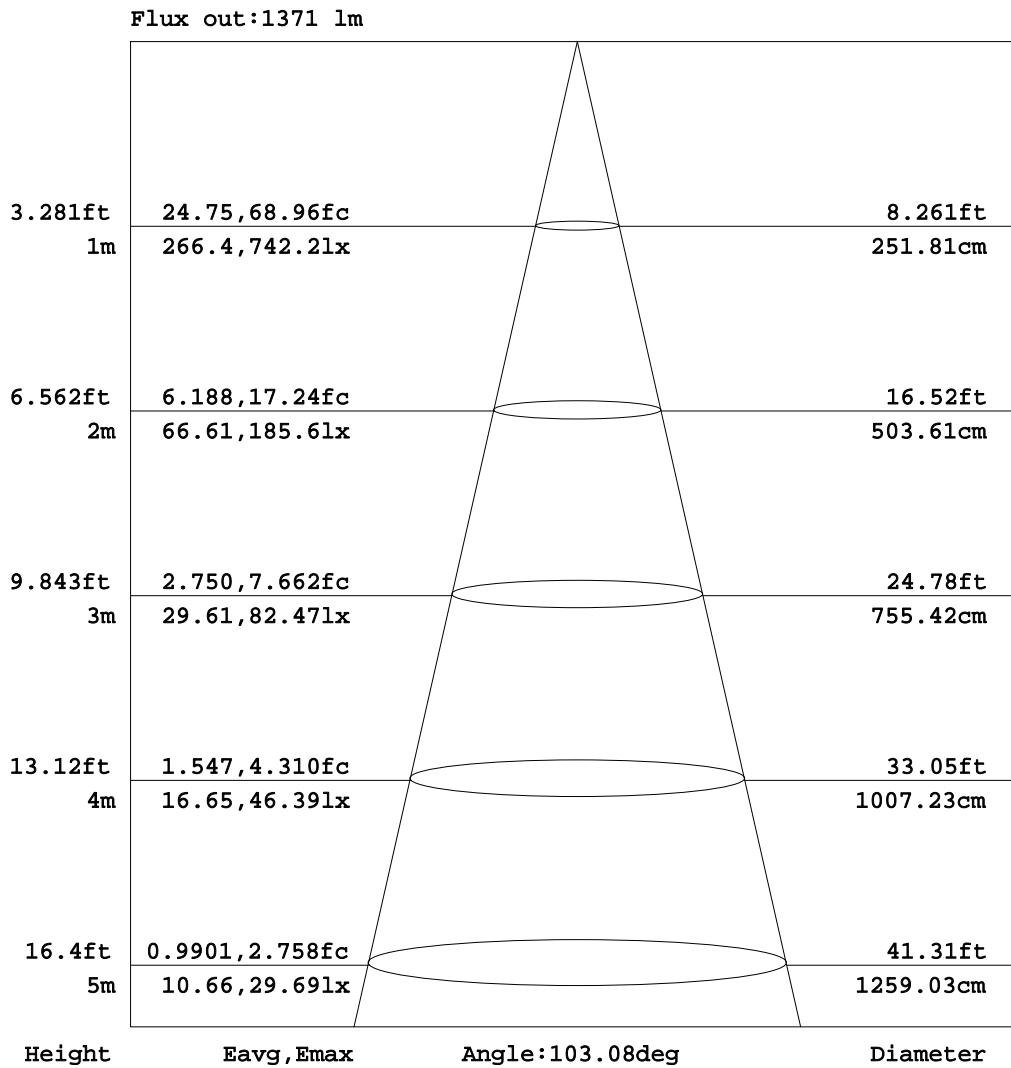


C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-07-24

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

AAI Figure

Test:U:240.0V I:0.0900A P:20.30W PF:0.9310 Lamp Flux:2611.63x1 lm		
NAME: 950-082	TYPE:19W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.: Tronix Lighting	SUR.:1.23X0.085	PROTECTION ANGLE:



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

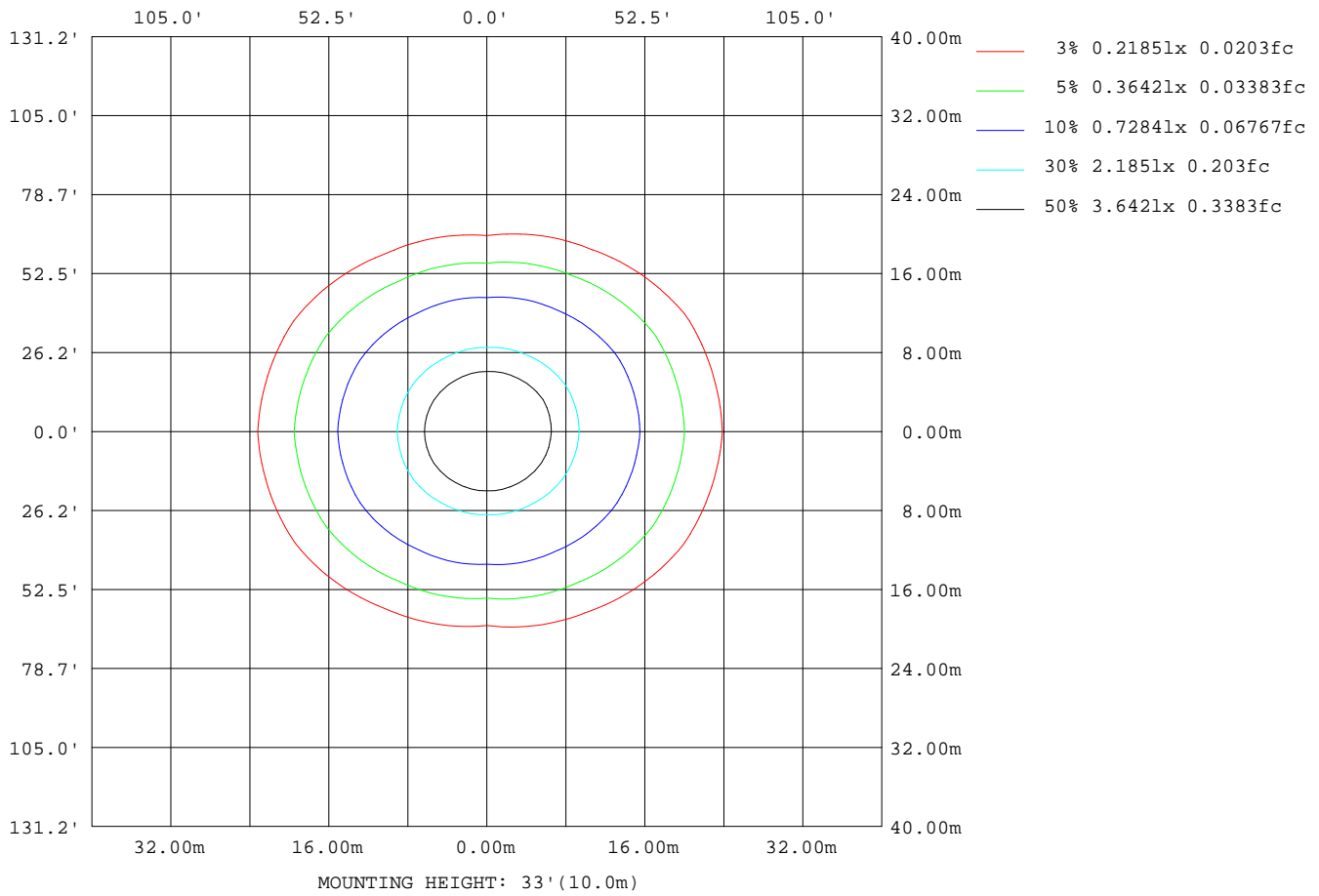
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-07-24

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:



**ISOLUX DIAGRAM**

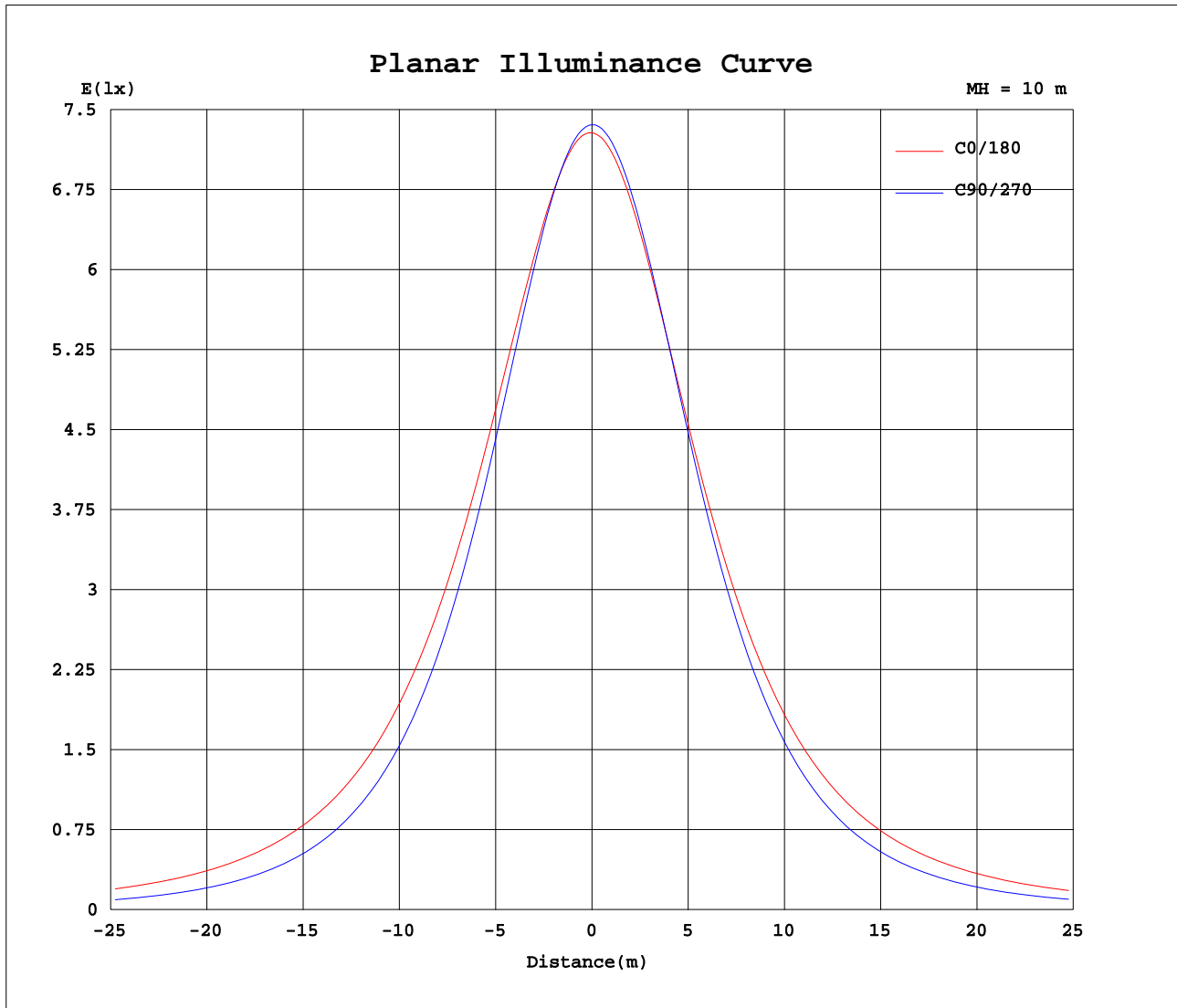
Test:U:240.0V I:0.0900A P:20.30W PF:0.9310 Lamp Flux:2611.63x1 lm		
NAME: 950-082	TYPE:19W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.: Tronix Lighting	SUR.:1.23X0.085	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-07-24

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2019-07-24

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity: 65.0%  
 Test Distance: 9.443m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:240.0V I:0.0900A P:20.30W PF:0.9310 Lamp Flux:2611.63x1 lm		
NAME: 950-082	TYPE:19W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.: Tronix Lighting	SUR.:1.23X0.085	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG)\ γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	735	735	735	735	735	735	735	735	735	735	735	735							
5	733	732	731	730	729	729	729	730	731	732	733	733							
10	724	722	718	716	715	715	717	717	718	719	722	724							
15	709	705	699	694	692	694	698	698	698	699	704	709							
20	691	683	671	664	663	669	676	674	670	671	678	688							
25	669	658	638	628	628	639	650	645	636	636	646	664							
30	644	628	599	585	588	606	621	613	597	594	609	635							
35	616	594	557	538	544	570	590	577	553	548	567	603							
40	585	559	511	488	497	533	557	540	507	498	523	569							
45	551	521	463	434	449	493	522	501	458	444	475	532							
50	515	481	414	379	399	453	485	461	408	389	427	493							
55	478	441	365	322	350	412	447	420	358	332	378	452							
60	439	400	317	267	302	372	409	379	308	276	328	411							
65	399	358	270	211	256	330	370	338	260	219	281	370							
70	359	317	225	157	212	291	329	298	215	163	235	329							
75	319	278	183	105	171	253	291	260	174	110	193	289							
80	280	240	145	58.1	135	218	254	224	137	61.8	155	251							
85	243	206	112	21.4	104	186	220	190	105	23.3	121	215							
90	209	174	86.1	4.90	79.5	157	189	160	79.3	5.07	93.5	182							
95	177	146	65.2	4.54	60.0	131	161	133	59.3	4.42	71.3	152							
100	150	121	49.0	4.64	44.9	108	135	110	44.0	4.52	53.7	126							
105	125	99.6	36.6	4.83	33.4	88.8	113	90.2	32.5	4.67	39.8	104							
110	103	80.7	27.1	5.21	24.7	71.7	93.1	72.7	23.9	4.91	27.7	82.8							
115	84.2	64.5	19.0	5.56	18.2	57.1	75.7	57.7	17.4	5.20	20.1	66.4							
120	67.4	50.7	13.6	5.95	13.2	44.6	60.5	45.0	12.6	5.60	14.1	52.1							
125	53.0	38.0	10.0	6.39	9.86	34.1	47.3	34.4	9.39	6.12	10.2	38.9							
130	40.5	26.8	8.29	6.87	8.81	25.4	36.1	25.4	8.70	6.72	8.28	26.2							
135	29.9	19.1	8.38	7.36	8.97	18.2	26.5	18.1	8.87	7.32	8.24	17.6							
140	21.0	13.5	8.60	7.94	9.21	12.8	18.5	12.7	9.17	7.93	8.51	12.7							
145	14.3	10.3	8.90	8.52	9.57	10.6	12.8	10.6	9.52	8.53	8.89	9.99							
150	10.9	9.91	9.27	9.11	9.97	10.6	11.2	10.6	9.89	9.11	9.29	9.99							
155	10.7	10.0	9.69	9.66	10.3	10.8	11.1	10.8	10.3	9.66	9.73	10.2							
160	10.8	10.2	10.1	10.2	10.7	11.0	11.1	11.0	10.6	10.2	10.1	10.3							
165	10.9	10.4	10.4	10.6	10.9	11.1	11.3	11.1	10.8	10.6	10.4	10.5							
170	11.0	10.6	10.8	10.9	11.0	11.2	11.4	11.2	10.9	10.9	10.7	10.7							
175	10.9	10.8	11.0	11.1	11.1	11.1	11.2	11.1	11.1	11.1	11.0	10.9							
180	11.1	11.1	11.2	11.1	11.2	11.1	11.1	11.1	11.2	11.1	11.1	11.1							

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-07-24

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks: