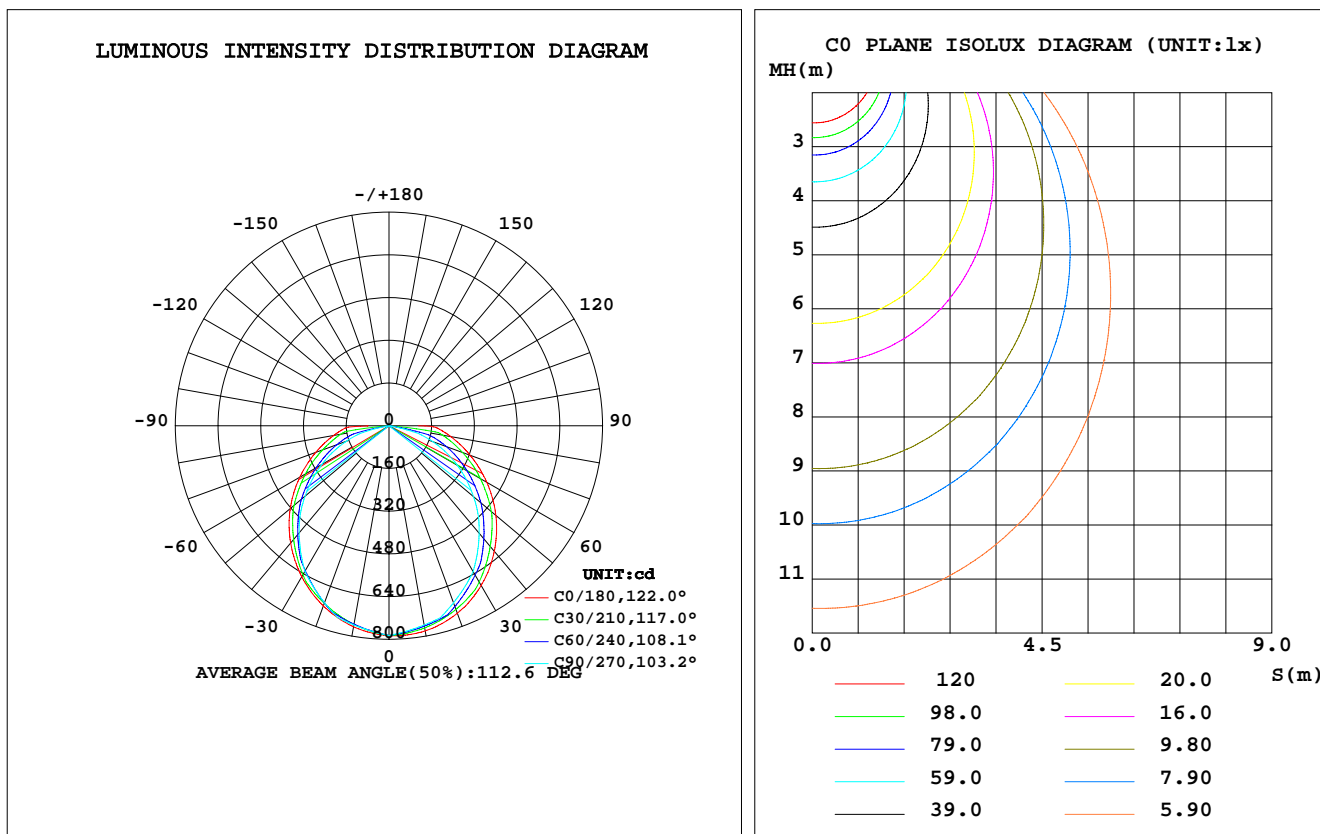


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:222.6V I:0.0890A P:18.70W PF:0.9470 Lamp Flux:2279.72x1 lm		
NAME: LED Tri-proof Light	TYPE:LED Tri-proof Light	WEIGHT:
DIM.:	SPEC.:20W	SERIAL No.:
MFR.: FILUX	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	40W 5000K	Imax(cd)	786.9	S/MH(C0/180)	1.31
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	1.20
RATED VOLTAGE(V)	222	TOTAL FLUX(lm)	2279.7	η UP, DN(C0-180)	0.0, 50.1
NOMINAL FLUX(lm)	2279.72	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 49.9
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	222.6	η down(%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Alice zhang
 Test Date:2018-09-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity:65.0%
 Test Distance:6.700m [K=1.0000]
 Remarks: LED Tri-proof Light

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum, lamp
5	786.5	777.0	771.8	771.5	777.9	771.5	771.7	776.9	0- 5	18.62	18.62	0.82,0.82
10	780.3	765.0	757.9	754.1	764.5	754.2	757.7	764.7	5- 10	54.93	73.56	3.23,3.23
15	767.0	749.7	744.0	734.2	744.1	734.2	743.6	749.1	10- 15	89.29	162.8	7.14,7.14
20	747.5	731.5	706.2	711.5	718.5	712.1	705.7	730.7	15- 20	120.5	283.4	12.4,12.4
25	721.9	696.8	668.4	672.9	687.9	673.7	667.8	695.8	20- 25	146.9	430.3	18.9,18.9
30	690.4	658.1	630.6	630.8	653.0	632.2	629.9	656.7	25- 30	168.4	598.6	26.3,26.3
35	654.0	618.4	578.0	589.0	614.9	590.5	576.8	616.5	30- 35	184.3	782.9	34.3,34.3
40	613.6	576.6	525.4	545.6	573.2	547.2	523.7	574.3	35- 40	193.8	976.7	42.8,42.8
45	569.6	524.7	472.8	494.3	529.6	495.2	470.6	521.9	40- 45	197.4	1174	51.5,51.5
50	522.6	473.5	413.5	444.2	482.6	443.9	410.6	470.1	45- 50	195.2	1369	60.1,60.1
55	473.1	423.0	354.2	395.2	434.7	393.8	350.5	419.3	50- 55	187.3	1557	68.3,68.3
60	422.6	368.4	295.0	341.9	385.7	339.2	290.5	364.6	55- 60	174.4	1731	75.9,75.9
65	372.1	314.9	235.2	290.3	337.7	286.6	230.4	311.3	60- 65	157.4	1888	82.8,82.8
70	323.1	263.6	175.4	241.9	292.1	237.9	170.4	260.6	65- 70	137.4	2026	88.9,88.9
75	277.4	214.7	115.7	197.2	249.7	193.2	110.4	212.9	70- 75	115.6	2141	93.9,93.9
80	235.2	139.4	0	128.2	210.8	124.9	0	138.6	75- 80	86.24	2228	97.7,97.7
85	196.8	0	0	0	176.2	0	0	0	80- 85	41.70	2269	99.5,99.5
90	110.8	0	0	0	81.51	0	0	0	85- 90	10.51	2280	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd								UNIT:lm			

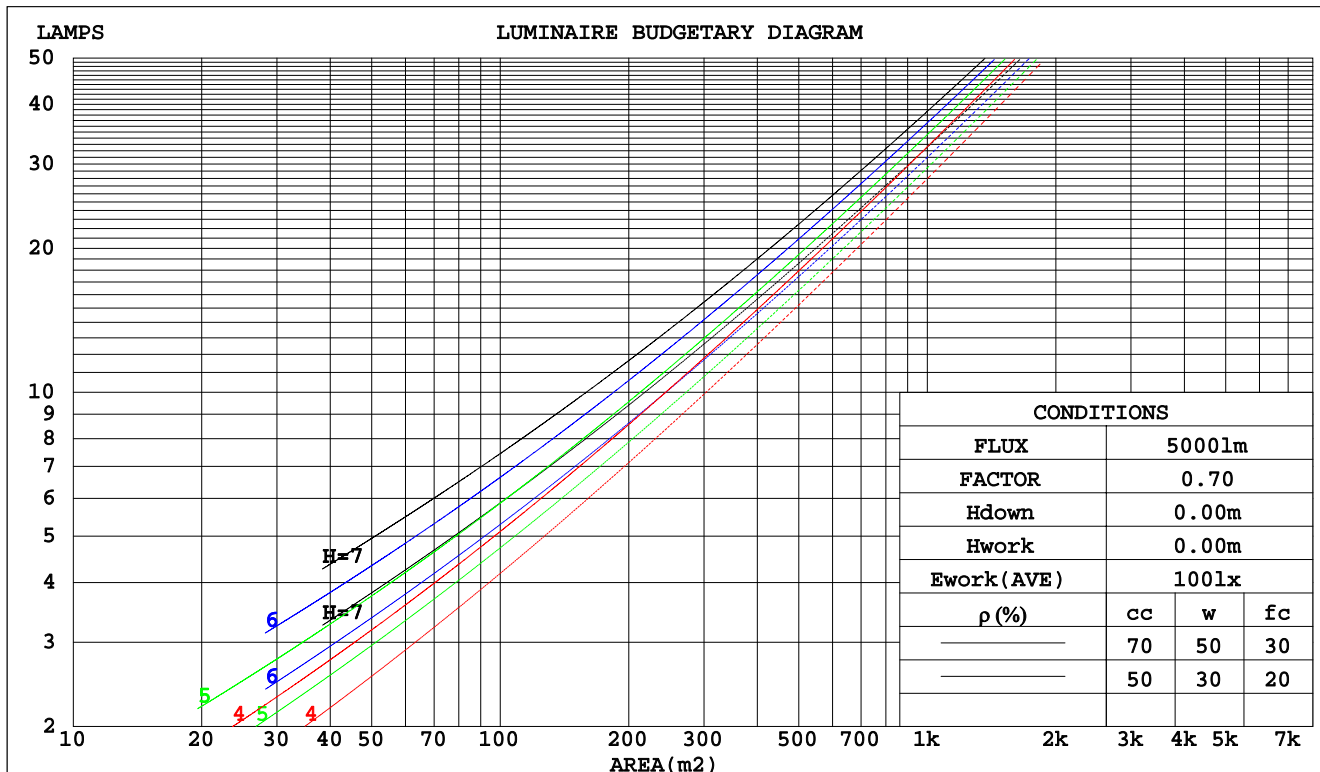
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Alice zhang
 Test Date:2018-09-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity:65.0%
 Test Distance:6.700m [K=1.0000]
 Remarks: LED Tri-proof Light

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:222.6V I:0.0890A P:18.70W PF:0.9470 Lamp Flux:2279.72x1 lm		
NAME: LED Tri-proof Light	TYPE:LED Tri-proof Light	WEIGHT:
DIM.:	SPEC.:20W	SERIAL No.:
MFR.: FILUX	SUR.:	PROTECTION 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	1.03	.99	.95	1.01	.97	.93	.97	.93	.90	.93	.90	.87	.89	.87	.85	.82
2.0	.89	.82	.76	.87	.81	.75	.84	.78	.73	.80	.76	.72	.77	.74	.70	.68
3.0	.78	.70	.63	.76	.69	.62	.73	.67	.61	.71	.65	.60	.68	.63	.59	.57
4.0	.69	.60	.53	.68	.59	.53	.65	.58	.52	.63	.56	.51	.61	.55	.50	.48
5.0	.62	.52	.46	.60	.52	.45	.58	.51	.45	.56	.50	.44	.54	.48	.44	.42
6.0	.55	.46	.40	.54	.46	.39	.53	.45	.39	.51	.44	.39	.49	.43	.38	.36
7.0	.50	.41	.35	.49	.41	.35	.48	.40	.35	.46	.39	.34	.45	.39	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.44	.36	.31	.42	.36	.31	.41	.35	.30	.29
9.0	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.26
10.0	.39	.31	.25	.38	.31	.25	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Alice zhang
 Test Date:2018-09-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity:65.0%
 Test Distance:6.700m [K=1.0000]
 Remarks: LED Tri-proof Light

WEC AND CCEC

Test:U:222.6V I:0.0890A P:18.70W PF:0.9470 Lamp Flux:2279.72x1 lm					
NAME: LED Tri-proof Light			TYPE:LED Tri-proof Light		WEIGHT:
DIM.:			SPEC.:20W		SERIAL No.:
MFR.: FILUX			SUR.:		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	.325	.185	.058	.318	.181	.058	.304	.174	.056	.292	.168	.054	.281	.163	.052	
2.0	.303	.166	.051	.296	.163	.050	.285	.158	.049	.274	.154	.048	.264	.149	.047	
3.0	.278	.148	.044	.273	.146	.044	.262	.142	.043	.252	.138	.042	.243	.135	.042	
4.0	.255	.133	.039	.250	.131	.039	.241	.128	.038	.232	.125	.038	.224	.122	.037	
5.0	.235	.120	.035	.231	.118	.034	.222	.116	.034	.215	.113	.034	.208	.111	.033	
6.0	.217	.109	.031	.213	.108	.031	.206	.106	.031	.199	.103	.030	.193	.101	.030	
7.0	.202	.100	.028	.198	.099	.028	.192	.097	.028	.186	.095	.028	.180	.093	.027	
8.0	.188	.092	.026	.185	.091	.026	.179	.089	.026	.174	.088	.025	.168	.086	.025	
9.0	.176	.085	.024	.173	.084	.024	.168	.083	.024	.163	.082	.023	.158	.080	.023	
10.0	.165	.079	.022	.163	.079	.022	.158	.077	.022	.153	.076	.022	.149	.075	.022	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.181	.156	.133	.155	.134	.115	.106	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.174	.132	.097	.149	.114	.084	.102	.079	.058	.059	.046	.034	.019	.015	.011	
3.0	.166	.114	.073	.142	.099	.063	.098	.069	.044	.056	.040	.026	.018	.013	.009	
4.0	.158	.101	.057	.136	.087	.050	.093	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.151	.091	.046	.129	.079	.040	.089	.055	.029	.052	.032	.017	.017	.011	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.076	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.028	.112	.060	.025	.077	.042	.018	.045	.025	.010	.015	.008	.003	
9.0	.124	.065	.025	.107	.056	.022	.074	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.118	.060	.022	.102	.053	.019	.071	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Alice zhang
 Test Date:2018-09-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity:65.0%
 Test Distance:6.700m [K=1.0000]
 Remarks: LED Tri-proof Light

Uncorrected UGR Table

Test:U:222.6V I:0.0890A P:18.70W PF:0.9470 Lamp Flux:2279.72x1 lm										
NAME: LED Tri-proof Light					TYPE:LED Tri-proof Light			WEIGHT:		
DIM.:					SPEC.:20W			SERIAL No.:		
MFR.: FILUX					SUR.:			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	20.6	22.1	20.8	22.3	22.5	19.1	20.7	19.4	20.9	21.1
3H	22.7	24.2	23.0	24.4	24.6	20.5	21.9	20.8	22.2	22.4
4H	23.9	25.2	24.2	25.5	25.8	21.0	22.4	21.3	22.6	22.9
6H	25.1	26.4	25.4	26.7	26.9	21.0	22.3	21.3	22.6	22.9
8H	25.7	27.0	26.1	27.3	27.6	21.0	22.2	21.3	22.5	22.8
12H	26.3	27.5	26.7	27.8	28.1	20.9	22.1	21.3	22.4	22.7
4H 2H	21.1	22.5	21.5	22.8	23.0	20.0	21.4	20.3	21.7	21.9
3H	23.5	24.7	23.9	25.0	25.3	21.7	22.9	22.0	23.2	23.5
4H	24.9	26.0	25.3	26.3	26.6	22.3	23.4	22.7	23.8	24.1
6H	26.3	27.3	26.7	27.7	28.0	22.4	23.4	22.8	23.7	24.1
8H	27.0	27.9	27.4	28.3	28.7	22.4	23.3	22.8	23.6	24.0
12H	27.6	28.5	28.1	28.9	29.3	22.3	23.2	22.7	23.5	23.9
8H 4H	25.2	26.1	25.6	26.5	26.9	23.0	24.0	23.5	24.3	24.7
6H	26.9	27.7	27.3	28.1	28.5	23.2	24.0	23.6	24.4	24.8
8H	27.8	28.5	28.3	28.9	29.4	23.2	23.8	23.6	24.3	24.7
12H	28.6	29.2	29.1	29.7	30.2	23.1	23.7	23.6	24.2	24.6
12H 4H	25.2	26.0	25.6	26.4	26.8	23.3	24.1	23.7	24.5	24.9
6H	26.9	27.6	27.4	28.0	28.5	23.4	24.1	23.9	24.5	25.0
8H	27.8	28.4	28.3	28.9	29.4	23.4	24.0	23.9	24.4	24.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.1 / - 0.2				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.5				

CIE Pub.117 Corrected 2280 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.9)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Alice zhang
 Test Date:2018-09-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity:65.0%
 Test Distance:6.700m [K=1.0000]
 Remarks: LED Tri-proof Light

UTILIZATION FACTORS TABLE

Test:U:222.6V I:0.0890A P:18.70W PF:0.9470 Lamp Flux:2279.72x1 lm		
NAME: LED Tri-proof Light	TYPE:LED Tri-proof Light	WEIGHT:
DIM.:	SPEC.:20W	SERIAL No.:
MFR.: FILUX	SUR.:	PROTECTION ANGLE:

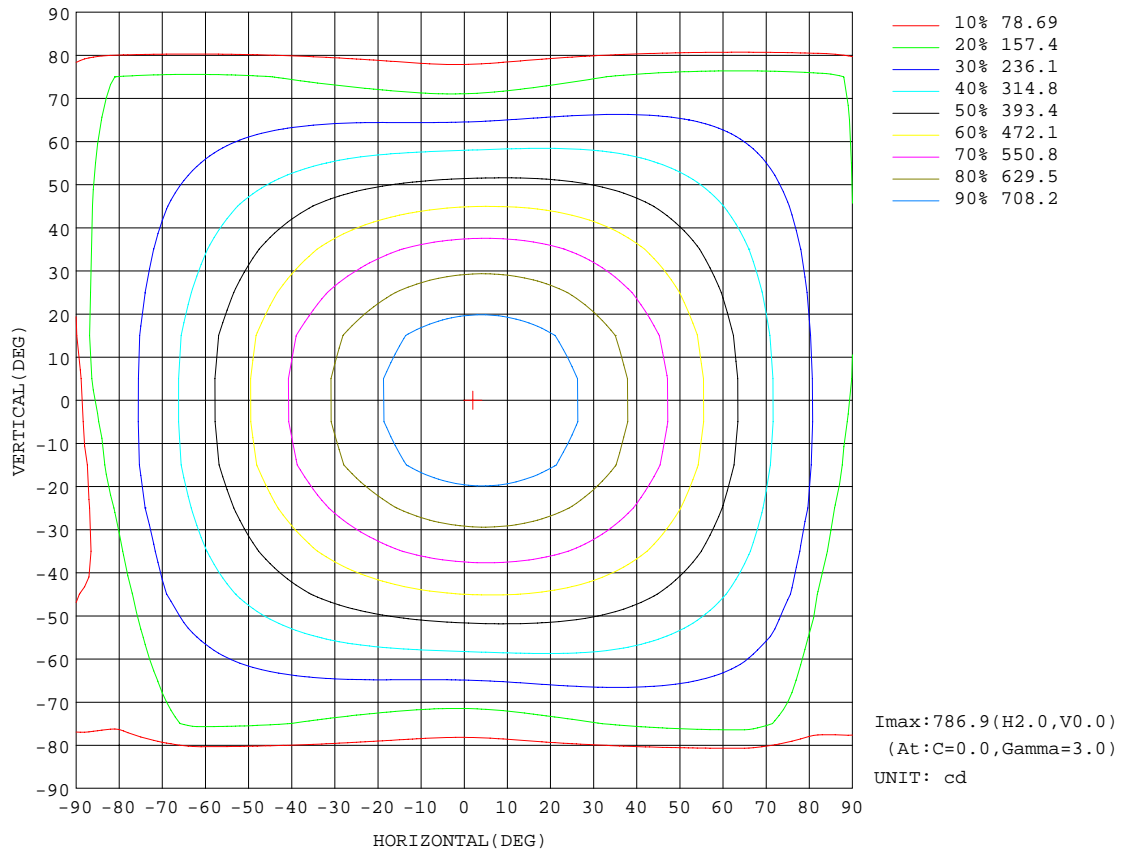
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	45	38	56	45	38	55	44	38	31
0.80	67	55	47	66	54	47	64	53	47	40
1.00	75	63	56	74	63	56	71	64	55	48
1.25	82	71	64	80	70	63	78	69	62	55
1.50	87	77	69	85	76	69	82	74	68	60
2.00	94	85	78	92	84	77	88	81	76	68
2.50	98	90	84	96	88	83	92	86	81	72
3.00	101	94	88	99	93	87	95	90	85	77
4.00	106	100	95	103	98	93	99	94	91	82
5.00	108	103	99	106	101	97	101	97	94	85
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Alice zhang
 Test Date:2018-09-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity:65.0%
 Test Distance:6.700m [K=1.0000]
 Remarks: LED Tri-proof Light

ISOCANDELA DIAGRAM

Test:U:222.6V I:0.0890A P:18.70W PF:0.9470 Lamp Flux:2279.72x1 lm		
NAME: LED Tri-proof Light	TYPE:LED Tri-proof Light	WEIGHT:
DIM.:	SPEC.:20W	SERIAL No.:
MFR.: FILUX	SUR.:	PROTECTION ANGLE:



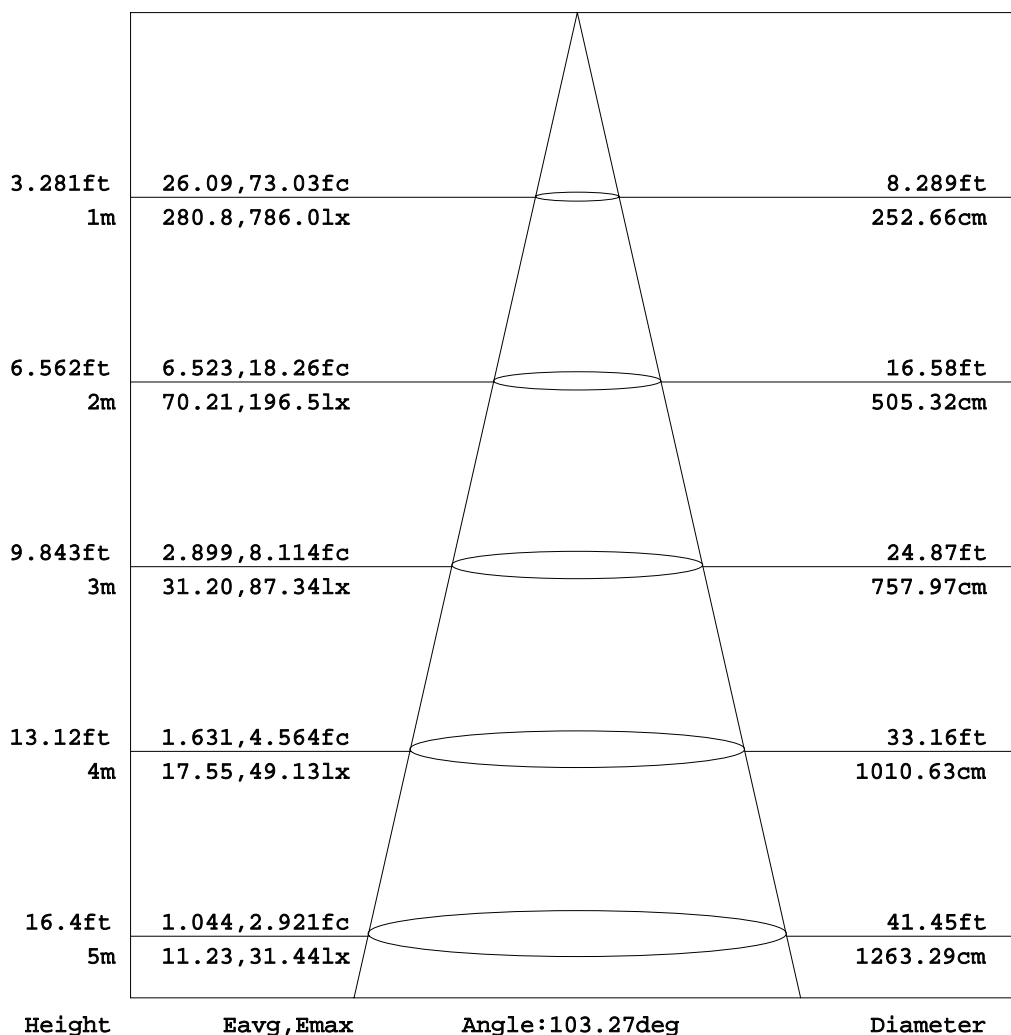
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Alice zhang
 Test Date: 2018-09-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity: 65.0%
 Test Distance: 6.700m [K=1.0000]
 Remarks: LED Tri-proof Light

AAI Figure

Test:U:222.6V I:0.0890A P:18.70W PF:0.9470 Lamp Flux:2279.72x1 lm		
NAME: LED Tri-proof Light	TYPE:LED Tri-proof Light	WEIGHT:
DIM.:	SPEC.:20W	SERIAL No.:
MFR.: FILUX	SUR.:	PROTECTION ANGLE:

Flux out:1445 lm



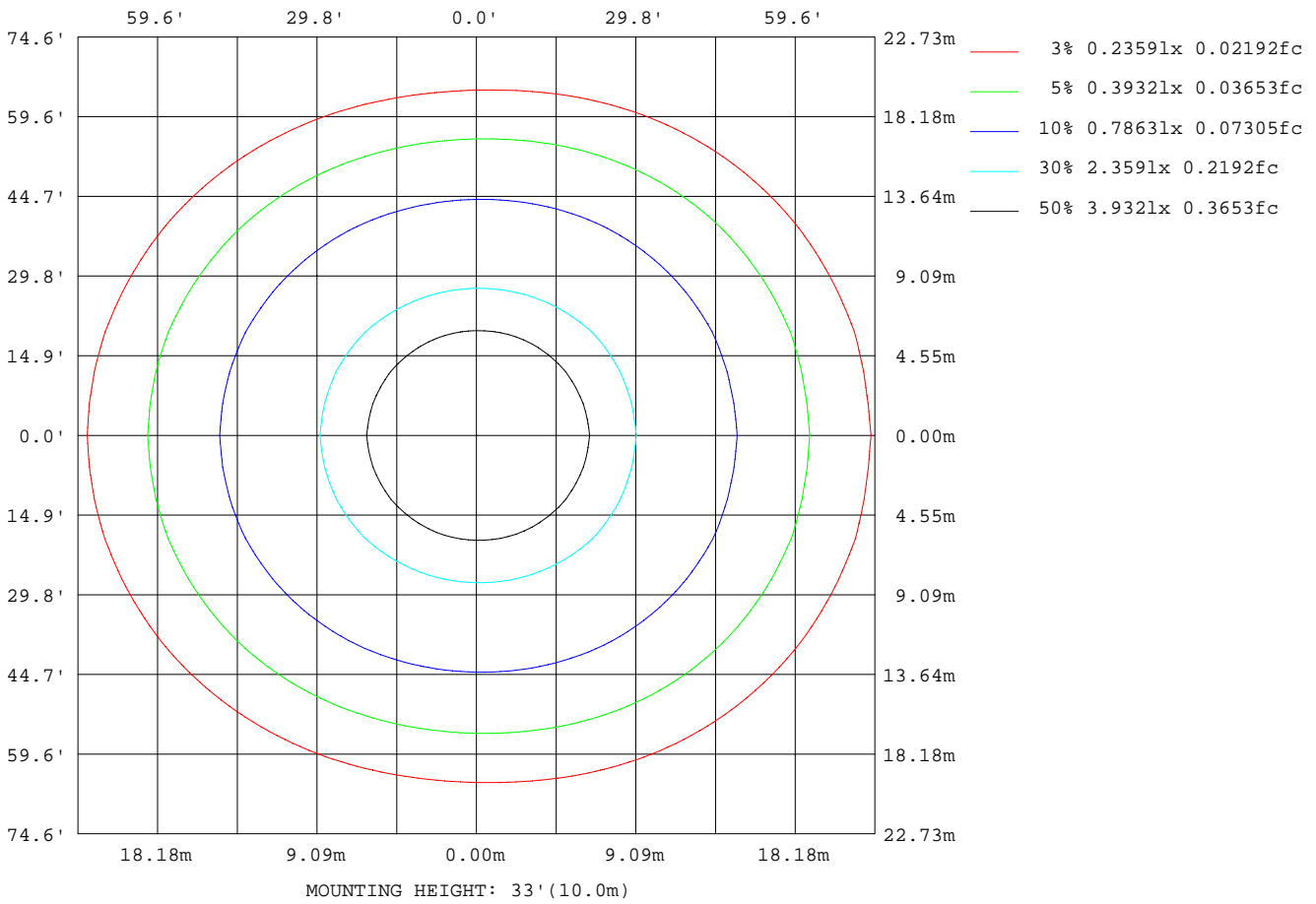
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Alice zhang
 Test Date:2018-09-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity:65.0%
 Test Distance:6.700m [K=1.0000]
 Remarks: LED Tri-proof Light

ISOLUX DIAGRAM

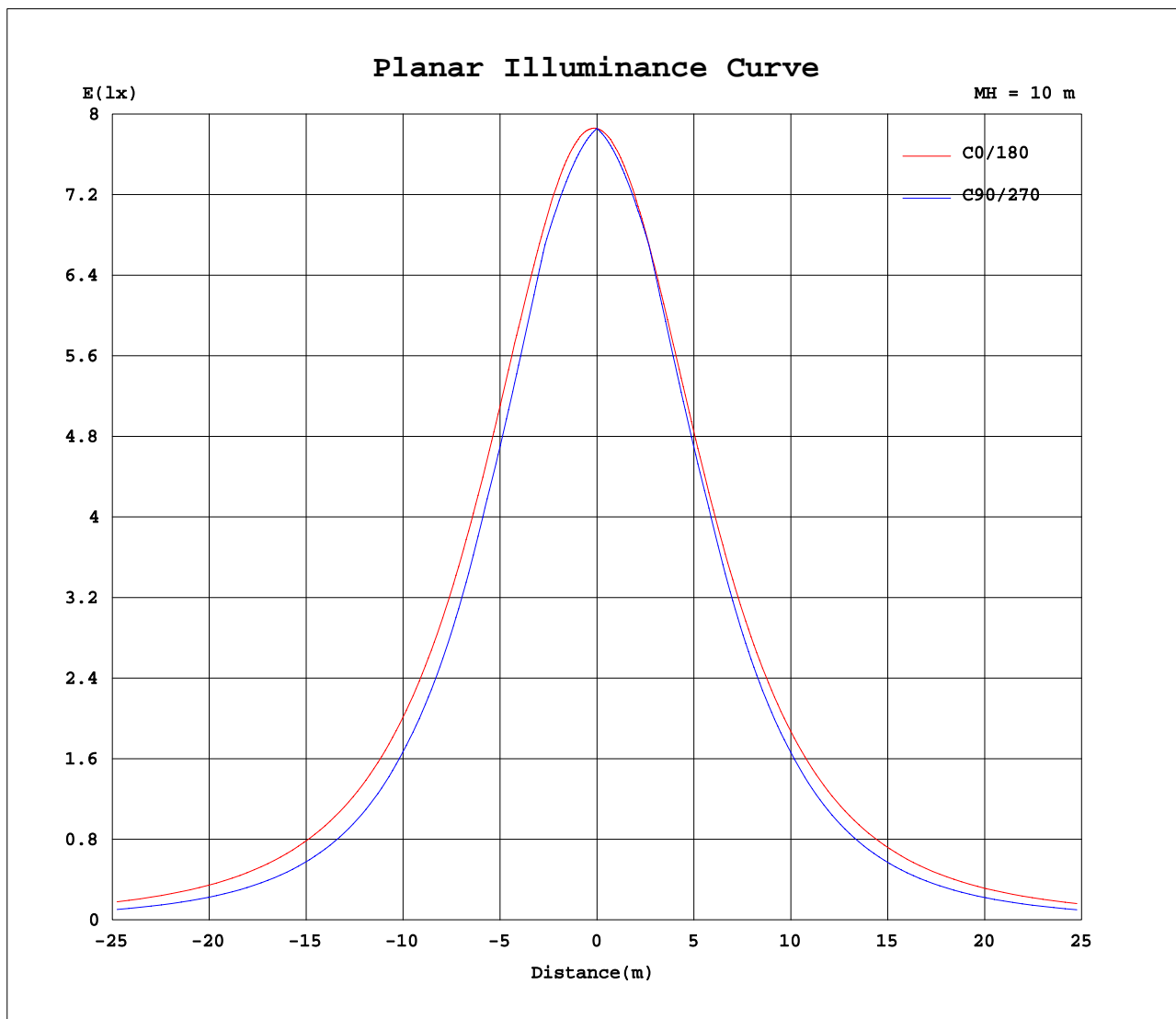
Test:U:222.6V I:0.0890A P:18.70W PF:0.9470 Lamp Flux:2279.72x1 lm		
NAME: LED Tri-proof Light	TYPE:LED Tri-proof Light	WEIGHT:
DIM.:	SPEC.:20W	SERIAL No.:
MFR.: FILUX	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Alice zhang
 Test Date:2018-09-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity:65.0%
 Test Distance:6.700m [K=1.0000]
 Remarks: LED Tri-proof Light

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Alice zhang
Test Date: 2018-09-07

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 6.700m [K=1.0000]
Remarks: LED Tri-proof Light

