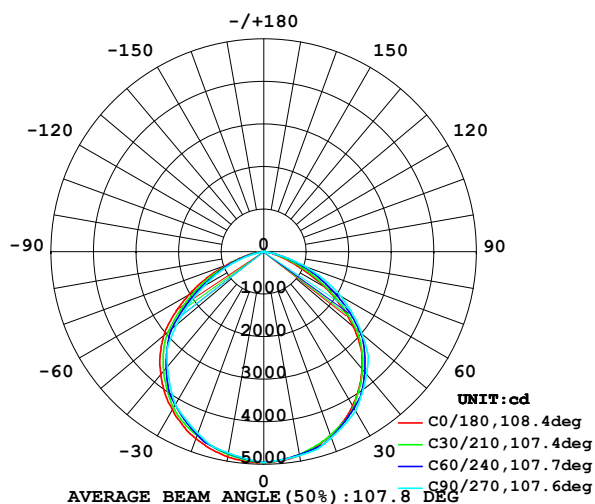


LUMINAIRE PHOTOMETRIC TEST REPORT

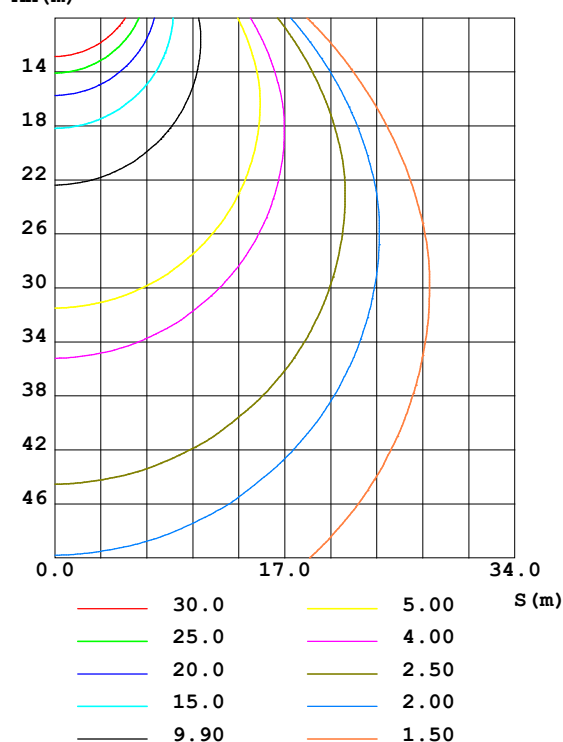
Test:U:230.1V I:0.4468A P:96.54W PF:0.9391 Lamp Flux:12774.8x1 lm		
NAME: 经济款工矿灯过EMC100W 230V 6500K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MKOPTO	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 132.32 lm/W			
MODEL		I _{max} (cd)	4962	S/MH (C0/180)	1.25
NOMINAL POWER (W)	96	LOR (%)	100.0	S/MH (C90/270)	1.29
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	12775	η UP, DN (C0-180)	0.0, 51.7
NOMINAL FLUX (lm)	12774.8	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 48.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230.1	η down (%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019-10-05

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 55.0%
 Test Distance: 8.852m [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
5	4927	4907	4912	4922	4946	4901	4883	4886	0- 5	117.8	117.8	0.92,0.92
10	4861	4839	4865	4864	4900	4825	4807	4799	5- 10	348.6	466.4	3.65,3.65
15	4755	4748	4817	4788	4806	4732	4731	4689	10- 15	568.8	1035	8.1,8.1
20	4594	4638	4653	4704	4673	4611	4541	4559	15- 20	771.4	1807	14.1,14.1
25	4411	4441	4488	4519	4505	4407	4350	4343	20- 25	947.0	2754	21.6,21.6
30	4179	4208	4323	4305	4294	4176	4159	4091	25- 30	1093	3847	30.1,30.1
35	3909	3965	4041	4076	4061	3934	3843	3826	30- 35	1203	5050	39.5,39.5
40	3595	3684	3760	3814	3769	3649	3527	3532	35- 40	1269	6318	49.5,49.5
45	3234	3287	3478	3476	3447	3248	3211	3097	40- 45	1289	7607	59.5,59.5
50	2750	2855	3013	3115	3070	2820	2681	2633	45- 50	1251	8858	69.3,69.3
55	2210	2378	2548	2710	2571	2372	2151	2131	50- 55	1139	9998	78.3,78.3
60	1638	1813	2083	2145	2041	1808	1621	1546	55- 60	968.8	10966	85.8,85.8
65	1051	1274	1563	1590	1486	1265	1175	986.3	60- 65	758.7	11725	91.8,91.8
70	594.7	818.8	1043	1095	951.6	813.8	728.7	566.5	65- 70	536.4	12262	96,96
75	299.5	478.9	523.0	669.3	525.9	480.8	282.6	310.6	70- 75	328.6	12590	98.6,98.6
80	119.9	171.1	0	258.9	262.0	170.8	0	87.07	75- 80	149.8	12740	99.7,99.7
85	18.41	0	0	0	98.33	0	0	0	80- 85	32.20	12772	100,100
90	4.872	0	0	0	6.376	0	0	0	85- 90	2.659	12775	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			

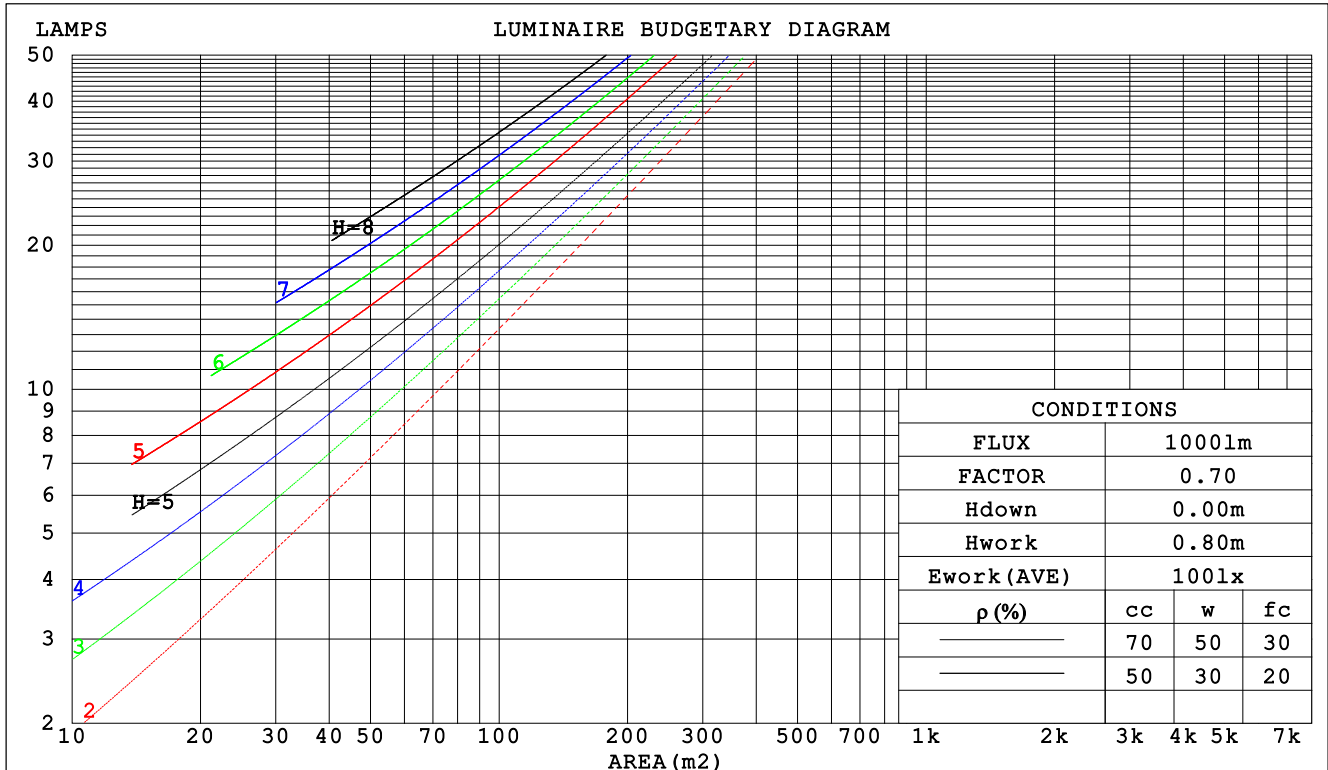
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:2019-10-05

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:55.0%
 Test Distance:8.852m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.1V I:0.4468A P:96.54W PF:0.9391 Lamp Flux:12774.8x1 lm		
NAME: 经济款工矿灯过EMC100W 230V 6500K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MKOPTO	SUR.:	PROTECTION ANGLE:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	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	.00
1.0	1.06	1.02	.99	1.04	1.00	.97	.99	.97	.94	.96	.93	.91	.92	.90	.89	.87
2.0	.93	.87	.82	.91	.86	.81	.88	.83	.79	.85	.81	.77	.82	.78	.76	.74
3.0	.83	.75	.69	.81	.74	.68	.78	.72	.67	.75	.70	.66	.73	.69	.65	.63
4.0	.73	.65	.59	.72	.64	.58	.70	.63	.58	.67	.62	.57	.65	.60	.56	.54
5.0	.66	.57	.51	.65	.57	.51	.63	.56	.50	.61	.54	.50	.59	.53	.49	.47
6.0	.59	.51	.45	.58	.50	.44	.57	.49	.44	.55	.49	.44	.53	.48	.43	.41
7.0	.54	.45	.39	.53	.45	.39	.52	.44	.39	.50	.44	.39	.49	.43	.38	.37
8.0	.49	.41	.35	.48	.41	.35	.47	.40	.35	.46	.39	.35	.45	.39	.34	.33
9.0	.45	.37	.32	.45	.37	.32	.43	.36	.31	.42	.36	.31	.41	.35	.31	.29
10.0	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.28	.38	.33	.28	.27



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019-10-05

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 55.0%
 Test Distance: 8.852m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.1V I:0.4468A P:96.54W PF:0.9391 Lamp Flux:12774.8x1 lm		
NAME: 经济款工矿灯过EMC100W 230V 6500K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MKOPTO	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						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.271	.154	.049	.264	.151	.048	.251	.144	.046	.239	.138	.044	.228	.132	.043		
2.0	.264	.145	.044	.258	.142	.044	.247	.137	.043	.236	.132	.041	.226	.128	.040		
3.0	.250	.133	.040	.244	.131	.039	.234	.127	.039	.225	.123	.038	.216	.120	.037		
4.0	.234	.122	.036	.229	.120	.035	.220	.117	.035	.212	.114	.034	.204	.111	.034		
5.0	.219	.111	.032	.214	.110	.032	.206	.107	.032	.199	.105	.031	.192	.103	.031		
6.0	.204	.102	.029	.201	.101	.029	.194	.099	.029	.187	.097	.029	.181	.095	.028		
7.0	.191	.095	.027	.188	.094	.027	.182	.092	.026	.176	.090	.026	.170	.088	.026		
8.0	.180	.088	.025	.177	.087	.025	.171	.085	.024	.166	.084	.024	.161	.082	.024		
9.0	.169	.082	.023	.166	.081	.023	.161	.080	.023	.156	.078	.022	.152	.077	.022		
10.0	.160	.076	.021	.157	.076	.021	.152	.075	.021	.148	.074	.021	.144	.072	.021		

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	.178	.156	.137	.152	.134	.118	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.169	.132	.101	.144	.114	.088	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.161	.114	.077	.138	.098	.067	.095	.068	.047	.055	.040	.028	.018	.013	.009	
4.0	.153	.101	.061	.131	.087	.053	.090	.061	.037	.052	.035	.022	.017	.012	.007	
5.0	.146	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.082	.040	.120	.071	.035	.082	.050	.025	.048	.029	.015	.015	.010	.005	
7.0	.133	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.126	.069	.029	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.104	.056	.022	.072	.039	.016	.042	.023	.010	.014	.008	.003	
10.0	.115	.060	.023	.099	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2019-10-05

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
Humidity:55.0%
Test Distance:8.852m [K=1.0000]
Remarks:

Uncorrected UGR Table

Test:U:230.1V I:0.4468A P:96.54W PF:0.9391 Lamp Flux:12774.8x1 lm											
NAME: 经济款工矿灯过EMC100W 230V 6500K						TYPE:		WEIGHT:			
DIM.:						SPEC.:		SERIAL No.:			
MFR.: MKOPTO						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	29.5	30.9	29.7	31.1	31.3	30.3	31.7	30.6	31.9	32.1	
	3H	30.0	31.4	30.3	31.6	31.8	31.4	32.7	31.7	32.9	33.2
	4H	30.1	31.4	30.4	31.6	31.9	31.6	32.9	31.9	33.1	33.4
	6H	30.1	31.3	30.4	31.5	31.8	31.6	32.7	31.9	33.0	33.3
	8H	30.0	31.2	30.4	31.5	31.7	31.5	32.6	31.8	32.9	33.2
	12H	30.0	31.1	30.3	31.4	31.7	31.5	32.5	31.8	32.8	33.1
4H	2H	29.9	31.2	30.3	31.5	31.7	30.6	31.9	30.9	32.1	32.4
	3H	30.6	31.7	31.0	32.0	32.3	31.8	32.9	32.2	33.2	33.5
	4H	30.8	31.8	31.1	32.1	32.4	32.1	33.1	32.5	33.4	33.8
	6H	30.8	31.7	31.2	32.0	32.4	32.1	33.0	32.5	33.3	33.7
	8H	30.8	31.6	31.2	31.9	32.3	32.1	32.9	32.5	33.2	33.6
	12H	30.7	31.5	31.1	31.8	32.3	32.0	32.8	32.5	33.2	33.6
8H	4H	30.9	31.7	31.3	32.0	32.4	32.1	33.0	32.6	33.3	33.7
	6H	31.0	31.6	31.4	32.0	32.4	32.2	32.8	32.6	33.2	33.6
	8H	31.0	31.5	31.4	32.0	32.4	32.1	32.7	32.6	33.1	33.6
	12H	30.9	31.4	31.4	31.9	32.3	32.1	32.6	32.6	33.0	33.5
12H	4H	30.8	31.6	31.3	32.0	32.4	32.1	32.8	32.5	33.2	33.6
	6H	30.9	31.5	31.4	31.9	32.4	32.1	32.7	32.6	33.1	33.6
	8H	30.9	31.4	31.4	31.9	32.3	32.1	32.6	32.6	33.0	33.5
Variations with the observer position at spacings:											
S = 1.0H	+ 0.4 / - 0.5					+ 0.3 / - 0.3					
1.5H	+ 0.3 / - 0.6					+ 0.2 / - 0.5					
2.0H	+ 0.7 / - 0.7					+ 0.6 / - 0.7					

CIE Pub.117 Corrected 12775 lm Total Lamp Luminous Flux.(8log(F/F0) = 8.9)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2019-10-05

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
Humidity:55.0%
Test Distance:8.852m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.1V I:0.4468A P:96.54W PF:0.9391 Lamp Flux:12774.8x1 lm		
NAME: 经济款工矿灯过EMC100W 230V 6500K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MKOPTO	SUR.:	PROTECTION ANGLE:

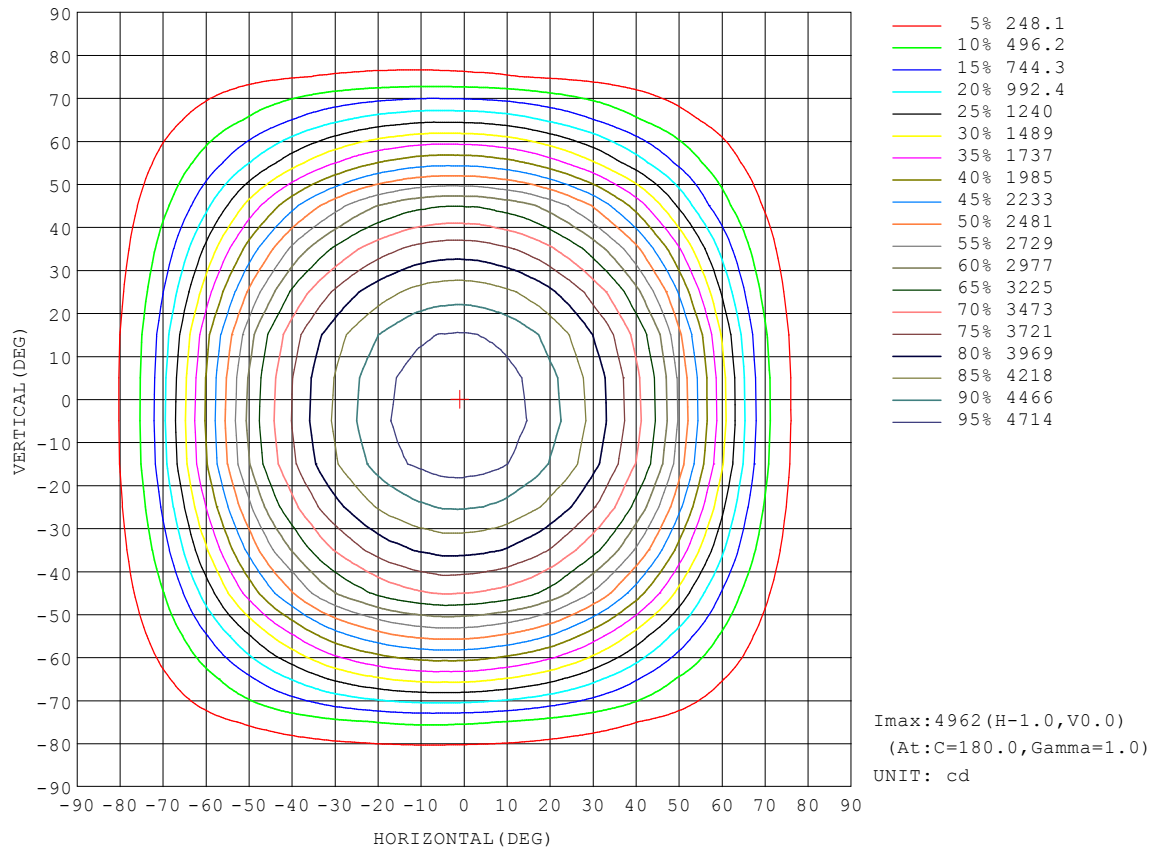
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	60	49	42	59	48	42	58	48	42	35
0.80	70	59	52	69	59	52	68	58	52	45
1.00	79	69	62	78	68	62	76	69	61	54
1.25	86	77	70	85	76	70	82	74	69	62
1.50	91	82	76	90	81	75	87	80	74	67
2.00	98	90	84	96	89	83	93	87	82	75
2.50	101	94	89	99	93	88	96	90	86	78
3.00	104	98	93	102	97	92	98	94	90	82
4.00	108	103	99	106	101	97	102	98	95	86
5.00	110	106	102	108	104	101	103	100	98	89
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: MEDIUM
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019-10-05

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 55.0%
 Test Distance: 8.852m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.1V I:0.4468A P:96.54W PF:0.9391 Lamp Flux:12774.8x1 lm		
NAME: 经济款工矿灯过EMC100W 230V 6500K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MKOPTO	SUR.:	PROTECTION ANGLE:

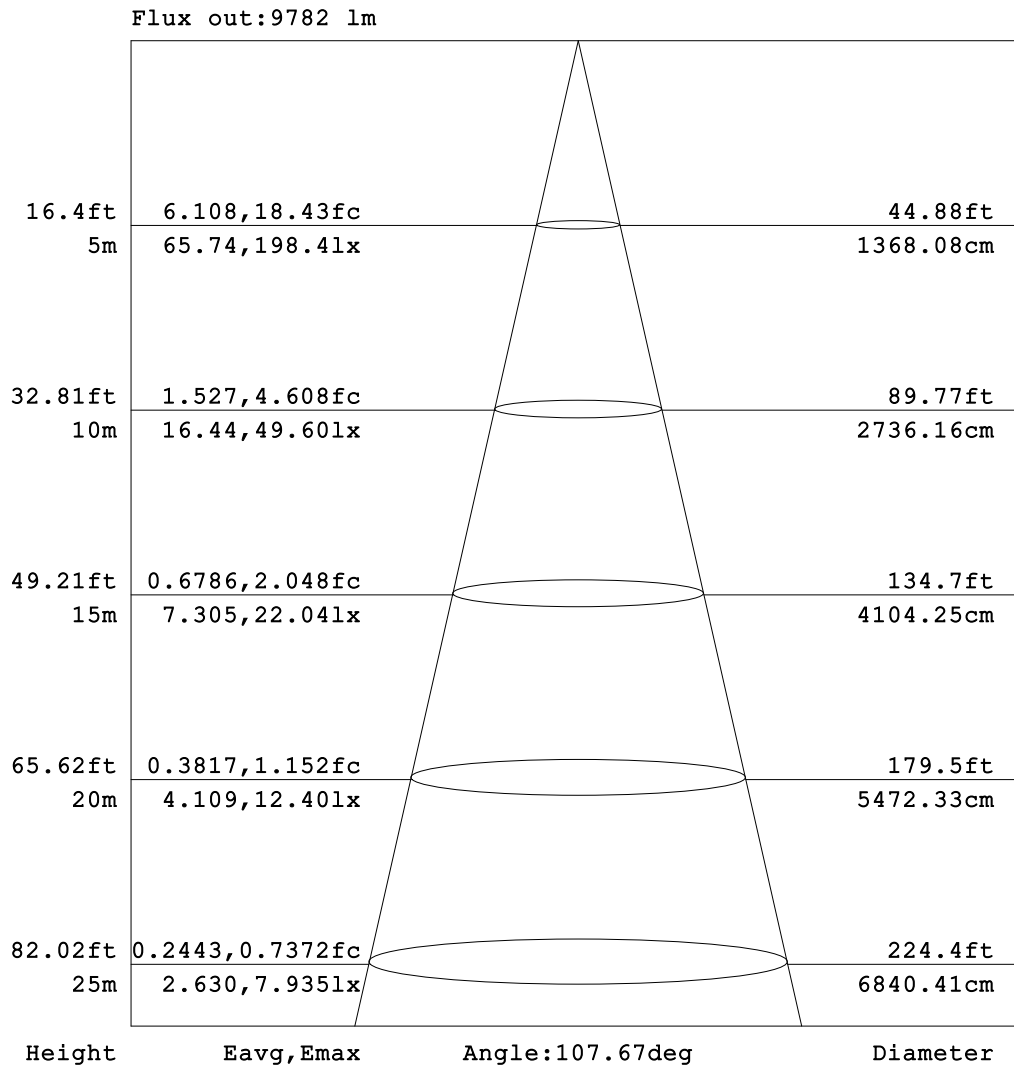


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2019-10-05

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
Humidity:55.0%
Test Distance:8.852m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.1V I:0.4468A P:96.54W PF:0.9391 Lamp Flux:12774.8x1 lm		
NAME: 经济款工矿灯过EMC100W 230V 6500K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MKOPTO	SUR.:	PROTECTION ANGLE:



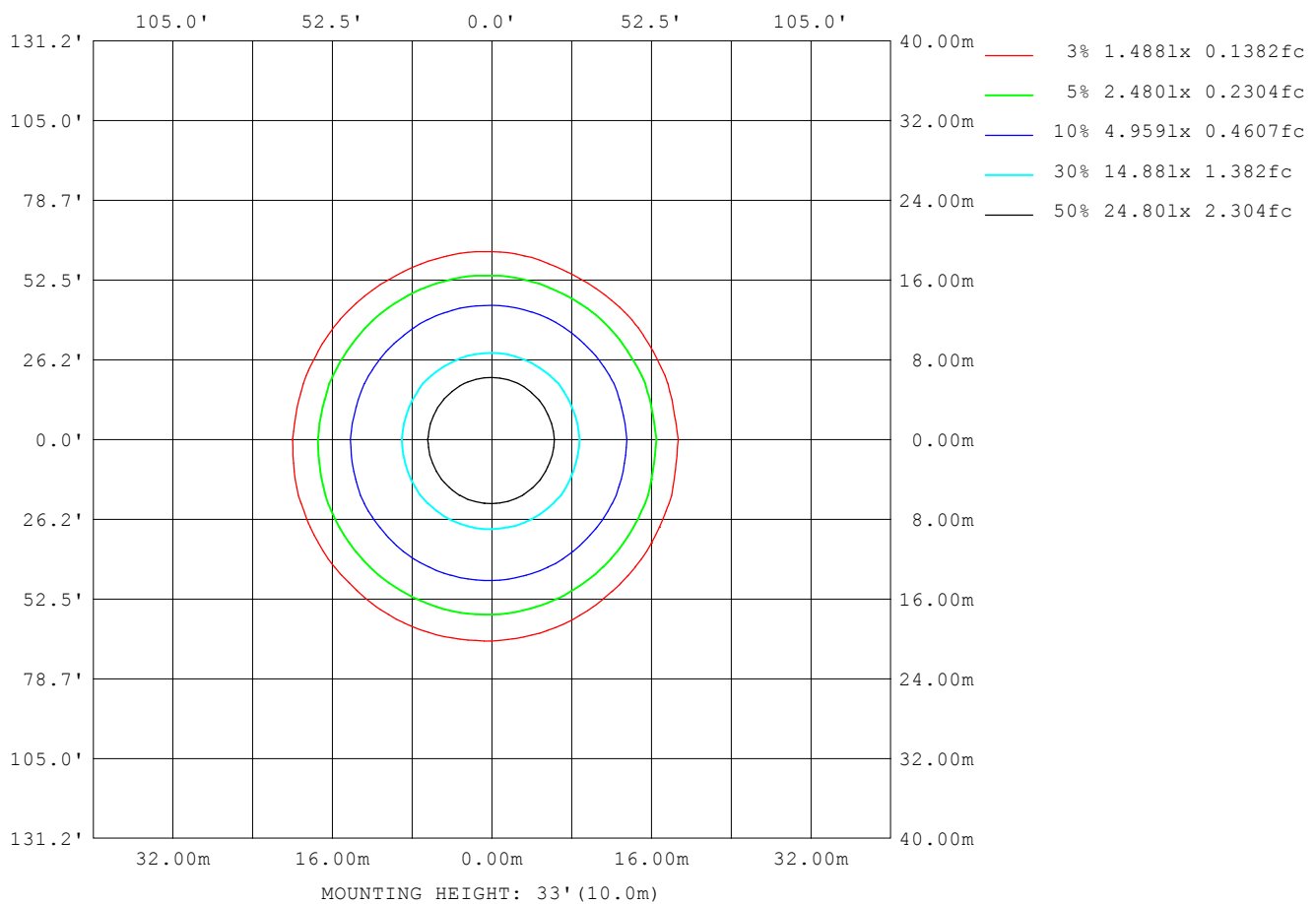
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019-10-05

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 55.0%
 Test Distance: 8.852m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

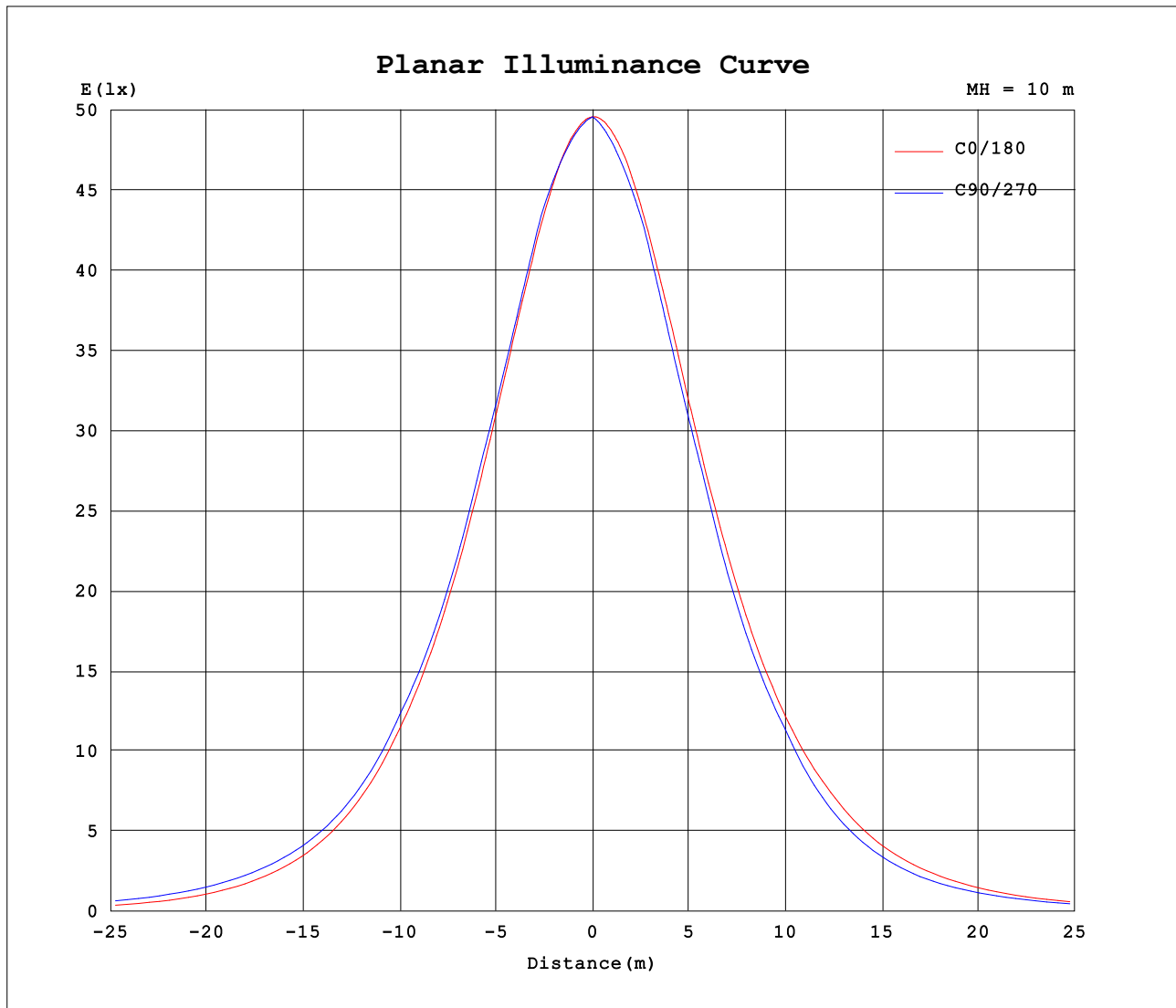
Test:U:230.1V I:0.4468A P:96.54W PF:0.9391 Lamp Flux:12774.8x1 lm		
NAME: 经济款工矿灯过EMC100W 230V 6500K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MKOPTO	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2019-10-05

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
Humidity:55.0%
Test Distance:8.852m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators:
Test Date: 2019-10-05

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
Humidity: 55.0%
Test Distance: 8.852m [K=1.0000]
Remarks:

