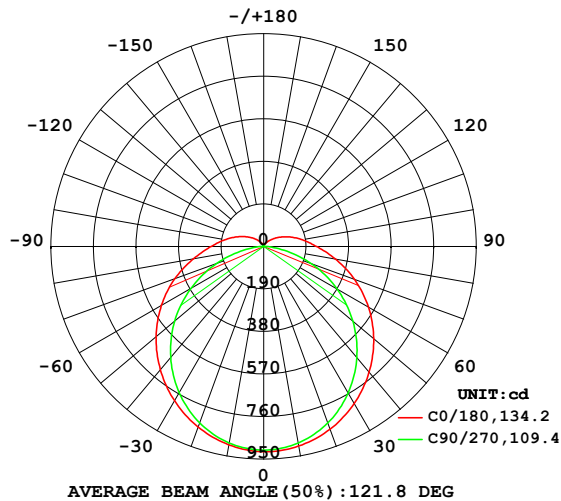


**LUMINAIRE PHOTOMETRIC TEST REPORT**

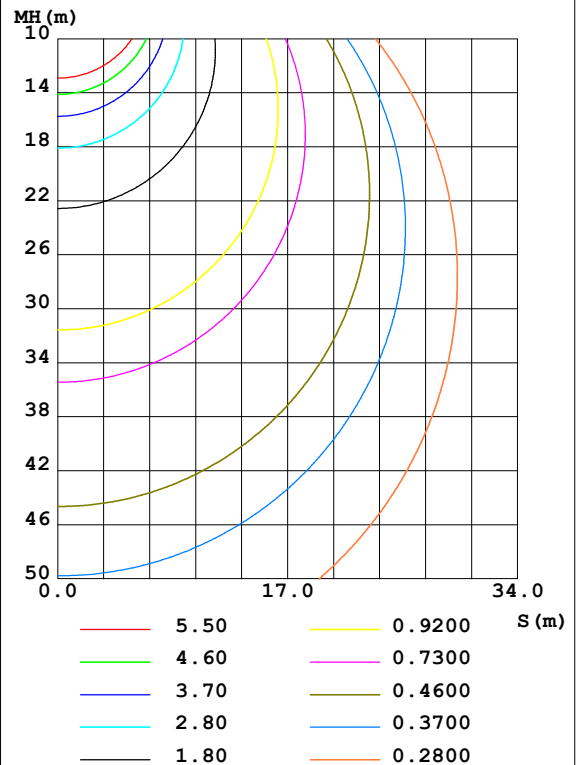
Test:U:230.4V I:0.1348A P:30.46W PF:0.9806 Freq:50.00Hz Lamp Flux:3304.84x1 lm		
NAME: Triproof Light TP S2 Serie 30 Watt 1200mm	TYPE:TP-S2-030_NW/W	
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 108.50 lm/W			
MODEL	50	I <sub>max</sub> (cd)	916.8	S/MH(C0/180)	1.30
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	3304.8	η UP,DN(C0-180)	4.8,45.3
NOMINAL FLUX(lm)	3304.84	CIE CLASS	DIRECT	η UP,DN(C180-360)	4.8,45.0
LAMPS INSIDE	1	η up(%)	9.7	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220.1	η down(%)	90.3	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:15 July 2016

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.500m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	904.9	897.9	891.0	889.3	899.5	893.7	891.2	893.2	0- 10	86.14	86.14	2.61,2.61
20	868.3	852.7	838.4	842.0	858.1	844.6	838.0	849.1	10- 20	246.9	333.0	10.1,10.1
30	809.6	780.8	755.4	770.3	796.6	769.7	754.7	779.7	20- 30	375.8	708.8	21.4,21.4
40	732.9	687.4	647.4	679.3	718.4	675.1	646.7	689.4	30- 40	458.3	1167	35.3,35.3
50	641.8	578.7	520.4	574.5	627.7	565.9	519.5	584.3	40- 50	487.4	1655	50.1,50.1
60	540.0	460.3	378.6	461.0	528.1	448.5	375.6	470.2	50- 60	463.0	2118	64.1,64.1
70	432.2	338.7	227.8	345.1	423.6	327.6	224.7	351.3	60- 70	392.0	2510	75.9,75.9
80	325.6	224.4	82.53	236.1	318.6	216.5	80.49	240.3	70- 80	289.7	2799	84.7,84.7
90	236.5	138.0	1.877	154.9	235.1	137.1	2.672	156.8	80- 90	186.5	2986	90.3,90.3
100	175.7	91.59	1.996	106.7	176.9	91.60	2.961	107.5	90-100	123.1	3109	94.1,94.1
110	125.6	58.59	2.807	71.00	127.7	59.53	3.904	67.45	100-110	82.39	3191	96.6,96.6
120	84.57	32.86	3.713	45.29	87.39	37.58	4.853	41.52	110-120	51.85	3243	98.1,98.1
130	52.77	17.81	4.677	27.48	55.80	23.12	5.782	22.59	120-130	30.01	3273	99,99
140	29.88	10.64	5.746	16.33	31.74	14.34	6.690	13.01	130-140	16.12	3289	99.5,99.5
150	15.52	8.100	6.813	10.23	16.96	9.807	7.443	9.074	140-150	8.099	3297	99.8,99.8
160	9.182	7.987	7.707	8.149	10.02	8.371	8.037	8.190	150-160	4.287	3302	99.9,99.9
170	8.413	8.371	8.329	8.287	8.644	8.665	8.609	8.497	160-170	2.356	3304	100,100
180	8.832	8.755	8.700	8.616	8.881	8.762	8.714	8.630	170-180	0.8162	3305	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1410.7 lm

%lum = 42.7%

%lamp = 42.7%

Conical surface Flux(120deg): 2117.6 lm

%lum = 64.1%

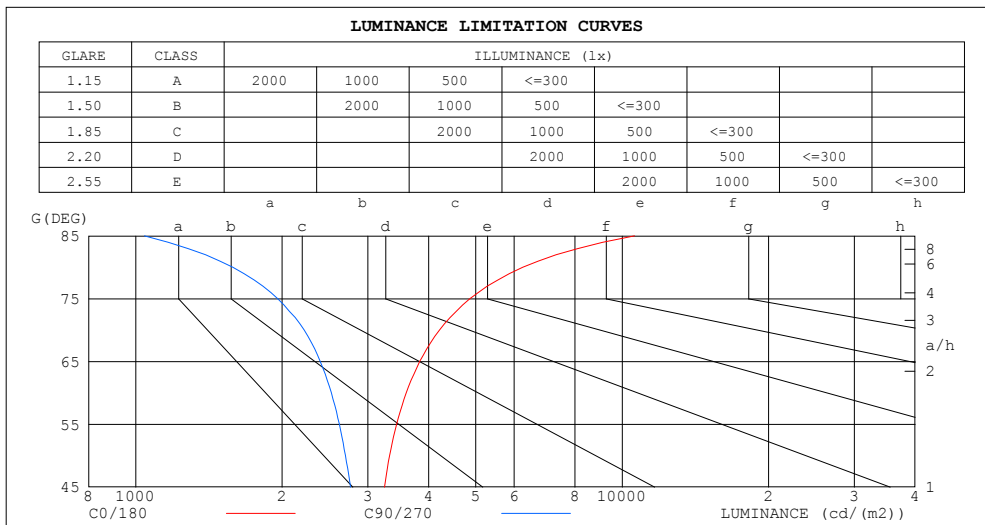
%lamp = 64.1%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:15 July 2016

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.500m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:230.4V I:0.1348A P:30.46W PF:0.9806 Freq:50.00Hz Lamp Flux:3304.84x1 lm		
NAME: Triproof Light TP S2 Serie 30 Watt 1200mm	TYPE:TP-S2-030_NW/W	
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	10597	1041
80	6249	1584
75	4865	1958
70	4212	2221
65	3837	2395
60	3600	2524
55	3439	2620
50	3328	2699
45	3247	2763

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:15 July 2016

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.500m [K=1.0000]  
Remarks:

### WEC AND CCEC

Test:U:230.4V I:0.1348A P:30.46W PF:0.9806 Freq:50.00Hz Lamp Flux:3304.84x1 lm		
NAME: Triproof Light TP S2 Serie 30 Watt 1200mm	TYPE:TP-S2-030_NW/W	
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	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	.360	.205	.065	.350	.200	.063	.331	.190	.061	.314	.181	.058	.298	.173	.056		
2.0	.320	.175	.054	.311	.171	.053	.294	.163	.051	.278	.156	.049	.264	.149	.047		
3.0	.288	.153	.046	.280	.150	.045	.264	.143	.044	.250	.137	.042	.237	.131	.041		
4.0	.261	.136	.040	.254	.133	.039	.240	.127	.038	.227	.122	.037	.216	.117	.036		
5.0	.239	.122	.035	.232	.119	.035	.220	.114	.034	.208	.110	.033	.197	.106	.032		
6.0	.220	.110	.032	.214	.108	.031	.203	.104	.030	.192	.100	.029	.182	.096	.028		
7.0	.203	.100	.028	.198	.099	.028	.188	.095	.027	.178	.091	.027	.169	.088	.026		
8.0	.189	.092	.026	.184	.091	.026	.175	.087	.025	.166	.084	.024	.158	.081	.024		
9.0	.176	.085	.024	.172	.084	.024	.163	.081	.023	.155	.078	.022	.148	.075	.022		
10.0	.165	.079	.022	.161	.078	.022	.153	.075	.021	.146	.073	.021	.139	.070	.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	.264	.264	.264	.226	.226	.226	.154	.154	.154	.088	.088	.088	.028	.028	.028	
1.0	.258	.230	.205	.221	.197	.176	.151	.136	.122	.087	.079	.071	.028	.025	.023	
2.0	.251	.206	.169	.215	.178	.146	.147	.123	.102	.085	.072	.060	.027	.023	.019	
3.0	.243	.189	.147	.208	.163	.127	.143	.114	.089	.083	.066	.053	.027	.022	.017	
4.0	.235	.177	.132	.202	.153	.115	.139	.106	.081	.080	.062	.048	.026	.020	.016	
5.0	.228	.167	.122	.195	.144	.106	.135	.101	.075	.078	.059	.044	.025	.019	.015	
6.0	.220	.158	.114	.189	.137	.099	.131	.096	.070	.076	.057	.042	.024	.018	.014	
7.0	.213	.152	.109	.183	.132	.095	.127	.092	.067	.074	.054	.040	.024	.018	.013	
8.0	.206	.146	.105	.178	.127	.091	.123	.089	.065	.072	.052	.039	.023	.017	.013	
9.0	.200	.141	.101	.173	.123	.088	.120	.086	.063	.070	.051	.037	.023	.017	.012	
10.0	.194	.137	.099	.168	.119	.086	.116	.084	.061	.068	.049	.037	.022	.016	.012	

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:15 July 2016

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.500m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

Test:U:230.4V I:0.1348A P:30.46W PF:0.9806 Freq:50.00Hz Lamp Flux:3304.84x1 lm											
NAME: Triproof Light TP S2 Serie 30 Watt 1200mm						TYPE:TP-S2-030_NW/W					
SPEC.:						DIM.:			SERIAL No.:		
MFR.: EVERFINE						SUR.:21cm*16cm			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	12.7	14.1	13.1	14.5	14.9	11.2	12.7	11.6	13.0	13.4	
	3H	15.0	16.3	15.4	16.7	17.2	12.7	14.0	13.1	14.4	14.8
	4H	16.2	17.5	16.7	17.9	18.4	13.2	14.5	13.7	14.9	15.4
	6H	17.5	18.7	18.0	19.2	19.6	13.5	14.7	14.0	15.2	15.7
	8H	18.2	19.4	18.7	19.8	20.3	13.6	14.8	14.1	15.2	15.7
	12H	19.0	20.1	19.5	20.6	21.1	13.6	14.8	14.1	15.2	15.7
4H	2H	13.2	14.5	13.7	14.9	15.4	12.1	13.4	12.6	13.8	14.3
	3H	15.7	16.9	16.2	17.3	17.8	13.8	14.9	14.3	15.4	15.9
	4H	17.2	18.2	17.7	18.7	19.2	14.5	15.5	15.0	16.0	16.5
	6H	18.7	19.6	19.2	20.1	20.7	15.0	15.9	15.5	16.4	17.0
	8H	19.5	20.4	20.1	20.9	21.5	15.1	16.0	15.7	16.5	17.1
	12H	20.5	21.2	21.0	21.8	22.4	15.2	16.0	15.7	16.5	17.1
8H	4H	17.4	18.3	18.0	18.8	19.4	15.2	16.0	15.7	16.6	17.2
	6H	19.2	19.9	19.8	20.5	21.2	16.0	16.7	16.5	17.3	17.9
	8H	20.3	20.9	20.9	21.5	22.2	16.2	16.9	16.8	17.5	18.1
	12H	21.5	22.0	22.1	22.6	23.3	16.4	17.0	17.1	17.6	18.3
12H	4H	17.4	18.2	18.0	18.8	19.4	15.4	16.2	16.0	16.7	17.4
	6H	19.3	20.0	19.9	20.5	21.2	16.3	17.0	16.9	17.6	18.2
	8H	20.4	21.0	21.1	21.6	22.3	16.8	17.3	17.4	17.9	18.6
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.1 / - 0.4					

CIE Pub.117, 3305 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 4.2$ )

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:15 July 2016

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.500m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:230.4V I:0.1348A P:30.46W PF:0.9806 Freq:50.00Hz Lamp Flux:3304.84x1 lm		
NAME: Triproof Light TP S2 Serie 30 Watt 1200mm	TYPE:TP-S2-030_NW/W	
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

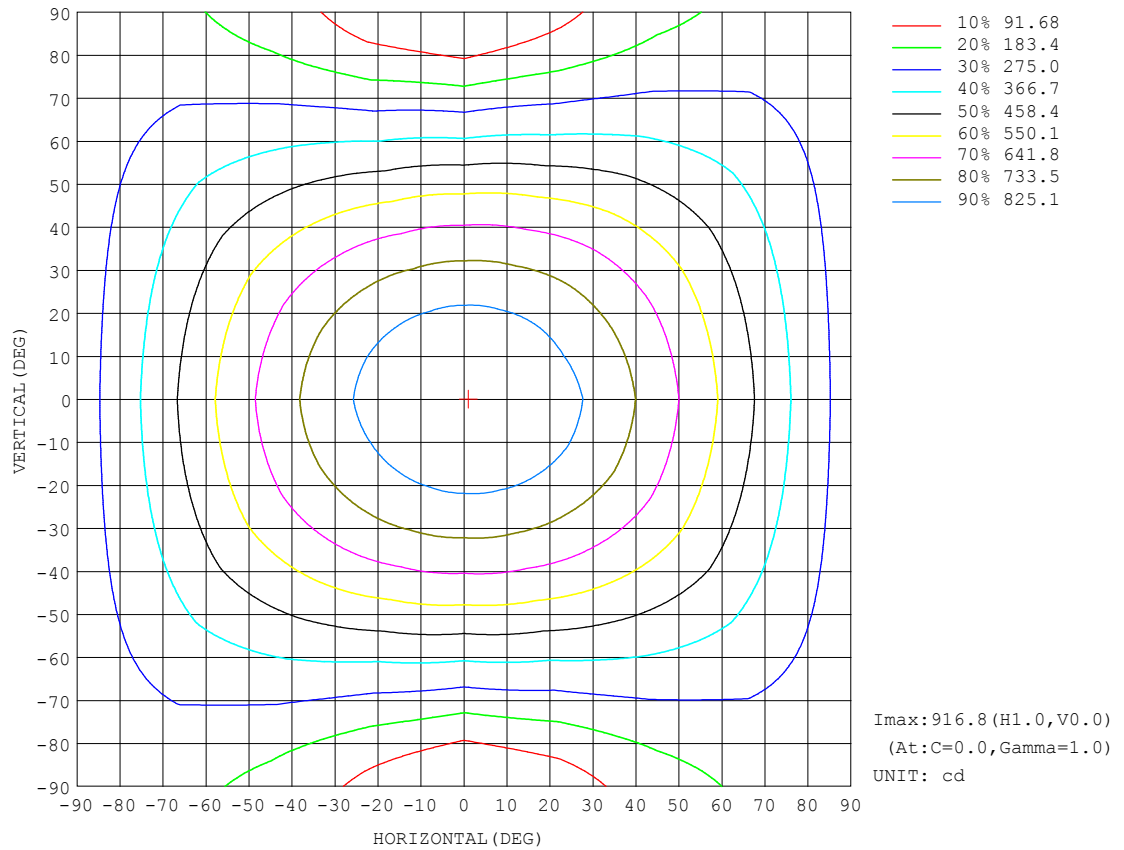
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	52	40	33	51	39	32	49	39	32	25
0.80	61	49	41	60	48	41	58	47	40	33
1.00	69	57	49	68	56	49	65	57	48	40
1.25	76	64	56	74	63	56	71	61	55	46
1.50	81	70	62	79	69	61	75	66	60	51
2.00	88	78	71	86	77	70	81	74	67	58
2.50	93	83	76	90	81	75	85	78	72	61
3.00	96	88	81	93	86	80	88	82	76	65
4.00	101	94	88	98	91	86	92	86	82	70
5.00	103	97	92	100	95	90	94	90	86	73
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:15 July 2016

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.500m [K=1.0000]  
Remarks:

### ISOCANDELA DIAGRAM

Test:U:230.4V I:0.1348A P:30.46W PF:0.9806 Freq:50.00Hz Lamp Flux:3304.84x1 lm		
NAME: Triproof Light TP S2 Serie 30 Watt 1200mm	TYPE:TP-S2-030_NW/W	
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

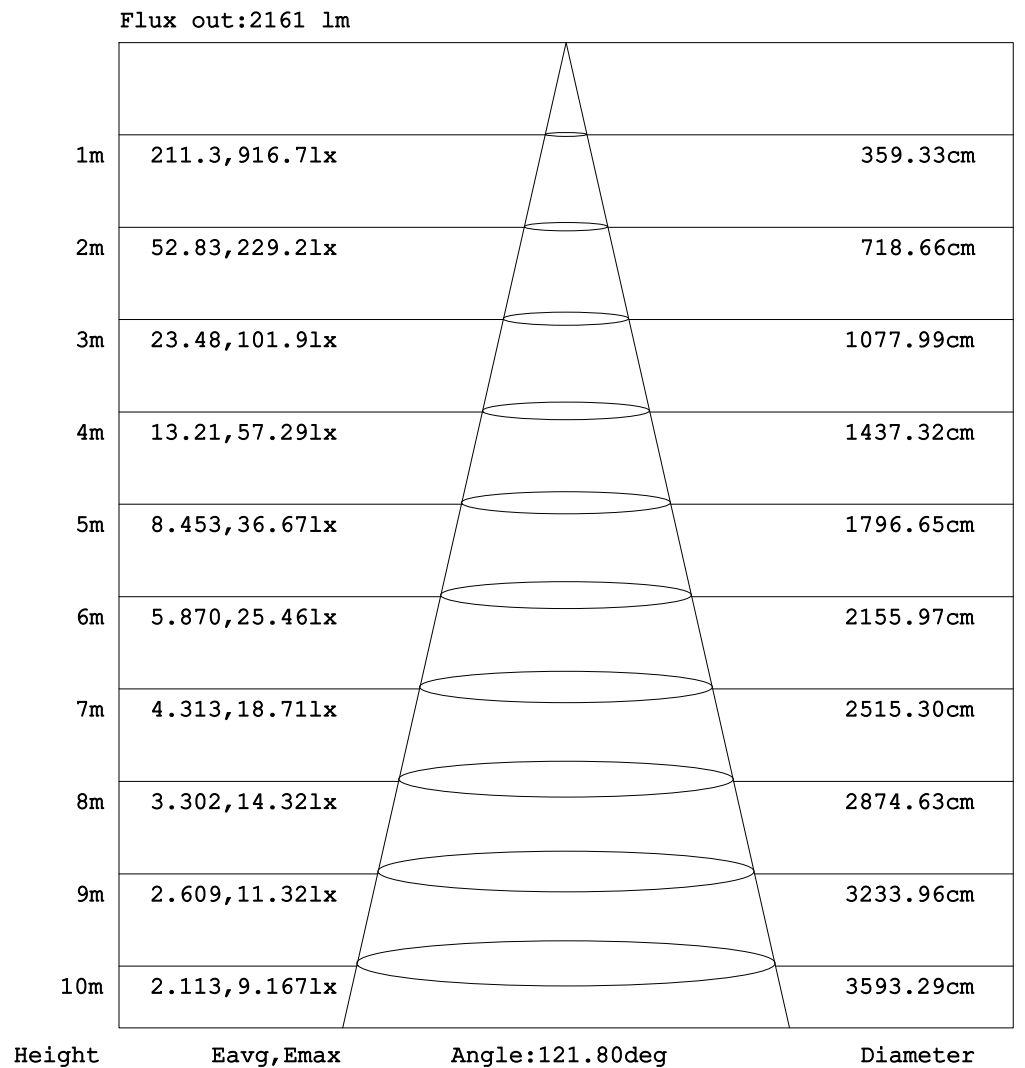


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:15 July 2016

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.500m [K=1.0000]  
Remarks:

**AAI Figure**

Test:U:230.4V I:0.1348A P:30.46W PF:0.9806 Freq:50.00Hz Lamp Flux:3304.84x1 lm		
NAME: Triproof Light TP S2 Serie 30 Watt 1200mm	TYPE:TP-S2-030_NW/W	
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:



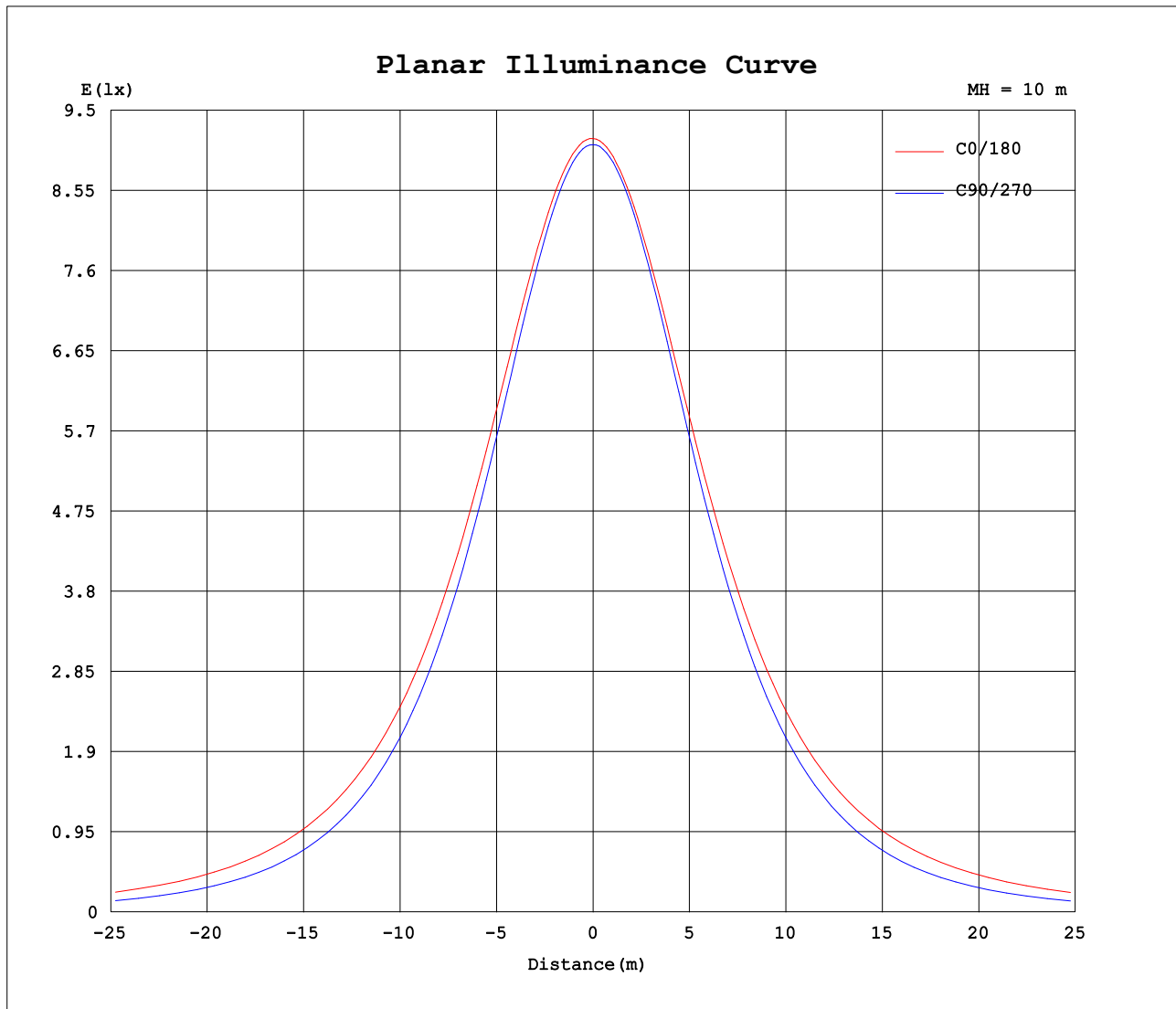
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:15 July 2016

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.500m [K=1.0000]  
 Remarks:



### Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 15 July 2016

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 10.500m [K=1.0000]  
 Remarks:

### LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.4V I:0.1348A P:30.46W PF:0.9806 Freq:50.00Hz Lamp Flux:3304.84x1 lm		
NAME: Triproof Light TP S2 Serie 30 Watt 1200mm	TYPE:TP-S2-030_NW/W	
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	917	914	912	911	909	908	907	906	917	914	912	911	909	908	907	906			
5	914	912	909	907	905	903	902	902	912	909	907	905	905	904	904	903			
10	905	902	898	894	891	889	889	890	900	896	894	891	891	891	893	894			
15	889	886	879	873	869	868	869	871	882	877	873	869	869	870	875	877			
20	868	863	853	844	838	838	842	848	858	852	845	838	838	841	849	855			
25	842	834	820	807	800	801	809	819	830	822	810	800	800	805	817	826			
30	810	800	781	764	755	758	770	785	797	786	770	756	755	762	780	793			
35	773	761	736	714	704	709	727	746	759	746	725	706	703	713	737	755			
40	733	718	687	660	647	655	679	704	718	702	675	650	647	660	689	713			
45	689	672	635	601	586	598	628	659	675	655	622	591	585	602	638	668			
50	642	622	579	538	520	537	575	612	628	606	566	527	519	541	584	619			
55	592	570	520	472	451	473	518	561	579	554	508	461	450	477	528	569			
60	540	516	460	403	379	405	461	510	528	501	448	393	376	411	470	516			
65	486	460	399	333	304	339	403	457	476	447	387	324	301	344	411	462			
70	432	403	339	264	228	273	345	402	424	393	328	255	225	277	351	407			
75	378	348	280	197	152	209	289	350	369	339	270	188	150	213	294	353			
80	326	294	224	135	82.5	151	236	299	319	288	217	128	80.5	153	240	301			
85	277	246	175	83.9	27.2	103	190	253	272	242	171	79.1	26.0	104	193	254			
90	237	206	138	50.9	1.88	71.1	155	216	235	206	137	50.2	2.67	72.2	157	215			
95	204	177	113	34.5	1.66	51.9	129	186	205	176	112	34.3	2.58	52.7	130	185			
100	176	150	91.6	23.8	2.00	38.1	107	160	177	150	91.6	24.1	2.96	38.7	107	158			
105	150	127	73.7	16.9	2.37	28.2	87.5	136	151	127	74.1	17.5	3.44	28.1	79.3	133			
110	126	105	58.6	12.4	2.81	21.1	71.0	114	128	106	59.5	13.3	3.90	21.1	67.5	110			
115	104	86.0	46.2	8.92	3.26	16.1	57.1	94.1	106	87.5	47.5	10.7	4.38	15.4	55.9	87.1			
120	84.6	69.3	32.9	6.97	3.71	12.6	45.3	76.7	87.4	71.1	37.6	8.92	4.85	11.6	41.5	65.9			
125	67.6	54.9	24.2	6.08	4.20	10.1	35.4	61.6	70.5	56.8	29.5	7.90	5.31	9.33	30.0	55.1			
130	52.8	42.3	17.8	5.76	4.68	8.54	27.5	48.4	55.8	44.5	23.1	7.32	5.78	8.09	22.6	45.0			
135	40.2	29.4	13.5	5.80	5.19	7.55	21.2	37.2	43.1	34.3	18.1	7.11	6.24	7.48	16.9	34.3			
140	29.9	20.8	10.6	6.08	5.75	7.05	16.3	28.1	31.7	26.0	14.3	7.13	6.69	7.28	13.0	24.0			
145	21.6	14.9	8.95	6.47	6.28	6.92	12.7	20.8	22.8	19.5	11.6	7.33	7.07	7.37	10.5	16.6			
150	15.5	11.3	8.10	6.91	6.81	7.05	10.2	15.3	17.0	14.6	9.81	7.62	7.44	7.57	9.07	12.2			
155	11.4	9.29	7.90	7.40	7.27	7.36	8.77	11.4	12.8	11.2	8.80	7.89	7.80	7.78	8.43	9.77			
160	9.18	8.43	7.99	7.81	7.71	7.72	8.15	9.21	10.0	9.25	8.37	8.11	8.04	8.01	8.19	8.58			
165	8.41	8.26	8.16	8.15	8.06	8.06	8.10	8.29	8.71	8.41	8.28	8.28	8.18	8.14	8.16	8.26			
170	8.41	8.36	8.37	8.38	8.33	8.32	8.29	8.17	8.64	8.52	8.67	8.67	8.61	8.58	8.50	8.47			
175	8.52	8.51	8.55	8.60	8.53	8.53	8.44	8.32	8.78	8.66	8.77	8.80	8.73	8.68	8.60	8.56			
180	8.83	8.69	8.76	8.80	8.70	8.70	8.62	8.55	8.88	8.68	8.76	8.80	8.71	8.70	8.63	8.55			

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:DAMIN

Test Date:15 July 2016

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362

Humidity:65.0%

Test Distance:10.500m [K=1.0000]

Remarks: