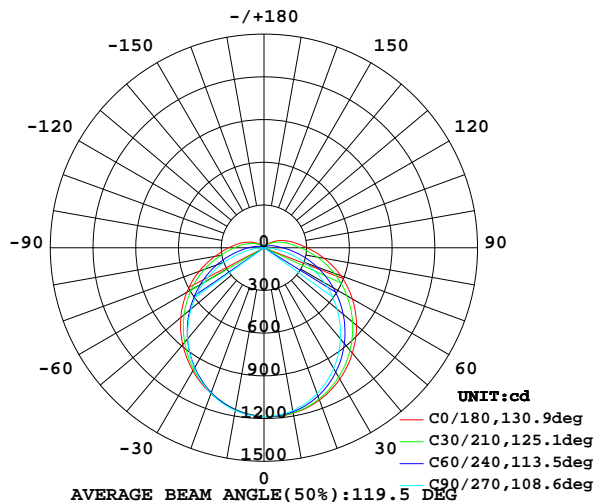


LUMINAIRE PHOTOMETRIC TEST REPORT

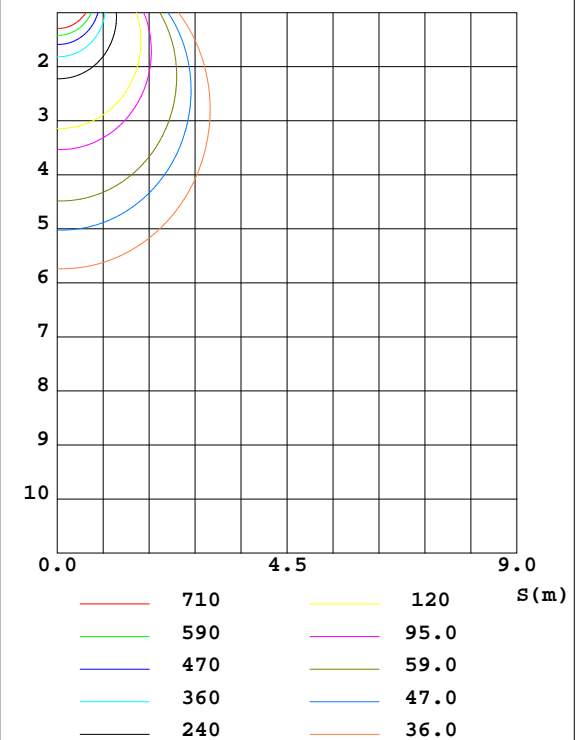
Test:U:230.0V I:0.1410A P:31.70W PF:0.9740 Lamp Flux:4185.16x1 lm		
NAME: UP-TRP08-1200-32W-5000K	TYPE:32W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.:	SUR.:0.129	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 132.02 lm/W			
MODEL:UP-TRP08-1200-32W-5000K		I _{max} (cd)	1188	S/MH(C0/180)	1.34
NOMINAL POWER(W)	32	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	4185.2	η UP,DN(C0-180)	4.5,46.2
NOMINAL FLUX(lm)	4185.16	CIE CLASS	DIRECT	η UP,DN(C180-360)	4.2,45.1
LAMPS INSIDE	1	η up(%)	8.7	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230.0	η down(%)	91.3	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2020-01-10

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	Φ lum, lamp
10	1180	1174	1161	1154	1154	1154	1161	1174	0- 10	112.1	112.1	2.68,2.68
20	1138	1120	1090	1083	1090	1084	1089	1120	10- 20	321.0	433.2	10.4,10.4
30	1065	1029	978.4	978.0	998.6	980.0	976.7	1028	20- 30	487.1	920.3	22,22
40	965.8	909.1	835.5	848.4	887.6	851.4	833.4	907.5	30- 40	591.2	1512	36.1,36.1
50	848.3	768.9	670.3	702.8	762.3	706.8	667.5	766.0	40- 50	625.1	2137	51.1,51.1
60	716.3	616.8	490.0	548.6	626.1	553.5	486.3	612.2	50- 60	590.5	2727	65.2,65.2
70	574.0	461.4	300.9	393.8	484.3	398.7	296.6	455.0	60- 70	497.5	3225	77,77
80	428.9	313.0	121.6	251.3	348.5	257.0	115.7	304.4	70- 80	365.3	3590	85.8,85.8
90	302.1	193.5	15.19	153.0	247.2	158.8	14.49	186.5	80- 90	231.4	3821	91.3,91.3
100	214.6	126.1	10.75	96.73	176.0	101.1	11.73	120.6	90-100	146.4	3968	94.8,94.8
110	148.4	80.20	10.81	57.15	117.7	60.32	10.98	76.24	100-110	93.28	4061	97,97
120	94.86	46.52	11.16	31.69	71.23	33.18	11.26	44.10	110-120	54.47	4115	98.3,98.3
130	53.71	25.76	12.29	18.58	36.72	19.45	12.23	24.05	120-130	29.07	4144	99,99
140	24.89	16.08	14.09	16.28	18.40	16.43	13.85	15.92	130-140	15.24	4160	99.4,99.4
150	17.78	16.64	15.98	17.30	18.54	17.20	15.59	16.46	140-150	10.40	4170	99.6,99.6
160	18.25	17.66	17.45	18.15	18.90	18.06	17.17	17.49	150-160	8.042	4178	99.8,99.8
170	18.78	18.46	18.56	18.98	19.57	18.97	18.42	18.41	160-170	5.182	4183	100,100
180	19.32	18.87	18.90	18.82	19.33	18.90	18.90	18.82	170-180	1.802	4185	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

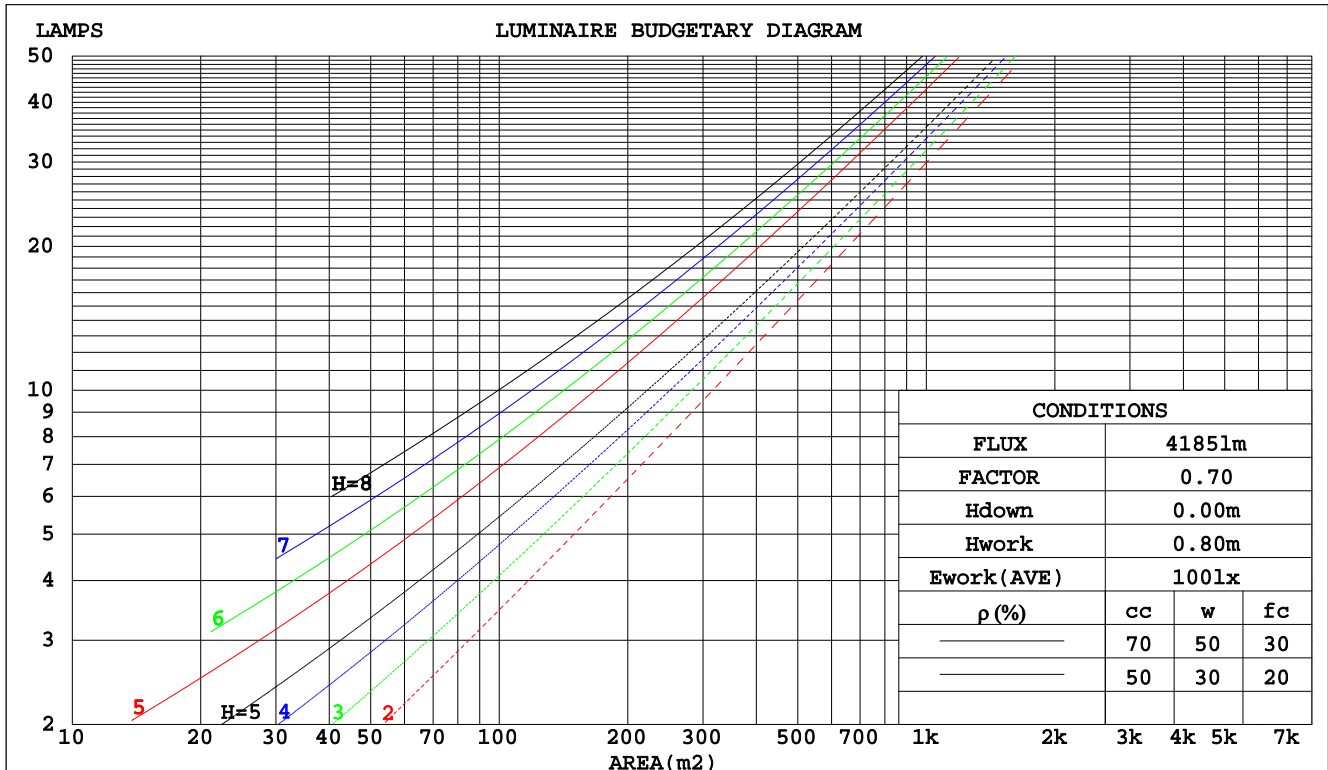
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2020-01-10

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:230.0V I:0.1410A P:31.70W PF:0.9740 Lamp Flux:4185.16x1 lm		
NAME: UP-TRP08-1200-32W-5000K	TYPE:32W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.:	SUR.:0.129	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	1.17	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	.99	.94	.90	.96	.92	.87	.90	.86	.83	.85	.82	.79	.80	.77	.75	.72
2.0	.86	.78	.72	.83	.76	.70	.78	.72	.67	.73	.68	.64	.69	.65	.62	.59
3.0	.75	.66	.59	.72	.64	.58	.68	.61	.56	.64	.58	.54	.60	.56	.52	.49
4.0	.66	.56	.49	.64	.55	.49	.60	.53	.47	.57	.50	.45	.54	.48	.44	.41
5.0	.59	.49	.42	.57	.48	.42	.54	.46	.40	.51	.44	.39	.48	.42	.38	.35
6.0	.53	.43	.37	.51	.42	.36	.48	.41	.35	.46	.39	.34	.43	.38	.33	.31
7.0	.48	.39	.32	.46	.38	.32	.44	.36	.31	.42	.35	.30	.40	.34	.29	.27
8.0	.43	.35	.29	.42	.34	.28	.40	.33	.28	.38	.32	.27	.36	.31	.26	.24
9.0	.40	.31	.26	.39	.31	.25	.37	.30	.25	.35	.29	.24	.34	.28	.24	.22
10.0	.37	.29	.23	.36	.28	.23	.34	.27	.22	.33	.26	.22	.31	.25	.21	.20



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2020-01-10

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:230.0V I:0.1410A P:31.70W PF:0.9740 Lamp Flux:4185.16x1 lm					
NAME: UP-TRP08-1200-32W-5000K			TYPE:32W		WEIGHT:
DIM.:			SPEC.:5000K		SERIAL No.:1
MFR.:			SUR.:0.129		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	.358	.204	.065	.349	.199	.063	.330	.189	.060	.313	.181	.058	.298	.173	.056		
2.0	.319	.175	.054	.310	.171	.053	.294	.163	.051	.278	.156	.049	.264	.149	.047		
3.0	.287	.153	.046	.279	.150	.045	.265	.143	.044	.251	.137	.042	.238	.132	.041		
4.0	.261	.136	.040	.254	.133	.039	.240	.127	.038	.228	.122	.037	.217	.118	.036		
5.0	.238	.121	.035	.232	.119	.035	.220	.115	.034	.209	.110	.033	.198	.106	.032		
6.0	.219	.110	.031	.214	.108	.031	.203	.104	.030	.193	.100	.029	.183	.096	.029		
7.0	.203	.100	.028	.198	.099	.028	.188	.095	.027	.179	.092	.027	.170	.088	.026		
8.0	.189	.092	.026	.184	.091	.026	.175	.087	.025	.167	.084	.024	.159	.082	.024		
9.0	.176	.085	.024	.172	.084	.024	.164	.081	.023	.156	.078	.022	.149	.076	.022		
10.0	.165	.079	.022	.161	.078	.022	.154	.075	.021	.147	.073	.021	.140	.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	.257	.257	.257	.219	.219	.219	.150	.150	.150	.086	.086	.086	.028	.028	.028	
1.0	.250	.222	.197	.214	.191	.170	.147	.131	.117	.084	.076	.068	.027	.024	.022	
2.0	.243	.199	.162	.208	.171	.140	.143	.119	.098	.082	.069	.057	.026	.022	.019	
3.0	.235	.182	.139	.202	.157	.121	.139	.109	.085	.080	.064	.050	.026	.021	.016	
4.0	.228	.169	.124	.195	.146	.108	.134	.102	.076	.078	.060	.045	.025	.019	.015	
5.0	.220	.159	.114	.189	.138	.099	.130	.096	.070	.075	.056	.042	.024	.018	.014	
6.0	.213	.151	.107	.183	.131	.093	.126	.091	.066	.073	.054	.039	.024	.018	.013	
7.0	.206	.144	.101	.177	.125	.088	.122	.088	.062	.071	.052	.037	.023	.017	.012	
8.0	.199	.138	.097	.171	.120	.085	.118	.084	.060	.069	.050	.036	.022	.016	.012	
9.0	.193	.134	.094	.166	.116	.082	.115	.081	.058	.067	.048	.035	.022	.016	.011	
10.0	.187	.129	.091	.161	.112	.079	.112	.079	.056	.065	.047	.034	.021	.015	.011	

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2020-01-10

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:230.0V I:0.1410A P:31.70W PF:0.9740 Lamp Flux:4185.16x1 lm											
NAME: UP-TRP08-1200-32W-5000K						TYPE:32W			WEIGHT:		
DIM.:						SPEC.:5000K			SERIAL No.:1		
MFR.:						SUR.:0.129			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		20.9	22.4	21.3	22.7	23.1	19.5	20.9	19.8	21.3	21.7
3H		23.2	24.6	23.7	25.0	25.4	21.0	22.3	21.4	22.7	23.1
4H		24.5	25.7	24.9	26.2	26.6	21.6	22.9	22.0	23.3	23.7
6H		25.8	27.0	26.2	27.4	27.9	22.0	23.2	22.5	23.6	24.1
8H		26.5	27.6	26.9	28.1	28.5	22.1	23.3	22.6	23.7	24.2
12H		27.3	28.4	27.7	28.8	29.3	22.2	23.3	22.7	23.8	24.3
4H 2H		21.5	22.8	21.9	23.2	23.6	20.4	21.7	20.8	22.1	22.5
3H		24.1	25.2	24.5	25.6	26.1	22.1	23.3	22.6	23.7	24.2
4H		25.5	26.5	26.0	27.0	27.5	22.9	24.0	23.4	24.4	25.0
6H		27.0	27.9	27.5	28.4	28.9	23.5	24.5	24.1	25.0	25.5
8H		27.8	28.6	28.3	29.2	29.7	23.7	24.6	24.3	25.1	25.7
12H		28.7	29.5	29.3	30.0	30.6	23.9	24.7	24.5	25.2	25.8
8H 4H		25.8	26.6	26.3	27.2	27.7	23.7	24.5	24.2	25.1	25.6
6H		27.6	28.3	28.1	28.8	29.5	24.6	25.3	25.2	25.9	26.5
8H		28.6	29.2	29.2	29.8	30.4	25.0	25.6	25.6	26.2	26.9
12H		29.7	30.3	30.4	30.9	31.6	25.3	25.9	25.9	26.5	27.1
12H 4H		25.8	26.6	26.4	27.1	27.7	23.9	24.7	24.5	25.2	25.8
6H		27.7	28.3	28.3	28.9	29.5	25.0	25.6	25.6	26.2	26.8
8H		28.8	29.4	29.4	29.9	30.6	25.5	26.1	26.1	26.7	27.3
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 4185 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.0)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2020-01-10

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:

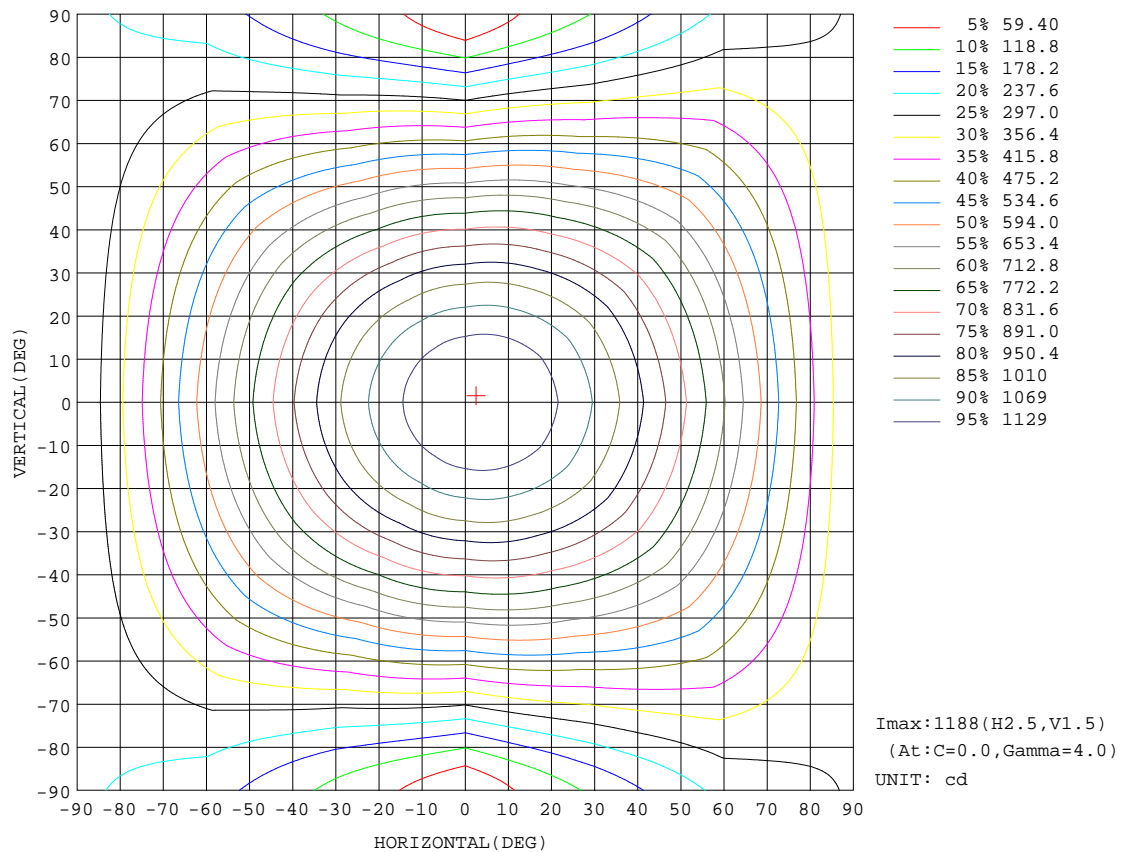
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γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
Humidity:65.0%
Test Distance:9.443m [K=1.0000]
Remarks:

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ISOCANDELA DIAGRAM

Test:U:230.0V I:0.1410A P:31.70W PF:0.9740 Lamp Flux:4185.16x1 lm		
NAME: UP-TRP08-1200-32W-5000K	TYPE:32W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.:	SUR.:0.129	PROTECTION ANGLE:

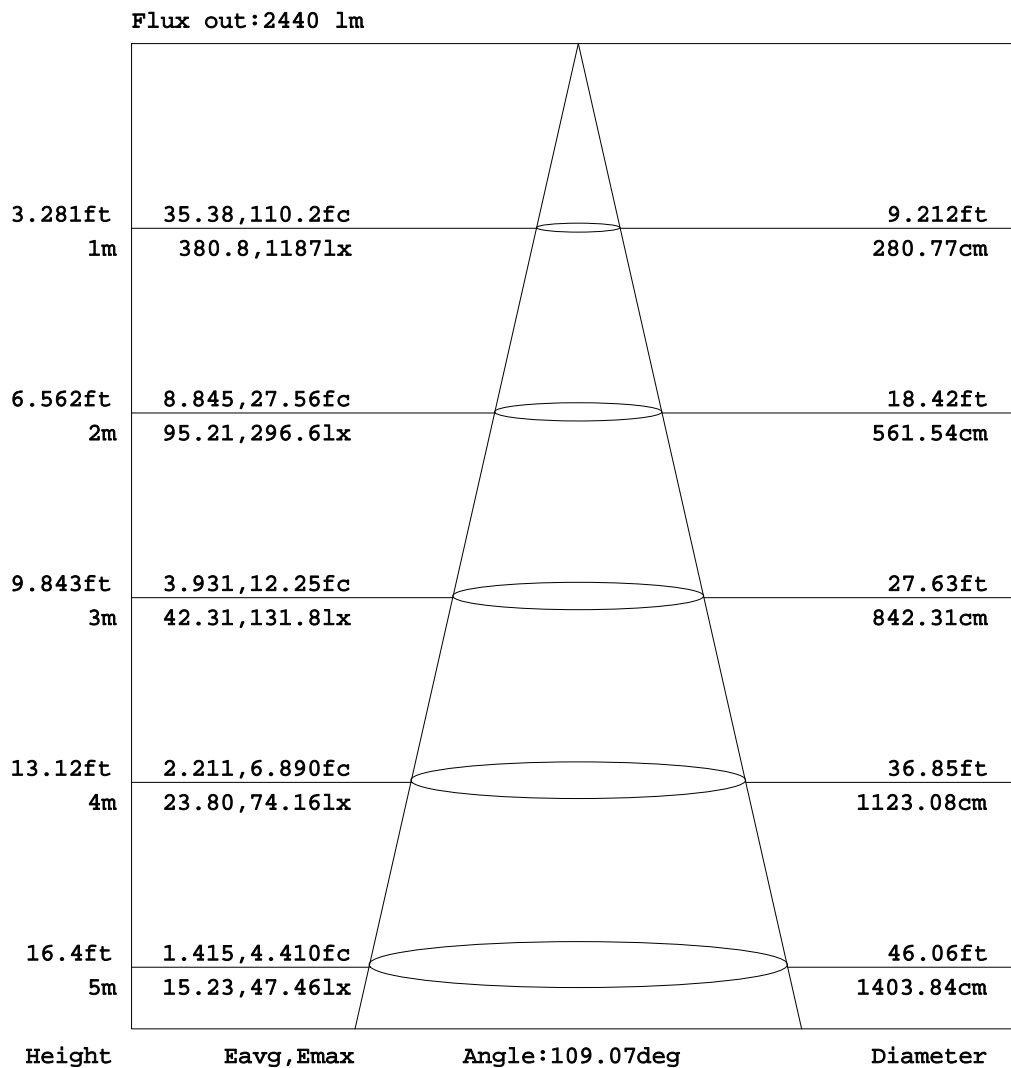


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2020-01-10

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:230.0V I:0.1410A P:31.70W PF:0.9740 Lamp Flux:4185.16x1 lm		
NAME: UP-TRP08-1200-32W-5000K	TYPE:32W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.:	SUR.:0.129	PROTECTION ANGLE:



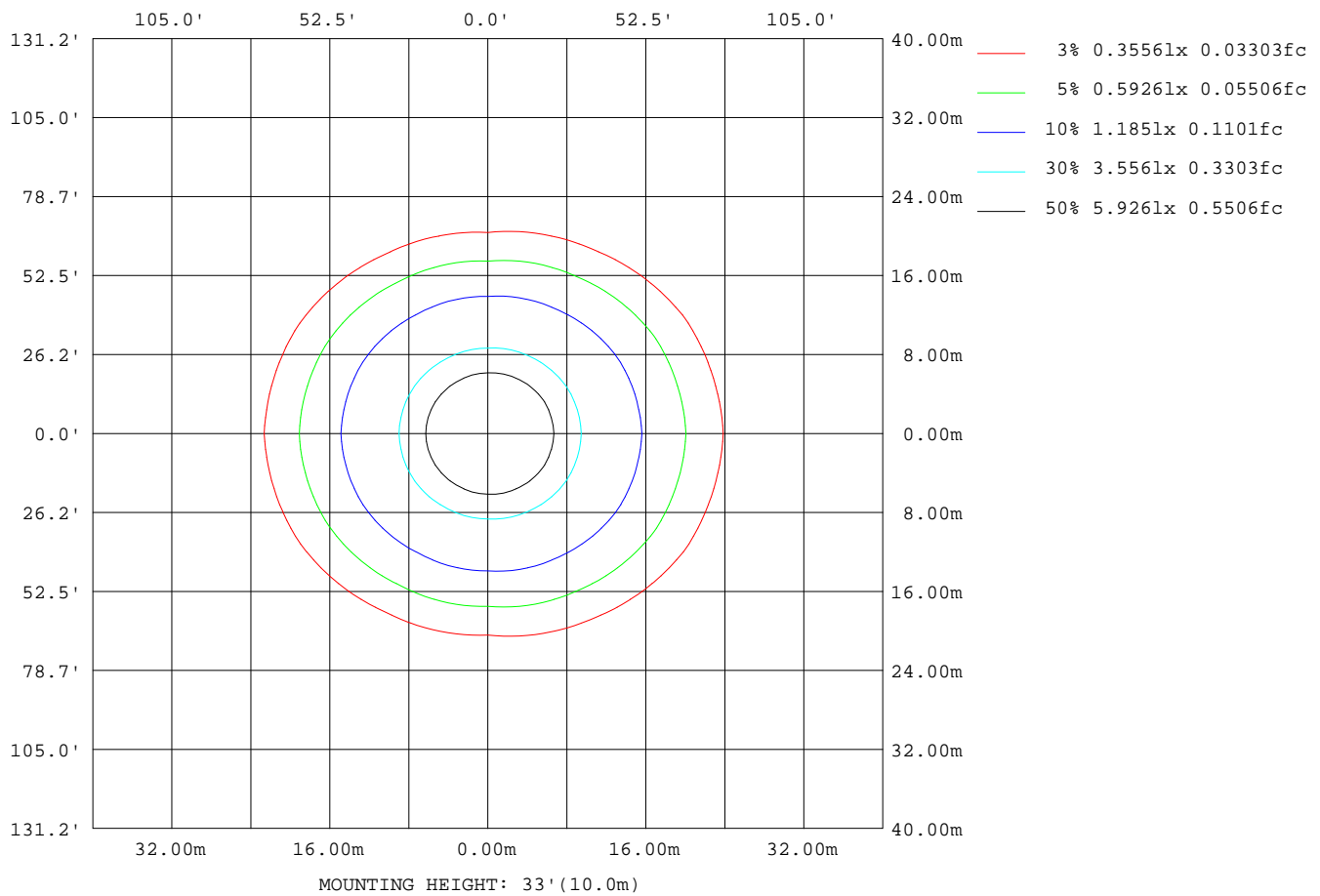
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2020-01-10

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

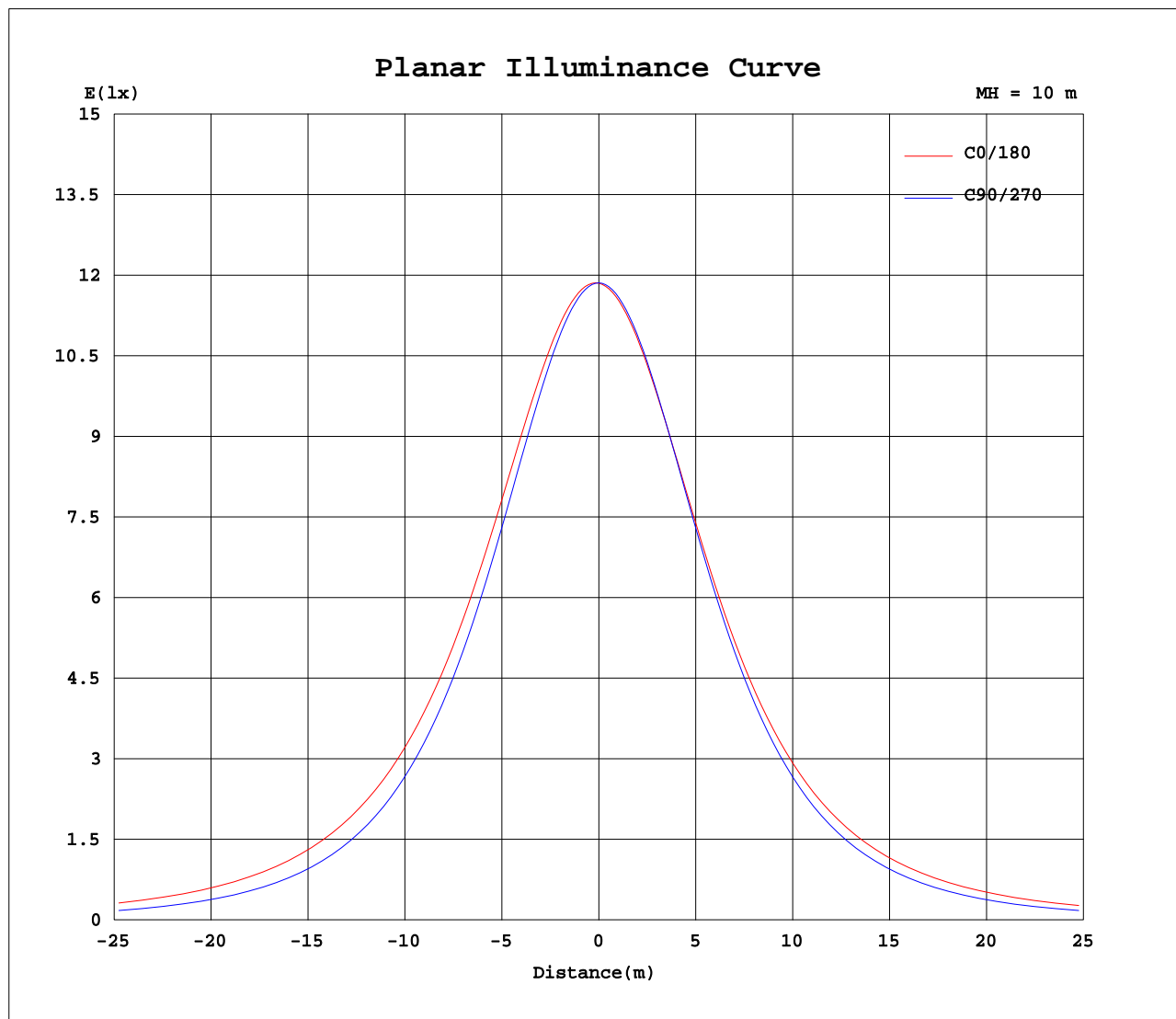
Test:U:230.0V I:0.1410A P:31.70W PF:0.9740 Lamp Flux:4185.16x1 lm		
NAME: UP-TRP08-1200-32W-5000K	TYPE:32W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.:	SUR.:0.129	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2020-01-10

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: 2020-01-10

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.0V I:0.1410A P:31.70W PF:0.9740 Lamp Flux:4185.16x1 lm		
NAME: UP-TRP08-1200-32W-5000K	TYPE:32W	WEIGHT:
DIM.:	SPEC.:5000K	SERIAL No.:1
MFR.:	SUR.:0.129	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEC)	0	30	60	90	120	150	180	210	240	270	300	330							
γ (DEC)																			
0	1186	1186	1186	1186	1186	1186	1186	1186	1186	1186	1186	1186							
5	1188	1187	1184	1180	1176	1174	1174	1175	1176	1179	1184	1187							
10	1180	1178	1170	1161	1155	1153	1154	1153	1155	1161	1170	1178							
15	1164	1159	1145	1131	1123	1123	1126	1123	1124	1130	1145	1159							
20	1138	1130	1109	1090	1081	1084	1090	1085	1082	1089	1109	1130							
25	1105	1094	1063	1039	1030	1038	1047	1040	1031	1037	1063	1093							
30	1065	1049	1009	978	970	986	999	988	972	977	1008	1048							
35	1019	998	947	910	904	927	945	930	907	908	946	996							
40	966	940	878	836	832	864	888	867	836	833	877	938							
45	909	878	804	755	756	798	826	802	760	753	802	875							
50	848	812	726	670	676	729	762	733	680	668	723	809							
55	784	743	645	582	594	658	695	662	599	578	641	739							
60	716	672	562	490	511	586	626	590	517	486	557	667							
65	646	599	479	397	429	512	555	517	434	392	473	594							
70	574	525	398	301	348	440	484	444	354	297	390	520							
75	501	452	319	208	270	369	415	373	276	203	309	446							
80	429	381	246	122	200	303	348	308	206	116	235	374							
85	361	312	180	51.0	141	248	293	253	149	46.4	170	308							
90	302	256	131	15.2	102	204	247	209	109	14.5	122	251							
95	254	212	98.8	12.8	75.0	169	210	173	81.4	13.0	91.1	207							
100	215	177	75.7	10.7	54.5	139	176	142	59.9	11.7	69.2	172							
105	179	146	57.1	10.7	38.5	112	145	115	43.1	11.0	50.6	142							
110	148	118	41.9	10.8	26.5	87.8	118	90.6	30.1	11.0	37.3	115							
115	120	94.1	29.1	10.9	17.9	67.0	93.1	69.5	20.4	11.0	26.2	91.3							
120	94.9	72.8	20.2	11.2	14.0	49.3	71.2	51.3	15.1	11.3	18.2	70.0							
125	72.8	54.6	15.2	11.6	14.0	34.6	52.5	36.2	14.8	11.7	14.0	51.6							
130	53.7	37.1	14.4	12.3	14.2	22.9	36.7	24.1	14.8	12.2	14.1	34.1							
135	37.7	24.7	14.5	13.1	14.7	17.0	24.1	17.4	15.0	13.0	14.4	23.9							
140	24.9	17.4	14.8	14.1	15.3	17.2	18.4	17.4	15.4	13.9	14.8	17.1							
145	17.6	16.6	15.4	15.1	16.0	17.6	18.4	17.6	16.0	14.7	15.3	16.6							
150	17.8	17.1	16.2	16.0	16.8	17.8	18.5	17.8	16.6	15.6	16.0	16.9							
155	18.0	17.5	16.9	16.8	17.4	18.1	18.7	18.0	17.2	16.4	16.6	17.3							
160	18.3	17.8	17.5	17.5	18.0	18.3	18.9	18.3	17.8	17.2	17.3	17.7							
165	18.5	18.1	18.0	18.1	18.5	18.7	19.2	18.7	18.4	17.9	17.9	18.1							
170	18.8	18.5	18.4	18.6	19.0	18.9	19.6	19.0	18.9	18.4	18.4	18.4							
175	19.0	18.7	18.6	18.8	19.1	19.1	19.5	19.2	19.1	18.7	18.7	18.7							
180	19.3	18.9	18.8	18.9	18.8	18.8	19.3	18.9	18.9	18.9	18.8	18.8							

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2020-01-10

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: