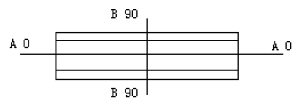
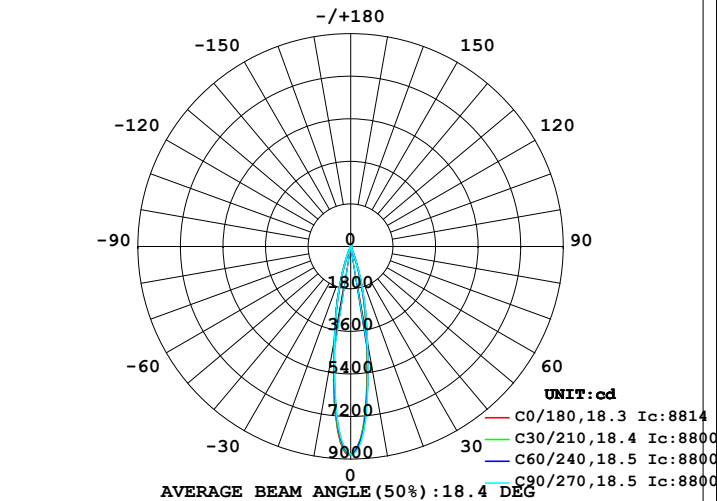


LUMINAIRE PHOTOMETRIC TEST REPORT

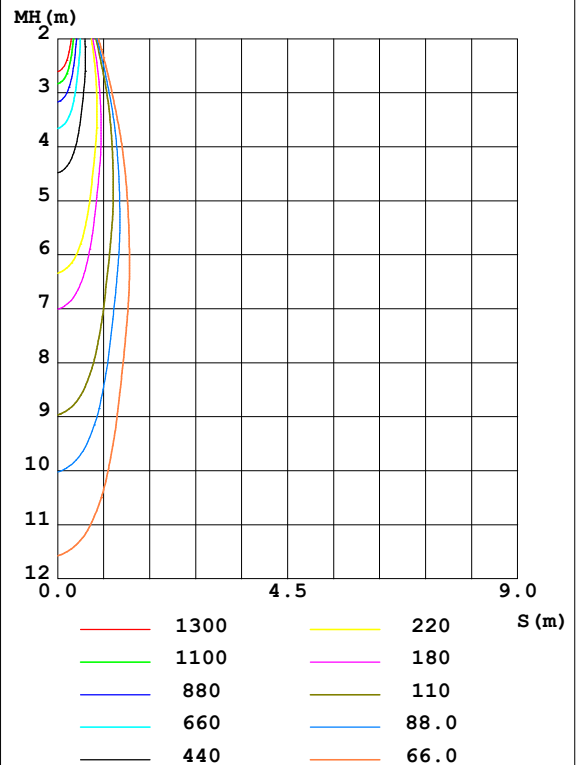
Test:U:225.2V I:0.0910A P:19.70W PF:0.9540 Freq:50.00Hz Lamp Flux:1212.78x1 lm					
NAME: REG2095RF-20G30-S		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:85		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 61.56 lm/W
MODEL	3000K CRI90	I _{max} (cd)	8846	S/MH(C0/180)	0.32	
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	0.31	
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	1212.8	η UP,DN(C0-180)	0.0,51.3	
NOMINAL FLUX(lm)	1212.78	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.7	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE(V)	225.1	η down(%)	100.0	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: AE
 Test Date: 2019-11-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.265
 Humidity: 65.0%
 Test Distance: 7.240m [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
10	3905	4114	4107	4184	4007	3865	3902	3793	0- 10	573.4	573.4	47.3, 47.3
20	615.9	658.2	643.3	696.0	657.6	581.7	596.3	574.3	10- 20	542.4	1116	92, 92
30	43.89	46.58	47.25	46.87	44.54	43.70	44.60	42.69	20- 30	76.78	1193	98.3, 98.3
40	9.113	9.182	9.336	9.561	9.416	8.967	8.913	8.781	30- 40	14.97	1208	99.6, 99.6
50	1.720	1.585	1.653	1.731	1.652	1.631	1.699	1.766	40- 50	3.607	1211	99.9, 99.9
60	0.3044	0.1668	0.3644	0.1957	0.2054	0.2461	0.3185	0.4527	50- 60	0.7306	1212	99.9, 99.9
70	0.0815	0.0899	0.0741	0.0985	0.2885	0.2883	0.3208	0.3026	60- 70	0.1182	1212	99.9, 99.9
80	0.3930	0.3981	0.3986	0.4053	0.3777	0.4174	0.3948	0.4365	70- 80	0.3224	1212	100, 100
90	0.7050	0.6903	0.6844	0.7079	0.1675	0.1794	0.1838	0.1888	80- 90	0.4694	1213	100, 100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1210 lm

%lum = 99.8%

%lamp = 99.8%

Conical surface Flux(120deg): 1211.9 lm

%lum = 99.9%

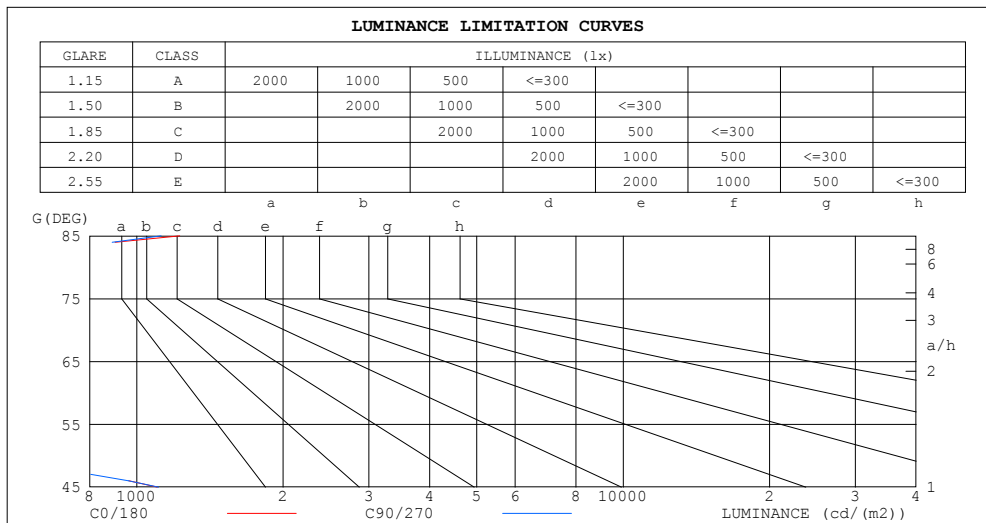
%lamp = 99.9%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: AE
 Test Date: 2019-11-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.265
 Humidity: 65.0%
 Test Distance: 7.240m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:225.2V I:0.0910A P:19.70W PF:0.9540 Freq:50.00Hz Lamp Flux:1212.78x1 lm		
NAME: REG2095RF-20G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:85	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1225	1123
80	401	405
75	165	157
70	42	38
65	0	0
60	108	129
55	254	248
50	474	453
45	1102	1109

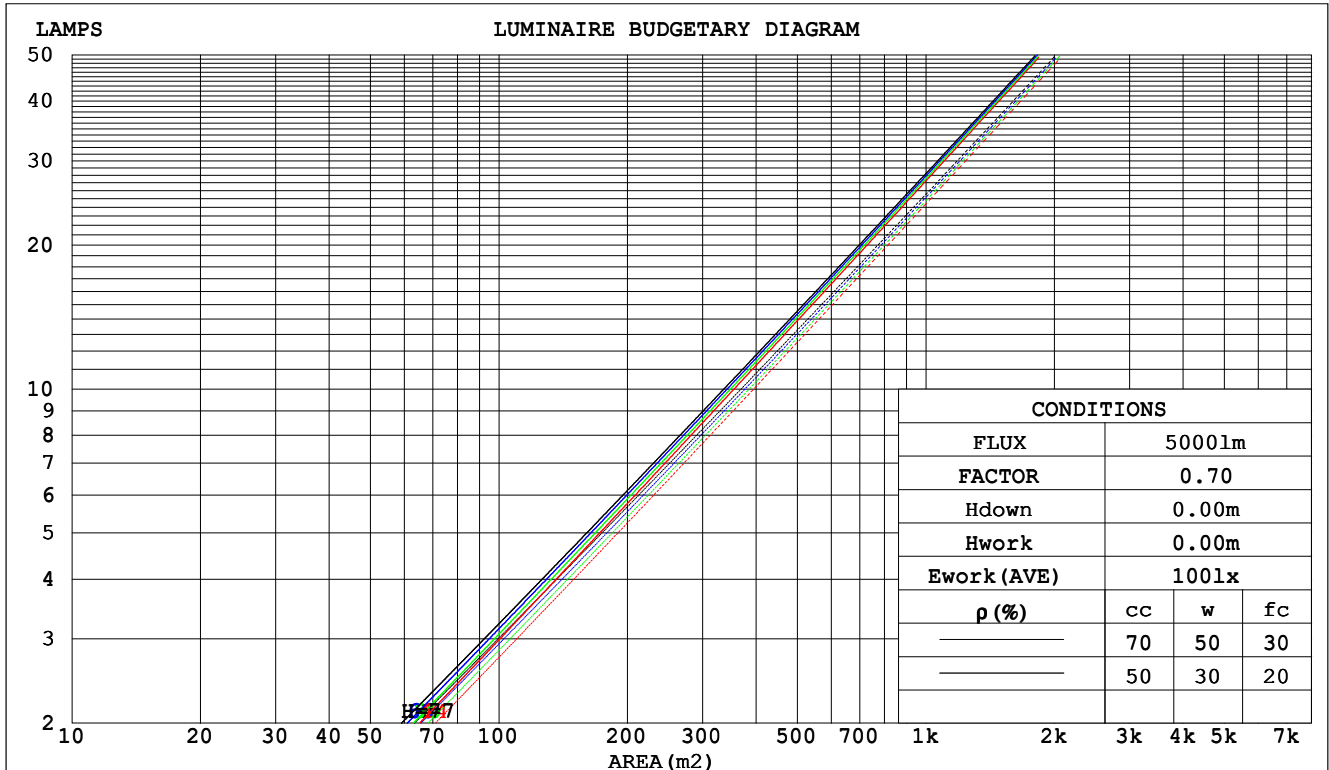
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2019-11-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:225.2V I:0.0910A P:19.70W PF:0.9540 Freq:50.00Hz Lamp Flux:1212.78x1 lm		
NAME: REG2095RF-20G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:85	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						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	1.14	1.12	1.10	1.11	1.10	1.09	1.07	1.06	1.05	1.04	1.03	1.02	1.00	.00	.99	.98
2.0	1.09	1.06	1.04	1.07	1.05	1.03	1.04	1.02	1.01	1.01	.00	.99	.99	.98	.97	.95
3.0	1.05	1.02	.99	1.04	1.01	.99	1.01	.99	.97	.99	.97	.96	.97	.96	.94	.93
4.0	1.02	.98	.96	1.01	.98	.95	.99	.96	.94	.97	.95	.93	.95	.94	.92	.91
5.0	.99	.95	.93	.98	.95	.92	.97	.94	.92	.95	.93	.91	.94	.92	.90	.89
6.0	.96	.93	.90	.96	.92	.90	.94	.91	.89	.93	.91	.89	.92	.90	.88	.87
7.0	.94	.90	.88	.93	.90	.88	.92	.89	.87	.91	.89	.87	.90	.88	.86	.86
8.0	.92	.88	.86	.91	.88	.86	.90	.87	.85	.90	.87	.85	.89	.86	.85	.84
9.0	.90	.86	.84	.89	.86	.84	.89	.86	.84	.88	.85	.83	.87	.85	.83	.82
10.0	.88	.84	.82	.87	.84	.82	.87	.84	.82	.86	.84	.82	.86	.83	.82	.81



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2019-11-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
 Humidity:65.0%
 Test Distance:7.240m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:225.2V I:0.0910A P:19.70W PF:0.9540 Freq:50.00Hz Lamp Flux:1212.78x1 lm					
NAME: REG2095RF-20G30-S			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:85		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	.124	.071	.022	.118	.067	.021	.105	.060	.019	.094	.054	.017	.083	.048	.016	
2.0	.113	.062	.019	.108	.059	.018	.098	.054	.017	.089	.050	.016	.080	.045	.014	
3.0	.105	.056	.017	.100	.054	.016	.092	.050	.015	.084	.046	.014	.077	.043	.013	
4.0	.097	.050	.015	.093	.049	.014	.086	.046	.014	.080	.043	.013	.074	.040	.012	
5.0	.091	.046	.013	.088	.045	.013	.082	.043	.013	.076	.040	.012	.071	.038	.011	
6.0	.085	.043	.012	.083	.042	.012	.078	.040	.012	.073	.038	.011	.069	.036	.011	
7.0	.081	.040	.011	.078	.039	.011	.074	.037	.011	.070	.036	.010	.066	.034	.010	
8.0	.077	.037	.011	.075	.037	.010	.071	.035	.010	.067	.034	.010	.064	.033	.010	
9.0	.073	.035	.010	.071	.035	.010	.068	.034	.010	.065	.033	.009	.062	.031	.009	
10.0	.070	.033	.009	.068	.033	.009	.065	.032	.009	.063	.031	.009	.060	.030	.009	

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	.167	.158	.149	.143	.135	.128	.098	.093	.089	.056	.054	.052	.018	.017	.017	
2.0	.148	.133	.120	.127	.114	.103	.087	.079	.072	.050	.046	.042	.016	.015	.014	
3.0	.133	.113	.098	.114	.098	.085	.078	.068	.059	.045	.040	.035	.014	.013	.011	
4.0	.119	.098	.081	.102	.084	.070	.070	.059	.050	.041	.034	.029	.013	.011	.010	
5.0	.108	.085	.068	.093	.074	.059	.064	.051	.042	.037	.030	.025	.012	.010	.008	
6.0	.099	.075	.058	.085	.065	.050	.059	.045	.035	.034	.027	.021	.011	.009	.007	
7.0	.091	.066	.049	.078	.058	.043	.054	.040	.030	.031	.024	.018	.010	.008	.006	
8.0	.084	.059	.043	.072	.052	.037	.050	.036	.026	.029	.021	.016	.009	.007	.005	
9.0	.078	.054	.037	.067	.047	.032	.047	.033	.023	.027	.019	.014	.009	.006	.005	
10.0	.073	.049	.033	.063	.042	.028	.044	.030	.020	.025	.018	.012	.008	.006	.004	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2019-11-15

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:225.2V I:0.0910A P:19.70W PF:0.9540 Freq:50.00Hz Lamp Flux:1212.78x1 lm											
NAME: REG2095RF-20G30-S					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.:					SUR.:85			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		-1.3	-0.7	-1.1	-0.6	-0.4	-1.2	-0.6	-1.0	-0.5	-0.3
	3H	-1.4	-0.9	-1.2	-0.7	-0.5	-1.3	-0.8	-1.1	-0.6	-0.4
	4H	-1.5	-1.0	-1.2	-0.8	-0.6	-1.4	-0.9	-1.1	-0.7	-0.5
	6H	-1.4	-0.9	-1.1	-0.7	-0.5	-1.3	-0.8	-1.0	-0.6	-0.4
	8H	-1.2	-0.8	-1.0	-0.5	-0.3	-1.1	-0.7	-0.9	-0.4	-0.2
	12H	-0.8	-0.4	-0.5	-0.1	0.1	-0.8	-0.3	-0.5	-0.1	0.2
4H	2H	-1.5	-1.0	-1.2	-0.8	-0.6	-1.4	-0.9	-1.1	-0.7	-0.5
	3H	-1.7	-1.2	-1.4	-1.0	-0.7	-1.6	-1.1	-1.2	-0.8	-0.6
	4H	-1.7	-1.3	-1.4	-1.0	-0.7	-1.6	-1.2	-1.3	-0.9	-0.6
	6H	-1.5	-1.2	-1.2	-0.8	-0.5	-1.4	-1.1	-1.1	-0.7	-0.4
	8H	-1.2	-0.9	-0.8	-0.5	-0.2	-1.1	-0.8	-0.7	-0.4	-0.1
	12H	-0.5	-0.2	-0.1	0.2	0.6	-0.5	-0.2	-0.1	0.2	0.6
8H	4H	-1.8	-1.5	-1.4	-1.1	-0.8	-1.7	-1.4	-1.3	-1.0	-0.7
	6H	-1.5	-1.2	-1.1	-0.8	-0.4	-1.4	-1.1	-1.0	-0.7	-0.3
	8H	-1.0	-0.7	-0.5	-0.3	0.1	-0.9	-0.6	-0.4	-0.2	0.2
	12H	0.1	0.4	0.6	0.8	1.3	0.1	0.4	0.6	0.8	1.3
12H	4H	-1.8	-1.5	-1.4	-1.1	-0.8	-1.7	-1.4	-1.3	-1.0	-0.7
	6H	-1.4	-1.2	-1.0	-0.8	-0.3	-1.3	-1.1	-0.9	-0.7	-0.2
	8H	-0.8	-0.6	-0.3	-0.1	0.3	-0.7	-0.5	-0.3	-0.1	0.4
Variations with the observer position at spacings:											
S = 1.0H	+ 2.3 / - 2.6					+ 2.6 / - 2.7					
1.5H	+ 4.2 / - 2.8					+ 4.5 / - 2.8					
2.0H	+ 2.8 / - 0.9					+ 2.8 / - 0.9					

CIE Pub.117, 1213 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.7)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2019-11-15

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:225.2V I:0.0910A P:19.70W PF:0.9540 Freq:50.00Hz Lamp Flux:1212.78x1 lm		
NAME: REG2095RF-20G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:85	Shielding Angle:

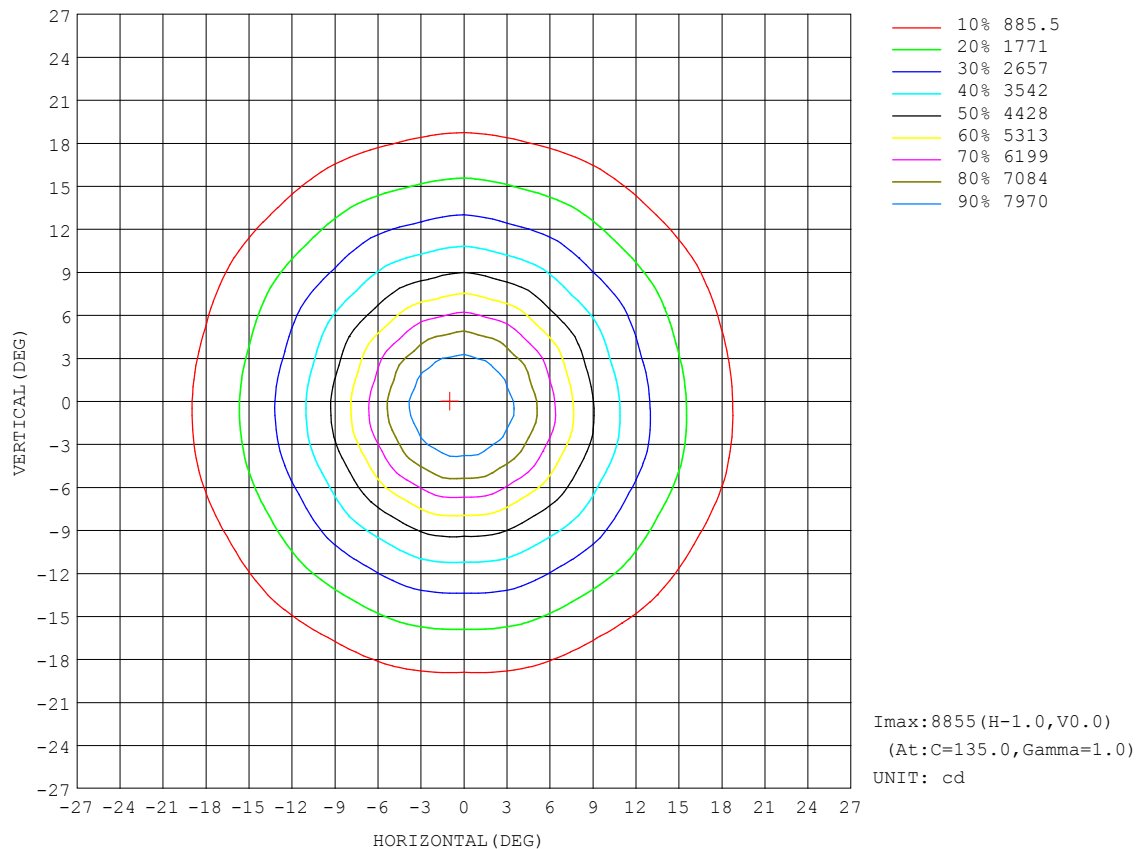
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	91	86	82	91	86	82	90	85	82	79
0.80	98	93	90	98	93	90	96	92	89	86
1.00	102	97	94	101	97	93	100	96	93	89
1.25	105	101	98	104	100	97	103	99	97	93
1.50	108	104	101	107	103	100	104	101	99	95
2.00	110	106	103	109	105	103	106	103	101	96
2.50	111	108	105	110	107	104	107	104	103	97
3.00	113	110	107	111	108	106	108	106	104	98
4.00	115	112	110	113	111	109	109	107	106	99
5.00	116	114	112	114	112	111	110	109	107	100
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2019-11-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:225.2V I:0.0910A P:19.70W PF:0.9540 Freq:50.00Hz Lamp Flux:1212.78x1 lm		
NAME: REG2095RF-20G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:85	Shielding Angle:

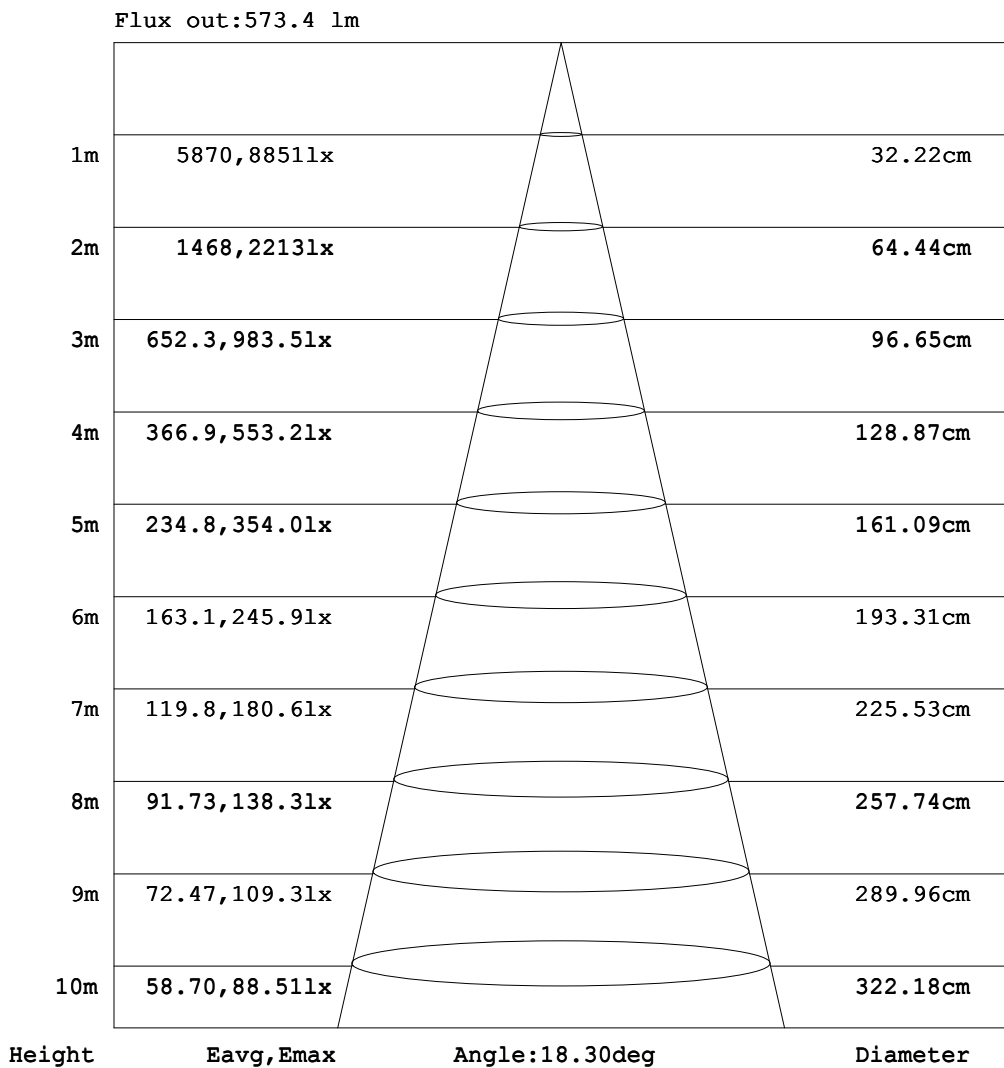


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2019-11-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

AAI Figure

Test:U:225.2V I:0.0910A P:19.70W PF:0.9540 Freq:50.00Hz Lamp Flux:1212.78x1 lm		
NAME: REG2095RF-20G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:85	Shielding Angle:



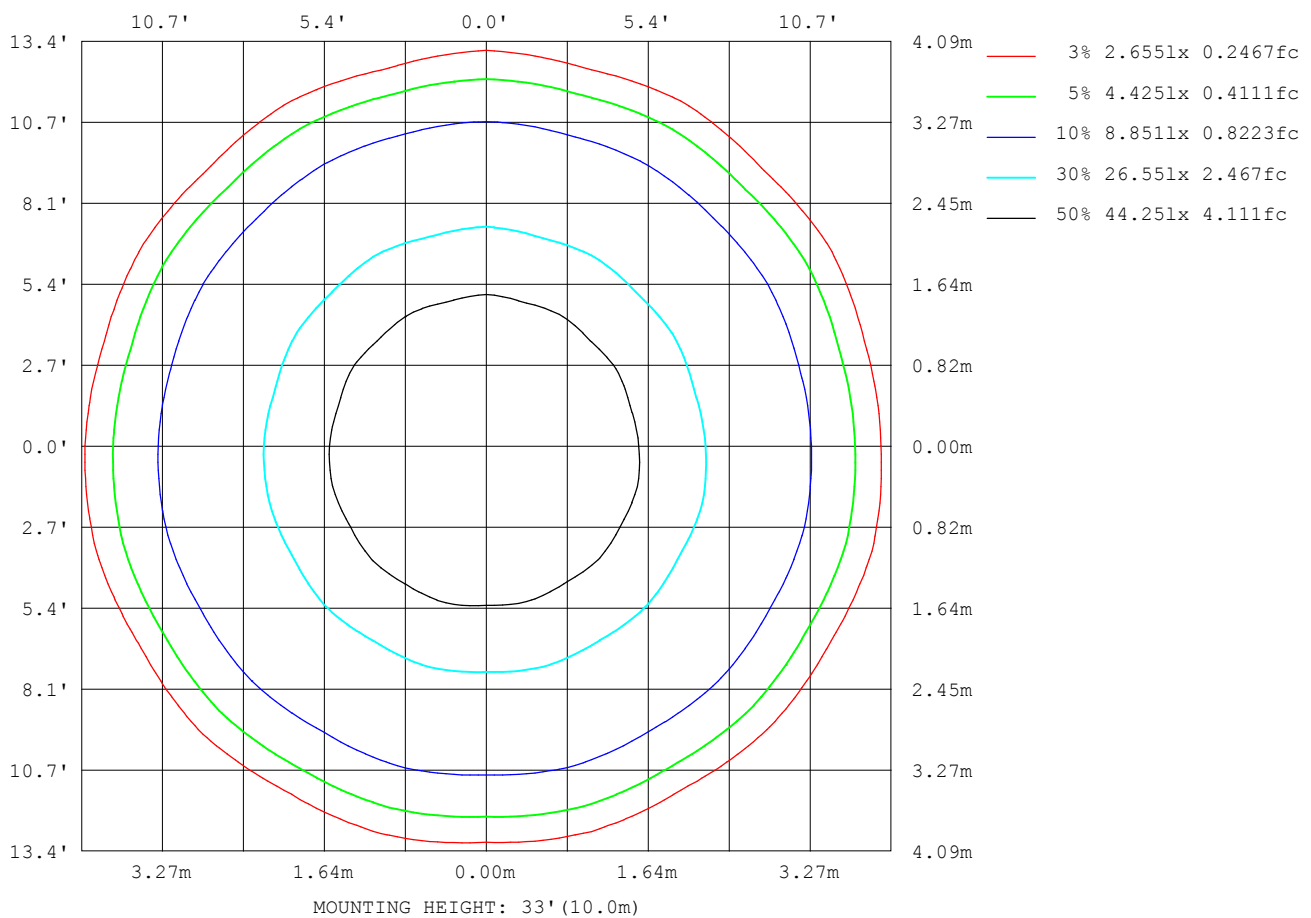
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2019-11-15

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:225.2V I:0.0910A P:19.70W PF:0.9540 Freq:50.00Hz Lamp Flux:1212.78x1 lm		
NAME: REG2095RF-20G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:85	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2019-11-15

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:225.2V I:0.0910A P:19.70W PF:0.9540 Freq:50.00Hz Lamp Flux:1212.78x1 lm		
NAME: REG2095RF-20G30-S	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:85	Shielding Angle:

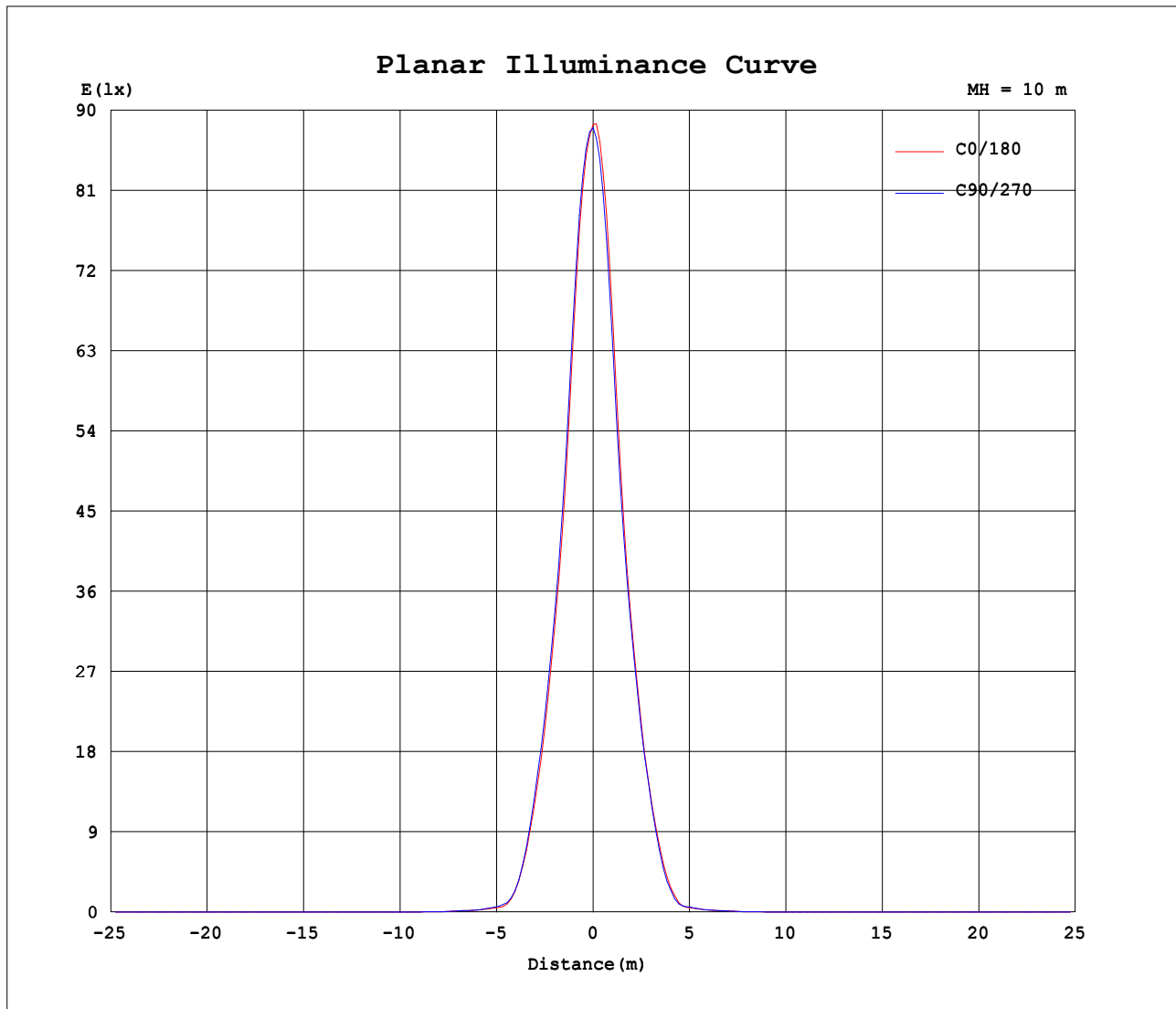
AvgL	cd/m2
L_0~180 (65) av	37
L_0~180 (75) av	204
L_0~180 (85) av	908
L_90~270 (65) av	41
L_90~270 (75) av	214
L_90~270 (85) av	873
L_45 (65) av	36
L_45 (75) av	211
L_45 (85) av	913

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2019-11-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
 Humidity:65.0%
 Test Distance:7.240m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: AE
Test Date: 2019-11-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity: 65.0%
Test Distance: 7.240m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

```