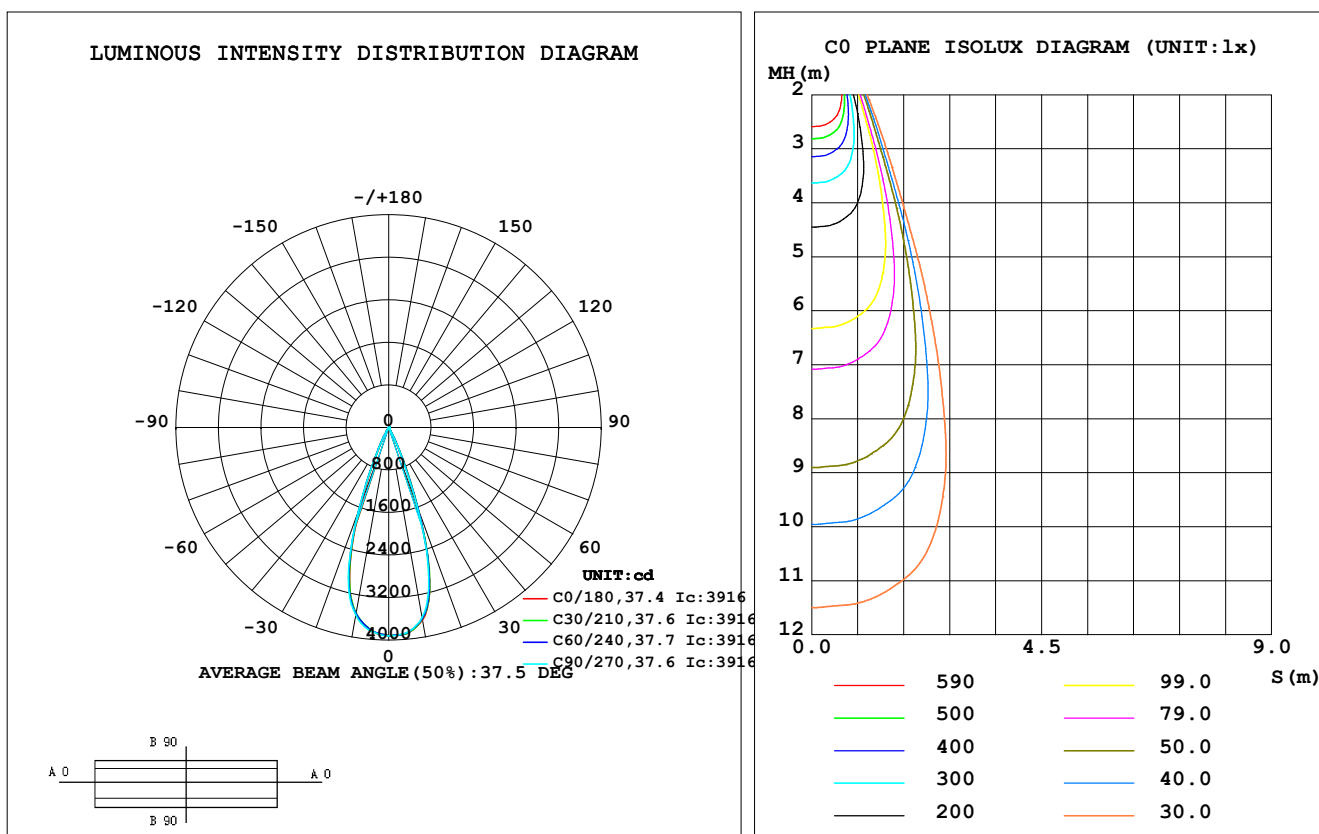


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:225.2V I:0.0920A P:19.70W PF:0.9530 Freq:50.00Hz Lamp Flux:1434.32x1 lm					
NAME: REG2095RF-20G40-F			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:85		Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 72.81 lm/W
MODEL	4000K CRI90	I _{max} (cd)	3930	S/MH(C0/180)	0.55	
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	0.56	
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	1434.3	η UP,DN(C0-180)	0.0,49.9	
NOMINAL FLUX(lm)	1434.32	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.1	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50	
TEST VOLTAGE(V)	225.1	η down(%)	100.0	CIBSE SHR MAX	0.55	



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: AE
 Test Date: 2020-04-17

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	3675	3670	3626	3626	3571	3536	3578	3637	0- 10	360.9	360.9	25.2,25.2
20	1609	1677	1551	1581	1547	1579	1660	1637	10- 20	767.7	1129	78.7,78.7
30	111.6	124.4	107.6	122.9	119.0	137.8	125.9	121.3	20- 30	274.0	1403	97.8,97.8
40	15.08	13.90	12.82	13.54	13.98	15.92	16.76	16.54	30- 40	24.22	1427	99.5,99.5
50	1.818	1.414	1.426	1.333	1.556	2.184	2.815	2.658	40- 50	5.426	1432	99.9,99.9
60	0.3680	0.1287	0.1451	0.1338	0.3093	0.4760	0.6112	0.7012	50- 60	0.8132	1433	99.9,99.9
70	0.2085	0.2341	0.2309	0.2286	0.3409	0.3617	0.3673	0.3739	60- 70	0.2745	1433	99.9,99.9
80	0.4754	0.5070	0.4861	0.5159	0.3496	0.3703	0.3755	0.3739	70- 80	0.3809	1434	100,100
90	0.8622	0.8614	0.8785	0.8660	0.3557	0.3586	0.3608	0.3700	80- 90	0.5683	1434	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): 1430.7 lm

%lum = 99.7%

%lamp = 99.7%

Conical surface Flux(120deg): 1433.1 lm

%lum = 99.9%

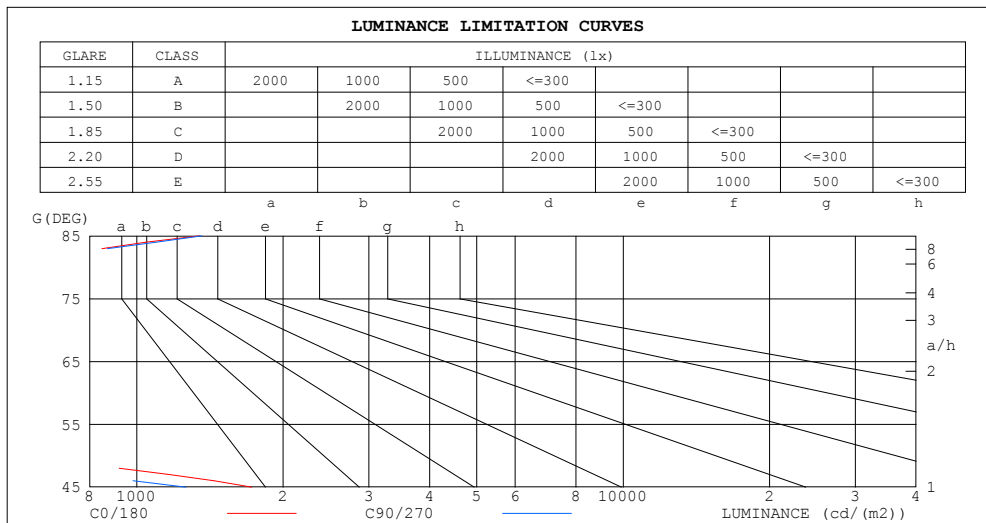
%lamp = 99.9%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-04-17

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:0.0920A P:19.70W PF:0.9530 Freq:50.00Hz Lamp Flux:1434.32x1 lm		
NAME: REG2095RF-20G40-F	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:85	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1344	1360
80	488	492
75	250	245
70	109	119
65	65	70
60	131	51
55	267	198
50	505	390
45	1722	1260

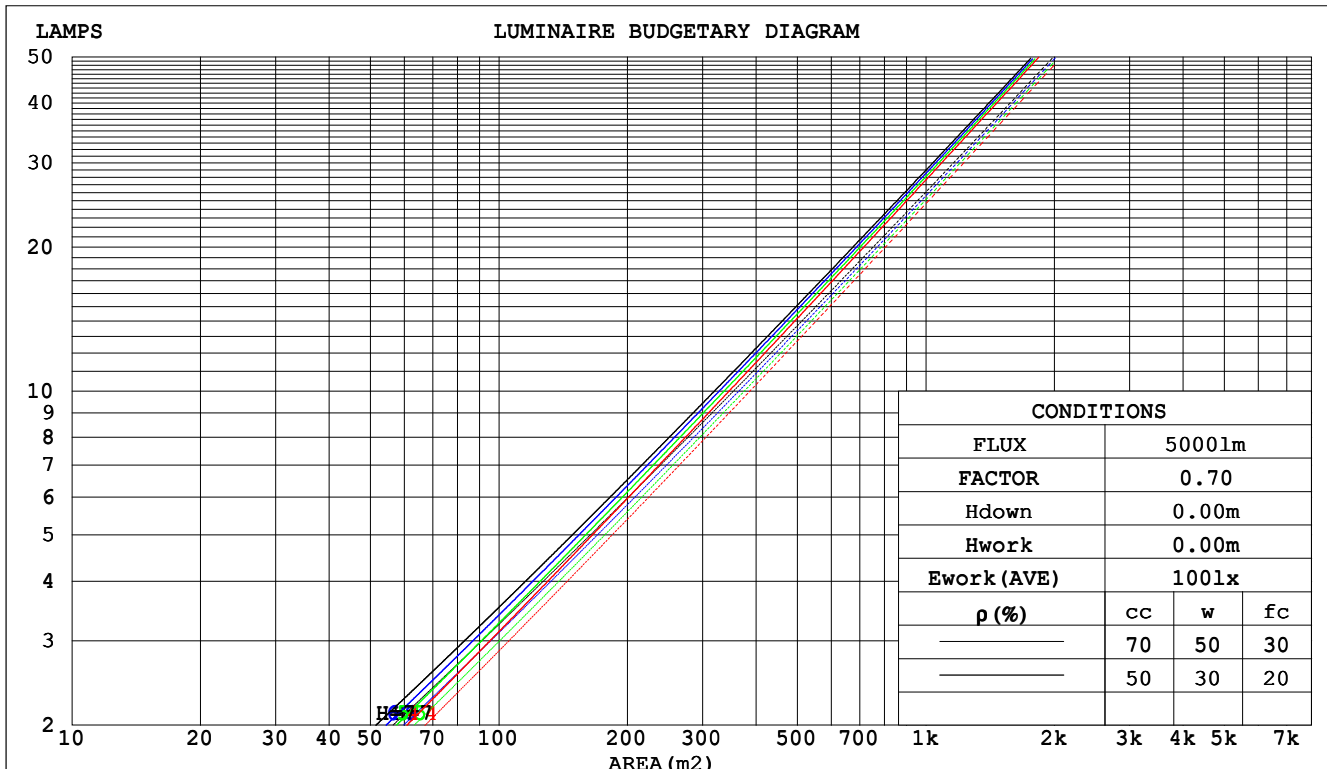
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-04-17

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:0.0920A P:19.70W PF:0.9530 Freq:50.00Hz Lamp Flux:1434.32x1 lm		
NAME: REG2095RF-20G40-F	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	1.13	1.11	1.09	1.11	1.09	1.07	1.07	1.05	1.04	1.03	1.02	1.01	.00	.99	.98	.96
2.0	1.07	1.04	1.02	1.06	1.03	1.00	1.02	1.00	.98	.00	.98	.96	.97	.95	.94	.93
3.0	1.02	.99	.96	1.01	.98	.95	.99	.96	.93	.96	.94	.92	.94	.92	.91	.89
4.0	.98	.94	.91	.97	.93	.90	.95	.92	.89	.93	.91	.88	.92	.89	.87	.86
5.0	.94	.90	.87	.93	.89	.86	.92	.88	.86	.90	.87	.85	.89	.86	.84	.83
6.0	.91	.86	.83	.90	.86	.83	.89	.85	.83	.87	.84	.82	.86	.84	.81	.80
7.0	.88	.83	.80	.87	.83	.80	.86	.82	.80	.85	.82	.79	.84	.81	.79	.78
8.0	.85	.80	.77	.84	.80	.77	.83	.79	.77	.82	.79	.76	.81	.78	.76	.75
9.0	.82	.77	.75	.81	.77	.74	.81	.77	.74	.80	.76	.74	.79	.76	.74	.73
10.0	.79	.75	.72	.79	.75	.72	.78	.74	.72	.77	.74	.72	.77	.74	.72	.71



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-04-17

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:0.0920A P:19.70W PF:0.9530 Freq:50.00Hz Lamp Flux:1434.32x1 lm					
NAME: REG2095RF-20G40-F			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	.141	.080	.025	.134	.077	.024	.122	.070	.022	.111	.064	.020	.100	.058	.019	
2.0	.131	.072	.022	.125	.069	.021	.115	.064	.020	.106	.059	.019	.097	.055	.017	
3.0	.122	.065	.019	.118	.063	.019	.109	.059	.018	.101	.055	.017	.094	.052	.016	
4.0	.115	.060	.018	.111	.058	.017	.104	.055	.016	.097	.052	.016	.091	.049	.015	
5.0	.109	.055	.016	.105	.054	.016	.099	.052	.015	.093	.049	.015	.088	.047	.014	
6.0	.103	.052	.015	.100	.051	.015	.095	.049	.014	.090	.047	.014	.085	.045	.013	
7.0	.098	.049	.014	.096	.048	.014	.091	.046	.013	.087	.045	.013	.083	.043	.013	
8.0	.094	.046	.013	.092	.045	.013	.088	.044	.013	.084	.043	.012	.080	.041	.012	
9.0	.090	.044	.012	.088	.043	.012	.085	.042	.012	.081	.041	.012	.078	.040	.011	
10.0	.087	.042	.012	.085	.041	.011	.082	.040	.011	.079	.039	.011	.076	.038	.011	

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	.169	.158	.148	.144	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.017	
2.0	.151	.133	.117	.129	.114	.102	.089	.079	.071	.051	.046	.042	.016	.015	.014	
3.0	.136	.113	.095	.117	.098	.083	.080	.068	.058	.046	.040	.034	.015	.013	.011	
4.0	.124	.098	.078	.106	.085	.068	.073	.059	.048	.042	.035	.028	.014	.011	.009	
5.0	.114	.086	.065	.097	.074	.057	.067	.052	.040	.039	.030	.024	.013	.010	.008	
6.0	.105	.076	.055	.090	.066	.048	.062	.046	.034	.036	.027	.020	.012	.009	.007	
7.0	.097	.068	.047	.084	.059	.041	.058	.041	.029	.034	.024	.017	.011	.008	.006	
8.0	.091	.061	.040	.078	.053	.035	.054	.037	.025	.032	.022	.015	.010	.007	.005	
9.0	.086	.055	.035	.074	.048	.031	.051	.034	.022	.030	.020	.013	.010	.007	.004	
10.0	.081	.051	.031	.070	.044	.027	.048	.031	.019	.028	.018	.011	.009	.006	.004	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-04-17

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:0.0920A P:19.70W PF:0.9530 Freq:50.00Hz Lamp Flux:1434.32x1 lm										
NAME: REG2095RF-20G40-F					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	0.2	0.9	0.4	1.1	1.2	-1.0	-0.4	-0.8	-0.2	-0.1
3H	0.1	0.7	0.3	0.9	1.1	-1.2	-0.6	-0.9	-0.4	-0.2
4H	0.0	0.6	0.3	0.8	1.1	-1.2	-0.6	-1.0	-0.4	-0.2
6H	0.1	0.6	0.3	0.9	1.1	-1.1	-0.6	-0.9	-0.3	-0.1
8H	0.2	0.7	0.5	1.0	1.2	-1.0	-0.4	-0.7	-0.2	0.1
12H	0.4	0.9	0.7	1.2	1.5	-0.6	-0.1	-0.3	0.2	0.4
4H 2H	0.0	0.6	0.3	0.8	1.0	-1.3	-0.7	-1.0	-0.5	-0.3
3H	-0.2	0.4	0.2	0.6	0.9	-1.4	-0.9	-1.1	-0.6	-0.4
4H	-0.2	0.3	0.1	0.6	0.9	-1.4	-1.0	-1.1	-0.7	-0.4
6H	-0.1	0.3	0.3	0.7	1.0	-1.2	-0.8	-0.9	-0.5	-0.1
8H	0.1	0.5	0.5	0.9	1.2	-0.9	-0.5	-0.5	-0.2	0.2
12H	0.6	1.0	1.0	1.3	1.7	-0.3	0.1	0.1	0.5	0.9
8H 4H	-0.3	0.1	0.1	0.4	0.8	-1.5	-1.1	-1.1	-0.8	-0.4
6H	-0.1	0.2	0.3	0.6	1.0	-1.2	-0.8	-0.8	-0.5	-0.0
8H	0.3	0.6	0.7	1.0	1.4	-0.7	-0.4	-0.2	0.0	0.5
12H	1.0	1.3	1.5	1.7	2.2	0.4	0.6	0.8	1.0	1.5
12H 4H	-0.3	0.0	0.1	0.4	0.8	-1.5	-1.2	-1.1	-0.8	-0.4
6H	-0.1	0.2	0.4	0.7	1.1	-1.1	-0.8	-0.7	-0.4	0.0
8H	0.4	0.6	0.9	1.1	1.6	-0.5	-0.2	-0.0	0.2	0.7
Variations with the observer position at spacings:										
S = 1.0H	+ 2.6 / - 3.5					+ 2.2 / - 3.1				
1.5H	+ 4.6 / - 3.6					+ 4.3 / - 3.0				
2.0H	+ 3.9 / - 1.0					+ 2.7 / - 0.7				

CIE Pub.117, 1434 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 1.3$)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-04-17

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:0.0920A P:19.70W PF:0.9530 Freq:50.00Hz Lamp Flux:1434.32x1 lm		
NAME: REG2095RF-20G40-F	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:85	Shielding Angle:

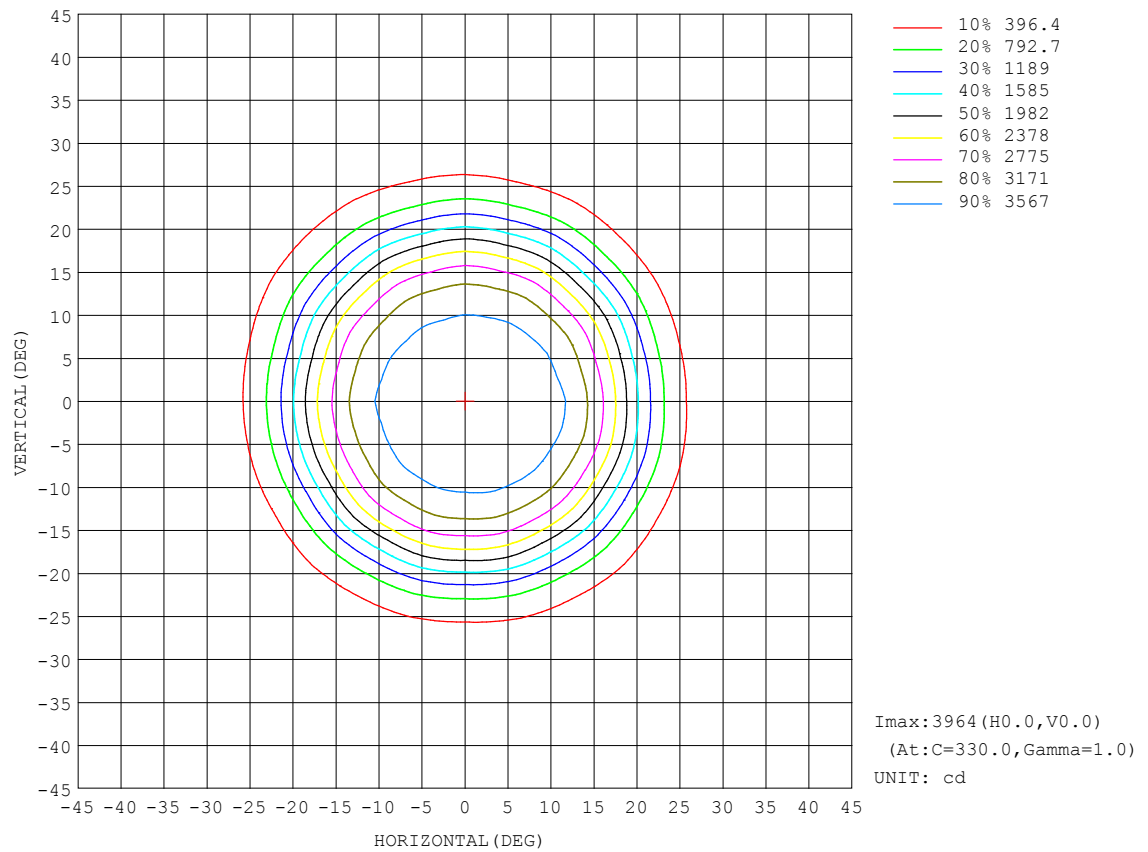
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	91	86	82	91	85	82	90	85	82	79
0.80	98	93	90	98	93	90	96	92	89	86
1.00	102	97	94	101	96	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	102	97
3.00	113	110	107	111	108	106	108	106	104	98
4.00	115	112	110	113	110	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:2020-04-17

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:0.0920A P:19.70W PF:0.9530 Freq:50.00Hz Lamp Flux:1434.32x1 lm		
NAME: REG2095RF-20G40-F	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:85	Shielding Angle:

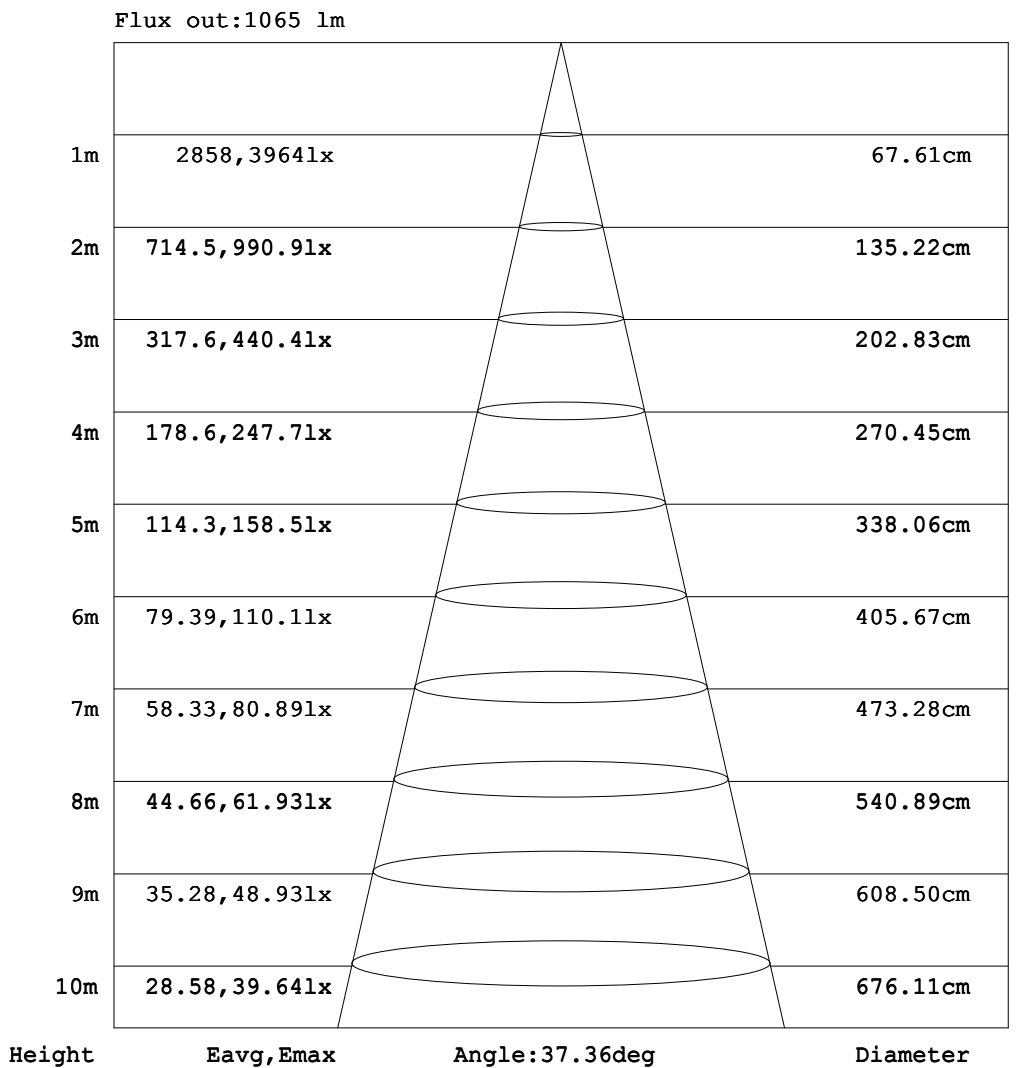


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-04-17

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:0.0920A P:19.70W PF:0.9530 Freq:50.00Hz Lamp Flux:1434.32x1 lm		
NAME: REG2095RF-20G40-F	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:85	Shielding Angle:



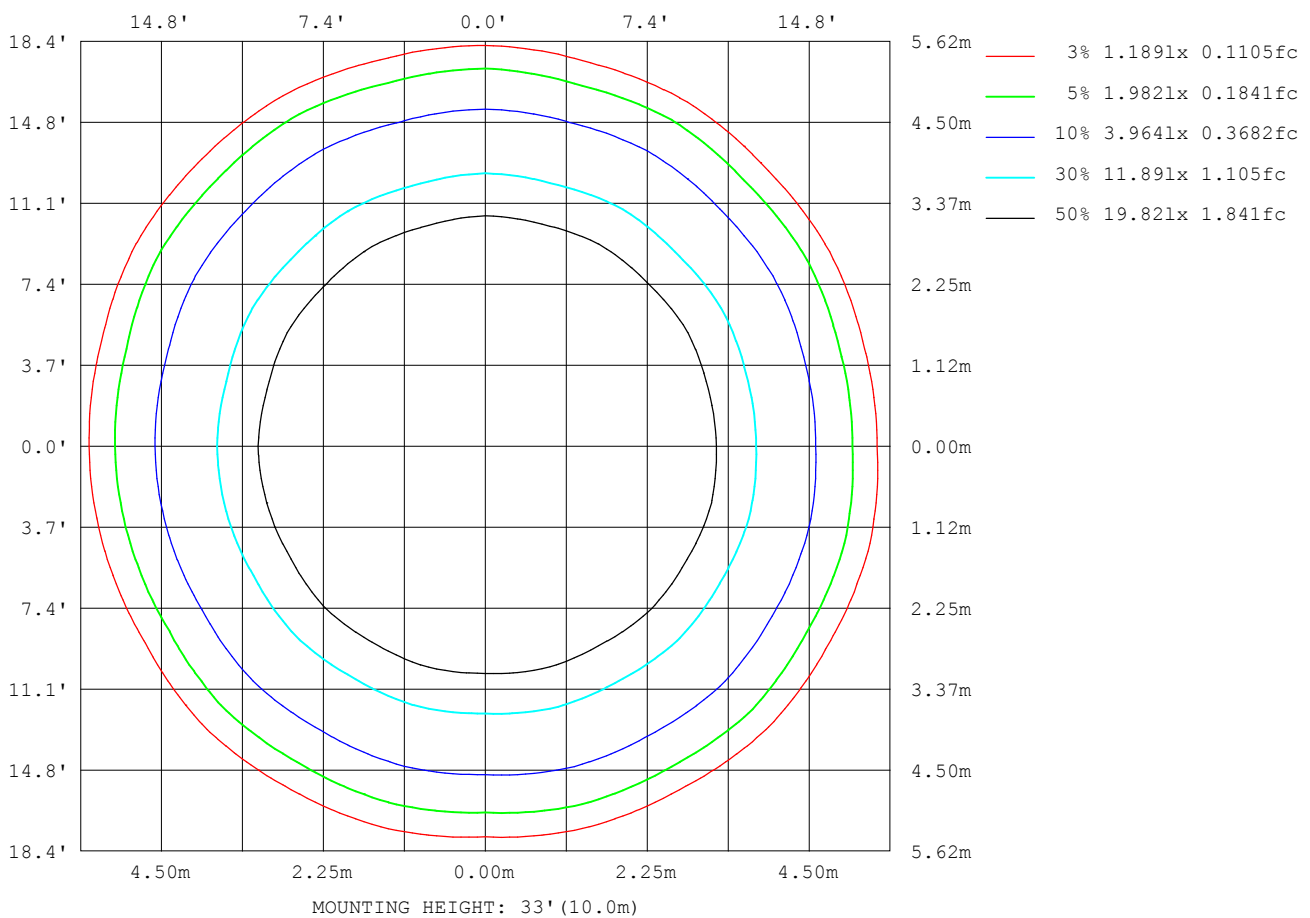
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-04-17

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:0.0920A P:19.70W PF:0.9530 Freq:50.00Hz Lamp Flux:1434.32x1 lm		
NAME: REG2095RF-20G40-F	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:2020-04-17

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:0.0920A P:19.70W PF:0.9530 Freq:50.00Hz Lamp Flux:1434.32x1 lm		
NAME: REG2095RF-20G40-F	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:85	Shielding Angle:

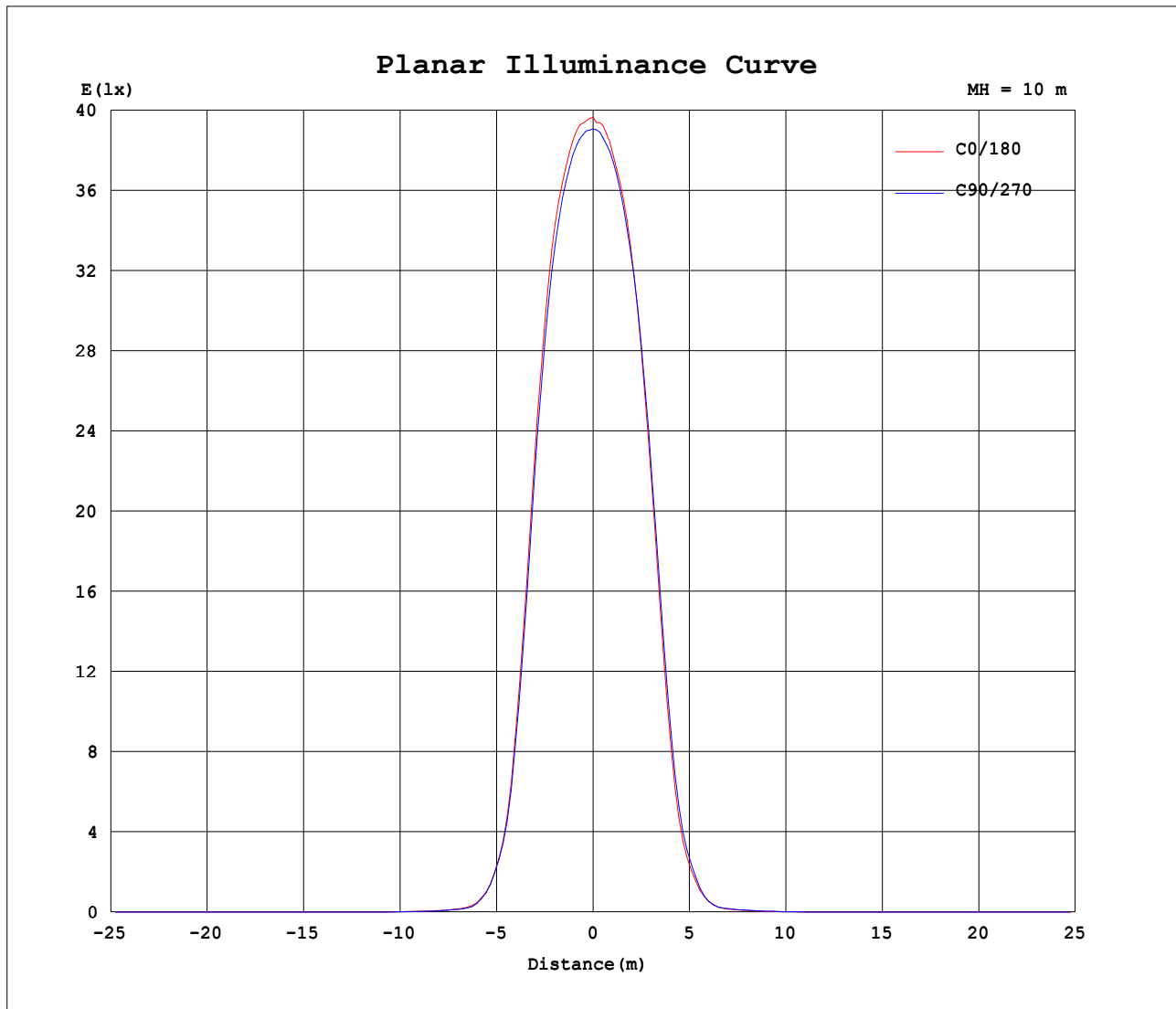
AvgL	cd/m2
L_0~180 (65) av	102
L_0~180 (75) av	241
L_0~180 (85) av	1022
L_90~270 (65) av	108
L_90~270 (75) av	249
L_90~270 (85) av	1047
L_45 (65) av	104
L_45 (75) av	246
L_45 (85) av	1066

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-04-17

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: 2020-04-17

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:

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