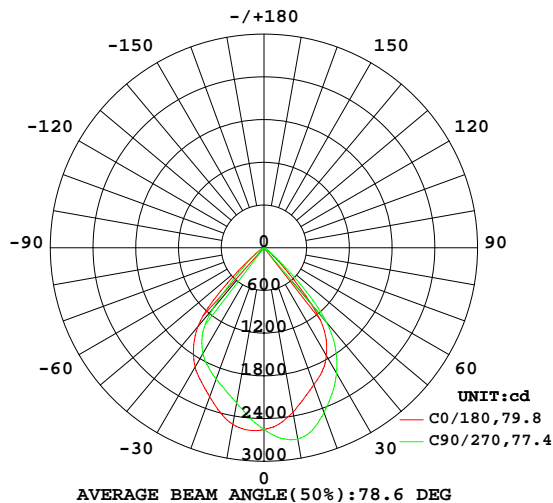


LUMINAIRE PHOTOMETRIC TEST REPORT

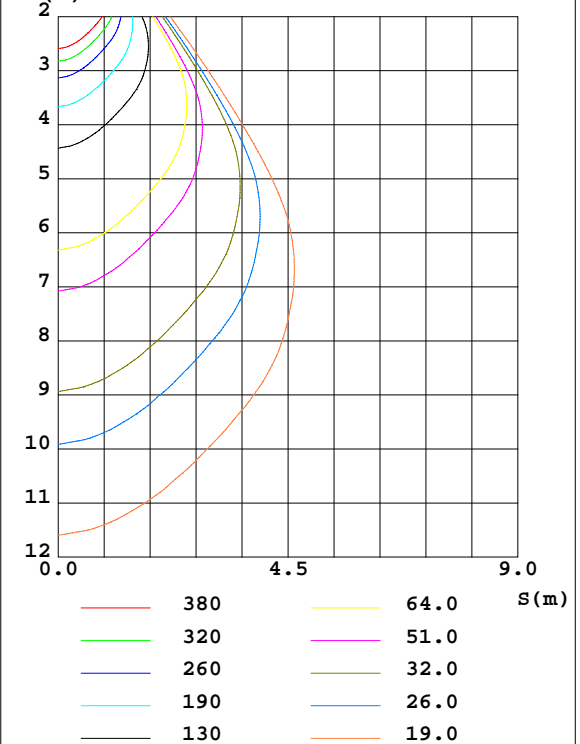
Test:U:229.75V I:0.1338A P:29.730W PF:0.9673 Freq:49.99Hz Lamp Flux:3451.35x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1282*45*30	SERIAL No.:
MFR.: A092N3435-01	SUR.:1.280*0.042	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 116.09 lm/W			
MODEL		Imax(cd)	2750	S/MH(C0/180)	1.14
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.02
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	3451.4	η UP,DN(C0-180)	0.0,52.5
NOMINAL FLUX(lm)	3451.35	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,47.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	1.15

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:
Test Date:2023-09-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

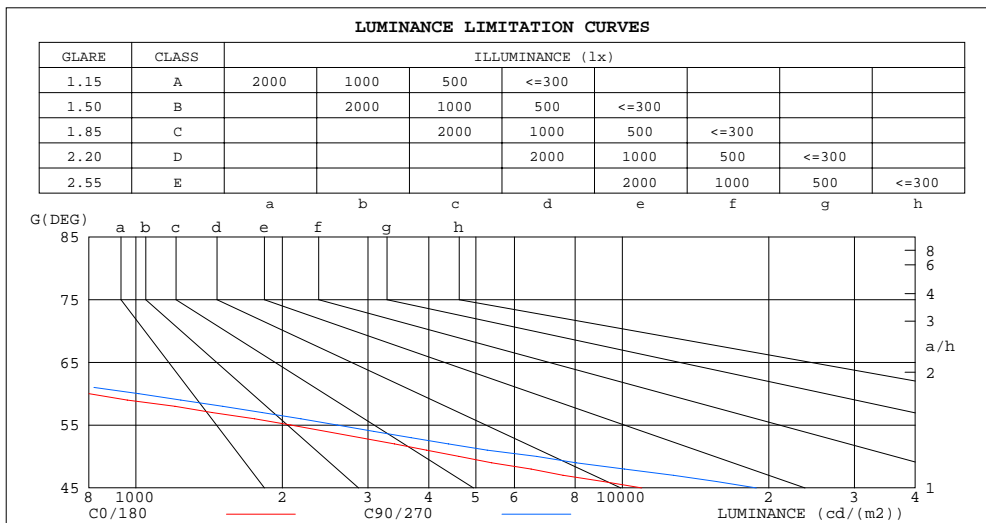
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	2344	2551	2728	2713	2521	2318	2215	2224	0- 10	239.0	239.0	6.93,6.93
20	2047	2253	2464	2450	2231	2049	1963	1956	10- 20	653.5	892.5	25.9,25.9
30	1751	1889	2037	2061	1934	1807	1717	1688	20- 30	933.9	1826	52.9,52.9
40	1044	1194	1367	1479	1444	1314	1116	995.7	30- 40	1000	2827	81.9,81.9
50	159.4	190.3	230.2	313.3	303.2	283.2	222.1	190.4	40- 50	510.9	3338	96.7,96.7
60	21.51	32.63	27.22	55.41	45.39	57.62	35.11	37.86	50- 60	98.58	3436	99.6,99.6
70	1.155	2.117	1.813	4.592	3.919	4.981	2.152	2.728	60- 70	14.13	3450	100,100
80	0.1939	0.1754	0.1690	0.1721	0.2749	0.2578	0.2837	0.3180	70- 80	0.8910	3451	100,100
90	0.1890	0.1804	0.2749	0.1632	0.3179	0.4381	0.6271	0.6443	80- 90	0.3044	3451	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		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-09-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:229.75V I:0.1338A P:29.730W PF:0.9673 Freq:49.99Hz Lamp Flux:3451.35x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1282*45*30	SERIAL No.:
MFR.: A092N3435-01	SUR.:1.280*0.042	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	41	35
80	21	18
75	15	15
70	63	99
65	258	325
60	801	1014
55	2082	2593
50	4617	6670
45	10957	18860

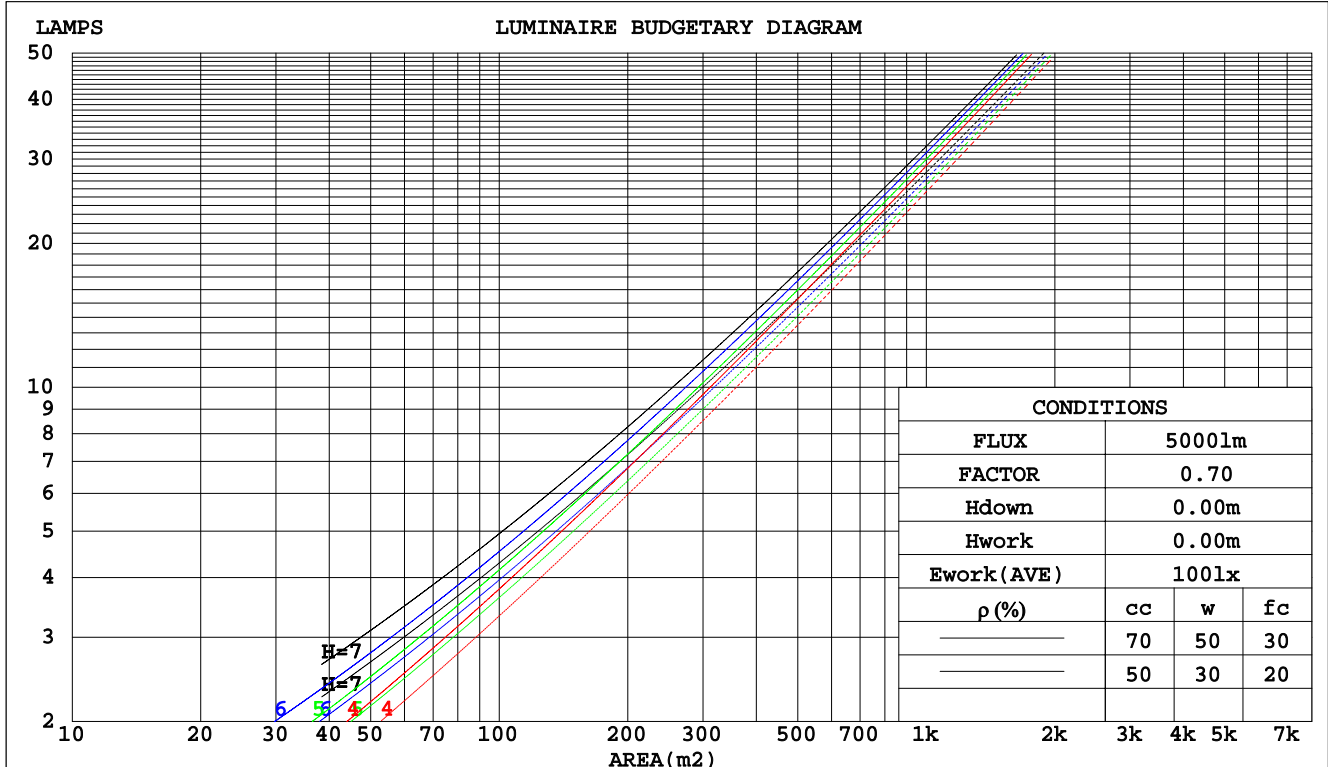
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-09-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.75V I:0.1338A P:29.730W PF:0.9673 Freq:49.99Hz Lamp Flux:3451.35x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1282*45*30	SERIAL No.:
MFR.: A092N3435-01	SUR.:1.280*0.042	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	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.96	.93	.99	.95	.92	.96	.93	.90	.93	.90	.88	.90	.88	.86	.84
3.0	.93	.87	.83	.91	.86	.82	.89	.84	.81	.86	.83	.79	.84	.81	.78	.77
4.0	.86	.79	.74	.84	.79	.74	.82	.77	.73	.80	.76	.72	.78	.74	.71	.70
5.0	.79	.72	.67	.78	.72	.67	.76	.71	.66	.74	.70	.66	.73	.69	.65	.64
6.0	.73	.66	.61	.72	.66	.61	.71	.65	.61	.69	.64	.60	.68	.63	.60	.58
7.0	.68	.61	.56	.67	.61	.56	.66	.60	.56	.64	.59	.55	.63	.59	.55	.53
8.0	.63	.56	.52	.62	.56	.51	.61	.55	.51	.60	.55	.51	.59	.54	.51	.49
9.0	.59	.52	.47	.58	.52	.47	.57	.51	.47	.56	.51	.47	.55	.50	.47	.45
10.0	.55	.48	.44	.54	.48	.44	.53	.48	.44	.53	.47	.44	.52	.47	.43	.42



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-09-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:229.75V I:0.1338A P:29.730W PF:0.9673 Freq:49.99Hz Lamp Flux:3451.35x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1282*45*30	SERIAL No.:
MFR.: A092N3435-01	SUR.:1.280*0.042	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	.196	.112	.035	.189	.108	.034	.177	.101	.032	.165	.095	.031	.154	.089	.029	
2.0	.191	.105	.032	.185	.102	.031	.174	.097	.030	.165	.092	.029	.155	.088	.028	
3.0	.184	.098	.029	.179	.096	.029	.169	.092	.028	.161	.088	.027	.153	.085	.026	
4.0	.176	.091	.027	.172	.090	.027	.163	.087	.026	.156	.084	.025	.149	.081	.025	
5.0	.168	.086	.025	.164	.084	.025	.157	.082	.024	.150	.079	.024	.144	.077	.023	
6.0	.160	.080	.023	.157	.079	.023	.151	.077	.022	.145	.075	.022	.139	.073	.022	
7.0	.153	.076	.021	.150	.075	.021	.145	.073	.021	.139	.071	.021	.134	.070	.021	
8.0	.146	.072	.020	.144	.071	.020	.139	.069	.020	.134	.068	.020	.129	.066	.019	
9.0	.140	.068	.019	.138	.067	.019	.133	.066	.019	.129	.065	.018	.125	.063	.018	
10.0	.134	.064	.018	.132	.064	.018	.128	.063	.018	.124	.061	.017	.120	.060	.017	

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	.172	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.148	.114	.087	.127	.098	.075	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.139	.099	.069	.119	.086	.060	.082	.060	.042	.047	.035	.025	.015	.011	.008	
5.0	.131	.088	.056	.113	.076	.049	.078	.053	.035	.045	.031	.021	.014	.010	.007	
6.0	.124	.079	.047	.107	.069	.041	.074	.048	.029	.043	.028	.017	.014	.009	.006	
7.0	.118	.072	.039	.102	.062	.034	.070	.044	.024	.041	.026	.014	.013	.008	.005	
8.0	.113	.066	.034	.097	.057	.029	.067	.040	.021	.039	.024	.012	.013	.008	.004	
9.0	.108	.061	.029	.093	.053	.025	.064	.037	.018	.037	.022	.011	.012	.007	.004	
10.0	.103	.057	.026	.089	.049	.022	.062	.035	.016	.036	.020	.009	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-09-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:229.75V I:0.1338A P:29.730W PF:0.9673 Freq:49.99Hz Lamp Flux:3451.35x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 1282*45*30			SERIAL No.:			
MFR.: A092N3435-01					SUR.:1.280*0.042			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	17.8	18.9	18.1	19.1	19.3	18.9	20.0	19.1	20.2	20.4	
	3H	17.7	18.7	17.9	18.9	19.1	18.7	19.7	19.0	19.9	
	4H	17.6	18.5	17.9	18.7	19.0	18.6	19.6	18.9	19.8	
	6H	17.5	18.4	17.8	18.6	18.9	18.5	19.4	18.8	19.7	
	8H	17.4	18.3	17.7	18.5	18.8	18.5	19.3	18.8	19.6	
	12H	17.4	18.2	17.7	18.5	18.7	18.5	19.3	18.8	19.5	
4H	2H	17.6	18.5	17.9	18.8	19.0	18.6	19.6	18.9	19.8	
	3H	17.4	18.2	17.7	18.5	18.8	18.5	19.3	18.8	19.5	
	4H	17.3	18.0	17.7	18.3	18.6	18.4	19.1	18.7	19.4	
	6H	17.2	17.8	17.6	18.2	18.5	18.3	18.9	18.7	19.2	
	8H	17.2	17.8	17.6	18.1	18.5	18.2	18.8	18.6	19.2	
	12H	17.1	17.7	17.5	18.0	18.4	18.2	18.7	18.6	19.1	
8H	4H	17.2	17.8	17.6	18.1	18.5	18.2	18.8	18.6	19.2	
	6H	17.1	17.5	17.5	17.9	18.4	18.1	18.6	18.6	19.0	
	8H	17.0	17.4	17.5	17.9	18.3	18.1	18.5	18.5	18.9	
	12H	17.0	17.3	17.4	17.8	18.2	18.0	18.4	18.5	18.8	
12H	4H	17.1	17.7	17.5	18.0	18.4	18.2	18.7	18.6	19.1	
	6H	17.0	17.4	17.5	17.9	18.3	18.1	18.5	18.5	18.9	
	8H	17.0	17.3	17.4	17.8	18.2	18.0	18.4	18.5	18.8	
Variations with the observer position at spacings:											
S = 1.0H	+ 2.7 / -14.4					+ 2.6 / -13.9					
1.5H	+ 4.6 / - 9.8					+ 4.3 / -10.5					
2.0H	+ 6.4 / -13.2					+ 7.7 / -15.2					

CIE Pub.117, 3451 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 4.3$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-09-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:229.75V I:0.1338A P:29.730W PF:0.9673 Freq:49.99Hz Lamp Flux:3451.35x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1282*45*30	SERIAL No.:
MFR.: A092N3435-01	SUR.:1.280*0.042	Shielding Angle:

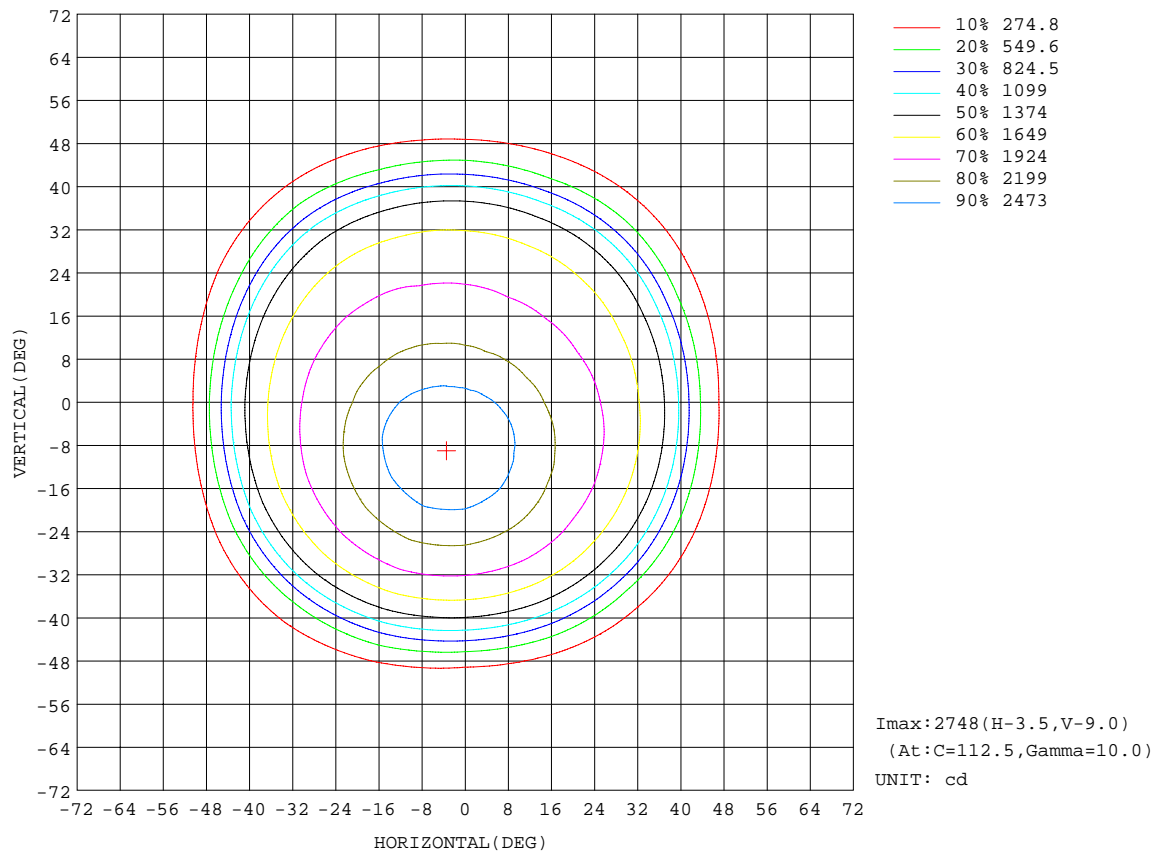
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	80	72	68	79	72	68	79	72	67	63
0.80	89	82	77	88	81	77	87	81	77	72
1.00	95	88	84	94	88	84	92	88	83	79
1.25	100	94	90	99	93	89	97	92	88	84
1.50	103	98	94	102	97	93	99	95	92	87
2.00	107	102	98	105	101	98	102	99	96	90
2.50	109	104	101	107	103	100	104	101	98	92
3.00	110	107	103	109	105	102	105	102	100	94
4.00	113	109	107	111	108	105	107	105	103	95
5.00	114	111	109	112	109	107	108	106	104	96
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:
Test Date:2023-09-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:229.75V I:0.1338A P:29.730W PF:0.9673 Freq:49.99Hz Lamp Flux:3451.35x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1282*45*30	SERIAL No.:
MFR.: A092N3435-01	SUR.:1.280*0.042	Shielding Angle:

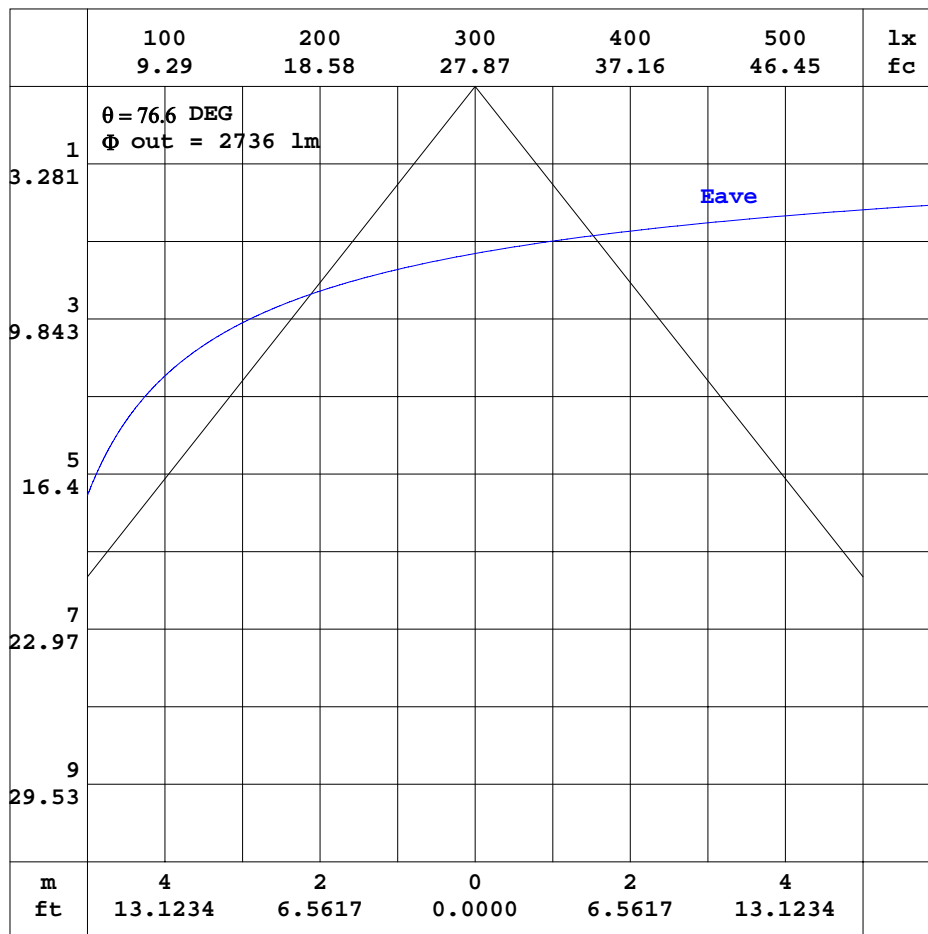


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2023-09-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

AAI CURVES

Test:U:229.75V I:0.1338A P:29.730W PF:0.9673 Freq:49.99Hz Lamp Flux:3451.35x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1282*45*30	SERIAL No.:
MFR.: A092N3435-01	SUR.:1.280*0.042	Shielding Angle:



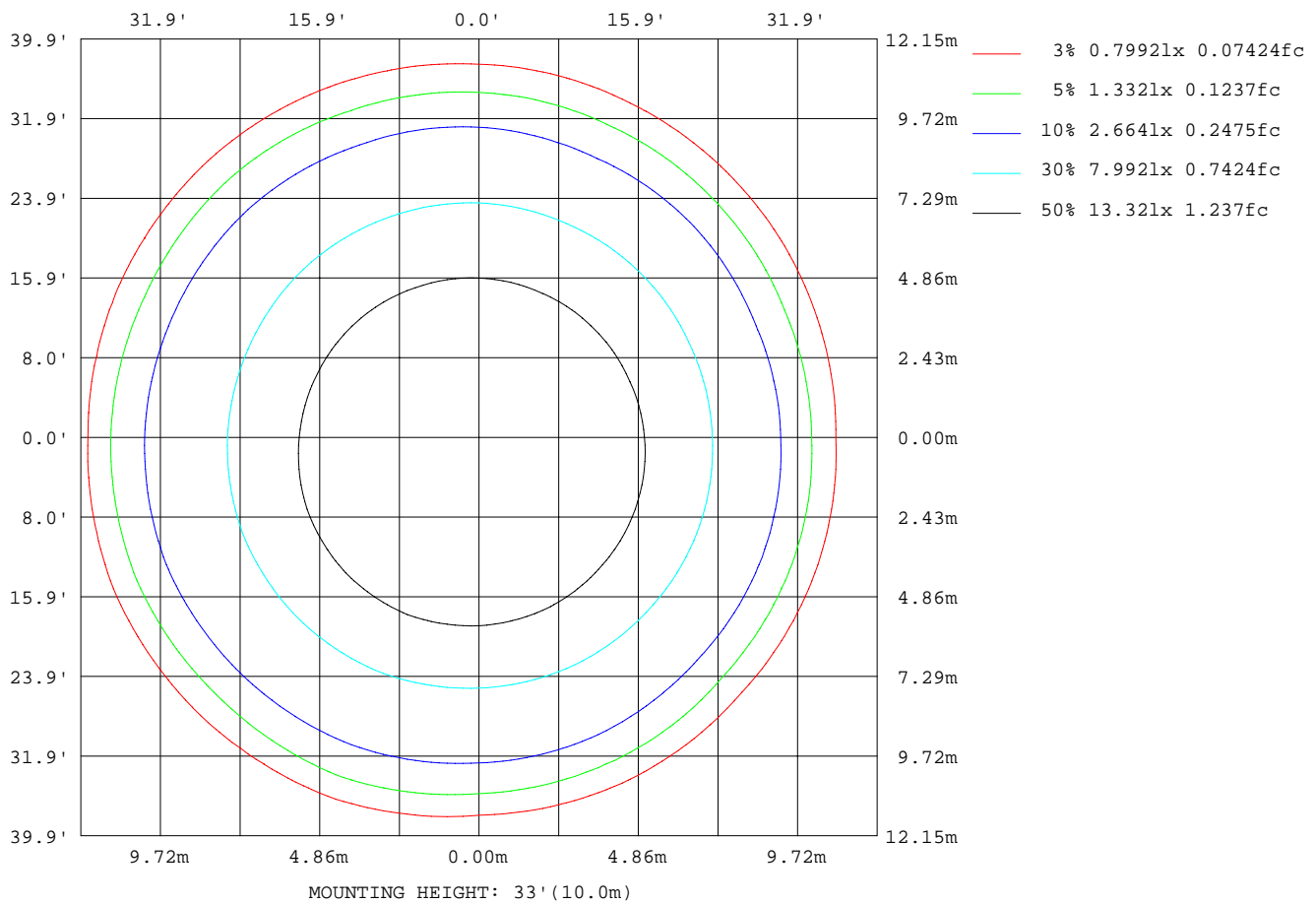
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2023-09-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:229.75V I:0.1338A P:29.730W PF:0.9673 Freq:49.99Hz Lamp Flux:3451.35x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1282*45*30	SERIAL No.:
MFR.: A092N3435-01	SUR.:1.280*0.042	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2023-09-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:229.75V I:0.1338A P:29.730W PF:0.9673 Freq:49.99Hz Lamp Flux:3451.35x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1282*45*30	SERIAL No.:
MFR.: A092N3435-01	SUR.:1.280*0.042	Shielding Angle:

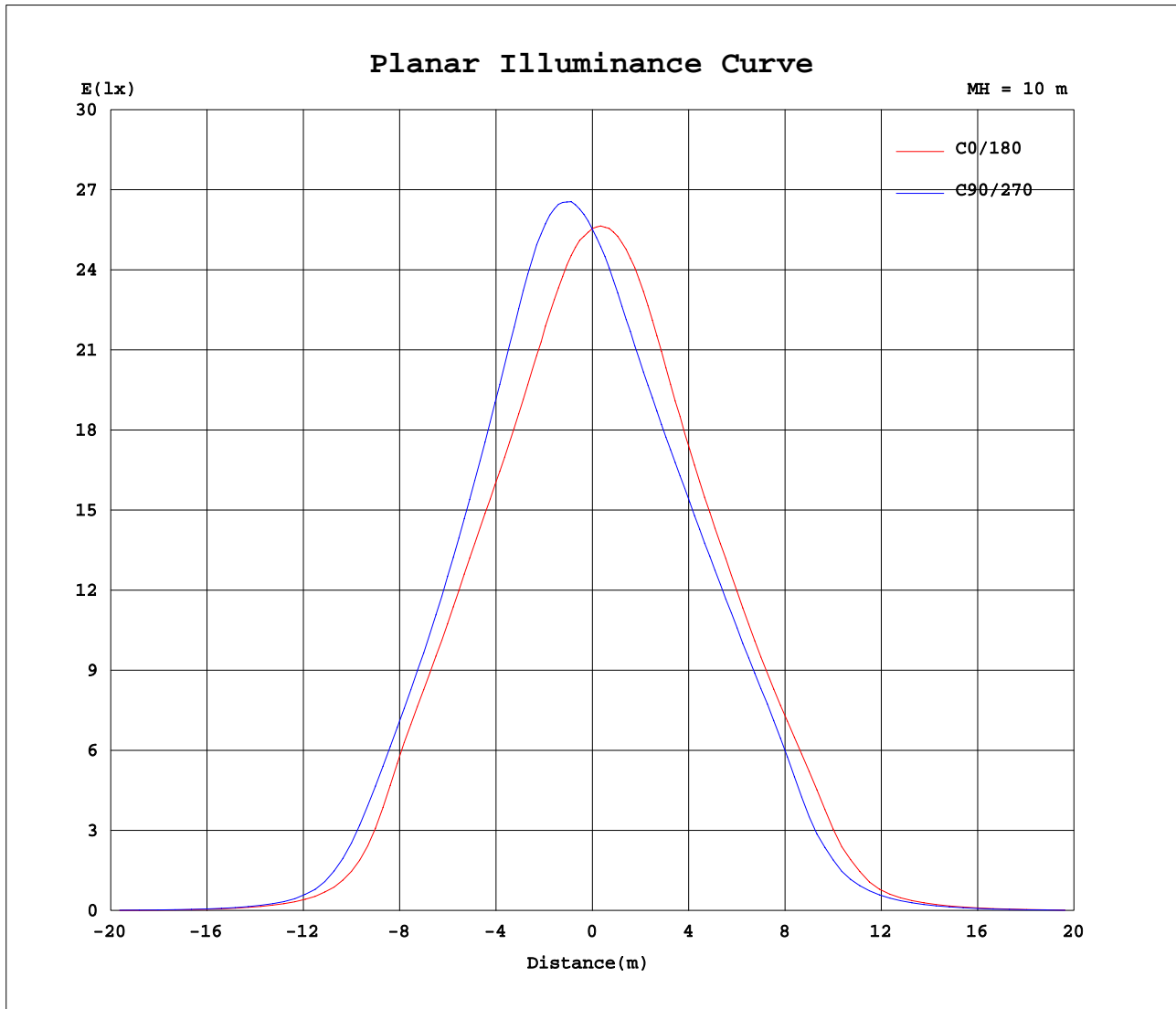
AvgL	cd/m2
L_0~180(65)av	443
L_0~180(75)av	43
L_0~180(85)av	55
L_90~270(65)av	378
L_90~270(75)av	25
L_90~270(85)av	63
L_45(65)av	667
L_45(75)av	50
L_45(85)av	59

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-09-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2023-09-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
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Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
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