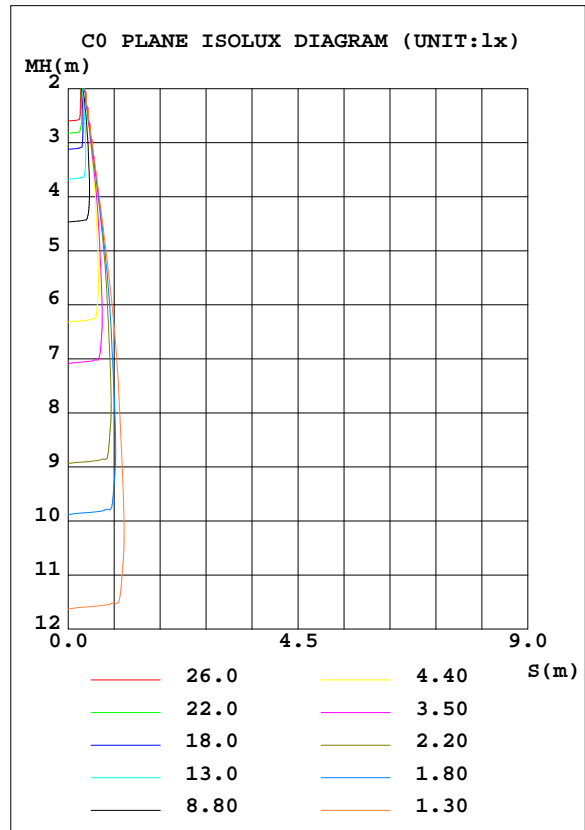
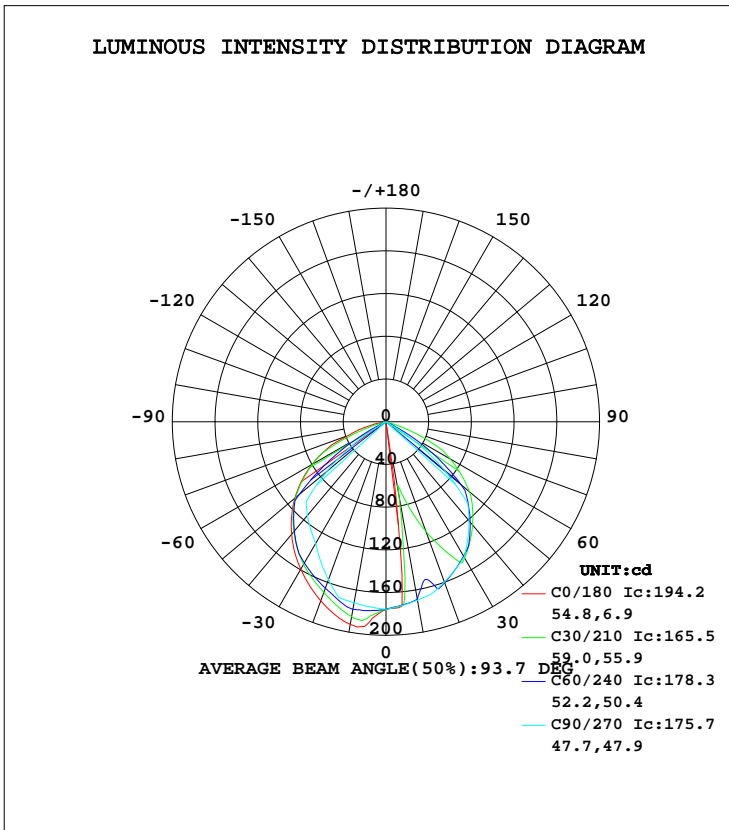


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:11.98V I:0.3944A P:2.990W PF:0.6328 Lamp Flux:235x1 lm		
NAME: 489871-3000K ELATION 22'' CLEAR LENS	TYPE:489871-3000K ELATION 22'' CLEAR LENS	22'' WEATHER LENS
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 98.65 lm/W			
489871-3000K ELATION 22'' CLEAR LENS		Imax(cd)	194.2	S/MH(C0/180)	1.33
NOMINAL POWER(W)	3	LOR(%)	125.5	S/MH(C90/270)	1.13
RATED VOLTAGE(V)	12	TOTAL FLUX(lm)	376.52	η UP, DN(C0-180)	0.0,61.0
NOMINAL FLUX(lm)	300	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,64.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	12	η down(%)	125.5	CIBSE SHR MAX	0.70



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:20DEG
 Operators:Y
 Test Date:2024-05-13

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:8.750m [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
5	173.2	172.6	172.7	179.3	189.3	180.2	173.9	169.3	0- 5	4.207	4.207	1.12,1.4
10	0.8624	126.1	169.6	180.3	192.6	182.2	172.2	125.6	5- 10	11.40	15.60	4.14,5.2
15	0.0867	117.0	166.6	172.5	186.6	175.3	170.4	119.7	10- 15	16.74	32.34	8.59,10.8
20	0.0922	154.9	159.8	163.9	178.5	167.5	157.5	158.5	15- 20	23.55	55.89	14.8,18.6
25	0.1193	153.9	153.0	156.0	169.3	160.3	144.6	158.3	20- 25	30.08	85.97	22.8,28.7
30	0.1573	145.5	146.2	147.7	159.5	152.7	131.6	150.8	25- 30	35.56	121.5	32.3,40.5
35	0.2006	136.5	133.6	138.6	149.1	144.4	123.0	142.6	30- 35	39.79	161.3	42.8,53.8
40	0.2499	126.3	121.0	128.5	137.5	135.0	114.4	133.6	35- 40	42.25	203.6	54.1,67.9
45	0.2524	112.0	108.3	115.4	125.0	122.3	105.8	120.8	40- 45	42.84	246.4	65.4,82.1
50	0.2382	97.46	73.53	102.0	111.5	109.2	72.29	107.7	45- 50	40.77	287.2	76.3,95.7
55	0.1734	81.97	38.74	87.27	96.34	94.81	38.77	93.25	50- 55	34.51	321.7	85.4,107
60	0.1516	50.46	3.956	53.90	79.90	58.91	5.252	57.99	55- 60	25.42	347.1	92.2,116
65	0.1030	19.65	3.024	21.27	61.90	23.88	3.906	23.81	60- 65	15.31	362.4	96.3,121
70	0.1030	2.381	2.092	2.909	37.22	4.031	2.560	4.442	65- 70	8.343	370.8	98.5,124
75	0.1030	1.539	1.160	1.931	19.90	2.533	1.214	2.701	70- 75	3.937	374.7	99.5,125
80	0.1030	0.6701	0	0.8730	6.117	0.9586	0	0.9034	75- 80	1.505	376.2	99.9,125
85	0.1030	0	0	0	0.7379	0	0	0	80- 85	0.2802	376.5	100,125
90	0.0596	0	0	0	0.0000	0	0	0	85- 90	0.0273	376.5	100,126
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd								UNIT:lm			

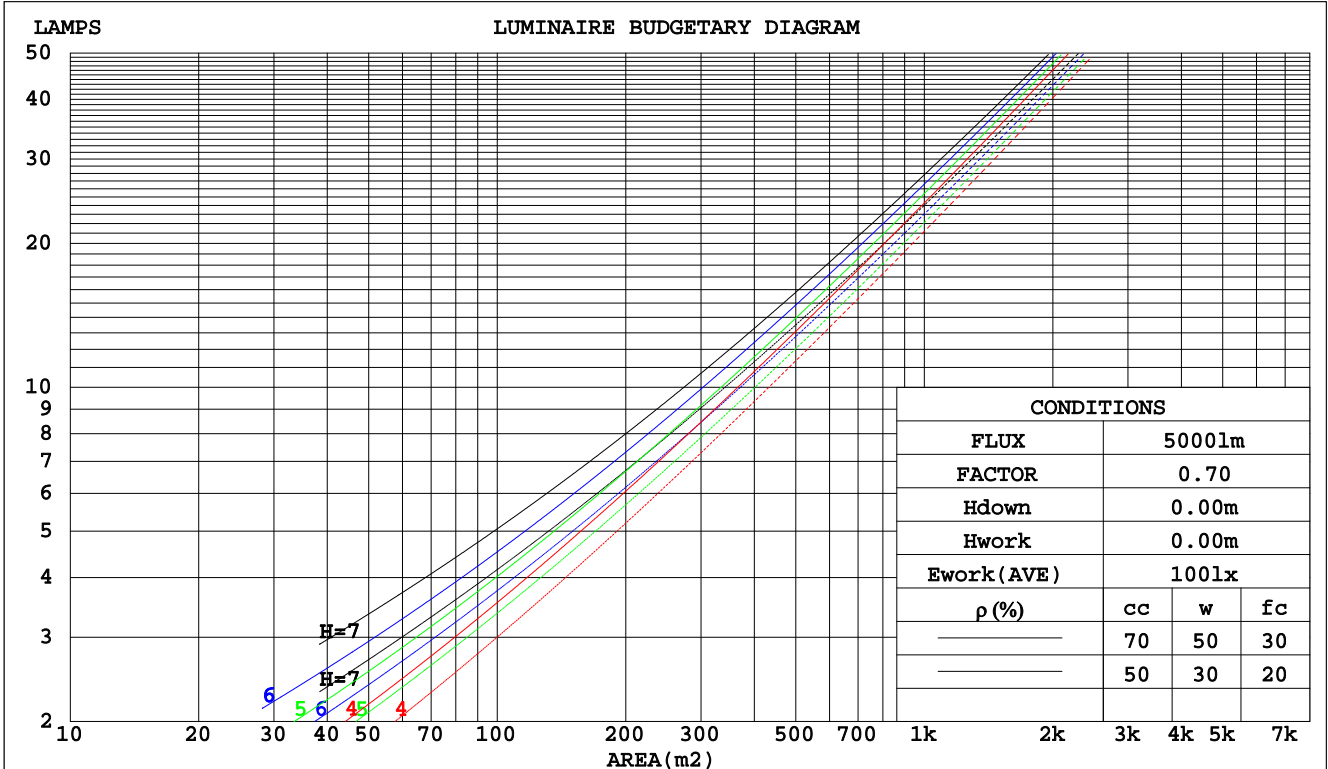
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:20DEG
 Operators:Y
 Test Date:2024-05-13

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:8.750m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:11.98V I:0.3944A P:2.990W PF:0.6328 Lamp Flux:235x1 lm		
NAME: 489871-3000K ELATION 22'' CLEAR LENS	TYPE:489871-3000K ELATION	22 WEIGHTED LENS
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.49	1.49	1.49	1.46	1.46	1.46	1.39	1.39	1.39	1.34	1.34	1.34	1.28	1.28	1.28	1.26
1.0	1.34	1.30	1.26	1.32	1.28	1.24	1.26	1.23	1.20	1.22	1.19	1.17	1.17	1.15	1.13	1.11
2.0	1.20	1.13	1.07	1.17	1.11	1.05	1.13	1.08	1.03	1.09	1.05	1.01	1.06	1.02	.98	.96
3.0	1.07	.98	.91	1.05	.97	.90	1.01	.94	.88	.98	.92	.87	.95	.90	.86	.83
4.0	.96	.86	.78	.94	.85	.78	.91	.83	.77	.88	.81	.76	.86	.80	.75	.72
5.0	.86	.76	.68	.85	.75	.68	.82	.74	.67	.80	.72	.66	.77	.71	.66	.63
6.0	.78	.67	.60	.77	.67	.60	.74	.66	.59	.72	.65	.59	.70	.64	.58	.56
7.0	.71	.60	.53	.70	.60	.53	.68	.59	.53	.66	.58	.52	.64	.57	.52	.50
8.0	.65	.54	.48	.64	.54	.47	.62	.53	.47	.61	.53	.47	.59	.52	.47	.44
9.0	.59	.49	.43	.59	.49	.43	.57	.49	.43	.56	.48	.42	.55	.47	.42	.40
10.0	.55	.45	.39	.54	.45	.39	.53	.44	.39	.52	.44	.38	.51	.43	.38	.36



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2024-05-13

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:11.98V I:0.3944A P:2.990W PF:0.6328 Lamp Flux:235x1 lm		
NAME: 489871-3000K ELATION 22'' CLEAR LENS	TYPE:489871-3000K ELATION	22 WEIGHTED LENS
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.311	.177	.056	.302	.172	.055	.286	.164	.052	.271	.156	.050	.257	.149	.048	
2.0	.306	.168	.051	.298	.164	.051	.284	.158	.049	.271	.152	.048	.259	.147	.046	
3.0	.293	.156	.047	.286	.153	.046	.274	.148	.045	.262	.144	.044	.251	.139	.043	
4.0	.277	.144	.042	.271	.142	.042	.260	.138	.041	.250	.134	.041	.241	.131	.040	
5.0	.261	.133	.039	.256	.131	.038	.246	.128	.038	.237	.125	.037	.229	.122	.037	
6.0	.246	.123	.035	.241	.122	.035	.233	.119	.035	.225	.117	.034	.217	.114	.034	
7.0	.232	.115	.032	.228	.113	.032	.220	.111	.032	.213	.109	.032	.206	.107	.031	
8.0	.219	.107	.030	.215	.106	.030	.208	.104	.030	.201	.102	.029	.195	.100	.029	
9.0	.207	.100	.028	.203	.099	.028	.197	.097	.028	.191	.096	.027	.185	.094	.027	
10.0	.196	.094	.026	.193	.093	.026	.187	.092	.026	.181	.090	.026	.176	.089	.025	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.239	.239	.239	.204	.204	.204	.139	.139	.139	.080	.080	.080	.026	.026	.026	
1.0	.221	.197	.175	.189	.169	.150	.129	.116	.104	.074	.067	.061	.024	.022	.020	
2.0	.208	.166	.130	.178	.143	.113	.122	.099	.079	.070	.057	.046	.023	.019	.015	
3.0	.198	.143	.100	.169	.123	.087	.116	.086	.061	.067	.050	.036	.022	.016	.012	
4.0	.188	.126	.079	.161	.109	.068	.111	.076	.048	.064	.044	.028	.021	.014	.009	
5.0	.179	.113	.063	.154	.097	.055	.106	.068	.039	.061	.040	.023	.020	.013	.008	
6.0	.171	.102	.052	.147	.088	.046	.101	.062	.032	.059	.036	.019	.019	.012	.006	
7.0	.163	.093	.044	.140	.081	.038	.097	.057	.027	.056	.033	.016	.018	.011	.005	
8.0	.156	.086	.038	.134	.075	.033	.093	.052	.023	.054	.031	.014	.017	.010	.005	
9.0	.149	.080	.033	.128	.069	.029	.089	.049	.020	.052	.029	.012	.017	.009	.004	
10.0	.142	.074	.029	.123	.065	.025	.085	.045	.018	.050	.027	.011	.016	.009	.004	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:20DEG
 Operators:Y
 Test Date:2024-05-13

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:8.750m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:11.98V I:0.3944A P:2.990W PF:0.6328 Lamp Flux:235x1 lm										
NAME: 489871-3000K ELATION 22'' CLEAR LENS					TYPE:489871-3000K ELATION			22 WEIGHTED LENS		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.:			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	10.8	12.2	11.1	12.4	12.6	9.2	10.6	9.5	10.8	11.0
3H	11.4	12.7	11.7	12.9	13.1	9.0	10.3	9.3	10.5	10.8
4H	11.4	12.6	11.7	12.9	13.1	9.0	10.1	9.3	10.4	10.6
6H	11.3	12.5	11.7	12.7	13.0	8.9	10.0	9.2	10.2	10.5
8H	11.3	12.4	11.6	12.6	12.9	8.8	9.9	9.1	10.1	10.4
12H	11.2	12.3	11.6	12.5	12.8	8.8	9.8	9.1	10.1	10.4
4H 2H	11.1	12.3	11.4	12.5	12.8	9.7	10.9	10.0	11.2	11.4
3H	11.9	12.9	12.2	13.2	13.5	9.5	10.6	9.9	10.9	11.1
4H	12.0	12.9	12.3	13.2	13.5	9.5	10.4	9.8	10.7	11.0
6H	11.9	12.7	12.3	13.1	13.4	9.4	10.2	9.8	10.5	10.9
8H	11.9	12.6	12.3	13.0	13.3	9.3	10.1	9.7	10.4	10.8
12H	11.8	12.5	12.2	12.9	13.3	9.3	10.0	9.7	10.3	10.7
8H 4H	11.8	12.6	12.2	12.9	13.3	9.4	10.2	9.8	10.5	10.9
6H	11.8	12.4	12.2	12.8	13.2	9.3	9.9	9.8	10.3	10.8
8H	11.7	12.3	12.2	12.7	13.1	9.3	9.8	9.7	10.3	10.7
12H	11.7	12.1	12.2	12.6	13.1	9.3	9.7	9.7	10.2	10.6
12H 4H	11.8	12.5	12.2	12.8	13.2	9.4	10.1	9.8	10.4	10.8
6H	11.7	12.3	12.2	12.7	13.1	9.3	9.8	9.7	10.3	10.7
8H	11.7	12.1	12.2	12.6	13.1	9.3	9.7	9.7	10.2	10.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.7 / - 0.6					+ 1.5 / - 2.6				
1.5H	+ 1.9 / - 7.4					+ 1.0 / - 0.9				
2.0H	+ 1.9 / -20.6					+ 3.0 / -15.0				

CIE Pub.117 Corrected 300.0 lm Total Lamp Luminous Flux. (8log(F/F0) = -4.2)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:20DEG
 Operators:Y
 Test Date:2024-05-13

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:8.750m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:11.98V I:0.3944A P:2.990W PF:0.6328 Lamp Flux:235x1 lm		
NAME: 489871-3000K ELATION 22'' CLEAR LENS	TYPE:489871-3000K ELATION	22 WEICHER LENS
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

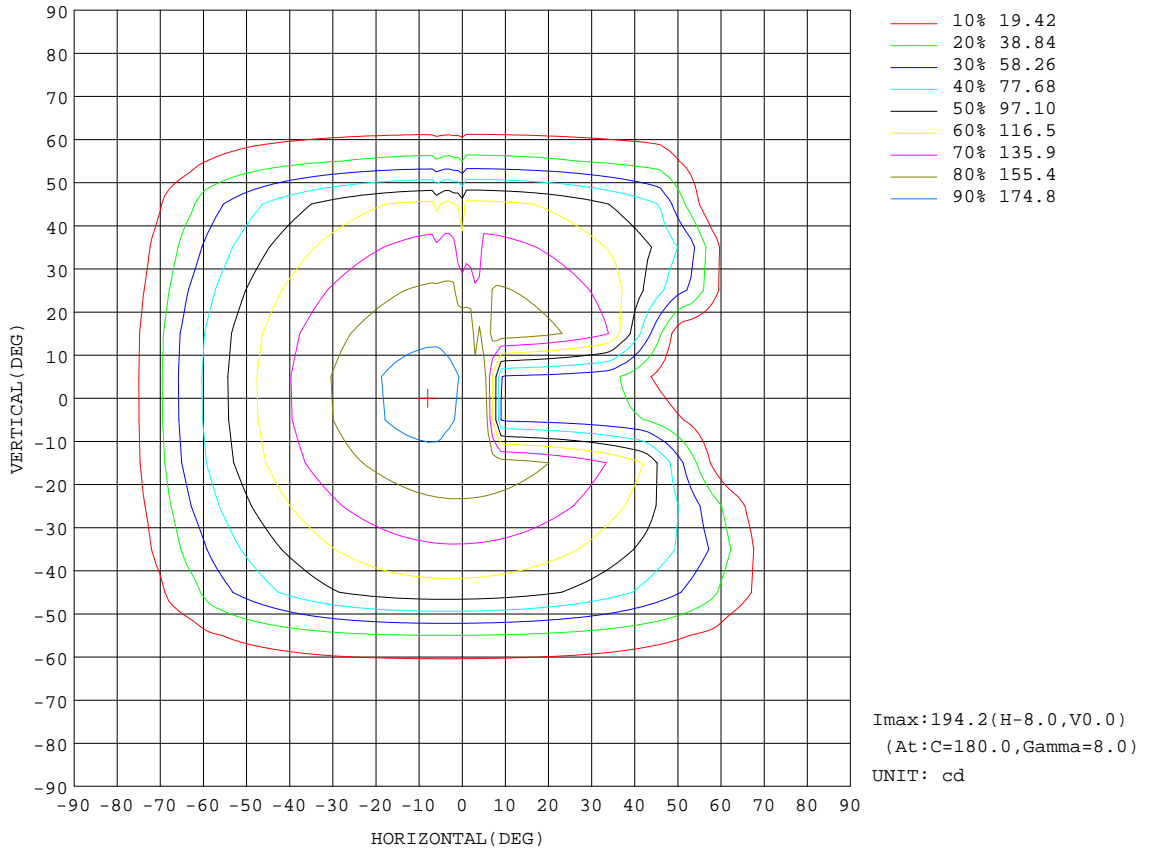
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	78	64	56	77	64	56	76	63	56	48
0.80	92	78	70	90	78	70	88	77	69	61
1.00	103	91	83	102	90	82	99	91	82	74
1.25	112	101	93	110	100	93	107	98	92	84
1.50	118	107	100	116	106	99	112	104	98	90
2.00	125	117	110	123	115	109	119	113	107	99
2.50	129	121	115	127	120	114	123	117	112	102
3.00	133	126	120	130	124	119	126	121	116	107
4.00	137	131	126	134	129	125	129	125	121	111
5.00	139	134	130	136	132	128	131	127	124	113
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:20DEG
 Operators:Y
 Test Date:2024-05-13

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:8.750m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:11.98V I:0.3944A P:2.990W PF:0.6328 Lamp Flux:235x1 lm		
NAME: 489871-3000K ELATION 22'' CLEAR LENS	TYPE:489871-3000K ELATION	22 WEIGHTED LENS
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

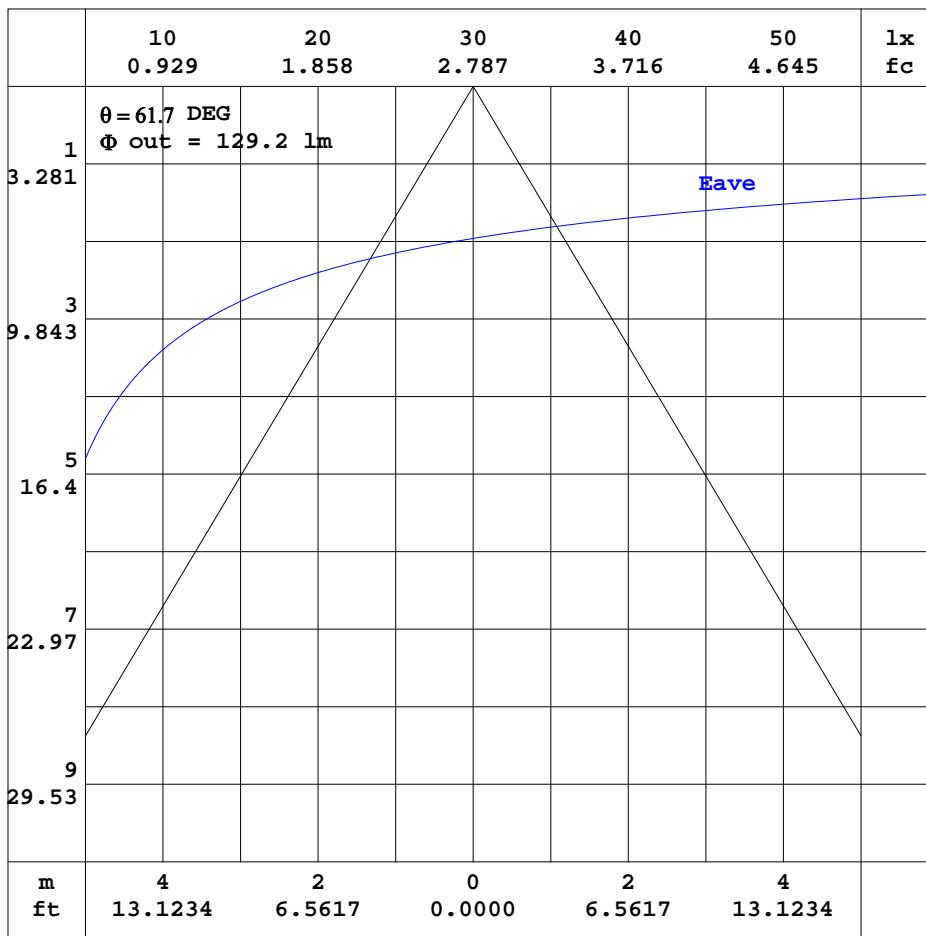


C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 20DEG
 Operators: Y
 Test Date: 2024-05-13

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity: 65.0%
 Test Distance: 8.750m [K=1.0000]
 Remarks:

AAI CURVES

Test:U:11.98V I:0.3944A P:2.990W PF:0.6328 Lamp Flux:235x1 lm		
NAME: 489871-3000K ELATION 22'' CLEAR LENS	TYPE:489871-3000K ELATION	22 WEICHER LENS
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



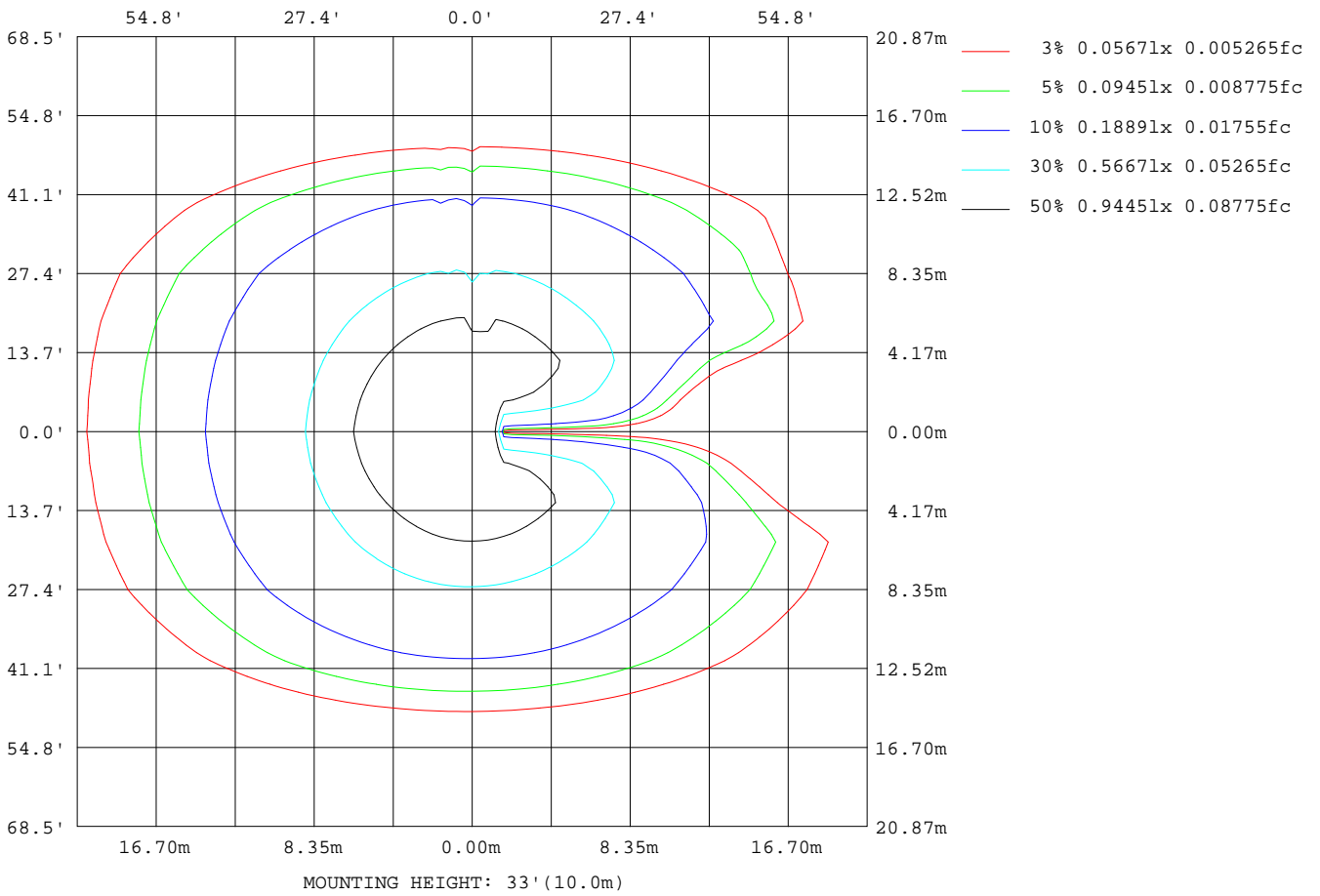
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2024-05-13

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:11.98V I:0.3944A P:2.990W PF:0.6328 Lamp Flux:235x1 lm		
NAME: 489871-3000K ELATION 22'' CLEAR LENS	TYPE:489871-3000K ELATION	22 WEIGHTED LENS
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:20DEG
 Operators:Y
 Test Date:2024-05-13

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:8.750m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:11.98V I:0.3944A P:2.990W PF:0.6328 Lamp Flux:235x1 lm		
NAME: 489871-3000K ELATION 22'' CLEAR LENS	TYPE:489871-3000K ELATION 22	WEIGHT: CLEAR LENS
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

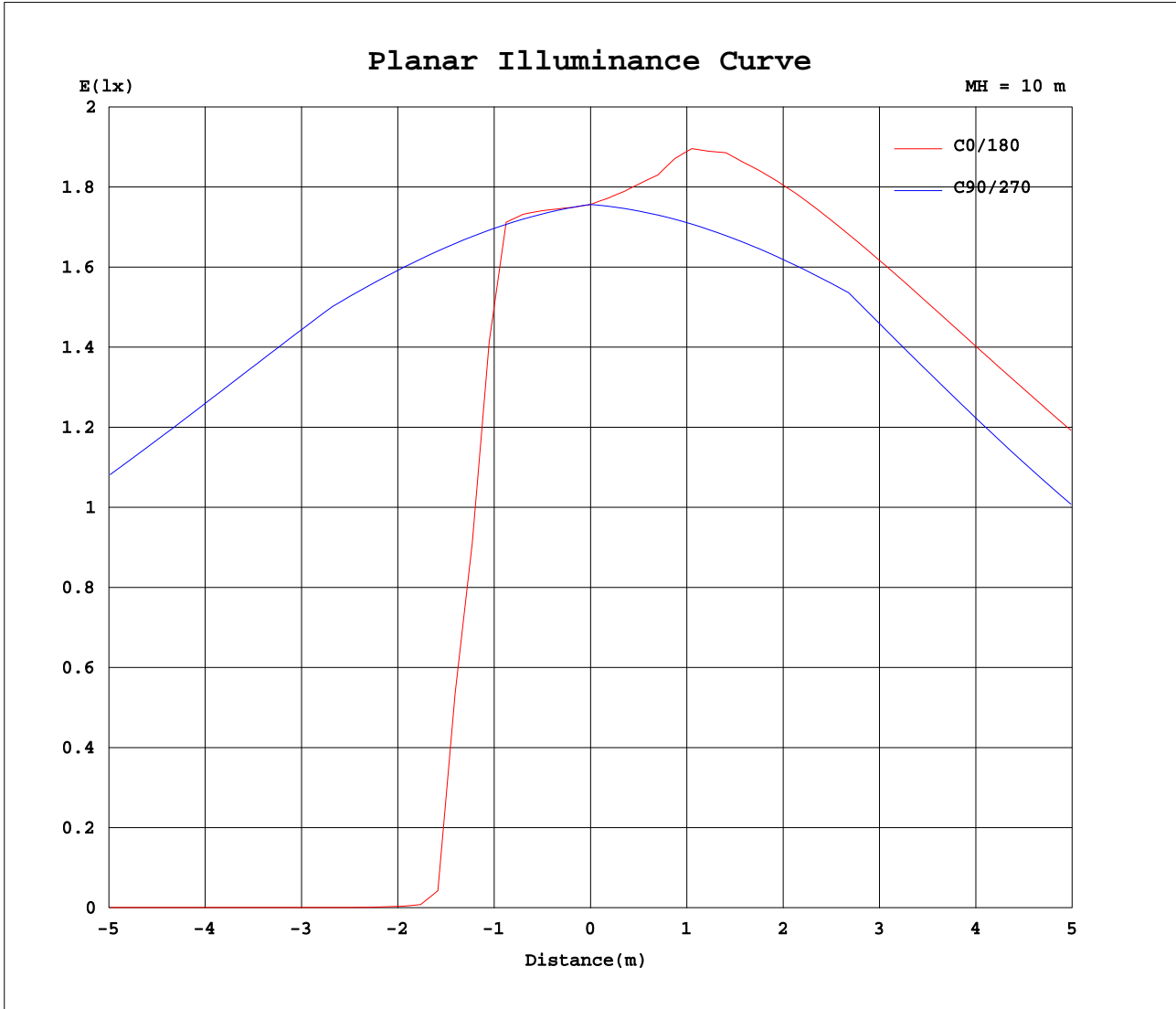
AvgL	cd/m2
L_0~180(65)av	367
L_0~180(75)av	193
L_0~180(85)av	24
L_90~270(65)av	41
L_90~270(75)av	23
L_90~270(85)av	0
L_45(65)av	262
L_45(75)av	42
L_45(85)av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2024-05-13

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 20DEG
 Operators: Y
 Test Date: 2024-05-13

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity: 65.0%
 Test Distance: 8.750m [K=1.0000]
 Remarks:

