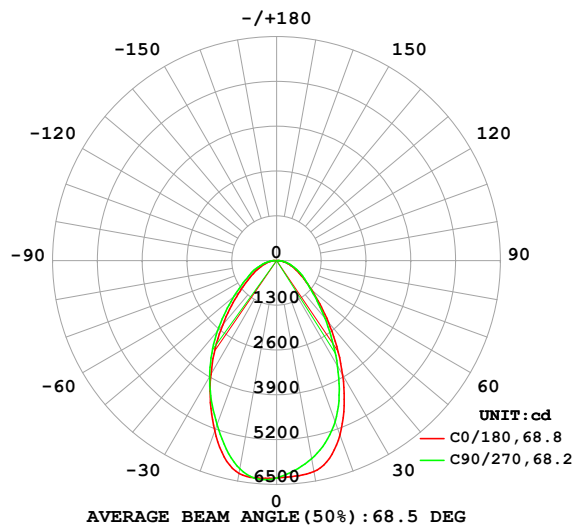


LUMINAIRE PHOTOMETRIC TEST REPORT

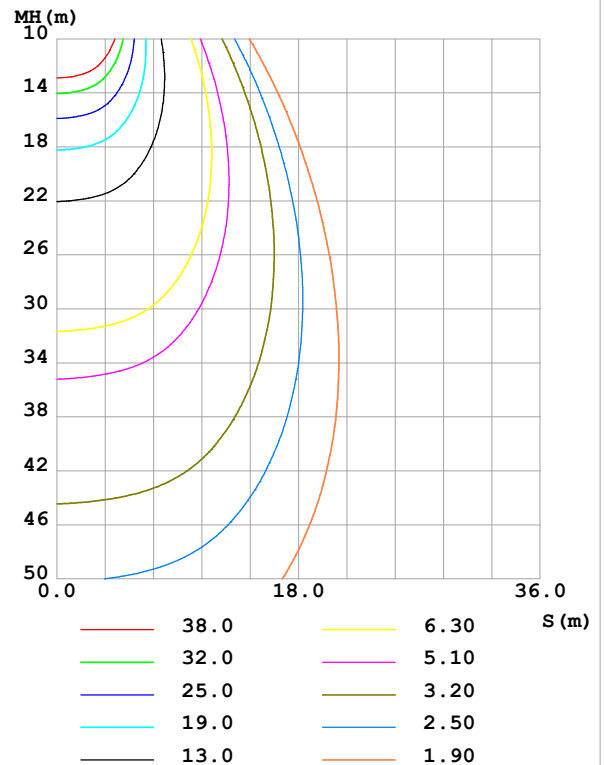
Test:U:229.48V I:0.255A P:57.7W PF:0.986 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:11086x1 lm		
NAME: 2853-60D*60D*60D-4080		
SPEC.: VS ECXe 350.619(187326)		
MFR.: SOTEN		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 169.25 lm/W			
MODEL	ET 2835	Imax (cd)	6387	S/MH(C0/180)	0.99
NOMINAL POWER(W)	60	LOR(%)	88.2	S/MH(C90/270)	0.98
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	9774.1	η UP,DN(C0-180)	0.0,42.3
NOMINAL FLUX(lm)	11086	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,45.9
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	230	η down (%)	88.2	CIBSE SHR MAX	1.05

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25°C
Operators: LI
Test Date: 2025-10-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity: 65.0%
Test Distance: 8.300m [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	6219	6034	5844	6047	6270	6263	6147	6243	0- 10	594.7	594.7	6.08, 5.36
20	5381	5222	4976	5088	5262	5197	5066	5318	10- 20	1610	2205	22.6, 19.9
30	3837	3669	3539	3619	3823	3903	3893	3955	20- 30	2063	4268	43.7, 38.5
40	2348	2210	2186	2238	2439	2611	2674	2588	30- 40	1915	6183	63.3, 55.8
50	1339	1286	1301	1306	1405	1545	1613	1522	40- 50	1439	7622	78.6, 68.8
60	790.8	789.2	861.2	796.0	814.8	905.1	968.7	899.6	50- 60	986.1	8608	88.1, 77.6
70	464.0	471.5	501.8	458.0	468.7	513.8	584.4	519.0	60- 70	653.5	9261	94.8, 83.5
80	214.1	217.8	240.2	209.4	212.2	244.5	284.2	252.4	70- 80	377.6	9639	98.6, 86.9
90	14.13	26.13	29.04	25.89	12.31	34.88	48.91	41.87	80- 90	135.2	9774	100, 88.2
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): 6967.1 lm

%lum = 71.3%

%lamp = 62.8%

Conical surface Flux(130deg): 8972.7 lm

%lum = 91.8%

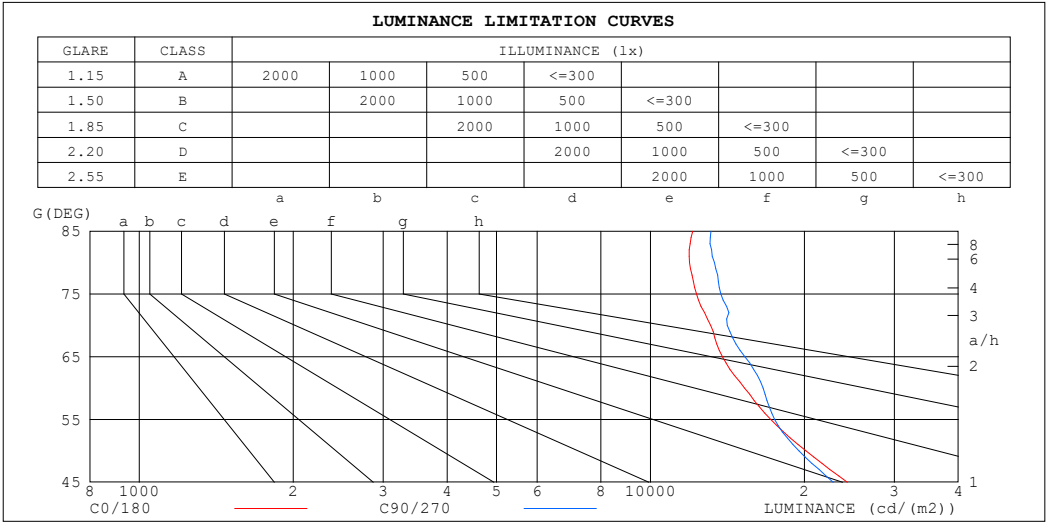
%lamp = 80.9%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25℃
 Operators: LI
 Test Date: 2025-10-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 65.0%
 Test Distance: 8.300m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:229.48V I:0.255A P:57.7W PF:0.986 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:11086x1 lm		
NAME: 2853-60D*60D*60D-4080		
SPEC.: VS ECXe 350.619(187326)		
MFR.: SOTEN		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	12097	13135
80	11918	13333
75	12303	13738
70	13110	14142
65	13834	15300
60	15285	16603
55	17200	17504
50	20136	19516
45	24253	22792

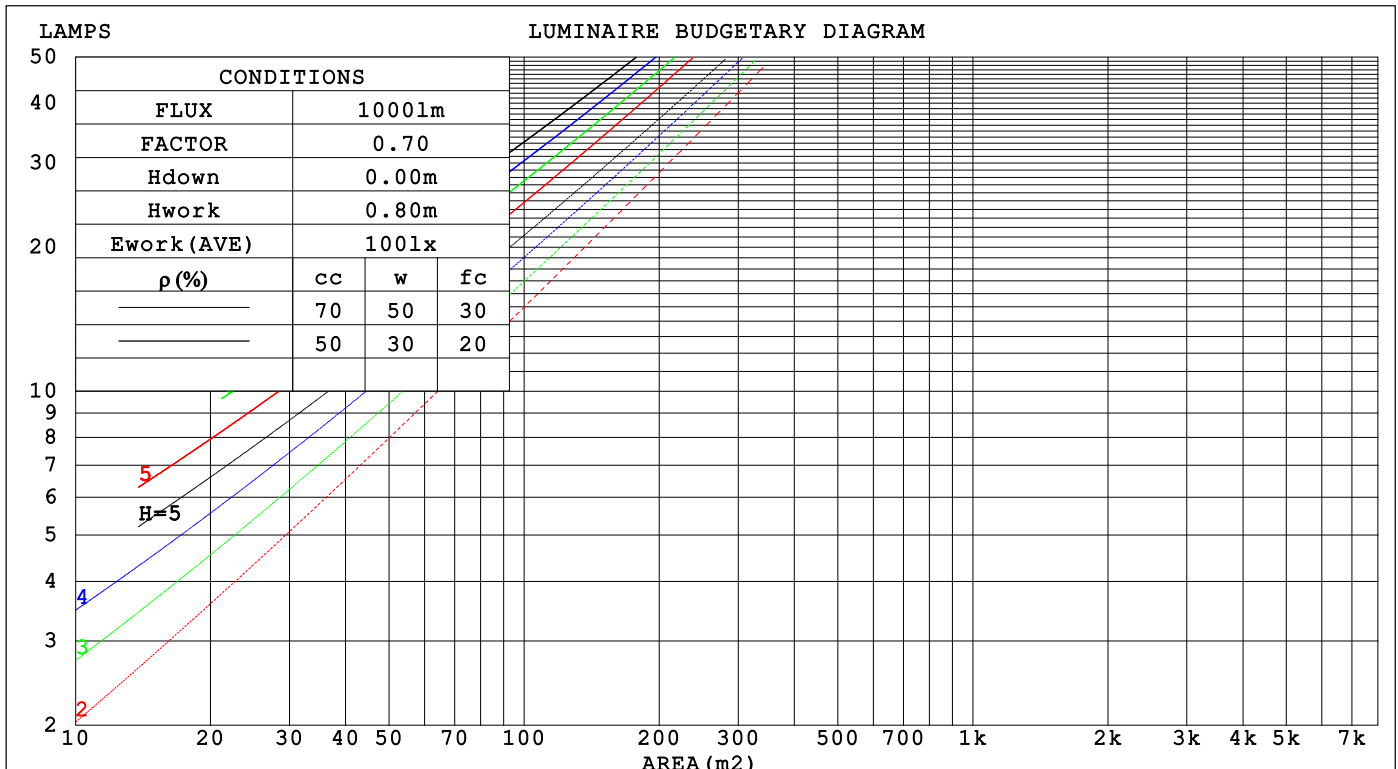
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25℃
Operators:LI
Test Date:2025-10-28

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.48V I:0.255A P:57.7W PF:0.986 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:11086x1 lm		
NAME: 2853-60D*60D*60D-4080		
SPEC.: VS ECXe 350.619(187326)		
MFR.: SOTEN		

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 Coefficients of Utilization(CU)															
0.0	1.05	1.05	1.05	1.03	1.03	1.03	.98	.98	.98	.94	.94	.94	.90	.90	.90	.88
1.0	.94	.91	.88	.92	.89	.87	.88	.86	.84	.85	.83	.81	.82	.80	.79	.77
2.0	.84	.79	.75	.83	.78	.74	.80	.76	.72	.77	.74	.71	.74	.72	.69	.68
3.0	.76	.70	.65	.75	.69	.64	.72	.67	.63	.70	.66	.62	.68	.64	.61	.60
4.0	.69	.62	.57	.68	.62	.57	.66	.60	.56	.64	.59	.55	.62	.58	.55	.53
5.0	.63	.56	.51	.62	.55	.51	.60	.55	.50	.59	.54	.50	.57	.53	.49	.48
6.0	.58	.51	.46	.57	.50	.46	.55	.50	.45	.54	.49	.45	.53	.48	.45	.43
7.0	.53	.46	.42	.52	.46	.41	.51	.45	.41	.50	.45	.41	.49	.44	.41	.39
8.0	.49	.43	.38	.49	.42	.38	.48	.42	.38	.46	.41	.37	.46	.41	.37	.36
9.0	.46	.39	.35	.45	.39	.35	.44	.39	.35	.43	.38	.35	.43	.38	.34	.33
10.0	.43	.36	.32	.42	.36	.32	.41	.36	.32	.41	.36	.32	.40	.35	.32	.30



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25℃
Operators:LI
Test Date:2025-10-28

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:229.48V I:0.255A P:57.7W PF:0.986 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:11086x1 lm		
NAME: 2853-60D*60D*60D-4080		
SPEC.: VS ECXe 350.619(187326)		
MFR.: SOTEN		

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	.227	.129	.041	.220	.126	.040	.209	.120	.038	.198	.114	.037	.189	.109	.035	
2.0	.214	.117	.036	.208	.115	.035	.199	.110	.034	.189	.106	.033	.181	.102	.032	
3.0	.200	.106	.032	.195	.104	.031	.186	.101	.031	.178	.098	.030	.171	.095	.029	
4.0	.186	.097	.028	.182	.095	.028	.175	.093	.028	.168	.090	.027	.161	.087	.027	
5.0	.174	.089	.026	.171	.088	.025	.164	.085	.025	.158	.083	.025	.152	.081	.024	
6.0	.163	.082	.023	.160	.081	.023	.154	.079	.023	.148	.077	.023	.143	.075	.022	
7.0	.153	.076	.021	.150	.075	.021	.145	.073	.021	.140	.072	.021	.135	.070	.021	
8.0	.144	.071	.020	.142	.070	.020	.137	.068	.020	.133	.067	.019	.128	.066	.019	
9.0	.136	.066	.018	.134	.065	.018	.130	.064	.018	.126	.063	.018	.122	.062	.018	
10.0	.129	.062	.017	.127	.061	.017	.123	.060	.017	.120	.059	.017	.116	.058	.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	.168	.168	.168	.144	.144	.144	.098	.098	.098	.056	.056	.056	.018	.018	.018	
1.0	.156	.138	.122	.133	.119	.105	.091	.082	.073	.052	.047	.042	.017	.015	.014	
2.0	.146	.117	.092	.125	.100	.079	.086	.069	.055	.049	.040	.032	.016	.013	.011	
3.0	.138	.101	.071	.118	.087	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
4.0	.130	.088	.056	.112	.076	.049	.077	.053	.034	.044	.031	.020	.014	.010	.007	
5.0	.123	.079	.046	.106	.068	.040	.073	.048	.028	.042	.028	.017	.014	.009	.006	
6.0	.117	.071	.038	.100	.062	.033	.069	.043	.024	.040	.025	.014	.013	.008	.005	
7.0	.111	.065	.032	.096	.056	.028	.066	.039	.020	.038	.023	.012	.012	.008	.004	
8.0	.106	.060	.028	.091	.052	.024	.063	.036	.017	.037	.021	.010	.012	.007	.003	
9.0	.101	.055	.024	.087	.048	.021	.060	.034	.015	.035	.020	.009	.011	.007	.003	
10.0	.096	.051	.021	.083	.045	.019	.058	.031	.013	.034	.019	.008	.011	.006	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25℃
 Operators:LI
 Test Date:2025-10-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:65.0%
 Test Distance:8.300m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:229.48V I:0.255A P:57.7W PF:0.986 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:11086x1 lm										
NAME: 2853-60D*60D*60D-4080										
SPEC.: VS ECXe 350.619(187326)										
MFR.: SOTEN										
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	21.4	22.7	21.7	22.9	23.1	21.5	22.8	21.7	22.9	23.1
3H	22.4	23.6	22.7	23.8	24.0	22.6	23.7	22.8	24.0	24.2
4H	22.9	24.0	23.2	24.2	24.5	23.1	24.2	23.4	24.4	24.7
6H	23.2	24.3	23.6	24.6	24.8	23.5	24.6	23.8	24.8	25.1
8H	23.4	24.4	23.7	24.7	25.0	23.7	24.7	24.0	25.0	25.3
12H	23.5	24.5	23.8	24.8	25.1	23.8	24.8	24.1	25.1	25.4
4H 2H	21.8	22.9	22.1	23.2	23.4	21.8	23.0	22.1	23.2	23.4
3H	23.0	24.0	23.3	24.3	24.6	23.1	24.1	23.5	24.4	24.7
4H	23.6	24.5	23.9	24.8	25.1	23.8	24.7	24.2	25.0	25.3
6H	24.1	24.9	24.5	25.2	25.6	24.4	25.2	24.8	25.5	25.9
8H	24.3	25.1	24.7	25.4	25.8	24.6	25.3	25.0	25.7	26.1
12H	24.5	25.2	24.9	25.5	25.9	24.8	25.5	25.2	25.9	26.2
8H 4H	23.8	24.5	24.2	24.9	25.3	24.0	24.7	24.4	25.1	25.5
6H	24.5	25.1	24.9	25.5	25.9	24.7	25.3	25.2	25.7	26.2
8H	24.8	25.3	25.2	25.8	26.2	25.1	25.6	25.5	26.0	26.5
12H	25.1	25.5	25.5	26.0	26.4	25.3	25.8	25.8	26.2	26.7
12H 4H	23.8	24.5	24.2	24.9	25.3	24.0	24.7	24.4	25.1	25.5
6H	24.5	25.1	25.0	25.5	26.0	24.8	25.3	25.2	25.8	26.2
8H	24.9	25.4	25.4	25.8	26.3	25.2	25.6	25.6	26.1	26.5
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4				
1.5H	+ 0.3 / - 0.2					+ 0.2 / - 0.2				
2.0H	+ 0.6 / - 0.4					+ 0.4 / - 0.3				

CIE Pub.117, 11086 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 8.4)
 Area: 0.1037 m2

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25℃
 Operators:LI
 Test Date:2025-10-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:65.0%
 Test Distance:8.300m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:229.48V I:0.255A P:57.7W PF:0.986 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:11086x1 lm		
NAME: 2853-60D*60D*60D-4080		
SPEC.: VS ECXe 350.619(187326)		
MFR.: SOTEN		

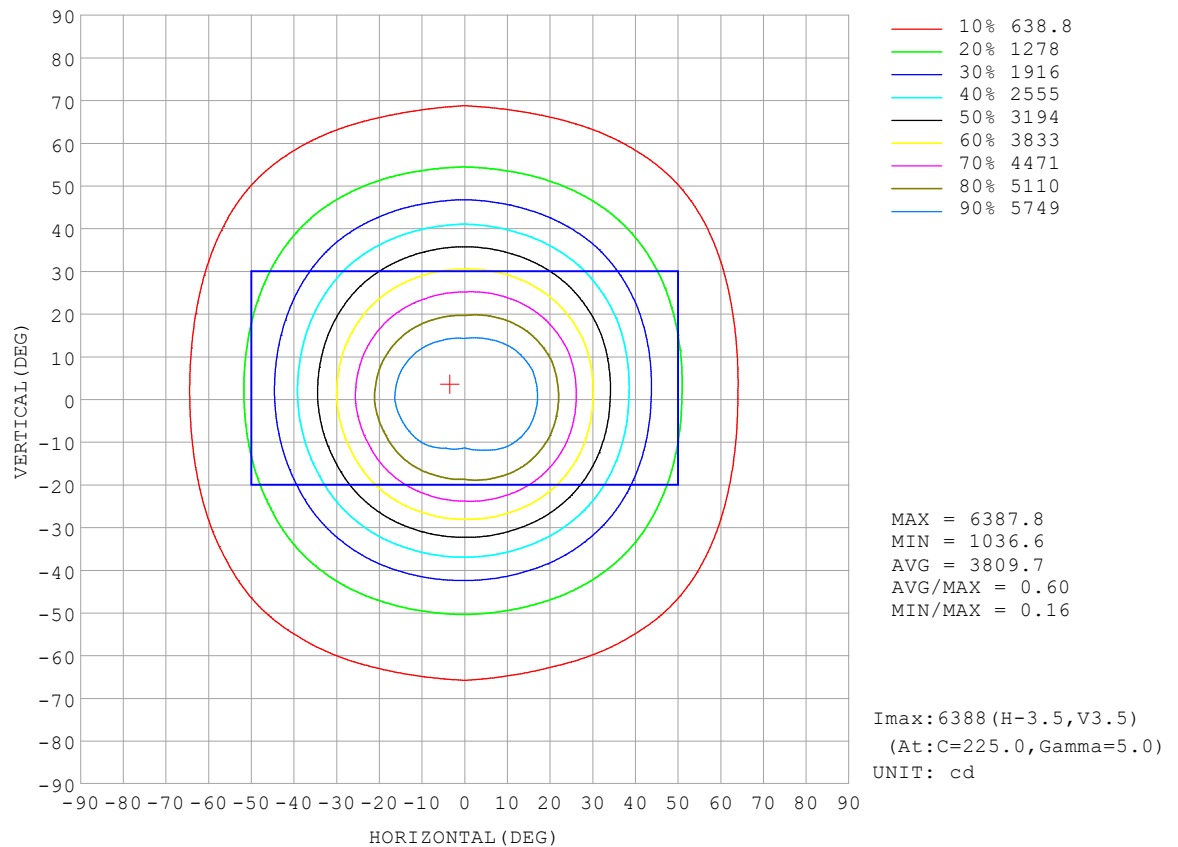
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	61	52	47	60	52	47	59	52	47	42
0.80	69	61	55	68	60	55	67	60	55	50
1.00	75	67	62	74	67	62	72	67	61	56
1.25	80	73	68	79	72	68	77	71	67	62
1.50	84	77	72	83	76	72	80	75	71	65
2.00	89	83	78	87	82	77	84	80	76	70
2.50	91	86	82	90	85	81	86	82	79	73
3.00	94	89	85	92	87	84	88	85	82	75
4.00	96	92	89	94	91	88	91	88	85	78
5.00	98	95	92	96	93	90	92	90	88	80
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°C
 Operators: LI
 Test Date: 2025-10-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 65.0%
 Test Distance: 8.300m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:229.48V I:0.255A P:57.7W PF:0.986 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:11086x1 lm		
NAME: 2853-60D*60D*60D-4080		
SPEC.: VS ECXe 350.619(187326)		
MFR.: SOTEN		

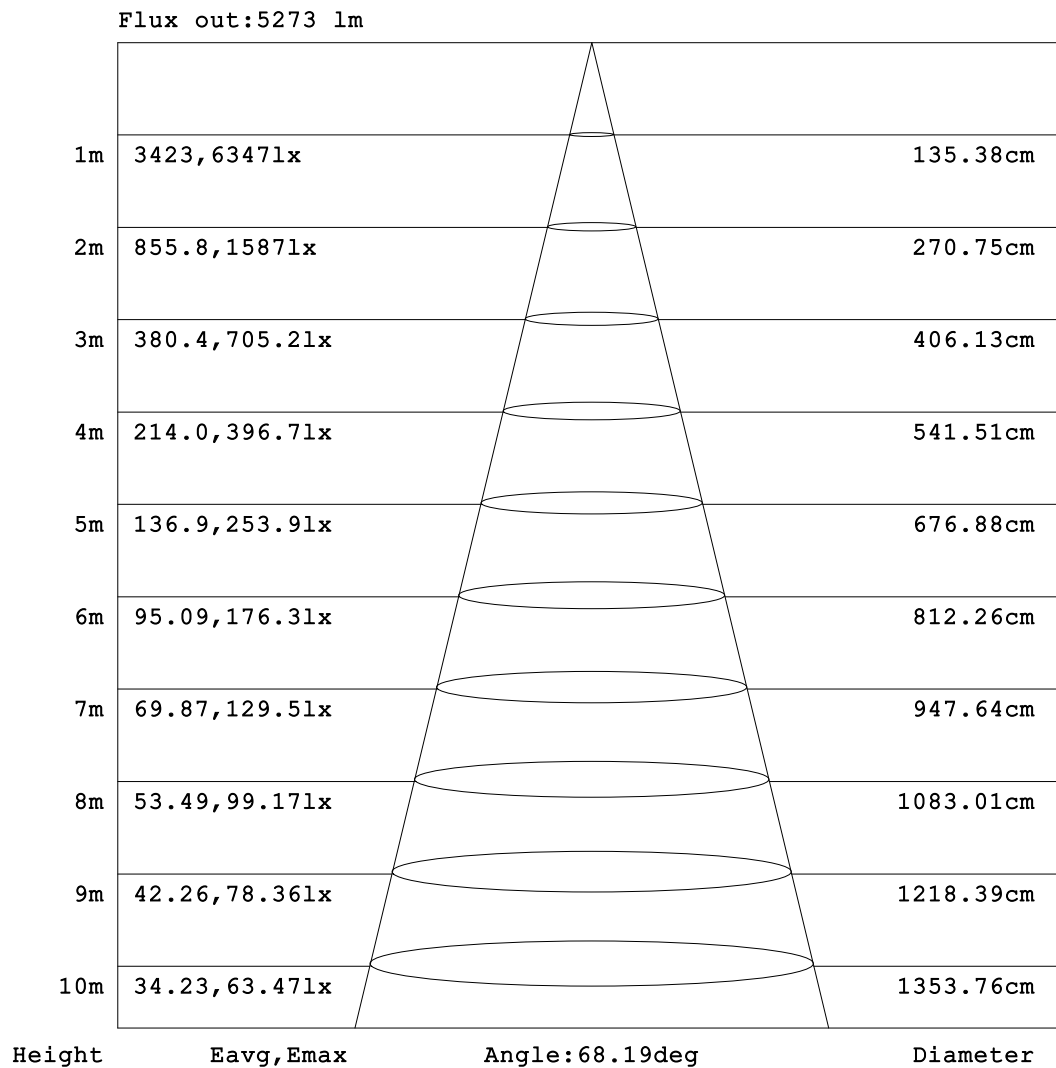


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25°C
 Operators: LI
 Test Date: 2025-10-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 65.0%
 Test Distance: 8.300m [K=1.0000]
 Remarks:

AAI Figure

Test:U:229.48V I:0.255A P:57.7W PF:0.986 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:11086x1 lm		
NAME: 2853-60D*60D*60D-4080		
SPEC.: VS ECXe 350.619(187326)		
MFR.: SOTEN		

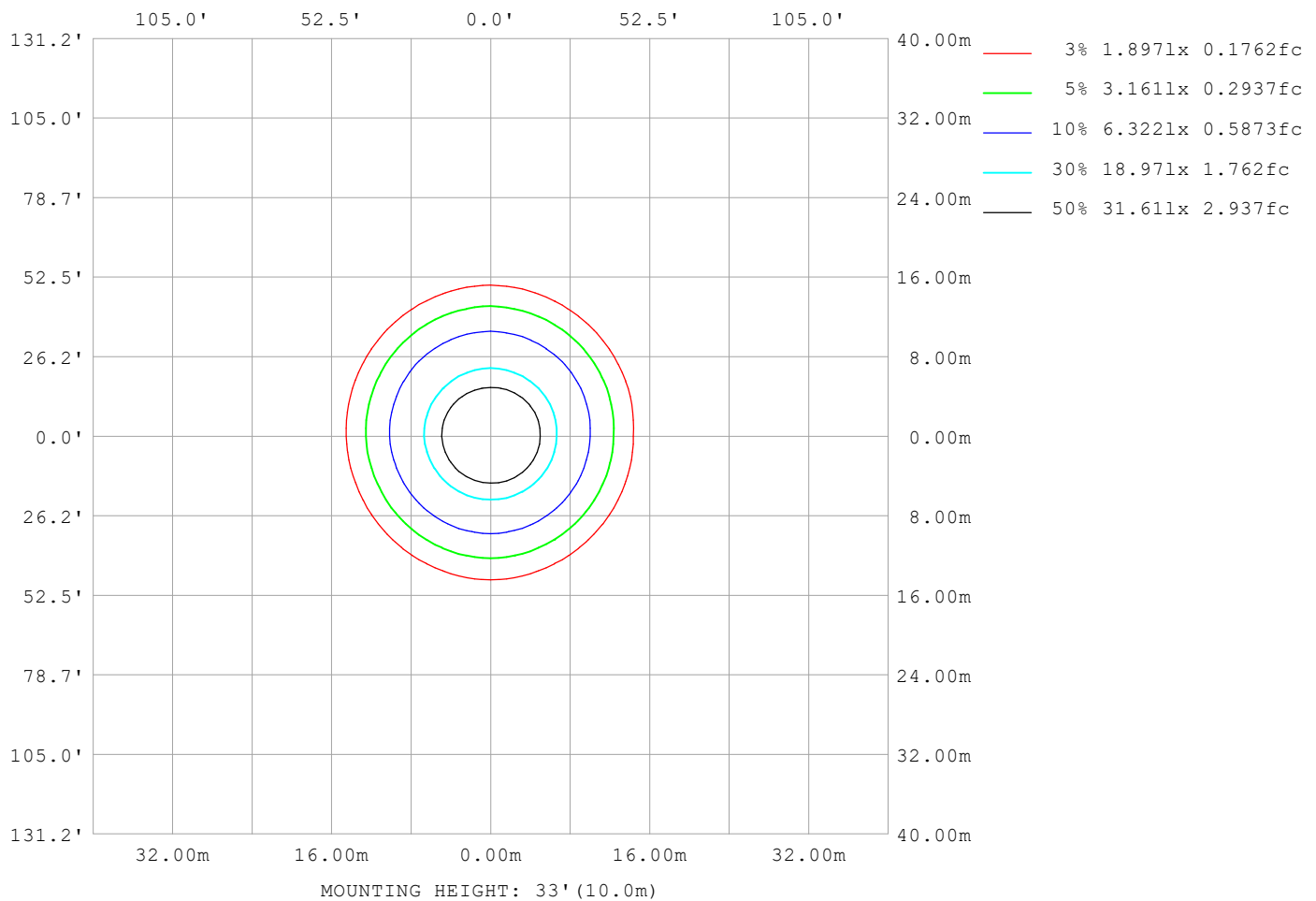


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25°C
 Operators: LI
 Test Date: 2025-10-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 65.0%
 Test Distance: 8.300m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test: U:229.48V I:0.255A P:57.7W PF:0.986 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:11086x1 lm		
NAME: 2853-60D*60D*60D-4080		
SPEC.: VS ECXe 350.619 (187326)		
MFR.: SOTEN		



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25°C
 Operators: LI
 Test Date: 2025-10-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 65.0%
 Test Distance: 8.300m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:229.48V I:0.255A P:57.7W PF:0.986 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:11086x1 lm		
NAME: 2853-60D*60D*60D-4080		
SPEC.: VS ECXe 350.619 (187326)		
MFR.: SOTEN		

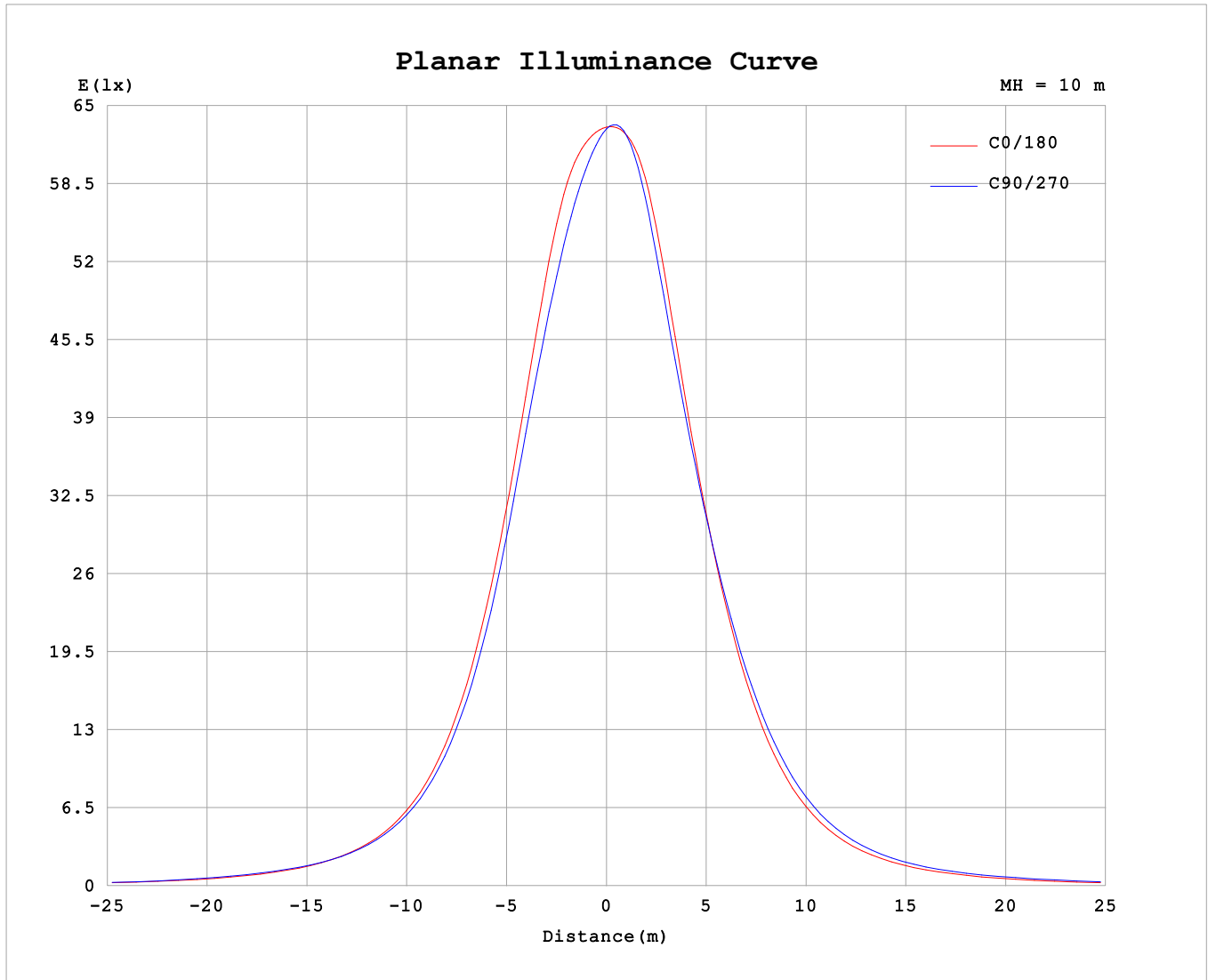
AvgL	cd/m2
L_0~180 (65) av	13926
L_0~180 (75) av	12273
L_0~180 (85) av	11883
L_90~270 (65) av	16603
L_90~270 (75) av	14776
L_90~270 (85) av	15350
L_45 (65) av	14719
L_45 (75) av	13282
L_45 (85) av	13439

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25℃
 Operators: LI
 Test Date: 2025-10-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 65.0%
 Test Distance: 8.300m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25°C
Operators: LI
Test Date: 2025-10-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity: 65.0%
Test Distance: 8.300m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

```