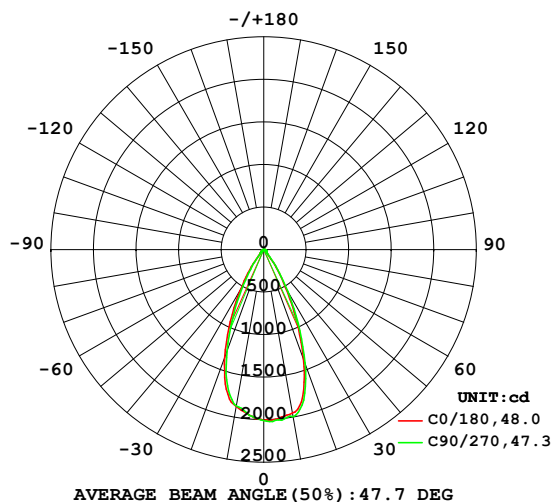


LUMINAIRE PHOTOMETRIC TEST REPORT

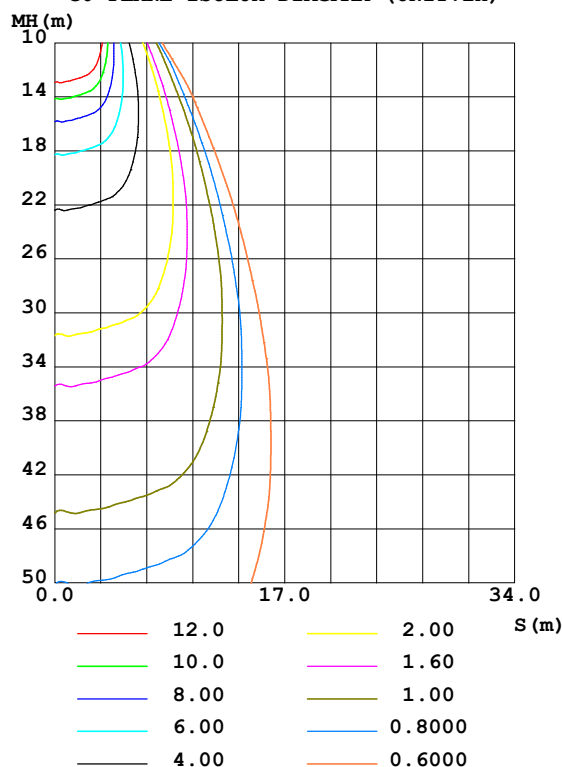
Test:U:240.2V I:0.0698A P:15.71W PF:0.9372 Lamp Flux:1358.07x1 lm		
NAME: BARREL_WHT_55 DEG_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 86.45 lm/W			
MODEL	TRIDONIC SLE G7 09MM	Imax(cd)	2023	S/MH(C0/180)	0.74
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.71
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	1358.1	η UP,DN(C0-180)	0.0,51.5
NOMINAL FLUX(lm)	1358.07	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	0.75

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:JEFF
Test Date:14 August 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.892m [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	1949	1989	1994	1944	1871	1855	1865	1894	0- 10	186.5	186.5	13.7,13.7
20	1370	1402	1420	1387	1345	1264	1256	1313	10- 20	472.5	659.0	48.5,48.5
30	517.3	542.1	564.9	566.2	563.1	510.1	484.1	506.0	20- 30	413.8	1073	79,79
40	85.51	87.66	87.82	94.54	96.91	88.17	79.47	83.04	30- 40	170.5	1243	91.5,91.5
50	40.40	40.24	39.80	40.26	41.99	40.74	40.07	40.18	40- 50	44.38	1288	94.8,94.8
60	28.40	28.11	28.22	29.15	29.93	28.66	28.06	27.90	50- 60	29.97	1318	97,97
70	18.62	18.61	18.64	18.99	18.94	18.13	17.87	18.15	60- 70	23.43	1341	98.7,98.7
80	7.467	7.269	7.073	7.005	6.910	6.847	7.093	7.404	70- 80	13.26	1354	99.7,99.7
90	0.0770	0.0991	0.0884	0.0696	0.0624	0.0587	0.0626	0.0622	80- 90	3.774	1358	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): 1268.8 lm

%lum = 93.4%

%lamp = 93.4%

Conical surface Flux(120deg): 1317.6 lm

%lum = 97.0%

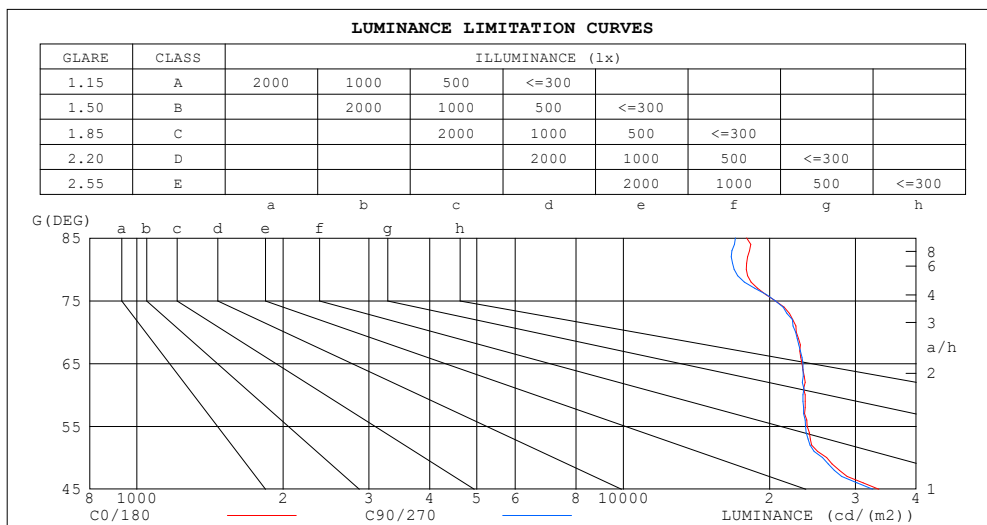
%lamp = 97.0%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:14 August 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.892m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:240.2V I:0.0698A P:15.71W PF:0.9372 Lamp Flux:1358.07x1 lm		
NAME: BARREL_WHT_55 DEG_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	17923	16995
80	17915	16906
75	20532	20515
70	22681	22625
65	23302	23406
60	23668	23430
55	23862	23704
50	26186	25698
45	33522	32557

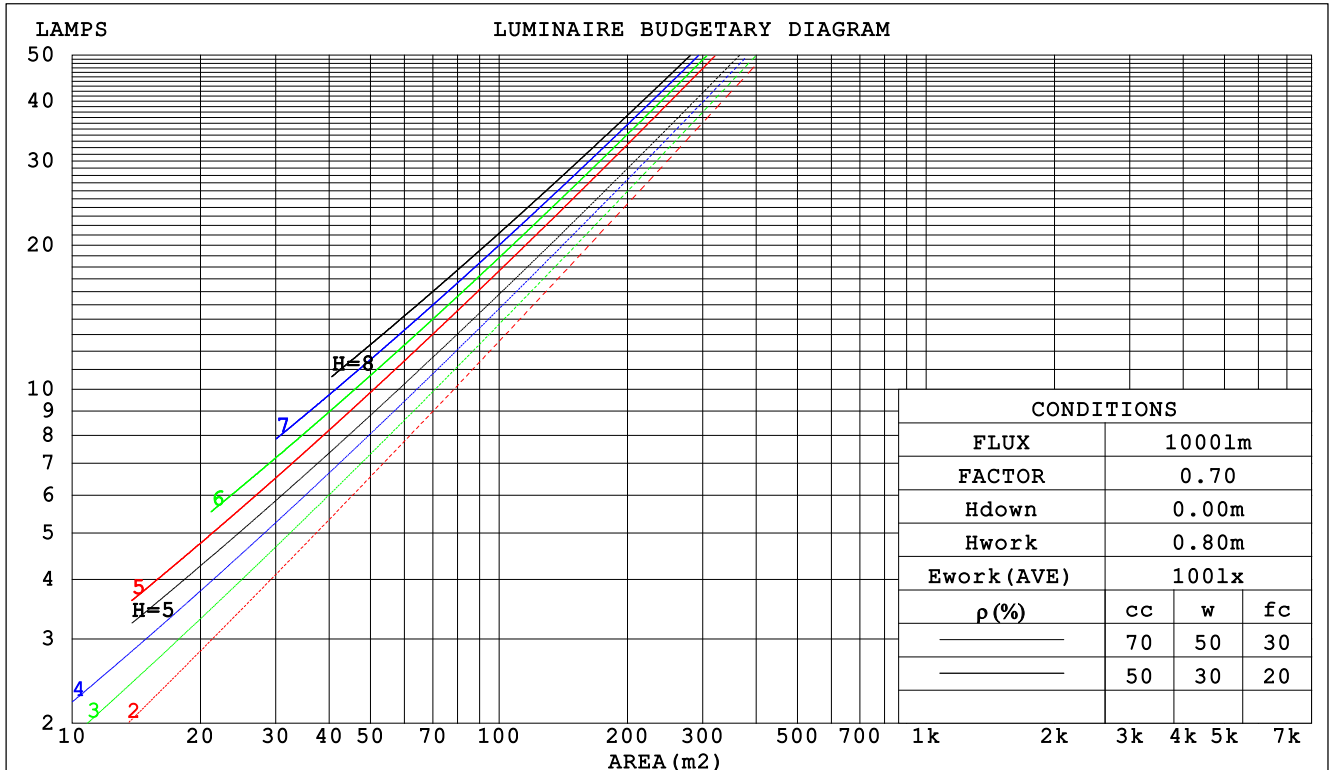
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:14 August 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.892m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.2V I:0.0698A P:15.71W PF:0.9372 Lamp Flux:1358.07x1 lm		
NAME: BARREL_WHT_55 DEG_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
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	.00
1.0	1.11	1.08	1.06	1.08	1.06	1.04	1.04	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.96	1.01	.98	.95	.98	.95	.93	.95	.93	.91	.92	.91	.89	.87
3.0	.97	.92	.88	.95	.91	.87	.93	.89	.86	.90	.87	.84	.88	.85	.83	.82
4.0	.91	.85	.81	.90	.85	.81	.87	.83	.80	.85	.82	.79	.84	.81	.78	.77
5.0	.85	.80	.76	.85	.79	.75	.83	.78	.75	.81	.77	.74	.80	.76	.73	.72
6.0	.81	.75	.71	.80	.75	.71	.79	.74	.70	.77	.73	.70	.76	.72	.69	.68
7.0	.77	.71	.67	.76	.70	.67	.75	.70	.66	.73	.69	.66	.72	.69	.66	.64
8.0	.73	.67	.63	.72	.67	.63	.71	.66	.63	.70	.66	.62	.69	.65	.62	.61
9.0	.69	.64	.60	.69	.63	.60	.68	.63	.59	.67	.62	.59	.66	.62	.59	.58
10.0	.66	.60	.57	.65	.60	.57	.65	.60	.57	.64	.60	.56	.63	.59	.56	.55



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:14 August 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.892m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:240.2V I:0.0698A P:15.71W PF:0.9372 Lamp Flux:1358.07x1 lm		
NAME: BARREL_WHT_55 DEG_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	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	.180	.102	.032	.173	.099	.031	.160	.092	.029	.149	.086	.028	.138	.080	.026	
2.0	.170	.093	.029	.164	.090	.028	.153	.085	.027	.144	.081	.025	.135	.076	.024	
3.0	.160	.085	.025	.155	.083	.025	.146	.079	.024	.138	.075	.023	.130	.072	.022	
4.0	.151	.078	.023	.147	.077	.023	.139	.074	.022	.132	.071	.021	.125	.068	.021	
5.0	.143	.073	.021	.139	.071	.021	.132	.069	.020	.126	.067	.020	.120	.064	.019	
6.0	.135	.068	.019	.132	.067	.019	.126	.065	.019	.121	.063	.018	.116	.061	.018	
7.0	.129	.064	.018	.126	.063	.018	.121	.061	.018	.116	.059	.017	.111	.058	.017	
8.0	.123	.060	.017	.120	.059	.017	.116	.058	.017	.111	.056	.016	.107	.055	.016	
9.0	.117	.057	.016	.115	.056	.016	.111	.055	.016	.107	.054	.015	.103	.053	.015	
10.0	.112	.054	.015	.110	.053	.015	.107	.052	.015	.103	.051	.015	.100	.050	.014	

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	.171	.157	.145	.147	.135	.124	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.133	.113	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.143	.114	.090	.123	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.073	.114	.085	.063	.078	.059	.045	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.106	.075	.052	.073	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.116	.078	.050	.099	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.109	.070	.043	.094	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.103	.064	.037	.089	.055	.032	.061	.039	.023	.036	.023	.014	.012	.008	.004	
9.0	.098	.058	.032	.084	.051	.028	.058	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.093	.054	.028	.080	.047	.024	.056	.033	.017	.032	.019	.010	.011	.006	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:14 August 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.892m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:240.2V I:0.0698A P:15.71W PF:0.9372 Lamp Flux:1358.07x1 lm											
NAME: BARREL_WHT_55 DEG_350mA_3000K CRI90					TYPE:LED			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:1			
MFR.: DARKON					SUR.:			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	20.3	21.2	20.5	21.4	21.5	20.4	21.3	20.6	21.5	21.6	
	3H	21.0	21.9	21.3	22.0	22.2	21.1	21.9	21.3	22.1	22.3
	4H	21.3	22.1	21.6	22.4	22.6	21.4	22.2	21.7	22.4	22.6
	6H	21.6	22.3	21.9	22.6	22.8	21.6	22.3	21.9	22.6	22.8
	8H	21.6	22.4	21.9	22.6	22.9	21.7	22.4	22.0	22.6	22.9
	12H	21.7	22.4	22.0	22.7	22.9	21.7	22.4	22.0	22.7	22.9
4H	2H	20.5	21.3	20.7	21.5	21.7	20.5	21.3	20.8	21.6	21.8
	3H	21.4	22.1	21.7	22.4	22.6	21.5	22.1	21.8	22.4	22.7
	4H	21.9	22.5	22.2	22.8	23.1	21.9	22.5	22.2	22.8	23.1
	6H	22.2	22.7	22.6	23.1	23.4	22.2	22.8	22.6	23.1	23.4
	8H	22.3	22.8	22.7	23.2	23.6	22.3	22.8	22.7	23.2	23.5
	12H	22.4	22.9	22.8	23.3	23.7	22.4	22.9	22.8	23.2	23.6
8H	4H	22.0	22.5	22.4	22.9	23.2	22.0	22.5	22.4	22.9	23.3
	6H	22.4	22.8	22.8	23.2	23.7	22.4	22.8	22.8	23.2	23.7
	8H	22.6	23.0	23.1	23.4	23.9	22.6	23.0	23.0	23.4	23.8
	12H	22.8	23.1	23.3	23.6	24.0	22.7	23.1	23.2	23.5	24.0
12H	4H	22.0	22.5	22.4	22.8	23.2	22.0	22.5	22.4	22.9	23.2
	6H	22.4	22.8	22.9	23.2	23.7	22.4	22.8	22.9	23.2	23.7
	8H	22.7	23.0	23.1	23.4	23.9	22.6	23.0	23.1	23.4	23.9
Variations with the observer position at spacings:											
S = 1.0H	+ 1.2 / - 0.7					+ 1.3 / - 0.7					
1.5H	+ 2.3 / - 0.7					+ 2.5 / - 0.7					
2.0H	+ 0.4 / - 0.3					+ 0.4 / - 0.3					

CIE Pub.117 Corrected 1358 lm Total Lamp Luminous Flux. (8log(F/F0) = 1.1)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:14 August 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.892m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.2V I:0.0698A P:15.71W PF:0.9372 Lamp Flux:1358.07x1 lm		
NAME: BARREL_WHT_55 DEG_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

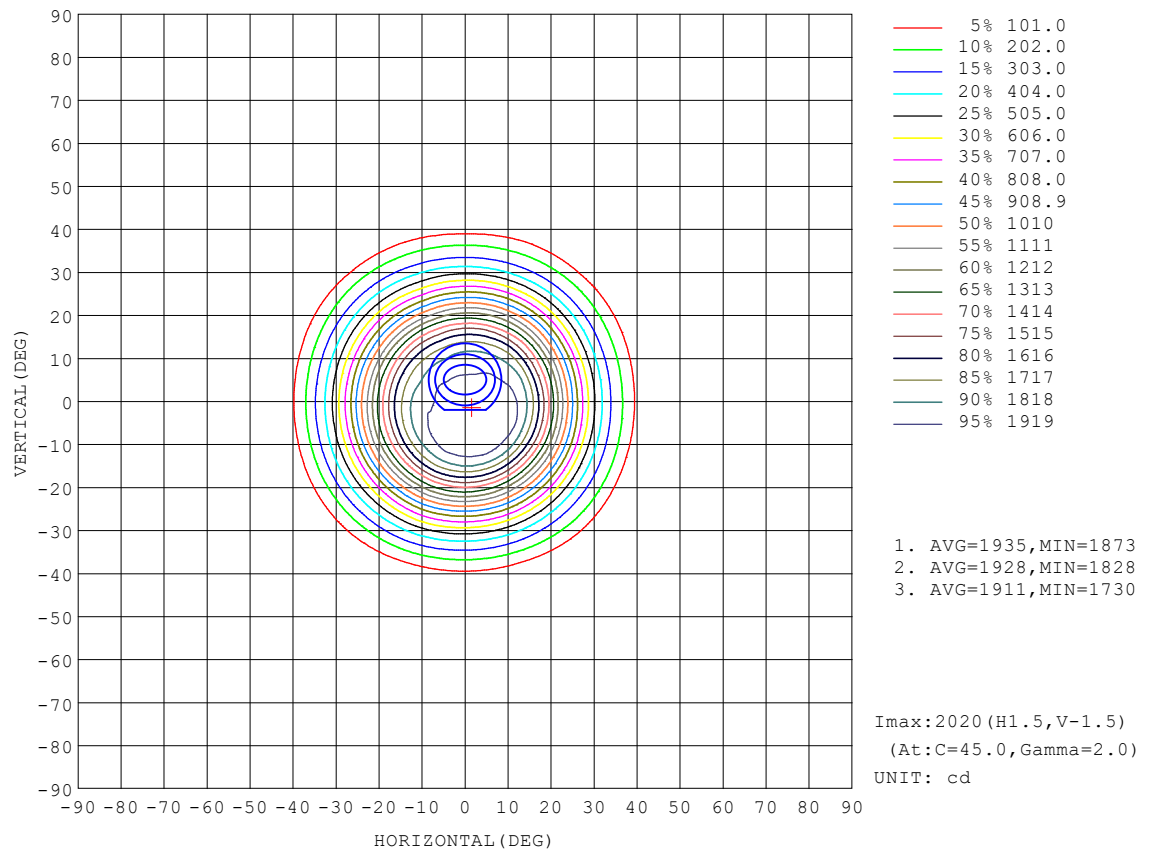
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	80	76	86	80	76	85	79	76	72
0.80	94	88	84	93	87	84	92	87	83	80
1.00	98	92	89	97	92	88	96	92	88	84
1.25	102	97	93	101	96	93	99	95	92	88
1.50	105	100	96	104	99	96	101	98	95	90
2.00	108	103	100	106	102	99	104	100	98	92
2.50	110	106	102	108	104	102	105	102	100	94
3.00	111	108	105	109	106	104	106	104	101	95
4.00	113	110	108	111	109	107	108	106	104	97
5.00	115	112	110	113	111	109	109	107	106	98
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHR NOM = 1.25		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JEFF
Test Date: 14 August 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.892m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:240.2V I:0.0698A P:15.71W PF:0.9372 Lamp Flux:1358.07x1 lm		
NAME: BARREL_WHT_55 DEG_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

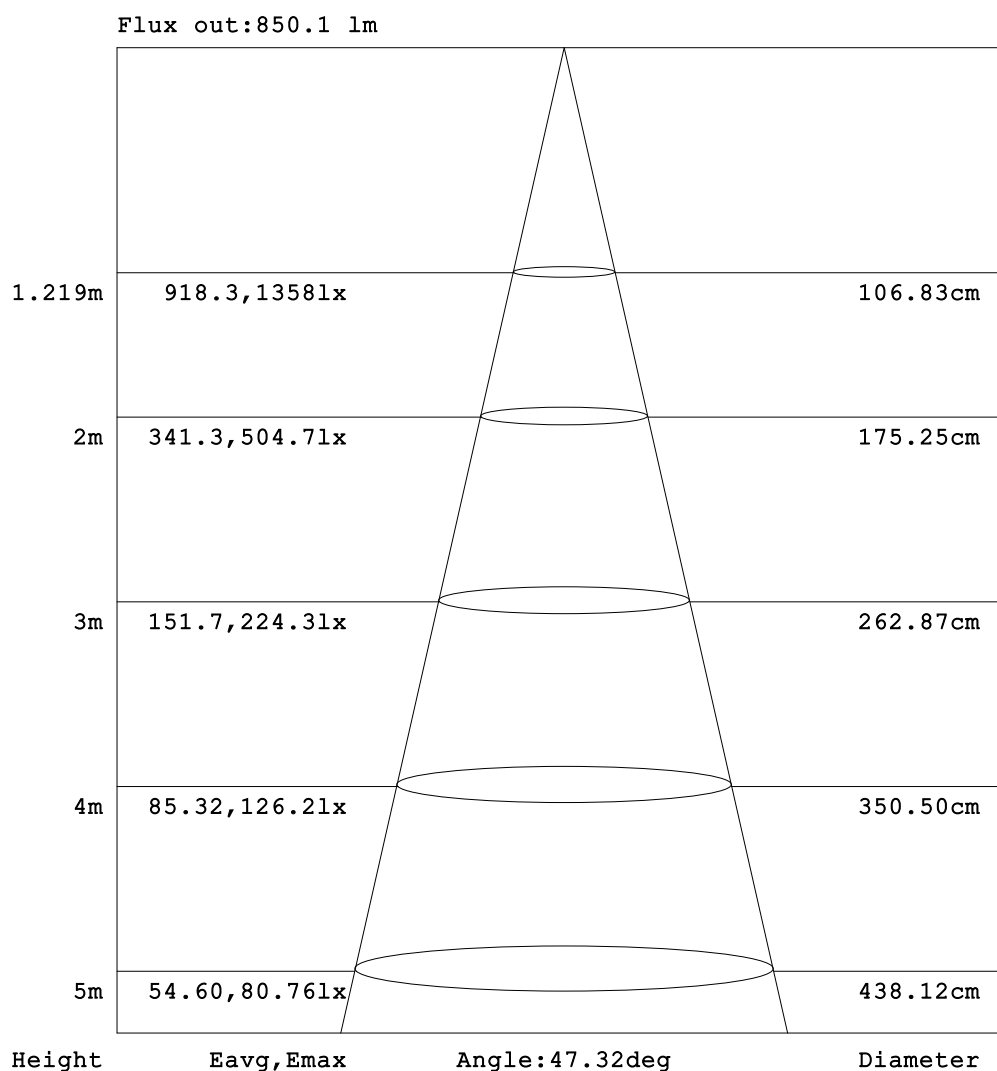


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:14 August 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.892m [K=1.0000]
Remarks:

AAI Figure

Test:U:240.2V I:0.0698A P:15.71W PF:0.9372 Lamp Flux:1358.07x1 lm		
NAME: BARREL_WHT_55 DEG_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



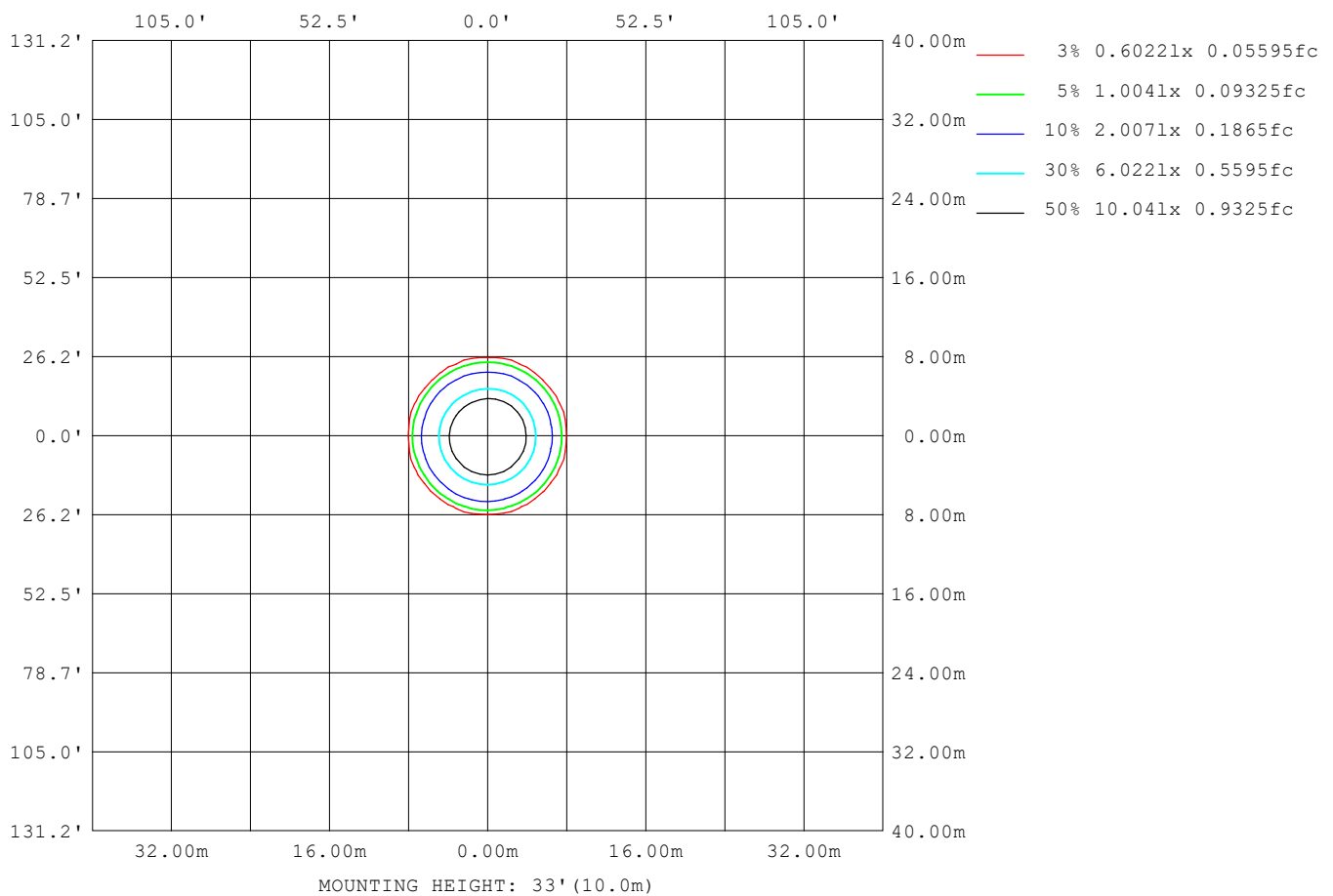
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JEFF
Test Date: 14 August 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.892m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:240.2V I:0.0698A P:15.71W PF:0.9372 Lamp Flux:1358.07x1 lm		
NAME: BARREL_WHT_55 DEG_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:14 August 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.892m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:240.2V I:0.0698A P:15.71W PF:0.9372 Lamp Flux:1358.07x1 lm		
NAME: BARREL_WHT_55 DEG_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

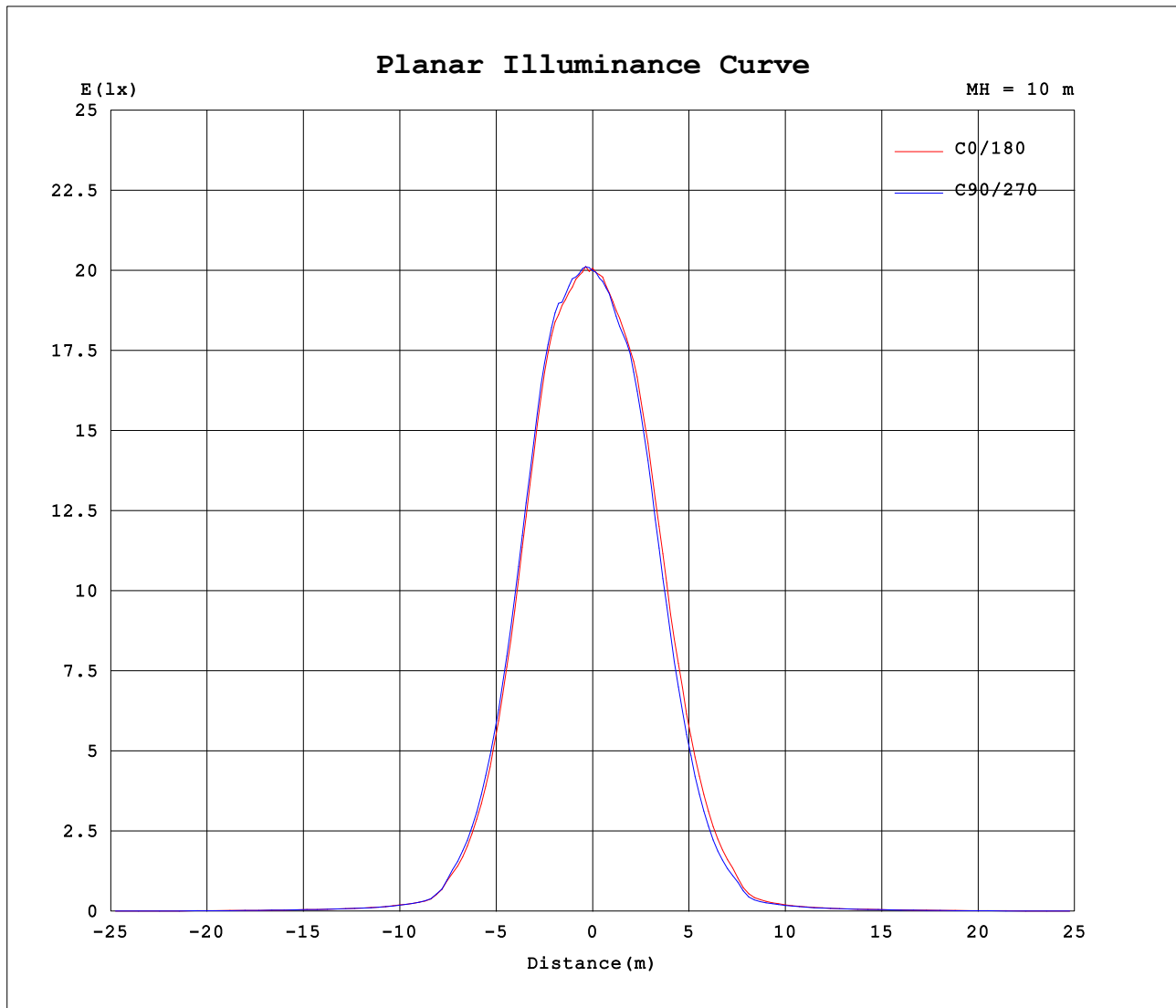
AvgL	cd/m2
L_0~180 (65) av	23914
L_0~180 (75) av	20443
L_0~180 (85) av	16885
L_90~270 (65) av	23099
L_90~270 (75) av	19817
L_90~270 (85) av	16578
L_45 (65) av	23327
L_45 (75) av	20139
L_45 (85) av	16687

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:14 August 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.892m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JEFF
Test Date: 14 August 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.892m [K=1.0000]
Remarks:

