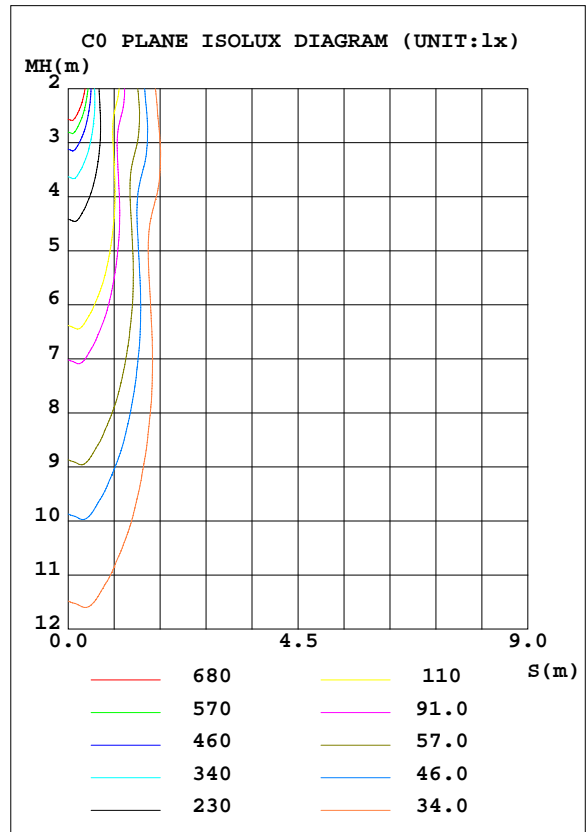
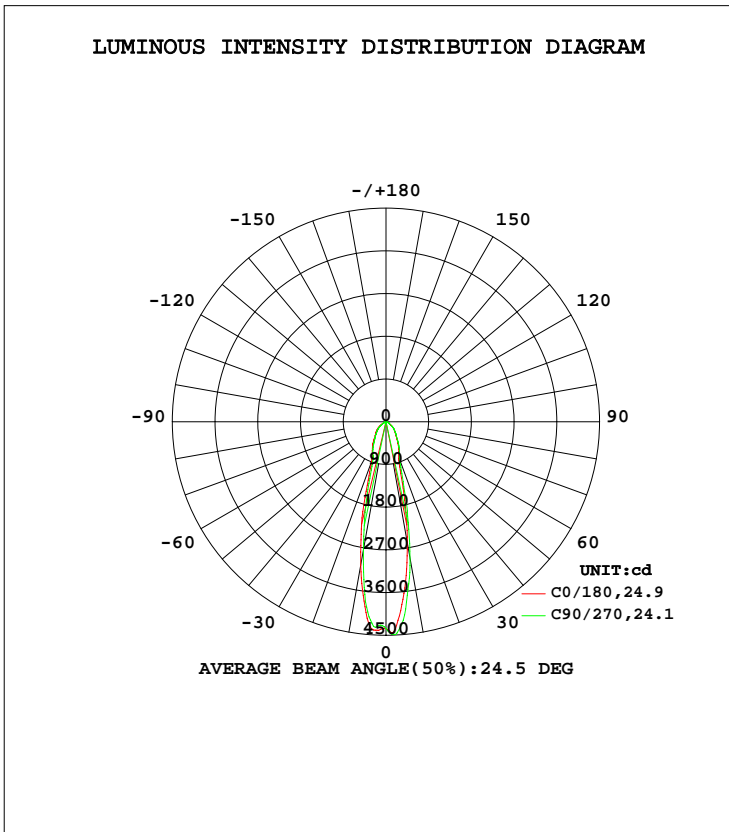


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: PAR38-18W-3000K-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	1020	I _{max} (cd)	4597	S/MH(C0/180)	0.44
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	0.41
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	1779.3	η UP, DN(C0-180)	0.0,49.8
NOMINAL FLUX(lm)	1779.3	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,50.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:12 September 2022

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-i300_V1 SYSTEM V2.0.406.11
 Humidity:65.0%
 Test Distance:3.161m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

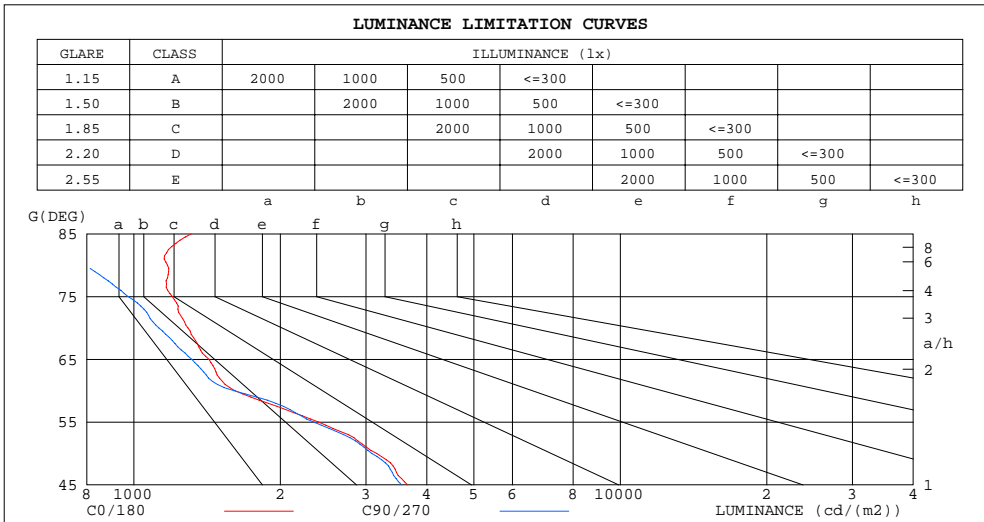
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	2603	2865	2924	2975	3070	2945	2747	2570	0- 10	350.1	350.1	19.7,19.7
20	782.7	820.7	855.5	915.2	888.2	823.9	796.6	802.4	10- 20	435.4	785.4	44.1,44.1
30	499.2	516.0	523.5	564.5	556.4	535.6	512.7	509.8	20- 30	305.4	1091	61.3,61.3
40	306.5	324.4	321.9	352.9	341.5	341.3	319.2	327.5	30- 40	257.2	1348	75.8,75.8
50	197.2	206.7	198.7	212.1	229.4	219.1	196.0	196.4	40- 50	205.9	1554	87.3,87.3
60	78.39	81.74	80.51	92.04	90.10	81.21	74.42	77.69	50- 60	128.7	1683	94.6,94.6
70	42.96	44.05	38.59	45.95	44.20	43.19	36.77	39.45	60- 70	57.85	1740	97.8,97.8
80	19.80	17.64	13.85	17.31	20.61	18.04	12.35	15.77	70- 80	30.15	1771	99.5,99.5
90	4.561	0.5155	0.4190	0.6677	5.051	0.4877	0.2727	0.5125	80- 90	8.655	1779	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: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:12 September 2022

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-i300_V1 SYSTEM V2.0.406.11
 Humidity:65.0%
 Test Distance:3.161m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

NAME: PAR38-18W-3000K-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1312	625
80	1173	796
75	1200	973
70	1292	1125
65	1427	1316
60	1613	1606
55	2395	2341
50	3156	3084
45	3655	3554

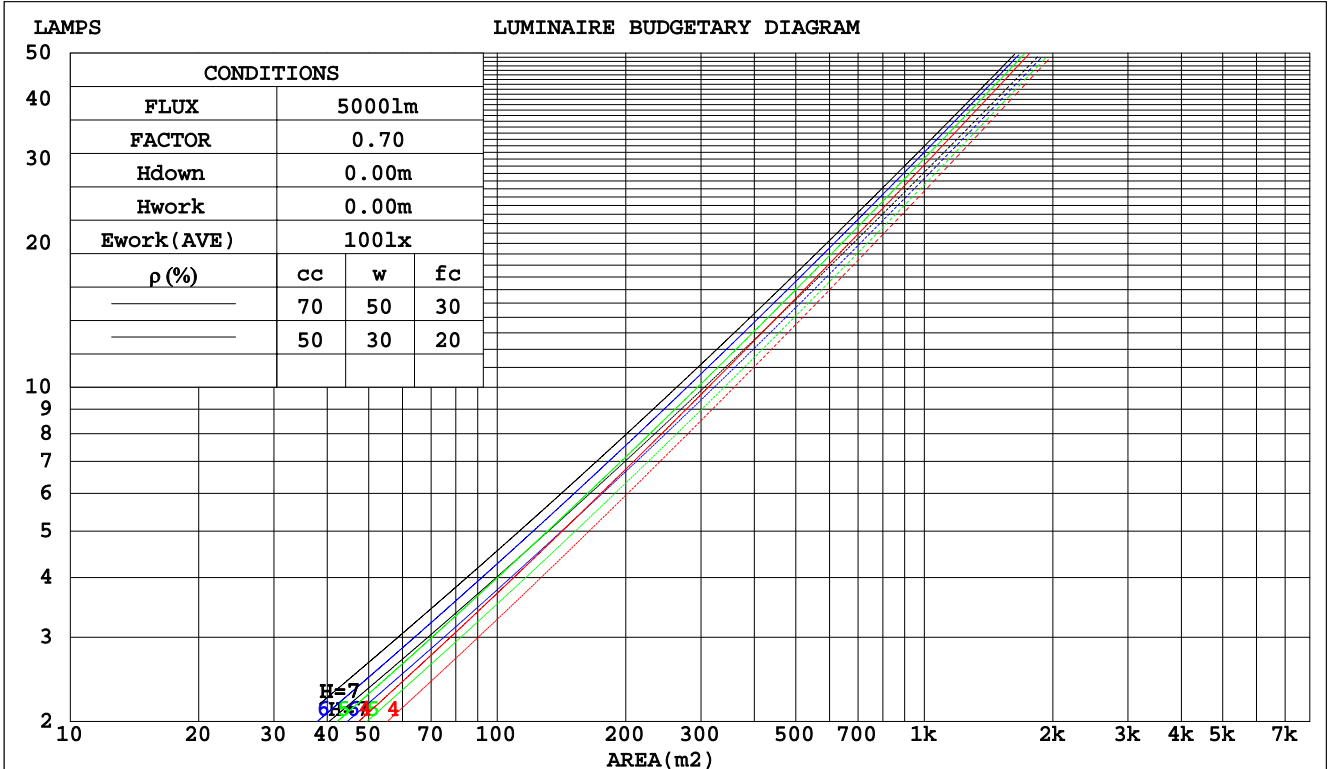
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: fu
 Test Date: 12 September 2022

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-i300_V1 SYSTEM V2.0.406.11
 Humidity: 65.0%
 Test Distance: 3.161m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: PAR38-18W-3000K-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding 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	1.19	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	1.09	1.07	1.04	1.07	1.05	1.02	1.03	1.01	.99	.99	.98	.96	.96	.95	.93	.92
2.0	1.01	.96	.92	.99	.95	.91	.96	.92	.89	.93	.90	.87	.90	.88	.86	.84
3.0	.93	.88	.83	.92	.87	.83	.89	.85	.81	.87	.83	.80	.84	.81	.79	.77
4.0	.87	.81	.76	.85	.80	.75	.83	.78	.75	.81	.77	.74	.79	.76	.73	.71
5.0	.81	.75	.70	.80	.74	.70	.78	.73	.69	.76	.72	.68	.75	.71	.68	.66
6.0	.76	.70	.65	.75	.69	.65	.74	.68	.64	.72	.68	.64	.71	.67	.63	.62
7.0	.72	.65	.61	.71	.65	.61	.70	.64	.60	.68	.64	.60	.67	.63	.60	.58
8.0	.68	.62	.57	.67	.61	.57	.66	.61	.57	.65	.60	.57	.64	.60	.56	.55
9.0	.64	.58	.54	.64	.58	.54	.63	.58	.54	.62	.57	.54	.61	.57	.54	.52
10.0	.61	.56	.52	.61	.55	.52	.60	.55	.51	.59	.55	.51	.59	.54	.51	.50



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:12 September 2022

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-i300_V1 SYSTEM V2.0.406.11
 Humidity:65.0%
 Test Distance:3.161m [K=1.0000]
 Remarks:

WEC AND CCEC

NAME: PAR38-18W-3000K-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding 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	.203	.115	.037	.196	.112	.036	.183	.105	.034	.172	.099	.032	.161	.093	.030	
2.0	.193	.106	.032	.187	.103	.032	.176	.098	.030	.166	.093	.029	.157	.089	.028	
3.0	.181	.097	.029	.177	.095	.028	.167	.091	.028	.159	.087	.027	.151	.083	.026	
4.0	.170	.089	.026	.166	.087	.026	.158	.084	.025	.151	.081	.024	.144	.078	.024	
5.0	.160	.082	.024	.156	.080	.023	.149	.078	.023	.143	.075	.022	.137	.073	.022	
6.0	.151	.076	.022	.148	.075	.021	.141	.072	.021	.136	.070	.021	.130	.069	.020	
7.0	.142	.070	.020	.139	.069	.020	.134	.068	.019	.129	.066	.019	.124	.064	.019	
8.0	.135	.066	.018	.132	.065	.018	.127	.064	.018	.123	.062	.018	.118	.061	.018	
9.0	.127	.062	.017	.125	.061	.017	.121	.060	.017	.117	.059	.017	.113	.057	.017	
10.0	.121	.058	.016	.119	.058	.016	.115	.056	.016	.112	.055	.016	.108	.054	.016	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.049	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.147	.114	.087	.126	.098	.075	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.137	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.129	.088	.058	.111	.076	.050	.076	.053	.035	.044	.031	.021	.014	.010	.007	
6.0	.121	.079	.048	.104	.068	.042	.072	.048	.030	.042	.028	.018	.013	.009	.006	
7.0	.114	.071	.041	.098	.062	.036	.068	.043	.025	.039	.025	.015	.013	.008	.005	
8.0	.108	.065	.035	.093	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.102	.060	.031	.088	.052	.027	.061	.036	.019	.036	.021	.011	.012	.007	.004	
10.0	.097	.055	.027	.084	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:12 September 2022

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-i300_V1 SYSTEM V2.0.406.11
 Humidity:65.0%
 Test Distance:3.161m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

NAME: PAR38-18W-3000K-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	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	11.5	12.6	11.8	12.7	12.9	11.5	12.5	11.7	12.7	12.9
3H	12.0	13.0	12.3	13.2	13.4	11.9	12.9	12.2	13.1	13.3
4H	12.3	13.2	12.6	13.4	13.6	12.1	13.0	12.3	13.2	13.4
6H	12.5	13.3	12.8	13.6	13.8	12.2	13.0	12.5	13.2	13.5
8H	12.5	13.4	12.9	13.6	13.9	12.2	13.0	12.5	13.2	13.5
12H	12.6	13.4	12.9	13.7	14.0	12.2	12.9	12.5	13.2	13.5
4H 2H	11.7	12.6	12.0	12.8	13.1	11.7	12.6	11.9	12.8	13.0
3H	12.4	13.2	12.7	13.4	13.7	12.2	13.0	12.6	13.3	13.6
4H	12.7	13.4	13.1	13.7	14.0	12.5	13.2	12.8	13.5	13.8
6H	13.0	13.6	13.4	14.0	14.3	12.7	13.3	13.0	13.6	14.0
8H	13.1	13.7	13.5	14.1	14.5	12.7	13.3	13.1	13.6	14.0
12H	13.3	13.8	13.7	14.2	14.6	12.7	13.2	13.1	13.6	14.0
8H 4H	12.8	13.4	13.2	13.7	14.1	12.6	13.2	13.0	13.5	13.9
6H	13.2	13.7	13.6	14.1	14.5	12.8	13.3	13.3	13.7	14.1
8H	13.4	13.8	13.8	14.2	14.7	12.9	13.3	13.4	13.8	14.2
12H	13.6	13.9	14.0	14.4	14.8	13.0	13.3	13.4	13.8	14.2
12H 4H	12.8	13.3	13.2	13.7	14.1	12.6	13.1	13.0	13.5	13.9
6H	13.2	13.6	13.6	14.0	14.5	12.8	13.3	13.3	13.7	14.1
8H	13.4	13.8	13.9	14.2	14.7	13.0	13.3	13.4	13.8	14.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.6 / - 0.8					+ 0.6 / - 0.9				
1.5H	+ 0.3 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 1.5 / - 1.4					+ 1.5 / - 1.6				

CIE Pub.117, 1779 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.0)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:12 September 2022

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-i300_V1 SYSTEM V2.0.406.11
 Humidity:65.0%
 Test Distance:3.161m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

NAME: PAR38-18W-3000K-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

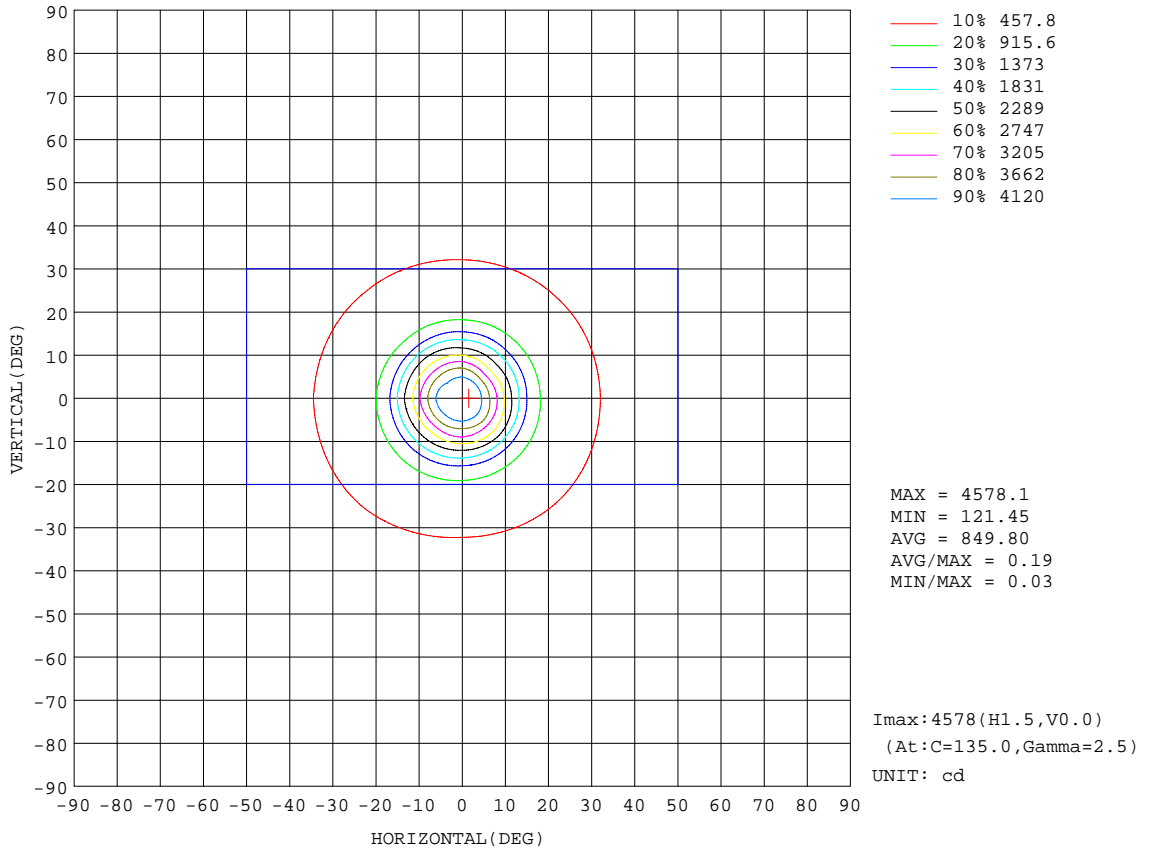
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	76	68	63	76	68	63	75	67	63	58
0.80	85	77	72	84	77	72	83	76	72	67
1.00	91	84	79	90	83	79	89	84	78	73
1.25	97	90	85	95	89	85	93	88	84	79
1.50	100	94	89	99	93	89	96	91	88	82
2.00	104	99	95	103	98	94	100	96	92	86
2.50	107	102	98	105	100	97	102	98	95	88
3.00	109	104	101	107	103	100	103	100	97	90
4.00	111	108	105	109	106	103	105	103	101	93
5.00	113	110	107	111	108	106	107	104	103	94
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
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 Test Date:12 September 2022

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-i300_V1 SYSTEM V2.0.406.11
 Humidity:65.0%
 Test Distance:3.161m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME: PAR38-18W-3000K-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

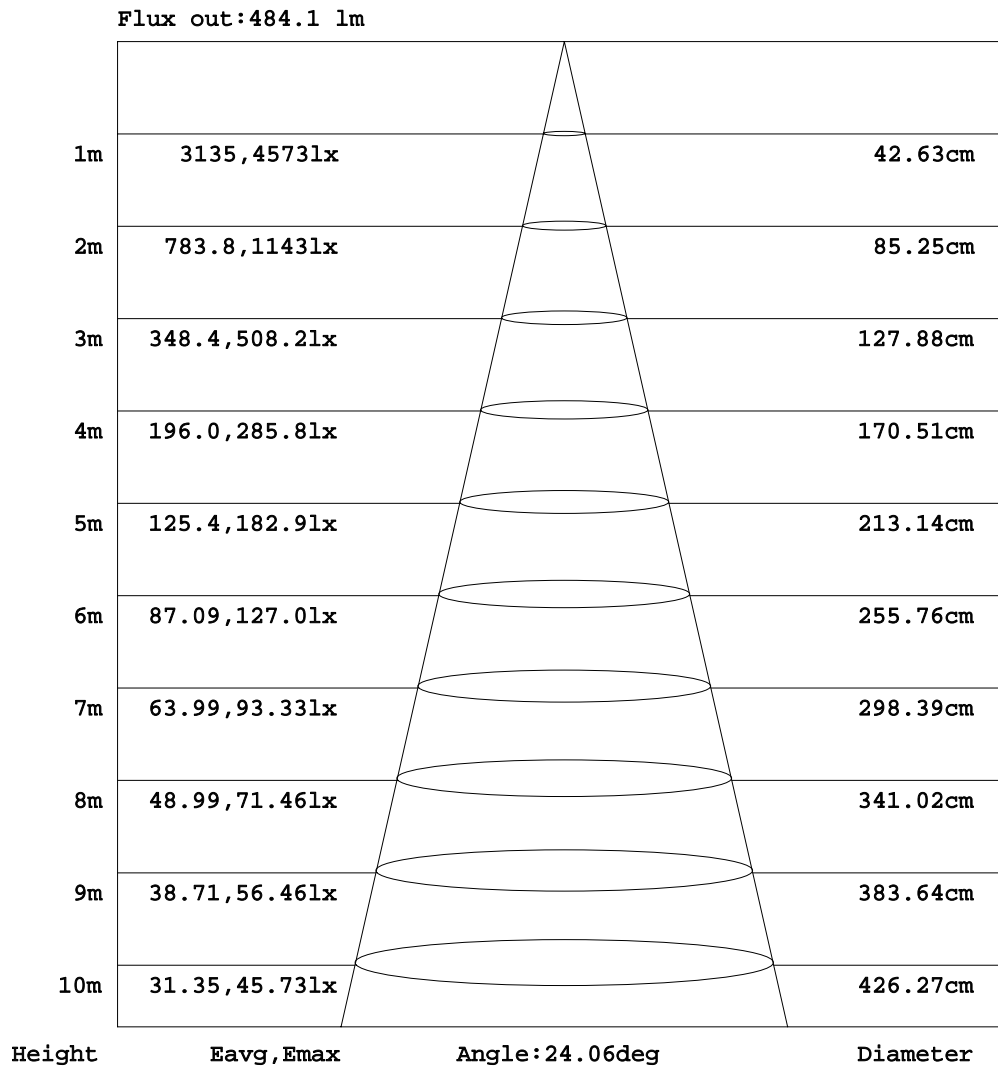


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: fu
 Test Date: 12 September 2022

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-i300_V1 SYSTEM V2.0.406.11
 Humidity: 65.0%
 Test Distance: 3.161m [K=1.0000]
 Remarks:

AAI Figure

NAME: PAR38-18W-3000K-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:



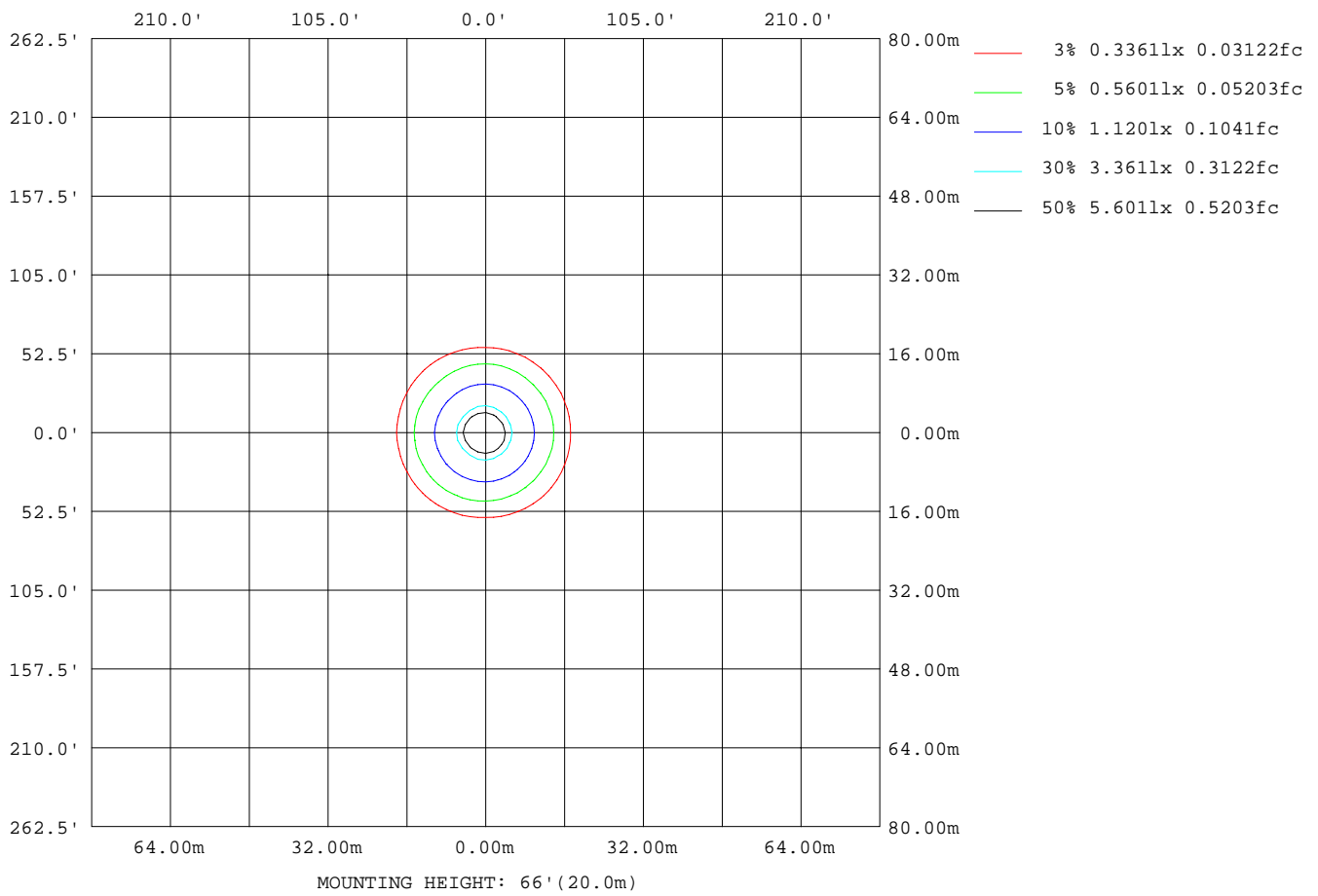
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:12 September 2022

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-i300_V1 SYSTEM V2.0.406.11
 Humidity:65.0%
 Test Distance:3.161m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

NAME: PAR38-18W-3000K-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:12 September 2022

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-i300_V1 SYSTEM V2.0.406.11
 Humidity:65.0%
 Test Distance:3.161m [K=1.0000]
 Remarks:

LED Avg.L Report

NAME: PAR38-18W-3000K-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

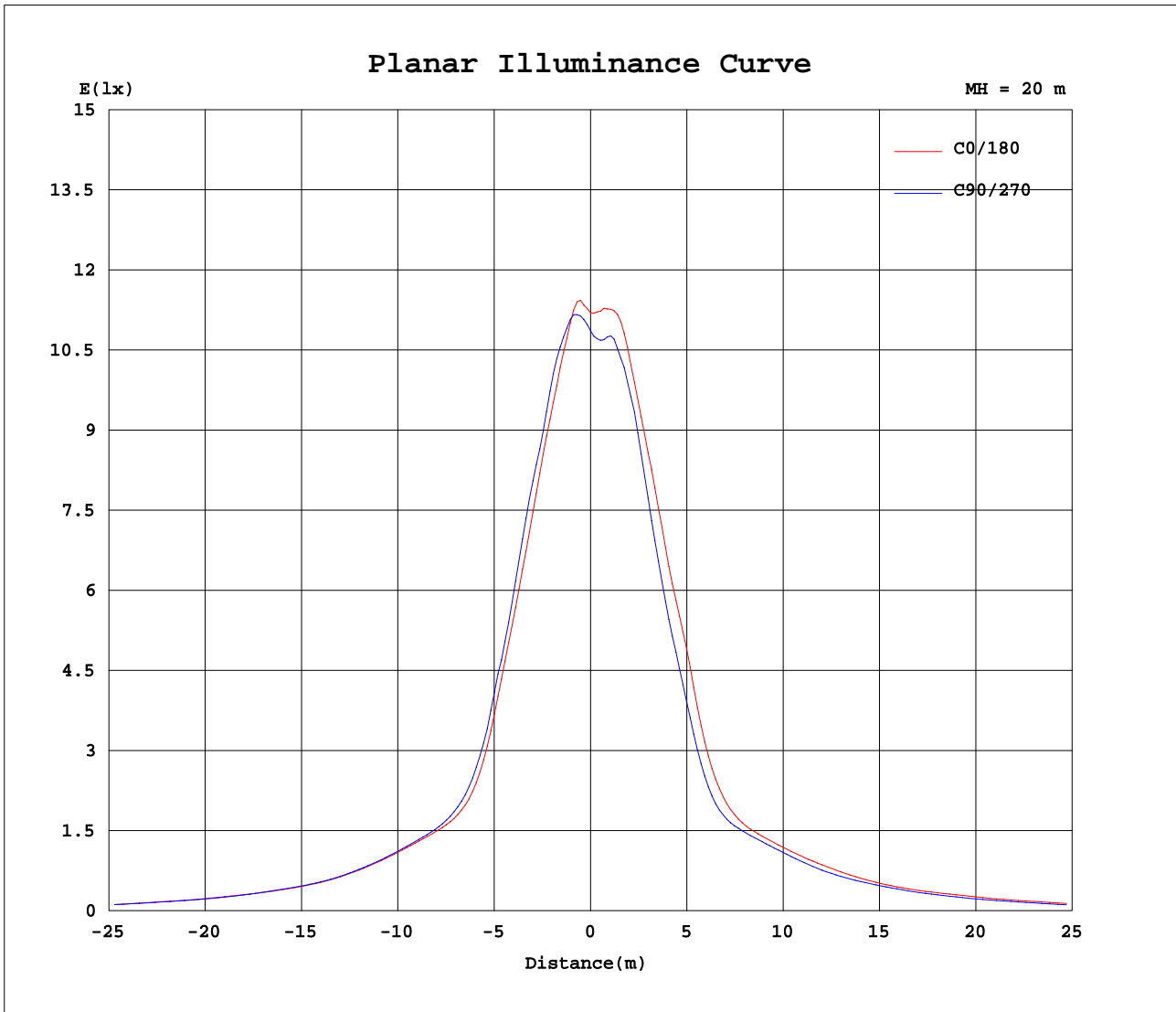
AvgL	cd/m2
L_0~180(65)av	1402
L_0~180(75)av	1187
L_0~180(85)av	1319
L_90~270(65)av	1286
L_90~270(75)av	945
L_90~270(85)av	580
L_45(65)av	1388
L_45(75)av	1114
L_45(85)av	734

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:12 September 2022

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-i300_V1 SYSTEM V2.0.406.11
 Humidity:65.0%
 Test Distance:3.161m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: fu
 Test Date: 12 September 2022

γ Range: 0 - 90DEG
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 Test System: EVERFINE GO-i300_V1 SYSTEM V2.0.406.11
 Humidity: 65.0%
 Test Distance: 3.161m [K=1.0000]
 Remarks:

