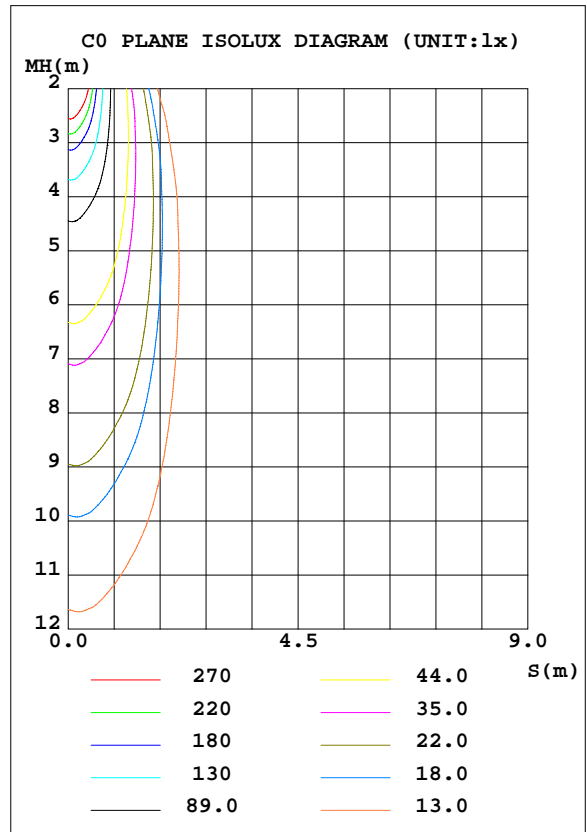
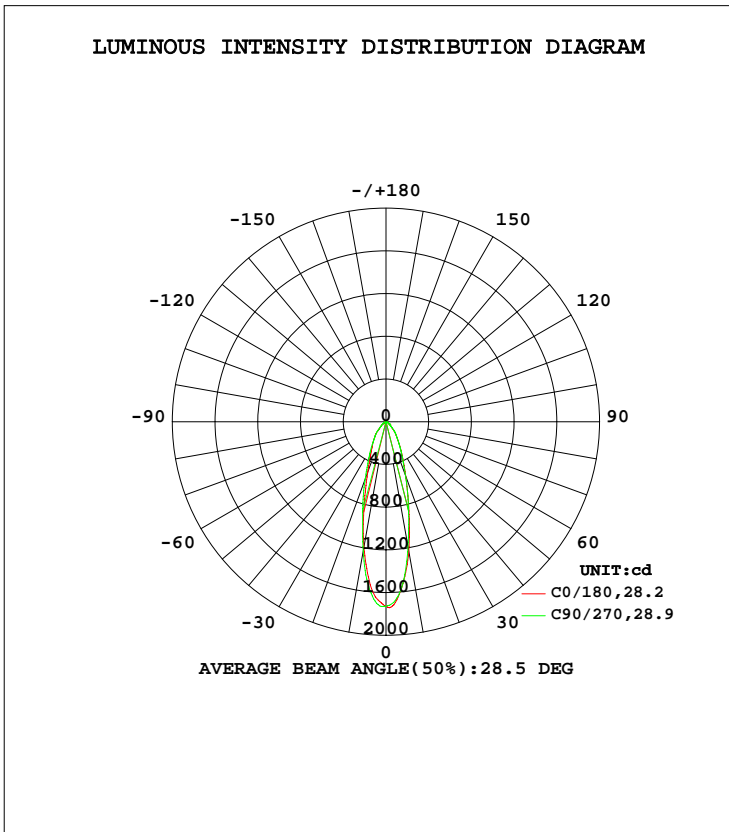


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: PAR20-8W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	1010	I _{max} (cd)	1741	S/MH(C0/180)	0.47
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	0.48
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	792.49	η UP, DN(C0-180)	0.0,50.2
NOMINAL FLUX(lm)	792.493	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,49.8
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	0.55



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:09 August 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:

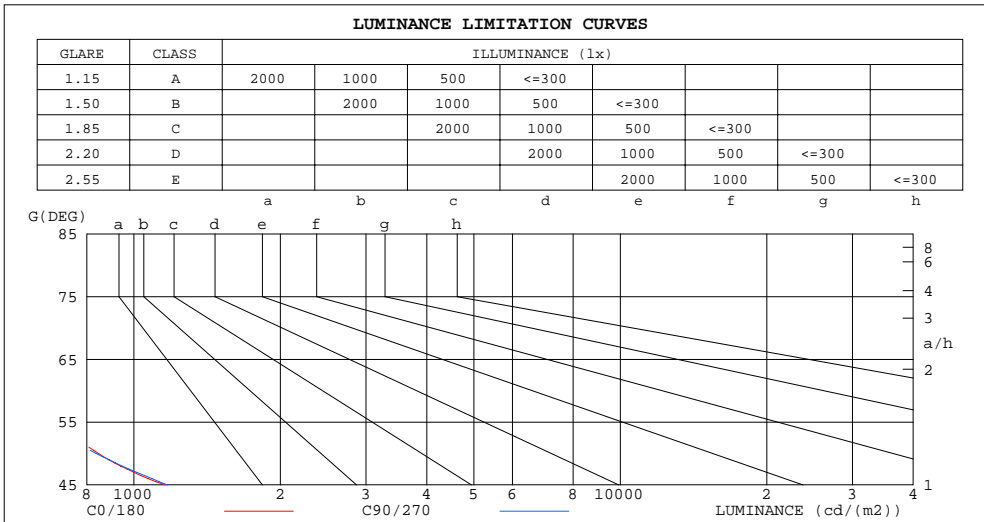
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum,lamp
10	1230	1185	1190	1270	1193	1188	1230	1175	0- 10	138.8	138.8	17.5,17.5
20	542.3	554.9	535.8	547.8	501.7	544.6	571.2	505.8	10- 20	227.1	365.9	46.2,46.2
30	256.5	265.1	252.9	268.7	257.5	269.1	271.6	240.1	20- 30	169.8	535.7	67.6,67.6
40	127.9	131.5	134.5	155.0	146.9	142.0	141.7	131.7	30- 40	119.4	655.1	82.7,82.7
50	53.30	51.87	53.94	61.03	56.44	55.66	57.70	54.02	40- 50	68.63	723.7	91.3,91.3
60	27.37	25.89	25.44	28.66	28.49	27.84	27.04	25.61	50- 60	35.03	758.8	95.7,95.7
70	16.75	14.59	12.93	14.50	17.36	15.12	12.92	13.59	60- 70	19.75	778.5	98.2,98.2
80	9.161	5.690	3.789	4.900	9.562	5.900	3.546	4.442	70- 80	10.96	789.5	99.6,99.6
90	2.908	0.0131	0.0944	0.0127	3.031	0.0276	0.1910	0.0358	80- 90	3.009	792.5	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:09 August 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: PAR20-8W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	697	126
80	538	218
75	510	331
70	499	377
65	499	424
60	558	507
55	676	653
50	845	836
45	1161	1172

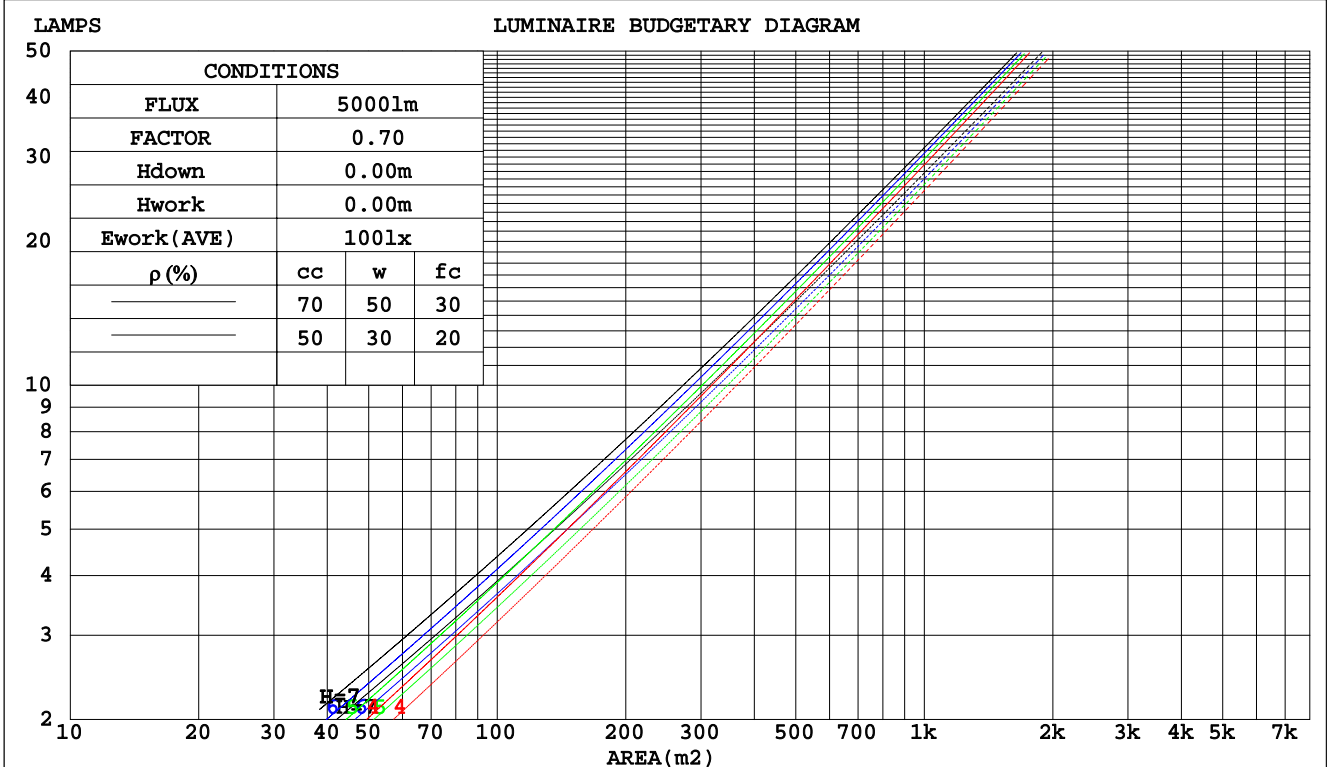
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:09 August 2022

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: PAR20-8W-3000K	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	.00
1.0	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	1.00	1.00	.98	.97	.97	.95	.94	.92
2.0	1.02	.98	.94	1.00	.96	.93	.97	.94	.91	.94	.91	.89	.91	.89	.87	.85
3.0	.95	.89	.85	.93	.88	.85	.91	.87	.83	.88	.85	.82	.86	.83	.81	.79
4.0	.88	.83	.78	.87	.82	.78	.85	.81	.77	.83	.79	.76	.81	.78	.75	.74
5.0	.83	.77	.73	.82	.76	.72	.80	.75	.72	.79	.74	.71	.77	.73	.70	.69
6.0	.78	.72	.68	.77	.72	.67	.76	.71	.67	.74	.70	.67	.73	.69	.66	.65
7.0	.74	.68	.64	.73	.67	.63	.72	.67	.63	.71	.66	.63	.70	.65	.62	.61
8.0	.70	.64	.60	.69	.64	.60	.68	.63	.59	.67	.63	.59	.66	.62	.59	.58
9.0	.66	.61	.57	.66	.60	.57	.65	.60	.56	.64	.60	.56	.63	.59	.56	.55
10.0	.63	.58	.54	.63	.57	.54	.62	.57	.54	.61	.57	.53	.61	.56	.53	.52



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: fu
 Test Date: 09 August 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: PAR20-8W-3000K	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	.192	.109	.035	.186	.106	.034	.173	.099	.032	.161	.093	.030	.150	.087	.028	
2.0	.182	.100	.031	.177	.097	.030	.166	.092	.029	.156	.088	.027	.147	.083	.026	
3.0	.172	.091	.027	.167	.089	.027	.158	.085	.026	.149	.082	.025	.141	.078	.024	
4.0	.162	.084	.025	.157	.082	.024	.150	.079	.024	.142	.076	.023	.135	.074	.022	
5.0	.152	.078	.022	.149	.076	.022	.142	.074	.022	.135	.071	.021	.129	.069	.021	
6.0	.144	.072	.021	.141	.071	.020	.135	.069	.020	.129	.067	.020	.124	.065	.019	
7.0	.136	.067	.019	.134	.067	.019	.128	.065	.019	.123	.063	.018	.118	.062	.018	
8.0	.129	.063	.018	.127	.062	.018	.122	.061	.017	.118	.060	.017	.113	.058	.017	
9.0	.123	.060	.017	.121	.059	.017	.117	.058	.016	.113	.056	.016	.109	.055	.016	
10.0	.117	.056	.016	.115	.056	.016	.112	.055	.015	.108	.054	.015	.105	.053	.015	

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	.172	.157	.144	.147	.135	.124	.101	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.158	.132	.111	.135	.114	.096	.093	.079	.067	.053	.046	.039	.017	.015	.013	
3.0	.146	.114	.088	.125	.098	.076	.086	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.135	.099	.071	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.008	
5.0	.126	.087	.059	.109	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007	
6.0	.119	.078	.049	.102	.068	.043	.070	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.112	.071	.042	.096	.061	.036	.066	.043	.026	.039	.025	.015	.012	.008	.005	
8.0	.106	.064	.036	.091	.056	.031	.063	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.100	.059	.031	.086	.051	.027	.060	.036	.019	.035	.021	.012	.011	.007	.004	
10.0	.095	.055	.027	.082	.047	.024	.057	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:09 August 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: PAR20-8W-3000K	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	9.5	10.5	9.7	10.6	10.8	9.4	10.4	9.6	10.5	10.7
3H	10.1	11.0	10.4	11.2	11.4	9.8	10.7	10.1	10.9	11.1
4H	10.5	11.3	10.8	11.6	11.8	10.0	10.8	10.3	11.1	11.3
6H	10.8	11.7	11.1	11.9	12.1	10.1	10.9	10.4	11.1	11.4
8H	11.0	11.8	11.3	12.1	12.3	10.0	10.8	10.4	11.1	11.3
12H	11.2	11.9	11.5	12.2	12.5	10.0	10.8	10.3	11.0	11.3
4H 2H	9.6	10.5	9.9	10.7	10.9	9.5	10.4	9.8	10.6	10.8
3H	10.4	11.2	10.7	11.4	11.7	10.1	10.9	10.4	11.1	11.4
4H	10.9	11.6	11.3	11.9	12.2	10.4	11.1	10.7	11.4	11.7
6H	11.4	12.0	11.8	12.4	12.7	10.5	11.1	10.9	11.5	11.8
8H	11.7	12.2	12.1	12.6	12.9	10.5	11.1	10.9	11.5	11.8
12H	11.9	12.4	12.3	12.8	13.2	10.5	11.0	10.9	11.4	11.8
8H 4H	11.0	11.6	11.4	11.9	12.3	10.5	11.1	10.9	11.4	11.8
6H	11.6	12.1	12.0	12.5	12.9	10.7	11.2	11.2	11.6	12.0
8H	11.9	12.3	12.4	12.7	13.2	10.8	11.2	11.2	11.6	12.0
12H	12.3	12.6	12.7	13.1	13.5	10.7	11.1	11.2	11.5	12.0
12H 4H	11.0	11.5	11.4	11.9	12.2	10.5	11.0	10.9	11.4	11.8
6H	11.6	12.0	12.0	12.4	12.9	10.7	11.2	11.2	11.6	12.0
8H	11.9	12.3	12.4	12.7	13.2	10.8	11.1	11.3	11.6	12.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.7 / - 0.9					+ 0.9 / - 1.3				
1.5H	+ 1.2 / - 0.7					+ 1.5 / - 1.0				
2.0H	+ 1.3 / - 0.7					+ 1.8 / - 1.1				

CIE Pub.117, 792.5 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.8)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:09 August 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: PAR20-8W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

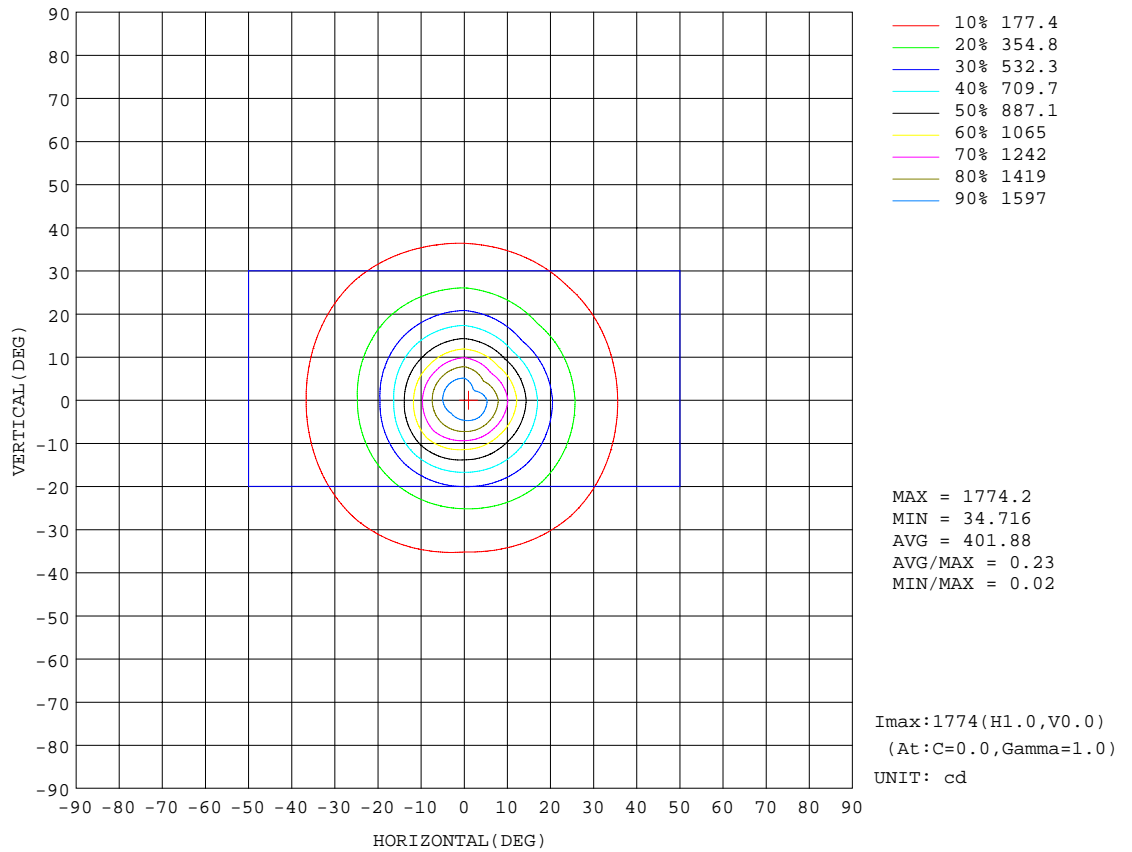
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	81	73	69	80	73	69	79	73	68	64
0.80	89	82	77	88	81	77	87	81	77	72
1.00	94	88	83	93	87	83	92	87	82	78
1.25	99	93	89	98	92	88	96	91	87	83
1.50	102	97	92	101	96	92	99	94	91	86
2.00	106	101	97	104	100	96	102	98	95	89
2.50	108	103	100	106	102	99	103	100	97	91
3.00	110	106	103	108	104	101	105	102	99	92
4.00	112	109	106	110	107	105	106	104	102	95
5.00	114	111	109	112	109	107	107	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: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:09 August 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: PAR20-8W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

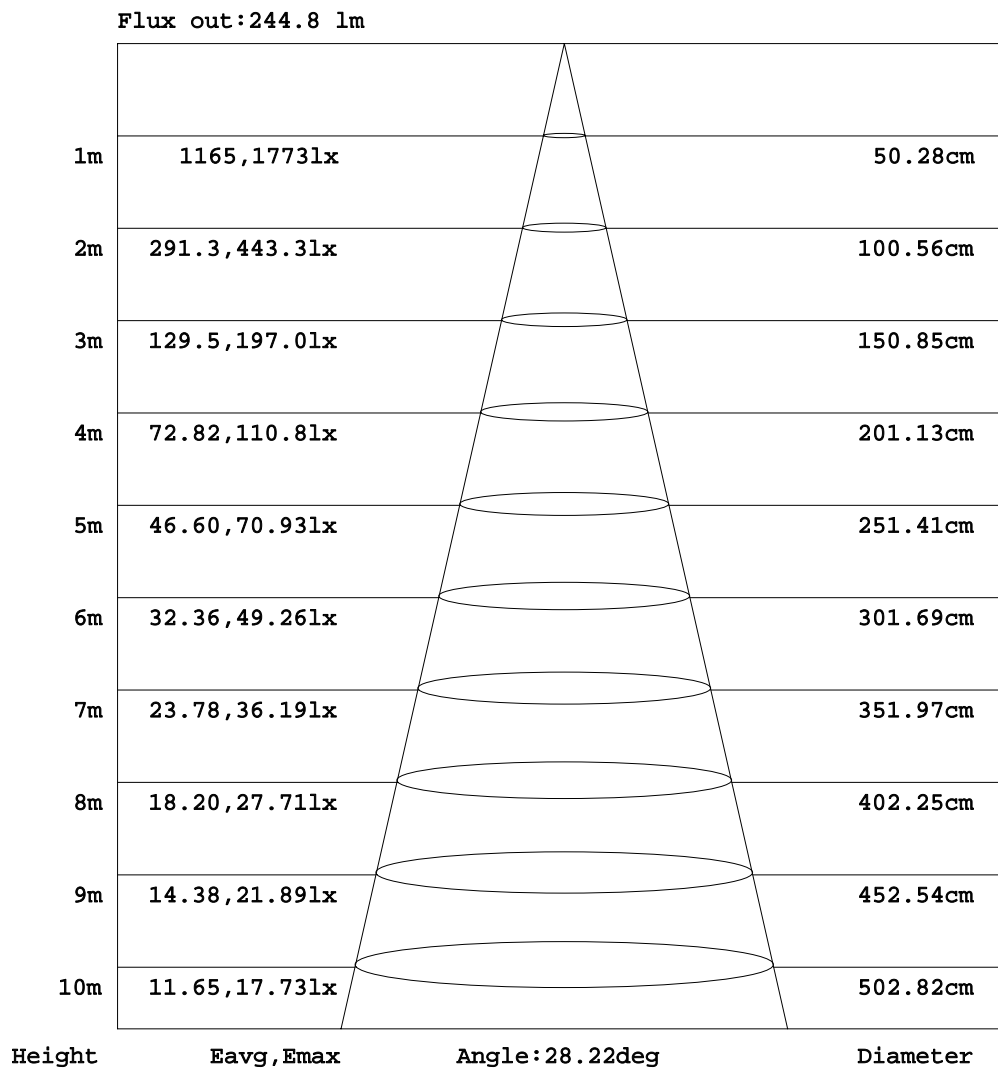


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:09 August 2022

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: PAR20-8W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:



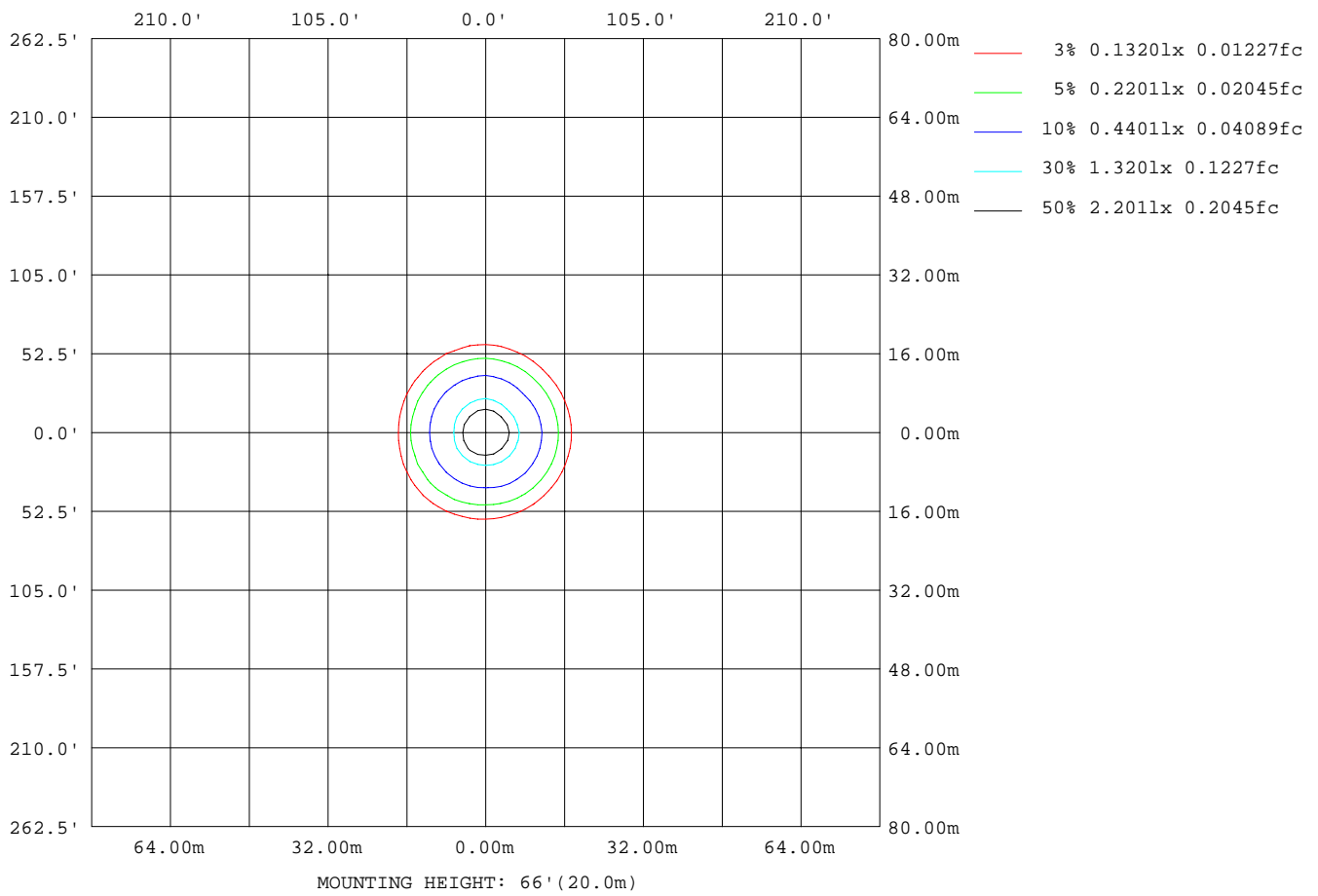
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:09 August 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: PAR20-8W-3000K	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:09 August 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: PAR20-8W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

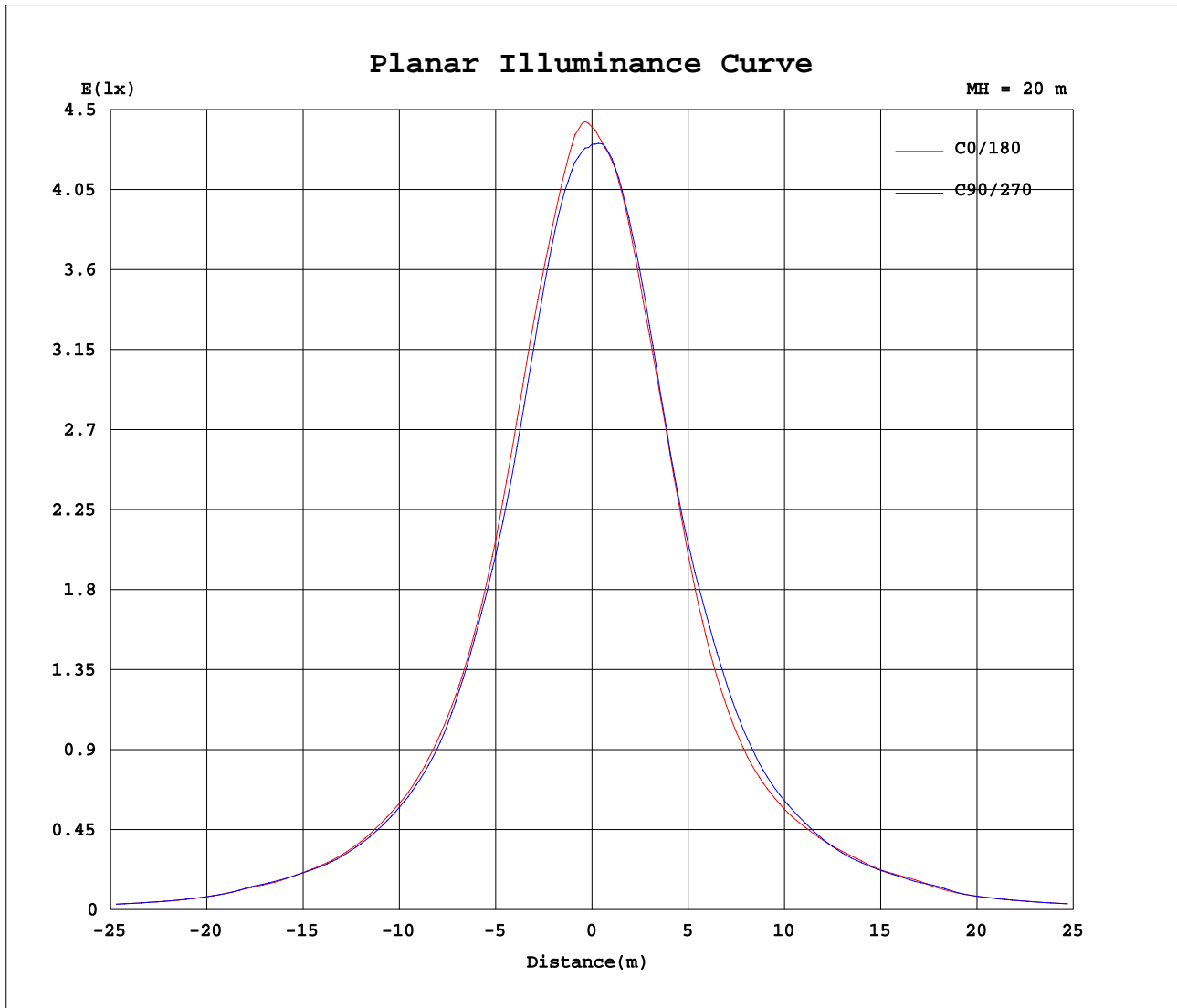
AvgL	cd/m2
L_0~180(65)av	500
L_0~180(75)av	513
L_0~180(85)av	691
L_90~270(65)av	427
L_90~270(75)av	325
L_90~270(85)av	131
L_45(65)av	457
L_45(75)av	386
L_45(85)av	167

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:09 August 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: 09 August 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:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: PAR20-8W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	45	90	135	180	225	270	315										
0	1728	1728	1728	1728	1728	1728	1728	1728										
5	1586	1609	1583	1600	1567	1596	1609	1523										
10	1230	1185	1190	1270	1193	1188	1230	1175										
15	826	814	816	864	787	818	844	788										
20	542	555	536	548	502	545	571	506										
25	366	378	361	358	343	371	383	346										
30	256	265	253	269	258	269	272	240										
35	181	186	180	203	196	196	193	182										
40	128	132	135	155	147	142	142	132										
45	80.5	79.6	83.2	93.1	84.4	84.4	85.6	79.2										
50	53.3	51.9	53.9	61.0	56.4	55.7	57.7	54.0										
55	38.0	36.6	37.6	41.6	39.9	39.3	39.6	37.3										
60	27.4	25.9	25.4	28.7	28.5	27.8	27.0	25.6										
65	20.7	19.0	18.0	19.9	21.5	20.2	18.1	18.1										
70	16.7	14.6	12.9	14.5	17.4	15.1	12.9	13.6										
75	13.0	10.2	8.59	9.90	13.6	10.6	8.24	9.26										
80	9.16	5.69	3.79	4.90	9.56	5.90	3.55	4.44										
85	5.96	1.48	1.10	1.38	6.08	1.79	1.19	1.17										
90	2.91	0.01	0.09	0.01	3.03	0.03	0.19	0.04										

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:fu
 Test Date:09 August 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: