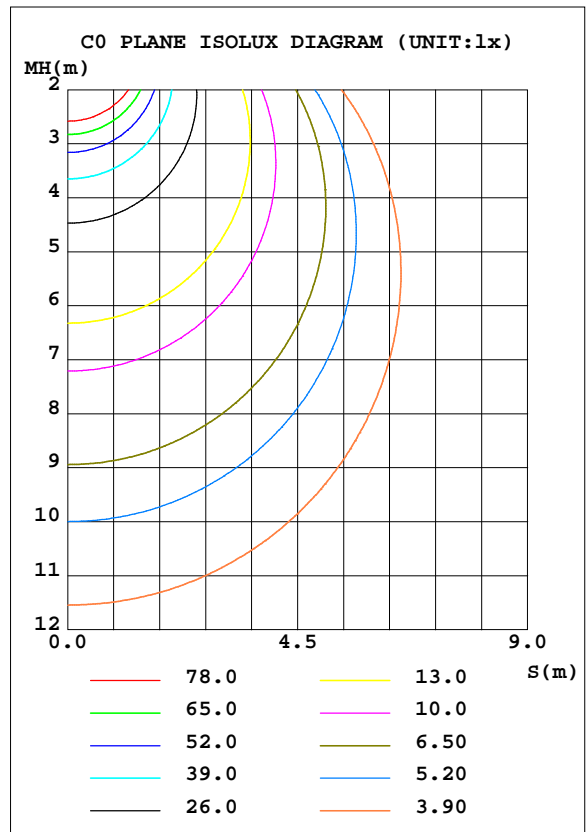
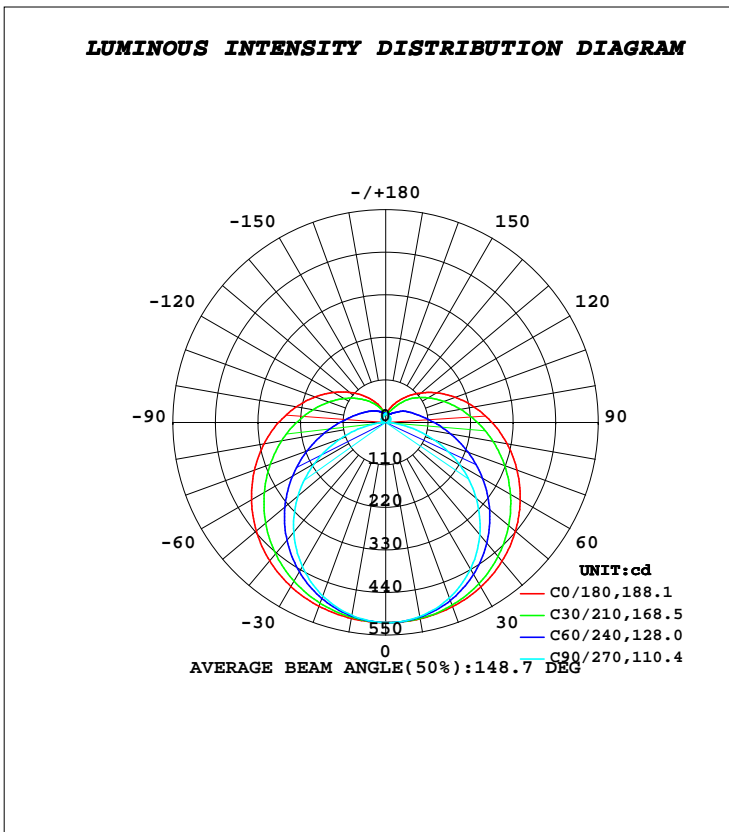


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.30V I:0.0870A P:18.900W PF:0.9840 Freq:50.00Hz		
Lamp Flux:2615.04x1 lm		
Name: G-0.6M-20W	Type: LED	
MFR.:	DIM.: 600mm	

DATA OF LAMP		PHOTOMETRIC DATA Eff: 138.36 lm/W			
MODEL		I _{max} (cd)	517.9	S/MH(C0/180)	1.43
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	2615.0	η UP, DN(C0-180)	10.8,39.5
NOMINAL FLUX(lm)	2615.04	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	10.7,38.9
LAMPS INSIDE	1	η up(%)	21.6	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	220	η down(%)	78.4	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:5.650m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

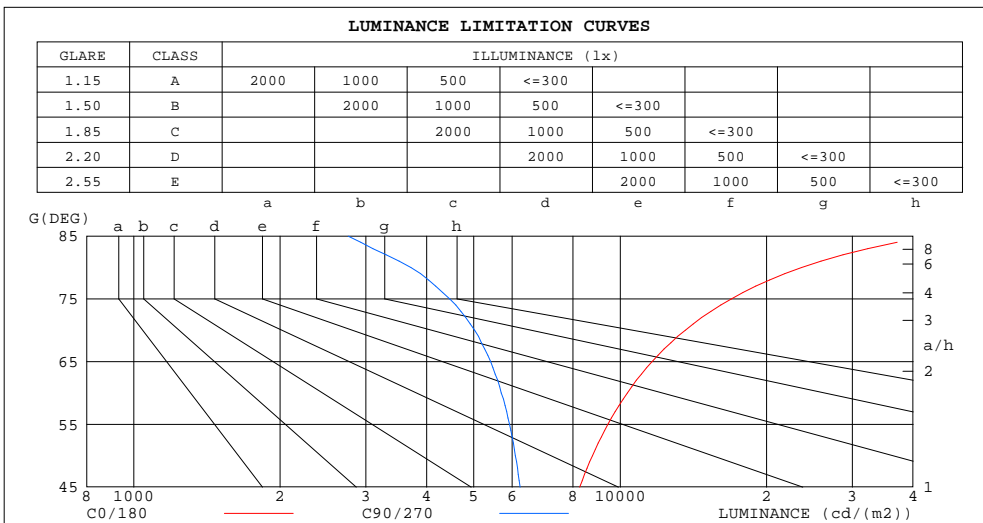
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp	
10	515.6	512.9	509.5	511.8	514.6	509.8	506.2	511.3	0- 10	49.11	49.11	1.88,1.88	
20	507.0	496.1	482.6	493.9	505.6	490.7	477.2	493.0	10- 20	142.4	191.5	7.32,7.32	
30	491.4	468.1	438.5	464.6	490.0	460.3	431.1	463.9	20- 30	221.5	413.0	15.8,15.8	
40	468.3	429.6	378.9	425.5	466.8	420.4	369.9	424.3	30- 40	278.7	691.7	26.5,26.5	
50	438.2	383.1	305.9	378.0	437.1	373.2	296.5	377.6	40- 50	309.2	1001	38.3,38.3	
60	401.7	331.0	222.5	325.5	400.7	320.6	213.6	324.7	50- 60	311.8	1313	50.2,50.2	
70	361.6	277.4	134.1	271.5	361.0	267.4	126.5	269.6	60- 70	289.2	1602	61.3,61.3	
80	318.5	226.1	50.42	220.3	319.4	217.6	45.11	215.4	70- 80	248.3	1850	70.8,70.8	
90	275.4	181.7	5.977	176.2	277.1	174.7	7.480	170.0	80- 90	201.3	2051	78.4,78.4	
100	232.4	145.6	7.236	140.9	235.1	140.2	8.436	136.7	90-100	162.3	2214	84.7,84.7	
110	191.6	116.8	9.375	112.7	194.1	112.6	10.41	113.6	100-110	128.9	2343	89.6,89.6	
120	153.6	93.10	11.74	89.95	156.0	90.33	12.52	90.45	110-120	98.39	2441	93.3,93.3	
130	118.8	71.59	13.98	71.28	121.5	71.92	14.43	69.02	120-130	70.97	2512	96.1,96.1	
140	88.75	52.14	16.02	55.91	91.08	56.44	16.06	49.06	130-140	47.72	2560	97.9,97.9	
150	63.37	35.86	17.71	42.89	65.38	43.68	17.29	34.07	140-150	29.20	2589	99,99	
160	43.62	26.24	18.97	33.44	44.32	33.64	18.70	24.83	150-160	16.20	2605	99.6,99.6	
170	24.16	22.01	21.80	26.73	29.64	26.29	21.62	21.31	160-170	7.674	2613	99.9,99.9	
180	19.75	22.98	23.81	23.06	19.80	22.96	23.80	23.09	170-180	2.206	2615	100,100	
DEG	LUMINOUS INTENSITY:cd									UNIT:lm			

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:5.650m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.30V I:0.0870A P:18.900W PF:0.9840 Freq:50.00Hz		
Lamp Flux:2615.04x1 lm		
Name: G-0.6M-20W	Type: LED	
MFR.:	DIM.: 600mm	



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	43842	2760
80	23608	3717
75	16931	4464
70	13607	5019
65	11632	5414
60	10340	5698
55	9435	5921
50	8774	6092
45	8261	6225

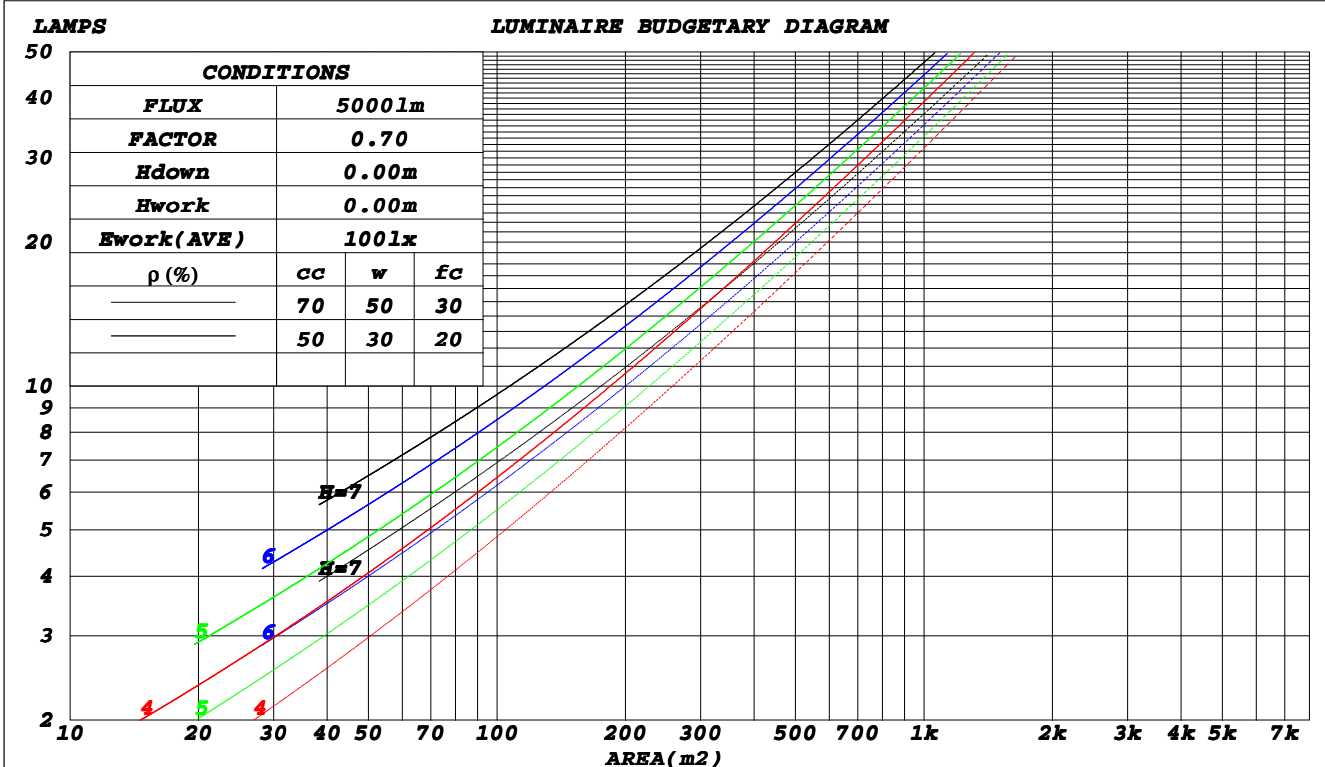
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-03-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity: 65.0%
Test Distance: 5.650m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.30V I:0.0870A P:18.900W PF:0.9840 Freq:50.00Hz		
Lamp Flux:2615.04x1 lm		
Name: G-0.6M-20W	Type: LED	
MFR.:	DIM.: 600mm	

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	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.14	1.14	1.14	1.09	1.09	1.09	.99	.99	.99	.90	.90	.90	.82	.82	.82	.78
1.0	.95	.89	.84	.90	.85	.81	.82	.78	.74	.74	.71	.68	.67	.65	.63	.59
2.0	.81	.73	.66	.77	.70	.64	.70	.64	.59	.63	.59	.54	.57	.53	.50	.47
3.0	.70	.61	.54	.67	.58	.52	.61	.54	.48	.55	.49	.45	.50	.45	.41	.38
4.0	.61	.52	.45	.59	.50	.43	.53	.46	.40	.48	.42	.37	.44	.39	.35	.32
5.0	.54	.45	.38	.52	.43	.37	.47	.40	.34	.43	.37	.32	.39	.34	.30	.27
6.0	.49	.39	.33	.47	.38	.32	.43	.35	.30	.39	.32	.28	.35	.30	.26	.23
7.0	.44	.35	.28	.42	.34	.28	.38	.31	.26	.35	.29	.24	.32	.27	.23	.20
8.0	.40	.31	.25	.38	.30	.24	.35	.28	.23	.32	.26	.22	.29	.24	.20	.18
9.0	.36	.28	.22	.35	.27	.22	.32	.25	.20	.30	.24	.19	.27	.22	.18	.16
10.0	.33	.25	.20	.32	.25	.19	.30	.23	.18	.27	.21	.17	.25	.20	.16	.14



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-03-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity: 65.0%
 Test Distance: 5.650m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.30V I:0.0870A P:18.900W PF:0.9840 Freq:50.00Hz		
Lamp Flux:2615.04x1 lm		
Name: G-0.6M-20W	Type: LED	
MFR.:	DIM.: 600mm	

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	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.388	.221	.070	.374	.214	.068	.349	.200	.064	.325	.187	.060	.303	.176	.057	
2.0	.335	.183	.056	.322	.177	.055	.299	.166	.052	.277	.155	.049	.257	.145	.046	
3.0	.297	.158	.047	.285	.153	.046	.264	.143	.044	.245	.134	.041	.226	.125	.039	
4.0	.267	.139	.041	.256	.134	.040	.237	.126	.038	.219	.118	.036	.203	.110	.034	
5.0	.242	.123	.036	.233	.120	.035	.215	.112	.033	.199	.105	.031	.184	.098	.030	
6.0	.222	.111	.032	.213	.108	.031	.197	.101	.029	.182	.095	.028	.168	.089	.026	
7.0	.204	.101	.029	.197	.098	.028	.182	.092	.026	.168	.086	.025	.155	.081	.024	
8.0	.190	.093	.026	.182	.090	.025	.169	.084	.024	.156	.079	.023	.144	.074	.022	
9.0	.177	.085	.024	.170	.083	.023	.158	.078	.022	.146	.073	.021	.135	.068	.020	
10.0	.165	.079	.022	.159	.077	.021	.148	.072	.020	.137	.068	.019	.126	.064	.018	

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	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.355	.355	.355	.303	.303	.303	.207	.207	.207	.119	.119	.119	.038	.038	.038	
1.0	.351	.321	.294	.301	.275	.253	.206	.190	.175	.118	.110	.102	.038	.035	.033	
2.0	.345	.298	.259	.295	.257	.224	.202	.178	.156	.117	.103	.092	.037	.033	.030	
3.0	.337	.282	.238	.289	.243	.206	.198	.169	.145	.115	.099	.085	.037	.032	.028	
4.0	.329	.270	.224	.283	.233	.195	.194	.162	.137	.112	.095	.081	.036	.031	.027	
5.0	.322	.260	.214	.276	.225	.186	.190	.157	.132	.110	.092	.078	.036	.030	.026	
6.0	.314	.252	.207	.270	.218	.181	.186	.153	.128	.108	.090	.076	.035	.029	.025	
7.0	.307	.246	.202	.264	.213	.176	.183	.149	.125	.106	.088	.074	.034	.029	.025	
8.0	.301	.240	.198	.259	.208	.173	.179	.146	.123	.104	.086	.073	.034	.028	.024	
9.0	.294	.235	.195	.254	.204	.170	.176	.144	.121	.102	.085	.072	.033	.028	.024	
10.0	.289	.231	.193	.249	.201	.168	.173	.141	.120	.101	.083	.071	.033	.027	.024	

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:5.650m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.30V I:0.0870A P:18.900W PF:0.9840 Freq:50.00Hz		
Lamp Flux:2615.04x1 lm		
Name: G-0.6M-20W	Type: LED	
MFR.:	DIM.: 600mm	

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	19.8	21.2	20.4	21.7	22.4	17.6	18.9	18.1	19.5	20.1
3H	22.6	23.8	23.2	24.4	25.1	19.1	20.3	19.7	20.9	21.6
4H	24.2	25.3	24.8	25.9	26.6	19.7	20.9	20.3	21.5	22.2
6H	25.9	27.0	26.5	27.6	28.3	20.2	21.3	20.8	21.9	22.6
8H	26.8	27.9	27.5	28.5	29.3	20.3	21.3	20.9	22.0	22.7
12H	27.9	28.9	28.6	29.6	30.3	20.3	21.4	21.0	22.0	22.7
4H 2H	20.4	21.6	21.0	22.2	22.9	18.8	20.0	19.4	20.6	21.3
3H	23.4	24.5	24.1	25.1	25.9	20.6	21.7	21.3	22.3	23.0
4H	25.2	26.1	25.8	26.8	27.6	21.5	22.4	22.1	23.1	23.9
6H	27.1	27.9	27.8	28.6	29.4	22.1	23.0	22.8	23.7	24.5
8H	28.2	29.0	28.9	29.7	30.5	22.4	23.2	23.1	23.9	24.7
12H	29.4	30.1	30.1	30.9	31.7	22.5	23.3	23.2	24.0	24.8
8H 4H	25.5	26.3	26.2	27.0	27.9	22.6	23.4	23.3	24.1	25.0
6H	27.8	28.4	28.5	29.2	30.0	23.7	24.4	24.5	25.1	26.0
8H	29.1	29.7	29.8	30.4	31.3	24.2	24.8	25.0	25.6	26.5
12H	30.6	31.1	31.3	31.9	32.8	24.6	25.2	25.4	25.9	26.8
12H 4H	25.6	26.3	26.3	27.0	27.8	23.0	23.8	23.8	24.5	25.3
6H	27.9	28.5	28.6	29.3	30.1	24.4	25.0	25.1	25.7	26.6
8H	29.3	29.8	30.1	30.6	31.5	25.1	25.6	25.8	26.4	27.3
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.4				

CIE Pub.117, 2615 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 3.3$)
 Area: 0.078 m²

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:5.650m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.30V I:0.0870A P:18.900W PF:0.9840 Freq:50.00Hz Lamp Flux:2615.04x1 lm		
Name: G-0.6M-20W	Type: LED	
MFR.:	DIM.: 600mm	

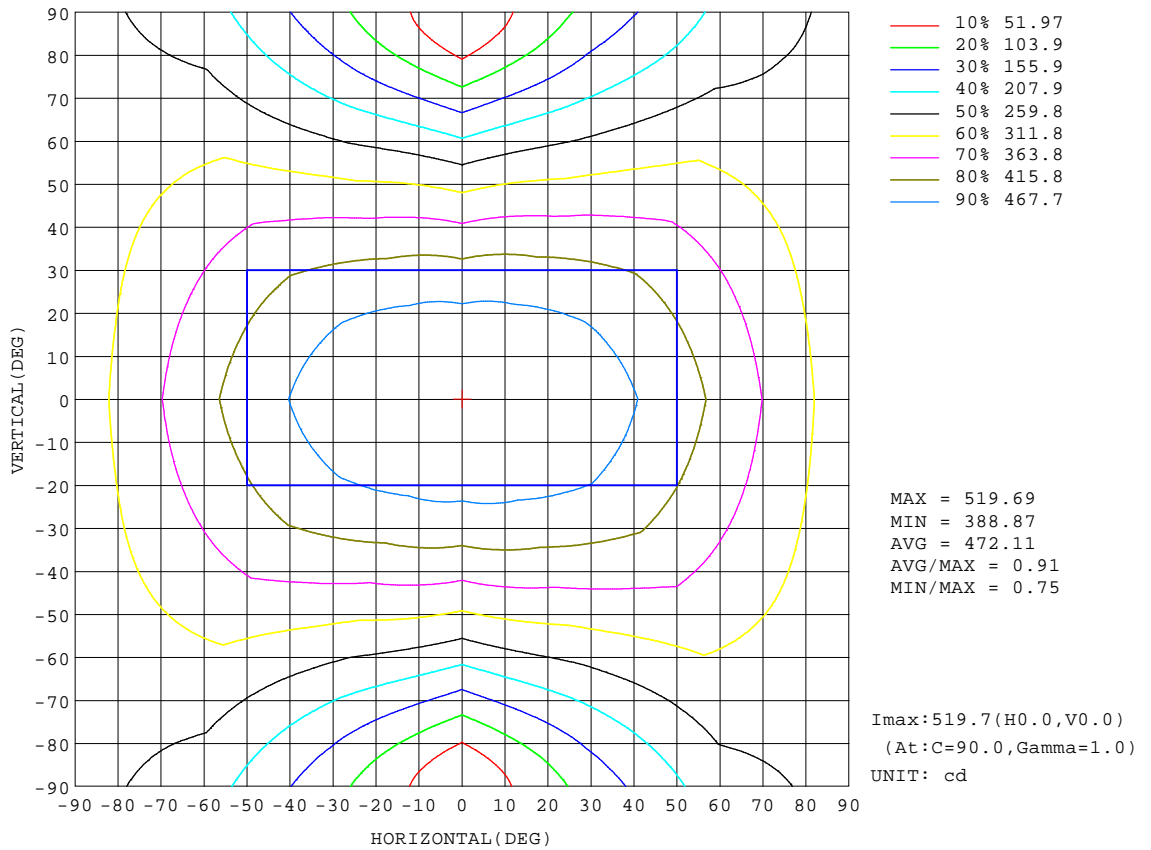
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	46	34	27	45	33	26	43	32	26	19
0.80	55	42	34	54	41	34	51	40	33	25
1.00	63	50	42	61	49	41	57	49	40	30
1.25	70	57	49	67	56	48	63	53	46	36
1.50	75	63	54	72	61	53	67	58	50	40
2.00	82	71	63	79	69	61	73	65	58	46
2.50	87	77	68	83	74	67	77	69	63	49
3.00	91	81	74	87	78	71	80	73	67	53
4.00	96	87	81	91	84	78	84	78	73	57
5.00	99	92	86	94	88	82	86	81	77	60
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:5.650m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.30V I:0.0870A P:18.900W PF:0.9840 Freq:50.00Hz		
Lamp Flux:2615.04x1 lm		
Name: G-0.6M-20W	Type: LED	
MFR.:	DIM.: 600mm	



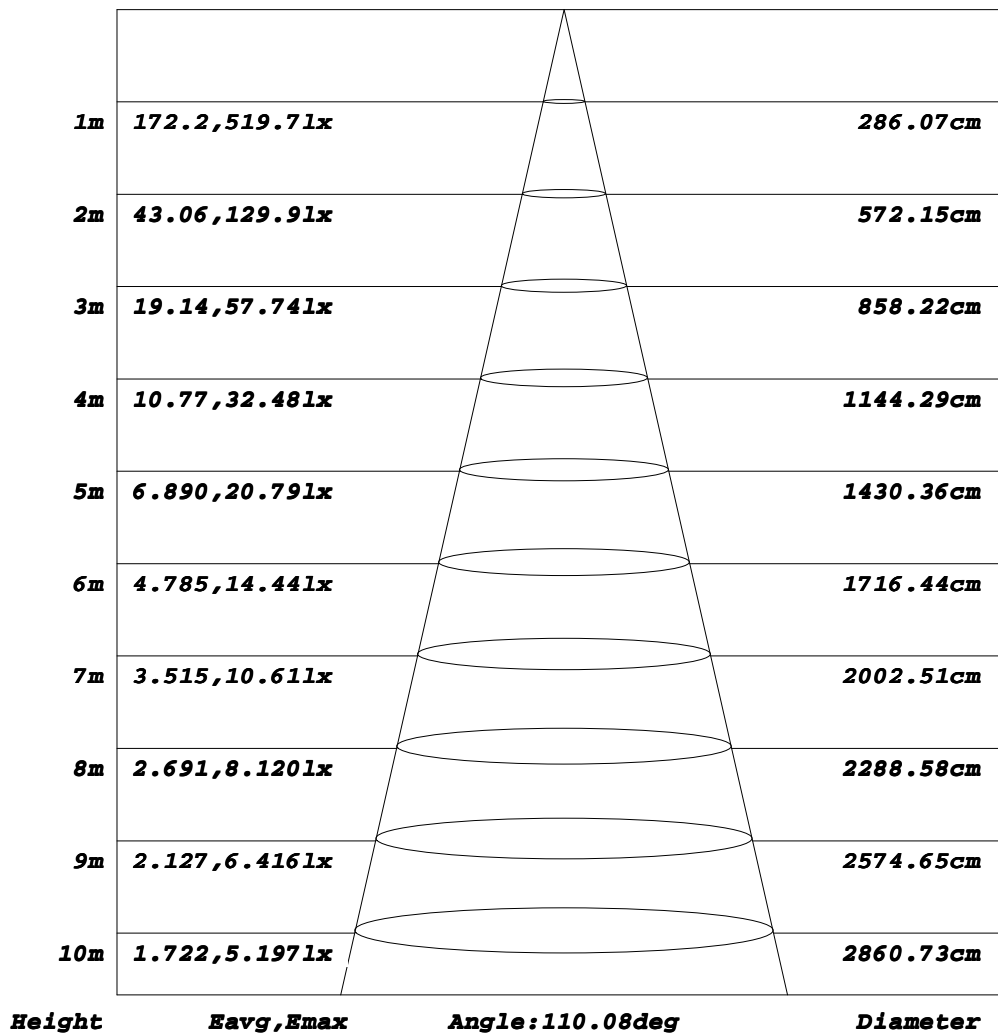
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-03-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:5.650m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.30V I:0.0870A P:18.900W PF:0.9840 Freq:50.00Hz		
Lamp Flux:2615.04x1 lm		
Name: G-0.6M-20W	Type: LED	
MFR.:	DIM.: 600mm	

Flux out:1189 lm



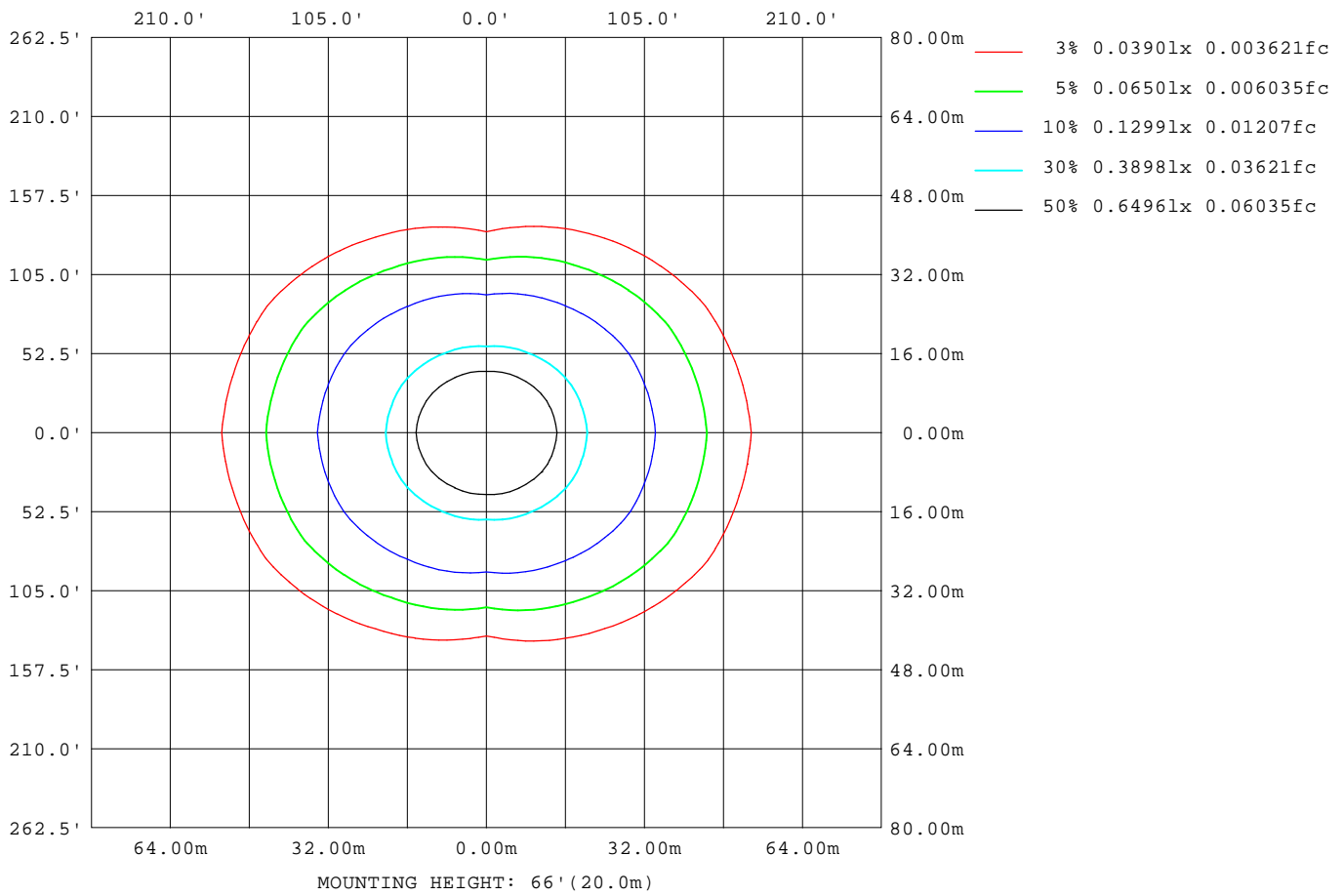
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-03-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity: 65.0%
Test Distance: 5.650m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

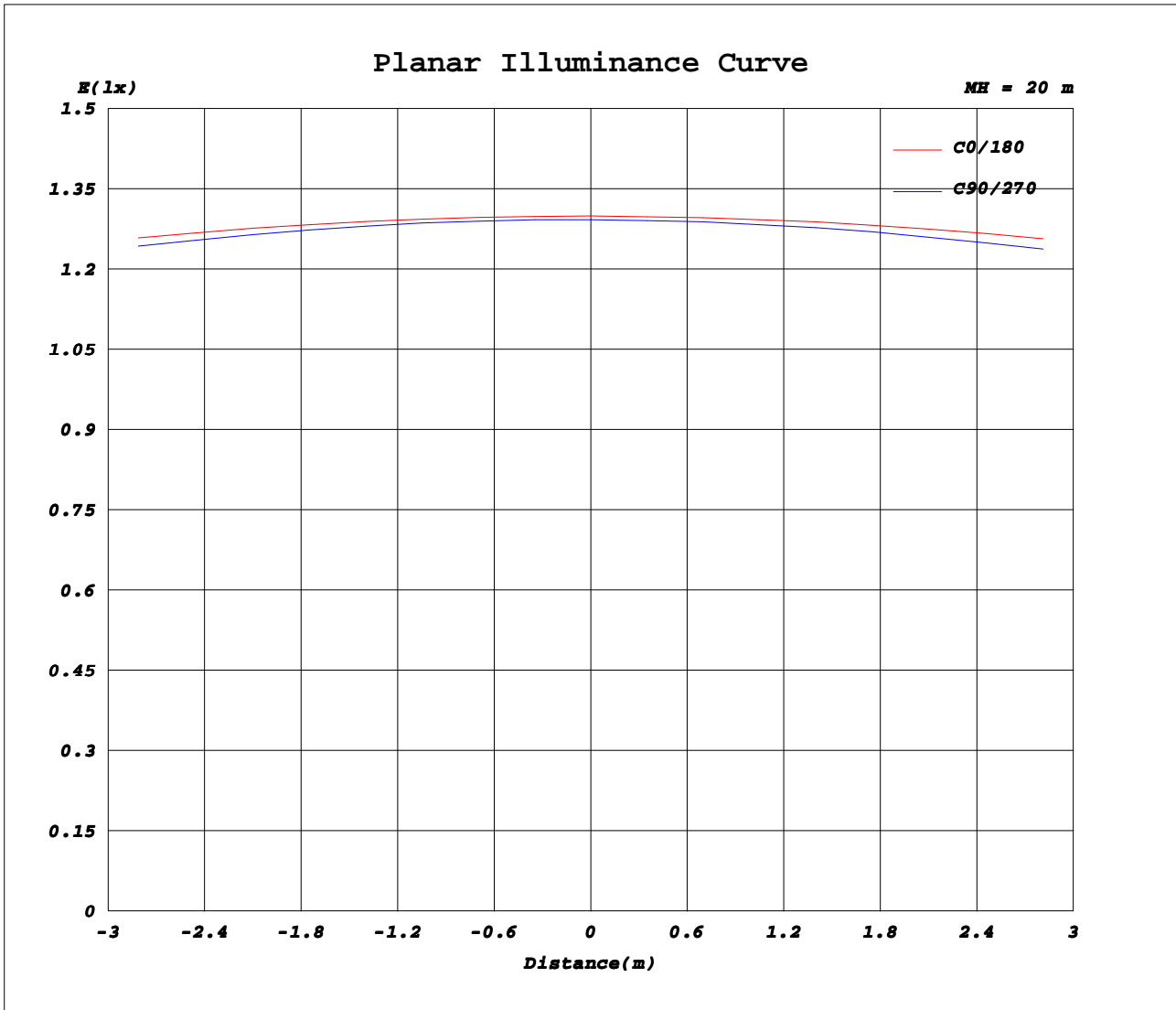
Test:U:220.30V I:0.0870A P:18.900W PF:0.9840 Freq:50.00Hz		
Lamp Flux:2615.04x1 lm		
Name: G-0.6M-20W	Type: LED	
MFR.:	DIM.: 600mm	



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-03-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity: 65.0%
Test Distance: 5.650m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-03-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity: 65.0%
Test Distance: 5.650m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.30V I:0.0870A P:18.900W PF:0.9840 Freq:50.00Hz Lamp Flux:2615.04x1 lm		
Name: G-0.6M-20W	Type: LED	
MFR.:	DIM.: 600mm	

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	518	518	518	518	518	518	518	518	518	518	518	518							
5	517	517	516	516	516	517	517	516	515	514	516	517							
10	516	515	511	509	510	513	515	511	508	506	509	513							
15	512	510	502	499	501	507	511	505	498	494	500	508							
20	507	502	490	483	488	500	506	497	484	477	486	500							
25	500	493	473	463	471	490	499	487	467	456	469	490							
30	491	482	454	438	451	478	490	474	446	431	450	478							
35	481	468	432	411	428	464	479	460	423	402	427	464							
40	468	452	407	379	403	448	467	443	398	370	401	448							
45	454	435	380	344	375	430	453	425	370	335	374	429							
50	438	415	351	306	346	410	437	405	341	297	345	410							
55	420	394	321	265	315	389	419	384	310	256	314	389							
60	402	373	289	223	283	368	401	363	279	214	283	366							
65	382	350	258	179	252	345	381	340	247	170	252	343							
70	362	328	227	134	220	322	361	318	217	126	221	318							
75	340	305	198	90.3	191	300	340	295	188	83.6	192	292							
80	319	282	170	50.4	163	277	319	273	162	45.1	166	265							
85	297	260	146	18.8	140	255	298	252	139	16.6	142	240							
90	275	238	125	5.98	119	233	277	231	119	7.48	120	220							
95	254	217	108	6.69	103	213	256	211	102	7.97	99.4	202							
100	232	197	94.0	7.24	88.8	193	235	191	89.2	8.44	90.0	183							
105	212	178	82.5	8.23	77.8	174	214	173	78.2	9.37	79.9	172							
110	192	160	73.2	9.37	68.8	157	194	156	69.5	10.4	71.4	156							
115	172	143	65.5	10.6	61.1	140	175	140	62.4	11.5	64.3	140							
120	154	128	58.4	11.7	54.9	125	156	124	56.3	12.5	56.3	125							
125	136	113	51.7	12.9	49.9	111	138	110	51.2	13.5	47.1	110							
130	119	99.4	43.7	14.0	45.4	97.1	121	96.9	46.9	14.4	41.5	96.5							
135	103	85.6	37.7	15.0	41.6	84.8	106	84.7	42.9	15.3	36.0	82.8							
140	88.8	71.1	33.1	16.0	38.2	73.6	91.1	73.6	39.3	16.1	31.4	66.7							
145	75.4	56.9	29.4	16.9	35.2	63.2	77.6	63.4	36.1	16.7	27.9	53.6							
150	63.4	45.3	26.4	17.7	32.4	53.4	65.4	54.2	33.1	17.3	25.1	43.0							
155	52.8	36.3	24.2	18.4	30.3	45.5	54.6	46.1	30.9	17.8	22.8	34.8							
160	43.6	30.0	22.5	19.0	28.1	38.7	44.3	39.0	28.3	18.7	21.1	28.5							
165	35.6	25.2	21.5	20.4	26.1	33.2	33.7	32.9	26.3	20.2	20.7	24.0							
170	24.2	22.1	22.0	21.8	24.7	28.7	29.6	28.0	24.6	21.6	21.5	21.2							
175	20.3	21.1	22.8	23.0	23.9	24.9	20.5	24.3	23.7	22.8	22.4	20.5							
180	19.8	22.4	23.6	23.8	23.6	22.6	19.8	22.4	23.6	23.8	23.6	22.6							

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-03-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity: 65.0%
Test Distance: 5.650m [K=1.0000]
Remarks: