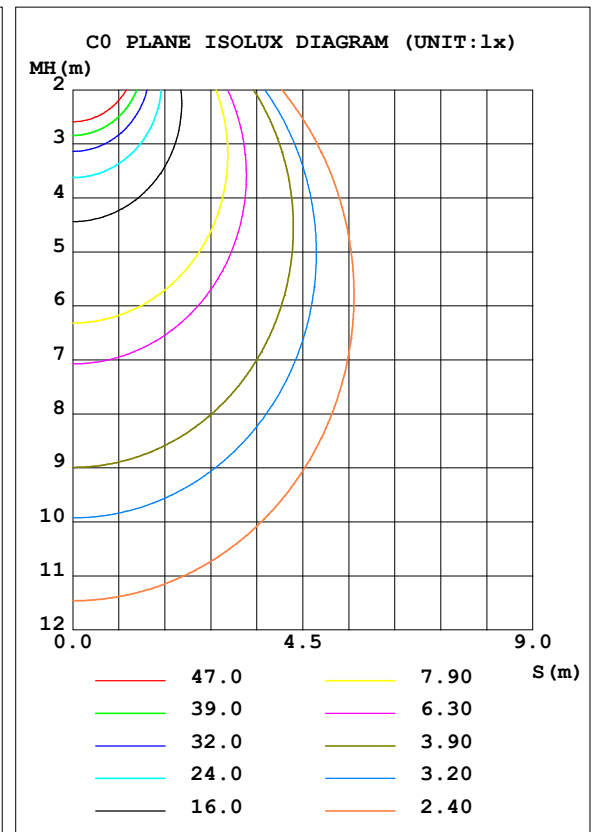
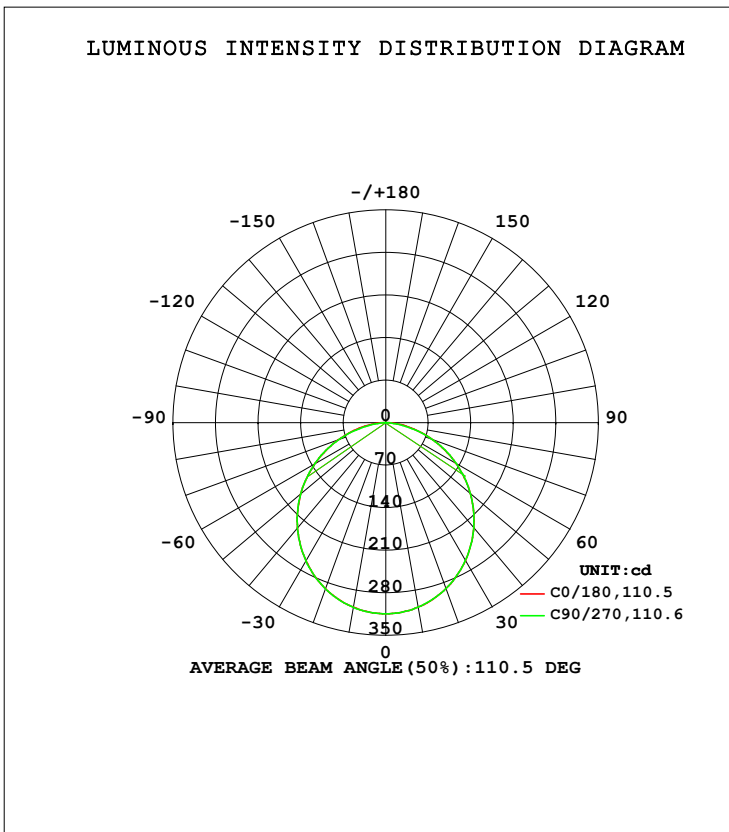


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.18V I:0.0893A P:10.270W PF:0.9573 Freq:59.98Hz Lamp Flux:874.903x1 lm		
NAME: 8742-30KCRI90	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85.19 lm/W			
MODEL		I _{max} (cd)	314.5	S/MH (C0/180)	1.24
NOMINAL POWER (W)	240	LOR (%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	874.90	η UP, DN (C0-180)	0.0, 49.9
NOMINAL FLUX (lm)	874.903	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120.0	η down (%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG C
 Interval: 22.5DEG Test
 Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019-10-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: GO-2000B_V1 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 6.390m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

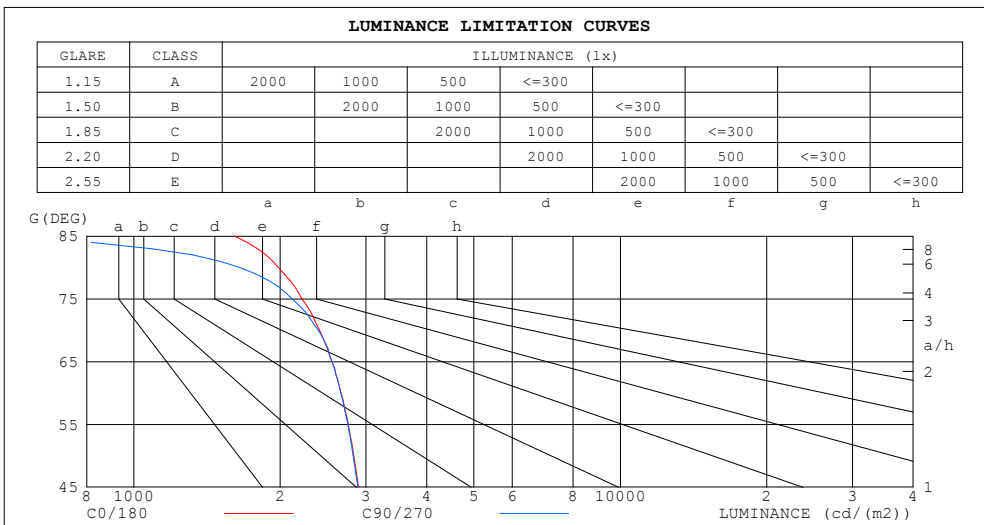
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	308.3	308.2	308.2	308.3	308.4	308.4	308.5	308.4	0- 10	29.72	29.72	3.4,3.4
20	290.4	290.4	290.2	290.5	290.7	290.8	290.8	290.6	10- 20	84.87	114.6	13.1,13.1
30	262.2	262.2	262.1	262.3	262.7	262.8	262.8	262.6	20- 30	127.9	242.5	27.7,27.7
40	225.4	225.4	225.3	225.5	226.0	226.3	226.2	226.0	30- 40	153.3	395.8	45.2,45.2
50	181.8	181.7	181.7	182.0	182.8	183.0	182.9	182.6	40- 50	157.9	553.7	63.3,63.3
60	133.0	132.9	133.2	133.6	134.4	134.5	134.6	134.3	50- 60	141.6	695.3	79.5,79.5
70	82.17	81.76	81.92	83.39	83.58	83.37	82.83	83.42	60- 70	107.3	802.6	91.7,91.7
80	34.34	30.48	28.67	32.40	35.67	31.76	28.76	31.67	70- 80	60.19	862.8	98.6,98.6
90	0.2879	0.2799	0.2773	0.2833	0.2965	0.2827	0.2801	0.2861	80- 90	12.09	874.9	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: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-10-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:6.390m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.18V I:0.0893A P:10.270W PF:0.9573 Freq:59.98Hz Lamp Flux:874.903x1 lm		
NAME: 8742-30KCRI90	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1610	505
80	1982	1650
75	2218	2116
70	2408	2394
65	2553	2557
60	2666	2664
55	2761	2755
50	2834	2826
45	2897	2887

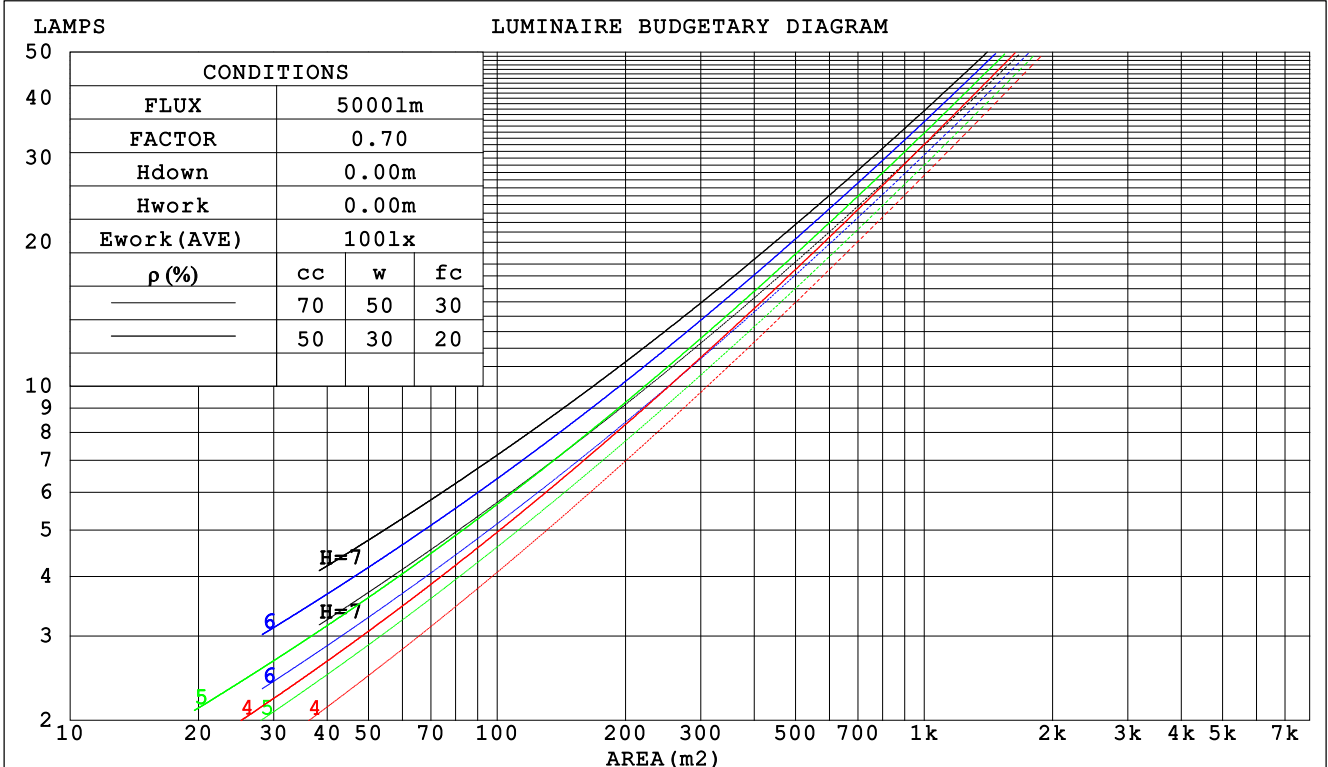
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-10-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:6.390m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.18V I:0.0893A P:10.270W PF:0.9573 Freq:59.98Hz Lamp Flux:874.903x1 lm		
NAME: 8742-30KCRI90	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	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						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	1.04	.00	.96	1.02	.98	.95	.98	.95	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.83	.77	.85	.80	.76	.82	.78	.74	.79	.75	.72	.70
3.0	.80	.72	.65	.78	.71	.65	.75	.69	.63	.72	.67	.62	.70	.65	.61	.59
4.0	.71	.62	.55	.69	.61	.55	.67	.60	.54	.64	.58	.53	.62	.57	.53	.50
5.0	.63	.54	.47	.62	.54	.47	.60	.52	.47	.58	.51	.46	.56	.50	.46	.44
6.0	.57	.48	.41	.56	.47	.41	.54	.46	.41	.52	.46	.40	.51	.45	.40	.38
7.0	.52	.43	.37	.51	.42	.36	.49	.42	.36	.48	.41	.36	.46	.40	.36	.34
8.0	.47	.38	.33	.46	.38	.33	.45	.38	.32	.44	.37	.32	.43	.36	.32	.30
9.0	.43	.35	.29	.43	.35	.29	.41	.34	.29	.40	.34	.29	.39	.33	.29	.27
10.0	.40	.32	.27	.39	.32	.27	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-10-25

γ Range: 0 - 90DEG
 γInterval: 1.0DEG
 Test System:GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:6.390m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:120.18V I:0.0893A P:10.270W PF:0.9573 Freq:59.98Hz Lamp Flux:874.903x1 lm									
NAME: 8742-30KCRI90					TYPE:			WEIGHT:	
SPEC.:					DIM.:			SERIAL No.:	
MFR.:					SUR.:			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	.304	.173	.055	.296	.169	.054	.283	.162	.052	.271	.156	.050	.260	.151	.049	
2.0	.288	.158	.048	.282	.155	.048	.270	.150	.047	.259	.146	.046	.249	.141	.044	
3.0	.268	.142	.043	.262	.140	.042	.252	.136	.041	.242	.133	.041	.233	.129	.040	
4.0	.247	.129	.038	.243	.127	.038	.233	.124	.037	.225	.121	.036	.217	.118	.036	
5.0	.229	.117	.034	.225	.115	.034	.217	.113	.033	.209	.110	.033	.202	.108	.032	
6.0	.213	.107	.030	.209	.105	.030	.201	.103	.030	.195	.101	.030	.188	.099	.029	
7.0	.198	.098	.028	.195	.097	.028	.188	.095	.027	.182	.093	.027	.176	.092	.027	
8.0	.185	.090	.025	.182	.090	.025	.176	.088	.025	.171	.086	.025	.166	.085	.025	
9.0	.173	.084	.023	.171	.083	.023	.165	.082	.023	.161	.080	.023	.156	.079	.023	
10.0	.163	.078	.022	.161	.078	.022	.156	.076	.022	.152	.075	.021	.147	.074	.021	

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	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.141	.099	.065	.097	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.069	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-10-25

γ Range: 0 - 90DEG
 γInterval: 1.0DEG
 Test System:GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:6.390m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.18V I:0.0893A P:10.270W PF:0.9573 Freq:59.98Hz Lamp Flux:874.903x1 lm										
NAME: 8742-30KCRI90					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					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	16.9	18.4	17.1	18.6	18.8	16.9	18.4	17.1	18.6	18.8
3H	18.3	19.7	18.6	20.0	20.2	18.3	19.7	18.6	20.0	20.2
4H	18.9	20.3	19.2	20.5	20.8	18.9	20.2	19.2	20.5	20.7
6H	19.3	20.6	19.7	20.9	21.1	19.2	20.5	19.5	20.7	21.0
8H	19.5	20.7	19.8	21.0	21.3	19.3	20.5	19.6	20.7	21.0
12H	19.5	20.7	19.9	21.0	21.3	19.2	20.4	19.6	20.7	21.0
4H 2H	17.5	18.8	17.8	19.0	19.3	17.5	18.8	17.8	19.0	19.3
3H	19.1	20.3	19.5	20.6	20.9	19.1	20.3	19.5	20.6	20.9
4H	19.8	20.9	20.2	21.2	21.6	19.8	20.8	20.2	21.2	21.5
6H	20.4	21.3	20.8	21.7	22.0	20.2	21.1	20.6	21.5	21.9
8H	20.5	21.4	21.0	21.8	22.2	20.3	21.2	20.7	21.5	21.9
12H	20.6	21.4	21.1	21.8	22.2	20.3	21.1	20.7	21.5	21.9
8H 4H	20.1	20.9	20.5	21.3	21.7	20.0	20.9	20.4	21.3	21.6
6H	20.7	21.5	21.2	21.9	22.3	20.6	21.3	21.0	21.7	22.1
8H	21.0	21.6	21.4	22.0	22.5	20.7	21.3	21.2	21.8	22.2
12H	21.1	21.7	21.6	22.1	22.6	20.7	21.3	21.2	21.7	22.2
12H 4H	20.1	20.9	20.5	21.3	21.7	20.0	20.8	20.4	21.2	21.6
6H	20.8	21.4	21.2	21.8	22.3	20.6	21.2	21.1	21.7	22.1
8H	21.0	21.6	21.5	22.0	22.5	20.8	21.3	21.2	21.8	22.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 874.9 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.5)
 Area: 0.1 m2

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-10-25

γ Range: 0 - 90DEG
 γInterval: 1.0DEG
 Test System:GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:6.390m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.18V I:0.0893A P:10.270W PF:0.9573 Freq:59.98Hz Lamp Flux:874.903x1 lm		
NAME: 8742-30KCRI90	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

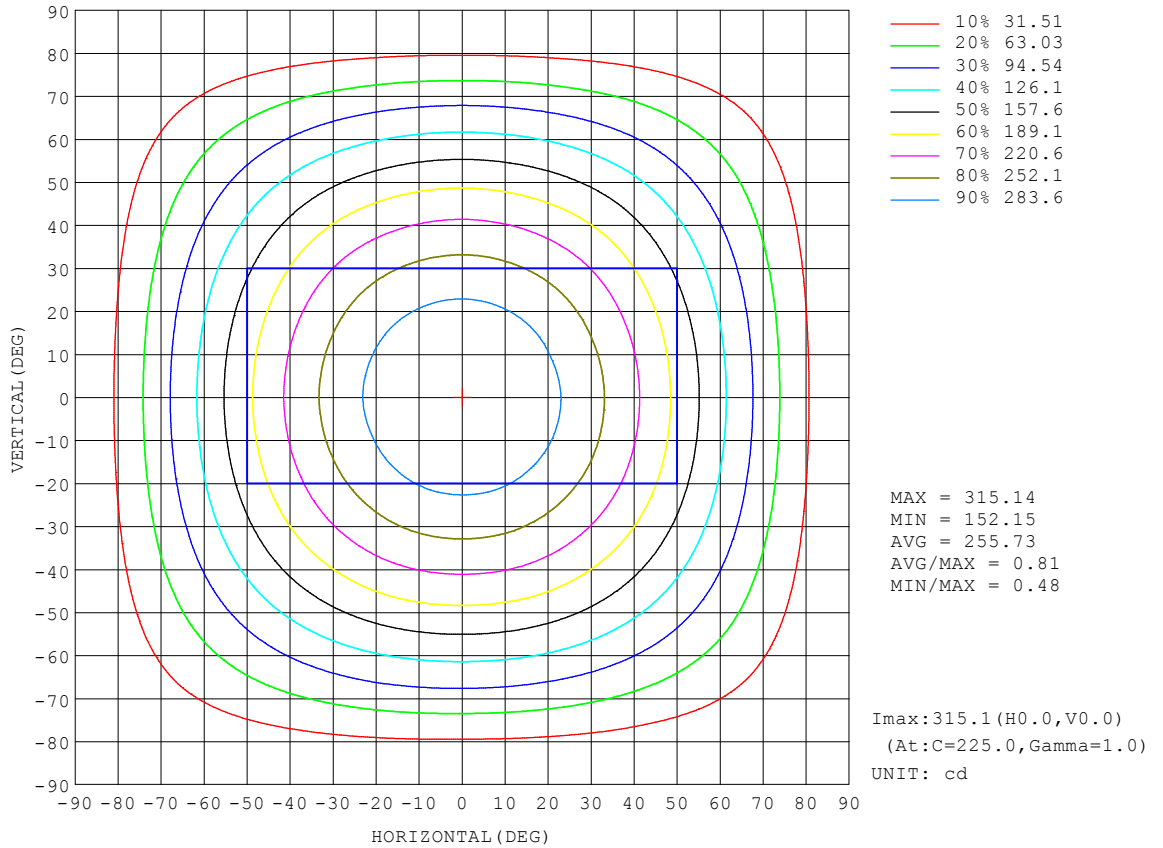
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	46	39	57	46	39	56	46	39	33
0.80	68	56	49	67	56	49	65	55	48	42
1.00	76	65	58	75	65	58	73	66	57	50
1.25	83	73	66	82	72	66	79	71	65	57
1.50	88	79	72	87	78	71	84	76	70	63
2.00	95	87	80	93	86	80	90	83	78	70
2.50	99	92	86	97	90	85	93	87	83	75
3.00	103	96	90	100	94	89	96	91	87	79
4.00	107	101	96	104	99	95	100	96	92	83
5.00	109	104	100	106	102	99	102	99	96	86
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:25.3DEG
 Operators:
 Test Date:2019-10-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:6.390m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.18V I:0.0893A P:10.270W PF:0.9573 Freq:59.98Hz Lamp Flux:874.903x1 lm		
NAME: 8742-30KCRI90	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

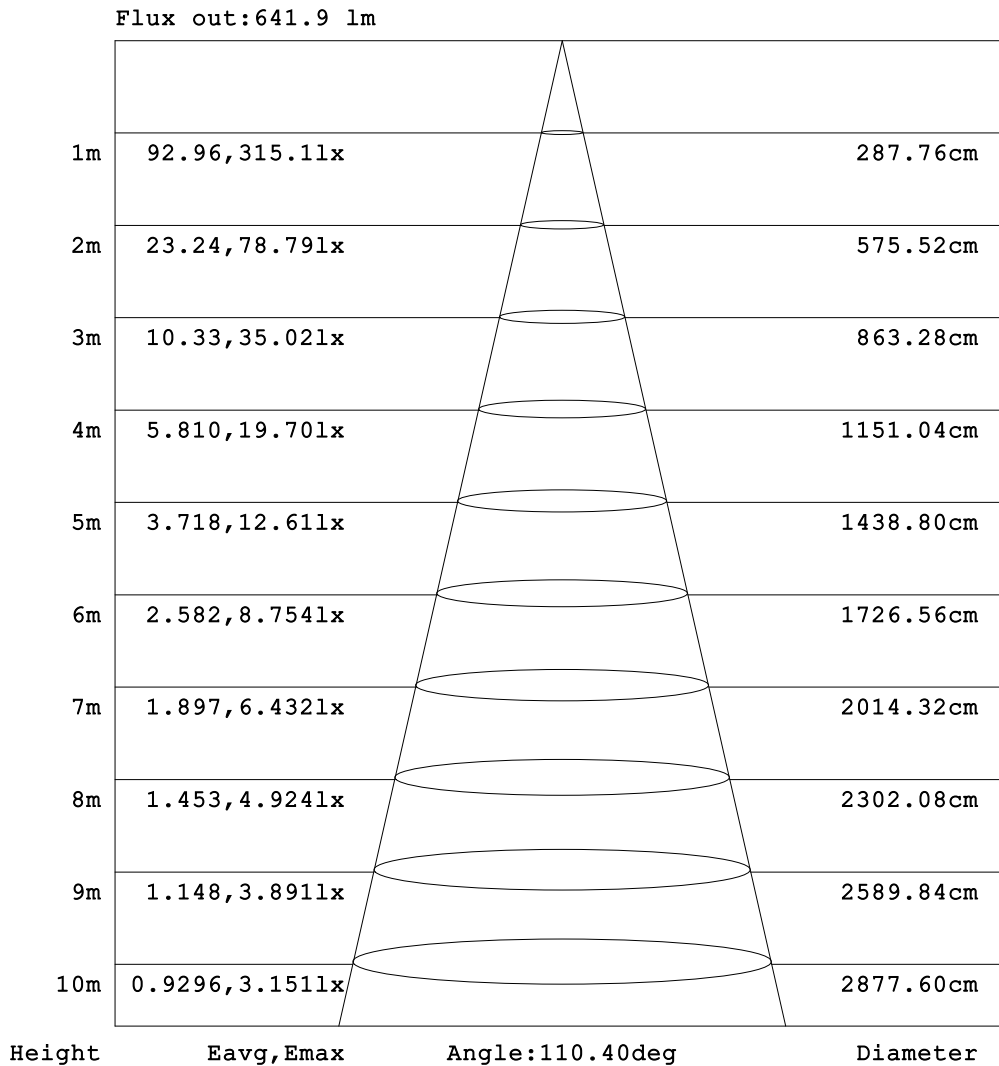


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-10-25

γ Range: 0 - 90DEG
 γInterval: 1.0DEG
 Test System:GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:6.390m [K=1.0000]
 Remarks:

AAI Figure

Test:U:120.18V I:0.0893A P:10.270W PF:0.9573 Freq:59.98Hz Lamp Flux:874.903x1 lm		
NAME: 8742-30KCRI90	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



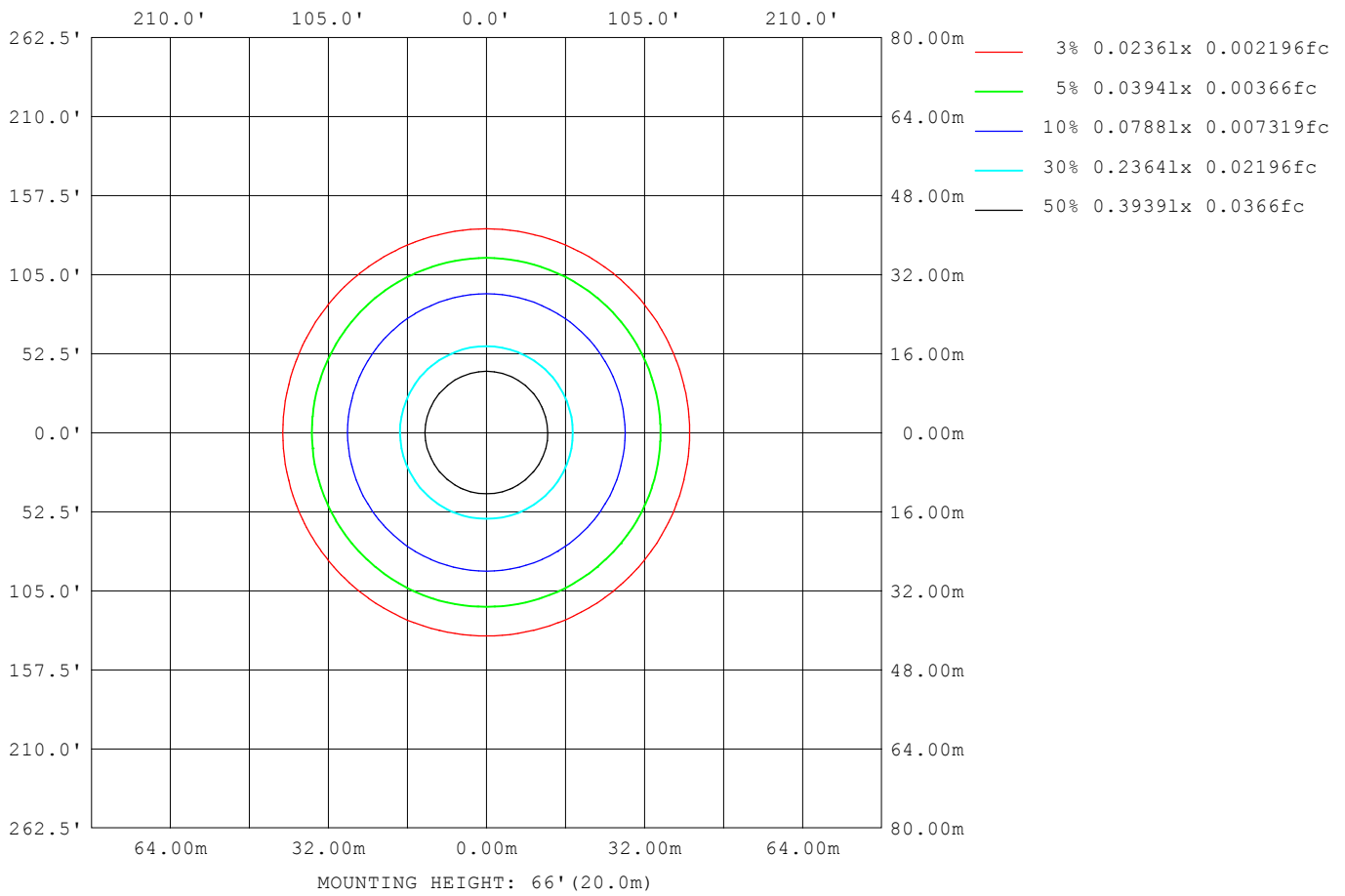
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-10-25

γ Range: 0 - 90DEG
 γInterval: 1.0DEG
 Test System:GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:6.390m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.18V I:0.0893A P:10.270W PF:0.9573 Freq:59.98Hz Lamp Flux:874.903x1 lm		
NAME: 8742-30KCRI90	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-10-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:6.390m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:120.18V I:0.0893A P:10.270W PF:0.9573 Freq:59.98Hz Lamp Flux:874.903x1 lm		
NAME: 8742-30KCRI90	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

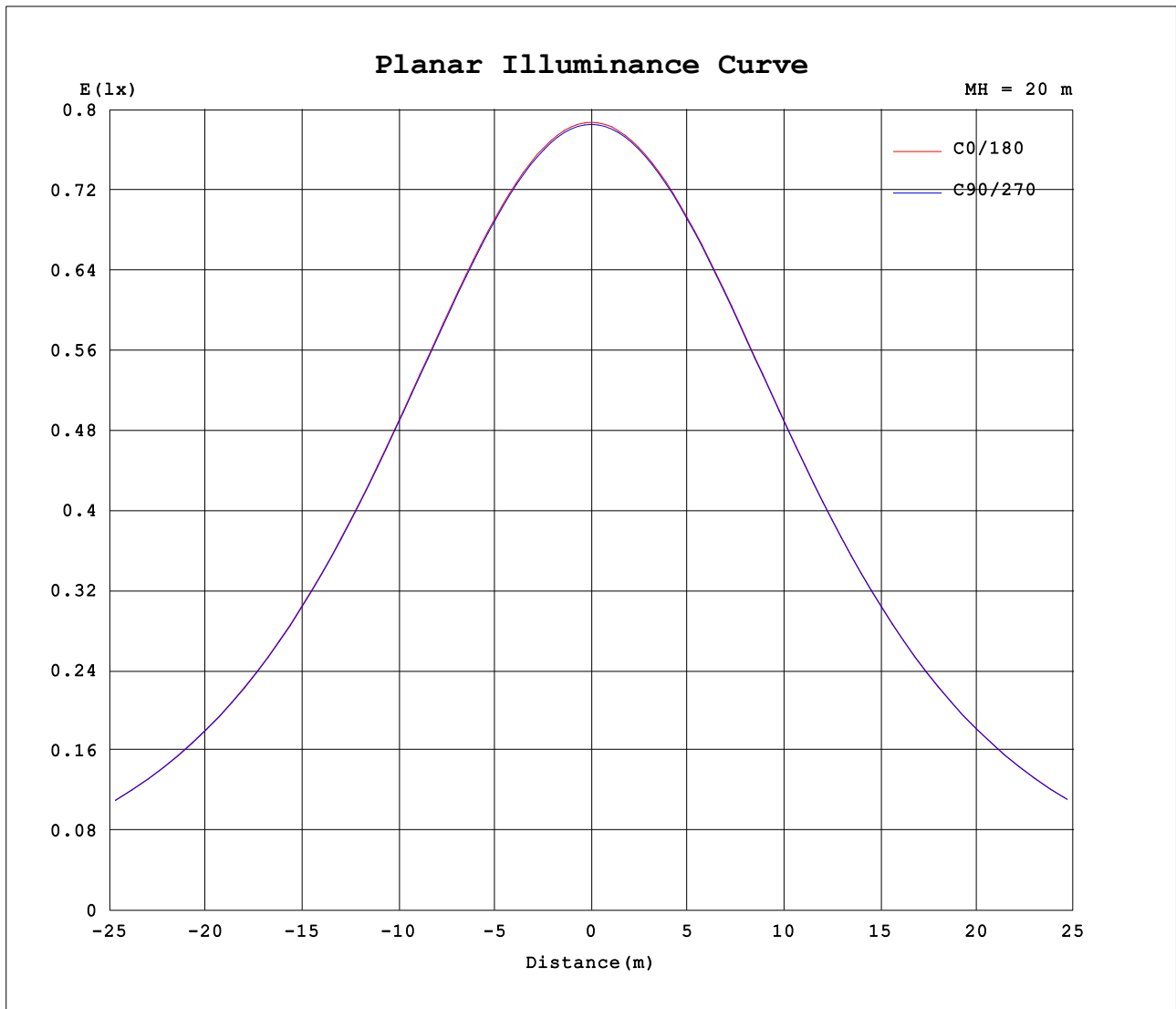
AvgL	cd/m2
L_0~180 (65) av	2564
L_0~180 (75) av	2243
L_0~180 (85) av	1674
L_90~270 (65) av	2572
L_90~270 (75) av	2132
L_90~270 (85) av	503
L_45 (65) av	2567
L_45 (75) av	2200
L_45 (85) av	848

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-10-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:6.390m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019-10-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: GO-2000B_V1 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 6.390m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.18V I:0.0893A P:10.270W PF:0.9573 Freq:59.98Hz Lamp Flux:874.903x1 lm		
NAME: 8742-30KCRI90	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314			
5	313	313	313	313	313	313	313	313	313	313	313	313	313	313	313	313			
10	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308			
15	301	301	301	301	301	301	301	301	301	301	301	301	301	301	301	301			
20	290	291	290	291	290	291	290	291	291	290	291	291	291	291	291	290			
25	277	278	277	278	277	278	278	278	278	278	278	278	278	278	278	278			
30	262	262	262	262	262	262	262	263	263	262	263	263	263	262	263	262			
35	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245			
40	225	226	225	226	225	226	226	226	226	226	226	226	226	226	226	225			
45	204	205	204	205	204	205	204	205	205	205	205	205	205	205	205	204			
50	182	182	182	182	182	182	182	183	183	182	183	182	183	182	183	182			
55	158	158	158	158	158	158	158	159	159	159	159	159	159	159	159	158			
60	133	133	133	133	133	134	134	134	134	134	135	134	135	134	134	133			
65	108	108	107	108	108	109	109	109	109	109	109	109	109	109	109	108			
70	82.2	82.2	81.8	81.9	81.9	83.2	83.4	83.6	83.6	83.2	83.4	83.0	82.8	82.8	83.4	83.0			
75	57.3	57.3	55.5	55.2	54.8	56.5	57.6	59.0	58.8	58.4	57.3	55.9	55.6	56.1	57.4	58.3			
80	34.3	33.1	30.5	29.3	28.7	30.4	32.4	34.9	35.7	34.3	31.8	29.6	28.8	29.6	31.7	33.9			
85	14.0	11.2	6.81	5.01	4.41	5.54	7.87	12.3	15.2	12.0	7.82	5.20	4.36	4.73	7.07	11.3			
90	0.29	0.29	0.28	0.28	0.28	0.27	0.28	0.29	0.30	0.31	0.28	0.28	0.28	0.29	0.29	0.31			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-10-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:6.390m [K=1.0000]
 Remarks: