

SUGAR-600-50W-830



Light Output Ratio:	100.0%	
Luminaire Power:	50.32 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.30	fine grid method.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Myles
Test Date:2019-01-05

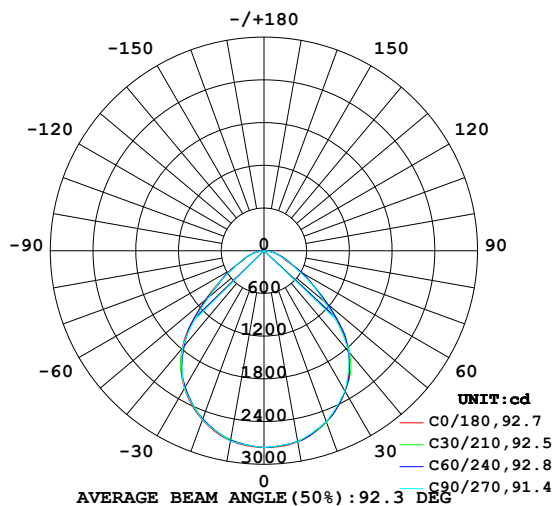
V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:56%
Test Distance:5.850m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

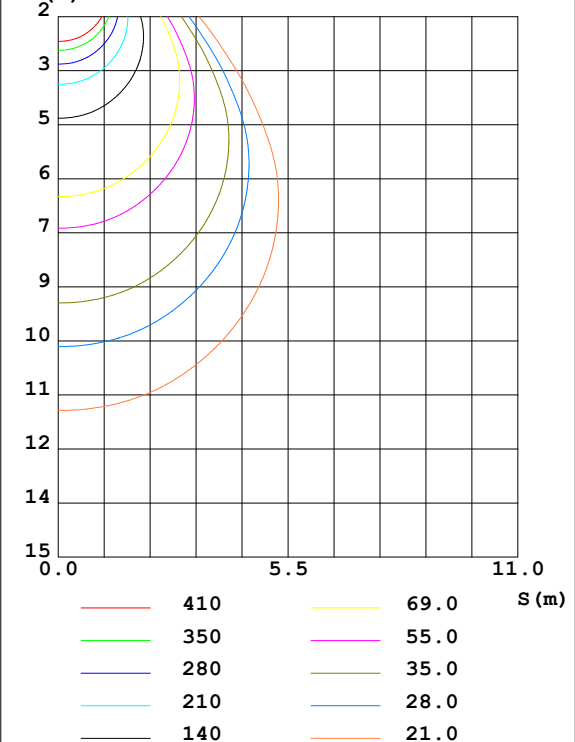
Test:U:220.9V I:0.2529A P:50.32W PF:0.9006 Freq:49.89Hz Lamp Flux:5793.94x1 lm		
NAME: SUGAR-600-50W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	DIM.: ϕ 600mm*H105mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 115.15 lm/W			
MODEL	OSRAM-3000K	I _{max} (cd)	2765	S/MH (C0/180)	1.21
NOMINAL POWER (W)	50	LOR (%)	100.0	S/MH (C90/270)	1.20
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	5793.9	η UP,DN (C0-180)	0.0,50.8
NOMINAL FLUX (lm)	5793.94	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,49.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Myles
Test Date:2019-01-05

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:56%
Test Distance:5.850m [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	2726	2718	2726	2705	2710	2695	2713	2709	0- 10	260.9	260.9	4.5,4.5
20	2560	2553	2556	2525	2528	2507	2527	2531	10- 20	743.2	1004	17.3,17.3
30	2279	2278	2274	2238	2234	2214	2237	2241	20- 30	1106	2110	36.4,36.4
40	1844	1868	1857	1804	1785	1769	1784	1805	30- 40	1277	3387	58.5,58.5
50	1156	1184	1097	1044	1081	1057	998.7	1006	40- 50	1115	4502	77.7,77.7
60	595.7	593.3	542.5	524.4	547.1	537.6	497.7	514.4	50- 60	692.3	5195	89.7,89.7
70	281.3	279.2	258.0	250.5	263.4	247.2	242.7	244.2	60- 70	379.0	5574	96.2,96.2
80	115.5	116.3	105.2	100.5	96.20	90.02	82.81	92.28	70- 80	188.1	5762	99.4,99.4
90	0.6013	0	0	0	0.8780	0	0	0	80- 90	32.25	5794	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): 3992.9 lm

%lum = 68.9%

%lamp = 68.9%

Conical surface Flux(120deg): 5194.6 lm

%lum = 89.7%

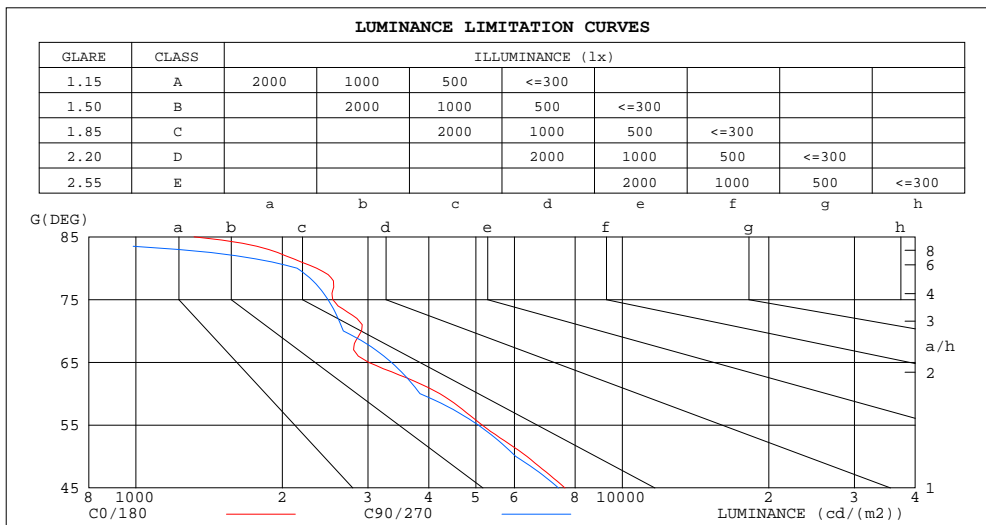
%lamp = 89.7%

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Temperature:25.3DEG
Operators:Myles
Test Date:2019-01-05

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:56%
Test Distance:5.850m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.9V I:0.2529A P:50.32W PF:0.9006 Freq:49.89Hz Lamp Flux:5793.94x1 lm		
NAME: SUGAR-600-50W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	DIM.: ϕ 600mm*H105mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G(°)	C0/180	C90/270
85	1317	0
80	2353	2145
75	2540	2483
70	2910	2669
65	3008	3351
60	4216	3839
55	5150	5056
50	6366	6037
45	7620	7390

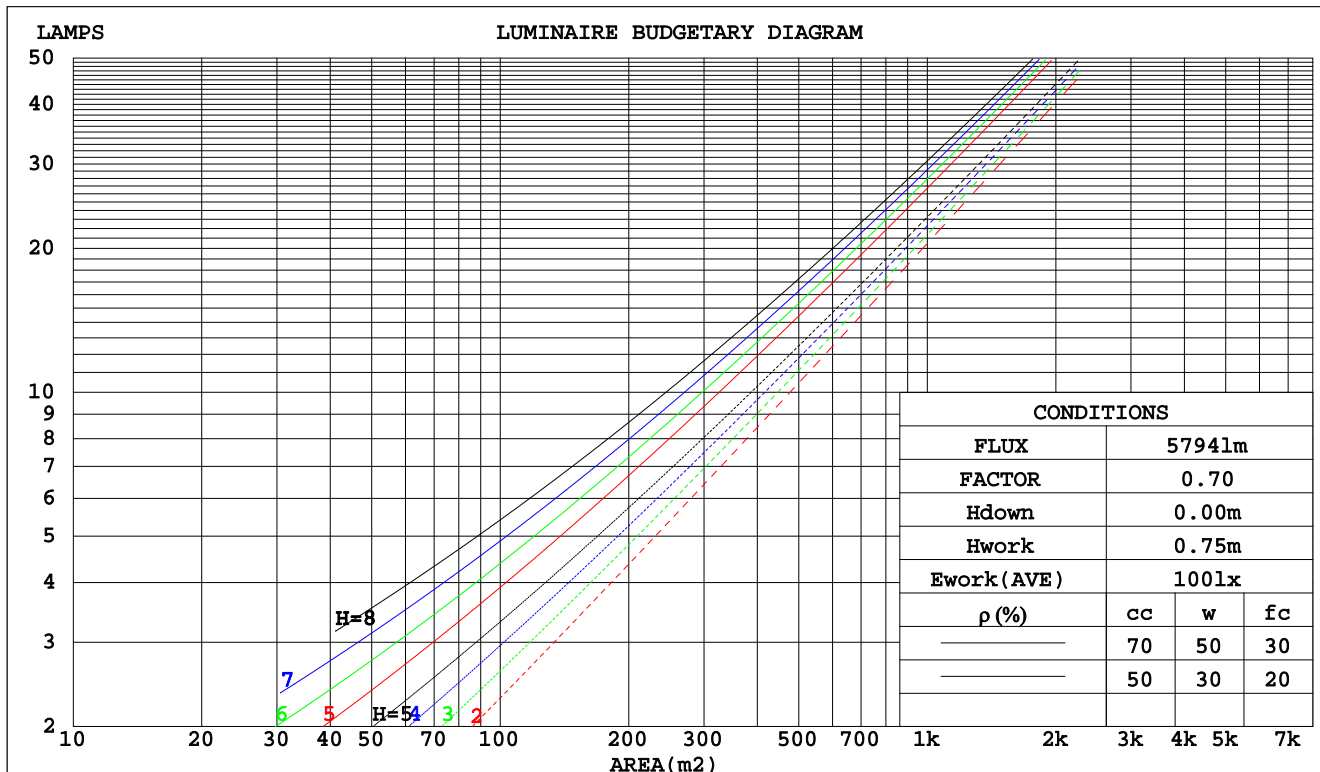
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Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:56%
Test Distance:5.850m [K=1.0000]
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CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.9V I:0.2529A P:50.32W PF:0.9006 Freq:49.89Hz Lamp Flux:5793.94x1 lm		
NAME: SUGAR-600-50W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	DIM.: ϕ 600mm*H105mm	
MFR.: NEKO LIGHTING AG		

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	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	1.07	1.03	1.00	1.05	1.01	.98	1.00	.98	.95	.97	.94	.92	.93	.91	.90	.88
2.0	.95	.89	.85	.93	.88	.84	.90	.86	.82	.87	.83	.80	.84	.81	.78	.76
3.0	.85	.78	.73	.84	.77	.72	.81	.75	.71	.78	.74	.70	.76	.72	.68	.66
4.0	.77	.69	.63	.76	.68	.63	.73	.67	.62	.71	.65	.61	.69	.64	.60	.58
5.0	.69	.61	.56	.68	.61	.55	.66	.60	.55	.64	.59	.54	.63	.58	.54	.52
6.0	.63	.55	.49	.62	.55	.49	.61	.54	.49	.59	.53	.48	.57	.52	.48	.46
7.0	.58	.50	.44	.57	.49	.44	.55	.49	.44	.54	.48	.43	.53	.47	.43	.41
8.0	.53	.45	.40	.52	.45	.40	.51	.44	.39	.50	.44	.39	.49	.43	.39	.37
9.0	.49	.41	.36	.48	.41	.36	.47	.41	.36	.46	.40	.36	.45	.40	.36	.34
10.0	.45	.38	.33	.45	.38	.33	.44	.37	.33	.43	.37	.33	.42	.37	.33	.31



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V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:56%
Test Distance:5.850m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:220.9V I:0.2529A P:50.32W PF:0.9006 Freq:49.89Hz Lamp Flux:5793.94x1 lm		
NAME: SUGAR-600-50W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	DIM.: ϕ 600mm*H105mm	
MFR.: NEKO LIGHTING AG		

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	.254	.145	.046	.247	.141	.045	.234	.134	.043	.222	.128	.041	.211	.122	.039		
2.0	.245	.134	.041	.239	.132	.041	.228	.127	.039	.218	.122	.038	.208	.118	.037		
3.0	.232	.123	.037	.227	.121	.037	.217	.117	.036	.208	.114	.035	.199	.110	.034		
4.0	.218	.113	.033	.213	.112	.033	.204	.108	.032	.196	.105	.032	.189	.103	.031		
5.0	.204	.104	.030	.200	.103	.030	.193	.100	.030	.185	.098	.029	.179	.095	.029		
6.0	.192	.096	.028	.188	.095	.027	.182	.093	.027	.175	.091	.027	.169	.089	.026		
7.0	.181	.089	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025	.160	.083	.024		
8.0	.170	.083	.023	.167	.082	.023	.162	.081	.023	.157	.079	.023	.152	.078	.023		
9.0	.161	.078	.022	.158	.077	.022	.153	.076	.021	.149	.075	.021	.144	.073	.021		
10.0	.152	.073	.020	.150	.072	.020	.146	.071	.020	.141	.070	.020	.137	.069	.020		

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020		
1.0	.176	.157	.139	.151	.134	.119	.103	.092	.083	.059	.054	.048	.019	.017	.016		
2.0	.166	.132	.104	.142	.114	.090	.097	.079	.062	.056	.046	.037	.018	.015	.012		
3.0	.157	.114	.080	.135	.098	.069	.092	.068	.048	.053	.040	.029	.017	.013	.009		
4.0	.149	.100	.063	.128	.087	.055	.088	.060	.039	.051	.035	.023	.016	.012	.007		
5.0	.142	.090	.051	.122	.077	.044	.084	.054	.031	.049	.032	.019	.016	.010	.006		
6.0	.135	.081	.042	.116	.070	.037	.080	.049	.026	.046	.029	.015	.015	.009	.005		
7.0	.129	.074	.036	.111	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004		
8.0	.123	.068	.031	.106	.059	.027	.073	.041	.019	.042	.024	.011	.014	.008	.004		
9.0	.117	.063	.027	.101	.055	.023	.070	.039	.017	.041	.023	.010	.013	.007	.003		
10.0	.112	.059	.024	.096	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003		

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Myles
 Test Date:2019-01-05

$V(B)$ Range:-80 - 80DEG
 $V(B)$ Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:56%
 Test Distance:5.850m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.9V I:0.2529A P:50.32W PF:0.9006 Freq:49.89Hz Lamp Flux:5793.94x1 lm										
NAME: SUGAR-600-50W-830					TYPE:Ceiling light			SERIAL No.:		
SPEC.:3000K					DIM.: ϕ 600mm*H105mm					
MFR.: NEKO LIGHTING AG										
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	12.1	13.4	12.3	13.6	13.8	12.0	13.4	12.3	13.6	13.8
3H	12.6	13.9	12.9	14.1	14.3	12.6	13.8	12.9	14.1	14.3
4H	12.9	14.0	13.2	14.3	14.5	12.8	14.0	13.1	14.2	14.5
6H	13.0	14.1	13.4	14.4	14.7	13.0	14.1	13.3	14.3	14.6
8H	13.1	14.1	13.4	14.4	14.7	13.0	14.0	13.3	14.3	14.6
12H	13.0	14.1	13.4	14.3	14.6	12.9	14.0	13.3	14.2	14.5
4H 2H	12.3	13.5	12.6	13.7	14.0	12.3	13.4	12.6	13.7	13.9
3H	13.0	14.0	13.4	14.3	14.6	13.0	14.0	13.4	14.3	14.6
4H	13.4	14.3	13.7	14.6	14.9	13.4	14.3	13.7	14.6	14.9
6H	13.6	14.5	14.0	14.8	15.2	13.6	14.4	14.0	14.8	15.1
8H	13.7	14.4	14.1	14.8	15.2	13.7	14.4	14.1	14.8	15.2
12H	13.7	14.4	14.1	14.8	15.2	13.6	14.3	14.1	14.7	15.1
8H 4H	13.5	14.2	13.9	14.6	15.0	13.5	14.2	13.9	14.6	15.0
6H	13.9	14.5	14.3	14.9	15.3	13.9	14.5	14.3	14.9	15.3
8H	14.0	14.5	14.4	14.9	15.4	13.9	14.5	14.4	14.9	15.4
12H	14.0	14.4	14.4	14.9	15.4	13.9	14.4	14.4	14.8	15.3
12H 4H	13.5	14.2	13.9	14.5	14.9	13.5	14.2	13.9	14.5	14.9
6H	13.9	14.4	14.3	14.8	15.3	13.9	14.4	14.3	14.8	15.3
8H	14.0	14.5	14.5	14.9	15.4	14.0	14.4	14.5	14.9	15.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.6 / - 0.6					+ 0.5 / - 0.5				
1.5H	+ 0.3 / - 0.3					+ 0.3 / - 0.4				
2.0H	+ 1.3 / - 1.0					+ 1.2 / - 1.1				

CIE Pub.117, 5794 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 6.1$)

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Myles
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V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:56%
Test Distance:5.850m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.9V I:0.2529A P:50.32W PF:0.9006 Freq:49.89Hz Lamp Flux:5793.94x1 lm		
NAME: SUGAR-600-50W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	DIM.: \varnothing 600mm*H105mm	
MFR.: NEKO LIGHTING AG		

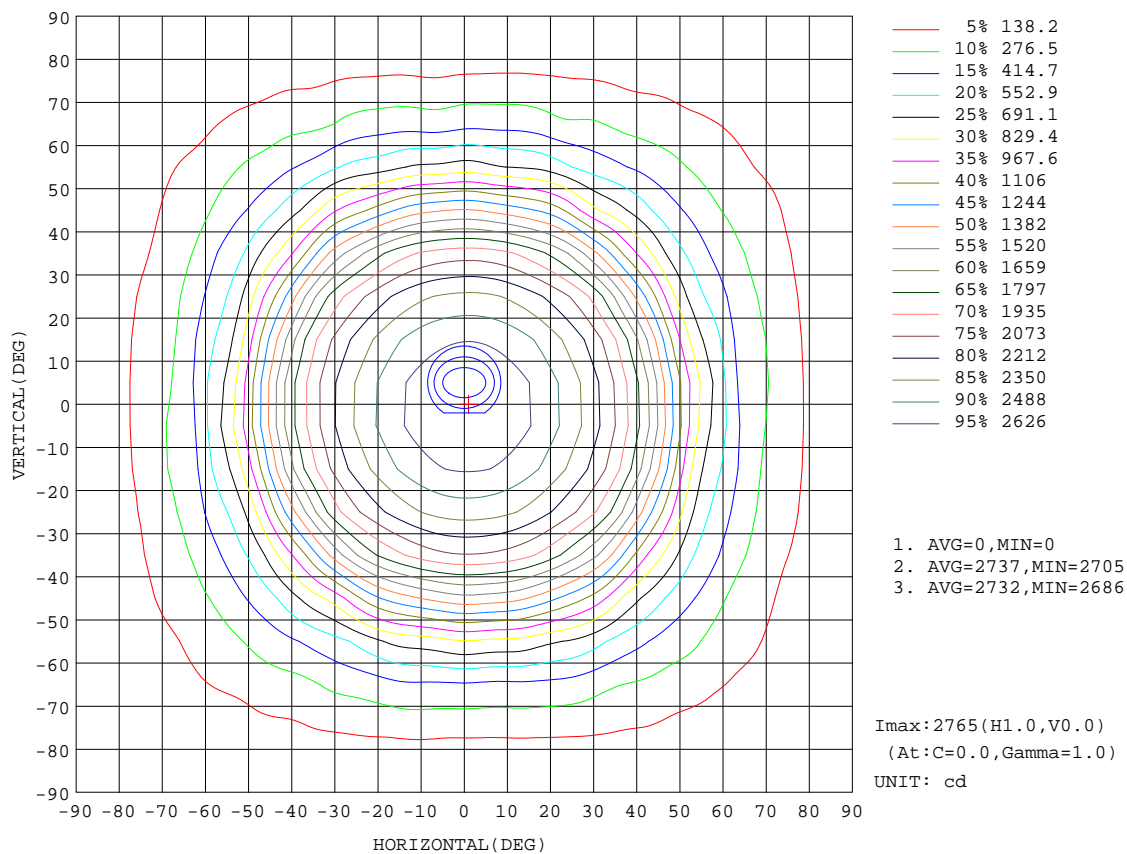
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	65	55	49	65	55	49	64	55	49	43
0.80	75	66	59	75	65	59	73	64	59	53
1.00	83	74	68	82	74	68	80	75	67	61
1.25	90	81	75	89	81	75	86	79	74	68
1.50	94	86	81	93	86	80	90	84	79	73
2.00	100	93	88	98	92	87	95	90	86	79
2.50	103	97	92	101	96	91	98	93	89	82
3.00	106	100	96	104	99	95	100	96	93	85
4.00	109	104	101	107	103	99	103	99	97	88
5.00	111	107	104	109	105	102	104	102	99	91
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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ISOCANDELA DIAGRAM

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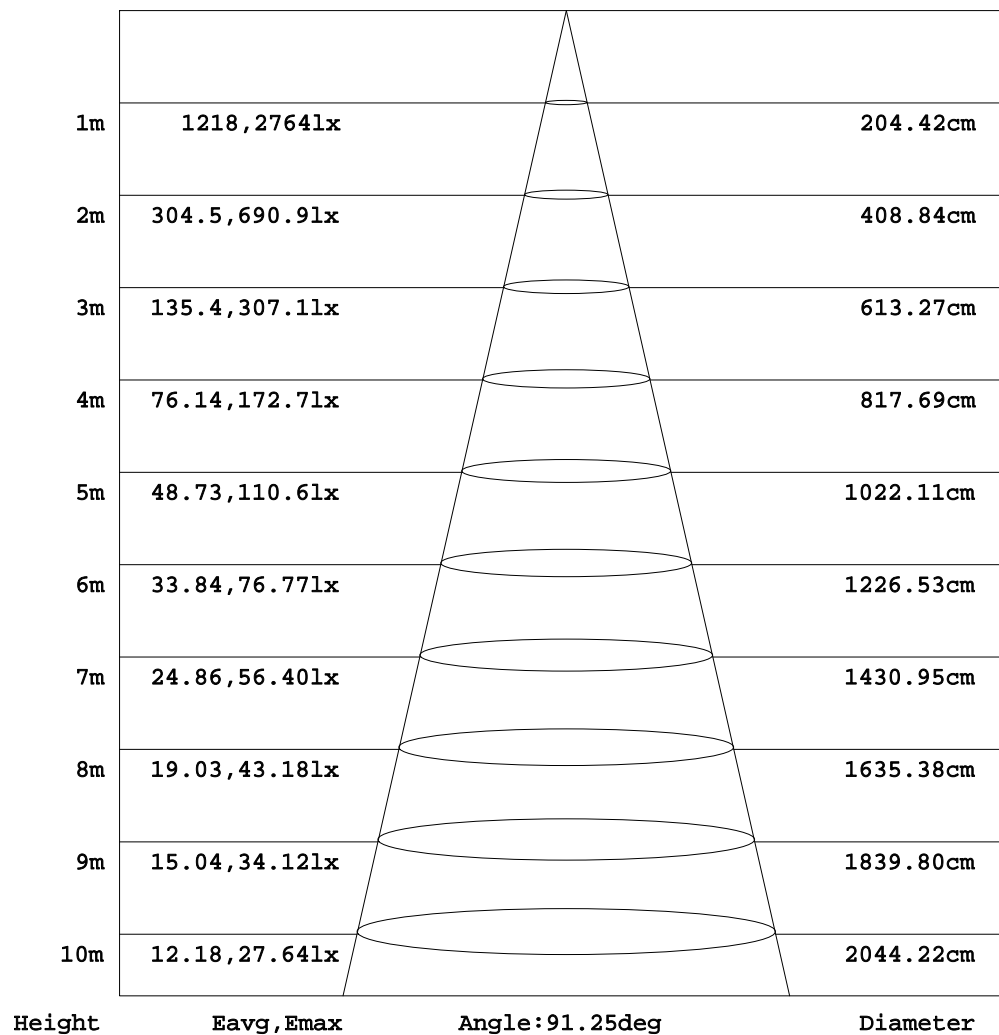
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AAI Figure

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NAME: SUGAR-600-50W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	DIM.: $\phi 600\text{mm} \times H105\text{mm}$	
MFR.: NEKO LIGHTING AG		

Flux out:4104 lm



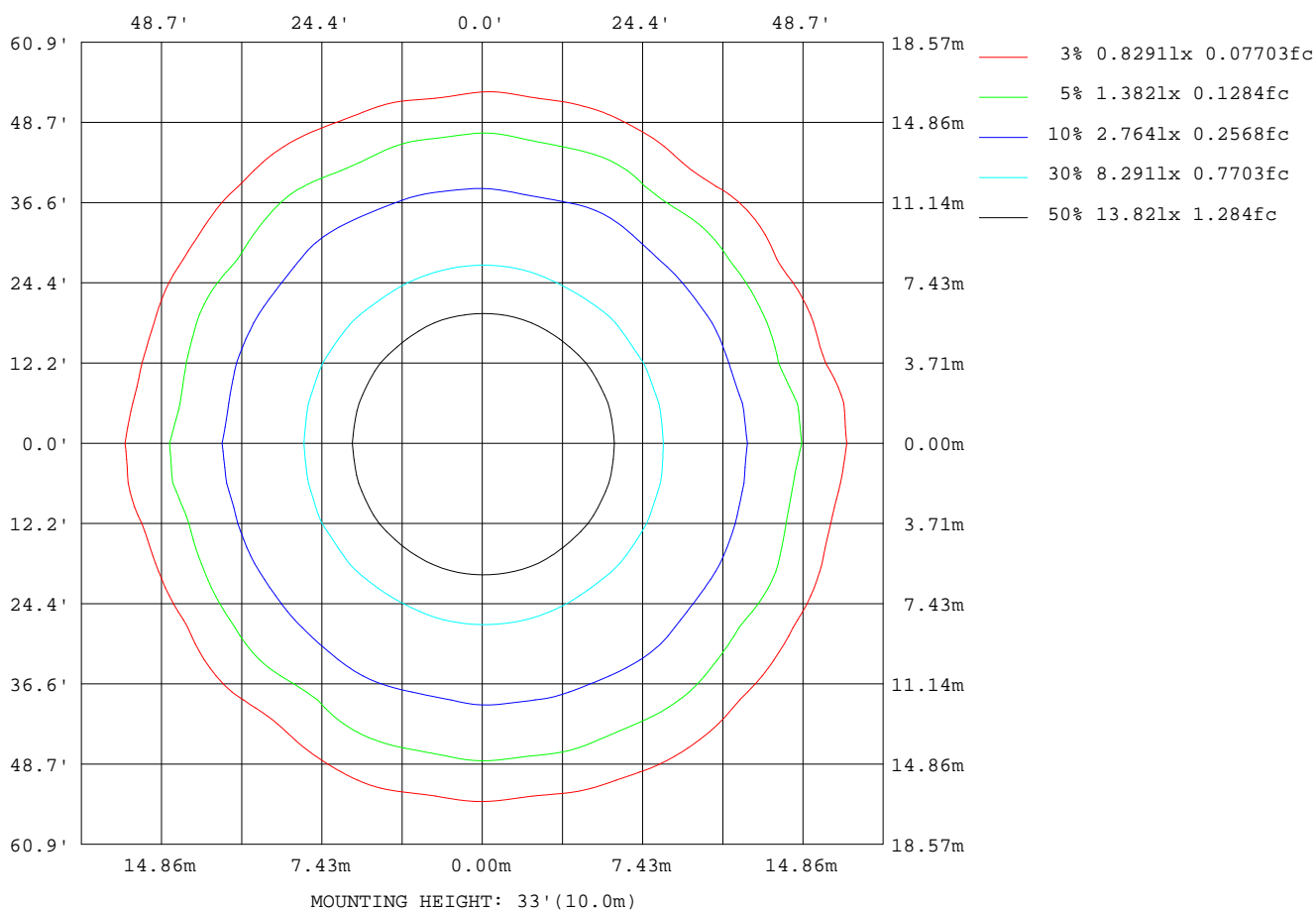
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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ISOLUX DIAGRAM

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LED Avg.L Report

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MFR.: NEKO LIGHTING AG		

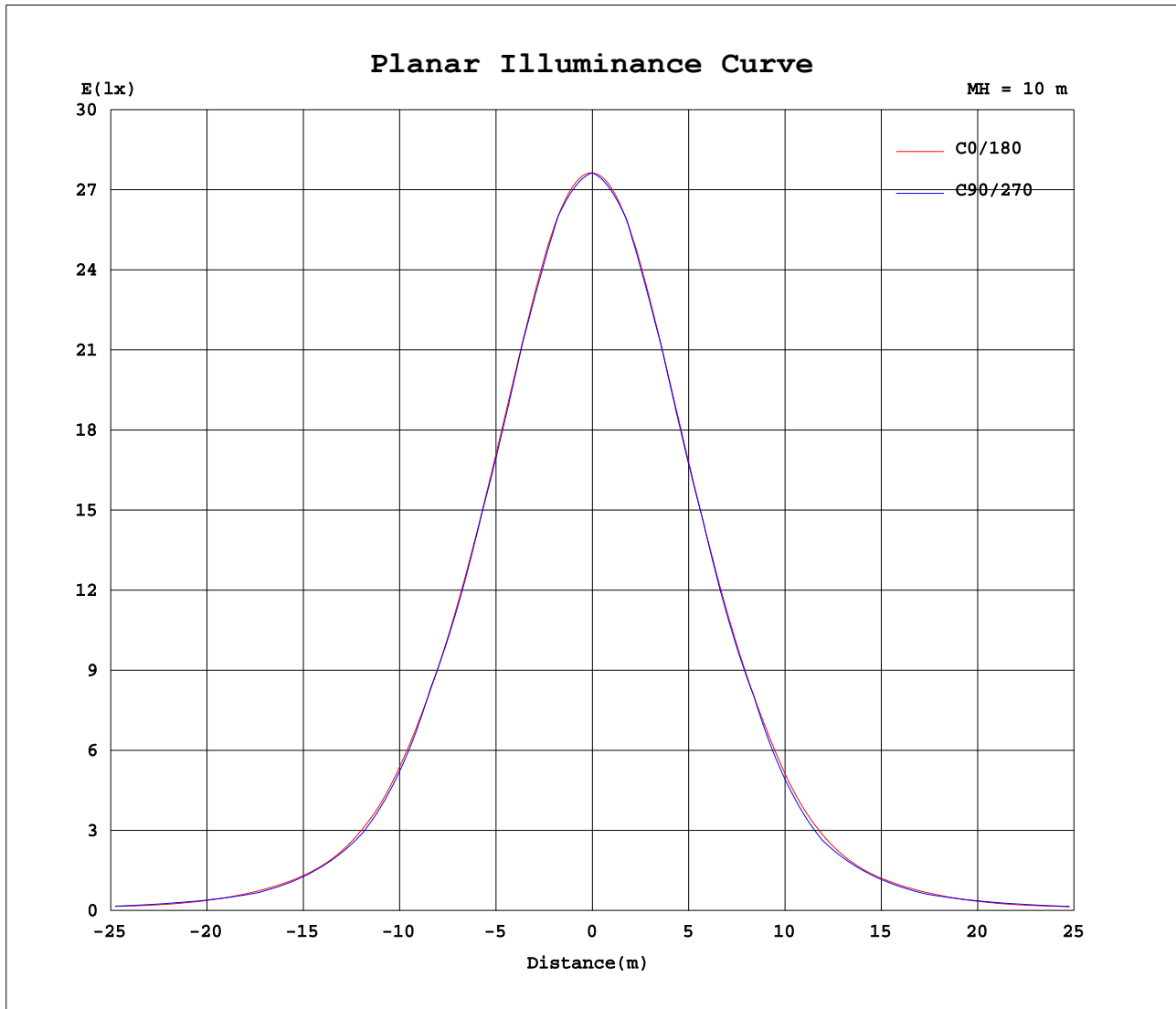
AvgL	cd/m2
L_0~180 (65) av	2898
L_0~180 (75) av	2431
L_0~180 (85) av	1020
L_90~270 (65) av	3225
L_90~270 (75) av	2354
L_90~270 (85) av	0
L_45 (65) av	3143
L_45 (75) av	2458
L_45 (85) av	879

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Myles
Test Date:2019-01-05

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:56%
Test Distance:5.850m [K=1.0000]
Remarks:

Planar Illuminance Curve



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H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Myles
Test Date:2019-01-05

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