

SUGAR-600-50W-840



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

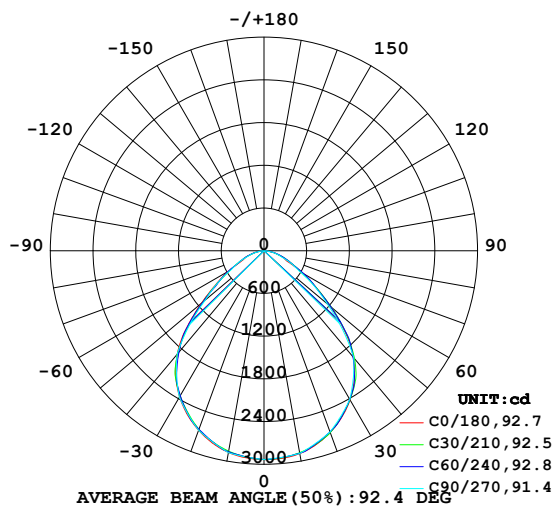
V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:56%
Test Distance:5.850m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

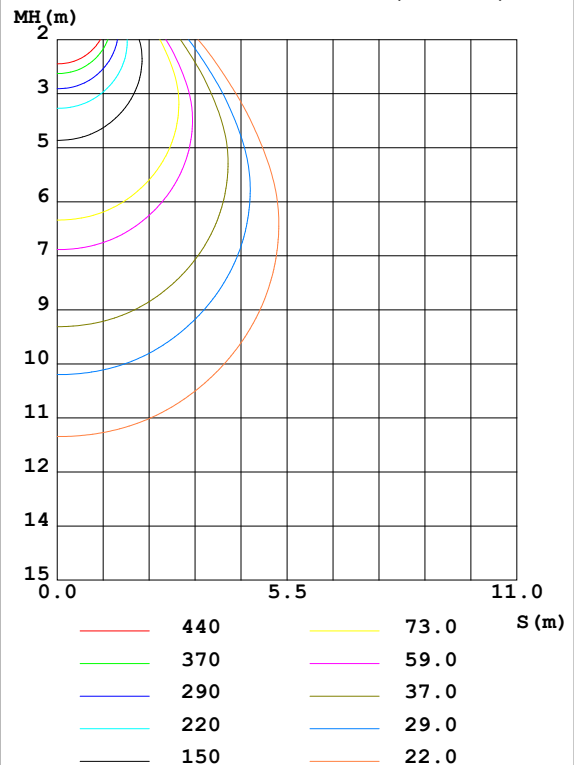
Test:U:220.9V I:0.2529A P:50.32W PF:0.9007 Freq:49.90Hz Lamp Flux:6149.82x1 lm		
NAME: SUGAR-600-50W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: ϕ 600mm*H105mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 122.21 lm/W			
MODEL	OSRAM-4000K	I _{max} (cd)	2933	S/MH (C0/180)	1.21
NOMINAL POWER (W)	50	LOR (%)	100.0	S/MH (C90/270)	1.21
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	6149.8	η UP,DN (C0-180)	0.0,50.6
NOMINAL FLUX (lm)	6149.82	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,49.4
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	2893	2882	2892	2870	2877	2861	2881	2875	0- 10	276.9	276.9	4.5,4.5
20	2716	2707	2710	2679	2684	2663	2685	2687	10- 20	788.7	1066	17.3,17.3
30	2417	2413	2410	2374	2371	2354	2378	2380	20- 30	1174	2239	36.4,36.4
40	1954	1975	1962	1911	1896	1885	1902	1919	30- 40	1355	3595	58.4,58.4
50	1224	1245	1153	1103	1151	1133	1072	1074	40- 50	1184	4778	77.7,77.7
60	628.2	625.7	571.4	554.5	582.2	574.0	532.3	547.9	50- 60	735.0	5513	89.6,89.6
70	297.4	293.8	271.5	264.4	280.1	264.8	259.2	260.1	60- 70	402.2	5915	96.2,96.2
80	121.5	123.1	113.1	106.2	102.9	97.72	90.64	99.10	70- 80	199.9	6115	99.4,99.4
90	0.6406	0	0	0	0.8887	0	0	0	80- 90	34.60	6150	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): 4237.4 lm

%lum = 68.9%

%lamp = 68.9%

Conical surface Flux(120deg): 5513.2 lm

%lum = 89.6%

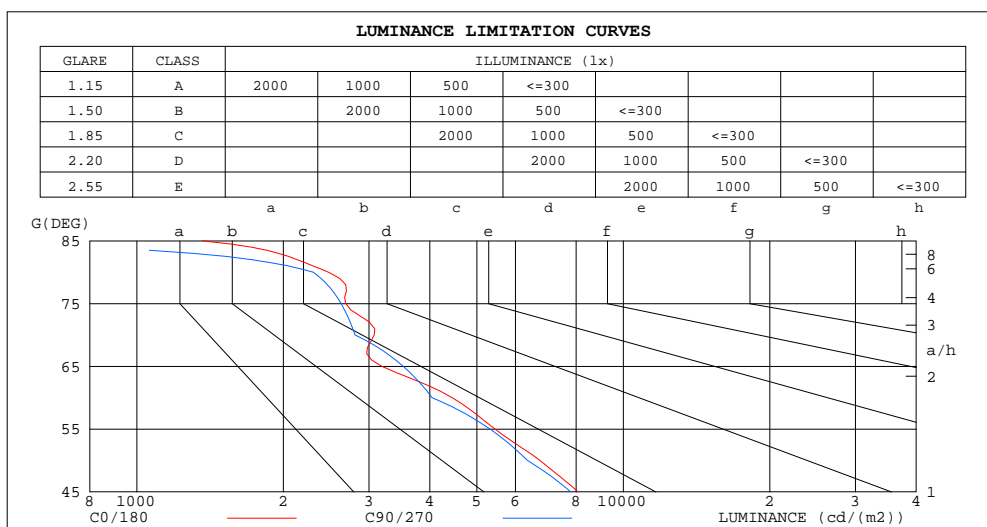
%lamp = 89.6%

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:

LUMINANCE LIMITATION CURVES

Test:U:220.9V I:0.2529A P:50.32W PF:0.9007 Freq:49.90Hz Lamp Flux:6149.82x1 lm		
NAME: SUGAR-600-50W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: ϕ 600mm*H105mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1362	0
80	2476	2305
75	2687	2630
70	3077	2809
65	3187	3529
60	4446	4044
55	5447	5321
50	6738	6350
45	8068	7797

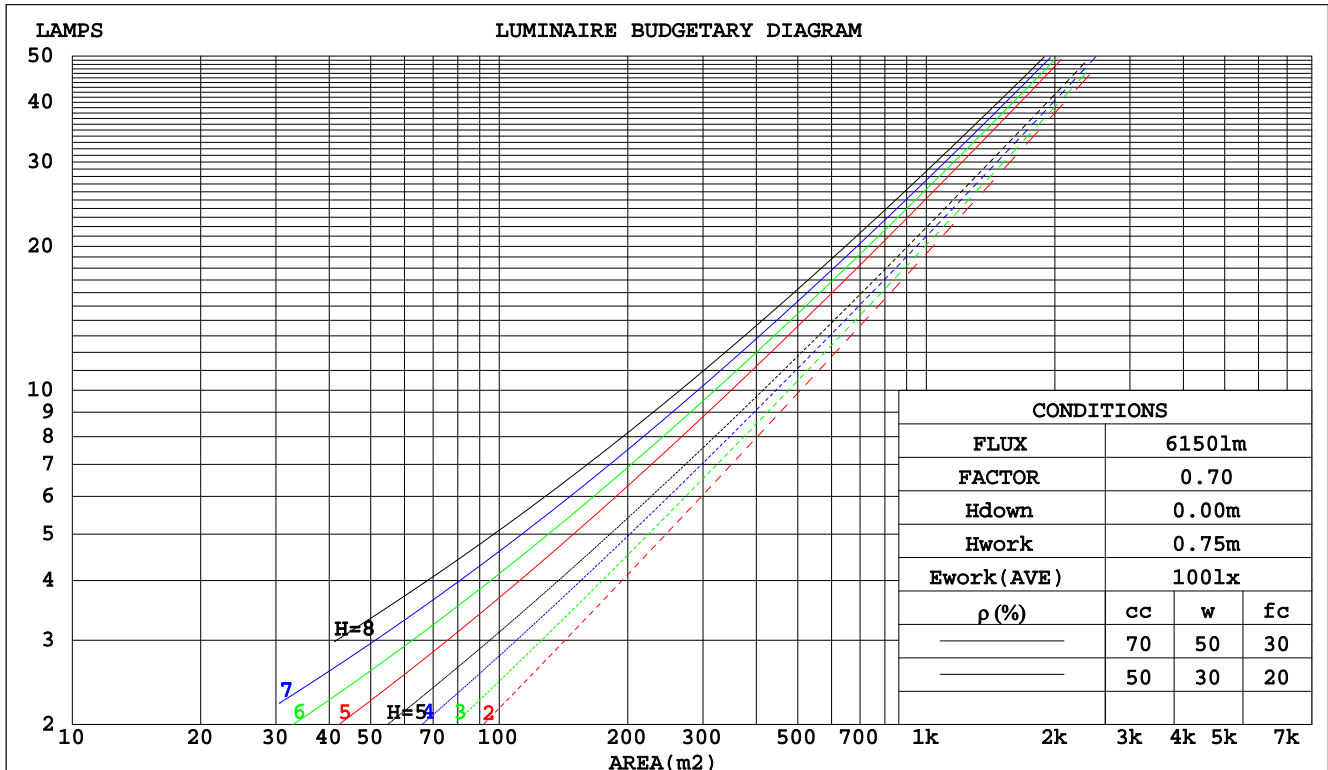
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Temperature:25.3DEG
Operators:Myles
Test Date:2019-01-05

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.9V I:0.2529A P:50.32W PF:0.9007 Freq:49.90Hz Lamp Flux:6149.82x1 lm		
NAME: SUGAR-600-50W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	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	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	1.07	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	.75	.68	.63	.73	.67	.62	.71	.65	.61	.69	.64	.60	.58
5.0	.69	.61	.55	.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

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NAME: SUGAR-600-50W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	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	.123	.039		
2.0	.245	.135	.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	.205	.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:0.9007 Freq:49.90Hz Lamp Flux:6149.82x1 lm										
NAME: SUGAR-600-50W-840					TYPE:Ceiling light			SERIAL No.:		
SPEC.:4000K					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	12.0	13.4	12.3	13.6	13.8	12.0	13.3	12.2	13.5	13.7
3H	12.6	13.8	12.9	14.0	14.3	12.5	13.8	12.8	14.0	14.2
4H	12.8	14.0	13.1	14.2	14.5	12.8	13.9	13.1	14.2	14.4
6H	13.0	14.1	13.3	14.4	14.6	12.9	14.0	13.2	14.3	14.6
8H	13.0	14.1	13.4	14.3	14.6	12.9	14.0	13.3	14.3	14.5
12H	13.0	14.0	13.3	14.3	14.6	12.9	13.9	13.2	14.2	14.5
4H 2H	12.3	13.4	12.6	13.7	13.9	12.2	13.4	12.5	13.6	13.9
3H	13.0	14.0	13.3	14.3	14.6	13.0	14.0	13.3	14.3	14.6
4H	13.3	14.3	13.7	14.6	14.9	13.3	14.2	13.7	14.6	14.9
6H	13.6	14.4	14.0	14.8	15.1	13.6	14.4	14.0	14.7	15.1
8H	13.7	14.4	14.1	14.8	15.1	13.6	14.4	14.0	14.7	15.1
12H	13.6	14.3	14.1	14.7	15.1	13.6	14.3	14.0	14.7	15.1
8H 4H	13.4	14.2	13.9	14.6	14.9	13.4	14.2	13.8	14.6	14.9
6H	13.8	14.4	14.2	14.8	15.3	13.8	14.4	14.3	14.8	15.3
8H	13.9	14.5	14.4	14.9	15.3	13.9	14.4	14.4	14.9	15.3
12H	13.9	14.4	14.4	14.8	15.3	13.9	14.4	14.4	14.8	15.3
12H 4H	13.4	14.1	13.9	14.5	14.9	13.4	14.1	13.8	14.5	14.9
6H	13.8	14.4	14.3	14.8	15.2	13.8	14.4	14.3	14.8	15.2
8H	13.9	14.4	14.4	14.9	15.3	13.9	14.4	14.4	14.9	15.3
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, 6150 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 6.3$)

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ 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:0.9007 Freq:49.90Hz Lamp Flux:6149.82x1 lm		
NAME: SUGAR-600-50W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: \varnothing 600mm*H105mm	
MFR.: NEKO LIGHTING AG		

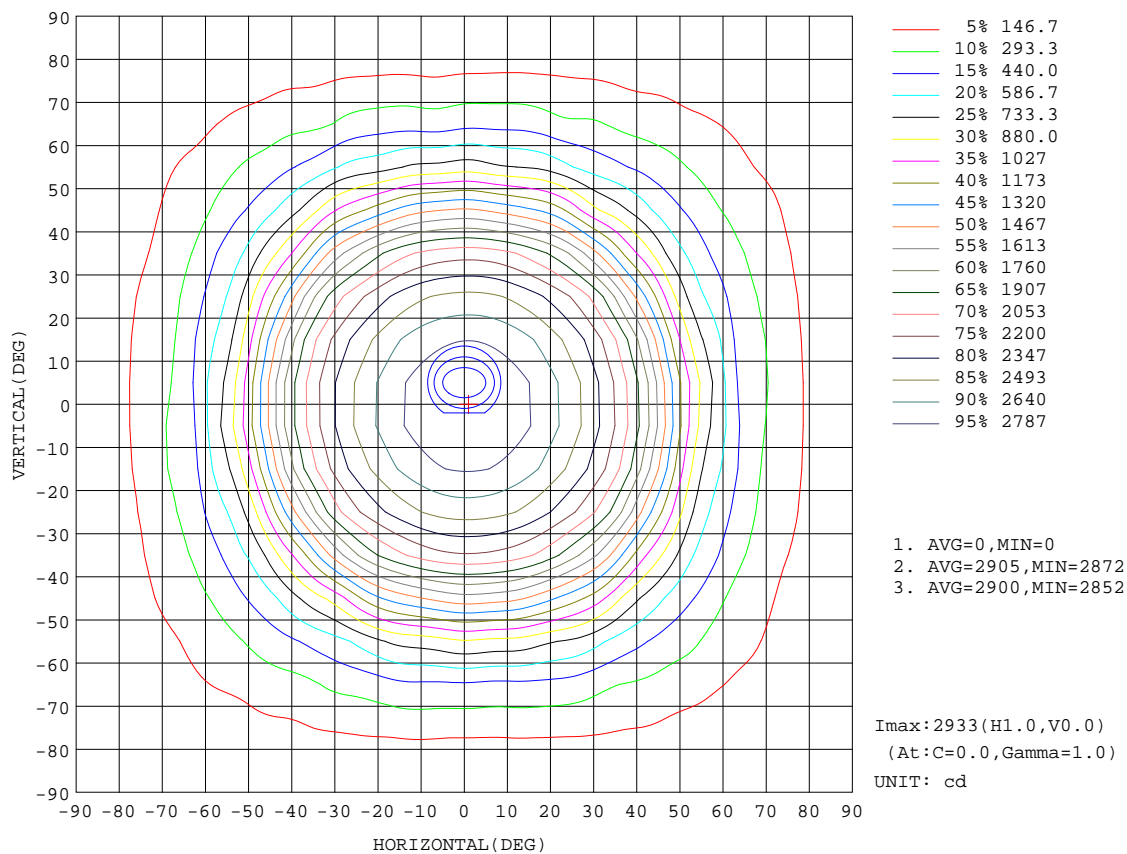
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	65	55	49	65	55	49	64	55	49	43
0.80	75	65	59	75	65	59	73	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	85	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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 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:56%
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 Remarks:

ISOCANDELA DIAGRAM

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SPEC.:4000K	DIM.: ϕ 600mm*H105mm	
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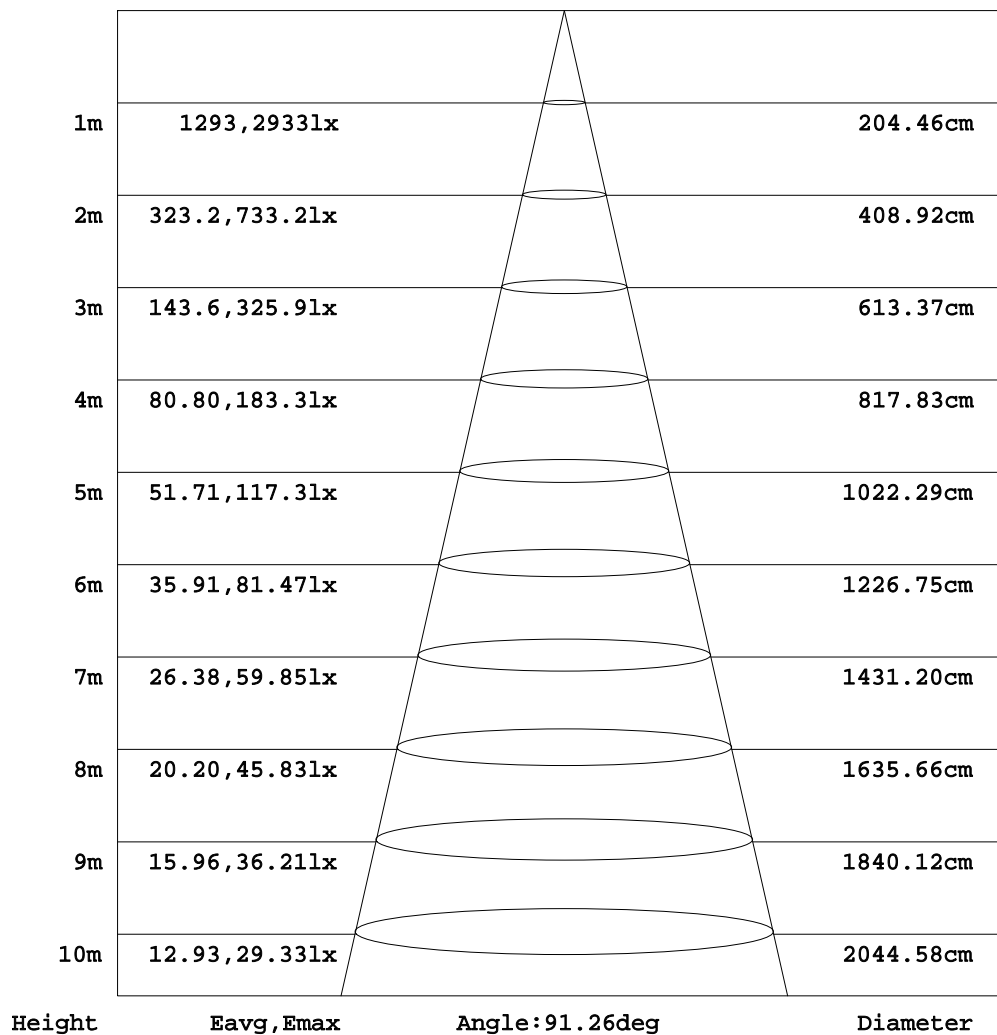
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AAI Figure

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NAME: SUGAR-600-50W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: ϕ 600mm*H105mm	
MFR.: NEKO LIGHTING AG		

Flux out:4355 lm



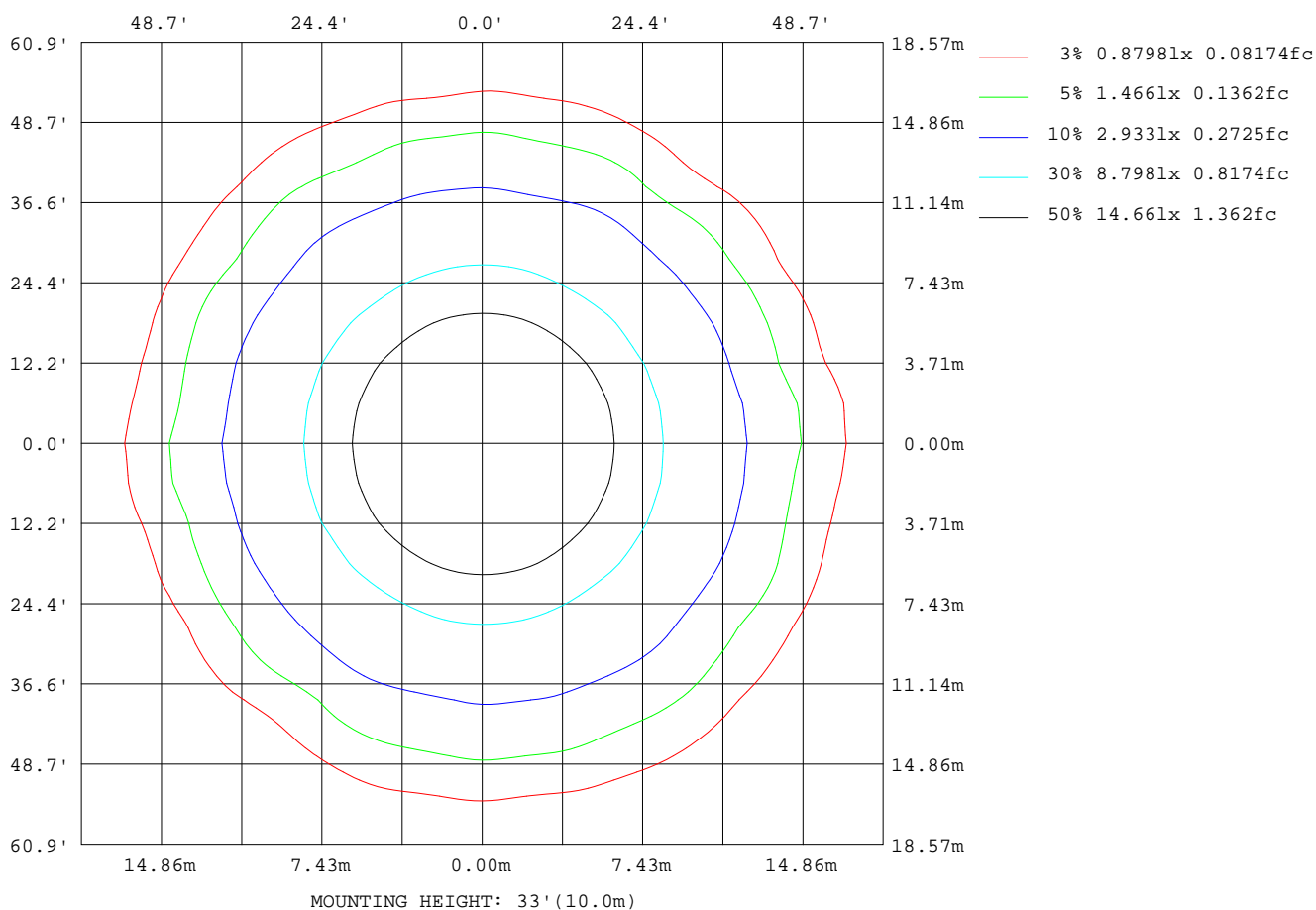
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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ISOLUX DIAGRAM

Test:U:220.9V I:0.2529A P:50.32W PF:0.9007 Freq:49.90Hz Lamp Flux:6149.82x1 lm		
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LED Avg.L Report

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SPEC.:4000K	DIM.: ϕ 600mm*H105mm	
MFR.: NEKO LIGHTING AG		

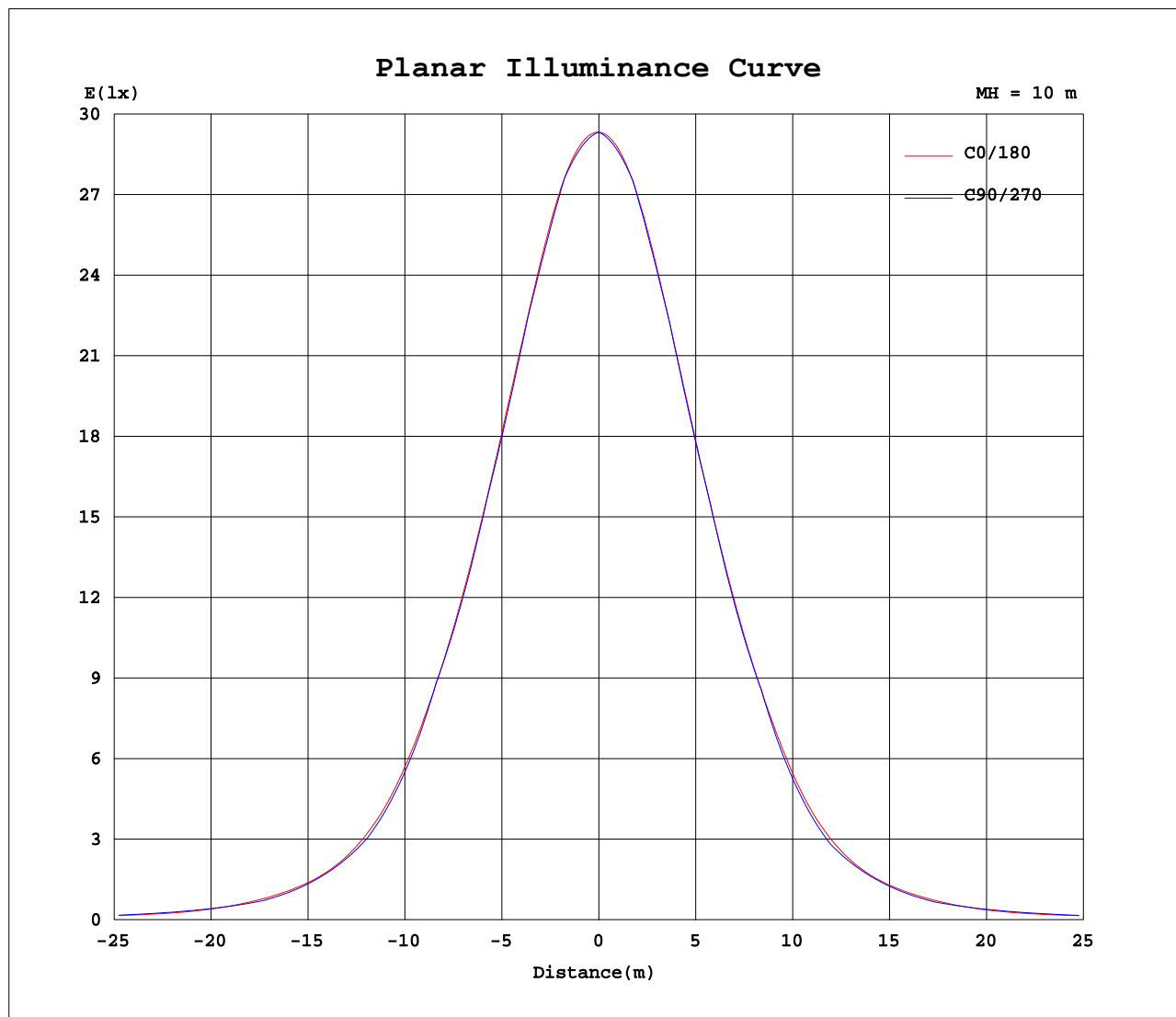
AvgL	cd/m2
L_0~180 (65) av	3078
L_0~180 (75) av	2579
L_0~180 (85) av	1076
L_90~270 (65) av	3421
L_90~270 (75) av	2511
L_90~270 (85) av	0
L_45 (65) av	3334
L_45 (75) av	2606
L_45 (85) av	954

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



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:

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
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Remarks:

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: