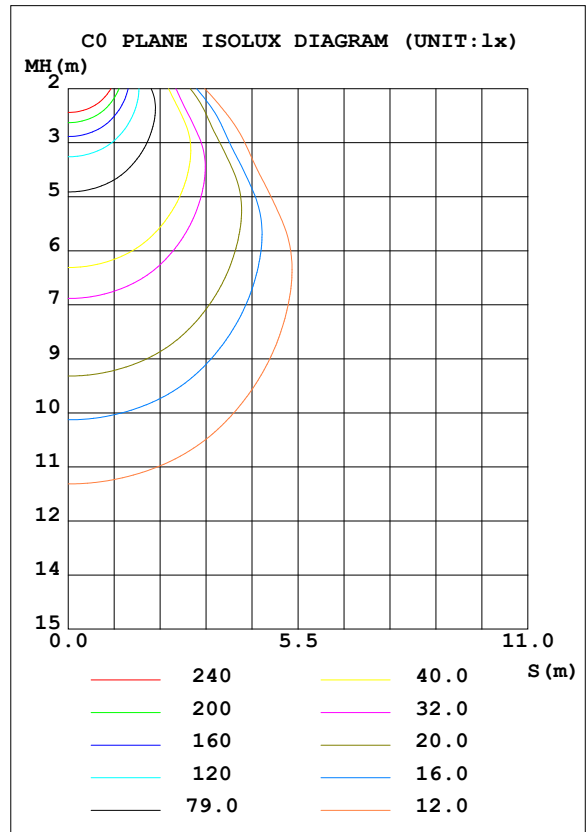
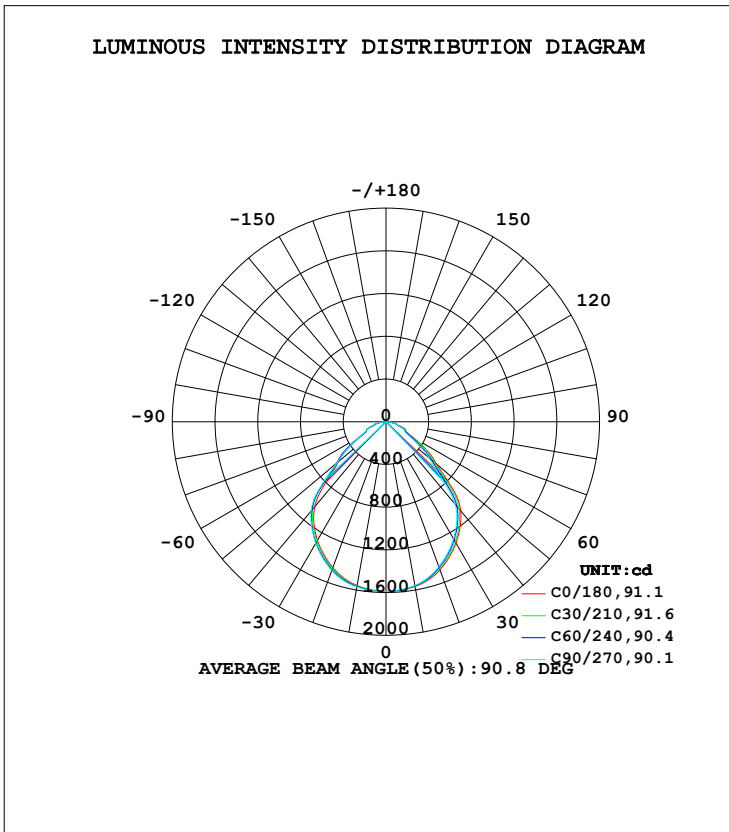


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.3V I:0.1183A P:25.71W PF:0.9326 Freq:49.90Hz Lamp Flux:3315.33x1 lm		
NAME: SUGAR-600-24W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 128.93 lm/W			
MODEL	OSRAM-4000K	I _{max} (cd)	1590	S/MH (C0/180)	1.21
NOMINAL POWER (W)	26	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	3315.3	η UP, DN (C0-180)	0.0, 48.6
NOMINAL FLUX (lm)	3315.33	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.4
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



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Jason
 Test Date: 2020-12-19

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 58%
 Test Distance: 8.967m [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	1566	1561	1557	1555	1558	1563	1571	1572	0- 10	150.4	150.4	4.54,4.54
20	1476	1460	1445	1442	1455	1470	1483	1486	10- 20	429.9	580.3	17.5,17.5
30	1311	1292	1264	1256	1283	1306	1315	1319	20- 30	637.9	1218	36.7,36.7
40	1088	1037	1004	1002	1037	1062	1092	1094	30- 40	739.2	1957	59,59
50	618.2	522.5	526.7	427.3	580.8	546.6	598.1	584.6	40- 50	617.6	2575	77.7,77.7
60	290.3	313.9	222.9	265.2	266.3	338.9	282.8	305.7	50- 60	368.0	2943	88.8,88.8
70	179.9	151.5	140.6	149.5	166.4	166.5	173.3	164.3	60- 70	212.4	3155	95.2,95.2
80	83.44	66.35	63.02	64.37	75.65	80.88	84.07	82.69	70- 80	121.6	3277	98.8,98.8
90	0.5241	0.5293	0.5240	0.5238	0.8170	0.7914	1.577	1.998	80- 90	38.32	3315	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): 2306.2 lm

%lum = 69.6%
%lamp = 69.6%

Conical surface Flux(120deg): 2943 lm

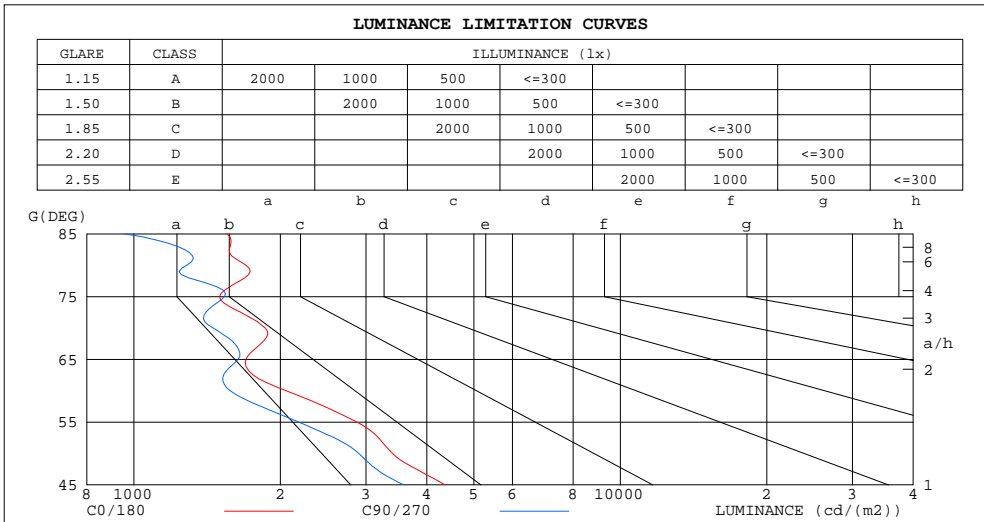
%lum = 88.8%
%lamp = 88.8%

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2020-12-19

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.3V I:0.1183A P:25.71W PF:0.9326 Freq:49.90Hz Lamp Flux:3315.33x1 lm		
NAME: SUGAR-600-24W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1554	957
80	1700	1284
75	1500	1535
70	1861	1455
65	1699	1638
60	2054	1577
55	2876	2183
50	3403	2899
45	4370	3591

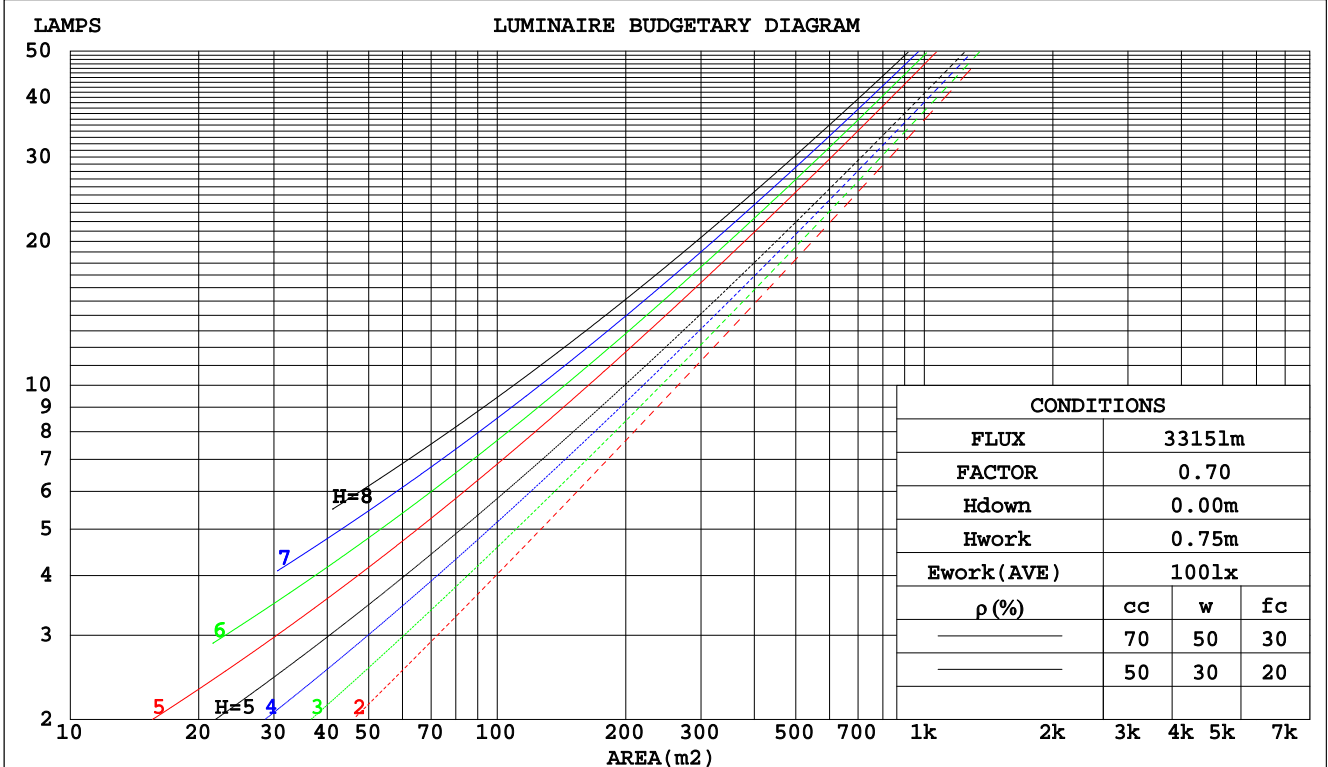
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason
 Test Date:2020-12-19

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:58%
 Test Distance:8.967m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.3V I:0.1183A P:25.71W PF:0.9326 Freq:49.90Hz Lamp Flux:3315.33x1 lm		
NAME: SUGAR-600-24W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

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	1.06	1.03	.00	1.04	1.01	.98	1.00	.97	.95	.96	.94	.92	.93	.91	.89	.87
2.0	.95	.89	.84	.93	.88	.83	.90	.85	.81	.86	.83	.79	.84	.80	.78	.76
3.0	.85	.78	.72	.84	.77	.72	.81	.75	.70	.78	.73	.69	.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	.53	.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	.56	.49	.44	.54	.48	.43	.53	.47	.43	.41
8.0	.53	.45	.40	.52	.45	.40	.51	.44	.40	.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



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason
 Test Date:2020-12-19

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:58%
 Test Distance:8.967m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.3V I:0.1183A P:25.71W PF:0.9326 Freq:49.90Hz Lamp Flux:3315.33x1 lm		
NAME: SUGAR-600-24W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

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	.261	.148	.047	.254	.145	.046	.241	.138	.044	.229	.132	.042	.218	.126	.041	
2.0	.249	.136	.042	.242	.134	.041	.231	.129	.040	.221	.124	.039	.211	.119	.038	
3.0	.233	.124	.037	.228	.122	.037	.218	.118	.036	.209	.115	.035	.201	.111	.034	
4.0	.219	.114	.033	.214	.112	.033	.205	.109	.032	.197	.106	.032	.190	.103	.031	
5.0	.205	.104	.030	.201	.103	.030	.193	.100	.030	.186	.098	.029	.179	.096	.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	.165	.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	.148	.074	.021	.144	.073	.021	
10.0	.152	.073	.020	.150	.072	.020	.145	.071	.020	.141	.070	.020	.137	.069	.020	

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	.177	.157	.138	.151	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.166	.132	.103	.143	.114	.089	.098	.079	.062	.056	.046	.036	.018	.015	.012	
3.0	.157	.114	.079	.135	.098	.069	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.149	.100	.063	.128	.087	.055	.088	.060	.038	.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	.105	.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	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason
 Test Date:2020-12-19

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:58%
 Test Distance:8.967m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.3V I:0.1183A P:25.71W PF:0.9326 Freq:49.90Hz Lamp Flux:3315.33x1 lm		
NAME: SUGAR-600-24W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
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	11.5	12.8	11.7	13.0	13.2	10.7	12.0	10.9	12.2	12.4
3H	12.2	13.4	12.5	13.7	13.9	11.3	12.6	11.6	12.8	13.0
4H	12.5	13.7	12.8	13.9	14.2	11.7	12.8	12.0	13.1	13.3
6H	12.8	13.9	13.1	14.2	14.4	11.9	13.0	12.3	13.3	13.6
8H	12.9	14.0	13.3	14.3	14.5	12.0	13.1	12.4	13.4	13.6
12H	13.0	14.0	13.3	14.3	14.6	12.1	13.1	12.4	13.4	13.7
4H 2H	11.7	12.9	12.0	13.1	13.3	11.0	12.2	11.3	12.4	12.7
3H	12.6	13.6	12.9	13.9	14.2	11.9	12.9	12.2	13.2	13.5
4H	13.1	14.0	13.4	14.3	14.6	12.3	13.2	12.7	13.5	13.9
6H	13.5	14.3	13.8	14.6	15.0	12.7	13.5	13.1	13.9	14.2
8H	13.6	14.4	14.0	14.8	15.1	12.9	13.6	13.3	14.0	14.4
12H	13.8	14.5	14.2	14.8	15.2	12.9	13.6	13.4	14.0	14.4
8H 4H	13.2	14.0	13.6	14.3	14.7	12.5	13.3	12.9	13.6	14.0
6H	13.7	14.4	14.2	14.8	15.2	13.0	13.7	13.5	14.1	14.5
8H	14.0	14.5	14.4	15.0	15.4	13.3	13.8	13.7	14.2	14.7
12H	14.2	14.7	14.7	15.1	15.6	13.4	13.9	13.9	14.3	14.8
12H 4H	13.2	13.9	13.6	14.3	14.7	12.5	13.2	13.0	13.6	14.0
6H	13.8	14.3	14.2	14.7	15.2	13.1	13.7	13.6	14.1	14.5
8H	14.1	14.5	14.5	15.0	15.4	13.4	13.8	13.8	14.3	14.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.7 / - 0.5					+ 0.8 / - 0.7				
1.5H	+ 0.5 / - 0.6					+ 0.5 / - 0.6				
2.0H	+ 1.4 / - 1.3					+ 1.3 / - 1.0				

CIE Pub.117, 3315 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.2)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason
 Test Date:2020-12-19

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:58%
 Test Distance:8.967m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.3V I:0.1183A P:25.71W PF:0.9326 Freq:49.90Hz Lamp Flux:3315.33x1 lm		
NAME: SUGAR-600-24W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

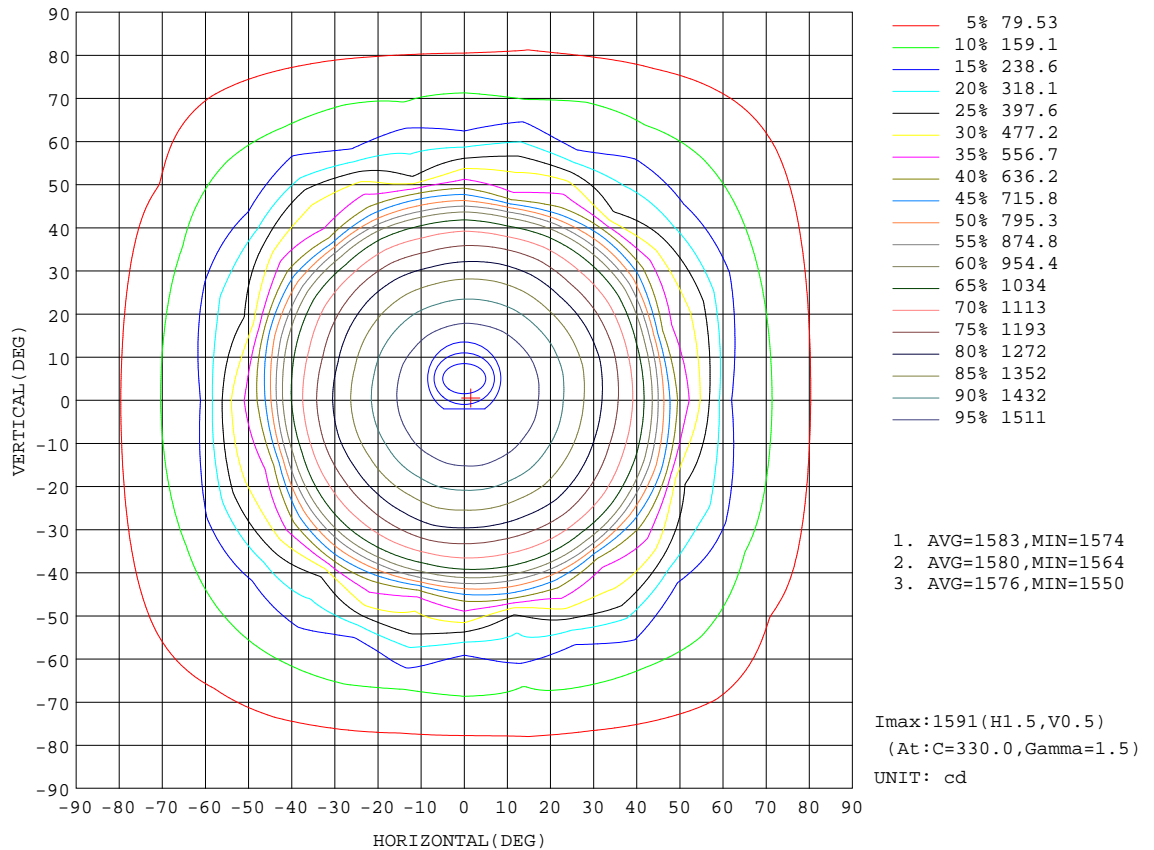
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	66	56	50	65	56	50	64	55	49	44
0.80	76	66	60	75	65	59	73	65	59	53
1.00	84	74	68	83	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	72
2.00	100	93	88	98	92	87	95	90	85	79
2.50	103	97	92	101	95	91	97	93	89	81
3.00	106	100	96	104	99	94	100	96	92	85
4.00	109	104	100	107	102	99	103	99	96	88
5.00	111	107	103	108	105	102	104	101	99	90
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason
 Test Date:2020-12-19

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:58%
 Test Distance:8.967m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.3V I:0.1183A P:25.71W PF:0.9326 Freq:49.90Hz Lamp Flux:3315.33x1 lm		
NAME: SUGAR-600-24W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		



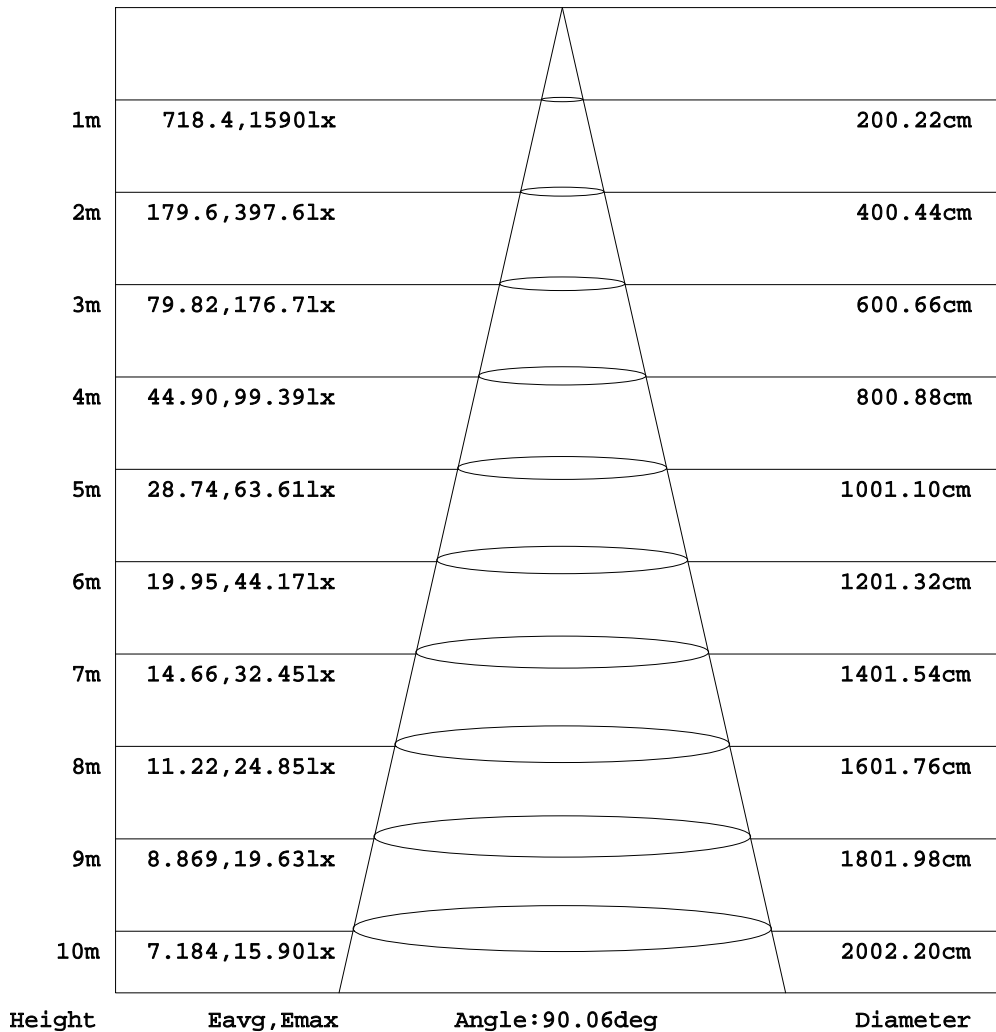
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2020-12-19

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.3V I:0.1183A P:25.71W PF:0.9326 Freq:49.90Hz Lamp Flux:3315.33x1 lm		
NAME: SUGAR-600-24W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

Flux out:2337 lm



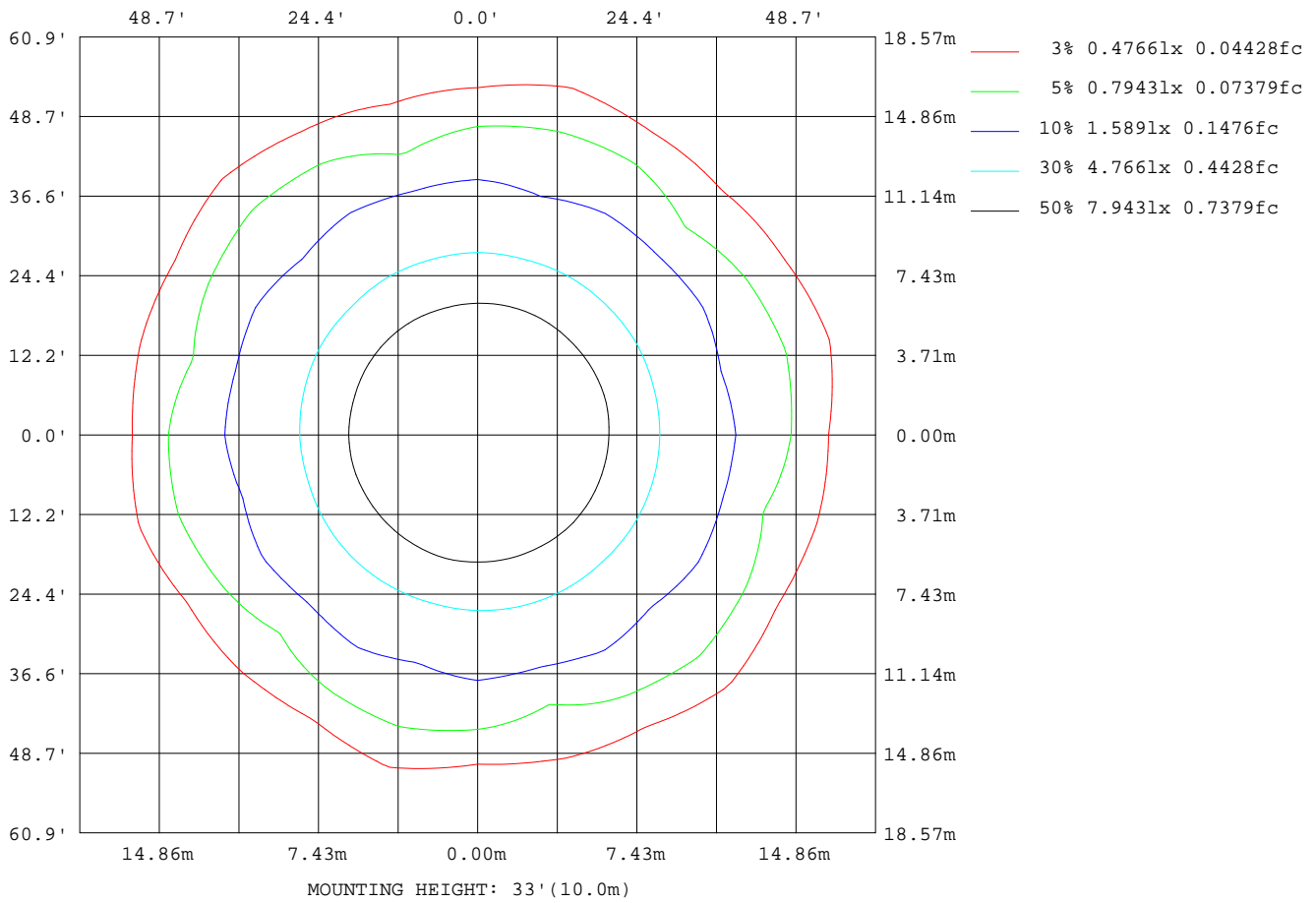
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2020-12-19

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:220.3V I:0.1183A P:25.71W PF:0.9326 Freq:49.90Hz Lamp Flux:3315.33x1 lm		
NAME: SUGAR-600-24W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason
 Test Date:2020-12-19

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:58%
 Test Distance:8.967m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:220.3V I:0.1183A P:25.71W PF:0.9326 Freq:49.90Hz Lamp Flux:3315.33x1 lm		
NAME: SUGAR-600-24W-840	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

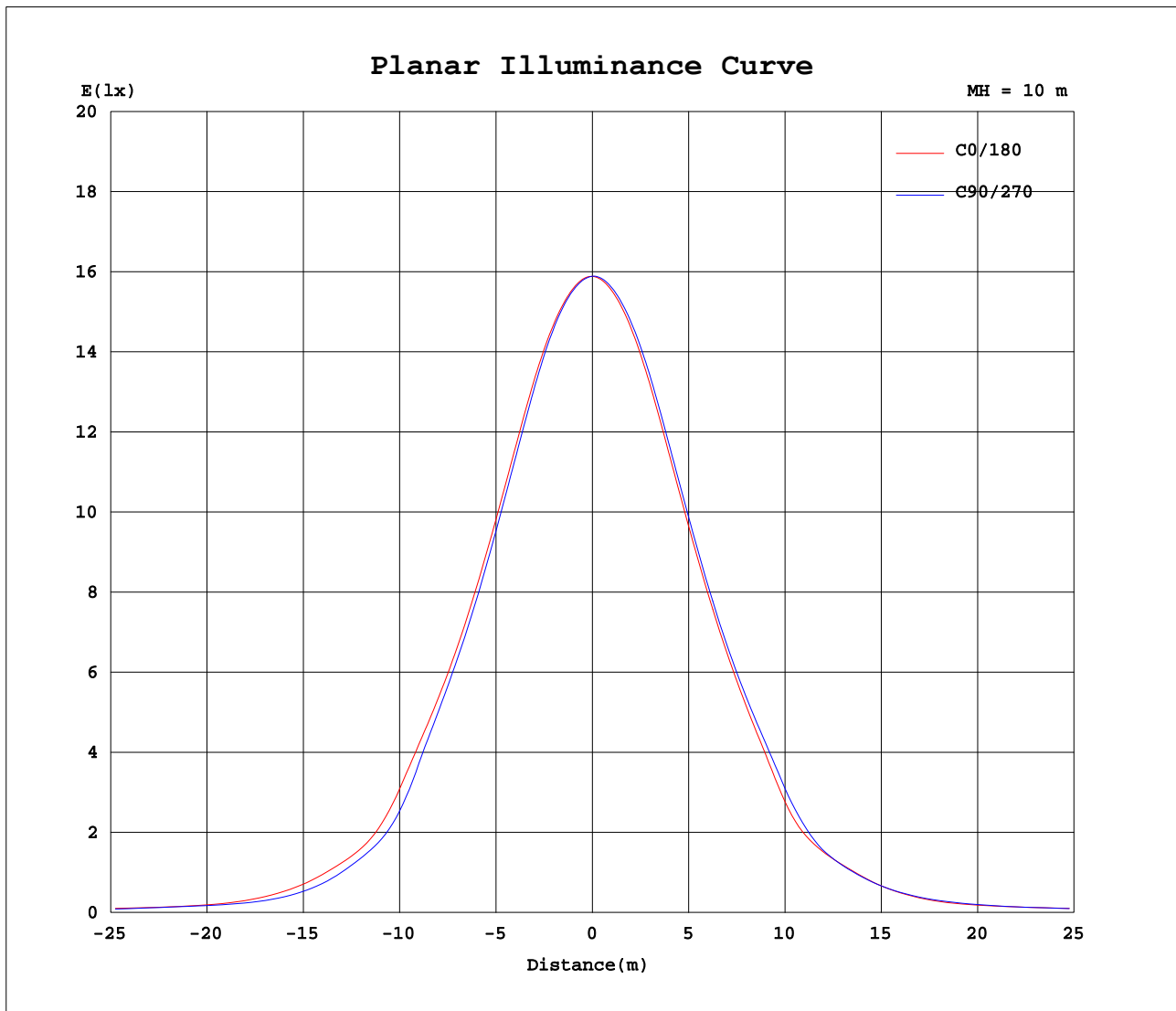
AvgL	cd/m2
L_0~180 (65) av	1696
L_0~180 (75) av	1480
L_0~180 (85) av	1422
L_90~270 (65) av	1687
L_90~270 (75) av	1604
L_90~270 (85) av	1457
L_45 (65) av	1846
L_45 (75) av	1578
L_45 (85) av	1429

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2020-12-19

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Jason
 Test Date: 2020-12-19

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 58%
 Test Distance: 8.967m [K=1.0000]
 Remarks:

