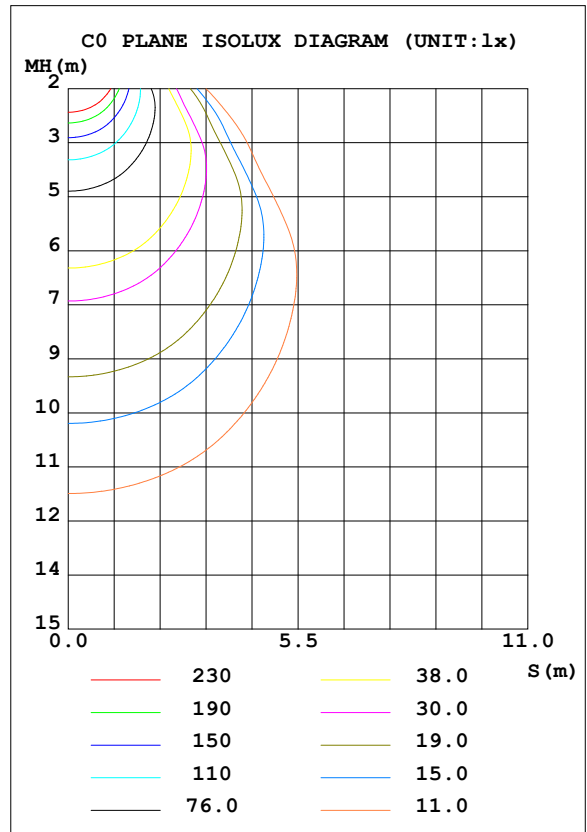
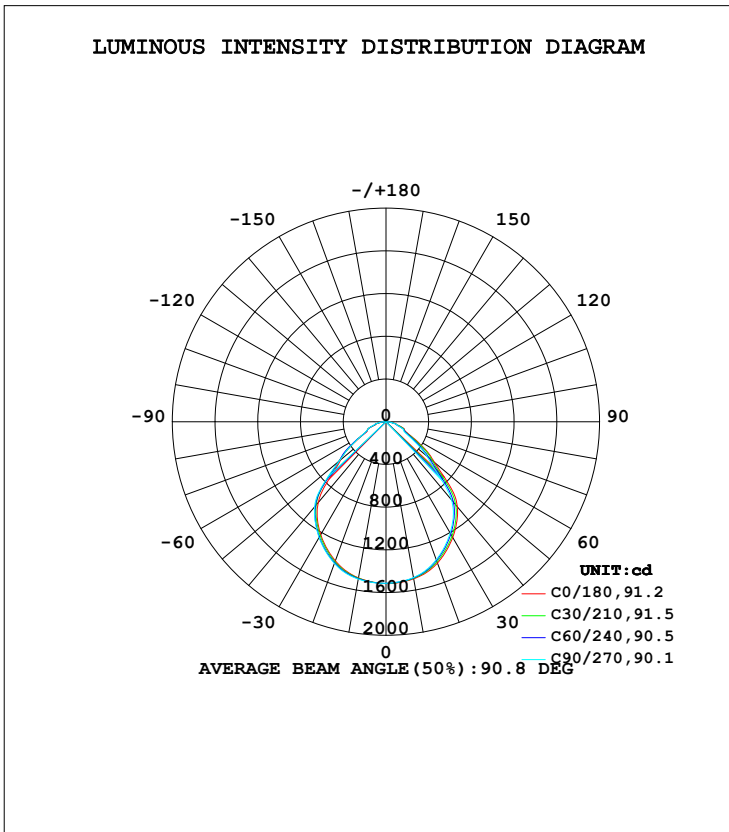


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.3V I:0.1183A P:25.65W PF:0.9523 Freq:49.90Hz Lamp Flux:3156.74x1 lm		
NAME: SUGAR-600-24W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 123.09 lm/W			
MODEL	OSRAM-3000K	I _{max} (cd)	1515	S/MH (C0/180)	1.20
NOMINAL POWER (W)	26	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	3156.7	η UP, DN (C0-180)	0.0, 48.6
NOMINAL FLUX (lm)	3156.74	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	1493	1487	1482	1481	1485	1489	1496	1497	0- 10	143.2	143.2	4.54,4.54
20	1408	1391	1376	1373	1386	1400	1412	1415	10- 20	409.4	552.7	17.5,17.5
30	1251	1231	1202	1196	1222	1243	1253	1255	20- 30	607.4	1160	36.7,36.7
40	1039	989.1	955.0	954.1	987.4	1010	1040	1041	30- 40	703.9	1864	59,59
50	592.1	499.2	500.5	407.1	553.6	517.9	570.3	555.4	40- 50	588.1	2452	77.7,77.7
60	278.5	296.0	211.8	252.6	251.5	321.6	269.7	291.0	50- 60	350.2	2802	88.8,88.8
70	171.7	145.0	133.5	142.4	157.2	157.5	165.3	155.7	60- 70	202.3	3005	95.2,95.2
80	79.73	63.49	59.94	61.31	70.96	76.31	80.30	78.70	70- 80	115.7	3120	98.8,98.8
90	0.5034	0.5034	0.4983	0.4983	0.7860	0.7500	1.649	1.870	80- 90	36.48	3157	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): 2196.2 lm

%lum = 69.6%
%lamp = 69.6%

Conical surface Flux(120deg): 2802.2 lm

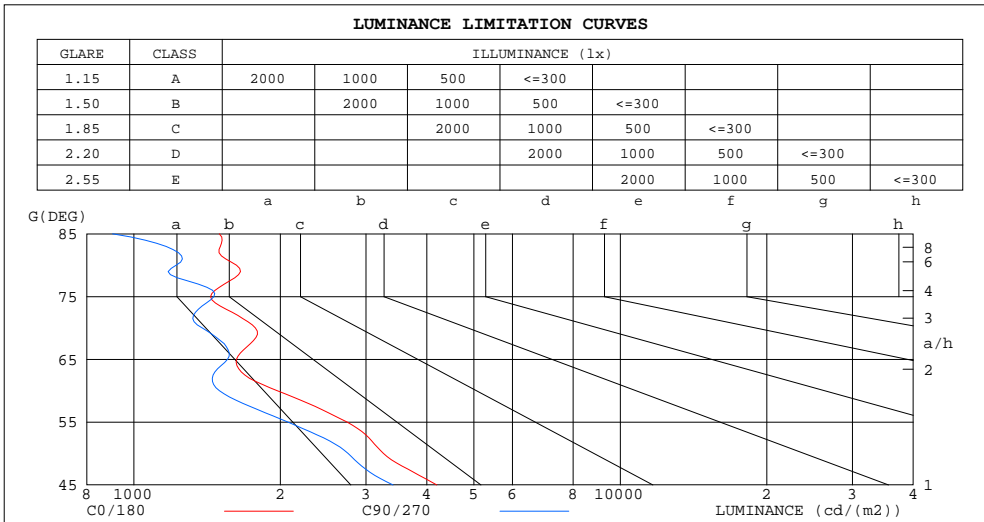
%lum = 88.8%
%lamp = 88.8%

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:25.65W PF:0.9523 Freq:49.90Hz Lamp Flux:3156.74x1 lm		
NAME: SUGAR-600-24W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1499	904
80	1625	1221
75	1438	1460
70	1777	1382
65	1626	1558
60	1971	1499
55	2743	2073
50	3260	2755
45	4193	3410

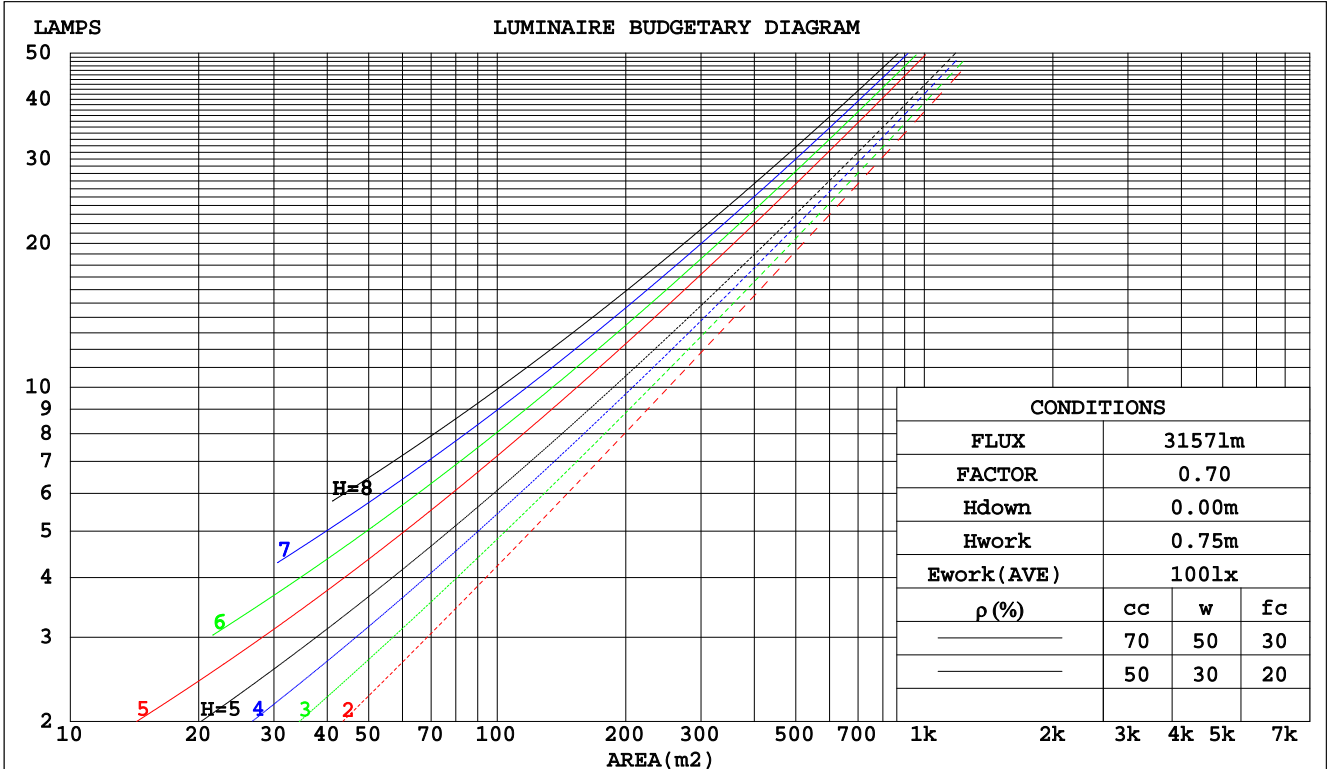
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason
 Test Date:2020-12-19

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:25.65W PF:0.9523 Freq:49.90Hz Lamp Flux:3156.74x1 lm		
NAME: SUGAR-600-24W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

pcc	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:25.65W PF:0.9523 Freq:49.90Hz Lamp Flux:3156.74x1 lm		
NAME: SUGAR-600-24W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	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	.248	.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	.189	.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:25.65W PF:0.9523 Freq:49.90Hz Lamp Flux:3156.74x1 lm		
NAME: SUGAR-600-24W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	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	12.9	11.8	13.1	13.3	10.7	12.0	10.9	12.2	12.4
3H	12.2	13.5	12.5	13.7	13.9	11.3	12.6	11.6	12.8	13.0
4H	12.6	13.7	12.9	14.0	14.2	11.7	12.8	12.0	13.1	13.3
6H	12.8	13.9	13.2	14.2	14.5	11.9	13.0	12.2	13.3	13.6
8H	13.0	14.0	13.3	14.3	14.6	12.0	13.1	12.3	13.4	13.6
12H	13.0	14.1	13.4	14.3	14.6	12.1	13.1	12.4	13.4	13.7
4H 2H	11.7	12.9	12.0	13.1	13.4	11.0	12.2	11.3	12.4	12.7
3H	12.6	13.6	13.0	13.9	14.2	11.9	12.9	12.2	13.2	13.5
4H	13.1	14.0	13.5	14.3	14.6	12.3	13.2	12.7	13.5	13.9
6H	13.5	14.3	13.9	14.6	15.0	12.7	13.5	13.1	13.9	14.2
8H	13.7	14.4	14.1	14.8	15.2	12.8	13.6	13.3	14.0	14.3
12H	13.8	14.5	14.2	14.9	15.3	12.9	13.6	13.3	14.0	14.4
8H 4H	13.2	14.0	13.6	14.4	14.7	12.5	13.3	12.9	13.6	14.0
6H	13.8	14.4	14.2	14.8	15.2	13.0	13.7	13.5	14.1	14.5
8H	14.0	14.6	14.5	15.0	15.4	13.3	13.8	13.7	14.2	14.7
12H	14.2	14.7	14.7	15.2	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	12.9	13.6	14.0
6H	13.8	14.4	14.3	14.8	15.2	13.1	13.7	13.6	14.1	14.5
8H	14.1	14.6	14.6	15.0	15.5	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, 3157 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.0)

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:25.65W PF:0.9523 Freq:49.90Hz Lamp Flux:3156.74x1 lm		
NAME: SUGAR-600-24W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

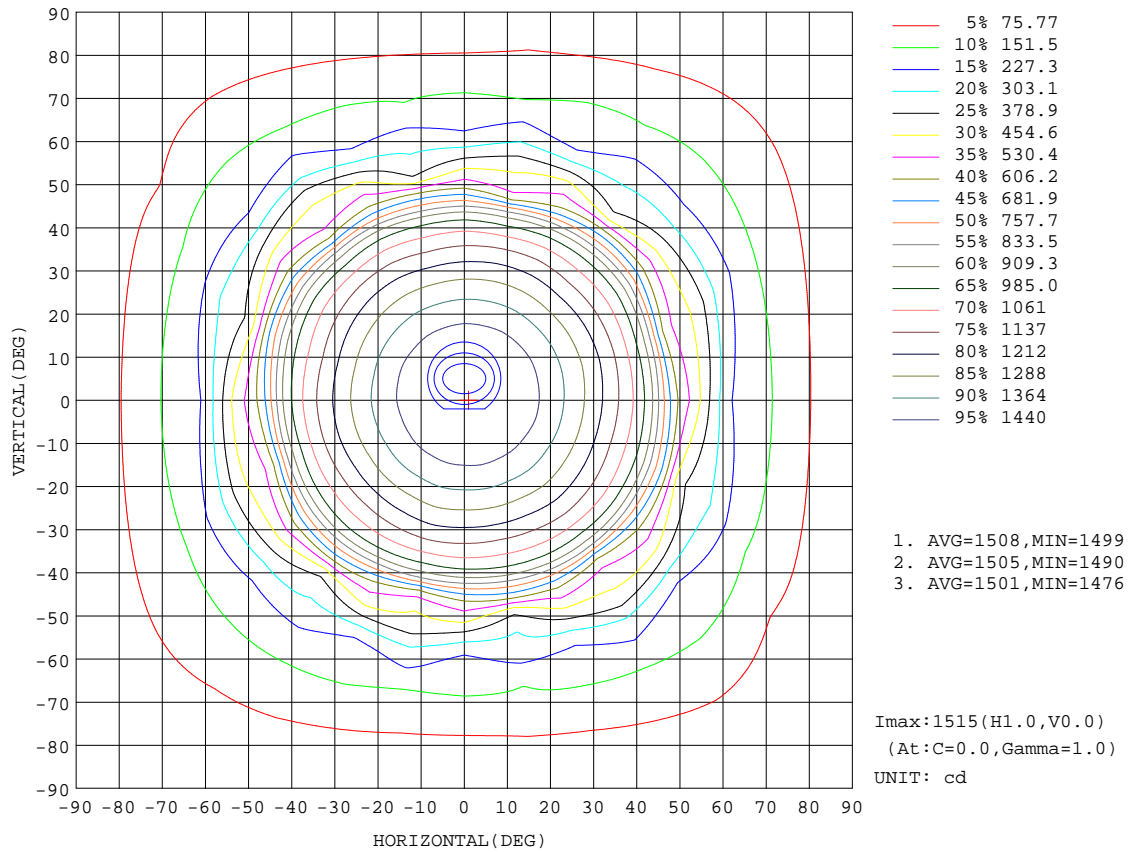
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	66	56	50	65	56	50	64	55	49	44
0.80	76	66	60	75	65	59	73	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	98	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:25.65W PF:0.9523 Freq:49.90Hz Lamp Flux:3156.74x1 lm		
NAME: SUGAR-600-24W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		



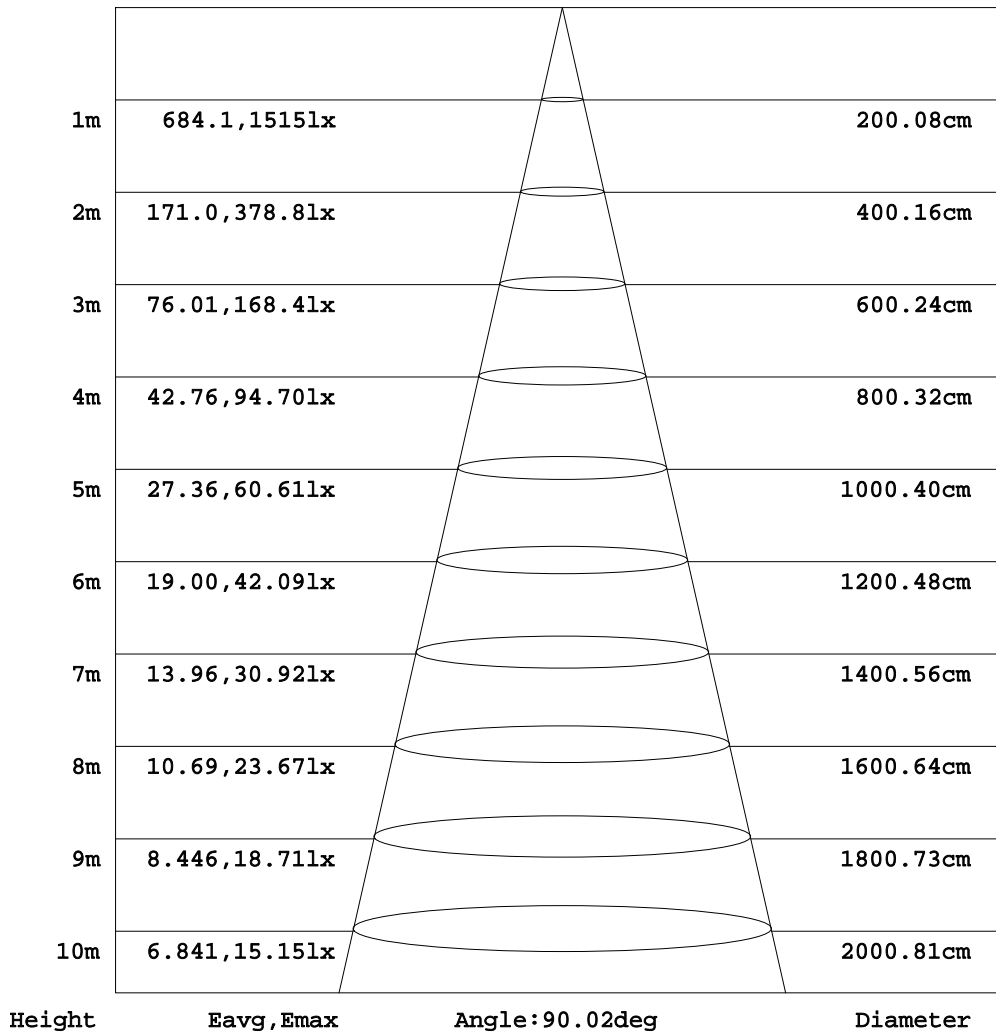
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason
 Test Date:2020-12-19

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:25.65W PF:0.9523 Freq:49.90Hz Lamp Flux:3156.74x1 lm		
NAME: SUGAR-600-24W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

Flux out:2225 lm



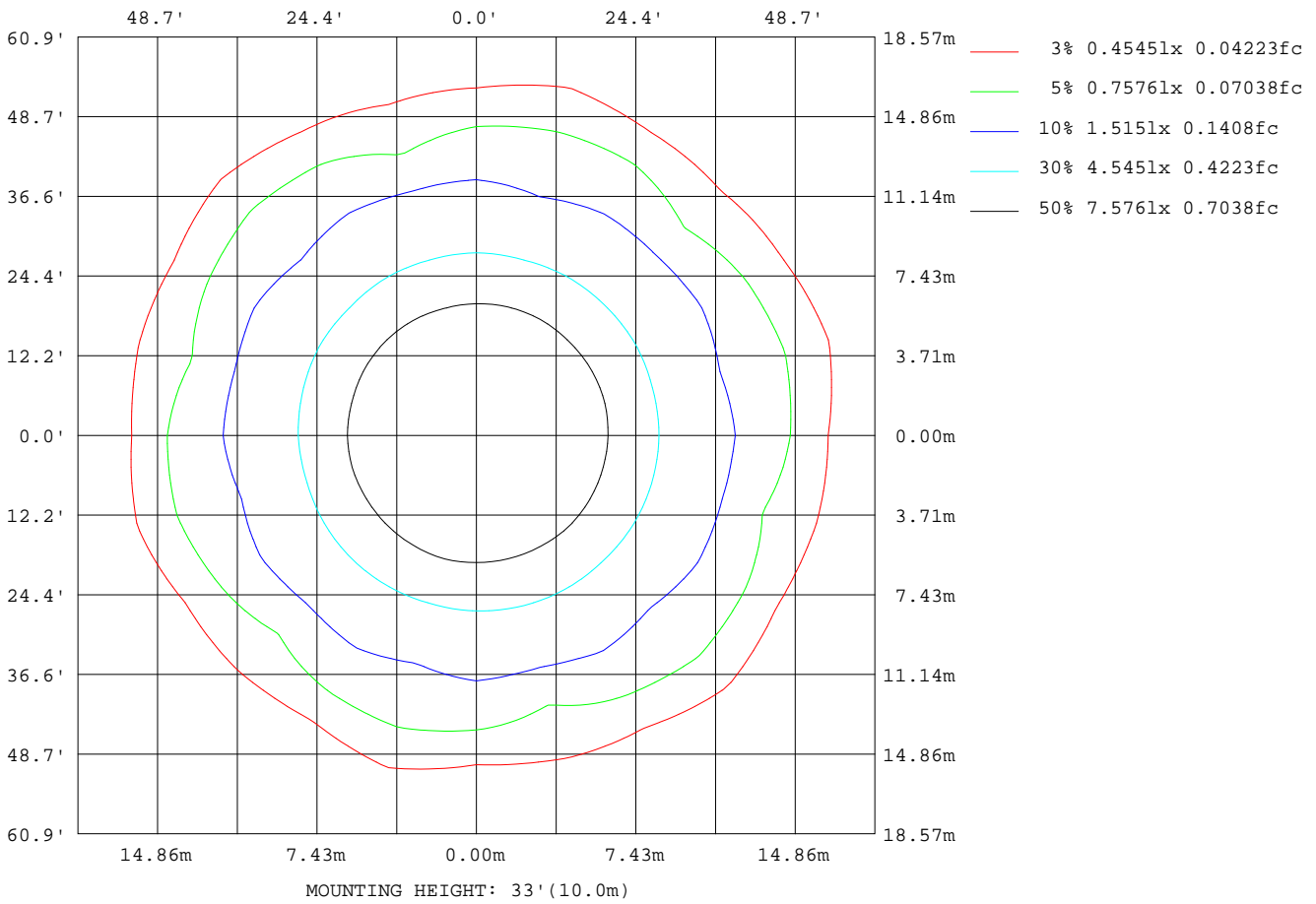
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:25.65W PF:0.9523 Freq:49.90Hz Lamp Flux:3156.74x1 lm		
NAME: SUGAR-600-24W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	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:25.65W PF:0.9523 Freq:49.90Hz Lamp Flux:3156.74x1 lm		
NAME: SUGAR-600-24W-830	TYPE:Ceiling light	SERIAL No.:
SPEC.:3000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

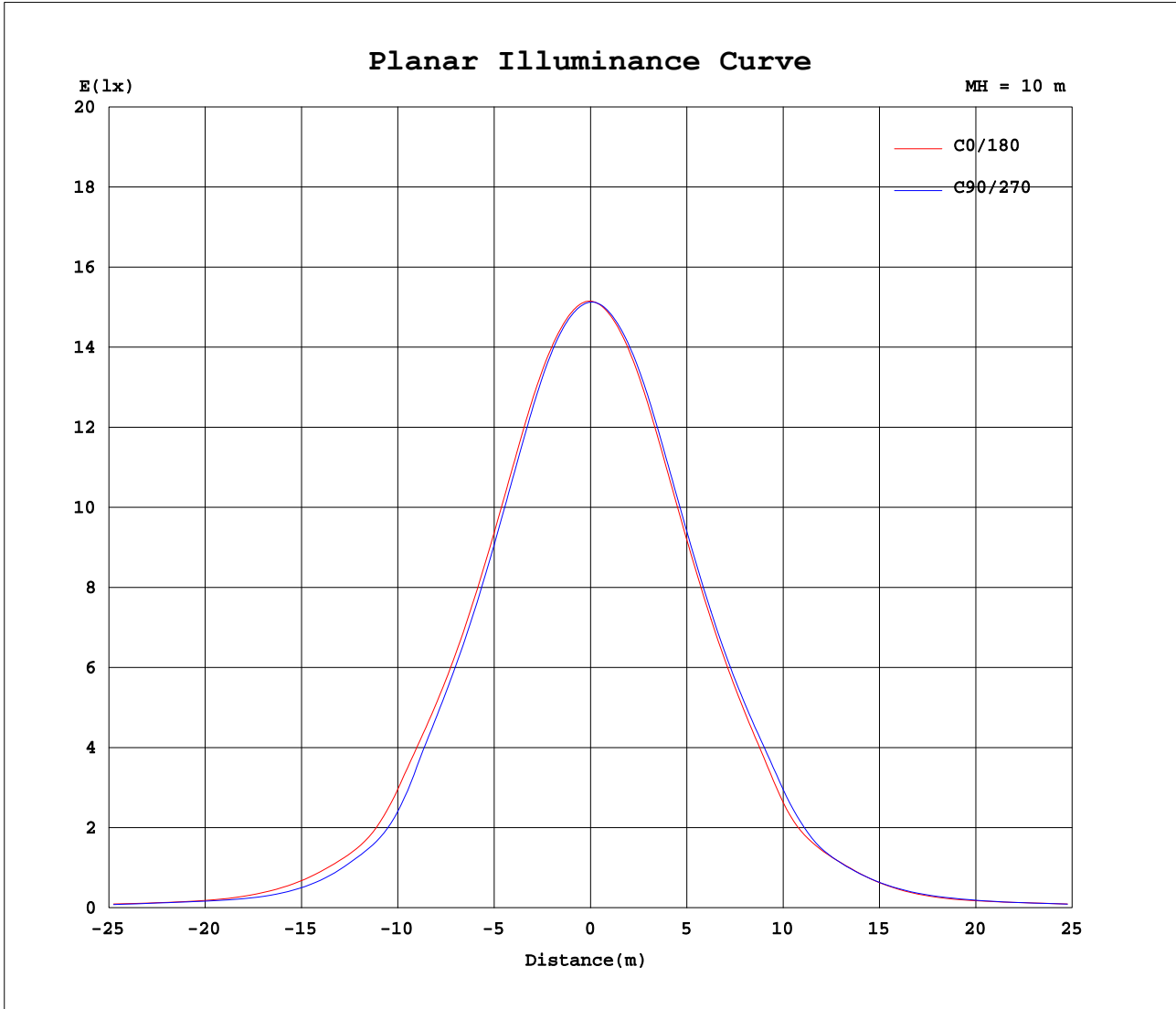
AvgL	cd/m2
L_0~180 (65) av	1619
L_0~180 (75) av	1413
L_0~180 (85) av	1351
L_90~270 (65) av	1605
L_90~270 (75) av	1528
L_90~270 (85) av	1390
L_45 (65) av	1759
L_45 (75) av	1504
L_45 (85) av	1360

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:

