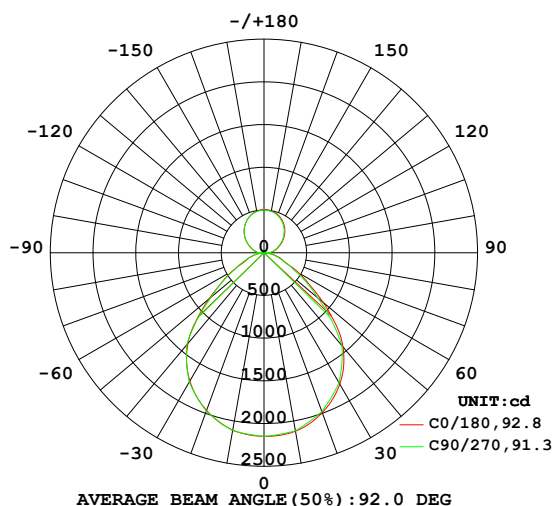


**LUMINAIRE PHOTOMETRIC TEST REPORT**

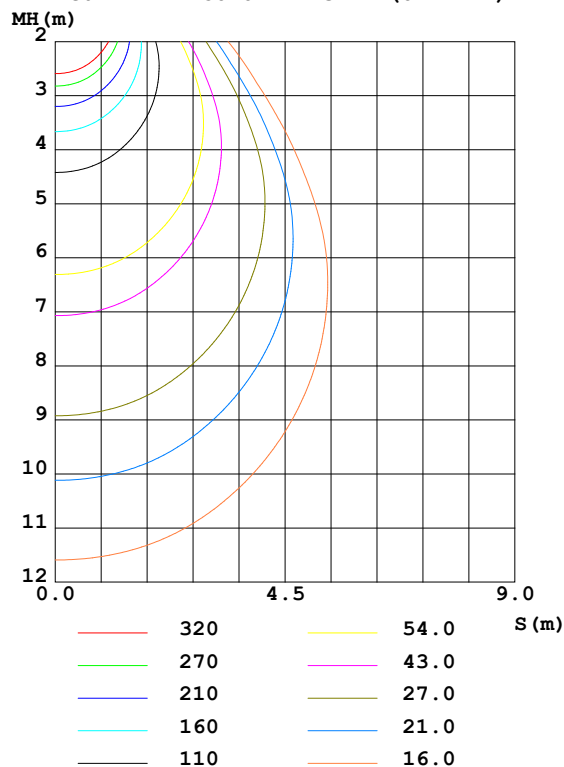
Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm		
NAME: SUGAR 600-U-56W-830	TYPE:Ceiling light	WEIGHT:0.2
SPEC.:3000K	DIM.: $\phi$ 600mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: $\phi$ 600mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 103.06 lm/W			
MODEL	OSRAM-3000K	I <sub>max</sub> (cd)	2149	S/MH (C0/180)	1.21
NOMINAL POWER (W)	60	LOR (%)	100.0	S/MH (C90/270)	1.21
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	6049.3	$\eta$ UP,DN (C0-180)	12.8,37.4
NOMINAL FLUX (lm)	6049.27	CIE CLASS	SEMI-D.	$\eta$ UP,DN (C180-360)	12.8,37.1
LAMPS INSIDE	1	$\eta$ up (%)	25.6	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220.0	$\eta$ down (%)	74.4	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

**ZONAL FLUX DIAGRAM**

**ZONAL FLUX DIAGRAM:**

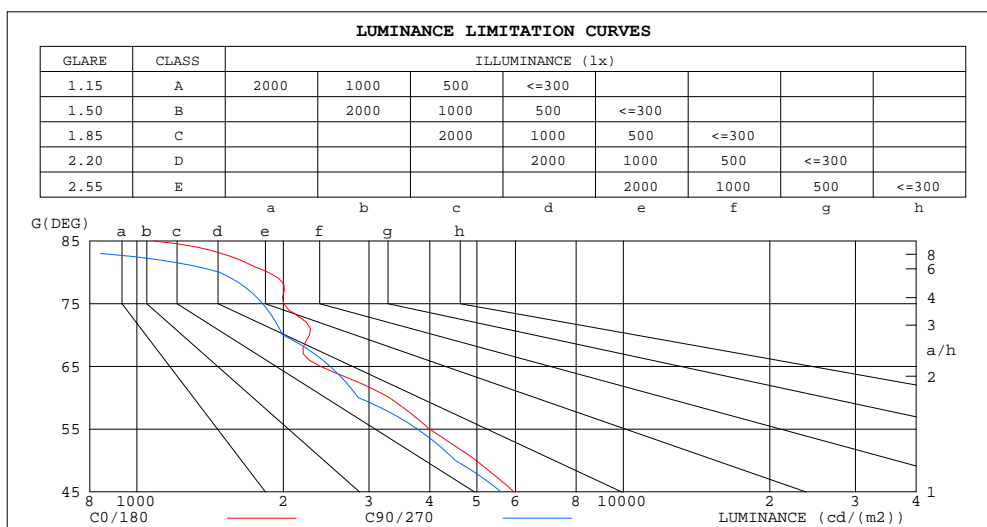
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	2121	2111	2116	2100	2108	2098	2114	2110	0- 10	202.9	202.9	3.35,3.35
20	1993	1980	1979	1957	1965	1955	1975	1976	10- 20	578.0	780.9	12.9,12.9
30	1775	1764	1757	1730	1736	1730	1749	1754	20- 30	860.2	1641	27.1,27.1
40	1439	1440	1421	1383	1386	1387	1408	1423	30- 40	993.0	2634	43.5,43.5
50	904.5	902.0	819.9	784.1	839.1	837.2	802.4	807.6	40- 50	866.6	3501	57.9,57.9
60	466.7	455.8	403.3	396.6	423.8	423.1	398.2	409.4	50- 60	537.2	4038	66.8,66.8
70	218.7	210.8	192.8	188.3	204.9	195.6	193.6	194.5	60- 70	293.5	4331	71.6,71.6
80	91.22	85.67	72.48	70.82	74.18	74.01	72.22	77.07	70- 80	145.5	4477	74,74
90	63.19	43.16	60.76	59.06	59.26	57.05	59.54	62.61	80- 90	26.40	4503	74.4,74.4
100	112.3	91.24	106.6	105.6	105.0	103.6	104.7	109.8	90-100	87.00	4590	75.9,75.9
110	172.8	158.7	162.6	158.8	159.1	157.5	157.8	166.5	100-110	139.3	4730	78.2,78.2
120	240.1	233.1	229.3	223.8	223.3	220.9	223.7	233.7	110-120	191.5	4921	81.4,81.4
130	311.4	304.4	300.2	294.4	293.8	290.9	294.7	305.1	120-130	235.9	5157	85.3,85.3
140	377.6	370.1	366.2	361.2	361.0	357.3	361.4	371.4	130-140	256.9	5414	89.5,89.5
150	433.4	425.6	422.7	418.6	419.1	414.7	418.9	427.4	140-150	247.1	5661	93.6,93.6
160	474.7	466.9	465.4	462.9	464.4	459.0	462.8	469.7	150-160	205.2	5866	97,97
170	498.5	491.4	491.4	490.9	493.3	487.4	489.9	494.8	160-170	135.6	6002	99.2,99.2
180	503.9	503.9	503.9	503.9	503.9	503.9	503.9	503.9	170-180	47.32	6049	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 $\gamma$  Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm		
NAME: SUGAR 600-U-56W-830	TYPE:Ceiling light	WEIGHT:0.2
SPEC.:3000K	DIM.: $\phi$ 600mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: $\phi$ 600mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1082	0
80	1859	1477
75	2003	1813
70	2263	1994
65	2380	2495
60	3303	2854
55	3994	3773
50	4980	4514
45	5959	5607

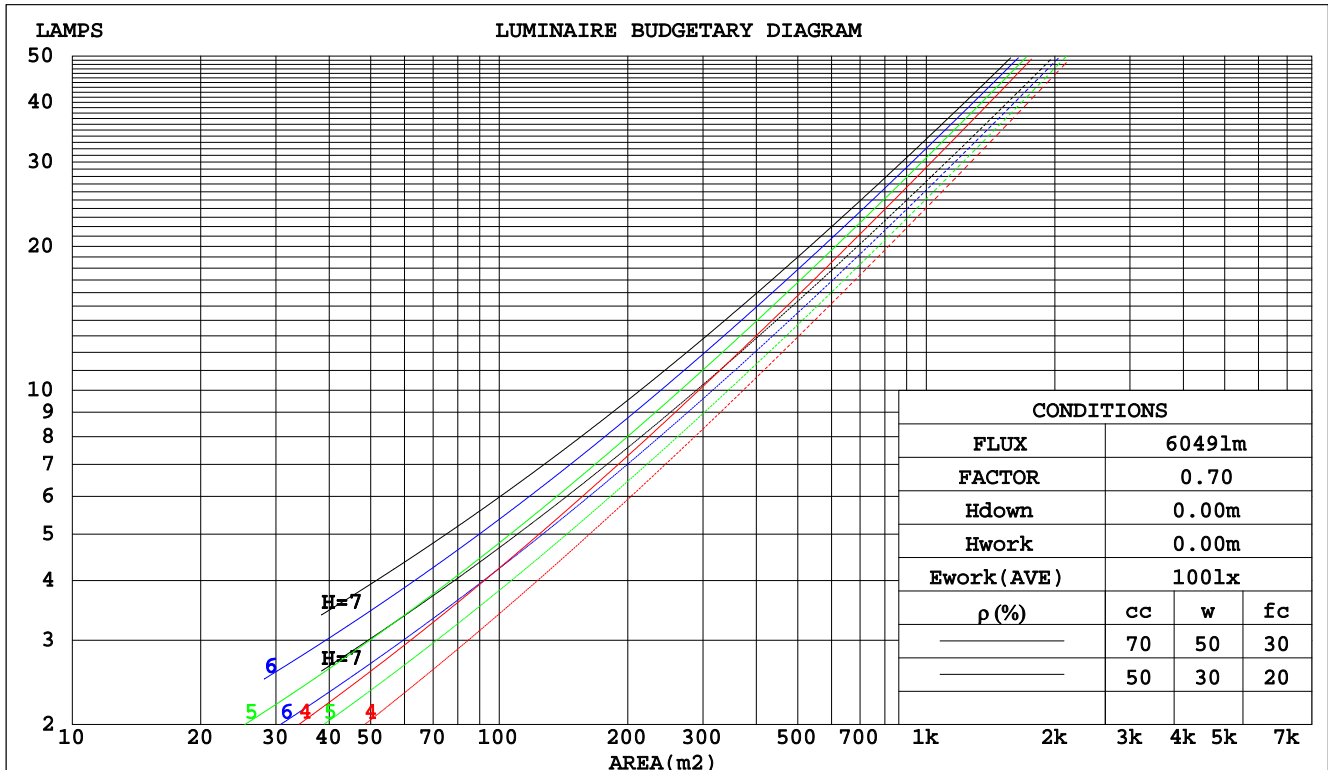
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm		
NAME: SUGAR 600-U-56W-830	TYPE:Ceiling light	WEIGHT:0.2
SPEC.:3000K	DIM.: $\phi$ 600mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: $\phi$ 600mm	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.13	1.13	1.13	1.07	1.07	1.07	.97	.97	.97	.87	.87	.87	.79	.79	.79	.74
1.0	1.01	.97	.94	.96	.93	.90	.87	.85	.83	.79	.77	.76	.72	.70	.69	.65
2.0	.89	.84	.79	.85	.80	.76	.78	.74	.70	.71	.68	.65	.64	.62	.60	.57
3.0	.80	.73	.67	.76	.70	.65	.70	.65	.61	.64	.60	.56	.58	.55	.52	.49
4.0	.71	.64	.58	.68	.62	.56	.63	.57	.53	.58	.53	.49	.53	.49	.46	.43
5.0	.64	.56	.51	.62	.55	.49	.57	.51	.46	.52	.47	.44	.48	.44	.41	.38
6.0	.58	.50	.45	.56	.49	.43	.52	.46	.41	.48	.43	.39	.44	.40	.37	.34
7.0	.53	.45	.40	.51	.44	.39	.47	.41	.37	.44	.39	.35	.40	.36	.33	.31
8.0	.49	.41	.36	.47	.40	.35	.43	.37	.33	.40	.35	.31	.37	.33	.30	.28
9.0	.45	.37	.32	.43	.36	.31	.40	.34	.30	.37	.32	.29	.35	.30	.27	.25
10.0	.41	.34	.29	.40	.33	.29	.37	.31	.27	.35	.30	.26	.32	.28	.25	.23



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

## WEC AND CCEC

Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm		
NAME: SUGAR 600-U-56W-830	TYPE:Ceiling light	WEIGHT:0.2
SPEC.:3000K	DIM.: $\phi$ 600mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: $\phi$ 600mm	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0	
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
$\rho_{fc}$	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.255	.145	.046	.240	.137	.044	.213	.122	.039	.188	.108	.035	.164	.095	.031		
2.0	.243	.133	.041	.230	.127	.039	.205	.114	.035	.183	.102	.032	.161	.091	.029		
3.0	.228	.122	.036	.217	.116	.035	.194	.105	.032	.173	.095	.029	.154	.085	.026		
4.0	.214	.111	.033	.203	.106	.031	.183	.097	.029	.164	.088	.027	.146	.079	.024		
5.0	.200	.102	.030	.190	.098	.028	.172	.089	.026	.154	.082	.024	.138	.074	.022		
6.0	.188	.094	.027	.179	.090	.026	.162	.083	.024	.146	.076	.022	.131	.069	.020		
7.0	.176	.087	.025	.168	.084	.024	.152	.077	.022	.138	.071	.021	.124	.064	.019		
8.0	.166	.081	.023	.158	.078	.022	.144	.072	.021	.130	.066	.019	.117	.060	.018		
9.0	.157	.076	.021	.150	.073	.020	.136	.067	.019	.124	.062	.018	.112	.057	.016		
10.0	.148	.071	.020	.142	.068	.019	.129	.063	.018	.117	.058	.017	.106	.053	.015		

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.385	.385	.385	.329	.329	.329	.225	.225	.225	.129	.129	.129	.041	.041	.041	
1.0	.373	.353	.335	.319	.303	.288	.218	.208	.199	.126	.121	.116	.040	.039	.037	
2.0	.363	.330	.302	.311	.284	.261	.213	.196	.182	.123	.114	.107	.039	.037	.035	
3.0	.355	.313	.279	.304	.270	.242	.209	.187	.170	.121	.109	.100	.039	.036	.033	
4.0	.348	.300	.263	.298	.259	.229	.205	.181	.161	.119	.106	.095	.038	.034	.031	
5.0	.341	.290	.252	.293	.251	.219	.202	.175	.155	.117	.103	.092	.038	.034	.030	
6.0	.334	.282	.244	.287	.244	.212	.198	.171	.150	.115	.100	.089	.037	.033	.029	
7.0	.328	.275	.238	.282	.238	.207	.195	.167	.147	.113	.098	.087	.037	.032	.029	
8.0	.323	.269	.233	.278	.234	.203	.192	.164	.144	.112	.097	.086	.036	.032	.028	
9.0	.317	.265	.229	.273	.230	.200	.189	.162	.142	.110	.095	.085	.036	.031	.028	
10.0	.312	.261	.226	.269	.226	.198	.187	.159	.140	.109	.094	.084	.035	.031	.028	

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm											
NAME: SUGAR 600-U-56W-830						TYPE:Ceiling light			WEIGHT:0.2		
SPEC.:3000K						DIM.: φ600mm*H105mm			SERIAL No.:		
MFR.: NEKO LIGHTING AG						SUR.:φ600mm			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		9.5	10.6	10.1	11.2	11.8	9.3	10.4	9.9	11.0	11.6
	3H	10.0	11.0	10.6	11.6	12.3	9.8	10.8	10.4	11.4	12.1
	4H	10.2	11.1	10.9	11.8	12.5	9.9	10.9	10.6	11.5	12.2
	6H	10.4	11.2	11.0	11.8	12.6	10.0	10.9	10.7	11.5	12.3
	8H	10.4	11.2	11.0	11.8	12.6	10.0	10.8	10.7	11.5	12.2
	12H	10.3	11.1	11.0	11.8	12.5	9.9	10.7	10.6	11.4	12.2
4H	2H	9.6	10.5	10.3	11.2	11.9	9.4	10.3	10.1	11.0	11.7
	3H	10.3	11.0	11.0	11.7	12.5	10.1	10.9	10.8	11.5	12.3
	4H	10.6	11.3	11.3	12.0	12.8	10.4	11.1	11.1	11.7	12.6
	6H	10.8	11.4	11.5	12.1	13.0	10.5	11.1	11.3	11.9	12.7
	8H	10.8	11.4	11.6	12.1	13.0	10.5	11.1	11.3	11.8	12.7
	12H	10.8	11.3	11.6	12.0	12.9	10.5	11.0	11.2	11.7	12.6
8H	4H	10.6	11.2	11.3	11.9	12.8	10.4	11.0	11.1	11.7	12.6
	6H	10.9	11.4	11.7	12.1	13.0	10.7	11.1	11.4	11.9	12.8
	8H	11.0	11.4	11.8	12.1	13.1	10.7	11.1	11.5	11.9	12.8
	12H	11.0	11.3	11.8	12.1	13.1	10.6	11.0	11.4	11.8	12.7
12H	4H	10.6	11.1	11.3	11.8	12.7	10.3	10.9	11.1	11.6	12.5
	6H	10.9	11.3	11.7	12.1	13.0	10.6	11.0	11.4	11.8	12.8
	8H	11.0	11.3	11.8	12.1	13.1	10.7	11.0	11.5	11.8	12.8
Variations with the observer position at spacings:											
S = 1.0H	+ 0.6 / - 0.6					+ 0.5 / - 0.6					
1.5H	+ 0.3 / - 0.3					+ 0.3 / - 0.4					
2.0H	+ 1.3 / - 1.0					+ 1.3 / - 1.2					

CIE Pub.117, 6049 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 6.3$ )

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm		
NAME: SUGAR 600-U-56W-830	TYPE:Ceiling light	WEIGHT:0.2
SPEC.:3000K	DIM.: $\phi$ 600mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: $\phi$ 600mm	Shielding Angle:

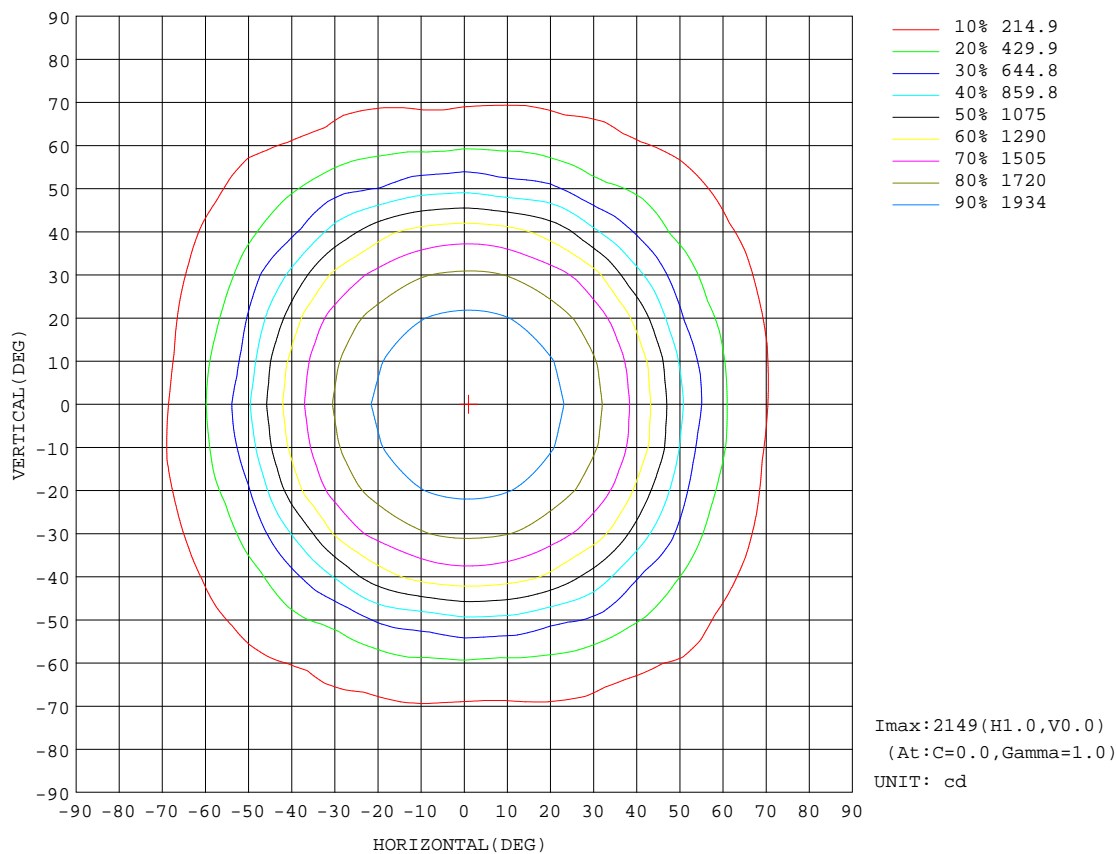
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	46	40	55	45	40	52	44	39	32
0.80	66	56	49	64	54	48	60	52	47	39
1.00	74	64	57	71	62	56	67	61	54	46
1.25	80	71	64	78	69	63	72	65	60	51
1.50	85	76	70	82	74	68	76	70	65	54
2.00	91	83	77	88	81	75	81	75	71	59
2.50	95	88	82	91	84	80	83	78	75	61
3.00	98	91	86	93	88	83	86	81	78	63
4.00	101	96	92	97	92	88	88	85	82	66
5.00	103	99	95	99	95	91	90	87	84	67
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm		
NAME: SUGAR 600-U-56W-830	TYPE:Ceiling light	WEIGHT:0.2
SPEC.:3000K	DIM.: $\phi$ 600mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: $\phi$ 600mm	Shielding Angle:



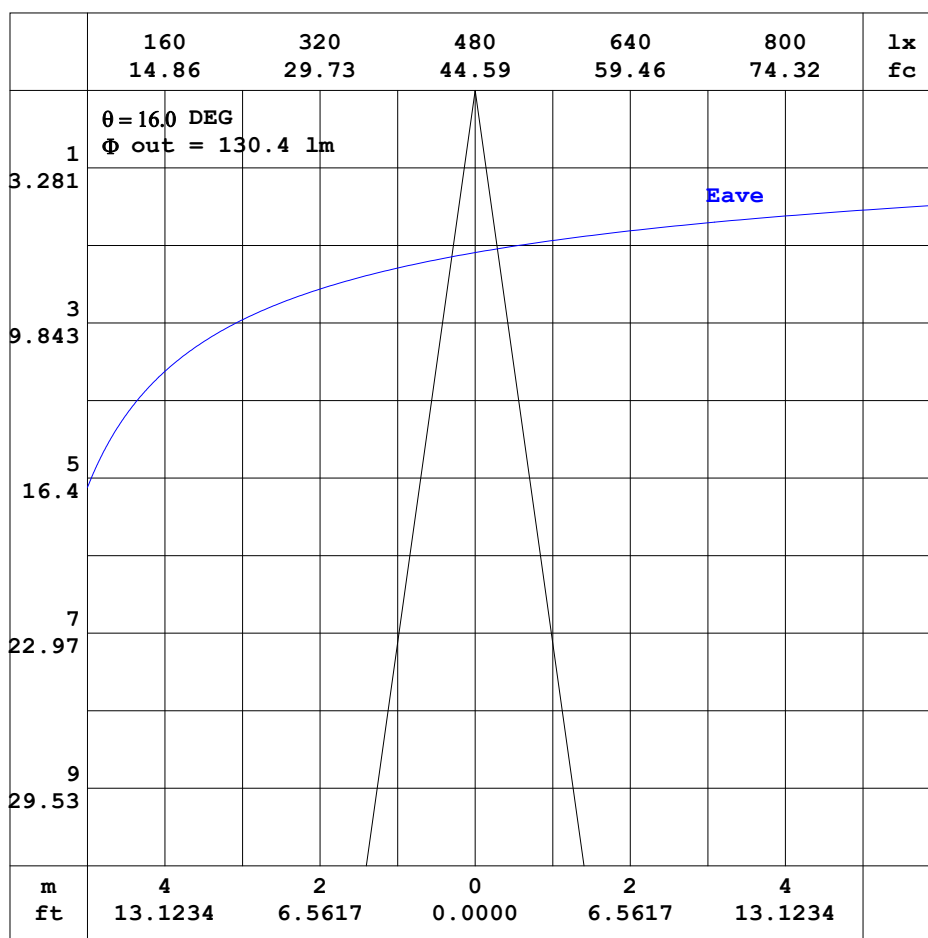
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:



AAI CURVES

Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm		
NAME: SUGAR 600-U-56W-830	TYPE:Ceiling light	WEIGHT:0.2
SPEC.:3000K	DIM.: $\phi$ 600mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: $\phi$ 600mm	Shielding Angle:



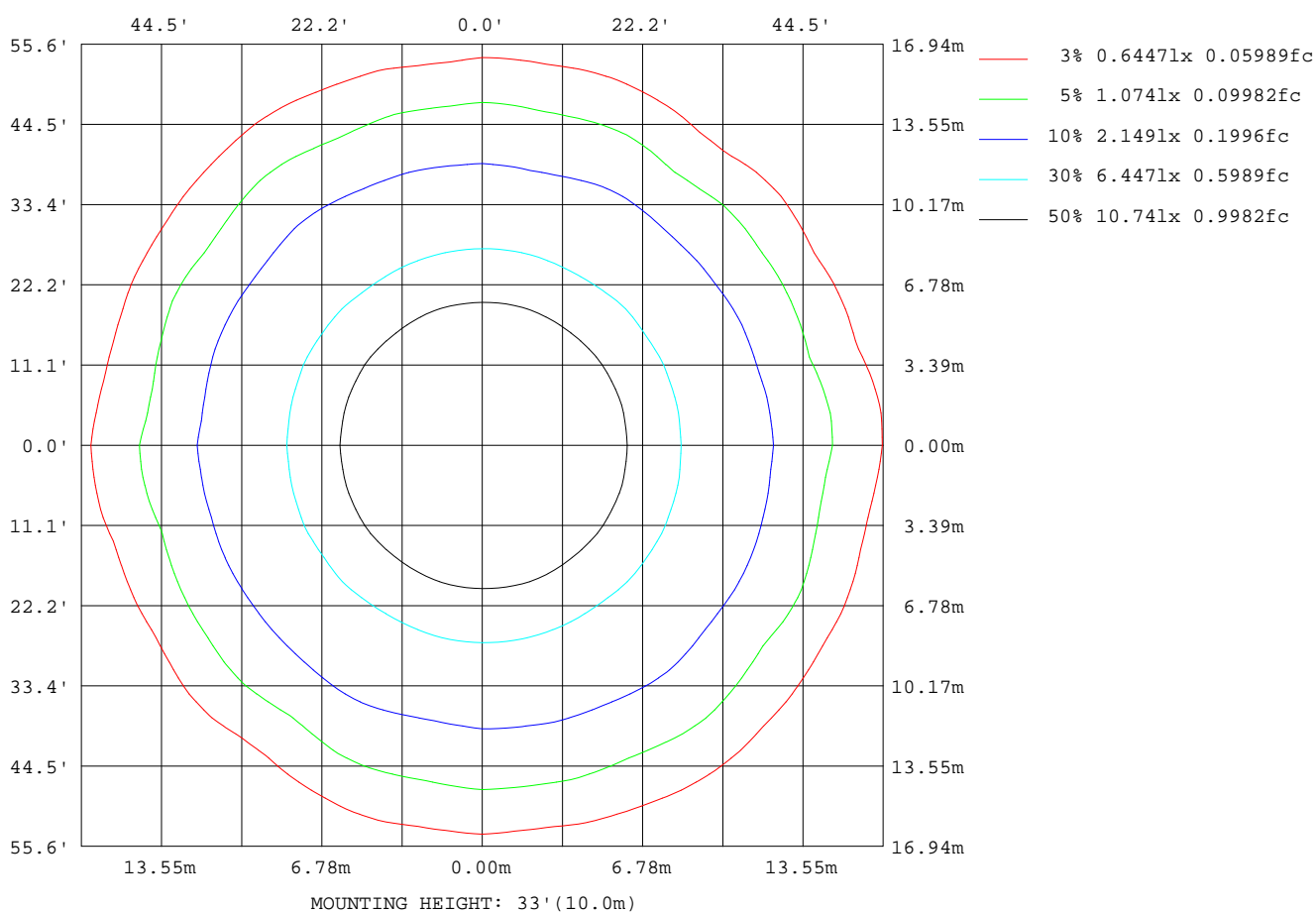
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

**ISOLUX DIAGRAM**

Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm		
NAME: SUGAR 600-U-56W-830	TYPE:Ceiling light	WEIGHT:0.2
SPEC.:3000K	DIM.: $\phi$ 600mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: $\phi$ 600mm	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

### LED Avg.L Report

Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm		
NAME: SUGAR 600-U-56W-830	TYPE:Ceiling light	WEIGHT:0.2
SPEC.:3000K	DIM.: $\phi$ 600mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: $\phi$ 600mm	Shielding Angle:

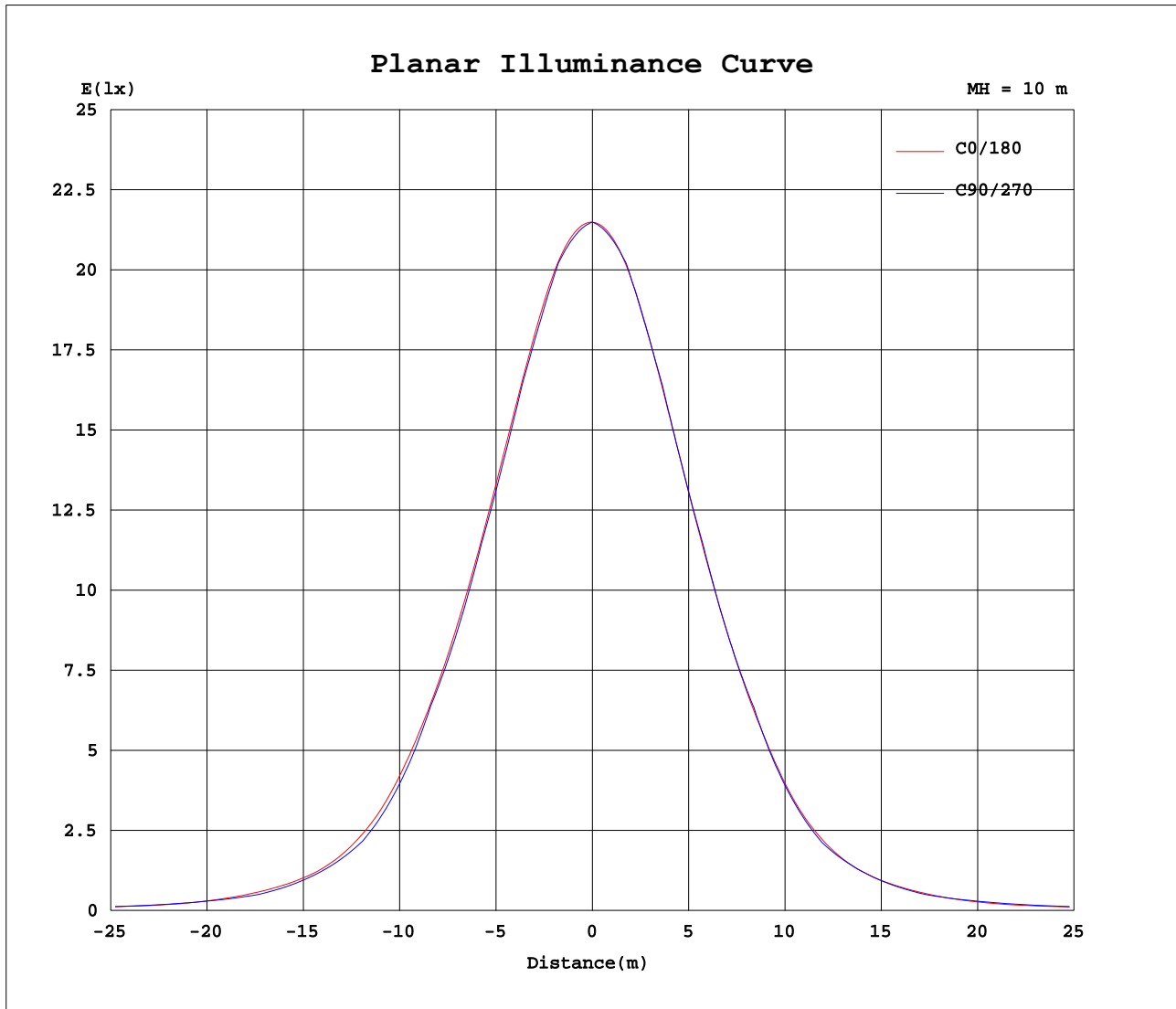
AvgL	cd/m2
L_0~180 (65) av	2266
L_0~180 (75) av	1908
L_0~180 (85) av	812
L_90~270 (65) av	2487
L_90~270 (75) av	1815
L_90~270 (85) av	0
L_45 (65) av	2436
L_45 (75) av	1899
L_45 (85) av	675

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3DEG  
Operators: Jason Long  
Test Date: 2019-11-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 5.850m [K=1.7094]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm		
NAME: SUGAR 600-U-56W-830	TYPE:Ceiling light	WEIGHT:0.2
SPEC.:3000K	DIM.: $\phi$ 600mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: $\phi$ 600mm	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149
5	2144	2143	2141	2140	2139	2138	2137	2136	2136	2135	2135	2134	2134	2134	2134	2133	2133	2133	2132
10	2121	2118	2115	2113	2111	2110	2110	2110	2110	2111	2112	2113	2114	2115	2116	2116	2116	2117	2116
15	2069	2064	2061	2059	2058	2059	2061	2064	2068	2065	2062	2058	2056	2054	2052	2051	2049	2048	2047
20	1993	1986	1983	1982	1984	1988	1991	1986	1982	1980	1979	1979	1979	1979	1980	1980	1980	1979	1979
25	1896	1888	1885	1886	1891	1890	1885	1883	1884	1887	1890	1887	1882	1879	1875	1873	1871	1869	1868
30	1775	1769	1769	1775	1776	1769	1768	1771	1773	1764	1759	1758	1759	1761	1761	1760	1759	1757	1757
35	1625	1623	1630	1643	1633	1631	1637	1628	1617	1614	1615	1620	1613	1607	1602	1597	1593	1591	1589
40	1439	1437	1450	1449	1445	1457	1447	1443	1445	1440	1418	1411	1414	1418	1419	1421	1422	1423	1421
45	1191	1192	1217	1189	1184	1184	1187	1208	1197	1183	1171	1178	1185	1173	1160	1147	1132	1125	1120
50	905	891	899	896	899	899	902	889	889	902	914	904	883	862	856	851	833	824	820
55	647	616	607	619	640	660	646	617	629	655	674	660	629	614	619	623	610	607	612
60	467	457	442	437	445	448	444	452	459	456	464	464	458	443	429	417	394	392	403
65	284	310	308	317	326	325	320	313	320	312	293	278	306	315	309	303	290	290	298
70	219	212	215	215	210	206	225	227	211	211	208	210	222	223	219	208	196	191	193
75	147	152	145	152	145	140	143	148	144	153	144	146	151	147	144	140	133	130	133
80	91.2	85.7	78.8	76.9	81.6	81.0	84.9	81.1	78.9	85.7	83.8	82.7	83.0	80.4	73.8	74.8	71.9	70.1	72.5
85	26.7	16.6	19.5	21.8	23.1	22.2	21.5	21.8	21.2	19.0	16.6	13.3	9.97	7.01	4.18	2.46	1.08	0.26	0.00
90	63.2	55.6	49.7	45.5	43.7	43.2	43.4	43.1	43.0	43.2	43.3	44.0	45.2	47.9	0.00	0.00	56.9	59.1	60.8
95	84.5	79.1	74.8	71.5	69.8	68.9	68.3	67.0	65.9	65.0	64.2	64.0	64.5	66.8	69.8	73.2	76.6	79.7	82.2
100	112	106	102	98.2	96.3	95.2	94.5	93.4	92.3	91.2	89.8	88.9	89.0	92.1	95.9	100.0	103	105	107
105	143	139	135	132	130	128	126	125	123	122	121	121	122	125	129	132	133	134	133
110	173	170	167	165	164	163	162	161	160	159	158	157	157	159	161	163	163	163	163
115	205	204	203	201	198	194	191	189	188	188	190	193	195	196	195	195	195	195	194
120	240	239	239	238	237	237	236	235	234	233	233	233	233	232	231	230	230	230	229
125	276	275	274	274	273	273	272	271	270	269	269	269	269	268	267	266	265	265	265
130	311	310	309	309	308	308	307	306	305	304	304	304	304	303	302	301	301	300	300
135	346	344	343	342	342	342	341	340	339	338	338	338	338	337	336	335	334	334	334
140	378	376	375	374	373	373	373	372	371	370	370	370	370	369	368	367	367	366	366
145	407	405	404	403	402	402	402	401	400	399	399	399	399	398	397	396	396	396	396
150	433	431	429	428	428	428	428	427	426	426	425	425	425	425	424	423	423	423	423
155	456	454	452	450	450	450	450	449	449	448	448	448	448	447	447	446	446	446	446
160	475	472	470	469	468	468	468	468	467	467	467	467	467	467	466	466	465	465	465
165	489	486	484	483	482	482	482	482	482	481	482	482	482	481	481	481	481	481	481
170	499	496	493	492	491	492	492	492	492	491	492	492	492	492	492	491	491	491	491
175	504	500	498	496	496	496	497	497	497	497	497	497	497	497	497	497	497	497	497
180	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm		
NAME: SUGAR 600-U-56W-830	TYPE:Ceiling light	WEIGHT:0.2
SPEC.:3000K	DIM.: φ600mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ600mm	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149
5	2132	2132	2132	2131	2131	2131	2131	2131	2131	2131	2131	2132	2132	2133	2134	2135	2137	2138	2137
10	2115	2114	2112	2111	2109	2107	2104	2102	2100	2099	2098	2097	2097	2098	2099	2101	2104	2108	2104
15	2046	2046	2045	2045	2044	2044	2045	2046	2047	2048	2043	2039	2037	2036	2036	2038	2042	2048	2042
20	1977	1975	1973	1970	1967	1964	1961	1958	1957	1956	1958	1961	1957	1953	1952	1953	1958	1965	1957
25	1866	1865	1863	1861	1860	1861	1863	1864	1857	1853	1850	1850	1853	1853	1849	1849	1853	1862	1852
30	1755	1752	1745	1739	1733	1729	1727	1727	1730	1738	1733	1728	1727	1730	1728	1724	1726	1736	1727
35	1587	1583	1578	1574	1572	1576	1585	1579	1574	1575	1581	1589	1577	1571	1575	1567	1567	1578	1571
40	1417	1410	1399	1385	1372	1365	1364	1367	1383	1375	1359	1364	1390	1372	1372	1376	1373	1386	1376
45	1109	1101	1105	1115	1124	1128	1112	1085	1081	1078	1063	1068	1092	1104	1098	1112	1104	1123	1109
50	796	779	788	813	832	828	806	789	784	785	782	789	794	793	788	806	818	839	807
55	594	581	587	594	585	553	520	543	566	563	549	547	542	536	528	564	589	600	559
60	396	398	414	408	392	390	384	387	397	398	390	379	388	392	398	413	413	424	420
65	297	301	306	288	268	276	273	263	275	283	290	280	274	270	270	271	250	257	270
70	201	210	211	205	197	202	199	184	188	189	191	192	198	197	199	203	209	205	196
75	135	142	141	139	135	135	133	122	128	131	125	132	133	121	130	132	122	133	134
80	70.2	74.6	75.5	77.3	78.1	76.9	75.2	69.4	70.8	70.9	67.1	71.2	69.4	66.8	66.5	60.6	65.1	74.2	70.8
85	0.26	1.12	2.49	4.47	6.92	9.41	12.0	13.6	14.9	16.0	15.6	13.9	15.0	16.1	14.2	11.6	8.77	13.4	13.2
90	61.2	61.2	0.00	0.00	60.0	59.5	59.3	59.1	59.1	59.0	59.1	59.1	59.3	59.5	59.6	59.7	59.6	59.3	58.4
95	82.8	82.8	82.4	82.3	82.2	82.0	82.0	81.9	81.9	81.9	81.8	81.8	81.9	81.9	81.9	81.9	81.8	81.6	80.7
100	107	107	106	106	106	106	106	106	106	106	106	106	105	105	105	105	105	105	104
105	133	133	132	132	132	132	132	131	131	131	131	131	131	131	130	131	131	131	130
110	162	161	160	160	160	160	160	159	159	159	159	159	159	158	158	158	159	159	158
115	193	193	192	192	191	191	191	190	189	189	189	189	189	188	188	189	189	189	188
120	228	227	227	226	226	226	225	225	224	224	224	224	223	223	222	223	223	223	222
125	264	263	262	262	262	262	261	260	259	259	259	259	259	258	257	258	259	259	257
130	299	298	297	297	297	297	296	295	294	294	295	295	294	293	293	293	294	294	292
135	333	332	331	331	331	331	330	329	329	329	329	329	329	328	328	327	328	328	326
140	365	365	364	364	364	364	363	362	361	361	361	361	361	360	360	360	361	361	359
145	395	394	394	393	393	393	393	392	391	391	391	391	392	391	391	390	391	391	389
150	422	421	421	420	420	420	420	419	419	419	419	419	418	418	418	418	419	419	417
155	445	445	444	444	444	444	444	443	443	443	443	443	443	442	442	443	444	444	441
160	465	464	464	464	464	464	464	463	463	463	463	464	463	463	463	464	464	464	462
165	480	480	480	480	480	480	480	479	479	479	480	480	480	480	480	480	481	481	479
170	491	491	491	491	491	491	491	491	491	491	491	491	492	492	492	492	493	493	491
175	497	498	498	498	498	498	498	498	498	499	499	499	499	499	500	501	501	501	499
180	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm		
NAME: SUGAR 600-U-56W-830	TYPE:Ceiling light	WEIGHT:0.2
SPEC.:3000K	DIM.: $\phi$ 600mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: $\phi$ 600mm	Shielding Angle:

Table--3

UNIT: cd

C (DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149
5	2135	2134	2133	2132	2131	2130	2130	2130	2130	2130	2130	2130	2130	2131	2131	2131	2132	2132	2132
10	2101	2098	2097	2096	2096	2096	2097	2098	2100	2102	2104	2106	2108	2110	2112	2113	2114	2115	2115
15	2038	2036	2035	2036	2038	2041	2046	2045	2043	2042	2041	2041	2041	2042	2042	2043	2044	2046	2047
20	1952	1951	1952	1956	1960	1957	1955	1955	1957	1959	1961	1964	1966	1969	1971	1973	1975	1976	1976
25	1847	1847	1851	1851	1849	1850	1853	1858	1864	1863	1860	1859	1858	1858	1859	1860	1862	1864	1866
30	1725	1729	1730	1726	1728	1734	1739	1730	1725	1726	1729	1735	1739	1742	1744	1746	1749	1752	1753
35	1575	1586	1580	1584	1594	1585	1574	1570	1572	1579	1576	1575	1575	1575	1575	1576	1579	1581	1583
40	1383	1381	1381	1399	1385	1383	1389	1387	1366	1364	1373	1382	1389	1394	1400	1405	1408	1409	1407
45	1121	1107	1107	1106	1107	1121	1125	1123	1114	1122	1136	1131	1123	1116	1106	1102	1105	1101	1096
50	803	816	829	827	827	816	819	837	859	853	834	815	810	814	802	795	802	788	771
55	546	559	574	597	589	568	577	601	623	617	589	575	583	597	588	586	600	591	576
60	409	402	401	406	405	410	421	423	425	433	434	424	414	408	384	379	398	398	399
65	277	281	296	300	291	285	289	290	273	261	293	306	302	297	281	279	296	299	300
70	196	195	188	179	201	209	198	196	193	194	212	215	214	204	187	182	194	201	208
75	122	132	131	124	129	135	130	139	133	131	141	141	139	137	127	125	133	135	141
80	71.6	68.8	70.5	68.8	71.4	70.2	67.4	74.0	75.1	73.1	74.2	74.7	69.8	71.6	68.9	68.8	72.2	69.5	76.0
85	14.1	14.2	15.2	13.6	12.9	15.3	16.2	15.3	14.2	11.7	8.68	6.41	3.93	2.35	1.03	0.26	0.00	0.26	1.14
90	57.5	56.7	56.5	56.5	56.6	56.8	56.9	57.0	57.0	57.0	57.1	57.7	58.4	59.0	59.3	59.4	59.5	59.8	60.1
95	79.8	79.0	79.0	79.1	79.5	79.7	79.9	80.2	80.3	80.3	80.4	80.5	80.6	80.8	81.0	81.2	81.5	81.6	81.8
100	103	102	102	103	103	103	103	104	104	104	104	104	104	104	104	105	105	105	105
105	129	128	128	128	128	129	129	130	130	129	129	130	130	130	130	130	130	131	131
110	157	156	155	155	156	156	157	158	157	157	157	157	158	158	158	158	158	159	160
115	187	185	185	185	185	186	187	187	187	187	187	187	188	189	189	189	189	190	191
120	220	218	218	218	219	219	220	221	221	221	221	221	222	223	223	223	224	225	226
125	255	253	253	253	253	254	255	256	256	256	256	257	258	258	259	259	259	260	262
130	290	288	287	288	288	289	290	291	291	291	291	292	293	294	294	294	295	296	297
135	324	322	321	321	322	323	324	325	325	325	325	326	327	328	328	329	329	330	331
140	356	354	354	354	355	356	356	357	357	357	358	359	360	361	361	361	361	363	364
145	387	384	384	384	385	386	387	387	388	388	388	389	390	391	391	391	392	393	394
150	414	412	411	412	413	413	414	415	415	415	415	416	417	418	418	418	419	420	421
155	439	436	436	436	437	437	438	439	439	439	439	440	441	442	442	442	443	444	445
160	459	457	456	457	457	458	458	459	459	459	459	460	461	462	462	462	463	464	465
165	476	474	473	473	474	474	475	475	476	476	476	476	477	478	478	478	479	479	480
170	488	486	486	486	486	487	487	487	488	488	488	488	489	489	489	490	490	490	491
175	496	494	493	494	494	494	495	495	495	495	495	496	496	496	496	497	497	497	498
180	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.9V I:0.2657A P:58.70W PF:0.9854 Freq:49.90Hz Lamp Flux:6049.27x1 lm		
NAME: SUGAR 600-U-56W-830	TYPE:Ceiling light	WEIGHT:0.2
SPEC.:3000K	DIM.: φ600mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ600mm	Shielding Angle:

Table--4

UNIT: cd

C (DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149	2149				
5	2133	2133	2133	2133	2134	2134	2135	2135	2136	2137	2138	2139	2140	2141	2143				
10	2115	2114	2114	2113	2112	2111	2110	2109	2109	2109	2110	2111	2112	2115	2117				
15	2048	2050	2052	2054	2056	2060	2064	2066	2063	2060	2058	2057	2058	2060	2064				
20	1977	1976	1976	1975	1975	1975	1976	1979	1983	1989	1987	1982	1981	1982	1986				
25	1868	1869	1871	1874	1879	1882	1879	1877	1877	1881	1888	1890	1885	1884	1888				
30	1751	1749	1746	1745	1745	1748	1754	1763	1762	1761	1764	1772	1772	1767	1768				
35	1583	1583	1585	1594	1608	1605	1604	1607	1615	1624	1618	1620	1631	1621	1618				
40	1402	1393	1384	1382	1388	1398	1423	1419	1408	1412	1434	1424	1432	1438	1431				
45	1104	1118	1134	1145	1137	1116	1117	1130	1125	1118	1145	1162	1169	1200	1182				
50	781	811	843	850	831	811	808	820	821	839	853	850	852	879	889				
55	582	594	598	574	537	554	583	587	580	589	587	583	574	616	645				
60	412	413	402	401	393	396	409	418	411	396	411	419	421	447	466				
65	305	294	272	280	286	277	287	293	303	296	290	289	298	295	278				
70	213	209	201	206	207	194	195	196	202	204	207	207	215	218	223				
75	143	141	139	140	137	129	135	138	134	141	142	138	145	150	138				
80	75.9	79.2	81.6	81.0	80.0	75.1	77.1	78.2	75.1	78.9	78.3	79.7	86.2	86.0	90.4				
85	2.50	4.59	7.30	10.0	13.1	15.2	17.3	19.3	19.8	19.0	20.3	21.9	23.8	24.4	25.7				
90	60.4	60.6	60.7	60.9	61.4	62.0	62.6	63.1	63.7	64.3	65.4	66.4	66.9	66.3	65.1				
95	82.0	82.3	82.7	83.2	83.7	84.4	85.1	85.8	86.5	87.2	88.3	89.1	89.4	88.6	86.9				
100	106	106	107	107	108	109	110	111	111	112	113	114	115	114	114				
105	132	132	133	134	135	136	137	138	139	139	141	142	143	143	143				
110	161	161	162	162	164	165	166	167	168	169	170	172	173	173	173				
115	192	193	193	194	195	197	198	199	200	201	202	203	205	205	205				
120	227	228	228	229	231	232	234	235	235	236	237	239	240	240	240				
125	263	264	264	265	266	268	270	270	271	272	273	274	276	276	276				
130	298	299	300	300	302	304	305	306	306	307	308	310	311	311	312				
135	333	333	334	335	336	338	339	340	341	341	342	344	345	345	346				
140	365	366	366	367	369	370	371	372	373	373	375	376	377	378	378				
145	395	396	396	397	398	400	401	402	402	403	404	405	406	407	407				
150	422	423	423	424	425	426	427	428	429	429	430	431	432	433	433				
155	446	446	447	447	448	449	450	451	452	452	453	454	455	456	456				
160	465	466	466	467	468	469	470	470	471	471	472	473	474	474	475				
165	481	481	482	482	483	484	484	485	485	486	486	487	488	488	489				
170	492	492	493	493	494	494	495	495	495	496	496	497	498	498	498				
175	498	498	499	499	499	500	500	500	501	501	502	502	502	503	503				
180	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504				

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-11-14

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks: