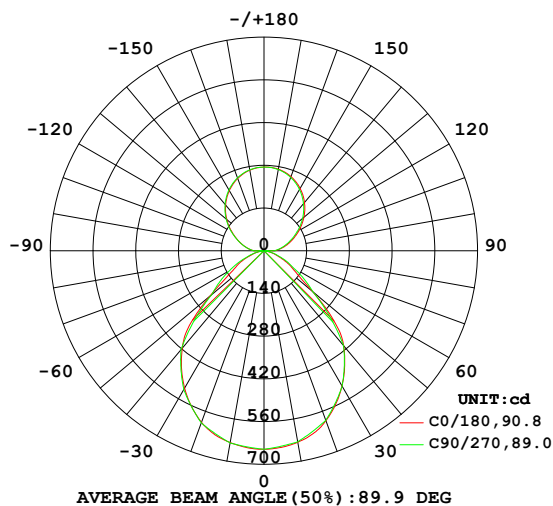


LUMINAIRE PHOTOMETRIC TEST REPORT

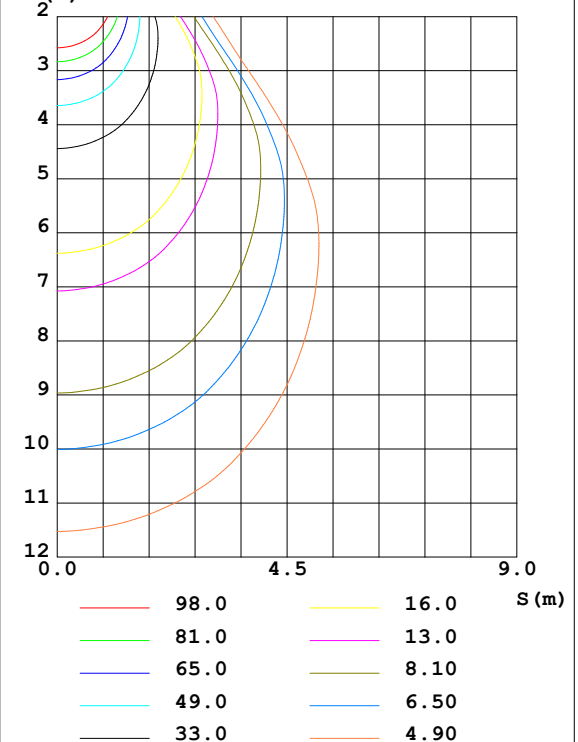
Test:U:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm		
NAME: SUGAR 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 91.87 lm/W			
MODEL	OSRAM-3000K	I _{max} (cd)	650.8	S/MH (C0/180)	1.19
NOMINAL POWER (W)	24	LOR (%)	100.0	S/MH (C90/270)	1.20
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	2140.0	η UP,DN (C0-180)	19.8,29.7
NOMINAL FLUX (lm)	2139.99	CIE CLASS	SEMI-D.	η UP,DN (C180-360)	19.8,30.6
LAMPS INSIDE	1	η up (%)	39.7	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220.0	η down (%)	60.3	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:2019-11-19

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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

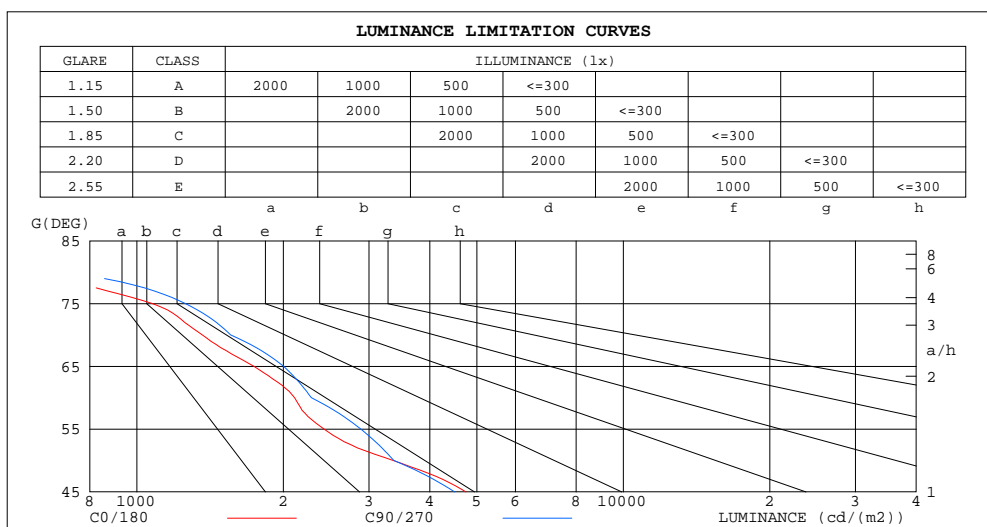
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	637.2	634.7	635.7	632.7	638.4	636.1	639.6	637.1	0- 10	61.26	61.26	2.86,2.86
20	592.8	590.7	591.6	585.8	598.7	592.7	600.8	596.8	10- 20	174.3	235.6	11,11
30	511.4	510.4	512.4	510.3	520.3	520.0	525.7	519.3	20- 30	256.4	492.1	23,23
40	406.3	400.2	405.8	409.8	416.9	417.6	423.0	418.4	30- 40	290.9	783.0	36.6,36.6
50	207.8	203.9	208.5	237.9	232.0	223.2	223.1	240.3	40- 50	247.5	1030	48.2,48.2
60	101.4	100.6	109.8	111.1	106.5	121.9	130.7	113.9	50- 60	145.0	1175	54.9,54.9
70	44.85	47.40	51.28	49.34	50.62	49.11	57.33	52.91	60- 70	77.84	1253	58.6,58.6
80	9.540	11.27	11.85	11.92	13.36	15.22	15.81	13.57	70- 80	33.20	1286	60.1,60.1
90	36.02	25.01	33.39	32.20	32.29	31.31	32.70	34.82	80- 90	4.349	1291	60.3,60.3
100	62.76	50.52	58.55	57.32	56.95	56.76	57.18	60.72	90-100	47.92	1339	62.6,62.6
110	95.58	86.26	89.07	86.57	85.86	85.90	86.60	91.35	100-110	76.38	1415	66.1,66.1
120	132.2	129.6	125.6	122.1	120.4	120.6	122.9	128.0	110-120	105.2	1520	71,71
130	170.8	168.8	165.2	160.7	159.3	159.7	161.9	167.7	120-130	129.6	1650	77.1,77.1
140	206.6	204.9	201.5	197.4	195.9	196.4	198.7	204.1	130-140	141.2	1791	83.7,83.7
150	236.8	235.3	232.5	229.0	227.7	228.2	230.3	234.7	140-150	135.8	1927	90,90
160	258.9	258.0	256.0	253.4	252.5	252.8	254.5	257.5	150-160	112.7	2040	95.3,95.3
170	271.7	271.3	270.4	268.8	268.4	268.6	269.5	271.2	160-170	74.48	2114	98.8,98.8
180	274.4	274.4	274.4	274.4	274.4	274.4	274.4	274.4	170-180	25.99	2140	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:2019-11-19

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:

LUMINANCE LIMITATION CURVES

Test:U:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm		
NAME: SUGAR 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	32	0
80	571	710
75	1076	1258
70	1364	1559
65	1740	2004
60	2110	2284
55	2425	2887
50	3361	3374
45	4747	4499

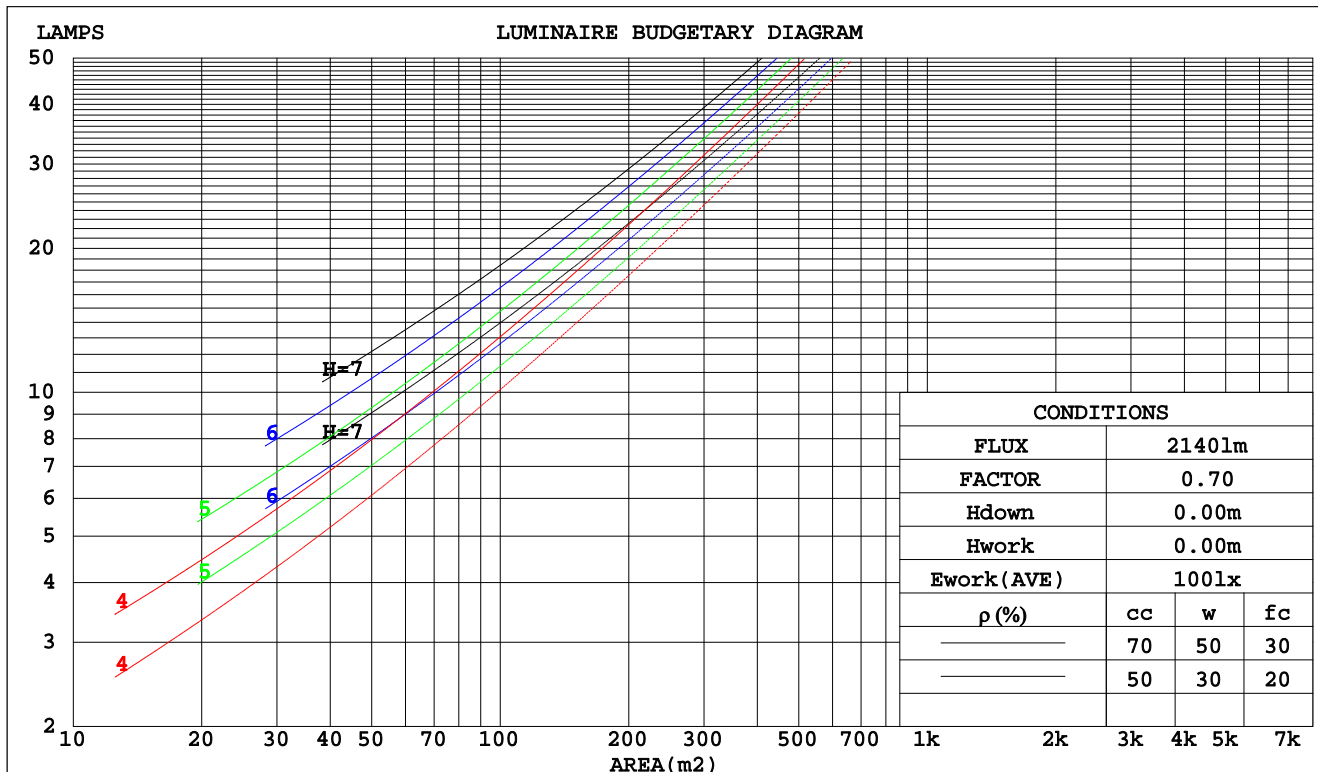
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2019-11-19

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm		
NAME: SUGAR 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

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	1.10	1.10	1.10	1.02	1.02	1.02	.89	.89	.89	.77	.77	.77	.66	.66	.66	.60
1.0	.97	.94	.91	.91	.88	.86	.80	.78	.76	.70	.68	.67	.60	.59	.58	.53
2.0	.87	.81	.76	.81	.76	.72	.72	.68	.65	.63	.60	.57	.54	.52	.51	.47
3.0	.77	.70	.65	.73	.67	.62	.64	.60	.56	.56	.53	.50	.49	.47	.44	.41
4.0	.69	.62	.56	.65	.59	.53	.58	.53	.49	.51	.47	.44	.45	.42	.39	.36
5.0	.62	.54	.49	.59	.52	.47	.52	.47	.43	.46	.42	.39	.41	.37	.35	.32
6.0	.56	.48	.43	.53	.46	.41	.47	.42	.38	.42	.38	.34	.37	.34	.31	.29
7.0	.51	.43	.38	.48	.41	.37	.43	.38	.34	.39	.34	.31	.34	.31	.28	.26
8.0	.47	.39	.34	.44	.37	.33	.40	.34	.30	.36	.31	.28	.32	.28	.25	.23
9.0	.43	.36	.31	.41	.34	.30	.37	.31	.27	.33	.28	.25	.29	.26	.23	.21
10.0	.39	.32	.28	.38	.31	.27	.34	.29	.25	.31	.26	.23	.27	.24	.21	.19



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2019-11-19

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:

WEC AND CCEC

Test:U:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm		
NAME: SUGAR 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.250	.142	.045	.231	.132	.042	.196	.112	.036	.163	.094	.030	.133	.077	.025	
2.0	.238	.130	.040	.220	.121	.037	.188	.105	.033	.159	.089	.028	.131	.074	.023	
3.0	.223	.119	.036	.207	.111	.033	.178	.097	.029	.151	.083	.025	.126	.070	.022	
4.0	.209	.108	.032	.195	.102	.030	.168	.089	.027	.143	.077	.023	.120	.065	.020	
5.0	.195	.100	.029	.182	.094	.027	.158	.082	.024	.135	.071	.021	.114	.061	.018	
6.0	.183	.092	.026	.171	.087	.025	.149	.076	.022	.128	.066	.019	.108	.057	.017	
7.0	.172	.085	.024	.161	.080	.023	.140	.071	.020	.121	.062	.018	.102	.053	.016	
8.0	.162	.079	.022	.152	.075	.021	.132	.066	.019	.114	.058	.017	.097	.050	.015	
9.0	.153	.074	.021	.144	.070	.020	.125	.062	.018	.108	.054	.016	.092	.047	.014	
10.0	.145	.069	.019	.136	.066	.018	.119	.058	.016	.103	.051	.015	.088	.044	.013	

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.493	.493	.493	.421	.421	.421	.287	.287	.287	.165	.165	.165	.053	.053	.053	
1.0	.481	.462	.444	.412	.396	.382	.282	.273	.264	.162	.158	.154	.052	.051	.050	
2.0	.472	.439	.411	.404	.378	.356	.277	.261	.248	.160	.152	.145	.051	.049	.047	
3.0	.464	.423	.389	.398	.364	.338	.273	.253	.237	.158	.148	.140	.051	.048	.046	
4.0	.457	.410	.374	.392	.354	.325	.270	.247	.229	.156	.145	.135	.050	.047	.045	
5.0	.450	.400	.363	.387	.346	.316	.266	.242	.223	.154	.142	.132	.050	.046	.044	
6.0	.444	.392	.355	.382	.340	.310	.263	.238	.219	.153	.140	.130	.049	.046	.043	
7.0	.438	.386	.350	.377	.335	.305	.260	.235	.216	.151	.138	.128	.049	.045	.042	
8.0	.433	.381	.345	.372	.330	.301	.258	.232	.213	.150	.137	.127	.048	.045	.042	
9.0	.427	.376	.342	.368	.326	.298	.255	.229	.212	.149	.136	.126	.048	.044	.042	
10.0	.423	.372	.339	.364	.323	.296	.253	.227	.210	.147	.134	.125	.048	.044	.042	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2019-11-19

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:

UGR(Unified Glare Rating) Table

Test:U:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm											
NAME: SUGAR 350-U-20W-830					TYPE:Ceiling light			WEIGHT:			
SPEC.:3000K					DIM.: φ350mm*H78mm			SERIAL No.:			
MFR.: NEKO LIGHTING AG					SUR.:φ350mm			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		10.5	11.5	11.3	12.2	13.1	10.6	11.6	11.4	12.3	13.2
	3H	10.8	11.7	11.6	12.5	13.4	11.0	11.9	11.8	12.6	13.6
	4H	10.9	11.7	11.7	12.5	13.5	11.1	11.9	11.9	12.7	13.7
	6H	10.9	11.6	11.7	12.4	13.4	11.1	11.8	11.9	12.6	13.6
	8H	10.8	11.5	11.6	12.3	13.3	11.0	11.7	11.9	12.5	13.6
	12H	10.7	11.4	11.6	12.2	13.2	11.0	11.6	11.8	12.4	13.5
4H	2H	10.5	11.3	11.3	12.1	13.1	10.6	11.4	11.4	12.2	13.1
	3H	11.0	11.7	11.8	12.5	13.5	11.1	11.8	11.9	12.6	13.6
	4H	11.1	11.7	12.0	12.6	13.6	11.3	11.9	12.1	12.7	13.8
	6H	11.1	11.6	12.0	12.5	13.6	11.3	11.8	12.1	12.7	13.7
	8H	11.0	11.5	11.9	12.4	13.5	11.2	11.7	12.1	12.6	13.7
	12H	11.0	11.4	11.9	12.3	13.4	11.1	11.6	12.0	12.5	13.6
8H	4H	11.0	11.5	11.9	12.4	13.5	11.2	11.6	12.1	12.5	13.6
	6H	11.1	11.4	12.0	12.3	13.5	11.2	11.6	12.1	12.5	13.6
	8H	11.0	11.3	11.9	12.3	13.4	11.1	11.5	12.1	12.4	13.6
	12H	10.9	11.2	11.9	12.1	13.3	11.1	11.3	12.0	12.3	13.5
12H	4H	11.0	11.4	11.9	12.3	13.4	11.1	11.5	12.0	12.4	13.5
	6H	11.0	11.3	11.9	12.2	13.4	11.1	11.5	12.0	12.4	13.5
	8H	10.9	11.2	11.9	12.1	13.3	11.1	11.3	12.0	12.3	13.5
Variations with the observer position at spacings:											
S = 1.0H	+ 0.9 / - 1.1					+ 0.8 / - 0.9					
1.5H	+ 0.7 / - 1.0					+ 0.7 / - 1.1					
2.0H	+ 2.3 / - 1.6					+ 2.1 / - 1.6					

CIE Pub.117, 2140 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 2.6$)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2019-11-19

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:

UTILIZATION FACTORS TABLE

Test:U:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm		
NAME: SUGAR 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

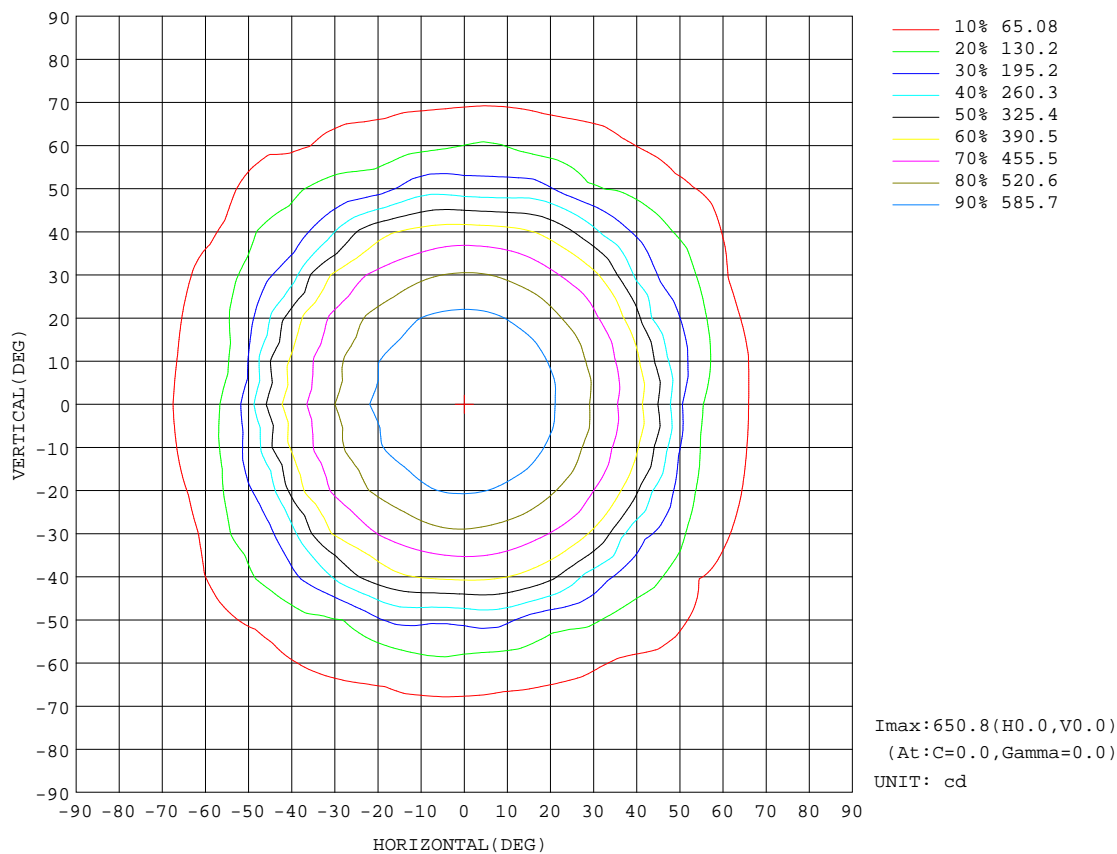
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	52	42	36	50	41	35	47	39	34	27
0.80	62	51	45	59	49	44	54	46	41	33
1.00	69	59	52	66	57	51	60	54	48	38
1.25	76	66	59	72	63	57	65	58	54	42
1.50	80	71	65	76	68	62	69	62	58	45
2.00	87	79	72	82	75	69	73	68	64	48
2.50	90	83	77	85	79	74	76	71	67	50
3.00	93	87	81	88	82	78	78	74	70	52
4.00	97	92	87	91	87	83	81	77	74	54
5.00	100	95	91	93	89	86	82	79	77	55
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:2019-11-19

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:

ISOCANDELA DIAGRAM

Test:U:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm		
NAME: SUGAR 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

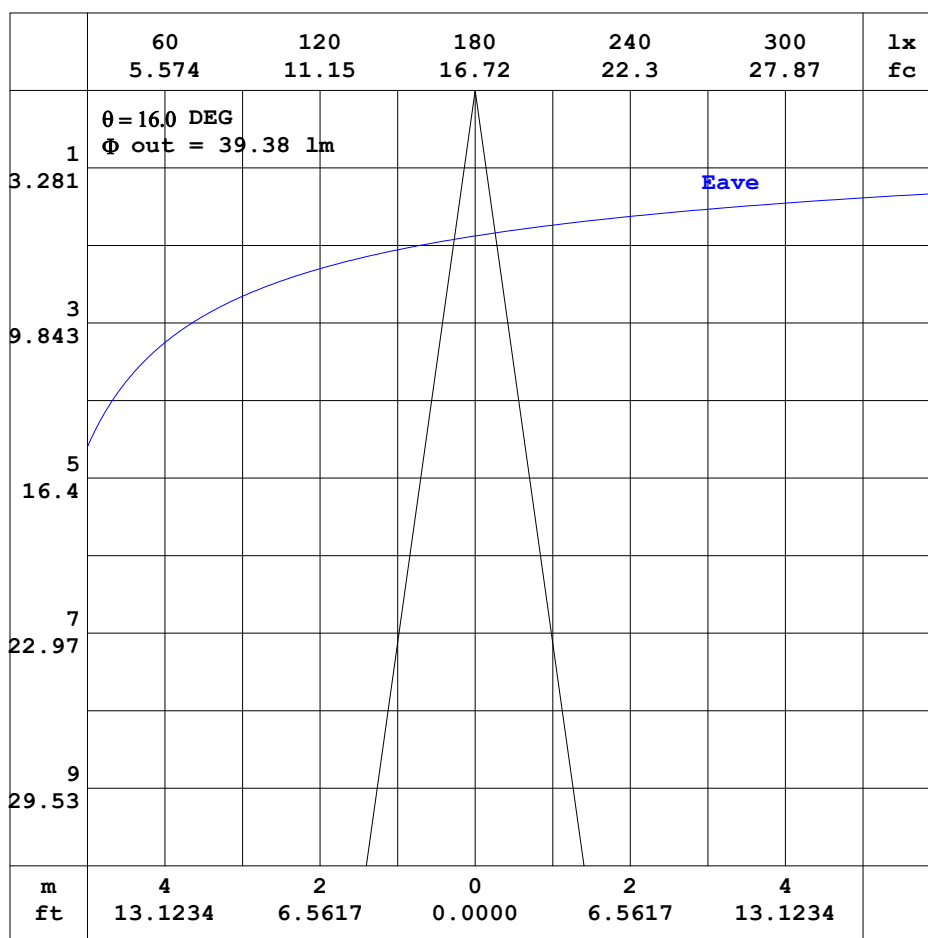


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2019-11-19

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:

AAI CURVES

Test:U:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm		
NAME: SUGAR 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:



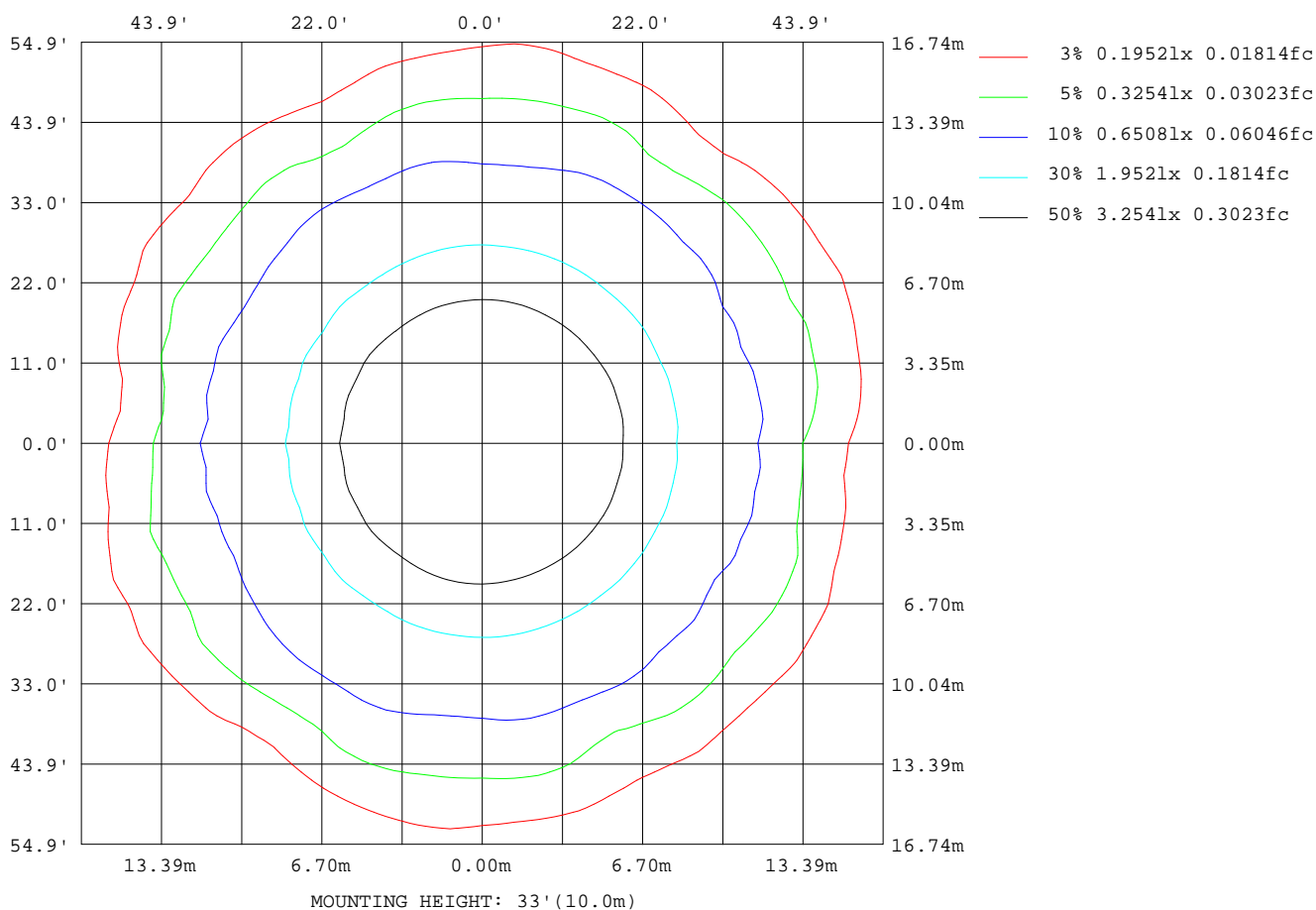
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2019-11-19

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:

ISOLUX DIAGRAM

Test:U:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm		
NAME: SUGAR 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2019-11-19

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:

LED Avg.L Report

Test:U:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm		
NAME: SUGAR 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

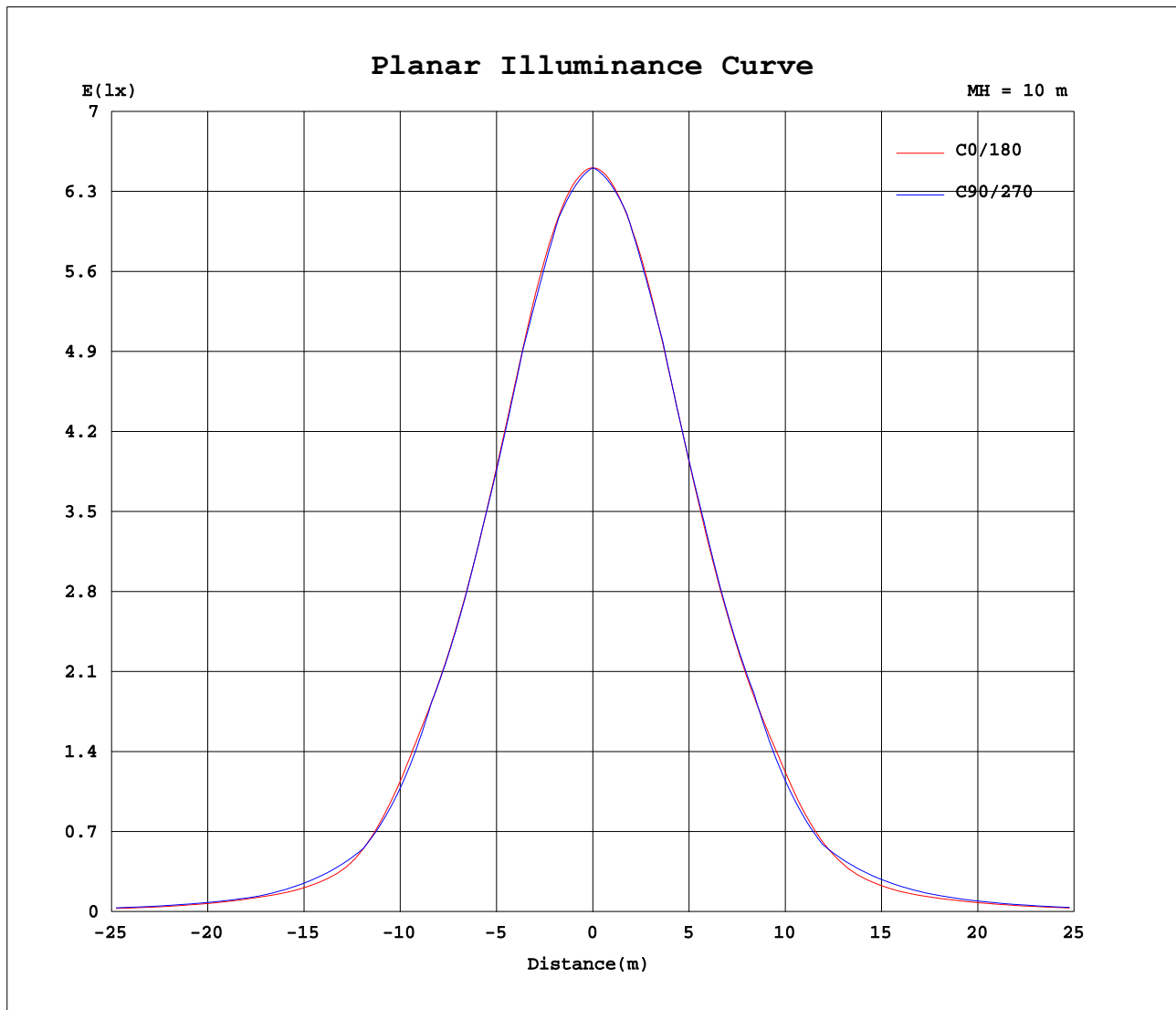
AvgL	cd/m2
L_0~180 (65) av	1851
L_0~180 (75) av	1175
L_0~180 (85) av	71
L_90~270 (65) av	2142
L_90~270 (75) av	1355
L_90~270 (85) av	0
L_45 (65) av	1862
L_45 (75) av	1189
L_45 (85) av	197

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2019-11-19

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:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: Jason Long
Test Date: 2019-11-19

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:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm		
NAME: SUGAR 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	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	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651
5	647	646	646	646	645	645	645	644	644	644	644	644	644	644	644	643	643	643	643
10	637	636	636	636	636	636	636	635	635	635	635	635	635	635	635	635	636	636	636
15	621	620	620	620	620	619	619	619	619	619	617	617	616	615	615	614	614	614	614
20	593	593	594	595	593	592	592	591	591	591	590	589	589	589	589	590	590	591	592
25	556	556	559	557	555	555	556	557	555	553	553	552	552	552	552	552	552	552	552
30	511	514	515	512	511	514	514	512	511	510	510	509	508	508	508	508	509	511	512
35	461	465	465	461	464	464	461	462	464	463	461	459	457	457	458	459	459	459	459
40	406	413	409	407	408	403	401	402	400	400	397	398	400	401	402	404	405	406	406
45	323	340	323	329	310	309	297	292	311	309	302	309	319	319	317	319	318	313	306
50	208	219	211	223	218	218	200	207	212	204	212	222	219	209	207	217	224	220	209
55	134	131	137	141	158	162	162	154	148	152	153	148	137	134	142	157	162	161	159
60	101	98.7	101	102	96.4	104	106	116	106	101	105	108	104	103	105	106	103	103	110
65	70.7	70.2	70.2	69.3	66.0	61.8	72.7	76.6	76.5	71.0	66.5	67.4	71.3	73.0	74.6	75.9	75.4	77.9	81.4
70	44.8	47.0	48.2	49.1	48.3	49.8	49.5	48.5	49.5	47.4	44.4	47.1	48.2	46.8	45.9	47.8	49.0	52.1	51.3
75	26.8	28.8	29.3	27.7	27.2	28.1	27.1	29.2	30.1	26.7	24.9	27.2	27.8	26.9	26.6	28.9	30.3	31.7	31.3
80	9.54	11.8	10.9	10.9	11.6	11.5	12.3	13.6	13.0	11.3	10.5	10.9	10.4	10.0	9.74	10.4	11.3	11.1	11.8
85	0.27	0.54	0.60	0.59	1.48	1.72	0.60	0.47	0.60	0.92	1.05	1.07	0.89	0.70	0.49	0.32	0.16	0.04	0.00
90	36.0	30.7	26.7	24.2	23.8	24.3	25.2	25.2	25.1	25.0	24.8	24.7	25.1	26.5	0.00	0.00	31.4	32.6	33.4
95	47.8	44.5	41.8	40.0	39.2	38.9	38.9	38.2	37.6	36.9	36.3	35.9	35.9	36.9	38.3	40.0	41.9	43.6	45.0
100	62.8	59.7	57.1	55.1	53.8	53.0	52.4	51.7	51.1	50.5	49.7	49.2	49.1	50.2	51.9	53.7	55.6	57.3	58.6
105	79.1	76.9	75.0	73.4	72.3	71.4	70.5	69.1	67.9	66.9	66.3	66.2	66.6	68.4	70.3	72.2	72.9	73.2	73.2
110	95.6	94.0	92.5	91.3	90.4	89.6	88.8	87.9	87.0	86.3	85.8	85.7	85.9	87.2	88.6	89.8	89.9	89.6	89.1
115	113	113	112	112	111	110	109	108	107	107	108	108	109	109	108	108	107	107	106
120	132	132	132	132	131	131	131	131	130	130	129	129	129	128	128	127	127	126	126
125	152	152	151	151	151	151	151	151	150	149	149	149	149	148	147	147	146	146	146
130	171	171	171	171	171	171	170	170	169	169	169	168	168	168	167	166	166	165	165
135	189	189	189	189	189	189	189	188	188	187	187	187	187	186	185	185	184	184	184
140	207	207	207	207	207	207	206	206	205	205	205	205	204	204	203	202	202	202	202
145	223	223	223	223	223	222	222	222	221	221	221	221	220	220	219	219	218	218	218
150	237	237	237	237	237	237	237	236	236	235	235	235	235	234	234	233	233	233	233
155	249	249	249	249	249	249	249	248	248	248	248	248	247	247	246	246	246	246	245
160	259	259	259	259	259	259	259	259	258	258	258	258	258	257	257	257	256	256	256
165	267	267	267	267	267	267	267	266	266	266	266	266	266	266	265	265	265	265	264
170	272	272	272	272	272	272	272	272	271	271	271	271	271	271	271	271	271	270	270
175	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274
180	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2019-11-19

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:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm		
NAME: SUGAR 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	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	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651
5	643	643	643	643	643	643	643	643	643	643	644	644	644	644	645	645	646	647	647
10	636	635	635	635	635	634	634	633	633	632	632	632	632	633	634	635	637	638	637
15	613	613	613	613	613	614	615	616	618	620	618	617	616	615	616	618	621	624	621
20	592	592	591	590	589	588	587	586	586	588	591	594	592	590	587	589	593	599	594
25	552	552	551	551	552	553	555	556	554	551	549	552	557	558	554	551	556	563	557
30	513	513	512	511	509	507	505	507	510	515	513	509	510	516	515	509	512	520	512
35	458	458	458	459	460	461	463	461	459	460	466	470	463	462	471	463	461	471	461
40	405	405	406	406	405	401	398	401	410	411	402	403	414	402	407	411	403	417	404
45	305	309	319	329	334	338	337	329	322	327	327	307	314	319	303	336	312	346	318
50	205	211	227	239	240	232	232	238	238	234	222	218	209	213	217	229	219	232	205
55	162	162	167	167	161	146	138	150	162	171	176	164	164	166	176	160	151	147	131
60	119	118	112	107	107	105	102	106	111	112	115	126	121	125	109	106	108	107	99.5
65	85.3	83.1	78.9	73.4	74.7	77.0	77.7	77.5	75.6	70.8	68.9	76.6	83.2	74.2	68.3	68.8	75.4	79.7	78.7
70	50.9	52.1	55.0	51.6	50.5	51.0	51.9	51.2	49.3	50.8	52.9	53.1	54.9	51.9	52.2	51.6	50.9	50.6	45.0
75	31.8	32.3	33.2	31.0	29.8	29.5	30.6	30.4	28.3	29.8	32.2	31.6	30.3	30.7	30.2	28.7	28.5	31.7	32.3
80	12.7	12.5	12.3	12.4	12.1	11.7	12.4	12.4	11.9	12.5	13.4	14.9	14.4	14.8	12.9	12.5	11.7	13.4	11.0
85	0.05	0.18	0.38	0.65	0.91	1.07	1.33	1.52	1.53	1.42	1.17	1.07	2.31	2.24	1.28	1.24	0.61	0.92	0.45
90	33.6	33.5	0.00	0.00	32.7	32.4	32.3	32.2	32.2	32.2	32.2	32.2	32.3	32.4	32.5	32.5	32.4	32.3	32.0
95	45.3	45.2	45.0	44.9	44.9	44.8	44.7	44.5	44.4	44.5	44.5	44.5	44.5	44.4	44.3	44.3	44.3	44.3	44.1
100	58.6	58.3	57.9	57.8	57.8	57.8	57.7	57.5	57.3	57.4	57.4	57.4	57.2	57.0	56.8	56.9	56.9	57.0	56.9
105	73.1	72.8	72.4	72.2	72.0	71.8	71.7	71.7	71.6	71.5	71.4	71.2	71.1	71.0	70.9	70.9	70.8	70.8	70.7
110	88.7	88.4	88.0	87.7	87.5	87.2	87.0	86.8	86.6	86.5	86.4	86.3	86.2	86.0	85.9	85.9	85.9	85.9	85.8
115	106	106	105	105	104	104	104	103	103	103	103	103	102	102	102	102	102	102	102
120	125	125	124	124	123	123	123	122	122	122	121	121	121	121	121	121	120	120	120
125	145	144	144	144	143	143	143	142	142	141	141	141	141	140	140	140	140	140	140
130	165	164	163	163	163	162	162	161	161	161	161	160	160	159	159	159	159	159	159
135	183	183	182	182	181	181	181	180	180	179	179	179	179	178	178	178	178	178	178
140	201	200	200	199	199	199	198	198	197	197	197	197	197	196	196	196	196	196	196
145	217	217	216	216	216	215	215	214	214	214	214	214	213	213	212	212	212	213	212
150	232	231	231	231	230	230	230	229	229	229	229	229	228	228	227	228	228	228	228
155	245	244	244	244	243	243	243	243	242	242	242	242	242	241	241	241	241	241	241
160	256	255	255	255	255	254	254	254	253	253	253	253	253	253	252	252	252	252	252
165	264	264	263	263	263	263	263	263	262	262	262	262	262	262	262	262	262	262	262
170	270	270	270	270	270	269	269	269	269	269	269	269	269	268	268	268	268	268	268
175	274	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273
180	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2019-11-19

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:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm		
NAME: SUGAR 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	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	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651
5	646	646	646	645	645	645	645	645	645	645	645	645	645	645	645	645	645	645	645
10	636	635	635	634	634	635	635	636	637	637	638	638	639	639	639	639	640	639	639
15	619	618	617	619	620	622	624	623	622	621	620	620	619	619	620	620	620	620	620
20	591	590	593	597	599	596	594	593	593	595	596	597	599	600	600	601	601	600	600
25	552	556	561	562	558	556	559	562	565	564	563	562	561	561	562	562	563	564	564
30	509	516	518	514	515	521	524	520	517	516	518	519	521	523	524	525	526	526	525
35	462	471	464	466	475	472	468	470	472	475	472	471	470	471	472	473	475	475	475
40	412	410	407	420	408	405	415	418	410	409	413	416	418	421	423	424	423	422	422
45	343	319	337	321	306	333	324	315	328	345	348	338	333	334	334	330	324	323	327
50	222	222	229	219	211	208	219	223	236	240	233	227	232	242	245	235	223	222	226
55	134	155	156	169	163	159	158	161	167	162	150	148	159	173	179	179	177	179	180
60	102	104	113	109	123	120	118	122	119	118	115	109	113	119	119	123	131	138	135
65	80.6	77.3	68.2	67.3	75.4	85.9	82.3	75.0	72.9	78.5	82.1	78.9	79.1	84.5	85.5	87.7	92.7	98.2	97.9
70	45.7	48.9	50.9	52.7	50.5	54.9	55.7	49.1	47.9	51.9	54.7	52.3	52.4	55.6	55.3	55.8	57.3	59.3	59.5
75	31.1	29.0	32.0	32.6	34.3	33.1	32.9	33.4	33.7	33.1	32.7	31.5	31.7	33.8	34.8	35.2	36.2	37.6	37.5
80	11.2	12.4	14.5	14.7	16.9	16.0	14.7	15.2	15.6	15.0	14.4	14.3	13.8	13.9	15.2	15.0	15.8	16.1	15.8
85	0.90	0.99	1.94	1.88	0.77	1.42	2.18	2.45	2.32	1.91	1.48	1.14	0.75	0.44	0.22	0.06	0.00	0.06	0.23
90	31.8	31.5	31.4	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.6	31.9	32.2	32.4	32.6	32.7	32.9	33.1
95	44.0	43.8	43.7	43.6	43.6	43.7	43.8	43.9	43.8	43.8	43.8	43.9	44.1	44.2	44.3	44.4	44.5	44.7	44.9
100	56.7	56.6	56.5	56.5	56.4	56.5	56.7	56.8	56.7	56.7	56.6	56.8	57.0	57.2	57.1	57.1	57.2	57.5	57.8
105	70.6	70.5	70.6	70.6	70.7	70.7	70.7	70.8	70.8	70.8	70.8	70.9	71.0	71.1	71.2	71.3	71.4	71.7	72.0
110	85.6	85.6	85.6	85.7	85.7	85.8	85.9	85.9	85.9	85.9	85.9	85.9	86.0	86.1	86.2	86.4	86.6	87.0	87.4
115	102	102	102	102	102	102	102	102	102	102	102	102	103	103	103	103	104	104	105
120	120	120	120	120	120	120	120	121	121	121	121	121	121	122	122	122	123	123	124
125	140	140	140	139	139	140	140	140	140	140	140	141	141	142	142	142	142	143	144
130	159	159	159	159	159	159	159	160	160	160	160	160	161	161	161	162	162	163	163
135	178	178	178	177	177	178	178	179	179	179	179	179	180	180	180	181	181	181	182
140	196	196	195	195	195	196	196	196	196	196	196	197	197	198	198	198	199	199	200
145	212	212	212	212	212	212	213	213	213	213	213	214	214	215	215	215	215	216	217
150	228	227	227	227	227	228	228	228	228	228	228	229	229	230	230	230	230	231	231
155	241	241	241	241	241	241	241	241	242	242	242	242	242	243	243	243	243	244	244
160	252	252	252	252	252	252	253	253	253	253	253	253	254	254	254	254	254	255	255
165	262	261	261	261	261	262	262	262	262	262	262	262	263	263	263	263	263	264	264
170	268	268	268	268	268	268	269	269	269	269	269	269	269	269	269	269	269	270	270
175	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	274
180	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2019-11-19

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:220.4V I:0.1057A P:23.29W PF:0.9627 Freq:49.90Hz Lamp Flux:2139.99x1 lm		
NAME: SUGAR 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	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	651	651	651	651	651	651	651	651	651	651	651	651	651	651	651				
5	645	645	645	645	645	645	645	645	645	645	645	646	646	646	647				
10	639	638	638	638	637	637	637	637	637	637	637	637	637	637	637				
15	620	621	621	621	621	621	622	623	622	621	621	622	621	621	620				
20	599	598	597	596	596	597	597	596	596	596	596	596	597	595	594				
25	564	564	563	563	562	561	561	561	563	562	561	560	560	561	558				
30	524	523	522	521	522	521	519	519	519	521	521	519	518	519	516				
35	475	475	474	473	472	472	473	475	473	471	473	473	469	470	468				
40	422	422	421	420	419	416	418	420	421	415	410	415	413	413	415				
45	334	343	350	351	347	343	345	342	328	324	324	313	330	325	340				
50	238	252	257	254	253	249	240	248	240	220	223	219	229	231	234				
55	180	183	175	156	147	162	174	176	176	174	168	178	173	170	154				
60	125	121	122	118	114	113	114	116	123	124	129	120	116	109	106				
65	90.9	84.2	83.8	85.3	84.6	80.2	81.0	77.0	70.3	81.2	81.9	78.7	65.7	67.1	71.0				
70	59.0	57.3	56.3	56.4	57.6	55.4	52.9	53.7	56.2	56.2	53.9	53.3	53.9	53.4	51.5				
75	36.7	35.6	33.9	32.2	32.8	32.7	29.9	31.4	34.7	30.5	31.4	30.0	31.5	29.2	27.7				
80	15.0	14.7	14.2	13.4	13.9	14.3	13.6	13.4	13.5	14.3	14.8	14.3	13.7	13.5	12.2				
85	0.48	0.77	1.07	1.26	1.50	1.60	1.69	1.33	0.66	0.30	1.93	1.95	0.38	0.51	0.57				
90	33.3	33.5	33.6	33.8	34.1	34.5	34.8	35.2	35.5	35.9	36.5	37.0	37.3	37.1	36.7				
95	45.2	45.3	45.5	45.8	46.2	46.7	47.2	47.5	47.9	48.2	48.9	49.5	49.8	49.5	48.9				
100	58.2	58.4	58.7	59.0	59.5	60.1	60.7	61.1	61.5	61.8	62.5	63.1	63.6	63.6	63.3				
105	72.4	72.8	73.2	73.7	74.3	74.8	75.4	76.0	76.5	77.0	77.6	78.1	78.6	78.9	79.0				
110	87.8	88.3	88.9	89.5	90.1	90.7	91.4	92.0	92.6	93.2	93.8	94.4	94.9	95.2	95.4				
115	105	106	106	107	108	108	109	109	110	111	111	112	112	113	113				
120	124	125	126	126	127	127	128	129	129	130	131	131	132	132	132				
125	145	145	145	146	147	147	148	149	149	149	150	151	152	152	152				
130	164	164	165	165	166	167	168	168	168	169	170	170	171	171	171				
135	183	183	184	184	185	186	186	187	187	187	188	189	189	190	190				
140	201	201	201	202	203	203	204	204	205	205	206	206	207	207	207				
145	217	218	218	218	219	220	220	221	221	221	222	222	223	223	223				
150	232	232	233	233	234	234	235	235	235	235	236	236	237	237	237				
155	245	245	245	246	246	247	247	247	248	248	248	249	249	249	249				
160	256	256	256	256	257	257	257	258	258	258	258	259	259	259	259				
165	264	264	265	265	265	265	266	266	266	266	266	266	267	267	267				
170	270	270	270	271	271	271	271	271	271	271	271	272	272	272	272				
175	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274				
180	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274				

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2019-11-19

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: