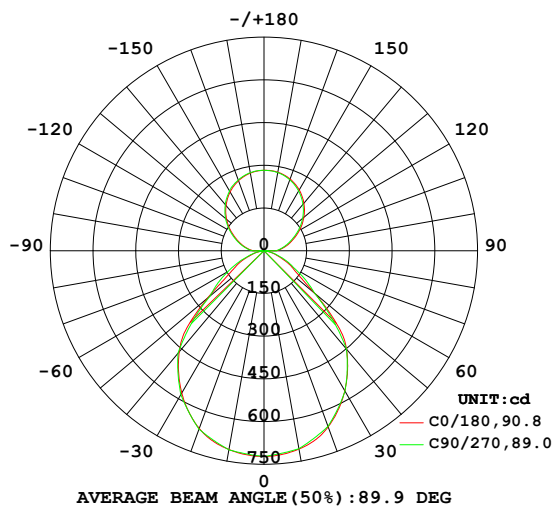


LUMINAIRE PHOTOMETRIC TEST REPORT

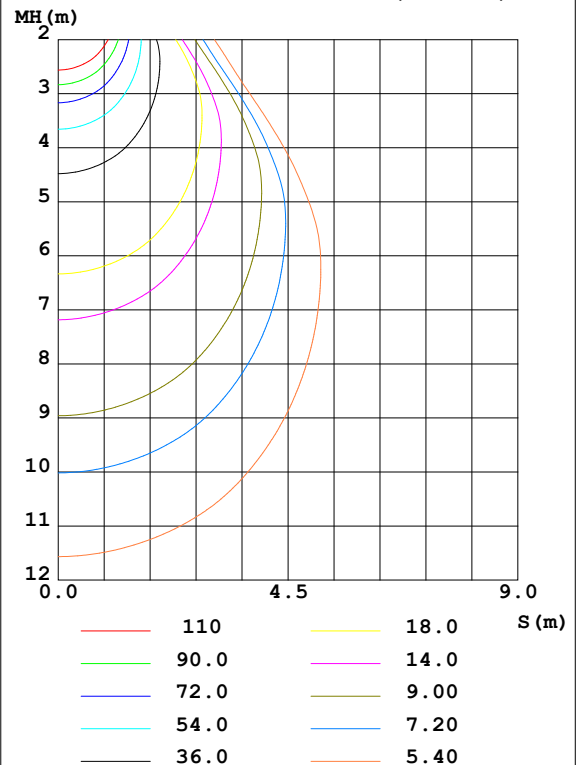
Test:U:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm		
NAME: SUGAR 350-U-20W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 101.04 lm/W			
MODEL	OSRAM-4000K	I _{max} (cd)	722.3	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)	2353.5	η UP, DN (C0-180)	19.6, 30.0
NOMINAL FLUX (lm)	2353.52	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	19.5, 30.9
LAMPS INSIDE	1	η up (%)	39.1	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220.0	η down (%)	60.9	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
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:

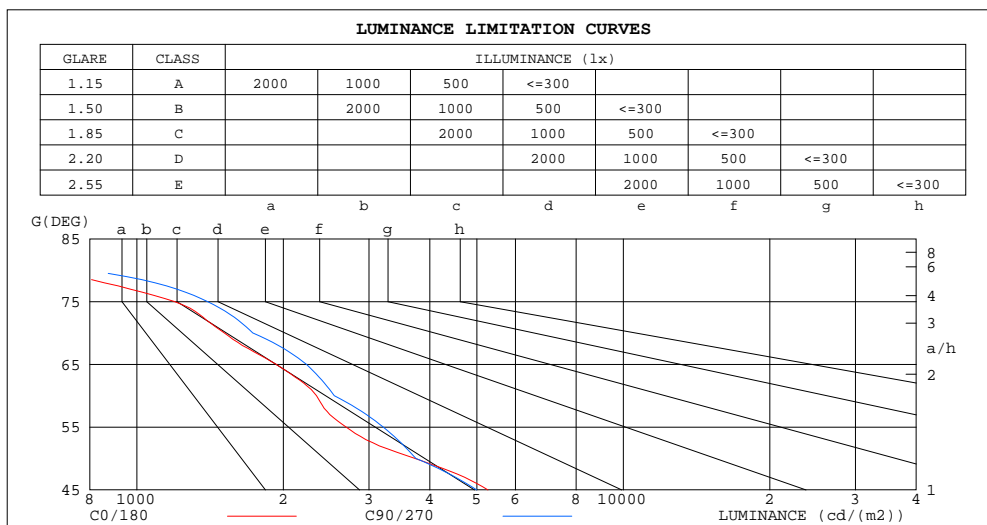
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	707.2	704.6	705.8	702.5	708.7	706.0	709.7	706.9	0- 10	68.01	68.01	2.89,2.89
20	658.3	655.8	656.6	650.4	664.5	657.8	666.9	662.3	10- 20	193.5	261.5	11.1,11.1
30	567.7	566.4	568.8	566.2	577.4	577.2	583.6	576.4	20- 30	284.6	546.2	23.2,23.2
40	451.0	444.1	450.6	455.1	462.9	463.6	469.5	464.5	30- 40	322.9	869.1	36.9,36.9
50	230.4	226.3	231.6	264.1	257.6	247.8	247.7	266.8	40- 50	274.7	1144	48.6,48.6
60	112.5	111.6	122.4	123.4	118.3	135.4	145.6	126.6	50- 60	161.0	1305	55.4,55.4
70	49.74	52.62	56.94	54.79	56.18	54.53	63.66	58.80	60- 70	86.50	1391	59.1,59.1
80	10.60	12.50	13.14	13.23	14.83	16.96	17.67	15.13	70- 80	36.88	1428	60.7,60.7
90	43.74	43.29	41.49	37.80	37.07	38.10	41.13	42.77	80- 90	4.971	1433	60.9,60.9
100	72.39	71.26	67.18	64.48	64.14	65.57	67.67	70.99	90-100	58.61	1492	63.4,63.4
110	105.2	103.7	98.84	96.15	94.99	96.60	99.97	103.5	100-110	88.35	1580	67.1,67.1
120	143.8	142.1	137.8	133.4	132.3	134.2	137.1	142.1	110-120	117.1	1697	72.1,72.1
130	182.8	181.4	177.1	172.5	171.5	172.8	176.0	181.1	120-130	141.0	1838	78.1,78.1
140	218.1	216.8	212.9	208.7	207.6	208.8	211.8	216.5	130-140	150.7	1989	84.5,84.5
150	247.2	246.1	243.0	239.5	238.4	239.6	242.8	246.8	140-150	143.0	2132	90.6,90.6
160	268.3	267.4	265.4	262.9	262.0	262.9	264.7	267.4	150-160	117.6	2250	95.6,95.6
170	280.3	279.7	278.9	277.5	277.1	277.6	278.6	279.8	160-170	77.10	2327	98.9,98.9
180	282.7	282.7	282.7	282.7	282.7	282.7	282.7	282.7	170-180	26.80	2354	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
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:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm		
NAME: SUGAR 350-U-20W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	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	35	0
80	635	787
75	1195	1397
70	1512	1731
65	1933	2231
60	2340	2545
55	2692	3210
50	3728	3746
45	5269	4995

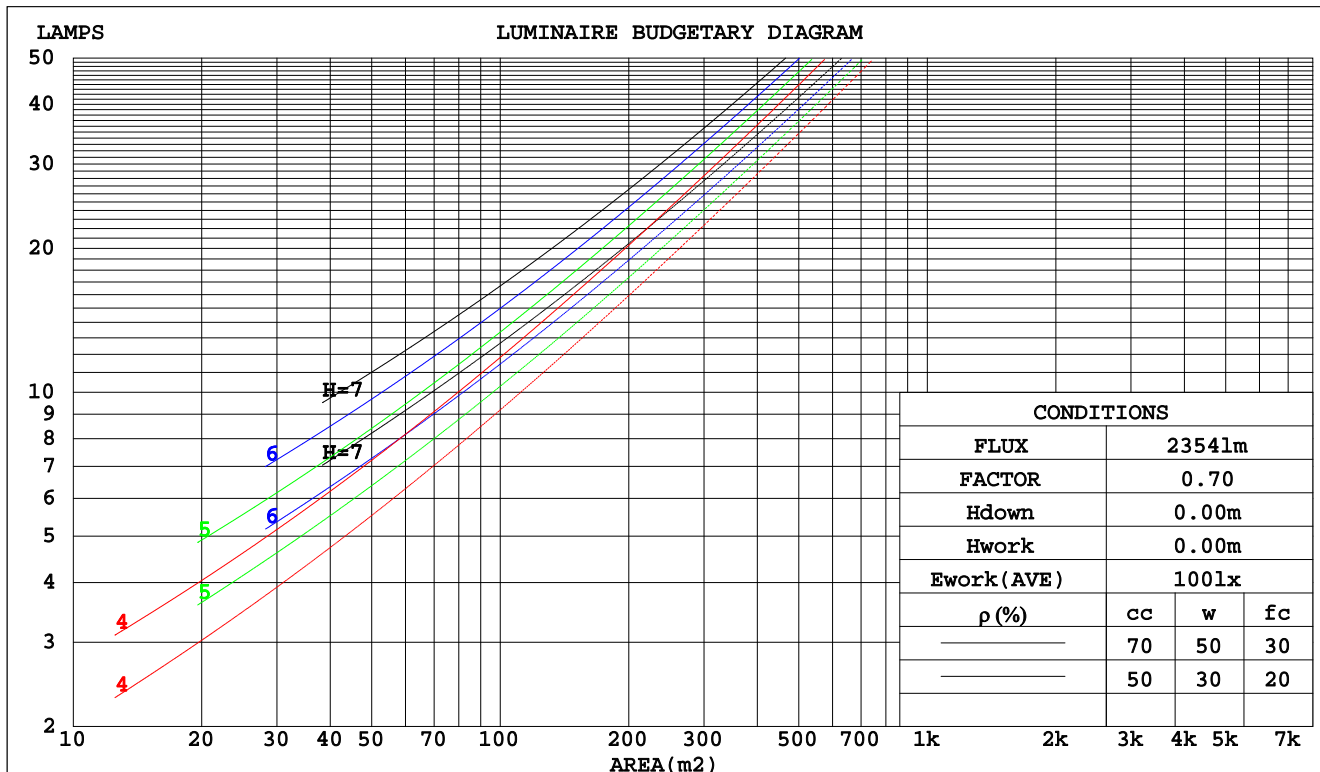
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2019-11-19

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:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm		
NAME: SUGAR 350-U-20W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	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	Coefficients of Utilization(CU)															
0.0	1.10	1.10	1.10	1.03	1.03	1.03	.89	.89	.89	.77	.77	.77	.66	.66	.66	.61
1.0	.98	.94	.91	.92	.89	.86	.80	.78	.76	.70	.68	.67	.60	.59	.58	.54
2.0	.87	.81	.76	.81	.77	.72	.72	.68	.65	.63	.60	.58	.55	.53	.51	.47
3.0	.77	.70	.65	.73	.67	.62	.64	.60	.56	.57	.53	.50	.49	.47	.45	.41
4.0	.69	.62	.56	.65	.59	.54	.58	.53	.49	.51	.47	.44	.45	.42	.40	.36
5.0	.62	.55	.49	.59	.52	.47	.52	.47	.43	.47	.42	.39	.41	.38	.35	.32
6.0	.56	.49	.43	.53	.46	.41	.48	.42	.38	.42	.38	.35	.38	.34	.31	.29
7.0	.51	.44	.38	.49	.42	.37	.44	.38	.34	.39	.34	.31	.35	.31	.28	.26
8.0	.47	.39	.34	.44	.38	.33	.40	.34	.30	.36	.31	.28	.32	.28	.26	.23
9.0	.43	.36	.31	.41	.34	.30	.37	.31	.28	.33	.29	.25	.30	.26	.23	.21
10.0	.40	.33	.28	.38	.31	.27	.34	.29	.25	.31	.26	.23	.28	.24	.21	.20



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
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:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm		
NAME: SUGAR 350-U-20W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

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	.250	.142	.045	.231	.132	.042	.196	.113	.036	.164	.095	.030	.134	.078	.025		
2.0	.238	.130	.040	.221	.122	.037	.189	.105	.033	.160	.090	.028	.133	.075	.024		
3.0	.223	.119	.036	.208	.111	.033	.179	.097	.029	.152	.083	.026	.127	.070	.022		
4.0	.209	.109	.032	.195	.102	.030	.168	.089	.027	.144	.077	.023	.121	.066	.020		
5.0	.196	.100	.029	.183	.094	.027	.158	.082	.024	.136	.072	.021	.115	.061	.018		
6.0	.183	.092	.026	.172	.087	.025	.149	.076	.022	.128	.067	.020	.109	.057	.017		
7.0	.172	.085	.024	.161	.080	.023	.141	.071	.020	.121	.062	.018	.103	.054	.016		
8.0	.162	.079	.022	.152	.075	.021	.133	.066	.019	.115	.058	.017	.098	.050	.015		
9.0	.153	.074	.021	.144	.070	.020	.126	.062	.018	.109	.055	.016	.093	.047	.014		
10.0	.145	.069	.019	.136	.066	.018	.119	.058	.016	.104	.051	.015	.089	.045	.013		

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	.488	.488	.488	.417	.417	.417	.285	.285	.285	.164	.164	.164	.052	.052	.052		
1.0	.477	.457	.439	.408	.392	.378	.279	.270	.262	.161	.156	.152	.051	.050	.049		
2.0	.467	.435	.407	.400	.374	.352	.274	.259	.245	.158	.151	.144	.051	.049	.047		
3.0	.459	.418	.385	.394	.361	.334	.270	.251	.234	.156	.146	.138	.050	.047	.045		
4.0	.452	.405	.370	.388	.350	.321	.267	.244	.226	.154	.143	.134	.050	.047	.044		
5.0	.446	.396	.359	.383	.342	.312	.264	.239	.220	.153	.140	.131	.049	.046	.043		
6.0	.439	.388	.351	.378	.336	.306	.261	.235	.216	.151	.138	.128	.049	.045	.042		
7.0	.434	.381	.345	.373	.331	.301	.258	.232	.213	.150	.137	.127	.048	.045	.042		
8.0	.428	.376	.340	.368	.326	.297	.255	.229	.211	.148	.135	.125	.048	.044	.042		
9.0	.423	.372	.337	.364	.322	.294	.252	.227	.209	.147	.134	.124	.048	.044	.041		
10.0	.418	.368	.334	.360	.319	.292	.250	.225	.207	.146	.133	.124	.047	.044	.041		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
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:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm										
NAME: SUGAR 350-U-20W-840					TYPE:Ceiling light			WEIGHT:		
SPEC.:4000K					DIM.: ϕ 350mm*H78mm			SERIAL No.:		
MFR.: NEKO LIGHTING AG					SUR.: ϕ 350mm			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	10.6	11.5	11.3	12.3	13.2	10.7	11.7	11.4	12.4	13.3
3H	10.9	11.8	11.7	12.5	13.5	11.1	12.0	11.9	12.7	13.7
4H	11.0	11.8	11.8	12.6	13.5	11.2	12.0	12.0	12.8	13.7
6H	11.0	11.7	11.8	12.5	13.5	11.2	11.9	12.0	12.7	13.7
8H	10.9	11.6	11.7	12.4	13.4	11.1	11.8	11.9	12.6	13.6
12H	10.8	11.5	11.6	12.3	13.3	11.0	11.7	11.9	12.5	13.5
4H 2H	10.6	11.4	11.4	12.2	13.1	10.7	11.5	11.5	12.3	13.2
3H	11.1	11.7	11.9	12.6	13.6	11.2	11.9	12.0	12.7	13.7
4H	11.2	11.8	12.1	12.6	13.7	11.4	12.0	12.2	12.8	13.8
6H	11.2	11.7	12.1	12.6	13.6	11.4	11.9	12.2	12.7	13.8
8H	11.1	11.6	12.0	12.5	13.6	11.3	11.8	12.2	12.7	13.7
12H	11.0	11.5	11.9	12.4	13.5	11.2	11.6	12.1	12.5	13.7
8H 4H	11.1	11.6	12.0	12.5	13.6	11.2	11.7	12.1	12.6	13.7
6H	11.1	11.5	12.1	12.4	13.6	11.3	11.7	12.2	12.6	13.7
8H	11.1	11.4	12.0	12.3	13.5	11.2	11.6	12.1	12.5	13.6
12H	11.0	11.3	11.9	12.2	13.4	11.1	11.4	12.1	12.4	13.5
12H 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	11.5	12.1	12.5	13.6
8H	11.0	11.3	11.9	12.2	13.4	11.2	11.4	12.1	12.4	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, 2354 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 3.0$)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
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:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm		
NAME: SUGAR 350-U-20W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

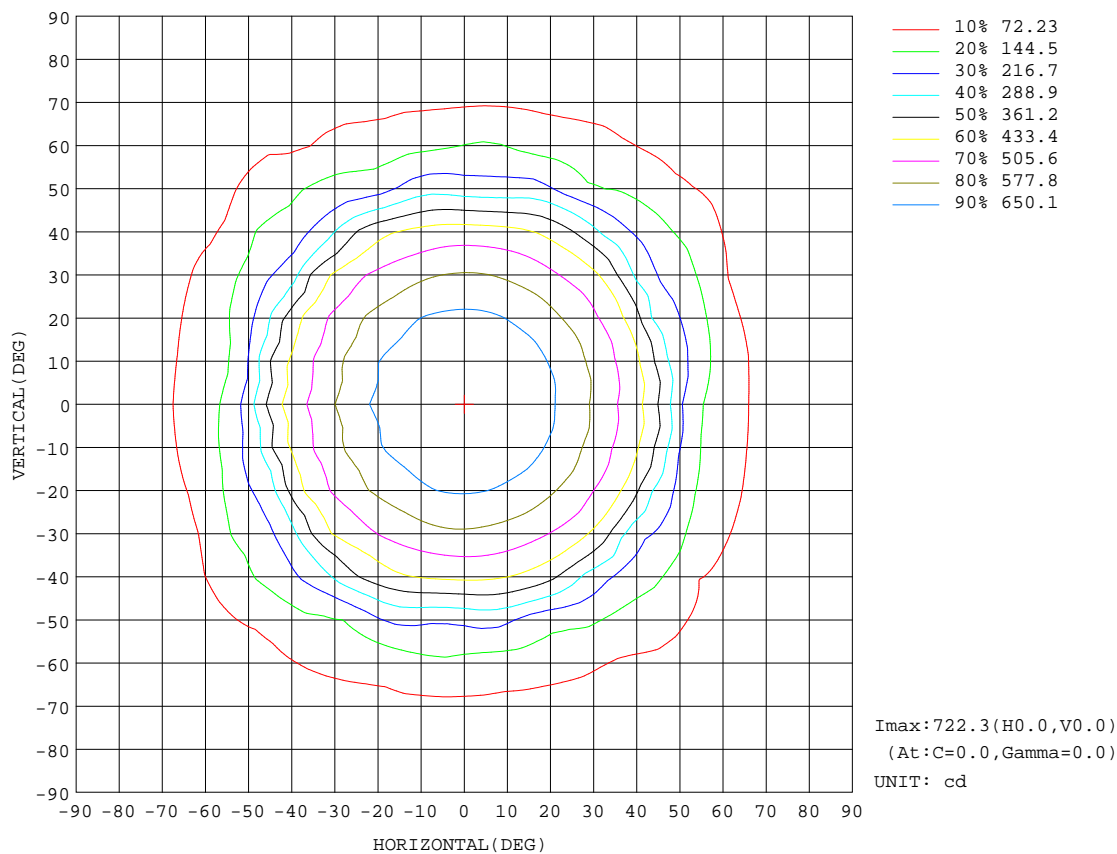
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	52	42	36	50	41	35	47	39	34	27
0.80	62	51	45	59	50	44	54	47	42	33
1.00	69	59	52	66	57	51	60	54	48	38
1.25	76	66	59	72	64	58	65	59	54	42
1.50	81	71	65	76	68	63	69	63	58	45
2.00	87	79	72	82	75	70	74	68	64	49
2.50	91	83	77	86	79	74	76	71	67	51
3.00	94	87	82	88	82	78	78	74	71	52
4.00	97	92	87	92	87	83	81	77	75	54
5.00	100	95	91	94	90	86	82	80	77	56
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
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:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm		
NAME: SUGAR 350-U-20W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

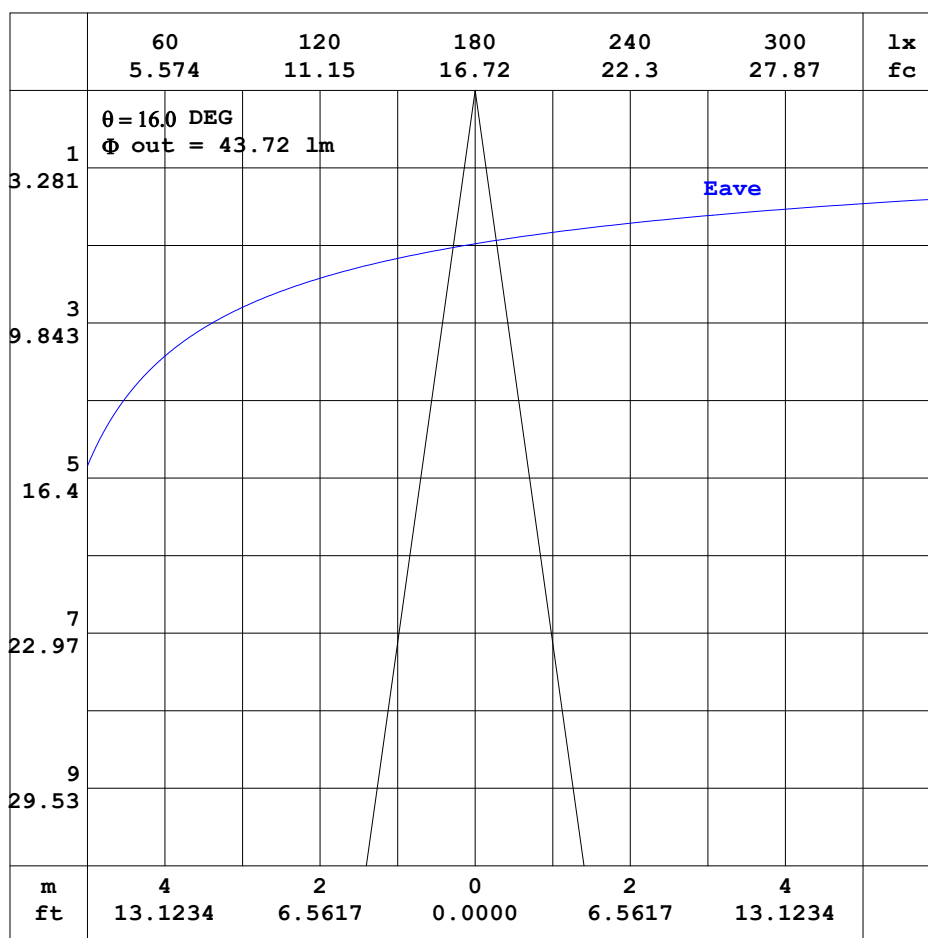


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2019-11-19

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:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm		
NAME: SUGAR 350-U-20W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:



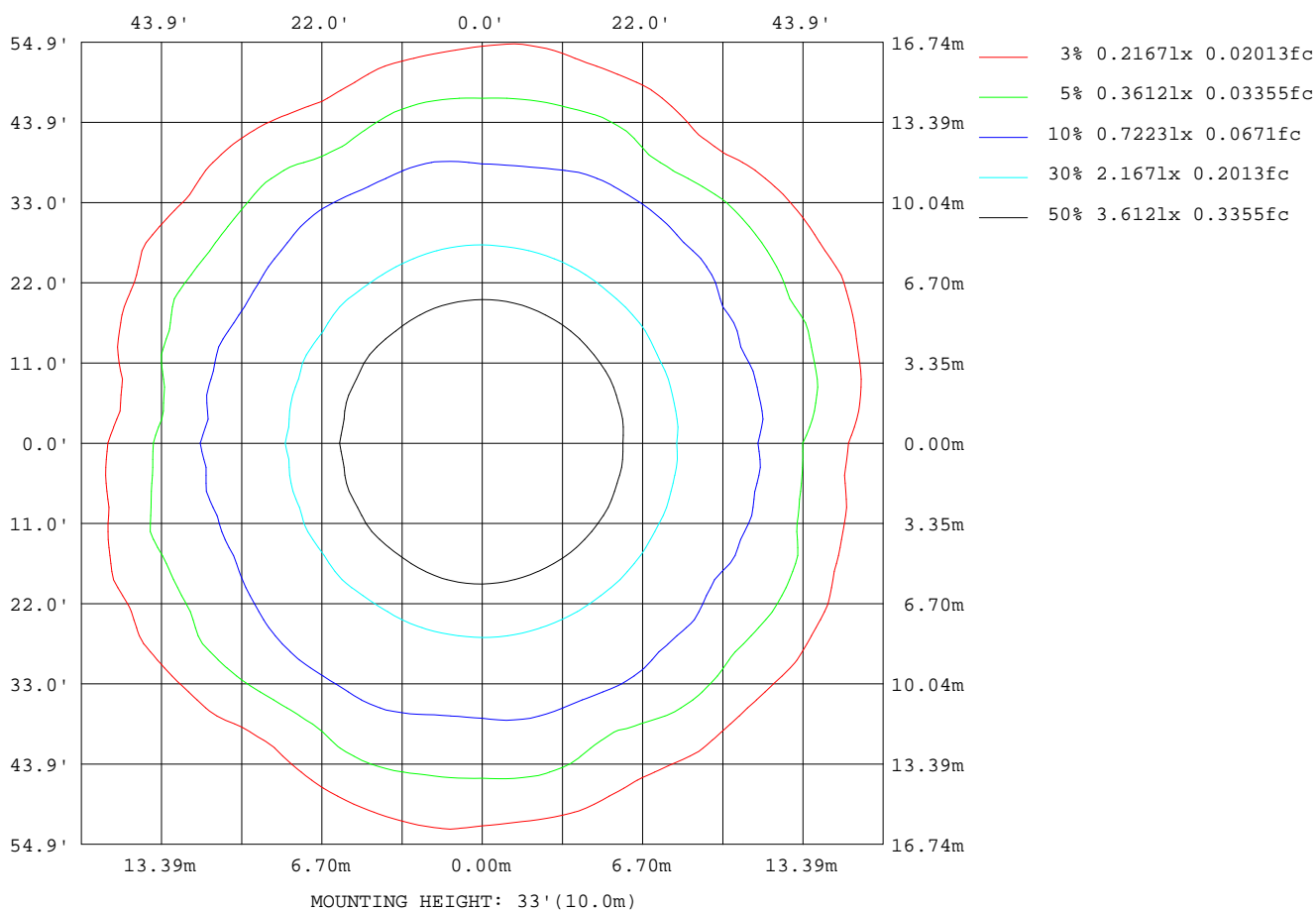
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
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:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm		
NAME: SUGAR 350-U-20W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	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
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:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm		
NAME: SUGAR 350-U-20W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

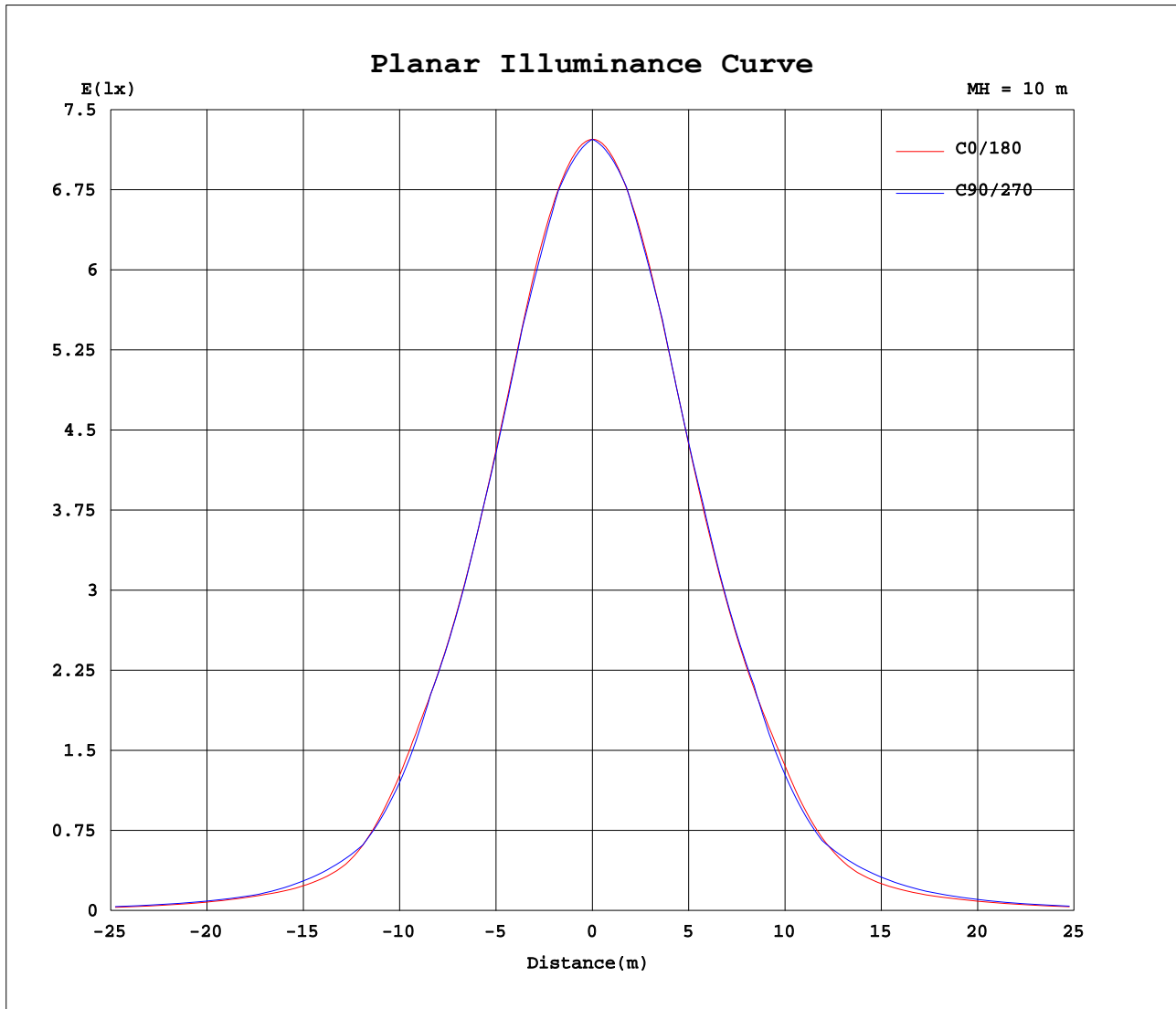
AvgL	cd/m2
L_0~180 (65) av	2055
L_0~180 (75) av	1305
L_0~180 (85) av	79
L_90~270 (65) av	2386
L_90~270 (75) av	1506
L_90~270 (85) av	0
L_45 (65) av	2069
L_45 (75) av	1321
L_45 (85) av	220

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
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
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:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm		
NAME: SUGAR 350-U-20W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	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	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722
5	718	718	717	717	716	716	716	716	715	715	715	715	715	715	714	714	714	714	714
10	707	706	706	706	705	705	705	705	705	705	705	705	705	705	705	706	706	706	706
15	689	688	688	688	688	687	687	687	688	687	685	684	684	683	683	682	682	681	681
20	658	658	659	660	658	657	657	657	656	656	655	654	653	654	654	655	655	656	657
25	617	618	620	618	616	616	617	618	616	614	614	613	613	613	613	613	613	613	613
30	568	570	572	568	568	571	571	568	567	566	566	566	564	564	564	564	566	567	569
35	512	517	516	512	516	516	512	513	515	514	511	509	508	508	509	509	510	510	510
40	451	459	454	452	453	447	445	446	444	444	441	442	444	445	447	448	450	451	451
45	358	377	359	365	344	343	330	324	345	342	336	343	354	354	352	354	353	347	340
50	230	243	235	248	242	242	221	229	235	226	236	246	243	232	229	240	248	244	232
55	148	147	152	156	175	180	179	171	164	169	170	164	152	149	158	174	180	180	177
60	113	110	112	114	107	115	117	128	117	112	117	120	116	114	117	118	115	114	122
65	78.5	77.9	78.1	77.0	73.2	69.1	80.8	85.1	84.9	78.8	73.9	75.1	79.5	81.4	83.2	84.5	83.9	86.7	90.7
70	49.7	52.2	53.5	54.5	53.6	55.3	54.9	53.9	55.0	52.6	49.4	52.4	53.6	52.1	51.0	53.1	54.4	57.9	56.9
75	29.7	32.0	32.5	30.7	30.2	31.2	30.0	32.5	33.4	29.7	27.7	30.2	30.9	29.9	29.6	32.1	33.7	35.2	34.8
80	10.6	13.1	12.1	12.1	12.9	12.8	13.6	15.1	14.4	12.5	11.7	12.1	11.6	11.1	10.8	11.5	12.5	12.3	13.1
85	0.30	0.61	0.67	0.66	1.65	1.91	0.67	0.53	0.66	1.01	1.17	1.19	0.98	0.78	0.55	0.35	0.18	0.05	0.00
90	43.7	41.5	40.0	39.1	39.1	39.5	40.3	41.4	42.4	43.3	43.3	43.1	42.7	42.5	0.00	0.00	41.9	41.7	41.5
95	57.3	55.8	54.9	54.6	55.3	56.2	57.1	57.0	56.8	56.5	56.4	56.2	56.1	55.7	55.3	54.9	54.6	54.3	53.9
100	72.4	72.3	72.3	72.2	72.2	72.1	72.0	71.8	71.5	71.3	71.0	70.7	70.4	70.0	69.5	68.9	68.3	67.7	67.2
105	88.8	88.8	88.7	88.6	88.4	88.1	87.9	87.6	87.3	86.9	86.5	86.0	85.5	85.0	84.5	84.0	83.4	82.9	82.4
110	105	106	106	106	106	105	105	105	104	104	103	103	102	101	101	100	99.9	99.3	98.8
115	124	124	125	125	124	124	124	123	123	122	122	121	121	120	120	119	118	118	117
120	144	144	144	144	144	144	144	143	143	142	142	142	141	140	140	139	138	138	138
125	164	164	164	164	164	164	164	163	163	162	162	161	161	160	160	159	158	158	158
130	183	183	183	183	183	183	183	182	182	181	181	181	180	180	179	178	178	177	177
135	201	201	201	202	202	201	201	201	200	200	199	199	199	198	197	197	196	196	196
140	218	218	218	218	218	218	218	218	217	217	216	216	216	215	215	214	214	213	213
145	234	234	234	234	234	234	234	233	233	232	232	232	232	231	230	230	230	229	229
150	247	247	247	247	247	247	247	247	246	246	246	246	245	245	244	244	244	243	243
155	259	259	259	259	259	259	259	258	258	258	258	257	257	257	256	256	256	255	255
160	268	268	268	268	268	268	268	268	268	267	267	267	267	267	266	266	266	266	265
165	275	276	276	276	276	275	275	275	275	275	275	275	275	274	274	274	274	274	273
170	280	280	280	280	280	280	280	280	280	280	280	280	280	279	279	279	279	279	279
175	283	283	283	283	283	283	282	282	282	282	282	282	282	282	282	282	282	282	282
180	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
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:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm		
NAME: SUGAR 350-U-20W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

Table--2

UNIT: cd

γ (DEG) \ C (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722
5	714	714	714	714	714	714	714	714	714	714	715	715	715	716	717	717	718	719	718
10	706	705	705	705	705	704	704	703	702	702	702	701	702	703	704	705	707	709	707
15	681	681	680	680	681	681	682	684	686	688	686	685	683	682	683	686	689	692	689
20	657	657	656	655	654	652	651	650	650	653	656	660	658	655	652	654	659	665	660
25	613	612	612	612	612	614	616	618	615	612	610	613	619	620	614	612	617	625	618
30	569	569	568	567	565	563	561	563	566	572	570	565	566	573	572	565	568	577	568
35	509	509	509	510	510	512	514	511	509	511	517	521	513	513	522	513	512	523	512
40	450	450	451	451	450	446	442	445	455	456	447	447	459	446	452	456	448	463	449
45	338	343	355	365	371	376	374	365	357	363	363	341	348	354	336	373	347	384	353
50	228	234	252	265	266	258	258	264	264	260	247	242	232	237	241	254	243	258	228
55	180	180	185	186	179	162	153	166	180	189	196	182	182	185	195	177	168	163	145
60	133	131	124	119	119	116	113	117	123	125	127	140	134	138	121	117	120	118	110
65	94.9	92.3	87.6	81.5	83.0	85.5	86.3	86.1	84.0	78.7	76.4	85.3	92.4	82.4	75.6	76.3	83.6	88.5	87.3
70	56.5	57.9	61.1	57.3	56.1	56.6	57.7	56.9	54.8	56.5	58.9	59.0	60.9	57.6	58.0	57.2	56.4	56.2	50.0
75	35.3	35.9	36.9	34.4	33.1	32.8	34.0	33.7	31.5	33.1	35.7	35.1	33.7	34.1	33.6	31.9	31.7	35.2	35.8
80	14.1	13.9	13.7	13.8	13.5	13.0	13.7	13.8	13.2	13.9	14.9	16.5	15.9	16.4	14.3	13.9	13.0	14.8	12.3
85	0.05	0.20	0.42	0.73	1.01	1.19	1.48	1.69	1.70	1.57	1.30	1.20	2.56	2.49	1.42	1.38	0.67	1.02	0.50
90	41.0	40.4	0.00	0.00	38.9	38.5	38.2	38.0	37.8	37.6	37.4	37.2	37.2	37.1	37.1	37.1	37.1	37.1	36.9
95	53.4	52.8	52.3	52.0	51.7	51.5	51.2	50.9	50.6	50.5	50.4	50.3	50.2	50.0	49.9	50.0	50.1	50.2	50.3
100	66.8	66.5	66.2	66.0	65.8	65.5	65.2	64.8	64.5	64.4	64.3	64.3	64.1	63.9	63.8	63.9	64.0	64.1	64.2
105	82.0	81.6	81.3	81.0	80.8	80.6	80.4	80.1	79.9	79.7	79.5	79.4	79.2	79.1	79.0	79.0	79.0	79.1	79.1
110	98.4	98.0	97.6	97.3	96.9	96.7	96.5	96.3	96.1	95.9	95.7	95.4	95.3	95.1	95.1	95.0	95.0	95.0	94.9
115	117	116	116	116	115	115	115	114	114	114	113	113	113	113	113	113	113	112	112
120	137	136	136	136	135	135	135	134	133	133	133	133	133	132	132	132	132	132	132
125	157	156	156	155	155	155	154	154	153	153	153	153	152	152	152	152	152	152	152
130	176	176	175	175	174	174	174	173	173	172	172	172	172	171	171	171	171	171	171
135	195	194	194	193	193	193	192	192	191	191	191	191	190	190	190	190	190	190	190
140	212	212	211	211	211	210	210	209	209	209	208	208	208	208	207	207	207	208	208
145	228	228	227	227	227	226	226	225	225	225	225	225	224	224	224	224	224	224	224
150	243	242	242	241	241	241	240	240	240	239	239	239	239	239	238	238	238	238	238
155	255	254	254	254	254	253	253	253	252	252	252	252	252	251	251	251	251	251	251
160	265	265	264	264	264	264	264	263	263	263	263	263	262	262	262	262	262	262	262
165	273	273	273	273	272	272	272	272	271	271	271	271	271	271	271	271	271	271	271
170	279	279	278	278	278	278	278	278	278	277	277	277	277	277	277	277	277	277	277
175	282	282	282	282	282	281	281	281	281	281	281	281	281	281	281	281	281	281	281
180	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
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:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm		
NAME: SUGAR 350-U-20W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	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	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722
5	718	717	717	716	716	716	716	716	716	715	715	716	716	716	716	716	716	716	716
10	706	705	704	704	704	704	705	706	707	707	708	709	709	709	710	710	710	710	709
15	687	686	685	687	689	691	693	692	690	689	688	688	687	688	688	688	688	688	689
20	656	655	658	662	665	662	659	658	658	660	662	663	665	666	666	667	667	667	666
25	613	616	623	623	619	617	620	624	628	626	625	623	623	623	623	624	625	626	626
30	565	573	575	570	571	578	582	577	574	573	574	576	578	580	581	583	584	584	583
35	513	522	515	517	528	524	520	521	524	527	524	523	522	523	524	526	527	527	527
40	457	455	452	466	453	450	461	464	455	455	459	462	464	467	469	471	469	468	468
45	381	355	374	356	340	369	360	350	364	383	386	375	370	371	371	367	360	358	363
50	246	246	254	243	234	231	244	248	262	266	259	252	257	269	272	261	248	246	251
55	149	172	173	188	181	176	175	179	186	179	166	165	177	192	199	199	197	199	200
60	114	116	125	121	138	134	131	135	132	132	128	122	125	132	132	137	146	153	150
65	89.5	85.8	75.7	74.7	83.6	95.4	91.4	83.3	81.0	87.2	91.2	87.6	87.8	93.9	95.0	97.8	103	109	109
70	50.6	54.3	56.5	58.5	56.0	61.0	61.8	54.5	53.3	57.7	60.7	58.1	58.2	61.8	61.4	62.0	63.7	66.0	66.2
75	34.6	32.1	35.6	36.2	38.1	36.8	36.6	37.1	37.5	36.8	36.4	35.0	35.3	37.6	38.7	39.1	40.2	41.8	41.8
80	12.5	13.8	16.1	16.3	18.8	17.8	16.3	17.0	17.4	16.7	16.0	16.0	15.4	15.5	17.0	16.8	17.7	18.0	17.6
85	1.01	1.11	2.16	2.09	0.88	1.60	2.46	2.75	2.61	2.14	1.65	1.27	0.84	0.49	0.25	0.06	0.00	0.07	0.26
90	36.8	36.8	36.9	37.1	37.4	37.6	37.8	38.1	38.4	38.7	39.0	39.3	39.7	40.0	40.4	40.8	41.1	41.3	41.4
95	50.3	50.3	50.3	50.4	50.5	50.8	51.1	51.4	51.6	51.8	52.1	52.4	52.8	53.2	53.5	53.8	54.1	54.4	54.6
100	64.2	64.2	64.2	64.3	64.4	64.8	65.2	65.6	65.8	66.0	66.3	66.7	67.1	67.5	67.6	67.6	67.7	68.2	68.7
105	79.1	79.2	79.4	79.6	79.8	80.1	80.4	80.7	81.1	81.5	81.8	82.1	82.4	82.6	82.9	83.1	83.4	83.8	84.1
110	94.9	94.9	95.2	95.5	95.8	96.1	96.3	96.6	97.0	97.3	97.7	98.1	98.4	98.8	99.2	99.6	100.0	100	101
115	112	112	112	113	113	113	114	114	114	115	115	115	116	116	116	117	118	118	119
120	132	132	132	132	132	133	134	134	134	134	134	135	136	136	137	137	137	138	139
125	152	152	152	152	152	152	153	154	154	154	154	155	155	156	156	156	157	157	158
130	171	171	171	171	171	172	172	173	173	173	173	174	174	175	175	176	176	177	177
135	190	190	190	190	190	190	191	191	192	192	192	192	193	194	194	194	194	195	196
140	207	207	207	207	207	208	208	209	209	209	209	210	210	211	211	211	212	212	213
145	224	224	224	224	224	224	225	225	225	225	226	226	227	227	227	228	228	228	229
150	239	239	239	238	239	239	239	240	240	240	240	241	241	241	242	242	243	243	244
155	251	251	251	251	251	252	252	252	252	253	253	253	253	254	254	255	255	255	256
160	262	262	262	262	262	262	263	263	263	263	263	264	264	264	264	265	265	265	265
165	271	271	271	271	271	271	271	271	272	272	272	272	272	273	273	273	273	273	273
170	277	277	277	277	277	277	277	278	278	278	278	278	278	278	278	279	279	279	279
175	281	281	281	281	281	281	281	281	281	281	281	282	282	282	282	282	282	282	282
180	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
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:220.6V I:0.1056A P:23.29W PF:0.9637 Freq:49.90Hz Lamp Flux:2353.52x1 lm		
NAME: SUGAR 350-U-20W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	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	722	722	722	722	722	722	722	722	722	722	722	722	722	722	722				
5	716	716	716	716	716	716	716	716	716	717	717	717	717	717	718				
10	709	709	708	708	707	707	707	707	707	707	707	706	706	706	707				
15	689	689	689	689	689	690	690	691	690	690	690	690	690	690	689	689			
20	665	664	663	662	662	662	662	662	662	662	661	661	662	661	659				
25	626	626	625	624	624	623	623	623	625	623	622	622	622	623	619				
30	582	580	579	579	579	578	576	576	577	579	578	576	575	577	572				
35	528	527	526	525	524	524	526	527	525	523	526	525	520	522	520				
40	469	468	468	467	465	462	464	466	467	461	456	461	459	458	461				
45	370	381	388	390	385	381	383	380	365	360	360	348	366	361	378				
50	264	280	285	282	281	276	267	275	267	244	248	243	255	256	259				
55	200	203	195	173	163	180	193	195	195	193	187	198	192	189	171				
60	139	135	136	132	126	126	127	129	136	138	143	134	129	121	118				
65	101	93.6	93.1	94.8	94.0	89.2	90.2	85.5	78.1	90.2	91.0	87.3	72.9	74.4	78.9				
70	65.5	63.6	62.5	62.6	64.1	61.6	58.8	59.7	62.4	62.4	59.9	59.3	59.8	59.2	57.1				
75	40.9	39.6	37.7	35.8	36.5	36.3	33.3	34.9	38.6	33.9	34.9	33.3	35.0	32.4	30.7				
80	16.8	16.4	15.8	14.9	15.5	15.9	15.1	15.0	15.0	15.9	16.4	15.9	15.3	15.0	13.6				
85	0.53	0.87	1.20	1.41	1.69	1.80	1.91	1.51	0.76	0.34	2.15	2.18	0.43	0.57	0.63				
90	41.5	41.6	41.8	42.0	42.3	42.5	42.8	43.0	43.2	43.4	43.5	43.6	43.7	43.7	43.7				
95	54.8	55.0	55.2	55.4	55.7	56.0	56.3	56.5	56.7	56.9	57.1	57.3	57.5	57.5	57.4				
100	69.3	69.6	69.8	70.0	70.3	70.7	71.0	71.3	71.5	71.8	72.0	72.1	72.3	72.3	72.4				
105	84.6	85.0	85.4	85.8	86.2	86.5	86.8	87.0	87.3	87.5	87.7	87.9	88.1	88.3	88.5				
110	101	102	102	102	103	103	103	104	104	104	105	105	105	105	105				
115	119	120	120	121	121	121	122	122	122	123	123	123	124	124	124				
120	139	140	140	140	141	141	142	142	143	143	143	144	144	144	144				
125	159	159	159	160	161	161	162	162	162	162	163	163	164	164	164				
130	178	178	179	179	180	180	181	181	182	182	182	183	183	183	183				
135	196	197	197	198	198	199	199	200	200	200	200	201	201	201	201				
140	214	214	214	215	215	216	217	217	217	217	218	218	218	218	218				
145	230	230	230	231	231	232	232	232	233	233	233	233	234	234	234				
150	244	244	244	245	245	246	247	247	247	246	247	247	247	247	247				
155	256	256	256	257	257	257	258	258	258	258	258	259	259	259	259				
160	266	266	266	266	267	267	267	268	268	268	268	268	268	268	268				
165	274	274	274	274	274	275	275	275	275	275	275	275	276	276	276				
170	279	279	279	279	280	280	280	280	280	280	280	280	280	280	280				
175	282	282	282	282	282	282	282	282	282	282	283	283	283	283	283				
180	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283				

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
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: