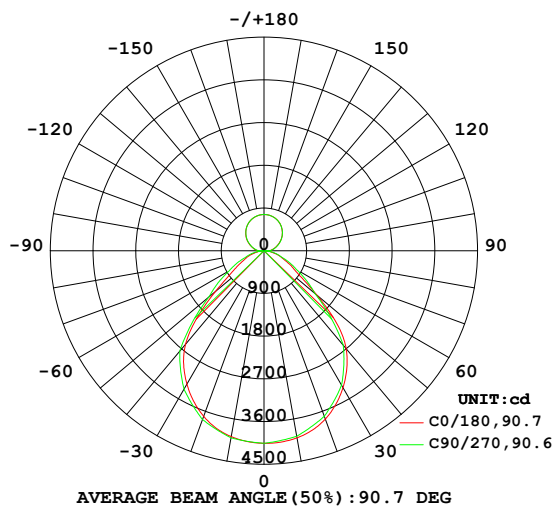


LUMINAIRE PHOTOMETRIC TEST REPORT

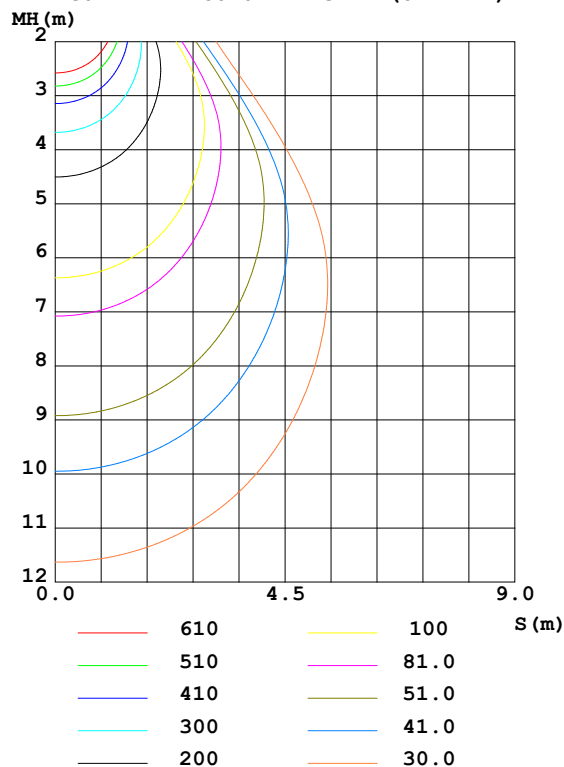
Test:U:220.4V I:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm		
NAME: SUGAR 900-U-90W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 900mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 900mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 114.88 lm/W			
MODEL	OSRAM-4000K	I _{max} (cd)	4058	S/MH (C0/180)	1.20
NOMINAL POWER (W)	96	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	10943	η UP, DN (C0-180)	11.9, 37.6
NOMINAL FLUX (lm)	10943.4	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	11.7, 38.8
LAMPS INSIDE	1	η up (%)	23.6	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220.0	η down (%)	76.4	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: 2020-03-05

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:

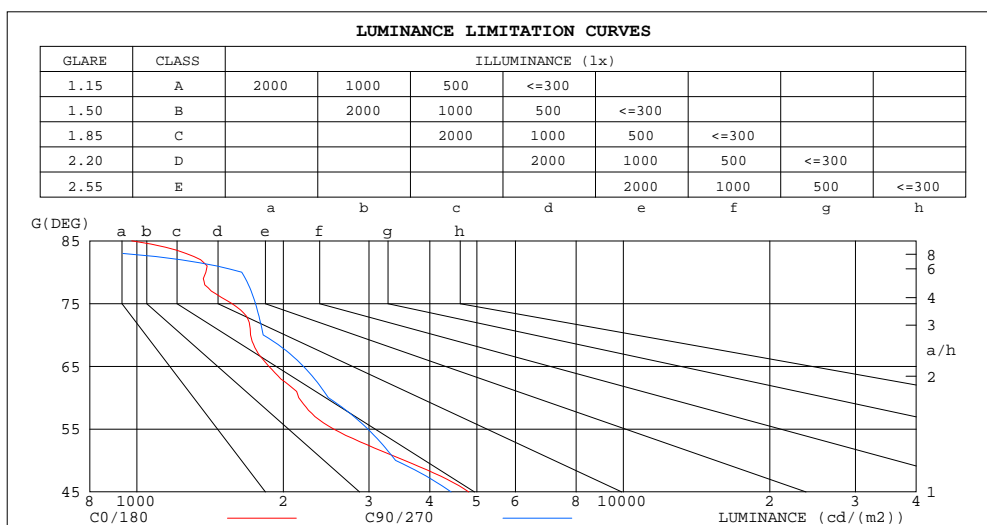
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	4002	3969	3969	3951	3976	3972	4003	3996	0- 10	382.8	382.8	3.5,3.5
20	3776	3718	3713	3674	3713	3725	3786	3773	10- 20	1093	1476	13.5,13.5
30	3329	3286	3269	3216	3248	3303	3368	3349	20- 30	1625	3101	28.3,28.3
40	2695	2656	2599	2528	2572	2662	2761	2729	30- 40	1866	4968	45.4,45.4
50	1456	1428	1396	1344	1331	1431	1514	1536	40- 50	1582	6549	59.8,59.8
60	686.6	793.1	789.9	662.1	642.9	798.5	848.3	730.3	50- 60	934.2	7484	68.4,68.4
70	374.1	389.8	397.2	365.2	361.3	401.9	425.7	384.7	60- 70	527.2	8011	73.2,73.2
80	153.7	167.9	182.2	152.1	146.3	176.9	192.4	168.3	70- 80	285.3	8296	75.8,75.8
90	104.5	98.10	122.4	134.9	123.4	116.5	106.9	93.33	80- 90	62.02	8358	76.4,76.4
100	192.1	185.5	203.2	214.7	203.9	196.8	189.7	182.3	90-100	168.8	8527	77.9,77.9
110	286.4	277.4	296.8	310.1	293.9	289.5	284.8	277.8	100-110	255.7	8783	80.3,80.3
120	394.4	383.1	401.1	413.8	398.4	396.1	390.3	385.4	110-120	338.5	9121	83.3,83.3
130	501.9	489.8	502.0	513.7	498.9	501.3	493.9	496.3	120-130	401.9	9523	87,87
140	592.9	585.1	593.6	600.4	589.7	594.2	588.3	583.3	130-140	422.2	9945	90.9,90.9
150	669.2	662.7	668.2	672.8	664.9	669.1	665.1	661.9	140-150	395.1	10340	94.5,94.5
160	723.8	719.2	722.3	725.2	719.7	723.0	720.6	718.5	150-160	321.3	10662	97.4,97.4
170	755.8	753.5	754.9	756.1	753.5	755.3	754.2	753.1	160-170	209.2	10871	99.3,99.3
180	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5	170-180	72.55	10943	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:2020-03-05

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 γ 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:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm		
NAME: SUGAR 900-U-90W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 900mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 900mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	976	0
80	1386	1643
75	1569	1753
70	1713	1819
65	1868	2200
60	2151	2474
55	2537	2985
50	3548	3402
45	4811	4425

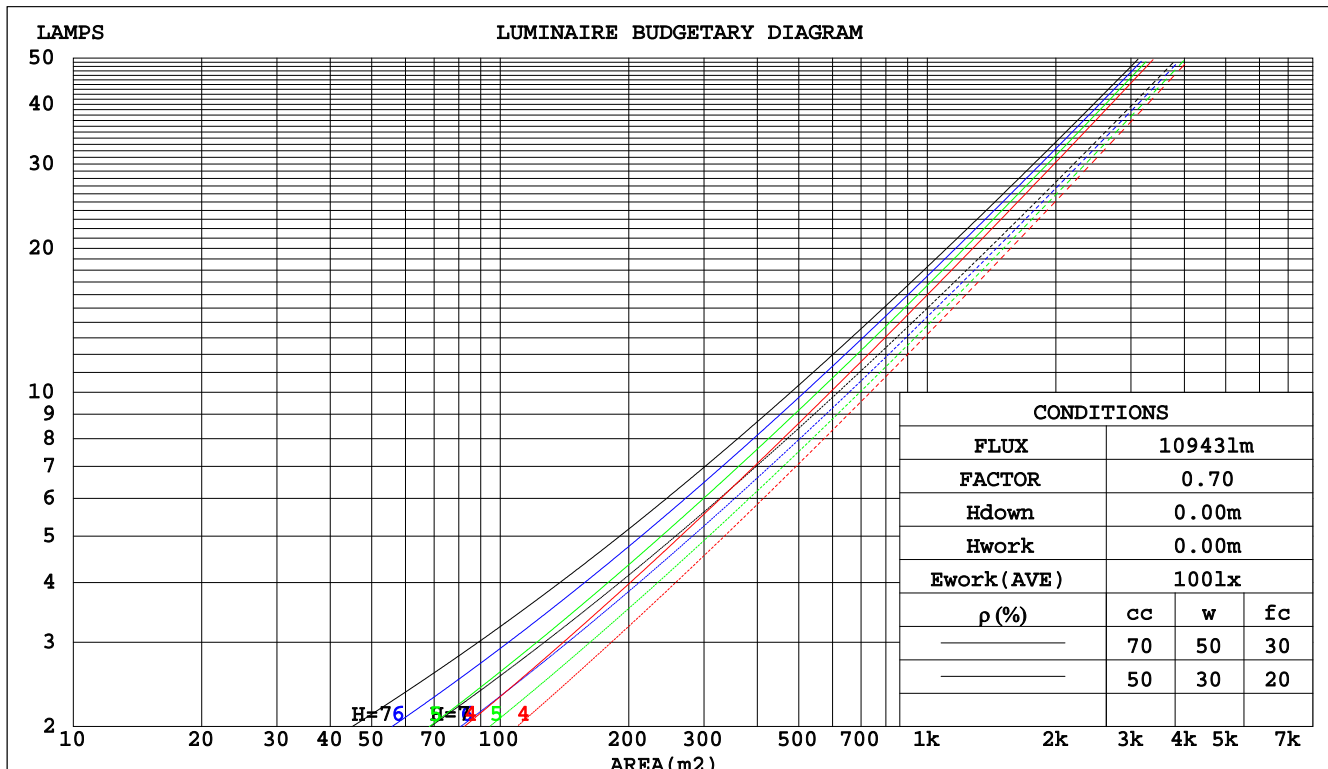
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2020-03-05

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 γ 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:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm		
NAME: SUGAR 900-U-90W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: φ900mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ900mm	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	1.13	1.13	1.13	1.08	1.08	1.08	.98	.98	.98	.89	.89	.89	.80	.80	.80	.76
1.0	1.01	.97	.94	.97	.93	.91	.88	.86	.83	.80	.78	.77	.73	.72	.71	.67
2.0	.90	.84	.79	.86	.81	.77	.79	.75	.71	.72	.69	.66	.66	.64	.61	.58
3.0	.80	.73	.68	.77	.71	.66	.71	.66	.62	.65	.61	.58	.60	.57	.54	.51
4.0	.72	.64	.59	.69	.62	.57	.64	.58	.54	.59	.54	.51	.54	.51	.47	.45
5.0	.65	.57	.51	.62	.55	.50	.58	.52	.47	.53	.49	.45	.49	.45	.42	.40
6.0	.59	.51	.45	.57	.49	.44	.53	.47	.42	.49	.44	.40	.45	.41	.38	.35
7.0	.54	.46	.40	.52	.45	.39	.48	.42	.38	.45	.40	.36	.42	.37	.34	.32
8.0	.49	.41	.36	.47	.40	.35	.44	.38	.34	.41	.36	.32	.38	.34	.31	.29
9.0	.45	.38	.33	.44	.37	.32	.41	.35	.31	.38	.33	.29	.36	.31	.28	.26
10.0	.42	.35	.30	.40	.34	.29	.38	.32	.28	.35	.30	.27	.33	.29	.26	.24



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2020-03-05

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:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm		
NAME: SUGAR 900-U-90W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 900mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 900mm	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	.256	.145	.046	.241	.138	.044	.215	.123	.039	.191	.110	.035	.169	.098	.032		
2.0	.243	.133	.041	.230	.127	.039	.207	.115	.036	.185	.104	.032	.165	.093	.029		
3.0	.228	.121	.036	.217	.116	.035	.195	.106	.032	.175	.096	.029	.157	.087	.027		
4.0	.213	.111	.033	.203	.106	.031	.184	.097	.029	.166	.089	.027	.149	.081	.025		
5.0	.200	.102	.029	.190	.098	.028	.173	.090	.026	.156	.082	.024	.141	.075	.023		
6.0	.187	.094	.027	.179	.090	.026	.162	.083	.024	.147	.077	.022	.133	.070	.021		
7.0	.176	.087	.025	.168	.084	.024	.153	.077	.022	.139	.071	.021	.126	.065	.019		
8.0	.166	.081	.023	.158	.078	.022	.145	.072	.021	.132	.067	.019	.119	.061	.018		
9.0	.156	.076	.021	.150	.073	.020	.137	.068	.019	.125	.063	.018	.113	.058	.017		
10.0	.148	.071	.020	.142	.068	.019	.130	.064	.018	.119	.059	.017	.108	.054	.016		

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	.370	.370	.370	.317	.317	.317	.216	.216	.216	.124	.124	.124	.040	.040	.040	
1.0	.358	.338	.320	.306	.290	.276	.210	.200	.191	.121	.116	.111	.039	.037	.036	
2.0	.348	.315	.287	.298	.271	.248	.205	.188	.173	.118	.109	.101	.038	.035	.033	
3.0	.340	.298	.264	.292	.257	.229	.200	.178	.160	.116	.104	.095	.037	.034	.031	
4.0	.333	.285	.248	.285	.246	.216	.196	.171	.152	.114	.100	.090	.037	.033	.030	
5.0	.326	.275	.237	.280	.238	.206	.193	.166	.146	.112	.097	.086	.036	.032	.028	
6.0	.319	.266	.229	.274	.231	.199	.189	.161	.141	.110	.095	.084	.035	.031	.028	
7.0	.313	.260	.222	.269	.225	.194	.186	.158	.137	.108	.093	.082	.035	.030	.027	
8.0	.307	.254	.218	.264	.220	.190	.183	.155	.135	.106	.091	.080	.034	.030	.027	
9.0	.302	.249	.214	.260	.217	.187	.180	.152	.133	.105	.090	.079	.034	.030	.026	
10.0	.297	.245	.211	.256	.213	.184	.178	.150	.131	.104	.089	.078	.034	.029	.026	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2020-03-05

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:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm											
NAME: SUGAR 900-U-90W-840					TYPE:Ceiling light			WEIGHT:			
SPEC.:4000K					DIM.: φ 900mm*H105mm			SERIAL No.:			
MFR.: NEKO LIGHTING AG					SUR.: φ 900mm			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	2H	6.1	7.2	6.7	7.7	8.4	6.4	7.5	7.0	8.0	8.6
	3H	6.6	7.6	7.2	8.2	8.8	6.9	7.9	7.5	8.5	9.2
	4H	6.8	7.7	7.4	8.3	9.0	7.2	8.1	7.8	8.7	9.4
	6H	6.9	7.8	7.6	8.4	9.1	7.4	8.2	8.0	8.9	9.6
	8H	7.0	7.8	7.6	8.4	9.1	7.4	8.2	8.0	8.9	9.6
	12H	6.9	7.7	7.6	8.4	9.1	7.3	8.1	8.0	8.8	9.5
4H	2H	6.3	7.2	6.9	7.8	8.5	6.5	7.4	7.1	8.0	8.7
	3H	6.9	7.7	7.6	8.4	9.1	7.2	8.0	7.9	8.6	9.4
	4H	7.3	8.0	8.0	8.6	9.4	7.5	8.2	8.2	8.9	9.7
	6H	7.5	8.1	8.2	8.8	9.6	7.8	8.4	8.5	9.1	10.0
	8H	7.5	8.1	8.2	8.8	9.6	7.9	8.4	8.6	9.2	10.0
	12H	7.5	8.0	8.3	8.8	9.6	7.8	8.3	8.6	9.1	9.9
8H	4H	7.3	7.9	8.1	8.6	9.5	7.6	8.2	8.3	8.9	9.7
	6H	7.7	8.1	8.4	8.9	9.8	8.0	8.4	8.7	9.2	10.1
	8H	7.8	8.2	8.5	8.9	9.8	8.1	8.5	8.8	9.2	10.1
	12H	7.8	8.1	8.6	8.9	9.9	8.0	8.4	8.8	9.1	10.1
12H	4H	7.3	7.8	8.1	8.6	9.4	7.6	8.1	8.3	8.8	9.7
	6H	7.7	8.1	8.5	8.8	9.8	8.0	8.4	8.8	9.1	10.1
	8H	7.8	8.2	8.6	8.9	9.9	8.1	8.4	8.9	9.2	10.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.7 / - 0.7					+ 0.5 / - 0.5					
1.5H	+ 0.5 / - 0.5					+ 0.4 / - 0.5					
2.0H	+ 1.7 / - 1.1					+ 1.4 / - 1.1					

CIE Pub.117, 10943 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 8.3$)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2020-03-05

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:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm		
NAME: SUGAR 900-U-90W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 900mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 900mm	Shielding Angle:

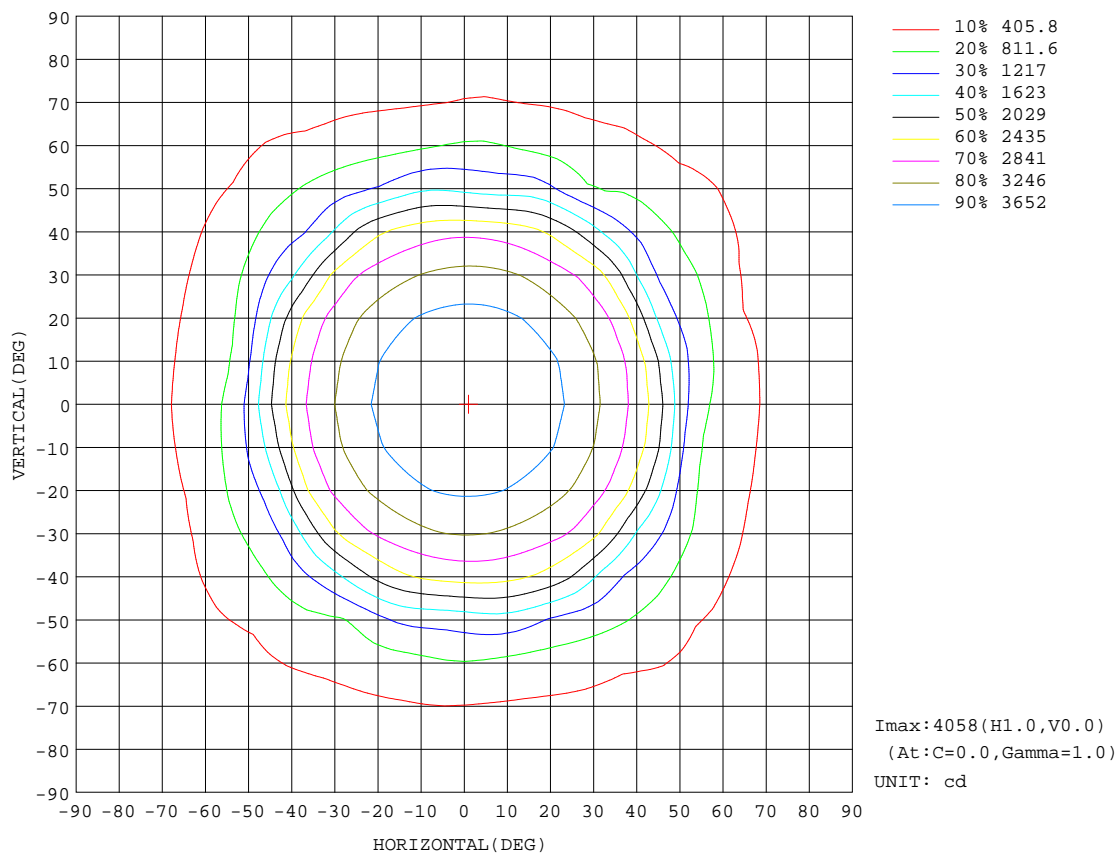
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	47	41	56	47	41	54	45	40	34
0.80	67	57	50	65	56	50	62	54	48	41
1.00	75	65	58	72	63	57	68	62	56	47
1.25	81	72	66	79	70	64	74	67	62	52
1.50	86	77	71	83	75	69	77	71	66	56
2.00	92	84	78	88	81	76	82	77	72	60
2.50	95	88	83	92	85	80	84	80	76	63
3.00	98	92	87	94	89	84	87	83	79	65
4.00	102	97	92	97	93	89	89	86	83	68
5.00	104	99	96	99	96	92	91	88	86	69
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:2020-03-05

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:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm		
NAME: SUGAR 900-U-90W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 900mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 900mm	Shielding Angle:

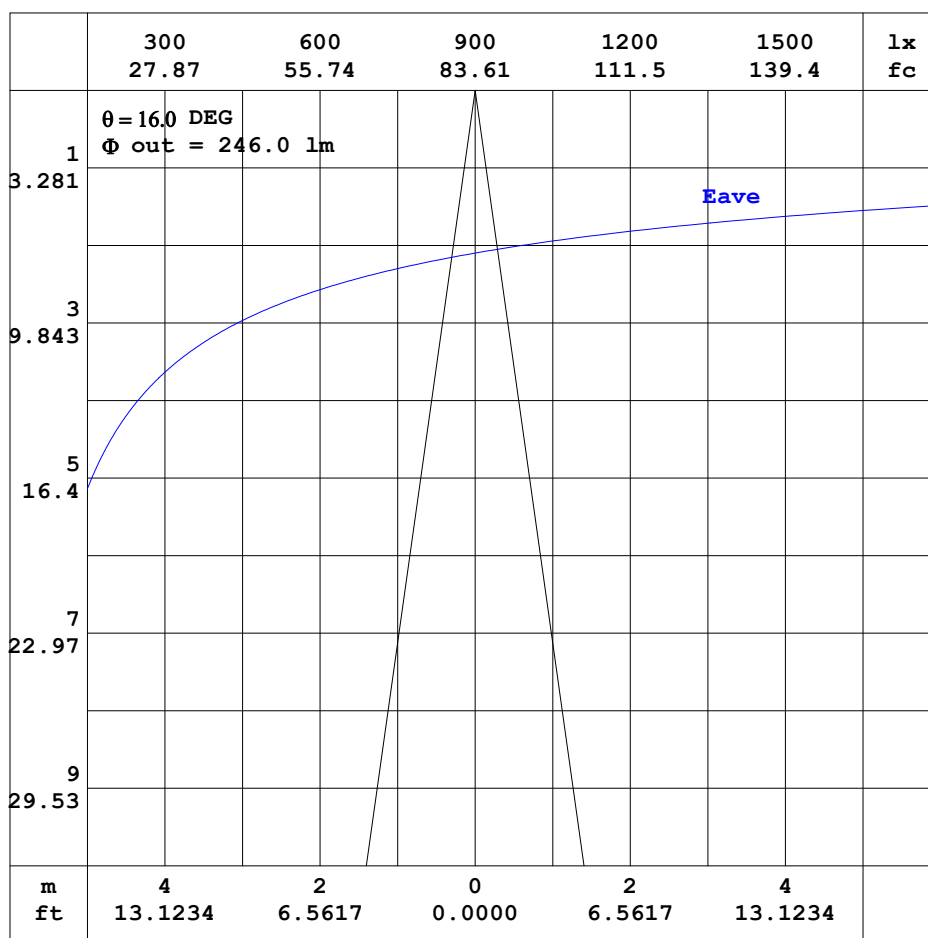


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2020-03-05

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:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm		
NAME: SUGAR 900-U-90W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 900mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 900mm	Shielding Angle:



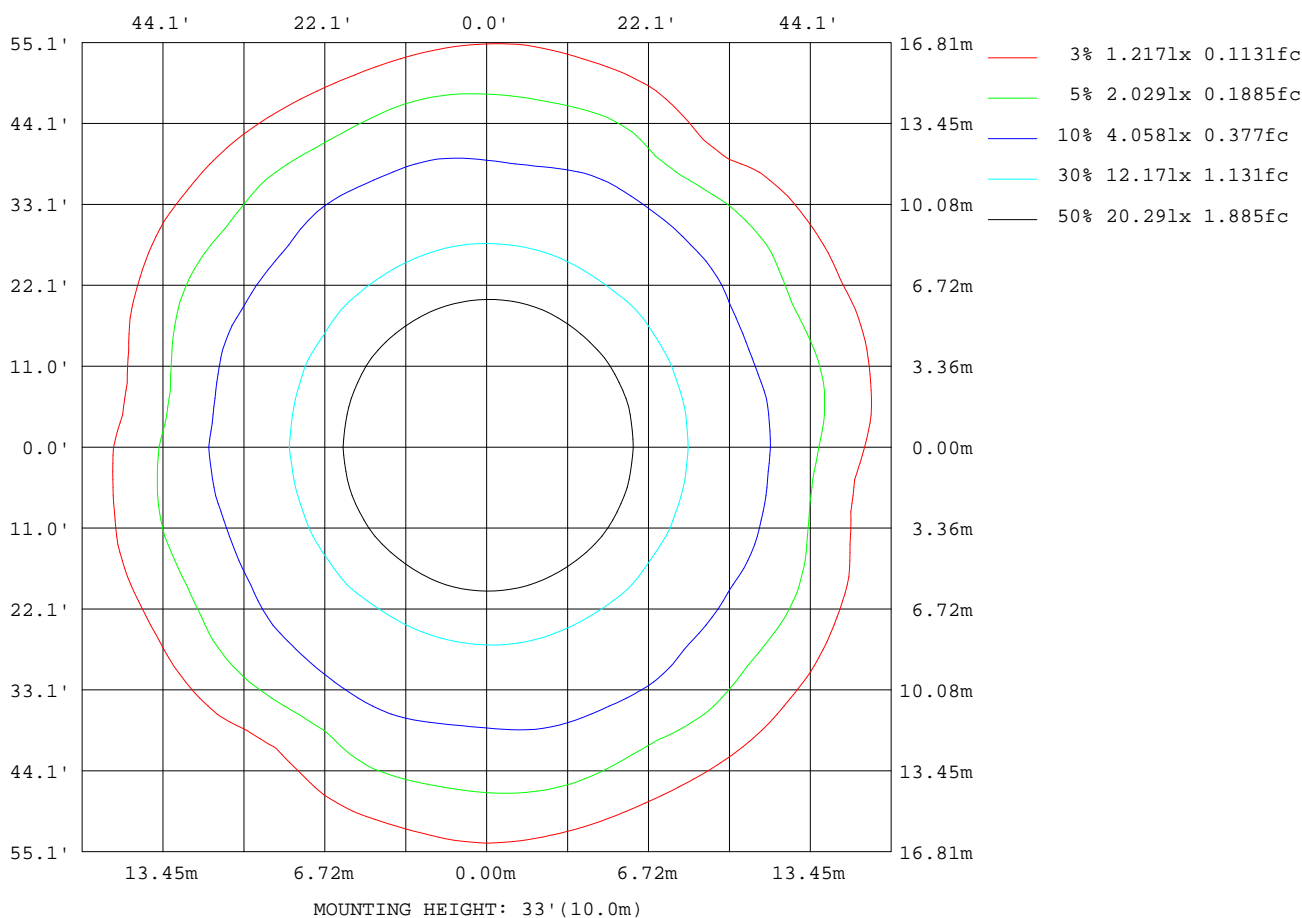
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2020-03-05

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:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm		
NAME: SUGAR 900-U-90W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: ϕ 900mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 900mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2020-03-05

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:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm		
NAME: SUGAR 900-U-90W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: φ900mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ900mm	Shielding Angle:

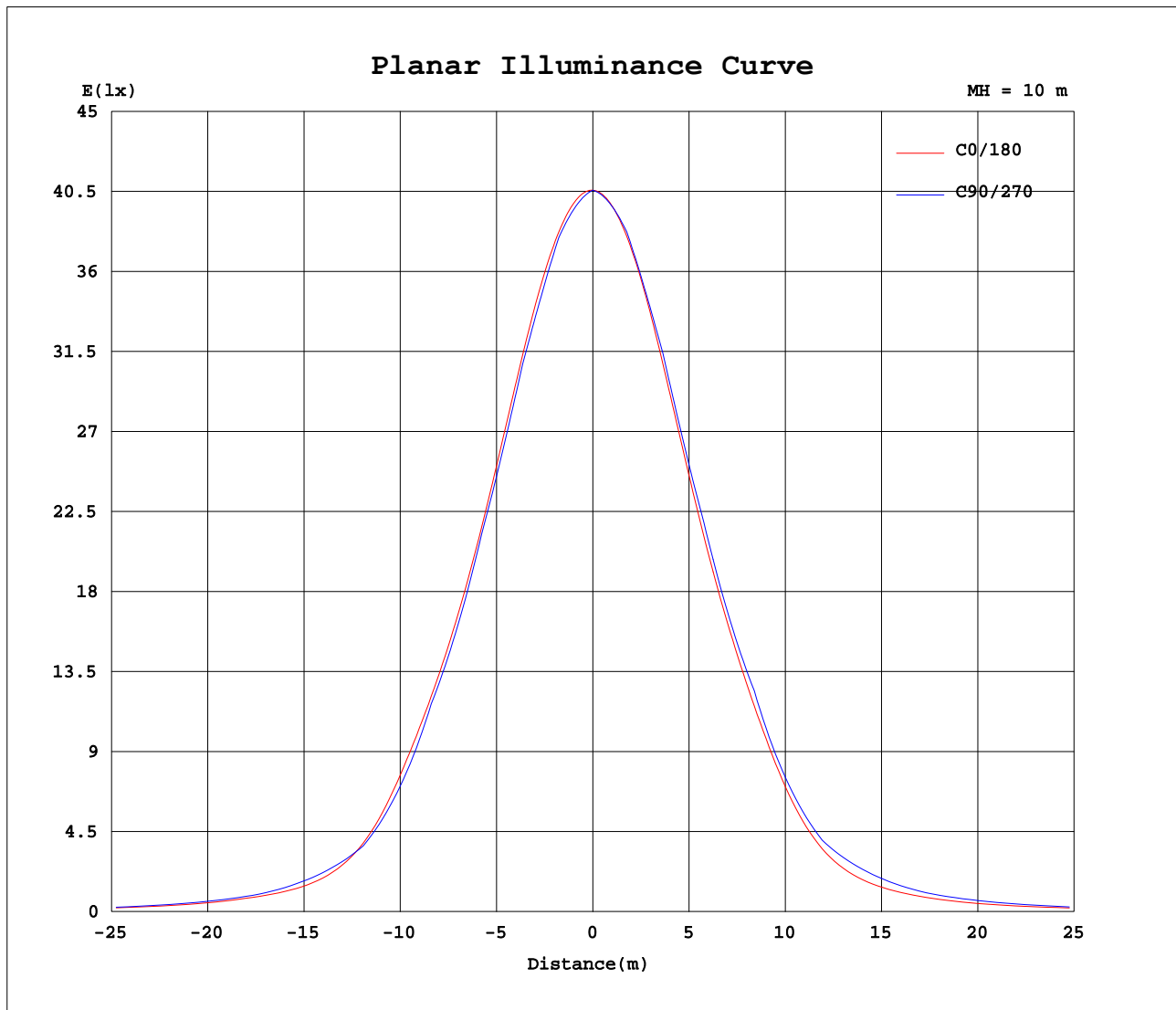
AvgL	cd/m2
L_0~180 (65) av	1808
L_0~180 (75) av	1501
L_0~180 (85) av	875
L_90~270 (65) av	2280
L_90~270 (75) av	1812
L_90~270 (85) av	0
L_45 (65) av	1989
L_45 (75) av	1625
L_45 (85) av	802

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2020-03-05

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: 2020-03-05

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:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm		
NAME: SUGAR 900-U-90W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: φ900mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ900mm	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	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058
5	4047	4043	4039	4036	4033	4030	4028	4026	4024	4022	4020	4019	4018	4017	4016	4015	4014	4014	4013
10	4002	3995	3988	3983	3978	3975	3972	3970	3969	3969	3969	3969	3969	3970	3970	3970	3970	3970	3969
15	3916	3905	3896	3889	3886	3884	3885	3888	3891	3883	3873	3865	3858	3853	3850	3847	3844	3842	3841
20	3776	3761	3751	3746	3747	3752	3754	3739	3727	3718	3713	3710	3709	3710	3712	3713	3714	3714	3713
25	3576	3559	3551	3552	3560	3555	3541	3532	3528	3528	3530	3522	3511	3504	3499	3496	3494	3493	3491
30	3329	3312	3307	3315	3316	3303	3299	3301	3303	3286	3273	3264	3259	3258	3260	3263	3267	3269	3269
35	3041	3022	3023	3036	3018	3017	3028	3013	3004	3002	3002	3001	2976	2960	2953	2949	2946	2941	2934
40	2695	2671	2677	2663	2648	2669	2624	2613	2641	2656	2620	2604	2600	2603	2610	2617	2618	2612	2599
45	2172	2143	2172	2128	2126	2082	2031	2057	2065	2064	2090	2140	2155	2130	2115	2101	2076	2037	1998
50	1456	1422	1446	1465	1493	1479	1432	1439	1436	1428	1518	1558	1540	1518	1526	1536	1518	1459	1396
55	929	864	871	926	1010	1063	1072	1047	1038	1065	1088	1056	1023	1035	1075	1112	1125	1115	1093
60	687	641	638	664	716	721	757	787	792	793	780	767	755	739	727	727	741	770	790
65	504	507	504	511	498	482	506	542	574	549	507	500	526	528	522	530	550	575	594
70	374	351	340	355	372	386	378	401	409	390	375	376	379	377	374	373	378	385	397
75	259	263	249	233	244	253	280	288	282	275	283	270	257	255	259	262	268	278	290
80	154	136	128	135	141	153	168	172	169	168	169	162	153	149	152	156	162	172	182
85	54.3	38.6	41.2	43.9	45.6	47.1	50.7	54.3	48.7	44.6	35.6	27.1	19.3	13.2	8.84	5.23	2.43	0.65	0.00
90	104	103	101	99.2	95.8	92.7	90.7	92.0	94.6	98.1	102	106	110	112	0.00	0.00	118	120	122
95	150	150	149	147	144	141	139	140	142	144	146	147	149	151	152	154	156	159	161
100	192	191	190	188	185	183	181	181	183	185	187	189	191	192	194	196	199	201	203
105	238	237	236	234	231	228	226	226	228	230	232	235	237	239	241	242	245	247	249
110	286	286	285	283	281	278	275	275	276	277	280	282	285	288	290	292	294	295	297
115	338	339	338	336	332	328	325	325	326	329	332	335	338	341	342	344	345	347	348
120	394	395	395	393	388	383	379	379	380	383	387	390	394	396	398	399	400	401	401
125	450	451	451	449	444	439	434	434	435	437	441	445	449	451	452	453	453	453	452
130	502	504	505	503	496	489	484	484	486	490	493	495	498	501	503	505	504	503	502
135	548	550	550	548	543	538	534	534	537	539	541	542	543	544	545	546	547	548	549
140	593	592	591	590	586	583	580	581	583	585	586	587	587	588	589	590	591	592	594
145	634	633	632	631	628	624	622	623	624	626	627	628	628	629	629	630	631	632	633
150	669	669	668	667	664	661	659	660	661	663	663	663	664	664	665	666	666	667	668
155	699	699	698	697	695	692	691	691	692	694	694	694	694	695	695	696	696	697	698
160	724	724	723	722	720	718	717	717	718	719	719	720	720	720	720	721	721	722	722
165	743	742	742	741	740	738	737	738	738	739	739	740	740	740	740	740	741	741	741
170	756	756	755	755	754	753	752	753	753	754	754	754	754	754	754	754	754	755	755
175	763	763	763	763	763	762	762	762	762	762	762	762	762	762	763	763	763	763	763
180	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2020-03-05

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:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm		
NAME: SUGAR 900-U-90W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: φ900mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ900mm	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	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058
5	4013	4012	4012	4012	4012	4012	4012	4013	4013	4015	4016	4017	4019	4022	4025	4028	4031	4035	4032
10	3968	3966	3964	3962	3960	3958	3955	3953	3951	3950	3949	3949	3951	3953	3957	3962	3968	3976	3971
15	3839	3838	3837	3837	3837	3839	3841	3846	3852	3857	3850	3845	3842	3843	3846	3852	3861	3874	3866
20	3710	3706	3700	3694	3688	3682	3677	3675	3674	3678	3684	3695	3690	3684	3683	3687	3697	3713	3703
25	3488	3485	3481	3477	3475	3476	3480	3483	3473	3467	3466	3470	3481	3484	3476	3476	3484	3502	3489
30	3265	3258	3246	3234	3223	3215	3210	3210	3216	3232	3226	3220	3222	3233	3232	3224	3229	3248	3233
35	2926	2919	2912	2908	2907	2913	2928	2914	2907	2908	2923	2941	2922	2918	2939	2925	2927	2950	2933
40	2584	2570	2555	2539	2518	2494	2480	2490	2528	2513	2483	2485	2509	2476	2489	2511	2520	2572	2550
45	1979	1988	2012	2033	2030	2007	1964	1930	1928	1928	1884	1845	1837	1816	1824	1880	1907	1988	1956
50	1368	1389	1434	1460	1440	1396	1367	1355	1344	1363	1331	1272	1260	1247	1275	1315	1320	1331	1267
55	1070	1057	1054	1040	976	872	829	900	958	980	978	941	934	949	972	953	919	884	813
60	778	743	717	716	706	664	633	648	662	663	666	672	684	688	665	629	625	643	616
65	591	564	535	524	516	497	478	487	497	469	437	476	512	500	454	429	445	472	472
70	406	400	388	381	370	358	357	362	365	368	357	364	359	354	351	357	362	361	346
75	294	289	278	268	254	245	248	247	245	258	264	260	248	239	244	241	247	237	243
80	183	182	173	165	156	150	153	153	152	157	168	171	150	153	147	133	135	146	144
85	0.69	2.74	5.81	9.69	14.1	19.2	26.0	33.4	40.6	46.7	52.3	54.1	49.8	48.8	43.7	39.1	35.6	43.0	42.2
90	124	126	0.00	0.00	131	133	134	135	135	135	134	133	132	131	129	127	125	123	123
95	162	164	165	168	170	172	173	173	173	173	173	172	171	169	167	166	164	163	162
100	205	206	208	210	212	214	214	215	215	215	215	215	213	211	208	207	205	204	203
105	250	251	252	254	257	259	260	261	261	262	262	261	258	255	251	250	249	248	247
110	298	298	299	302	305	307	309	310	310	310	309	307	304	300	297	295	294	294	294
115	348	349	350	352	355	358	359	360	360	360	359	357	354	350	347	345	345	345	345
120	401	401	401	404	407	410	412	413	414	413	412	410	407	403	399	398	398	398	399
125	452	453	454	457	460	463	464	465	465	464	462	460	457	454	452	451	451	452	454
130	502	503	505	507	510	513	514	514	514	512	511	509	506	504	502	500	499	499	500
135	550	551	552	554	556	558	558	558	557	557	557	556	554	552	549	548	546	546	546
140	594	595	596	597	599	600	601	601	600	600	600	599	597	595	593	592	590	590	590
145	634	634	635	636	638	639	639	639	639	639	638	638	636	634	633	631	630	630	630
150	669	669	670	671	672	673	673	673	673	673	672	672	671	669	668	666	665	665	665
155	698	699	699	700	701	702	702	702	702	701	701	701	699	698	697	696	695	695	695
160	723	723	723	724	725	725	725	725	725	725	725	724	723	722	721	721	720	720	720
165	742	742	742	742	743	743	743	743	743	743	743	743	742	741	740	740	739	739	739
170	755	755	755	756	756	756	756	756	756	756	756	756	755	755	754	754	754	753	754
175	763	763	763	763	763	764	764	764	764	763	763	763	763	763	763	762	762	762	762
180	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2020-03-05

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:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm		
NAME: SUGAR 900-U-90W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: φ900mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ900mm	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	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058
5	4030	4029	4027	4026	4025	4025	4025	4025	4025	4025	4026	4026	4027	4028	4029	4029	4030	4031	4031
10	3967	3965	3964	3964	3964	3966	3969	3972	3976	3980	3984	3988	3992	3995	3998	4001	4003	4004	4004
15	3861	3858	3860	3863	3870	3878	3887	3886	3883	3881	3881	3882	3884	3887	3889	3892	3894	3896	3898
20	3698	3700	3706	3718	3729	3724	3724	3725	3730	3736	3744	3752	3761	3769	3776	3782	3786	3787	3787
25	3486	3492	3507	3513	3513	3519	3530	3542	3557	3557	3554	3554	3556	3560	3565	3571	3577	3582	3585
30	3232	3245	3255	3259	3272	3292	3310	3303	3302	3302	3306	3314	3324	3335	3347	3358	3368	3374	3375
35	2936	2954	2955	2974	3005	3002	3004	3016	3030	3043	3031	3027	3031	3040	3050	3059	3065	3068	3068
40	2562	2566	2581	2629	2589	2588	2630	2662	2648	2657	2672	2689	2707	2727	2746	2758	2761	2758	2752
45	1982	1991	2036	2024	1984	2004	2042	2060	2109	2195	2237	2219	2207	2207	2197	2170	2138	2122	2132
50	1275	1339	1410	1437	1416	1423	1419	1431	1533	1603	1611	1591	1598	1632	1631	1581	1514	1476	1487
55	808	865	946	1019	1057	1059	1044	1070	1111	1104	1085	1095	1129	1180	1207	1203	1181	1164	1151
60	617	634	677	695	739	778	788	799	795	788	781	771	763	769	793	825	848	861	840
65	473	483	487	483	498	527	569	562	519	501	530	542	544	555	581	611	637	649	628
70	336	342	360	373	374	393	410	402	385	386	390	390	386	384	389	401	426	440	427
75	244	239	247	259	276	288	290	282	282	281	272	265	265	271	280	291	309	320	311
80	147	147	155	161	177	180	179	177	177	172	167	155	154	166	175	182	192	201	201
85	44.1	46.9	49.6	49.5	55.3	59.7	54.8	47.7	39.1	29.3	21.4	13.9	8.95	5.56	2.64	0.69	0.00	0.76	3.03
90	124	125	126	128	128	124	120	116	116	115	115	114	112	111	110	109	107	103	99.4
95	162	163	165	166	167	163	159	155	154	153	153	152	151	150	149	149	149	148	147
100	203	203	205	207	208	205	201	197	196	195	195	194	192	190	190	190	190	189	188
105	247	247	250	253	254	250	246	241	240	240	241	240	239	238	237	237	236	235	233
110	294	295	297	299	300	297	293	290	289	289	290	290	289	288	287	286	285	282	280
115	346	348	350	352	353	349	345	342	342	343	344	344	343	341	339	337	335	333	331
120	400	401	404	406	407	404	400	396	397	399	401	400	399	397	395	393	390	388	385
125	456	459	460	461	460	457	453	450	451	453	456	456	455	453	450	447	444	441	439
130	503	505	508	511	512	509	505	501	501	502	503	504	505	505	502	498	494	492	491
135	547	548	552	555	558	556	553	550	549	549	549	548	547	546	545	544	543	542	541
140	591	592	595	598	601	599	597	594	594	593	593	592	591	590	590	589	588	588	587
145	631	632	635	638	640	638	636	634	634	633	633	633	632	631	630	630	629	629	628
150	666	667	669	672	674	673	671	669	669	669	668	668	667	667	666	666	665	665	664
155	696	697	699	701	702	702	700	699	698	698	698	698	697	697	696	696	696	695	695
160	720	721	723	725	726	725	724	723	723	723	723	722	722	722	721	721	721	720	720
165	740	740	742	743	744	744	743	742	742	742	742	742	741	741	741	740	740	740	740
170	754	754	755	756	757	756	756	755	755	755	755	755	755	755	754	754	754	754	754
175	762	763	763	763	764	764	763	763	763	763	763	763	763	763	763	763	763	762	762
180	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2020-03-05

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:0.4322A P:95.26W PF:0.9787 Freq:49.90Hz Lamp Flux:10943.4x1 lm		
NAME: SUGAR 900-U-90W-840	TYPE:Ceiling light	WEIGHT:
SPEC.:4000K	DIM.: φ900mm*H105mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ900mm	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	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058	4058				
5	4032	4032	4033	4033	4034	4034	4035	4035	4036	4037	4038	4039	4041	4043	4045				
10	4005	4004	4003	4002	4000	3998	3996	3995	3993	3992	3992	3992	3993	3995	3998				
15	3900	3903	3905	3908	3913	3918	3926	3931	3923	3916	3911	3907	3905	3906	3910				
20	3786	3783	3779	3776	3774	3772	3773	3777	3784	3795	3786	3775	3767	3765	3768				
25	3586	3587	3589	3592	3597	3600	3591	3585	3583	3587	3597	3596	3579	3569	3568				
30	3371	3365	3358	3350	3346	3345	3349	3361	3354	3348	3349	3359	3351	3331	3324				
35	3068	3067	3067	3071	3082	3069	3062	3063	3074	3085	3070	3066	3082	3055	3038				
40	2743	2730	2713	2694	2680	2686	2729	2729	2704	2697	2713	2684	2696	2706	2684				
45	2170	2214	2239	2243	2214	2173	2168	2184	2173	2092	2081	2073	2077	2155	2131				
50	1550	1616	1626	1587	1559	1555	1536	1543	1507	1426	1388	1380	1410	1469	1463				
55	1160	1166	1115	993	913	981	1057	1087	1094	1041	1008	1033	1063	1065	1017				
60	810	796	780	730	681	690	730	745	749	768	769	780	754	718	708				
65	595	572	558	536	523	531	538	509	464	515	561	547	474	438	474				
70	416	415	406	386	386	396	385	385	390	403	421	404	385	385	387				
75	300	294	281	263	267	280	272	274	294	286	275	275	282	269	259				
80	192	182	172	164	167	170	168	170	186	204	182	195	195	186	174				
85	6.45	10.8	15.6	21.2	28.5	36.4	45.6	54.3	63.2	72.4	67.7	66.2	68.3	62.3	59.5				
90	96.0	94.9	94.5	94.4	93.9	93.5	93.3	93.6	94.0	94.7	95.3	96.2	97.5	99.3	102				
95	146	145	144	143	143	142	142	142	142	143	144	146	148	149	150				
100	187	186	185	184	183	183	182	183	183	185	186	188	190	191	192				
105	232	231	230	230	229	228	228	229	230	231	232	233	235	236	237				
110	278	278	278	278	278	278	278	279	279	280	281	281	282	283	284				
115	329	329	329	329	330	331	331	330	330	329	330	331	332	334	336				
120	383	383	383	384	385	385	385	385	384	384	384	385	387	389	391				
125	438	438	439	440	441	442	442	441	440	439	439	440	441	444	447				
130	491	491	492	493	495	496	496	494	491	489	490	492	495	497	499				
135	541	540	539	539	540	542	543	542	540	539	540	542	544	546	547				
140	586	585	584	584	583	583	583	584	584	585	586	588	590	591	592				
145	628	627	626	625	625	625	625	625	626	626	628	630	631	632	633				
150	664	663	662	662	662	662	662	662	662	663	664	666	667	668	669				
155	695	694	693	693	693	693	693	693	693	694	695	696	698	698	699				
160	720	719	719	718	718	718	718	719	719	719	720	721	722	723	724				
165	740	739	739	738	738	738	739	739	739	739	740	741	742	742	742				
170	754	753	753	753	753	753	753	753	753	754	754	755	755	755	756				
175	762	762	762	762	762	762	762	762	762	762	763	763	763	763	763				
180	765	765	765	765	765	765	765	765	765	765	765	765	765	765	765				

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason Long
Test Date:2020-03-05

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: