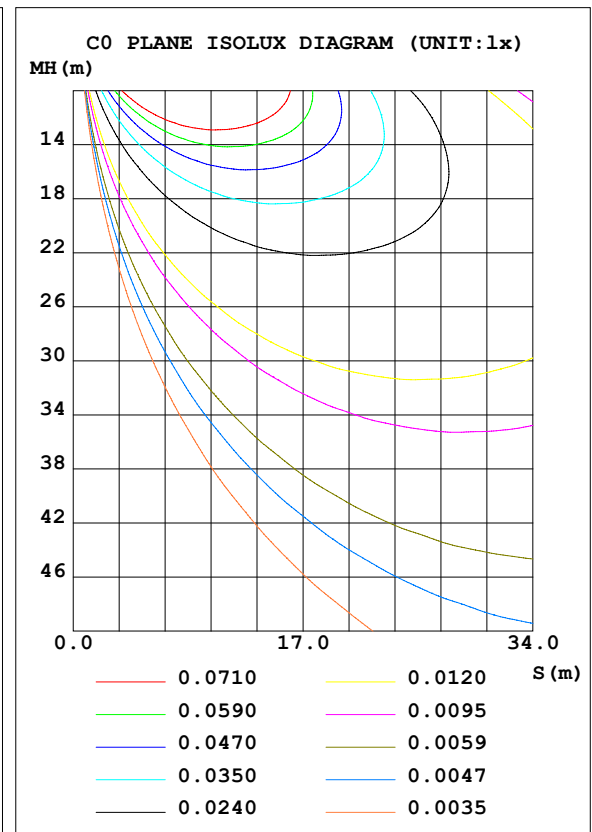
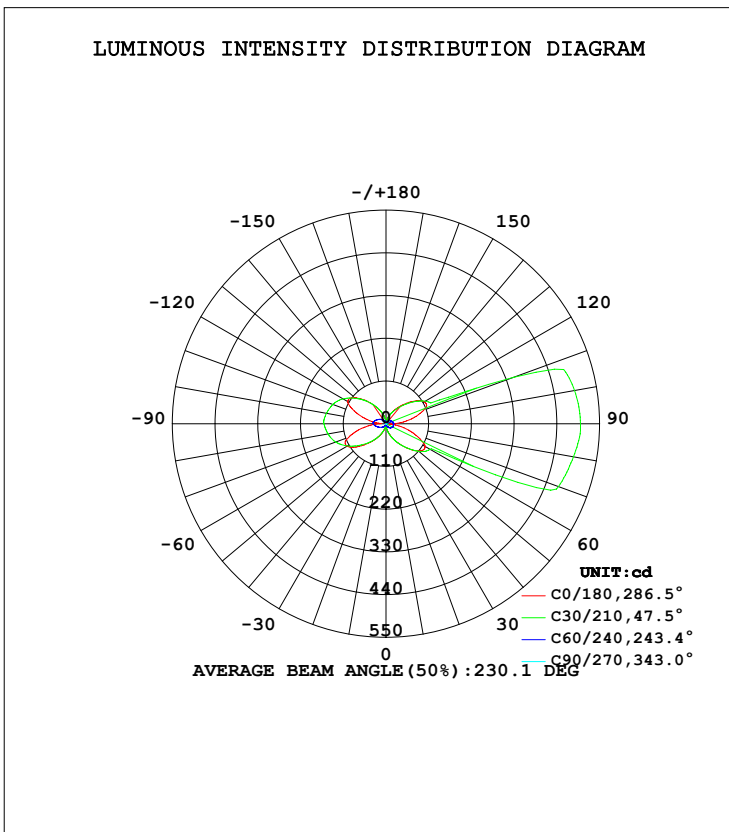


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: Niteo N	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 48.47 lm/W			
MODEL	Niteo N	I _{max} (cd)	501.0	S/MH (C0/180)	0.11
NOMINAL POWER (W)	8	LOR (%)	95.5	S/MH (C90/270)	2.07
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	385.84	η UP, DN (C0-180)	17.9, 18.1
NOMINAL FLUX (lm)	404.14	CIE CLASS	DIFFUSE	η UP, DN (C180-360)	29.8, 29.6
LAMPS INSIDE	1	η up (%)	47.7	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	220.1	η down (%)	47.8	CIBSE SHR MAX	0.90



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-27

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	6.463	2.075	0.6228	2.616	14.64	6.867	0.8797	0.8566	0- 10	0.1648	0.1648	0.04,0.04
20	20.22	7.693	0.4826	5.215	31.37	13.46	0.8985	2.954	10- 20	1.335	1.499	0.39,0.37
30	38.33	14.73	0.3643	8.355	52.83	21.43	0.5820	5.425	20- 30	4.050	5.549	1.44,1.37
40	61.43	23.10	0.2148	11.91	80.30	31.14	0.0389	8.319	30- 40	8.636	14.18	3.68,3.51
50	90.84	32.81	0.0996	15.84	109.5	41.77	0.0249	11.44	40- 50	15.25	29.44	7.63,7.28
60	115.6	43.71	0.0561	19.96	116.3	51.50	0.0249	14.67	50- 60	22.98	52.42	13.6,13
70	102.4	55.05	0.0561	23.97	78.72	211.3	0.0311	22.07	60- 70	33.33	85.75	22.2,21.2
80	59.77	65.60	0.0576	27.16	34.07	244.8	0.0234	68.52	70- 80	53.14	138.9	36,34.4
90	20.79	72.17	0.0576	27.93	18.98	233.3	0.0360	69.64	80- 90	54.20	193.1	50,47.8
100	39.37	70.14	0.0919	25.56	62.47	214.4	0.0218	72.27	90-100	55.12	248.2	64.3,61.4
110	79.85	61.93	0.1636	21.24	103.6	80.33	0.0171	70.98	100-110	52.85	301.1	78,74.5
120	113.8	50.94	0.2694	16.68	113.8	41.96	0.0202	17.31	110-120	34.41	335.5	86.9,83
130	104.5	39.94	0.3707	12.45	89.16	31.37	0.0591	14.05	120-130	22.36	357.8	92.7,88.5
140	76.14	29.57	0.4657	8.705	60.76	21.82	0.1634	9.993	130-140	14.65	372.5	96.5,92.2
150	48.95	20.39	0.5326	5.499	37.50	13.98	0.3004	6.445	140-150	8.185	380.7	98.7,94.2
160	28.79	12.61	0.5544	2.859	19.85	7.542	0.4266	4.706	150-160	3.788	384.5	99.6,95.1
170	13.30	6.151	0.5630	0.7825	6.441	2.198	0.5232	2.401	160-170	1.234	385.7	100,95.4
180	0.0499	0.0278	0.0265	0.0409	0.0453	0.0322	0.0280	0.0403	170-180	0.1463	385.8	100,95.5
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

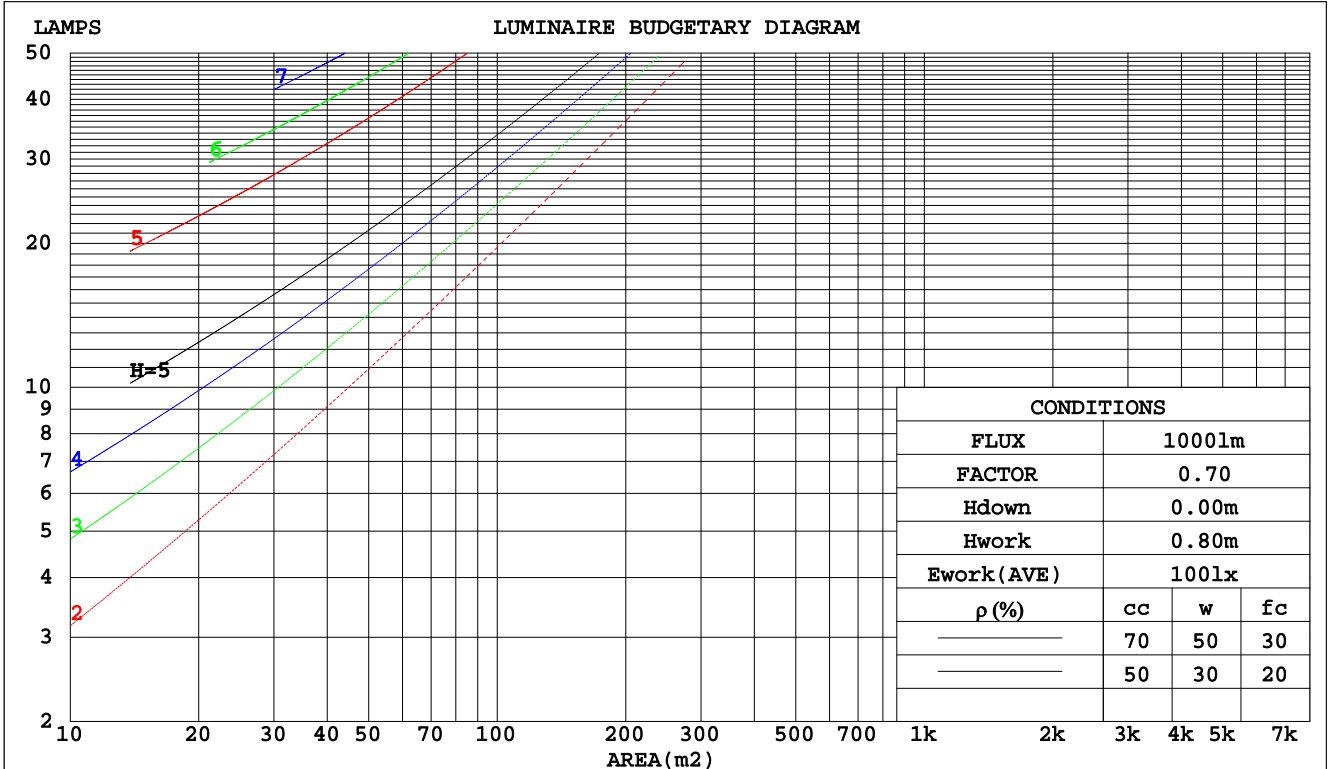
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-27

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: Niteo N	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
pfc																
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.02	1.02	1.02	.94	.94	.94	.80	.80	.80	.66	.66	.66	.54	.54	.54	.48
1.0	.79	.73	.67	.72	.67	.61	.59	.55	.51	.47	.44	.41	.36	.34	.31	.26
2.0	.65	.57	.50	.59	.52	.45	.48	.42	.37	.38	.33	.29	.28	.25	.21	.16
3.0	.56	.46	.38	.50	.42	.35	.41	.34	.28	.31	.26	.22	.23	.19	.16	.11
4.0	.48	.38	.31	.43	.35	.28	.35	.28	.22	.27	.22	.17	.20	.15	.12	.08
5.0	.42	.32	.25	.38	.29	.23	.31	.24	.18	.24	.18	.14	.17	.13	.09	.06
6.0	.37	.28	.21	.34	.25	.19	.27	.20	.15	.21	.16	.12	.15	.11	.08	.05
7.0	.33	.24	.18	.30	.22	.16	.24	.18	.13	.19	.14	.10	.14	.10	.06	.04
8.0	.30	.21	.16	.27	.19	.14	.22	.16	.11	.17	.12	.08	.12	.08	.05	.03
9.0	.27	.19	.13	.25	.17	.12	.20	.14	.10	.16	.11	.07	.11	.08	.05	.02
10.0	.25	.17	.12	.22	.15	.11	.18	.12	.08	.14	.10	.06	.11	.07	.04	.02



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-27

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: Niteo N	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.459	.261	.083	.437	.249	.079	.397	.228	.073	.359	.207	.067	.325	.188	.061	
2.0	.368	.202	.062	.349	.192	.059	.311	.173	.054	.277	.156	.049	.246	.139	.044	
3.0	.313	.167	.050	.295	.158	.048	.261	.142	.043	.230	.126	.039	.201	.111	.034	
4.0	.274	.142	.042	.257	.135	.040	.226	.120	.036	.197	.106	.032	.171	.093	.028	
5.0	.244	.124	.036	.229	.117	.034	.200	.104	.031	.174	.092	.027	.149	.080	.024	
6.0	.220	.110	.032	.206	.104	.030	.180	.092	.027	.155	.081	.024	.132	.070	.021	
7.0	.201	.099	.028	.188	.094	.027	.163	.083	.024	.141	.072	.021	.119	.062	.018	
8.0	.184	.090	.025	.173	.085	.024	.150	.075	.021	.129	.065	.019	.109	.056	.016	
9.0	.171	.083	.023	.160	.078	.022	.139	.068	.019	.119	.060	.017	.100	.051	.015	
10.0	.159	.076	.021	.148	.072	.020	.129	.063	.018	.110	.055	.016	.093	.047	.013	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.545	.545	.545	.466	.466	.466	.318	.318	.318	.183	.183	.183	.058	.058	.058	
1.0	.550	.514	.482	.470	.441	.415	.322	.304	.287	.185	.176	.167	.059	.057	.054	
2.0	.545	.494	.452	.467	.426	.390	.320	.294	.272	.185	.171	.160	.059	.055	.052	
3.0	.539	.480	.434	.462	.414	.376	.317	.288	.264	.183	.168	.156	.059	.055	.051	
4.0	.531	.470	.423	.456	.406	.367	.313	.283	.259	.181	.166	.153	.058	.054	.050	
5.0	.523	.461	.415	.450	.399	.361	.310	.279	.255	.179	.164	.151	.058	.053	.050	
6.0	.516	.454	.410	.444	.393	.357	.306	.275	.253	.178	.162	.150	.057	.053	.050	
7.0	.509	.449	.406	.438	.389	.354	.303	.273	.251	.176	.161	.149	.057	.053	.049	
8.0	.503	.444	.403	.433	.385	.351	.299	.270	.249	.174	.159	.149	.056	.052	.049	
9.0	.496	.439	.401	.428	.381	.350	.296	.268	.248	.173	.158	.148	.056	.052	.049	
10.0	.491	.436	.399	.423	.378	.348	.294	.266	.247	.171	.157	.148	.056	.052	.049	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DOBAC
 Test Date:2017-11-27

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity:65.0%
 Test Distance:6.960m [K=1.0000]
 Remarks:

Uncorrected UGR Table

NAME: Niteo N		TYPE:LED					WEIGHT:				
DIM.:		SPEC.:					SERIAL No.:				
MFR.: DOBAC		SUR.:					PROTECTION 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	21.1	22.2	21.9	23.1	24.3	11.2	12.3	12.0	13.2	14.4	
3H	24.7	25.8	25.6	26.7	27.9	12.7	13.8	13.6	14.7	15.9	
4H	26.2	27.2	27.1	28.1	29.4	13.4	14.4	14.3	15.3	16.5	
6H	27.4	28.3	28.3	29.3	30.5	13.8	14.8	14.8	15.7	17.0	
8H	27.8	28.8	28.8	29.7	31.0	14.0	14.9	15.0	15.9	17.2	
12H	28.3	29.2	29.2	30.1	31.4	14.2	15.1	15.1	16.0	17.3	
4H 2H	21.6	22.6	22.5	23.5	24.7	16.8	17.8	17.7	18.8	20.0	
3H	25.7	26.6	26.6	27.5	28.8	18.8	19.7	19.8	20.7	21.9	
4H	27.5	28.4	28.5	29.3	30.6	19.7	20.6	20.7	21.5	22.8	
6H	29.1	29.8	30.1	30.8	32.1	20.4	21.2	21.4	22.2	23.5	
8H	29.7	30.4	30.7	31.4	32.7	20.6	21.3	21.6	22.4	23.7	
12H	30.3	30.9	31.2	31.9	33.3	20.8	21.4	21.8	22.4	23.8	
8H 4H	28.1	28.8	29.1	29.8	31.1	23.7	24.4	24.6	25.4	26.7	
6H	30.4	31.0	31.4	32.0	33.3	25.1	25.7	26.1	26.7	28.1	
8H	31.4	32.0	32.4	33.0	34.4	25.7	26.2	26.7	27.3	28.6	
12H	32.4	32.8	33.4	33.9	35.2	26.1	26.5	27.1	27.6	28.9	
12H 4H	28.2	28.8	29.1	29.8	31.1	24.8	25.4	25.7	26.4	27.7	
6H	30.7	31.2	31.7	32.2	33.6	26.7	27.3	27.7	28.3	29.7	
8H	32.0	32.5	33.0	33.5	34.9	27.7	28.1	28.7	29.2	30.5	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1					
1.5H	+ 0.2 / - 0.2					+ 0.1 / - 0.1					
2.0H	+ 0.3 / - 0.4					+ 0.2 / - 0.2					

CIE Pub.117 Corrected 404.1 lm Total Lamp Luminous Flux. (8log(F/F0) = -3.1)

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-27

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: Niteo N	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

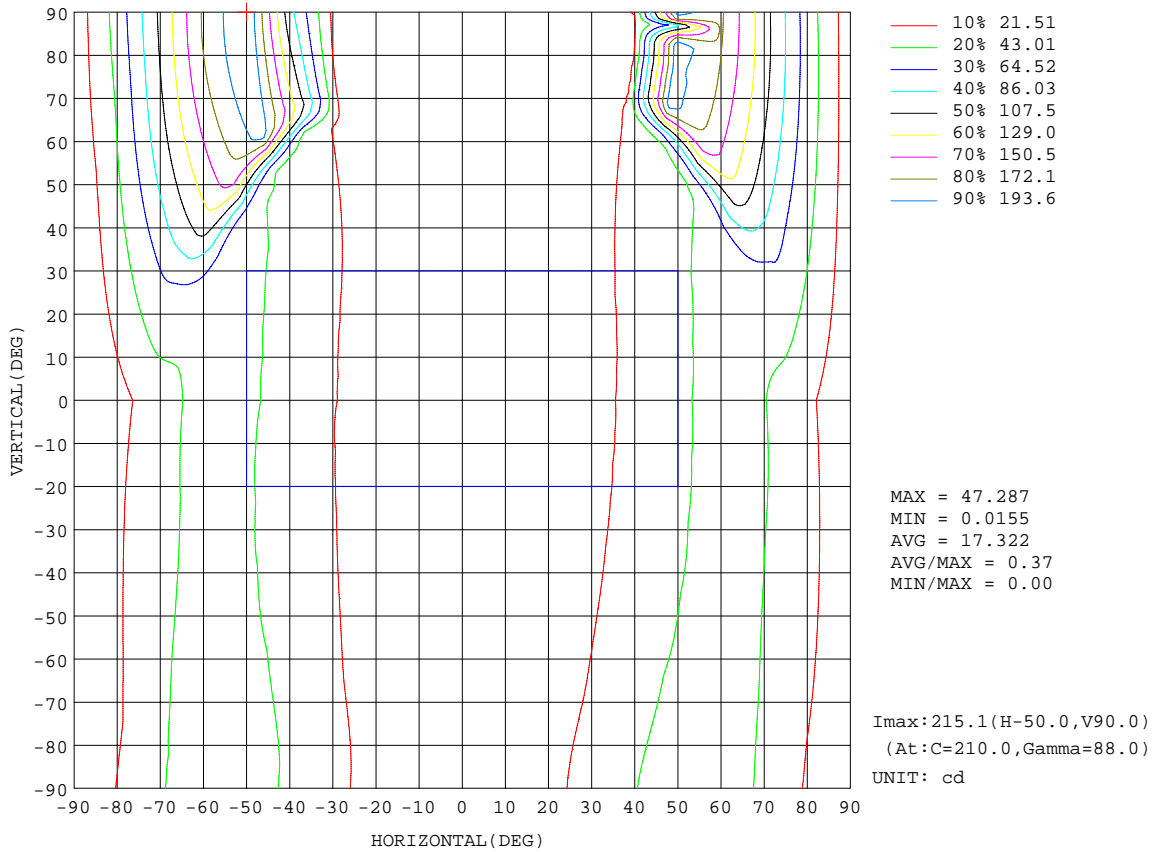
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	31	18	11	29	17	10	26	16	9	3
0.80	38	24	15	36	23	15	31	20	13	4
1.00	45	30	20	42	28	19	36	27	17	6
1.25	51	36	26	47	33	24	40	29	21	8
1.50	56	41	31	52	38	29	44	33	25	10
2.00	64	49	39	59	46	36	49	39	31	14
2.50	69	55	45	63	51	42	53	44	36	17
3.00	73	60	51	67	56	47	56	47	40	20
4.00	78	68	59	72	62	54	60	53	46	23
5.00	82	72	64	75	67	60	63	56	51	26
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DOBAC
 Test Date:2017-11-27

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity:65.0%
 Test Distance:6.960m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME: Niteo N	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

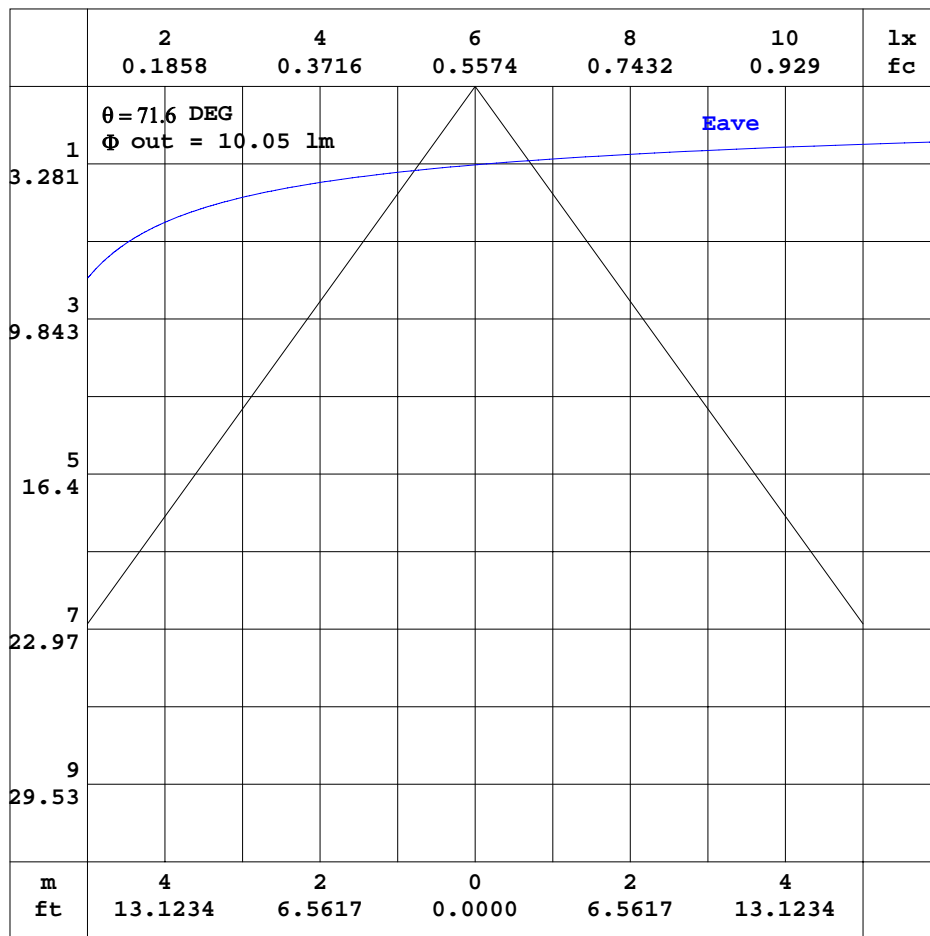


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-27

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

AAI CURVES

NAME: Niteo N	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:



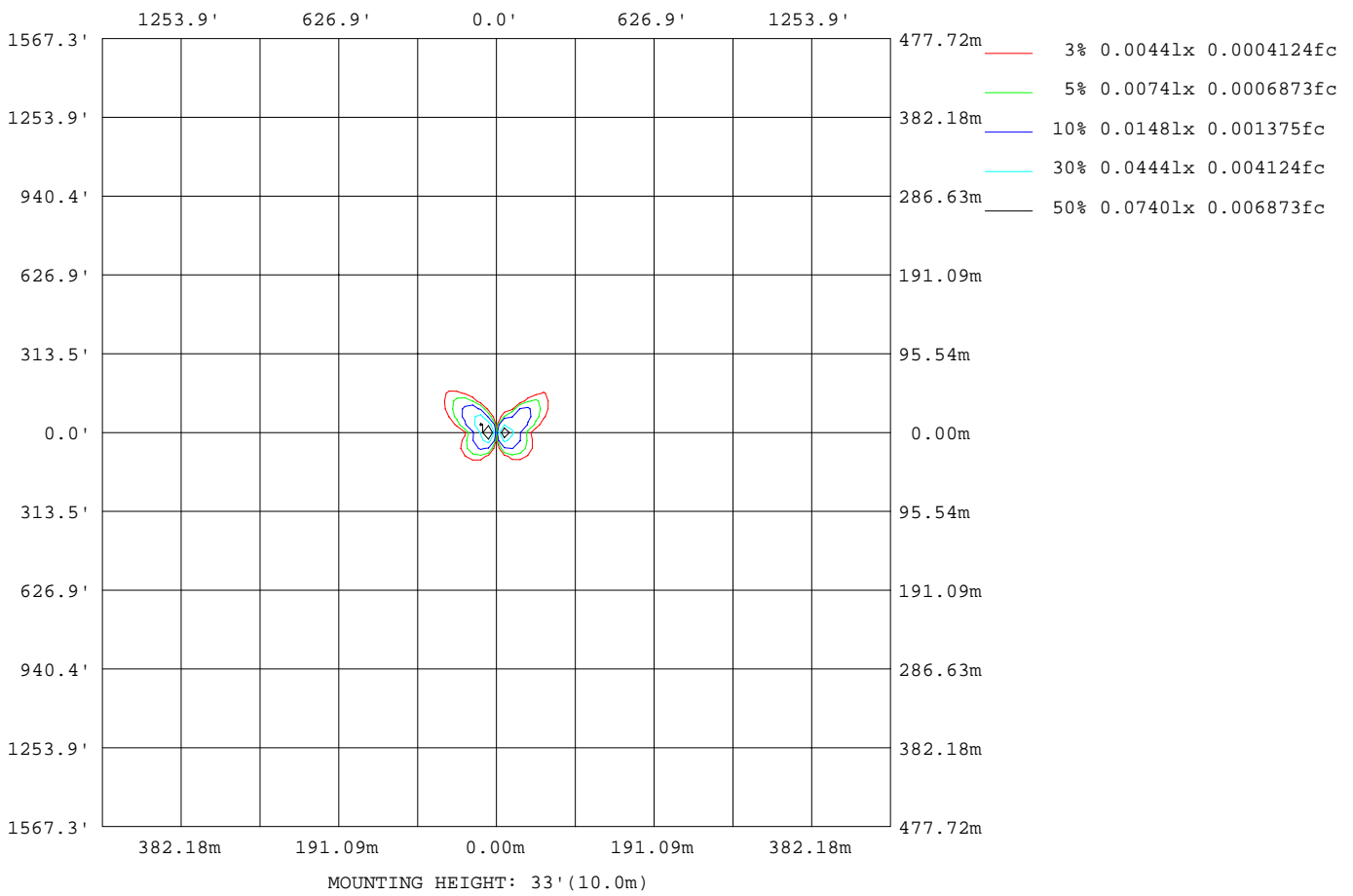
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-27

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

NAME: Niteo N	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-27

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: Niteo N	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	404.14	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.0038	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:1996 Average Luminance

G deg	C plane(deg)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	48467645854336946036260871218675403911115836	1333	3180	5201	6753	9810	14382	17927	25954	53908									
60	60861821335594960201343061599298345083153630	1592	3931	6562	8624	12571	18211	21963	30535	61222									
65	7236510059271267792764580021397130656706206035	1939	4960	8465	11264	16363	23207	26373	33432	62111									
70	78817116102896951061026282929653180309142283443	2439	6474	11379	15263	21934	30250	31496	35675	60569									
75	833491317421137944820690738435612658213219410157	3243	8969	16345	21848	30954	41620	39421	39125	57501									
80	90572160243584222990445273709774403021422661087	4806	13871	26115	34531	48441	64045	55447	46783	51631									
85	116292483729224716080538450946953824581514032174	9382	28143	54093	70978	99540	131024	161547	4334	37753									

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

CIBSE Category	Gamma (deg)	Average Luminance		Patch Luminance	
		maximum	specified	maximum	specified
		calculated	maximum	measured	maximum
Category 1	55 to 90	471608	200	---	500
Category 2	65 to 90	471608	200	---	500
Category 3	75 to 90	471608	200	---	500

Table 3. Tabulation of Average and Patch Luminance(cd/sq.m.) for defined CIBSE categories

No match

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-27

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: Niteo N	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	404.14	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.0038	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:2001 Average Luminance

G deg	C plane(deg)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	48467645854336946036260871218675403911115836	1333	3180	5201	6753	9810	14382	17927	25954	53908									
60	60861821335594960201343061599298345083153630	1592	3931	6562	8624	12571	18211	21963	30535	61222									
65	7236510059271267792764580021397130656706206035	1939	4960	8465	11264	16363	23207	26373	33432	62111									
70	78817116102896951061026282929653180309142283443	2439	6474	11379	15263	21934	30250	31496	35675	60569									
75	833491317421137944820690738435612658213219410157	3243	8969	16345	21848	30954	41620	39421	39125	57501									
80	90572160243584222990445273709774403021422661087	4806	13871	26115	34531	48441	64045	55447	46783	51631									
85	116292483729224716080538450946953824581514032174	9382	28143	54093	70978	99540	131024	106154	74334	37753									

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

range (deg)	Maximum measured	Average Luminance(cd/sq.m)			
		Maximum limit for screen type & software category used			
		Type I,II screen Some neg.s'ware	Type I,II screen Only pos.s'ware	Type III screen Some neg.s'ware	Type III screen Only pos.s'ware
55 to 90	471608	1000	1500	200	500
65 to 90	471608	1000	1500	200	500

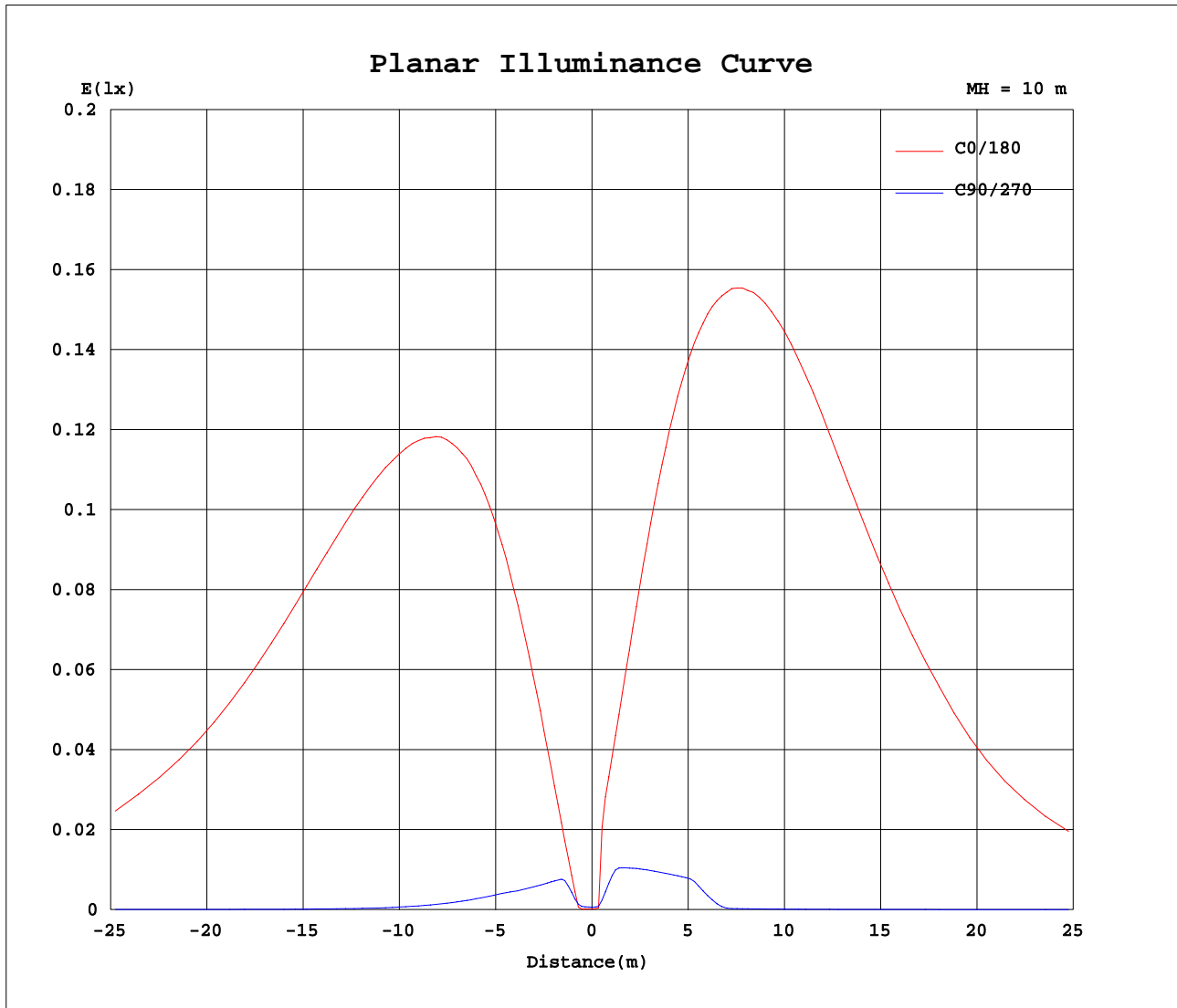
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

No match

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-27

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-27

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Niteo N	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
5	1.05	1.19	0.79	0.44	0.11	0.05	0.05	0.07	0.11	0.22	0.41	0.62	1.07	1.37	1.73	2.25	2.67	3.70	7.85
10	6.46	8.43	5.79	5.93	3.30	1.32	0.56	0.04	0.09	0.62	1.13	1.62	2.09	2.28	2.99	4.05	4.90	6.90	14.6
15	12.9	17.0	11.8	12.4	7.16	3.22	1.84	0.58	0.03	0.55	1.35	2.15	2.93	3.32	4.45	6.10	7.46	10.6	22.5
20	20.2	27.0	18.5	19.8	11.5	5.35	3.22	1.37	0.05	0.48	1.57	2.70	3.82	4.45	6.05	8.44	10.4	14.9	31.4
25	28.7	38.3	26.3	28.2	16.4	7.72	4.78	2.23	0.31	0.44	1.81	3.30	4.78	5.69	7.85	11.1	13.6	19.6	41.5
30	38.3	51.3	35.1	37.7	21.8	10.3	6.44	3.16	0.63	0.36	2.03	3.90	5.79	7.04	9.80	13.9	17.3	25.0	52.8
35	49.2	66.0	44.9	48.3	27.8	13.2	8.24	4.15	0.9663	0.29	2.23	4.50	6.87	8.46	11.9	17.1	21.3	31.1	65.7
40	61.4	82.4	55.9	59.8	34.2	16.2	10.1	5.20	1.33	0.21	2.42	5.12	7.97	9.93	14.1	20.5	25.8	37.9	80.3
45	75.4	101	68.0	72.6	41.3	19.5	12.1	6.29	1.71	0.15	2.60	5.75	9.08	11.5	16.4	24.1	30.4	45.0	95.7
50	90.8	121	81.2	86.2	48.8	22.9	14.3	7.39	2.12	0.10	2.75	6.36	10.2	13.1	18.9	27.8	35.1	51.7	110
55	106	141	94.5	100	56.9	26.6	16.4	8.53	2.52	0.08	2.90	6.93	11.3	14.7	21.4	31.3	39.1	56.6	117
60	116	156	106	114	65.2	30.4	18.7	9.66	2.92	0.06	3.03	7.47	12.5	16.4	23.9	34.6	41.7	58.0	116
65	116	162	114	127	73.6	34.4	21.0	10.8	3.31	0.06	3.11	7.96	13.6	18.1	26.3	37.3	42.4	53.7	99.7
70	102	151	117	138	81.7	38.5	23.4	11.9	3.68	0.06	3.17	8.41	14.8	19.8	28.5	39.3	40.9	46.4	78.7
75	82.0	130	112	146	89.2	42.8	26.1	13.0	4.03	0.06	3.19	8.82	16.1	21.5	30.4	40.9	38.8	38.5	56.6
80	59.8	106	105	152	95.9	46.8	29.1	14.1	4.36	0.06	3.17	9.15	17.2	22.8	32.0	42.3	36.6	30.9	34.1
85	38.5	82.3	96.8	156	101	50.0	31.6	15.2	4.65	0.06	3.11	9.32	17.9	23.5	33.0	43.4	35.2	24.6	12.5
90	20.8	62.2	90.7	160	105	51.9	33.2	15.9	4.86	0.06	2.97	9.19	17.9	23.5	32.8	43.3	35.4	25.8	19.0
95	20.2	60.1	89.8	160	105	52.1	33.4	16.1	4.98	0.07	2.80	8.81	17.2	22.8	31.8	42.3	37.2	32.6	40.7
100	39.4	79.6	95.4	156	102	50.6	32.3	15.8	5.01	0.09	2.59	8.23	15.8	21.4	30.1	40.8	39.5	40.3	62.5
105	58.3	103	103	151	96.6	48.0	30.1	15.1	4.96	0.12	2.36	7.59	14.2	19.6	27.9	38.9	41.3	47.8	83.8
110	79.8	126	110	146	90.3	44.3	27.5	14.2	4.86	0.16	2.12	6.92	12.7	17.5	25.4	36.4	42.0	54.3	104
115	99.6	147	115	138	82.9	40.2	25.0	13.3	4.69	0.21	1.87	6.24	11.3	15.5	22.7	33.3	40.4	57.1	115
120	114	159	113	128	74.9	36.1	22.6	12.3	4.48	0.27	1.61	5.55	9.97	13.6	20.1	29.8	37.2	54.7	114
125	114	155	106	116	66.7	32.1	20.4	11.3	4.23	0.32	1.35	4.86	8.72	11.8	17.5	26.1	33.0	49.2	104
130	104	140	94.1	102	58.7	28.3	18.2	10.3	3.94	0.37	1.10	4.18	7.52	10.2	15.0	22.5	28.6	42.7	89.2
135	90.0	121	81.9	88.7	50.8	24.6	16.0	9.23	3.63	0.42	0.8768	3.51	6.38	8.59	12.6	18.9	24.0	35.8	74.8
140	76.1	103	69.0	74.9	43.2	21.1	13.9	8.18	3.31	0.47	0.66	2.87	5.29	7.13	10.4	15.6	19.6	29.2	60.8
145	61.5	83.7	56.5	61.9	36.0	17.8	11.9	7.12	2.97	0.50	0.46	2.27	4.25	5.77	8.43	12.5	15.7	23.3	48.3
150	49.0	66.9	45.4	50.2	29.4	14.8	9.99	6.09	2.62	0.53	0.28	1.73	3.29	4.51	6.59	9.82	12.2	18.1	37.5
155	38.2	52.3	35.6	39.6	23.5	11.9	8.17	5.08	2.27	0.56	0.10	1.20	2.42	3.36	4.93	7.37	9.17	13.6	28.1
160	28.8	39.4	26.9	30.2	18.0	9.27	6.46	4.11	1.91	0.55	0.02	0.7226	1.62	2.33	3.44	5.18	6.45	9.62	19.9
165	20.5	28.1	19.3	21.8	13.1	6.83	4.84	3.18	1.57	0.56	0.02	0.30	0.9076	1.41	2.13	3.26	4.09	6.12	12.7
170	13.3	18.2	12.5	14.3	8.65	4.60	3.35	2.31	1.24	0.56	0.03	0.02	0.28	0.5924	0.9916	1.61	2.07	3.13	6.44
175	7.03	9.66	6.65	7.69	4.76	2.56	1.41	0.70	0.22	0.05	0.04	0.03	0.05	0.04	0.07	0.22	0.34	0.61	1.16
180	0.05	0.06	0.05	0.06	0.04	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-27

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Niteo N	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C(DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350			
0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05			
5	10.8	7.49	8.76	5.46	3.07	2.38	1.50	0.8892	0.54	0.27	0.11	0.07	0.06	0.08	0.21	0.33	0.59			
10	20.0	13.7	15.7	9.60	5.17	3.86	2.76	1.61	0.8797	0.15	0.12	0.33	0.6670	1.07	1.69	2.12	3.21			
15	30.6	20.9	23.6	14.2	7.45	5.37	3.66	1.98	0.8984	0.12	0.39	1.03	1.51	2.24	3.39	4.21	6.30			
20	42.6	29.0	32.4	19.2	9.88	6.96	4.56	2.32	0.8985	0.10	0.8667	1.75	2.43	3.54	5.29	6.60	9.85			
25	56.3	38.2	42.3	24.9	12.5	8.59	5.45	2.64	0.8892	0.15	1.35	2.51	3.40	4.96	7.43	9.30	13.9			
30	71.6	48.5	53.5	31.2	15.4	10.3	6.31	2.94	0.58	0.34	1.82	3.27	4.43	6.52	9.82	12.4	18.4			
35	88.9	60.0	65.9	38.3	18.5	12.0	7.13	3.21	0.06	0.55	2.29	4.06	5.53	8.24	12.5	15.8	23.6			
40	108	73.1	79.7	46.1	21.9	13.6	7.88	3.45	0.04	0.7702	2.75	4.85	6.66	10.1	15.5	19.7	29.4			
45	129	87.4	94.9	54.4	25.2	15.2	8.53	3.65	0.03	0.9736	3.18	5.59	7.78	12.1	18.8	24.0	36.1			
50	149	101	111	63.1	28.6	16.5	9.09	3.82	0.02	1.17	3.59	6.27	8.89	14.2	22.5	28.9	43.5			
55	160	111	124	71.6	31.7	17.6	9.56	3.95	0.02	1.37	3.97	6.89	9.97	16.5	26.4	34.0	50.8			
60	160	113	131	79.0	34.4	18.5	9.96	4.06	0.02	1.55	4.33	7.46	11.0	18.7	30.0	38.1	55.9			
65	146	213	311	112	36.5	19.0	10.3	4.13	0.02	1.72	4.64	7.97	11.9	20.9	32.6	39.7	56.7			
70	194	272	473	380	107	19.4	10.5	4.16	0.03	1.88	4.92	8.40	12.6	32.5	74.7	77.4	55.6			
75	193	269	482	412	144	19.6	10.6	4.15	0.02	1.81	4.40	8.76	12.1	122	132	104	77.1			
80	173	264	490	420	136	19.7	10.6	4.11	0.02	1.18	2.93	7.73	11.7	131	135	103	74.5			
85	158	259	498	424	126	19.8	10.5	4.05	0.02	0.38	1.25	6.86	10.1	133	136	102	68.5			
90	164	261	501	425	115	19.5	10.4	3.30	0.04	0.53	2.03	8.27	13.2	132	137	99.9	62.9			
95	184	270	498	423	102	18.9	10.1	2.27	0.03	0.9774	3.73	9.51	14.8	136	136	99.6	63.5			
100	206	277	493	417	88.6	18.3	9.80	1.99	0.02	1.57	5.30	9.47	14.9	135	135	101	69.7			
105	217	282	484	408	77.6	17.5	9.39	2.21	0.02	1.83	5.66	9.39	15.3	133	132	102	76.6			
110	161	250	351	158	32.4	16.7	8.91	2.87	0.02	2.27	5.59	9.24	19.1	128	129	103	83.1			
115	158	118	127	73.9	29.9	15.8	8.36	3.01	0.02	2.46	5.47	9.03	13.7	41.5	91.5	93.4	64.1			
120	155	107	117	66.0	27.1	14.7	7.76	2.60	0.02	2.34	5.31	8.71	13.1	22.0	33.0	45.3	56.1			
125	140	95.3	102	57.1	24.0	13.5	7.10	1.70	0.02	2.06	4.97	8.29	12.1	19.9	30.3	38.0	55.1			
130	121	81.5	86.3	48.3	20.9	12.1	6.39	2.16	0.06	2.31	4.07	7.79	11.0	17.5	26.6	34.0	50.1			
135	99.8	67.1	71.2	40.1	17.9	10.7	5.64	1.85	0.10	2.21	4.55	5.73	9.75	15.0	22.7	29.0	42.7			
140	80.8	54.5	58.0	32.8	15.0	9.20	4.84	1.52	0.16	2.10	4.22	6.49	7.54	12.7	18.9	24.1	35.8			
145	64.4	43.5	46.4	26.4	12.3	7.67	4.02	1.17	0.23	1.97	3.83	5.80	6.35	10.6	15.5	19.6	29.0			
150	49.9	33.9	36.2	20.8	9.77	6.15	3.18	0.81	0.30	1.82	3.40	5.03	6.15	6.77	12.6	15.8	23.1			
155	37.4	25.5	27.2	15.7	7.42	4.68	2.34	0.45	0.36	1.64	2.94	4.24	5.06	6.69	9.97	12.4	18.0			
160	26.4	18.1	19.3	11.2	5.26	3.27	1.52	0.06	0.43	1.45	2.46	3.45	4.01	5.47	4.88	9.44	13.6			
165	16.8	11.5	12.3	7.12	3.28	1.94	0.71	0.03	0.48	1.24	1.97	2.67	3.03	4.06	5.58	6.81	9.75			
170	8.47	5.86	6.07	3.43	1.44	0.68	0.03	0.04	0.52	1.02	1.48	1.91	2.09	2.74	3.69	2.38	6.31			
175	1.41	0.92	0.63	0.14	0.03	0.03	0.03	0.03	0.02	0.12	0.34	0.62	1.01	1.22	1.54	2.01	2.39	3.32		
180	0.07	0.05	0.06	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.03	0.04			

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-27

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks: