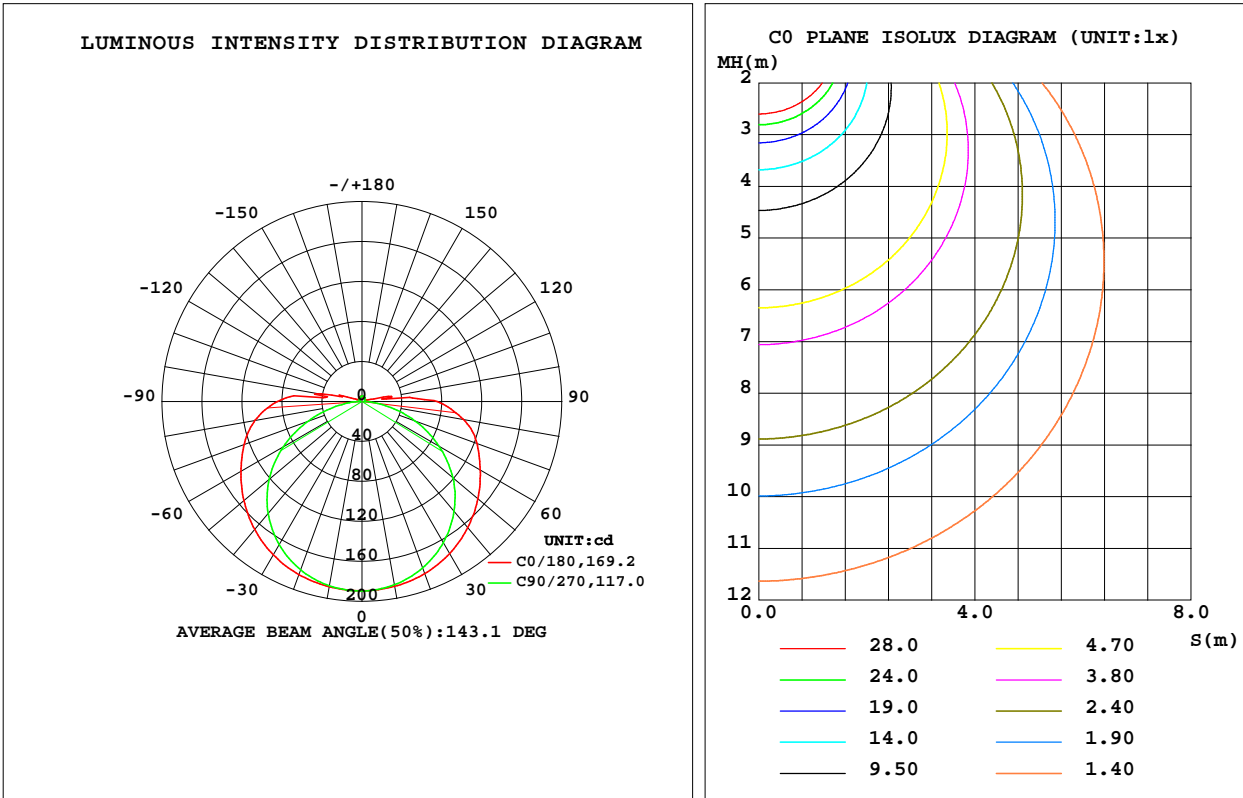


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.4204A P:10.09W PF:1.000 Freq:0Hz Lamp Flux:797.682x1 lm		
NAME: DRF102408NO	TYPE:	WEIGHT:
SPEC.:DRF102408NO-9WNSA012WC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 79.07 lm/W			
MODEL	DRF102408NO	I _{max} (cd)	189.6	S/MH(C0/180)	1.39
NOMINAL POWER(W)	9.2	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	797.68	h UP,DN(C0-180)	3.4,46.0
NOMINAL FLUX(lm)	797.682	CIE CLASS	DIRECT	h UP,DN(C180-360)	3.8,46.8
LAMPS INSIDE	1	h up(%)	7.2	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	h down(%)	92.8	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

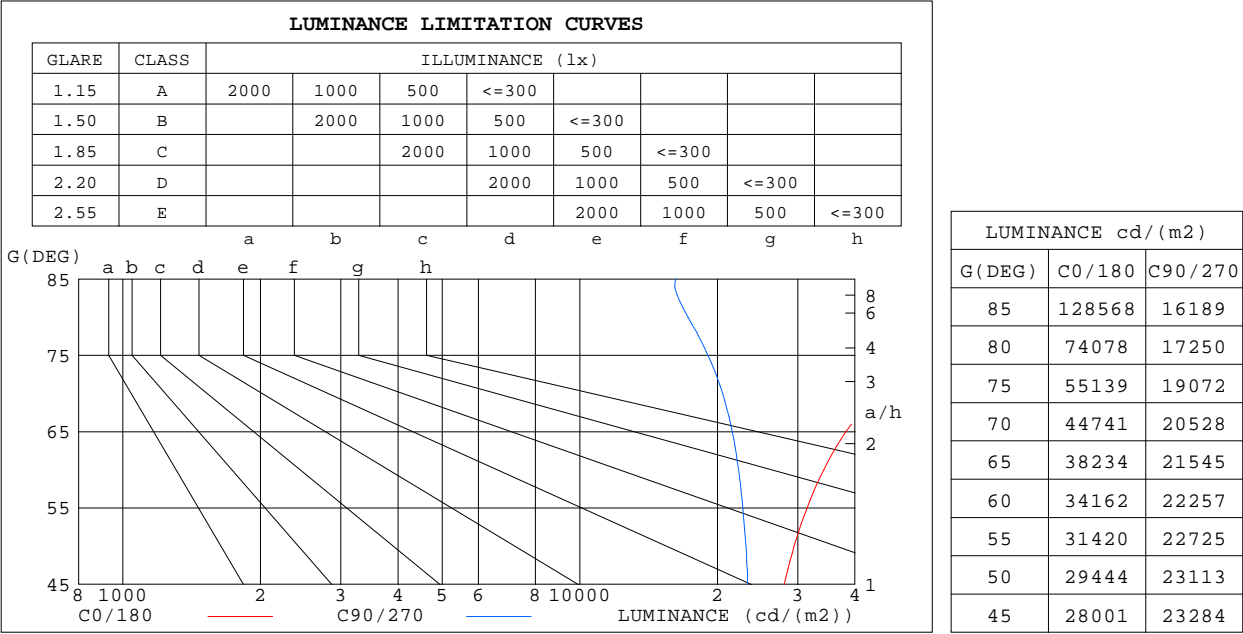
ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	187.8	186.7	186.2	187.3	188.2	188.0	187.3	187.4	0- 10	17.99	17.99	2.25,2.25
20	183.4	180.2	177.3	180.9	184.4	182.6	179.3	181.0	10- 20	52.23	70.22	8.8,8.8
30	175.6	169.5	163.0	170.4	177.3	173.1	165.6	170.2	20- 30	81.41	151.6	19,19
40	164.6	155.0	143.3	156.0	167.0	159.6	146.2	155.0	30- 40	102.5	254.2	31.9,31.9
50	151.4	137.4	118.9	138.1	154.2	142.6	121.2	136.3	40- 50	113.6	367.8	46.1,46.1
60	136.6	118.3	89.03	118.0	139.9	123.7	91.09	115.8	50- 60	113.9	481.7	60.4,60.4
70	122.4	99.08	56.17	98.12	125.5	104.5	57.17	94.90	60- 70	104.7	586.4	73.5,73.5
80	102.9	79.88	23.96	79.19	108.5	85.60	23.67	74.70	70- 80	88.53	674.9	84.6,84.6
90	75.35	52.62	3.548	54.81	84.53	60.72	2.881	46.70	80- 90	65.22	740.1	92.8,92.8
100	30.11	8.563	2.674	13.01	45.14	15.89	1.794	4.066	90-100	31.11	771.2	96.7,96.7
110	3.958	3.886	3.250	3.909	8.891	3.565	2.423	2.974	100-110	8.492	779.7	97.7,97.7
120	4.125	4.144	3.753	4.048	4.317	3.436	3.070	3.550	110-120	3.748	783.5	98.2,98.2
130	4.509	4.419	4.203	4.324	4.414	3.891	3.634	3.934	120-130	3.577	787.1	98.7,98.7
140	4.755	4.684	4.701	4.671	4.707	4.251	4.144	4.293	130-140	3.357	790.4	99.1,99.1
150	4.971	4.953	5.007	4.989	5.019	4.629	4.503	4.617	140-150	2.935	793.3	99.5,99.5
160	5.175	5.259	5.343	5.277	5.253	5.007	4.983	4.995	150-160	2.311	795.7	99.7,99.7
170	5.355	5.535	5.541	5.499	5.475	5.444	5.391	5.372	160-170	1.502	797.2	99.9,99.9
180	5.559	5.583	5.553	5.559	5.559	5.577	5.565	5.553	170-180	0.5255	797.7	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

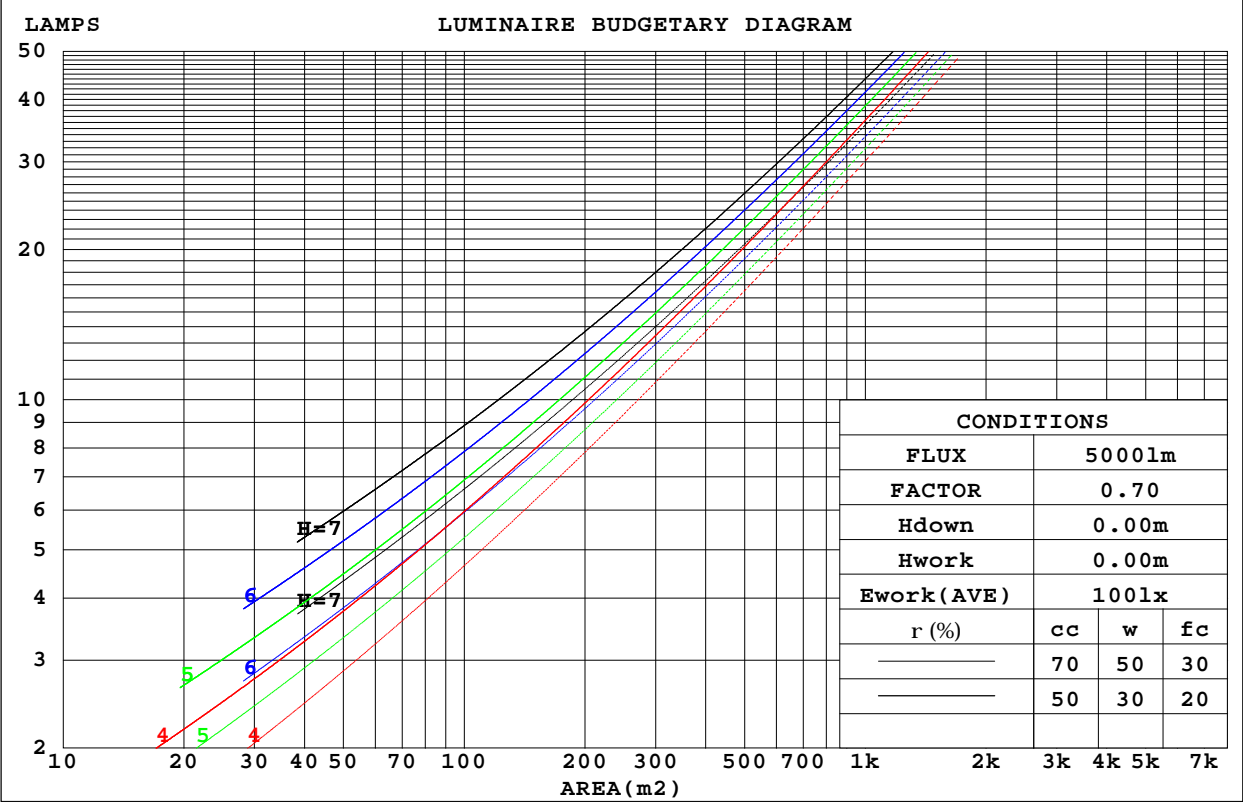


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.375m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Coefficients of Utilization(CU)															
0.0	1.17	1.17	1.17	1.14	1.14	1.14	1.07	1.07	1.07	1.01	1.01	1.01	.95	.95	.95	.93
1.0	.97	.92	.87	.94	.89	.85	.89	.84	.81	.83	.80	.77	.78	.76	.73	.70
2.0	.83	.75	.68	.80	.73	.66	.75	.69	.64	.71	.66	.61	.67	.63	.59	.56
3.0	.72	.62	.55	.70	.61	.54	.65	.58	.52	.62	.55	.50	.58	.53	.48	.46
4.0	.63	.53	.46	.61	.52	.45	.57	.50	.43	.54	.47	.42	.51	.45	.41	.38
5.0	.56	.46	.39	.54	.45	.38	.51	.43	.37	.48	.41	.36	.46	.40	.35	.32
6.0	.50	.40	.33	.49	.39	.33	.46	.38	.32	.43	.36	.31	.41	.35	.30	.28
7.0	.45	.36	.29	.44	.35	.29	.42	.34	.28	.39	.33	.27	.37	.31	.27	.24
8.0	.41	.32	.26	.40	.31	.25	.38	.30	.25	.36	.29	.24	.34	.28	.24	.22
9.0	.37	.29	.23	.37	.28	.23	.35	.27	.22	.33	.27	.22	.32	.26	.21	.19
10.0	.34	.26	.21	.34	.26	.20	.32	.25	.20	.31	.24	.20	.29	.23	.19	.17



C Range: 0 - 360DEG

C Interval: 45.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:JYH

Test Date:2024-04-29

g Range: 0 - 180DEG

g Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362

Humidity:65.0%

Test Distance:10.375m [K=1.0000]

Remarks:

WEC AND CCEC

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.402	.229	.072	.393	.224	.071	.375	.215	.069	.358	.207	.066	.343	.199	.064	
2.0	.347	.190	.058	.339	.187	.057	.323	.179	.056	.308	.173	.054	.294	.166	.052	
3.0	.308	.164	.049	.300	.161	.048	.286	.155	.047	.272	.149	.046	.260	.144	.045	
4.0	.276	.144	.042	.269	.141	.042	.257	.136	.041	.245	.131	.040	.233	.127	.039	
5.0	.250	.128	.037	.244	.125	.037	.233	.121	.036	.222	.117	.035	.212	.113	.034	
6.0	.229	.115	.033	.224	.113	.033	.213	.109	.032	.203	.106	.031	.194	.102	.030	
7.0	.211	.104	.030	.206	.103	.029	.197	.099	.029	.188	.096	.028	.179	.093	.027	
8.0	.195	.095	.027	.191	.094	.027	.182	.091	.026	.174	.088	.025	.167	.086	.025	
9.0	.182	.088	.025	.178	.087	.024	.170	.084	.024	.163	.082	.023	.156	.079	.023	
10.0	.170	.082	.023	.166	.080	.022	.159	.078	.022	.152	.076	.022	.146	.074	.021	

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Ceiling Cavity Exitance Coefficients(CCEC)															
0.0	.245	.245	.245	.210	.210	.210	.143	.143	.143	.082	.082	.082	.026	.026	.026	
1.0	.242	.211	.182	.207	.181	.157	.142	.124	.109	.082	.072	.063	.026	.023	.020	
2.0	.235	.187	.147	.202	.161	.127	.138	.112	.089	.080	.065	.052	.026	.021	.017	
3.0	.228	.171	.125	.195	.147	.108	.134	.102	.076	.077	.060	.045	.025	.019	.015	
4.0	.220	.158	.111	.189	.136	.096	.130	.095	.068	.075	.056	.040	.024	.018	.013	
5.0	.212	.148	.101	.182	.128	.088	.125	.089	.062	.073	.052	.037	.023	.017	.012	
6.0	.204	.140	.094	.175	.121	.082	.121	.085	.058	.070	.050	.034	.023	.016	.011	
7.0	.197	.133	.088	.169	.115	.077	.117	.081	.055	.068	.048	.032	.022	.016	.011	
8.0	.190	.127	.084	.163	.110	.074	.113	.078	.052	.066	.046	.031	.021	.015	.010	
9.0	.183	.122	.081	.158	.106	.071	.109	.075	.050	.064	.044	.030	.021	.014	.010	
10.0	.177	.118	.079	.153	.103	.069	.106	.072	.049	.062	.043	.029	.020	.014	.010	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

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	25.4	27.0	25.8	27.3	27.7	23.9	25.5	24.3	25.8	26.2
3H	28.1	29.6	28.5	30.0	30.3	25.6	27.0	26.0	27.4	27.8
4H	29.7	31.0	30.1	31.4	31.9	26.3	27.7	26.7	28.1	28.5
6H	31.3	32.6	31.8	33.0	33.5	26.8	28.1	27.3	28.6	29.0
8H	32.2	33.4	32.6	33.9	34.3	27.0	28.3	27.5	28.7	29.2
12H	33.2	34.4	33.6	34.8	35.3	27.1	28.4	27.6	28.8	29.3
4H 2H	26.1	27.5	26.5	27.8	28.3	25.0	26.4	25.4	26.8	27.2
3H	29.0	30.2	29.5	30.7	31.2	27.0	28.2	27.5	28.7	29.1
4H	30.7	31.9	31.2	32.3	32.8	27.9	29.1	28.4	29.5	30.0
6H	32.6	33.6	33.1	34.1	34.6	28.7	29.7	29.2	30.2	30.7
8H	33.6	34.5	34.1	35.0	35.6	29.0	29.9	29.5	30.4	31.0
12H	34.7	35.6	35.2	36.1	36.6	29.2	30.1	29.7	30.6	31.2
8H 4H	31.2	32.1	31.7	32.6	33.2	29.0	29.9	29.5	30.4	31.0
6H	33.3	34.1	33.8	34.6	35.2	30.1	30.9	30.7	31.5	32.1
8H	34.5	35.2	35.0	35.7	36.4	30.6	31.4	31.2	31.9	32.5
12H	35.8	36.4	36.4	37.0	37.7	31.1	31.7	31.6	32.3	32.9
12H 4H	31.2	32.1	31.8	32.6	33.2	29.3	30.2	29.8	30.7	31.2
6H	33.4	34.2	34.0	34.7	35.3	30.7	31.4	31.2	31.9	32.6
8H	34.7	35.4	35.3	35.9	36.6	31.3	32.0	31.9	32.6	33.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 797.7 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.8)

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

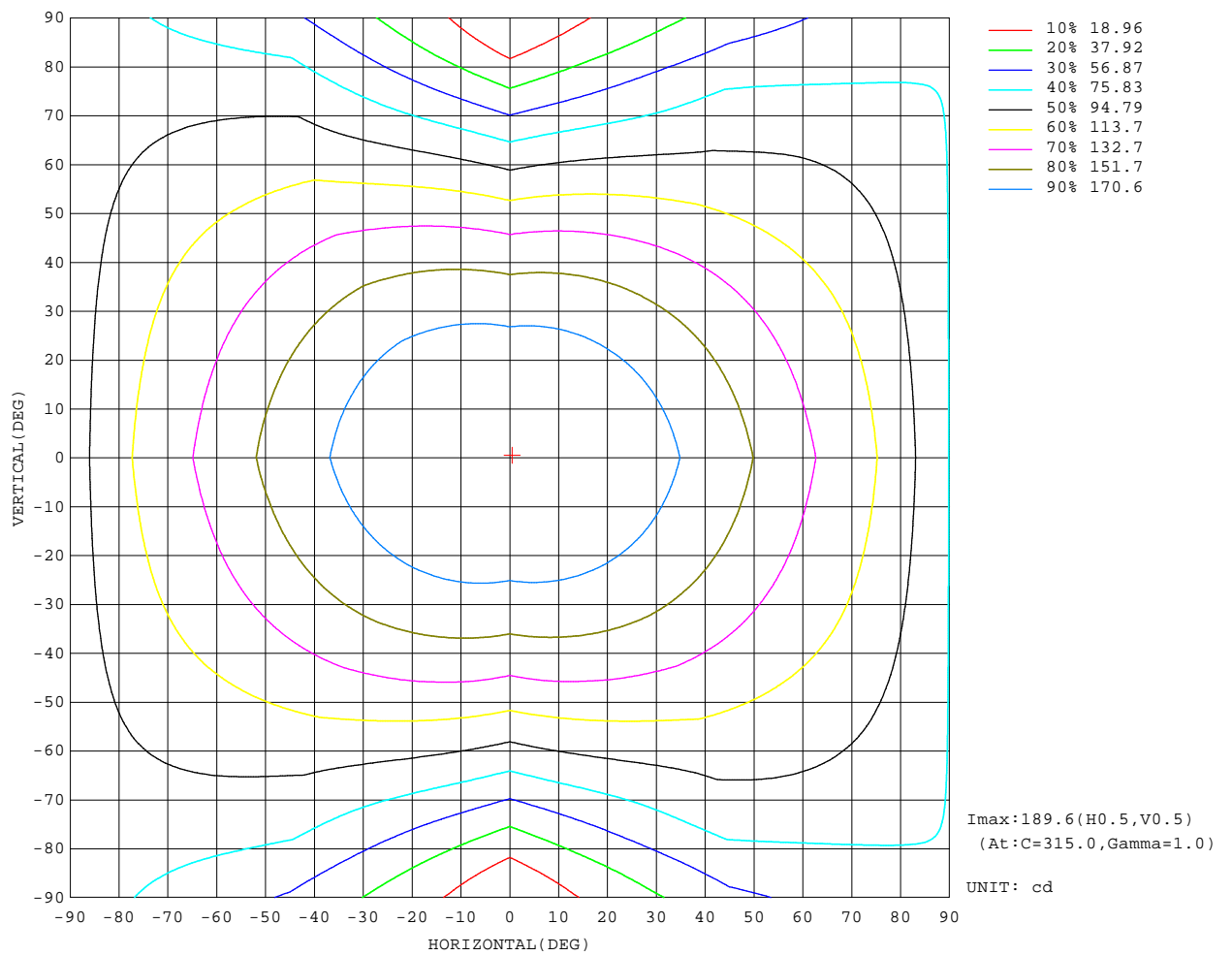
UTILIZATION FACTORS TABLE

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	50	38	30	49	37	30	48	37	30	23
0.80	59	46	38	58	46	38	56	45	38	30
1.00	67	54	46	66	54	46	63	55	45	37
1.25	74	62	53	72	61	53	69	59	52	43
1.50	79	67	59	77	66	58	73	64	57	48
2.00	87	76	68	84	74	67	80	71	65	55
2.50	91	81	73	88	79	72	84	76	70	59
3.00	95	86	78	92	84	77	87	80	74	63
4.00	100	92	85	97	89	84	91	85	80	69
5.00	103	96	90	99	93	88	94	89	84	72
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

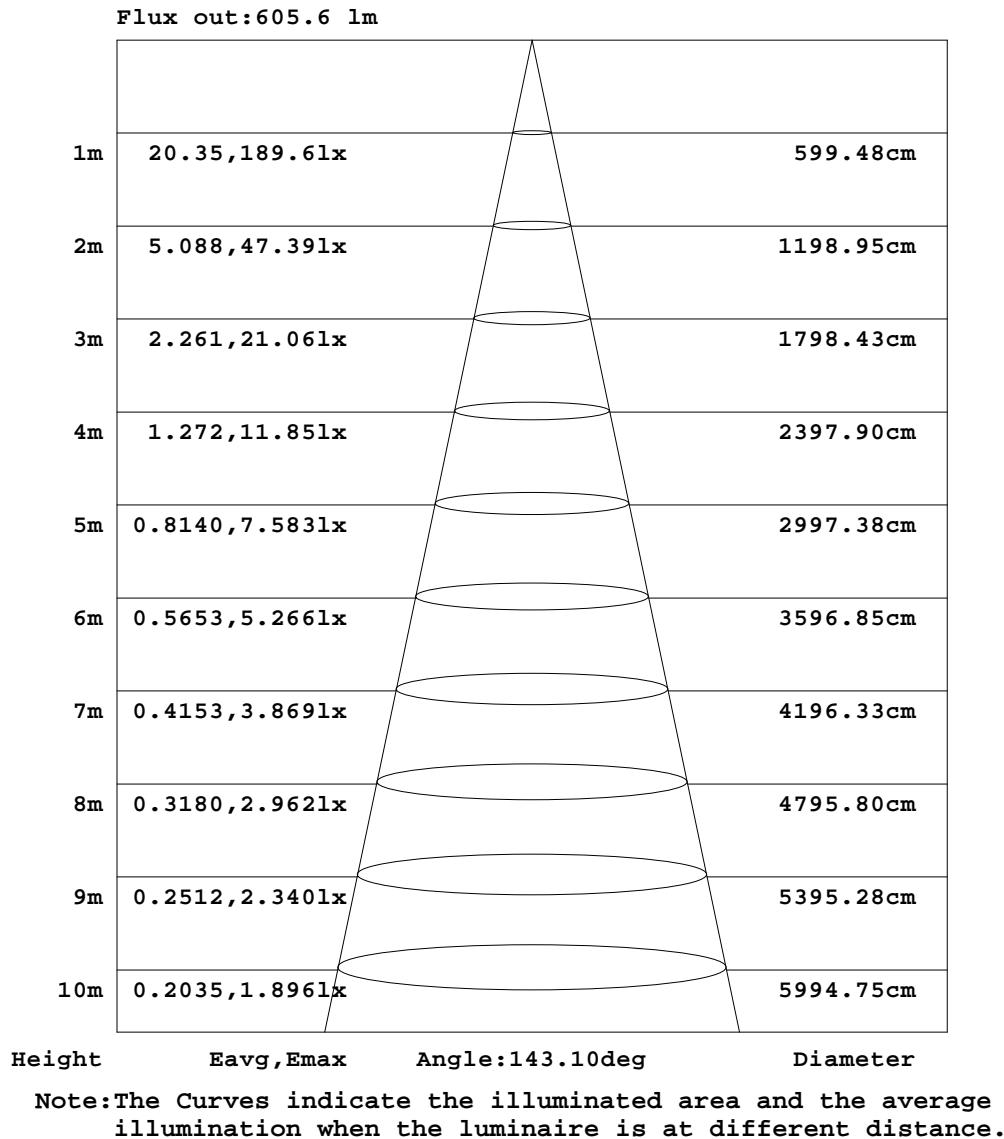
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

deg Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

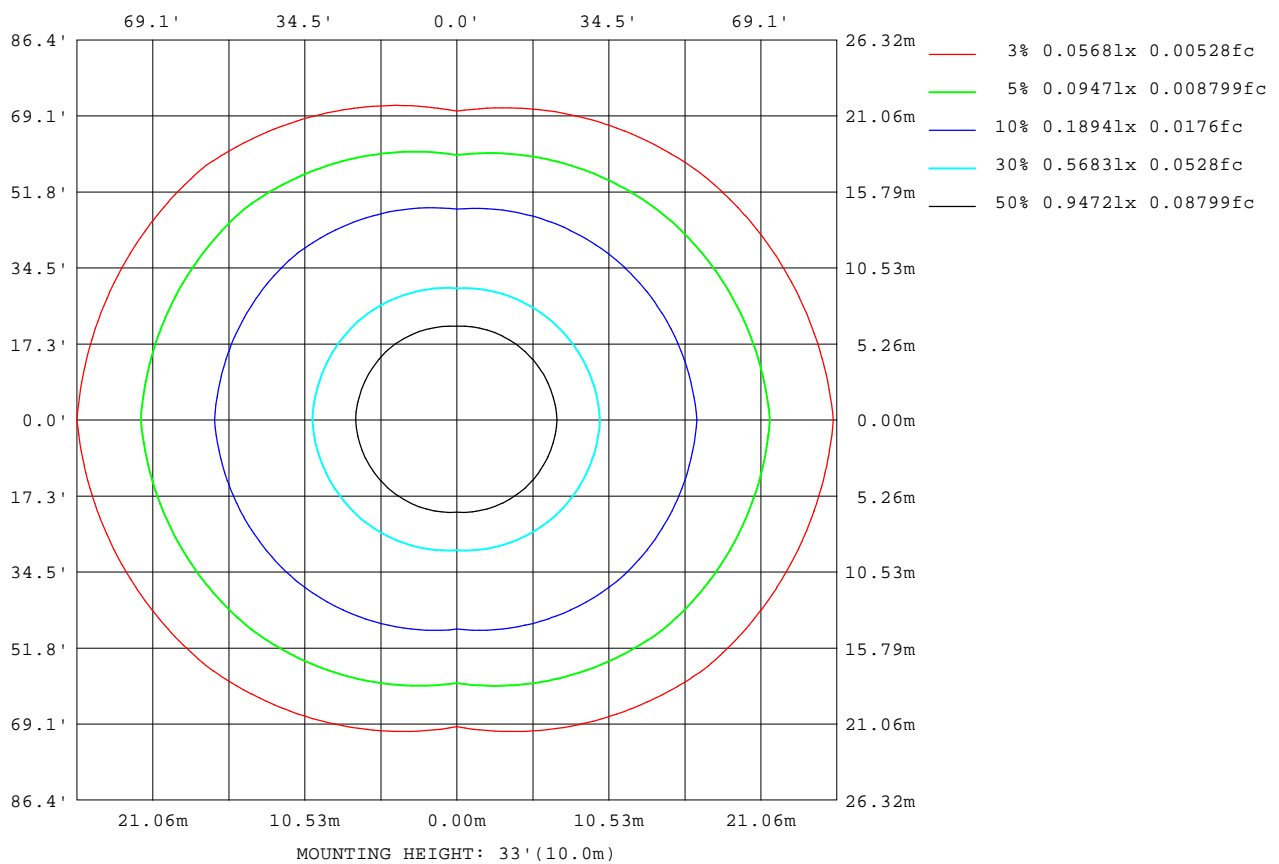
AAI Figure



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.375m [K=1.0000]
Remarks:

LED Avg.L Report

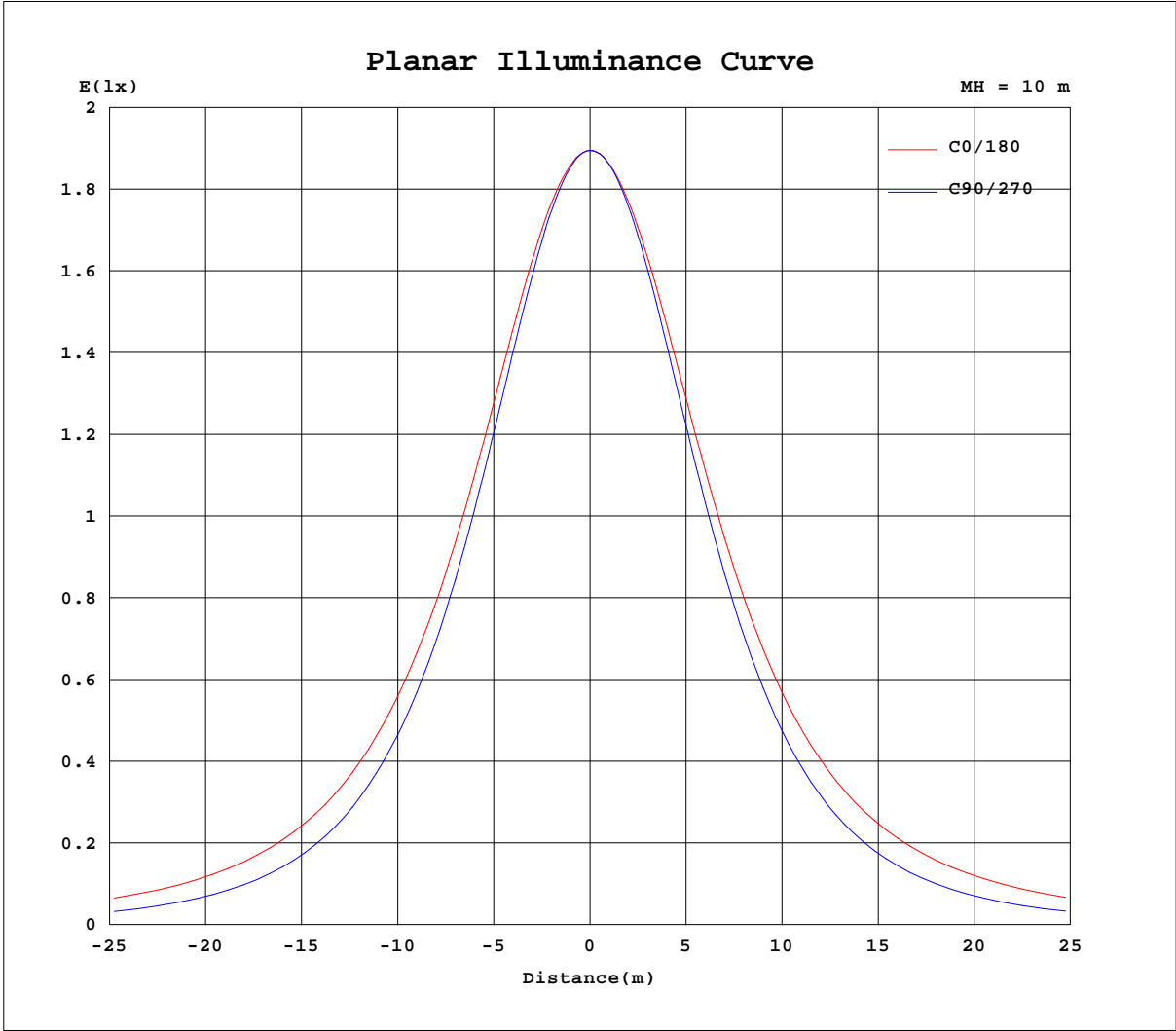
Test:U:24.00V I:0.4204A P:10.09W PF:1.000 Freq:0Hz Lamp Flux:797.682x1 lm		
NAME: DRF102408NO	TYPE:	WEIGHT:
SPEC.:DRF102408NO-9WNSA012WC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:

AvgL	cd/m2
L_0~180(65)av	38717
L_0~180(75)av	56003
L_0~180(85)av	134082
L_90~270(65)av	21781
L_90~270(75)av	19162
L_90~270(85)av	15764
L_45(65)av	32234
L_45(75)av	43472
L_45(85)av	96276

Standard: GB/T 29293-2012

C Range: 0 - 360DEG	g Range: 0 - 180DEG
C Interval: 45.0DEG	g Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Temperature:25.3DEG	Humidity:65.0%
Operators:JYH	Test Distance:10.375m [K=1.0000]
Test Date:2024-04-29	Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1UNIT: cd

C(DEG) g (DEG)	0	45	90	135	180	225	270	315										
0	189	189	190	190	189	189	190	190										
5	189	189	189	189	189	189	189	189										
10	188	187	186	187	188	188	187	187										
15	186	184	182	185	187	186	184	185										
20	183	180	177	181	184	183	179	181										
25	180	175	171	176	181	178	173	176										
30	176	169	163	170	177	173	166	170										
35	170	163	154	164	173	167	157	163										
40	165	155	143	156	167	160	146	155										
45	158	147	132	147	161	151	134	146										
50	151	137	119	138	154	143	121	136										
55	144	128	104	128	147	133	107	126										
60	137	118	89.0	118	140	124	91.1	116										
65	129	109	72.8	108	133	114	74.4	105										
70	122	99.1	56.2	98.1	125	105	57.2	94.9										
75	114	90.4	39.5	88.8	118	95.5	39.9	85.3										
80	103	79.9	24.0	79.2	109	85.6	23.7	74.7										
85	89.6	66.3	11.3	67.6	97.3	73.9	10.7	60.7										
90	75.3	52.6	3.55	54.8	84.5	60.7	2.88	46.7										
95	48.2	17.4	2.38	23.8	68.4	27.4	1.52	17.3										
100	30.1	8.56	2.67	13.0	45.1	15.9	1.79	4.07										
105	7.44	3.85	2.96	5.52	22.1	6.65	2.12	2.84										
110	3.96	3.89	3.25	3.91	8.89	3.56	2.42	2.97										
115	3.95	3.99	3.53	3.92	4.88	3.29	2.73	3.24										
120	4.13	4.14	3.75	4.05	4.32	3.44	3.07	3.55										
125	4.31	4.29	4.01	4.17	4.32	3.69	3.38	3.77										
130	4.51	4.42	4.20	4.32	4.41	3.89	3.63	3.93										
135	4.63	4.55	4.44	4.49	4.55	4.04	3.95	4.11										
140	4.75	4.68	4.70	4.67	4.71	4.25	4.14	4.29										
145	4.87	4.82	4.89	4.82	4.88	4.44	4.26	4.44										
150	4.97	4.95	5.01	4.99	5.02	4.63	4.50	4.62										
155	5.07	5.10	5.17	5.14	5.15	4.83	4.73	4.80										
160	5.17	5.26	5.34	5.28	5.25	5.01	4.98	4.99										
165	5.28	5.42	5.46	5.40	5.35	5.26	5.21	5.19										
170	5.35	5.53	5.54	5.50	5.47	5.44	5.39	5.37										
175	5.46	5.59	5.55	5.56	5.56	5.56	5.49	5.45										
180	5.56	5.58	5.55	5.56	5.56	5.58	5.56	5.55										

C Range: 0 - 360DEGC Interval: 45.0DEGTest Speed: HIGHTemperature:25.3DEGOperators:JYHTest Date:2024-04-29

g Range: 0 - 180DEGInterval: 1.0DEGTest System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362Humidity:65.0%Test Distance:10.375m [K=1.0000]Remarks: