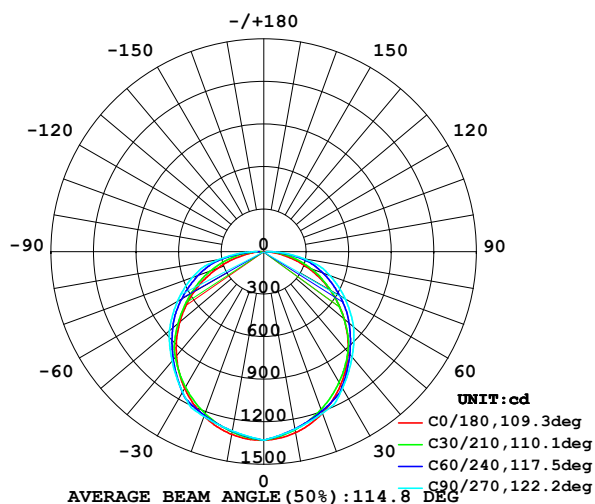


LUMINAIRE PHOTOMETRIC TEST REPORT

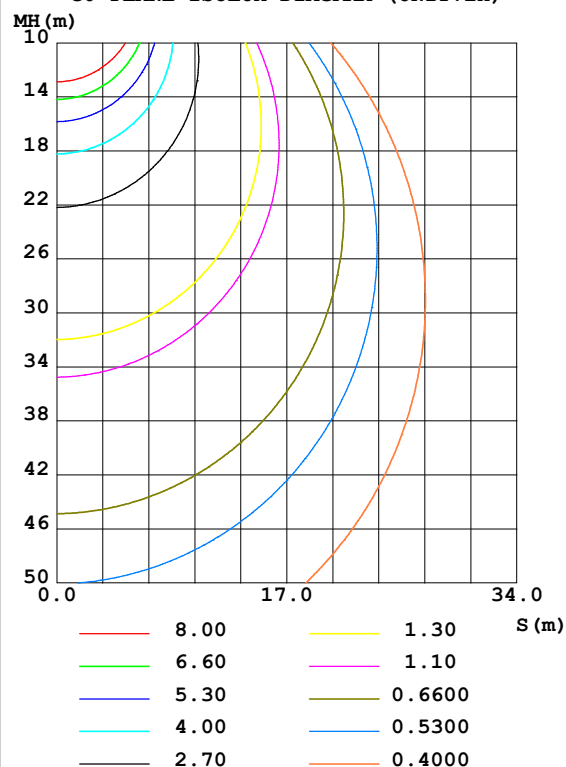
Test:U:120.2V I:0.2275A P:27.13W PF:0.9927 Lamp Flux:1987.57x2 lm		
NAME: LOC-24TRKT-DMWMCCT	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Fintronx LLC	SUR.:1188*63*14mm	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 146.52 lm/W			
MODEL	5000K	I _{max} (cd)	1329	S/MH (C0/180)	1.25
NOMINAL POWER(W)	29	LOR(%)	100.0	S/MH (C90/270)	1.28
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	3975.1	η UP,DN(C0-180)	0.0,49.0
NOMINAL FLUX(lm)	1987.57	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,51.0
LAMPS INSIDE	2	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2020-05-23

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:50%
Test Distance:8.600m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

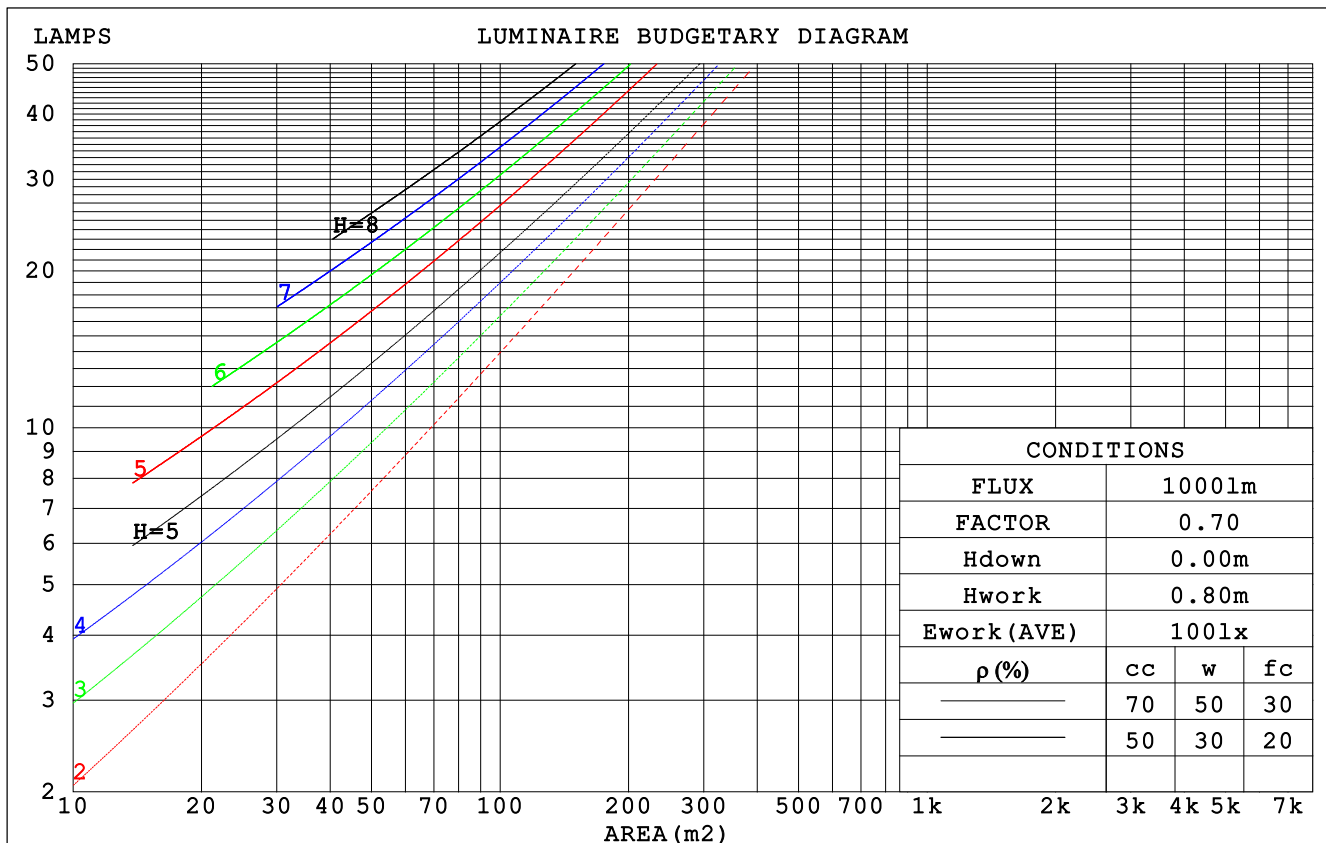
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	1319	1303	1300	1307	1325	1312	1306	1307	0- 5	31.47	31.47	0.79,0.79
10	1296	1271	1271	1279	1308	1287	1283	1279	5- 10	92.65	124.1	3.12,3.12
15	1260	1232	1242	1244	1278	1256	1260	1245	10- 15	150.1	274.3	6.9,6.9
20	1212	1188	1213	1204	1235	1219	1237	1206	15- 20	202.7	477.0	12,12
25	1153	1139	1184	1158	1180	1177	1214	1162	20- 25	249.3	726.3	18.3,18.3
30	1086	1086	1113	1108	1115	1130	1145	1114	25- 30	287.9	1014	25.5,25.5
35	1009	1021	1041	1045	1041	1069	1076	1052	30- 35	315.4	1330	33.4,33.4
40	926.0	933.0	969.7	958.1	959.0	982.7	1007	966.0	35- 40	332.5	1662	41.8,41.8
45	836.0	844.2	898.2	870.1	869.4	895.7	938.0	879.2	40- 45	339.5	2002	50.4,50.4
50	741.2	755.7	826.7	782.1	774.3	808.6	869.1	792.9	45- 50	337.0	2339	58.8,58.8
55	642.2	668.7	744.5	695.1	673.8	722.7	786.3	708.0	50- 55	325.1	2664	67,67
60	539.0	582.3	662.2	608.5	568.6	636.7	703.5	623.8	55- 60	303.8	2968	74.7,74.7
65	433.5	490.2	580.0	516.2	460.3	540.7	620.7	532.6	60- 65	274.8	3242	81.6,81.6
70	327.2	401.1	497.7	426.9	350.3	447.6	537.9	444.9	65- 70	239.6	3482	87.6,87.6
75	223.6	315.3	415.4	340.8	241.8	357.6	455.1	360.8	70- 75	199.8	3682	92.6,92.6
80	129.0	228.6	282.7	252.0	141.3	265.1	319.3	274.6	75- 80	153.8	3836	96.5,96.5
85	53.07	121.3	149.9	133.2	61.60	142.7	183.6	158.2	80- 85	98.29	3934	99,99
90	11.04	16.59	17.15	16.55	17.39	22.68	47.83	43.98	85- 90	41.26	3975	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2020-05-23

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity:50%
 Test Distance:8.600m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.02	.98	.93	1.00	.96	.92	.96	.92	.89	.92	.89	.86	.88	.86	.84	.81
2.0	.89	.81	.75	.87	.80	.74	.83	.77	.72	.80	.75	.71	.77	.73	.69	.67
3.0	.77	.69	.62	.76	.68	.61	.73	.66	.60	.70	.64	.59	.67	.62	.58	.56
4.0	.68	.59	.52	.67	.58	.52	.64	.57	.51	.62	.56	.50	.60	.54	.50	.47
5.0	.61	.52	.45	.60	.51	.44	.58	.50	.44	.56	.49	.43	.54	.48	.43	.41
6.0	.55	.46	.39	.54	.45	.39	.52	.44	.38	.50	.43	.38	.49	.42	.38	.35
7.0	.50	.41	.34	.49	.40	.34	.47	.39	.34	.46	.39	.34	.44	.38	.33	.31
8.0	.45	.36	.31	.45	.36	.30	.43	.36	.30	.42	.35	.30	.41	.34	.30	.28
9.0	.41	.33	.27	.41	.33	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.25
10.0	.38	.30	.25	.38	.30	.25	.37	.30	.25	.36	.29	.25	.35	.29	.24	.23



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2020-05-23

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity: 50%
 Test Distance: 8.600m [K=1.0000]
 Remarks:

WEC AND CCEC

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.338	.192	.061	.331	.189	.060	.317	.182	.058	.305	.176	.056	.294	.170	.055	
2.0	.310	.170	.052	.304	.167	.052	.292	.162	.050	.281	.157	.049	.271	.153	.048	
3.0	.283	.150	.045	.277	.148	.045	.267	.145	.044	.257	.141	.043	.248	.137	.042	
4.0	.259	.134	.040	.254	.133	.039	.244	.130	.039	.236	.127	.038	.228	.124	.038	
5.0	.237	.121	.035	.233	.120	.035	.225	.117	.034	.217	.115	.034	.210	.112	.034	
6.0	.219	.110	.031	.215	.109	.031	.208	.107	.031	.201	.104	.031	.195	.102	.030	
7.0	.203	.100	.028	.200	.100	.028	.193	.098	.028	.187	.096	.028	.181	.094	.028	
8.0	.189	.092	.026	.186	.092	.026	.180	.090	.026	.175	.089	.026	.170	.087	.025	
9.0	.177	.086	.024	.174	.085	.024	.169	.084	.024	.164	.082	.024	.159	.081	.023	
10.0	.166	.080	.022	.164	.079	.022	.159	.078	.022	.154	.077	.022	.150	.076	.022	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.182	.156	.132	.156	.134	.114	.107	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.175	.132	.096	.150	.113	.083	.103	.079	.058	.059	.046	.034	.019	.015	.011	
3.0	.167	.114	.072	.143	.099	.063	.098	.069	.044	.057	.040	.026	.018	.013	.009	
4.0	.159	.101	.057	.137	.087	.049	.094	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.152	.091	.046	.130	.079	.040	.090	.055	.028	.052	.032	.017	.017	.011	.006	
6.0	.144	.083	.038	.124	.071	.033	.085	.050	.024	.050	.029	.014	.016	.010	.005	
7.0	.137	.076	.033	.118	.066	.028	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.028	.112	.061	.025	.078	.043	.017	.045	.025	.010	.015	.008	.003	
9.0	.124	.065	.025	.107	.056	.022	.074	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.118	.061	.022	.102	.053	.019	.071	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2020-05-23

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity:50%
 Test Distance:8.600m [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	13.8	15.4	14.1	15.6	15.8	14.8	16.4	15.1	16.6	16.8
3H	15.2	16.7	15.5	16.9	17.2	16.9	18.3	17.2	18.6	18.8
4H	15.8	17.2	16.1	17.4	17.7	17.9	19.3	18.3	19.6	19.8
6H	16.1	17.4	16.5	17.7	18.0	18.8	20.1	19.2	20.4	20.7
8H	16.2	17.5	16.6	17.8	18.1	19.2	20.4	19.5	20.7	21.0
12H	16.3	17.5	16.6	17.8	18.1	19.4	20.7	19.8	21.0	21.3
4H 2H	14.6	16.0	14.9	16.2	16.5	15.3	16.7	15.7	17.0	17.2
3H	16.2	17.4	16.6	17.7	18.0	17.7	18.9	18.0	19.2	19.5
4H	16.9	18.0	17.3	18.3	18.7	18.9	20.0	19.3	20.3	20.7
6H	17.4	18.4	17.8	18.7	19.1	20.0	21.0	20.4	21.3	21.7
8H	17.5	18.5	18.0	18.8	19.2	20.4	21.3	20.8	21.7	22.1
12H	17.6	18.5	18.1	18.9	19.3	20.7	21.6	21.2	22.0	22.4
8H 4H	17.5	18.4	17.9	18.8	19.2	19.2	20.1	19.6	20.5	20.9
6H	18.2	19.0	18.6	19.4	19.8	20.5	21.2	20.9	21.6	22.1
8H	18.4	19.1	18.9	19.6	20.0	21.0	21.7	21.5	22.1	22.6
12H	18.6	19.2	19.1	19.7	20.1	21.5	22.1	22.0	22.6	23.0
12H 4H	17.6	18.4	18.0	18.8	19.2	19.2	20.0	19.6	20.4	20.8
6H	18.4	19.1	18.8	19.5	20.0	20.5	21.2	21.0	21.7	22.1
8H	18.7	19.3	19.2	19.8	20.3	21.1	21.8	21.6	22.2	22.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.2					+ 0.1 / - 0.2				
2.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.3				

CIE Pub.117 Corrected 3975 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.8)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2020-05-23

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity:50%
 Test Distance:8.600m [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) $k(RI) \times RCR = 5$									
$k = 0.60$	56	44	37	55	44	37	54	43	37	30
0.80	66	54	46	65	53	46	63	53	46	39
1.00	74	63	55	73	62	55	71	64	54	47
1.25	81	70	63	80	69	62	77	68	61	54
1.50	86	76	68	85	75	68	81	73	67	59
2.00	93	84	77	91	83	76	88	81	75	67
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	93	87	99	92	86	94	89	84	75
4.00	105	99	94	103	97	92	98	94	90	81
5.00	108	102	98	105	100	96	100	97	93	84
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: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2020-05-23

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity: 50%
 Test Distance: 8.600m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Conical surface Flux(90deg):

2001.6 lm

%lum = 50.4%

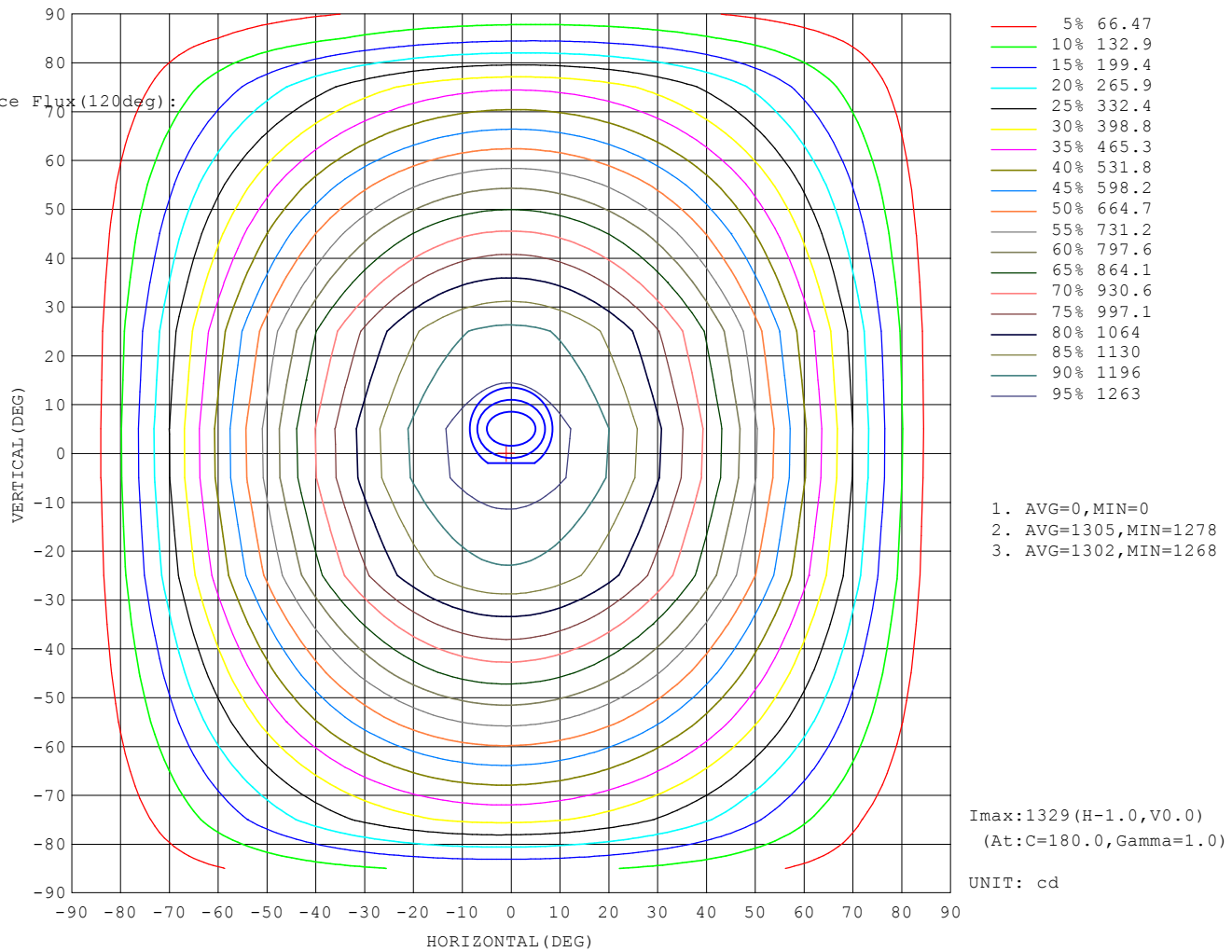
%lamp = 50.4%

Conical surface Flux(120deg):

2967.6 lm

%lum = 74.7%

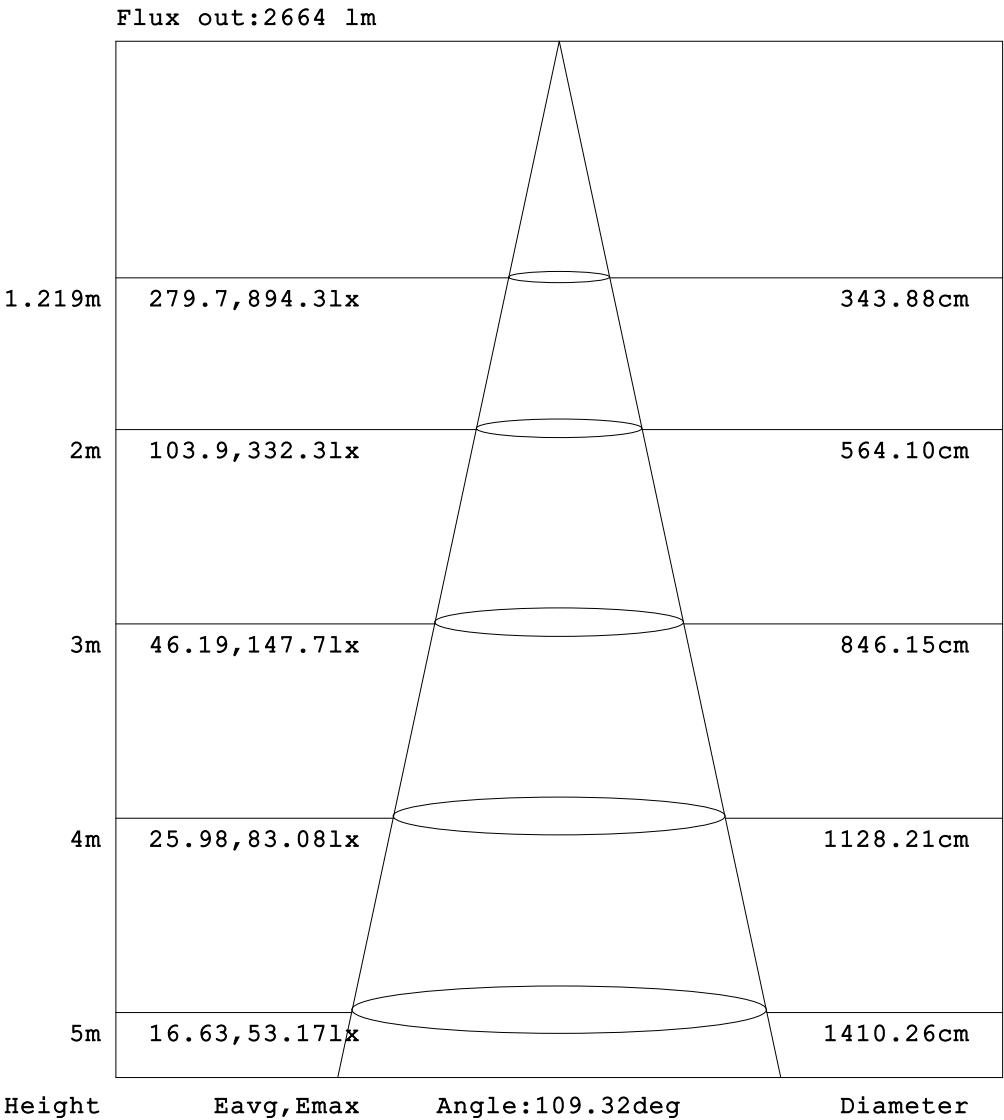
%lamp = 74.7%



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2020-05-23

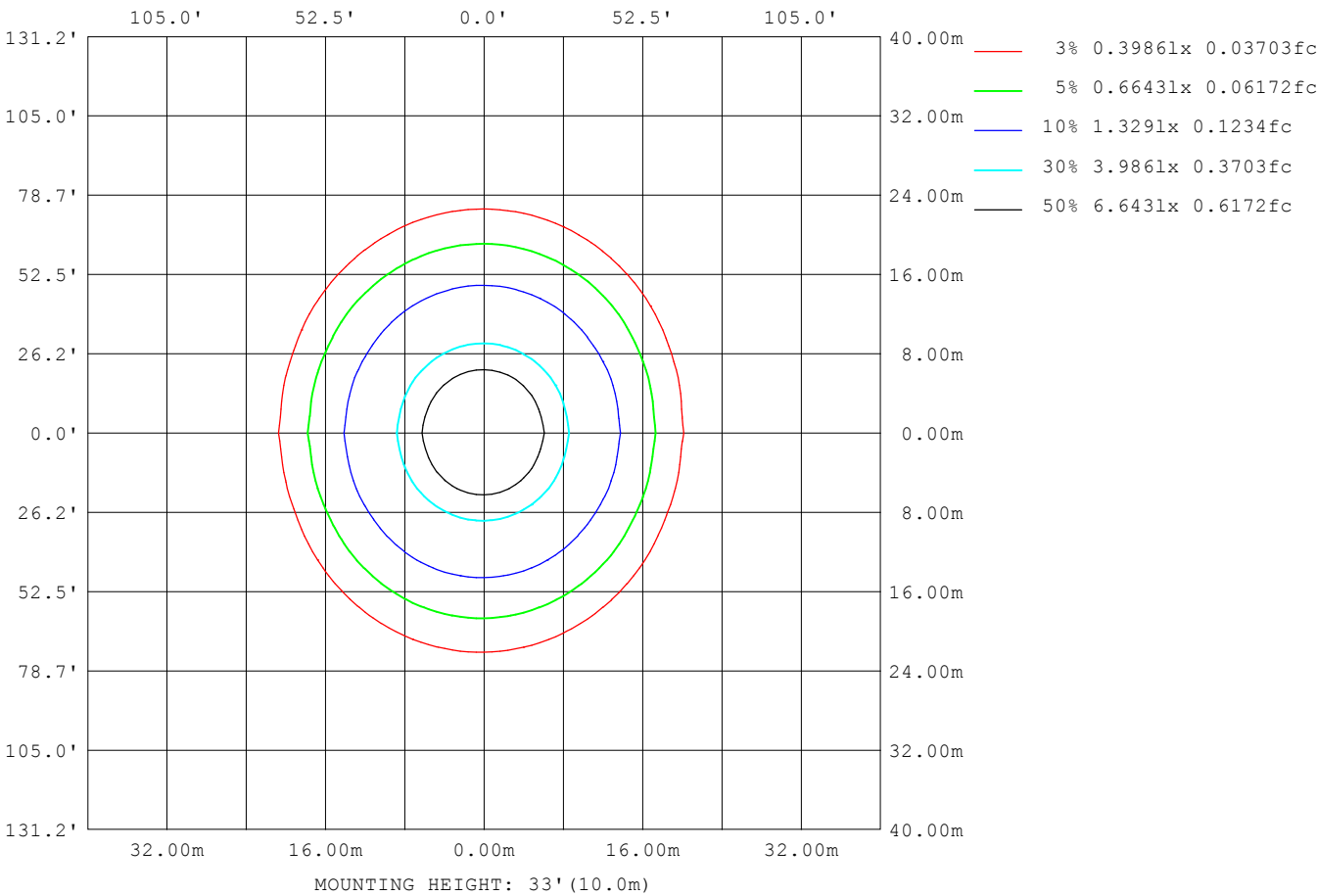
γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:50%
Test Distance:8.600m [K=1.0000]
Remarks:

AAI Figure



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

ISOLUX DIAGRAM



C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 5.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Temperature:25DEG	Humidity:50%
Operators:	Test Distance:8.600m [K=1.0000]
Test Date:2020-05-23	Remarks:

LED Avg.L Report

Test:U:120.2V I:0.2275A P:27.13W PF:0.9927 Lamp Flux:1987.57x2 lm		
NAME: LOC-24TRKT-DMWMCCT	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Fintronx LLC	SUR.:1188*63*14mm	PROTECTION ANGLE:

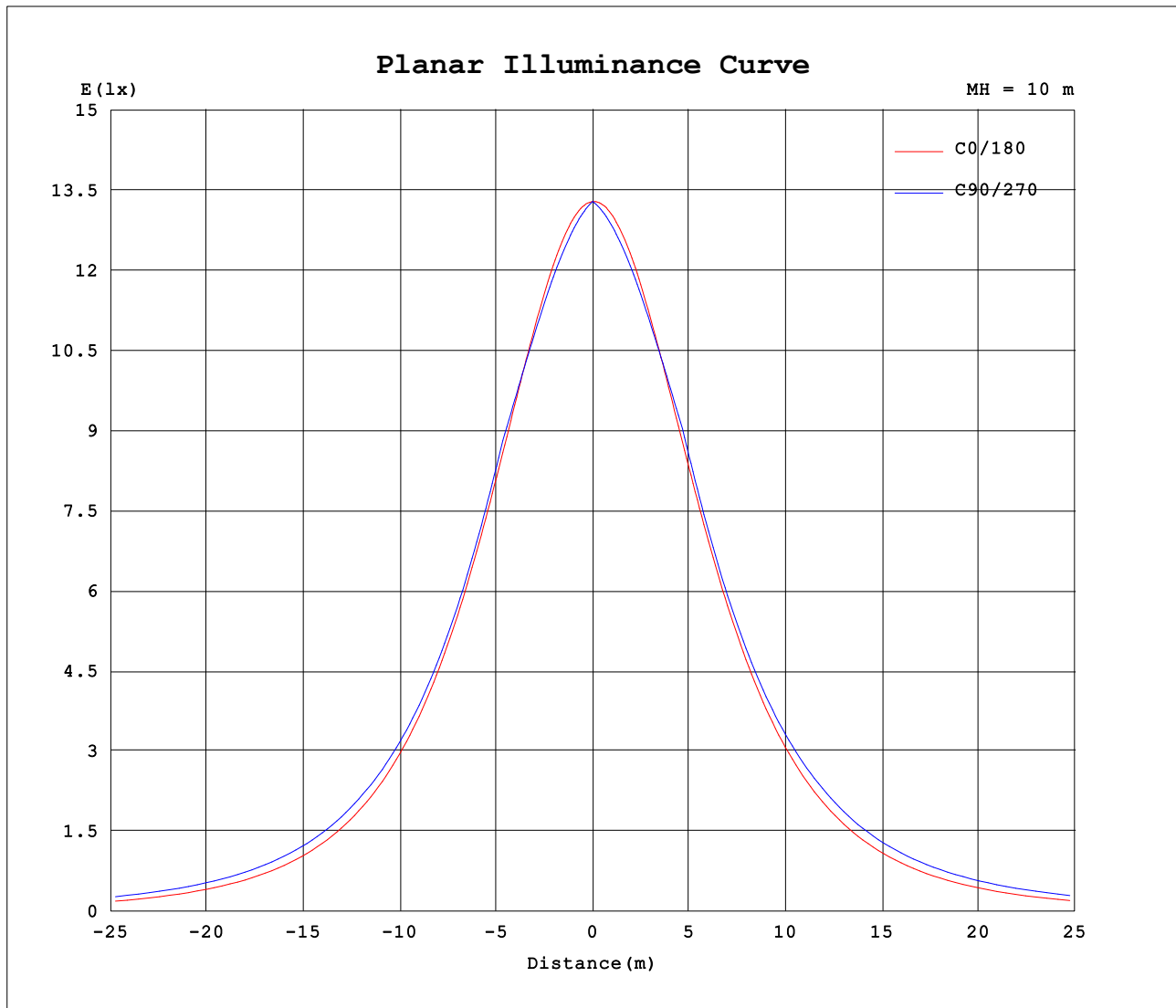
AvgL	cd/m2
L_0~180 (65) av	1413
L_0~180 (75) av	1201
L_0~180 (85) av	879
L_90~270 (65) av	1898
L_90~270 (75) av	2247
L_90~270 (85) av	2556
L_45 (65) av	1644
L_45 (75) av	1774
L_45 (85) av	2129

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2020-05-23

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity:50%
 Test Distance:8.600m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2020-05-23

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity: 50%
Test Distance: 8.600m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2020-05-23

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:50%
Test Distance:8.600m [K=1.0000]
Remarks:

```

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2020-05-23

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:50%
Test Distance:8.600m [K=1.0000]
Remarks:

```

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--3

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2020-05-23

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:50%
Test Distance:8.600m [K=1.0000]
Remarks:

```

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--4

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2020-05-23

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:50%
Test Distance:8.600m [K=1.0000]
Remarks:

```