

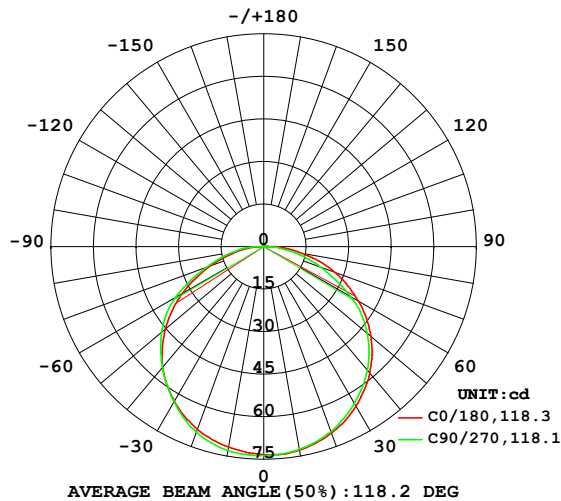
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.04V I:0.0259A P:3.0122W PF:0.5048 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% Lamp Flux:221.98x1 lm

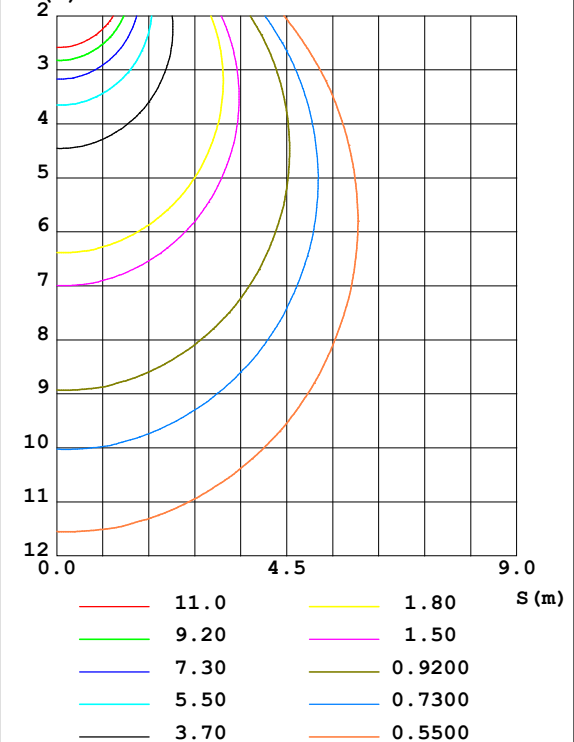
NAME: LED LIGHT	TYPE: LED	WEIGHT: /
SPEC.: 613497	DIM.: /	SERIAL No.: /
MFR.: ILLUS	SUR.: 32	Shielding Angle: /

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 73.69 lm/W
MODEL	ILS3MDL930WW01	Imax(cd)	74.08	S/MH(C0/180)	1.28	
NOMINAL POWER(W)	2	LOR(%)	100.0	S/MH(C90/270)	1.28	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	221.98	η UP,DN(C0-180)	0.1,50.7	
NOMINAL FLUX(lm)	221.98	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.1,49.2	
LAMPS INSIDE	1	η up(%)	0.1	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	230	η down(%)	99.9	CIBSE SHR MAX	1.50	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:NOAH
Test Date:2023-02-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.442
Humidity:56.5%
Test Distance:1.142m [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
10	72.86	72.93	72.57	72.27	71.73	72.29	72.98	73.01	0- 10	6.982	6.881	3.1,3.1
20	69.92	69.88	69.43	69.11	68.55	68.63	69.57	69.94	10- 20	20.14	26.86	12.1,12.1
30	65.08	64.78	63.84	63.63	63.00	62.36	63.22	64.65	20- 30	30.83	57.27	25.8,25.8
40	58.19	58.41	56.88	55.97	55.53	55.37	55.56	57.32	30- 40	37.84	94.56	42.6,42.6
50	49.36	49.65	47.70	46.16	45.21	46.28	47.00	48.20	40- 50	40.34	134.3	60.5,60.5
60	38.62	36.14	35.52	34.77	33.28	31.96	35.97	37.36	50- 60	37.34	171.1	77.1,77.1
70	26.87	23.55	21.45	22.28	20.08	16.96	21.54	24.86	60- 70	28.42	201.3	90.7,90.7
80	13.73	10.43	9.871	11.70	8.842	6.169	10.61	12.55	70- 80	16.90	215.8	97.2,97.2
90	1.701	0.7774	0.0369	0.0662	0.0274	0.0141	0.0875	0.8876	80- 90	5.872	221.7	99.9,99.9
100	0.0240	0.0137	0.0167	0.0173	0.0192	0.0111	0.0100	0.0133	90-100	0.1484	221.8	99.9,99.9
110	0.0252	0.0176	0.0201	0.0215	0.0169	0.0123	0.0117	0.0140	100-110	0.0171	221.8	99.9,99.9
120	0.0254	0.0216	0.0229	0.0245	0.0157	0.0133	0.0122	0.0139	110-120	0.0178	221.8	99.9,99.9
130	0.0275	0.0259	0.0268	0.0274	0.0225	0.0218	0.0206	0.0216	120-130	0.0188	221.9	99.9,99.9
140	0.0334	0.0319	0.0337	0.0338	0.0361	0.0358	0.0346	0.0351	130-140	0.0222	221.9	100,100
150	0.0370	0.0378	0.0374	0.0387	0.0870	0.0864	0.0854	0.0856	140-150	0.0283	221.9	100,100
160	0.0451	0.0450	0.0460	0.0462	0.1561	0.1552	0.1559	0.1558	150-160	0.0381	221.9	100,100
170	0.0424	0.0424	0.0450	0.0430	0.1160	0.1131	0.1147	0.1151	160-170	0.0275	222.0	100,100
180	0.0216	0.0234	0.0217	0.0221	0.0264	0.0271	0.0275	0.0272	170-180	0.0060	222.0	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 114.31 lm

%lum = 51.5%

%lamp = 51.5%

Conical surface Flux(120deg): 171.15 lm

%lum = 77.1%

%lamp = 77.1%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.9DEG
 Operators:NOAH
 Test Date:2023-02-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.442
 Humidity:56.5%
 Test Distance:1.142m [K=1.0000]
 Remarks:

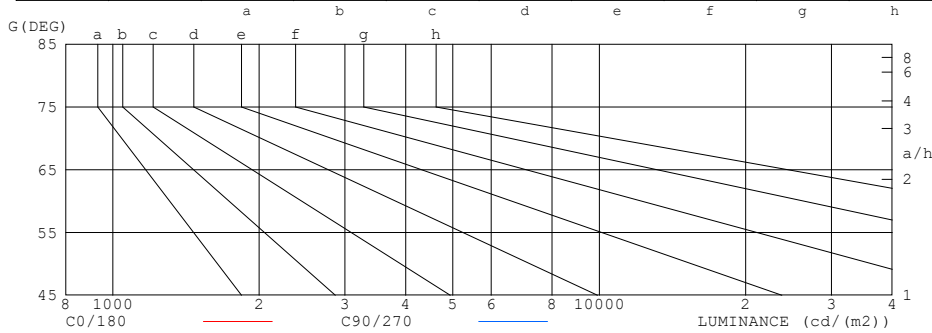
LUMINANCE LIMITATION CURVES

Test:U:230.04V I:0.0259A P:3.0122W PF:0.5048 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% Lamp Flux:221.98x1 lm

NAME: LED LIGHT	TYPE: LED	WEIGHT: /
SPEC.: 613497	DIM.: /	SERIAL No.: /
MFR.: ILLUS	SUR.: 32	Shielding Angle: /

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	116674	72129
80	98861	71054
75	98161	74877
70	98186	78403
65	96790	82820
60	96543	88810
55	96384	92051
50	95982	92755
45	95481	92990

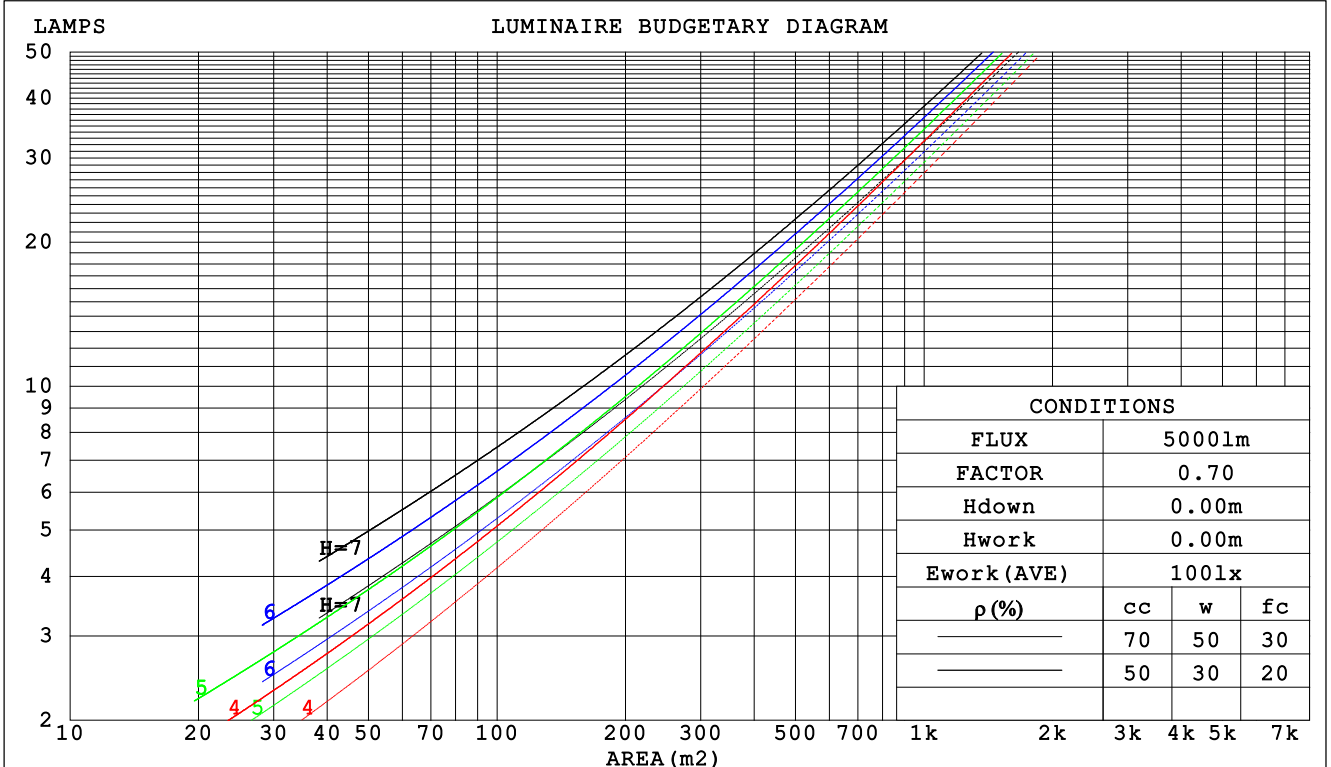
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γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.442
Humidity:56.5%
Test Distance:1.142m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.04V I:0.0259A P:3.0122W PF:0.5048 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% Lamp Flux:221.98xl lm		
NAME: LED LIGHT	TYPE: LED	WEIGHT: /
SPEC.: 613497	DIM.: /	SERIAL No.: /
MFR.: ILLUS	SUR.: 32	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	1.19	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	.00
1.0	1.03	.99	.95	1.01	.97	.93	.97	.93	.90	.93	.90	.87	.89	.87	.85	.83
2.0	.90	.82	.77	.88	.81	.76	.84	.79	.74	.81	.76	.72	.78	.74	.70	.68
3.0	.78	.70	.63	.77	.69	.63	.74	.67	.62	.71	.65	.60	.68	.63	.59	.57
4.0	.69	.60	.53	.68	.59	.53	.65	.58	.52	.63	.57	.51	.61	.55	.51	.48
5.0	.62	.52	.46	.61	.52	.45	.58	.51	.45	.56	.50	.44	.54	.49	.44	.42
6.0	.55	.46	.40	.54	.46	.40	.53	.45	.39	.51	.44	.39	.49	.43	.38	.36
7.0	.50	.41	.35	.49	.41	.35	.48	.40	.35	.46	.39	.34	.45	.39	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.44	.36	.31	.42	.36	.31	.41	.35	.30	.28
9.0	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.25
10.0	.39	.31	.25	.38	.30	.25	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:NOAH
Test Date:2023-02-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.442
Humidity:56.5%
Test Distance:1.142m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.04V I:0.0259A P:3.0122W PF:0.5048 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% Lamp Flux:221.98x1 lm									
NAME: LED LIGHT				TYPE: LED			WEIGHT: /		
SPEC.: 613497				DIM.: /			SERIAL No.: /		
MFR.: ILLUS				SUR.: 32			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						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.322	.183	.058	.315	.180	.057	.301	.173	.055	.289	.167	.054	.278	.161	.052		
2.0	.300	.164	.050	.294	.162	.050	.282	.157	.049	.271	.152	.048	.261	.147	.046		
3.0	.276	.147	.044	.271	.145	.044	.260	.141	.043	.250	.137	.042	.241	.134	.041		
4.0	.254	.132	.039	.249	.130	.039	.240	.127	.038	.231	.124	.037	.223	.121	.037		
5.0	.234	.119	.035	.230	.118	.034	.222	.115	.034	.214	.113	.034	.207	.110	.033		
6.0	.217	.109	.031	.213	.108	.031	.206	.105	.031	.199	.103	.030	.192	.101	.030		
7.0	.202	.100	.028	.198	.099	.028	.191	.097	.028	.185	.095	.028	.180	.093	.027		
8.0	.188	.092	.026	.185	.091	.026	.179	.089	.026	.173	.088	.025	.168	.086	.025		
9.0	.176	.085	.024	.173	.084	.024	.168	.083	.024	.163	.082	.023	.158	.080	.023		
10.0	.165	.079	.022	.163	.079	.022	.158	.077	.022	.154	.076	.022	.149	.075	.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	.192	.192	.192	.164	.164	.164	.112	.112	.112	.064	.064	.064	.021	.021	.021	
1.0	.182	.157	.135	.156	.135	.116	.107	.093	.080	.061	.054	.047	.020	.017	.015	
2.0	.174	.133	.098	.149	.114	.085	.102	.079	.059	.059	.046	.035	.019	.015	.011	
3.0	.167	.115	.075	.143	.100	.065	.098	.069	.045	.057	.040	.027	.018	.013	.009	
4.0	.159	.102	.059	.137	.088	.051	.094	.062	.036	.054	.036	.021	.017	.012	.007	
5.0	.152	.092	.048	.130	.079	.042	.090	.056	.029	.052	.033	.017	.017	.011	.006	
6.0	.144	.084	.040	.124	.072	.035	.086	.051	.025	.050	.030	.015	.016	.010	.005	
7.0	.138	.077	.034	.118	.066	.030	.082	.047	.021	.048	.027	.012	.015	.009	.004	
8.0	.131	.071	.030	.113	.061	.026	.078	.043	.018	.045	.025	.011	.015	.008	.004	
9.0	.125	.066	.026	.108	.057	.023	.075	.040	.016	.043	.024	.010	.014	.008	.003	
10.0	.119	.062	.023	.103	.054	.020	.071	.038	.014	.042	.022	.009	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:NOAH
Test Date:2023-02-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.442
Humidity:56.5%
Test Distance:1.142m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.04V I:0.0259A P:3.0122W PF:0.5048 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% Lamp Flux:221.98x1 lm										
NAME: LED LIGHT					TYPE: LED			WEIGHT: /		
SPEC.: 613497					DIM.: /			SERIAL No.: /		
MFR.: ILLUS					SUR.: 32			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	34.3	35.8	34.5	36.0	36.2	33.8	35.3	34.1	35.5	35.8
3H	36.1	37.5	36.4	37.7	38.0	35.2	36.6	35.5	36.8	37.1
4H	36.8	38.2	37.2	38.5	38.7	35.7	37.1	36.0	37.3	37.6
6H	37.5	38.8	37.9	39.1	39.4	36.2	37.5	36.5	37.7	38.0
8H	37.8	39.0	38.1	39.3	39.6	36.3	37.6	36.7	37.8	38.1
12H	38.0	39.2	38.4	39.5	39.8	36.4	37.6	36.8	37.9	38.2
4H 2H	34.8	36.2	35.2	36.5	36.7	34.5	35.8	34.8	36.1	36.3
3H	36.8	38.0	37.2	38.3	38.6	36.0	37.2	36.3	37.5	37.8
4H	37.8	38.9	38.1	39.2	39.5	36.6	37.7	37.0	38.1	38.4
6H	38.6	39.6	39.0	39.9	40.3	37.1	38.1	37.6	38.5	38.9
8H	38.9	39.8	39.3	40.2	40.6	37.3	38.2	37.8	38.6	39.0
12H	39.3	40.1	39.7	40.5	40.9	37.5	38.3	37.9	38.7	39.1
8H 4H	38.0	38.9	38.4	39.3	39.7	37.0	37.9	37.4	38.3	38.7
6H	39.0	39.8	39.4	40.2	40.6	37.6	38.4	38.1	38.8	39.2
8H	39.5	40.2	39.9	40.6	41.0	37.9	38.6	38.3	39.0	39.4
12H	40.0	40.5	40.4	41.0	41.5	38.1	38.7	38.6	39.1	39.6
12H 4H	38.0	38.8	38.4	39.2	39.6	37.0	37.9	37.5	38.3	38.7
6H	39.0	39.7	39.5	40.1	40.6	37.7	38.4	38.2	38.8	39.3
8H	39.6	40.2	40.1	40.6	41.1	38.0	38.6	38.5	39.1	39.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 225.0 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -5.2)
Area: 0.0008 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:NOAH
Test Date:2023-02-14

γ Range: 0 - 180DEG
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Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.442
Humidity:56.5%
Test Distance:1.142m [K=1.0000]
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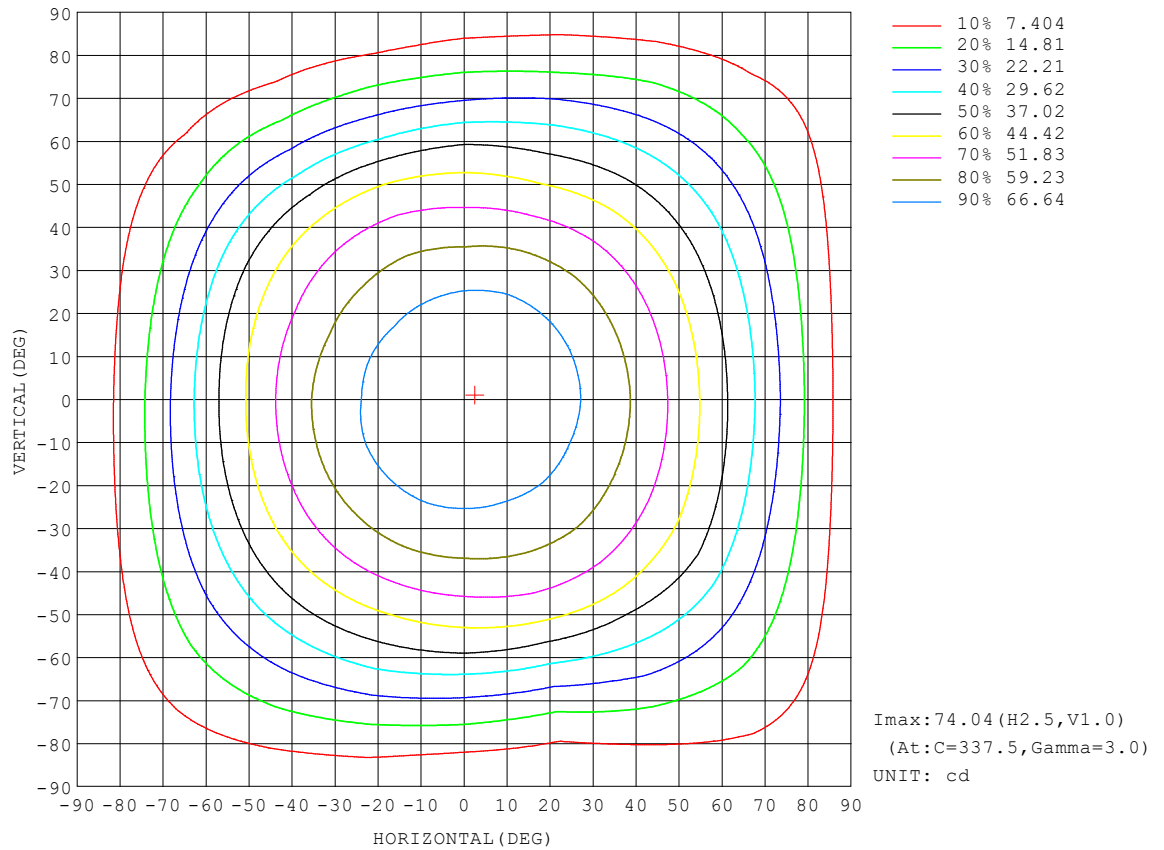
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γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.442
Humidity:56.5%
Test Distance:1.142m [K=1.0000]
Remarks:

```

ISOCANDELA DIAGRAM

Test:U:230.04V I:0.0259A P:3.0122W PF:0.5048 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% Lamp Flux:221.98x1 lm		
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SPEC.: 613497	DIM.: /	SERIAL No.: /
MFR.: ILLUS	SUR.: 32	Shielding Angle: /

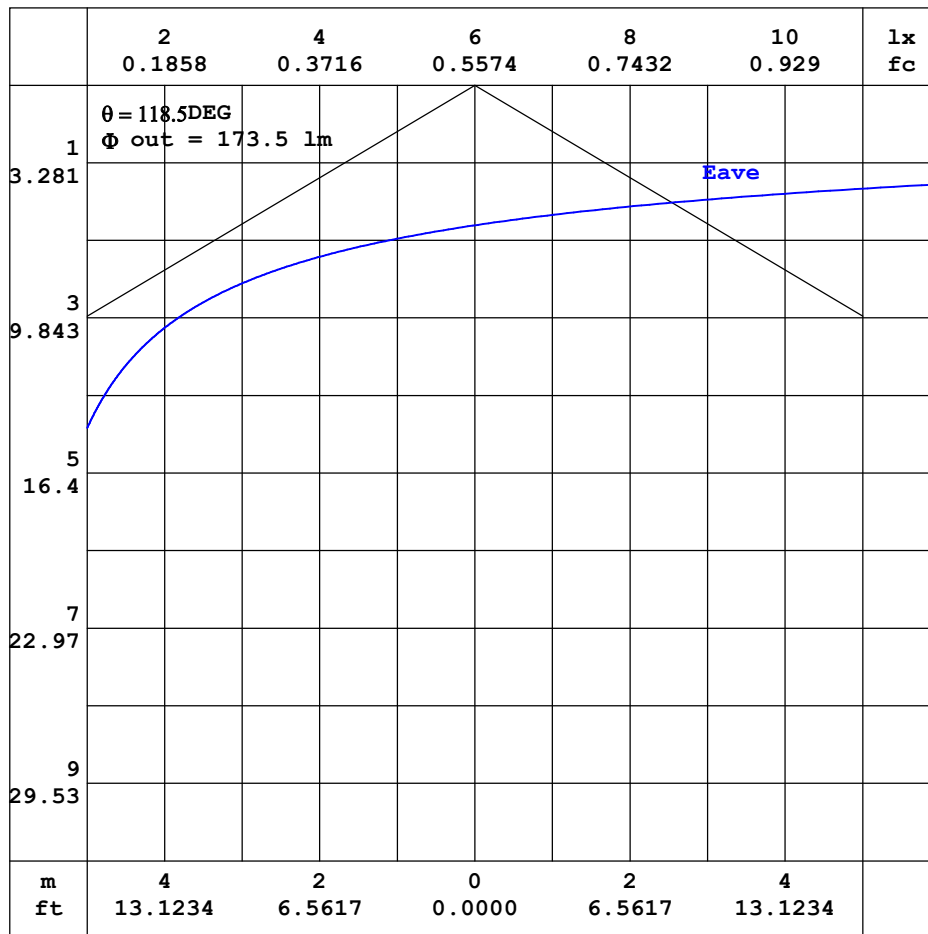


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Remarks:

AAI CURVES

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NAME: LED LIGHT	TYPE: LED	WEIGHT: /
SPEC.: 613497	DIM.: /	SERIAL No.: /
MFR.: ILLUS	SUR.: 32	Shielding Angle: /



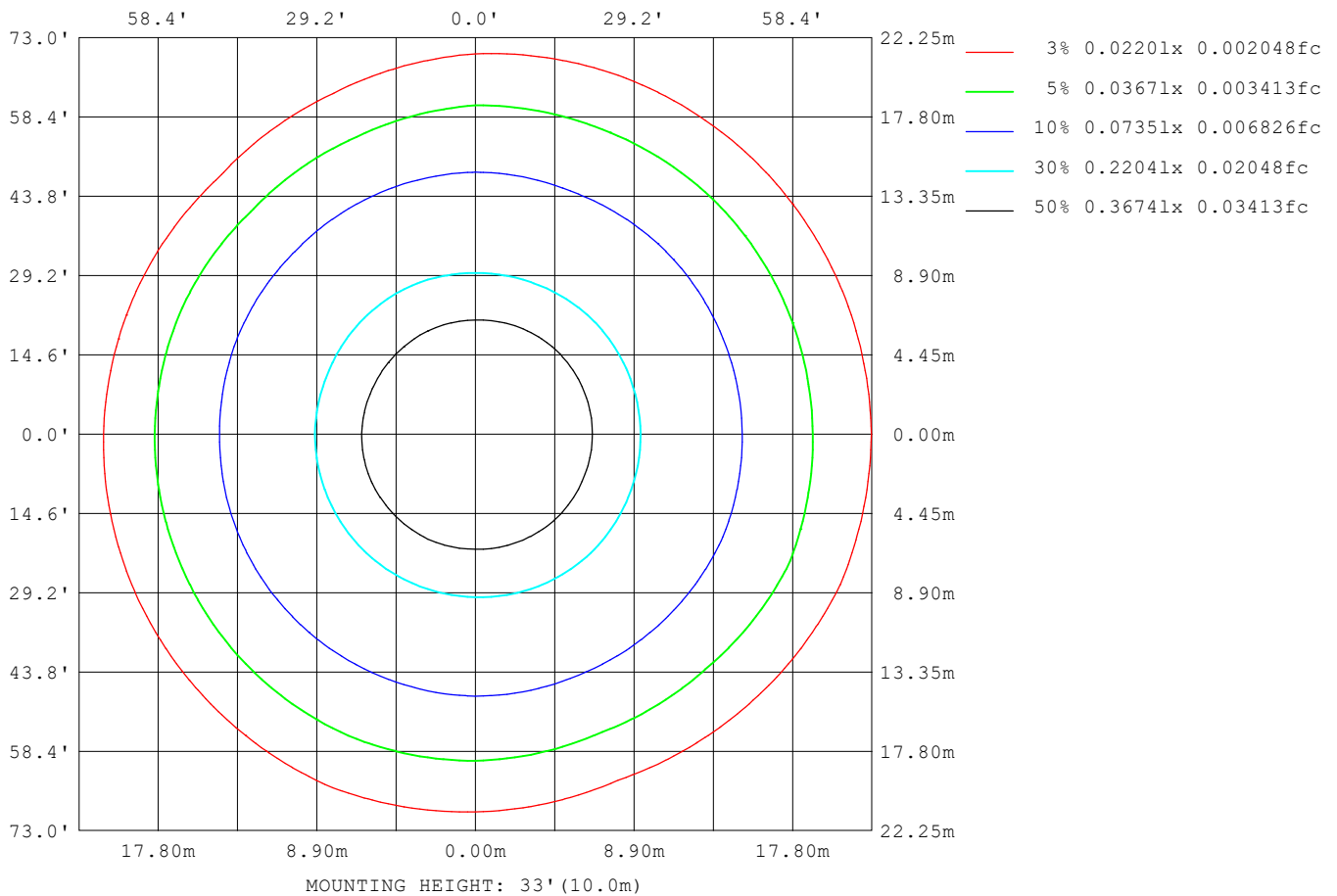
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 24.9DEG
 Operators: NOAH
 Test Date: 2023-02-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442
 Humidity: 56.5%
 Test Distance: 1.142m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

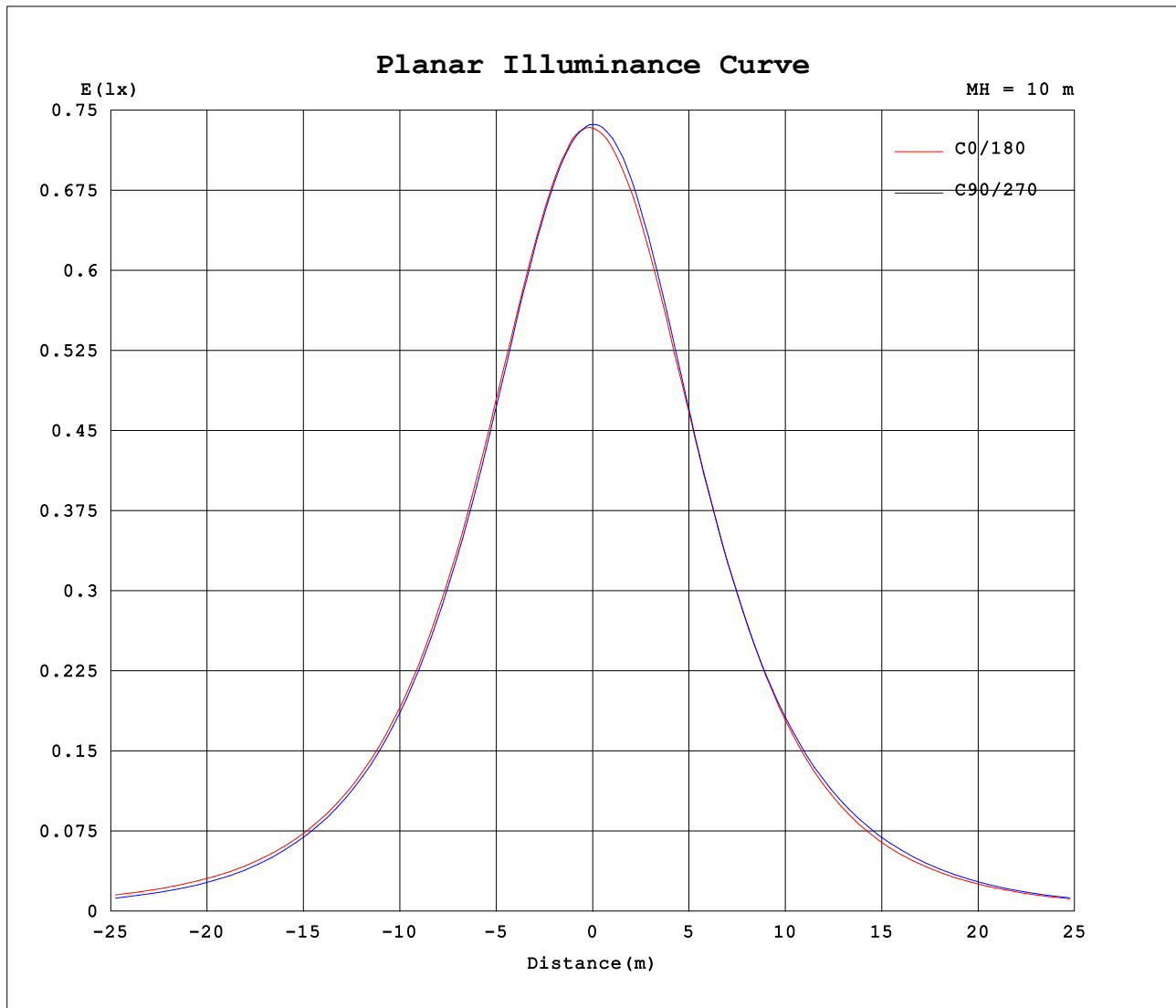
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 Remarks:

Planar Illuminance Curve



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