

Low Voltage Track System Module ML26-GL280-7W-930



Light Output Ratio:	100.0%	
Luminaire Power:	7.105 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.35	fine grid method.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Jason Long  
Test Date: 2019-12-04

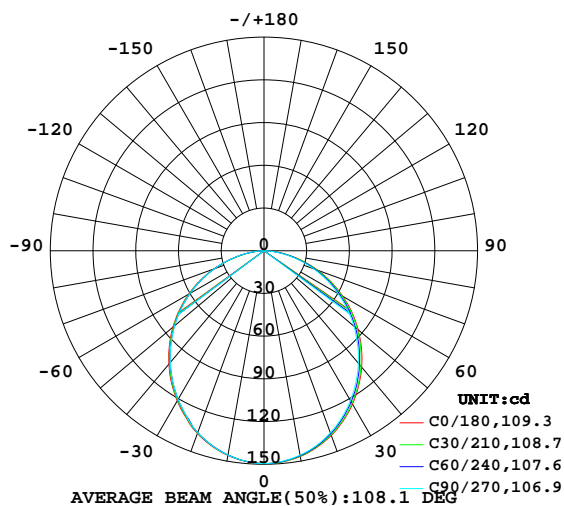
γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 56%  
Test Distance: 5.850m [K=1.0000]  
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

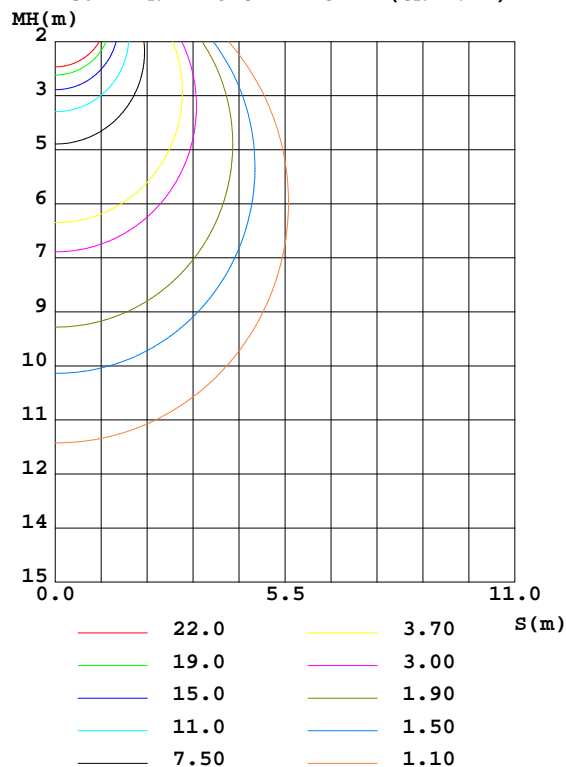
Test:U:48.00V I:0.1480A P:7.105W PF:1.000 Freq:0Hz Lamp Flux:405.78lx1 lm		
NAME: ML26-GL280-7W-930	TYPE:Low Voltage Track System Module	
SPEC.:3000K	DIM.: L284mm*W22mm*H43mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 57.11 lm/W			
MODEL	SAMSUNG-3000K	I <sub>max</sub> (cd)	149.5	S/MH(C0/180)	1.22
NOMINAL POWER(W)	7	LOR(%)	100.0	S/MH(C90/270)	1.21
RATED VOLTAGE(V)	48	TOTAL FLUX(lm)	405.78	η UP,DN(C0-180)	0.0,50.2
NOMINAL FLUX(lm)	405.781	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.8
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	48	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: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-12-04

γ Range: 0 - 90DEG  
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Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
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Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	146.7	146.4	145.8	145.7	145.9	145.5	145.7	146.1	0- 10	14.09	14.09	3.47,3.47
20	138.0	137.4	136.1	136.3	136.6	135.8	136.0	136.9	10- 20	40.04	54.13	13.3,13.3
30	124.3	122.9	121.4	121.2	121.8	121.1	120.6	122.6	20- 30	59.77	113.9	28.1,28.1
40	106.7	105.0	103.0	103.1	104.0	103.0	102.4	104.7	30- 40	70.88	184.8	45.5,45.5
50	86.27	84.65	82.44	82.51	83.50	82.47	81.98	84.30	40- 50	72.49	257.3	63.4,63.4
60	63.76	62.56	60.04	60.24	61.11	60.00	60.01	62.01	50- 60	64.84	322.1	79.4,79.4
70	40.23	39.31	37.10	36.99	37.53	36.79	37.21	38.91	60- 70	49.12	371.2	91.5,91.5
80	17.02	16.65	14.90	14.39	14.66	14.23	14.92	12.41	70- 80	27.73	399.0	98.3,98.3
90	0.9715	0.6478	0.4285	0.2512	0.1379	0.2013	0.2930	0.3474	80- 90	6.810	405.8	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 221.43 lm

%lum = 54.6%

%lamp = 54.6%

Conical surface Flux(120deg): 322.11 lm

%lum = 79.4%

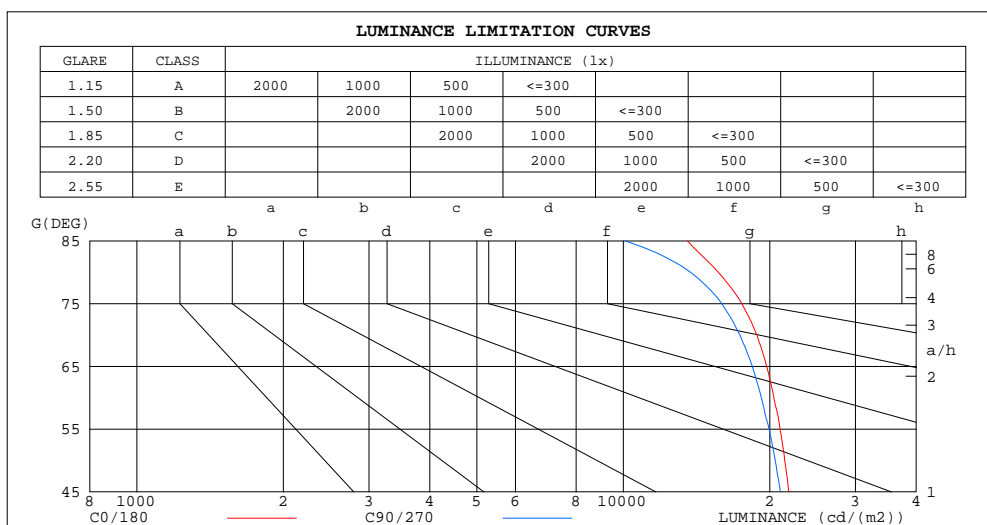
%lamp = 79.4%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-12-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:56%  
Test Distance:5.850m [K=1.0000]  
Remarks:

### LUMINANCE LIMITATION CURVES

Test:U:48.00V I:0.1480A P:7.105W PF:1.000 Freq:0Hz Lamp Flux:405.78lx1 lm		
NAME: ML26-GL280-7W-930	TYPE:Low Voltage Track System Module	
SPEC.:3000K	DIM.: L284mm*W22mm*H43mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	13542	10096
80	15678	13737
75	17520	15932
70	18812	17364
65	19706	18399
60	20394	19218
55	21006	19950
50	21465	20528
45	21892	21036

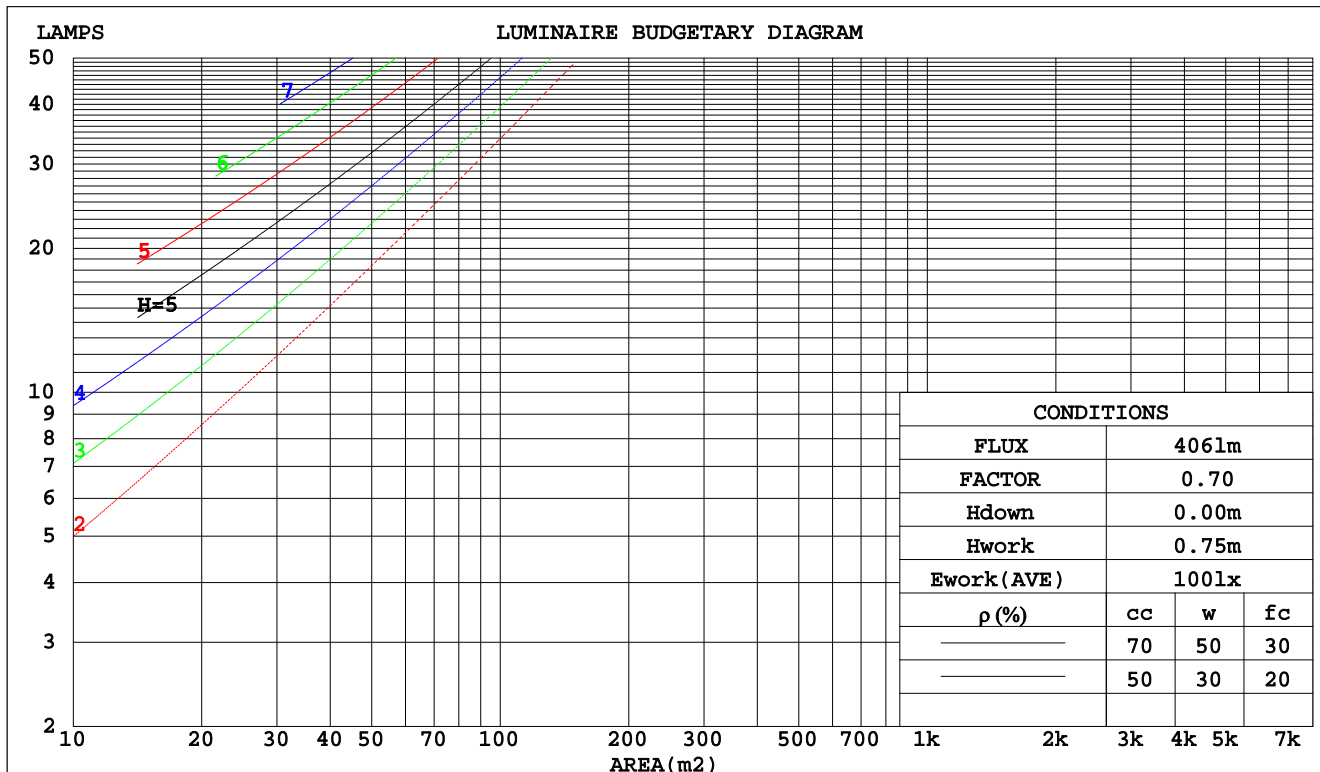
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**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:48.00V I:0.1480A P:7.105W PF:1.000 Freq:0Hz Lamp Flux:405.78lx1 lm		
NAME: ML26-GL280-7W-930	TYPE:Low Voltage Track System Module	
SPEC.:3000K	DIM.: L284mm*W22mm*H43mm	
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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	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	1.04	.00	.96	1.02	.98	.94	.98	.94	.91	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.83	.77	.85	.80	.76	.82	.78	.74	.79	.75	.72	.70
3.0	.80	.72	.65	.78	.71	.65	.75	.69	.63	.72	.67	.62	.70	.65	.61	.59
4.0	.71	.62	.55	.69	.61	.55	.67	.60	.54	.65	.58	.53	.62	.57	.53	.50
5.0	.63	.54	.48	.62	.54	.47	.60	.52	.47	.58	.51	.46	.56	.50	.46	.44
6.0	.57	.48	.42	.56	.48	.41	.54	.47	.41	.52	.46	.41	.51	.45	.40	.38
7.0	.52	.43	.37	.51	.43	.37	.49	.42	.36	.48	.41	.36	.46	.40	.36	.34
8.0	.47	.39	.33	.46	.38	.33	.45	.38	.32	.44	.37	.32	.43	.37	.32	.30
9.0	.43	.35	.30	.43	.35	.29	.42	.34	.29	.40	.34	.29	.39	.33	.29	.27
10.0	.40	.32	.27	.39	.32	.27	.38	.31	.27	.38	.31	.26	.37	.31	.26	.25



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γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:56%  
Test Distance:5.850m [K=1.0000]  
Remarks:

## WEC AND CCEC

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NAME: ML26-GL280-7W-930	TYPE:Low Voltage Track System Module	
SPEC.:3000K	DIM.: L284mm*W22mm*H43mm	
MFR.: NEKO LIGHTING AG		

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	.305	.174	.055	.298	.170	.054	.285	.164	.052	.273	.157	.051	.262	.152	.049		
2.0	.288	.158	.049	.282	.155	.048	.271	.150	.047	.260	.146	.046	.250	.141	.045		
3.0	.267	.142	.043	.262	.140	.042	.252	.136	.041	.242	.133	.041	.233	.129	.040		
4.0	.247	.128	.038	.242	.127	.037	.233	.124	.037	.225	.121	.036	.217	.118	.036		
5.0	.229	.116	.034	.224	.115	.034	.216	.113	.033	.209	.110	.033	.202	.108	.032		
6.0	.212	.106	.030	.208	.105	.030	.201	.103	.030	.194	.101	.030	.188	.099	.029		
7.0	.198	.098	.028	.194	.097	.028	.188	.095	.027	.182	.093	.027	.176	.091	.027		
8.0	.185	.090	.025	.182	.089	.025	.176	.088	.025	.170	.086	.025	.165	.085	.025		
9.0	.173	.084	.023	.170	.083	.023	.165	.082	.023	.160	.080	.023	.156	.079	.023		
10.0	.163	.078	.022	.160	.077	.022	.156	.076	.021	.151	.075	.021	.147	.074	.021		

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	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.141	.099	.065	.097	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.023	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-12-04

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:56%  
Test Distance:5.850m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:48.00V I:0.1480A P:7.105W PF:1.000 Freq:0Hz Lamp Flux:405.78lx1 lm										
NAME: ML26-GL280-7W-930					TYPE:Low Voltage Track System Module					
SPEC.:3000K					DIM.: L284mm*W22mm*H43mm					
MFR.: NEKO LIGHTING AG										
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	26.6	28.1	26.9	28.4	28.6	26.4	27.9	26.7	28.1	28.3
3H	28.2	29.6	28.5	29.8	30.1	27.9	29.3	28.2	29.5	29.7
4H	28.8	30.2	29.1	30.4	30.7	28.5	29.8	28.8	30.0	30.3
6H	29.3	30.5	29.6	30.8	31.1	28.9	30.1	29.2	30.4	30.7
8H	29.4	30.6	29.7	30.9	31.2	29.0	30.2	29.3	30.5	30.7
12H	29.5	30.7	29.8	30.9	31.2	29.0	30.2	29.4	30.5	30.8
4H 2H	27.2	28.6	27.5	28.8	29.1	27.0	28.4	27.4	28.6	28.9
3H	29.0	30.1	29.3	30.4	30.7	28.7	29.9	29.1	30.2	30.5
4H	29.7	30.8	30.1	31.1	31.4	29.4	30.5	29.8	30.8	31.1
6H	30.3	31.2	30.7	31.6	32.0	29.9	30.9	30.3	31.2	31.6
8H	30.5	31.4	30.9	31.7	32.1	30.1	31.0	30.5	31.3	31.7
12H	30.6	31.4	31.1	31.8	32.2	30.2	31.0	30.6	31.4	31.8
8H 4H	30.0	30.9	30.4	31.2	31.6	29.7	30.6	30.1	31.0	31.3
6H	30.7	31.4	31.1	31.8	32.3	30.4	31.1	30.8	31.5	31.9
8H	31.0	31.6	31.4	32.1	32.5	30.6	31.3	31.1	31.7	32.1
12H	31.2	31.8	31.7	32.2	32.7	30.8	31.3	31.2	31.8	32.2
12H 4H	30.0	30.8	30.4	31.2	31.6	29.7	30.5	30.1	30.9	31.3
6H	30.8	31.4	31.2	31.8	32.3	30.4	31.1	30.9	31.5	32.0
8H	31.1	31.6	31.6	32.1	32.6	30.7	31.3	31.2	31.7	32.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 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, 405.8 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = -3.1$ )

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Temperature:25.3DEG  
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$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:56%  
Test Distance:5.850m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:48.00V I:0.1480A P:7.105W PF:1.000 Freq:0Hz Lamp Flux:405.78lx1 lm		
NAME: ML26-GL280-7W-930	TYPE:Low Voltage Track System Module	
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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) x RCR = 5									
k = 0.60	58	47	40	57	46	40	56	46	39	33
0.80	68	57	49	67	56	49	65	55	49	42
1.00	76	65	58	75	65	58	73	66	57	50
1.25	84	73	66	82	72	66	79	71	65	58
1.50	88	79	72	87	78	71	84	76	70	63
2.00	95	87	80	93	86	80	90	83	78	70
2.50	99	91	86	97	90	85	93	87	83	74
3.00	102	96	90	100	94	89	96	91	87	79
4.00	106	101	96	104	99	95	100	96	92	83
5.00	109	104	100	106	102	99	102	99	95	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004										
Suspended										
SHRNOM = 1.25										

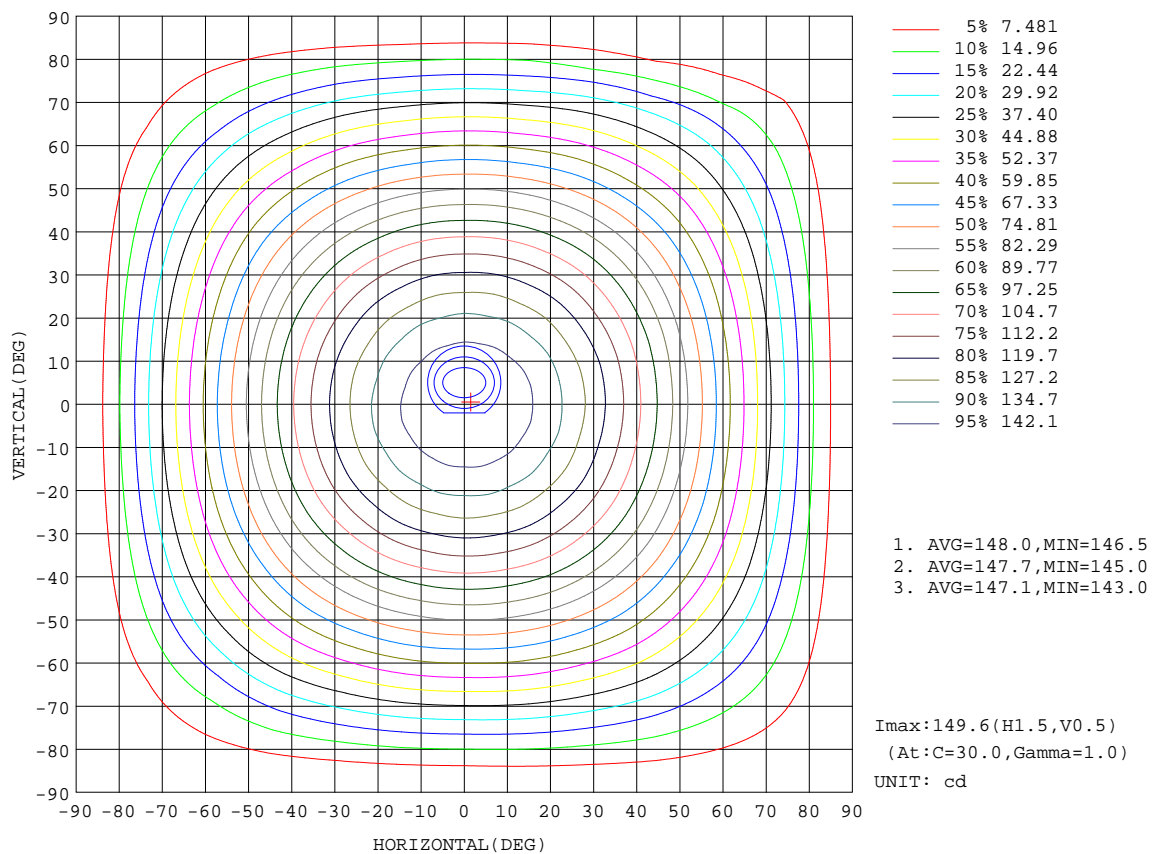
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ISOCANDELA DIAGRAM

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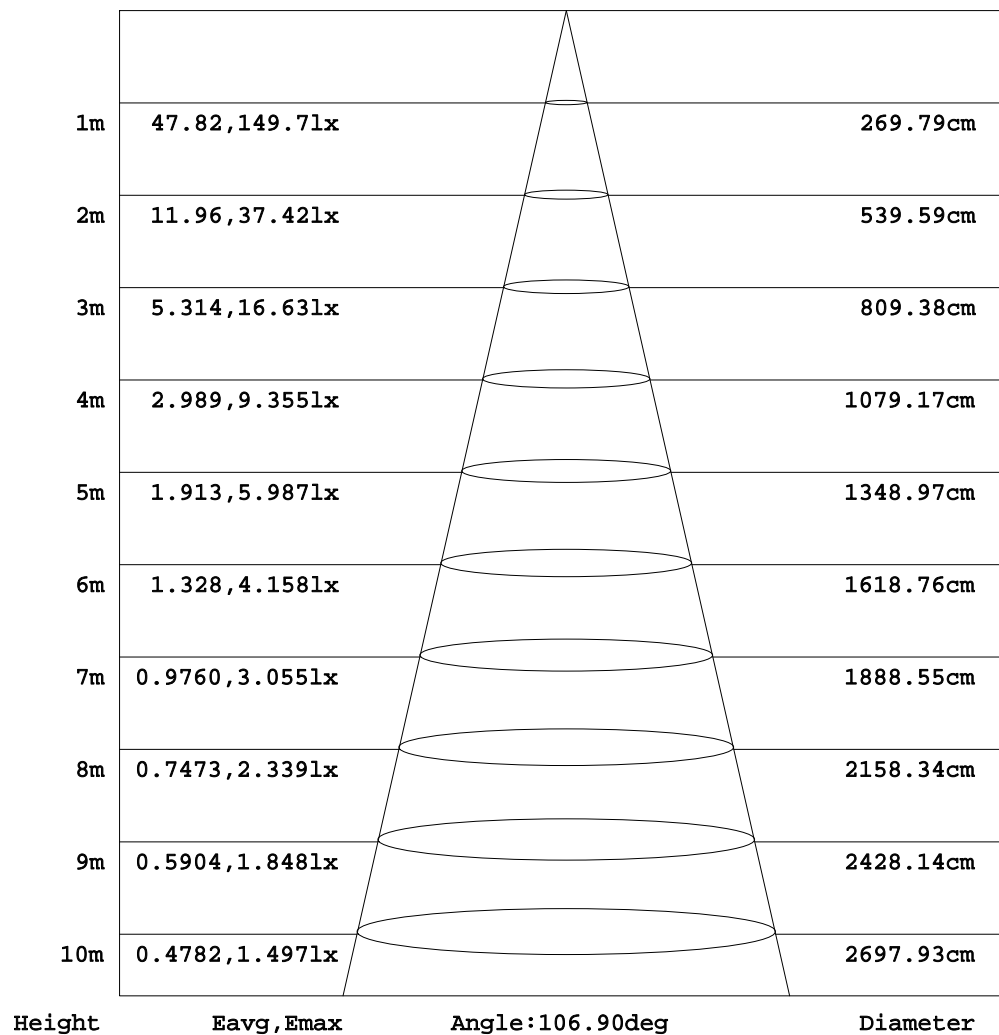
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AAI Figure

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Flux out:284.6 lm



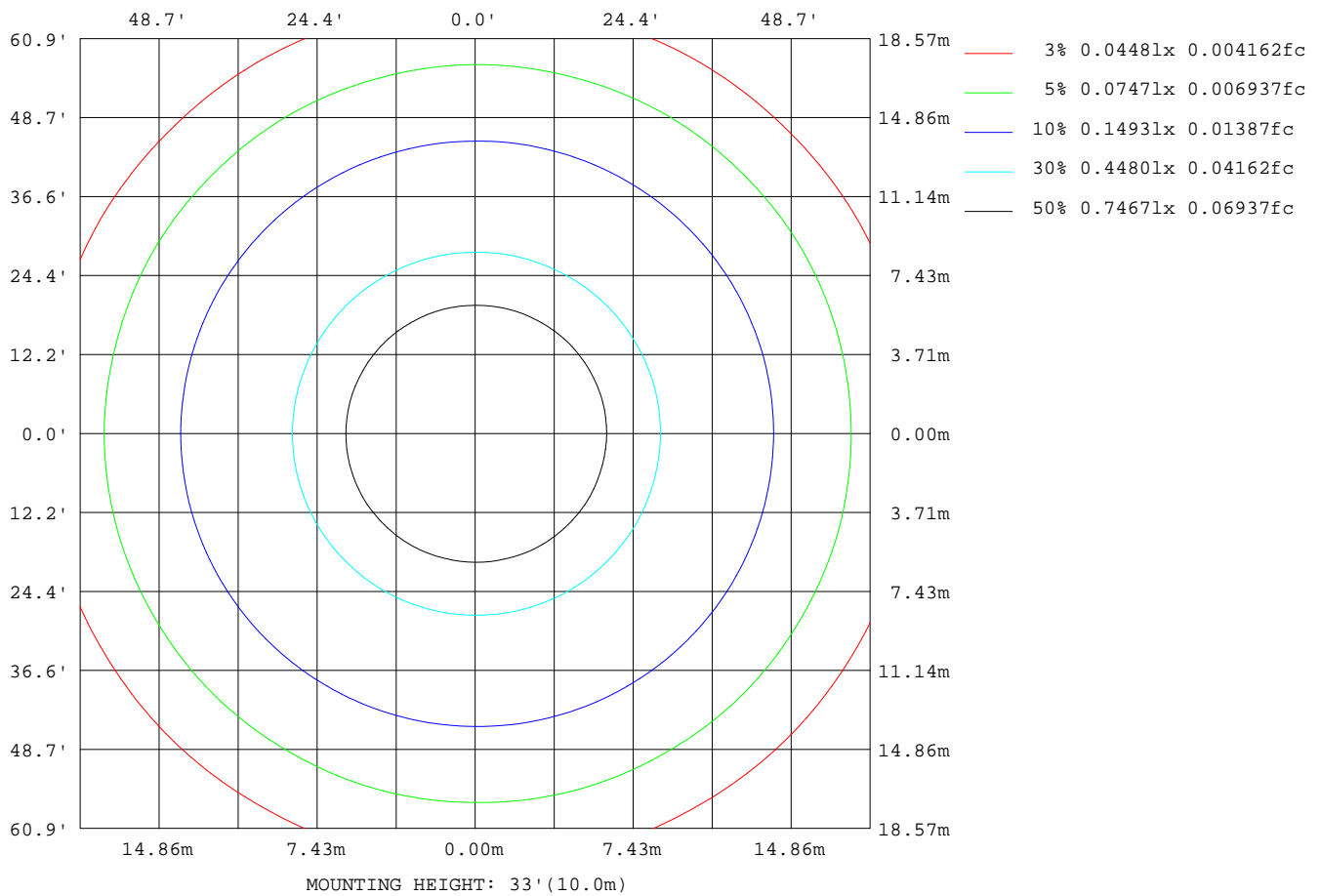
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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**ISOLUX DIAGRAM**

Test:U:48.00V I:0.1480A P:7.105W PF:1.000 Freq:0Hz Lamp Flux:405.78lx 1m		
NAME: ML26-GL280-7W-930	TYPE:Low Voltage Track System Module	
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### LED Avg.L Report

Test:U:48.00V I:0.1480A P:7.105W PF:1.000 Freq:0Hz Lamp Flux:405.78lx1 lm		
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SPEC.:3000K	DIM.: L284mm*W22mm*H43mm	
MFR.: NEKO LIGHTING AG		

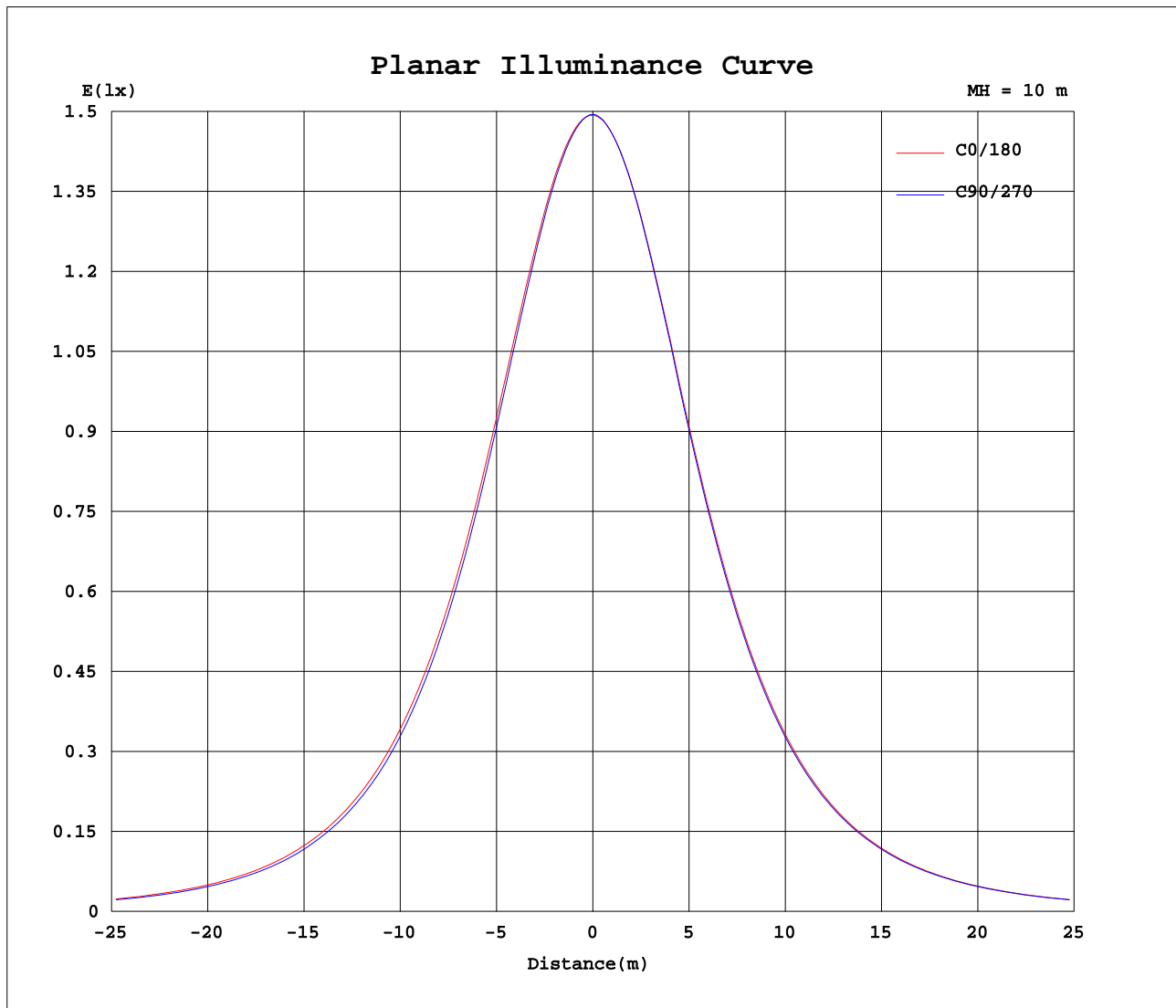
AvgL	cd/m2
L_0~180(65)av	19223
L_0~180(75)av	16715
L_0~180(85)av	11958
L_90~270(65)av	18417
L_90~270(75)av	15918
L_90~270(85)av	9884
L_45(65)av	18814
L_45(75)av	16176
L_45(85)av	9899

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason Long  
Test Date:2019-12-04

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:56%  
Test Distance:5.850m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Jason Long  
Test Date: 2019-12-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 56%  
Test Distance: 5.850m [K=1.0000]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:56%
Test Distance:5.850m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:56%
Test Distance:5.850m [K=1.0000]
Remarks:

```