

Low Voltage Track System Module ML26-RS25-5W-940-45



Light Output Ratio:	100.0%	
Luminaire Power:	5.088 W	
SHR Nominal:	0.75	Calculated using the TM5
SHR Maximum:	0.75	fine grid method.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Jason  
Test Date: 2020-05-05

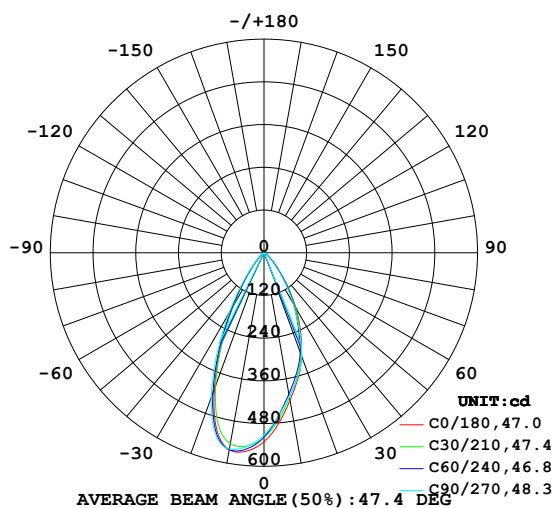
γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 58%  
Test Distance: 5.850m [K=1.0000]  
Remarks:

**LUMINAIRE PHOTOMETRIC TEST REPORT**

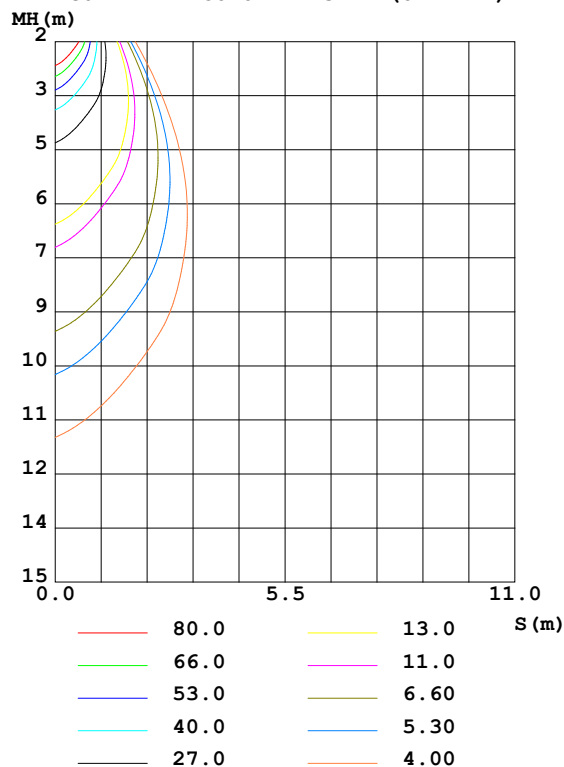
Test:U:48.00V I:0.1060A P:5.088W PF:1.000 Freq:0Hz Lamp Flux:388.91x1 lm		
NAME: ML26-RS25-5W-940-45	TYPE:Low Voltage Track System	Serial No.:
SPEC.:4000K	DIM.: $\phi$ 25mm*H40mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 76.44 lm/W
MODEL	OSRAM-4000K	I <sub>max</sub> (cd)	575.9	S/MH (C0/180)	0.78	
NOMINAL POWER (W)	5.5	LOR (%)	100.0	S/MH (C90/270)	0.82	
RATED VOLTAGE (V)	48	TOTAL FLUX (lm)	388.91	$\eta$ UP,DN (C0-180)	0.0,46.7	
NOMINAL FLUX (lm)	388.91	CIE CLASS	DIRECT	$\eta$ UP,DN (C180-360)	0.0,53.3	
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE (V)	48	$\eta$ down (%)	100.0	CIBSE SHR MAX	0.75	

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  
 Test Date:2020-05-05

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 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	421.1	407.4	410.4	479.2	562.0	553.7	559.7	485.2	0- 10	47.40	47.40	12.2,12.2
20	308.3	301.1	309.0	356.3	407.7	404.3	433.3	382.9	10- 20	121.0	168.4	43.3,43.3
30	179.6	171.2	163.1	167.6	177.3	172.8	199.3	199.8	20- 30	121.4	289.8	74.5,74.5
40	67.74	65.58	58.68	50.57	47.85	46.25	54.64	63.26	30- 40	67.44	357.2	91.9,91.9
50	19.95	19.77	17.27	14.35	13.12	12.28	14.43	17.56	40- 50	24.49	381.7	98.1,98.1
60	2.209	2.531	2.156	1.391	1.015	0.7500	1.021	1.695	50- 60	6.788	388.5	99.9,99.9
70	0.0440	0.0306	0.0461	0.0218	0.0152	0.0262	0.0109	0.0330	60- 70	0.3781	388.9	100,100
80	0.0175	0.0197	0.0219	0.0175	0.0109	0.0131	0.0109	0.0131	70- 80	0.0189	388.9	100,100
90	0.0175	0.0197	0.0219	0.0197	0.0109	0.0109	0.0109	0.0087	80- 90	0.0166	388.9	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): 372.68 lm

%lum = 95.8%

%lamp = 95.8%

Conical surface Flux(120deg): 388.5 lm

%lum = 99.9%

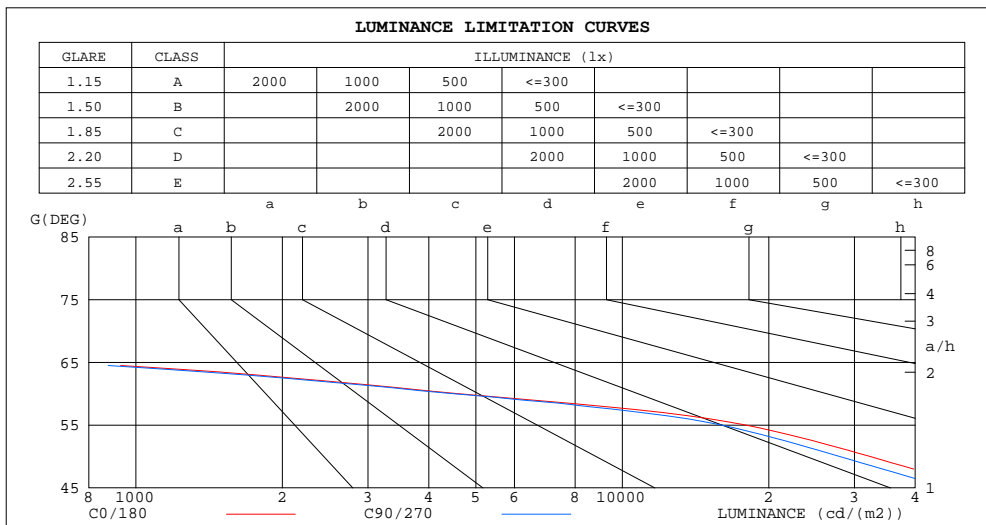
%lamp = 99.9%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-05-05

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 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:48.00V I:0.1060A P:5.088W PF:1.000 Freq:0Hz Lamp Flux:388.9lx1 lm		
NAME: ML26-RS25-5W-940-45	TYPE:Low Voltage Track System	Serial No.:
SPEC.:4000K	DIM.: $\phi$ 25mm*H40mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	209	261
80	105	131
75	79	97
70	134	140
65	726	672
60	4594	4485
55	17954	15987
50	32281	27948
45	54016	46675

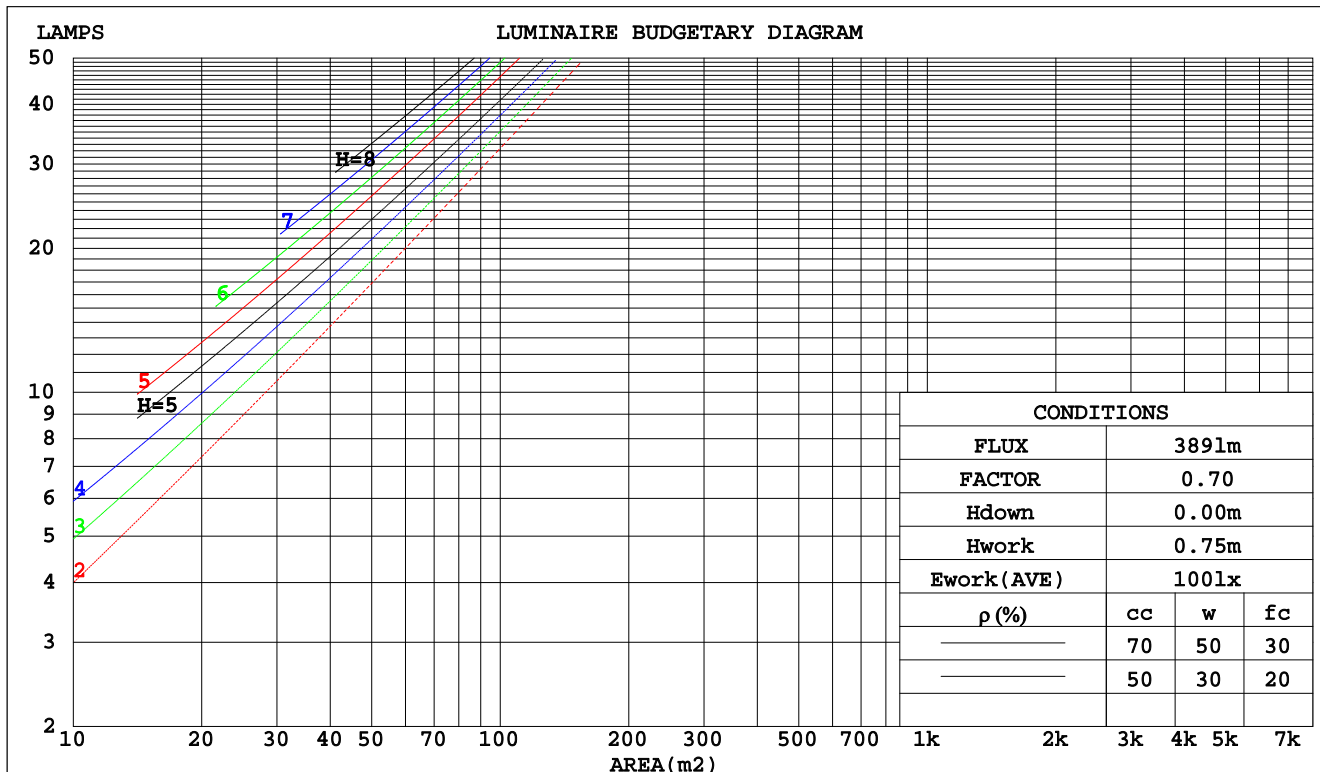
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**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:48.00V I:0.1060A P:5.088W PF:1.000 Freq:0Hz Lamp Flux:388.91x1 lm		
NAME: ML26-RS25-5W-940-45	TYPE:Low Voltage Track System	SERIAL No.:
SPEC.:4000K	DIM.: $\phi$ 25mm*H40mm	
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	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	1.11	1.09	1.06	1.09	1.07	1.05	1.05	1.03	1.01	1.01	.00	.98	.98	.97	.96	.94
2.0	1.04	.00	.96	1.02	.98	.95	.99	.96	.93	.96	.93	.91	.93	.91	.89	.88
3.0	.97	.92	.88	.95	.91	.87	.93	.89	.86	.90	.87	.85	.88	.86	.83	.82
4.0	.91	.85	.81	.90	.85	.81	.87	.83	.80	.85	.82	.79	.84	.80	.78	.76
5.0	.85	.79	.75	.84	.79	.75	.82	.78	.74	.81	.77	.74	.79	.76	.73	.72
6.0	.80	.74	.70	.79	.74	.70	.78	.73	.69	.76	.72	.69	.75	.71	.69	.67
7.0	.76	.70	.66	.75	.69	.65	.74	.69	.65	.72	.68	.65	.71	.67	.64	.63
8.0	.71	.66	.62	.71	.65	.61	.70	.65	.61	.69	.64	.61	.68	.64	.61	.59
9.0	.68	.62	.58	.67	.62	.58	.66	.61	.58	.65	.61	.58	.65	.60	.57	.56
10.0	.64	.59	.55	.64	.58	.55	.63	.58	.55	.62	.58	.54	.61	.57	.54	.53



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# WEC AND CCEC

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NAME: ML26-RS25-5W-940-45	TYPE:Low Voltage Track System	Serial No.:
SPEC.:4000K	DIM.: φ25mm*H40mm	
MFR.: NEKO LIGHTING AG		

pcc	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	.173	.099	.031	.167	.095	.030	.154	.088	.028	.143	.082	.026	.132	.076	.025		
2.0	.166	.091	.028	.161	.088	.027	.150	.083	.026	.140	.079	.025	.131	.074	.023		
3.0	.158	.084	.025	.154	.082	.025	.145	.078	.024	.136	.075	.023	.129	.071	.022		
4.0	.151	.078	.023	.147	.077	.023	.139	.074	.022	.132	.071	.021	.125	.068	.021		
5.0	.144	.073	.021	.140	.072	.021	.134	.070	.020	.127	.067	.020	.122	.065	.020		
6.0	.138	.069	.020	.134	.068	.020	.128	.066	.019	.123	.064	.019	.118	.062	.018		
7.0	.131	.065	.018	.129	.064	.018	.123	.062	.018	.119	.061	.018	.114	.059	.017		
8.0	.126	.061	.017	.123	.061	.017	.119	.059	.017	.114	.058	.017	.110	.057	.016		
9.0	.121	.058	.016	.118	.058	.016	.114	.056	.016	.110	.055	.016	.106	.054	.016		
10.0	.116	.055	.015	.114	.055	.015	.110	.054	.015	.106	.053	.015	.103	.052	.015		

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.155	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.143	.114	.090	.123	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.073	.114	.085	.063	.078	.059	.045	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.106	.075	.052	.073	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.116	.078	.050	.100	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.110	.070	.042	.095	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.104	.064	.036	.090	.056	.032	.062	.039	.022	.036	.023	.013	.012	.008	.004	
9.0	.099	.059	.032	.085	.051	.027	.059	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.095	.054	.028	.082	.047	.024	.057	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-05-05

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:48.00V I:0.1060A P:5.088W PF:1.000 Freq:0Hz Lamp Flux:388.9lx1 lm										
NAME: ML26-RS25-5W-940-45					TYPE:Low Voltage Track SystemSerial No.:					
SPEC.:4000K					DIM.: $\phi$ 25mm*H40mm					
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	24.9	25.8	25.1	26.0	26.1	24.4	25.3	24.6	25.5	25.7
3H	24.7	25.6	25.0	25.8	26.0	24.3	25.1	24.5	25.3	25.5
4H	24.6	25.4	24.9	25.6	25.9	24.2	25.0	24.4	25.2	25.4
6H	24.5	25.3	24.8	25.5	25.8	24.1	24.8	24.4	25.1	25.3
8H	24.5	25.2	24.8	25.5	25.7	24.0	24.8	24.3	25.0	25.3
12H	24.4	25.1	24.8	25.4	25.7	24.0	24.7	24.3	24.9	25.2
4H 2H	24.7	25.5	24.9	25.7	25.9	24.2	25.0	24.5	25.2	25.4
3H	24.5	25.2	24.8	25.4	25.7	24.0	24.7	24.3	25.0	25.3
4H	24.4	25.0	24.7	25.3	25.6	23.9	24.6	24.3	24.8	25.2
6H	24.3	24.8	24.7	25.2	25.5	23.8	24.4	24.2	24.7	25.1
8H	24.2	24.7	24.6	25.1	25.5	23.8	24.3	24.2	24.6	25.0
12H	24.2	24.6	24.6	25.0	25.4	23.7	24.2	24.1	24.6	25.0
8H 4H	24.2	24.7	24.6	25.1	25.5	23.8	24.3	24.2	24.6	25.0
6H	24.1	24.5	24.6	24.9	25.4	23.7	24.1	24.1	24.5	24.9
8H	24.1	24.4	24.5	24.9	25.3	23.6	24.0	24.1	24.4	24.8
12H	24.0	24.3	24.5	24.8	25.2	23.6	23.9	24.0	24.3	24.8
12H 4H	24.2	24.6	24.6	25.0	25.4	23.7	24.2	24.1	24.6	25.0
6H	24.1	24.4	24.5	24.9	25.3	23.6	24.0	24.1	24.4	24.8
8H	24.0	24.3	24.5	24.8	25.2	23.6	23.9	24.0	24.3	24.8
Variations with the observer position at spacings:										
S = 1.0H	+ 2.8 / - 9.0					+ 2.5 / - 9.2				
1.5H	+ 4.2 / - 5.5					+ 3.8 / - 5.1				
2.0H	+ 5.3 / -17.1					+ 5.1 / -16.7				

CIE Pub.117, 388.9 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = -3.3$ )

C Range: 0 - 360DEG  
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Temperature:25.3DEG  
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$\gamma$  Range: 0 - 90DEG  
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Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:48.00V I:0.1060A P:5.088W PF:1.000 Freq:0Hz Lamp Flux:388.9lx1 lm		
NAME: ML26-RS25-5W-940-45	TYPE:Low Voltage Track System	SERIAL No.:
SPEC.:4000K	DIM.: $\varnothing 25\text{mm} \times H40\text{mm}$	
MFR.: NEKO LIGHTING AG		

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) $k(RI) \times RCR = 5$									
$k = 0.60$	86	80	76	86	80	76	85	79	76	72
0.80	94	88	84	93	88	84	92	87	84	80
1.00	99	93	89	98	93	89	96	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
2.00	109	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	102	105	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	107	106	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

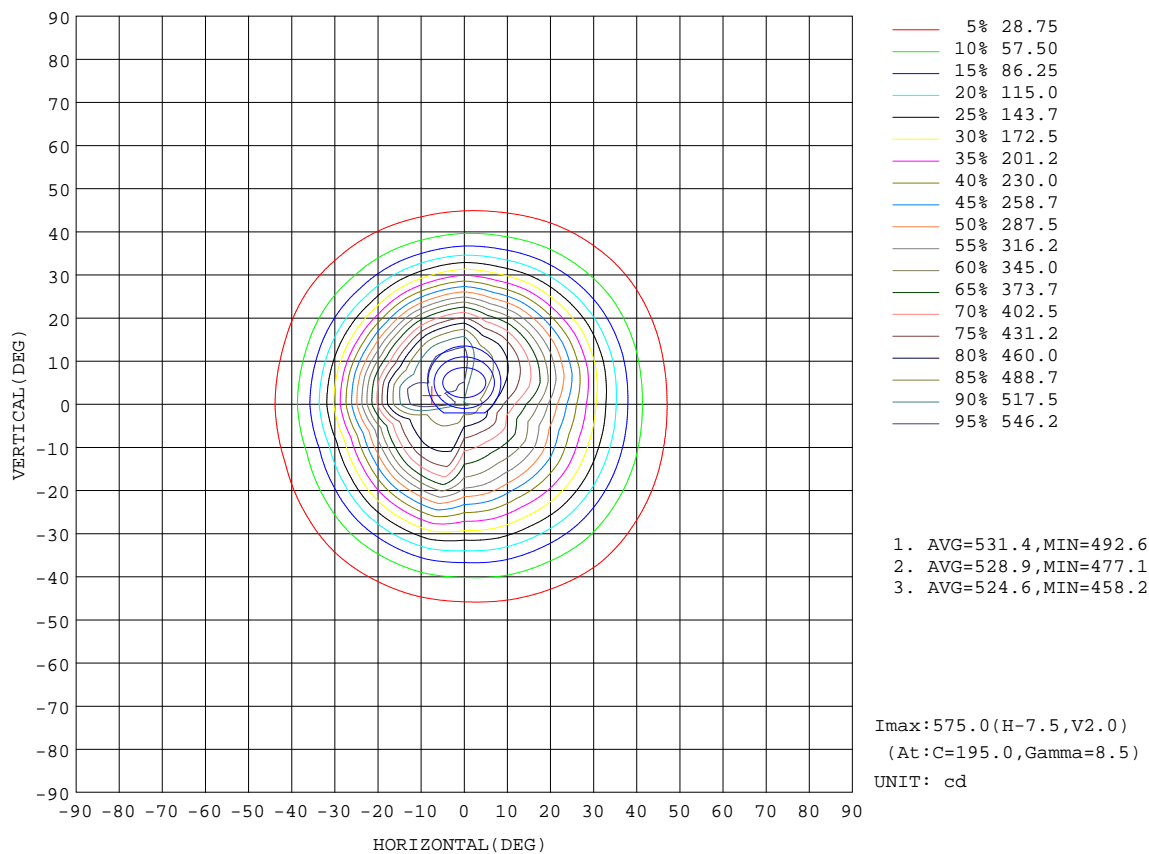
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ISOCANDELA DIAGRAM

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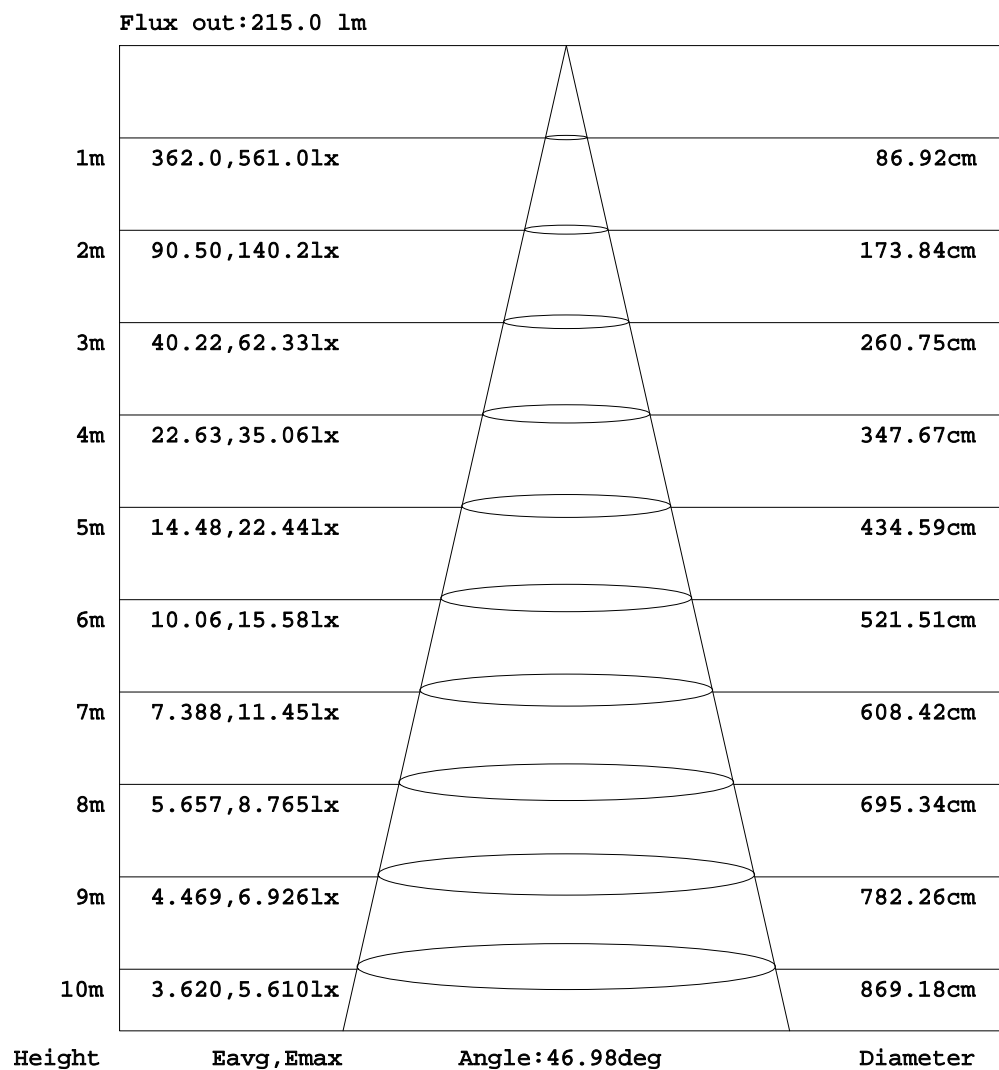


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**AAI Figure**

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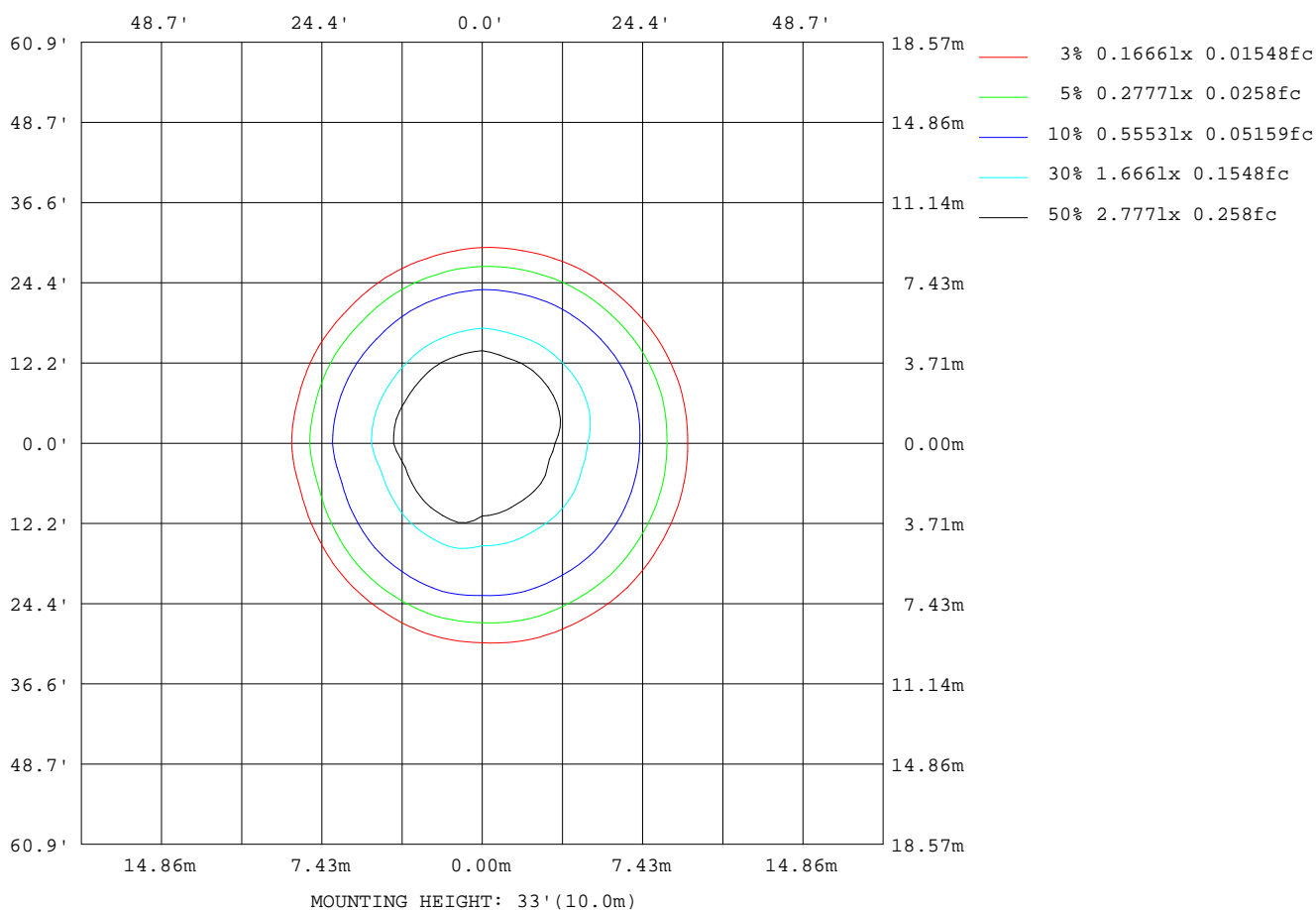
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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**ISOLUX DIAGRAM**

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### LED Avg.L Report

Test:U:48.00V I:0.1060A P:5.088W PF:1.000 Freq:0Hz Lamp Flux:388.91x1 lm		
NAME: ML26-RS25-5W-940-45	TYPE:Low Voltage Track System	Serial No.:
SPEC.:4000K	DIM.: $\phi$ 25mm*H40mm	
MFR.: NEKO LIGHTING AG		

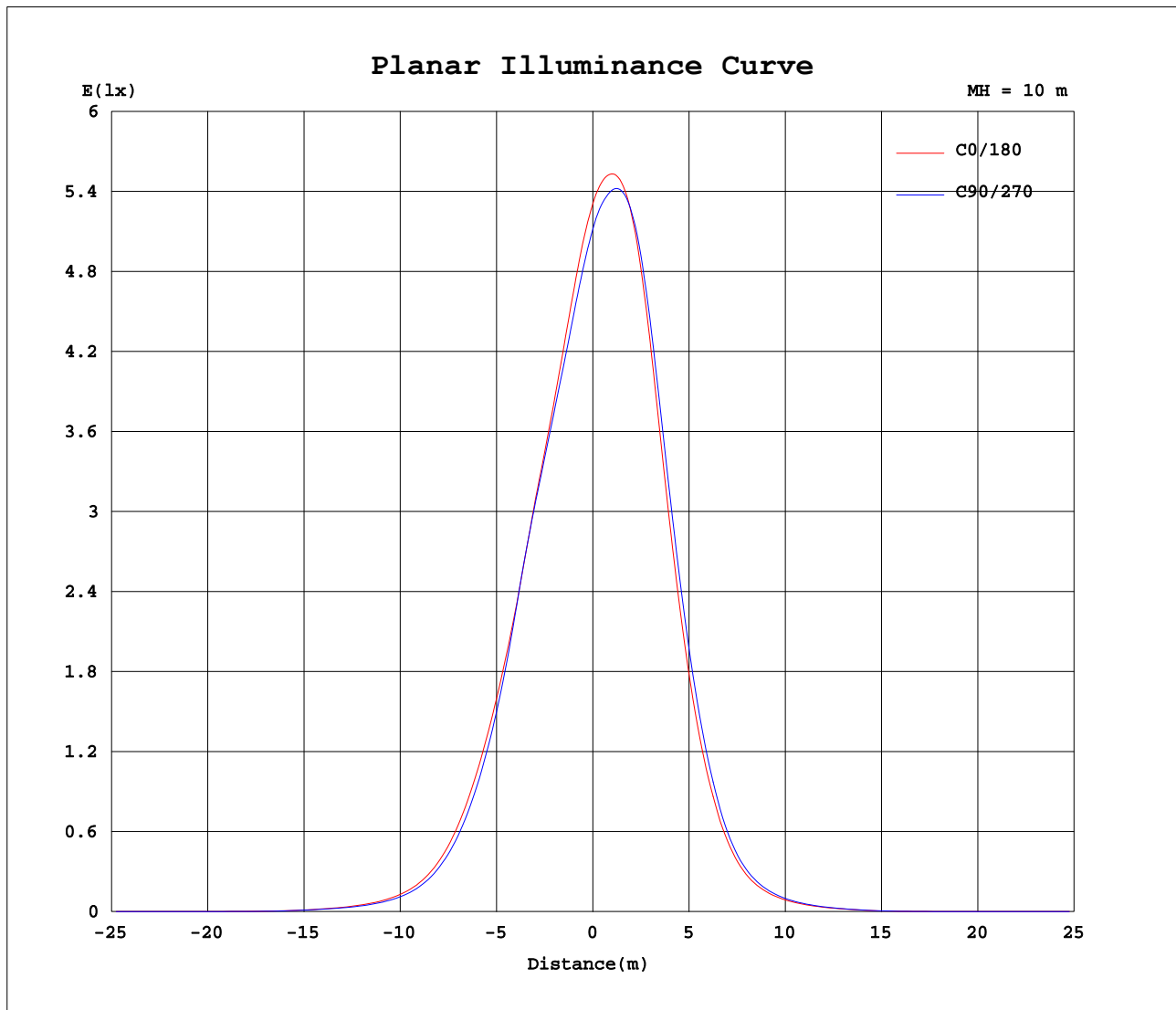
AvgL	cd/m2
L_0~180 (65) av	468
L_0~180 (75) av	61
L_0~180 (85) av	170
L_90~270 (65) av	427
L_90~270 (75) av	70
L_90~270 (85) av	196
L_45 (65) av	466
L_45 (75) av	70
L_45 (85) av	183

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-05-05

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
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  
Test Date: 2020-05-05

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 58%  
Test Distance: 5.850m [K=1.0000]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:5.850m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:5.850m [K=1.0000]
Remarks:

```