

## ANEXO 24-0270-1-A RALED II 48 LED RA10 110W

DRIVER ADVANCE XITANIUM 180W 0.1-1.25A 0-10V Dimming SimpleSet

MOD LED 2X8 Z15 5050 4K SEOUL (3 UND)

ABLE AP5P277MG



Light Output Ratio: 100.0%  
Luminaire Power: 111.5 W

I80 = 85.9 cd per klm. I88 = 1.1 cd per klm.  
I90 = 1.1 cd per klm. I80/I88 = 76.211

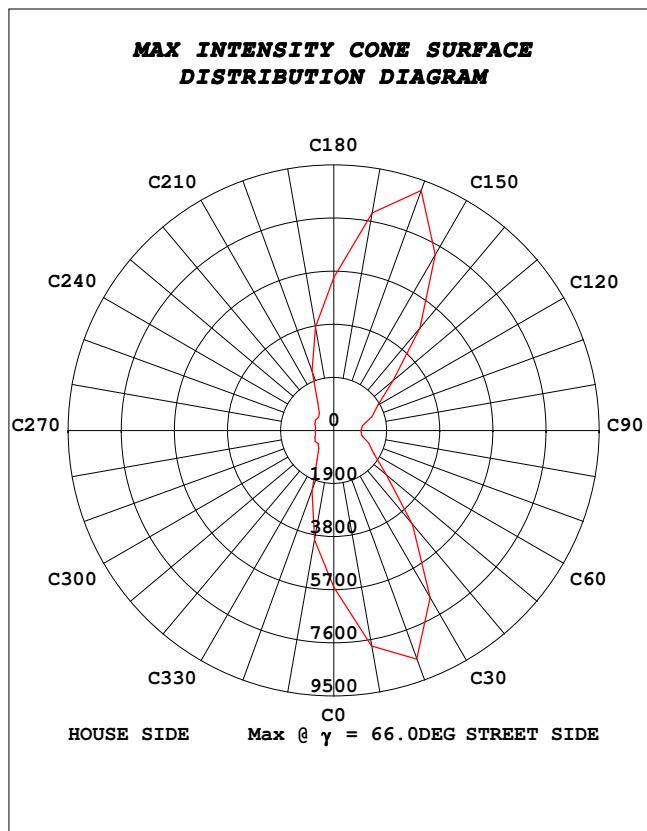
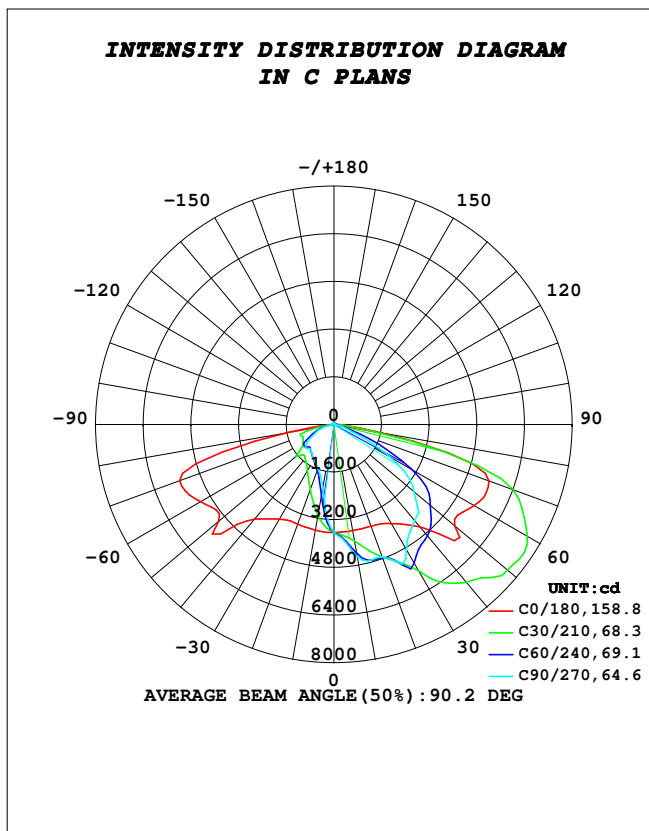
**C Range:** 0 - 360DEG  
**C Interval:** 10.0DEG  
**Test Speed:** HIGH  
**Temperature:** 25±1°CDEG  
**Operators:** Sebastian Vidal  
**Test Date:** 2024-04-25

**γ Range:** 0 - 180DEG  
**γ Interval:** 2.0DEG  
**Test System:** EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10  
**Humidity:** MAX: 52.0-MIN: 42.0%  
**Test Distance:** 7.080m [K=1.0000]  
**Remarks:** ANEXO 24-0270-1-A RALED II 48 LED 110W  
DRIVER ADVANCE XITANIUM 180W  
MOD LED 2X8 Z15 5050 4K SEOUL  
LENTE: RA10

## STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.15V I:0.5164A P:111.55W PF:0.9811 Freq:60.01Hz Lamp Flux:16550.7x1 lm		
NAME: ANEXO 24-0270-1-A RALED II 48 LED	TYPE:Alumbrado Publico	WEIGHT:-----
SPEC.:48 LED 110W	DIM.: -----	SERIAL No.:24-0270-1
MFR.: ROY APLHA	SUR.:-----	Shielding Angle:-----

DATA OF LAMP		PHOTOMETRIC DATA Eff: 148.37 lm/W			
MODEL	2X8 Z15 5050	Imax(cd)	9145	$\eta$ street_up(%)	0.3
NOMINAL POWER(W)	110	LOR(%)	100.0	$\eta$ street_down(%)	71.8
RATED VOLTAGE(V)	-----	TOTAL FLUX(lm)	16551	$\eta$ house_up(%)	0.7
NOMINAL FLUX(lm)	16550.7	MAXIMUM @ (C, $\gamma$ )	160,66.0	$\eta$ house_down(%)	27.2
LAMPS INSIDE	1	$\eta$ up(%)	1.0	76 FLASHAREA(m2)	
TEST VOLTAGE(V)	220	$\eta$ down(%)	99.0	SLI	

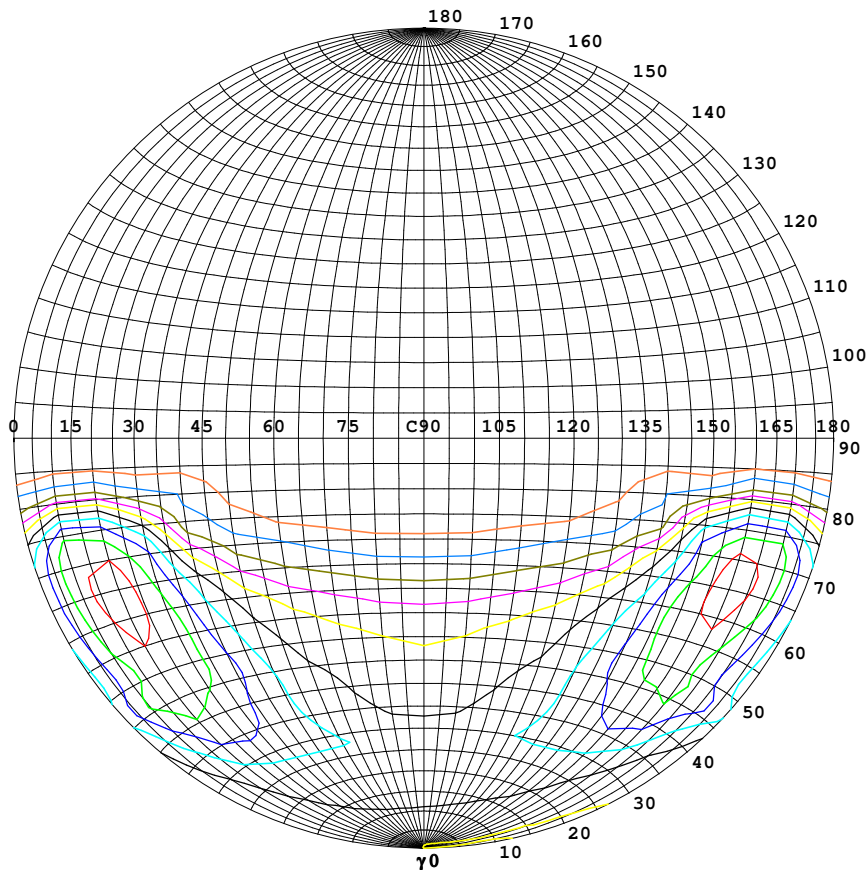


C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25±1°CDEG  
Operators: Sebastian Vidal  
Test Date: 2024-04-25

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
Test System: EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10  
Humidity: MAX: 52.0-MIN: 42.0%  
Test Distance: 7.080m [K=1.0000]  
Remarks: ANEXO 24-0270-1-A RALED II 48 LED 110W  
DRIVER ADVANCE XITANIUM 180W  
MOD LED 2X8 Z15 5050 4K SEOUL  
LENTE: RA10

## STREETLIGHT ISOCANDELA DIAGRAM

Test:U:220.15V I:0.5164A P:111.55W PF:0.9811 Freq:60.01Hz Lamp Flux:16550.7x1 lm		
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SPEC.:48 LED 110W	DIM.: -----	SERIAL No.:24-0270-1
MFR.: ROY APLHA	SUR.:-----	Shielding Angle:-----



### Classification:

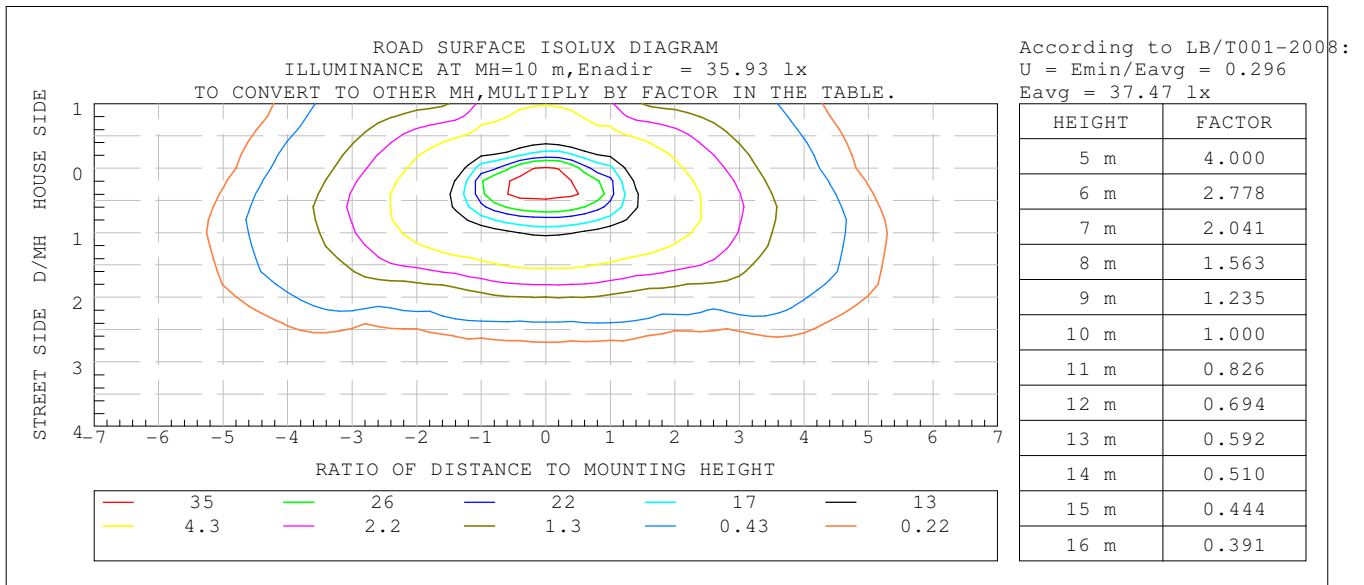
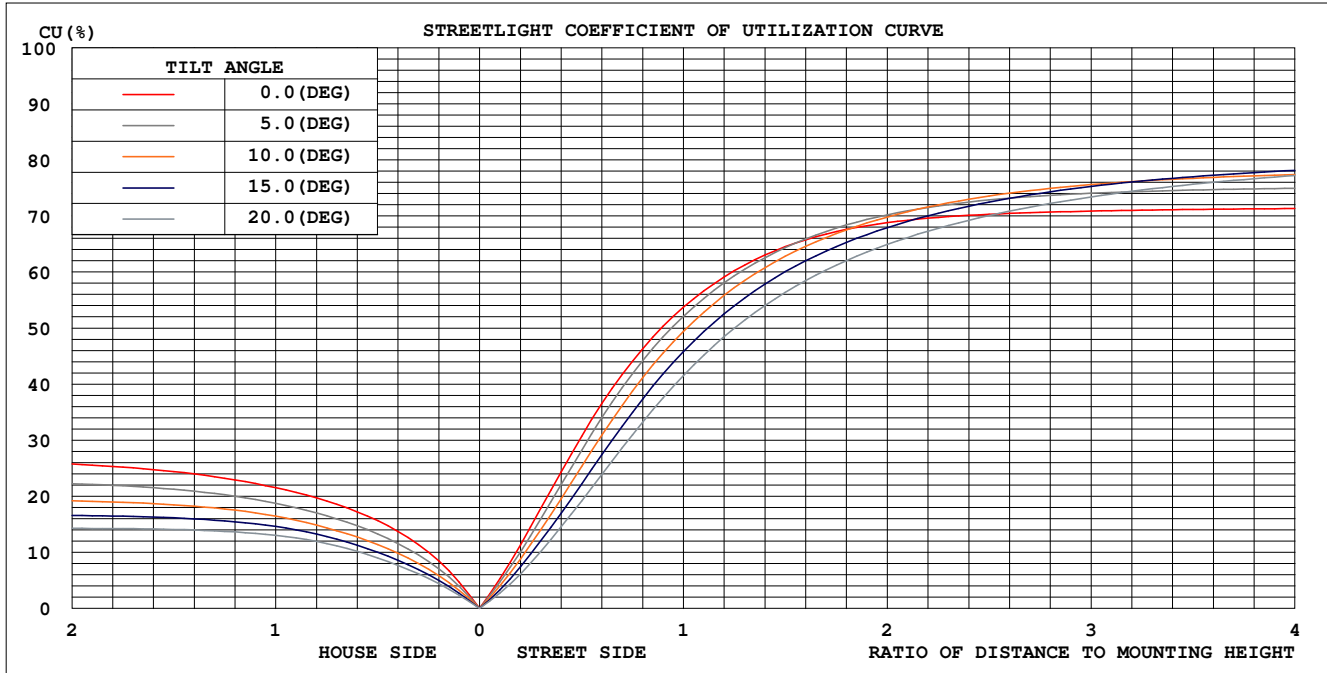
IES:Type III - Short  
CIE:Narrow - Intermediate  
IES:None cut-off  
CIE:Non-cut-off  
Max.At80:206.2cd/klm  
Max.At90:1.448cd/klm  
Max.80-90:206.2cd/klm  
NRB 5101:Non limited[39.6%]

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	9145
90%	8231
80%	7316
70%	6402
60%	5487
50%	4573
40%	3658
30%	2744
20%	1829
10%	915
5%	457

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25±1°CDEG  
Operators:Sebastian Vidal  
Test Date:2024-04-25

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10  
Humidity:MAX:52.0-MIN:42.0%  
Test Distance:7.080m [K=1.0000]  
Remarks: ANEXO 24-0270-1-A RALED II 48 LED 110W  
DRIVER ADVANCE XITANIUM 180W  
MOD LED 2X8 Z15 5050 4K SEOUL  
LENTE: RA10

## COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25±1°CDEG  
Operators: Sebastian Vidal  
Test Date: 2024-04-25

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
Test System: EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10  
Humidity: MAX: 52.0-MIN: 42.0%  
Test Distance: 7.080m [K=1.0000]  
Remarks: ANEXO 24-0270-1-A RALEID II 48 LED 110W  
DRIVER ADVANCE XITANIUM 180W  
MOD LED 2X8 Z15 5050 4K SEOUL  
LENTE: RA10

## ZONAL FLUX DIAGRAM

Test:U:220.15V I:0.5164A P:111.55W PF:0.9811 Freq:60.01Hz Lamp Flux:16550.7x1 lm		
NAME: ANEXO 24-0270-1-A RALED II 48 LED	TYPE:Alumbrado Publico	WEIGHT:-----
SPEC.:48 LED 110W	DIM.: -----	SERIAL No.:24-0270-1
MFR.: ROY APLHA	SUR.:-----	Shielding Angle:-----

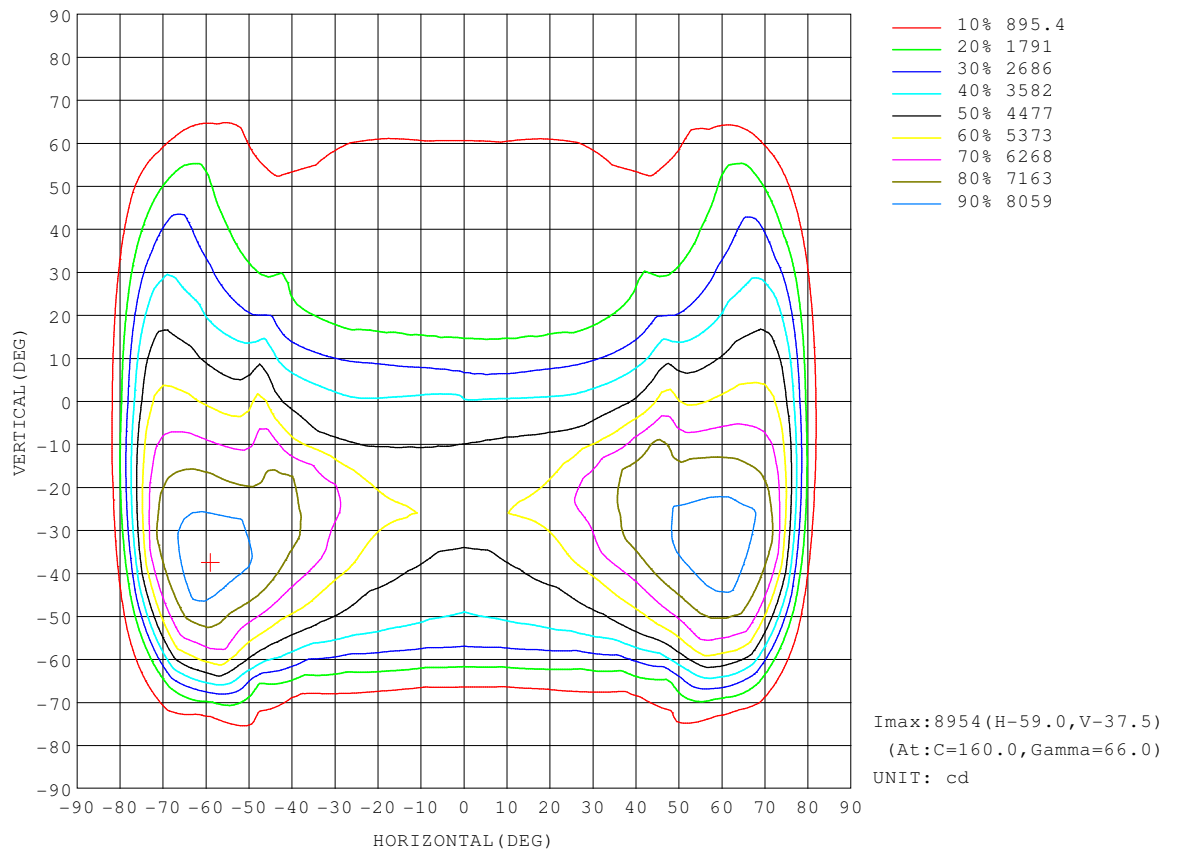
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
10	3618	4214	4494	4095	3605	2741	2187	2596	0- 10	334.4	334.4	2.02,2.02
20	3637	4844	4737	4846	3560	1864	1588	1856	10- 20	962.0	1296	7.83,7.83
30	3845	5808	4871	5725	3675	1478	1355	1520	20- 30	1591	2887	17.4,17.4
40	4497	5852	4222	5968	4159	1273	1191	1345	30- 40	2246	5133	31,31
50	5286	5672	3510	5942	5054	1201	1239	1351	40- 50	2911	8044	48.6,48.6
60	5437	4726	2142	5054	5179	971.1	925.7	1007	50- 60	3206	11250	68,68
70	5532	2199	507.9	2575	5517	646.7	530.7	651.8	60- 70	2967	14217	85.9,85.9
80	1421	600.9	140.8	647.1	1533	281.7	123.2	275.1	70- 80	1927	16145	97.5,97.5
90	18.07	4.001	2.145	3.830	18.36	9.614	2.493	11.14	80- 90	237.6	16382	99,99
100	27.35	6.309	3.987	5.913	44.33	24.18	8.092	26.85	90-100	15.32	16398	99.1,99.1
110	42.61	9.461	6.365	8.942	51.53	37.42	17.44	39.59	100-110	25.00	16423	99.2,99.2
120	46.18	12.04	8.894	11.18	51.23	43.49	26.61	46.06	110-120	28.65	16451	99.4,99.4
130	41.59	14.38	11.00	12.81	49.56	43.32	34.40	48.74	120-130	27.83	16479	99.6,99.6
140	37.64	17.18	12.61	15.31	45.55	41.93	39.42	48.14	130-140	24.30	16503	99.7,99.7
150	34.77	20.82	15.57	17.62	42.29	41.60	42.22	45.86	140-150	19.86	16523	99.8,99.8
160	34.09	24.98	20.34	20.59	41.06	41.35	41.79	41.87	150-160	14.90	16538	99.9,99.9
170	35.77	30.40	26.22	25.08	39.96	39.87	39.22	37.93	160-170	9.387	16547	100,100
180	39.11	35.93	33.52	32.72	39.15	35.94	33.51	32.73	170-180	3.260	16551	100,100
DEG	LUMINOUS INTENSITY:cd Less than 35% Percent = 12.7 %									UNIT:lm		

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25±1°CDEG  
Operators:Sebastian Vidal  
Test Date:2024-04-25

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
Test System:EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10  
Humidity:MAX:52.0-MIN:42.0%  
Test Distance:7.080m [K=1.0000]  
Remarks: ANEXO 24-0270-1-A RALED II 48 LED 110W  
DRIVER ADVANCE XITANIUM 180W  
MOD LED 2X8 Z15 5050 4K SEOUL  
LENTE: RA10

## ISOCANDELA DIAGRAM

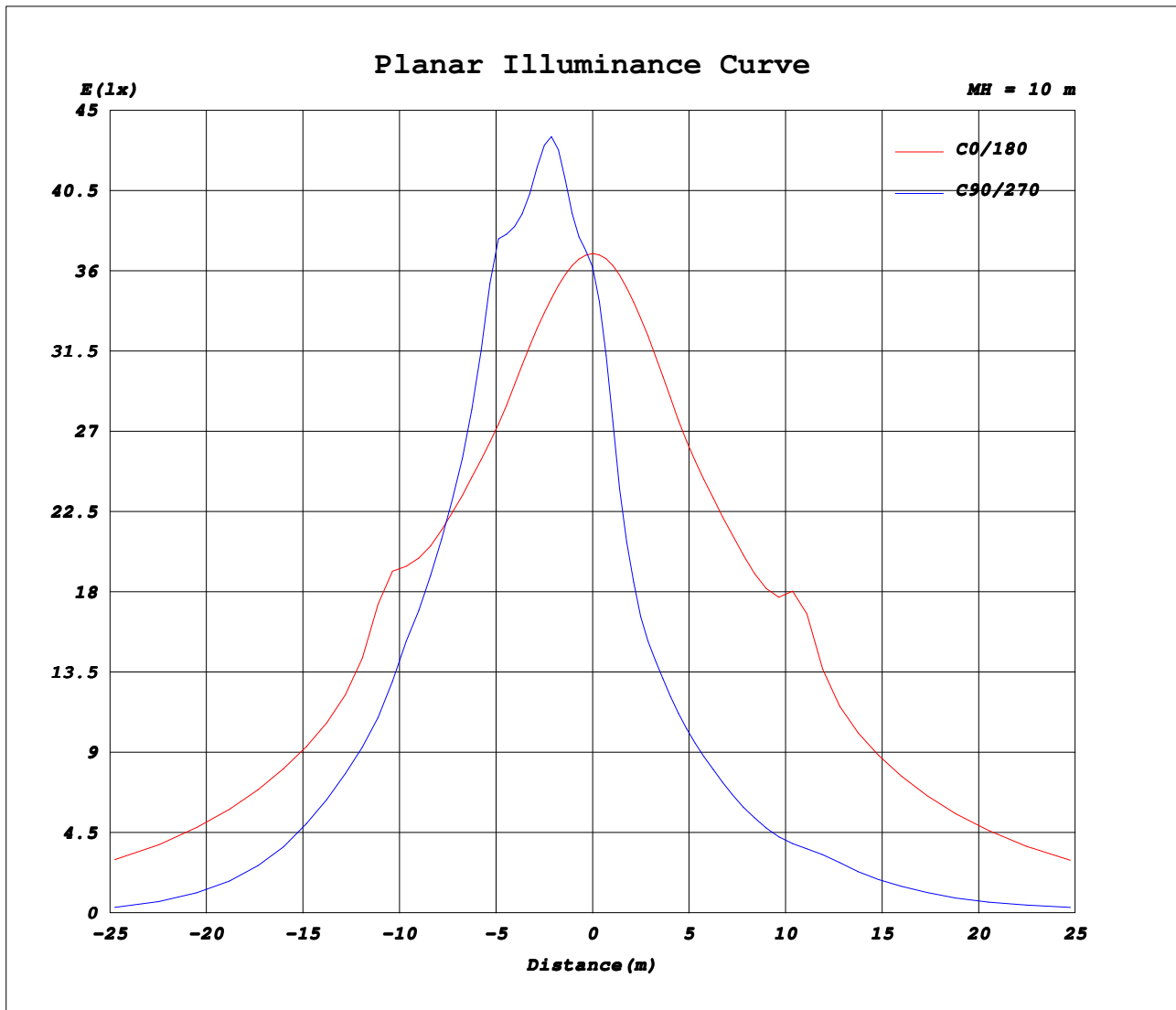
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NAME: ANEXO 24-0270-1-A RALED II 48 LED	TYPE:Alumbrado Publico	WEIGHT:-----
SPEC.:48 LED 110W	DIM.: -----	SERIAL No.:24-0270-1
MFR.: ROY APLHA	SUR.:-----	Shielding Angle:-----



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LENTE: RA10

## Planar Illuminance Curve



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**γ Range:** 0 - 180DEG  
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**Test System:** EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10  
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 MOD LED 2X8 Z15 5050 4K SEOUL  
 LENTE: RA10

DRIVER ADVANCE XITANIUM 180W 0.1-1.25A 0-10V Dimming SimpleSet  
MOD LED 2X8 Z15 5050 4K SEOUL (3 UND)  
ABLE AP5P277MG

Test Distance: 7.080 metres  
Test Tempertature: 25±1°C degrees Celsius

Significance: ENSAYO FOTOMETRICO A LUMINARIAS  
ROY ALPHA S.A  
CALLE 15 No 32-598  
Acopi Yumbo

Special Notes: EQUIPOS UTILIZADOS  
Fotogoniómetro EQEN-023  
Fuente de tensión INCO-011  
Luxometro INME-039  
Flexometro INME-041  
Controlador de temperatura INME-046  
Analizador de potencia INME-013  
Datalogger INME-062-3  
El presente reporte de pruebas no se debe reproducir en forma parcial,  
sin la aprobación del Laboratorio de ensayos de Roy Alpha.

Realizó/revisó Realizó: Sebastian Vidal. Revisó: Luis Asprilla.

Testing Procedure: Las prueba fue realizada de acuerdo con la norma LM 79 de 2019.  
Tiempo de estabilizacion: 0:29':50"  
Tiempo de ensayo: 0:20':19"

C Range: 0 - 360DEG  
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Test Speed: HIGH  
Temperature: 25±1°CDEG  
Operators: Sebastian Vidal  
Test Date: 2024-04-25

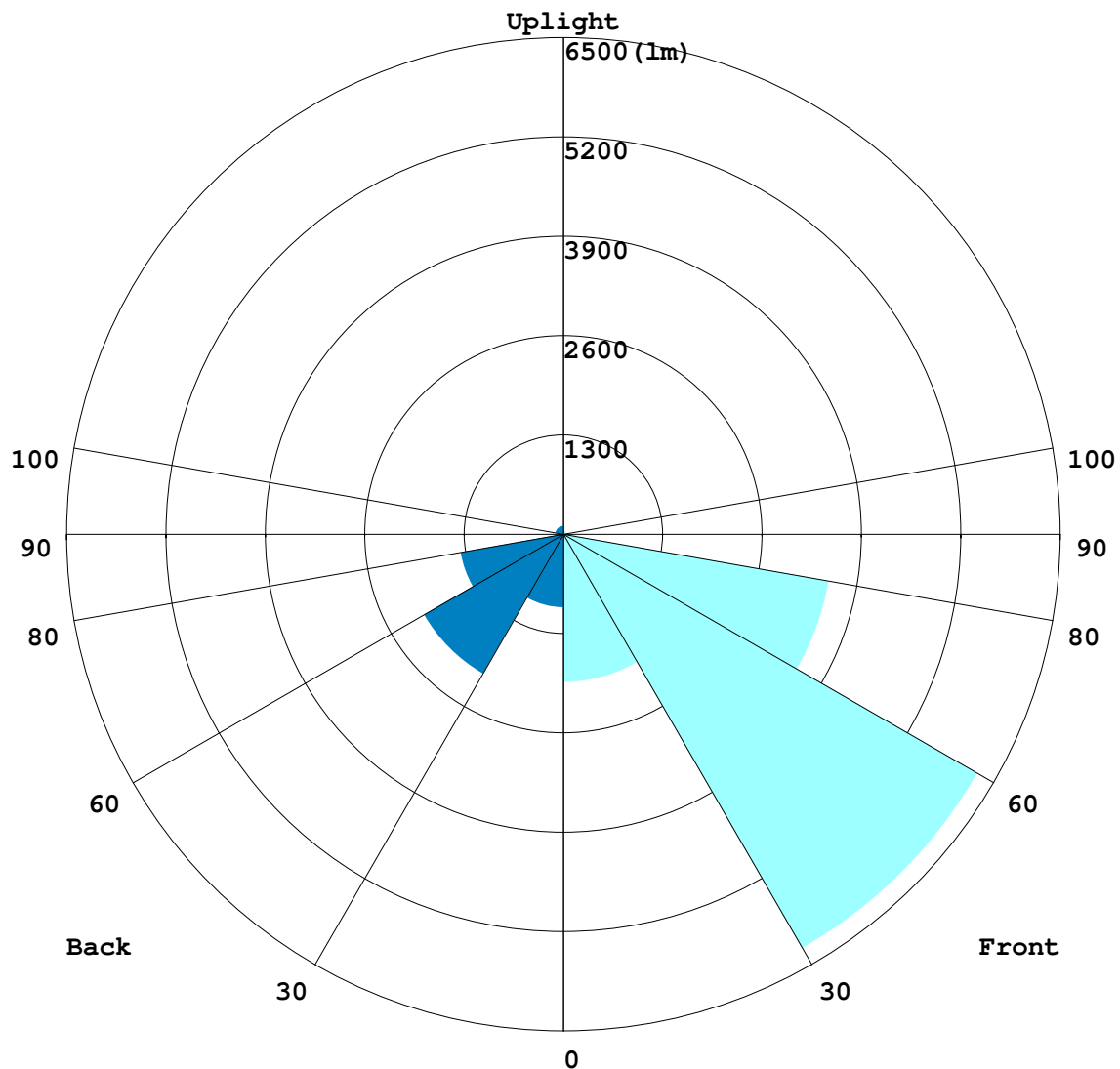
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Remarks: ANEXO 24-0270-1-A RALED II 48 LED 110W  
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MOD LED 2X8 Z15 5050 4K SEOUL  
LENTE: RA10



## LCS REPORT

Test:U:220.15V I:0.5164A P:111.55W PF:0.9811 Freq:60.01Hz Lamp Flux:16550.7x1 lm		
NAME: ANEXO 24-0270-1-A RALED II 48 LED	TYPE:Alumbrado Publico	WEIGHT:-----
SPEC.:48 LED 110W	DIM.: -----	SERIAL No.:24-0270-1
MFR.: ROY APLHA	SUR.:-----	Shielding Angle:-----

### LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



**C Range: 0 - 360DEG**  
**C Interval: 10.0DEG**  
**Test Speed: HIGH**  
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**Operators: Sebastian Vidal**  
**Test Date: 2024-04-25**

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**Test System: EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10**  
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**Remarks: ANEXO 24-0270-1-A RALED II 48 LED 110W**  
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**LENTE: RA10**

## BUG REPORT

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SPEC.:48 LED 110W	DIM.: -----	SERIAL No.:24-0270-1
MFR.: ROY APLHA	SUR.:-----	Shielding Angle:-----

### IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	1932.3	11.7
FM - Front-Medium(30-60)	6256.6	37.8
FH - Front-High(60-80)	3529.3	21.3
FVH - Front-Very High(80-90)	164.12	1.0
Total Forward Light	11933	72.1

BL - Back-Low(0-30)	954.94	5.8
BM - Back-Medium(30-60)	2106.5	12.7
BH - Back-High(60-80)	1365	8.2
BVH - Back-Very High(80-90)	73.47	0.4
Total Back Light	4617.8	27.9

UL - Uplight-Low(90-100)	15.316	0.1
UH - Uplight-High(100-180)	153.19	0.9
Total Up Light	168.51	1.0

BUG (Back, Up, Glare) Rating	B3-U3-G3
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	4499.8	117.97	4617.8
Street Side	11882	50.54	11933

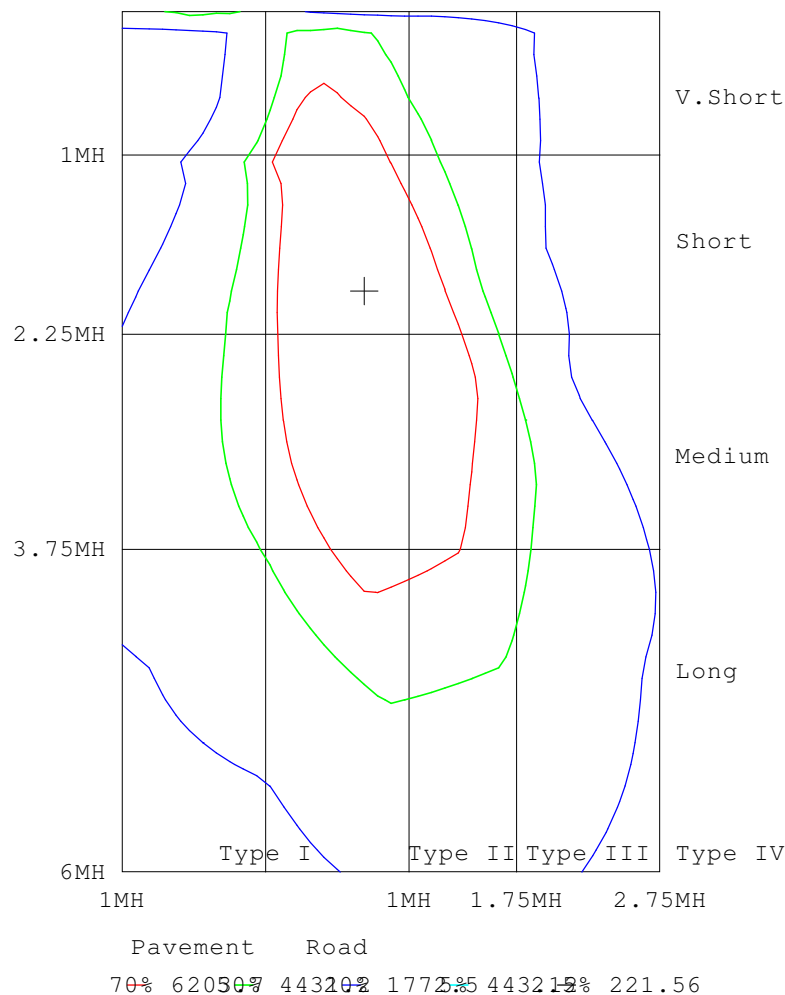
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Remarks: ANEXO 24-0270-1-A RALED II 48 LED 110W  
DRIVER ADVANCE XITANIUM 180W  
MOD LED 2X8 Z15 5050 4K SEOUL  
LENTE: RA10

## ROAD ISOCANDELA REPORT

Test:U:220.15V I:0.5164A P:111.55W PF:0.9811 Freq:60.01Hz Lamp Flux:16550.7x1 lm		
NAME: ANEXO 24-0270-1-A RALED II 48 LED	TYPE: Alumbrado Publico	WEIGHT:-----
SPEC.: 48 LED 110W	DIM.: -----	SERIAL No.: 24-0270-1
MFR.: ROY ALPHA	SUR.: -----	Shielding Angle:-----

ROAD SURFACE ISOCANDELA DIAGRAM



**C Range: 0 - 360DEG**  
**C Interval: 10.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25±1°CDEG**  
**Operators: Sebastian Vidal**  
**Test Date: 2024-04-25**

**γ Range: 0 - 180DEG**  
**γ Interval: 2.0DEG**  
**Test System: EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10**  
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**Remarks: ANEXO 24-0270-1-A RALED II 48 LED 110W**  
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**MOD LED 2X8 Z15 5050 4K SEOUL**  
**LENTE: RA10**

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.15V I:0.5164A P:111.55W PF:0.9811 Freq:60.01Hz Lamp Flux:16550.7x1 lm		
NAME: ANEXO 24-0270-1-A RALEL II 48 LED	TYPE:Alumbrado Publico	WEIGHT:-----
SPEC.:48 LED 110W	DIM.: -----	SERIAL No.:24-0270-1
MFR.: ROY APLHA	SUR.:-----	Shielding Angle:-----

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631
5	3627	3658	3689	3720	3750	3775	3799	3814	3824	3830	3826	3823	3805	3798	3774	3755	3724	3681	3629
10	3618	3706	3822	3976	4147	4280	4392	4451	4489	4494	4473	4405	4307	4170	4020	3891	3793	3720	3605
15	3619	3754	3985	4264	4511	4642	4694	4715	4709	4727	4725	4732	4682	4566	4343	4076	3859	3731	3586
20	3637	3885	4353	4737	4860	4828	4762	4739	4727	4737	4728	4754	4791	4871	4820	4526	4071	3755	3560
25	3669	4047	4668	5011	5042	4978	4975	4991	5008	5007	4998	4956	4911	4968	5028	4852	4317	3812	3559
30	3845	4520	5340	5671	5869	5747	5383	5073	4866	4871	4928	5200	5505	5739	5710	5478	4944	4112	3675
35	4037	4999	6071	6373	6156	5623	5071	4719	4507	4490	4558	4822	5206	5748	6143	6247	5602	4483	3826
40	4497	6081	7097	6920	6220	5482	4892	4493	4256	4222	4304	4587	5008	5625	6311	6942	6800	5370	4159
45	5129	6937	7595	7152	6396	5440	4689	4268	4094	4108	4121	4357	4827	5611	6452	7192	7472	6347	4671
50	5286	6926	7787	7606	6331	5010	4227	3944	3663	3510	3692	4041	4396	5304	6580	7747	7666	6543	5054
55	5162	7043	7999	7694	6033	4681	3952	3527	3229	3153	3264	3669	4141	4977	6381	7973	7922	6683	4885
60	5437	7528	8575	7499	5468	3982	3019	2540	2215	2142	2256	2654	3221	4315	5792	8076	8639	7293	5179
65	5603	7766	8768	7099	4916	3014	2084	1724	1415	1350	1461	1839	2296	3327	5199	7607	9068	7758	5412
70	5532	7932	8072	6406	3028	1367	943	588	510	508	517	634	1030	1563	3586	6764	8702	8060	5517
75	4861	7344	6944	5031	1409	667	441	385	327	327	335	407	468	719	1663	5900	7380	7427	4827
80	1421	2897	2826	1306	857	344	182	161	142	141	149	171	201	383	911	1568	3413	3107	1533
85	268	570	614	400	421	136	78.3	62.2	54.5	44.7	59.2	67.6	91.6	160	471	401	778	659	434
90	18.1	13.8	9.55	6.25	4.93	3.07	2.64	2.42	2.29	2.14	2.27	2.45	2.65	2.98	4.67	5.54	9.09	12.6	18.4
95	21.5	16.6	11.6	7.71	5.32	3.86	3.26	2.94	2.84	2.75	2.78	2.88	3.13	3.67	4.87	6.92	10.6	15.5	27.7
100	27.4	21.3	15.2	10.3	7.23	5.39	4.60	4.16	4.04	3.99	4.02	4.11	4.43	5.11	6.72	9.55	14.3	20.5	44.3
105	33.2	25.7	18.3	12.4	8.75	6.56	5.50	4.96	4.91	4.90	4.92	4.95	5.34	6.21	8.16	11.6	17.3	25.0	50.0
110	42.6	32.4	23.0	15.6	10.8	8.07	6.78	6.16	6.38	6.37	6.39	6.18	6.60	7.70	10.2	14.8	22.3	32.1	51.5
115	45.4	34.8	24.8	17.0	12.0	9.08	7.54	7.15	7.42	7.38	7.39	7.12	7.35	8.66	11.3	16.2	24.3	34.8	51.2
120	46.2	36.2	26.5	18.8	13.6	10.4	8.88	8.70	8.94	8.89	8.86	8.57	8.57	9.75	12.6	17.6	25.3	35.7	51.2
125	45.0	36.0	27.0	19.6	14.5	11.3	9.91	9.90	9.88	9.82	9.75	9.67	9.40	10.5	13.0	17.8	24.9	34.4	51.2
130	41.6	34.5	27.0	20.4	15.8	13.0	11.6	11.4	11.1	11.0	10.9	10.9	10.9	11.7	13.9	17.8	23.5	31.1	49.6
135	39.6	33.6	27.0	21.1	16.7	14.1	12.9	12.2	11.9	11.7	11.4	11.5	11.9	12.7	14.7	18.1	23.0	29.2	48.0
140	37.6	32.6	27.3	22.3	18.4	16.0	14.5	13.5	13.0	12.6	12.3	12.3	13.0	14.4	16.3	19.2	22.8	27.6	45.5
145	36.4	32.2	27.6	23.2	19.7	17.4	15.7	14.6	14.0	13.5	13.2	13.2	13.9	15.3	17.2	19.7	22.7	26.7	44.1
150	34.8	31.7	28.3	25.0	22.0	19.6	18.0	16.8	16.1	15.6	15.3	15.2	15.7	16.8	18.4	20.5	22.6	25.4	42.3
155	34.4	31.9	29.0	26.1	23.5	21.3	19.7	18.6	17.8	17.3	17.0	16.9	17.2	18.0	19.4	21.0	22.7	25.1	41.7
160	34.1	32.1	30.0	28.1	25.9	24.0	22.6	21.7	21.0	20.3	19.9	19.7	19.8	20.2	21.0	22.1	23.5	25.7	41.1
165	34.2	32.6	31.0	29.5	27.8	26.2	24.8	24.0	23.3	22.6	22.2	21.8	21.7	21.8	22.3	23.3	24.6	26.4	40.6
170	35.8	34.6	33.7	32.4	31.0	29.8	28.4	27.7	26.9	26.2	25.7	25.2	24.8	24.8	25.3	26.3	27.3	28.6	40.0
175	38.0	36.9	35.8	34.5	33.3	32.2	30.8	30.3	29.5	28.8	28.1	27.7	27.5	27.6	28.1	29.0	30.1	31.3	39.7
180	39.1	38.7	37.8	37.0	36.2	35.7	34.6	34.5	33.8	33.5	33.0	32.9	32.6	32.7	32.7	33.1	33.3	33.8	39.2

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25±1°CDEG

Operators:Sebastian Vidal

Test Date:2024-04-25

γ Range: 0 - 180DEG

γ Interval: 2.0DEG

Test System:EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10

Humidity:MAX:52.0-MIN:42.0%

Test Distance:7.080m [K=1.0000]

Remarks: ANEXO 24-0270-1-A RALEL II 48 LED 110W

DRIVER ADVANCE XITANIUM 180W

MOD LED 2X8 Z15 5050 4K SEOUL

LENTE: RA10

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.15V I:0.5164A P:111.55W PF:0.9811 Freq:60.01Hz Lamp Flux:16550.7x1 lm		
NAME: ANEXO 24-0270-1-A RALED II 48 LED	TYPE:Alumbrado Publico	WEIGHT:-----
SPEC.:48 LED 110W	DIM.: -----	SERIAL No.:24-0270-1
MFR.: ROY APLHA	SUR.:-----	Shielding Angle:-----

Table--2

UNIT: cd

C (DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631		
5	3593	3549	3493	3436	3364	3306	3235	3199	3158	3162	3163	3214	3261	3335	3407	3489	3561		
10	3499	3335	3101	2866	2617	2433	2289	2225	2187	2201	2237	2335	2481	2710	2953	3224	3458		
15	3432	3154	2780	2432	2165	2013	1903	1847	1825	1838	1882	1980	2115	2323	2641	3044	3406		
20	3343	2870	2328	1976	1752	1650	1608	1585	1588	1593	1621	1670	1756	1955	2262	2780	3352		
25	3283	2674	2087	1758	1599	1528	1484	1468	1473	1473	1496	1546	1631	1757	2069	2604	3311		
30	3246	2394	1794	1530	1427	1368	1350	1346	1355	1352	1366	1393	1463	1577	1810	2366	3308		
35	3253	2264	1649	1428	1330	1292	1289	1285	1290	1291	1305	1321	1376	1482	1690	2272	3351		
40	3311	2142	1505	1317	1230	1201	1208	1186	1191	1191	1230	1235	1290	1400	1614	2228	3515		
45	3499	2138	1444	1255	1170	1146	1137	1139	1153	1154	1172	1190	1251	1376	1611	2286	3781		
50	3785	2315	1686	1292	1110	1184	1202	1209	1239	1223	1234	1277	1267	1436	1785	2368	3965		
55	3595	2087	1346	1224	1249	1241	1198	1156	1150	1135	1197	1316	1362	1322	1429	2100	3764		
60	3619	2150	1194	994	948	1098	1043	936	926	929	1054	1144	981	1032	1249	2157	3825		
65	3792	2260	1149	867	801	854	817	740	739	739	823	876	821	895	1204	2278	4015		
70	3720	2368	1152	711	582	595	573	536	531	530	565	593	580	724	1162	2389	3875		
75	3197	2208	1174	605	418	431	434	376	350	372	425	426	418	615	1124	2296	3190		
80	1211	707	406	353	210	196	161	128	123	125	157	189	217	333	380	803	1183		
85	282	123	129	93.1	82.5	58.7	54.3	38.4	33.2	37.1	50.0	53.8	81.4	82.9	116	129	244		
90	22.5	22.0	18.1	12.0	7.22	4.19	3.05	2.52	2.49	2.72	3.43	4.91	8.48	13.8	20.3	24.0	23.5		
95	34.5	34.0	27.9	18.6	11.5	7.07	5.18	4.31	4.25	4.58	5.77	8.11	13.1	21.0	30.9	36.9	35.8		
100	54.8	54.3	43.9	29.2	19.1	12.9	9.79	8.27	8.09	8.66	10.7	14.4	21.4	32.3	47.6	57.0	55.6		
105	59.9	59.7	50.1	35.7	25.0	17.8	13.8	11.8	11.5	12.2	14.8	19.6	27.5	38.8	52.7	61.5	60.2		
110	60.5	61.5	54.0	42.3	32.5	25.1	20.3	17.9	17.4	18.3	21.2	27.0	34.9	44.3	55.2	61.9	59.7		
115	59.4	60.8	54.9	45.2	36.2	29.0	24.1	21.8	21.3	22.1	24.7	30.6	38.4	47.0	55.8	60.5	58.0		
120	57.7	58.8	54.6	47.3	39.6	33.3	29.1	27.0	26.6	27.3	29.5	34.9	42.3	49.8	56.1	58.4	55.3		
125	56.3	56.6	52.7	46.9	40.9	35.7	32.3	30.2	30.0	30.5	32.8	37.5	44.1	50.8	55.9	56.7	53.1		
130	53.0	52.1	48.7	45.0	41.6	38.3	36.1	34.4	34.4	35.0	37.3	40.7	46.2	51.2	54.0	52.9	48.2		
135	50.8	49.6	46.5	43.7	41.3	39.6	37.8	36.7	36.7	37.4	39.4	42.4	46.9	50.8	52.2	50.1	45.1		
140	47.6	47.0	44.6	42.4	41.4	40.4	39.5	39.0	39.4	40.0	41.5	44.2	47.2	49.1	49.1	46.2	41.5		
145	45.9	45.4	43.7	42.3	41.7	40.8	40.5	40.4	40.9	41.3	42.6	44.5	47.0	48.0	47.1	44.3	39.8		
150	43.8	43.6	42.8	41.8	41.4	41.0	41.4	41.8	42.2	42.5	43.2	44.2	45.7	46.0	44.8	42.1	38.2		
155	43.0	42.9	42.3	41.5	41.2	40.8	41.5	41.9	42.4	42.5	42.9	43.4	44.3	44.3	43.2	41.0	37.9		
160	42.1	42.3	42.0	41.5	41.2	40.6	41.1	41.4	41.8	41.7	41.8	41.9	42.0	41.7	41.0	39.6	37.7		
165	41.3	41.4	41.4	41.1	41.1	40.4	40.9	40.9	41.0	40.8	40.8	40.6	40.5	40.1	39.6	38.6	37.2		
170	40.2	40.1	40.0	39.9	39.9	39.4	39.7	39.4	39.2	38.9	38.7	38.4	38.2	37.7	37.1	36.7	36.1		
175	39.7	39.2	38.9	38.5	38.4	37.7	37.9	37.6	37.3	36.9	36.6	36.3	36.2	35.7	35.4	35.3	35.3		
180	38.7	37.8	37.0	36.2	35.7	34.6	34.5	33.9	33.5	33.1	32.9	32.6	32.7	32.7	33.1	33.3	33.9		

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25±1°CDEG

Operators:Sebastian Vidal

Test Date:2024-04-25

γ Range: 0 - 180DEG

γ Interval: 2.0DEG

Test System:EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10

Humidity:MAX:52.0-MIN:42.0%

Test Distance:7.080m [K=1.0000]

Remarks: ANEXO 24-0270-1-A RALED II 48 LED 110W

DRIVER ADVANCE XITANIUM 180W

MOD LED 2X8 Z15 5050 4K SEOUL

LENTE: RA10

Photometric Data Table [cd]

G/C	0.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0	90.0
0.0	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631
2.0	3629	3644	3658	3673	3685	3697	3706	3717	3722	3733
4.0	3627	3658	3689	3720	3750	3775	3799	3814	3824	3830
6.0	3625	3673	3725	3782	3845	3899	3952	3978	4001	3998
8.0	3622	3690	3769	3866	3980	4074	4163	4210	4245	4241
10.0	3618	3706	3822	3976	4147	4280	4392	4451	4489	4494
12.0	3616	3726	3895	4111	4332	4484	4581	4629	4650	4664
14.0	3619	3754	3985	4264	4511	4642	4694	4715	4709	4727
16.0	3624	3790	4095	4431	4661	4743	4739	4729	4702	4719
18.0	3629	3831	4218	4592	4777	4796	4747	4717	4687	4701
20.0	3637	3885	4353	4737	4860	4828	4762	4739	4727	4737
22.0	3649	3955	4504	4873	4941	4877	4828	4827	4838	4843
24.0	3669	4047	4668	5011	5042	4978	4975	4991	5008	5007
26.0	3708	4169	4853	5175	5193	5189	5254	5242	5223	5221
28.0	3767	4326	5078	5379	5471	5556	5491	5291	5133	5143
30.0	3845	4520	5340	5671	5869	5747	5383	5073	4866	4871
32.0	3935	4750	5644	6089	6060	5711	5213	4861	4645	4641
34.0	4037	4999	6071	6373	6156	5623	5071	4719	4507	4490
36.0	4163	5297	6448	6588	6196	5544	4988	4637	4417	4387
38.0	4310	5686	6775	6768	6206	5500	4946	4569	4339	4297
40.0	4497	6081	7097	6920	6220	5482	4892	4493	4256	4222
42.0	4763	6483	7390	7022	6288	5477	4805	4391	4182	4147
44.0	5129	6937	7595	7152	6396	5440	4689	4268	4094	4108
46.0	5613	7267	7677	7396	6487	5349	4540	4127	3959	3889
48.0	5680	7167	7822	7581	6449	5197	4375	4011	3826	3672
50.0	5286	6926	7787	7606	6331	5010	4227	3944	3663	3510
52.0	5150	6906	7837	7639	6195	4839	4097	3761	3462	3359
54.0	5162	7043	7999	7694	6033	4681	3952	3527	3229	3153
56.0	5246	7211	8191	7706	5846	4517	3740	3266	2946	2877
58.0	5344	7376	8393	7641	5656	4298	3430	2946	2606	2510
60.0	5437	7528	8575	7499	5468	3982	3019	2540	2215	2142
62.0	5526	7652	8710	7303	5247	3550	2549	2133	1809	1736
64.0	5603	7766	8768	7099	4916	3014	2084	1724	1415	1350
66.0	5605	7822	8700	6909	4395	2438	1660	1334	1023	973.0
68.0	5592	7890	8460	6702	3720	1862	1292	914.5	630.1	624.7
70.0	5532	7932	8072	6406	3028	1367	943.1	587.6	509.9	507.9
72.0	5344	7812	7573	5899	2173	939.7	594.2	477.9	417.4	415.2
74.0	4861	7344	6944	5031	1409	667.1	440.9	385.1	326.6	327.1
76.0	3966	6381	6080	3873	1152	529.3	357.4	296.4	253.2	258.8
78.0	2715	4776	4661	2587	900.6	438.9	260.1	228.5	192.3	190.6
80.0	1421	2897	2826	1306	856.6	344.3	182.4	160.7	142.1	140.8
82.0	841.1	1036	1108	685.7	710.5	240.0	124.6	104.2	98.28	94.93
84.0	267.8	569.7	614.4	399.6	421.1	136.1	78.29	62.17	54.52	44.68
86.0	143.1	108.3	121.9	114.1	151.4	61.73	38.11	31.87	24.11	11.30
88.0	18.65	15.38	12.44	13.91	77.30	13.13	10.32	10.47	7.237	3.173
90.0	18.07	13.84	9.548	6.253	4.933	3.067	2.640	2.423	2.288	2.145
92.0	19.75	15.19	10.49	6.943	4.728	3.397	2.860	2.569	2.480	2.383
94.0	21.53	16.63	11.59	7.714	5.318	3.864	3.260	2.944	2.844	2.752
96.0	23.34	18.12	12.73	8.534	5.921	4.357	3.681	3.348	3.237	3.148
98.0	25.19	19.66	13.89	9.370	6.543	4.849	4.122	3.760	3.631	3.561
100.0	27.35	21.34	15.18	10.26	7.225	5.389	4.596	4.163	4.035	3.987
102.0	30.05	23.36	16.63	11.26	7.966	5.968	5.059	4.561	4.459	4.436
104.0	33.19	25.65	18.25	12.37	8.746	6.560	5.500	4.958	4.909	4.900
106.0	36.70	28.09	20.00	13.56	9.544	7.093	5.942	5.351	5.365	5.380
108.0	39.99	30.39	21.63	14.69	10.26	7.575	6.370	5.727	5.851	5.868
110.0	42.61	32.36	23.01	15.63	10.85	8.071	6.780	6.162	6.383	6.365
112.0	44.42	33.81	24.06	16.33	11.39	8.579	7.175	6.642	6.915	6.869
114.0	45.43	34.76	24.85	16.96	11.97	9.078	7.536	7.149	7.416	7.383
116.0	46.02	35.41	25.46	17.58	12.57	9.554	7.926	7.650	7.924	7.893
118.0	46.25	35.87	26.02	18.21	13.15	10.00	8.393	8.131	8.429	8.398
120.0	46.18	36.15	26.50	18.77	13.65	10.42	8.884	8.696	8.936	8.894
122.0	45.73	36.16	26.80	19.25	14.11	10.85	9.384	9.291	9.424	9.375
124.0	44.99	35.99	26.97	19.64	14.50	11.35	9.908	9.901	9.884	9.816
126.0	44.05	35.64	27.04	19.94	14.91	11.86	10.40	10.51	10.34	10.23
128.0	42.89	35.14	27.04	20.19	15.35	12.40	10.99	10.99	10.76	10.63
130.0	41.59	34.51	27.00	20.44	15.80	12.96	11.64	11.43	11.15	11.00
132.0	40.47	34.09	26.98	20.78	16.24	13.53	12.27	11.84	11.51	11.35
134.0	39.61	33.56	27.00	21.08	16.75	14.06	12.89	12.25	11.86	11.66
136.0	38.88	33.22	27.06	21.41	17.31	14.68	13.47	12.65	12.20	11.96
138.0	38.27	32.87	27.15	21.84	17.82	15.31	13.98	13.08	12.56	12.27
140.0	37.64	32.57	27.34	22.34	18.40	15.96	14.51	13.54	12.97	12.61
142.0	37.06	32.41	27.56	22.70	19.05	16.66	15.08	14.06	13.45	13.03
144.0	36.42	32.20	27.59	23.17	19.73	17.37	15.70	14.63	14.00	13.55
146.0	35.54	31.78	27.75	23.70	20.51	18.05	16.41	15.28	14.64	14.13

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25±1°CDEG  
Operators: Sebastian Vidal  
Test Date: 2024-04-25

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System: EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10  
Humidity: MAX: 52.0-MIN: 42.0%  
Test Distance: 7.080m [K=1.0000]  
Remarks: ANEXO 24-0270-1-A RALEID II 48 LED 110W  
DRIVER ADVANCE TITANIUM 180W  
MOD LED 2X8 Z15 5050 4K SEOUL  
LENTE: RA10

## Photometric Data Table [cd]

148.0	35.12	31.69	28.01	24.30	21.29	18.81	17.19	16.00	15.33	14.83
150.0	34.77	31.70	28.32	24.99	22.03	19.61	17.99	16.78	16.08	15.57
152.0	34.52	31.75	28.74	25.57	22.78	20.44	18.84	17.62	16.92	16.38
154.0	34.41	31.85	29.02	26.14	23.54	21.28	19.71	18.57	17.84	17.27
156.0	34.26	31.85	29.29	26.75	24.32	22.14	20.60	19.55	18.84	18.24
158.0	34.11	31.91	29.63	27.40	25.12	23.05	21.56	20.59	19.91	19.27
160.0	34.09	32.06	30.00	28.05	25.93	24.03	22.59	21.69	21.02	20.34
162.0	34.09	32.28	30.43	28.74	26.83	25.08	23.66	22.81	22.13	21.47
164.0	34.21	32.60	30.98	29.51	27.78	26.17	24.79	23.97	23.26	22.61
166.0	34.50	33.06	31.69	30.39	28.80	27.33	25.94	25.17	24.42	23.80
168.0	35.02	33.72	32.61	31.34	29.88	28.54	27.15	26.42	25.62	25.00
170.0	35.77	34.59	33.67	32.36	31.01	29.78	28.42	27.70	26.89	26.22
172.0	36.76	35.76	34.80	33.43	32.17	31.05	29.62	29.02	28.20	27.49
174.0	37.95	36.93	35.83	34.55	33.29	32.20	30.80	30.34	29.53	28.80
176.0	38.60	37.65	36.56	35.39	34.20	33.31	31.99	31.63	30.85	30.15
178.0	38.85	38.16	37.17	36.22	35.20	34.50	33.32	33.07	32.34	31.82
180.0	39.11	38.70	37.79	37.04	36.17	35.68	34.59	34.47	33.82	33.52
G/C	100.0	110.0	120.0	130.0	140.0	150.0	160.0	170.0	180.0	190.0
0.0	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631
2.0	3732	3739	3732	3733	3717	3705	3683	3658	3630	3614
4.0	3826	3823	3805	3798	3774	3755	3724	3681	3629	3593
6.0	3984	3953	3914	3876	3830	3796	3752	3702	3625	3568
8.0	4219	4158	4085	3997	3907	3836	3773	3714	3617	3537
10.0	4473	4405	4307	4170	4020	3891	3793	3720	3605	3499
12.0	4650	4615	4525	4371	4170	3969	3820	3724	3594	3464
14.0	4725	4732	4682	4566	4343	4076	3859	3731	3586	3432
16.0	4727	4768	4765	4718	4526	4211	3914	3738	3578	3403
18.0	4706	4757	4792	4816	4688	4366	3981	3745	3568	3372
20.0	4728	4754	4791	4820	4526	4071	3755	3560	3343	3143
22.0	4826	4809	4816	4908	4926	4689	4181	3775	3558	3313
24.0	4998	4956	4911	4968	5028	4852	4317	3812	3559	3283
26.0	5234	5231	5159	5093	5154	5027	4483	3877	3578	3263
28.0	5193	5395	5503	5411	5344	5228	4691	3975	3617	3249
30.0	4928	5200	5505	5739	5710	5478	4944	4112	3675	3246
32.0	4704	4979	5351	5788	6000	5869	5229	4284	3746	3248
34.0	4558	4822	5206	5748	6143	6247	5602	4483	3826	3253
36.0	4464	4735	5113	5685	6240	6507	6047	4709	3922	3264
38.0	4388	4663	5063	5641	6289	6739	6432	4997	4029	3281
40.0	4304	4587	5008	5625	6311	6942	6800	5370	4159	3311
42.0	4225	4484	4927	5623	6358	7079	7175	5795	4354	3369
44.0	4121	4357	4827	5611	6452	7192	7472	6347	4671	3499
46.0	3994	4228	4695	5567	6588	7392	7534	6944	5288	3834
48.0	3910	4107	4542	5462	6632	7660	7706	6879	5498	4108
50.0	3692	4041	4396	5304	6580	7747	7666	6543	5054	3785
52.0	3507	3912	4273	5140	6499	7830	7732	6529	4882	3635
54.0	3264	3669	4141	4977	6381	7973	7922	6683	4885	3595
56.0	2989	3388	3949	4818	6220	8092	8142	6869	4964	3587
58.0	2645	3052	3641	4613	6020	8132	8382	7074	5070	3595
60.0	2256	2654	3221	4315	5792	8076	8639	7293	5179	3619
62.0	1852	2256	2773	3874	5524	7899	8874	7526	5291	3666
64.0	1461	1839	2296	3327	5199	7607	9068	7758	5412	3792
66.0	1056	1451	1837	2755	4796	7258	9145	7914	5471	3772
68.0	651.4	1014	1421	2183	4289	6947	9028	8015	5524	3730
70.0	517.3	634.1	1030	1563	3586	6764	8702	8060	5517	3720
72.0	426.7	502.6	639.8	1030	2705	6536	8130	7926	5344	3591
74.0	335.5	407.3	467.7	718.6	1663	5900	7380	7427	4827	3197
76.0	261.6	314.3	380.8	570.1	1304	4770	6548	6491	3892	2586
78.0	198.2	242.4	283.5	478.2	954.8	3164	5313	5014	2710	1907
80.0	148.8	170.6	201.4	383.4	910.5	1568	3413	3107	1533	1211
82.0	104.0	112.0	137.6	271.7	781.5	680.5	1409	1204	795.4	746.4
84.0	59.24	67.60	91.59	160.4	470.9	400.7	778.0	658.6	433.7	281.5
86.0	26.67	35.51	45.70	75.59	175.8	122.6	147.5	120.0	75.14	150.2
88.0	8.311	12.23	14.23	18.88	90.18	18.57	74.25	15.27	17.64	20.87
90.0	2.267	2.450	2.647	2.985	4.674	5.542	9.090	12.60	18.36	22.48
92.0	2.412	2.507	2.733	3.216	4.290	6.138	9.510	13.99	22.63	27.98
94.0	2.784	2.881	3.135	3.668	4.875	6.922	10.60	15.50	27.71	34.45
96.0	3.178	3.277	3.546	4.139	5.471	7.760	11.77	17.08	33.37	41.76
98.0	3.586	3.686	3.970	4.605	6.073	8.635	12.98	18.71	39.22	49.07
100.0	4.018	4.109	4.428	5.111	6.715	9.550	14.27	20.46	44.33	54.76
102.0	4.458	4.539	4.887	5.648	7.415	10.54	15.74	22.59	47.95	58.16
104.0	4.917	4.946	5.338	6.209	8.159	11.61	17.34	25.01	49.99	59.92
106.0	5.388	5.343	5.763	6.741	8.906	12.74	19.09	27.54	51.04	60.65
108.0	5.867	5.731	6.191	7.224	9.597	13.85	20.81	29.97	51.50	60.79
110.0	6.385	6.180	6.600	7.696	10.19	14.82	22.33	32.11	51.53	60.54

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25±1°CDEG  
Operators: Sebastian Vidal  
Test Date: 2024-04-25

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System: EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10  
Humidity: MAX: 52.0-MIN: 42.0%  
Test Distance: 7.080m [K=1.0000]  
Remarks: ANEXO 24-0270-1-A RALEID II 48 LED 110W  
DRIVER ADVANCE XITANUM 180W  
MOD LED 2X8 Z15 5050 4K SEOUL  
LENTE: RA10



## Photometric Data Table [cd]

112.0	6.892	6.638	6.985	8.188	10.76	15.59	23.48	33.74	51.38	60.00
114.0	7.392	7.116	7.345	8.661	11.31	16.22	24.32	34.84	51.15	59.37
116.0	7.889	7.567	7.731	9.086	11.84	16.80	24.88	35.53	51.11	58.84
118.0	8.379	8.046	8.147	9.443	12.28	17.28	25.23	35.81	51.15	58.31
120.0	8.861	8.571	8.572	9.747	12.60	17.61	25.34	35.71	51.23	57.72
122.0	9.321	9.120	8.993	10.07	12.82	17.75	25.21	35.18	51.22	57.05
124.0	9.754	9.672	9.395	10.45	13.00	17.75	24.88	34.35	51.18	56.31
126.0	10.17	10.12	9.793	10.84	13.25	17.72	24.45	33.40	50.97	55.51
128.0	10.55	10.54	10.32	11.25	13.58	17.70	23.97	32.31	50.34	54.32
130.0	10.89	10.91	10.88	11.71	13.90	17.77	23.46	31.15	49.56	53.04
132.0	11.19	11.23	11.42	12.19	14.27	17.92	23.10	30.01	48.78	51.86
134.0	11.45	11.50	11.92	12.72	14.74	18.06	22.96	29.17	48.00	50.76
136.0	11.69	11.74	12.28	13.31	15.26	18.31	22.79	28.63	47.21	49.69
138.0	11.96	12.01	12.62	13.85	15.76	18.74	22.73	28.08	46.35	48.62
140.0	12.28	12.32	12.99	14.36	16.26	19.15	22.82	27.63	45.55	47.63
142.0	12.68	12.72	13.41	14.85	16.72	19.40	22.91	27.34	44.80	46.77
144.0	13.20	13.23	13.90	15.30	17.18	19.66	22.66	26.71	44.07	45.89
146.0	13.80	13.80	14.45	15.77	17.65	19.91	22.58	26.00	43.37	45.03
148.0	14.51	14.49	15.05	16.25	18.04	20.20	22.56	25.63	42.77	44.32
150.0	15.27	15.23	15.73	16.80	18.45	20.49	22.59	25.35	42.29	43.76
152.0	16.09	16.02	16.46	17.39	18.89	20.70	22.64	25.19	41.88	43.32
154.0	16.97	16.88	17.24	18.03	19.39	21.00	22.70	25.11	41.65	43.03
156.0	17.89	17.77	18.05	18.73	19.91	21.36	22.87	25.21	41.45	42.70
158.0	18.89	18.71	18.91	19.44	20.43	21.71	23.14	25.43	41.25	42.41
160.0	19.94	19.71	19.81	20.19	20.98	22.13	23.52	25.70	41.06	42.11
162.0	21.05	20.75	20.73	20.98	21.60	22.65	23.99	26.00	40.86	41.74
164.0	22.18	21.83	21.67	21.80	22.30	23.31	24.57	26.36	40.61	41.32
166.0	23.35	22.93	22.65	22.69	23.16	24.15	25.33	26.90	40.41	40.93
168.0	24.52	24.05	23.69	23.69	24.16	25.12	26.23	27.63	40.19	40.55
170.0	25.68	25.20	24.82	24.83	25.32	26.25	27.33	28.59	39.96	40.21
172.0	26.87	26.39	26.06	26.16	26.66	27.55	28.61	29.80	39.79	39.92
174.0	28.15	27.72	27.46	27.61	28.13	29.04	30.06	31.25	39.70	39.69
176.0	29.57	29.22	29.03	29.19	29.61	30.42	31.30	32.38	39.50	39.43
178.0	31.31	31.09	30.87	31.04	31.28	31.93	32.40	33.12	39.27	39.10
180.0	33.05	32.89	32.60	32.73	32.71	33.06	33.26	33.83	39.15	38.69
G/C	200.0	210.0	220.0	230.0	240.0	250.0	260.0	270.0	280.0	290.0
0.0	3631	3631	3631	3631	3631	3631	3631	3631	3631	3631
2.0	3596	3574	3554	3525	3505	3476	3464	3444	3443	3439
4.0	3549	3493	3436	3364	3306	3235	3199	3158	3162	3163
6.0	3490	3387	3278	3144	3040	2920	2868	2810	2817	2833
8.0	3418	3253	3081	2885	2736	2584	2546	2457	2472	2502
10.0	3335	3101	2866	2617	2433	2289	2225	2187	2201	2237
12.0	3245	2940	2649	2364	2195	2073	2018	1989	2004	2043
14.0	3154	2780	2432	2165	2013	1903	1847	1825	1838	1882
16.0	3063	2623	2253	2009	1862	1760	1723	1721	1730	1762
18.0	2969	2469	2104	1874	1732	1673	1651	1652	1660	1687
20.0	2870	2328	1976	1752	1650	1608	1585	1588	1593	1621
22.0	2773	2201	1864	1660	1589	1544	1522	1527	1529	1555
24.0	2674	2087	1758	1599	1528	1484	1468	1473	1473	1496
26.0	2575	1978	1664	1541	1470	1432	1419	1428	1425	1445
28.0	2475	1880	1589	1483	1417	1388	1380	1389	1385	1403
30.0	2394	1794	1530	1427	1368	1350	1346	1355	1352	1366
32.0	2322	1716	1477	1376	1327	1318	1315	1323	1321	1335
34.0	2264	1649	1428	1330	1292	1289	1285	1290	1291	1305
36.0	2214	1592	1387	1293	1262	1262	1254	1252	1257	1277
38.0	2173	1545	1351	1261	1233	1236	1219	1217	1222	1254
40.0	2142	1505	1317	1230	1201	1208	1186	1191	1191	1230
42.0	2125	1469	1285	1199	1172	1172	1160	1166	1168	1201
44.0	2138	1444	1255	1170	1146	1137	1139	1153	1154	1172
46.0	2240	1458	1229	1140	1127	1127	1139	1168	1164	1178
48.0	2475	1587	1227	1116	1135	1160	1172	1204	1195	1209
50.0	2315	1686	1292	1110	1184	1202	1209	1239	1223	1234
52.0	2126	1460	1398	1154	1232	1221	1210	1216	1196	1227
54.0	2087	1346	1224	1249	1241	1198	1156	1150	1135	1197
56.0	2095	1281	1117	1177	1219	1168	1090	1079	1070	1157
58.0	2116	1233	1055	1044	1206	1154	1039	1016	1023	1162
60.0	2150	1194	994.3	947.8	1098	1043	935.7	925.7	929.0	1054
62.0	2191	1172	927.8	872.7	969.9	918.5	829.7	824.3	826.1	930.8
64.0	2260	1149	867.0	800.9	853.6	816.5	740.0	739.3	739.3	823.0
66.0	2287	1150	819.1	730.3	764.4	721.4	669.4	668.8	667.1	724.7
68.0	2324	1132	771.9	661.8	680.8	649.5	604.2	598.5	598.8	644.2
70.0	2368	1152	710.9	582.3	594.7	573.1	536.2	530.7	529.6	565.1
72.0	2371	1175	651.7	498.7	511.0	500.4	471.0	459.8	467.7	495.3
74.0	2208	1174	604.6	418.0	431.1	433.7	375.7	349.9	372.1	424.8

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature: 25±1°CDEG

Operators: Sebastian Vidal

Test Date: 2024-04-25

γ Range: 0 - 180DEG

γ Interval: 2.0DEG

Test System: EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10

Humidity: MAX: 52.0-MIN: 42.0%

Test Distance: 7.080m [K=1.0000]

Remarks: ANEXO 24-0270-1-A RALED II 48 LED 110W

DRIVER ADVANCE XITANUM 180W

MOD LED 2X8 Z15 5050 4K SEOUL

LENTE: RA10



Photometric Data Table [cd]

76.0	1815	960.3	571.2	349.8	355.2	329.4	283.2	246.5	279.6	321.5
78.0	1275	662.2	499.0	279.8	275.5	236.1	190.9	176.0	187.4	229.3
80.0	707.0	405.6	353.0	210.2	195.7	161.3	127.7	123.2	125.3	156.5
82.0	413.5	223.6	222.6	143.8	116.3	107.8	78.14	70.58	75.87	103.2
84.0	123.2	129.4	93.15	82.51	58.67	54.27	38.37	33.20	37.07	50.01
86.0	38.21	35.80	40.79	21.29	19.68	15.46	12.29	9.465	11.63	13.69
88.0	19.36	15.58	10.89	6.379	3.924	2.569	2.092	2.060	2.172	2.949
90.0	22.01	18.13	12.00	7.219	4.195	3.055	2.515	2.493	2.720	3.432
92.0	27.47	22.63	15.14	9.243	5.504	4.002	3.340	3.268	3.559	4.507
94.0	34.01	27.88	18.60	11.47	7.075	5.180	4.310	4.246	4.585	5.773
96.0	41.34	33.53	22.21	13.81	8.794	6.545	5.459	5.369	5.748	7.225
98.0	48.71	39.17	25.75	16.39	10.73	8.066	6.759	6.646	7.104	8.834
100.0	54.32	43.88	29.21	19.14	12.92	9.790	8.271	8.092	8.658	10.66
102.0	57.75	47.43	32.62	22.08	15.31	11.72	9.919	9.680	10.35	12.69
104.0	59.71	50.06	35.71	24.99	17.84	13.80	11.76	11.49	12.23	14.84
106.0	60.86	51.91	38.37	27.72	20.45	16.02	13.72	13.43	14.19	17.06
108.0	61.45	53.16	40.54	30.20	22.88	18.23	15.82	15.44	16.23	19.22
110.0	61.50	53.95	42.33	32.49	25.15	20.34	17.86	17.44	18.25	21.22
112.0	61.25	54.46	43.85	34.46	27.21	22.28	19.86	19.40	20.22	23.02
114.0	60.81	54.87	45.16	36.16	28.97	24.08	21.78	21.29	22.13	24.70
116.0	60.34	55.13	46.20	37.55	30.48	25.78	23.58	23.11	23.93	26.34
118.0	59.70	55.08	46.94	38.69	31.91	27.42	25.32	24.88	25.65	27.97
120.0	58.84	54.57	47.34	39.63	33.25	29.06	27.00	26.61	27.32	29.54
122.0	57.80	53.77	47.28	40.38	34.52	30.67	28.59	28.32	28.96	31.14
124.0	56.63	52.74	46.91	40.93	35.71	32.29	30.17	29.96	30.54	32.77
126.0	55.35	51.51	46.40	41.31	36.67	33.80	31.70	31.56	32.09	34.42
128.0	53.76	50.09	45.76	41.52	37.49	35.06	33.13	33.06	33.59	36.00
130.0	52.13	48.67	45.03	41.61	38.27	36.13	34.44	34.40	34.98	37.27
132.0	50.69	47.48	44.30	41.56	38.98	37.04	35.62	35.63	36.26	38.37
134.0	49.56	46.50	43.66	41.35	39.57	37.84	36.66	36.74	37.39	39.35
136.0	48.61	45.69	43.21	41.31	40.03	38.48	37.57	37.75	38.40	40.20
138.0	47.73	45.09	42.73	41.30	40.27	39.04	38.33	38.63	39.27	40.93
140.0	46.98	44.60	42.44	41.42	40.43	39.53	39.04	39.42	40.05	41.54
142.0	46.25	44.08	42.34	41.61	40.59	39.99	39.72	40.19	40.73	42.08
144.0	45.44	43.72	42.27	41.66	40.79	40.45	40.37	40.90	41.35	42.55
146.0	44.75	43.38	42.21	41.64	40.95	40.86	40.96	41.50	41.88	42.92
148.0	44.09	43.00	42.02	41.50	40.97	41.14	41.41	41.92	42.24	43.12
150.0	43.58	42.76	41.81	41.40	40.97	41.36	41.76	42.22	42.51	43.19
152.0	43.20	42.49	41.61	41.26	40.90	41.46	41.93	42.37	42.56	43.12
154.0	42.91	42.33	41.53	41.19	40.80	41.46	41.93	42.40	42.49	42.90
156.0	42.69	42.18	41.48	41.12	40.66	41.33	41.79	42.27	42.29	42.57
158.0	42.51	42.14	41.50	41.13	40.61	41.24	41.62	42.07	42.06	42.25
160.0	42.26	42.01	41.51	41.20	40.59	41.15	41.42	41.79	41.74	41.84
162.0	41.92	41.74	41.40	41.22	40.55	41.02	41.18	41.42	41.32	41.35
164.0	41.45	41.36	41.14	41.09	40.43	40.87	40.88	40.99	40.80	40.77
166.0	41.02	40.99	40.84	40.90	40.35	40.73	40.61	40.65	40.35	40.23
168.0	40.55	40.53	40.41	40.50	40.04	40.41	40.20	40.06	39.71	39.52
170.0	40.06	39.98	39.86	39.88	39.41	39.73	39.43	39.22	38.90	38.66
172.0	39.61	39.42	39.23	39.19	38.61	38.91	38.57	38.27	37.88	37.65
174.0	39.22	38.89	38.53	38.39	37.73	37.94	37.62	37.34	36.89	36.64
176.0	38.81	38.32	37.81	37.55	36.76	36.85	36.46	36.17	35.78	35.55
178.0	38.35	37.71	37.05	36.67	35.75	35.70	35.20	34.93	34.53	34.32
180.0	37.83	37.02	36.21	35.67	34.62	34.47	33.86	33.51	33.09	32.89
G/C	300.0	310.0	320.0	330.0	340.0	350.0				
0.0	3631	3631	3631	3631	3631	3631				
2.0	3457	3474	3504	3533	3566	3598				
4.0	3214	3261	3335	3407	3489	3561				
6.0	2918	3003	3137	3265	3405	3528				
8.0	2626	2734	2922	3113	3316	3493				
10.0	2335	2481	2710	2953	3224	3458				
12.0	2137	2274	2498	2792	3132	3429				
14.0	1980	2115	2323	2641	3044	3406				
16.0	1839	1980	2182	2501	2958	3387				
18.0	1739	1853	2063	2372	2870	3369				
20.0	1670	1756	1955	2262	2780	3352				
22.0	1607	1689	1847	2161	2692	3331				
24.0	1546	1631	1757	2069	2604	3311				
26.0	1489	1572	1690	1977	2516	3297				
28.0	1439	1516	1633	1889	2434	3296				
30.0	1393	1463	1577	1810	2366	3308				
32.0	1353	1417	1525	1742	2314	3327				
34.0	1321	1376	1482	1690	2272	3351				
36.0	1291	1343	1447	1654	2242	3387				
38.0	1263	1315	1420	1631	2228	3442				

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25±1°CDEG  
Operators: Sebastian Vidal  
Test Date: 2024-04-25

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System: EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10  
Humidity: MAX: 52.0-MIN: 42.0%  
Test Distance: 7.080m [K=1.0000]  
Remarks: ANEXO 24-0270-1-A RALED II 48 LED 110W  
DRIVER ADVANCE XITANIUM 180W  
MOD LED 2X8 Z15 5050 4K SEOUL  
LENTE: RA10

Photometric Data Table [cd]

40.0	1235	1290	1400	1614	2228	3515
42.0	1211	1268	1386	1605	2242	3618
44.0	1190	1251	1376	1611	2286	3781
46.0	1189	1240	1370	1644	2381	4059
48.0	1220	1243	1383	1735	2521	4257
50.0	1277	1267	1436	1785	2368	3965
52.0	1314	1317	1493	1565	2157	3808
54.0	1316	1362	1322	1429	2100	3764
56.0	1292	1249	1196	1349	2103	3762
58.0	1258	1115	1110	1294	2125	3786
60.0	1144	981.2	1032	1249	2157	3825
62.0	1002	897.0	958.3	1215	2198	3890
64.0	875.6	821.0	895.1	1204	2278	4015
66.0	778.5	743.9	845.5	1192	2305	3980
68.0	686.4	668.1	792.5	1165	2337	3932
70.0	592.9	579.9	723.7	1162	2389	3875
72.0	505.1	494.8	662.2	1163	2420	3660
74.0	425.6	418.2	615.4	1124	2296	3190
76.0	350.3	352.2	571.2	890.1	1937	2492
78.0	269.6	282.5	487.3	603.6	1392	1760
80.0	189.0	217.2	333.0	379.5	803.5	1183
82.0	110.0	144.3	179.0	200.9	465.8	606.5
84.0	53.78	81.35	82.86	116.2	128.9	243.6
86.0	16.57	18.54	33.72	32.56	37.19	131.1
88.0	4.007	6.940	11.54	16.97	20.39	21.61
90.0	4.910	8.476	13.80	20.31	23.97	23.53
92.0	6.413	10.71	17.23	25.23	29.90	29.18
94.0	8.111	13.13	20.99	30.94	36.88	35.83
96.0	9.992	15.67	24.86	37.15	44.64	43.16
98.0	12.08	18.43	28.66	43.10	51.94	50.31
100.0	14.43	21.36	32.34	47.61	57.04	55.63
102.0	16.97	24.45	35.79	50.70	59.88	58.73
104.0	19.63	27.47	38.77	52.73	61.48	60.19
106.0	22.29	30.21	41.05	54.00	62.24	60.60
108.0	24.73	32.66	42.83	54.78	62.32	60.37
110.0	26.97	34.85	44.33	55.22	61.93	59.72
112.0	28.94	36.76	45.72	55.51	61.26	58.93
114.0	30.65	38.43	47.00	55.77	60.51	57.98
116.0	32.16	39.91	48.13	55.98	59.84	57.21
118.0	33.57	41.20	49.05	56.10	59.17	56.34
120.0	34.94	42.28	49.84	56.14	58.40	55.31
122.0	36.24	43.25	50.43	56.10	57.59	54.24
124.0	37.50	44.15	50.79	55.86	56.71	53.13
126.0	38.70	44.98	50.96	55.35	55.69	51.81
128.0	39.66	45.70	51.12	54.68	54.38	50.12
130.0	40.69	46.25	51.23	53.96	52.88	48.22
132.0	41.63	46.69	51.11	53.18	51.46	46.54
134.0	42.43	46.85	50.80	52.25	50.07	45.06
136.0	43.20	47.05	50.34	51.23	48.73	43.80
138.0	43.82	47.14	49.79	50.17	47.39	42.61
140.0	44.16	47.15	49.13	49.13	46.21	41.54
142.0	44.39	47.11	48.55	48.07	45.18	40.65
144.0	44.54	47.03	47.98	47.12	44.27	39.84
146.0	44.53	46.67	47.39	46.27	43.45	39.15
148.0	44.42	46.20	46.77	45.47	42.71	38.59
150.0	44.20	45.67	46.04	44.75	42.11	38.23
152.0	43.84	45.03	45.20	43.99	41.55	38.01
154.0	43.39	44.32	44.33	43.20	41.05	37.95
156.0	42.89	43.49	43.39	42.39	40.50	37.82
158.0	42.40	42.73	42.54	41.67	40.04	37.76
160.0	41.86	42.03	41.71	41.01	39.65	37.71
162.0	41.26	41.27	40.89	40.36	39.21	37.51
164.0	40.57	40.52	40.10	39.59	38.58	37.17
166.0	39.94	39.82	39.34	38.81	38.01	36.88
168.0	39.20	39.06	38.55	38.03	37.42	36.57
170.0	38.37	38.20	37.65	37.14	36.71	36.13
172.0	37.38	37.23	36.69	36.27	35.97	35.68
174.0	36.34	36.19	35.69	35.45	35.28	35.28
176.0	35.24	35.12	34.70	34.62	34.59	34.85
178.0	34.05	34.03	33.77	33.88	33.95	34.42
180.0	32.65	32.74	32.72	33.09	33.27	33.85

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25±1°CDEG  
Operators: Sebastian Vidal  
Test Date: 2024-04-25

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System: EVERFINE GO-2000H\_V1 SYSTEM V2.0.406.10  
Humidity: MAX: 52.0-MIN: 42.0%  
Test Distance: 7.080m [K=1.0000]  
Remarks: ANEXO 24-0270-1-A RALEID II 48 LED 110W  
DRIVER ADVANCE XITANIUM 180W  
MOD LED 2X8 Z15 5050 4K SEOUL  
LENTE: RA10