

ANEXO 23-0951-6-A RALED I 16 LED's RA10 57W

DRIVER ADVANCE XITANIUM 55W 0.1-1.8A 0-10V Dimming
MODULO LED 2X8 Z15 5050 4K SAMSUNG
SURGE PROTECTIVE DEVICE SPD-10KP320
LENTE: RA10 (4UND)



Light Output Ratio: 100.0%
Luminaire Power: 56.43 W

I80 = 47.9 cd per klm. I88 = 0.9 cd per klm.
I90 = 0.9 cd per klm. I80/I88 = 55.133

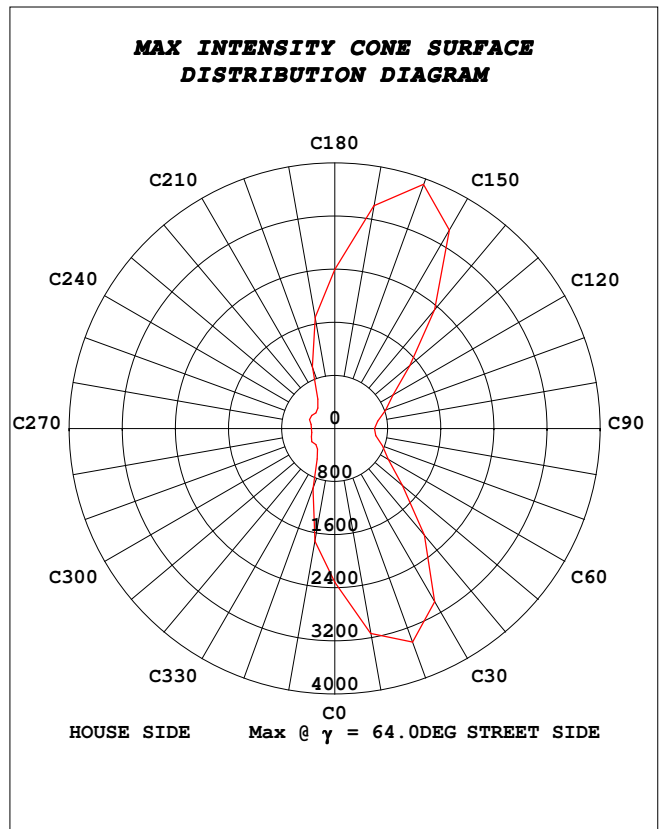
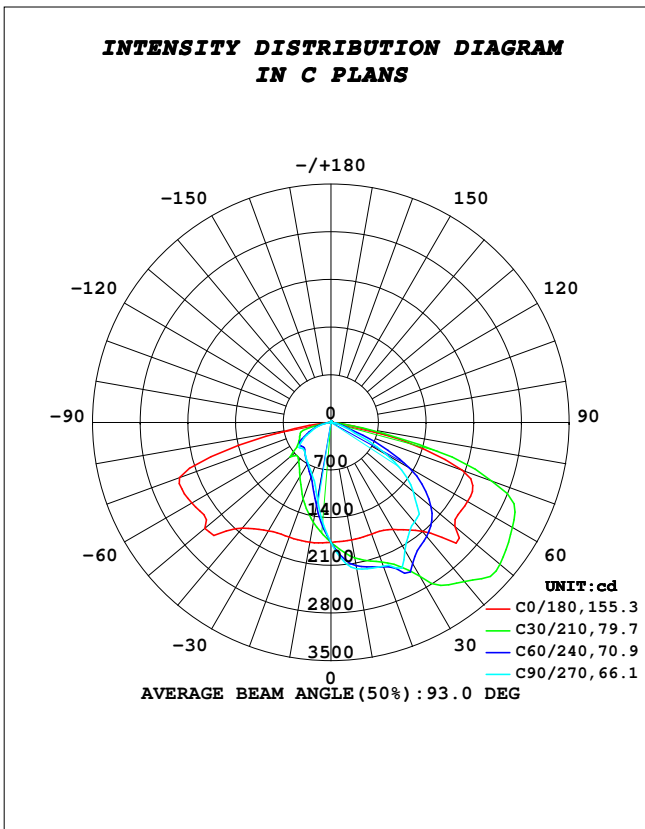
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25±1°CDEG
Operators: Fabian Loaiza
Test Date: 2023-11-06

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.406.10
Humidity: MAX: 50.1-MIN: 40.4%
Test Distance: 7.080m [K=1.0000]
Remarks: ANEXO 23-0951-6-A RALED I 16 LED's 57W
DRIVER ADVANCE 55W 0.1.-1.8A 0-10V
MODULO LED 2X8 Z15 5050 4K SAMSUNG
Corriente de programacion: 1054mA

STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.17V I:0.2585A P:56.428W PF:0.9914 Freq:60.01Hz Lamp Flux:7286.66x1 lm		
NAME: ANEXO 23-0951-6-A RALED I 16 LED's 57W	TYPE: Alumbrado Publico	WEIGHT: ----
SPEC.: 16 LED's 57W	DIM.: ----	SERIAL No.: 23-0951-6
MFR.: ROY ALPHA	SUR.: ----	Shielding Angle: ----

DATA OF LAMP		PHOTOMETRIC DATA Eff: 129.13 lm/W			
MODEL	2X8 Z15 5050	Imax(cd)	3915	η street_up(%)	0.3
NOMINAL POWER(W)	57	LOR(%)	100.0	η street_down(%)	70.8
RATED VOLTAGE(V)	----	TOTAL FLUX(lm)	7287	η house_up(%)	0.5
NOMINAL FLUX(lm)	7286.66	MAXIMUM @ (C, γ)	160, 64.0	η house_down(%)	28.3
LAMPS INSIDE	1	η up(%)	0.8	76 FLASHAREA(m2)	
TEST VOLTAGE(V)	220	η down(%)	99.2	SLI	

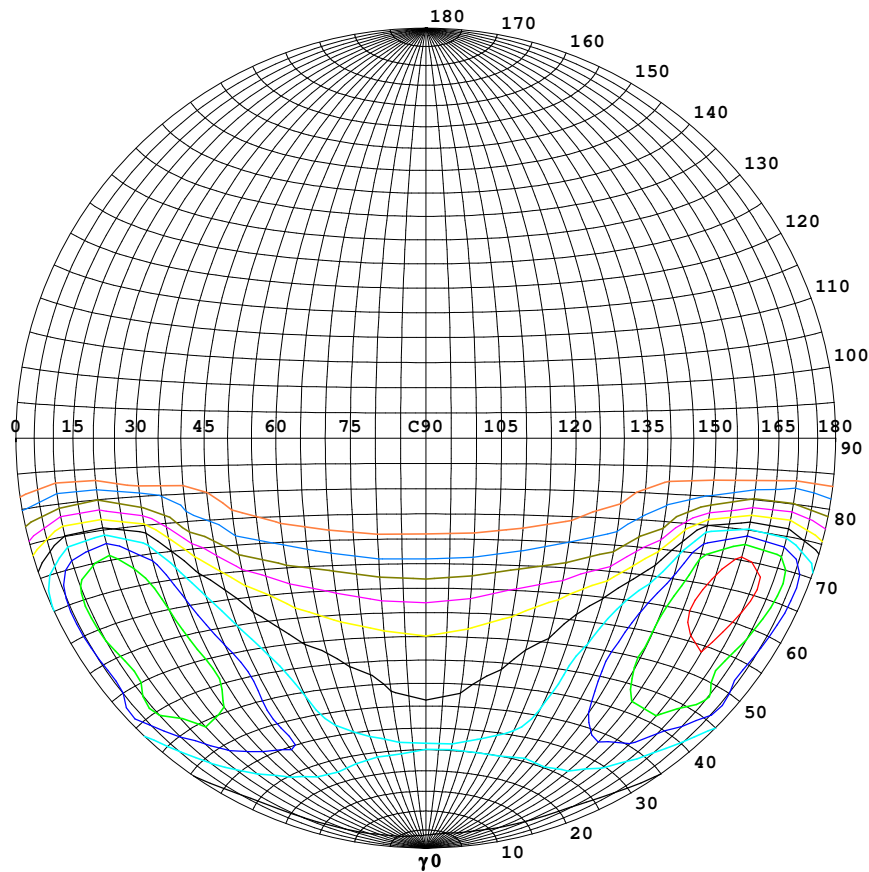


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25 \pm 1°C DEG
Operators: Fabian Loaiza
Test Date: 2023-11-06

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.406.10
Humidity: MAX: 50.1-MIN: 40.4%
Test Distance: 7.080m [K=1.0000]
Remarks: ANEXO 23-0951-6-A RALED I 16 LED's 57W
DRIVER ADVANCE 55W 0.1-1.8A 0-10V
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STREETLIGHT ISOCANDELA DIAGRAM

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Classification:

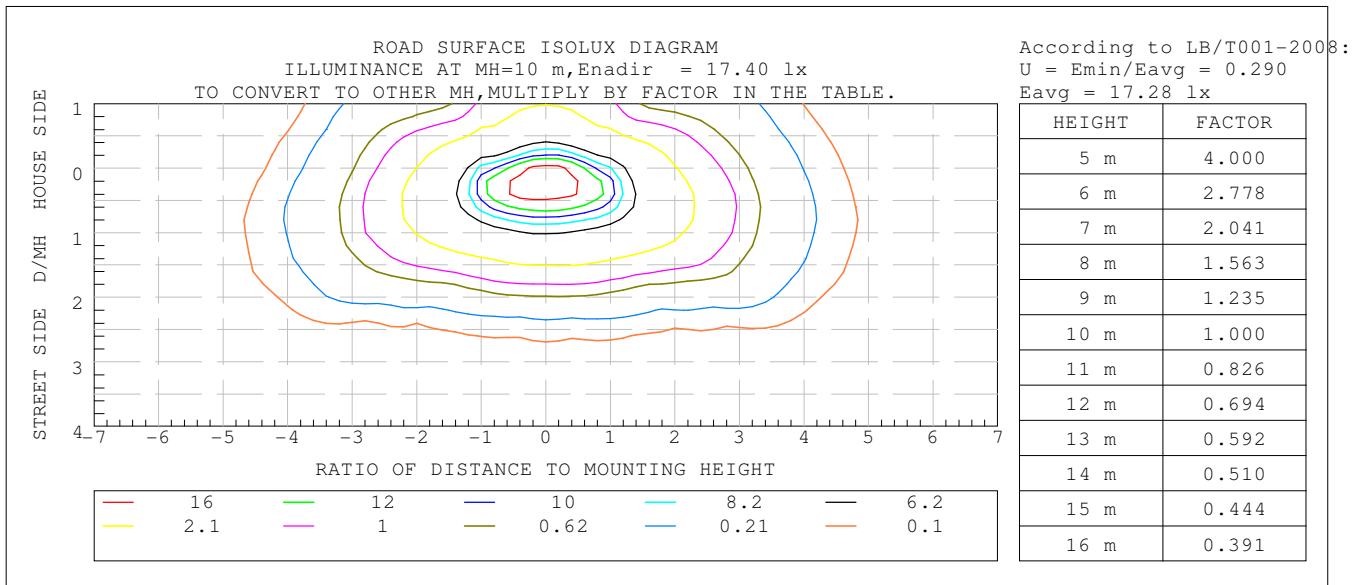
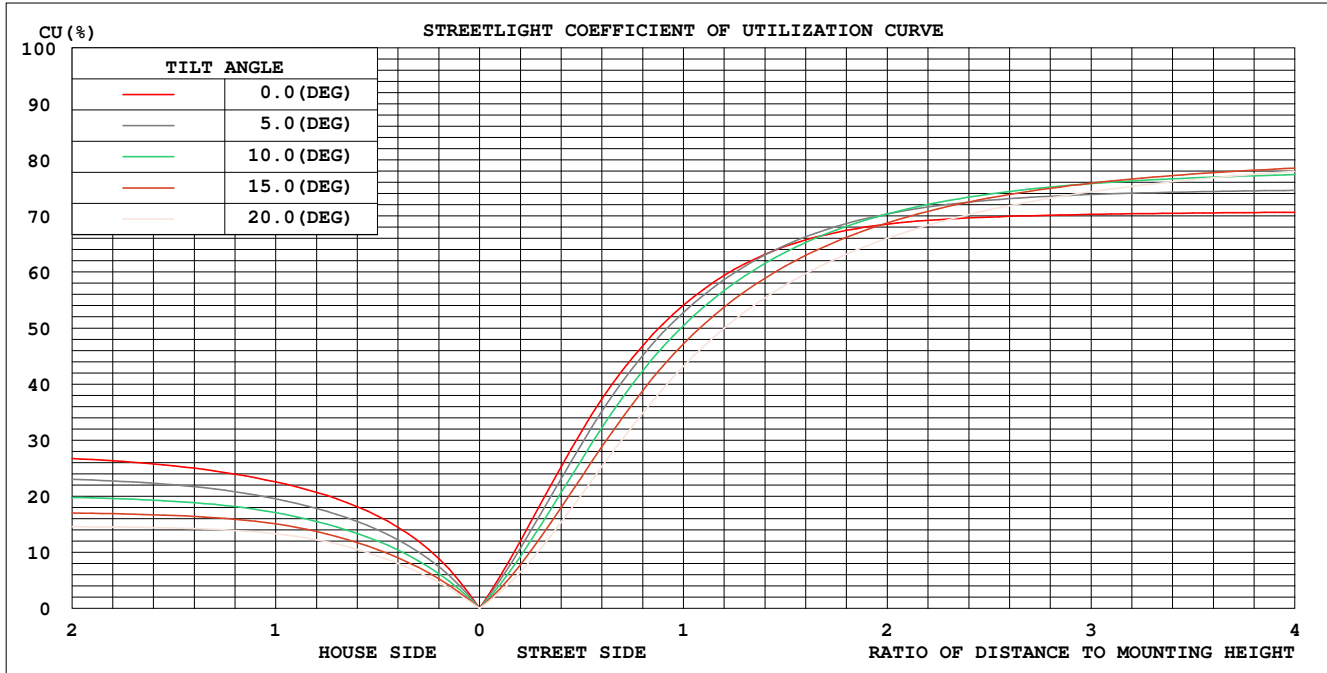
IES:Type III - Short
CIE:Narrow - Intermediate
IES:Semi cut-off
CIE:Non-cut-off
Max.At80:115.6cd/klm
Max.At90:0.8788cd/klm
Max.80-90:115.6cd/klm
NRB 5101:Semi limited[28.9%]

ISOCANDELA DIAGRAM	
UNIT	cd
I _{max} =100%	3915
90%	3524
80%	3132
70%	2741
60%	2349
50%	1958
40%	1566
30%	1175
20%	783
10%	392
5%	196

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γ Interval: 2.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.406.10
Humidity:MAX:50.1-MIN:40.4%
Test Distance:7.080m [K=1.0000]
Remarks: ANEXO 23-0951-6-A RALED I 16 LED's 57W
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COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM



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ZONAL FLUX DIAGRAM

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NAME: ANEXO 23-0951-6-A RALED I 16 LED's 57W	TYPE:Alumbrado Publico	WEIGHT:----
SPEC.:16 LED's 57W	DIM.: ----	SERIAL No.:23-0951-6
MFR.: ROY ALPHA	SUR.:-----	Shielding Angle:-----

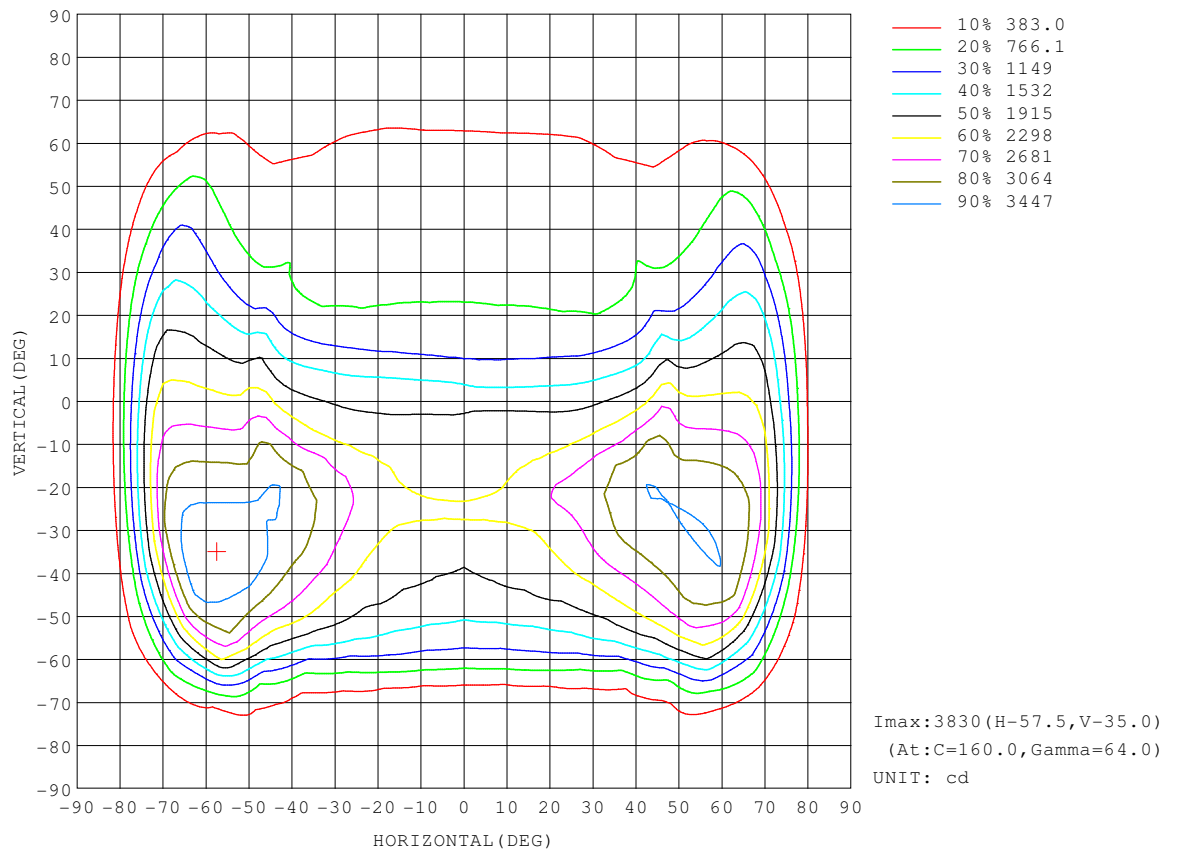
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	1752	2093	2183	2143	1788	1355	1146	1323	0- 10	166.6	166.6	2.29,2.29
20	1748	2250	2248	2289	1795	968.9	819.0	951.0	10- 20	473.2	639.8	8.78,8.78
30	1817	2658	2173	2582	1840	754.1	685.6	764.3	20- 30	762.1	1402	19.2,19.2
40	2089	2602	1911	2662	2028	629.4	595.9	643.0	30- 40	1038	2440	33.5,33.5
50	2375	2503	1578	2683	2422	574.3	590.4	600.3	40- 50	1321	3761	51.6,51.6
60	2320	2063	940.0	2331	2362	459.4	458.4	464.6	50- 60	1429	5190	71.2,71.2
70	2055	939.6	216.6	1061	2369	295.7	251.1	294.0	60- 70	1278	6468	88.8,88.8
80	348.8	195.0	60.83	231.9	539.8	104.1	66.54	100.3	70- 80	690.4	7158	98.2,98.2
90	6.403	1.602	0.8949	1.892	2.367	1.372	0.3345	1.562	80- 90	68.99	7227	99.2,99.2
100	12.51	2.841	1.846	2.703	6.855	3.973	1.220	5.034	90-100	3.392	7231	99.2,99.2
110	17.43	4.313	3.275	4.166	12.72	8.942	3.886	9.650	100-110	6.863	7238	99.3,99.3
120	18.62	5.758	4.327	5.135	15.96	14.65	7.696	14.18	110-120	9.600	7247	99.5,99.5
130	17.91	6.746	4.934	5.666	16.58	17.29	11.78	17.11	120-130	10.40	7258	99.6,99.6
140	16.02	7.968	5.626	6.501	15.33	15.90	14.71	17.88	130-140	9.552	7267	99.7,99.7
150	14.83	9.479	6.999	7.879	14.48	15.19	16.29	17.58	140-150	7.895	7275	99.8,99.8
160	14.44	11.73	9.584	9.830	13.78	16.69	17.02	16.55	150-160	6.110	7281	99.9,99.9
170	14.82	14.24	12.69	12.04	14.09	15.57	16.27	15.47	160-170	3.968	7285	100,100
180	15.70	16.07	15.64	14.67	15.70	16.06	15.62	14.69	170-180	1.406	7287	100,100
DEG	LUMINOUS INTENSITY:cd Less than 35% Percent = 13.2 %									UNIT:lm		

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Test Date:2023-11-06

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.406.10
Humidity:MAX:50.1-MIN:40.4%
Test Distance:7.080m [K=1.0000]
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Corriente de programacion:1054mA

ISOCANDELA DIAGRAM

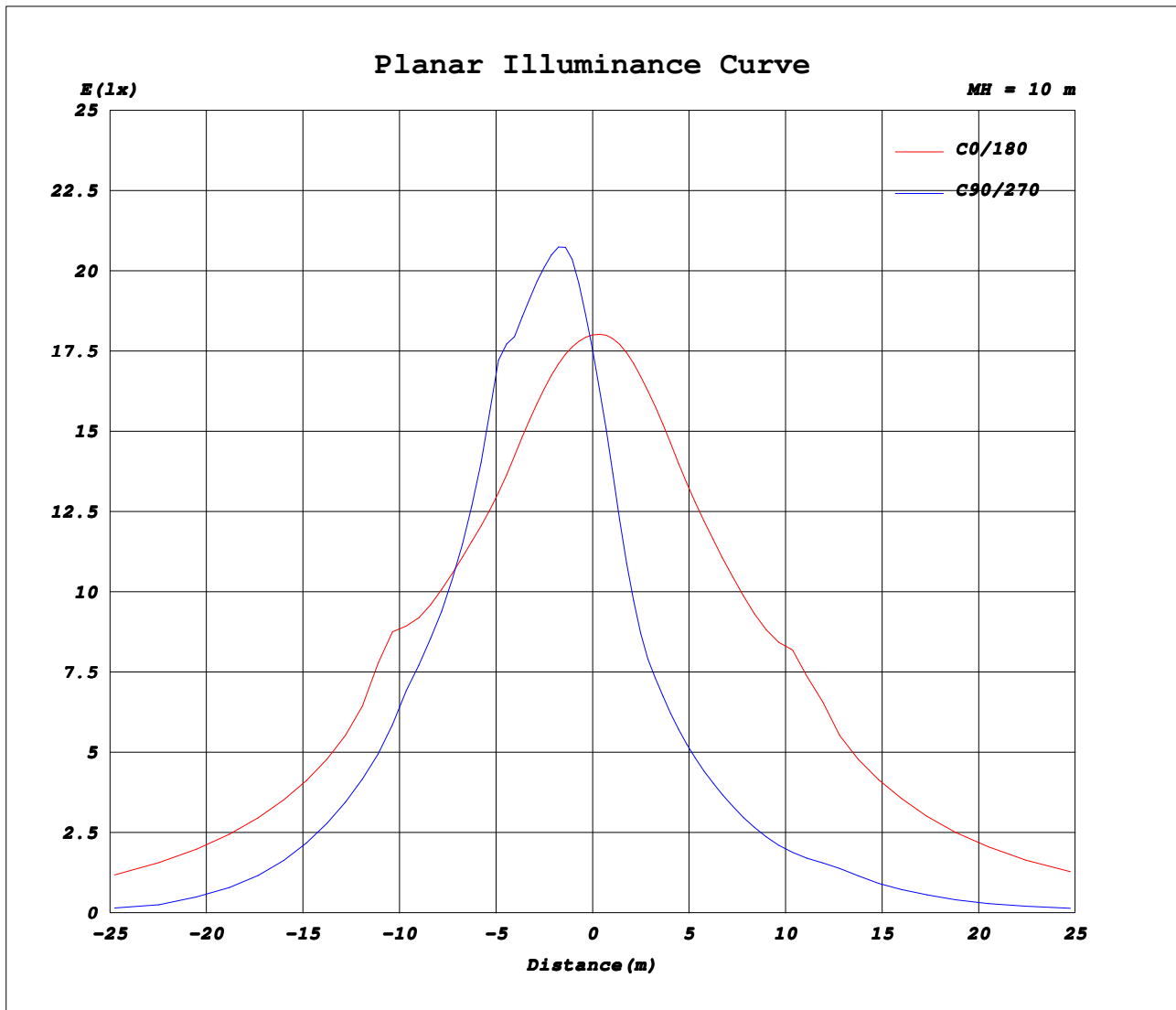
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Planar Illuminance Curve



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DRIVER ADVANCE XITANIUM 55W 0.1-1.8A 0-10V Dimming
MODULO LED 2X8 Z15 5050 4K SAMSUNG
SURGE PROTECTIVE DEVICE SPD-10KP320
LENTE: RA10 (4UND)

Test Distance: 7.080 metres
Test Temperature: 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
Luxómetro INME-039
Flexómetro INME-050
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
Fabian Loaiza.

Revisó
Luis Asprilla.

Testing Procedure: Las pruebas fueron realizadas de acuerdo con la norma LM 79 de 2019.
Tiempo de estabilización: 0:32':00"
Tiempo de ensayo: 0:20':23"

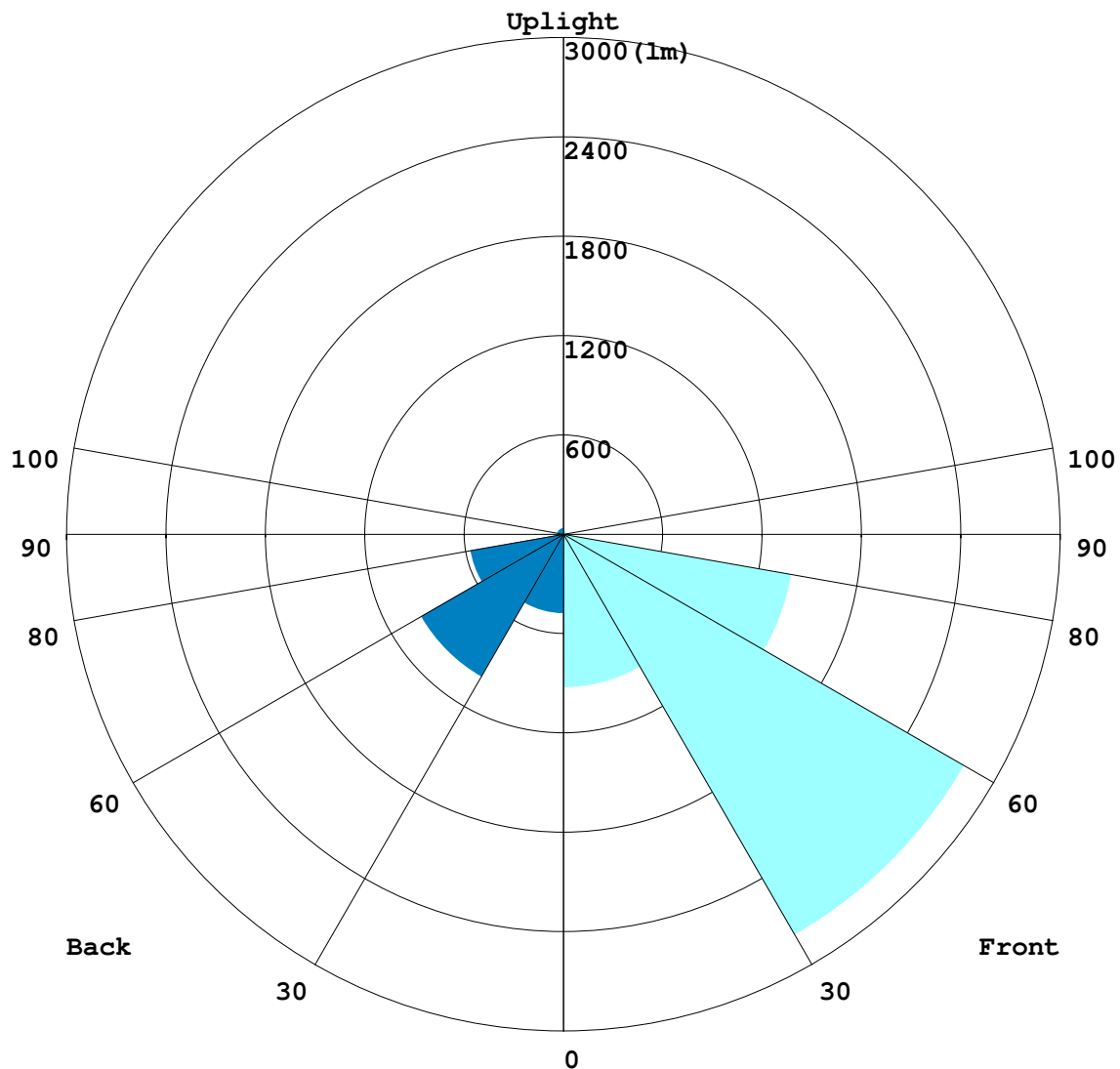
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LCS REPORT

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LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



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BUG REPORT

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IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	924.82	12.7
FM - Front-Medium(30-60)	2794.5	38.4
FH - Front-High(60-80)	1398.8	19.2
FVH - Front-Very High(80-90)	44.403	0.6
Total Forward Light	5185.1	71.2

BL - Back-Low(0-30)	477.13	6.5
BM - Back-Medium(30-60)	993.21	13.6
BH - Back-High(60-80)	570.04	7.8
BVH - Back-Very High(80-90)	24.586	0.3
Total Back Light	2101.6	28.8

UL - Uplight-Low(90-100)	3.3922	0.0
UH - Uplight-High(100-180)	55.797	0.8
Total Up Light	59.19	0.8

BUG (Back, Up, Glare) Rating	B2-U3-G2
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	2065	36.624	2101.6
Street Side	5162.5	22.566	5185.1

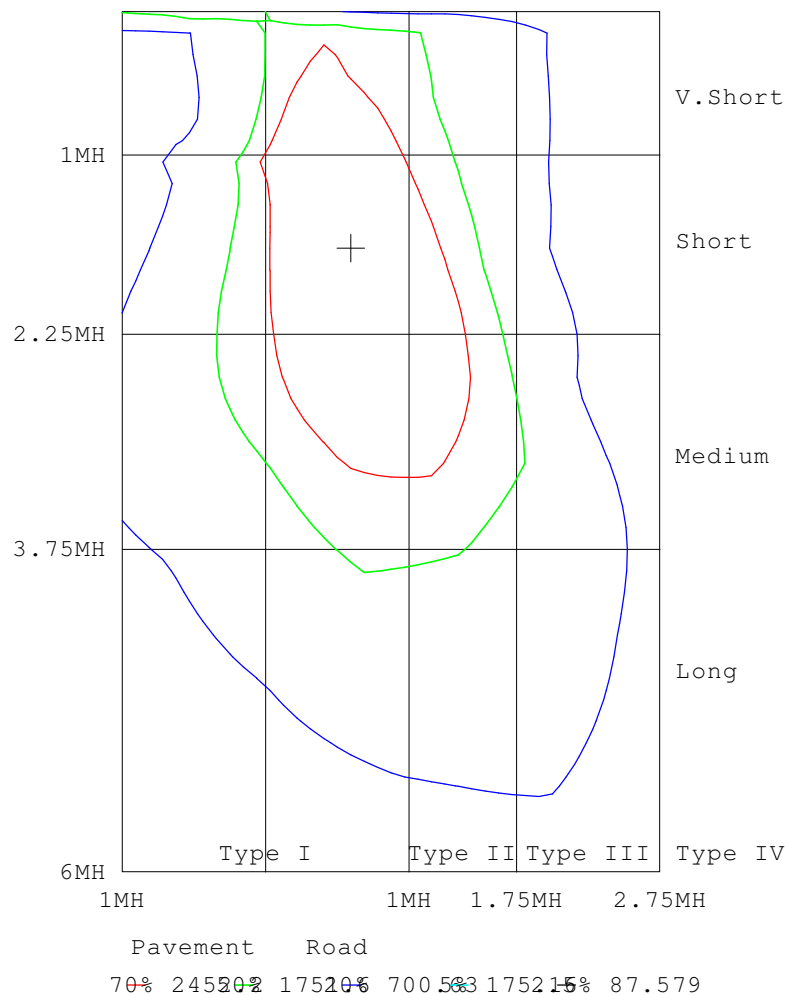
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ROAD ISOCANDELA REPORT

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ROAD SURFACE ISOCANDELA DIAGRAM



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LUMINOUS DISTRIBUTION INTENSITY DATA

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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	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762
5	1754	1794	1832	1866	1899	1926	1948	1967	1976	1984	1982	1977	1961	1943	1917	1888	1853	1814	1773
10	1752	1850	1943	2018	2071	2115	2137	2160	2164	2183	2181	2191	2179	2164	2122	2061	1977	1888	1788
15	1749	1884	2002	2088	2140	2175	2186	2203	2198	2213	2211	2229	2229	2234	2203	2151	2050	1925	1789
20	1748	1932	2080	2183	2235	2266	2259	2258	2239	2248	2243	2262	2266	2290	2288	2253	2149	1982	1795
25	1752	1981	2160	2282	2355	2368	2346	2344	2335	2336	2328	2331	2320	2342	2360	2334	2224	2028	1798
30	1817	2135	2403	2605	2740	2576	2397	2274	2175	2173	2186	2285	2408	2576	2588	2556	2420	2160	1840
35	1902	2309	2703	2890	2755	2486	2271	2139	2036	2026	2053	2157	2296	2520	2716	2845	2684	2299	1897
40	2089	2706	3123	3052	2766	2437	2188	2035	1931	1911	1938	2046	2211	2493	2831	3107	3101	2637	2028
45	2349	3054	3282	3189	2812	2403	2112	1955	1875	1871	1875	1974	2158	2478	2904	3299	3382	2960	2215
50	2375	2973	3386	3242	2746	2260	1917	1792	1637	1578	1666	1851	2006	2407	2958	3487	3566	3110	2422
55	2308	2989	3400	3181	2620	2089	1725	1530	1403	1381	1444	1620	1870	2291	2897	3496	3601	3083	2310
60	2320	3102	3440	3076	2378	1747	1328	1125	977	940	1014	1216	1468	1960	2700	3543	3830	3260	2362
65	2315	3135	3424	3011	2100	1328	934	766	627	602	658	820	1017	1476	2346	3454	3915	3408	2398
70	2055	2888	3193	2514	1339	539	344	263	215	217	223	295	396	625	1497	3129	3671	3421	2369
75	1411	2174	2345	1857	594	286	184	155	136	138	141	165	202	309	745	2346	2802	2611	1835
80	349	571	754	474	273	117	76.6	65.6	59.2	60.8	62.6	73.0	86.0	143	321	411	842	812	540
85	91.2	94.3	114	74.7	92.0	40.6	30.5	26.3	23.6	24.5	25.7	30.3	37.3	54.3	123	108	119	121	108
90	6.40	5.13	3.50	2.48	1.76	1.45	1.23	1.24	1.18	0.89	1.18	1.38	1.42	1.66	2.12	2.68	3.78	5.15	2.37
95	8.48	6.44	4.50	2.99	2.14	1.66	1.44	1.36	1.29	1.24	1.24	1.31	1.36	1.56	1.95	2.70	4.07	5.88	3.76
100	12.5	9.48	6.68	4.48	3.20	2.48	2.19	2.06	1.97	1.85	1.87	2.01	2.09	2.36	3.05	4.19	6.26	8.90	6.86
105	15.1	11.5	8.11	5.37	3.85	3.03	2.70	2.57	2.48	2.49	2.46	2.51	2.60	2.90	3.71	5.26	7.94	11.1	9.19
110	17.4	13.4	9.42	6.45	4.76	3.87	3.48	3.30	3.22	3.27	3.21	3.26	3.38	3.73	4.60	6.41	9.54	13.5	12.7
115	18.2	14.2	10.0	7.07	5.36	4.42	4.01	3.79	3.72	3.75	3.65	3.75	3.83	4.20	5.13	7.00	10.18	14.4	14.5
120	18.6	14.9	10.9	8.01	6.27	5.24	4.65	4.45	4.39	4.33	4.10	4.19	4.28	4.69	5.58	7.61	10.7	14.8	16.0
125	18.5	15.0	11.3	8.62	6.81	5.60	5.00	4.84	4.75	4.61	4.28	4.41	4.46	4.90	5.83	7.79	10.9	14.8	16.4
130	17.9	14.9	11.6	9.14	7.35	6.14	5.48	5.33	5.18	4.93	4.58	4.68	4.81	5.25	6.08	7.94	10.8	14.6	16.6
135	17.0	14.5	11.7	9.43	7.76	6.56	5.87	5.65	5.43	5.15	4.85	4.86	5.05	5.56	6.34	8.00	10.5	13.8	16.3
140	16.0	14.2	12.0	10.1	8.56	7.38	6.67	6.31	5.99	5.63	5.37	5.39	5.63	6.14	6.87	8.23	10.4	13.0	15.3
145	15.4	14.1	12.3	10.6	9.15	8.04	7.31	6.88	6.50	6.11	5.86	5.91	6.18	6.67	7.31	8.43	10.3	12.6	14.5
150	14.8	14.1	12.7	11.4	9.97	8.98	8.33	7.82	7.42	7.00	6.83	6.90	7.17	7.60	8.16	8.94	10.3	12.3	14.5
155	14.5	14.1	13.2	11.9	10.6	9.94	9.47	8.91	8.44	7.89	7.76	7.77	8.06	8.38	8.92	9.50	10.7	12.4	13.9
160	14.4	14.4	13.8	12.7	12.0	11.4	11.0	10.6	10.1	9.58	9.34	9.32	9.42	9.68	9.98	10.4	11.2	12.6	13.8
165	14.5	14.6	14.0	13.5	12.9	12.4	12.2	11.8	11.3	10.8	10.5	10.4	10.4	10.6	10.8	11.1	11.6	12.8	13.8
170	14.8	15.2	14.9	14.8	14.3	14.1	14.0	13.8	13.4	12.7	12.3	12.1	12.0	12.0	12.1	12.2	12.4	13.4	14.1
175	15.2	15.3	15.7	15.6	15.3	15.3	15.4	15.3	14.8	14.0	13.5	13.4	13.2	13.1	13.1	13.1	13.2	13.9	14.4
180	15.7	15.6	15.8	15.9	16.0	16.1	16.4	16.6	16.2	15.6	15.2	15.1	14.8	14.8	14.5	14.5	14.3	14.8	15.7

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25±1°CDEG

Operators:Fabian Loaiza

Test Date:2023-11-06

γ Range: 0 - 180DEG

γ Interval: 2.0DEG

Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.406.10

Humidity:MAX:50.1-MIN:40.4%

Test Distance:7.080m [K=1.0000]

Remarks: ANEXO 23-0951-6-A RALED I 16 LED's 57W

DRIVER ADVANCE 55W 0.1.-1.8A 0-10V

MODULO LED 2X8 Z15 5050 4K SAMSUNG

Corriente de programacion:1054mA

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.17V I:0.2585A P:56.428W PF:0.9914 Freq:60.01Hz Lamp Flux:7286.66x1 lm		
NAME: ANEXO 23-0951-6-A RALED I 16 LED's 57W	TYPE:Alumbrado Publico	WEIGHT:----
SPEC.:16 LED's 57W	DIM.: ----	SERIAL No.:23-0951-6
MFR.: ROY ALPHA	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	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762		
5	1733	1693	1653	1619	1590	1565	1545	1533	1526	1528	1536	1553	1574	1603	1635	1671	1711		
10	1688	1588	1491	1398	1312	1244	1188	1160	1146	1154	1174	1219	1281	1364	1455	1551	1649		
15	1653	1517	1374	1241	1131	1049	998	969	958	965	988	1033	1103	1204	1334	1474	1611		
20	1612	1409	1198	1024	914	857	835	820	819	820	836	860	902	1000	1151	1356	1562		
25	1573	1326	1074	910	823	789	767	754	755	755	768	794	833	893	1041	1266	1519		
30	1542	1202	914	778	730	702	688	681	686	685	696	710	741	787	893	1146	1494		
35	1535	1131	829	718	675	654	648	645	649	650	659	665	688	732	815	1089	1505		
40	1531	1036	740	649	609	596	597	593	596	596	605	610	624	662	746	1038	1538		
45	1596	1011	703	613	573	561	562	564	570	568	574	576	589	628	726	1049	1656		
50	1758	1101	790	615	533	554	572	572	590	580	583	579	562	638	831	1096	1715		
55	1666	946	627	606	580	567	576	567	574	565	565	573	611	615	657	973	1637		
60	1697	960	543	469	450	502	530	471	458	452	484	530	454	475	573	959	1684		
65	1707	998	513	404	374	401	408	364	356	356	378	401	376	408	533	965	1723		
70	1572	1012	481	320	271	277	270	257	251	251	258	268	266	322	481	924	1509		
75	1188	819	433	251	193	201	204	190	181	183	192	191	188	258	402	714	974		
80	379	242	132	118	90.0	92.6	83.8	71.9	66.5	69.0	75.7	84.0	82.0	119	125	158	248		
85	97.7	54.3	37.0	38.8	33.4	31.8	30.0	26.2	23.4	24.5	26.1	26.9	28.9	30.8	29.1	36.3	49.5		
90	3.31	3.21	2.62	1.68	1.06	0.49	0.48	0.45	0.33	0.41	0.53	0.73	1.26	1.86	2.72	3.30	3.29		
95	4.54	4.64	3.89	2.35	1.19	0.71	0.55	0.52	0.52	0.61	0.77	1.23	2.07	3.13	4.70	5.60	5.63		
100	8.26	8.58	7.47	5.02	2.93	1.77	1.40	1.18	1.22	1.37	1.83	2.67	4.13	5.93	8.54	10.11	10.02		
105	11.1	11.8	10.3	7.15	4.54	2.95	2.38	2.00	2.08	2.28	2.98	4.11	5.75	8.02	11.4	13.7	13.7		
110	15.5	16.4	14.6	10.6	7.26	5.33	4.37	3.71	3.89	4.10	5.13	6.56	8.31	11.0	15.4	18.7	18.8		
115	17.5	18.5	16.9	13.1	9.58	7.21	5.90	5.02	5.30	5.49	6.69	8.24	10.2	12.9	17.1	20.0	20.1		
120	19.2	20.3	19.2	16.2	13.1	10.3	8.47	7.26	7.70	7.79	9.05	10.7	12.9	15.5	18.6	20.8	20.3		
125	19.6	20.9	19.9	17.5	14.8	12.2	9.58	8.90	9.35	9.36	10.5	12.2	14.4	16.7	19.2	20.6	19.9		
130	19.4	20.7	20.0	18.4	16.2	13.6	11.4	11.5	11.8	11.8	12.9	14.3	16.2	18.0	19.2	19.7	18.6		
135	18.8	20.2	19.8	18.3	16.0	13.5	12.5	13.5	13.1	13.2	14.2	15.4	17.1	18.3	18.8	18.7	17.5		
140	17.7	18.8	18.5	16.9	14.9	14.1	14.1	15.4	14.7	14.7	15.6	16.5	17.6	18.2	18.1	17.2	15.9		
145	16.4	17.6	17.2	15.8	14.6	14.4	15.0	16.2	15.5	15.5	16.2	17.0	17.7	17.9	17.6	16.4	15.0		
150	15.6	16.2	15.6	15.1	15.3	15.4	17.3	17.1	16.3	16.2	16.8	17.2	17.7	17.5	16.9	15.5	14.2		
155	14.7	15.0	15.1	15.3	15.6	16.5	18.4	17.6	16.8	16.5	16.9	17.1	17.4	17.1	16.5	15.3	13.9		
160	14.5	15.1	15.5	16.1	17.3	18.3	18.4	17.8	17.0	16.6	16.8	16.8	16.7	16.4	15.9	15.0	13.9		
165	14.4	15.0	15.6	16.5	17.1	17.5	17.4	17.1	16.7	16.4	16.5	16.3	16.2	15.8	15.4	14.7	13.9		
170	14.4	14.8	15.2	15.5	15.7	15.9	16.2	16.1	16.3	16.1	16.0	15.8	15.7	15.3	14.9	14.4	13.9		
175	14.5	14.8	15.1	15.3	15.6	15.8	16.0	16.0	16.1	15.9	15.8	15.5	15.3	15.0	14.7	14.3	14.0		
180	15.6	15.8	15.9	16.0	16.1	16.4	16.6	16.2	15.6	15.3	15.1	14.9	14.8	14.6	14.5	14.3	14.8		

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25±1°CDEG

Operators:Fabian Loaiza

Test Date:2023-11-06

γ Range: 0 - 180DEG

γ Interval: 2.0DEG

Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.406.10

Humidity:MAX:50.1-MIN:40.4%

Test Distance:7.080m [K=1.0000]

Remarks: ANEXO 23-0951-6-A RALED I 16 LED's 57W

DRIVER ADVANCE 55W 0.1.-1.8A 0-10V

MODULO LED 2X8 Z15 5050 4K SAMSUNG

Corriente de programacion:1054mA

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	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762
2.0	1758	1777	1796	1814	1830	1844	1856	1867	1871	1876
4.0	1754	1794	1832	1866	1899	1926	1948	1967	1976	1984
6.0	1754	1812	1870	1921	1967	2005	2032	2056	2066	2080
8.0	1753	1832	1907	1974	2026	2067	2093	2120	2128	2145
10.0	1752	1850	1943	2018	2071	2115	2137	2160	2164	2183
12.0	1751	1868	1975	2055	2109	2148	2165	2184	2182	2201
14.0	1749	1884	2002	2088	2140	2175	2186	2203	2198	2213
16.0	1748	1900	2026	2118	2168	2201	2209	2222	2212	2226
18.0	1748	1916	2051	2148	2197	2230	2233	2239	2224	2236
20.0	1748	1932	2080	2183	2235	2266	2259	2258	2239	2248
22.0	1747	1953	2116	2225	2286	2312	2287	2279	2259	2263
24.0	1752	1981	2160	2282	2355	2368	2346	2344	2335	2336
26.0	1764	2018	2219	2365	2446	2471	2466	2429	2382	2382
28.0	1786	2069	2300	2464	2593	2611	2487	2377	2285	2284
30.0	1817	2135	2403	2605	2740	2576	2397	2274	2175	2173
32.0	1857	2217	2553	2791	2761	2541	2326	2193	2092	2089
34.0	1902	2309	2703	2890	2755	2486	2271	2139	2036	2026
36.0	1954	2409	2876	2947	2745	2458	2239	2099	1989	1972
38.0	2015	2541	3012	2998	2748	2447	2217	2065	1954	1930
40.0	2089	2706	3123	3052	2766	2437	2188	2035	1931	1911
42.0	2191	2889	3206	3110	2793	2424	2151	1997	1911	1890
44.0	2349	3054	3282	3189	2812	2403	2112	1955	1875	1871
46.0	2556	3131	3384	3255	2814	2374	2063	1901	1827	1759
48.0	2540	3076	3411	3263	2790	2327	1998	1849	1739	1662
50.0	2375	2973	3386	3242	2746	2260	1917	1792	1637	1578
52.0	2317	2960	3382	3210	2684	2180	1827	1655	1517	1486
54.0	2308	2989	3400	3181	2620	2089	1725	1530	1403	1381
56.0	2311	3030	3420	3148	2549	1989	1615	1411	1278	1254
58.0	2316	3068	3432	3110	2468	1878	1487	1278	1135	1107
60.0	2320	3102	3440	3076	2378	1747	1328	1125	977.0	940.0
62.0	2320	3127	3437	3048	2265	1562	1143	951.5	811.0	774.9
64.0	2315	3135	3424	3011	2100	1328	934.4	765.5	627.1	601.7
66.0	2283	3104	3401	2943	1863	1073	715.6	546.1	390.6	384.4
68.0	2216	3036	3343	2796	1617	792.5	509.8	332.6	254.3	300.4
70.0	2055	2888	3193	2514	1339	538.6	343.6	263.4	214.8	216.6
72.0	1764	2532	2888	2231	967.2	365.6	236.2	194.5	173.4	174.9
74.0	1411	2174	2345	1857	594.3	286.5	183.8	155.1	135.5	138.4
76.0	1046	1682	1727	1341	418.4	207.4	143.4	119.6	108.2	109.3
78.0	681.2	1155	1221	788.0	341.8	161.0	110.0	91.57	81.06	82.98
80.0	348.8	570.7	753.9	473.6	272.8	116.8	76.61	65.64	59.22	60.83
82.0	165.0	332.0	287.5	160.6	163.5	74.90	51.91	43.62	39.66	40.95
84.0	91.17	94.29	114.3	74.70	91.97	40.58	30.53	26.30	23.59	24.49
86.0	18.40	20.90	21.36	21.67	20.76	17.03	13.85	13.03	11.59	3.223
88.0	6.326	5.292	4.091	3.466	3.022	3.693	3.450	4.260	3.816	0.7561
90.0	6.403	5.133	3.496	2.479	1.755	1.447	1.232	1.242	1.185	0.8949
92.0	7.365	5.574	3.890	2.572	1.827	1.426	1.248	1.177	1.101	1.067
94.0	8.480	6.438	4.504	2.992	2.141	1.657	1.438	1.360	1.287	1.240
96.0	9.717	7.405	5.185	3.457	2.481	1.919	1.680	1.575	1.496	1.422
98.0	11.10	8.444	5.907	3.962	2.841	2.200	1.935	1.809	1.724	1.628
100.0	12.51	9.476	6.685	4.477	3.199	2.480	2.190	2.061	1.970	1.846
102.0	13.88	10.54	7.462	4.966	3.530	2.758	2.444	2.320	2.226	2.153
104.0	15.13	11.52	8.106	5.373	3.848	3.034	2.702	2.566	2.482	2.491
106.0	16.09	12.26	8.610	5.755	4.165	3.315	2.965	2.810	2.730	2.757
108.0	16.85	12.89	9.045	6.107	4.468	3.588	3.227	3.055	2.974	3.018
110.0	17.43	13.43	9.419	6.448	4.757	3.868	3.482	3.299	3.220	3.275
112.0	17.90	13.87	9.745	6.754	5.053	4.143	3.740	3.534	3.464	3.525
114.0	18.22	14.19	10.04	7.066	5.356	4.424	4.010	3.787	3.716	3.751
116.0	18.44	14.47	10.33	7.377	5.672	4.696	4.250	4.037	3.957	3.962
118.0	18.58	14.70	10.60	7.702	5.979	4.971	4.453	4.254	4.177	4.157
120.0	18.62	14.85	10.86	8.011	6.275	5.239	4.648	4.452	4.386	4.327
122.0	18.62	14.96	11.11	8.319	6.579	5.427	4.829	4.653	4.583	4.479
124.0	18.53	15.05	11.31	8.624	6.809	5.604	4.997	4.839	4.753	4.607
126.0	18.44	15.12	11.55	8.895	6.976	5.781	5.157	5.014	4.907	4.719
128.0	18.33	15.13	11.64	9.020	7.166	5.954	5.324	5.171	5.039	4.827
130.0	17.91	14.94	11.65	9.143	7.352	6.138	5.484	5.329	5.176	4.934
132.0	17.42	14.71	11.67	9.298	7.536	6.349	5.665	5.481	5.303	5.035
134.0	17.04	14.53	11.72	9.433	7.763	6.563	5.873	5.648	5.431	5.150
136.0	16.68	14.38	11.77	9.615	8.012	6.799	6.115	5.834	5.585	5.278
138.0	16.35	14.28	11.86	9.852	8.280	7.075	6.377	6.056	5.774	5.439
140.0	16.02	14.20	11.98	10.08	8.557	7.376	6.671	6.307	5.987	5.626
142.0	15.70	14.15	12.12	10.33	8.852	7.690	6.991	6.575	6.233	5.851
144.0	15.42	14.12	12.27	10.59	9.151	8.035	7.313	6.877	6.504	6.105
146.0	15.14	14.08	12.41	10.83	9.422	8.366	7.542	7.156	6.782	6.374

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25±1°CDEG
Operators: Fabian Loaiza
Test Date: 2023-11-06

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.406.10
Humidity: MAX: 50.1-MIN: 40.4%
Test Distance: 7.080m [K=1.0000]
Remarks: ANEXO 23-0951-6-A RALED I 16 LED's 57W
DRIVER ADVANCE 55W 0.1.-1.8A 0-10V
MODULO LED 2X8 Z15 5050 4K SAMSUNG
Corriente de programacion: 1054mA

Photometric Data Table [cd]

148.0	14.90	14.08	12.54	11.06	9.728	8.530	7.856	7.414	7.045	6.672
150.0	14.83	14.10	12.74	11.35	9.972	8.985	8.328	7.824	7.415	6.999
152.0	14.60	14.09	12.91	11.63	10.27	9.435	8.857	8.323	7.840	7.402
154.0	14.55	14.14	13.18	11.95	10.63	9.941	9.466	8.914	8.440	7.892
156.0	14.51	14.23	13.37	12.06	11.07	10.50	9.959	9.470	9.002	8.485
158.0	14.46	14.28	13.58	12.39	11.55	10.94	10.48	10.01	9.543	9.024
160.0	14.44	14.37	13.78	12.69	12.04	11.42	11.02	10.58	10.11	9.584
162.0	14.44	14.48	13.87	13.09	12.47	11.92	11.58	11.18	10.71	10.16
164.0	14.46	14.61	13.96	13.47	12.92	12.45	12.16	11.79	11.33	10.77
166.0	14.54	14.78	14.26	14.00	13.37	13.00	12.76	12.44	11.99	11.40
168.0	14.67	14.98	14.55	14.38	13.85	13.55	13.38	13.13	12.67	12.04
170.0	14.82	15.19	14.89	14.77	14.34	14.13	14.05	13.83	13.37	12.69
172.0	14.99	15.28	15.23	15.17	14.83	14.73	14.72	14.56	14.07	13.34
174.0	15.17	15.32	15.67	15.59	15.33	15.34	15.38	15.29	14.77	14.00
176.0	15.36	15.58	15.99	16.03	15.84	15.93	16.05	16.02	15.49	14.69
178.0	15.56	15.84	16.30	16.43	16.40	16.50	16.68	16.70	16.12	15.32
180.0	15.70	15.62	15.82	15.91	16.05	16.10	16.40	16.57	16.24	15.64
G/C	100.0	110.0	120.0	130.0	140.0	150.0	160.0	170.0	180.0	190.0
0.0	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762
2.0	1875	1872	1864	1855	1841	1826	1807	1788	1767	1747
4.0	1982	1977	1961	1943	1917	1888	1853	1814	1773	1733
6.0	2077	2074	2055	2030	1992	1947	1897	1841	1779	1718
8.0	2143	2145	2128	2106	2062	2006	1938	1866	1784	1704
10.0	2181	2191	2179	2164	2122	2061	1977	1888	1788	1688
12.0	2199	2216	2210	2205	2168	2110	2015	1907	1789	1670
14.0	2211	2229	2229	2234	2203	2151	2050	1925	1789	1653
16.0	2223	2242	2243	2254	2232	2185	2084	1943	1791	1639
18.0	2231	2252	2255	2273	2259	2218	2117	1963	1794	1626
20.0	2243	2262	2266	2290	2288	2253	2149	1982	1795	1612
22.0	2259	2279	2284	2312	2321	2291	2184	2003	1797	1594
24.0	2328	2331	2320	2342	2360	2334	2224	2028	1798	1573
26.0	2380	2426	2432	2402	2409	2391	2274	2063	1805	1558
28.0	2289	2389	2484	2537	2490	2464	2338	2106	1819	1548
30.0	2186	2285	2408	2576	2588	2556	2420	2160	1840	1542
32.0	2110	2211	2339	2541	2687	2722	2518	2226	1866	1540
34.0	2053	2157	2296	2520	2716	2845	2684	2299	1897	1535
36.0	2006	2115	2266	2513	2754	2918	2851	2386	1933	1529
38.0	1965	2079	2239	2508	2792	3011	2985	2498	1976	1525
40.0	1938	2046	2211	2493	2831	3107	3101	2637	2028	1531
42.0	1915	2010	2184	2482	2871	3194	3238	2804	2103	1548
44.0	1875	1974	2158	2478	2904	3299	3382	2960	2215	1596
46.0	1834	1928	2123	2473	2936	3370	3516	3152	2393	1700
48.0	1760	1888	2073	2453	2967	3434	3569	3237	2408	1842
50.0	1666	1851	2006	2407	2958	3487	3566	3110	2422	1758
52.0	1557	1739	1941	2354	2926	3478	3548	3047	2320	1677
54.0	1444	1620	1870	2291	2897	3496	3601	3083	2310	1666
56.0	1321	1505	1775	2212	2856	3523	3673	3139	2324	1676
58.0	1178	1374	1641	2108	2793	3543	3753	3199	2344	1688
60.0	1014	1216	1468	1960	2700	3543	3830	3260	2362	1697
62.0	839.4	1018	1242	1753	2552	3516	3892	3331	2379	1692
64.0	658.4	819.7	1017	1476	2346	3454	3915	3408	2398	1707
66.0	419.3	603.9	791.4	1178	2113	3370	3885	3462	2399	1683
68.0	265.0	382.6	584.9	884.5	1843	3271	3808	3484	2404	1632
70.0	223.0	294.5	396.0	625.1	1497	3129	3671	3421	2369	1572
72.0	180.7	206.5	267.9	429.7	1121	2740	3370	3179	2186	1427
74.0	141.3	165.5	202.3	309.1	745.3	2346	2802	2611	1835	1188
76.0	113.1	127.8	159.1	250.7	510.0	1599	2105	2043	1397	907.5
78.0	85.06	99.57	122.5	192.4	389.4	917.2	1386	1459	979.4	626.8
80.0	62.60	72.98	86.00	142.9	320.8	411.1	842.5	811.5	539.8	379.1
82.0	42.35	49.32	60.31	95.39	209.3	258.7	300.1	465.6	323.2	172.9
84.0	25.68	30.33	37.29	54.29	123.3	107.5	119.3	121.4	108.0	97.68
86.0	12.96	15.61	18.50	24.87	37.59	41.50	43.95	43.91	32.33	24.64
88.0	4.398	5.622	5.848	7.237	7.538	9.589	9.462	10.99	7.185	5.671
90.0	1.183	1.375	1.423	1.660	2.123	2.676	3.777	5.154	2.367	3.306
92.0	1.090	1.168	1.228	1.339	1.655	2.302	3.491	5.050	2.880	3.472
94.0	1.241	1.310	1.361	1.556	1.949	2.696	4.067	5.880	3.764	4.538
96.0	1.414	1.518	1.584	1.804	2.291	3.140	4.739	6.794	4.726	5.705
98.0	1.617	1.754	1.832	2.073	2.666	3.638	5.480	7.821	5.757	6.963
100.0	1.870	2.006	2.089	2.356	3.049	4.186	6.265	8.901	6.855	8.261
102.0	2.179	2.262	2.341	2.627	3.390	4.755	7.120	10.00	7.995	9.618
104.0	2.457	2.510	2.602	2.904	3.708	5.259	7.936	11.11	9.192	11.14
106.0	2.709	2.759	2.863	3.188	4.018	5.676	8.573	12.10	10.44	12.74
108.0	2.965	3.014	3.123	3.464	4.315	6.065	9.100	12.89	11.60	14.23
110.0	3.213	3.264	3.384	3.734	4.599	6.407	9.538	13.54	12.72	15.53

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25±1°CDEG
Operators: Fabian Loaiza
Test Date: 2023-11-06

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.406.10
Humidity: MAX: 50.1-MIN: 40.4%
Test Distance: 7.080m [K=1.0000]
Remarks: ANEXO 23-0951-6-A RALED I 16 LED's 57W
DRIVER ADVANCE 55W 0.1.-1.8A 0-10V
MODULO LED 2X8 Z15 5050 4K SAMSUNG
Corriente de programacion: 1054mA

Photometric Data Table [cd]

112.0	3.459	3.517	3.628	3.991	4.881	6.714	9.886	14.04	13.71	16.67
114.0	3.646	3.750	3.833	4.203	5.126	7.003	10.18	14.41	14.49	17.53
116.0	3.816	3.920	3.994	4.376	5.296	7.266	10.42	14.66	15.12	18.25
118.0	3.971	4.065	4.162	4.540	5.441	7.473	10.61	14.82	15.61	18.78
120.0	4.103	4.189	4.281	4.691	5.578	7.610	10.75	14.85	15.96	19.21
122.0	4.192	4.313	4.373	4.823	5.711	7.700	10.84	14.83	16.21	19.50
124.0	4.281	4.410	4.457	4.901	5.834	7.788	10.89	14.78	16.41	19.64
126.0	4.368	4.507	4.569	4.995	5.907	7.905	10.91	14.74	16.56	19.66
128.0	4.468	4.596	4.695	5.111	5.980	7.934	10.93	14.74	16.60	19.60
130.0	4.583	4.679	4.811	5.250	6.080	7.938	10.78	14.63	16.58	19.39
132.0	4.715	4.768	4.924	5.412	6.194	7.962	10.60	14.22	16.44	19.08
134.0	4.854	4.856	5.049	5.564	6.335	7.995	10.50	13.83	16.26	18.80
136.0	4.994	4.979	5.204	5.722	6.500	8.060	10.41	13.47	16.15	18.60
138.0	5.169	5.164	5.402	5.916	6.681	8.154	10.41	13.19	15.87	18.26
140.0	5.372	5.386	5.634	6.135	6.867	8.227	10.36	12.98	15.33	17.69
142.0	5.596	5.628	5.898	6.385	7.074	8.308	10.30	12.75	14.85	16.91
144.0	5.862	5.909	6.175	6.669	7.312	8.426	10.27	12.57	14.54	16.44
146.0	6.135	6.191	6.461	6.932	7.558	8.548	10.24	12.39	14.75	16.00
148.0	6.437	6.505	6.775	7.228	7.814	8.702	10.23	12.29	14.62	15.92
150.0	6.833	6.901	7.172	7.600	8.158	8.941	10.31	12.32	14.48	15.64
152.0	7.212	7.306	7.550	7.957	8.461	9.151	10.34	12.21	14.17	15.14
154.0	7.757	7.774	8.060	8.376	8.924	9.495	10.67	12.38	13.91	14.68
156.0	8.260	8.304	8.496	8.849	9.274	9.858	10.83	12.53	13.69	14.45
158.0	8.788	8.802	8.951	9.254	9.623	10.14	10.99	12.55	13.74	14.45
160.0	9.336	9.322	9.420	9.677	9.984	10.44	11.16	12.60	13.78	14.45
162.0	9.895	9.853	9.897	10.11	10.36	10.76	11.36	12.69	13.82	14.45
164.0	10.48	10.41	10.40	10.55	10.76	11.09	11.59	12.82	13.83	14.39
166.0	11.08	10.98	10.90	11.02	11.17	11.45	11.84	12.97	13.88	14.37
168.0	11.68	11.56	11.43	11.51	11.60	11.83	12.12	13.17	13.98	14.36
170.0	12.29	12.15	11.98	12.02	12.06	12.23	12.44	13.40	14.09	14.36
172.0	12.90	12.75	12.55	12.56	12.55	12.66	12.78	13.66	14.21	14.38
174.0	13.54	13.39	13.15	13.14	13.07	13.13	13.15	13.95	14.37	14.47
176.0	14.19	14.05	13.78	13.75	13.62	13.63	13.56	14.28	14.58	14.58
178.0	14.76	14.63	14.33	14.28	14.10	14.07	13.91	14.58	14.77	14.73
180.0	15.22	15.10	14.84	14.78	14.55	14.48	14.25	14.78	15.70	15.59
G/C	200.0	210.0	220.0	230.0	240.0	250.0	260.0	270.0	280.0	290.0
0.0	1762	1762	1762	1762	1762	1762	1762	1762	1762	1762
2.0	1728	1708	1691	1675	1663	1653	1646	1643	1644	1648
4.0	1693	1653	1619	1590	1565	1545	1533	1526	1528	1536
6.0	1658	1600	1549	1501	1462	1429	1410	1398	1402	1415
8.0	1623	1547	1476	1407	1352	1308	1283	1268	1275	1291
10.0	1588	1491	1398	1312	1244	1188	1160	1146	1154	1174
12.0	1552	1432	1320	1217	1139	1084	1057	1045	1052	1074
14.0	1517	1374	1241	1131	1049	998.1	969.1	958.3	965.1	988.0
16.0	1481	1316	1163	1045	973.5	922.7	898.4	894.3	897.3	917.3
18.0	1447	1258	1089	977.7	905.3	870.8	856.3	855.0	857.1	872.5
20.0	1409	1198	1024	913.9	856.6	834.7	820.1	819.0	820.5	835.9
22.0	1368	1136	964.9	860.1	822.0	799.9	785.2	784.9	785.7	800.4
24.0	1326	1074	910.1	823.5	788.8	766.8	753.9	755.4	755.0	768.5
26.0	1283	1016	859.1	792.1	757.2	737.4	726.5	728.8	728.9	740.9
28.0	1241	962.9	813.6	760.6	728.4	711.7	702.4	705.7	705.8	716.5
30.0	1202	913.9	778.0	730.0	702.1	688.4	681.2	685.6	685.4	695.6
32.0	1166	869.6	746.8	701.5	677.3	667.8	662.9	666.6	666.9	676.3
34.0	1131	829.1	718.1	675.3	654.2	648.5	645.4	648.6	650.0	658.5
36.0	1097	794.7	692.2	651.4	633.8	631.6	627.7	630.2	631.4	641.6
38.0	1064	764.6	669.7	629.3	614.4	614.7	609.6	612.4	612.7	623.0
40.0	1036	739.8	649.3	609.4	596.1	596.9	593.3	595.9	595.7	604.7
42.0	1019	718.5	630.3	591.0	577.7	578.5	577.0	581.6	580.1	587.1
44.0	1011	703.2	612.9	573.5	560.7	561.9	564.1	570.3	568.3	573.5
46.0	1033	700.1	598.6	556.5	547.5	556.3	560.4	567.8	564.6	570.6
48.0	1102	731.1	593.1	541.3	544.4	562.1	564.0	573.4	568.8	575.4
50.0	1101	790.5	615.5	532.8	553.5	571.6	571.8	590.4	580.3	583.3
52.0	979.8	705.6	665.0	542.5	564.1	582.2	581.2	597.1	588.5	586.1
54.0	945.6	627.2	606.3	579.6	566.7	576.2	567.4	574.0	564.6	565.3
56.0	940.5	589.7	534.2	573.9	555.9	555.9	532.7	532.8	523.2	531.4
58.0	946.4	563.8	500.1	502.9	543.5	544.1	504.0	497.1	490.5	512.1
60.0	960.3	542.9	468.7	450.1	501.5	530.0	471.2	458.4	451.5	484.0
62.0	976.3	525.2	435.7	408.8	445.1	466.3	412.3	404.5	399.6	421.6
64.0	997.7	512.8	403.5	373.7	401.3	408.3	363.8	356.5	355.5	378.3
66.0	1013	507.9	374.8	339.7	357.7	345.0	323.9	318.4	317.4	333.4
68.0	1021	491.4	349.6	305.8	318.3	305.9	289.6	284.0	282.9	294.9
70.0	1012	480.7	320.4	270.9	277.3	269.9	256.6	251.1	250.7	258.1
72.0	953.4	465.7	287.6	231.9	239.1	234.6	223.6	221.8	218.5	223.9
74.0	819.2	433.3	251.1	193.5	200.9	204.1	189.5	180.5	182.6	192.4

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25±1°CDEG
Operators: Fabian Loaiza
Test Date: 2023-11-06

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.406.10
Humidity: MAX: 50.1-MIN: 40.4%
Test Distance: 7.080m [K=1.0000]
Remarks: ANEXO 23-0951-6-A RALED I 16 LED's 57W
DRIVER ADVANCE 55W 0.1.-1.8A 0-10V
MODULO LED 2X8 Z15 5050 4K SAMSUNG
Corriente de programacion: 1054mA

Photometric Data Table [cd]

76.0	594.2	336.5	214.5	159.4	165.1	166.5	143.6	131.9	135.9	149.9
78.0	365.4	228.1	166.9	125.8	129.0	121.3	103.3	99.12	98.41	112.8
80.0	242.4	132.3	118.1	89.98	92.61	83.83	71.92	66.54	68.98	75.67
82.0	119.7	84.46	71.76	60.38	57.64	54.11	45.86	42.32	43.46	48.04
84.0	54.25	36.98	38.81	33.44	31.80	29.97	26.16	23.36	24.48	26.13
86.0	21.17	17.05	17.73	14.56	14.22	12.55	12.07	9.204	11.12	10.45
88.0	6.446	5.254	5.085	4.015	3.838	3.236	3.261	1.609	2.508	1.995
90.0	3.210	2.618	1.679	1.064	0.4915	0.4785	0.4467	0.3345	0.4112	0.5304
92.0	3.514	2.891	1.689	0.8412	0.5636	0.4396	0.4087	0.3950	0.4755	0.5871
94.0	4.645	3.893	2.354	1.189	0.7133	0.5537	0.5197	0.5183	0.6070	0.7670
96.0	5.862	5.012	3.141	1.668	0.9667	0.7515	0.6710	0.6734	0.7855	1.035
98.0	7.198	6.222	4.032	2.247	1.319	1.038	0.8825	0.9065	1.031	1.382
100.0	8.578	7.465	5.016	2.926	1.768	1.399	1.176	1.220	1.367	1.828
102.0	10.07	8.772	6.069	3.695	2.318	1.858	1.543	1.596	1.793	2.367
104.0	11.76	10.27	7.154	4.539	2.950	2.384	1.998	2.082	2.284	2.977
106.0	13.34	11.81	8.162	5.399	3.697	2.987	2.522	2.634	2.828	3.646
108.0	14.91	13.25	9.276	6.288	4.484	3.668	3.107	3.239	3.439	4.368
110.0	16.38	14.62	10.61	7.261	5.325	4.370	3.709	3.886	4.103	5.132
112.0	17.63	15.83	11.95	8.376	6.221	5.114	4.350	4.578	4.794	5.911
114.0	18.52	16.91	13.14	9.578	7.214	5.897	5.020	5.300	5.490	6.692
116.0	19.25	17.79	14.25	10.80	8.240	6.808	5.713	6.055	6.222	7.479
118.0	19.84	18.58	15.31	11.98	9.291	7.678	6.475	6.851	7.005	8.257
120.0	20.33	19.17	16.22	13.08	10.32	8.470	7.265	7.696	7.794	9.047
122.0	20.68	19.61	16.96	14.01	11.30	9.076	8.083	8.522	8.577	9.803
124.0	20.86	19.90	17.52	14.81	12.15	9.576	8.902	9.354	9.364	10.53
126.0	20.89	20.02	17.90	15.43	12.84	10.04	9.728	10.17	10.17	11.32
128.0	20.85	20.06	18.17	15.93	13.31	10.70	10.57	10.99	10.99	12.11
130.0	20.68	20.01	18.36	16.22	13.55	11.37	11.50	11.78	11.77	12.86
132.0	20.44	19.89	18.43	16.27	13.52	11.97	12.51	12.49	12.50	13.54
134.0	20.17	19.75	18.32	16.05	13.47	12.55	13.49	13.14	13.16	14.15
136.0	19.93	19.53	18.02	15.66	13.48	13.09	14.41	13.73	13.75	14.71
138.0	19.56	19.04	17.56	15.21	13.75	13.60	14.99	14.26	14.30	15.18
140.0	18.78	18.54	16.93	14.87	14.06	14.09	15.45	14.71	14.74	15.57
142.0	18.22	17.87	16.33	14.78	14.24	14.52	15.83	15.11	15.12	15.90
144.0	17.61	17.16	15.79	14.60	14.35	15.04	16.20	15.48	15.48	16.21
146.0	16.88	16.48	15.36	15.04	14.69	15.73	16.57	15.80	15.76	16.49
148.0	16.33	15.83	15.13	15.13	14.96	16.53	16.85	16.04	15.98	16.67
150.0	16.15	15.64	15.13	15.25	15.43	17.30	17.13	16.29	16.17	16.79
152.0	15.47	15.19	15.18	15.38	15.94	17.98	17.40	16.55	16.37	16.87
154.0	15.02	15.13	15.28	15.57	16.52	18.35	17.61	16.75	16.52	16.92
156.0	15.01	15.25	15.41	15.69	17.28	18.43	17.76	16.88	16.61	16.93
158.0	15.08	15.36	15.65	16.28	17.85	18.44	17.84	16.97	16.63	16.91
160.0	15.08	15.49	16.13	17.26	18.26	18.44	17.84	17.02	16.63	16.83
162.0	15.06	15.77	16.70	17.81	18.38	18.40	17.82	17.02	16.59	16.71
164.0	14.96	15.61	16.51	17.13	17.51	17.41	17.09	16.69	16.40	16.50
166.0	14.91	15.42	15.93	16.04	16.38	16.42	16.36	16.38	16.23	16.30
168.0	14.86	15.34	15.59	15.73	15.98	16.21	16.16	16.31	16.15	16.15
170.0	14.78	15.25	15.50	15.65	15.92	16.18	16.14	16.27	16.07	16.01
172.0	14.76	15.16	15.39	15.58	15.85	16.12	16.08	16.20	15.98	15.88
174.0	14.78	15.11	15.31	15.63	15.79	16.04	16.00	16.10	15.87	15.77
176.0	14.80	15.06	15.24	15.50	15.67	15.90	15.83	15.91	15.70	15.61
178.0	14.83	15.03	15.17	15.28	15.49	15.65	15.57	15.64	15.44	15.38
180.0	15.79	15.90	16.02	16.09	16.37	16.56	16.24	15.62	15.25	15.11
G/C	300.0	310.0	320.0	330.0	340.0	350.0				
0.0	1762	1762	1762	1762	1762	1762				
2.0	1656	1667	1681	1697	1716	1736				
4.0	1553	1574	1603	1635	1671	1711				
6.0	1443	1478	1524	1574	1630	1690				
8.0	1329	1379	1444	1515	1590	1668				
10.0	1219	1281	1364	1455	1551	1649				
12.0	1120	1187	1283	1395	1512	1629				
14.0	1033	1103	1204	1334	1474	1611				
16.0	958.8	1026	1131	1273	1436	1596				
18.0	898.1	959.8	1062	1208	1397	1580				
20.0	860.3	902.2	999.8	1151	1356	1562				
22.0	827.5	862.7	943.6	1095	1311	1540				
24.0	794.1	833.1	892.5	1041	1266	1519				
26.0	763.6	802.9	848.6	988.5	1223	1504				
28.0	735.5	772.4	816.4	938.7	1183	1494				
30.0	709.9	741.4	787.1	892.5	1146	1494				
32.0	686.4	713.1	758.4	851.1	1116	1498				
34.0	665.4	688.1	731.7	815.3	1089	1505				
36.0	646.0	664.6	706.3	785.9	1068	1510				
38.0	627.3	642.8	683.3	763.1	1051	1519				

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25±1°CDEG
Operators: Fabian Loaiza
Test Date: 2023-11-06

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.406.10
Humidity: MAX: 50.1-MIN: 40.4%
Test Distance: 7.080m [K=1.0000]
Remarks: ANEXO 23-0951-6-A RALED I 16 LED's 57W
DRIVER ADVANCE 55W 0.1.-1.8A 0-10V
MODULO LED 2X8 Z15 5050 4K SAMSUNG
Corriente de programacion: 1054mA

Photometric Data Table [cd]

40.0	610.2	623.6	662.3	746.1	1038	1538
42.0	592.9	605.6	644.4	732.5	1035	1577
44.0	576.5	588.6	627.8	725.9	1049	1656
46.0	567.7	573.5	614.3	736.2	1102	1802
48.0	570.2	563.0	610.3	790.2	1191	1874
50.0	578.9	562.0	638.5	831.0	1096	1715
52.0	582.7	574.7	687.3	721.3	1004	1649
54.0	573.4	611.3	615.3	657.2	973.2	1637
56.0	557.2	584.1	552.3	621.1	963.9	1650
58.0	551.5	508.9	511.5	595.7	959.6	1668
60.0	530.0	454.3	474.9	572.6	958.6	1684
62.0	465.9	412.9	439.9	551.0	956.4	1702
64.0	401.0	376.1	408.1	533.4	964.6	1723
66.0	355.1	339.3	379.8	523.6	955.9	1697
68.0	311.9	303.2	353.1	504.0	942.6	1644
70.0	268.3	265.5	322.4	481.4	924.4	1509
72.0	229.9	225.4	288.6	453.2	856.9	1279
74.0	191.5	188.2	257.8	401.8	714.4	973.7
76.0	155.6	153.7	226.8	294.9	489.9	667.6
78.0	120.1	117.8	179.5	189.5	323.9	435.5
80.0	83.98	81.97	118.7	125.4	158.1	248.0
82.0	49.85	55.75	64.82	61.41	77.81	148.1
84.0	26.87	28.90	30.84	29.09	36.33	49.54
86.0	11.30	10.76	12.37	11.14	13.33	12.46
88.0	2.179	2.216	2.627	2.946	3.293	3.165
90.0	0.7256	1.263	1.861	2.716	3.301	3.293
92.0	0.9359	1.595	2.363	3.621	4.276	4.313
94.0	1.227	2.067	3.128	4.700	5.603	5.628
96.0	1.604	2.651	3.978	5.887	7.014	7.035
98.0	2.085	3.353	4.926	7.205	8.532	8.533
100.0	2.668	4.135	5.933	8.542	10.11	10.02
102.0	3.352	4.945	7.013	9.899	11.85	11.71
104.0	4.114	5.750	8.019	11.36	13.73	13.70
106.0	4.920	6.568	8.962	12.79	15.60	15.47
108.0	5.732	7.413	9.947	14.21	17.33	17.17
110.0	6.556	8.306	10.99	15.42	18.70	18.76
112.0	7.383	9.259	11.97	16.36	19.49	19.72
114.0	8.242	10.22	12.92	17.08	20.00	20.13
116.0	9.053	11.16	13.85	17.63	20.33	20.28
118.0	9.856	12.05	14.68	18.10	20.60	20.35
120.0	10.65	12.89	15.47	18.57	20.77	20.31
122.0	11.43	13.69	16.11	18.96	20.75	20.18
124.0	12.15	14.38	16.68	19.19	20.61	19.93
126.0	12.88	15.04	17.24	19.29	20.36	19.56
128.0	13.63	15.66	17.69	19.29	20.07	19.14
130.0	14.32	16.21	18.00	19.16	19.66	18.58
132.0	14.93	16.68	18.18	19.03	19.16	17.98
134.0	15.44	17.05	18.26	18.82	18.66	17.47
136.0	15.87	17.33	18.26	18.59	18.18	16.98
138.0	16.24	17.50	18.23	18.35	17.70	16.41
140.0	16.52	17.58	18.17	18.11	17.21	15.87
142.0	16.77	17.65	18.07	17.86	16.79	15.42
144.0	16.99	17.68	17.94	17.61	16.41	15.04
146.0	17.16	17.73	17.85	17.37	16.10	14.73
148.0	17.21	17.72	17.69	17.11	15.80	14.42
150.0	17.21	17.67	17.50	16.89	15.55	14.23
152.0	17.19	17.56	17.33	16.68	15.37	14.13
154.0	17.11	17.39	17.13	16.49	15.25	13.89
156.0	17.02	17.16	16.90	16.30	15.18	13.75
158.0	16.92	16.93	16.64	16.11	15.09	13.80
160.0	16.76	16.72	16.37	15.92	15.00	13.86
162.0	16.58	16.51	16.09	15.69	14.89	13.89
164.0	16.32	16.25	15.82	15.43	14.70	13.89
166.0	16.14	16.05	15.62	15.24	14.60	13.89
168.0	15.98	15.88	15.47	15.10	14.54	13.90
170.0	15.78	15.66	15.27	14.94	14.43	13.90
172.0	15.63	15.47	15.08	14.82	14.35	13.92
174.0	15.49	15.34	14.96	14.74	14.35	14.02
176.0	15.32	15.19	14.85	14.68	14.34	14.14
178.0	15.12	15.02	14.72	14.60	14.32	14.24
180.0	14.88	14.79	14.59	14.48	14.30	14.78

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25±1°C DEG
Operators: Fabian Loaiza
Test Date: 2023-11-06

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.406.10
Humidity: MAX: 50.1-MIN: 40.4%
Test Distance: 7.080m [K=1.0000]
Remarks: ANEXO 23-0951-6-A RALED I 16 LED's 57W
DRIVER ADVANCE 55W 0.1.-1.8A 0-10V
MODULO LED 2X8 Z15 5050 4K SAMSUNG
Corriente de programacion: 1054mA