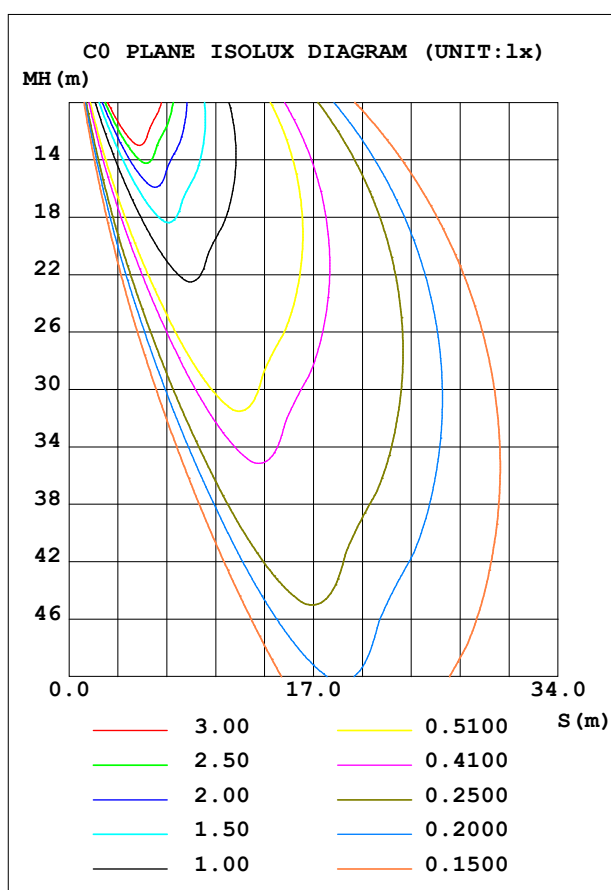
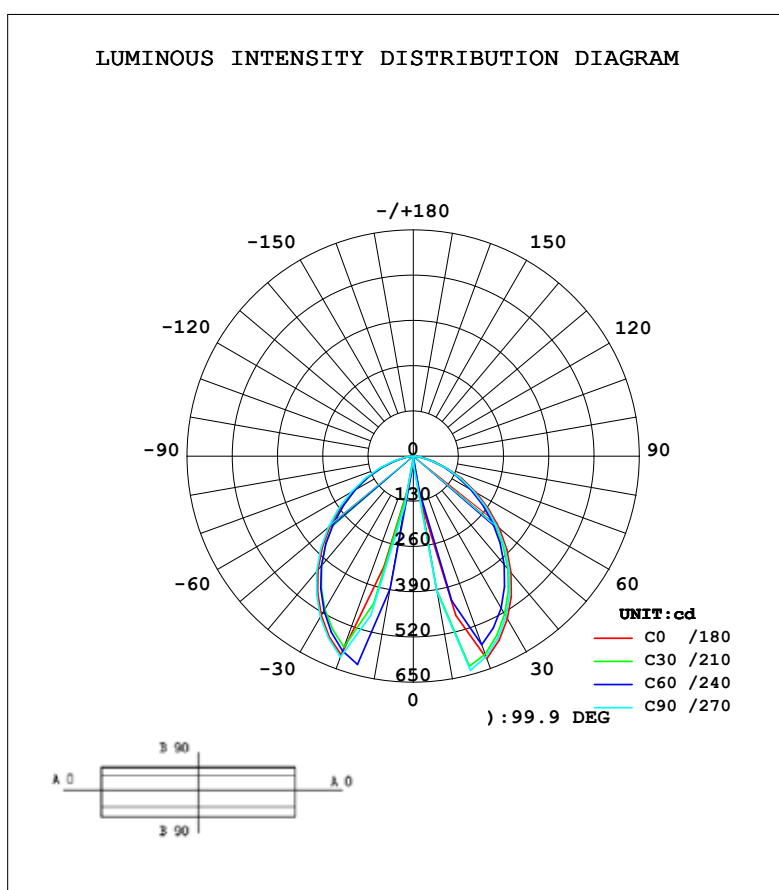


# LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.1V I:0.2622A P:29.83W PF:0.4737 Lamp Flux:1425x1 lm		
NAME: FL88012	TYPE:	WEIGHT:
DIMENSION:	SPECIFICATION:	SERIAL No.:
MANUFACTURER: Famco	SURFACE:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA <span style="float: right;">Eff: 47.76 lm/W</span>			
MODEL FL88012		I <sub>max</sub> (cd)	636.9	S/MH (C0/180)	8.27
NOMINAL POWER (W)	30	EFFICIENCY (%)	100.0	S/MH (C90/270)	8.64
RATED VOLTAGE (V)	240	TOTAL FLUX (lm)	1424.7	η UP (C0-180)	0.4
NOMINAL FLUX (lm)	1424.7	CIE CLASS	DIRECT	η DN (C0-180)	49.5
LAMPS INSIDE	1	η up (%)	0.8	η UP (C180-360)	0.4
TEST VOLTAGE (V)	240.1	η down (%)	99.2	η DN (C180-360)	49.8



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators: Chris Dumesny  
 Test Date: 2014-10-23

γ Range: 0 - 180DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-2000A SYSTEM V1.0.210  
 Humidity: 65%  
 Test Distance: 5.000m [K=1.0000]  
 Remarks: FL88012  
 26W LED Garden Bollard Square  
 PC = LED Centre

## ZONAL FLUX DIAGRAM

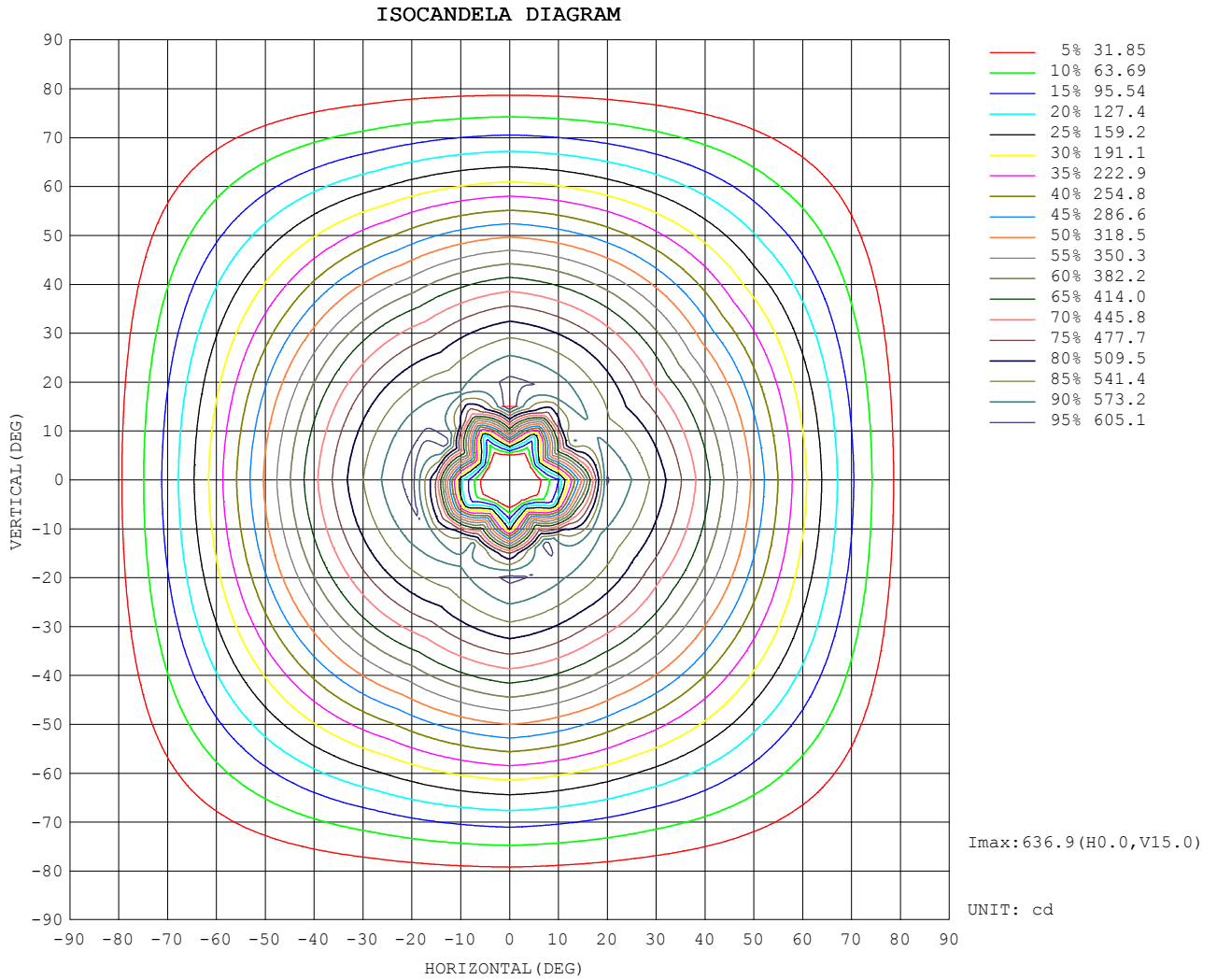
**ZONAL FLUX DIAGRAM:**

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%
10	95.48	245.0	148.4	237.4	138.0	243.8	397.0	232.6	0- 10	1.506	1.506	0.11
20	607.8	589.7	613.7	588.3	619.5	590.9	613.2	582.8	10- 20	143.9	145.4	10.21
30	529.4	511.1	534.1	513.2	541.1	514.8	533.2	504.2	20- 30	259.8	405.2	28.44
40	425.9	410.4	432.0	413.7	437.6	414.8	429.5	403.4	30- 40	295.4	700.6	49.18
50	311.5	299.9	319.4	303.3	323.2	303.1	313.8	293.5	40- 50	280.5	981.1	68.86
60	199.6	191.6	206.3	194.4	208.2	193.4	200.6	186.2	50- 60	223.7	1205	84.56
70	99.45	95.77	105.0	98.77	105.8	96.79	99.82	92.34	60- 70	143.7	1348	94.65
80	22.18	22.57	26.49	25.29	27.30	23.49	22.38	21.24	70- 80	60.36	1409	98.89
90	1.118	1.256	1.084	1.306	1.206	1.318	1.186	1.294	80- 90	4.968	1414	99.23
100	1.292	1.394	1.212	1.401	1.291	1.418	1.306	1.409	90-100	1.368	1415	99.33
110	1.453	1.509	1.392	1.502	1.426	1.528	1.473	1.511	100-110	1.513	1417	99.44
120	1.584	1.628	1.566	1.622	1.571	1.657	1.579	1.649	110-120	1.524	1418	99.54
130	1.925	1.969	1.889	1.945	1.877	1.967	1.902	1.972	120-130	1.601	1420	99.66
140	2.077	2.183	2.063	2.169	2.065	2.209	2.102	2.192	130-140	1.580	1421	99.77
150	2.307	2.332	2.282	2.345	2.265	2.342	2.255	2.328	140-150	1.416	1423	99.87
160	2.359	2.315	2.331	2.314	2.343	2.296	2.264	2.294	150-160	1.085	1424	99.94
170	2.155	2.065	2.012	2.047	2.131	2.038	1.991	2.039	160-170	0.6246	1425	99.99
180	1.904	1.942	1.988	1.977	1.994	1.934	1.961	1.918	170-180	0.1873	1425	100.00
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature:25DEG**  
**Operators:Chris Dumesny**  
**Test Date:2014-10-23**

**$\gamma$  Range: 0 - 180DEG**  
 **$\gamma$  Interval: 5.0DEG**  
**Test System:EVERFINE GO-2000A SYSTEM V1.0.210**  
**Humidity:65%**  
**Test Distance:5.000m [K=1.0000]**  
**Remarks: FL88012**  
**26W LED Garden Bollard Square**  
**PC = LED Centre**

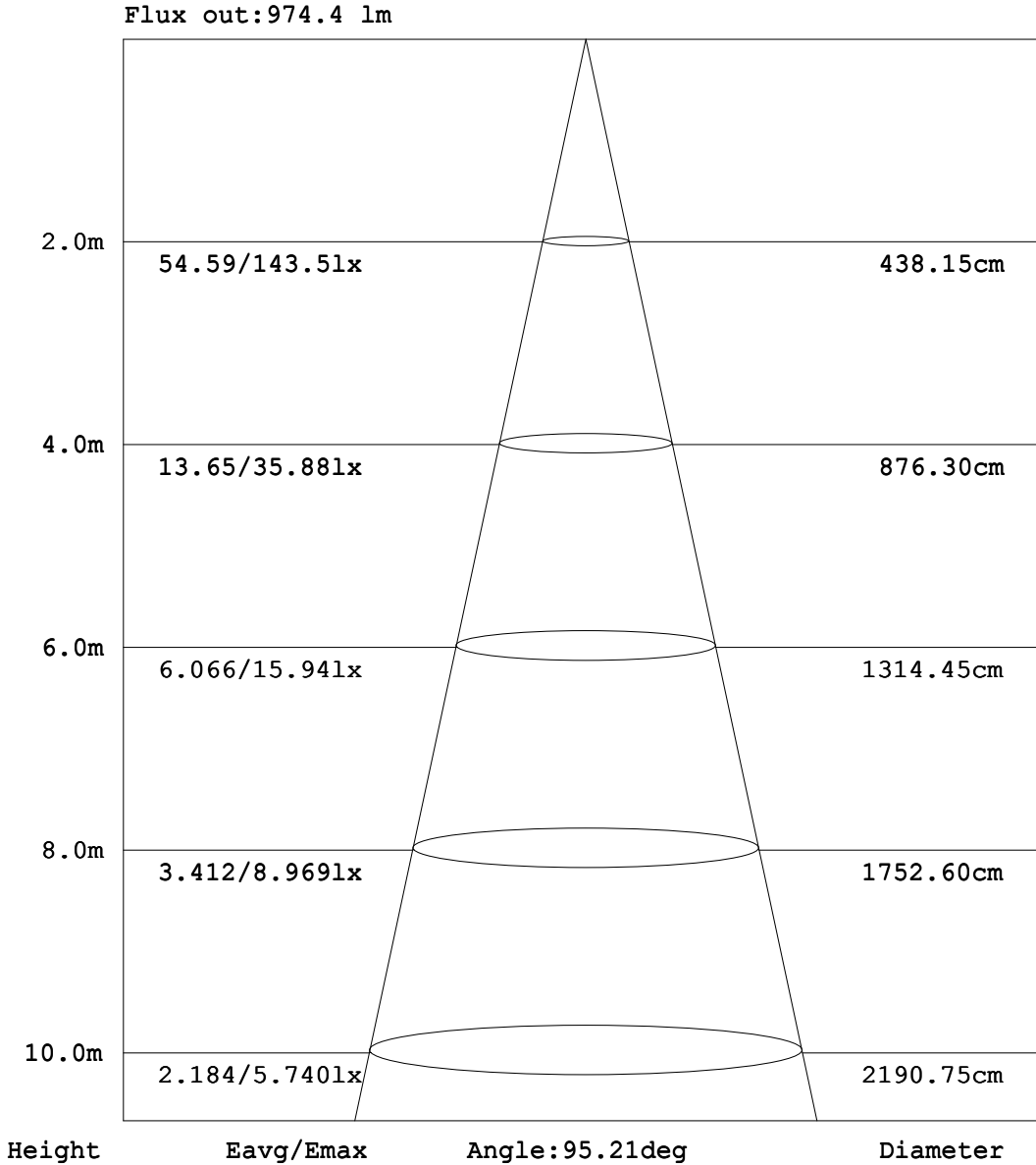
# ISOCANDELA DIAGRAM



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators: Chris Dumesny  
 Test Date: 2014-10-23

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 5.0DEG  
 Test System: EVERFINE GO-2000A SYSTEM V1.0.210  
 Humidity: 65%  
 Test Distance: 5.000m [K=1.0000]  
 Remarks: FL88012  
 26W LED Garden Bollard Square  
 PC = LED Centre

# AAI Figure



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

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators: Chris Dumesny  
 Test Date: 2014-10-23

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 5.0DEG  
 Test System: EVERFINE GO-2000A SYSTEM V1.0.210  
 Humidity: 65%  
 Test Distance: 5.000m [K=1.0000]  
 Remarks: FL88012  
 26W LED Garden Bollard Square  
 PC = LED Centre

# LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	0.40	0.36	0.31	0.40	0.37	0.37	0.40	0.36	0.31	0.40	0.37	0.37						
5	7.96	2.20	30.9	10.7	28.6	4.65	8.30	31.1	1.66	31.8	3.13	28.4						
10	95.5	103	387	148	357	118	138	388	99.5	397	110	355						
15	328	438	620	474	581	456	474	625	431	637	452	576						
20	608	584	595	614	575	602	619	605	576	613	598	567						
25	573	550	558	577	543	566	584	569	545	577	560	533						
30	529	509	514	534	503	523	541	525	505	533	516	492						
35	480	461	464	485	457	474	492	476	458	484	467	445						
40	426	410	411	432	406	421	438	423	407	430	413	393						
45	369	356	356	377	352	366	381	366	353	372	358	340						
50	311	300	300	319	298	309	323	308	298	314	302	285						
55	254	245	244	262	243	252	265	251	243	256	245	232						
60	200	191	192	206	191	198	208	197	190	201	191	181						
65	148	141	142	154	143	147	155	146	140	148	141	134						
70	99.5	95.0	96.6	105	97.5	100	106	99.5	94.1	99.8	94.5	90.2						
75	56.7	54.7	56.1	62.1	57.7	59.3	62.8	58.1	54.5	56.8	54.3	51.7						
80	22.2	22.0	23.1	26.5	24.8	25.8	27.3	24.6	22.3	22.4	21.8	20.7						
85	3.66	4.04	4.26	5.35	5.00	5.55	5.88	4.90	4.42	3.94	4.02	3.62						
90	1.12	1.26	1.25	1.08	1.29	1.32	1.21	1.30	1.33	1.19	1.29	1.29						
95	1.15	1.30	1.29	1.09	1.28	1.32	1.14	1.31	1.34	1.19	1.32	1.31						
100	1.29	1.40	1.38	1.21	1.38	1.42	1.29	1.40	1.44	1.31	1.42	1.40						
105	1.36	1.46	1.46	1.31	1.45	1.48	1.35	1.47	1.49	1.36	1.49	1.47						
110	1.45	1.52	1.50	1.39	1.50	1.50	1.43	1.53	1.52	1.47	1.52	1.50						
115	1.52	1.57	1.53	1.47	1.55	1.54	1.50	1.55	1.56	1.52	1.56	1.56						
120	1.58	1.64	1.61	1.57	1.62	1.62	1.57	1.66	1.65	1.58	1.65	1.64						
125	1.75	1.81	1.82	1.70	1.79	1.80	1.69	1.85	1.82	1.74	1.85	1.80						
130	1.93	1.96	1.98	1.89	1.94	1.95	1.88	1.98	1.95	1.90	2.00	1.95						
135	1.97	2.06	2.07	1.96	2.05	2.07	1.97	2.08	2.08	2.02	2.09	2.05						
140	2.08	2.18	2.18	2.06	2.18	2.16	2.06	2.21	2.20	2.10	2.21	2.17						
145	2.17	2.27	2.29	2.17	2.28	2.32	2.16	2.32	2.30	2.17	2.32	2.26						
150	2.31	2.33	2.34	2.28	2.34	2.35	2.26	2.36	2.33	2.26	2.35	2.31						
155	2.36	2.37	2.34	2.35	2.30	2.38	2.33	2.38	2.30	2.32	2.33	2.37						
160	2.36	2.37	2.26	2.33	2.25	2.38	2.34	2.38	2.21	2.26	2.24	2.34						
165	2.30	2.26	2.16	2.21	2.13	2.26	2.27	2.27	2.09	2.11	2.13	2.24						
170	2.16	2.07	2.06	2.01	2.00	2.09	2.13	2.09	1.99	1.99	2.00	2.07						
175	1.98	1.97	1.98	1.98	1.89	1.99	1.99	2.00	1.89	1.90	1.99	1.99						
180	1.90	1.93	1.95	1.99	1.96	1.99	1.99	1.91	1.95	1.96	1.87	1.97						

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
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 Test Date: 2014-10-23

γ Range: 0 - 180DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-2000A SYSTEM V1.0.210  
 Humidity: 65%  
 Test Distance: 5.000m [K=1.0000]  
 Remarks: FL88012  
 26W LED Garden Bollard Square  
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