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Photometric Test Report

Relevant Standards
IES LM-79-2008
ANSI C82.77-2002

Prepared For
LF Illumination LLC

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Catalog Number
LF #EF6-C-08L-8030-SL-D2-048-U-WW (277V)

Order Number
10946826
Test Number
1153001

Test Date

2015-09-01

Prepared By

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Approved By

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The results contained in this report pertain only to the tested sample.
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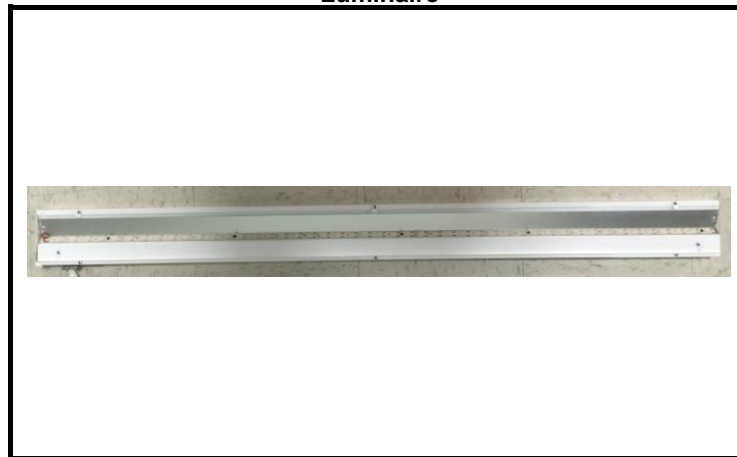
Laboratory results may not be representative of field performance
Ballast factors have not been applied

Testing was performed in a 2-meter integrating sphere using the 4π geometry method.
Absorption correction was employed for Sphere measurement



Luminaire Description: White steel housing, specular reflector, frosted plastic lens
Lamp: 96 white LEDs
Mounting: Surface
Ballast/Driver: One Everline D15CC55UNVT-C

Luminaire



Luminaire Characteristics

Luminous Length: 47.88 in.
Luminous Width: 2.000 in.

Summary of Results

Integrating Sphere

Luminous Flux: 3479 Lumens
Efficacy: 102.0 lm/w
CCT: 3082 K
CRI (Ra): 81.8

Distribution

Total Luminaire Output: 3334 Lumens
Luminaire Efficacy: 97.7 lm/w
Maximum Candela: 1874 Candela

Electrical Data at 277 VAC

Test Temperature: 25.9 °C
Voltage: 277.0 VAC
Current: 0.1284 A
Power: 34.11 W
Power Factor: 0.959
Frequency: 60 Hz
Current THD: 8.68 %



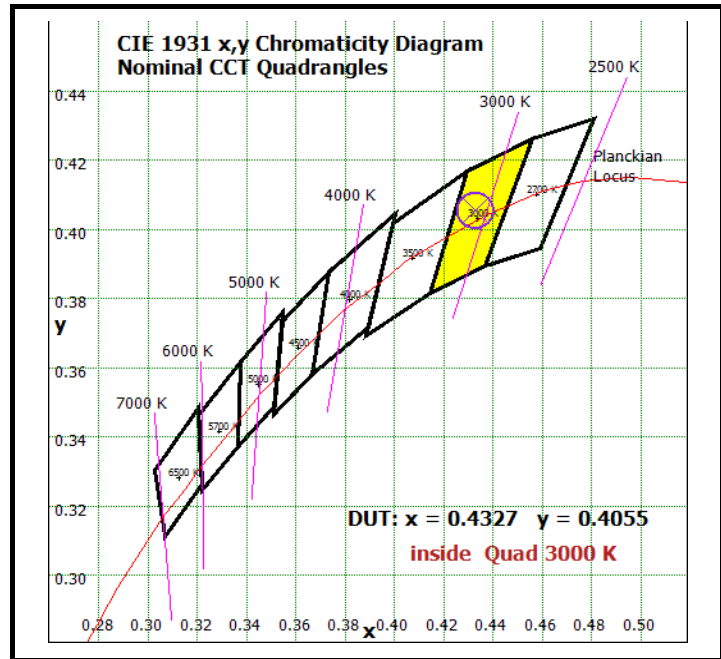
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.9 °C	277.0 VAC	0.1284 A	34.11 W	0.959	60 Hz	8.68 %

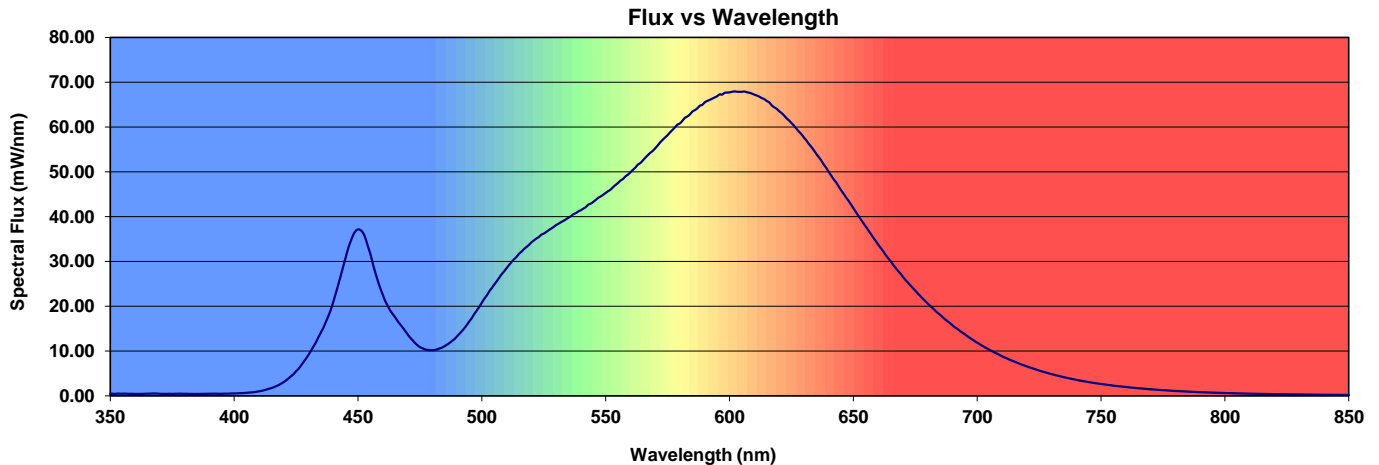
Summary of Results

Total Output:	3479 Lumens
Efficacy:	102.0 lm/w
CCT:	3082 K
CRI (Ra):	81.8
CRI (R9):	9.0
Chromaticity (x):	0.4327
Chromaticity (y):	0.4055
Chromaticity (u):	0.2472
Chromaticity (v):	0.3475
Chromaticity (u')	0.2472
Chromaticity (v')	0.5213
Duv:	0.0006



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
81.8	79.9	88.1	95.2	80.9	79.5	84.5	84.9	61.6	9.0	72.3	79.6	65.1	81.5	97.1





Distribution - Goniophotometer

Distribution Test Conditions

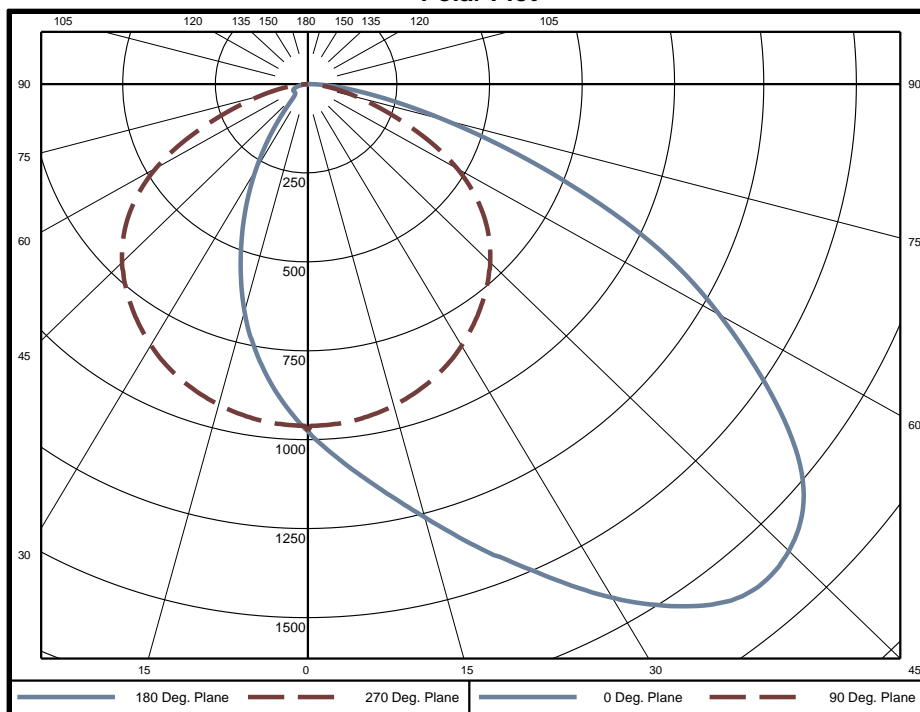
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.4 °C	277.1 VAC	0.1281 A	34.12 W	0.961	60 Hz	8.76 %

Summary of Results

Spacing Criteria
 0-180: 2.34
 90-270: 0.67

Total Lumen Output: 3334 Lumens
Luminaire Efficacy: 97.7 lm/w
Maximum Candela: 1874 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	23.3	0.7%	60-65	260.9	7.8%	120-125	0	0.0%
5-10	69.3	2.1%	65-70	197.4	5.9%	125-130	0	0.0%
10-15	113.8	3.4%	70-75	128.8	3.9%	130-135	0	0.0%
15-20	156.2	4.7%	75-80	73.7	2.2%	135-140	0	0.0%
20-25	195.9	5.9%	80-85	34.2	1.0%	140-145	0	0.0%
25-30	233.0	7.0%	85-90	8.4	0.3%	145-150	0	0.0%
30-35	266.9	8.0%	90-95	0.2	0.0%	150-155	0	0.0%
35-40	296.2	8.9%	95-100	0	0.0%	155-160	0	0.0%
40-45	317.9	9.5%	100-105	0	0.0%	160-165	0	0.0%
45-50	329.4	9.9%	105-110	0	0.0%	165-170	0	0.0%
50-55	326.1	9.8%	110-115	0	0.0%	170-175	0	0.0%
55-60	302.9	9.1%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1355	40.6%
0-60	2631	78.9%
0-90	3334	100.0%
90-180	0	0.0%



Candela Tabulation
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)															
	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
0	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975
5	1065	1060	1035	1009	959	939	908	893	884	893	908	939	959	1009	1035	1060
10	1158	1142	1092	1033	949	895	834	797	781	797	834	895	949	1033	1092	1142
15	1267	1237	1153	1055	933	845	750	692	667	692	750	845	933	1055	1153	1237
20	1393	1346	1219	1072	911	787	659	570	538	570	659	787	911	1072	1219	1346
25	1523	1463	1292	1089	883	723	554	448	412	448	554	723	883	1089	1292	1463
30	1668	1587	1369	1103	848	646	446	331	293	331	446	646	848	1103	1369	1587
35	1792	1706	1444	1113	806	560	341	224	187	224	341	560	806	1113	1444	1706
40	1869	1786	1507	1117	761	470	243	135	106	135	243	470	761	1117	1507	1786
45	1857	1788	1537	1110	710	376	159	78	61	78	159	376	710	1110	1537	1788
50	1766	1711	1511	1088	647	286	98	53	46	53	98	286	647	1088	1511	1711
55	1559	1531	1401	1038	570	206	67	45	43	45	67	206	570	1038	1401	1531
60	1298	1278	1206	934	474	143	54	45	43	45	54	143	474	934	1206	1278
65	1010	991	928	740	355	103	52	46	44	46	52	103	355	740	928	991
70	670	652	610	492	235	77	49	44	41	44	49	77	235	492	610	652
75	381	371	349	285	143	55	41	37	33	37	41	55	143	285	349	371
80	186	183	175	144	77	34	27	23	19	23	27	34	77	144	175	183
85	72	69	66	54	28	12	6	2	1	2	6	12	28	54	66	69
90	7	6	4	2	0	0	0	1	1	1	0	0	0	2	4	6
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Average Luminance (cd/m²)
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)		
	0	45	90
0	15790	15790	15790
45	42520	35190	16240
55	43990	39550	16080
65	38690	35550	13580
75	23850	21800	8920
85	13310	12290	5282



Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	3969	3969	3969	3969	3877	3877	3877	3877	3705	3705	3705	3547	3547	3547	3402	3402	3402	3334
1	3627	3467	3324	3196	3535	3391	3261	3143	3249	3142	3044	3119	3031	2950	2999	2928	2863	2793
2	3287	3007	2776	2581	3198	2944	2731	2550	2825	2645	2490	2715	2565	2433	2613	2489	2379	2306
3	2983	2623	2345	2123	2899	2570	2312	2103	2470	2248	2065	2377	2188	2029	2291	2130	1993	1919
4	2719	2308	2007	1777	2641	2263	1982	1764	2178	1933	1739	2099	1887	1715	2026	1843	1691	1617
5	2490	2048	1740	1512	2418	2010	1720	1503	1938	1682	1486	1871	1646	1469	1809	1611	1453	1380
6	2290	1832	1525	1305	2225	1800	1510	1299	1739	1480	1287	1682	1451	1275	1628	1423	1263	1192
7	2116	1652	1351	1141	2057	1624	1339	1136	1572	1315	1127	1523	1291	1118	1477	1269	1110	1041
8	1964	1500	1208	1008	1910	1476	1198	1004	1431	1178	998	1389	1159	991	1349	1140	984	919
9	1830	1370	1089	899	1781	1350	1081	897	1311	1064	891	1274	1048	886	1240	1033	881	819
10	1711	1260	989	809	1668	1242	982	807	1208	968	803	1176	955	799	1146	942	795	735

Cone of Light Tabulation

Mounting Height	Footcandles at Nadir	Diameter (Feet)
4.00	61.0	5.66
6.00	27.1	8.50
8.00	15.2	11.3
10.0	9.75	14.2
12.0	6.77	17.0
14.0	4.98	19.8
16.0	3.81	22.7

Cone of Light Plot

