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Photometric Test Report

Relevant Standards
IES LM-79-2008
ANSI C82.77-2002
UL1598-2008

Prepared For

TechBrite LLC

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Cincinnati, OH 45217

Catalog Number

V272SS1B30AXXXX

Order Number

10994982

Test Number

1175742

Test Date

2015-11-16 - 2015-11-24

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 plastic housing, frosted stepped plastic lens enclosure
Lamp: 112 white LEDs
Mounting: Pendant
Ballast/Driver: One Everline D10CC55UNTZ-C

Luminaire

Luminaire Characteristics

Luminous Length:	27.25	in.
Luminous Width:	6.500	in.
Luminous Height:	1.75	in.

Summary of Results

Integrating Sphere

Luminous Flux:	3104	Lumens
Efficacy:	115.4	lm/w
CCT:	3523	K
CRI (Ra):	84.7	

Distribution

Total Luminaire Output:	3008	Lumens
Luminaire Efficacy:	111.8	lm/w
Maximum Candela:	1020	Candela

Electrical Data at 277 VAC

Test Temperature:	24.5	°C
Voltage:	277.0	VAC
Current:	0.1052	A
Power:	27.84	W
Power Factor:	0.955	
Frequency:	60	Hz
Current THD:	8.07	%

In-Situ

LED Temperature:	50.6	°C
Driver Temperature:	52.4	°C
Maximum LED Current:	0.07060	A

Temperature is offset to an ambient temperature of 25°C as described in UL1598-2008.

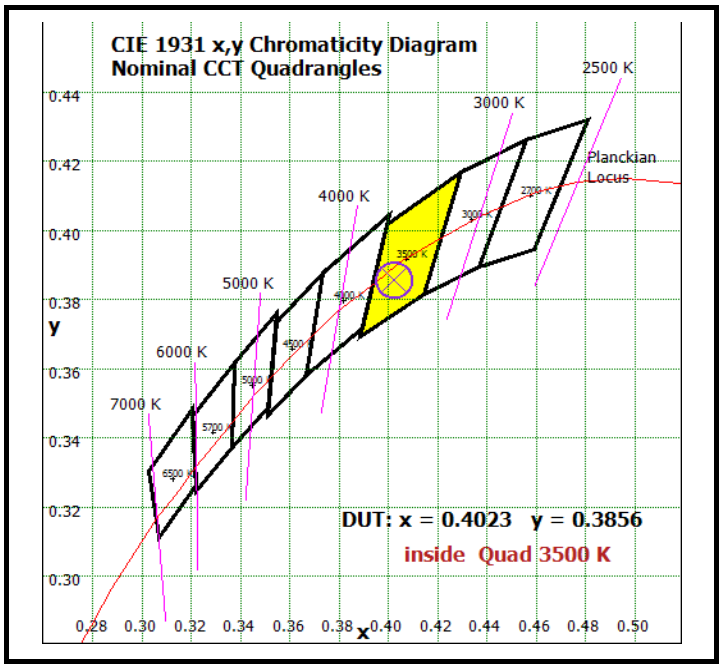
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.3 °C	120.0 VAC	0.2252 A	26.89 W	0.995	60 Hz	7.98 %

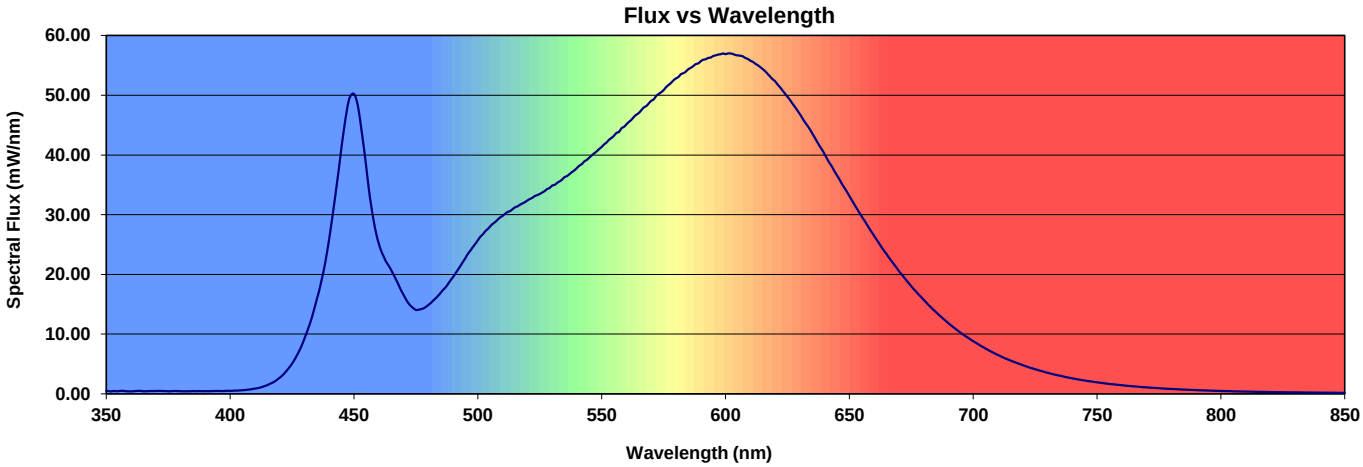
Summary of Results

Total Output:	3104	Lumens
Efficacy:	115.4	lm/w
CCT:	3523	K
CRI (Ra):	84.7	
CRI (R9):	17.0	
Chromaticity (x):	0.4023	
Chromaticity (y):	0.3856	
Chromaticity (u):	0.2359	
Chromaticity (v):	0.3391	
Chromaticity (u'):	0.2359	
Chromaticity (v'):	0.5086	
Duv:	-0.0018	



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
84.7	83.3	91.1	96.3	83.6	83.7	88.2	85.5	65.6	17.0	79.3	83.1	72.0	85.1	98.3



Distribution - Goniophotometer

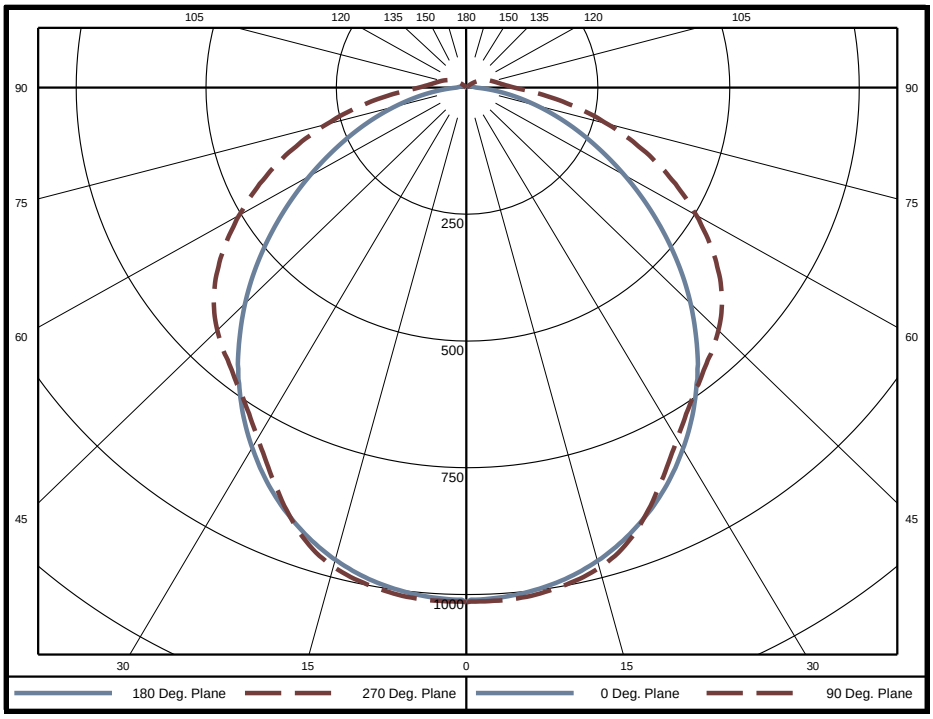
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.5 °C	120.0 VAC	0.2253 A	26.91 W	0.995	60 Hz	7.86 %

Summary of Results

Spacing Criteria			
0-180: 1.21	**Total Lumen Output:**	3008	Lumens
90-270: 1.21	**Luminaire Efficacy:**	111.8	lm/w
	Maximum Candela:	1020	Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	24.3	0.8%	60-65	191.9	6.4%	120-125	4.3	0.1%
5-10	72.1	2.4%	65-70	164.3	5.5%	125-130	2.0	0.1%
10-15	117.4	3.9%	70-75	133.3	4.4%	130-135	0.7	0.0%
15-20	158.2	5.3%	75-80	101.4	3.4%	135-140	0.1	0.0%
20-25	191.6	6.4%	80-85	71.2	2.4%	140-145	0	0.0%
25-30	215.9	7.2%	85-90	45.9	1.5%	145-150	0	0.0%
30-35	231.9	7.7%	90-95	31.4	1.0%	150-155	0	0.0%
35-40	241.2	8.0%	95-100	24.1	0.8%	155-160	0	0.0%
40-45	244.8	8.1%	100-105	18.8	0.6%	160-165	0	0.0%
45-50	242.2	8.1%	105-110	14.4	0.5%	165-170	0	0.0%
50-55	232.5	7.7%	110-115	10.5	0.3%	170-175	0	0.0%
55-60	215.2	7.2%	115-120	7.2	0.2%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1253	41.6%
0-60	2187	72.7%
0-90	2895	96.3%
90-180	114	3.8%

Candela Tabulation

Horizontal Angle (Degrees)

Vertical 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	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015
5	1006	1016	1014	1011	1013	1011	1014	1016	1006	1016	1014	1011	1013	1011	1014	1016
10	992	1003	1002	1000	1002	1000	1002	1003	992	1003	1002	1000	1002	1000	1002	1003
15	966	980	980	979	980	979	980	980	966	980	980	979	980	979	980	980
20	930	944	945	939	936	939	945	944	930	944	945	939	936	939	945	944
25	883	897	895	875	868	875	895	897	883	897	895	875	868	875	895	897
30	825	840	827	805	801	805	827	840	825	840	827	805	801	805	827	840
35	760	772	751	744	749	744	751	772	760	772	751	744	749	744	751	772
40	687	696	679	697	711	697	679	696	687	696	679	697	711	697	679	696
45	606	612	613	657	678	657	613	612	606	612	613	657	678	657	613	612
50	522	526	555	613	634	613	555	526	522	526	555	613	634	613	555	526
55	435	444	498	557	574	557	498	444	435	444	498	557	574	557	498	444
60	352	367	437	490	506	490	437	367	352	367	437	490	506	490	437	367
65	274	297	370	419	432	419	370	297	274	297	370	419	432	419	370	297
70	204	233	301	345	356	345	301	233	204	233	301	345	356	345	301	233
75	142	173	233	269	278	269	233	173	142	173	233	269	278	269	233	173
80	88	120	169	200	206	200	169	120	88	120	169	200	206	200	169	120
85	44	75	116	137	140	137	116	75	44	75	116	137	140	137	116	75
90	19	44	75	90	92	90	75	44	19	44	75	90	92	90	75	44
95	14	31	57	69	71	69	57	31	14	31	57	69	71	69	57	31
100	11	22	44	56	59	56	44	22	11	22	44	56	59	56	44	22
105	9	14	34	47	51	47	34	14	9	14	34	47	51	47	34	14
110	6	7	26	39	43	39	26	7	6	7	26	39	43	39	26	7
115	4	3	17	31	35	31	17	3	4	3	17	31	35	31	17	3
120	2	1	10	22	27	22	10	1	2	1	10	22	27	22	10	1
125	1	0	3	14	18	14	3	0	1	0	3	14	18	14	3	0
130	0	0	0	7	10	7	0	0	0	0	0	7	10	7	0	0
135	0	0	0	1	4	1	0	0	0	0	0	1	4	1	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/m^2)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)

	0	45	90
0	8885	8885	8885
45	7052	6139	6606
55	6085	5686	6329
65	4980	5094	5666
75	3858	4192	4693
85	2569	3158	3458

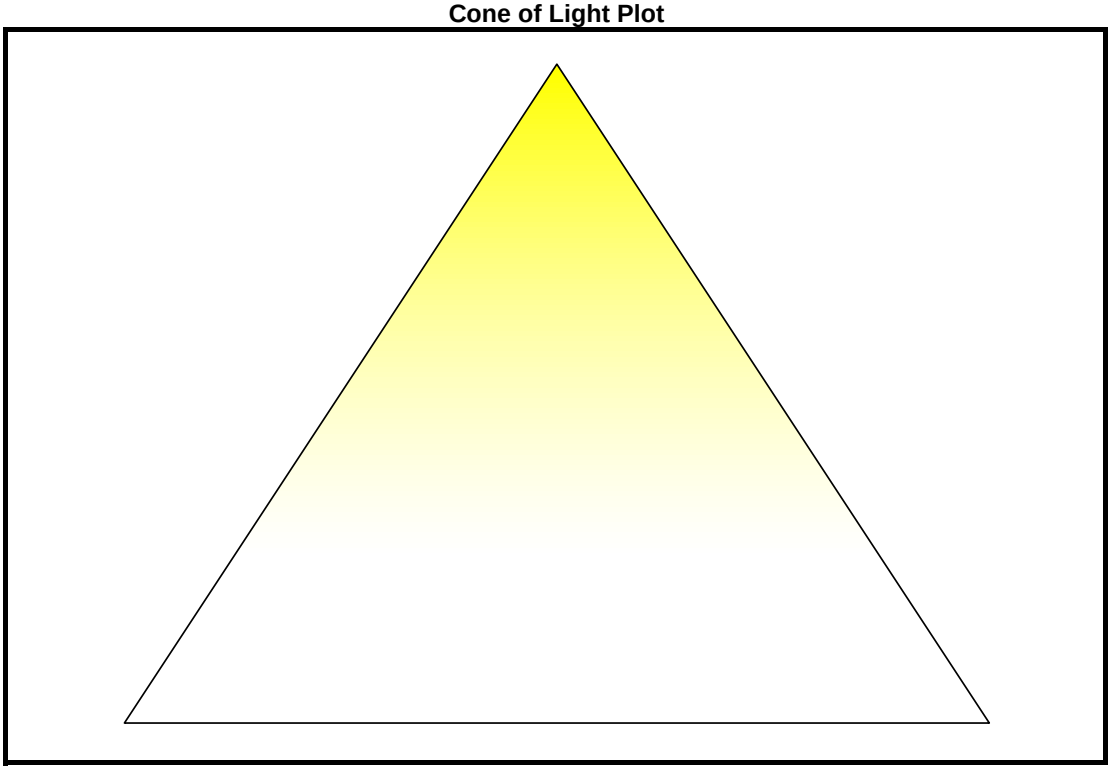
Utilization of Lumens - Zonal Cavity Method

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	3554	3554	3554	3554	3459	3459	3459	3459	3280	3280	3280	3116	3116	3116	2966	2966	2966	2895
1	3216	3060	2921	2795	3121	2980	2853	2738	2830	2726	2631	2693	2608	2530	2566	2498	2434	2362
2	2916	2656	2440	2259	2825	2588	2391	2223	2462	2296	2153	2345	2208	2087	2238	2125	2024	1951
3	2655	2327	2073	1871	2569	2270	2035	1846	2163	1963	1799	2064	1895	1753	1973	1830	1708	1636
4	2429	2059	1789	1582	2350	2011	1759	1564	1921	1703	1530	1837	1649	1497	1758	1598	1465	1394
5	2234	1839	1564	1361	2161	1799	1541	1348	1721	1496	1322	1649	1452	1297	1582	1411	1273	1205
6	2063	1656	1383	1187	1997	1621	1364	1178	1555	1328	1158	1493	1292	1139	1435	1258	1120	1054
7	1913	1502	1235	1049	1853	1472	1220	1041	1415	1189	1025	1361	1160	1010	1311	1132	995	932
8	1781	1371	1113	936	1727	1345	1100	929	1296	1074	917	1249	1050	904	1205	1026	892	833
9	1665	1259	1010	842	1616	1236	999	837	1193	977	826	1152	957	816	1114	936	806	749
10	1561	1162	923	764	1517	1142	913	759	1104	895	751	1069	877	742	1035	860	733	680

Cone of Light Tabulation

Mounting Height	Footcandles at Nadir	Diameter (Feet)
4.00	63.5	4.82
6.00	28.2	7.22
8.00	15.9	9.63
10.0	10.2	12.0
12.0	7.05	14.4
14.0	5.18	16.9
16.0	3.97	19.3

Cone of Light Plot



In-Situ Test

In-Situ Test Conditions

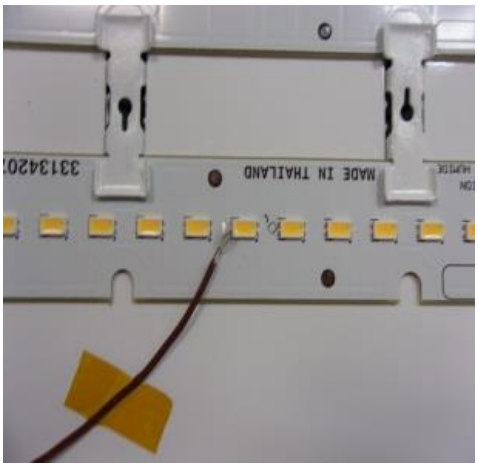
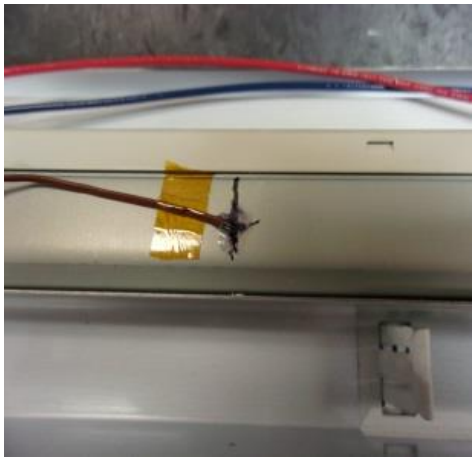
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
23.9 °C	120.8 VAC	N/A	N/A	N/A	60 Hz	N/A

Summary of Results

LED Temperature:	50.6	°C
Driver Temperature:	52.4	°C
Maximum LED Current:	0.07060	A

Temperatures are offset to an ambient temperature of 25°C as described in UL1598-2008

LED Temperature Location



Driver Temperature Location