



Report No.: UTU2502037E-A

LM-79-08 Test Report

For

RAB Lighting Inc.

(Brand Name:RAB Lighting)

408 W 14th St, New York, NY 10014 United States
Xiao Xiang,15921313292,Gary.Xiao@rablighting.com

Outdoor Full-Cutoff Wall-Mounted Area Luminaires

Model name(s):SLIM17FAFC40[blank,/PIR,/MVS,/LCB,
LCBS,/LCBS/MVS]

Test & Report By:

Engineer: Winny Wu

Date: 2024-02-12

Review By:

Manager: Jason Luo

1.1 Product Information:

Organization Name	RAB Lighting Inc.	
Brand Name	RAB Lighting	
Model Number	SLIM17FAFC40[blank,/PIR,/MVS,/LCB,/LCBS, /LCBS/MVS]	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Outdoor Full-Cutoff Wall-Mounted Area Luminaires	
Rated Voltage / Frequency	120-347Vac, 50/60 Hz	
Nominal Power	40W	
Rated Initial Lamp Lumen	--	
Declared CCT	3000K,4000K, 5000K (Color tunable)	
LED Manufacturer	Lumileds Holding B.V.	
LED Model	L128-3080RC35000E1 L128-5080RC35000E1	
Sample Number	UTU2502037E-A1	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

Photo



1.2 Test Specifications:

Date of Receipt	2025-02-20
Date of Test	2025-02-22
Test item	<ol style="list-style-type: none"> 1. Total Luminous Flux 2. Luminous Distribution Intensity 3. Luminous Efficacy 4. Correlated Color Temperature 5. Color Rendering Index 6. Chromaticity Coordinate 7. Electrical Parameters
Reference Standard	<ol style="list-style-type: none"> 1. IES LM-79-2019 Electrical and Photometric Measurements of Solid-State Lighting Products 2. ANSI C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products 3. CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources 4. CIE 15-2004 Technical Report Colorimetry 5. IESNA LM-16-93 Practical Guide to Colorimetry of Light Source 6. IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems
Reference Work Instruction	BL-QP-033

1.3 Test Methods

1) Photometric and Light Distribution Measurement – Goniophotometer Method:

Photometric parameters were measured using the goniophotometer and software. The ambient temperature shall be maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$, measured at a point not more than 1 m from the sample and at the same height as the sample. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1° vertical intervals and 22.5° horizontal intervals. Goniophotometer far field detector $f1' = 1.42\%$, Test distance: 14.14m

2) Chromaticity Measurement – Sphere-Spectroradiometer Method:

Chromaticity parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral power distribution taken at 5 nm intervals over the range of 380 to 780 nm. Use 2m diameter integrated sphere (94-98% coating reflectance) and 4π geometry.

Self-absorption:

AST-FWP01C-40WBT3DC1-abce :1.024

3) Electrical Measurements:

Electrical parameters were measured using power meters incorporated in goniophotometer or sphere-spectroradiometer system. The ambient temperature surrounding the sample was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Voltage, frequency, current, power, power factor and total harmonic distortion were measured by and read from the power meter.

Laboratory: UTEST TECHNICAL LABORATORY CO.LTD A2LA Certificate# 4810.01

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Report Format Number BL-FM-SA-012

2.1 Electrical, Photometric and Chromaticity Measurements
(Refer to Work Instruction BL-QP-033)

Test date	2025-02-22	Test Ambient:	25.2 ° C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	SLIM17FAFC40 at 3000K	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU250203 7E-A1	120.0	60	0.342	40.76	0.993	10.9
	277.0	60	0.147	39.33	0.969	8.01
	347.0	60	0.122	39.56	0.936	10.03
DLC Pass Criteria					$\geq 0.9(-3\%)$	$\leq 20(+5)$

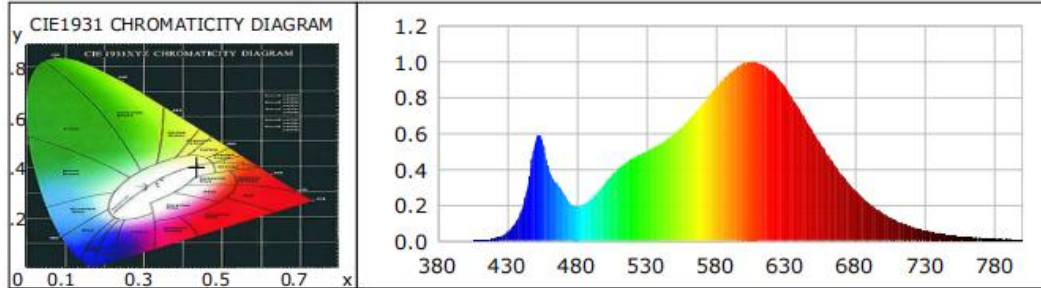
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	83	R9	13
Frequency (Hz)	60	R2	92	R10	83
CCT (K)	2982	R3	96	R11	82
Duv	-0.0008	R4	82	R12	72
Chromaticity (x, y)	x=0.437 y=0.4021	R5	83	R13	85
Chromaticity (u', v')	u'=0.2515 v'=0.5206	R6	91	R14	99
Color Rendering Index (CRI)	84	R7	83	R15	75
R9	13	R8	61	--	--
Rf	85	--	--	--	--
Rg	96	--	--	--	--
Rcs,h1(%)	-11				

Photometric Measurement – Goniophotometer Method:

Parameter	Result			DLC V5.1 Pass Criteria
Test Voltage (V)	120.0	277.0	347.0	--
Frequency (Hz)	60	60	60	
Total Luminous (lm)	5632.3	5568.8	5515.1	$\geq 300(-10\%)$
Luminous Efficacy (lm/W)	138.18	141.59	139.41	Premium: $\geq 120(-3\%)$
Most worst Luminous/Highest	135.31			
Zonal lumens in the 0-90° zone (%)	100	--	--	$\geq 100(-3\%)$
Zonal lumens in the 80-90°zone (%)	0.6	--	--	$\leq 10(+3\%)$
Beam Angle (°)	109.6	--	--	--
Center Beam Candle Power (cd)	1954	--	--	--

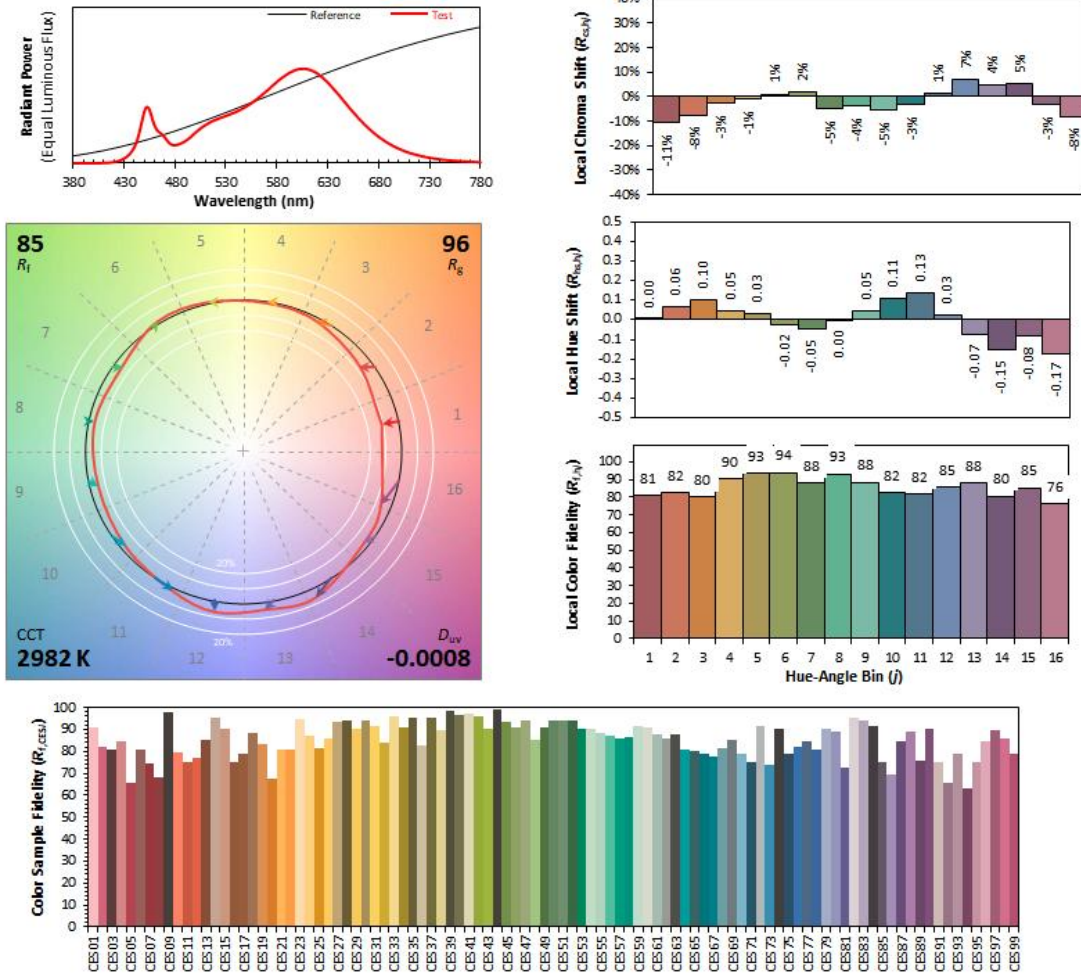
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0002	0.0266	535	0.4815	56.4431	690	0.3714	43.5270
385	0.0006	0.0683	540	0.5002	58.6318	695	0.3232	37.8817
390	0.0005	0.0552	545	0.5220	61.1880	700	0.2812	32.9554
395	0.0005	0.0571	550	0.5436	63.7181	705	0.2430	28.4824
400	0.0005	0.0594	555	0.5693	66.7233	710	0.2086	24.4505
405	0.0010	0.1228	560	0.6008	70.4191	715	0.1786	20.9318
410	0.0026	0.3086	565	0.6355	74.4938	720	0.1531	17.9486
415	0.0061	0.7152	570	0.6740	78.9983	725	0.1302	15.2622
420	0.0129	1.5173	575	0.7192	84.2984	730	0.1111	13.0202
425	0.0256	2.9970	580	0.7648	89.6441	735	0.0948	11.1165
430	0.0496	5.8134	585	0.8118	95.1548	740	0.0813	9.5262
435	0.0922	10.8080	590	0.8593	100.7156	745	0.0692	8.1152
440	0.1678	19.6673	595	0.9024	105.7668	750	0.0584	6.8439
445	0.3252	38.1172	600	0.9407	110.2610	755	0.0493	5.7791
450	0.5481	64.2407	605	0.9696	113.6513	760	0.0427	5.0038
455	0.5646	66.1783	610	0.9921	116.2822	765	0.0362	4.2419
460	0.3969	46.5221	615	0.9988	117.0686	770	0.0308	3.6097
465	0.3254	38.1462	620	0.9959	116.7359	775	0.0267	3.1303
470	0.2734	32.0493	625	0.9775	114.5756	780	0.0228	2.6692
475	0.2089	24.4811	630	0.9479	111.1099	785	0.0184	2.1565
480	0.1912	22.4089	635	0.9048	106.0540	790	0.0177	2.0782
485	0.2055	24.0879	640	0.8533	100.0137	795	0.0132	1.5432
490	0.2330	27.3072	645	0.7956	93.2511	800	0.0117	1.3667
495	0.2734	32.0460	650	0.7347	86.1179			
500	0.3221	37.7501	655	0.6681	78.3063			
505	0.3672	43.0419	660	0.6028	70.6526			
510	0.4045	47.4079	665	0.5404	63.3419			
515	0.4359	51.0883	670	0.4784	56.0733			
520	0.4599	53.9087	675	0.4235	49.6413			
525	0.4815	56.4431	680	0.3714	43.5270			
530	0.5002	58.6318	685	0.3232	37.8817			

TM30

ANSI/IES TM-30-18 Color Rendition Report



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.4370
 y 0.4021
 z' 0.2515
 v' 0.5206

CIE 13.3-1995 (CRI)	
R_a	84
R_g	13

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

Zonal Lumen Tabulation

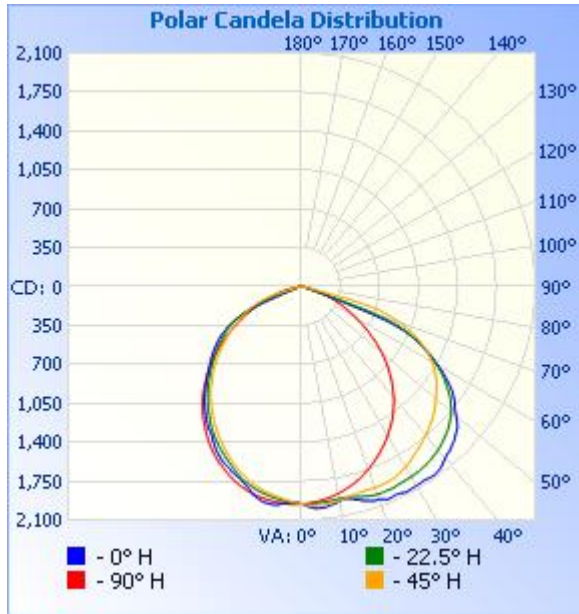
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	1,537.7	27.3%	27.3%
0-40	2,545.8	45.2%	45.2%
0-60	4,609.5	81.8%	81.8%
60-90	1,022.2	18.1%	18.2%
70-100	285.8	5.1%	5.1%
90-120	0	0%	0%
0-90	5,631.7	100%	100%
90-180	0	0%	0%
0-180	5,631.7	100%	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	185.2	3.3%	90-100	0	0%
10-20	532.6	9.5%	100-110	0	0%
20-30	819.9	14.6%	110-120	0	0%
30-40	1,008.1	17.9%	120-130	0	0%
40-50	1,071.8	19.0%	130-140	0	0%
50-60	991.9	17.6%	140-150	0	0%
60-70	736.4	13.1%	150-160	0	0%
70-80	249.5	4.4%	160-170	0	0%
80-90	36.3	0.6%	170-180	0	0%

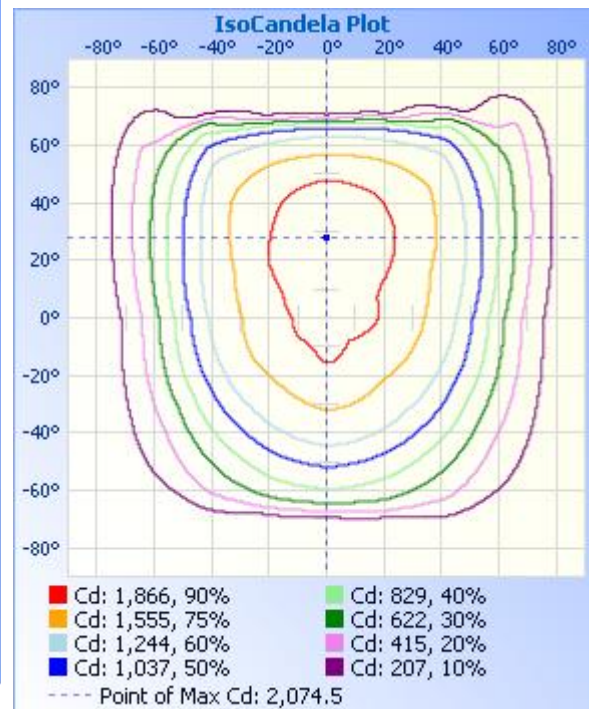
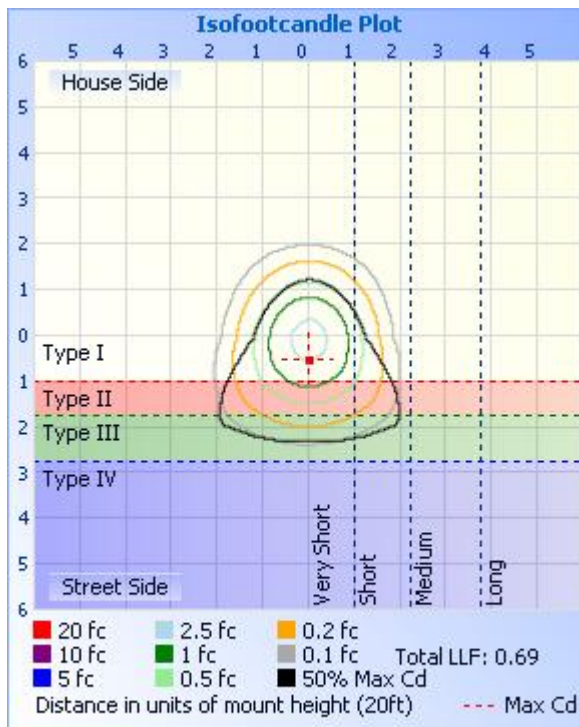
Photometric Data



Illuminance at a Distance

	Center Beam fc	Beam Width	
17.0ft	6.76 fc	56.3 ft	43.2 ft
34.0ft	1.69 fc	112.5 ft	86.3 ft
51.0ft	0.75 fc	168.8 ft	129.5 ft
68.0ft	0.42 fc	225.0 ft	172.7 ft
85.0ft	0.27 fc	281.3 ft	215.9 ft
102.0ft	0.19 fc	337.6 ft	259.0 ft

■ Vert. Spread: 117.7°
■ Horiz. Spread: 103.6°



Candela Table - Type C

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	360
0	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954
1	1965	1956	1959	1955	1952	1949	1948	1948	1945	1948	1947	1951	1957	1956	1959	1961	1965
2	1982	1956	1965	1956	1948	1944	1940	1943	1943	1945	1940	1949	1958	1959	1964	1968	1982
3	1994	1956	1968	1953	1944	1938	1934	1937	1944	1942	1932	1946	1959	1961	1967	1971	1994
4	1998	1954	1970	1953	1938	1933	1926	1932	1955	1939	1925	1941	1959	1962	1969	1971	1998
5	1999	1952	1969	1950	1933	1927	1921	1927	1958	1932	1915	1938	1955	1963	1970	1972	1999
6	1996	1949	1969	1947	1926	1920	1912	1920	1973	1926	1907	1932	1954	1962	1969	1973	1996
7	1989	1946	1966	1945	1918	1915	1906	1913	1979	1918	1899	1925	1950	1959	1966	1972	1989
8	1979	1944	1964	1941	1909	1906	1897	1904	1977	1911	1890	1918	1946	1957	1963	1972	1979
9	1972	1940	1960	1934	1901	1899	1887	1895	1973	1902	1882	1909	1942	1952	1959	1969	1972
10	1959	1936	1955	1929	1891	1890	1877	1884	1968	1894	1873	1901	1935	1948	1953	1968	1959
11	1950	1936	1950	1921	1880	1880	1867	1873	1957	1886	1861	1892	1931	1942	1948	1969	1950
12	1949	1937	1944	1913	1869	1869	1856	1860	1942	1877	1850	1883	1924	1934	1943	1973	1949
13	1956	1940	1936	1902	1856	1857	1843	1848	1922	1866	1837	1872	1917	1925	1936	1980	1956
14	1973	1949	1929	1893	1843	1844	1831	1834	1894	1854	1824	1860	1907	1918	1932	1987	1973
15	1985	1957	1926	1882	1829	1832	1817	1820	1871	1842	1809	1849	1898	1908	1928	1996	1985
16	2003	1966	1923	1870	1816	1819	1801	1802	1849	1828	1794	1835	1887	1898	1927	2006	2003
17	2014	1973	1922	1859	1800	1805	1782	1785	1828	1813	1776	1820	1875	1886	1926	2017	2014
18	2027	1980	1922	1847	1785	1790	1763	1768	1812	1797	1759	1805	1864	1874	1928	2029	2027
19	2035	1986	1923	1833	1767	1774	1743	1753	1799	1776	1741	1790	1849	1861	1930	2037	2035
20	2037	1989	1925	1818	1749	1755	1724	1734	1785	1756	1723	1772	1835	1848	1934	2042	2037
21	2046	1991	1925	1805	1732	1738	1703	1717	1774	1738	1705	1756	1819	1835	1936	2045	2046
22	2063	1991	1923	1787	1713	1720	1683	1696	1755	1719	1686	1739	1801	1821	1939	2046	2063
23	2065	1989	1921	1772	1694	1700	1660	1678	1744	1700	1666	1721	1784	1806	1940	2045	2065
24	2055	1990	1918	1756	1674	1678	1637	1660	1731	1682	1645	1701	1767	1793	1940	2042	2055
25	2056	1987	1915	1739	1655	1658	1615	1641	1713	1662	1623	1681	1750	1778	1939	2040	2056
26	2065	1981	1909	1722	1633	1637	1591	1620	1690	1644	1602	1659	1731	1764	1936	2039	2065
27	2075	1979	1901	1704	1613	1614	1568	1599	1672	1624	1578	1638	1711	1749	1931	2036	2075
28	2072	1977	1893	1687	1592	1591	1545	1577	1650	1604	1558	1616	1690	1734	1926	2032	2072

29	2068	1975	1882	1670	1571	1562	1522	1558	1624	1582	1536	1593	1669	1719	1920	2030	2068
30	2068	1974	1873	1652	1548	1535	1499	1537	1596	1562	1513	1569	1648	1704	1912	2026	2068
31	2066	1970	1860	1633	1524	1509	1475	1517	1568	1540	1491	1545	1625	1689	1903	2022	2066
32	2061	1969	1846	1615	1501	1482	1447	1494	1545	1518	1469	1517	1600	1673	1894	2020	2061
33	2063	1965	1833	1595	1478	1454	1422	1472	1529	1495	1444	1491	1574	1658	1881	2019	2063
34	2073	1958	1819	1576	1454	1426	1397	1449	1510	1470	1422	1464	1548	1644	1872	2012	2073
35	2074	1954	1807	1555	1429	1393	1371	1425	1486	1443	1398	1437	1523	1629	1862	2005	2074
36	2069	1947	1794	1535	1400	1364	1346	1401	1461	1417	1374	1410	1497	1611	1853	1995	2069
37	2061	1941	1779	1516	1374	1334	1319	1374	1436	1393	1350	1380	1471	1596	1842	1986	2061
38	2047	1931	1766	1495	1346	1304	1292	1348	1413	1369	1323	1352	1445	1580	1833	1977	2047
39	2029	1922	1753	1474	1318	1270	1265	1322	1385	1342	1298	1325	1416	1563	1824	1964	2029
40	2011	1914	1741	1452	1290	1240	1238	1297	1361	1318	1273	1296	1387	1550	1814	1951	2011
41	1997	1902	1726	1432	1257	1208	1210	1270	1336	1290	1247	1266	1358	1532	1804	1940	1997
42	1990	1890	1711	1408	1226	1178	1182	1239	1303	1262	1219	1237	1326	1512	1793	1926	1990
43	1976	1876	1696	1384	1194	1146	1151	1213	1273	1235	1190	1205	1295	1492	1780	1915	1976
44	1957	1863	1683	1362	1163	1112	1123	1188	1243	1204	1163	1176	1262	1473	1767	1902	1957
45	1946	1849	1667	1337	1127	1079	1094	1158	1213	1177	1136	1145	1228	1451	1751	1886	1946
46	1924	1835	1651	1313	1094	1046	1065	1133	1185	1148	1107	1111	1195	1428	1734	1869	1924
47	1906	1817	1634	1286	1061	1012	1032	1106	1155	1121	1080	1079	1162	1407	1719	1850	1906
48	1888	1798	1615	1262	1026	978	1003	1080	1128	1094	1047	1046	1125	1385	1703	1831	1888
49	1853	1780	1596	1236	991	941	974	1055	1103	1065	1017	1013	1091	1362	1685	1811	1853
50	1816	1758	1577	1210	954	907	944	1027	1074	1040	988	978	1054	1337	1666	1790	1816
51	1779	1730	1558	1183	916	873	914	1001	1050	1015	958	945	1019	1312	1646	1766	1779
52	1748	1704	1539	1153	879	839	884	977	1027	989	926	913	984	1285	1626	1741	1748
53	1725	1675	1520	1124	840	805	855	950	1003	962	895	879	947	1260	1607	1714	1725
54	1693	1642	1501	1095	802	767	828	924	977	933	867	844	910	1234	1587	1679	1693
55	1659	1606	1479	1066	760	733	800	895	949	907	839	812	869	1206	1567	1645	1659
56	1615	1567	1458	1035	722	698	770	869	924	881	809	774	832	1177	1544	1609	1615
57	1568	1530	1437	1006	685	659	743	843	898	851	782	738	795	1148	1521	1573	1568
58	1519	1490	1413	977	647	625	716	816	870	827	755	703	757	1117	1497	1532	1519
59	1472	1447	1385	949	607	591	688	789	840	801	727	669	716	1088	1472	1494	1472

60	1420	1400	1356	919	570	557	660	757	803	773	699	633	679	1059	1444	1451	1420
61	1365	1345	1326	890	535	524	630	728	768	746	672	597	643	1029	1410	1405	1365
62	1316	1296	1292	857	500	490	603	695	729	714	640	564	607	1000	1379	1356	1316
63	1261	1246	1258	828	464	460	576	653	678	682	613	532	572	968	1346	1298	1261
64	1205	1192	1217	798	431	430	548	608	621	644	585	500	535	939	1310	1246	1205
65	1145	1130	1179	770	399	402	520	557	555	602	558	466	502	909	1268	1193	1145
66	1066	1074	1138	739	369	374	487	496	480	552	528	435	470	880	1227	1138	1066
67	971	1009	1094	711	340	348	456	431	403	495	500	407	437	852	1183	1077	971
68	845	936	1045	682	309	320	421	356	269	426	472	379	406	819	1136	1005	845
69	616	821	989	655	283	296	378	242	166	359	442	349	374	791	1084	926	616
70	323	647	935	626	257	273	334	149	117	256	405	323	346	758	1030	791	323
71	172	381	872	600	231	248	289	106	96	151	366	299	315	731	973	589	172
72	100	195	807	574	204	227	242	87	84	106	325	276	288	703	911	321	100
73	72	110	737	549	182	206	170	75	76	86	281	252	264	676	845	166	72
74	59	73	627	520	160	186	105	68	68	76	233	230	237	647	769	97	59
75	51	59	450	493	137	164	78	61	60	67	167	210	212	617	681	69	51
76	43	50	229	465	118	144	64	52	53	60	107	191	188	588	534	58	43
77	37	41	123	436	101	125	55	47	48	52	79	172	166	561	315	49	37
78	31	35	75	407	84	106	46	42	44	47	63	152	144	530	155	41	31
79	25	28	51	375	69	88	39	37	39	42	54	133	125	499	90	33	25
80	19	23	39	345	54	60	34	32	34	37	45	115	104	468	61	27	19
81	15	17	27	309	42	43	28	29	31	32	39	97	88	432	44	22	15
82	12	13	19	249	31	31	24	25	27	29	32	78	72	394	33	16	12
83	7	8	14	166	22	23	19	19	20	25	28	56	58	351	24	13	7
84	5	5	9	68	13	15	13	13	15	19	23	39	43	285	17	7	5
85	4	3	4	22	8	10	9	8	9	13	19	28	32	187	13	5	4
86	3	4	4	5	5	6	4	5	6	8	13	19	23	80	6	4	3
87	2	3	3	4	2	3	3	4	5	5	8	13	14	29	4	4	2
88	3	3	3	3	2	2	2	3	2	4	5	8	8	9	3	2	3
89	3	3	3	3	1	2	2	1	2	2	3	4	5	4	3	3	3
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Report No.: UTU2502037E-A

91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	0	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	0
101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	0	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	0
106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
109	0	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	0
111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	0	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	0
116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
119	0	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	0
121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Report No.: UTU2502037E-A

122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	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
126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
129	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
131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
134	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
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
139	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
141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	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
146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	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
151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154	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
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	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
161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	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
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	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
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	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
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	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

BUG Rating

Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	804.7	14.3	14.3
FM (30-60)	1806.6	32.1	32.1
FH (60-80)	666.9	11.8	11.8
FVH (80-90)	25.7	0.5	0.5
BL (0-30)	733.1	13.0	13.0
BM (30-60)	1265.8	22.5	22.5
BH (60-80)	319.0	5.7	5.7
BVH (80-90)	10.6	0.2	0.2
UL (90-100)	0.0	0.0	0.0
UH (100-180)	0.0	0.0	0.0
Total	5632.4	100.1	100.0
BUG Rating	B2-U0-G1		

2.2 Electrical, Photometric and Chromaticity Measurements
(Refer to Work Instruction BL-QP-033)

Test date	2025-02-22	Test Ambient:	25.2 ° C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	SLIM17FAFC40 at 4000K	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU250203 7E-A1	120.0	60	0.332	39.57	0.993	11.17
	277.0	60	0.144	38.55	0.968	7.91
	347.0	60	0.119	38.57	0.933	10.05
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

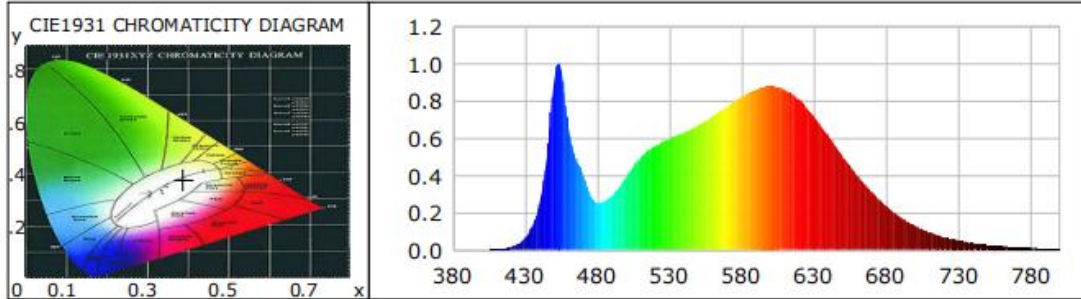
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	85	R9	22
Frequency (Hz)	60	R2	92	R10	81
CCT (K)	3783	R3	96	R11	83
Duv	-0.0009	R4	84	R12	63
Chromaticity (x, y)	x=0.3898 y=0.3804	R5	84	R13	87
Chromaticity (u', v')	u'=0.2298 v'=0.5046	R6	89	R14	98
Color Rendering Index (CRI)	86	R7	87	R15	79
R9	22	R8	68	--	--
Rf	85	--	--	--	--
Rg	96	--	--	--	--
Rcs,h1(%)	-10				

Photometric Measurement – Sphere-Spectroradiometer Method:

Parameter	Result			DLC V5.1 Pass Criteria
Test Voltage (V)	120.0	277.0	347.0	--
Frequency (Hz)	60	60	60	
Total Luminous (lm)	6051.7	6049.9	5979.3	>=300(-10%)
Luminous Efficacy (lm/W)	152.94	156.94	155.02	Premium: >= 120(-3%)
Most worst Luminous/Highest Watts	151.11			
Zonal lumens in the 0-90° zone (%)	100	--	--	>=100(-3%)
Zonal lumens in the 80-90°zone (%)	0.7	--	--	<=10(+3%)
Beam Angle (°)	109.8	--	--	--
Center Beam Candle Power (cd)	2083	--	--	--

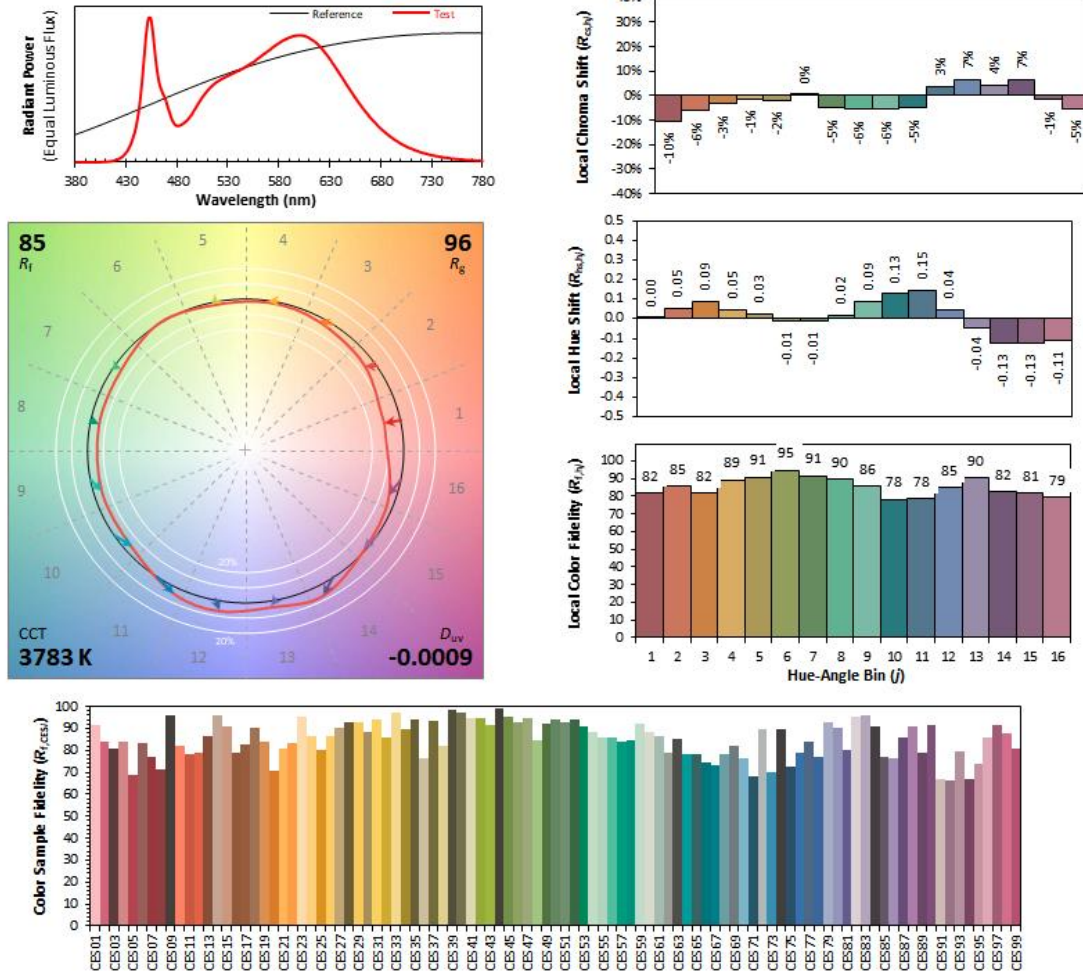
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0004	0.0558	535	0.5805	72.9121	690	0.3083	38.7214
385	0.0006	0.0807	540	0.5974	75.0303	695	0.2700	33.9093
390	0.0006	0.0731	545	0.6151	77.2522	700	0.2344	29.4361
395	0.0006	0.0736	550	0.6322	79.3970	705	0.2036	25.5679
400	0.0007	0.0908	555	0.6492	81.5330	710	0.1753	22.0161
405	0.0011	0.1345	560	0.6714	84.3272	715	0.1499	18.8313
410	0.0027	0.3375	565	0.6937	87.1250	720	0.1283	16.1123
415	0.0064	0.8007	570	0.7194	90.3465	725	0.1095	13.7562
420	0.0147	1.8468	575	0.7486	94.0235	730	0.0951	11.9496
425	0.0320	4.0177	580	0.7722	96.9841	735	0.0800	10.0491
430	0.0660	8.2943	585	0.7993	100.3886	740	0.0684	8.5880
435	0.1315	16.5162	590	0.8241	103.5037	745	0.0579	7.2745
440	0.2524	31.7000	595	0.8461	106.2667	750	0.0491	6.1641
445	0.5073	63.7173	600	0.8633	108.4178	755	0.0419	5.2579
450	0.9016	113.2358	605	0.8739	109.7592	760	0.0370	4.6450
455	0.9699	121.8068	610	0.8774	110.1898	765	0.0316	3.9636
460	0.6593	82.8051	615	0.8752	109.9162	770	0.0255	3.2023
465	0.4961	62.3018	620	0.8597	107.9719	775	0.0226	2.8374
470	0.4053	50.8975	625	0.8366	105.0742	780	0.0193	2.4249
475	0.2976	37.3705	630	0.8046	101.0484	785	0.0154	1.9355
480	0.2521	31.6649	635	0.7614	95.6210	790	0.0134	1.6886
485	0.2622	32.9277	640	0.7147	89.7619	795	0.0113	1.4226
490	0.2906	36.4974	645	0.6644	83.4375	800	0.0091	1.1430
495	0.3367	42.2849	650	0.6102	76.6354			
500	0.3948	49.5875	655	0.5553	69.7431			
505	0.4506	56.5930	660	0.5005	62.8558			
510	0.4971	62.4343	665	0.4479	56.2552			
515	0.5332	66.9603	670	0.3988	50.0885			
520	0.5600	70.3355	675	0.3516	44.1597			
525	0.5805	72.9121	680	0.3083	38.7214			
530	0.5974	75.0303	685	0.2700	33.9093			

TM30

ANSI/IES TM-30-18 Color Rendition Report



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3898	CIE 13.3-1995 (CRI) R_a 86 R_g 22
y	0.3804	
u'	0.2298	
v'	0.5046	

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

Zonal Lumen Tabulation

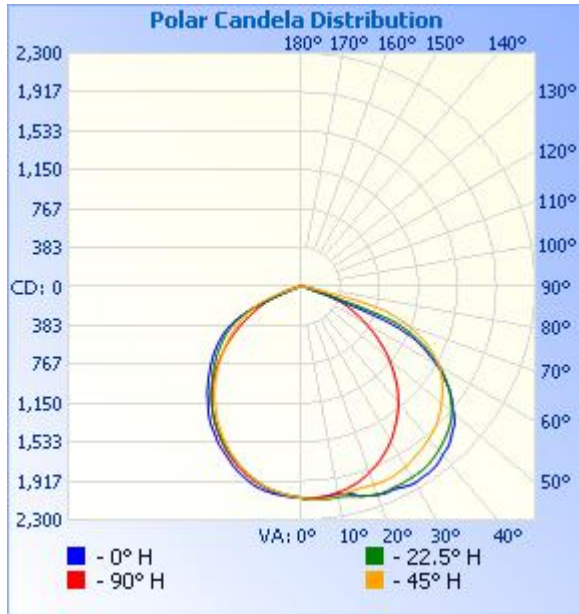
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	1,642.6	27.1%	27.1%
0-40	2,723.6	45%	45%
0-60	4,943.0	81.7%	81.7%
60-90	1,108.0	18.3%	18.3%
70-100	314.0	5.2%	5.2%
90-120	0	0%	0%
0-90	6,051.0	100%	100%
90-180	0	0%	0%
0-180	6,051.0	100%	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	197.3	3.3%	90-100	0	0%
10-20	568.8	9.4%	100-110	0	0%
20-30	876.6	14.5%	110-120	0	0%
30-40	1,080.9	17.9%	120-130	0	0%
40-50	1,152.0	19.0%	130-140	0	0%
50-60	1,067.4	17.6%	140-150	0	0%
60-70	794.0	13.1%	150-160	0	0%
70-80	274.1	4.5%	160-170	0	0%
80-90	39.9	0.7%	170-180	0	0%

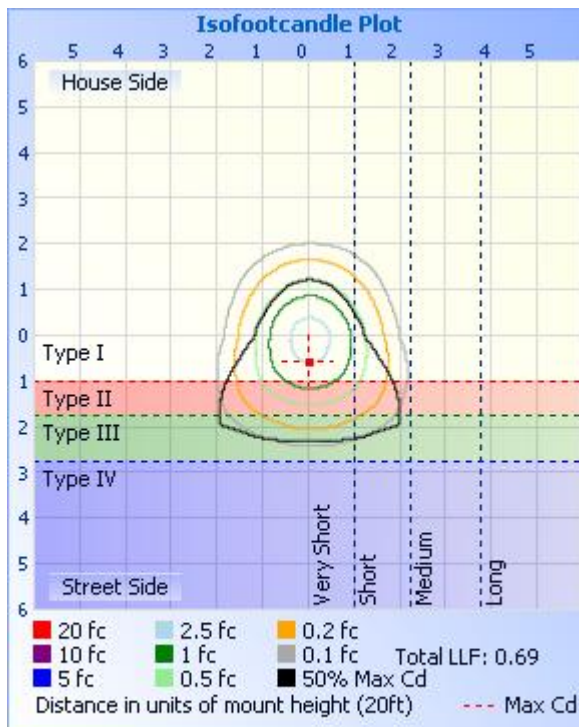
Photometric Data



Illuminance at a Distance

	Center Beam fc	Beam Width	
17.0ft	7.21 fc	56.1 ft	43.4 ft
34.0ft	1.80 fc	112.2 ft	86.8 ft
51.0ft	0.80 fc	168.3 ft	130.3 ft
68.0ft	0.45 fc	224.4 ft	173.7 ft
85.0ft	0.29 fc	280.5 ft	217.1 ft
102.0ft	0.20 fc	336.6 ft	260.5 ft

■ Vert. Spread: 117.6°
■ Horiz. Spread: 103.9°



Candela Table - Type C

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	360
0	2083	2083	2083	2083	2083	2083	2083	2083	2083	2083	2083	2083	2083	2083	2083	2083	2083
1	2091	2091	2089	2086	2084	2082	2074	2074	2076	2074	2078	2078	2081	2085	2087	2088	2091
2	2099	2098	2094	2088	2086	2079	2067	2070	2072	2067	2071	2074	2077	2087	2094	2092	2099
3	2101	2103	2098	2091	2085	2074	2060	2065	2070	2061	2065	2068	2073	2086	2097	2091	2101
4	2098	2106	2102	2092	2085	2070	2053	2061	2072	2056	2058	2061	2068	2086	2099	2091	2098
5	2095	2107	2104	2093	2082	2066	2044	2058	2066	2050	2053	2054	2059	2084	2103	2089	2095
6	2092	2109	2101	2092	2080	2059	2035	2054	2063	2043	2044	2046	2052	2085	2102	2089	2092
7	2089	2107	2100	2090	2077	2052	2026	2049	2061	2036	2034	2040	2044	2083	2100	2088	2089
8	2085	2107	2097	2088	2071	2045	2017	2041	2055	2028	2026	2030	2035	2079	2097	2086	2085
9	2080	2104	2095	2084	2065	2036	2007	2032	2050	2018	2017	2022	2027	2074	2093	2081	2080
10	2079	2105	2090	2077	2059	2029	1995	2025	2042	2008	2007	2012	2016	2068	2086	2078	2079
11	2079	2107	2085	2071	2053	2019	1984	2016	2038	1996	1994	2002	2006	2061	2081	2078	2079
12	2083	2113	2081	2065	2046	2009	1971	2006	2028	1982	1981	1989	1993	2053	2074	2080	2083
13	2090	2119	2078	2058	2038	1998	1956	1991	2020	1968	1968	1979	1981	2043	2067	2084	2090
14	2109	2127	2074	2049	2027	1986	1942	1975	2006	1952	1953	1964	1969	2033	2061	2092	2109
15	2130	2139	2072	2040	2019	1972	1927	1960	1992	1935	1938	1954	1954	2022	2058	2101	2130
16	2149	2148	2070	2029	2007	1959	1911	1946	1973	1920	1922	1938	1939	2010	2054	2110	2149
17	2154	2157	2070	2018	1995	1945	1893	1929	1958	1901	1904	1921	1922	1996	2051	2116	2154
18	2164	2167	2072	2006	1980	1927	1875	1914	1942	1884	1884	1906	1906	1983	2048	2124	2164
19	2174	2175	2074	1995	1966	1912	1858	1898	1928	1867	1865	1888	1889	1966	2046	2131	2174
20	2182	2181	2076	1981	1949	1894	1838	1880	1907	1849	1845	1870	1870	1951	2044	2135	2182
21	2191	2183	2078	1968	1934	1876	1819	1862	1890	1831	1823	1850	1852	1936	2043	2137	2191
22	2197	2184	2079	1954	1918	1859	1799	1844	1866	1812	1803	1831	1831	1918	2040	2140	2197
23	2198	2184	2082	1941	1901	1839	1778	1825	1845	1794	1781	1811	1811	1902	2036	2138	2198
24	2193	2180	2081	1927	1883	1817	1756	1806	1826	1772	1759	1789	1791	1886	2031	2136	2193
25	2197	2178	2077	1913	1864	1797	1730	1787	1807	1754	1734	1767	1770	1866	2026	2133	2197
26	2205	2177	2073	1897	1843	1775	1710	1767	1787	1735	1711	1741	1748	1848	2018	2131	2205
27	2215	2177	2068	1882	1823	1751	1688	1746	1769	1712	1686	1718	1726	1830	2010	2129	2215
28	2222	2174	2063	1868	1801	1729	1666	1723	1750	1688	1662	1694	1702	1810	2001	2127	2222

29	2231	2173	2054	1853	1779	1704	1641	1701	1723	1666	1637	1666	1679	1791	1990	2127	2231
30	2233	2173	2048	1838	1757	1679	1617	1679	1699	1643	1612	1640	1654	1771	1979	2129	2233
31	2230	2169	2040	1822	1732	1653	1595	1653	1677	1620	1586	1614	1631	1752	1967	2127	2230
32	2225	2168	2031	1806	1707	1628	1571	1629	1655	1597	1562	1583	1605	1730	1953	2127	2225
33	2222	2166	2022	1789	1679	1599	1546	1605	1634	1571	1535	1554	1579	1710	1941	2124	2222
34	2222	2160	2011	1775	1652	1568	1521	1580	1610	1546	1509	1525	1554	1688	1927	2121	2222
35	2218	2154	2002	1756	1626	1540	1493	1554	1583	1521	1477	1494	1527	1667	1914	2116	2218
36	2214	2146	1993	1741	1598	1512	1466	1525	1560	1496	1450	1463	1499	1647	1902	2109	2214
37	2205	2136	1983	1726	1572	1482	1441	1500	1528	1470	1422	1429	1468	1626	1889	2100	2205
38	2194	2126	1974	1708	1543	1449	1415	1472	1498	1440	1394	1398	1440	1604	1878	2090	2194
39	2180	2116	1965	1690	1514	1419	1384	1445	1467	1414	1364	1365	1409	1579	1865	2081	2180
40	2163	2102	1954	1672	1483	1389	1358	1419	1439	1386	1332	1334	1379	1556	1851	2073	2163
41	2153	2091	1944	1654	1450	1358	1329	1387	1415	1359	1303	1301	1347	1532	1838	2060	2153
42	2145	2075	1931	1633	1419	1326	1300	1358	1389	1329	1273	1265	1313	1508	1825	2048	2145
43	2131	2062	1919	1613	1386	1295	1272	1329	1357	1297	1242	1232	1277	1482	1811	2032	2131
44	2108	2048	1907	1591	1351	1259	1242	1300	1329	1268	1208	1198	1243	1456	1797	2020	2108
45	2088	2033	1888	1568	1315	1226	1212	1268	1300	1241	1177	1160	1209	1428	1780	2007	2088
46	2063	2016	1871	1545	1280	1191	1182	1239	1273	1214	1146	1125	1174	1401	1763	1991	2063
47	2045	1998	1855	1522	1242	1157	1152	1210	1243	1187	1114	1089	1135	1377	1746	1969	2045
48	2027	1979	1837	1499	1207	1121	1120	1182	1215	1159	1081	1052	1098	1350	1727	1948	2027
49	1995	1958	1820	1473	1170	1084	1086	1154	1188	1131	1048	1016	1060	1323	1709	1927	1995
50	1959	1934	1799	1447	1132	1049	1055	1125	1159	1102	1016	976	1022	1293	1689	1902	1959
51	1923	1906	1778	1420	1095	1013	1023	1097	1129	1074	985	939	980	1262	1669	1872	1923
52	1883	1876	1756	1389	1057	977	992	1070	1105	1048	955	902	939	1232	1650	1842	1883
53	1854	1845	1737	1362	1015	937	960	1040	1077	1016	925	865	899	1202	1631	1808	1854
54	1819	1812	1716	1334	976	901	927	1012	1048	989	892	828	859	1171	1607	1772	1819
55	1780	1775	1694	1304	937	866	897	980	1017	961	862	788	818	1138	1587	1734	1780
56	1738	1735	1671	1273	896	829	868	952	986	933	834	751	774	1107	1565	1697	1738
57	1685	1697	1645	1242	856	787	835	923	956	902	804	713	734	1076	1540	1659	1685
58	1640	1656	1620	1211	813	749	806	895	926	873	774	676	695	1046	1514	1613	1640
59	1592	1614	1593	1180	773	712	778	863	896	845	742	640	655	1015	1485	1568	1592

60	1538	1568	1562	1149	734	674	748	833	861	813	712	602	616	983	1456	1518	1538
61	1478	1518	1525	1115	696	639	718	803	819	780	682	564	575	949	1423	1464	1478
62	1417	1461	1492	1083	654	600	686	770	777	741	651	531	538	917	1388	1413	1417
63	1360	1406	1454	1052	616	566	656	730	727	699	622	495	503	886	1347	1354	1360
64	1299	1350	1415	1021	580	532	626	690	668	651	591	463	467	852	1308	1295	1299
65	1231	1289	1371	986	545	499	597	644	594	597	560	434	431	822	1267	1235	1231
66	1142	1229	1328	955	510	465	567	591	520	535	527	404	398	792	1223	1174	1142
67	1031	1162	1280	923	475	434	537	531	441	462	492	375	367	762	1175	1101	1031
68	861	1084	1231	892	438	404	503	460	329	392	450	346	338	732	1119	1005	861
69	630	984	1172	861	408	373	470	393	223	290	408	319	306	701	1064	874	630
70	359	815	1114	826	373	348	434	297	168	201	362	294	278	673	1006	675	359
71	209	594	1053	796	343	319	390	206	135	148	310	269	251	646	943	402	209
72	127	356	988	765	314	294	346	149	105	119	260	246	224	618	867	231	127
73	92	206	918	736	286	270	301	120	85	92	192	221	197	590	782	137	92
74	77	123	832	706	259	245	257	93	75	75	136	200	172	559	662	94	77
75	66	89	720	672	230	223	190	76	66	67	103	179	150	529	462	75	66
76	57	73	556	641	205	202	134	68	58	58	78	157	128	498	271	64	57
77	49	63	332	610	181	183	103	58	52	52	62	136	110	465	157	54	49
78	41	53	191	577	157	161	79	52	47	46	52	113	90	432	96	45	41
79	34	44	116	541	135	141	61	46	41	40	42	94	74	400	66	38	34
80	28	36	78	505	113	122	50	41	36	35	35	70	59	366	48	31	28
81	21	30	56	467	95	102	41	35	31	30	29	49	45	319	37	24	21
82	16	23	44	422	77	84	35	30	26	25	23	33	33	261	28	17	16
83	11	17	33	370	61	62	28	25	19	19	19	23	23	182	18	12	11
84	7	11	25	297	47	44	22	19	14	13	13	15	15	95	11	7	7
85	5	6	16	204	35	29	17	13	8	8	8	10	9	34	5	5	5
86	4	5	9	104	25	20	12	8	5	5	5	5	5	7	4	4	4
87	4	4	5	43	15	13	8	5	3	3	3	4	3	4	4	3	4
88	3	4	4	10	9	8	4	3	3	3	3	3	2	4	4	3	3
89	3	3	3	5	6	4	4	3	2	2	2	2	2	3	3	3	3
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	0	0	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	0	0
101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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119	0	0	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	0	0
121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	0	0	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	0	0
126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154	0	0	0	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	0	0	0
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176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	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	0	0	0

BUG Rating

Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	860.7	14.2	14.2
FM (30-60)	1943.5	32.1	32.1
FH (60-80)	721.3	11.9	11.9
FVH (80-90)	28.8	0.5	0.5
BL (0-30)	782.0	12.9	12.9
BM (30-60)	1357.5	22.4	22.4
BH (60-80)	346.8	5.7	5.7
BVH (80-90)	11.1	0.2	0.2
UL (90-100)	0.0	0.0	0.0
UH (100-180)	0.0	0.0	0.0
Total	6051.7	99.9	100.0
BUG Rating	B2-U0-G1		

2.3 Electrical, Photometric and Chromaticity Measurements
(Refer to Work Instruction BL-QP-033)

Test date	2025-02-22	Test Ambient:	25.2 ° C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	SLIM17FAFC40 at 5000K	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU250203 7E-A1	120.0	60	0.342	40.71	0.993	10.92
	277.0	60	0.146	39.31	0.969	7.84
	347.0	60	0.122	39.56	0.936	9.97
DLC Pass Criteria					$\geq 0.9(-3\%)$	$\leq 20(+5)$

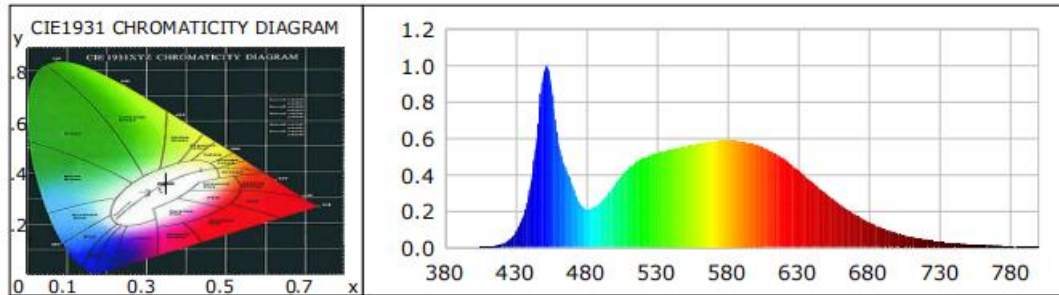
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	81	R9	11
Frequency (Hz)	60	R2	88	R10	71
CCT (K)	4878	R3	93	R11	80
Duv	0.0039	R4	82	R12	53
Chromaticity (x, y)	x=0.3496 y=0.3631	R5	80	R13	83
Chromaticity (u', v')	u'=0.21 v'=0.4908	R6	82	R14	96
Color Rendering Index (CRI)	83	R7	89	R15	76
R9	11	R8	69	--	--
Rf	84	--	--	--	--
Rg	96	--	--	--	--
Rcs,h1(%)	-12				

Photometric Measurement – Sphere-Spectroradiometer Method:

Parameter	Result			DLC V5.1 Pass Criteria
Test Voltage (V)	120.0	277.0	347.0	--
Frequency (Hz)	60	60	60	
Total Luminous (lm)	6031.8	5986.5	5938.9	$\geq 300(-10\%)$
Luminous Efficacy (lm/W)	148.17	152.29	150.12	Premium: $\geq 120(-3\%)$
Most worst Luminous/Highest Watts	145.88			
Zonal lumens in the 0-90° zone (%)	100	--	--	$\geq 100(-3\%)$
Zonal lumens in the 80-90°zone (%)	0.7	--	--	$\leq 10(+3\%)$
Beam Angle (°)	109.8	--	--	--
Center Beam Candle Power (cd)	2061	--	--	--

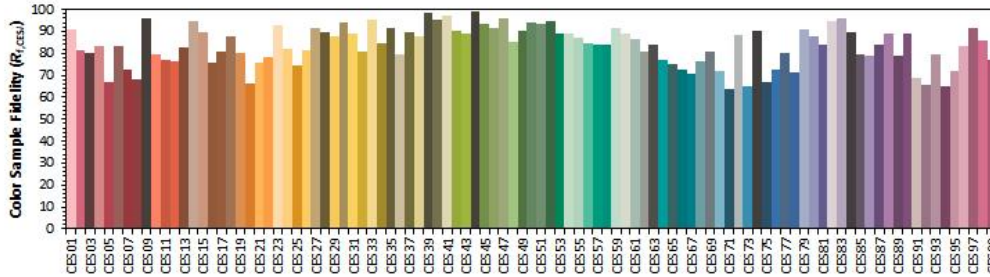
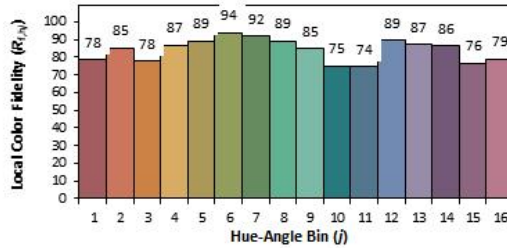
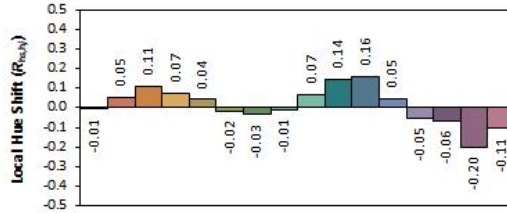
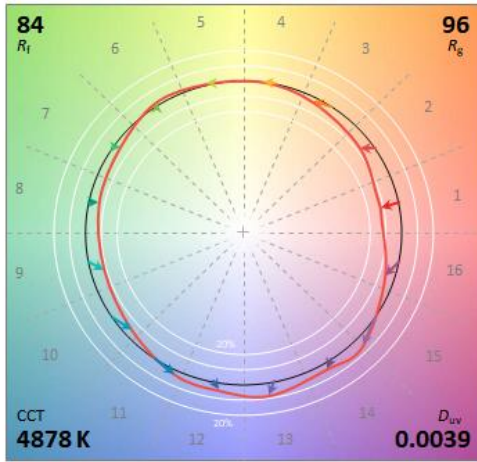
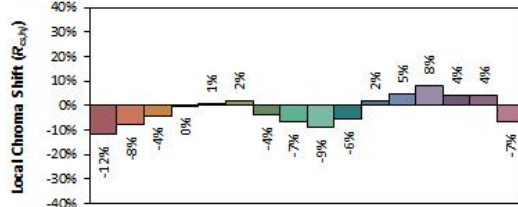
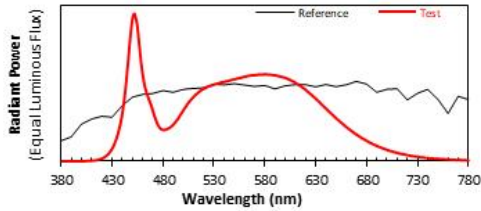
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0002	0.0266	535	0.5077	84.8712	690	0.1819	30.4046
385	0.0002	0.0332	540	0.5188	86.7237	695	0.1586	26.5075
390	0.0006	0.1024	545	0.5299	88.5758	700	0.1391	23.2570
395	0.0008	0.1262	550	0.5376	89.8594	705	0.1203	20.1037
400	0.0013	0.2104	555	0.5466	91.3737	710	0.1050	17.5571
405	0.0016	0.2653	560	0.5557	92.8902	715	0.0904	15.1132
410	0.0034	0.5651	565	0.5640	94.2844	720	0.0780	13.0320
415	0.0080	1.3367	570	0.5726	95.7079	725	0.0672	11.2298
420	0.0182	3.0412	575	0.5809	97.1074	730	0.0571	9.5403
425	0.0403	6.7367	580	0.5830	97.4524	735	0.0495	8.2778
430	0.0846	14.1447	585	0.5879	98.2767	740	0.0421	7.0366
435	0.1686	28.1837	590	0.5891	98.4699	745	0.0360	6.0207
440	0.3214	53.7255	595	0.5868	98.0864	750	0.0298	4.9785
445	0.6190	103.4658	600	0.5829	97.4400	755	0.0260	4.3503
450	0.9636	161.0752	605	0.5748	96.0859	760	0.0234	3.9067
455	0.9035	151.0273	610	0.5658	94.5733	765	0.0192	3.2042
460	0.5897	98.5757	615	0.5512	92.1422	770	0.0164	2.7331
465	0.4437	74.1625	620	0.5326	89.0334	775	0.0139	2.3183
470	0.3422	57.2053	625	0.5114	85.4781	780	0.0119	1.9828
475	0.2472	41.3199	630	0.4851	81.0922	785	0.0098	1.6411
480	0.2126	35.5449	635	0.4556	76.1527	790	0.0100	1.6786
485	0.2216	37.0353	640	0.4240	70.8742	795	0.0078	1.3047
490	0.2471	41.3061	645	0.3913	65.4147	800	0.0064	1.0665
495	0.2909	48.6348	650	0.3592	60.0419			
500	0.3445	57.5880	655	0.3240	54.1529			
505	0.3956	66.1362	660	0.2921	48.8345			
510	0.4364	72.9488	665	0.2614	43.7028			
515	0.4683	78.2880	670	0.2326	38.8873			
520	0.4914	82.1398	675	0.2065	34.5172			
525	0.5077	84.8712	680	0.1819	30.4046			
530	0.5188	86.7237	685	0.1586	26.5075			

TM30

ANSI/IES TM-30-18 Color Rendition Report



Notes:

This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.3496
 y 0.3631
 z' 0.2100
 v' 0.4908

CIE 13.3-1995 (CRI)	
R_a	83
R_g	11

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

Zonal Lumen Tabulation

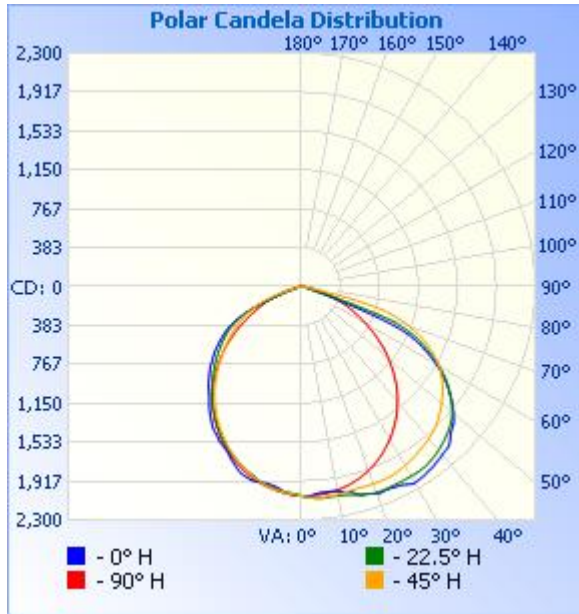
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	1,629.0	27%	27%
0-40	2,704.5	44.8%	44.8%
0-60	4,918.5	81.5%	81.6%
60-90	1,112.6	18.4%	18.4%
70-100	318.8	5.3%	5.3%
90-120	0	0%	0%
0-90	6,031.1	100%	100%
90-180	0	0%	0%
0-180	6,031.1	100%	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	195.1	3.2%	90-100	0	0%
10-20	564.0	9.4%	100-110	0	0%
20-30	869.9	14.4%	110-120	0	0%
30-40	1,075.5	17.8%	120-130	0	0%
40-50	1,148.7	19.0%	130-140	0	0%
50-60	1,065.3	17.7%	140-150	0	0%
60-70	793.9	13.2%	150-160	0	0%
70-80	278.6	4.6%	160-170	0	0%
80-90	40.2	0.7%	170-180	0	0%

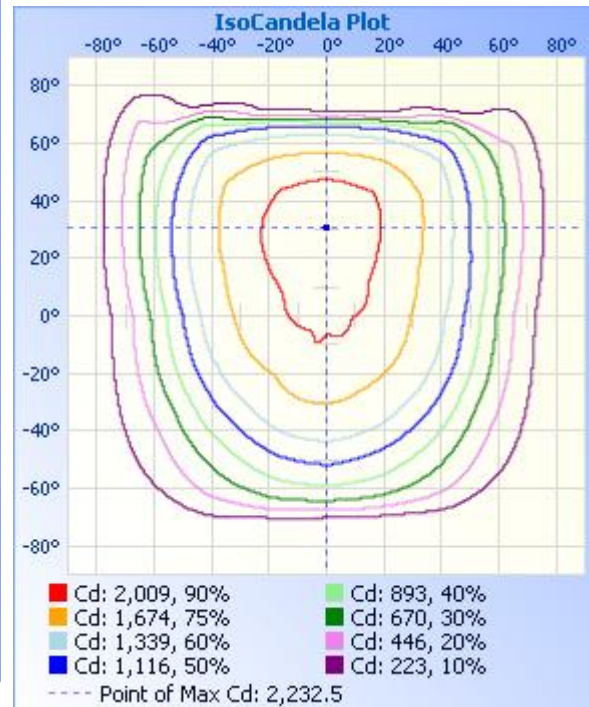
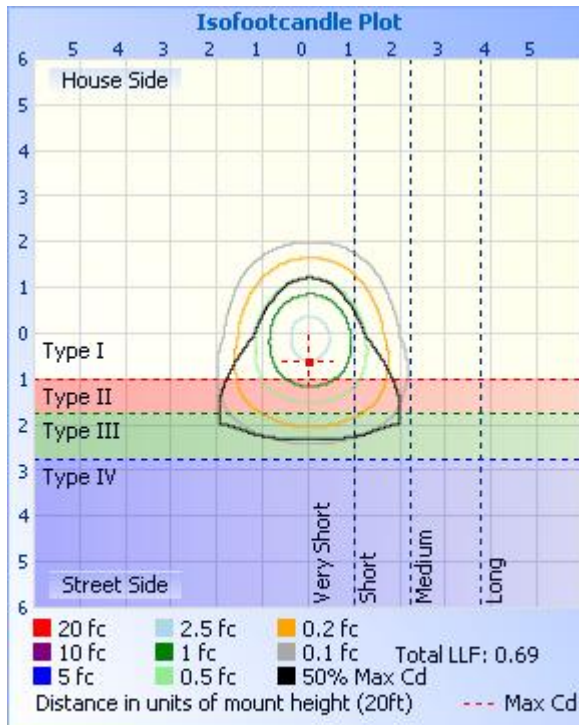
Photometric Data



Illuminance at a Distance

	Center Beam fc	Beam Width	
17.0ft	7.13 fc	55.8 ft	43.4 ft
34.0ft	1.78 fc	111.6 ft	86.7 ft
51.0ft	0.79 fc	167.5 ft	130.1 ft
68.0ft	0.45 fc	223.3 ft	173.5 ft
85.0ft	0.29 fc	279.1 ft	216.8 ft
102.0ft	0.20 fc	334.9 ft	260.2 ft

■ Vert. Spread: 117.3°
■ Horiz. Spread: 103.8°



Candela Table - Type C

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	360
0	2061	2061	2061	2061	2061	2061	2061	2061	2061	2061	2061	2061	2061	2061	2061	2061	2061
1	2064	2071	2067	2065	2062	2058	2054	2053	2057	2051	2055	2057	2058	2065	2068	2070	2064
2	2062	2077	2074	2068	2063	2055	2046	2047	2052	2044	2049	2052	2055	2068	2073	2075	2062
3	2057	2084	2079	2069	2062	2051	2041	2042	2049	2037	2043	2046	2049	2070	2077	2079	2057
4	2046	2090	2083	2070	2059	2047	2036	2039	2040	2031	2039	2040	2044	2071	2081	2082	2046
5	2040	2093	2085	2071	2058	2042	2027	2036	2026	2025	2033	2033	2039	2071	2083	2083	2040
6	2036	2094	2086	2070	2053	2035	2018	2036	2007	2019	2026	2027	2031	2069	2084	2082	2036
7	2039	2091	2085	2069	2052	2029	2011	2033	1992	2012	2019	2019	2025	2068	2081	2081	2039
8	2038	2091	2083	2069	2046	2022	2001	2027	1981	2004	2012	2010	2015	2063	2078	2079	2038
9	2040	2089	2082	2066	2041	2014	1991	2019	1975	1996	2002	2001	2006	2061	2074	2077	2040
10	2047	2090	2077	2061	2034	2007	1979	2011	1969	1983	1991	1991	1998	2057	2068	2075	2047
11	2057	2093	2074	2057	2028	1997	1965	2002	1971	1972	1977	1981	1987	2049	2063	2074	2057
12	2064	2098	2070	2050	2020	1987	1951	1990	1966	1960	1965	1971	1975	2044	2057	2076	2064
13	2073	2104	2067	2043	2013	1976	1938	1974	1974	1946	1951	1958	1964	2033	2049	2082	2073
14	2089	2113	2065	2034	2001	1963	1924	1959	1971	1927	1937	1944	1951	2023	2043	2088	2089
15	2117	2121	2064	2025	1993	1953	1909	1945	1967	1913	1921	1931	1938	2013	2038	2096	2117
16	2140	2133	2063	2016	1980	1937	1893	1930	1955	1896	1904	1918	1923	2000	2033	2104	2140
17	2136	2141	2064	2005	1968	1924	1877	1913	1946	1882	1886	1901	1908	1988	2029	2112	2136
18	2144	2147	2065	1994	1955	1909	1859	1898	1933	1865	1868	1885	1891	1974	2026	2120	2144
19	2156	2155	2066	1983	1942	1894	1842	1884	1914	1849	1851	1869	1873	1960	2022	2126	2156
20	2170	2159	2067	1971	1928	1875	1823	1872	1890	1831	1834	1851	1855	1945	2019	2130	2170
21	2176	2161	2068	1958	1913	1858	1802	1855	1865	1814	1814	1832	1836	1929	2016	2133	2176
22	2169	2162	2068	1947	1897	1840	1783	1839	1843	1796	1792	1813	1817	1909	2012	2135	2169
23	2169	2161	2069	1934	1878	1821	1758	1821	1814	1778	1771	1789	1798	1892	2006	2134	2169
24	2172	2159	2067	1922	1861	1800	1737	1803	1788	1760	1750	1768	1778	1876	2001	2131	2172
25	2177	2157	2065	1908	1842	1780	1717	1787	1769	1742	1727	1746	1756	1857	1996	2130	2177
26	2183	2157	2062	1894	1822	1759	1695	1766	1753	1719	1702	1724	1736	1839	1987	2128	2183
27	2191	2157	2056	1881	1801	1737	1673	1744	1737	1699	1680	1702	1714	1820	1978	2128	2191
28	2207	2157	2051	1866	1780	1714	1651	1722	1725	1677	1656	1676	1691	1804	1969	2128	2207

29	2227	2157	2043	1852	1758	1690	1630	1696	1701	1655	1633	1650	1669	1781	1960	2129	2227
30	2232	2157	2035	1838	1737	1666	1607	1674	1680	1631	1608	1626	1641	1762	1948	2135	2232
31	2228	2158	2028	1821	1714	1640	1584	1649	1663	1608	1583	1599	1618	1743	1937	2133	2228
32	2223	2157	2020	1806	1689	1613	1558	1626	1646	1582	1556	1573	1595	1723	1924	2134	2223
33	2217	2155	2013	1790	1663	1586	1534	1603	1620	1558	1530	1541	1570	1702	1910	2134	2217
34	2210	2152	2005	1774	1638	1558	1509	1580	1592	1533	1504	1513	1544	1680	1899	2133	2210
35	2201	2148	1996	1758	1613	1531	1485	1552	1565	1507	1477	1483	1514	1659	1887	2129	2201
36	2198	2141	1987	1741	1587	1502	1459	1527	1540	1482	1449	1453	1487	1639	1875	2123	2198
37	2188	2131	1978	1725	1557	1471	1430	1500	1510	1455	1419	1423	1458	1615	1865	2115	2188
38	2178	2121	1970	1709	1528	1442	1403	1474	1478	1430	1391	1389	1430	1594	1855	2104	2178
39	2170	2112	1961	1692	1499	1411	1375	1445	1444	1404	1362	1358	1400	1570	1844	2095	2170
40	2159	2101	1951	1674	1469	1381	1347	1418	1414	1378	1333	1326	1368	1548	1832	2085	2159
41	2151	2090	1941	1654	1439	1351	1320	1388	1391	1350	1302	1294	1336	1522	1821	2074	2151
42	2146	2076	1931	1634	1409	1315	1292	1358	1368	1321	1272	1262	1303	1498	1808	2062	2146
43	2133	2064	1917	1614	1376	1284	1261	1330	1345	1291	1239	1229	1270	1471	1796	2046	2133
44	2105	2050	1905	1592	1342	1252	1233	1299	1320	1263	1208	1194	1233	1447	1781	2034	2105
45	2074	2036	1890	1569	1308	1215	1203	1273	1291	1236	1177	1160	1199	1420	1765	2024	2074
46	2050	2019	1871	1547	1272	1181	1173	1245	1266	1209	1146	1125	1164	1393	1748	2004	2050
47	2033	2003	1854	1523	1238	1146	1139	1218	1241	1179	1110	1089	1129	1366	1732	1983	2033
48	2014	1984	1837	1501	1199	1110	1108	1189	1217	1152	1078	1053	1092	1340	1716	1961	2014
49	1988	1962	1819	1474	1163	1075	1078	1159	1190	1124	1046	1012	1052	1312	1697	1936	1988
50	1954	1937	1799	1450	1126	1037	1047	1131	1154	1094	1014	976	1014	1283	1679	1911	1954
51	1922	1908	1779	1422	1089	1001	1017	1104	1126	1065	982	939	975	1254	1661	1880	1922
52	1883	1879	1759	1395	1051	966	983	1076	1102	1038	952	902	936	1221	1642	1846	1883
53	1849	1846	1739	1367	1014	930	952	1043	1074	1011	922	862	896	1191	1623	1817	1849
54	1809	1808	1718	1339	972	894	922	1014	1043	984	892	825	853	1161	1603	1781	1809
55	1769	1774	1696	1307	933	854	892	985	1008	956	862	788	813	1131	1582	1745	1769
56	1728	1736	1670	1277	894	818	861	958	978	926	831	751	773	1100	1557	1709	1728
57	1687	1700	1646	1246	854	781	832	926	947	898	801	710	734	1069	1533	1667	1687
58	1637	1656	1620	1215	811	743	803	896	916	869	771	672	694	1035	1508	1626	1637
59	1590	1613	1592	1184	772	702	774	866	884	840	743	636	652	1004	1480	1583	1590

60	1538	1566	1562	1154	733	665	745	836	852	808	713	599	613	974	1450	1535	1538
61	1479	1517	1527	1120	695	630	713	804	815	771	681	564	576	943	1416	1484	1479
62	1419	1467	1493	1089	658	595	684	766	771	734	652	527	536	909	1383	1426	1419
63	1356	1409	1455	1057	616	558	655	730	717	693	622	495	501	879	1344	1371	1356
64	1294	1354	1417	1023	580	524	625	689	659	647	591	464	466	849	1306	1311	1294
65	1223	1299	1372	992	545	492	593	643	595	588	556	434	434	819	1262	1252	1223
66	1140	1239	1330	960	511	461	562	591	526	528	522	404	402	790	1218	1184	1140
67	1024	1170	1282	928	476	431	531	527	454	466	486	373	371	760	1169	1109	1024
68	816	1084	1232	897	439	400	500	466	351	401	448	346	339	728	1119	1014	816
69	577	974	1174	863	408	371	463	403	268	306	403	320	309	700	1066	868	577
70	372	801	1116	832	375	344	427	321	209	232	358	294	281	670	1002	630	372
71	238	545	1054	802	345	318	388	237	166	182	312	267	250	643	939	408	238
72	142	350	989	771	315	290	345	184	116	144	265	244	223	617	871	258	142
73	104	222	920	740	287	266	302	147	88	97	200	221	198	588	783	161	104
74	88	140	829	709	260	243	255	104	76	79	153	200	173	559	650	109	88
75	77	99	702	678	231	221	203	80	66	69	121	176	148	527	468	86	77
76	65	82	533	647	205	200	154	69	58	60	86	154	127	496	304	73	65
77	55	70	354	611	180	179	122	60	51	52	64	134	108	465	179	62	55
78	48	60	210	577	156	159	86	52	46	46	51	113	90	431	111	52	48
79	41	51	130	541	134	139	63	47	40	40	41	92	73	397	74	44	41
80	34	43	86	505	112	121	51	40	34	34	34	71	57	358	55	38	34
81	26	36	65	461	93	102	40	34	29	27	26	53	44	313	43	30	26
82	19	28	49	419	76	84	33	28	24	23	21	33	33	257	33	20	19
83	14	19	39	364	60	65	26	23	17	17	15	21	23	180	22	15	14
84	9	14	29	295	45	47	20	17	12	12	11	13	13	108	13	9	9
85	5	8	19	205	34	30	15	13	7	5	7	8	7	40	8	6	5
86	3	5	11	126	24	18	12	7	4	3	4	4	5	7	5	4	3
87	3	4	5	57	14	11	6	4	3	3	3	2	2	4	4	2	3
88	2	3	4	9	8	6	3	3	2	2	2	2	1	3	3	3	2
89	3	3	4	4	5	4	3	2	2	2	2	2	1	3	3	3	3
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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109	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
111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	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
116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
119	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
121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	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
126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
129	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
131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
134	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
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
139	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
141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	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
146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	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
151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154	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
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	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
161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	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
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	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
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	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
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	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

BUG Rating

Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	854.5	14.2	14.2
FM (30-60)	1939.6	32.2	32.2
FH (60-80)	723.4	12.0	12.0
FVH (80-90)	29.6	0.5	0.5
BL (0-30)	774.5	12.8	12.8
BM (30-60)	1350.6	22.4	22.4
BH (60-80)	349.0	5.8	5.8
BVH (80-90)	10.6	0.2	0.2
UL (90-100)	0.0	0.0	0.0
UH (100-180)	0.0	0.0	0.0
Total	6031.8	100.1	100.0
BUG Rating	B2-U0-G1		

3. Test Equipment

Equipment Name	Model No.	Serial No.	Calibration Date
Goniophotometric System	GPM-3000	DYHXF120001	2024-01-09
AC Power Source	CHP-500C	DYBWD010159	2024-01-08
Standard Lamp*	24V/150W	DYJYR040040	2024-01-17
Standard Lamp**	24V/100W	DYBWR030014	2024-01-17
Digital Power Meter	WT500	DYDWQ20010	2024-01-08
Integral Sphere (2M)	2M	DYJCE120067	2024-01-09
Digital Power Meter	WT500	DYDWQ200006	2024-01-08
Optical Color and Electrical Measurement System	CMS-3000S	DYJCE120067	2024-01-09

* Reference standard lamp (150W incandescent directional lamp) calibrated by Guangzhou Institute of Measurement and Testing Technology.

** Reference standard lamp (100W incandescent omni-directional lamp) calibrated by Guangzhou Institute of Measurement and Testing Technology.

Expand Uncertainty:

Photometric Measurement (Sphere): 2.02%, k=2

Chromaticity Measurement(Sphere):24.8K, k=2

Photometric Measurement(Goniophotometer):2.88%, k=2

***** END OF REPORT *****