

Photometric Test Report

Relevant Standards

- ☒ IES LM-79-2008
- ☒ ANSI C82.77:2017

Prepared For

RAB Lighting Inc.

Room 6A33, No.1388, Wuzhong road, Shanghai, China

Xiao Xiang, 15921313292, Gary.Xiao@rabweb.com

Prepared By

Deliver Co., Ltd.

Block 11, 78 Keling Road, SSTP, Suzhou, China

0512-66801950, kevin.jia@szdeliver.com

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Test Date

2021/11/2

Issue Date

2021/11/4

Prepared By



Wangzun Zhu

Approved By



Kevin Jia

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1.0 Test Summary

DLC Technical Requirements v5.1

Outdoor - Pole/Arm-Mounted Area and Roadway Luminaires				
Requirement Category	Test Method	Requirements		Test value
Luminaire Output (lm) (Goniophotometer - Section 4.2)	IES LM-79-2008	1000		21070
Minimum Luminaire Efficacy (lm/W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Standard 105	Premium 120	145.6
Power (Input Wattage) (W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		144.7
Total Harmonic Distortion (A%) (THD & PF - section 4.3)	ANSI C82.77:2014	20.00%		6.13%
Power Factor (THD & PF - section 4.3)	ANSI C82.77:2014	0.9		0.958
Allowable CCTs* (K) (Integrating Sphere - Section 4.1)	IES LM-79-2008	7 step	5029±355	5011
		4 step	5029±220	
Minimum CRI (Integrating Sphere - Section 4.1)	IES LM-79-2008 CIE 13.3-1995	≥70		85
Minimum R9 (Integrating Sphere - Section 4.1)	IES LM-79-2008 CIE 13.3-1995	≥-40		15
Minimum Rf (Integrating Sphere - Section 4.1)	ANSI/IES TM-30-18	≥70		84
Minimum Rg (Integrating Sphere - Section 4.1)	ANSI/IES TM-30-18	≥89		93
IES Rcs,h1 (Integrating Sphere - Section 4.1)	ANSI/IES TM-30-18	-18%≤IES Rcs,h1≤+23%		-12%
Zonal Lumen Requirement (0°-90°) (Goniophotometer - Section 4.2)	IES LM-79-2008	100%		100.00%
Zonal Lumen Requirement (80°-90°) (Goniophotometer - Section 4.2)	IES LM-79-2008	≤10%		0.65%
Input Voltage (V) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		480
Input Current (A) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		0.315

2.0 Test List

Test Item	Test	Test Date	Model Number	Sample No.
1	Integrating Sphere Test	2021/11/2	ALEDM5T/480	U1
2	Goniophotometer Test	2021/11/2	ALEDM5T/480	U1
3	THD and PF Test	2021/11/2	ALEDM5T/480	U1

Remark(If any)

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- 2、 The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products. This report does not imply that the product(s) has met the criteria for certification.

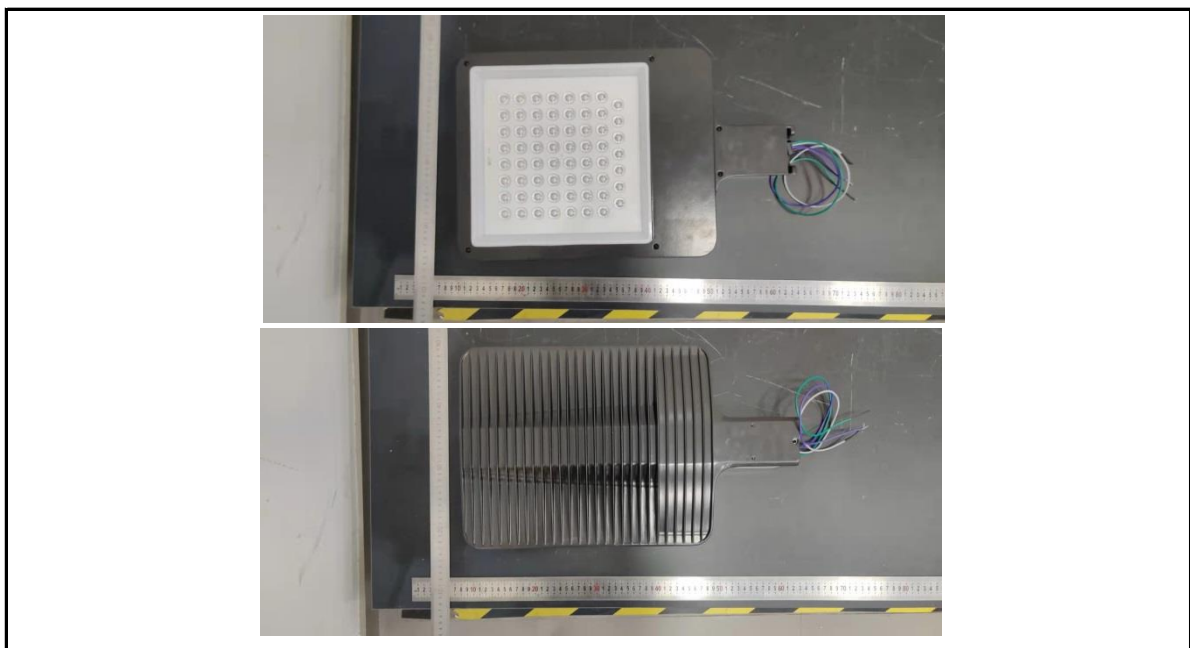
3.0 Production Description

Luminaire Description: ALEDM5T/480

Description: 150W/18,000 lm @ 5000K

Electrical Specification: 480V,50/60HZ

Photos of Luminaire Characteristics



4.0 LM-79 Measurement and Test Results

4.1 Integrating Sphere Test

Model No.	ALEDM5T/480	Sample ID.	U1
Operate time (Min.)	90	Stabilization time (Min.)	45
Temperature (°C)	25.3	Humidity (%RH)	56.0

Test Method

The samples were tested according to the IES LM-79-2008.

Photometric 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 voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ± 0.2 percent under load.

The sample was measured using 4π geometry and operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm.

Test Result

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
479.94	60	0.314	144.6	0.958

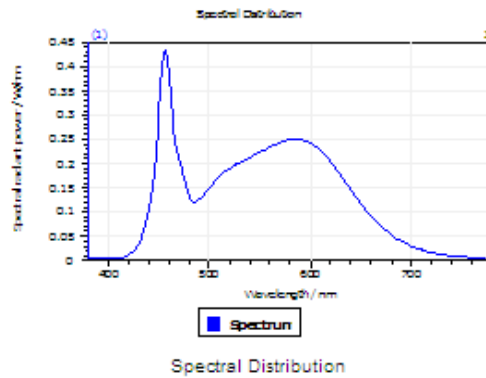
Test Result

CCT (K)	CRI	R9	Duv
5011	85	15	0.00052

Rf	Rg	IES Rcs,h1
84	93	-12%

4.1 Integrating Sphere Test

Results



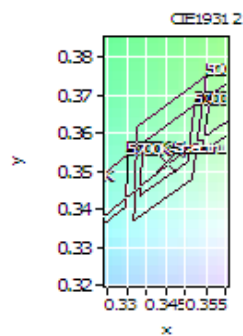
Spectral values

DominantWavelength 572.08 nm
Purity 0.093
PeakWavelength 456.45 nm
Radiant Power 49.11 W
Width50%:

Color Coordinates

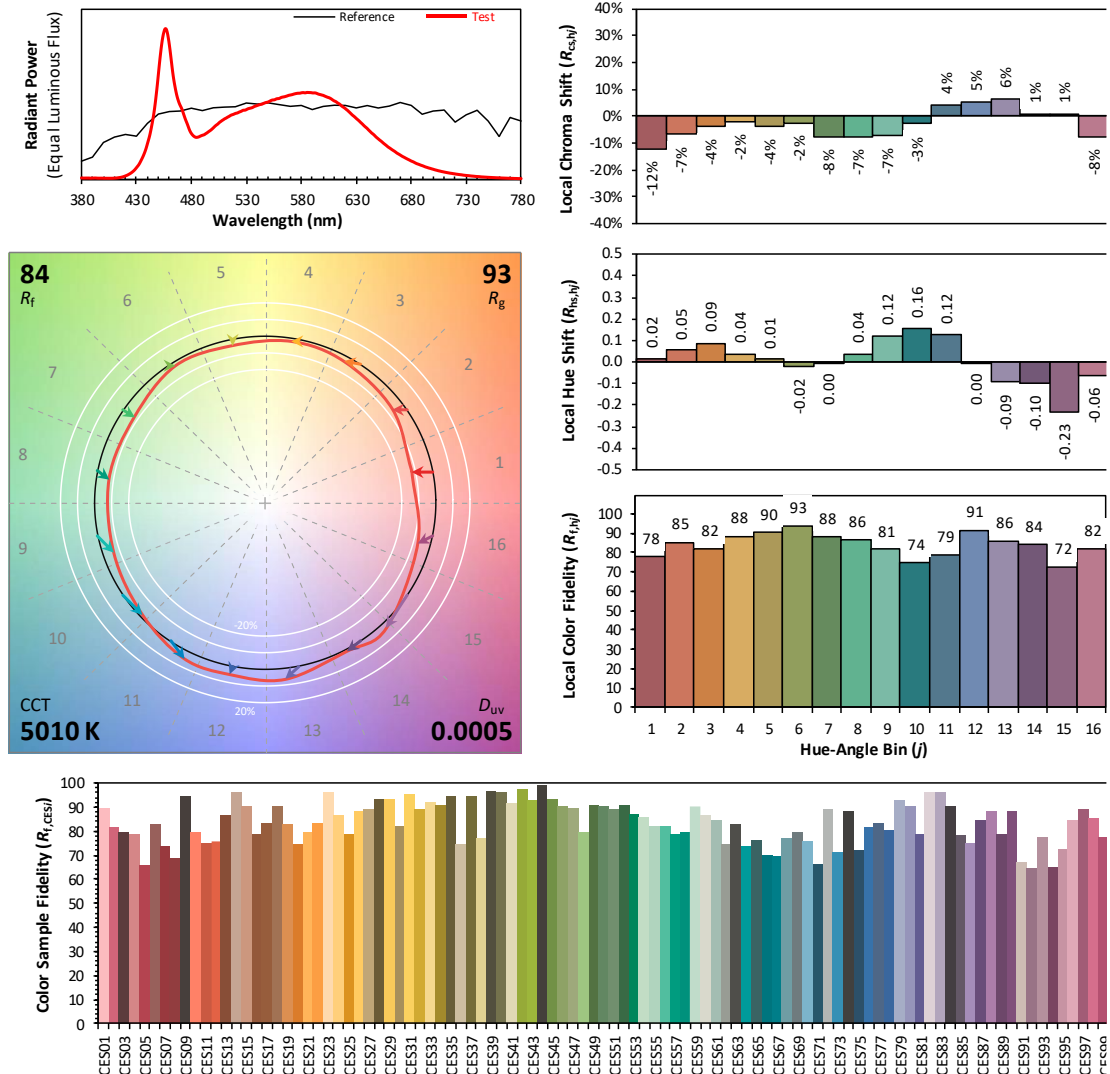
Correlated Color Temperat 5011 K
x: 0.3449 u: 0.2109 u': 0.2109
y: 0.3525 v: 0.3234 v': 0.4851

CRI01	83.9	CRI09	14.8
CRI02	93.4	CRI10	82.7
CRI03	94.8	CRI11	80.2
CRI04	81.1	CRI12	63.4
CRI05	83.8	CRI13	87.2
CRI06	88.4	CRI14	97.9
CRI07	85.0	CRI15	79.1
CRI08	67.0	CRI16	74.6
ResultsCRI	84.7		



PlanckDistance 5.2E-004

4.1 Integrating Sphere Test



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

x 0.3449
 y 0.3525
 u' 0.2109
 v' 0.4851

CIE 13.3-1995
 (CRI)

R_a 85

R_g 15

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	ALEDM5T/480	Sample ID.	U1
Opreate time (Min.)	90	Stabilization time (Min.)	45
Temperature (°C)	25.3	Humidity (%RH)	54.0

Test Method

The samples were tested according to the IES LM-79-2008.

Photometric paramters were measured using a type C goniophotometer and software.

The ambient temperature shall be maintained at 25° C ± 1° C, measured at a point not more than 1 m from the sample and at the same height as the sample.

The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ±0.2 percent under load.

The samples were operated at rated voltage and was stabilized before measurement. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 0.5° vertical intervals and 10° horizontal intervals.

Test Conditions

Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
WORST CASE	480.08	60	0.315	144.7	0.956

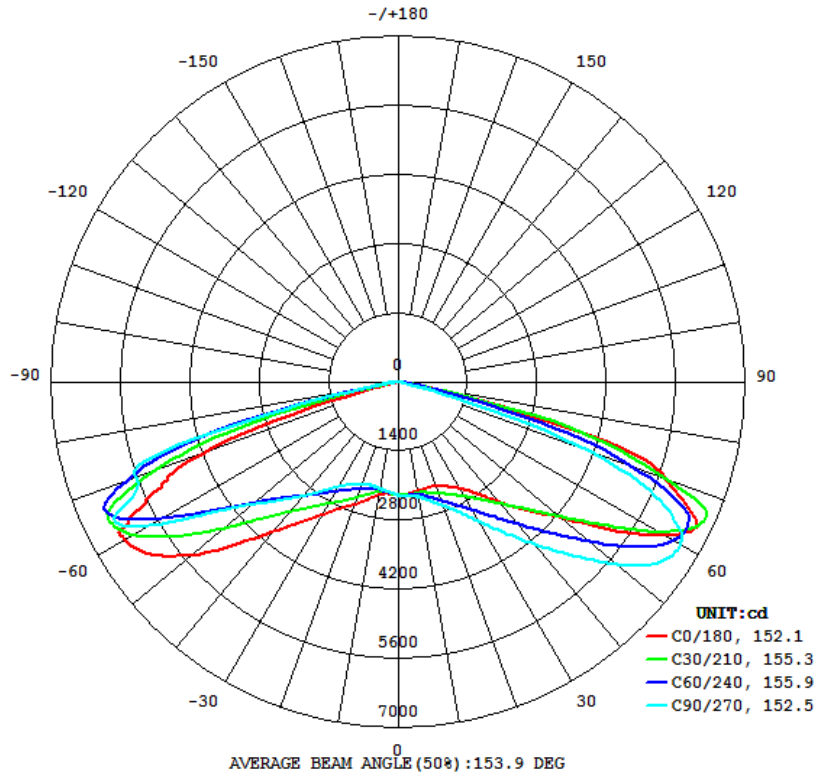
Test Result

Flux (lm)	Field Angle(10%)		Beam Angle(50%)		Luminous Efficacy (lm/W)
	C0-180	C90-270	C0-180	C90-270	
21070	158.3	159.4	152.1	152.5	145.6

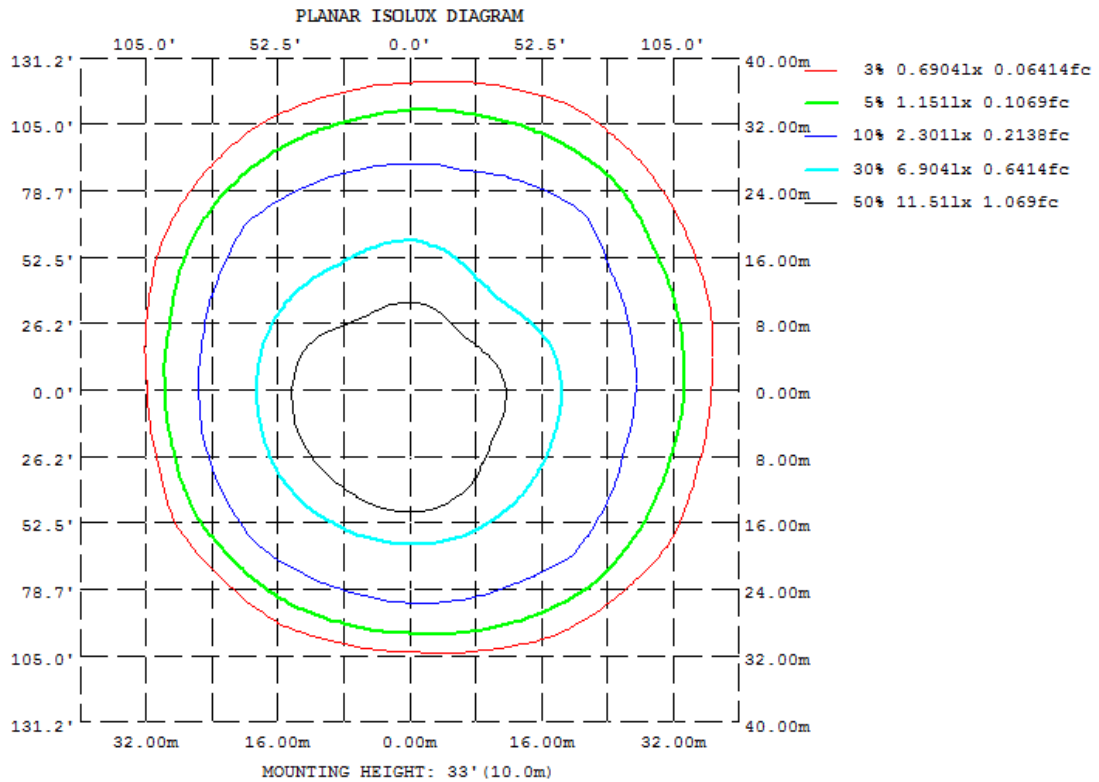
Zonal Lumen Requirement (0°-90°)	Zonal Lumen Requirement (80°-90°)	BUG rating
100.00%	0.65%	B4-U0-G2

4.2 Goniophotometer Test

Light Distrubtion Curve



Isolux Plot



4.2 Goniophotometer Test

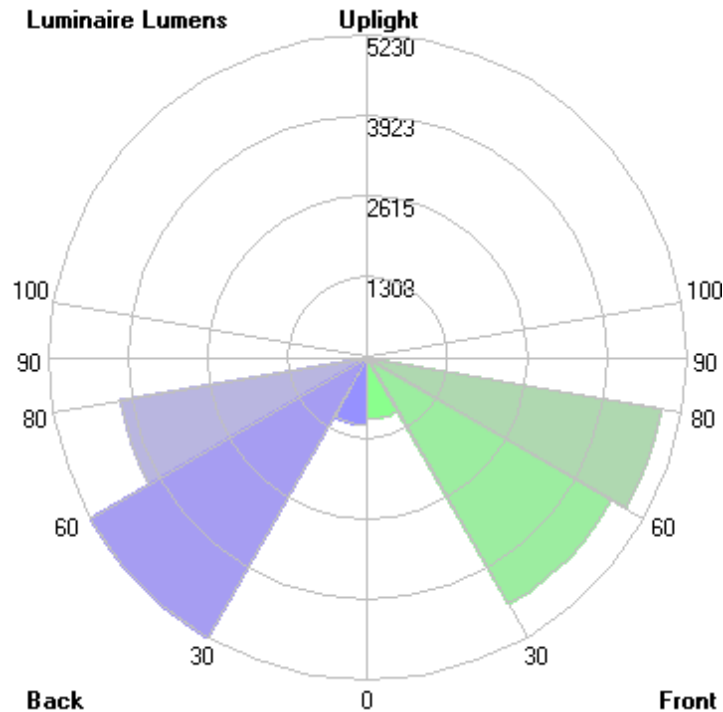
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315
10	2243	2300	2365	2380	2325	2239	2200	2198
20	2254	2496	2676	2744	2639	2403	2205	2212
30	2496	2817	3259	3232	3099	2695	2455	2398
40	3183	3397	4290	3977	3953	3127	3013	2742
50	4262	4516	5751	5279	5455	4026	3869	3403
60	6226	6251	6570	6636	6371	5814	5830	4886
70	5737	6228	4089	4458	4189	6302	5632	7411
80	419.4	512.4	107.0	151.9	126.6	512.2	479.6	1460
90	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0
DEG	LUMINOUS INTENSITY:cd							

	Zonal (lm)		Total (lm)	Percent
0-10	217.70	0 - 10	217.70	1.03%
10-20	669.27	0 - 20	886.97	4.21%
20-30	1212.53	0 - 30	2099.50	9.96%
30-40	1960.83	0 - 40	4060.33	19.27%
40-50	3103.77	0 - 50	7164.10	34.00%
50-60	4786.59	0 - 60	11950.69	56.72%
60-70	6026.08	0 - 70	17976.77	85.32%
70-80	2957.61	0 - 80	20934.38	99.35%
80-90	136.00	0 - 90	21070.38	100.00%
90-100	0.00	0 - 100	21070.38	100.00%
100-110	0.00	0 - 110	21070.38	100.00%
110-120	0.00	0 - 120	21070.38	100.00%
120-130	0.00	0 - 130	21070.38	100.00%
130-140	0.00	0 - 140	21070.38	100.00%
140-150	0.00	0 - 150	21070.38	100.00%
150-160	0.00	0 - 160	21070.38	100.00%
160-170	0.00	0 - 170	21070.38	100.00%
170-180	0.00	0 - 180	21070.38	100.00%

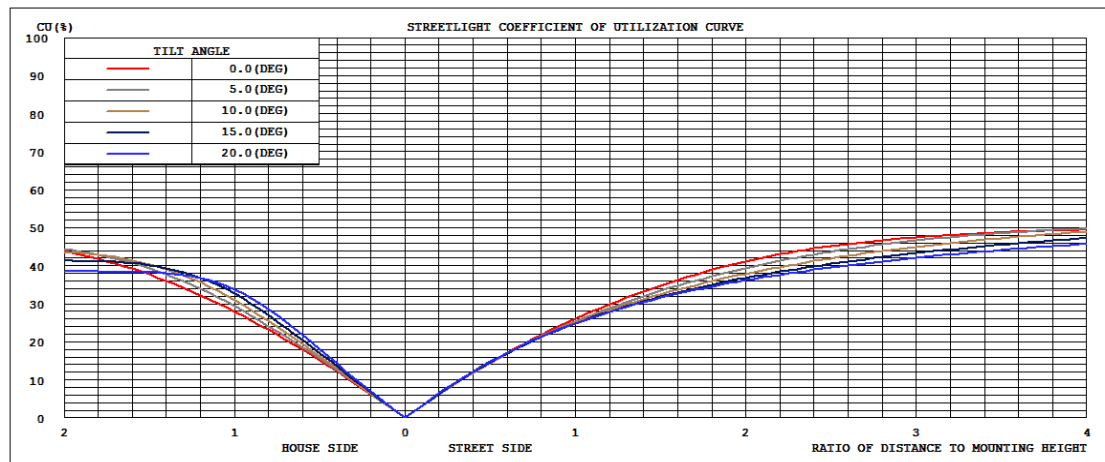
4.2 Goniophotometer Test

LCS/BUG

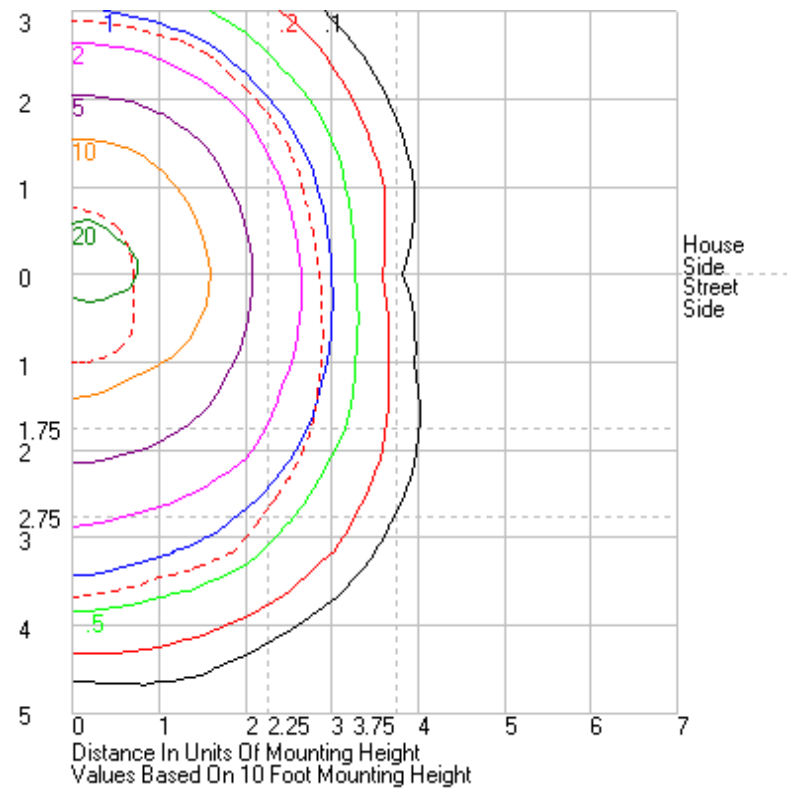


	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1005.7	N.A.	4.8
FM - Front-Medium (30-60)	4620.9	N.A.	21.9
FH - Front-High (60-80)	4874.2	N.A.	23.1
FVH - Front-Very High (80-90)	88.4	N.A.	0.4
BL - Back-Low (0-30)	1093.8	N.A.	5.2
BM - Back-Medium (30-60)	5230.3	N.A.	24.8
BH - Back-High (60-80)	4109.4	N.A.	19.5
BVH - Back-Very High (80-90)	47.6	N.A.	0.2
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	21070.3	N.A.	100.0
BUG Rating	B4-U0-G2		

Coefficients of Utilization



Isolines



4.2 Goniophotometer Test

	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360
0	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22	2301.22
1	2297.81	2300.31	2303.39	2306.06	2307.64	2308.13	2308.53	2308.28	2307.33	2305.57	2303.15	2299.79	2301.17	2297.79	2295.08	2292.68	2290.98	2289.97	2288.9	2288.08	2288.14	2288.72	2290.44	2291.53	2297.81
2	2290.89	2296.56	2301.65	2307.91	2313.26	2317.07	2318.14	2317.73	2315.72	2311.65	2307.89	2301.62	2300.45	2294.6	2289.15	2283.79	2280.23	2277.92	2276.79	2276.11	2275.56	2276.79	2279.72	2283.1	2290.89
3	2284.4	2292.86	2301.39	2309.07	2314.73	2319.02	2321.9	2323.63	2323.83	2318.17	2309.28	2299.63	2295.06	2285.62	2278.28	2274.41	2270.47	2267.03	2265.5	2263.92	2262.27	2262.99	2267.89	2273.31	2284.4
4	2281.67	2292.38	2302.72	2307.55	2313.37	2318.12	2323.28	2326.16	2327.07	2321.25	2310.86	2297.58	2289.59	2276.75	2268.19	2262.8	2262.52	2257.57	2255.85	2253.39	2250.4	2251.64	2258.96	2268.8	2281.67
5	2275.55	2289.92	2302.53	2306.82	2310.46	2314.73	2322.41	2327.13	2328.47	2323.71	2314.18	2298.01	2285.34	2269.63	2259.55	2254.27	2252.81	2249.48	2247.25	2244.19	2241.47	2244.15	2251.82	2260.41	2275.55
6	2268.59	2285.45	2299.46	2305.29	2307.12	2312.07	2322.6	2329.16	2331.6	2327.3	2318.91	2301.95	2284.75	2265.23	2252.77	2245.39	2245.64	2243.01	2238.79	2234.77	2232.52	2236.24	2240.57	2249.45	2268.59
7	2262.39	2282.51	2294.56	2302.35	2305.24	2312.22	2327.02	2335.41	2337.83	2334.11	2327.96	2309.59	2287.58	2264.4	2249.7	2239.93	2239.26	2235.43	2229.49	2224.11	2224.87	2226.98	2230.44	2241.04	2262.39
8	2254.62	2278.66	2292.42	2299.59	2306.57	2318.11	2336.29	2347.1	2348.76	2345.19	2339.7	2321.89	2294.85	2268.01	2249.09	2237.74	2231.91	2227.16	2219.38	2212.02	2215.48	2217.76	2221.19	2231.15	2254.62
9	2247.64	2273.73	2289.26	2297.8	2313.05	2328.16	2349.98	2363.71	2363.96	2359.6	2355.74	2339.39	2307.08	2276.14	2252.54	2237.54	2224.84	2219.71	2209.28	2199.86	2203.61	2207.68	2210.76	2220.14	2247.64
10	2243.42	2272.29	2286.32	2300.49	2323.18	2341.57	2365.45	2382.88	2383.65	2379.68	2376.43	2359.71	2324.9	2288.93	2260.17	2239.35	2220.13	2213.81	2199.78	2188.74	2192.1	2198.2	2201.61	2210.56	2243.42
11	2240.46	2273.86	2286.05	2308.55	2335.29	2357.91	2385.69	2405.94	2408.11	2405.92	2401.32	2384.26	2347.18	2306.7	2272.35	2243.55	2218.57	2209.98	2192.36	2178.21	2182.21	2188.4	2194.5	2202.92	2240.46
12	2238.03	2276.93	2290.52	2319.33	2350.2	2379.79	2410.28	2432.08	2434.43	2434.6	2429.79	2411.96	2373.64	2329.06	2288.82	2250.78	2220.51	2209.8	2186.51	2169.77	2173.83	2181.06	2189.39	2197.39	2238.03
13	2233.75	2279.94	2299.76	2333.21	2369.51	2408.02	2439.18	2463.36	2465.86	2468.48	2462.71	2441.64	2401.98	2354.73	2308.14	2260.5	2226.67	2212.07	2183.48	2164.57	2167.22	2176	2187.16	2192.21	2233.75
14	2228.11	2281.08	2312.55	2350.41	2393.63	2434.62	2469.04	2496.08	2501.76	2504.81	2497.57	2472.46	2433.48	2382.33	2330.82	2274.92	2236.66	2214.79	2179.48	2161.16	2164.65	2173.2	2186.05	2185.36	2228.11
15	2224.05	2283.05	2326.13	2371.02	2417.78	2464.72	2499.71	2527.18	2536.72	2541.41	2533.49	2504.48	2465.54	2411.96	2353.52	2293.29	2248.12	2217.06	2176.85	2157.59	2166.47	2174.82	2185.36	2179.69	2224.05
16	2222.64	2287.35	2342.06	2397.36	2444.04	2496.11	2533.62	2561.18	2574.33	2583.24	2570.71	2538.57	2500.08	2442.79	2377.86	2313.45	2259.88	2221.52	2179.89	2158.42	2168.06	2179.39	2184.95	2177.27	2222.64
17	2225.07	2293.36	2357.99	2422.8	2470.08	2527.11	2567	2595.09	2611.08	2622.54	2608.89	2573.1	2533.57	2473.75	2403.75	2336.52	2272.16	2228.55	2185.21	2164.12	2170.96	2187.43	2185.9	2178.4	2225.07
18	2231.32	2302.34	2375.44	2448.54	2498.56	2562.02	2603.47	2631.95	2649.89	2662.53	2650.08	2609.86	2568.54	2505.93	2429.96	2359.68	2287.24	2234.99	2189.93	2171.66	2177.96	2197.16	2187.92	2183.17	2231.32
19	2240.7	2312.16	2392.21	2473.31	2529.78	2594.46	2640.93	2670.01	2691.51	2703.03	2691.4	2646.98	2603.02	2538.28	2458.1	2381.18	2302.78	2241.83	2196.21	2178.03	2177.55	2205.61	2191.16	2189.91	2240.7
20	2253.54	2324.82	2409.53	2495.73	2560.19	2627.38	2675.55	2707.23	2733.34	2743.66	2735.72	2686.11	2638.63	2571.11	2486.62	2402.81	2317.75	2250.28	2205.18	2186.08	2198.44	2212.37	2197.25	2198.95	2253.54
21	2268.54	2339.79	2429.59	2521.55	2595.27	2660.73	2714.57	2749.41	2781.1	2790.21	2782.9	2727.09	2674.02	2604.06	2518.3	2425.61	2333.04	2261.43	2218.35	2197.16	2209.46	2221.23	2204.93	2210.19	2268.54
22	2285.97	2356.22	2448.94	2545.24	2628.46	2693.67	2755.64	2791.06	2827.42	2833.7	2828.91	2767.59	2709.98	2638.13	2551.98	2451.41	2350.31	2275.45	2234.53	2211.38	2222.16	2233.12	2216.03	2223.38	2285.97
23	2303.37	2376	2473.83	2571.96	2664.18	2735.52	2802.68	2838.96	2873.88	2880.82	2878.57	2812.26	2747.7	2671.82	2587.97	2477.52	2371.33	2292.93	2253.6	2229.07	2239.61	2247.54	2231.35	2238.73	2303.37
24	2321.35	2396.66	2500.93	2601.59	2704.31	2780.08	2854.97	2891.34	2924.6	2930.17	2925.26	2856.1	2785.24	2705.69	2624.67	2504.03	2393.18	2314	2274.29	2251.36	2259.5	2262.32	2251.41	2254.15	2321.35
25	2345.39	2420.85	2526.92	2630.35	2744.54	2827.69	2909.23	2943.03	2973.48	2977.97	2973.21	2901.62	2827.21	2741.79	2659.34	2532.06	2417.26	2334.13	2293.95	2273.77	2281.91	2276.94	2271.56	2272.8	2345.39
26	2370.32	2451.6	2554.6	2663.07	2791.76	2885.09	2972.28	3003.33	3028.88	3030.54	3020.89	2951.71	2872.73	2780.63	2694.89	2562.13	2443.85	2355.12	2317.83	2296.79	2309.55	2294.25	2292.56	2295.52	2370.32
27	2395.87	2483.15	2581.6	2696.44	2840.34	2941.7	3037.89	3064.85	3084.17	3079.13	3065.92	3004.88	2922.62	2821.76	2729.33	2594.07	2470.86	2381.6	2346.35	2322.5	2339.96	2316.39	2313.78	2319.17	2395.87
28	2424.89	2517.47	2615.11	2733.28	2889.57	3007.02	3107.19	3130.59	3141.15	3128.53	3114.85	3061.9	2977.42	2867.33	2765.71	2627.81	2497.94	2411.54	2378.73	2353.59	2368.1	2341.83	2340.28	2344.39	2424.89
29	2457.03	2552.72	2651.69	2775.3	2944.5	3076.74	3181.92	3203.92	3204.02	3180.77	3166.19	3123.16	3036.83	2917.31	2805.83	2660.95	2529.78	2444.14	2415	2389.04	2395.51	2369.54	2370.02	2372.21	2457.03
30	2496.28	2593.07	2687.61	2817.46	2998.17	3146.01	3258.77	3276.9	3265.44	3231.83	3220.76	3186.82	3098.71	2971.84	2847.72	2695.01	2563.66	2480.66	2454.65	2426.97	2425.15	2398.17	2402.67	2403.56	2496.28
31	2541.45	2638.43	2729.1	2861.82	3058.26	3227.21	3344.3	3358.94	3335.34	3287.13	3281.35	3257.84	3163.73	3031.07	2889.96	2730.2	2599.34	2520.88	2497.76	2468.8	2457.3	2427.4	2433.91	2438.89	2541.45
32	2589.05	2687.86	2770.4	2904.79	3120.72	3306.82	3431.43	3443.49	3406.75	3344.39	3343.16	3328.63	3233.77	3096.12	2936.22	2762.3	2637.54	2562.59	2542.84	2511.59	2490.27	2457.51	2465.2	2478.81	2589.05
33	2640.89	2744.27	2815.95	2953.02	3185.49	3392.27	3521.11	3531.98	3479.71	3404.76	3409.04	3406.31	3308.08	3165.11	2984.93	2796.35	2676.66	2609.54	2592.99	2557.02	2523.59	2485.44	2498.31	2520.68	2640.89
34	2697.35	2805.48	2863.23	3008.22	3257.3	3488.31	3619.37	3629.33	3559.1	3473.49	3478.35	3486.66	3385.25	3237.22	3037.63	2833.92	2720.15	2658.64	2645.32	2607.08	2559.45	2514.72	2533.62	2564.24	2697.35
35	2760.67	2867.68	2912.02	3063.07	3330.75	3577.15	3717.36	3725.12	3637.49	3540.87	3550.31	3570.04	3465.76	3315.31	3094.41	2847.27	2765.36	2710.61	2700.89	2657.76	2598.9	2545.11	2572.27	2611.77	2760.67
36	2832.82	2937.6	2967.33	3121.58	3409.18	3683.14	3822.88	3827.81	3721.29	3617.85	3629.34	3660	3553.12	3395.51	3155.04	2915.47	2812.52	2767.38	2759.38	2713.74	2640.09	2580.02	2614.07	2668.13	2832.82
37	2913.39	3007.19	3026.14	3185.11	3493.92	3789.1	3935.85	3939.45	3811.76	3699.88	3710.16	3751.54	3642.71	3482.42	3219.7	2962.36	2860.89	2825.7	2819.77	2772.28	2680.89	2616.63	2661.17	2736.95	2913.39
38	3000.68	3085.45	3088.64	3249.01	3578.49	3895.63	4045.06	4046.9	3898.82	3785.76	3799.24	3852.44	3739.8												

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161	0	0	0	0	0	0	0	0	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	0	0	0	0	0

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	ALEDM5T/480	Sample ID.	U1
Temperature (°C)	25.3	Humidity (%RH)	56.0

Test Method

The samples were tested according to the ANSI C82.77:2002.

The total harmonic distortion shall be measured to the 40th order.

The ambient temperature condition was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. The sample measurements were made using a digital power meter and power supply. The sample was operated at rated voltage and was stabilized before measurement. The total harmonic distortion were calculated.

Test Results

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD
479.94	60	0.314	144.6	0.958	6.13%

5.0 Equipment Information

Test Equipment			
Equipment ID	Equipment Name	Last Calibration Date	Calibration Due Date
DLF107	Integrating Sphere System	2020/12/26	2021/12/25
DLF108	Auxiliary Lamp	2020/12/26	2021/12/25
DLF122	Measurement Standard Lamp Standard Lamp Type: 220 V, 0.4720 A, Tungsten, Omni-derectional	2020/12/26	2021/12/25
DLF116	AC Power Source	2020/12/26	2021/12/25
DLF113	Power Meter	2020/12/26	2021/12/25
DLF112	Temperature Recorder	2020/12/26	2021/12/25
DLF114	Temperature & Humidity Datalogger	2020/12/26	2021/12/25
DLF101	Goniophotometer	2020/12/26	2021/12/25
DLF125	Standard Lamp Standard Lamp Type: 76.58 V, 6.7875 A, Tungsten, Omni-derectional	2020/12/26	2021/12/25
DLF104	AC Power Source	2020/12/26	2021/12/25
DLF507	DC Power Source	2020/12/26	2021/12/25
DLF102	Power Meter	2020/12/26	2021/12/25
DLF111	Temperature & Humidity Datalogger	2020/12/26	2021/12/25
DLF119	Power Meter	2020/12/26	2021/12/25
DLF031	Temperature data logger	2020/12/26	2021/12/25
DLF022	Digital power meter	2020/12/26	2021/12/25
DLF003	Temperature & Humidity Datalogger	2020/12/26	2021/12/25

***** End of Test Report*****