

Photometric Test Report

Relevant Standards

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

Prepared For

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Test Date

2022/1/12

Issue Date

2022/1/13

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		28390
Minimum Luminaire Efficacy (lm/W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Standard 105	Premium 120	166.3
Power (Input Wattage) (W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		170.7
Total Harmonic Distortion (A%) (THD & PF - section 4.3)	ANSI C82.77:2014	20.00%		11.70%
Power Factor (THD & PF - section 4.3)	ANSI C82.77:2014	0.9		0.926
Allowable CCTs* (K) (Integrating Sphere - Section 4.1)	IES LM-79-2008	7 step	5029±355	5000
		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		83
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%		0.52%
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		0.386

2.0 Test List

Test Item	Test	Test Date	Model Number	Sample No.
1	Integrating Sphere Test	2022/1/12	ALEDL5T/480	G1
2	Goniophotometer Test	2022/1/12	ALEDL5T/480	G1
3	THD and PF Test	2022/1/12	ALEDL5T/480	G1

Remark(If any)

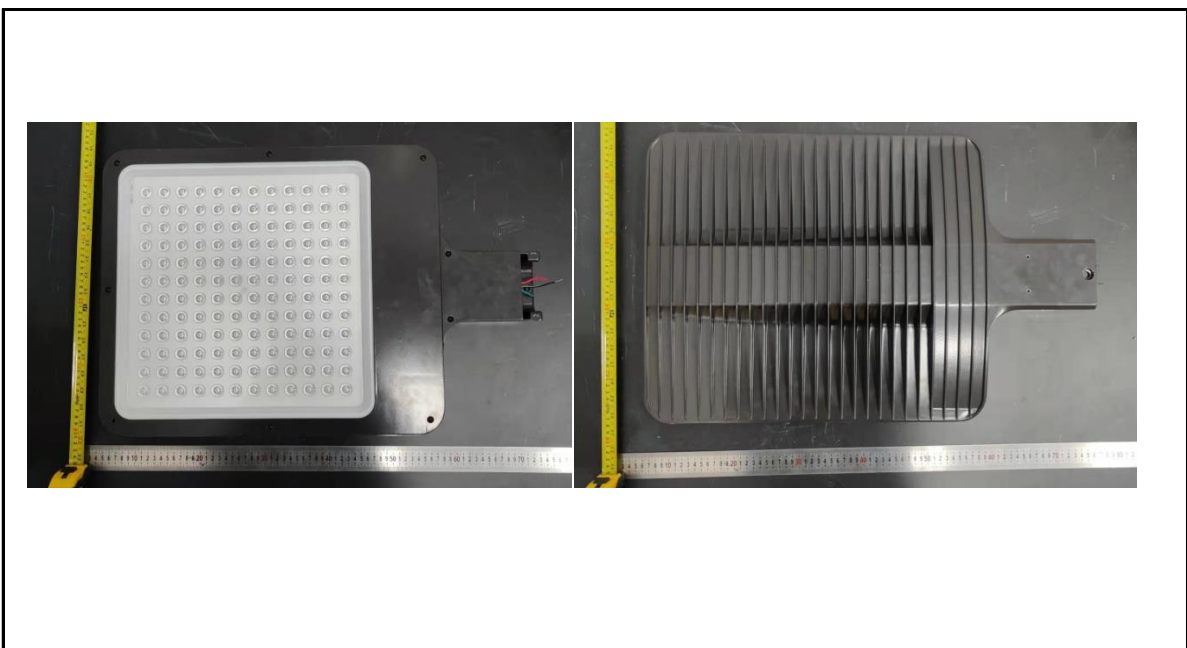
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3.0 Production Description

Luminaire Description: 170W/24,000 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.	ALEDL5T/480	Sample ID.	G1
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
480.00	60	0.385	171.3	0.926

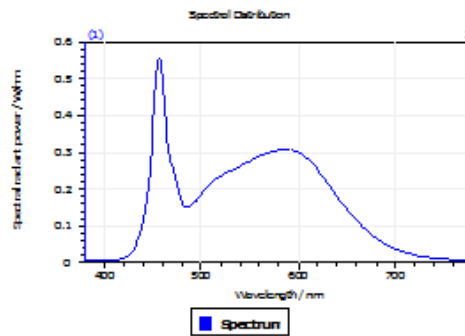
Test Result

CCT (K)	CRI	R9	Duv
5000	85	15	0.00092

Rf	Rg	IES Rcs,h1
83	93	-12%

4.1 Integrating Sphere Test

Results



Spectral values

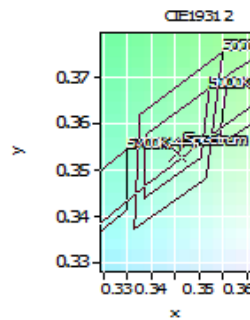
DominantWavelength	571.81 nm
Purity	0.097
PeakWavelength	456.68 nm
Radiant Power	60.61 W
Width50%	20.54 nm

Color Coordinates

Correlated Color Temporal 5000 K

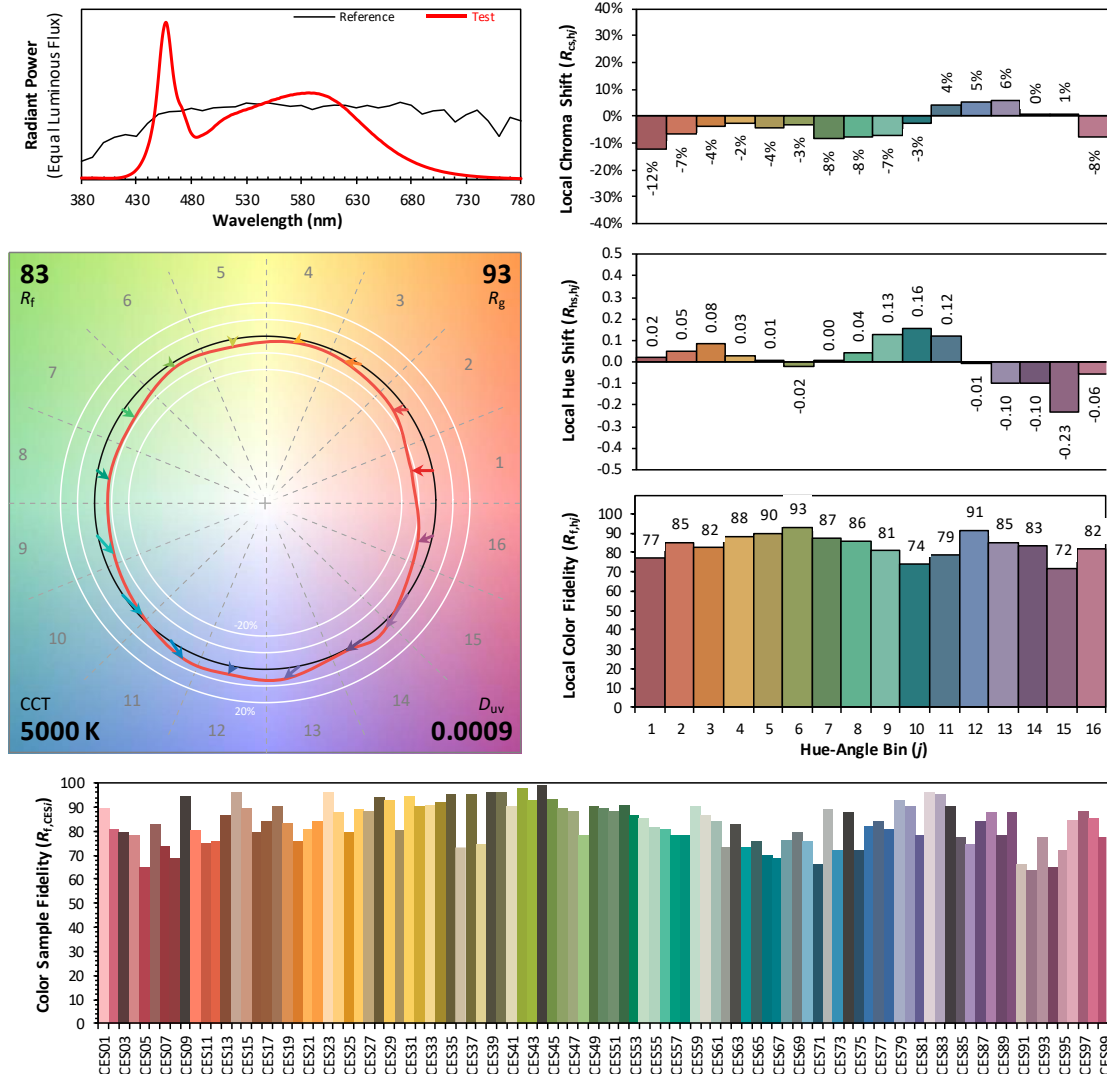
x: 0.3453 u: 0.2108 u': 0.2108
y: 0.3536 v: 0.3238 v': 0.4857

ResultsCRICRI01	84.1	ResultsCRICRI09	14.8
ResultsCRICRI02	93.7	ResultsCRICRI10	83.4
ResultsCRICRI03	94.8	ResultsCRICRI11	80.1
ResultsCRICRI04	80.9	ResultsCRICRI12	62.5
ResultsCRICRI05	83.7	ResultsCRICRI13	87.4
ResultsCRICRI06	88.6	ResultsCRICRI14	98.0
ResultsCRICRI07	84.8	ResultsCRICRI15	79.2
ResultsCRICRI08	66.9	ResultsCRICRI16	74.3
ResultsCRI	84.7		



PlanckDistance 9.2E-004

4.1 Integrating Sphere Test



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

x 0.3453
 y 0.3536
 u' 0.2108
 v' 0.4857

CIE 13.3-1995
(CRI)

R_a 84

R_g 16

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.0

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	ALEDL5T/480	Sample ID.	G1
Operate 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 parameters were measured using a type C 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 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	480.04	60	0.386	170.7	0.922

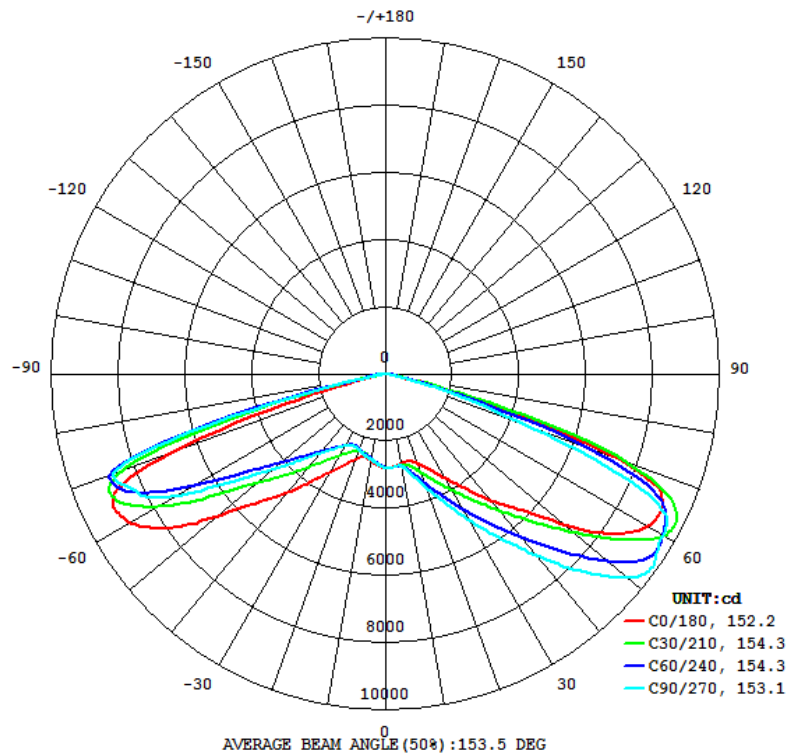
Test Result

Flux (lm)	Field Angle(10%)		Beam Angle(50%)		Luminous Efficacy (lm/W)
	C0-180	C90-270	C0-180	C90-270	
28390	158.0	160.1	152.2	153.1	166.3

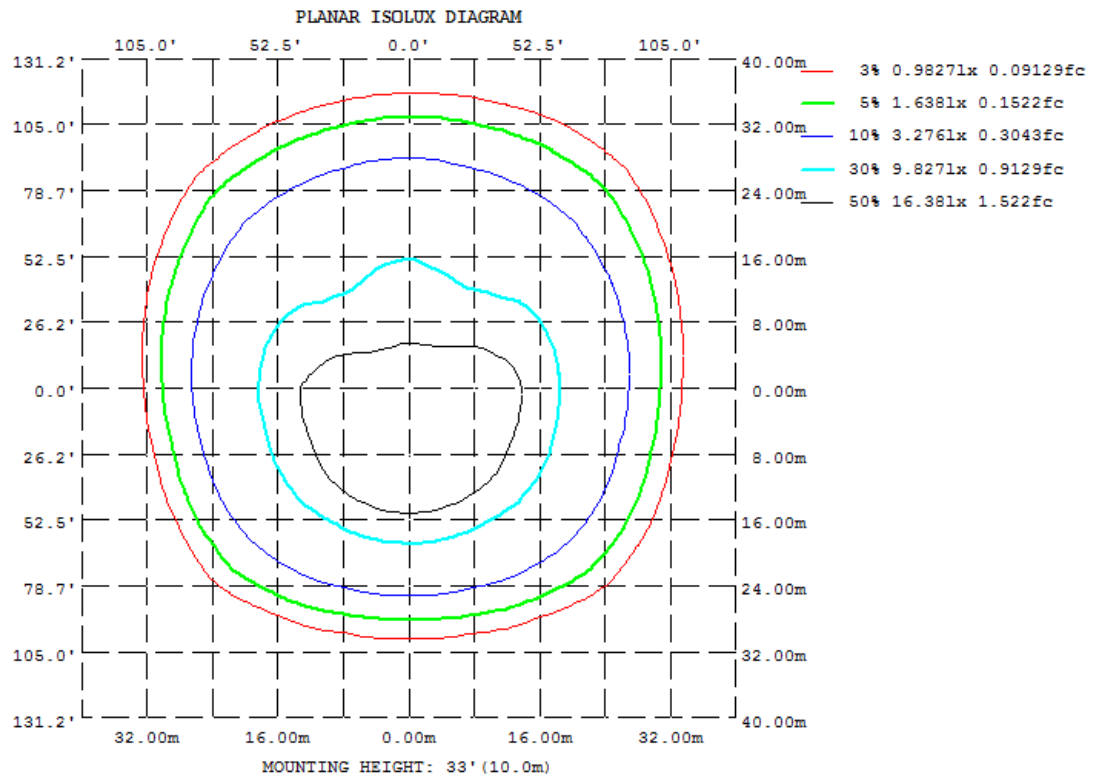
Zonal Lumen Requirement (0° - 90°)	Zonal Lumen Requirement (80° - 90°)	BUG rating
100.00%	0.52%	B5-U0-G5

4.2 Goniophotometer Test

Light Distrubtion Curve



Isolux Plot



4.2 Goniophotometer Test

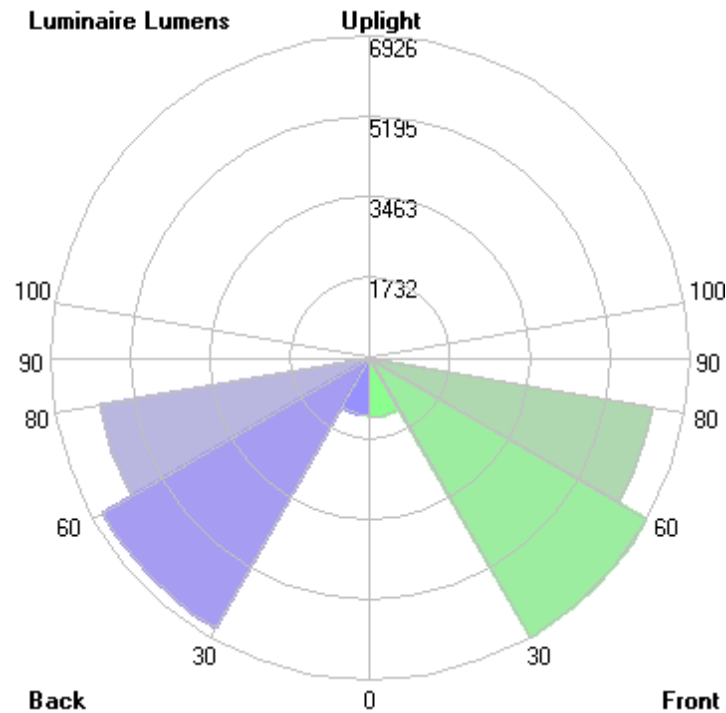
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315
10	271.7	277.7	280.1	271.5	262.9	256.9	259.5	263.9
20	285.0	328.3	361.4	314.5	270.8	237.6	240.0	250.6
30	359.5	427.6	502.0	407.9	337.4	257.6	247.5	271.5
40	490.9	574.2	704.8	547.2	461.4	319.6	308.9	338.9
50	695.2	791.9	943.0	760.4	657.0	432.7	441.6	458.8
60	906.1	997.8	959.3	968.1	884.3	687.0	725.9	717.5
70	743.1	760.2	463.9	728.3	687.2	914.6	864.8	922.0
80	24.77	37.92	15.73	30.14	16.27	54.09	41.87	67.58
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: *10cd							

	Zonal (lm)		Total (lm)	Percent
0-10	260.25	0 - 10	260.25	0.92%
10-20	776.75	0 - 20	1037.00	3.65%
20-30	1464.72	0 - 30	2501.72	8.81%
30-40	2554.53	0 - 40	5056.25	17.81%
40-50	4281.38	0 - 50	9337.63	32.89%
50-60	6776.88	0 - 60	16114.51	56.76%
60-70	8540.18	0 - 70	24654.69	86.84%
70-80	3589.52	0 - 80	28244.21	99.48%
80-90	146.28	0 - 90	28390.49	100.00%
90-100	0.00	0 - 100	28390.49	100.00%
100-110	0.00	0 - 110	28390.49	100.00%
110-120	0.00	0 - 120	28390.49	100.00%
120-130	0.00	0 - 130	28390.49	100.00%
130-140	0.00	0 - 140	28390.49	100.00%
140-150	0.00	0 - 150	28390.49	100.00%
150-160	0.00	0 - 160	28390.49	100.00%
160-170	0.00	0 - 170	28390.49	100.00%
170-180	0.00	0 - 180	28390.49	100.00%

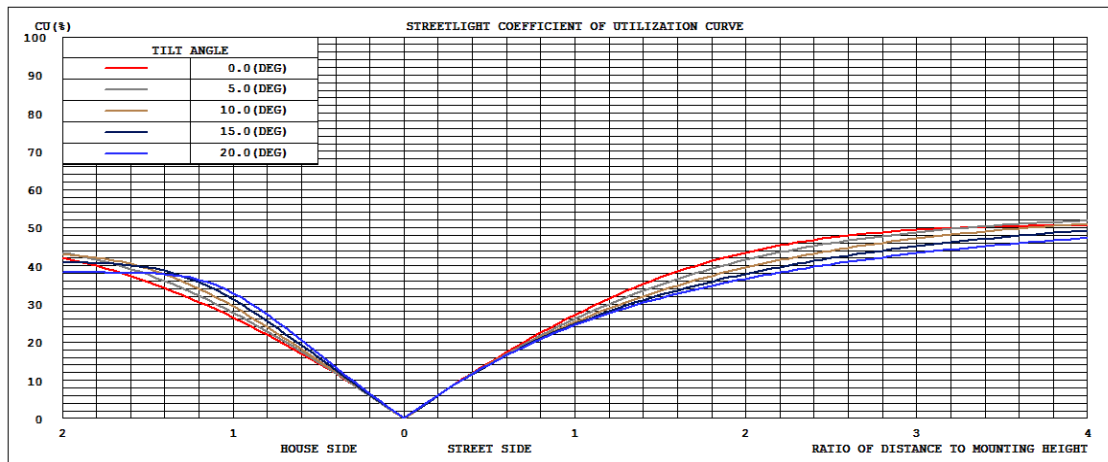
4.2 Goniophotometer Test

LCS/BUG

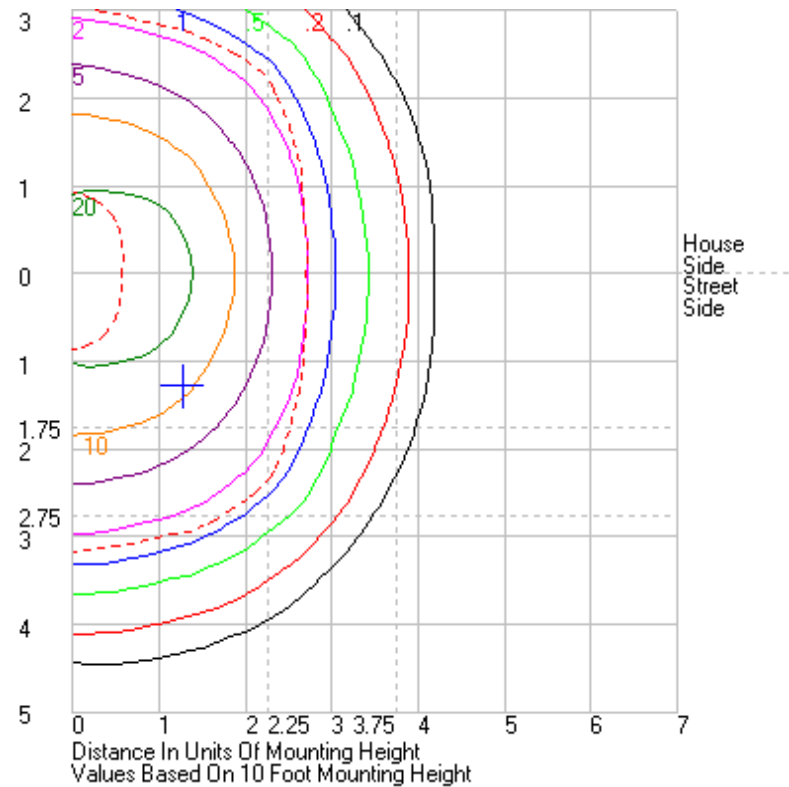


	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1272.5	N.A.	4.5
FM - Front-Medium (30-60)	6926.0	N.A.	24.4
FH - Front-High (60-80)	6205.2	N.A.	21.9
FVH - Front-Very High (80-90)	79.3	N.A.	0.3
BL - Back-Low (0-30)	1229.2	N.A.	4.3
BM - Back-Medium (30-60)	6686.7	N.A.	23.6
BH - Back-High (60-80)	5924.5	N.A.	20.9
BVH - Back-Very High (80-90)	67.0	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	28390.4	N.A.	100.0
BUG Rating	B5-U0-G5		

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	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87	2815.87
1	2817.38	2818.5	2819.17	2820.23	2820.65	2820.46	2819.61	2818.28	2816.71	2814.55	2811.69	2808.68	2806.92	2803.84	2802.53	2801.53	2800.57	2801.75	2803.09	2804.72	2806.58	2810.67	2813.02	2815.52	2817.38
2	2814.34	2816.14	2818.55	2818.18	2816.84	2816.95	2815.02	2812.92	2809.12	2806.2	2804.34	2799.34	2795.57	2789.93	2785.56	2781.48	2779.19	2780.22	2783.29	2786.6	2791.89	2799.09	2805.64	2810.75	2814.34
3	2804.15	2808.43	2810.47	2812.57	2812.43	2811.83	2809.95	2805.99	2800.27	2795.37	2791.9	2789.44	2782.45	2773.04	2765.55	2756.58	2753.44	2755.04	2760.32	2765	2771.14	2780	2789.83	2798.83	2804.15
4	2792.13	2797.09	2799.6	2805.92	2807.06	2802.79	2800.11	2794.71	2788.78	2783.35	2779.13	2775.33	2766.2	2752.75	2741.01	2731.7	2728.52	2730.86	2737.11	2744.44	2749.14	2758.39	2770.93	2784.75	2792.13
5	2782.46	2788.05	2791.41	2797.69	2796.41	2792.79	2789.87	2782.25	2774.76	2771.71	2766.04	2759.58	2748.03	2731.53	2715.64	2707.73	2702.56	2703.54	2713.38	2721.2	2728.06	2737.13	2751.11	2770.19	2782.46
6	2772.26	2780.11	2787.87	2787.83	2786.83	2781.31	2775.79	2766.84	2760.89	2758.42	2751.35	2740.53	2727.09	2707.35	2689.93	2680.38	2673.48	2673.94	2686.59	2694.55	2703.67	2716.39	2731.56	2755.8	2772.26
7	2757.4	2769.9	2783.56	2781.41	2778.43	2770.17	2762.09	2749.75	2746.54	2744.83	2735.71	2720.41	2702.94	2679.12	2662.79	2650.03	2645.13	2647.67	2662.89	2671.56	2681.13	2695.55	2712.56	2737.06	2757.4
8	2741.74	2759.86	2776.82	2779.06	2771.69	2765.02	2760.21	2742.01	2735.46	2732.63	2719.79	2699.94	2677.75	2650.22	2634.31	2621.34	2618.48	2620.19	2638.8	2647.76	2660.16	2676.05	2692.01	2716.71	2741.74
9	2728.04	2751.43	2769.15	2777.45	2772.44	2775.13	2771.2	2748.66	2731.39	2723.07	2704.55	2681.14	2653.2	2621.01	2603.93	2594.41	2591.82	2596.77	2614.82	2625.08	2638.69	2657.51	2669.34	2695.99	2728.04
10	2717.03	2745.16	2765.47	2776.52	2786.46	2800.78	2801.35	2770.59	2739.55	2715.36	2691.96	2662.37	2629.08	2593.33	2573.89	2569.37	2568.23	2575.14	2594.91	2604.51	2620.74	2638.63	2648.53	2678.08	2717.03
11	2706.02	2740.06	2767.46	2784.44	2813.42	2843.7	2842.55	2807.83	2760.09	2716.88	2683.03	2649.93	2606.23	2565.8	2546.74	2544.74	2545.74	2556.82	2576.07	2585.58	2602.01	2621.19	2630.86	2662.72	2706.02
12	2698.06	2740.62	2774.98	2804.82	2854.29	2894.37	2894.69	2853.37	2793.07	2727.79	2683.05	2642.32	2586.9	2541.12	2518.76	2521.45	2526.39	2540.49	2559.57	2570.75	2587.12	2603.94	2615.37	2649.58	2698.06
13	2692.02	2747.58	2789.54	2837.21	2906.45	2959.4	2963.94	2915.4	2837.31	2749.32	2693.08	2641.73	2572.72	2520.72	2494.31	2498.5	2510.11	2523.81	2543.49	2557.36	2574.28	2588.01	2602.16	2638.54	2692.02
14	2690.75	2760.15	2811.33	2880.14	2966.44	3029.7	3035.45	2980.92	2887.64	2781.45	2709.31	2648.16	2567.09	2505.24	2472.41	2475.32	2494.07	2507.56	2526.96	2543.93	2562.21	2572.87	2590.08	2629.8	2690.75
15	2697.05	2778.64	2840.78	2931.73	3034.39	3110.17	3120.72	3057.4	2950.75	2825.29	2733.16	2660.53	2570.01	2498.67	2455.96	2453.74	2479.37	2489.74	2509.94	2529.74	2551.45	2558.29	2581.5	2625.99	2697.05
16	2713	2804.76	2882.52	2991.78	3108.36	3197.75	3212.57	3142.3	3020.39	2875.35	2767.69	2679.76	2581.53	2497.16	2444.89	2433.44	2460.92	2467.66	2487.45	2511.17	2538.76	2545.27	2575.57	2629.02	2713
17	2734.9	2837.33	2932.63	3056.6	3189.02	3285.6	3303.89	3224.34	3093.46	2936.93	2813.08	2707.59	2600.69	2501.81	2438.38	2415.53	2438.86	2443.57	2463.13	2489.81	2523.48	2533.66	2573.42	2637.2	2734.9
18	2765.57	2877.26	2990.8	3127.29	3276.75	3384.48	3409.22	3322.34	3178.89	2998.12	2868.24	2745.72	2628.31	2514.98	2436.63	2398.49	2415.55	2419.91	2438.83	2466.37	2506.73	2522.42	2576.59	2651.46	2765.57
19	2803.92	2923.74	3055.36	3203.11	3365.68	3480.96	3506.87	3412.97	3258.14	3068.88	2925.6	2791.61	2664.32	2535.36	2440.68	2384.94	2392.62	2398.52	2417.07	2440.79	2486.67	2513.31	2583.64	2673.62	2803.92
20	2850.08	2976.27	3124.54	3282.78	3461.71	3583.43	3614.18	3512.07	3348.84	3144.9	2989.41	2843.13	2708.5	2564	2450.57	2375.55	2374.05	2377.84	2399.66	2418.44	2467.79	2506.27	2595.54	2704.31	2850.08
21	2902.08	3037.59	3198.64	3364.49	3559.33	3692.33	3728.41	3618.18	3442.45	3219.22	3057.09	2897.79	2757.38	2598.38	2466.22	2371.83	2359.26	2359.87	2385.78	2397.57	2450.11	2504.09	2615.11	2741.17	2902.08
22	2959.24	3102.15	3274.22	3450.42	3659.13	3795.66	3834.35	3714.37	3534.45	3305.09	3123.84	2955.7	2810.65	2636.71	2487.65	2373.78	2349.33	2344.63	2375.37	2380.86	2438.05	2505.24	2640.73	2782.85	2959.24
23	3023.63	3172.5	3354.15	3542.28	3767.59	3918.96	3968.51	3839.74	3642.86	3384.42	3197.79	3017.85	2868.82	2680.23	2513.13	2380.5	2344.27	2332.73	2367.63	2368.66	2431.83	2511.11	2671.18	2830.81	3023.63
24	3092.4	3244.7	3434.31	3633.56	3874	4037.78	4092.04	3953.73	3742.22	3473.67	3270.99	3082.75	2929.09	2727.75	2542.42	2392.64	2344.07	2326.21	2363.47	2360.76	2429.63	2523.24	2705.71	2882.34	3092.4
25	3165.26	3321.39	3518.9	3728.7	3990.5	4166.41	4228.9	4080.33	3855.39	3564.94	3350.82	3150.55	2995.66	2778.6	2577.47	2410.27	2349.96	2327.15	2365.38	2358.96	2433.37	2542.03	2743.67	2939.32	3165.26
26	3242.95	3401.83	3609	3830.27	4109.9	4309.45	4384.4	4222.79	3970.79	3654.66	3430.93	3223.55	3064.24	2835.5	2616.65	2433.69	2362.24	2334.5	2374.36	2363.91	2443.55	2567.88	2788.8	3002.43	3242.95
27	3326.22	3487.79	3700.18	3932.16	4232.52	4444.41	4524.56	4352.61	4085.35	3758	3516.24	3301.08	3136.23	2894.55	2659.77	2462.64	2381.47	2348.37	2391.31	2375.45	2459.88	2598.55	2837.44	3069.42	3326.22
28	3410.63	3577.21	3799	4045.59	4366.5	4602.34	4697.12	4514.31	4220.35	3855.67	3602.98	3382.9	3211.4	2958.56	2707.98	2496.87	2406.48	2368.91	2413.61	2394.07	2482.08	2633.34	2893.48	3140.48	3410.63
29	3499.12	3672.4	3898.57	4157.16	4498.32	4755.03	4854.01	4659.96	4342.63	3966.5	3693.96	3467.56	3289.96	3025.31	2760.45	2535.08	2436.61	2395.86	2441.16	2419.44	2510.17	2672.22	2948.06	3216.78	3499.12
30	3594.78	3774.27	4001.36	4276.42	4640.24	4911.21	5020.12	4817.76	4484.57	4078.88	3791.26	3561.38	3374.03	3096.94	2817.1	2576.1	2471.12	2428.92	2475.09	2450.26	2541.69	2715.22	3011.03	3297.36	3594.78
31	3692.42	3878.54	4112.82	4402.19	4785.24	5088.81	5204.78	4992.26	4625.73	4194.55	3888.54	3658.11	3461.71	3170.74	2876.36	2622.15	2509.69	2467.3	2516.09	2486.91	2578.02	2762.78	3077.36	3379.25	3692.42
32	3801.38	3990.3	4224.04	4531.07	4932.27	5247.62	5365.96	5143.59	4768.7	4324.03	3992.77	3761.9	3560.45	3250.28	2938.44	2670.56	2550.67	2511.84	2563.25	2529.7	2617.73	2815.69	3146.12	3471.04	3801.38
33	3913.96	4109.16	4345.35	4667.41	5091.07	5433.29	5561.81	5331.27	4927.11	4445.75	4102.14	3870.87	3666.68	3335.96	3005.67	2722.05	2596.03	2563.48	2617.18	2577.49	2660.37	2870.95	3221.43	3567.19	3913.96
34	4037	4229.63	4467.37	4804.15	5249.26	5611.22	5747.55	5501.62	5072.96	4585.82	4212.92	3988.34	3780.19	3427.65	3076.32	2778.11	2644.3	2618.14	2674.66	2630.45	2708.7	2929.47	3297.29	3670.94	4037
35	4170.16	4359.68	4596.1	4948.72	5413.83	5792.93	5938.08	5679.11	5233.49	4720.99	4331.2	4109.1	3904.36	3530.54	3150.97	2837.14	2694.88	2677.8	2736.53	2688.46	2760.82	2993.62	3381.7	3785.58	4170.16
36	4308.59	4498.45	4728.95	5099.31	5584.62	6002.14	6158.43	5886.4	5400.47	4862.87	4455.02	4239.05	4034.31	3644.79	3230.95	2899.45	2749.35	2741.79	2800.58	2751.29	2816.57	3062.75	3472.99	3907.98	4308.59
37	4451.71	4640.02	4866.47	5250.91	5756.65	6192.33	6349.12	6069.83	5556.85	5014.21	4581.61	4373.65	4171.76	3766.32	3316.82	2966.82	2807.43	2807.82	2867.19	2817.32	2876.97	3137.05	3570.05	4041.55	4451.71
38	4601.08	4786.31	5006.18	5408.69	5943.08	6411.58	6581.12	6289.61	5735.97	5156.48	4714.52	4509.85	4313.6	38											

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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.	ALEDL5T/480	Sample ID.	G1
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
480.00	60	0.385	171.3	0.926	11.70%

5.0 Equipment Information

Test Equipment			
Equipment ID	Equipment Name	Last Calibration Date	Calibration Due Date
DLF107	Integrating Sphere System	2021/12/26	2022/12/25
DLF108	Auxiliary Lamp	2021/12/26	2022/12/25
DLF122	Measurement Standard Lamp Standard Lamp Type: 220 V, 0.4720 A, Tungsten, Omni-derectional	2021/12/26	2022/12/25
DLF116	AC Power Source	2021/12/26	2022/12/25
DLF113	Power Meter	2021/12/26	2022/12/25
DLF112	Temperature Recorder	2021/12/26	2022/12/25
DLF114	Temperature & Humidity Datalogger	2021/12/26	2022/12/25
DLF101	Goniophotometer	2021/12/26	2022/12/25
DLF125	Standard Lamp Standard Lamp Type: 76.58 V, 6.7875 A, Tungsten, Omni-derectional	2021/12/26	2022/12/25
DLF104	AC Power Source	2021/12/26	2022/12/25
DLF507	DC Power Source	2021/12/26	2022/12/25
DLF102	Power Meter	2021/12/26	2022/12/25
DLF111	Temperature & Humidity Datalogger	2021/12/26	2022/12/25
DLF119	Power Meter	2021/12/26	2022/12/25
DLF031	Temperature data logger	2021/12/26	2022/12/25
DLF022	Digital power meter	2021/12/26	2022/12/25
DLF003	Temperature & Humidity Datalogger	2021/12/26	2022/12/25

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