

Photometric Test Report

Relevant Standards

- ☒ ANSI/IES LM-79-2019
- ☒ ANSI C82.77-2017

Prepared For

RAB Lighting Inc.

Address: 408 W 14th St New York, NY 10014

Prepared By

Dongguan New Testing Centre Co., Ltd.

Address: 3F No. 1 the 1st North Industry Road, Songshan Lake Science & Technology Park, Dongguan, Guangdong, China

Prepare by:

Alan Wang

Engineer: Alan Wang

Date: 2025-02-21

Review by:

Vincent Yuan

Technical Lead: Vincent Yuan

Issue Date: 2025-02-21

Revised Date: N/A

1.0 Test Summary

DLC Technical Requirements V5.1

Architectural Flood and Spot Luminaires				
Requirement Category	Test Method	Requirements		Test Value
Luminaire Output (lm) (Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	1000		2057
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Standard	Premium	111.2
		105	120	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Worst Case		18.5
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)	ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	14.40
Power Factor (THD & PF – Section 4.3)	ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.989
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)	ANSI/IES LM-79:2019	7 steps	5029±283	5182
		4 steps	5029±220	
Minimum CRI (Integrating Sphere – Section 4.1)	ANSI/IES LM-79:2019 CIE13.3-1995	≥70		82.8
Minimum R9 (Integrating Sphere – Section 4.1)	ANSI/IES LM-79:2019 CIE13.3-1995	N/A		11
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		98
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)	ANSI/IES LM-79:2019	≥85%		100.0%
Input Voltage (V)				
(Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Worst Cast		120.0
(Goniophotometer – Section 4.2)		Non-Worst Case		N/A
Input Current (A)				
(Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Worst Case		0.156
(Goniophotometer – Section 4.2)		Non-Worst Case		N/A
Power (Input Wattage – W)				
(Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Worst Case		18.5
(Goniophotometer – Section 4.2)		Non-Worst Case		N/A

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Goniophotometer Test	-	BULLET2X12 @18W5000K	ES 1st ES#3-3	241216022-S1
2	THD and PF Test	-	BULLET2X12 @18W5000K	ES 1st ES#3-3	241216022-S1

Remark (If any):

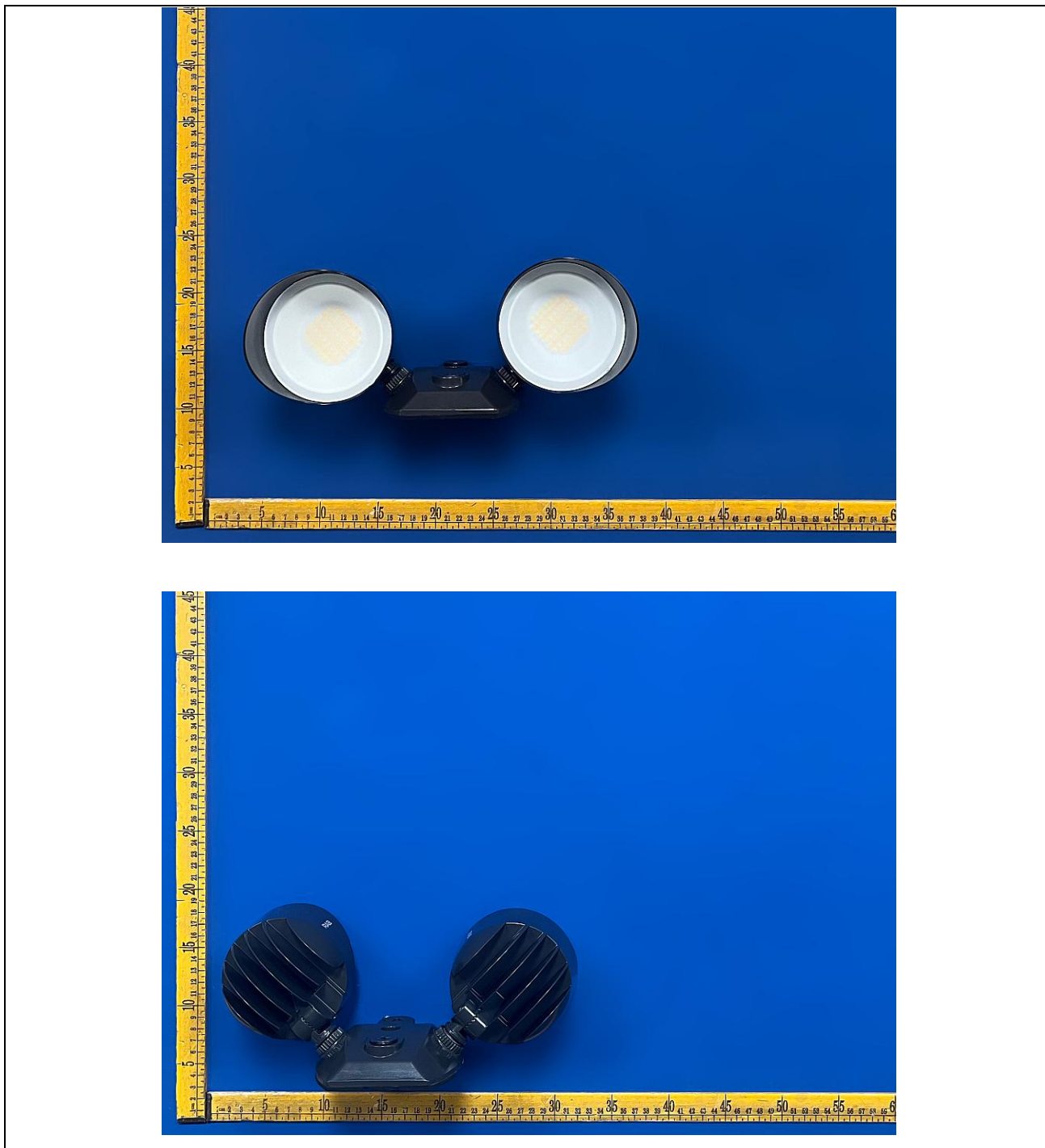
1. The results contained in this report pertain only to the tested samples.
2. This report shall not be reproduced, no limited part or full, without approval of Dongguan New Testing Centre Co., Ltd.
3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.
4. The test result is based BULLET2X12 @18W3000K and BULLET2X12 @24W5000K.

4.0 Product Description

Luminaire Description: Model No. BULLET2X12 @18W5000K, color tunable from 3000K, 4000K and 5000K.

Electrical Specification: 120Vac, 60Hz

Photos of Luminaire Characteristics



4.0 LM-79 Measurement and Test Results

4.1 Goniophotometer Test

Model No.	BULLET2X12 @18W5000K	Sample ID	241216022-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	24.8	Humidity (%RH)	41.1

Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using a type C goniophotometer and software.</p> <p>The ambient temperature shall be maintained at $25\pm1^{\circ}\text{C}$, measured at a point not more than 1 m from the sample and at the same height as the sample.</p> <p>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.</p> <p>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 1.0° vertical intervals and 15° horizontal intervals.</p>

Test Conditions

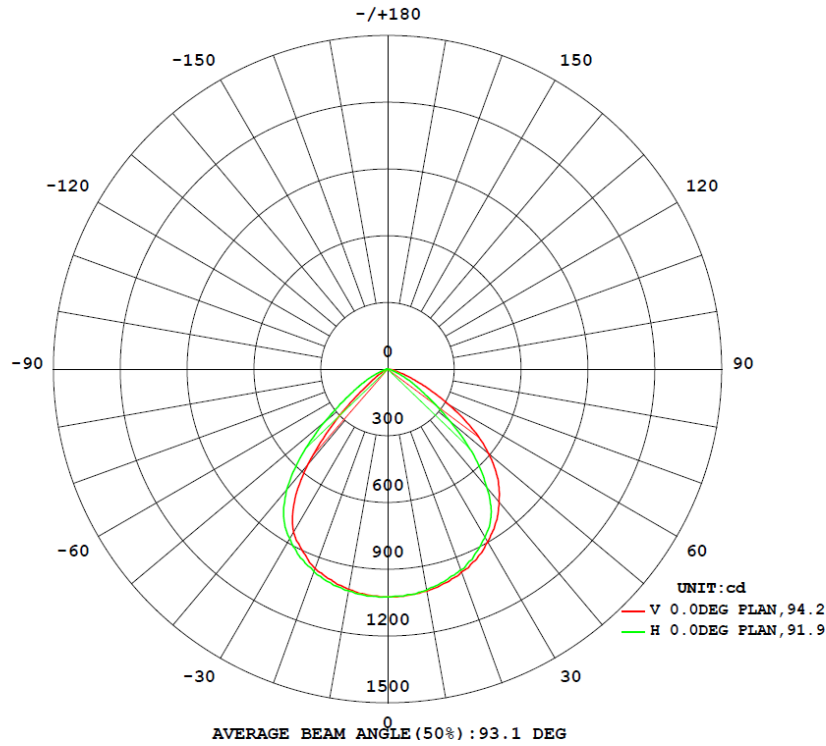
Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
WORST CASE	120.0	60	0.156	18.5	0.989
NON-WORST CASE	N/A	N/A	N/A	N/A	N/A

Test Result

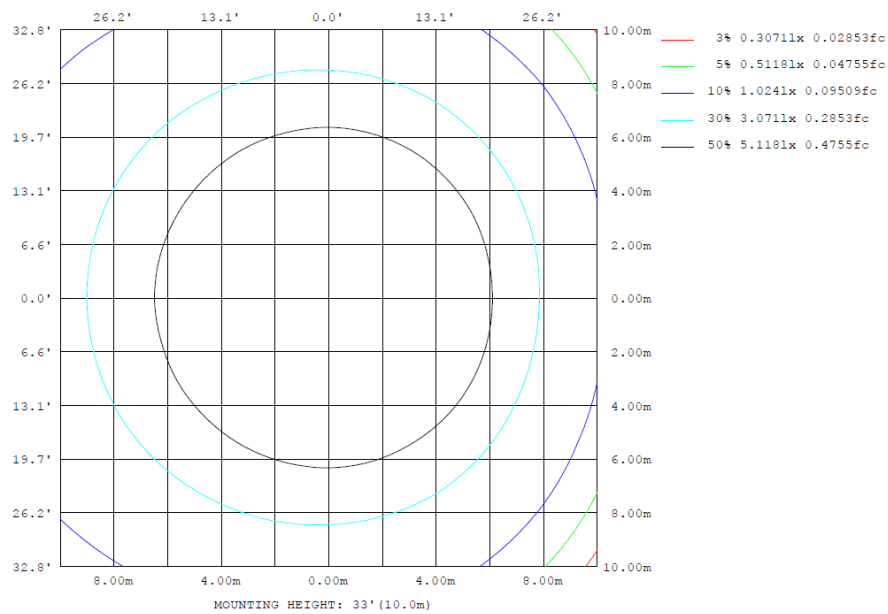
Flux (lm)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)	Zonal Lumen Requirement	NEMA Type
	C0-180	C90-270	C0-180	C90-270		(0°-90°)	
2057	124.8	126.9	93.9	92.0	111.2	100.0%	6 H x 6 V

4.1 Goniophotometer Test

Lighting Distribution Curve



Isolux Plot



4.1 Goniophotometer Test

Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	± zone	± total	±lum, lamp
10	1005	1008	1008	1010	1013	1014	1011	1013	0- 10	97.08	97.08	4.72, 4.72
20	954.0	955.3	960.1	960.1	969.9	969.0	969.0	959.6	10- 20	279.5	376.6	18.3, 18.3
30	845.4	855.1	873.4	885.9	897.7	887.5	879.6	863.9	20- 30	425.4	802.0	39, 39
40	555.9	632.0	693.5	758.2	779.1	765.6	704.3	637.4	30- 40	497.6	1300	63.2, 63.2
50	160.3	270.7	369.4	504.2	593.4	531.2	373.3	290.5	40- 50	418.1	1718	83.5, 83.5
60	38.27	66.12	137.6	212.4	313.0	228.4	138.5	72.92	50- 60	226.9	1945	94.5, 94.5
70	2.238	11.46	38.38	63.00	100.5	65.23	38.37	12.30	60- 70	86.60	2031	98.7, 98.7
80	0.0445	1.779	7.822	10.49	22.63	10.19	7.844	2.124	70- 80	22.49	2054	99.8, 99.8
90	0	0	0	0	0	0	0	0	80- 90	3.335	2057	100, 100
100	0	0	0	0	0	0	0	0	90-100	0	2057	100, 100
110	0	0	0	0	0	0	0	0	100-110	0	2057	100, 100
120	0	0	0	0	0	0	0	0	110-120	0	2057	100, 100
130	0	0	0	0	0	0	0	0	120-130	0	2057	100, 100
140	0	0	0	0	0	0	0	0	130-140	0	2057	100, 100
150	0	0	0	0	0	0	0	0	140-150	0	2057	100, 100
160	0	0	0	0	0	0	0	0	150-160	0	2057	100, 100
170	0	0	0	0	0	0	0	0	160-170	0	2057	100, 100
180	0	0	0	0	0	0	0	0	170-180	0	2057	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

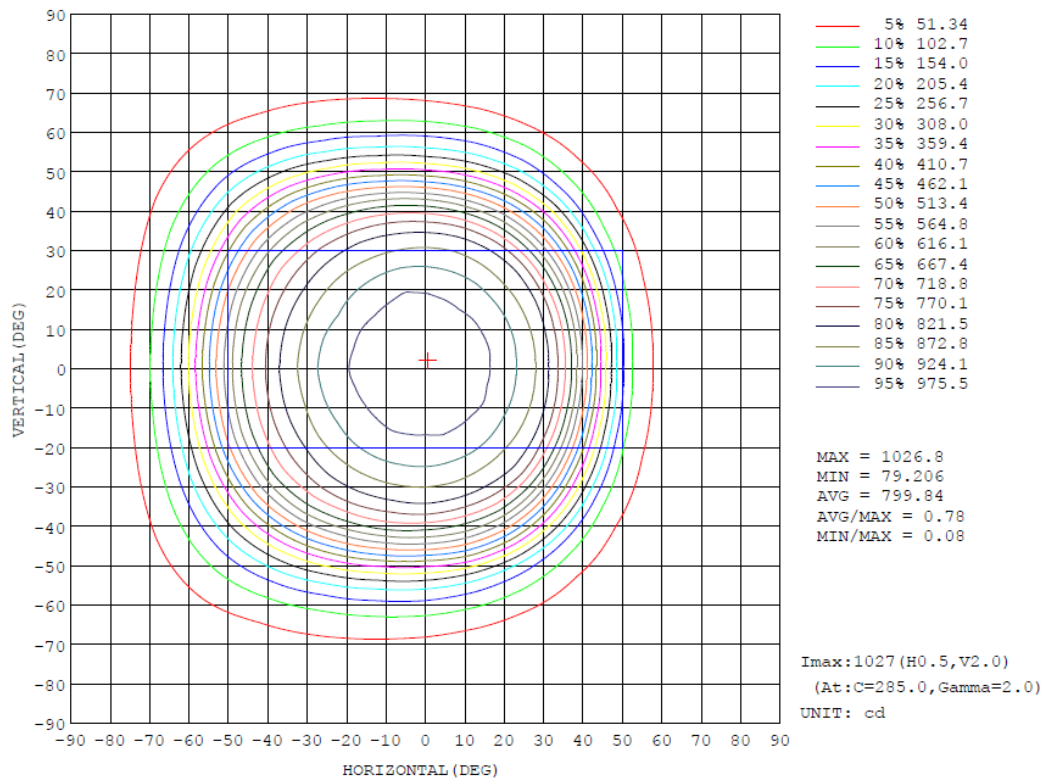
Zonal (lm)		Total (lm)		Percent
0-10	97.08	0-10	97.08	4.72%
10-20	279.51	0-20	376.59	18.31%
20-30	425.37	0-30	801.96	38.99%
30-40	497.63	0-40	1299.59	63.18%
40-50	418.12	0-50	1717.71	83.51%
50-60	226.87	0-60	1944.58	94.53%
60-70	86.60	0-70	2031.18	98.74%
70-80	22.49	0-80	2053.67	99.84%
80-90	3.34	0-90	2057.01	100.00%
90-100	0.00	0-100	2057.01	100.00%
100-110	0.00	0-110	2057.01	100.00%
110-120	0.00	0-120	2057.01	100.00%
120-130	0.00	0-130	2057.01	100.00%
130-140	0.00	0-140	2057.01	100.00%
140-150	0.00	0-150	2057.01	100.00%
150-160	0.00	0-160	2057.01	100.00%
160-170	0.00	0-170	2057.01	100.00%
170-180	0.00	0-180	2057.01	100.00%

4.1 Goniophotometer Test

Area Flux Diagram

		AREA FLUX DIAGRAM																		UNIT: lm			Φ t	Φ a
VERTICAL (DEG)	90	0.00	0.02	0.04	0.05	0.06	0.06	0.08	0.10	0.07	0.04	0.02	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.62	0.00			
	80	0.01	0.05	0.11	0.19	0.29	0.43	0.58	0.65	0.64	0.54	0.39	0.23	0.12	0.05	0.02	0.00	0.00	0.00	4.30	0.00			
	70	0.01	0.09	0.25	0.56	1.02	1.61	2.12	2.45	2.54	2.31	1.76	1.03	0.47	0.17	0.05	0.01	0.00	0.00	16.5	3.79			
	60	0.02	0.14	0.50	1.32	2.71	4.41	5.95	7.02	7.40	6.90	5.50	3.49	1.61	0.54	0.13	0.02	0.00	0.00	47.7	42.4			
	50	0.02	0.20	0.88	2.63	5.76	9.59	13.1	15.6	16.7	15.9	13.2	8.80	4.14	1.34	0.32	0.04	0.00	0.00	108	105			
	40	0.03	0.28	1.37	4.37	9.44	14.9	19.6	22.8	24.4	24.1	21.4	15.9	8.67	2.70	0.63	0.08	0.00	0.00	171	168			
	30	0.03	0.35	1.88	6.08	12.4	18.4	23.0	26.3	28.1	27.9	25.8	21.3	13.3	4.73	0.96	0.14	0.01	0.00	211	209			
	20	0.03	0.41	2.29	7.33	14.1	20.1	24.8	28.2	30.0	29.8	27.9	23.8	16.5	6.58	1.27	0.19	0.01	0.00	233	232			
	10	0.04	0.45	2.53	7.97	14.9	20.9	25.7	29.1	30.8	30.7	28.8	24.8	17.9	7.55	1.44	0.22	0.01	0.00	244	242			
	0	0.04	0.45	2.51	7.92	14.9	20.9	25.7	29.0	30.8	30.7	28.7	24.7	17.8	7.42	1.42	0.22	0.01	0.00	243	242			
	-10	0.03	0.41	2.22	7.16	14.0	20.0	24.8	28.1	29.8	29.7	27.7	23.7	16.2	6.27	1.21	0.19	0.00	0.00	231	230			
	-20	0.03	0.35	1.79	5.77	12.1	18.2	22.9	26.2	27.8	27.7	25.6	21.2	12.9	4.41	0.91	0.13	0.00	0.00	208	206			
	-30	0.03	0.28	1.30	4.03	8.90	14.5	19.3	22.6	24.2	23.9	21.3	15.8	8.22	2.47	0.59	0.07	0.00	0.00	167	165			
	-40	0.02	0.20	0.86	2.44	5.26	8.93	12.6	15.2	16.5	15.9	13.2	8.48	3.78	1.23	0.30	0.03	0.00	0.00	105	102			
	-50	0.02	0.14	0.50	1.29	2.53	4.12	5.66	6.80	7.26	6.75	5.22	3.19	1.48	0.50	0.12	0.02	0.00	0.00	45.6	39.9			
	-60	0.01	0.09	0.26	0.56	0.99	1.56	2.08	2.45	2.54	2.27	1.69	0.99	0.44	0.16	0.04	0.01	0.00	0.00	16.1	3.46			
-70	0.01	0.05	0.12	0.20	0.29	0.42	0.57	0.66	0.64	0.54	0.38	0.23	0.11	0.05	0.01	0.00	0.00	0.00	4.28	0.00				
-80	0.00	0.02	0.04	0.06	0.06	0.07	0.08	0.10	0.07	0.04	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.63	0.00				
-90																								
		-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)	20	30	40	50	60	70	80	90						
Φ t	0.39	3.99	19.5	60.0	120	179	228	263	280	276	248	198	124	46.2	9.43	1.38	0.05	0.00	2057	---				
Φ a	0.00	0.00	14.2	55.8	116	175	224	259	276	271	244	194	119	40.6	1.96	0.00	0.00	0.00	---	1990				

Isocandela



4.1 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

H (DEG)	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
V (DEG)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-80	0.00	2.69	3.81	4.80	5.49	5.98	6.39	6.33	6.14	5.91	6.10	6.38	6.68	7.66	8.57	9.33	8.93	8.43	7.82
-70	0.00	3.94	6.13	8.42	10.7	13.2	16.1	19.0	21.5	23.7	27.8	32.6	36.6	39.6	41.7	42.7	42.4	40.9	38.4
-60	0.00	4.99	8.53	13.2	19.2	27.1	37.0	48.9	61.1	74.0	86.8	101	112	122	131	137	140	141	138
-50	0.00	6.01	11.3	19.6	32.0	49.5	71.6	99.9	133	169	208	247	282	314	340	360	371	377	369
-40	0.00	6.96	14.5	27.1	48.2	78.4	121	178	247	324	401	478	543	596	635	669	689	698	694
-30	0.00	7.78	17.7	35.2	66.0	113	183	274	383	496	596	676	734	783	819	845	861	871	873
-20	0.00	8.42	20.2	42.6	81.9	147	244	369	504	619	708	776	827	871	909	933	948	955	960
-10	0.00	8.84	21.9	48.1	94.7	175	290	433	570	680	760	826	876	921	955	974	997	1003	1008
0	0.00	9.01	22.6	50.5	101	188	313	460	593	701	779	845	898	943	970	995	1013	1020	1024
10	0.00	8.81	21.9	48.3	95.7	179	297	440	574	681	764	830	880	922	951	983	997	1011	1011
20	0.00	8.37	20.2	42.9	83.5	153	257	385	515	626	714	780	831	873	905	935	955	970	969
30	0.00	7.69	17.7	35.5	66.9	118	197	295	407	515	608	683	744	792	825	850	867	877	880
40	0.00	6.84	14.5	27.2	49.1	81.7	128	193	272	353	430	503	562	611	651	679	698	707	704
50	0.00	5.88	11.1	19.6	32.4	50.0	73.7	105	144	185	226	267	303	331	358	373	380	383	373
60	0.00	4.87	8.26	13.1	19.1	26.9	36.9	48.9	62.5	77.2	91.5	106	117	126	134	139	141	141	138
70	0.00	3.87	5.81	7.99	10.2	12.8	15.8	18.8	21.8	24.4	28.8	33.7	37.8	40.3	41.9	42.5	42.2	40.8	38.4
80	0.00	2.66	3.66	4.39	4.98	5.44	5.73	5.80	5.63	5.25	5.56	5.90	6.29	7.25	8.13	8.75	8.52	8.24	7.84
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

H (DEG)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	
V (DEG)																			
-180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-80	6.35	4.71	3.00	2.52	2.25	2.28	1.76	1.28	0.85	0.54	0.29	0.13	0.08	0.05	0.04	0.04	0.04	0.04	
-70	34.8	30.6	25.8	20.7	15.8	11.7	8.56	5.86	3.80	2.36	1.25	0.56	0.26	0.10	0.04	0.04	0.04	0.04	
-60	129	117	102	83.7	65.6	47.4	31.3	19.1	11.7	7.03	3.75	1.79	0.72	0.23	0.07	0.04	0.04	0.04	
-50	357	331	288	235	181	132	90.9	58.6	35.5	19.7	9.50	4.20	1.47	0.39	0.12	0.04	0.04	0.04	
-40	679	653	607	540	447	337	224	131	75.1	42.7	23.2	9.50	2.69	0.66	0.18	0.05	0.04	0.04	
-30	866	850	822	776	694	574	426	273	144	73.3	40.6	18.8	5.87	1.15	0.25	0.06	0.04	0.04	
-20	957	940	915	877	834	741	598	418	240	108	55.9	28.9	9.57	1.73	0.30	0.06	0.04	0.04	
-10	1002	989	967	933	883	825	700	518	316	148	67.8	36.1	13.1	2.24	0.32	0.06	0.04	0.04	
0	1020	1005	980	954	904	845	733	556	341	160	70.2	38.3	14.1	2.24	0.28	0.04	0.04	0.04	
10	1005	991	972	938	890	826	709	533	327	156	69.6	36.4	13.5	2.49	0.40	0.07	0.04	0.04	
20	960	948	922	883	839	750	613	440	254	116	57.7	29.5	10.1	2.21	0.43	0.09	0.04	0.04	
30	875	860	832	782	696	584	448	293	157	79.2	42.2	19.9	6.39	1.72	0.39	0.09	0.04	0.04	
40	687	651	604	537	453	354	243	146	82.6	45.6	24.2	10.4	3.67	1.12	0.31	0.09	0.05	0.05	
50	359	333	296	250	200	147	100	63.9	38.2	21.1	10.3	4.97	2.12	0.66	0.21	0.07	0.05	0.05	
60	132	122	107	88.9	69.5	50.0	33.5	21.0	13.0	7.69	4.50	2.37	1.07	0.39	0.13	0.06	0.05	0.05	
70	35.1	31.0	26.4	21.5	16.7	12.3	8.98	6.32	4.27	2.83	1.68	0.86	0.42	0.18	0.08	0.06	0.05	0.05	
80	6.24	4.52	2.84	2.64	2.53	2.58	2.04	1.55	1.11	0.73	0.43	0.21	0.14	0.09	0.07	0.07	0.05	0.05	
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

4.0 LM-79 Measurement and Test Results

4.2 THD and PF Test

Model No.	BULLET2X12 @18W5000K	Sample ID	241216022-S1
Temperature (°C)	25.4	Humidity (%RH)	41.0

Test Method
<p>The samples were tested according to the and Ansi C82.77: 2002 and ANSI C82.77-10:2020</p> <p>The total harmonic distortion shall be measured to the 40th order.</p> <p>The ambient temperature shall be maintained at $25 \pm 1^\circ\text{C}$. 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 was calculated.</p>

Test Results

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	iTHD(%)
120.0	60	0.156	18.5	0.989	14.40

5.0 Equipment List:

Equipment ID	Equipment Name	Last Cal.	Due Cal.
NTC-F01-001	Goniophotometer System	2024-11-07	2025-11-06
NTC-F01-006	2.0 meter Integrating Sphere	2024-11-07	2025-11-06
NTC-F01-012	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-013	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-031	Digital Power Meter	2024-08-06	2025-08-05
NTC-F01-019	Temperature & Humidity Meter	2024-10-29	2025-10-28

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