

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: LUMIERE

Report Number: P27781[_3000K

Luminaire Tested: 696-8LED3010-12-BK

Issue Date: 3/3/2020

Tested By:

Approved By:



NVLAP Lab Code: 200050-0

Cooper Lighting Solutions laboratories have been accredited by National Voluntary Laboratory Accreditation Program (NVLAP) that it adheres to the requirements of ISO/IEC 17025:2005 and appropriate IESNA test methods. This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government. Results contained in this report are valid for luminaire sample tested, as supplied by requestor. Information related to the luminaire tested has been supplied by requestor and can affect the validity of the test results. Report shall not be reproduced except in full without approval of Cooper Lighting Solutions Lighting Laboratory. Test performed at address noted above.

Test Information

Test Method: LM-79-2019
 Report Number: P27781[_3000K
 Test Lab: INNOVATION CENTER(G2)
 Issue Date: 3/3/2020
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: LUMIERE
 Catalog Number: 696-8LED3010-12-BK
 Description: BOCA 696 , 8 WATT, 3000K CCT, 10 DEGREE SPOT OPTIC,
 FLUSH HOOD BLACK
 Light Source: (1) SORAA 3000K 90 CRI LED
 SM16-07-10D-930-03
 Ballast/Driver: -

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 355.1 lumens
 Efficiency: N/A
 Efficacy: 44.4 lumens/watt
 N/A
 Luminous Opening: Circular (Dia: 0.17' x H: 0')
 CIE Type: Indirect

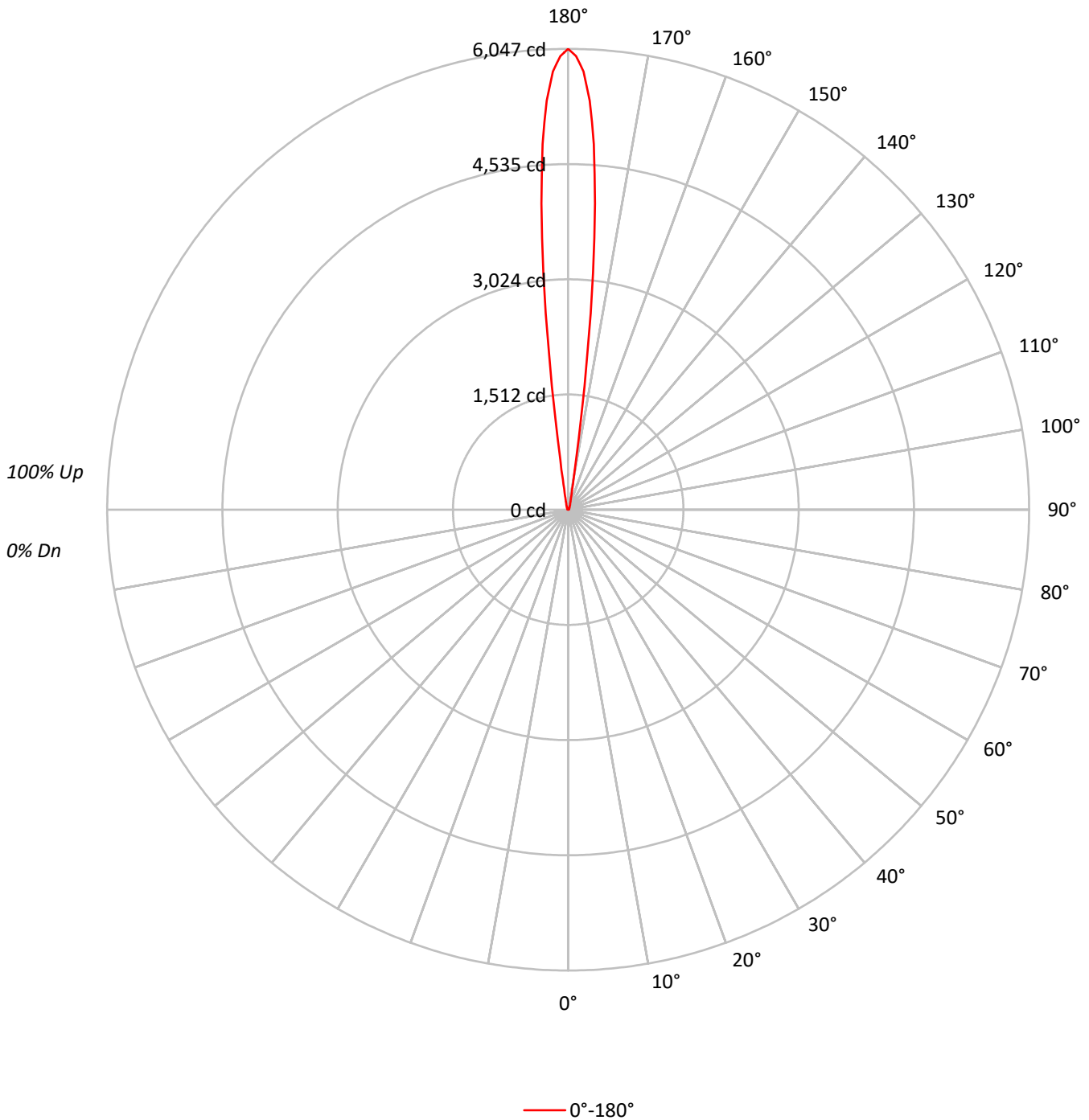
Input Watts (W): 8
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 24 FT



Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	P3	10/30/2015	4/30/2016
Power Meter	IN0214	1/12/2016	1/12/2017
AC Power Source	IN0062	1/12/2016	1/12/2017
DC Power Supply	--	--	--
Room Thermometer	IN0145	1/13/2016	1/13/2017

TEST NUMBER: P27781[_3000K
CATALOG NUMBER: 696-8LED3010-12-BK

Luminous Intensity Polar Plot



TEST NUMBER: P27781[_3000K
 CATALOG NUMBER: 696-8LED3010-12-BK

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20
RC	80									70									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																			
0	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0	
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8	0	
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7	0	
3	72	63	57	51	61	54	49	44	37	34	31	21	20	18	7	6	6	0	
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0	
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4	0	
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4	0	
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0	
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0	
9	43	32	25	20	37	28	22	18	19	15	13	11	9	8	4	3	3	0	
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0	

AVERAGE LUMINANCE (cd/sqm):

	0°
95°	0
100°	2825
105°	5704
110°	8786
115°	9443
120°	9944
125°	12197
130°	13180
135°	13369
140°	14982
145°	15813
150°	17294
155°	23099
160°	38212
165°	61958
170°	200125
175°	1996850

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 0°
 Luminance: 0 cd/sqm

TEST NUMBER: P27781[_3000K

CATALOG NUMBER: 696-8LED3010-12-BK

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
90°-100°	0.7	0.2
100°-110°	3.3	0.9
110°-120°	8.0	2.3
120°-130°	12.3	3.5
130°-140°	15.2	4.3
140°-150°	16.3	4.6
150°-160°	20.8	5.9
160°-170°	39.5	11.1
170°-180°	239.3	67.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	0.0	0.0
90°-120°	12.0	3.4
90°-150°	55.8	15.7
90°-180°	355.0	100.0
0°-180°	355.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
90°	0	
95°	0	1
105°	3	3
115°	8	8
125°	14	12
135°	19	15
145°	26	16
155°	42	21
165°	121	40
175°	4032	239
180°	6047	

TEST NUMBER: P27781[_3000K
CATALOG NUMBER: 696-8LED3010-12-BK

CANDELA DISTRIBUTION (FULL):

	0°
90°	0.0
92.5°	0.0
95°	0.0
97.5°	1.0
100°	1.0
102.5°	2.0
105°	3.0
107.5°	4.1
110°	6.1
112.5°	7.1
115°	8.1
117.5°	9.1
120°	10.1
122.5°	11.1
125°	14.2
127.5°	16.2
130°	17.2
132.5°	18.2
135°	19.2
137.5°	21.3
140°	23.3
142.5°	24.3
145°	26.3
147.5°	27.2
150°	30.4
152.5°	34.3
155°	42.4
157.5°	56.6
160°	72.8
162.5°	89.0
165°	121.3
166°	142.6
167°	170.9
168°	212.4
169°	279.2
170°	399.5
171°	664.4
172°	1199.4
173°	2069.1
174°	3123.7
175°	4031.9
176°	4810.5
177°	5376.8
178°	5752.0
179°	5954.3

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



TEST NUMBER: P27781[_3000K
CATALOG NUMBER: 696-8LED3010-12-BK

CANDELA DISTRIBUTION (continued):

180° | $\frac{0^\circ}{6047.3}$

(END OF REPORT)