

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: P277818

Luminaire Tested: 696-8LED2725-12-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: P277818  
 Test Lab: INNOVATION CENTER(G2)  
 Issue Date: 3/3/2020  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: LUMIERE  
 Catalog Number: 696-8LED2725-12-BK  
 Description: BOCA 696, 8 WATT, 2700K CCT, 25 DEGREE NARROW  
 OPTIC, FLUSH HOOD BLACK  
 Light Source: (1) SORAA 2700K 90 CRI 25° NFL LED  
 SM16-07-25D-927-03  
 Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
 Luminaire Lumens: 380.9 lumens  
 Efficiency: N/A  
 Efficacy: 48.8 lumens/watt  
 N/A  
 Luminous Opening: Circular (Dia: 0.17' x H: 0')  
 CIE Type: Indirect

Input Watts (W): 7.8  
 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

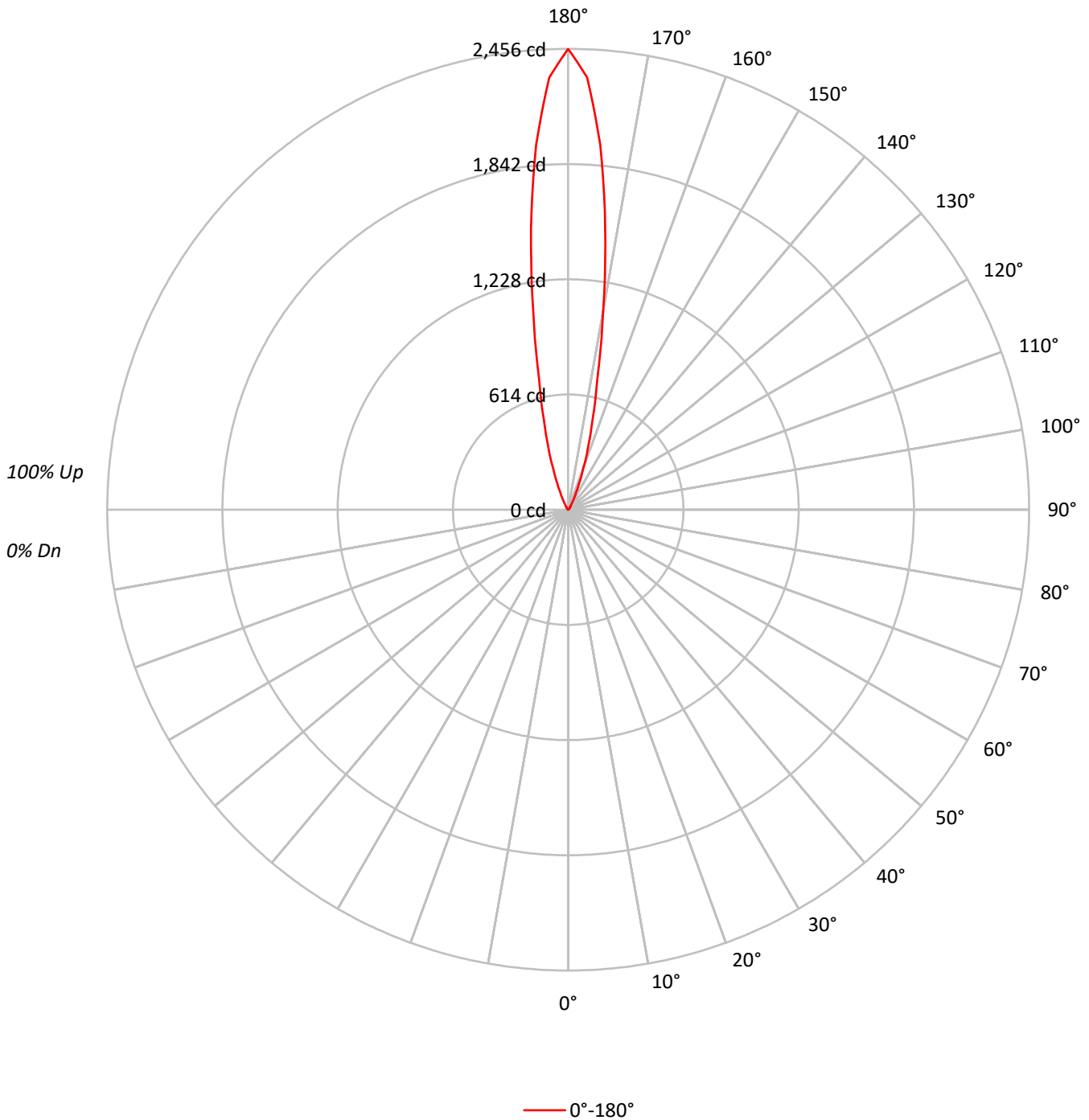


Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	P3	10/30/2015	4/30/2016
Power Meter	IN0214	1/12/2016	1/12/2017
AC Power Source	IN0062	1/12/2016	1/12/2017
DC Power Supply	--	--	--
Room Thermometer	IN0145	1/13/2016	1/13/2017

TEST NUMBER: P277818

CATALOG NUMBER: 696-8LED2725-12-BK

### Luminous Intensity Polar Plot



TEST NUMBER: P277818

CATALOG NUMBER: 696-8LED2725-12-BK

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									20									20
RC	80									70									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	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	27	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°	0
105°	1724
110°	2596
115°	3157
120°	3655
125°	3956
130°	4225
135°	5096
140°	7084
145°	11563
150°	21309
155°	52700
160°	126073
165°	258329
170°	535156
175°	967193

**MAXIMUM LUMINANCE 45°-90°:**

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

TEST NUMBER: P277818  
 CATALOG NUMBER: 696-8LED2725-12-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°	0.0	0.0
100°-110°	1.2	0.3
110°-120°	2.7	0.7
120°-130°	3.9	1.0
130°-140°	5.8	1.5
140°-150°	12.8	3.4
150°-160°	49.3	13.0
160°-170°	147.2	38.7
170°-180°	157.9	41.5
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°	3.9	1.0
90°-150°	26.4	6.9
90°-180°	381.0	100.0
0°-180°	380.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
90°	0	
95°	0	0
105°	1	1
115°	3	3
125°	5	4
135°	7	6
145°	19	13
155°	97	49
165°	506	147
175°	1953	158
180°	2456	

TEST NUMBER: P277818

CATALOG NUMBER: 696-8LED2725-12-BK

**CANDELA DISTRIBUTION (FULL):**

	0°
90°	0.0
92.5°	0.0
95°	0.0
97.5°	0.0
100°	0.0
102.5°	0.9
105°	0.9
107.5°	1.8
110°	1.8
112.5°	2.7
115°	2.7
117.5°	2.7
120°	3.7
122.5°	3.7
125°	4.6
127.5°	4.6
130°	5.5
132.5°	6.4
135°	7.3
137.5°	8.2
140°	11.0
142.5°	15.5
145°	19.2
147.5°	24.6
150°	37.4
152.5°	60.3
155°	96.8
157.5°	153.4
160°	240.1
162.5°	359.7
165°	505.7
167.5°	717.6
170°	1068.2
172.5°	1512.8
175°	1952.9
177.5°	2305.2
180°	2455.9

(END OF REPORT)