

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: P277819

Luminaire Tested: 696-8LED2725-12-BK-DIFF

Issue Date: 3/3/2020

Tested By:

Approved By:



NVLAP Lab Code: 200050-0

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**Test Information**

Test Method: LM-79-2019  
 Report Number: P277819  
 Test Lab: INNOVATION CENTER(G2)  
 Issue Date: 3/3/2020  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: LUMIERE  
 Catalog Number: 696-8LED2725-12-BK-DIFF  
 Description: BOCA 696, 8 WATT, 2700K CCT, 25 DEGREE NARROW  
 OPTIC, FLUSH HOOD BLACK, DIFFUSED LENS  
 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: 309.1 lumens  
 Efficiency: N/A  
 Efficacy: 39.6 lumens/watt  
 N/A  
 Luminous Opening: Circular (Dia: 0.17' x H: 0')  
 CIE Type: Indirect

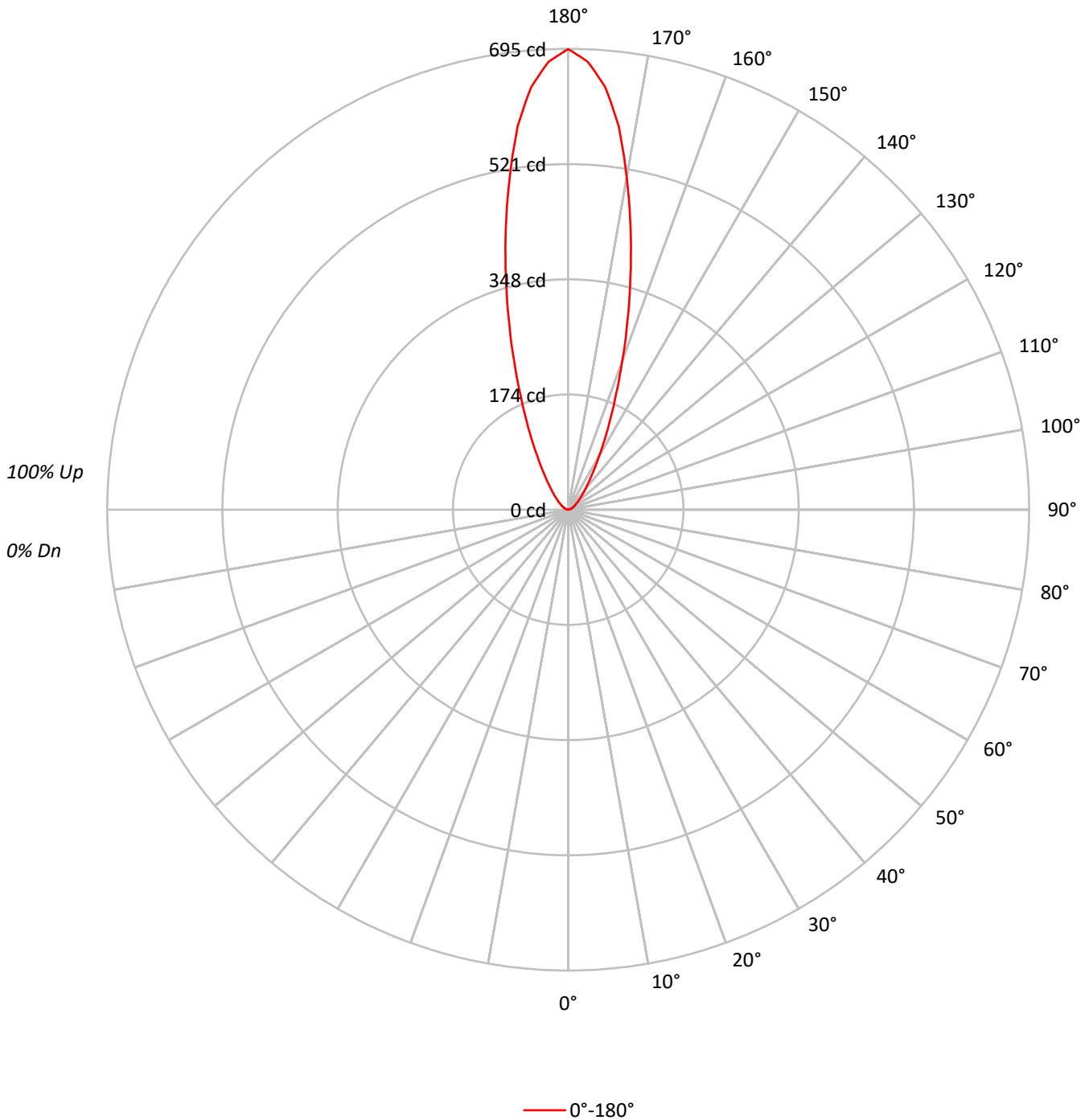
Input Watts (W): 7.8  
 Input Voltage (V): NR  
 Input Current (Ain): NR  
 Voltage Rise (V): NR  
 Power Factor: NR  
 Total Harmonic Distortion (THDi): NR  
 Frequency (hertz): 60  
 Stabilization Time: NR  
 Operation Time: NR  
 Ambient Temperature (°C): NR  
 Test Distance: 24 FT



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

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CATALOG NUMBER: 696-8LED2725-12-BK-DIFF

### Luminous Intensity Polar Plot



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

RF	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	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°	2547
105°	5141
110°	6633
115°	8525
120°	9867
125°	11785
130°	14733
135°	19114
140°	25308
145°	35713
150°	53036
155°	80996
160°	124635
165°	185091
170°	254731
175°	316888

**MAXIMUM LUMINANCE 45°-90°:**

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

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**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°	0.1	0.0
100°-110°	2.9	0.9
110°-120°	7.0	2.3
120°-130°	12.6	4.1
130°-140°	21.5	7.0
140°-150°	38.3	12.4
150°-160°	69.8	22.6
160°-170°	100.0	32.3
170°-180°	56.9	18.4
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°	10.0	3.2
90°-150°	82.4	26.7
90°-180°	309.0	100.0
0°-180°	309.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
90°	0	
95°	0	0
105°	3	3
115°	7	7
125°	14	13
135°	27	22
145°	59	38
155°	149	70
165°	362	100
175°	640	57
180°	695	

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**CANDELA DISTRIBUTION (FULL):**

	0°
90°	0.0
92.5°	0.0
95°	0.0
97.5°	0.0
100°	0.9
102.5°	1.8
105°	2.7
107.5°	3.7
110°	4.6
112.5°	5.5
115°	7.3
117.5°	8.2
120°	10.0
122.5°	11.9
125°	13.7
127.5°	16.4
130°	19.2
132.5°	22.8
135°	27.4
137.5°	32.9
140°	39.3
142.5°	48.4
145°	59.3
147.5°	73.9
150°	93.1
152.5°	117.8
155°	148.8
157.5°	188.1
160°	237.4
162.5°	296.7
165°	362.4
167.5°	434.5
170°	508.5
172.5°	583.2
175°	639.8
177.5°	676.3
180°	694.6

(END OF REPORT)