

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: P277823

Luminaire Tested: 696-8LED2736-12-BK

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: P277823
 Test Lab: INNOVATION CENTER(G2)
 Issue Date: 3/3/2020
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: LUMIERE
 Catalog Number: 696-8LED2736-12-BK
 Description: BOCA 696, 8 WATT, 2700K CCT, 36 DEGREE WIDE OPTIC,
 FLUSH HOOD BLACK
 Light Source: (1) SORAA 2700K 95 CRI LED
 SM16-07-36D-927-03
 Ballast/Driver: -

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 373.5 lumens
 Efficiency: N/A
 Efficacy: 48.5 lumens/watt
 N/A
 Luminous Opening: Circular (Dia: 0.17' x H: 0')
 CIE Type: Indirect

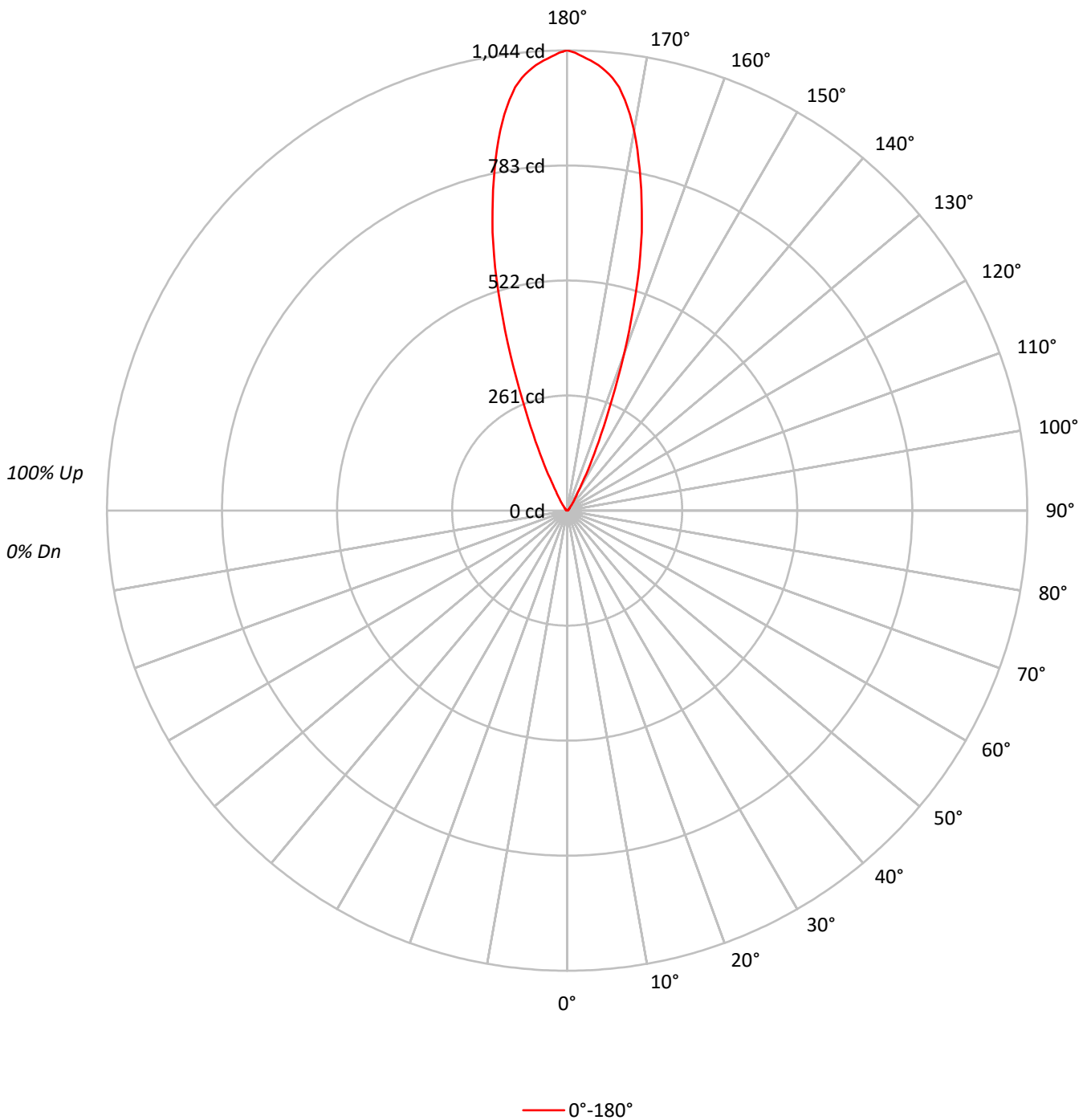
 Input Watts (W): 7.7
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 24 FT



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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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°	0
105°	1709
110°	2600
115°	3150
120°	3649
125°	3181
130°	4221
135°	5095
140°	8245
145°	14814
150°	30136
155°	85464
160°	196986
165°	333828
170°	438591
175°	495925

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°	0.0	0.0
100°-110°	1.2	0.3
110°-120°	2.7	0.7
120°-130°	3.7	1.0
130°-140°	6.1	1.6
140°-150°	16.6	4.4
150°-160°	77.0	20.6
160°-170°	174.4	46.7
170°-180°	91.8	24.6
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°	30.3	8.1
90°-180°	373.0	99.9
0°-180°	373.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
90°	0	
95°	0	0
105°	1	1
115°	3	3
125°	4	4
135°	7	6
145°	25	17
155°	157	77
165°	654	174
175°	1001	92
180°	1044	

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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°	3.7
127.5°	4.6
130°	5.5
132.5°	6.4
135°	7.3
137.5°	9.1
140°	12.8
142.5°	17.3
145°	24.6
147.5°	33.8
150°	52.9
151°	65.7
152°	83.1
153°	104.1
154°	128.7
155°	157.0
156°	189.0
157°	227.3
158°	272.0
159°	321.3
160°	375.2
161°	431.8
162°	490.2
163°	547.7
164°	602.5
165°	653.6
166°	700.2
167°	746.7
168°	791.5
169°	834.4
170°	875.4

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CANDELA DISTRIBUTION (continued):

	0°
171°	910.0
172°	941.1
173°	967.6
174°	986.7
175°	1001.3
176°	1013.2
177°	1022.3
178°	1030.5
179°	1038.8
180°	1044.2

(END OF REPORT)