

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[_4000K

Luminaire Tested: 696-8LED4025-12-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: P27781[_4000K
 Test Lab: INNOVATION CENTER(G2)
 Issue Date: 3/3/2020
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: LUMIERE
 Catalog Number: 696-8LED4025-12-BK-DIFF
 Description: BOCA 696, 8 WATT, 4000K CCT, 25 DEGREE NARROW
 OPTIC, FLUSH HOOD BLACK, DIFFUSED LENS
 Light Source: (1) SORAA 4000K 90 CRI 25° NFL LED
 SM16-07-25D-940-03
 Ballast/Driver: -

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 398.3 lumens
 Efficiency: N/A
 Efficacy: 51.1 lumens/watt
 N/A
 Luminous Opening: Circular (Dia: 0.17' x H: 0')
 CIE Type: Indirect

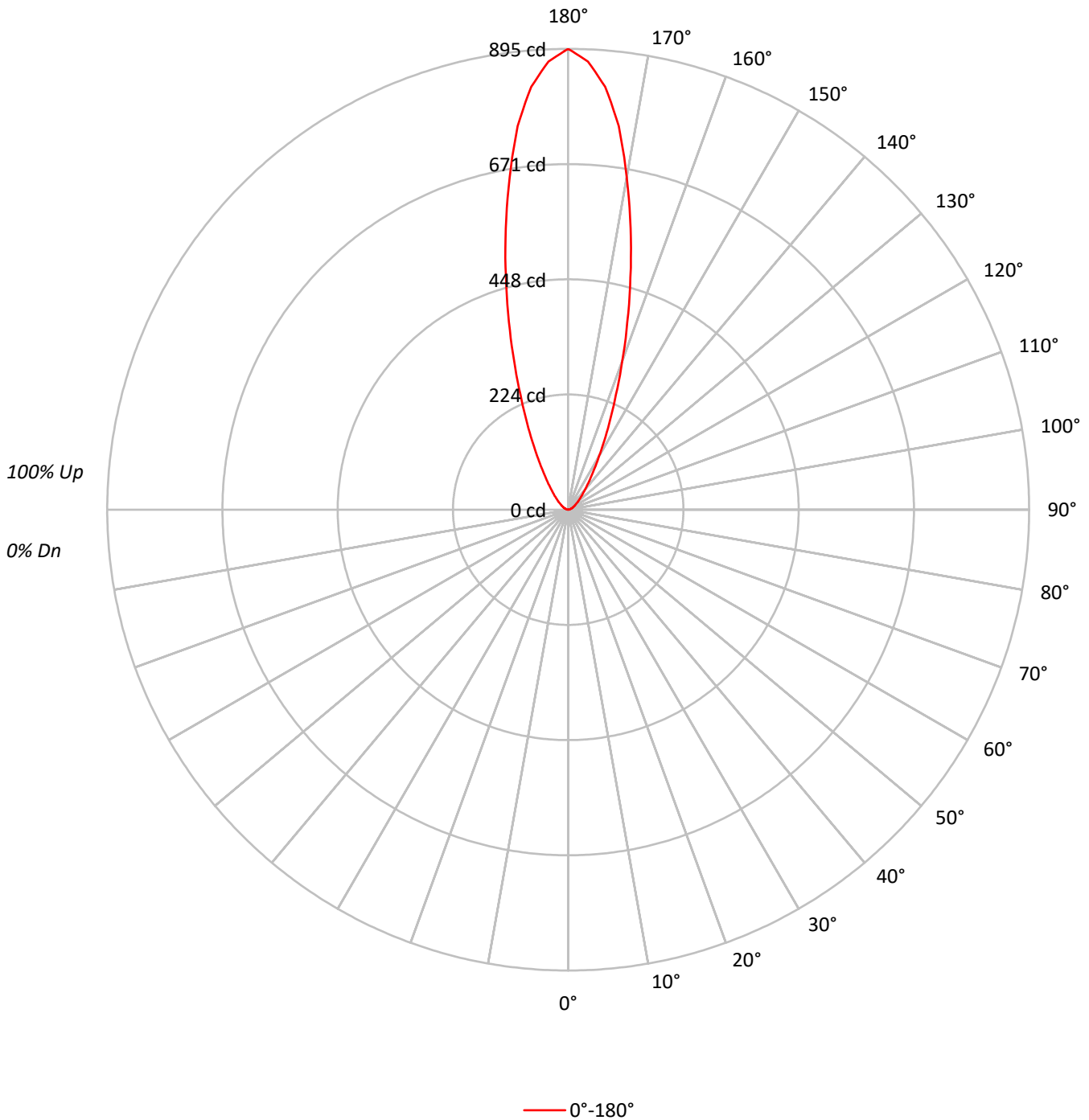
Input Watts (W): 7.8
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 24 FT



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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Luminous Intensity Polar Plot



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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°	3282
105°	6624
110°	8546
115°	10984
120°	12713
125°	15185
130°	18983
135°	24627
140°	32608
145°	46014
150°	68334
155°	104359
160°	160586
165°	238479
170°	328207
175°	408293

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°	0.2	0.0
100°-110°	3.7	0.9
110°-120°	9.0	2.3
120°-130°	16.3	4.1
130°-140°	27.7	7.0
140°-150°	49.3	12.4
150°-160°	89.9	22.6
160°-170°	128.8	32.3
170°-180°	73.3	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°	12.9	3.2
90°-150°	106.2	26.7
90°-180°	398.0	99.9
0°-180°	398.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
90°	0	
95°	0	0
105°	3	4
115°	9	9
125°	18	16
135°	35	28
145°	76	49
155°	192	90
165°	467	129
175°	824	73
180°	895	

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CANDELA DISTRIBUTION (FULL):

	0°
90°	0.0
92.5°	0.0
95°	0.0
97.5°	0.0
100°	1.2
102.5°	2.3
105°	3.5
107.5°	4.8
110°	5.9
112.5°	7.1
115°	9.4
117.5°	10.6
120°	12.9
122.5°	15.3
125°	17.7
127.5°	21.1
130°	24.7
132.5°	29.4
135°	35.3
137.5°	42.4
140°	50.6
142.5°	62.4
145°	76.4
147.5°	95.2
150°	119.9
152.5°	151.8
155°	191.7
157.5°	242.3
160°	305.9
162.5°	382.2
165°	466.9
167.5°	559.8
170°	655.1
172.5°	751.5
175°	824.4
177.5°	871.4
180°	895.0

(END OF REPORT)