

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P488387

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1HI-20-120-EDD**

Issue Date: 3/11/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P488387
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-115-8)
Test Lab: INNOVATION CENTER
Issue Date: 3/11/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: CLM-12-2-INS-A19156-LD4-1HI-20-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

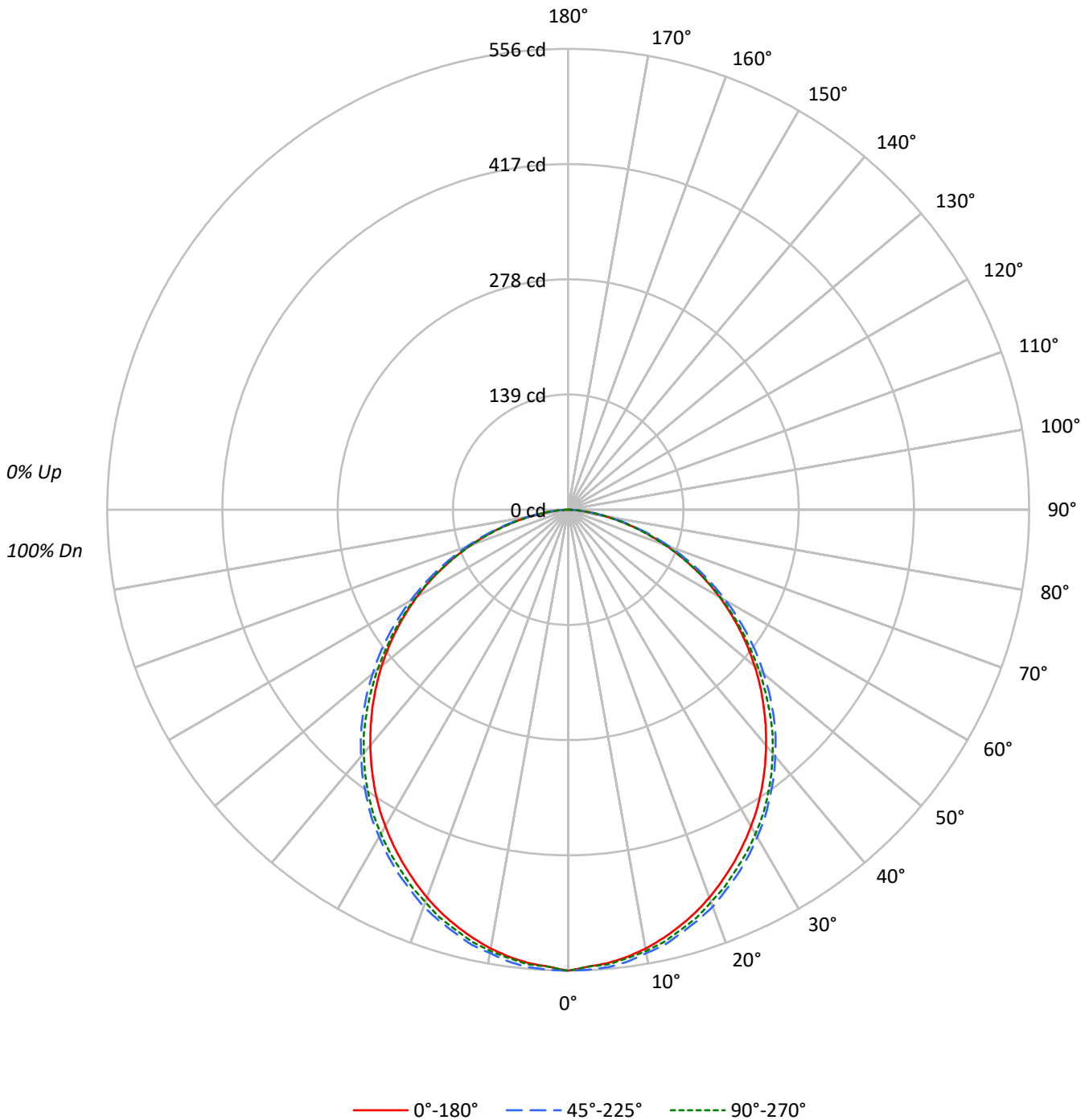
Lumens per Lamp: N/A
Luminaire Lumens: 1462.3 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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: 25 FT

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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2993	2993	2993
5°	2966	2994	2975
10°	2939	2969	2954
15°	2898	2945	2924
20°	2852	2920	2885
25°	2797	2878	2845
30°	2740	2833	2807
35°	2679	2784	2759
40°	2609	2729	2694
45°	2536	2664	2614
50°	2460	2578	2511
55°	2370	2481	2405
60°	2269	2364	2291
65°	2138	2221	2141
70°	1969	2047	1947
75°	1732	1811	1707
80°	1407	1469	1392
85°	982	1044	1019



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.4	3.6
10°-20°	148.4	10.2
20°-30°	221.4	15.1
30°-40°	262.4	17.9
40°-50°	265.5	18.2
50°-60°	231.8	15.9
60°-70°	169.4	11.6
70°-80°	90.1	6.2
80°-90°	20.8	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	422.2	28.9
0°-40°	684.6	46.8
0°-60°	1181.9	80.8
0°-90°	1462.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1462.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	556	556	556	556	556	
5°	549	550	554	555	551	52
15°	520	524	528	532	525	147
25°	471	477	485	486	479	217
35°	408	414	424	427	420	255
45°	333	339	350	350	343	257
55°	253	258	264	261	256	226
65°	168	171	174	171	168	166
75°	83	85	87	84	82	89
85°	16	16	17	17	16	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	556.2	556.2	556.2	556.2	556.2
2.5°	551.9	553.7	555.5	556.3	551.8
5°	549.0	550.0	554.1	555.4	550.7
7.5°	544.2	545.8	549.8	550.4	545.8
10°	537.7	540.5	543.2	546.1	540.6
12.5°	529.4	533.2	537.7	538.2	534.1
15°	520.1	523.6	528.5	531.7	524.8
17.5°	509.7	513.0	519.4	520.0	515.8
20°	498.0	502.2	509.8	511.2	503.7
22.5°	484.8	490.4	496.8	498.1	492.6
25°	471.0	476.8	484.6	486.4	479.1
27.5°	456.5	462.0	470.9	472.2	466.0
30°	440.9	446.2	455.9	458.0	451.7
32.5°	425.2	430.4	441.2	443.0	436.8
35°	407.7	414.1	423.8	426.8	419.9
37.5°	389.8	396.0	407.2	409.8	402.4
40°	371.3	377.5	388.4	390.6	383.5
42.5°	352.5	358.6	370.3	370.7	364.7
45°	333.2	339.1	350.0	350.3	343.4
47.5°	313.6	319.5	329.3	328.2	321.7
50°	293.8	299.4	307.9	305.7	299.9
52.5°	273.2	278.7	286.8	283.2	277.7
55°	252.6	257.7	264.4	260.6	256.3
57.5°	231.8	237.0	242.1	238.2	234.5
60°	210.8	215.3	219.6	215.6	212.8
62.5°	189.5	193.4	197.0	193.3	190.6
65°	167.9	171.4	174.4	170.9	168.1
67.5°	146.5	149.4	152.2	148.6	145.6
70°	125.1	127.5	130.1	126.4	123.7
72.5°	103.9	106.1	108.4	104.8	102.4
75°	83.3	85.2	87.1	83.9	82.1
77.5°	63.7	65.3	66.6	64.6	62.8
80°	45.4	46.6	47.4	46.6	44.9
82.5°	29.2	30.1	30.5	30.4	29.3
85°	15.9	16.2	16.9	17.1	16.5
87.5°	6.1	6.5	6.7	7.2	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)