

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: P488448

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2STD-27-120-EDD-90**

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: P488448
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-LD4-2STD-27-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

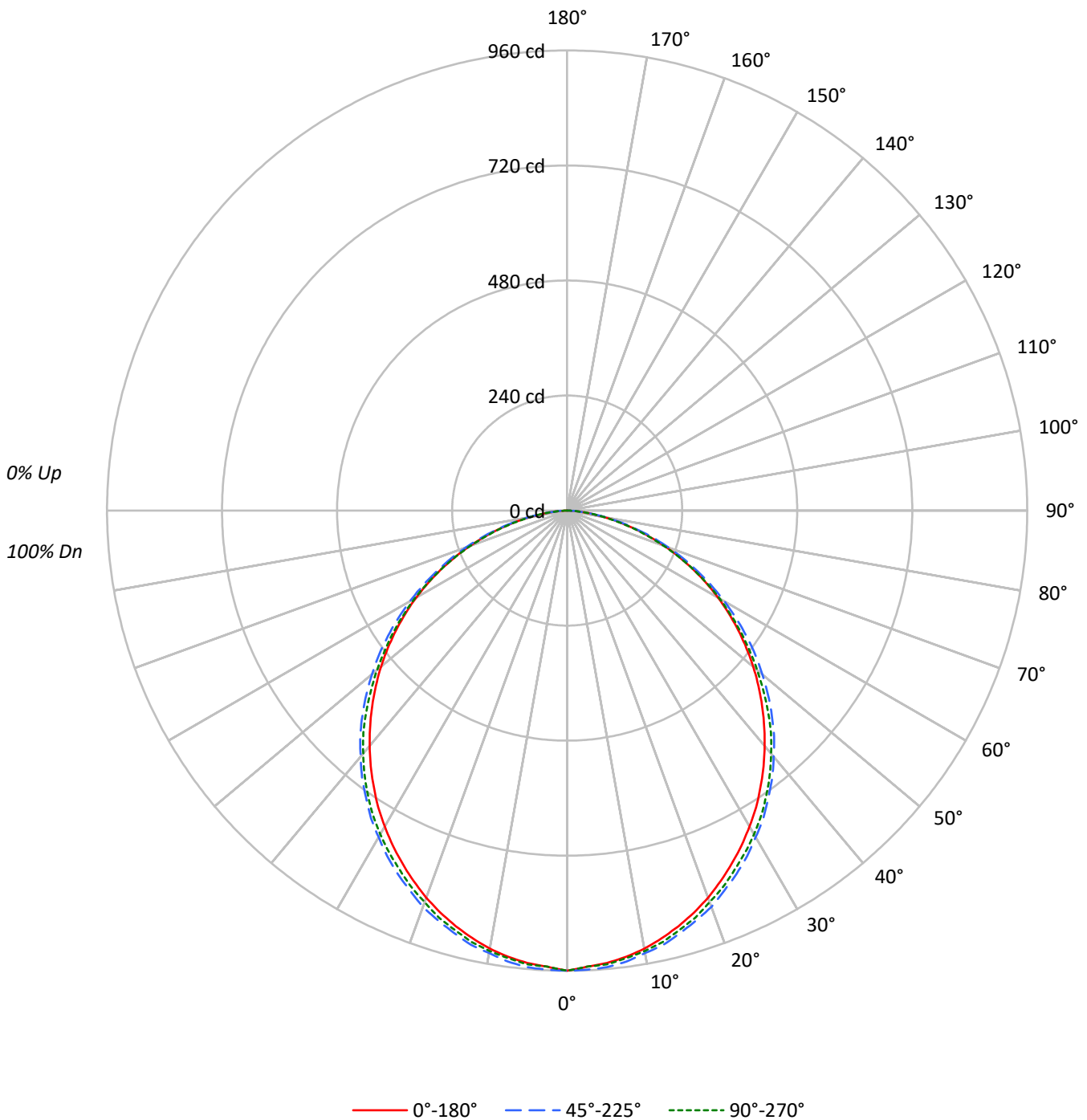
Lumens per Lamp: N/A
Luminaire Lumens: 2523.7 lumens
Efficiency: N/A
Efficacy: 75.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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°	5166	5166	5166
5°	5118	5166	5135
10°	5072	5123	5098
15°	5001	5082	5046
20°	4923	5040	4979
25°	4827	4967	4910
30°	4729	4890	4845
35°	4623	4806	4761
40°	4503	4710	4650
45°	4376	4597	4510
50°	4245	4450	4334
55°	4091	4282	4151
60°	3916	4078	3953
65°	3691	3832	3693
70°	3396	3533	3358
75°	2990	3125	2944
80°	2430	2535	2402
85°	1692	1803	1760



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	3.6
10°-20°	256.2	10.2
20°-30°	382.1	15.1
30°-40°	452.8	17.9
40°-50°	458.2	18.2
50°-60°	400.2	15.9
60°-70°	292.4	11.6
70°-80°	155.6	6.2
80°-90°	36.0	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°	728.7	28.9
0°-40°	1181.5	46.8
0°-60°	2039.8	80.8
0°-90°	2523.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2523.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	947	949	956	958	950	90
15°	898	904	912	918	906	253
25°	813	823	836	840	827	374
35°	704	715	732	737	725	440
45°	575	585	604	604	593	444
55°	436	445	456	450	442	390
65°	290	296	301	295	290	287
75°	144	147	150	145	142	153
85°	27	28	29	30	28	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	959.9	959.9	959.9	959.9	959.9
2.5°	952.4	955.5	958.7	960.1	952.3
5°	947.4	949.2	956.3	958.5	950.4
7.5°	939.2	941.9	948.8	949.8	942.0
10°	928.0	932.8	937.4	942.4	932.9
12.5°	913.7	920.2	928.0	928.9	921.7
15°	897.6	903.6	912.1	917.6	905.7
17.5°	879.6	885.4	896.4	897.4	890.2
20°	859.5	866.7	879.9	882.2	869.3
22.5°	836.7	846.4	857.4	859.6	850.1
25°	812.8	822.8	836.4	839.5	826.8
27.5°	787.8	797.4	812.7	814.9	804.2
30°	761.0	770.0	786.8	790.5	779.6
32.5°	733.8	742.8	761.4	764.5	753.9
35°	703.6	714.6	731.5	736.6	724.7
37.5°	672.8	683.5	702.7	707.3	694.5
40°	640.9	651.5	670.4	674.2	661.9
42.5°	608.3	618.9	639.1	639.7	629.5
45°	575.0	585.2	604.0	604.5	592.6
47.5°	541.2	551.5	568.3	566.4	555.2
50°	507.0	516.8	531.5	527.7	517.6
52.5°	471.6	481.1	495.0	488.8	479.3
55°	436.0	444.8	456.4	449.8	442.4
57.5°	400.1	409.0	417.9	411.2	404.8
60°	363.8	371.6	378.9	372.1	367.2
62.5°	327.0	333.7	340.0	333.5	328.9
65°	289.8	295.7	300.9	294.9	290.0
67.5°	252.8	257.8	262.6	256.4	251.3
70°	215.8	220.1	224.5	218.1	213.4
72.5°	179.3	183.1	187.0	180.8	176.7
75°	143.8	147.1	150.3	144.8	141.6
77.5°	109.9	112.7	114.9	111.4	108.3
80°	78.4	80.5	81.8	80.4	77.5
82.5°	50.4	51.9	52.6	52.5	50.6
85°	27.4	27.9	29.2	29.5	28.5
87.5°	10.6	11.3	11.6	12.5	11.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)