

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: P489238

Luminaire Tested: **CLM-24-2-INS-P12125-LD4-1STD-20-120-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: P489238  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P387254)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/11/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: CLM-24-2-INS-P12125-LD4-1STD-20-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

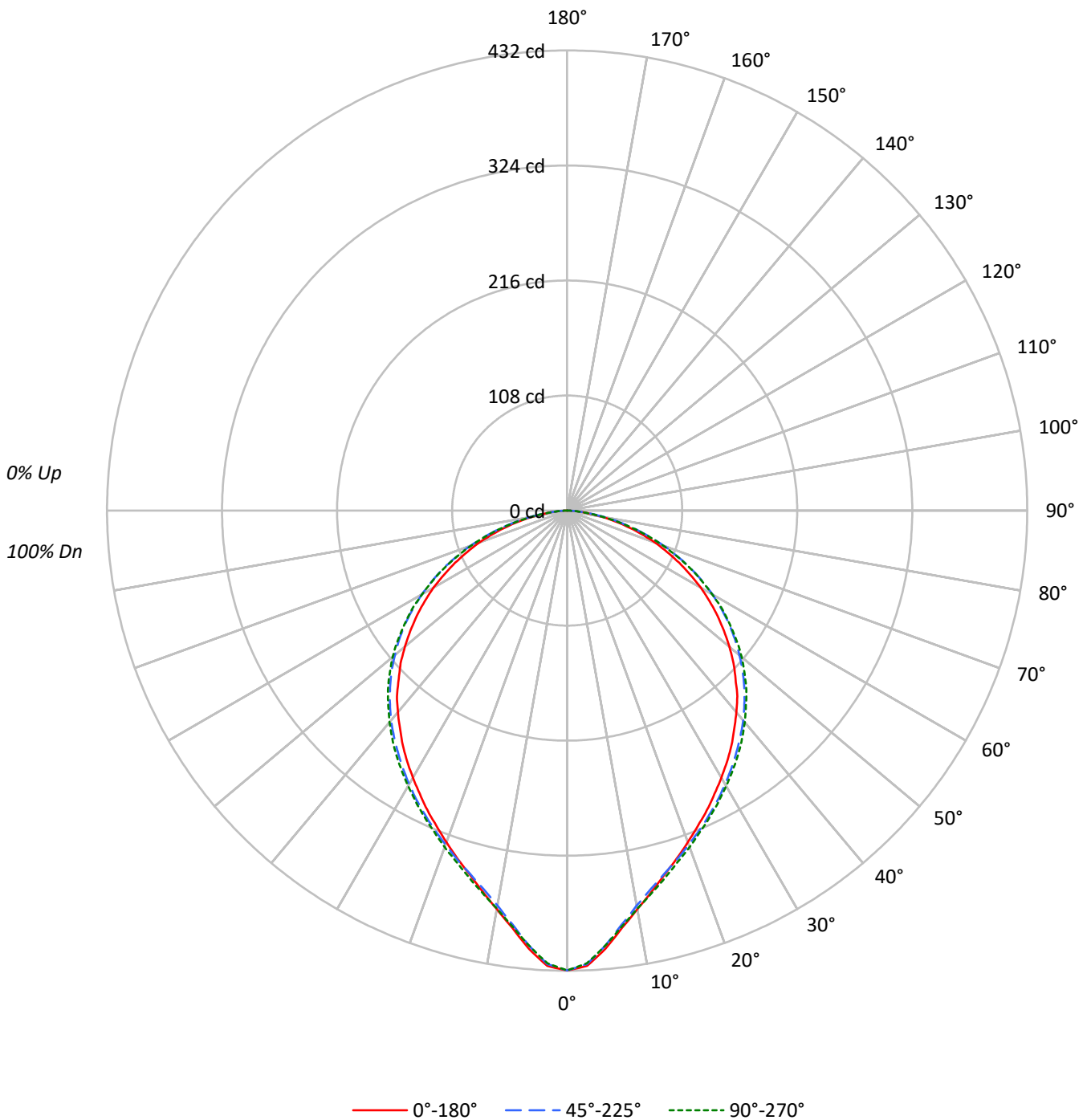
Lumens per Lamp: N/A  
Luminaire Lumens: 1002.7 lumens  
Efficiency: N/A  
Efficacy: 60.4 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
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

TEST NUMBER: P489238

CATALOG NUMBER: CLM-24-2-INS-P12125-LD4-1STD-20-120-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P489238

CATALOG NUMBER: CLM-24-2-INS-P12125-LD4-1STD-20-120-EDD-90

**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	104	100	96	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64		73	67	62		70	65	61	59
4	83	71	62	55	81	70	61	55	67	60	54		65	59	54		63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47		58	52	46		56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	37		48	41	36		47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33		44	37	33		43	37	32	30
9	57	43	35	30	55	43	35	30	42	35	30		41	34	29		40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1162	1162	1162
5°	1115	1108	1108
10°	1038	1029	1037
15°	985	983	993
20°	949	956	963
25°	922	937	942
30°	900	922	928
35°	884	910	919
40°	868	904	911
45°	851	895	905
50°	832	884	895
55°	809	871	875
60°	780	847	846
65°	739	814	809
70°	690	759	751
75°	609	673	666
80°	494	549	521
85°	343	349	337



TEST NUMBER: P489238

CATALOG NUMBER: CLM-24-2-INS-P12125-LD4-1STD-20-120-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.1	3.8
10°-20°	99.9	10.0
20°-30°	145.3	14.5
30°-40°	172.9	17.2
40°-50°	179.5	17.9
50°-60°	162.6	16.2
60°-70°	122.7	12.2
70°-80°	66.9	6.7
80°-90°	14.7	1.5
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°	283.3	28.3
0°-40°	456.2	45.5
0°-60°	798.4	79.6
0°-90°	1002.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1002.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	432	432	432	432	432	
5°	413	412	410	410	410	38
15°	354	353	353	355	356	100
25°	310	313	316	318	317	143
35°	269	272	277	281	280	168
45°	224	228	235	238	238	173
55°	172	176	186	187	186	154
65°	116	119	128	128	127	115
75°	59	61	65	65	64	62
85°	11	11	11	11	11	14
90°	0	0	0	0	0	



TEST NUMBER: P489238

CATALOG NUMBER: CLM-24-2-INS-P12125-LD4-1STD-20-120-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	431.7	431.7	431.7	431.7	431.7
2.5°	427.9	427.5	426.1	425.5	425.4
5°	412.9	411.9	410.0	409.8	410.0
7.5°	395.0	393.9	392.0	392.7	393.7
10°	379.9	377.2	376.4	377.5	379.4
12.5°	366.4	364.3	363.6	366.4	367.7
15°	353.6	352.7	352.9	355.3	356.4
17.5°	342.5	341.9	343.3	345.2	345.7
20°	331.4	332.4	333.7	335.7	336.3
22.5°	320.5	322.5	324.7	327.3	326.4
25°	310.4	313.0	315.5	318.1	317.3
27.5°	299.8	302.8	306.2	309.0	308.0
30°	289.5	293.3	296.6	300.1	298.5
32.5°	279.4	282.9	286.9	291.1	289.3
35°	269.1	272.4	277.0	281.2	279.8
37.5°	257.8	261.8	267.1	270.7	269.8
40°	247.2	250.9	257.3	259.6	259.4
42.5°	236.5	239.6	246.3	249.0	248.5
45°	223.5	227.5	235.1	237.7	237.9
47.5°	212.0	215.3	223.5	225.5	226.0
50°	198.7	202.9	211.1	213.6	213.9
52.5°	185.6	190.2	198.6	200.3	200.6
55°	172.4	176.5	185.6	186.9	186.4
57.5°	158.5	163.4	171.8	172.5	173.0
60°	144.9	149.2	157.4	158.2	157.1
62.5°	130.1	134.5	142.9	143.1	142.2
65°	116.1	119.4	127.9	127.7	127.1
67.5°	101.4	105.5	111.7	112.0	111.4
70°	87.7	90.5	96.5	96.6	95.4
72.5°	72.9	75.9	80.8	80.1	79.8
75°	58.6	60.9	64.7	65.2	64.1
77.5°	45.4	47.1	49.9	49.6	48.4
80°	31.9	33.3	35.4	35.0	33.6
82.5°	20.4	21.3	22.5	22.0	21.5
85°	11.1	11.2	11.3	11.2	10.9
87.5°	4.1	4.2	4.2	4.1	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)