

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: P489246

Luminaire Tested: **CLM-24-2-INS-P12125-LD4-1STD-40-120-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: P489246  
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-40-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

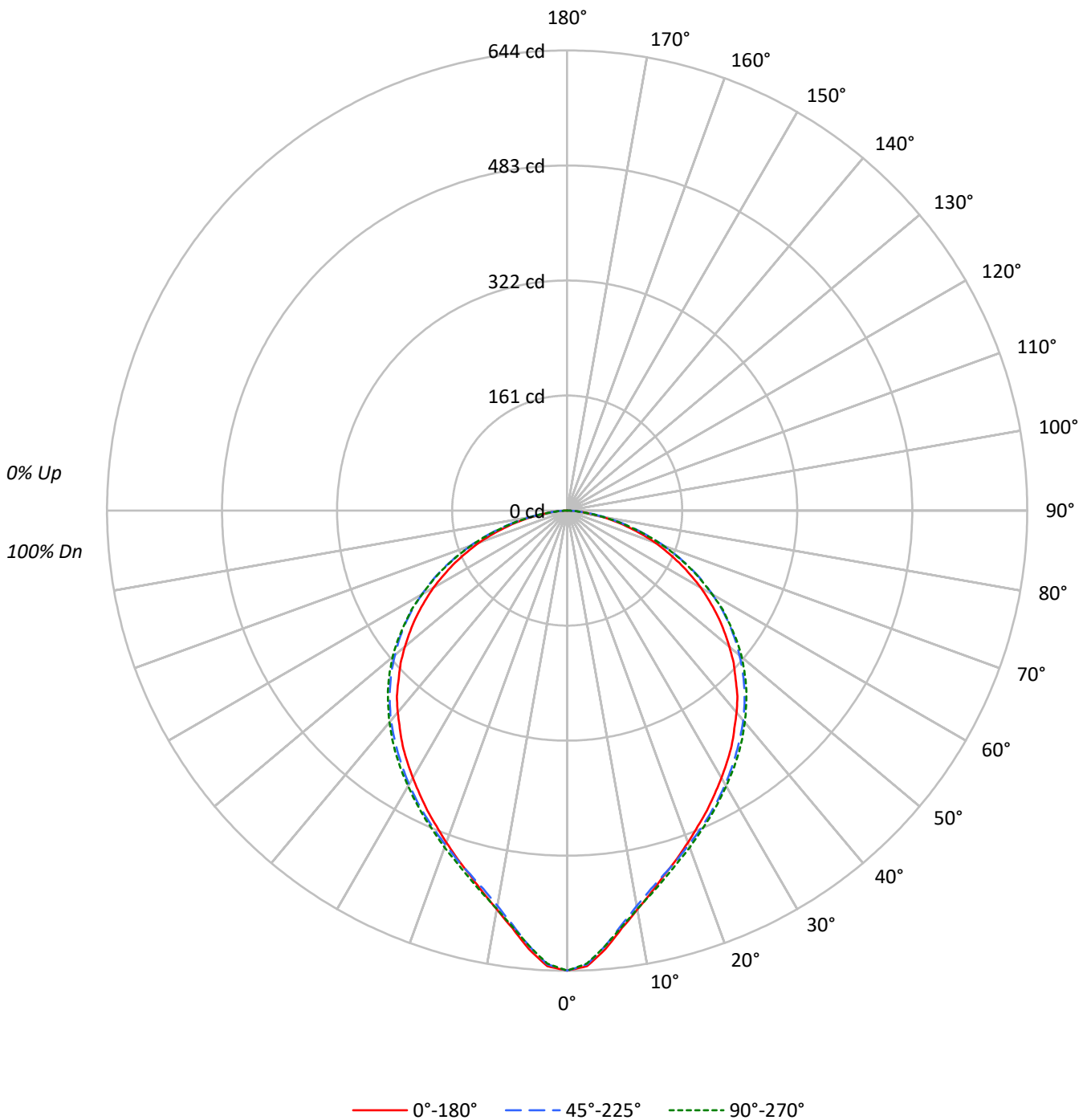
Lumens per Lamp: N/A  
Luminaire Lumens: 1495.5 lumens  
Efficiency: N/A  
Efficacy: 90.1 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

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

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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	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°	1732	1732	1732
5°	1663	1652	1652
10°	1548	1534	1546
15°	1469	1467	1481
20°	1415	1426	1436
25°	1375	1397	1405
30°	1342	1375	1383
35°	1319	1357	1371
40°	1295	1348	1359
45°	1268	1335	1351
50°	1240	1318	1335
55°	1206	1299	1304
60°	1163	1263	1260
65°	1102	1215	1207
70°	1029	1133	1119
75°	909	1003	994
80°	738	818	778
85°	513	522	500



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.9	3.8
10°-20°	149.0	10.0
20°-30°	216.7	14.5
30°-40°	257.9	17.2
40°-50°	267.7	17.9
50°-60°	242.6	16.2
60°-70°	183.0	12.2
70°-80°	99.7	6.7
80°-90°	21.9	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°	422.6	28.3
0°-40°	680.5	45.5
0°-60°	1190.8	79.6
0°-90°	1495.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1495.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	644	644	644	644	644	
5°	616	614	612	611	612	57
15°	527	526	526	530	532	149
25°	463	467	471	474	473	213
35°	401	406	413	419	417	251
45°	333	339	351	355	355	258
55°	257	263	277	279	278	230
65°	173	178	191	190	190	171
75°	87	91	96	97	96	93
85°	17	17	17	17	16	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	643.8	643.8	643.8	643.8	643.8
2.5°	638.2	637.6	635.5	634.7	634.5
5°	615.8	614.4	611.5	611.2	611.5
7.5°	589.1	587.5	584.6	585.8	587.2
10°	566.6	562.6	561.5	563.1	565.8
12.5°	546.5	543.3	542.3	546.5	548.4
15°	527.4	526.1	526.4	529.9	531.5
17.5°	510.8	510.0	512.1	514.8	515.6
20°	494.2	495.8	497.8	500.7	501.6
22.5°	478.0	481.0	484.2	488.1	486.8
25°	463.0	466.9	470.6	474.4	473.3
27.5°	447.1	451.6	456.7	460.9	459.3
30°	431.8	437.4	442.4	447.6	445.2
32.5°	416.7	422.0	427.9	434.2	431.5
35°	401.4	406.2	413.1	419.4	417.3
37.5°	384.5	390.5	398.3	403.8	402.4
40°	368.7	374.2	383.7	387.2	386.9
42.5°	352.8	357.3	367.3	371.3	370.7
45°	333.3	339.3	350.7	354.6	354.9
47.5°	316.1	321.1	333.3	336.4	337.0
50°	296.3	302.6	314.8	318.5	319.0
52.5°	276.9	283.6	296.2	298.7	299.2
55°	257.1	263.2	276.9	278.8	278.0
57.5°	236.3	243.7	256.3	257.2	258.0
60°	216.1	222.5	234.7	236.0	234.2
62.5°	194.0	200.6	213.2	213.5	212.0
65°	173.1	178.1	190.8	190.5	189.5
67.5°	151.2	157.3	166.7	167.0	166.2
70°	130.8	135.0	144.0	144.1	142.2
72.5°	108.8	113.3	120.5	119.5	119.1
75°	87.4	90.9	96.5	97.2	95.6
77.5°	67.7	70.3	74.5	74.0	72.2
80°	47.6	49.7	52.8	52.1	50.2
82.5°	30.4	31.7	33.6	32.8	32.0
85°	16.6	16.7	16.9	16.7	16.2
87.5°	6.1	6.3	6.3	6.1	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)