

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: METALUX

Report Number: P475379

Luminaire Tested: **14CZ2-29-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475379
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-29-S-UNV-L830-CD1-U
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

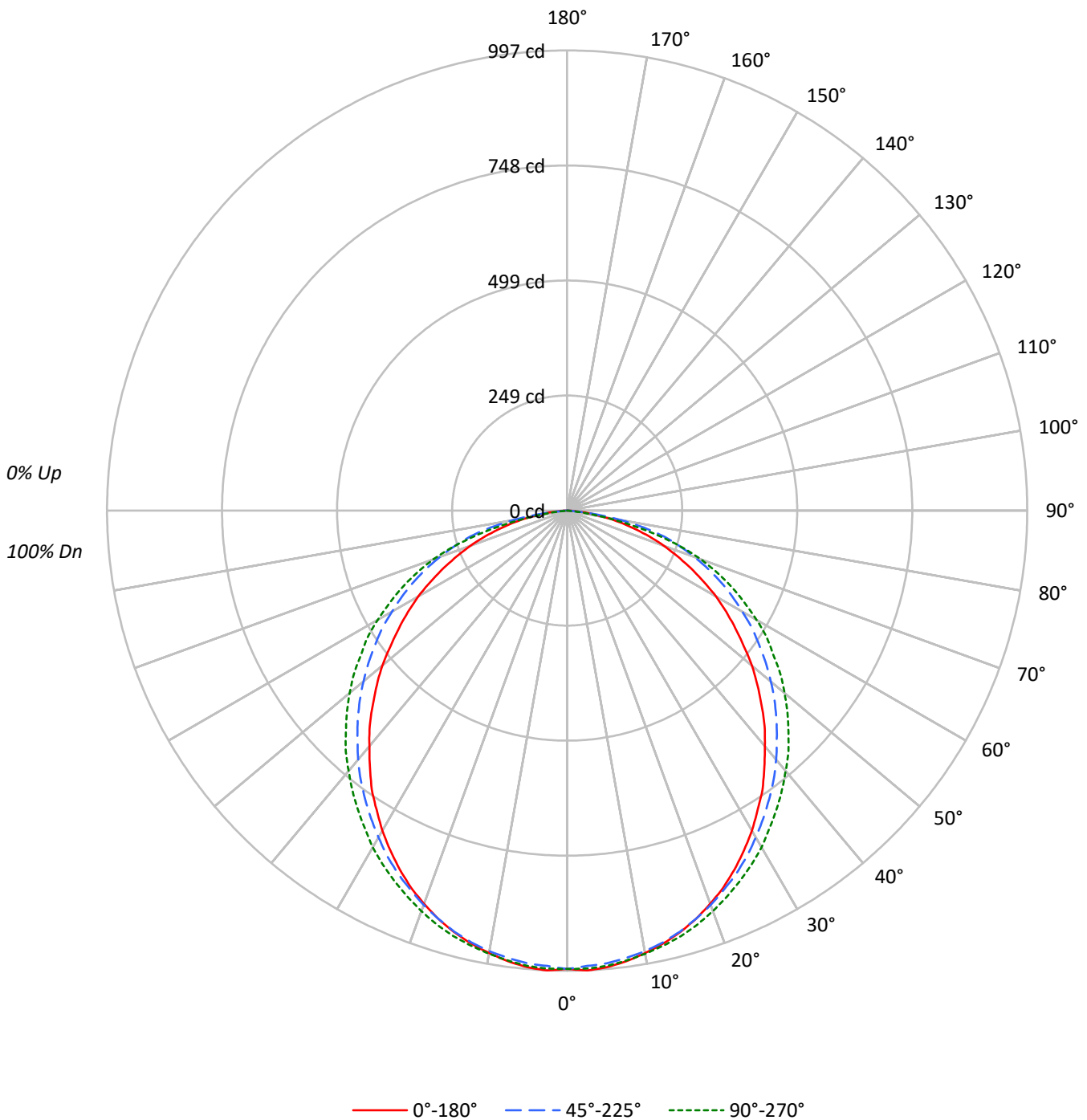
Lumens per Lamp: N/A
Luminaire Lumens: 2776.1 lumens
Efficiency: N/A
Efficacy: 129.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 21.4
Input Voltage (V): 120
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	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2672	2672	2672
5°	2683	2660	2675
10°	2660	2649	2664
15°	2635	2631	2658
20°	2596	2604	2644
25°	2547	2576	2630
30°	2488	2540	2618
35°	2424	2507	2598
40°	2342	2474	2587
45°	2267	2442	2580
50°	2190	2412	2575
55°	2088	2382	2559
60°	2004	2357	2552
65°	1883	2344	2513
70°	1756	2305	2426
75°	1551	2262	2045
80°	1254	1838	1210
85°	905	516	130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.9	3.4
10°-20°	267.4	9.6
20°-30°	401.2	14.5
30°-40°	478.2	17.2
40°-50°	493.8	17.8
50°-60°	449.8	16.2
60°-70°	352.4	12.7
70°-80°	203.9	7.3
80°-90°	35.4	1.3
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°	762.5	27.5
0°-40°	1240.8	44.7
0°-60°	2184.4	78.7
0°-90°	2776.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2776.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	993	993	993	993	993	
5°	993	990	985	992	990	94
15°	946	944	944	954	954	267
25°	858	861	868	884	886	395
35°	738	745	763	787	791	460
45°	596	611	642	671	678	460
55°	445	467	508	540	545	399
65°	296	322	368	392	395	293
75°	149	181	218	211	197	159
85°	29	39	17	6	4	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	993.1	993.1	993.1	993.1	993.1
2.5°	997.3	993.1	987.5	993.1	993.1
5°	993.1	990.3	984.8	991.7	990.3
7.5°	984.8	982.0	977.8	984.8	983.4
10°	973.6	972.2	969.4	977.8	975.0
12.5°	961.0	959.6	958.3	966.6	965.2
15°	945.7	944.3	944.3	954.1	954.1
17.5°	927.6	927.6	927.6	940.1	940.1
20°	906.6	906.6	909.4	923.4	923.4
22.5°	884.3	884.3	888.5	903.9	905.2
25°	857.8	860.6	867.6	884.3	885.7
27.5°	829.9	834.1	843.9	862.0	864.8
30°	800.6	804.8	817.4	838.3	842.5
32.5°	768.6	775.5	790.9	811.8	816.0
35°	737.9	744.8	763.0	786.7	790.9
37.5°	701.6	712.8	735.1	757.4	764.4
40°	666.7	679.3	704.4	730.9	736.5
42.5°	633.3	644.4	672.3	701.6	710.0
45°	595.6	610.9	641.6	670.9	677.9
47.5°	559.3	574.7	609.5	640.2	647.2
50°	523.1	538.4	576.1	606.8	615.1
52.5°	482.6	504.9	542.6	573.3	583.0
55°	445.0	467.3	507.7	539.8	545.4
57.5°	408.7	431.0	475.6	504.9	513.3
60°	372.4	394.7	438.0	467.3	474.2
62.5°	333.4	358.5	403.1	428.2	433.8
65°	295.7	322.2	368.2	391.9	394.7
67.5°	258.0	285.9	330.6	350.1	352.9
70°	223.2	251.1	292.9	311.0	308.3
72.5°	186.9	214.8	255.3	265.0	256.7
75°	149.2	181.3	217.6	210.6	196.7
77.5°	115.8	146.5	170.2	149.2	138.1
80°	80.9	113.0	118.6	92.1	78.1
82.5°	53.0	79.5	64.2	39.1	34.9
85°	29.3	39.1	16.7	5.6	4.2
87.5°	9.8	5.6	2.8	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)