

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: P475378

Luminaire Tested: **14CZ2-25-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475378
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-25-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

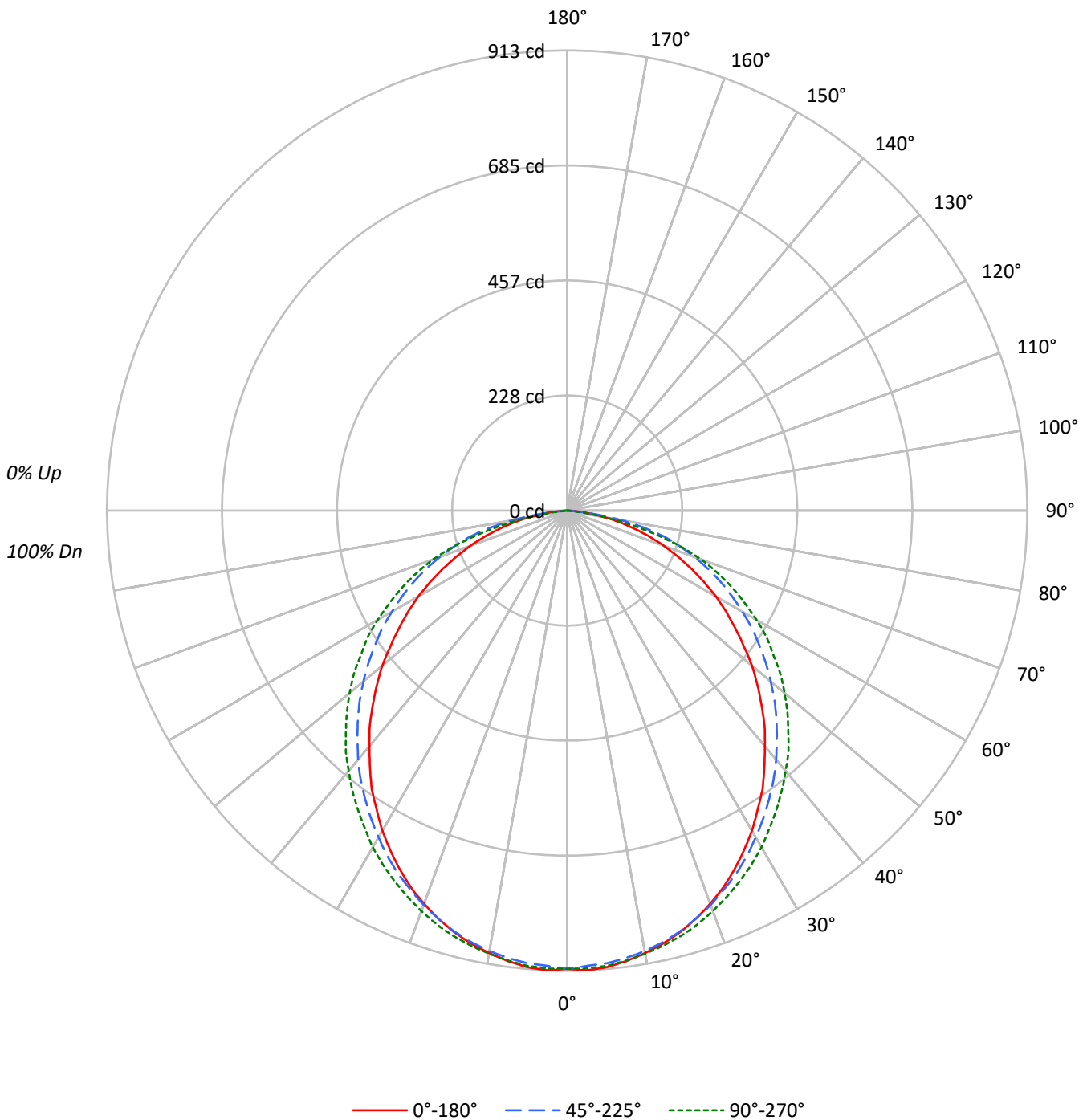
Lumens per Lamp: N/A
Luminaire Lumens: 2541.8 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19
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°	2447	2447	2447
5°	2456	2435	2450
10°	2436	2425	2439
15°	2412	2409	2433
20°	2377	2385	2421
25°	2332	2359	2408
30°	2278	2325	2397
35°	2219	2295	2379
40°	2145	2265	2369
45°	2075	2236	2362
50°	2005	2208	2358
55°	1911	2181	2343
60°	1835	2158	2337
65°	1724	2147	2301
70°	1607	2110	2220
75°	1421	2071	1873
80°	1148	1683	1108
85°	827	472	117



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.0	3.4
10°-20°	244.9	9.6
20°-30°	367.3	14.5
30°-40°	437.9	17.2
40°-50°	452.2	17.8
50°-60°	411.8	16.2
60°-70°	322.6	12.7
70°-80°	186.7	7.3
80°-90°	32.4	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°	698.2	27.5
0°-40°	1136.0	44.7
0°-60°	2000.0	78.7
0°-90°	2541.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2541.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	909	909	909	909	909	
5°	909	907	902	908	907	86
15°	866	865	865	874	874	244
25°	785	788	794	810	811	362
35°	676	682	699	720	724	422
45°	545	559	588	614	621	421
55°	407	428	465	494	499	365
65°	271	295	337	359	361	268
75°	137	166	199	193	180	146
85°	27	36	15	5	4	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	909.3	909.3	909.3	909.3	909.3
2.5°	913.1	909.3	904.2	909.3	909.3
5°	909.3	906.8	901.6	908.0	906.8
7.5°	901.6	899.1	895.3	901.6	900.4
10°	891.4	890.2	887.6	895.3	892.7
12.5°	879.9	878.7	877.4	885.0	883.8
15°	865.9	864.6	864.6	873.5	873.5
17.5°	849.3	849.3	849.3	860.8	860.8
20°	830.1	830.1	832.7	845.5	845.5
22.5°	809.7	809.7	813.5	827.6	828.8
25°	785.4	788.0	794.4	809.7	811.0
27.5°	759.9	763.7	772.7	789.3	791.8
30°	733.1	736.9	748.4	767.5	771.4
32.5°	703.7	710.1	724.1	743.3	747.1
35°	675.6	682.0	698.6	720.3	724.1
37.5°	642.4	652.6	673.0	693.5	699.9
40°	610.5	622.0	644.9	669.2	674.3
42.5°	579.8	590.0	615.6	642.4	650.1
45°	545.3	559.4	587.5	614.3	620.7
47.5°	512.1	526.2	558.1	586.2	592.6
50°	478.9	493.0	527.4	555.5	563.2
52.5°	441.9	462.3	496.8	524.9	533.8
55°	407.4	427.8	464.9	494.2	499.4
57.5°	374.2	394.6	435.5	462.3	470.0
60°	341.0	361.4	401.0	427.8	434.2
62.5°	305.2	328.2	369.1	392.1	397.2
65°	270.7	295.0	337.2	358.9	361.4
67.5°	236.3	261.8	302.7	320.6	323.1
70°	204.3	229.9	268.2	284.8	282.2
72.5°	171.1	196.7	233.7	242.7	235.0
75°	136.7	166.0	199.2	192.8	180.1
77.5°	106.0	134.1	155.8	136.7	126.4
80°	74.1	103.4	108.6	84.3	71.5
82.5°	48.5	72.8	58.7	35.8	31.9
85°	26.8	35.8	15.3	5.1	3.8
87.5°	8.9	5.1	2.6	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)