

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: P475005

Luminaire Tested: **22CZ2-24VHE-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475005
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24VHE-RDP-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1563.4 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

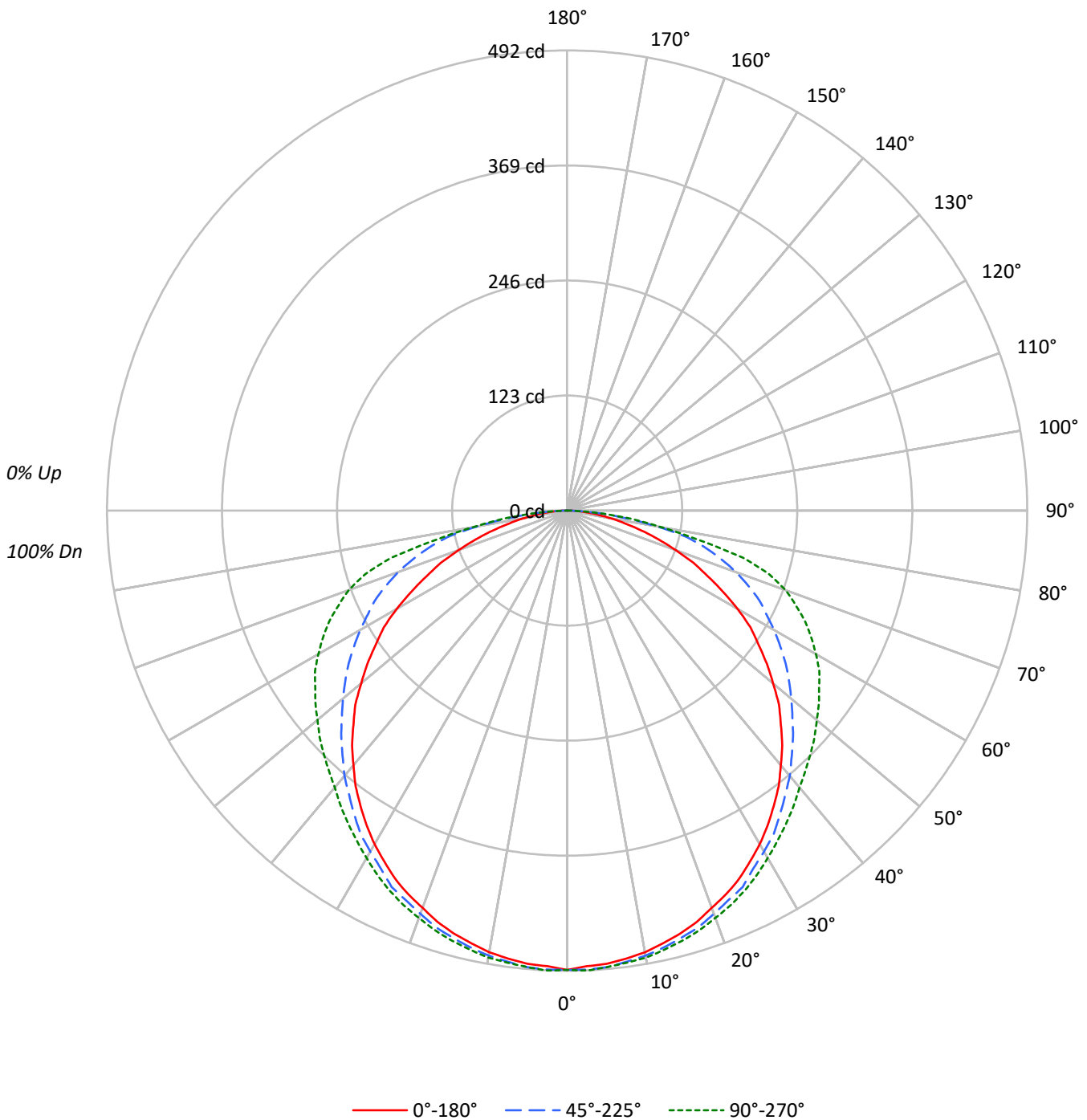
Input Watts (W): 16.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1322	1322	1322
5°	1314	1323	1323
10°	1310	1320	1326
15°	1304	1317	1326
20°	1294	1314	1327
25°	1291	1318	1332
30°	1280	1308	1333
35°	1265	1304	1341
40°	1248	1301	1357
45°	1230	1300	1400
50°	1204	1310	1459
55°	1171	1338	1543
60°	1133	1374	1653
65°	1054	1443	1787
70°	969	1511	1954
75°	849	1590	2021
80°	731	1514	1587
85°	639	1102	1207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.5	3.0
10°-20°	133.4	8.5
20°-30°	203.5	13.0
30°-40°	248.5	15.9
40°-50°	265.7	17.0
50°-60°	256.4	16.4
60°-70°	220.7	14.1
70°-80°	149.4	9.6
80°-90°	39.4	2.5
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°	383.3	24.5
0°-40°	631.8	40.4
0°-60°	1153.9	73.8
0°-90°	1563.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1563.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	491	491	491	491	491	
5°	486	488	490	490	490	46
15°	468	469	473	475	476	132
25°	435	437	444	446	449	200
35°	385	389	397	405	408	241
45°	323	329	342	359	368	249
55°	250	258	285	314	329	224
65°	166	182	227	262	281	165
75°	82	108	153	184	194	88
85°	21	29	36	37	39	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	491.1	491.1	491.1	491.1	491.1
2.5°	487.6	488.8	491.1	491.1	492.2
5°	486.5	487.6	489.9	489.9	489.9
7.5°	483.1	484.2	486.5	487.6	487.6
10°	479.5	480.8	483.1	484.2	485.3
12.5°	473.8	474.9	478.4	480.8	480.8
15°	468.1	469.2	472.7	474.9	476.1
17.5°	461.1	463.5	467.0	469.2	470.4
20°	452.0	454.3	458.8	462.4	463.5
22.5°	444.0	446.3	450.8	454.3	456.6
25°	434.7	437.0	444.0	446.3	448.6
27.5°	423.2	425.6	431.3	435.9	439.3
30°	411.8	414.0	420.9	426.7	429.0
32.5°	399.1	402.5	410.6	415.2	418.6
35°	385.2	388.7	396.8	404.8	408.3
37.5°	371.5	375.0	383.0	393.4	397.9
40°	355.4	360.0	370.3	384.1	386.4
42.5°	340.4	346.2	355.4	371.5	377.2
45°	323.2	328.9	341.6	358.8	368.0
47.5°	307.1	312.8	326.6	347.3	358.8
50°	287.5	295.5	312.8	337.0	348.4
52.5°	269.1	276.0	299.1	325.5	339.3
55°	249.6	257.6	285.2	313.9	328.9
57.5°	232.3	239.2	270.3	302.5	319.8
60°	210.5	219.6	255.3	289.8	307.1
62.5°	187.4	201.2	240.3	276.0	294.4
65°	165.6	181.7	226.6	262.2	280.7
67.5°	146.1	163.3	209.4	247.3	264.6
70°	123.1	144.9	192.1	228.9	248.4
72.5°	102.4	126.5	172.6	209.4	226.6
75°	81.7	108.1	152.9	184.0	194.4
77.5°	63.2	88.6	131.1	140.3	141.5
80°	47.2	70.2	97.7	98.9	102.4
82.5°	32.2	49.5	63.2	69.0	70.2
85°	20.7	28.8	35.7	36.8	39.1
87.5°	9.3	10.4	12.7	11.5	11.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)