

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: P474282

Luminaire Tested: **24CZ2-30VHE-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474282
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30VHE-RDP-UNV-L840-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2071.4 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

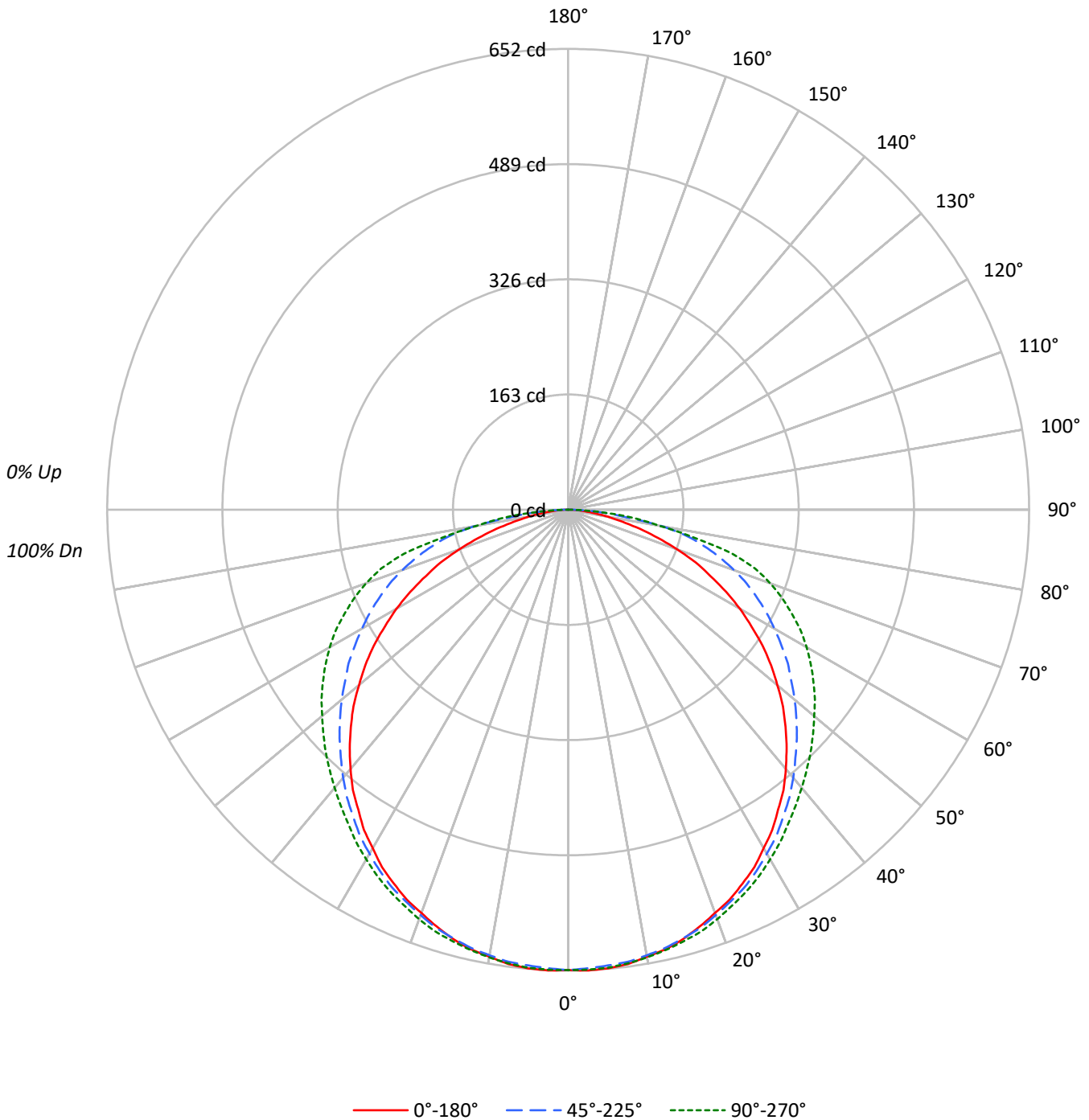
Input Watts (W): 20.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	89		92	89	87		88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72		80	75	71		77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60		70	64	59		67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		41	34	29		40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27		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°	876	876	876
5°	880	874	878
10°	877	875	879
15°	876	874	880
20°	869	874	883
25°	866	876	885
30°	859	873	888
35°	851	871	891
40°	841	870	902
45°	827	870	923
50°	809	875	951
55°	788	889	993
60°	755	907	1048
65°	706	939	1112
70°	642	982	1196
75°	545	1036	1250
80°	430	1043	1011
85°	318	794	889



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.8	3.0
10°-20°	177.8	8.6
20°-30°	271.9	13.1
30°-40°	332.4	16.0
40°-50°	354.3	17.1
50°-60°	338.8	16.4
60°-70°	287.0	13.9
70°-80°	192.9	9.3
80°-90°	54.4	2.6
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°	511.6	24.7
0°-40°	844.0	40.7
0°-60°	1537.1	74.2
0°-90°	2071.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2071.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	651	651	651	651	651	
5°	651	650	647	650	650	62
15°	629	629	628	633	632	177
25°	584	586	590	595	596	269
35°	518	522	530	540	542	324
45°	435	442	457	477	485	335
55°	336	348	379	409	423	299
65°	222	245	295	334	349	220
75°	105	143	199	233	240	112
85°	21	42	51	56	58	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	651.4	651.4	651.4	651.4	651.4
2.5°	652.5	652.5	649.4	651.4	651.4
5°	651.4	650.4	647.3	650.4	650.4
7.5°	648.4	647.3	645.3	648.4	647.3
10°	642.2	642.2	640.1	643.2	643.2
12.5°	637.0	636.0	635.0	639.1	638.1
15°	628.8	628.8	627.8	632.9	631.9
17.5°	618.5	619.6	620.6	624.7	625.7
20°	607.2	609.3	610.3	616.5	616.5
22.5°	597.0	598.0	600.0	606.2	606.2
25°	583.6	585.6	589.8	594.9	595.9
27.5°	570.2	571.3	576.4	583.6	584.6
30°	552.8	555.8	562.0	570.2	571.3
32.5°	537.3	540.4	547.6	555.8	557.9
35°	517.8	521.9	530.1	540.4	542.5
37.5°	500.3	503.4	513.7	525.0	528.1
40°	478.8	484.9	495.2	508.5	513.7
42.5°	457.3	463.4	475.8	493.1	499.3
45°	434.6	441.8	457.3	476.8	484.9
47.5°	412.0	420.2	437.7	460.3	469.6
50°	386.3	396.6	418.2	443.9	454.2
52.5°	361.6	374.0	397.6	426.4	439.8
55°	335.9	348.3	379.1	408.9	423.3
57.5°	307.2	323.6	357.5	391.5	406.9
60°	280.5	295.9	337.0	374.0	389.4
62.5°	251.8	272.3	316.4	355.5	370.9
65°	221.9	244.6	294.8	333.9	349.3
67.5°	195.2	219.9	273.3	312.3	327.7
70°	163.3	194.2	249.7	288.7	304.1
72.5°	133.5	167.5	225.0	263.1	277.5
75°	104.8	142.8	199.3	233.3	240.4
77.5°	78.1	118.1	172.6	187.0	181.9
80°	55.5	94.6	134.6	127.4	130.5
82.5°	36.0	72.0	83.3	94.6	97.6
85°	20.6	42.1	51.4	55.5	57.6
87.5°	9.3	15.4	20.6	20.6	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)