

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: P474032

Luminaire Tested: **24CZ2-30VHE-S-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474032
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30VHE-S-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3094.7 lumens
Efficiency: N/A
Efficacy: 151.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

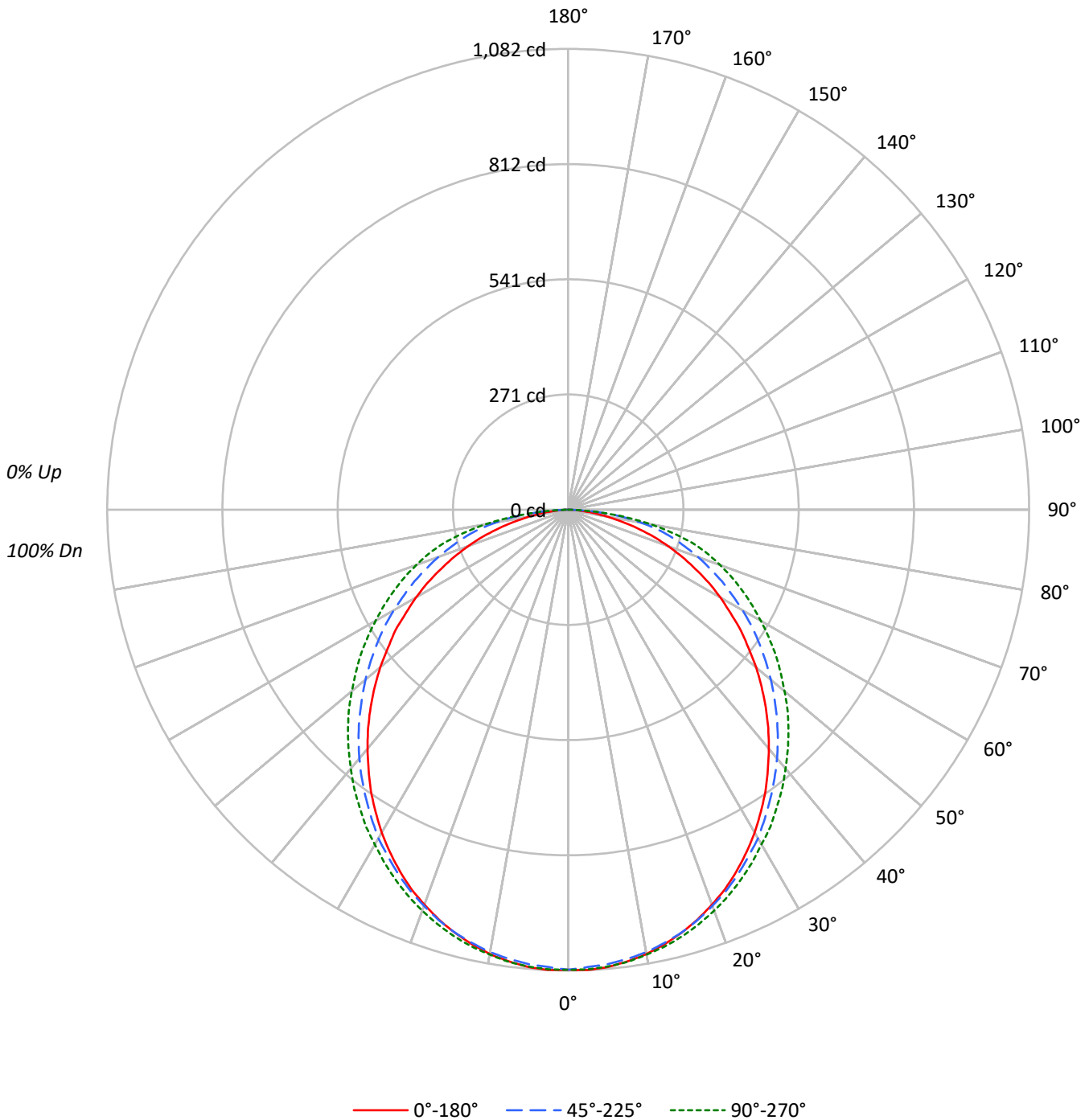
Input Watts (W): 20.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	55	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1453	1453	1453
5°	1455	1447	1454
10°	1447	1441	1449
15°	1432	1432	1444
20°	1413	1417	1435
25°	1389	1401	1423
30°	1360	1384	1410
35°	1326	1359	1402
40°	1287	1339	1394
45°	1248	1318	1391
50°	1205	1300	1388
55°	1163	1284	1395
60°	1109	1272	1405
65°	1050	1267	1439
70°	980	1274	1490
75°	872	1311	1569
80°	713	1339	1532
85°	502	1169	1193



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.1	3.3
10°-20°	290.9	9.4
20°-30°	436.0	14.1
30°-40°	519.3	16.8
40°-50°	535.4	17.3
50°-60°	488.6	15.8
60°-70°	390.7	12.6
70°-80°	255.2	8.2
80°-90°	76.6	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°	829.0	26.8
0°-40°	1348.2	43.6
0°-60°	2372.2	76.7
0°-90°	3094.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3094.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1080	1080	1080	1080	1080	
5°	1078	1076	1071	1078	1077	102
15°	1028	1029	1028	1036	1036	290
25°	936	937	944	958	959	431
35°	807	813	828	848	854	504
45°	656	667	693	722	731	506
55°	496	510	548	584	595	441
65°	330	352	398	437	452	327
75°	168	196	252	293	302	178
85°	32	58	76	77	77	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1080.2	1080.2	1080.2	1080.2	1080.2
2.5°	1081.7	1080.2	1074.6	1081.2	1080.2
5°	1077.6	1075.6	1071.0	1077.6	1076.6
7.5°	1069.5	1068.5	1063.9	1071.5	1070.5
10°	1059.3	1058.3	1054.8	1062.4	1060.9
12.5°	1045.1	1044.6	1042.1	1051.2	1050.2
15°	1028.3	1028.8	1027.8	1036.5	1036.5
17.5°	1009.0	1008.5	1010.5	1021.2	1020.2
20°	986.7	987.2	989.7	1001.9	1001.9
22.5°	963.3	962.8	968.4	980.6	981.6
25°	935.8	937.4	944.0	957.7	958.7
27.5°	906.3	908.9	917.0	932.8	934.3
30°	875.3	878.4	890.6	905.3	907.4
32.5°	841.3	847.9	859.1	877.9	883.0
35°	807.2	812.8	827.6	848.4	853.5
37.5°	769.6	778.8	795.5	818.4	825.0
40°	732.5	741.6	762.5	786.4	793.5
42.5°	694.9	704.5	728.4	755.4	763.0
45°	655.7	667.4	692.8	721.8	731.0
47.5°	615.6	629.3	656.8	688.3	698.4
50°	575.9	589.7	621.2	653.7	662.9
52.5°	533.2	550.5	584.1	619.1	628.3
55°	495.6	509.8	547.5	583.6	594.7
57.5°	451.4	470.7	510.9	547.5	558.1
60°	412.3	430.0	472.7	509.8	522.0
62.5°	372.6	390.9	433.6	475.8	487.0
65°	329.9	352.3	398.0	437.2	451.9
67.5°	289.2	312.6	359.4	401.1	416.3
70°	249.1	273.0	323.8	366.5	378.7
72.5°	209.4	234.3	287.2	328.9	343.1
75°	167.7	195.7	252.1	292.8	301.9
77.5°	128.6	159.6	216.5	244.0	250.6
80°	92.0	126.1	172.8	192.7	197.7
82.5°	60.5	93.5	129.1	139.8	138.3
85°	32.5	58.5	75.7	77.3	77.3
87.5°	12.7	23.4	23.9	18.3	17.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)