

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: P473819

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

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473819
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30HE-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3099.9 lumens
Efficiency: N/A
Efficacy: 139.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

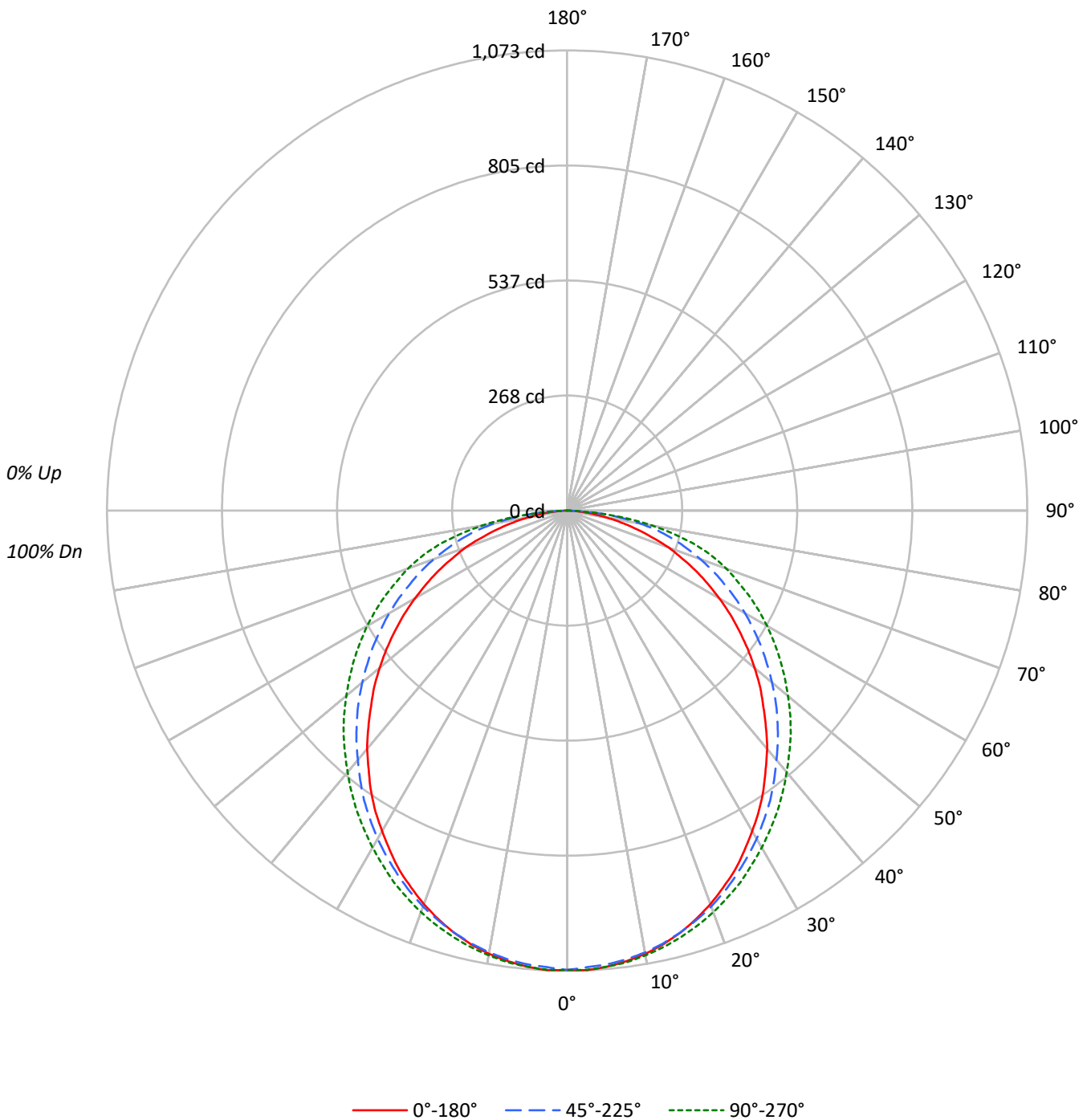
Input Watts (W): 22.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	89	82	76	95	88	81	75	84	78	74	81	76	72	78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1441	1441	1441
5°	1442	1435	1442
10°	1434	1429	1439
15°	1420	1419	1433
20°	1398	1407	1427
25°	1374	1390	1420
30°	1341	1373	1410
35°	1310	1356	1404
40°	1275	1333	1399
45°	1231	1320	1403
50°	1194	1305	1407
55°	1150	1296	1423
60°	1102	1290	1449
65°	1051	1285	1486
70°	989	1298	1554
75°	870	1325	1617
80°	726	1335	1560
85°	519	1144	1159



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.3	3.3
10°-20°	288.4	9.3
20°-30°	432.7	14.0
30°-40°	516.6	16.7
40°-50°	535.1	17.3
50°-60°	492.6	15.9
60°-70°	397.4	12.8
70°-80°	259.6	8.4
80°-90°	76.1	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°	822.4	26.5
0°-40°	1339.0	43.2
0°-60°	2366.8	76.3
0°-90°	3099.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3099.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1071	1071	1071	1071	1071	
5°	1068	1067	1062	1068	1068	101
15°	1019	1019	1019	1029	1029	287
25°	926	928	936	953	956	426
35°	798	805	825	848	855	498
45°	647	663	694	725	737	500
55°	490	511	552	593	606	439
65°	330	353	404	450	467	326
75°	167	199	255	299	311	179
85°	34	58	74	79	75	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1071.2	1071.2	1071.2	1071.2	1071.2
2.5°	1072.7	1071.2	1065.7	1072.2	1071.7
5°	1067.7	1066.7	1062.2	1068.2	1067.7
7.5°	1059.7	1059.2	1055.7	1062.2	1062.2
10°	1049.7	1048.7	1046.2	1053.7	1053.2
12.5°	1035.7	1035.2	1033.7	1042.7	1042.2
15°	1019.1	1019.1	1018.6	1028.7	1028.7
17.5°	999.1	999.6	1001.6	1013.1	1013.6
20°	976.6	978.6	982.6	995.6	996.6
22.5°	951.0	955.0	960.5	975.1	976.6
25°	925.5	927.5	936.0	953.0	956.5
27.5°	894.4	899.5	910.5	928.0	931.5
30°	862.9	869.9	883.9	902.0	907.5
32.5°	831.8	837.9	854.4	874.9	881.4
35°	797.8	804.8	825.3	847.9	854.9
37.5°	760.2	771.2	792.8	818.8	826.3
40°	725.7	735.7	759.2	788.3	796.3
42.5°	686.1	698.6	727.2	756.7	766.7
45°	647.0	663.1	693.6	724.7	737.2
47.5°	610.5	623.5	659.6	694.6	705.6
50°	570.4	585.4	623.5	660.6	672.1
52.5°	530.9	548.9	587.4	626.5	639.0
55°	490.3	511.3	552.4	593.0	606.5
57.5°	451.2	472.3	514.8	557.9	571.9
60°	409.7	432.2	479.3	520.8	538.4
62.5°	369.6	392.1	441.7	486.8	503.3
65°	330.0	352.6	403.7	449.7	466.8
67.5°	289.0	313.5	368.1	412.7	429.2
70°	251.4	274.9	330.0	377.6	395.1
72.5°	208.3	236.4	292.5	339.5	356.1
75°	167.3	198.8	254.9	299.0	311.0
77.5°	129.2	160.8	216.8	249.9	257.4
80°	93.7	125.7	172.3	195.3	201.3
82.5°	60.6	93.7	124.7	140.2	142.2
85°	33.6	58.1	74.1	78.6	75.1
87.5°	12.0	22.0	21.5	17.5	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)