

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: P473769

Luminaire Tested: **24CZ2-30HE-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473769
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30HE-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2991.5 lumens
Efficiency: N/A
Efficacy: 134.1 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

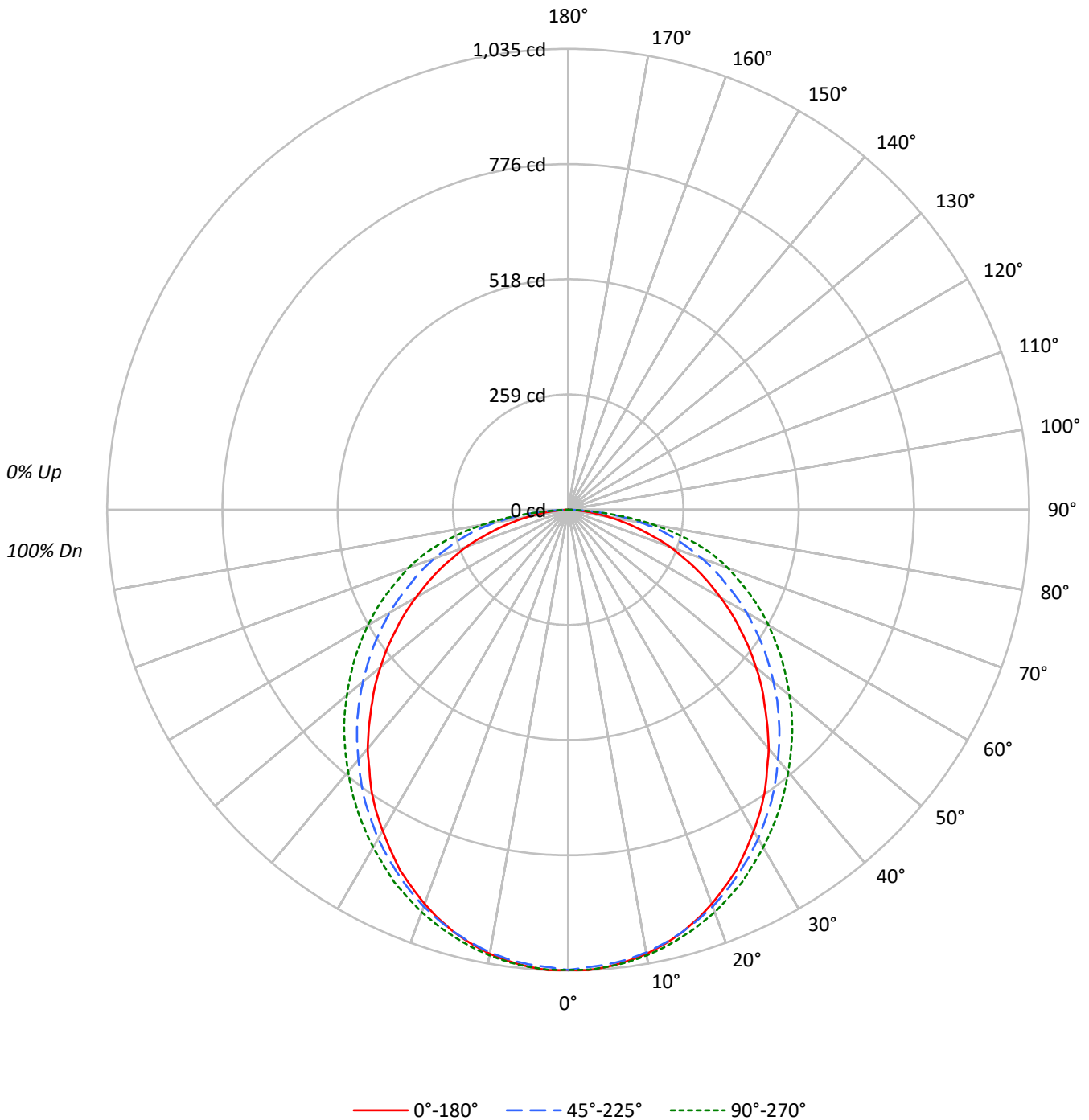
Input Watts (W): 22.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1391	1391	1391
5°	1392	1384	1392
10°	1384	1379	1389
15°	1370	1369	1383
20°	1349	1358	1377
25°	1326	1341	1370
30°	1294	1325	1361
35°	1265	1308	1355
40°	1230	1287	1350
45°	1188	1274	1354
50°	1152	1259	1358
55°	1110	1251	1373
60°	1064	1245	1398
65°	1014	1240	1434
70°	954	1253	1500
75°	839	1279	1560
80°	700	1288	1506
85°	500	1104	1119



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.7	3.3
10°-20°	278.3	9.3
20°-30°	417.6	14.0
30°-40°	498.5	16.7
40°-50°	516.4	17.3
50°-60°	475.4	15.9
60°-70°	383.5	12.8
70°-80°	250.6	8.4
80°-90°	73.5	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°	793.6	26.5
0°-40°	1292.2	43.2
0°-60°	2284.0	76.3
0°-90°	2991.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2991.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1034	1034	1034	1034	1034	
5°	1030	1029	1025	1031	1030	98
15°	984	984	983	993	993	277
25°	893	895	903	920	923	411
35°	770	777	796	818	825	481
45°	624	640	669	699	711	483
55°	473	493	533	572	585	423
65°	318	340	390	434	450	315
75°	161	192	246	288	300	172
85°	32	56	72	76	72	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1033.7	1033.7	1033.7	1033.7	1033.7
2.5°	1035.2	1033.7	1028.4	1034.7	1034.2
5°	1030.4	1029.4	1025.0	1030.8	1030.4
7.5°	1022.6	1022.1	1018.8	1025.0	1025.0
10°	1013.0	1012.0	1009.6	1016.8	1016.3
12.5°	999.4	998.9	997.5	1006.2	1005.7
15°	983.5	983.5	983.0	992.7	992.7
17.5°	964.1	964.6	966.6	977.7	978.2
20°	942.4	944.3	948.2	960.8	961.7
22.5°	917.7	921.6	926.9	940.9	942.4
25°	893.1	895.0	903.2	919.7	923.1
27.5°	863.1	868.0	878.6	895.5	898.9
30°	832.7	839.5	853.0	870.4	875.7
32.5°	802.7	808.5	824.5	844.3	850.6
35°	769.9	776.6	796.4	818.2	825.0
37.5°	733.6	744.3	765.0	790.2	797.4
40°	700.3	709.9	732.7	760.7	768.4
42.5°	662.1	674.2	701.7	730.2	739.9
45°	624.4	639.9	669.3	699.3	711.4
47.5°	589.1	601.7	636.5	670.3	680.9
50°	550.5	565.0	601.7	637.4	648.6
52.5°	512.3	529.7	566.9	604.6	616.7
55°	473.1	493.4	533.1	572.2	585.3
57.5°	435.4	455.7	496.8	538.4	551.9
60°	395.3	417.1	462.5	502.6	519.5
62.5°	356.7	378.4	426.3	469.7	485.7
65°	318.5	340.2	389.5	434.0	450.4
67.5°	278.9	302.5	355.2	398.2	414.2
70°	242.6	265.3	318.5	364.4	381.3
72.5°	201.0	228.1	282.2	327.7	343.6
75°	161.4	191.9	246.0	288.5	300.1
77.5°	124.7	155.1	209.3	241.2	248.4
80°	90.4	121.3	166.2	188.5	194.3
82.5°	58.5	90.4	120.3	135.3	137.3
85°	32.4	56.1	71.5	75.9	72.5
87.5°	11.6	21.3	20.8	16.9	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)