

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: P272054

Luminaire Tested: **24CZ2-30HE-UNV-L935-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P272054
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30HE-UNV-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (168) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2548.0 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

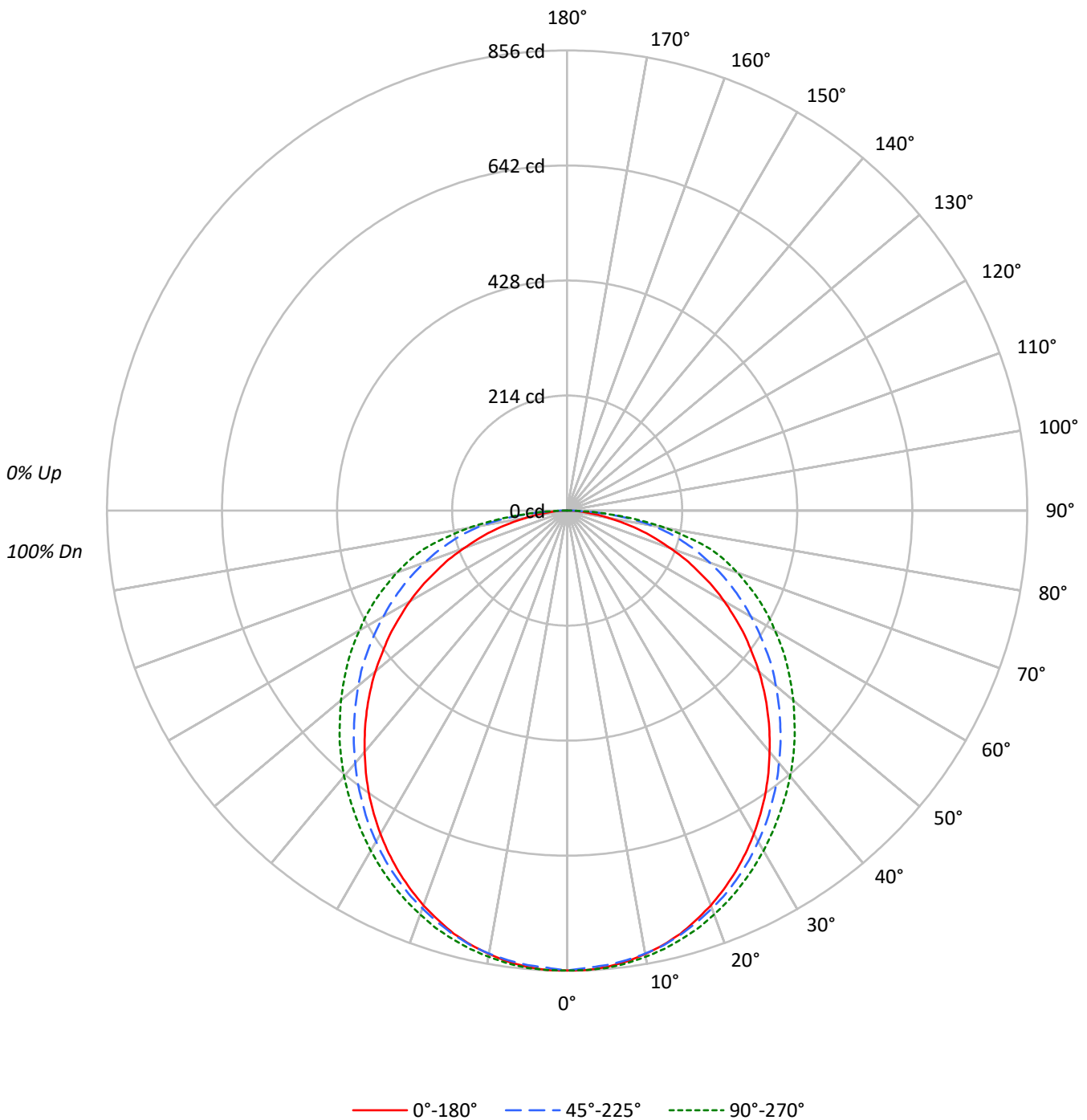
Input Watts (W): 22.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1151	1151	1151
5°	1151	1146	1153
10°	1144	1143	1151
15°	1135	1137	1149
20°	1119	1128	1145
25°	1101	1117	1140
30°	1079	1104	1135
35°	1056	1091	1131
40°	1029	1077	1134
45°	1003	1066	1139
50°	975	1061	1150
55°	946	1059	1171
60°	908	1064	1201
65°	861	1080	1253
70°	799	1107	1325
75°	729	1162	1437
80°	600	1252	1437
85°	460	1155	1233



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.9	3.2
10°-20°	231.0	9.1
20°-30°	347.6	13.6
30°-40°	416.6	16.3
40°-50°	434.1	17.0
50°-60°	403.9	15.9
60°-70°	332.6	13.1
70°-80°	226.5	8.9
80°-90°	74.8	2.9
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°	659.5	25.9
0°-40°	1076.0	42.2
0°-60°	1914.0	75.1
0°-90°	2548.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2548.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	856	856	856	856	856	
5°	852	852	849	853	854	81
15°	815	816	816	824	825	230
25°	742	745	753	765	768	341
35°	643	650	664	682	689	402
45°	527	538	560	588	599	407
55°	403	417	452	487	499	359
65°	270	293	339	379	394	268
75°	140	172	224	264	276	148
85°	30	58	75	80	80	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	855.5	855.5	855.5	855.5	855.5
2.5°	855.5	855.5	851.2	855.5	855.5
5°	852.1	852.1	848.7	852.9	853.8
7.5°	846.1	847.0	843.6	848.7	849.5
10°	837.6	838.5	836.8	841.9	842.7
12.5°	827.4	828.3	828.3	834.2	835.1
15°	814.7	815.5	816.4	824.0	824.9
17.5°	798.5	801.1	802.8	812.1	813.8
20°	781.5	784.1	787.5	797.7	799.4
22.5°	761.9	765.3	771.3	782.3	784.9
25°	741.5	744.9	752.6	765.3	767.9
27.5°	718.6	723.7	733.0	746.6	750.0
30°	694.8	699.9	710.9	725.4	730.5
32.5°	669.2	676.1	688.8	705.0	710.1
35°	642.9	650.5	664.1	682.0	688.8
37.5°	614.8	623.3	639.5	659.0	667.5
40°	585.9	596.1	613.1	636.1	645.4
42.5°	557.0	566.4	587.6	612.3	622.5
45°	527.2	538.3	560.4	588.5	598.7
47.5°	496.6	507.7	534.0	563.8	573.2
50°	466.0	477.1	506.8	538.3	549.3
52.5°	432.8	447.3	481.3	512.8	523.8
55°	403.1	416.7	451.6	487.3	499.2
57.5°	369.1	385.2	423.5	460.9	473.7
60°	337.6	354.6	395.4	433.7	446.4
62.5°	305.3	324.0	367.4	406.5	420.9
65°	270.4	293.4	339.3	379.3	393.7
67.5°	239.0	262.8	311.2	352.1	364.8
70°	203.2	232.2	281.5	322.3	336.8
72.5°	172.6	201.5	253.4	293.4	307.8
75°	140.3	171.8	223.6	263.6	276.4
77.5°	108.0	142.9	194.7	225.4	229.6
80°	77.4	114.0	161.6	179.4	185.4
82.5°	54.4	87.6	119.1	131.0	134.4
85°	29.8	57.8	74.8	79.9	79.9
87.5°	12.8	24.7	29.8	30.6	31.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)