

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: P272053

Luminaire Tested: **24CZ2-30HE-UNV-L930-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: P272053
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-L930-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (168) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2486.0 lumens
Efficiency: N/A
Efficacy: 111.0 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

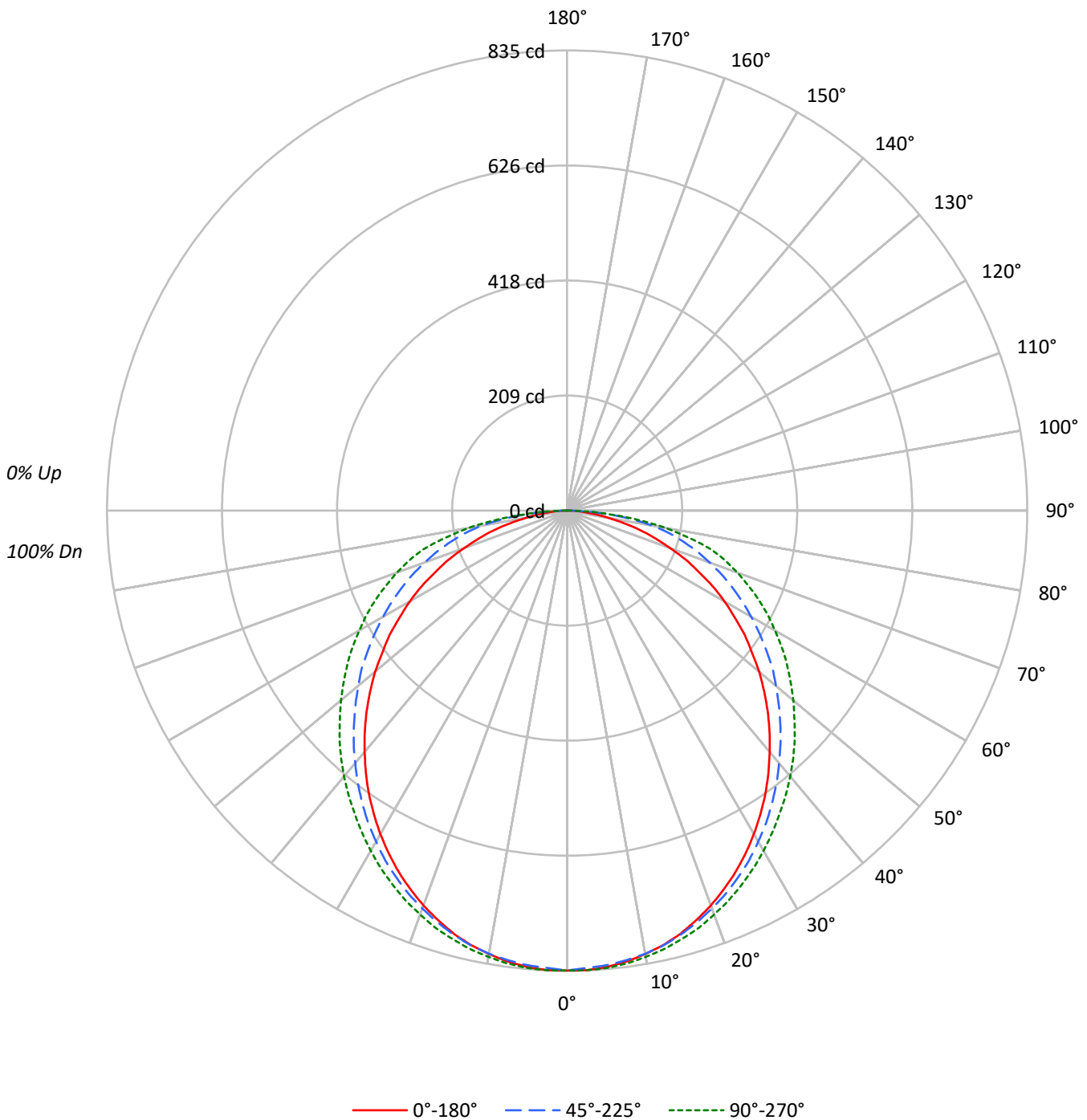
Input Watts (W): 22.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1123	1123	1123
5°	1123	1118	1125
10°	1116	1115	1123
15°	1107	1109	1121
20°	1092	1100	1117
25°	1074	1090	1112
30°	1053	1078	1107
35°	1030	1064	1104
40°	1004	1051	1106
45°	979	1040	1111
50°	952	1035	1122
55°	923	1034	1142
60°	886	1038	1172
65°	840	1054	1223
70°	780	1080	1293
75°	712	1134	1402
80°	585	1221	1402
85°	448	1127	1204



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	3.2
10°-20°	225.4	9.1
20°-30°	339.1	13.6
30°-40°	406.4	16.3
40°-50°	423.5	17.0
50°-60°	394.0	15.9
60°-70°	324.5	13.1
70°-80°	221.0	8.9
80°-90°	73.0	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°	643.4	25.9
0°-40°	1049.9	42.2
0°-60°	1867.4	75.1
0°-90°	2486.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2486.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	835	835	835	835	835	
5°	831	831	828	832	833	79
15°	795	796	796	804	805	224
25°	724	727	734	747	749	333
35°	627	635	648	665	672	392
45°	514	525	547	574	584	397
55°	393	406	441	475	487	351
65°	264	286	331	370	384	262
75°	137	168	218	257	270	144
85°	29	56	73	78	78	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	834.7	834.7	834.7	834.7	834.7
2.5°	834.7	834.7	830.5	834.7	834.7
5°	831.3	831.3	828.0	832.2	833.0
7.5°	825.5	826.4	823.1	828.0	828.9
10°	817.2	818.1	816.4	821.4	822.2
12.5°	807.3	808.1	808.1	813.9	814.8
15°	794.8	795.7	796.5	804.0	804.8
17.5°	779.1	781.6	783.2	792.4	794.0
20°	762.5	765.0	768.3	778.2	779.9
22.5°	743.4	746.7	752.5	763.3	765.8
25°	723.5	726.8	734.3	746.7	749.2
27.5°	701.1	706.1	715.2	728.5	731.8
30°	677.9	682.8	693.6	707.7	712.7
32.5°	653.0	659.6	672.0	687.8	692.8
35°	627.2	634.7	648.0	665.4	672.0
37.5°	599.9	608.2	623.9	643.0	651.3
40°	571.7	581.6	598.2	620.6	629.7
42.5°	543.4	552.6	573.3	597.4	607.3
45°	514.4	525.2	546.8	574.1	584.1
47.5°	484.5	495.3	521.0	550.1	559.2
50°	454.7	465.5	494.5	525.2	536.0
52.5°	422.3	436.4	469.6	500.3	511.1
55°	393.3	406.5	440.6	475.4	487.0
57.5°	360.1	375.8	413.2	449.7	462.1
60°	329.4	346.0	385.8	423.1	435.6
62.5°	297.9	316.1	358.4	396.6	410.7
65°	263.8	286.2	331.0	370.0	384.1
67.5°	233.1	256.4	303.7	343.5	355.9
70°	198.3	226.5	274.6	314.5	328.6
72.5°	168.4	196.6	247.2	286.2	300.3
75°	136.9	167.6	218.2	257.2	269.6
77.5°	105.4	139.4	190.0	219.9	224.0
80°	75.5	111.2	157.6	175.1	180.9
82.5°	53.1	85.5	116.2	127.8	131.1
85°	29.0	56.4	73.0	78.0	78.0
87.5°	12.4	24.1	29.0	29.9	30.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)