

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: P276437

Luminaire Tested: **24CZ2-30-S-UNV-L93050-W2A1-U-3000K**

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: P276437
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30-S-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2345.5 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

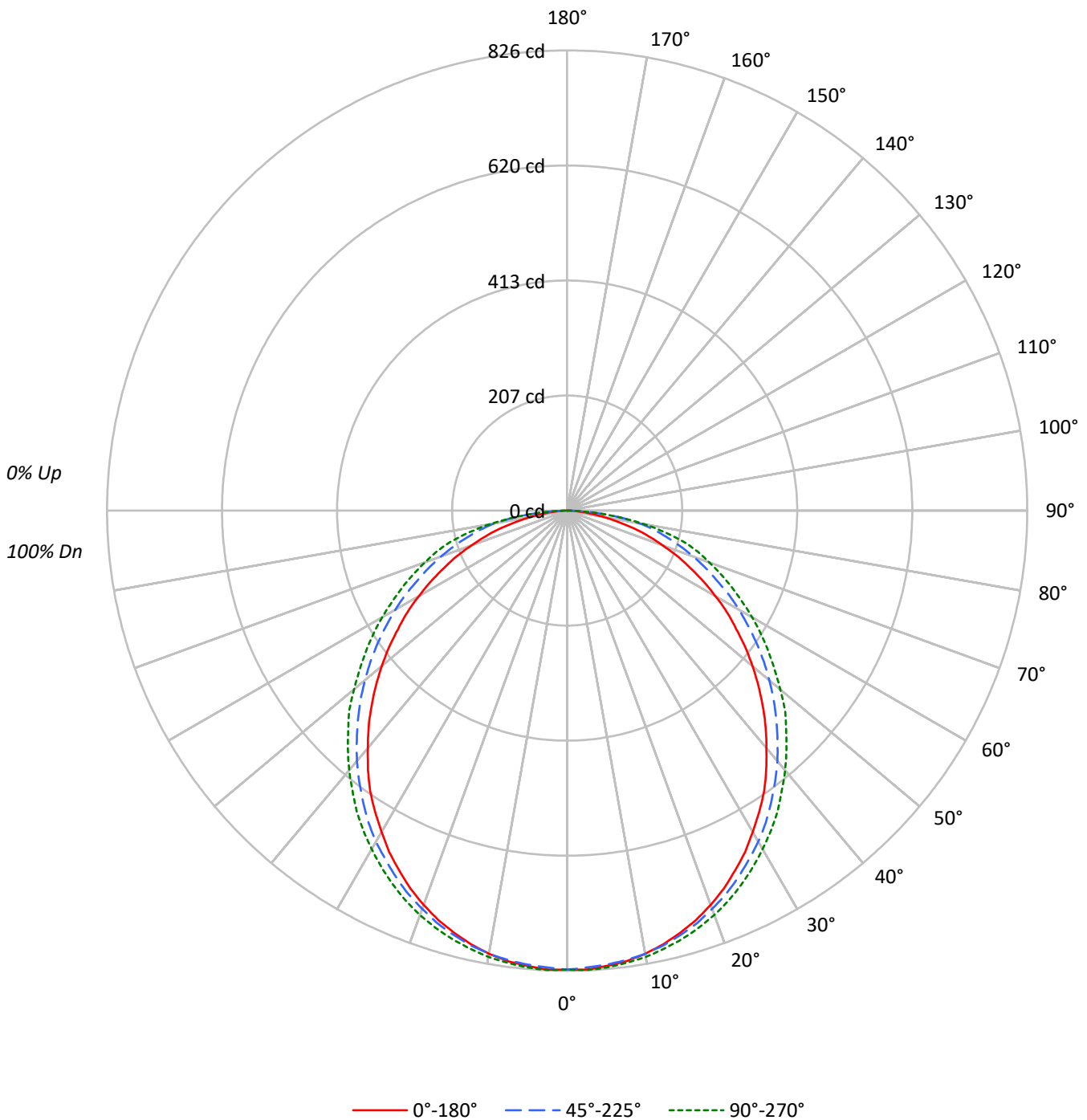
Input Watts (W): 22.262526
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1109	1109	1109
5°	1108	1105	1112
10°	1103	1103	1112
15°	1093	1098	1109
20°	1078	1089	1106
25°	1059	1078	1099
30°	1035	1066	1090
35°	1012	1049	1082
40°	977	1031	1069
45°	946	1011	1058
50°	909	992	1045
55°	869	974	1035
60°	828	958	1033
65°	776	942	1039
70°	718	947	1067
75°	643	964	1127
80°	520	1022	1103
85°	391	897	874



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	3.3
10°-20°	222.9	9.5
20°-30°	335.1	14.3
30°-40°	399.1	17.0
40°-50°	408.5	17.4
50°-60°	367.8	15.7
60°-70°	288.8	12.3
70°-80°	187.4	8.0
80°-90°	58.0	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°	636.0	27.1
0°-40°	1035.1	44.1
0°-60°	1811.3	77.2
0°-90°	2345.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2345.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	824	824	824	824	824	
5°	820	822	818	822	823	78
15°	784	787	788	795	796	221
25°	713	719	726	738	740	328
35°	616	624	638	654	659	384
45°	497	509	531	551	556	383
55°	370	387	415	437	441	332
65°	244	262	296	320	326	243
75°	124	148	186	211	217	131
85°	25	47	58	57	57	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	824.0	824.0	824.0	824.0	824.0
2.5°	824.7	824.7	821.0	824.7	825.5
5°	820.3	821.8	818.0	822.5	823.2
7.5°	815.8	815.8	813.6	818.0	818.8
10°	807.6	808.3	807.6	812.8	813.6
12.5°	797.2	798.7	799.4	804.6	805.4
15°	784.5	786.7	788.2	794.9	796.4
17.5°	770.3	772.6	776.3	783.8	785.2
20°	753.2	756.2	760.7	770.3	772.6
22.5°	734.6	737.6	745.0	754.0	757.7
25°	713.0	718.9	726.4	738.3	740.5
27.5°	691.4	696.6	706.3	718.9	721.9
30°	666.0	674.2	686.2	698.8	701.8
32.5°	641.5	649.7	663.8	677.2	680.9
35°	616.1	623.6	638.5	654.1	658.6
37.5°	587.1	596.8	613.2	628.8	633.3
40°	556.5	568.4	587.1	603.5	608.7
42.5°	527.5	540.1	558.8	576.6	582.6
45°	496.9	508.8	531.2	551.3	555.8
47.5°	465.6	479.0	502.9	523.0	530.5
50°	434.3	448.5	473.8	494.7	499.2
52.5°	403.1	418.0	444.8	467.1	469.4
55°	370.3	386.7	415.0	436.6	441.1
57.5°	340.5	354.6	385.2	407.5	412.7
60°	307.7	323.3	356.1	377.0	383.7
62.5°	276.4	292.8	327.1	347.9	353.9
65°	243.6	262.2	295.8	320.4	326.3
67.5°	215.3	233.2	269.0	292.8	298.8
70°	182.5	202.6	240.6	265.2	271.2
72.5°	154.2	175.1	213.1	236.9	245.9
75°	123.7	147.5	185.5	210.8	216.8
77.5°	93.9	121.4	160.2	179.5	179.5
80°	67.1	96.1	131.9	140.8	142.3
82.5°	44.0	72.3	97.6	96.9	96.9
85°	25.3	46.9	58.1	56.6	56.6
87.5°	9.7	19.4	20.9	20.9	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)