

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: P276688

Luminaire Tested: **24CZ2-30-S-UNV-L92765-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: P276688
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-L92765-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: 2456.2 lumens
Efficiency: N/A
Efficacy: 113.8 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

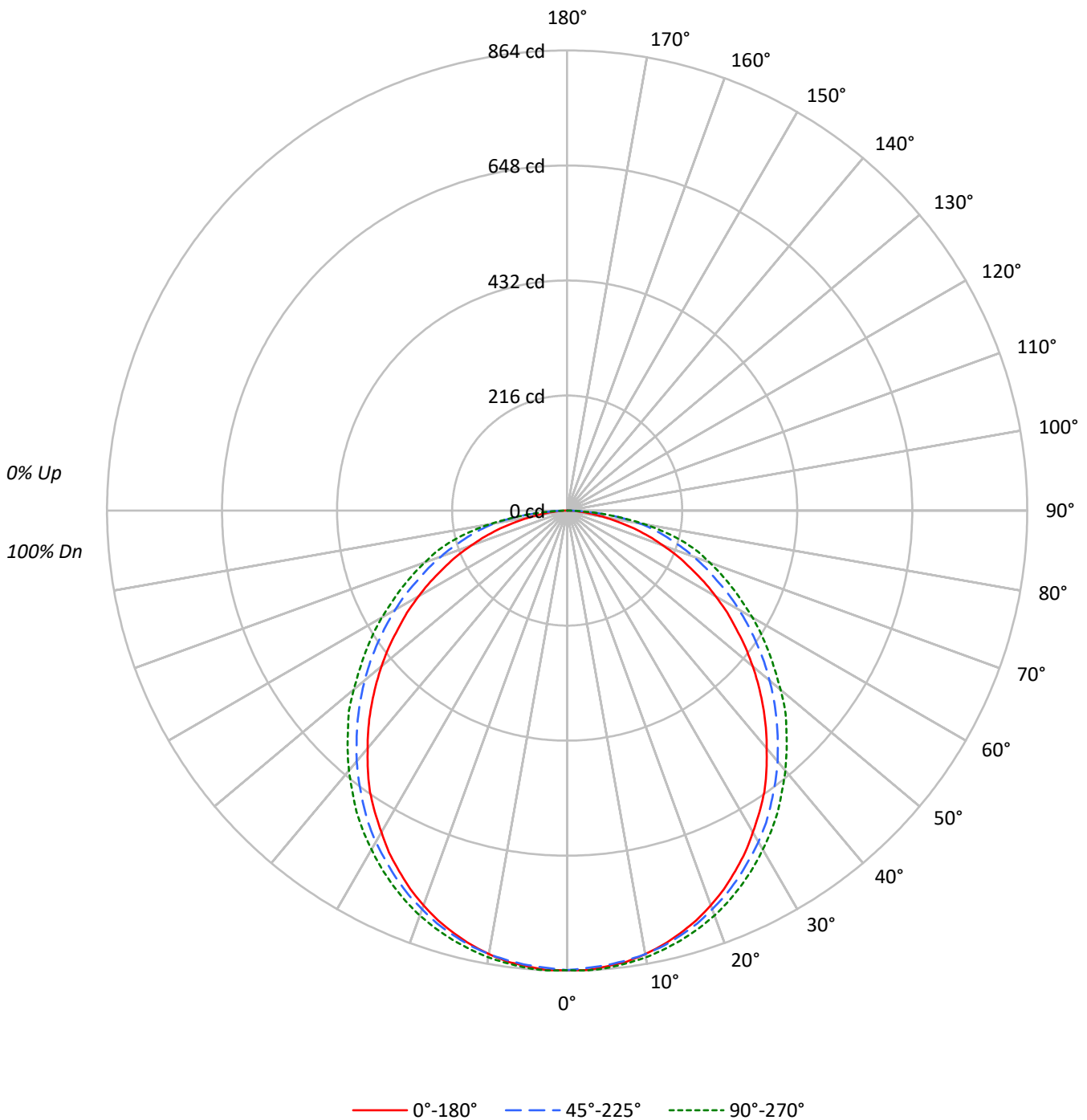
Input Watts (W): 21.576
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1161	1161	1161
5°	1160	1157	1164
10°	1155	1155	1164
15°	1144	1150	1162
20°	1129	1141	1158
25°	1108	1129	1151
30°	1084	1116	1142
35°	1060	1098	1133
40°	1024	1080	1120
45°	990	1059	1107
50°	952	1039	1094
55°	909	1019	1084
60°	867	1003	1081
65°	812	986	1088
70°	752	991	1117
75°	673	1010	1180
80°	544	1070	1155
85°	409	940	915



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	3.3
10°-20°	233.4	9.5
20°-30°	350.9	14.3
30°-40°	417.9	17.0
40°-50°	427.7	17.4
50°-60°	385.1	15.7
60°-70°	302.4	12.3
70°-80°	196.3	8.0
80°-90°	60.7	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°	666.0	27.1
0°-40°	1083.9	44.1
0°-60°	1896.8	77.2
0°-90°	2456.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2456.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	863	863	863	863	863	
5°	859	860	857	861	862	82
15°	822	824	825	832	834	232
25°	747	753	761	773	776	344
35°	645	653	669	685	690	403
45°	520	533	556	577	582	401
55°	388	405	435	457	462	348
65°	255	275	310	336	342	254
75°	130	154	194	221	227	137
85°	26	49	61	59	59	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	862.9	862.9	862.9	862.9	862.9
2.5°	863.6	863.6	859.7	863.6	864.4
5°	859.0	860.5	856.6	861.3	862.1
7.5°	854.3	854.3	851.9	856.6	857.4
10°	845.7	846.5	845.7	851.2	851.9
12.5°	834.8	836.3	837.1	842.6	843.4
15°	821.5	823.9	825.4	832.4	834.0
17.5°	806.7	809.0	812.9	820.7	822.3
20°	788.7	791.9	796.6	806.7	809.0
22.5°	769.2	772.4	780.2	789.5	793.4
25°	746.6	752.9	760.7	773.1	775.5
27.5°	724.0	729.5	739.6	752.9	756.0
30°	697.5	706.1	718.5	731.8	734.9
32.5°	671.7	680.3	695.1	709.2	713.1
35°	645.2	653.0	668.6	685.0	689.7
37.5°	614.8	624.9	642.1	658.5	663.1
40°	582.8	595.3	614.8	631.9	637.4
42.5°	552.4	565.6	585.1	603.8	610.1
45°	520.4	532.9	556.3	577.3	582.0
47.5°	487.6	501.6	526.6	547.7	555.5
50°	454.8	469.7	496.2	518.0	522.7
52.5°	422.1	437.7	465.8	489.2	491.5
55°	387.7	404.9	434.6	457.2	461.9
57.5°	356.5	371.4	403.3	426.8	432.2
60°	322.2	338.6	372.9	394.8	401.8
62.5°	289.4	306.6	342.5	364.3	370.6
65°	255.1	274.6	309.7	335.5	341.7
67.5°	225.5	244.2	281.6	306.6	312.8
70°	191.1	212.2	252.0	277.7	284.0
72.5°	161.5	183.3	223.1	248.1	257.5
75°	129.5	154.5	194.3	220.8	227.0
77.5°	98.3	127.2	167.7	188.0	188.0
80°	70.2	100.6	138.1	147.5	149.0
82.5°	46.0	75.7	102.2	101.4	101.4
85°	26.5	49.2	60.9	59.3	59.3
87.5°	10.1	20.3	21.8	21.8	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)