

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: P276364

Luminaire Tested: **24CZ2-30-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276364  
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-L83050-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3166.0 lumens  
Efficiency: N/A  
Efficacy: 142.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

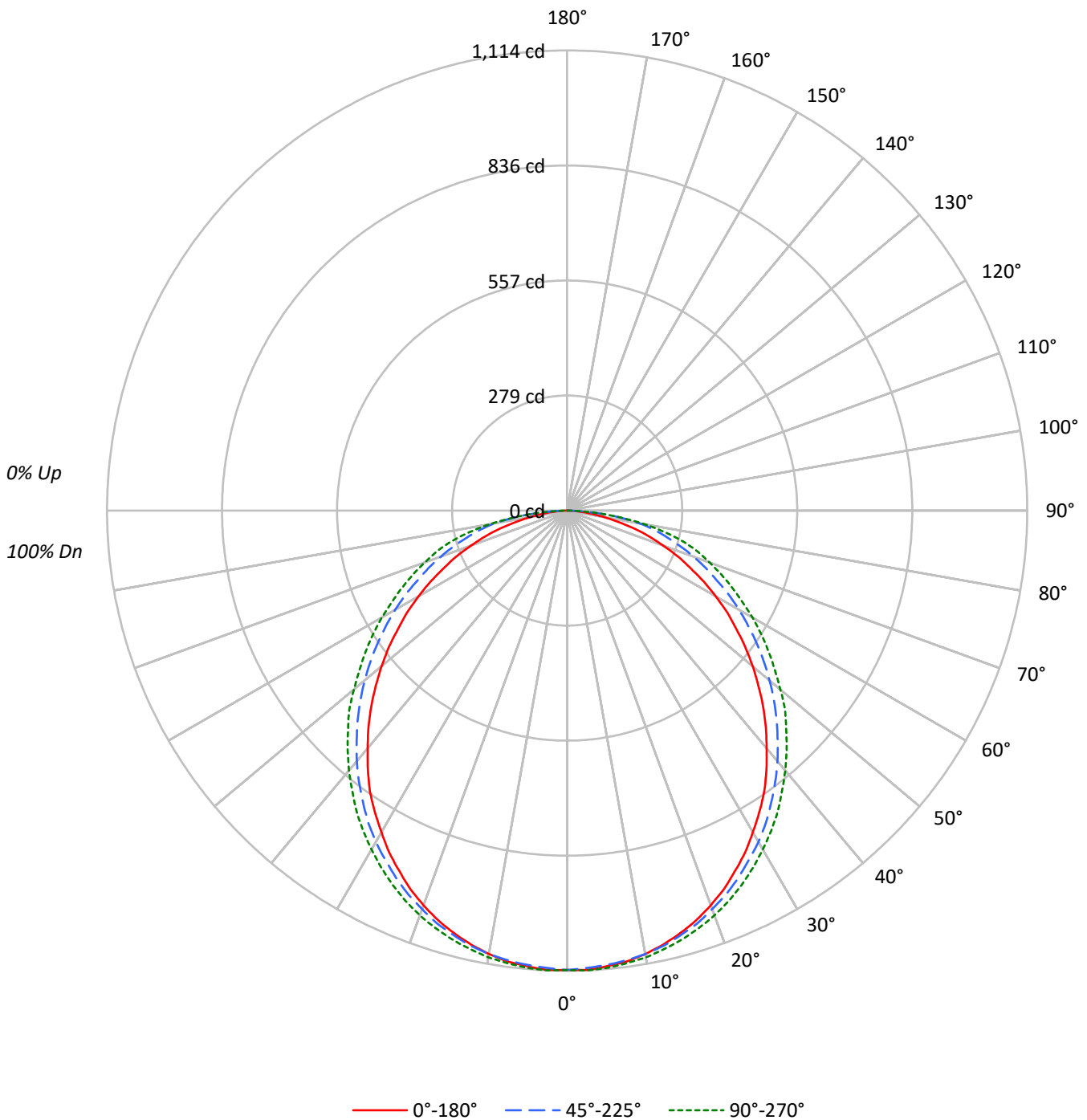
Input Watts (W): 22.262526  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1496	1496	1496
5°	1495	1491	1501
10°	1489	1489	1500
15°	1475	1482	1497
20°	1456	1470	1493
25°	1429	1456	1484
30°	1397	1439	1472
35°	1366	1416	1460
40°	1319	1392	1443
45°	1276	1364	1427
50°	1227	1339	1410
55°	1172	1314	1396
60°	1118	1294	1394
65°	1047	1271	1402
70°	969	1278	1440
75°	868	1302	1521
80°	701	1379	1488
85°	528	1210	1179



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.3	3.3
10°-20°	300.9	9.5
20°-30°	452.3	14.3
30°-40°	538.7	17.0
40°-50°	551.4	17.4
50°-60°	496.4	15.7
60°-70°	389.8	12.3
70°-80°	253.0	8.0
80°-90°	78.2	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°	858.4	27.1
0°-40°	1397.2	44.1
0°-60°	2444.9	77.2
0°-90°	3166.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3166.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1112	1112	1112	1112	1112	
5°	1107	1109	1104	1110	1111	105
15°	1059	1062	1064	1073	1075	299
25°	962	970	980	997	1000	443
35°	832	842	862	883	889	519
45°	671	687	717	744	750	517
55°	500	522	560	589	595	448
65°	329	354	399	432	440	327
75°	167	199	250	285	293	177
85°	34	63	78	76	76	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1112.2	1112.2	1112.2	1112.2	1112.2
2.5°	1113.2	1113.2	1108.2	1113.2	1114.2
5°	1107.2	1109.2	1104.2	1110.2	1111.2
7.5°	1101.2	1101.2	1098.2	1104.2	1105.2
10°	1090.1	1091.1	1090.1	1097.2	1098.2
12.5°	1076.0	1078.0	1079.1	1086.1	1087.1
15°	1058.9	1062.0	1064.0	1073.0	1075.0
17.5°	1039.8	1042.8	1047.9	1057.9	1059.9
20°	1016.7	1020.7	1026.8	1039.8	1042.8
22.5°	991.6	995.6	1005.6	1017.7	1022.7
25°	962.4	970.4	980.5	996.6	999.6
27.5°	933.2	940.3	953.3	970.4	974.5
30°	899.0	910.1	926.2	943.3	947.3
32.5°	865.9	876.9	896.0	914.1	919.2
35°	831.7	841.7	861.8	883.0	889.0
37.5°	792.4	805.5	827.6	848.8	854.8
40°	751.2	767.3	792.4	814.6	821.6
42.5°	712.0	729.1	754.2	778.4	786.4
45°	670.8	686.9	717.0	744.2	750.2
47.5°	628.5	646.6	678.8	706.0	716.0
50°	586.3	605.4	639.6	667.7	673.8
52.5°	544.1	564.2	600.4	630.5	633.6
55°	499.8	521.9	560.1	589.3	595.3
57.5°	459.6	478.7	519.9	550.1	557.1
60°	415.3	436.4	480.7	508.9	517.9
62.5°	373.1	395.2	441.5	469.6	477.7
65°	328.8	354.0	399.2	432.4	440.5
67.5°	290.6	314.8	363.0	395.2	403.3
70°	246.4	273.5	324.8	358.0	366.1
72.5°	208.2	236.3	287.6	319.8	331.9
75°	166.9	199.1	250.4	284.6	292.6
77.5°	126.7	163.9	216.2	242.4	242.4
80°	90.5	129.7	178.0	190.1	192.1
82.5°	59.3	97.5	131.7	130.7	130.7
85°	34.2	63.4	78.4	76.4	76.4
87.5°	13.1	26.1	28.2	28.2	27.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)