

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: P276363

Luminaire Tested: **24CZ2-30-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276363  
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-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3015.0 lumens  
Efficiency: N/A  
Efficacy: 138.5 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

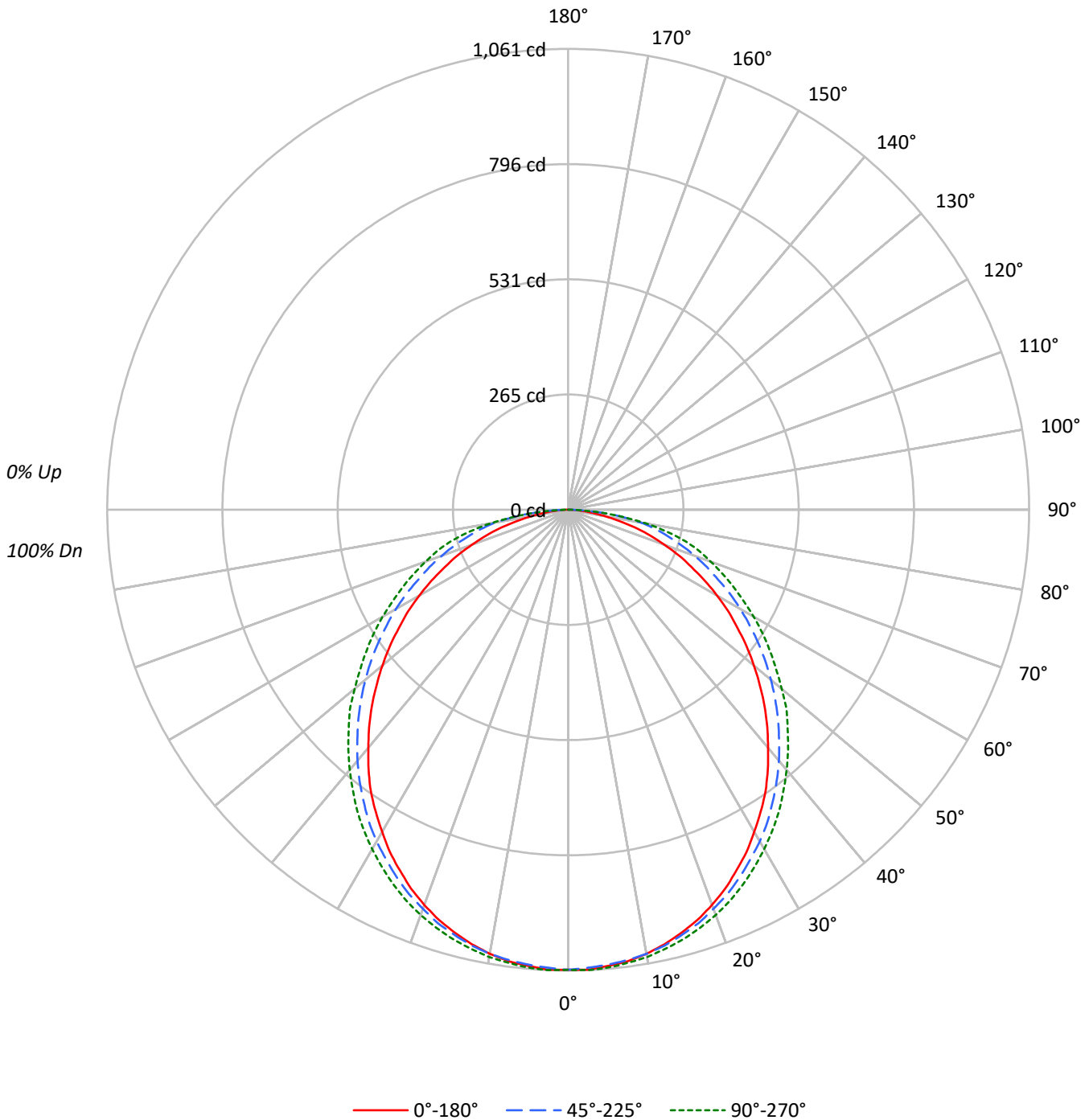
Input Watts (W): 21.762  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1425	1425	1425
5°	1424	1420	1429
10°	1418	1418	1429
15°	1405	1411	1426
20°	1386	1400	1422
25°	1361	1386	1413
30°	1330	1370	1402
35°	1301	1348	1391
40°	1257	1325	1374
45°	1216	1299	1359
50°	1169	1275	1343
55°	1117	1251	1330
60°	1064	1232	1327
65°	997	1210	1336
70°	923	1217	1371
75°	827	1240	1449
80°	668	1313	1417
85°	503	1153	1124



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.3	3.3
10°-20°	286.5	9.5
20°-30°	430.7	14.3
30°-40°	513.0	17.0
40°-50°	525.1	17.4
50°-60°	472.7	15.7
60°-70°	371.2	12.3
70°-80°	240.9	8.0
80°-90°	74.5	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°	817.5	27.1
0°-40°	1330.5	44.1
0°-60°	2328.3	77.2
0°-90°	3015.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3015.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1054	1056	1052	1057	1058	100
15°	1008	1011	1013	1022	1024	284
25°	916	924	934	949	952	422
35°	792	802	821	841	847	494
45°	639	654	683	709	714	492
55°	476	497	533	561	567	427
65°	313	337	380	412	420	312
75°	159	190	238	271	279	168
85°	33	60	75	73	73	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1059.2	1059.2	1059.2	1059.2	1059.2
2.5°	1060.1	1060.1	1055.4	1060.1	1061.1
5°	1054.4	1056.3	1051.5	1057.3	1058.2
7.5°	1048.7	1048.7	1045.8	1051.5	1052.5
10°	1038.1	1039.1	1038.1	1044.8	1045.8
12.5°	1024.7	1026.6	1027.6	1034.3	1035.2
15°	1008.4	1011.3	1013.2	1021.8	1023.8
17.5°	990.2	993.1	997.9	1007.5	1009.4
20°	968.2	972.0	977.8	990.2	993.1
22.5°	944.3	948.1	957.7	969.2	974.0
25°	916.5	924.2	933.7	949.1	951.9
27.5°	888.7	895.4	907.9	924.2	928.0
30°	856.2	866.7	882.0	898.3	902.1
32.5°	824.6	835.1	853.3	870.5	875.3
35°	792.0	801.6	820.7	840.8	846.6
37.5°	754.6	767.1	788.2	808.3	814.0
40°	715.4	730.7	754.6	775.7	782.4
42.5°	678.0	694.3	718.3	741.2	748.9
45°	638.8	654.1	682.8	708.7	714.4
47.5°	598.5	615.8	646.4	672.3	681.9
50°	558.3	576.5	609.1	635.9	641.6
52.5°	518.1	537.3	571.7	600.5	603.3
55°	476.0	497.0	533.4	561.2	566.9
57.5°	437.7	455.9	495.1	523.8	530.6
60°	395.5	415.6	457.8	484.6	493.2
62.5°	355.3	376.4	420.4	447.2	454.9
65°	313.2	337.1	380.2	411.8	419.5
67.5°	276.8	299.8	345.7	376.4	384.0
70°	234.6	260.5	309.3	340.9	348.6
72.5°	198.2	225.1	273.9	304.5	316.0
75°	159.0	189.6	238.5	271.0	278.7
77.5°	120.7	156.1	205.9	230.8	230.8
80°	86.2	123.5	169.5	181.0	182.9
82.5°	56.5	92.9	125.5	124.5	124.5
85°	32.6	60.3	74.7	72.8	72.8
87.5°	12.4	24.9	26.8	26.8	25.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)