

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: P276997

Luminaire Tested: **24CZ2-40-RDP-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276997  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-40-RDP-UNV-L82765-W2A1-U-5700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2684.9 lumens  
Efficiency: N/A  
Efficacy: 85.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

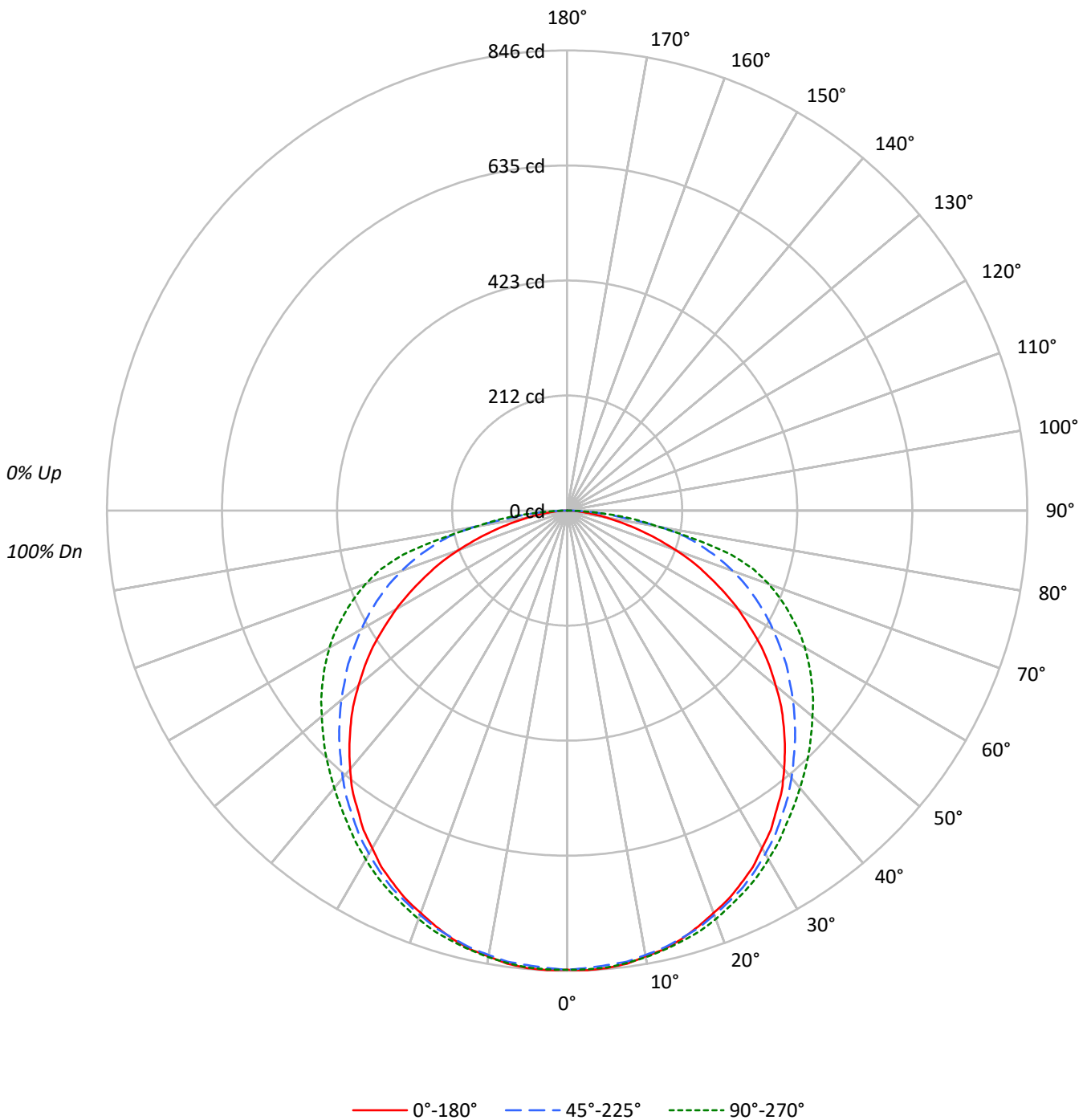
Input Watts (W): 31.248  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1136	1136	1136
5°	1140	1133	1139
10°	1137	1134	1139
15°	1135	1133	1141
20°	1127	1133	1144
25°	1123	1135	1147
30°	1113	1132	1150
35°	1102	1129	1155
40°	1090	1127	1170
45°	1072	1128	1196
50°	1048	1135	1232
55°	1022	1153	1287
60°	978	1175	1358
65°	916	1217	1442
70°	833	1273	1551
75°	706	1343	1620
80°	557	1352	1310
85°	411	1028	1152



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.1	3.0
10°-20°	230.5	8.6
20°-30°	352.5	13.1
30°-40°	430.9	16.0
40°-50°	459.3	17.1
50°-60°	439.1	16.4
60°-70°	372.0	13.9
70°-80°	250.0	9.3
80°-90°	70.5	2.6
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°	663.1	24.7
0°-40°	1094.0	40.7
0°-60°	1992.4	74.2
0°-90°	2684.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2684.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	844	844	844	844	844	
5°	844	843	839	843	843	80
15°	815	815	814	820	819	230
25°	756	759	764	771	772	349
35°	671	676	687	700	703	420
45°	563	573	593	618	629	434
55°	436	452	491	530	549	388
65°	288	317	382	433	453	286
75°	136	185	258	302	312	145
85°	27	55	67	72	75	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	844.3	844.3	844.3	844.3	844.3
2.5°	845.7	845.7	841.7	844.3	844.3
5°	844.3	843.0	839.0	843.0	843.0
7.5°	840.3	839.0	836.4	840.3	839.0
10°	832.4	832.4	829.7	833.7	833.7
12.5°	825.7	824.4	823.0	828.4	827.0
15°	815.0	815.0	813.7	820.4	819.0
17.5°	801.7	803.1	804.4	809.7	811.0
20°	787.1	789.7	791.1	799.1	799.1
22.5°	773.8	775.1	777.8	785.7	785.7
25°	756.4	759.1	764.4	771.1	772.4
27.5°	739.1	740.5	747.1	756.4	757.8
30°	716.5	720.5	728.5	739.1	740.5
32.5°	696.5	700.5	709.8	720.5	723.1
35°	671.2	676.5	687.2	700.5	703.2
37.5°	648.6	652.6	665.9	680.5	684.5
40°	620.6	628.6	641.9	659.2	665.9
42.5°	592.6	600.6	616.6	639.2	647.2
45°	563.3	572.7	592.6	617.9	628.6
47.5°	534.0	544.7	567.3	596.6	608.6
50°	500.7	514.1	542.0	575.3	588.6
52.5°	468.8	484.8	515.4	552.7	570.0
55°	435.5	451.5	491.4	530.0	548.7
57.5°	398.2	419.5	463.5	507.4	527.4
60°	363.6	383.5	436.8	484.8	504.7
62.5°	326.3	352.9	410.2	460.8	480.8
65°	287.7	317.0	382.2	432.8	452.8
67.5°	253.0	285.0	354.3	404.9	424.8
70°	211.8	251.7	323.6	374.2	394.2
72.5°	173.1	217.1	291.7	340.9	359.6
75°	135.8	185.1	258.4	302.3	311.6
77.5°	101.2	153.2	223.7	242.4	235.7
80°	71.9	122.5	174.5	165.1	169.1
82.5°	46.6	93.2	107.9	122.5	126.5
85°	26.6	54.6	66.6	71.9	74.6
87.5°	12.0	20.0	26.6	26.6	25.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)