

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: P276905

Luminaire Tested: **24CZ2-40HE-RDP-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276905  
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: 24CZ2-40HE-RDP-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2668.4 lumens  
Efficiency: N/A  
Efficacy: 92.3 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

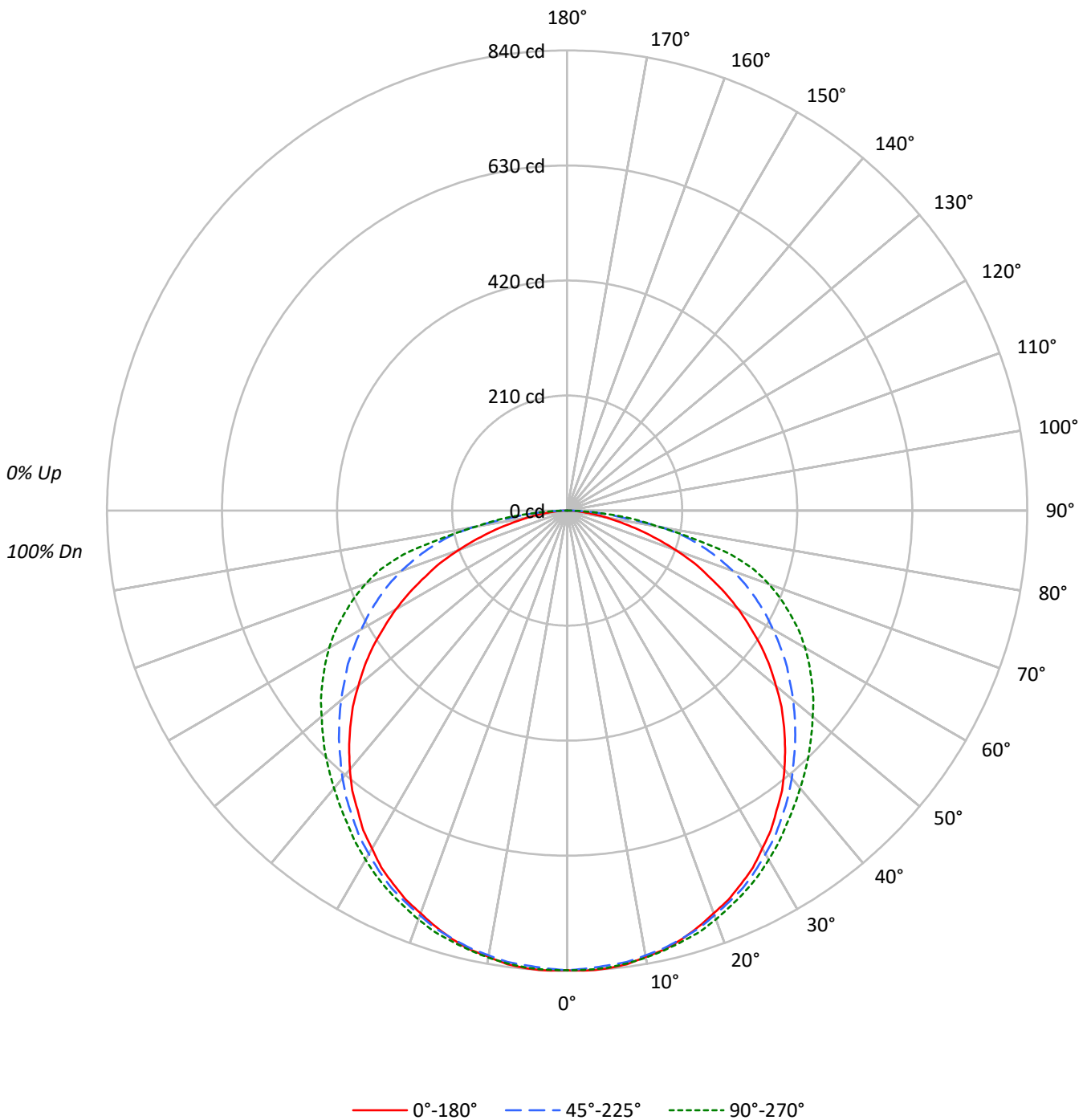
Input Watts (W): 28.923  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1129	1129	1129
5°	1133	1126	1132
10°	1130	1127	1132
15°	1128	1126	1134
20°	1120	1126	1137
25°	1116	1128	1140
30°	1106	1125	1143
35°	1096	1122	1148
40°	1083	1121	1162
45°	1065	1121	1189
50°	1042	1128	1225
55°	1015	1146	1279
60°	972	1168	1350
65°	910	1209	1433
70°	828	1265	1541
75°	702	1335	1610
80°	554	1344	1303
85°	409	1022	1144



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.6	3.0
10°-20°	229.1	8.6
20°-30°	350.3	13.1
30°-40°	428.3	16.0
40°-50°	456.4	17.1
50°-60°	436.4	16.4
60°-70°	369.7	13.9
70°-80°	248.5	9.3
80°-90°	70.1	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°	659.0	24.7
0°-40°	1087.3	40.7
0°-60°	1980.1	74.2
0°-90°	2668.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2668.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	839	838	834	838	838	80
15°	810	810	809	815	814	228
25°	752	754	760	766	768	347
35°	667	672	683	696	699	418
45°	560	569	589	614	625	432
55°	433	449	488	527	545	385
65°	286	315	380	430	450	284
75°	135	184	257	300	310	145
85°	26	54	66	72	74	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	839.1	839.1	839.1	839.1	839.1
2.5°	840.5	840.5	836.5	839.1	839.1
5°	839.1	837.8	833.8	837.8	837.8
7.5°	835.2	833.8	831.2	835.2	833.8
10°	827.2	827.2	824.6	828.6	828.6
12.5°	820.6	819.3	818.0	823.3	821.9
15°	810.0	810.0	808.7	815.3	814.0
17.5°	796.8	798.1	799.4	804.7	806.0
20°	782.2	784.9	786.2	794.1	794.1
22.5°	769.0	770.3	773.0	780.9	780.9
25°	751.8	754.4	759.7	766.3	767.7
27.5°	734.6	735.9	742.5	751.8	753.1
30°	712.1	716.0	724.0	734.6	735.9
32.5°	692.2	696.2	705.5	716.0	718.7
35°	667.1	672.4	683.0	696.2	698.8
37.5°	644.6	648.5	661.8	676.3	680.3
40°	616.8	624.7	638.0	655.2	661.8
42.5°	589.0	596.9	612.8	635.3	643.3
45°	559.9	569.1	589.0	614.1	624.7
47.5°	530.7	541.3	563.8	593.0	604.9
50°	497.7	510.9	538.7	571.8	585.0
52.5°	465.9	481.8	512.2	549.3	566.5
55°	432.8	448.7	488.4	526.8	545.3
57.5°	395.7	416.9	460.6	504.3	524.1
60°	361.3	381.2	434.1	481.8	501.6
62.5°	324.3	350.7	407.7	458.0	477.8
65°	285.9	315.0	379.9	430.2	450.0
67.5°	251.5	283.2	352.1	402.4	422.2
70°	210.4	250.2	321.6	371.9	391.8
72.5°	172.1	215.7	289.9	338.8	357.4
75°	135.0	184.0	256.8	300.4	309.7
77.5°	100.6	152.2	222.4	240.9	234.3
80°	71.5	121.8	173.4	164.1	168.1
82.5°	46.3	92.6	107.2	121.8	125.7
85°	26.5	54.3	66.2	71.5	74.1
87.5°	11.9	19.9	26.5	26.5	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)