

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: P230478

Luminaire Tested: **24CZ-LD5-50-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230478  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-50-RDP-UNV-L940-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RDP LENS  
Light Source: (168) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2898.0 lumens  
Efficiency: N/A  
Efficacy: 71.2 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

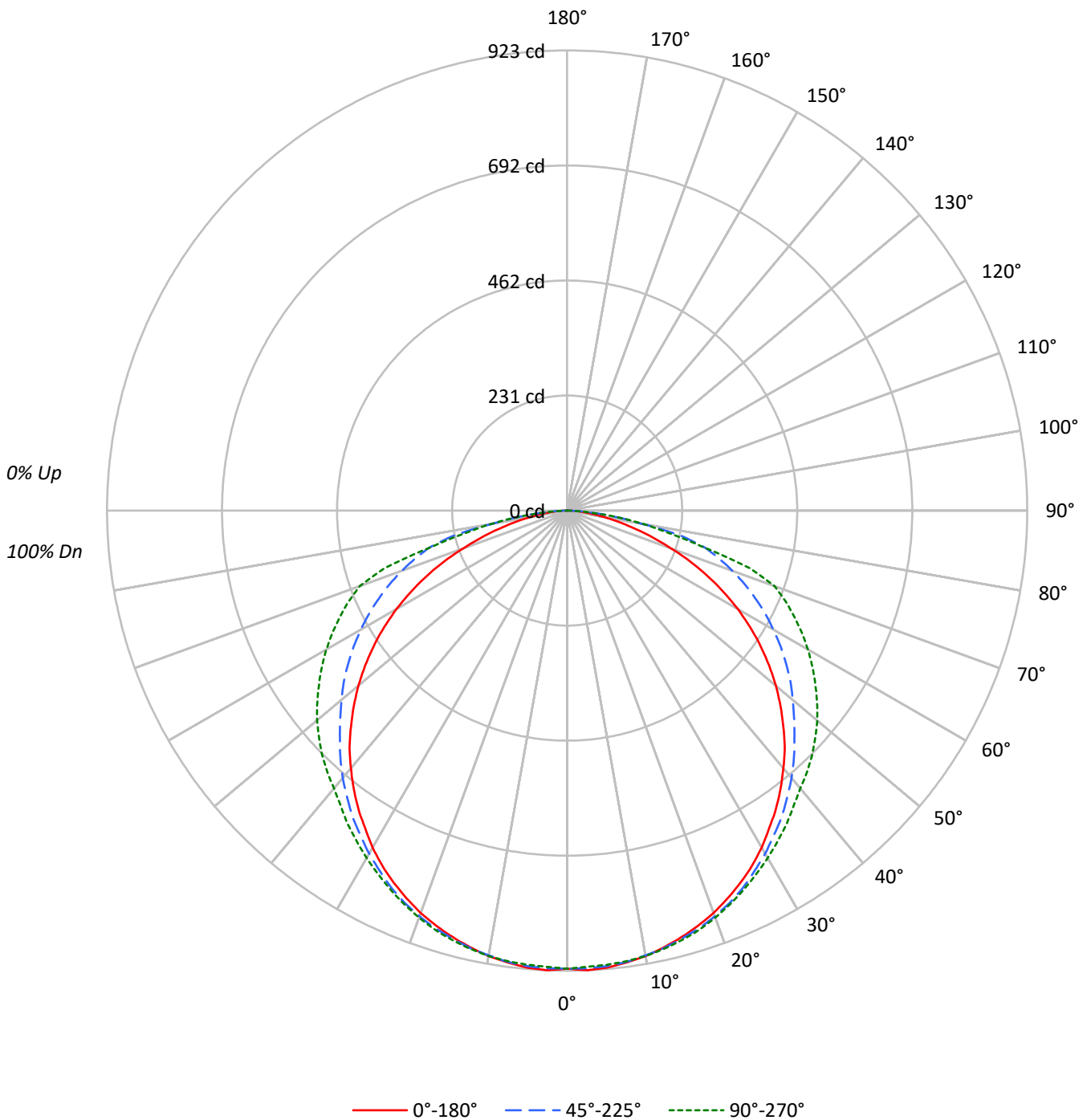
Input Watts (W): 40.68  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

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

	0°	45°	90°
0°	1236	1236	1236
5°	1243	1239	1235
10°	1240	1238	1240
15°	1234	1238	1242
20°	1230	1240	1244
25°	1222	1239	1245
30°	1212	1235	1250
35°	1200	1233	1261
40°	1185	1230	1278
45°	1167	1227	1322
50°	1144	1236	1371
55°	1111	1258	1426
60°	1063	1286	1501
65°	990	1326	1599
70°	875	1386	1740
75°	734	1483	1461
80°	586	1172	1216
85°	463	794	727



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.1	3.0
10°-20°	250.8	8.7
20°-30°	383.0	13.2
30°-40°	468.3	16.2
40°-50°	501.3	17.3
50°-60°	480.8	16.6
60°-70°	406.0	14.0
70°-80°	259.4	9.0
80°-90°	61.4	2.1
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°	720.9	24.9
0°-40°	1189.2	41.0
0°-60°	2171.3	74.9
0°-90°	2898.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2898.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	919	919	919	919	919	
5°	920	914	917	916	914	87
15°	886	883	889	892	892	250
25°	823	822	834	837	839	379
35°	730	736	750	760	768	457
45°	613	623	645	675	695	473
55°	474	489	536	585	608	423
65°	311	341	417	475	502	307
75°	141	201	285	291	281	152
85°	30	50	51	50	47	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	918.7	918.7	918.7	918.7	918.7
2.5°	923.0	917.3	918.7	918.7	915.9
5°	920.1	914.4	917.3	915.9	914.4
7.5°	914.4	910.1	913.0	913.0	911.6
10°	907.3	903.0	905.9	907.3	907.3
12.5°	897.3	894.5	898.7	898.7	900.2
15°	885.9	883.0	888.8	891.6	891.6
17.5°	873.1	871.6	878.8	880.2	881.6
20°	858.8	857.4	865.9	865.9	868.8
22.5°	841.7	840.2	851.7	851.7	854.5
25°	823.1	821.7	834.5	837.4	838.8
27.5°	803.2	801.7	814.6	818.8	821.7
30°	780.3	780.3	794.6	800.3	804.6
32.5°	754.7	758.9	771.8	780.3	786.0
35°	730.4	736.1	750.4	760.4	767.5
37.5°	703.3	709.0	724.7	737.5	746.1
40°	674.8	681.9	700.4	714.7	727.5
42.5°	646.2	653.4	673.3	694.7	711.9
45°	613.4	623.4	644.8	674.8	694.7
47.5°	580.6	590.6	617.7	654.8	674.8
50°	546.4	557.8	590.6	633.4	654.8
52.5°	510.7	523.5	564.9	610.6	632.0
55°	473.6	489.3	536.4	584.9	607.7
57.5°	435.1	452.2	507.9	559.2	583.5
60°	395.2	416.6	477.9	532.1	557.8
62.5°	353.8	379.5	447.9	503.6	530.7
65°	311.0	340.9	416.6	475.0	502.2
67.5°	266.8	306.7	385.2	446.5	473.6
70°	222.5	269.6	352.4	415.1	442.2
72.5°	181.2	235.4	319.6	378.0	383.7
75°	141.2	201.1	285.3	291.0	281.0
77.5°	105.6	166.9	235.4	209.7	208.3
80°	75.6	134.1	151.2	155.5	156.9
82.5°	49.9	101.3	98.4	101.3	99.9
85°	30.0	49.9	51.4	49.9	47.1
87.5°	14.3	18.5	14.3	12.8	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)