

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: P230486

Luminaire Tested: **24CZ-LD5-60-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230486  
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-LD5-60-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: 3543.4 lumens  
Efficiency: N/A  
Efficacy: 67.9 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

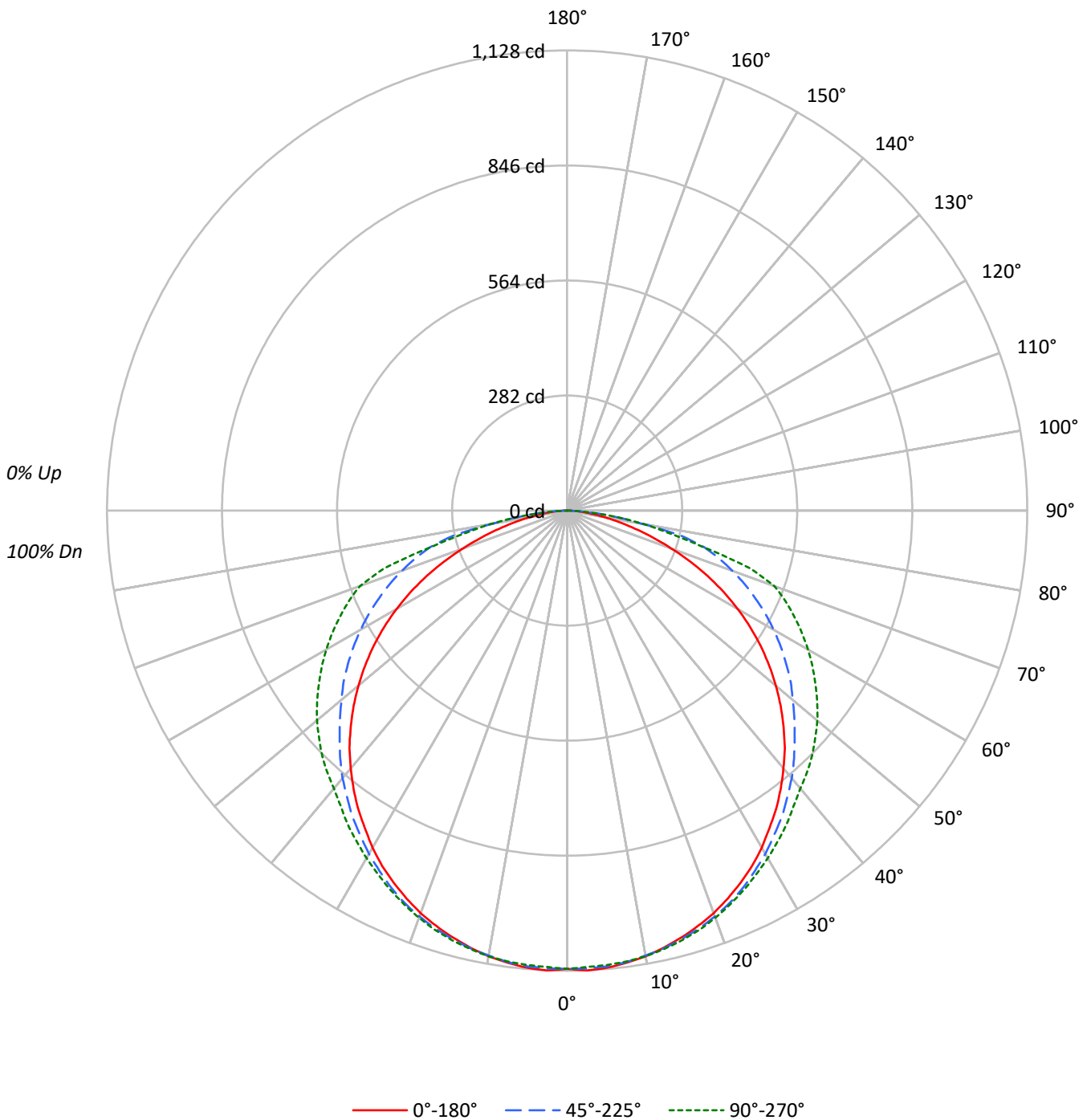
Input Watts (W): 52.17  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1511	1511	1511
5°	1519	1515	1510
10°	1516	1513	1516
15°	1509	1514	1518
20°	1503	1516	1521
25°	1494	1515	1523
30°	1482	1509	1528
35°	1467	1507	1541
40°	1449	1504	1563
45°	1427	1500	1616
50°	1398	1512	1676
55°	1358	1538	1743
60°	1300	1572	1835
65°	1210	1621	1955
70°	1070	1695	2127
75°	898	1813	1786
80°	716	1433	1487
85°	565	969	889



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.5	3.0
10°-20°	306.6	8.7
20°-30°	468.3	13.2
30°-40°	572.6	16.2
40°-50°	612.9	17.3
50°-60°	587.8	16.6
60°-70°	496.4	14.0
70°-80°	317.2	9.0
80°-90°	75.0	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°	881.5	24.9
0°-40°	1454.1	41.0
0°-60°	2654.8	74.9
0°-90°	3543.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3543.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1125	1118	1122	1120	1118	107
15°	1083	1080	1087	1090	1090	306
25°	1006	1005	1020	1024	1026	464
35°	893	900	918	930	938	558
45°	750	762	788	825	849	578
55°	579	598	656	715	743	517
65°	380	417	509	581	614	375
75°	173	246	349	356	344	186
85°	37	61	63	61	58	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1123.3	1123.3	1123.3	1123.3	1123.3
2.5°	1128.5	1121.5	1123.3	1123.3	1119.8
5°	1125.0	1118.1	1121.5	1119.8	1118.1
7.5°	1118.1	1112.8	1116.3	1116.3	1114.6
10°	1109.3	1104.1	1107.6	1109.3	1109.3
12.5°	1097.1	1093.6	1098.9	1098.9	1100.6
15°	1083.2	1079.7	1086.7	1090.1	1090.1
17.5°	1067.5	1065.7	1074.4	1076.2	1077.9
20°	1050.0	1048.3	1058.7	1058.7	1062.2
22.5°	1029.1	1027.4	1041.3	1041.3	1044.8
25°	1006.4	1004.7	1020.4	1023.9	1025.6
27.5°	982.0	980.3	996.0	1001.2	1004.7
30°	954.1	954.1	971.5	978.5	983.7
32.5°	922.7	927.9	943.6	954.1	961.1
35°	893.0	900.0	917.5	929.7	938.4
37.5°	859.9	866.9	886.1	901.8	912.2
40°	825.0	833.7	856.4	873.9	889.6
42.5°	790.1	798.9	823.3	849.4	870.4
45°	750.0	762.2	788.4	825.0	849.4
47.5°	709.9	722.1	755.3	800.6	825.0
50°	668.0	682.0	722.1	774.4	800.6
52.5°	624.4	640.1	690.7	746.5	772.7
55°	579.1	598.3	655.8	715.1	743.0
57.5°	532.0	552.9	620.9	683.7	713.4
60°	483.2	509.3	584.3	650.6	682.0
62.5°	432.6	464.0	547.7	615.7	648.9
65°	380.2	416.9	509.3	580.8	614.0
67.5°	326.2	375.0	470.9	545.9	579.1
70°	272.1	329.7	430.8	507.6	540.7
72.5°	221.5	287.8	390.7	462.2	469.2
75°	172.7	245.9	348.8	355.8	343.6
77.5°	129.1	204.1	287.8	256.4	254.7
80°	92.4	164.0	184.9	190.1	191.9
82.5°	61.0	123.8	120.4	123.8	122.1
85°	36.6	61.0	62.8	61.0	57.6
87.5°	17.4	22.7	17.4	15.7	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)