

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: P230526

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230526  
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-LD5-60SE-RDP-UNV-L940-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RDP LENS  
Light Source: (84) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3463.0 lumens  
Efficiency: N/A  
Efficacy: 57.7 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

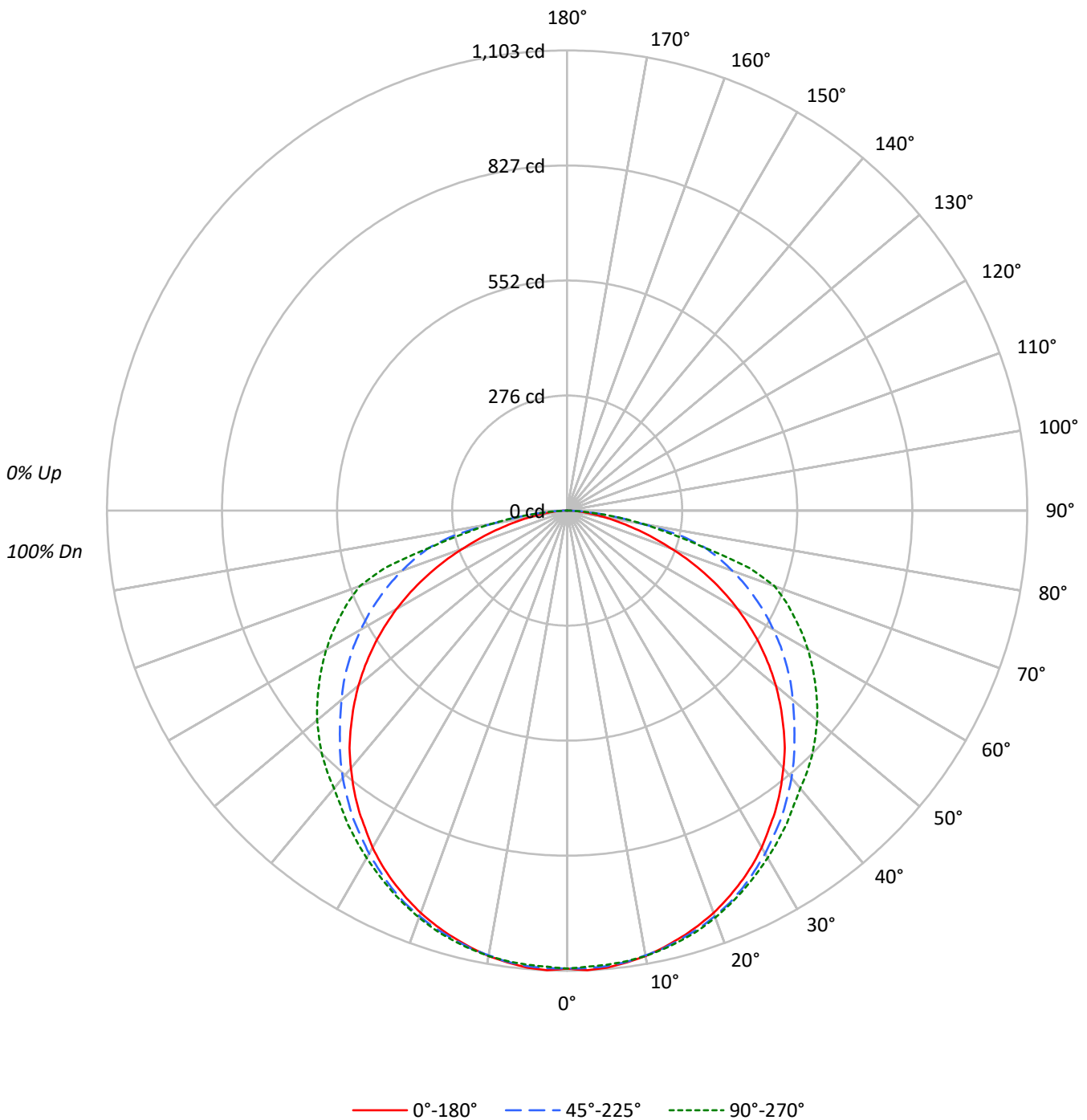
Input Watts (W): 60  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20			20				20			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	50	30	10
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°	1477	1477	1477
5°	1485	1480	1476
10°	1481	1479	1481
15°	1475	1479	1484
20°	1469	1482	1487
25°	1460	1480	1488
30°	1449	1475	1494
35°	1434	1473	1506
40°	1416	1470	1527
45°	1395	1466	1580
50°	1367	1477	1638
55°	1328	1504	1704
60°	1271	1537	1794
65°	1183	1585	1910
70°	1046	1657	2079
75°	878	1772	1746
80°	700	1400	1453
85°	553	948	869



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.1	3.0
10°-20°	299.7	8.7
20°-30°	457.7	13.2
30°-40°	559.6	16.2
40°-50°	599.0	17.3
50°-60°	574.5	16.6
60°-70°	485.1	14.0
70°-80°	310.0	9.0
80°-90°	73.3	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°	861.5	24.9
0°-40°	1421.1	41.0
0°-60°	2594.6	74.9
0°-90°	3463.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3463.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1098	1098	1098	1098	1098	
5°	1100	1093	1096	1094	1093	104
15°	1059	1055	1062	1065	1065	299
25°	984	982	997	1001	1002	453
35°	873	880	897	909	917	546
45°	733	745	770	806	830	565
55°	566	585	641	699	726	505
65°	372	407	498	568	600	367
75°	169	240	341	348	336	182
85°	36	60	61	60	56	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1097.8	1097.8	1097.8	1097.8	1097.8
2.5°	1102.9	1096.1	1097.8	1097.8	1094.4
5°	1099.5	1092.7	1096.1	1094.4	1092.7
7.5°	1092.7	1087.6	1091.0	1091.0	1089.3
10°	1084.2	1079.1	1082.5	1084.2	1084.2
12.5°	1072.2	1068.8	1074.0	1074.0	1075.7
15°	1058.6	1055.2	1062.0	1065.4	1065.4
17.5°	1043.3	1041.6	1050.1	1051.8	1053.5
20°	1026.2	1024.5	1034.7	1034.7	1038.2
22.5°	1005.8	1004.1	1017.7	1017.7	1021.1
25°	983.6	981.9	997.2	1000.6	1002.4
27.5°	959.7	958.0	973.4	978.5	981.9
30°	932.5	932.5	949.5	956.3	961.4
32.5°	901.8	906.9	922.2	932.5	939.3
35°	872.8	879.6	896.7	908.6	917.1
37.5°	840.4	847.2	866.0	881.3	891.5
40°	806.3	814.8	837.0	854.0	869.4
42.5°	772.2	780.7	804.6	830.2	850.6
45°	733.0	744.9	770.5	806.3	830.2
47.5°	693.8	705.7	738.1	782.4	806.3
50°	652.9	666.5	705.7	756.9	782.4
52.5°	610.3	625.6	675.1	729.6	755.2
55°	566.0	584.7	641.0	698.9	726.2
57.5°	519.9	540.4	606.9	668.2	697.2
60°	472.2	497.8	571.1	635.8	666.5
62.5°	422.8	453.4	535.3	601.8	634.1
65°	371.6	407.4	497.8	567.7	600.0
67.5°	318.8	366.5	460.3	533.6	566.0
70°	265.9	322.2	421.1	496.1	528.5
72.5°	216.5	281.3	381.8	451.7	458.6
75°	168.8	240.4	340.9	347.8	335.8
77.5°	126.1	199.4	281.3	250.6	248.9
80°	90.3	160.2	180.7	185.8	187.5
82.5°	59.7	121.0	117.6	121.0	119.3
85°	35.8	59.7	61.4	59.7	56.3
87.5°	17.0	22.2	17.0	15.3	13.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)