

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: P230510

Luminaire Tested: **24CZ-LD5-40SE-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230510  
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-LD5-40SE-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: 2335.0 lumens  
Efficiency: N/A  
Efficacy: 71.7 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

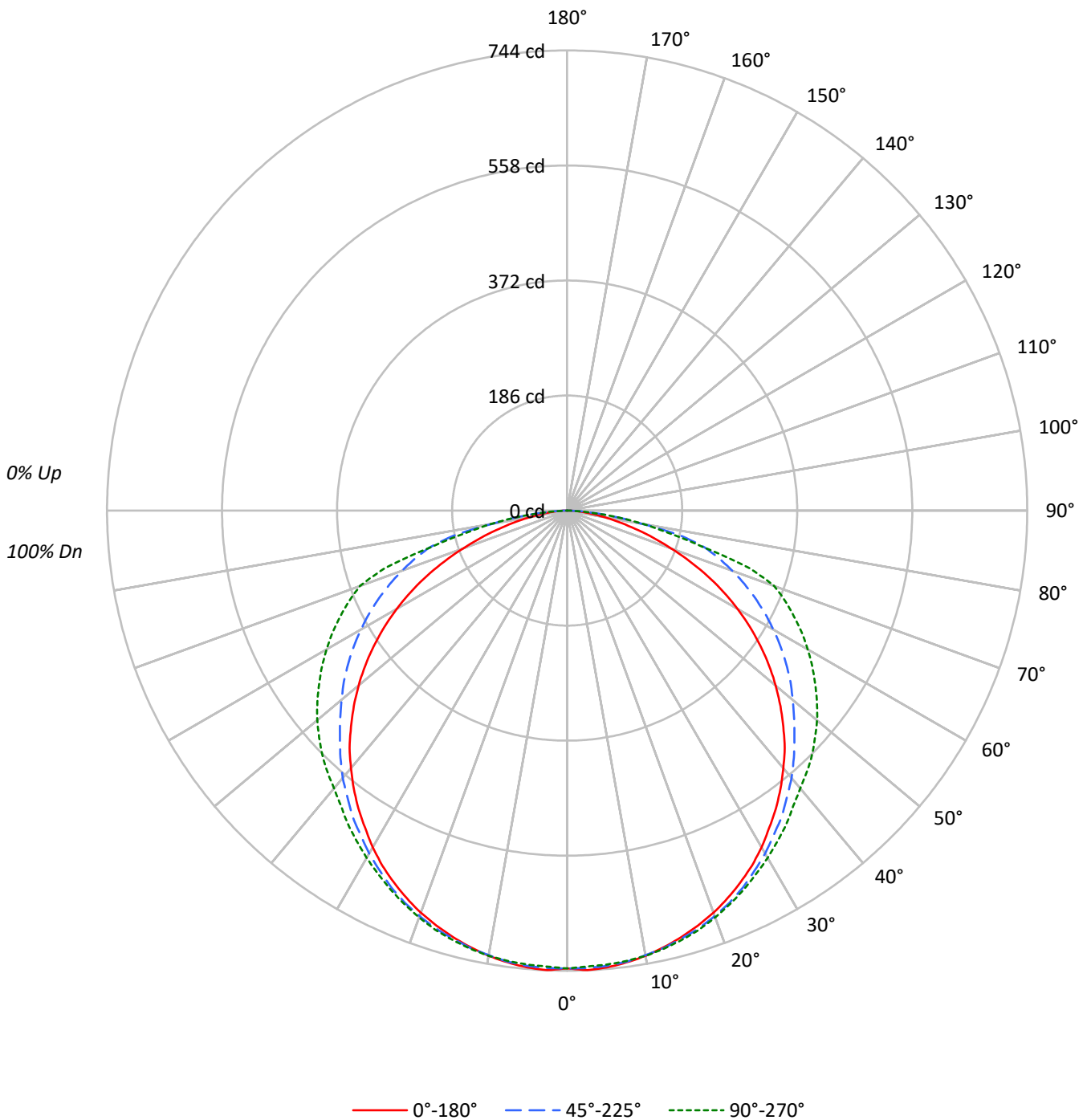
Input Watts (W): 32.55  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	996	996	996
5°	1001	998	995
10°	999	997	999
15°	994	997	1001
20°	991	999	1002
25°	985	998	1003
30°	977	995	1007
35°	967	993	1016
40°	955	991	1030
45°	941	989	1065
50°	921	996	1104
55°	895	1014	1149
60°	857	1036	1209
65°	798	1068	1288
70°	705	1117	1402
75°	592	1195	1177
80°	472	944	979
85°	372	639	585



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.2	3.0
10°-20°	202.1	8.7
20°-30°	308.6	13.2
30°-40°	377.3	16.2
40°-50°	403.9	17.3
50°-60°	387.4	16.6
60°-70°	327.1	14.0
70°-80°	209.1	9.0
80°-90°	49.4	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°	580.9	24.9
0°-40°	958.2	41.0
0°-60°	1749.5	74.9
0°-90°	2335.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2335.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	741	737	739	738	737	70
15°	714	712	716	718	718	202
25°	663	662	672	675	676	306
35°	588	593	605	613	618	368
45°	494	502	520	544	560	381
55°	382	394	432	471	490	341
65°	251	275	336	383	405	247
75°	114	162	230	234	226	123
85°	24	40	41	40	38	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	740.2	740.2	740.2	740.2	740.2
2.5°	743.7	739.1	740.2	740.2	737.9
5°	741.4	736.8	739.1	737.9	736.8
7.5°	736.8	733.3	735.6	735.6	734.5
10°	731.0	727.6	729.9	731.0	731.0
12.5°	723.0	720.7	724.1	724.1	725.3
15°	713.8	711.5	716.1	718.4	718.4
17.5°	703.4	702.3	708.0	709.2	710.3
20°	692.0	690.8	697.7	697.7	700.0
22.5°	678.2	677.0	686.2	686.2	688.5
25°	663.2	662.1	672.4	674.7	675.9
27.5°	647.1	646.0	656.3	659.8	662.1
30°	628.7	628.7	640.2	644.8	648.3
32.5°	608.0	611.5	621.8	628.7	633.3
35°	588.5	593.1	604.6	612.6	618.4
37.5°	566.7	571.3	583.9	594.3	601.1
40°	543.7	549.4	564.4	575.9	586.2
42.5°	520.7	526.4	542.5	559.8	573.6
45°	494.3	502.3	519.5	543.7	559.8
47.5°	467.8	475.9	497.7	527.6	543.7
50°	440.2	449.4	475.9	510.3	527.6
52.5°	411.5	421.8	455.2	492.0	509.2
55°	381.6	394.3	432.2	471.3	489.7
57.5°	350.6	364.4	409.2	450.6	470.1
60°	318.4	335.6	385.1	428.7	449.4
62.5°	285.1	305.7	360.9	405.7	427.6
65°	250.6	274.7	335.6	382.8	404.6
67.5°	214.9	247.1	310.3	359.8	381.6
70°	179.3	217.2	283.9	334.5	356.3
72.5°	146.0	189.7	257.5	304.6	309.2
75°	113.8	162.1	229.9	234.5	226.4
77.5°	85.1	134.5	189.7	169.0	167.8
80°	60.9	108.0	121.8	125.3	126.4
82.5°	40.2	81.6	79.3	81.6	80.5
85°	24.1	40.2	41.4	40.2	37.9
87.5°	11.5	14.9	11.5	10.3	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)