

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: P230462

Luminaire Tested: **24CZ-LD5-30-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230462  
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-LD5-30-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: 1749.0 lumens  
Efficiency: N/A  
Efficacy: 80.9 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

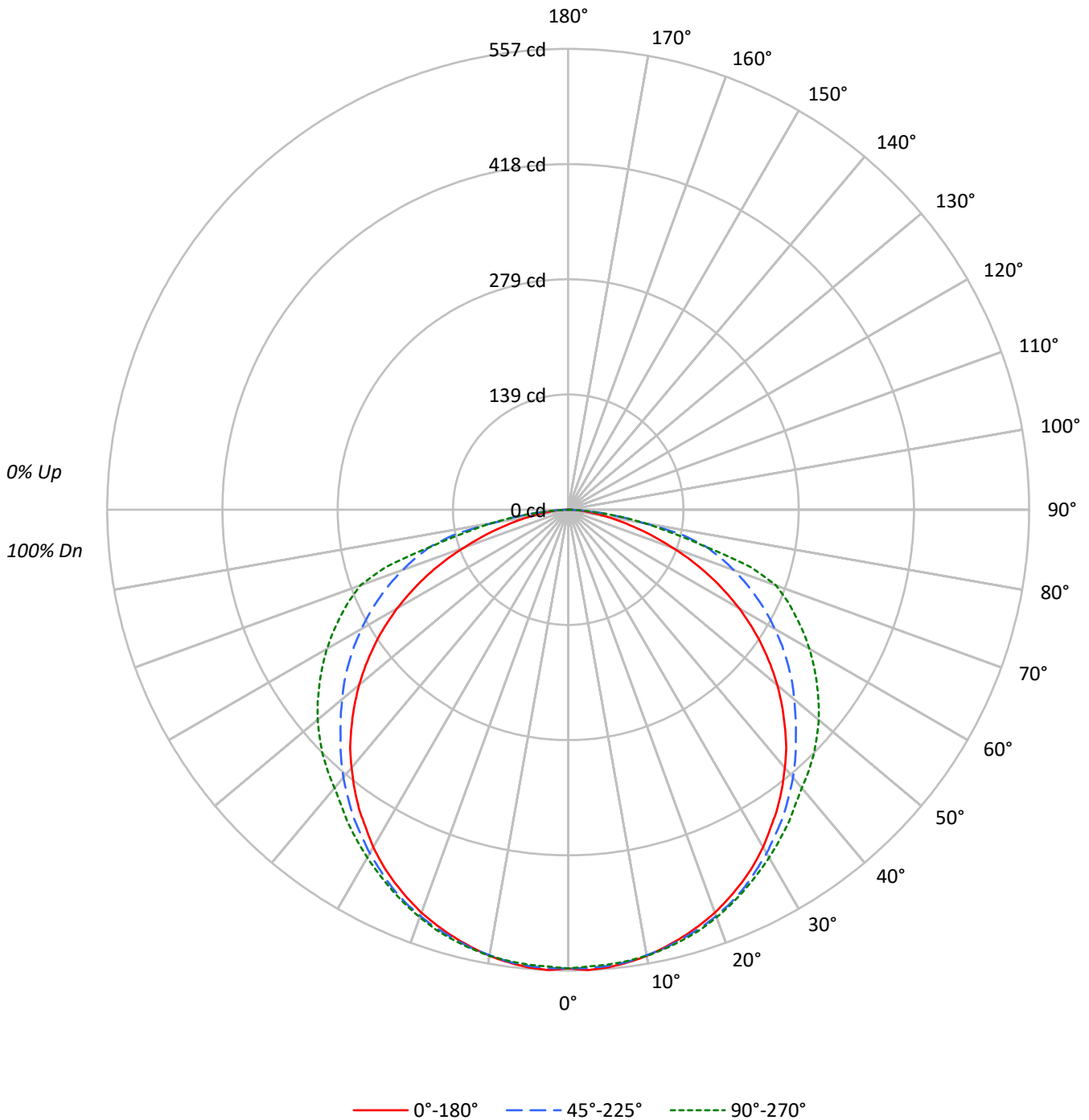
Input Watts (W): 21.62  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	746	746	746
5°	750	748	745
10°	748	747	748
15°	745	747	750
20°	742	748	751
25°	738	748	751
30°	732	745	754
35°	724	744	761
40°	715	742	771
45°	704	740	798
50°	690	746	827
55°	670	759	860
60°	642	776	906
65°	598	800	965
70°	528	837	1050
75°	443	895	882
80°	353	707	734
85°	279	479	438



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.6	3.0
10°-20°	151.3	8.7
20°-30°	231.2	13.2
30°-40°	282.6	16.2
40°-50°	302.5	17.3
50°-60°	290.2	16.6
60°-70°	245.0	14.0
70°-80°	156.6	9.0
80°-90°	37.0	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°	435.1	24.9
0°-40°	717.7	41.0
0°-60°	1310.4	74.9
0°-90°	1749.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1749.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	554	554	554	554	554	
5°	555	552	554	553	552	53
15°	535	533	536	538	538	151
25°	497	496	504	505	506	229
35°	441	444	453	459	463	276
45°	370	376	389	407	419	286
55°	286	295	324	353	367	255
65°	188	206	251	287	303	185
75°	85	121	172	176	170	92
85°	18	30	31	30	28	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	554.4	554.4	554.4	554.4	554.4
2.5°	557.0	553.6	554.4	554.4	552.7
5°	555.3	551.9	553.6	552.7	551.9
7.5°	551.9	549.3	551.0	551.0	550.1
10°	547.6	545.0	546.7	547.6	547.6
12.5°	541.5	539.8	542.4	542.4	543.2
15°	534.6	532.9	536.4	538.1	538.1
17.5°	526.9	526.0	530.3	531.2	532.1
20°	518.3	517.4	522.6	522.6	524.3
22.5°	507.9	507.1	514.0	514.0	515.7
25°	496.8	495.9	503.6	505.4	506.2
27.5°	484.7	483.8	491.6	494.2	495.9
30°	470.9	470.9	479.5	483.0	485.6
32.5°	455.4	458.0	465.8	470.9	474.4
35°	440.8	444.2	452.9	458.9	463.2
37.5°	424.4	427.9	437.4	445.1	450.3
40°	407.2	411.5	422.7	431.3	439.1
42.5°	390.0	394.3	406.4	419.3	429.6
45°	370.2	376.2	389.1	407.2	419.3
47.5°	350.4	356.4	372.8	395.2	407.2
50°	329.7	336.6	356.4	382.3	395.2
52.5°	308.2	316.0	340.9	368.5	381.4
55°	285.8	295.3	323.7	353.0	366.8
57.5°	262.6	272.9	306.5	337.5	352.1
60°	238.5	251.4	288.4	321.1	336.6
62.5°	213.5	229.0	270.3	303.9	320.3
65°	187.7	205.8	251.4	286.7	303.0
67.5°	161.0	185.1	232.5	269.5	285.8
70°	134.3	162.7	212.7	250.5	266.9
72.5°	109.3	142.1	192.8	228.1	231.6
75°	85.2	121.4	172.2	175.6	169.6
77.5°	63.7	100.7	142.1	126.6	125.7
80°	45.6	80.9	91.3	93.8	94.7
82.5°	30.1	61.1	59.4	61.1	60.3
85°	18.1	30.1	31.0	30.1	28.4
87.5°	8.6	11.2	8.6	7.7	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)