

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: P230501

Luminaire Tested: **24CZ-LD5-30SE-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230501  
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-LD5-30SE-RDP-UNV-L935-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RDP LENS  
Light Source: (84) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1733.1 lumens  
Efficiency: N/A  
Efficacy: 73.8 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

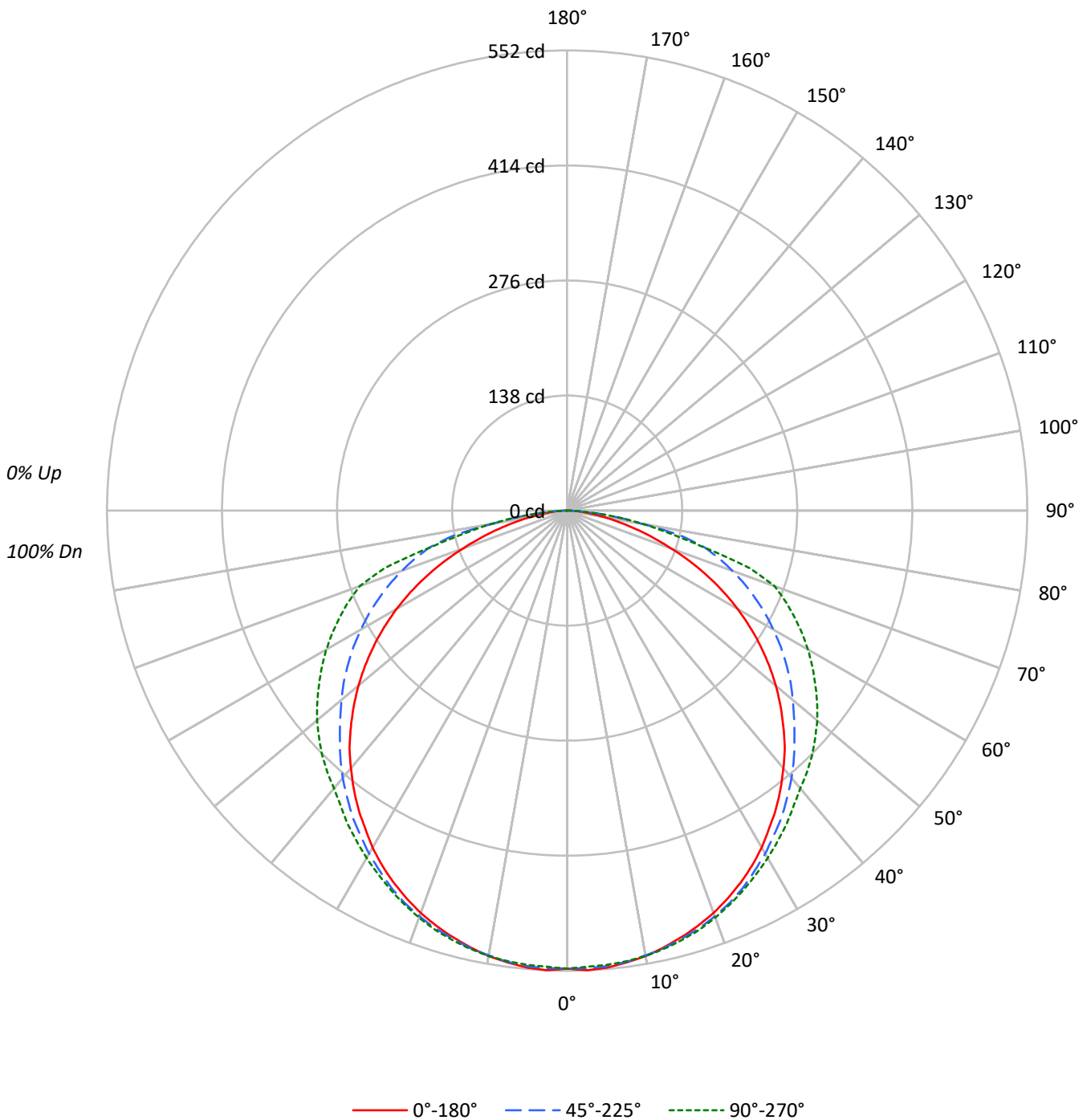
Input Watts (W): 23.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	739	739	739
5°	743	741	739
10°	741	740	741
15°	738	740	743
20°	735	742	744
25°	731	741	745
30°	725	738	748
35°	717	737	754
40°	709	736	764
45°	698	734	791
50°	684	739	820
55°	664	753	852
60°	636	769	898
65°	592	793	956
70°	524	829	1041
75°	439	887	874
80°	350	700	727
85°	276	474	435



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.1	3.0
10°-20°	150.0	8.7
20°-30°	229.1	13.2
30°-40°	280.1	16.2
40°-50°	299.8	17.3
50°-60°	287.5	16.6
60°-70°	242.8	14.0
70°-80°	155.2	9.0
80°-90°	36.7	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°	431.2	24.9
0°-40°	711.2	41.0
0°-60°	1298.5	74.9
0°-90°	1733.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1733.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	549	549	549	549	549	
5°	550	547	549	548	547	52
15°	530	528	532	533	533	150
25°	492	491	499	501	502	227
35°	437	440	449	455	459	273
45°	367	373	386	404	416	283
55°	283	293	321	350	363	253
65°	186	204	249	284	300	183
75°	84	120	171	174	168	91
85°	18	30	31	30	28	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	549.4	549.4	549.4	549.4	549.4
2.5°	552.0	548.6	549.4	549.4	547.7
5°	550.3	546.9	548.6	547.7	546.9
7.5°	546.9	544.3	546.0	546.0	545.2
10°	542.6	540.0	541.8	542.6	542.6
12.5°	536.6	534.9	537.5	537.5	538.3
15°	529.8	528.1	531.5	533.2	533.2
17.5°	522.1	521.3	525.5	526.4	527.2
20°	513.6	512.7	517.9	517.9	519.6
22.5°	503.4	502.5	509.3	509.3	511.0
25°	492.3	491.4	499.1	500.8	501.7
27.5°	480.3	479.5	487.1	489.7	491.4
30°	466.7	466.7	475.2	478.6	481.2
32.5°	451.3	453.9	461.6	466.7	470.1
35°	436.8	440.2	448.8	454.7	459.0
37.5°	420.6	424.0	433.4	441.1	446.2
40°	403.5	407.8	418.9	427.4	435.1
42.5°	386.5	390.7	402.7	415.5	425.7
45°	366.9	372.8	385.6	403.5	415.5
47.5°	347.2	353.2	369.4	391.6	403.5
50°	326.8	333.6	353.2	378.8	391.6
52.5°	305.4	313.1	337.8	365.1	377.9
55°	283.2	292.6	320.8	349.8	363.4
57.5°	260.2	270.4	303.7	334.4	348.9
60°	236.3	249.1	285.8	318.2	333.6
62.5°	211.6	226.9	267.9	301.2	317.4
65°	186.0	203.9	249.1	284.1	300.3
67.5°	159.5	183.4	230.4	267.0	283.2
70°	133.1	161.2	210.7	248.3	264.5
72.5°	108.4	140.8	191.1	226.1	229.5
75°	84.5	120.3	170.6	174.0	168.1
77.5°	63.1	99.8	140.8	125.4	124.6
80°	45.2	80.2	90.4	93.0	93.8
82.5°	29.9	60.6	58.9	60.6	59.7
85°	17.9	29.9	30.7	29.9	28.2
87.5°	8.5	11.1	8.5	7.7	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)