

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: P391246

Luminaire Tested: **24CZ2-30VHE-RDP-UNV-L930-CD1-SWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P391246  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30VHE-RDP-UNV-L930-CD1-SWPD1-U  
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1650.1 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

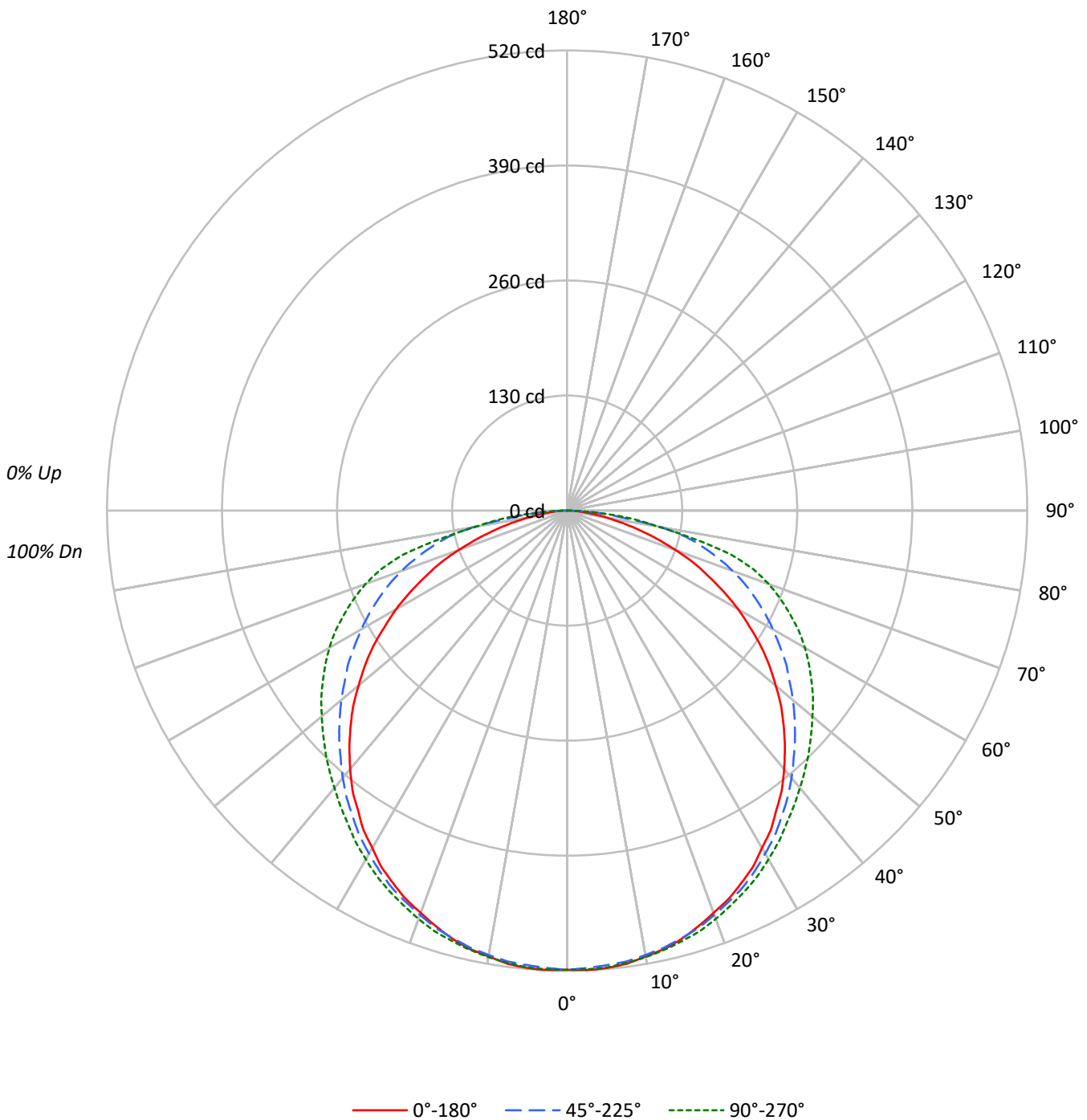
Input Watts (W): 20.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	698	698	698
5°	701	696	700
10°	699	697	700
15°	698	697	701
20°	693	696	703
25°	690	697	705
30°	684	696	707
35°	678	694	710
40°	670	693	719
45°	659	693	735
50°	644	697	757
55°	628	708	791
60°	601	723	835
65°	563	748	886
70°	512	782	953
75°	434	826	996
80°	342	831	805
85°	253	631	707



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.2	3.0
10°-20°	141.7	8.6
20°-30°	216.6	13.1
30°-40°	264.8	16.0
40°-50°	282.3	17.1
50°-60°	269.9	16.4
60°-70°	228.6	13.9
70°-80°	153.7	9.3
80°-90°	43.4	2.6
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°	407.5	24.7
0°-40°	672.4	40.7
0°-60°	1224.5	74.2
0°-90°	1650.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1650.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	519	519	519	519	519	
5°	519	518	516	518	518	49
15°	501	501	500	504	503	141
25°	465	466	470	474	475	214
35°	412	416	422	430	432	258
45°	346	352	364	380	386	267
55°	268	278	302	326	337	238
65°	177	195	235	266	278	175
75°	84	114	159	186	192	89
85°	16	34	41	44	46	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	518.9	518.9	518.9	518.9	518.9
2.5°	519.7	519.7	517.3	518.9	518.9
5°	518.9	518.1	515.6	518.1	518.1
7.5°	516.5	515.6	514.0	516.5	515.6
10°	511.5	511.5	509.9	512.4	512.4
12.5°	507.5	506.6	505.8	509.1	508.3
15°	500.9	500.9	500.1	504.2	503.4
17.5°	492.7	493.5	494.4	497.6	498.4
20°	483.7	485.4	486.2	491.1	491.1
22.5°	475.5	476.3	478.0	482.9	482.9
25°	464.9	466.5	469.8	473.9	474.7
27.5°	454.3	455.1	459.2	464.9	465.7
30°	440.3	442.8	447.7	454.3	455.1
32.5°	428.1	430.5	436.2	442.8	444.4
35°	412.5	415.8	422.3	430.5	432.2
37.5°	398.6	401.0	409.2	418.2	420.7
40°	381.4	386.3	394.5	405.1	409.2
42.5°	364.2	369.1	379.0	392.9	397.8
45°	346.2	351.9	364.2	379.8	386.3
47.5°	328.2	334.8	348.7	366.7	374.0
50°	307.7	315.9	333.1	353.6	361.8
52.5°	288.1	297.9	316.7	339.7	350.3
55°	267.6	277.5	302.0	325.8	337.2
57.5°	244.7	257.8	284.8	311.8	324.1
60°	223.4	235.7	268.5	297.9	310.2
62.5°	200.5	216.9	252.1	283.2	295.5
65°	176.8	194.8	234.9	266.0	278.3
67.5°	155.5	175.2	217.7	248.8	261.1
70°	130.1	154.7	198.9	230.0	242.3
72.5°	106.4	133.4	179.2	209.5	221.0
75°	83.5	113.8	158.8	185.8	191.5
77.5°	62.2	94.1	137.5	149.0	144.9
80°	44.2	75.3	107.2	101.5	103.9
82.5°	28.6	57.3	66.3	75.3	77.8
85°	16.4	33.6	40.9	44.2	45.8
87.5°	7.4	12.3	16.4	16.4	15.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)