

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: P276809

Luminaire Tested: **24CZ2-30HE-RDP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276809  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30HE-RDP-UNV-L93050-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1793.1 lumens  
Efficiency: N/A  
Efficacy: 89.1 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

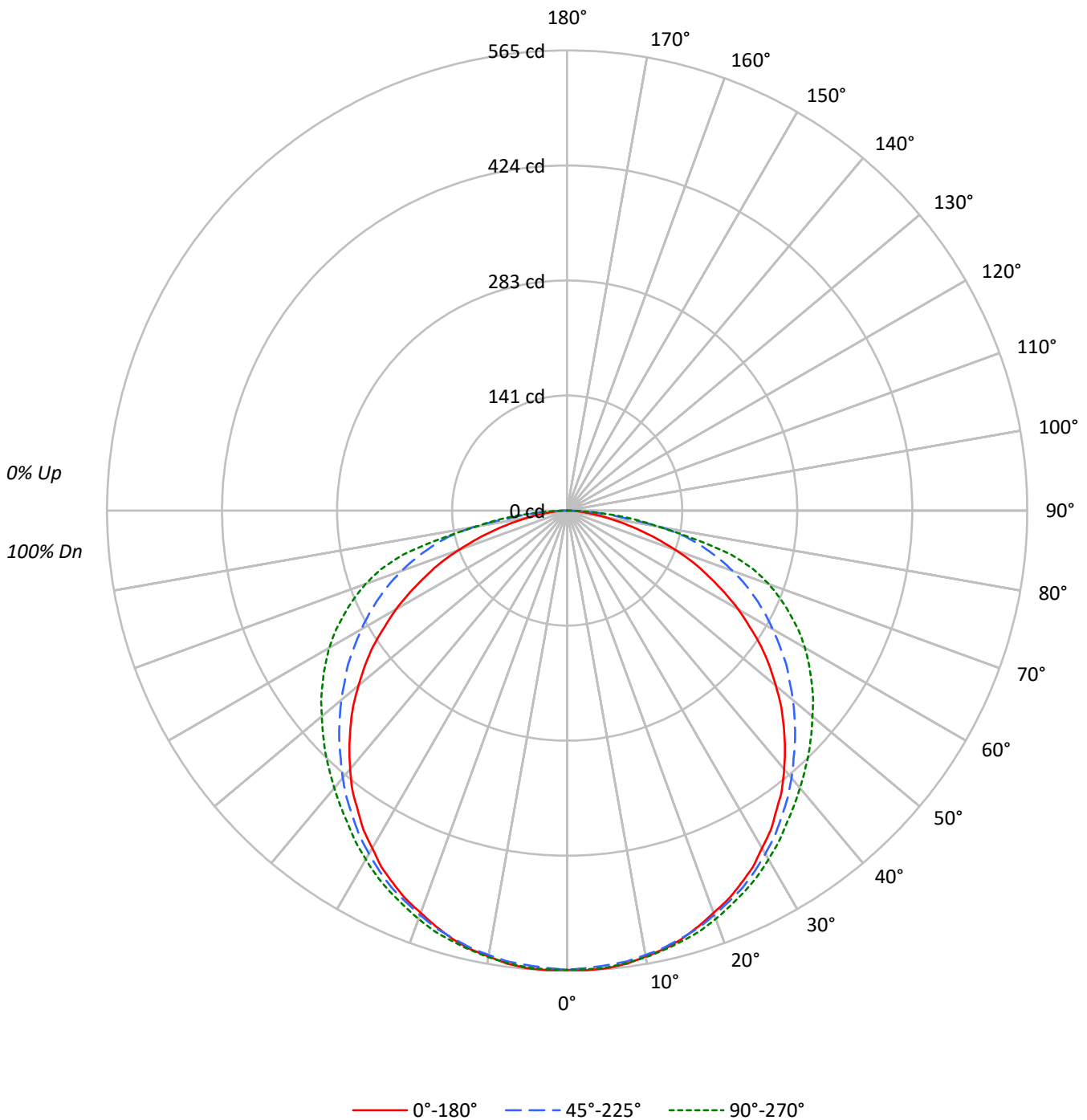
Input Watts (W): 20.133198  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	759	759	759
5°	762	757	760
10°	759	757	761
15°	758	757	762
20°	753	756	764
25°	750	758	766
30°	743	756	768
35°	736	754	771
40°	728	753	781
45°	716	753	799
50°	700	758	823
55°	682	770	859
60°	653	785	907
65°	612	813	963
70°	556	850	1036
75°	472	897	1082
80°	372	903	876
85°	275	687	769



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.5	3.0
10°-20°	153.9	8.6
20°-30°	235.4	13.1
30°-40°	287.8	16.0
40°-50°	306.7	17.1
50°-60°	293.3	16.4
60°-70°	248.4	13.9
70°-80°	167.0	9.3
80°-90°	47.1	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°	442.8	24.7
0°-40°	730.6	40.7
0°-60°	1330.6	74.2
0°-90°	1793.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1793.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	564	564	564	564	564	
5°	564	563	560	563	563	54
15°	544	544	543	548	547	153
25°	505	507	510	515	516	233
35°	448	452	459	468	470	281
45°	376	382	396	413	420	290
55°	291	302	328	354	366	259
65°	192	212	255	289	302	191
75°	91	124	172	202	208	97
85°	18	36	44	48	50	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	563.9	563.9	563.9	563.9	563.9
2.5°	564.8	564.8	562.1	563.9	563.9
5°	563.9	563.0	560.3	563.0	563.0
7.5°	561.2	560.3	558.5	561.2	560.3
10°	555.9	555.9	554.1	556.8	556.8
12.5°	551.4	550.5	549.6	553.2	552.3
15°	544.3	544.3	543.4	547.9	547.0
17.5°	535.4	536.3	537.2	540.8	541.6
20°	525.6	527.4	528.3	533.6	533.6
22.5°	516.7	517.6	519.4	524.7	524.7
25°	505.2	507.0	510.5	515.0	515.9
27.5°	493.6	494.5	499.0	505.2	506.1
30°	478.5	481.2	486.5	493.6	494.5
32.5°	465.2	467.8	474.1	481.2	482.9
35°	448.3	451.8	458.9	467.8	469.6
37.5°	433.1	435.8	444.7	454.5	457.2
40°	414.5	419.8	428.7	440.3	444.7
42.5°	395.8	401.1	411.8	426.9	432.2
45°	376.2	382.4	395.8	412.7	419.8
47.5°	356.6	363.8	378.9	398.5	406.5
50°	334.4	343.3	362.0	384.2	393.1
52.5°	313.1	323.7	344.2	369.1	380.7
55°	290.8	301.5	328.2	354.0	366.4
57.5°	265.9	280.2	309.5	338.9	352.2
60°	242.8	256.1	291.7	323.7	337.1
62.5°	217.9	235.7	273.9	307.7	321.1
65°	192.1	211.7	255.3	289.1	302.4
67.5°	169.0	190.3	236.6	270.4	283.7
70°	141.4	168.1	216.1	249.9	263.3
72.5°	115.6	145.0	194.8	227.7	240.1
75°	90.7	123.6	172.5	201.9	208.1
77.5°	67.6	102.3	149.4	161.9	157.4
80°	48.0	81.8	116.5	110.3	113.0
82.5°	31.1	62.3	72.0	81.8	84.5
85°	17.8	36.5	44.5	48.0	49.8
87.5°	8.0	13.3	17.8	17.8	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)