

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: P263200

Luminaire Tested: **24CZ-LD5-30SE-SQP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263200  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-30SE-SQP-UNV-L93050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1875.3 lumens  
Efficiency: N/A  
Efficacy: 82.7 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

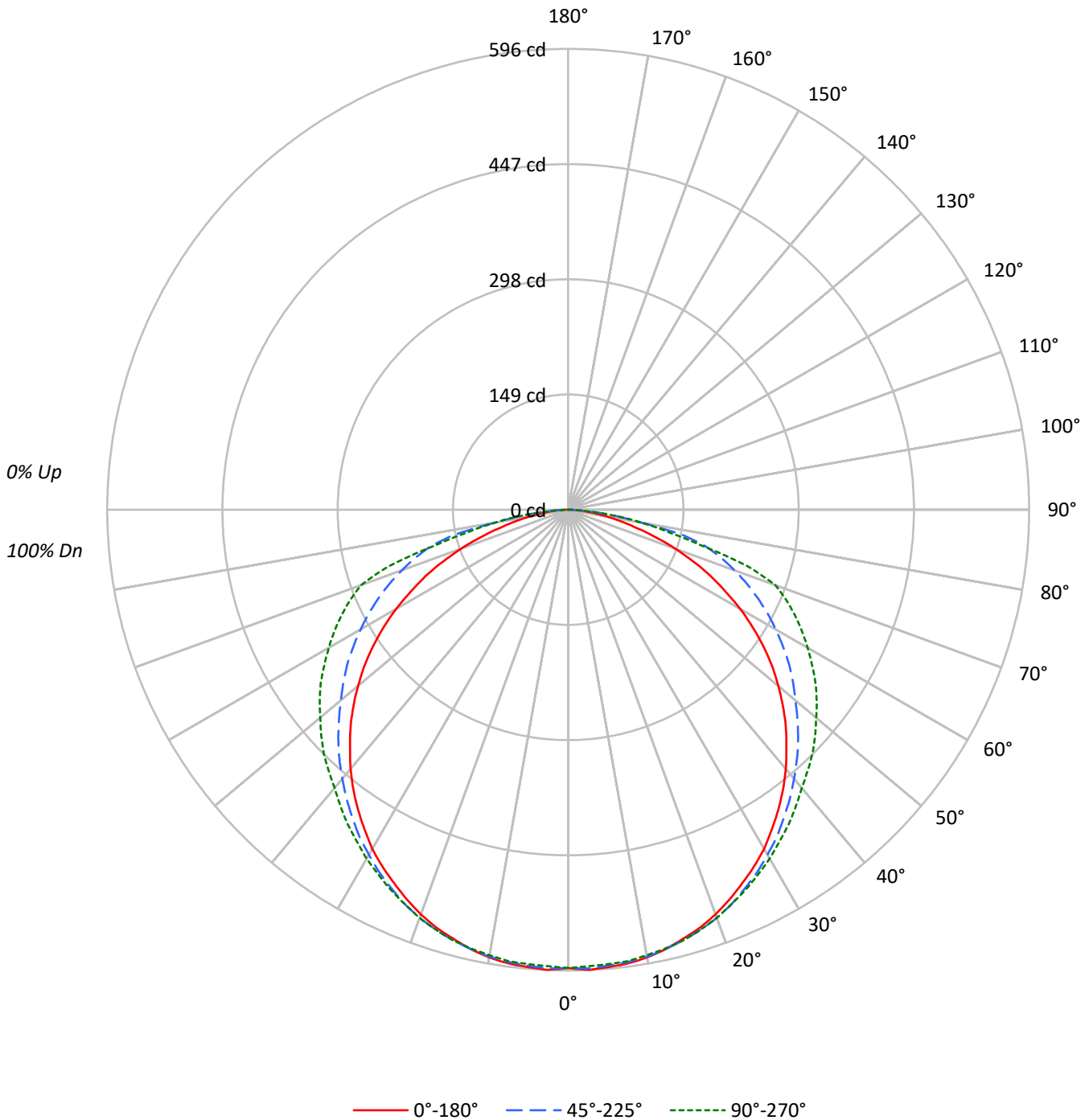
Input Watts (W): 22.676004  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	63	58	56
4	81	68	59	52	79	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	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	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°	798	798	798
5°	802	799	797
10°	803	802	799
15°	800	803	803
20°	798	804	804
25°	791	802	805
30°	787	801	810
35°	778	799	816
40°	769	798	825
45°	758	800	850
50°	742	803	876
55°	723	818	916
60°	691	834	962
65°	648	861	1030
70°	579	899	1120
75°	478	962	926
80°	391	743	751
85°	313	494	463



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.3	3.0
10°-20°	162.5	8.7
20°-30°	248.3	13.2
30°-40°	303.7	16.2
40°-50°	324.9	17.3
50°-60°	311.2	16.6
60°-70°	263.2	14.0
70°-80°	166.8	8.9
80°-90°	38.4	2.0
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°	467.1	24.9
0°-40°	770.8	41.1
0°-60°	1406.9	75.0
0°-90°	1875.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1875.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	593	593	593	593	593	
5°	594	591	592	591	590	57
15°	574	574	576	576	576	162
25°	533	533	540	542	542	246
35°	474	477	486	493	497	296
45°	398	405	420	438	447	307
55°	308	318	349	378	390	275
65°	203	223	270	307	324	200
75°	92	130	185	184	178	100
85°	20	31	32	29	30	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	592.8	592.8	592.8	592.8	592.8
2.5°	595.7	592.8	593.8	592.8	590.9
5°	593.8	590.9	591.9	590.9	589.9
7.5°	591.9	589.0	589.9	589.0	589.0
10°	588.0	585.1	587.0	586.0	585.1
12.5°	582.2	580.2	582.2	581.2	581.2
15°	574.4	573.5	576.4	576.4	576.4
17.5°	566.7	565.7	569.6	569.6	569.6
20°	557.0	556.0	561.8	561.8	561.8
22.5°	545.4	544.4	552.1	552.1	552.1
25°	532.8	532.8	540.5	542.5	542.5
27.5°	520.2	520.2	528.9	531.8	531.8
30°	506.6	506.6	515.3	519.2	521.1
32.5°	490.1	492.1	501.8	506.6	508.6
35°	473.7	476.6	486.3	493.1	496.9
37.5°	456.2	459.1	470.8	478.5	483.4
40°	437.8	441.7	454.3	464.0	469.8
42.5°	417.5	423.3	437.8	450.4	458.2
45°	398.1	404.9	420.4	437.8	446.6
47.5°	376.8	384.6	402.0	424.3	433.0
50°	354.5	362.3	383.6	408.8	418.5
52.5°	332.3	341.0	366.2	393.3	404.9
55°	308.0	317.7	348.7	377.8	390.4
57.5°	282.9	294.5	329.3	360.3	373.9
60°	256.7	271.2	310.0	342.9	357.4
62.5°	229.6	247.0	290.6	325.5	341.0
65°	203.4	222.8	270.3	307.1	323.5
67.5°	175.3	199.5	249.9	289.6	305.1
70°	147.2	175.3	228.6	269.3	284.8
72.5°	119.1	153.0	207.3	244.1	244.1
75°	92.0	129.8	185.0	184.0	178.2
77.5°	69.7	108.5	152.1	129.8	130.8
80°	50.4	87.2	95.9	95.9	96.9
82.5°	33.9	66.8	62.0	61.0	63.0
85°	20.3	31.0	32.0	29.1	30.0
87.5°	9.7	10.7	8.7	5.8	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)