

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: P263197

Luminaire Tested: **24CZ-LD5-30SE-SQP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263197  
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-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1562.1 lumens  
Efficiency: N/A  
Efficacy: 70.2 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

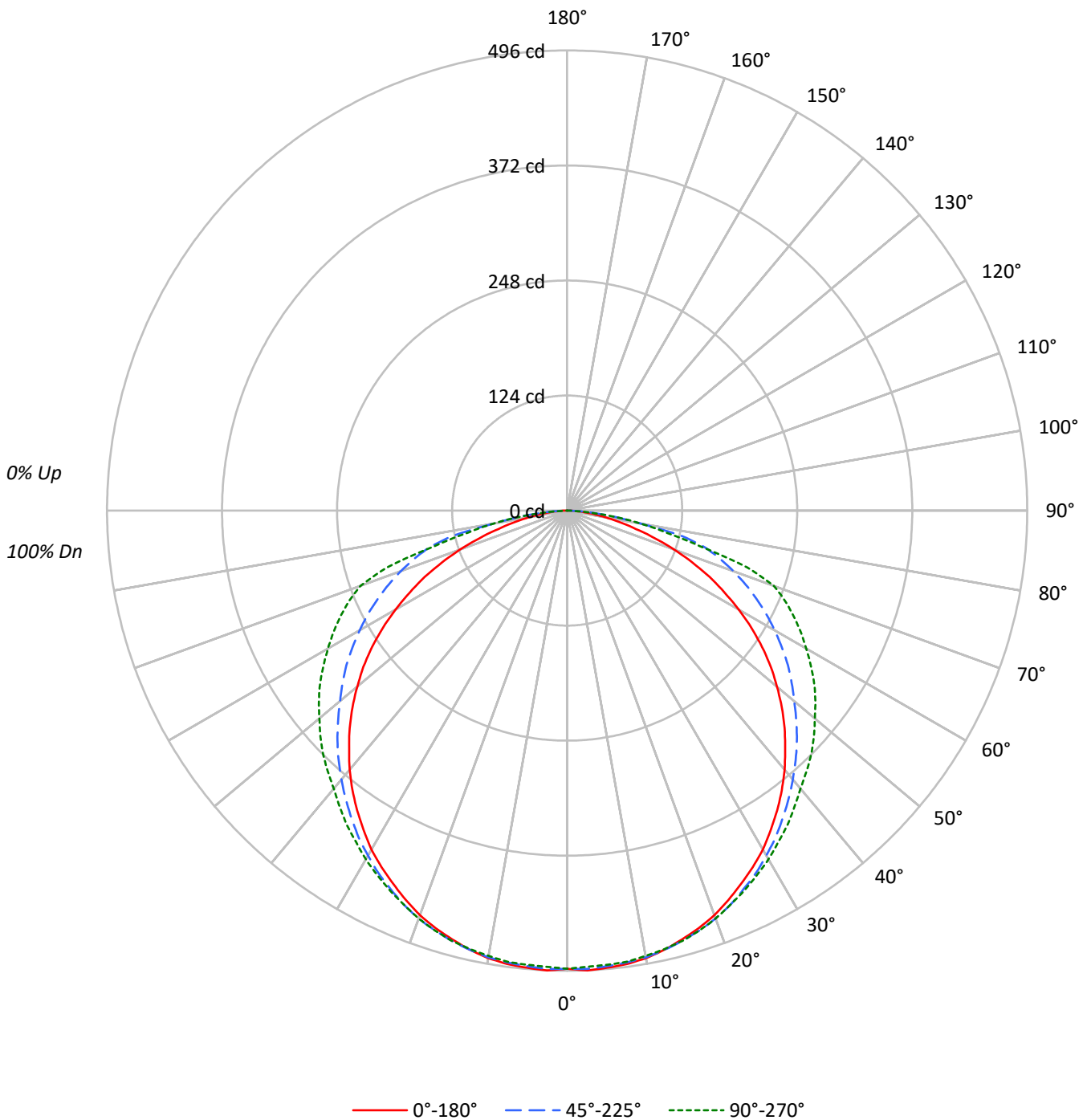
Input Watts (W): 22.262526  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20			20			20			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°	664	664	664
5°	668	666	664
10°	669	668	666
15°	667	669	669
20°	664	670	670
25°	659	668	671
30°	656	667	674
35°	648	665	680
40°	641	665	687
45°	631	666	708
50°	618	669	730
55°	602	681	763
60°	575	695	801
65°	539	717	858
70°	482	749	933
75°	399	801	772
80°	325	619	625
85°	261	411	386



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.9	3.0
10°-20°	135.3	8.7
20°-30°	206.8	13.2
30°-40°	253.0	16.2
40°-50°	270.7	17.3
50°-60°	259.2	16.6
60°-70°	219.3	14.0
70°-80°	139.0	8.9
80°-90°	32.0	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°	389.1	24.9
0°-40°	642.0	41.1
0°-60°	1171.9	75.0
0°-90°	1562.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1562.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	494	494	494	494	494	
5°	495	492	493	492	491	47
15°	478	478	480	480	480	135
25°	444	444	450	452	452	205
35°	395	397	405	411	414	247
45°	332	337	350	365	372	255
55°	257	265	290	315	325	229
65°	169	186	225	256	270	167
75°	77	108	154	153	148	83
85°	17	26	27	24	25	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	493.8	493.8	493.8	493.8	493.8
2.5°	496.2	493.8	494.6	493.8	492.2
5°	494.6	492.2	493.0	492.2	491.4
7.5°	493.0	490.6	491.4	490.6	490.6
10°	489.8	487.4	489.0	488.2	487.4
12.5°	484.9	483.3	484.9	484.1	484.1
15°	478.5	477.7	480.1	480.1	480.1
17.5°	472.0	471.2	474.4	474.4	474.4
20°	464.0	463.1	468.0	468.0	468.0
22.5°	454.3	453.5	459.9	459.9	459.9
25°	443.8	443.8	450.2	451.9	451.9
27.5°	433.3	433.3	440.6	443.0	443.0
30°	422.0	422.0	429.3	432.5	434.1
32.5°	408.3	409.9	418.0	422.0	423.6
35°	394.6	397.0	405.1	410.7	413.9
37.5°	380.0	382.5	392.1	398.6	402.6
40°	364.7	367.9	378.4	386.5	391.3
42.5°	347.8	352.6	364.7	375.2	381.7
45°	331.6	337.3	350.2	364.7	372.0
47.5°	313.9	320.3	334.9	353.4	360.7
50°	295.3	301.8	319.5	340.5	348.6
52.5°	276.8	284.0	305.0	327.6	337.3
55°	256.6	264.7	290.5	314.7	325.2
57.5°	235.6	245.3	274.3	300.2	311.5
60°	213.8	225.9	258.2	285.6	297.7
62.5°	191.2	205.8	242.1	271.1	284.0
65°	169.4	185.6	225.1	255.8	269.5
67.5°	146.0	166.2	208.2	241.3	254.2
70°	122.6	146.0	190.4	224.3	237.2
72.5°	99.2	127.5	172.7	203.3	203.3
75°	76.7	108.1	154.1	153.3	148.5
77.5°	58.1	90.4	126.7	108.1	108.9
80°	42.0	72.6	79.9	79.9	80.7
82.5°	28.2	55.7	51.6	50.8	52.4
85°	16.9	25.8	26.6	24.2	25.0
87.5°	8.1	8.9	7.3	4.8	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)