

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: P261097

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261097  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-30SE-S-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2406.8 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

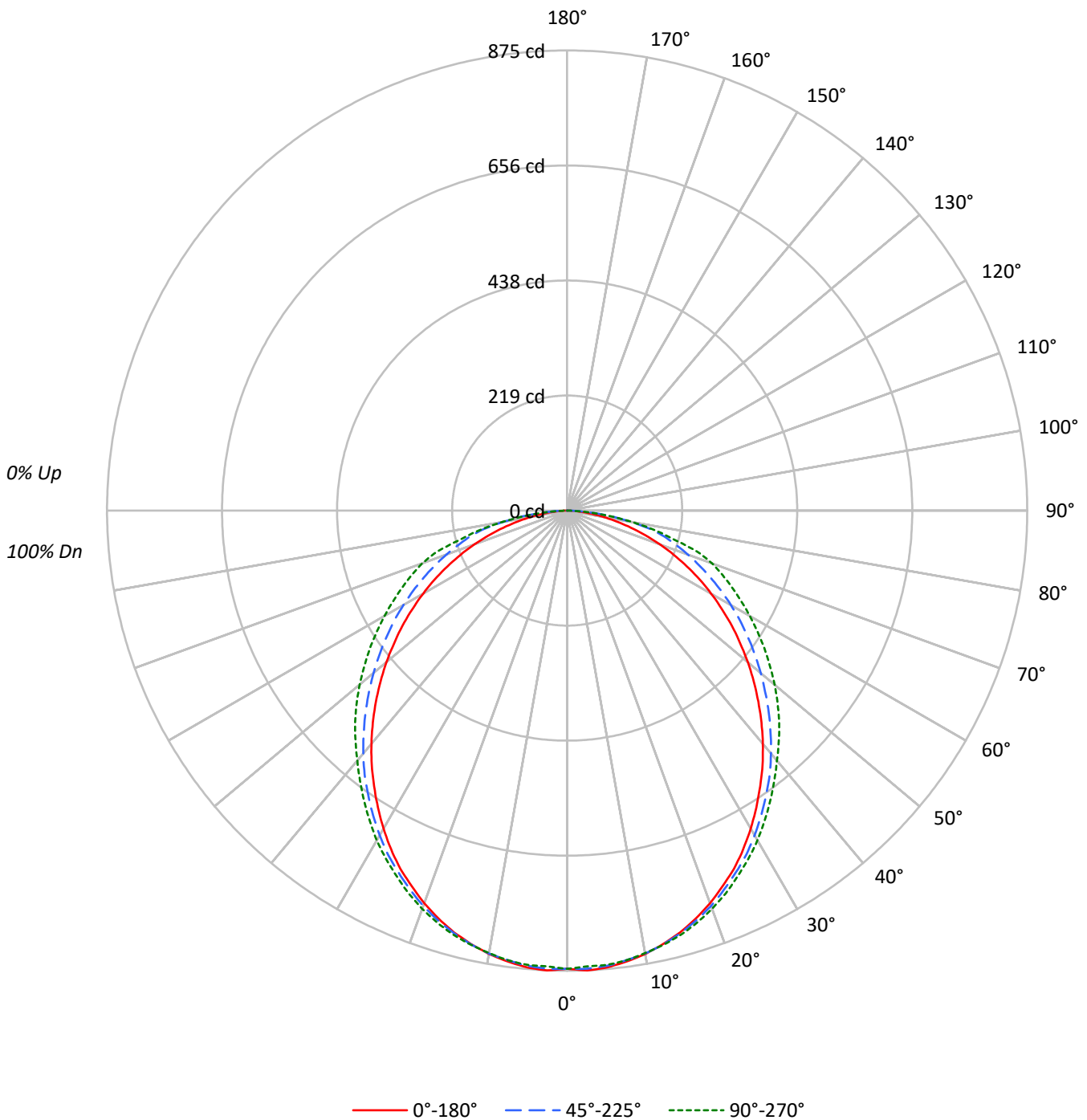
Input Watts (W): 22.262526  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				20	
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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1172	1172	1172
5°	1178	1174	1171
10°	1170	1169	1167
15°	1157	1159	1164
20°	1137	1146	1154
25°	1115	1127	1139
30°	1085	1107	1125
35°	1051	1084	1106
40°	1017	1059	1090
45°	978	1032	1085
50°	939	1006	1078
55°	898	984	1075
60°	851	968	1080
65°	801	956	1102
70°	737	961	1153
75°	653	995	1074
80°	546	943	968
85°	408	755	692



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.4	3.4
10°-20°	234.3	9.7
20°-30°	349.2	14.5
30°-40°	411.0	17.1
40°-50°	417.7	17.4
50°-60°	375.5	15.6
60°-70°	296.7	12.3
70°-80°	188.2	7.8
80°-90°	51.9	2.2
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°	665.8	27.7
0°-40°	1076.8	44.7
0°-60°	1870.0	77.7
0°-90°	2406.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2406.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	871	871	871	871	871	
5°	872	865	869	867	867	83
15°	830	826	832	834	835	234
25°	751	750	759	764	767	345
35°	640	644	660	667	674	400
45°	514	521	542	558	570	397
55°	383	392	420	447	458	342
65°	252	264	300	333	346	249
75°	126	147	191	208	207	134
85°	26	46	49	45	45	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	871.3	871.3	871.3	871.3	871.3
2.5°	875.3	868.9	872.1	870.5	867.3
5°	872.1	864.9	868.9	867.3	867.3
7.5°	864.9	859.3	862.5	861.7	862.5
10°	856.1	850.5	855.3	855.3	854.5
12.5°	844.1	839.3	844.9	844.9	845.7
15°	830.5	826.5	832.1	834.5	835.3
17.5°	813.7	809.7	816.9	819.3	821.7
20°	794.4	792.8	800.1	802.5	805.7
22.5°	772.8	772.8	780.0	783.2	788.0
25°	751.2	750.4	759.2	764.0	767.2
27.5°	725.6	726.4	737.6	742.4	746.4
30°	698.3	699.9	712.8	718.4	724.0
32.5°	669.5	672.7	687.1	693.5	699.1
35°	639.9	643.9	659.9	667.1	673.5
37.5°	610.3	615.9	632.7	639.9	647.1
40°	579.0	583.8	603.0	611.9	620.7
42.5°	547.0	553.4	572.6	585.4	595.8
45°	514.1	521.4	542.2	558.2	570.2
47.5°	481.3	490.9	510.9	532.6	543.0
50°	448.5	458.1	480.5	504.5	514.9
52.5°	414.8	424.5	450.1	474.9	486.1
55°	382.8	392.4	419.6	446.9	458.1
57.5°	349.2	359.6	390.0	418.0	429.3
60°	316.3	326.7	359.6	389.2	401.2
62.5°	284.3	295.5	330.0	361.2	373.2
65°	251.5	264.3	300.3	333.2	346.0
67.5°	219.4	233.8	271.5	305.9	319.5
70°	187.4	204.2	244.3	279.5	293.1
72.5°	156.2	174.6	217.0	252.3	259.5
75°	125.7	147.4	191.4	208.2	206.6
77.5°	96.9	120.9	162.6	165.8	170.6
80°	70.5	96.9	121.7	128.1	124.9
82.5°	46.4	72.9	87.3	84.1	83.3
85°	26.4	45.6	48.9	44.8	44.8
87.5°	11.2	18.4	16.0	12.0	11.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)