

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: P263167

Luminaire Tested: **24CZ-LD5-50-SQP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263167  
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-LD5-50-SQP-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2588.6 lumens  
Efficiency: N/A  
Efficacy: 70.9 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

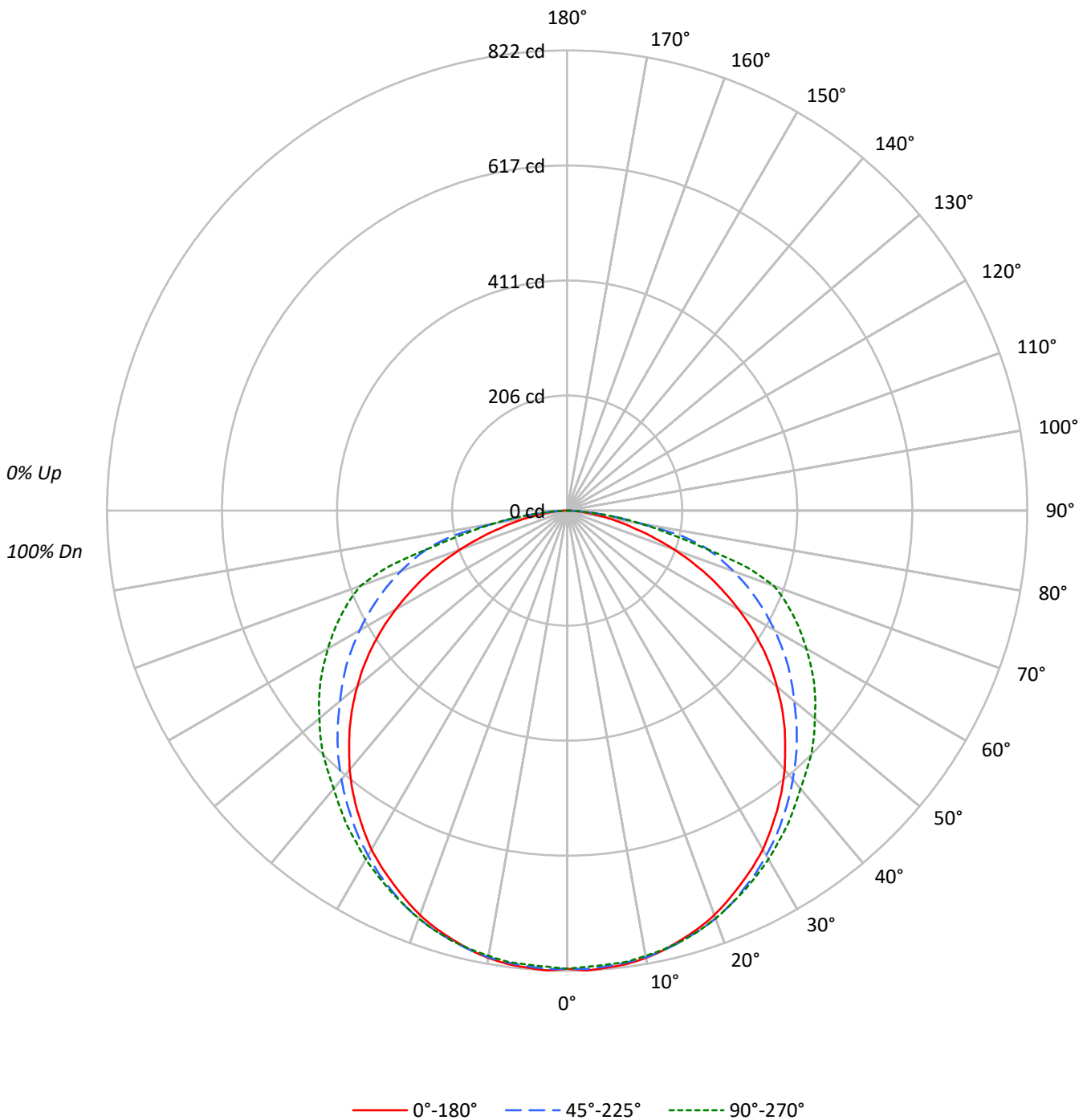
Input Watts (W): 36.533376  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1101	1101	1101
5°	1107	1103	1100
10°	1109	1107	1103
15°	1104	1108	1108
20°	1101	1110	1110
25°	1092	1108	1112
30°	1086	1105	1118
35°	1074	1102	1127
40°	1062	1101	1139
45°	1046	1104	1173
50°	1024	1108	1209
55°	997	1129	1264
60°	953	1151	1328
65°	894	1188	1422
70°	799	1242	1546
75°	660	1328	1279
80°	539	1026	1036
85°	434	681	639



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.7	3.0
10°-20°	224.3	8.7
20°-30°	342.7	13.2
30°-40°	419.2	16.2
40°-50°	448.5	17.3
50°-60°	429.5	16.6
60°-70°	363.3	14.0
70°-80°	230.3	8.9
80°-90°	53.0	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°	644.7	24.9
0°-40°	1063.9	41.1
0°-60°	1942.0	75.0
0°-90°	2588.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2588.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	820	816	817	816	814	78
15°	793	792	796	796	796	224
25°	735	735	746	749	749	339
35°	654	658	671	681	686	409
45°	550	559	580	604	616	423
55°	425	439	481	522	539	379
65°	281	308	373	424	447	277
75°	127	179	255	254	246	138
85°	28	43	44	40	41	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	818.3	818.3	818.3	818.3	818.3
2.5°	822.3	818.3	819.6	818.3	815.6
5°	819.6	815.6	817.0	815.6	814.3
7.5°	817.0	812.9	814.3	812.9	812.9
10°	811.6	807.6	810.3	808.9	807.6
12.5°	803.6	800.9	803.6	802.3	802.3
15°	792.9	791.6	795.6	795.6	795.6
17.5°	782.2	780.9	786.2	786.2	786.2
20°	768.8	767.5	775.5	775.5	775.5
22.5°	752.8	751.4	762.1	762.1	762.1
25°	735.4	735.4	746.1	748.8	748.8
27.5°	718.0	718.0	730.0	734.1	734.1
30°	699.3	699.3	711.3	716.7	719.4
32.5°	676.6	679.2	692.6	699.3	702.0
35°	653.8	657.8	671.2	680.6	685.9
37.5°	629.8	633.8	649.8	660.5	667.2
40°	604.4	609.7	627.1	640.5	648.5
42.5°	576.3	584.3	604.4	621.7	632.4
45°	549.5	558.9	580.3	604.4	616.4
47.5°	520.1	530.8	554.9	585.6	597.7
50°	489.4	500.1	529.5	564.2	577.6
52.5°	458.6	470.7	505.4	542.9	558.9
55°	425.2	438.6	481.4	521.5	538.8
57.5°	390.4	406.5	454.6	497.4	516.1
60°	354.3	374.4	427.9	473.3	493.4
62.5°	316.9	341.0	401.1	449.3	470.7
65°	280.8	307.5	373.0	423.9	446.6
67.5°	242.0	275.4	345.0	399.8	421.2
70°	203.2	242.0	315.6	371.7	393.1
72.5°	164.5	211.3	286.1	336.9	336.9
75°	127.0	179.2	255.4	254.0	246.0
77.5°	96.3	149.8	209.9	179.2	180.5
80°	69.5	120.3	132.4	132.4	133.7
82.5°	46.8	92.3	85.6	84.2	86.9
85°	28.1	42.8	44.1	40.1	41.4
87.5°	13.4	14.7	12.0	8.0	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)