

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: P263168

Luminaire Tested: **24CZ-LD5-50-SQP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263168  
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-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2828.1 lumens  
Efficiency: N/A  
Efficacy: 77.7 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

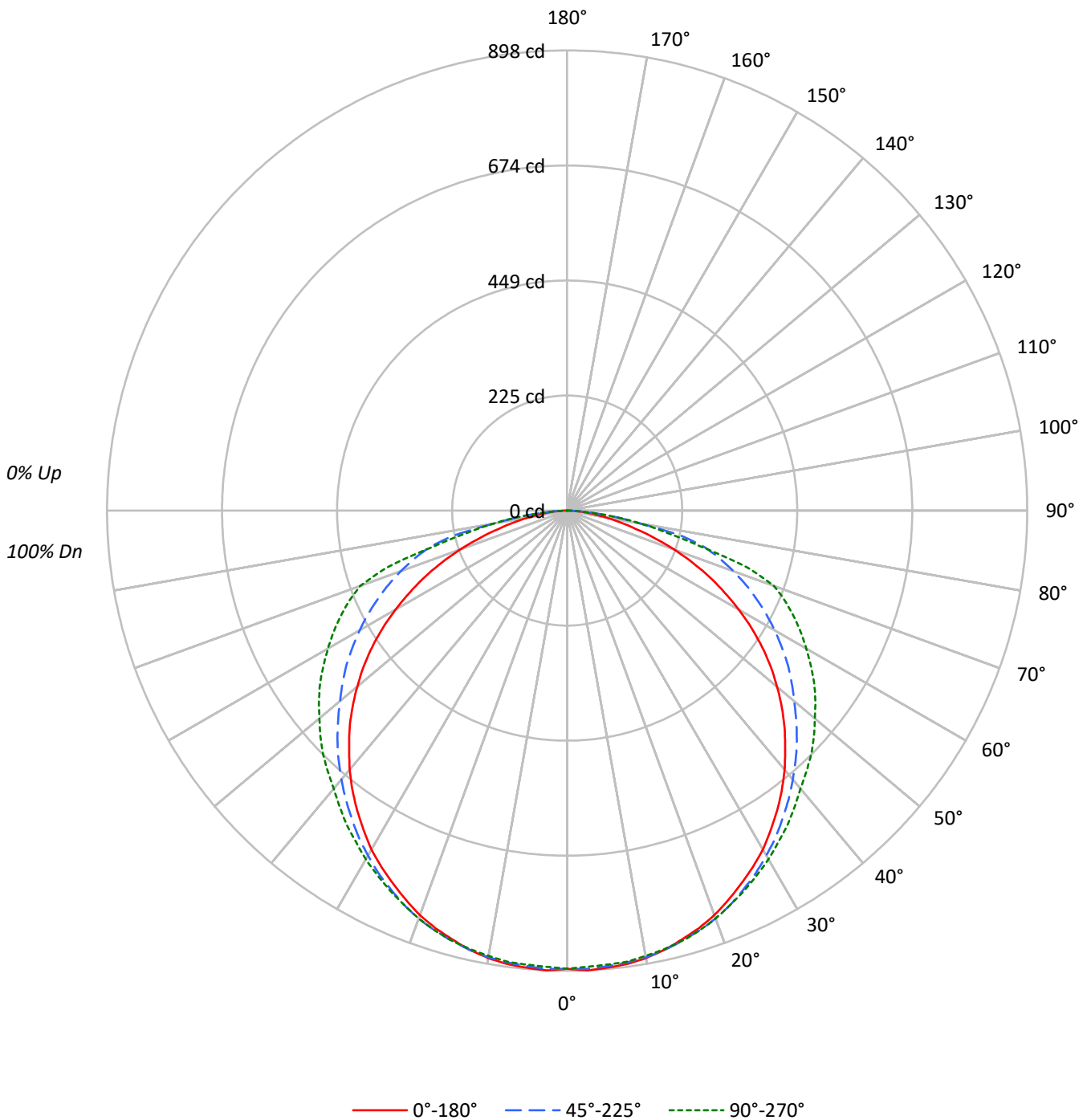
Input Watts (W): 36.390528  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1203	1203	1203
5°	1209	1206	1202
10°	1211	1210	1205
15°	1207	1211	1211
20°	1203	1213	1213
25°	1193	1210	1215
30°	1187	1207	1221
35°	1173	1204	1231
40°	1160	1203	1244
45°	1142	1206	1281
50°	1119	1211	1321
55°	1090	1234	1381
60°	1042	1258	1450
65°	977	1298	1553
70°	873	1356	1690
75°	722	1450	1397
80°	589	1120	1132
85°	474	744	699



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.9	3.0
10°-20°	245.0	8.7
20°-30°	374.5	13.2
30°-40°	458.0	16.2
40°-50°	490.0	17.3
50°-60°	469.3	16.6
60°-70°	397.0	14.0
70°-80°	251.6	8.9
80°-90°	57.9	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°	704.4	24.9
0°-40°	1162.4	41.1
0°-60°	2121.7	75.0
0°-90°	2828.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2828.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	894	894	894	894	894	
5°	896	891	893	891	890	85
15°	866	865	869	869	869	245
25°	804	804	815	818	818	371
35°	714	719	733	744	749	447
45°	600	611	634	660	673	463
55°	464	479	526	570	589	414
65°	307	336	408	463	488	302
75°	139	196	279	278	269	151
85°	31	47	48	44	45	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	894.0	894.0	894.0	894.0	894.0
2.5°	898.4	894.0	895.5	894.0	891.1
5°	895.5	891.1	892.6	891.1	889.6
7.5°	892.6	888.2	889.6	888.2	888.2
10°	886.7	882.3	885.3	883.8	882.3
12.5°	878.0	875.0	878.0	876.5	876.5
15°	866.3	864.8	869.2	869.2	869.2
17.5°	854.6	853.1	859.0	859.0	859.0
20°	840.0	838.5	847.3	847.3	847.3
22.5°	822.4	821.0	832.7	832.7	832.7
25°	803.5	803.5	815.1	818.1	818.1
27.5°	784.5	784.5	797.6	802.0	802.0
30°	764.0	764.0	777.2	783.0	785.9
32.5°	739.2	742.1	756.7	764.0	766.9
35°	714.3	718.7	733.3	743.6	749.4
37.5°	688.0	692.4	710.0	721.6	729.0
40°	660.3	666.1	685.1	699.7	708.5
42.5°	629.6	638.4	660.3	679.3	691.0
45°	600.4	610.6	634.0	660.3	673.4
47.5°	568.3	579.9	606.2	639.8	653.0
50°	534.7	546.3	578.5	616.5	631.1
52.5°	501.1	514.2	552.2	593.1	610.6
55°	464.5	479.2	525.9	569.7	588.7
57.5°	426.6	444.1	496.7	543.4	563.9
60°	387.1	409.0	467.5	517.1	539.0
62.5°	346.2	372.5	438.2	490.8	514.2
65°	306.8	336.0	407.6	463.1	487.9
67.5°	264.4	300.9	376.9	436.8	460.2
70°	222.0	264.4	344.8	406.1	429.5
72.5°	179.7	230.8	312.6	368.1	368.1
75°	138.8	195.8	279.0	277.6	268.8
77.5°	105.2	163.6	229.3	195.8	197.2
80°	76.0	131.5	144.6	144.6	146.1
82.5°	51.1	100.8	93.5	92.0	95.0
85°	30.7	46.7	48.2	43.8	45.3
87.5°	14.6	16.1	13.1	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)