

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: P263135

Luminaire Tested: **24CZ-LD5-40SE-SQP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263135  
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-LD5-40SE-SQP-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2841.0 lumens  
Efficiency: N/A  
Efficacy: 89.1 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

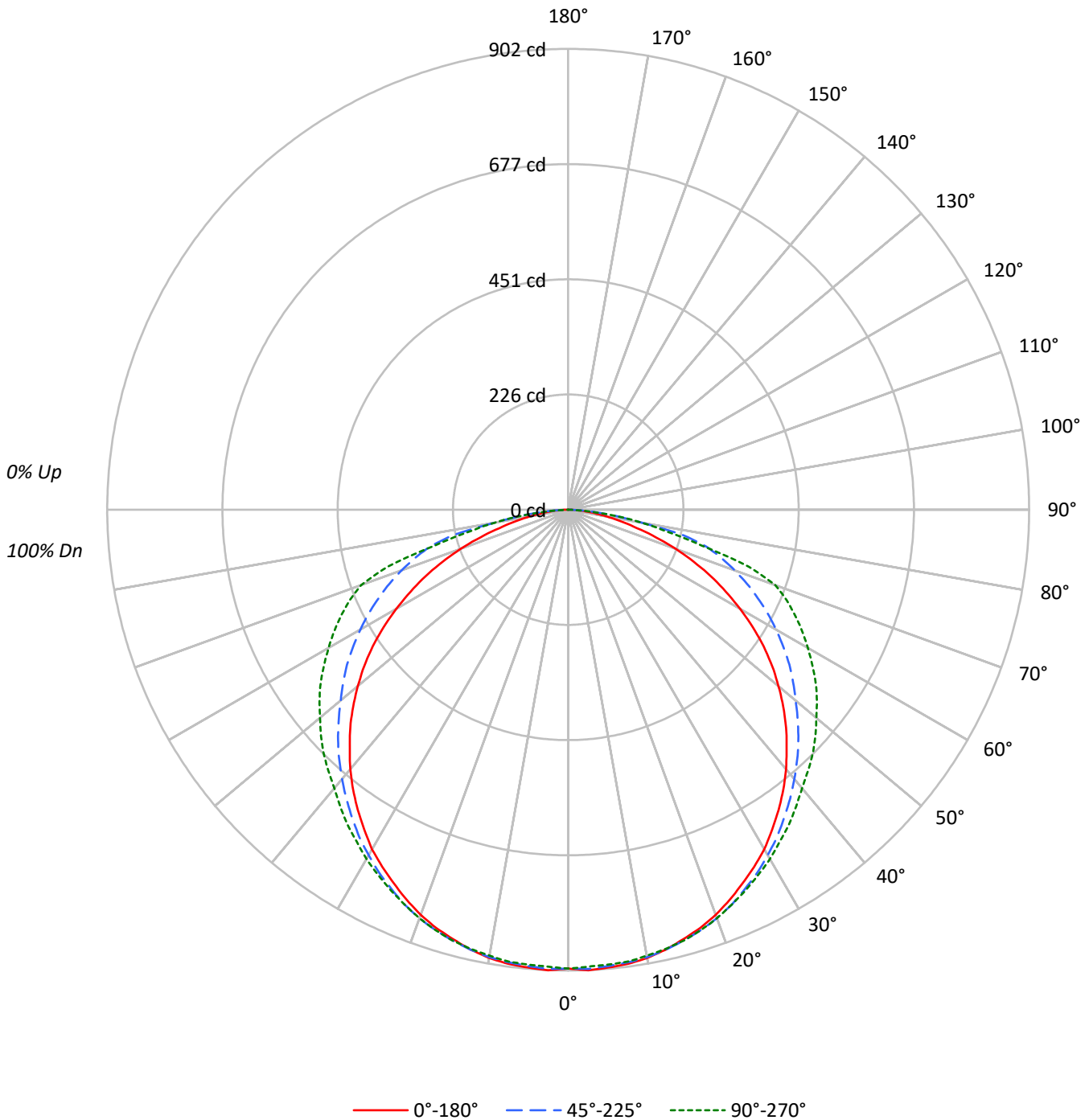
Input Watts (W): 31.901139  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1208	1208	1208
5°	1215	1211	1207
10°	1217	1215	1211
15°	1212	1216	1216
20°	1208	1219	1219
25°	1198	1216	1220
30°	1192	1213	1227
35°	1179	1210	1237
40°	1165	1209	1250
45°	1148	1212	1287
50°	1124	1216	1327
55°	1095	1239	1387
60°	1047	1264	1457
65°	981	1303	1560
70°	878	1362	1697
75°	725	1457	1404
80°	591	1126	1137
85°	475	747	702



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.3	3.0
10°-20°	246.1	8.7
20°-30°	376.2	13.2
30°-40°	460.1	16.2
40°-50°	492.3	17.3
50°-60°	471.4	16.6
60°-70°	398.8	14.0
70°-80°	252.8	8.9
80°-90°	58.2	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°	707.6	24.9
0°-40°	1167.7	41.1
0°-60°	2131.3	75.0
0°-90°	2841.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2841.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	898	898	898	898	898	
5°	900	895	897	895	894	86
15°	870	869	873	873	873	246
25°	807	807	819	822	822	372
35°	718	722	737	747	753	449
45°	603	613	637	663	676	465
55°	467	481	528	572	591	416
65°	308	338	409	465	490	304
75°	139	197	280	279	270	152
85°	31	47	48	44	46	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	898.1	898.1	898.1	898.1	898.1
2.5°	902.5	898.1	899.6	898.1	895.2
5°	899.6	895.2	896.6	895.2	893.7
7.5°	896.6	892.2	893.7	892.2	892.2
10°	890.8	886.4	889.3	887.8	886.4
12.5°	882.0	879.0	882.0	880.5	880.5
15°	870.2	868.7	873.1	873.1	873.1
17.5°	858.5	857.0	862.9	862.9	862.9
20°	843.8	842.3	851.1	851.1	851.1
22.5°	826.2	824.7	836.5	836.5	836.5
25°	807.1	807.1	818.8	821.8	821.8
27.5°	788.0	788.0	801.2	805.6	805.6
30°	767.5	767.5	780.7	786.6	789.5
32.5°	742.5	745.5	760.2	767.5	770.4
35°	717.6	722.0	736.7	746.9	752.8
37.5°	691.2	695.6	713.2	724.9	732.3
40°	663.3	669.2	688.2	702.9	711.7
42.5°	632.5	641.3	663.3	682.4	694.1
45°	603.1	613.4	636.9	663.3	676.5
47.5°	570.8	582.6	609.0	642.8	656.0
50°	537.1	548.8	581.1	619.3	633.9
52.5°	503.3	516.6	554.7	595.8	613.4
55°	466.7	481.3	528.3	572.3	591.4
57.5°	428.5	446.1	498.9	545.9	566.4
60°	388.9	410.9	469.6	519.5	541.5
62.5°	347.8	374.2	440.2	493.1	516.6
65°	308.2	337.5	409.4	465.2	490.1
67.5°	265.6	302.3	378.6	438.8	462.3
70°	223.1	265.6	346.3	408.0	431.4
72.5°	180.5	231.9	314.0	369.8	369.8
75°	139.4	196.6	280.3	278.8	270.0
77.5°	105.7	164.4	230.4	196.6	198.1
80°	76.3	132.1	145.3	145.3	146.7
82.5°	51.4	101.3	93.9	92.5	95.4
85°	30.8	47.0	48.4	44.0	45.5
87.5°	14.7	16.1	13.2	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)