

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: P263209

Luminaire Tested: **24CZ-LD5-40SE-SQP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263209  
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-L93050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2460.1 lumens  
Efficiency: N/A  
Efficacy: 78.8 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

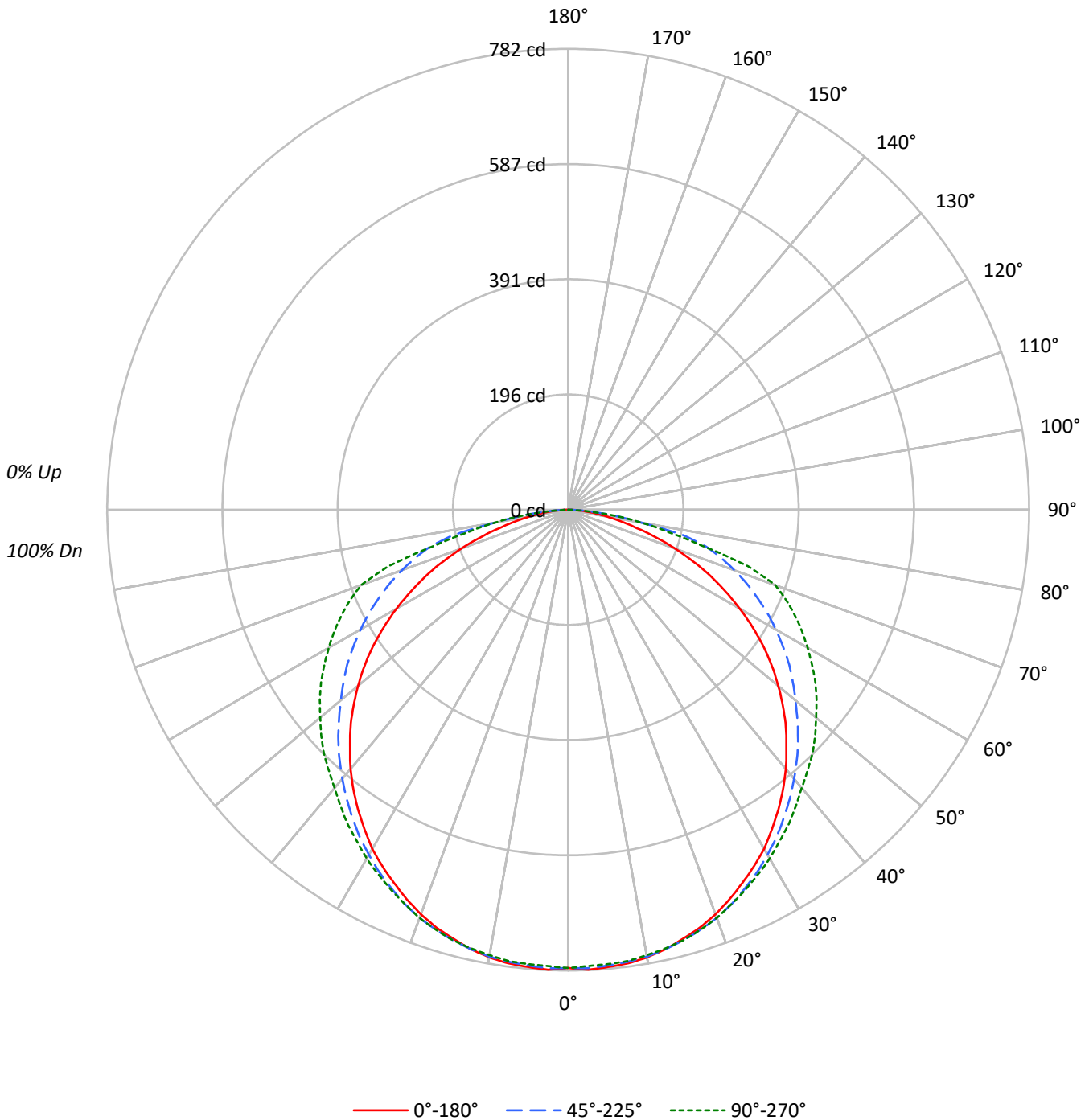
Input Watts (W): 31.201686  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1046	1046	1046
5°	1052	1049	1045
10°	1054	1052	1049
15°	1050	1053	1053
20°	1046	1055	1055
25°	1038	1053	1056
30°	1033	1050	1062
35°	1021	1048	1071
40°	1009	1047	1082
45°	994	1049	1115
50°	974	1053	1149
55°	948	1073	1201
60°	906	1094	1262
65°	849	1129	1351
70°	760	1180	1470
75°	627	1262	1215
80°	512	975	985
85°	412	647	608



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.9	3.0
10°-20°	213.1	8.7
20°-30°	325.7	13.2
30°-40°	398.4	16.2
40°-50°	426.3	17.3
50°-60°	408.2	16.6
60°-70°	345.3	14.0
70°-80°	218.9	8.9
80°-90°	50.4	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°	612.7	24.9
0°-40°	1011.1	41.1
0°-60°	1845.5	75.0
0°-90°	2460.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2460.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	778	778	778	778	778	
5°	779	775	776	775	774	74
15°	754	752	756	756	756	213
25°	699	699	709	712	712	322
35°	621	625	638	647	652	389
45°	522	531	552	574	586	402
55°	404	417	457	496	512	360
65°	267	292	354	403	424	263
75°	121	170	243	241	234	131
85°	27	41	42	38	39	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	777.7	777.7	777.7	777.7	777.7
2.5°	781.5	777.7	778.9	777.7	775.1
5°	778.9	775.1	776.4	775.1	773.9
7.5°	776.4	772.6	773.9	772.6	772.6
10°	771.3	767.5	770.0	768.8	767.5
12.5°	763.7	761.1	763.7	762.4	762.4
15°	753.5	752.2	756.1	756.1	756.1
17.5°	743.4	742.1	747.2	747.2	747.2
20°	730.6	729.4	737.0	737.0	737.0
22.5°	715.4	714.1	724.3	724.3	724.3
25°	698.9	698.9	709.0	711.6	711.6
27.5°	682.4	682.4	693.8	697.6	697.6
30°	664.6	664.6	676.0	681.1	683.6
32.5°	643.0	645.5	658.2	664.6	667.1
35°	621.4	625.2	637.9	646.8	651.9
37.5°	598.5	602.3	617.6	627.7	634.1
40°	574.4	579.4	596.0	608.7	616.3
42.5°	547.7	555.3	574.4	590.9	601.0
45°	522.3	531.1	551.5	574.4	585.8
47.5°	494.3	504.5	527.3	556.6	568.0
50°	465.1	475.2	503.2	536.2	548.9
52.5°	435.8	447.3	480.3	515.9	531.1
55°	404.1	416.8	457.4	495.6	512.1
57.5°	371.0	386.3	432.0	472.7	490.5
60°	336.7	355.8	406.6	449.8	468.9
62.5°	301.2	324.0	381.2	427.0	447.3
65°	266.8	292.3	354.5	402.8	424.4
67.5°	230.0	261.8	327.8	379.9	400.3
70°	193.1	230.0	299.9	353.3	373.6
72.5°	156.3	200.8	271.9	320.2	320.2
75°	120.7	170.3	242.7	241.4	233.8
77.5°	91.5	142.3	199.5	170.3	171.5
80°	66.1	114.4	125.8	125.8	127.1
82.5°	44.5	87.7	81.3	80.1	82.6
85°	26.7	40.7	41.9	38.1	39.4
87.5°	12.7	14.0	11.4	7.6	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)