

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: P263471

Luminaire Tested: **24CZ-LD5-40SE-SQP-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263471  
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-L92765-W2A1-U-5500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2516.0 lumens  
Efficiency: N/A  
Efficacy: 80.5 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

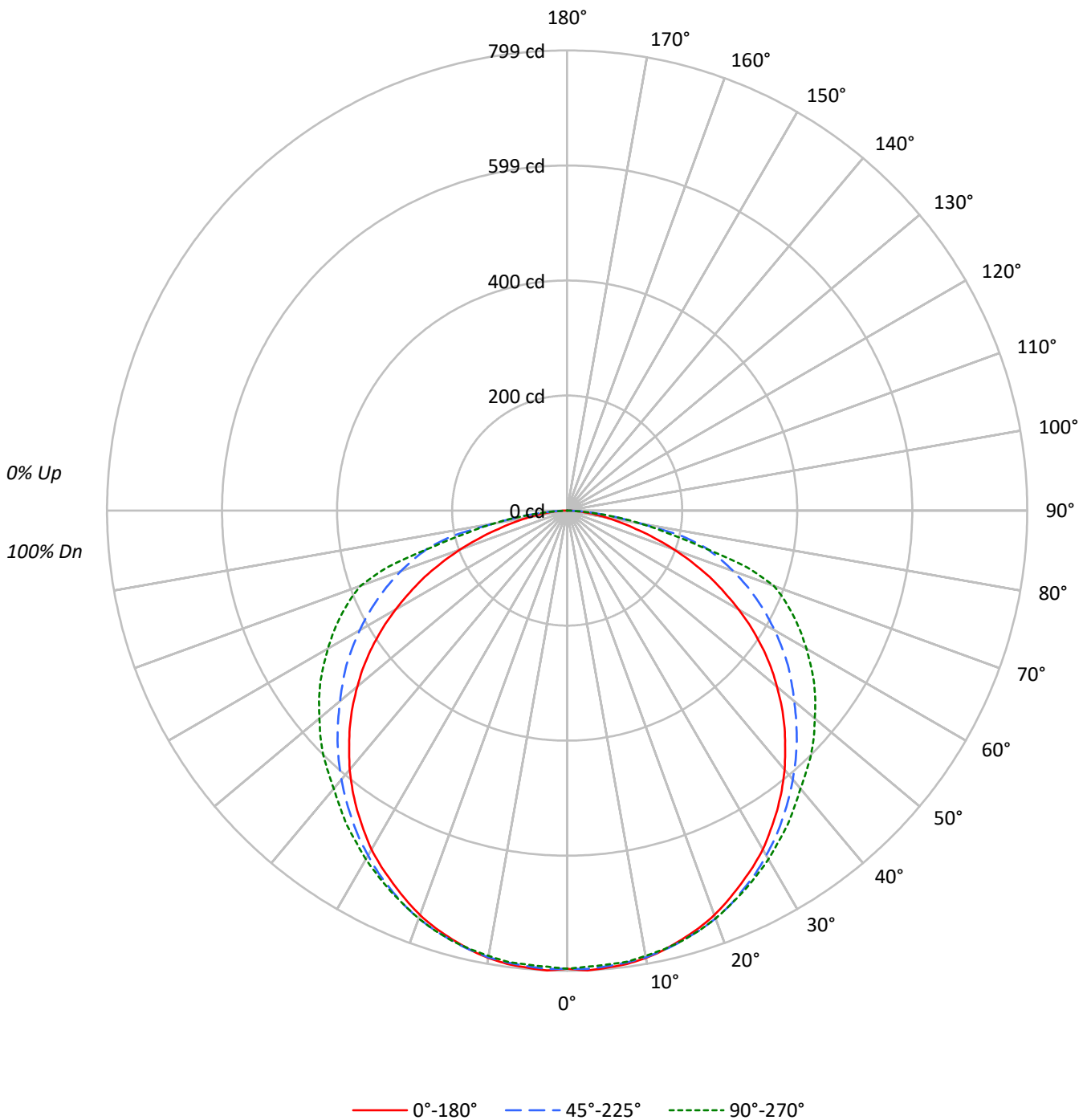
Input Watts (W): 31.248  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1070	1070	1070
5°	1076	1073	1069
10°	1078	1076	1073
15°	1074	1077	1077
20°	1070	1079	1079
25°	1061	1077	1080
30°	1056	1074	1086
35°	1044	1072	1095
40°	1032	1071	1107
45°	1016	1073	1140
50°	996	1077	1175
55°	970	1098	1228
60°	927	1119	1291
65°	869	1154	1382
70°	777	1207	1503
75°	642	1290	1243
80°	524	997	1007
85°	421	662	622



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.5	3.0
10°-20°	218.0	8.7
20°-30°	333.1	13.2
30°-40°	407.4	16.2
40°-50°	435.9	17.3
50°-60°	417.5	16.6
60°-70°	353.2	14.0
70°-80°	223.8	8.9
80°-90°	51.5	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°	626.7	24.9
0°-40°	1034.1	41.1
0°-60°	1887.5	75.0
0°-90°	2516.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2516.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	795	795	795	795	795	
5°	797	793	794	793	792	76
15°	771	769	773	773	773	218
25°	715	715	725	728	728	330
35°	636	639	652	662	667	398
45°	534	543	564	587	599	411
55°	413	426	468	507	524	369
65°	273	299	363	412	434	269
75°	124	174	248	247	239	134
85°	27	42	43	39	40	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	795.4	795.4	795.4	795.4	795.4
2.5°	799.3	795.4	796.7	795.4	792.8
5°	796.7	792.8	794.1	792.8	791.5
7.5°	794.1	790.2	791.5	790.2	790.2
10°	788.9	785.0	787.6	786.3	785.0
12.5°	781.1	778.5	781.1	779.8	779.8
15°	770.7	769.4	773.3	773.3	773.3
17.5°	760.3	759.0	764.2	764.2	764.2
20°	747.3	746.0	753.8	753.8	753.8
22.5°	731.7	730.4	740.8	740.8	740.8
25°	714.8	714.8	725.2	727.8	727.8
27.5°	697.9	697.9	709.6	713.5	713.5
30°	679.7	679.7	691.4	696.6	699.2
32.5°	657.6	660.2	673.2	679.7	682.3
35°	635.5	639.4	652.4	661.5	666.7
37.5°	612.1	616.0	631.6	642.0	648.5
40°	587.4	592.6	609.5	622.5	630.3
42.5°	560.1	567.9	587.4	604.3	614.7
45°	534.1	543.2	564.0	587.4	599.1
47.5°	505.5	515.9	539.3	569.2	580.9
50°	475.7	486.1	514.6	548.4	561.4
52.5°	445.8	457.5	491.2	527.6	543.2
55°	413.3	426.3	467.9	506.8	523.7
57.5°	379.5	395.1	441.9	483.5	501.6
60°	344.4	363.9	415.9	460.1	479.6
62.5°	308.0	331.4	389.9	436.7	457.5
65°	272.9	298.9	362.6	412.0	434.1
67.5°	235.2	267.7	335.3	388.6	409.4
70°	197.5	235.2	306.7	361.3	382.1
72.5°	159.9	205.3	278.1	327.5	327.5
75°	123.5	174.1	248.2	246.9	239.1
77.5°	93.6	145.6	204.0	174.1	175.4
80°	67.6	117.0	128.7	128.7	130.0
82.5°	45.5	89.7	83.2	81.9	84.5
85°	27.3	41.6	42.9	39.0	40.3
87.5°	13.0	14.3	11.7	7.8	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)