

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: P263334

Luminaire Tested: **24CZ-LD5-40SE-SQP-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263334  
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-L82765-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: 2722.0 lumens  
Efficiency: N/A  
Efficacy: 87.9 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

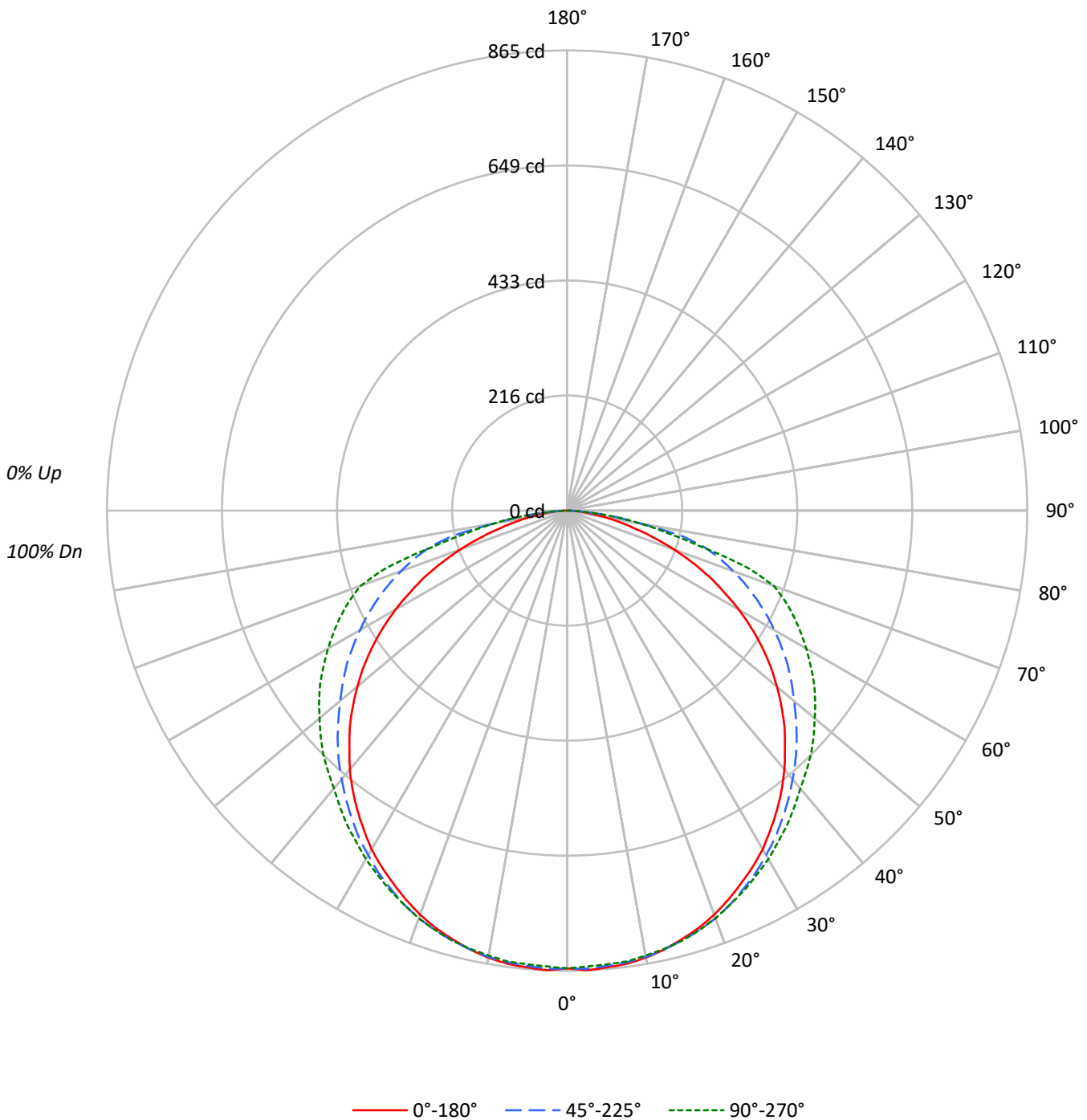
Input Watts (W): 30.969  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1158	1158	1158
5°	1164	1160	1157
10°	1166	1164	1160
15°	1161	1165	1165
20°	1158	1168	1168
25°	1148	1165	1169
30°	1142	1162	1175
35°	1129	1159	1185
40°	1116	1158	1198
45°	1100	1161	1233
50°	1077	1165	1271
55°	1049	1187	1329
60°	1003	1211	1396
65°	940	1249	1495
70°	841	1305	1626
75°	695	1396	1345
80°	566	1079	1089
85°	455	716	673



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.7	3.0
10°-20°	235.8	8.7
20°-30°	360.4	13.2
30°-40°	440.8	16.2
40°-50°	471.6	17.3
50°-60°	451.6	16.6
60°-70°	382.1	14.0
70°-80°	242.2	8.9
80°-90°	55.7	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°	678.0	24.9
0°-40°	1118.8	41.1
0°-60°	2042.0	75.0
0°-90°	2722.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2722.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	860	860	860	860	860	
5°	862	858	859	858	856	82
15°	834	832	837	837	837	235
25°	773	773	785	787	787	357
35°	688	692	706	716	721	430
45°	578	588	610	636	648	445
55°	447	461	506	548	567	399
65°	295	323	392	446	470	291
75°	134	188	268	267	259	145
85°	30	45	46	42	44	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	860.5	860.5	860.5	860.5	860.5
2.5°	864.7	860.5	861.9	860.5	857.7
5°	861.9	857.7	859.1	857.7	856.3
7.5°	859.1	854.9	856.3	854.9	854.9
10°	853.4	849.2	852.0	850.6	849.2
12.5°	845.0	842.2	845.0	843.6	843.6
15°	833.8	832.4	836.6	836.6	836.6
17.5°	822.5	821.1	826.7	826.7	826.7
20°	808.5	807.0	815.5	815.5	815.5
22.5°	791.6	790.2	801.4	801.4	801.4
25°	773.3	773.3	784.6	787.4	787.4
27.5°	755.0	755.0	767.7	771.9	771.9
30°	735.3	735.3	748.0	753.6	756.4
32.5°	711.4	714.3	728.3	735.3	738.2
35°	687.5	691.8	705.8	715.7	721.3
37.5°	662.2	666.4	683.3	694.6	701.6
40°	635.5	641.1	659.4	673.5	681.9
42.5°	606.0	614.4	635.5	653.8	665.0
45°	577.9	587.7	610.2	635.5	648.2
47.5°	546.9	558.2	583.5	615.8	628.5
50°	514.6	525.8	556.8	593.3	607.4
52.5°	482.3	494.9	531.5	570.8	587.7
55°	447.1	461.2	506.2	548.3	566.6
57.5°	410.6	427.4	478.0	523.0	542.7
60°	372.6	393.7	449.9	497.7	518.8
62.5°	333.2	358.5	421.8	472.4	494.9
65°	295.3	323.4	392.3	445.7	469.6
67.5°	254.5	289.6	362.7	420.4	442.9
70°	213.7	254.5	331.8	390.9	413.4
72.5°	172.9	222.1	300.9	354.3	354.3
75°	133.6	188.4	268.5	267.1	258.7
77.5°	101.2	157.5	220.7	188.4	189.8
80°	73.1	126.5	139.2	139.2	140.6
82.5°	49.2	97.0	90.0	88.6	91.4
85°	29.5	45.0	46.4	42.2	43.6
87.5°	14.1	15.5	12.7	8.4	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)