

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: P263245

Luminaire Tested: **24CZ-LD5-40-SQP-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263245  
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-LD5-40-SQP-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2776.0 lumens  
Efficiency: N/A  
Efficacy: 96.0 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

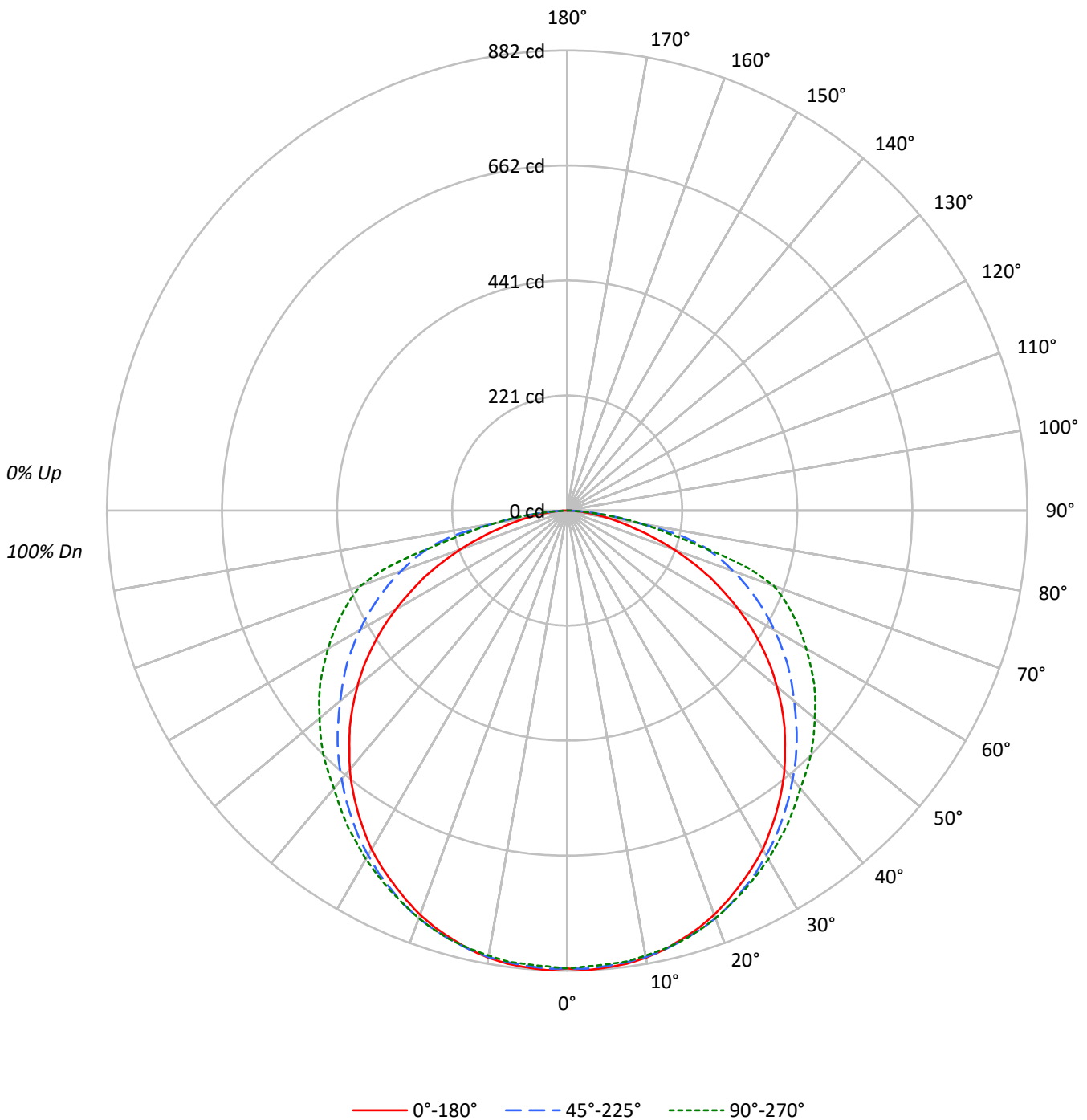
Input Watts (W): 28.923  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1181	1181	1181
5°	1187	1183	1179
10°	1189	1187	1183
15°	1184	1188	1188
20°	1181	1191	1191
25°	1171	1188	1192
30°	1165	1185	1198
35°	1152	1182	1208
40°	1138	1181	1221
45°	1121	1184	1258
50°	1099	1189	1297
55°	1070	1211	1356
60°	1023	1235	1424
65°	959	1274	1525
70°	858	1331	1659
75°	708	1424	1371
80°	578	1100	1111
85°	465	730	687



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.3	3.0
10°-20°	240.5	8.7
20°-30°	367.6	13.2
30°-40°	449.5	16.2
40°-50°	481.0	17.3
50°-60°	460.6	16.6
60°-70°	389.6	14.0
70°-80°	247.0	8.9
80°-90°	56.8	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°	691.4	24.9
0°-40°	1140.9	41.1
0°-60°	2082.6	75.0
0°-90°	2776.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2776.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	878	878	878	878	878	
5°	879	875	876	875	873	84
15°	850	849	853	853	853	240
25°	789	789	800	803	803	364
35°	701	706	720	730	736	439
45°	589	599	622	648	661	454
55°	456	470	516	559	578	407
65°	301	330	400	454	479	297
75°	136	192	274	272	264	148
85°	30	46	47	43	44	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	877.5	877.5	877.5	877.5	877.5
2.5°	881.8	877.5	879.0	877.5	874.7
5°	879.0	874.7	876.1	874.7	873.2
7.5°	876.1	871.8	873.2	871.8	871.8
10°	870.4	866.1	868.9	867.5	866.1
12.5°	861.8	858.9	861.8	860.3	860.3
15°	850.3	848.9	853.2	853.2	853.2
17.5°	838.8	837.4	843.1	843.1	843.1
20°	824.5	823.1	831.7	831.7	831.7
22.5°	807.3	805.9	817.3	817.3	817.3
25°	788.6	788.6	800.1	803.0	803.0
27.5°	770.0	770.0	782.9	787.2	787.2
30°	749.9	749.9	762.8	768.6	771.4
32.5°	725.6	728.4	742.8	749.9	752.8
35°	701.2	705.5	719.8	729.9	735.6
37.5°	675.4	679.7	696.9	708.3	715.5
40°	648.1	653.9	672.5	686.8	695.4
42.5°	618.0	626.6	648.1	666.8	678.2
45°	589.3	599.4	622.3	648.1	661.0
47.5°	557.8	569.3	595.1	628.0	641.0
50°	524.8	536.3	567.8	605.1	619.4
52.5°	491.8	504.7	542.0	582.2	599.4
55°	456.0	470.3	516.2	559.2	577.9
57.5°	418.7	435.9	487.5	533.4	553.5
60°	380.0	401.5	458.8	507.6	529.1
62.5°	339.8	365.6	430.2	481.8	504.7
65°	301.1	329.8	400.1	454.5	478.9
67.5°	259.5	295.4	369.9	428.7	451.7
70°	218.0	259.5	338.4	398.6	421.6
72.5°	176.4	226.6	306.9	361.3	361.3
75°	136.2	192.1	273.9	272.4	263.8
77.5°	103.2	160.6	225.1	192.1	193.6
80°	74.6	129.1	142.0	142.0	143.4
82.5°	50.2	98.9	91.8	90.3	93.2
85°	30.1	45.9	47.3	43.0	44.5
87.5°	14.3	15.8	12.9	8.6	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)