

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: P263479

Luminaire Tested: **24CZ-LD5-45SE-SQP-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263479  
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-LD5-45SE-SQP-UNV-L92765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2773.0 lumens  
Efficiency: N/A  
Efficacy: 77.4 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

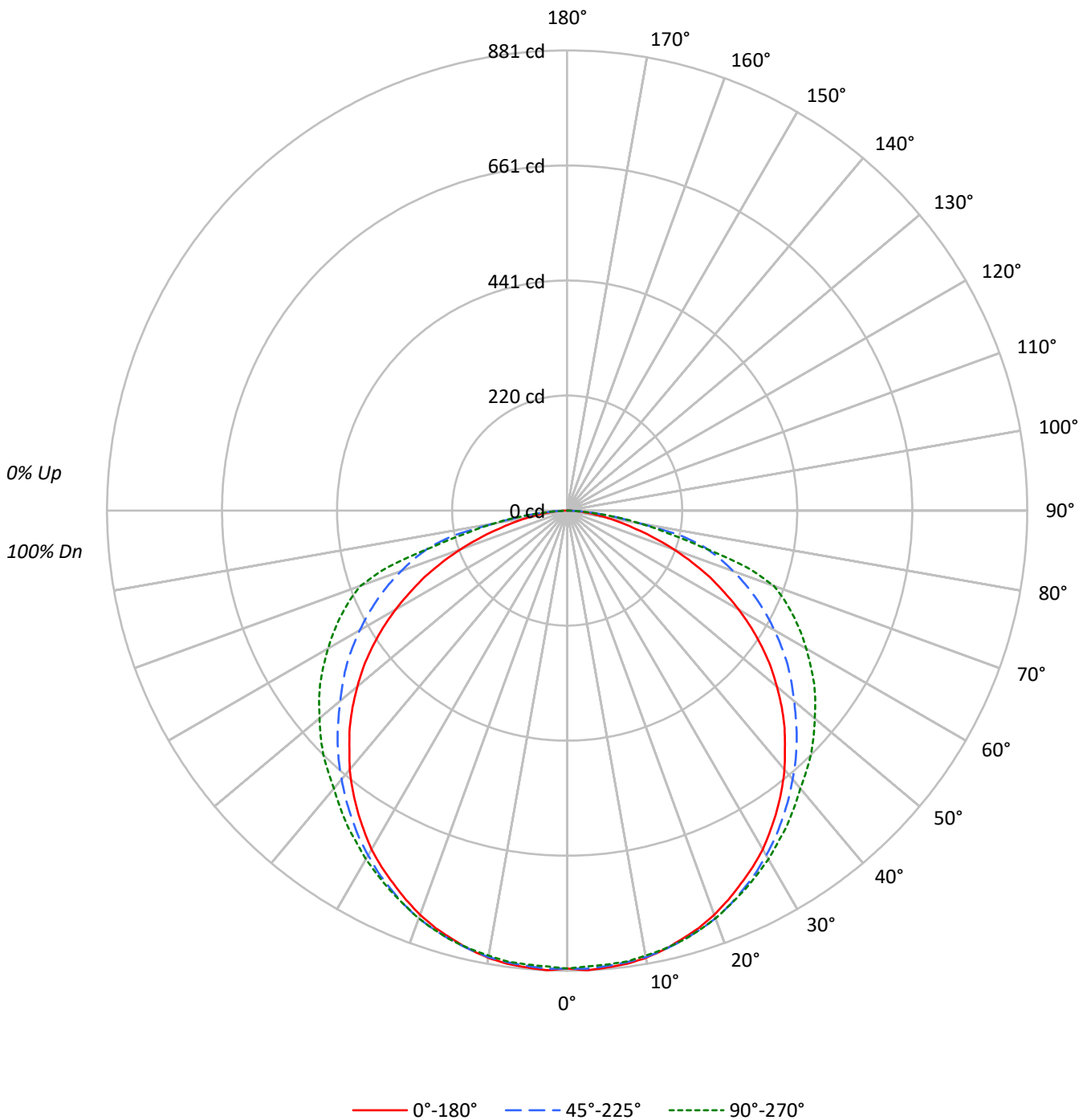
Input Watts (W): 35.805  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1179	1179	1179
5°	1186	1182	1178
10°	1188	1186	1182
15°	1183	1187	1187
20°	1179	1190	1190
25°	1170	1187	1191
30°	1164	1184	1197
35°	1150	1181	1207
40°	1137	1180	1220
45°	1120	1183	1256
50°	1097	1187	1295
55°	1069	1209	1354
60°	1021	1234	1422
65°	958	1272	1523
70°	856	1330	1657
75°	708	1422	1370
80°	577	1099	1110
85°	465	730	685



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.3	3.0
10°-20°	240.2	8.7
20°-30°	367.2	13.2
30°-40°	449.1	16.2
40°-50°	480.5	17.3
50°-60°	460.1	16.6
60°-70°	389.2	14.0
70°-80°	246.7	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°	690.7	24.9
0°-40°	1139.7	41.1
0°-60°	2080.3	75.0
0°-90°	2773.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2773.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	877	877	877	877	877	
5°	878	874	875	874	872	84
15°	849	848	852	852	852	240
25°	788	788	799	802	802	363
35°	700	705	719	729	735	438
45°	589	599	622	647	660	454
55°	456	470	516	559	577	406
65°	301	329	400	454	478	296
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°	876.6	876.6	876.6	876.6	876.6
2.5°	880.9	876.6	878.0	876.6	873.7
5°	878.0	873.7	875.2	873.7	872.3
7.5°	875.2	870.9	872.3	870.9	870.9
10°	869.4	865.1	868.0	866.6	865.1
12.5°	860.8	858.0	860.8	859.4	859.4
15°	849.4	848.0	852.2	852.2	852.2
17.5°	837.9	836.5	842.2	842.2	842.2
20°	823.6	822.2	830.8	830.8	830.8
22.5°	806.4	805.0	816.4	816.4	816.4
25°	787.8	787.8	799.3	802.1	802.1
27.5°	769.2	769.2	782.1	786.4	786.4
30°	749.1	749.1	762.0	767.7	770.6
32.5°	724.8	727.6	742.0	749.1	752.0
35°	700.4	704.7	719.0	729.1	734.8
37.5°	674.6	678.9	696.1	707.6	714.7
40°	647.4	653.2	671.8	686.1	694.7
42.5°	617.3	625.9	647.4	666.0	677.5
45°	588.7	598.7	621.6	647.4	660.3
47.5°	557.2	568.6	594.4	627.4	640.3
50°	524.2	535.7	567.2	604.5	618.8
52.5°	491.3	504.2	541.4	581.5	598.7
55°	455.5	469.8	515.6	558.6	577.2
57.5°	418.2	435.4	487.0	532.8	552.9
60°	379.6	401.1	458.4	507.1	528.5
62.5°	339.5	365.2	429.7	481.3	504.2
65°	300.8	329.4	399.6	454.1	478.4
67.5°	259.3	295.1	369.5	428.3	451.2
70°	217.7	259.3	338.0	398.2	421.1
72.5°	176.2	226.3	306.5	361.0	361.0
75°	136.1	191.9	273.6	272.1	263.6
77.5°	103.1	160.4	224.9	191.9	193.4
80°	74.5	128.9	141.8	141.8	143.2
82.5°	50.1	98.8	91.7	90.2	93.1
85°	30.1	45.8	47.3	43.0	44.4
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)