

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: P261349

Luminaire Tested: **24CZ-LD5-30SE-S-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261349  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-30SE-S-UNV-L92765-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2647.0 lumens  
Efficiency: N/A  
Efficacy: 121.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

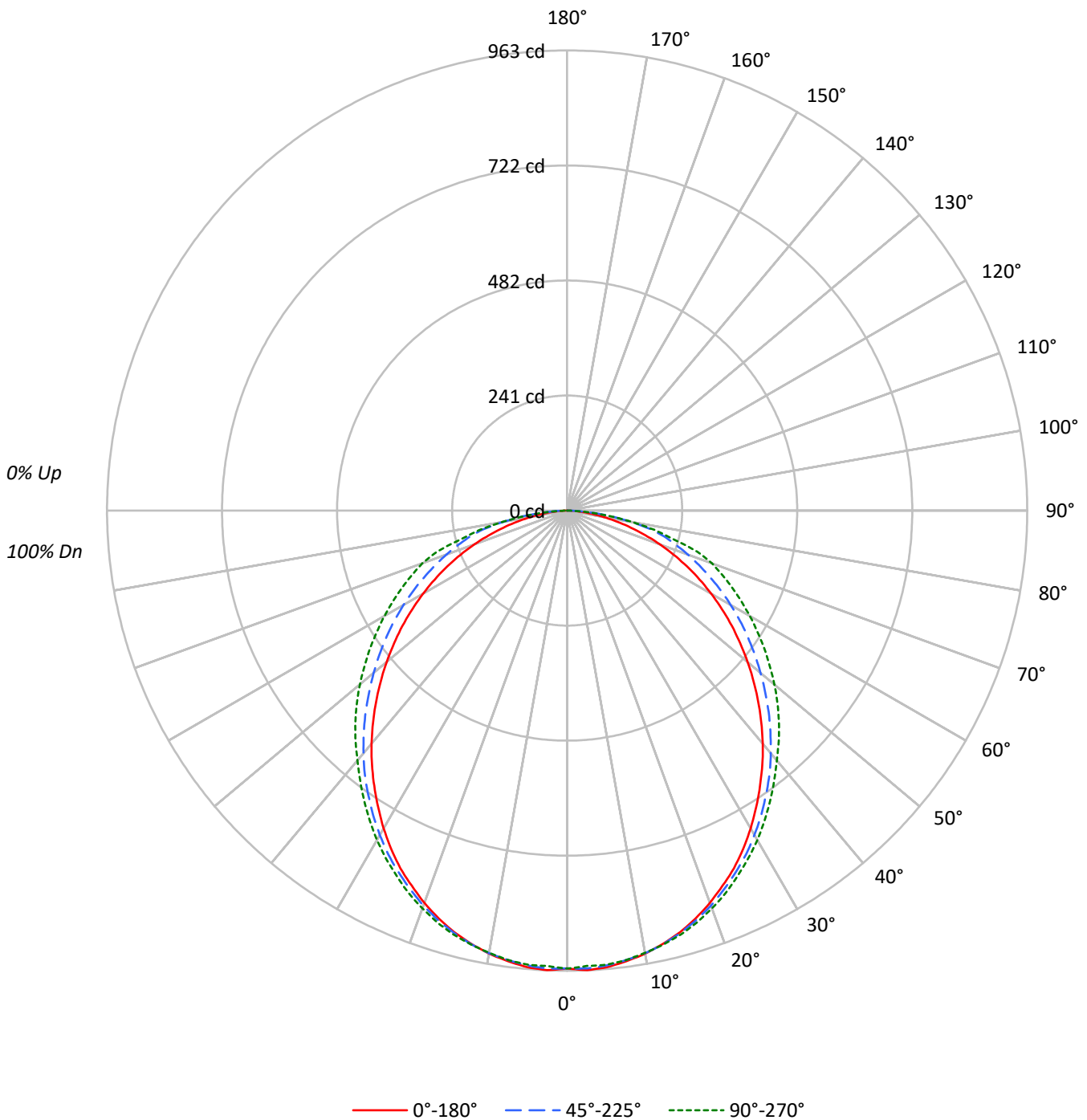
Input Watts (W): 21.855  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1289	1289	1289
5°	1295	1291	1288
10°	1286	1285	1284
15°	1272	1275	1280
20°	1251	1260	1269
25°	1226	1240	1253
30°	1193	1218	1237
35°	1156	1192	1217
40°	1118	1165	1199
45°	1076	1135	1193
50°	1032	1106	1185
55°	988	1083	1182
60°	936	1064	1188
65°	881	1052	1211
70°	811	1057	1268
75°	719	1094	1181
80°	600	1038	1065
85°	449	829	761



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.6	3.4
10°-20°	257.7	9.7
20°-30°	384.0	14.5
30°-40°	452.0	17.1
40°-50°	459.4	17.4
50°-60°	413.0	15.6
60°-70°	326.3	12.3
70°-80°	207.0	7.8
80°-90°	57.1	2.2
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°	732.3	27.7
0°-40°	1184.3	44.7
0°-60°	2056.6	77.7
0°-90°	2647.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2647.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	958	958	958	958	958	
5°	959	951	956	954	954	91
15°	913	909	915	918	919	257
25°	826	825	835	840	844	380
35°	704	708	726	734	741	440
45°	565	573	596	614	627	436
55°	421	432	462	492	504	376
65°	277	291	330	366	380	274
75°	138	162	210	229	227	147
85°	29	50	54	49	49	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	958.3	958.3	958.3	958.3	958.3
2.5°	962.7	955.6	959.1	957.4	953.9
5°	959.1	951.2	955.6	953.9	953.9
7.5°	951.2	945.1	948.6	947.7	948.6
10°	941.5	935.4	940.6	940.6	939.8
12.5°	928.3	923.0	929.2	929.2	930.1
15°	913.3	908.9	915.1	917.7	918.6
17.5°	894.8	890.4	898.4	901.0	903.7
20°	873.7	871.9	879.9	882.5	886.0
22.5°	849.9	849.9	857.9	861.4	866.7
25°	826.1	825.3	835.0	840.2	843.8
27.5°	798.0	798.8	811.2	816.5	820.9
30°	768.0	769.8	783.9	790.0	796.2
32.5°	736.3	739.8	755.7	762.7	768.9
35°	703.7	708.1	725.7	733.7	740.7
37.5°	671.1	677.3	695.8	703.7	711.7
40°	636.8	642.1	663.2	672.9	682.6
42.5°	601.6	608.6	629.7	643.8	655.3
45°	565.4	573.4	596.3	613.9	627.1
47.5°	529.3	539.9	561.9	585.7	597.2
50°	493.2	503.8	528.5	554.9	566.3
52.5°	456.2	466.8	495.0	522.3	534.6
55°	421.0	431.6	461.5	491.5	503.8
57.5°	384.0	395.5	428.9	459.8	472.1
60°	347.9	359.3	395.5	428.0	441.3
62.5°	312.7	325.0	362.9	397.2	410.4
65°	276.6	290.6	330.3	366.4	380.5
67.5°	241.3	257.2	298.6	336.4	351.4
70°	206.1	224.6	268.6	307.4	322.4
72.5°	171.7	192.0	238.7	277.4	285.4
75°	138.3	162.1	210.5	229.0	227.2
77.5°	106.6	133.0	178.8	182.3	187.6
80°	77.5	106.6	133.9	140.9	137.4
82.5°	51.1	80.1	96.0	92.5	91.6
85°	29.1	50.2	53.7	49.3	49.3
87.5°	12.3	20.3	17.6	13.2	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)