

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: P261051

Luminaire Tested: **24CZ-LD5-30-S-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261051  
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-LD5-30-S-UNV-L93050-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2924.7 lumens  
Efficiency: N/A  
Efficacy: 143.0 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

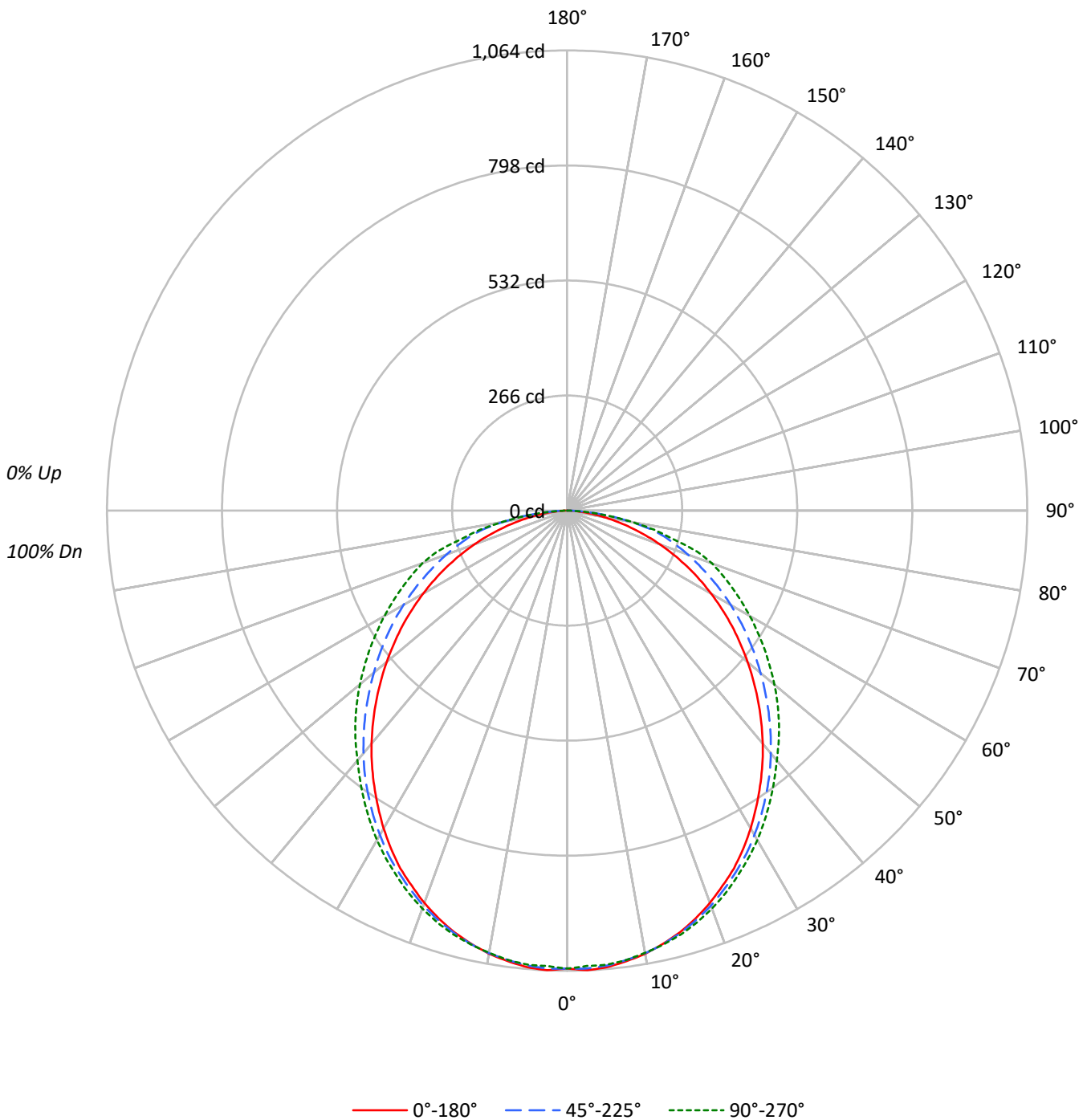
Input Watts (W): 20.447166  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1425	1425	1425
5°	1431	1426	1423
10°	1421	1420	1419
15°	1406	1408	1414
20°	1382	1392	1402
25°	1355	1370	1384
30°	1318	1346	1367
35°	1277	1317	1344
40°	1236	1287	1325
45°	1189	1254	1318
50°	1141	1222	1310
55°	1091	1196	1306
60°	1034	1176	1312
65°	973	1162	1338
70°	896	1168	1401
75°	794	1209	1305
80°	663	1146	1176
85°	496	917	841



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.1	3.4
10°-20°	284.7	9.7
20°-30°	424.3	14.5
30°-40°	499.4	17.1
40°-50°	507.6	17.4
50°-60°	456.3	15.6
60°-70°	360.5	12.3
70°-80°	228.7	7.8
80°-90°	63.1	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°	809.1	27.7
0°-40°	1308.5	44.7
0°-60°	2272.4	77.7
0°-90°	2924.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2924.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1060	1051	1056	1054	1054	100
15°	1009	1004	1011	1014	1015	284
25°	913	912	923	928	932	420
35°	778	782	802	811	818	486
45°	625	634	659	678	693	482
55°	465	477	510	543	557	415
65°	306	321	365	405	420	303
75°	153	179	233	253	251	163
85°	32	56	59	54	54	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1058.8	1058.8	1058.8	1058.8	1058.8
2.5°	1063.7	1055.9	1059.8	1057.8	1053.9
5°	1059.8	1051.0	1055.9	1053.9	1053.9
7.5°	1051.0	1044.2	1048.1	1047.1	1048.1
10°	1040.3	1033.5	1039.3	1039.3	1038.4
12.5°	1025.7	1019.9	1026.7	1026.7	1027.7
15°	1009.2	1004.3	1011.1	1014.0	1015.0
17.5°	988.7	983.9	992.6	995.5	998.5
20°	965.4	963.4	972.2	975.1	979.0
22.5°	939.1	939.1	947.9	951.8	957.6
25°	912.8	911.9	922.6	928.4	932.3
27.5°	881.7	882.7	896.3	902.1	907.0
30°	848.6	850.5	866.1	872.9	879.7
32.5°	813.6	817.5	835.0	842.8	849.6
35°	777.6	782.4	801.9	810.6	818.4
37.5°	741.6	748.4	768.8	777.6	786.3
40°	703.6	709.4	732.8	743.5	754.2
42.5°	664.7	672.5	695.8	711.4	724.0
45°	624.8	633.5	658.8	678.3	692.9
47.5°	584.9	596.6	620.9	647.2	659.8
50°	545.0	556.7	583.9	613.1	625.7
52.5°	504.1	515.8	546.9	577.1	590.7
55°	465.2	476.9	509.9	543.0	556.7
57.5°	424.3	437.0	473.9	508.0	521.6
60°	384.4	397.1	437.0	473.0	487.6
62.5°	345.5	359.1	400.9	438.9	453.5
65°	305.6	321.1	364.9	404.8	420.4
67.5°	266.6	284.2	329.9	371.7	388.3
70°	227.7	248.2	296.8	339.6	356.2
72.5°	189.8	212.2	263.7	306.5	315.3
75°	152.8	179.1	232.6	253.0	251.1
77.5°	117.8	146.9	197.6	201.4	207.3
80°	85.6	117.8	147.9	155.7	151.8
82.5°	56.4	88.6	106.1	102.2	101.2
85°	32.1	55.5	59.4	54.5	54.5
87.5°	13.6	22.4	19.5	14.6	13.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)