

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: P230069

Luminaire Tested: **24CZ-LD5-30SE-S-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230069  
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-L935-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH SMOOTH LENS  
Light Source: (84) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2685.0 lumens  
Efficiency: N/A  
Efficacy: 114.3 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

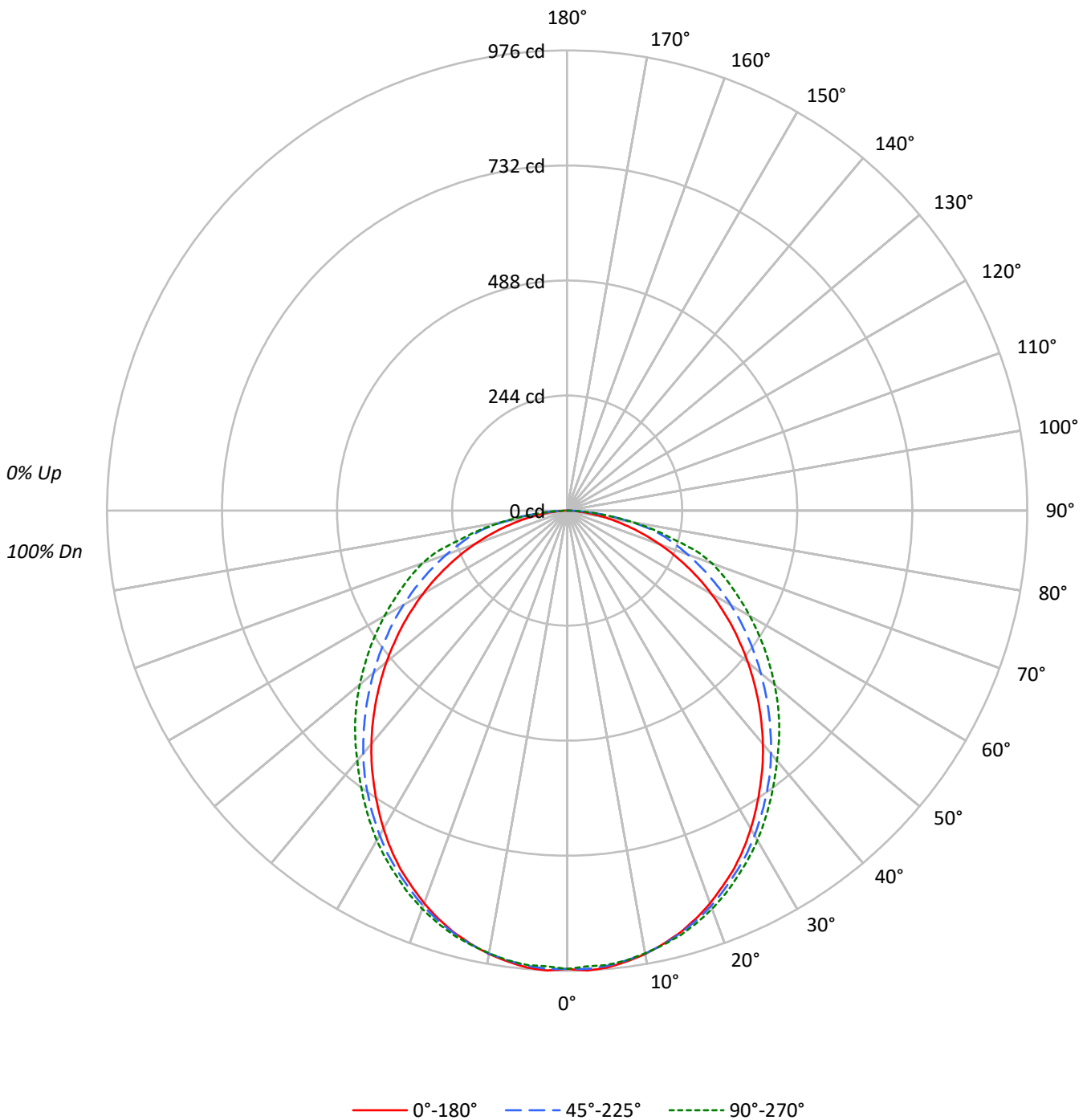
Input Watts (W): 23.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1308	1308	1308
5°	1314	1309	1307
10°	1305	1304	1302
15°	1291	1293	1298
20°	1269	1278	1287
25°	1244	1257	1271
30°	1210	1235	1255
35°	1172	1209	1234
40°	1134	1182	1216
45°	1091	1151	1210
50°	1047	1122	1203
55°	1002	1098	1199
60°	950	1079	1204
65°	893	1067	1229
70°	823	1072	1286
75°	729	1110	1198
80°	609	1052	1080
85°	455	841	772



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.9	3.4
10°-20°	261.4	9.7
20°-30°	389.5	14.5
30°-40°	458.5	17.1
40°-50°	465.9	17.4
50°-60°	418.9	15.6
60°-70°	331.0	12.3
70°-80°	210.0	7.8
80°-90°	57.9	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
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0°-30°	742.8	27.7
0°-40°	1201.3	44.7
0°-60°	2086.1	77.7
0°-90°	2685.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2685.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	972	972	972	972	972	
5°	973	965	969	968	968	92
15°	926	922	928	931	932	261
25°	838	837	847	852	856	385
35°	714	718	736	744	751	447
45°	574	582	605	623	636	443
55°	427	438	468	498	511	381
65°	280	295	335	372	386	278
75°	140	164	214	232	230	149
85°	30	51	54	50	50	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	972.0	972.0	972.0	972.0	972.0
2.5°	976.5	969.3	972.9	971.1	967.6
5°	972.9	964.9	969.3	967.6	967.6
7.5°	964.9	958.6	962.2	961.3	962.2
10°	955.0	948.8	954.2	954.2	953.3
12.5°	941.6	936.3	942.5	942.5	943.4
15°	926.5	922.0	928.2	930.9	931.8
17.5°	907.7	903.2	911.3	913.9	916.6
20°	886.3	884.5	892.5	895.2	898.8
22.5°	862.1	862.1	870.2	873.7	879.1
25°	838.0	837.1	846.9	852.3	855.9
27.5°	809.4	810.3	822.8	828.2	832.6
30°	779.0	780.8	795.1	801.4	807.6
32.5°	746.9	750.5	766.5	773.7	779.9
35°	713.8	718.3	736.2	744.2	751.3
37.5°	680.8	687.0	705.8	713.8	721.9
40°	645.9	651.3	672.7	682.6	692.4
42.5°	610.2	617.3	638.8	653.1	664.7
45°	573.6	581.6	604.8	622.7	636.1
47.5°	536.9	547.7	570.0	594.1	605.7
50°	500.3	511.0	536.0	562.8	574.5
52.5°	462.8	473.5	502.1	529.8	542.3
55°	427.0	437.8	468.1	498.5	511.0
57.5°	389.5	401.1	435.1	466.4	478.9
60°	352.9	364.5	401.1	434.2	447.6
62.5°	317.2	329.7	368.1	402.9	416.3
65°	280.5	294.8	335.0	371.7	385.9
67.5°	244.8	260.9	302.9	341.3	356.5
70°	209.1	227.8	272.5	311.8	327.0
72.5°	174.2	194.8	242.1	281.4	289.5
75°	140.3	164.4	213.5	232.3	230.5
77.5°	108.1	134.9	181.4	184.9	190.3
80°	78.6	108.1	135.8	142.9	139.4
82.5°	51.8	81.3	97.4	93.8	92.9
85°	29.5	50.9	54.5	50.0	50.0
87.5°	12.5	20.5	17.9	13.4	12.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)