

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: P261127

Luminaire Tested: **24CZ-LD5-30-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261127  
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-L82765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3224.0 lumens  
Efficiency: N/A  
Efficacy: 160.5 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

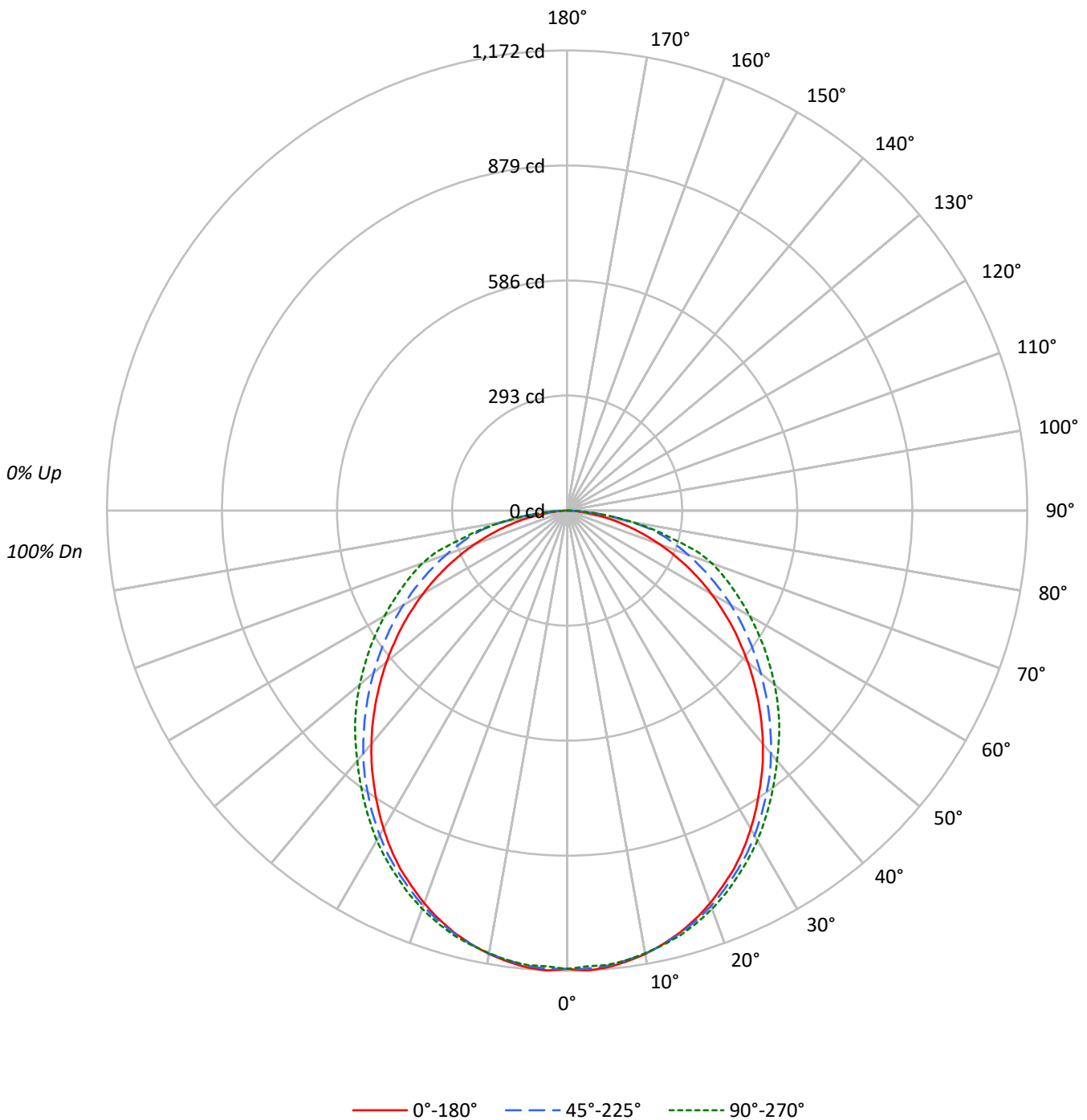
Input Watts (W): 20.088  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1570	1570	1570
5°	1578	1572	1569
10°	1567	1565	1564
15°	1550	1553	1559
20°	1524	1535	1545
25°	1494	1510	1526
30°	1453	1483	1507
35°	1408	1452	1482
40°	1362	1419	1460
45°	1310	1382	1453
50°	1257	1347	1444
55°	1203	1319	1439
60°	1140	1296	1446
65°	1072	1281	1475
70°	987	1287	1544
75°	875	1333	1439
80°	731	1264	1296
85°	546	1010	928



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.3	3.4
10°-20°	313.8	9.7
20°-30°	467.7	14.5
30°-40°	550.5	17.1
40°-50°	559.5	17.4
50°-60°	503.0	15.6
60°-70°	397.4	12.3
70°-80°	252.1	7.8
80°-90°	69.6	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°	891.9	27.7
0°-40°	1442.4	44.7
0°-60°	2504.9	77.7
0°-90°	3224.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3224.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1167	1167	1167	1167	1167	
5°	1168	1159	1164	1162	1162	111
15°	1112	1107	1115	1118	1119	313
25°	1006	1005	1017	1023	1028	463
35°	857	862	884	894	902	536
45°	689	698	726	748	764	531
55°	513	526	562	599	614	458
65°	337	354	402	446	463	334
75°	168	197	256	279	277	179
85°	35	61	65	60	60	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1167.1	1167.1	1167.1	1167.1	1167.1
2.5°	1172.5	1163.9	1168.2	1166.1	1161.8
5°	1168.2	1158.6	1163.9	1161.8	1161.8
7.5°	1158.6	1151.1	1155.3	1154.3	1155.3
10°	1146.8	1139.3	1145.7	1145.7	1144.6
12.5°	1130.7	1124.2	1131.7	1131.7	1132.8
15°	1112.4	1107.1	1114.6	1117.8	1118.9
17.5°	1089.9	1084.5	1094.2	1097.4	1100.6
20°	1064.2	1062.0	1071.7	1074.9	1079.2
22.5°	1035.2	1035.2	1044.9	1049.1	1055.6
25°	1006.2	1005.2	1017.0	1023.4	1027.7
27.5°	971.9	973.0	988.0	994.4	999.8
30°	935.4	937.6	954.7	962.3	969.8
32.5°	896.8	901.1	920.4	929.0	936.5
35°	857.1	862.5	883.9	893.6	902.2
37.5°	817.4	824.9	847.5	857.1	866.8
40°	775.6	782.0	807.8	819.6	831.4
42.5°	732.7	741.3	767.0	784.2	798.1
45°	688.7	698.4	726.2	747.7	763.8
47.5°	644.7	657.6	684.4	713.4	727.3
50°	600.7	613.6	643.6	675.8	689.8
52.5°	555.7	568.6	602.9	636.1	651.2
55°	512.8	525.6	562.1	598.6	613.6
57.5°	467.7	481.7	522.4	560.0	575.0
60°	423.7	437.7	481.7	521.4	537.4
62.5°	380.8	395.8	442.0	483.8	499.9
65°	336.8	354.0	402.3	446.3	463.4
67.5°	293.9	313.2	363.7	409.8	428.0
70°	251.0	273.6	327.2	374.4	392.6
72.5°	209.2	233.9	290.7	337.9	347.6
75°	168.4	197.4	256.4	278.9	276.8
77.5°	129.8	162.0	217.8	222.1	228.5
80°	94.4	129.8	163.1	171.6	167.3
82.5°	62.2	97.6	116.9	112.6	111.6
85°	35.4	61.1	65.4	60.1	60.1
87.5°	15.0	24.7	21.5	16.1	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)