

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: P261373

Luminaire Tested: **24CZ-LD5-40SE-S-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261373  
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-LD5-40SE-S-UNV-L92765-W2A1-U-6500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3919.0 lumens  
Efficiency: N/A  
Efficacy: 123.2 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

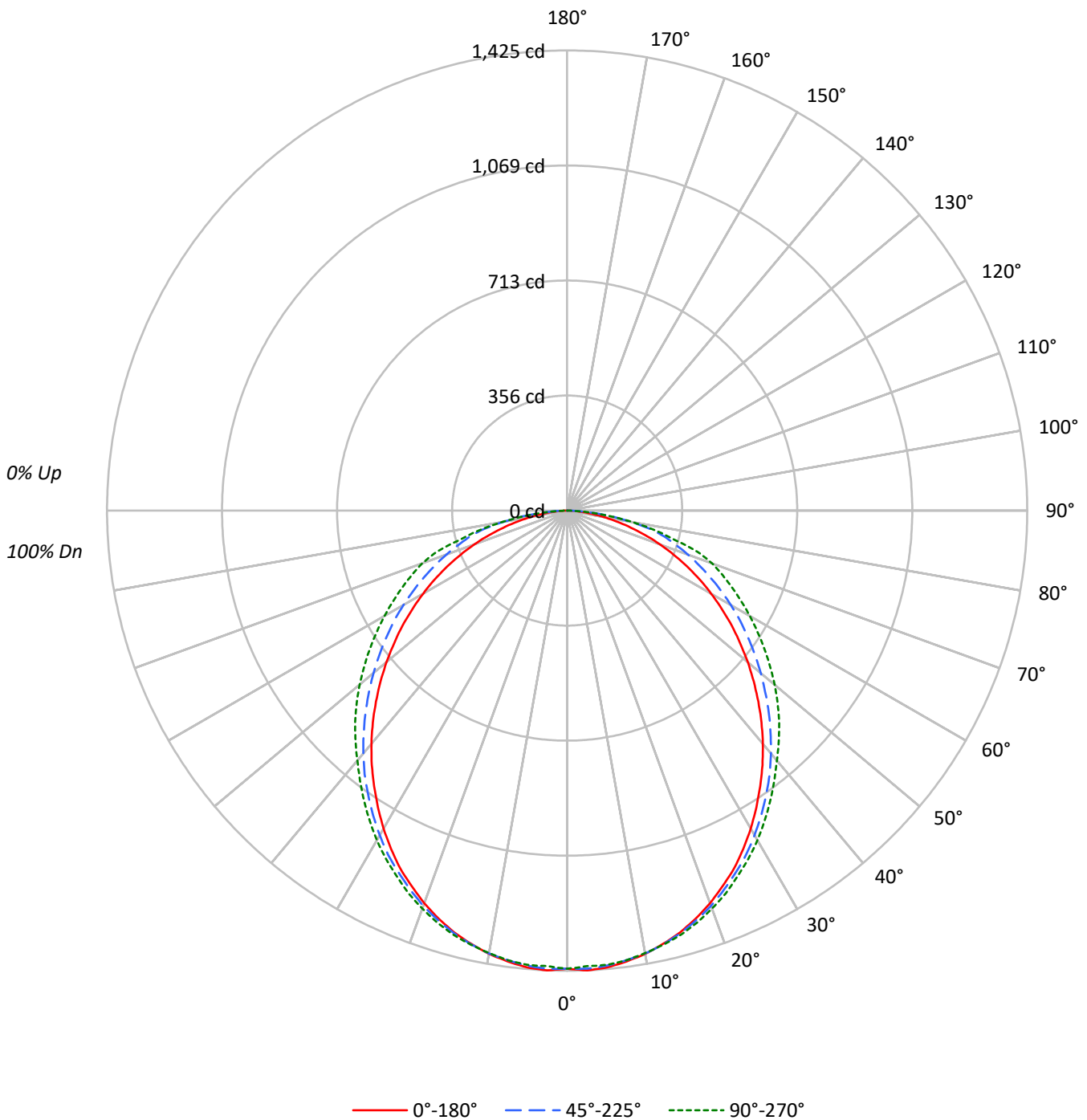
Input Watts (W): 31.806  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50					50			
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	1909	1909	1909
5°	1918	1911	1907
10°	1905	1903	1901
15°	1884	1887	1895
20°	1852	1865	1878
25°	1816	1835	1855
30°	1767	1803	1831
35°	1711	1765	1801
40°	1656	1725	1775
45°	1593	1680	1767
50°	1528	1638	1755
55°	1462	1603	1750
60°	1386	1576	1758
65°	1304	1557	1793
70°	1200	1565	1878
75°	1064	1620	1749
80°	890	1536	1576
85°	664	1227	1127



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.1	3.4
10°-20°	381.5	9.7
20°-30°	568.5	14.5
30°-40°	669.2	17.1
40°-50°	680.1	17.4
50°-60°	611.4	15.6
60°-70°	483.1	12.3
70°-80°	306.5	7.8
80°-90°	84.6	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°	1084.1	27.7
0°-40°	1753.4	44.7
0°-60°	3044.9	77.7
0°-90°	3919.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3919.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1419	1419	1419	1419	1419	
5°	1420	1408	1415	1412	1412	135
15°	1352	1346	1355	1359	1360	381
25°	1223	1222	1236	1244	1249	562
35°	1042	1048	1074	1086	1097	652
45°	837	849	883	909	928	646
55°	623	639	683	728	746	557
65°	410	430	489	542	563	406
75°	205	240	312	339	336	218
85°	43	74	80	73	73	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1418.8	1418.8	1418.8	1418.8	1418.8
2.5°	1425.3	1414.8	1420.1	1417.4	1412.2
5°	1420.1	1408.3	1414.8	1412.2	1412.2
7.5°	1408.3	1399.2	1404.4	1403.1	1404.4
10°	1394.0	1384.8	1392.7	1392.7	1391.4
12.5°	1374.4	1366.6	1375.7	1375.7	1377.0
15°	1352.2	1345.7	1354.9	1358.8	1360.1
17.5°	1324.9	1318.3	1330.1	1334.0	1337.9
20°	1293.6	1291.0	1302.7	1306.6	1311.8
22.5°	1258.4	1258.4	1270.1	1275.3	1283.1
25°	1223.2	1221.8	1236.2	1244.0	1249.2
27.5°	1181.4	1182.7	1201.0	1208.8	1215.3
30°	1137.1	1139.7	1160.6	1169.7	1178.8
32.5°	1090.1	1095.4	1118.8	1129.3	1138.4
35°	1041.9	1048.4	1074.5	1086.2	1096.7
37.5°	993.6	1002.8	1030.2	1041.9	1053.6
40°	942.8	950.6	981.9	996.3	1010.6
42.5°	890.6	901.1	932.4	953.2	970.2
45°	837.2	848.9	882.8	908.9	928.4
47.5°	783.7	799.4	832.0	867.2	884.1
50°	730.2	745.9	782.4	821.5	838.5
52.5°	675.5	691.1	732.8	773.3	791.5
55°	623.3	639.0	683.3	727.6	745.9
57.5°	568.5	585.5	635.0	680.7	698.9
60°	515.1	532.0	585.5	633.7	653.3
62.5°	462.9	481.2	537.2	588.1	607.7
65°	409.5	430.3	489.0	542.5	563.3
67.5°	357.3	380.8	442.1	498.1	520.3
70°	305.1	332.5	397.7	455.1	477.3
72.5°	254.3	284.3	353.4	410.8	422.5
75°	204.7	239.9	311.7	339.0	336.4
77.5°	157.8	196.9	264.7	269.9	277.8
80°	114.8	157.8	198.2	208.6	203.4
82.5°	75.6	118.7	142.1	136.9	135.6
85°	43.0	74.3	79.5	73.0	73.0
87.5°	18.3	30.0	26.1	19.6	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)