

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: P277097

Luminaire Tested: **24CZ2-70HE-RDP-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277097  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-70HE-RDP-UNV-L92765-W2A1-U-6500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4257.7 lumens  
Efficiency: N/A  
Efficacy: 75.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

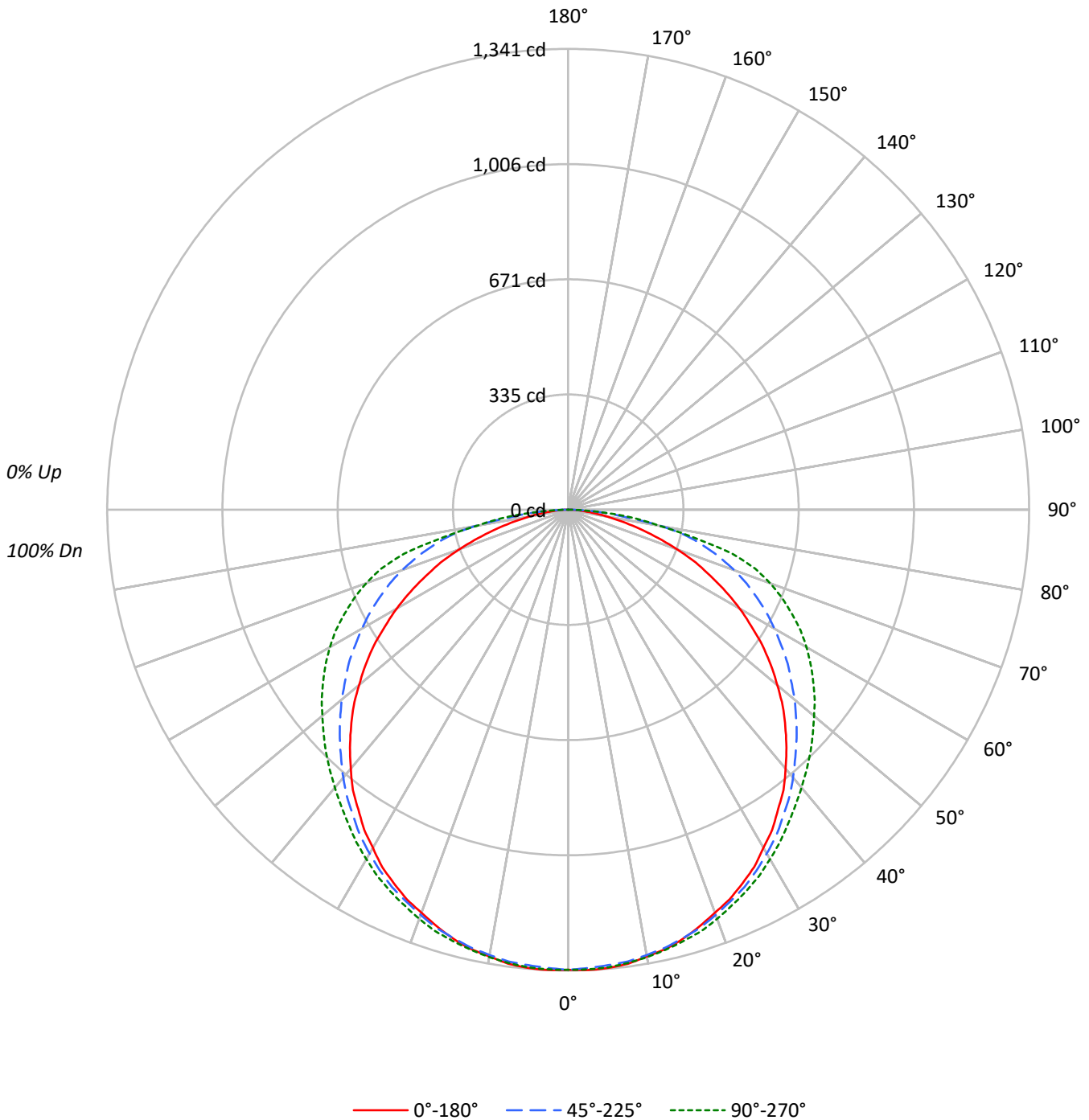
Input Watts (W): 56.172  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1801	1801	1801
5°	1808	1797	1806
10°	1803	1798	1806
15°	1800	1797	1809
20°	1787	1796	1814
25°	1781	1800	1818
30°	1765	1795	1824
35°	1748	1790	1832
40°	1728	1788	1855
45°	1700	1788	1897
50°	1662	1799	1954
55°	1620	1828	2041
60°	1551	1864	2154
65°	1452	1930	2286
70°	1321	2019	2459
75°	1120	2130	2569
80°	883	2144	2078
85°	651	1630	1826



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.0	3.0
10°-20°	365.5	8.6
20°-30°	559.0	13.1
30°-40°	683.3	16.0
40°-50°	728.3	17.1
50°-60°	696.3	16.4
60°-70°	589.9	13.9
70°-80°	396.5	9.3
80°-90°	111.8	2.6
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°	1051.5	24.7
0°-40°	1734.9	40.7
0°-60°	3159.5	74.2
0°-90°	4257.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4257.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1339	1339	1339	1339	1339	
5°	1339	1337	1330	1337	1337	127
15°	1292	1292	1290	1301	1299	364
25°	1200	1204	1212	1223	1225	553
35°	1064	1073	1090	1111	1115	667
45°	893	908	940	980	997	689
55°	691	716	779	840	870	615
65°	456	503	606	686	718	453
75°	215	294	410	479	494	231
85°	42	87	106	114	118	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1338.9	1338.9	1338.9	1338.9	1338.9
2.5°	1341.1	1341.1	1334.7	1338.9	1338.9
5°	1338.9	1336.8	1330.5	1336.8	1336.8
7.5°	1332.6	1330.5	1326.3	1332.6	1330.5
10°	1319.9	1319.9	1315.7	1322.0	1322.0
12.5°	1309.4	1307.3	1305.2	1313.6	1311.5
15°	1292.5	1292.5	1290.4	1300.9	1298.8
17.5°	1271.4	1273.5	1275.6	1284.0	1286.1
20°	1248.1	1252.4	1254.5	1267.1	1267.1
22.5°	1227.0	1229.1	1233.3	1246.0	1246.0
25°	1199.6	1203.8	1212.2	1222.8	1224.9
27.5°	1172.1	1174.2	1184.8	1199.6	1201.7
30°	1136.2	1142.5	1155.2	1172.1	1174.2
32.5°	1104.5	1110.9	1125.6	1142.5	1146.8
35°	1064.4	1072.8	1089.7	1110.9	1115.1
37.5°	1028.5	1034.8	1055.9	1079.2	1085.5
40°	984.1	996.8	1017.9	1045.4	1055.9
42.5°	939.8	952.5	977.8	1013.7	1026.4
45°	893.3	908.1	939.8	979.9	996.8
47.5°	846.9	863.8	899.7	946.1	965.1
50°	794.1	815.2	859.5	912.3	933.5
52.5°	743.4	768.7	817.3	876.4	903.9
55°	690.6	715.9	779.3	840.5	870.1
57.5°	631.5	665.2	734.9	804.6	836.3
60°	576.5	608.2	692.7	768.7	800.4
62.5°	517.4	559.7	650.5	730.7	762.4
65°	456.2	502.6	606.1	686.4	718.0
67.5°	401.3	451.9	561.8	642.0	673.7
70°	335.8	399.1	513.2	593.4	625.1
72.5°	274.5	344.2	462.5	540.6	570.2
75°	215.4	293.6	409.7	479.4	494.2
77.5°	160.5	242.9	354.8	384.4	373.8
80°	114.0	194.3	276.7	261.9	268.2
82.5°	73.9	147.8	171.1	194.3	200.6
85°	42.2	86.6	105.6	114.0	118.3
87.5°	19.0	31.7	42.2	42.2	40.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)