

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: P277092

Luminaire Tested: **24CZ2-70HE-RDP-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277092  
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-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3961.9 lumens  
Efficiency: N/A  
Efficacy: 72.9 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

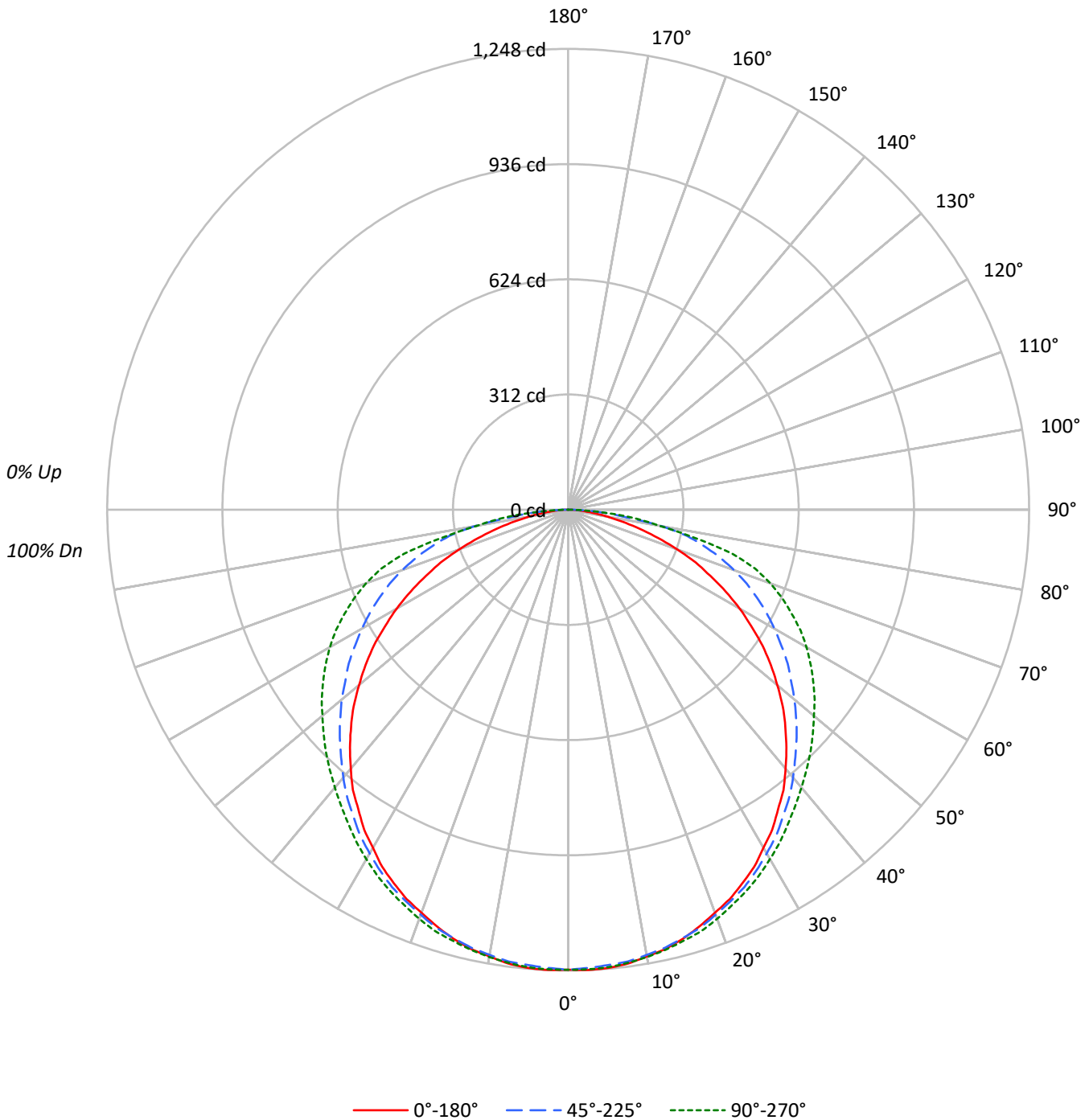
Input Watts (W): 54.312  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1676	1676	1676
5°	1683	1672	1680
10°	1678	1673	1681
15°	1675	1673	1684
20°	1663	1671	1688
25°	1657	1675	1692
30°	1643	1670	1698
35°	1627	1666	1704
40°	1609	1664	1726
45°	1582	1664	1765
50°	1547	1674	1818
55°	1507	1701	1899
60°	1444	1735	2004
65°	1351	1796	2127
70°	1229	1878	2288
75°	1042	1982	2390
80°	822	1994	1934
85°	607	1518	1698



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.2	3.0
10°-20°	340.1	8.6
20°-30°	520.1	13.1
30°-40°	635.9	16.0
40°-50°	677.7	17.1
50°-60°	648.0	16.4
60°-70°	548.9	13.9
70°-80°	368.9	9.3
80°-90°	104.1	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°	978.5	24.7
0°-40°	1614.3	40.7
0°-60°	2940.0	74.2
0°-90°	3961.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3961.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1246	1246	1246	1246	1246	
5°	1246	1244	1238	1244	1244	118
15°	1203	1203	1201	1210	1209	339
25°	1116	1120	1128	1138	1140	514
35°	990	998	1014	1034	1038	620
45°	831	845	874	912	928	641
55°	643	666	725	782	810	572
65°	424	468	564	639	668	421
75°	200	273	381	446	460	215
85°	39	81	98	106	110	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1245.9	1245.9	1245.9	1245.9	1245.9
2.5°	1247.9	1247.9	1242.0	1245.9	1245.9
5°	1245.9	1243.9	1238.0	1243.9	1243.9
7.5°	1240.0	1238.0	1234.1	1240.0	1238.0
10°	1228.2	1228.2	1224.3	1230.2	1230.2
12.5°	1218.4	1216.4	1214.5	1222.3	1220.4
15°	1202.7	1202.7	1200.7	1210.5	1208.6
17.5°	1183.0	1185.0	1186.9	1194.8	1196.8
20°	1161.4	1165.3	1167.3	1179.1	1179.1
22.5°	1141.8	1143.7	1147.6	1159.4	1159.4
25°	1116.2	1120.1	1128.0	1137.8	1139.8
27.5°	1090.7	1092.6	1102.4	1116.2	1118.2
30°	1057.2	1063.1	1074.9	1090.7	1092.6
32.5°	1027.8	1033.7	1047.4	1063.1	1067.1
35°	990.4	998.3	1014.0	1033.7	1037.6
37.5°	957.0	962.9	982.6	1004.2	1010.1
40°	915.8	927.5	947.2	972.7	982.6
42.5°	874.5	886.3	909.9	943.3	955.1
45°	831.3	845.0	874.5	911.8	927.5
47.5°	788.0	803.7	837.2	880.4	898.1
50°	738.9	758.5	799.8	848.9	868.6
52.5°	691.7	715.3	760.5	815.5	841.1
55°	642.6	666.2	725.1	782.1	809.6
57.5°	587.6	619.0	683.9	748.7	778.2
60°	536.5	566.0	644.6	715.3	744.8
62.5°	481.5	520.8	605.3	679.9	709.4
65°	424.5	467.7	564.0	638.7	668.1
67.5°	373.4	420.5	522.7	597.4	626.9
70°	312.5	371.4	477.5	552.2	581.7
72.5°	255.5	320.3	430.4	503.1	530.6
75°	200.4	273.2	381.2	446.1	459.8
77.5°	149.4	226.0	330.1	357.7	347.8
80°	106.1	180.8	257.4	243.7	249.6
82.5°	68.8	137.6	159.2	180.8	186.7
85°	39.3	80.6	98.3	106.1	110.0
87.5°	17.7	29.5	39.3	39.3	37.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)