

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: P277094

Luminaire Tested: **24CZ2-70HE-RDP-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277094  
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-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4147.0 lumens  
Efficiency: N/A  
Efficacy: 75.5 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

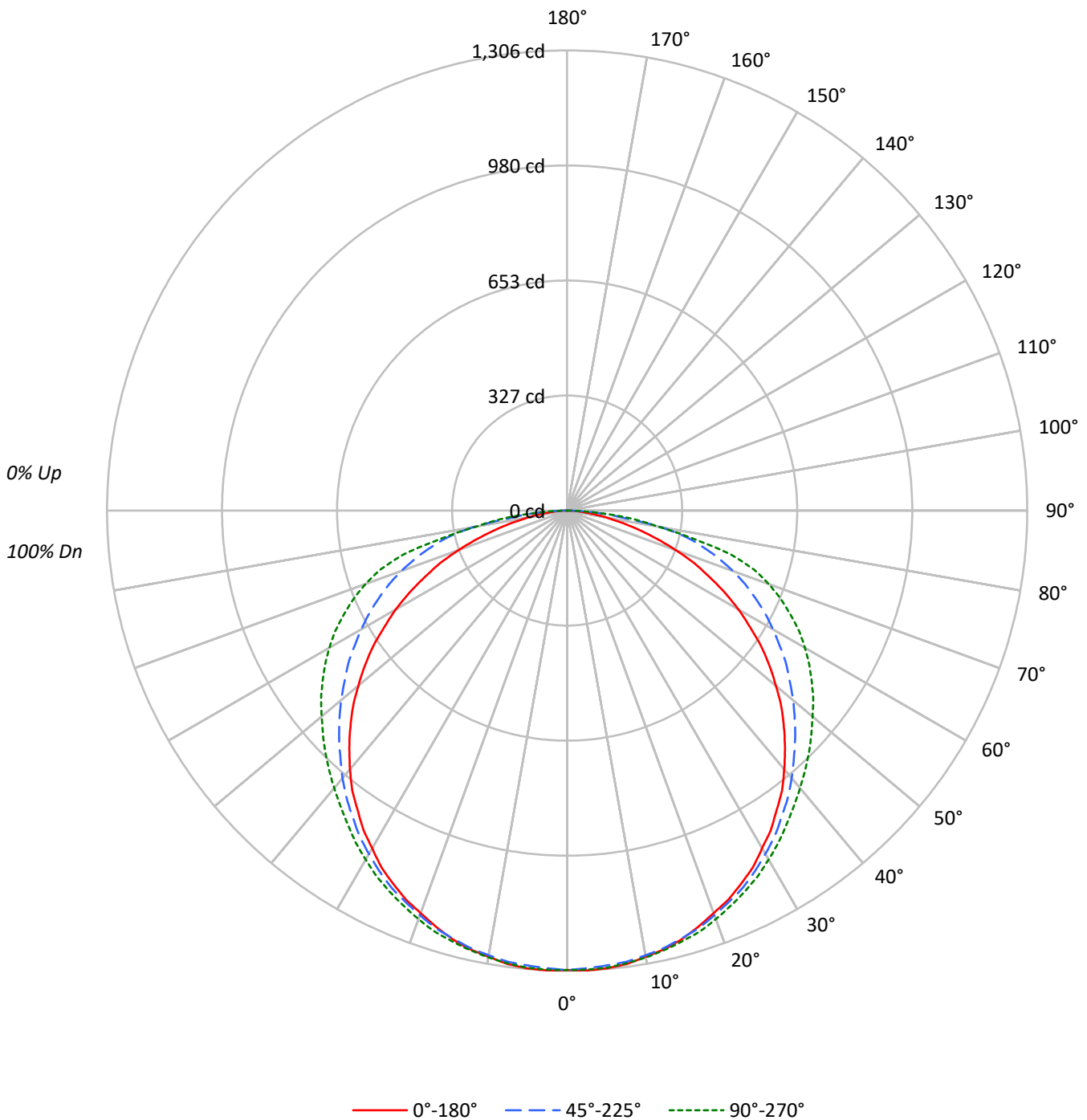
Input Watts (W): 54.963  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1755	1755	1755
5°	1761	1750	1759
10°	1756	1751	1759
15°	1754	1751	1762
20°	1741	1749	1767
25°	1735	1753	1771
30°	1719	1748	1777
35°	1703	1743	1784
40°	1684	1741	1806
45°	1656	1742	1847
50°	1619	1752	1903
55°	1578	1780	1988
60°	1511	1816	2098
65°	1415	1880	2227
70°	1287	1966	2395
75°	1091	2075	2502
80°	861	2088	2024
85°	634	1587	1778



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.7	3.0
10°-20°	356.0	8.6
20°-30°	544.5	13.1
30°-40°	665.6	16.0
40°-50°	709.4	17.1
50°-60°	678.2	16.4
60°-70°	574.6	13.9
70°-80°	386.2	9.3
80°-90°	108.9	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°	1024.2	24.7
0°-40°	1689.8	40.7
0°-60°	3077.4	74.2
0°-90°	4147.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4147.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1304	1304	1304	1304	1304	
5°	1304	1302	1296	1302	1302	124
15°	1259	1259	1257	1267	1265	355
25°	1168	1172	1181	1191	1193	539
35°	1037	1045	1061	1082	1086	649
45°	870	884	915	954	971	671
55°	673	697	759	819	848	599
65°	444	490	590	668	699	441
75°	210	286	399	467	481	225
85°	41	84	103	111	115	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1304.1	1304.1	1304.1	1304.1	1304.1
2.5°	1306.2	1306.2	1300.0	1304.1	1304.1
5°	1304.1	1302.1	1295.9	1302.1	1302.1
7.5°	1298.0	1295.9	1291.8	1298.0	1295.9
10°	1285.6	1285.6	1281.5	1287.7	1287.7
12.5°	1275.3	1273.3	1271.2	1279.4	1277.4
15°	1258.9	1258.9	1256.8	1267.1	1265.0
17.5°	1238.3	1240.4	1242.4	1250.6	1252.7
20°	1215.7	1219.8	1221.8	1234.2	1234.2
22.5°	1195.1	1197.2	1201.3	1213.6	1213.6
25°	1168.4	1172.5	1180.7	1191.0	1193.0
27.5°	1141.6	1143.7	1154.0	1168.4	1170.4
30°	1106.7	1112.8	1125.2	1141.6	1143.7
32.5°	1075.8	1082.0	1096.4	1112.8	1116.9
35°	1036.7	1044.9	1061.4	1082.0	1086.1
37.5°	1001.8	1007.9	1028.5	1051.1	1057.3
40°	958.6	970.9	991.5	1018.2	1028.5
42.5°	915.4	927.7	952.4	987.4	999.7
45°	870.1	884.5	915.4	954.4	970.9
47.5°	824.8	841.3	876.3	921.5	940.0
50°	773.4	794.0	837.2	888.6	909.2
52.5°	724.1	748.7	796.1	853.6	880.4
55°	672.6	697.3	759.0	818.7	847.5
57.5°	615.0	647.9	715.8	783.7	814.6
60°	561.6	592.4	674.7	748.7	779.6
62.5°	504.0	545.1	633.6	711.7	742.6
65°	444.3	489.6	590.4	668.5	699.4
67.5°	390.8	440.2	547.2	625.3	656.2
70°	327.1	388.8	499.8	578.0	608.9
72.5°	267.4	335.3	450.5	526.6	555.4
75°	209.8	285.9	399.1	466.9	481.3
77.5°	156.3	236.6	345.6	374.4	364.1
80°	111.1	189.2	269.5	255.1	261.2
82.5°	72.0	144.0	166.6	189.2	195.4
85°	41.1	84.3	102.8	111.1	115.2
87.5°	18.5	30.9	41.1	41.1	39.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)