

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: P276960

Luminaire Tested: **24CZ2-70HE-RDP-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276960  
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-L82765-W2A1-U-5500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4665.0 lumens  
Efficiency: N/A  
Efficacy: 84.6 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

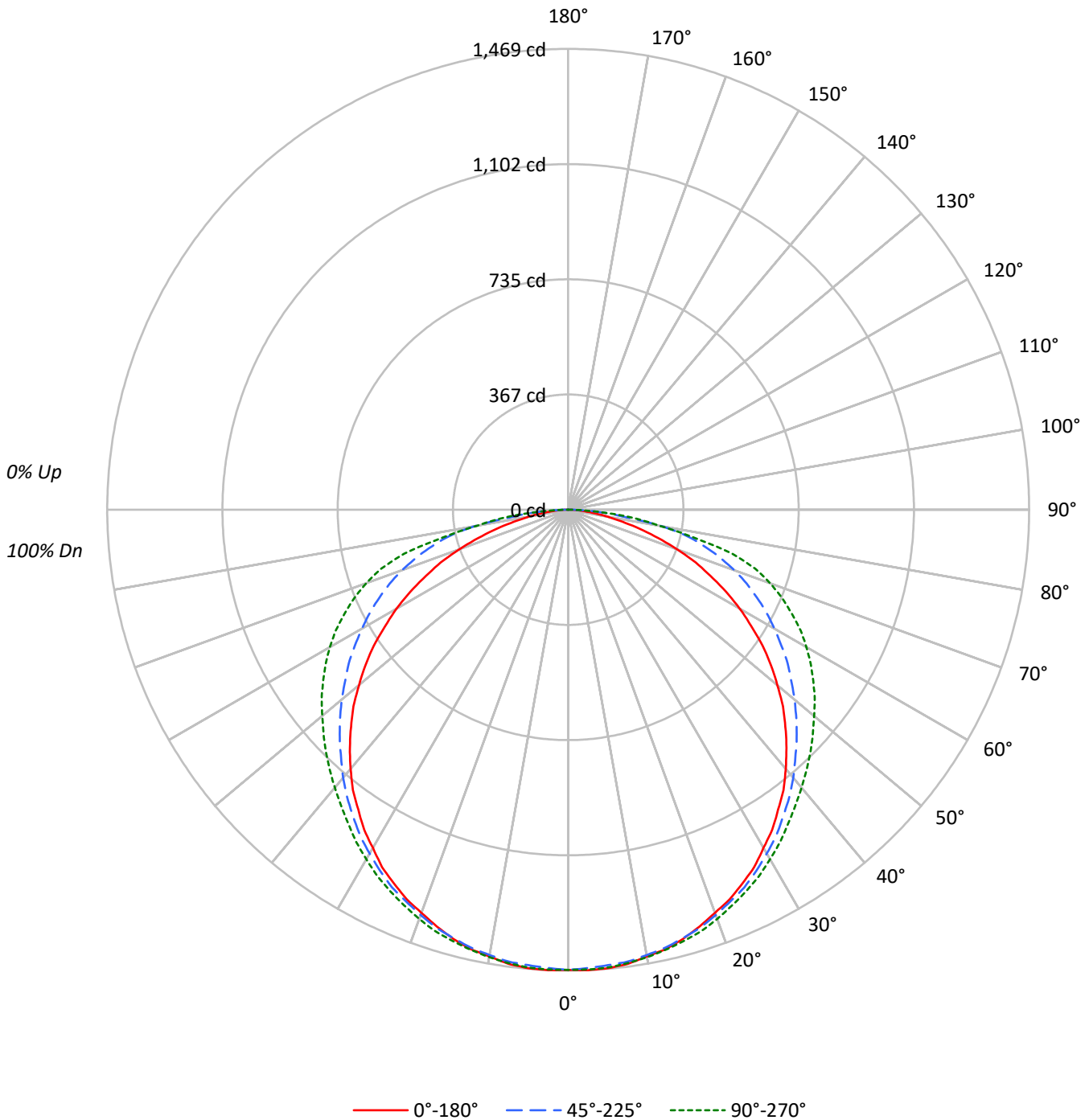
Input Watts (W): 55.149  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1974	1974	1974
5°	1981	1969	1978
10°	1976	1969	1979
15°	1973	1969	1982
20°	1958	1968	1988
25°	1951	1972	1992
30°	1934	1966	1999
35°	1916	1961	2007
40°	1894	1959	2032
45°	1862	1959	2078
50°	1821	1971	2141
55°	1775	2003	2236
60°	1700	2042	2360
65°	1591	2114	2505
70°	1447	2212	2694
75°	1227	2334	2815
80°	968	2349	2277
85°	715	1786	2001



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.2	3.0
10°-20°	400.5	8.6
20°-30°	612.4	13.1
30°-40°	748.7	16.0
40°-50°	798.0	17.1
50°-60°	763.0	16.4
60°-70°	646.3	13.9
70°-80°	434.4	9.3
80°-90°	122.5	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°	1152.1	24.7
0°-40°	1900.8	40.7
0°-60°	3461.7	74.2
0°-90°	4665.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4665.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1467	1467	1467	1467	1467	
5°	1467	1465	1458	1465	1465	139
15°	1416	1416	1414	1425	1423	399
25°	1314	1319	1328	1340	1342	606
35°	1166	1175	1194	1217	1222	731
45°	979	995	1030	1074	1092	755
55°	757	784	854	921	953	674
65°	500	551	664	752	787	496
75°	236	322	449	525	541	253
85°	46	95	116	125	130	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1467.0	1467.0	1467.0	1467.0	1467.0
2.5°	1469.3	1469.3	1462.4	1467.0	1467.0
5°	1467.0	1464.7	1457.7	1464.7	1464.7
7.5°	1460.1	1457.7	1453.1	1460.1	1457.7
10°	1446.2	1446.2	1441.5	1448.5	1448.5
12.5°	1434.6	1432.3	1430.0	1439.2	1436.9
15°	1416.1	1416.1	1413.8	1425.3	1423.0
17.5°	1392.9	1395.3	1397.6	1406.8	1409.1
20°	1367.5	1372.1	1374.4	1388.3	1388.3
22.5°	1344.4	1346.7	1351.3	1365.2	1365.2
25°	1314.3	1318.9	1328.2	1339.7	1342.0
27.5°	1284.2	1286.5	1298.1	1314.3	1316.6
30°	1244.9	1251.8	1265.7	1284.2	1286.5
32.5°	1210.2	1217.1	1233.3	1251.8	1256.4
35°	1166.2	1175.4	1194.0	1217.1	1221.7
37.5°	1126.9	1133.8	1156.9	1182.4	1189.3
40°	1078.3	1092.1	1115.3	1145.4	1156.9
42.5°	1029.7	1043.6	1071.3	1110.7	1124.5
45°	978.8	995.0	1029.7	1073.6	1092.1
47.5°	927.9	946.4	985.7	1036.6	1057.4
50°	870.0	893.2	941.7	999.6	1022.7
52.5°	814.5	842.2	895.5	960.3	990.3
55°	756.6	784.4	853.8	920.9	953.3
57.5°	691.8	728.9	805.2	881.6	916.3
60°	631.7	666.4	758.9	842.2	877.0
62.5°	566.9	613.2	712.7	800.6	835.3
65°	499.8	550.7	664.1	752.0	786.7
67.5°	439.6	495.2	615.5	703.4	738.1
70°	367.9	437.3	562.3	650.2	684.9
72.5°	300.8	377.2	506.7	592.4	624.7
75°	236.0	321.6	448.9	525.2	541.4
77.5°	175.9	266.1	388.7	421.1	409.6
80°	124.9	212.9	303.1	286.9	293.9
82.5°	81.0	162.0	187.4	212.9	219.8
85°	46.3	94.9	115.7	124.9	129.6
87.5°	20.8	34.7	46.3	46.3	44.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)