

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: P272097

Luminaire Tested: **24CZ2-55-UNV-L930-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P272097  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-15)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-55-UNV-L930-CD1-U  
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI  
Light Source: (112) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4597.0 lumens  
Efficiency: N/A  
Efficacy: 91.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

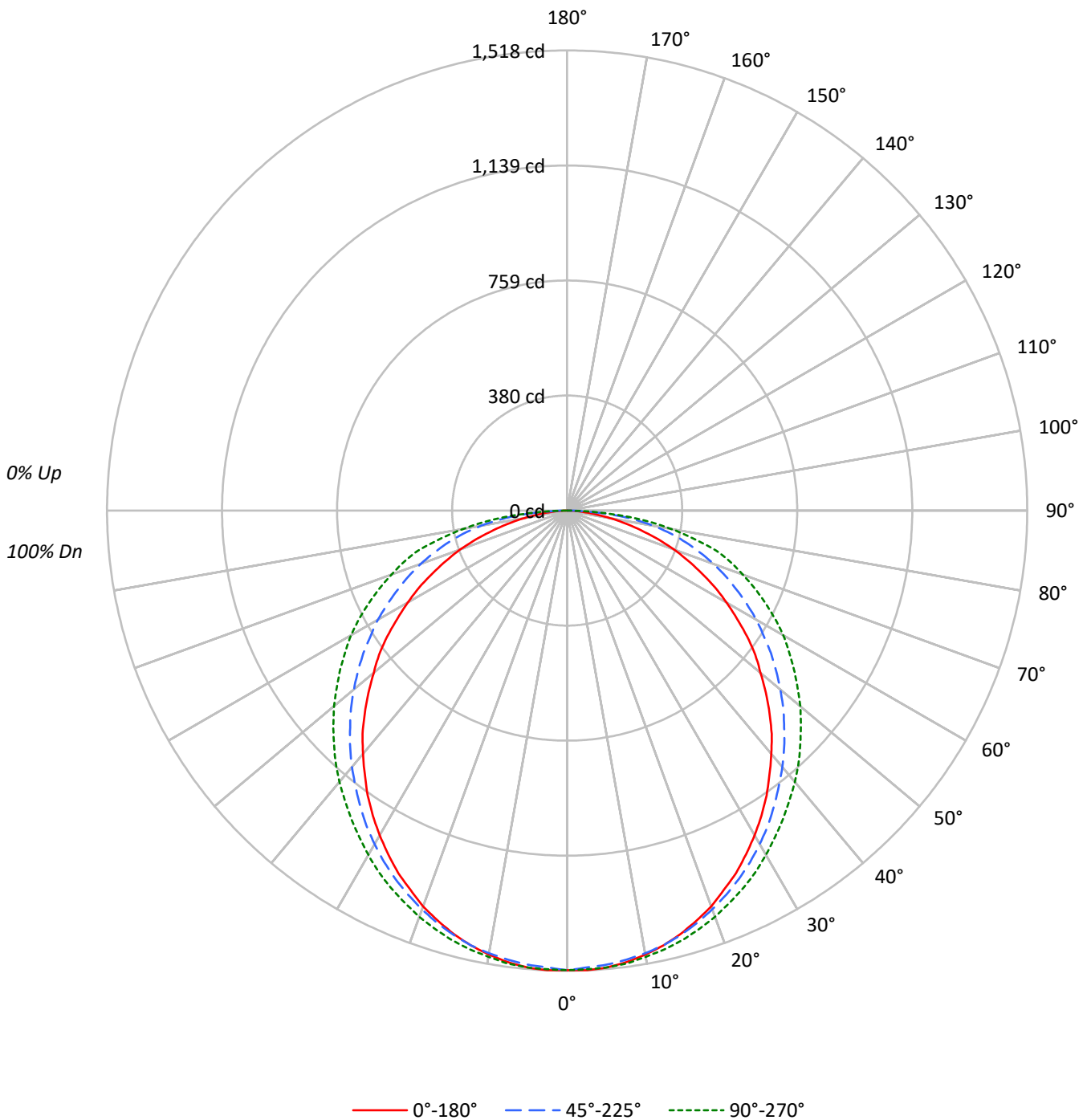
Input Watts (W): 50.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	89	92	89	87	88	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	36
7	64	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	37	31	57	45	36	30	43	36	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

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

	0°	45°	90°
0°	2040	2040	2040
5°	2044	2031	2044
10°	2032	2025	2042
15°	2014	2018	2044
20°	1990	2005	2042
25°	1959	1990	2040
30°	1922	1974	2038
35°	1884	1954	2039
40°	1840	1939	2052
45°	1796	1927	2069
50°	1743	1922	2101
55°	1700	1925	2143
60°	1633	1941	2216
65°	1559	1962	2297
70°	1476	2022	2424
75°	1316	2109	2648
80°	1123	2234	2707
85°	801	2214	2590



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.5	3.1
10°-20°	410.3	8.9
20°-30°	619.7	13.5
30°-40°	746.8	16.2
40°-50°	784.0	17.1
50°-60°	733.5	16.0
60°-70°	605.7	13.2
70°-80°	412.8	9.0
80°-90°	140.8	3.1
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°	1173.4	25.5
0°-40°	1920.2	41.8
0°-60°	3437.7	74.8
0°-90°	4597.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4597.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1516	1516	1516	1516	1516	
5°	1513	1512	1504	1513	1513	144
15°	1446	1447	1449	1464	1467	408
25°	1319	1325	1341	1367	1374	607
35°	1147	1159	1190	1229	1242	717
45°	944	964	1013	1068	1088	728
55°	724	753	821	888	914	647
65°	490	531	616	694	721	486
75°	253	311	406	482	509	270
85°	52	102	143	162	168	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1516.1	1516.1	1516.1	1516.1	1516.1
2.5°	1517.6	1516.1	1508.4	1516.1	1514.5
5°	1513.0	1511.5	1503.8	1513.0	1513.0
7.5°	1502.3	1502.3	1494.7	1505.4	1506.9
10°	1487.1	1487.1	1482.5	1494.7	1494.7
12.5°	1468.8	1468.8	1468.8	1481.0	1482.5
15°	1445.9	1447.4	1448.9	1464.2	1467.2
17.5°	1418.4	1421.5	1426.1	1444.4	1447.4
20°	1389.5	1392.5	1400.1	1421.5	1426.1
22.5°	1352.9	1360.5	1371.2	1395.6	1400.1
25°	1319.3	1325.4	1340.7	1366.6	1374.2
27.5°	1278.1	1287.3	1307.1	1334.6	1345.2
30°	1236.9	1246.1	1270.5	1302.5	1311.7
32.5°	1192.7	1206.4	1232.4	1265.9	1276.6
35°	1147.0	1159.2	1189.7	1229.3	1241.5
37.5°	1096.6	1113.4	1147.0	1189.7	1204.9
40°	1047.8	1066.1	1104.2	1150.0	1168.3
42.5°	999.0	1017.3	1060.0	1111.9	1130.2
45°	944.1	963.9	1012.7	1067.6	1087.5
47.5°	889.2	913.6	967.0	1024.9	1046.3
50°	832.8	860.2	918.2	979.2	1003.6
52.5°	782.4	808.4	869.4	934.9	957.8
55°	724.5	753.4	820.6	887.7	913.6
57.5°	665.0	697.0	768.7	841.9	867.8
60°	607.0	642.1	721.4	794.6	823.6
62.5°	550.6	585.7	668.0	744.3	773.3
65°	489.6	530.8	616.2	694.0	721.4
67.5°	431.6	475.9	565.8	642.1	669.6
70°	375.2	417.9	514.0	588.7	616.2
72.5°	314.2	363.0	459.1	536.9	565.8
75°	253.2	311.1	405.7	482.0	509.4
77.5°	196.8	256.2	350.8	413.3	427.1
80°	144.9	205.9	288.3	332.5	349.3
82.5°	93.0	154.0	219.6	251.7	265.4
85°	51.9	102.2	143.4	161.7	167.8
87.5°	21.4	44.2	58.0	65.6	65.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)