

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: P271976

Luminaire Tested: **22CZ2-24HE-UNV-L950-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: P271976  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-24HE-UNV-L950-CD1-U  
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI  
Light Source: (112) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2191.0 lumens  
Efficiency: N/A  
Efficacy: 114.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

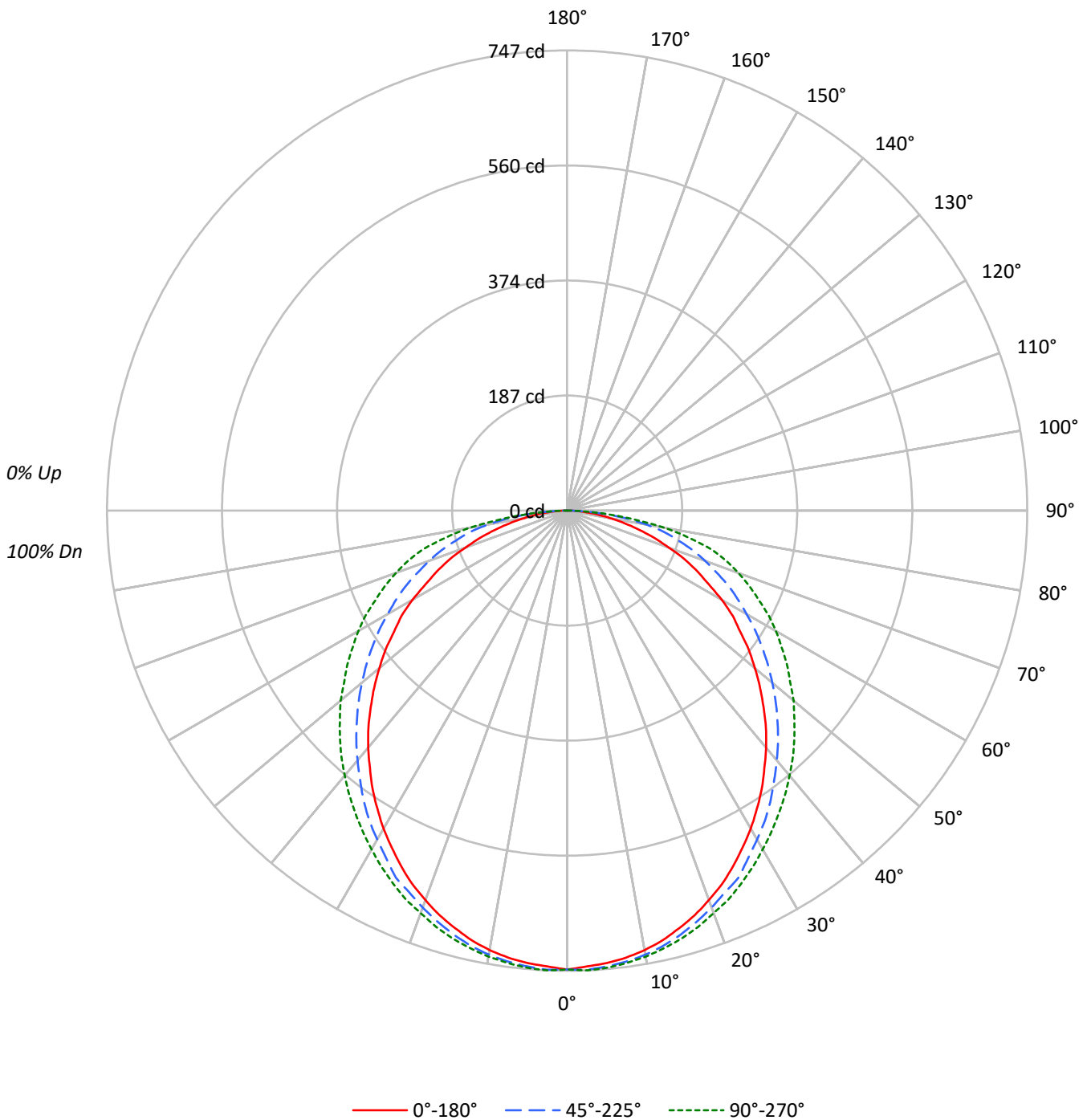
Input Watts (W): 19.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	2005	2005	2005
5°	1992	2006	2012
10°	1980	2000	2009
15°	1955	1985	2003
20°	1926	1964	1991
25°	1892	1953	1985
30°	1853	1916	1973
35°	1810	1891	1969
40°	1765	1860	1973
45°	1715	1838	1986
50°	1665	1819	2009
55°	1608	1811	2044
60°	1561	1810	2106
65°	1483	1840	2183
70°	1382	1875	2324
75°	1266	1939	2511
80°	1103	2022	2473
85°	966	1797	1964



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.5	3.2
10°-20°	200.7	9.2
20°-30°	301.3	13.7
30°-40°	360.0	16.4
40°-50°	374.3	17.1
50°-60°	346.9	15.8
60°-70°	284.6	13.0
70°-80°	192.4	8.8
80°-90°	60.4	2.8
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°	572.4	26.1
0°-40°	932.4	42.6
0°-60°	1653.6	75.5
0°-90°	2191.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2191.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	745	745	745	745	745	
5°	737	738	743	744	745	70
15°	702	705	713	717	719	198
25°	637	643	658	665	668	293
35°	551	558	576	593	599	344
45°	451	459	483	511	522	348
55°	343	354	386	420	436	308
65°	233	246	289	327	343	230
75°	122	142	186	224	242	129
85°	31	43	58	65	64	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	745.0	745.0	745.0	745.0	745.0
2.5°	740.7	742.8	746.1	747.1	747.1
5°	737.4	738.5	742.8	743.9	745.0
7.5°	732.0	734.2	738.5	739.6	740.7
10°	724.5	726.7	732.0	734.2	735.3
12.5°	714.8	716.9	723.4	726.7	727.7
15°	701.9	705.1	712.6	716.9	719.1
17.5°	688.9	692.2	699.7	706.2	708.3
20°	672.7	680.3	685.7	694.3	695.4
22.5°	656.6	660.9	670.6	679.2	683.5
25°	637.2	642.6	657.7	665.2	668.4
27.5°	616.7	624.2	636.1	647.9	652.3
30°	596.2	601.6	616.7	630.7	635.0
32.5°	573.6	581.1	597.3	611.3	617.8
35°	550.9	558.5	575.7	593.0	599.4
37.5°	526.1	534.7	552.0	572.5	581.1
40°	502.4	508.9	529.4	554.2	561.7
42.5°	477.6	485.2	506.7	533.7	542.3
45°	450.7	459.3	483.0	511.0	521.8
47.5°	424.8	433.4	459.3	487.3	500.2
50°	397.8	408.6	434.5	466.8	479.8
52.5°	372.0	381.7	410.8	444.2	456.0
55°	342.8	353.6	386.0	420.5	435.6
57.5°	319.1	326.7	362.2	397.8	412.9
60°	290.0	299.7	336.4	374.1	391.4
62.5°	258.7	274.9	312.7	351.5	368.7
65°	232.9	245.8	288.9	326.7	342.8
67.5°	205.9	219.9	262.0	301.9	320.2
70°	175.7	194.1	238.3	278.2	295.4
72.5°	148.8	168.2	213.5	252.3	270.6
75°	121.8	142.3	186.5	224.2	241.5
77.5°	96.0	118.6	161.7	190.8	201.6
80°	71.2	92.7	130.5	150.9	159.6
82.5°	49.6	67.9	96.0	106.7	108.9
85°	31.3	43.1	58.2	64.7	63.6
87.5°	14.0	17.2	21.6	23.7	22.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)