

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: P274742

Luminaire Tested: **22CZ2-24HE-RDP-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: P274742
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24HE-RDP-UNV-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 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: 1466.0 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

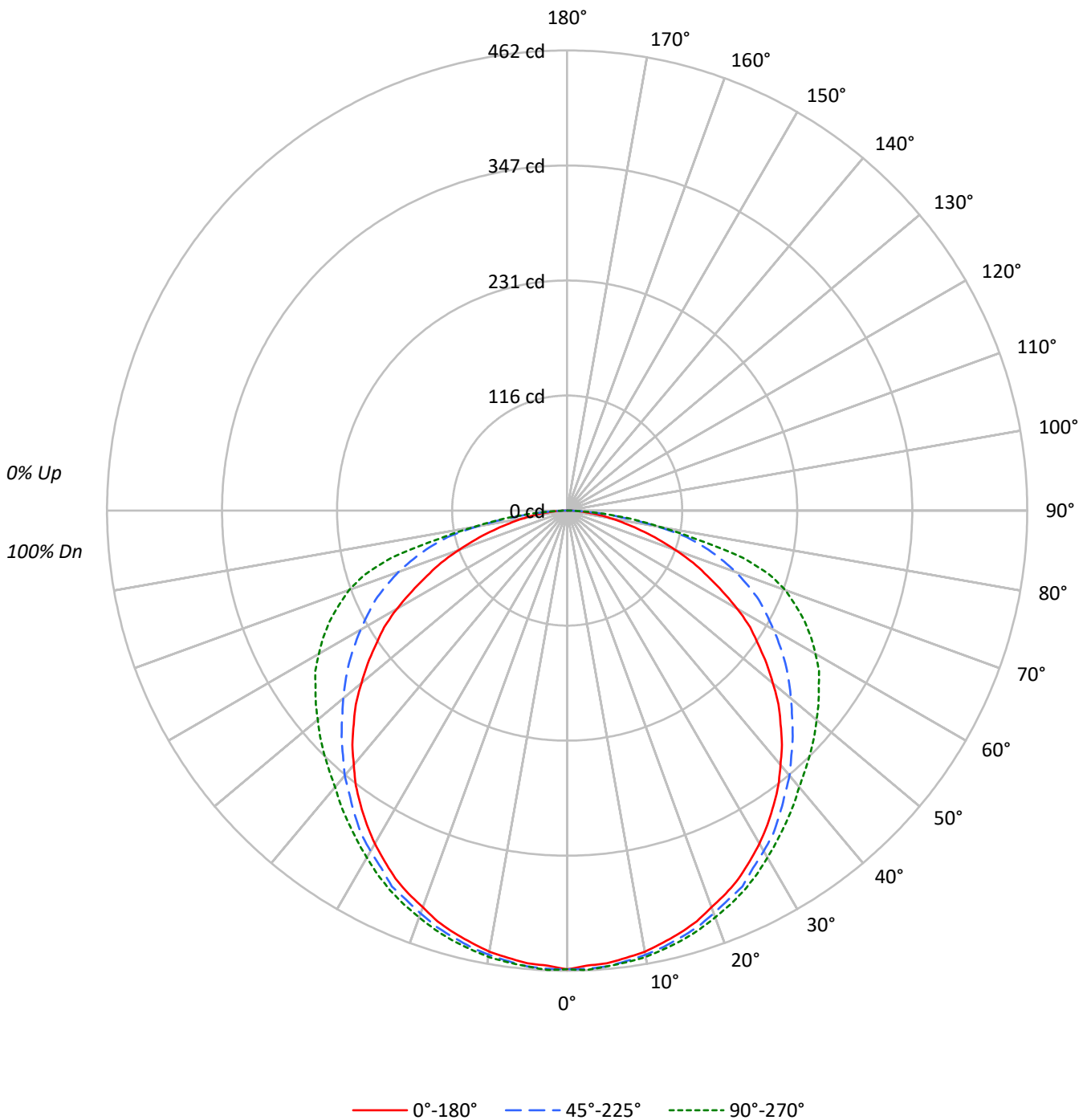
Input Watts (W): 19.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	1239	1239	1239
5°	1232	1241	1241
10°	1229	1238	1244
15°	1223	1235	1244
20°	1214	1232	1245
25°	1211	1236	1249
30°	1200	1226	1250
35°	1187	1222	1258
40°	1170	1220	1273
45°	1153	1219	1313
50°	1129	1228	1368
55°	1098	1255	1447
60°	1062	1288	1549
65°	989	1353	1675
70°	908	1417	1832
75°	796	1491	1895
80°	685	1421	1488
85°	599	1031	1133



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.6	3.0
10°-20°	125.1	8.5
20°-30°	190.8	13.0
30°-40°	233.0	15.9
40°-50°	249.1	17.0
50°-60°	240.5	16.4
60°-70°	207.0	14.1
70°-80°	140.0	9.6
80°-90°	37.0	2.5
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°	359.4	24.5
0°-40°	592.4	40.4
0°-60°	1082.0	73.8
0°-90°	1466.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1466.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	460	460	460	460	460	
5°	456	457	459	459	459	43
15°	439	440	443	445	446	124
25°	408	410	416	418	421	188
35°	361	364	372	380	383	226
45°	303	308	320	336	345	234
55°	234	242	268	294	308	210
65°	155	170	212	246	263	154
75°	77	101	143	173	182	82
85°	19	27	33	34	37	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	460.5	460.5	460.5	460.5	460.5
2.5°	457.3	458.3	460.5	460.5	461.6
5°	456.2	457.3	459.4	459.4	459.4
7.5°	452.9	454.0	456.2	457.3	457.3
10°	449.7	450.8	452.9	454.0	455.1
12.5°	444.3	445.4	448.6	450.8	450.8
15°	438.9	440.0	443.2	445.4	446.5
17.5°	432.5	434.6	437.8	440.0	441.1
20°	423.8	426.0	430.3	433.5	434.6
22.5°	416.3	418.4	422.8	426.0	428.1
25°	407.7	409.8	416.3	418.4	420.6
27.5°	396.9	399.0	404.4	408.7	412.0
30°	386.1	388.2	394.7	400.1	402.3
32.5°	374.2	377.5	385.0	389.3	392.6
35°	361.3	364.5	372.1	379.6	382.8
37.5°	348.3	351.6	359.1	368.8	373.1
40°	333.2	337.6	347.3	360.2	362.4
42.5°	319.2	324.6	333.2	348.3	353.7
45°	303.0	308.4	320.3	336.5	345.1
47.5°	287.9	293.3	306.3	325.7	336.5
50°	269.6	277.2	293.3	316.0	326.8
52.5°	252.4	258.8	280.4	305.2	318.1
55°	234.0	241.6	267.5	294.4	308.4
57.5°	217.8	224.3	253.4	283.6	299.8
60°	197.4	206.0	239.4	271.8	287.9
62.5°	175.8	188.7	225.4	258.8	276.1
65°	155.3	170.4	212.5	245.9	263.1
67.5°	137.0	153.1	196.3	231.9	248.0
70°	115.4	135.9	180.1	214.6	232.9
72.5°	96.0	118.6	161.8	196.3	212.5
75°	76.6	101.4	143.4	172.6	182.3
77.5°	59.3	83.0	122.9	131.6	132.6
80°	44.2	65.8	91.7	92.7	96.0
82.5°	30.2	46.4	59.3	64.7	65.8
85°	19.4	27.0	33.4	34.5	36.7
87.5°	8.6	9.7	11.9	10.8	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)