

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: P272024

Luminaire Tested: **22CZ2-24-S-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: P272024
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24-S-UNV-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (56) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2343.0 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

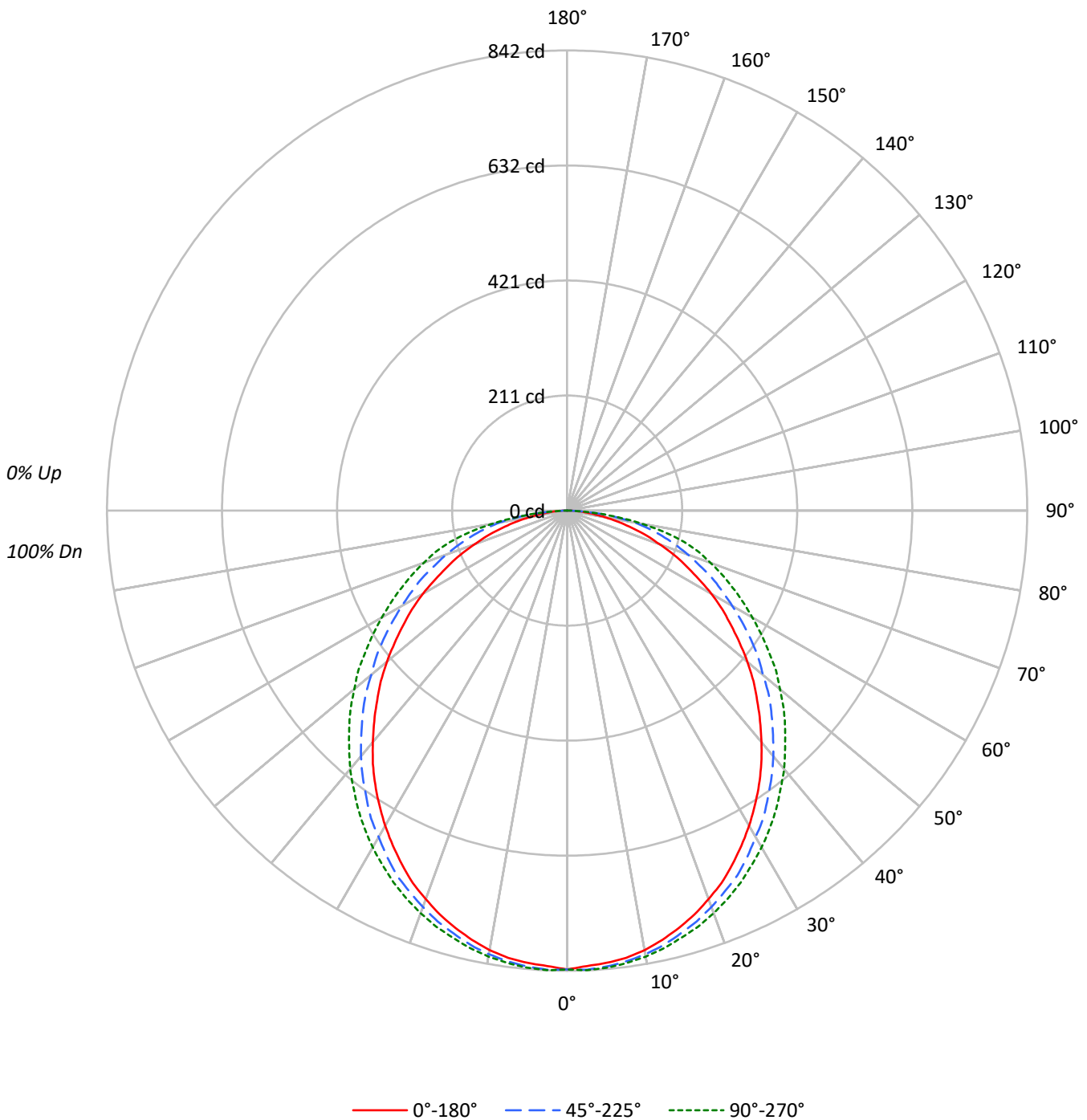
Input Watts (W): 21.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2259	2259	2259
5°	2244	2262	2268
10°	2231	2252	2264
15°	2202	2232	2254
20°	2166	2210	2245
25°	2123	2188	2230
30°	2069	2143	2211
35°	2011	2104	2190
40°	1943	2062	2170
45°	1872	2014	2147
50°	1803	1959	2128
55°	1718	1923	2113
60°	1641	1877	2106
65°	1531	1866	2130
70°	1411	1849	2194
75°	1273	1876	2307
80°	1102	1931	2168
85°	911	1621	1621



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.4	3.4
10°-20°	225.9	9.6
20°-30°	338.1	14.4
30°-40°	400.4	17.1
40°-50°	408.0	17.4
50°-60°	365.7	15.6
60°-70°	286.3	12.2
70°-80°	184.6	7.9
80°-90°	54.5	2.3
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°	643.4	27.5
0°-40°	1043.8	44.5
0°-60°	1817.5	77.6
0°-90°	2343.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2343.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	840	840	840	840	840	
5°	831	833	837	838	840	79
15°	790	795	801	808	809	223
25°	715	722	737	747	751	329
35°	612	620	641	660	667	383
45°	492	503	529	556	564	380
55°	366	378	410	438	450	328
65°	240	255	293	321	334	239
75°	122	141	180	211	222	131
85°	30	40	52	52	52	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	839.6	839.6	839.6	839.6	839.6
2.5°	834.1	836.3	840.7	841.8	841.8
5°	830.8	833.0	837.4	838.5	839.6
7.5°	825.4	826.5	831.9	834.1	835.2
10°	816.6	818.8	824.3	827.5	828.6
12.5°	804.6	807.9	814.4	818.8	819.9
15°	790.4	794.7	801.3	807.9	809.0
17.5°	775.1	779.4	788.2	795.8	798.0
20°	756.5	762.0	771.8	780.5	783.8
22.5°	737.9	742.3	754.3	765.2	768.5
25°	714.9	721.5	736.8	746.6	751.0
27.5°	690.9	698.5	713.9	727.0	731.3
30°	665.8	673.4	689.8	706.2	711.7
32.5°	639.5	648.3	667.9	684.3	689.8
35°	612.2	619.8	640.6	660.3	666.8
37.5°	583.8	590.3	614.4	635.1	641.7
40°	553.2	561.9	587.0	611.1	617.7
42.5°	522.5	532.4	557.5	583.8	590.3
45°	491.9	502.9	529.1	556.4	564.1
47.5°	462.4	471.2	500.7	526.9	537.8
50°	430.7	439.5	467.9	497.4	508.3
52.5°	397.9	409.9	440.6	469.0	482.1
55°	366.2	378.2	409.9	438.4	450.4
57.5°	336.7	346.5	379.3	408.9	420.9
60°	305.0	313.7	348.7	380.4	391.4
62.5°	271.1	284.2	320.3	349.8	362.9
65°	240.5	254.7	293.0	321.4	334.5
67.5°	212.1	225.2	262.4	293.0	307.2
70°	179.3	196.8	235.0	265.6	278.8
72.5°	153.0	168.4	207.7	238.3	252.5
75°	122.4	141.0	180.4	211.0	221.9
77.5°	97.3	115.9	153.0	177.1	182.6
80°	71.1	89.6	124.6	136.6	139.9
82.5°	48.1	65.6	89.6	92.9	94.0
85°	29.5	40.4	52.5	52.5	52.5
87.5°	14.2	16.4	18.6	17.5	17.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)