

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: P277443

Luminaire Tested: **22CZ2-24HE-S-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277443
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: 22CZ2-24HE-S-UNV-L92765-W2A1-U-2700K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1877.0 lumens
Efficiency: N/A
Efficacy: 106.8 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

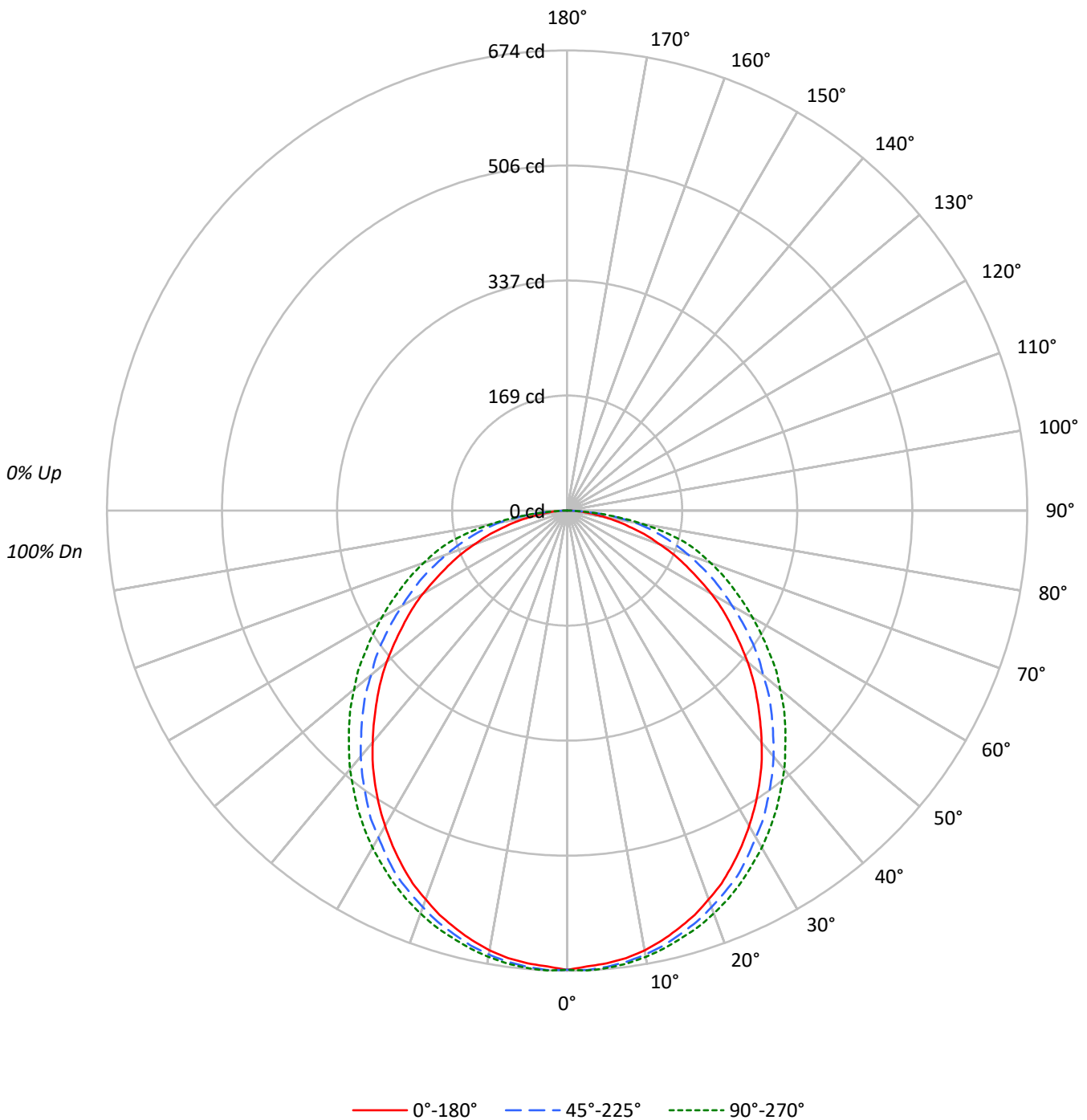
Input Watts (W): 17.577
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1810	1810	1810
5°	1798	1812	1817
10°	1788	1804	1814
15°	1764	1788	1806
20°	1735	1771	1798
25°	1701	1753	1787
30°	1657	1717	1771
35°	1611	1686	1755
40°	1557	1652	1738
45°	1500	1613	1720
50°	1445	1569	1705
55°	1377	1541	1693
60°	1315	1504	1687
65°	1227	1494	1706
70°	1130	1482	1757
75°	1020	1502	1849
80°	882	1547	1737
85°	729	1297	1297



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.6	3.4
10°-20°	181.0	9.6
20°-30°	270.8	14.4
30°-40°	320.7	17.1
40°-50°	326.9	17.4
50°-60°	293.0	15.6
60°-70°	229.4	12.2
70°-80°	147.9	7.9
80°-90°	43.7	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°	515.4	27.5
0°-40°	836.2	44.5
0°-60°	1456.0	77.6
0°-90°	1877.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1877.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	673	673	673	673	673	
5°	666	667	671	672	673	63
15°	633	637	642	647	648	179
25°	573	578	590	598	602	264
35°	490	497	513	529	534	306
45°	394	403	424	446	452	304
55°	293	303	328	351	361	263
65°	193	204	235	258	268	191
75°	98	113	144	169	178	105
85°	24	32	42	42	42	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	672.6	672.6	672.6	672.6	672.6
2.5°	668.2	670.0	673.5	674.3	674.3
5°	665.6	667.3	670.8	671.7	672.6
7.5°	661.2	662.1	666.5	668.2	669.1
10°	654.2	655.9	660.3	663.0	663.8
12.5°	644.6	647.2	652.4	655.9	656.8
15°	633.2	636.7	641.9	647.2	648.1
17.5°	620.9	624.4	631.4	637.6	639.3
20°	606.0	610.4	618.3	625.3	627.9
22.5°	591.1	594.6	604.3	613.0	615.7
25°	572.8	578.0	590.3	598.1	601.7
27.5°	553.5	559.6	571.9	582.4	585.9
30°	533.3	539.5	552.6	565.7	570.1
32.5°	512.3	519.3	535.1	548.2	552.6
35°	490.4	496.6	513.2	529.0	534.2
37.5°	467.7	472.9	492.2	508.8	514.1
40°	443.1	450.1	470.3	489.6	494.8
42.5°	418.6	426.5	446.6	467.7	472.9
45°	394.1	402.9	423.9	445.8	451.9
47.5°	370.4	377.5	401.1	422.1	430.9
50°	345.1	352.1	374.8	398.5	407.2
52.5°	318.8	328.4	352.9	375.7	386.2
55°	293.4	303.0	328.4	351.2	360.8
57.5°	269.7	277.6	303.9	327.5	337.2
60°	244.3	251.3	279.4	304.8	313.5
62.5°	217.2	227.7	256.6	280.2	290.8
65°	192.7	204.1	234.7	257.5	268.0
67.5°	169.9	180.4	210.2	234.7	246.1
70°	143.6	157.6	188.3	212.8	223.3
72.5°	122.6	134.9	166.4	190.9	202.3
75°	98.1	113.0	144.5	169.0	177.8
77.5°	77.9	92.8	122.6	141.9	146.3
80°	56.9	71.8	99.8	109.5	112.1
82.5°	38.5	52.5	71.8	74.4	75.3
85°	23.6	32.4	42.0	42.0	42.0
87.5°	11.4	13.1	14.9	14.0	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)