

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: P277157

Luminaire Tested: **22CZ2-24HE-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277157
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-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2146.0 lumens
Efficiency: N/A
Efficacy: 122.1 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

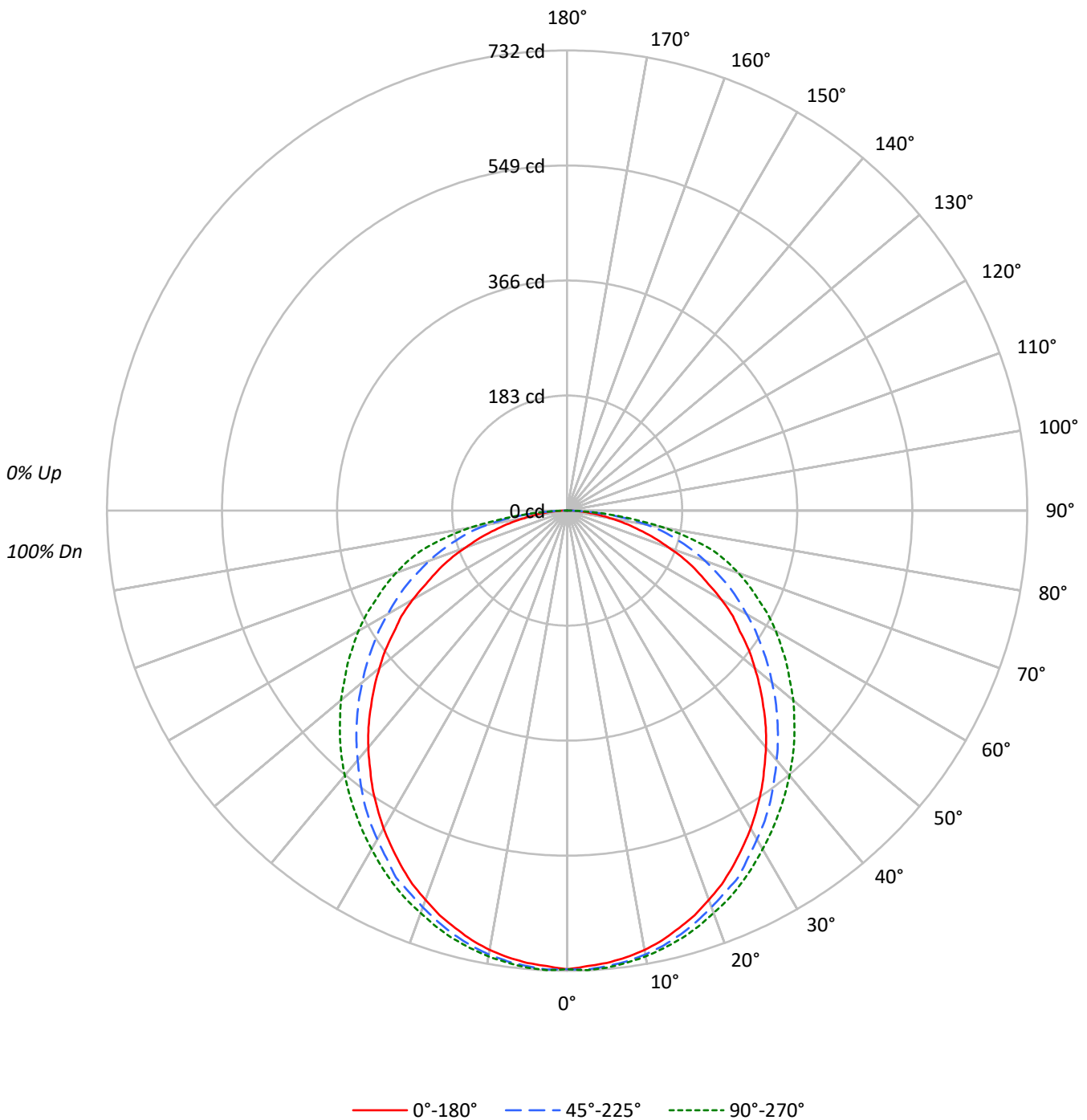
Input Watts (W): 17.577
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1964	1964	1964
5°	1951	1965	1971
10°	1939	1959	1968
15°	1915	1945	1962
20°	1887	1923	1950
25°	1853	1912	1944
30°	1815	1877	1933
35°	1773	1852	1929
40°	1729	1821	1933
45°	1680	1800	1945
50°	1631	1782	1967
55°	1575	1773	2001
60°	1529	1773	2063
65°	1452	1802	2138
70°	1354	1836	2276
75°	1240	1900	2459
80°	1080	1980	2422
85°	945	1760	1924



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.0	3.2
10°-20°	196.6	9.2
20°-30°	295.1	13.7
30°-40°	352.6	16.4
40°-50°	366.6	17.1
50°-60°	339.8	15.8
60°-70°	278.7	13.0
70°-80°	188.4	8.8
80°-90°	59.2	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°	560.6	26.1
0°-40°	913.2	42.6
0°-60°	1619.6	75.5
0°-90°	2146.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2146.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	722	723	728	729	730	69
15°	687	691	698	702	704	194
25°	624	629	644	652	655	287
35°	540	547	564	581	587	337
45°	441	450	473	500	511	341
55°	336	346	378	412	427	302
65°	228	241	283	320	336	225
75°	119	139	183	220	236	127
85°	31	42	57	63	62	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	729.7	729.7	729.7	729.7	729.7
2.5°	725.5	727.6	730.7	731.8	731.8
5°	722.3	723.3	727.6	728.6	729.7
7.5°	717.0	719.1	723.3	724.4	725.5
10°	709.6	711.7	717.0	719.1	720.2
12.5°	700.1	702.2	708.6	711.7	712.8
15°	687.4	690.6	698.0	702.2	704.3
17.5°	674.8	677.9	685.3	691.7	693.8
20°	658.9	666.3	671.6	680.0	681.1
22.5°	643.1	647.3	656.8	665.3	669.5
25°	624.1	629.4	644.1	651.5	654.7
27.5°	604.0	611.4	623.0	634.6	638.9
30°	584.0	589.2	604.0	617.7	622.0
32.5°	561.8	569.2	585.0	598.7	605.1
35°	539.6	547.0	563.9	580.8	587.1
37.5°	515.3	523.8	540.7	560.7	569.2
40°	492.1	498.4	518.5	542.8	550.2
42.5°	467.8	475.2	496.3	522.7	531.2
45°	441.4	449.8	473.1	500.5	511.1
47.5°	416.1	424.5	449.8	477.3	490.0
50°	389.7	400.2	425.6	457.2	469.9
52.5°	364.3	373.8	402.3	435.1	446.7
55°	335.8	346.4	378.0	411.8	426.6
57.5°	312.6	320.0	354.8	389.7	404.4
60°	284.1	293.6	329.5	366.4	383.3
62.5°	253.4	269.3	306.2	344.2	361.1
65°	228.1	240.8	283.0	320.0	335.8
67.5°	201.7	215.4	256.6	295.7	313.6
70°	172.1	190.1	233.4	272.4	289.3
72.5°	145.7	164.7	209.1	247.1	265.1
75°	119.3	139.4	182.7	219.6	236.5
77.5°	94.0	116.2	158.4	186.9	197.5
80°	69.7	90.8	127.8	147.8	156.3
82.5°	48.6	66.5	94.0	104.5	106.7
85°	30.6	42.2	57.0	63.4	62.3
87.5°	13.7	16.9	21.1	23.2	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)