

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: P277152

Luminaire Tested: **22CZ2-20HE-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277152
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: 22CZ2-20HE-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: 1902.0 lumens
Efficiency: N/A
Efficacy: 122.5 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

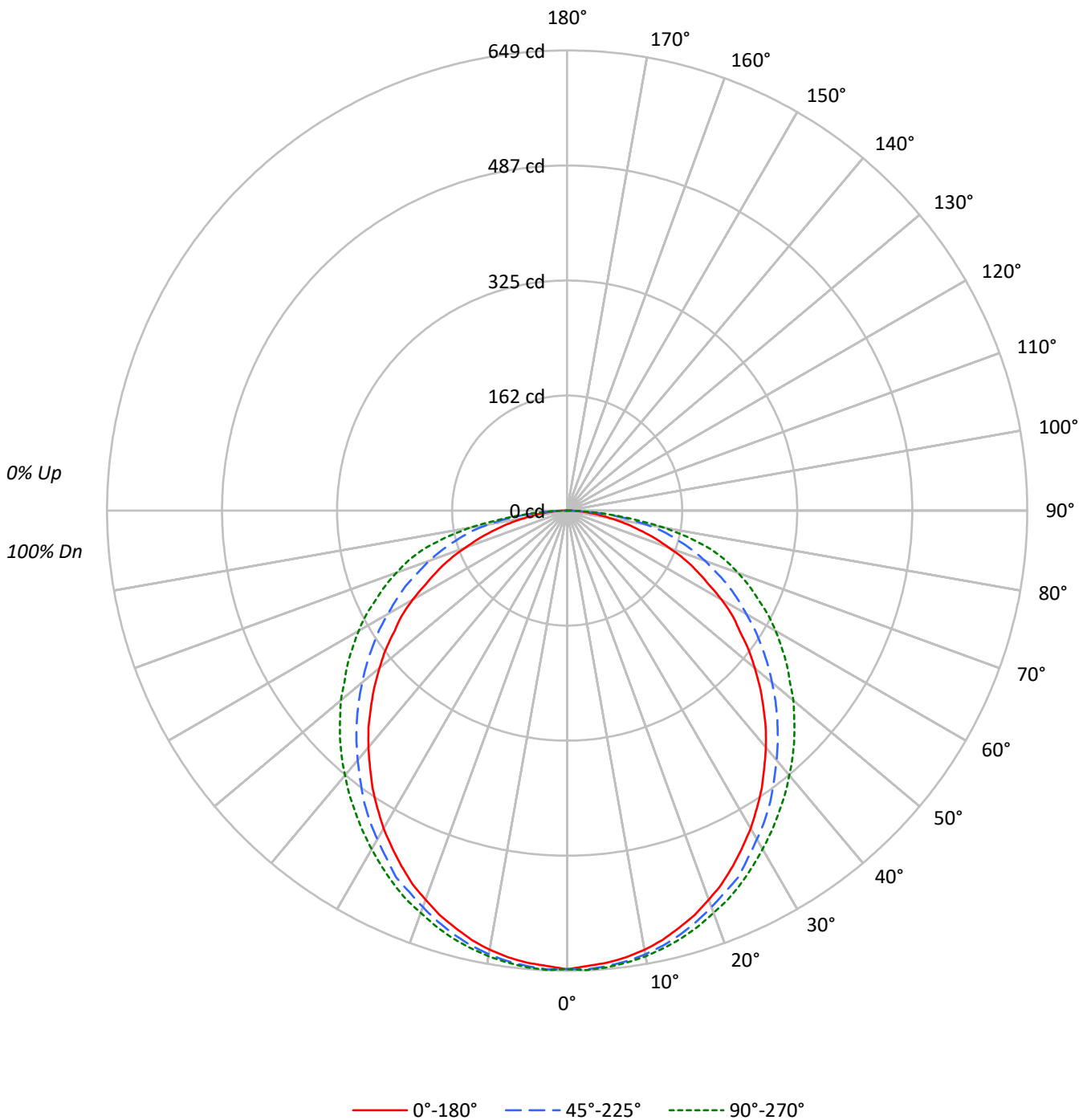
Input Watts (W): 15.531
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1740	1740	1740
5°	1729	1742	1747
10°	1718	1736	1744
15°	1697	1723	1739
20°	1672	1704	1729
25°	1642	1695	1723
30°	1608	1663	1713
35°	1571	1642	1710
40°	1532	1614	1713
45°	1489	1596	1724
50°	1446	1579	1744
55°	1396	1572	1774
60°	1355	1572	1828
65°	1287	1597	1895
70°	1201	1627	2017
75°	1100	1683	2179
80°	958	1754	2146
85°	837	1559	1704



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.2	3.2
10°-20°	174.2	9.2
20°-30°	261.5	13.7
30°-40°	312.5	16.4
40°-50°	324.9	17.1
50°-60°	301.2	15.8
60°-70°	247.0	13.0
70°-80°	167.0	8.8
80°-90°	52.5	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°	496.9	26.1
0°-40°	809.4	42.6
0°-60°	1435.5	75.5
0°-90°	1902.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1902.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	647	647	647	647	647	
5°	640	641	645	646	647	61
15°	609	612	619	622	624	172
25°	553	558	571	578	580	255
35°	478	485	500	515	520	299
45°	391	399	419	444	453	302
55°	298	307	335	365	378	267
65°	202	213	251	284	298	200
75°	106	124	162	195	210	112
85°	27	37	50	56	55	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	646.7	646.7	646.7	646.7	646.7
2.5°	643.0	644.8	647.7	648.6	648.6
5°	640.2	641.1	644.8	645.8	646.7
7.5°	635.5	637.4	641.1	642.0	643.0
10°	628.9	630.8	635.5	637.4	638.3
12.5°	620.5	622.4	628.0	630.8	631.7
15°	609.3	612.1	618.6	622.4	624.3
17.5°	598.0	600.9	607.4	613.0	614.9
20°	584.0	590.6	595.2	602.7	603.7
22.5°	570.0	573.7	582.1	589.6	593.4
25°	553.1	557.8	570.9	577.5	580.3
27.5°	535.3	541.9	552.2	562.5	566.2
30°	517.6	522.2	535.3	547.5	551.3
32.5°	497.9	504.5	518.5	530.7	536.3
35°	478.3	484.8	499.8	514.8	520.4
37.5°	456.7	464.2	479.2	497.0	504.5
40°	436.1	441.8	459.5	481.1	487.6
42.5°	414.6	421.2	439.9	463.3	470.8
45°	391.2	398.7	419.3	443.6	453.0
47.5°	368.7	376.2	398.7	423.0	434.3
50°	345.4	354.7	377.2	405.2	416.5
52.5°	322.9	331.3	356.6	385.6	395.9
55°	297.6	307.0	335.1	365.0	378.1
57.5°	277.0	283.6	314.5	345.4	358.5
60°	251.8	260.2	292.0	324.8	339.7
62.5°	224.6	238.7	271.4	305.1	320.1
65°	202.2	213.4	250.8	283.6	297.6
67.5°	178.8	190.9	227.4	262.1	278.0
70°	152.6	168.5	206.8	241.5	256.4
72.5°	129.2	146.0	185.3	219.0	234.9
75°	105.8	123.5	161.9	194.7	209.6
77.5°	83.3	103.0	140.4	165.7	175.0
80°	61.8	80.5	113.2	131.0	138.5
82.5°	43.1	59.0	83.3	92.7	94.5
85°	27.1	37.4	50.5	56.2	55.2
87.5°	12.2	15.0	18.7	20.6	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)