

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: P277331

Luminaire Tested: **22CZ2-29HE-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277331
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: 22CZ2-29HE-S-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2801.0 lumens
Efficiency: N/A
Efficacy: 134.5 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

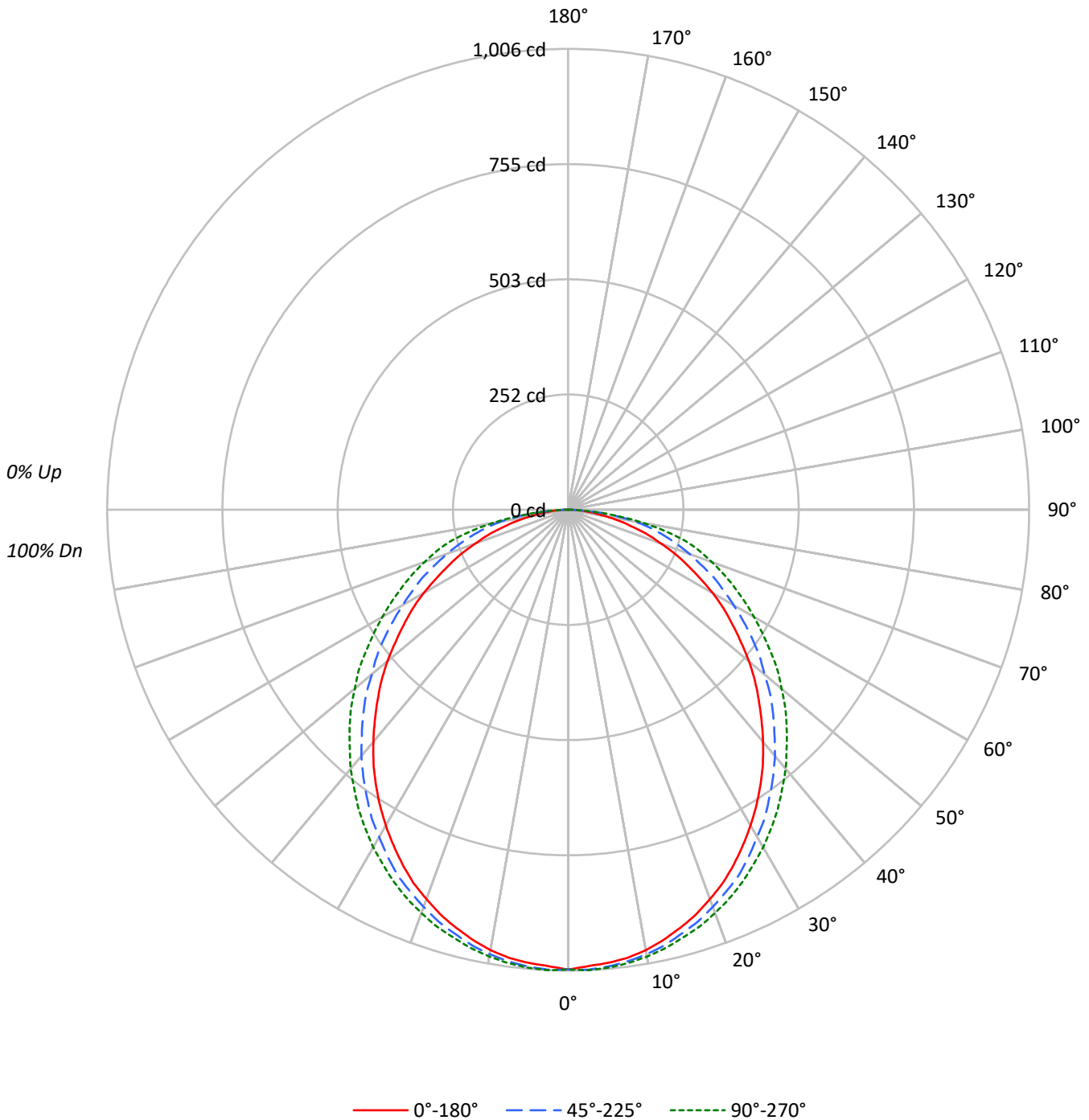
Input Watts (W): 20.832
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2701	2701	2701
5°	2683	2704	2711
10°	2667	2693	2707
15°	2632	2669	2694
20°	2590	2642	2683
25°	2538	2615	2666
30°	2473	2562	2644
35°	2404	2516	2619
40°	2323	2465	2594
45°	2238	2407	2567
50°	2156	2341	2544
55°	2054	2299	2526
60°	1962	2244	2518
65°	1831	2230	2546
70°	1686	2211	2622
75°	1522	2242	2758
80°	1316	2309	2593
85°	1090	1936	1936



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.9	3.4
10°-20°	270.1	9.6
20°-30°	404.2	14.4
30°-40°	478.6	17.1
40°-50°	487.8	17.4
50°-60°	437.2	15.6
60°-70°	342.3	12.2
70°-80°	220.7	7.9
80°-90°	65.2	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°	769.2	27.5
0°-40°	1247.8	44.5
0°-60°	2172.8	77.6
0°-90°	2801.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2801.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1004	1004	1004	1004	1004	
5°	993	996	1001	1002	1004	94
15°	945	950	958	966	967	266
25°	855	862	881	893	898	393
35°	732	741	766	789	797	457
45°	588	601	632	665	674	454
55°	438	452	490	524	538	393
65°	288	304	350	384	400	286
75°	146	169	216	252	265	157
85°	35	48	63	63	63	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1003.7	1003.7	1003.7	1003.7	1003.7
2.5°	997.2	999.8	1005.0	1006.3	1006.3
5°	993.2	995.8	1001.1	1002.4	1003.7
7.5°	986.7	988.0	994.5	997.2	998.5
10°	976.2	978.9	985.4	989.3	990.6
12.5°	961.9	965.8	973.6	978.9	980.2
15°	944.9	950.1	957.9	965.8	967.1
17.5°	926.6	931.8	942.3	951.4	954.0
20°	904.4	910.9	922.7	933.1	937.0
22.5°	882.1	887.4	901.7	914.8	918.7
25°	854.7	862.5	880.8	892.6	897.8
27.5°	825.9	835.1	853.4	869.1	874.3
30°	795.9	805.0	824.6	844.2	850.8
32.5°	764.5	775.0	798.5	818.1	824.6
35°	731.9	741.0	765.8	789.4	797.2
37.5°	697.9	705.7	734.5	759.3	767.1
40°	661.3	671.7	701.8	730.5	738.4
42.5°	624.7	636.5	666.5	697.9	705.7
45°	588.1	601.2	632.5	665.2	674.4
47.5°	552.8	563.3	598.6	629.9	643.0
50°	514.9	525.4	559.3	594.6	607.7
52.5°	475.7	490.1	526.7	560.7	576.3
55°	437.8	452.2	490.1	524.1	538.4
57.5°	402.5	414.3	453.5	488.8	503.1
60°	364.6	375.1	416.9	454.8	467.9
62.5°	324.1	339.8	382.9	418.2	433.9
65°	287.5	304.5	350.2	384.2	399.9
67.5°	253.5	269.2	313.7	350.2	367.2
70°	214.3	235.2	281.0	317.6	333.3
72.5°	183.0	201.3	248.3	284.9	301.9
75°	146.4	168.6	215.6	252.2	265.3
77.5°	116.3	138.5	183.0	211.7	218.2
80°	84.9	107.2	149.0	163.4	167.3
82.5°	57.5	78.4	107.2	111.1	112.4
85°	35.3	48.4	62.7	62.7	62.7
87.5°	17.0	19.6	22.2	20.9	20.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)