

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: P277327

Luminaire Tested: **22CZ2-24HE-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277327
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-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2515.0 lumens
Efficiency: N/A
Efficacy: 140.1 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

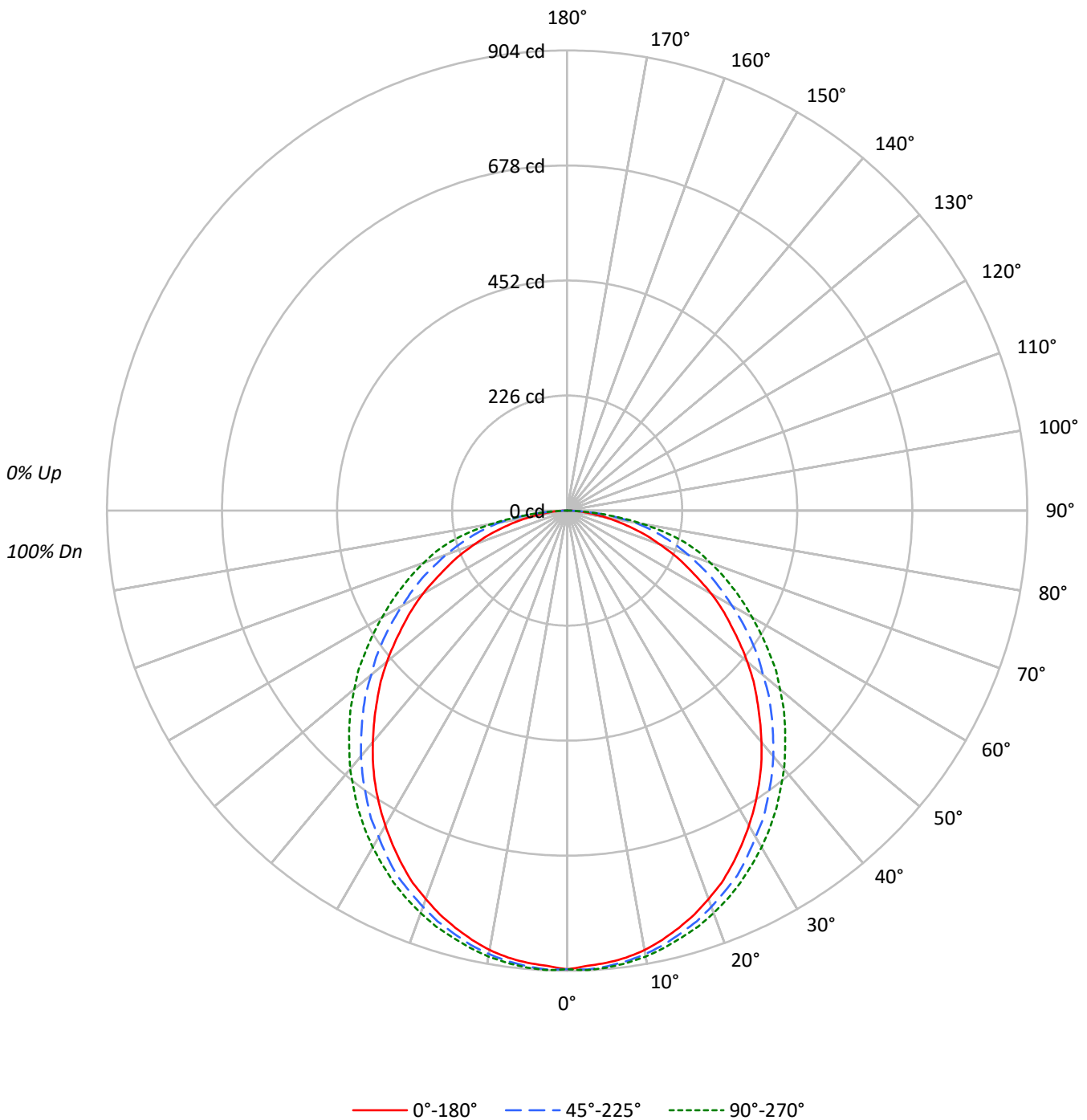
Input Watts (W): 17.949
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2425	2425	2425
5°	2409	2428	2434
10°	2395	2418	2431
15°	2364	2396	2419
20°	2325	2372	2410
25°	2279	2348	2394
30°	2220	2301	2374
35°	2159	2259	2351
40°	2086	2213	2329
45°	2009	2161	2304
50°	1935	2102	2285
55°	1844	2064	2268
60°	1762	2014	2261
65°	1644	2003	2287
70°	1514	1985	2354
75°	1366	2013	2477
80°	1182	2073	2328
85°	979	1738	1738



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.2	3.4
10°-20°	242.5	9.6
20°-30°	362.9	14.4
30°-40°	429.8	17.1
40°-50°	438.0	17.4
50°-60°	392.5	15.6
60°-70°	307.3	12.2
70°-80°	198.2	7.9
80°-90°	58.5	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°	690.7	27.5
0°-40°	1120.4	44.5
0°-60°	1950.9	77.6
0°-90°	2515.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2515.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	901	901	901	901	901	
5°	892	894	899	900	901	85
15°	848	853	860	867	868	239
25°	767	774	791	802	806	353
35°	657	665	688	709	716	411
45°	528	540	568	597	606	408
55°	393	406	440	470	484	352
65°	258	273	314	345	359	256
75°	131	151	194	226	238	141
85°	32	43	56	56	56	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	901.2	901.2	901.2	901.2	901.2
2.5°	895.3	897.7	902.4	903.5	903.5
5°	891.8	894.2	898.9	900.0	901.2
7.5°	885.9	887.1	893.0	895.3	896.5
10°	876.6	878.9	884.8	888.3	889.5
12.5°	863.7	867.2	874.2	878.9	880.1
15°	848.4	853.1	860.1	867.2	868.3
17.5°	832.0	836.7	846.1	854.3	856.6
20°	812.0	817.9	828.4	837.8	841.4
22.5°	792.1	796.8	809.7	821.4	824.9
25°	767.4	774.5	790.9	801.5	806.2
27.5°	741.6	749.8	766.3	780.3	785.0
30°	714.6	722.8	740.4	758.0	763.9
32.5°	686.5	695.9	717.0	734.6	740.4
35°	657.1	665.3	687.6	708.8	715.8
37.5°	626.6	633.7	659.5	681.8	688.8
40°	593.8	603.1	630.1	656.0	663.0
42.5°	560.9	571.5	598.5	626.6	633.7
45°	528.0	539.8	567.9	597.3	605.5
47.5°	496.4	505.8	537.4	565.6	577.3
50°	462.3	471.7	502.2	533.9	545.7
52.5°	427.1	440.0	472.9	503.4	517.5
55°	393.1	406.0	440.0	470.5	483.5
57.5°	361.4	372.0	407.2	438.9	451.8
60°	327.4	336.8	374.3	408.4	420.1
62.5°	291.0	305.1	343.8	375.5	389.6
65°	258.2	273.4	314.5	345.0	359.1
67.5°	227.6	241.7	281.6	314.5	329.7
70°	192.4	211.2	252.3	285.1	299.2
72.5°	164.3	180.7	223.0	255.8	271.1
75°	131.4	151.4	193.6	226.5	238.2
77.5°	104.4	124.4	164.3	190.1	196.0
80°	76.3	96.2	133.8	146.7	150.2
82.5°	51.6	70.4	96.2	99.7	100.9
85°	31.7	43.4	56.3	56.3	56.3
87.5°	15.3	17.6	19.9	18.8	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)