

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: P277396

Luminaire Tested: **22CZ2-24HE-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277396
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-L82765-W2A1-U-5700K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2498.0 lumens
Efficiency: N/A
Efficacy: 138.5 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

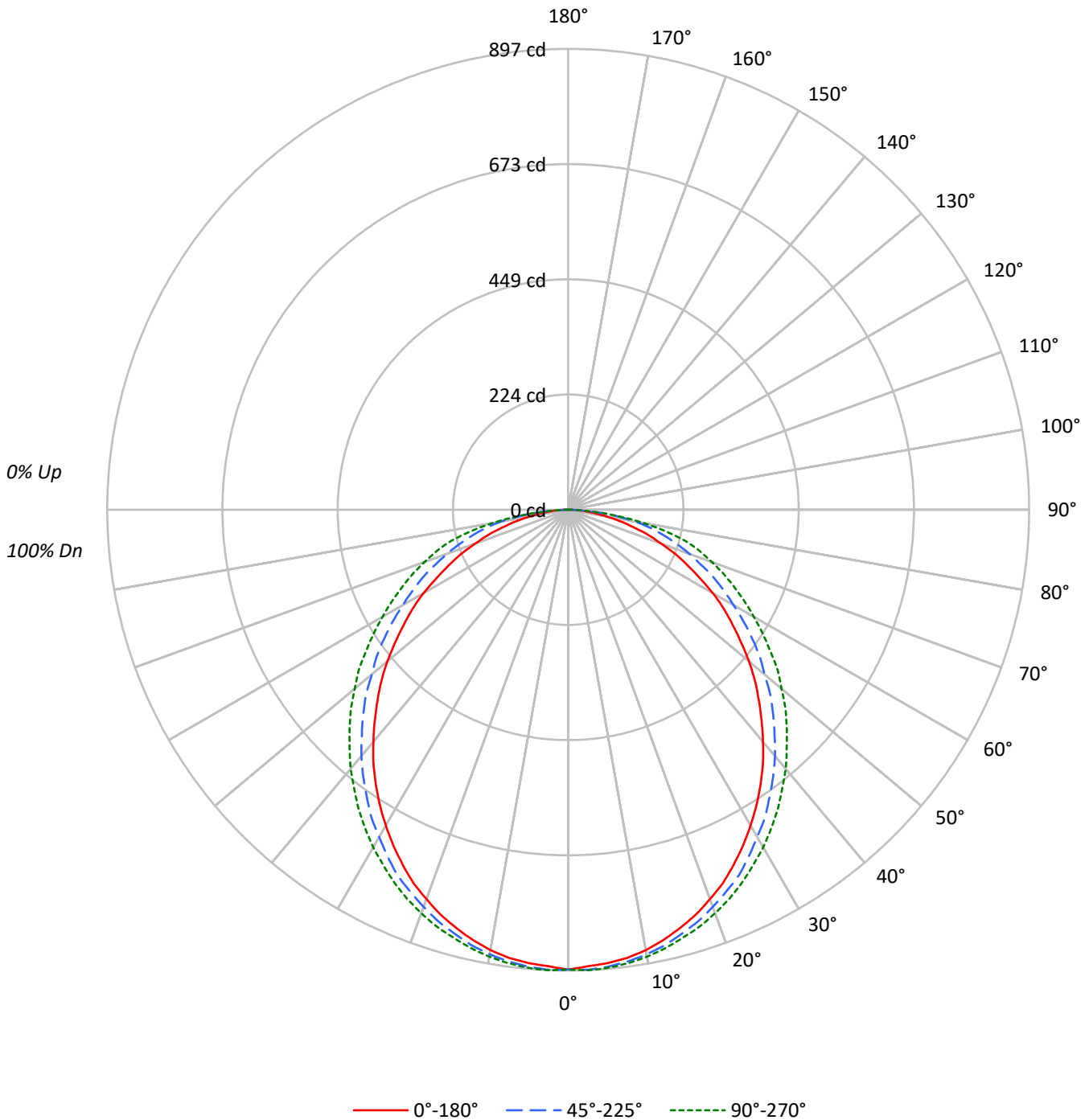
Input Watts (W): 18.042
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2409	2409	2409
5°	2393	2412	2418
10°	2379	2401	2414
15°	2348	2380	2403
20°	2310	2356	2393
25°	2263	2333	2377
30°	2206	2285	2357
35°	2144	2244	2336
40°	2072	2199	2313
45°	1996	2147	2289
50°	1922	2088	2269
55°	1832	2051	2253
60°	1750	2001	2246
65°	1633	1989	2271
70°	1504	1972	2338
75°	1357	1999	2460
80°	1175	2060	2312
85°	973	1726	1726



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	3.4
10°-20°	240.9	9.6
20°-30°	360.4	14.4
30°-40°	426.9	17.1
40°-50°	435.0	17.4
50°-60°	389.9	15.6
60°-70°	305.3	12.2
70°-80°	196.8	7.9
80°-90°	58.1	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°	686.0	27.5
0°-40°	1112.8	44.5
0°-60°	1937.8	77.6
0°-90°	2498.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2498.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	886	888	893	894	895	84
15°	843	847	854	861	862	238
25°	762	769	786	796	801	351
35°	653	661	683	704	711	408
45°	524	536	564	593	601	405
55°	390	403	437	467	480	350
65°	256	272	312	343	357	255
75°	130	150	192	225	237	140
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°	895.1	895.1	895.1	895.1	895.1
2.5°	889.3	891.6	896.3	897.4	897.4
5°	885.8	888.1	892.8	893.9	895.1
7.5°	880.0	881.1	887.0	889.3	890.4
10°	870.6	873.0	878.8	882.3	883.5
12.5°	857.8	861.3	868.3	873.0	874.1
15°	842.7	847.3	854.3	861.3	862.5
17.5°	826.3	831.0	840.3	848.5	850.8
20°	806.5	812.4	822.8	832.2	835.7
22.5°	786.7	791.4	804.2	815.9	819.4
25°	762.2	769.2	785.6	796.0	800.7
27.5°	736.6	744.8	761.1	775.1	779.7
30°	709.8	718.0	735.4	752.9	758.7
32.5°	681.8	691.1	712.1	729.6	735.4
35°	652.7	660.8	683.0	704.0	711.0
37.5°	622.4	629.4	655.0	677.2	684.2
40°	589.7	599.1	625.9	651.5	658.5
42.5°	557.1	567.6	594.4	622.4	629.4
45°	524.5	536.1	564.1	593.2	601.4
47.5°	493.0	502.3	533.8	561.8	573.4
50°	459.2	468.5	498.8	530.3	542.0
52.5°	424.2	437.1	469.7	500.0	514.0
55°	390.4	403.3	437.1	467.4	480.2
57.5°	359.0	369.5	404.4	435.9	448.7
60°	325.2	334.5	371.8	405.6	417.3
62.5°	289.0	303.0	341.5	373.0	386.9
65°	256.4	271.6	312.4	342.7	356.6
67.5°	226.1	240.1	279.7	312.4	327.5
70°	191.1	209.8	250.6	283.2	297.2
72.5°	163.2	179.5	221.4	254.1	269.2
75°	130.5	150.4	192.3	224.9	236.6
77.5°	103.7	123.5	163.2	188.8	194.6
80°	75.8	95.6	132.9	145.7	149.2
82.5°	51.3	69.9	95.6	99.1	100.2
85°	31.5	43.1	55.9	55.9	55.9
87.5°	15.2	17.5	19.8	18.6	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)