

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: P277394

Luminaire Tested: **22CZ2-24HE-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277394
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-5000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2466.0 lumens
Efficiency: N/A
Efficacy: 137.4 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

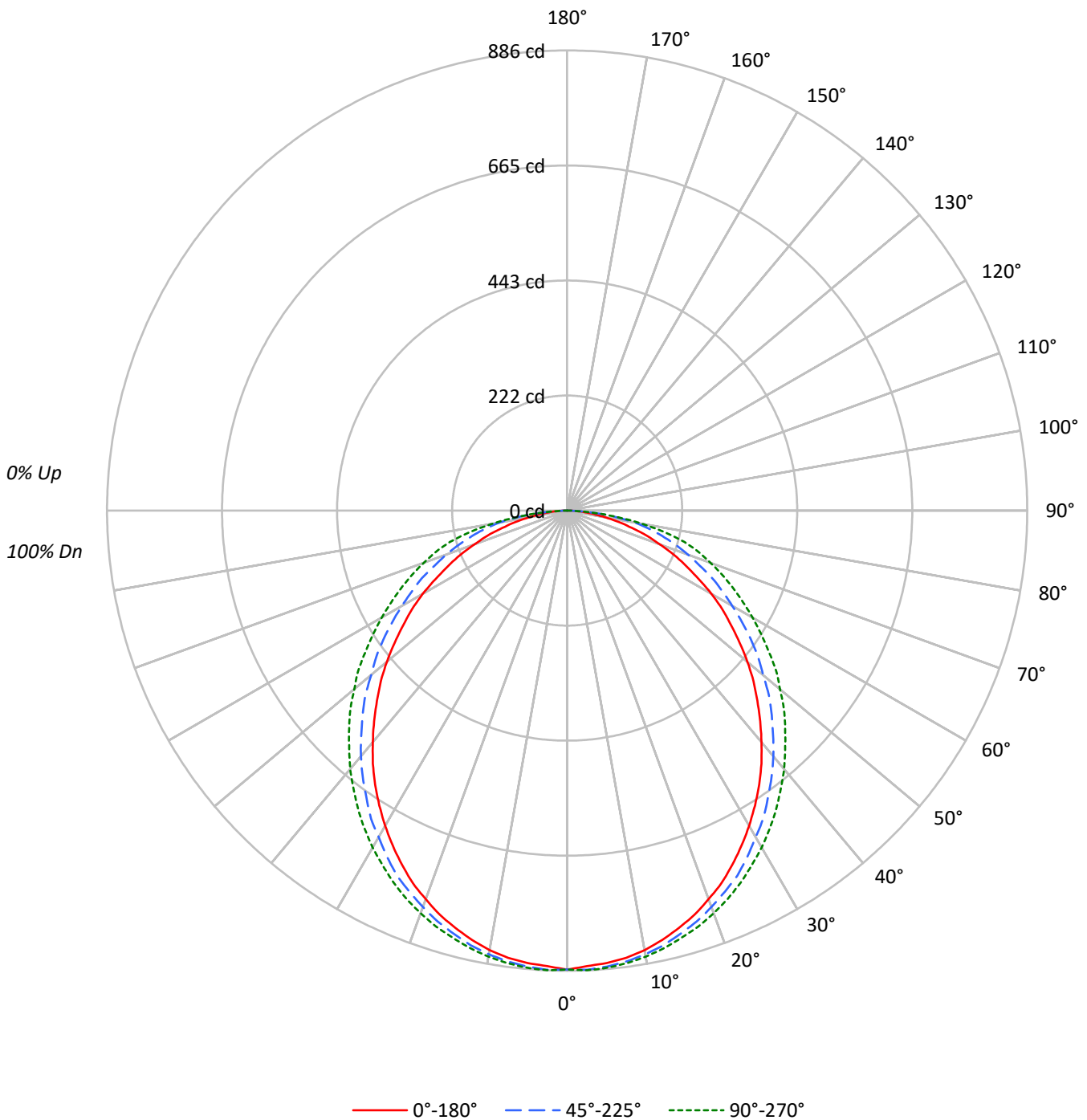
Input Watts (W): 17.949
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2378	2378	2378
5°	2362	2381	2387
10°	2349	2370	2383
15°	2318	2350	2372
20°	2280	2326	2363
25°	2234	2303	2347
30°	2177	2256	2327
35°	2117	2215	2306
40°	2045	2171	2284
45°	1971	2119	2259
50°	1898	2061	2240
55°	1808	2024	2224
60°	1728	1975	2217
65°	1612	1964	2242
70°	1485	1947	2308
75°	1340	1973	2429
80°	1159	2033	2283
85°	960	1704	1704



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.6	3.4
10°-20°	237.8	9.6
20°-30°	355.8	14.4
30°-40°	421.4	17.1
40°-50°	429.4	17.4
50°-60°	384.9	15.6
60°-70°	301.4	12.2
70°-80°	194.3	7.9
80°-90°	57.4	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°	677.2	27.5
0°-40°	1098.6	44.5
0°-60°	1912.9	77.6
0°-90°	2466.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2466.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	884	884	884	884	884	
5°	874	877	881	882	884	83
15°	832	836	843	850	851	235
25°	752	759	776	786	790	346
35°	644	652	674	695	702	403
45°	518	529	557	586	594	400
55°	385	398	432	461	474	346
65°	253	268	308	338	352	251
75°	129	148	190	222	234	138
85°	31	43	55	55	55	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	883.6	883.6	883.6	883.6	883.6
2.5°	877.9	880.2	884.8	885.9	885.9
5°	874.4	876.7	881.3	882.5	883.6
7.5°	868.7	869.8	875.6	877.9	879.0
10°	859.5	861.8	867.5	871.0	872.1
12.5°	846.8	850.3	857.2	861.8	862.9
15°	831.9	836.5	843.4	850.3	851.4
17.5°	815.8	820.4	829.6	837.6	839.9
20°	796.2	802.0	812.3	821.5	825.0
22.5°	776.6	781.2	793.9	805.4	808.9
25°	752.5	759.4	775.5	785.8	790.4
27.5°	727.2	735.2	751.3	765.1	769.7
30°	700.7	708.8	726.0	743.3	749.0
32.5°	673.1	682.3	703.0	720.3	726.0
35°	644.3	652.4	674.2	694.9	701.9
37.5°	614.4	621.3	646.6	668.5	675.4
40°	582.2	591.4	617.9	643.2	650.1
42.5°	550.0	560.3	586.8	614.4	621.3
45°	517.8	529.3	556.9	585.6	593.7
47.5°	486.7	495.9	527.0	554.6	566.1
50°	453.3	462.5	492.4	523.5	535.0
52.5°	418.8	431.5	463.7	493.6	507.4
55°	385.4	398.1	431.5	461.4	474.0
57.5°	354.4	364.7	399.3	430.3	443.0
60°	321.0	330.2	367.0	400.4	411.9
62.5°	285.3	299.2	337.1	368.2	382.0
65°	253.1	268.1	308.4	338.3	352.1
67.5°	223.2	237.0	276.1	308.4	323.3
70°	188.7	207.1	247.4	279.6	293.4
72.5°	161.1	177.2	218.6	250.8	265.8
75°	128.9	148.4	189.8	222.1	233.6
77.5°	102.4	122.0	161.1	186.4	192.1
80°	74.8	94.3	131.2	143.8	147.3
82.5°	50.6	69.0	94.3	97.8	98.9
85°	31.1	42.6	55.2	55.2	55.2
87.5°	15.0	17.3	19.6	18.4	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)