

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: P277451

Luminaire Tested: **22CZ2-24HE-S-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277451  
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-L92765-W2A1-U-6500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2273.0 lumens  
Efficiency: N/A  
Efficacy: 123.4 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

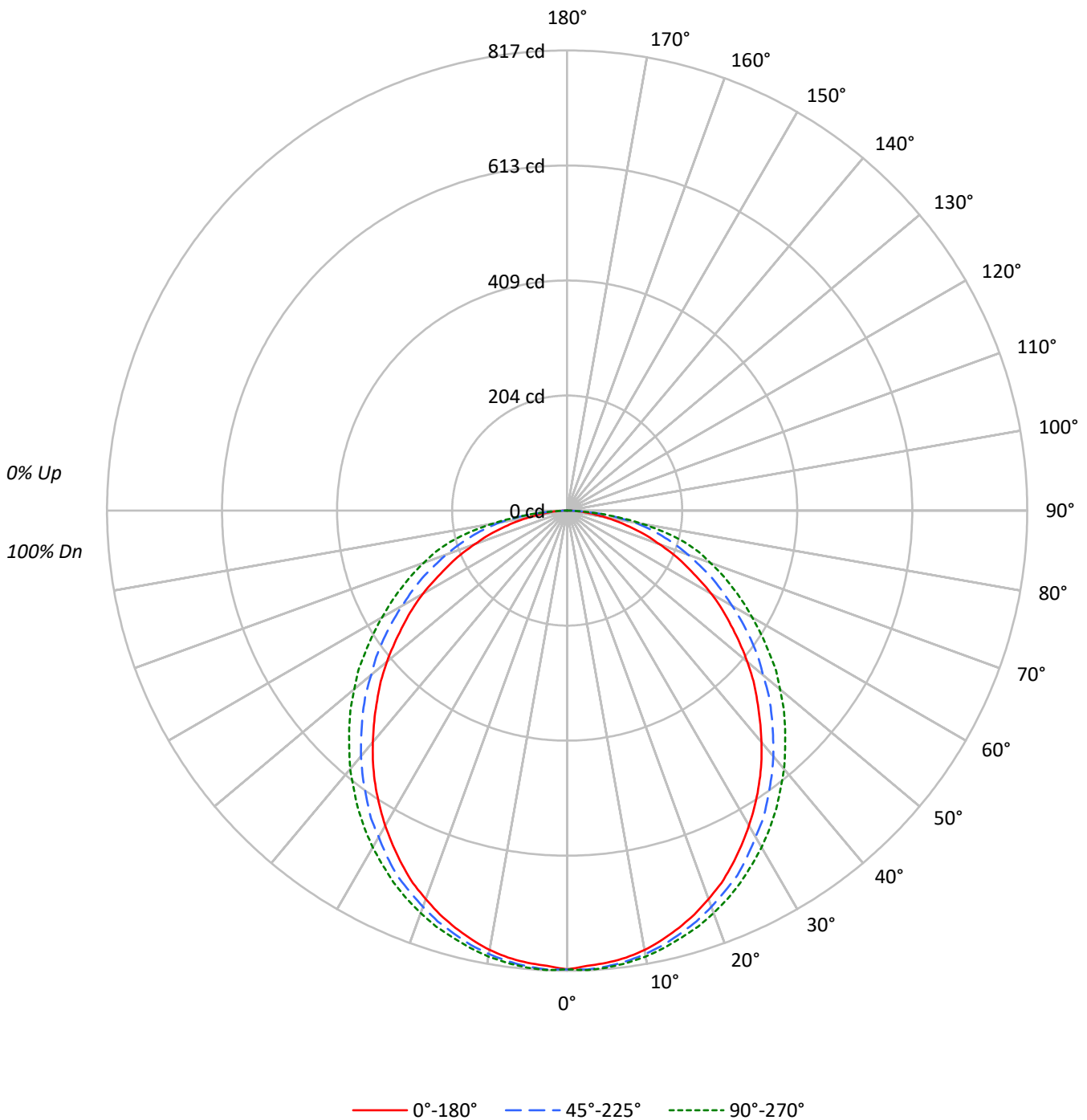
Input Watts (W): 18.414  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2192	2192	2192
5°	2177	2195	2200
10°	2165	2185	2197
15°	2136	2166	2186
20°	2102	2144	2178
25°	2059	2122	2163
30°	2007	2079	2145
35°	1951	2042	2125
40°	1885	2001	2105
45°	1816	1953	2082
50°	1749	1900	2064
55°	1667	1866	2050
60°	1593	1821	2044
65°	1486	1810	2066
70°	1368	1794	2127
75°	1235	1820	2239
80°	1068	1874	2103
85°	883	1572	1572



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.0	3.4
10°-20°	219.2	9.6
20°-30°	328.0	14.4
30°-40°	388.4	17.1
40°-50°	395.8	17.4
50°-60°	354.8	15.6
60°-70°	277.8	12.2
70°-80°	179.1	7.9
80°-90°	52.9	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°	624.2	27.5
0°-40°	1012.6	44.5
0°-60°	1763.2	77.6
0°-90°	2273.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2273.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	806	808	812	813	814	77
15°	767	771	777	784	785	216
25°	694	700	715	724	729	319
35°	594	601	622	641	647	371
45°	477	488	513	540	547	369
55°	355	367	398	425	437	319
65°	233	247	284	312	324	232
75°	119	137	175	205	215	127
85°	29	39	51	51	51	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	814.5	814.5	814.5	814.5	814.5
2.5°	809.2	811.3	815.5	816.6	816.6
5°	806.0	808.1	812.4	813.4	814.5
7.5°	800.7	801.8	807.1	809.2	810.2
10°	792.2	794.3	799.6	802.8	803.9
12.5°	780.5	783.7	790.1	794.3	795.4
15°	766.8	771.0	777.4	783.7	784.8
17.5°	751.9	756.2	764.6	772.1	774.2
20°	733.9	739.2	748.7	757.2	760.4
22.5°	715.9	720.1	731.8	742.4	745.6
25°	693.6	699.9	714.8	724.3	728.6
27.5°	670.3	677.7	692.5	705.3	709.5
30°	645.9	653.3	669.2	685.1	690.4
32.5°	620.4	628.9	648.0	663.9	669.2
35°	593.9	601.3	621.5	640.6	646.9
37.5°	566.3	572.7	596.0	616.2	622.5
40°	536.6	545.1	569.5	592.8	599.2
42.5°	506.9	516.5	540.9	566.3	572.7
45°	477.2	487.8	513.3	539.8	547.2
47.5°	448.6	457.1	485.7	511.2	521.8
50°	417.8	426.3	453.9	482.5	493.1
52.5°	386.0	397.7	427.4	455.0	467.7
55°	355.3	366.9	397.7	425.3	436.9
57.5°	326.6	336.2	368.0	396.6	408.3
60°	295.9	304.4	338.3	369.1	379.7
62.5°	263.0	275.7	310.7	339.4	352.1
65°	233.3	247.1	284.2	311.8	324.5
67.5°	205.7	218.5	254.5	284.2	298.0
70°	173.9	190.9	228.0	257.7	270.4
72.5°	148.5	163.3	201.5	231.2	245.0
75°	118.8	136.8	175.0	204.7	215.3
77.5°	94.4	112.4	148.5	171.8	177.1
80°	68.9	87.0	120.9	132.6	135.7
82.5°	46.7	63.6	87.0	90.1	91.2
85°	28.6	39.2	50.9	50.9	50.9
87.5°	13.8	15.9	18.0	17.0	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)