

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: P277229

Luminaire Tested: **22CZ2-24HE-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277229  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-24HE-UNV-L82765-W2A1-U-6500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2374.0 lumens  
Efficiency: N/A  
Efficacy: 129.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

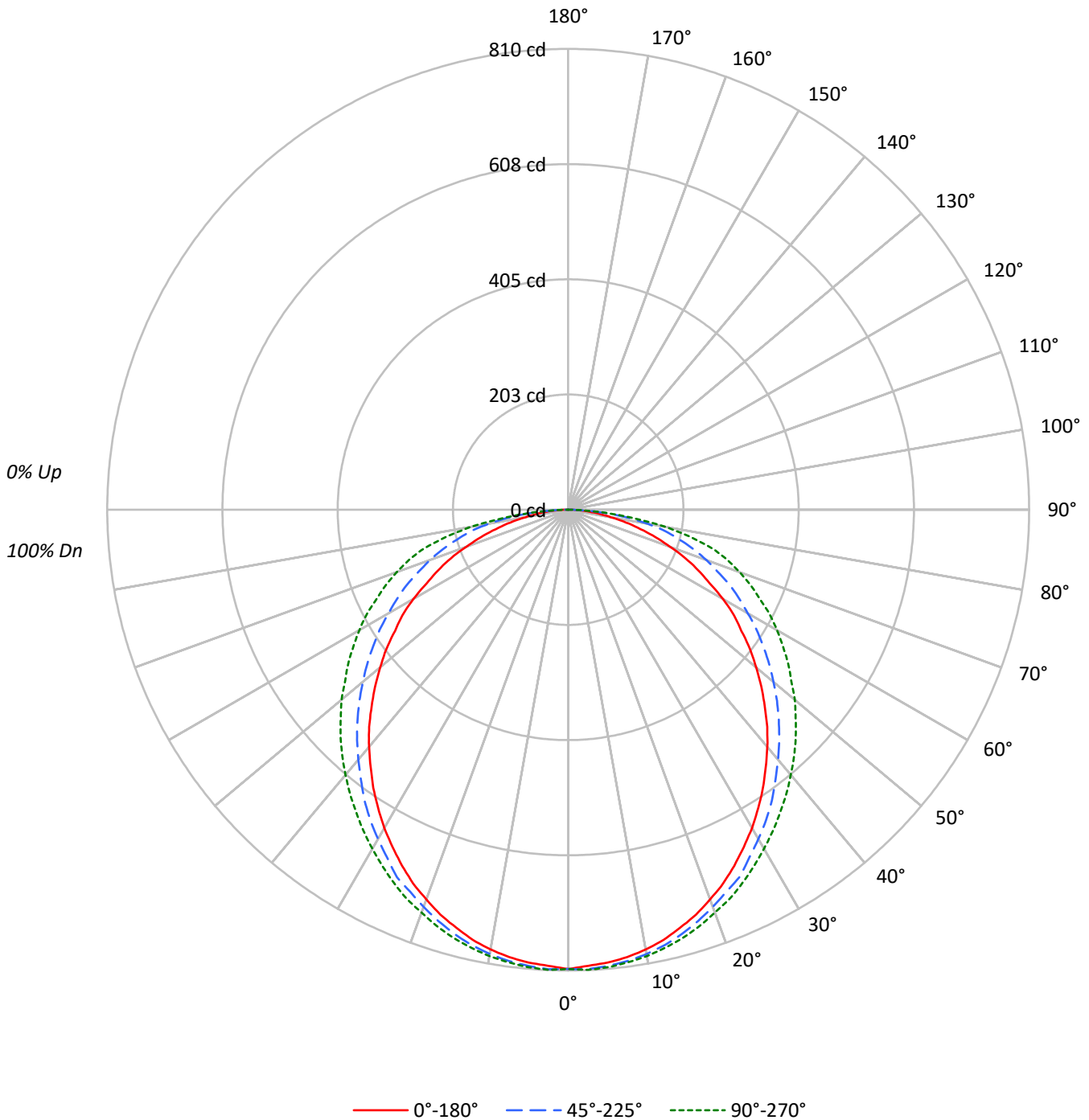
Input Watts (W): 18.321  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2172	2172	2172
5°	2158	2174	2180
10°	2145	2167	2177
15°	2119	2151	2171
20°	2087	2128	2158
25°	2050	2116	2151
30°	2007	2076	2138
35°	1961	2049	2134
40°	1912	2015	2138
45°	1858	1991	2152
50°	1805	1971	2176
55°	1743	1962	2214
60°	1691	1962	2282
65°	1606	1994	2365
70°	1498	2031	2519
75°	1372	2101	2721
80°	1195	2190	2679
85°	1047	1948	2127



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.3	3.2
10°-20°	217.4	9.2
20°-30°	326.4	13.7
30°-40°	390.0	16.4
40°-50°	405.6	17.1
50°-60°	375.9	15.8
60°-70°	308.3	13.0
70°-80°	208.4	8.8
80°-90°	65.5	2.8
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°	620.2	26.1
0°-40°	1010.2	42.6
0°-60°	1791.7	75.5
0°-90°	2374.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2374.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	807	807	807	807	807	
5°	799	800	805	806	807	76
15°	760	764	772	777	779	215
25°	690	696	713	721	724	318
35°	597	605	624	642	650	373
45°	488	498	523	554	565	377
55°	372	383	418	456	472	334
65°	252	266	313	354	372	249
75°	132	154	202	243	262	140
85°	34	47	63	70	69	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	807.2	807.2	807.2	807.2	807.2
2.5°	802.5	804.9	808.4	809.5	809.5
5°	799.0	800.2	804.9	806.0	807.2
7.5°	793.2	795.5	800.2	801.4	802.5
10°	785.0	787.3	793.2	795.5	796.7
12.5°	774.5	776.8	783.8	787.3	788.5
15°	760.5	764.0	772.2	776.8	779.2
17.5°	746.5	750.0	758.1	765.1	767.5
20°	728.9	737.1	743.0	752.3	753.5
22.5°	711.4	716.1	726.6	735.9	740.6
25°	690.4	696.2	712.6	720.8	724.3
27.5°	668.2	676.4	689.2	702.1	706.7
30°	646.0	651.8	668.2	683.4	688.1
32.5°	621.5	629.6	647.2	662.4	669.4
35°	596.9	605.1	623.8	642.5	649.5
37.5°	570.1	579.4	598.1	620.3	629.6
40°	544.4	551.4	573.6	600.4	608.6
42.5°	517.5	525.7	549.0	578.2	587.6
45°	488.3	497.6	523.3	553.7	565.4
47.5°	460.3	469.6	497.6	528.0	542.0
50°	431.1	442.7	470.8	505.8	519.8
52.5°	403.0	413.5	445.1	481.3	494.1
55°	371.5	383.2	418.2	455.6	471.9
57.5°	345.8	354.0	392.5	431.1	447.4
60°	314.2	324.8	364.5	405.4	424.0
62.5°	280.4	297.9	338.8	380.8	399.5
65°	252.3	266.3	313.1	354.0	371.5
67.5°	223.1	238.3	283.9	327.1	346.9
70°	190.4	210.3	258.2	301.4	320.1
72.5°	161.2	182.2	231.3	273.4	293.2
75°	132.0	154.2	202.1	243.0	261.7
77.5°	104.0	128.5	175.2	206.8	218.4
80°	77.1	100.5	141.3	163.5	172.9
82.5°	53.7	73.6	104.0	115.6	118.0
85°	33.9	46.7	63.1	70.1	68.9
87.5°	15.2	18.7	23.4	25.7	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)