

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: P275822

Luminaire Tested: **14CZ2-39-RDP-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275822  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-39-RDP-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2411.0 lumens  
Efficiency: N/A  
Efficacy: 77.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

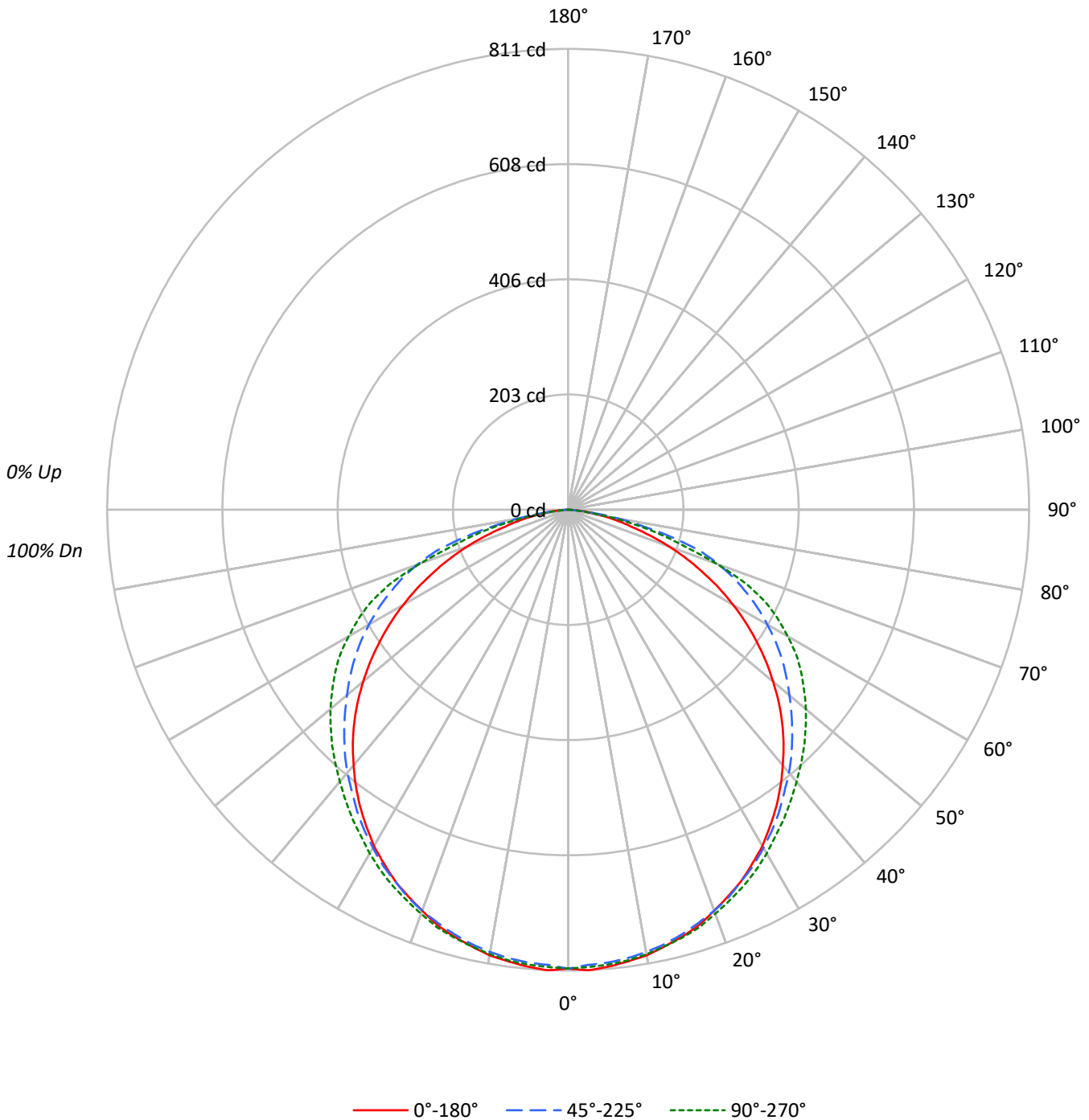
Input Watts (W): 31.155  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P275822

CATALOG NUMBER: 14CZ2-39-RDP-UNV-L82765-W2A1-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P275822

CATALOG NUMBER: 14CZ2-39-RDP-UNV-L82765-W2A1-U-3500K

**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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	2173	2173	2173
5°	2181	2161	2171
10°	2176	2160	2170
15°	2166	2155	2171
20°	2151	2151	2167
25°	2140	2140	2168
30°	2123	2135	2170
35°	2096	2127	2177
40°	2063	2122	2195
45°	2027	2120	2235
50°	1970	2128	2285
55°	1899	2155	2349
60°	1803	2178	2401
65°	1666	2205	2433
70°	1481	2221	2177
75°	1194	1996	1742
80°	933	1401	1137
85°	639	408	290



TEST NUMBER: P275822

CATALOG NUMBER: 14CZ2-39-RDP-UNV-L82765-W2A1-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.4	3.2
10°-20°	219.3	9.1
20°-30°	333.9	13.8
30°-40°	406.7	16.9
40°-50°	431.5	17.9
50°-60°	407.2	16.9
60°-70°	328.8	13.6
70°-80°	178.4	7.4
80°-90°	28.9	1.2
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°	629.6	26.1
0°-40°	1036.3	43.0
0°-60°	1875.0	77.8
0°-90°	2411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2411.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	808	808	808	808	808	
5°	808	806	800	806	804	77
15°	777	776	774	779	779	219
25°	721	719	721	728	730	332
35°	638	642	648	661	663	399
45°	533	540	557	578	587	410
55°	405	422	459	489	501	361
65°	262	294	346	375	382	259
75°	115	168	192	173	168	125
85°	21	23	13	11	9	27
90°	0	0	0	0	0	



TEST NUMBER: P275822

CATALOG NUMBER: 14CZ2-39-RDP-UNV-L82765-W2A1-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	807.5	807.5	807.5	807.5	807.5
2.5°	811.3	807.5	801.9	807.5	805.6
5°	807.5	805.6	800.0	805.6	803.7
7.5°	801.9	801.9	796.2	800.0	800.0
10°	796.2	794.3	790.6	796.2	794.3
12.5°	786.8	784.9	783.0	788.7	786.8
15°	777.4	775.5	773.6	779.3	779.3
17.5°	766.1	764.2	762.3	769.9	769.9
20°	751.0	751.0	751.0	758.6	756.7
22.5°	736.0	736.0	737.9	745.4	743.5
25°	720.9	719.0	720.9	728.4	730.3
27.5°	702.1	704.0	705.9	713.4	715.3
30°	683.3	685.2	687.0	696.4	698.3
32.5°	660.7	664.5	668.2	679.5	679.5
35°	638.1	641.9	647.5	660.7	662.6
37.5°	613.6	617.4	624.9	640.0	643.7
40°	587.3	592.9	604.2	619.3	624.9
42.5°	560.9	568.5	581.6	598.6	606.1
45°	532.7	540.2	557.2	577.9	587.3
47.5°	502.6	512.0	532.7	559.0	566.6
50°	470.6	483.8	508.2	536.5	545.9
52.5°	438.6	453.6	483.8	513.9	523.3
55°	404.7	421.6	459.3	489.4	500.7
57.5°	370.8	389.6	432.9	464.9	476.2
60°	335.0	357.6	404.7	436.7	446.1
62.5°	299.3	325.6	376.5	408.5	416.0
65°	261.6	293.6	346.3	374.6	382.1
67.5°	225.9	263.5	316.2	336.9	336.9
70°	188.2	229.6	282.3	288.0	276.7
72.5°	150.6	197.6	244.7	224.0	214.6
75°	114.8	167.5	192.0	173.2	167.5
77.5°	86.6	135.5	135.5	124.2	120.5
80°	60.2	103.5	90.4	79.1	73.4
82.5°	39.5	58.4	47.1	37.6	32.0
85°	20.7	22.6	13.2	11.3	9.4
87.5°	7.5	3.8	1.9	3.8	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)