

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: P277645

Luminaire Tested: **22CZ2-39HE-RDP-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277645  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-39HE-RDP-UNV-L92765-W2A1-U-5700K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2315.0 lumens  
Efficiency: N/A  
Efficacy: 74.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

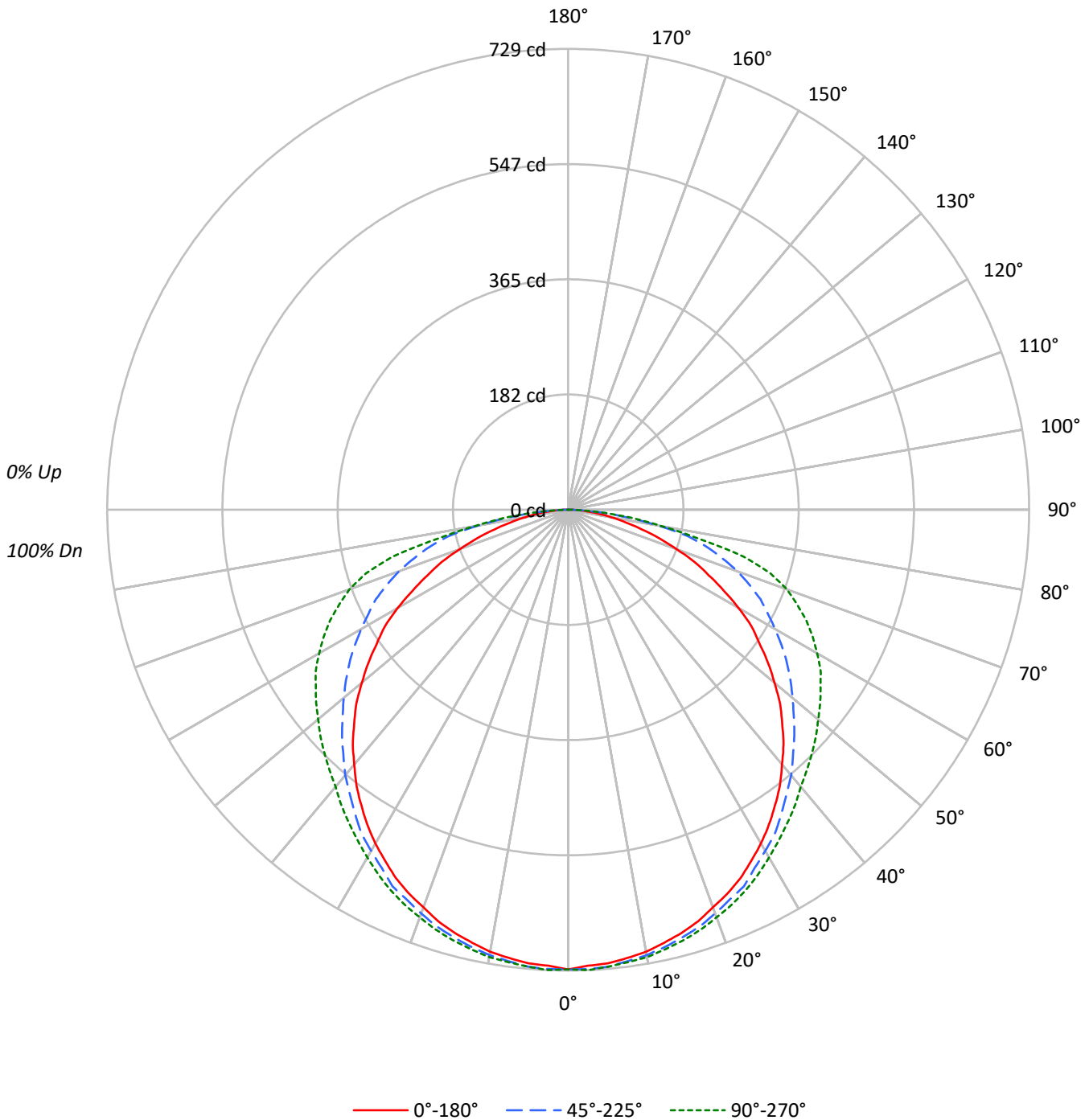
Input Watts (W): 31.062  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1957	1957	1957
5°	1946	1960	1960
10°	1941	1955	1964
15°	1931	1950	1964
20°	1917	1946	1965
25°	1911	1952	1972
30°	1895	1937	1974
35°	1874	1930	1986
40°	1848	1926	2010
45°	1821	1925	2074
50°	1783	1939	2160
55°	1734	1981	2285
60°	1677	2035	2447
65°	1561	2136	2646
70°	1434	2238	2894
75°	1257	2355	2992
80°	1082	2244	2349
85°	948	1630	1788



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.8	3.0
10°-20°	197.5	8.5
20°-30°	301.3	13.0
30°-40°	367.9	15.9
40°-50°	393.4	17.0
50°-60°	379.7	16.4
60°-70°	326.9	14.1
70°-80°	221.2	9.6
80°-90°	58.4	2.5
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°	567.6	24.5
0°-40°	935.5	40.4
0°-60°	1708.6	73.8
0°-90°	2315.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2315.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	727	727	727	727	727	
5°	720	722	726	726	726	68
15°	693	695	700	703	705	196
25°	644	647	657	661	664	296
35°	570	576	588	600	605	357
45°	478	487	506	531	545	369
55°	370	382	422	465	487	331
65°	245	269	336	388	416	244
75°	121	160	226	272	288	130
85°	31	43	53	54	58	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	727.2	727.2	727.2	727.2	727.2
2.5°	722.1	723.8	727.2	727.2	728.9
5°	720.4	722.1	725.5	725.5	725.5
7.5°	715.3	717.0	720.4	722.1	722.1
10°	710.2	711.9	715.3	717.0	718.7
12.5°	701.6	703.3	708.4	711.9	711.9
15°	693.1	694.8	699.9	703.3	705.0
17.5°	682.9	686.3	691.4	694.8	696.5
20°	669.3	672.7	679.5	684.6	686.3
22.5°	657.4	660.8	667.6	672.7	676.1
25°	643.7	647.1	657.4	660.8	664.2
27.5°	626.7	630.1	638.6	645.4	650.5
30°	609.7	613.1	623.3	631.8	635.2
32.5°	590.9	596.1	608.0	614.8	619.9
35°	570.5	575.6	587.5	599.5	604.6
37.5°	550.1	555.2	567.1	582.4	589.2
40°	526.2	533.0	548.4	568.8	572.2
42.5°	504.1	512.6	526.2	550.1	558.6
45°	478.5	487.1	505.8	531.3	545.0
47.5°	454.7	463.2	483.7	514.3	531.3
50°	425.8	437.7	463.2	499.0	516.0
52.5°	398.5	408.7	442.8	481.9	502.4
55°	369.6	381.5	422.3	464.9	487.1
57.5°	344.0	354.2	400.2	447.9	473.4
60°	311.6	325.3	378.1	429.2	454.7
62.5°	277.6	298.0	355.9	408.7	436.0
65°	245.2	269.1	335.5	388.3	415.5
67.5°	216.3	241.8	309.9	366.1	391.7
70°	182.2	214.6	284.4	338.9	367.8
72.5°	151.6	187.3	255.5	309.9	335.5
75°	120.9	160.1	226.5	272.5	287.8
77.5°	93.7	131.1	194.1	207.8	209.5
80°	69.8	103.9	144.8	146.5	151.6
82.5°	47.7	73.2	93.7	102.2	103.9
85°	30.7	42.6	52.8	54.5	57.9
87.5°	13.6	15.3	18.7	17.0	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)