

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: P277586

Luminaire Tested: **22CZ2-39HE-RDP-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277586  
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-L82765-W2A1-U-3500K  
Description: CRUZE 2.0 2x2 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: 2399.0 lumens  
Efficiency: N/A  
Efficacy: 79.1 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

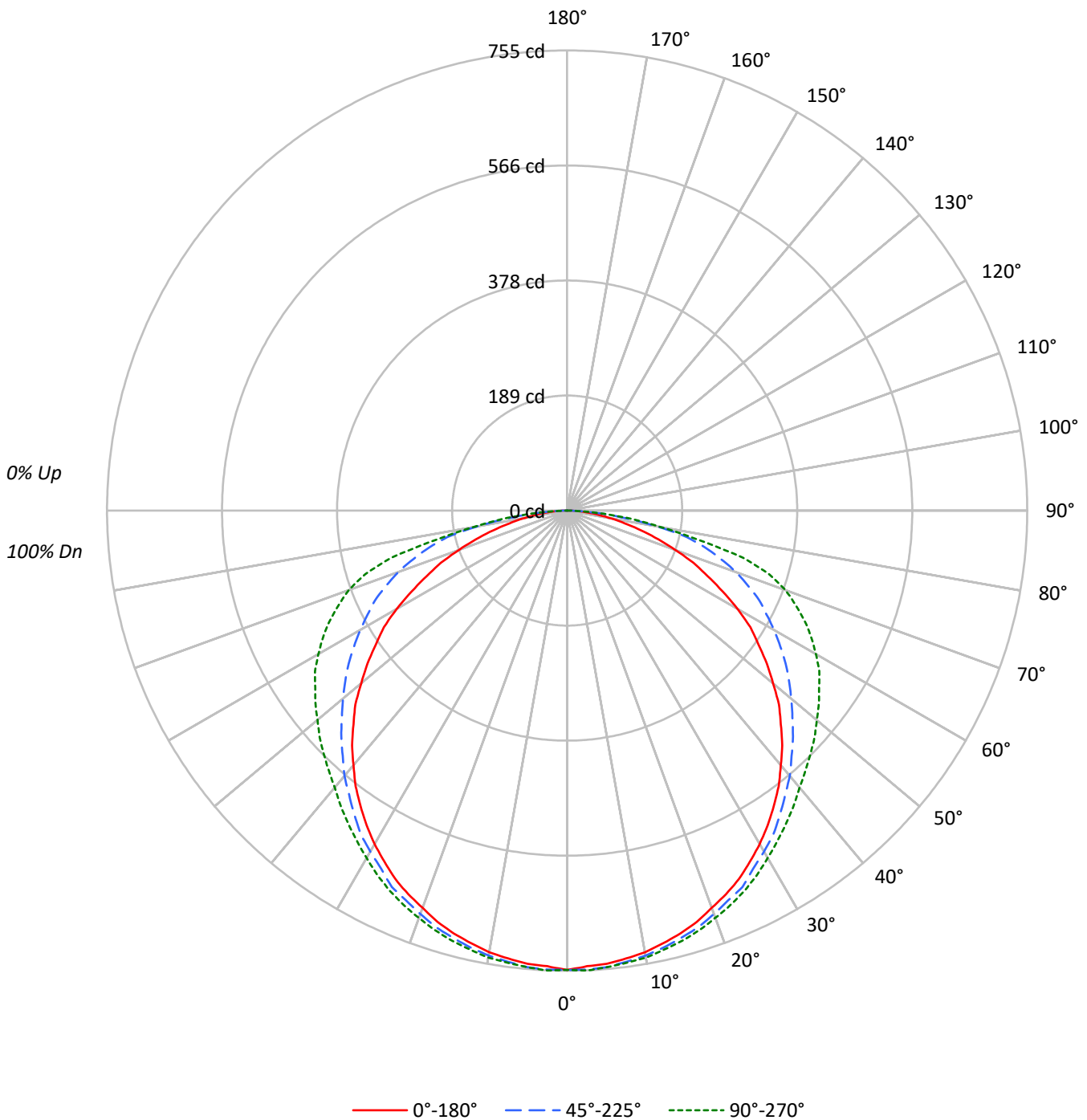
Input Watts (W): 30.318  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2028	2028	2028
5°	2016	2031	2031
10°	2011	2025	2035
15°	2001	2021	2035
20°	1986	2017	2037
25°	1981	2023	2044
30°	1963	2007	2046
35°	1942	2000	2058
40°	1916	1996	2083
45°	1887	1995	2149
50°	1847	2009	2238
55°	1797	2054	2368
60°	1738	2109	2536
65°	1618	2214	2742
70°	1485	2319	2999
75°	1303	2440	3101
80°	1122	2325	2435
85°	982	1689	1853



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.3	3.0
10°-20°	204.7	8.5
20°-30°	312.3	13.0
30°-40°	381.3	15.9
40°-50°	407.7	17.0
50°-60°	393.5	16.4
60°-70°	338.7	14.1
70°-80°	229.2	9.6
80°-90°	60.5	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°	588.2	24.5
0°-40°	969.5	40.4
0°-60°	1770.6	73.8
0°-90°	2399.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2399.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	754	754	754	754	754	
5°	746	748	752	752	752	71
15°	718	720	725	729	731	203
25°	667	671	681	685	688	307
35°	591	596	609	621	626	370
45°	496	505	524	551	565	383
55°	383	395	438	482	505	343
65°	254	279	348	402	431	253
75°	125	166	235	282	298	134
85°	32	44	55	56	60	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	753.6	753.6	753.6	753.6	753.6
2.5°	748.3	750.0	753.6	753.6	755.3
5°	746.5	748.3	751.8	751.8	751.8
7.5°	741.2	743.0	746.5	748.3	748.3
10°	735.9	737.7	741.2	743.0	744.7
12.5°	727.1	728.9	734.2	737.7	737.7
15°	718.3	720.0	725.3	728.9	730.6
17.5°	707.7	711.2	716.5	720.0	721.8
20°	693.6	697.1	704.2	709.4	711.2
22.5°	681.2	684.7	691.8	697.1	700.6
25°	667.1	670.6	681.2	684.7	688.3
27.5°	649.4	653.0	661.8	668.9	674.2
30°	631.8	635.3	645.9	654.7	658.3
32.5°	612.4	617.7	630.0	637.1	642.4
35°	591.2	596.5	608.9	621.2	626.5
37.5°	570.0	575.3	587.7	603.6	610.6
40°	545.3	552.4	568.3	589.4	593.0
42.5°	522.4	531.2	545.3	570.0	578.9
45°	495.9	504.7	524.1	550.6	564.7
47.5°	471.2	480.0	501.2	533.0	550.6
50°	441.2	453.6	480.0	517.1	534.7
52.5°	413.0	423.6	458.8	499.4	520.6
55°	383.0	395.3	437.7	481.8	504.7
57.5°	356.5	367.1	414.7	464.1	490.6
60°	323.0	337.1	391.8	444.7	471.2
62.5°	287.7	308.8	368.8	423.6	451.8
65°	254.1	278.8	347.7	402.4	430.6
67.5°	224.1	250.6	321.2	379.4	405.9
70°	188.8	222.4	294.7	351.2	381.2
72.5°	157.1	194.1	264.7	321.2	347.7
75°	125.3	165.9	234.7	282.4	298.3
77.5°	97.1	135.9	201.2	215.3	217.1
80°	72.4	107.7	150.0	151.8	157.1
82.5°	49.4	75.9	97.1	105.9	107.7
85°	31.8	44.1	54.7	56.5	60.0
87.5°	14.1	15.9	19.4	17.6	17.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)