

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: P277589

Luminaire Tested: **22CZ2-39HE-RDP-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277589  
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-5000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2529.0 lumens  
Efficiency: N/A  
Efficacy: 81.9 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

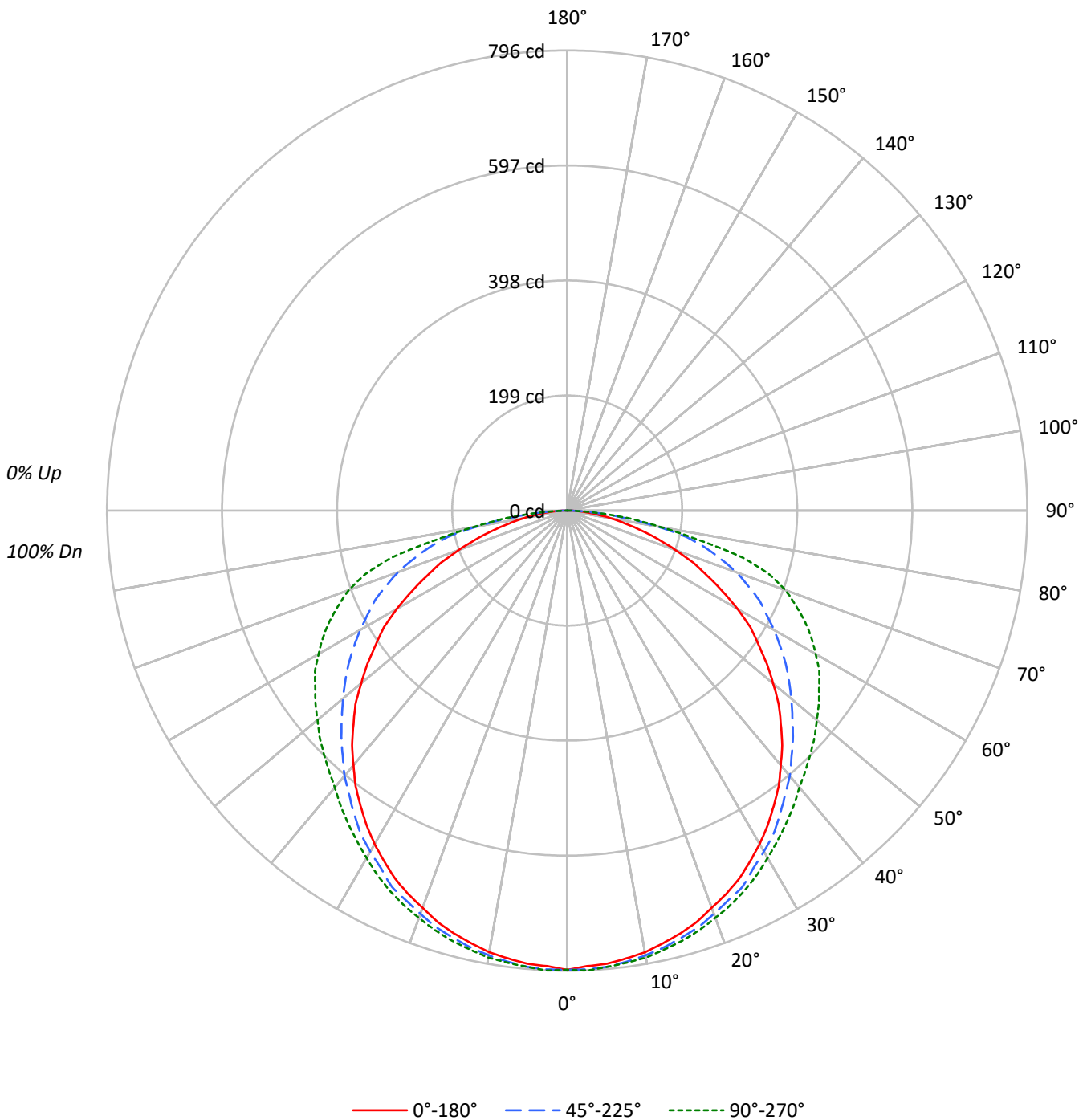
Input Watts (W): 30.876  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2138	2138	2138
5°	2126	2141	2141
10°	2120	2135	2145
15°	2109	2130	2146
20°	2094	2126	2147
25°	2088	2132	2154
30°	2069	2116	2156
35°	2047	2108	2170
40°	2020	2105	2196
45°	1990	2103	2265
50°	1947	2118	2360
55°	1894	2165	2496
60°	1833	2223	2673
65°	1706	2334	2890
70°	1566	2445	3162
75°	1373	2572	3269
80°	1182	2450	2566
85°	1034	1782	1954



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.1	3.0
10°-20°	215.8	8.5
20°-30°	329.2	13.0
30°-40°	401.9	15.9
40°-50°	429.8	17.0
50°-60°	414.8	16.4
60°-70°	357.1	14.1
70°-80°	241.6	9.6
80°-90°	63.7	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°	620.1	24.5
0°-40°	1022.0	40.4
0°-60°	1866.6	73.8
0°-90°	2529.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2529.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	794	794	794	794	794	
5°	787	789	792	792	792	75
15°	757	759	765	768	770	214
25°	703	707	718	722	726	324
35°	623	629	642	655	660	390
45°	523	532	552	580	595	404
55°	404	417	461	508	532	362
65°	268	294	366	424	454	266
75°	132	175	247	298	314	142
85°	34	46	58	60	63	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	794.4	794.4	794.4	794.4	794.4
2.5°	788.8	790.7	794.4	794.4	796.3
5°	787.0	788.8	792.5	792.5	792.5
7.5°	781.4	783.2	787.0	788.8	788.8
10°	775.8	777.7	781.4	783.2	785.1
12.5°	766.5	768.4	773.9	777.7	777.7
15°	757.2	759.1	764.6	768.4	770.2
17.5°	746.0	749.8	755.3	759.1	760.9
20°	731.1	734.9	742.3	747.9	749.8
22.5°	718.1	721.8	729.3	734.9	738.6
25°	703.2	707.0	718.1	721.8	725.6
27.5°	684.6	688.4	697.7	705.1	710.7
30°	666.0	669.8	680.9	690.2	693.9
32.5°	645.6	651.1	664.2	671.6	677.2
35°	623.2	628.8	641.8	654.9	660.5
37.5°	600.9	606.5	619.5	636.3	643.7
40°	574.9	582.3	599.1	621.4	625.1
42.5°	550.7	560.0	574.9	600.9	610.2
45°	522.8	532.1	552.5	580.5	595.3
47.5°	496.7	506.0	528.4	561.8	580.5
50°	465.1	478.1	506.0	545.1	563.7
52.5°	435.3	446.5	483.7	526.5	548.8
55°	403.7	416.7	461.4	507.9	532.1
57.5°	375.8	387.0	437.2	489.3	517.2
60°	340.5	355.3	413.0	468.8	496.7
62.5°	303.2	325.6	388.8	446.5	476.3
65°	267.9	293.9	366.5	424.2	453.9
67.5°	236.3	264.2	338.6	400.0	427.9
70°	199.1	234.4	310.7	370.2	401.9
72.5°	165.6	204.6	279.1	338.6	366.5
75°	132.1	174.9	247.4	297.7	314.4
77.5°	102.3	143.3	212.1	227.0	228.8
80°	76.3	113.5	158.1	160.0	165.6
82.5°	52.1	80.0	102.3	111.6	113.5
85°	33.5	46.5	57.7	59.5	63.3
87.5°	14.9	16.7	20.5	18.6	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)