

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: P277545

Luminaire Tested: **22CZ2-44HE-RDP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277545  
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: 22CZ2-44HE-RDP-UNV-L93050-W2A1-U-4000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2530.0 lumens  
Efficiency: N/A  
Efficacy: 71.3 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

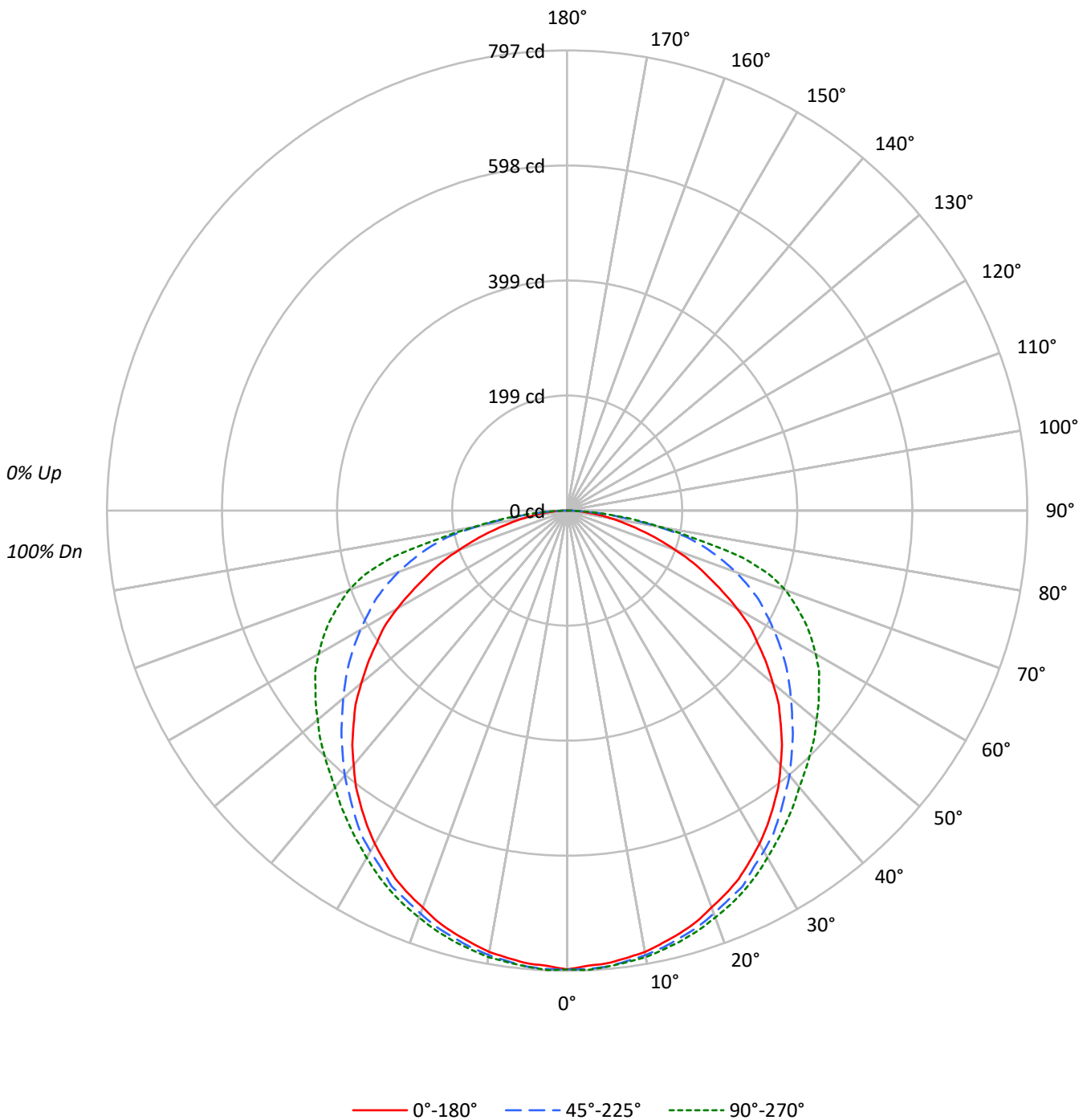
Input Watts (W): 35.495496  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2139	2139	2139
5°	2127	2142	2142
10°	2121	2136	2146
15°	2110	2131	2147
20°	2094	2127	2148
25°	2089	2133	2155
30°	2070	2117	2157
35°	2048	2109	2170
40°	2020	2105	2197
45°	1990	2104	2267
50°	1948	2119	2361
55°	1895	2166	2497
60°	1833	2224	2674
65°	1706	2334	2891
70°	1566	2445	3163
75°	1373	2573	3270
80°	1182	2452	2566
85°	1034	1782	1954



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.2	3.0
10°-20°	215.8	8.5
20°-30°	329.3	13.0
30°-40°	402.1	15.9
40°-50°	429.9	17.0
50°-60°	415.0	16.4
60°-70°	357.2	14.1
70°-80°	241.7	9.6
80°-90°	63.8	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°	620.3	24.5
0°-40°	1022.4	40.4
0°-60°	1867.3	73.8
0°-90°	2530.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2530.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	795	795	795	795	795	
5°	787	789	793	793	793	75
15°	758	759	765	769	770	214
25°	704	707	718	722	726	324
35°	624	629	642	655	661	390
45°	523	532	553	581	596	404
55°	404	417	462	508	532	362
65°	268	294	367	424	454	267
75°	132	175	248	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°	794.7	794.7	794.7	794.7	794.7
2.5°	789.1	791.0	794.7	794.7	796.6
5°	787.3	789.1	792.9	792.9	792.9
7.5°	781.7	783.6	787.3	789.1	789.1
10°	776.1	778.0	781.7	783.6	785.4
12.5°	766.8	768.7	774.2	778.0	778.0
15°	757.5	759.4	764.9	768.7	770.5
17.5°	746.3	750.0	755.6	759.4	761.2
20°	731.4	735.2	742.6	748.2	750.0
22.5°	718.4	722.1	729.6	735.2	738.9
25°	703.5	707.2	718.4	722.1	725.9
27.5°	684.9	688.6	697.9	705.4	711.0
30°	666.3	670.0	681.2	690.5	694.2
32.5°	645.8	651.4	664.4	671.9	677.5
35°	623.5	629.1	642.1	655.1	660.7
37.5°	601.2	606.7	619.8	636.5	644.0
40°	575.1	582.5	599.3	621.6	625.4
42.5°	550.9	560.2	575.1	601.2	610.5
45°	523.0	532.3	552.8	580.7	595.6
47.5°	496.9	506.2	528.6	562.1	580.7
50°	465.3	478.3	506.2	545.3	563.9
52.5°	435.5	446.7	483.9	526.7	549.0
55°	403.9	416.9	461.6	508.1	532.3
57.5°	376.0	387.1	437.4	489.5	517.4
60°	340.6	355.5	413.2	469.0	496.9
62.5°	303.4	325.7	389.0	446.7	476.5
65°	268.0	294.1	366.6	424.3	454.1
67.5°	236.4	264.3	338.7	400.2	428.1
70°	199.1	234.5	310.8	370.4	402.0
72.5°	165.6	204.7	279.2	338.7	366.6
75°	132.1	174.9	247.5	297.8	314.5
77.5°	102.4	143.3	212.2	227.1	228.9
80°	76.3	113.5	158.2	160.1	165.6
82.5°	52.1	80.0	102.4	111.7	113.5
85°	33.5	46.5	57.7	59.6	63.3
87.5°	14.9	16.8	20.5	18.6	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)