

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: P277541

Luminaire Tested: **22CZ2-39HE-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277541
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-L93050-W2A1-U-4500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2294.0 lumens
Efficiency: N/A
Efficacy: 73.1 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

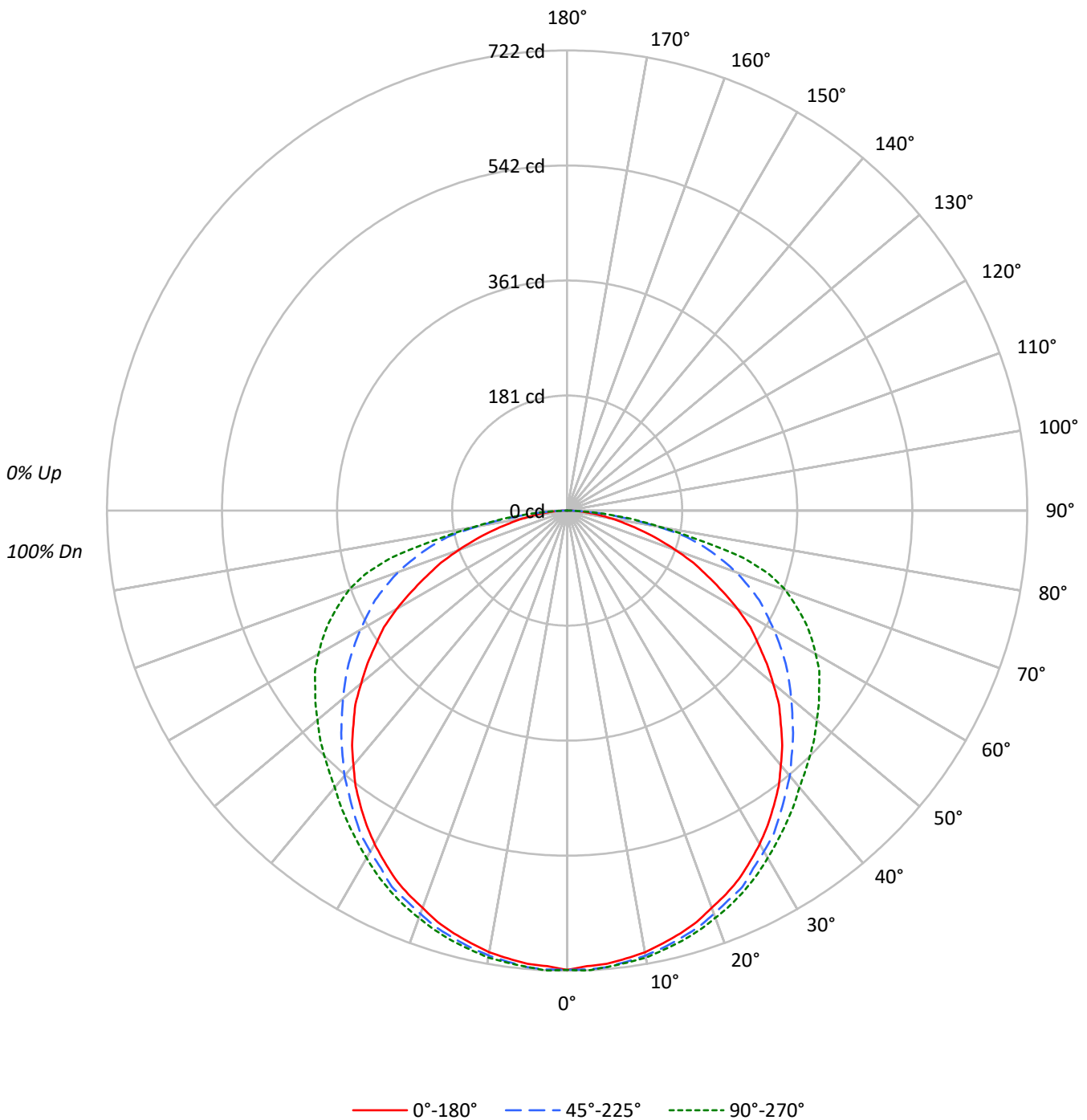
Input Watts (W): 31.397544
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1939	1939	1939
5°	1928	1942	1942
10°	1923	1937	1946
15°	1913	1932	1946
20°	1899	1928	1948
25°	1894	1934	1954
30°	1877	1919	1956
35°	1857	1913	1968
40°	1832	1909	1992
45°	1805	1907	2055
50°	1766	1922	2141
55°	1718	1963	2264
60°	1662	2016	2425
65°	1547	2117	2622
70°	1421	2217	2868
75°	1246	2333	2965
80°	1072	2222	2328
85°	939	1615	1772



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	3.0
10°-20°	195.7	8.5
20°-30°	298.6	13.0
30°-40°	364.6	15.9
40°-50°	389.8	17.0
50°-60°	376.3	16.4
60°-70°	323.9	14.1
70°-80°	219.1	9.6
80°-90°	57.8	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°	562.5	24.5
0°-40°	927.0	40.4
0°-60°	1693.1	73.8
0°-90°	2294.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2294.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	721	721	721	721	721	
5°	714	716	719	719	719	68
15°	687	688	694	697	699	194
25°	638	641	651	655	658	294
35°	565	570	582	594	599	354
45°	474	483	501	526	540	366
55°	366	378	418	461	483	328
65°	243	267	332	385	412	242
75°	120	159	224	270	285	129
85°	30	42	52	54	57	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	720.6	720.6	720.6	720.6	720.6
2.5°	715.5	717.2	720.6	720.6	722.3
5°	713.8	715.5	718.9	718.9	718.9
7.5°	708.8	710.5	713.8	715.5	715.5
10°	703.7	705.4	708.8	710.5	712.1
12.5°	695.3	697.0	702.0	705.4	705.4
15°	686.8	688.5	693.6	697.0	698.6
17.5°	676.7	680.1	685.1	688.5	690.2
20°	663.2	666.6	673.3	678.4	680.1
22.5°	651.4	654.8	661.5	666.6	670.0
25°	637.9	641.3	651.4	654.8	658.1
27.5°	621.0	624.4	632.8	639.6	644.6
30°	604.1	607.5	617.6	626.1	629.5
32.5°	585.6	590.6	602.5	609.2	614.3
35°	565.3	570.4	582.2	594.0	599.1
37.5°	545.1	550.1	562.0	577.1	583.9
40°	521.5	528.2	543.4	563.6	567.0
42.5°	499.5	508.0	521.5	545.1	553.5
45°	474.2	482.6	501.2	526.5	540.0
47.5°	450.6	459.0	479.3	509.6	526.5
50°	421.9	433.7	459.0	494.5	511.3
52.5°	394.9	405.0	438.8	477.6	497.8
55°	366.2	378.0	418.5	460.7	482.6
57.5°	340.9	351.0	396.6	443.8	469.1
60°	308.8	322.3	374.6	425.3	450.6
62.5°	275.1	295.3	352.7	405.0	432.0
65°	243.0	266.6	332.4	384.8	411.8
67.5°	214.3	239.6	307.1	362.8	388.1
70°	180.6	212.6	281.8	335.8	364.5
72.5°	150.2	185.6	253.1	307.1	332.4
75°	119.8	158.6	224.4	270.0	285.2
77.5°	92.8	129.9	192.4	205.9	207.6
80°	69.2	102.9	143.4	145.1	150.2
82.5°	47.3	72.6	92.8	101.3	102.9
85°	30.4	42.2	52.3	54.0	57.4
87.5°	13.5	15.2	18.6	16.9	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)