

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: P277203

Luminaire Tested: **22CZ2-39HE-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277203
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3120.0 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

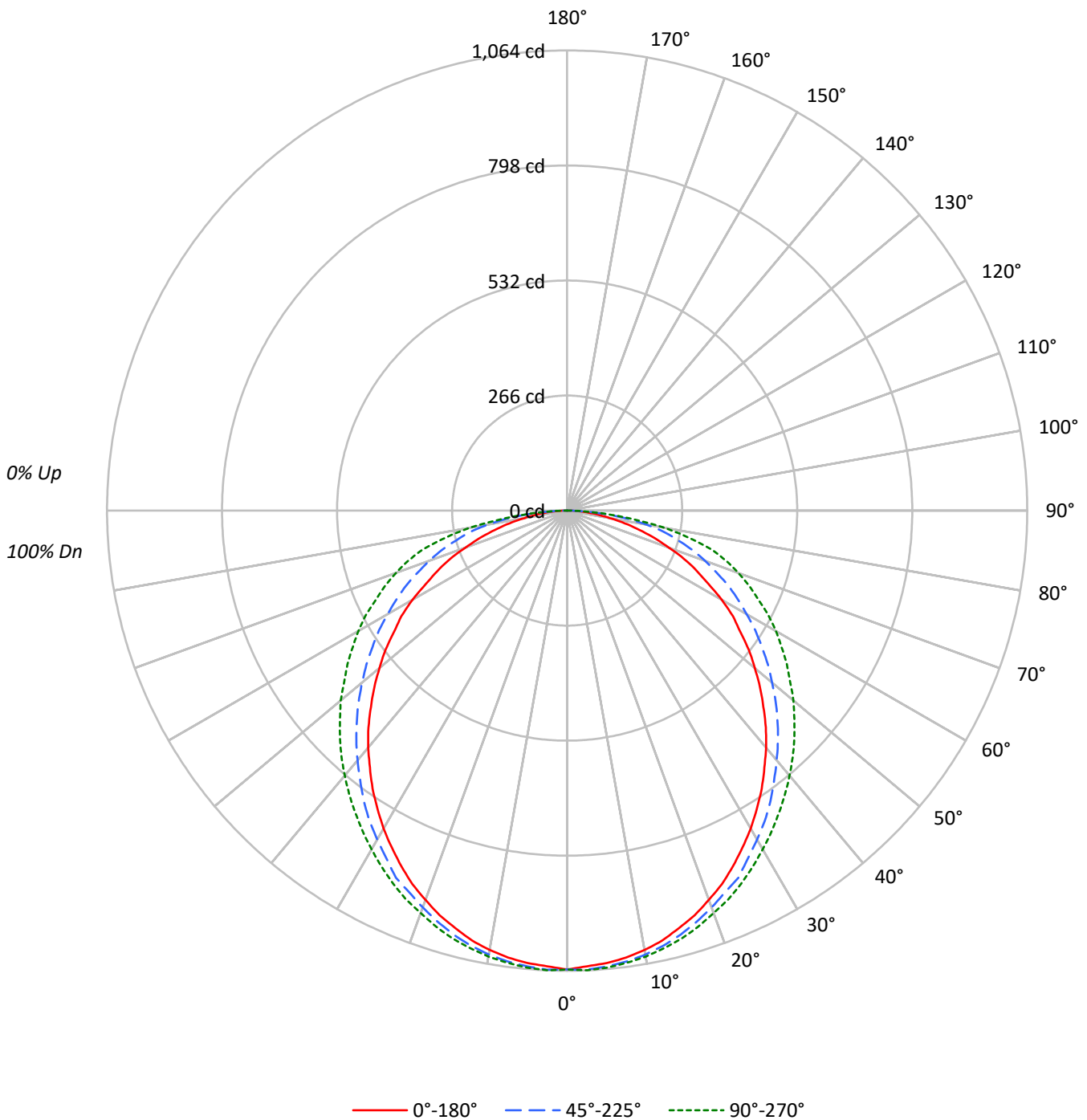
Input Watts (W): 30.704508
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2855	2855	2855
5°	2837	2857	2866
10°	2819	2848	2861
15°	2784	2827	2853
20°	2743	2796	2836
25°	2694	2781	2826
30°	2638	2729	2810
35°	2577	2693	2804
40°	2513	2648	2810
45°	2442	2618	2828
50°	2372	2590	2860
55°	2290	2578	2910
60°	2223	2578	2999
65°	2111	2620	3109
70°	1969	2670	3310
75°	1804	2761	3576
80°	1570	2879	3521
85°	1374	2560	2797



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.3	3.2
10°-20°	285.8	9.2
20°-30°	429.0	13.7
30°-40°	512.6	16.4
40°-50°	533.0	17.1
50°-60°	494.0	15.8
60°-70°	405.2	13.0
70°-80°	273.9	8.8
80°-90°	86.1	2.8
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°	815.1	26.1
0°-40°	1327.7	42.6
0°-60°	2354.7	75.5
0°-90°	3120.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3120.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1050	1052	1058	1059	1061	100
15°	999	1004	1015	1021	1024	282
25°	907	915	936	947	952	418
35°	784	795	820	844	854	490
45°	642	654	688	728	743	496
55°	488	504	550	599	620	439
65°	332	350	411	465	488	328
75°	174	203	266	319	344	184
85°	44	61	83	92	91	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1060.9	1060.9	1060.9	1060.9	1060.9
2.5°	1054.7	1057.8	1062.4	1063.9	1063.9
5°	1050.1	1051.6	1057.8	1059.3	1060.9
7.5°	1042.4	1045.5	1051.6	1053.2	1054.7
10°	1031.7	1034.8	1042.4	1045.5	1047.0
12.5°	1017.9	1020.9	1030.2	1034.8	1036.3
15°	999.4	1004.1	1014.8	1020.9	1024.0
17.5°	981.0	985.6	996.4	1005.6	1008.7
20°	958.0	968.7	976.4	988.7	990.2
22.5°	935.0	941.1	954.9	967.2	973.3
25°	907.3	915.0	936.5	947.2	951.9
27.5°	878.2	888.9	905.8	922.7	928.8
30°	849.0	856.7	878.2	898.1	904.3
32.5°	816.8	827.5	850.5	870.5	879.7
35°	784.5	795.3	819.8	844.4	853.6
37.5°	749.2	761.5	786.0	815.2	827.5
40°	715.4	724.6	753.8	789.1	799.9
42.5°	680.1	690.9	721.6	759.9	772.2
45°	641.7	654.0	687.8	727.7	743.1
47.5°	604.9	617.2	654.0	693.9	712.4
50°	566.5	581.9	618.7	664.8	683.2
52.5°	529.7	543.5	584.9	632.5	649.4
55°	488.2	503.6	549.6	598.7	620.2
57.5°	454.4	465.2	515.8	566.5	588.0
60°	413.0	426.8	479.0	532.7	557.3
62.5°	368.5	391.5	445.2	500.5	525.1
65°	331.6	350.0	411.4	465.2	488.2
67.5°	293.2	313.2	373.1	429.9	456.0
70°	250.2	276.3	339.3	396.1	420.7
72.5°	211.9	239.5	304.0	359.2	385.3
75°	173.5	202.7	265.6	319.3	343.9
77.5°	136.6	168.9	230.3	271.7	287.1
80°	101.3	132.0	185.8	214.9	227.2
82.5°	70.6	96.7	136.6	152.0	155.1
85°	44.5	61.4	82.9	92.1	90.6
87.5°	20.0	24.6	30.7	33.8	32.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)