

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: P277207

Luminaire Tested: **22CZ2-44HE-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277207
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: 22CZ2-44HE-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3203.0 lumens
Efficiency: N/A
Efficacy: 90.5 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

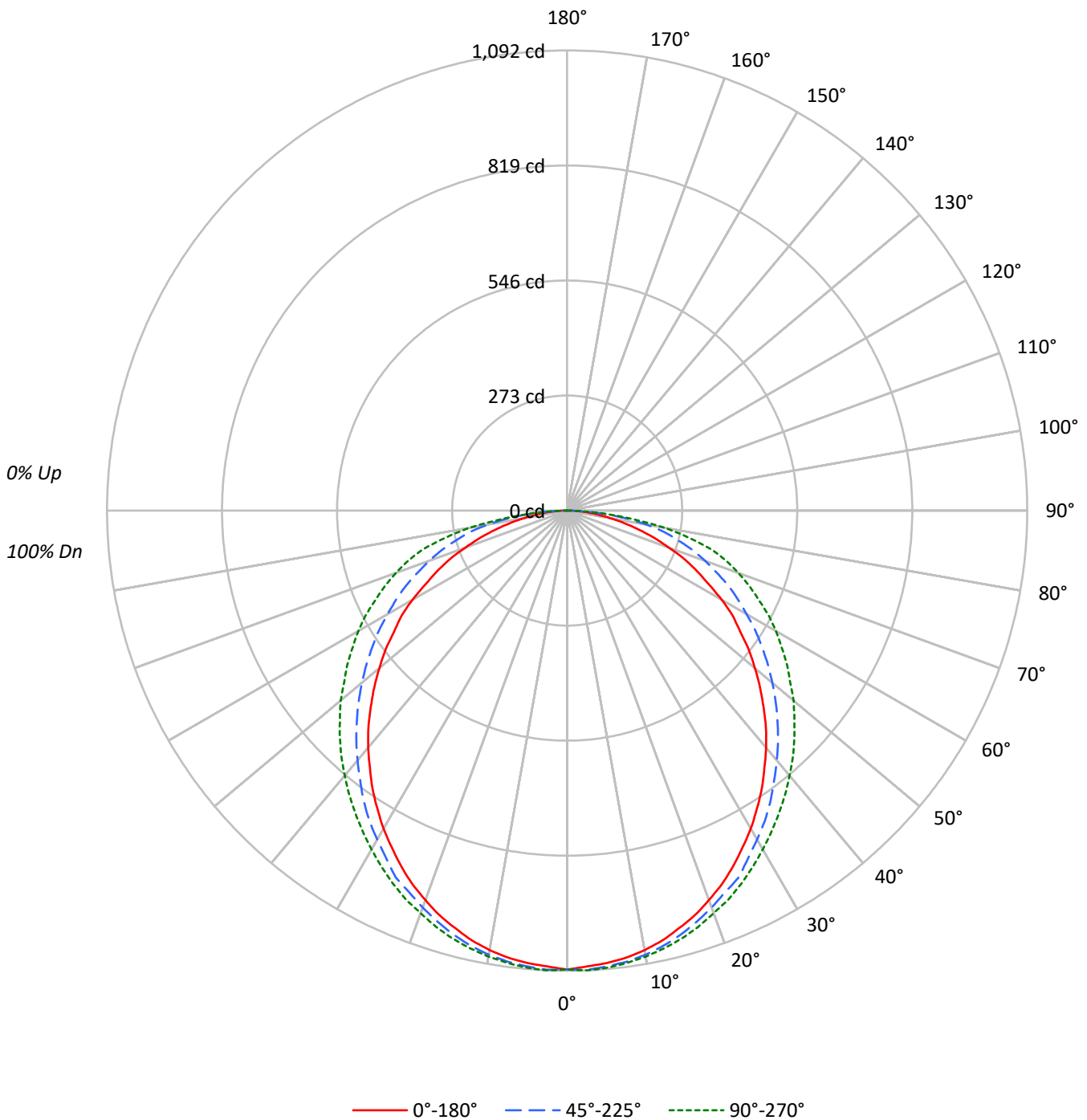
Input Watts (W): 35.391708
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2931	2931	2931
5°	2912	2933	2942
10°	2894	2924	2937
15°	2858	2902	2929
20°	2816	2871	2911
25°	2766	2855	2901
30°	2708	2801	2884
35°	2646	2765	2879
40°	2580	2719	2884
45°	2507	2687	2903
50°	2435	2659	2936
55°	2351	2647	2987
60°	2282	2646	3079
65°	2167	2690	3191
70°	2021	2740	3397
75°	1852	2835	3670
80°	1612	2955	3615
85°	1411	2628	2871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	3.2
10°-20°	293.4	9.2
20°-30°	440.4	13.7
30°-40°	526.2	16.4
40°-50°	547.2	17.1
50°-60°	507.2	15.8
60°-70°	416.0	13.0
70°-80°	281.2	8.8
80°-90°	88.4	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°	836.8	26.1
0°-40°	1363.0	42.6
0°-60°	2417.4	75.5
0°-90°	3203.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3203.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	1078	1080	1086	1088	1089	102
15°	1026	1031	1042	1048	1051	289
25°	932	939	961	972	977	429
35°	805	816	842	867	876	503
45°	659	671	706	747	763	509
55°	501	517	564	615	637	450
65°	340	359	422	478	501	337
75°	178	208	273	328	353	189
85°	46	63	85	95	93	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1089.1	1089.1	1089.1	1089.1	1089.1
2.5°	1082.8	1085.9	1090.7	1092.2	1092.2
5°	1078.0	1079.6	1085.9	1087.5	1089.1
7.5°	1070.2	1073.3	1079.6	1081.2	1082.8
10°	1059.1	1062.3	1070.2	1073.3	1074.9
12.5°	1044.9	1048.1	1057.6	1062.3	1063.9
15°	1026.0	1030.8	1041.8	1048.1	1051.3
17.5°	1007.1	1011.9	1022.9	1032.3	1035.5
20°	983.5	994.5	1002.4	1015.0	1016.6
22.5°	959.8	966.1	980.3	992.9	999.2
25°	931.5	939.4	961.4	972.4	977.2
27.5°	901.5	912.6	929.9	947.2	953.5
30°	871.6	879.5	901.5	922.0	928.3
32.5°	838.5	849.5	873.2	893.6	903.1
35°	805.4	816.4	841.6	866.9	876.3
37.5°	769.1	781.7	807.0	836.9	849.5
40°	734.5	743.9	773.9	810.1	821.1
42.5°	698.2	709.2	740.8	780.2	792.8
45°	658.8	671.4	706.1	747.1	762.8
47.5°	621.0	633.6	671.4	712.4	731.3
50°	581.6	597.3	635.2	682.4	701.4
52.5°	543.8	557.9	600.5	649.3	666.7
55°	501.2	517.0	564.2	614.7	636.7
57.5°	466.5	477.6	529.6	581.6	603.6
60°	424.0	438.2	491.7	546.9	572.1
62.5°	378.3	401.9	457.1	513.8	539.0
65°	340.4	359.3	422.4	477.6	501.2
67.5°	301.0	321.5	383.0	441.3	468.1
70°	256.9	283.7	348.3	406.6	431.8
72.5°	217.5	245.9	312.1	368.8	395.6
75°	178.1	208.0	272.7	327.8	353.0
77.5°	140.3	173.4	236.4	279.0	294.7
80°	104.0	135.5	190.7	220.7	233.3
82.5°	72.5	99.3	140.3	156.0	159.2
85°	45.7	63.0	85.1	94.6	93.0
87.5°	20.5	25.2	31.5	34.7	33.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)