

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: P277335

Luminaire Tested: **22CZ2-34HE-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277335
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34HE-S-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3192.0 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

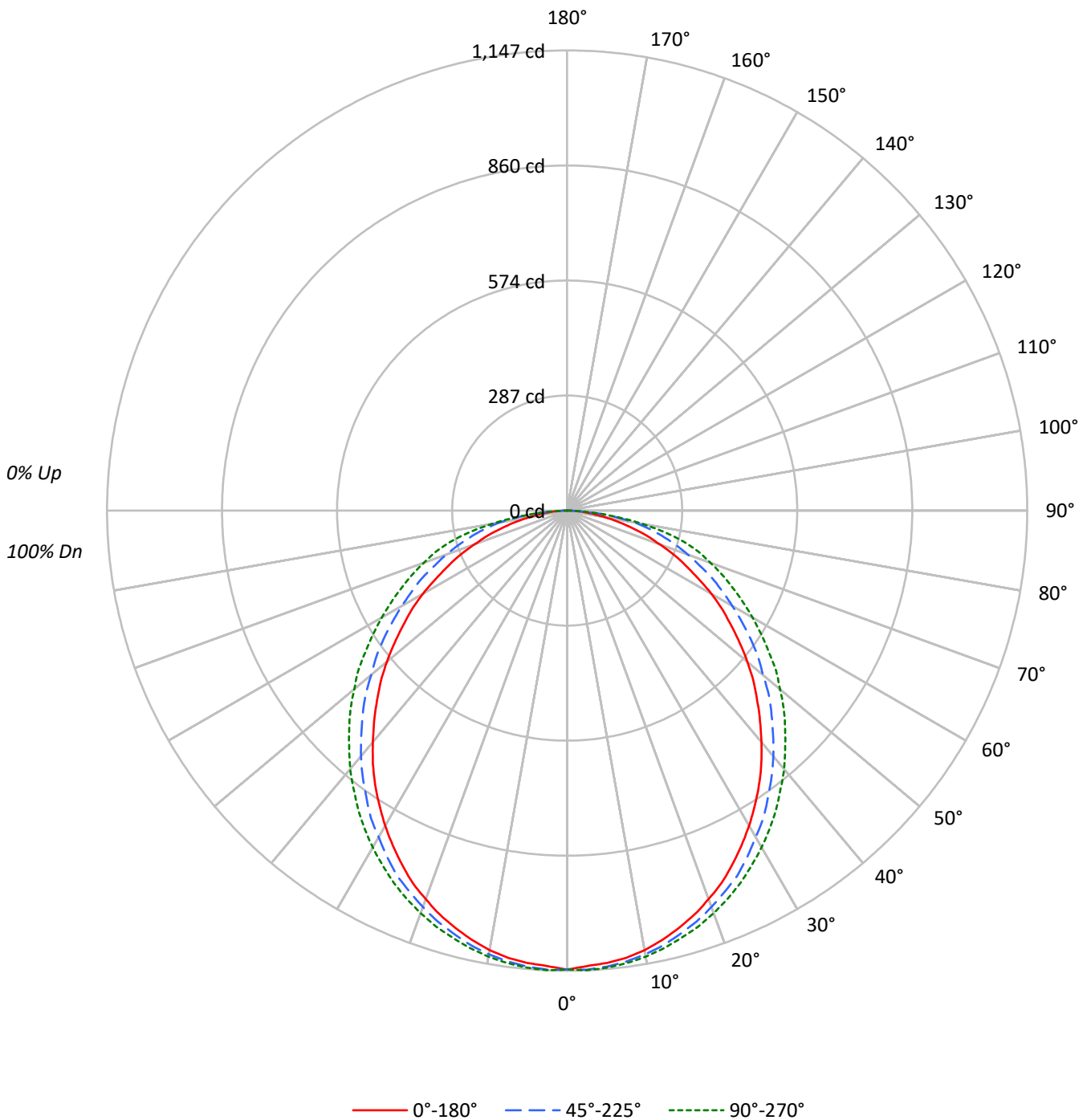
Input Watts (W): 25.575
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3078	3078	3078
5°	3058	3082	3090
10°	3040	3068	3085
15°	3000	3041	3070
20°	2951	3011	3058
25°	2892	2980	3038
30°	2818	2920	3013
35°	2740	2867	2984
40°	2647	2810	2956
45°	2551	2743	2925
50°	2457	2668	2899
55°	2341	2620	2879
60°	2236	2557	2870
65°	2086	2541	2902
70°	1921	2519	2988
75°	1734	2555	3143
80°	1500	2631	2954
85°	1241	2208	2208



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.2	3.4
10°-20°	307.8	9.6
20°-30°	460.6	14.4
30°-40°	545.4	17.1
40°-50°	555.9	17.4
50°-60°	498.2	15.6
60°-70°	390.1	12.2
70°-80°	251.5	7.9
80°-90°	74.3	2.3
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°	876.6	27.5
0°-40°	1422.0	44.5
0°-60°	2476.1	77.6
0°-90°	3192.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3192.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1132	1135	1141	1142	1144	107
15°	1077	1083	1092	1101	1102	304
25°	974	983	1004	1017	1023	448
35°	834	844	873	900	908	521
45°	670	685	721	758	768	518
55°	499	515	558	597	614	447
65°	328	347	399	438	456	325
75°	167	192	246	287	302	179
85°	40	55	72	72	72	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1143.8	1143.8	1143.8	1143.8	1143.8
2.5°	1136.3	1139.3	1145.3	1146.8	1146.8
5°	1131.9	1134.9	1140.8	1142.3	1143.8
7.5°	1124.4	1125.9	1133.4	1136.3	1137.8
10°	1112.5	1115.5	1122.9	1127.4	1128.9
12.5°	1096.1	1100.6	1109.5	1115.5	1117.0
15°	1076.8	1082.7	1091.7	1100.6	1102.1
17.5°	1055.9	1061.9	1073.8	1084.2	1087.2
20°	1030.6	1038.1	1051.5	1063.4	1067.8
22.5°	1005.3	1011.2	1027.6	1042.5	1047.0
25°	974.0	982.9	1003.8	1017.2	1023.2
27.5°	941.2	951.7	972.5	990.4	996.4
30°	907.0	917.4	939.8	962.1	969.5
32.5°	871.2	883.2	910.0	932.3	939.8
35°	834.0	844.4	872.7	899.5	908.5
37.5°	795.3	804.2	837.0	865.3	874.2
40°	753.6	765.5	799.8	832.5	841.5
42.5°	711.9	725.3	759.6	795.3	804.2
45°	670.2	685.1	720.8	758.1	768.5
47.5°	630.0	641.9	682.1	717.8	732.7
50°	586.8	598.7	637.4	677.6	692.5
52.5°	542.1	558.5	600.2	638.9	656.8
55°	498.9	515.3	558.5	597.2	613.6
57.5°	458.7	472.1	516.8	557.0	573.4
60°	415.5	427.4	475.1	518.3	533.2
62.5°	369.3	387.2	436.4	476.6	494.5
65°	327.6	347.0	399.1	437.9	455.7
67.5°	288.9	306.8	357.4	399.1	418.5
70°	244.2	268.1	320.2	361.9	379.8
72.5°	208.5	229.4	283.0	324.7	344.0
75°	166.8	192.1	245.7	287.4	302.3
77.5°	132.5	157.9	208.5	241.3	248.7
80°	96.8	122.1	169.8	186.2	190.6
82.5°	65.5	89.4	122.1	126.6	128.1
85°	40.2	55.1	71.5	71.5	71.5
87.5°	19.4	22.3	25.3	23.8	23.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)