

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: P277170

Luminaire Tested: **22CZ2-34HE-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277170  
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: 22CZ2-34HE-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3394.0 lumens  
Efficiency: N/A  
Efficacy: 125.8 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

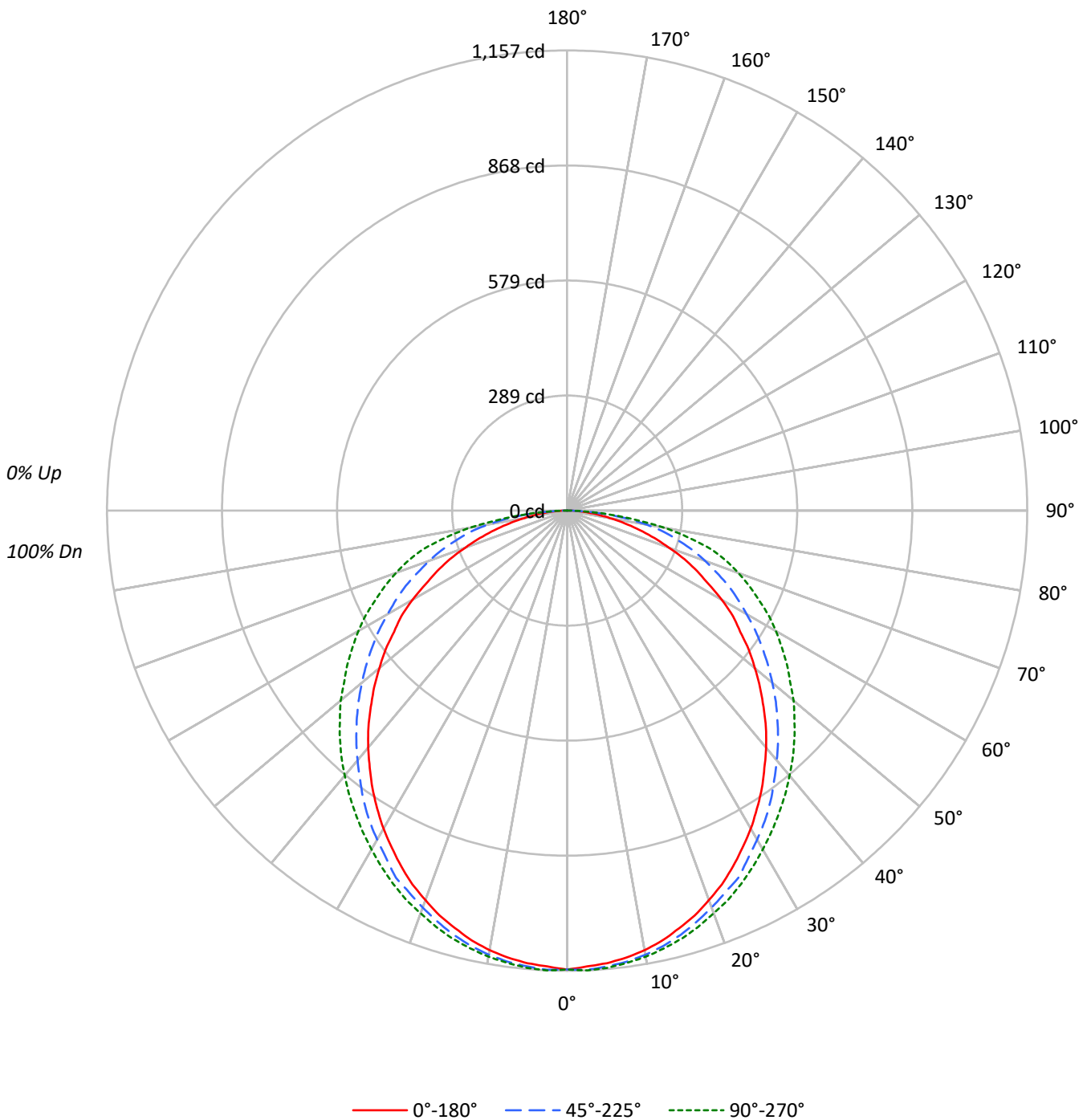
Input Watts (W): 26.97  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3105	3105	3105
5°	3086	3108	3117
10°	3067	3099	3112
15°	3029	3075	3103
20°	2984	3042	3085
25°	2931	3025	3074
30°	2870	2968	3057
35°	2803	2930	3051
40°	2734	2881	3057
45°	2657	2847	3076
50°	2580	2817	3111
55°	2492	2805	3165
60°	2418	2805	3263
65°	2297	2850	3382
70°	2142	2904	3600
75°	1962	3004	3890
80°	1708	3132	3831
85°	1494	2785	3041



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.1	3.2
10°-20°	310.9	9.2
20°-30°	466.7	13.7
30°-40°	557.6	16.4
40°-50°	579.8	17.1
50°-60°	537.4	15.8
60°-70°	440.8	13.0
70°-80°	298.0	8.8
80°-90°	93.6	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°	886.7	26.1
0°-40°	1444.3	42.6
0°-60°	2561.5	75.5
0°-90°	3394.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3394.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1154	1154	1154	1154	1154	
5°	1142	1144	1151	1152	1154	108
15°	1087	1092	1104	1111	1114	307
25°	987	995	1019	1030	1035	455
35°	853	865	892	918	929	533
45°	698	712	748	792	808	539
55°	531	548	598	651	675	477
65°	361	381	448	506	531	357
75°	189	220	289	347	374	200
85°	48	67	90	100	98	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1154.0	1154.0	1154.0	1154.0	1154.0
2.5°	1147.3	1150.7	1155.7	1157.4	1157.4
5°	1142.3	1144.0	1150.7	1152.4	1154.0
7.5°	1134.0	1137.3	1144.0	1145.7	1147.3
10°	1122.3	1125.6	1134.0	1137.3	1139.0
12.5°	1107.3	1110.6	1120.6	1125.6	1127.3
15°	1087.2	1092.2	1103.9	1110.6	1113.9
17.5°	1067.2	1072.2	1083.9	1093.9	1097.2
20°	1042.1	1053.8	1062.2	1075.5	1077.2
22.5°	1017.1	1023.8	1038.8	1052.1	1058.8
25°	987.0	995.4	1018.7	1030.4	1035.4
27.5°	955.3	967.0	985.3	1003.7	1010.4
30°	923.6	931.9	955.3	977.0	983.7
32.5°	888.5	900.2	925.2	946.9	957.0
35°	853.4	865.1	891.8	918.5	928.6
37.5°	815.0	828.4	855.1	886.8	900.2
40°	778.3	788.3	820.0	858.4	870.1
42.5°	739.8	751.5	784.9	826.7	840.0
45°	698.1	711.5	748.2	791.6	808.3
47.5°	658.0	671.4	711.5	754.9	774.9
50°	616.3	633.0	673.0	723.1	743.2
52.5°	576.2	591.2	636.3	688.1	706.4
55°	531.1	547.8	597.9	651.3	674.7
57.5°	494.3	506.0	561.1	616.3	639.6
60°	449.3	464.3	521.1	579.5	606.2
62.5°	400.8	425.9	484.3	544.4	571.2
65°	360.7	380.8	447.6	506.0	531.1
67.5°	319.0	340.7	405.8	467.6	496.0
70°	272.2	300.6	369.1	430.9	457.6
72.5°	230.5	260.5	330.7	390.8	419.2
75°	188.7	220.5	288.9	347.4	374.1
77.5°	148.6	183.7	250.5	295.6	312.3
80°	110.2	143.6	202.1	233.8	247.2
82.5°	76.8	105.2	148.6	165.3	168.7
85°	48.4	66.8	90.2	100.2	98.5
87.5°	21.7	26.7	33.4	36.7	35.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)