

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: P259066

Luminaire Tested: **14CZ-LD5-44-SQP-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259066  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35908)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-44-SQP-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2813.0 lumens  
Efficiency: N/A  
Efficacy: 79.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

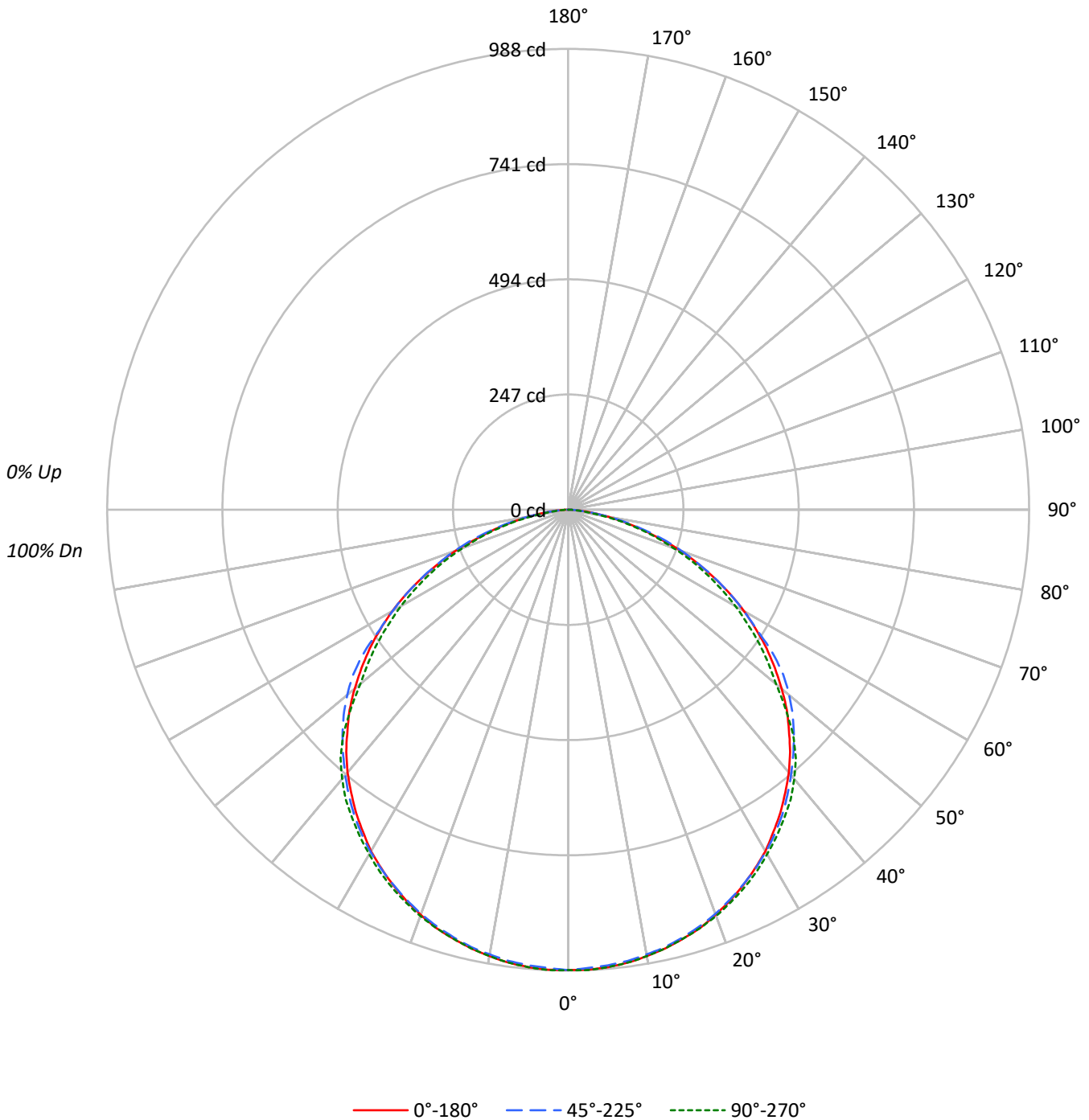
Input Watts (W): 35.619  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70					70			
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	62	59					59			
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51					51			
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	50	46	44					44			
6	70	57	48	42	68	56	48	41	54	47	41	52	46	41	51	45	40	38					38			
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34					34			
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30					30			
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2656	2656	2656
5°	2659	2649	2659
10°	2656	2645	2656
15°	2652	2644	2652
20°	2647	2641	2655
25°	2637	2634	2654
30°	2626	2632	2650
35°	2604	2626	2651
40°	2584	2611	2648
45°	2546	2603	2593
50°	2501	2589	2433
55°	2436	2508	2343
60°	2343	2338	2231
65°	2196	2208	2087
70°	2017	2039	1889
75°	1694	1774	1615
80°	1344	1373	1137
85°	883	766	648



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.5	3.3
10°-20°	268.7	9.6
20°-30°	410.3	14.6
30°-40°	500.6	17.8
40°-50°	523.4	18.6
50°-60°	463.4	16.5
60°-70°	341.3	12.1
70°-80°	176.7	6.3
80°-90°	35.2	1.3
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°	772.4	27.5
0°-40°	1273.0	45.3
0°-60°	2259.9	80.3
0°-90°	2813.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2813.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	987	987	987	987	987	
5°	984	984	980	984	984	94
15°	952	952	949	953	952	269
25°	888	888	887	893	894	409
35°	793	795	799	807	807	496
45°	669	675	684	690	681	516
55°	519	530	534	507	499	463
65°	345	366	347	334	328	342
75°	163	174	171	160	155	174
85°	29	30	25	22	21	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	987.1	987.1	987.1	987.1	987.1
2.5°	987.1	987.1	983.3	987.1	988.1
5°	984.3	984.3	980.5	984.3	984.3
7.5°	979.5	978.6	975.7	979.5	979.5
10°	971.9	971.9	968.1	972.8	971.9
12.5°	963.3	962.4	960.5	964.3	963.3
15°	951.9	951.9	949.0	952.8	951.9
17.5°	940.4	939.5	936.6	940.4	940.4
20°	924.2	923.3	922.3	926.1	927.1
22.5°	907.1	906.1	905.2	910.9	910.9
25°	888.0	888.0	887.1	892.8	893.8
27.5°	867.1	867.1	868.0	875.7	874.7
30°	845.2	845.2	847.1	852.8	852.8
32.5°	818.5	820.4	824.2	830.9	830.9
35°	792.8	794.7	799.4	807.0	807.0
37.5°	764.2	767.0	771.8	781.3	783.2
40°	735.6	737.5	743.2	753.7	753.7
42.5°	704.1	706.0	713.7	724.2	722.2
45°	668.9	674.6	684.1	689.8	681.3
47.5°	635.5	639.3	652.7	646.0	631.7
50°	597.4	605.0	618.4	594.6	581.2
52.5°	558.4	566.9	581.2	547.9	540.3
55°	519.3	529.8	534.5	506.9	499.3
57.5°	477.4	488.8	479.3	463.1	455.5
60°	435.4	448.8	434.5	419.2	414.5
62.5°	391.6	406.9	390.7	377.3	370.7
65°	344.9	365.9	346.8	333.5	327.8
67.5°	299.2	321.1	301.1	289.7	285.8
70°	256.3	268.7	259.2	247.7	240.1
72.5°	204.9	217.2	215.3	203.0	198.2
75°	162.9	174.4	170.6	160.1	155.3
77.5°	121.0	133.4	129.6	117.2	115.3
80°	86.7	95.3	88.6	77.2	73.4
82.5°	54.3	61.0	52.4	43.8	41.9
85°	28.6	30.5	24.8	21.9	21.0
87.5°	9.5	10.5	10.5	9.5	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)