

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: P275658

Luminaire Tested: **14CZ2-39-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275658  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-39-S-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4041.0 lumens  
Efficiency: N/A  
Efficacy: 127.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

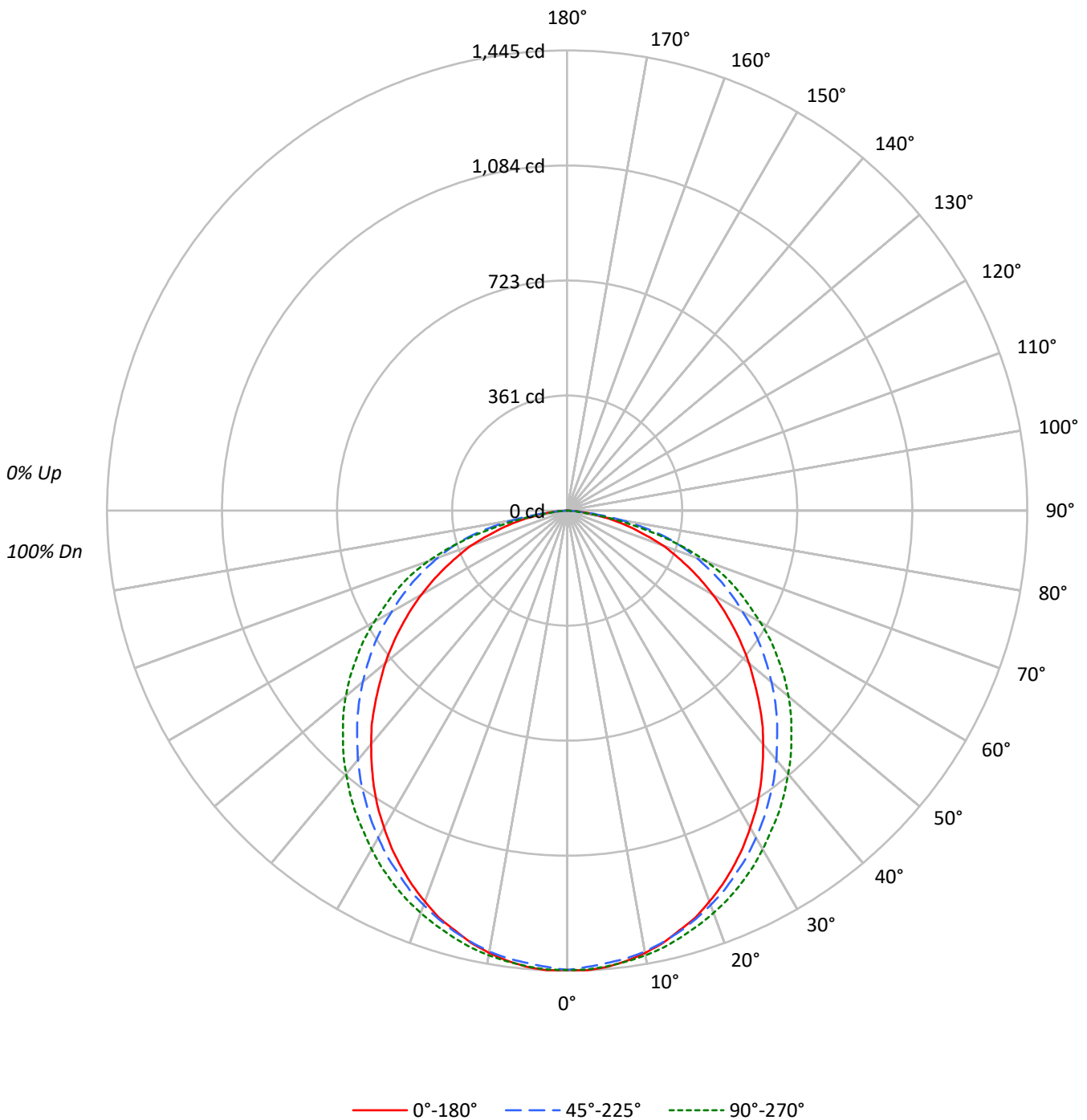
Input Watts (W): 31.806  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	94	97	94	91	94	91	89	90	88	86	84					84			
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58					58			
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50					50			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	3882	3882	3882
5°	3886	3853	3881
10°	3854	3843	3876
15°	3801	3812	3863
20°	3741	3775	3850
25°	3665	3730	3837
30°	3573	3686	3816
35°	3475	3633	3804
40°	3364	3589	3793
45°	3240	3546	3790
50°	3120	3506	3800
55°	2989	3478	3788
60°	2847	3429	3763
65°	2679	3419	3764
70°	2522	3389	3657
75°	2188	3313	3124
80°	1770	2670	2080
85°	1176	929	618



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.2	3.4
10°-20°	387.6	9.6
20°-30°	581.4	14.4
30°-40°	693.6	17.2
40°-50°	717.1	17.7
50°-60°	654.7	16.2
60°-70°	515.2	12.7
70°-80°	299.9	7.4
80°-90°	55.3	1.4
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°	1105.3	27.4
0°-40°	1798.9	44.5
0°-60°	3170.6	78.5
0°-90°	4041.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4041.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1443	1443	1443	1443	1443	
5°	1439	1435	1426	1439	1437	136
15°	1364	1366	1368	1386	1386	385
25°	1234	1240	1256	1286	1292	568
35°	1058	1072	1106	1148	1158	661
45°	852	880	932	984	996	658
55°	637	671	741	795	807	570
65°	421	465	537	579	591	418
75°	210	260	319	313	300	224
85°	38	54	30	24	20	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1442.6	1442.6	1442.6	1442.6	1442.6
2.5°	1444.6	1440.6	1434.6	1444.6	1442.6
5°	1438.6	1434.6	1426.5	1438.6	1436.6
7.5°	1426.5	1422.5	1418.5	1430.5	1428.5
10°	1410.5	1408.5	1406.5	1420.5	1418.5
12.5°	1390.5	1390.5	1388.5	1404.5	1404.5
15°	1364.4	1366.4	1368.4	1386.5	1386.5
17.5°	1340.4	1338.4	1344.4	1364.4	1366.4
20°	1306.3	1310.3	1318.3	1342.4	1344.4
22.5°	1272.3	1276.3	1290.3	1314.3	1320.4
25°	1234.2	1240.2	1256.2	1286.3	1292.3
27.5°	1194.1	1202.1	1224.2	1256.2	1262.2
30°	1150.0	1162.1	1186.1	1222.2	1228.2
32.5°	1106.0	1118.0	1148.0	1184.1	1192.1
35°	1057.9	1071.9	1106.0	1148.0	1158.1
37.5°	1007.8	1025.8	1065.9	1108.0	1120.0
40°	957.7	977.7	1021.8	1065.9	1079.9
42.5°	907.6	927.7	975.7	1025.8	1039.9
45°	851.5	879.6	931.7	983.8	995.8
47.5°	797.4	827.5	885.6	937.7	953.7
50°	745.3	775.4	837.5	891.6	907.6
52.5°	691.2	723.3	789.4	845.5	859.5
55°	637.1	671.2	741.3	795.4	807.4
57.5°	583.0	619.1	691.2	743.3	757.3
60°	528.9	567.0	637.1	689.2	699.2
62.5°	474.8	514.9	587.0	633.1	643.1
65°	420.7	464.8	537.0	579.0	591.1
67.5°	368.7	412.7	482.9	522.9	532.9
70°	320.6	360.6	430.8	460.8	464.8
72.5°	260.5	310.6	378.7	394.7	384.7
75°	210.4	260.5	318.6	312.6	300.5
77.5°	160.3	210.4	248.4	228.4	212.4
80°	114.2	164.3	172.3	142.3	134.2
82.5°	74.1	114.2	96.2	74.1	60.1
85°	38.1	54.1	30.1	24.0	20.0
87.5°	12.0	8.0	4.0	4.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)