

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: P277418

Luminaire Tested: **22CZ2-39HE-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277418  
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: 22CZ2-39HE-S-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3780.0 lumens  
Efficiency: N/A  
Efficacy: 124.7 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

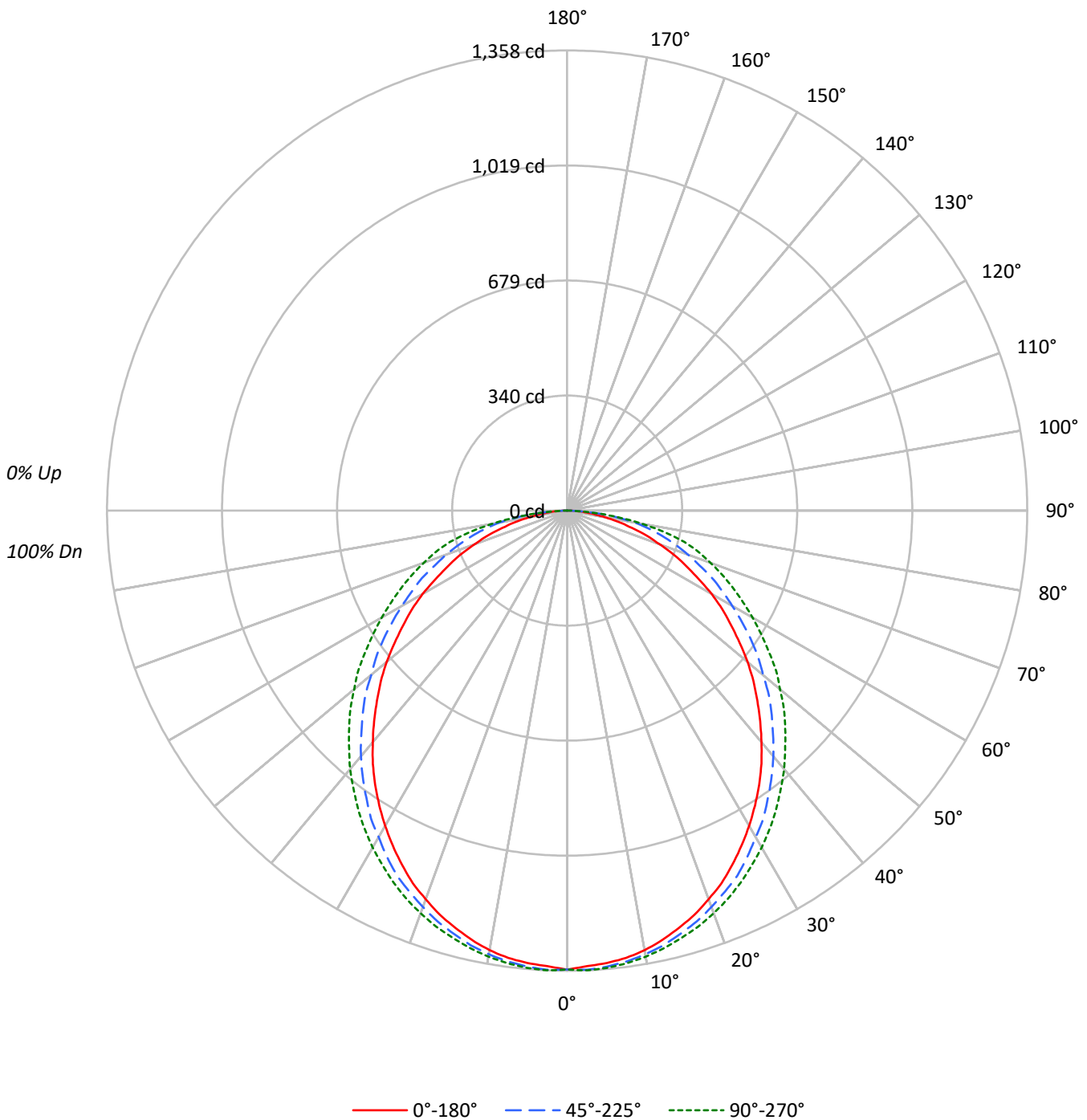
Input Watts (W): 30.318  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	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	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	3645	3645	3645
5°	3621	3649	3659
10°	3600	3634	3653
15°	3552	3602	3636
20°	3495	3566	3621
25°	3425	3529	3597
30°	3338	3458	3567
35°	3245	3395	3534
40°	3135	3327	3501
45°	3020	3248	3463
50°	2909	3160	3433
55°	2772	3103	3409
60°	2648	3028	3398
65°	2471	3010	3436
70°	2275	2984	3538
75°	2053	3026	3722
80°	1776	3116	3498
85°	1470	2615	2615



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.1	3.4
10°-20°	364.5	9.6
20°-30°	545.4	14.4
30°-40°	645.9	17.1
40°-50°	658.3	17.4
50°-60°	590.0	15.6
60°-70°	461.9	12.2
70°-80°	297.9	7.9
80°-90°	88.0	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°	1038.0	27.5
0°-40°	1684.0	44.5
0°-60°	2932.2	77.6
0°-90°	3780.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3780.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1354	1354	1354	1354	1354	
5°	1340	1344	1351	1353	1354	127
15°	1275	1282	1293	1303	1305	360
25°	1153	1164	1189	1205	1212	531
35°	988	1000	1034	1065	1076	617
45°	794	811	854	898	910	613
55°	591	610	661	707	727	530
65°	388	411	473	518	540	385
75°	198	228	291	340	358	212
85°	48	65	85	85	85	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1354.5	1354.5	1354.5	1354.5	1354.5
2.5°	1345.7	1349.2	1356.3	1358.0	1358.0
5°	1340.4	1343.9	1351.0	1352.7	1354.5
7.5°	1331.6	1333.3	1342.1	1345.7	1347.4
10°	1317.5	1321.0	1329.8	1335.1	1336.9
12.5°	1298.1	1303.3	1313.9	1321.0	1322.7
15°	1275.1	1282.2	1292.8	1303.3	1305.1
17.5°	1250.4	1257.5	1271.6	1283.9	1287.5
20°	1220.5	1229.3	1245.1	1259.3	1264.5
22.5°	1190.5	1197.5	1216.9	1234.6	1239.9
25°	1153.4	1164.0	1188.7	1204.6	1211.6
27.5°	1114.6	1127.0	1151.7	1172.8	1179.9
30°	1074.1	1086.4	1112.9	1139.3	1148.1
32.5°	1031.7	1045.9	1077.6	1104.1	1112.9
35°	987.7	1000.0	1033.5	1065.3	1075.8
37.5°	941.8	952.4	991.2	1024.7	1035.3
40°	892.4	906.5	947.1	985.9	996.5
42.5°	843.0	858.9	899.5	941.8	952.4
45°	793.6	811.3	853.6	897.7	910.0
47.5°	746.0	760.1	807.8	850.1	867.7
50°	694.9	709.0	754.8	802.5	820.1
52.5°	642.0	661.4	710.8	756.6	777.8
55°	590.8	610.2	661.4	707.2	726.6
57.5°	543.2	559.1	612.0	659.6	679.0
60°	492.1	506.2	562.6	613.8	631.4
62.5°	437.4	458.6	516.8	564.4	585.5
65°	388.0	410.9	472.7	518.5	539.7
67.5°	342.2	363.3	423.3	472.7	495.6
70°	289.2	317.5	379.2	428.6	449.7
72.5°	246.9	271.6	335.1	384.5	407.4
75°	197.5	227.5	291.0	340.4	358.0
77.5°	157.0	186.9	246.9	285.7	294.5
80°	114.6	144.6	201.1	220.5	225.7
82.5°	77.6	105.8	144.6	149.9	151.7
85°	47.6	65.3	84.7	84.7	84.7
87.5°	22.9	26.5	30.0	28.2	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)