

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: P277261

Luminaire Tested: **22CZ2-44HE-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277261  
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: 22CZ2-44HE-UNV-L82765-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: 4183.0 lumens  
Efficiency: N/A  
Efficacy: 118.7 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

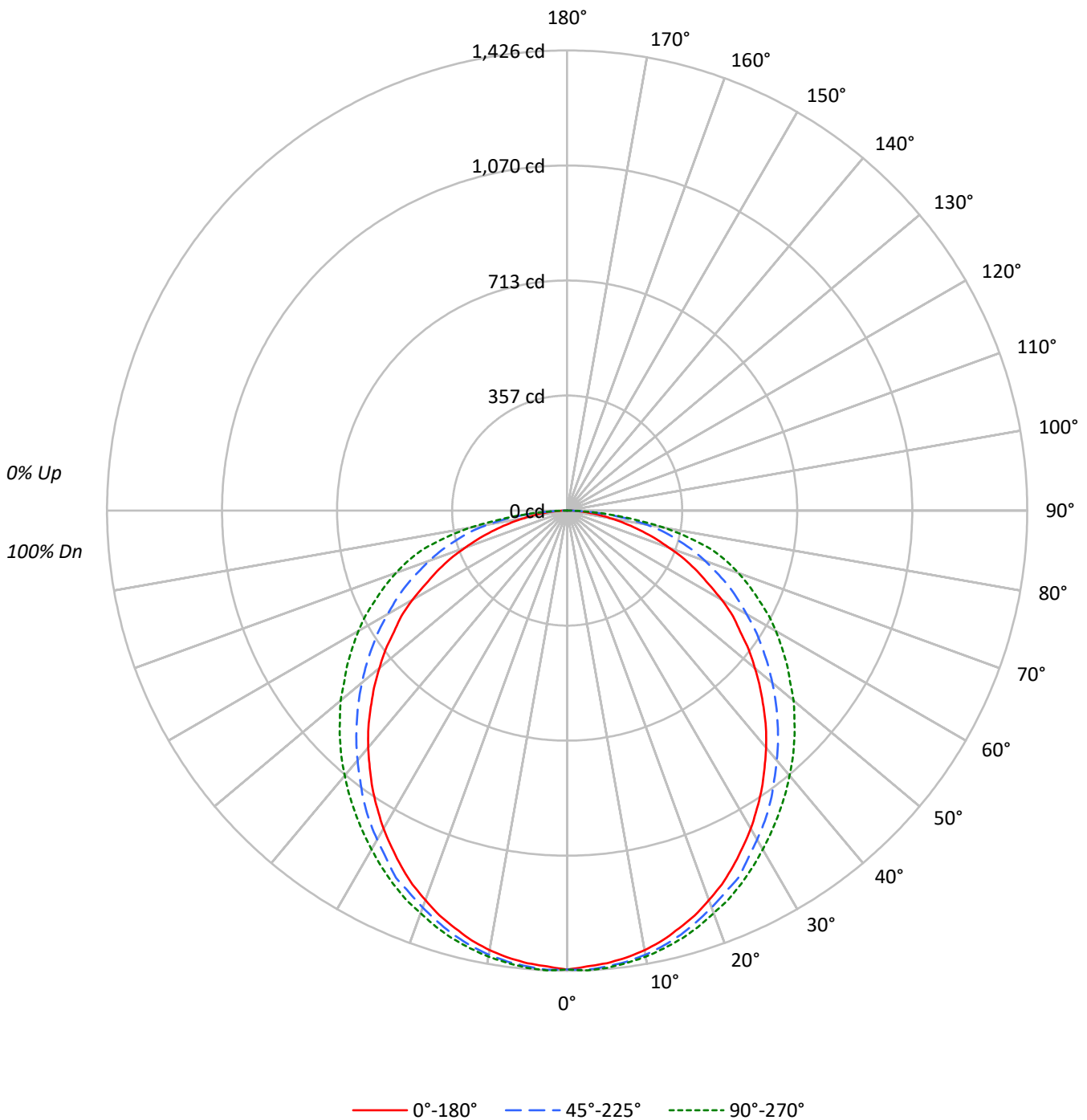
Input Watts (W): 35.247  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3827	3827	3827
5°	3803	3831	3842
10°	3780	3819	3836
15°	3733	3790	3825
20°	3678	3749	3802
25°	3612	3728	3789
30°	3537	3659	3767
35°	3455	3611	3759
40°	3370	3550	3767
45°	3274	3509	3791
50°	3180	3473	3835
55°	3071	3457	3902
60°	2980	3456	4021
65°	2831	3512	4167
70°	2640	3579	4437
75°	2418	3702	4794
80°	2104	3860	4720
85°	1843	3430	3748



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.5	3.2
10°-20°	383.1	9.2
20°-30°	575.2	13.7
30°-40°	687.2	16.4
40°-50°	714.6	17.1
50°-60°	662.4	15.8
60°-70°	543.3	13.0
70°-80°	367.3	8.8
80°-90°	115.4	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°	1092.8	26.1
0°-40°	1780.0	42.6
0°-60°	3157.0	75.5
0°-90°	4183.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4183.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1422	1422	1422	1422	1422	
5°	1408	1410	1418	1420	1422	134
15°	1340	1346	1360	1369	1373	378
25°	1216	1227	1256	1270	1276	560
35°	1052	1066	1099	1132	1144	657
45°	860	877	922	976	996	664
55°	654	675	737	803	832	588
65°	445	469	552	624	654	439
75°	233	272	356	428	461	247
85°	60	82	111	124	121	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1422.3	1422.3	1422.3	1422.3	1422.3
2.5°	1414.1	1418.2	1424.4	1426.4	1426.4
5°	1407.9	1409.9	1418.2	1420.2	1422.3
7.5°	1397.6	1401.7	1409.9	1412.0	1414.1
10°	1383.2	1387.3	1397.6	1401.7	1403.8
12.5°	1364.7	1368.8	1381.1	1387.3	1389.4
15°	1340.0	1346.1	1360.5	1368.8	1372.9
17.5°	1315.3	1321.4	1335.8	1348.2	1352.3
20°	1284.4	1298.8	1309.1	1325.6	1327.6
22.5°	1253.5	1261.7	1280.3	1296.7	1305.0
25°	1216.5	1226.8	1255.6	1270.0	1276.2
27.5°	1177.4	1191.8	1214.4	1237.0	1245.3
30°	1138.2	1148.5	1177.4	1204.1	1212.3
32.5°	1095.0	1109.4	1140.3	1167.1	1179.4
35°	1051.8	1066.2	1099.1	1132.1	1144.4
37.5°	1004.5	1020.9	1053.9	1093.0	1109.4
40°	959.2	971.5	1010.6	1058.0	1072.4
42.5°	911.8	926.2	967.4	1018.9	1035.3
45°	860.4	876.8	922.1	975.6	996.2
47.5°	811.0	827.4	876.8	930.4	955.1
50°	759.5	780.1	829.5	891.3	916.0
52.5°	710.1	728.6	784.2	848.0	870.7
55°	654.5	675.1	736.9	802.7	831.6
57.5°	609.3	623.7	691.6	759.5	788.3
60°	553.7	572.2	642.2	714.2	747.2
62.5°	494.0	524.9	596.9	671.0	703.9
65°	444.6	469.3	551.6	623.7	654.5
67.5°	393.1	419.9	500.2	576.3	611.3
70°	335.5	370.5	454.9	531.0	564.0
72.5°	284.0	321.1	407.5	481.6	516.6
75°	232.6	271.7	356.1	428.1	461.1
77.5°	183.2	226.4	308.7	364.3	384.9
80°	135.8	177.0	249.1	288.2	304.6
82.5°	94.7	129.7	183.2	203.8	207.9
85°	59.7	82.3	111.1	123.5	121.4
87.5°	26.8	32.9	41.2	45.3	43.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)