

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: P259478

Luminaire Tested: **22CZ-LD5-39-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259478  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ-LD5-39-S-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4177.0 lumens  
Efficiency: N/A  
Efficacy: 134.9 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

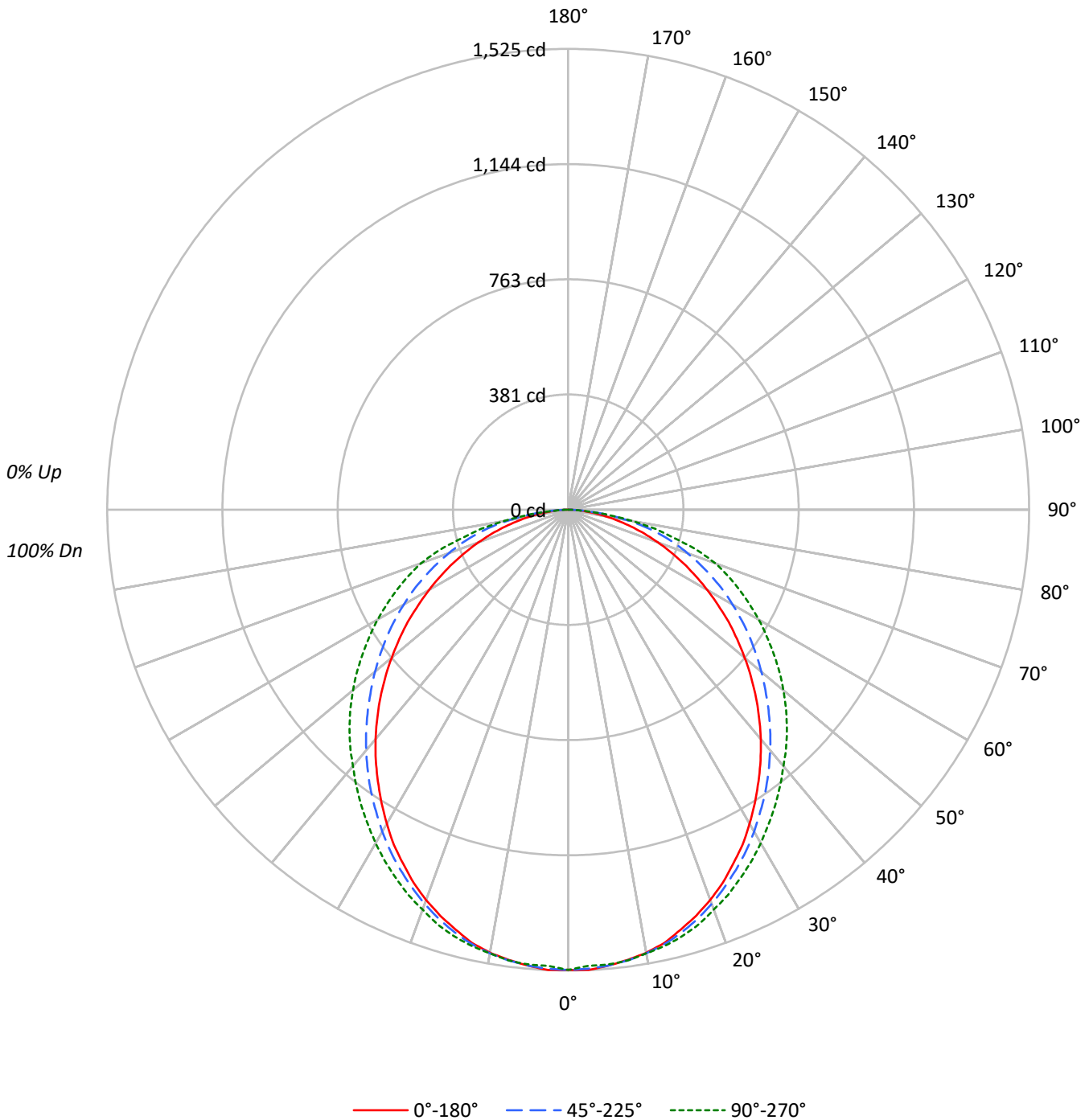
Input Watts (W): 30.969  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	4098	4098	4098
5°	4092	4092	4081
10°	4068	4073	4073
15°	4008	4035	4069
20°	3936	3976	4033
25°	3836	3902	3997
30°	3728	3821	3959
35°	3605	3737	3921
40°	3482	3651	3890
45°	3344	3565	3894
50°	3192	3494	3889
55°	3040	3436	3887
60°	2862	3380	3920
65°	2683	3334	3973
70°	2478	3299	4072
75°	2232	3275	3775
80°	1959	3047	3296
85°	1612	2291	2044



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.8	3.4
10°-20°	408.5	9.8
20°-30°	606.7	14.5
30°-40°	714.2	17.1
40°-50°	728.1	17.4
50°-60°	656.6	15.7
60°-70°	517.2	12.4
70°-80°	319.0	7.6
80°-90°	82.8	2.0
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°	1159.0	27.7
0°-40°	1873.2	44.8
0°-60°	3257.9	78.0
0°-90°	4177.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4177.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1523	1523	1523	1523	1523	
5°	1515	1517	1515	1513	1511	144
15°	1438	1444	1448	1457	1461	406
25°	1292	1300	1314	1336	1346	595
35°	1097	1110	1138	1174	1194	687
45°	879	893	937	993	1023	677
55°	648	670	732	798	829	578
65°	421	451	524	590	624	417
75°	215	251	315	351	363	229
85°	52	66	74	70	66	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1522.8	1522.8	1522.8	1522.8	1522.8
2.5°	1524.8	1524.8	1520.8	1516.7	1510.7
5°	1514.7	1516.7	1514.7	1512.7	1510.7
7.5°	1502.7	1504.7	1504.7	1504.7	1504.7
10°	1488.7	1490.7	1490.7	1490.7	1490.7
12.5°	1468.6	1470.6	1472.6	1474.6	1478.6
15°	1438.5	1444.5	1448.5	1456.6	1460.6
17.5°	1408.4	1414.4	1420.4	1430.5	1438.5
20°	1374.3	1378.3	1388.3	1400.4	1408.4
22.5°	1336.2	1342.2	1352.2	1368.3	1380.3
25°	1292.0	1300.1	1314.1	1336.2	1346.2
27.5°	1249.9	1255.9	1274.0	1298.1	1312.1
30°	1199.8	1207.8	1229.8	1259.9	1274.0
32.5°	1149.6	1159.6	1183.7	1217.8	1233.9
35°	1097.4	1109.5	1137.6	1173.7	1193.7
37.5°	1045.3	1057.3	1089.4	1129.5	1151.6
40°	991.1	1003.1	1039.3	1083.4	1107.5
42.5°	934.9	949.0	989.1	1039.3	1067.3
45°	878.7	892.8	936.9	993.1	1023.2
47.5°	820.6	836.6	884.8	947.0	977.1
50°	762.4	780.4	834.6	898.8	928.9
52.5°	704.2	724.3	782.4	848.7	880.8
55°	648.0	670.1	732.3	798.5	828.6
57.5°	587.8	613.9	680.1	744.3	778.4
60°	531.7	559.8	628.0	692.2	728.3
62.5°	475.5	505.6	577.8	642.0	676.1
65°	421.3	451.4	523.6	589.8	624.0
67.5°	367.1	401.3	471.5	537.7	571.8
70°	315.0	351.1	419.3	483.5	517.6
72.5°	264.8	300.9	369.2	429.3	449.4
75°	214.7	250.8	315.0	351.1	363.1
77.5°	168.5	202.6	258.8	280.9	296.9
80°	126.4	156.5	196.6	210.7	212.7
82.5°	86.3	112.4	136.4	138.4	136.4
85°	52.2	66.2	74.2	70.2	66.2
87.5°	24.1	26.1	24.1	16.1	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)