

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: P274738

Luminaire Tested: **22CZ2-20-RDP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P274738  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-20-RDP-UNV-L950-CD1-U  
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI  
Light Source: (56) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1275.0 lumens  
Efficiency: N/A  
Efficacy: 71.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

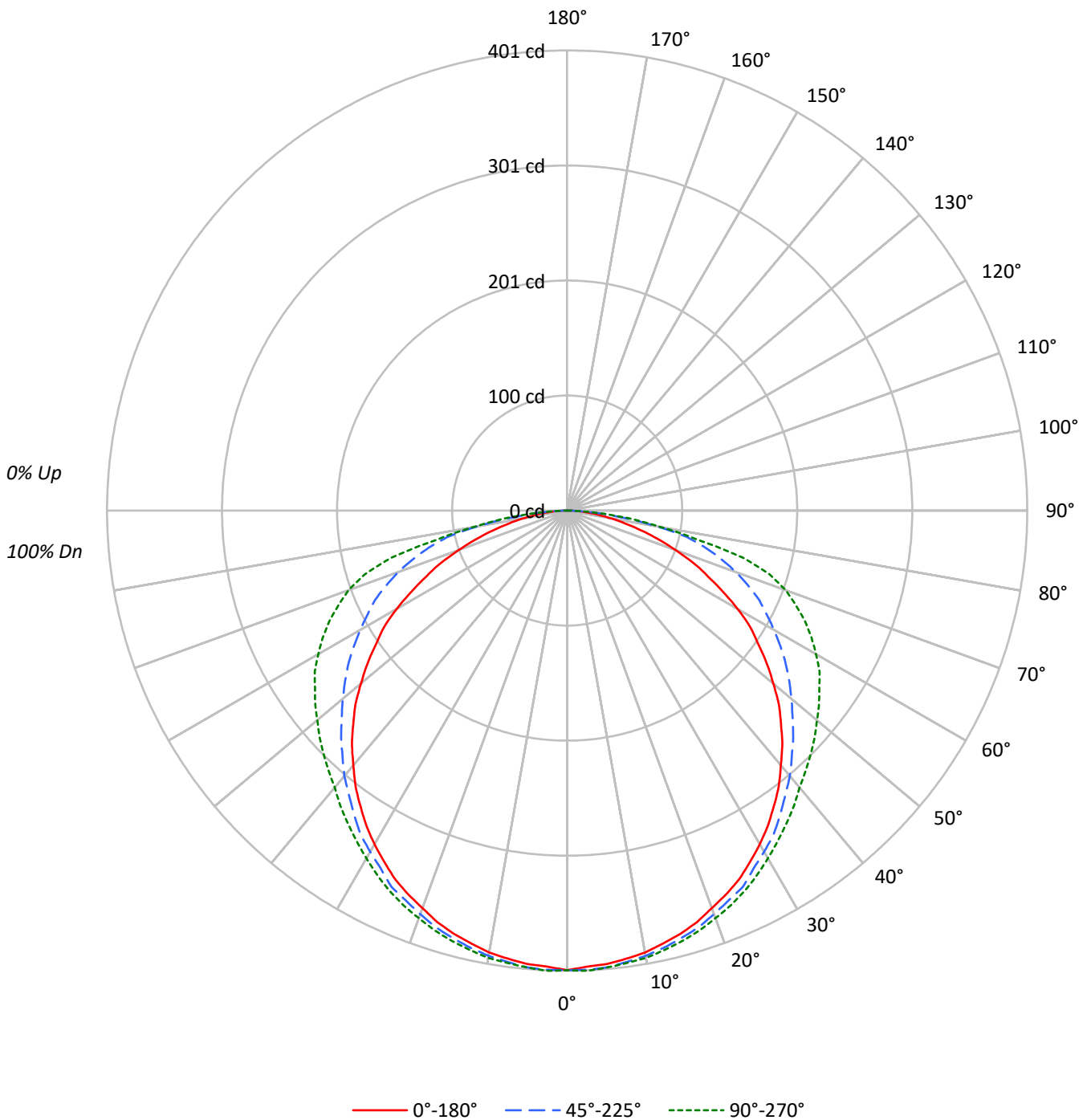
Input Watts (W): 17.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1078	1078	1078
5°	1072	1079	1079
10°	1069	1076	1082
15°	1063	1074	1082
20°	1056	1072	1082
25°	1053	1075	1086
30°	1043	1067	1087
35°	1032	1063	1094
40°	1018	1061	1107
45°	1003	1060	1142
50°	982	1068	1190
55°	955	1091	1259
60°	924	1121	1348
65°	860	1177	1457
70°	790	1232	1594
75°	692	1297	1648
80°	597	1235	1294
85°	522	898	985



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.9	3.0
10°-20°	108.8	8.5
20°-30°	166.0	13.0
30°-40°	202.6	15.9
40°-50°	216.7	17.0
50°-60°	209.1	16.4
60°-70°	180.0	14.1
70°-80°	121.8	9.6
80°-90°	32.1	2.5
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°	312.6	24.5
0°-40°	515.3	40.4
0°-60°	941.1	73.8
0°-90°	1275.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1275.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	400	400	400	400	400	
5°	397	398	400	400	400	38
15°	382	383	386	387	388	108
25°	354	356	362	364	366	163
35°	314	317	324	330	333	197
45°	264	268	279	293	300	203
55°	204	210	233	256	268	182
65°	135	148	185	214	229	134
75°	67	88	125	150	158	71
85°	17	23	29	30	32	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	400.5	400.5	400.5	400.5	400.5
2.5°	397.7	398.6	400.5	400.5	401.4
5°	396.7	397.7	399.6	399.6	399.6
7.5°	393.9	394.9	396.7	397.7	397.7
10°	391.1	392.1	393.9	394.9	395.8
12.5°	386.4	387.4	390.2	392.1	392.1
15°	381.7	382.7	385.5	387.4	388.3
17.5°	376.1	378.0	380.8	382.7	383.6
20°	368.6	370.5	374.2	377.1	378.0
22.5°	362.0	363.9	367.7	370.5	372.4
25°	354.5	356.4	362.0	363.9	365.8
27.5°	345.2	347.0	351.7	355.5	358.3
30°	335.8	337.7	343.3	348.0	349.9
32.5°	325.5	328.3	334.8	338.6	341.4
35°	314.2	317.0	323.6	330.2	333.0
37.5°	303.0	305.8	312.3	320.8	324.5
40°	289.8	293.6	302.0	313.3	315.1
42.5°	277.6	282.3	289.8	303.0	307.6
45°	263.6	268.3	278.6	292.6	300.1
47.5°	250.4	255.1	266.4	283.3	292.6
50°	234.5	241.1	255.1	274.8	284.2
52.5°	219.5	225.1	243.9	265.4	276.7
55°	203.5	210.1	232.6	256.1	268.3
57.5°	189.5	195.1	220.4	246.7	260.7
60°	171.6	179.1	208.2	236.4	250.4
62.5°	152.9	164.1	196.0	225.1	240.1
65°	135.1	148.2	184.8	213.8	228.9
67.5°	119.1	133.2	170.7	201.7	215.7
70°	100.4	118.2	156.6	186.6	202.6
72.5°	83.5	103.2	140.7	170.7	184.8
75°	66.6	88.2	124.7	150.1	158.5
77.5°	51.6	72.2	106.9	114.4	115.4
80°	38.5	57.2	79.7	80.7	83.5
82.5°	26.3	40.3	51.6	56.3	57.2
85°	16.9	23.4	29.1	30.0	31.9
87.5°	7.5	8.4	10.3	9.4	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)