

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: P274734

Luminaire Tested: **22CZ2-20HE-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: P274734  
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: 22CZ2-20HE-RDP-UNV-L950-CD1-U  
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI  
Light Source: (112) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1240.0 lumens  
Efficiency: N/A  
Efficacy: 77.5 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

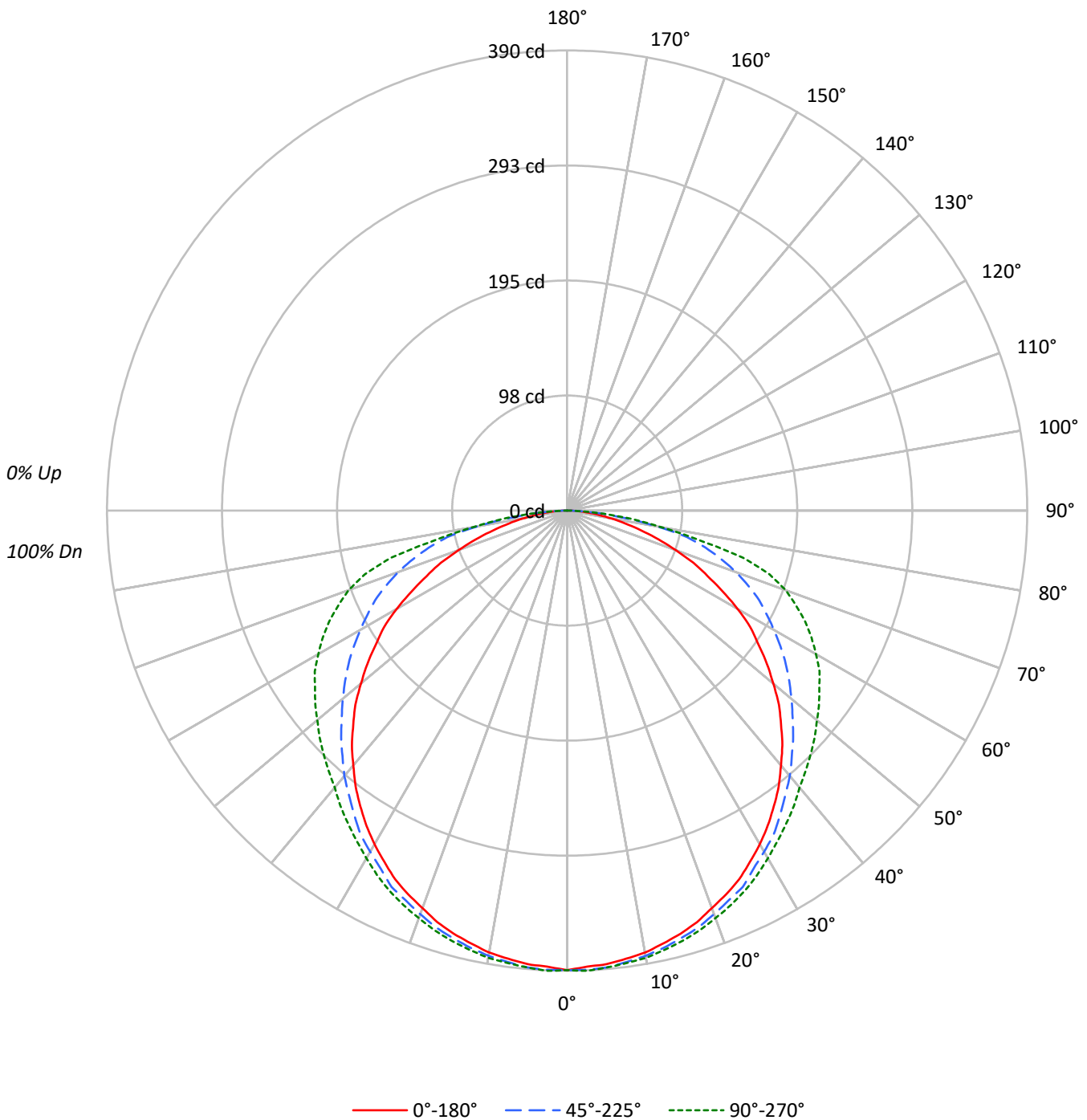
Input Watts (W): 16  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1048	1048	1048
5°	1042	1050	1050
10°	1039	1047	1052
15°	1034	1044	1052
20°	1027	1042	1053
25°	1024	1045	1056
30°	1015	1038	1057
35°	1004	1034	1064
40°	990	1032	1077
45°	975	1031	1111
50°	955	1039	1157
55°	928	1061	1224
60°	898	1090	1311
65°	837	1144	1417
70°	768	1198	1550
75°	674	1261	1603
80°	580	1201	1258
85°	506	874	957



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.8	3.0
10°-20°	105.8	8.5
20°-30°	161.4	13.0
30°-40°	197.1	15.9
40°-50°	210.7	17.0
50°-60°	203.4	16.4
60°-70°	175.1	14.1
70°-80°	118.4	9.6
80°-90°	31.2	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°	304.0	24.5
0°-40°	501.1	40.4
0°-60°	915.2	73.8
0°-90°	1240.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1240.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	390	390	390	390	390	
5°	386	387	389	389	389	37
15°	371	372	375	377	378	105
25°	345	347	352	354	356	159
35°	306	308	315	321	324	191
45°	256	261	271	285	292	198
55°	198	204	226	249	261	177
65°	131	144	180	208	223	131
75°	65	86	121	146	154	70
85°	16	23	28	29	31	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	389.5	389.5	389.5	389.5	389.5
2.5°	386.8	387.7	389.5	389.5	390.4
5°	385.9	386.8	388.6	388.6	388.6
7.5°	383.1	384.0	385.9	386.8	386.8
10°	380.4	381.3	383.1	384.0	384.9
12.5°	375.8	376.7	379.5	381.3	381.3
15°	371.3	372.2	374.9	376.7	377.6
17.5°	365.8	367.6	370.3	372.2	373.1
20°	358.5	360.3	364.0	366.7	367.6
22.5°	352.1	353.9	357.6	360.3	362.1
25°	344.8	346.6	352.1	353.9	355.8
27.5°	335.7	337.5	342.1	345.7	348.5
30°	326.6	328.4	333.9	338.4	340.2
32.5°	316.5	319.3	325.7	329.3	332.0
35°	305.6	308.3	314.7	321.1	323.8
37.5°	294.6	297.4	303.8	312.0	315.6
40°	281.9	285.5	293.7	304.7	306.5
42.5°	270.0	274.6	281.9	294.6	299.2
45°	256.3	260.9	270.9	284.6	291.9
47.5°	243.6	248.1	259.1	275.5	284.6
50°	228.0	234.4	248.1	267.3	276.4
52.5°	213.5	218.9	237.2	258.2	269.1
55°	197.9	204.3	226.2	249.0	260.9
57.5°	184.3	189.7	214.4	239.9	253.6
60°	166.9	174.2	202.5	229.9	243.6
62.5°	148.7	159.6	190.6	218.9	233.5
65°	131.4	144.1	179.7	208.0	222.6
67.5°	115.8	129.5	166.0	196.1	209.8
70°	97.6	114.9	152.3	181.5	197.0
72.5°	81.2	100.3	136.8	166.0	179.7
75°	64.8	85.7	121.3	146.0	154.2
77.5°	50.2	70.2	104.0	111.3	112.2
80°	37.4	55.6	77.5	78.4	81.2
82.5°	25.5	39.2	50.2	54.7	55.6
85°	16.4	22.8	28.3	29.2	31.0
87.5°	7.3	8.2	10.0	9.1	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)