

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: P271952

Luminaire Tested: **14CZ2-44-S-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: P271952  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-44-S-UNV-L950-CD1-U  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 90CRI  
Light Source: (112) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

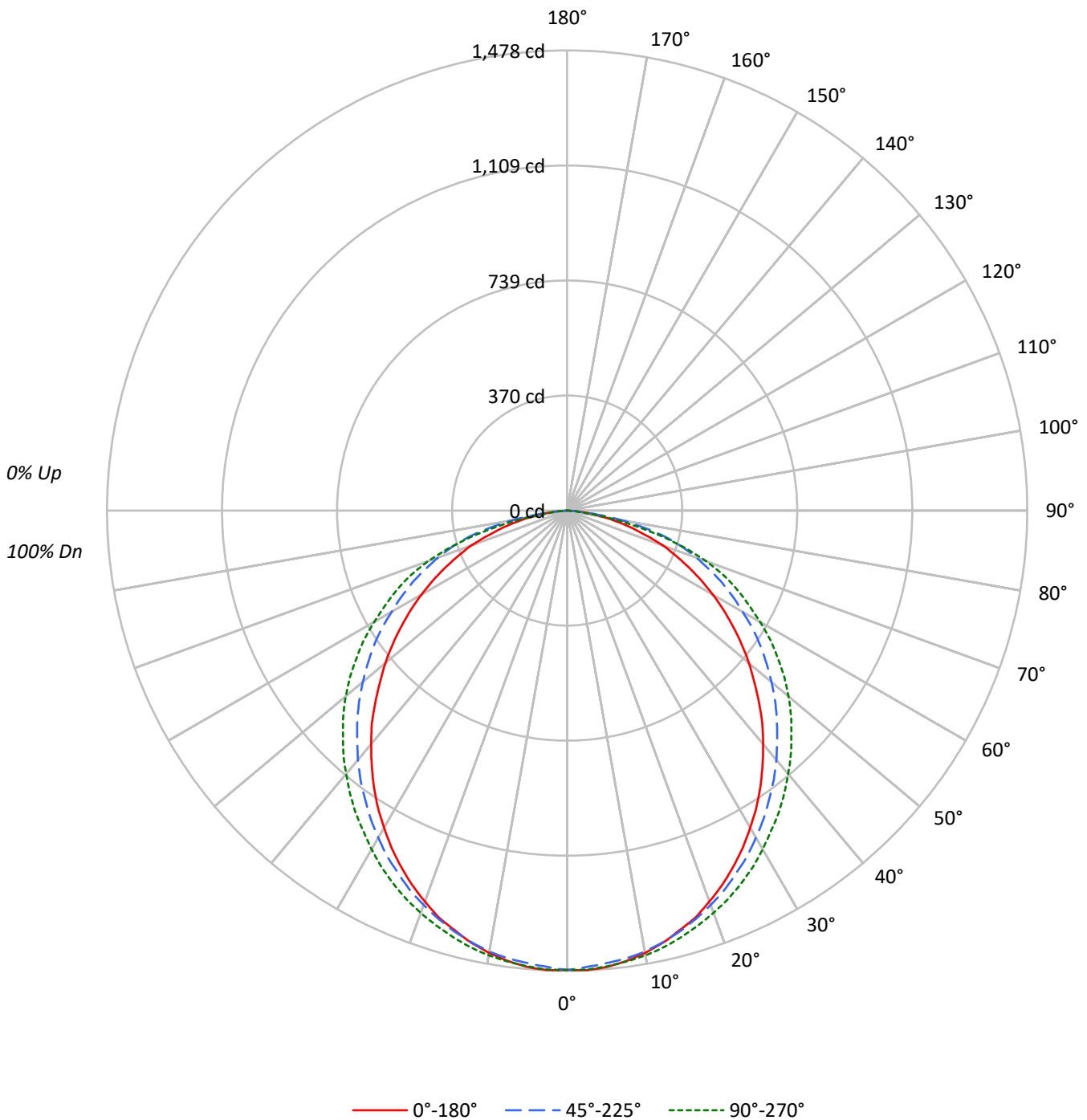
Lumens per Lamp: N/A  
Luminaire Lumens: 4133.0 lumens  
Efficiency: N/A  
Efficacy: 107.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 38.3  
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



TEST NUMBER: P271952  
CATALOG NUMBER: 14CZ2-44-S-UNV-L950-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P271952

CATALOG NUMBER: 14CZ2-44-S-UNV-L950-CD1-U

**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	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	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	55	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	35	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	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3970	3970	3970
5°	3974	3941	3969
10°	3942	3931	3964
15°	3888	3899	3950
20°	3826	3861	3938
25°	3748	3815	3924
30°	3655	3769	3903
35°	3554	3716	3891
40°	3441	3671	3880
45°	3314	3626	3876
50°	3191	3586	3886
55°	3057	3557	3874
60°	2912	3507	3849
65°	2740	3497	3849
70°	2580	3467	3740
75°	2237	3387	3196
80°	1810	2731	2128
85°	1201	948	633



TEST NUMBER: P271952

CATALOG NUMBER: 14CZ2-44-S-UNV-L950-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.3	3.4
10°-20°	396.4	9.6
20°-30°	594.7	14.4
30°-40°	709.4	17.2
40°-50°	733.4	17.7
50°-60°	669.6	16.2
60°-70°	526.9	12.7
70°-80°	306.7	7.4
80°-90°	56.5	1.4
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°	1130.5	27.4
0°-40°	1839.9	44.5
0°-60°	3242.8	78.5
0°-90°	4133.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4133.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1475	1475	1475	1475	1475	
5°	1471	1467	1459	1471	1469	139
15°	1396	1398	1400	1418	1418	394
25°	1262	1268	1285	1316	1322	581
35°	1082	1096	1131	1174	1184	676
45°	871	900	953	1006	1018	673
55°	652	686	758	814	826	583
65°	430	475	549	592	604	427
75°	215	266	326	320	307	229
85°	39	55	31	25	20	50
90°	0	0	0	0	0	



TEST NUMBER: P271952

CATALOG NUMBER: 14CZ2-44-S-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1475.4	1475.4	1475.4	1475.4	1475.4
2.5°	1477.5	1473.4	1467.2	1477.5	1475.4
5°	1471.3	1467.2	1459.0	1471.3	1469.3
7.5°	1459.0	1454.9	1450.8	1463.1	1461.1
10°	1442.6	1440.6	1438.5	1452.9	1450.8
12.5°	1422.1	1422.1	1420.1	1436.5	1436.5
15°	1395.5	1397.5	1399.6	1418.0	1418.0
17.5°	1370.9	1368.9	1375.0	1395.5	1397.5
20°	1336.1	1340.2	1348.4	1373.0	1375.0
22.5°	1301.2	1305.3	1319.7	1344.3	1350.4
25°	1262.3	1268.4	1284.8	1315.6	1321.7
27.5°	1221.3	1229.5	1252.1	1284.8	1291.0
30°	1176.2	1188.5	1213.1	1250.0	1256.1
32.5°	1131.1	1143.4	1174.2	1211.1	1219.3
35°	1082.0	1096.3	1131.1	1174.2	1184.4
37.5°	1030.7	1049.2	1090.2	1133.2	1145.5
40°	979.5	1000.0	1045.1	1090.2	1104.5
42.5°	928.3	948.8	998.0	1049.2	1063.5
45°	870.9	899.6	952.9	1006.1	1018.4
47.5°	815.6	846.3	905.7	959.0	975.4
50°	762.3	793.0	856.6	911.9	928.3
52.5°	707.0	739.8	807.4	864.8	879.1
55°	651.6	686.5	758.2	813.5	825.8
57.5°	596.3	633.2	707.0	760.2	774.6
60°	541.0	579.9	651.6	704.9	715.2
62.5°	485.7	526.6	600.4	647.5	657.8
65°	430.3	475.4	549.2	592.2	604.5
67.5°	377.0	422.1	493.9	534.8	545.1
70°	327.9	368.9	440.6	471.3	475.4
72.5°	266.4	317.6	387.3	403.7	393.4
75°	215.2	266.4	325.8	319.7	307.4
77.5°	163.9	215.2	254.1	233.6	217.2
80°	116.8	168.0	176.2	145.5	137.3
82.5°	75.8	116.8	98.4	75.8	61.5
85°	38.9	55.3	30.7	24.6	20.5
87.5°	12.3	8.2	4.1	4.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)