

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: P274767

Luminaire Tested: **22CZ2-44HE-RDP-UNV-L930-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: P274767  
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: 22CZ2-44HE-RDP-UNV-L930-CD1-U  
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI  
Light Source: (196) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2465.1 lumens  
Efficiency: N/A  
Efficacy: 70.4 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

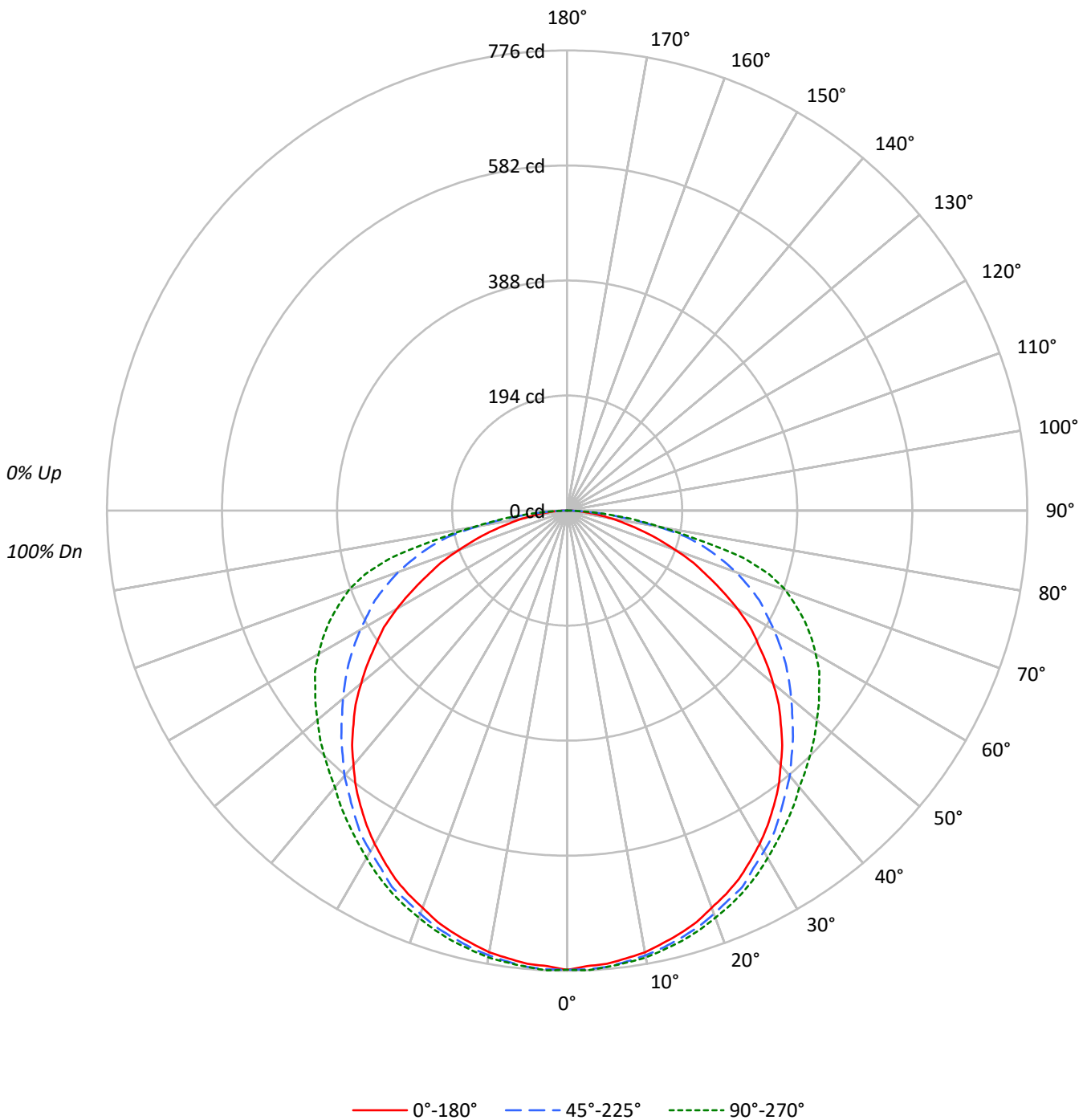
Input Watts (W): 35  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2084	2084	2084
5°	2072	2087	2087
10°	2066	2081	2091
15°	2056	2076	2092
20°	2041	2072	2093
25°	2035	2078	2100
30°	2017	2062	2102
35°	1996	2055	2115
40°	1968	2051	2140
45°	1939	2050	2208
50°	1898	2065	2300
55°	1846	2110	2433
60°	1786	2167	2606
65°	1663	2274	2818
70°	1526	2382	3082
75°	1339	2508	3187
80°	1153	2388	2501
85°	1007	1735	1905



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.2	3.0
10°-20°	210.3	8.5
20°-30°	320.9	13.0
30°-40°	391.8	15.9
40°-50°	418.9	17.0
50°-60°	404.3	16.4
60°-70°	348.1	14.1
70°-80°	235.5	9.6
80°-90°	62.1	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°	604.4	24.5
0°-40°	996.2	40.4
0°-60°	1819.4	73.8
0°-90°	2465.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2465.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	774	774	774	774	774	
5°	767	769	772	772	772	73
15°	738	740	745	749	751	208
25°	686	689	700	704	707	315
35°	608	613	626	638	644	380
45°	510	519	539	566	580	393
55°	394	406	450	495	519	353
65°	261	286	357	414	442	260
75°	129	170	241	290	306	138
85°	33	45	56	58	62	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	774.3	774.3	774.3	774.3	774.3
2.5°	768.9	770.7	774.3	774.3	776.1
5°	767.1	768.9	772.5	772.5	772.5
7.5°	761.6	763.5	767.1	768.9	768.9
10°	756.2	758.0	761.6	763.5	765.3
12.5°	747.1	748.9	754.4	758.0	758.0
15°	738.1	739.9	745.3	748.9	750.8
17.5°	727.2	730.8	736.2	739.9	741.7
20°	712.7	716.3	723.6	729.0	730.8
22.5°	700.0	703.6	710.9	716.3	719.9
25°	685.5	689.1	700.0	703.6	707.2
27.5°	667.3	671.0	680.0	687.3	692.7
30°	649.2	652.8	663.7	672.8	676.4
32.5°	629.3	634.7	647.4	654.6	660.1
35°	607.5	612.9	625.6	638.3	643.8
37.5°	585.7	591.2	603.9	620.2	627.4
40°	560.3	567.6	583.9	605.7	609.3
42.5°	536.8	545.8	560.3	585.7	594.8
45°	509.6	518.6	538.6	565.8	580.3
47.5°	484.2	493.3	515.0	547.7	565.8
50°	453.4	466.0	493.3	531.3	549.5
52.5°	424.3	435.2	471.5	513.2	535.0
55°	393.5	406.2	449.7	495.1	518.6
57.5°	366.3	377.2	426.2	476.9	504.1
60°	331.9	346.4	402.6	457.0	484.2
62.5°	295.6	317.3	379.0	435.2	464.2
65°	261.1	286.5	357.2	413.5	442.5
67.5°	230.3	257.5	330.0	389.9	417.1
70°	194.0	228.5	302.8	360.9	391.7
72.5°	161.4	199.5	272.0	330.0	357.2
75°	128.8	170.5	241.2	290.1	306.5
77.5°	99.7	139.6	206.7	221.2	223.1
80°	74.4	110.6	154.1	156.0	161.4
82.5°	50.8	78.0	99.7	108.8	110.6
85°	32.6	45.3	56.2	58.0	61.7
87.5°	14.5	16.3	19.9	18.1	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)