

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: P294801

Luminaire Tested: **14CZ2-35-HRP-UNV-L940-CD1-U**

Issue Date: 12/2/2019

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: P294801  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-35-HRP-UNV-L940-CD1-U  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS  
Light Source: (84) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

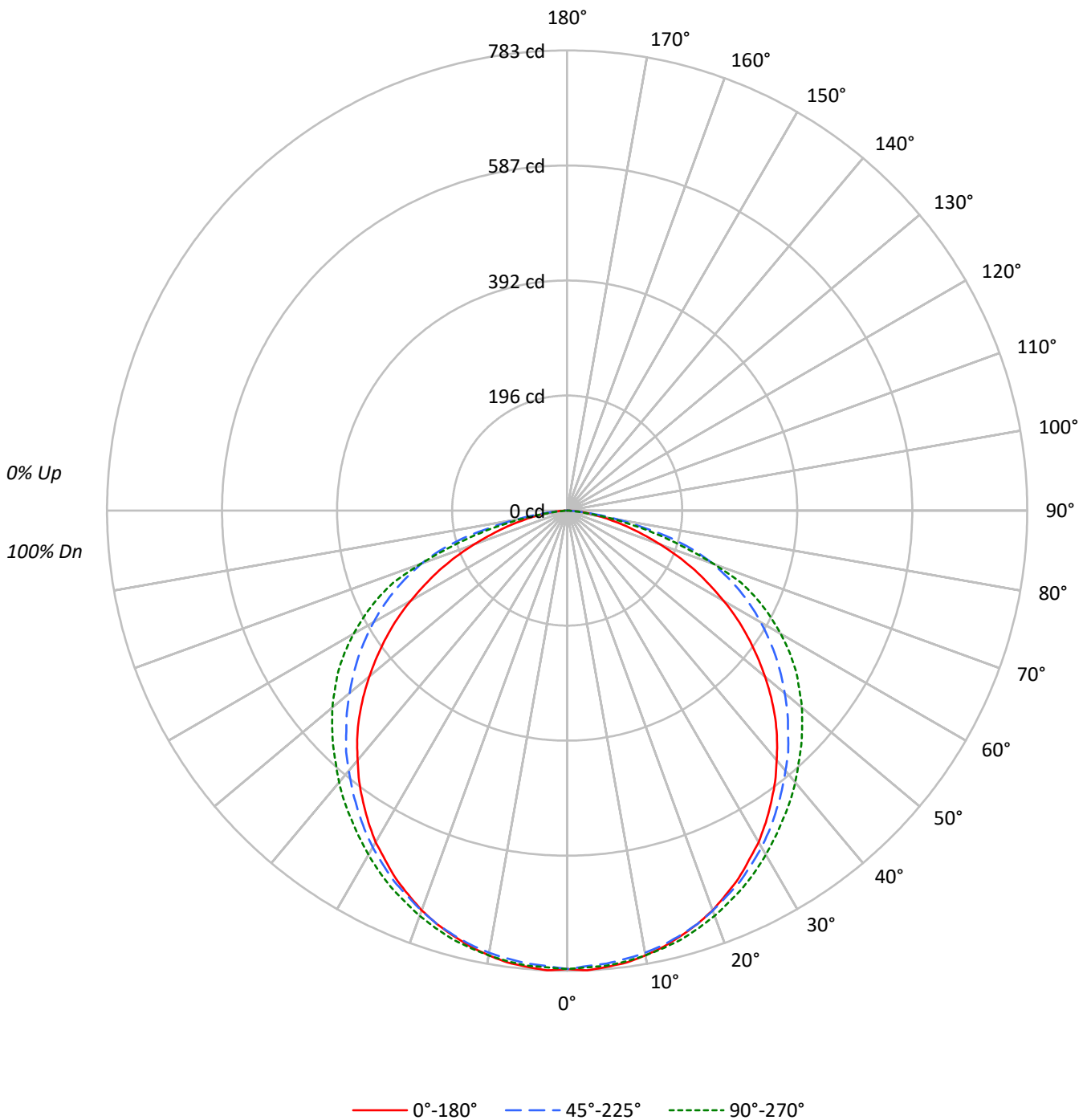
Lumens per Lamp: N/A  
Luminaire Lumens: 2297.0 lumens  
Efficiency: N/A  
Efficacy: 73.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 31.2  
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84				84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69				69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58				58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49				49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42				42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37				37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33				33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29				29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26				26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24				24

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

	0°	45°	90°
0°	2099	2099	2099
5°	2105	2090	2099
10°	2100	2088	2100
15°	2087	2083	2103
20°	2072	2074	2101
25°	2050	2067	2102
30°	2024	2056	2101
35°	1988	2041	2105
40°	1949	2030	2121
45°	1908	2023	2144
50°	1842	2023	2183
55°	1762	2033	2230
60°	1656	2048	2258
65°	1527	2069	2272
70°	1330	2074	2091
75°	1097	1930	1690
80°	862	1389	1131
85°	670	534	269



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.8	3.2
10°-20°	211.9	9.2
20°-30°	321.8	14.0
30°-40°	389.9	17.0
40°-50°	410.9	17.9
50°-60°	383.6	16.7
60°-70°	306.5	13.3
70°-80°	168.7	7.3
80°-90°	29.8	1.3
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°	607.6	26.5
0°-40°	997.5	43.4
0°-60°	1792.0	78.0
0°-90°	2297.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2297.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	780	780	780	780	780	
5°	779	777	774	779	777	74
15°	749	749	748	755	755	211
25°	690	692	696	706	708	318
35°	605	611	621	637	641	379
45°	501	511	532	555	563	386
55°	376	394	433	464	475	335
65°	240	270	325	352	357	236
75°	106	151	186	167	162	114
85°	22	27	17	11	9	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	780.1	780.1	780.1	780.1	780.1
2.5°	783.0	780.8	775.7	780.1	777.9
5°	779.3	777.2	773.6	778.6	777.2
7.5°	775.7	772.8	769.2	775.0	773.6
10°	768.5	766.3	764.2	769.2	768.5
12.5°	759.8	759.1	756.9	762.7	762.0
15°	749.0	749.0	747.6	754.8	754.8
17.5°	737.4	736.7	737.4	745.4	744.7
20°	723.7	723.7	724.4	733.8	733.8
22.5°	707.1	707.8	710.0	721.6	720.8
25°	690.5	691.9	696.3	706.4	707.8
27.5°	670.3	673.9	678.9	691.2	692.7
30°	651.5	653.7	661.6	673.2	676.1
32.5°	629.1	633.4	642.1	655.1	658.7
35°	605.3	611.0	621.2	637.1	640.7
37.5°	581.4	586.5	600.2	616.8	623.3
40°	554.7	563.4	577.8	596.6	603.8
42.5°	528.7	537.4	556.9	576.4	582.9
45°	501.3	510.7	531.6	555.4	563.4
47.5°	470.9	481.8	508.5	533.8	542.4
50°	439.9	453.6	483.2	511.4	521.5
52.5°	407.4	424.7	458.6	488.3	497.7
55°	375.6	394.4	433.4	463.7	475.3
57.5°	343.1	363.3	407.4	442.0	448.5
60°	307.7	332.2	380.6	411.0	419.6
62.5°	273.0	301.2	353.2	382.1	389.3
65°	239.8	270.1	325.0	351.8	356.8
67.5°	203.7	239.8	294.0	318.5	320.0
70°	169.0	210.9	263.6	275.2	265.8
72.5°	135.1	179.8	228.2	218.9	210.9
75°	105.5	151.0	185.6	166.8	162.5
77.5°	78.0	123.5	132.9	122.8	114.8
80°	55.6	97.5	89.6	76.6	73.0
82.5°	38.3	61.4	49.1	38.3	33.2
85°	21.7	27.4	17.3	10.8	8.7
87.5°	9.4	6.5	3.6	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)