

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: P475459

Luminaire Tested: **14CZ2-25-HRP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475459  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-25-HRP-UNV-L835-CD1-U  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS W/ HRP INSERT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

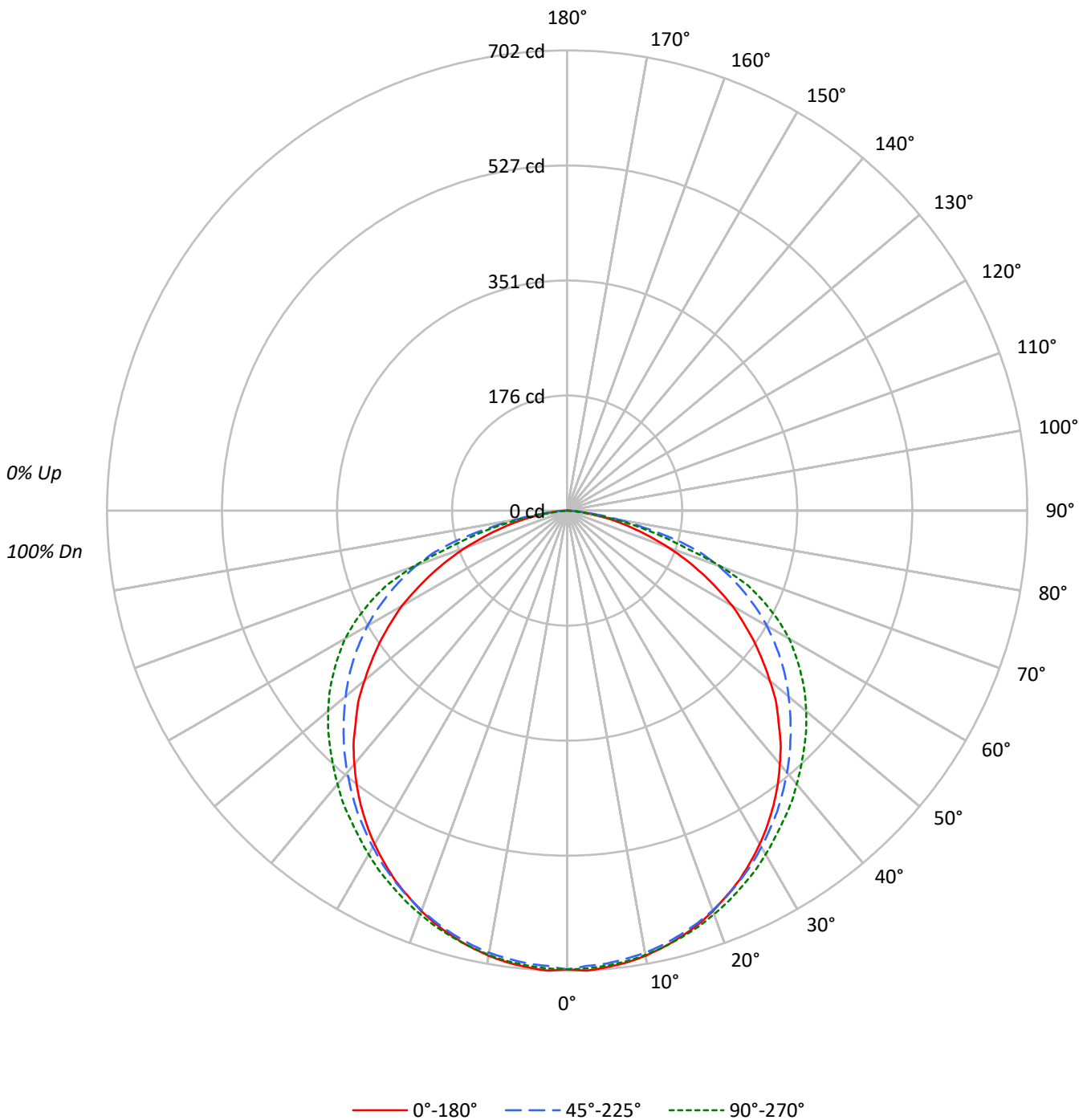
Lumens per Lamp: N/A  
Luminaire Lumens: 2091.3 lumens  
Efficiency: N/A  
Efficacy: 110.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 19  
Input Voltage (V): 120  
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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	41	33	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	1883	1883	1883
5°	1889	1873	1882
10°	1884	1872	1881
15°	1874	1865	1878
20°	1862	1858	1877
25°	1846	1850	1877
30°	1826	1842	1882
35°	1803	1837	1892
40°	1774	1833	1914
45°	1735	1835	1946
50°	1690	1846	1992
55°	1633	1869	2045
60°	1567	1894	2106
65°	1447	1912	2117
70°	1290	1921	1961
75°	1081	1779	1524
80°	820	1251	1001
85°	577	438	139



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.2	3.2
10°-20°	189.8	9.1
20°-30°	288.5	13.8
30°-40°	351.3	16.8
40°-50°	373.2	17.8
50°-60°	353.0	16.9
60°-70°	286.0	13.7
70°-80°	156.8	7.5
80°-90°	26.2	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°	544.6	26.0
0°-40°	895.9	42.8
0°-60°	1622.2	77.6
0°-90°	2091.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2091.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	700	700	700	700	700	
5°	699	698	694	698	697	66
15°	673	672	670	675	674	190
25°	622	622	623	632	632	286
35°	549	551	559	573	576	343
45°	456	463	482	504	511	352
55°	348	364	398	428	436	311
65°	227	253	300	327	332	225
75°	104	143	171	151	147	111
85°	19	24	14	7	4	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	699.9	699.9	699.9	699.9	699.9
2.5°	702.5	699.9	695.4	699.9	699.3
5°	699.3	698.0	693.5	698.0	696.7
7.5°	695.4	694.1	689.6	694.8	693.5
10°	689.6	688.3	685.1	689.6	688.3
12.5°	681.9	681.2	678.0	683.1	681.9
15°	672.8	671.5	669.6	674.8	674.1
17.5°	662.5	661.2	659.9	666.4	665.7
20°	650.2	649.6	648.9	656.0	655.4
22.5°	636.0	636.0	636.7	644.4	644.4
25°	621.8	621.8	623.1	631.5	632.1
27.5°	605.0	606.3	608.9	617.9	619.9
30°	587.6	588.9	592.8	603.1	605.7
32.5°	568.9	570.8	576.0	588.2	590.8
35°	548.8	550.8	559.2	572.7	576.0
37.5°	527.5	530.8	540.5	555.9	561.8
40°	504.9	510.1	521.7	538.5	545.0
42.5°	482.3	486.9	502.4	521.7	528.2
45°	455.9	463.0	482.3	504.3	511.4
47.5°	432.6	439.1	461.7	486.2	494.6
50°	403.6	413.2	441.0	468.1	475.9
52.5°	375.8	388.7	420.4	448.1	457.2
55°	348.0	363.5	398.4	427.5	435.8
57.5°	319.0	335.8	375.2	404.9	413.9
60°	291.2	309.3	351.9	382.3	391.3
62.5°	258.3	280.9	326.7	355.8	363.5
65°	227.3	253.1	300.3	326.7	332.5
67.5°	195.6	226.0	273.1	296.4	298.3
70°	164.0	198.2	244.1	258.3	249.2
72.5°	133.0	171.1	213.1	201.5	191.1
75°	104.0	143.3	171.1	151.1	146.6
77.5°	76.8	117.5	119.5	109.8	106.5
80°	52.9	91.0	80.7	69.7	64.6
82.5°	34.2	56.2	44.6	32.9	29.7
85°	18.7	24.5	14.2	7.1	4.5
87.5°	7.1	4.5	1.9	1.9	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)