

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: P475394

Luminaire Tested: **14CZ2-60HE-S-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475394  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-60HE-S-UNV-L835-CD1-U  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

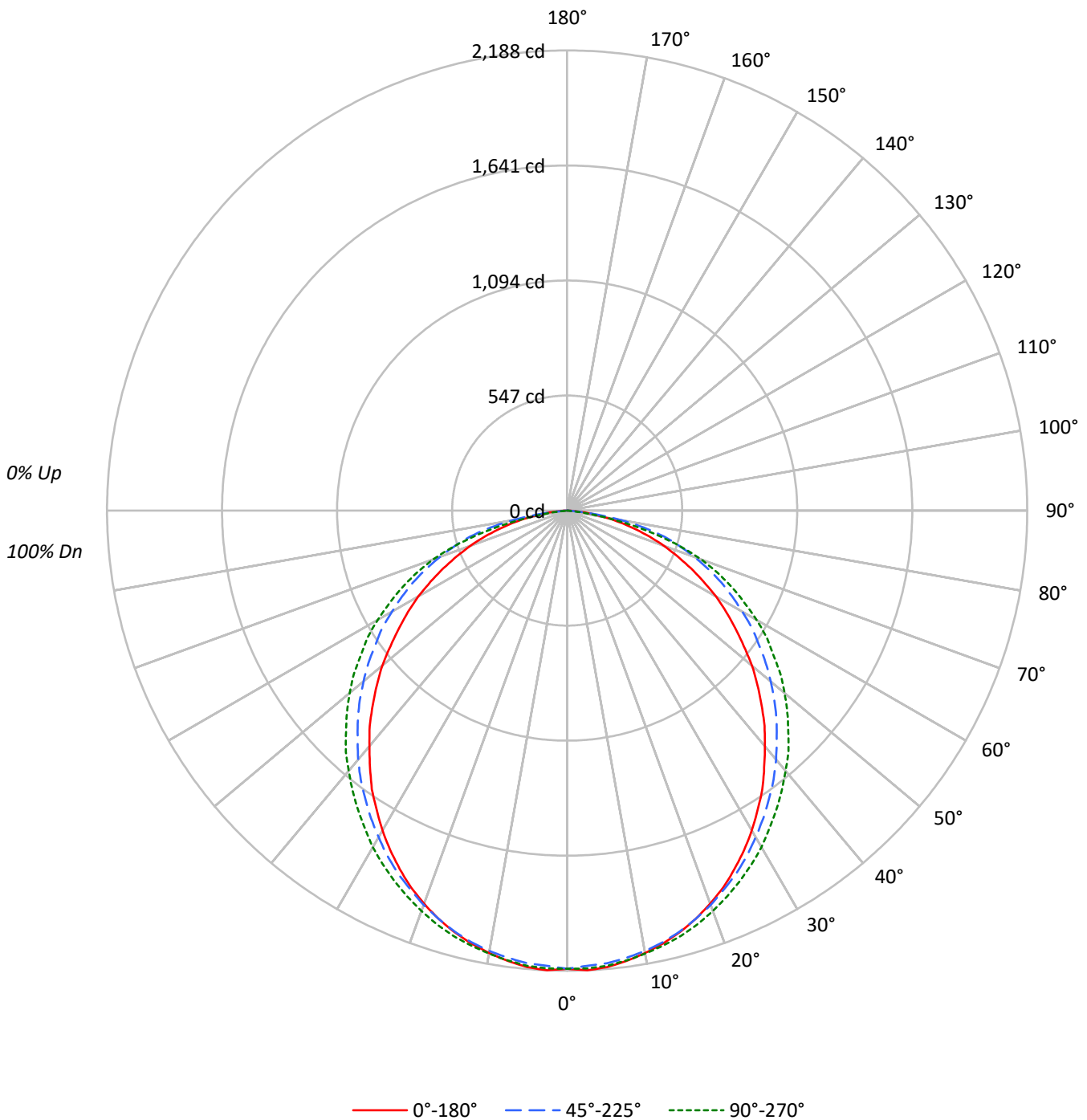
Lumens per Lamp: N/A  
Luminaire Lumens: 6090.1 lumens  
Efficiency: N/A  
Efficacy: 136.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 44.6  
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	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	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	36	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	29	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°	5863	5863	5863
5°	5885	5836	5869
10°	5836	5811	5845
15°	5780	5771	5831
20°	5696	5713	5801
25°	5588	5651	5769
30°	5458	5572	5743
35°	5318	5499	5700
40°	5138	5428	5676
45°	4972	5357	5660
50°	4804	5291	5650
55°	4579	5225	5613
60°	4397	5171	5599
65°	4131	5144	5514
70°	3852	5056	5321
75°	3404	4964	4486
80°	2751	4031	2656
85°	1985	1133	284



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.0	3.4
10°-20°	586.7	9.6
20°-30°	880.1	14.5
30°-40°	1049.1	17.2
40°-50°	1083.4	17.8
50°-60°	986.7	16.2
60°-70°	773.0	12.7
70°-80°	447.3	7.3
80°-90°	77.7	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°	1672.8	27.5
0°-40°	2722.0	44.7
0°-60°	4792.1	78.7
0°-90°	6090.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6090.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2179	2179	2179	2179	2179	
5°	2179	2173	2160	2176	2173	207
15°	2075	2072	2072	2093	2093	585
25°	1882	1888	1903	1940	1943	866
35°	1619	1634	1674	1726	1735	1010
45°	1307	1340	1408	1472	1487	1009
55°	976	1025	1114	1184	1196	875
65°	649	707	808	860	866	643
75°	327	398	477	462	432	349
85°	64	86	37	12	9	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2178.7	2178.7	2178.7	2178.7	2178.7
2.5°	2187.9	2178.7	2166.5	2178.7	2178.7
5°	2178.7	2172.6	2160.4	2175.7	2172.6
7.5°	2160.4	2154.2	2145.1	2160.4	2157.3
10°	2135.9	2132.8	2126.7	2145.1	2138.9
12.5°	2108.3	2105.3	2102.2	2120.6	2117.5
15°	2074.7	2071.6	2071.6	2093.0	2093.0
17.5°	2034.9	2034.9	2034.9	2062.4	2062.4
20°	1989.0	1989.0	1995.1	2025.7	2025.7
22.5°	1940.0	1940.0	1949.2	1982.9	1985.9
25°	1881.9	1888.0	1903.3	1940.0	1943.1
27.5°	1820.7	1829.9	1851.3	1891.1	1897.2
30°	1756.4	1765.6	1793.2	1839.1	1848.2
32.5°	1686.1	1701.4	1735.0	1780.9	1790.1
35°	1618.7	1634.0	1673.8	1725.8	1735.0
37.5°	1539.2	1563.7	1612.6	1661.6	1676.9
40°	1462.7	1490.2	1545.3	1603.4	1615.7
42.5°	1389.2	1413.7	1474.9	1539.2	1557.5
45°	1306.6	1340.3	1407.6	1471.9	1487.2
47.5°	1227.1	1260.7	1337.2	1404.5	1419.8
50°	1147.5	1181.2	1263.8	1331.1	1349.5
52.5°	1058.8	1107.7	1190.3	1257.7	1279.1
55°	976.1	1025.1	1113.8	1184.2	1196.5
57.5°	896.6	945.5	1043.5	1107.7	1126.1
60°	817.0	866.0	960.8	1025.1	1040.4
62.5°	731.3	786.4	884.3	939.4	951.7
65°	648.7	706.9	807.8	859.9	866.0
67.5°	566.1	627.3	725.2	768.1	774.2
70°	489.6	550.8	642.6	682.4	676.3
72.5°	410.0	471.2	560.0	581.4	563.0
75°	327.4	397.8	477.4	462.1	431.5
77.5°	254.0	321.3	373.3	327.4	302.9
80°	177.5	247.9	260.1	202.0	171.4
82.5°	116.3	174.4	140.8	85.7	76.5
85°	64.3	85.7	36.7	12.2	9.2
87.5°	21.4	12.2	6.1	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)