

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: P475144

Luminaire Tested: **22CZ2-24HE-HRP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475144
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24HE-HRP-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ HRP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2004.0 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

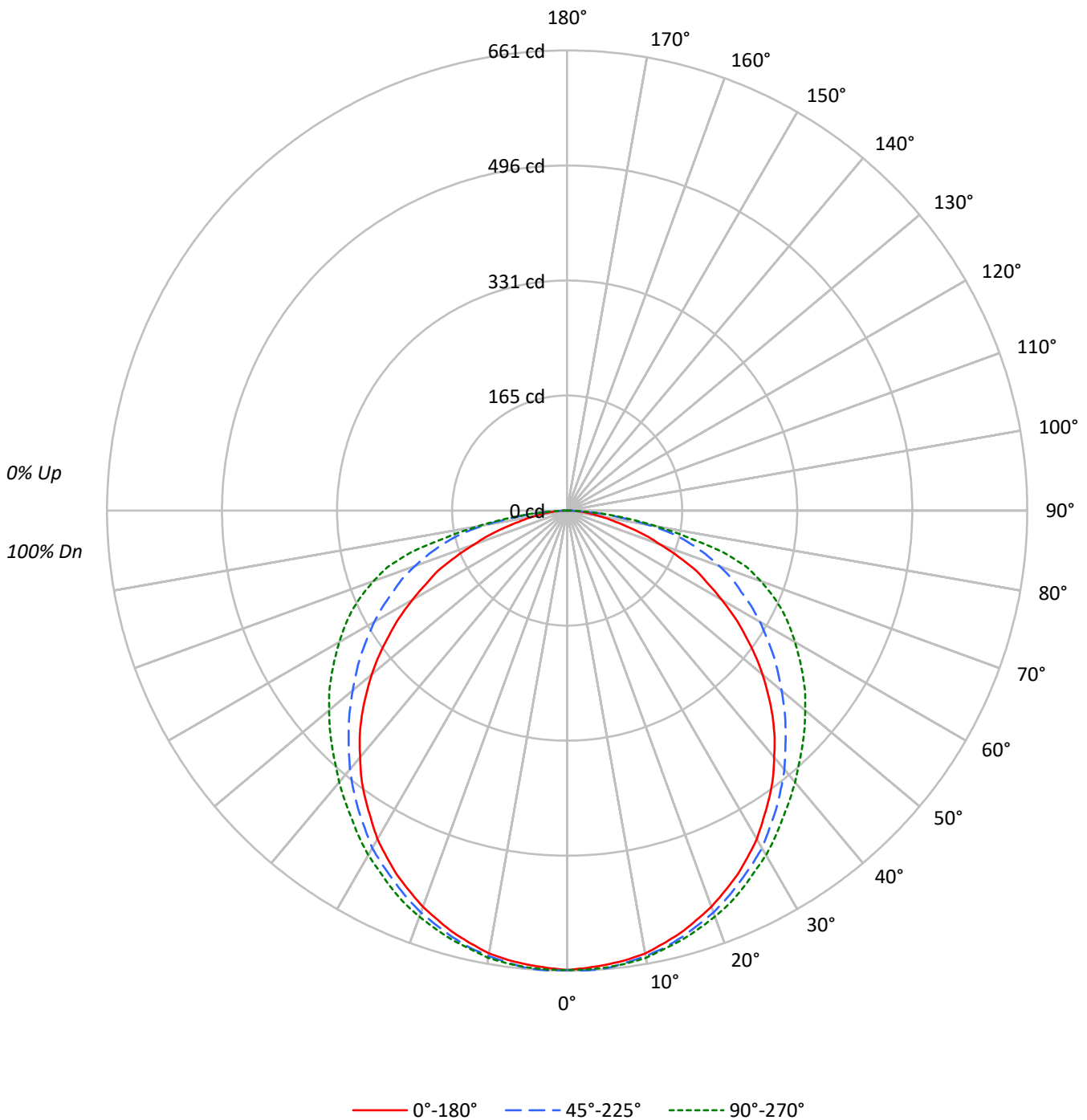
Input Watts (W): 18.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1776	1776	1776
5°	1769	1783	1779
10°	1765	1776	1783
15°	1750	1768	1779
20°	1734	1759	1777
25°	1716	1745	1776
30°	1693	1740	1775
35°	1661	1719	1773
40°	1625	1705	1789
45°	1588	1689	1818
50°	1535	1683	1868
55°	1465	1696	1939
60°	1381	1721	2034
65°	1304	1755	2174
70°	1114	1830	2327
75°	934	1907	2418
80°	766	1841	2018
85°	661	1365	1482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.5	3.1
10°-20°	178.9	8.9
20°-30°	271.1	13.5
30°-40°	327.4	16.3
40°-50°	344.0	17.2
50°-60°	323.7	16.2
60°-70°	269.9	13.5
70°-80°	178.8	8.9
80°-90°	47.6	2.4
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°	512.6	25.6
0°-40°	840.0	41.9
0°-60°	1507.6	75.2
0°-90°	2004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2004.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	655	656	660	660	659	62
15°	628	631	635	637	638	177
25°	578	582	588	595	598	266
35°	506	511	523	535	540	316
45°	417	423	444	466	478	321
55°	312	326	362	398	413	279
65°	205	222	276	321	341	199
75°	90	125	183	221	233	97
85°	21	33	44	48	48	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	659.9	659.9	659.9	659.9	659.9
2.5°	657.4	658.6	661.2	661.2	659.9
5°	654.8	656.1	659.9	659.9	658.6
7.5°	651.0	652.4	654.8	657.4	656.1
10°	646.0	647.2	649.8	652.4	652.4
12.5°	637.2	638.4	643.4	644.8	644.8
15°	628.3	630.8	634.6	637.2	638.4
17.5°	617.0	619.4	624.5	629.6	629.6
20°	605.6	608.0	614.4	619.4	620.7
22.5°	591.6	595.4	601.8	608.0	610.6
25°	577.8	581.6	587.8	595.4	598.0
27.5°	561.3	565.0	574.0	582.8	584.0
30°	544.8	548.6	560.0	567.6	571.4
32.5°	524.6	529.6	541.0	552.4	556.2
35°	505.6	510.8	523.4	534.8	539.8
37.5°	485.4	490.5	504.4	518.4	524.6
40°	462.6	469.0	485.4	500.6	509.4
42.5°	441.2	447.6	464.0	484.2	493.0
45°	417.2	423.4	443.8	466.4	477.8
47.5°	391.8	399.4	423.4	451.4	462.6
50°	366.6	375.4	402.0	433.6	446.2
52.5°	340.0	351.4	381.8	416.0	431.0
55°	312.2	326.2	361.6	398.2	413.4
57.5°	285.6	298.4	340.0	379.2	395.6
60°	256.6	273.0	319.8	360.2	378.0
62.5°	228.8	246.6	298.4	341.4	360.2
65°	204.8	222.4	275.6	321.0	341.4
67.5°	173.2	197.2	256.6	299.6	319.8
70°	141.6	174.4	232.6	276.8	295.8
72.5°	117.6	149.2	208.6	252.8	270.6
75°	89.8	125.2	183.4	221.2	232.6
77.5°	67.0	103.6	156.8	175.8	177.0
80°	49.4	79.6	118.8	125.2	130.2
82.5°	34.2	55.6	77.2	84.6	87.2
85°	21.4	32.8	44.2	48.0	48.0
87.5°	11.4	12.6	15.2	15.2	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)